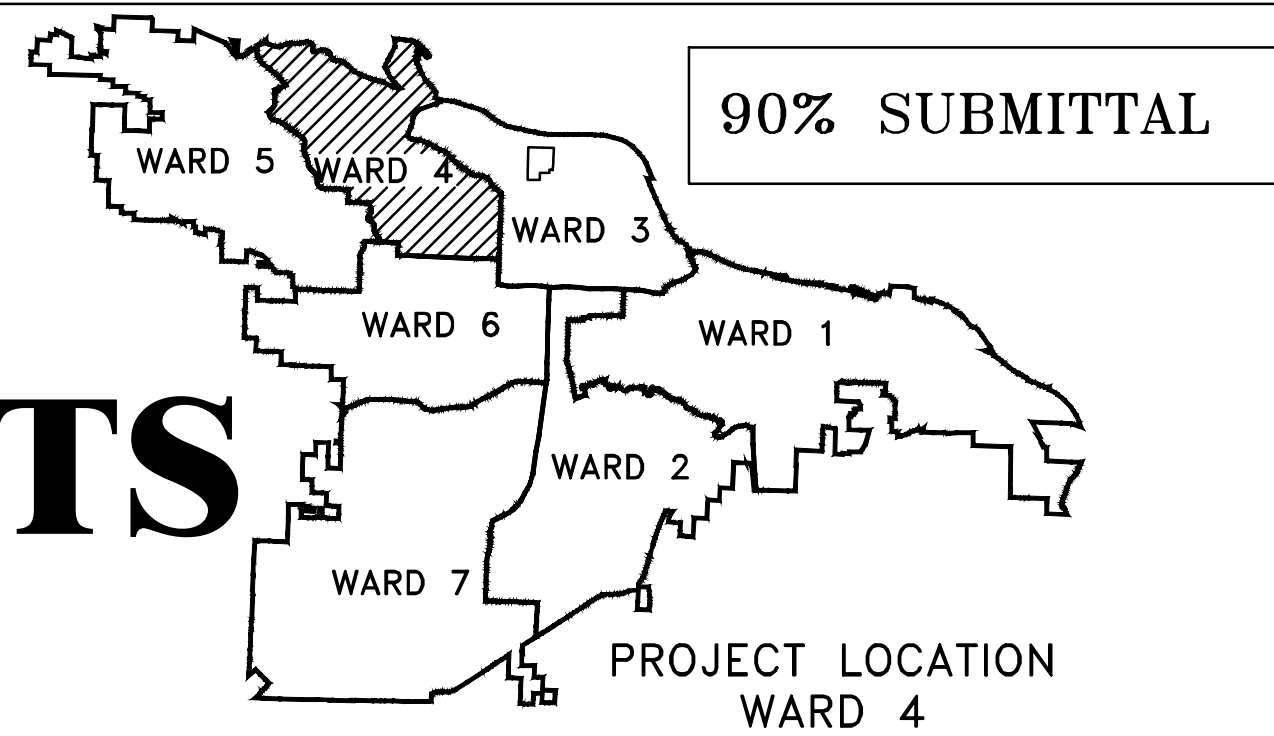


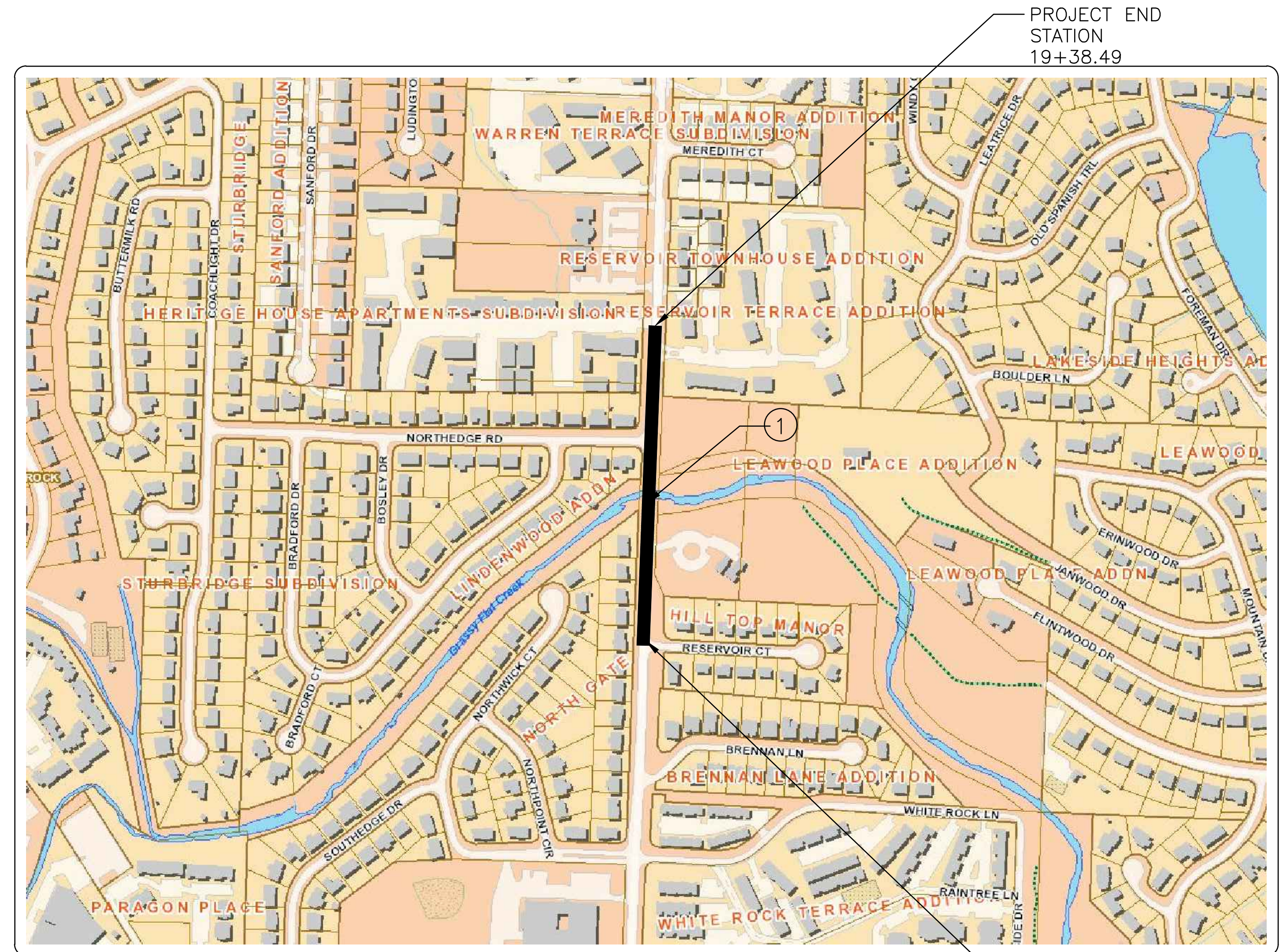
CLR PROJECT 04-17ST-202A RESEVOIR ROAD IMPROVEMENTS (RESERVOIR CT. TO NORTHEdge RD.)



REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
RESERVOIR ROAD IMPROVEMENTS
COVER SHEET

Sheet List Table	
Sheet Number	Sheet Title
C1	COVER SHEET
C2	GENERAL NOTES, LEGEND AND QUANTITIES
C3	TYPICAL SECTION SHT. 1
C4	TYPICAL SECTION SHT. 2
C5	P&P SHEET 1
C6	P&P SHEET 2
C7	P&P SHEET 3
C8	STRIPING PLAN
C9	MAINTANCE OF TRAFFIC PLAN
C10	EROSION CONTROL PH I
C11	EROSION CONTROL PH II
C12	EROSION CONTROL PH III
C13	CENTERLINE TIES
Q1	BRIDGE QUANTITIES
L1	LAYOUT OF BRIDGE OVER GRASSY FLAT CREEK SHEET 1 OF 2
L2	LAYOUT OF BRIDGE OVER GRASSY FLAT CREEK SHEET 1 OF 2
S1	DETAILS OF STAGED CONSTRUCTION SHEET 1 OF 2
S2	DETAILS OF STAGED CONSTRUCTION SHEET 2 OF 2
S3	BRIDGE NAME PLATE
B1	DETAILS OF BENT 1
B2	DETAILS OF BENT 4
B3	DETAILS OF BENTS 1 & 4
B4	DETAILS OF BENTS 2 & 3



LOCATION



BRIDGE DATA

- ① STA. 13+06.70 BRIDGE END
- BRIDGE NUMBER 04143
- PRECAST CONCRETE SPANS (3@19'-0")
- 38'-6" CLEAR ROADWAY
- 57'-0" BRIDGE LENGTH
- STA. 13+63.70 BRIDGE END

**2019-2021
BOND PROGRAM**

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



10825 Financial Center Parkway, Suite 300
Little Rock, Arkansas 72211

Crafton Tull
engineering | surveying
501.664.3245 | 501.664.6704 | www.craftontull.com

CERTIFICATE OF AUTHORIZATION:
CTA # 18804904

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DATE 05-20-2019

PROJECT NO. 04-17ST-202A
SHEET NO. C1

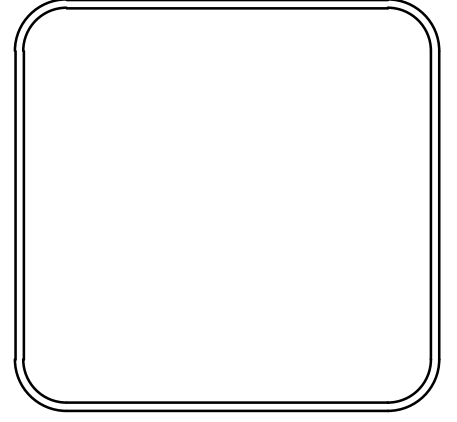
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701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201

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REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
 RESERVOIR ROAD STREET IMPROVEMENTS
 GENERAL NOTES, LEGEND AND QUANTITIES

DEPARTMENT OF PUBLIC WORKS
 CIVIL ENGINEERING
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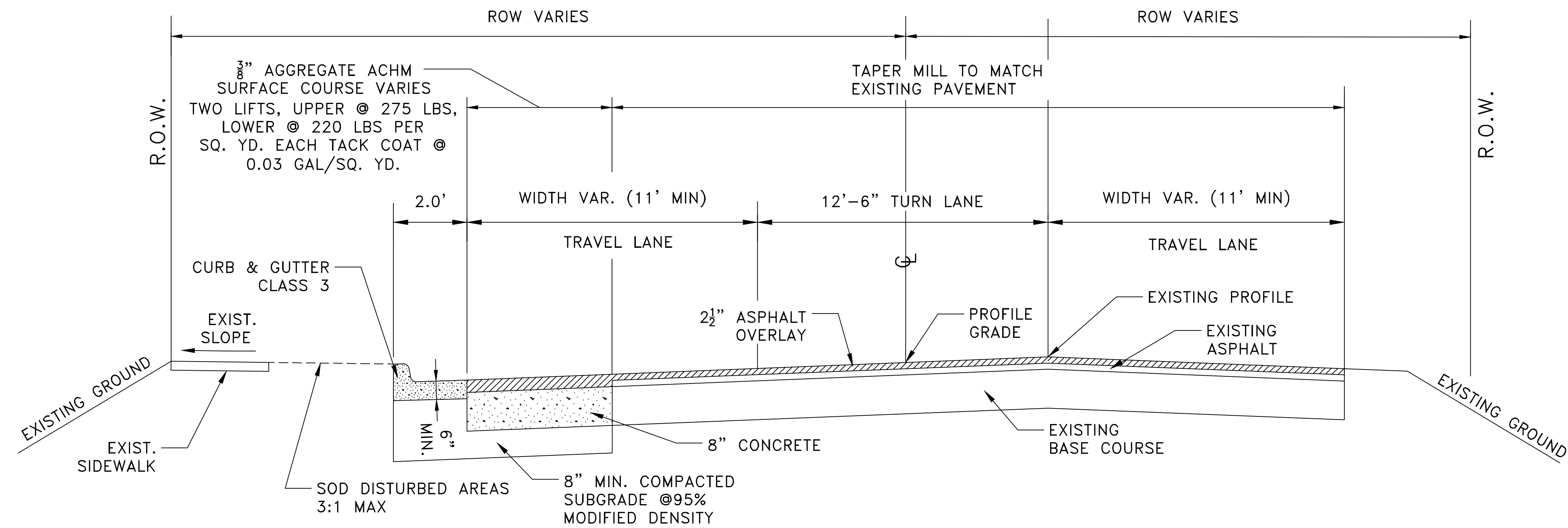
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 SCALE

 PROJECT NO.
 04-17ST-202A
 SHEET NO.
 C2

OPINION OF PROBABLE CONSTRUCTION COSTS - 90%			
ITEM NO.	DESCRIPTION OF ITEMS	CONTRACT QUANTITY	UNIT
CLR PROJECT # 04-17ST-202A			
RESERVOIR ROAD STREET & DRAINAGE IMPROVEMENTS			
9/26/2019			
2.01	SITE PREPARATION	1	L.S.
3.30	BORROW MATERIAL	115	C.Y.
3.40	TOPSOIL	82	C.Y.
4.01	AGGREGATE BASE COURSE	96	TON
5.01	TACK COAT	91	GAL
6.01	ACHM SURFACE COURSE	414	TON
7.06	CONCRETE DRIVEWAY (6" THICK), STANDARD FINISH	501	S.F.
8.03	CONCRETE CURB & GUTTER (CLASS 3)	485	L.F.
9.04	CONCRETE SIDEWALK (4" THICK)	1385	S.F.
10.04	CURB INLET - 4' BOX	3	EA
10.07	WING 3' EXTENSION	4	EA
11.06	REINFORCED CONCRETE HEADWALL	3	C.Y.
13.15	SIDE DRAIN, 18"	75	L.F.
14.01	SOLID SODDING (BERMUDA)	390	S.Y.
16.01	MAINTENANCE OF TRAFFIC	1	L.S.
18.55	WATER FOR DUST CONTROL	20000	GAL
19.01	CLEAN UP	1	L.S.
24.02	CHECK DAM (CD)	1	C.Y.
24.06	SEDIMENT BARRIER, SILT FENCE (SD1)	3	EA
24.09	SEDIMENT BARRIER, BLOCK (SD4)	3	EA
24.11	SILT FENCE - TYPE A (SFA)	496	L.F.
24.17	DISTURBED AREA STABILIZATION - TEMPORARY GRASSING (TS2)	0.1	AC
26.10	TRENCH & EXCAVATION SAFETY	1	L.S.
27.10	COLD MILLING ASPHALT PAVEMENT	289	SY
28.01	GUARD RAIL	101	L.F.
205.00	REMOVAL OF EXISTING BRIDGE STRUCTURE	1	L.S.
309.06	PORTLAND CEMENT CONCRETE BASE (8" U.T.)	294	S.Y.
636	BRIDGE CONSTRUCTION CONTROL	1	L.S.
719.04W	THERMOPLASTIC PAVEMENT MARKING WHITE (4")	1240	L.F.
719.04Y	THERMOPLASTIC PAVEMENT MARKING YELLOW (4")	1320	L.F.
801.00	UNCLASSIFIED EXCAVATION FOR STRUCTURES - BRIDGE	665	C.Y.
802.00	CLASS S CONCRETE - BRIDGE	211	C.Y.
802.00	19' PRECAST CONC. CURB UNITS	9	EA
802.00	19' PRECAST CONC. INTERIOR UNITS	9	EA
802.00	19' PRECAST CONC. PARAPET RAIL UNITS	3	EA
803.00	CLASS 1 PROTECTIVE SURFACE TREATMENT	2.8	GAL
804.00	REINFORCING STEEL - BRIDGE (GRADE 60)	36,900	LB
806.00	METAL BRIDGE RAILING (PEDESTRIAN HANDRAIL)	57	L.F.
806.00	TRANSITIONAL APPROACH RAILING	2	EA
812.00	BRIDGE NAME PLATE (TYPE SPECIAL)	1	EA
816.00	FILTER BLANKET	92	S.Y.
816.00	DUMPED RIP RAP (GROUTED)	67	C.Y.
821.00	MODIFICATION OF EXISTING BRIDGE STRUCTURE (BRIDGE NO. 04143)	1	L.S.
SP1	SHORING	1	L.S.

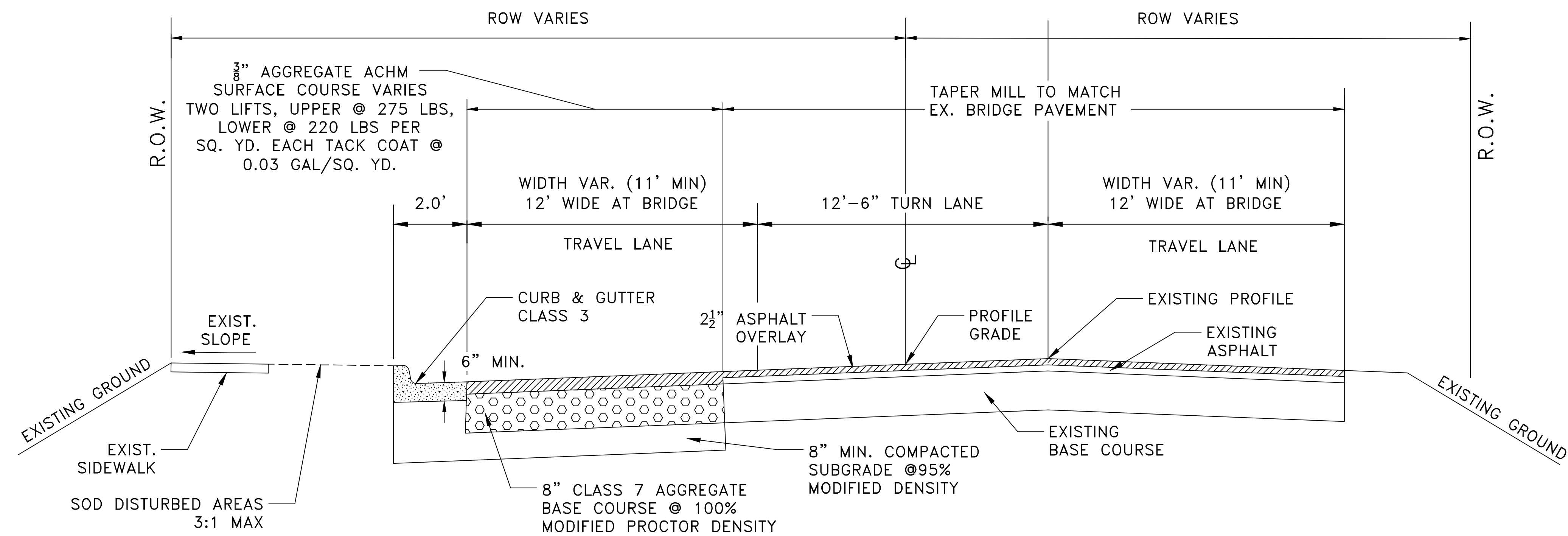
EXISTING	PROPOSED
IRON ROD	PROPOSED CONTOUR
PK NAIL	PROPOSED SPOT ELEVATION
R.R. SPIKE	PROPOSED SPOT CURB ELEVATION
CONC. MONUMENT	STORM SEWER - PIPE
WATER VALVE	STORM SEWER - MITERED END SECTION
WATER METER	STORM SEWER - GRATE INLET
FIRE HYDRANT	STORM SEWER - JUNCTION BOX
GAS METER	STORM SEWER - FLARED END SECTION
GAS VALVE	STORM SEWER - HEADWALL
CLEAN-OUT	STORM SEWER - SINGLE WING
GUARD POST (BOLLARD)	STORM SEWER - DOUBLE WING
SIGN POST	STORM SEWER - AREA INLET
BENCHMARK	GRADE BREAK LINE
STORM SEWER MANHOLE	HIGH POINT
SANITARY SEWER MANHOLE	LOW POINT
TELEPHONE MANHOLE	CUT LINE
ELECTRIC MANHOLE	FILL LINE
TELEPHONE BOX	SANITARY SEWER PIPE
ELECTRIC BOX	SANITARY SEWER MANHOLE
CABLE BOX	PROPOSED CURB
UTILITY POLE	PROPOSED CONCRETE
GUY WIRE	CONSTRUCTION - ENTRANCE/EXIT
LIGHT POLE	CHECK DAM
POST OR POLE (TYPE AS NOTED)	DIVERSION BERM
MAILBOX	DOWNDRAIN STRUCTURE - TEMPORARY
DECIDUOUS TREE	ROCK DAM
EVERGREEN/CONIFEROUS TREE	SEDIMENT BARRIER - SILT FENCE
BUSH	SEDIMENT BARRIER - GRAVEL RING
PROPERTY LINE	SEDIMENT BARRIER - BLOCK & GRAVEL
SETBACK LINE	SEDIMENT BARRIER - BLOCK
EASEMENT LINE	TEMPORARY SEDIMENT BASIN
CURB	SILT FENCE - TYPE A
FENCE	SILT FENCE - TYPE B
OVERHEAD ELECTRIC	SILT FENCE - TYPE C
OVERHEAD TELEPHONE	STORM DRAIN OUTLET PROTECTION
OVERHEAD CABLE	SURFACE ROUGHENING
UNDERGROUND TELEPHONE	DISTURBED AREA STABILIZATION - TEMPORARY STABILIZATION
UNDERGROUND ELECTRIC	DISTURBED AREA STABILIZATION - TEMPORARY GRASSING
UNDERGROUND CABLE	DISTURBED AREA STABILIZATION - PERMANENT GRASSING
WATER LINE	MATting/BLANKETS
SEWER LINE	
GAS LINE	
STORM SEWER/CULVERT	
EDGE OF WOODS	
CONTOUR LINE	

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TYPICAL SECTION - RESERVOIR RD: RESERVOIR CT TO NORTHEdge RD

Sta 10+53.60 to Sta 11+88.15
 Transition Cross Slope to Match Existing for first 50' and last 50' of Street



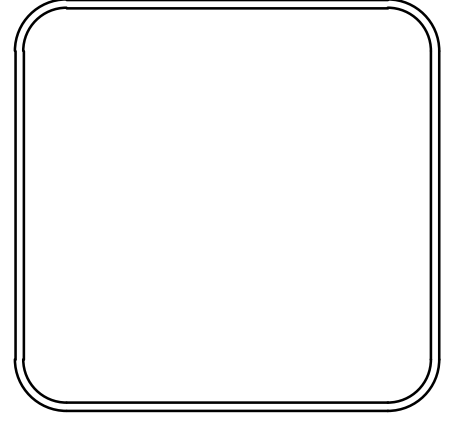
TYPICAL SECTION - RESERVOIR RD: RESERVOIR CT TO NORTHEdge RD

Sta 11+88.15 to Sta 13+06.58

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
 RESERVOIR ROAD IMPROVEMENTS
 TYPICAL SECTION SHT. 1

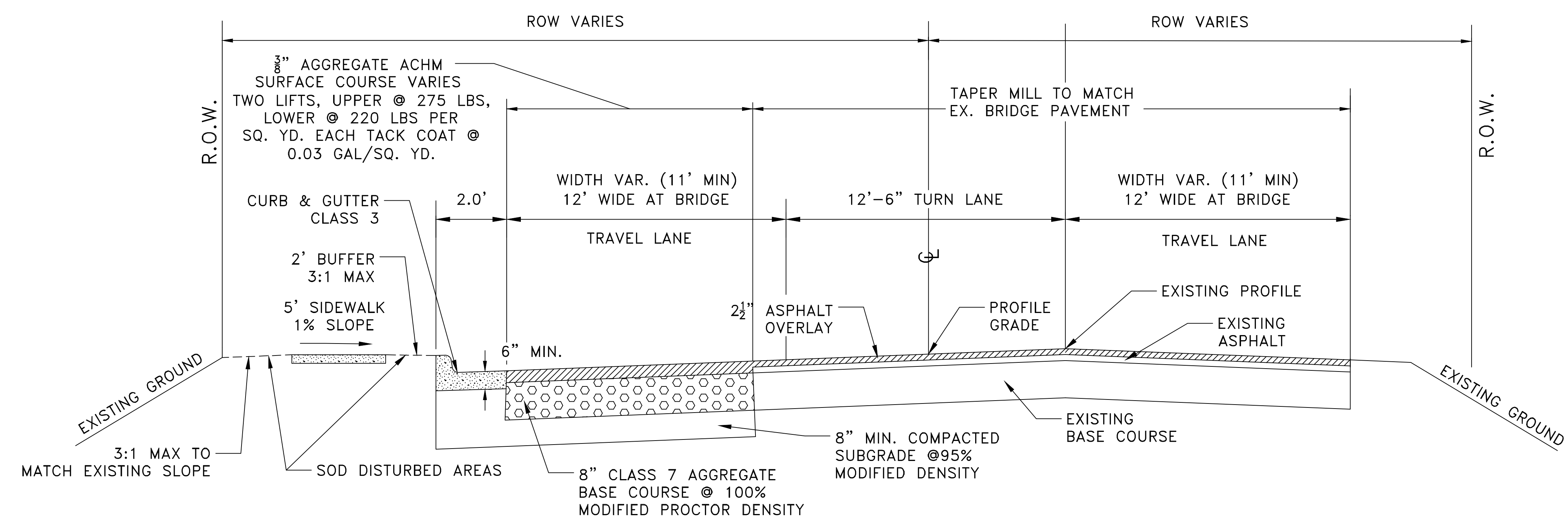
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PROJECT NO.	04-17ST-202A
SHEET NO.	C3

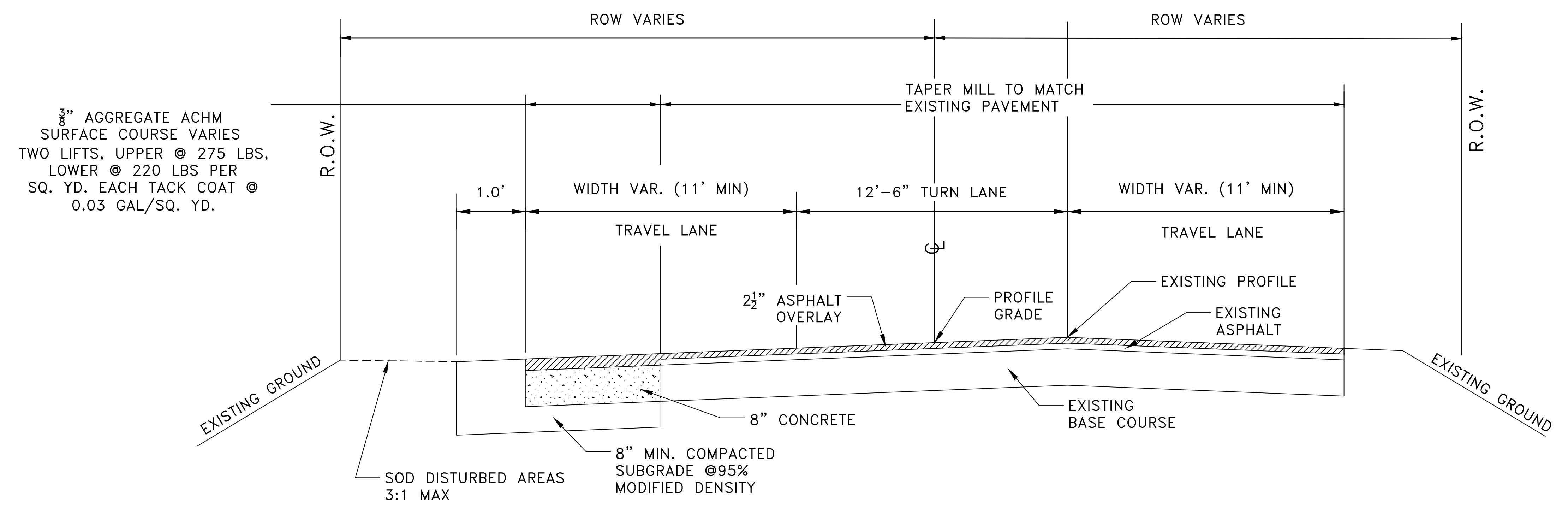
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REVISIONS	DATE



TYPICAL SECTION - RESERVOIR RD: RESERVOIR CT TO NORTHEdge RD

Sta 13+63.68 to Sta 15.51.71

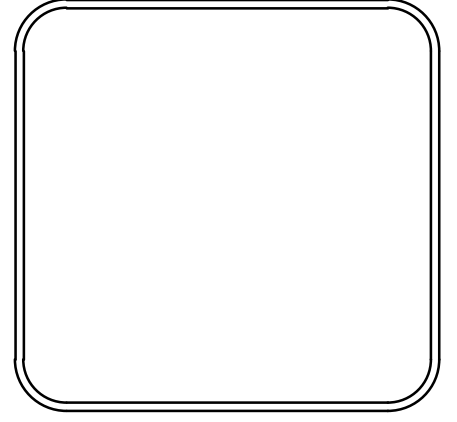


TYPICAL SECTION - RESERVOIR RD: RESERVOIR CT TO NORTHEdge RD

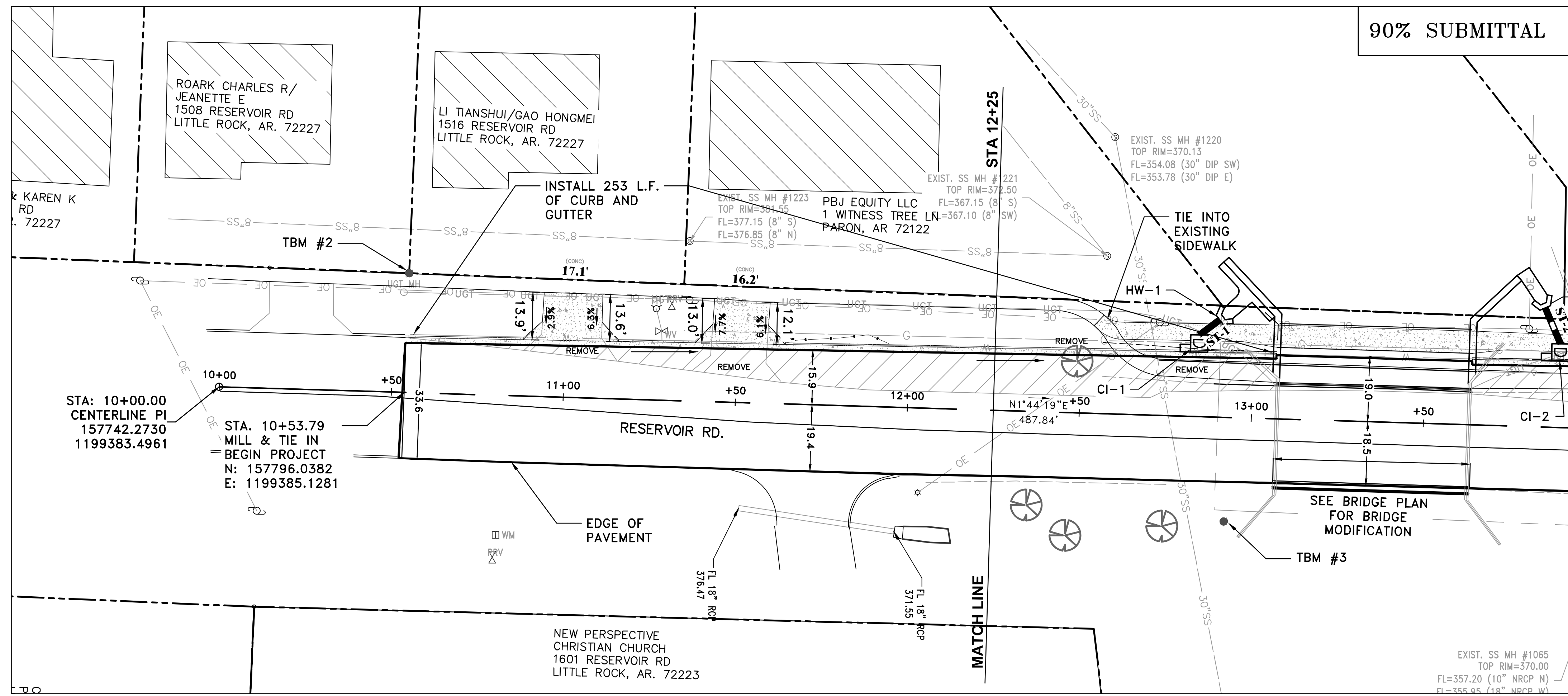
Sta 16+40.08 to Sta 18+84.68 (END)
 Transition Cross Slope to Match Existing for first 50' and last 50' of Street

CITY OF LITTLE ROCK, ARKANSAS
 RESERVOIR ROAD IMPROVEMENTS
 TYPICAL SECTION SHT. 2

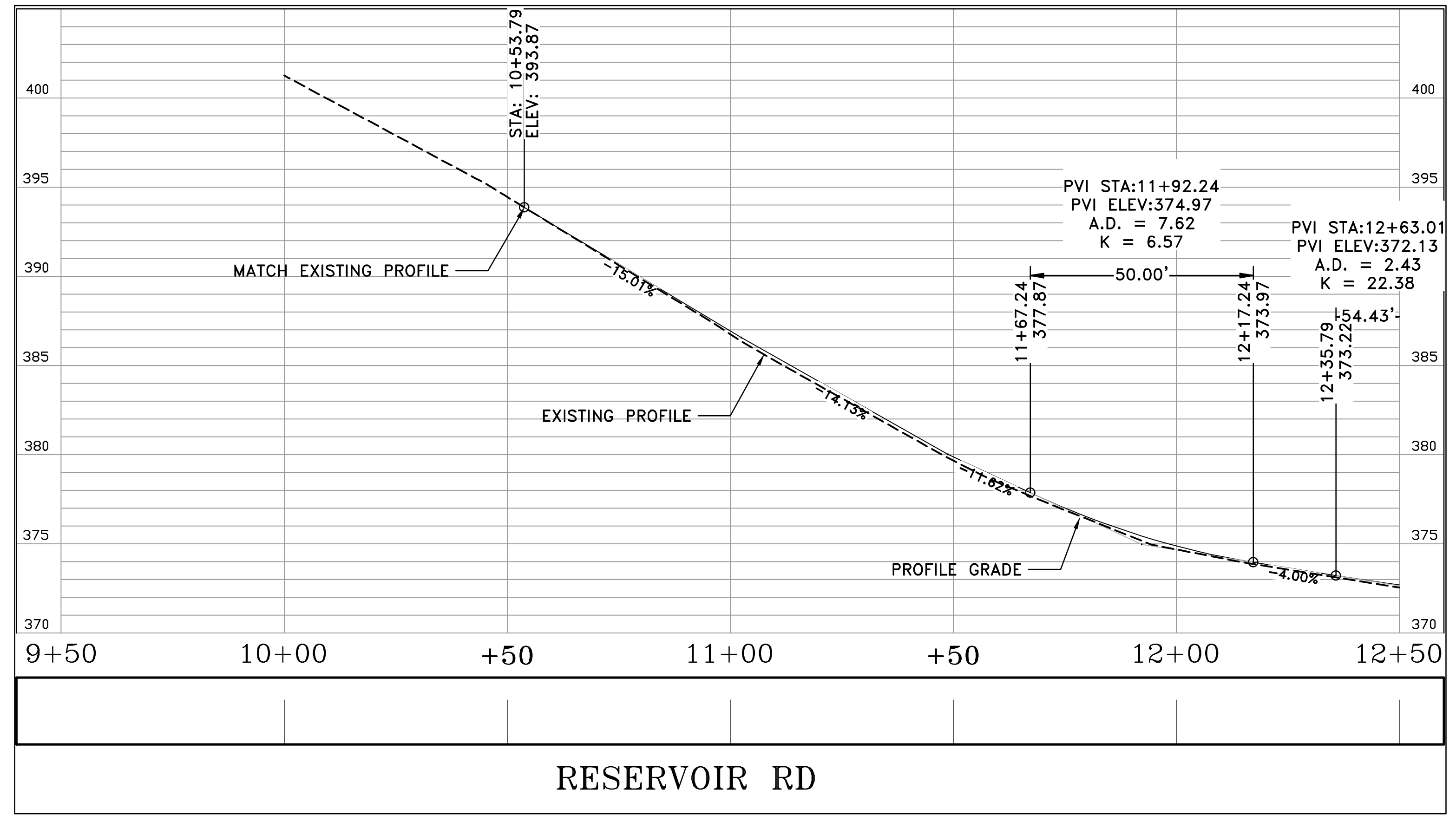
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CHECKED	BAP
DATE	05-20-2019
SCALE	H: 1"=20' V: 1"=5'
PROJECT NO.	04-17ST-202A
SHEET NO.	C4



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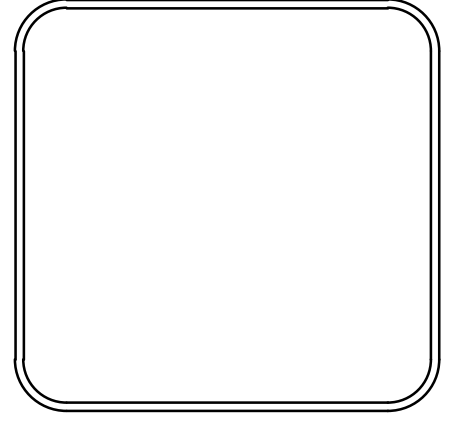


POINT TABLE				
POINT #	DESCRIPTION	NORTHING	EASTING	ELEVATION
TBM 1	FIP R4	158412.40	1199449.56	374.74
TBM 2	FIP R4	157797.46	1199350.47	394.08
TBM 3	FIP R4	158034.13	1199422.61	365.67

REVISIONS	DATE

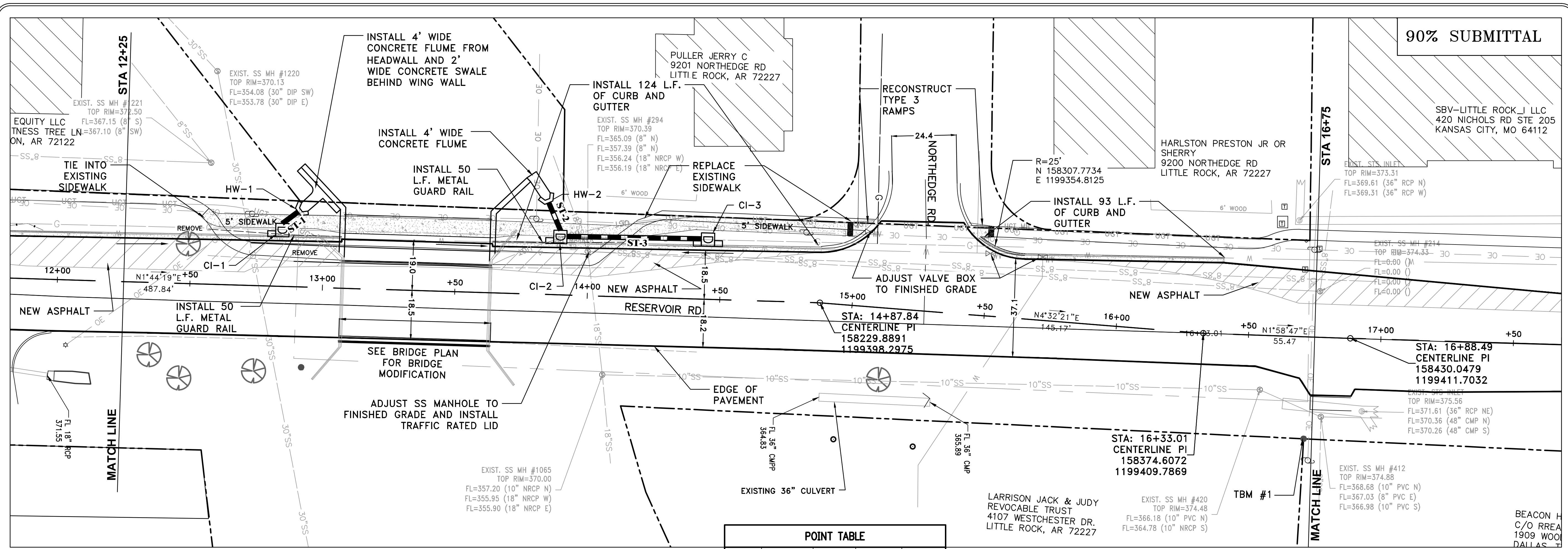
CITY OF LITTLE ROCK, ARKANSAS
 RESERVOIR ROAD IMPROVEMENTS
 P&P SHEET 1

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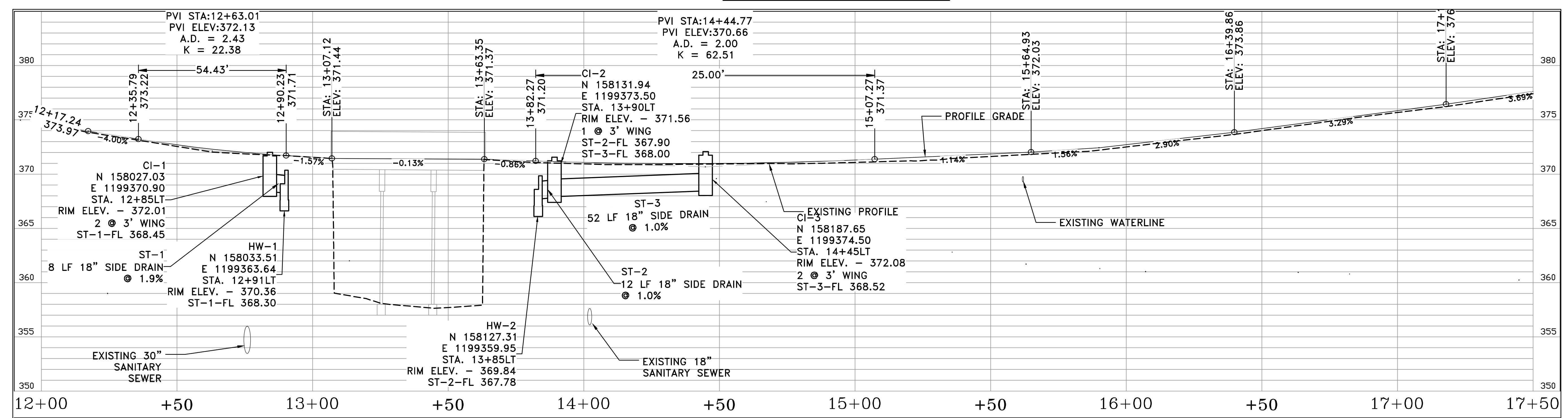
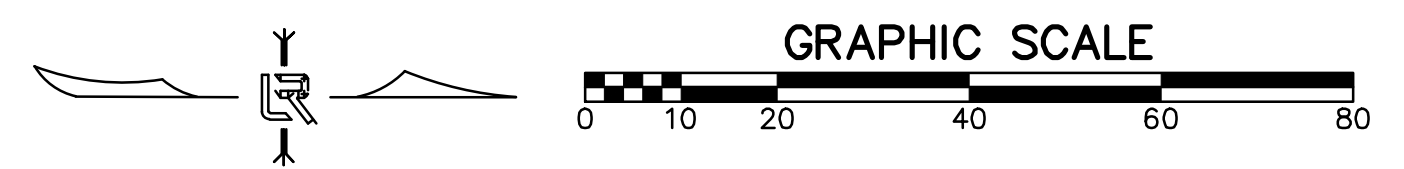


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 H: 1"=20'
 V: 1"=5'
 PROJECT NO.
 04-17ST-202A
 SHEET NO.
 C5

REVISIONS	DATE



POINT #	DESCRIPTION	NORTHING	EASTING	ELEVATION
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TBM 2	FIP R4	157797.46	1199350.47	394.08
TBM 3	FIP R4	158034.13	1199422.61	365.67



RESERVOIR RD

CITY OF LITTLE ROCK, ARKANSAS
RESERVOIR ROAD IMPROVEMENTS
P & P SHEET 2

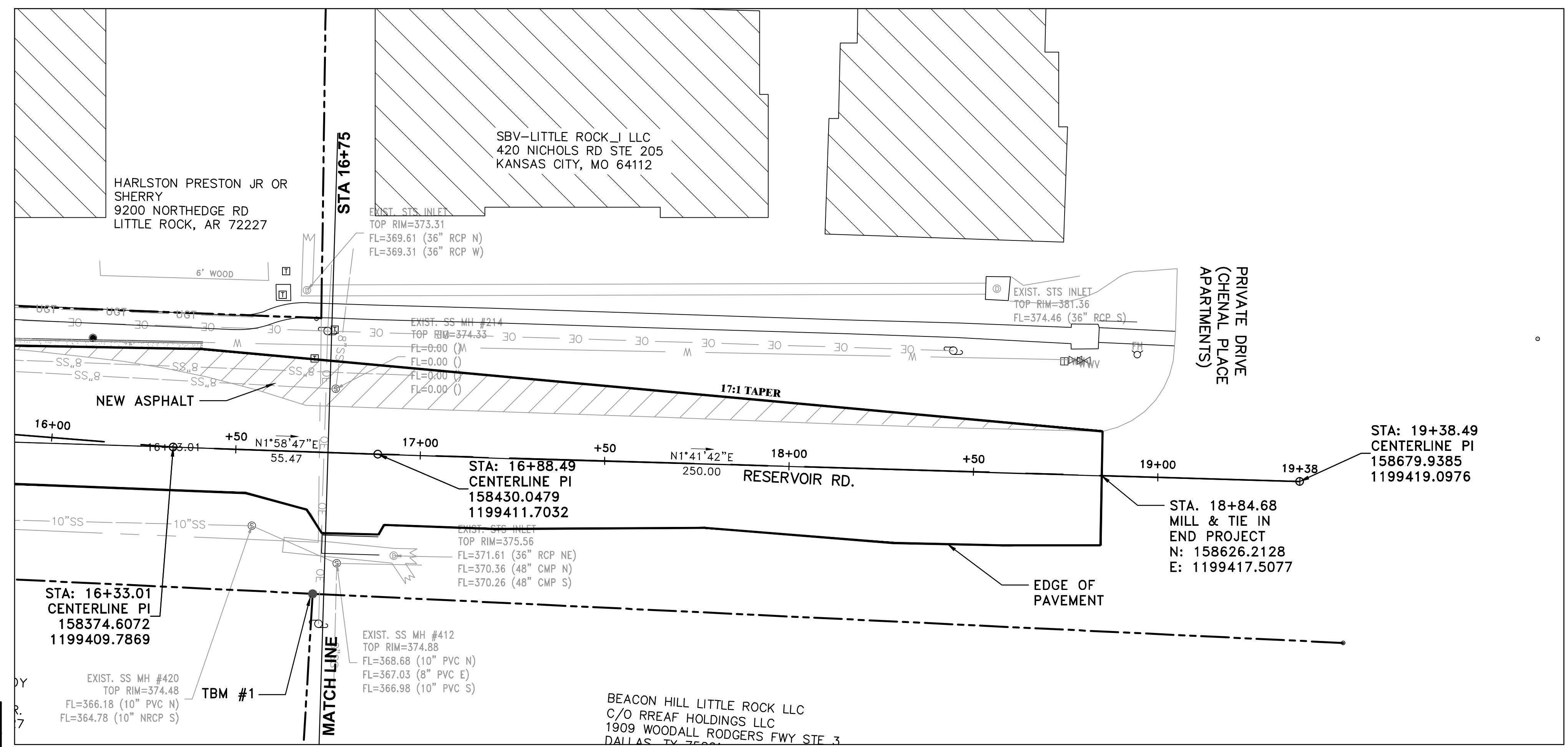
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CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201

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DATE
05-20-2019
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H: 1"=20'
V: 1"=5'
PROJECT NO.
04-17ST-202A
SHEET NO.
C6

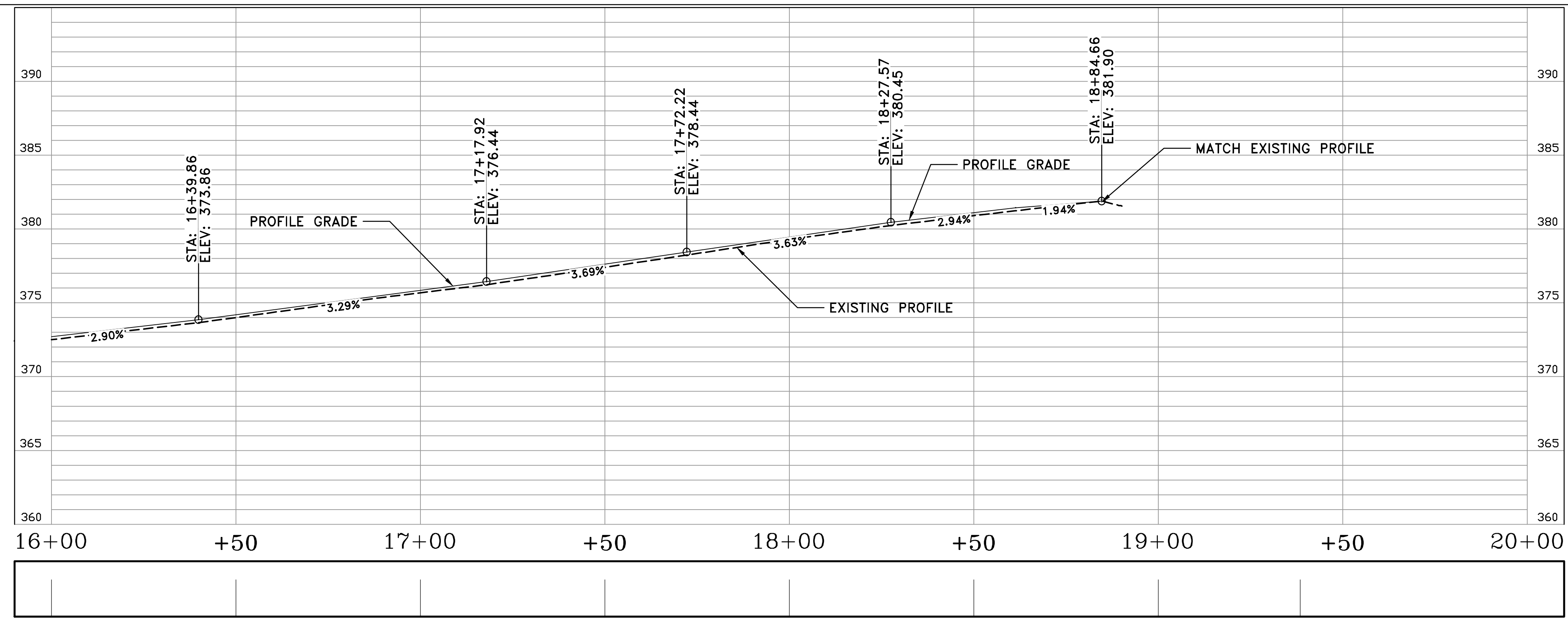
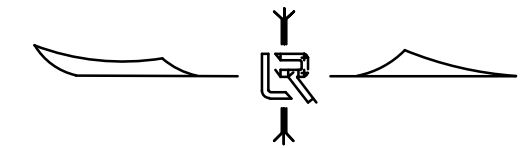
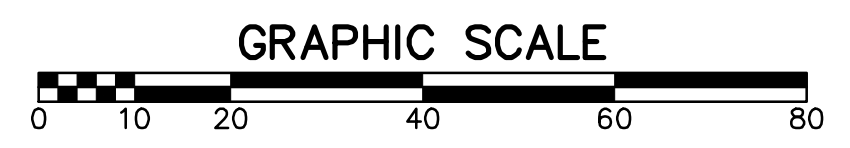
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REVISIONS	DATE



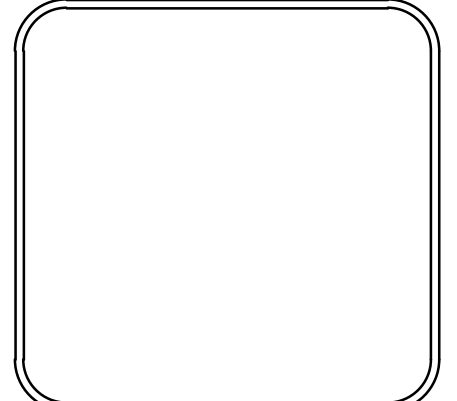
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TBM 1	FIP R4	158412.40	1199449.56	374.74
TBM 2	FIP R4	157797.46	1199350.47	394.08
TBM 3	FIP R4	158034.13	1199422.61	365.67



RESERVOIR RD

CITY OF LITTLE ROCK, ARKANSAS
RESERVOIR ROAD IMPROVEMENTS
P & P SHEET 3

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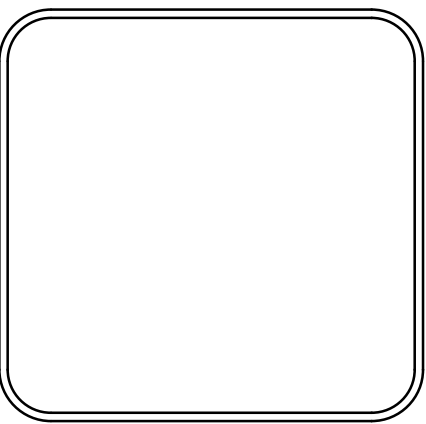


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PROJECT NO.
04-17ST-202A
SHEET NO.
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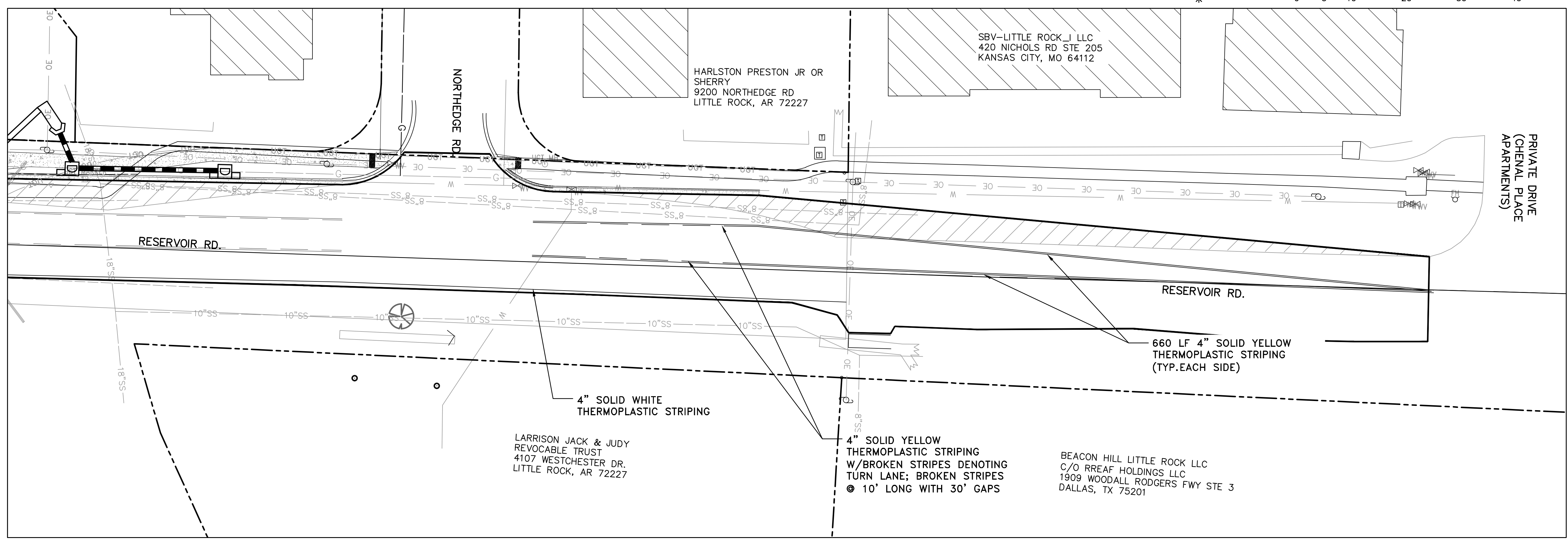
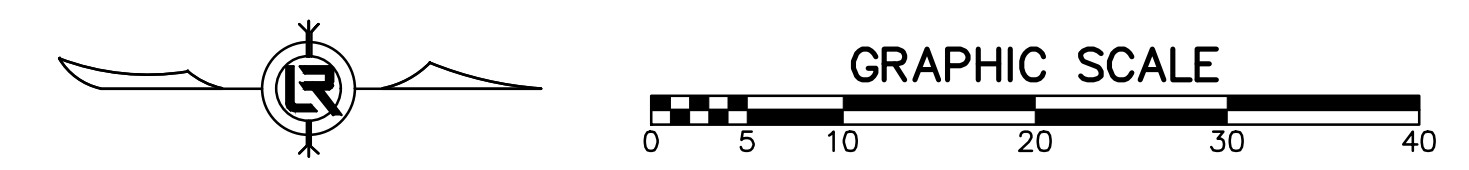
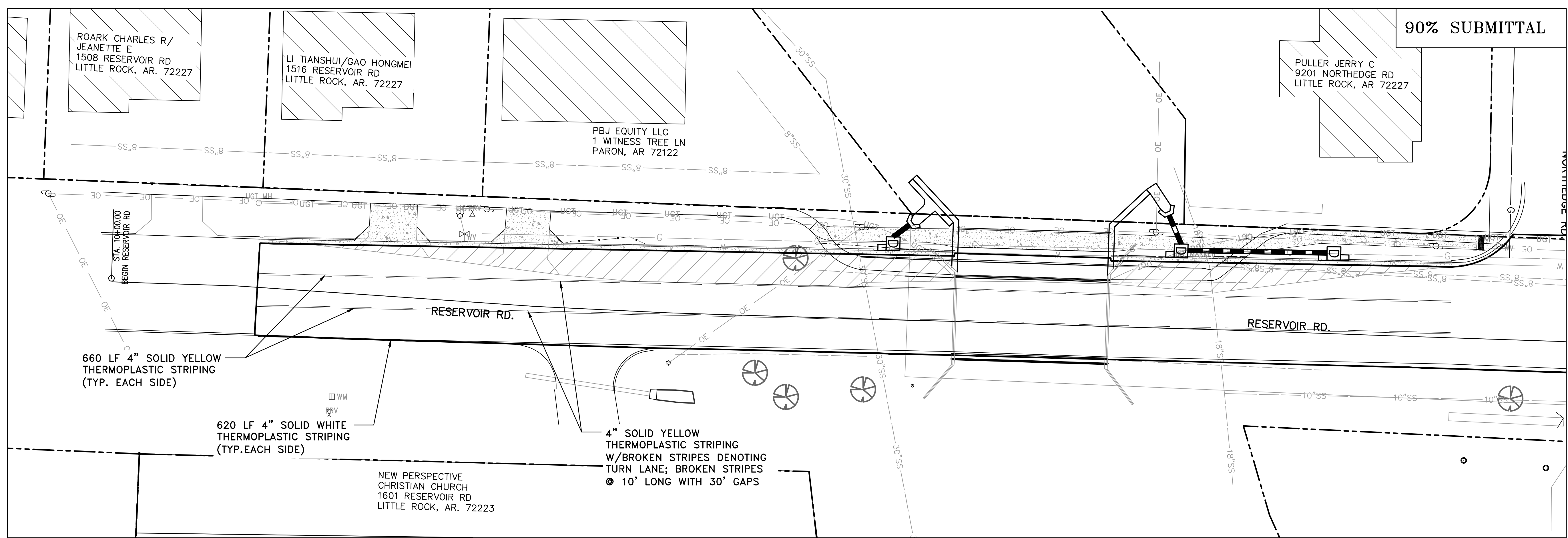
REVISIONS	DATE

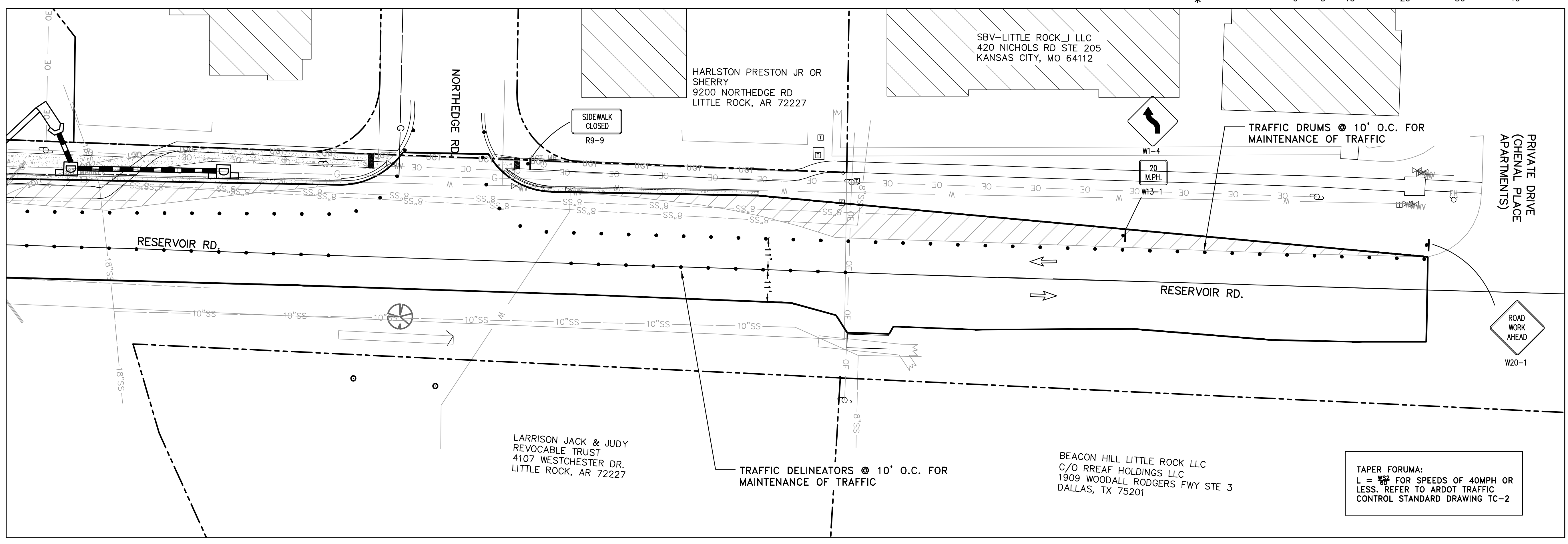
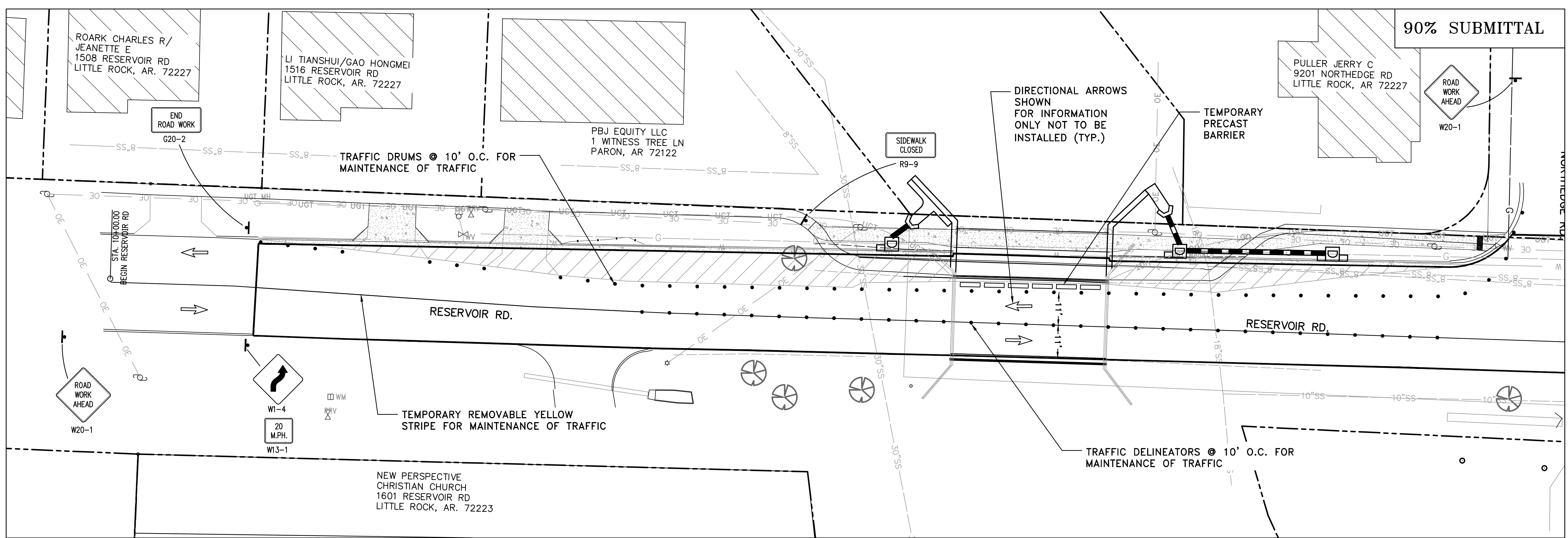
**CITY OF LITTLE ROCK, ARKANSAS
RESERVOIR ROAD IMPROVEMENTS
STRIPING PLAN**

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



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05-20-2019
SCALE
H: 1"=20'
V: 1"=5'
PROJECT NO.
04-17ST-202A
SHEET NO.
C8

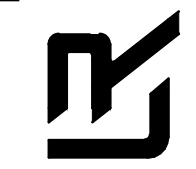




REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
RESERVOIR ROAD IMPROVEMENTS
MAINTANCE OF TRAFFIC PLAN

DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
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SCALE
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V: 1"=5'
PROJECT NO.
04-17ST-202A
SHEET NO.
C9

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
RESERVOIR ROAD IMPROVEMENTS

EROSION CONTROL PH I

DEPARTMENT OF PUBLIC WORKS

CIVIL ENGINEERING

701 W. MARKHAM

LITTLE ROCK, ARKANSAS 72201



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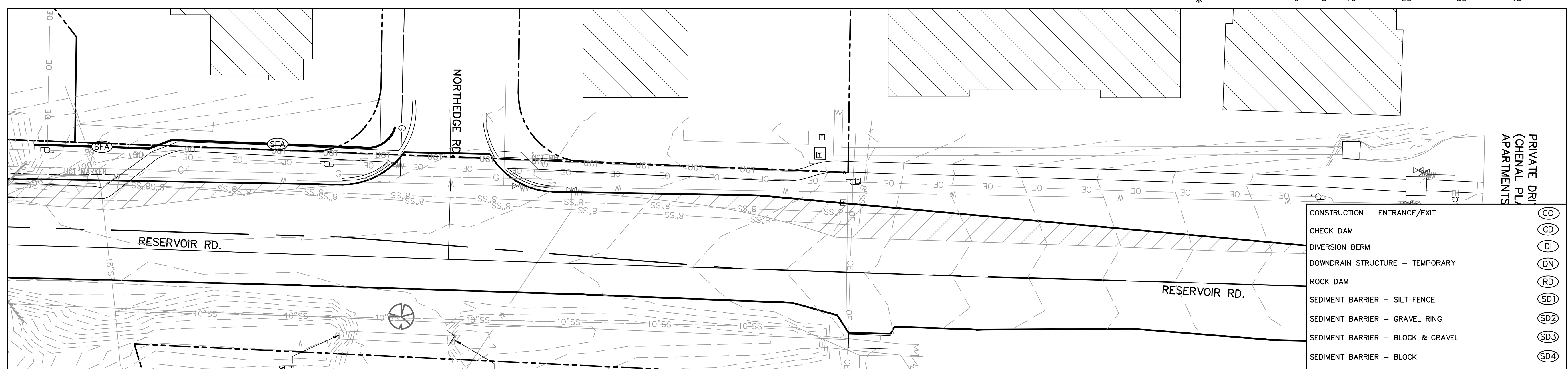
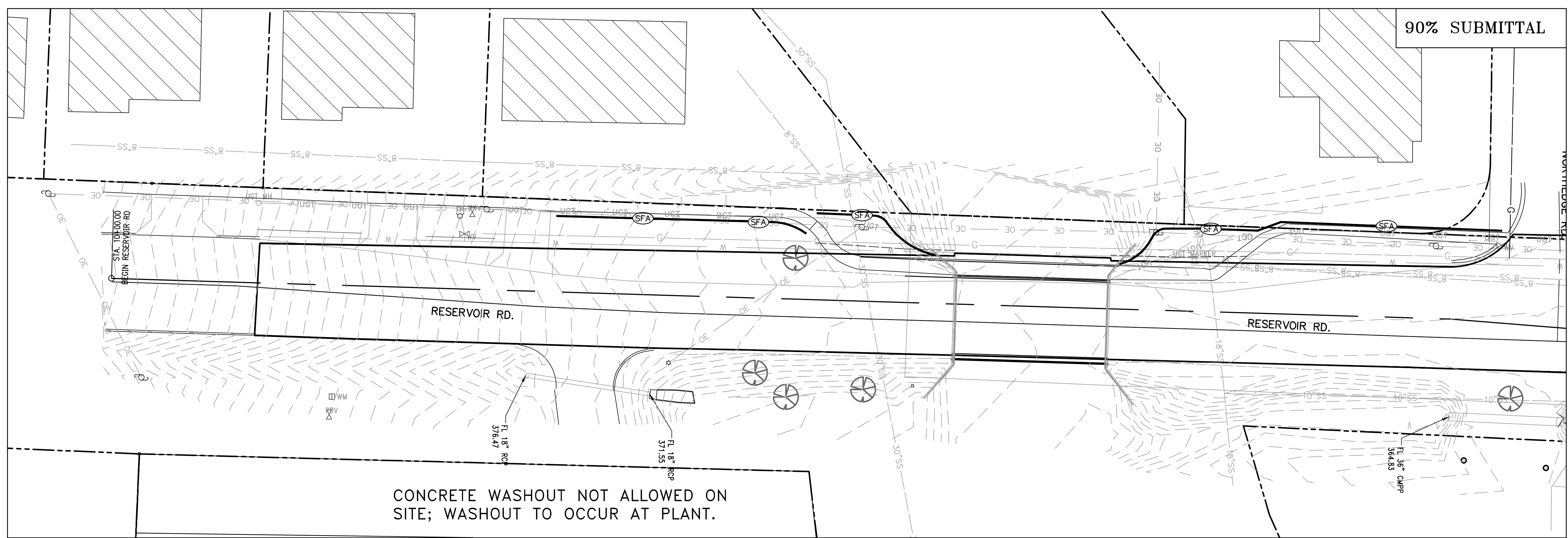
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DATE
05-20-2019

SCALE
H: 1"=20'
V: 1"=5'

PROJECT NO.
04-17ST-202A

SHEET NO.
C10



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	(SBI)
SILT FENCE - TYPE A	(SFA)
SILT FENCE - TYPE B	(SFB)
SILT FENCE - TYPE C	(SFC)
STORM DRAIN OUTLET 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)

**CONSTRUCTION EROSION CONTROL
BEST MANAGEMENT PRACTICES**

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILERS, PARKING, LAY DOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS. IN ADDITION, NOTE ANY OFF-SITE AREA WHERE FILL IS IMPORTED FROM OR SOIL IS EXPORTED TO ON THE SITE MAPS.

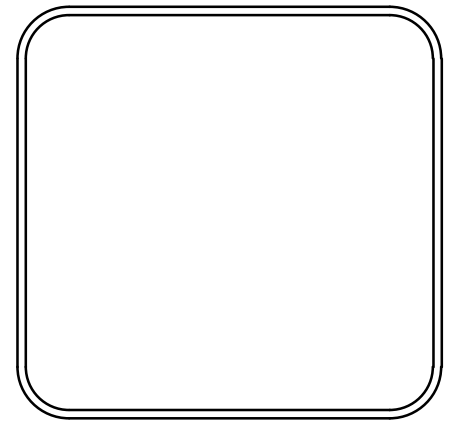
PHASE 1

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE/EXIT(S) AND SWPPP INFORMATION SIGN.
2. INSTALL SILT FENCE(S) ON THE SITE. CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL SILT FENCE.
3. PREPARE TEMPORARY PARKING AND STORAGE AREA.
4. HALT ALL ACTIVITIES AND CONTACT THE CITY OF LITTLE ROCK TO PERFORM INSPECTION AND ACCEPTANCE OF BMP'S.
5. CONSTRUCT AND STABILIZE SEDIMENT BASIN(S) AND SEDIMENT TRAP(S) WITH APPROPRIATE OUTFALL STRUCTURES. CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL BASINS AND TRAPS.
6. INSTALL AND STABILIZE HYDRAULIC CONTROL STRUCTURES (DIKES, SWALES, CHECK DAMS, ETC.). CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL HYDRAULIC CONTROL DEVICES.

REVISIONS	DATE

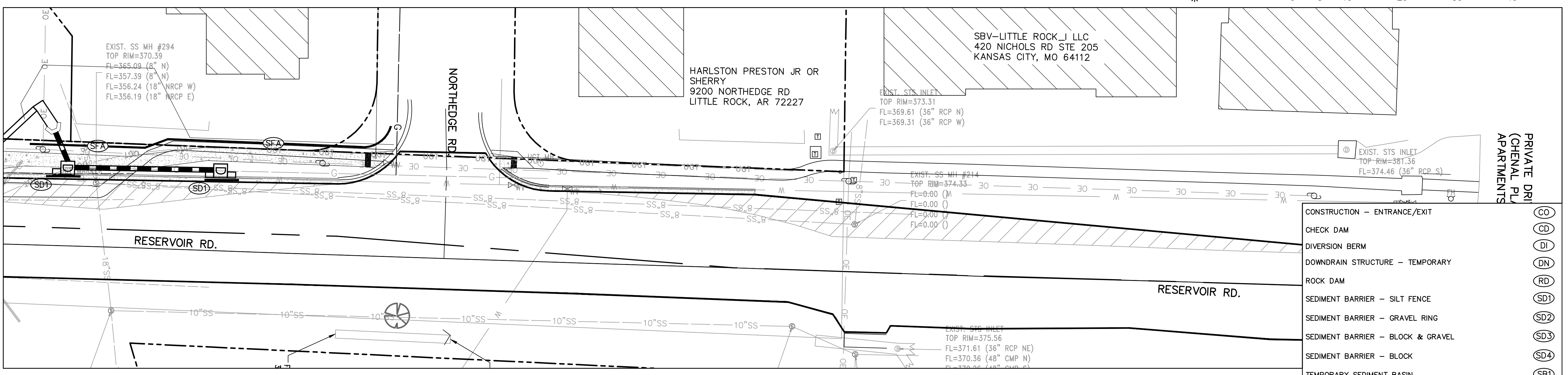
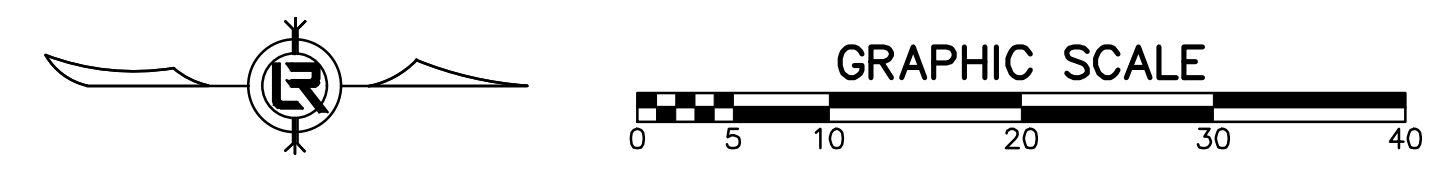
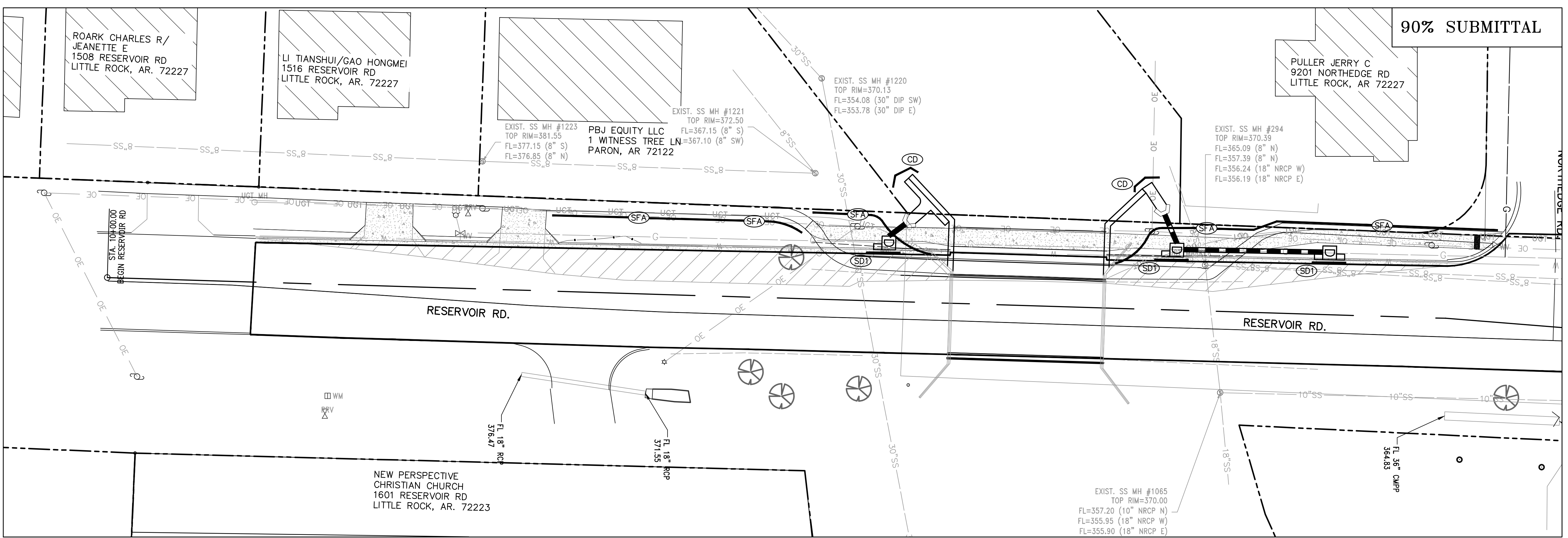
CITY OF LITTLE ROCK, ARKANSAS
 RESERVOIR ROAD IMPROVEMENTS
 EROSION CONTROL PH II

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



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SCALE
 H: 1"=20'
 V: 1"=5'
PROJECT NO.
 04-17ST-202A
SHEET NO.
 C11

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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	(SBI)
SILT FENCE - TYPE A	(SFA)
SILT FENCE - TYPE B	(SFB)
SILT FENCE - TYPE C	(SFC)
STORM DRAIN OUTLET 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)

**CONSTRUCTION EROSION CONTROL
 BEST MANAGEMENT PRACTICES**

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILERS, PARKING, LAY DOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS. IN ADDITION, NOTE ANY OFF-SITE AREA WHERE FILL IS IMPORTED FROM OR SOIL IS EXPORTED TO ON THE SITE MAPS.

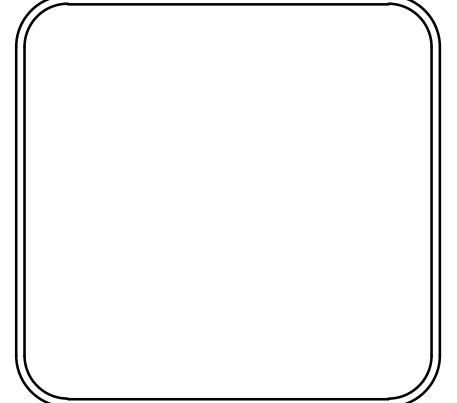
PHASE 2

- BEGIN SITE DEMOLITION, CLEARING AND GRUBBING.
- CONTINUE GRADING THE SITE.
- INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS & INLETS.
- PREPARE SUBGRADE, ROAD BASE AND CURBS AND GUTTERS.
- CONSTRUCT DRIVEWAY TRANSITIONS.
- INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.

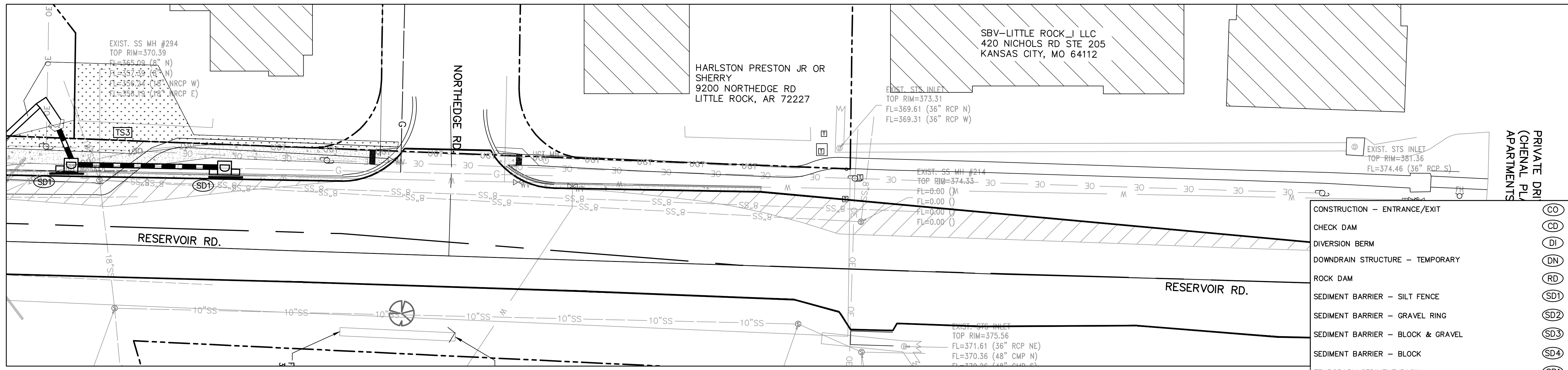
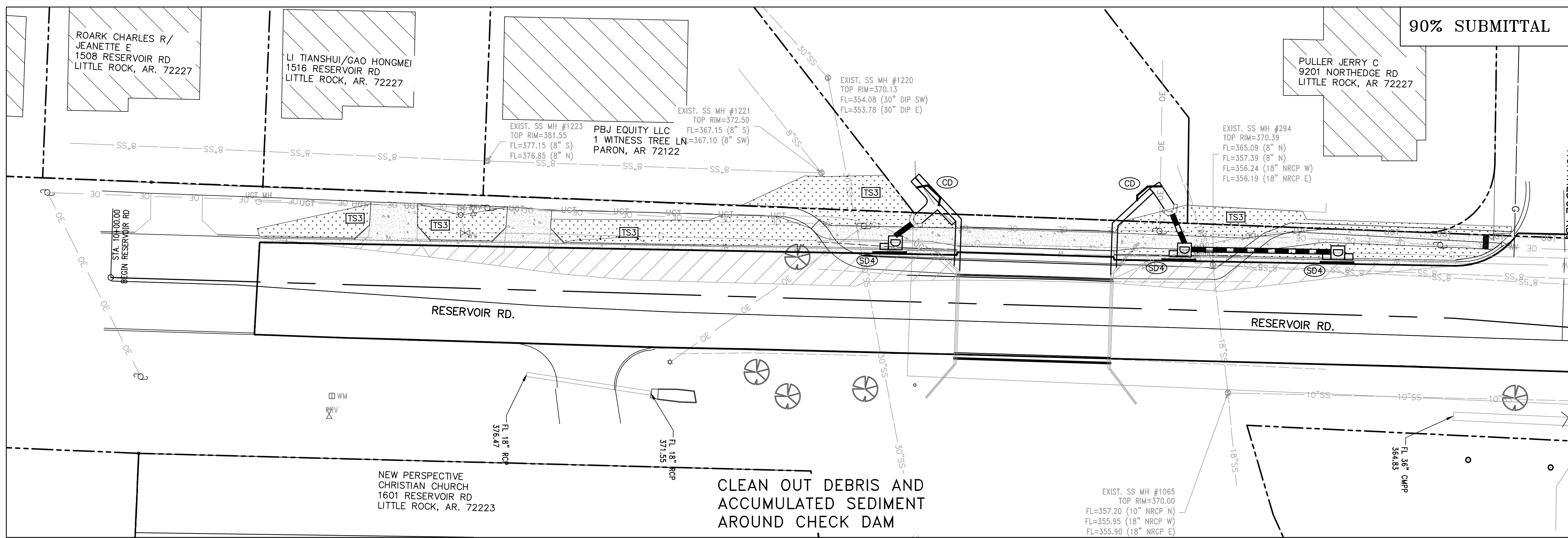
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
RESERVOIR ROAD IMPROVEMENTS
EROSION CONTROL PH III

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



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PROJECT NO.
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SHEET NO.
 C12



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 OUTLET 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)

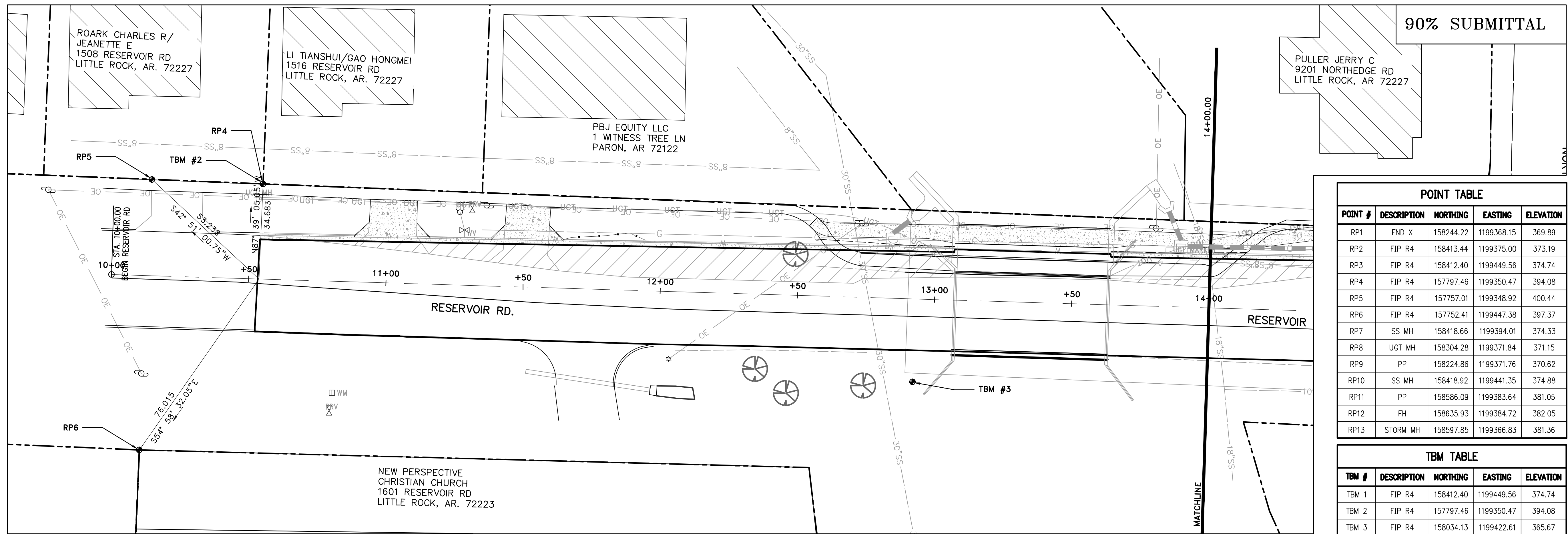
CONSTRUCTION EROSION CONTROL BEST MANAGEMENT PRACTICES

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILERS, PARKING, LAY DOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS. IN ADDITION, NOTE ANY OFF-SITE AREA WHERE FILL IS IMPORTED FROM OR SOIL IS EXPORTED TO ON THE SITE MAPS.

PHASE 3

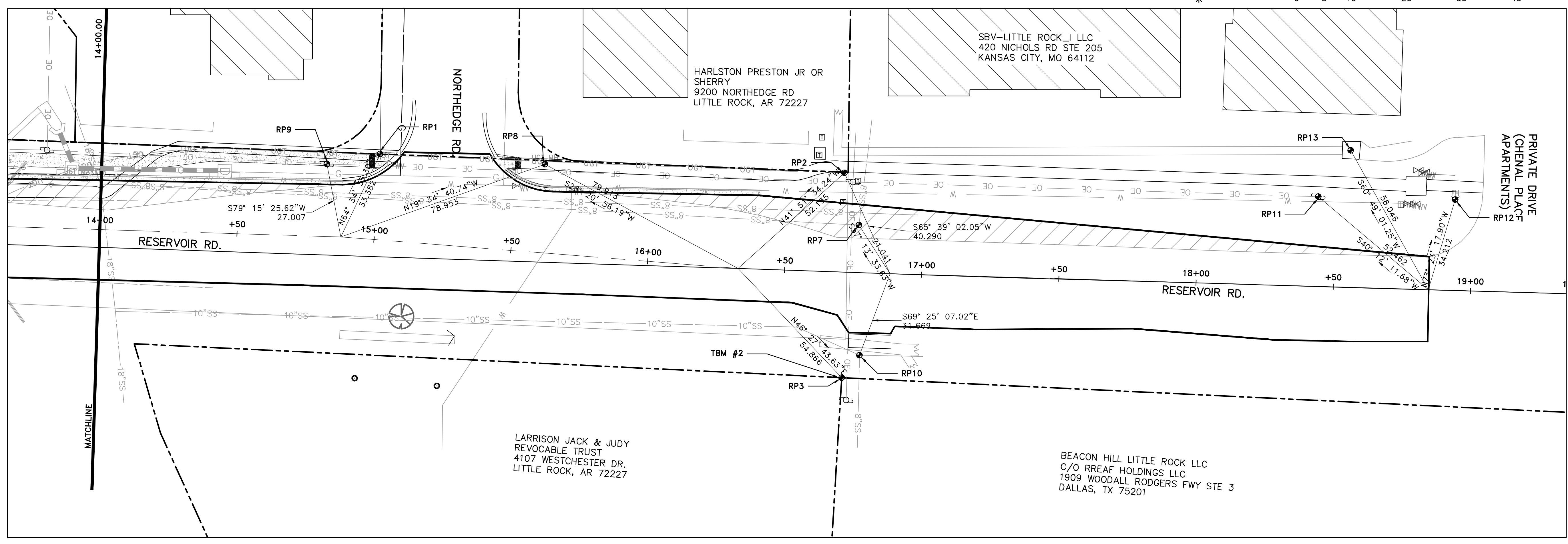
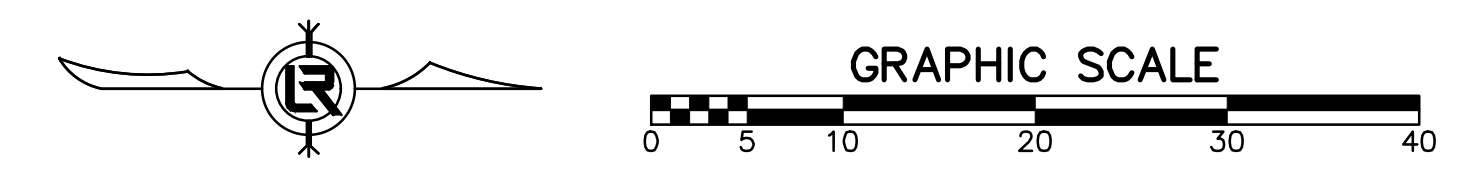
1. FINISH GRADE SIDE SLOPES & PREPARE SUBGRADES FOR SIDEWALKS, ETC.
2. PREPARE SITE FOR PAVING.
3. PAVE WHERE INDICATED ON PLANS. CONSTRUCT SIDEWALKS.
4. INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.
5. COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL NON-PAVED AREAS.

REVISIONS	DATE



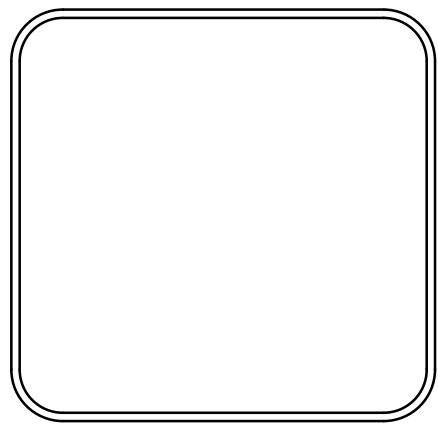
POINT TABLE				
POINT #	DESCRIPTION	NORTHING	EASTING	ELEVATION
RP1	FND X	158244.22	1199368.15	369.89
RP2	FIP R4	158413.44	1199375.00	373.19
RP3	FIP R4	158412.40	1199449.56	374.74
RP4	FIP R4	157797.46	1199350.47	394.08
RP5	FIP R4	157757.01	1199348.92	400.44
RP6	FIP R4	157752.41	1199447.38	397.37
RP7	SS MH	158418.66	1199394.01	374.33
RP8	UGT MH	158304.28	1199371.84	371.15
RP9	PP	158224.86	1199371.76	370.62
RP10	SS MH	158418.92	1199441.35	374.88
RP11	PP	158586.09	1199383.64	381.05
RP12	FH	158635.93	1199384.72	382.05
RP13	STORM MH	158597.85	1199366.83	381.36

TBM TABLE				
TBM #	DESCRIPTION	NORTHING	EASTING	ELEVATION
TBM 1	FIP R4	158412.40	1199449.56	374.74
TBM 2	FIP R4	157797.46	1199350.47	394.08
TBM 3	FIP R4	158034.13	1199422.61	365.67



CITY OF LITTLE ROCK, ARKANSAS
RESERVOIR ROAD IMPROVEMENTS
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CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201



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PROJECT NO. 04-17ST-202A
SHEET NO. C13

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REVISIONS DATE

CITY OF LITTLE ROCK, ARKANSAS
RESERVOIR ROAD IMPROVEMENTS

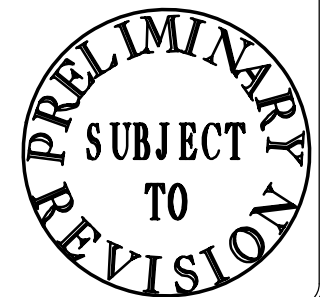
BRIDGE QUANTITIES

SCHEDULE OF BRIDGE QUANTITIES - PROJECT NO. 04-17ST-202A

BRIDGE NO.	NAME PLATE TITLE	UNIT OF STRUCTURE	ITEM NO.	205	636	801	802	802	802	802	803	804	806	806	812	816	816	821	SP JOB 04-17ST-202A		
			ITEM	REMOVAL OF EXISTING BRIDGE STRUCTURE	BRIDGE CONSTRUCTION CONTROL	UNCLASSIFIED EXCAVATION FOR STRUCTURES-BRIDGE	CLASS S CONCRETE -BRIDGE	19' PRECAST CONCRETE CURB UNITS	19' PRECAST CONCRETE INTERIOR UNITS	19' PRECAST CONCRETE PARAPET RAIL UNITS	CLASS I PROTECTIVE SURFACE TREATMENT	REINFORCING STEEL - BRIDGE (GRADE 60)	METAL BRIDGE RAILING (PEDESTRIAN HANDRAIL) ②	TRANSITIONAL APPROACH RAILING	BRIDGE NAME PLATE (TYPE SPECIAL) ①	FILTER BLANKET	DUMPED RIPRAP (GROUTED)	MODIFICATION OF EXISTING BRIDGE STRUCTURE (BRIDGE NO.)	SHORING (SITE NO.)		
			UNIT	LUMP SUM	LUMP SUM	CU. YD.	CU. YD.	EACH	EACH	EACH	GAL.	LB.	LIN. FT.	EACH	EACH	SQ. YD.	CU. YD.	LUMP SUM	LUMP SUM		
04143	RESERVOIR RD. OVER GRASSY FLAT CREEK	BENT NO. 1				327	92.90					15,840		1		36	28				
		BENT NO. 2				24	16.35					3,190									
		BENT NO. 3				24	16.35					3,190									
		BENT NO. 4				290	85.40					14,680		1		56	39				
		3 - 19'-0" PRECAST SPANS							9	9	3	2.8		57		1					
		EXISTING BRIDGE NO. 04143		1	1														1	1	
		TOTALS FOR PROJECT NO. 04-17ST-202A		1	1	665	211.00	9	9	3	2.8	36,900	57	2	1	92	67	1	1		

- ① THE BRIDGE NAME PLATE SHALL BE CAST INTO THE PRECAST PARAPET. SEE SHEET NO. S3 FOR LOCATION.
- ② THE GALVANIZING METHOD SHALL BE COMPATIBLE WITH THE PAINT SHOWN ON THE STANDARD DRAWINGS.

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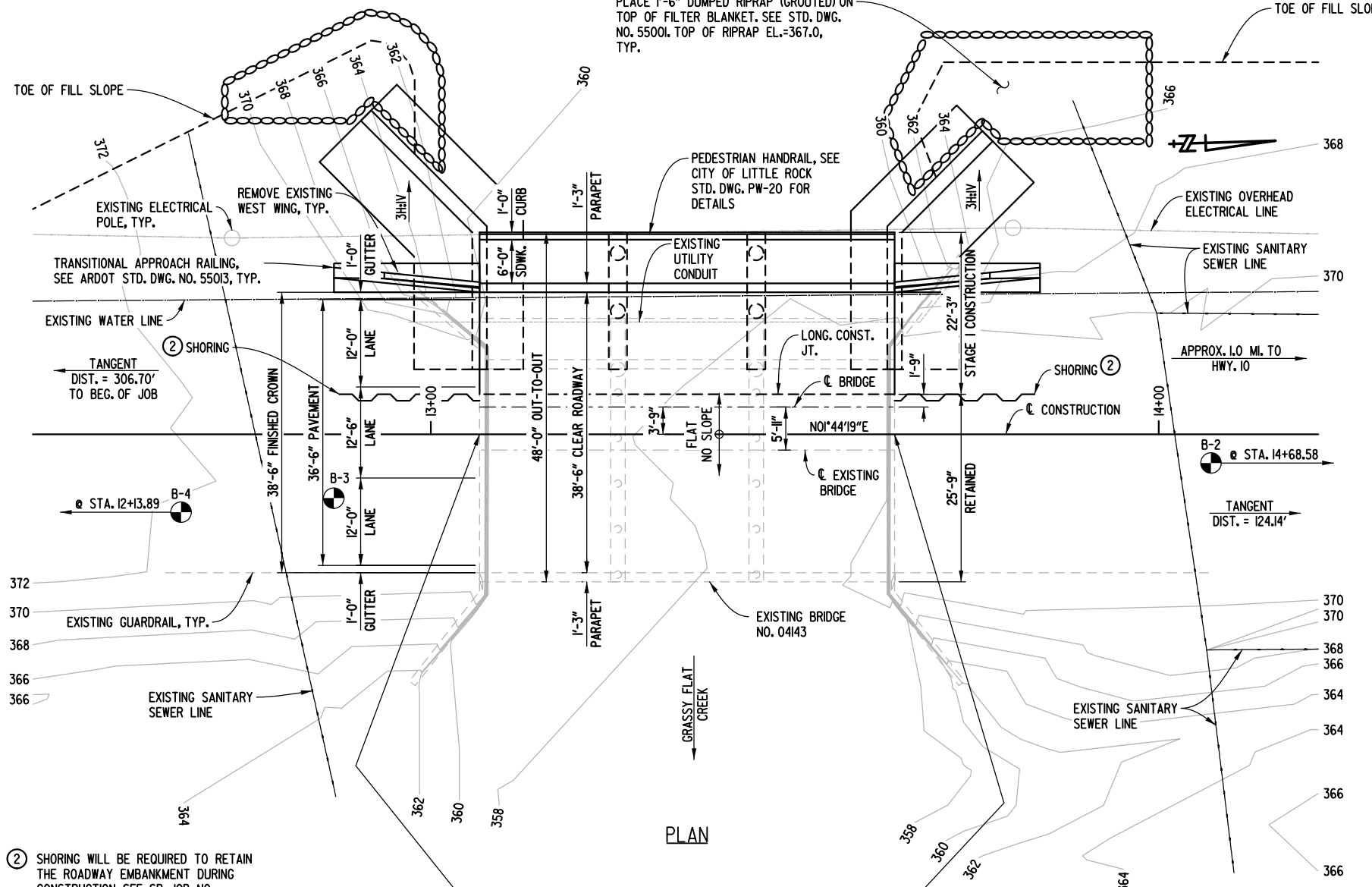
FOR R/W DATA, SEE ROADWAY PLANS

PLACE 1'-6" DUMPED RIPRAP (GROUTED) ON TOP OF FILTER BLANKET. SEE STD. DWG. NO. 55001, TOP OF RIPRAP EL.=367.0, TYP.

GENERAL NOTES

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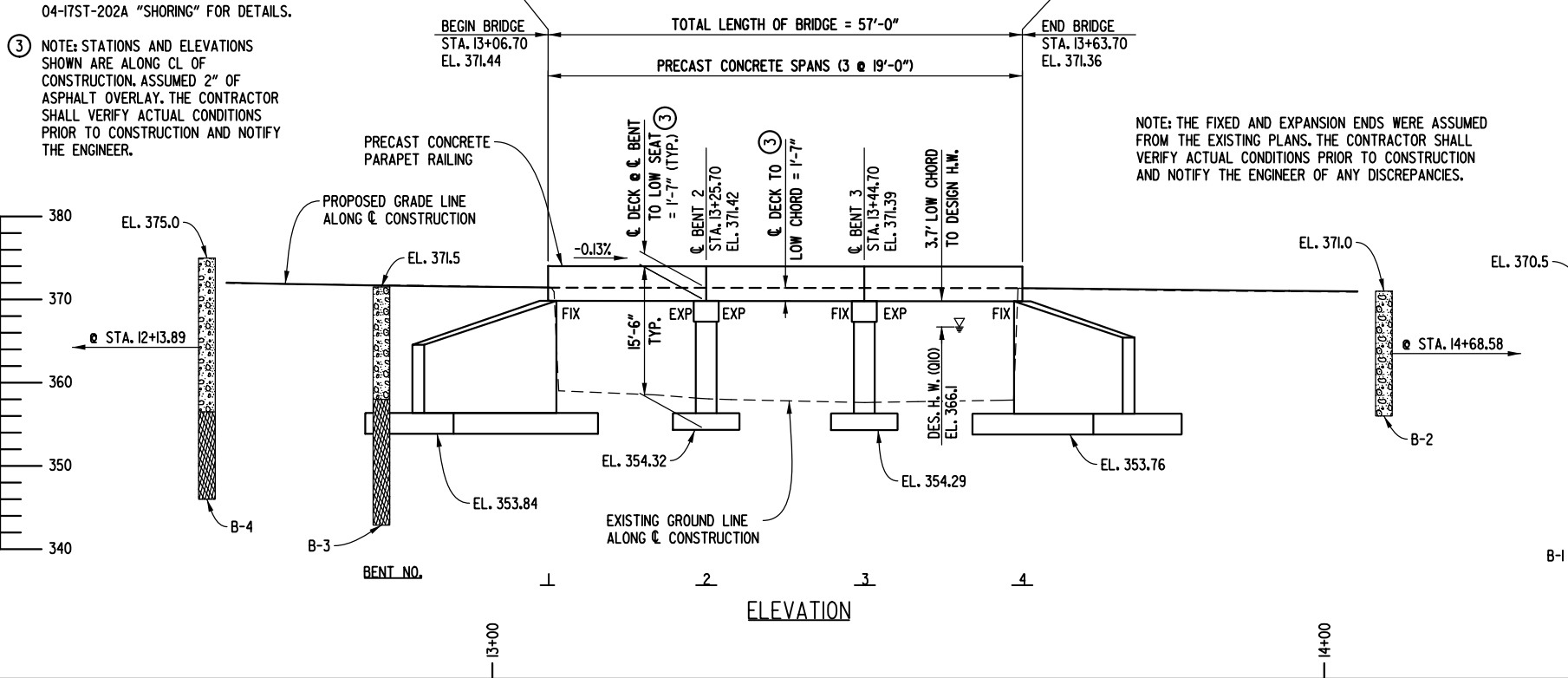
REVISIONS	DATE



PLAN

- ② SHORING WILL BE REQUIRED TO RETAIN THE ROADWAY EMBANKMENT DURING CONSTRUCTION. SEE SP JOB NO. 04-17ST-202A "SHORING" FOR DETAILS.
- ③ NOTE: STATIONS AND ELEVATIONS SHOWN ARE ALONG CL OF CONSTRUCTION. ASSUMED 2" OF ASPHALT OVERLAY. THE CONTRACTOR SHALL VERIFY ACTUAL CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER.

NOTE: THE FIXED AND EXPANSION ENDS WERE ASSUMED FROM THE EXISTING PLANS. THE CONTRACTOR SHALL VERIFY ACTUAL CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.



ELEVATION

BENCH MARK: VERTICAL CONTROL DATA ARE SHOWN ON THE SURVEY CONTROL DATA SHEETS.

CONSTRUCTION SPECIFICATIONS: ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2014 EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS UNLESS OTHERWISE NOTED IN THE PLANS.

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 7TH EDITION WITH 2015 INTERIM SPECIFICATIONS. (SUBSTRUCTURE) AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES (2002 EDITION) WITH CURRENT INTERIM SPECIFICATIONS (SUPERSTRUCTURE)

LIVE LOADING: HL-93 (SUBSTRUCTURE) HS-20 (SUPERSTRUCTURE) SITE CLASS = C $S_{DI} = 0.150$ SEISMIC PERFORMANCE ZONE: I

MATERIALS AND STRENGTHS:
 CLASS (S/AE) CONCRETE (SUPERSTRUCTURE) $F'_C = 4,000$ PSI
 CLASS S CONCRETE (SUBSTRUCTURE) $F'_C = 3,500$ PSI
 REINFORCING STEEL (GRADE 60 AASHTO M 31 OR M 322 TYPE A) $F_Y = 60,000$ PSI

BORING LOGS: BORING LOGS MAY BE OBTAINED FROM THE DEPARTMENT OF PUBLIC WORKS, THE CITY OF LITTLE ROCK.

SPREAD FOOTINGS: FOOTINGS SHALL BE SET A MINIMUM OF 2'-0" INTO MATERIAL DESIGNATED AS HIGHLY WEATHERED SHALE ON THE BORING LEGEND. THE TOP OF FOOTINGS AT BENTS 1 THRU 4 SHALL BE SET AT OR BELOW THE CHANNEL BOTTOM AS DETERMINED BY THE LOWEST CHANNEL ELEVATION WITHIN THE FOOTPRINT OF THE FOOTING. FOUNDATIONS FOR FOOTINGS SHALL BE PREPARED IN ACCORDANCE WITH SUBSECTION 801.04. ROCK EXCAVATIONS SHALL BE MADE TO NEAT LINES OF THE CONCRETE FOOTINGS. BLASTING SHALL NOT BE ALLOWED. CONCRETE IN FOOTINGS SHALL BE POURED DIRECTLY AGAINST EXCAVATED SURFACES OF ROCK.

BRIDGE DECK: THE CONCRETE BRIDGE DECK, EXCEPT SIDEWALKS, SHALL BE GIVEN A TINE FINISH AS SPECIFIED FOR FINAL FINISHING IN SUBSECTION 802.19 FOR CLASS 5 TINED BRIDGE ROADWAY SURFACE FINISH. SIDEWALKS SHALL BE GIVEN A CLASS 6 BROOMED FINISH.

PROTECTIVE SURFACE TREATMENT: CLASS I PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE ROADWAY SURFACE, ROADWAY FACE, AND TOP OF PARAPET RAILS IN ACCORDANCE WITH SECTION 803.

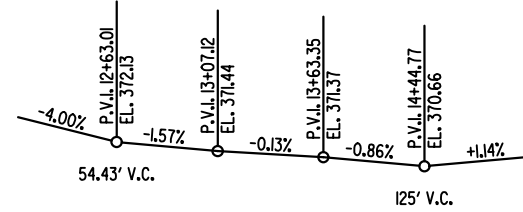
DETAIL DRAWINGS:
 STAGE CONSTRUCTION
 BRIDGE NAME PLATE
 END BENT DETAILS
 INTERMEDIATE BENT DETAILS
 ④ DETAILS OF STANDARD 19'-0" PRECAST CONCRETE SPANS
 ④ TRANSITIONAL APPROACH RAILING
 ⑤ HANDRAIL DETAIL ALTERNATE

EXISTING BRIDGE: EXISTING BRIDGE NO. 04143 (LOG MILE 1.0) IS 36.2' WIDE AND 57.0' LONG AND CONSISTS OF PRECAST CONCRETE SPANS (3 SPANS TOTAL) SUPPORTED BY CONCRETE COLUMNS ON CONCRETE PILE FOOTINGS.

VERIFICATION: EXCEPT AS NOTED, COMPONENTS OF THE EXISTING BRIDGE ARE TO BE RETAINED AND JOINED TO THE PROPOSED WORK. INFORMATION AND DIMENSIONS SHOWN ARE BASED ON THE EXISTING BRIDGE PLANS AND AVAILABLE SURVEY DATA. THE CONTRACTOR IS TO ADHERE STRICTLY TO THE REQUIREMENTS FOR VERIFICATION OF THE GEOMETRY OF THE EXISTING BRIDGE AND ITS RELATIONSHIP TO THE PROPOSED WORK DESCRIBED IN SUBSECTION 821.02 AND MAKE NECESSARY ADJUSTMENTS TO FIT THE PROPOSED WORK TO THE EXISTING STRUCTURE. PAYMENT FOR THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO THE PAY ITEM "MODIFICATION OF EXISTING BRIDGE STRUCTURE (BRIDGE NO. 04143)".

REMOVAL AND SALVAGE: PORTIONS OF EXISTING BRIDGE NO. 04143 SHALL BE REMOVED IN ACCORDANCE WITH SECTION 205. ALL MATERIAL FROM THE EXISTING BRIDGE SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

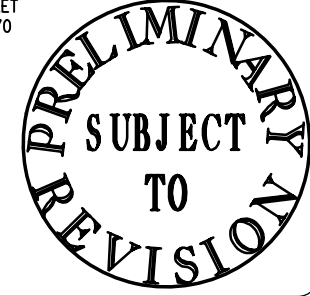
MAINTENANCE OF TRAFFIC: SEE ROADWAY PLANS.



HYDRAULIC DATA

FLOOD DESCRIPTION	FREQUENCY YEARS	DISCHARGE CFS	NATURAL W.S. ELEVATION FEET	W.S. ELEVATION WITH BACKWATER FEET
DESIGN	10	5230	366.9	366.1
BASE	100	7960	370.9	372.8
EXTREME	500	9235	372.5	373.3
OVERTOPPING	37	6049	---	370.8

① UNCONSTRICTED WATER SURFACE ELEVATION WITHOUT STRUCTURE OR ROADWAY APPROACHES.
 100 YR. BACKWATER ELEVATION FOR EXISTING STRUCTURE = 372.8 FEET
 PROPOSED LOW BRIDGE CHORD EL. = 369.8 FEET AT STATION 13+63.70
 DRAINAGE AREA = 3.9 SQ. MILES
 HISTORICAL H.W. EL. = N/A

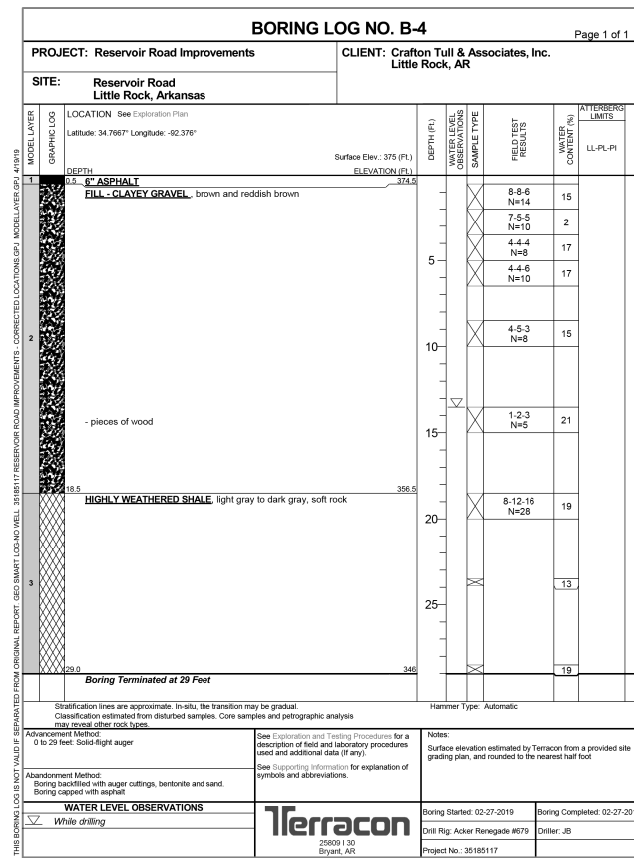
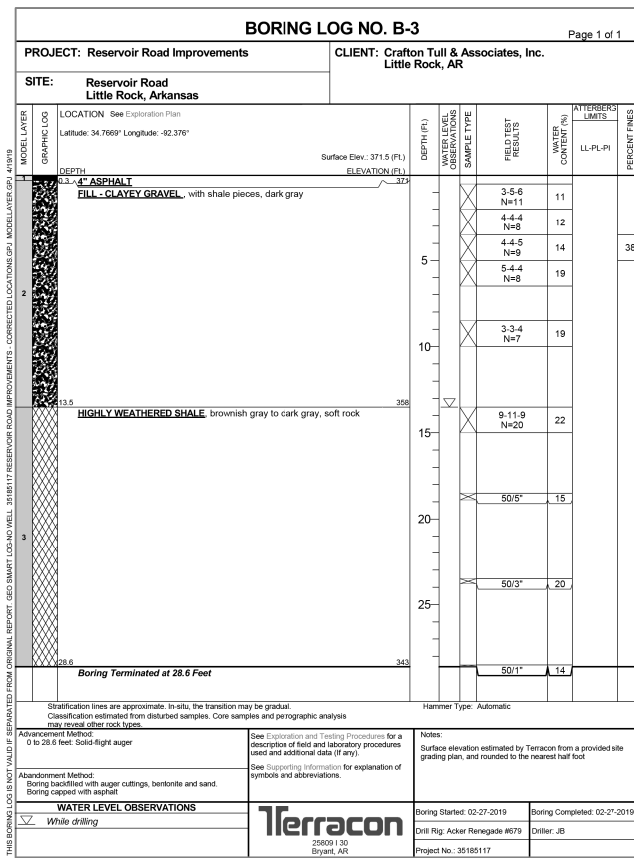
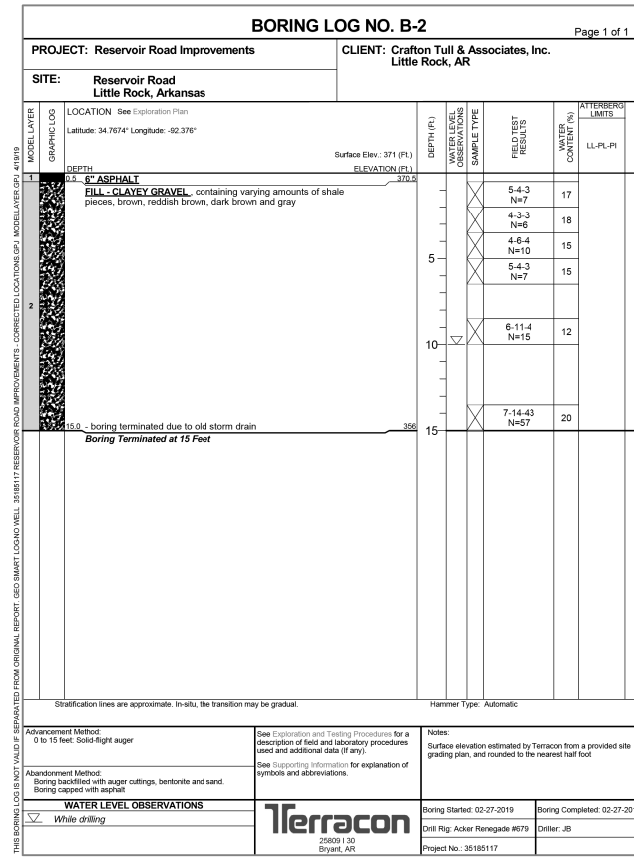
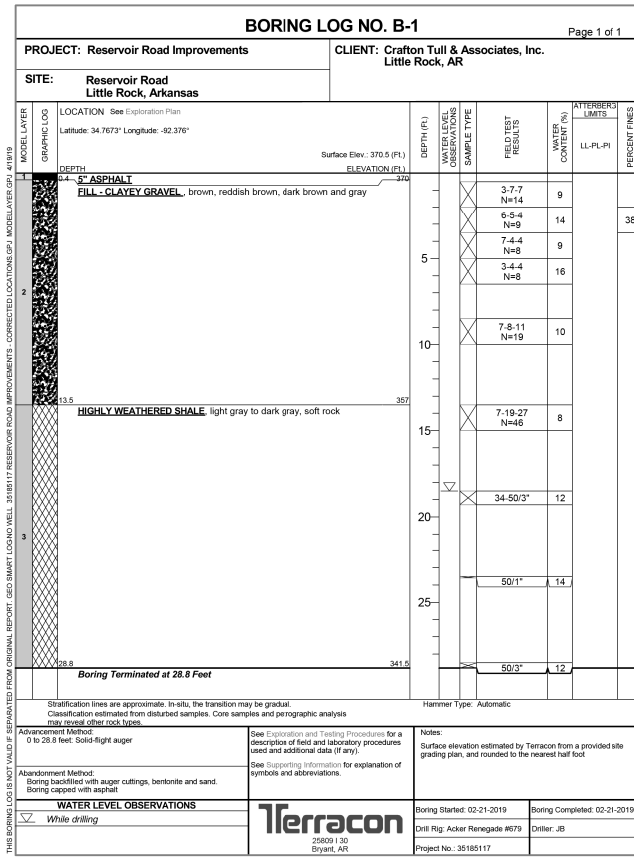


CITY OF LITTLE ROCK, ARKANSAS
 RESERVOIR ROAD IMPROVEMENTS
 LAYOUT OF BRIDGE OVER GRASSY FLAT CREEK
 SHEET 1 OF 2

DEPARTMENT OF PUBLIC WORKS
 CIVIL ENGINEERING
 701 W. MARKHAM
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 PROJECT NO. 04-17ST-202A
 SHEET NO. L1

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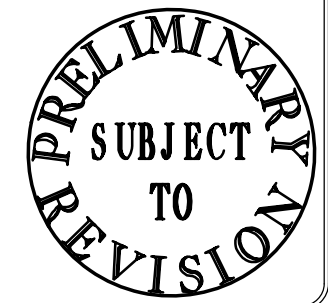


CITY OF LITTLE ROCK, ARKANSAS
RESERVOIR ROAD IMPROVEMENTS
LAYOUT OF BRIDGE OVER GRASSY FLAT CREEK
SHEET 2 OF 2

DEPARTMENT OF PUBLIC WORKS
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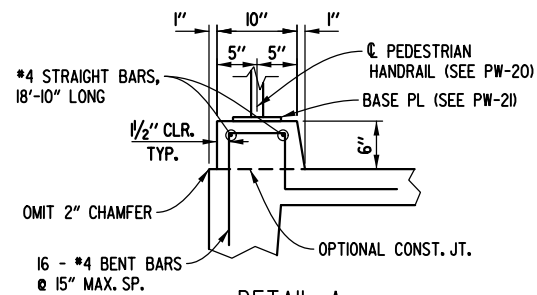
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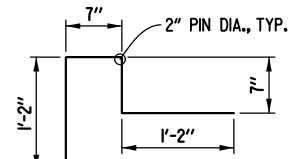
NOTES:

- ① FOR DETAILS OF TEMPORARY PRECAST BARRIER, SEE STD. DWG. NO. TC-4. ATTACH TEMPORARY PRECAST BARRIER TO EXISTING DECK.
- ② PARTIAL DEPTH SAW CUT THROUGH EXISTING GROUT KEY. REMOVE GROUT FROM EXISTING KEYWAY ON PRECAST UNIT TO REMAIN IN PLACE.

REMOVE EXISTING PRECAST CONCRETE UNIT, PRECAST CONCRETE PARAPET, PEDESTRIAN HANDRAIL, AND SIDEWALK.



DETAIL A
SCALE: 1" = 1'-0"

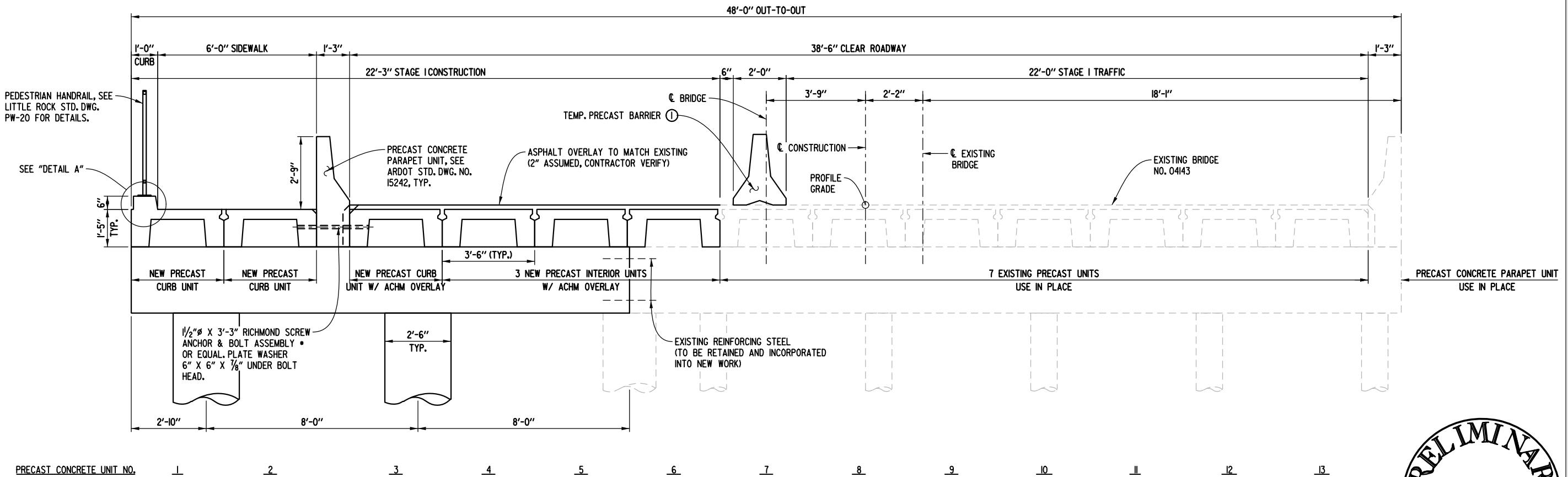


#4 BENT BAR
BENDING DIAGRAM

NOTE:
PAYMENT FOR CURB SHALL BE CONSIDERED SUBSIDIARY TO "19' PRECAST CONCRETE CURB UNITS".

STAGE I CONSTRUCTION
(LOOKING NORTH)
SCALE: 1/2" = 1'-0"

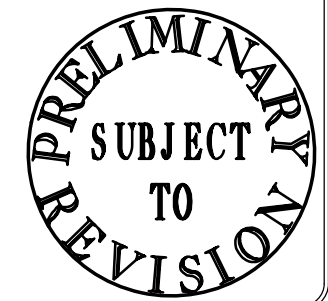
NOTE:
DETAILS RELATED TO MAINTENANCE OF TRAFFIC ARE SHOWN ON BRIDGE PLANS FOR INFORMATION ONLY. FOR MAINTENANCE OF TRAFFIC PLANS AND ADDITIONAL INFORMATION, SEE ROADWAY PLANS.



STAGE I CONSTRUCTION
(LOOKING NORTH)
SCALE: 1/2" = 1'-0"

• DESIGNATED "RICHMOND SCAB" ON THE PLANS.

NOTE:
SEE ARDOT STD. DWG. NO. 15242 FOR ADDITIONAL DETAILS.
USE THE CLEAR ROADWAY WIDTH, SIDEWALK, AND OUT-TO-OUT DIMENSIONS AS SHOWN ABOVE.



CITY OF LITTLE ROCK, ARKANSAS
RESERVOIR ROAD IMPROVEMENTS
DETAILS OF STAGED CONSTRUCTION
SHEET 1 OF 2

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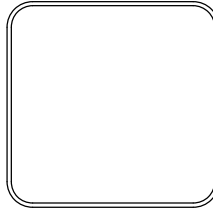
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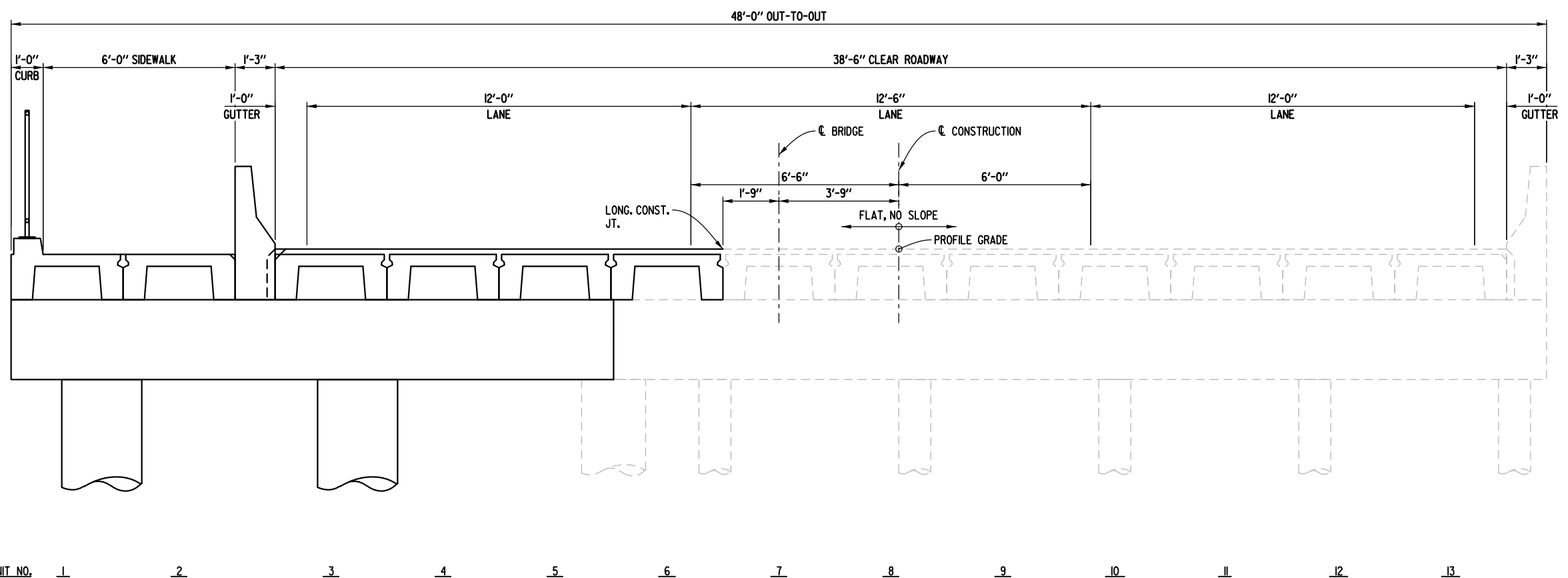
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
 RESERVOIR ROAD IMPROVEMENTS
 DETAILS OF STAGED CONSTRUCTION
 SHEET 2 OF 2

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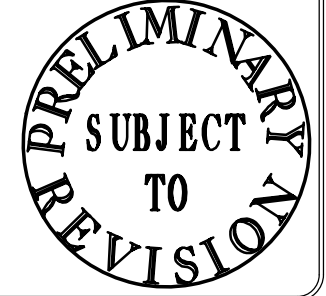
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 S2



PRECAST CONCRETE UNIT NO. 1 2 3 4 5 6 7 8 9 10 11 12 13

CONSTRUCTION COMPLETE
 (LOOKING NORTH)
 SCALE: 1/2" = 1'-0"

NOTE:
 SEE ARDOT STD. DWG. NO. 15242 FOR ADDITIONAL DETAILS.
 USE THE CLEAR ROADWAY WIDTH, SIDEWALK, AND OUT-TO-OUT
 DIMENSIONS AS SHOWN ABOVE.



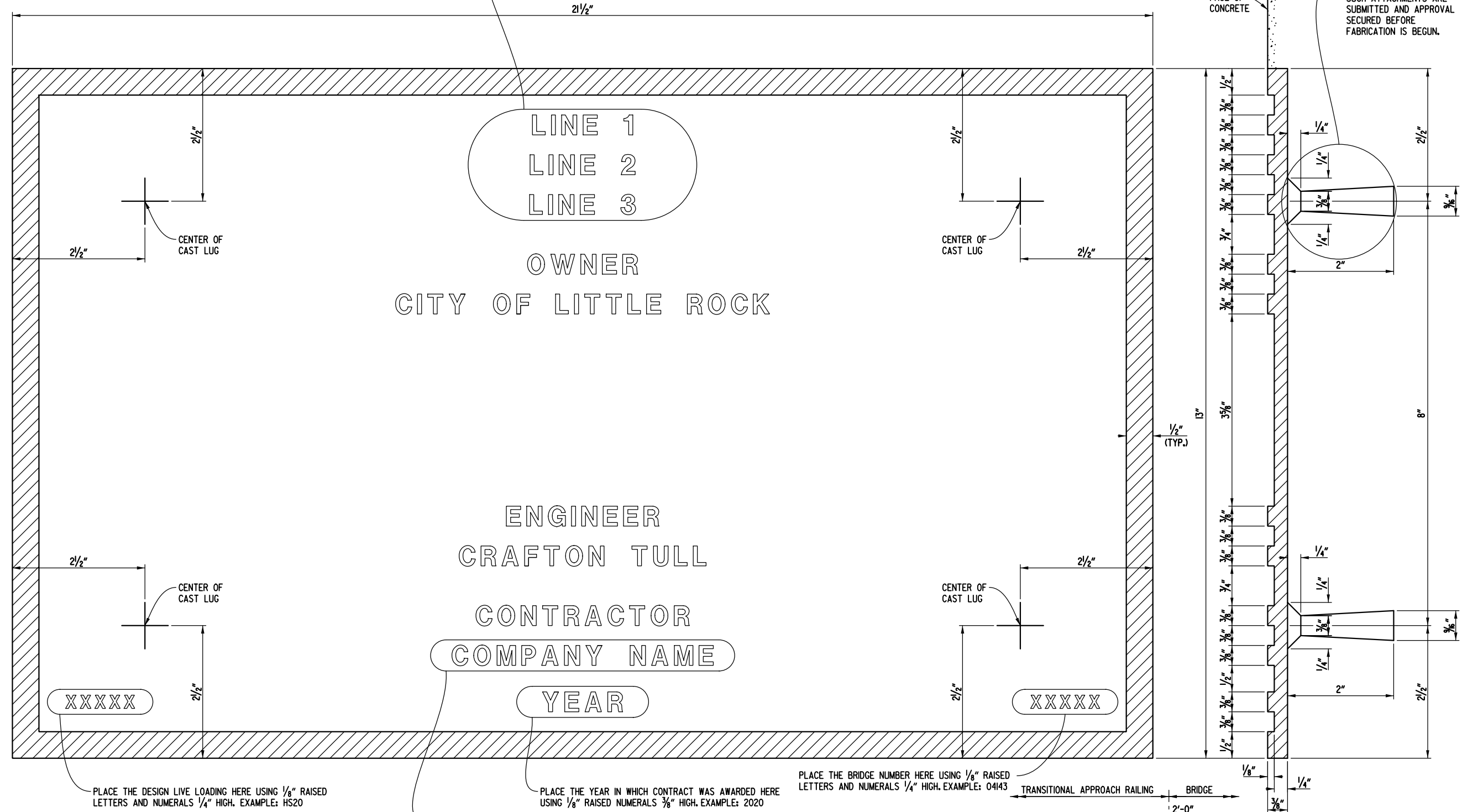
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 PLOTTED: 9/23/2019 09:21
 SCALE: 1/4

REVISIONS	DATE

90% SUBMITTAL

THE NAME OF THE BRIDGE AS SHOWN ON THE PLANS SHALL BE PLACED ON LINES 1-3 USING 1/8" RAISED LETTERS AND NUMERALS 3/8" HIGH.

- LINE 1 RESERVOIR ROAD
- LINE 2 OVER
- LINE 3 GRASSY FLAT CREEK



OWNER
CITY OF LITTLE ROCK

ENGINEER
CRAFTON TULL

CONTRACTOR
COMPANY NAME

YEAR

XXXXX

XXXXX

PLACE THE DESIGN LIVE LOADING HERE USING 1/8" RAISED LETTERS AND NUMERALS 1/4" HIGH. EXAMPLE: HS20

PLACE THE YEAR IN WHICH CONTRACT WAS AWARDED HERE USING 1/8" RAISED NUMERALS 3/8" HIGH. EXAMPLE: 2020

PLACE THE NAME OF THE COMPANY AWARDED THE CONSTRUCTION CONTRACT HERE USING 1/8" RAISED LETTERS AND NUMERALS 3/8" HIGH. EXAMPLE: ABCD CONSTRUCTION, INC.

PLACE THE BRIDGE NUMBER HERE USING 1/8" RAISED LETTERS AND NUMERALS 1/4" HIGH. EXAMPLE: 04143

GENERAL NOTES

SPECIFICATIONS: ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, (2014 EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

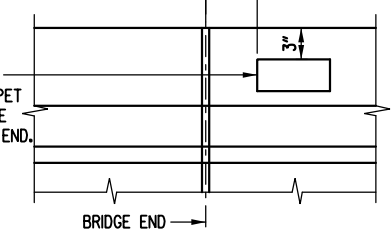
NAME PLATES SHALL BE CAST BRONZE AND SHALL MEET THE MATERIAL REQUIREMENTS AS SPECIFIED IN SECTION 812 OF THE STANDARD SPECIFICATIONS.

BODY OF PLATE SHALL BE 1/4" THICK AND SHALL INCLUDE FOUR TAPERING CONE LUGS 3/8" TO 3/16" X 2" LONG. THE BORDER AND ALL LETTERING SHALL BE RAISED 1/8" ABOVE THE FACE OF PLATE AND SHALL BE POLISHED.

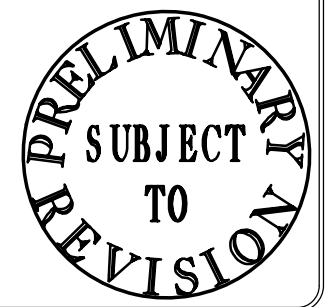
ALL LETTERING SHALL BE PLAIN GOTHIC, SQUARE CUT AND NOT TAPERED. THE NUMBER OF PLATES REQUIRED AND THE LOCATION AND NAME ON THE PLATE FOR EACH BRIDGE SHALL BE AS DESIGNATED ON THE PLANS.

TYPICAL BRIDGE NAME PLATE

PLACE TYPE SPECIAL BRIDGE NAME PLATE ON LEFT PARAPET RAIL AT BEGINNING OF BRIDGE APPROX. 2'-0" FROM BRIDGE END.

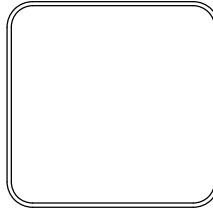


NAME PLATE DETAIL
NO SCALE



CITY OF LITTLE ROCK, ARKANSAS
RESERVOIR ROAD IMPROVEMENTS
BRIDGE NAME PLATE

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



DRAWN BY
LDG
DESIGNED
LDG
CHECKED
CAW
DATE
09-26-19
SCALE
NO SCALE
PROJECT NO.
04-17ST-202A
SHEET NO.
S3

USER: lg5169
DESIGN FILE: G:\18804904_ReservoirRoad\TRANSP\dgn\bridge\18804904.plt.dgn
PLOTTED: 8/26/2019 14:37
SCALE: 1:2

REVISIONS	DATE

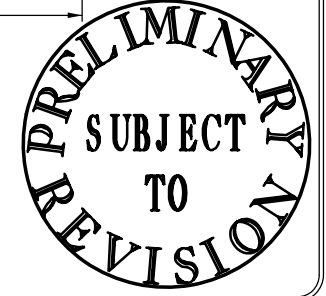
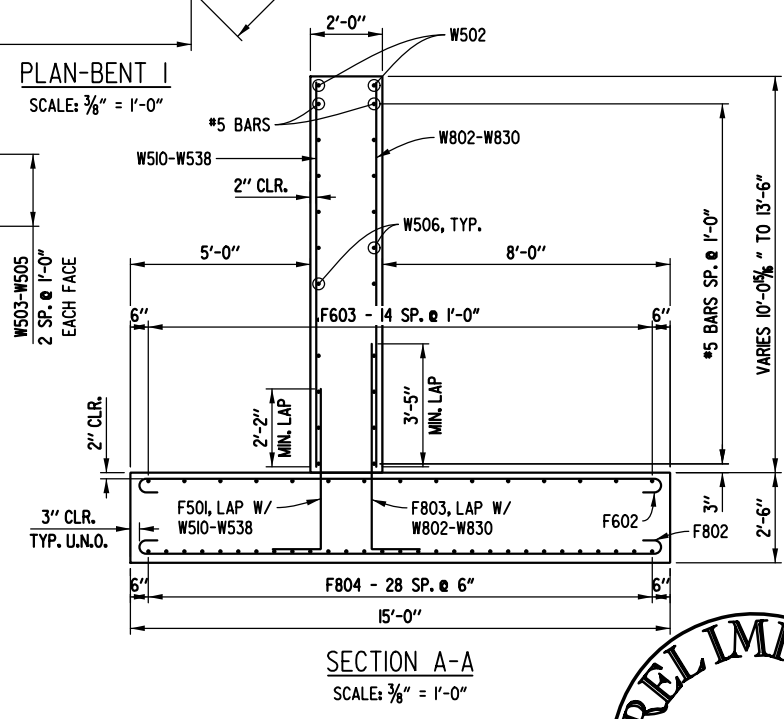
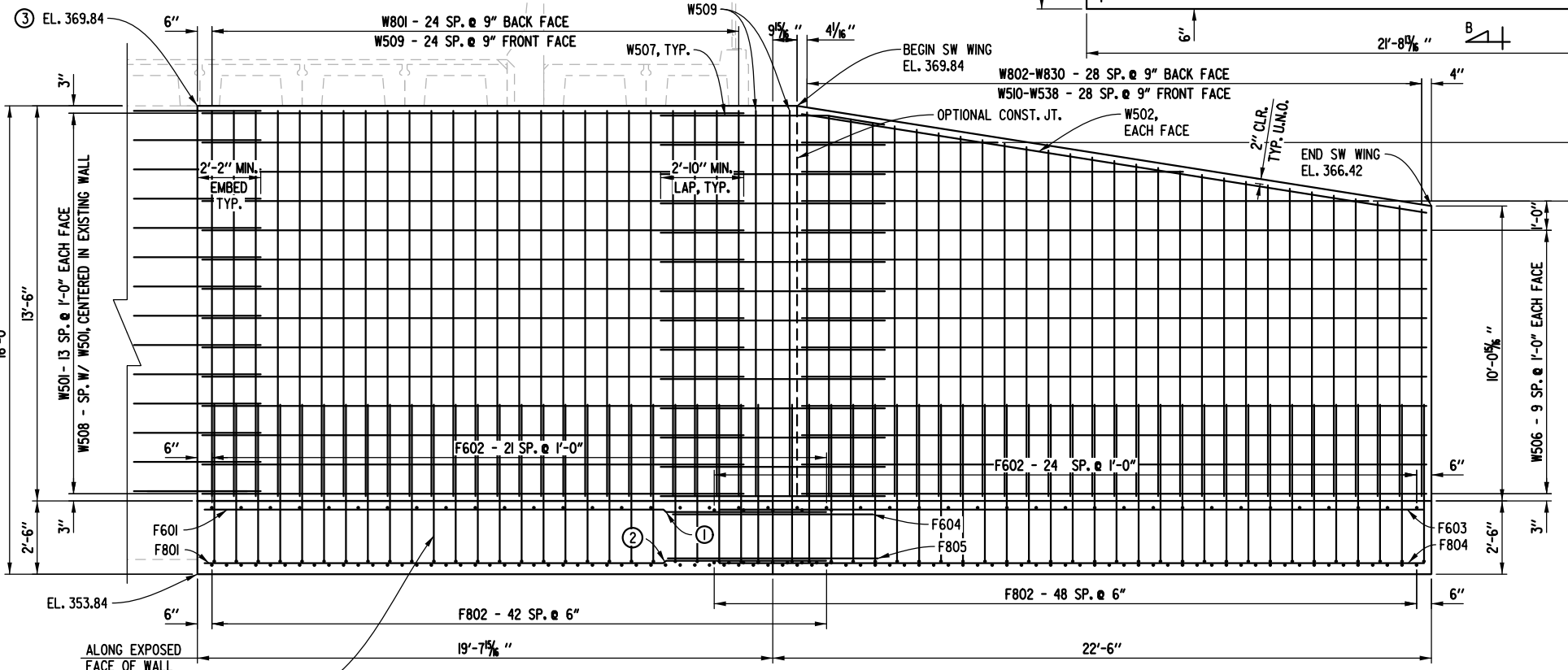
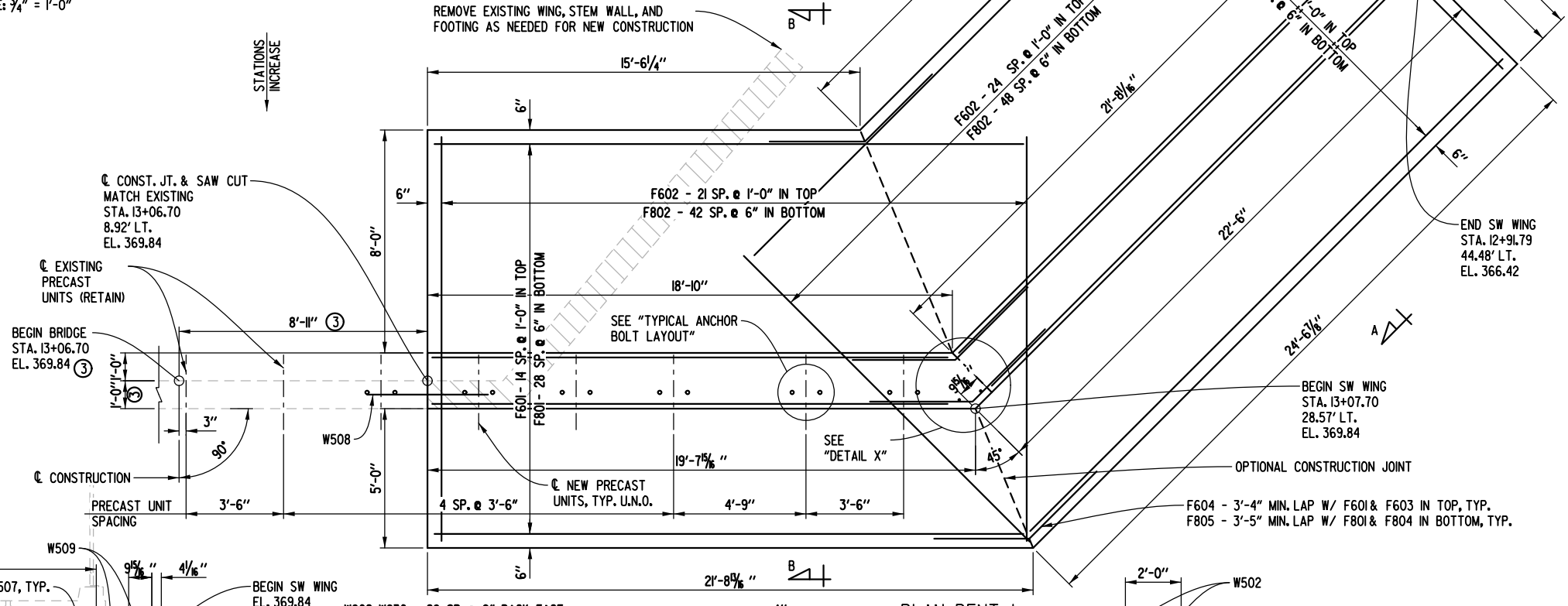
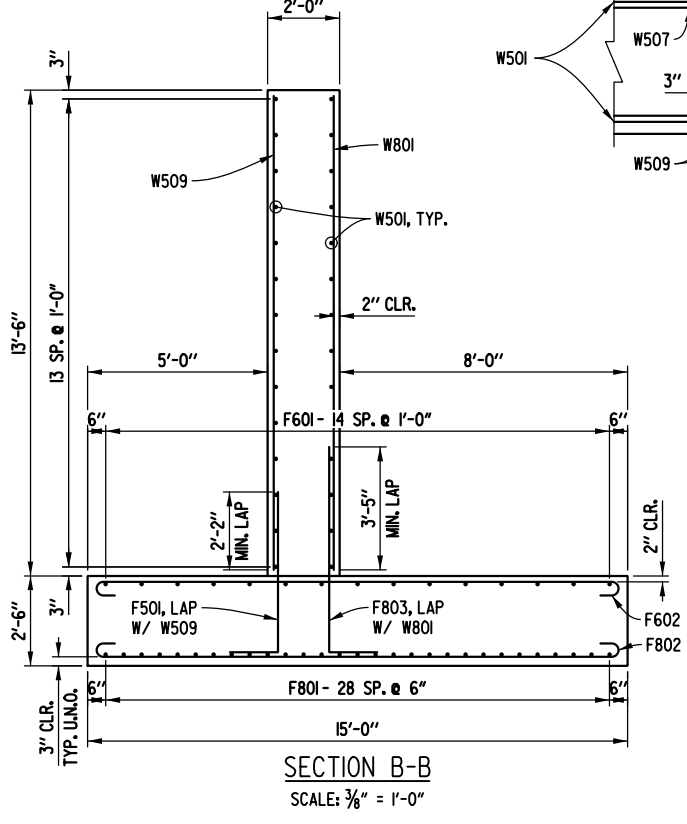
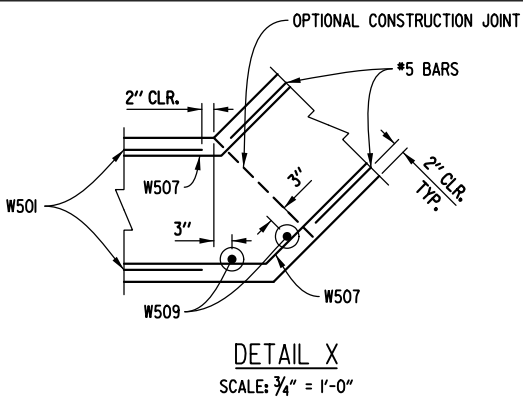
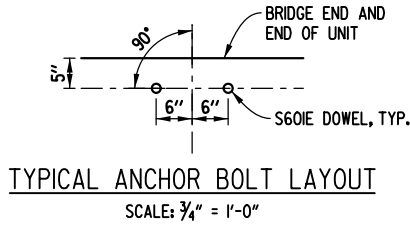
CITY OF LITTLE ROCK, ARKANSAS
 RESERVOIR ROAD IMPROVEMENTS
 DETAILS OF BENT 1

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

DRAWN BY
 LDG
 DESIGNED
 LDG
 CHECKED
 CAW
 DATE
 09-26-19
 SCALE
 AS SHOWN
 PROJECT NO.
 04-17ST-202A
 SHEET NO.
B1

90% SUBMITTAL

- ① MAINTAIN 2" CLR. FROM TOP SURFACE. FIELD ADJUST F602 TO LAP UNDERNEATH F601.
- ② MAINTAIN 3" CLR. FROM BOTTOM SURFACE. FIELD ADJUST F802 TO LAP OVER F801.
- ③ BASED ON ORIGINAL PLANS, THE CONTRACTOR SHALL VERIFY IN THE FIELD AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.



USER: ig5169
 DESIGN FILE: G:\18804904_Reser\Road\TRANSP\cogn\br\lodge\18804904_bld.dgn
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REVISIONS	DATE

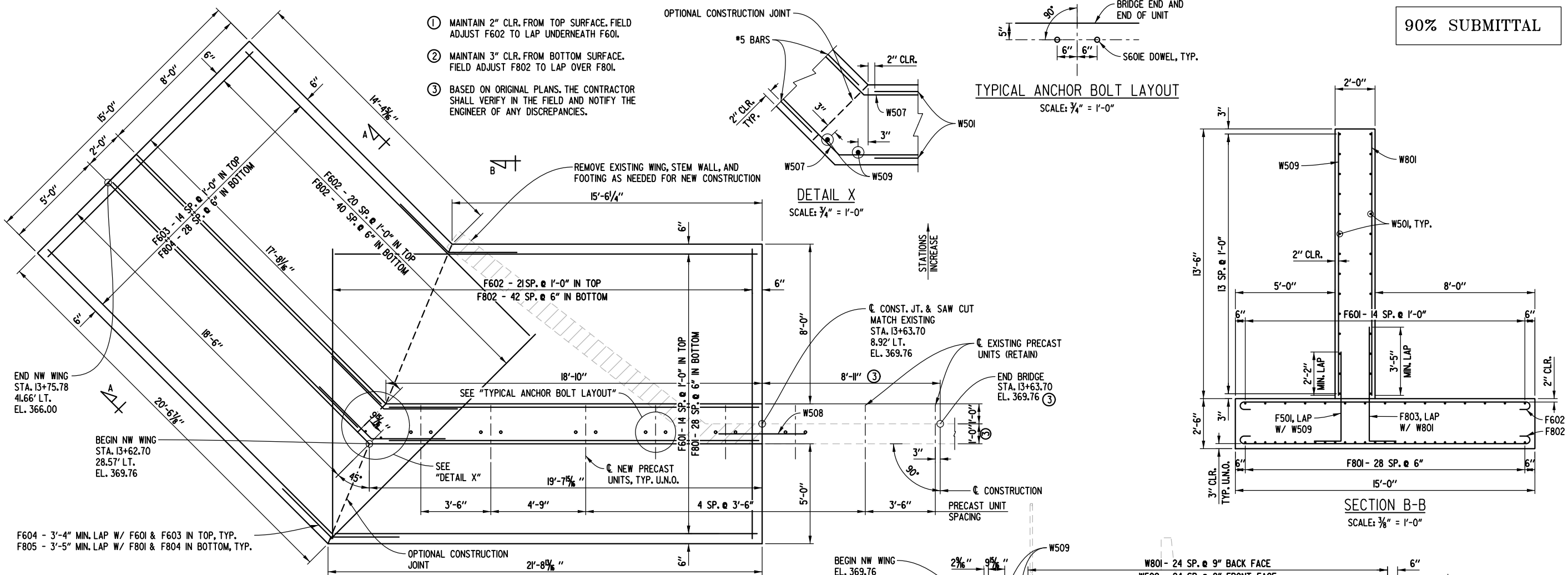
90% SUBMITTAL

CITY OF LITTLE ROCK, ARKANSAS
RESERVOIR ROAD IMPROVEMENTS

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

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CAW
DATE
09-26-19
SCALE
AS SHOWN
PROJECT NO.
04-17ST-202A
SHEET NO.
B2

DETAILS OF BENT 4



PLAN-BENT 4
SCALE: 3/8" = 1'-0"

SECTION B-B
SCALE: 3/8" = 1'-0"

ELEVATION-BENT 4
(LOOKING AHEAD)
SCALE: 3/8" = 1'-0"

SECTION A-A
SCALE: 3/8" = 1'-0"

PRELIMINARY
SUBJECT
TO
REVISION

USER: lg5169
DESIGN FILE: G:\18804904_Reser\Road\TRANSP\dgn\br1dgc\18804904_b12.dgn
PLOTTED: 9/3/2019 13:47
SCALE: 1:5.3333

GENERAL NOTES

ALL CONCRETE SHALL BE POURED IN THE DRY AND ALL EXPOSED CORNERS TO BE CHAMFERED 3/4". ALL CONCRETE SHALL BE CLASS S WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH F'C = 3,500 PSL A CLASS 2 SURFACE FINISH SHALL BE USED ON ALL EXPOSED SURFACES OF THE CONCRETE UNLESS OTHERWISE NOTED.

ALL REINFORCING STEEL SHALL BE GRADE 60 (FY = 60,000 PSI) AASHTO M 31 OR M 322, TYPE A WITH MILL TEST REPORTS. TOP REINFORCING BARS IN CAP SHALL BE PROPERLY PLACED TO AVOID INTERFERENCE WITH ANCHOR BOLTS.

WATERPROOF MEMBRANE (TYPE C), WEEP HOLES & WEEP HOLE DOWELS, SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO CLASS S CONCRETE.

DRAINAGE FILL MATERIAL (CLASS 3) AND BACKFILL SHALL BE MEASURED AND PAID FOR AS COMPACTED EMBANKMENT. PAYMENT FOR TYPE 2 GEOTEXTILE FILTER FABRIC SHALL BE SUBSIDIARY TO OTHER BID ITEMS.

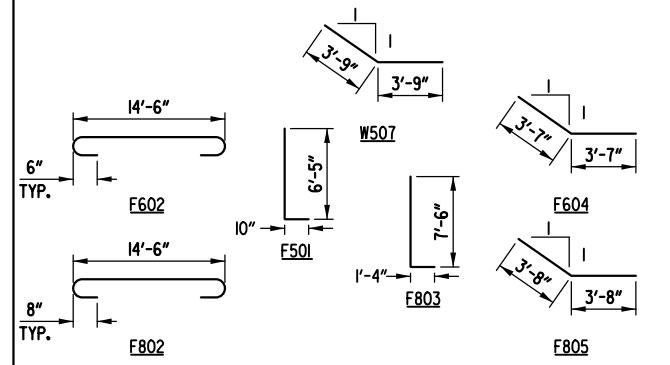
DRILL AND GROUT BARS WHERE SHOWN USING AN APPROVED CEMENT OR EPOXY SYSTEM FROM THE ARDOT OPL. MINIMUM EMBEDMENT SHALL BE 12" FOR CEMENT BASED GROUT. MINIMUM EMBEDMENT SHALL BE PER THE MANUFACTURER'S RECOMMENDATIONS FOR EPOXY BASED GROUT.

WORK REQUIRED TO REMOVE & DISPOSE OF PORTIONS OF THE EXISTING BRIDGE, RETAIN AND CLEAN EXISTING REINFORCING STEEL, AND ANY REQUIRED DOWELING WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED SUBSIDIARY TO THE ITEM "MODIFICATION OF EXISTING BRIDGE STRUCTURE (BR. NO. 04143)".

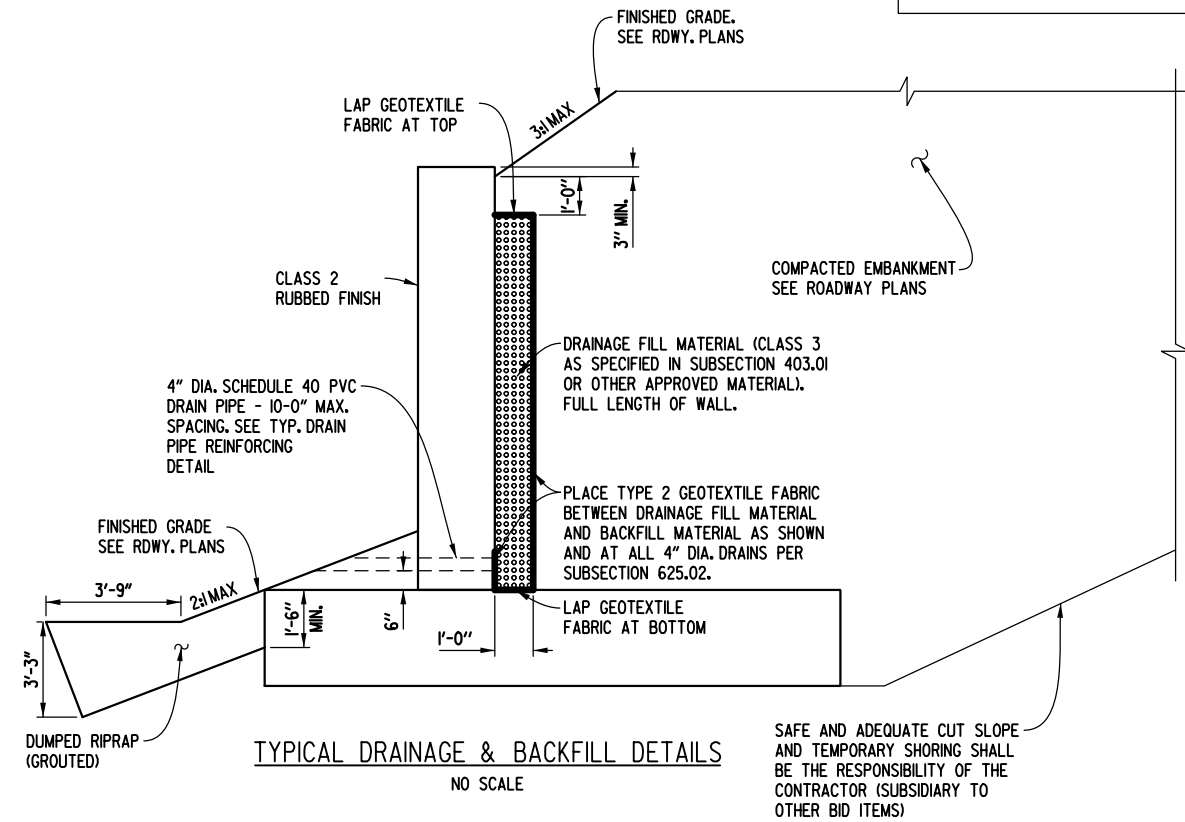
BAR LIST

BENT 1				BENT 2			
MARK	NO. REQ'D.	LENGTH	P.D.	MARK	NO. REQ'D.	LENGTH	P.D.
W501	28	18'-6"	STR.	W501	28	18'-6"	STR.
W502	2	21'-8"	STR.	W502	2	17'-9"	STR.
W503	2 EA.	VAR. 6'-9"	STR.	W503	2 EA.	VAR. 4'-11"	STR.
TO W505		19'-5"		TO W505		14'-4"	
W506	20	21'-4"	STR.	W506	20	17'-4"	STR.
W507	28	7'-6"	3 3/4"	W507	28	7'-6"	3 3/4"
W508	14	4'-4"	STR.	W508	14	4'-4"	STR.
W509	27	13'-4"	STR.	W509	27	13'-4"	STR.
W510	1 EA.	VAR. 13'-3"	STR.	W510	1 EA.	VAR. 13'-3"	STR.
TO W538		10'-0"		TO W533		9'-7"	
W801	25	13'-4"	STR.	W801	25	13'-4"	STR.
W802	1 EA.	VAR. 13'-3"	STR.	W802	1 EA.	VAR. 13'-3"	STR.
TO W830		10'-0"		TO W825		9'-7"	
F501	56	7'-2"	3 3/4"	F501	51	7'-2"	3 3/4"
F601	15	21'-3"	STR.	F601	15	21'-3"	STR.
F602	47	15'-10"	4 1/2"	F602	43	15'-10"	4 1/2"
F603	15	24'-1"	STR.	F603	15	20'-1"	STR.
F604	15	7'-1"	4 1/2"	F604	15	7'-1"	4 1/2"
F801	29	21'-3"	STR.	F801	29	21'-3"	STR.
F802	92	16'-4"	6"	F802	84	16'-4"	6"
F803	54	8'-8"	6"	F803	49	8'-8"	6"
F804	29	24'-1"	STR.	F804	29	20'-1"	STR.
F805	29	7'-2"	6"	F805	29	7'-2"	6"

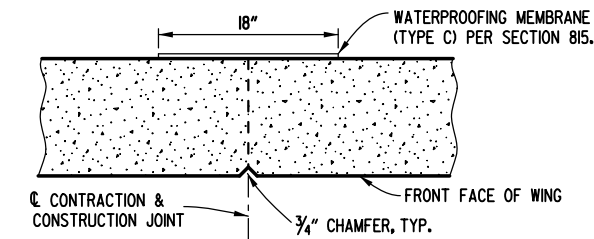
BENDING DIAGRAMS
DIMENSIONS ARE OUT TO OUT OF BARS.



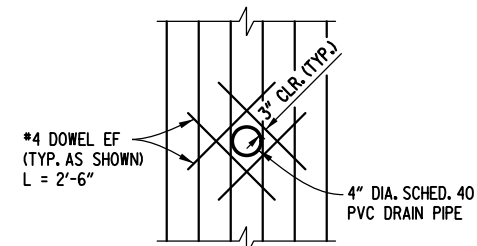
90% SUBMITTAL



TYPICAL DRAINAGE & BACKFILL DETAILS
NO SCALE



TYPICAL CONTRACTION & CONSTRUCTION JOINT DETAIL
NO SCALE

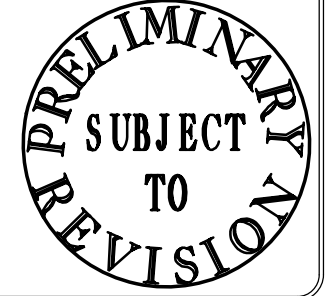


TYPICAL DRAIN PIPE REINFORCING DETAIL
NO SCALE

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
RESERVOIR ROAD IMPROVEMENTS
DETAILS OF BENTS 1 & 4

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



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LDG
DESIGNED
LDG
CHECKED
CAW
DATE
09-26-19
SCALE
AS SHOWN
PROJECT NO.
04-17ST-202A
SHEET NO.
B3

USER: lg5169
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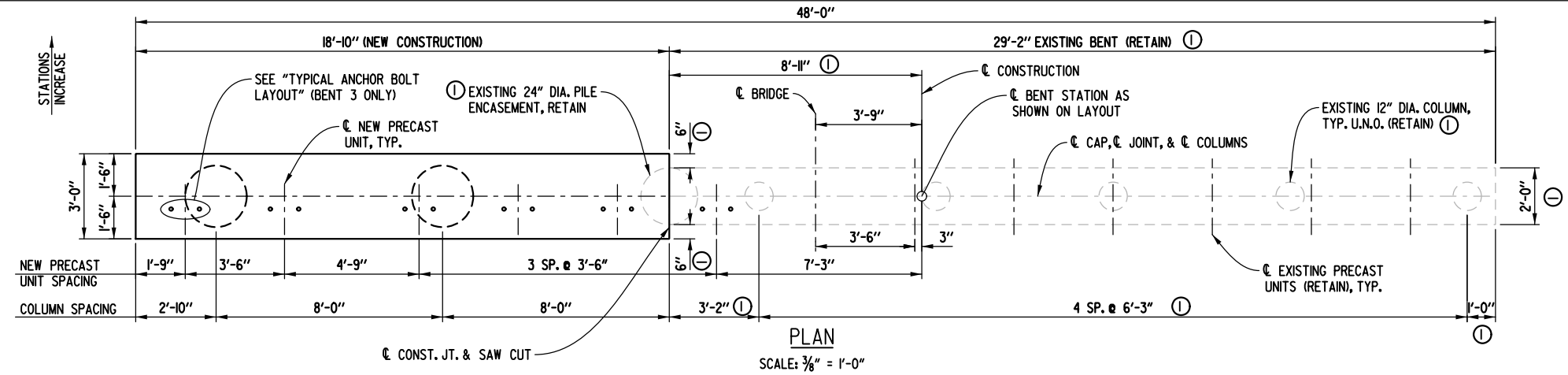
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
RESERVOIR ROAD IMPROVEMENTS
DETAILS OF BENTS 2 & 3

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

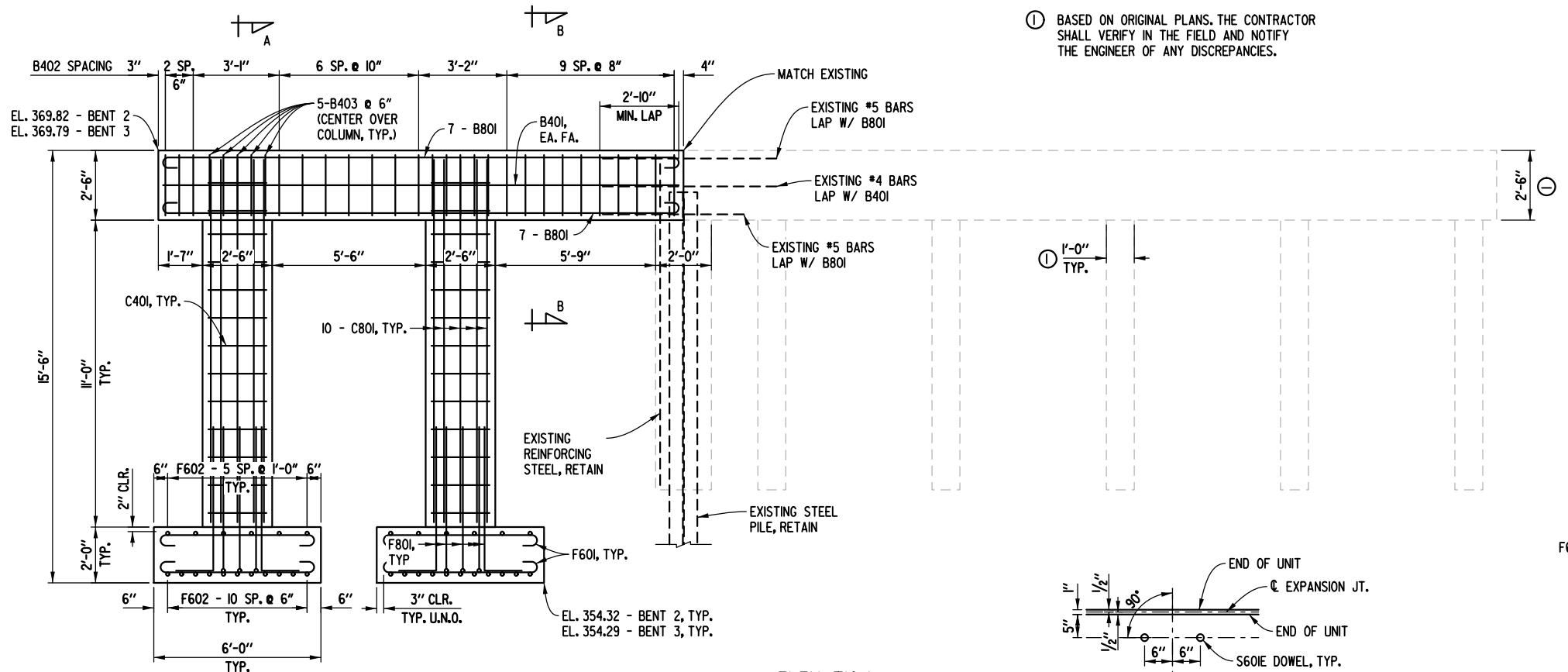
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09-26-19
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PROJECT NO.
04-17ST-202A
SHEET NO.
B4

90% SUBMITTAL



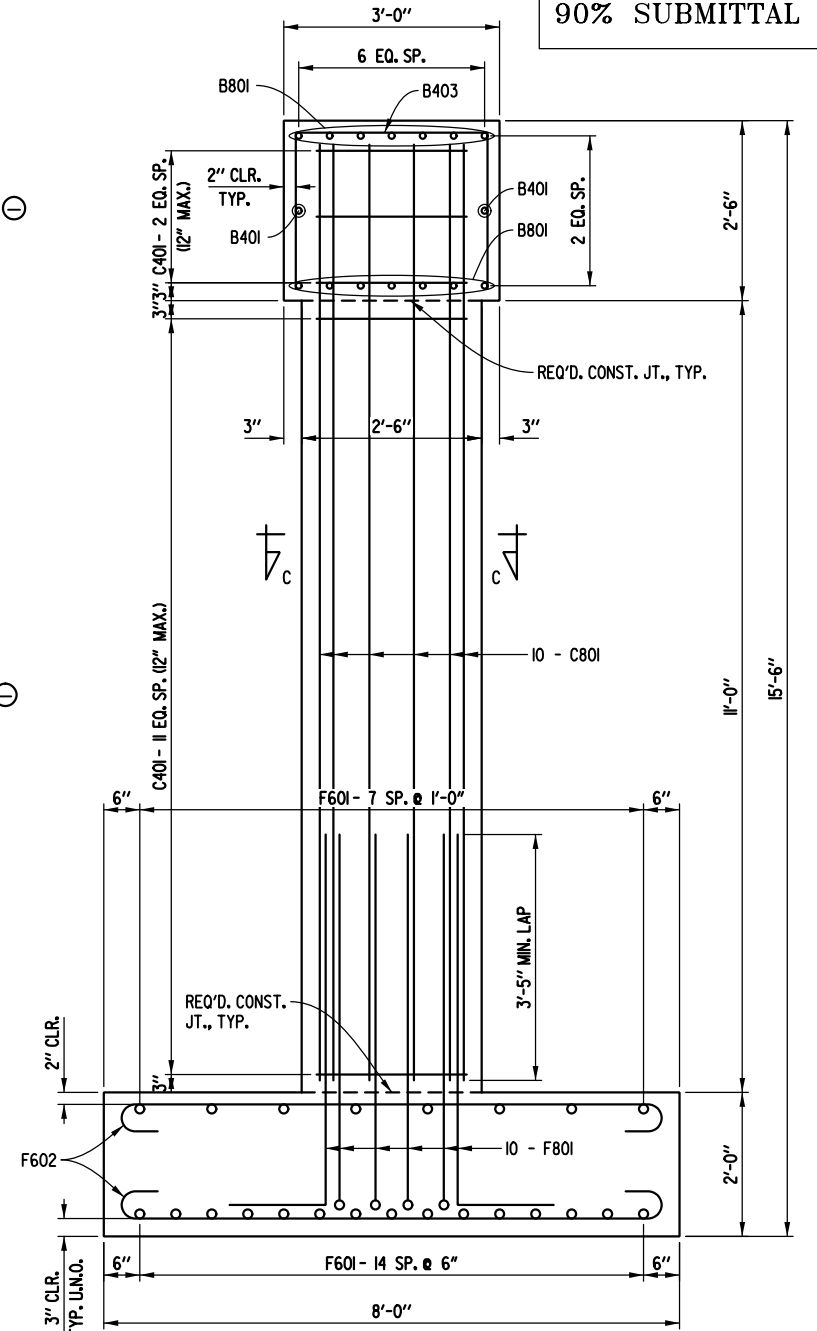
PLAN
SCALE: 3/8" = 1'-0"

① BASED ON ORIGINAL PLANS, THE CONTRACTOR SHALL VERIFY IN THE FIELD AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

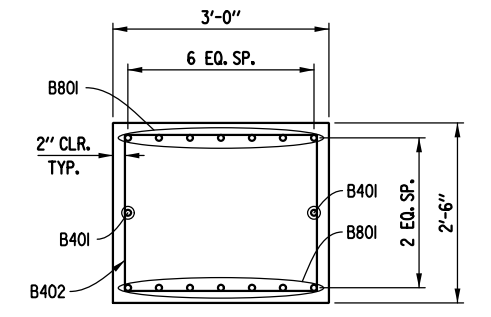


ELEVATION
(LOOKING AHEAD)
SCALE: 3/8" = 1'-0"

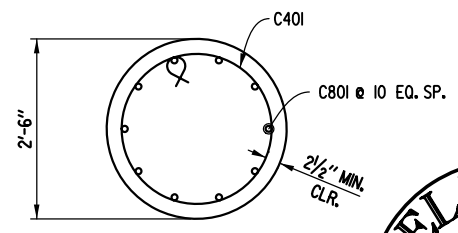
TYPICAL ANCHOR BOLT LAYOUT
SCALE: 3/4" = 1'-0"



SECTION A-A
SCALE: 3/4" = 1'-0"



SECTION B-B
SCALE: 3/4" = 1'-0"



SECTION C-C
SCALE: 3/4" = 1'-0"

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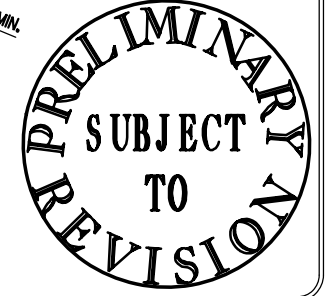
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BAR LIST

PER BENT				BENDING DIAGRAMS	
MARK	NO. REQ'D.	LENGTH	P.D.	DIMENSIONS ARE OUT TO OUT OF BARS.	
B401	2	18'-6"	STR.		
B402	20	10'-0"	2"		
B403	10	6'-10"	2"		
B801	14	20'-4"	6"		
C401	30	7'-8"	3"		
C801	20	13'-0"	STR.		
F601	46	6'-10"	4 1/2"		
F602	34	8'-10"	4 1/2"		
F801	20	8'-6"	6"		



USER: lgs1619
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