

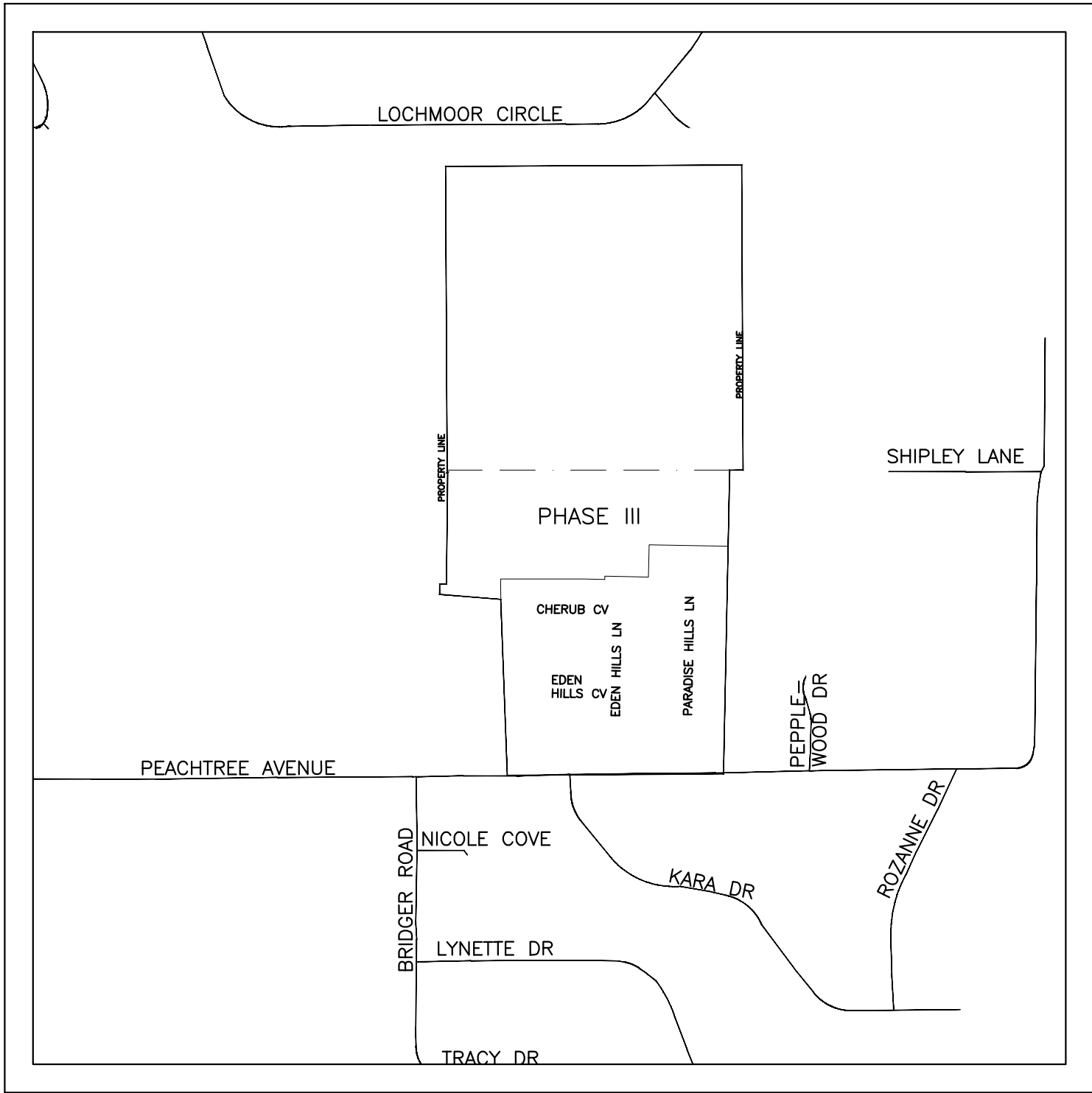
EDEN HILLS ESTATES

EDEN HILLS PHASE III UTILITY PLANS

JONESBORO, CRAIGHEAD COUNTY, ARKANSAS

LOCAL CONTACTS

CITY OF JONESBORO ENGINEERING DEPT.	870-932-2438
CITY OF JONESBORO PLANNING AND ZONING	870-932-0406
CITY, WATER, & LIGHT	870-935-5581
AT&T	1-800-464-7928
RITTER COMMUNICATIONS	870-336-3400
SUDDENLINK COMMUNICATIONS	870-935-3615
CENTER POINT ENERGY	870-972-6682



VICINITY MAP
(NOT TO SCALE)



NAD83 Arkansas State Planes, North Zone, US Foot

INDEX OF SHEETS

PAGE	DESCRIPTION
C-1	COVER PAGE
P-1	PLAT
OV-1	KEY MAP
OV-2	OVERALL UTILITY PLAN
E-1	EROSION CONTROL PLAN
WT-1	WATER PLAN
SW-1	SEWER PLAN
SW-2	SANITARY SEWER PROFILE A
SW-3	SANITARY SEWER PROFILE A
GR-1	GRADING & DRAINAGE PLAN
ST-1	STREET PLAN & PROFILE
ST-2	STREET PLAN & PROFILE
DT-1	EROSION CONTROL DETAILS
DT-2	WATER DETAILS
DT-3	SANITARY SEWER DETAILS
DT-4	CONSTRUCTION DETAILS

EDEN HILLS PHASE III

COVER PAGE

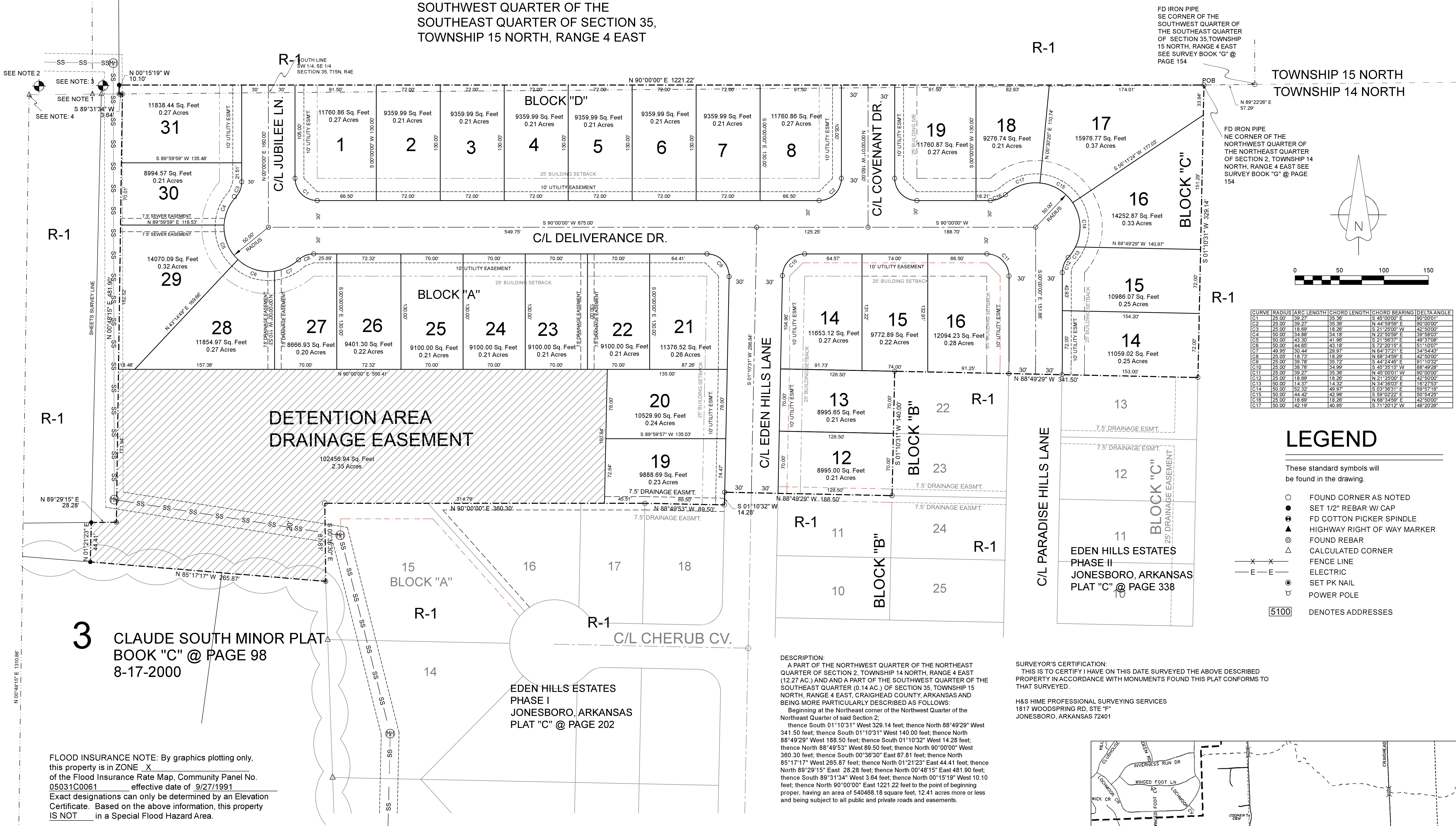


REVISIONS		
DATE	BY	DESCRIPTION
DRAWING INFO.		
DRAWN BY:	GMD	
DATE:	4/1/2021	
SCALE:	1"=50'	
SHEET NUMBER:		
C-1		

MARK MORRIS P.E.
3221 SHELBY DRIVE
JONESBORO, AR 72404
PH: 1-870-919-7700
MARK.B.MORRIS@YAHOO.COM

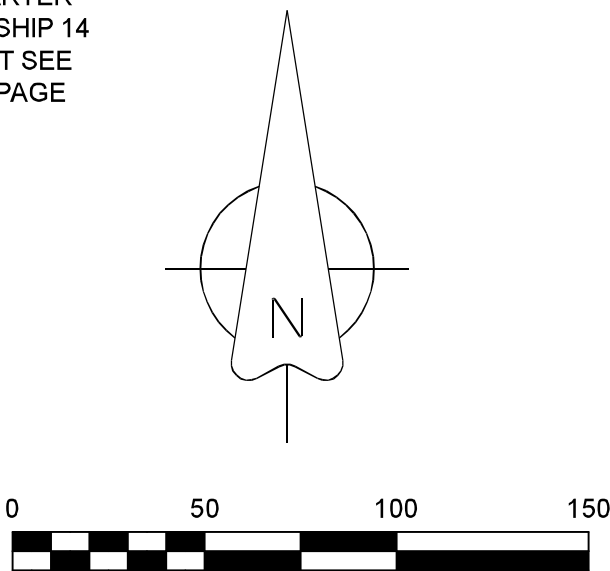
MARK MORRIS

SOUTHWEST QUARTER OF THE
SOUTHEAST QUARTER OF SECTION 35,
TOWNSHIP 15 NORTH, RANGE 4 EAST



FD IRON PIPE
SE CORNER OF THE
SOUTHWEST QUARTER OF
THE SOUTHEAST QUARTER
OF SECTION 35, TOWNSHIP
15 NORTH, RANGE 4 EAST
SEE SURVEY BOOK "G" @
PAGE 154

FD IRON PIPE
NE CORNER OF THE
NORTHWEST QUARTER OF
THE NORTHEAST QUARTER
OF SECTION 2, TOWNSHIP 14
NORTH, RANGE 4 EAST SEE
SURVEY BOOK "G" @ PAGE
154



CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
G1	25.00	39.27	35.36	S 45°00'00" E	90°00'01"
G2	25.00	39.27	35.36	N 44°59'59" E	90°00'00"
G3	25.00	18.69	18.26	S 21°25'00" W	42°50'00"
G4	50.00	34.88	34.18	N 22°50'59" E	39°58'03"
G5	50.00	33.30	41.86	S 21°56'37" E	49°27'08"
G6	50.00	44.65	43.18	S 72°20'15" E	51°10'07"
G7	49.99	30.44	29.97	N 64°37'21" E	34°54'43"
G8	25.00	18.73	18.29	N 68°34'59" E	42°50'00"
G9	25.00	39.78	35.72	S 44°24'45" E	91°10'32"
G10	25.00	38.76	34.99	S 45°35'19" W	88°49'28"
G11	25.00	39.27	35.36	N 45°00'01" W	90°00'00"
G12	25.00	18.69	18.26	N 21°25'00" E	42°50'00"
G13	50.00	14.37	14.32	N 34°36'03" E	16°27'53"
G14	50.00	52.32	49.97	S 03°36'31" E	59°47'18"
G15	50.00	44.42	42.98	S 59°02'22" E	50°54'25"
G16	25.00	18.69	18.26	N 68°34'59" E	42°50'00"
G17	50.00	42.19	40.95	S 71°20'12" W	48°20'28"

LEGEND

These standard symbols will
be found in the drawing.

- FOUND CORNER AS NOTED
- SET 1/2" REBAR W/ CAP
- FD COTTON PICKER SPINDLE
- ▲ HIGHWAY RIGHT OF WAY MARKER
- ⊙ FOUND REBAR
- △ CALCULATED CORNER
- X—X— FENCE LINE
- E—E— ELECTRIC
- ⊙ SET PK NAIL
- ⊕ POWER POLE
- 5100 DENOTES ADDRESSES

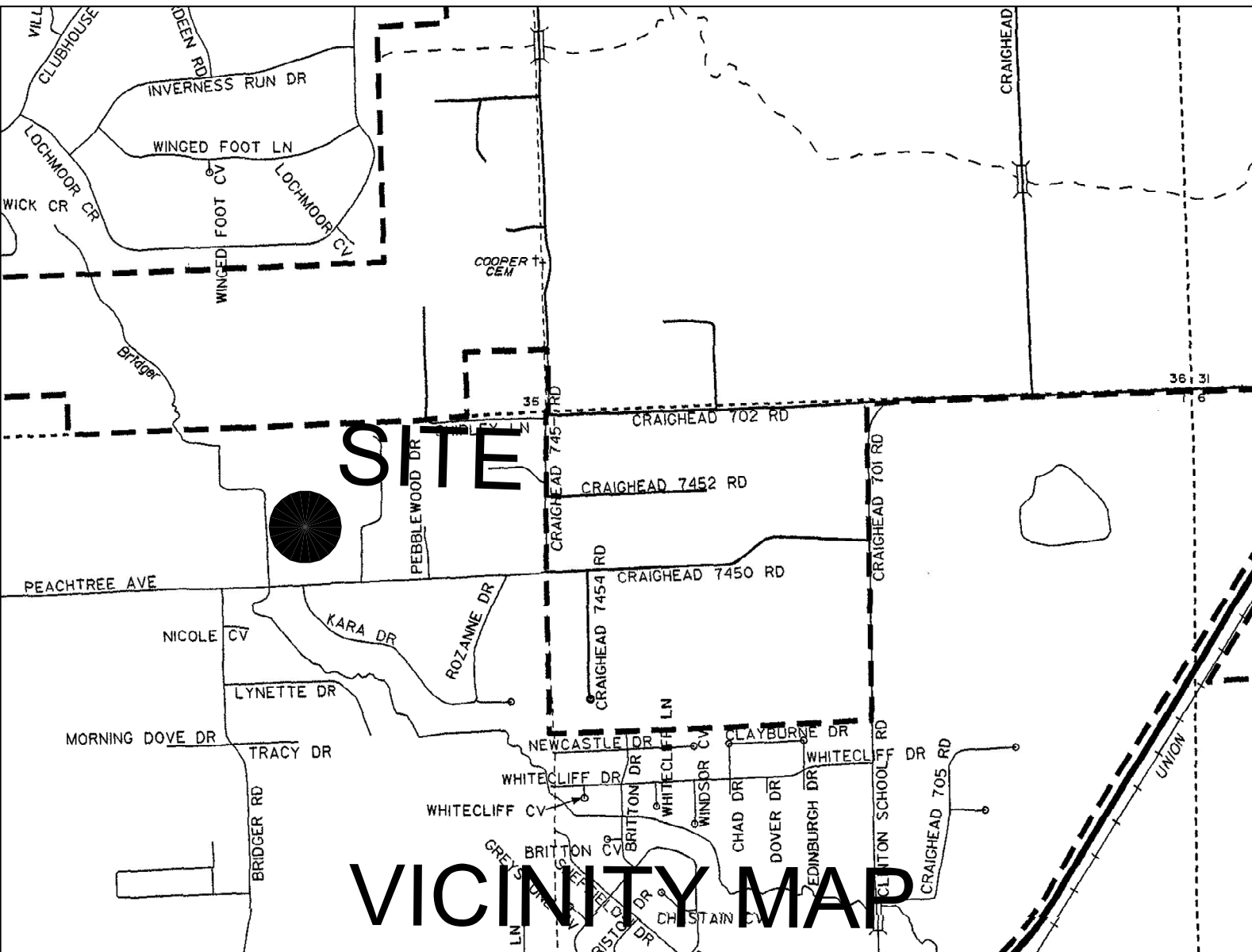
DESCRIPTION:
A PART OF THE NORTHWEST QUARTER OF THE NORTHEAST
QUARTER OF SECTION 2, TOWNSHIP 14 NORTH, RANGE 4 EAST
(12.27 AC.) AND A PART OF THE SOUTHWEST QUARTER OF THE
SOUTHEAST QUARTER (0.14 AC.) OF SECTION 35, TOWNSHIP 15
NORTH, RANGE 4 EAST, CRAIGHEAD COUNTY, ARKANSAS AND
BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
Beginning at the Northeast corner of the Northwest Quarter of the
Northeast Quarter of said Section 2;
thence South 01°10'31" West 329.14 feet; thence North 88°49'29" West
341.50 feet; thence South 01°10'31" West 140.00 feet; thence North
88°49'29" West 188.50 feet; thence South 01°10'32" West 14.28 feet;
thence North 88°49'53" West 89.50 feet; thence North 90°00'00" West
360.30 feet; thence South 00°36'30" East 87.81 feet; thence North
85°17'17" West 265.87 feet; thence North 01°21'23" East 44.41 feet; thence
North 89°29'15" East 28.28 feet; thence North 00°48'15" East 481.90 feet;
thence South 89°31'34" West 3.64 feet; thence North 00°15'19" West 10.10
feet; thence North 90°00'00" East 1221.22 feet to the point of beginning
proper, having an area of 540468.18 square feet, 12.41 acres more or less
and being subject to all public and private roads and easements.

SURVEYOR'S CERTIFICATION:
THIS IS TO CERTIFY I HAVE ON THIS DATE SURVEYED THE ABOVE DESCRIBED
PROPERTY IN ACCORDANCE WITH MONUMENTS FOUND THIS PLAT CONFORMS TO
THAT SURVEYED.

H&S HIME PROFESSIONAL SURVEYING SERVICES
1817 WOODSPRING RD, STE "F"
JONESBORO, ARKANSAS 72401

OWNER CERTIFICATION:
WE HEREBY CERTIFY THAT WE THE OWNERS OF THE PROPERTY SHOWN AND
DESCRIBED HEREON AND THAT WE ADOPT THE PLAN OF THE SUBDIVISION AND DEDICATED
PERPETUAL USE OF ALL STREETS AND EASEMENTS AS NOTED.

MARK MORRIS



SETBACK NOTES:
R-1 ZONING
25' FRONT SETBACK
7.5' SIDE YARD SETBACK
25' REAR SETBACK

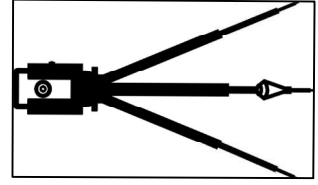
FLOOD INSURANCE NOTE: By graphics plotting only,
this property is in ZONE X
of the Flood Insurance Rate Map, Community Panel No.
05031C0061 effective date of 9/27/1991
Exact designations can only be determined by an Elevation
Certificate. Based on the above information, this property
IS NOT in a Special Flood Hazard Area.

SURVEYOR NOTES:
1. FD ARKANSAS STATE ALUM. MONUMENT SET BY MICHAEL DANIELS. NOT ACCEPTED THIS SURVEY. NO RECORD
FOUND; MARKED SOUTH 1/4 CORNER SECTION 35, T15N, R4E -540100) NO RECORD FOUND.
2. FD ARKANSAS STATE ALUM. MONUMENT SET BY SINGLE PROPORTIONATE MEASURE FROM THE NORTHWEST
AND NORTHEAST CORNERS OF SECTION 2, T14N, R4E NOTE ACCEPTED THIS SURVEY; (PLSS CORNER
CERTIFICATES DATED 12-31-2012) NOT RECORDED. (MARKED NORTH 1/4 CORNER OF SECTION 2, T14N, R4E 540700).
3. CALCULATED CORNER FOR THE SOUTHWEST CORNER (SOUTH 1/4 CORNER) OF THE SOUTHWEST QUARTER OF
THE SOUTHEAST QUARTER OF SECTION 35, TOWNSHIP 15 NORTH, RANGE 4 EAST AS PER AREA SURVEYS. USED
AND ACCEPTED CORNER POSITION OF A TROY SHEETS SURVEY DATED 3-04-1982 AND RECORDED BOOK "G" @
PAGE 154. (FD ALUM. MON 9.6' NORTH & 11.80' EAST NOT ACCEPTED)
4. CALCULATED CORNER FOR THE NORTHWEST CORNER OF THE NORTHWEST QUARTER OF THE NORTHEAST
QUARTER (NORTH 1/4 CORNER) OF SECTION 2, TOWNSHIP 14 NORTH, RANGE 4 EAST AS PER TROY SHEETS
SURVEY (FD ALUM MON 9.7' NORTH & 11.2' EAST NOT ACCEPTED)
5. FD NAIL WITH CAP FOR THE SECTION CORNERS TO 35 & 36. T15N, R4E. ACCEPTED THIS SURVEY. THE NAIL
APPEARS TO HAVE BEEN PLACED IN THE POSITION OF A COTTON PICKER SPINDLE FOUND IN OTHER SURVEY BY
MYSELF.
6. FD ARKANSAS ALUM. MONUMENT FOR THE SECTION CORNERS OF SECTIONS 1 & 2, T14N, R4E.
7. FD. ARKANSAS ALUM. MONUMENT FOR THE CENTER OF SECTION 2, T14N, R4E SET BY MICHAEL DANIELS.
DANIELS REMOVED EXISTING 1 1/2" IRON PIPE AND SET MONUMENT. CORNERS APPEARS TO PLACE IN ORIGINAL
SURVEY OF THE AREA. (DATED 12-31-2012 NO RECORD FOUND)
8. FD ARKANSAS ALUM. MONUMENT FOR NW CORNER OF SECTION 2, T14N, R4E. ACCEPTED THIS SURVEY.
MICHAEL DANIELS REMOVED EXISTING 5/8" REBAR AND REPLACED WITH MONUMENT.
9. FD AND ACCEPTED RR SPIKE FOUND BY MYSELF IN 8-17-2000 FOR CLAUDE SOUTH MINOR PLAT (C) @ PAGE 98
, ALSO FD COTTON PICKER SPINDLE 1.6 FEET SOUTH & 23.14 FEET WEST AND A PK NAIL 12.5 NORTH AND 20.36
WEST BOTH NOT ACCEPTED.

H&S HIME PROFESSIONAL
SURVEYING SERVICES

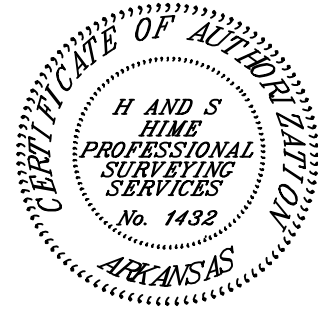
PHONE: 870-972-1288
EMAIL: hstime_butch@yahoo.com

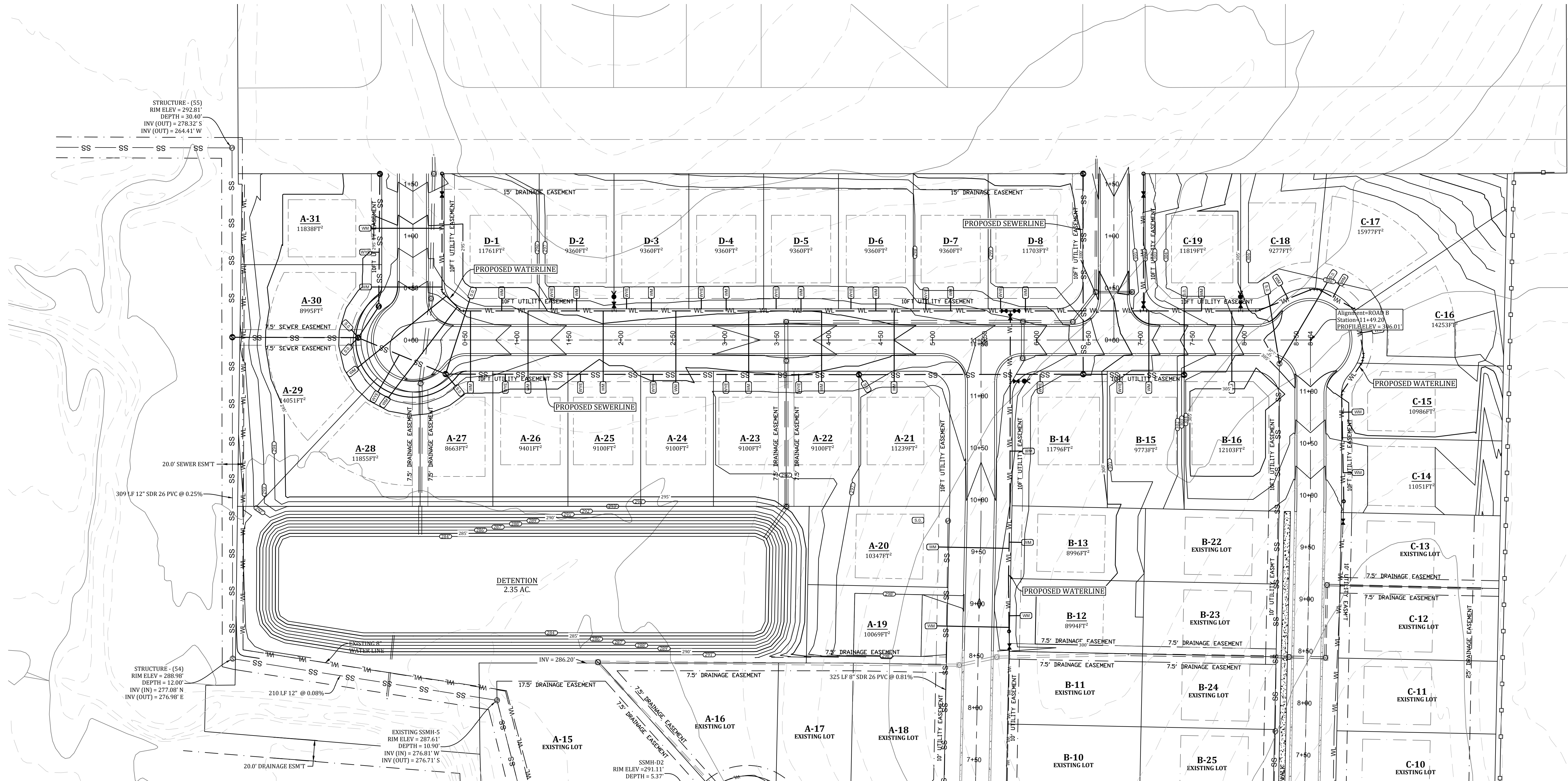
1817 WOODSPRING RD, STE. "F"
JONESBORO, ARKANSAS 72401



EDEN HILLS ESTATES, PHASE III
JONESBORO, ARKANSAS
PRELIMINARY PLAT (NOT FOR RECORD)

DATE: 4/21/2021
REV:
CLEINT: MARK MORRIS
DRAWN BY: H. HIME





LEGEND

	CURB		STORM DRAIN INLET
	SIDEWALK		STORM DRAIN PIPE
	CORRIDOR CROSS SECTION LINE		SANITARY SEWER
	WATER LINE		SEWER MANHOLE
	WATER METER		SEWER WYE
	FIRE HYDRANT		SEWER STUB- OUT
	BLOW-OFF ASSEMBLY		EX. SEWER WYE
	GATE VALVE		EX. SEWER STUB- OUT

NOTE: SYMBOLS REPRESENTED IN LEGEND MAY NOT ALL BE INCLUDED ON THIS SHEET
RESPECTIVE SYMBOLS REPRESENTED IN PLAN VIEW ARE NOT TO SCALE

EDEN HILLS PHASE III

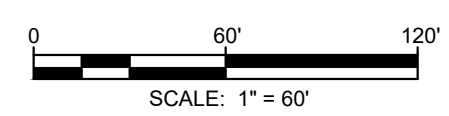
UTILITY LAYOUT



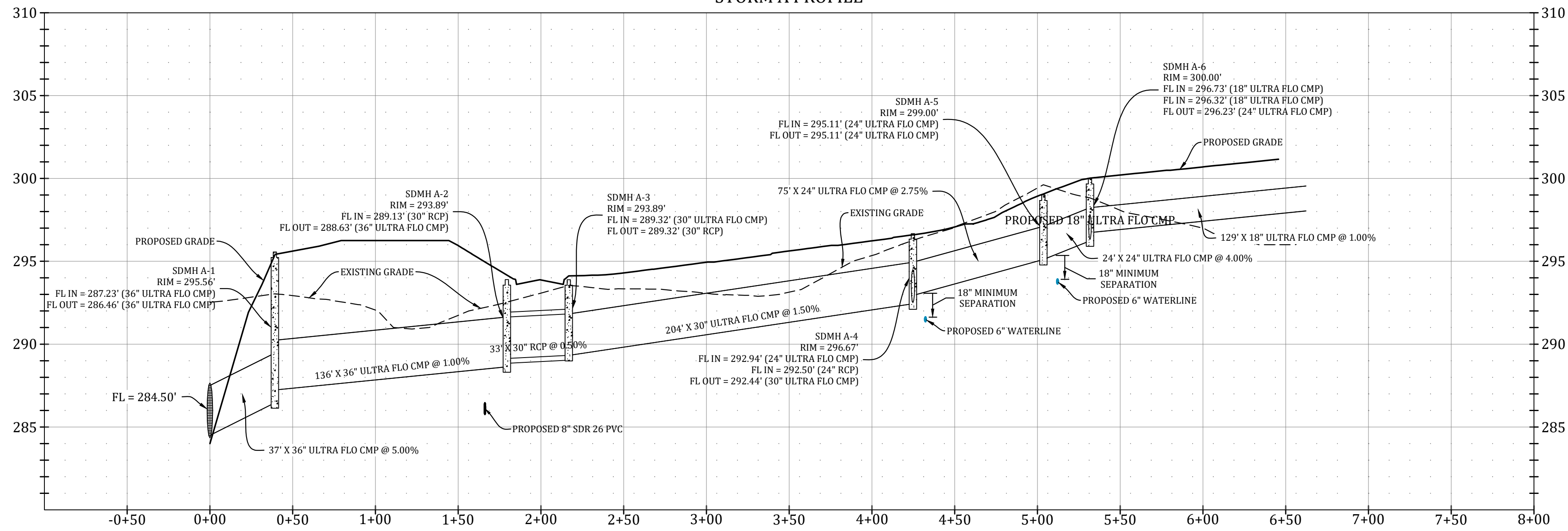
REVISIONS		
DATE	BY	DESCRIPTION

DRAWING INFO.	
DRAWN BY:	GMD
DATE:	4/1/2021
SCALE:	1"=60'

SHEET NUMBER:
OV-2



STORM A PROFILE



LEGEND			
	CURB		STORM DRAIN INLET
	SIDEWALK		STORM DRAIN PIPE
	CORRIDOR CROSS SECTION LINE		SANITARY SEWER
	WATER LINE		SEWER MANHOLE
	WATER METER		SEWER WYE
	FIRE HYDRANT		SEWER STUB-OUT
	BLOW-OFF ASSEMBLY		EX. SEWER WYE
	GATE VALVE		EX. SEWER STUB-OUT

NOTE: SYMBOLS REPRESENTED IN LEGEND MAY NOT ALL BE INCLUDED ON THIS SHEET
RESPECTIVE SYMBOLS REPRESENTED IN PLAN VIEW ARE NOT TO SCALE

TOTAL WATERLINE QUANTITIES:
954 LF - 6" C-900 PVC WATERLINE
13- 3/4" SHORT SERVICES
13- 3/4" LONG SERVICES

PRESSURES:
STATIC PRESSURE = 82 PSI
RESIDUAL PRESSURE = 72 PSI

WATER AND ELECTRIC NOTES:

- CONTRACTOR SHALL PROVIDE NECESSARY ELECTRICAL CONDUIT & PERMANENT MARKERS W/ GRAY PVC SCH 40 (21" & PVC SCH 40 (4") & 36" RAD ELBOWS FOR RISERS AND A STRING & MOUSE BLOWN IN THE CONDUIT. CONTRACTOR SHALL OBTAIN AN ELECTRICAL PLAN FROM CWL AND INSTALL THE ELECTRICAL CONDUIT AS SPECIFIED BY CWL/CONTRACTOR SHALL OBTAIN CIVIL SPECIFICATIONS.
- CONTRACTOR SHALL PROVIDE 3/4" METER STOP, TAP, SERVICE LINE & METER BOX AS REQUIRED BY CWL & INSTALL AS REQUIRED BY CWL.
- CONTRACTOR SHALL PROVIDE ENGINEER W/ "AS-BUILT" DIMENSIONS FOR WYES, VALVES, TEES, BENDS, FIRE HYDRANTS & WATER METERS.
- CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS FOR ALL SEWER, WATER, & ELECTRICAL LINE LATERALS & PROVIDE LABOR & MATERIAL TO BACKFILL ALL SEWER, WATER & ELECTRICAL STREET CUTS WITH SANDY MATERIAL (P.I. -45) TO TOP OF EXCAVATION & COMPACT FILL TO 95% COMPACTION & PROVIDE COMPACTION TESTS AT 2' INTERVALS. CONTRACTOR SHALL PROVIDE LABOR AND MATERIAL FOR ALL SEWER & WATER LINE MANS THAT CROSS A STREET AND BACKFILL THEM WITH SANDY (P.I. -45) TO TOP OF EXCAVATION & COMPACT FILL TO 95% COMPACTION & PROVIDE MATERIAL COMPACTION TESTS AT 2' INTERVALS.
- A 12 GA SOLID TRACER WIRE SHALL BE INSTALLED WITH WATER LINE MAIN WHERE THERE SHALL BE A PERMANENT WATER LINE MARKER INSTALLED @ THE BEGINNING, THE END, AND 750' INTERVALS IN BETWEEN WHERE THE TRACER WIRE IS INSTALLED THE TRACER WIRE SHALL BE INSTALLED ABOVE THE WATER LINE AND CONNECTED TO THE PERMANENT MARKERS IN A MANNER THAT WILL INSURE A CONTINUOUS CONNECTION OF THE TRACER LINE.
- CONTRACTOR SHALL CALL ARK ONE CALL FOR LOCATES PRIOR TO CONSTRUCTION.
- CWL SHALL PROVIDE FIRE HYDRANT, 6" O.D. GATE VALVE, VALVE BOX W/LID, AND 6" BY LINE SIZE D.I. TEE. CONTRACTOR SHALL PROVIDE LABOR FOR INSTALLATION AND CONCRETE BLOCKING. (SEE DETAIL SHEET)
- CONTRACTOR SHALL NOTIFY ENGINEER TO DETERMINE ELEVATIONS FOR MANHOLE TOPS, WATERLINE ELEVATION WHERE IT CROSSES PROPOSED STORM DRAINS, WATER METER BOX ELEVATIONS, VALVE BOX ELEVATIONS, AND FIRE HYDRANT ELEVATIONS. AND WATER LINE LOCATION ABOVE INLETS. WATER LINE SHALL BE INSTALLED AT AN ELEVATION WHERE HYDRANTS ARE LOCATED TO ENSURE HYDRANT WILL BE AT PROPER HEIGHT WHEN FINISHED GRADE HAS BEEN OBTAINED.
- CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH PLANS TO INSURE THE WATER LINE DEPTH OF INSTALLATION IS BELOW THE PROPOSED STORM DRAIN ELEVATION. CONTRACTOR WILL BE REQUIRED TO COME BACK AND LOWER WATER LINE (AT THE CONTRACTOR'S EXPENSE) IF IT INTERFERES WITH THE STORM DRAIN INSTALLATION.
- IF CONTRACTOR CAN NOT INSURE WATER LINE INSTALLATION TO BE BELOW STORM DRAIN, THEN THE CONTRACTOR SHALL POSTPONE WATER LINE INSTALLATION UNTIL STORM DRAIN HAS BEEN INSTALLED.
- CONTRACTOR SHALL PROVIDE OWNER WITH ONE YEAR WARRANTY FOR MATERIALS AND WORKMANSHIP.
- CONTRACTOR SHALL PROVIDE ENGINEER WITH LIEN RELEASES FOR MATERIALS AND LABOR; BACTERIAL SAMPLE RESULTS, AND MODEL & YEAR OF WATER LINE VALVES WITHIN 30 DAYS OF COMPLETION OF WORK.
- CONTRACTOR SHALL DRESS UP PROJECT TO THE CONDITION IT AS PRIOR TO BEGINNING CONSTRUCTION. MOUND BACKFILL OVER TRENCHES 1' TO 2' TO ALLOW FOR SETTLING IN AREAS OUT OF THE STREET.
- CONTRACTOR SHALL REVIEW DETAIL SHEETS TO ENSURE PROPER INSTALLATION OF VALVES, FIRE HYDRANTS, CONCRETE BLOCKING, SERVICE LINES, MANHOLE INVERTS, AND DROP ASSEMBLIES.
- CONTRACTOR SHALL OBTAIN A CURRENT SET OF CIVIL SPECIFICATIONS AND REVIEW THEM. CIVIL SPECIFICATIONS ARE TO BE ADHERED TO AND MAKE A PART OF THIS SET OF PLANS. CONTRACTOR SHALL USE CIVIL SPECIFICATIONS TO INCLUDE ITEMS NOT SHOWN OR REFERRED TO IN THIS SET OF PLANS (18). ALL STREET EXCAVATION MATERIAL SHALL BE DISPOSED OF BY CONTRACTOR ON THE ADJACENT LOTS OR AS DIRECTED BY OWNER.
- ALL STREET EXCAVATION MATERIAL SHALL BE DISPOSED OF BY CONTRACTOR ON THE ADJACENT LOTS OR AS DIRECTED BY OWNER.
- CONTRACTOR SHALL PLACE 8 MIL POLYWRAP OVER DUCTILE IRON FITTINGS PRIOR TO PLACING CONCRETE BLOCKING TO PREVENT CONCRETE FROM ENCASEING BOLTS & NUTS.
- ALL WATER LINES 4"-12" DIAMETER SHALL BE AWWA C-900 PRESSURE CLASS 150 DR 18. ALL 2" AND 3" DIAMETER WATER LINES SHALL BE SDR 21 CLASS 200 (ASTM 2241). ALL SEWER LINES SHALL BE ASTM 2412 SDR 26.
- WATER LINE AND SANITARY SEWER LINE SHALL MAINTAIN 18" MINIMUM VERTICAL SEPARATION. WATER LINE AND STORM DRAIN SHALL MAINTAIN 18" MINIMUM VERTICAL SEPARATION TO PREVENT FREEZING. MAINTAIN 10" HORIZONTAL SEPARATION BETWEEN SEWER AND WATER LINE.
- CONSTRUCTION SHALL BEGIN ONLY AFTER APPROVED PLANS FROM THE ARKANSAS DEPARTMENT OF HEALTH ARE SUBMITTED TO CWL AND ALL NECESSARY FEES ARE PAID IN FULL. AND ALL NECESSARY FEES ARE PAID IN FULL. AFTER THE RIGHT OF WAY HAS BEEN CLEARED, THE ENTIRE SECTION OF THE ELEVATIONS CAREFULLY CHECKED, AND A PRE-CONSTRUCTION MEETING HAS BEEN HELD. A POST CONSTRUCTION MEETING WILL BE HELD W/ CONTRACTOR TO VERIFY ALL CONSTRUCTION IS ACCEPTABLE TO CWL PRIOR TO THE INSTALLATION OF ELECTRICAL WIRE.
- DEVELOPER MUST SHOW PROOF OF ADEQUATE INSURANCE COVERAGE (ARKANSAS WORKER'S COMPENSATION, \$1,000,000.00 MINIMUM GENERAL LIABILITY, AND \$1,000,000.00 MINIMUM AUTO LIABILITY). CONTRACTOR MUST HAVE A STATE CONTRACTORS LICENSE. CONTRACTOR MUST HAVE A COMPETENT PERSON AT THE JOB SITE AS DEFINED BY OSHA.
- FINAL CLEAN-UP OF THE SITE SHALL INCLUDE THE REMOVAL AND DISPOSAL OFF-SITE OF ALL CONSTRUCTION DEBRIS, AND SURPLUS MATERIALS.
- DURING CONSTRUCTION, WORK SHALL BE INSPECTED BY THE DEVELOPER'S CONSULTING ENGINEER FOR NECESSARY SAFETY PRACTICES, PROPER MATERIALS, AND WORKMANSHIP. CWL WILL PROVIDE RANDOM INSPECTIONS TO INSURE THAT THE PLANS APPROVED BY THE ARKANSAS DEPARTMENT OF HEALTH AND CWL ARE FOLLOWED CONCERNING WORKMANSHIP AND MATERIALS.
- IF SEWER AND WATER LINES HAVE NOT BEEN ACCEPTED BY CWL WITHIN 360 DAYS AFTER MANDREL TESTS, LOW PRESSURE AIR TESTS, HYDROSTATIC TESTS AND BACTERIAL TESTS, ALL TESTS WILL BE REQUIRED TO BE REPEATED AND RE-CERTIFIED.
- INSTALLATION OF DOMESTIC WATER METER TAPS ARE REQUIRED TO BE MADE DURING THE INSTALLATION OF THE NEW WATER MAINS.
- OBSTRUCTING DRAINAGE PIPES, SHALL BE REMOVED. IF IN SOUND, UNDAMAGED CONDITION, THEY MAY BE CLEANED AND RE-INSTALLED. IF UNSOUND OR DAMAGED, THEY SHALL BE REPLACED WITH THE SAME TYPE OF MATERIAL WHEN THE ANGLE BETWEEN CENTER LINES OF A DRAINAGE PIPE AND WATER MAIN WILL PERMIT, THE WATER MAIN MAY BE INSTALLED BY TUNNELING, PROVIDED THE DRAINAGE PIPE IS NOT DAMAGED AND THE WATER MAIN IS LAID PROPERLY. AS AN ALTERNATIVE IN THE CASE OF CORRUGATED METAL PIPE, A SECTION MAY BE CUT FROM THE DRAINAGE PIPE, AND RESTORATION ACCOMPLISHED WITH NEW PIPE AND COUPLING BANDS.
- CWL ENGINEERING DEPT. MUST APPROVE ANY WATER OR SEWER LINES THAT WILL BE INSTALLED CLOSER THAN 5' PARALLEL WITH EDGE OF PAVED STREET SURFACE.
- REPAIRS SHALL BE MADE IN ACCORDANCE WITH AWWA. IF VALVE IS CLOSED BY THE CONTRACTOR WITHOUT CWL'S KNOWLEDGE, THE NEW SECTION WILL BE TESTED FOR WATER QUALITY AND FLUSHED. THE CWL INSPECTOR WILL WITHNESS ALL REPAIRS.
- WATER LINE FITTINGS SHALL BE CLASS 350 DUCTILE IRON OR CAST IRON.
- TRENCH DEPTH WILL BE SUCH AS TO ALLOW A MINIMUM COVER OF 42" OVER WATER MAIN.
- LEAKAGE TESTS SHALL BE MADE PRIOR TO STERILIZATION OPERATIONS. THE TEST PERIOD SHALL BE TWO (2) HOURS. TEST PRESSURE SHALL BE 1.5 TIMES THE CALCULATED WORKING PRESSURE OF THE MAIN, BUT NOT LESS THAN 100 PSI. THE LINE WILL NOT BE ACCEPTED UNLESS OR UNTIL THE TOTAL IS LESS THAN THAT SPECIFIED IN AWWA C-600-93 FOR DUCTILE IRON AND AWWA C-605-94 FOR PVC PIPE.
- ALL WATER LINES SHALL BE STERILIZED IN ACCORDANCE WITH AWWA C-651-94. ANY NEW CONSTRUCTION OR REPAIRED WATER MAIN MUST BE THOROUGHLY CLEANED (FLUSHED), DISINFECTED, AND TESTED FOR BACTERIOLOGICAL QUALITY BEFORE IT CAN BE PLACED IN SERVICE. FOLLOWING A CONTACT PERIOD OF NOT LESS THAN 24 HOURS, THE CHLORINATED WATER SHALL BE FLUSHED FROM THE SYSTEM AND THE SYSTEM FILLED WITH WATER OF NORMAL CHLORINE CONTENT. SAMPLES OF WATER THEN SHALL BE TAKEN ON TWO CONSECUTIVE DAYS FROM THE LINES AND DELIVERED TO THE CWL - LABORATORY FOR BACTERIAL ANALYSIS. THIS PROCESS SHALL BE CONTINUED UNTIL THE SAMPLES SHOW THE WATER IS SAFE FOR DOMESTIC REQUIREMENTS. FLUSHING DEVICES SHOULD BE SIZED TO PROVIDE FLOWS WHICH WILL GIVE A VELOCITY OF AT LEAST 2.5 FEET PER SECOND IN THE WATER MAIN BEING FLUSHED. NO FLUSHING DEVICES SHALL BE DIRECTLY CONNECTED TO ANY SEWER. IF THE LINE HAS NOT SET FOR A ONE MONTH OR LONGER BEFORE FINAL ACCEPTANCE, IT SHALL BE RESTERILIZED, FLUSHED, AND BACTERIAL TESTED.
- THE DEVELOPER AND ENGINEER ARE RESPONSIBLE FOR METER BOX LOCATIONS. ANY CONFLICTS THAT REQUIRE PLASTIC BOX(S) TO BE CHANGED OUT TO CONCRETE BOX(S) WILL BE AT THE EXPENSE OF THE DEVELOPER AND/OR CONTRACTOR.
- IF UNSAFE PRACTICES ARE DISCOVERED BY CWL DURING INSPECTIONS OF WORKMANSHIP AND MATERIALS, CWL WILL NOTIFY OSHA. THIS PROCEDURE IN NO WAY OBLIGATES CWL FOR THE RESPONSIBILITY OF THE CONTRACTOR'S SAFETY PRACTICES.
- DURING CONSTRUCTION, WORK SHALL BE INSPECTED DAILY BY THE ENGINEER OF RECORD FOR PROPER MATERIALS, WORKMANSHIP, AND INSTALLATION IN ACCORDANCE WITH THE APPROVED ARKANSAS DEPARTMENT OF HEALTH AND CITY WATER AND LIGHT APPROVED PLANS.

THERE SHALL BE AN ANCHOR COUPLING BETWEEN TEE AND GATE VALVE CONNECTIONS AND TEE AND REDUCER CONNECTIONS.

OPERATING NOTE:

THE OPERATING ROUTINE SHALL INCLUDE NECESSARY PROTECTIVE MEASURES TO DETECT AND REMOVE OR DESTROY ANY CONTAMINANT OF CONCERN OR REGULATION THAT MIGHT ENTER THE DISTRIBUTION SYSTEM. EVERY PRECAUTION MUST BE TAKEN AGAINST THE POSSIBILITY OF SEWAGE CONTAMINATION OF THE WATER IN THE DISTRIBUTION SYSTEM. WATER MAINS AND SANITARY SEWERS SHALL BE CONSTRUCTED AS FAR APART AS PRACTICABLE, AND SHALL BE SEPARATED BY UNDISTURBED AND COMPACTED EARTH. A MINIMUM HORIZONTAL DISTANCE OF 10' SHOULD BE MAINTAINED BETWEEN WATER LINES AND SEWER LINE OR OTHER SOURCES OF CONTAMINATION. WATER LINES AND SEWER SHALL NOT BE LAID IN THE SAME TRENCH EXCEPT OF THE WRITTEN APPROVAL OF THE ARKANSAS DEPARTMENT OF HEALTH. WATER MAINS NECESSARILY CLOSE PROXIMITY TO SEWERS MUST BE PLACED SO THAT THE BOTTOM OF THE WATERLINE WILL BE AT LEAST 18" ABOVE THE TOP OF THE SEWER LINE AT ITS HIGHEST POINT. IF THIS DISTANCE MUST UNAVOIDABLY BE REDUCED, THE WATER LINE OR THE SEWER LINE MUST BE ENCASED IN A WATERTIGHT PIPE WITH SEALED WATERTIGHT ENDS EXTENDING AT LEAST 10' EITHER SIDE OF THE CROSSING. ANY JOINT IN THE ENCASEMENT PIPE IS TO BE MECHANICALLY RESTRAINED. THE ENCASEMENT PIPE MAY BE VENTED TO THE SURFACE IF CARRYING WATER OR SEWER UNDER PRESSURE. WHERE A WATER LINE MUST UNAVOIDABLY PASS BENEATH THE SEWER LINE, AT LEAST 18" OF SEPARATION MUST BE MAINTAINED BETWEEN THE SEWER LINE AND THE TWO PIPES IN ADDITION TO THE PRECEDING ENCASEMENT REQUIREMENTS. EXCEPTIONS TO THIS MUST BE APPROVED IN WRITING BY THE ARKANSAS DEPARTMENT OF HEALTH. A MINIMUM HORIZONTAL DISTANCE OF 3' SHALL BE MAINTAINED BETWEEN WATER LINES AND OTHER UNDERGROUND UTILITIES OF A NON-SANITARY NATURE (GAS, ELECTRIC, ETC.). EXCEPTIONS TO THIS MUST BE APPROVED IN WRITING BY THE ARKANSAS DEPARTMENT OF HEALTH AND HUMAN SERVICES.

TRENCH SETTLEMENT NOTE:

CITY WATER & LIGHT IS NOT RESPONSIBLE FOR ANY SETTLEMENT OVER WATER & SEWER TRENCHES THAT OCCURS BEFORE OR AFTER THE WARRANTY PERIOD.

WATER METER NOTE:

WATER METERS ARE SHOWN PICTORIALLY ONLY. WATER METERS SHALL BE LOCATED AT THE RIGHT OF WAY APPROXIMATELY AT THE CENTER OF THE LOT. THERE SHOULD BE A MINIMUM OF 10 FEET SEPARATION BETWEEN WATER METERS AND SANITARY SEWER SERVICES.

WATER CONNECTION NOTE:

CONTRACTOR SHALL NOT INITIATE TIE IN CONNECTION TO EXISTING WATER MAIN AFTER 3 P.M. DURING NORMAL WORKING DAYS OR ON FRIDAY AFTER 12 P.M., UNLESS APPROVED BY CITY WATER & LIGHT ENGINEERING DEPT. CONTRACTOR SHALL NOTIFY CWL INSPECTOR OF TENTATIVE TIME FRAME FOR CONNECTION 24 HOURS PRIOR TO ACTIVITY.

ALL SEWER WYES SHALL BE A MINIMUM OF 10' FOOT AWAY FROM PROPERTY CORNERS.

ELECTRICAL CONDUIT NOTE:

ALL ELECTRICAL CONDUIT SHALL HAVE A MINIMUM 48" OF COVER BELOW FINISHED GRADE.

NO TRANSFORMER, JUNCTION BOX, OR PULL BOX TO BE PLACED OVER WATER FITTINGS WITHOUT CITY WATER AND LIGHT APPROVAL.

EDEN HILLS PHASE III

WATER PLAN



REVISIONS

DATE	BY	DESCRIPTION

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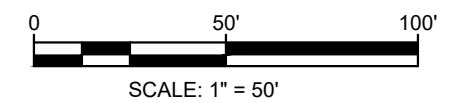
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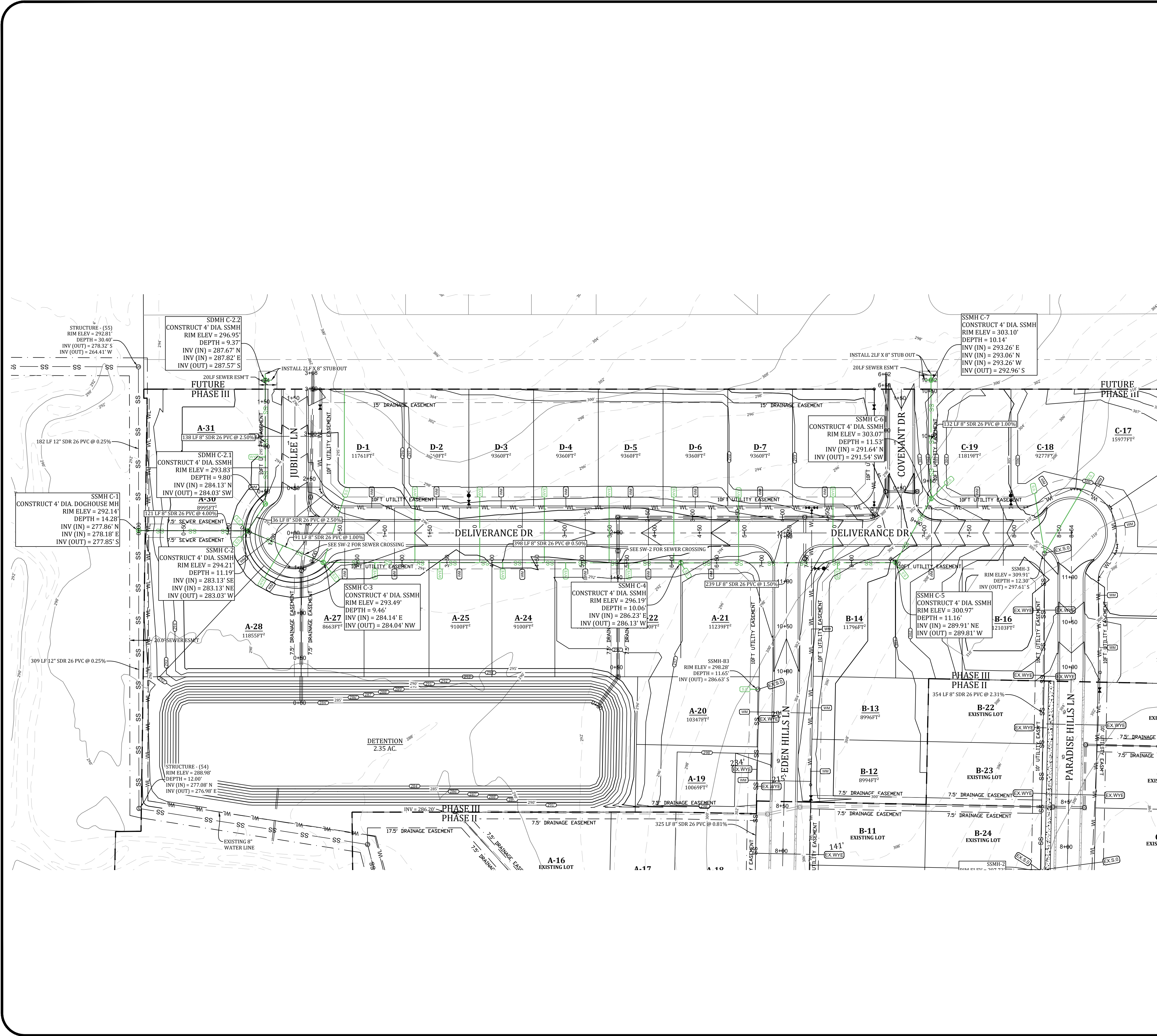
SHEET NUMBER:

WT-1



Know what's below.
Call before you dig.





CURB

SIDEWALK

SL-1

CORRIDOR CROSS SECTION LINE

WL

WATER LINE

WM

WATER METER

FIRE HYDRANT

BLOW-OFF ASSEMBLY

GATE VALVE

STORM DRAIN INLET

STORM DRAIN PIPE

SS

SANITARY SEWER

WYE

SEWER MANHOLE

WYE

SEWER WYE

S.O.

SEWER STUB- OUT

EX.WYE

EX. SEWER WYE

EX.S.O.

EX. SEWER STUB- OUT

NOTE: SYMBOLS REPRESENTED IN LEGEND MAY NOT ALL BE INCLUDED ON THIS SHEET

RESPECTIVE SYMBOLS REPRESENTED IN PLAN VIEW ARE NOT TO SCALE

TOTAL SEWERLINE QUANTITIES:

1070 LF - 8" SDR 26 PVC

PHASE 2 SERVICES:

10- SHORT LATERALS

10- LONG LATERALS

2- SHORT STUB-OUTS

2- LONG STUB-OUT

SANITARY SEWER NOTES:

1. CONTRACTOR SHALL PROVIDE WYES OR STUBOUTS FOR EACH LOT. THEY SHALL BE PLACED ON THE LOW ELEVATION SIDE OF LOT OR IN THE CENTER OF THE LOT IF THE ELEVATION IS FLAT.

2. CONTRACTOR SHALL PROVIDE ENGINEER W/ "AS-BUILT" DIMENSIONS FOR WYES, VALVES, TEES, BENDS, FIRE HYDRANTS, & WATER METERS.

3. CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS FOR ALL SEWER, WATER, & ELECTRICAL LINE LATERALS & PROVIDE LABOR & MATERIAL TO BACKFILL ALL SEWER, WATER & ELECTRICAL STREET CUTS WITH SANDY MATERIAL (P.I. <15) TO TOP OF EXCAVATION & COMPACT FILL TO 95% COMPACTION & PROVIDE COMPACTION TESTS AT 2' INTERVALS. CONTRACTOR SHALL PROVIDE LABOR AND MATERIAL FOR ALL SEWER & WATER LINE MAINS THAT CROSS A STREET AND BACKFILL THEM WITH SANDY (P.I. <15) TO TOP OF EXCAVATION & COMPACT FILL TO 95% COMPACTION & PROVIDE MATERIAL COMPACTION TESTS AT 2' INTERVALS.

4. CONTRACTOR SHALL CALL ARK ONE CALL FOR LOCATES PRIOR TO CONSTRUCTION.

5. CONTRACTOR SHALL NOTIFY ENGINEER TO DETERMINE ELEVATIONS FOR MANHOLE TOPS, WATERLINE ELEVATION WHERE IT CROSSES PROPOSED STORM DRAINS, WATER METER BOX ELEVATIONS, VALVE BOX ELEVATIONS, AND FIRE HYDRANT ELEVATIONS. AND WATER LINE LOCATION AROUND INLETS. WATER LINE SHALL BE INSTALLED AT AN ELEVATION WHERE HYDRANTS ARE LOCATED TO ENSURE HYDRANT WILL BE AT PROPER HEIGHT WHEN FINISHED GRADE HAS BEEN OBTAINED.

6. CONTRACTOR SHALL PROVIDE OWNER WITH ONE YEAR WARRANTY FOR MATERIALS AND WORKMANSHIP.

7. CONTRACTOR SHALL PROVIDE ENGINEER WITH LIEN RELEASES FOR MATERIALS AND LABOR, BACTERIAL SAMPLE RESULTS, AND MODEL & YEAR OF WATER LINE VALVES WITHIN 30 DAYS OF COMPLETION OF WORK.

8. CONTRACTOR SHALL DRESS UP PROJECT AFTER INSTALLATION TO THE CONDITION IT AS PRIOR TO BEGINNING CONSTRUCTION. MOUND BACKFILL OVER TRENCHES 1' TO 2' TO ALLOW FOR SETTLING IN AREAS OUT OF THE STREET. ALL STREET EXCAVATION MATERIAL SHALL BE DISPOSED OF BY CONTRACTOR ON THE ADJACENT LOTS OR AS DIRECTED BY OWNER.

9. CONTRACTOR SHALL REVIEW DETAIL SHEETS TO ENSURE PROPER INSTALLATION OF VALVES, FIRE HYDRANTS, CONCRETE BLOCKING, SERVICE LINES, MANHOLE INVERTS, AND DROP ASSEMBLIES.

10. ALL SEWER LINES SHALL BE ASTM 2241 SDR 26.

11. WATER LINE AND SANITARY SEWER LINE SHALL MAINTAIN 18" MINIMUM SEPARATION. WATER LINE AND STORM DRAIN SHALL MAINTAIN 36" MINIMUM SEPARATION TO PREVENT FREEZING. MAINTAIN 10" HORIZONTAL SEPARATION BETWEEN SEWER AND WATER LINE. WHERE A WATER LINE MUST UNAVOIDABLY PASS BENEATH THE SEWER LINE, AT LEAST 18" OF SEPARATION MUST BE MAINTAINED BETWEEN THE OUTSIDE OF THE TWO PIPES IN ADDITION TO THE PRECEDING ENCASEMENT REQUIREMENTS.

12. CONSTRUCTION SHALL BEGIN ONLY AFTER APPROVED PLANS FROM THE ARKANSAS DEPARTMENT OF HEALTH ARE SUBMITTED TO CWL, AND ALL NECESSARY FEES ARE PAID IN FULL. CONSTRUCTION BY CONTRACTORS SHALL THEN BEGIN ONLY AFTER THE RIGHT OF WAY HAS BEEN CLEARED, THE ENTIRE SECTION STAKED, THE ELEVATIONS CAREFULLY CHECKED, AND A PRE-CONSTRUCTION MEETING HAS BEEN HELD. A POST CONSTRUCTION MEETING WILL BE HELD W/ CONTRACTOR PRESENT TO VERIFY ALL CONSTRUCTION IS ACCEPTABLE TO CWL PRIOR TO THE INSTALLATION OF ELECTRICAL WIRE.

13. DEVELOPER MUST SHOW PROOF OF ADEQUATE INSURANCE COVERAGE. (ARKANSAS - WORKERS COMPENSATION, \$1,000,000.00 MINIMUM GENERAL LIABILITY, AND \$1,000,000.00 MINIMUM AUTO LIABILITY.) CONTRACTOR MUST HAVE A STATE CONTRACTORS LICENSE. CONTRACTOR MUST HAVE A COMPETENT PERSON AT THE JOB SITE AS DEFINED BY OSHA.

14. DURING CONSTRUCTION, WORK SHALL BE INSPECTED BY THE DEVELOPER'S CONSULTING ENGINEER FOR NECESSARY SAFETY PRACTICES, PROPER MATERIALS, AND WORKMANSHIP. CWL WILL PROVIDE RANDOM INSPECTIONS TO INSURE THAT THE PLANS APPROVED BY THE ARKANSAS DEPARTMENT OF HEALTH AND CWL ARE FOLLOWED CONCERNING WORKMANSHIP AND MATERIALS.

15. IF SEWER AND WATER LINES HAVE NOT BEEN ACCEPTED BY CWL WITHIN 360 DAYS AFTER MANHOLE TESTS, LOW PRESSURE AIR TESTS, HYDROSTATIC TESTS AND BACTERIAL TESTS, ALL TESTS WILL BE REQUIRED TO BE REPEATED AND RE-CERTIFIED.

16. CWL ENGINEERING DEPT. MUST APPROVE ANY WATER OR SEWER LINES THAT WILL BE INSTALLED CLOSER THAN 5' PARALLEL WITH EDGE OF PAVED STREET SURFACE.

17. REPAIRS SHALL BE MADE IN ACCORDANCE WITH AWWA.

18. ALL SEWER WYES & STUBOUTS SHALL BE EXTENDED ACROSS STREETS TO THE APPROPRIATE LOT LINES. CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL LOTS HAVE A SEWER SERVICE.

TRENCH SETTLEMENT NOTE:

CITY WATER & LIGHT IS NOT RESPONSIBLE FOR ANY SETTLEMENT OVER WATER & SEWER TRENCHES THAT OCCURS BEFORE OR AFTER THE WARRANTY PERIOD.

ALL SEWER WYES SHALL BE A MINIMUM OF 10' FOOT AWAY FROM PROPERTY CORNERS.

NOTE: IF UNSAFE PRACTICES ARE DISCOVERED BY CWL DURING OUR INSPECTIONS OF WORKMANSHIP AND MATERIALS, CWL WILL NOTIFY THE OSHA. THIS NO WAY OBLIGATES CWL FOR THE RESPONSIBILITY OF THE CONTRACTORS SAFETY PRACTICES.

0

50'

100'

SCALE: 1" = 50'

811

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EDEN HILLS PHASE III

SEWER LINE RECORD

STATE OF ARKANSAS

REGISTERED PROFESSIONAL ENGINEER

MARK B. MORRIS

No. 13212

REVISIONS

DATE	BY	DESCRIPTION

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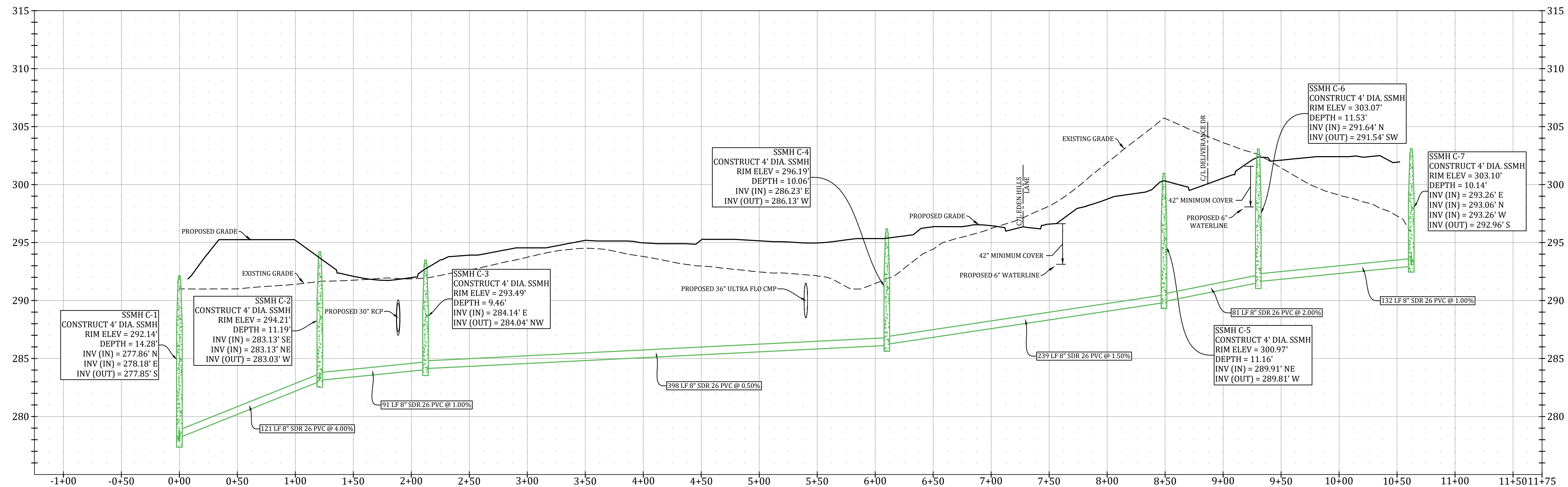
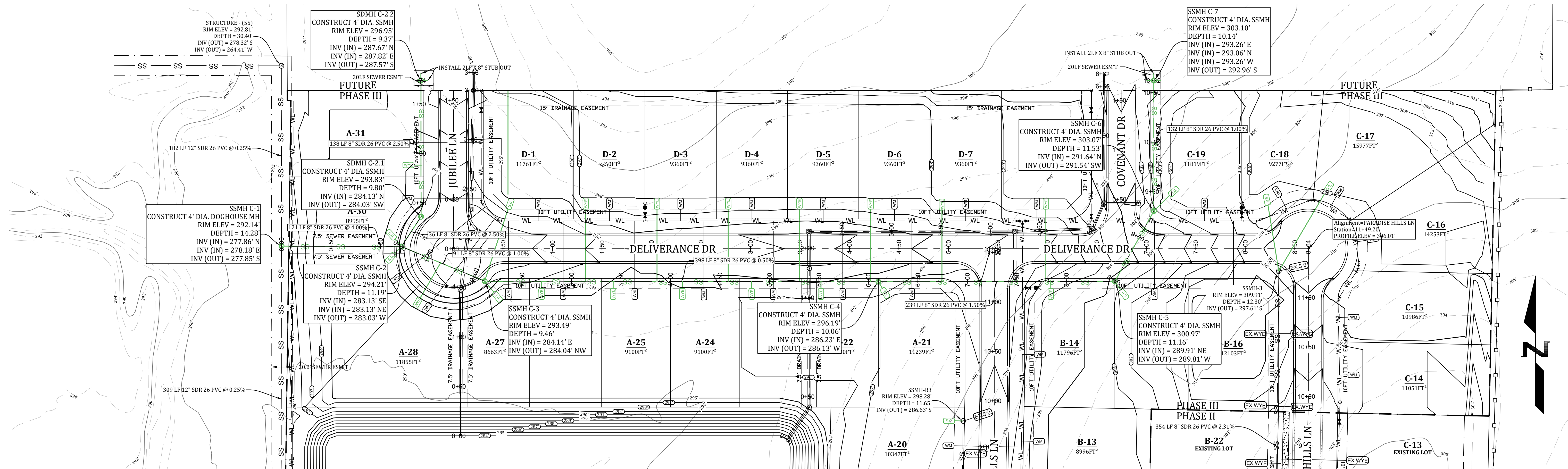
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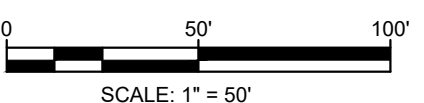
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HORIZONTAL SCALE 1:50



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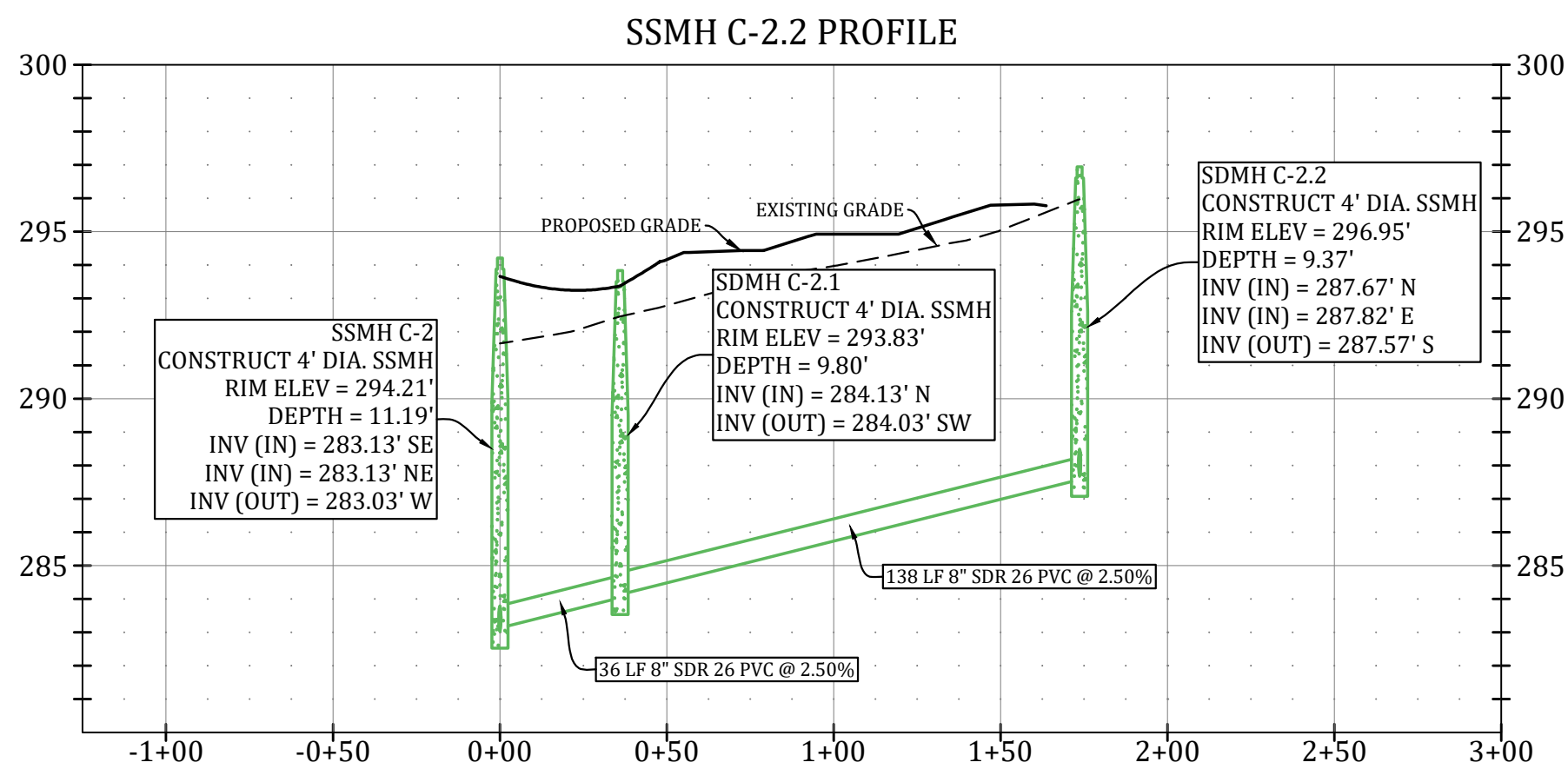
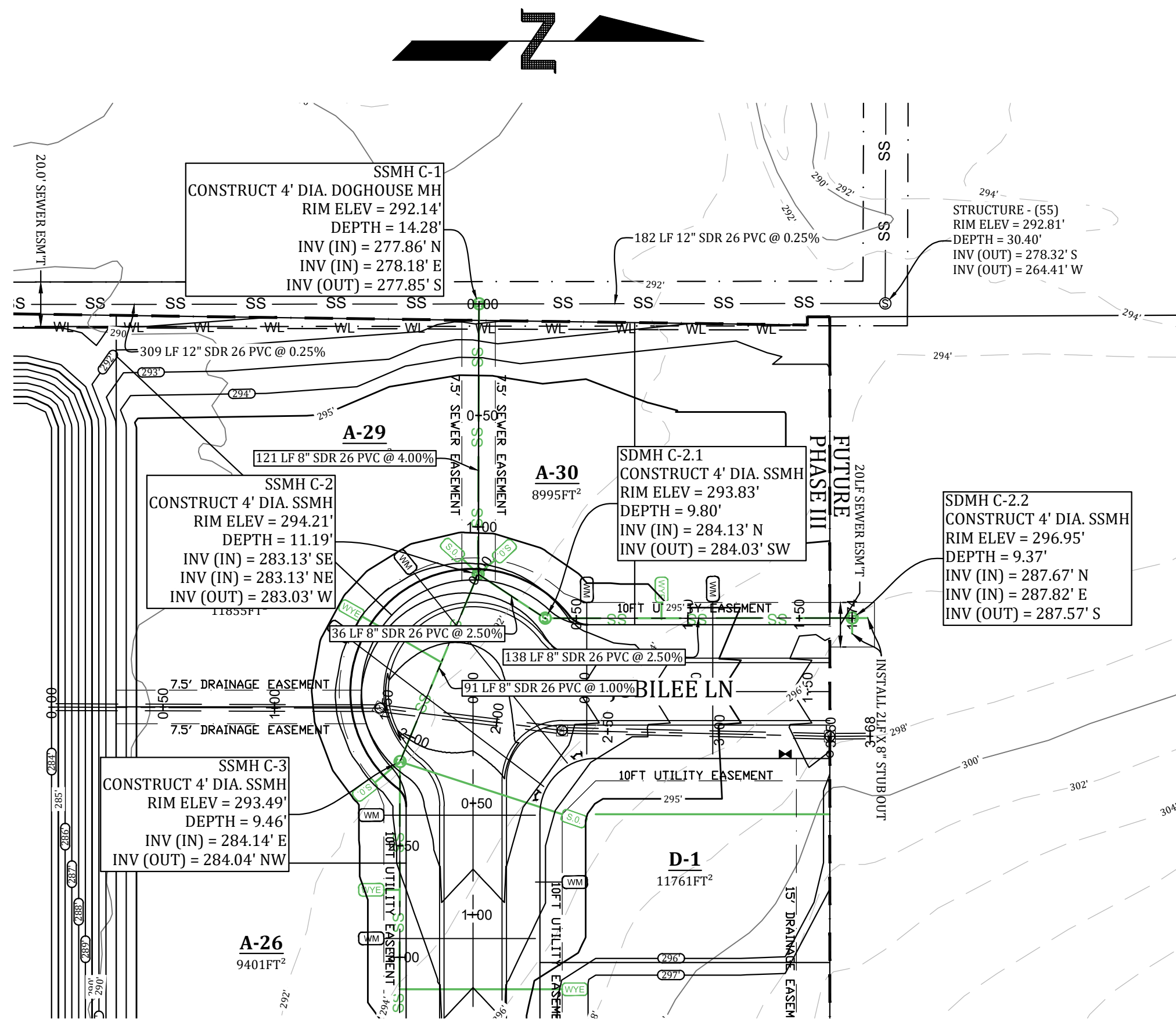
SEWER PLAN & PROFILE



REVISIONS		
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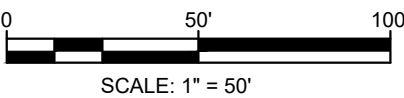
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SHEET NUMBER:
SW-2



LEGEND			
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	SIDEWALK		STORM DRAIN PIPE
	CORRIDOR CROSS SECTION LINE		SANITARY SEWER
	WATER LINE		SEWER MANHOLE
	WATER METER		SEWER WYE
	FIRE HYDRANT		SEWER STUB- OUT
	BLOW-OFF ASSEMBLY		EX. SEWER WYE
	GATE VALVE		EX. SEWER STUB- OUT
NOTE: SYMBOLS REPRESENTED IN LEGEND MAY NOT ALL BE INCLUDED ON THIS SHEET RESPECTIVE SYMBOLS REPRESENTED IN PLAN VIEW ARE NOT TO SCALE.			

VERTICAL SCALE 1:5
HORIZONTAL SCALE 1:50



EDEN HILLS PHASE III

SEWER PLAN & PROFILE

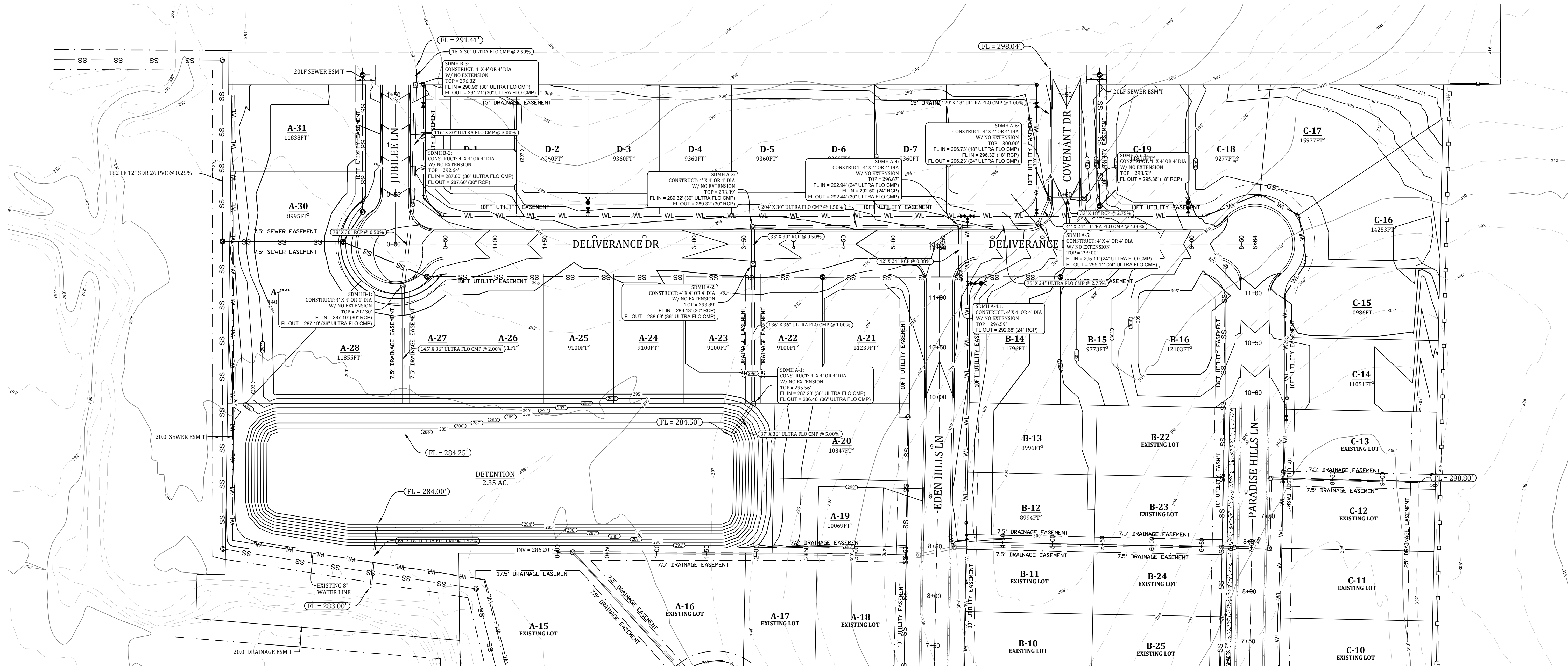


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SW-3

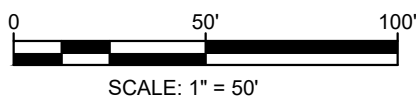
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LEGEND

	CURB		STORM DRAIN INLET
	SIDEWALK		STORM DRAIN PIPE
	CORRIDOR CROSS SECTION LINE		SANITARY SEWER
	WATER LINE		SEWER MANHOLE
	WATER METER		SEWER WYE
	FIRE HYDRANT		SEWER STUB- OUT
	BLOW-OFF ASSEMBLY		EX. SEWER WYE
	GATE VALVE		EX. SEWER STUB- OUT

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GRADING & DRAINAGE

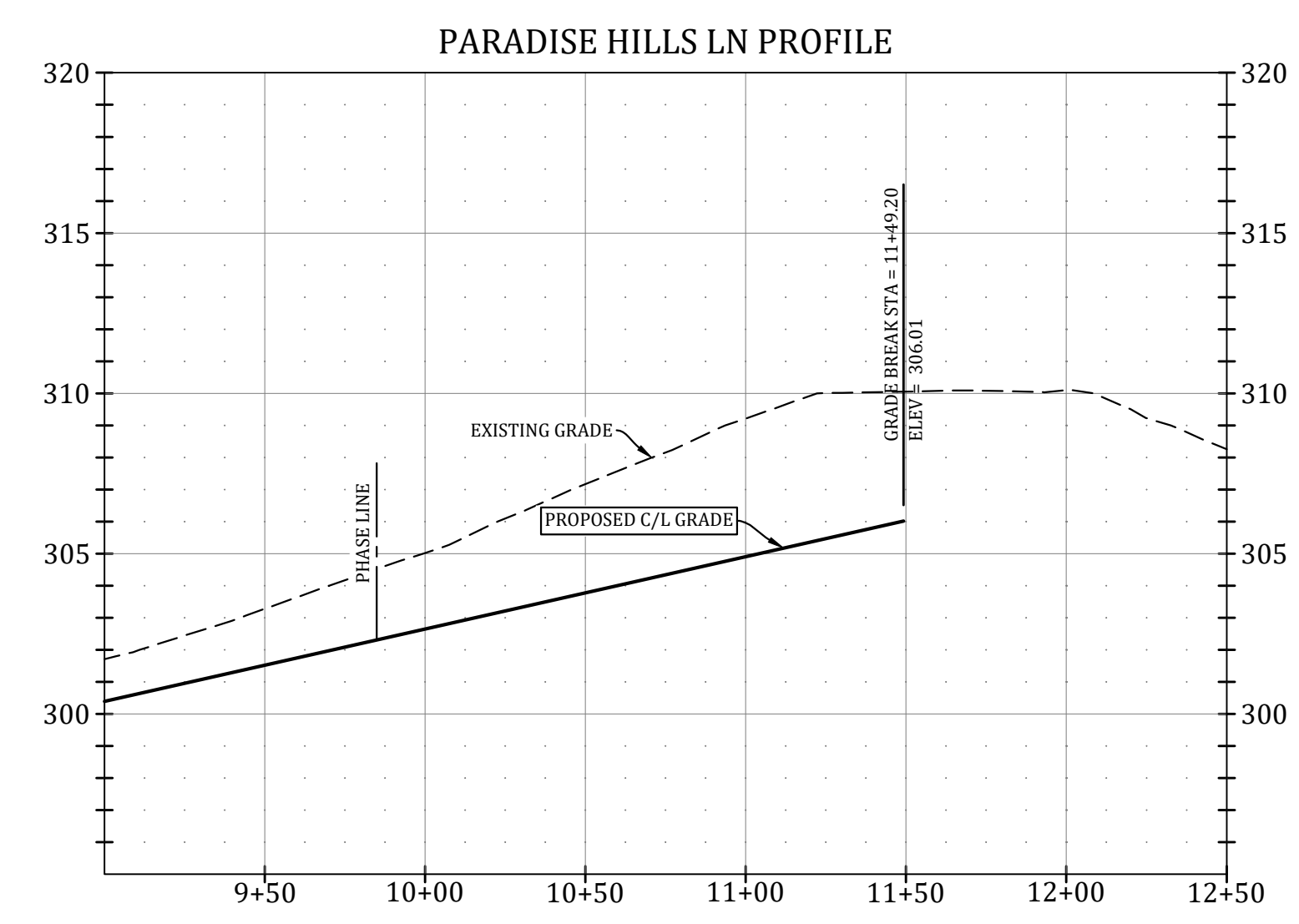
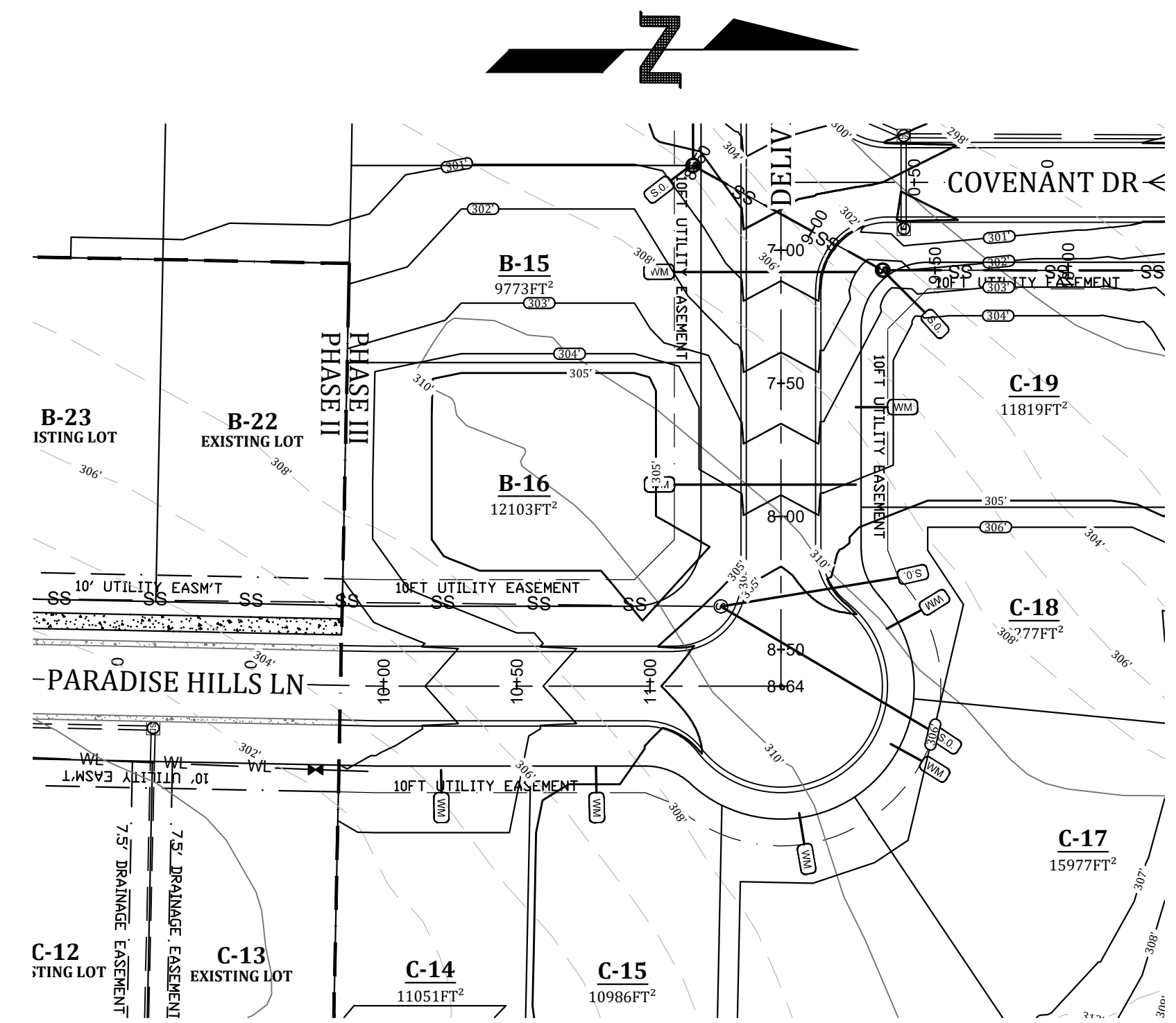
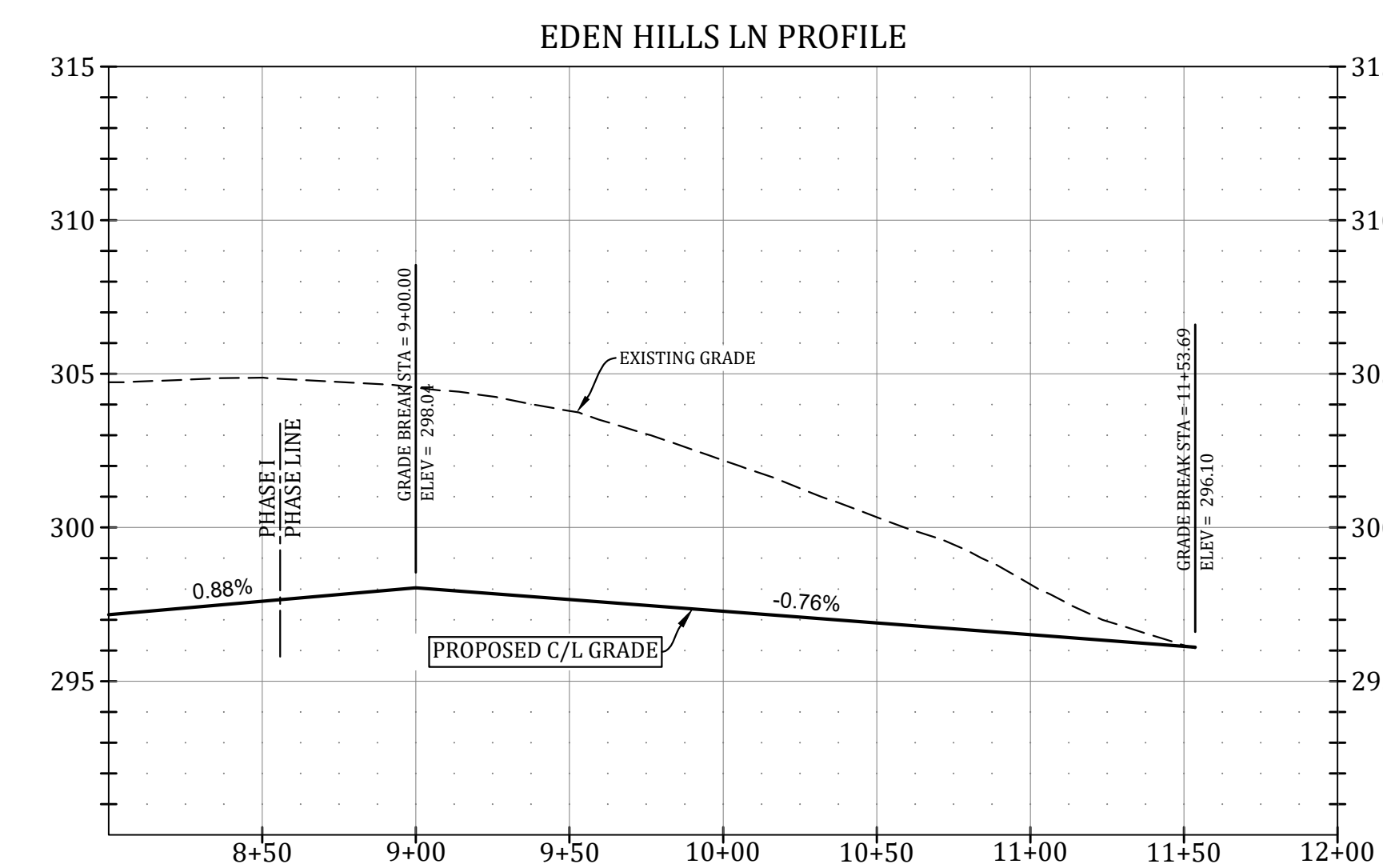
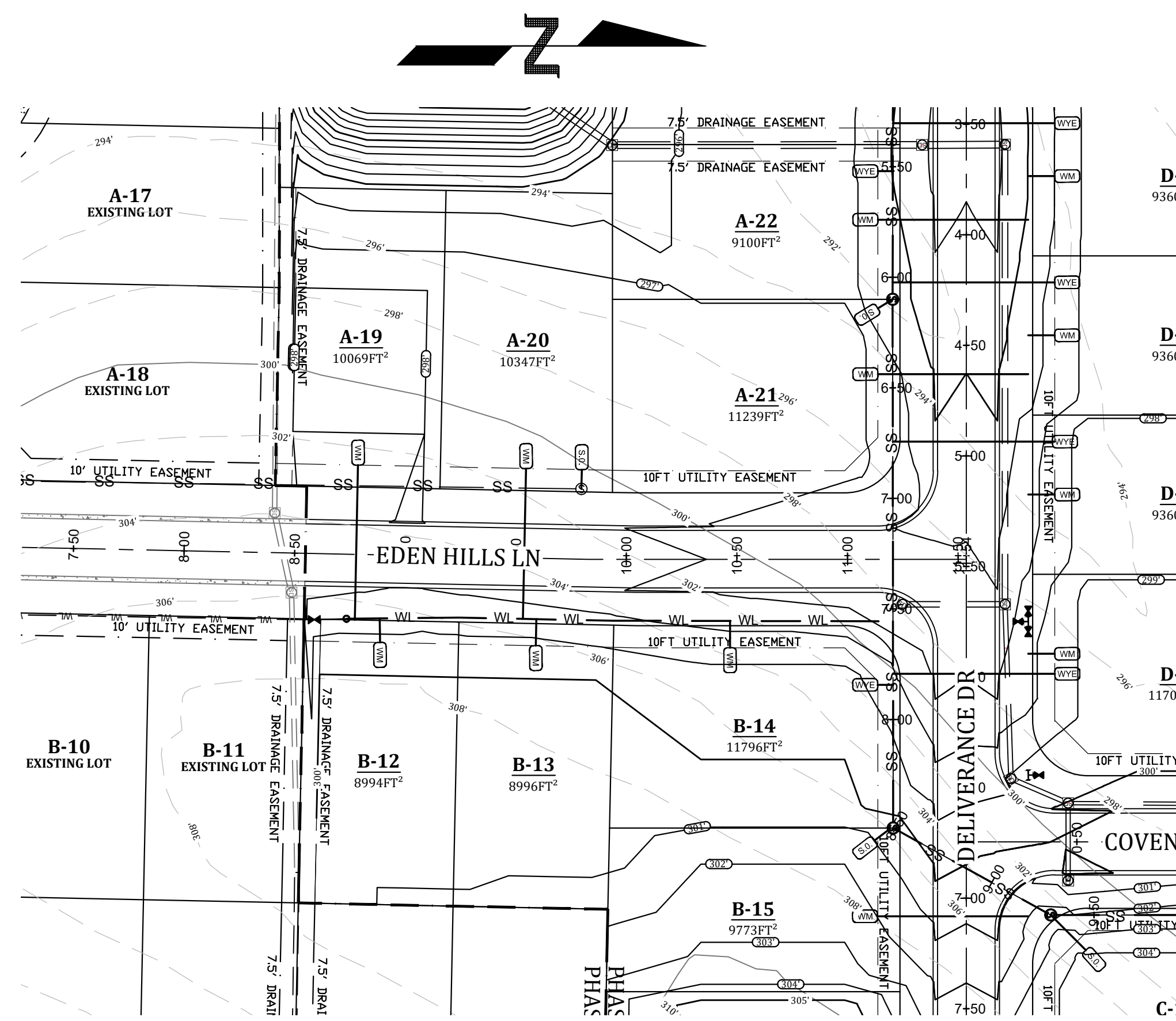


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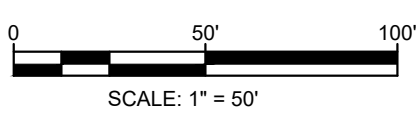


LEGEND

	CURB		STORM DRAIN INLET
	SIDEWALK		STORM DRAIN PIPE
	CORRIDOR CROSS SECTION LINE		SANITARY SEWER
	WATER LINE		SEWER MANHOLE
	WATER METER		SEWER WYE
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VERTICAL SCALE 1:5
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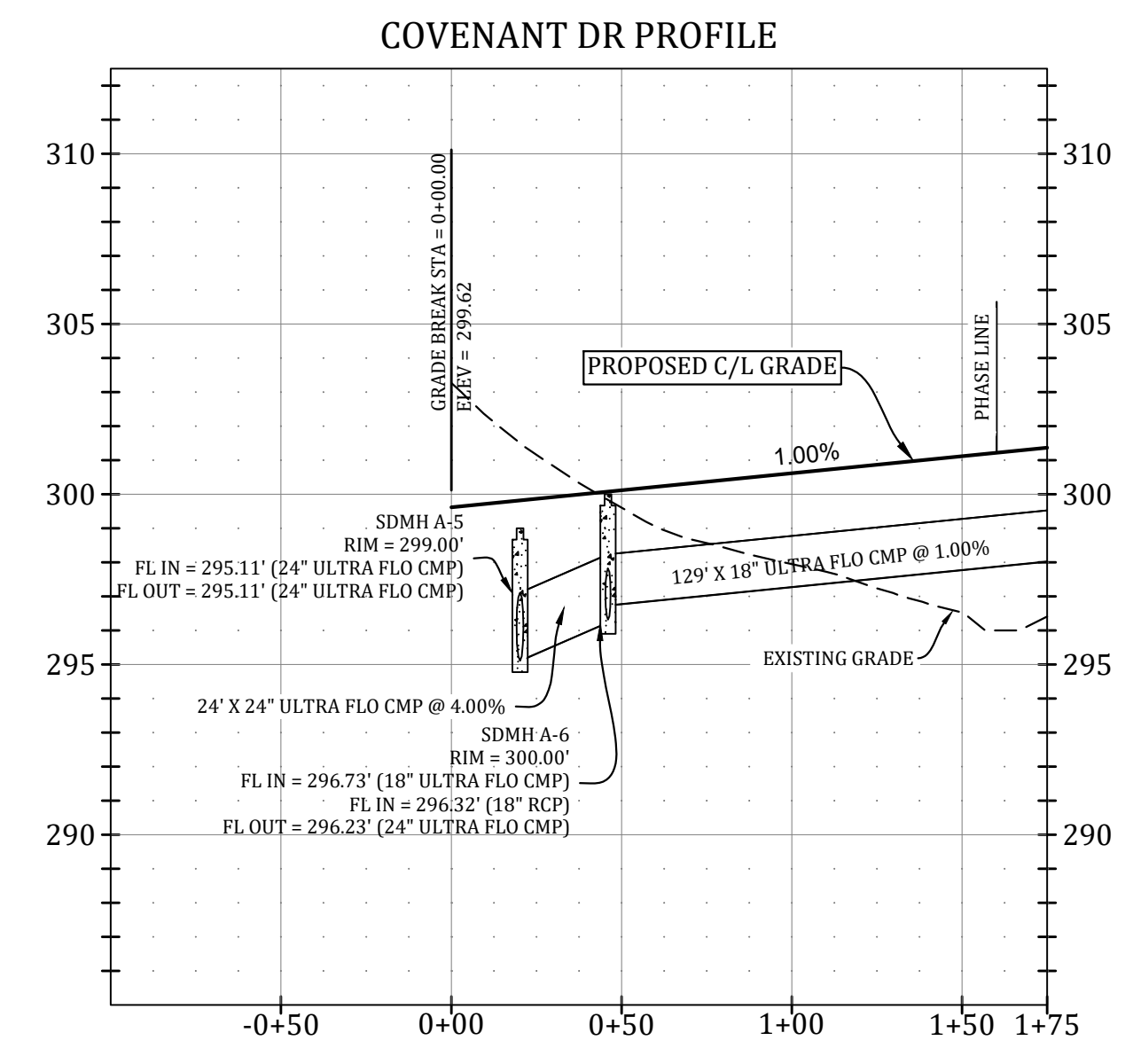
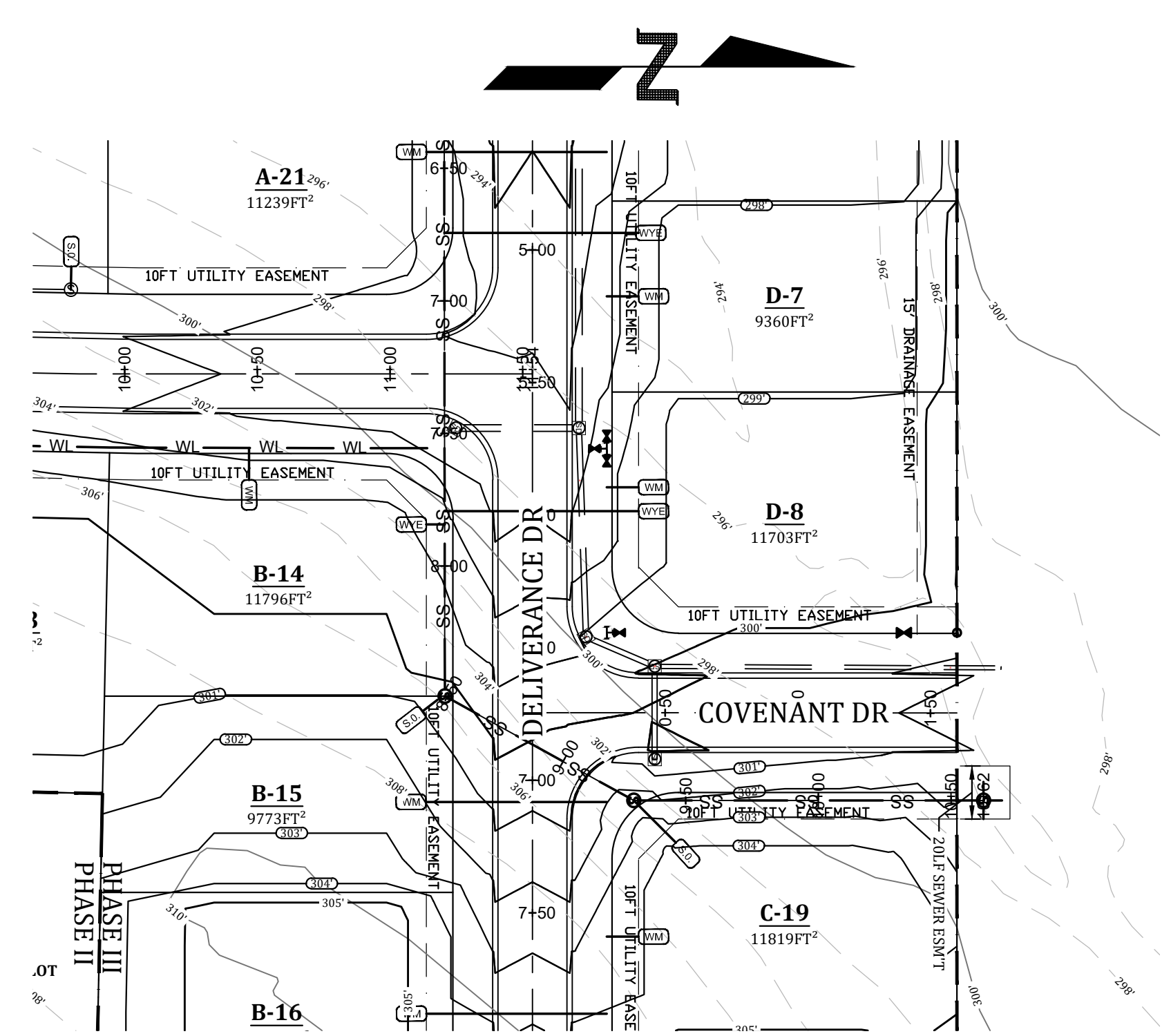
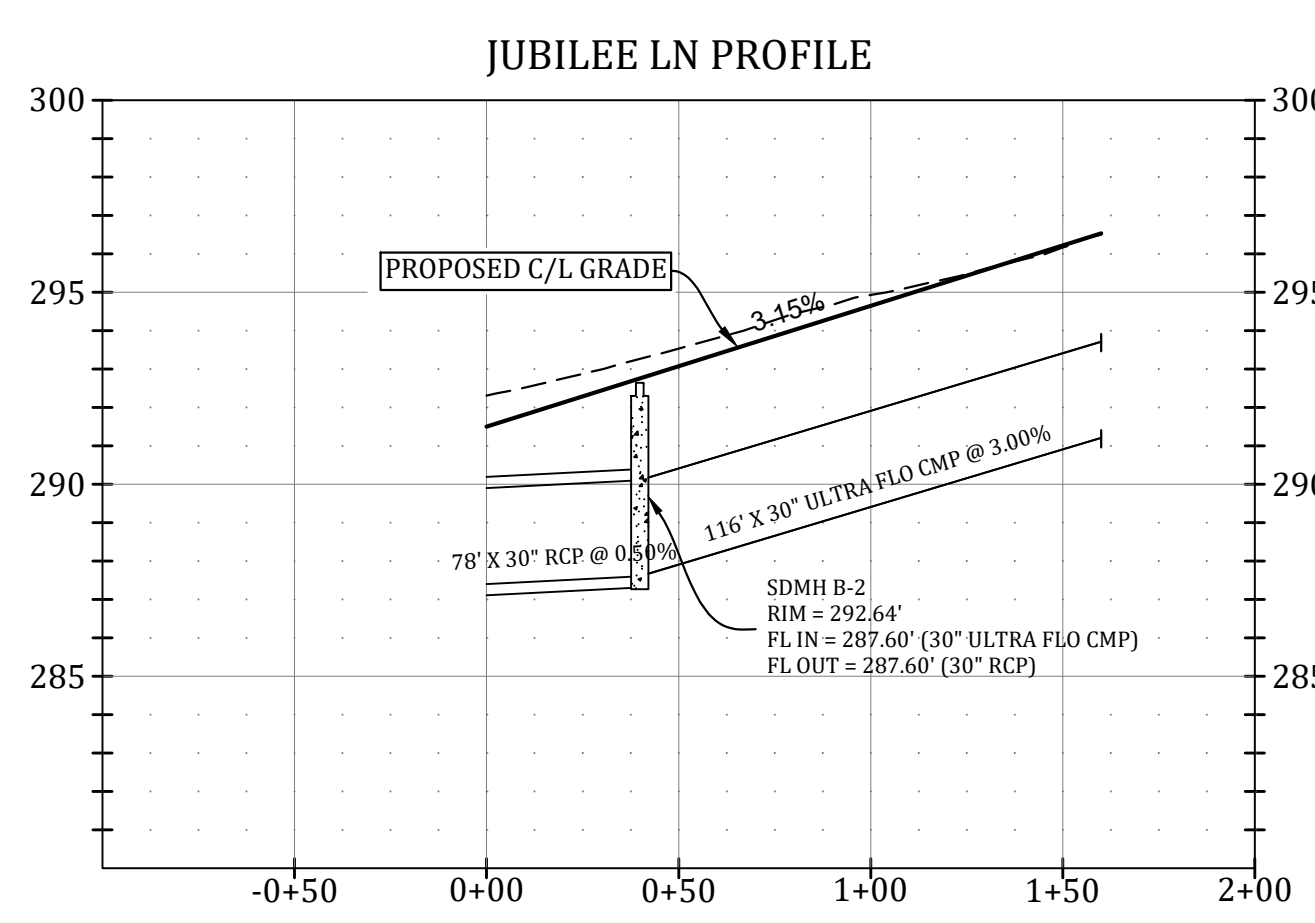
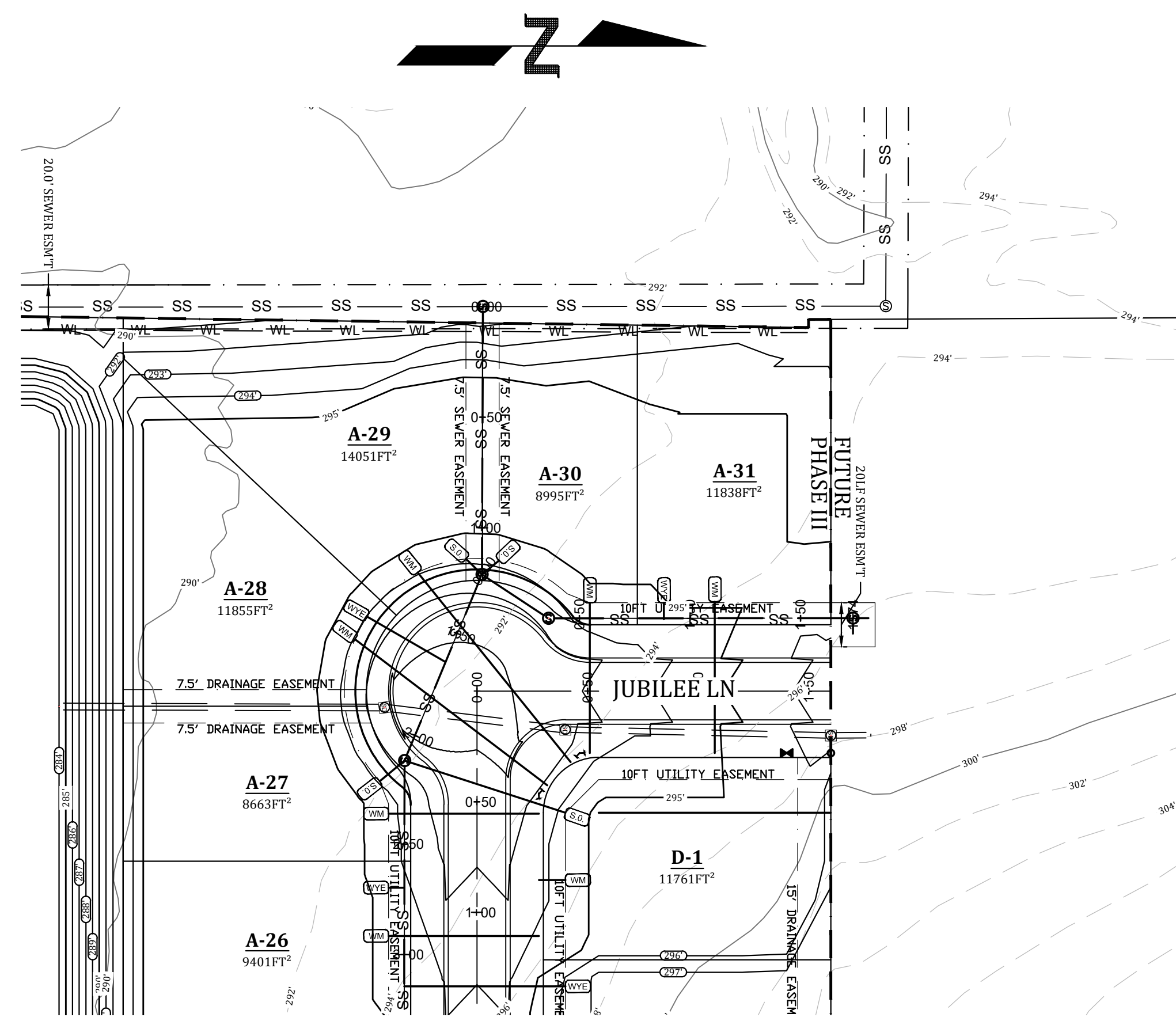
STREET PLAN & PROFILE

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 13212
MARK B. MORRIS

REVISIONS		
DATE	BY	DESCRIPTION

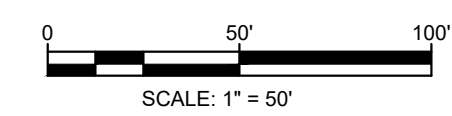
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ST-3



LEGEND			
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	SIDEWALK		STORM DRAIN PIPE
	CORRIDOR CROSS SECTION LINE		SANITARY SEWER
	WATER LINE		SEWER MANHOLE
	WATER METER		SEWER WYE
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STATE OF ARKANSAS

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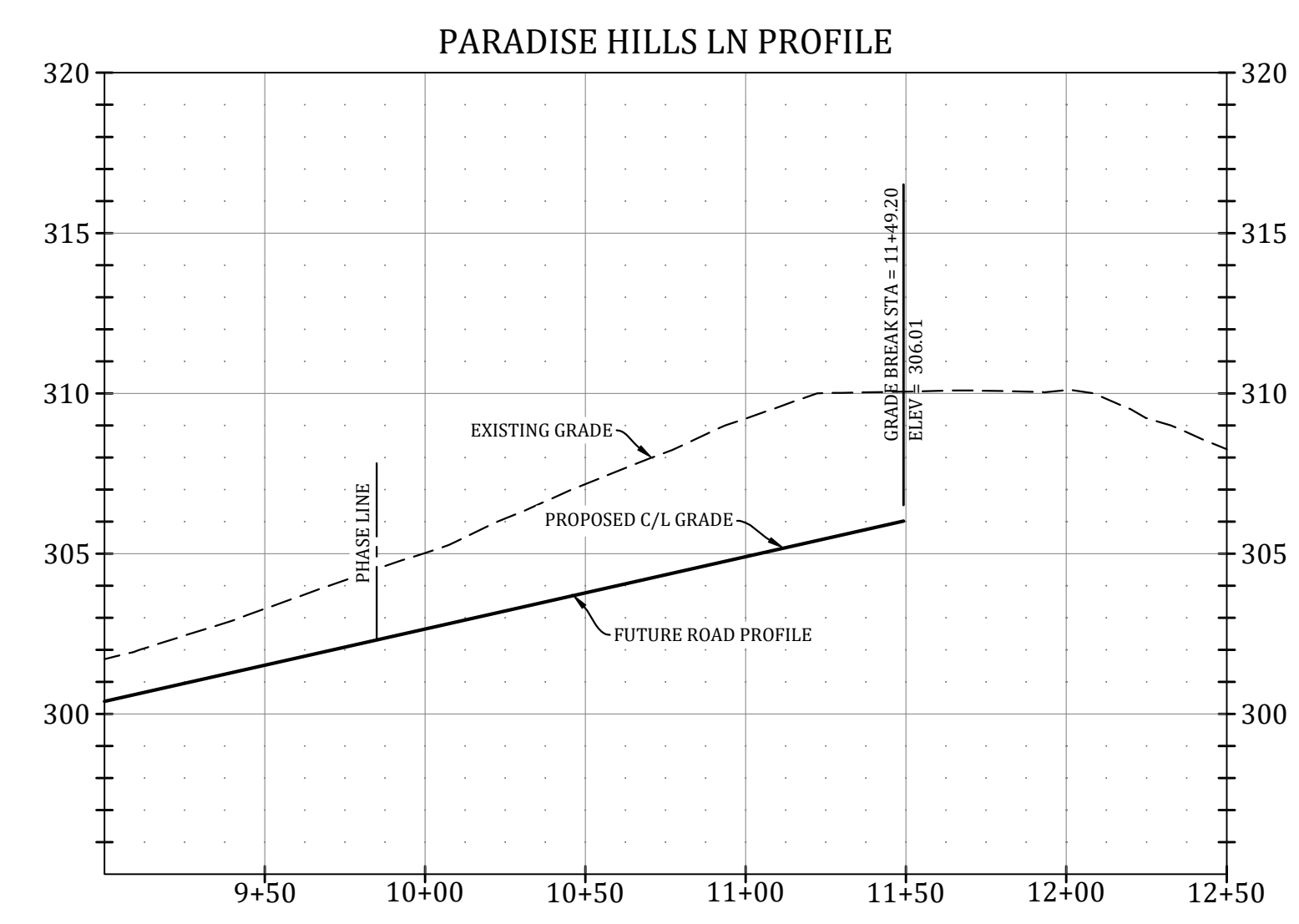
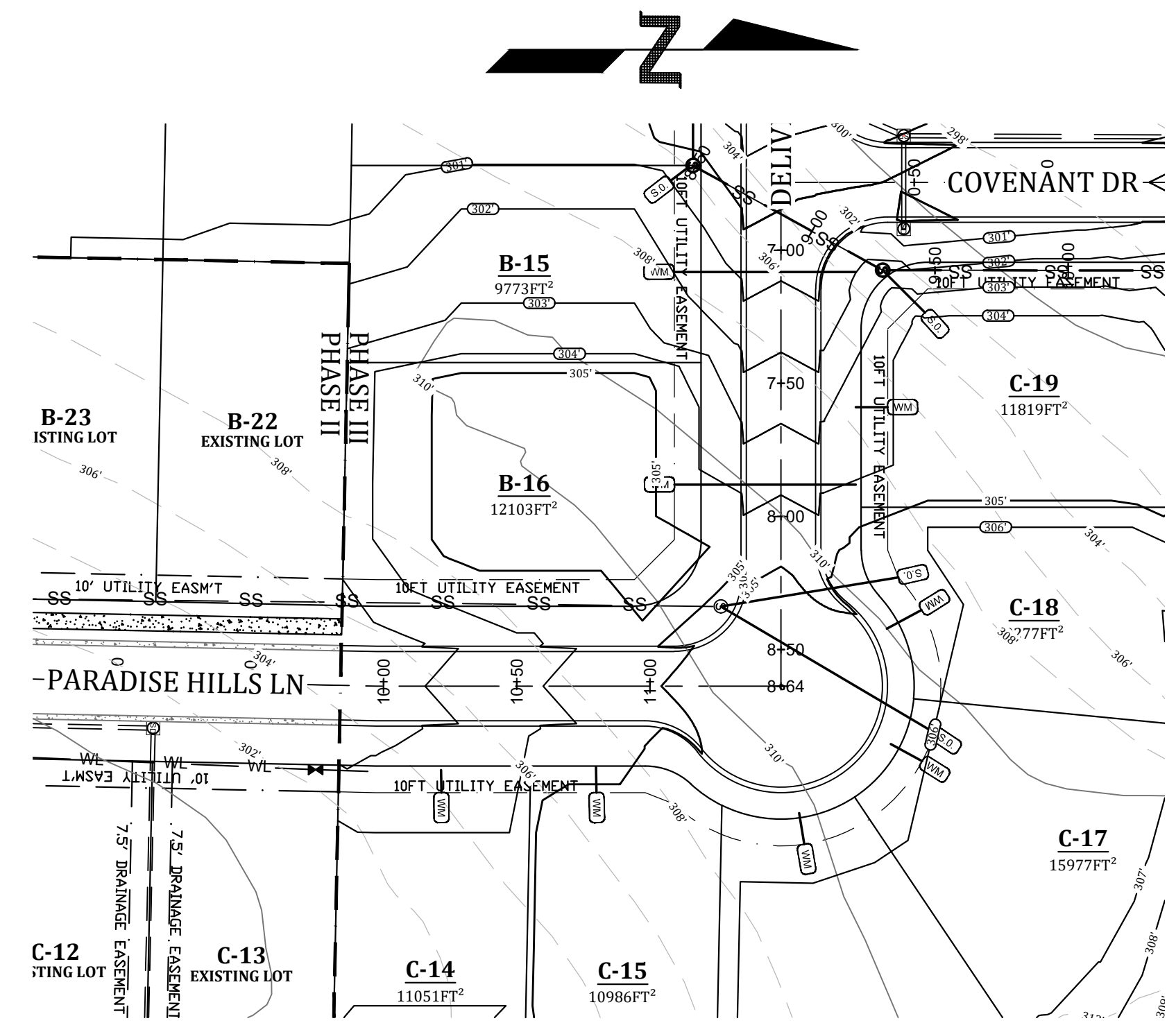
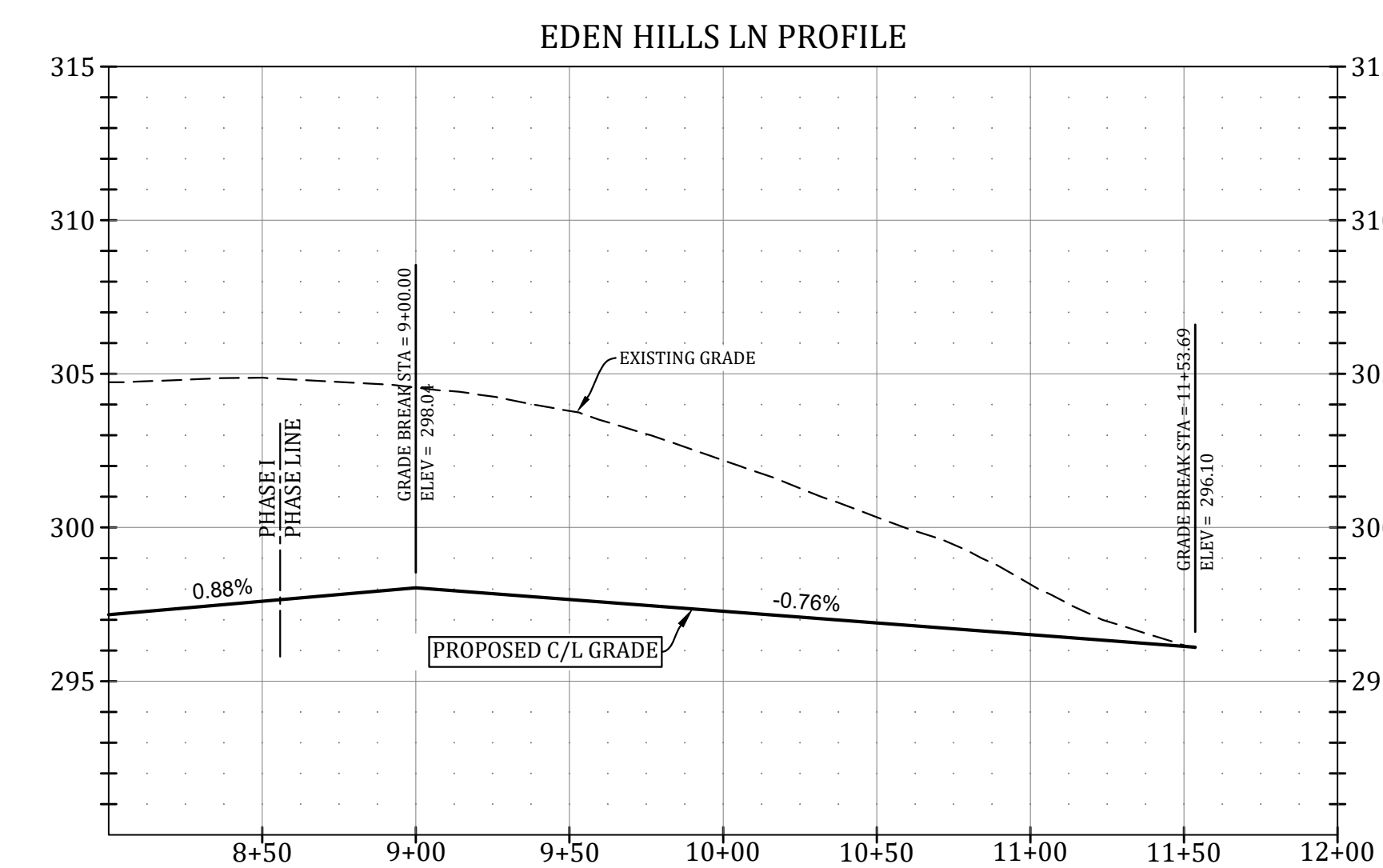
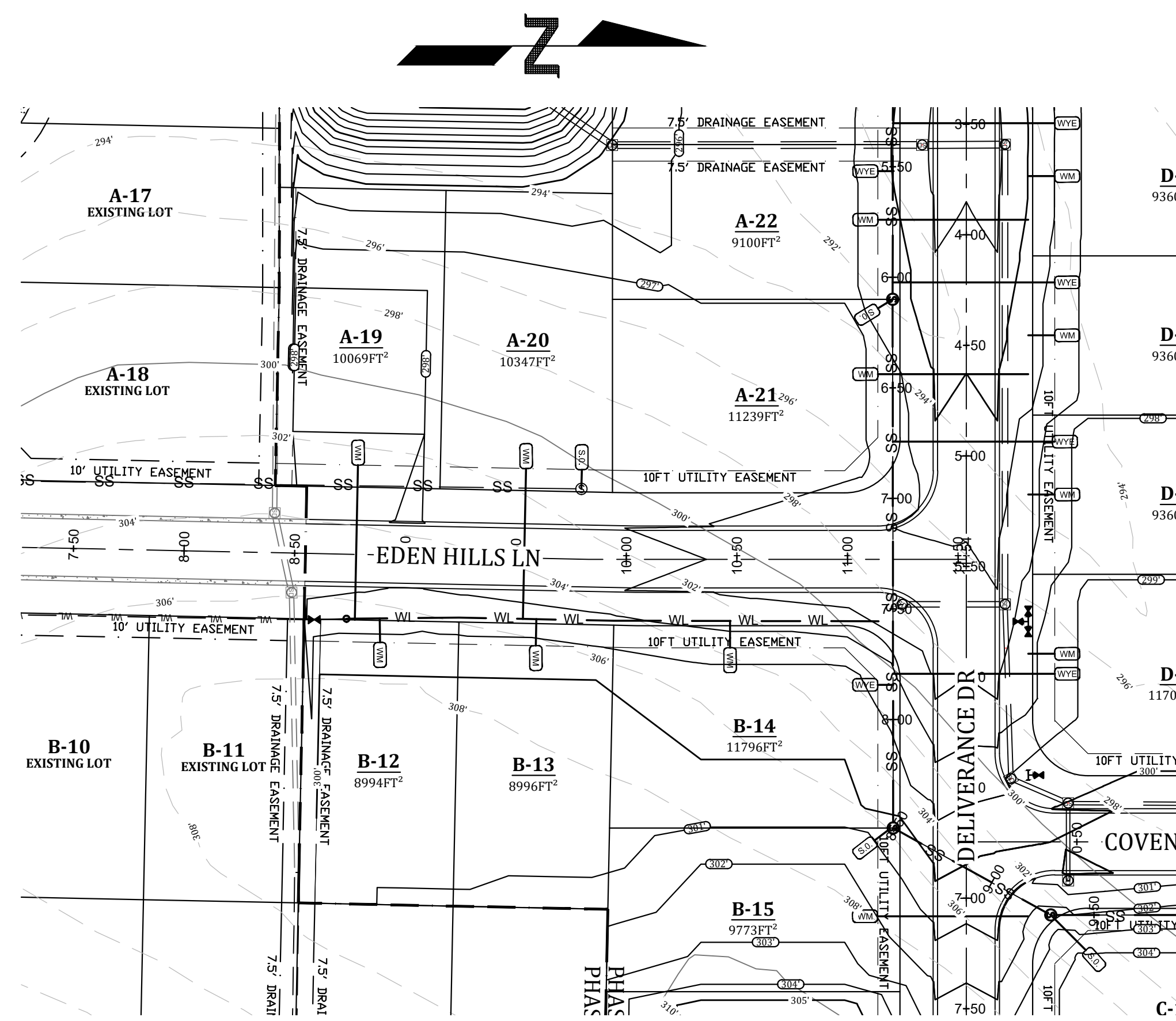
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LEGEND

	CURB		STORM DRAIN INLET
	SIDEWALK		STORM DRAIN PIPE
	CORRIDOR CROSS SECTION LINE		SANITARY SEWER
	WATER LINE		SEWER MANHOLE
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VERTICAL SCALE 1:5
HORIZONTAL SCALE 1:50

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

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SEWER PLAN & PROFILE

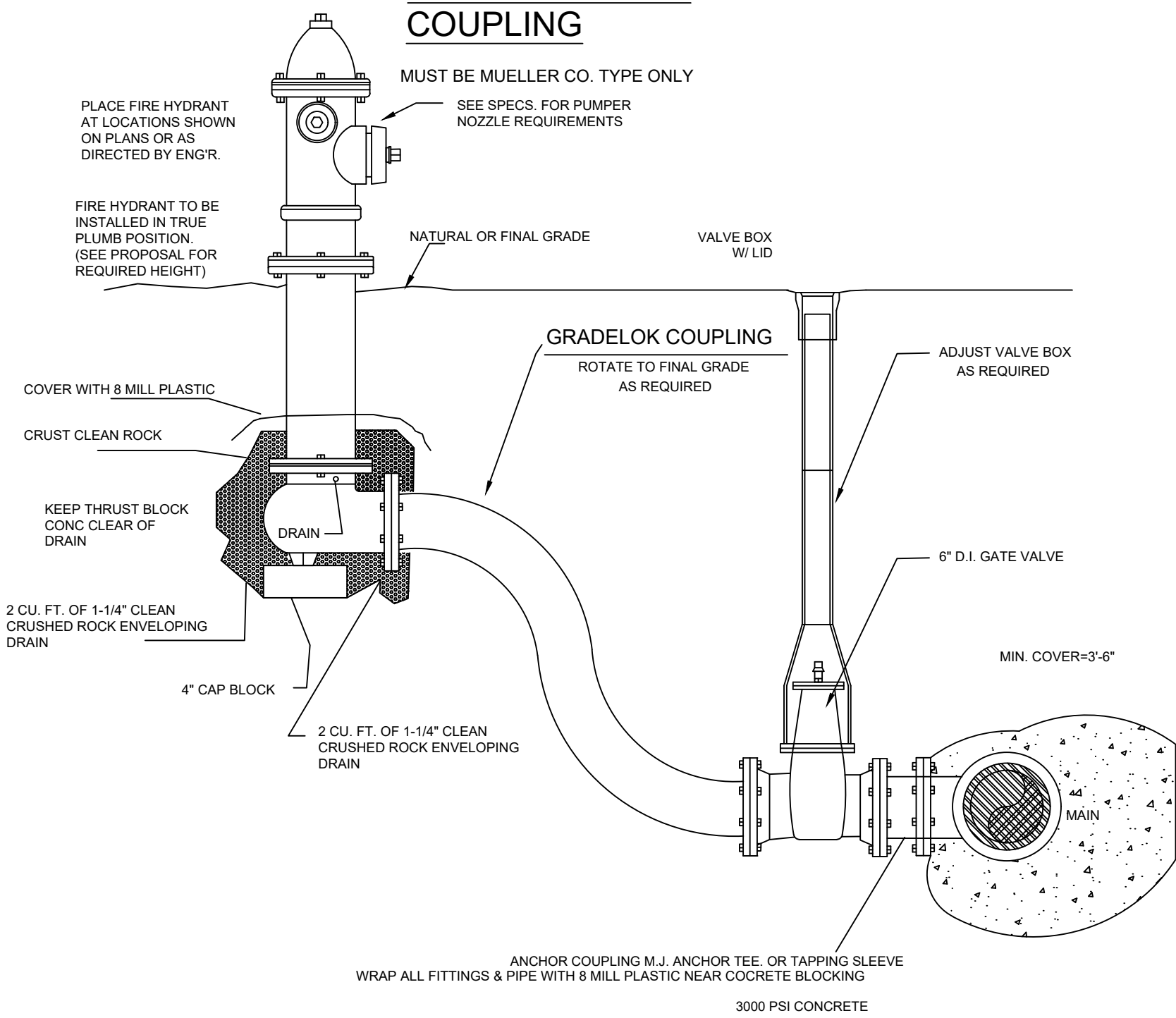
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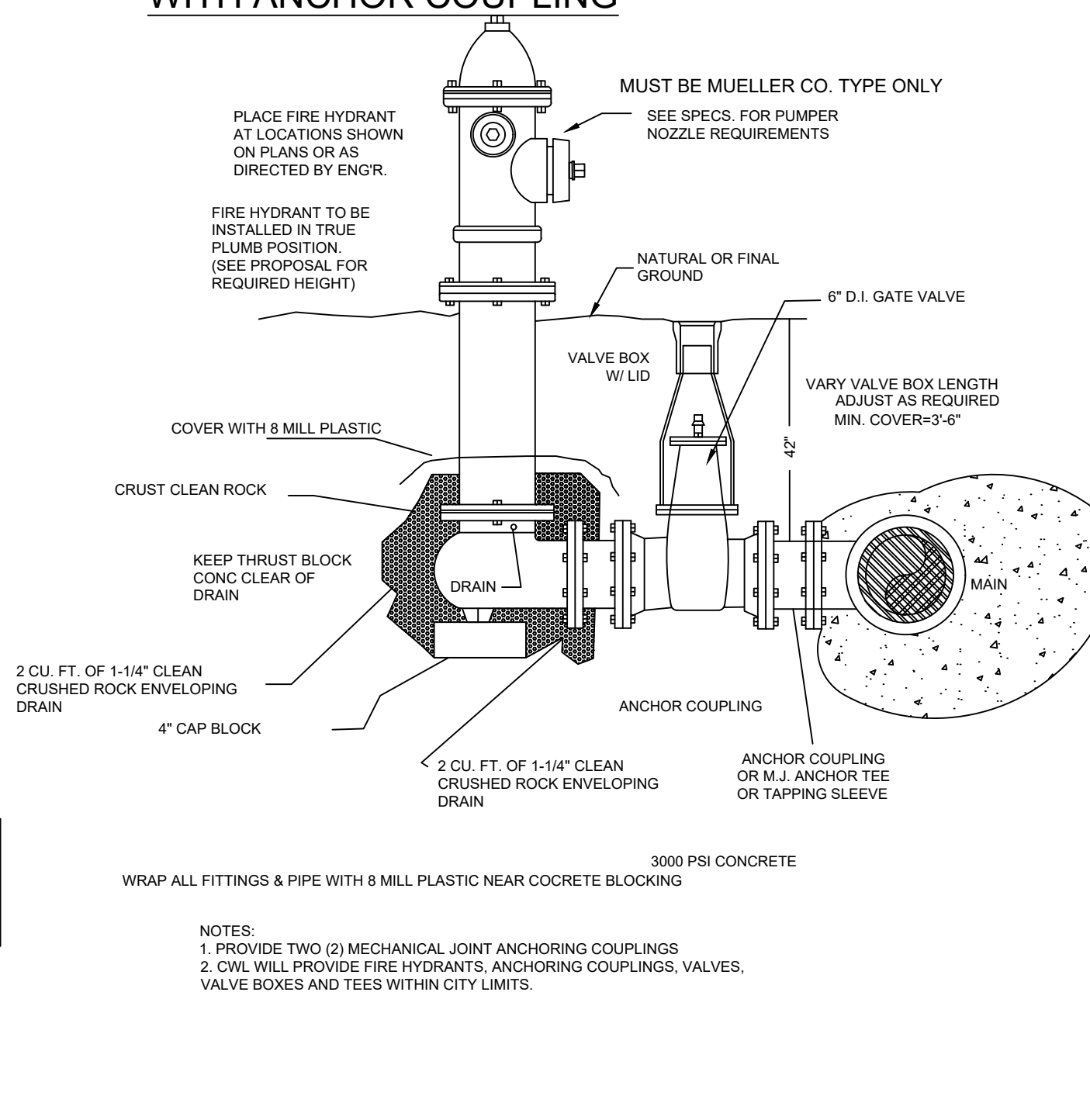
SHEET NUMBER:
ST-3

FIRE HYDRANT DETAIL
WITH GRADELOK
COUPLING



TYPICAL FIRE HYDRANT LOCATION
ALONG HWY. RIGHT-OF-WAY

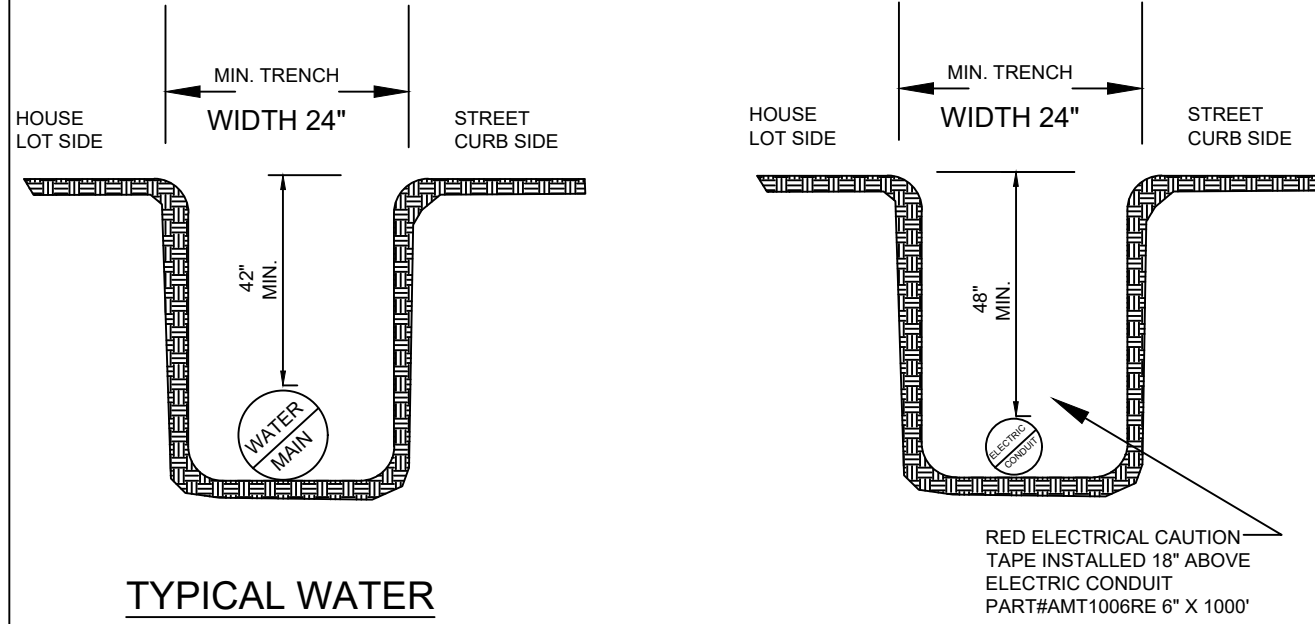
FIRE HYDRANT DETAIL
WITH ANCHOR COUPLING



TYPICAL FIRE HYDRANT
LOCATION

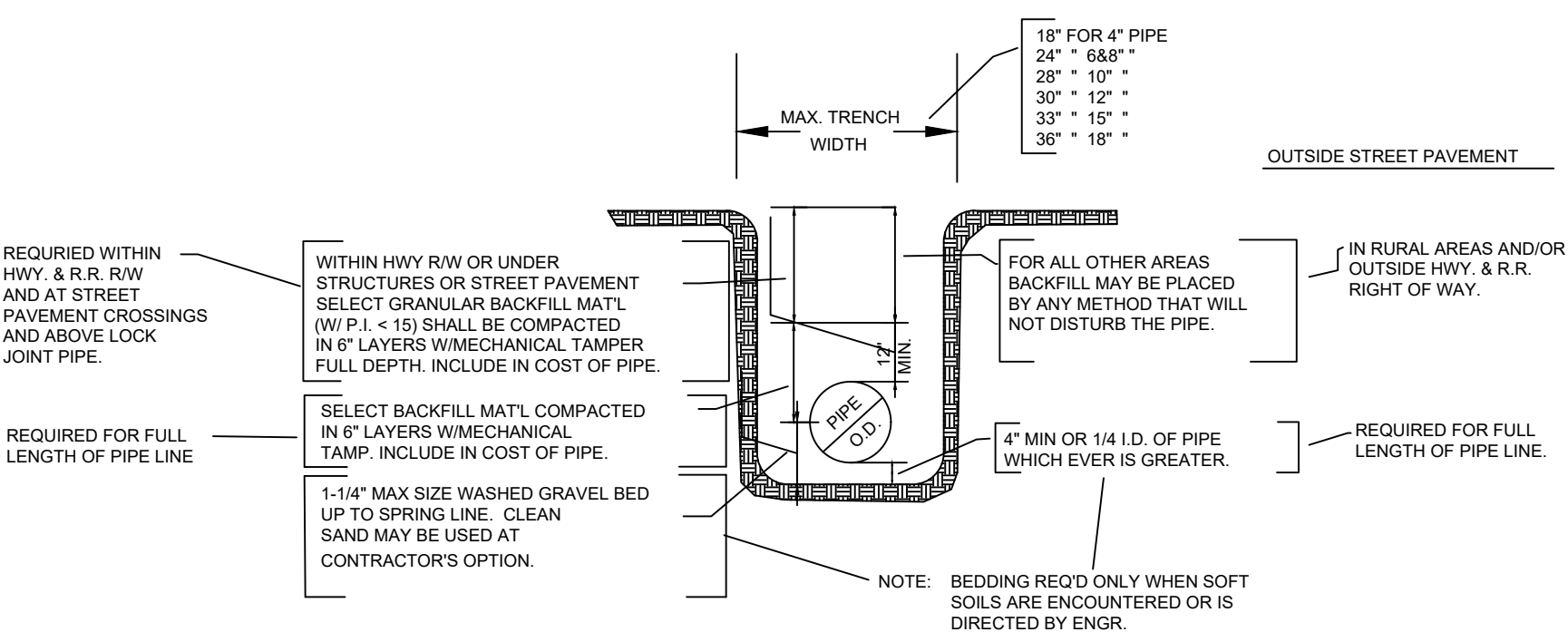
RADIUS OF CURVATURE FOR BENDING OF PIPE
AROUND CURVES OR IN COVES SHALL NOT
EXCEED THAT OF THE RECOMMENDATIONS OF
THE PIPE MANUFACTURER OR REFER TO THE
PVC PIPE HANDBOOK.

PIPE SIZE (inches)	LENGTH (feet)	MIN. BENDING RADIUS (feet)
(DR 21) 2"	20	60
(DR 21) 3"	20	60
(DR 18) 4"	20	100
(DR 18) 6"	20	144
(DR 18) 8"	20	189
(DR 18) 10"	20	231
(DR 18) 12"	20	275
(DR 35) 4"	12.5 or 20	54.9
(DR 35) 6"	12.5 or 21	81.6
(DR 35) 8"	12.5 or 22	109
(DR 35) 10"	12.5 or 23	137
(DR 35) 12"	12.5 or 24	163
(DR 35) 15"	12.5 or 25	199

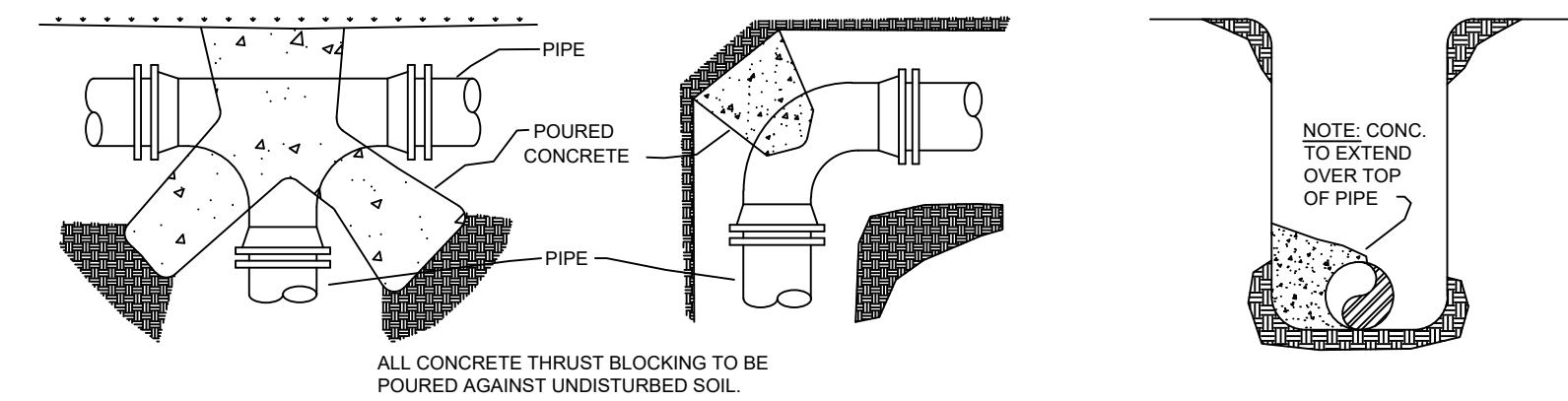


TYPICAL WATER
TRENCH DETAIL

TYPICAL ELECTRIC
TRENCH DETAIL



TYPICAL WATER PIPE BEDDING
AND BACKFILL DETAIL

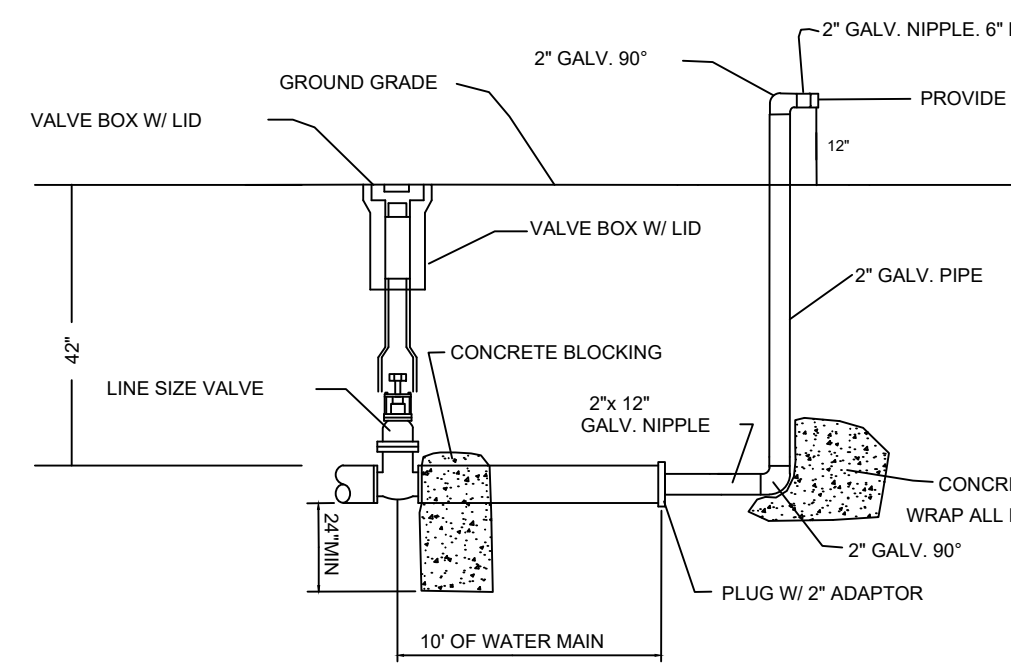


THRUST BLOCK DETAILS

- NOTES:
1. ALL BLOCKING SHALL BE AGAINST UNDISTURBED HAND DUG SOIL.
 2. WHERE SOIL CONDITIONS MAKE IT NECESSARY TO POUR CONCRETE BLOCKING OVER JOINTS, THE ENDS OF THE ADJACENT PIPES MUST HAVE A BRACE BLOCK TO RESIST MOVEMENT OF THESE JOINTS.
 3. ALL FITTINGS & PIPE SHALL BE COVERED WITH 8 MILL PLASTIC WHEN BLOCKING TO PREVENT BONDING OF CONCRETE.
 4. WHERE SHEAR IS HIGH PROPER REINFORCING MUST BE INSTALLED INTO THE BLOCKING AS DIRECTED BY ENGINEER.
 5. COVER SHALL BE A MINIMUM OF 3\"/>

SIZE & BEND DEGREE	STATIC THRUST (LB)	BLOCKING AREA (FT ²)
4" - 22 1/2°	1103	1
4" - 45°	2164	2
4" - 90°/TEE/PLUG	3998	4
6" - 22 1/2°	2482	2.5
6" - 45°	4867	5
6" - 90°/TEE/PLUG	8997	9
8" - 22 1/2°	4413	4.5
8" - 45°	8656	8.5
8" - 90°/TEE/PLUG	15994	16

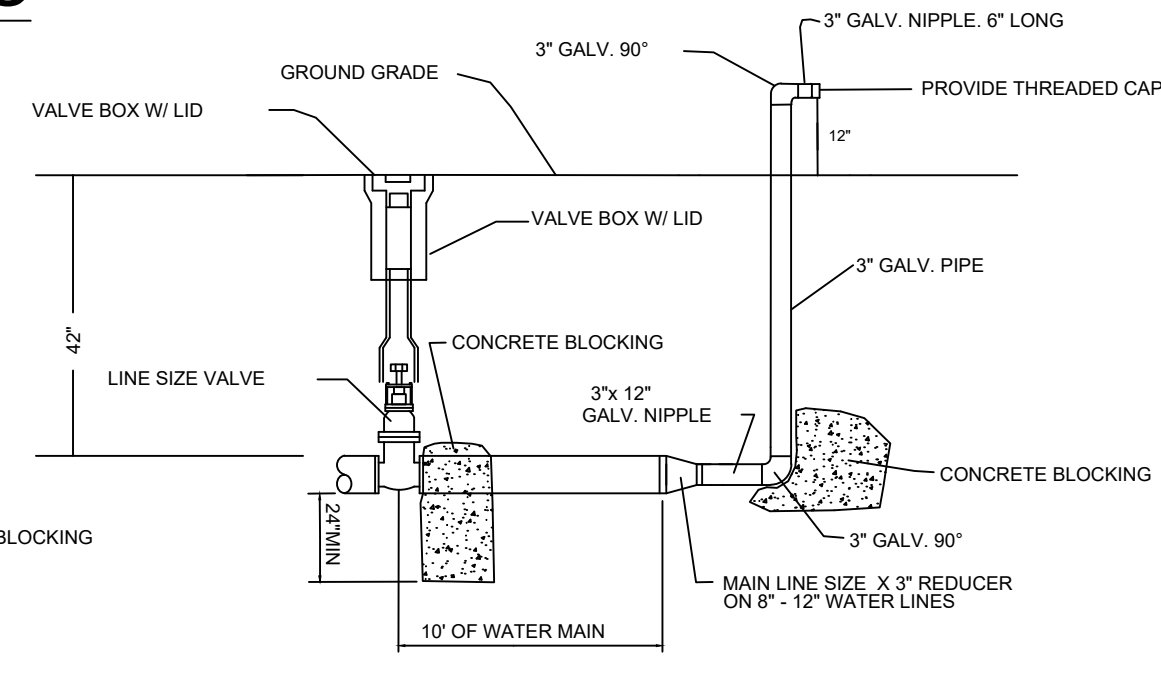
BLOW-OFF ASSEMBLY DETAILS



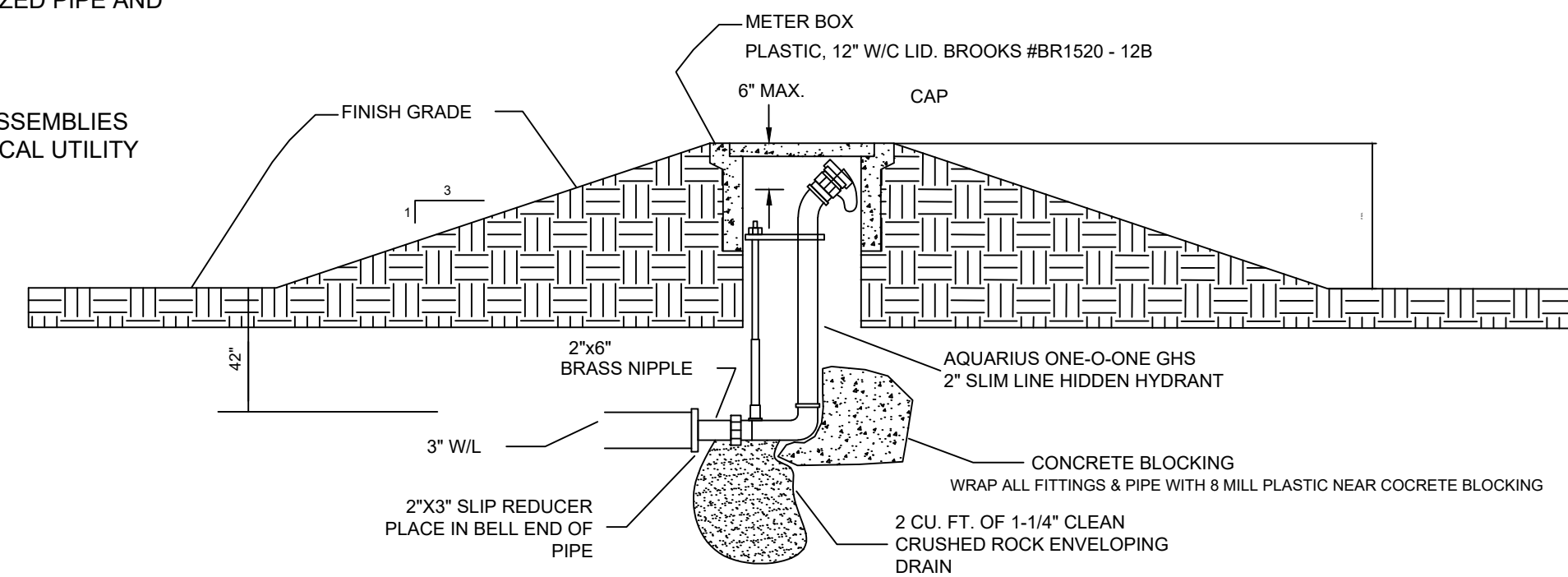
2" B.O. ASSEMBLY
FOR 2" THRU 6" LINES
WITH FUTURE EXPANSION

NOTE: ALL 2", OR 3" GALVANIZED PIPE AND
FITTINGS ARE TO BE SCH 40

NOTE: OTHER BLOW-OFF ASSEMBLIES
MUST BE APPROVED BY LOCAL UTILITY
COMPANY



3" B.O. ASSEMBLY
FOR 8" THRU 12" LINES
WITH FUTURE EXPANSION

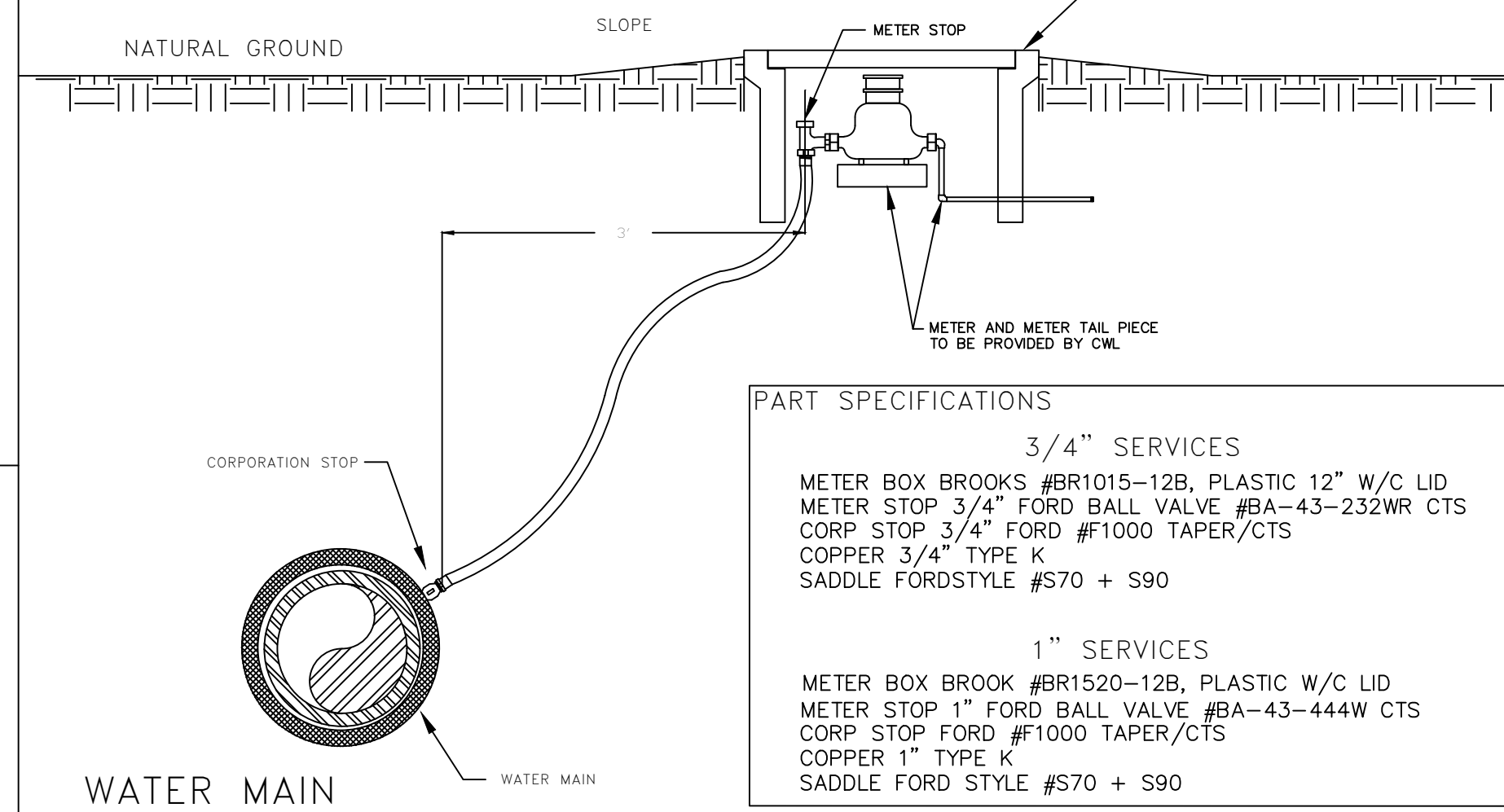


UNDERGROUND WASHOUT ASSEMBLY
FOR COVES AND DEAD END LINES WITH
NO FUTURE EXTENSION

SERVICE CONNECTION AND METER SETTING

NOTE: ONLY 3/4" SERVICES TO BE USED OUTSIDE CITY LIMITS
NOTE: 1" SERVICES TO BE USE WHEN WATER PRESSURE IS BELOW 60 PSI

UNDERGROUND SERVICE LINE
MINIMUM REQUIREMENTS
CITY WATER AND LIGHT PLANT

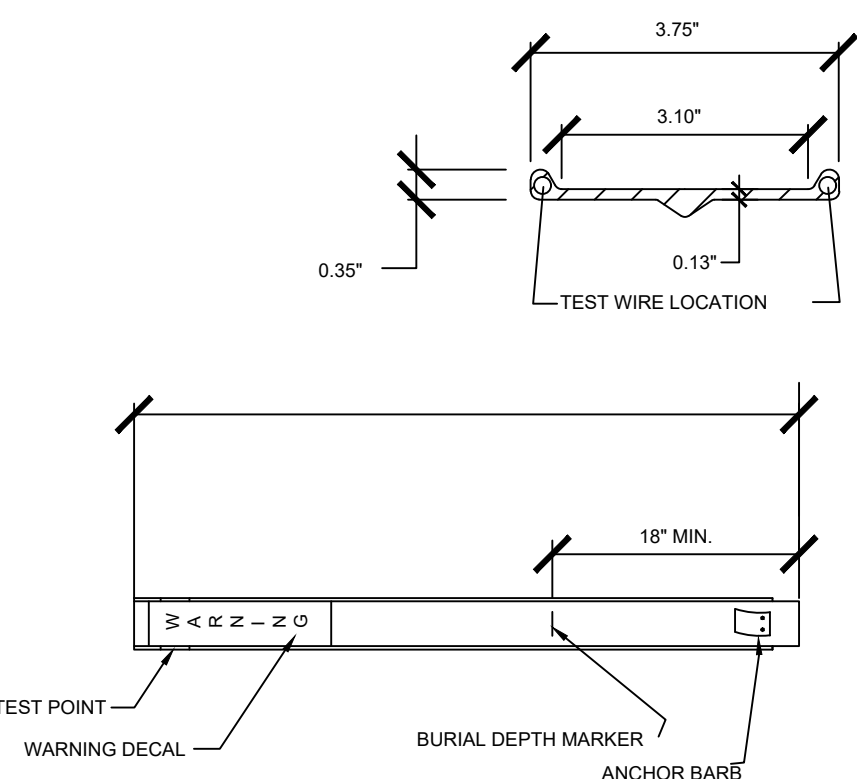


PART SPECIFICATIONS

3/4" SERVICES
METER BOX BROOKS #BR1015-12B, PLASTIC 12" W/C LID
METER STOP 3/4" FORD BALL VALVE #BA-43-232WR CTS
CORP STOP 3/4" FORD #F1000 TAPER/CTS
COPPER 3/4" TYPE K
SADDLE FORDSTYLE #S70 + S90

1" SERVICES
METER BOX BROOK #BR1520-12B, PLASTIC W/C LID
METER STOP 1" FORD BALL VALVE #BA-43-444W CTS
CORP STOP FORD #F1000 TAPER/CTS
COPPER 1" TYPE K
SADDLE FORD STYLE #S70 + S90

TAPPING CONNECTIONS SHALL CONSIST OF TAPPING
SLEEVES AND COMPANION TAPPING VALVES. THEY
SHALL BE DESIGNED FOR WORKING WATER PRESSURE
OF 200 PSI. SLEEVES SHALL BE FASTENED SECURELY
TO THE PIPE TO BE TAPPED. TAPPING VALVES SHALL
BE BOLTED SECURELY TO THE FLANGES OF THE
SLEEVES, AND THE TAPPING MACHINE CONNECTED TO
THE MECHANICAL JOINT END. THE INLET OPENINGS
SHALL BE FLANGED AND THE OUTLET OPENINGS SHALL
HAVE MECHANICAL JOINT ENDS. ALL TAPS WILL BE
PERFORMED BY CWL.



WATER LINE & FORCE MAIN
MARKER DETAIL

VALVE SIZE	A	B	C	D	E	F	G	H	J
4	9-1/4	4-1/4	2-5/8	9-1/2	9	1-5/16	14-3/4	8-3/4	4-3/4
6	10-1/4	5	2-5/8	11-1/2	11	1	19	8-3/4	6-3/4
8	11	5-1/4	2-5/8	13-3/4	13-1/2	1-1/8	22-1/2	8-3/4	8-3/4
10	12-1/2	6	2-5/8	15-3/4	15	1-5/16	26-1/2	12-7/8	8-3/4
12	13-1/2	6-1/2	2-5/8	18	19	1-1/4	30	12-7/8	8-3/4
8	6-1/4	4-1/4	2-5/8	7-3/4	7-7/8	3/4	12-3/8	4-3/8	4-3/4

TAPPING SLEEVE
TAPPING VALVE DETAIL

EDEN HILLS PHASE III

WATER DETAILS



REVISIONS

DATE	BY	DESCRIPTION

DRAWING INFO.

DRAWN BY:	
DATE:	
SCALE:	

SHEET NUMBER:

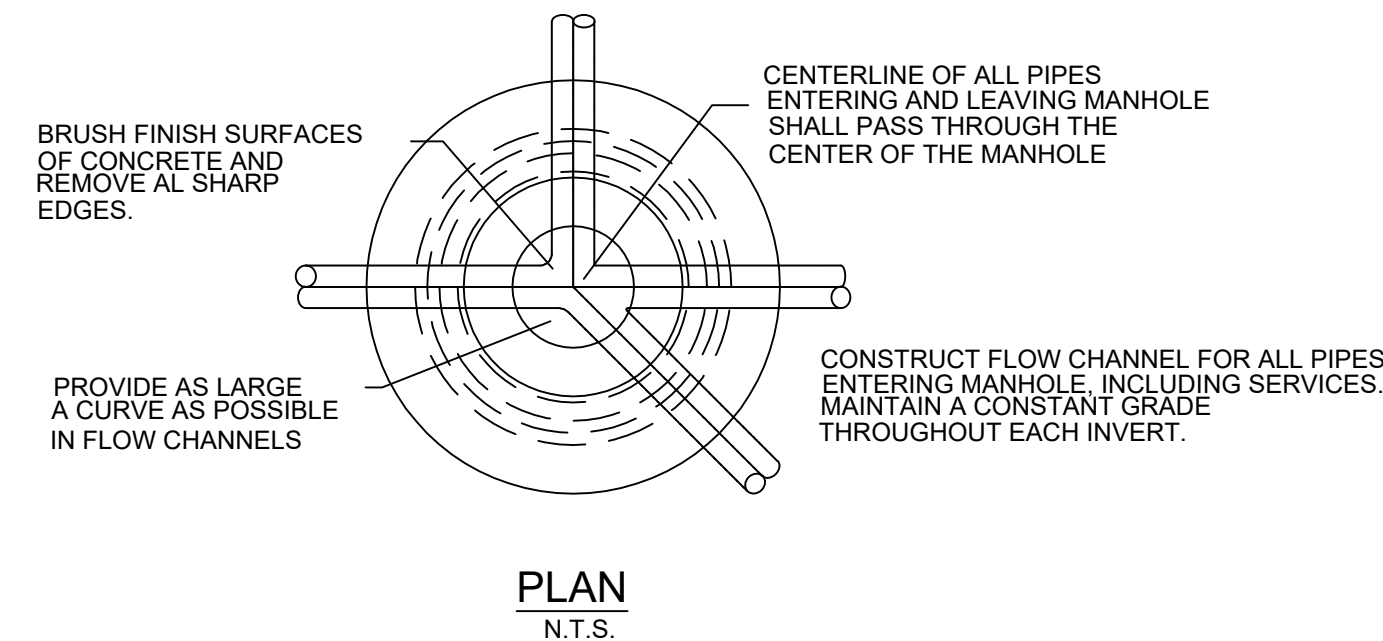
DT-2

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NOTES TYPICAL TO ALL MANHOLES

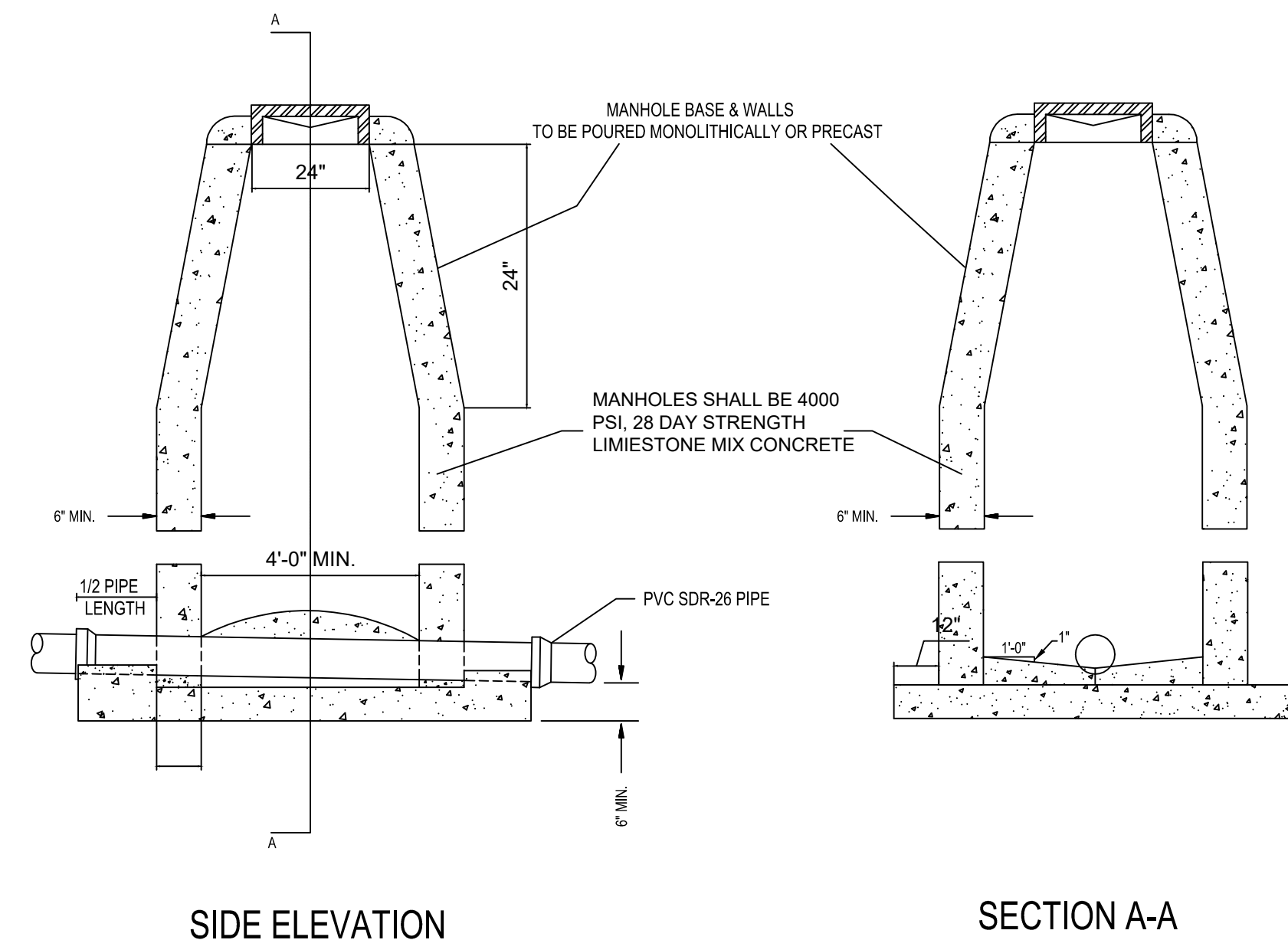
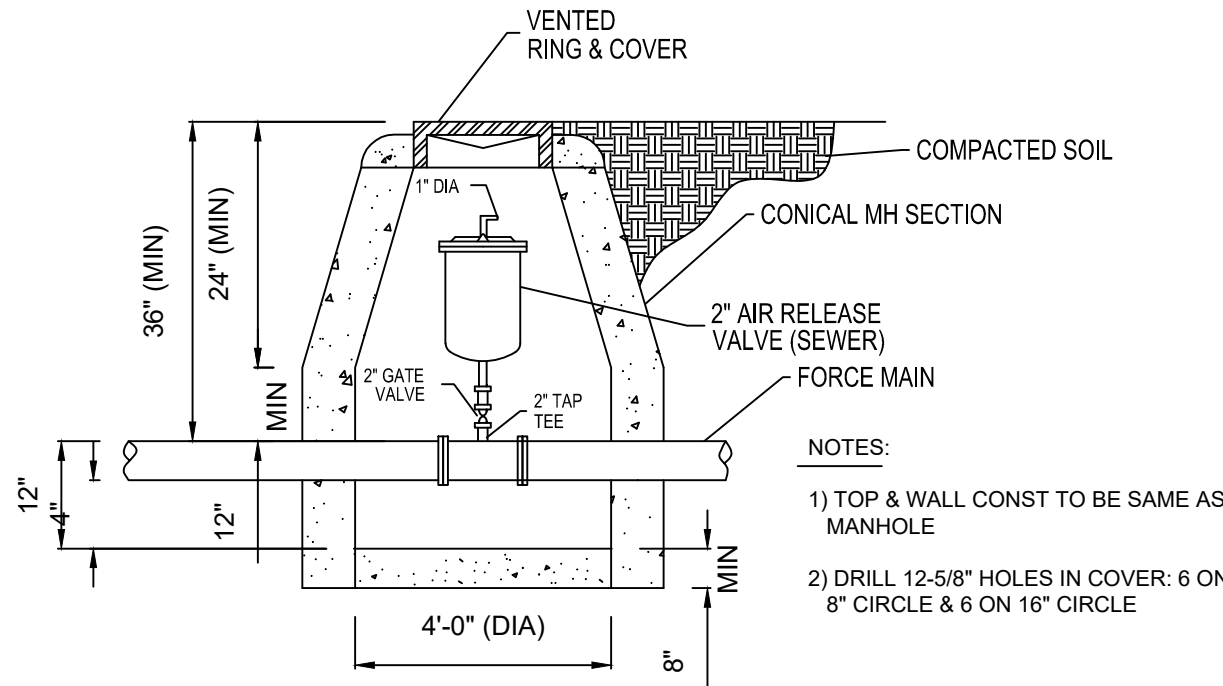
- MANHOLE BASES TO BE 4000 PSI, 28 DAY STRENGTH, LIMESTONE MIX CONCRETE ON UNDISTURBED SUB-GRADE OR ON COMPACTED SELECT FILL MATERIAL AS AUTHORIZED.
- MANHOLE SIDEWALL MATERIAL TO BE CONCRETE IN ACCORDANCE WITH PROPOSAL FORM REQUIREMENTS.
 - 4" I.D. FOR SEWER SIZES 6" THRU 24"
 - 5" I.D. FOR SEWER SIZES 24" THRU 30"
 - 6" I.D. FOR SEWER SIZES 36" THRU 42"
- SET MANHOLE TOPS AS FOLLOWS:
 - IN STREETS, ROADS, HIGHWAYS, AND OTHER PAVED AREAS: FLUSH WITH FINISHED PAVING GRADE.
 - UNDEVELOPED AREAS, SUCH AS FIELDS, WOODS, ETC...: 12" ABOVE GROUND.
 - OTHER AREAS: 1" ABOVE GROUND.
- MANHOLE FRAMES SHALL HAVE MIN. OPENING OF 22" DIA.

STANDARD MANHOLE



MANHOLE DETAILS

AIR/VACUUM RELEASE VALVE DETAIL

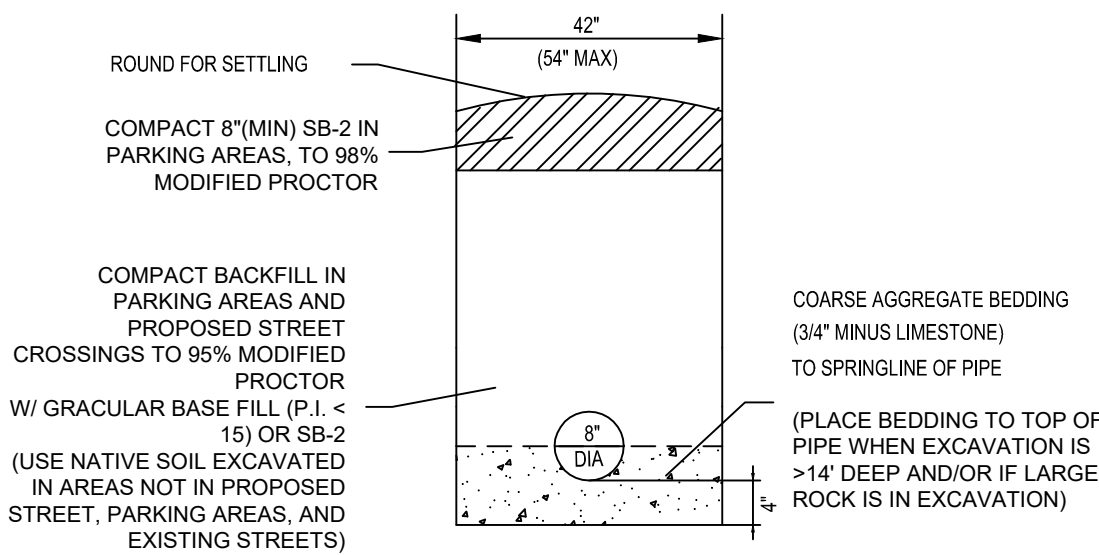


STANDARD MANHOLE

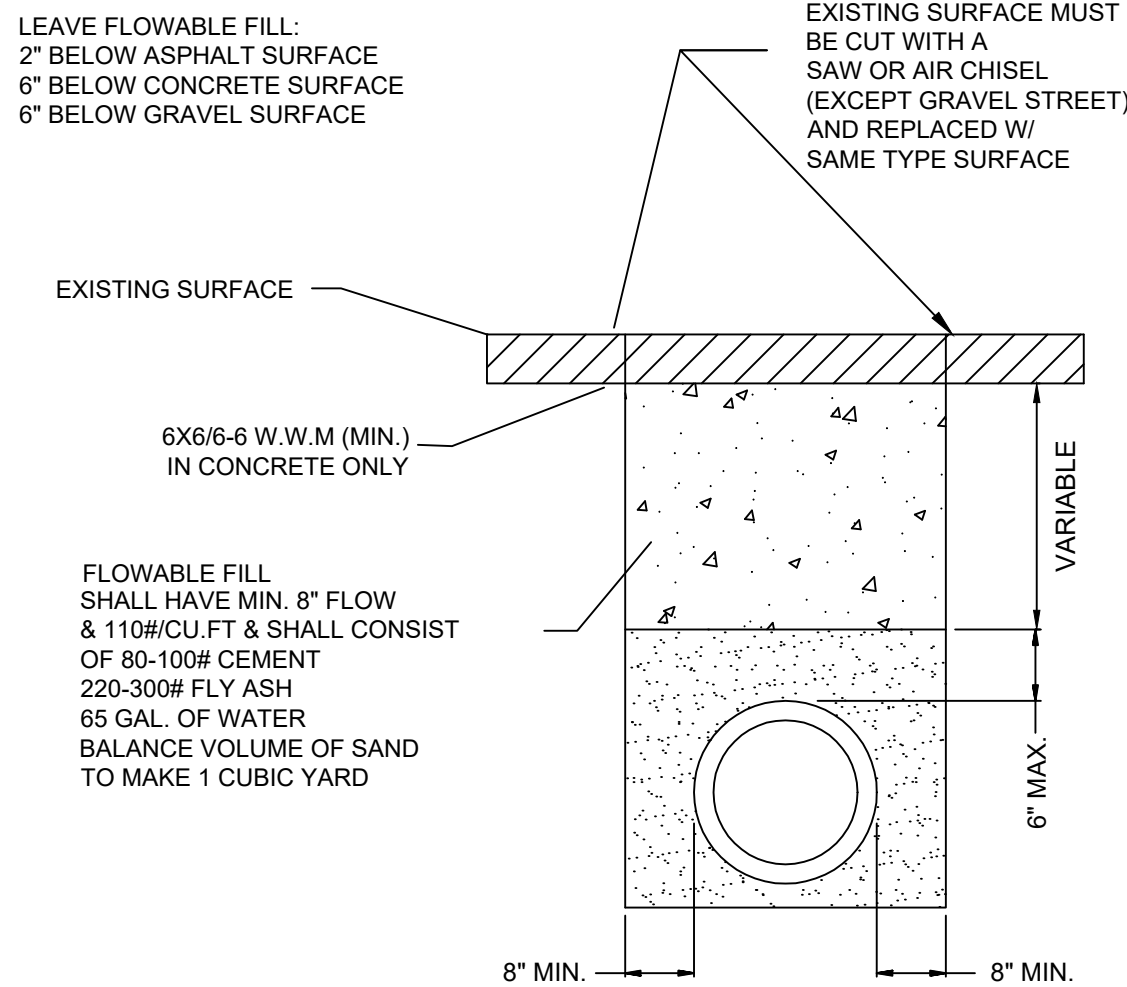
NON-EXISTING STREET LOCATIONS
SDR-26 PVC TRENCH DETAIL

NOTES:

- COARSE AGGREGATE SHALL BE MECHANICALLY TAMPED WHEN USED.
- PIPE IN TRENCH SHALL BE PLACED ON NO LESS THAN 4" OF 3/4" MINUS LIMESTONE. ALL OVER EXCAVATION SHALL BE COMPACTED BACK TO GRADE W/ BEDDING MATERIAL.
- PVC PIPE SHALL BE SDR-26 AND INSTALLED IN ACCORDANCE WITH UNI-BELL PVC PIPE ASSOCIATION'S RECOMMENDATIONS FOR CONSTRUCTION.



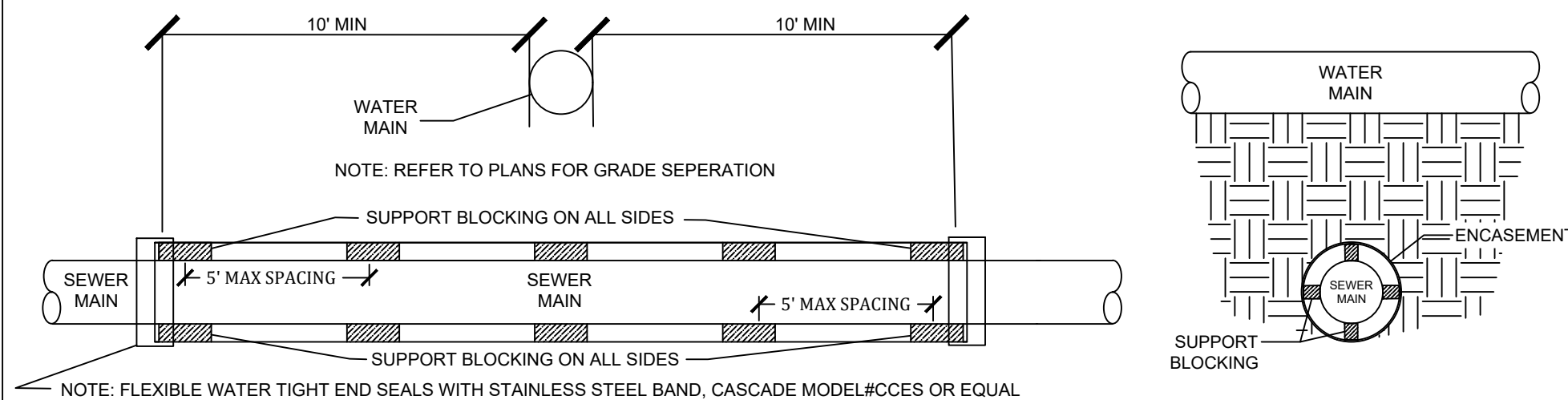
- NOTE: (1) CONTRACTOR SHALL OBTAIN A STREET CROSSING PERMIT FROM THE CITY OF JONESBORO PRIOR TO CUTTING STREET.
(2) EXCAVATED MATERIAL SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR
(3) THIS REPAIR DETAIL IS REQUIRED FOR ALL EXCAVATION WITHIN 5' OF PAVED EDGE AND ALL TRANSVERSE EXCAVATIONS TO EXTEND 3' BEYOND PAVED EDGE.



EXISTING STREET LOCATIONS

PVC TRENCH DETAIL

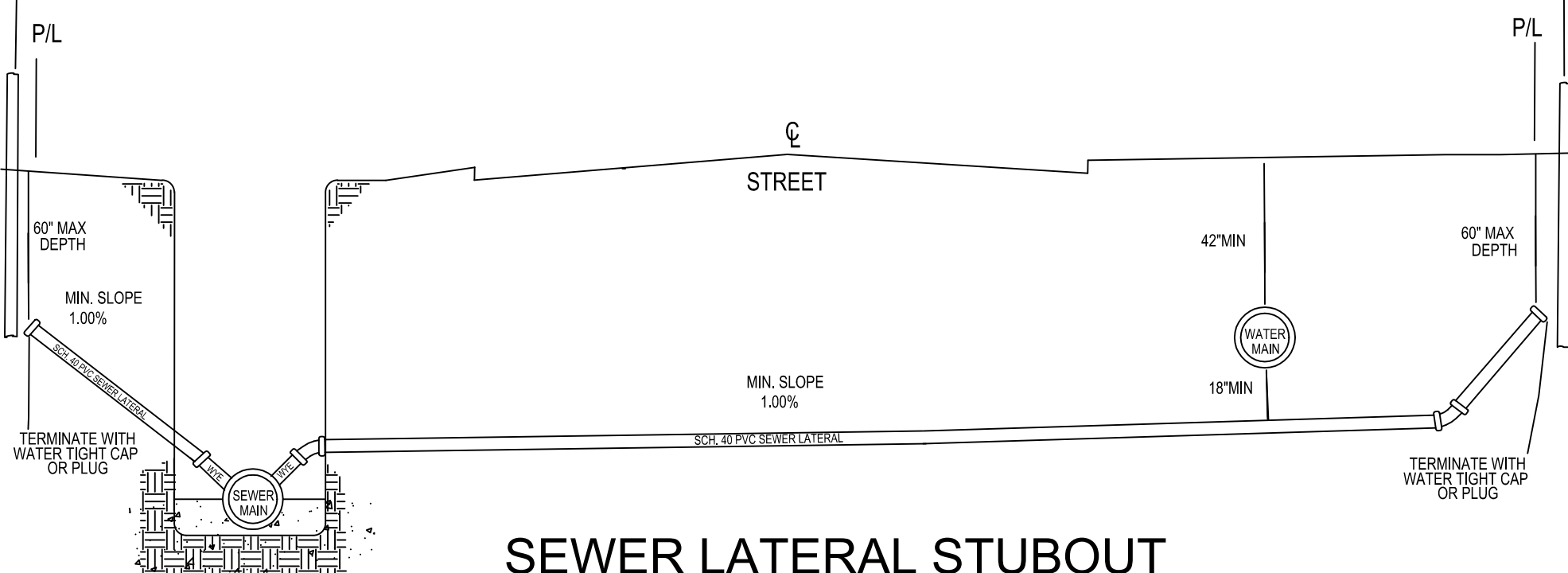
- NOTE: 0.25 THICKNESS STEEL OR SCH 40" PVC ENCASMENT PIPE SHALL EXTEND 10' MINIMUM EACH SIDE OF WATER MAIN
NOTE: REFER TO OPERATING ROUTING NOTE IF WATERLINE CANNOT AVOID GOING UNDER SEWERLINE



ENCASEMENT FOR SEWER MAINS AT WATER CROSSINGS

NOTE: WHEN 18" VERTICAL SEPERATION CANNOT BE MAINTAINED

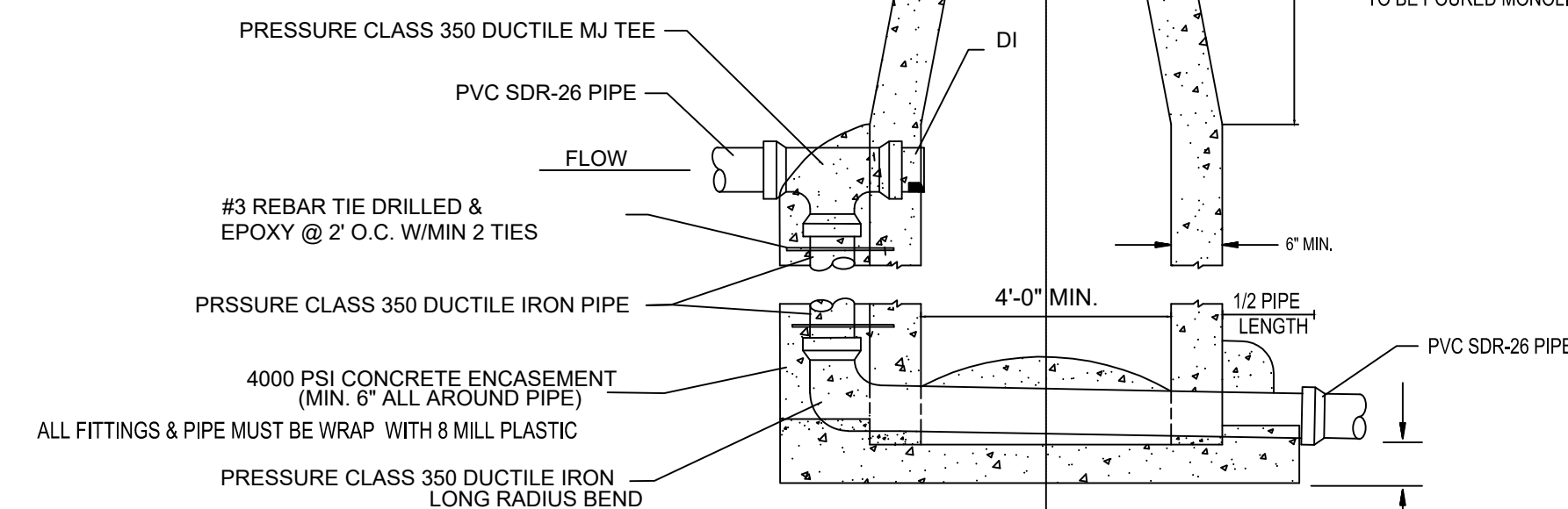
USE 4" PERFORATED SDR-35 PVC PIPE AS MARKERS @ END OF LATERALS 3'-4' ABOVE GROUND PAINTED GREEN FOR IDENTIFICATION MARKER



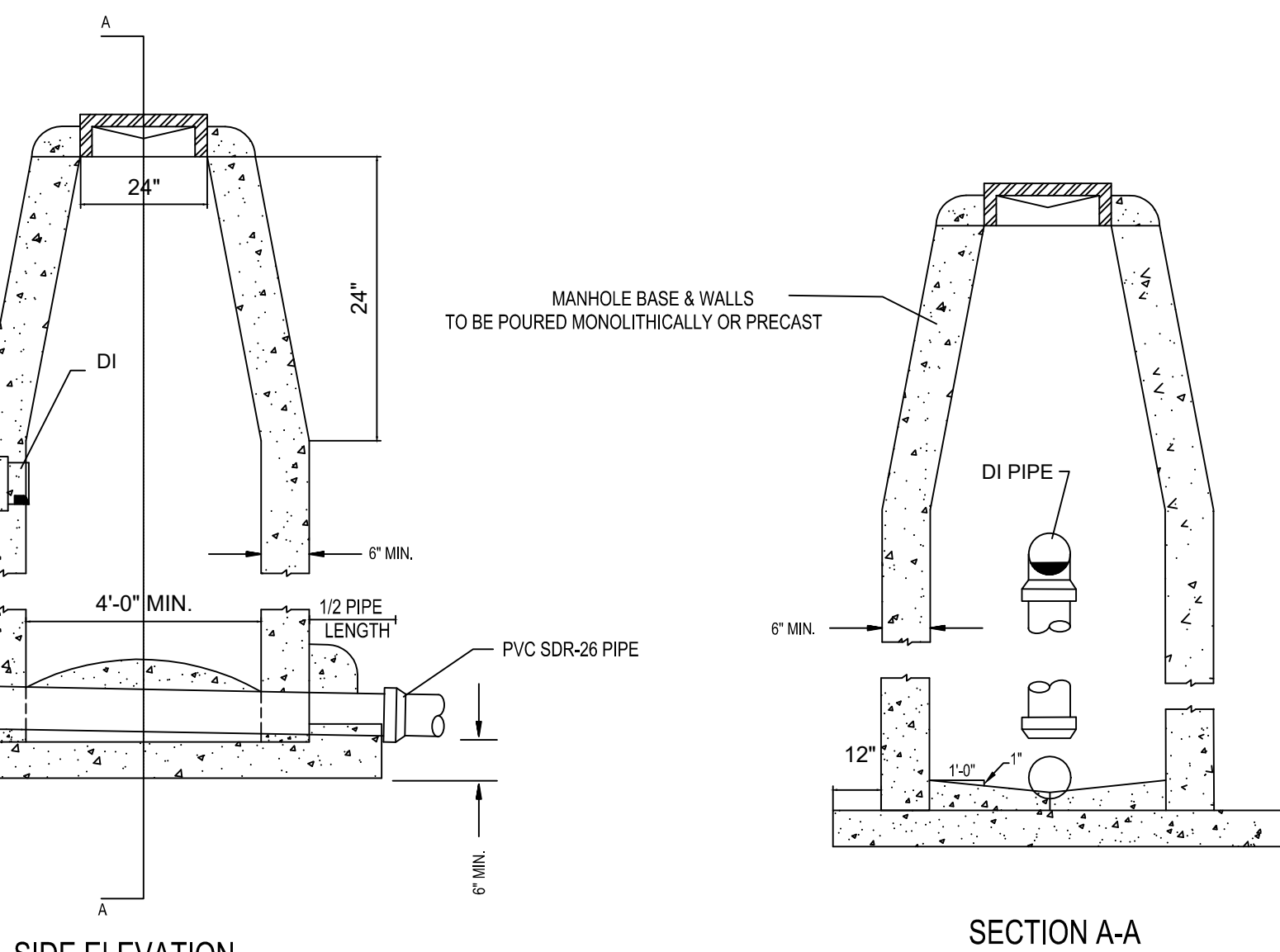
SEWER LATERAL STUBOUT
PERMITS REQUIRED BEFORE INSTALLATION

USE SAME CONFIGURATION FOR MANHOLE STUBOUTS

MANHOLE
CONSTRUCTION DETAIL



NOTE: MANHOLES SHALL BE PRECAST W/ NEOPRENE GASKETS AS APPROVED BY ENGINEER AND/OR UTILITY COMPANY

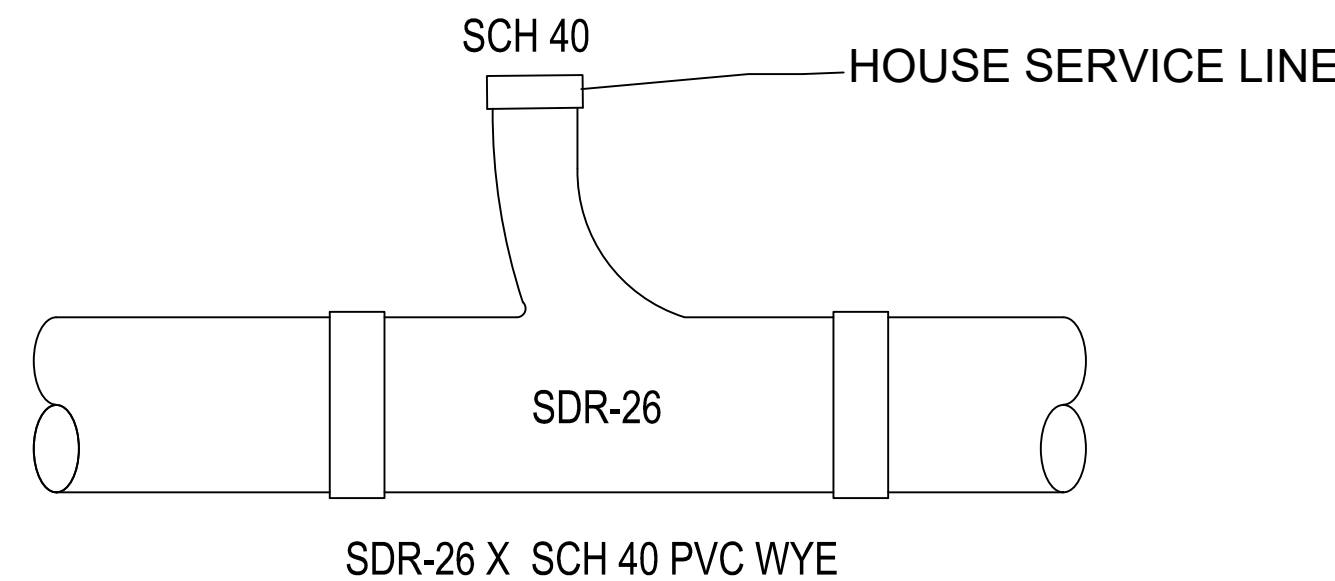


DROP MANHOLE

SINGLE WYE

ALL SERVICE LINES UNDER PAVEMENT SHALL BE PVC SCH 40 PIPE W/ PVC SCH 40 COUPLINGS

TEE WYE ONLY



EDEN HILLS PHASE III

SEWER DETAILS

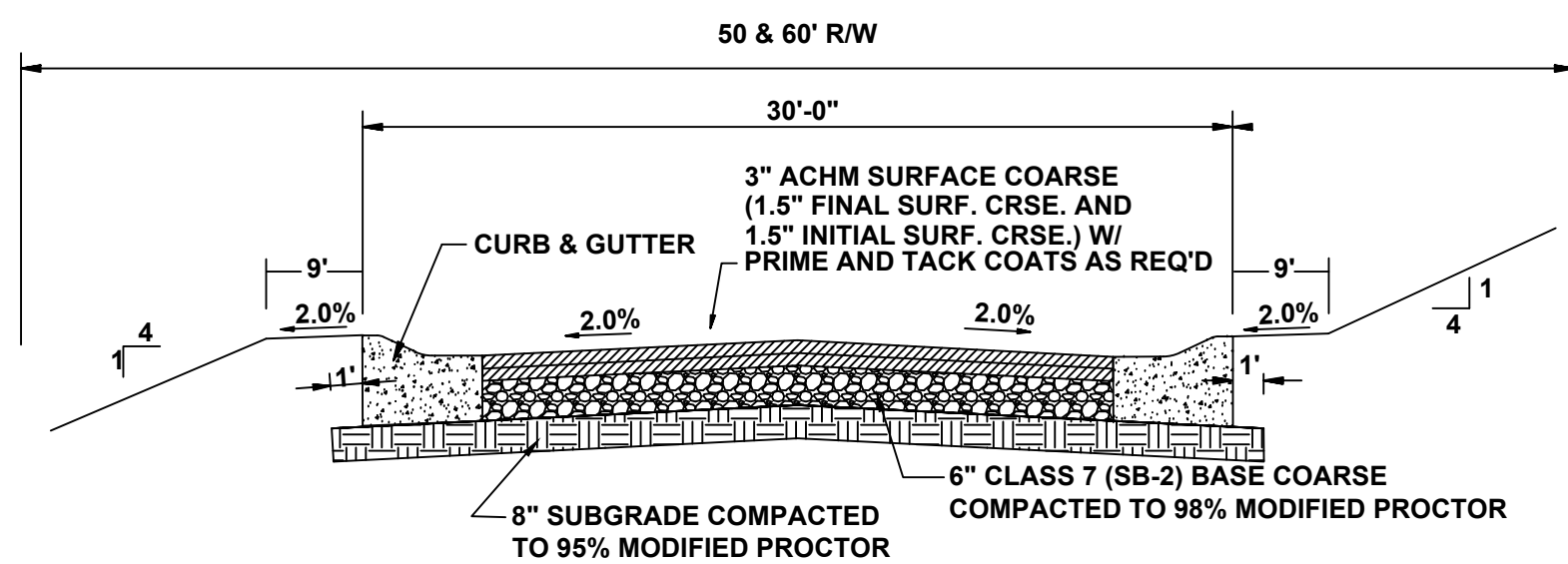


REVISIONS		
DATE	BY	DESCRIPTION

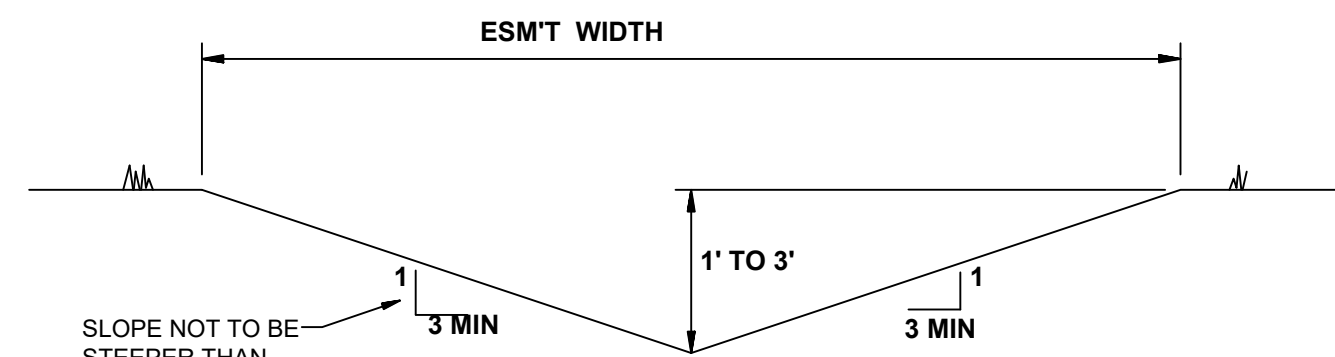
DRAWING INFO.		
DRAWN BY:		
DATE:		
SCALE:		

SHEET NUMBER:
DT-3

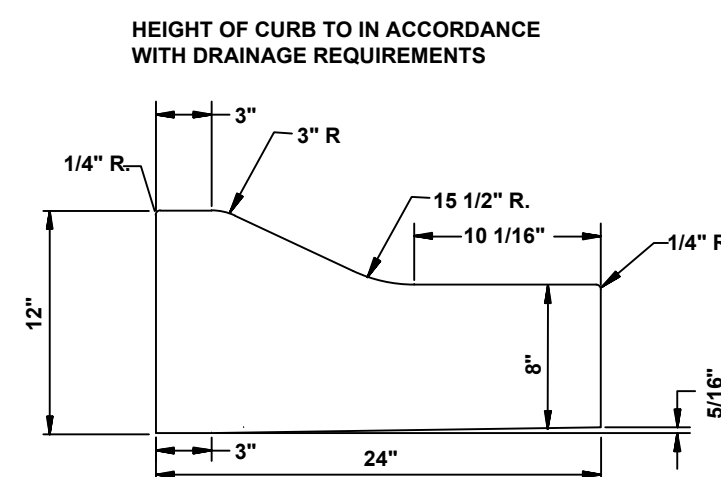
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TYPICAL SECTION - INTERIOR STREETS
N.T.S.



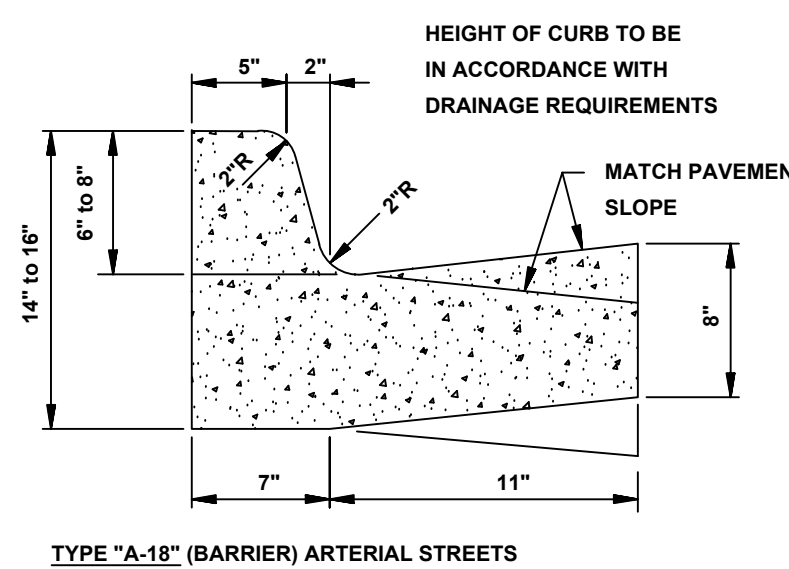
'A' TYPICAL DITCH DETAIL
N.T.S.



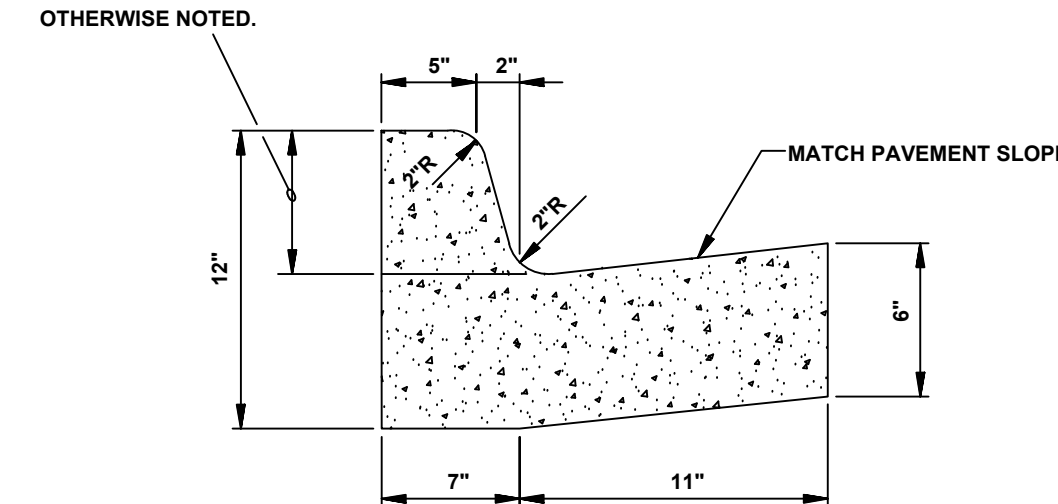
TYPE 'B' CURB & GUTTER
N.T.S.

NOTE: CONTRACTION AND EXPANSION JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF JONESBORO SPECIFICATIONS

NO DRIVEWAY CUTS ALLOWED WITH THIS TYPE OF CURB



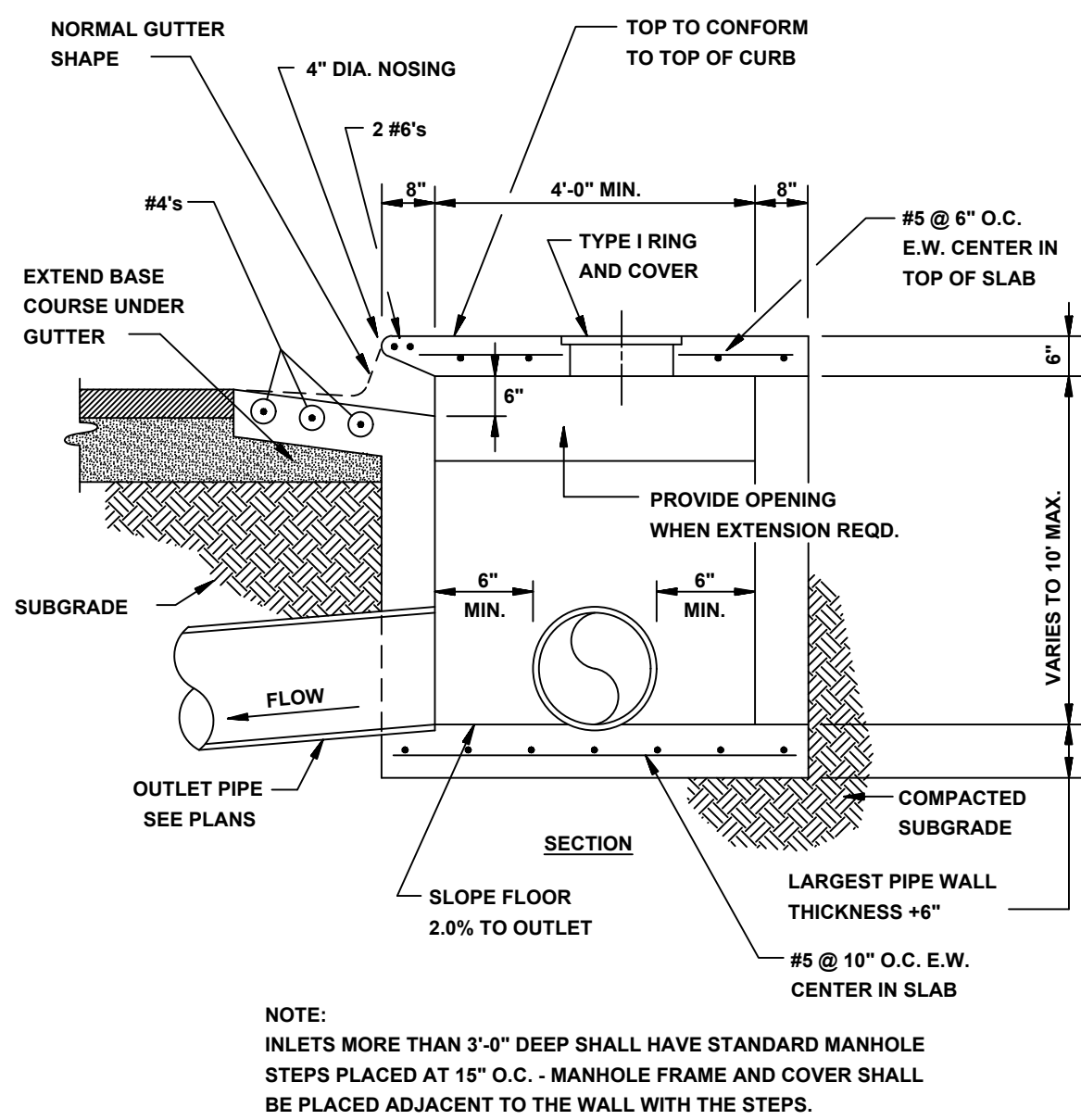
TYPE "A-18" (BARRIER) ARTERIAL STREETS



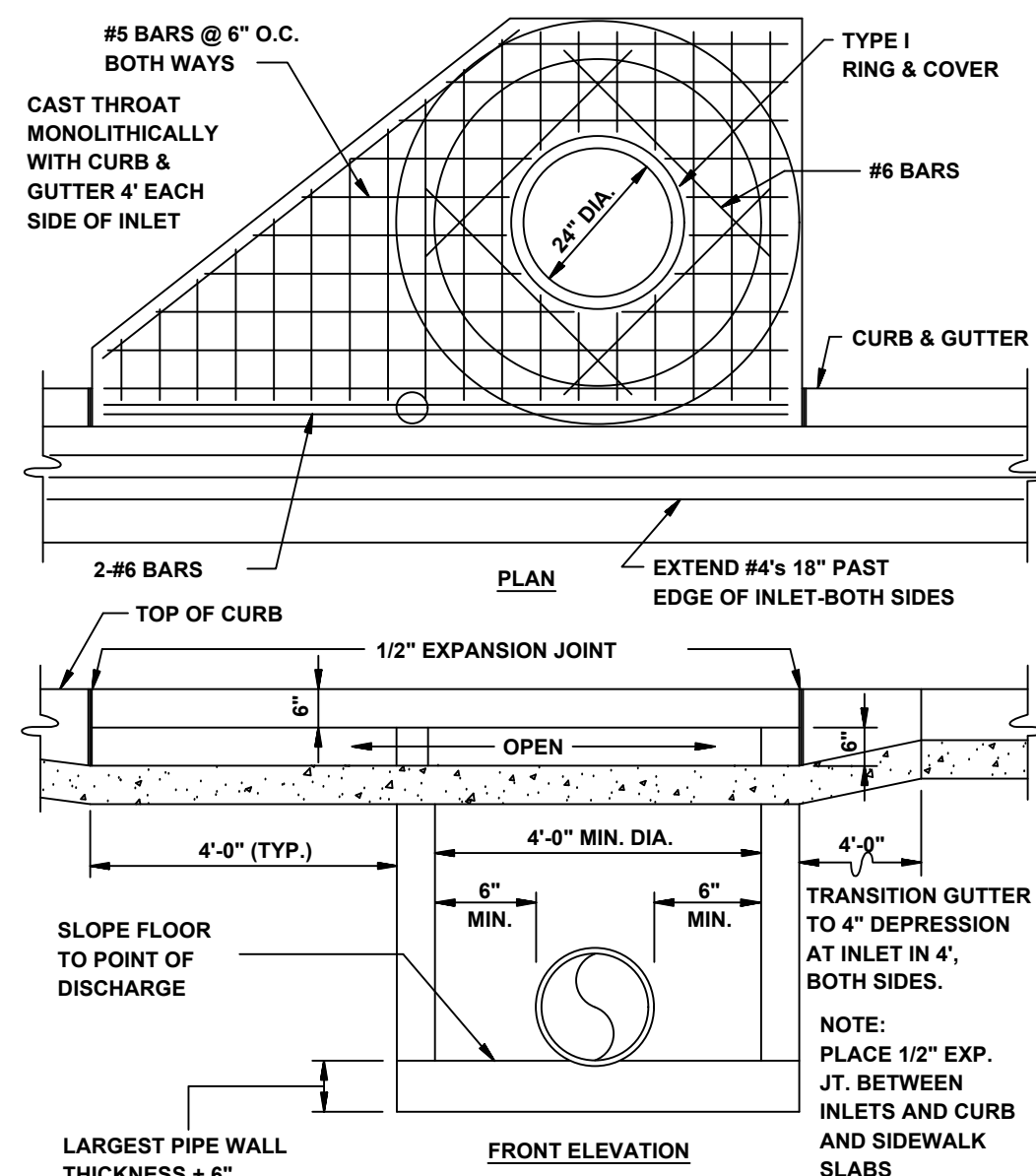
TYPE "A-18" (BARRIER) RESIDENTIAL & COLLECTOR STREETS

COMBINATION CURB & GUTTER
N.T.S.

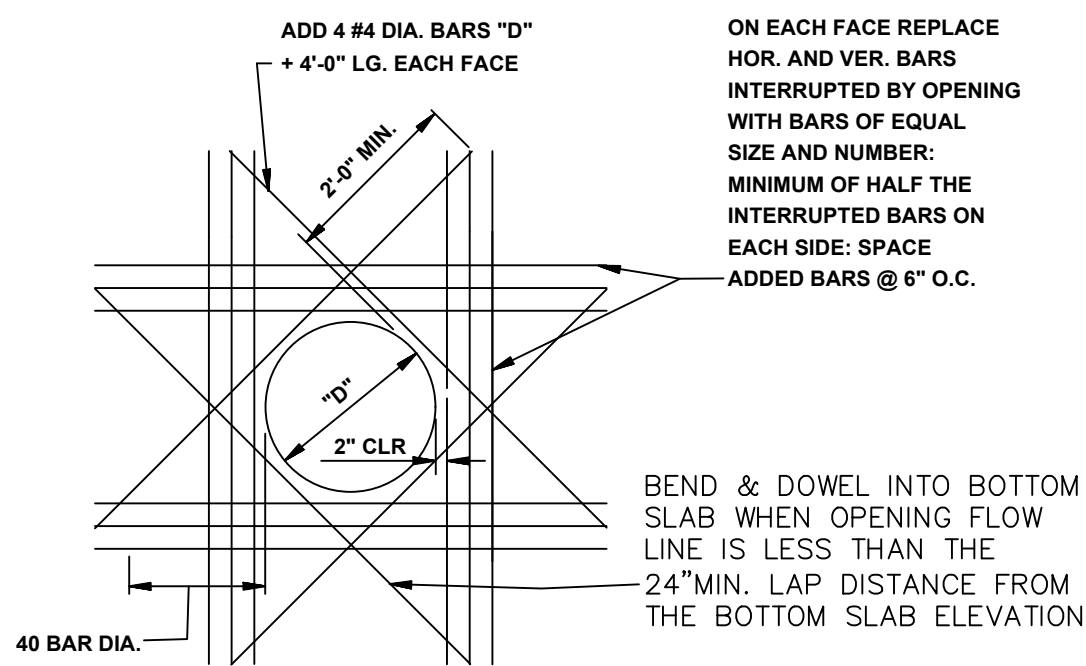
NOTE: CONTRACTION AND EXPANSION JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.



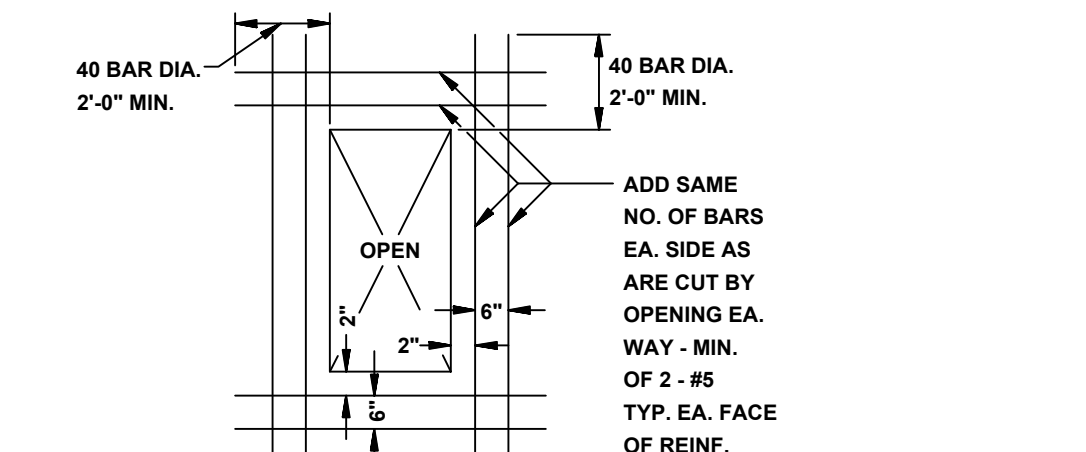
SECTION - CIRCULAR CURB INLET
N.T.S.



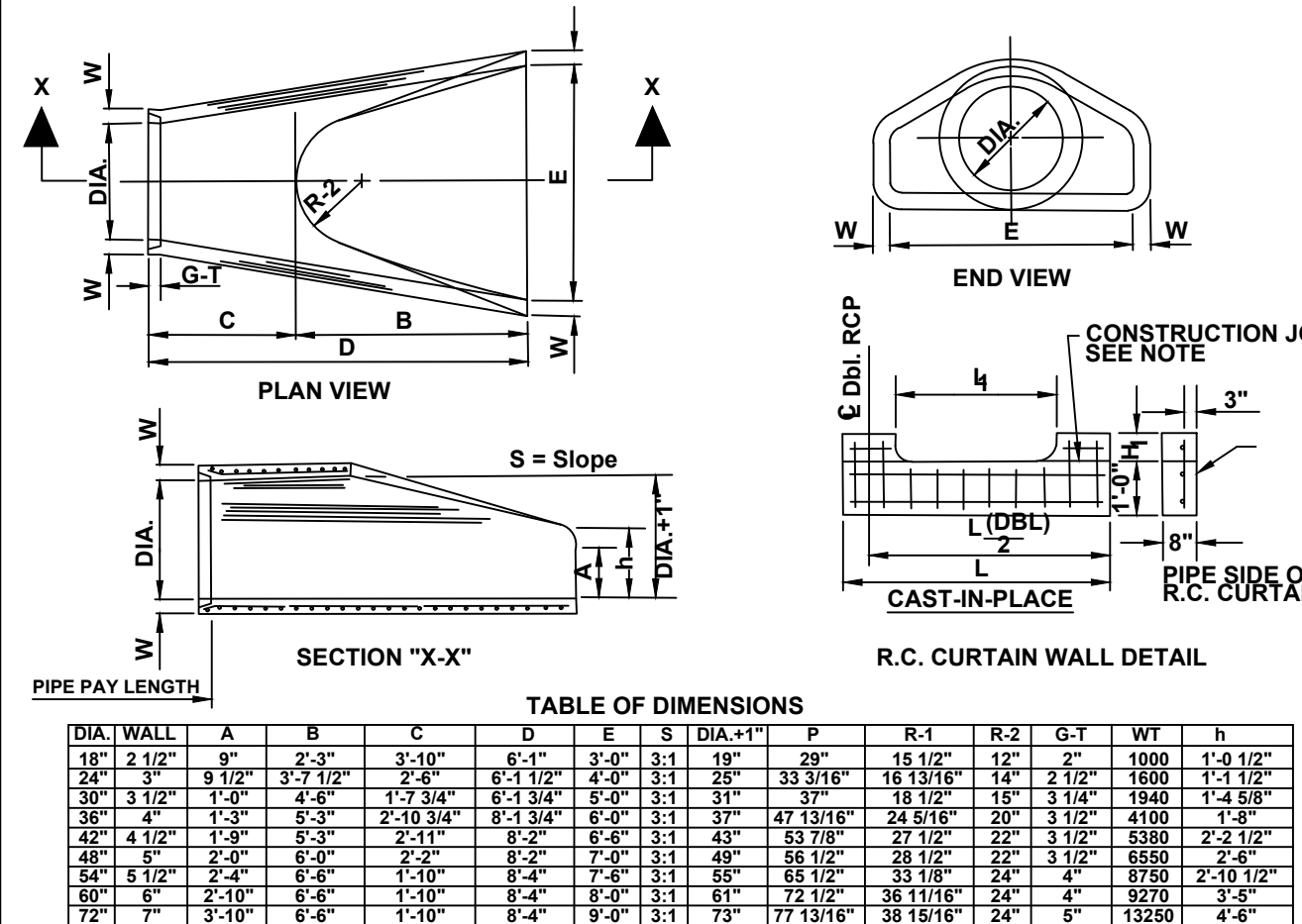
**CIRCULAR CURB INLET
W/ INLET EXTENSION**
N.T.S.



**ADDED REINFORCEMENT AT
ROUND OPENING IN WALL OR SLAB**
N.T.S.

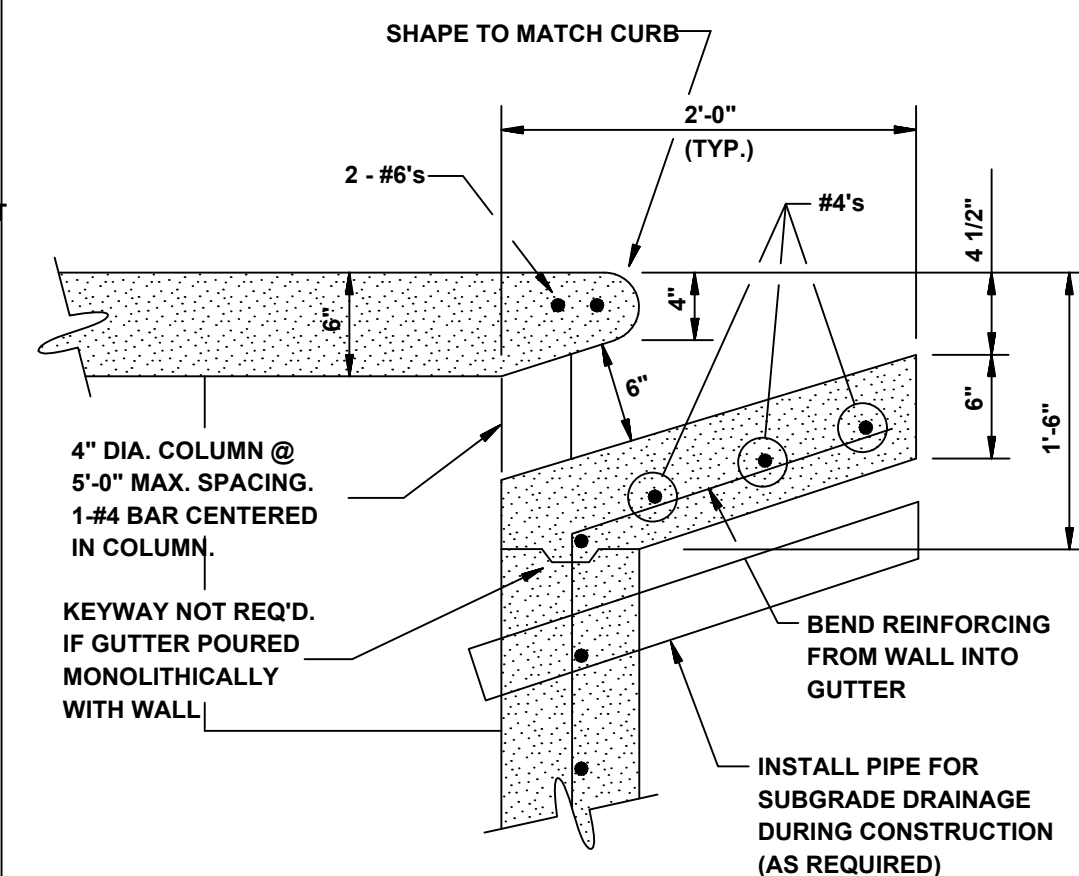


**ADDED REINFORCEMENT AT
RECTANGULAR OPENING
IN WALL OR SLAB**
N.T.S.

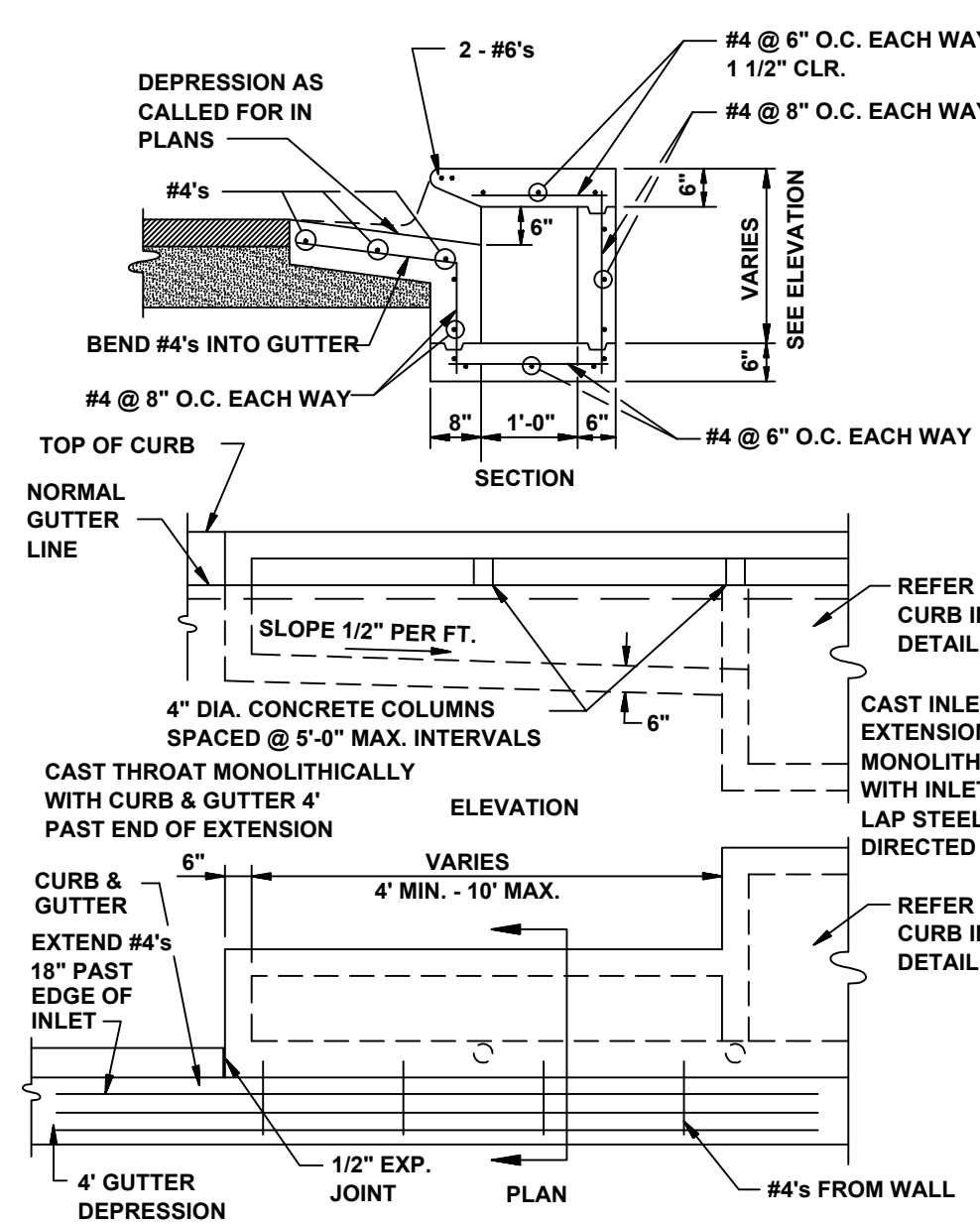


- NOTES:
- The portion of the R.C. Curtain Wall beneath the Flared End Section (Lower 1'-0") shall be placed monolithically. The Flared End Section shall then be set in place and the remaining portions of the R.C. Curtain Wall placed.
 - All reinforcing steel are #4 Bars at 6" O.C.
 - No separate payment will be made for the Curtain Walls. They shall be considered subsidiary to the Flared End Sections.
 - Tongue End On Upstream Section. Groove End On Downstream Section.

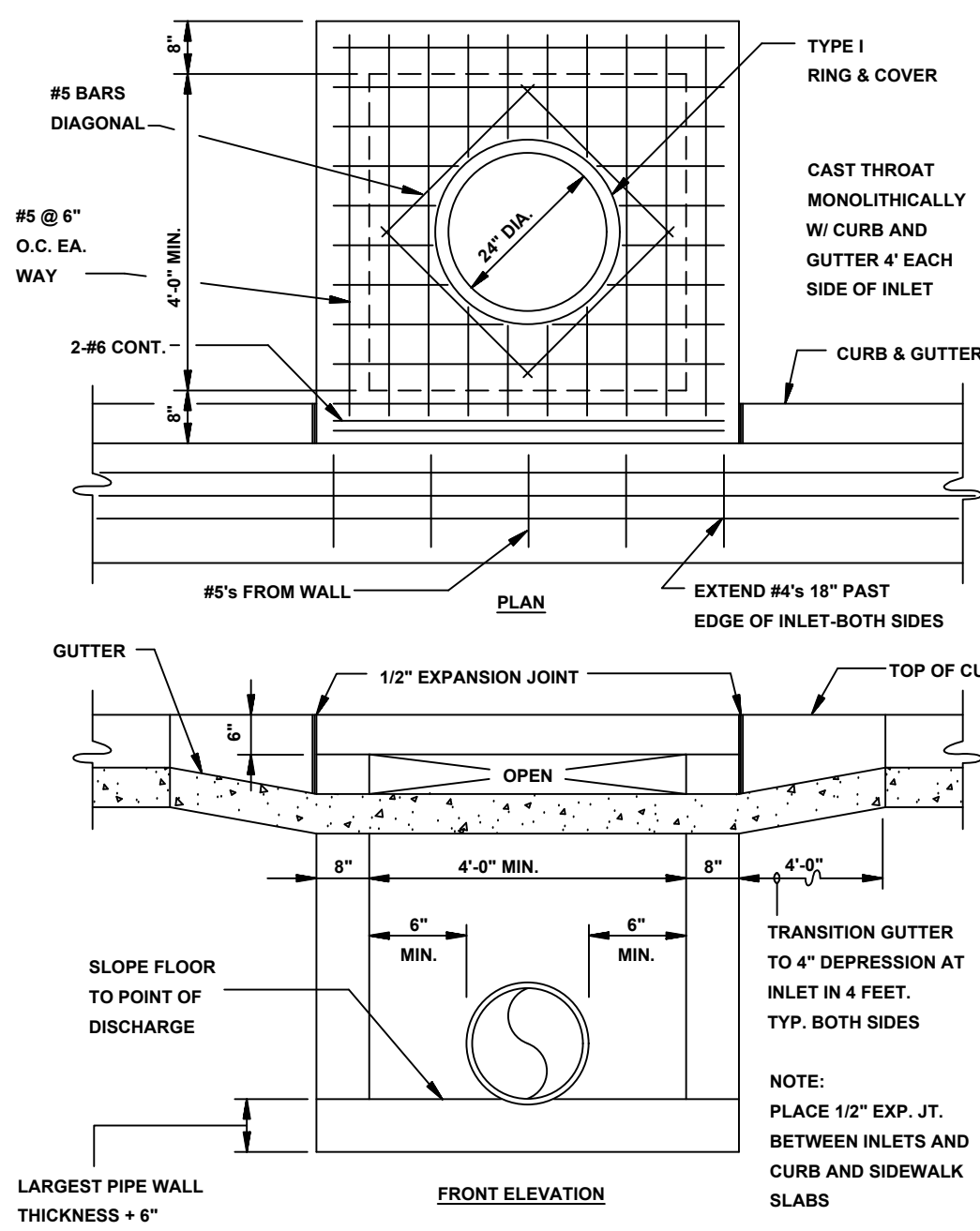
**FLARED END SECTION DETAIL FOR
REINFORCED CONCRETE PIPE CULVERT**
N.T.S.



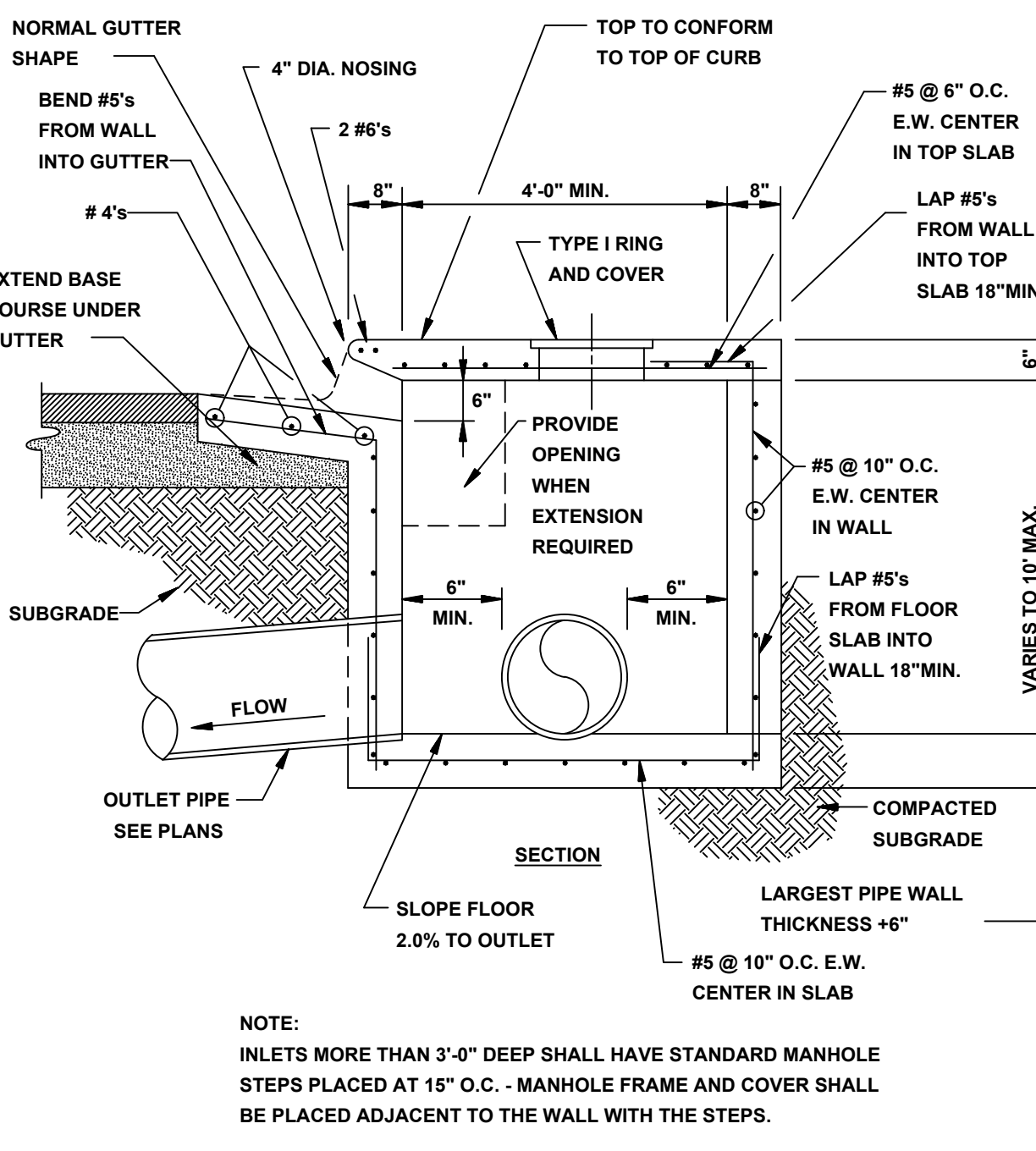
CURB OPENING
N.T.S.



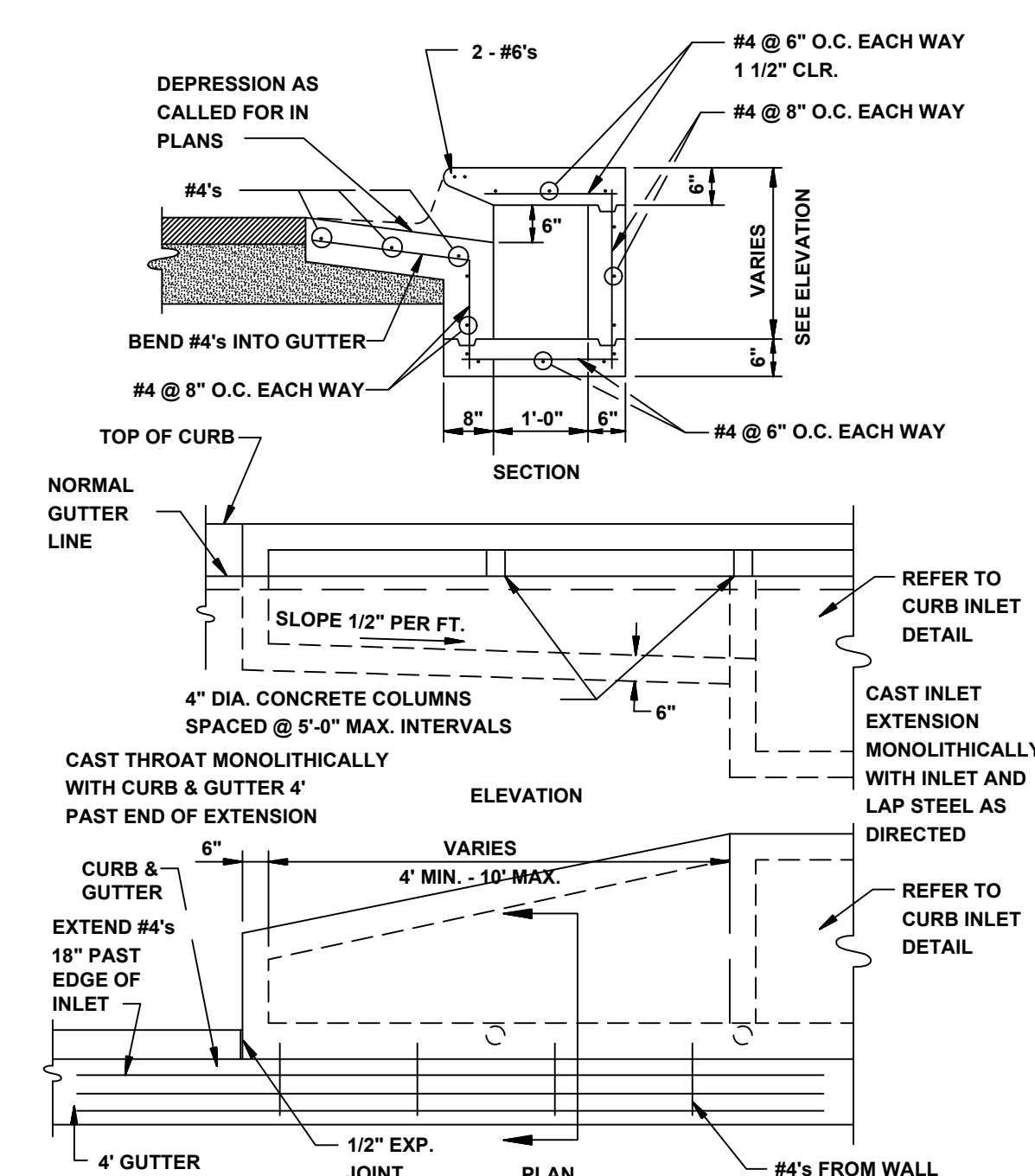
RECTANGULAR CURB INLET EXTENSION
N.T.S.



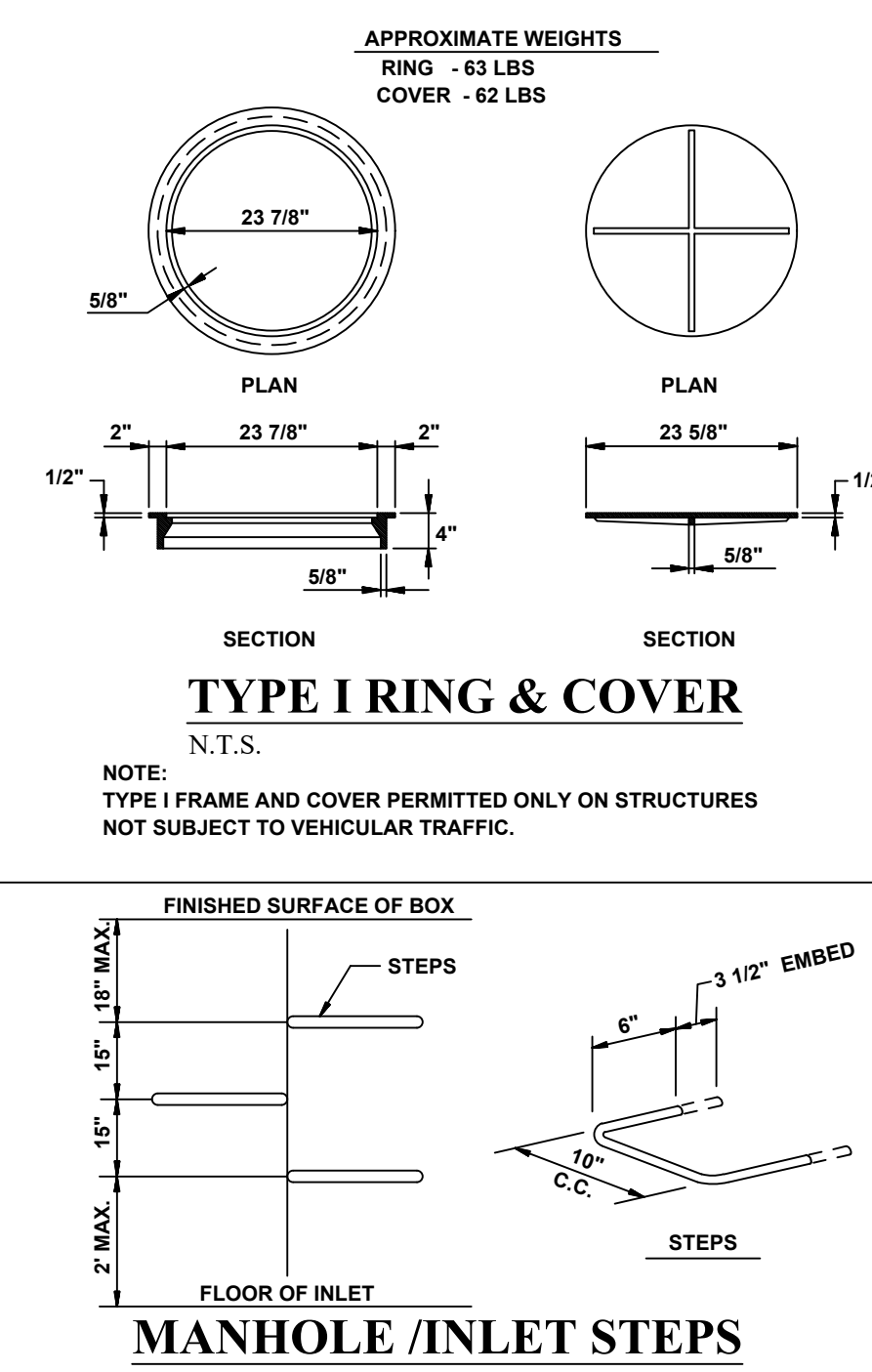
RECTANGULAR CURB INLET
N.T.S.



SECTION - TYPICAL CURB INLET - TYPE 'A'
N.T.S.



ALTERNATE CURB INLET EXTENSION
N.T.S.



MANHOLE /INLET STEPS
N.T.S.

- STEPS SPECIFICATIONS:
- MANHOLE STEPS: CORROSION RESISTANT, COATED AND REINFORCED WITH STEEL PER ASTM C-478. STEEL REINFORCING MINIMUM 1/2" DIAMETER.
 - CAPABLE OF SUPPORTING MINIMUM 300 LB. LOAD.
 - NON-SLIP TEXTURED TREADS
 - REQUIRED IN ALL STRUCTURES 3'-0" DEEP OR DEEPER, UNLESS SPECIFIED OTHERWISE.

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EDEN HILLS PHASE III

STREET DETAILS



REVISIONS		
DATE	BY	DESCRIPTION

DRAWING INFO.
DRAWN BY: GMD
DATE:
SCALE:

SHEET NUMBER:
DT-4