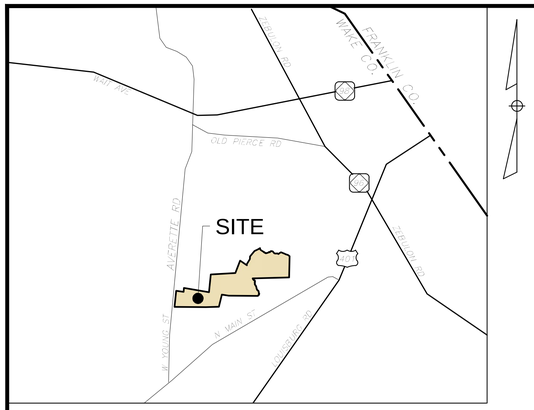
SAVED: 8/14/20 10:34 AM

CONSTRUCTION DRAWINGS

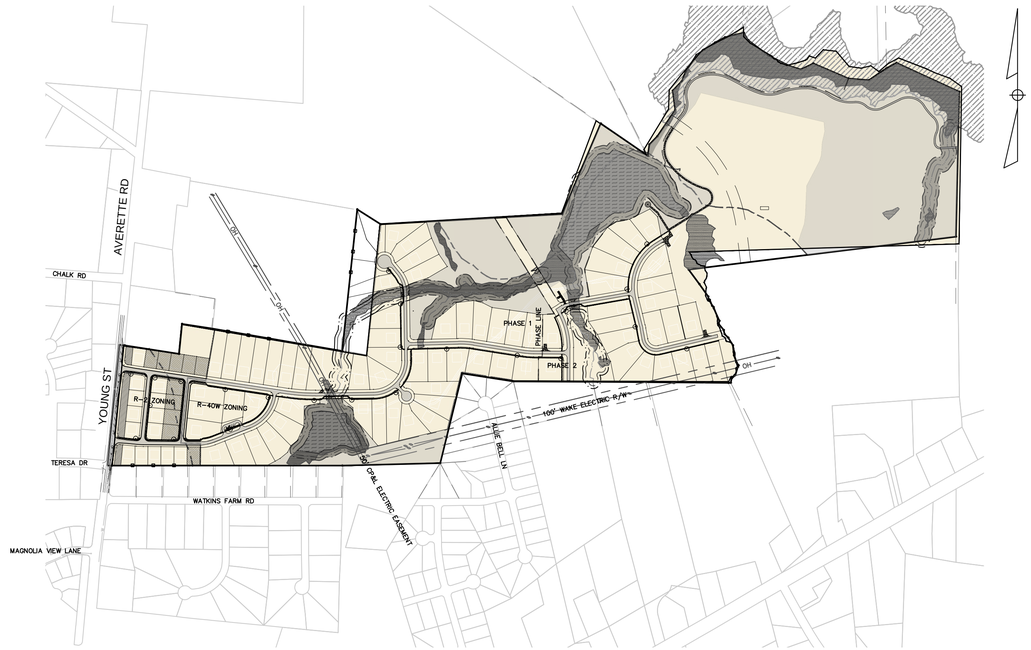
CHANDLER'S RIDGE
CONSERVATION SUBDIVISION

TOWN OF ROLESVILLE
WAKE CO, NC
JUNE 17, 2020

1st SUBMITTAL JUNE 19, 2020
2nd SUBMITTAL AUGUST 14, 2020



VICINITY MAP
(NTS)



PROJECT PLAN
GRAPHIC SCALE
1 inch = 500 ft.

ATTENTION CONTRACTORS

The ***Construction Contractor*** responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for ***contacting*** the ***Public Utilities Department*** at ***(919) 996-4540*** at least ***twenty four hours*** prior to beginning any of their construction.

Failure to notify both ***City Departments*** in advance of beginning construction, will result in the issuance of ***monetary fines***, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure.

Failure to call for ***Inspection***, ***Install a Downstream Plug***, have ***Permitted Plans*** on the ***Jobsite***, or any other ***Violation*** of ***City of Raleigh Standards*** will result in a ***Fine and Possible Exclusion*** from future work in the ***City of Raleigh***.

SITE PERMITTING APPROVAL

Water and Sewer Permits (If applicable)

The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # _____

The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # _____

The City of Raleigh consents to the connection to its public sewer system and extension of the private sewer collection system as shown on this plan. The material and constructions methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.

City of Raleigh Public Utilities Department Permit # _____

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

City of Raleigh Development Approval _____
Raleigh Water Review Officer

PARCEL DATA	
PIN	1769362748
ADDRESS	410 W. YOUNG STREET
GROSS TRACT AREA	171.53 AC. (NET: 174.43)
EXISTING USE	AGRICULTURE
EXISTING ZONING	R-2 / R-40W
PROPOSED USE	CONSERVATION SUBDIVISION
UNITS PROPOSED	96 SINGLE FAMILY
PHASE 1	24 R-2, 50 R-40W
PHASE 2	22 R40-W

UTILITY IMPROVEMENTS	
8" PVC PUBLIC SEWER	9,090 LF
8" DIP PUBLIC SEWER	929 LF
CLASS III RCP STORM	1,387 LF
8" DIP PUBLIC WATER	5,250 LF
12" DIP PUBLIC WATER	3,415 LF
4" C900 PVC PUBLIC FORCEMAIN	4,944 LF

EROSION CONTROL, STORMWATER AND FLOODPLAIN MANAGEMENT

APPROVED

EROSION CONTROL ☐ S-_____

STORMWATER MGMT. ☐ S-_____

FLOOD STUDY ☐ S-_____

DATE_____

WAKE COUNTY NORTH CAROLINA EFFECTIVE: 01/18/17

ENVIRONMENTAL CONSULTANT SIGNATURE

DEVELOPER:
WRIGHT-WHITLEY DEVELOPMENT COMPANY, LLC
1225 N. WHITE ST.
WAKE FOREST, NC
(919) 349-5220

OWNER:
MELISSA CORBIN NONDORF, LINDA TRIPP-CORBIN
10622 S 600 W
WARREN, IN 46792

ENGINEER:
THOMAS S. SPEIGHT, JR., PE, PLS
BATEMAN CIVIL SURVEY COMPANY
2524 RELIANCE AVENUE
APEX, NC 27539

BCSC
BATEMAN CIVIL SURVEY COMPANY

Bateman Civil Survey Company
Engineers • Surveyors • Planners
2524 Reliance Avenue, Apex, North Carolina 27539
Phone: 919.577.1080 Fax: 919.577.1081
NCBELS FIRM No. C-2378

811
KNOW WHAT IS BELOW
CALL BEFORE YOU DIG

PROJECT NUMBER: 0170347

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C701	LILY OAK DR. P&P STA. 10+50 - 21+00
C702	LILY OAK DR. P&P STA. 21+00 - 29+08
C703	LONGSPUR LN. P&P STA. 0+00 - 10+00
C704	LONGSPUR LN. P&P STA. 10+00 - 13+20
C705	TIMBERDASH TR. P&P STA. 0+00 - 4+97
C706	PINE SPUR LN. P&P STA. 0+00 - 4+59
C707	OAK ROSE LN. P&P STA. 0+00 - 1+10
C708	SPARROW RIDGE DR. P&P STA. 0+00 - 11+00
C709	MELLONBROOK WAY P&P STA. 0+00 - 7+08
C710	MAPLEHURST DR. P&P STA. 0+00 - 5+44
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C712	SCENIC POND WAY P&P STA. 9+50 - 13+27
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C715	LOT 48 / 49 SEWER STUB P&P
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CHANDLER'S RIDGE

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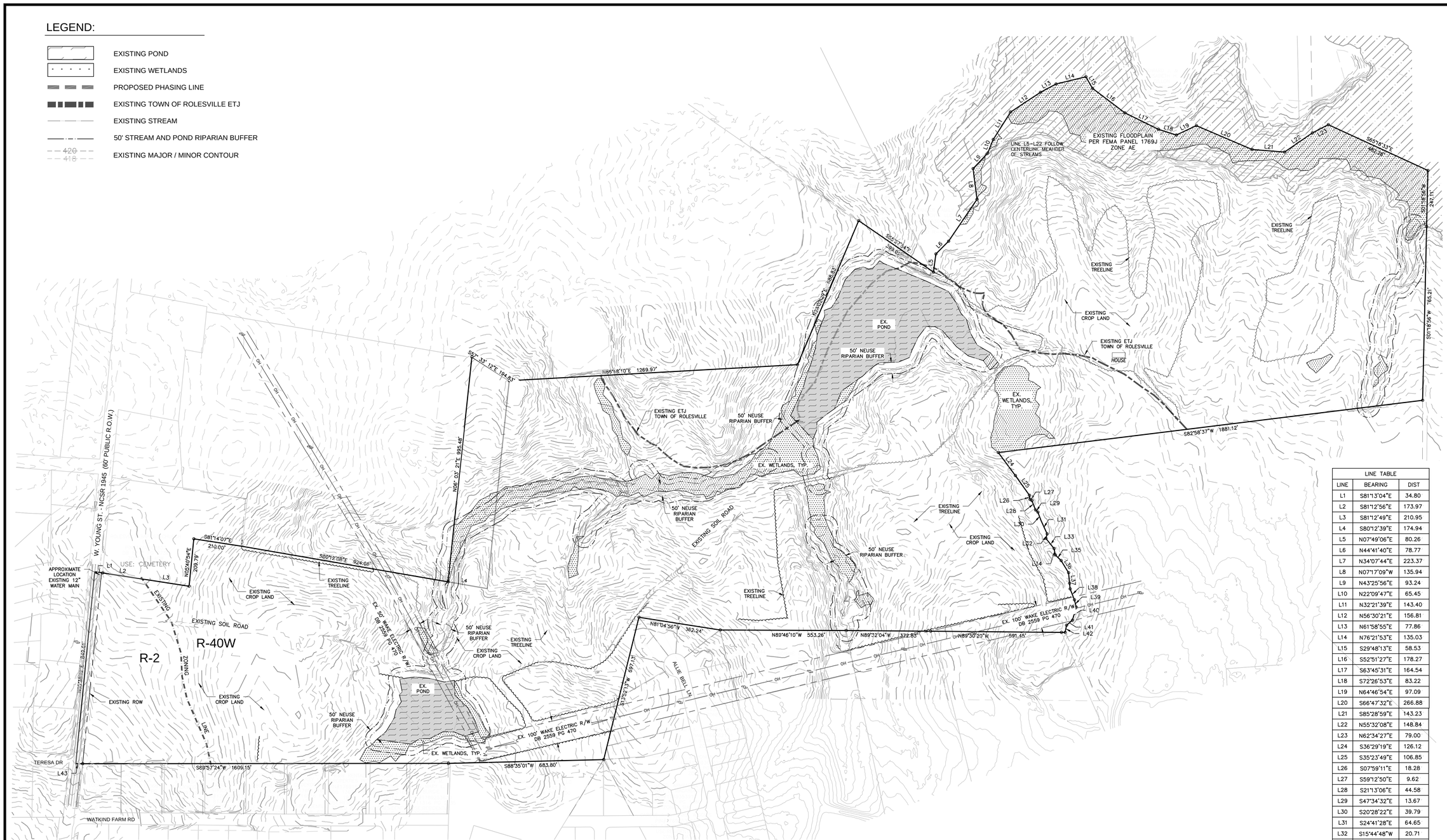
LEGEND:

- EXISTING POND
- EXISTING WETLANDS
- PROPOSED PHASING LINE
- EXISTING TOWN OF ROLESVILLE ETJ
- EXISTING STREAM
- 50' STREAM AND POND RIPARIAN BUFFER
- 420 / 418 EXISTING MAJOR / MINOR CONTOUR



LINE TABLE		
LINE	BEARING	DIST
L1	S81°13'04"E	34.80
L2	S81°12'56"E	173.97
L3	S81°12'49"E	210.95
L4	S80°12'39"E	174.94
L5	N07°49'06"E	80.26
L6	N44°41'40"E	78.77
L7	N34°07'44"E	223.37
L8	N07°17'09"W	135.94
L9	N43°25'56"E	93.24
L10	N22°09'47"E	65.45
L11	N32°21'39"E	143.40
L12	N56°30'21"E	156.81
L13	N61°58'55"E	77.86
L14	N76°21'53"E	135.03
L15	S29°48'13"E	58.53
L16	S52°51'27"E	178.27
L17	S63°45'31"E	164.54
L18	S72°26'53"E	83.22
L19	N64°46'54"E	97.09
L20	S66°47'32"E	266.88
L21	S85°28'59"E	143.23
L22	N55°32'08"E	148.84
L23	N62°34'27"E	79.00
L24	S36°29'19"E	126.12
L25	S35°23'49"E	106.85
L26	S07°59'11"E	18.28
L27	S59°12'50"E	9.62
L28	S21°13'06"E	44.58
L29	S47°34'32"E	13.67
L30	S20°28'22"E	39.79
L31	S24°41'28"E	64.65
L32	S15°44'48"W	20.71
L33	S38°52'21"E	57.30
L34	S11°42'28"E	28.87
L35	S45°40'36"E	35.21
L36	S31°30'25"E	62.67
L37	S05°44'30"E	71.50
L38	S21°01'37"E	52.07
L39	S14°11'37"E	33.36
L40	S16°41'36"W	59.55
L41	S49°18'04"W	33.85
L42	S11°19'37"W	32.19
L43	S89°52'40"W	30.04

EXISTING TRACT DATA:

TRACT DEVELOPER:

THOMAS RICHARD WRIGHT, JR.
1225 N. WHITE ST.
WAKE FOREST, NC 27588
CONTACT NO: (919) 349-5220

NC PIN: 1769-36-2748
DEED REFERENCE: DB 2559, PG 470 MAP #1769 01
REAL ESTATE ID: 0014930
ZONING: R-2 & R-40W
TOTAL TRACT AREA: 171.53 AC.
EXISTING USE: VACANT / UNDEVELOPED WOODS / CULTIVATED

NOTES

1. EXISTING BOUNDARY AND WETLANDS SURVEYED BY BATEMAN CIVIL SURVEY OF APEX, NC.
2. TOPOGRAPHY IS A COMPOSITE OF FIELD SURVEY AND WAKE COUNTY GIS DATA..

REV	DESCRIPTION	DATE
02	CONSTRUCTION DOCUMENTS 2ND SUBMITTAL	08/14/2020
01	CONSTRUCTION DOCUMENTS 1ST SUBMITTAL	06/19/2020

REVISIONS

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NORTH CAROLINA PROFESSIONAL SEAL 20234 ENGINEER THOMAS S. SPEIGHT, JR.

Bateman Civil Survey Company
Engineers • Surveyors • Planners
2524 Reliance Avenue, Apex, North Carolina 27539
Phone: 919.577.1080 Fax: 919.577.1081
NCBELS FIRM No. C-2378

CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION
410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

EXISTING CONDITIONS

Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 200'
Date:	08/14/2020
Project Number:	P170347

SHEET
C100

LINE TABLE		
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EXISTING TRACT DATA:

TRACT DEVELOPER:

THOMAS RICHARD WRIGHT, JR.
1225 N. WHITE ST.
WAKE FOREST, NC 27588
CONTACT NO: (919) 349-5220

NC PIN: 1769-36-2748
DEED REFERENCE: DB 2559, PG 470 MAP #1769 01
REAL ESTATE ID: 0014930
ZONING: R-1 & R-40W
TOTAL TRACT AREA: 171.53 ± AC.
EXISTING USE: VACANT / UNDEVELOPED WOODS / CULTIVATED

NOTES

1. EXISTING BOUNDARY AND WETLANDS SURVEYED BY BATEMAN CIVIL SURVEY OF APEX, NC.
2. TOPOGRAPHY IS WAKE COUNTY GIS FOR THE PRELIMINARY PLANS.

VaC2
Vance sandy loam, 6 to 10 percent slopes, eroded

VaB2
Vance sandy loam, 2 to 6 percent slopes, eroded

LoC
Louisburg loamy sand, 6 to 10 percent slopes

ApC
Appling sandy loam, 6 to 10 percent slopes

LoB
Louisburg loamy sand, 2 to 6 percent slopes

ApB2
Appling sandy loam, 2 to 6 percent slopes, eroded

WkC
Wake soil, 2 to 10 percent slopes

ApC2
Appling sandy loam, 6 to 10 percent slopes, eroded

DuC
Durham loamy sand, 6 to 10 percent slopes

Flood-Prone Soils
Wy, Au, Cu, Wo

VaB
Vance sandy loam, 2 to 6 percent slopes

DuB
Durham loamy sand, 2 to 6 percent slopes

ApB
Appling sandy loam, 2 to 6 percent slopes

1"=200' 200 0 200 400

REV	DESCRIPTION	DATE
02	CONSTRUCTION DOCUMENTS 2ND SUBMITTAL	08/14/2020
01	CONSTRUCTION DOCUMENTS 1ST SUBMITTAL	06/19/2020

REVISIONS

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NORTH CAROLINA PROFESSIONAL SEAL 20234 ENGINEER THOMAS S. SPEIGHT, JR. 9/10/20

Bateman Civil Survey Company
Engineers • Surveyors • Planners
2524 Reliance Avenue, Apex, North Carolina 27539
Phone: 919.577.1080 Fax: 919.577.1081
NCBELS FIRM No. C-2378

CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION
410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

SOILS MAP

Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 200'
Date:	08/14/2020
Project Number:	P170347

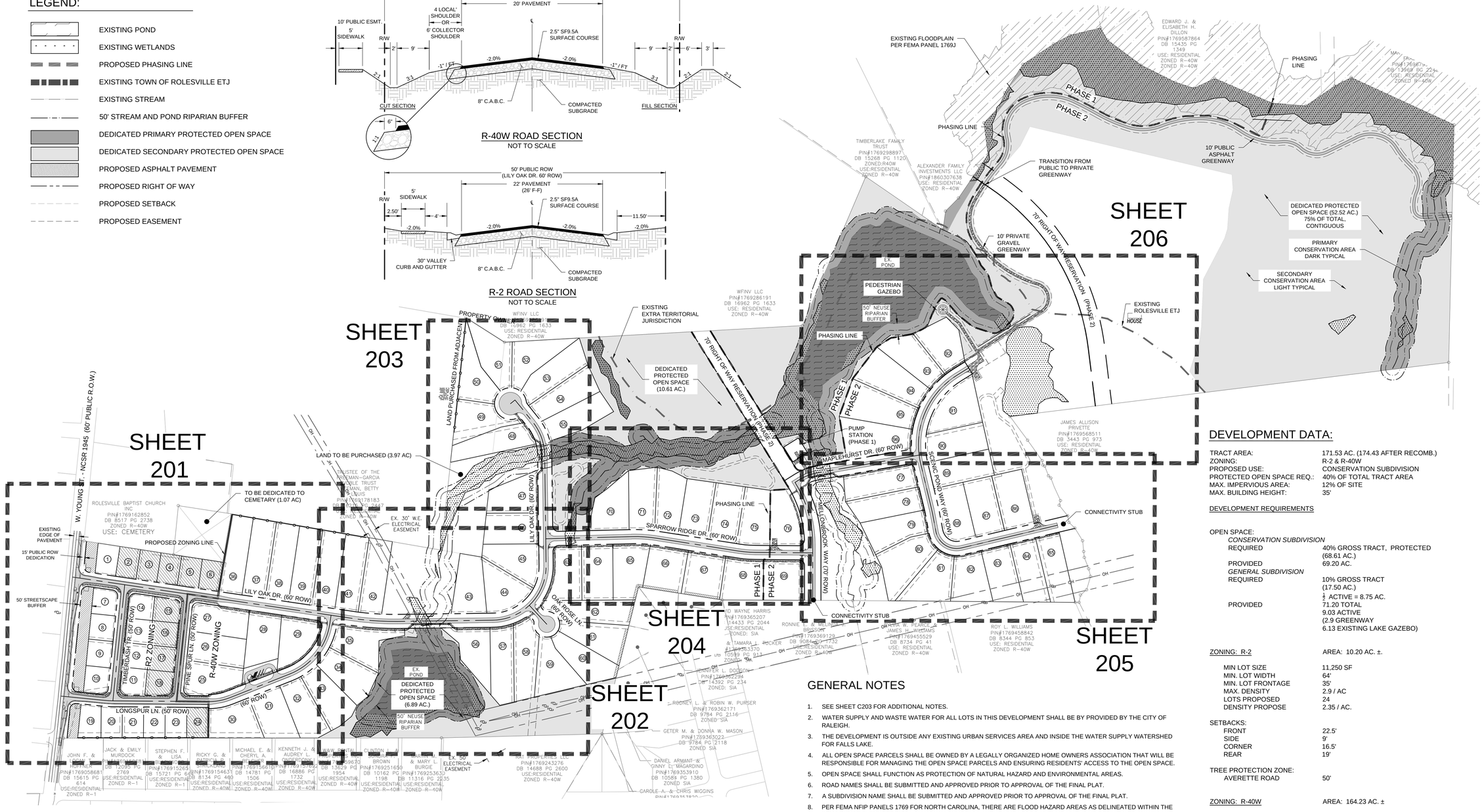
SHEET
C101

LEGEND:

- EXISTING POND
- EXISTING WETLANDS
- PROPOSED PHASING LINE
- EXISTING TOWN OF ROLESVILLE ETJ
- EXISTING STREAM
- 50' STREAM AND POND RIPARIAN BUFFER
- DEDICATED PRIMARY PROTECTED OPEN SPACE
- DEDICATED SECONDARY PROTECTED OPEN SPACE
- PROPOSED ASPHALT PAVEMENT
- PROPOSED RIGHT OF WAY
- PROPOSED SETBACK
- PROPOSED EASEMENT

R-40W ROAD SECTION
NOT TO SCALE

R-2 ROAD SECTION
NOT TO SCALE



DEVELOPMENT DATA:

TRACT AREA:	171.53 AC. (174.43 AFTER RECOMB.)
ZONING:	R-2 & R-40W
PROPOSED USE:	CONSERVATION SUBDIVISION
PROTECTED OPEN SPACE REQ.:	40% OF TOTAL TRACT AREA
MAX. IMPERVIOUS AREA:	12% OF SITE
MAX. BUILDING HEIGHT:	35'

DEVELOPMENT REQUIREMENTS

OPEN SPACE:

CONSERVATION SUBDIVISION

REQUIRED	40% GROSS TRACT, PROTECTED (68.61 AC.)
PROVIDED	69.20 AC.

GENERAL SUBDIVISION

REQUIRED	10% GROSS TRACT (17.50 AC.) ½ ACTIVE = 8.75 AC.
PROVIDED	71.20 TOTAL 9.03 ACTIVE (2.9 GREENWAY 6.13 EXISTING LAKE GAZEBO)

ZONING: R-2 — AREA: 10.20 AC. ±.

MIN LOT SIZE	11,250 SF
MIN. LOT WIDTH	64'
MIN. LOT FRONTAGE	35'
MAX. DENSITY	2.9 / AC
LOTS PROPOSED	24
DENSITY PROPOSE	2.35 / AC.

SETBACKS:

FRONT	22.5'
SIDE	9'
CORNER	16.5'
REAR	19'

TREE PROTECTION ZONE:

AVERETTE ROAD	50'

ZONING: R-40W — AREA: 164.23 AC. ±

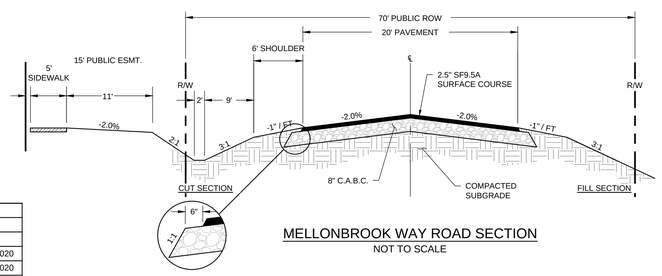
MIN LOT SIZE	30,000 SF
MIN. LOT WIDTH	83'
MIN. LOT FRONTAGE	35'
MAX. DENSITY	1 / AC
LOTS PROPOSED	72
DENSITY PROPOSED	0.44 / AC.

SETBACKS

FRONT	38'
SIDE	15'
CORNER	15'
REAR	23'

GENERAL NOTES

1. SEE SHEET C203 FOR ADDITIONAL NOTES.
2. WATER SUPPLY AND WASTE WATER FOR ALL LOTS IN THIS DEVELOPMENT SHALL BE BY PROVIDED BY THE CITY OF RALEIGH.
3. THE DEVELOPMENT IS OUTSIDE ANY EXISTING URBAN SERVICES AREA AND INSIDE THE WATER SUPPLY WATERSHED FOR FALLS LAKE.
4. ALL OPEN SPACE PARCELS SHALL BE OWNED BY A LEGALLY ORGANIZED HOME OWNERS ASSOCIATION THAT WILL BE RESPONSIBLE FOR MANAGING THE OPEN SPACE PARCELS AND ENSURING RESIDENTS' ACCESS TO THE OPEN SPACE.
5. OPEN SPACE SHALL FUNCTION AS PROTECTION OF NATURAL HAZARD AND ENVIRONMENTAL AREAS.
6. ROAD NAMES SHALL BE SUBMITTED AND APPROVED PRIOR TO APPROVAL OF THE FINAL PLAT.
7. A SUBDIVISION NAME SHALL BE SUBMITTED AND APPROVED PRIOR TO APPROVAL OF THE FINAL PLAT.
8. PER FEMA NFIP PANELS 1769 FOR NORTH CAROLINA, THERE ARE FLOOD HAZARD AREAS AS DELINEATED WITHIN THE DEVELOPMENT BOUNDARIES.
9. THERE SHALL BE NO FILLING OR ERECTION OF PERMANENT STRUCTURES IN THE AREAS OF WAKE COUNTY FLOOD HAZARD SOILS OR FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) 100 YEAR FLOOD ZONES UNTIL A FLOOD STUDY IS APPROVED BY WAKE COUNTY AND/OR FEMA.



MELLONBROOK WAY ROAD SECTION
NOT TO SCALE

OVERALL IMPERVIOUS AREA SUMMARY

EXISTING		0
ASPHALT ROADWAY		209,712 SF / 4.81 AC.
MAIL KIOSK		150 SF / 0.003 AC.
RESIDENTIAL LOTS	R-2 ZONED = 4,600 SF R-40W ZONED = 6,500 SF	578,400 S.F. / 13.28 AC.
CONCRETE SIDEWALK AND CURB GUTTER		53,278 S.F. / 1.22 AC.
PUMP STATION & DRIVEWAY		6,847 S.F. / 0.16 AC.
GREENWAY		37,758 S.F. / 0.86 AC.
GRAVEL TURN-AROUNDS		5,779 S.F. / 0.13 AC.
TOTAL IMPERVIOUS AREA PROVIDED (AC)		891,924 SF / 20.48 AC.
IMPERVIOUS AREA RATIO		11.74%

(NOTE: RESIDENTIAL LOT IMPERVIOUS ALLOCATION DOES NOT INCLUDE SIDEWALK. SIDEWALK IS ALREADY ACCOUNTED FOR)

PHASING SUMMARY

PHASE 1 AREA	91.40 ACRES
PHASE 1 OPEN SPACE	36.70 ACRES (40.15%)
PHASE 2 AREA	80.13 ACRES
PHASE 2 OPEN SPACE	32.50 ACRES (40.56%)

1"=200' — 200 0 200 400

NORTH Referenced to N.C. GRID (NAD 83)

REV	DESCRIPTION	DATE
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01	CONSTRUCTION DOCUMENTS 1ST SUBMITTAL	06/19/2020

REVISIONS

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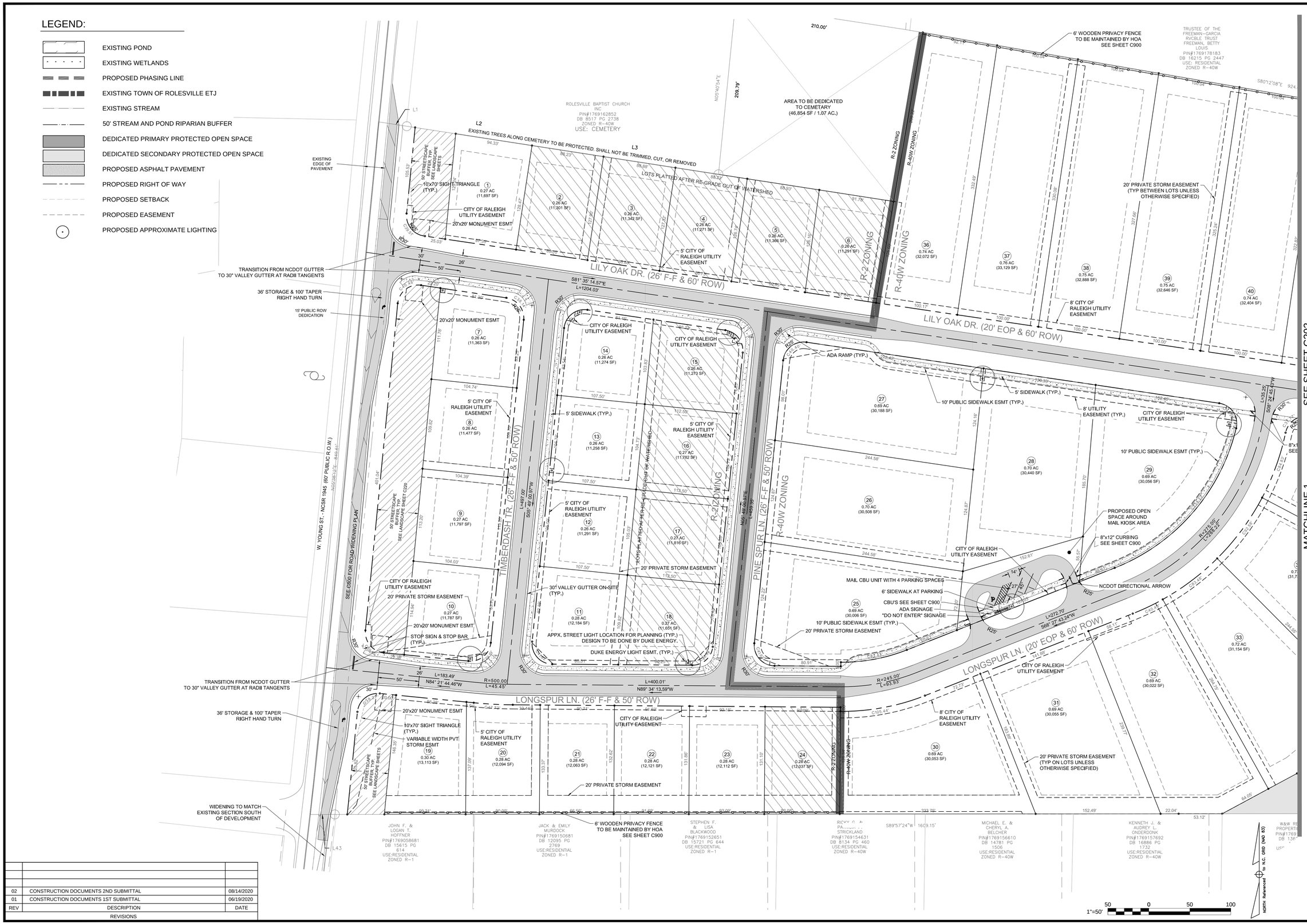
CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION
410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

OVERALL SITE & OPEN SPACE PLAN

Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 200'
Date:	08/14/2020
Project Number:	P170347

SHEET
C200



REV	DESCRIPTION	DATE
02	CONSTRUCTION DOCUMENTS 2ND SUBMITTAL	08/14/2020
01	CONSTRUCTION DOCUMENTS 1ST SUBMITTAL	06/19/2020

REVISIONS

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NORTH CAROLINA PROFESSIONAL SEAL 20234 ENGINEER THOMAS S. SPEIGHT, JR.

Bateman Civil Survey Company
Engineers • Surveyors • Planners
2524 Reliance Avenue, Apex, North Carolina 27539
Phone: 919.577.1080 Fax: 919.577.1081
NCBELS FIRM No. C-2378

SEE SHEET C202

MATCHLINE 1

CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION

410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

PHASE 1
SITE PLAN

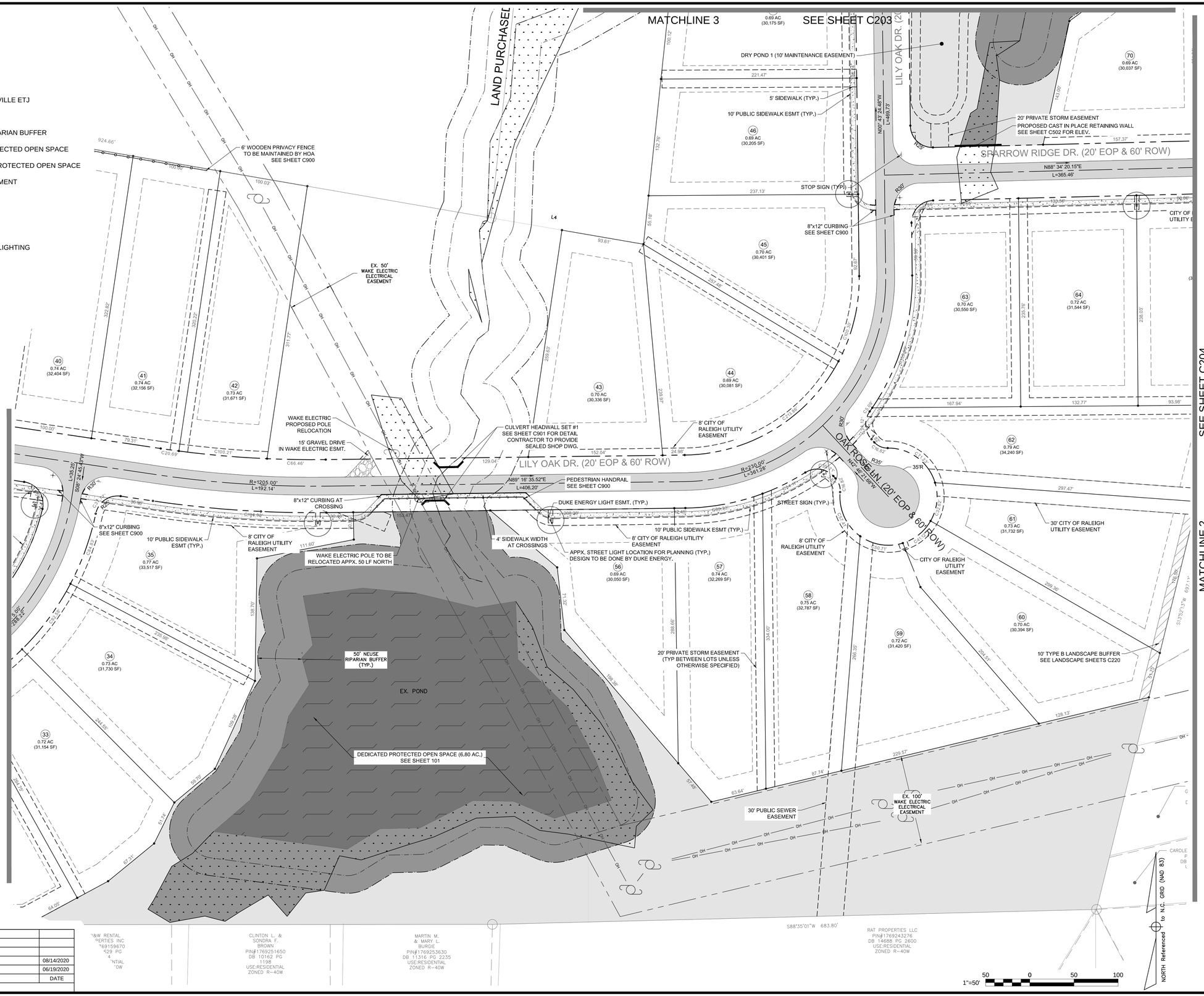
Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 50'
Date:	08/14/2020
Project Number:	P170347

SHEET

C201

LEGEND:

- EXISTING POND
- EXISTING WETLANDS
- PROPOSED PHASING LINE
- EXISTING TOWN OF ROLESVILLE ETJ
- EXISTING STREAM
- 50' STREAM AND POND RIPARIAN BUFFER
- DEDICATED PRIMARY PROTECTED OPEN SPACE
- DEDICATED SECONDARY PROTECTED OPEN SPACE
- PROPOSED ASPHALT PAVEMENT
- PROPOSED RIGHT OF WAY
- PROPOSED SETBACK
- PROPOSED EASEMENT
- PROPOSED APPROXIMATE LIGHTING



REV	DESCRIPTION	DATE
02	CONSTRUCTION DOCUMENTS 2ND SUBMITTAL	08/14/2020
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REVISIONS

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CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION

410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

PHASE 1 SITE PLAN

Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 50'
Date:	08/14/2020
Project Number:	P170347

SHEET

C202

LEGEND:

- EXISTING POND
- EXISTING WETLANDS
- PROPOSED PHASING LINE
- EXISTING TOWN OF ROLESVILLE ETJ
- EXISTING STREAM
- 50' STREAM AND POND RIPARIAN BUFFER
- DEDICATED PRIMARY PROTECTED OPEN SPACE
- DEDICATED SECONDARY PROTECTED OPEN SPACE
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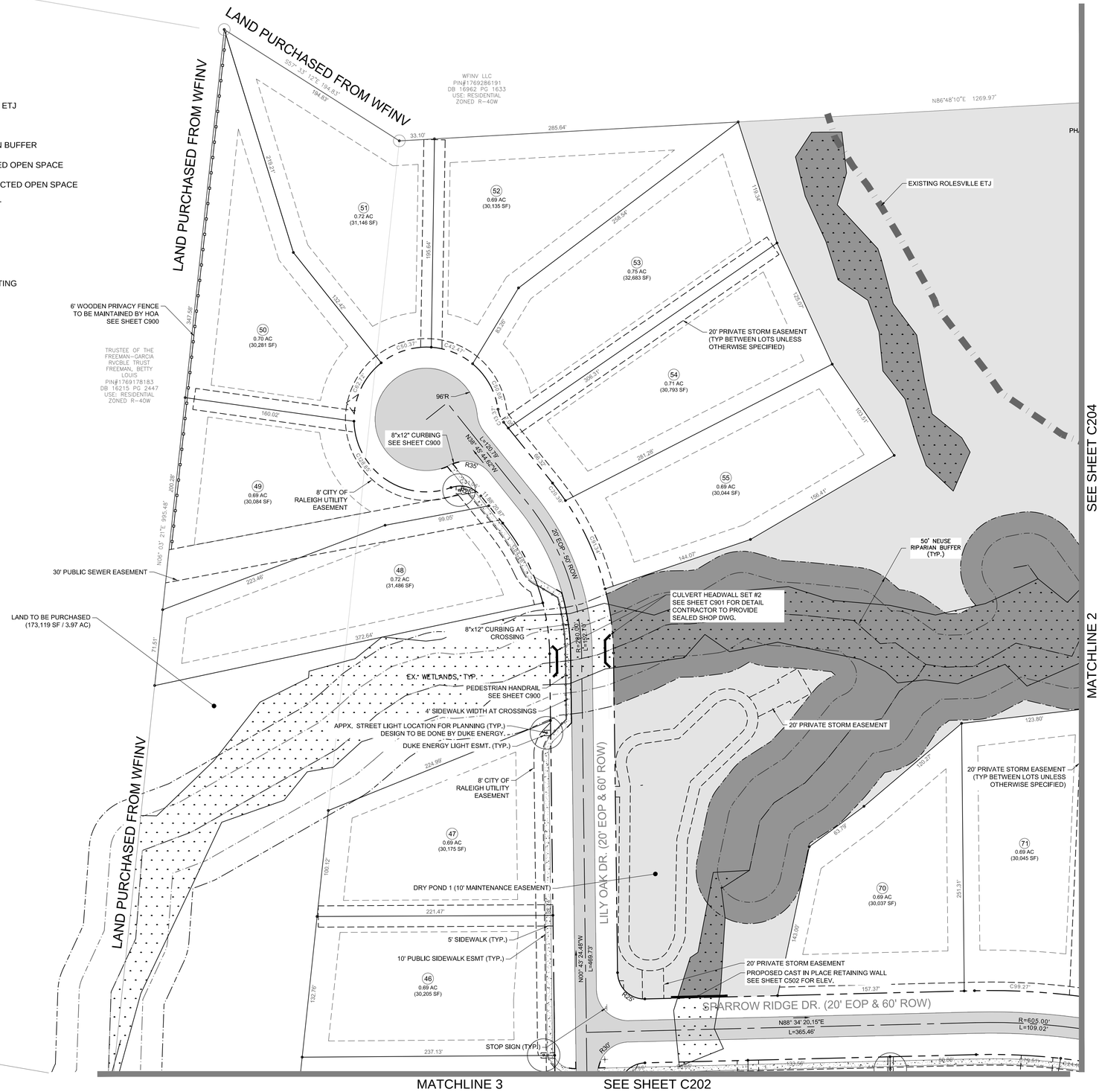

SITE NOTES:

2.THE CONTRACTOR SHALL REFERENCE THE DESIGN PLANS FOR DIMENSIONS, JOINT LOCATIONS, AND INLAY SPECIFICATIONS NEAR BUILDINGS AND IN COURTYARDS. CONTRACTOR SHALL PROVIDE JOINTS IN WALKWAYS AND HARDSCAPE PER DETAILS OR AS INDICATED ON LANDSCAPE/HARDSCAPE PLAN SHEETS.

3.ALL CONSTRUCTION TRAFFIC SHALL ENTER SITE FROM WEST YOUNG ST. UNLESS OTHERWISE APPROVED IN WRITING FROM THE OWNER'S REPRESENTATIVE FOR AN ALTERNATE POINT OF ACCESS.

4.REFER TO ARCHITECTURAL PLANS FOR BUILDING INFORMATION.

5.ALL DIMENSIONS ARE IN DECIMAL FEET TO OUTSIDE FACE OF BUILDINGS, TO CENTERLINES, AND/OR FACE OF CURB UNLESS OTHERWISE NOTED.

6. THIS SITE IS PARTIALLY LOCATED IN THE LITTLE RIVER WATERSHED AND STREET DESIGNS MUST MEET NCDOT AND TOWN OF ROLESVILLE SPECIFICATION AND STANDARDS.

7.THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND COORDINATES AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO ANY CONSTRUCTION.

8.ALL WRITTEN DIMENSIONS SHALL PREVAIL. DO NOT SCALE FROM DRAWINGS.

9.ALL UTILITIES WITH SURFACE ACCESS SHALL BE LOCATED WITHIN THE PAVING PATTERN AND SHALL BE COORDINATED WITH LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION. REFER TO LAYOUT DRAWINGS.

10. ALL ANGLES ARE 90 DEGREES UNLESS OTHERWISE NOTED.

11. ALIGN ALL JOINTS, CORNERS, AND EDGES AS SHOWN

12. CONTRACTOR SHALL REFER TO AND COORDINATE WITH ARCHITECTURAL, STRUCTURAL, AND MEP DRAWINGS AT ALL TIMES PRIOR TO AND DURING CONSTRUCTION.

13. ALL CURB TAPERS ARE SIX (6') FEET LONG UNLESS OTHERWISE SHOWN ON PLAN.

14. WHERE NEW SIDEWALK ADJOINS EXISTING WALK, PROVIDE EXPANSION JOINT BY DRILLING INTO THE FACE OF THE EXISTING WALK FOR PLACEMENT OF DOWELS. TIE NEW SIDEWALKS INTO NEAREST EXISTING PAVEMENT JOINT; MATCH WIDTH OF EXISTING WALKWAY.

15. WHERE SIDEWALK OR WALKWAYS ARE ADJACENT TO PARKING SPACES THE WALKWAY SHALL BE A MINIMUM 6.5' WIDE AS MEASURED FROM THE FACE OF CURB.

16. MAXIMUM RUNNING SLOPE FOR WALKING SURFACES CANNOT BE GREATER THAN 1:20 AND CROSS SLOPES CANNOT BE GREATER THAN 1:48. HANDICAP SPACES SURFACE SLOPES SHALL NOT EXCEED 1:48 IN ALL DIRECTIONS.

17. SIGHT TRIANGLES - NOTHING OVER 30" HIGH SHALL BE ALLOWED WITHIN THE SIGHT DISTANCE TRIANGLES.

18. THE SITE SHALL BE FULLY STABILIZED (90% COVERAGE) PRIOR TO ISSUANCE OF A BUILDING CERTIFICATE OF OCCUPANCY OR PROJECT APPROVAL

19. HANDICAP RAMPS SHALL BE INSTALLED PER LATEST EDITION OF THE NC BUILDING CODE AND ANSI 117.11 WITH DETECTABLE WARNING DOMES WITH A COLOR CONTRAST OF 70% MINIMUM. SEE DETAILS AND GRADING SPOT ELEVATIONS. IF THE EXISTING CONDITIONS PRECLUDE THE ABILITY TO PROVIDE A MAXIMUM SLOPE 1/12 FOR 6-FEET OR A MAXIMUM CROSS SLOPE OF 1:48 AND A 36" MINIMUM LANDING, THE CONTRACTOR SHALL NOTIFY ENGINEER OR OWNER REPRESENTATIVE PRIOR TO INSTALLATION.

20. THE TESTING AGENCY SHALL BE RESPONSIBLE FOR PROVIDING THE ASPHALT AND CONTRACTOR CERTIFICATION MEMO TO NCDOT FOR ALL ROADWAY IMPROVEMENTS WITHIN THE PUBLIC RIGHT-OF-WAY.

21. THE MAINTENANCE OF ALL REQUIRED LANDSCAPING BY KEEPING LAWNS MOWED, ALL PLANTS MAINTAINED AS DISEASE FREE, AND ALL PLANTING BEDS GROOMED AND KEPT WEED FREE (EXCEPT IN AREAS OF PRESERVED EXISTING NATURAL VEGETATION (I.E. THICKETS), AND KEPT FREE FROM TRASH, DEBRIS AND OTHER OBJECTIONABLE MATERIALS; THE REPLACEMENT OF ANY REQUIRED PLANTING, WHICH IS REMOVED OR DIES AFTER THE DATE OF PLANTING, SUCH REPLACEMENT SHALL OCCUR DURING THE NEXT PLANTING SEASON; AND, THE REPLACEMENT OF ANY TREE IN A TREE SAVE AREA, WHICH IS REMOVED OR DIES AFTER THE DATE OF APPROVAL OF A PRESERVATION LANDSCAPE PLAN. SUCH REPLACEMENT SHALL OCCUR DURING THE NEXT PLANTING

GENERAL NOTES:

1. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE OFFICE OF STATE CONSTRUCTION, DEPARTMENT OF INSURANCE, NCDENR, AND ALL OTHER APPLICABLE LOCAL, STATE AND FEDERAL GUIDELINES. ALL UTILITY CONSTRUCTION SHALL COMPLY WITH APPLICABLE LOCAL JURISDICTIONAL STANDARDS AND SPECIFICATIONS.

2. EXISTING SURVEY INFORMATION INCLUDING TOPOGRAPHIC INFORMATION PROVIDED BY BATEMAN CIVIL SURVEY, UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF ANY WORK. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS
.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING, COORDINATING AND PAYMENT FOR ALL NECESSARY LOCATING SERVICES INCLUDING INDEPENDENT LOCATING SERVICES. THE CONTRACTOR SHALL PROVIDE NOTICE OF EXCAVATION TO NOTIFICATION CENTER AND FACILITY OWNERS (PER NC STATUTE) NO LESS THAN 3 BUSINESS DAYS AND NO MORE THAN 12 WORKING DAYS PRIOR TO BEGINNING DEMOLITION, EXCAVATION OR ANY OTHER FORM OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS. NO EXCAVATION OR DEMOLITION SHALL BE STARTED WITHOUT ALL UTILITIES BEING LOCATED.

4. ALL SUB-SURFACE UTILITIES IDENTIFIED ON THE CONSTRUCTION DOCUMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATION BASED ON SURVEY INFORMATION GATHERED FROM FIELD INSPECTION AND/OR ANY OTHER APPLICABLE RECORD DRAWINGS WHICH MAY BE AVAILABLE. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS.

5. EXISTING IMPROVEMENTS DAMAGED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED OR REPLACED TO ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND COORDINATING PERMITS, INSPECTIONS, CERTIFICATIONS AND OTHER REQUIREMENTS WHICH MUST BE MET UNDER THIS CONTRACT.

7. THE CONTRACTOR SHALL MAINTAIN "AS-BUILT" DRAWINGS TO RECORD THE ACTUAL LOCATION OF ALL PIPING PRIOR TO CONCEALMENT, VALVE AND MANHOLE CHANGES, AND HARDSCAPE OR LANDSCAPE CHANGES. DRAWINGS SHALL BE PROVIDED TO THE OWNER'S REPRESENTATIVE AT REGULAR INTERVALS, OR AS REQUESTED THROUGHOUT THE PROJECT FOR RECORD KEEPING.

8. IF DEPARTURES FROM THE PROJECT DRAWINGS OR SPECIFICATIONS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THERE OF SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR REVIEW. NO DEPARTURES FROM THE CONTRACT DOCUMENTS SHALL BE MADE WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE OWNER'S REPRESENTATIVE.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION OF ANY EXISTING UTILITY LINES REQUIRED TO COMPLETE ANY PORTION OF CONSTRUCTION. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE COORDINATION AND COSTS OF THE RELOCATION AND ASSOCIATED WORK.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE PREMISES FREE FROM ACCUMULATIONS OF WASTE MATERIALS AND RUBBISH CAUSED BY THE CONTRACTOR. ALL DEBRIS SHALL BE REMOVED FROM THE PROJECT SITE ON A DAILY BASIS.

11. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND/OR METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.

12. ROADWAYS (TEMPORARY OR PERMANENT) MUST BE CAPABLE OF SUPPORTING FIRE FIGHTING APPARATUS (85,000 LBS) DURING ALL PHASES OF CONSTRUCTION ONCE VERTICAL CONSTRUCTION HAS BEGUN.

1"=50' 50 0 50 100

NORTH CAROLINA PROFESSIONAL SEAL 20234 ENGINEER THOMAS S. SPEIGHT, JR.

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NCBELS FIRM No. C-2378

CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION

410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

PHASE 1
SITE PLAN

Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 50'
Date:	08/14/2020
Project Number:	P170347

SHEET

C203

REV	DESCRIPTION	DATE
02	CONSTRUCTION DOCUMENTS 2ND SUBMITTAL	08/14/2020
01	CONSTRUCTION DOCUMENTS 1ST SUBMITTAL	06/19/2020

REVISIONS

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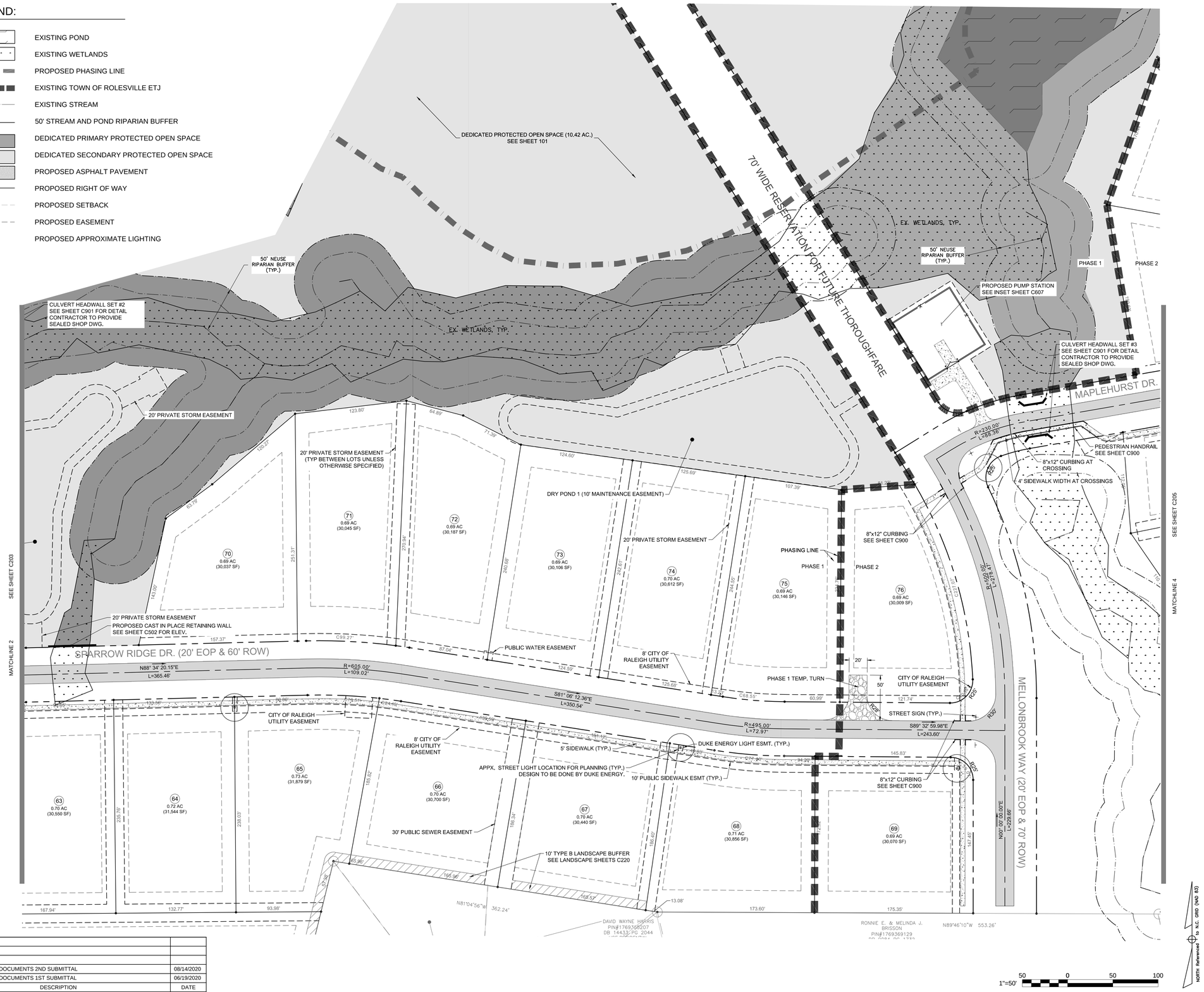
LEGEND:

- EXISTING POND
- EXISTING WETLANDS
- PROPOSED PHASING LINE
- EXISTING TOWN OF ROLESVILLE ETJ
- EXISTING STREAM
- 50' STREAM AND POND RIPARIAN BUFFER
- DEDICATED PRIMARY PROTECTED OPEN SPACE
- DEDICATED SECONDARY PROTECTED OPEN SPACE
- PROPOSED ASPHALT PAVEMENT
- PROPOSED RIGHT OF WAY
- PROPOSED SETBACK
- PROPOSED EASEMENT
- PROPOSED APPROXIMATE LIGHTING



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REVISIONS

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Bateman Civil Survey Company
Engineers • Surveyors • Planners
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Phone: 919.577.1080 Fax: 919.577.1081
NCBELS FIRM No. C-2378

CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION
410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

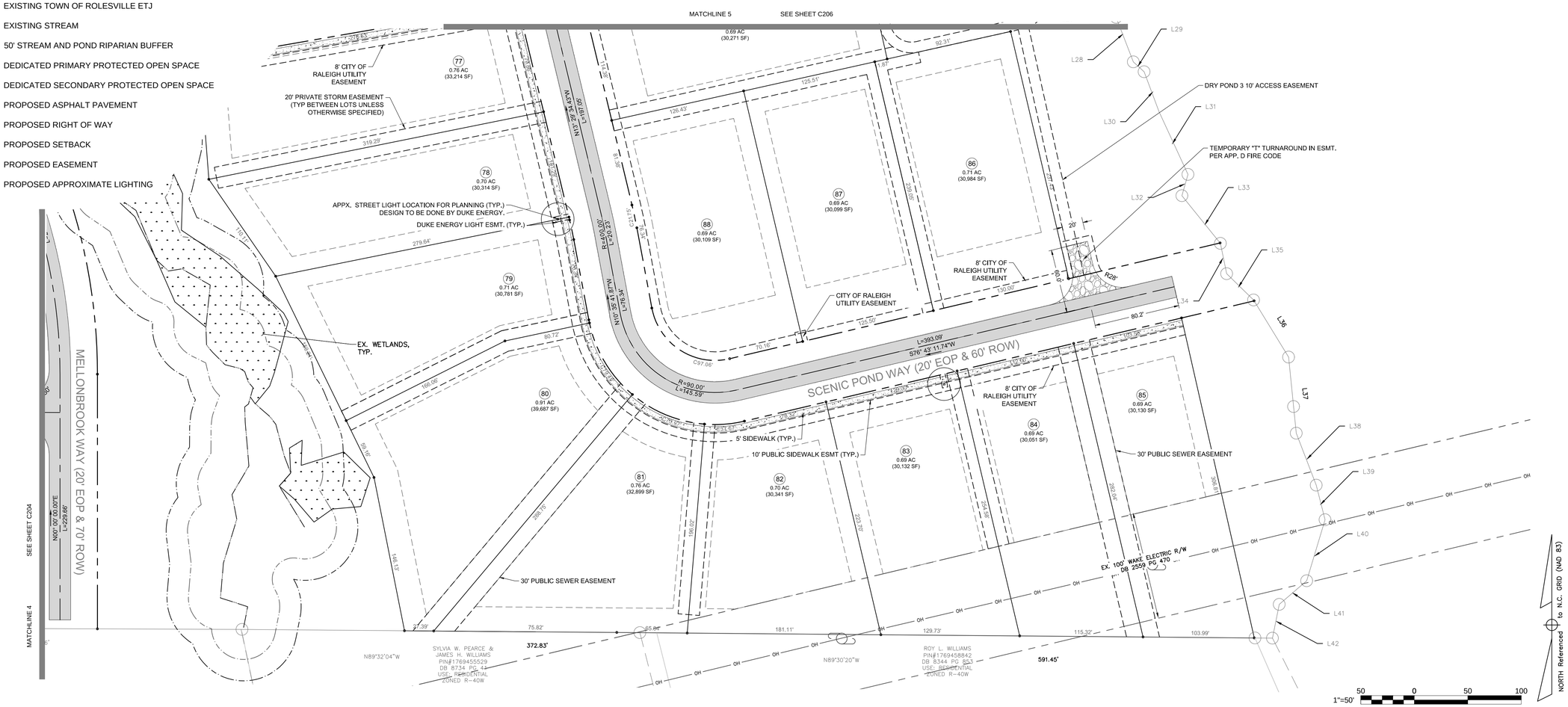
PHASE 1 / 2
SITE PLAN

Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 50'
Date:	08/14/2020
Project Number:	P170347

SHEET
C204

LEGEND:

- EXISTING POND
- EXISTING WETLANDS
- PROPOSED PHASING LINE
- EXISTING TOWN OF ROLESVILLE ETJ
- EXISTING STREAM
- 50' STREAM AND POND RIPARIAN BUFFER
- DEDICATED PRIMARY PROTECTED OPEN SPACE
- DEDICATED SECONDARY PROTECTED OPEN SPACE
- PROPOSED ASPHALT PAVEMENT
- PROPOSED RIGHT OF WAY
- PROPOSED SETBACK
- PROPOSED EASEMENT
- PROPOSED APPROXIMATE LIGHTING



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01	CONSTRUCTION DOCUMENTS 1ST SUBMITTAL	06/19/2020

REVISIONS

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Bateman Civil Survey Company
Engineers • Surveyors • Planners
2524 Reliance Avenue, Apex, North Carolina 27539
Phone: 919.577.1080 Fax: 919.577.1081
NCBELS FIRM No. C-2378

CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION

410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

PHASE 2 SITE PLAN

Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 50'
Date:	08/14/2020
Project Number:	P170347

SHEET

C205

LEGEND:

- EXISTING POND
- EXISTING WETLANDS
- PROPOSED PHASING LINE
- EXISTING TOWN OF ROLESVILLE ETJ
- EXISTING STREAM
- 50' STREAM AND POND RIPARIAN BUFFER
- DEDICATED PRIMARY PROTECTED OPEN SPACE
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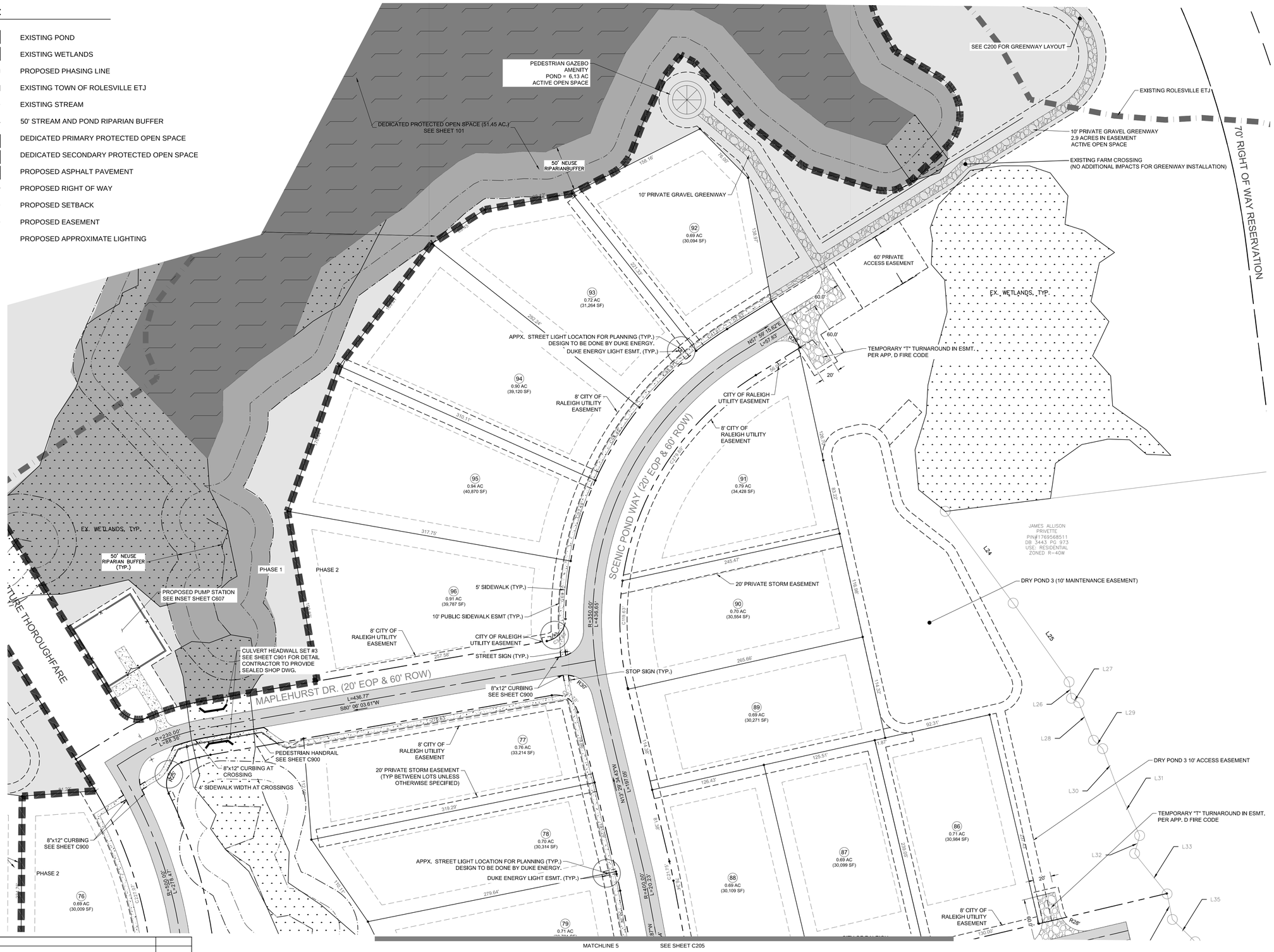

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Engineers • Surveyors • Planners
2524 Reliance Avenue, Apex, North Carolina 27539
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CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION
410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

PHASE 2
SITE PLAN

Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 50'
Date:	08/14/2020
Project Number:	P170347

SHEET
C206

LEGEND:

- EXISTING POND
- EXISTING WETLANDS
- PROPOSED PHASING LINE
- EXISTING TOWN OF ROLESVILLE ETJ
- EXISTING STREAM
- 50' STREAM AND POND RIPARIAN BUFFER
- DEDICATED PRIMARY PROTECTED OPEN SPACE
- DEDICATED SECONDARY PROTECTED OPEN SPACE
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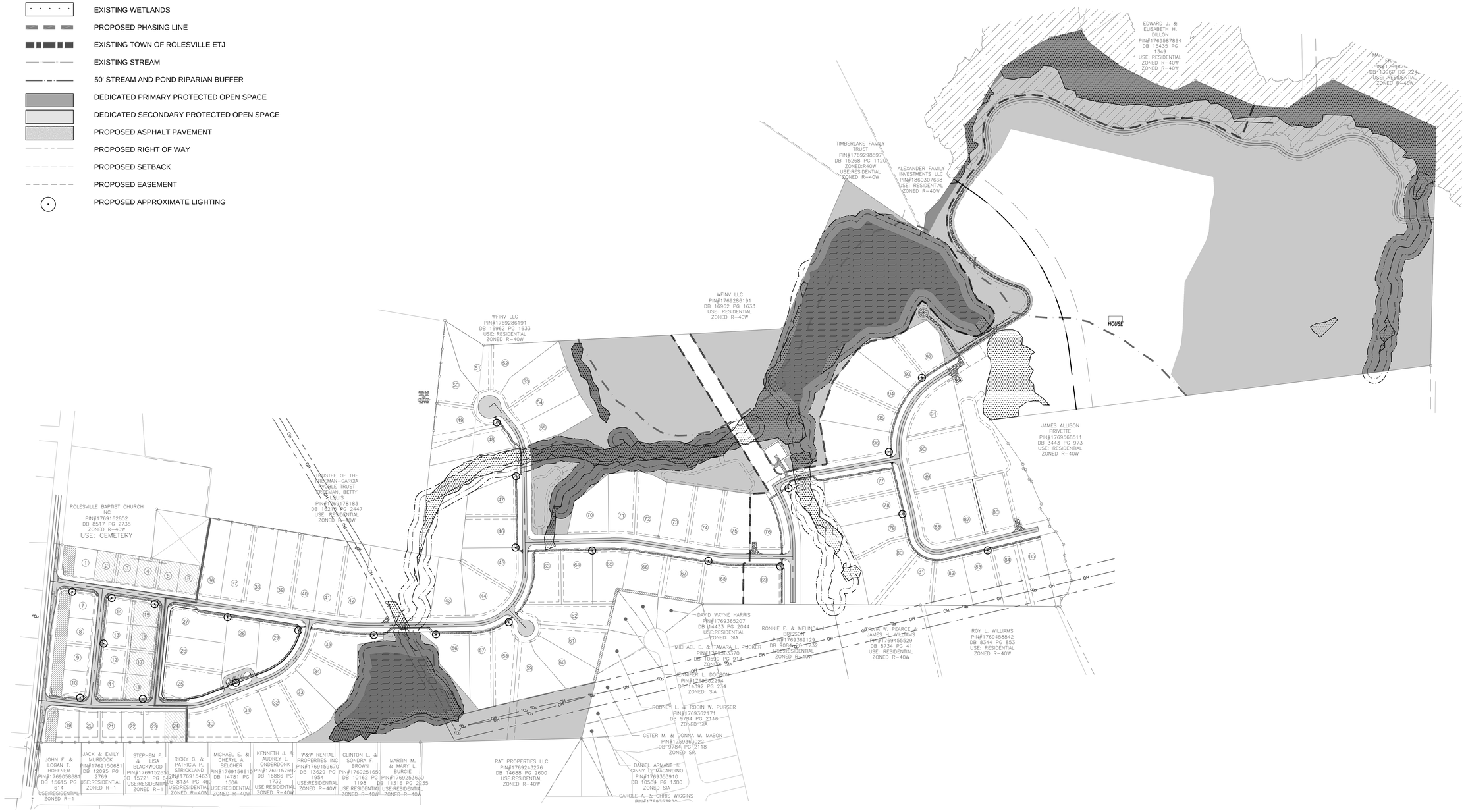
- PROPOSED EASEMENT
- PROPOSED APPROXIMATE LIGHTING



NOTES

1. LIGHTING LOCATIONS ARE APPROXIMATE FOR PLANNING. FULL DESIGN TO BE DONE BY DUKE ENERGY.

1"=200' 200 0 200 400

NORTH Referenced to N.C. GRID (NAD 83)

REV	DESCRIPTION	DATE
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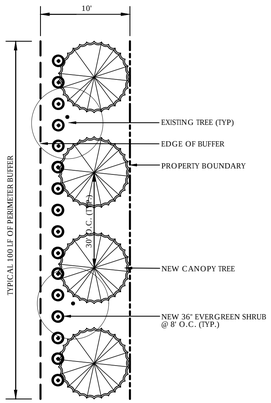
CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION
410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

OVERALL LIGHTING PLAN

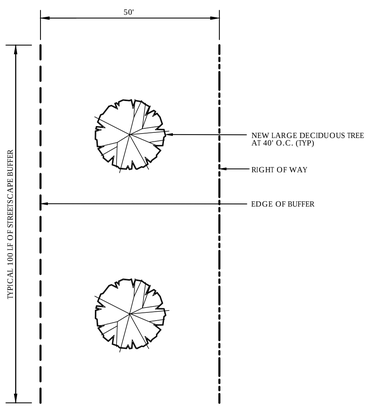
Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 200'
Date:	08/14/2020
Project Number:	P170347

SHEET
C210



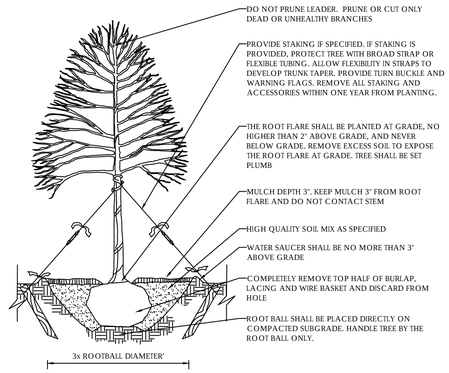
10'W TYPE B SEMI-OPAQUE PERIMETER BUFFER

NTS (BUFFER TO BE LOCATED BEHIND LOTS 60 THRU 67)



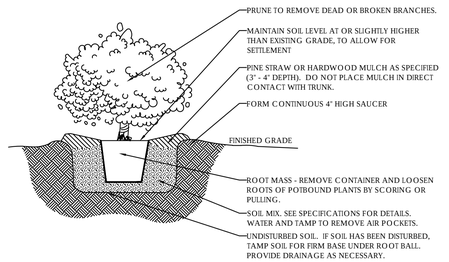
TYPE C - 50'W STREETSCAPE BUFFER

NTS (BUFFER LOCATED ALONG WEST YOUNG STREET)



DECIDUOUS TREE PLANTING

NOT TO SCALE



NOTES:
1. ALL TECHNICAL SPECIFICATIONS AND GENERAL CONDITIONS APPLY.
2. REMOVE ALL TAGS, TWINE OR OTHER NON-BIODEGRADABLE MATERIALS ATTACHED TO PLANT OR ROOT MASS.

SHRUB PLANTING

NOT TO SCALE

LANDSCAPE COMPLIANCE CHART
ROLESVILLE, NC

CODE SECTION	BUFFER REQUIREMENT	CALCULATIONS (REQUIRED/PROVIDED)
UDO 14.4.1 STREETSCAPE BUFFER	ONE - 2.5 CALIPER CANOPY TREE AT 40 FT O.C. ALONG LENGTH OF STREETSCAPE BUFFER	725 LF OF BUFFER REQUIRES 19 TREES. 19 TREES PROVIDED
UDO 14.6.7 SEMI-OPAQUE TYPE B PERIMETER BUFFER	THIS BUFFER SERVES AS A SEMI - OPAQUE SCREEN FROM THE GROUND UP TO A HEIGHT OF AT LEAST THREE FEET. CANOPY TREES SHALL REACH A HEIGHT OF AT LEAST 20 FEET AT MATURITY AND HAVE NO UNOBSTRUCTED OPENINGS GREATER THAN 20 FEET BETWEEN CANOPIES. THIS BUFFER MAY INCLUDE A WALL, AN EARTHEN BERM, AN OPAQUE OR SEMI-OPAQUE FENCE EXISTING OR PLANTED VEGETATION, OR ANY APPROPRIATE COMBINATION OF THESE ELEMENTS TO ACHIEVE THE DESIRED OPACITY. AT LEAST 50 PERCENT OF THE REQUIRED SHRUBS MUST BE OF THE EVERGREEN SPECIES. SHRUBBERY IS TO BE PLANTED SUFFICIENTLY CLOSE TOGETHER TO FORM AN OPAQUE SCREEN WITHIN THREE YEARS AFTER PLANTING.	706 LF OF BUFFER REQUIRES 24 TREES AND 118 SHRUBS. 24 TREES AT 30' O.C AND 120 SHRUBS AT 6' O.C. PROVIDED

LANDSCAPE SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	CAL.	CONT.	SIZE	REMARKS
CANOPY TREES							
NSGG	12	Nyssa sylvatica 'Green Gable'	Black Gum	2.0" CAL	B+B	8–10' HT	PERIMETER BUFFER
QULY	19	Quercus lyrata 'Highbeam'	'Highbeam' Overcup Oak	2.5" CAL	B+B	12–14' HT	STREETSCAPE BUFFER
TCGS	12	Tilia cordata 'Greenspire'	Littleleaf Linden	2.0" CAL	B+B	8–10' HT	PERIMETER BUFFER
SUBTOTAL:	43						
SHRUBS							
ILBN	40	Ilex cornuta 'Burfordii nana'	Dwarf Burford Holly	N/A	5–7 GAL	24" HT	PERIMETER BUFFER
LIJA	40	Ligustrum japonicum 'Texanum'	Waxleaf Ligustrum	N/A	5–7 GAL	24" HT	PERIMETER BUFFER
MYCE	40	Myrica cerifera	Wax Myrtle	N/A	5–7 GAL	24" HT	PERIMETER BUFFER
SUBTOTAL:	120						

Village Green Land Design
1149 EXECUTIVE CIRCLE
CARY, NC 27511
P:919.624.4468

NORTH CAROLINA LANDSCAPE ARCHITECT 1200 REGISTERED TERRENCE MICHAEL BOYLAN
08/14/2020

PLANTING NOTES

1. ALL TECHNICAL SPECIFICATIONS AND GENERAL CONDITIONS APPLY. ALL GENERAL NOTES AND GENERAL CONSTRUCTION NOTES APPLY.
2. ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, AND FREE OF PESTS AND DISEASE.
3. ALL PLANT MATERIAL SHALL BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED IN THE PLANT LIST.
4. ALL TREES SHALL HAVE A STRAIGHT TRUNK AND FULL HEAD AND MEET ALL REQUIREMENTS SPECIFIED.
5. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR 1) TO VERIFY THE LOCATIONS OF UTILITY LINES AND ADJACENT TO THE WORK AREA 2) TO PROTECT OF ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD 3) TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY AND PLANTING PER SPECIFICATIONS TO MAINTAIN HEALTHY PLANT CONDITIONS.
8. THE CONTRACTOR SHALL COMPLETELY GUARANTEE AND BE RESPONSIBLE FOR FULLY MAINTAINING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) ALL OF THE PLANT MATERIALS FOR A ONE YEAR GROWING PERIOD.
9. ANY PLANT MATERIAL WHICH IS DISEASED, DISTRESSED, DEAD, OR REJECTED (PRIOR TO SUBSTANTIAL COMPLETION) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
10. ALL PLANT MATERIALS SHALL MEET THE MINIMUM CONTAINER SIZE, CLASS AND OTHER REQUIREMENTS OUTLINED IN THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION. PLANTS SHALL HAVE NORMAL WELL-DEVELOPED BRANCHES AND VIGOROUS ROOT SYSTEMS.
11. WHERE SHOWN ON THE PLANS AND DETAILS, PLANTING BEDS ARE TO BE COMPLETELY COVERED WITH A MINIMUM 3" DEPTH OF TRIPLE SHRED HARDWOOD MULCH.PRIOR TO THE END OF EACH WORKING DAY, THE CONTRACTOR SHALL PROPERLY BACKFILL ALL PLANT MATERIAL THAT HAS BEEN PLACED IN PREPARED HOLES; AND PROPERLY WATER AND MULCH ALL PREPARED GROUNDCOVER, PERENNIAL AND ANNUAL BEDS.
12. ALL TREES AND SHRUBS SHALL BE SOAKED WITH WATER AND MULCHED IMMEDIATELY FOLLOWING INSTALLATION.
13. ALL ROOT BALLS REMOVED FROM CONTAINERS SHALL BE SCARIFIED BY HAND PRIOR TO PLACEMENT AND BACK FILLING WITH PREPARED SOILS. HAND TOOLS ARE NOT TO BE USED TO SCARIFY ROOT BALLS.
14. ALL ROPE AND WRAPPING TWINE SHALL BE CUT AND REMOVED FROM AROUND THE UPPER PARTS OF THE ROOT BALL. METAL BASKET WIRES AND BURLAP SHALL BE PULLED BACK AND TUCKED UNDER THE EDGES OF THE SAUCER RINGS ON ALL TREES AND LARGE SHRUBS. ALL SYNTHETIC BURLAP SHALL BE REMOVED FROM PLANT BALLS PRIOR TO BACKFILLING.
15. ALL PLANTING AREAS SHALL BE EDGED WITH SMOOTH, CONTINUOUS CURVES. PINE STRAW MULCH, IF SPECIFIED, SHALL BE ROLLED AND TUCKED ALONG PLANT BED EDGE.
16. ALL PLANT MATERIAL SHALL BE PLANTED AT HEIGHTS AS ILLUSTRATED IN THE PLANTING DETAILS & PLANT LIST.
17. TREE STAKING AND GUYING, IF NECESSARY, SHALL BE PERFORMED WITHIN A WEEK OF PLANTING. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TREE STAKING MATERIAL AFTER THE FIRST FULL GROWING SEASON OR ONE YEAR, WHICH EVER COMES FIRST.
18. THE SPACING AND PLACEMENT OF PLANTS SHALL BE ADEQUATE AND APPROPRIATE FOR THE TYPE, SIZE, SHAPE AND HABIT OF THE PLANT SPECIES AT MATURITY. MEASUREMENTS FOR SPACING REQUIREMENTS SHALL BE TAKEN FROM THE TRUNK, STEM OR SIMILAR CENTER OF THE PLANT MATERIAL.

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NCBELS FIRM No. C-2378

CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION

410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

LANDSCAPING DETAILS

Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 200'
Date:	08/14/2020
Project Number:	P170347

SHEET

C220

REV	DESCRIPTION	DATE
02	CONSTRUCTION DOCUMENTS 2ND SUBMITTAL	08/14/2020
01	CONSTRUCTION DOCUMENTS 1ST SUBMITTAL	06/19/2020

REVISIONS

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LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
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ADMIXTURES

AGRICULTURAL LIMESTONE: 2 TONS/ACRE

FERTILIZER: 1,000 LBS/ACRE – 10–10–10

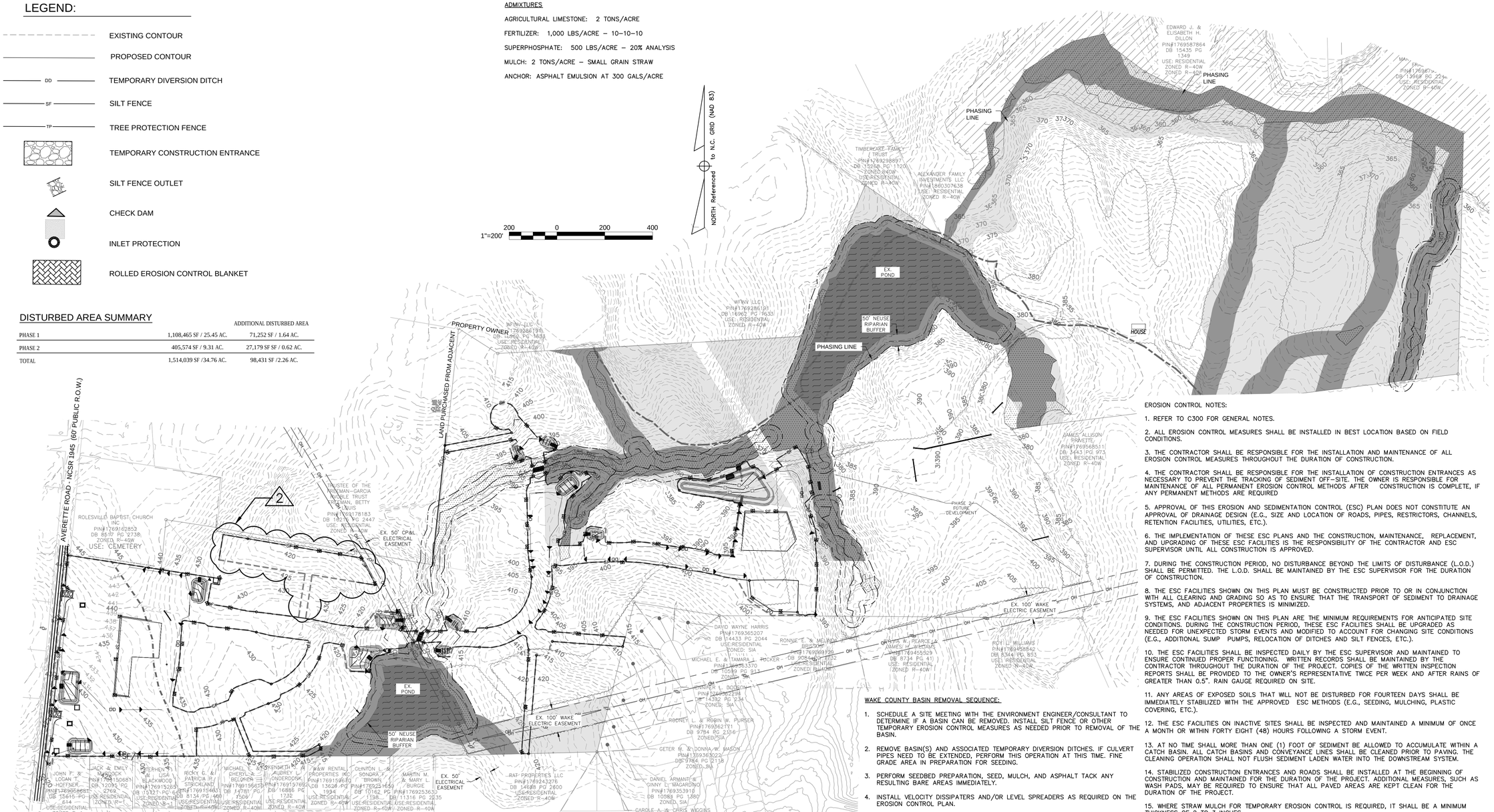
SUPERPHOSPHATE: 500 LBS/ACRE – 20% ANALYSIS

MULCH: 2 TONS/ACRE – SMALL GRAIN STRAW

ANCHOR: ASPHALT EMULSION AT 300 GALS/ACRE

DISTURBED AREA SUMMARY

		ADDITIONAL DISTURBED AREA
PHASE 1	1,108,465 SF / 25.45 AC.	71,252 SF / 1.64 AC.
PHASE 2	405,574 SF / 9.31 AC.	27,179 SF SF / 0.62 AC.
TOTAL	1,514,039 SF /34.76 AC.	98,431 SF /2.26 AC.



EROSION CONTROL NOTES:

1. REFER TO C300 FOR GENERAL NOTES.

2. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED IN BEST LOCATION BASED ON FIELD CONDITIONS.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF CONSTRUCTION.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF CONSTRUCTION ENTRANCES AS NECESSARY TO PREVENT THE TRACKING OF SEDIMENT OFF–SITE. THE OWNER IS RESPONSIBLE FOR MAINTENANCE OF ALL PERMANENT EROSION CONTROL METHODS AFTER CONSTRUCTION IS COMPLETE, IF ANY PERMANENT METHODS ARE REQUIRED

5. APPROVAL OF THIS EROSION AND SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).

6. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR AND ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.

7. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE LIMITS OF DISTURBANCE (L.O.D.) SHALL BE PERMITTED. THE L.O.D. SHALL BE MAINTAINED BY THE ESC SUPERVISOR FOR THE DURATION OF CONSTRUCTION.

8. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.

9. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G., ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.).

10. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF THE PROJECT. COPIES OF THE WRITTEN INSPECTION REPORTS SHALL BE PROVIDED TO THE OWNER'S REPRESENTATIVE TWICE PER WEEK AND AFTER RAINS OF GREATER THAN 0.5". RAIN GAUGE REQUIRED ON SITE.

11. ANY AREAS OF EXPOSED SOILS THAT WILL NOT BE DISTURBED FOR FOURTEEN DAYS SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).

12. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN FORTY EIGHT (48) HOURS FOLLOWING A STORM EVENT.

13. AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.

14. STABILIZED CONSTRUCTION ENTRANCES AND ROADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

15. WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE A MINIMUM THICKNESS OF 2 TO 3 INCHES.

16. INTERIM SLOPES MAY BE GRADED TO A MAXIMUM SLOPE OF 2:1 (HORIZONTAL: VERTICAL); CUT SLOPES SHALL BE LIMITED TO A MAXIMUM SLOPE OF 1.5:1.

17. THE SURFACE OF AREAS SLOPES STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL THAT ARE TO RECEIVE INTERIM FILL SHALL BE PLOWED, FURROWED, TILLED OR BROKEN UP PRIOR TO PLACING FILL SO THAT FILL MATERIAL WILL BOND WITH EXISTING SURFACE. INTERIM FILL SHALL BE PLACED AS SPECIFIED FOR PERMANENT FILLS AND IN LIFTS NOT GREATER THAN 6".

18. PROVIDE DUST CONTROL MEASURES INCLUDING, BUT NOT LIMITED TO, WETTING DOWN TO CONTROL DUST ON SITE, IN ORDER TO PREVENT ANNOYANCE/AND OR DAMAGE TO ADJACENT SITES. CALCIUM CHLORIDE OR ANY OTHER CHEMICAL MATERIAL MAY NOT BE USED ON SUBGRADES OF AREAS TO BE SEEDED OR PLANTED.

19. SEDIMENT LADEN RUNOFF FROM EXCAVATIONS SHALL NOT BE PUMPED DIRECTLY TO STORM DRAINAGE.

20. INSPECTOR REFERS TO LOCAL JURISDICTIONAL (NCDENR OR LOCAL) LAND QUALITY INSPECTOR OR HIS REPRESENTATIVE. FIELD INSPECTIONS MAY REQUIRE ADDITIONAL SEDIMENTATION AND EROSION CONTROL MEASURES AS DEEMED NECESSARY BY THE INSPECTOR.

21. CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL DEVICES SHALL CONFORM TO THE STANDARDS SET FORTH IN THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT, HEALTH AND NATURAL RESOURCES LAND QUALITY SECTION EROSION AND SEDIMENT CONTROL PLANNING LAND DESIGN MANUAL.

22. NOTIFICATION OF LAND RESOURCES SEDIMENT AND EROSION CONTROL SELF–INSPECTION PROGRAM: THE PERSON RESPONSIBLE FOR LAND–DISTURBING ACTIVITIES IS REQUIRED TO INSPECT THE PROJECT AFTER EACH PHASE OF THE PROJECT AND CONTINUED UNTIL PERMANENT GROUND COVER IS ESTABLISHED IN ACCORDANCE WITH NCGS 113A–54.1 AND 15A NCAC 4B.0131 TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. THE SELF–INSPECTION REPORT FORM IS AVAILABLE AS AN EXCEL SPREADSHEET FORM HTTP://WWW.DLR.ENR.STATE.NC.US/PAGES/SEDIMENTATION_NEW.HTM

23. COMPLIANCE WITH THE STATE NCG01 SELF–INSPECTION PROGRAM IS REQUIRED FOR THIS SITE.

WAKE COUNTY BASIN REMOVAL SEQUENCE:

1. SCHEDULE A SITE MEETING WITH THE ENVIRONMENT ENGINEER/CONSULTANT TO DETERMINE IF A BASIN CAN BE REMOVED. INSTALL SILT FENCE OR OTHER TEMPORARY EROSION CONTROL MEASURES AS NEEDED PRIOR TO REMOVAL OF THE BASIN.

2. REMOVE BASIN(S) AND ASSOCIATED TEMPORARY DIVERSION DITCHES. IF CULVERT PIPES NEED TO BE EXTENDED, PERFORM THIS OPERATION AT THIS TIME. FINE GRADE AREA IN PREPARATION FOR SEEDING.

3. PERFORM SEEDBED PREPARATION, SEED, MULCH, AND ASPHALT TACK ANY RESULTING BARE AREAS IMMEDIATELY.

4. INSTALL VELOCITY DISSIPATERS AND/OR LEVEL SPREADERS AS REQUIRED ON THE EROSION CONTROL PLAN.

5. WHEN SITE IS FULLY STABILIZED, CALL ENVIRONMENTAL ENGINEER/CONSULTANT FOR APPROVAL OF REMOVING REMAINING TEMPORARY EROSION CONTROL MEASURES AND ADVICE ON WHEN SITE CAN BE ISSUED A CERTIFICATE OF COMPLETION.

TEMPORARY SEEDBED PREPARATION:

1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL THREE INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.

2. RIP THE ENTIRE AREA TO SIX INCHES DEEP.

3. REMOVE ALL LOOSE ROCK, ROOTS AND OTHER OBSTRUCTIONS, LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.

4. APPLY AGRICULTURAL LIME, FERTILIZER AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE ADMIXTURE BELOW).

5. CONTINUE TILLAGE UNTIL A WELL–PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED FOUR TO SIX INCHES DEEP.

6. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.

7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.

8. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE OVER 50% DAMAGED, RE–ESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES.

9. CONSULT WAKE COUNTY EROSION & SEDIMENT CONTROL DEPARTMENT ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

STOCKPILE MAINTENANCE NOTES:

1. SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED AND WILL RESOLVE PROBLEMS. TARPS SHOULD BE KEYED IN AT THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE PLASTIC.

2. IF A STOCKPILE IS TO REMAIN FOR FUTURE USE AFTER THE PROJECT IS COMPLETE (BUILDERS, ETC.), THE FINANCIALLY RESPONSIBLE PARTY MUST NOTIFY WAKE COUNTY OF A NEW RESPONSIBLE PARTY FOR THAT STOCKPILE.

3. THE APPROVED PLAN SHALL PROVIDE FOR THE USE OF STAGES DEEDING AND MULCHING ON A CONTINUAL BASIS WHILE STOCKPILE IS IN USE.

4. ESTABLISH AND MAINTAIN A VEGETATIVE BUFFER AT THE TOE OF THE SLOPE (WHERE PRACTICAL).

TREE PROTECTION NOTES:

1. TREE PROTECTION FENCING MUST BE IN PLACE PRIOR TO ANY DEMOLITION, LAND DISTURBANCE OR ISSUANCE OF A GRADING PERMIT. OR OBTAIN A GRADING PERMIT THEN TREE PROTECTION FENCING MUST BE IN PLACE PRIOR TO ANY DEMOLITION, LAND DISTURBANCE.

2. TREE PROTECTION FENCING SHALL INCLUDE WARNING SIGNS POSTED IN BOTH ENGLISH AND SPANISH, AS FOLLOWS: "NO TRESPASSING/TREE PROTECTION AREA/PROHIBIDO ENTRAR / ZONA PROTECTORA PARA LOS ÁRBOLES."

3. PROTECTION OF EXISTING VEGETATION: AT THE START OF GRADING INVOLVING THE LOWERING OF EXISTING GRADE AROUND A TREE OR STRIPPING OF TOPSOIL, A CLEAN, SHARP, VERTICAL CUT SHALL BE MADE AT THE EDGE ON THE TREE ROOTS OUTSIDE OF THE TREE SAVE AREA. THIS SHALL OCCUR AT THE SAME TIME THAT OTHER EROSION CONTROL MEASURES ARE INSTALLED. THE TREE PROTECTION FENCING SHALL BE INSTALLED ON THE SIDE OF THE CUT FARTHEST AWAY FROM THE TREE TRUNK AND SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION IN THE VICINITY OF THE TREES IS COMPLETE.

4. NO STORAGE OF MATERIALS, FILL, OR EQUIPMENT AND NO TRESPASSING SHALL BE ALLOWED WITHIN THE BOUNDARY OF THE PROTECTED TREE AREA.

5. TREE PROTECTION AREA: EQUALS ONE FOOT OF RADIUS FOR EVERY INCH OF DIAMETER OF EXISTING TREES, OR SIX FOOT RADIUS, WHICHEVER IS GREATER. NO DISTURBANCE ALLOWED WITHIN THIS AREA.

SEEDBED PREPARATION:

1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONED, IF AVAILABLE.

2. RIP THE ENTIRE AREA TO 6 INCHES DEPTH.

3. REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.

4. APPLY ALL AGRICULTURAL LIME, FERTILIZER, AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE BELOW).

5. CONTINUE TILLAGE UNTIL A WELL PULVERIZED, FIRM, REASONABLY UNIFORM 4 TO 6 INCHES DEEP SEEDBED IS PREPARED.

6. SEED ON A FRESHLY PREPARED SEED BED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.

7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.

8. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESENDING WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE OVER 60% DAMAGED, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES.

9. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESENDING WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE OVER 50% DAMAGED, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES AND LANDSCAPING PLANS.

10. SEE LANDSCAPING PLANS FOR PERMANENT SEEDING, MULCHING, AND FERTILIZING RATES. ALL AREAS NOT DESIGNATED TO RECEIVE PLANTS SHALL BE SEEDED PER THE LANDSCAPING PLANS.

REV	DESCRIPTION	DATE
02	CONSTRUCTION DOCUMENTS 2ND SUBMITTAL	08/14/2020
01	CONSTRUCTION DOCUMENTS 1ST SUBMITTAL	06/19/2020

REVISIONS

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NORTH CAROLINA PROFESSIONAL SEAL 20234 ENGINEER THOMAS S. SPEIGHT, JR.

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Phone: 919.577.1080 Fax: 919.577.1081
NCBELS FIRM No. C-2378

CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION
410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

OVERALL EROSION CONTROL PLAN PH 1 ST 1

Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 200'
Date:	08/14/2020
Project Number:	P170347

SHEET

C400

LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- DD — TEMPORARY DIVERSION DITCH
- SF — SILT FENCE
- TP — TREE PROTECTION FENCE
- TEMPORARY CONSTRUCTION ENTRANCE
- SILT FENCE OUTLET
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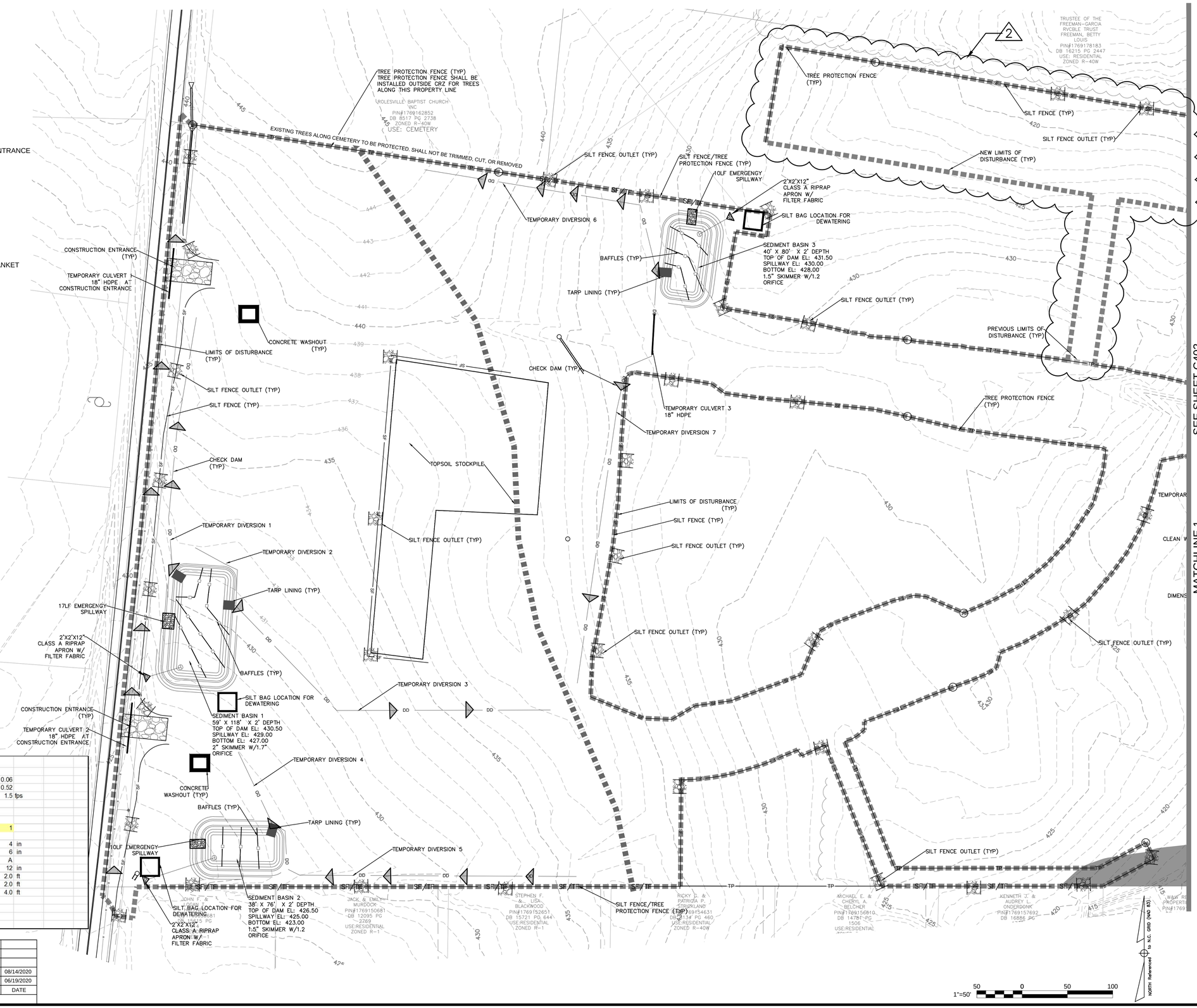
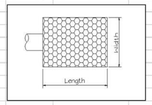
- ROLLED EROSION CONTROL BLANKET



Outlet Protection

Structure=	Skimmer Basins		Q10/Qfull =	0.06	
Size=	6	in	V/Vfull =	0.52	
Q10 =	0.04	cfs	V =	1.5	fps
Qfull =	0.56	cfs			
Vfull =	2.85	fps			
From Fig. 8.06.b.1:		Zone	=	1	
From Fig. 8.06.b.2:		D50	=	4	in
		DMAX	=	6	in
		Riprap Class	=	A	
		Apron Thickness	=	12	in
		Apron Length	=	2.0	ft
		Apron Width = 3 x Dia	=	2.0	ft
		Width at End + Width + length	=	4.0	ft



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SEE SHEET C402

MATCHLINE 1

CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION

410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

EROSION CONTROL PLAN PH 1 ST 1

Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 50'
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SHEET

C401

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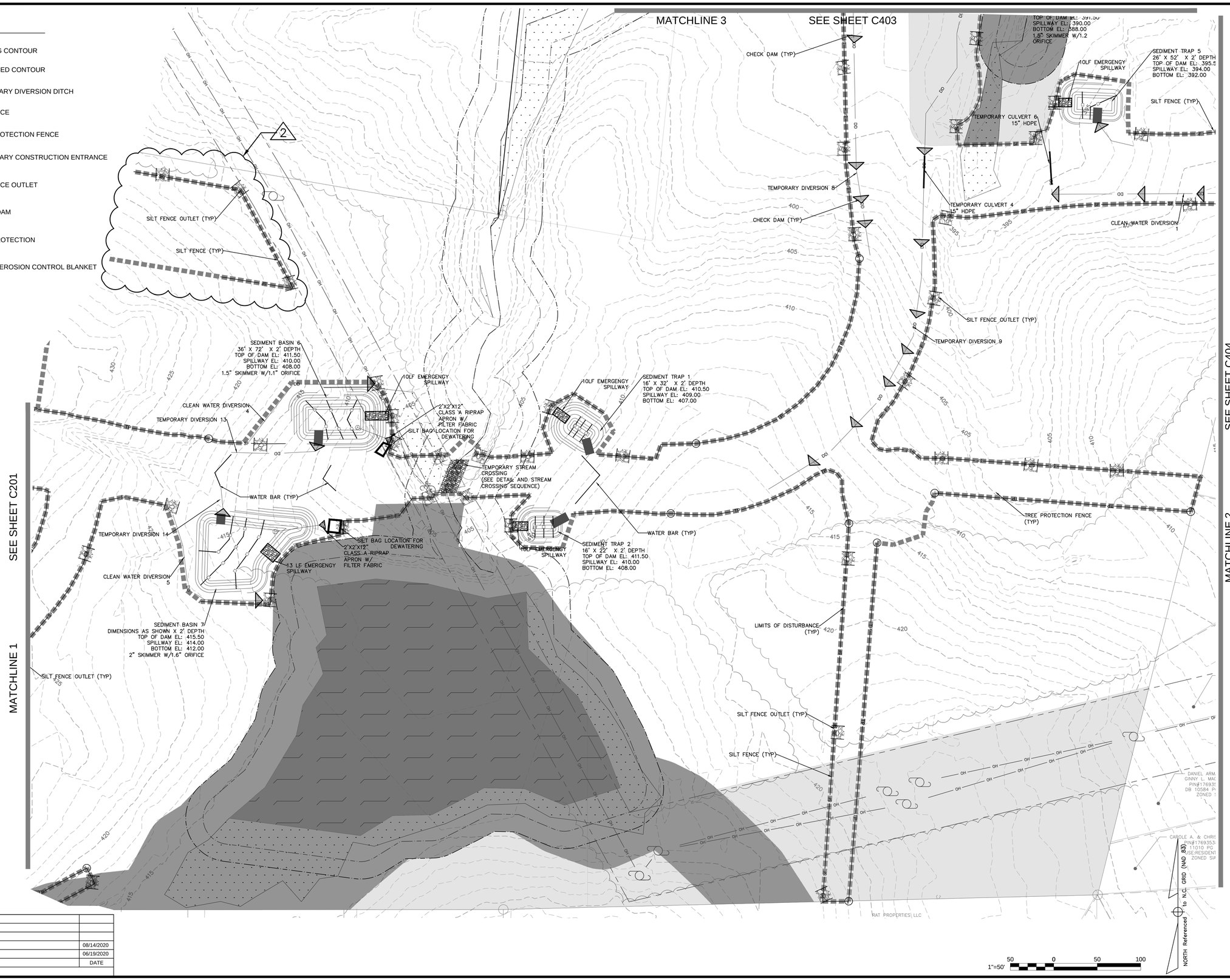

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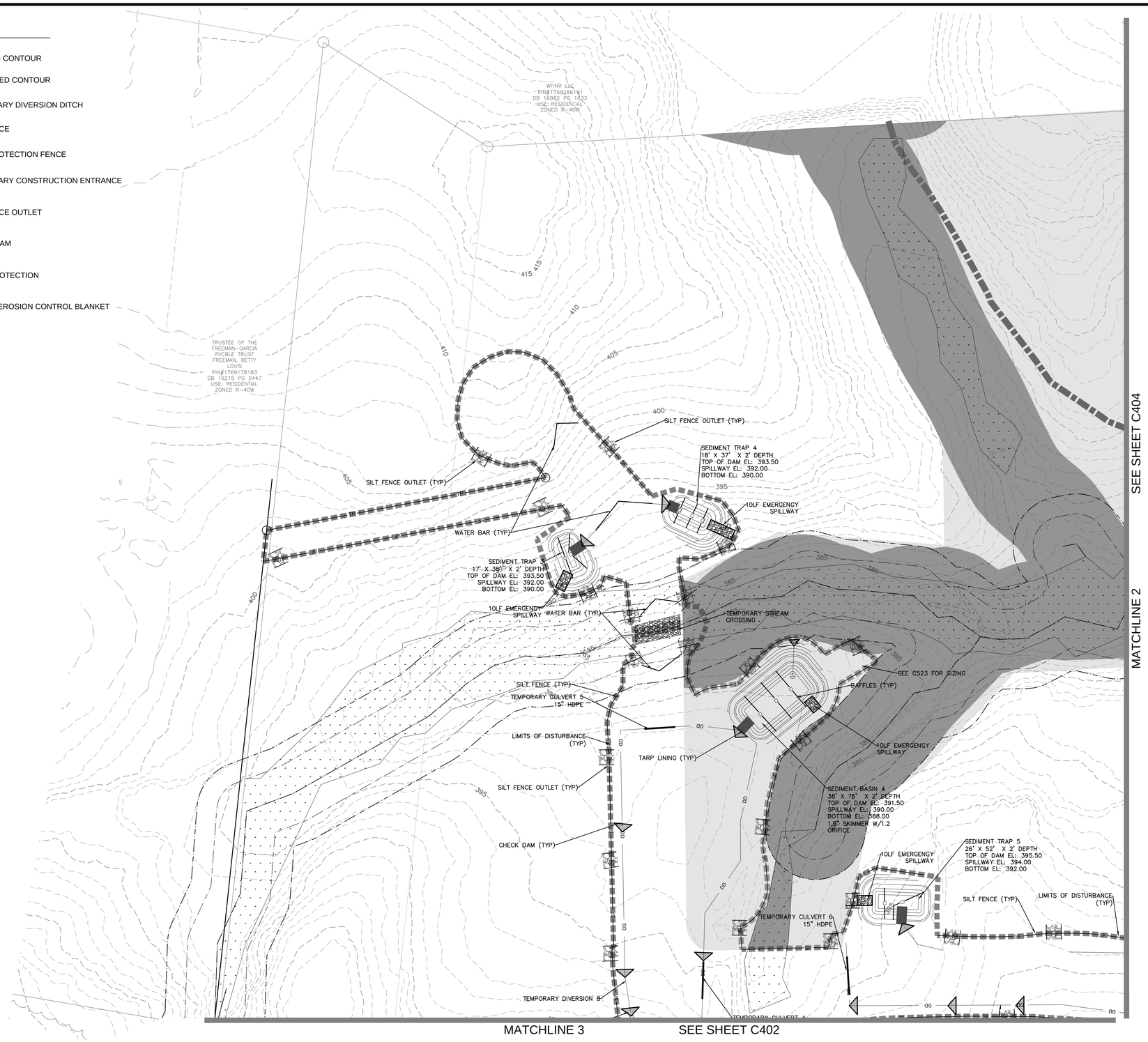

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1"=50' 50 0 50 100

NORTH Referenced to N.C. GRID (NAD 83)

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Scale:	1" = 50'
Date:	08/14/2020
Project Number:	P170347

SHEET

C403

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LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- DD — TEMPORARY DIVERSION DITCH
- SF — SILT FENCE
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- TEMPORARY CONSTRUCTION ENTRANCE
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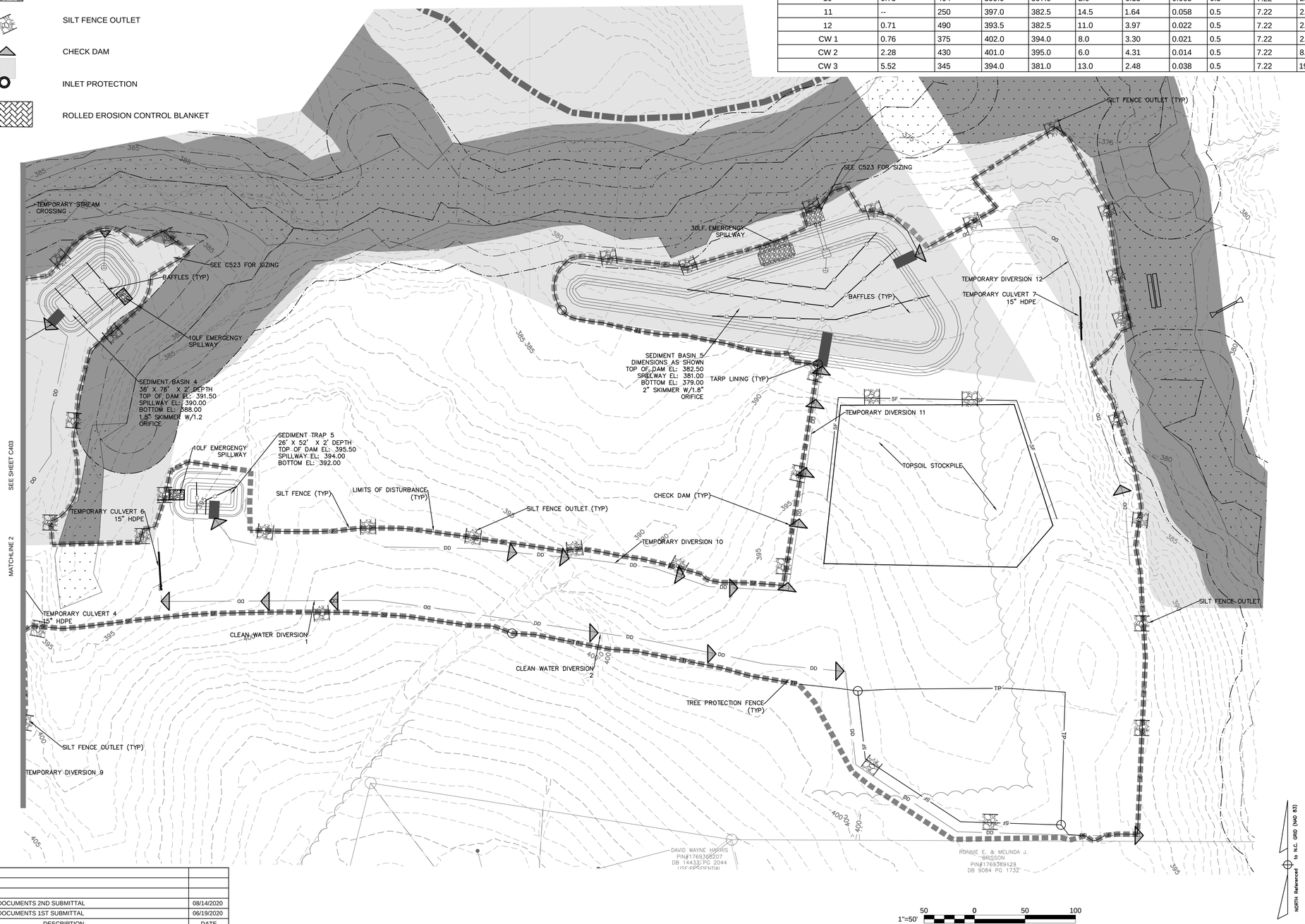
- INLET PROTECTION
- ROLLED EROSION CONTROL BLANKET

Temporary Culvert						
ID	Length (ft)	Slope (ft/ft)	Diamter (in)	Drainage Area (ac)	Intensity (in/hr)	Q2 (cfs)
1	56	0.010	15	0.79	5.64	2.23
2	56	0.010	18	1.74	5.64	4.90
3	45	0.010	18	1.28	5.64	3.61
4	40	0.010	15	1.05	5.64	2.96
5	40	0.010	15	0.45	5.64	1.27
6	40	0.010	15	0.76	5.64	2.14
7	45	0.010	15	0.71	5.64	2.00

DIVERSION DITCH LINER SUMMARY - Chandler's Ridge

Temporary Diversion #	Total Area (ac)	Total Length	Begin Elevation	End Elevation	Δ Elevation	Tc	Slope	C	Intensity	Q	Depth	Shear	Liner
Phase 1 Stage 1 Diversions													
1	0.70	300	436.5	430.5	6.0	2.85	0.020	0.5	7.22	2.54	0.45	0.56	Straw w/ Net
2	0.53	100	431.0	430.5	0.5	2.08	0.005	0.5	7.22	1.91	0.53	0.17	Straw w/ Net
3	2.83	410	438.0	430.5	7.5	3.75	0.018	0.5	7.22	10.23	0.78	0.89	Straw w/ Net
4	0.53	100	427.0	426.5	0.5	2.08	0.005	0.5	7.22	1.92	0.53	0.17	Straw w/ Net
5	1.00	380	436.0	426.5	9.5	3.13	0.025	0.5	7.22	3.62	0.19	0.30	Straw w/ Net
6	0.52	332	444.0	431.5	12.5	2.41	0.038	0.5	7.22	1.89	0.36	0.85	Straw w/ Net
7	1.28	490	437.5	431.5	6.0	5.02	0.012	0.5	7.22	4.62	0.62	0.47	Straw w/ Net
8	0.45	470	403.0	391.5	11.5	3.72	0.024	0.5	7.22	1.64	0.37	0.56	Straw w/ Net
9	1.05	710	416.0	391.5	24.5	4.48	0.035	0.5	7.22	3.80	0.48	1.03	Straw w/ Net
10	0.75	404	399.0	397.0	2.0	6.13	0.005	0.5	7.22	2.70	0.60	0.19	Straw w/ Net
11	--	250	397.0	382.5	14.5	1.64	0.058	0.5	7.22	2.70	0.38	1.38	Straw w/ Net
12	0.71	490	393.5	382.5	11.0	3.97	0.022	0.5	7.22	2.70	0.46	0.64	Straw w/ Net
CW 1	0.76	375	402.0	394.0	8.0	3.30	0.021	0.5	7.22	2.76	0.46	0.61	Straw w/ Net
CW 2	2.28	430	401.0	395.0	6.0	4.31	0.014	0.5	7.22	8.22	0.75	0.65	Straw w/ Net
CW 3	5.52	345	394.0	381.0	13.0	2.48	0.038	0.5	7.22	19.93	0.87	2.05	SC250



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01	CONSTRUCTION DOCUMENTS 1ST SUBMITTAL	06/19/2020

REVISIONS

NORTH CAROLINA PROFESSIONAL SEAL 20234 ENGINEER THOMAS S. SPEIGHT, JR.

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NCBELS FIRM No. C-2378

CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION
410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

EROSION CONTROL PLAN PH 1 ST 1

Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 50'
Date:	08/14/2020
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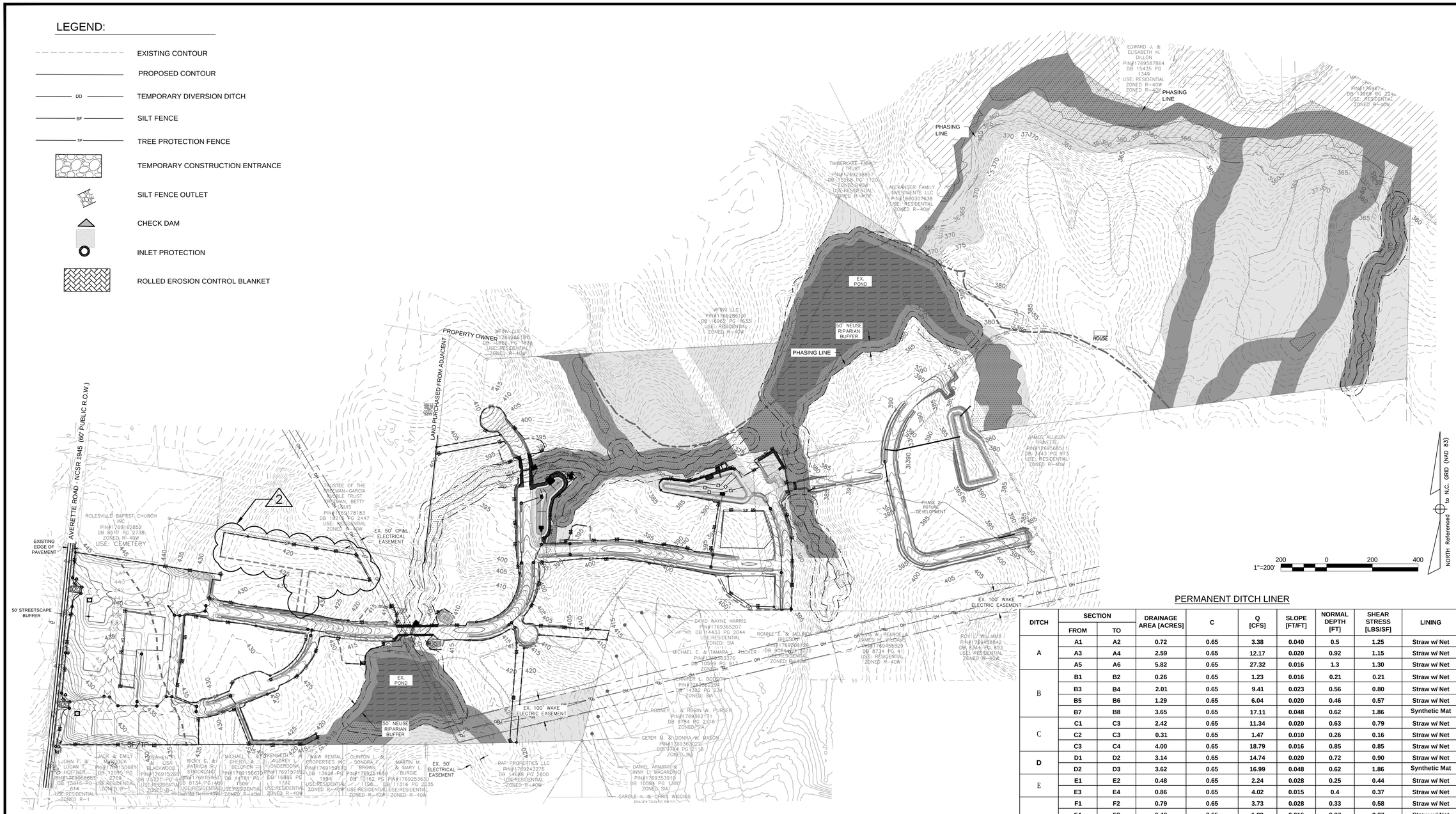

PERMANENT DITCH LINER

DITCH	SECTION FROM	SECTION TO	DRAINAGE AREA [ACRES]	C	Q [CFS]	SLOPE [FT/FT]	NORMAL DEPTH [FT]	SHEAR STRESS [LBS/SF]	LINING
A	A1	A2	0.72	0.65	3.38	0.040	0.5	1.25	Straw w/ Net
	A3	A4	2.59	0.65	12.17	0.020	0.92	1.15	Straw w/ Net
	A5	A6	5.82	0.65	27.32	0.016	1.3	1.30	Straw w/ Net
B	B1	B2	0.26	0.65	1.23	0.016	0.21	0.21	Straw w/ Net
	B3	B4	2.01	0.65	9.41	0.023	0.56	0.80	Straw w/ Net
	B5	B6	1.29	0.65	6.04	0.020	0.46	0.57	Straw w/ Net
	B7	B8	3.65	0.65	17.11	0.048	0.62	1.86	Synthetic Mat
C	C1	C3	2.42	0.65	11.34	0.020	0.63	0.79	Straw w/ Net
	C2	C3	0.31	0.65	1.47	0.010	0.26	0.16	Straw w/ Net
	C3	C4	4.00	0.65	18.79	0.016	0.85	0.85	Straw w/ Net
D	D1	D2	3.14	0.65	14.74	0.020	0.72	0.90	Straw w/ Net
	D2	D3	3.62	0.65	16.99	0.048	0.62	1.86	Synthetic Mat
E	E1	E2	0.48	0.65	2.24	0.028	0.25	0.44	Straw w/ Net
	E3	E4	0.86	0.65	4.02	0.015	0.4	0.37	Straw w/ Net
F	F1	F2	0.79	0.65	3.73	0.028	0.33	0.58	Straw w/ Net
	F4	F3	0.42	0.65	1.99	0.016	0.27	0.27	Straw w/ Net
	F5	F6	1.70	0.65	7.97	0.037	0.46	1.06	Straw w/ Net
	F7	F8	2.14	0.65	10.04	0.012	0.68	0.51	Straw w/ Net
	F9	F8	0.68	0.65	3.21	0.014	0.36	0.31	Straw w/ Net
	F9	F10	1.25	0.65	5.87	0.028	0.42	0.73	Straw w/ Net
	F11	F10	0.46	0.65	2.17	0.011	0.32	0.22	Straw w/ Net
	F11	F12	0.35	0.65	1.66	0.014	0.25	0.22	Straw w/ Net
	F14	F13	0.44	0.65	2.06	0.021	0.26	0.34	Straw w/ Net
	F15	F16	1.21	0.65	5.69	0.022	0.44	0.60	Straw w/ Net
	F17	F18	1.63	0.65	7.66	0.010	0.62	0.39	Straw w/ Net
G	G1	G2	0.23	0.65	1.07	0.014	0.2	0.17	Straw w/ Net
	G1	G3	0.46	0.65	2.15	0.028	0.24	0.42	Straw w/ Net
	G4	G3	0.19	0.65	0.90	0.011	0.2	0.14	Straw w/ Net

STREAM CROSSING CONSTRUCTION SEQUENCE:

1. KEEP CLEARING AND EXCAVATION OF THE STREAM BANKS AND BED AND APPROACH SECTIONS TO A MINIMUM.
2. DIVERT ALL SURFACE WATER FROM THE CONSTRUCTION SITE ONTO UNDISTURBED AREAS ADJOINING THE STREAM. LINE UNSTABLE STREAM BANKS WITH RIPRAP OR OTHERWISE APPROPRIATELY STABILIZE THEM.
3. CONSTRUCTION OF STREAM CULVERT SHALL BE COMPLETED IN 48 HOURS OF DRY WEATHER.
4. ENSURE BYPASS CHANNELS, IF USING TO DEWATER THE CROSSING SITE, ARE STABLE BEFORE DIVERTING THE STREAM. UPON COMPLETION OF THE CROSSING, FILL, COMPACT AND STABILIZE THE BYPASS CHANNEL APPROPRIATELY. PUMP AROUND MAY BE USED INSTEAD OF BYPASS CHANNEL AND MUST BE IN PLACE AS SHOWN IN DETAIL PRIOR TO DEWATERING THE CROSSING SITE.
5. PLACE FILL AND INSTALL PROTECTIVE GROUND COVER TO PROVIDE PERMANENT EROSION PROTECTION.
6. ENSURE THAT PERMANENT MEASURES NEEDED TO CONTROL EROSION FROM ROAD WATER RUNOFF MEET ALL CONSTRUCTION REQUIREMENTS FOR THOSE PRACTICES.
7. INSPECT STREAM CROSSINGS PERIODICALLY AND AFTER MAJOR STORMS TO CHECK FOR CHANNEL BLOCKAGE, EROSION OF ABUTMENTS, CHANNEL DEGRADATION, RIPRAP DISPACEMENT, SLOPEFAILURE AND PIPING. MAKE ALL NEEDED REPAIRS IMMEDIATELY.

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REVISIONS

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CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION

410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

OVERALL EROSION CONTROL PLAN PH 1 ST 2

Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 200'
Date:	08/14/2020
Project Number:	P170347

SHEET

C410

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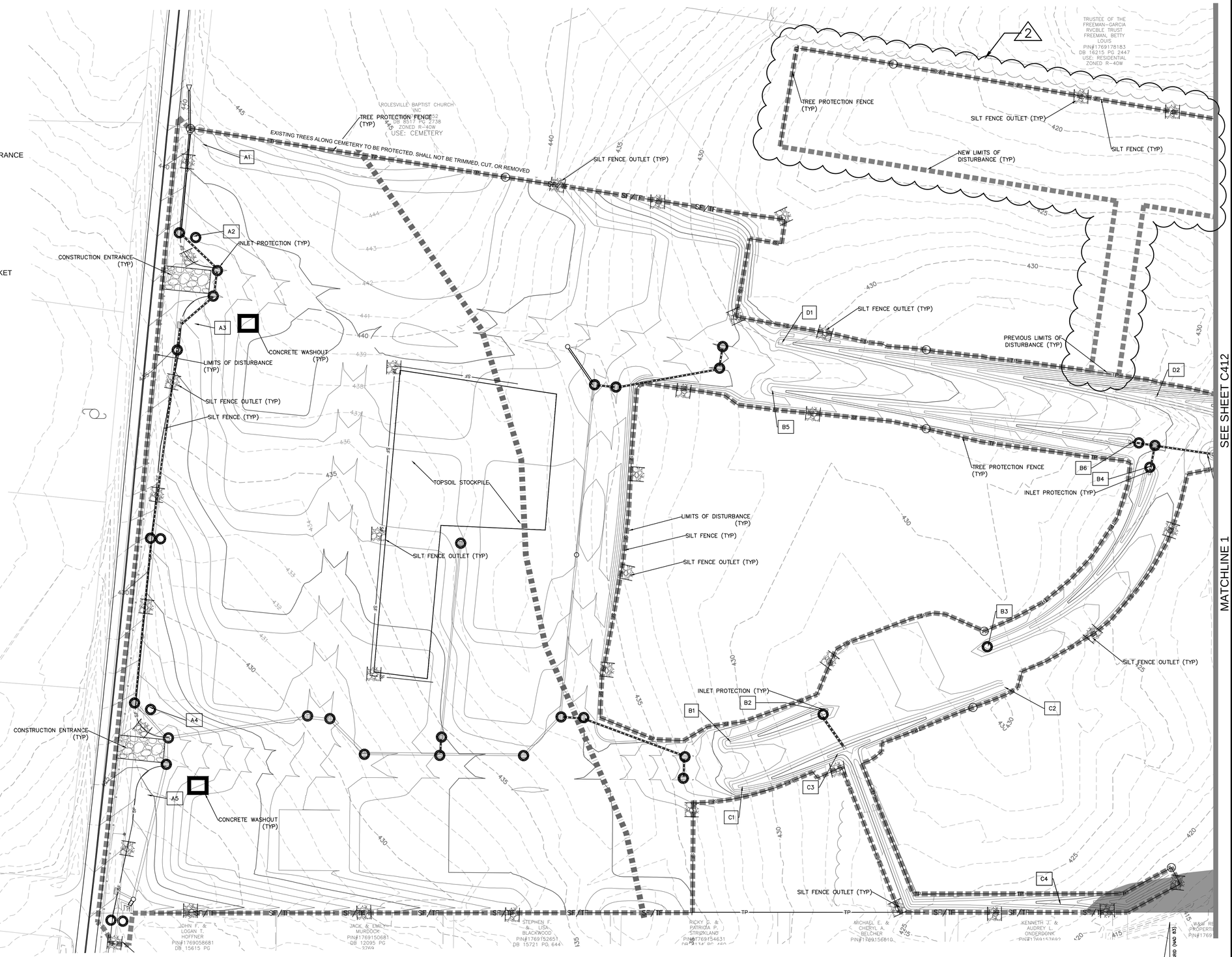

SEE SHEET C412

MATCHLINE 1

NORTH CAROLINA PROFESSIONAL SEAL 20234 9/10/20 ENGINEER THOMAS S. SPEIGHT, JR.

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WAKE COUNTY

EROSION CONTROL PLAN PH 1 ST 2

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SHEET

C411

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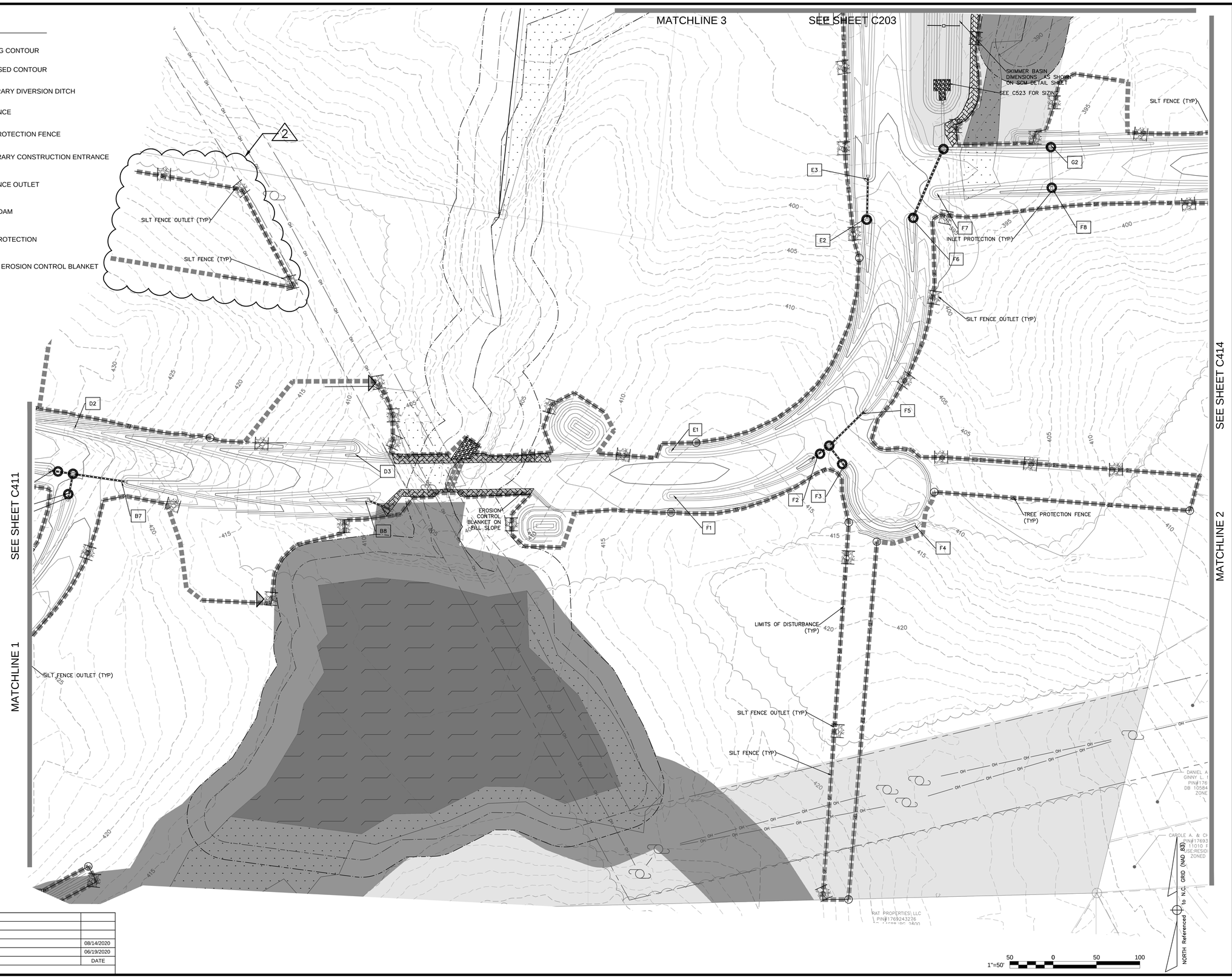

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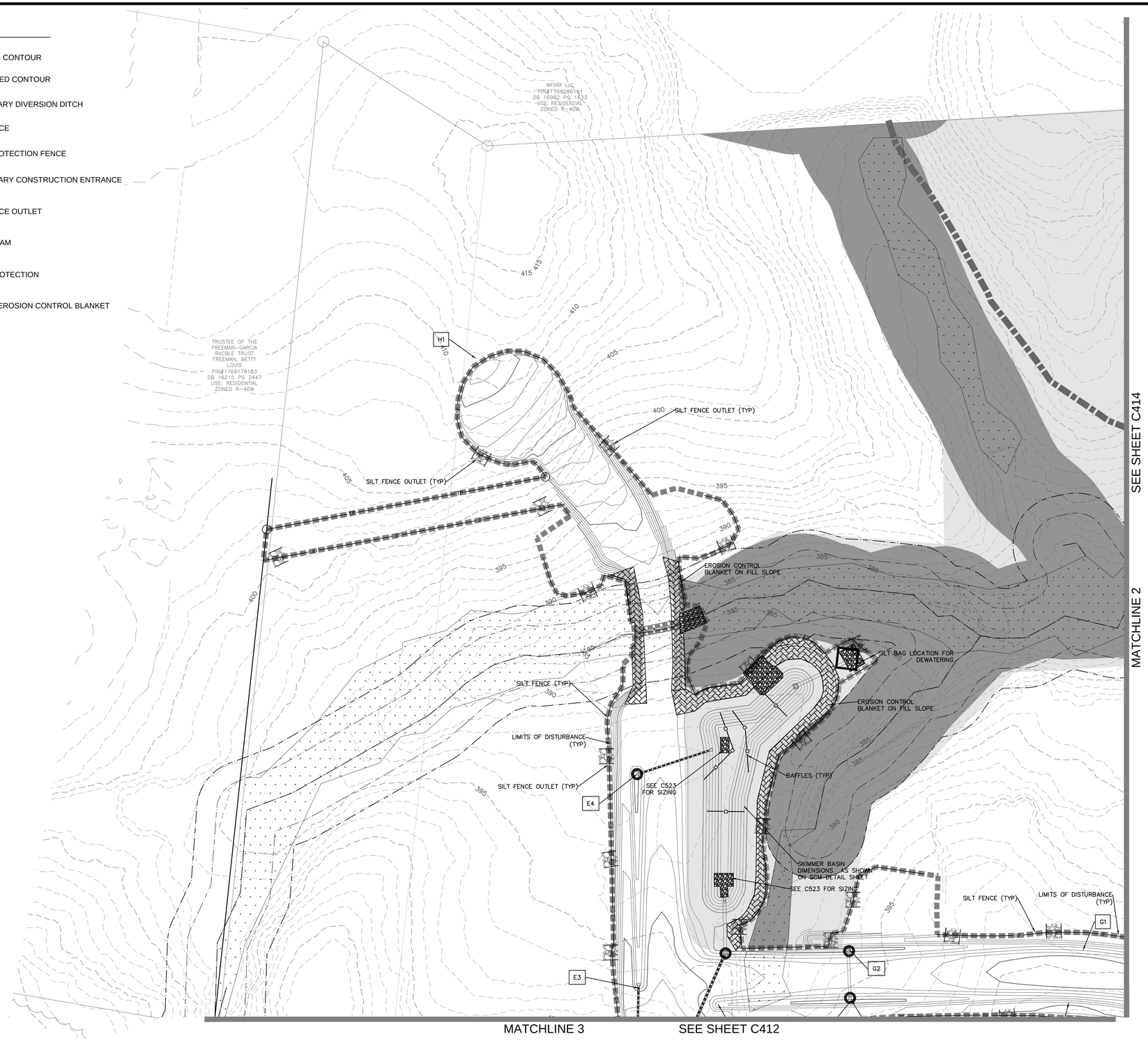

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1"=50' 50 0 50 100

NORTH Referenced to N.C. GRID (NAD 83)

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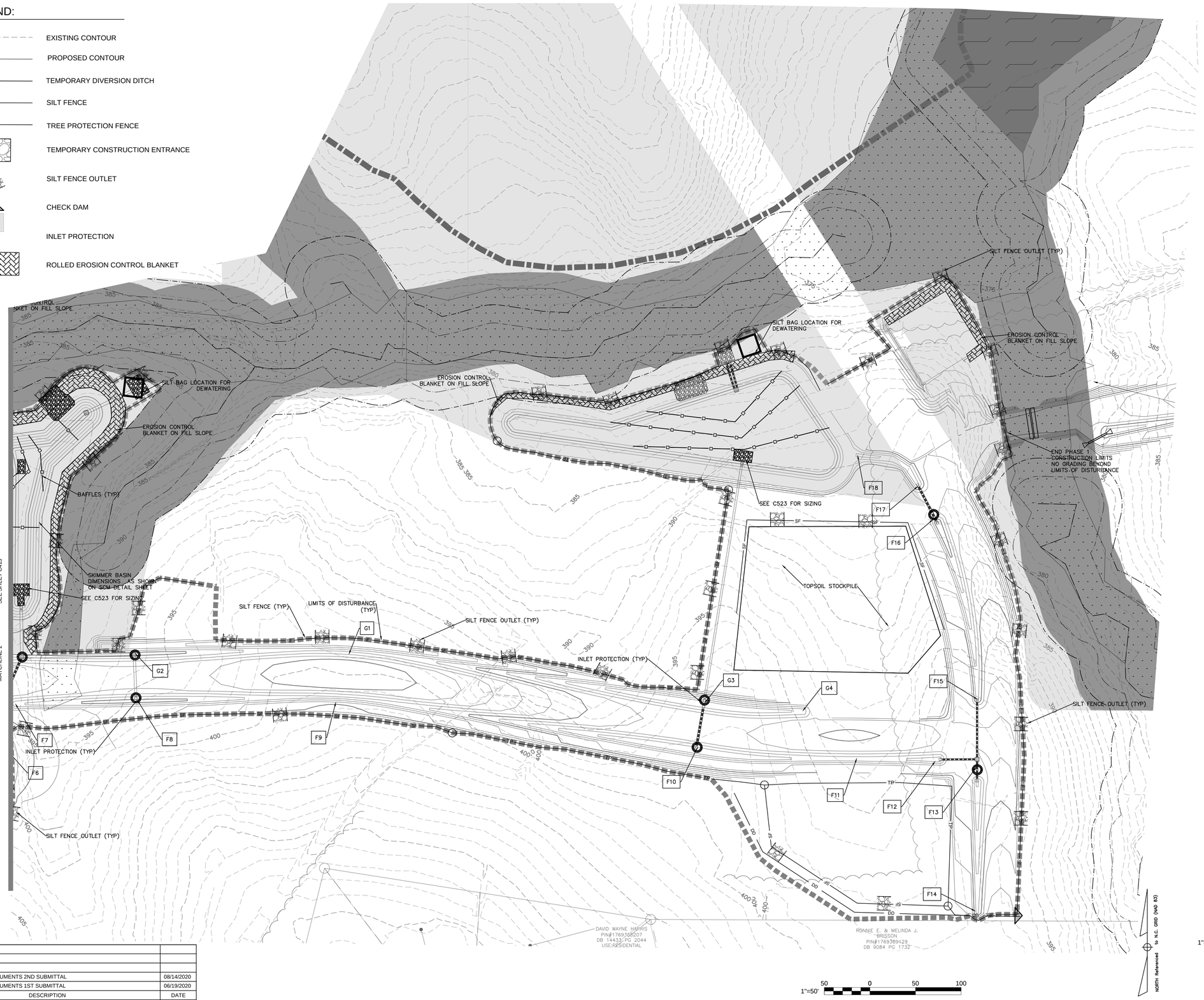

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DISTURBED AREA SUMMARY

		ADDITIONAL DISTURBED AREA
PHASE 1	1,108,465 SF / 25.45 AC.	71,252 SF / 1.64 AC.
PHASE 2	405,574 SF / 9.31 AC.	27,179 SF SF / 0.62 AC.
TOTAL	1,514,039 SF /34.76 AC.	98,431 SF /2.26 AC.

ADMIXTURES

AGRICULTURAL LIMESTONE: 2 TONS/ACRE

FERTILIZER: 1,000 LBS/ACRE – 10–10–10

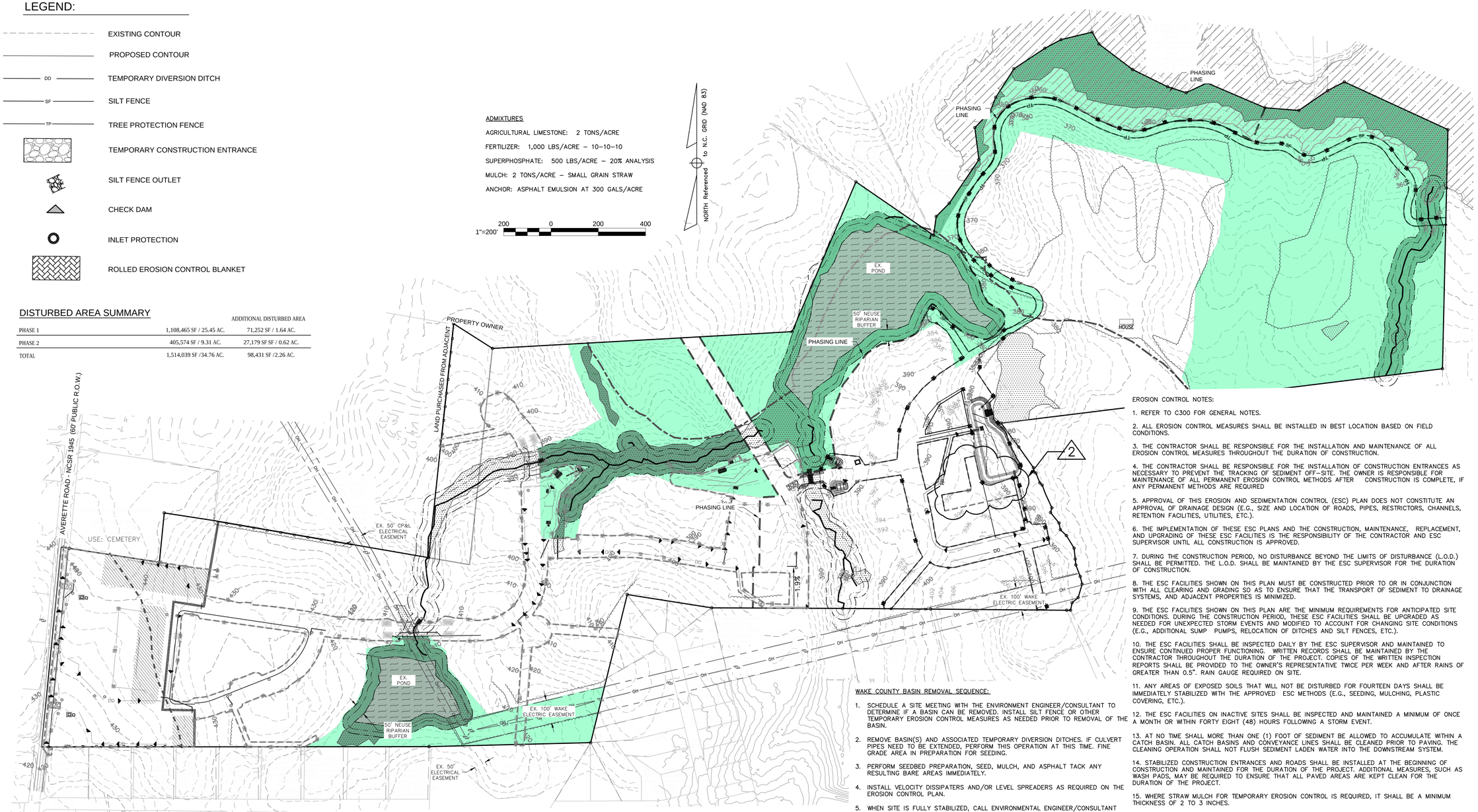
SUPERPHOSPHATE: 500 LBS/ACRE – 20% ANALYSIS

MULCH: 2 TONS/ACRE – SMALL GRAIN STRAW

ANCHOR: ASPHALT EMULSION AT 300 GALS/ACRE

1"=200' 200 0 200 400

NORTH Referenced to N.C. GRID (NAD 83)



EROSION CONTROL NOTES:

1. REFER TO C300 FOR GENERAL NOTES.

2. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED IN BEST LOCATION BASED ON FIELD CONDITIONS.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF CONSTRUCTION.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF CONSTRUCTION ENTRANCES AS NECESSARY TO PREVENT THE TRACKING OF SEDIMENT OFF–SITE. THE OWNER IS RESPONSIBLE FOR MAINTENANCE OF ALL PERMANENT EROSION CONTROL METHODS AFTER CONSTRUCTION IS COMPLETE, IF ANY PERMANENT METHODS ARE REQUIRED

5. APPROVAL OF THIS EROSION AND SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).

6. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR AND ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.

7. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE LIMITS OF DISTURBANCE (L.O.D.) SHALL BE PERMITTED. THE L.O.D. SHALL BE MAINTAINED BY THE ESC SUPERVISOR FOR THE DURATION OF CONSTRUCTION.

8. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.

9. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G., ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.).

10. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF THE PROJECT. COPIES OF THE WRITTEN INSPECTION REPORTS SHALL BE PROVIDED TO THE OWNER'S REPRESENTATIVE TWICE PER WEEK AND AFTER RAINS OF GREATER THAN 0.5". RAIN GAUGE REQUIRED ON SITE.

11. ANY AREAS OF EXPOSED SOILS THAT WILL NOT BE DISTURBED FOR FOURTEEN DAYS SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).

12. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN FORTY EIGHT (48) HOURS FOLLOWING A STORM EVENT.

13. AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.

14. STABILIZED CONSTRUCTION ENTRANCES AND ROADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

15. WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE A MINIMUM THICKNESS OF 2 TO 3 INCHES.

16. INTERIM SLOPES MAY BE GRADED TO A MAXIMUM SLOPE OF 2:1 (HORIZONTAL: VERTICAL); CUT SLOPES SHALL BE LIMITED TO A MAXIMUM SLOPE OF 1.5:1.

17. THE SURFACE OF AREAS SLOPES STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL THAT ARE TO RECEIVE INTERIM FILL SHALL BE PLOWED, FURROWED, TILLED OR BROKEN UP PRIOR TO PLACING FILL SO THAT FILL MATERIAL WILL BOND WITH EXISTING ; "SURFACE. INTERIM FILL SHALL BE PLACED AS SPECIFIED FOR PERMANENT FILLS AND IN LIFTS NOT GREATER THAN 6".

18. PROVIDE DUST CONTROL MEASURES INCLUDING, BUT NOT LIMITED TO, WETTING DOWN TO CONTROL DUST ON SITE, IN ORDER TO PREVENT ANNOYANCE/AND OR DAMAGE TO ADJACENT SITES. CALCIUM CHLORIDE OR ANY OTHER CHEMICAL MATERIAL MAY NOT BE USED ON SUBGRADES OF AREAS TO BE SEEDED OR PLANTED.

19. SEDIMENT LADEN RUNOFF FROM EXCAVATIONS SHALL NOT BE PUMPED DIRECTLY TO STORM DRAINAGE.

20. INSPECTOR REFERS TO LOCAL JURISDICTIONAL (NCDENR OR LOCAL) LAND QUALITY INSPECTOR OR HIS REPRESENTATIVE. FIELD INSPECTIONS MAY REQUIRE ADDITIONAL SEDIMENTATION AND EROSION CONTROL MEASURES AS DEEMED NECESSARY BY THE INSPECTOR.

21. CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL DEVICES SHALL CONFORM TO THE STANDARDS SET FORTH IN THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT, HEALTH AND NATURAL RESOURCES LAND QUALITY SECTION EROSION AND SEDIMENT CONTROL PLANNING LAND DESIGN MANUAL.

22. NOTIFICATION OF LAND RESOURCES SEDIMENT AND EROSION CONTROL SELF–INSPECTION PROGRAM: THE PERSON RESPONSIBLE FOR LAND–DISTURBING ACTIVITIES IS REQUIRED TO INSPECT THE PROJECT AFTER EACH PHASE OF THE PROJECT AND CONTINUED UNTIL PERMANENT GROUND COVER IS ESTABLISHED IN ACCORDANCE WITH NCGS 113A–54.1 AND 15A NCAC 4B.0131 TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. THE SELF–INSPECTION REPORT FORM IS AVAILABLE AS AN EXCEL SPREADSHEET FORM HTTP://WWW.DLR.ENR.STATE.NC.US/PAGES/SEDIMENTATION_NEW.HTM

23. COMPLIANCE WITH THE STATE NCG01 SELF–INSPECTION PROGRAM IS REQUIRED FOR THIS SITE.

WAKE COUNTY BASIN REMOVAL SEQUENCE:

1. SCHEDULE A SITE MEETING WITH THE ENVIRONMENT ENGINEER/CONSULTANT TO DETERMINE IF A BASIN CAN BE REMOVED. INSTALL SILT FENCE OR OTHER TEMPORARY EROSION CONTROL MEASURES AS NEEDED PRIOR TO REMOVAL OF THE BASIN.
2. REMOVE BASIN(S) AND ASSOCIATED TEMPORARY DIVERSION DITCHES. IF CULVERT PIPES NEED TO BE EXTENDED, PERFORM THIS OPERATION AT THIS TIME. FINE GRADE AREA IN PREPARATION FOR SEEDING.
3. PERFORM SEEDBED PREPARATION, SEED, MULCH, AND ASPHALT TACK ANY RESULTING BARE AREAS IMMEDIATELY.
4. INSTALL VELOCITY DISSIPATERS AND/OR LEVEL SPREADERS AS REQUIRED ON THE EROSION CONTROL PLAN.
5. WHEN SITE IS FULLY STABILIZED, CALL ENVIRONMENTAL ENGINEER/CONSULTANT FOR APPROVAL OF REMOVING REMAINING TEMPORARY EROSION CONTROL MEASURES AND ADVICE ON WHEN SITE CAN BE ISSUED A CERTIFICATE OF COMPLETION.

TEMPORARY SEEDBED PREPARATION:

1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL THREE INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.
2. RIP THE ENTIRE AREA TO SIX INCHES DEEP.
3. REMOVE ALL LOOSE ROCK, ROOTS AND OTHER OBSTRUCTIONS, LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
4. APPLY AGRICULTURAL LIME, FERTILIZER AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE ADMIXTURE BELOW).
5. CONTINUE TILLAGE UNTIL A WELL–PULVERIZED, FIRM, REASONABLY UNIFORM FOUR TO SIX INCHES DEEP.
6. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
8. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE OVER 60% DAMAGED, RE–ESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
9. CONSULT WAKE COUNTY EROSION & SEDIMENT CONTROL DEPARTMENT ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

STOCKPILE MAINTENANCE NOTES:

1. SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED AND WILL REDUCE EROSION PROBLEMS. TARPS SHOULD BE KEYED IN AT THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE PLASTIC.

2. IF A STOCKPILE IS TO REMAIN FOR FUTURE USE AFTER THE PROJECT IS COMPLETE (BUILDERS, ETC.), THE FINANCIALLY RESPONSIBLE PARTY MUST NOTIFY WAKE COUNTY OF A NEW RESPONSIBLE PARTY FOR THAT STOCKPILE.

3. THE APPROVED PLAN SHALL PROVIDE FOR THE USE OF STAGES DEEDING AND MULCHING ON A CONTINUAL BASIS WHILE STOCKPILE IS IN USE.

4. ESTABLISH AND MAINTAIN A VEGETATIVE BUFFER AT THE TOE OF THE SLOPE (WHERE PRACTICAL).

TREE PROTECTION NOTES:

1. TREE PROTECTION FENCING MUST BE IN PLACE PRIOR TO ANY DEMOLITION, LAND DISTURBANCE OR ISSUANCE OF A GRADING PERMIT. OR OBTAIN A GRADING PERMIT THEN TREE PROTECTION FENCING MUST BE IN PLACE PRIOR TO ANY DEMOLITION, LAND DISTURBANCE.

2. TREE PROTECTION FENCING SHALL INCLUDE WARNING SIGNS POSTED IN BOTH ENGLISH AND SPANISH, AS FOLLOWS: "NO TRESPASSING/TREE PROTECTION AREA/PROHIBIDO ENTRAR / ZONA PROTECTORA PARA LOS ÁRBOLES."

3. PROTECTION OF EXISTING VEGETATION: AT THE START OF GRADING INVOLVING THE LOWERING OF EXISTING GRADE AROUND A TREE OR STRIPPING OF TOPSOIL, A CLEAN, SHARP, VERTICAL CUT SHALL BE MADE AT THE EDGE ON THE TREE ROOTS OUTSIDE OF THE TREE SAVE AREA. THIS SHALL OCCUR AT THE SAME TIME THAT OTHER EROSION CONTROL MEASURES ARE INSTALLED. THE TREE PROTECTION FENCING SHALL BE INSTALLED ON THE SIDE OF THE CUT FARTHEST AWAY FROM THE TREE TRUNK AND SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION IN THE VICINITY OF THE TREES IS COMPLETE.

4. NO STORAGE OF MATERIALS, FILL, OR EQUIPMENT AND NO TRESPASSING SHALL BE ALLOWED WITHIN THE BOUNDARY OF THE PROTECTED TREE AREA.

5. TREE PROTECTION AREA: EQUALS ONE FOOT OF RADIUS FOR EVERY INCH OF DIAMETER OF EXISTING TREES, OR SIX FOOT RADIUS, WHICHEVER IS GREATER. NO DISTURBANCE ALLOWED WITHIN THIS AREA.

SEEDBED PREPARATION:

1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONED, IF AVAILABLE.

2. RIP THE ENTIRE AREA TO 6 INCHES DEPTH.

3. REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.

4. APPLY ALL AGRICULTURAL LIME, FERTILIZER, AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE BELOW).

5. CONTINUE TILLAGE UNTIL A WELL PULVERIZED, FIRM, REASONABLY UNIFORM 4 TO 6 INCHES DEEP SEEDBED IS PREPARED.

6. SEED ON A FRESHLY PREPARED SEED BED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.

7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.

8. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESENDING WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE OVER 60% DAMAGED, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES.

9. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESENDING WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE OVER 50% DAMAGED, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES AND LANDSCAPING PLANS.

10. SEE LANDSCAPING PLANS FOR PERMANENT SEEDING, MULCHING, AND FERTILIZING RATES. ALL AREAS NOT DESIGNATED TO RECEIVE PLANTS SHALL BE SEEDED PER THE LANDSCAPING PLANS.

REV	DESCRIPTION	DATE
02	CONSTRUCTION DOCUMENTS 2ND SUBMITTAL	08/14/2020
01	CONSTRUCTION DOCUMENTS 1ST SUBMITTAL	06/19/2020

REVISIONS

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NORTH CAROLINA PROFESSIONAL SEAL 20234 ENGINEER THOMAS S. SPEIGHT, JR.

Bateman Civil Survey Company
Engineers • Surveyors • Planners
2524 Reliance Avenue, Apex, North Carolina 27539
Phone: 919.577.1080 Fax: 919.577.1081
NCBELS FIRM No. C-2378

CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION

410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

OVERALL EROSION CONTROL PLAN PH 2 ST 1

Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 200'
Date:	08/14/2020
Project Number:	P170347

SHEET

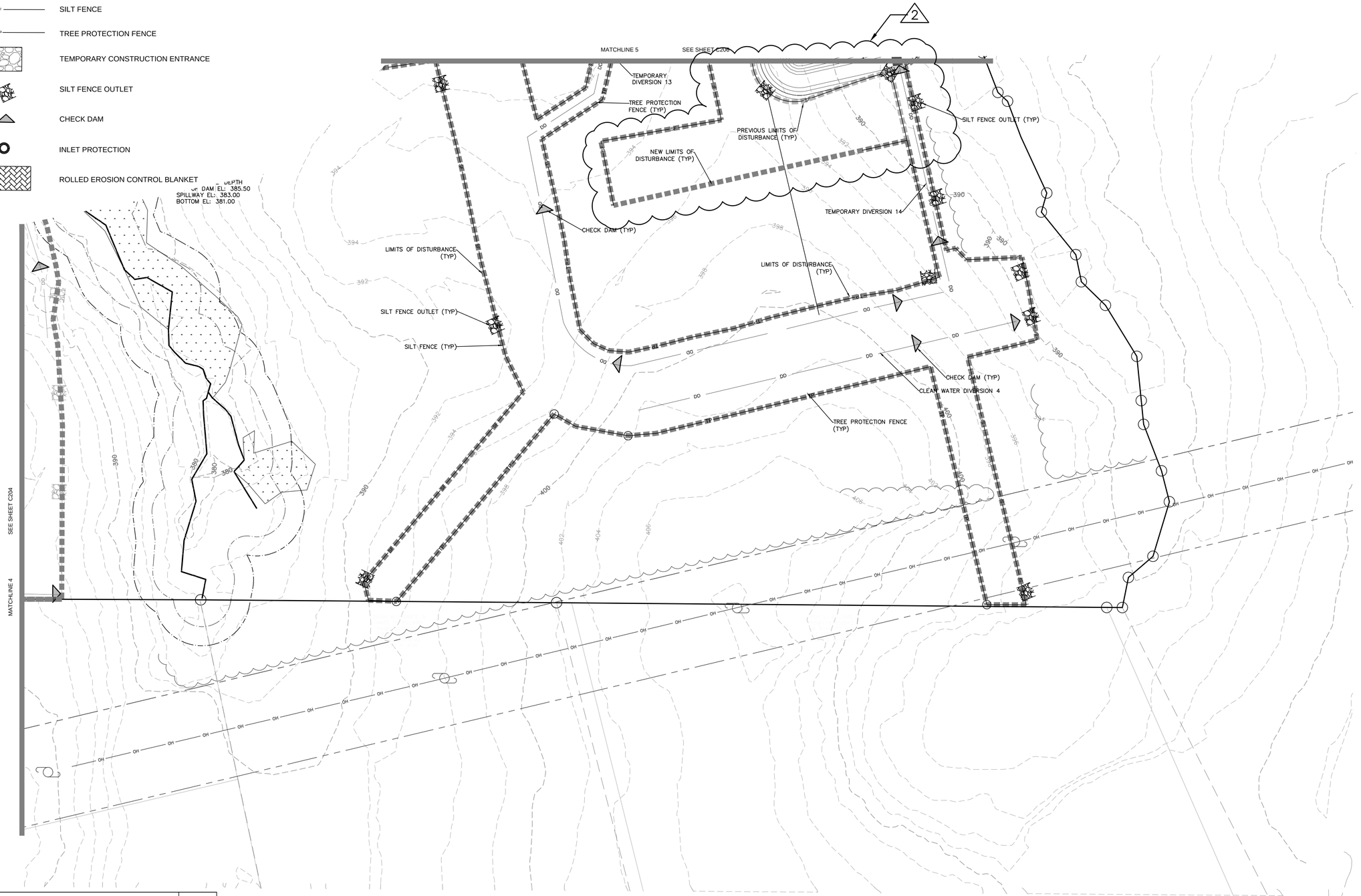
C420

LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- DD — TEMPORARY DIVERSION DITCH
- SF — SILT FENCE
- TP — TREE PROTECTION FENCE
- TEMPORARY CONSTRUCTION ENTRANCE
- SILT FENCE OUTLET
- CHECK DAM
- INLET PROTECTION
- ROLLED EROSION CONTROL BLANKET

DIVERSION DITCH LINER SUMMARY - Chandler's Ridge

Temporary Diversion #	Total Area (ac)	Total Length	Begin Elevation	End Elevation	Δ Elevation	Tc	Slope	C	Intensity	Q	Depth	Shear	Liner
Phase 2 Stage 1 Diversions													
13	2.20	850	400.0	394.0	6.0	9.48	0.007	0.5	7.22	7.93	0.82	0.36	Straw w/ Net
14	0.98	440	400.0	394.0	6.0	4.43	0.014	0.5	7.22	3.54	0.55	0.47	Straw w/ Net
CW 5	1.02	405	402.0	391.0	11.0	3.19	0.027	0.5	7.22	3.70	0.49	0.83	Straw w/ Net



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NORTH Referenced to N.C. GRID (NAD 83)

REV	DESCRIPTION	DATE
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01	CONSTRUCTION DOCUMENTS 1ST SUBMITTAL	06/19/2020

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CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION
410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

EROSION CONTROL PLAN PH 2 ST 1

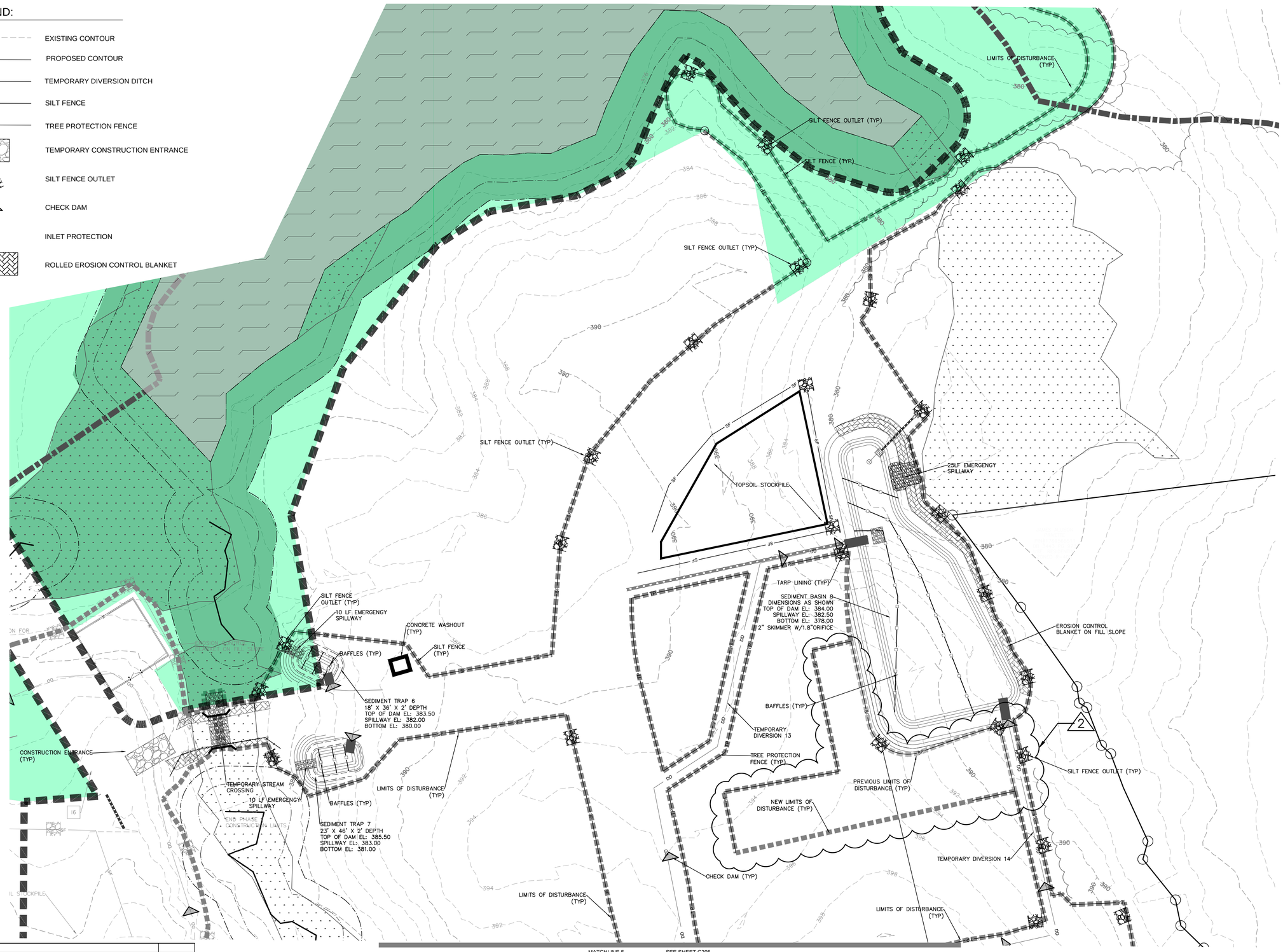
Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 50'
Date:	08/14/2020
Project Number:	P170347

SHEET

C422

LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- DD — TEMPORARY DIVERSION DITCH
- SF — SILT FENCE
- TP — TREE PROTECTION FENCE
- TEMPORARY CONSTRUCTION ENTRANCE
- SILT FENCE OUTLET
- CHECK DAM
- INLET PROTECTION
- ROLLED EROSION CONTROL BLANKET



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01	CONSTRUCTION DOCUMENTS 1ST SUBMITTAL	06/19/2020

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CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION
410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

EROSION CONTROL PLAN PH 2 ST 1

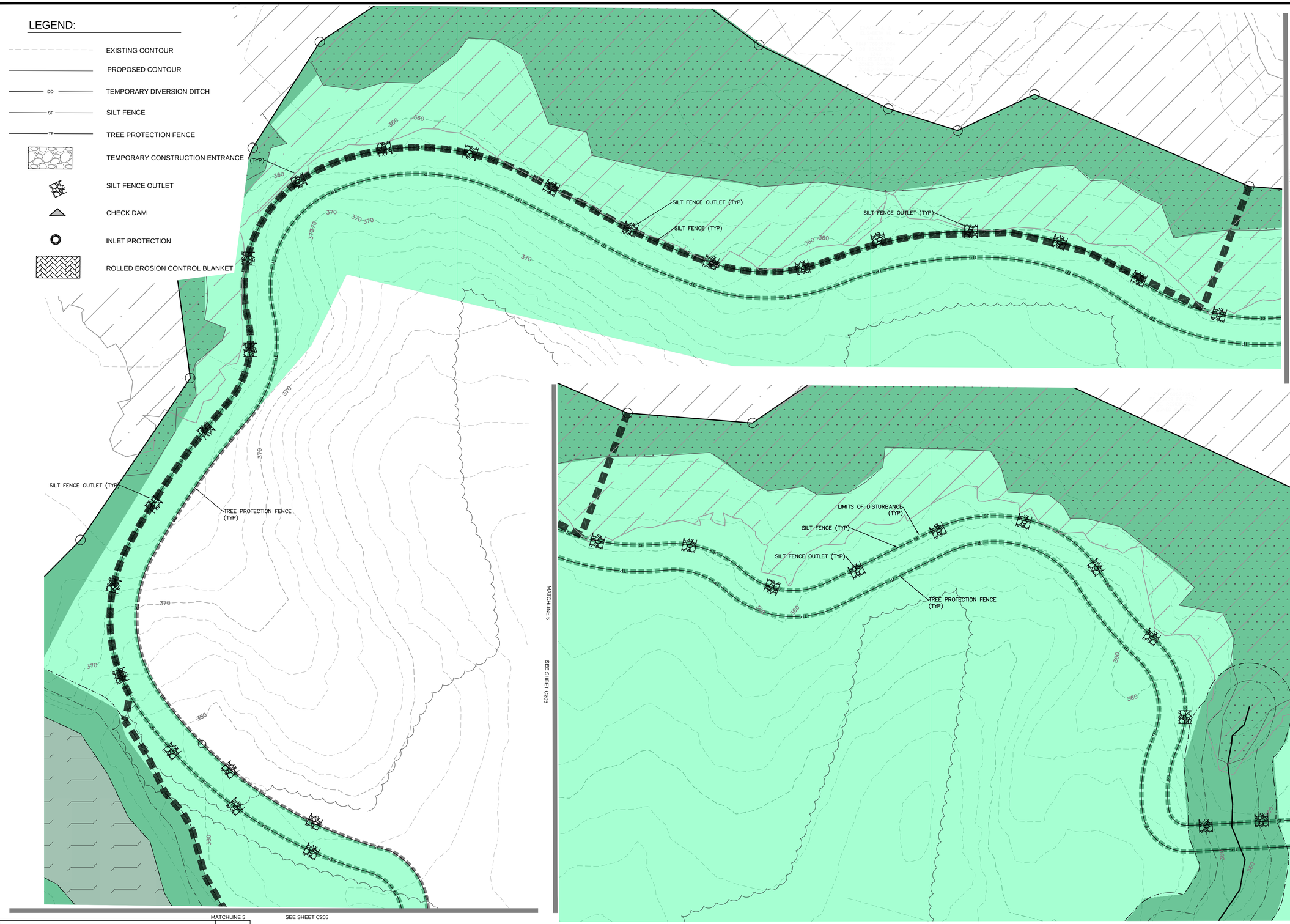
Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 50'
Date:	08/14/2020
Project Number:	P170347

SHEET

C423

LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- DD — TEMPORARY DIVERSION DITCH
- SF — SILT FENCE
- TP — TREE PROTECTION FENCE
- TEMPORARY CONSTRUCTION ENTRANCE (TYP)
- SILT FENCE OUTLET
- CHECK DAM
- INLET PROTECTION
- ROLLED EROSION CONTROL BLANKET



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01	CONSTRUCTION DOCUMENTS 1ST SUBMITTAL	06/19/2020

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CONSTRUCTION DOCUMENTS
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410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

EROSION CONTROL PLAN PH 2 ST 1

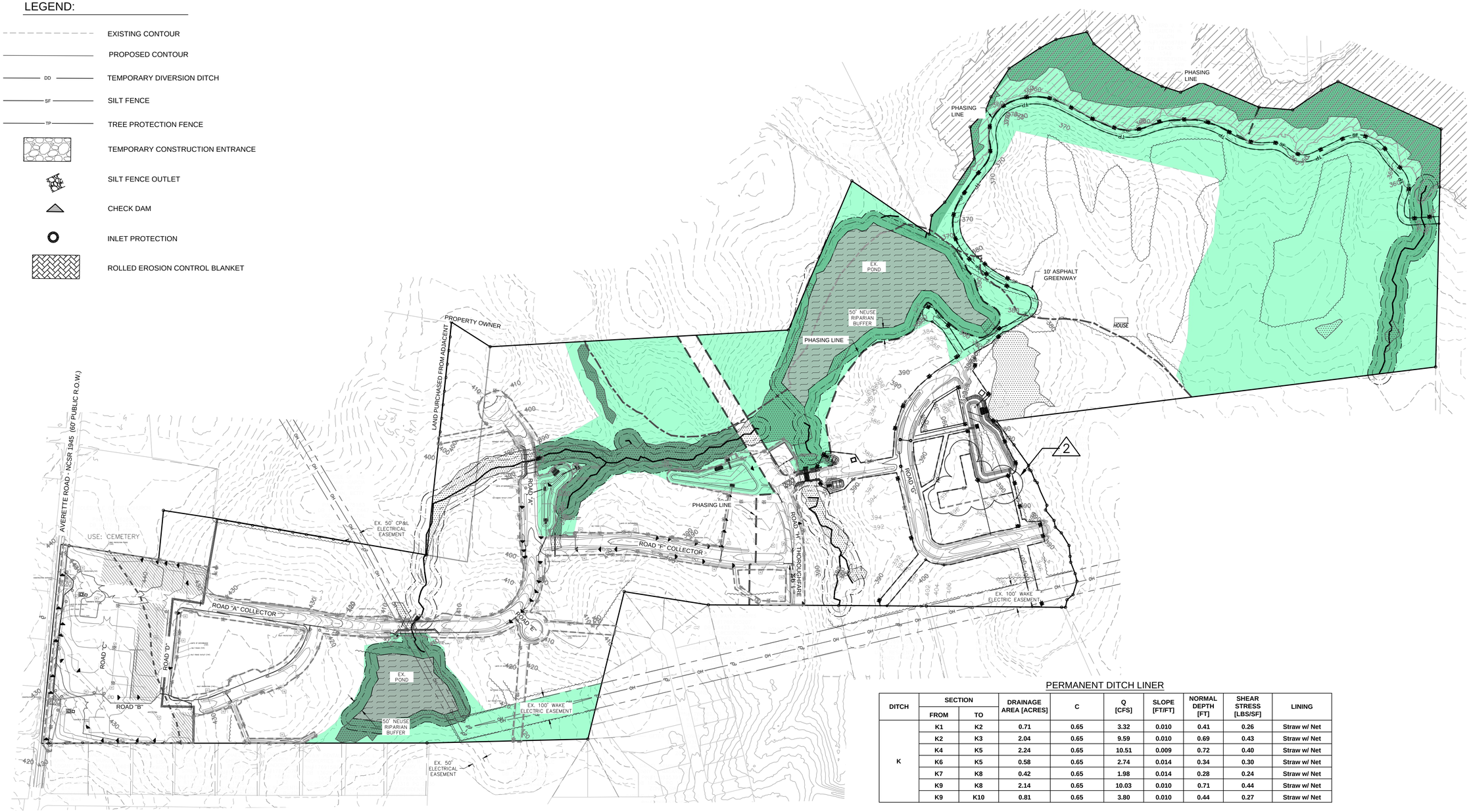
Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 50'
Date:	08/14/2020
Project Number:	P170347

SHEET

C424

LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- DD — TEMPORARY DIVERSION DITCH
- SF — SILT FENCE
- TP — TREE PROTECTION FENCE
- TEMPORARY CONSTRUCTION ENTRANCE
- SILT FENCE OUTLET
- CHECK DAM
- INLET PROTECTION
- ROLLED EROSION CONTROL BLANKET



PERMANENT DITCH LINER

DITCH	SECTION FROM	SECTION TO	DRAINAGE AREA [ACRES]	C	Q [CFS]	SLOPE [FT/FT]	NORMAL DEPTH [FT]	SHEAR STRESS [LBS/SF]	LINING
K	K1	K2	0.71	0.65	3.32	0.010	0.41	0.26	Straw w/ Net
	K2	K3	2.04	0.65	9.59	0.010	0.69	0.43	Straw w/ Net
	K4	K5	2.24	0.65	10.51	0.009	0.72	0.40	Straw w/ Net
	K6	K5	0.58	0.65	2.74	0.014	0.34	0.30	Straw w/ Net
	K7	K8	0.42	0.65	1.98	0.014	0.28	0.24	Straw w/ Net
	K9	K8	2.14	0.65	10.03	0.010	0.71	0.44	Straw w/ Net
	K9	K10	0.81	0.65	3.80	0.010	0.44	0.27	Straw w/ Net

STREAM CROSSING CONSTRUCTION SEQUENCE:

1. KEEP CLEARING AND EXCAVATION OF THE STREAM BANKS AND BED AND APPROACH SECTIONS TO A MINIMUM.
2. DIVERT ALL SURFACE WATER FROM THE CONSTRUCTION SITE ONTO UNDISTURBED AREAS ADJOINING THE STREAM. LINE UNSTABLE STREAM BANKS WITH RIPRAP OR OTHERWISE APPROPRIATELY STABILIZE THEM.
3. CONSTRUCTION OF STREAM CULVERT SHALL BE COMPLETED IN 48 HOURS OF DRY WEATHER.
4. ENSURE BYPASS CHANNELS, IF USING TO DEWATER THE CROSSING SITE, ARE STABLE BEFORE DIVERTING THE STREAM. UPON COMPLETION OF THE CROSSING, FILL, COMPACT AND STABILIZE THE BYPASS CHANNEL APPROPRIATELY. PUMP AROUND MAY BE USED INSTEAD OF BYPASS CHANNEL AND MUST BE IN PLACE AS SHOWN IN DETAIL PRIOR TO DEWATERING THE CROSSING SITE.
5. PLACE FILL AND INSTALL PROTECTIVE GROUND COVER TO PROVIDE PERMANENT EROSION PROTECTION.
6. ENSURE THAT PERMANENT MEASURES NEEDED TO CONTROL EROSION FROM ROAD WATER RUNOFF MEET ALL CONSTRUCTION REQUIREMENTS FOR THOSE PRACTICES.
7. INSPECT STREAM CROSSINGS PERIODICALLY AND AFTER MAJOR STORMS TO CHECK FOR CHANNEL BLOCKAGE, EROSION OF ABUTMENTS, CHANNEL DEGRADATION, RIPRAP DISPACEMENT, SLOPEFAILURE AND PIPING. MAKE ALL NEEDED REPAIRS IMMEDIATELY.

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02	CONSTRUCTION DOCUMENTS 2ND SUBMITTAL	08/14/2020
01	CONSTRUCTION DOCUMENTS 1ST SUBMITTAL	06/19/2020

REVISIONS

1"=200' 200 0 200 400

NORTH Referenced to N.C. GRID (NAD 83)

NORTH CAROLINA PROFESSIONAL SEAL 20234 ENGINEER THOMAS S. SPEIGHT, JR. 8/14/20

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NCBELS FIRM No. C-2378

CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION
410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

OVERALL EROSION CONTROL PLAN PH 2 ST 2

Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 200'
Date:	08/14/2020
Project Number:	P170347

SHEET

C430

P:\2017 Projects\170347 Chandlers Ridge\Eng\CAD\DWG\TP SHEET\P_170347_C420_EROSION_CONTROL.dwg

LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- DD — TEMPORARY DIVERSION DITCH
- SF — SILT FENCE
- TP — TREE PROTECTION FENCE
- TEMPORARY CONSTRUCTION ENTRANCE
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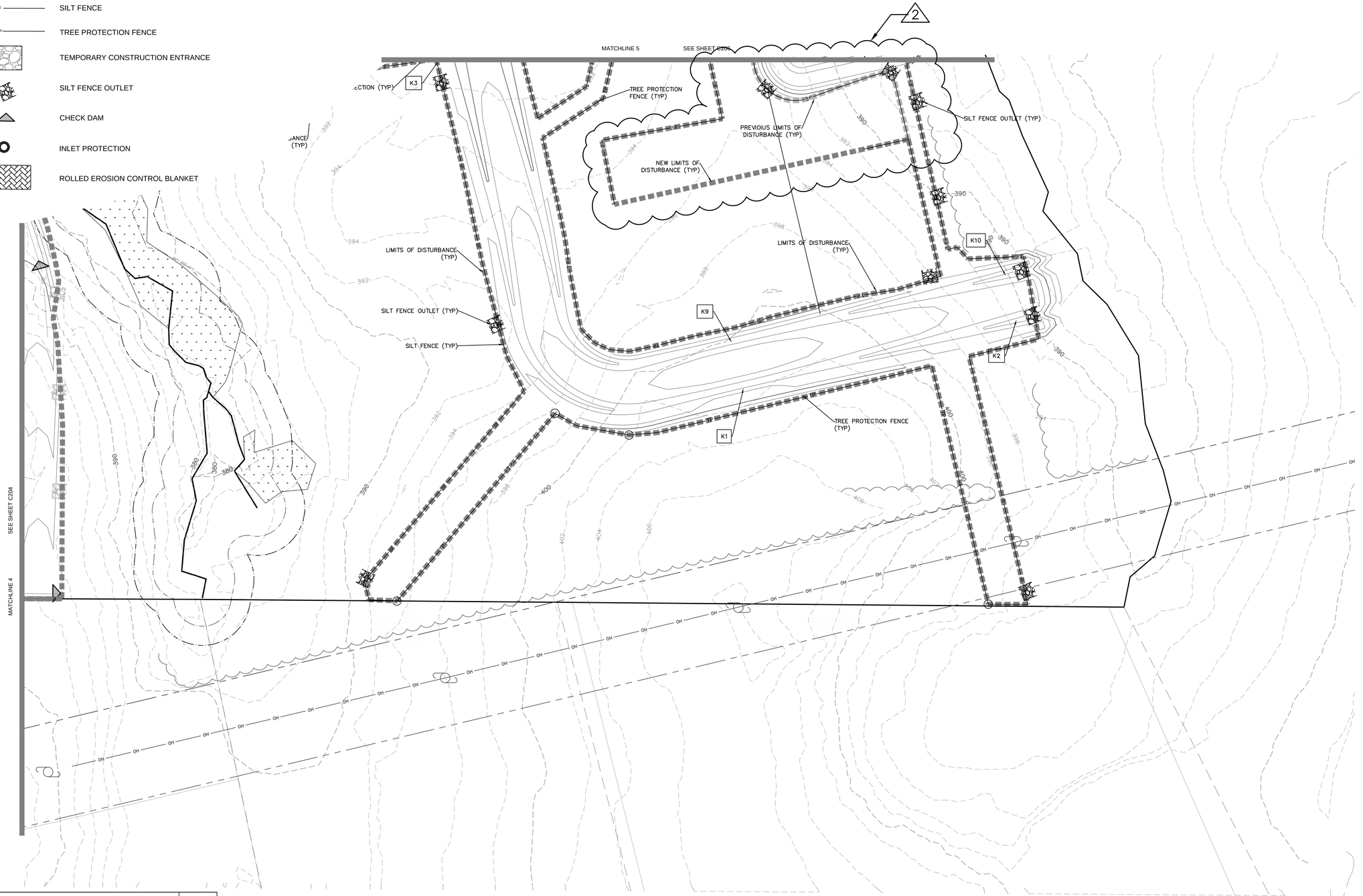

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CONSERVATION SUBDIVISION
410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

EROSION CONTROL PLAN PH 2 ST 2

Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 50'
Date:	08/14/2020
Project Number:	P170347

SHEET
C432

LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- DD — TEMPORARY DIVERSION DITCH
- SF — SILT FENCE
- TP — TREE PROTECTION FENCE
- TEMPORARY CONSTRUCTION ENTRANCE
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- CHECK DAM
- INLET PROTECTION
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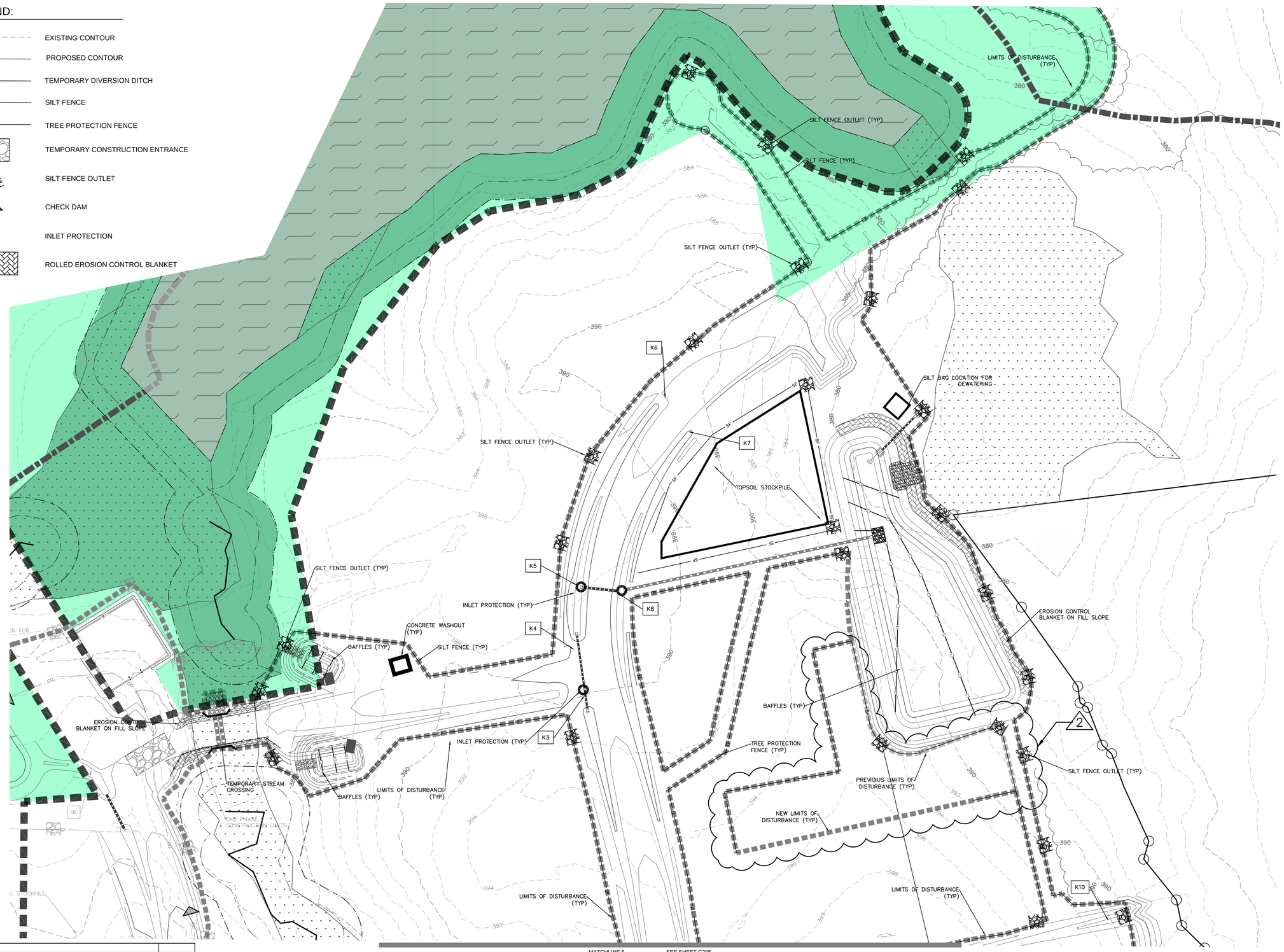

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01	CONSTRUCTION DOCUMENTS 1ST SUBMITTAL	06/19/2020

REVISIONS

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CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION
410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

EROSION CONTROL PLAN PH 2 ST 2

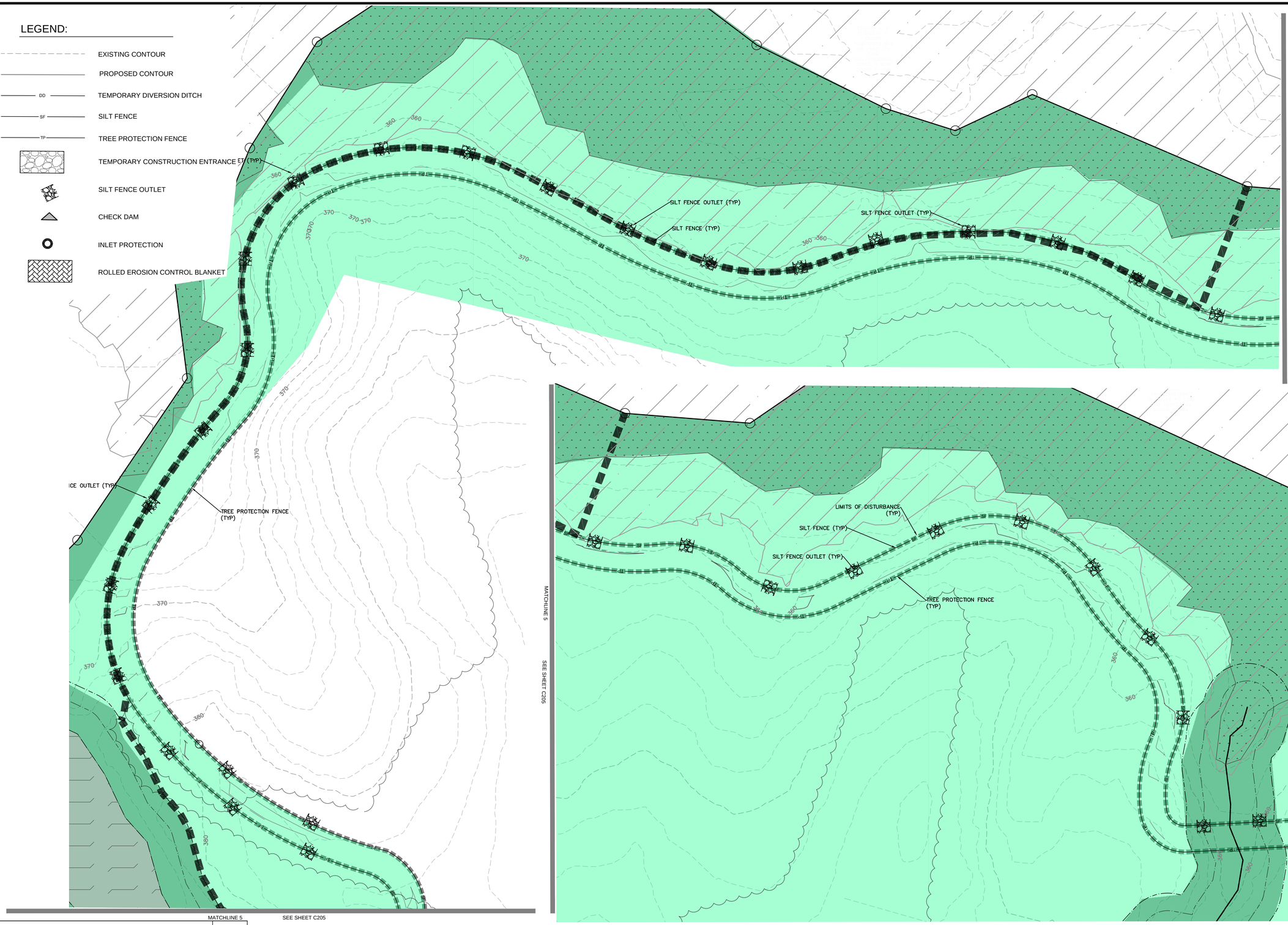
Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 50'
Date:	08/14/2020
Project Number:	P170347

SHEET

C433

LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- DD — TEMPORARY DIVERSION DITCH
- SF — SILT FENCE
- TP — TREE PROTECTION FENCE
- TEMPORARY CONSTRUCTION ENTRANCE ET (TYP)
- SILT FENCE OUTLET
- CHECK DAM
- INLET PROTECTION
- ROLLED EROSION CONTROL BLANKET



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REVISIONS

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CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION

410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

EROSION CONTROL PLAN PH 2 ST 2

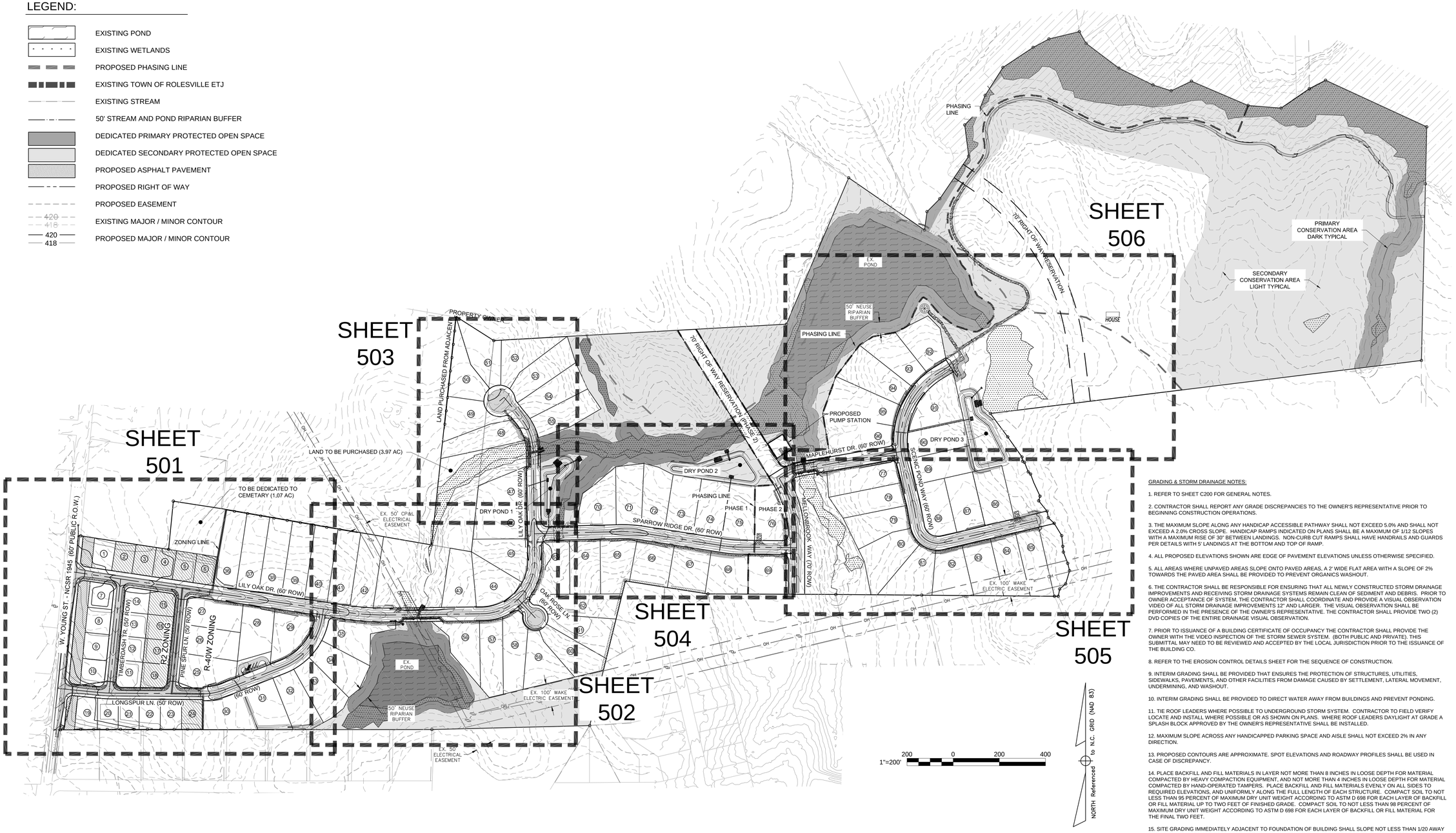
Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 50'
Date:	08/14/2020
Project Number:	P170347

SHEET

C434

LEGEND:

- EXISTING POND
- EXISTING WETLANDS
- PROPOSED PHASING LINE
- EXISTING TOWN OF ROLESVILLE ETJ
- EXISTING STREAM
- 50' STREAM AND POND RIPARIAN BUFFER
- DEDICATED PRIMARY PROTECTED OPEN SPACE
- DEDICATED SECONDARY PROTECTED OPEN SPACE
- PROPOSED ASPHALT PAVEMENT
- PROPOSED RIGHT OF WAY
- PROPOSED EASEMENT
- 420 / 418 EXISTING MAJOR / MINOR CONTOUR
- 420 / 418 PROPOSED MAJOR / MINOR CONTOUR



GRADING & STORM DRAINAGE NOTES:

1. REFER TO SHEET C200 FOR GENERAL NOTES.

2. CONTRACTOR SHALL REPORT ANY GRADE DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING CONSTRUCTION OPERATIONS.

3. THE MAXIMUM SLOPE ALONG ANY HANDICAP ACCESSIBLE PATHWAY SHALL NOT EXCEED 5.0% AND SHALL NOT EXCEED A 2.0% CROSS SLOPE. HANDICAP RAMPS INDICATED ON PLANS SHALL BE A MAXIMUM OF 1/12 SLOPES WITH A MAXIMUM RISE OF 30" BETWEEN LANDINGS. NON-CURB CUT RAMPS SHALL HAVE HANDRAILS AND GUARDS PER DETAILS WITH 5' LANDINGS AT THE BOTTOM AND TOP OF RAMP.

4. ALL PROPOSED ELEVATIONS SHOWN ARE EDGE OF PAVEMENT ELEVATIONS UNLESS OTHERWISE SPECIFIED.

5. ALL AREAS WHERE UNPAVED AREAS SLOPE ONTO PAVED AREAS, A 2' WIDE FLAT AREA WITH A SLOPE OF 2% TOWARDS THE PAVED AREA SHALL BE PROVIDED TO PREVENT ORGANICS WASHOUT.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL NEWLY CONSTRUCTED STORM DRAINAGE IMPROVEMENTS AND RECEIVING STORM DRAINAGE SYSTEMS REMAIN CLEAN OF SEDIMENT AND DEBRIS. PRIOR TO OWNER ACCEPTANCE OF SYSTEM, THE CONTRACTOR SHALL COORDINATE AND PROVIDE A VISUAL OBSERVATION VIDEO OF ALL STORM DRAINAGE IMPROVEMENTS 12" AND LARGER. THE VISUAL OBSERVATION SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL PROVIDE TWO (2) DVD COPIES OF THE ENTIRE DRAINAGE VISUAL OBSERVATION.

7. PRIOR TO ISSUANCE OF A BUILDING CERTIFICATE OF OCCUPANCY THE CONTRACTOR SHALL PROVIDE THE OWNER WITH THE VIDEO INSPECTION OF THE STORM SEWER SYSTEM. (BOTH PUBLIC AND PRIVATE). THIS SUBMITTAL MAY NEED TO BE REVIEWED AND ACCEPTED BY THE LOCAL JURISDICTION PRIOR TO THE ISSUANCE OF THE BUILDING CO.

8. REFER TO THE EROSION CONTROL DETAILS SHEET FOR THE SEQUENCE OF CONSTRUCTION.

9. INTERIM GRADING SHALL BE PROVIDED THAT ENSURES THE PROTECTION OF STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, AND WASHOUT.

10. INTERIM GRADING SHALL BE PROVIDED TO DIRECT WATER AWAY FROM BUILDINGS AND PREVENT PONDING.

11. TIE ROOF LEADERS WHERE POSSIBLE TO UNDERGROUND STORM SYSTEM. CONTRACTOR TO FIELD VERIFY LOCATE AND INSTALL WHERE POSSIBLE OR AS SHOWN ON PLANS. WHERE ROOF LEADERS DAYLIGHT AT GRADE A SPLASH BLOCK APPROVED BY THE OWNER'S REPRESENTATIVE SHALL BE INSTALLED.

12. MAXIMUM SLOPE ACROSS ANY HANDICAPPED PARKING SPACE AND AISLE SHALL NOT EXCEED 2% IN ANY DIRECTION.

13. PROPOSED CONTOURS ARE APPROXIMATE. SPOT ELEVATIONS AND ROADWAY PROFILES SHALL BE USED IN CASE OF DISCREPANCY.

14. PLACE BACKFILL AND FILL MATERIALS IN LAYER NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS. PLACE BACKFILL AND FILL MATERIALS EVENLY ON ALL SIDES TO REQUIRED ELEVATIONS, AND UNIFORMLY ALONG THE FULL LENGTH OF EACH STRUCTURE. COMPACT SOIL TO NOT LESS THAN 95 PERCENT OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 698 FOR EACH LAYER OF BACKFILL OR FILL MATERIAL UP TO TWO FEET OF FINISHED GRADE. COMPACT SOIL TO NOT LESS THAN 98 PERCENT OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 698 FOR EACH LAYER OF BACKFILL OR FILL MATERIAL FOR THE FINAL TWO FEET.

15. SITE GRADING IMMEDIATELY ADJACENT TO FOUNDATION OF BUILDING SHALL SLOPE NOT LESS THAN 1/20 AWAY FOR MINIMUM DISTANCE OF 10 FEET. ALTERNATIVE METHOD SHALL BE PROVIDED TO DIVERT WATER AWAY FROM FOUNDATION VIA SWALES SLOPED AT A MINIMUM OF 2% OR IMPERVIOUS SURFACES SLOPED AWAY A MINIMUM OF 2% AWAY FROM BUILDING.

16. CONTRACTOR SHALL ADJUST RIM ELEVATIONS OF EXISTING MANHOLES, METERS, VALVES, ETC. AS REQUIRED TO MEET NEW FINISHED GRADES.

17. CONTRACTOR SHALL SLOPE GRADES TO ASSURE POSITIVE STROMWATER FLOW TO KEEP WATER FROM POOLING ALONG CURBS AND WALLS.

18. TOP OF WALL ELEVATIONS INDICATE THE ELEVATION AT THE TOP OF THE CAP, UNLESS OTHERWISE NOTED.

19. BOTTOM OF WALL ELEVATIONS INDICATE THE ELEVATION OF THE FINISHED GRADE.

20. WALLS GREATER THAN 4 FT. IN HEIGHT WILL REQUIRE ENGINEERING DESIGN APPROVAL.

NOTE: 2' INTERVAL CONTOURS

REV	DESCRIPTION	DATE
02	CONSTRUCTION DOCUMENTS 2ND SUBMITTAL	08/14/2020
01	CONSTRUCTION DOCUMENTS 1ST SUBMITTAL	06/19/2020

REVISIONS

NORTH CAROLINA PROFESSIONAL SEAL 20234 ENGINEER THOMAS S. SPEIGHT, JR.

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Phone: 919.577.1080 Fax: 919.577.1081
NCBELS FIRM No. C-2378

CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION

410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

OVERALL GRADING PLAN

Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 200'
Date:	08/14/2020
Project Number:	P170347

SHEET

C500

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LEGEND:

- EXISTING POND
- EXISTING WETLANDS
- PROPOSED PHASING LINE
- EXISTING TOWN OF ROLESVILLE ETJ
- EXISTING STREAM
- 50' STREAM AND POND RIPARIAN BUFFER
- DEDICATED PRIMARY PROTECTED OPEN SPACE
- DEDICATED SECONDARY PROTECTED OPEN SPACE
- PROPOSED ASPHALT PAVEMENT
- PROPOSED RIGHT OF WAY
- PROPOSED EASEMENT
- 420 / 418 EXISTING MAJOR / MINOR CONTOUR
- 420 / 418 PROPOSED MAJOR / MINOR CONTOUR

NOTE: 1' INTERVAL CONTOURS

1"=50' 50 0 50 100

NORTH Referenced to N.C. GRID (NAD 83)

REV	DESCRIPTION	DATE
02	CONSTRUCTION DOCUMENTS 2ND SUBMITTAL	08/14/2020
01	CONSTRUCTION DOCUMENTS 1ST SUBMITTAL	06/19/2020

REVISIONS

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CHANDLER'S RIDGE
CONSTRUCTION DOCUMENTS
CONSERVATION SUBDIVISION
410 W. YOUNG ST.
ROLESVILLE, NC
WAKE COUNTY

PHASE 1
GRADING PLAN

Project Engineer:	TSS
Designed By:	TEP
Drawn By:	TEP
Checked By:	TSS
Scale:	1" = 50'
Date:	08/14/2020
Project Number:	P170347

SHEET
C501

LEGEND:

- EXISTING POND
- EXISTING WETLANDS
- PROPOSED PHASING LINE
- EXISTING TOWN OF ROLESVILLE ETJ
- EXISTING STREAM
- 50' STREAM AND POND RIPARIAN BUFFER
- DEDICATED PRIMARY PROTECTED OPEN SPACE
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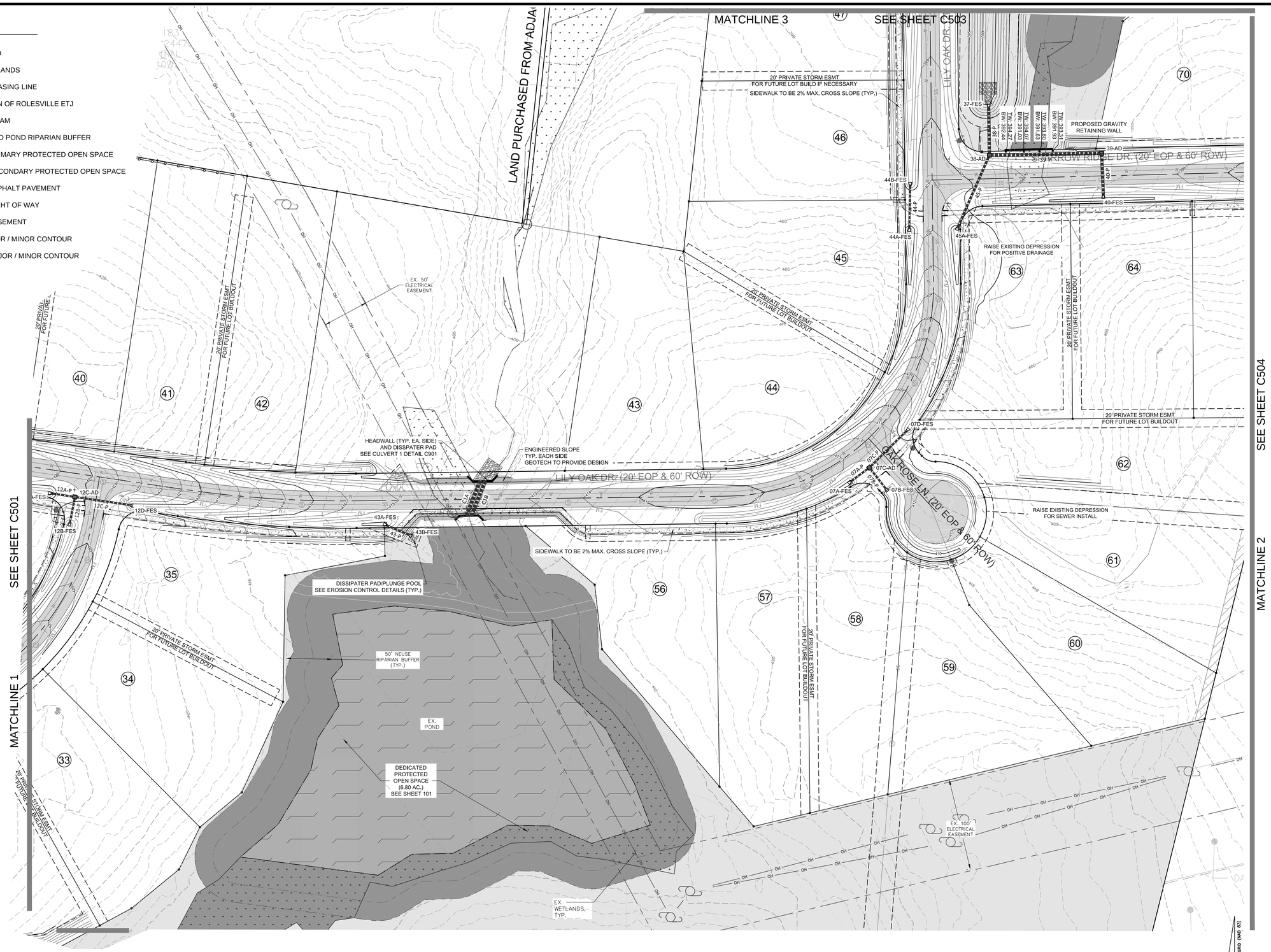
- PROPOSED RIGHT OF WAY
- PROPOSED EASEMENT
- 420 / 418 EXISTING MAJOR / MINOR CONTOUR
- 420 / 418 PROPOSED MAJOR / MINOR CONTOUR



NOTE: 1' INTERVAL CONTOURS

1"=50' 50 0 50 100

NORTH Referenced to N.C. GRID (NAD 83)

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REVISIONS

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PHASE 1
GRADING PLAN

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SHEET

C502