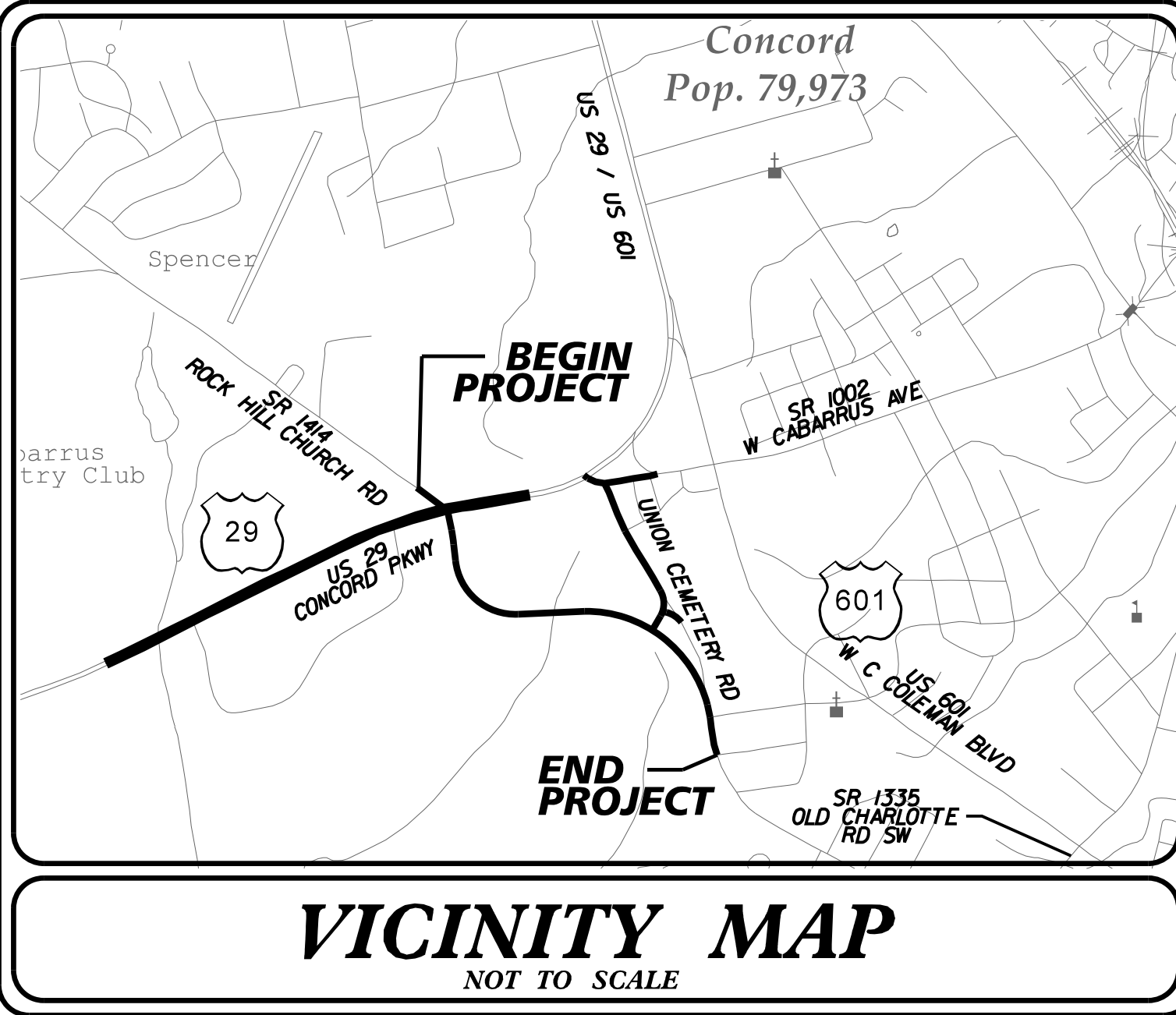


CONTRACT: C205117

CONTRACT: C205117

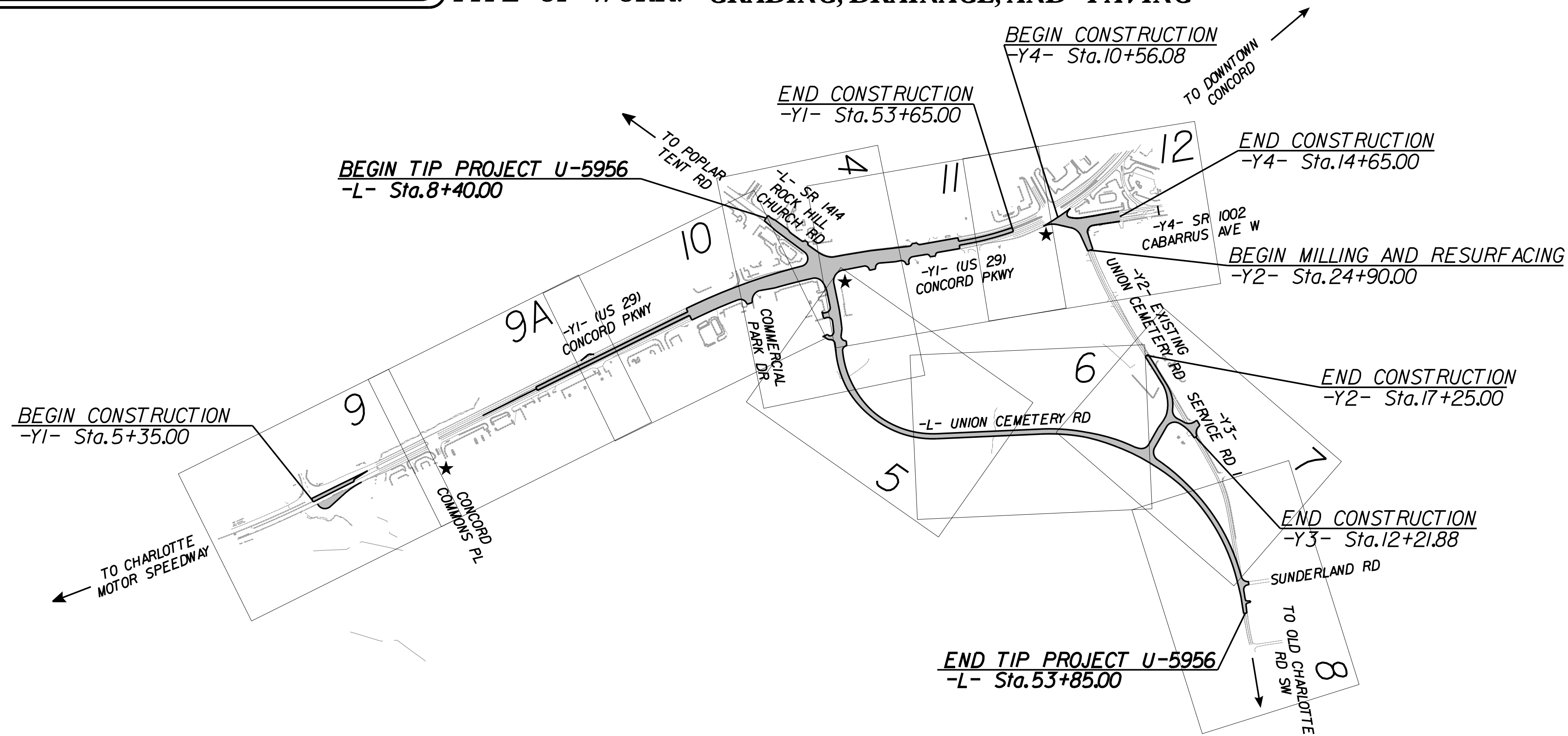
T.I.P.: U-5956



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL
CABARRUS COUNTY

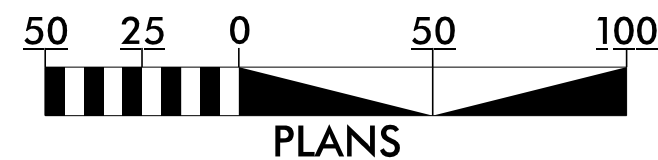
LOCATION: US 29, REALIGN UNION CEMETERY ROAD TO INTERSECT US 29 AT SR 1414 (ROCK HILL CHURCH ROAD) AND CONSTRUCT IMPROVEMENTS ALONG US 29 FROM 0.6 MILE WEST OF SR 1414 (ROCK HILL CHURCH ROAD) TO JUST EAST OF SR 1414 (ROCK HILL CHURCH ROAD)

TYPE OF WORK: GRADING, DRAINAGE, AND PAVING



THIS PROJECT CONTAINS
EROSION CONTROL PLANS
FOR CLEARING AND
GRUBBING PHASE OF
CONSTRUCTION.

GRAPHIC SCALE



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG 010000 GENERAL STORMWATER CONSTRUCTION PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES.

Kimley»Horn

200 S. TRYON ST. • CHARLOTTE, NC 28202

Prepared in the Office of:

KIMLEY-HORN

200 S Tryon St #200
Charlotte, NC 28202

Designed by:

Spencer Green, PE

NAME

4244

LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

The "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2024 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

PROJECT REFERENCE NO.
U-5956

SHEET NO.
EC-2

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

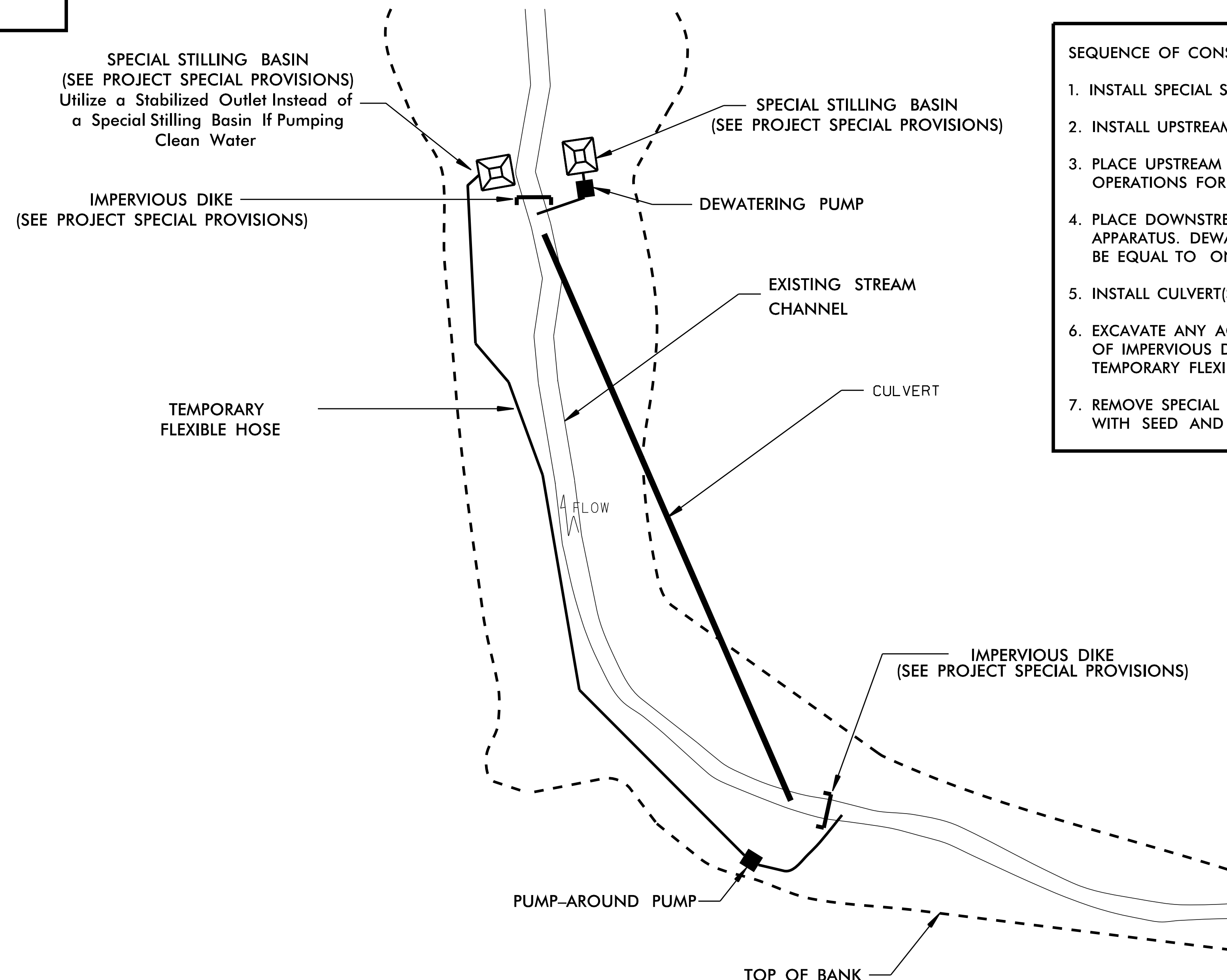
EROSION & SEDIMENT CONTROL LEGEND

Std. #	Description	Symbol	Std. #	Description	Symbol
1605.01	Temporary Silt Fence		1633.01	Temporary Rock Silt Check Type A	
1606.01	Special Sediment Control Fence		1633.02	Temporary Rock Silt Check Type B	
1622.01	Temporary Berms and Slope Drains		1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1630.02	Silt Basin Type B		1634.01	Temporary Rock Sediment Dam Type A	
1630.03	Temporary Silt Ditch		1634.02	Temporary Rock Sediment Dam Type B	
1630.04	Stilling Basin		1635.01	Rock Pipe Inlet Sediment Trap Type A	
1630.05	Temporary Diversion		1635.02	Rock Pipe Inlet Sediment Trap Type B	
1630.06	Special Stilling Basin		1636.01	Excelsior Wattle Check	
1630.07	Skimmer Basin		1636.01	Excelsior Wattle Check with Flocculant	
1630.08	Tiered Skimmer Basin		1636.01	Coir Fiber Wattle Check	
1630.09	Earthen Dam with Skimmer		1636.01	Coir Fiber Wattle Check with Flocculant	
	Infiltration Basin		1636.02	Silt Fence Excelsior Wattle Break	
	Rock Inlet Sediment Trap:			Silt Fence Coir Fiber Wattle Break	
1632.01	Type A		1636.03	Excelsior Wattle Barrier	
1632.02	Type B		1636.03	Coir Fiber Wattle Barrier	
1632.03	Type C				

EXAMPLE OF PUMP-AROUND OPERATION

NOTES:

- 1) All excavation shall be performed in only dry or isolated areas of the work zone.
- 2) Impervious dikes are to be used to isolate work from stream flow when necessary.
- 3) Maintenance of stream flow operations shall be incidental to the work. This includes polyethylene sheeting, diversion pipes, pumps and hoses.
- 4) Pumps and hoses shall be of sufficient size to dewater the work area.
- 5) All erosion control measures for the pump-around must be located within the permitted stream and buffer limits of impact.

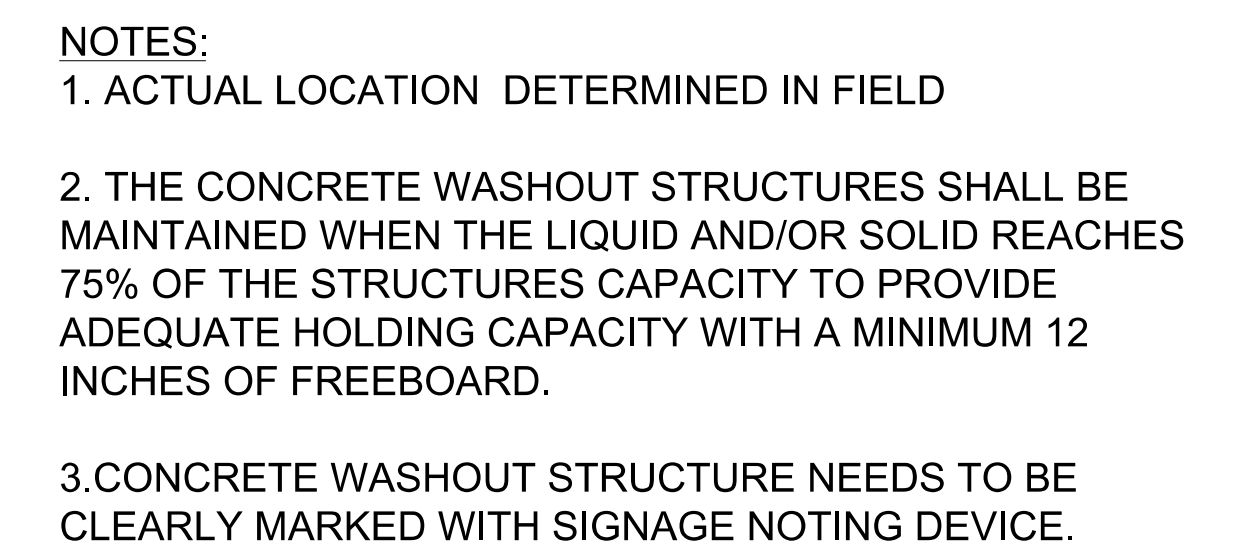


SEQUENCE OF CONSTRUCTION FOR TYPICAL WORK AREA

1. INSTALL SPECIAL STILLING BASIN(S).
2. INSTALL UPSTREAM PUMP AND TEMPORARY FLEXIBLE HOSE.
3. PLACE UPSTREAM IMPERVIOUS DIKE AND BEGIN PUMPING OPERATIONS FOR STREAM DIVERSION.
4. PLACE DOWNSTREAM IMPERVIOUS DIKE AND PUMPING APPARATUS. DEWATER ENTRAPPED AREA. AREA TO BE DEWATERED SHALL BE EQUAL TO ONE DAY'S WORK.
5. INSTALL CULVERT(S) IN ACCORDANCE WITH THE PLANS.
6. EXCAVATE ANY ACCUMULATED SILT AND DEWATER BEFORE REMOVAL OF IMPERVIOUS DIKES. REMOVE IMPERVIOUS DIKES, PUMPS, AND TEMPORARY FLEXIBLE HOSE. (DOWNSTREAM IMPERVIOUS DIKES FIRST).
7. REMOVE SPECIAL STILLING BASIN(S) AND BACKFILL. STABILIZE DISTURBED AREA WITH SEED AND MULCH.

REVISIONS

Kimley»Horn © 2023 200 S. TRYON ST. • CHARLOTTE, NC 28202	PROJECT REFERENCE NO.		SHEET NO.
	U-5956		EC-2B
RIGHT-OF-WAY REV.			
CONST. REV.			



DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

Kimley»Horn

200 S. TRYON ST. • CHARLOTTE, NC 28202

RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.

U-5956

SHEET NO.

EC-3

SOIL STABILIZATION SUMMARY SHEET

STRAW MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
5	-L-	21+25	23+50	L	175
5	-L-	23+50	25+00	L	120
6	-L-	28+75	30+50	L	135
6	-L-	33+00	36+00	L	235
6/7	-L-	38+50	40+72	R	175
7	-L-	40+72	42+27	R	180
7	-L-	42+20	46+20	L	310
7	-L-	46+20	48+50	L	180
7	-L-	47+19	47+19	L	30
8	-L-	52+00	53+85	R	145
8	-L-	53+00	54+25	L	100
9A	-Y1-	24+50	26+00	L	120
11	-Y1-	44+70	46+00	R	105
11	-Y1-	46+00	47+00	R	80
7	-Y2-	10+50	11+00	R	40
7	-Y3-	11+22	12+17	R	75
STRAW MATTING TOTAL					2205

EXCELSIOR MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
5	-L-	25+00	27+00	L	155
5	-L-	27+25	28+50	L	100
6	-L-	33+00	36+00	R	235
8	-L-	52+23	53+00	L	60
EXCELSIOR MATTING TOTAL					550

SLOPE MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
5/6	-L-	27+50	30+75	L	1000
6	-L-	30+75	32+00	R	390
6	-L-	31+25	32+50	L	220
6	-L-	33+00	37+50	R	1270
6	-L-	34+00	37+00	L	850
SLOPE MATTING TOTAL					3,730

MATTING FOR EROSION CONTROL SUBTOTAL					6,485
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					9,990
GRAND TOTAL: MATTING FOR EROSION CONTROL					16,475
SAY					16,580

REVISIONS

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10/14/2025

REVISIONS

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DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

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RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
U-5956	EC-3A

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10’ OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 TO 4:1	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50’ IN LENGTH WITH SLOPES STEEPER THAN 4:1. 7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES

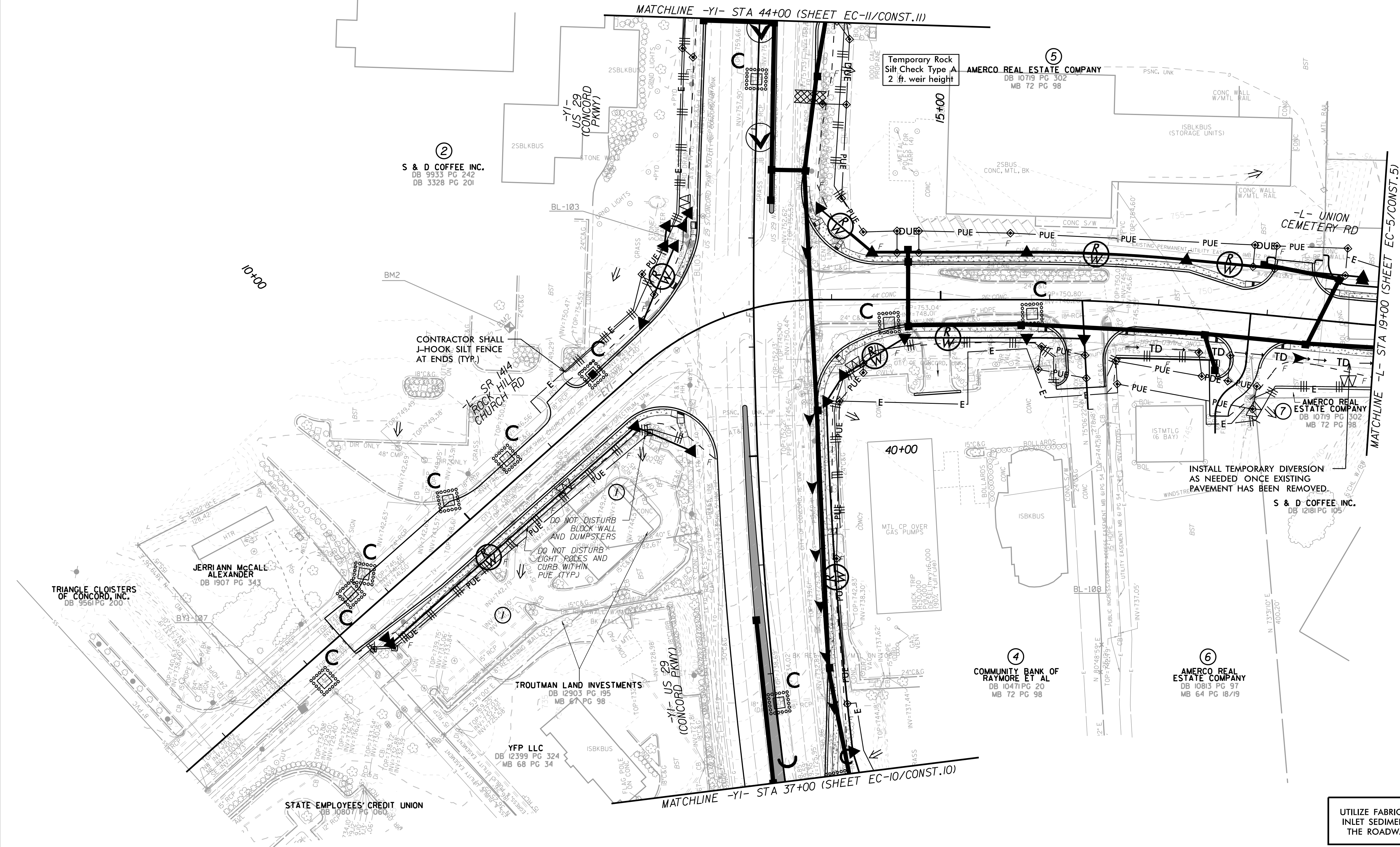
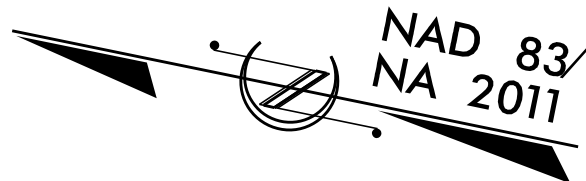
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PROJECT REFERENCE NO.	SHEET NO.
U-5956	EC-4/CONST.4

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200 SOUTH TRYON, SUITE 200
CHARLOTTE, N.C. 28202

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4



UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK
INLET SEDIMENT TRAP TYPE C WHERE WATER MAY POND ON
THE ROADWAY IN AREAS WHERE LIVE TRAFFIC IS PRESENT.

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

5/14/99

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10/14/2025

REVISIONS

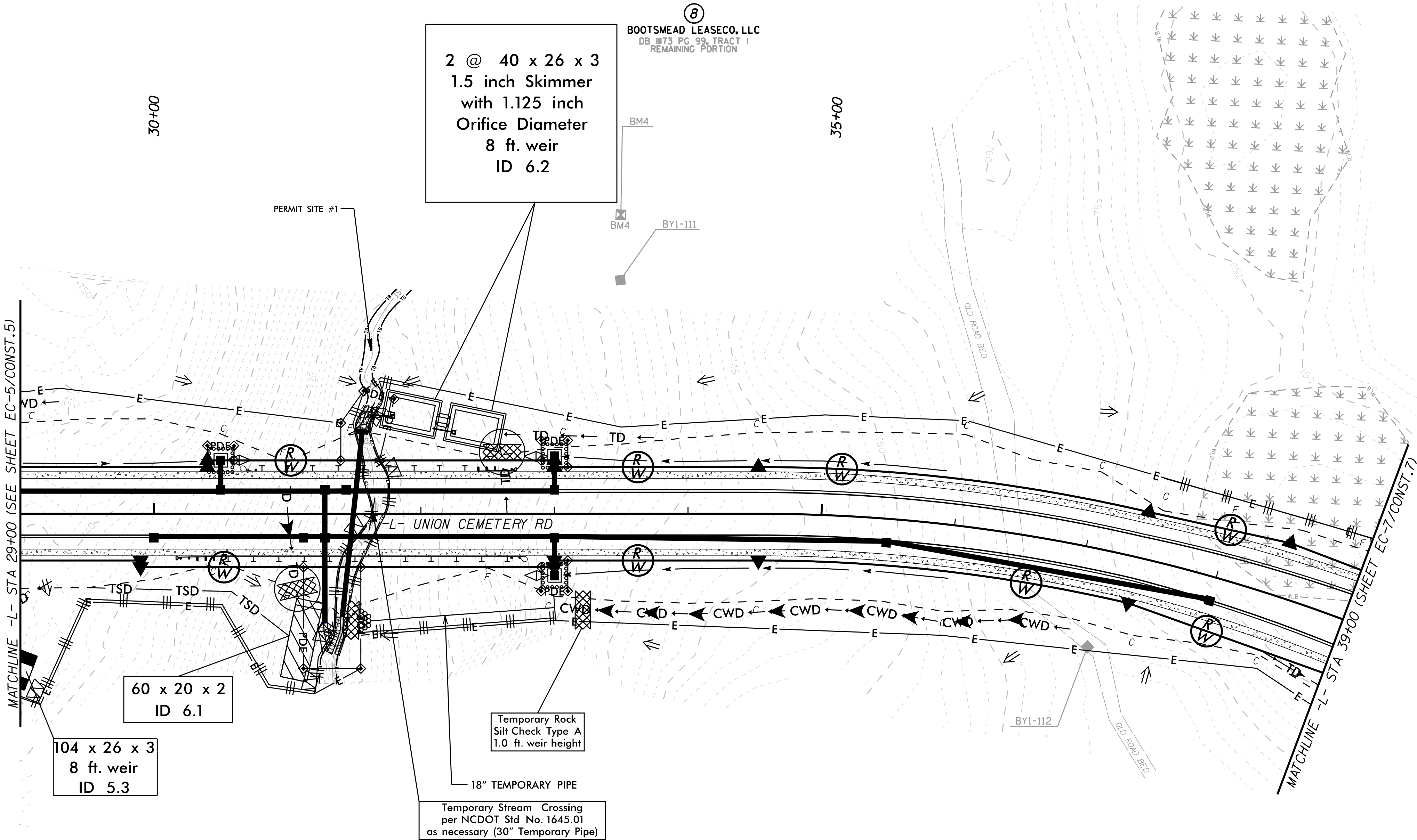
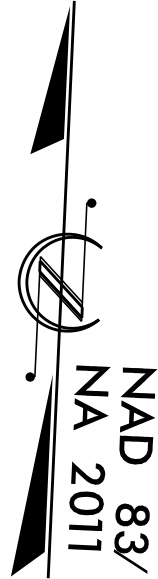
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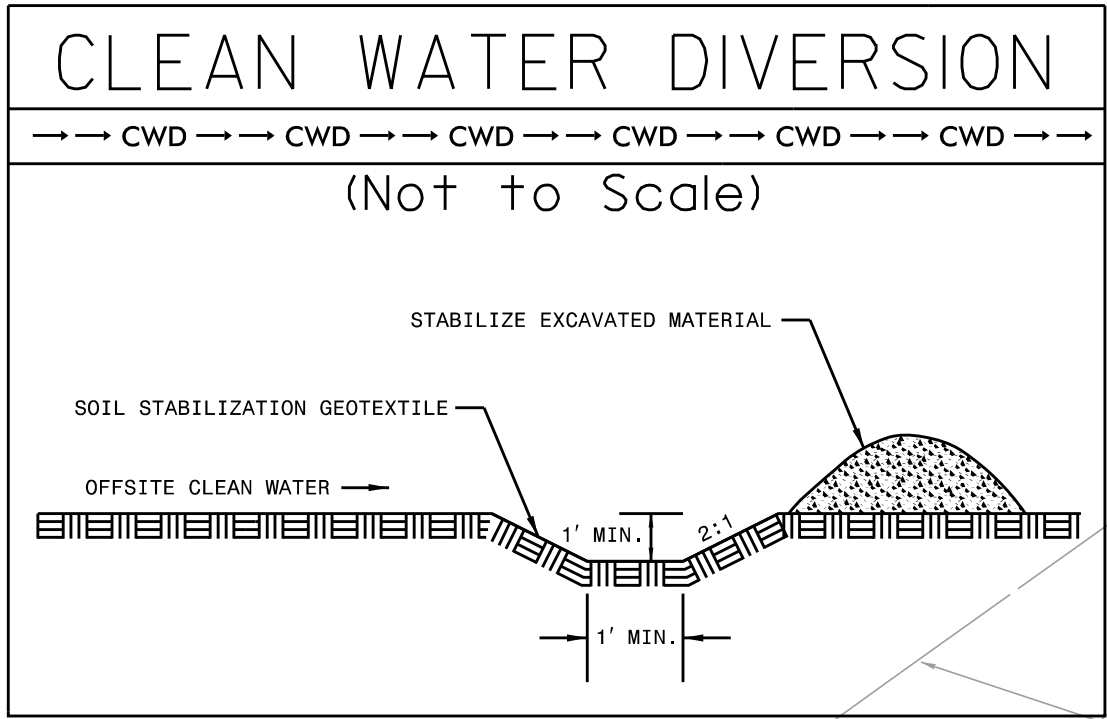
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200 SOUTH TRYON, SUITE 200
CHARLOTTE, N.C. 28202

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6



BOOTSMEAD LEASECO, LLC
DB .III73 PG 99, TRACT I
REMAINING PORTION



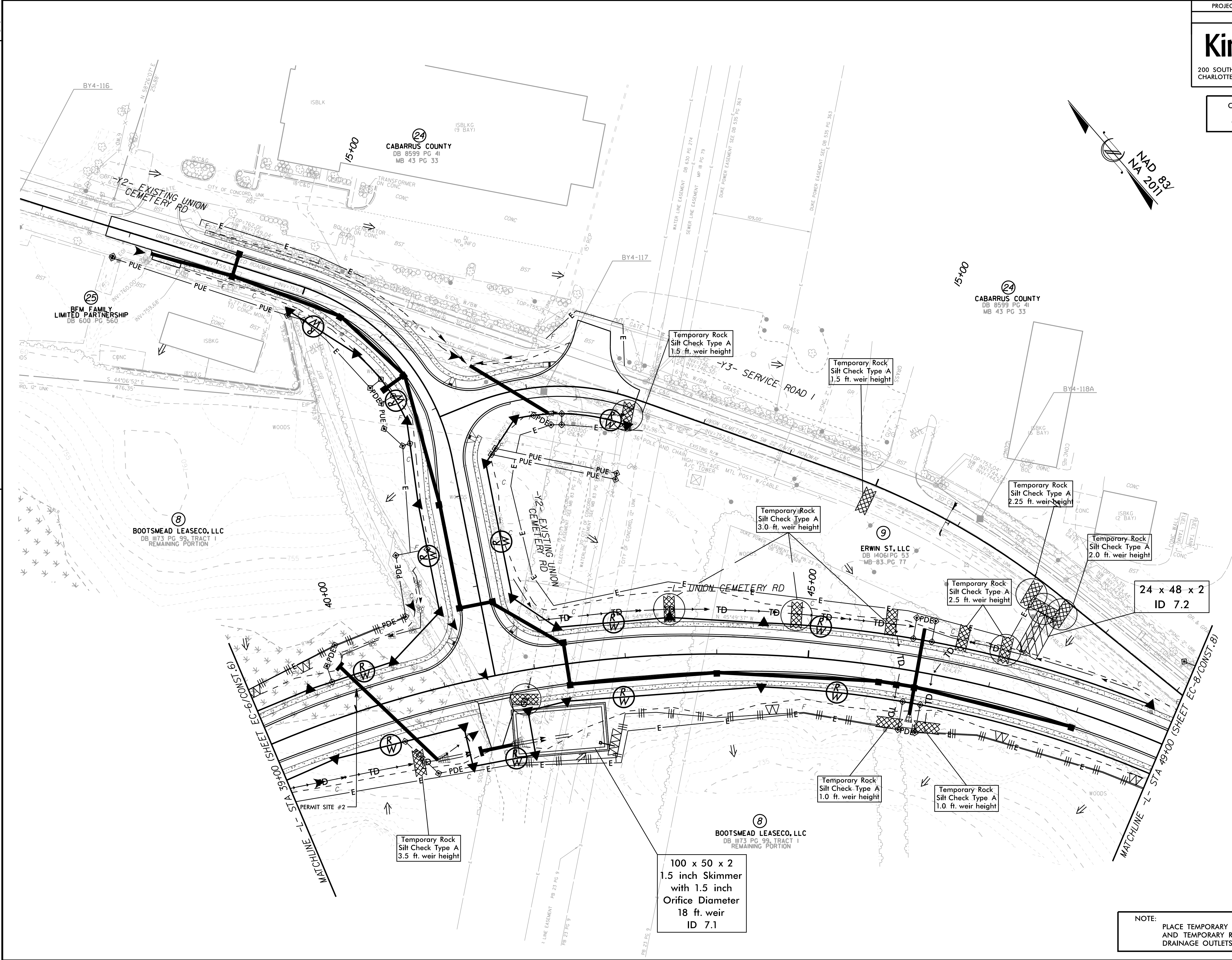
REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
U-5956	EC-7/CONST.7

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200 SOUTH TRYON, SUITE 200
CHARLOTTE, N.C. 28202

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 7



NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

REVISIONS

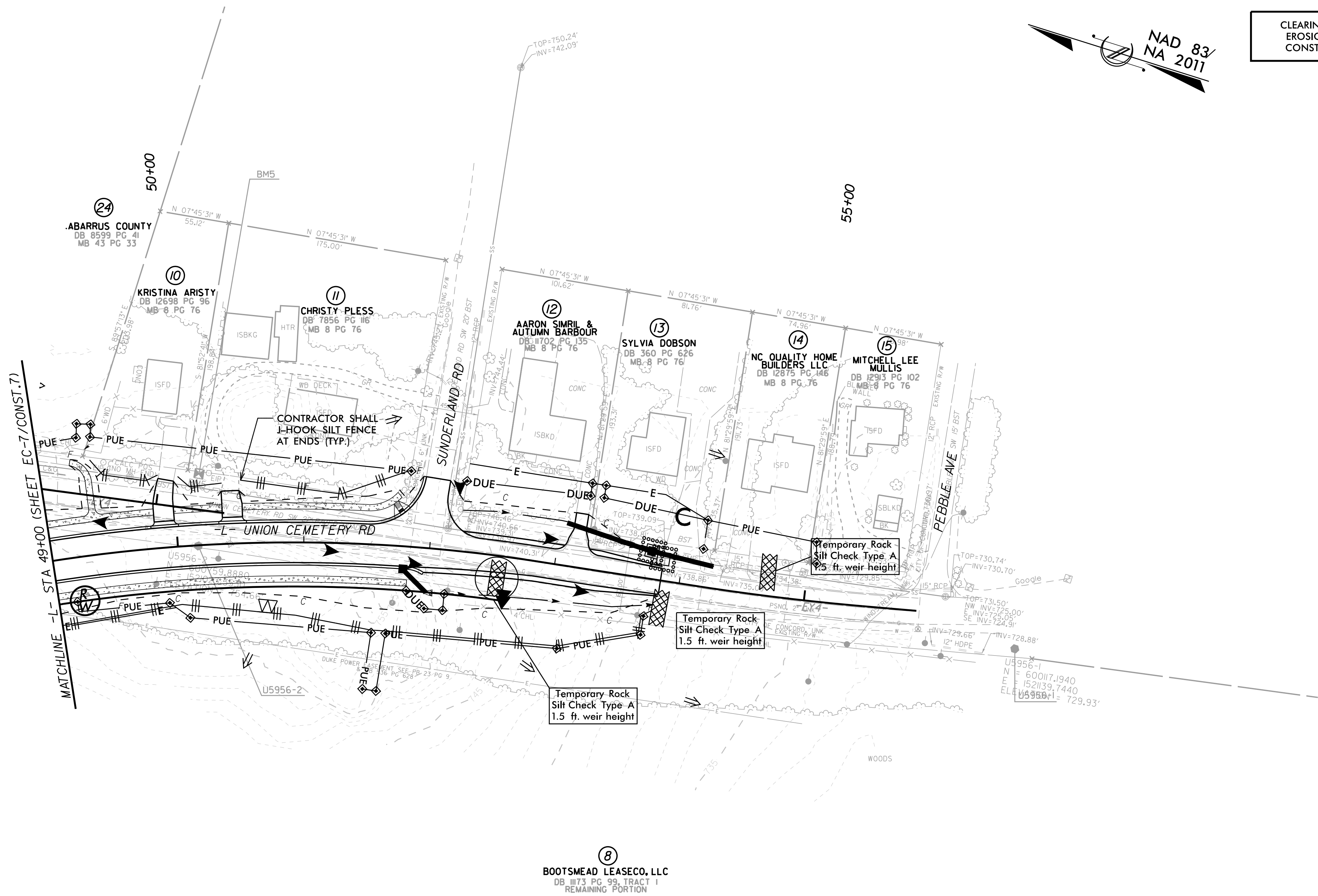
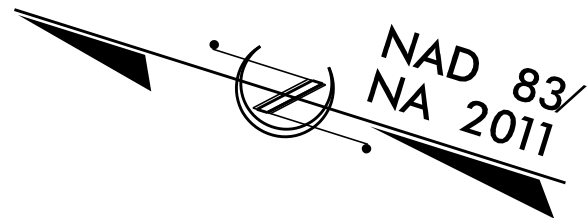
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SHEET NO.
EC-8/CONST.8

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CHARLOTTE, N.C. 28202

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 8



NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

REVISIONS

PROJECT REFERENCE NO.
U-5956

SHEET NO.
EC-9/CONST.9

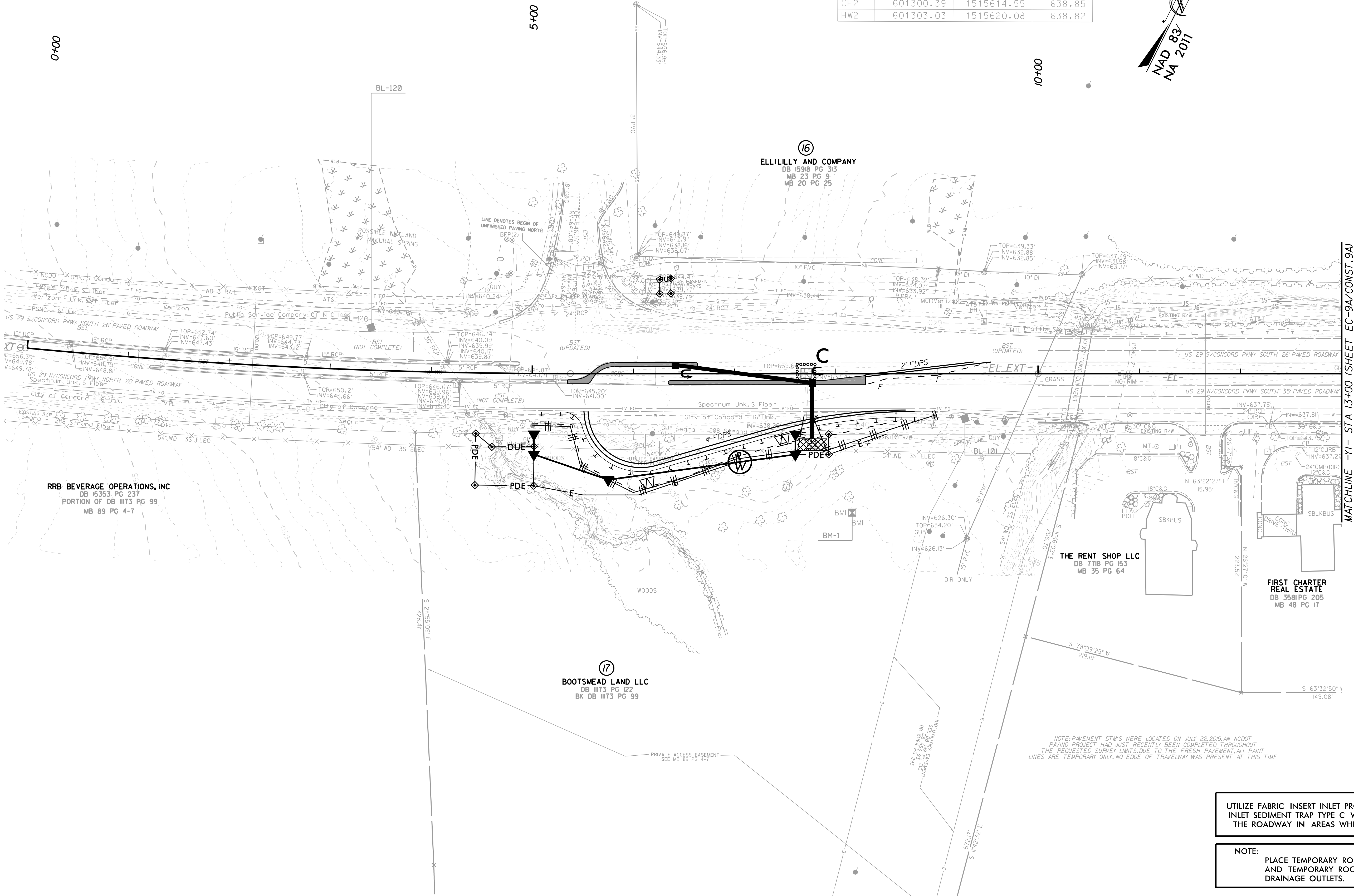
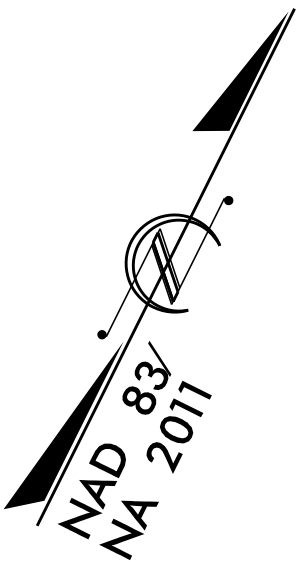
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200 SOUTH TRYON, SUITE 200
CHARLOTTE, N.C. 28202

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 9

CULVERT #1
ONE BARREL

	NORTH	EAST	ELEV.
CUL1	601390.57	1515583.08	631.47
CUL2	601395.08	1515592.11	631.26
CE1	601392.16	1515587.27	640.28
HW1	601389.97	1515583.42	640.21
CUL3	601298.08	1515610.34	630.87
CUL4	601302.05	1515619.01	629.63
CE2	601300.39	1515614.55	638.85
HW2	601303.03	1515620.08	638.82



NOTE: PAVEMENT DTMS WERE LOCATED ON JULY 22, 2019. AN NCDOT PAVING PROJECT HAD JUST RECENTLY BEEN COMPLETED THROUGHOUT THE REQUESTED SURVEY LIMITS. DUE TO THE FRESH PAVEMENT, ALL PAINT LINES ARE TEMPORARY ONLY. NO EDGE OF TRAVELWAY WAS PRESENT AT THIS TIME.

UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C WHERE WATER MAY POND ON THE ROADWAY IN AREAS WHERE LIVE TRAFFIC IS PRESENT.

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

REVISIONS

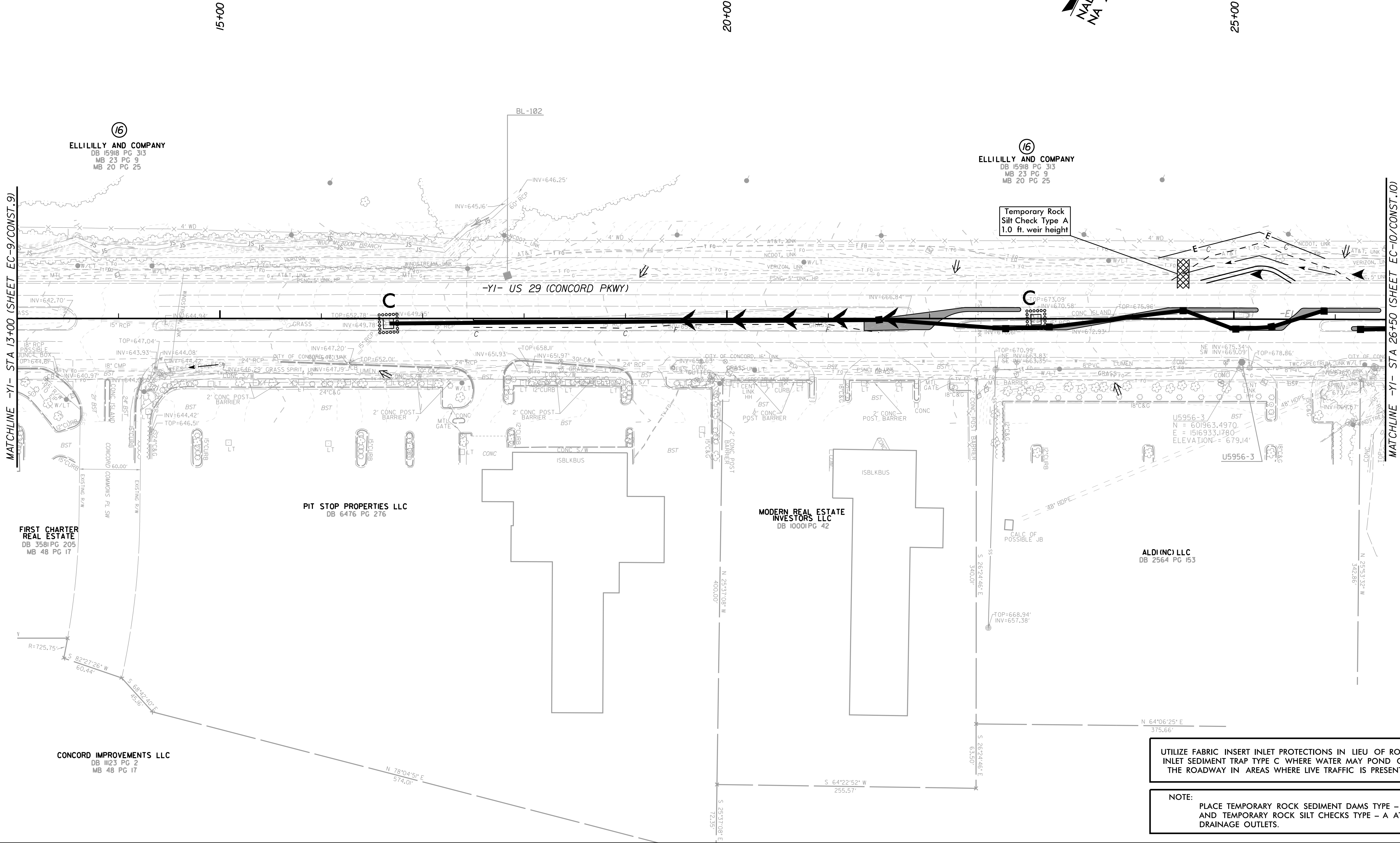
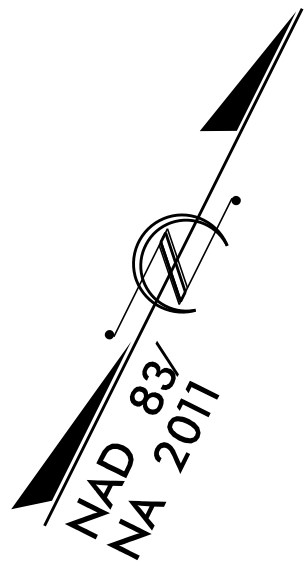
PROJECT REFERENCE NO.
U-5956

SHEET NO.
EC-9A/CONST.9A

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200 SOUTH TRYON, SUITE 200
CHARLOTTE, N.C. 28202

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 9A



UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C WHERE WATER MAY POND ON THE ROADWAY IN AREAS WHERE LIVE TRAFFIC IS PRESENT.

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

REVISIONS

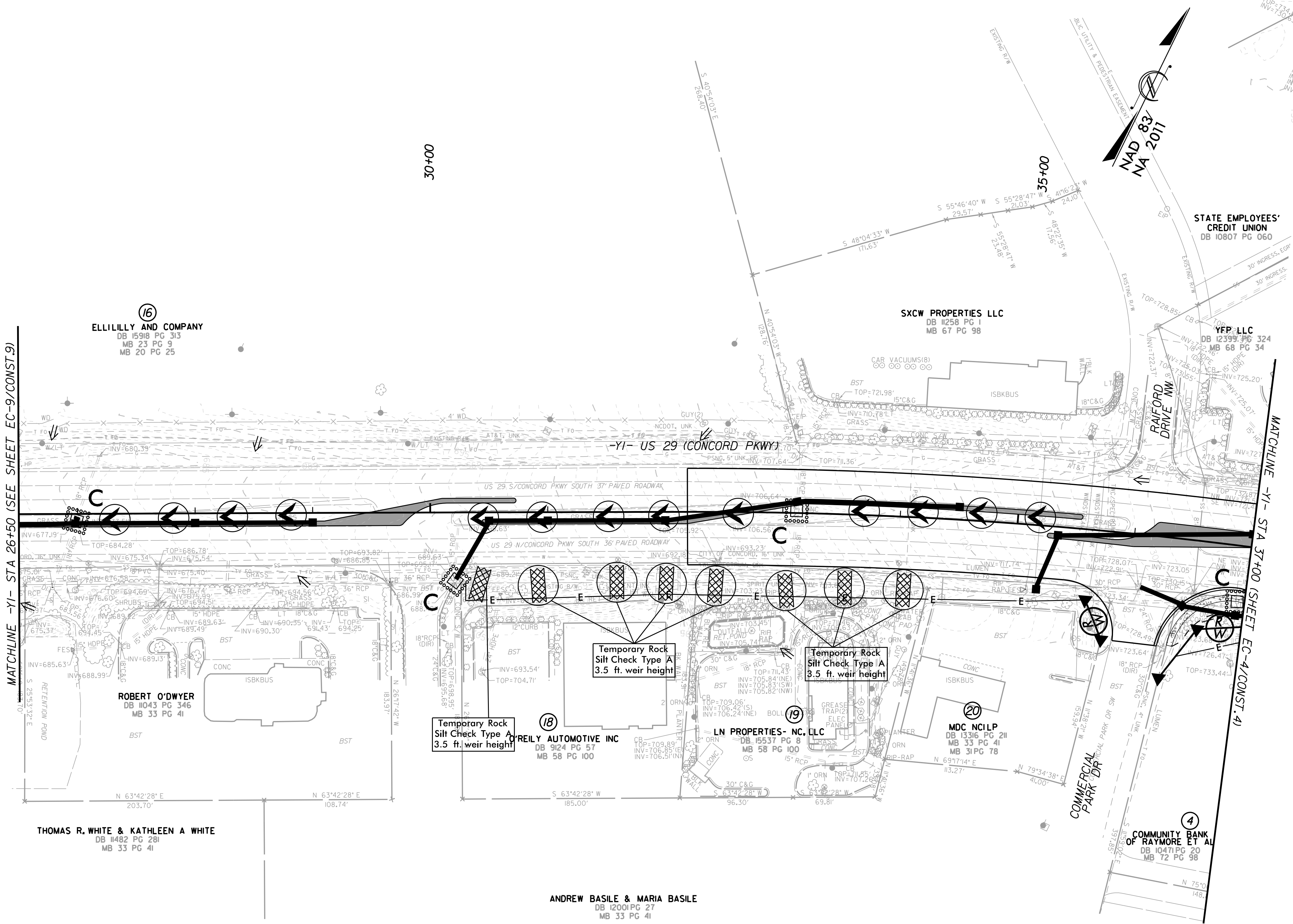
PROJECT REFERENCE NO.
U-5956

SHEET NO.
EC-10/CONST.10

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200 SOUTH TRYON, SUITE 200
CHARLOTTE, N.C. 28202

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 10



UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C WHERE WATER MAY POND ON THE ROADWAY IN AREAS WHERE LIVE TRAFFIC IS PRESENT.

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

REVISIONS

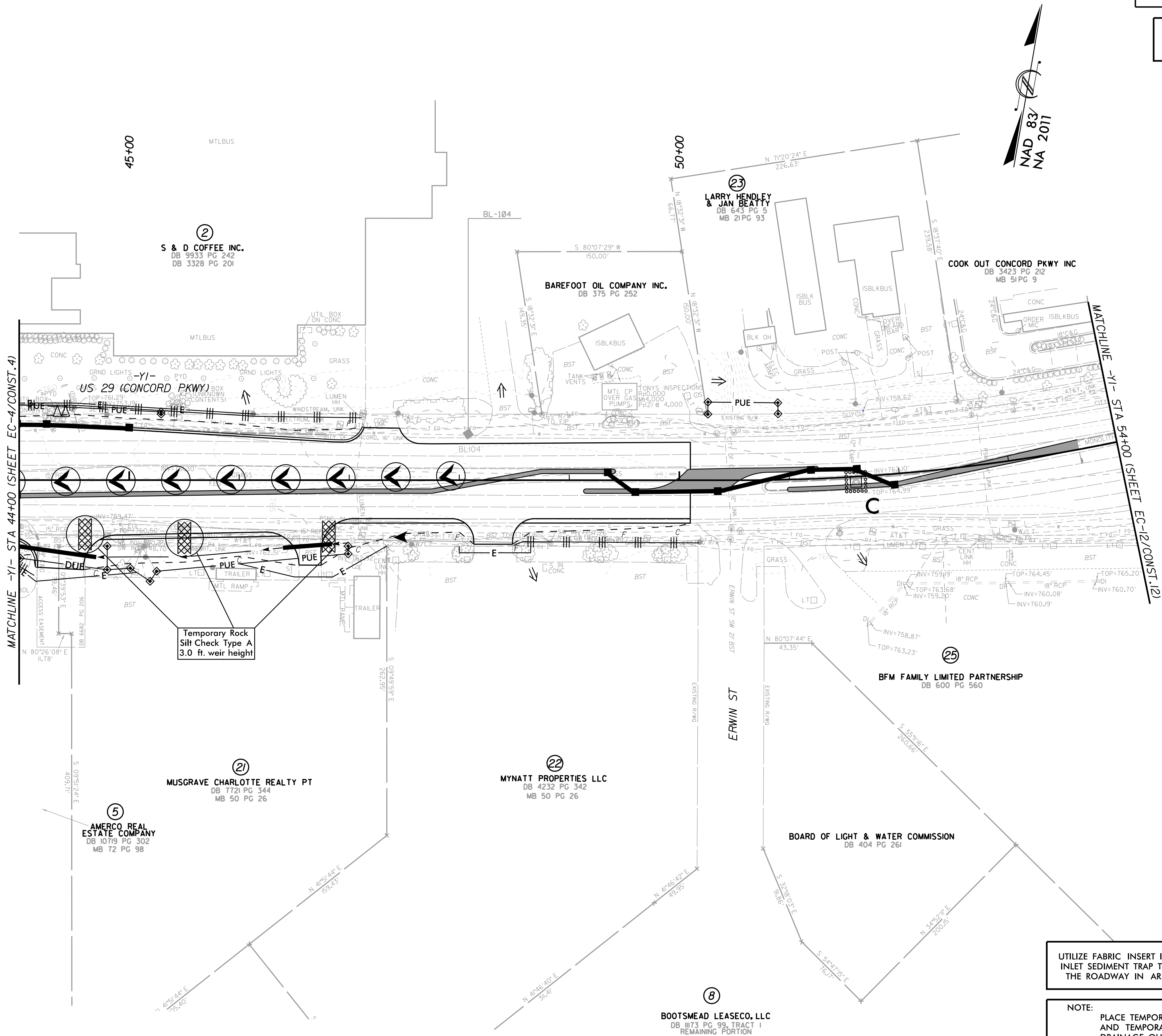
PROJECT REFERENCE NO.
U-5956

SHEET NO.
EC-11/CONST.11

Kimley»Horn

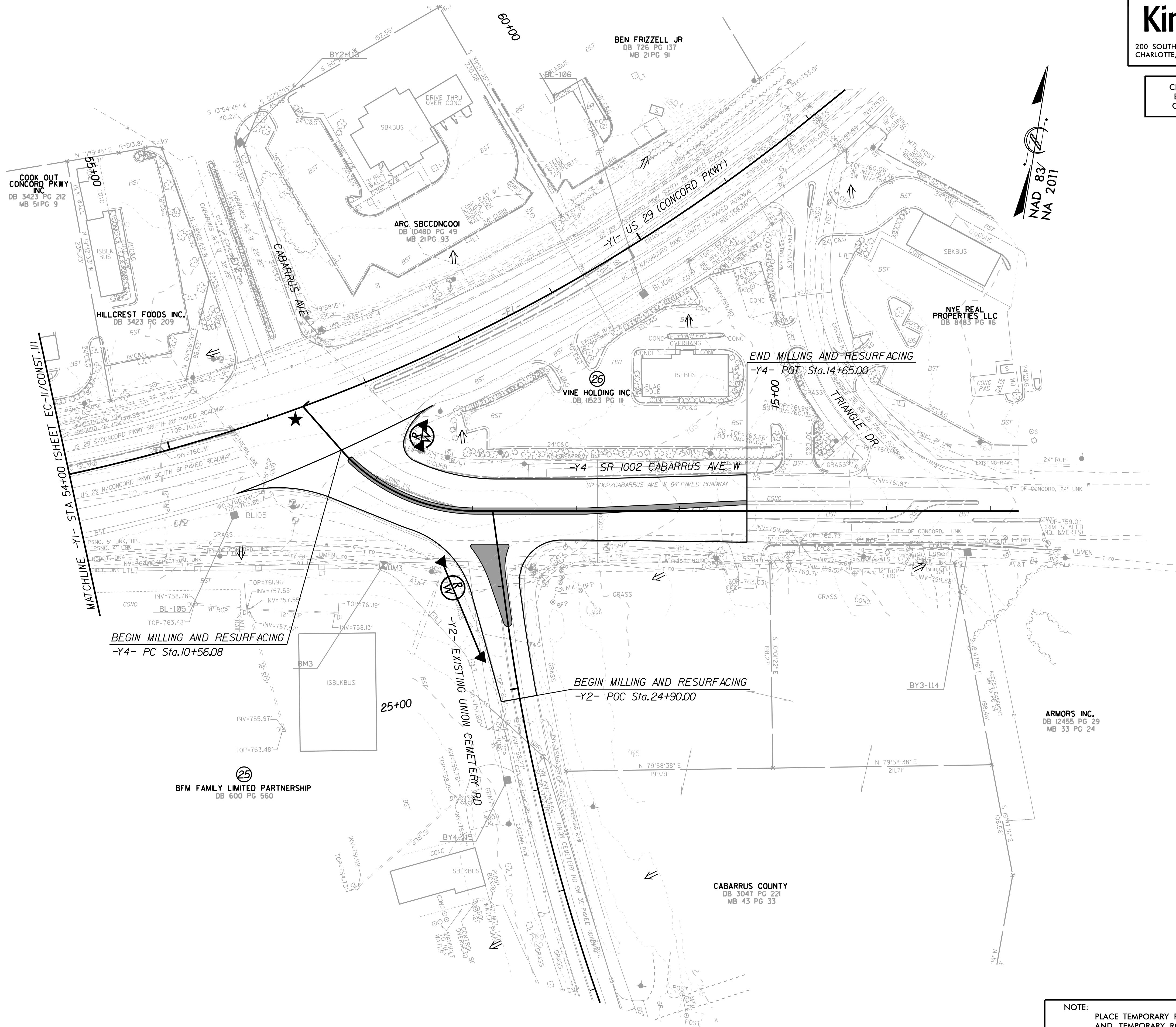
200 SOUTH TRYON, SUITE 200
CHARLOTTE, N.C. 28202

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 11



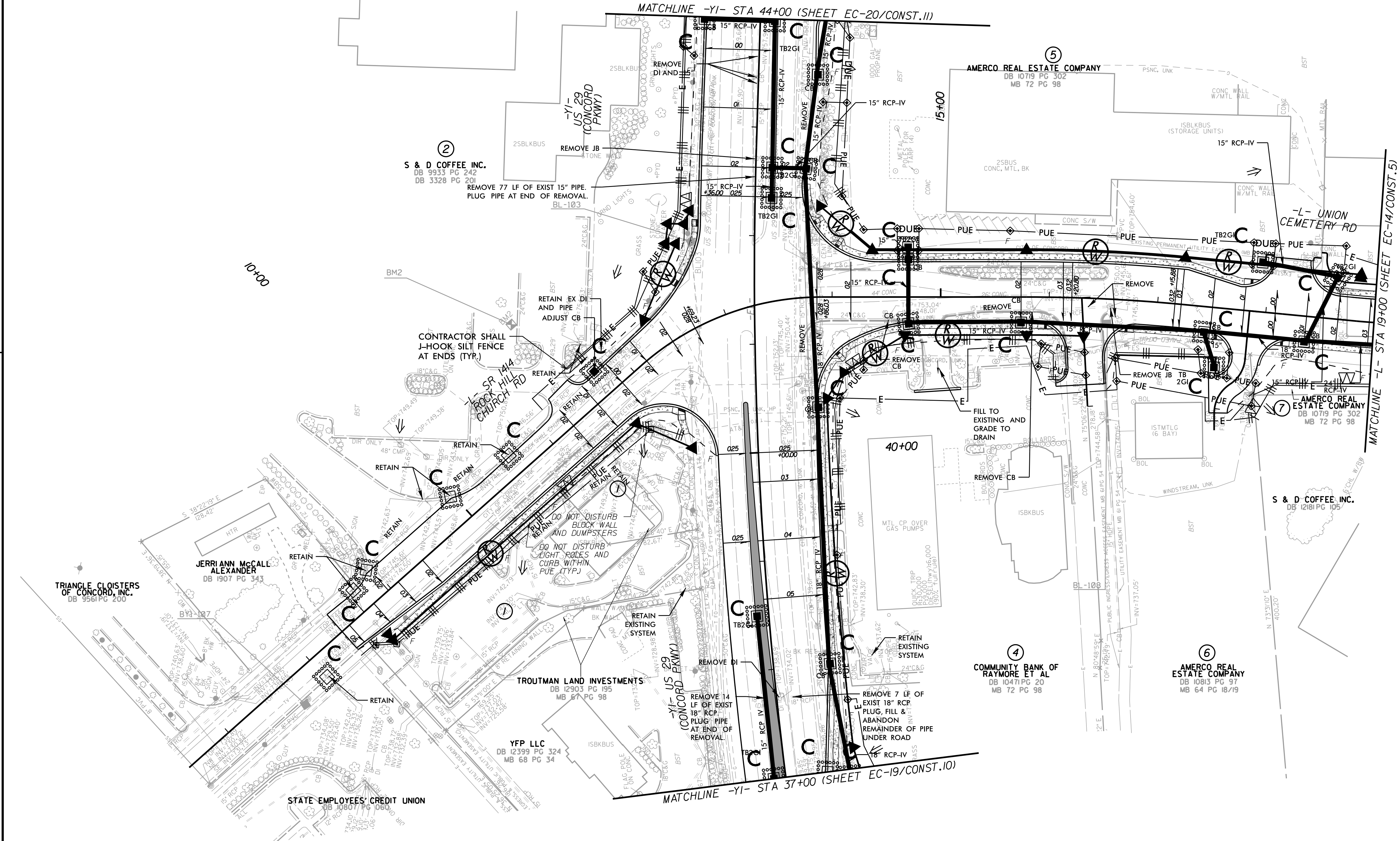
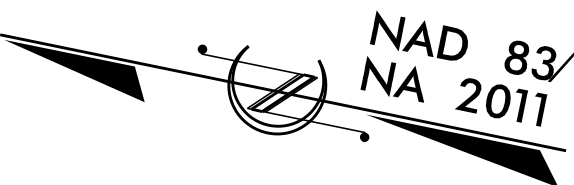
UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK
INLET SEDIMENT TRAP TYPE C WHERE WATER MAY POND ON
THE ROADWAY IN AREAS WHERE LIVE TRAFFIC IS PRESENT.

NOTE:
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AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

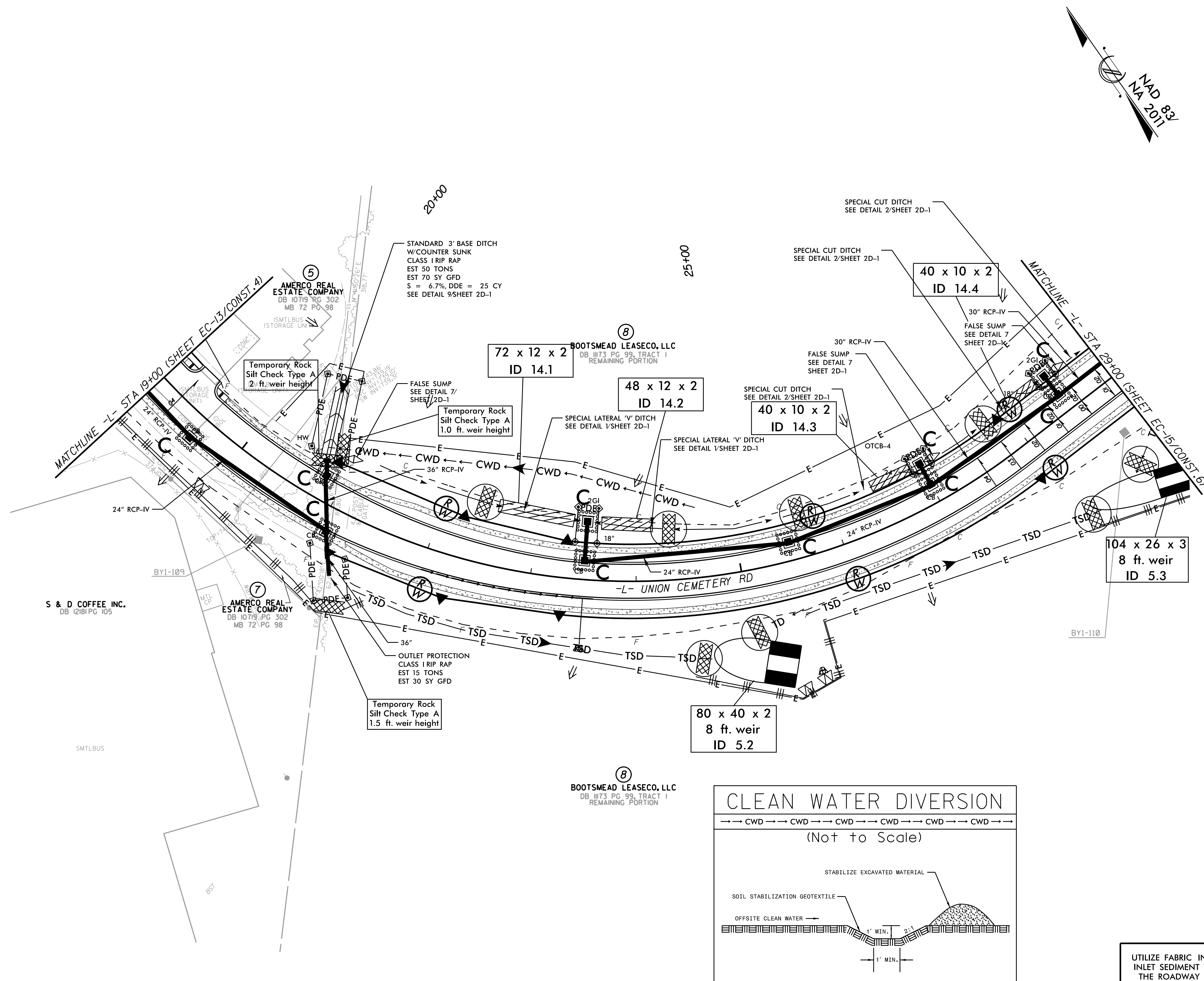


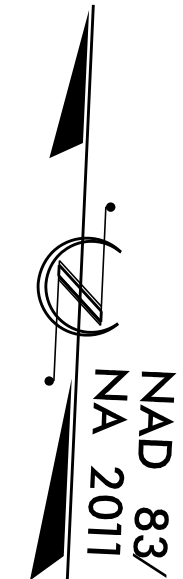
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

REVISIONS



UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C WHERE WATER MAY POND ON THE ROADWAY IN AREAS WHERE LIVE TRAFFIC IS PRESENT.



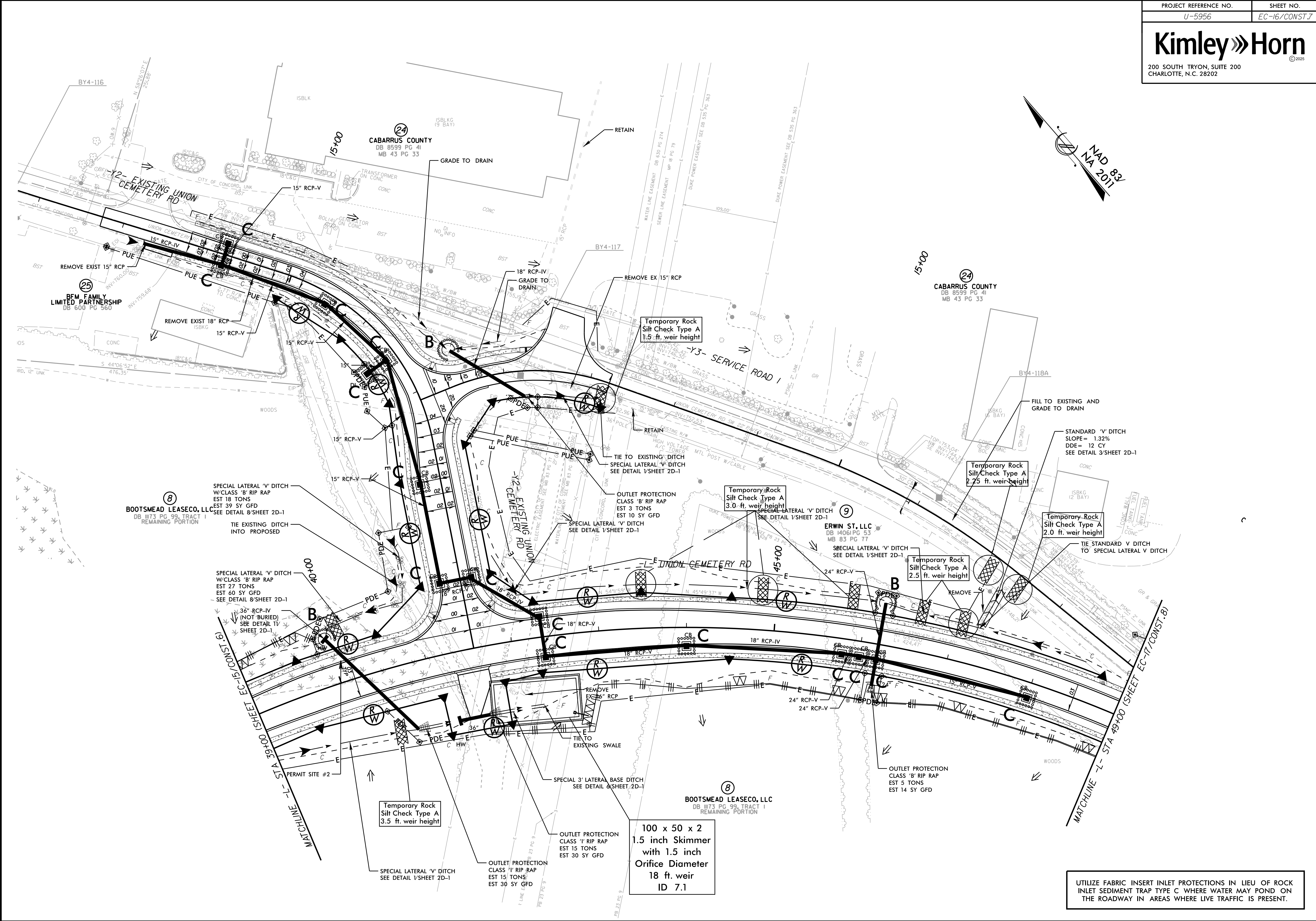


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REVISIONS

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10/14/2025

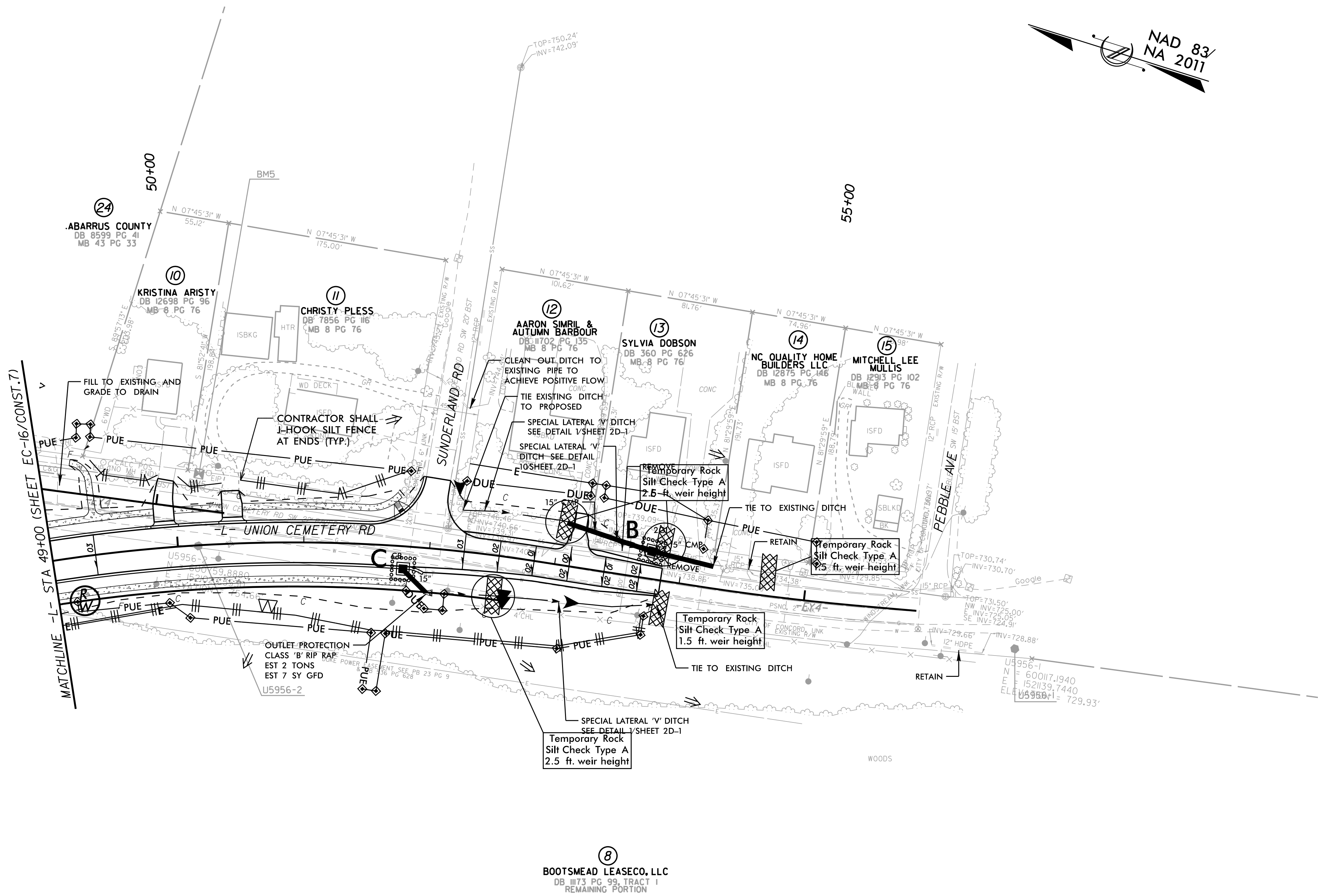


REVISIONS

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10/14/2025

5/14/99



UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C WHERE WATER MAY POND ON THE ROADWAY IN AREAS WHERE LIVE TRAFFIC IS PRESENT.

REVISIONS

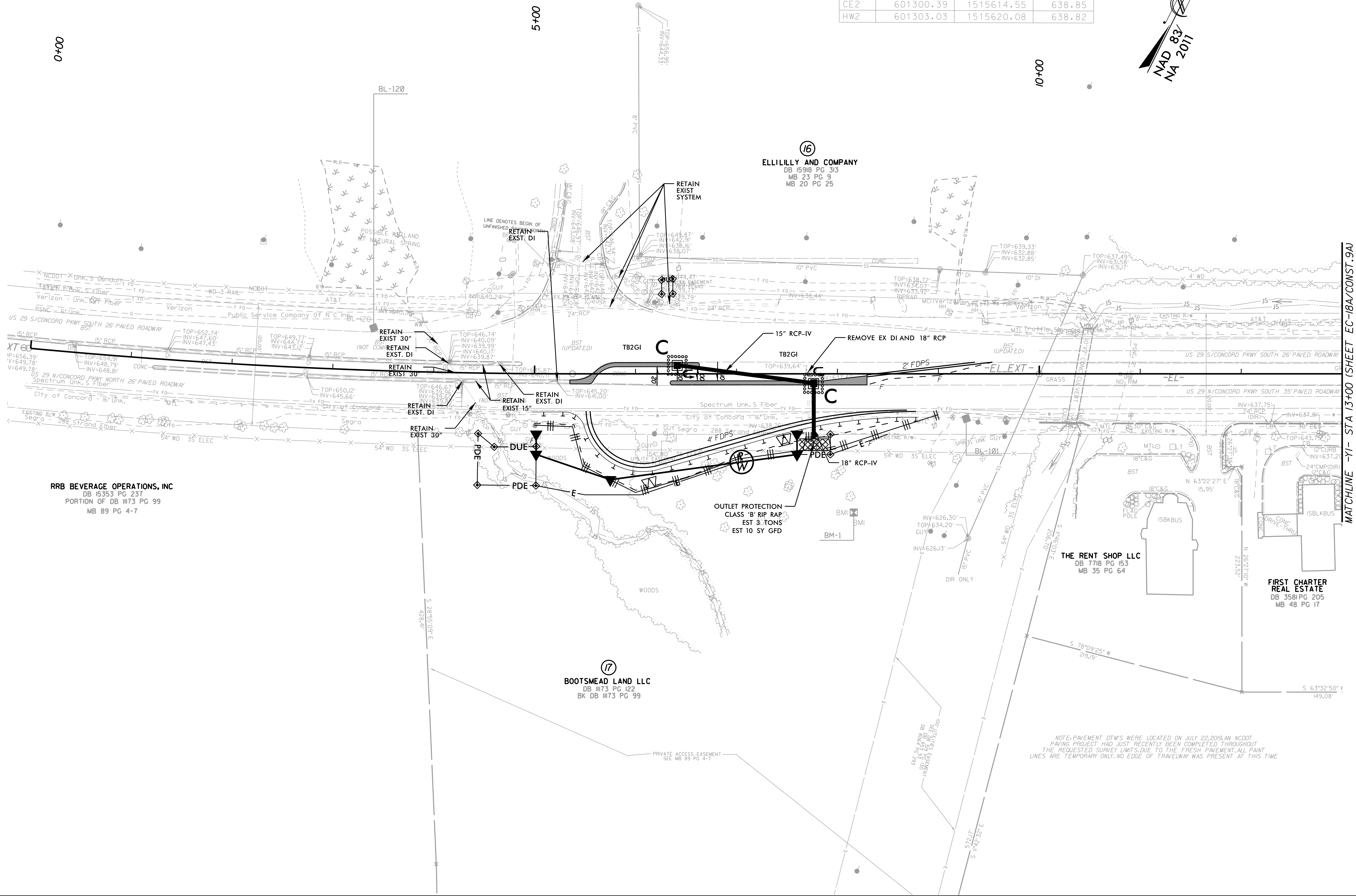
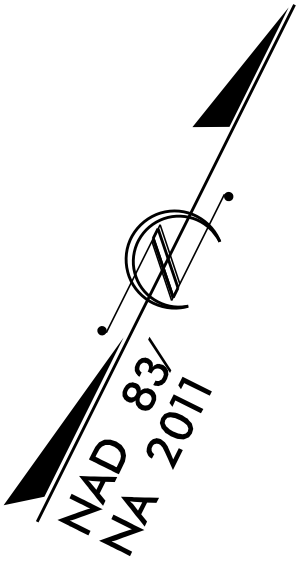
PROJECT REFERENCE NO.
U-5956

SHEET NO.
EC-18/CONST.9

Kimley»Horn

200 SOUTH TRYON, SUITE 200
CHARLOTTE, N.C. 28202

	NORTH	EAST	ELEV.
CUL1	601390.57	1515583.08	631.47
CUL2	601395.08	1515592.11	631.26
CE1	601392.16	1515587.27	640.28
HW1	601389.97	1515583.42	640.21
CUL3	601298.08	1515610.34	630.87
CUL4	601302.05	1515619.01	629.63
CE2	601300.39	1515614.55	638.85
HW2	601303.03	1515620.08	638.82

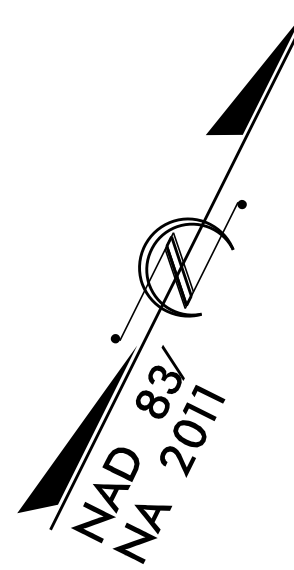


NOTE: PAVEMENT DTW'S WERE LOCATED ON JULY 22, 2019. AN NCDOT PAVING PROJECT HAD JUST RECENTLY BEEN COMPLETED THROUGHOUT THE REQUESTED SURVEY LIMITS. DUE TO THE FRESH PAVEMENT, ALL PAINT LINES ARE TEMPORARY ONLY. NO EDGE OF TRAVELWAY WAS PRESENT AT THIS TIME.

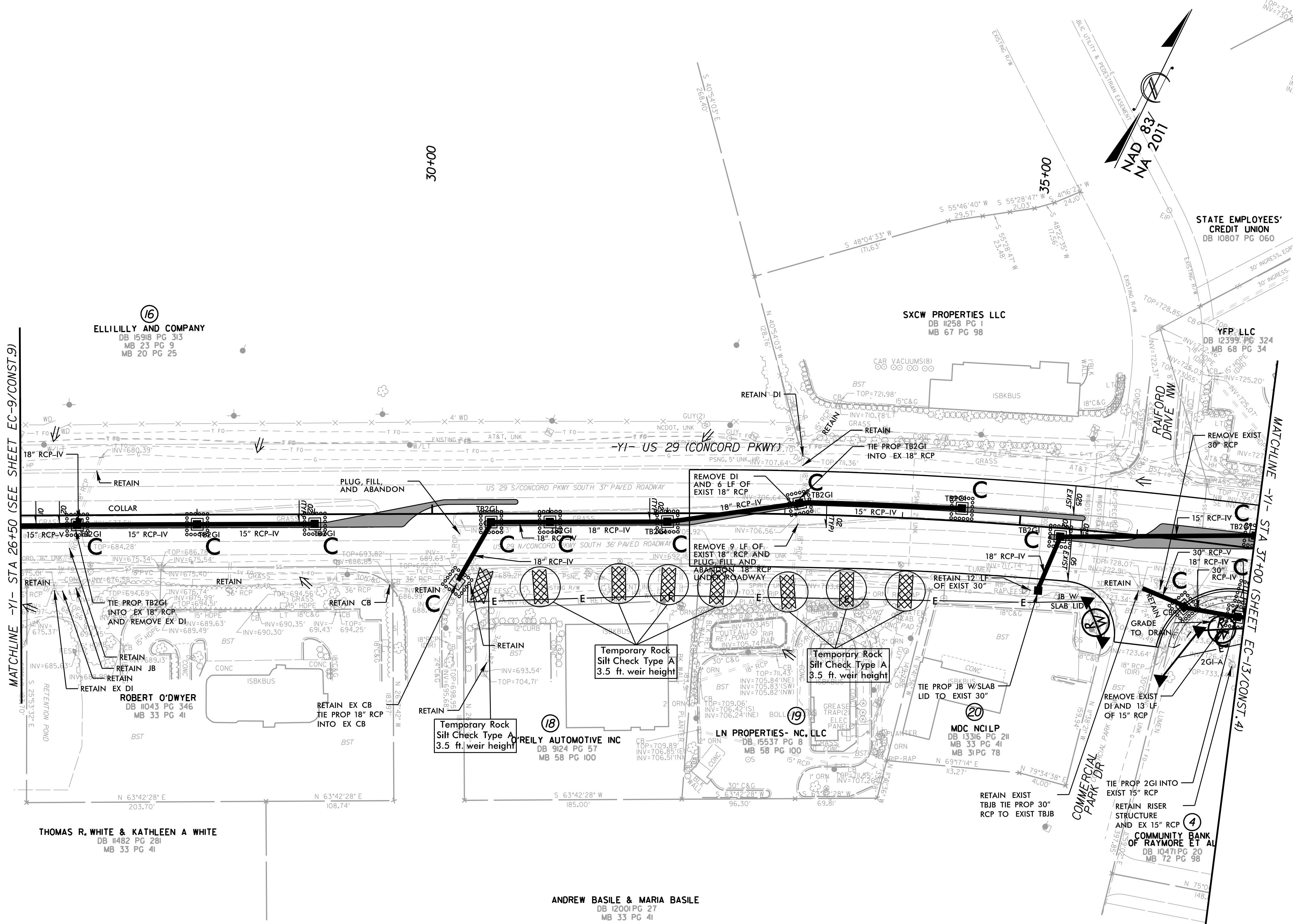
PROJECT REFERENCE NO.	SHEET NO.
U-5956	EC-18A/CONST.9A

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200 SOUTH TRYON, SUITE 200
CHARLOTTE, N.C. 28202



UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK
INLET SEDIMENT TRAP TYPE C WHERE WATER MAY POND ON
THE ROADWAY IN AREAS WHERE LIVE TRAFFIC IS PRESENT.



UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C WHERE WATER MAY POND ON THE ROADWAY IN AREAS WHERE LIVE TRAFFIC IS PRESENT.

REVISIONS

5/14/99

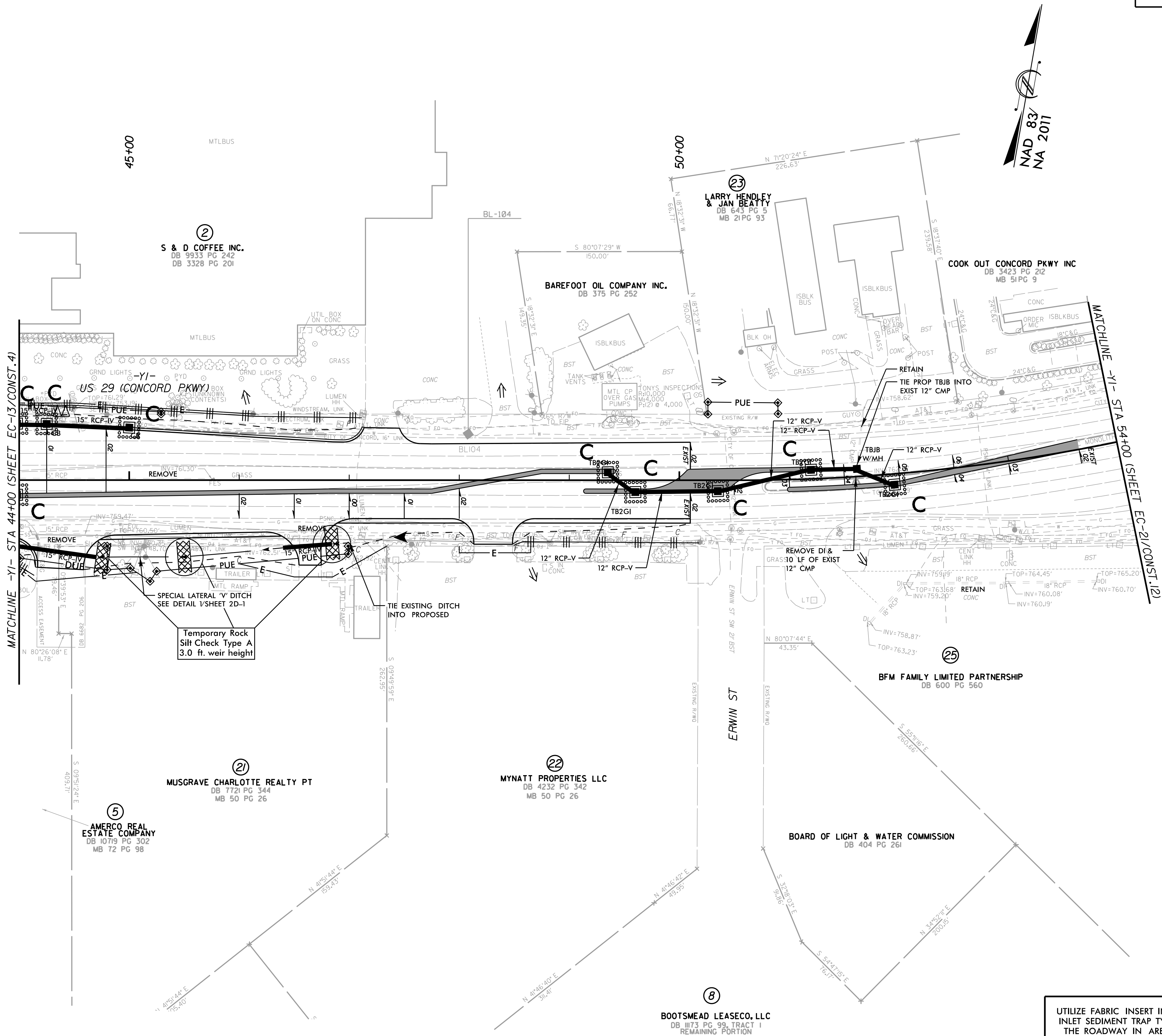
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10/14/2025

PROJECT REFERENCE NO.	SHEET NO.
U-5956	EC-20/CONST.II

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200 SOUTH TRYON, SUITE 200
CHARLOTTE, N.C. 28202



UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C WHERE WATER MAY POND ON THE ROADWAY IN AREAS WHERE LIVE TRAFFIC IS PRESENT.

REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
U-5956	EC-21/CONST.12

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