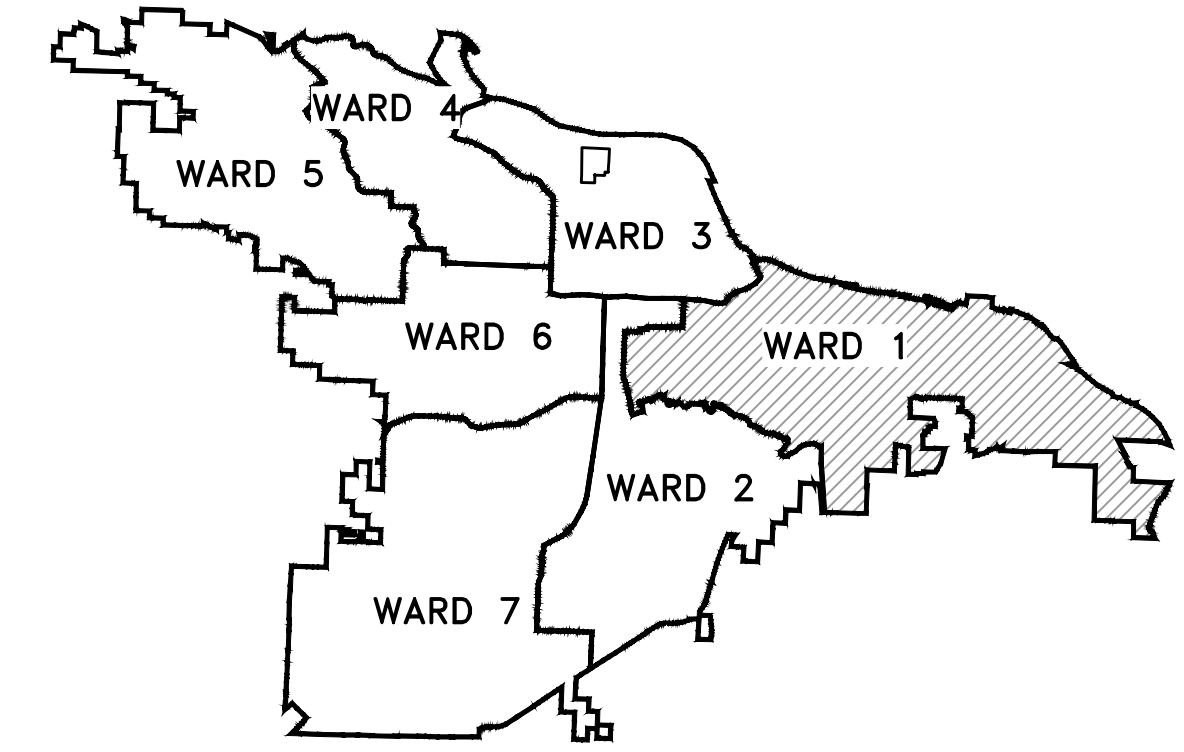
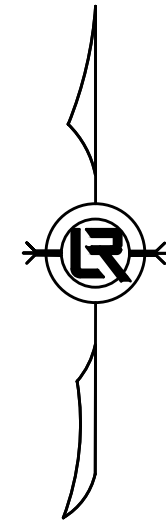


01-15-DR-1 13TH STREET DRAINAGE IMPROVEMENTS (2400 BLOCK)



PROJECT LOCATION – WARD 1

SHEET NO.	TITLE
C1	COVER SHEET
C2	QUANTITIES, GENERAL NOTES, LEGEND
C3	FIELD TIES/LAYOUT SHEET
C4	DRAINAGE PLAN AND PROFILE
C5	EROSION CONTROL PLAN
C6	MAINTENANCE OF TRAFFIC



**2019-2021
BOND PROGRAM**

DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 WEST MARKHAM STREET
LITTLE ROCK, ARKANSAS 72201



Know what's below.
Call before you dig.

Harbor

5800 Evergreen Drive
Little Rock, AR 72205
Ph (501) 663-8800
Fax (501) 588-0123
www.harboenv.com

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
13TH STREET DRAINAGE IMPROVEMENTS

COVER SHEET

DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201



**90%
REVIEW
SET**

DRAWN BY AES/HV
DESIGNED AHR
CHECKED CJM
DATE 04/11/2019
SCALE 1" = 300'
PROJECT NO. CLR # 01-15-DR-1
SHEET NO. C1

CLR PROJECT # 01-15-DR-1			
13TH STREET DRAINAGE IMPROVEMENTS			
4/11/2019			
ITEM NO.	DESCRIPTION OF ITEMS	CONTRACT QUANTITY	UNIT
2.01	SITE PREPARATION	1	L.S.
2.02	CLEARING AND GRUBBING TREES	1	L.S.
3.01	UNCLASSIFIED EXCAVATION	486	C.Y.
3.30	BORROW MATERIAL	243	C.Y.
3.40	TOPSOIL	26	C.Y.
7.06	CONCRETE DRIVEWAY (6" THICK), STANDARD FINISH	1500	S.F.
8.03	CONCRETE CURB & GUTTER (CLASS 3)	60	L.F.
9.04	CONCRETE SIDEWALK (4" THICK)	712	S.F.
10.01	JUNCTION BOX - 5' BOX	1	EA
10.05	CURB INLET - 5' BOX	4	EA
10.06	GRATE INLET - 5' BOX	1	EA
10.07	WING 3' EXTENSION	1	EA
10.10	WING 6' EXTENSION	6	EA
10.10	STORM DRAIN PIPES, 24" CROSS DRAIN	43	L.F.
10.10	STORM DRAIN PIPES, 24" SIDE DRAIN	79	L.F.
10.10	STORM DRAIN PIPES, 30" SIDE DRAIN	32	L.F.
13.30A	STORM DRAIN PIPE, ARCH 36"x23" SIDE DRAIN	108	L.F.
14.01	SOLID SODDING (BERMUDA)	54	S.Y.
16.01	MAINTENANCE OF TRAFFIC	1	L.S.
17.01	PAVEMENT REPAIRS	23	S.Y.
19.01	FINAL CLEAN UP	1	L.S.
24.01	SILT FENCE, TYPE A (SFA)	500	L.F.
24.03	DIVERSION BERM (DI)	4	C.Y.
24.03	SEDIMENT BARRIER, SILT FENCE (SD1)	5	EA
24.05	SEDIMENT BARRIER, BLOCK & GRAVEL (SD3)	2	EA
24.06	DISTURBED AREA STABILIZATION (TS2)	0.1	AC
26.10	TRENCH & EXCAVATION SAFETY	1	L.S.

NOTES:

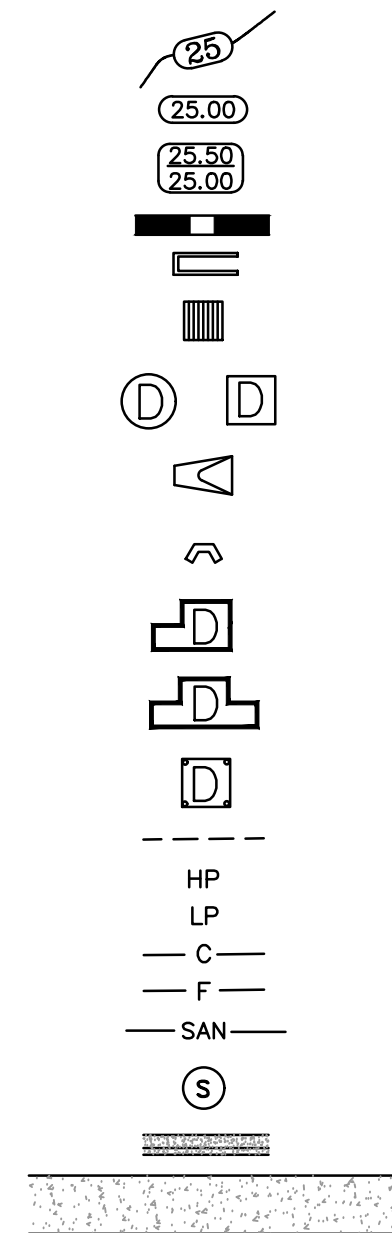
THIS AREA IS FOR ANY SPECIAL CONDITIONS OR NOTES THAT NEED TO BE ADDED TO THE PLAN SET THAT ARE NOT COVERED IN THE BID/CONTRACT DOCUMENTS OR STANDARD SPECIFICATIONS.

EXISTING

- IRON ROD ○ IR
- PK NAIL ○ PK
- R.R. SPIKE ○ RR(Sp)
- CONC. MONUMENT □ CM
- WATER VALVE X WV
- WATER METER □ WM
- FIRE HYDRANT ∇ FH
- GAS METER □ GM
- GAS VALVE ⊗ GV
- CLEAN-OUT ○ CO
- GUARD POST (BOLLARD) * GP
- SIGN POST
- BENCHMARK
- STORM SEWER MANHOLE (D)
- SANITARY SEWER MANHOLE (S)
- TELEPHONE MANHOLE (T)
- ELECTRIC MANHOLE (E)
- TELEPHONE BOX □ TB
- ELECTRIC BOX □ EB
- CABLE BOX □ CB
- UTILITY POLE
- GUY WIRE
- LIGHT POLE
- POST OR POLE (TYPE AS NOTED)
- MAILBOX
- DECIDUOUS TREE
- EVERGREEN/CONIFEROUS TREE
- BUSH
- PROPERTY LINE
- SETBACK LINE
- EASEMENT LINE
- CURB
- FENCE
- OVERHEAD ELECTRIC
- OVERHEAD TELEPHONE
- OVERHEAD CABLE
- UNDERGROUND TELEPHONE
- UNDERGROUND ELECTRIC
- UNDERGROUND CABLE
- WATER LINE
- SEWER LINE
- GAS LINE
- STORM SEWER/CULVERT
- EDGE OF WOODS
- CONTOUR LINE

PROPOSED

- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- PROPOSED SPOT CURB ELEVATION
- STORM SEWER – PIPE
- STORM SEWER – MITERED END SECTION
- STORM SEWER – GRATE INLET
- STORM SEWER – JUNCTION BOX
- STORM SEWER – FLARED END SECTION
- STORM SEWER – HEADWALL
- STORM SEWER – SINGLE WING
- STORM SEWER – DOUBLE WING
- STORM SEWER – AREA INLET
- GRADE BREAK LINE
- HIGH POINT
- LOW POINT
- CUT LINE
- FILL LINE
- SANITARY SEWER PIPE
- SANITARY SEWER MANHOLE
- PROPOSED CURB
- PROPOSED CONCRETE
- CONSTRUCTION – ENTRANCE/EXIT
- CHECK DAM
- DIVERSION BERM
- DOWNDRAIN STRUCTURE – TEMPORARY
- ROCK DAM
- SEDIMENT BARRIER – SILT FENCE
- SEDIMENT BARRIER – GRAVEL RING
- SEDIMENT BARRIER – BLOCK & GRAVEL
- SEDIMENT BARRIER – BLOCK
- TEMPORARY SEDIMENT BASIN
- SILT FENCE – TYPE A
- SILT FENCE – TYPE B
- SILT FENCE – TYPE C
- STORM DRAIN OUTLET PROTECTION
- SURFACE ROUGHENING
- DISTURBED AREA STABILIZATION –TEMPORARY STABILIZATION
- DISTURBED AREA STABILIZATION –TEMPORARY GRASSING
- DISTURBED AREA STABILIZATION –PERMANENT GRASSING
- MATTING/BLANKETS



- (CO)
- (CD)
- (DI)
- (DN)
- (RD)
- (SD1)
- (SD2)
- (SD3)
- (SD4)
- (SB1)
- (SFA)
- (SFB)
- (SFC)
- (ST)
- (SU)
- (TS1)
- (TS2)
- (TS3)
- (Mb)

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
13TH STREET DRAINAGE IMPROVEMENTS
GENERAL NOTES, LEGEND AND QUANTITIES

DEPARTMENT OF PUBLIC WORKS
 CIVIL ENGINEERING
 701 W. MARKHAM
 LITTLE ROCK, ARKANSAS 72201

90%
REVIEW
SET

DRAWN BY
AES/HV
DESIGNED
AHR
CHECKED
CJM
DATE
04/11/2019
SCALE
N/A
PROJECT NO.
CLR # 01-15-DR-1
SHEET NO.
C2

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
 13TH STREET DRAINAGE IMPROVEMENTS
 FIELD TIES/LAYOUT SHEET


DEPARTMENT OF PUBLIC WORKS
 CIVIL ENGINEERING
 701 W. MARKHAM
 LITTLE ROCK, ARKANSAS 72201

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 REVIEW
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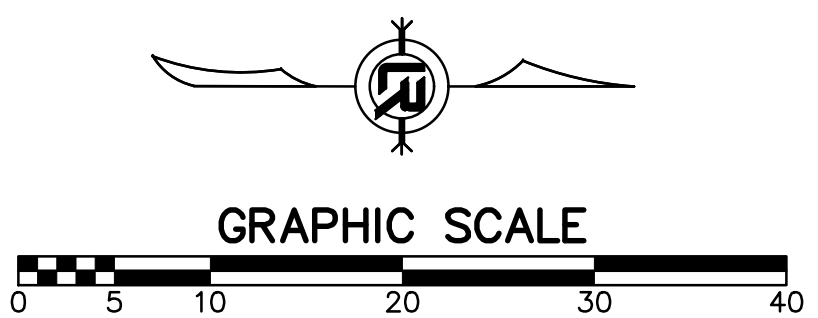
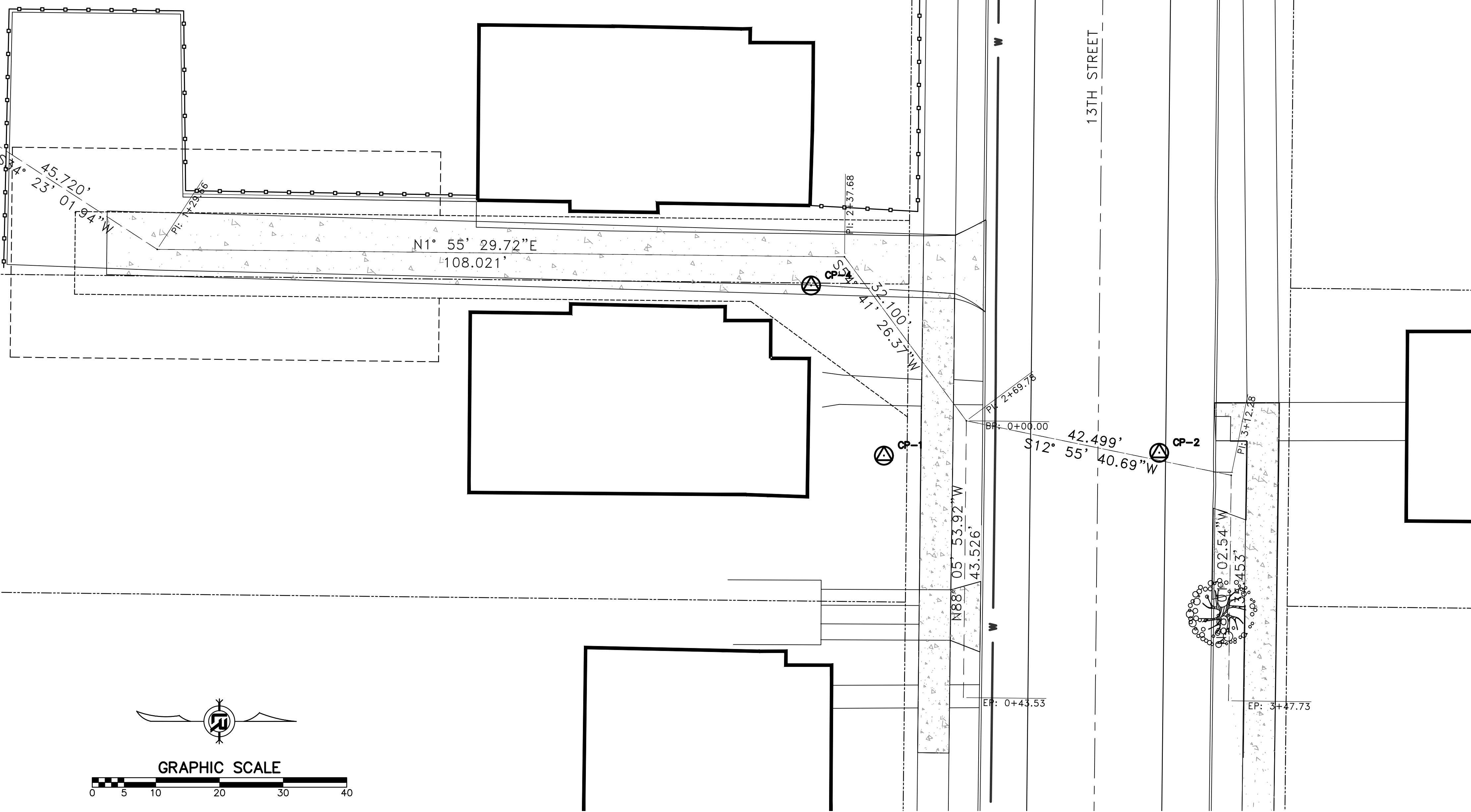
DRAWN BY
 AES/HV
 DESIGNED
 AHR
 CHECKED
 CJM
 DATE
 04/11/2019
 SCALE
 1" = 10'
 PROJECT NO.
 CLR # 01-15-DR-1
 SHEET NO.
C3

PI COORDINATES		
STATION	NORTHING	EASTING
0+00.00	147551.29	1221767.72
0+83.94	147550.62	1221851.65
1+29.66	147588.35	1221877.47
2+20.99	147679.65	1221880.08
2+65.50	147714.87	1221907.30
3+08.00	147756.29	1221916.81
3+43.45	147755.06	1221952.24
0+43.53	147713.42	1221950.80

SURVEY BENCHMARKS				
NO.	DESCRIPTION	NORTHING	EASTING	ELEV.
CP-1	SET NAIL	147701.808	1221912.491	333.648
CP-2	SET NAIL	147745.062	1221913.031	332.847
CP-3	SET NAIL	147690.966	1221885.497	332.827
CP-4	SET NAIL	147550.558	1221888.748	329.532

VERTICAL DATUM: NGVD 29
 BASIS OF BEARING: ARKANSAS GRID NORTH NAD 83 AS DETERMINE BY GPS
 CONTROL POINT

N89° 32' 27.46"W
 22.030'
 BP: 0+00.00
 N89° 32' 27.46"W
 61.910'
 PI: 0+83.94



LOT 8, BLK 8 PARK ADDITION
HARLSTON BETTY J JOHNS
2424 W DAISY L GASTON BATES DR

LOT 9, BLK 8 PARK ADDITION
HATTON ABRAHAM & GLADYS
2416 W DAISY L GASTON BATES DR

LOT 10, BLK 8 PARK ADDITION
BUCHANAN ERIC SPENCER
2410 W DAISY L GASTON BATES DR

LOT 7, BLK 8 PARK ADDITION
BENNETT JACK W
2425 W 13TH ST

LOT 6, BLK 8 PARK ADDITION
URBAN FRONTIER LLC
2423 W 13TH ST

LOT 5, BLK 8 PARK ADDITION
WILLIAMS ELSIE L/INDIA A
2419 W 13TH ST

LOT 8, BLK 1 PARK ADDITION
BANKS RICHARD
2426 W 13TH ST

LOT 9, BLK 1 PARK ADDITION
MCCLURE SHERRY Y
2422 W 13TH ST

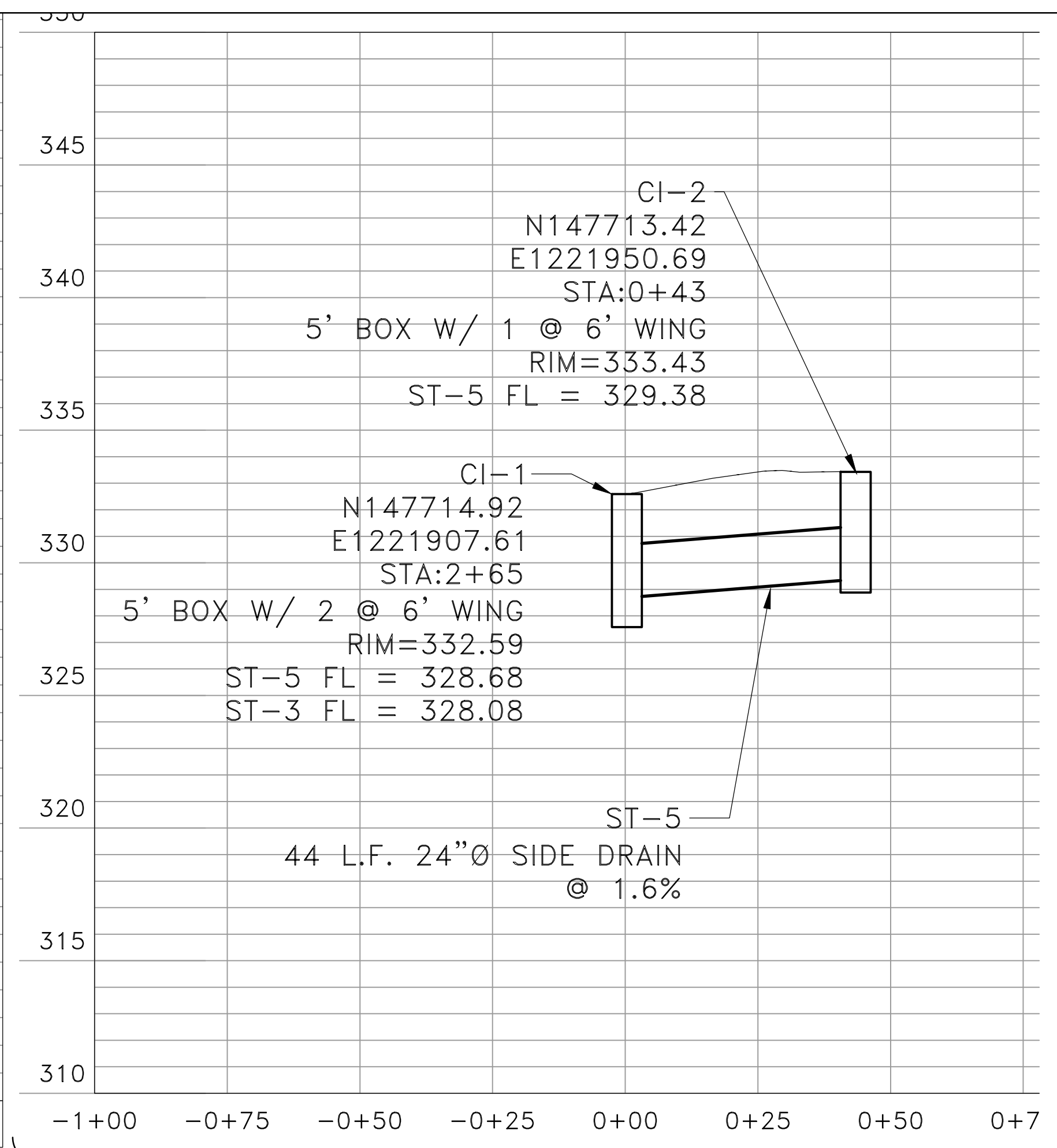
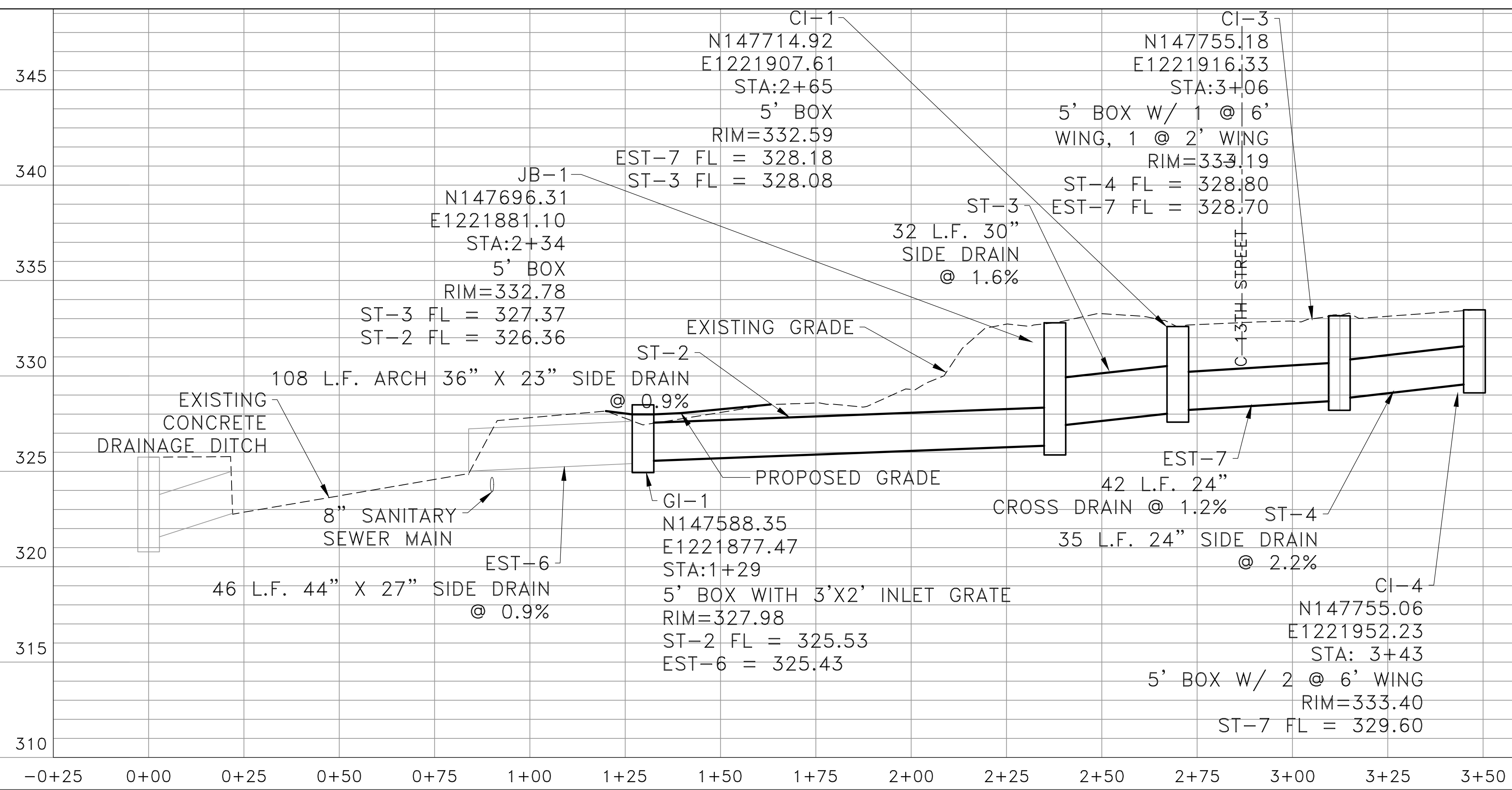
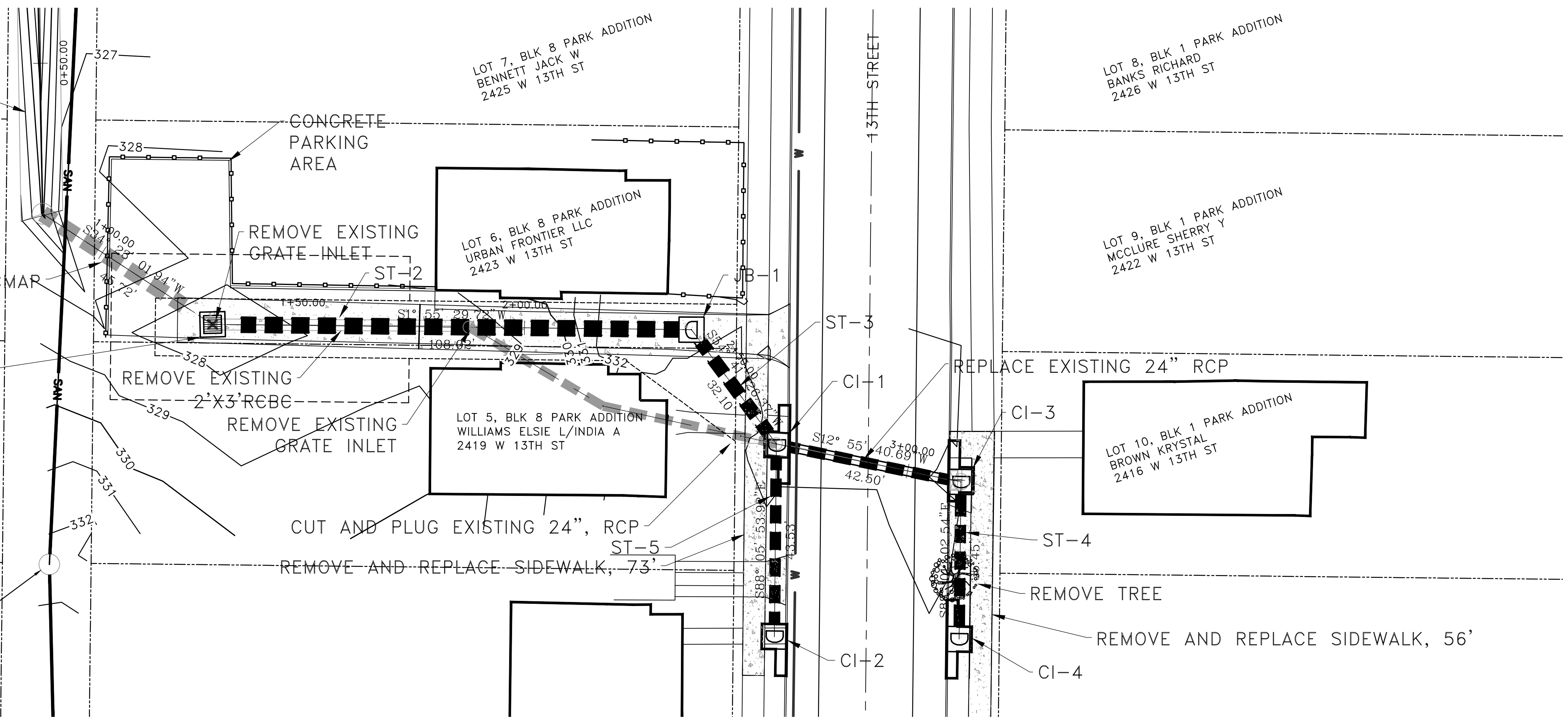
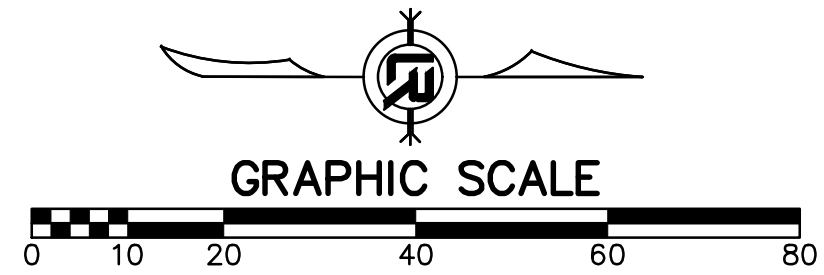
LOT 10, BLK 1 PARK ADDITION
BROWN KRISTAL
2416 W 13TH ST

EXISTING CONCRETE DITCH

EXISTING 27X44" CMAR

GI-1 TO BE ARDOT
GRATE FOR TYPE E
DROP INLET PER
ARDOT STANDARD DWG
FPC-9.
OUTSIDE BOX
DIMENSIONS TO BE
5'X5'

SS Manhole 91142
STA:3+15.26 OFF:0.00
RIM=332.48
SUMP=324.18
INV OUT=324.18 8"



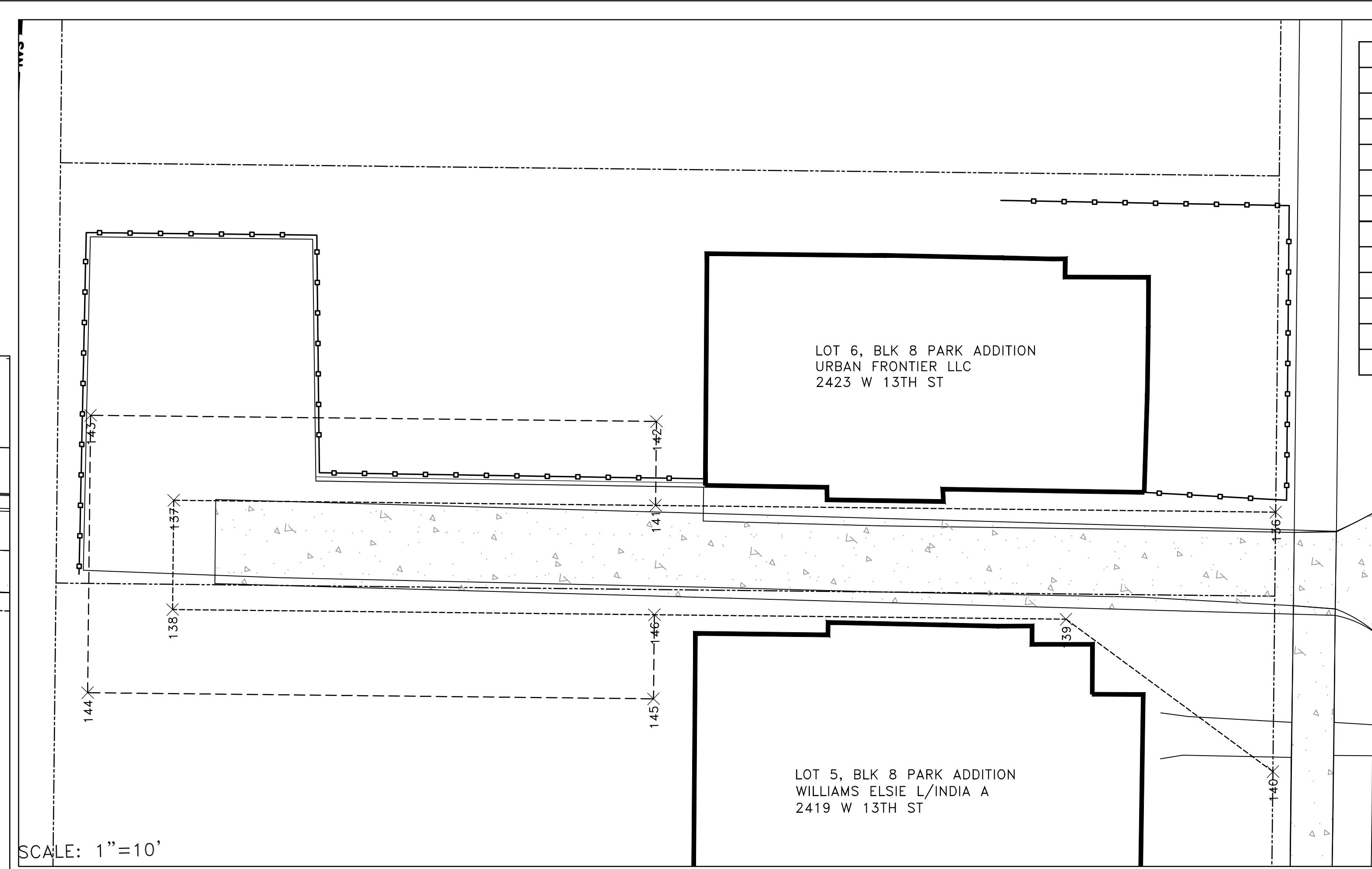
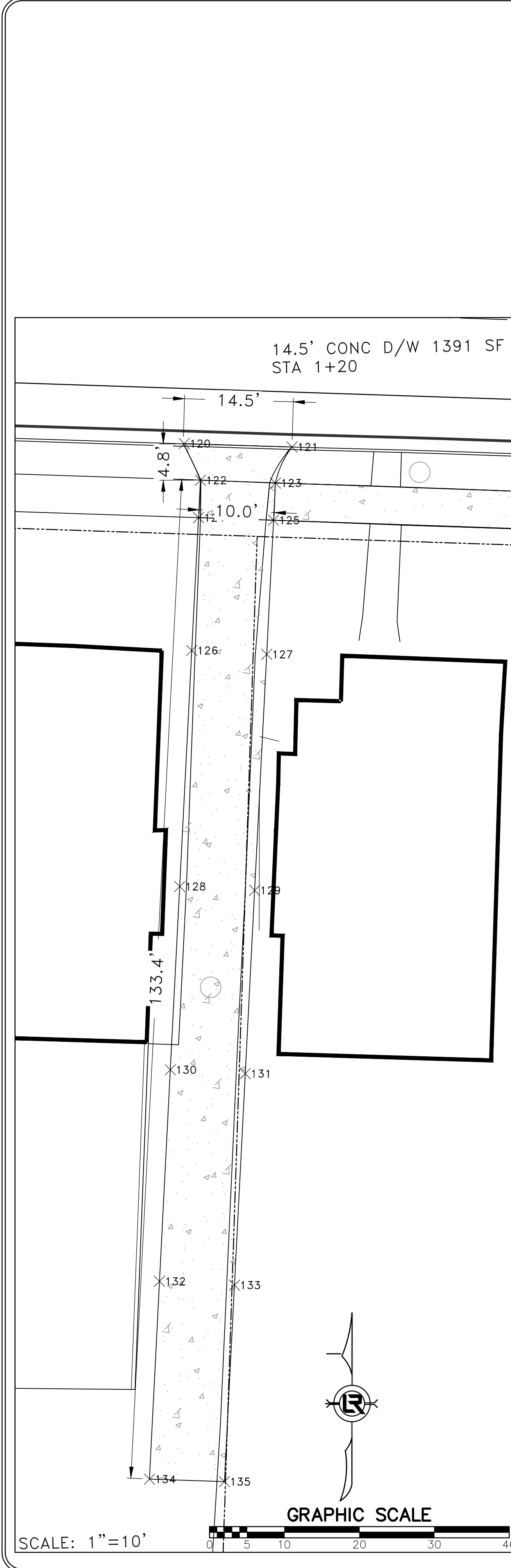
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
13TH STREET DRAINAGE IMPROVEMENTS
DRAINAGE PLAN & PROFILE AND DRIVEWAY DETAIL

DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201

**90%
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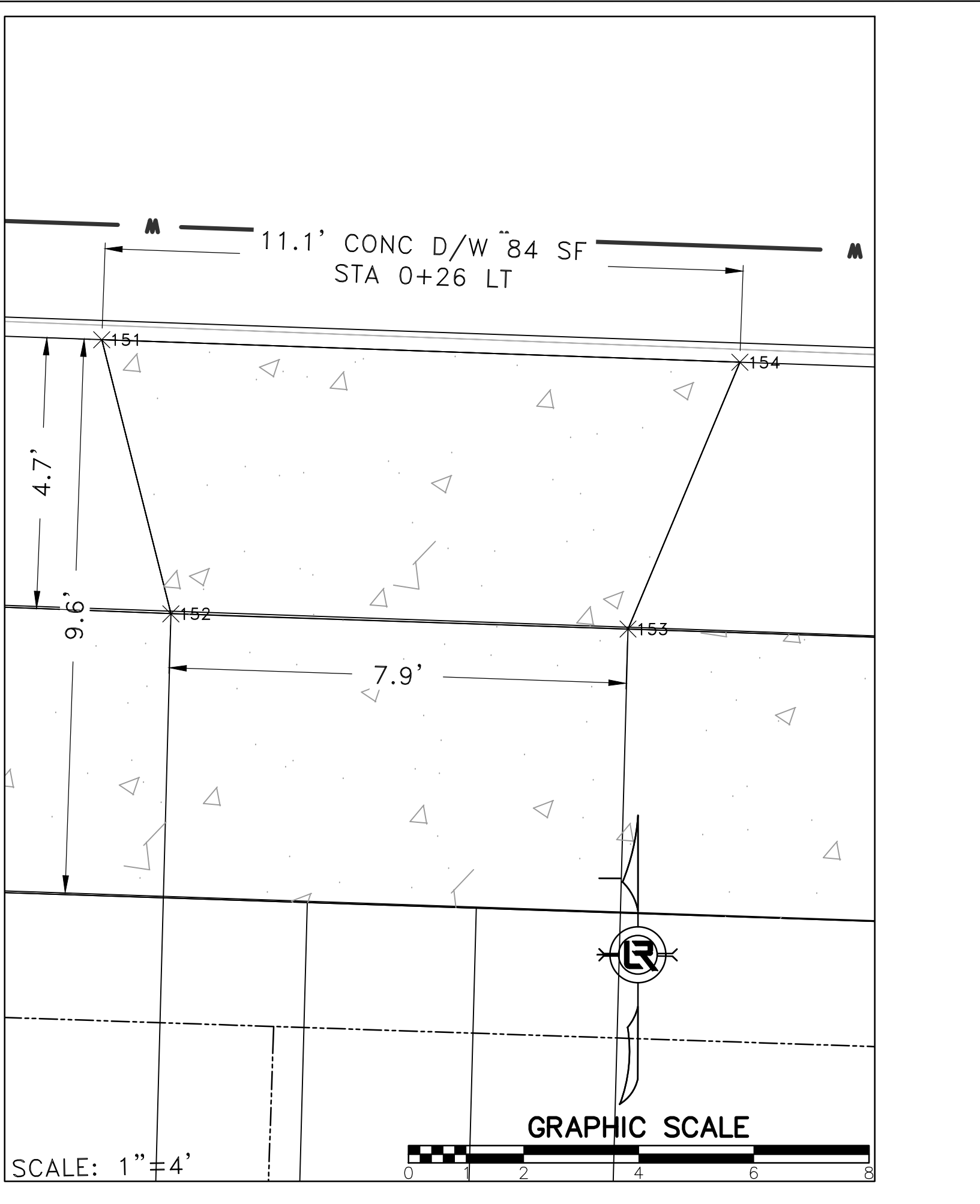
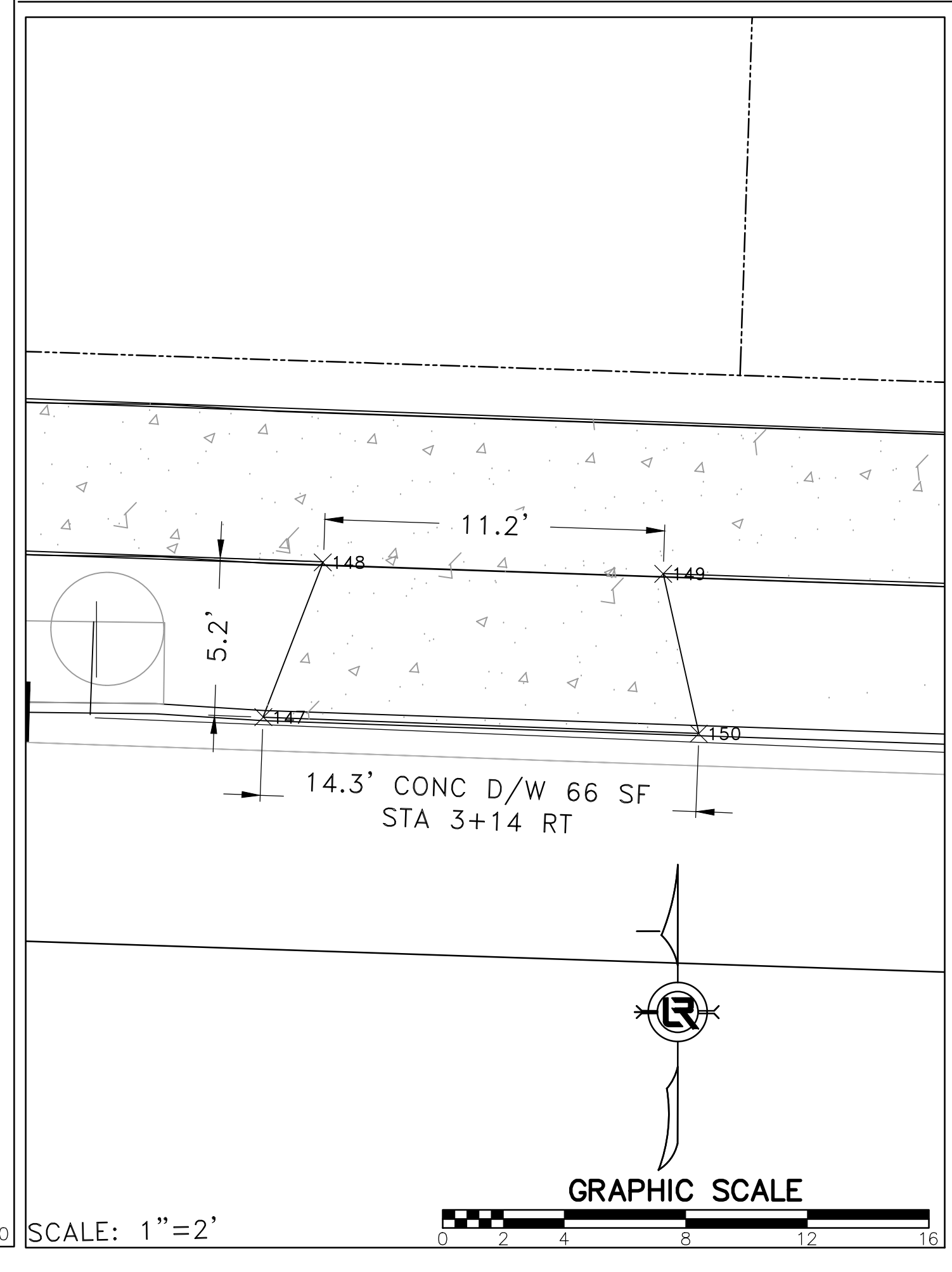
DRAWN BY
AES/HV
DESIGNED
AHR
CHECKED
CJM
DATE
04/11/2019
SCALE
H: 1" = 20' V: 1" = 4'
PROJECT NO.
CLR # 01-15-DR-1
SHEET NO.
C4



PERMANENT AND TEMPORARY CONST. EASEMENTS			
NO.	DESCRIPTION	NORTHING	EASTING
136	PCE	147706.66	1221875.62
137	PCE	147575.63	1221871.24
138	PCE	147575.19	1221884.23
139	PCE	147681.44	1221887.78
140	PCE	147705.62	1221906.47
141	PCE/TCE	147632.92	1221873.15
142	TCE	147633.26	1221863.16
143	TCE	147565.97	1221860.91
144	TCE	147564.87	1221893.89
145	TCE	147632.15	1221896.14
146	PCE/TCE	147632.49	1221886.15

13TH STREET

GRAPHIC SCALE



DRIVEWAY EDGE & ELEVATION				
NO.	DESCRIPTION	NORTHING	EASTING	ELEV.
120	EDGE OF DW	147718.70	1221875.91	332.30
121	EDGE OF DW	147718.24	1221890.27	332.40
122	EDGE OF DW	147713.81	1221878.06	332.83
123	EDGE OF DW	147713.44	1221888.05	332.85
124	EDGE OF DW	147708.82	1221877.81	332.93
125	EDGE OF DW	147708.48	1221887.80	332.95
126	EDGE OF DW	147691.11	1221876.90	332.50
127	EDGE OF DW	147690.60	1221886.89	332.50
128	EDGE OF DW	147659.64	1221875.30	329.05
129	EDGE OF DW	147659.13	1221885.28	329.05
130	EDGE OF DW	147635.21	1221874.05	328.50
131	EDGE OF DW	147634.70	1221884.04	328.50
132	EDGE OF DW	147607.01	1221872.61	328.25
133	EDGE OF DW	147606.50	1221882.60	328.25
134	EDGE OF DW	147580.63	1221871.26	328.00
135	EDGE OF DW	147580.30	1221881.26	328.00
147	EDGE OF DW	147753.69	1221922.39	332.63
148	EDGE OF DW	147758.60	1221923.48	333.17
149	EDGE OF DW	147758.64	1221933.62	333.24
150	EDGE OF DW	147752.99	1221934.45	332.91
151	EDGE OF DW	147716.35	1221933.67	332.26
152	EDGE OF DW	147711.76	1221934.70	333.02
153	EDGE OF DW	147711.61	1221941.90	333.11
154	EDGE OF DW	147716.05	1221943.57	332.57

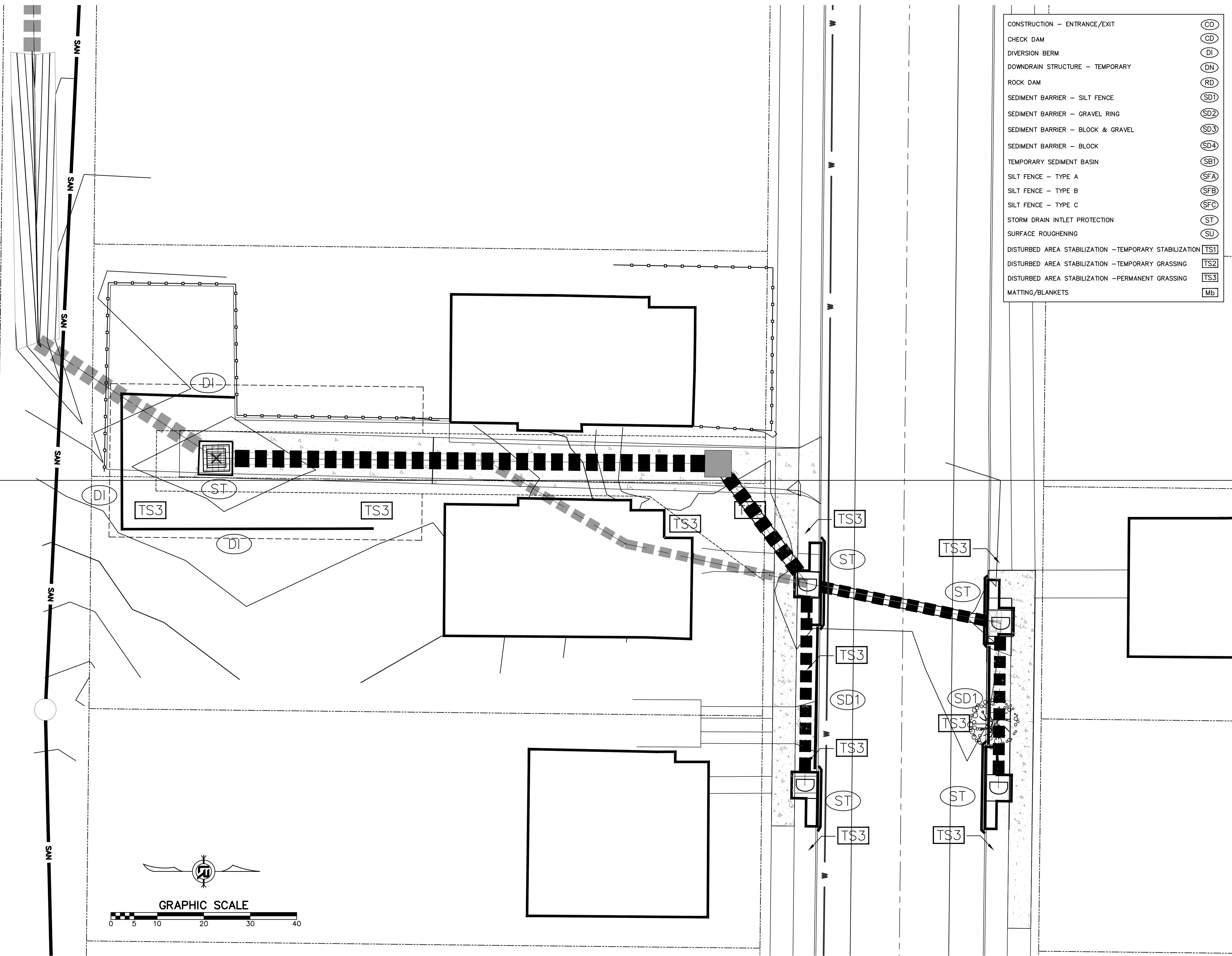
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
13TH STREET DRAINAGE IMPROVEMENTS
DRAINAGE PLAN & PROFILE AND DRIVEWAY DETAIL

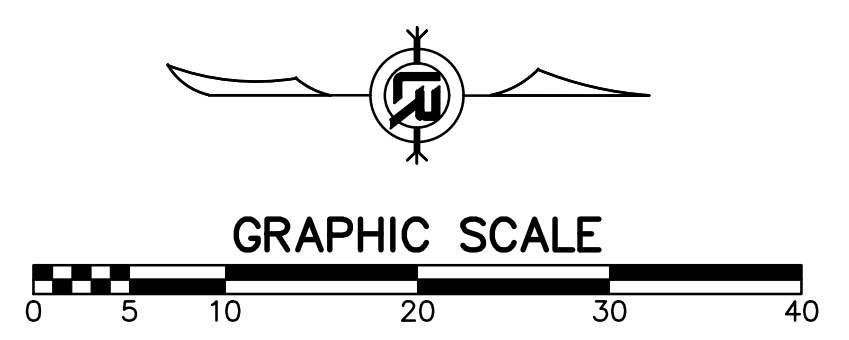
DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201

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AES/HV
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CHECKED
CJM
DATE
04/11/2019
SCALE
NOTED
PROJECT NO.
CLR # 01-15-DR-1
SHEET NO.
C5



CONSTRUCTION - ENTRANCE/EXIT	(CO)
CHECK DAM	(CD)
DIVERSION BERM	(DI)
DOWNDRAIN STRUCTURE - TEMPORARY	(DN)
ROCK DAM	(RD)
SEDIMENT BARRIER - SILT FENCE	(SD1)
SEDIMENT BARRIER - GRAVEL RING	(SD2)
SEDIMENT BARRIER - BLOCK & GRAVEL	(SD3)
SEDIMENT BARRIER - BLOCK	(SD4)
TEMPORARY SEDIMENT BASIN	(SB1)
SILT FENCE - TYPE A	(SFA)
SILT FENCE - TYPE B	(SFB)
SILT FENCE - TYPE C	(SFC)
STORM DRAIN INTLET PROTECTION	(ST)
SURFACE ROUGHENING	(SU)
DISTURBED AREA STABILIZATION - TEMPORARY STABILIZATION	(TS1)
DISTURBED AREA STABILIZATION - TEMPORARY GRASSING	(TS2)
DISTURBED AREA STABILIZATION - PERMANENT GRASSING	(TS3)
MATTING/BLANKETS	(Mb)



REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
13TH STREET DRAINAGE IMPROVEMENTS
EROSION CONTROL PLAN

DEPARTMENT OF PUBLIC WORKS
 CIVIL ENGINEERING
 701 W. MARKHAM
 LITTLE ROCK, ARKANSAS 72201

**90%
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 SET**

DRAWN BY AES/HV
DESIGNED AHR
CHECKED CJM
DATE 04/11/2019
SCALE 1" = 10'
PROJECT NO. CLR # 01-15-DR-1
SHEET NO. C6

- CONSTRUCTION SEQUENCE NOTES_
1. INSTALL ADVANCE WARNING SIGNS AND DEVICES AS SHOWN.
 2. CONSTRUCT PROJECT STA. 10+68 TO 13+05

DAISY GATSON BATES DRIVE

JONES STREET

13TH STREET

RICE STREET

NWS

SAN

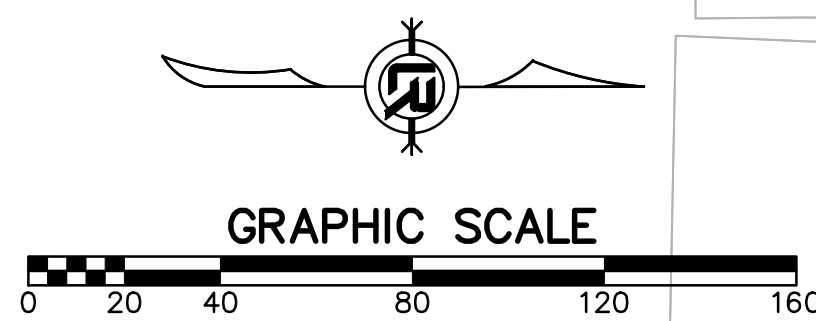
SAN

1

1

ROAD WORK AHEAD (1) W20-1 (48" X 48")

1



REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
13TH STREET DRAINAGE IMPROVEMENTS
MAINTENANCE OF TRAFFIC

DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201

**90%
REVIEW
SET**

DRAWN BY
AES/HV
DESIGNED
AHR
CHECKED
CJM
DATE
04/11/2019
SCALE
1" = 40'
PROJECT NO.
CLR # 01-15-DR-1
SHEET NO.

C7