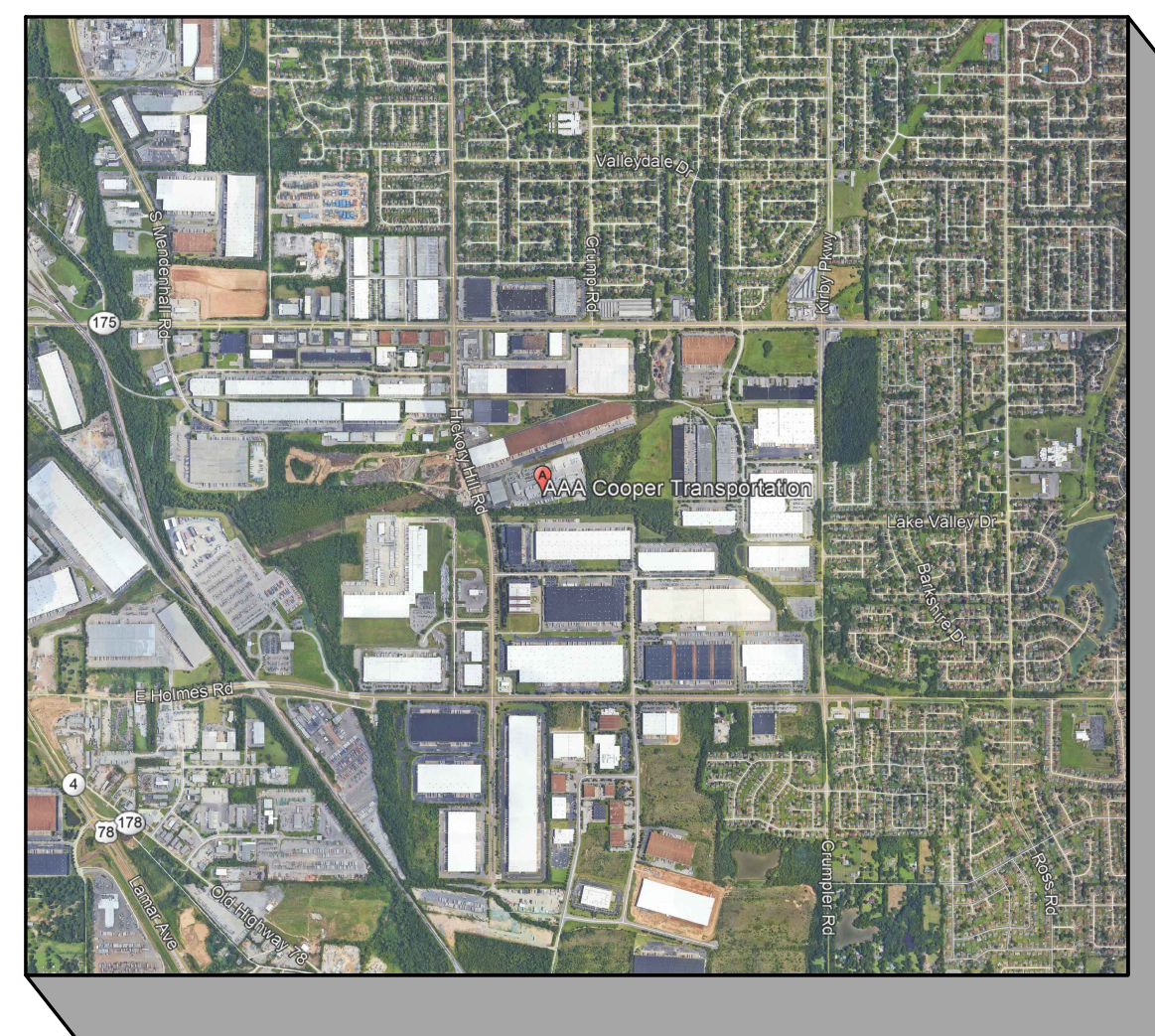


# AAA COOPER BANK STABILIZATION

## MEMPHIS , TENNESSEE FOR

# AAA COOPER TRANSPORTATION

## 4920 HICKORY HILL ROAD MEMPHIS, TN 38141



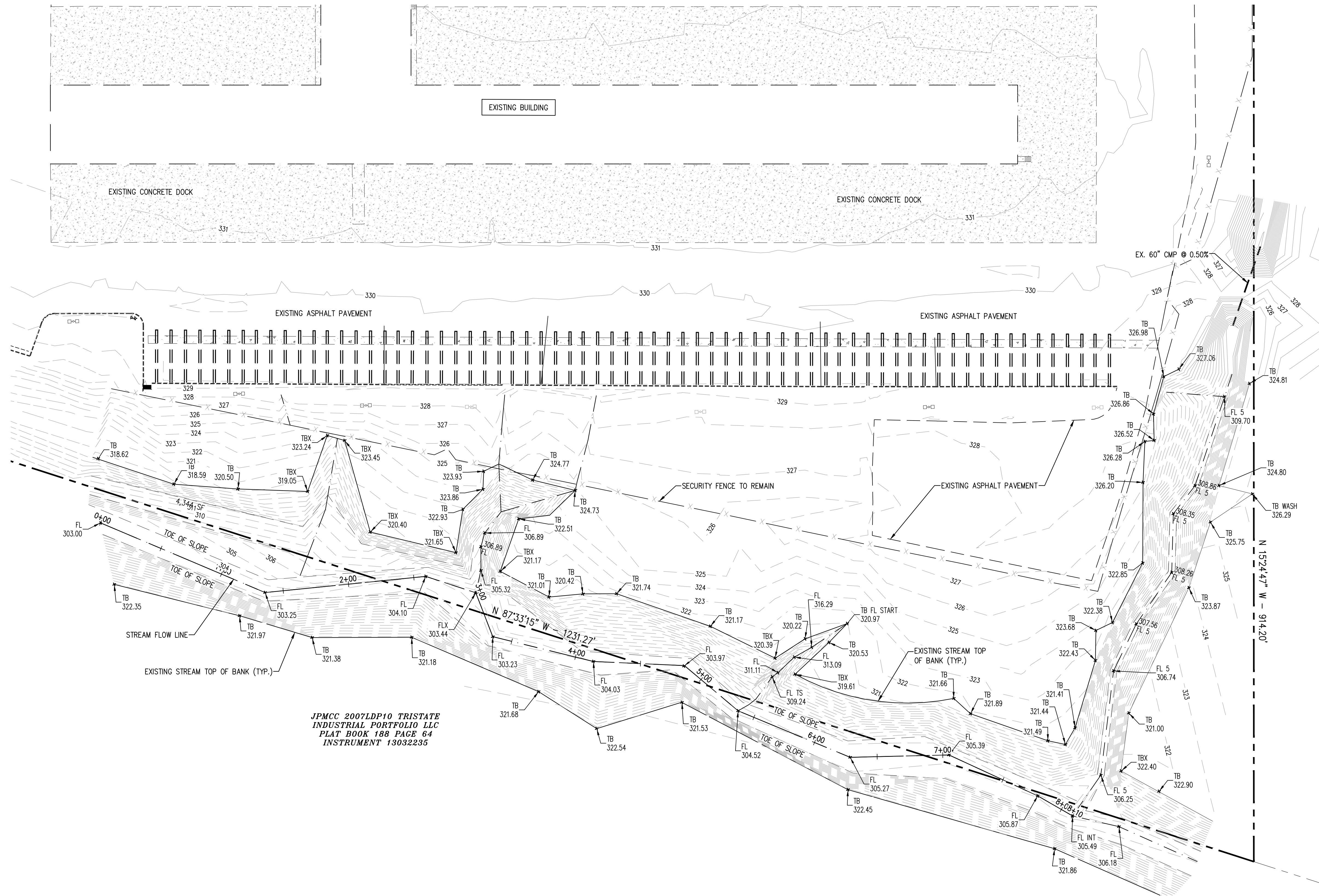
VICINITY MAP  
N.T.S.

 **Ledford**  
Engineering • Planning • Architecture  
5567 Commander Drive, Suite 105, Arlington, TN 38002  
phone: 901.867.5220 fax: 901.867.5331

### INDEX TO DRAWINGS

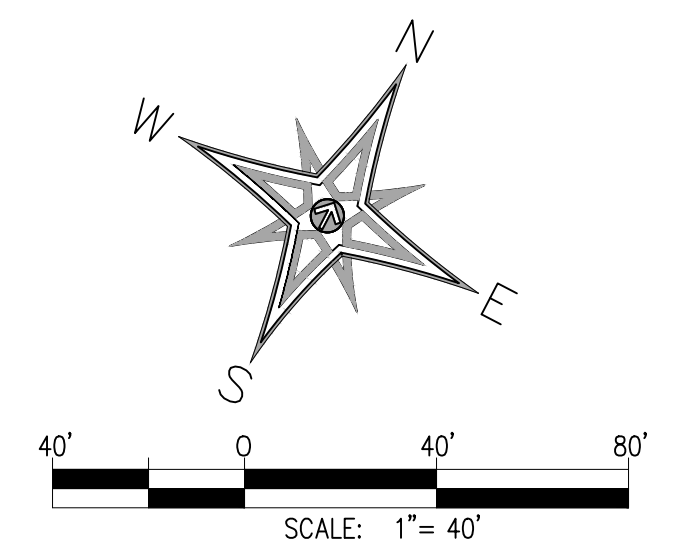
CV	COVER SHEET
C-1	EXISTING CONDITIONS
C-2	GRADING AND DRAINAGE PLAN
C-3	DRAINAGE PLAN & PROFILE
C-4	STREAM PROFILES
C-5	STREAM PROFILES
C-6	STREAM PROFILES
C-7	SITE DETAILS

April 19, 2021



**LEGEND**

	PROPERTY LINE
	EXISTING CONTOURS
	EXISTING CURB
	EXISTING EDGE OF PAVEMENT
	EXISTING CONCRETE
	STREAM TOP OF BANK
	EXISTING SECURITY FENCE



JPMCC 2007LDP10 TRISTATE INDUSTRIAL PORTFOLIO LLC PLAT BOOK 188 PAGE 64 INSTRUMENT 13032235

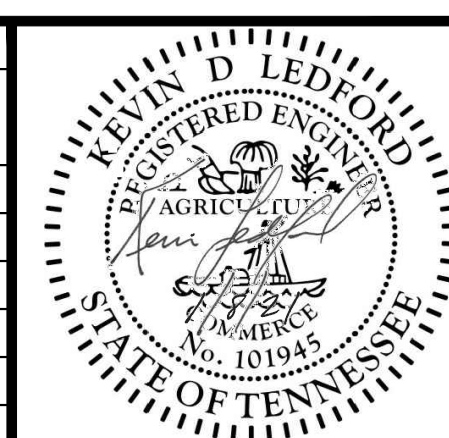
**BENCHMARK:**  
BASIS OF ELEVATIONS NAVD 88 CITY BM#296 - LOCATED AT THE ER ON THE HICKORY HILL SIDE AT THE INTERSECTION OF HICKORY HILL ROAD & RAINES ROAD. ELEV. 341.46

**FLOOD NOTE:**  
JOHN'S CREEK IS A ZONE AE FLOODWAY WITH BFE AT CONFLUENCE WITH LOCATED FEEDER CREEK. SEE FLOOD MAP FEMA 4715700465F EFFECTIVE 9/28/2007.

DRAINAGE BASIN: JOHN'S CREEK

DWG NO. C 1

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE

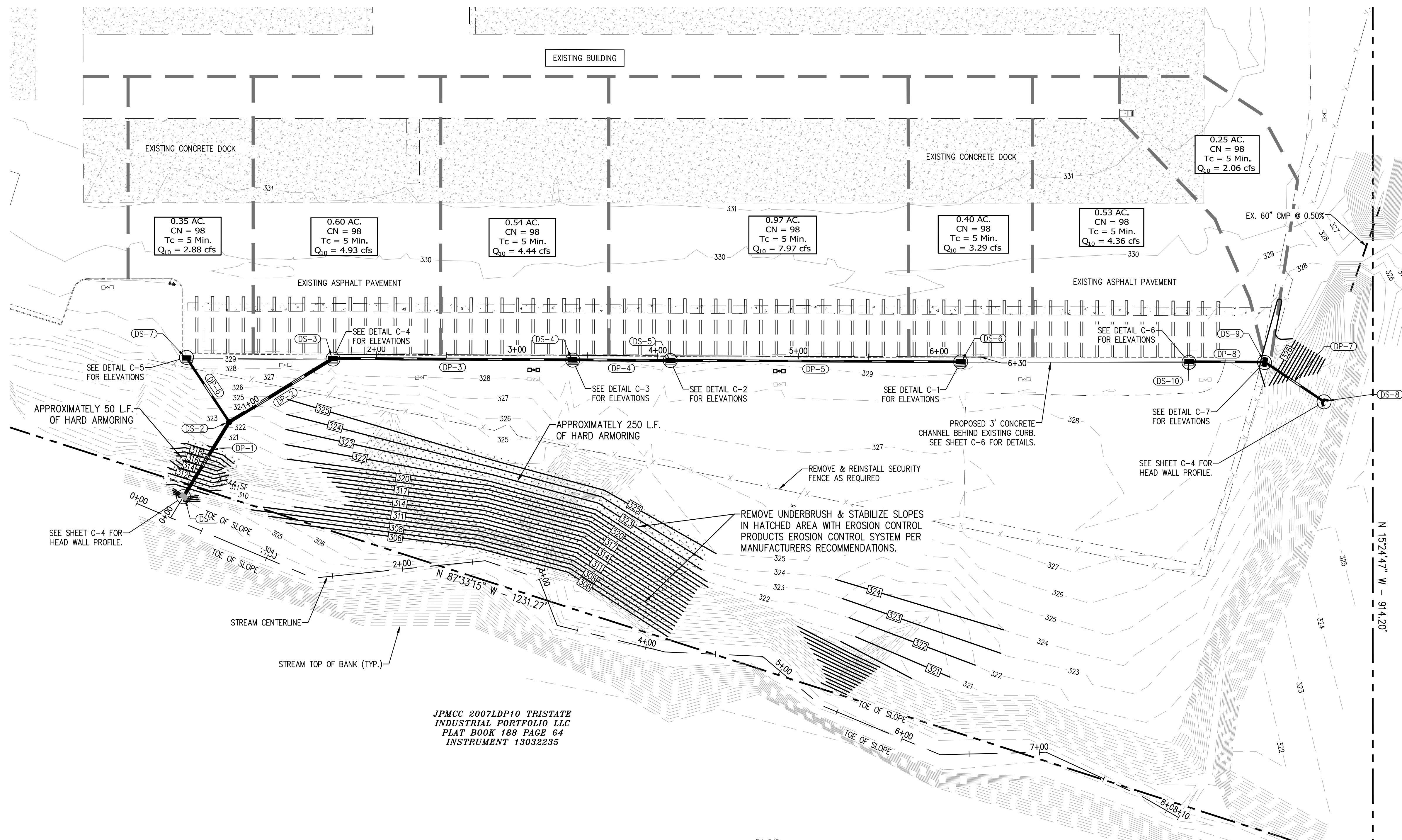


AAA COOPER BANK STABILIZATION

DEVELOPER: AAA COOPER TRANSPORTATION  
ENGINEER: LEDFORD ENGINEERING AND PLANNING, LLC

SHEET 1 OF 1  
DIVISION OF ENGINEERING  
**EXISTING CONDITIONS PLAN**  
LOCATION: 4920 HICKORY HILL ROAD  
MEMPHIS, TN  
SURVEY: \_\_\_\_\_ DATE: \_\_\_\_\_ BOOK: \_\_\_\_\_  
DESIGN BY: KH DATE: 4/19/21 SCALE: 1"=40'  
REVIEWED: \_\_\_\_\_  
DEPUTY CITY ENGINEER DATE CITY ENGINEER DATE

Z:\1290-04\CONSTRUCTION DRAWINGS\C-1 EXISTING CONDITIONS.dwg



**LEGEND**

- PROPERTY LINE
- - - - - EXISTING CONTOURS
- 100 — PROPOSED CONTOURS
- - - - - EXISTING CURB
- - - - - EXISTING EDGE OF PAVEMENT
- - - - - EXISTING CONCRETE
- - - - - STREAM TOP OF BANK
- - - - - STREAM BUFFER
- - - - - EXISTING SECURITY FENCE
- - - - - PROPOSED DRAINAGE

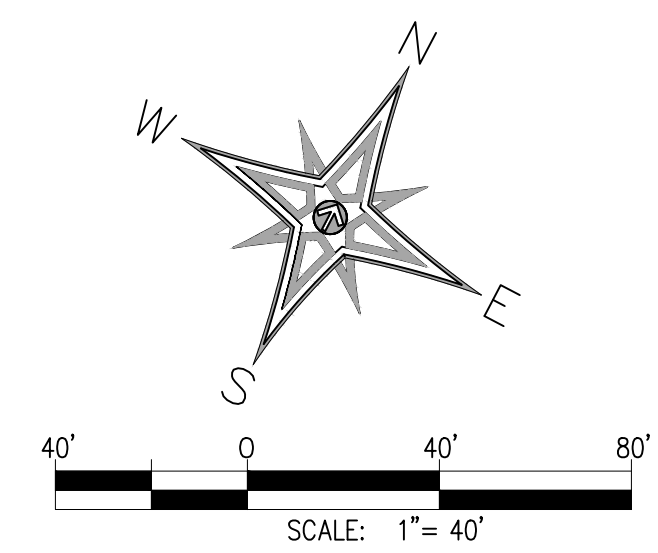
**STORM DRAINAGE STRUCTURE DATA**

NAME	TYPE	DRAINAGE AREA	Q10 (CFS)	TOP	AS BUILT	INVERT	AS BUILT
DS-1	TYPE 'D' HW	-	-	-	-	305.00	-
DS-2	DMH	-	-	322.50	-	305.58	-
DS-3	3070 INLET	0.60	4.93	328.77	-	319.13	-
DS-4	3070 INLET	0.54	4.44	329.31	-	323.04	-
DS-5	3070 INLET	0.97	7.97	328.68	-	324.09	-
DS-6	3070 INLET	0.40	3.29	329.61	-	326.40	-
DS-7	3070 INLET	0.35	2.88	329.26	-	320.66	-
DS-8	TYPE 'D' HW	-	-	-	-	311.00	-
DS-9	3070 INLET	0.25	2.06	326.90	-	311.50	-
DS-10	3070 INLET	0.53	4.36	329.40	-	325.04	-

**STORM DRAINAGE PIPE DATA**

PIPE NAME	FROM	INVERT (UP)	AS BUILT	TO	INVERT (DOWN)	AS BUILT	SLOPE (%)	AS BUILT	SIZE	LENGTH	MATERIAL	DA (ACR)	Q10 (CFS)	QCAP (CFS)	VEL (FPS)
DP-1	DS-2	306.25	-	DS-1	305.00	-	2.00%	-	24" 58'	CMP	0.81	23.51	29.40	9.36	
DP-2	DS-3	319.13	-	DS-2	318.27	-	2.00%	-	24" 86'	CMP	2.51	20.63	29.40	9.36	
DP-3	DS-4	323.04	-	DS-3	319.63	-	2.00%	-	18" 170'	CMP	1.91	15.70	19.31	10.92	
DP-4	DS-5	324.09	-	DS-4	323.04	-	1.50%	-	18" 70'	CMP	1.37	11.26	16.72	9.46	
DP-5	DS-6	326.40	-	DS-5	324.34	-	1.00%	-	15" 206'	CMP	0.40	3.29	8.39	6.84	
DP-6	DS-7	320.66	-	DS-2	319.02	-	3.00%	-	15" 50'	CMP	0.35	2.88	14.54	11.85	
DP-7	DS-9	311.50	-	DS-8	311.00	-	1.00%	-	15" 50'	CMP	0.78	6.42	8.39	6.84	
DP-8	DS-10	325.04	-	DS-9	324.50	-	1.00%	-	15" 54'	CMP	0.53	4.36	8.39	6.84	

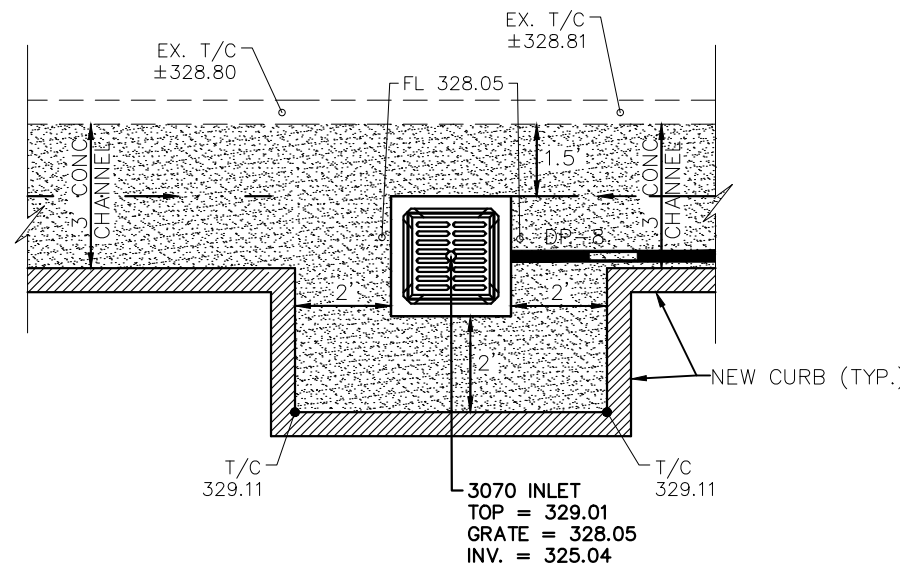
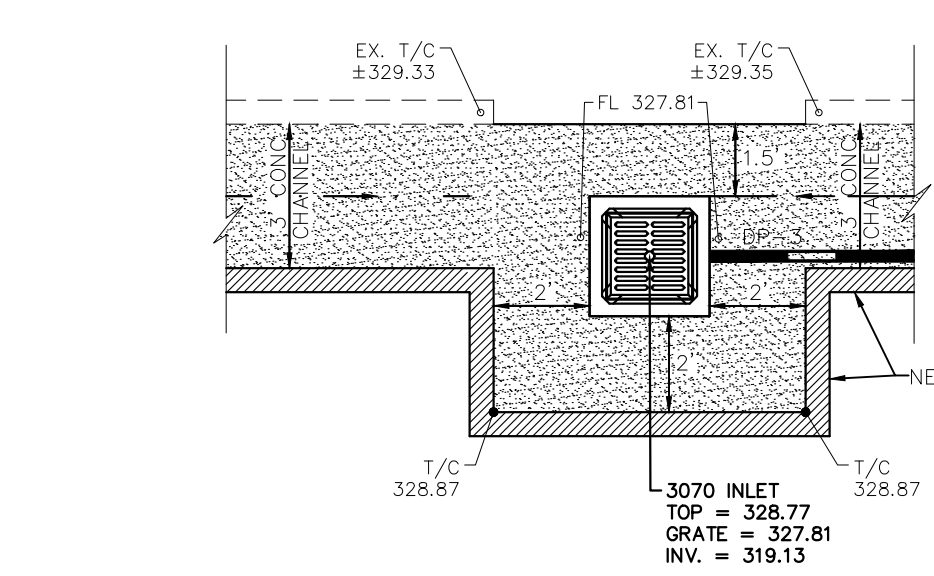
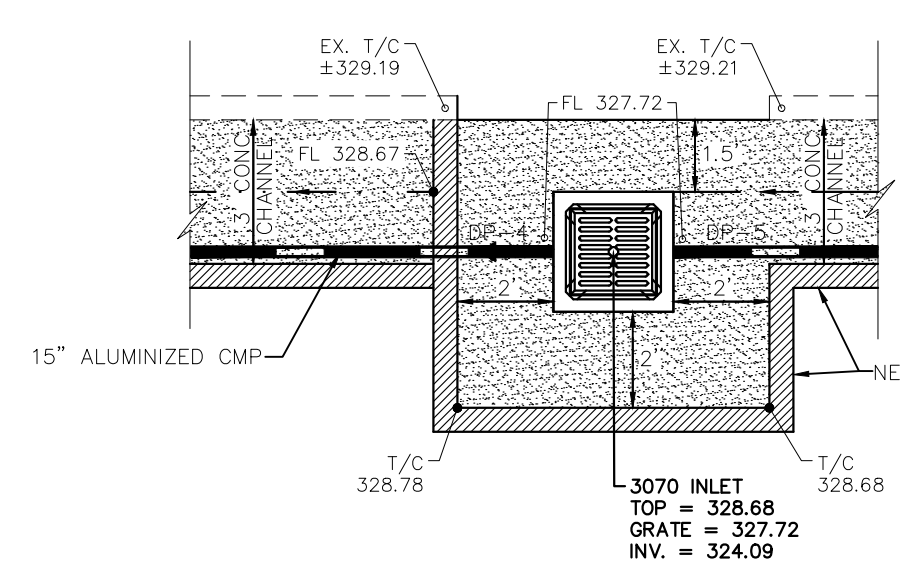
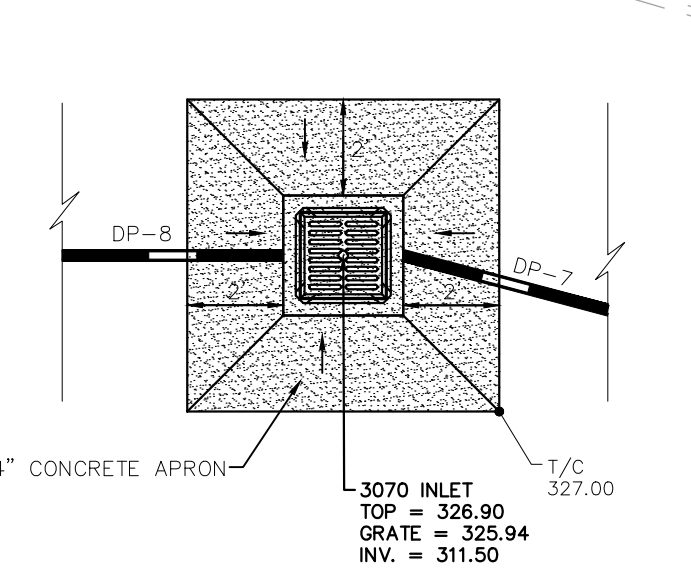
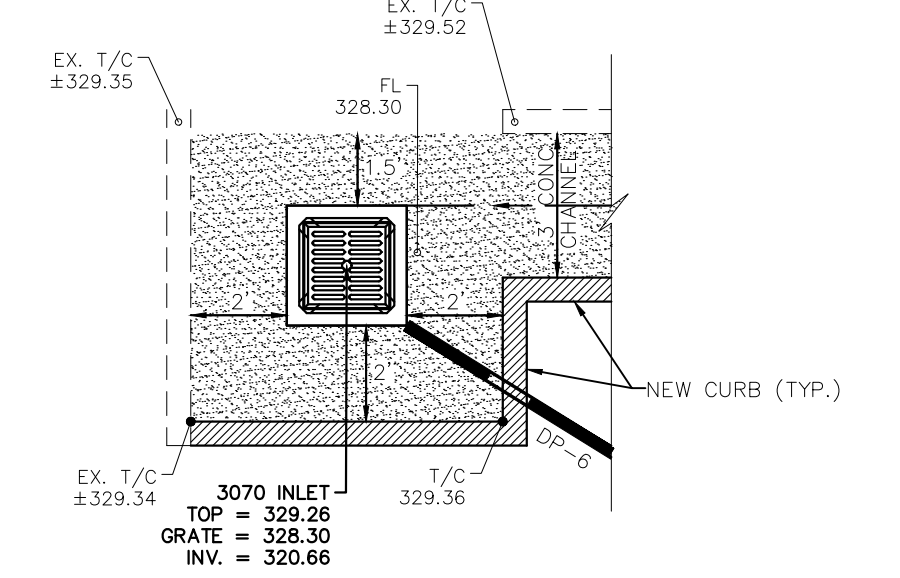
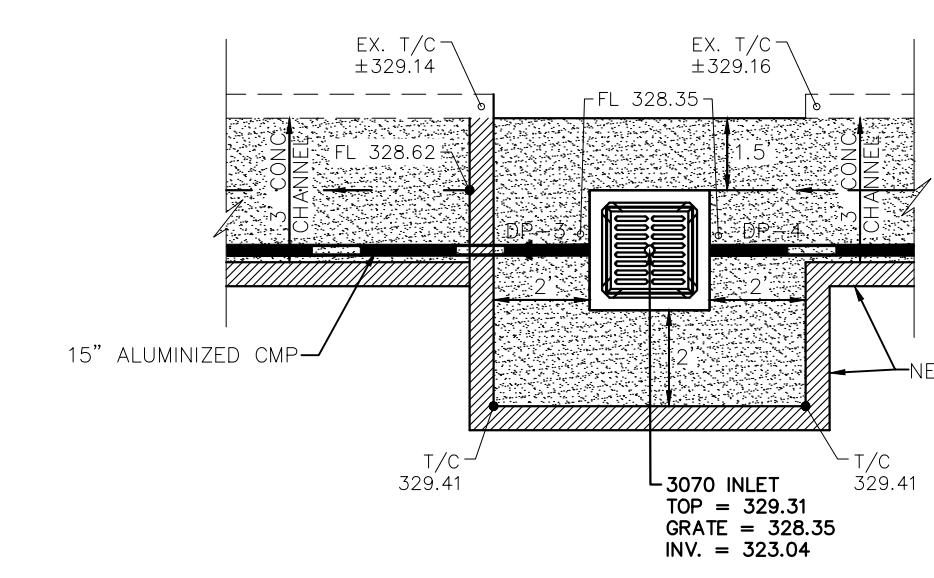
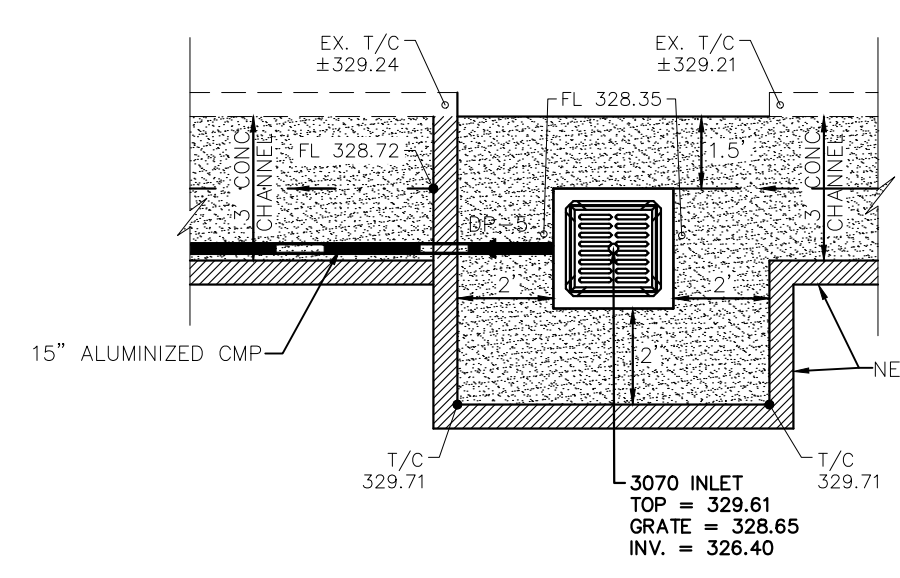
- CONSTRUCTION NOTES:**
1. REMOVE UNDERBRUSH IN IT'S ENTIRITY DOWN TO EXISTING SLOPE.
  2. INSTALL EROSION CONTROL PRODUCTS DOUBLE COIR EROSION CONTROL BLANKET SURROUNDED ON TOP AND BOTTOM WITH BIODEGRADABLE JUTE FIBER NETTING. SECURE THE EROSION BLANKET WITH EROSION CONTROL PRODUCTS BIODEGRADABLE LANDSCAPE STAKES.
  3. SEED WITH HYDROSEEDING MEASURES AS FOLLOWS: SEED 60% OF APPLICATION RATE ON PREPARED SLOPES PRIOR TO INSTALLATION OF EROSION CONTROL PRODUCTS EROSION CONTROL SYSTEM AND THE REMAINING 40% AFTER INSTALLATION. USE PERMANENT NATIVE SPECIES.



**BENCHMARK:**  
BASIS OF ELEVATIONS NAVD 88 CITY BM#296 - LOCATED AT THE ER ON THE HICKORY HILL SIDE AT THE INTERSECTION OF HICKORY HILL ROAD & RAINES ROAD. ELEV. 341.46

**FLOOD NOTE:**  
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JPMCC 2007LDP10 TRISTATE INDUSTRIAL PORTFOLIO LLC PLAT BOOK 188 PAGE 64 INSTRUMENT 13032235

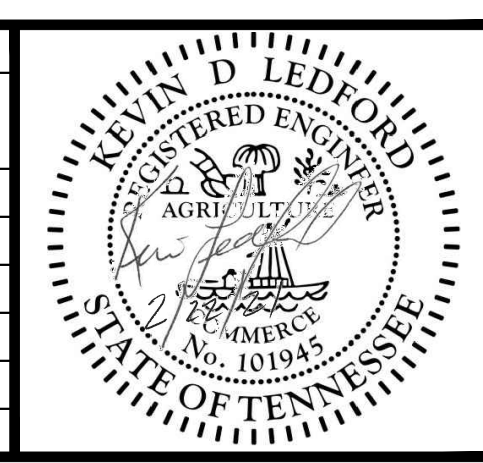


DRAINAGE BASIN: JOHN'S CREEK

DWG NO. C-2

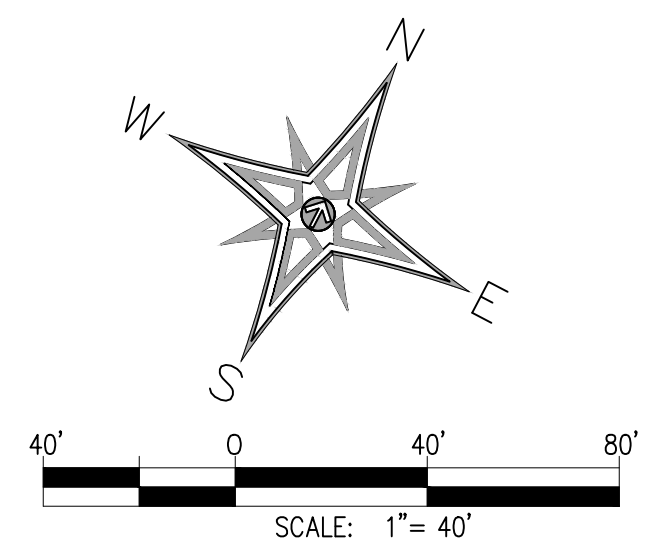
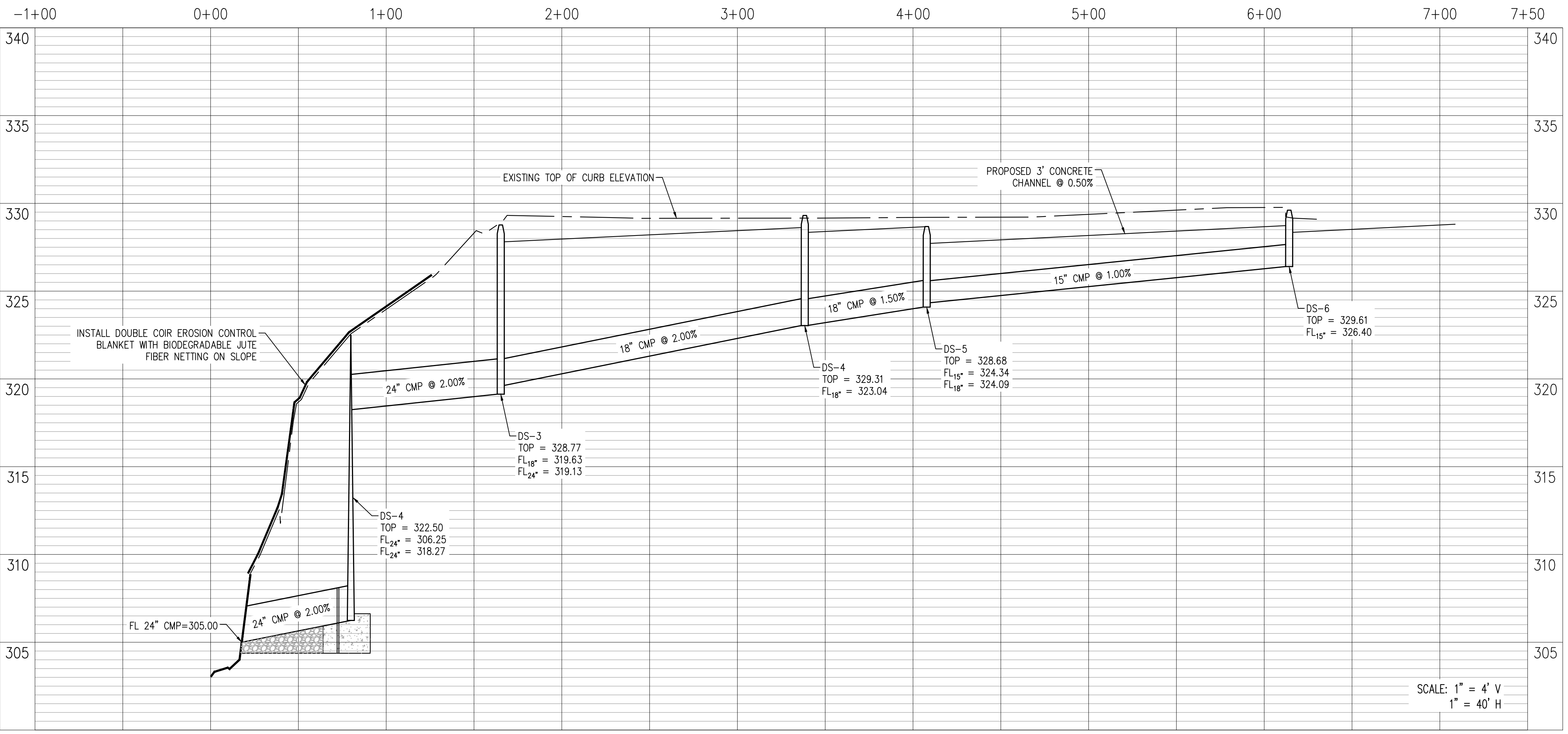
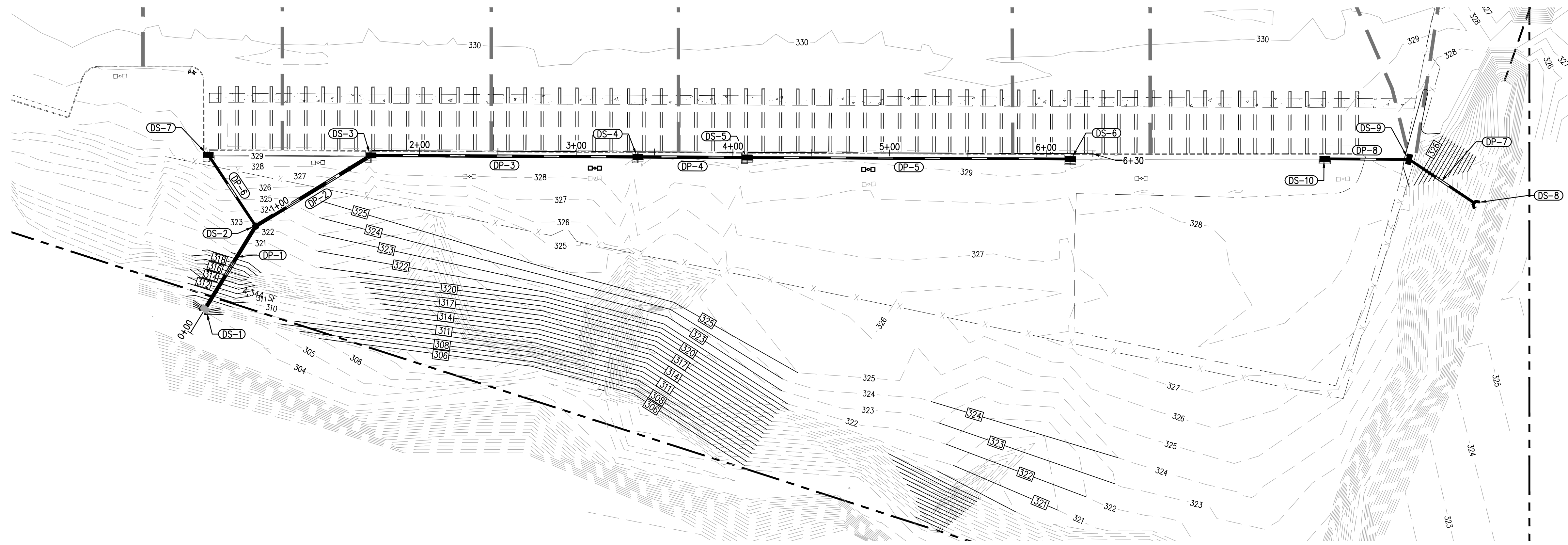
**REVISION**

ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



SHEET 1 OF 1  
DIVISION OF ENGINEERING  
**GRADING & DRAINAGE PLAN**  
LOCATION: 4920 HICKORY HILL ROAD  
MEMPHIS, TN  
SURVEY: \_\_\_\_\_ DATE: \_\_\_\_\_ BOOK: \_\_\_\_\_  
DESIGN BY: KH DATE: 4/19/21 SCALE: 1"=40'  
REVIEWED: \_\_\_\_\_  
DEPUTY CITY ENGINEER DATE CITY ENGINEER DATE

**AAA COOPER BANK STABILIZATION**  
DEVELOPER: AAA COOPER TRANSPORTATION  
ENGINEER: LEDFORD ENGINEERING AND PLANNING, LLC



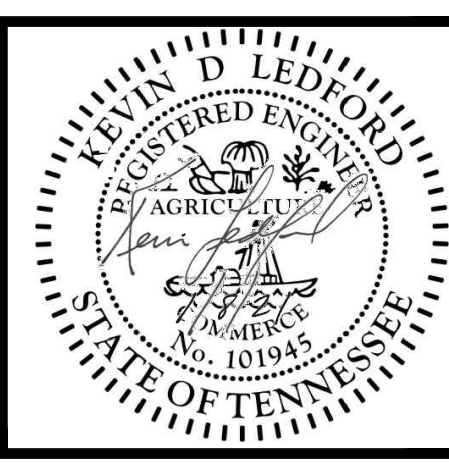
**BENCHMARK:**  
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DRAINAGE BASIN: JOHN'S CREEK

DWG NO.  
C-3

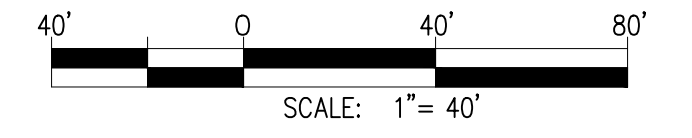
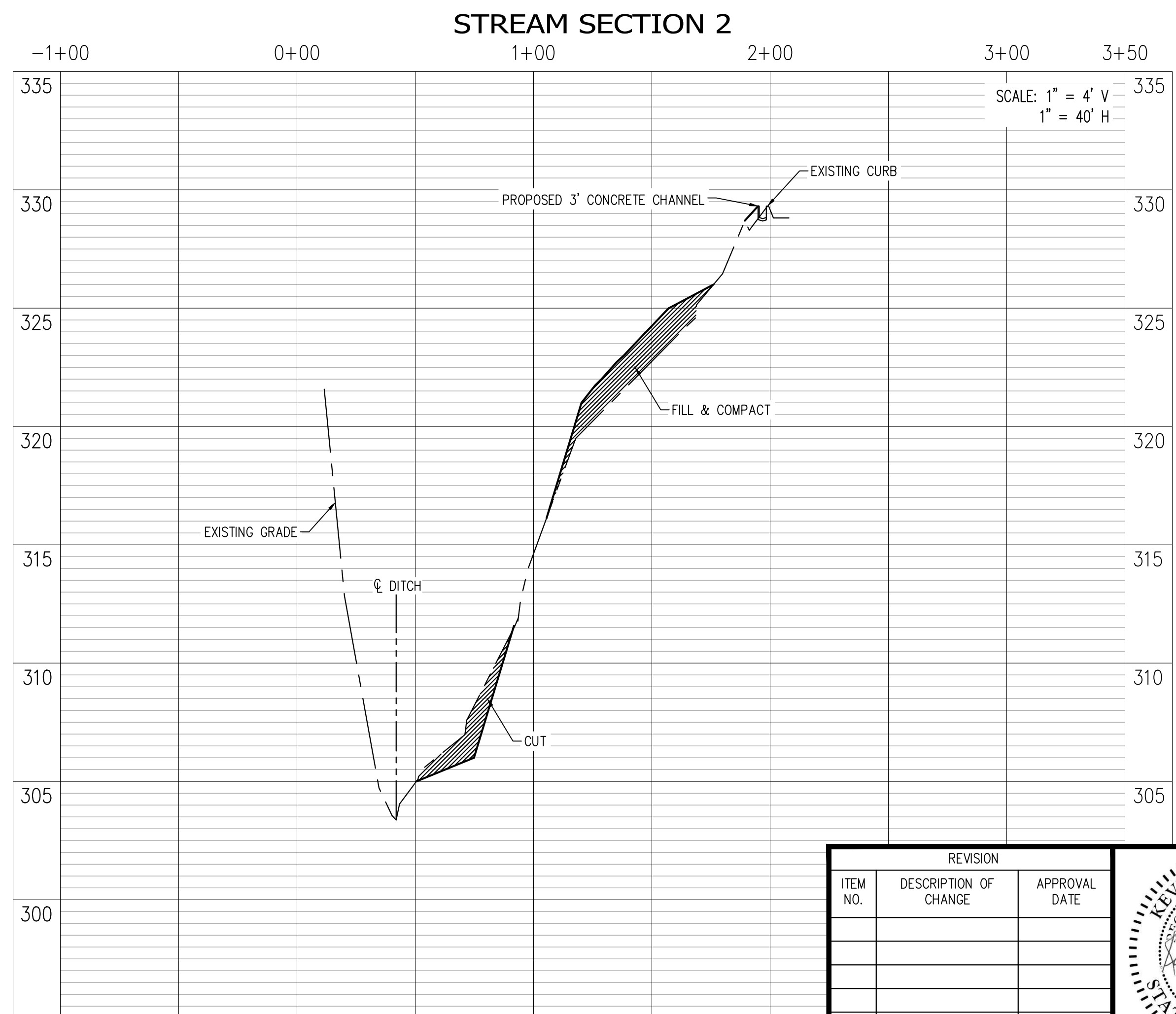
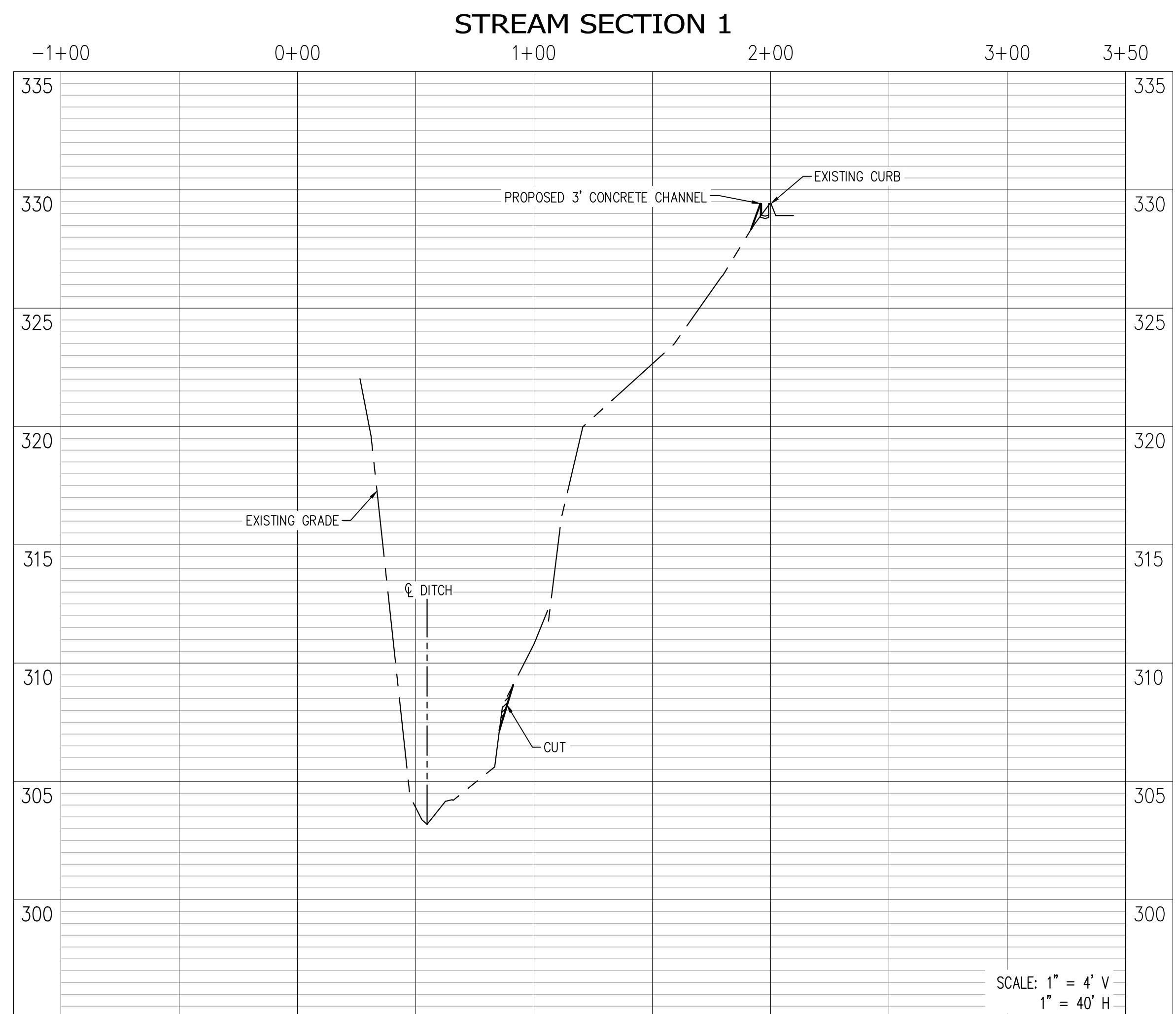
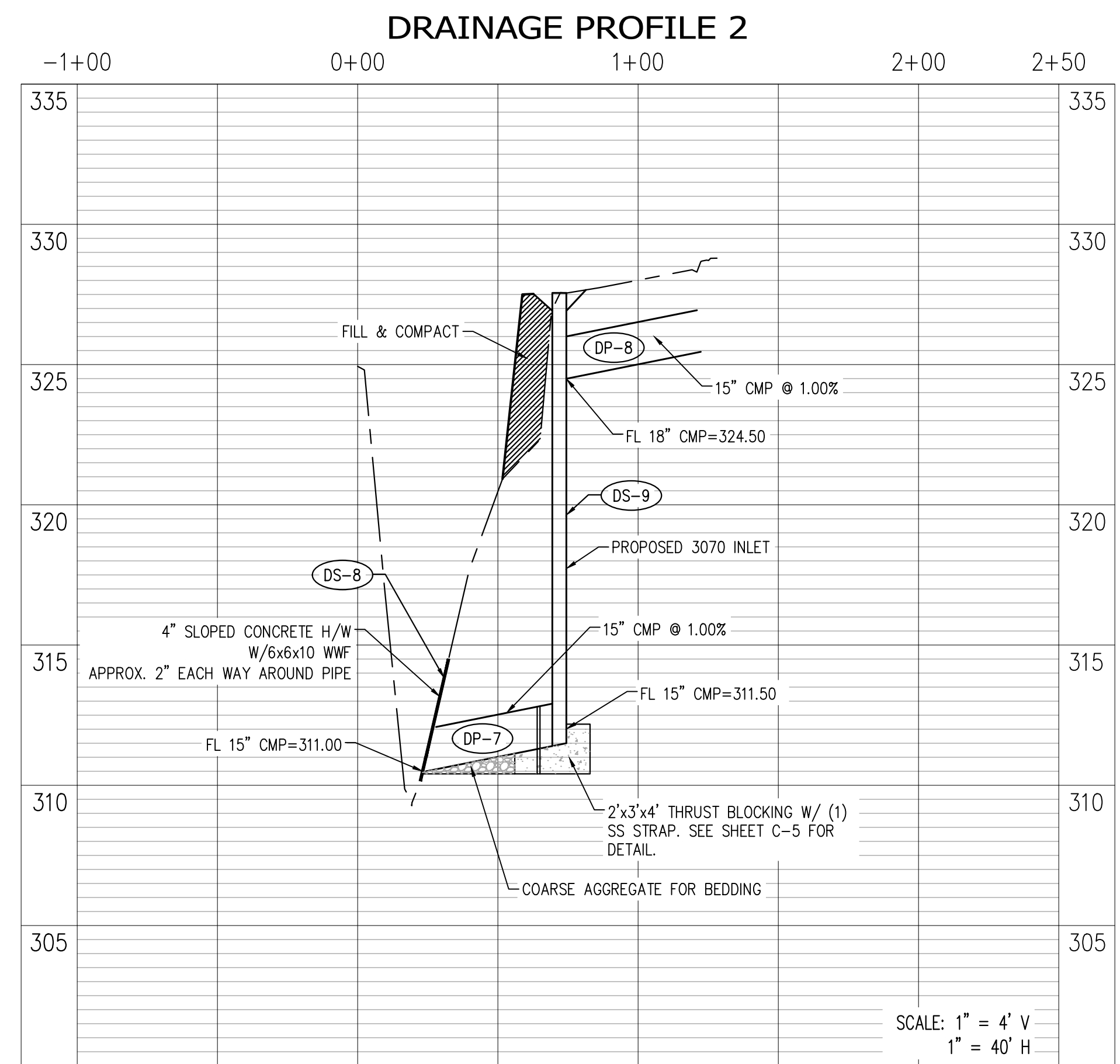
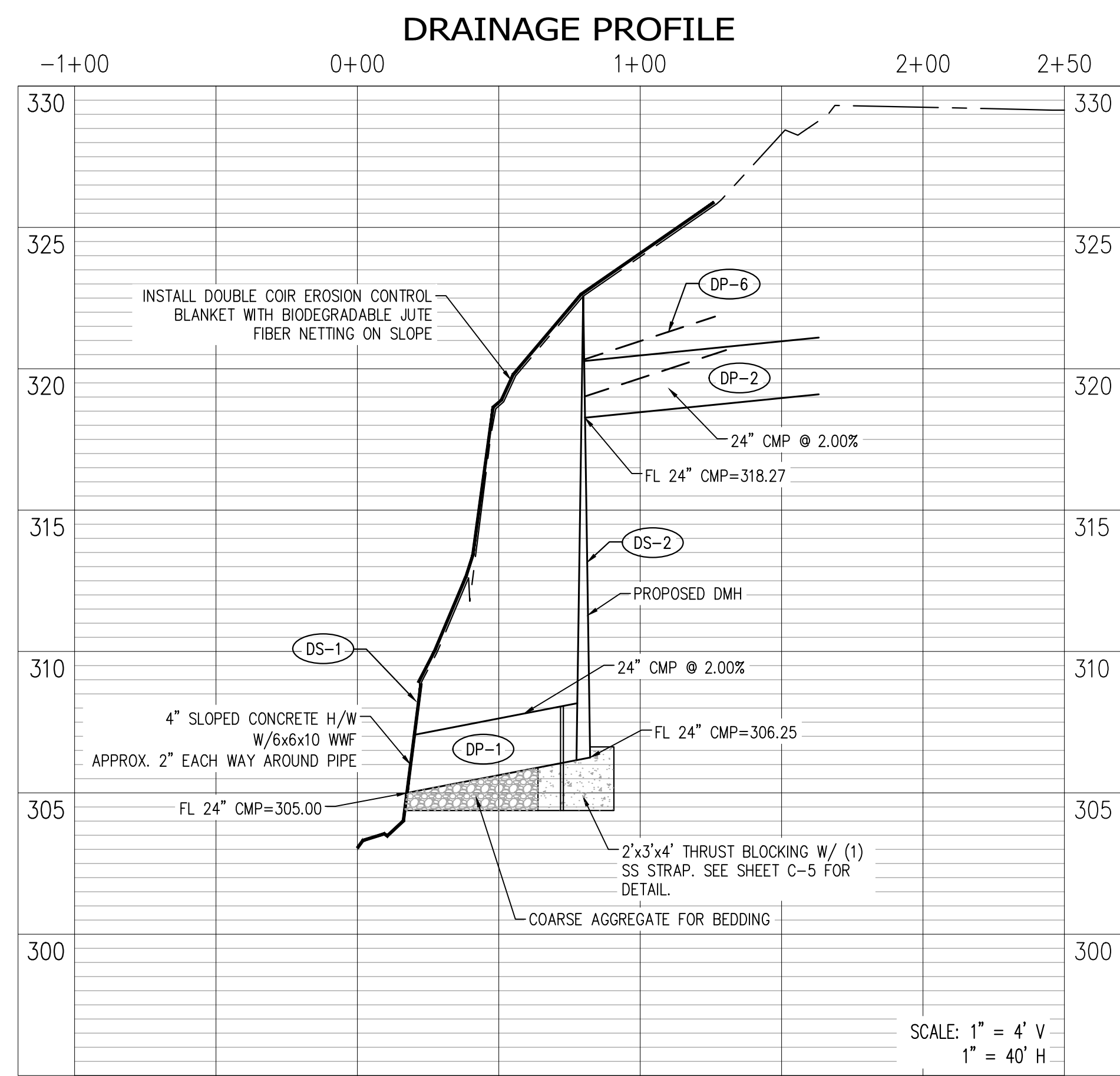
REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



SHEET 1 OF 1  
DIVISION OF ENGINEERING  
**DRAINAGE PLAN & PROFILE**  
LOCATION: 4920 HICKORY HILL ROAD  
MEMPHIS, TN  
SURVEY: \_\_\_\_\_ DATE: \_\_\_\_\_ BOOK: \_\_\_\_\_  
DESIGN BY: KH DATE: 4/19/21 SCALE: 1"=40'  
REVIEWED: \_\_\_\_\_  
DEPUTY CITY ENGINEER DATE CITY ENGINEER DATE

**AAA COOPER BANK STABILIZATION**  
DEVELOPER: AAA COOPER TRANSPORTATION  
ENGINEER: LEDFORD ENGINEERING AND PLANNING, LLC  
LEP: 1290-04

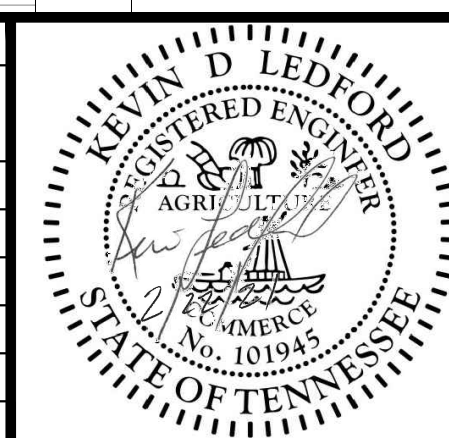
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REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



DRAINAGE BASIN: JOHN'S CREEK

SHEET 1 OF 3

## STREAM PROFILES

LOCATION: 4920 HICKORY HILL ROAD  
MEMPHIS, TN

SURVEY: \_\_\_\_\_ DATE: \_\_\_\_\_ BOOK: \_\_\_\_\_  
DESIGN BY: KH DATE: 4/19/21 SCALE: 1"=40'  
REVIEWED: \_\_\_\_\_

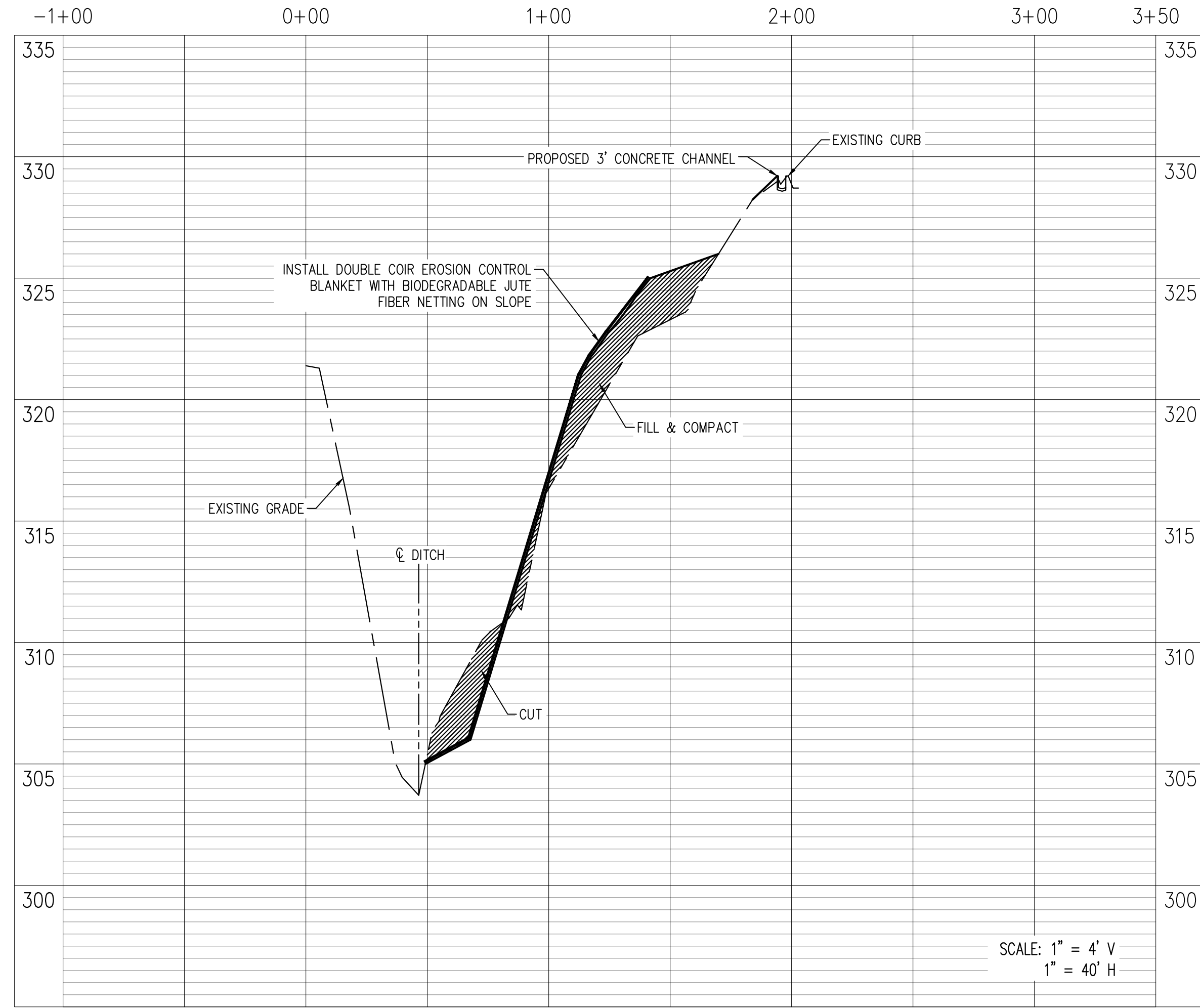
**AAA COOPER BANK STABILIZATION**

DEVELOPER: AAA COOPER TRANSPORTATION  
ENGINEER: LEDFORD ENGINEERING AND PLANNING, LLC

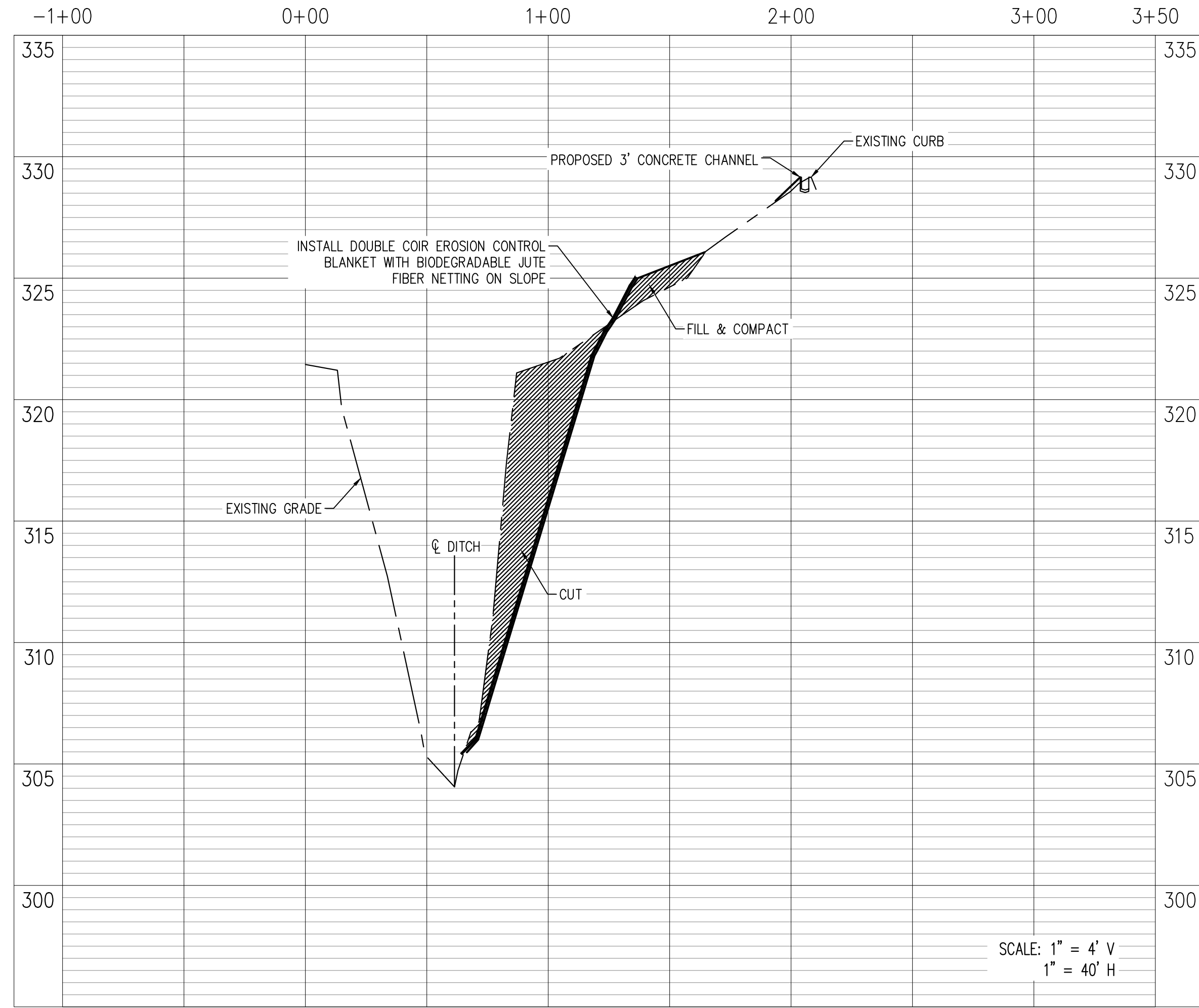
DEPUTY CITY ENGINEER DATE CITY ENGINEER DATE

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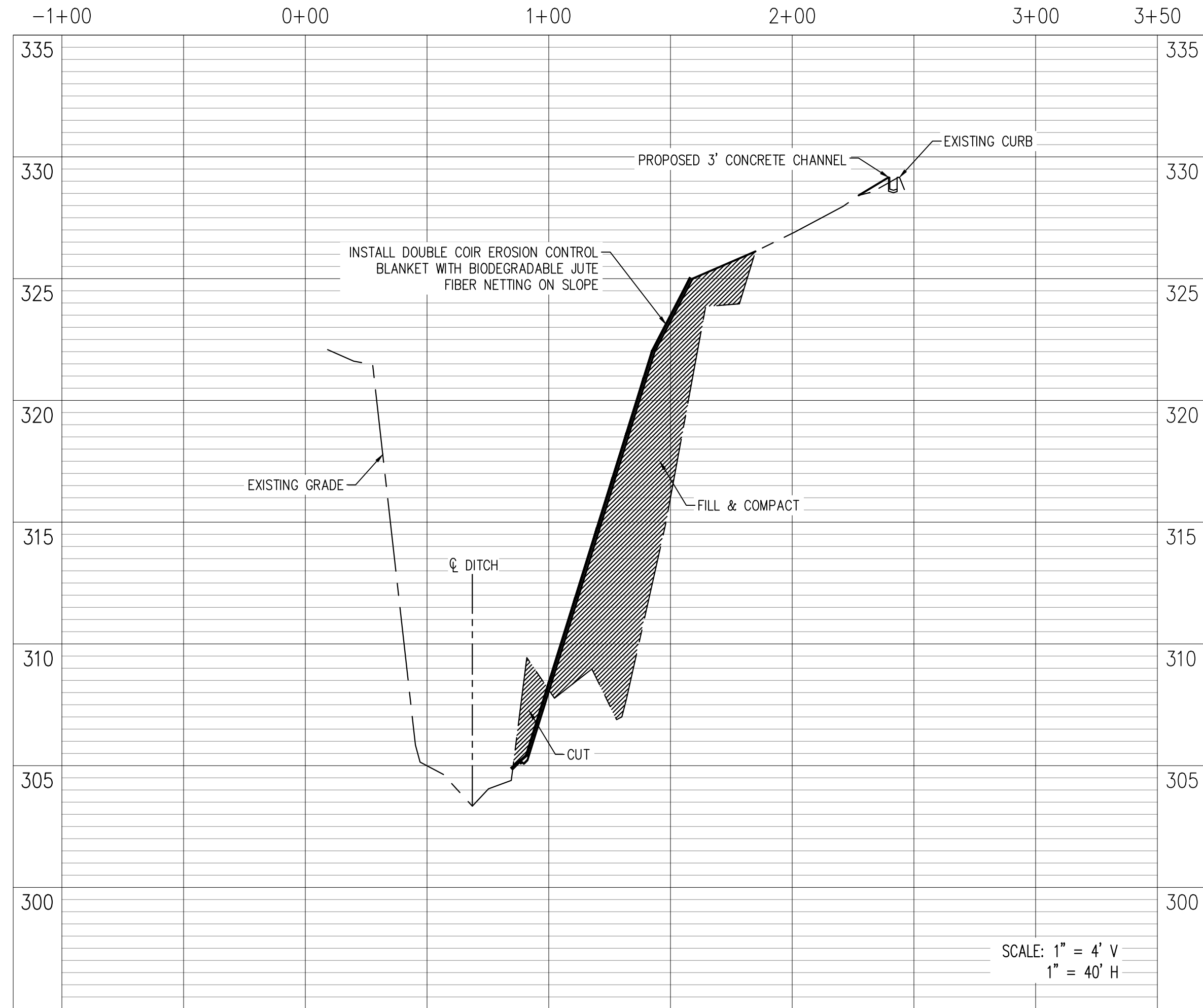
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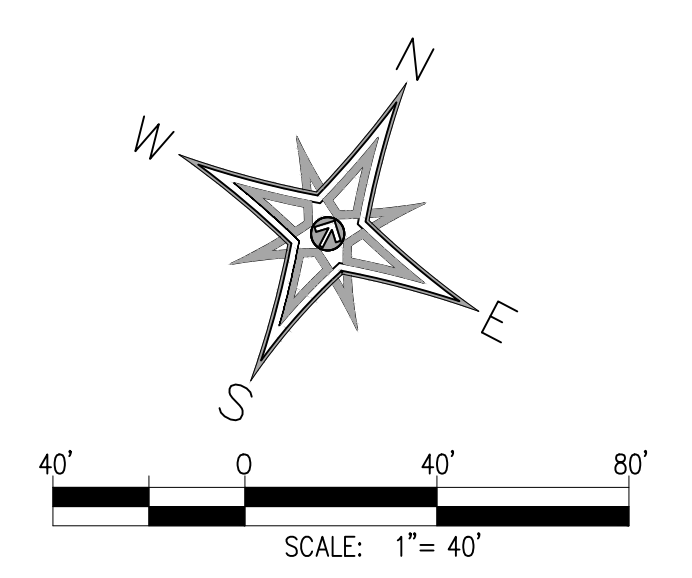
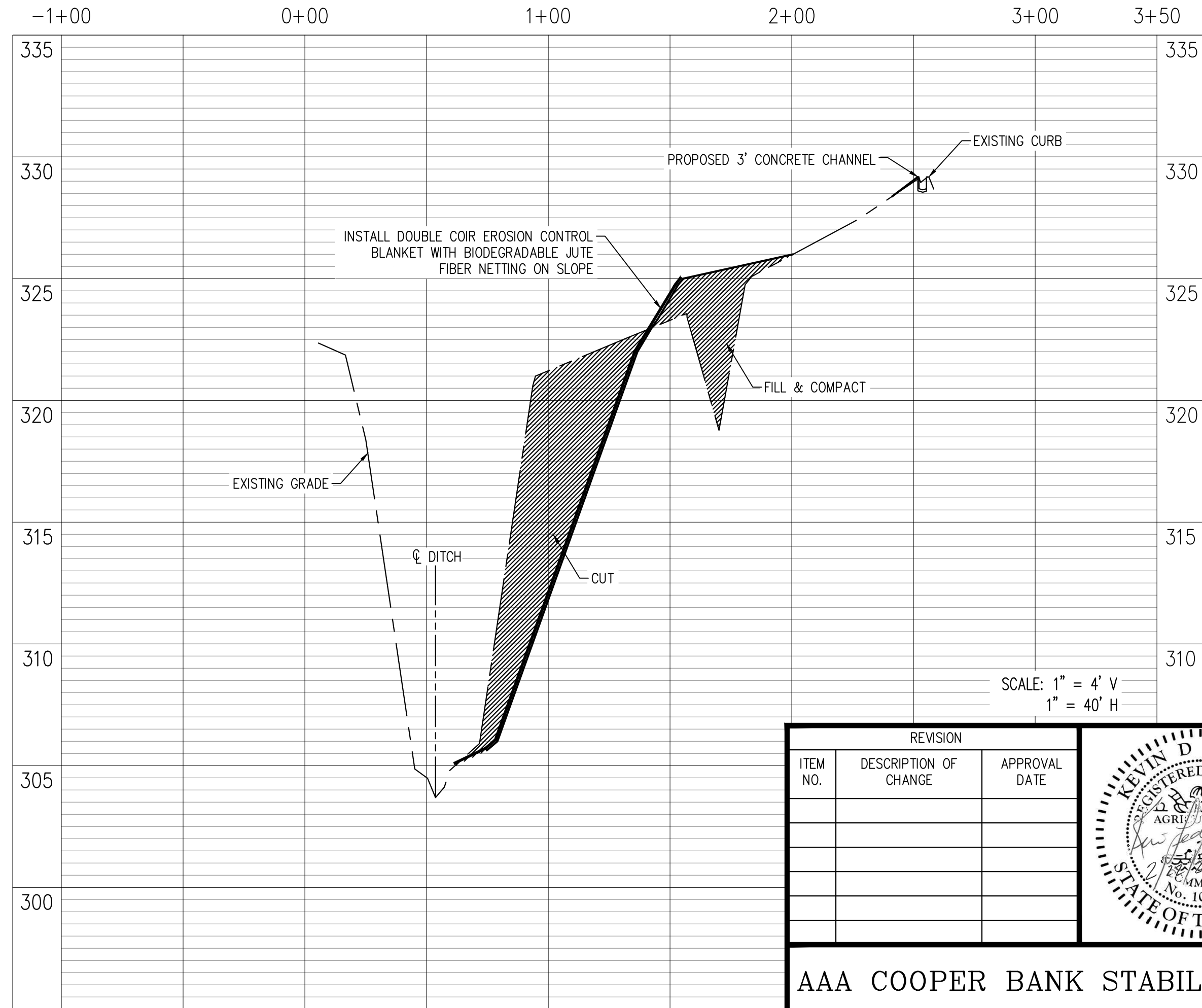
**STREAM SECTION 4**



**STREAM SECTION 5**



**STREAM SECTION 6**



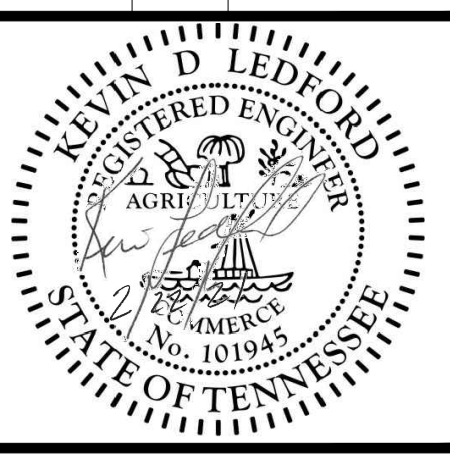
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DRAINAGE BASIN: JOHN'S CREEK

DWG NO. C-5

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



SHEET 2 OF 3  
DIVISION OF ENGINEERING

**STREAM PROFILES**

LOCATION: 4920 HICKORY HILL ROAD  
MEMPHIS, TN

SURVEY: \_\_\_\_\_ DATE: \_\_\_\_\_ BOOK: \_\_\_\_\_  
DESIGN BY: KH DATE: 4/19/21 SCALE: 1"=40'  
REVIEWED: \_\_\_\_\_

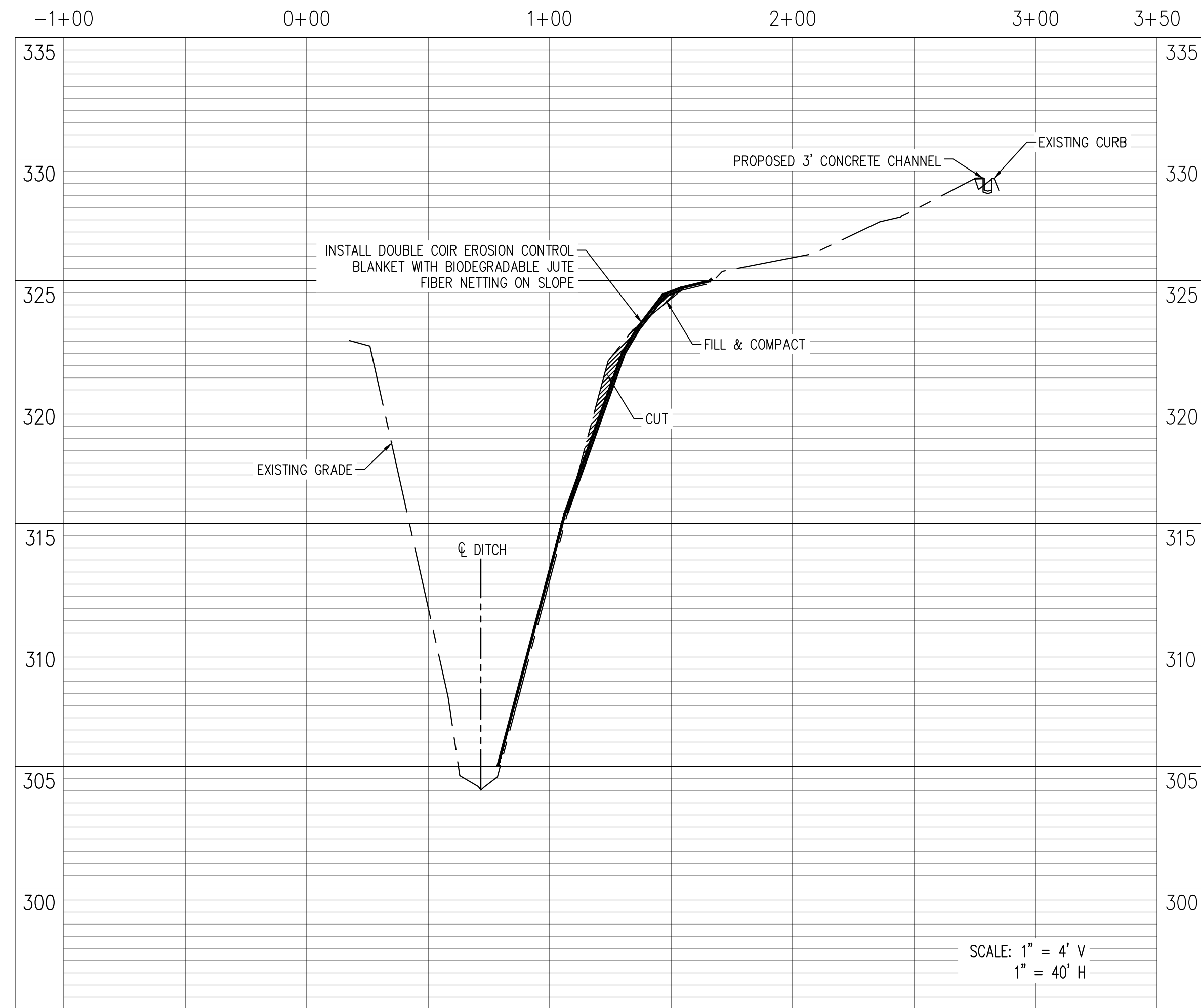
DEPUTY CITY ENGINEER DATE CITY ENGINEER DATE

**AAA COOPER BANK STABILIZATION**

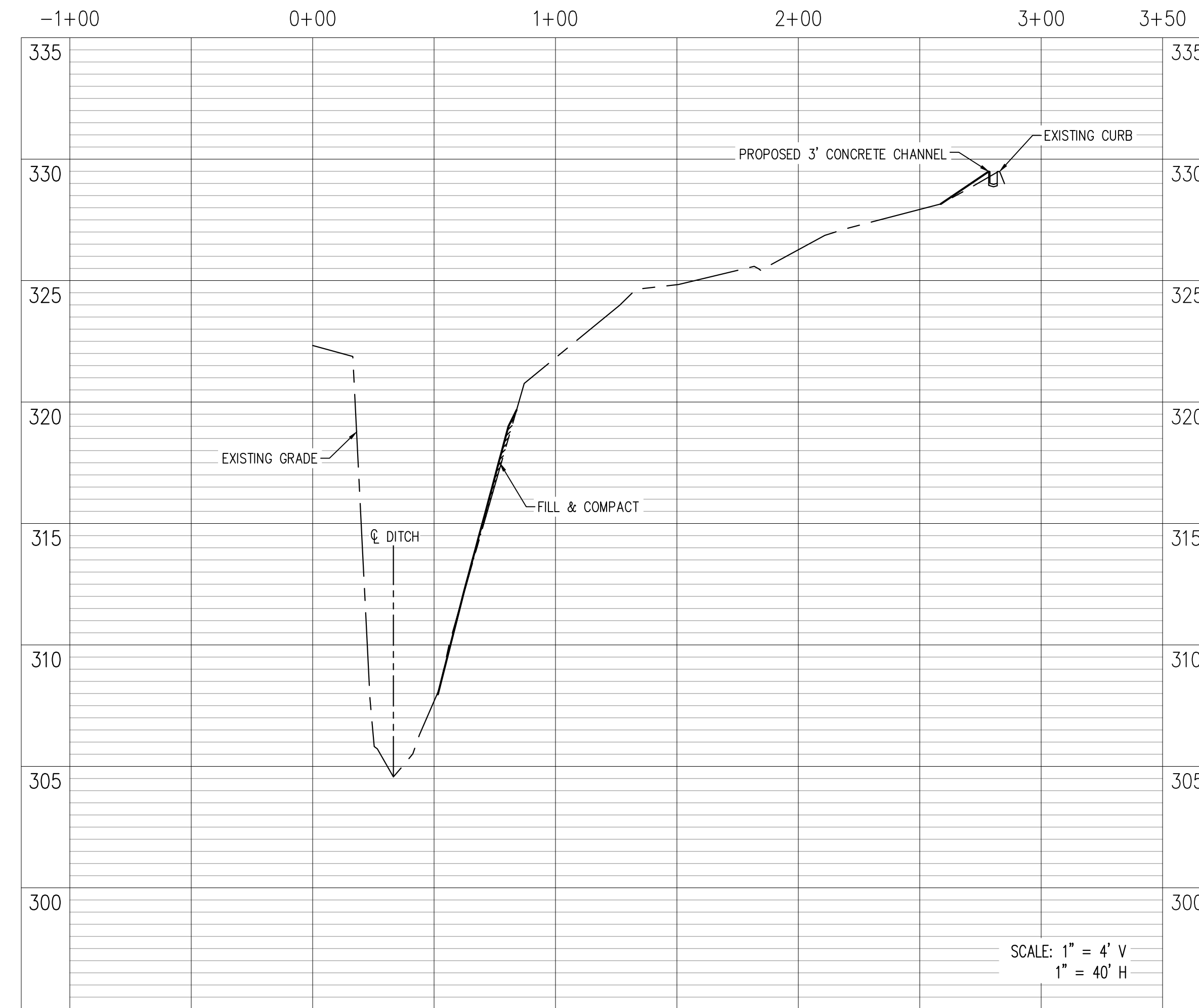
DEVELOPER: AAA COOPER TRANSPORTATION  
ENGINEER: LEDFORD ENGINEERING AND PLANNING, LLC

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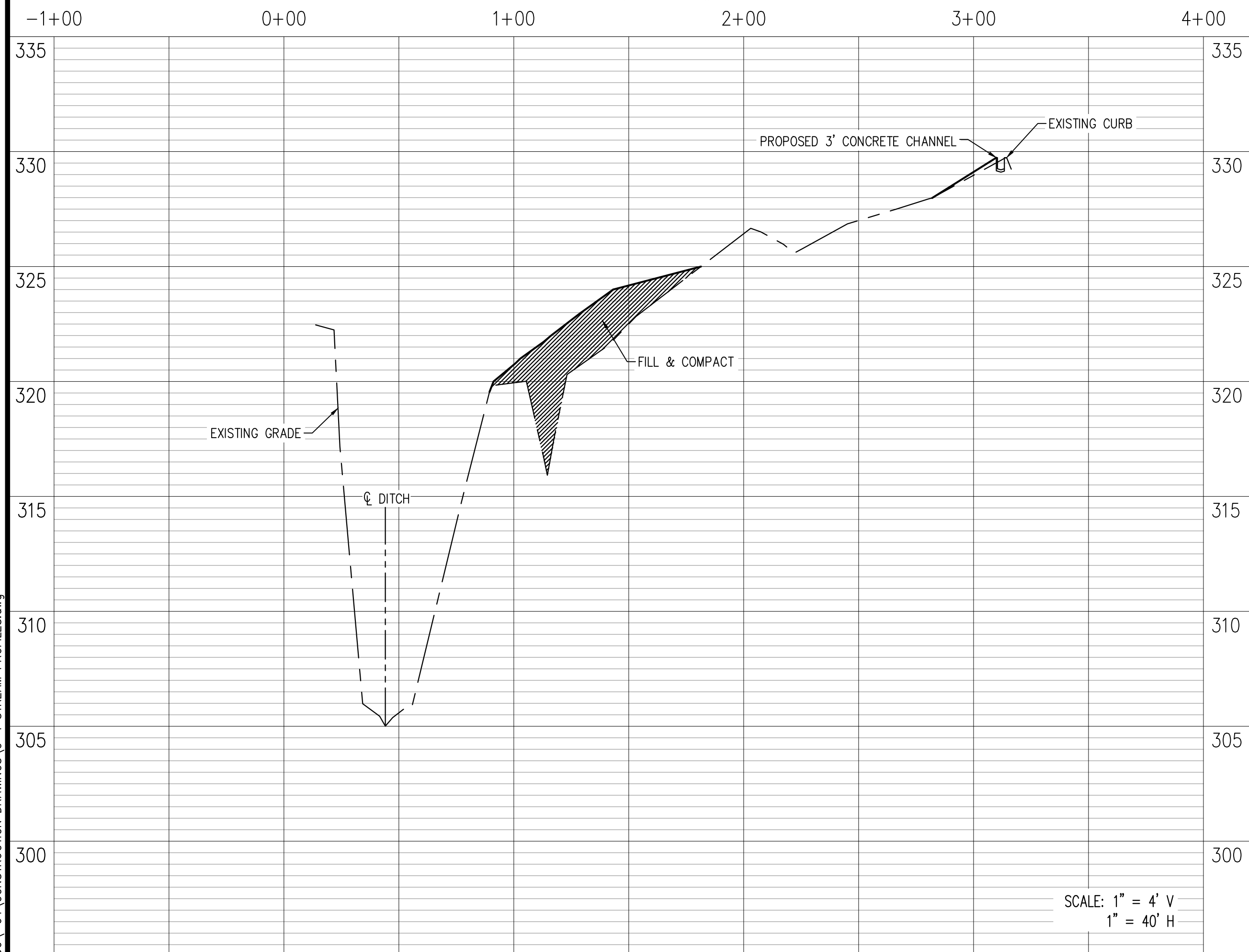
**STREAM SECTION 7**



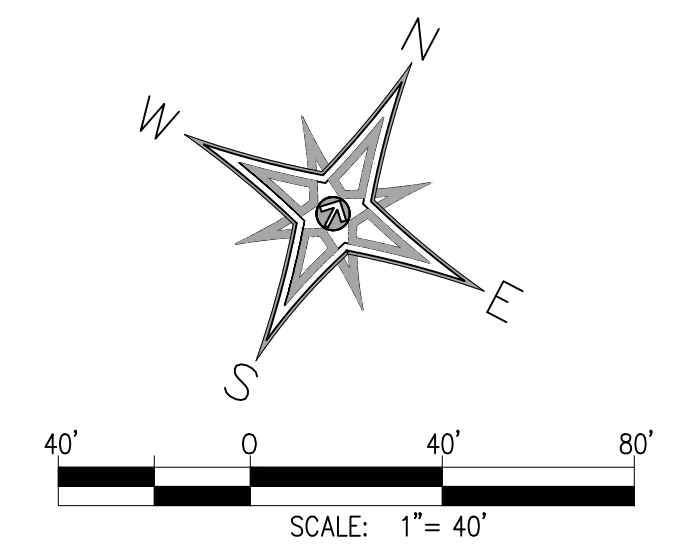
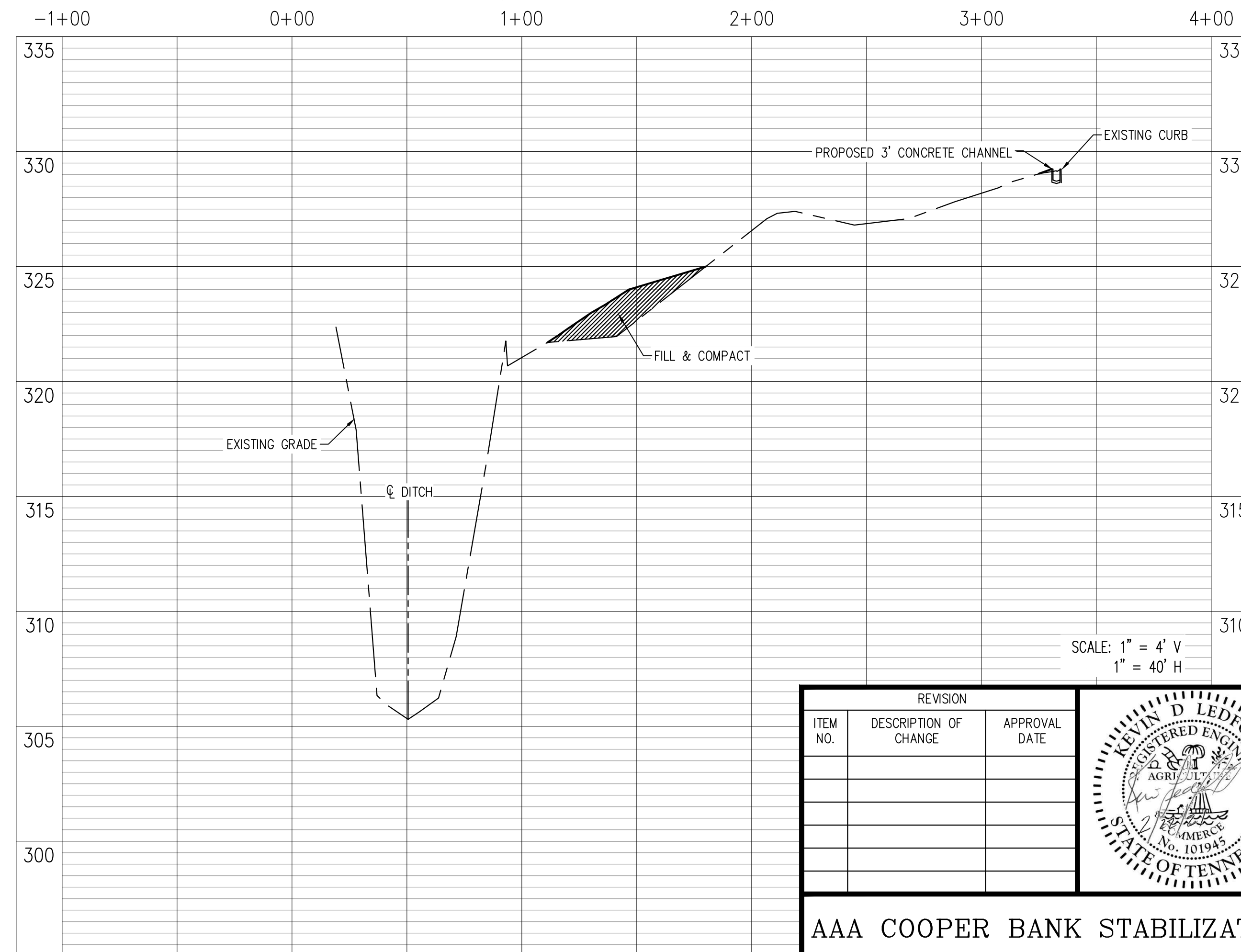
**STREAM SECTION 8**



**STREAM SECTION 9**



**STREAM SECTION 10**



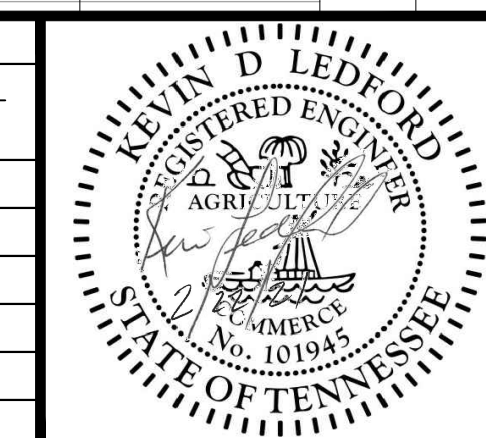
**BENCHMARK:**  
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DRAINAGE BASIN: JOHN'S CREEK

DWG NO. C-6

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE

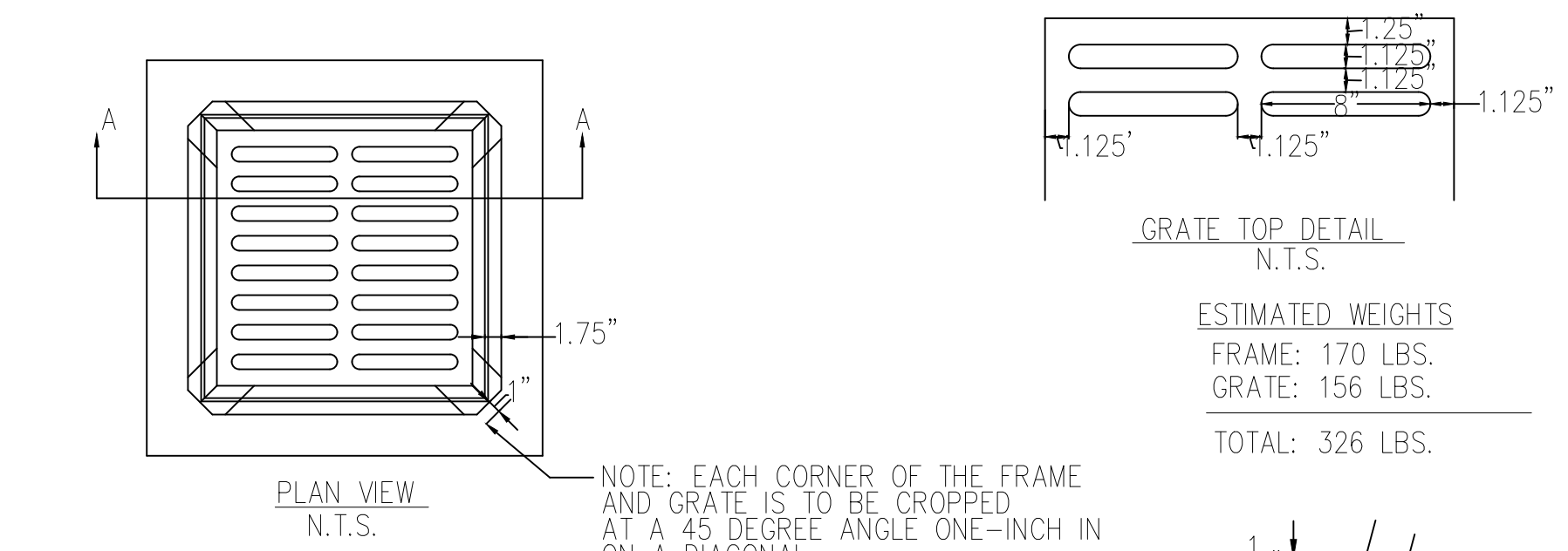


**AAA COOPER BANK STABILIZATION**

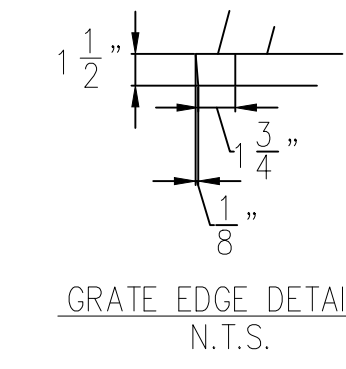
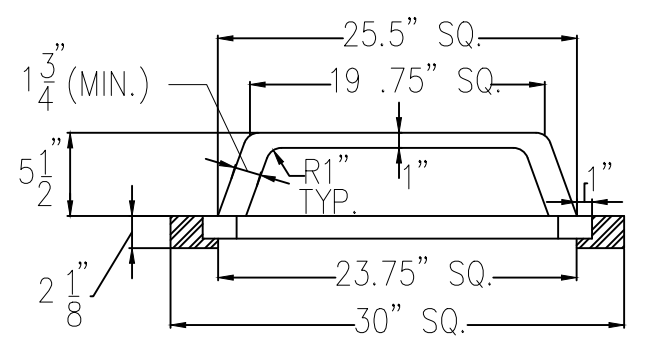
DEVELOPER: AAA COOPER TRANSPORTATION  
ENGINEER: LEDFORD ENGINEERING AND PLANNING, LLC

SHEET 3 OF 3  
DIVISION OF ENGINEERING  
**STREAM PROFILES**  
LOCATION: 4920 HICKORY HILL ROAD  
MEMPHIS, TN  
SURVEY: \_\_\_\_\_ DATE: \_\_\_\_\_ BOOK: \_\_\_\_\_  
DESIGN BY: KH DATE: 4/19/21 SCALE: 1"=40'  
REVIEWED: \_\_\_\_\_  
DEPUTY CITY ENGINEER DATE CITY ENGINEER DATE

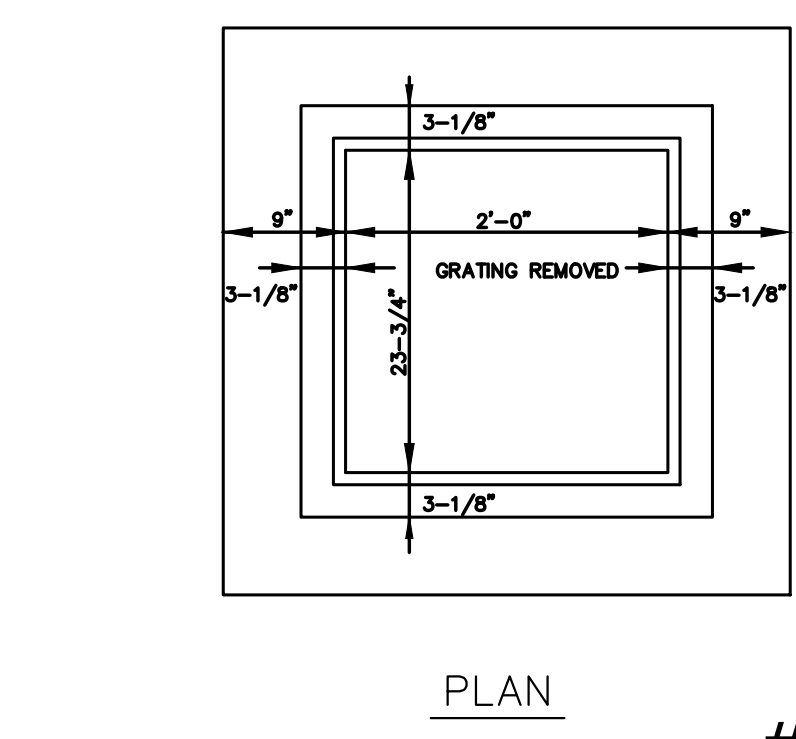
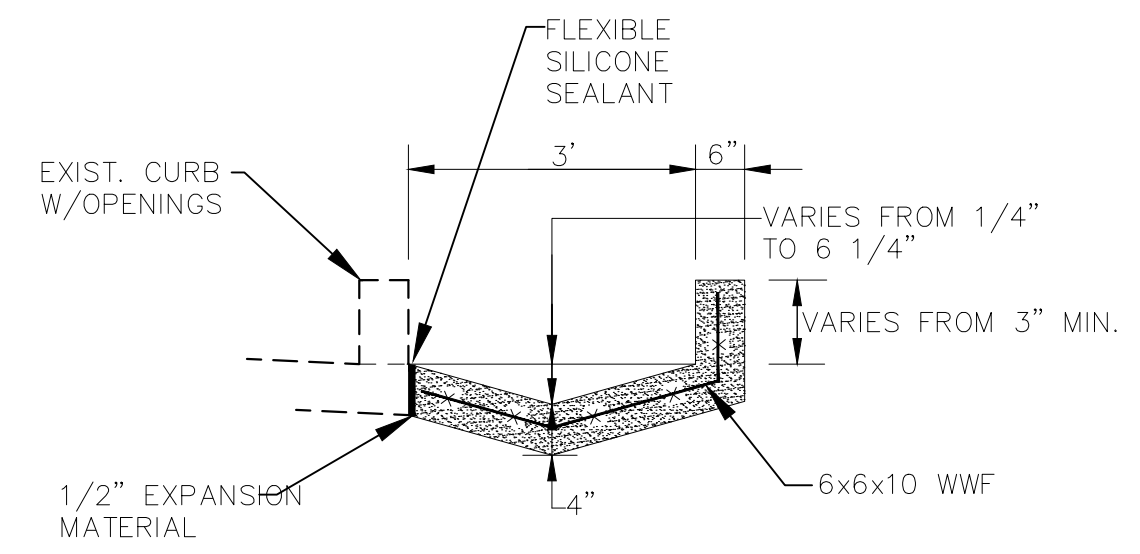
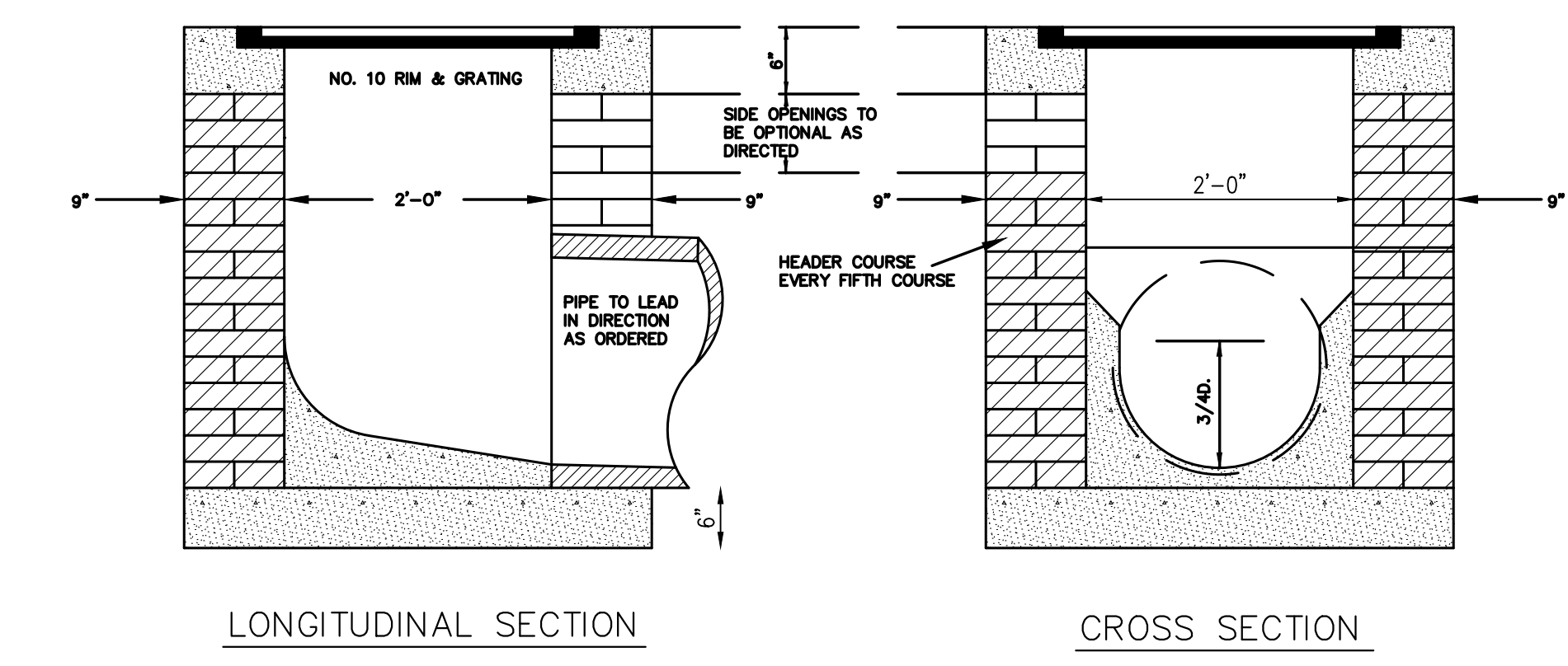
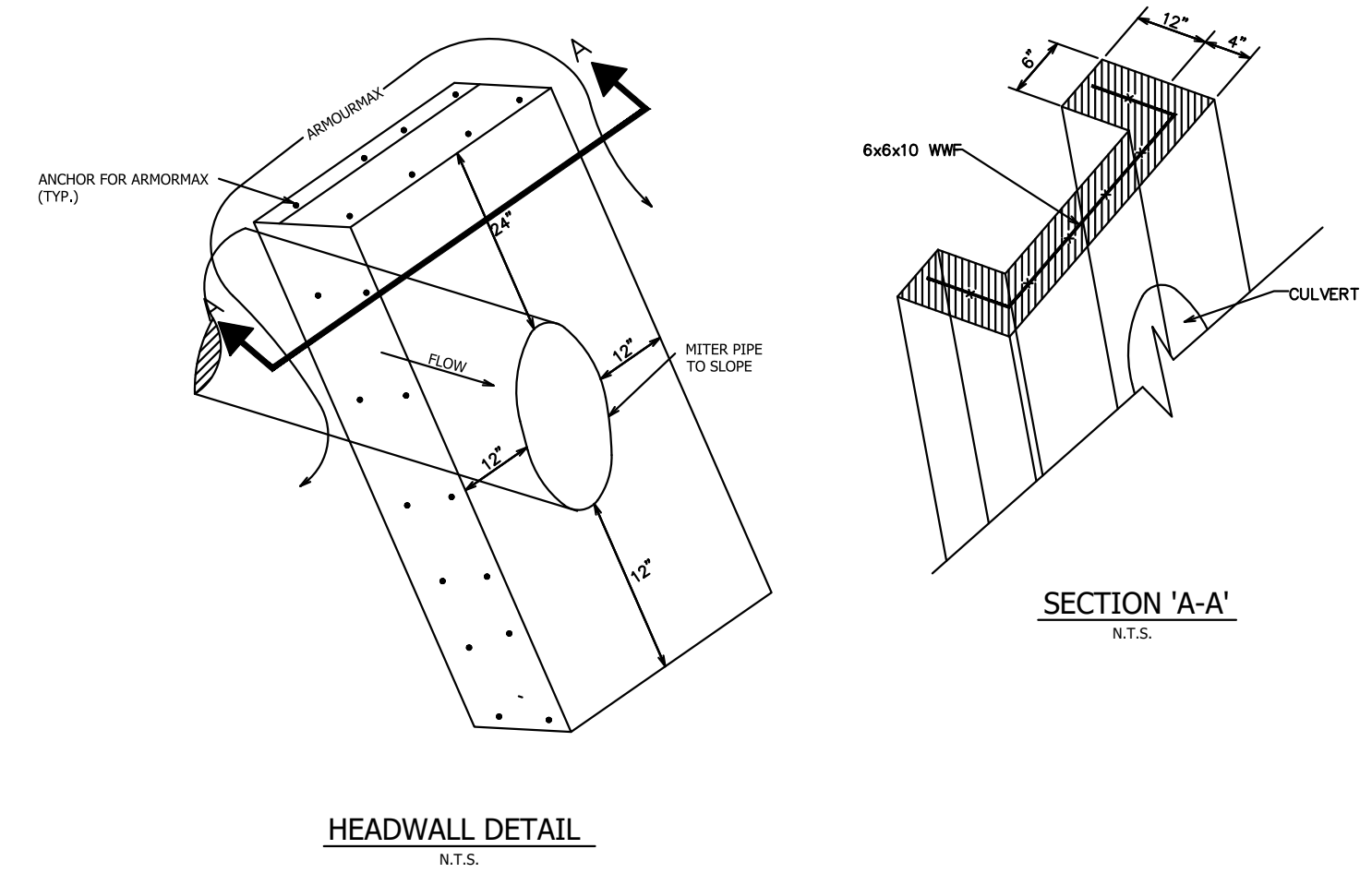
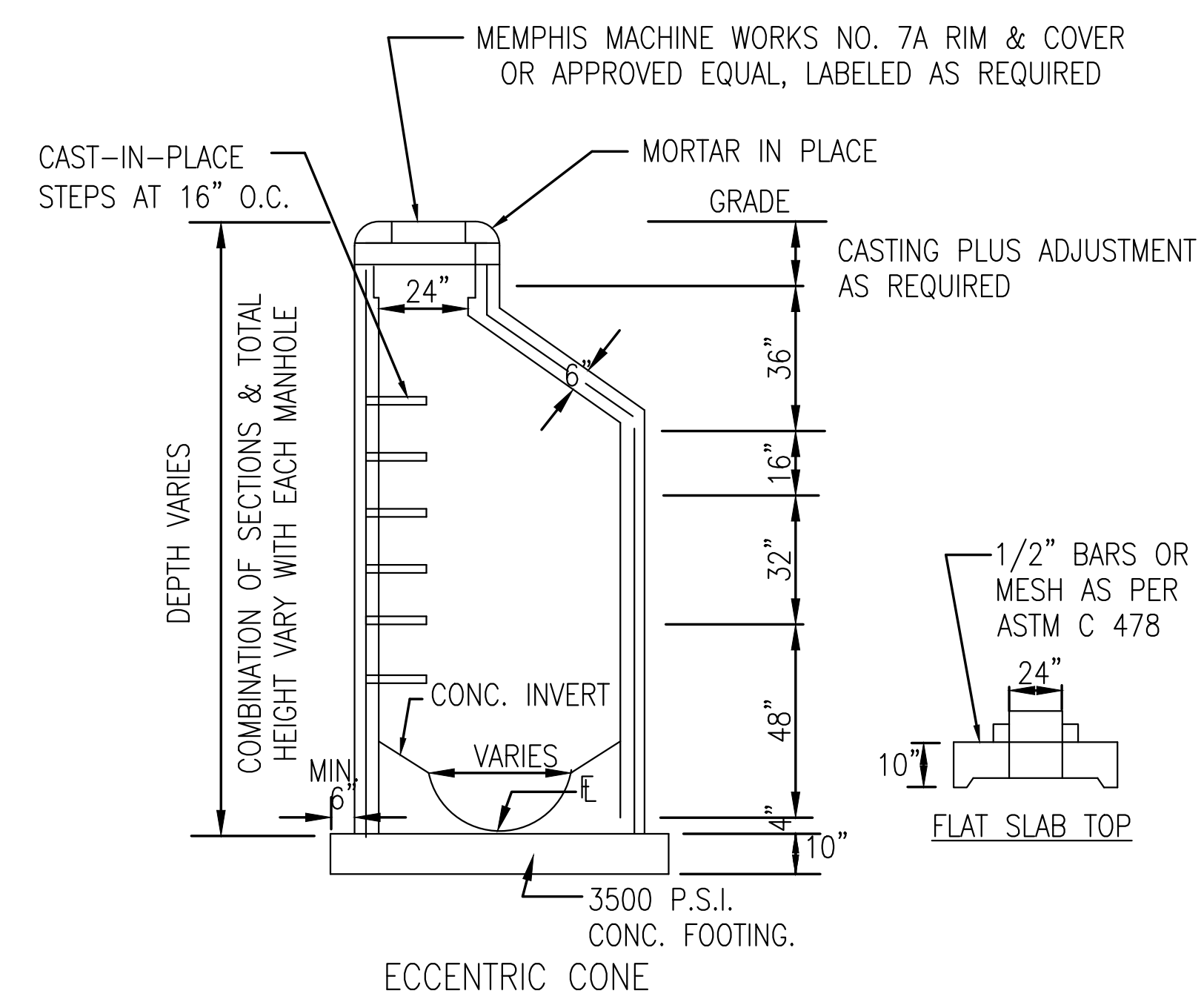
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**ESTIMATED WEIGHTS**  
FRAME: 170 LBS.  
GRATE: 156 LBS.  
TOTAL: 326 LBS.



- NOTES:**
- FOR INLET STRUCTURE CONSTRUCTION SEE THE CITY OF MEMPHIS DESIGN STANDARD FOR A NO. 10 INLET
  - INLET CAPACITY: (WITH 50% TRASH BLOCKAGE)
- | H (FT.) | Q (C.F.S.) |
|---------|------------|
| 1.0     | 6.6        |
| 0.8     | 5.6        |
| 0.6     | 4.4        |
- MAXIMUM TRIBUTARY DRAINAGE AREA ALLOWED IN INLET = 2 ACRES  
MAXIMUM ALLOWABLE HEIGHT OF WATER (H) = 1 FT.
  - NO TWIN 3070 INLETS ALLOWED.



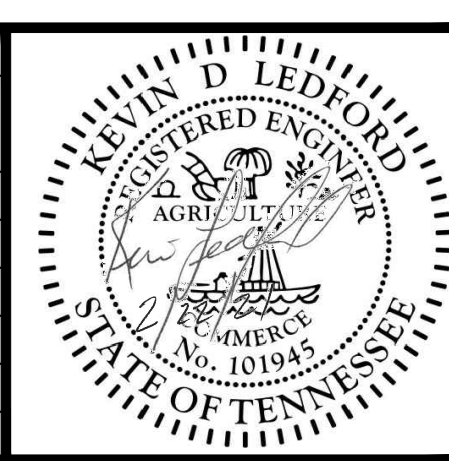
**#3070 INLET**  
N.T.S.

NOTE: CONC. TO BE 3000 PSI (8 BAG MIN.)

**BENCHMARK:**  
BASIS OF ELEVATIONS NAVD 88 CITY BM#296 - LOCATED AT THE ER ON THE HICKORY HILL SIDE AT THE INTERSECTION OF HICKORY HILL ROAD & RAINES ROAD. ELEV. 341.46

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REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



**AAA COOPER BANK STABILIZATION**

DEVELOPER: AAA COOPER TRANSPORTATION  
ENGINEER: LEDFORD ENGINEERING AND PLANNING, LLC

DRAINAGE BASIN: JOHN'S CREEK

SHEET 1 OF 1

DIVISION OF ENGINEERING

**SITE DETAILS**

LOCATION: 4920 HICKORY HILL ROAD  
MEMPHIS, TN

SURVEY: \_\_\_\_\_ DATE: \_\_\_\_\_ BOOK: \_\_\_\_\_  
DESIGN BY: KH DATE: 4/19/21 SCALE: N/A  
REVIEWED: \_\_\_\_\_

DEPUTY CITY ENGINEER DATE CITY ENGINEER DATE

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