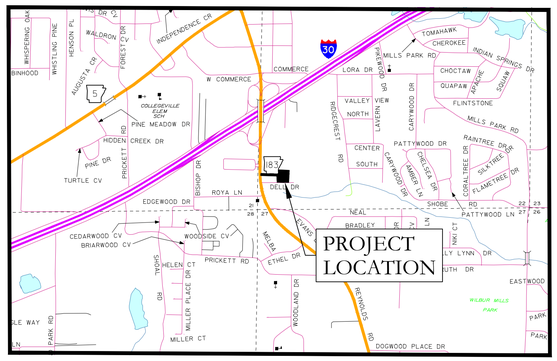
CONSTRUCTION PLANS
MEDICAL PLAZA

DELL STREET, BRYANT, SALINE COUNTY, ARKANSAS



VICINITY MAP

N

PREPARED BY:

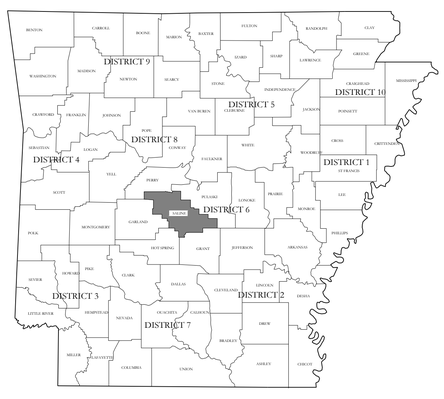
HOPE CONSULTING
ENGINEERS - SURVEYORS

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

DRAWING INDEX

SHEET NO.	TITLE
C-1.0	SITE PLAN
C-2.0	UTILITY PLAN & SEWER PROFILE
C-3.0-3.1	SEWER UTILITIES DETAILS
C-4.0-4.1	WATER UTILITIES DETAILS
C-5.0	STORM DRAINAGE PLAN & PROFILE
C-6.0	GRADING PLAN
C-7.0	EROSION CONTROL PLAN

OWNER:	DEVELOPER:
Name: R & M DUNLAP PROPERTIES, LLC	Name: R & M DUNLAP PROPERTIES, LLC
Address:	Address:
Phone:	Phone:
Email:	Email:



HOPE CONSULTING
ENGINEERS - SURVEYORS

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

FOR USE AND BENEFIT OF:
R & M DUNLAP PROPERTIES, LLC

MEDICAL PLAZA
COVER SHEET
DELL STREET, BRYANT, SALINE COUNTY, ARKANSAS

DATE: 03/19/2025		C.A.D. BY:	DRAWING NUMBER:
REVISED:		CHECKED BY:	24-1351
SHEET:		SCALE:	

AUTODESK DOCUMENTS://MEDICAL PLAZA - DELL STREET, BRYANT, SALINE COUNTY, ARKANSAS 24-1351.DWG 03/19/2025 12:24:15 PM CDT

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

FND. 1/2" REBAR

PROPOSE CURVE CUT

S86°59'17"E 306.13'

FND. COTTON SPINDLE IN ASPHALT

S02°52'36"W 8.84'

EXISTING INGRESS/ EGRESS EASEMENT (#2005-11645)

N00°41'39"E 118.02'

10' UTILITY & DRAINAGE ESMT

15' SETBACK

24'

5' SIDE SETBACK (FROM ESMT)

PROPOSED BUILDING #1 9,960 SQ. FT.

HDCP RAMP

MOUNTABLE CURB

DRIVE-THRU

25' SETBACK

ROLL OUT GARAGE CANS AREA

S02°52'36"W 149.43'

NO PARKING SIGN

S88°29'45"E 270.00'

N88°29'45"W 270.00'

PROPOSED BUILDING #2 7,507 SQ. FT.

S02°52'36"W 192.33'

N00°05'56"W 752.88'

POINT OF BEGINNING (LOT 2)

FND. 1/2" REBAR (PS 1506), POINT OF BEGINNING (OVERALL BOUNDARY & R/W DED.)

N00°05'50"W 13.39'

S88°28'15"E 334.86'

N88°28'15"W 334.86'

N88°36'41"W 333.95'

PROPOSE CURVE CUT

S02°52'36"W 12.96'

FND. 1/2" REBAR (PS 154)

REYNOLDS ROAD SITE SIGN

N02°33'00"E 60.14'

S88°33'59"E 502.86'

20' SEWER ESMT LAYING TEN FEET ON EITHER SIDE OF MAIN

FND. 1/2" REBAR (PS 1506), POINT OF BEGINNING (LOT 1)

EXISTING INGRESS/ EGRESS EASEMENT (#2000-03033)

S02°52'14"E 58.52'

N88°30'12"W 458.94'

EXISTING INGRESS/ EGRESS EASEMENT PER DOC. #2005-11645

FND. 1/2" REBAR (PS 154)

FND. 1/2" REBAR (PS 1141)

30' UTILITY & DRAINAGE ESMT

R/W

W

SS

MCDONALD'S

840-12643-002
MCDONALD'S REAL ESTATE COMPANY

LOWE'S HOME CENTER

840-12643-000
UNITED TRADERS INC

840-12644-000
ARC CAFEHLDOOL LLC

SUPER 8

840-12644-005
PARTNERS PROVISION TRUST I J&S ERWIN JR TRUSTEES

840-12644-001
SHIV MARUTI INC

840-12644-004
PARTNERS PROVISION TRUST I J&S ERWIN JR TRUSTEES

PROMOTIONAL IDEAS

WENDY'S

REYNOLDS ROAD/ARK. HWY. 183
(MINOR ARTERIAL CLASS, 80' R/W PER M.S.P.)

DELL DRIVE
(COLLECTOR CLASS, 60' R/W PER M.S.P.)

HOPE CONSULTING, INC. No. 1931 CERTIFICATE OF AUTHORIZATION ARKANSAS

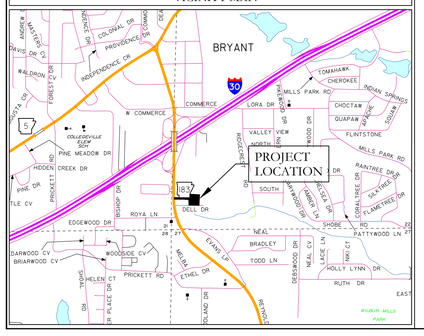
SITE DATA	
TOTAL SITE AREA	3.33 ACRES
TOTAL DEVELOPMENT AREA	3.33 ACRES
GROSS BUILDING AREA	BUILDING #1 9,600 SQ. FT. BUILDING #2 7,507 SQ. FT. TOTAL 16,107 SQ. FT.
BUILDING SETBACKS	FRONT SETBACK LINE: 50' SIDE SETBACK LINE: AS SHOWN REAR SETBACK LINE: 15' FRONT LANDSCAPE BUFFER: 10'
BUILDING HEIGHTS	1 STORY
BUSINESS TYPE	HEALTH CARE
PARKING CALCULATION (PROVIDED)	113 PARKING SPACES PROVIDED (6 ADA SPACES)

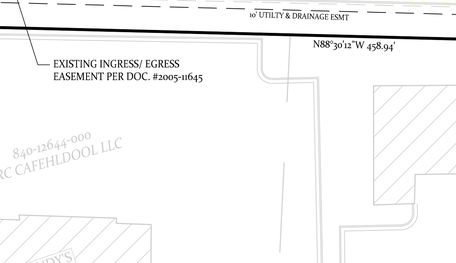
ZONING INFORMATION	
CURRENT ZONING	C-2 HIGHWAY COMMERCIAL DISTRICT
MINIMUM LOT WIDTH (FT)	N/A
FRONT YARD SETBACK (FT)	50'
REAR YARD SETBACK (FT)	15'
SIDE YARD SETBACK (FT)	AS SHOWN
MAXIMUM BUILDING COVERAGE (SF)	17,707

BASIS OF BEARING: GRID NORTH, ARKANSAS COORDINATE SYSTEM, SOUTH ZONE BY GPS OBSERVATION

30' 15' 0 30'

VICINITY MAP:

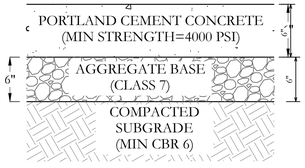




USE DIMENSIONS ABOVE UNLESS OTHERWISE NOTED

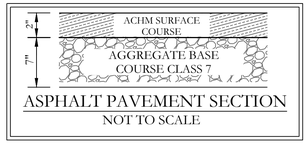
PARKING STALL & SIDEWALK DETAIL

NOT TO SCALE



HEAVY DUTY CONCRETE PAVEMENT SECTION

NOT TO SCALE



ASPHALT PAVEMENT SECTION

NOT TO SCALE

OWNER:
Name: R & M DUNLAP PROPERTIES, LLC
Address:
Phone:
Email:

DEVELOPER:
Name: R & M DUNLAP PROPERTIES, LLC
Address:
Phone:
Email:

LEGEND

- PLSS Aliquot Corner
- Fnd. Corner Monument
- Set 1/2" Rebar/Cap (1664)
- Computed Point
- (M)- As Measured
- (P)- Per Deed or Plat Records
- ESMT - Easement
- B.S.L. - Building Setback Lines
- Clean Out
- Water Meter
- Power Pole
- Sewer Manhole
- Light Pole
- Telephone Pedestal
- Drainage Manhole
- Gas Meter
- Fence
- Overhead Power
- Sewer Line
- Water Line
- Telephone Line
- Electric Line
- Gas Line
- Existing Access Agreement
- Public Right-of-Way Dedication

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

FOR USE AND BENEFIT OF:
R & M DUNLAP PROPERTIES, LLC

MEDICAL PLAZA
SITE PLAN
DELL STREET, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	03-19-2025	C.A.D. BY:	DRAWING NUMBER: 24-1351
REVISED:		CHECKED BY:	
SHEET:	C-1.0	SCALE:	

A:\HOPE CONSULTING\9. PROJECTS\11. 24-1351 DELL DRIVE - PHILLIP BYE\CIVIL\DWG\24-1351-03-12-2025.DWG

EXISTING WATER LINE

TIE IN WITH 8"X8" TAPPING SLEEVING AND 8" GATE VALVE

PROPOSED 1" IRRIGATION METER

PROPOSED 1" SERVICE WATER METER

158.7' LF OF 8" PVC (C900) WATER MAIN

PROPOSED MEDICAL PLAZA BUILDING #1
47 PARKING SPACES
AREA 9,960 SQ. FT.
FFE=391.50'

MH # 4498 (EXISTING)
RIM:390.05
SUMP:383.05
INV IN:383.15 8" PVC
INV IN:384.00 8" PVC
INV OUT:383.05 8" PVC

PROPOSED GREASE TRAP

PROPOSED 6" SEWER SERVICE LINE

PROPOSED 6" FIRE HYDRANT

6" VALVE

8"X6" VALVE REDUCER

182.1' LF OF 8" PVC (C900) WATER MAIN

ANCHOR COLLAR

90° ELBOWS

PROPOSED 8" SEWER MAIN

86' OF 8"-SDR 26 PVC @ 0.50%

PROPOSED SEWER MANHOLE
STA:0+00.00
RIM:388.96
INV OUT:384.42

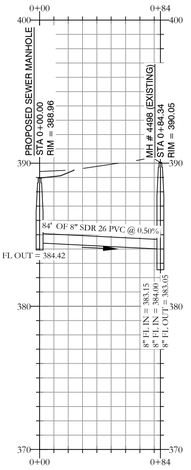
PROPOSED 6" SEWER SERVICE LINE

PROPOSED GREASE TRAP

PROPOSED MEDICAL
PLAZA BUILDING #2
67 PARKING SPACES
AREA 7,507 SQ. FT.
FFE=389.5'

MH # 4496 (EXISTING)
RIM:387.41
SUMP:380.21
INV IN:380.31 8" PVC
INV IN:380.41 8" PVC
INV OUT:380.21 8" PVC

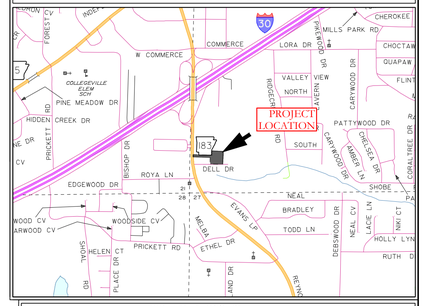
DELL DRIVE
(COLLECTOR CLASS, 60' R/W
PER M.S.P.)



PROPOSED SEWER PROFILE

VERTICAL SCALE 1" = 5'
HORIZONTAL SCALE 1" = 50'

VICINITY MAP:

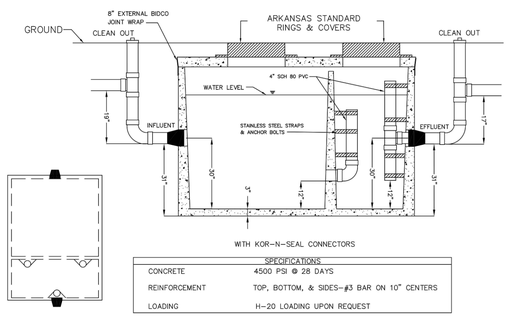


WATER UTILITY NOTES:

1. ALL WATER INSTALLATION SHALL BE DONE IN ACCORDANCE WITH CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION FOR WATER LINES AND SEWER LINES" 2015 EDITION.

SEWER CONSTRUCTION NOTES:

1. ALL SEWER CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION FOR WATER LINES AND SEWER LINES" 2015 EDITION.



SPECIFICATIONS	
CONCRETE	4500 PSI @ 28 DAYS
REINFORCEMENT	TOP, BOTTOM, & SIDES-#3 BAR ON 10" CENTERS
LOADING	H-20 LOADING UPON REQUEST

1,000 GALLON GREASE TRAP

99 1/2" LONG X 65 1/2" WIDE X 67" TALL
(73" TALL WITH TRAFFIC LID)

OWNER:
Name: R & M DUNLAP PROPERTIES, LLC
Address: _____
Phone: _____
Email: _____

DEVELOPER:
Name: R & M DUNLAP PROPERTIES, LLC
Address: _____
Phone: _____
Email: _____

LEGEND

- PLSS Aliquot Corner
- Fnd. Corner Monument
- Set 1/2" Rebar/Cap (166₄)
- Computed Point
- (M)- As Measured
- (P)- Per Deed or Plat Records
- ESMT - Easement
- B.S.L. - Building Setback Lines
- Clean Out
- Water Meter
- Power Pole
- Sewer Manhole
- Light Pole
- Telephone Pedestal
- Drainage Manhole
- Gas Meter
- Fence
- Overhead Power
- Sewer Line
- Water Line
- Telephone Line
- Electric Line
- Gas Line
- Existing Access Agreement
- Public Right-of-Way Dedication

BASIS OF BEARING:
GRID NORTH, ARKANSAS
COORDINATE SYSTEM, SOUTH ZONE
BY GPS OBSERVATION

20' 10' 0 20'

CERTIFICATE OF AUTHORIZATION
HOPE CONSULTING, INC.
No. 1931
ARKANSAS

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

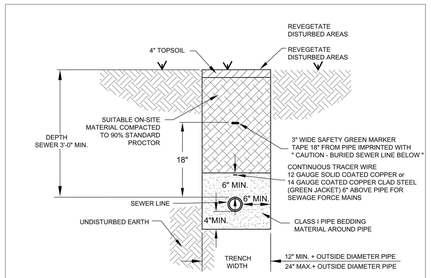
FOR USE AND BENEFIT OF:
R & M DUNLAP PROPERTIES, LLC

MEDICAL PLAZA
UTILITY PLAN & SEWER PROFILE
DELL STREET, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	03/19/2025	C.A.D. BY:	DRAWING NUMBER:
REVISED:	--	CHECKED BY:	24-1351
SHEET:	C-2.0	SCALE: 1" = 20"	

500	XX	XX	0	XX	XX	XX	XX

V:\HOPE\PROJECTS\2024\24-1351\CAD\C3D\DWG\24-1351 UTILITY PLAN.DWG 3/19/2025 2:15:12 PM CDT



SEWER TRENCH

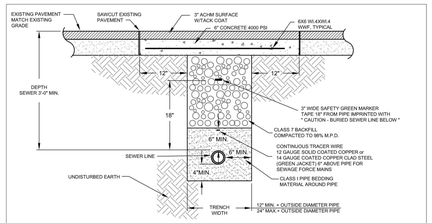
(NON-PAVED AREA)

NOTES:

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

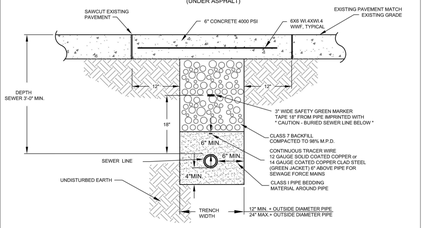
CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0488

TITLE:	DESCRIPTION:	DRAWN BY:	CHECKED BY:	FILE:	DATE: APRIL 2015 REVISED	SHEET:
SEWER DETAILS	SEWER TRENCH (NON-PAVED AREA)			S1-Sewer Trench (Non-Paved Area).dwg	-----	S1



SEWER TRENCH

(UNDER ASPHALT)



SEWER TRENCH

(UNDER CONCRETE)

NOTES:

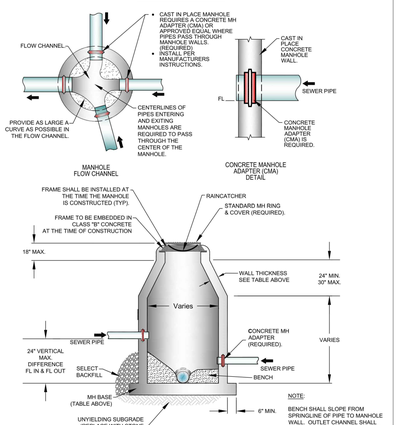
1. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING SEWER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE SEWER SYSTEM.
2. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART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

CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0488

TITLE:	DESCRIPTION:	DRAWN BY:	CHECKED BY:	FILE:	DATE: APRIL 2015 REVISED	SHEET:
SEWER DETAILS	SEWER TRENCH (UNDER PAVEMENT)			S2-Sewer Trench (Under Pavement).dwg	-----	S2

Inside Diameter of Manhole	Minimum Wall Thickness	Base Thickness	Minimum Ring & Cover Size
4' DIA	6"	6"	24" (< or Equal to 24" Pipes)
5' DIA	8"	8"	30" (> 24" Pipes)
6' DIA	8"	12"	

MANHOLE INFORMATION TABLE



- CAST IN PLACE MANHOLE REQUIRES A CONCRETE MH ADAPTER (CMA) OR APPROVED EQUAL WHERE SEWER PASS THROUGH MANHOLE WALLS. (REQUIRED)
- INSTALL PER MANUFACTURERS INSTRUCTIONS.

NOTE:
BENCH SHALL SLOPE FROM SPRINGLINE OF PIPE TO MANHOLE WALL. OUTLET CHANNEL SHALL BE FULL DEPTH "I" FROM CENTER OF MANHOLE TO WALL.

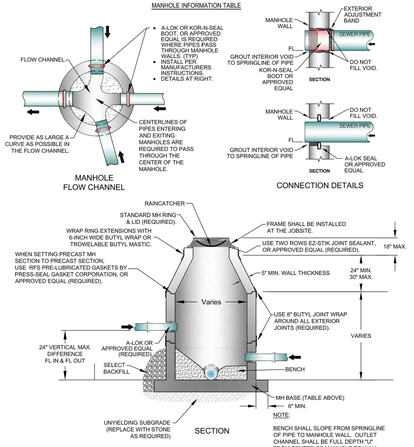
CAST-IN-PLACE MANHOLE

CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0488

TITLE:	DESCRIPTION:	DRAWN BY:	CHECKED BY:	FILE:	DATE: APRIL 2015 REVISED	SHEET:
SEWER DETAILS	CAST-IN-PLACE MANHOLE			S4-Cast In Place Manhole.dwg	-----	S4

Inside Diameter of Manhole	Minimum Wall Thickness	Base Thickness	Minimum Ring & Cover Size
4' DIA	6"	6"	24" (< or Equal to 24" Pipes)
5' DIA	7"	8"	30" (> 24" Pipes)
6' DIA	7"	8"	

MANHOLE INFORMATION TABLE



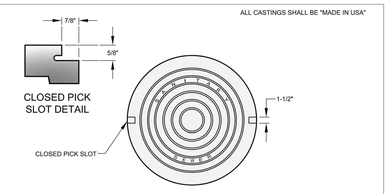
NOTE:
BENCH SHALL SLOPE FROM SPRINGLINE OF PIPE TO MANHOLE WALL. OUTLET CHANNEL SHALL BE FULL DEPTH "I" FROM CENTER OF MANHOLE TO WALL.

PRECAST MANHOLE

CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0488

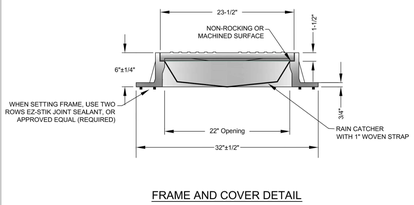
TITLE:	DESCRIPTION:	DRAWN BY:	CHECKED BY:	FILE:	DATE: APRIL 2015 REVISED	SHEET:
SEWER DETAILS	PRECAST MANHOLE			S5-Precast Manhole.dwg	-----	S5

ALL CASTINGS SHALL BE "MADE IN USA"



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

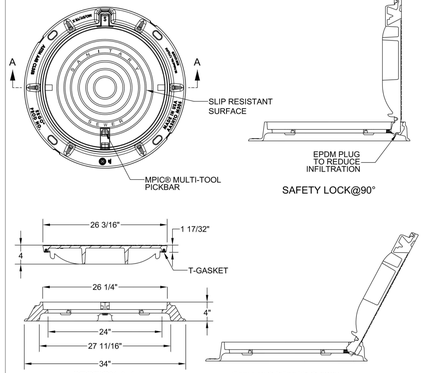
* DIMENSIONAL TOLERANCES SHALL NOT EXCEED 1/16 INCH PER FOOT



FRAME AND COVER DETAIL

CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0488

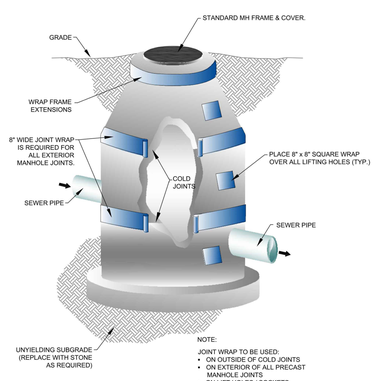
TITLE:	DESCRIPTION:	DRAWN BY:	CHECKED BY:	FILE:	DATE: APRIL 2015 REVISED	SHEET:
SEWER DETAILS	MANHOLE FRAME AND COVER			S6-Manhole Frame and Cover.dwg	-----	S6



HINGED FRAME AND COVER DETAIL

CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0488

TITLE:	DESCRIPTION:	DRAWN BY:	CHECKED BY:	FILE:	DATE:	SHEET:
	HINGED MANHOLE FRAME AND COVER			S7-Hinged Manhole Frame and Cover-GLD.dwg	-----	S7



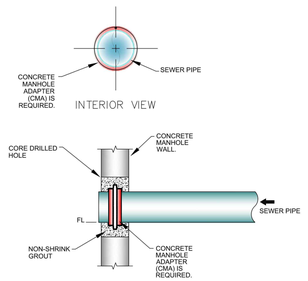
NOTE:
JOINT WRAP TO BE USED:
- ON OUTSIDE OF COLD JOINTS
- ON EXTERIOR OF ALL PRECAST MANHOLE JOINTS
- ON LIFT HOLES / SOCKETS

MANHOLE JOINT WRAP

CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0488

TITLE:	DESCRIPTION:	DRAWN BY:	CHECKED BY:	FILE:	DATE: APRIL 2015 REVISED	SHEET:
SEWER DETAILS	MANHOLE JOINT WRAP			S9-Manhole Joint Wrap.dwg	-----	S9

THE INSTALLATION SHALL BE DYE TESTED FOR ACCEPTANCE.



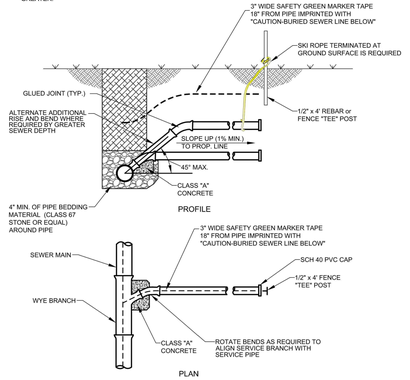
MANHOLE CORING DETAILS

CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0488

TITLE:	DESCRIPTION:	DRAWN BY:	CHECKED BY:	FILE:	DATE:	SHEET:
SEWER DETAILS	MANHOLE CORING			S11-Manhole Coring.dwg	-----	S11

NOTES:

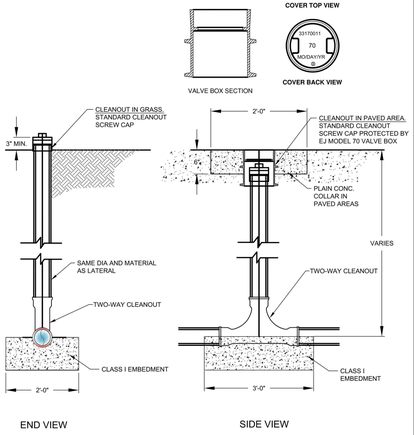
1. MODIFIED RISER LATERAL SHALL BE USED WHEN DEPTH OF COVER EXCEEDS 7'-0"
2. PLACE CLASS "A" CONCRETE UNDER EACH WYE BRANCH TO PREVENT CRACKING OR TWISTING UNDER EARTH LOADS.
3. SERVICE LATERAL STUBS SHALL TERMINATE AT LEAST 2 FEET INSIDE THE PROPERTY LINE BUT IN NO CASE SHALL THE SERVICE LATERAL STUB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



SEWER SERVICE LATERAL

CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0488

TITLE:	DESCRIPTION:	DRAWN BY:	CHECKED BY:	FILE:	DATE: APRIL 2015 REVISED	SHEET:
SEWER DETAILS	SEWER SERVICE LATERAL			S15-Sewer Service Lateral.dwg	-----	S15

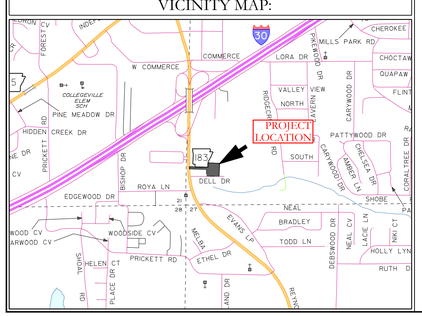


TYPICAL CLEANOUT

CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0488

TITLE:	DESCRIPTION:	DRAWN BY:	CHECKED BY:	FILE:	DATE: APRIL 2015 REVISED	SHEET:
SEWER DETAILS	SEWER SERVICE CLEANOUT			S16-Sewer Service Cleanout.dwg	-----	S16

VICINITY MAP:



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

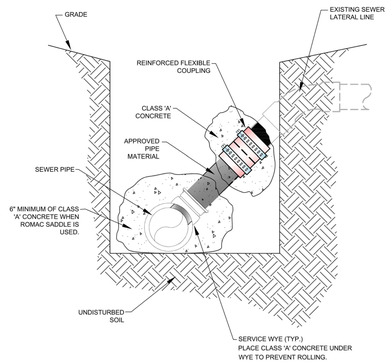
FOR USE AND BENEFIT OF:
R & M DUNLAP PROPERTIES, LLC

MEDICAL PLAZA
SEWER UTILITIES DETAILS
DELL STREET, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	03/19/2025	C.A.D. BY:		DRAWING NUMBER:
REVISED:	--	CHECKED BY:		24-1351
SHEET:	C-3.0	SCALE:		

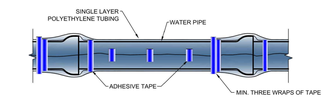
500	XX	XX	0	XX	XX	XX	XX

A:\HOPE CONSULTING\0_PROJECTS\11_24-1351 DELL DRIVE - PH II\PH II @ BRYANT\CIVIL\DWG\24-1351_DELL_DRIVE_-_PH_II_8-28-25.DWG



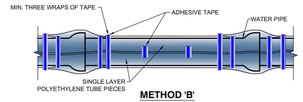
CITY OF BRYANT, AR	TITLE:	SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES			REVISED	
210 S.W. 3rd. STREET	DESCRIPTION:	CONNECT TO EXISTING SEWER SERVICE	-----	S19
BRYANT, AR			-----	
PHONE: (501) 847-0448	DRAWN BY:	CHECKED BY:	FILE: S19-Connect to Existing Sewer Service.dwg	-----

4/25/2025 3:03:56 AM



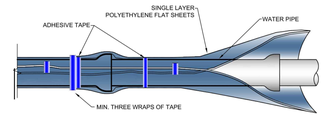
METHOD 'A'

METHOD 'A' USES ONE LENGTH OF POLYETHYLENE TUBE, OVERLAPPED AT THE JOINTS A MINIMUM OF 2 FEET.



METHOD 'B'

METHOD 'B' USES SEPARATE PIECES OF POLYETHYLENE TUBE FOR THE BARREL OF THE PIPE AND THE JOINTS. SHORT PIECES SHALL BE APPROXIMATELY 6' LONG AND OVERLAP BARREL SECTION BY A MINIMUM OF 2 FEET.



METHOD 'C'

METHOD 'C' - USED FOR PIPE-SHAPED AND ODD- SHAPED APPURTENANCES SUCH AS BENDS, REDUCERS, OFFSETS, VALVES, TEES, ETC.

ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE POLY WRAPPED.

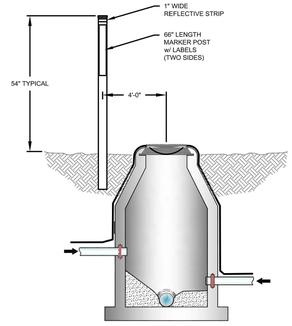
THE ANSI/AWWA C105/A21.5 STANDARD OUTLINES THREE METHODS OF INSTALLING POLYETHYLENE ENCASEMENT/ SLEEVING.

CITY OF BRYANT, AR	TITLE:	SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES			REVISED	
210 S.W. 3rd. STREET	DESCRIPTION:	POLYETHYLENE PROTECTION MATERIAL	-----	S20
BRYANT, AR			-----	
PHONE: (501) 847-0448	DRAWN BY:	CHECKED BY:	FILE: S20-Poly Wrap.dwg	-----

4/25/2025 3:03:56 AM

NOTES:

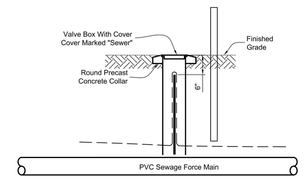
1. SEWER LINE MARKERS SHALL BE TRI-VIEW MARKING SYSTEM BY RHINO MARKING AND PROTECTION SYSTEMS OR CARSONITE INTERNATIONAL DUAL-SIDED UTILITY MARKER (CJB-380).
2. THE UPPERMOST PORTION OF THE CARSONITE MARKER SHALL BE MADE OF VISIBILITY ENHANCER (CVE-360).
3. TRI-VIEW MARKERS DO NOT REQUIRE VISIBILITY ENHANCERS.
4. AN ADDITIONAL WHITE 1" WIDE REFLECTIVE TAPE (3M OR EQUAL) SHALL BE PLACED AROUND THE FULL CIRCUMFERENCE OF THE TOP OF THE MARKER.



SEWER MARKER

CITY OF BRYANT, AR	TITLE:	SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES			REVISED	
210 S.W. 3rd. STREET	DESCRIPTION:	SEWER MARKER	-----	S24
BRYANT, AR			-----	
PHONE: (501) 847-0448	DRAWN BY:	CHECKED BY:	FILE: S24-Sewer Marker.dwg	-----

4/25/2025 3:03:56 AM



Notes:

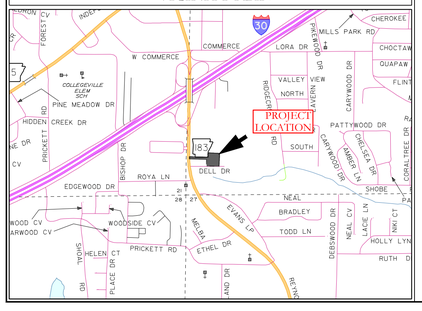
1. Tracer Wire Test Station Shall Be Installed Every 1,000 Ft. Minimum And At Every Fiberglass Post Utility Marker.
2. Do Not Install Test Stations At Posts Located At Valves, Clean-out Stations Or Air Release Valves That Have Ground Rod Inside Access Vault

TRACER WIRE TEST STATION

CITY OF BRYANT, AR	TITLE:	SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES			REVISED	
210 S.W. 3rd. STREET	DESCRIPTION:	TRACER WIRE TEST STATION	-----	S33
BRYANT, AR			-----	
PHONE: (501) 847-0448	DRAWN BY:	CHECKED BY:	FILE: S33-Tracer Wire Test Station.dwg	-----

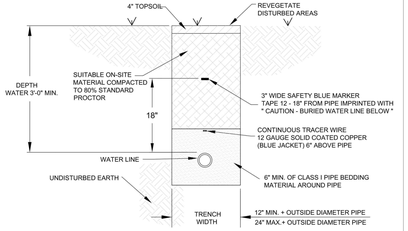
4/25/2025 3:03:56 AM

VICINITY MAP:



HOPE CONSULTING ENGINEERS - SURVEYORS	129 N. Main Street, Benton, Arkansas 72015 PH. (501)315-2626 FAX (501) 315-0024 www.hopeconsulting.com						
FOR USE AND BENEFIT OF: R & M DUNLAP PROPERTIES, LLC							
MEDICAL PLAZA SEWER UTILITIES DETAILS DELL STREET, BRYANT, SALINE COUNTY, ARKANSAS							
DATE: 03/19/2025	C.A.D. BY:	DRAWING NUMBER: 24-1351					
REVISED: --	CHECKED BY:						
SHEET: C-3.1	SCALE:						
500	XX	XX	0	XX	XX	XX	XX

A:\HOPE CONSULTING\0. PROJECTS\11. 24-1351 DELL DR MEDICAL PH II\LAYOUT\DWG\C3-24-1351_DETAILS.DWG[LAYOUT]C3.1 03/18/2025 8:43:53 AM



NOTES:

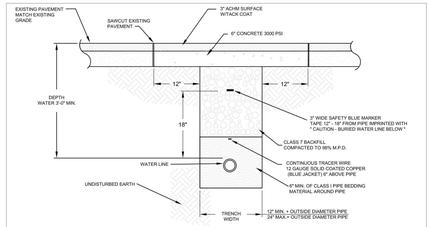
1. ALL VALVES, BENDS, ETC. SHALL BE RESTRAINED.
2. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING WATER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE WATER SYSTEM.
3. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART B)
4. TRENCH SHALL BE EXCAVATED BELOW GRADE REQUIRED TO PROVIDE A MINIMUM 36" OF PIPE COVER.
5. MAXIMUM PIPE COVER SHALL BE 60" UNDER NORMAL CONDITIONS. COVER GREATER THAN 60" MAY BE ALLOWED FOR SHORT DISTANCES WHERE REQUIRED BY FIELD CONDITIONS. NO HYDRANT SHALL BE ALLOWED WHERE LINES ARE GREATER THAN 60" DEEP.

WATER MAIN TRENCH

(NON-PAVED AREA)

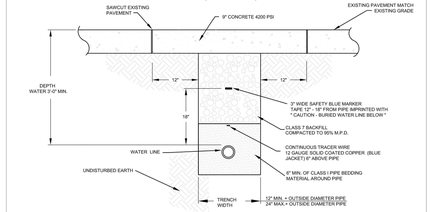
CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0468

TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	WATER MAIN TRENCH (NON-PAVED AREA)	REVISED	W1
DRAWN BY:	CHECKED BY:	FILE: W1-Water Trench (Non-Paved Area).dwg	-----



WATER MAIN TRENCH

(UNDER ASPHALT)



WATER MAIN TRENCH

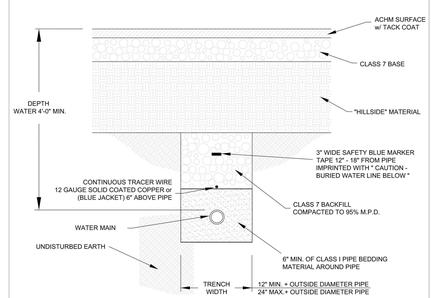
(UNDER CONCRETE)

NOTES:

1. ALL VALVES, BENDS, ETC. SHALL BE RESTRAINED.
2. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING WATER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE WATER SYSTEM.
3. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART B)
4. TRENCH SHALL BE EXCAVATED BELOW GRADE REQUIRED TO PROVIDE A MINIMUM 36" OF PIPE COVER.
5. MAXIMUM PIPE COVER SHALL BE 60" UNDER NORMAL CONDITIONS. COVER GREATER THAN 60" MAY BE ALLOWED FOR SHORT DISTANCES WHERE REQUIRED BY FIELD CONDITIONS. NO HYDRANT SHALL BE ALLOWED WHERE LINES ARE GREATER THAN 60" DEEP.

CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0468

TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	WATER MAIN TRENCH (UNDER PAVEMENT)	REVISED	W2
DRAWN BY:	CHECKED BY:	FILE: W2-Water Trench (Under Pavement).dwg	-----



WATER MAIN INSTALLATION
PRIOR TO ROADWAY CONSTRUCTION

NOTES:

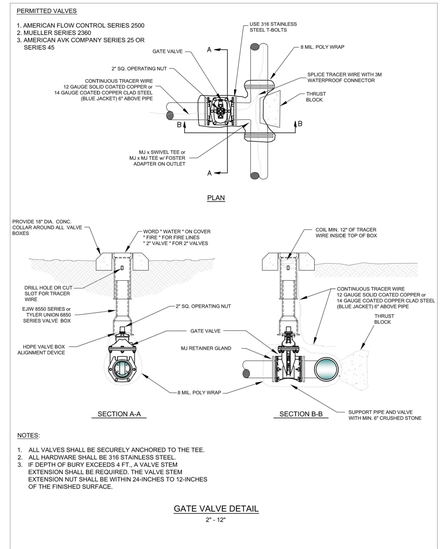
1. ALL VALVES, BENDS, ETC. SHALL BE RESTRAINED.
2. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING WATER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE WATER SYSTEM.
3. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART B)
4. TRENCH SHALL BE EXCAVATED BELOW GRADE REQUIRED TO PROVIDE A MINIMUM 36" OF PIPE COVER.
5. MAXIMUM PIPE COVER SHALL BE 60" UNDER NORMAL CONDITIONS. COVER GREATER THAN 60" MAY BE ALLOWED FOR SHORT DISTANCES WHERE REQUIRED BY FIELD CONDITIONS. NO HYDRANT SHALL BE ALLOWED WHERE LINES ARE GREATER THAN 60" DEEP.

CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0468

TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	WATER MAIN INSTALLATION PRIOR TO ROADWAY CONSTRUCTION	REVISED	W3
DRAWN BY:	CHECKED BY:	FILE: W3-Water Main Installation Prior to Roadway Const.dwg	-----

PERMITTED VALVES

1. AMERICAN FLOW CONTROL SERIES 2500
2. MUELLER SERIES 2360
3. AMERICAN AVK COMPANY SERIES 25 OR SERIES 45



NOTES:

1. ALL VALVES SHALL BE SECURELY ANCHORED TO THE TEE.
2. ALL HARDWARE SHALL BE 316 STAINLESS STEEL.
3. IF DEPTH OF BURY EXCEEDS 4 FT., A VALVE STEM EXTENSION SHALL BE REQUIRED. THE VALVE STEM EXTENSION NUT SHALL BE WITHIN 24-INCHES TO 12-INCHES OF THE FINISHED SURFACE.

GATE VALVE DETAIL

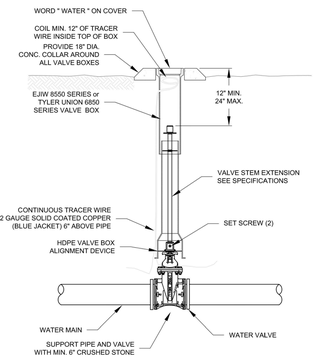
2" - 12"

CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0468

TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	GATE VALVE	REVISED	W4
DRAWN BY:	CHECKED BY:	FILE: W4-Gate Valve.dwg	-----

NOTES:

1. OPERATING NUT EXTENSIONS SHALL BE USED WHEN THE TOP OF THE OPERATING NUT IS GREATER THAN 4 FEET FROM THE TOP OF FINISHED SURFACE.
2. THE STEM EXTENSION SHALL BE OF ADEQUATE LENGTH TO REACH FROM THE VALVE OPERATING NUT TO A POINT WITHIN 24-INCHES TO 12-INCHES OF THE FINISHED SURFACE.



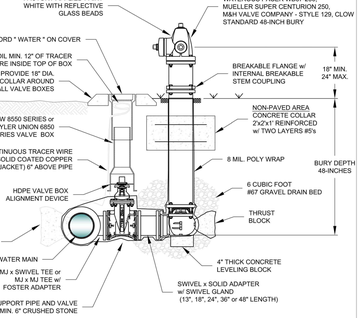
VALVE WITH STEM EXTENSION

CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0468

TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	VALVE STEM EXTENSION	REVISED	W7
DRAWN BY:	CHECKED BY:	FILE: W7-Valve Stem Extension.dwg	-----

NOTES:

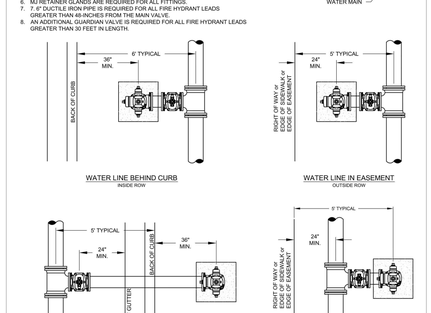
1. THE 6" GATE VALVE SHALL BE POSITIVELY RESTRAINED TO THE MAIN BY THE USE OF EITHER A SWIVEL TEE OR FOSTER ADAPTER.
2. FIRE HYDRANTS SHALL BE DESIGNED FOR A MINIMUM 48" BURY.
3. BURY LINE OF HYDRANT SHALL BE NO LESS THAN THE PROPOSED FINISHED ELEVATION OF BACK OF CURB, OR SIDEWALK, WHICHEVER IS GREATER.
4. NO MORE THAN ONE EXTENSION PER HYDRANT.
5. IF SIDEWALK IS PRESENT, HYDRANT SHALL BE INSTALLED 2' MINIMUM BEHIND THE BACK OF THE SIDEWALK OR CURB. VALVES SHALL BE INSTALLED 1' MINIMUM BEHIND THE BACK OF THE SIDEWALK OR CURB.
6. DO NOT COVER UP WEEP HOLE WITH CONCRETE.
7. MJ RETAINER GLANDS ARE REQUIRED FOR ALL FITTINGS.
8. 7, 6" DUCTILE IRON PIPE IS REQUIRED FOR ALL FIRE HYDRANT LEADS GREATER THAN 48-INCHES FROM THE MAIN VALVE.
9. AN ADDITIONAL GUARDIAN VALVE IS REQUIRED FOR ALL FIRE HYDRANT LEADS GREATER THAN 30 FEET IN LENGTH.



FIRE HYDRANT & VALVE CONNECTION

CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0468

TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	FIRE HYDRANT AND VALVE CONNECTION	REVISED	W8
DRAWN BY:	CHECKED BY:	FILE: W8-Fire Hydrant and Valve.dwg	-----

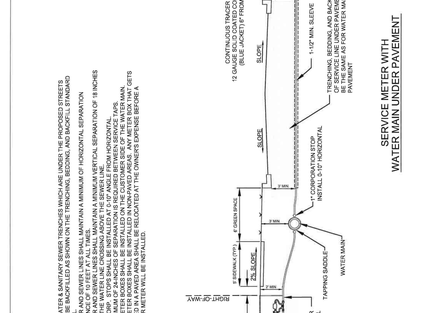


NOTES:

1. THE 6" GATE VALVE SHALL BE POSITIVELY RESTRAINED TO THE MAIN BY THE USE OF EITHER A SWIVEL TEE OR FOSTER ADAPTER.
2. FIRE HYDRANTS SHALL BE DESIGNED FOR A MINIMUM 48" BURY.
3. NO MORE THAN ONE EXTENSION PER HYDRANT.
4. IF SIDEWALK IS PRESENT, HYDRANT SHALL BE INSTALLED 2' MINIMUM BEHIND THE BACK OF THE SIDEWALK OR CURB. VALVES SHALL BE INSTALLED 1' MINIMUM BEHIND THE BACK OF THE SIDEWALK OR CURB.
5. DO NOT COVER UP WEEP HOLE WITH CONCRETE.
6. MJ RETAINER GLANDS ARE REQUIRED FOR ALL FITTINGS.
7. 7, 6" DUCTILE IRON PIPE IS REQUIRED FOR ALL FIRE HYDRANT LEADS GREATER THAN 48-INCHES FROM THE MAIN VALVE.
8. AN ADDITIONAL GUARDIAN VALVE IS REQUIRED FOR ALL FIRE HYDRANT LEADS GREATER THAN 30 FEET IN LENGTH.

CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0468

TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	FIRE HYDRANT PLACEMENT	REVISED	W9
DRAWN BY:	CHECKED BY:	FILE: W9-Fire Hydrant Placement.dwg	-----



NOTES:

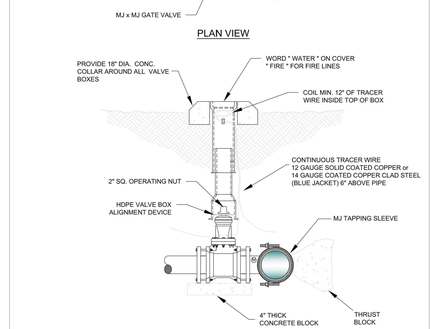
1. ALL WATER & SANITARY SEWER TRENCHES WHICH ARE UNDER THE PROPOSED STREETS SHALL BE BACKFILLED WITH SELECT MATERIAL AS PER CITY'S PAVEMENT CUT DETAIL.
2. WATER AND SEWER LINES SHALL MAINTAIN A MINIMUM OF HORIZONTAL SEPARATION DISTANCE OF 10 FEET AT ALL TIMES.
3. WATER AND SEWER LINES SHALL MAINTAIN A MINIMUM VERTICAL SEPARATION OF 18 INCHES WITH THE WATER LINE CROSSING ABOVE THE SEWER LINE.
4. ALL METER BOXES SHALL BE INSTALLED 2' MINIMUM HORIZONTAL
5. A MINIMUM OF 24-INCHES OF SEPARATION IS REQUIRED BETWEEN SERVICE TAPS.
6. ALL METER BOXES SHALL BE INSTALLED IN NON-PAVED AREAS. ANY METER BOX THAT GETS PLACED IN PAVED AREAS SHALL BE RELOCATED BY THE OWNER/DEVELOPER BEFORE A WATER METER WILL BE INSTALLED.

CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0468

TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	METER SERVICE LINE UNDER PAVEMENT	REVISED	W11
DRAWN BY:	CHECKED BY:	FILE: W11-Water Service Line Under Pavement.dwg	-----

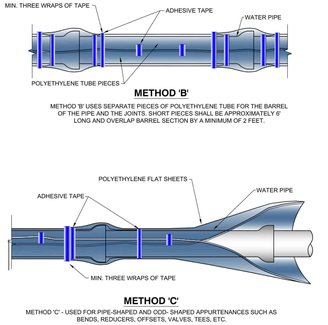
NOTES:

1. TAPPING SLEEVE SHALL BE SMITH-BLAIR 662 OR FORD FAST.
2. AFTER THE TAP IS MADE, RE-TORQUE BOLTS ON SLEEVE TO SEAL TO FINAL SHAPE OF PIPE.
3. TAPPING SLEEVE AND VALVE SHALL BE WRAPPED WITH 8 MIL POLY WRAP.



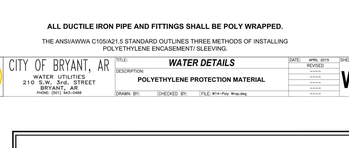
CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0468

TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	TAPPING SLEEVE AND VALVE	REVISED	W13
DRAWN BY:	CHECKED BY:	FILE: W13-Tapping Sleeve and Valve.dwg	-----



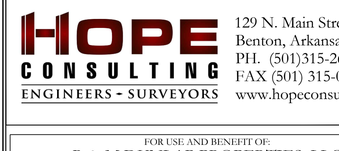
METHOD 'A'

METHOD 'A' USES ONE LENGTH OF POLYETHYLENE TUBE, OVERLAPPED AT THE JOINTS A MINIMUM OF 2 FEET.



METHOD 'B'

METHOD 'B' USES SEPARATE PIECES OF POLYETHYLENE TUBE FOR THE BARREL OF THE PIPE AND THE JOINTS. SHORT PIECES SHALL BE APPROXIMATELY 6" LONG AND OVERLAP BARREL SECTION BY A MINIMUM OF 2 FEET.



METHOD 'C'

METHOD 'C' - USED FOR PIPE-SHAPED AND OCID- SHAPED APPURTENANCES SUCH AS BENDS, REDUCERS, OFFSETS, VALVES, TEES, ETC.

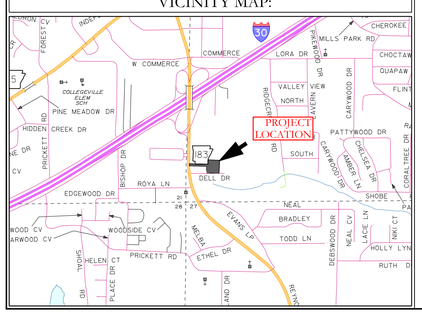
ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE POLY WRAPPED.

THE ANSI/AWWA C105/A21.5 STANDARD OUTLINES THREE METHODS OF INSTALLING POLYETHYLENE ENCASEMENT/ SLEEVING.

CITY OF BRYANT, AR — WATER UTILITIES — 210 S.W. 3rd. STREET — BRYANT, AR — PHONE: (501) 943-0468

TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	POLYETHYLENE PROTECTION MATERIAL	REVISED	W14
DRAWN BY:	CHECKED BY:	FILE: W14-Poly Wrap.dwg	-----

VICINITY MAP:



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

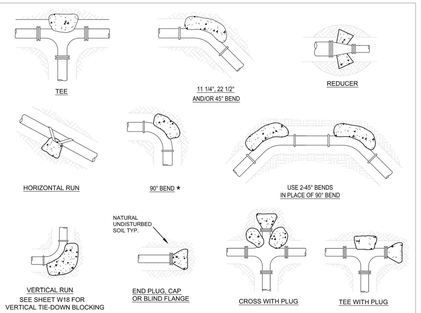
FOR USE AND BENEFIT OF:
R & M DUNLAP PROPERTIES, LLC

MEDICAL PLAZA
WATER UTILITIES DETAILS
DELL STREET, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	03/19/2025	C.A.D. BY:		DRAWING NUMBER:
REVISED:	--	CHECKED BY:		24-1351
SHEET:	C-4.0	SCALE:		

500	XX	XX	0	XX	XX	XX	XX

A:\HOPE CONSULTING\9. PROJECTS\11. 24-1351 DELL DRIVE - PH III\BRYANT\CIVIL\DWG\24-1351-DELL_DRIVE_-_PH_III.2025.DWG



THRUST BLOCK SCHEDULE

(2000 PSF SOIL, 200 PSI WATER PRESSURE, 100 PSI WATER HAMMER)

FITTING SIZE	PLUG	BEARING AREA OF THRUST BLOCKS IN SQ. FT. (HORIZONTAL BENDS)				FITTING SIZE	VOLUME OF THRUST BLOCK IN CU. FEET (VERTICAL BENDS)				ROD DIAM.	EMBED-MENT
	TEE OR CAP	90°	45°	22 1/2°	11 1/4°		90°	45°	22 1/2°	11 1/4°		
2, 3, & 4	1.9	2.7	1.4	0.7	0.4	2, 3, & 4	35.5	19.2	8.9	4.5	.75"	30"
6	5.6	7.8	4.3	2.2	1.1	6	105.8	57.2	29.2	14.7	.75"	30"
8	9.5	13.5	7.4	3.8	1.9	8	181.5	98.5	50.2	25.2	.75"	30"
12	20.5	29.0	15.7	8.0	4.0	12	387.1	209.5	106.8	53.7	1.0"	30"
16	35.5	50.2	27.1	13.8	6.9	16	670.1	362.4	184.8	92.9	1.0"	30"
18	44.9	63.6	34.3	17.5	8.8	18	848.2	457.2	233.1	117.1	1.0"	30"
24	79.4	112.9	60.0	30.8	15.4	24	1478.7	800.3	408.0	205.0	1.0"	30"

✶ 90 DEGREE BENDS SHALL ONLY BE USED ON A BY-EXCEPTION BASIS, AND MUST EACH BE SPECIFICALLY APPROVED BY CITY.

THRUST BLOCK NOTES:

1. CONCRETE FOR THRUST BLOCKS - CLASS A CONCRETE SHALL DEVELOP NOT LESS THAN 3000 P.S.I. COMPRESSIVE STRENGTH AT 28 DAYS AND BE PLACED AGAINST UNDISTURBED SOIL.
2. ALL BENDS, BOTH HORIZONTAL AND VERTICAL, SHALL BE BACKED WITH CONCRETE. VERTICAL BENDS SHALL BE PLACED ON CONCRETE PADS WHERE BENDS TURN UP, OR LOADED WHERE BENDS TURN DOWN.
3. WRAP PIPE JOINTS IN 8 MIL "POLYETHYLENE" BEFORE PLACING CONCRETE.
4. BEARING AREA SHOWN IN TABLE, IS BASED UPON A 2000 LB/SF. SOIL BEARING, AND UPON A PIPELINE PRESSURE OF 200 psi. PLUS 100 psi. WATER HAMMER. AREAS SHOWN SHALL BE ADJUSTED. SHOULD FIELD CONDITIONS VARY.
5. USE LONG-RADIUS FITTINGS WHEREVER POSSIBLE.
6. ALL BOLTS FOR FITTINGS SHALL BE 316 STAINLESS STEEL.
7. ALL DUCTILE IRON FITTINGS SHALL BE FUSION-BONDED EPOXY COATED INSIDE AND OUTSIDE IN ACCORDANCE WITH ANSI/AWWA C116/A21.16.
8. UNIT WEIGHT OF CONCRETE FOR VERTICAL THRUST BLOCKS IS 150 LBS/CU. FT.

THRUST BLOCKING

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-5468	TITLE:	**WATER DETAILS**	DATE:	APRIL 2015	SHEET:
	DESCRIPTION:	**THRUST BLOCKING**	REVISED	-----	**W16**
	DRAWN BY:	CHECKED BY:	FILE: W16-Thrust Blocking.dwg	-----	

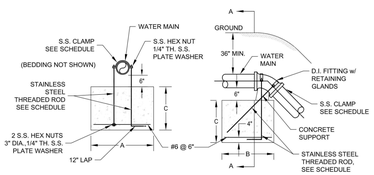
4/30/2015 3:04:07 AM

BLOCKING SCHEDULE

PIPE SIZE		BENDS 45°	BENDS 22 1/2°	BENDS 11 1/4°	ROD DIA.
8"	VOLUME REQ'D (CU. FT.)	98.5	50.2	25.2	
	A (FT.)	5.00'	4.00'	3.00'	
	B (FT.)	4.00'	3.20'	2.80'	3/4 IN.
	C (FT.)	5.00'	4.00'	3.00'	
	MIN. CLAMP (2 EA.)	3/8 IN. x 2 IN.			
12"	VOLUME REQ'D (CU. FT.)	209.5	106.8	53.7	
	A (FT.)	6.00'	5.00'	4.00'	
	B (FT.)	6.00'	4.25'	3.50'	3/4 IN.
	C (FT.)	6.00'	5.00'	4.00'	
	MIN. CLAMP (2 EA.)	1/2 IN. x 2 IN.			
18"	VOLUME REQ'D (CU. FT.)	457.2	233.1	117.1	
	A (FT.)	8.00'	6.50'	5.00'	
	B (FT.)	7.25'	5.50'	4.75'	1 IN.
	C (FT.)	8.00'	6.50'	5.00'	
	MIN. CLAMP (2 EA.)	5/8 IN. x 3 IN.			
24"	VOLUME REQ'D (CU. FT.)	800.3	408.0	205.0	
	A (FT.)	9.50'	7.50'	6.00'	
	B (FT.)	9.00'	7.25'	5.75'	1 1/4 IN.
	C (FT.)	9.50'	7.50'	6.00'	
	MIN. CLAMP (2 EA.)	5/8 IN. x 3 IN.			

VOLUME CALCULATED ON THE BASIS OF CONCRETE REACTING THRUST ON THE RESPECTIVE BENDS UNDER AN INTERNAL PRESSURE OF 250 PSI, 50 PSI SURGE AND THE WEIGHT OF CONCRETE IS 150 POUNDS PER CU. FT.

ALL FITTINGS SHALL BE MECHANICAL JOINTS WITH RETAINING GLANDS. BEDDING NOT SHOWN



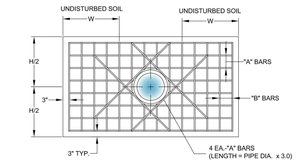
VERTICAL TIE-DOWN BLOCKING

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-5468	TITLE:	**WATER DETAILS**	DATE:	APRIL 2015	SHEET:
	DESCRIPTION:	**VERTICAL TIE-DOWN BLOCKING**	REVISED	-----	**W17**
	DRAWN BY:	CHECKED BY:	FILE: W17-Vertical Tie-Down Blocking.dwg	-----	

4/30/2015 3:07:04 AM

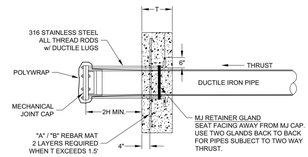
ANCHOR COLLAR SCHEDULE

PIPE SIZE	✶ MINIMUM DIMENSIONS ✶ W	H	T	REINFORCING BARS "A" BARS	"B" BARS
6"	1.5'	2.0'	1.0'	#6 @ 6"	#6 @ 6"
8"	2.0'	2.5'	1.0'	#6 @ 6"	#6 @ 6"
12"	2.5'	4.0'	1.5'	#6 @ 6"	#6 @ 6"
16"	3.5'	5.0'	1.5'	#6 @ 6"	#6 @ 6"
20"	5.0'	5.5'	2.0'	#6 @ 6"	#6 @ 6"
24"	6.5'	6.0'	2.0'	#7 @ 6"	#7 @ 10"



NOTES:

1. DESIGN PRESSURE IS 200 PSI PLUS 100 PSI SURGE AND 2,000 PSI SOIL BEARING.
2. ALL DIMENSIONS ARE MINIMUM REQUIREMENTS. ACTUAL FIELD CONDITIONS MAY REQUIRE LARGER DIMENSIONS.
3. ALL RETAINER GLANDS SHALL BE MEGA-LUG BY EBAA IRON.



ANCHOR COLLAR

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-5468	TITLE:	**WATER DETAILS**	DATE:	APRIL 2015	SHEET:
	DESCRIPTION:	**ANCHOR COLLAR**	REVISED	-----	**W18**
	DRAWN BY:	CHECKED BY:	FILE: W18-Anchor Collar.dwg	-----	

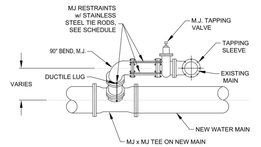
4/30/2015 3:47:03 AM

NOTES:

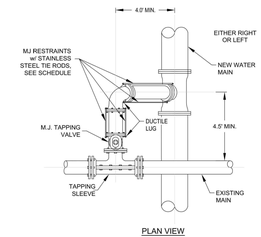
1. SWING CONNECTIONS USING 90° BENDS SHALL BE PERMITTED BY THE CITY ON A CASE BY CASE BASIS.
2. CONTRACTOR SHALL LOCATE EXISTING MAIN IN ADVANCE OF LAYING NEW LINE IN ORDER TO ASSURE ADEQUATE LENGTH TO ADJUST DEPTH OF NEW MAIN.
3. DIMENSIONS SHOWN ARE RECOMMENDED MINIMUMS TO PROVIDE ADEQUATE ROOM FOR TIGHTENING BOLTS ON JOINTS (OTHER DIMENSIONS MAY BE USED).
4. PROVIDE ALL THREAD STAINLESS STEEL TIE RODS WITH DUCTILE LUGS FOR ANCHORING ALL JOINTS.
5. ROTATE TEE UP & ELBOW DOWN AS REQUIRED TO MATCH.
6. TRACER WIRE SHALL BE INSTALLED ON ALL NEW WATER LINES.
7. ALL FITTINGS, VALVES, AND DIP SHALL BE POLY WRAPPED.

SCHEDULE OF TIE RODS

SIZE	NUMBER OF ROD PER FITTING	DIAMETER OF S.S. RODS
8"	4	3/4"
12"	4	3/4"



SECTION VIEW



PLAN VIEW

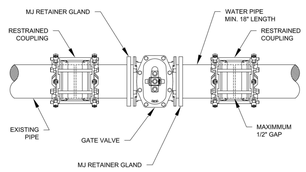
SWING CONNECTION - NEW MAIN TO EXISTING MAIN

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-5468	TITLE:	**WATER DETAILS**	DATE:	APRIL 2015	SHEET:
	DESCRIPTION:	**SWING CONNECTION - NEW MAIN TO EXISTING MAIN**	REVISED	-----	**W20**
	DRAWN BY:	CHECKED BY:	FILE: W20-Swing_Connection.dwg	-----	

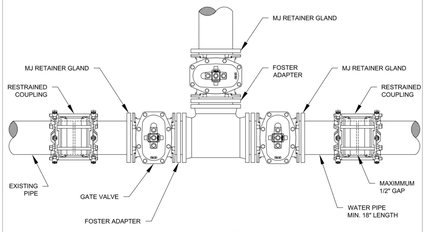
4/30/2015 3:47:03 AM

NOTES:

1. ALL VALVES SHALL BE SECURELY ANCHORED.
2. ALL HARDWARE SHALL BE 316 STAINLESS STEEL.
3. IF DEPTH OF BURY EXCEEDS 4 FT., A VALVE STEM EXTENSION SHALL BE REQUIRED. THE VALVE STEM EXTENSION NUT SHALL BE WITHIN 24-INCHES TO 12-INCHES OF THE FINISHED SURFACE.



VALVE CUT-IN



TEE AND VALVES CUT-IN

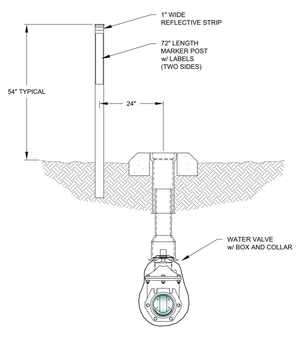
VALVE CUT-IN

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-5468	TITLE:	**WATER DETAILS**	DATE:	APRIL 2015	SHEET:
	DESCRIPTION:	**VALVE CUT-IN**	REVISED	-----	**W21**
	DRAWN BY:	CHECKED BY:	FILE: W21-Valve Cut In.dwg	-----	

4/30/2015 3:47:03 AM

NOTES:

1. WATER LINE MARKERS SHALL BE TRI-VIEW MARKING SYSTEM BY RHINO MARKING AND PROTECTION SYSTEMS OR CARSONITE INTERNATIONAL DUAL-SIDED UTILITY MARKER (CIB-380).
2. THE UPPERMOST PORTION OF THE CARSONITE MARKER SHALL BE MADE OF VISIBILITY ENHANCER (CVE-360).
3. TRI-VIEW MARKERS DO NOT REQUIRE VISIBILITY ENHANCERS.
4. AN ADDITIONAL WHITE 1" WIDE REFLECTIVE TAPE (3M OR EQUAL) SHALL BE PLACED AROUND THE FULL CIRCUMFERENCE OF THE TOP OF THE MARKER.



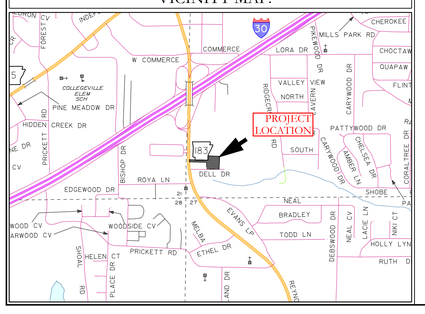
VALVE MARKER

VALVE MARKER

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-5468	TITLE:	**WATER DETAILS**	DATE:	APRIL 2015	SHEET:
	DESCRIPTION:	**VALVE MARKER**	REVISED	-----	**W22**
	DRAWN BY:	CHECKED BY:	FILE: W22-Valve Marker.dwg	-----	

4/30/2015 3:47:03 AM

VICINITY MAP:



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

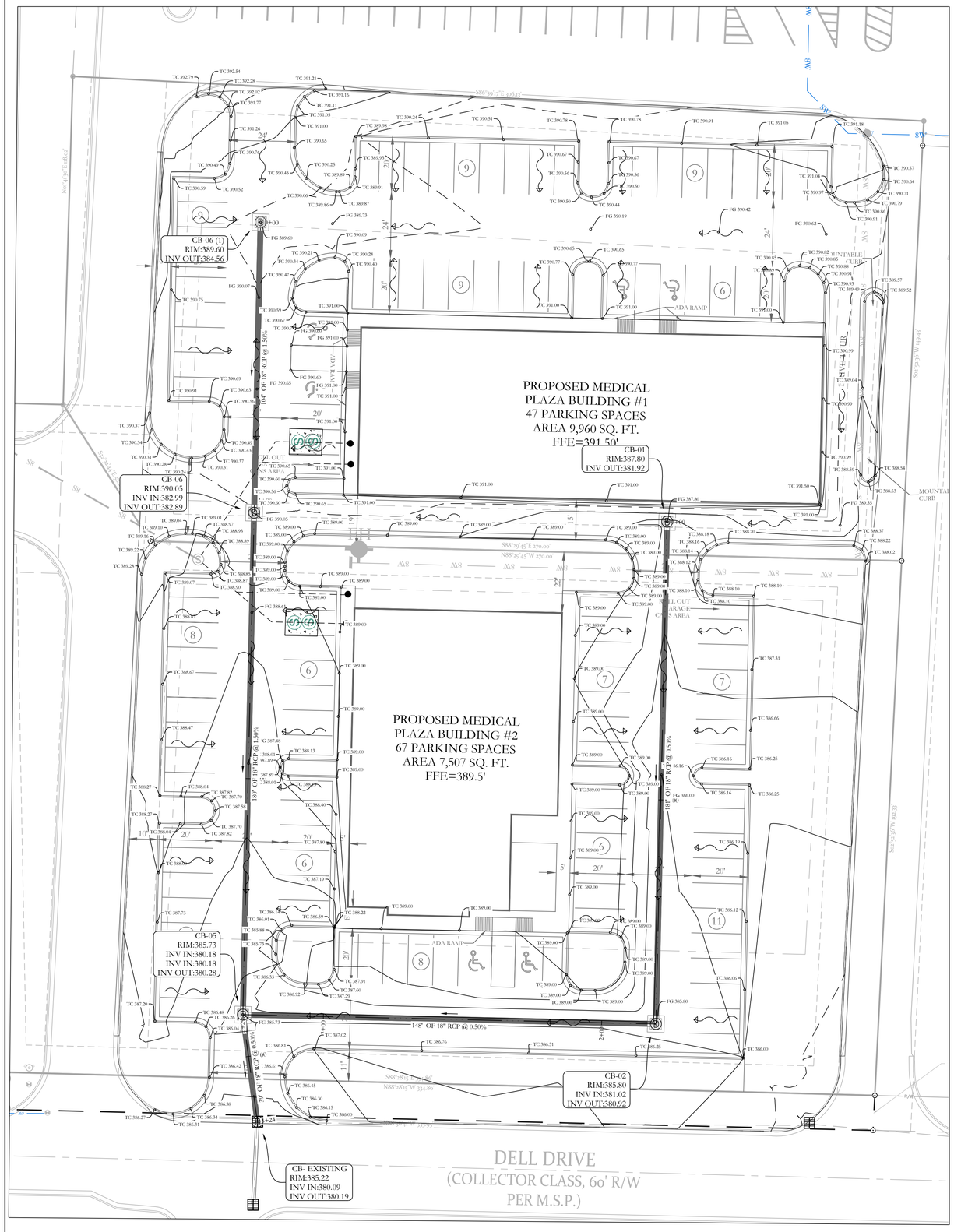
FOR USE AND BENEFIT OF:
R & M DUNLAP PROPERTIES, LLC

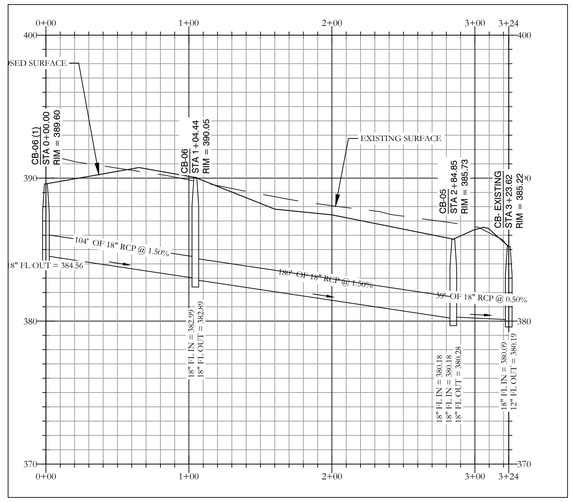
MEDICAL PLAZA
WATER UTILITIES DETAILS
DELL STREET, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	03/19/2025	C.A.D. BY:	DRAWING NUMBER:
REVISED:	--	CHECKED BY:	24-1351
SHEET:	C-4.1	SCALE:	

500	XX	XX	0	XX	XX	XX	XX

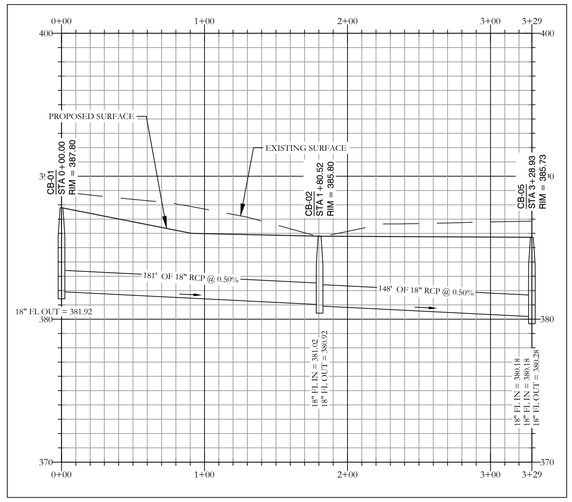
A:\HOPE CONSULTING\0. PROJECTS\11-24-1351 DELL DR\DRAWINGS\24-1351 DELL DR-MP-PH II.DWG 03/19/2025 3:07:38 PM





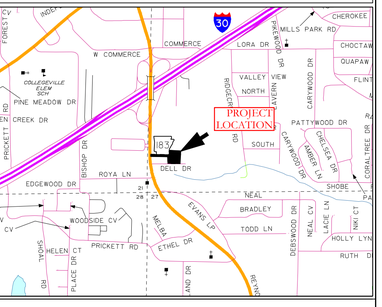
PROPOSED STORM DRAIN-A PROFILE

VERTICAL SCALE 1" = 5'
HORIZONTAL SCALE 1" = 50'



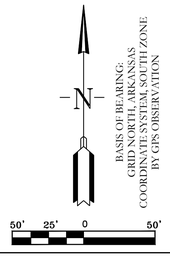
PROPOSED STORM DRAIN-B PROFILE

VERTICAL SCALE 1" = 5'
HORIZONTAL SCALE 1" = 50'





HDPE
RCP



LEGEND

- PLSS Aliquot Corner
- Fnd. Corner Monument
- Set 1/2" Rebar/Cap (#664)
- Computed Point
- (M)- As Measured
- (P) - Per Deed or Plat Records
- ESMT - Easement
- B.S.L. - Building Setback Lines
- Clean Out
- Water Meter
- Power Pole
- Sewer Manhole
- Light Pole
- Telephone Pedestal
- Drainage Manhole
- Gas Meter
- Fence
- Overhead Power
- Sewer Line
- Water Line
- Telephone Line
- Electric Line
- Gas Line
- Existing Access Agreement
- Public Right-of-Way Dedication
- Water Flow Path

OWNER:
Name: R & M DUNLAP PROPERTIES, LLC
Address: _____
_____
Phone: _____
Email: _____

DEVELOPER:
Name: R & M DUNLAP PROPERTIES, LLC
Address: _____
_____
Phone: _____
Email: _____

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

FOR USE AND BENEFIT OF:
R & M DUNLAP PROPERTIES, LLC

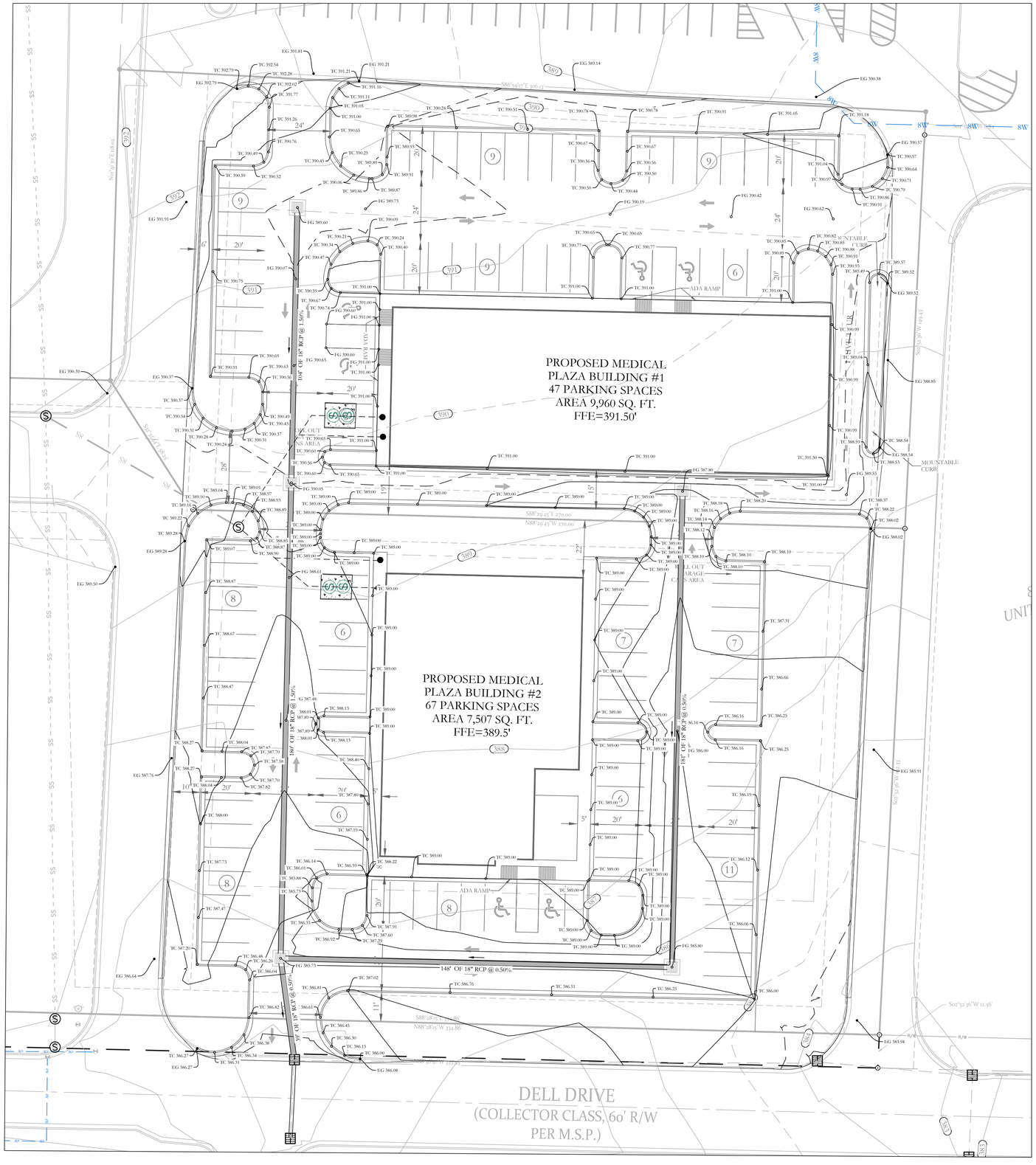
MEDICAL PLAZA
STORM DRAINAGE PLAN & PROFILE

DELL STREET, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	03/19/2025	C.A.D. BY:	DRAWING NUMBER: 24-1351
REVISED:	--	CHECKED BY:	
SHEET:	C-5.0	SCALE:	1" = 20"

500	XX	XX	0	XX	XX	XX	XX

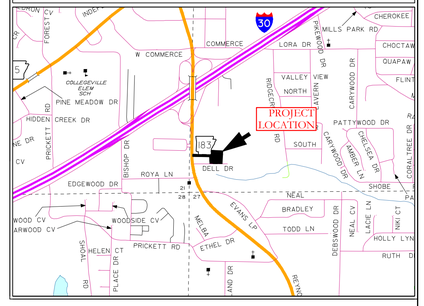
A:\HOPE CONSULTING\0. PROJECTS\11-24-1351 DELL DRIVE, BRYANT, AR\DWG\24-1351 DELL DR.dwg 03/19/2025 1:04:27 PM



GRADING PLAN NOTES

1. DESIGN CONTOURS SHOWN ARE FINISHED GRADE.
2. SPOT ELEVATIONS SHOWN ARE FINISHED ASPHALT, GROUND OR CONCRETE ELEVATIONS.
3. CLEAR AND GRUB AREAS OF THE SITE WHERE CUT OR FILL IS TO OCCUR.
4. FILL SHALL BE COMPACTED AT LEAST 98% OF THE MATERIALS MAXIMUM STANDARD PROCTOR DRY DENSITY.
5. THE MOISTURE CONTENT OF 1% BELOW TO 3% ABOVE THE OPTIMUM MOISTURE CONTENT.
6. SUB-GRADES SHALL BE PROOF-ROLLED WITH A LOADED DUMP TRUCK TO DETECT ZONES OF UNSUITABLE AND/OR EXCESSIVELY WET SOILS. IF PUMPING BEGINS, COMPACTION SHALL BE STOPPED IMMEDIATELY AND RESUMED ONLY WHEN THE MATERIAL IS SUFFICIENTLY DRY THAT PUMPING DOES NOT OCCUR.
7. ALL UNUSABLE SOILS SHALL BE USED ON SITE FOR FILL PURPOSES OUTSIDE THE AREAS OF BUILDING AND PAVEMENT CONSTRUCTION.
8. PROPER DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE PROJECT SITE TO PREVENT THE INCREASE OF THE IN-SITU SOILS MOISTURE CONTENT.

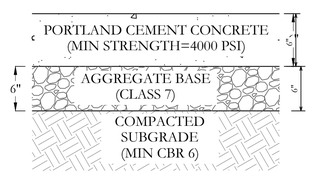
VICINITY MAP:



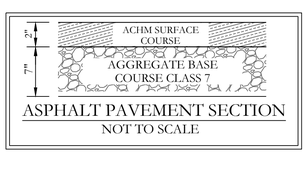
OWNER:	DEVELOPER:
Name: R & M DUNLAP PROPERTIES, LLC	Name: R & M DUNLAP PROPERTIES, LLC
Address:	Address:
Phone:	Phone:
Email:	Email:

LEGEND

- PLSS Aliquot Corner
- Fnd. Corner Monument
- Set 1/2" Rebar/Cap (1664)
- Computed Point
- (M)- As Measured
- (P)- Per Deed or Plat Records
- ESMT - Easement
- B.S.L. - Building Setback Lines
- Clean Out
- Water Meter
- Power Pole
- Sewer Manhole
- Light Pole
- Telephone Pedestal
- Drainage Manhole
- Gas Meter
- Fence
- Overhead Power
- Sewer Line
- Water Line
- Telephone Line
- Electric Line
- Gas Line
- Existing Access Agreement
- Public Right-of-Way Dedication

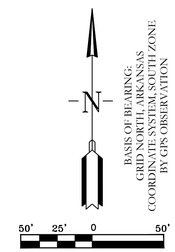


HEAVY DUTY CONCRETE PAVEMENT SECTION
NOT TO SCALE



ASPHALT PAVEMENT SECTION
NOT TO SCALE

HDPE
RCP



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

FOR USE AND BENEFIT OF:
R & M DUNLAP PROPERTIES, LLC

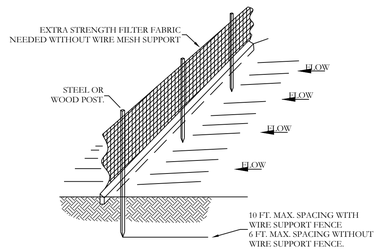
MEDICAL PLAZA
GRADING PLAN
DELL STREET, BRYANT, SALINE COUNTY, ARKANSAS

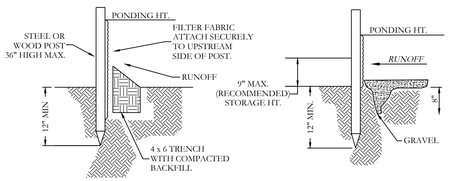
DATE:	03/19/2025	C.A.D. BY:	DRAWING NUMBER:
REVISED:	--	CHECKED BY:	24-1351
SHEET:	C-6.0	SCALE: 1" = 20"	

500	XX	XX	0	XX	XX	XX	XX

CERTIFICATE OF AUTHORIZATION
HOPE CONSULTING, INC.
No. 1931
ARKANSAS

C:\HOPE\PROJECTS\2024\24-1351\CAD\DWG\24-1351 GRADING.DWG 03/19/2025 10:47:21 AM CDT





STANDARD DETAIL
TRENCH WITH NATIVE BACKFILL.

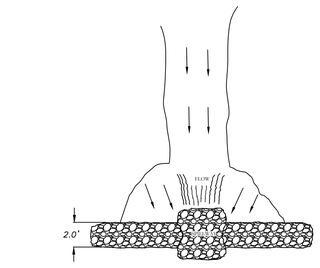
ALTERNATE DETAIL
TRENCH WITH GRAVEL

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

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

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

SILT FENCE



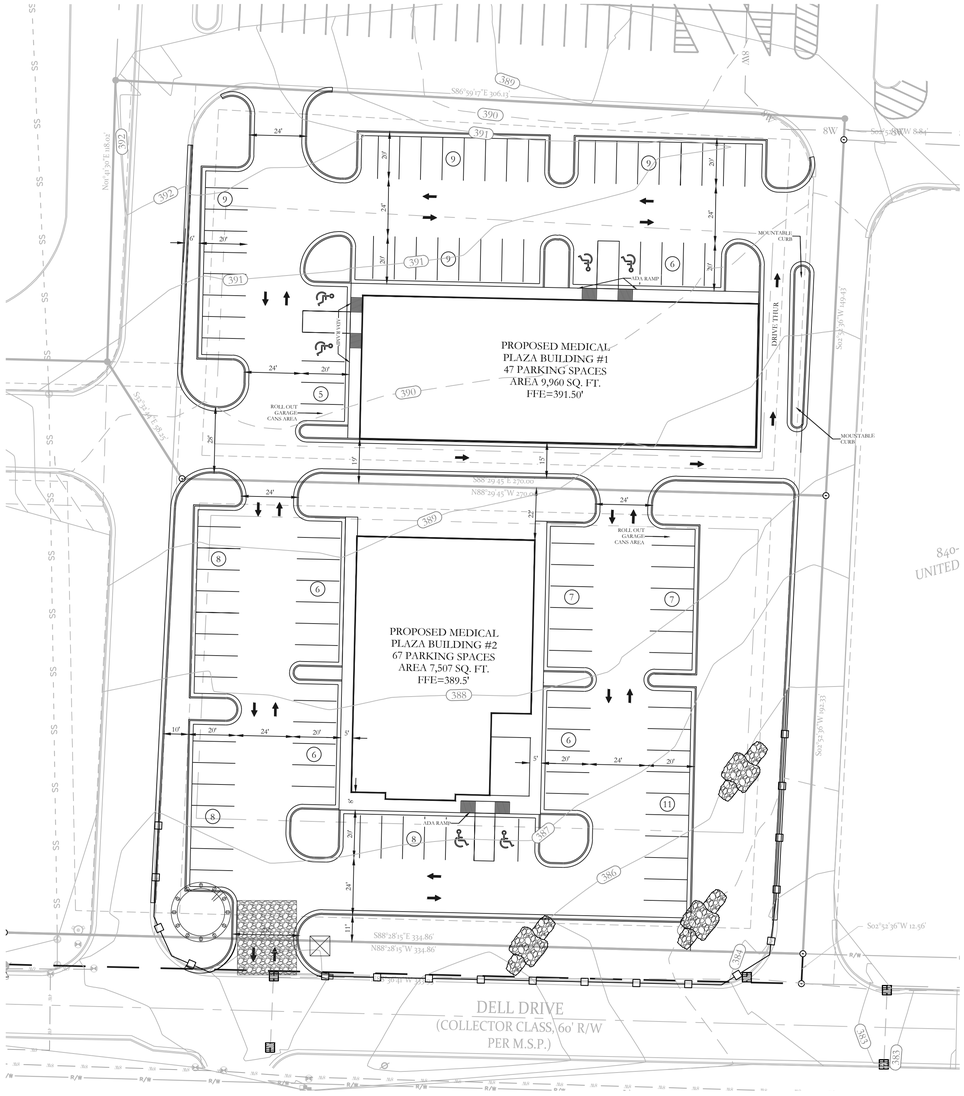
PLAN



VIEW LOOKING UPSTREAM

NOTES:
1.) POINT 'A' MUST BE HIGHER THAN POINT 'B' (SPILLWAY HEIGHT).
2.) THE CHECK DAM MUST BE KEYED INTO THE BANKS OF THE FLOW WITH TIGHT GROUPING.
3.) USE STONE, ROCKS, OR FILTER FABRIC TO FILL THE CHECK DAM.
BACKFILL MATERIAL TO PREVENT EROSION OR FLOW AROUND THE DAM.
3.) SPILLWAY HEIGHT SHALL NOT EXCEED 16"-24".
4.) INSPECT AFTER EACH SIGNIFICANT STORM, MAINTAIN AND REPAIR PROMPTLY.

RIP-RAP
CHECK DAM



ERC LEGEND

SITE POSTING

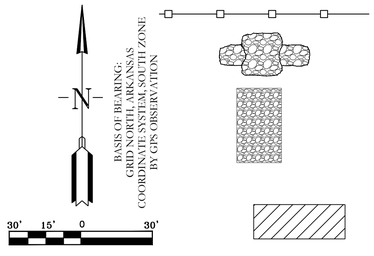
CONC. WASHOUT DETENTION AREA

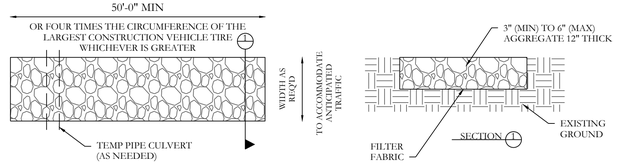
SILT FENCE

RIP RAP CHECK DAM

CONSTRUCTION ENTRANCE

DISTURBED AREA





STABILIZED CONSTRUCTION ENTRANCE
N.T.S

EROSION CONTROL NOTES

SOD OR SEED DETENTION AREA POST-CONSTRUCTION (IF APPLICABLE)

MAXIMUM SLOPE OF 3H:1V ON DETENTION POND LEVEES

CONTRACTOR MUST HAVE INLET PROTECTION MEASURES INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF DRAINAGE INLETS/STRUCTURES IS COMPLETE. SEDIMENT BARRIERS SHALL BE MAINTAINED THROUGHOUT AND INSPECTED THROUGHOUT CONSTRUCTION PROCESS UNTIL PROJECT IS COMPLETE

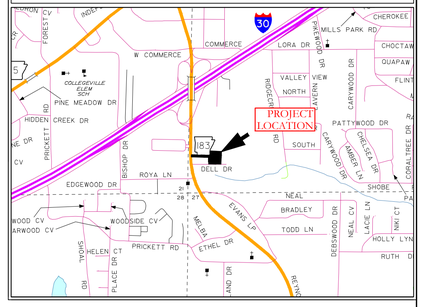
RIP RAP SEDIMENT BARRIERS SHALL BE USED AT ALL STORMWATER DISCHARGE POINTS SHOWN ON PLANS ASAP

CONTRACTOR SHOULD WORK WITH ENGINEER TO ESTABLISH EFFECTIVE AND EFFICIENT PLAN TO PREVENT SEDIMENT RUNOFF BY DETERMINING WHERE SILT FENCING OR OTHER TYPES OF CONTROLS ARE NECESSARY

SOME EROSION CONTROL MEASURES, SILT FENCING, OR CHECK DAMS MAY NOT BE NECESSARY DURING INITIAL ROW CLEARING BUT MAY BE NEEDED ONCE LOT CLEARING AND HOME BUILDING BEGINS

EXISTING VEGETATION WILL ONLY BE REMOVED INSIDE ROW AND WITHIN HOUSE FOOTPRINTS AS THEY ARE CONSTRUCTED. ADDITIONAL SILT FENCING WILL BE ADDED TO INDIVIDUAL LOTS AS HOME CONSTRUCTION TAKES PLACE.

VICINITY MAP:



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

CERTIFICATE OF AUTHORIZATION
HOPE CONSULTING, INC.
No. 1931
ARKANSAS

FOR USE AND BENEFIT OF:
R & M DUNLAP PROPERTIES, LLC

MEDICAL PLAZA
EROSION CONTROL PLAN
DELL STREET, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	03/19/2025	C.A.D. BY:	DRAWING NUMBER:
REVISED:	--	CHECKED BY:	24-1351
SHEET:	C-7.0	SCALE: 1" = 30"	

500	XX	XX	0	XX	XX	XX	XX

A:\HOPE CONSULTING\0 PROJECTS\11. 24-1351 DELL DRIVE - PHILLIP RYE\CIVIL\DWGS\24-1351-24-1351_DELL_DRIVE_03.18.2025.DWG