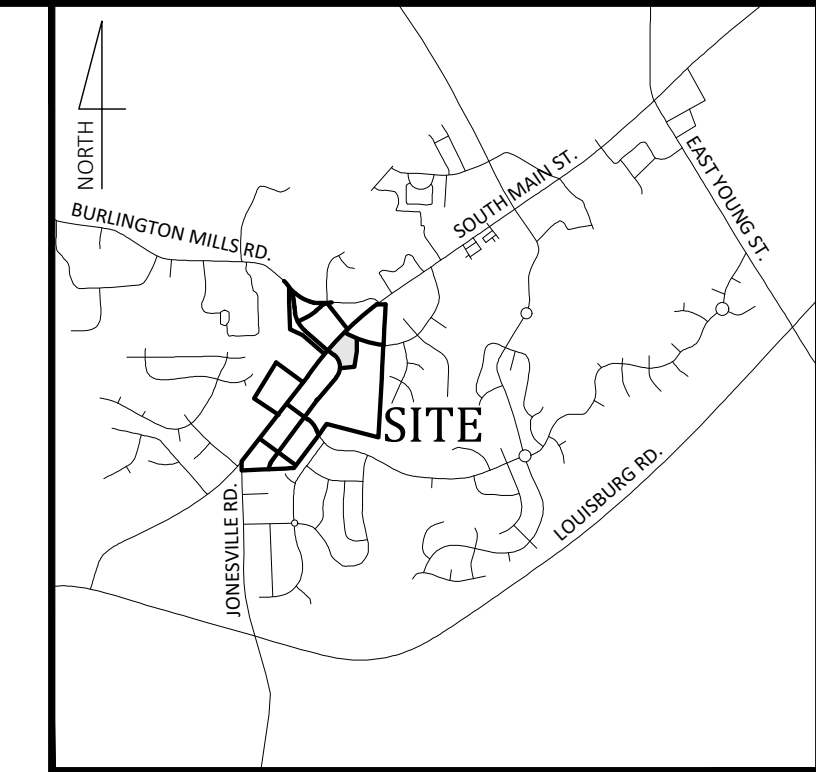


MASS GRADING / EROSION CONTROL WALLBROOK - Lot 7

S. Main St. / US-401 Business & Wall Creek Drive, Town of Rolesville, Wake County, North Carolina

Project No.: CID 24-_____

V1 - CID-24-02



Vicinity Map
NOT TO SCALE

- Final Drawing -
Issued for Permit
Review Purposes Only

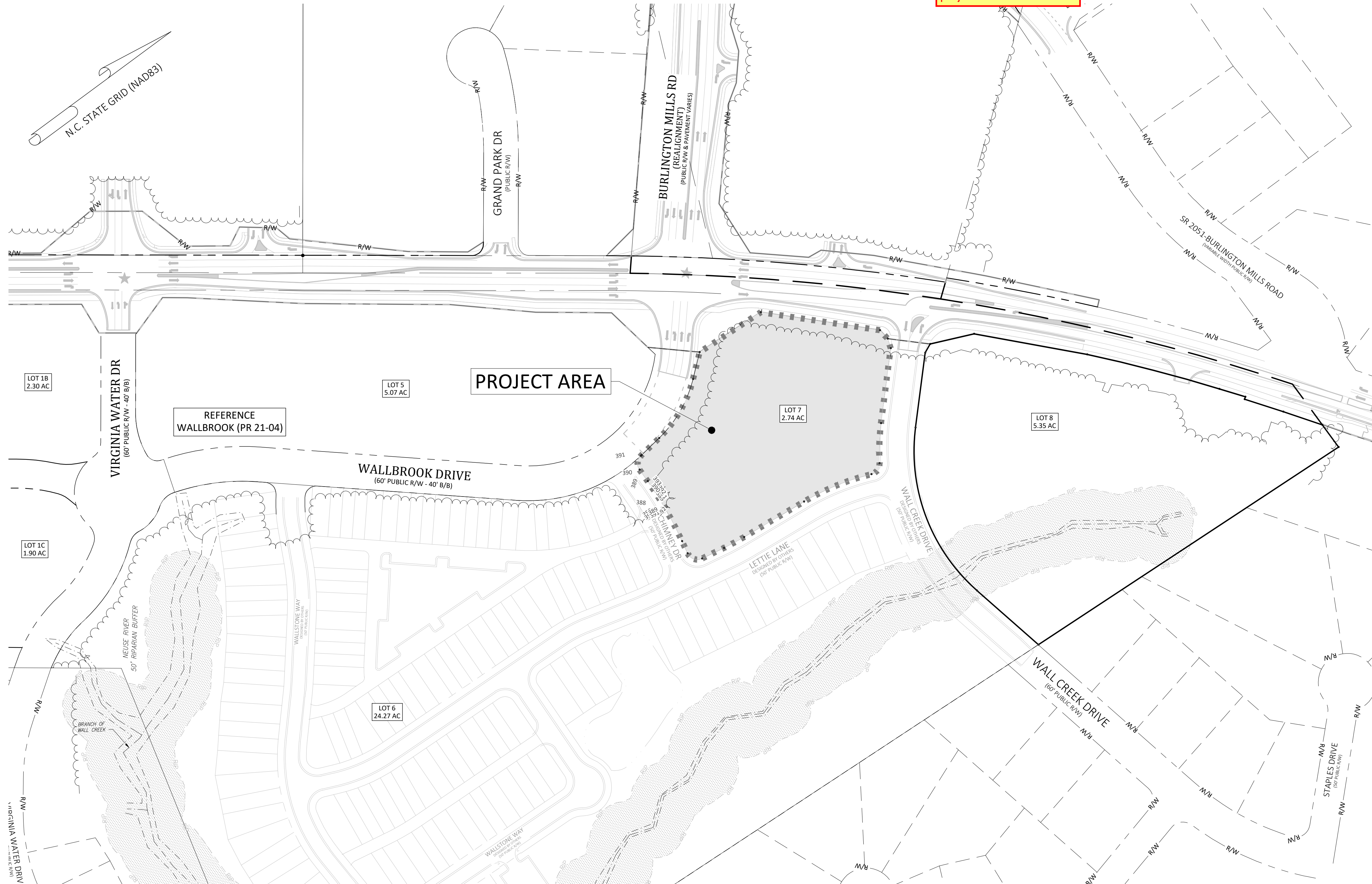
REVISIONS:



COVER
WALLBROOK - LOT 7
MASS GRADING / EROSION CONTROL
Town of Rolesville Project No. CID 24-_____
Rolesville, Wake County, North Carolina

NC License: P-1199
ARK CONSULTING GROUP PLLC
ENGINEERS & PLANNERS
2755-B Charles Blvd
Greenville, NC 27638
(757) 558-0888
www.arkconsultinggroup.com

Project Manager: BCF
Drawn By: DLC
Checked By: TN
Project Number: 24
Drawing Number: D-1471
C0.1
Date: April 1, 2024



Sheet Index

#	Title
△ C0.1	Cover
△ C0.2	Existing Conditions & Demolition Plan
△ C1.0	Erosion Control Notes & Legend
△ C1.1	Erosion Control Phase 1
△ C1.2	Erosion Control Phase 2 & Mass Grading Plan
△ C2.1	Details
△ C2.2	Details
REF	Survey - Johnson, Mirmiran & Thompson (4 Sheets)
REF	Tree Preservation Plan - PR-21-04 REVISED (1 Sheet)

#2 Only three sheets were included in this plan set; include the fourth sheet or update the index

Site Data

PIN NUMBERS:	1758-57-7481
REAL ESTATE ID:	0509437
CURRENT ZONING:	GC-C2
ACREAGE IN PARCEL:	2.74 ACRES
ACREAGE IN PUBLIC R/W:	0.00 ACRES
TOTAL ACREAGE DISTURBED:	2.30 ACRES
WATERSHED:	Lower Neuse
RIVER BASIN:	Neuse
CURRENT USE:	VACANT / WOODED
EXISTING IMPERVIOUS:	0 SF
PROPOSED IMPERVIOUS:	0 SF
PROPOSED USE(S):	NON-RESIDENTIAL/COMMERCIAL/RETAIL
LOTS IN DEVELOPMENT:	LOT 7
REFERENCES:	DB 018103 PG 01563 BM2023 PG 01602

Owner/Developer

Wallbrook Landco, LLC
3 Keel St, Ste 2
Wrightsville Beach, NC

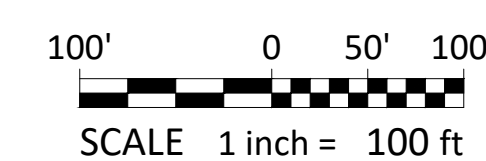
Engineer

Ark Consulting Group, PLLC
2755-B Charles Blvd
Greenville, NC
Contact: Bryan C. Fagundus, PE

EROSION AND SEDIMENT CONTROL
APPROVED PLAN
DATE _____
PERMIT NO. S-_____
Wake County Environmental Services
Sedimentation & Erosion Control
919-856-7400



#1 Update with Rolesville project number



D:\V\B\0909\01 - PROJECTS\EROSION CONTROL\24-02 - WALLBROOK - FINAL\01 - WALLBROOK - EROSION CONTROL - FINAL\01 - WALLBROOK - EROSION CONTROL - FINAL.dwg, 01/04/2024, 10:00:00 AM, 100% (PLOT)

#3 Erosion control sheets were designed with the use of design contours from adjacent projects (Wallbrook Townhomes CID 22-04 and Publix at Wallbrook CID 23-01). If these will be the existing conditions during construction for Lot 7 they should also be shown on sheet C0.2 sheet for consistency.

#4 Label Grand Park Dr ROW width

#4 Label existing ROW, name and width

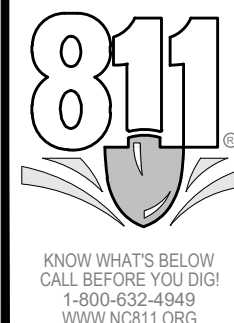
#5 Provide property information for Lot 5

#6 Provide label for existing OHE easement including, DB, PG # and type.

#8 Adjust contour labels to allow for legibility

#7 Label existing TCE with NCDOT Proj. # as seen on sheets 1.1 and 1.2

#9 Label creek and buffer



GRID (NAD83)
GRAND PARK DR (PUBLIC R/W)
ZONED CC-CZ
DB 1200 PG 1039
PIN# 1758-57-1481
COMMERCIAL

WALLBROOK LANDCO LLC
DB 1780 PG 1550
BM 1780 PG 1552
PIN# 1758-58-2090
(NO ADDRESS LISTED)
7.07 ACRES
ZONED: CC-CZ

MICHELLE H. GAY, TRUSTEE
DB 15275 PG 1750
LOT 2-4
BM 1508 PG 187
PIN# 1758-58-7077
ZONED: CC-CZ
NON-RESIDENTIAL

WALLBROOK LANDCO LLC
DB 18103 PG 1563
BM 2023 PG 1600
DB 18992 PG 416
PIN# 1758-56-9725
24.27 ACRES
ZONED: CC-CZ

REMOVE EXISTING CHIMNEY AND
SAVE MATERIALS FOR FUTURE USE
STORE CHIMNEY REMAINS
REMOVE/
ABANDON
OLD WELL

WALLBROOK LANDCO LLC
DB 18103 PG 1563
BM 2023 PG 1600
DB 18992 PG 416
PIN# 1758-57-7841
ZONED: G4512Z
2.74 ACRES

PROPERTY COVERED WITH MIX OF PINE
AND HARDWOOD DECIDUOUS TREES
CLEAR EXISTING WOODS (P)

WALLBROOK LANDCO LLC
DB 18103 PG 1563
BM 2023 PG 1600
DB 18992 PG 416
PIN# 1758-67-1871
5.35 ACRES
ZONED: CC-CZ

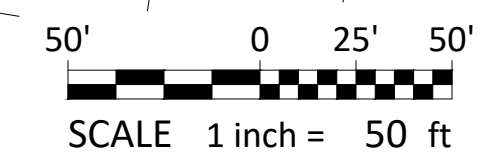
TREE PRESERVATION AREA
70,132.0 SF (1.6 AC±)

MICHELLE R. WILLIAMS &
STEVEN A. WILLIAMS
DB 15754 PG 156
LOT 102
ZONED R & PUD
BM 1997 PG 1162
PIN# 1758-67-5529
RESIDENTIAL

RODERICK BLACKWELL &
CHRISTINE BLACKWELL
DB 8763 PG 1894
LOT 101
ZONED R & PUD
BM 1997 PG 1162
PIN# 1758-67-6638
RESIDENTIAL

CHARLES CALBERTSON &
THERESE CALBERTSON
DB 17935 PG 896
LOT 96
ZONED R & PUD
BM 1997 PG 1162
PIN# 1758-67-4619
RESIDENTIAL

ANTONIO G. CATTARUZZA &
SHELBA B. CATTARUZZA
DB 8149 PG 422
LOT 92
ZONED R & PUD
BM 1997 PG 1162
PIN# 1758-67-4446
RESIDENTIAL



- Final Drawing -
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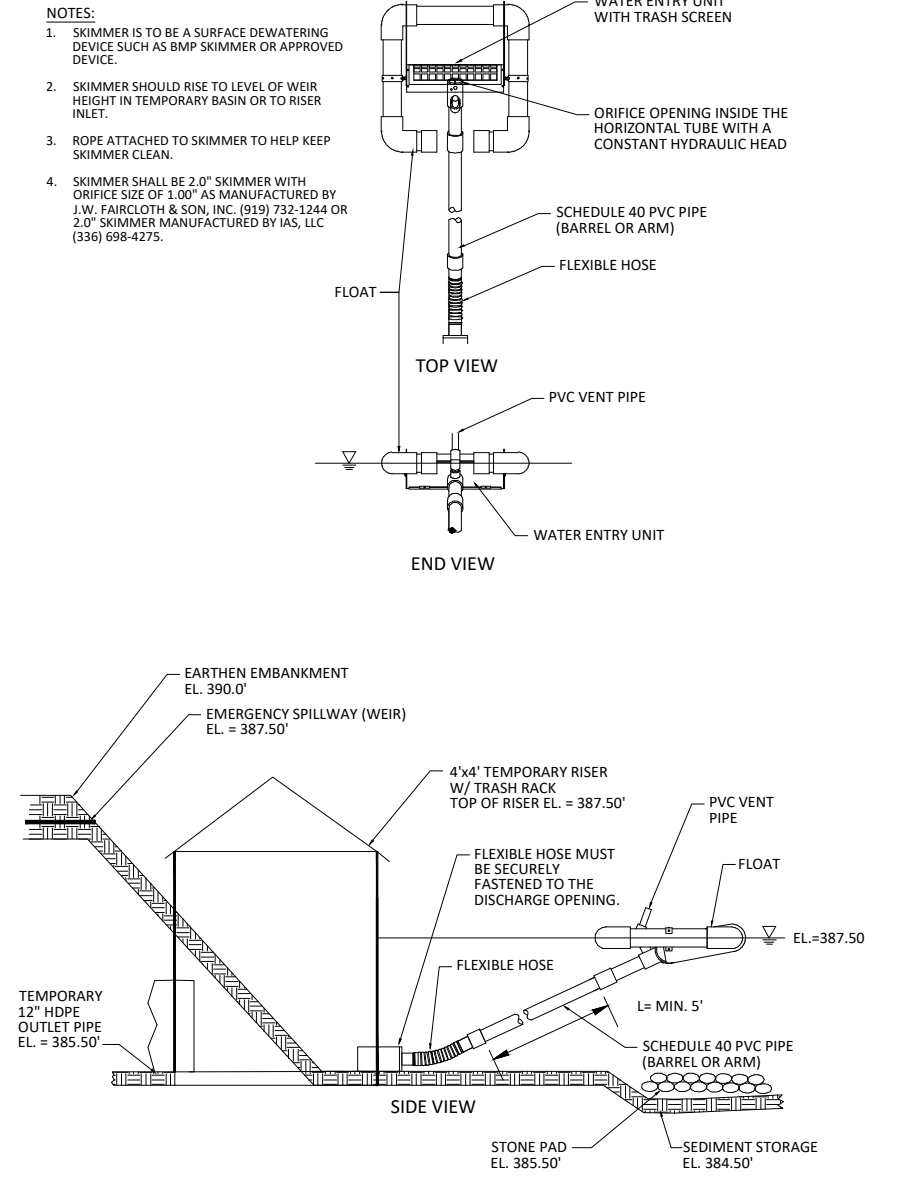
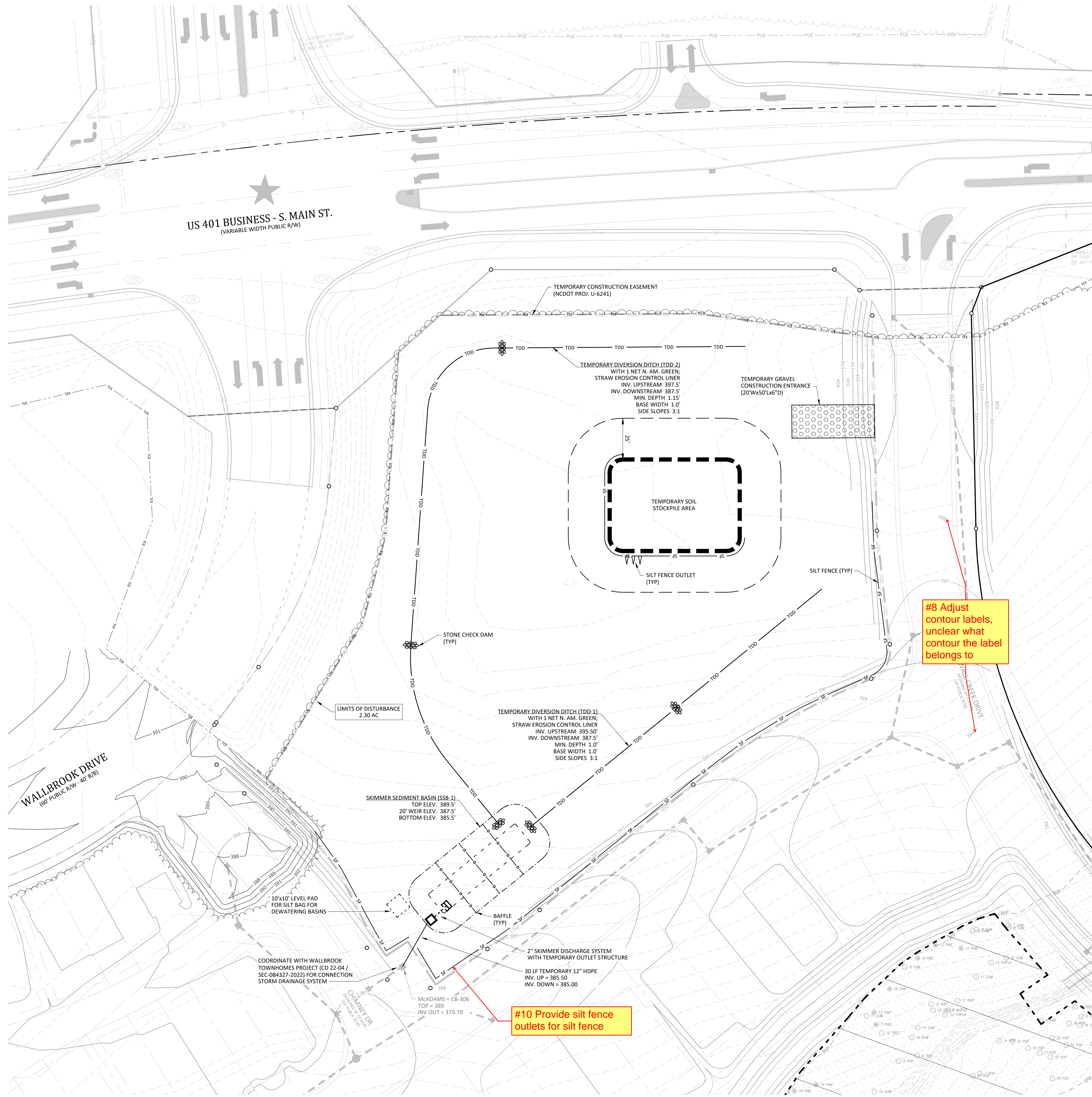
EXISTING CONDITIONS & DEMOLITION PLAN
WALLBROOK - LOT 7
MASS GRADING / EROSION CONTROL
Town of Rolesville Project No. CID 24-
S Main St. / US-401 Business & Wall Creek Drive
Rolesville, Wake County, North Carolina

NC License: P-1109
ARK CONSULTING GROUP PLLC
ENGINEERS & PLANNERS
2755-B Charles Blvd
Charlotte, NC 28205
(754) 558-0888
www.arkconsultinggroup.com

Project Manager: BCF
Drawn By: DLC
Checked By: TN
Project Number: 24
Drawing Number: D-1471

C0.2

Date: April 1, 2024



SKIMMER DISCHARGE SYSTEM WITH OUTLET STRUCTURE FOR SSB-1
NOT TO SCALE

CONTOUR LEGEND

	400	PROPOSED CONTOURS
	400	DESIGN CONTOURS PUBLIX AT WALLBROOK (SDP 23-05 / CID 23-01) (ARK CONSULTING GROUP)
	400	DESIGN CONTOURS WALLBROOK TOWNHOMES (CD 22-04) (MACADAMS CO.)
	400	EXISTING INDEX CONTOUR
	399	EXISTING CONTOUR

#8 Adjust contour labels, unclear what contour the label belongs to

#10 Provide silt fence outlets for silt fence

- Final Drawing -
Issued for Permit
Review Purposes Only

REVISIONS:

#	DATE	DESCRIPTION
1.1	1-APR-24	ISSUED FOR INITIAL REVIEW

CROSLAND SOUTHEAST

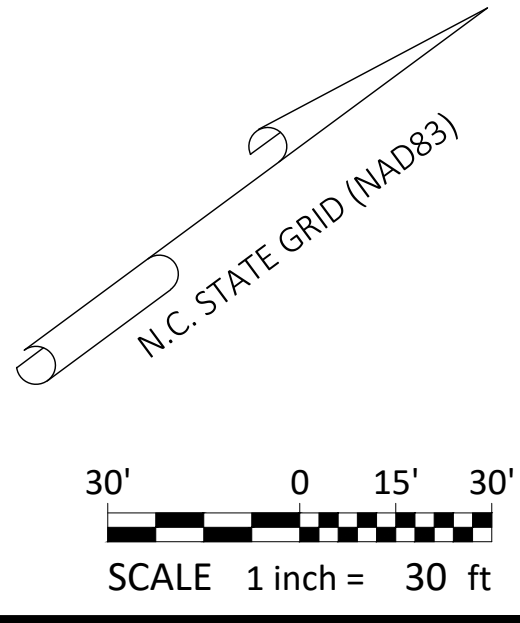
EROSION CONTROL PHASE 1
WALLBROOK - LOT 7
MASS GRADING / EROSION CONTROL
Town of Rolesville Project No. CID 24-
S Main St. / US-401 Business & Wall Creek Drive
Rolesville, Wake County, North Carolina

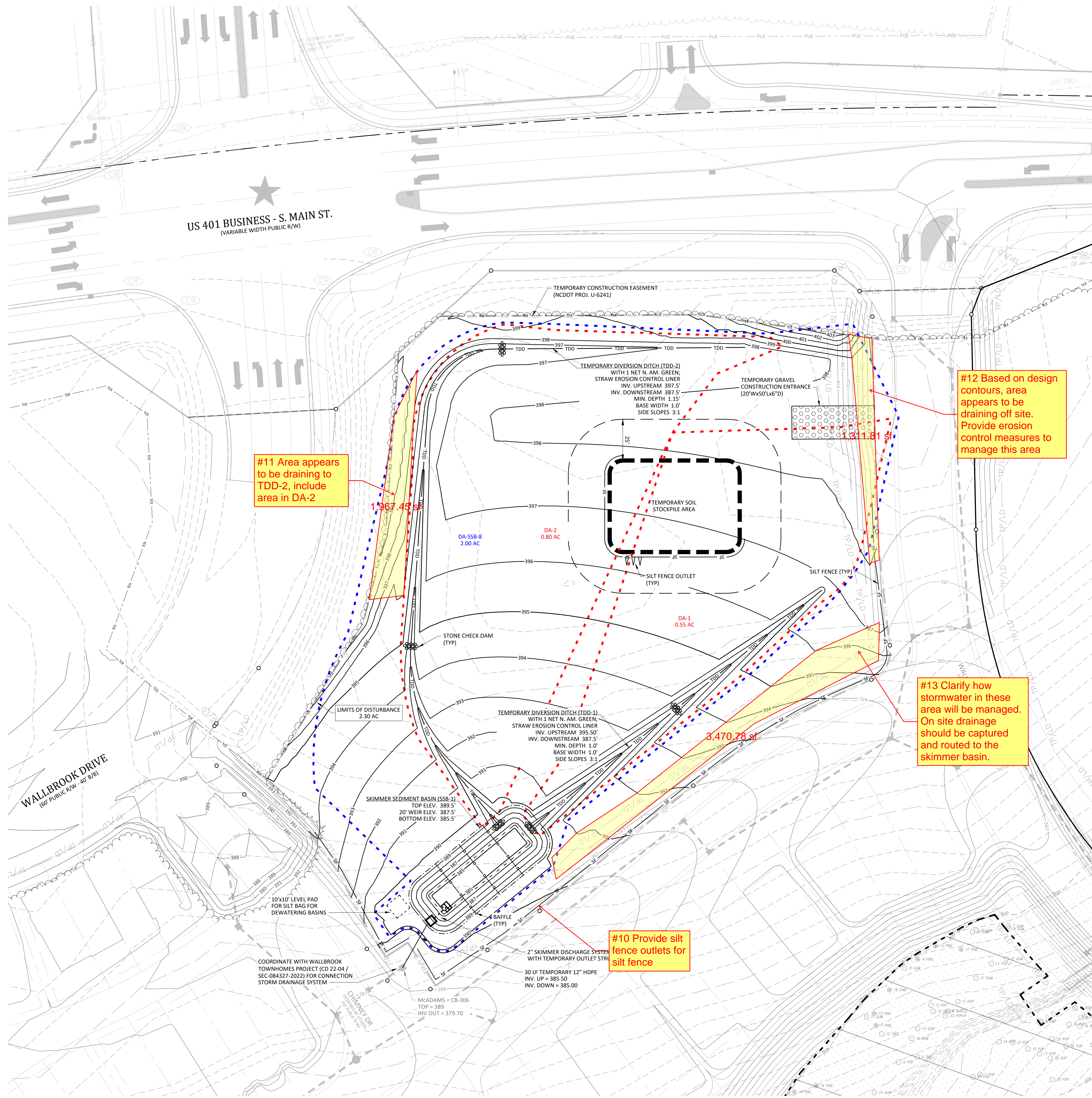
NC License: P-1199
ARK CONSULTING GROUP PLLC
ENGINEERS & PLANNERS
2755-B Charles Blvd.
Raleigh, NC 27604
(919) 878-8888
www.arkconsultinggroup.com

Professional Engineer
KYLE C. FABUNDI
4/1/2024

Project Manager:	BCF
Drawn By:	DLC
Checked By:	TN
Project Number:	24
Drawing Number:	D-1471

C1.1
Date: April 1, 2024





#11 Area appears to be draining to TDD-2, include area in DA-2

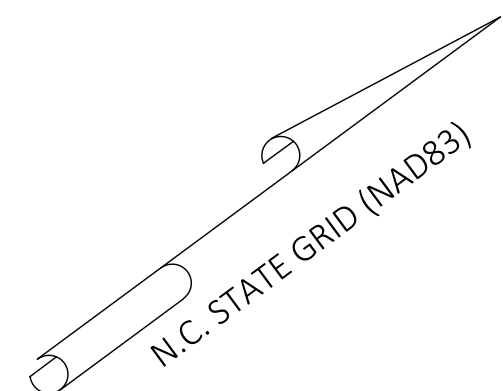
#12 Based on design contours, area appears to be draining off site. Provide erosion control measures to manage this area

#13 Clarify how stormwater in these area will be managed. On site drainage should be captured and routed to the skimmer basin.

#10 Provide silt fence outlets for silt fence

CONTOUR LEGEND

— 400 —	PROPOSED CONTOURS
— 400 —	DESIGN CONTOURS PUBLIX AT WALLBROOK (SDP 23-05 / CID 23-01) (ARK CONSULTING GROUP)
— 400 —	DESIGN CONTOURS WALLBROOK TOWNHOMES (CD 22-04) (MCADAMS CO.)
— 400 —	EXISTING INDEX CONTOUR
- - - 399 - - -	EXISTING CONTOUR



- Final Drawing -
Issued for Permit
Review Purposes Only

REVISIONS:

#	DATE	DESCRIPTION
1	1-APR-24	ISSUED FOR INITIAL REVIEW

EROSION CONTROL PHASE 2 & MASS GRADING PLAN

WALLBROOK - LOT 7 MASS GRADING / EROSION CONTROL

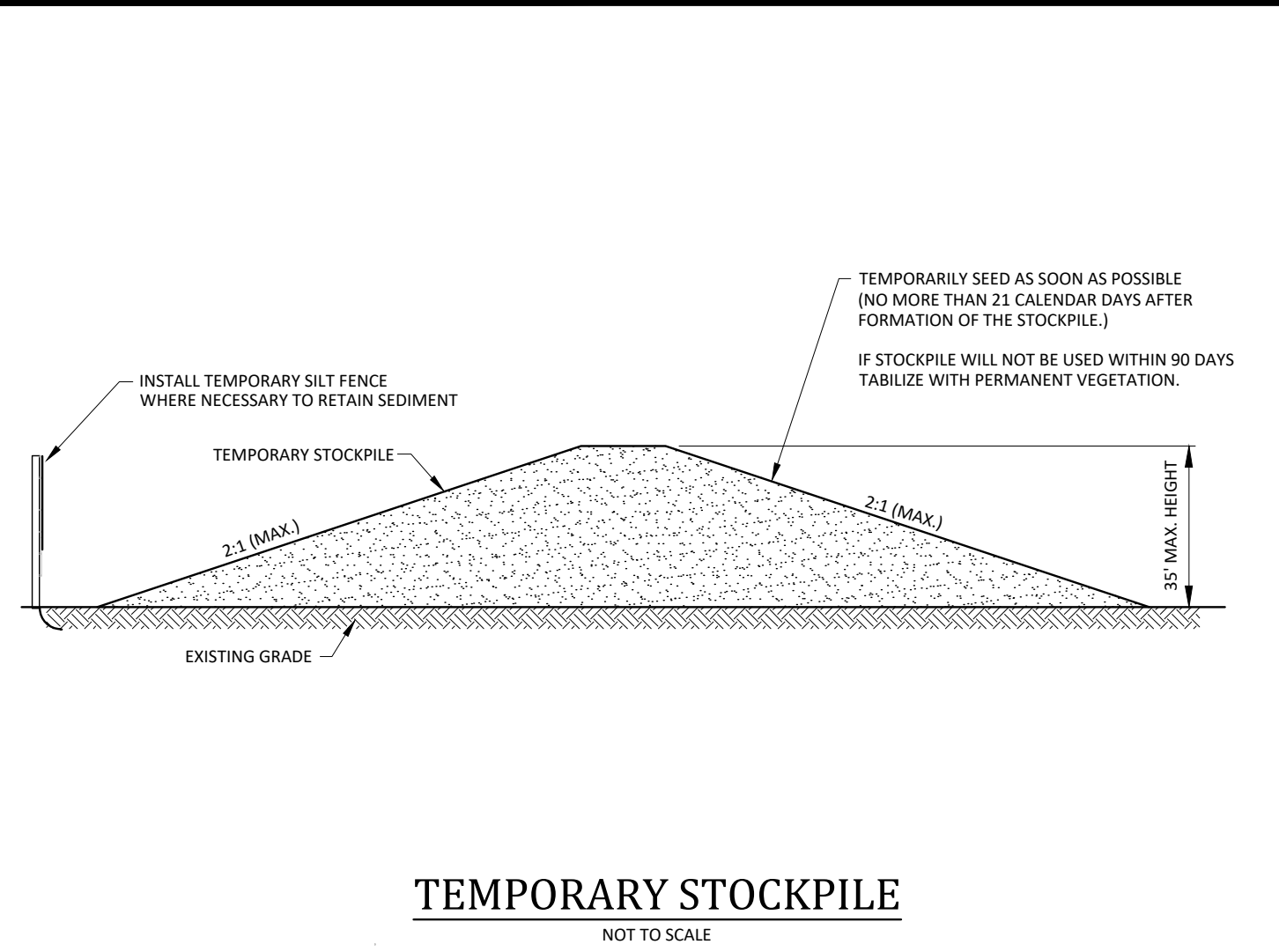
Town of Rolesville Project No. CID 24-
S Main St. / US-401 Business & Wall Creek Drive
Rolesville, Wake County, North Carolina

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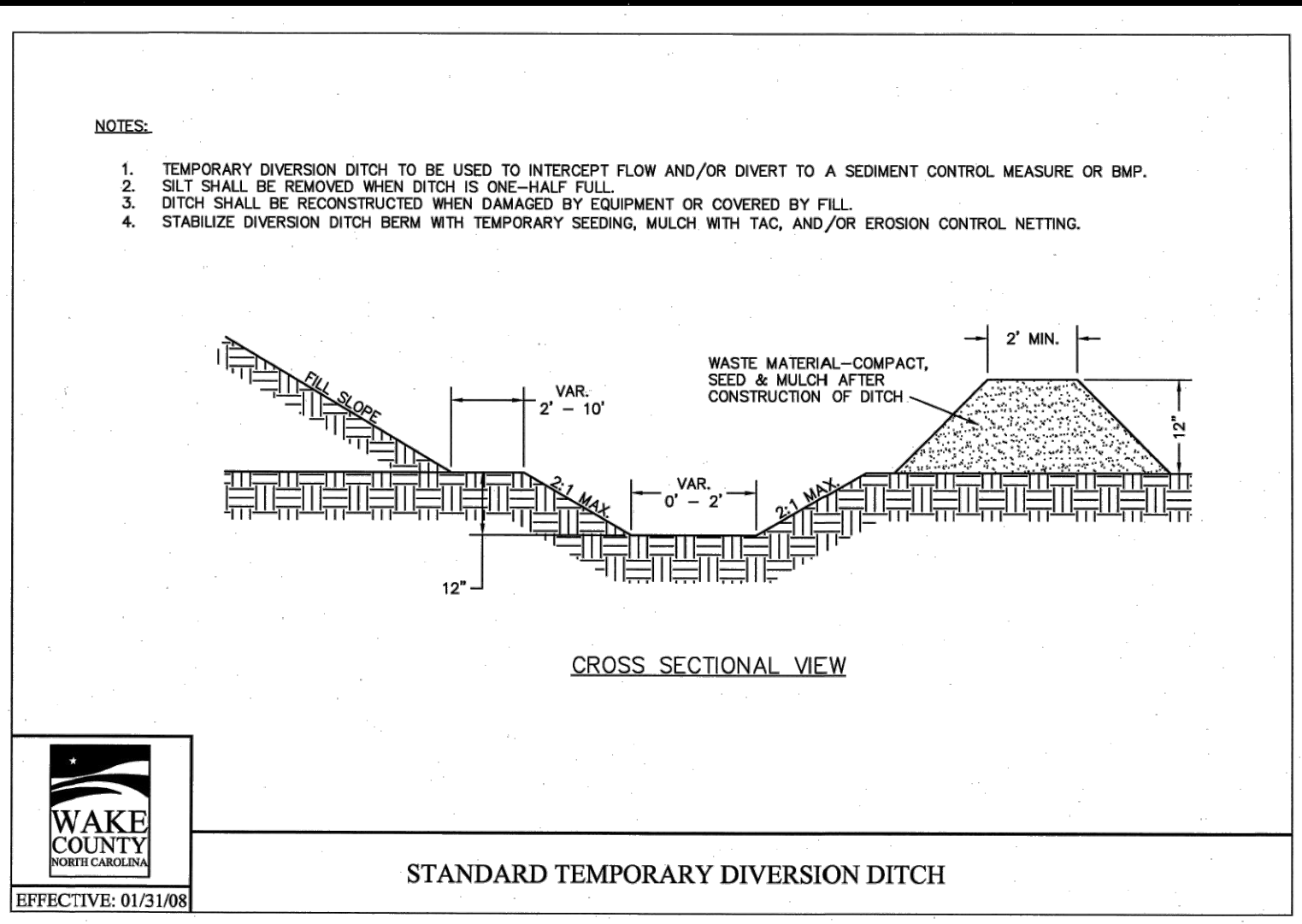
Project Manager:	BCF
Drawn By:	DLC
Checked By:	TN
Project Number:	24
Drawing Number:	D-1471

C1.2

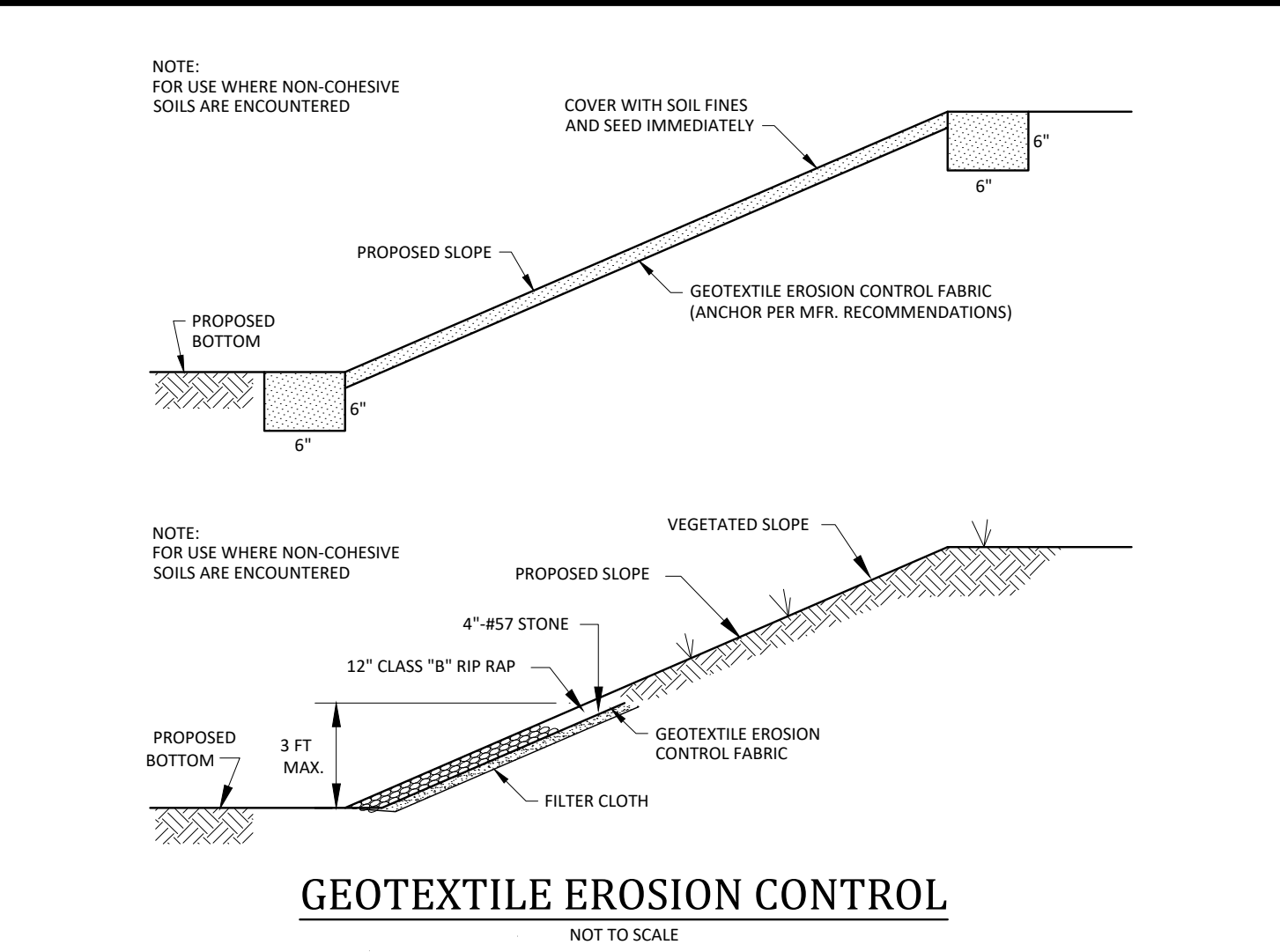
Date: April 1, 2024



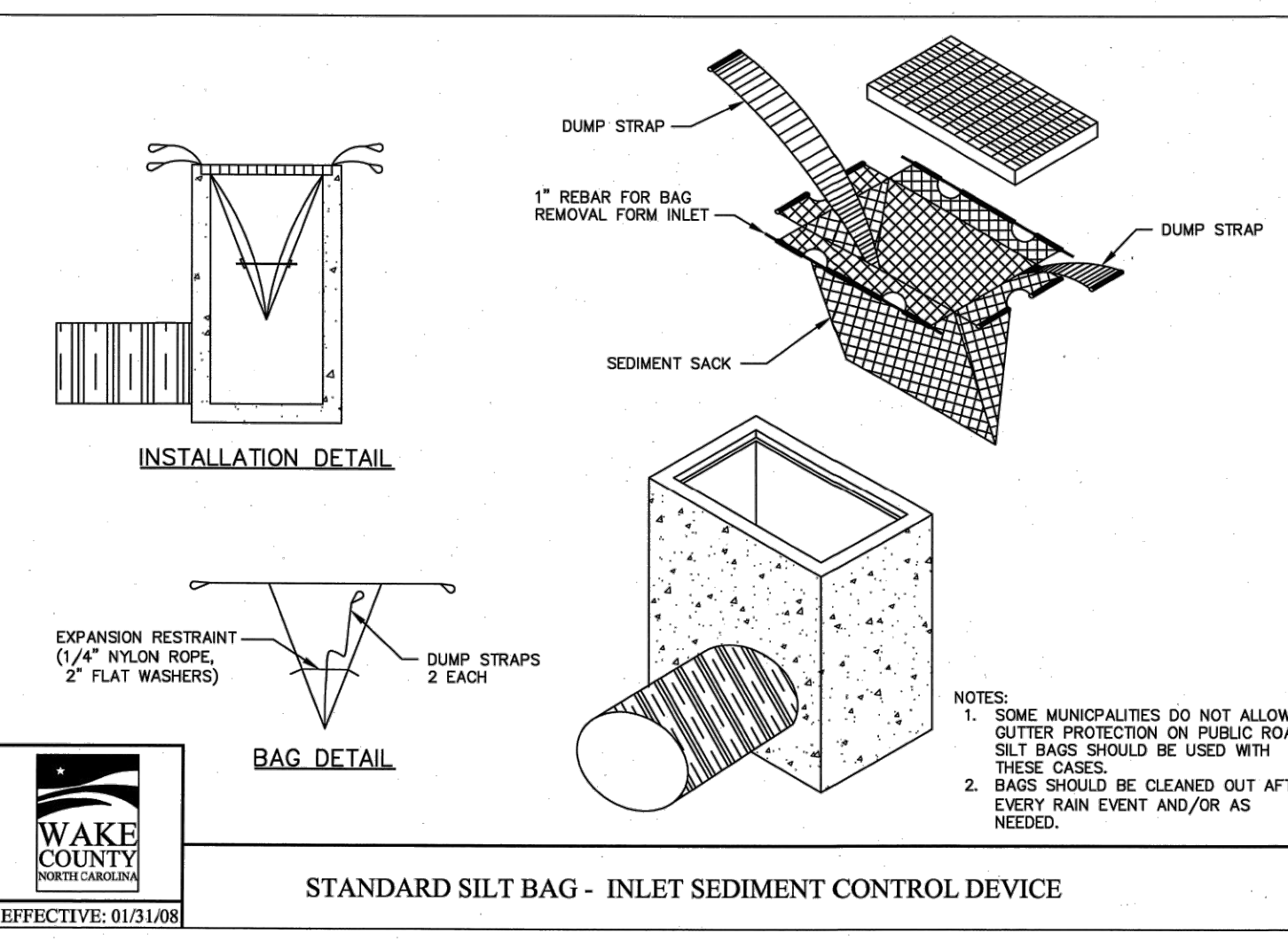
TEMPORARY STOCKPILE
NOT TO SCALE



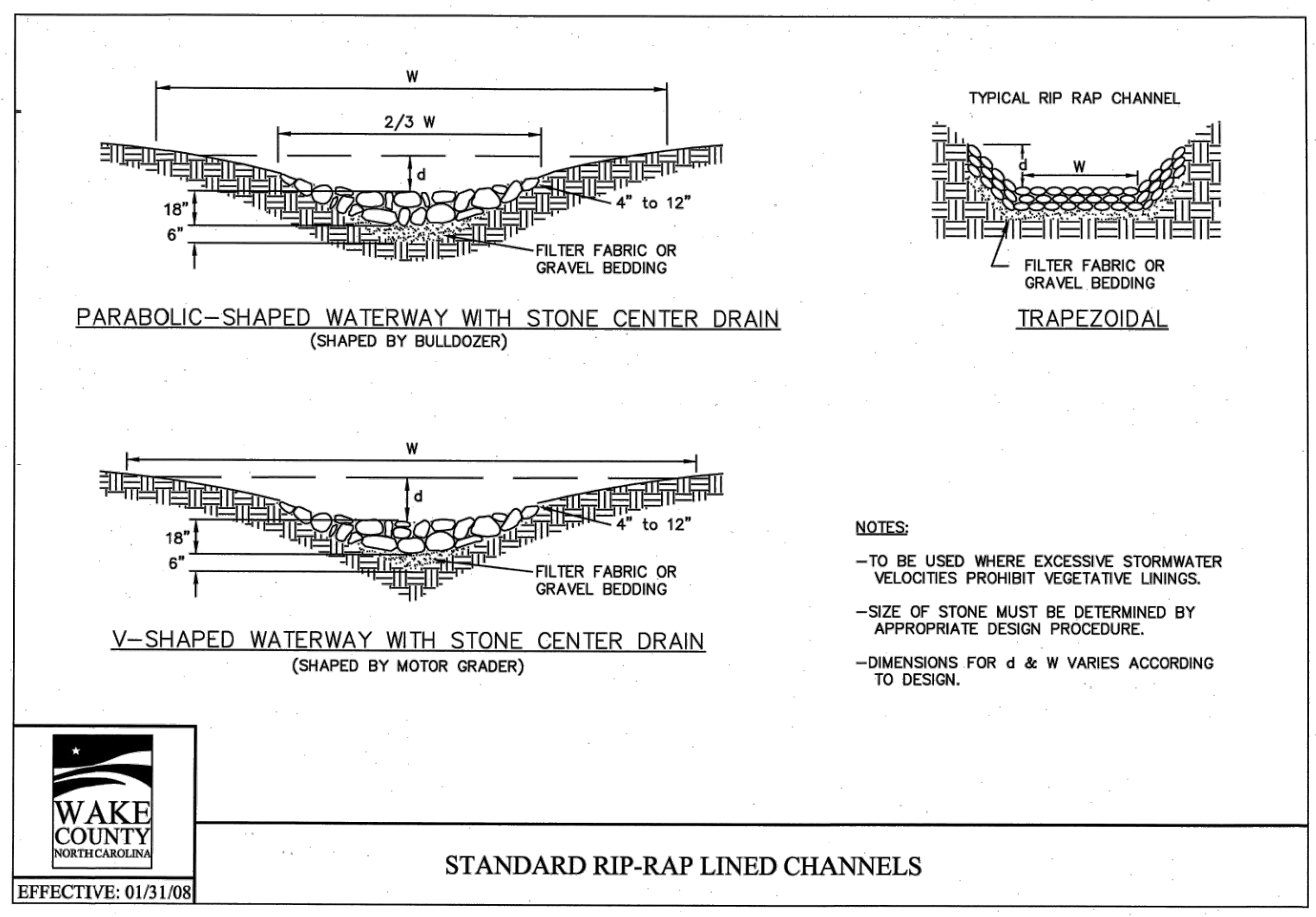
STANDARD TEMPORARY DIVERSION DITCH



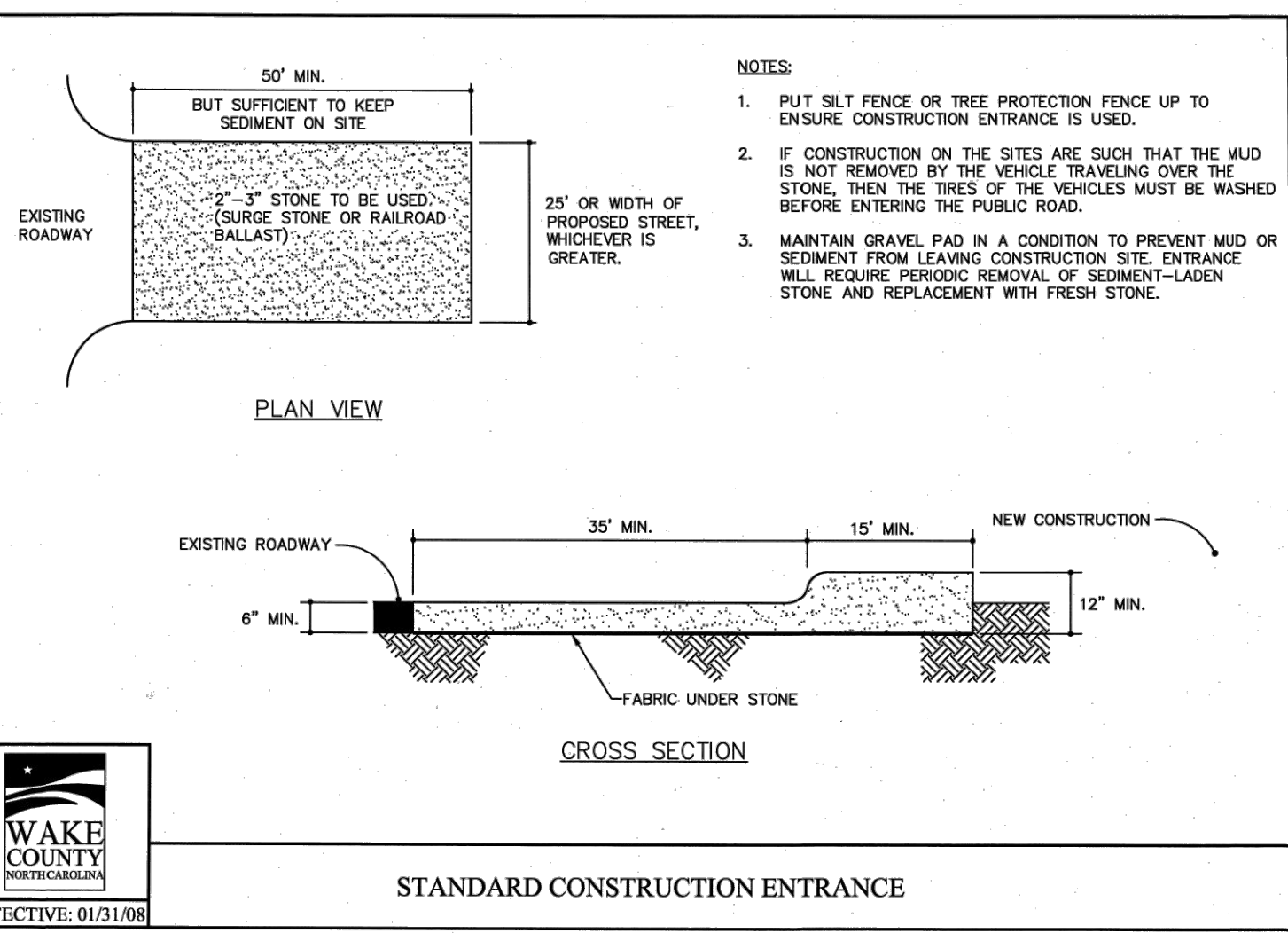
GEOTEXTILE EROSION CONTROL
NOT TO SCALE



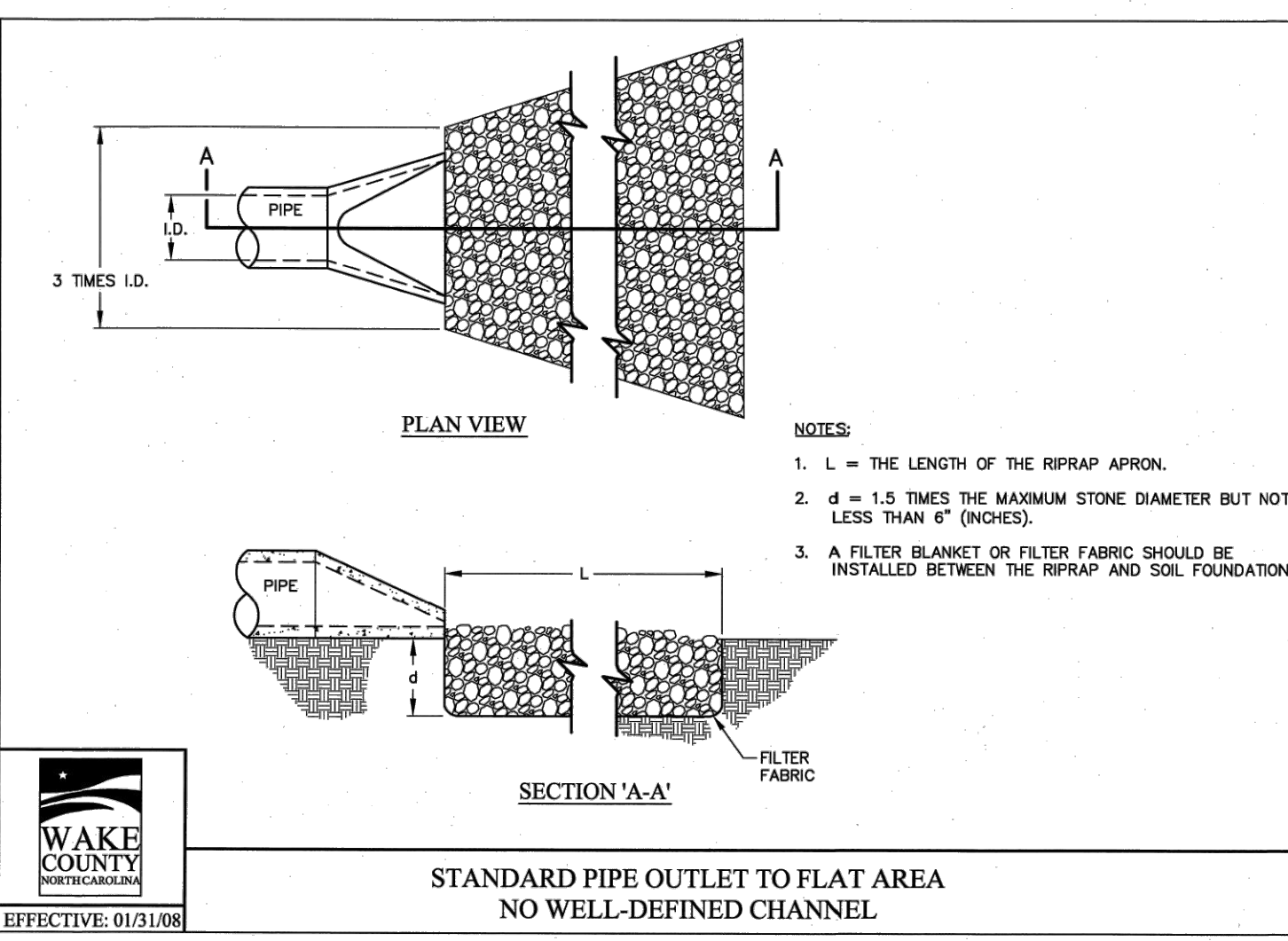
STANDARD SILT BAG - INLET SEDIMENT CONTROL DEVICE



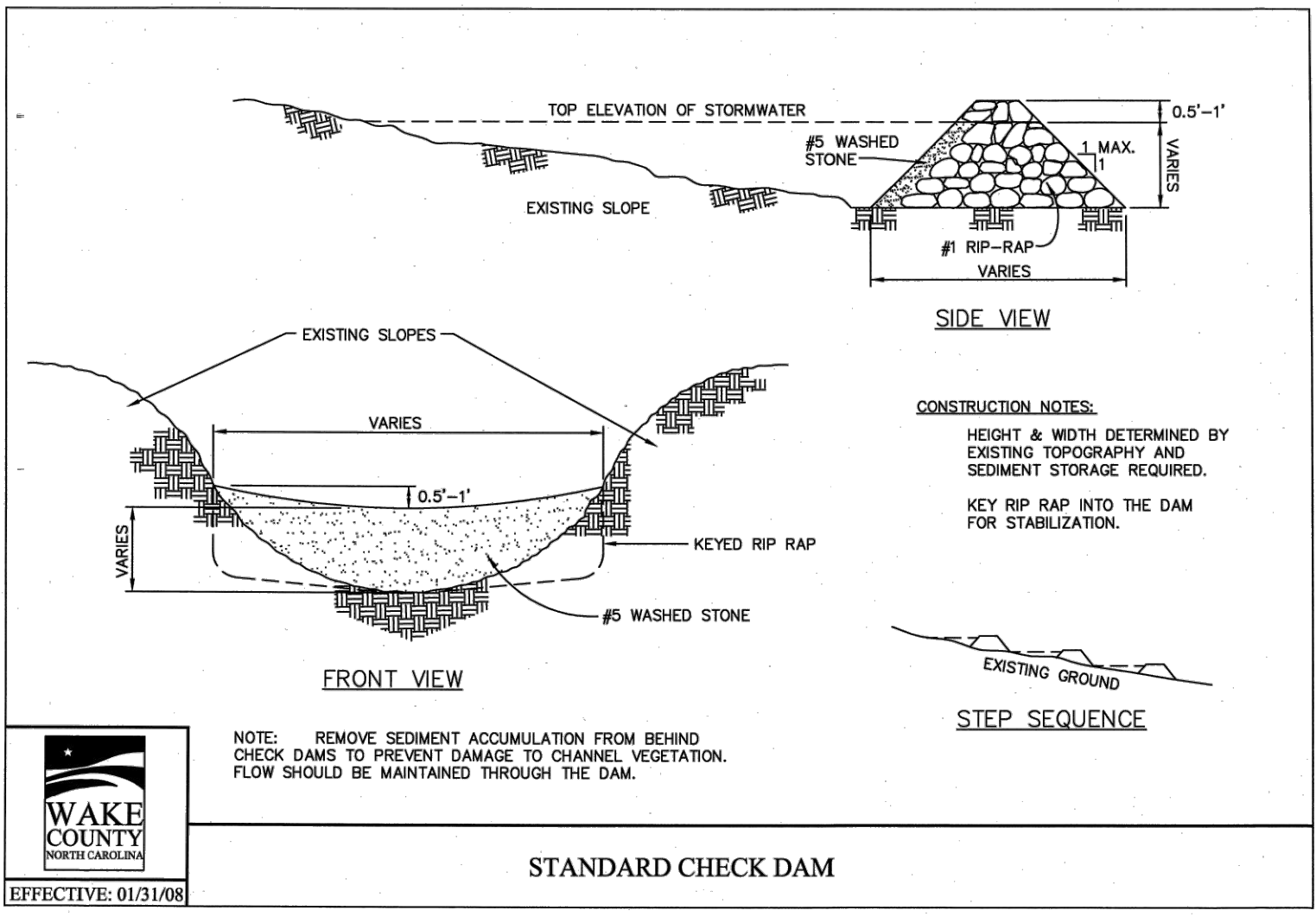
STANDARD RIP-RAP LINED CHANNELS



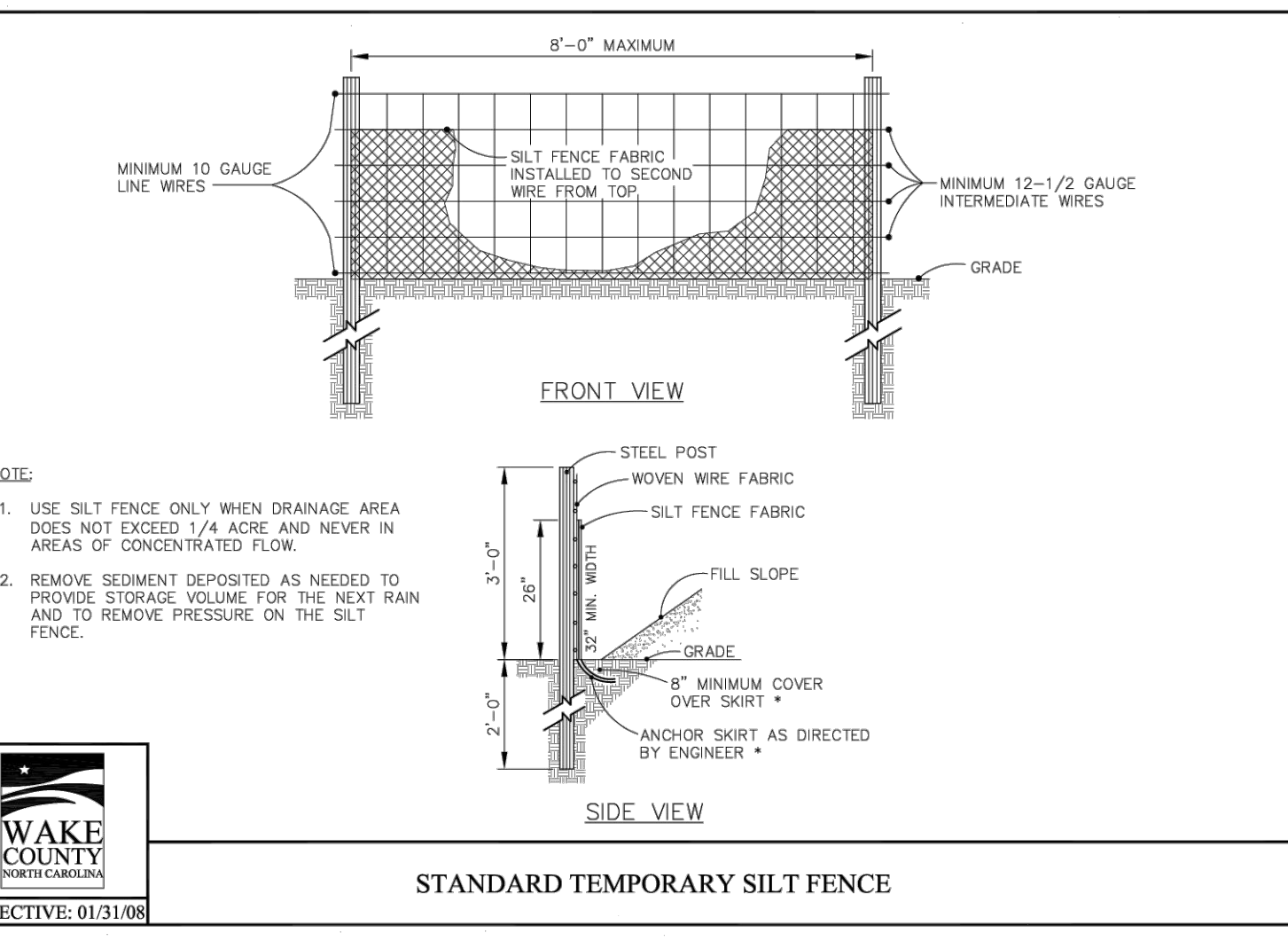
STANDARD CONSTRUCTION ENTRANCE



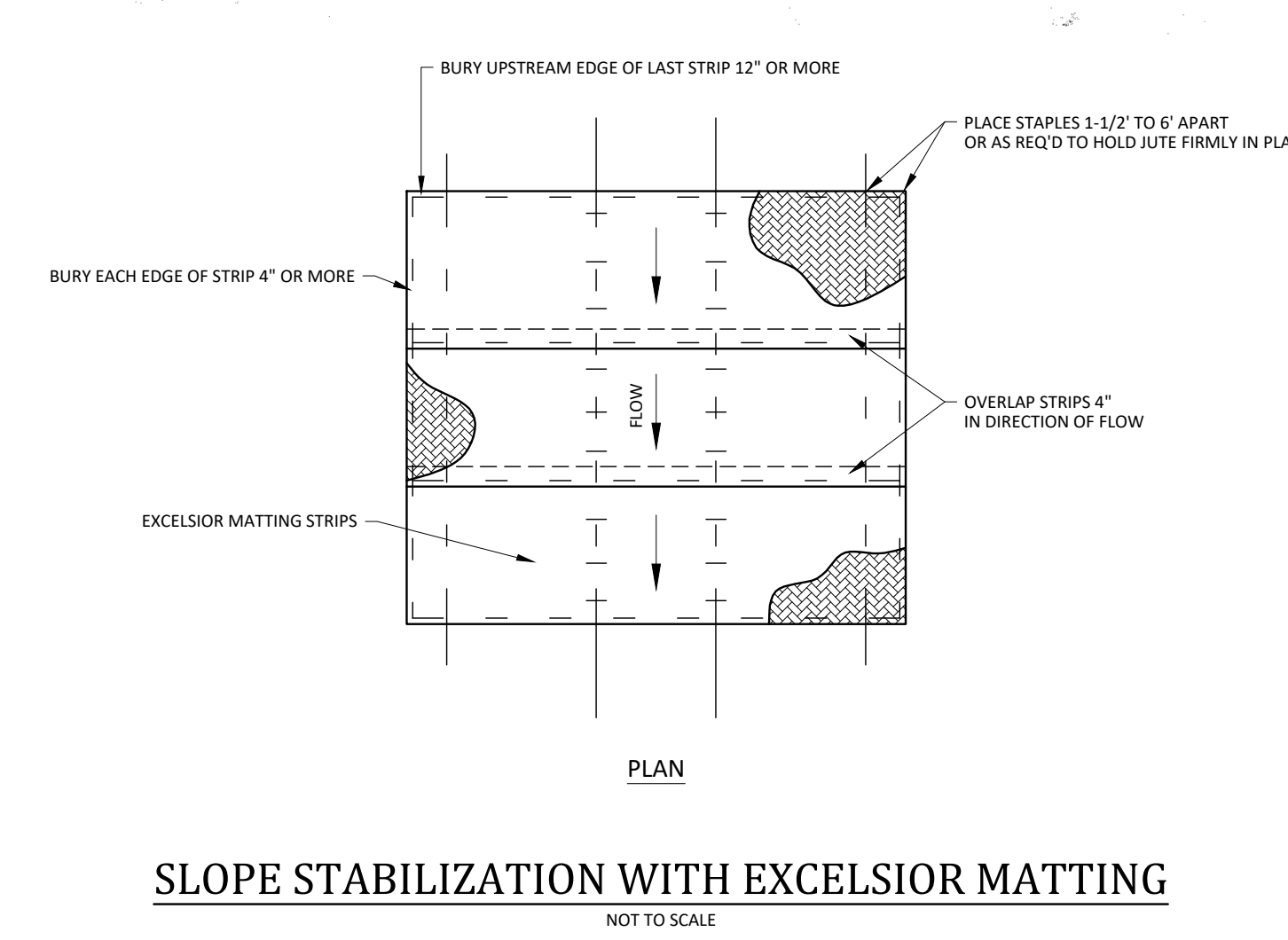
STANDARD PIPE OUTLET TO FLAT AREA NO WELL-DEFINED CHANNEL



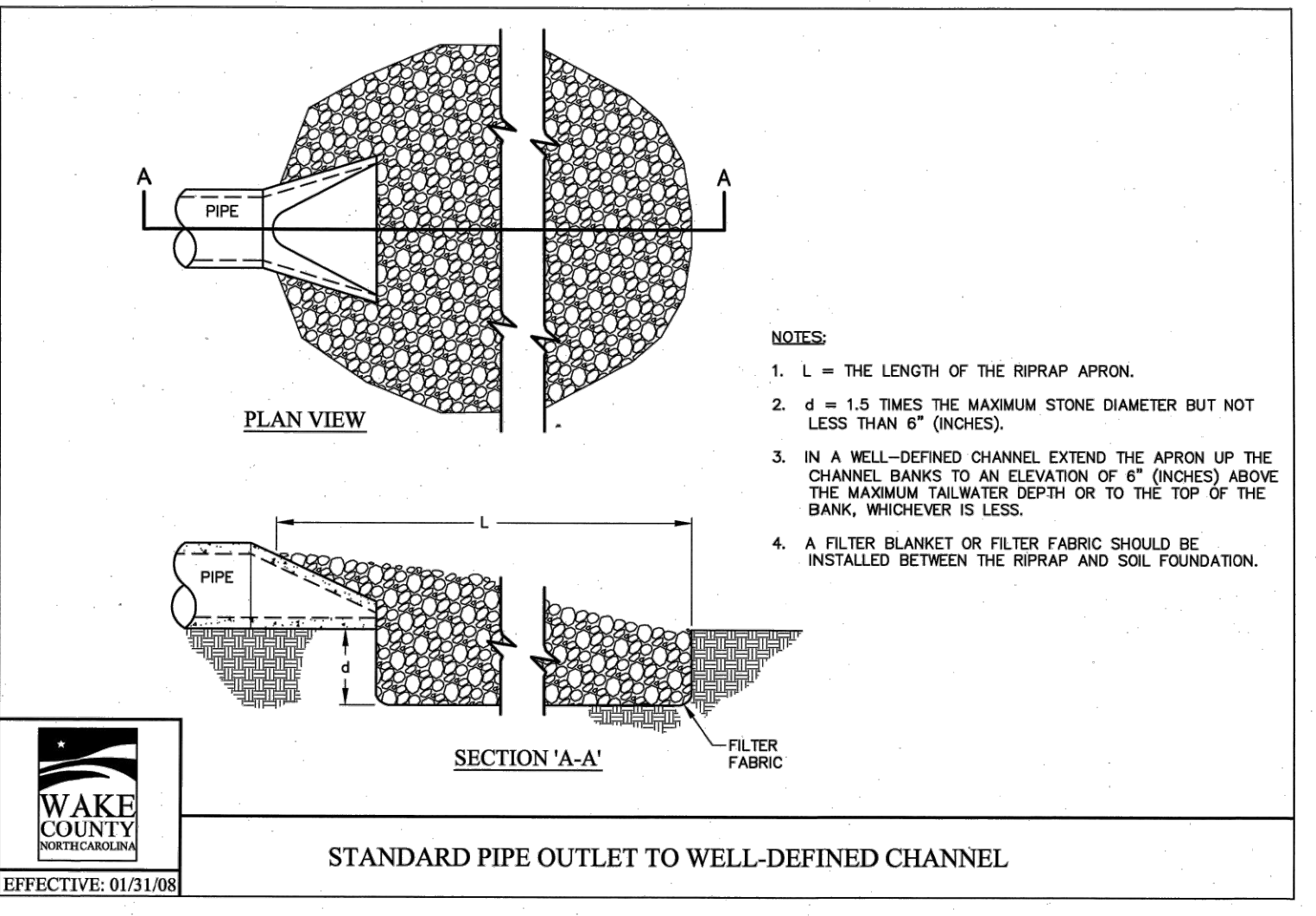
STANDARD CHECK DAM



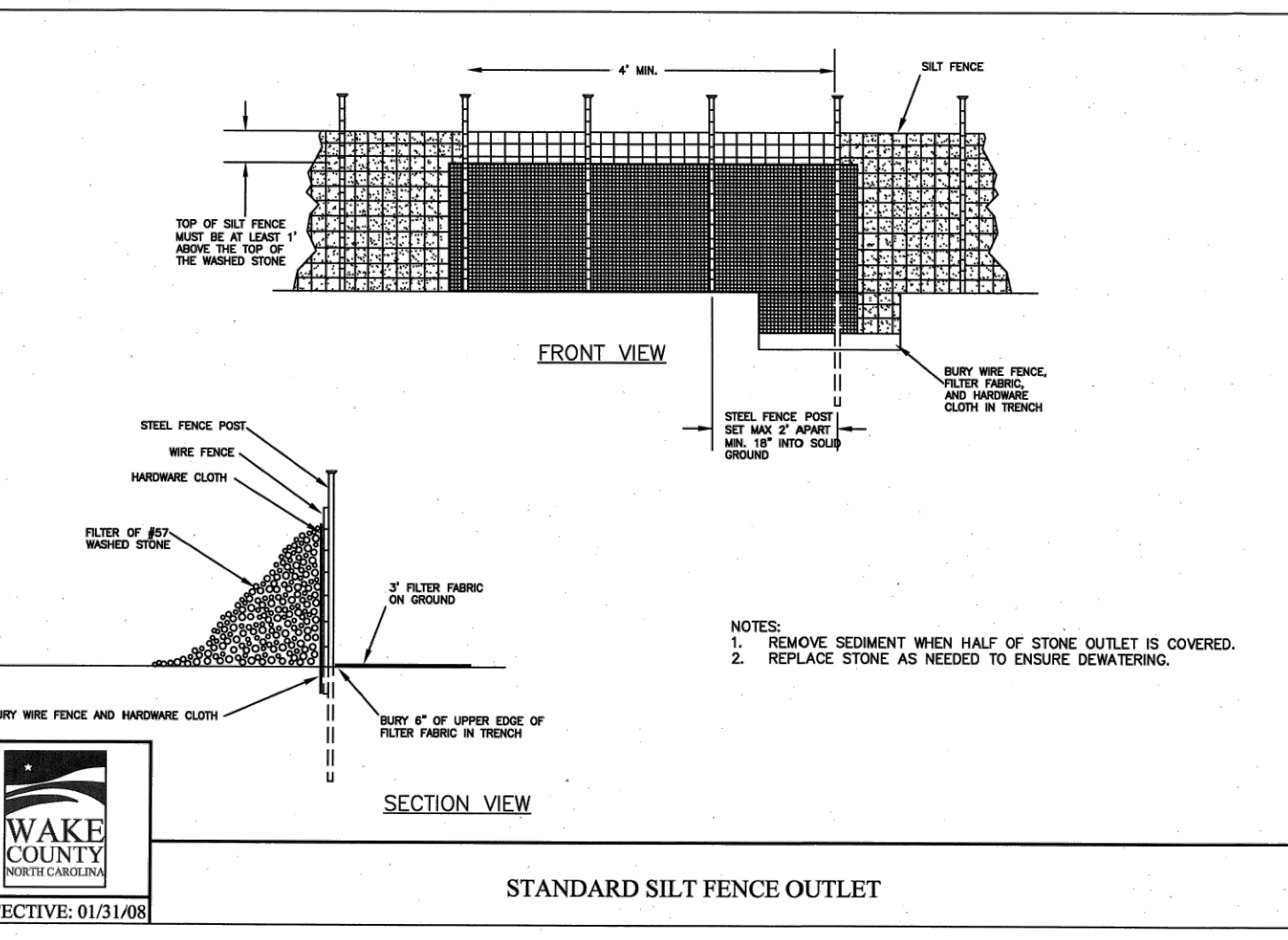
STANDARD TEMPORARY SILT FENCE



SLOPE STABILIZATION WITH EXCELSIOR MATTING
NOT TO SCALE



STANDARD PIPE OUTLET TO WELL-DEFINED CHANNEL



STANDARD SILT FENCE OUTLET

Environmental Services
Effective September 1, 2008
Soil stockpiles shall be located on the approved plan and shall adhere to the following requirements:
Design Criteria
a. A 25-foot temporary maintenance and access easement shall be shown around all proposed stockpiles (erosion control measures surrounding the stockpile shall be shown at the outer limit of this easement).
b. Stockpile footprints shall be setback a minimum of 25' from adjacent property lines.
c. A silt fence shall be provided on the approved plan that stockpile height shall not exceed 35 feet.
d. Stockpile slopes shall be 2:1 or flatter.
e. Approved BMPs shall be shown on a plan to control any potential sediment loss from a stockpile.
f. Stockpiling materials adjacent to a ditch, drainage, watercourse, wetland, stream buffer, or other body of water shall be avoided unless an alternative location is demonstrated to be unavailable.
g. Any concentrated flow likely to affect the stockpile shall be diverted to an approved BMP.
h. Off-site spoil or borrow areas must be in compliance with Wake County UDO and State Regulations. All spoil areas over an acre are required to have an approved sediment control plan. Developer/Contractor shall notify Wake County of any off-site disposal of soil, prior to disposal. Fill of FEMA Floodways and Non-encroachment Areas are prohibited except as otherwise provided by subsection 14-19-2 of the Wake County Unified Development Ordinance (certifications and permits required).
Maintenance Requirements to be Noted on the Plan
i. Seeding or covering stockpiles with turps or mulch is required and will reduce erosion problems. Turps should be keyed in at the top of the slope to keep water from running underneath the plastic.
j. If a stockpile is to remain for future use after the project is complete (builders, etc.), the financial responsible party must notify Wake County of a new responsible party for that stockpile.
k. The approved plan shall provide for the use of staged seeding and mulching on a continual basis while the stockpile is in use.
l. Establish and maintain a vegetative buffer at the toe of the slope (where practical).

Seeding Specifications

NPDES Stormwater Discharge Permit for Construction Activities (NCG01 - 4/1/19)
NCEQ/Division of Energy, Mineral and Land Resources

Soil Area Description	Seeding Rate	Seeding Schedule
For Shoulders, Side Ditches, Slopes (Max 3:1)	300 lbs/acre	Aug 15 - Tall Fescue Nov 1 - Tall Fescue & Abruzzi Rye
For Shoulders, Side Ditches, Slopes (3:1 to 2:1)	50 lbs/acre	Mar 1 - Sericea Lespedeza (scarified) Jun 1 - Sericea Lespedeza (unscarified) AND Tall Fescue
For Shoulders, Side Ditches, Slopes (2:1 to 1:1)	120 lbs/acre	Mar 1 - Add Tall Fescue Apr 15 - Add Weeping Love Grass
For Shoulders, Side Ditches, Slopes (1:1 to 0.5:1)	10 lbs/acre	Mar 1 - Or add Weeping Love Grass Jun 30 - Or add Hulled Common
For Shoulders, Side Ditches, Slopes (0.5:1 to 0.2:1)	25 lbs/acre	Jun 30 - Bermudagrass Jul 1 - Tall Fescue AND Browntop Millet or Sorghum-Sudan Hybrids**
For Shoulders, Side Ditches, Slopes (0.2:1 to 0.1:1)	125 lbs/acre (Tall Fescue); 35 lbs/acre (Browntop Millet); 30 lbs/acre (Sorghum-Sudan Hybrids)**	Aug 15 - Tall Fescue AND Browntop Millet or Sorghum-Sudan Hybrids**

Seeding Schedule

For Shoulders, Side Ditches, Slopes (Max 3:1):

Date	Type	Planting Rate
Aug 15	Tall Fescue	300 lbs/acre
Nov 1	Tall Fescue & Abruzzi Rye	300 lbs/acre
Mar 1	Tall Fescue	300 lbs/acre
Apr 15	Tall Fescue	300 lbs/acre
Apr 15	Hulled Common	25 lbs/acre
Jun 30	Bermudagrass	25 lbs/acre
Jul 1	Tall Fescue AND Browntop Millet or Sorghum-Sudan Hybrids**	125 lbs/acre (Tall Fescue); 35 lbs/acre (Browntop Millet); 30 lbs/acre (Sorghum-Sudan Hybrids)**
Aug 15	Tall Fescue AND Browntop Millet or Sorghum-Sudan Hybrids**	125 lbs/acre (Tall Fescue); 35 lbs/acre (Browntop Millet); 30 lbs/acre (Sorghum-Sudan Hybrids)**

For Shoulders, Side Ditches, Slopes (3:1 to 2:1):

Date	Type	Planting Rate
Mar 1	Sericea Lespedeza (scarified) and use the following combinations:	50 lbs/acre (Sericea Lespedeza);
Mar 1	Add Tall Fescue	120 lbs/acre
Mar 1	Or add Weeping Love Grass	10 lbs/acre
Mar 1	Or add Hulled Common	25 lbs/acre
Jun 30	Bermudagrass	25 lbs/acre
Jun 1	Tall Fescue AND Browntop Millet or Sorghum-Sudan Hybrids**	120 lbs/acre (Tall Fescue); 35 lbs/acre (Browntop Millet); 30 lbs/acre (Sorghum-Sudan Hybrids)**
Sept 1	Sericea Lespedeza (unscarified) AND Tall Fescue	70 lbs/acre (Sericea Lespedeza); 120 lbs/acre (Tall Fescue)
Nov 1	AND Abruzzi Rye	25 lbs/acre

Consult Wake County Soil & Water Conservation District or NC State Cooperative Extension for additional information concerning other alternatives for vegetation of denuded areas. The above vegetation rates are those that do well under local conditions; other seeding rate combinations are possible.

*** TEMPORARY: Reseed according to optimum season for desired permanent vegetation. Do not allow temporary cover to grow more than 12" in height before moving, otherwise, fescue may be shaded out.

WAKE COUNTY NORTH CAROLINA

Final Drawing - Issued for Permit Review Purposes Only

CROSLAND SOUTHEAST

WALLBROOK - LOT 7 MASS GRADING / EROSION CONTROL

Town of Rolesville Project No. CID 24-1

Rolesville, Wake County, North Carolina

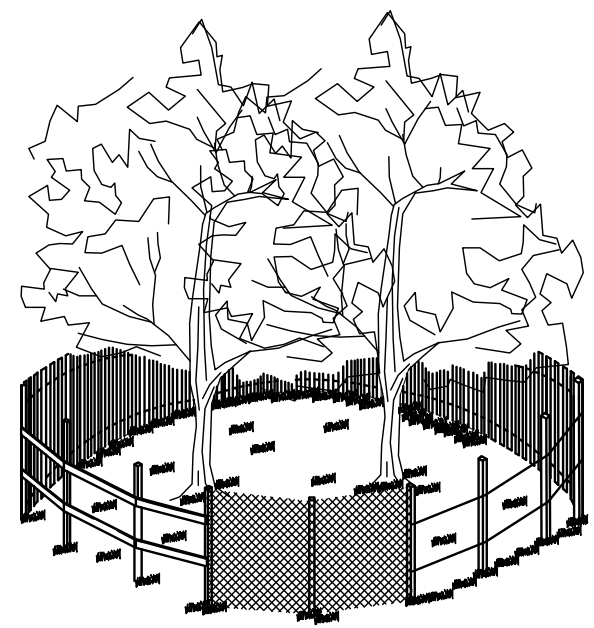
DETAILS

NC License: P-1109
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Raleigh, NC 27604
(919) 876-0888
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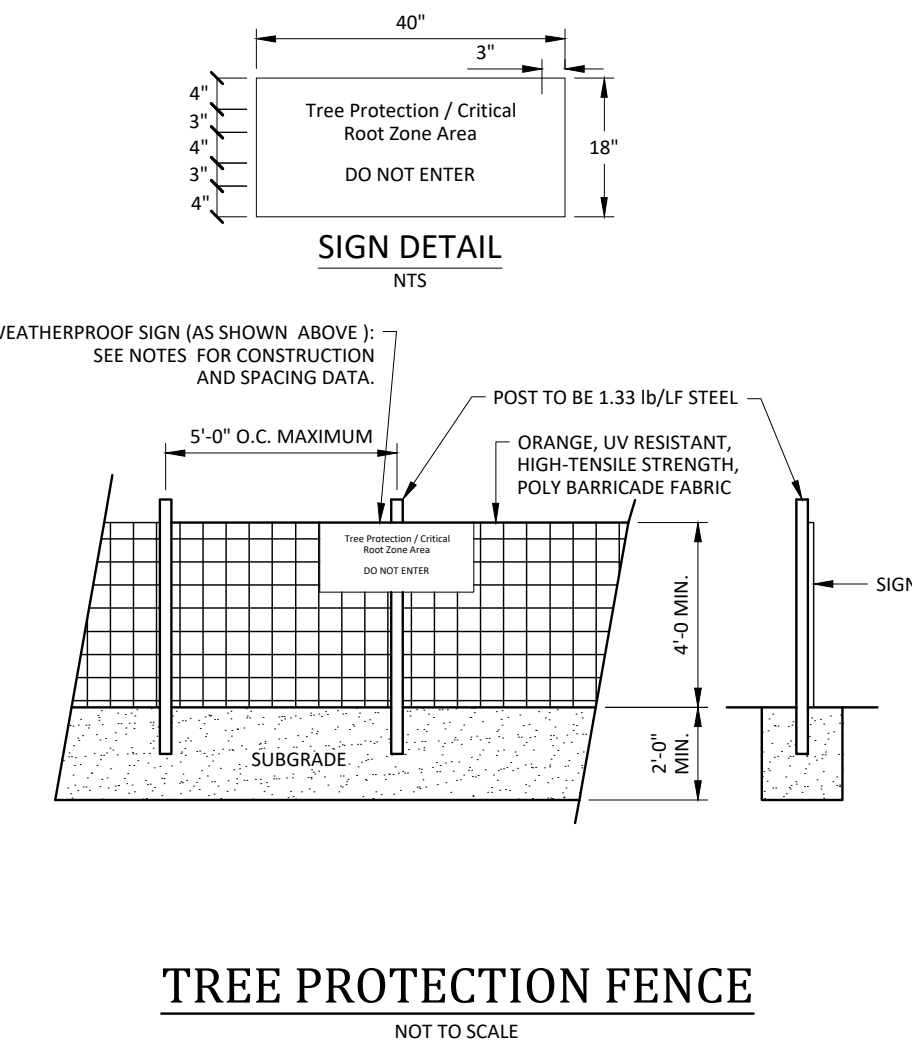
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Drawn By: DLC
Checked By: TN
Project Number: 24
Drawing Number: D-1471

C2.1

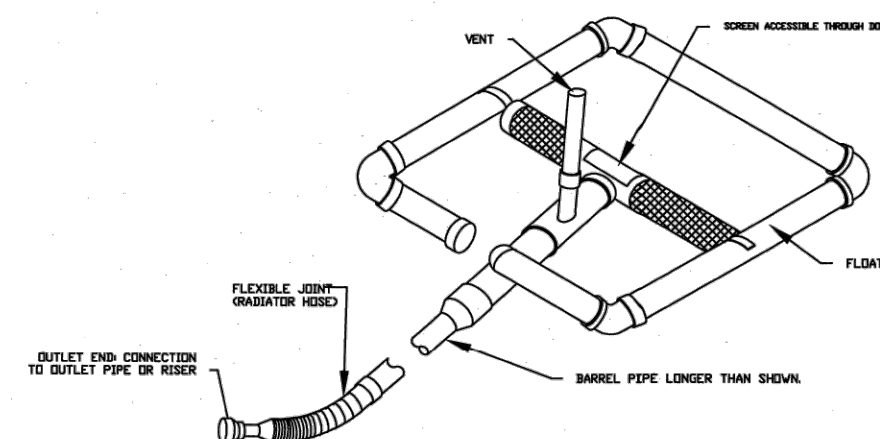
Date: April 1, 2024



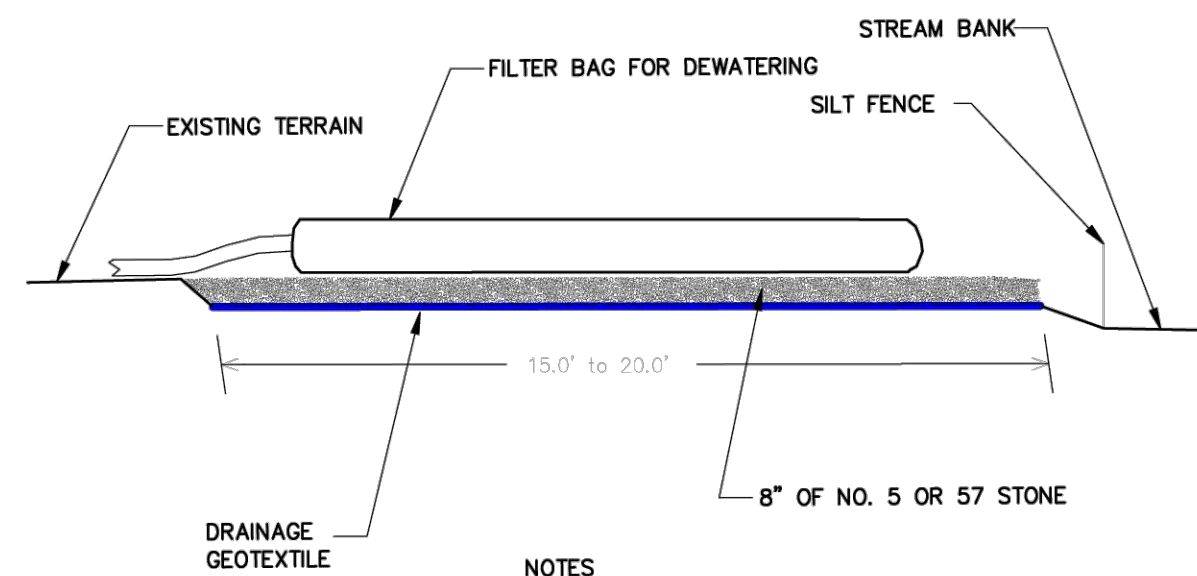
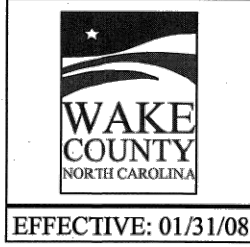
- NOTES:
1. SIGNS ARE TO BE PLACED NO GREATER THAN 200' ON CENTER. PLACE SIGN AT EACH END OF LINEAR TREE PROTECTION AREA AND 200' ON CENTER THEREAFTER.
 2. FOR TREE PROTECTION AREAS LESS THAN 200' IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER PROTECTION AREA.
 3. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.
 4. WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL.
 5. LETTERS ARE TO BE 3" HIGH MINIMUM, CLEARLY LEGIBLE AND SPACED AS DETAILED.
 6. INSTALL TREE PROTECTION FENCE & SIGNAGE PRIOR TO CALLING FOR THE INITIAL ON-SITE INSPECTION BY A NCDENR INSPECTOR. MAINTAIN TREE PROTECTION FENCE THROUGHOUT DURATION OF PROJECT. ADDITIONAL SIGNS MAY BE REQUIRED BY NCDENR BASED ON ACTUAL FIELD CONDITIONS.



TREE PROTECTION FENCE
NOT TO SCALE

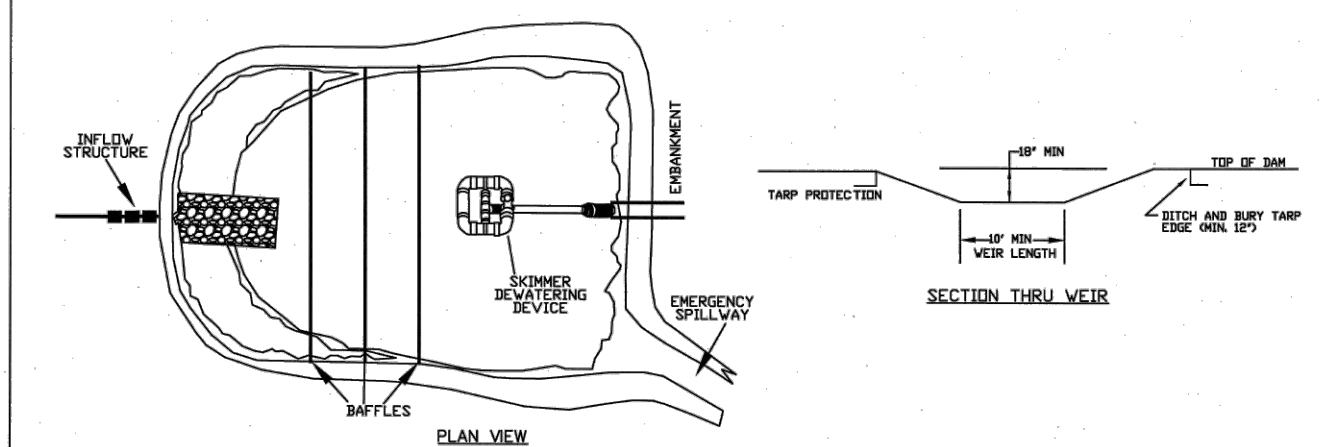
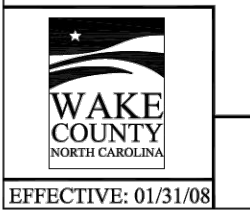


STANDARD SKIMMER DETAIL



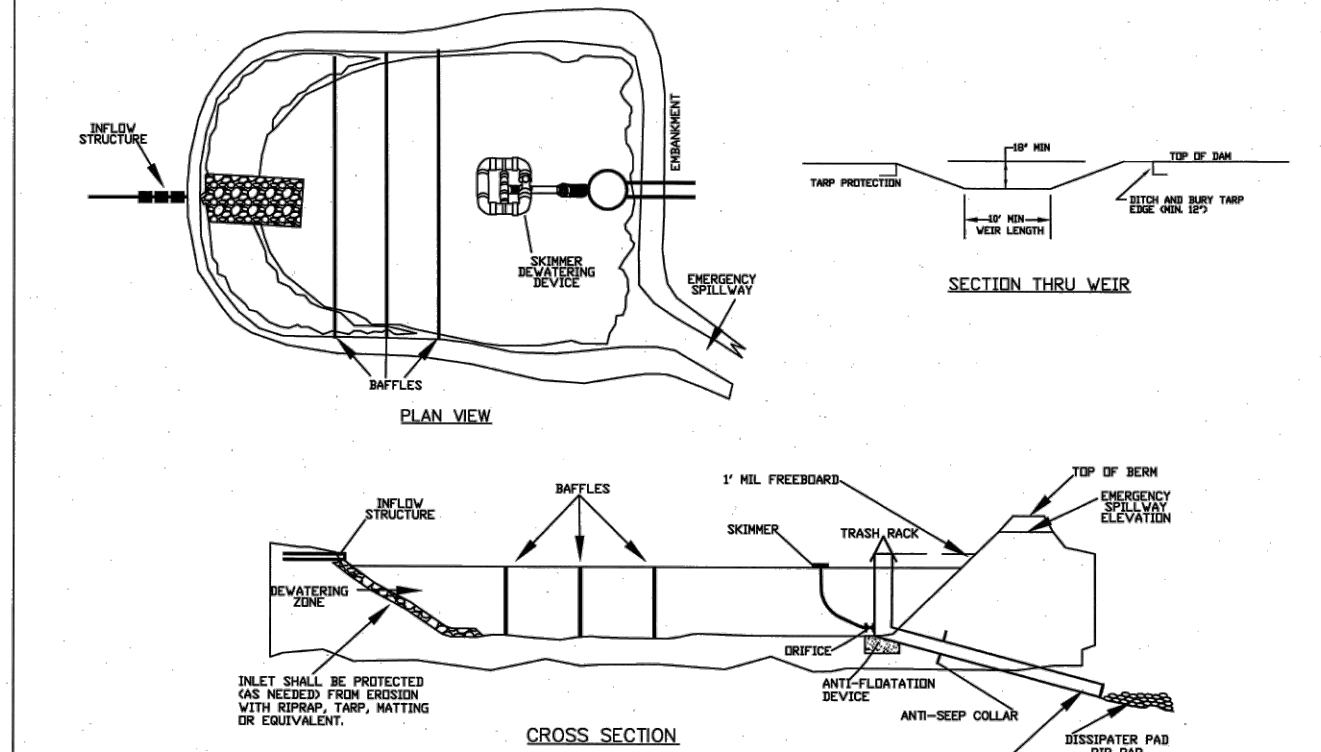
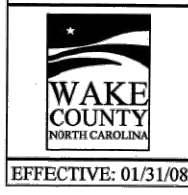
- NOTES
1. PROVIDE STABILIZED OUTLET TO STREAM BANK. WOOD PALLETTS MAY BE USED IN LIEU OF STONE AND GEOTEXTILE AS DIRECTED. A SUFFICIENT NUMBER OF PALLETTS MUST BE PROVIDED TO ELEVATE THE ENTIRE FILTER BAG FOR DEWATERING ABOVE NATURAL GROUND.

STANDARD FILTER BAG FOR DEWATERING ACTIVITIES
NOT TO SCALE



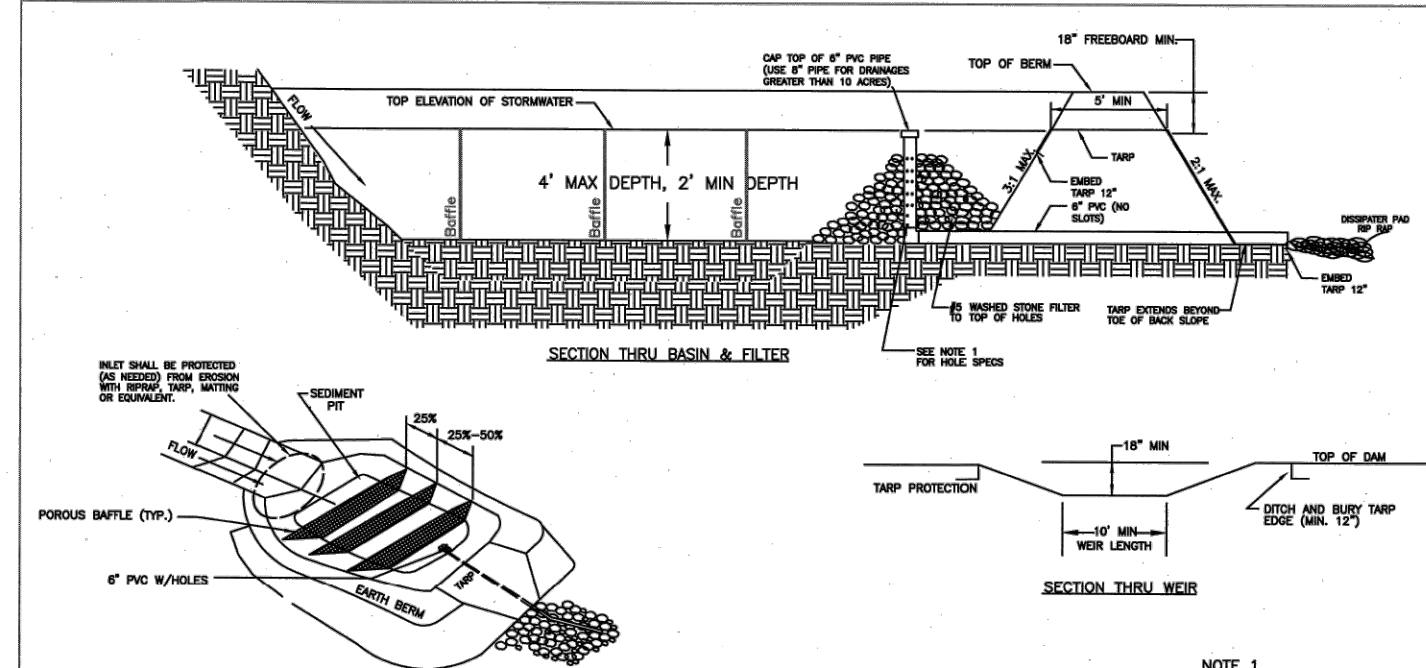
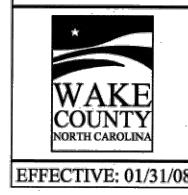
- NOTES:
1. BASIN SHOULD BE CLEANED OUT WHEN CAPACITY REACHES AN ELEVATION REPRESENTING THAT THE BASIN IS HALF-FULL.
 2. THE TARP USED TO PROTECT THE WEIR SHALL BE THE WEIR HEIGHT. THE LENGTH OF THE TARP SHALL BE ACCORDING TO AVAILABLE SUPPLY. IF MULTIPLE TARPS ARE TO BE USED, THEN TARPS SHALL BE OVERLAPPED AT LEAST 12" THE UPSTREAM 12" TARP SHALL OVERLAP THE DOWNSTREAM TARP. THE TARP SHALL BE AT LEAST 2" HEAVY DUTY SLUICE TARP/AQUADUR OR EQUIVALENT FOR UV RESISTANCE.
 3. PROVIDE A MINIMUM OF THREE POROUS BAFFLES TO EVENLY DISTRIBUTE FLOW ACROSS THE BASIN, REDUCING TURBULENCE.
 4. BAFFLE MATERIAL MUST BE SECURED AT THE BOTTOM AND SIDES USING STAPLES OR BY TRENCHING AT LEAST 12" FROM THE BOTTOM OF THE BASIN. PROVIDE A MINIMUM OF TWO (2) BAFFLES PER BASIN. THE FIRST BAY OF BAFFLES SHALL BE 75% OF THE TOTAL LENGTH OF THE BASIN. THE REMAINING BAFFLES SHALL BE 25% OF THE TOTAL LENGTH OF THE BASIN.
 5. MOST OF THE SEDIMENT WILL ACCUMULATE IN THE FIRST BAY, SO THIS SHOULD BE READILY AVAILABLE FOR MAINTENANCE.
 6. DURING THE CONSTRUCTION PHASE OF THE PROJECT, FORWARD STORMWATER RISK SHALL ONLY GREATER FROM THE TOP OF PIPE.
 7. POND SHALL NOT BE CONVERTED FOR STORMWATER USE UNTIL APPROVED BY ENVIRONMENTAL ENGINEER.

STANDARD SKIMMER BASIN



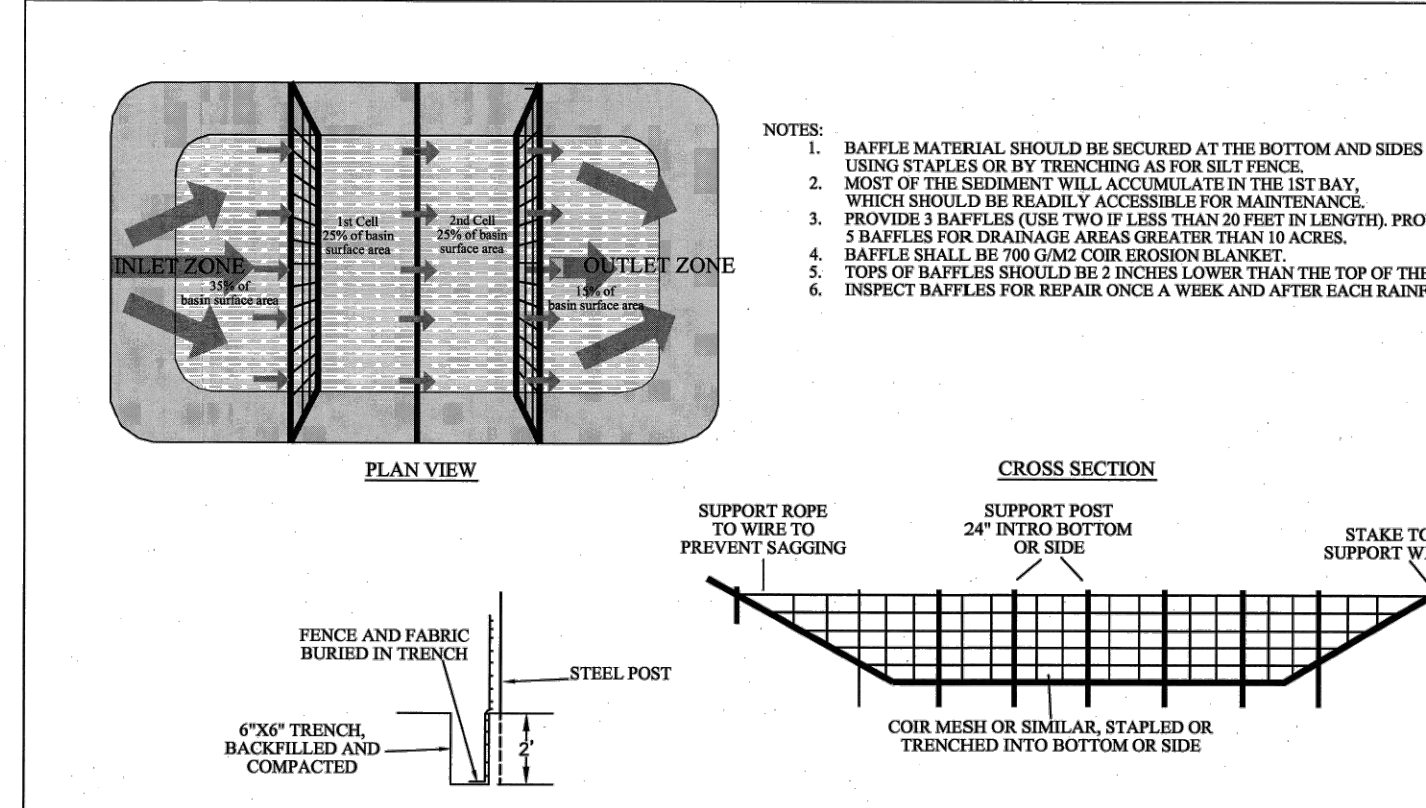
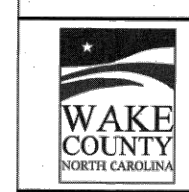
- NOTES:
1. BASIN SHOULD BE CLEANED OUT WHEN CAPACITY REACHES AN ELEVATION REPRESENTING THAT THE BASIN IS HALF-FULL.
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 3. PROVIDE A MINIMUM OF THREE POROUS BAFFLES TO EVENLY DISTRIBUTE FLOW ACROSS THE BASIN, REDUCING TURBULENCE.
 4. BAFFLE MATERIAL MUST BE SECURED AT THE BOTTOM AND SIDES USING STAPLES OR BY TRENCHING AT LEAST 12" FROM THE BOTTOM OF THE BASIN. PROVIDE A MINIMUM OF TWO (2) BAFFLES PER BASIN. THE FIRST BAY OF BAFFLES SHALL BE 75% OF THE TOTAL LENGTH OF THE BASIN. THE REMAINING BAFFLES SHALL BE 25% OF THE TOTAL LENGTH OF THE BASIN.
 5. MOST OF THE SEDIMENT WILL ACCUMULATE IN THE FIRST BAY, SO THIS SHOULD BE READILY AVAILABLE FOR MAINTENANCE.
 6. DURING THE CONSTRUCTION PHASE OF THE PROJECT, FORWARD STORMWATER RISK SHALL ONLY GREATER FROM THE TOP OF PIPE.
 7. POND SHALL NOT BE CONVERTED FOR STORMWATER USE UNTIL APPROVED BY ENVIRONMENTAL ENGINEER.

STANDARD SKIMMER ATTACHED TO PERMANENT RISER



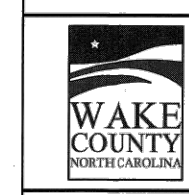
- GENERAL NOTES
1. DRAW DOWN BASIN & BARRIERS SHALL BE AT LEAST 12" BELOW THE TOP OF THE WEIR.
 2. THE TARP USED TO PROTECT THE WEIR SHALL BE THE WEIR HEIGHT. THE LENGTH OF THE TARP SHALL BE ACCORDING TO AVAILABLE SUPPLY. IF MULTIPLE TARPS ARE TO BE USED, THEN TARPS SHALL BE OVERLAPPED AT LEAST 12" THE UPSTREAM 12" TARP SHALL OVERLAP THE DOWNSTREAM TARP. THE TARP SHALL BE AT LEAST 2" HEAVY DUTY SLUICE TARP/AQUADUR OR EQUIVALENT FOR UV RESISTANCE.
 3. PROVIDE A MINIMUM OF THREE POROUS BAFFLES TO EVENLY DISTRIBUTE FLOW ACROSS THE BASIN, REDUCING TURBULENCE.
 4. BAFFLE MATERIAL MUST BE SECURED AT THE BOTTOM AND SIDES USING STAPLES OR BY TRENCHING AT LEAST 12" FROM THE BOTTOM OF THE BASIN. PROVIDE A MINIMUM OF TWO (2) BAFFLES PER BASIN. THE FIRST BAY OF BAFFLES SHALL BE 75% OF THE TOTAL LENGTH OF THE BASIN. THE REMAINING BAFFLES SHALL BE 25% OF THE TOTAL LENGTH OF THE BASIN.
 5. MOST OF THE SEDIMENT WILL ACCUMULATE IN THE FIRST BAY, SO THIS SHOULD BE READILY AVAILABLE FOR MAINTENANCE.
 6. DURING THE CONSTRUCTION PHASE OF THE PROJECT, FORWARD STORMWATER RISK SHALL ONLY GREATER FROM THE TOP OF PIPE.
 7. POND SHALL NOT BE CONVERTED FOR STORMWATER USE UNTIL APPROVED BY ENVIRONMENTAL ENGINEER.

STANDARD CUSTOM BASIN



- NOTES:
1. BAFFLE MATERIAL SHOULD BE SECURED AT THE BOTTOM AND SIDES USING STAPLES OR BY TRENCHING AS FOR SILT FENCE.
 2. MOST OF THE SEDIMENT WILL ACCUMULATE IN THE FIRST BAY, WHICH SHOULD BE READILY ACCESSIBLE FOR MAINTENANCE.
 3. PROVIDE BAFFLES (USE TWO IF LESS THAN 20 FEET IN LENGTH), PROVIDE 5 BAFFLES FOR DRAINAGE AREAS GREATER THAN 10 ACRES.
 4. BAFFLES SHALL BE 70% LONGER OVER EROSION BELANNET.
 5. TOPS OF BAFFLES SHOULD BE 7 INCHES LOWER THAN THE TOP OF THE BERMS.
 6. INSPECT BAFFLES FOR REPAIR ONCE A WEEK AND AFTER EACH RAINFALL.

STANDARD BAFFLES DETAIL



Temporary Sediment Traps, Skimmer Sediment Basins, and Temporary Sediment Basins

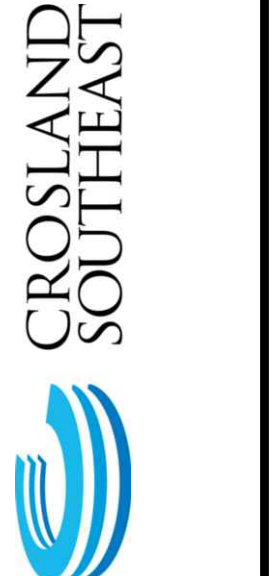
Device	Type	Weir Flow		Depth	Depth Below Weir (ft)	Side Slope (x:1)	Top Length (ft)	Top Width (ft)	Skimmer Orifice	
		Weir (ft)	Depth (ft)						Size (in)	(in)
SSB-1	Skimmer Sediment Basin	20	0.2	1.5	2.0	3.0	92	39	2.00	1.00

Device ID	Device Type	Add'l Flow (cfs)	Disturbed Area (AC)	Tc (min)	Intensity (in/hr)*	C	Qreq (cfs)	Up Invert	Down Invert	Length (ft)	Base Width (ft)	Left Slope (x:1)	Right Slope (x:1)	Flow Depth (ft)	Manning's n	Slope (ft/ft)	Wetted Area (sf)	Wetted Perimeter (ft)	Hydraulic Radius (ft)	Velocity (ft/s)	Qa (cfs)	Qa>Qreq?	τ (lbs/ft ²)	Liner Type	Allowable Shear Stress, τ (lbs/ft ²)
TDD-1	Temporary Diversion	0.0	0.75	5	7.18	0.5	2.69	395.5	387.5	266	1	3	3	0.96	0.020	0.03008	3.75	7.30	0.51	0.72	2.69	Yes	1.808237032	N. Am. Green; Straw; 1 nets	1.55
TDD-2	Temporary Diversion	0.0	0.80	5	7.18	0.5	2.87	397.5	387.5	475	1	3	3	1.12	0.020	0.02105	4.85	7.40	0.66	0.59	2.87	Yes	1.466147893	N. Am. Green; Straw; 1 nets	1.55

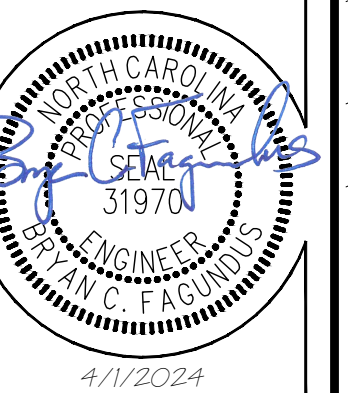
*NOAA Atlas 14, NEUSE 2 NE Station, 10-yr 5-min duration intensity

- Final Drawing -
Issued for Permit
Review Purposes Only

REVISIONS:



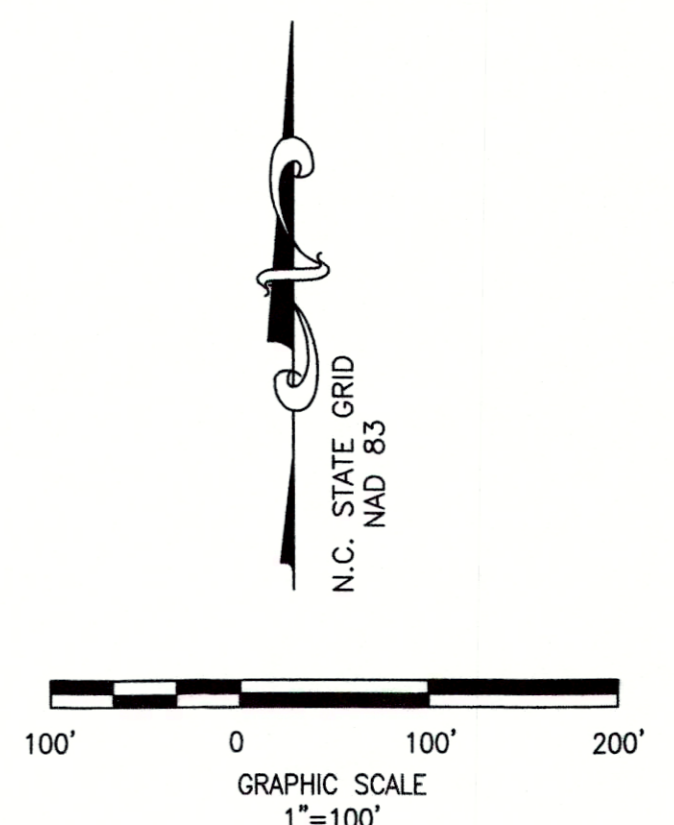
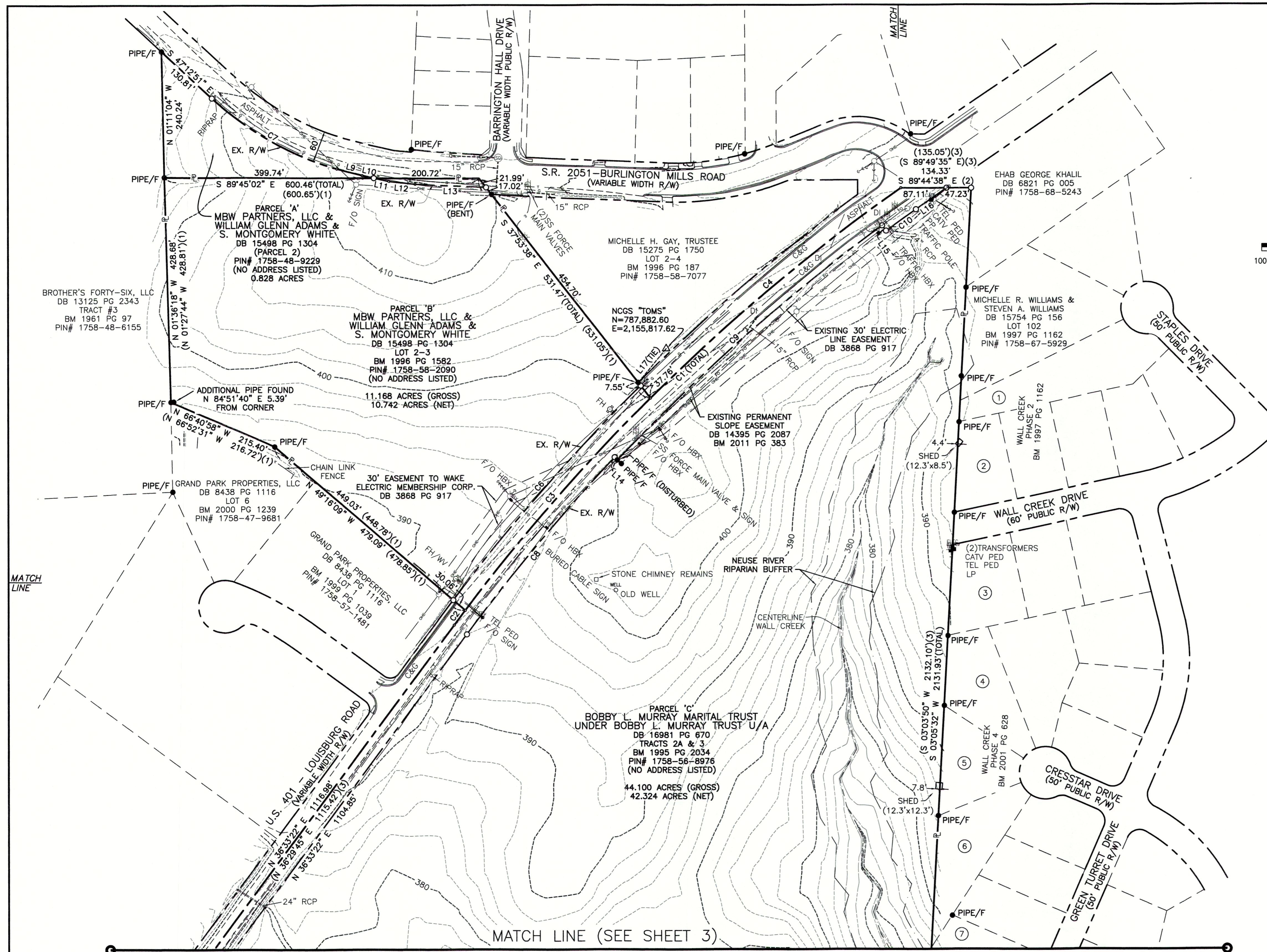
DETAILS
WALLBROOK - LOT 7
MASS GRADING / EROSION CONTROL
Town of Rolesville Project No. CID 24-
S Main St. / US-401 Business & Wall Creek Drive
Rolesville, Wake County, North Carolina



Project Manager: BCF
Drawn By: DLC
Checked By: TN
Project Number: 24
Drawing Number: D-1471

C2.2

Date: April 1, 2024



ADJOINING PROPERTY OWNERS

- ① RODERICK BLACKWELL & CHRISTINE BLACKWELL
DB 8769 PG 1894
LOT 101
BM 1997 PG 1162
PIN# 1758-67-6836
- ② CHARLES CULBERTSON & TERESA CULBERTSON
DB 17393 PG 896
LOT 96
BM 1997 PG 1162
PIN# 1758-67-4619
- ③ ANTONIO G. CATTARUZZA & SHEILA B. CATTARUZZA
DB 8149 PG 422
LOT 92
BM 1997 PG 1162
PIN# 1758-67-4416
- ④ JOHN DANIEL BONO, III & SABRINA MICHELE BONO
DB 13369 PG 2170
LOT 85
BM 2001 PG 628
PIN# 1758-67-4204
- ⑤ RONALD G. PATTERSON & LAURA A. PATTERSON
DB 10087 PG 2409
LOT 84
BM 2001 PG 628
PIN# 1758-67-4100
- ⑥ MICHAEL A. HADDER & JENNIFER H. HADDER
DB 16143 PG 2477
LOT 83
BM 2001 PG 628
PIN# 1758-66-3984
- ⑦ JOSEPH L. KEELEY, III & SARAH E. KEELEY
DB 10496 PG 1314
LOT 79
BM 2002 PG 825
PIN# 1758-66-4723

- LEGEND**
- (1) = RECORD DATA PER BM 1996 PG 1582
 - (2) = RECORD DATA PER BM 2011 PG 383
 - (3) = RECORD DATA PER BM 1995 PG 2034
 - (4) = RECORD DATA PER BM 2002 PG 825
 - (5) = RECORD DATA PER BM 2005 PG 1195-1196
 - (6) = RECORD DATA PER DB 13993 PG 2591
 - = FOUND MONUMENT AS NOTED
 - = SET IRON PIN
 - △ = NCGS MONUMENT
 - = DIMENSION POINT (NOTHING SET)
 - ℙ = PROPERTY LINE
 - R/W = RIGHT OF WAY

- C&G = CURB AND GUTTER
- CAV = CABLE TV PEDESTAL
- DI = DROP INLET
- ELEC = ELECTRIC BOX
- EM = ELECTRIC METER
- F/O = FIBER OPTIC
- FH = FIRE HYDRANT
- GV = GAS VALVE
- HBX = HAND BOX
- LP = LIGHT POLE
- PP = POWER POLE
- ← = GUY WIRE
- RCP = REINFORCED CONCRETE PIPE
- S.F. = SQUARE FEET (AREA)
- = SIGN
- = TRAFFIC SIGNAL POLE
- = SANITARY SEWER MANHOLE
- = SANITARY SEWER FORCE MAIN VALVE
- = STORM DRAIN MANHOLE
- = TELEPHONE PEDESTAL
- = TRAFFIC BOX
- = WATER BOX
- = WATER METER
- WM = WATER MANHOLE
- WMH = WATER MANHOLE
- WV = WATER VALVE
- = WELL
- = PEDESTRIAN X-WALK POLE
- = ELECTRIC LINE
- = SANITARY SEWER FORCE MAIN
- = FIBER OPTIC LINE
- = GAS LINE
- = OVERHEAD ELECTRIC LINE
- = SANITARY SEWER LINE
- = TELEPHONE LINE
- = CABLE TV LINE
- = WATER LINE

LINE	BEARING	DISTANCE
L1	N 02°07'15" W	48.32'
L2	N 03°10'03" W	17.67'
L3	N 41°10'16" E	41.30'
L4	N 40°37'47" E	49.15'
L5	N 39°31'43" E	50.83'
L6	N 38°52'58" E	49.80'
L7	N 38°22'04" E	50.40'
L8	N 37°17'31" E	50.37'
L9	S 75°02'10" E	50.12'
L10	S 77°31'31" E	22.85'
L11	S 77°31'31" E	29.16'
L12	S 84°03'28" E	50.67'
L13	S 87°10'20" E	135.52'
L14	S 46°39'44" E	7.50'
L15	S 36°12'58" E	12.50'
L16	N 55°13'38" E	70.99'
L17	N 39°21'58" E	83.92'

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	1197.82'	3750.00'	18°18'05"	S 45°42'25" W	1192.73'
C2	35.15'	3750.00'	0°32'13"	S 36°49'29" W	35.15'
C3	537.89'	3750.00'	8°13'06"	S 41°12'09" W	537.43'
C4	624.78'	3750.00'	9°32'45"	S 50°05'04" W	624.06'
C5	65.86'	123.92'	30°27'05"	S 17°21'49" E	65.09'
C6	543.86'	3780.00'	8°14'37"	S 41°14'38" W	543.40'
C7	276.12'	800.00'	26°22'04"	N 60°23'53" W	273.69'
C8	440.32'	3720.00'	6°46'55"	S 39°56'50" W	440.07'
C9	675.86'	3712.50'	10°25'52"	S 48°33'13" W	674.95'
C10	70.31'	3700.00'	1°05'20"	S 54°18'48" W	70.31'

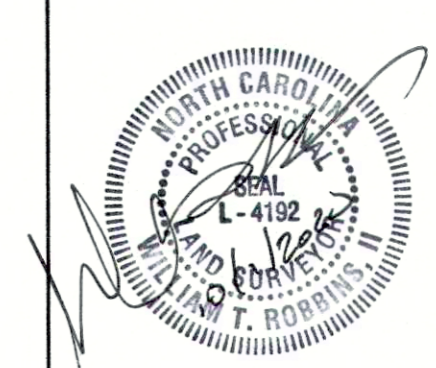
(R=3750.00', L=1199.06')(3)

JMT JOHNSON, MIRMIRAN & THOMPSON
 Engineering A Brighter Future
 9201 Arboretum Parkway Suite 310 Richmond, Virginia 23236
 PHONE: (804)-323-9900 FAX: (804)-323-0596
 EMAIL: jmtva@jmt-engineering.com

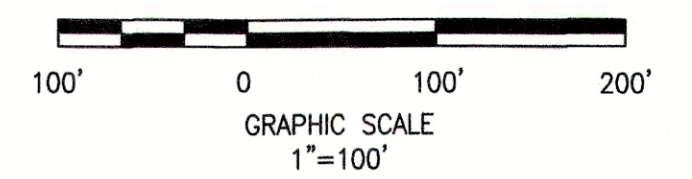
REVISION #	DATE	REASON FOR REVISION
1	10/01/2020	ADDED RIPARIAN BUFFER ALONG WALL CREEK

ALTA/NSPS LAND TITLE SURVEY
 PREPARED FOR
WALLBROOK LANDCO, LLC
 WAKE FOREST TOWNSHIP
 TOWN OF ROLESVILLE, WAKE COUNTY, NORTH CAROLINA

DRAWN BY: JSZ PROJECT#: JMT# 17-10946-001
 CHECKED BY: WTR CONTRACT#: SHEET 2 OF 3
 DATE: 03/25/2020 SCALE: 1"=100'



MATCH LINE (SEE SHEET 2)



ADJOINING PROPERTY OWNERS

- (7) JOSEPH L. KEELEY, III & SARAH E. KEELEY
DB 10496 PG 1314
LOT 79
BM 2002 PG 825
PIN# 1758-66-4723
- (8) PHILIP B. MCENANEY & ELIZABETH J. MCENANEY
DB 16674 PG 2208
LOT 78
BM 2002 PG 825
PIN# 1758-66-3695
- (9) KATHRYN G. GAMBLE & DONALD P. MCFARLAND
DB 16914 PG 210
LOT 77
BM 2002 PG 825
PIN# 1758-66-3467
- (10) JAMES A. WOODARD & PHYLLIS A. WOODARD
DB 9813 PG 1290
LOT 76
BM 2002 PG 825
PIN# 1758-66-3293
- (11) CARLTON GROUP OF NORTH CAROLINA, LLC
DB 11427 PG 882
POR. TRACT 1
BM 2005 PG 1195-1196
PIN# 1758-55-1729
- (12) CARLTON GROUP OF NORTH CAROLINA, LLC
DB 11427 PG 882
POR. TRACT 1
BM 2005 PG 1195-1196
PIN# 1758-44-5944
- (13) CARLTON GROUP OF NORTH CAROLINA, LLC
DB 13993 PG 2591
PIN# 1758-45-1587

LEGEND

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- S.F. = SQUARE FEET (AREA)
- SIGN = SIGN
- TS = TRAFFIC SIGNAL POLE
- SSM = SANITARY SEWER MANHOLE
- SSFMV = SANITARY SEWER FORCE MAIN VALVE
- SDM = STORM DRAIN MANHOLE
- TP = TELEPHONE PEDESTAL
- TB = TRAFFIC BOX
- WB = WATER BOX
- WM = WATER METER
- WMH = WATER MANHOLE
- WV = WATER VALVE
- WELL = WELL
- X-WALK = PEDESTRIAN X-WALK POLE
- E = ELECTRIC LINE
- FM = SANITARY SEWER FORCE MAIN
- FO = FIBER OPTIC LINE
- G = GAS LINE
- OHE = OVERHEAD ELECTRIC LINE
- S = SANITARY SEWER LINE
- T = TELEPHONE LINE
- TV = CABLE TV LINE
- W = WATER LINE

LINE	BEARING	DISTANCE	
L1	N 02°07'15" W	48.32'	(6)
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L8	N 37°17'31" E	50.37'	(5)
L9	S 75°02'10" E	50.12'	(5)
L10	S 77°31'31" E	22.85'	(2)
L11	S 77°31'31" E	29.16'	(2)
L12	S 84°03'28" E	50.67'	(2)
L13	S 87°10'20" E	135.52'	(2)
L14	S 46°39'44" E	7.50'	(2)
L15	S 36°12'58" E	12.50'	(2)
L16	N 55°13'38" E	70.99'	(2)
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C7	276.12'	600.00'	26°22'04"	N 60°23'53" W	273.69'
C8	440.32'	3720.00'	6°46'55"	S 39°56'50" W	440.07'
C9	675.88'	3712.50'	10°25'52"	S 48°33'13" W	674.95'
C10	70.31'	3700.00'	1°05'20"	S 54°18'48" W	70.31'

(R=3750.00', L=1199.06')(3)

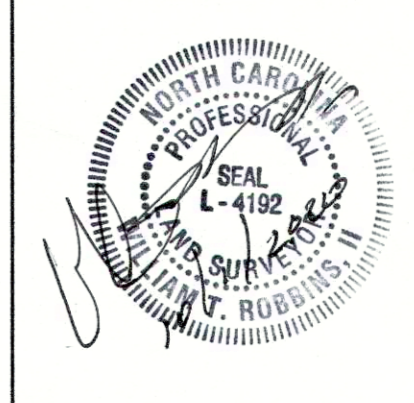
(2)

JMT JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future
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 PHONE: (804)-323-9900 FAX: (804)-323-0596
 EMAIL: jmtvo@jmt-engineering.com

REVISION #	DATE	REASON FOR REVISION
1	10/01/2020	ADDED RIPARIAN BUFFER ALONG WALL CREEK

ALTA/NSPS LAND TITLE SURVEY
 PREPARED FOR
WALLBROOK LANDCO, LLC
 WAKE FOREST TOWNSHIP
 TOWN OF ROLESVILLE, WAKE COUNTY, NORTH CAROLINA

DRAWN BY: JSZ PROJECT#: JMT#: 17-10946-001
 CHECKED BY: WTR CONTRACT#: JMT#: 17-10946-001
 DATE: 03/25/2020 SCALE: 1"=100' SHEET 3 OF 3



TREE PRESERVATION AREA			
Wallbrook	Area (SF)	Acres	
Lot 1A (Publix)	289,488.0	6.65	
Lot 1B	100,018.8	2.30	
Lot 1C	82,590.5	1.90	
Lot 2	74,702.8	1.71	
Lot 3	47,515.5	1.09	
Lot 4	78,725.4	1.81	
Lot 5 (Boat Tract)	220,767.8	5.07	
Lot 6 (Townhomes)	876,206.2	20.11	
Lot 7	119,306.6	2.74	
Lot 8	232,868.9	5.35	
Right-of-Way (Future)	290,799.5	6.68	
WALLBROOK GROSS ACREAGE		55.39	
TREE PRESERVATION AREA	368,616.2	8.46	15.28%
QUALIFYING REPLACEMENT DECIDUOUS			12
QUALIFYING REPLACEMENT EVERGREEN			8

Paris Tract	Area (SF)	Acres	
Lot 9	86,013.5	1.97	
Lot 10	136,382.3	3.13	
Lot 11	70,406.6	1.62	
Right-of-Way (Future)	13,978.4	0.32	
PARIS TRACT GROSS ACREAGE		7.04	
TREE PRESERVATION AREA	16,399.5	0.38	5.35%
QUALIFYING REPLACEMENT DECIDUOUS			2
QUALIFYING REPLACEMENT EVERGREEN			0

MBW Tract	Area (SF)	Acres	
Lot 12	223,658.5	5.13	
Lot 13	60,807.1	1.40	
Lot 14	17,893.2	0.41	
MBW GROSS ACREAGE		6.94	
TREE PRESERVATION AREA	0.0	0.00	0.00%
QUALIFYING REPLACEMENT DECIDUOUS			1
QUALIFYING REPLACEMENT EVERGREEN			0

TREE REPLACEMENT - WALLBROOK						
Date	ToR Project #	Project Description	Deciduous	Total Provided / Required	Evergreen	Total Provided / Required
18-AUG-23	SOP 23-05	Publix at Wallbrook	12	12 / 12	8	8 / 8

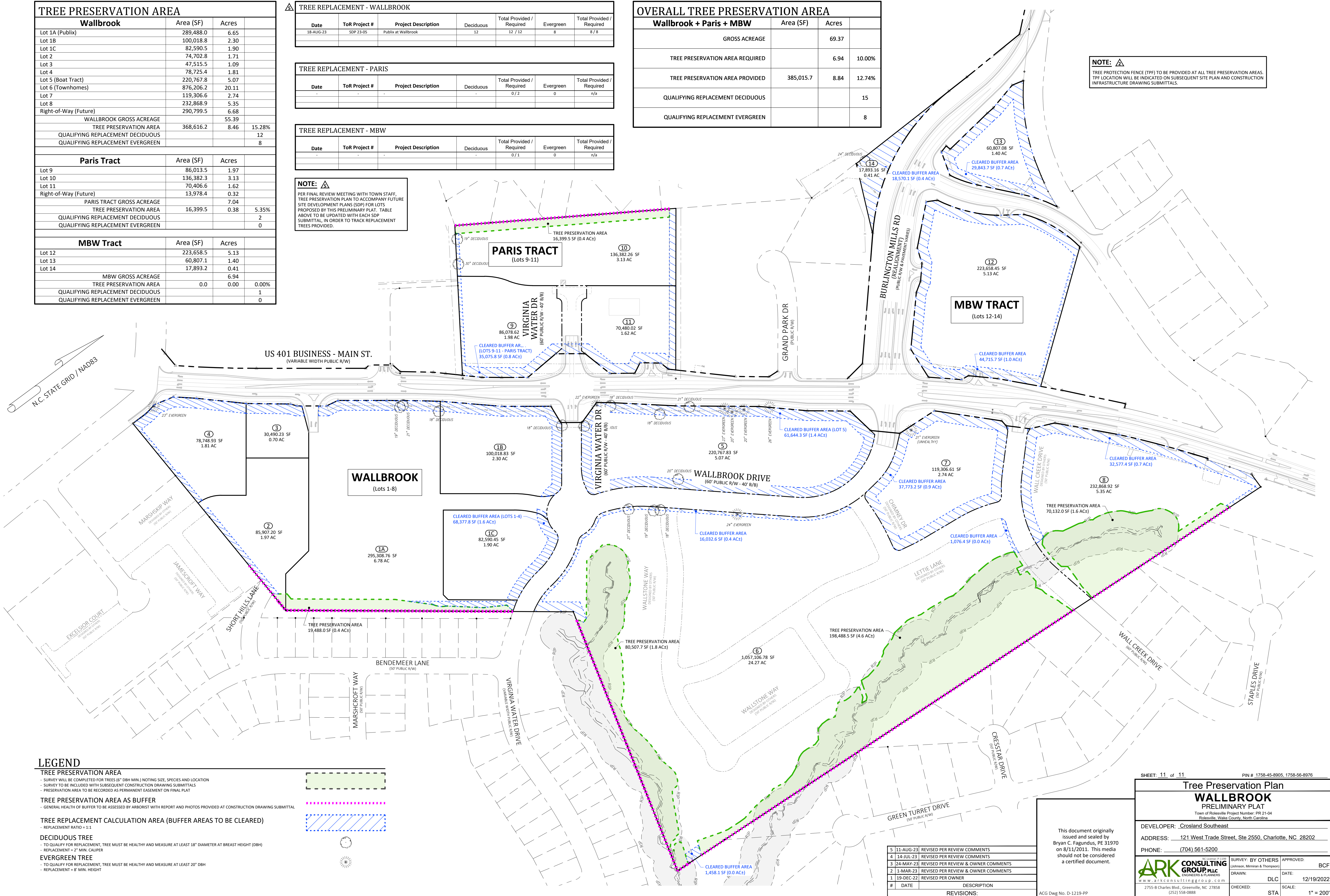
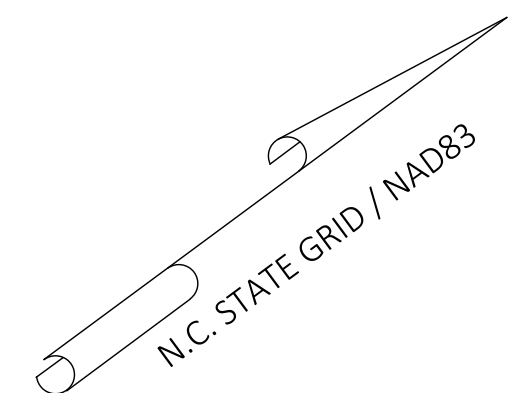
TREE REPLACEMENT - PARIS						
Date	ToR Project #	Project Description	Deciduous	Total Provided / Required	Evergreen	Total Provided / Required
				0 / 2	0	n/a

TREE REPLACEMENT - MBW						
Date	ToR Project #	Project Description	Deciduous	Total Provided / Required	Evergreen	Total Provided / Required
				0 / 1	0	n/a

NOTE: PER FINAL REVIEW MEETING WITH TOWN STAFF, TREE PRESERVATION PLAN TO ACCOMPANY FUTURE SITE DEVELOPMENT PLANS (SDP) FOR LOTS PROPOSED BY THIS PRELIMINARY PLAT. TABLE ABOVE TO BE UPDATED WITH EACH SDP SUBMITTAL, IN ORDER TO TRACK REPLACEMENT TREES PROVIDED.

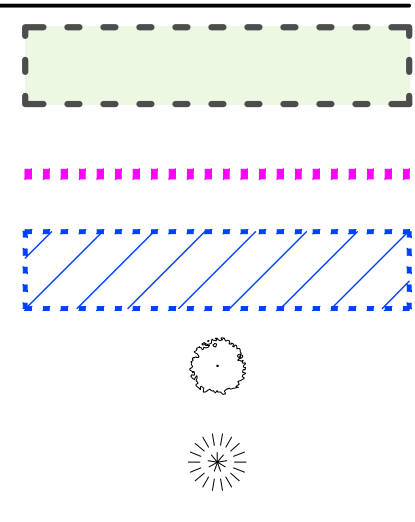
OVERALL TREE PRESERVATION AREA			
Wallbrook + Paris + MBW	Area (SF)	Acres	
GROSS ACREAGE		69.37	
TREE PRESERVATION AREA REQUIRED		6.94	10.00%
TREE PRESERVATION AREA PROVIDED	385,015.7	8.84	12.74%
QUALIFYING REPLACEMENT DECIDUOUS			15
QUALIFYING REPLACEMENT EVERGREEN			8

NOTE: TREE PROTECTION FENCE (TPF) TO BE PROVIDED AT ALL TREE PRESERVATION AREAS. TPF LOCATION WILL BE INDICATED ON SUBSEQUENT SITE PLAN AND CONSTRUCTION INFRASTRUCTURE DRAWING SUBMITTALS.



LEGEND

- TREE PRESERVATION AREA**
 - SURVEY WILL BE COMPLETED FOR TREES (6" DBH MIN.) NOTING SIZE, SPECIES AND LOCATION
 - SURVEY TO BE INCLUDED WITH SUBSEQUENT CONSTRUCTION DRAWING SUBMITTALS
 - PRESERVATION AREA TO BE RECORDED AS PERMANENT EASEMENT ON FINAL PLAT
- TREE PRESERVATION AREA AS BUFFER**
 - GENERAL HEALTH OF BUFFER TO BE ASSESSED BY ARBORIST WITH REPORT AND PHOTOS PROVIDED AT CONSTRUCTION DRAWING SUBMITTAL
- TREE REPLACEMENT CALCULATION AREA (BUFFER AREAS TO BE CLEARED)**
 - REPLACEMENT RATIO = 1:1
- DECIDUOUS TREE**
 - TO QUALIFY FOR REPLACEMENT, TREE MUST BE HEALTHY AND MEASURE AT LEAST 18" DIAMETER AT BREAST HEIGHT (DBH)
 - REPLACEMENT = 2" MIN. CALIPER
- EVERGREEN TREE**
 - TO QUALIFY FOR REPLACEMENT, TREE MUST BE HEALTHY AND MEASURE AT LEAST 20" DBH
 - REPLACEMENT = 8" MIN. HEIGHT



#	DATE	DESCRIPTION
5	11-AUG-23	REVISED PER REVIEW COMMENTS
4	14-JUL-23	REVISED PER REVIEW COMMENTS
3	24-MAY-23	REVISED PER REVIEW & OWNER COMMENTS
2	1-MAR-23	REVISED PER REVIEW & OWNER COMMENTS
1	19-DEC-22	REVISED PER OWNER

This document originally issued and sealed by Bryan C. Fagundus, PE 31970 on 8/11/2011. This media should not be considered a certified document.

SHEET: 11 of 11 PIN # 1758-45-8905, 1758-56-8976

Tree Preservation Plan
WALLBROOK
PRELIMINARY PLAT

DEVELOPER: Crosland Southeast
ADDRESS: 121 West Trade Street, Ste 2550, Charlotte, NC 28202
PHONE: (704) 561-5200

795-B Charles Blvd., Greenville, NC 27858
(252) 558-0888

APPROVED: BCF
DATE: 12/19/2022
SCALE: 1" = 200'

D:\VARS\03000101 - PROJECTS\03000101\03000101 - WALLBROOK - SHEET 11 - TREE PRESERVATION PLAN - 12-19-2022.dwg