

PLANT SCHEDULE		
SYMBOL	CODE	BOTANICAL / COMMON NAME
SHRUBS		
•	BUX GEM	Buxus 'Green Gem' Boxwood 'Green Gem'
○	GAR FRO	Gardenia jasminoides 'Frostproof' Frostproof Gardenia
•	HYD LTL	Hydrangea paniculata 'Jane' TM Little Lime Panicle Hydrangea
○	PRU OTT	Prunus laurocerasus 'Otto Luyken' Otto Luyken English Laurel
•	THU SMA	Thuja occidentalis 'Smaragd' Emerald Green Arborvitae
SHRUB AREAS		
AMS EBD		Amsonia tabernaemontana 'Blue Ice' Strom Cloud Eastern Bluestar
CAR EVL		Carex oshimensis 'Everillo' TM EverColor Everillo Japanese Sedge
HEL SBY		Helleborus x hybridus Hellebore
LIA SPI		Liatris spicata Blazing Star
MUH EIN		Muhlenbergia capillaris Pink Muhly Grass
PAN SHD		Panicum virgatum 'Shenandoah' Shenandoah Switch Grass
PER LIT		Perovskia atriplicifolia 'Little Spire' Little Spire Russian Sage
SPO TAR		Sporobolus heterolepis 'Tara' Tara Prairie Dropseed
GROUND COVERS		
PAC TER		Pachysandra terminalis Japanese Spurge
TRA ASI		Trachelospermum asiaticum Asiatic Jasmine
TUR SOD		Turf Sod Sod

KEY MAP

SEAL

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12/15/22
ENGINEER REG. # DATE

PROJECT

UNIVERSITY PLACE PHASE 1B/1C

RAM REALTY
201 S ESTES DR
CHAPEL HILL, NC 27514

NO.	DESCRIPTION	DATE
1	ZCP	09.20.2021
2	ZCP	03.30.2022
3	ZCP	05.19.2022
4	OWNER COORDINATION	08.01.2022
5	IFC	09.06.2022
6	OWNER VE DIRECTIVE	03.02.2023
7	ZCP REVISION	03.20.2023
8	ASI #1	09.15.2023
9	ZCP REVISION	05.20.2024

DESIGNED BY: LD
 DRAWN BY: ZK
 CHECKED BY: AM

SCALE: NORTH
 VERT: N/A
 HORIZ: 1'=20'
 0 10' 20' 40'

SHEET TITLE: SUPPLEMENTAL PLANTING ENLARGEMENT 4

SHEET NUMBER: L5-04

PHASE 1B SUPPLEMENTAL PLANTING SCHEDULE

PLANT SCHEDULE									
SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	MIN. CONT.	SPACING	MIN. HT.		REMARKS
SHRUBS									
	BUX GEM	338	Buxus 'Green Gem'	Boxwood 'Green Gem'	#3	As Shown	24"		FULL TO CONTAINER
	GAR FRO	9	Gardenia jasminoides 'Frostproof'	Frostproof Gardenia	#3	As Shown	36"		FULL TO CONTAINER
	HYD LTL	24	Hydrangea paniculata 'Jane' TM	Little Lime Panicle Hydrangea	#3	As Shown	36"		FULL TO CONTAINER
	PRU OTT	24	Prunus laurocerasus 'Otto Luyken'	Otto Luyken English Laurel	#3	As Shown	30"		FULL TO CONTAINER
	THU SMA	5	Thuja occidentalis 'Smaragd'	Emerald Green Arborvitae	#5/7	As Shown	48"		FULL TO CONTAINER, STRONG CENTRAL LEADER, UPRIGHT GROWTH.
SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	MIN. CONT.	SPACING	MIN. HT.	SPACING	REMARKS
SHRUB AREAS									
	AMS EBD	61	Amsonia tabernaemontana 'Blue Ice'	Strom Cloud Eastern Bluestar	#1	30" O.C.	18-24"	30" o.c.	FULL TO CONTAINER.
	CAR EVL	481	Carex oshimensis 'Everillo' TM	EverColor Everillo Japanese Sedge	#1	18" O.C.	12"	18" o.c.	FULL TO CONTAINER
	HEL SBY	106	Helleborus x hybridus	Hellebore	#1	18" O.C.		18" o.c.	FULL TO CONTAINER
	LIA SPI	756	Liatris spicata	Blazing Star	#1	18" O.C.	12"	18" o.c.	FULL TO CONTAINER
	MUH EIN	417	Muhlenbergia capillaris	Pink Muhly Grass	#3	30" O.C.	18-24"	30" o.c.	FULL TO CONTAINER.
	PAN SHD	77	Panicum virgatum 'Shenandoah'	Shenandoah Switch Grass	#1	36" O.C.	36"	36" o.c.	FULL TO CONTAINER
	PER LIT	104	Perovskia atriplicifolia 'Little Spire'	Little Spire Russian Sage	#1	24" O.C.	24"	24" o.c.	FULL TO CONTAINER.
	SPO TAR	191	Sporobolus heterolepis 'Tara'	Tara Prairie Dropseed	#1	24" O.C.	12"	24" o.c.	FULL TO CONTAINER
GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	MIN. CONT.	SPACING	MIN. HT.	SPACING	REMARKS
	PAC TER	295	Pachysandra terminalis	Japanese Spurge	#SP4	15" O.C.	6"	15" o.c.	FULL TO CONTAINER
	TRA ASI	267	Trachelospermum asiaticum	Asiatic Jasmine	#SP4	15" O.C.	6"	15" o.c.	FULL TO CONTAINER
	TUR SOD	5,906 sf	Turf Sod	Sod	SOD	-	-		

PHASE 1C SUPPLEMENTAL PLANTING SCHEDULE

PLANT SCHEDULE									
SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	MIN. CONT.	SPACING	MIN. HT.		REMARKS
	PRU OTT	17	Prunus laurocerasus 'Otto Luyken'	Otto Luyken English Laurel	#3	As Shown	30"		FULL TO CONTAINER
SHRUB AREAS	CODE	QTY	BOTANICAL NAME	COMMON NAME	MIN. CONT.	SPACING	MIN. HT.		REMARKS
	MUH EIN	214	Muhlenbergia capillaris	Pink Muhly Grass	#3	30" O.C.	18-24"		FULL TO CONTAINER.
TURF	CODE	QTY	BOTANICAL NAME	COMMON NAME	MIN. CONT.	SPACING	MIN. HT.		REMARKS
	TUR SEE	38,283 sf	Turf Grass	SEED	SEED				
	TUR SOD	3,779 sf	Turf Grass	SOD	SOD	-	-		

NOTE: HOLD ALLOWANCE FOR PLANTER POT PLANTINGS THAT CONSIST OF 25% GROUND COVER, 50% SMALL HERBACEOUS PERENNIAL, AND 25% SMALL EVERGREEN PERENNIAL.

KEY MAP

SEAL

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PROJECT

UNIVERSITY PLACE PHASE 1B/1C
RAM REALTY
201 S ESTES DR
CHAPEL HILL, NC 27514

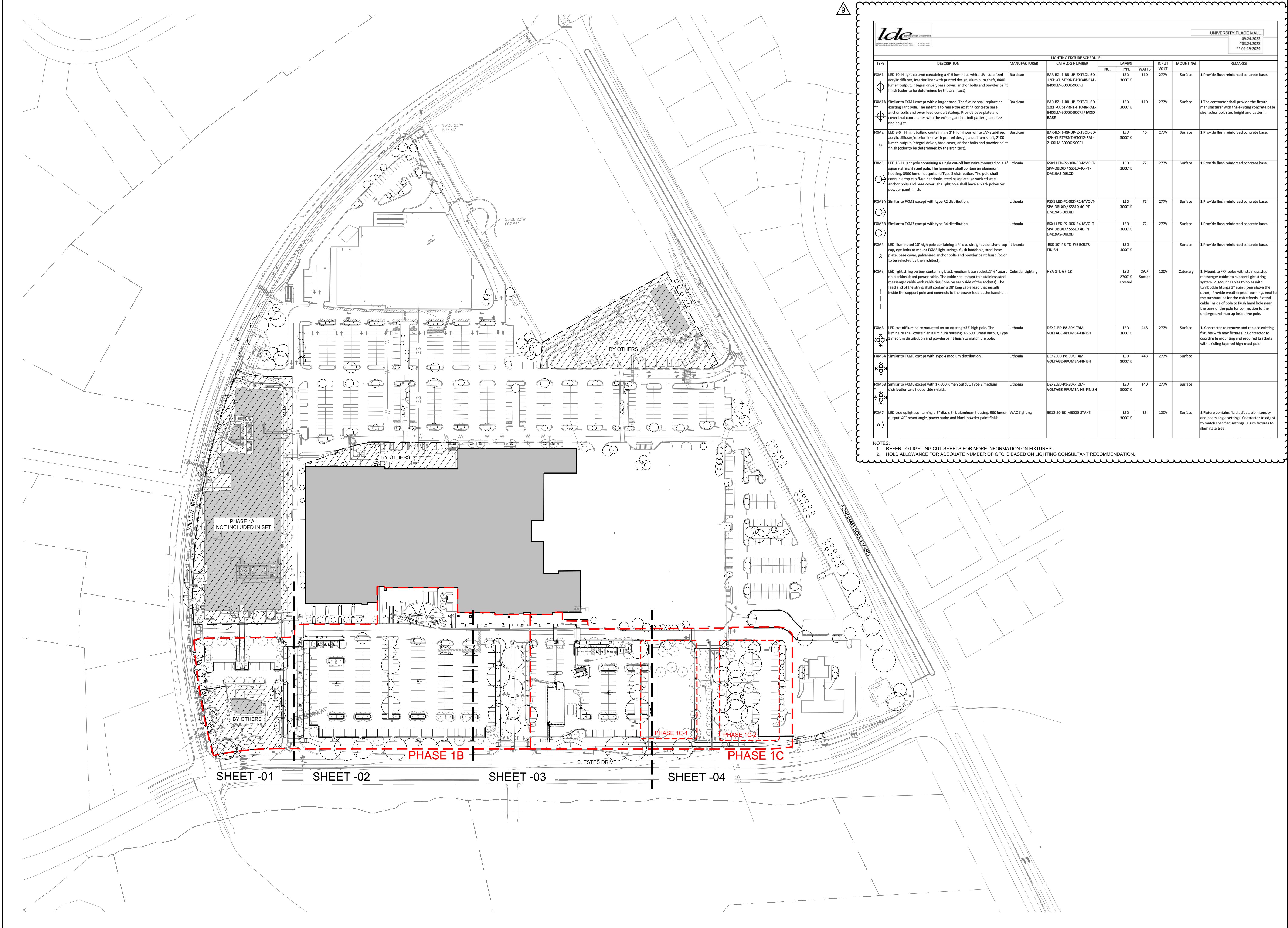
LANDDESIGN PROJ.# 1019418
REVISION / ISSUANCE

NO.	DESCRIPTION	DATE
1	ZCP	09.20.2021
2	ZCP	03.30.2022
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8	ASI #1	09.15.2023
9	ZCP REVISION	05.20.2024

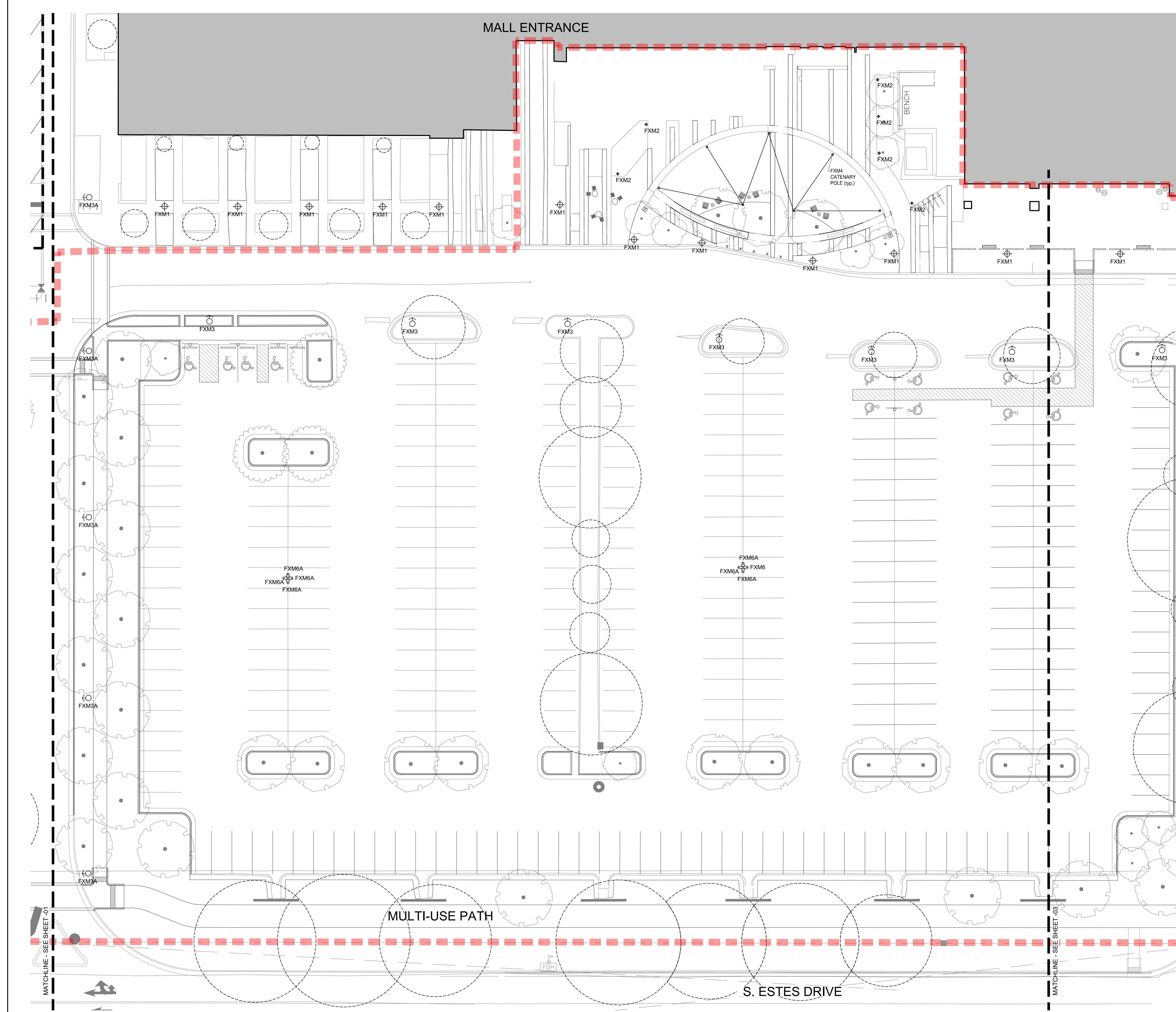
DESIGNED BY: LD
DRAWN BY: ZK
CHECKED BY: AM

SCALE: N/A
VERT: N/A
HORZ:

SHEET TITLE: SUPPLEMENTAL PLANTING SCHEDULE
SHEET NUMBER: L5-10
ORIGINAL SHEET SIZE: 24" X 36"







LIGHTING FIXTURE SCHEDULE		
TYPE	MANUFACTURER	CATALOG NUMBER
FXM1	Barbican	BAR-B2-11-88-UP-EXT10L-6D-120H-CUSTPRINT-HT048-RAL-8400LM-3000K-90CRI
FXM1A	Barbican	BAR-B2-11-88-UP-EXT10L-6D-120H-CUSTPRINT-HT048-RAL-8400LM-3000K-90CRI / MOD BASE
FXM2	Barbican	BAR-B2-11-88-UP-EXT10L-6D-42H-CUSTPRINT-HT013-RAL-2100LM-3000K-90CRI
FXM3	Lithonia	RSX1 LED-P2-30K-R3-MVOLT-SPA-DBLXD / SSS10-4C-PT-DM19AS-DBLXD
FXM3A	Lithonia	RSX1 LED-P2-30K-R2-MVOLT-SPA-DBLXD / SSS10-4C-PT-DM19AS-DBLXD
FXM3B	Lithonia	RSX1 LED-P2-30K-R4-MVOLT-SPA-DBLXD / SSS10-4C-PT-DM19AS-DBLXD
FXM4	Lithonia	RSS-10-4B-TC-EYE BOLTS-FINISH
FXM5	Celestial Lighting	HYA-STL-GF-18
FXM6	Lithonia	DSX2LED-P8-30K-T3M-VOLTAGE-RPUMBA-FINISH
FXM6A	Lithonia	DSX2LED-P8-30K-T4M-VOLTAGE-RPUMBA-FINISH
FXM6B	Lithonia	DSX2LED-P8-30K-T2M-VOLTAGE-RPUMBA-HS-FINISH
FXM7	WAC Lighting	5012-30-BK-M6000-STAKE

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3/25/22
ENGINEER REG. # DATE

**UNIVERSITY
PLACE PHASE
1B/C**

RAM REALTY
201 S ESTES DR
CHAPEL HILL, NC 27514

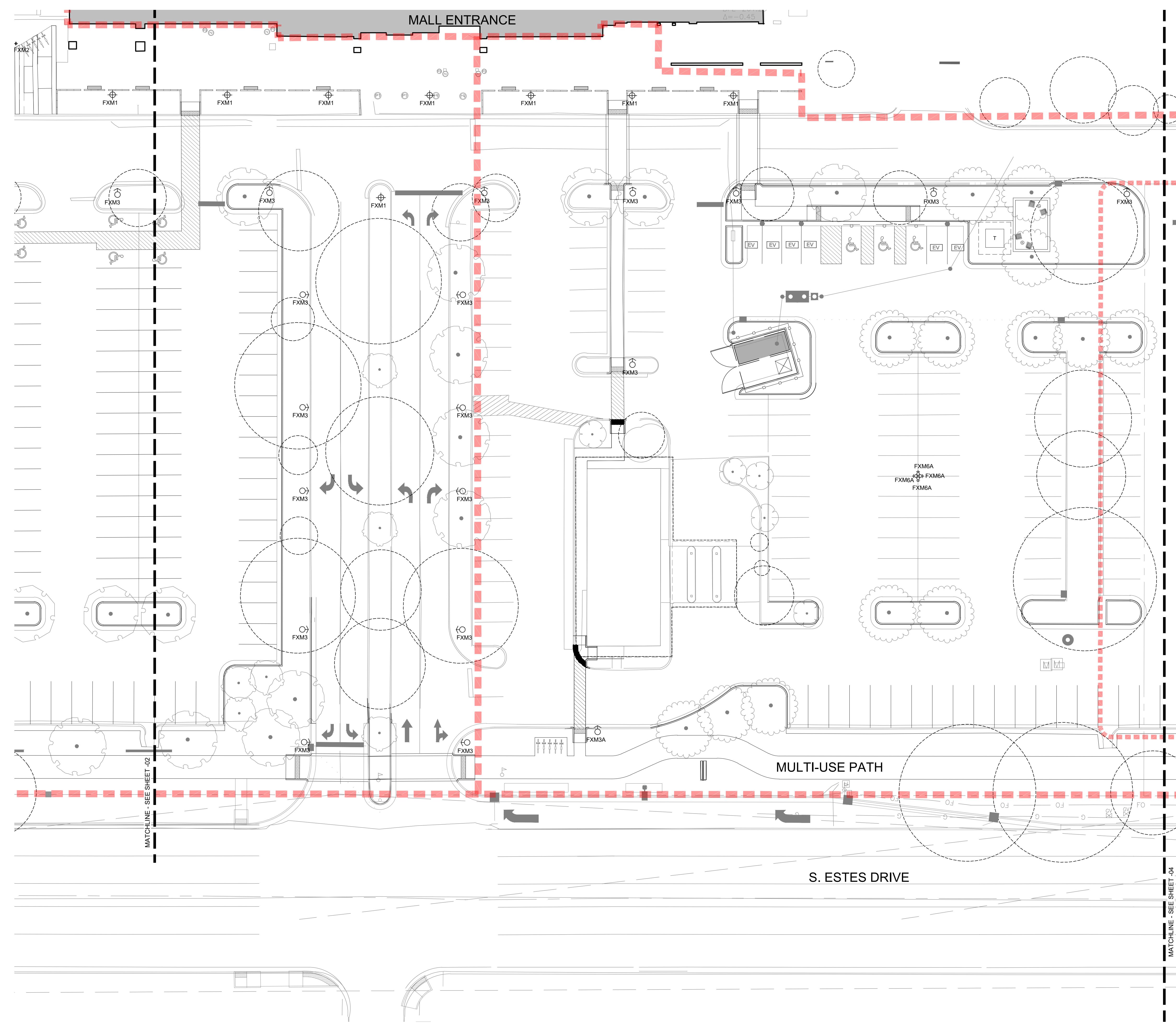
LANDDESIGN PROJ.# 1019418

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8	ASI #1	09.15.2023
9	ZCP REVISION	05.20.2024

DESIGNED BY: LD
DRAWN BY: ZK
CHECKED BY: AM

SCALE: N/A
VERT: N/A
HORZ: 1'=20'
0 10' 20' 40'
SHEET TITLE: LIGHTING PLAN
ENLARGEMENT 2

ORIGINAL SHEET SIZE: 24" X 36"
L6-02



LIGHTING FIXTURE SCHEDULE		
TYPE	MANUFACTURER	CATALOG NUMBER
FXM1	Barbican	BAR-B2-11-R8-UP-EXT10L-6D-120H-CUSTPRINT-HT048-RAL-8400LM-3000K-90CRI
FXM1A	Barbican	BAR-B2-11-R8-UP-EXT10L-6D-120H-CUSTPRINT-HT048-RAL-8400LM-3000K-90CRI / MOD BASE
FXM2	Barbican	BAR-B2-11-R8-UP-EXT10L-6D-42H-CUSTPRINT-HT012-RAL-2100LM-3000K-90CRI
FXM3	Lithonia	RSX1 LED-P2-30K-R3-MVOLT-SPA-DBLXD / SSS10-4C-PT-DM19AS-DBLXD
FXM3A	Lithonia	RSX1 LED-P2-30K-R2-MVOLT-SPA-DBLXD / SSS10-4C-PT-DM19AS-DBLXD
FXM3B	Lithonia	RSX1 LED-P2-30K-R4-MVOLT-SPA-DBLXD / SSS10-4C-PT-DM19AS-DBLXD
FXM4	Lithonia	RSX10-4B-TC-EYE BOLTS-FINISH
FXM5	Celestial Lighting	HYA-STL-GF-18
FXM6	Lithonia	DSX2LED-P8-30K-T3M-VOLTAGE-RPUMBA-FINISH
FXM6A	Lithonia	DSX2LED-P8-30K-T4M-VOLTAGE-RPUMBA-FINISH
FXM6B	Lithonia	DSX2LED-P8-30K-T2M-VOLTAGE-RPUMBA-HS-FINISH
FXM7	WAC Lighting	5012-30-BK-M6000-STAKE

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3/25/22
ENGINEER REG. # DATE

**UNIVERSITY
PLACE PHASE
1B/1C**
RAM REALTY
201 S ESTES DR
CHAPEL HILL, NC 27514

LANDDESIGN PROJ.# 1019418		
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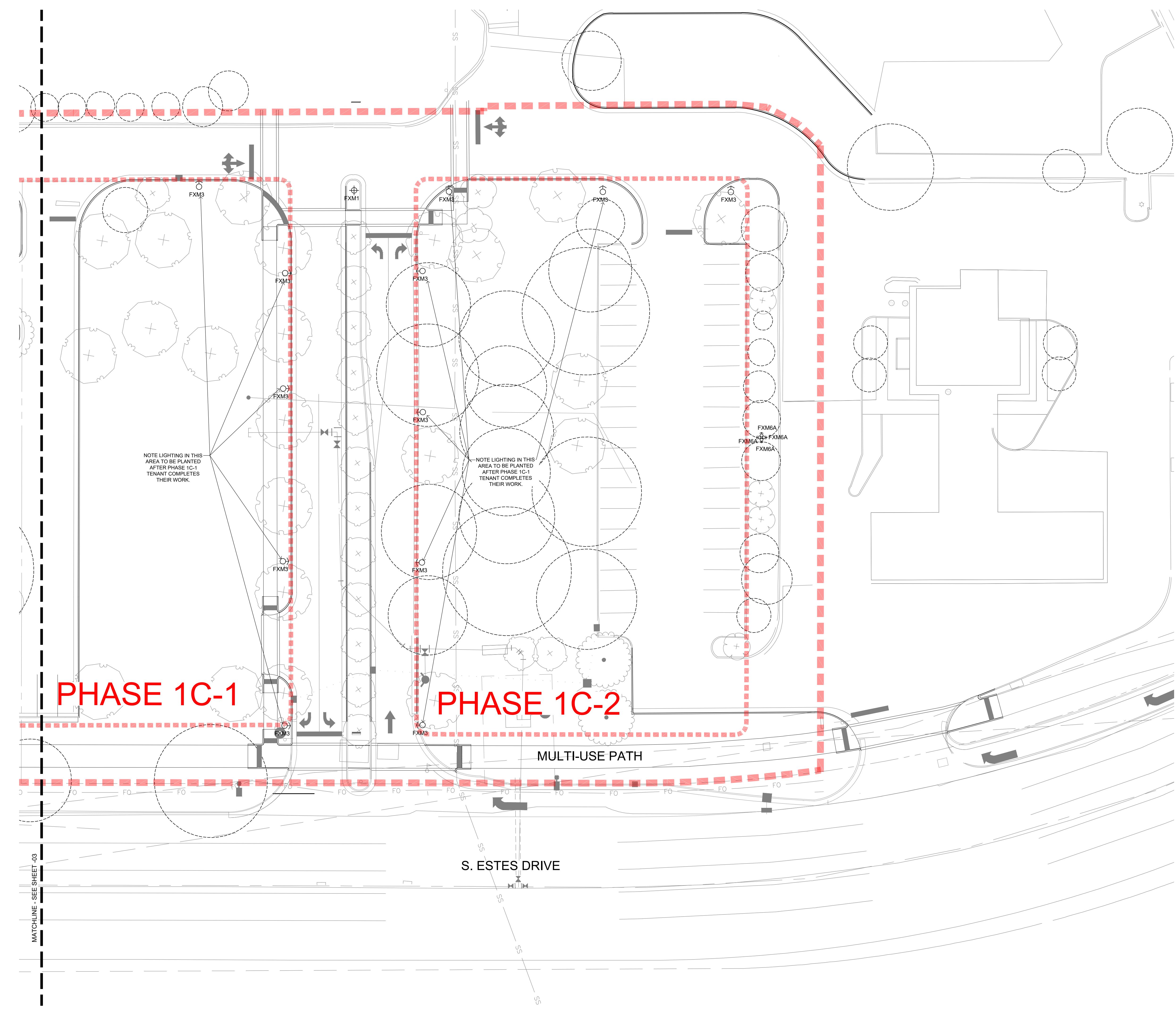
DESIGNED BY: LD
DRAWN BY: ZK
CHECKED BY: AM

SCALE: NORTH
VERT: N/A HORIZ: 1'=20'
0 10' 20' 40'

SHEET TITLE: LIGHTING PLAN
ENLARGEMENT 3

SHEET NUMBER: L6-03

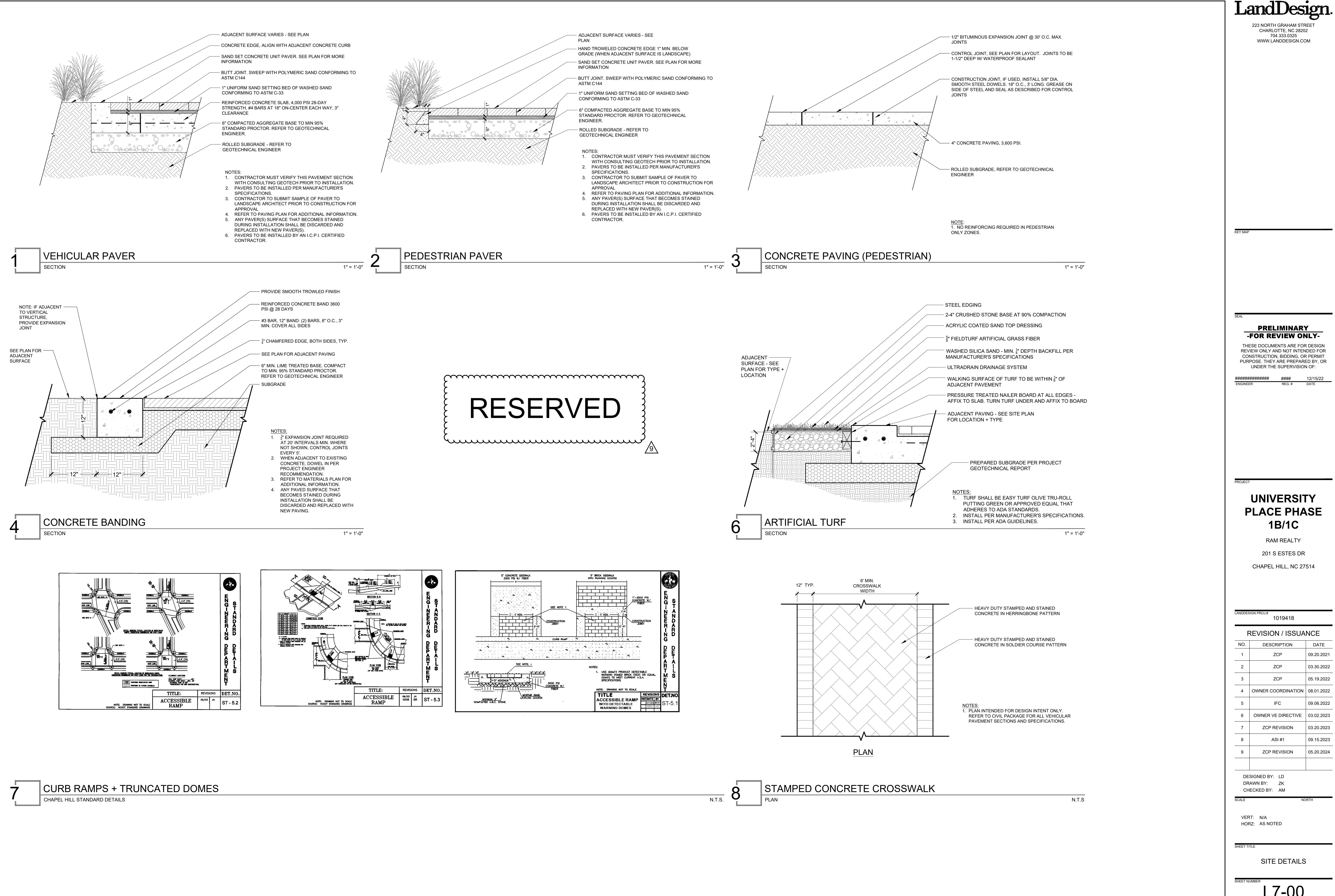
ORIGINAL SHEET SIZE: 24" X 36"

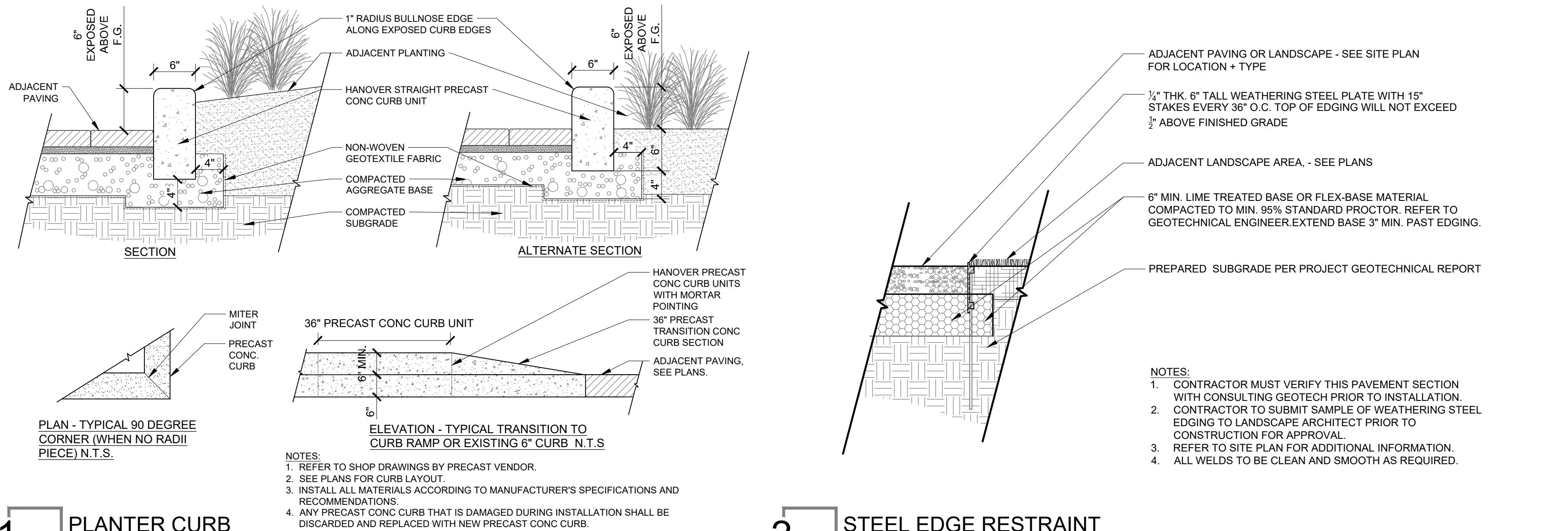


LIGHTING FIXTURE SCHEDULE		
TYPE	MANUFACTURER	CATALOG NUMBER
FXM1	Barbican	BAR-B2-11-88-UP-EXTBOL-6D-120H-CUSTPRINT-HT048-RAL-8400LM-3000K-90CRI
FXM1A	Barbican	BAR-B2-11-88-UP-EXTBOL-6D-120H-CUSTPRINT-HT048-RAL-8400LM-3000K-90CRI / MOD BASE
FXM2	Barbican	BAR-B2-11-88-UP-EXTBOL-6D-42H-CUSTPRINT-HT012-RAL-2100LM-3000K-90CRI
FXM3	Lithonia	RSX1 LED-P2-30K-R3-MVOLT-SPA-DBLXD / SS310-4C-PT-DM19AS-DBLXD
FXM3A	Lithonia	RSX1 LED-P2-30K-R2-MVOLT-SPA-DBLXD / SS310-4C-PT-DM19AS-DBLXD
FXM3B	Lithonia	RSX1 LED-P2-30K-R4-MVOLT-SPA-DBLXD / SS310-4C-PT-DM19AS-DBLXD
FXM4	Lithonia	RSX10-4B-TC-EYE BOLTS-FINISH
FXM5	Celestial Lighting	HYA-STL-GF-18
FXM6	Lithonia	DSX2LED-P8-30K-T3M-VOLTAGE-RPUMBA-FINISH
FXM6A	Lithonia	DSX2LED-P8-30K-T4M-VOLTAGE-RPUMBA-FINISH
FXM6B	Lithonia	DSX2LED-P8-30K-T2M-VOLTAGE-RPUMBA-HS-FINISH
FXM7	WAC Lighting	5012-30-BK-M6000-STAKE

NOTES:

1. REFER TO LIGHTING CUT SHEETS FOR MORE INFORMATION ON FIXTURES.
2. HOLD ALLOWANCE FOR ADEQUATE NUMBER OF GFCI'S BASED ON LIGHTING CONSULTANT RECOMMENDATION.
3. REFER TO SHEET L5-00 FOR FULL LIGHTING SCHEDULE INFORMATION.



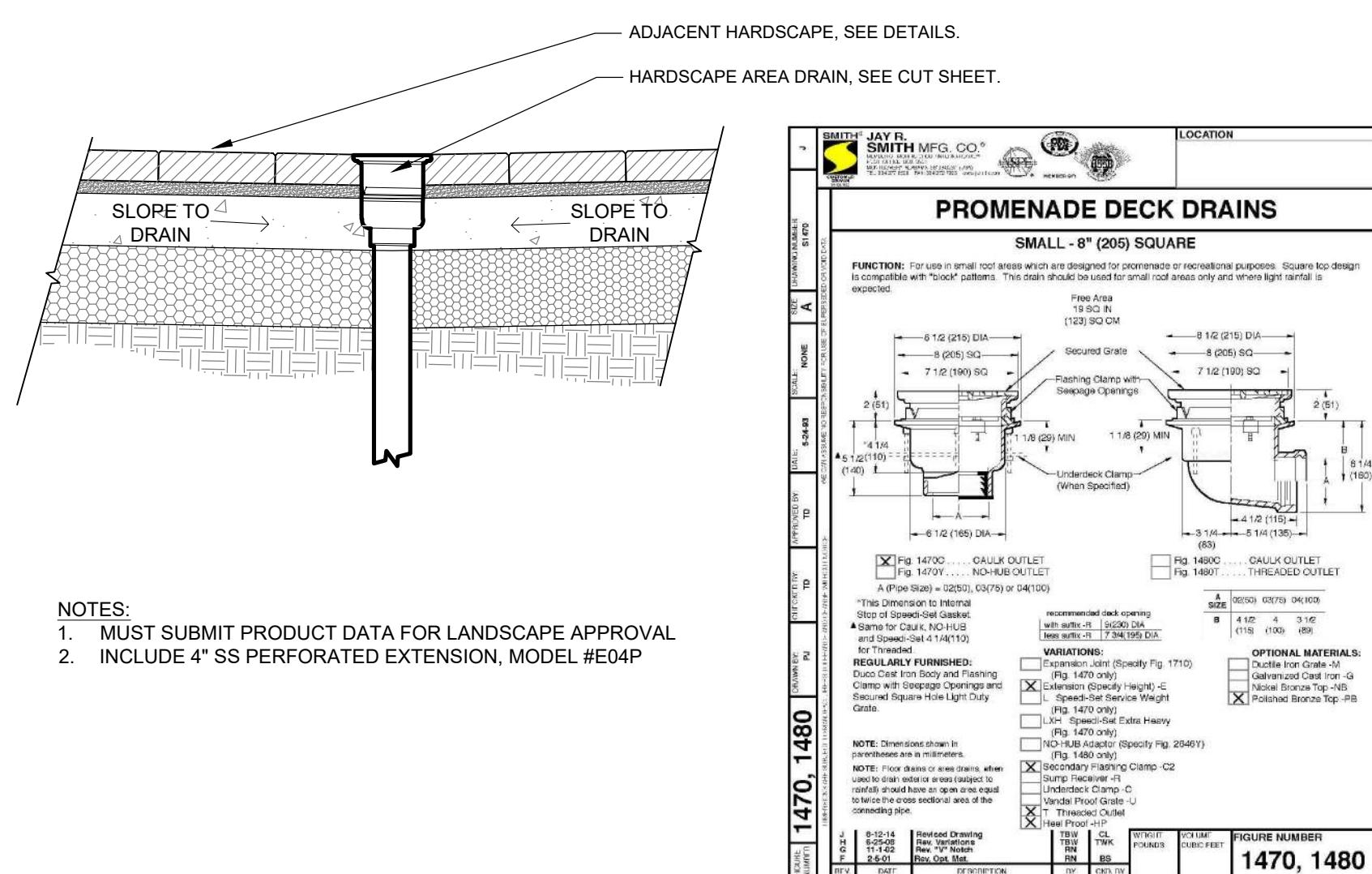


1 **PLANTER CURB**
SECTION | PLAN | ELEVATION

2 **STEEL EDGE RESTRAINT**
SECTION

1" = 1'-0"

RESERVED

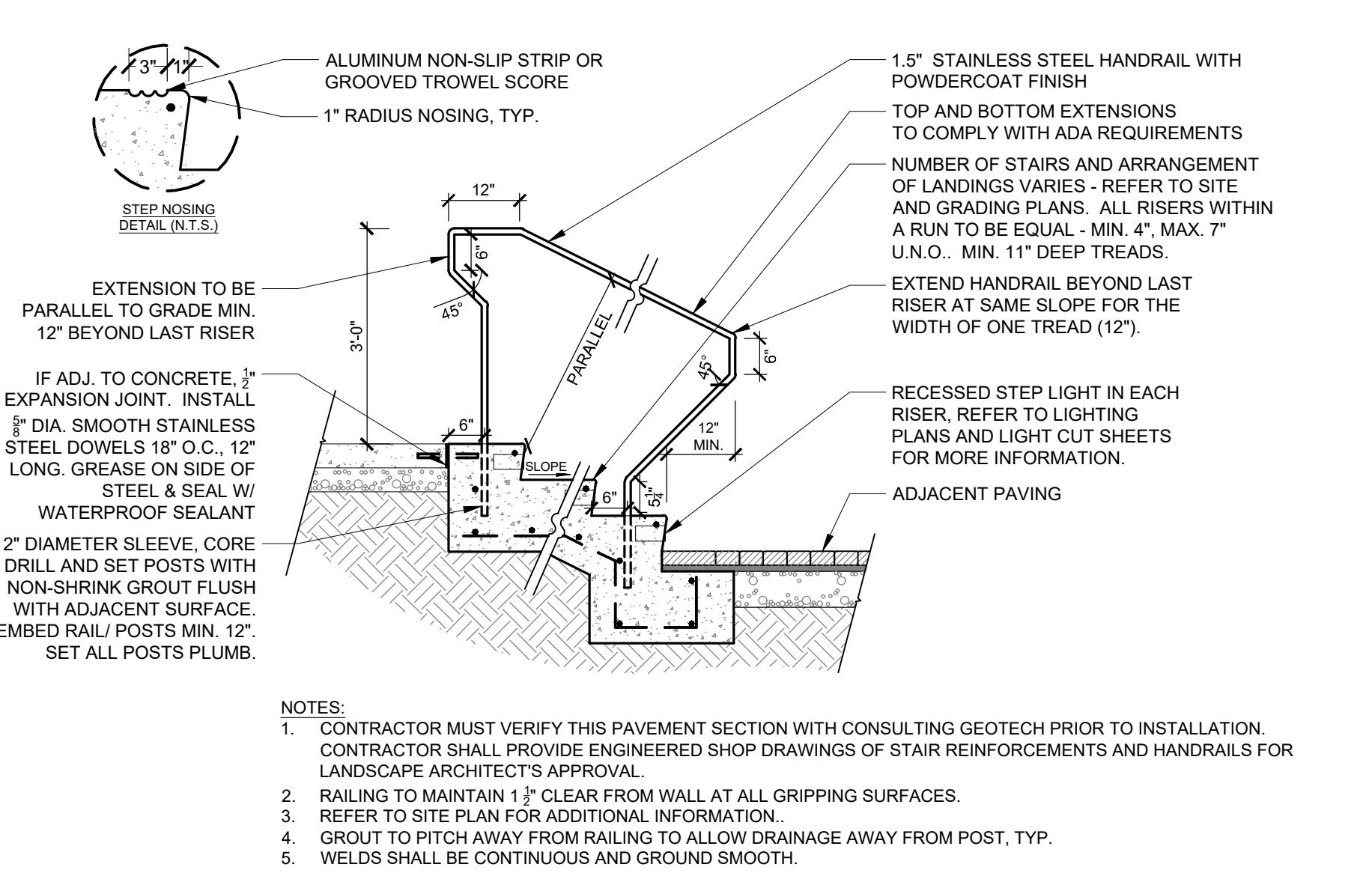


4 **HARDSCAPE DRAINAGE**
SECTION

1" = 1'-0"

RESERVED

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#12/15/22
ENGINEER REG. # DATE



8 **CIP CONCRETE STAIR + HANDRAIL**
SECTION

1/2" = 1'-0"

RESERVED

LANDDESIGN PROJ.# 1019418
REVISION / ISSUANCE
NO. DESCRIPTION DATE
1 ZCP 09.20.2021
2 ZCP 03.30.2022
3 ZCP 05.19.2022
4 OWNER COORDINATION 08.01.2022
5 IFC 09.06.2022
6 OWNER VE DIRECTIVE 03.02.2023
7 ZCP REVISION 03.20.2023
8 ASI #1 09.15.2023
9 ZCP REVISION 05.20.2024

DESIGNED BY: LD
DRAWN BY: ZK
CHECKED BY: AM

SCALE: NORTH

VERT: N/A
HORZ: AS NOTED

SHEET TITLE: SITE DETAILS

SHEET NUMBER: L7-01

ORIGINAL SHEET SIZE: 24" X 36"

RESERVED

RESERVED

RESERVED

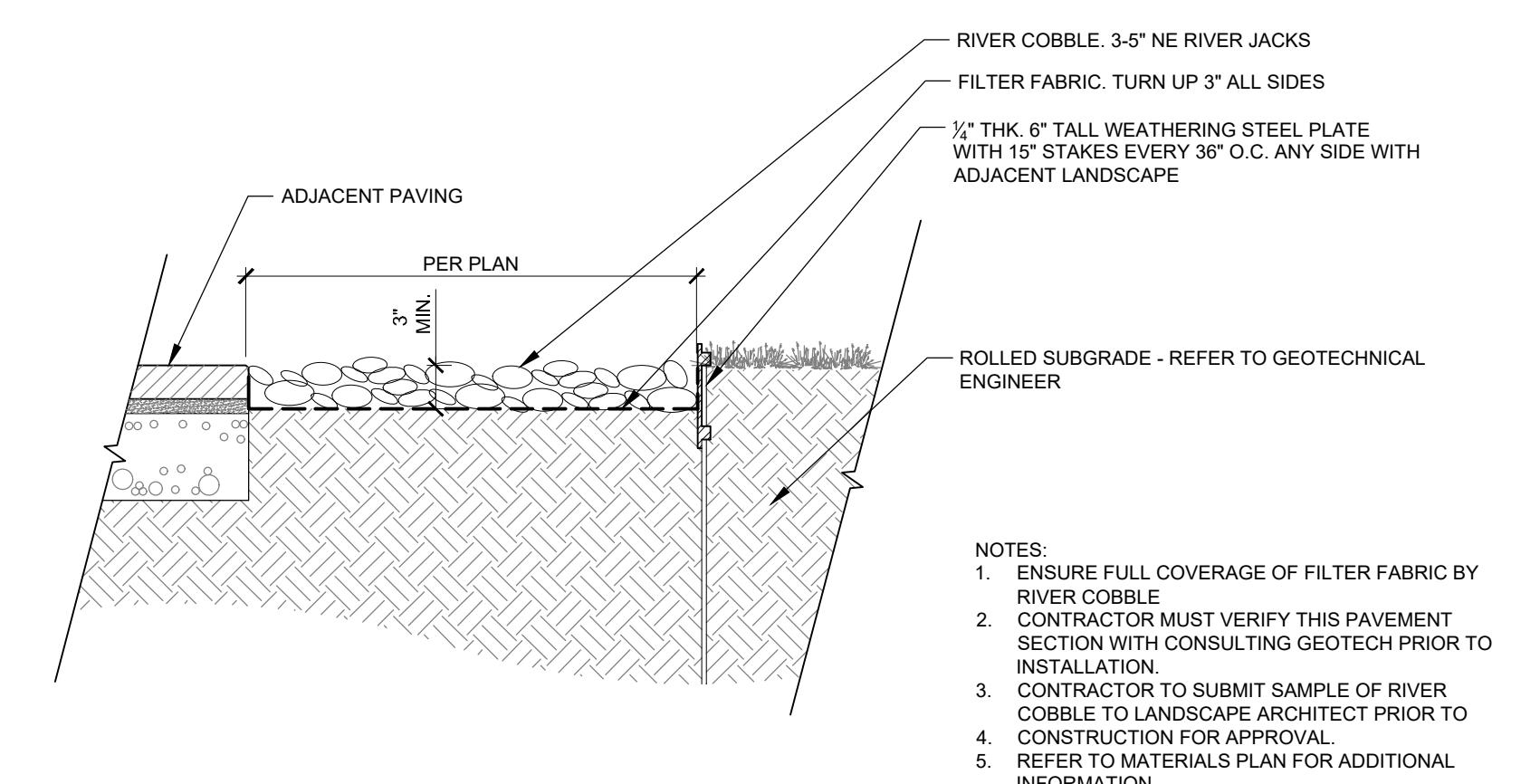
RESERVED

RESERVED

RESERVED

RESERVED

RESERVED



5 RIVER ROCK
SECTION

1" = 1'-0"

UNIVERSITY
PLACE PHASE
1B/1C

RAM REALTY

201 S ESTES DR

CHAPEL HILL, NC 27514

LANDDESIGN PROJ.# 1019418

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DESIGNED BY: LD
DRAWN BY: ZK
CHECKED BY: AM

SCALE NORTH

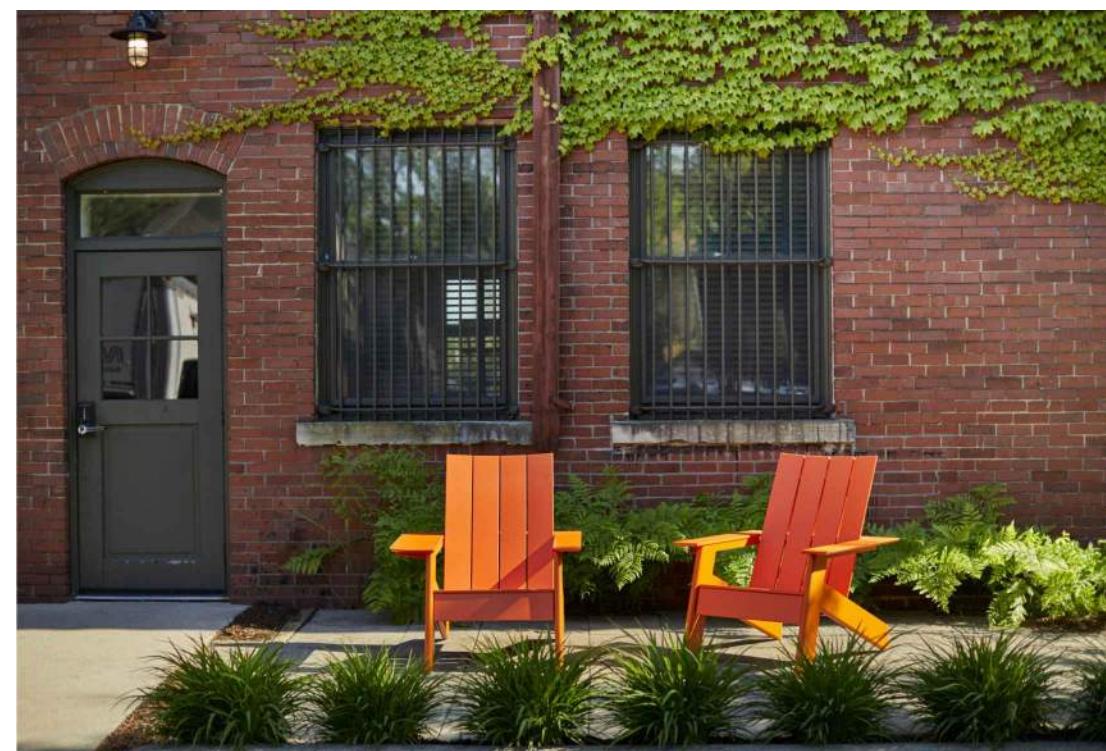
VERT: N/A
HORZ: AS NOTED

SHEET TITLE

SITE DETAILS

SHEET NUMBER

L7-02

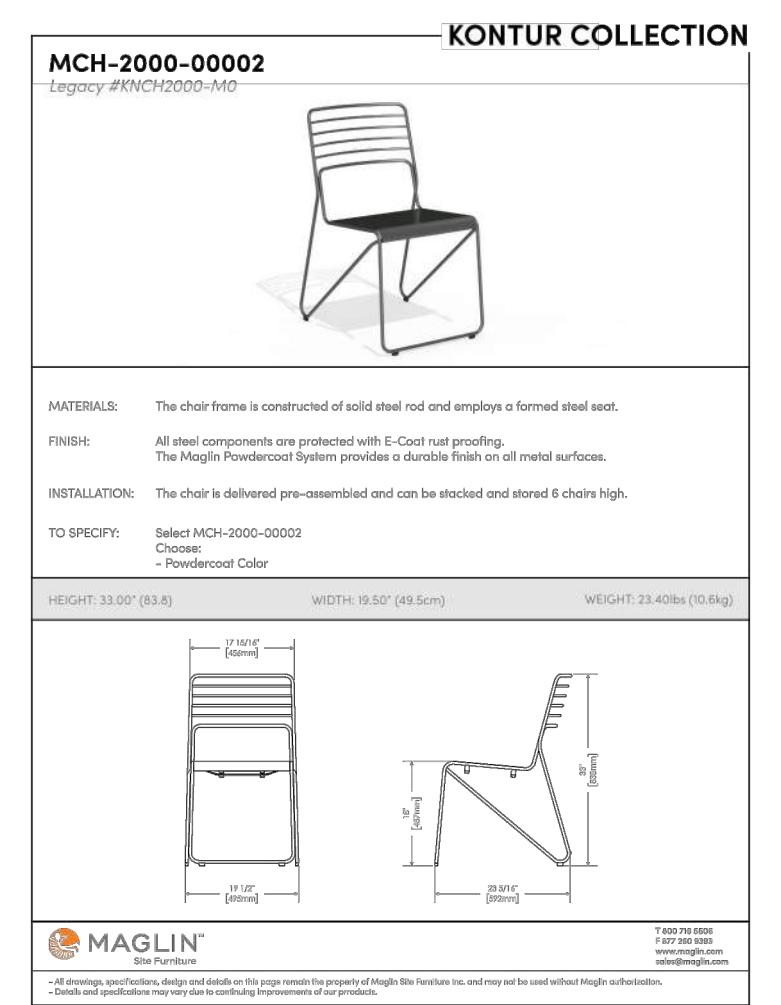


FOR DESIGN INTENT ONLY

MANUFACTURER: LOLL DESIGNS
 PRODUCT NAME: ADIRONDACK CHAIR
 (CURVED) TALLM AD-ASC
 BACK OPTION: CURVED
 COLOR: SUNSET ORANGE
 CONTACT: P.877.740.3387 /
 E.SALES@LOLLEDIGNS.COM



MANUFACTURER: LANDSCAPE FORMS
 MODEL: FREE-STANDING BACKED AUSTIN
 BENCH
 SIZE: 24" X 72" X 18"
 COLOR: IPE



MANUFACTURER: MAGLIN
 PRODUCT NAME: KONTUR CHAIR, FREESTANDING
 FINISH: POWDERCOATED STEEL
 COLOR: ORANGE, RAL 2009

1 ADIRONDACK CHAIR

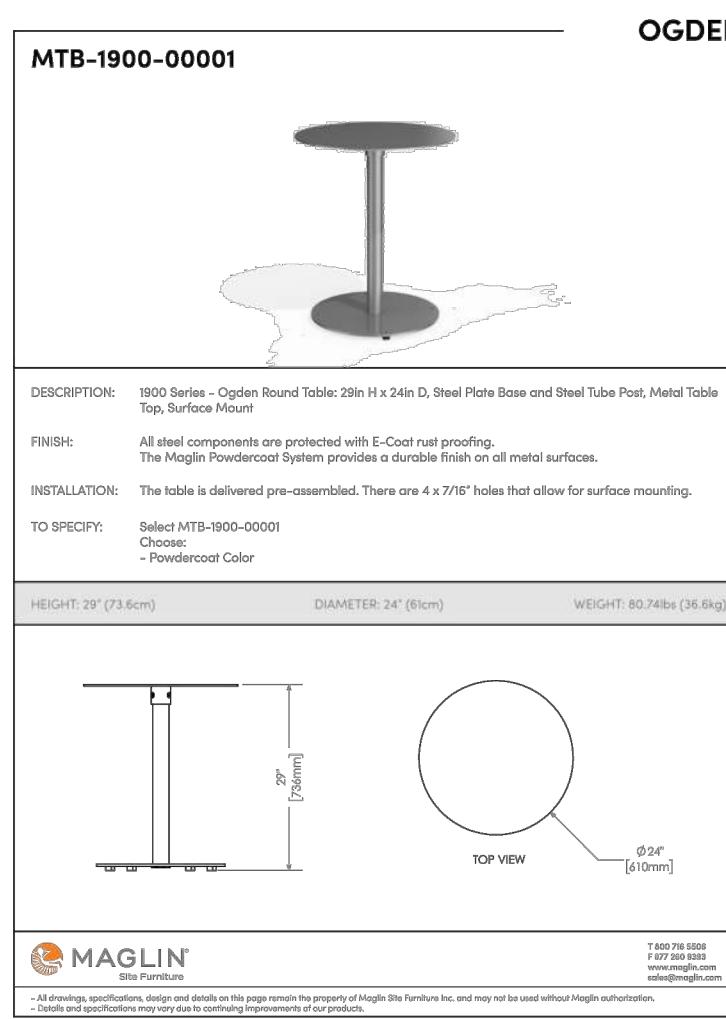
CHARACTER IMAGERY

2 BENCH

CUT SHEET

3 BISTRO CHAIR

CHARACTER IMAGERY



DESIGN INTENT ONLY

4 BISTRO TABLE

CHARACTER IMAGERY

5 PLANTER POTS

CHARACTER IMAGERY

6 PLANTER POT - INTERNAL DETAILS

SECTION

RESERVED

9



FOR DESIGN INTENT ONLY

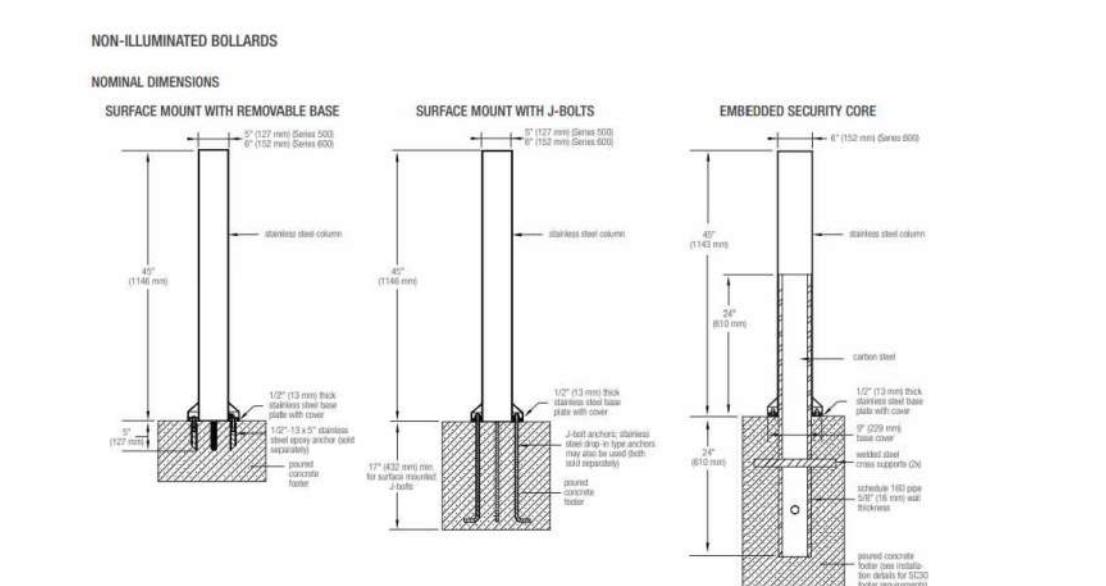
8 SMALL SIDE TABLE

CUT SHEET



9 SECURITY BOLLARD

CUT SHEET



NOTE: INSTALL FORM AND SURFACES
 BOLLARD OR APPROVED EQUAL PER
 MANUFACTURER'S RECOMMENDATIONS.

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DESIGNED BY: LD

DRAWN BY: ZK

CHECKED BY: AM

SCALE: NORTH

VERT: N/A

HORZ: AS NOTED

SHEET TITLE

SITE DETAILS

SHEET NUMBER

L7-03



DESIGN INTENT ONLY

MANUFACTURER: FORMS + SURFACES
PRODUCT NAME: TONYO LITTER AND RECYCLING RECEPTACLENOTE: INSTALL FORMS + SURFACES TRASH
RECEPTACLE OR APPROVED EQUAL PER
MANUFACTURER'S RECOMMENDATIONS.

1 TRASH RECEPTACLE
CHARACTER IMAGERY

2 BIKE RACK
CHARACTER IMAGERY

N.T.S.

MANUFACTURER: LANDSCAPE FORMS
PRODUCT NAME: BOLA BIKE RACK
FINISH: STAINLESS STEEL SATIN
NOTE: EMBEDDED MOUNTING

RESERVED

9



4 DOG WASTE STATION
CUT SHEET | SECTION

3/4" = 1'-0"

RESERVED

9

RESERVED

9

RESERVED

9

RESERVED

9

UNIVERSITY
PLACE PHASE
1B/1C

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VERT: N/A

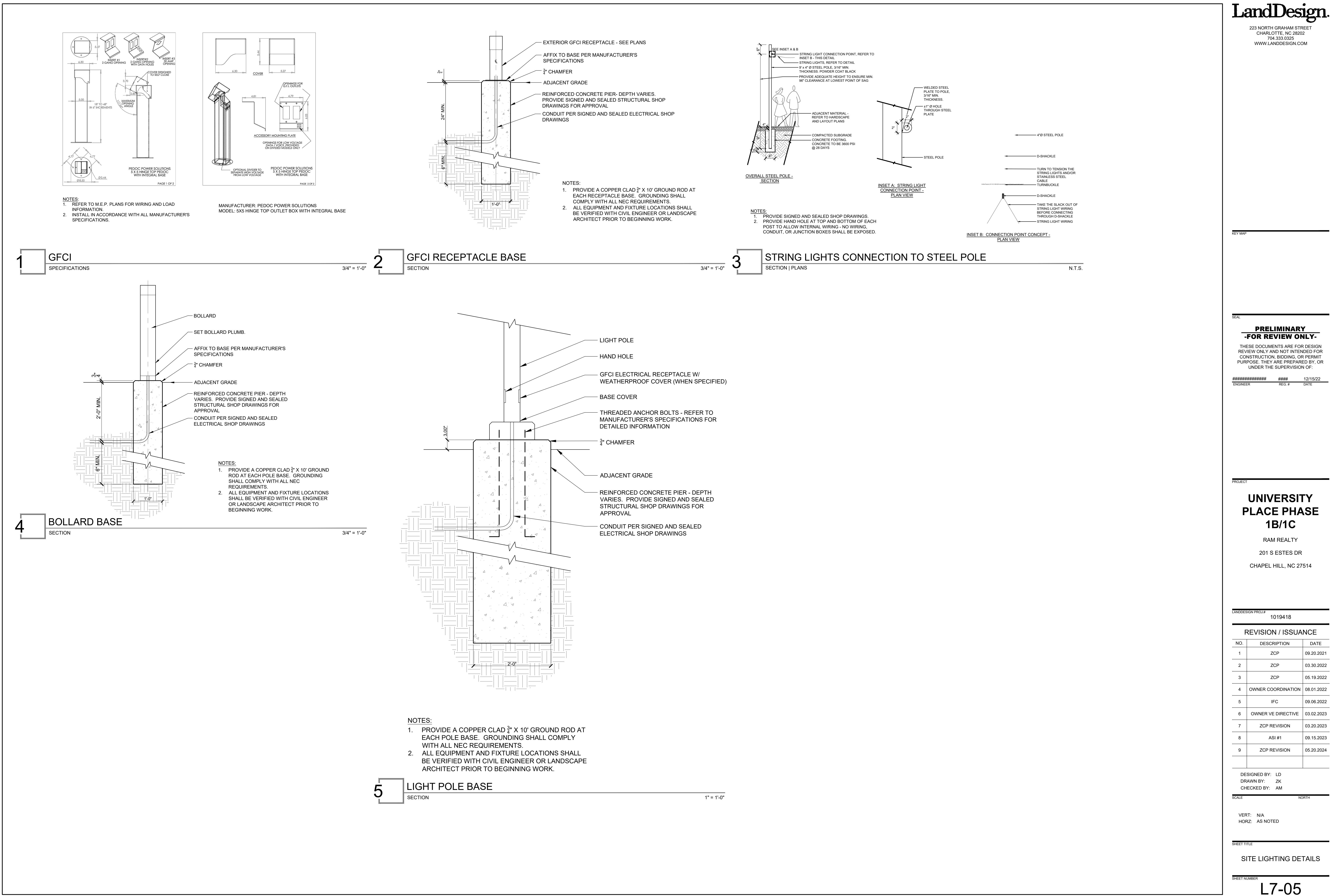
HORZ: AS NOTED

SHEET TITLE

SITE DETAILS

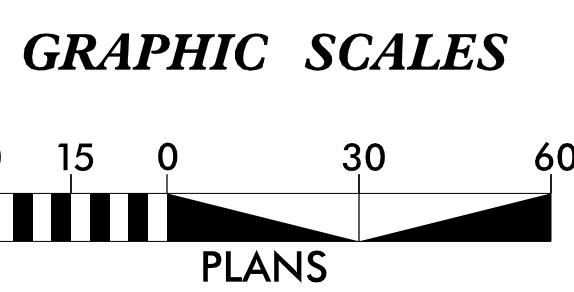
SHEET NUMBER

L7-04



09/08/99

PROJECT: UNIVERSITY PLACE OFFSITE ROADWAY



DESIGN DATA
 US 501 (FORDHAM BLVD)
 ADT 2020 = 25,500
 V = 50 MPH

SR 1750 (S. ESTES DR)
 ADT 2020 = 7,600
 V = 40 MPH

NC DOT CONTACT:
 CHUCK EDWARDS, P.E.
 DISTRICT ENGINEER, DIVISION 7 DISTRICT 1
 PH: 336-570-6833

PROJECT LENGTH

LENGTH ROADWAY PROJECT 21370
 FORDHAM BLVD -L- = 0.231 MILES
 S. ESTES DRIVE -Y1- = 0.320 MILES

Prepared in the Office of:
 Infrastructure Consulting Services, Inc.

RKA
 RAMEY KEMP ASSOCIATES
 3001 Fairview Place, Raleigh, North Carolina 27605
 Phone: 919-873-8115 | www.rameykemp.com | NC License No. F-1489

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:

HYDRAULICS ENGINEER

Michael D. Bixby, P.E.
 Michael D. Bixby, P.E.
 070120AF68F247D

SIGNATURE:

ROADWAY DESIGN ENGINEER

Robert Williams
 Robert Williams
 927BBDDF5030EE
 070120AF68F247D

**NORTH CAROLINA
PROFESSIONAL
SEAL**

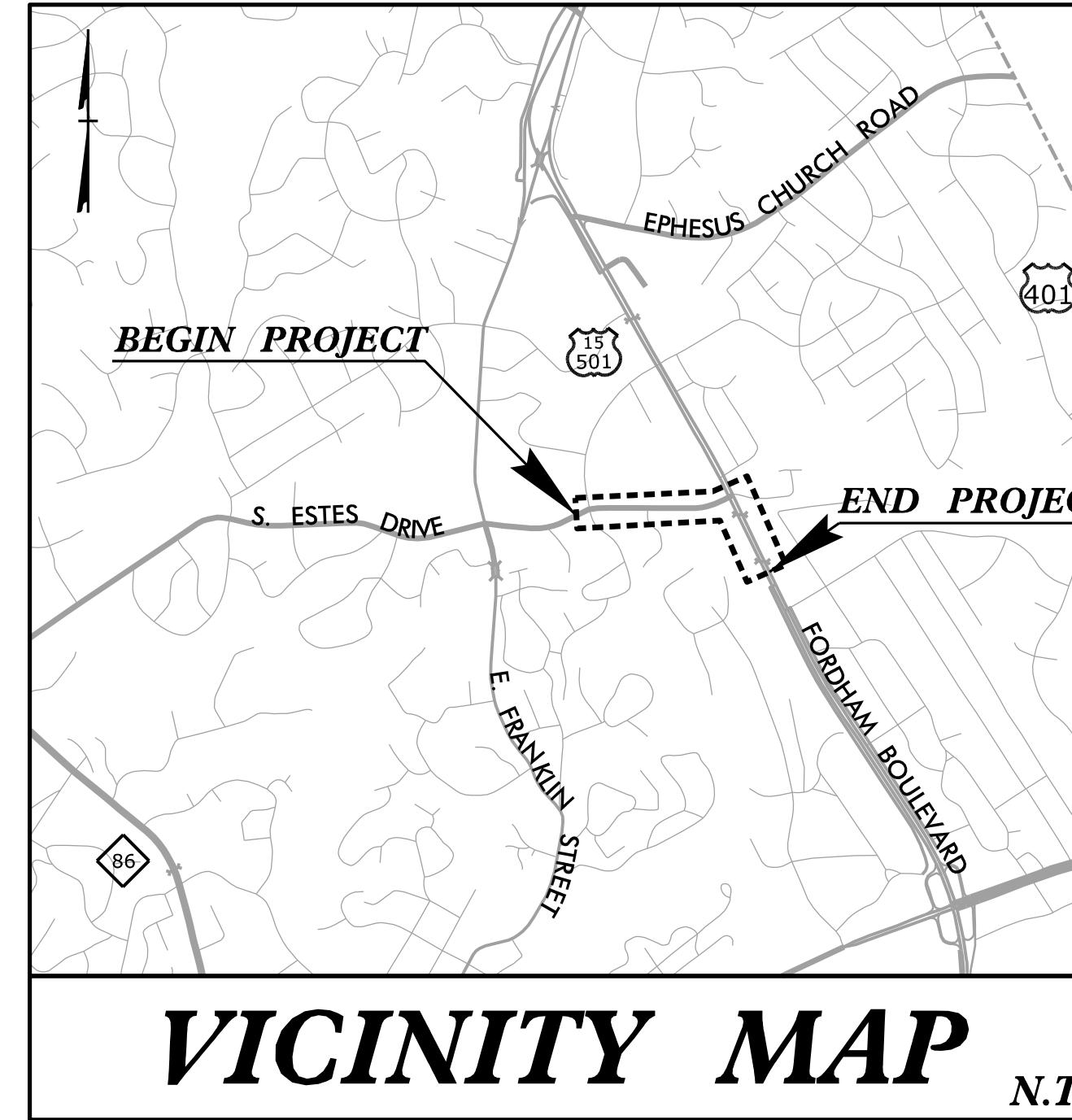
43342
 MICHAEL D. BIXBY, P.E.
 070120AF68F247D

SIGNATURE:

**NORTH CAROLINA
PROFESSIONAL
SEAL**

30932
 ROBERT A. WILLIAMS
 070120AF68F247D

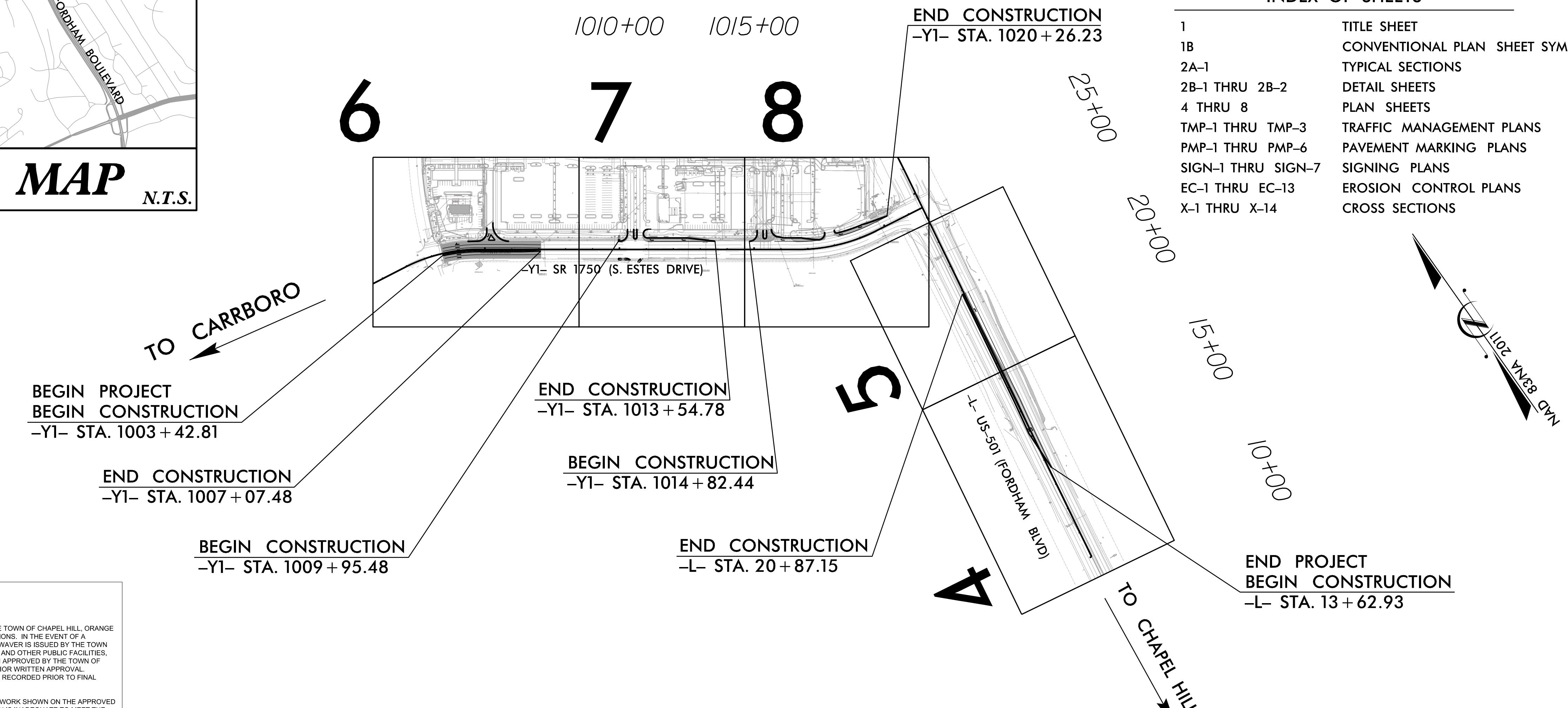
SIGNATURE:



ORANGE COUNTY

LOCATION: US 15-501 (FORDHAM BOULEVARD) AT SR 1750 (S. ESTES DRIVE)

TYPE OF WORK: GRADING, PAVING, DRAINAGE, & PAVEMENT MARKINGS



TOWN OF CHAPEL HILL
CONSTRUCTION PLAN APPROVAL

ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH THE TOWN OF CHAPEL HILL, ORANGE WATER AND SEWER AUTHORITY (OWASA) AND NC DOT STANDARDS AND SPECIFICATIONS. IN THE EVENT OF A CONFLICT BETWEEN STANDARDS, THE MORE STRINGENT SHALL GOVERN UNLESS A WAIVER IS ISSUED BY THE TOWN ENGINEER AND/OR AUTHORITY HAVING JURISDICTION (AHJ). UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING SANITARY SEWER, STORMWATER, AND UTILITY EASEMENTS, SHALL BE APPROVED BY THE TOWN OF CHAPEL HILL, AND SHALL BE SO INSTALLED UNLESS A CHANGE IS AUTHORIZED BY PRIOR WRITTEN APPROVAL. PUBLIC WATER/SANITARY SEWER, STORMWATER AND UTILITY EASEMENTS SHALL BE RECORDED PRIOR TO FINAL ACCEPTANCE AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE TOWN.

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ENGINEERING SIGNATURE:
DATE:

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II

12/2/2016

PROJECT REFERENCE NO.	12370	1B
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STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

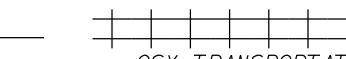
CONVENTIONAL PLAN SHEET SYMBOLS

RAILROADS:

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

Standard Gauge



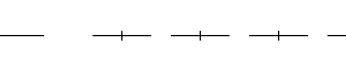
RR Signal Milepost



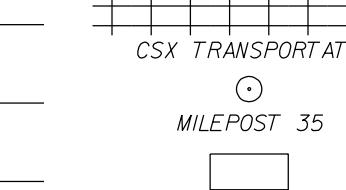
Switch



RR Abandoned



RR Dismantled



BOUNDARIES AND PROPERTY:

State Line

County Line

Township Line

City Line

Reservation Line

Property Line

Existing Iron Pin



Computed Property Corner



Property Monument



Parcel/Sequence Number



Existing Fence Line



Proposed Woven Wire Fence



Proposed Chain Link Fence



Proposed Barbed Wire Fence



Existing Wetland Boundary



Proposed Wetland Boundary



Existing Endangered Animal Boundary



Existing Endangered Plant Boundary



Existing Historic Property Boundary



Known Contamination Area: Soil



s

Potential Contamination Area: Soil



s

Known Contamination Area: Water



w

Potential Contamination Area: Water



w

Contaminated Site: Known or Potential



SKULL & BONES

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap



Sign



Well



Small Mine



Foundation



Area Outline



Cemetery



Building



School



Church



Dam



HYDROLOGY:

Stream or Body of Water

Hydro, Pool or Reservoir

Jurisdictional Stream



Buffer Zone 1



Buffer Zone 2



Flow Arrow



Disappearing Stream



Spring



Wetland



Proposed Lateral, Tail, Head Ditch



False Sump

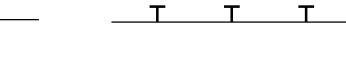


ROADS AND RELATED FEATURES:

Existing Edge of Pavement



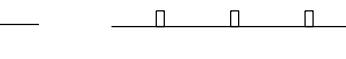
Existing Curb



Proposed Slope Stakes Cut



Proposed Slope Stakes Fill



Proposed Curb Ramp



Existing Metal Guardrail



Proposed Guardrail



Existing Cable Guiderrail



Proposed Cable Guiderrail



Equality Symbol



Pavement Removal



VEGETATION:



Single Tree



Single Shrub



WATER:

WATER:

Water Manhole



Water Meter



Water Valve



Water Hydrant



U/G Water Line LOS B (S.U.E.)



U/G Water Line LOS C (S.U.E.)



U/G Water Line LOS D (S.U.E.)



Above Ground Water Line



TV:

TV Pedestal



TV Tower



U/G TV Cable Hand Hole



U/G TV Cable LOS B (S.U.E.)



U/G TV Cable LOS C (S.U.E.)



U/G TV Cable LOS D (S.U.E.)



U/G Fiber Optic Cable LOS B (S.U.E.)



U/G Fiber Optic Cable LOS C (S.U.E.)



U/G Fiber Optic Cable LOS D (S.U.E.)



GAS:

Gas Valve



Gas Meter



U/G Gas Line LOS B (S.U.E.)



U/G Gas Line LOS C (S.U.E.)



U/G Gas Line LOS D (S.U.E.)



Above Ground Gas Line



SANITARY SEWER:

Sanitary Sewer Manhole



Sanitary Sewer Cleanout



8/17/99

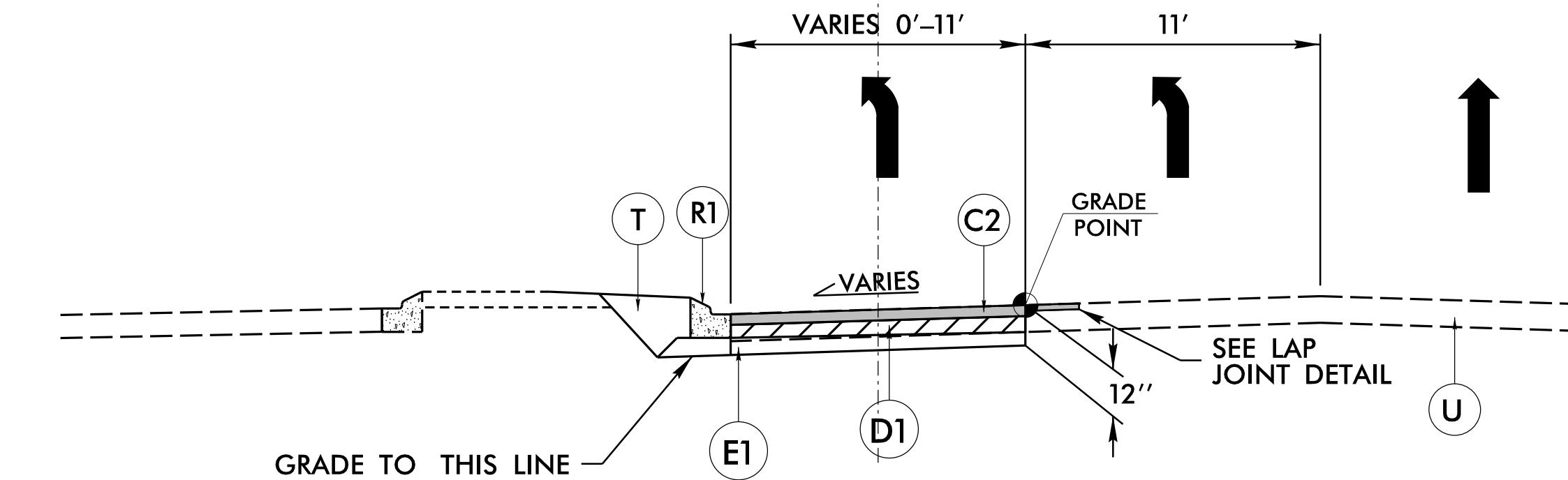
Infrastructure Consulting Services, Inc.
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 Phone: 919-872-5115
 NC License No. F-1489
 www.rameykemp.com

PROJECT REFERENCE NO. 21370 SHEET NO. 2A-1
 RW SHEET NO.
 ROADWAY DESIGN ENGINEER HYDRAULICS ENGINEER
 NORTH CAROLINA PROFESSIONAL ENGINEER
 Documented by: Robert Williams, P.E. Michael D. Bryant, P.E.
 02/18/2022
 NORTH CAROLINA PROFESSIONAL ENGINEER
 Documented by: Michael D. Bryant, P.E.
 02/18/2022
 DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 3.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E1	PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
R1	1'-6" CURB AND GUTTER
R2	2'-6" CURB AND GUTTER
R3	5" MONOLITHIC CONCRETE ISLAND (SURFACE MOUNTED)
T	COMPACTED EARTH MATERIAL
U	EXISTING PAVEMENT
V	1.5" MILLING

NOTES: 1. ALL PAVEMENT SLOPES ARE 1:1 UNLESS OTHERWISE SPECIFIED.
 2. SEE PLANS FOR LOCATIONS OF CONCRETE ISLANDS, TURN LANES, AND TAPERS.
 3. CONTRACTOR SHALL SAW CUT EXISTING PAVEMENT EDGE TO ENSURE CLEAN JOINTS FOR TIE IN.

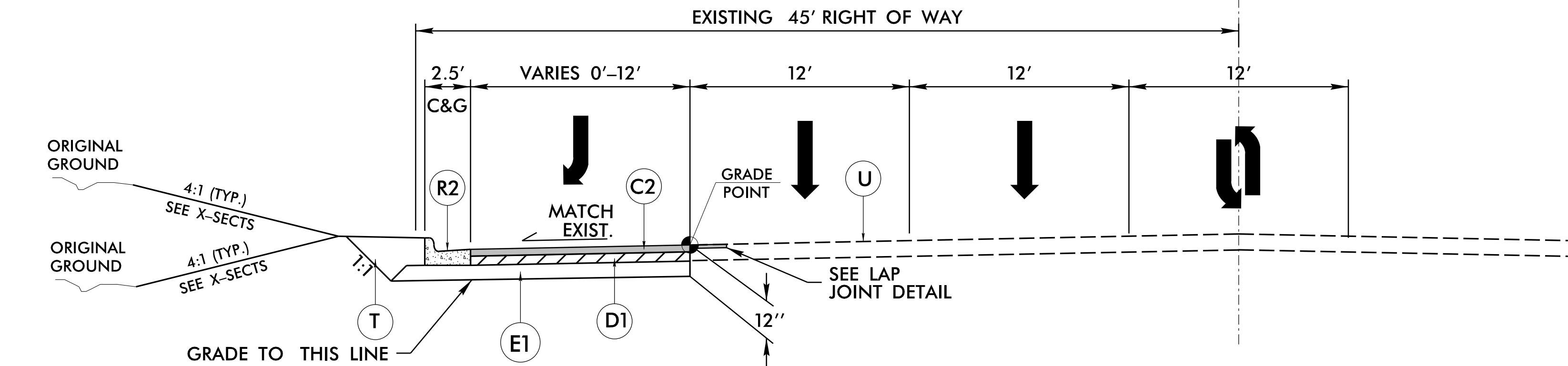
C-L- US 15-105 (FORDHAM BOULEVARD)



TYPICAL SECTION NO. 1

-L- STA. 13 + 62.93 TO STA. 20 + 87.15

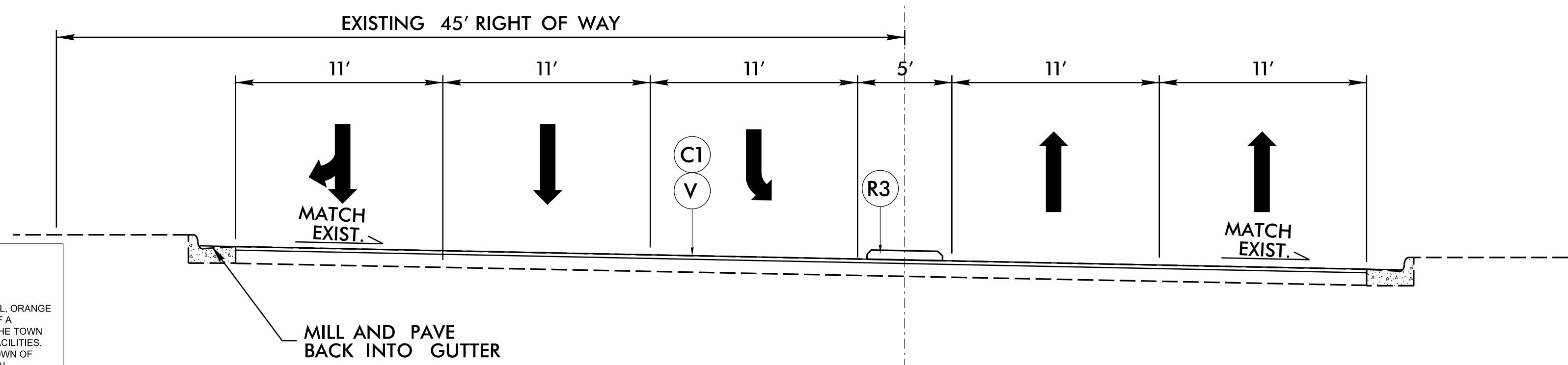
C-Y1- SR 1750 (S. ESTES DRIVE)



TYPICAL SECTION NO. 2

-Y1- STA. 1009 + 95.48 TO STA. 1013 + 54.78
 -Y1- STA. 1014 + 82.44 TO STA. 1020 + 26.23

C-Y1- SR 1750 (S. ESTES DRIVE)



TYPICAL SECTION NO. 3

-Y1- STA. 1003 + 42.81 TO STA. 1007 + 07.48

TOWN OF CHAPEL HILL
 CONSTRUCTION PLAN APPROVAL

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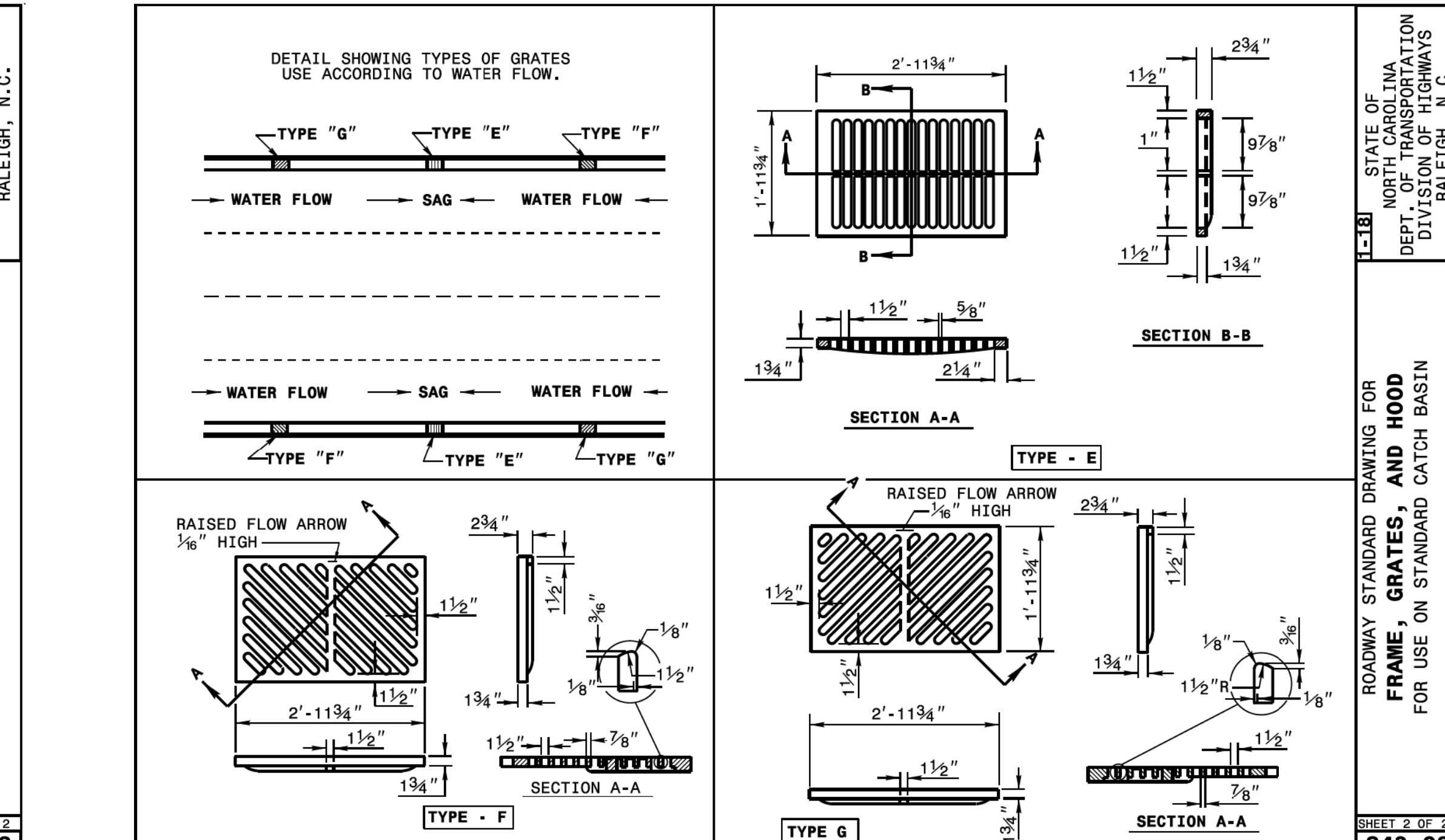
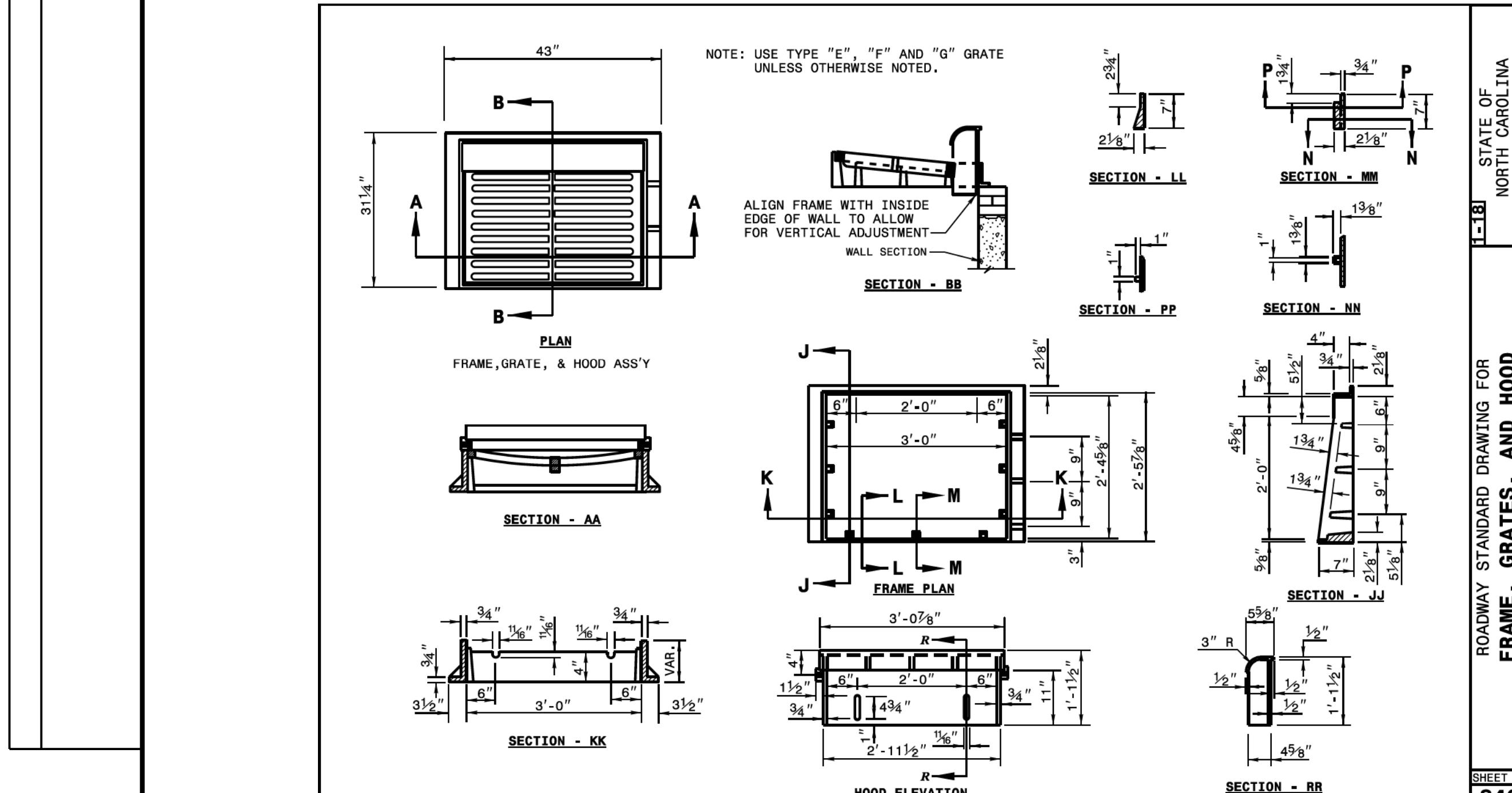
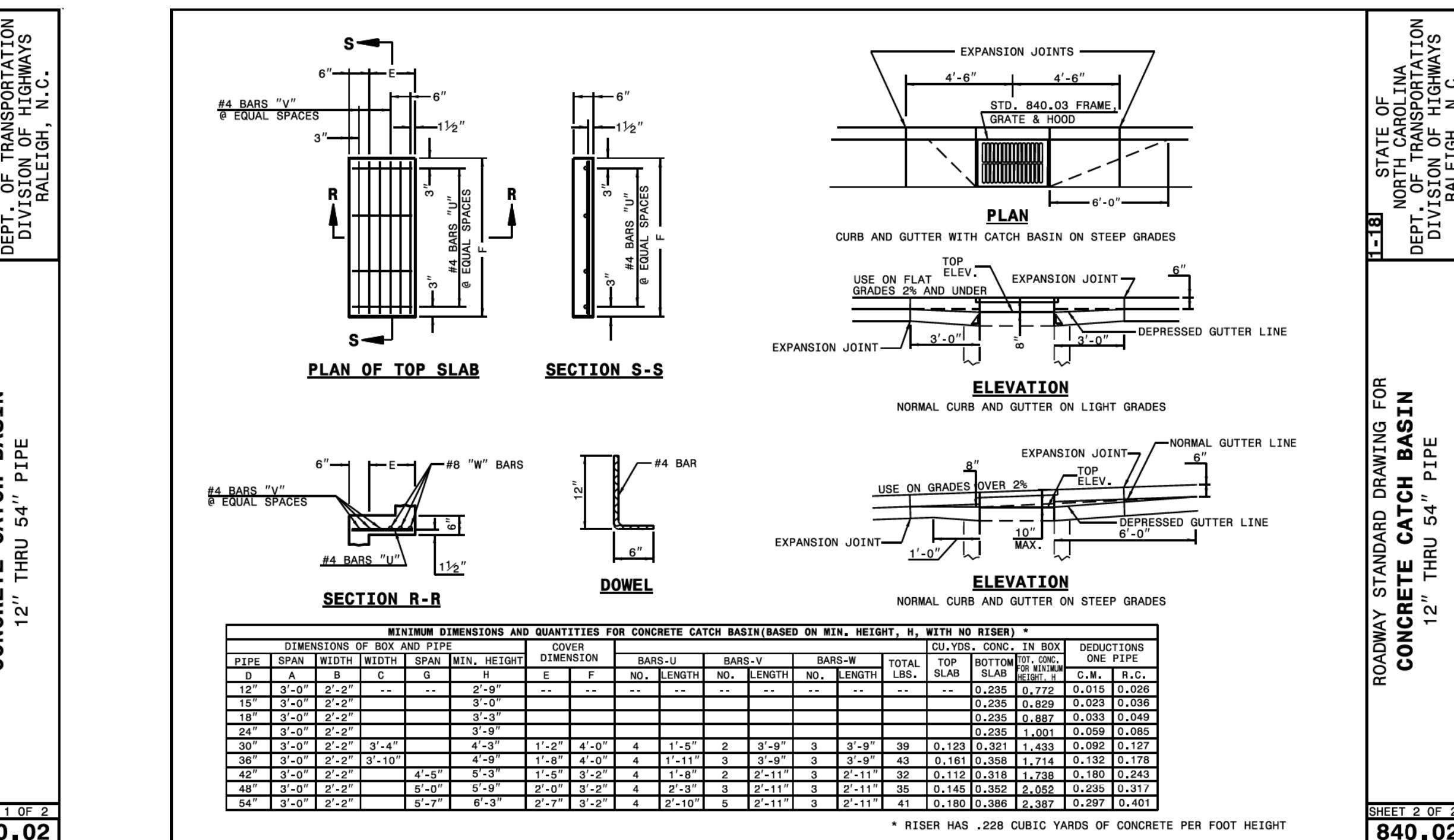
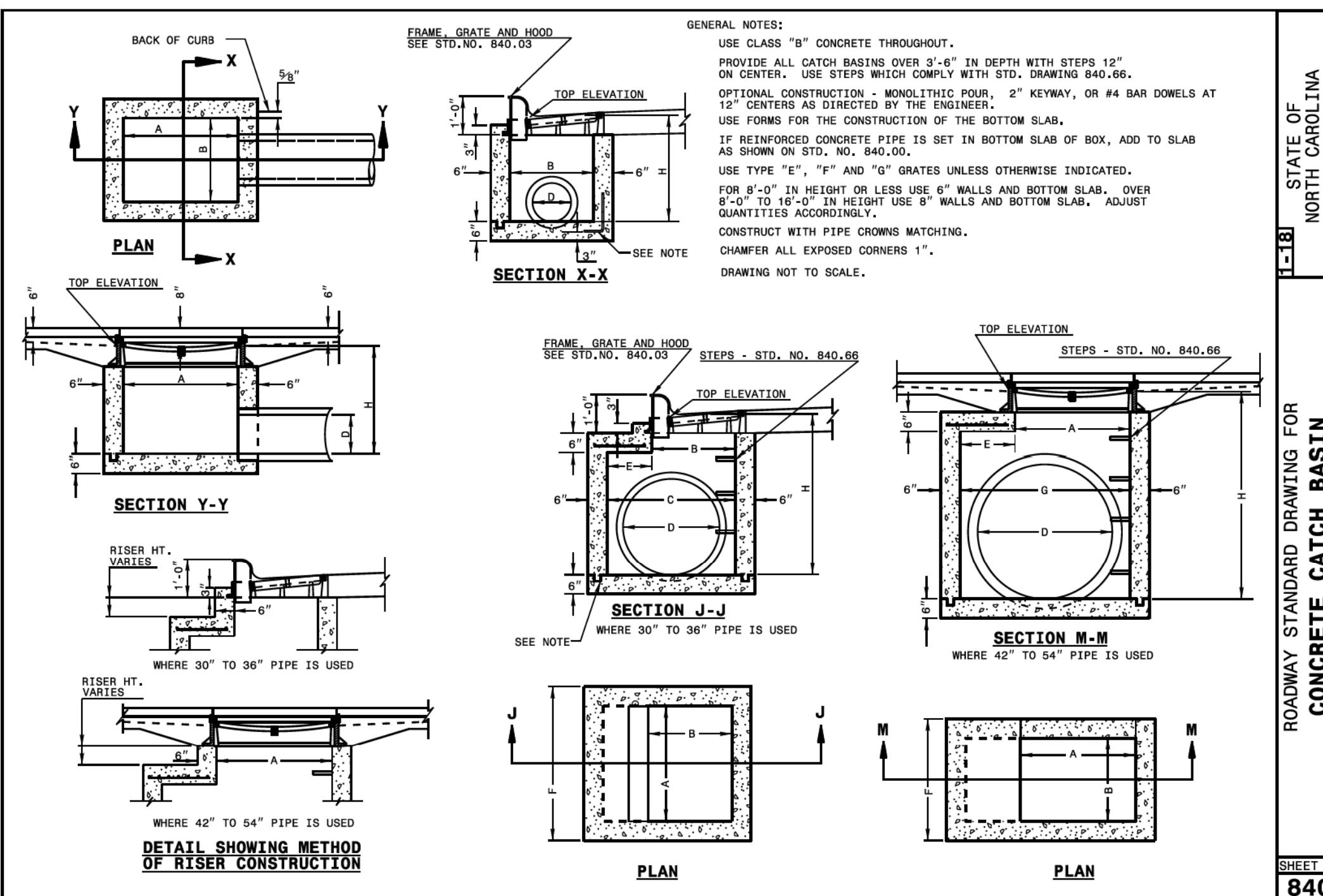
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ENGINEERING SIGNATURE:
 DATE:

10/8/2022 37001-Rdy-typ.dgn
 User: SMC-Cart

8/17/99

REVISIONS



TOWN OF CHAPEL CONSTRUCTION PLAN

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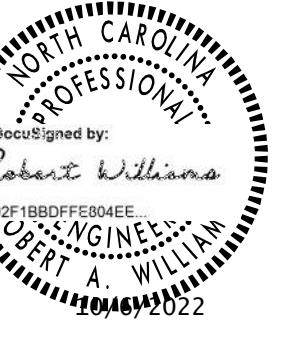
ENGINEERING SIGNATURE

PROJECT REFERENCE NO.	SHEET NO.
21370	2B-1
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
 <p>DecuSigned by: Robert Williams 92F1BB0DFFEB04EE ENGINEER ROBERT A. WILLIAMS 10/16/2022</p>	 <p>DecuSigned by: Michael D. Bywalek 67D12A0F66F247D ENGINEER MICHAEL D. BYWALEK 10/16/2022</p>
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>	

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UNLESS ALL SIGNATURES COMPLETED**

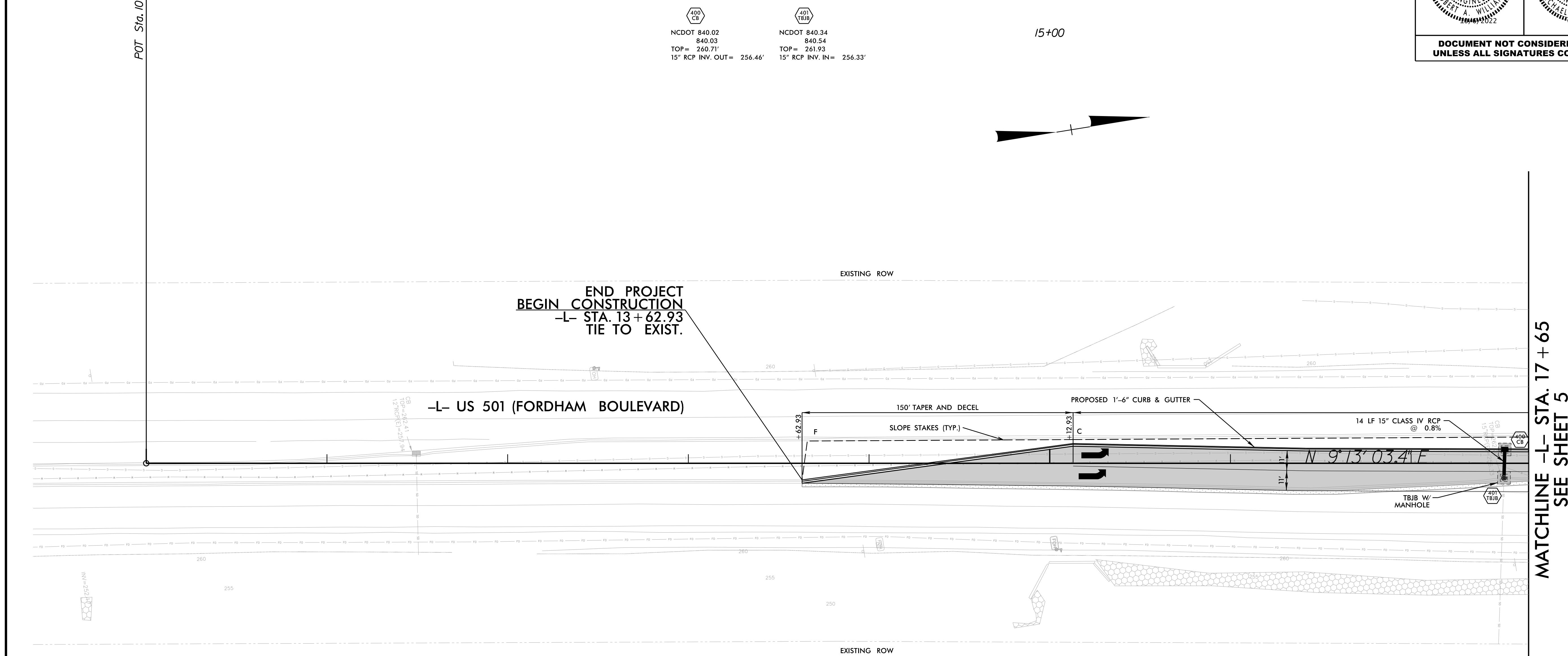
8/17/99

Infrastructure Consulting Services, Inc.
RKA
RAMEY KEMP ASSOCIATES
 6099 Farnham Place
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 NC License No. P-1489
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PROJECT REFERENCE NO.	4
R/W SHEET NO.	4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
Documented by: Robert Williams 08/18/2022	Documented by: Michael D. Caprioli 08/18/2022
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POT Sta. 10+000.00

REVISIONS

TOWN OF CHAPEL HILL
CONSTRUCTION PLAN APPROVAL

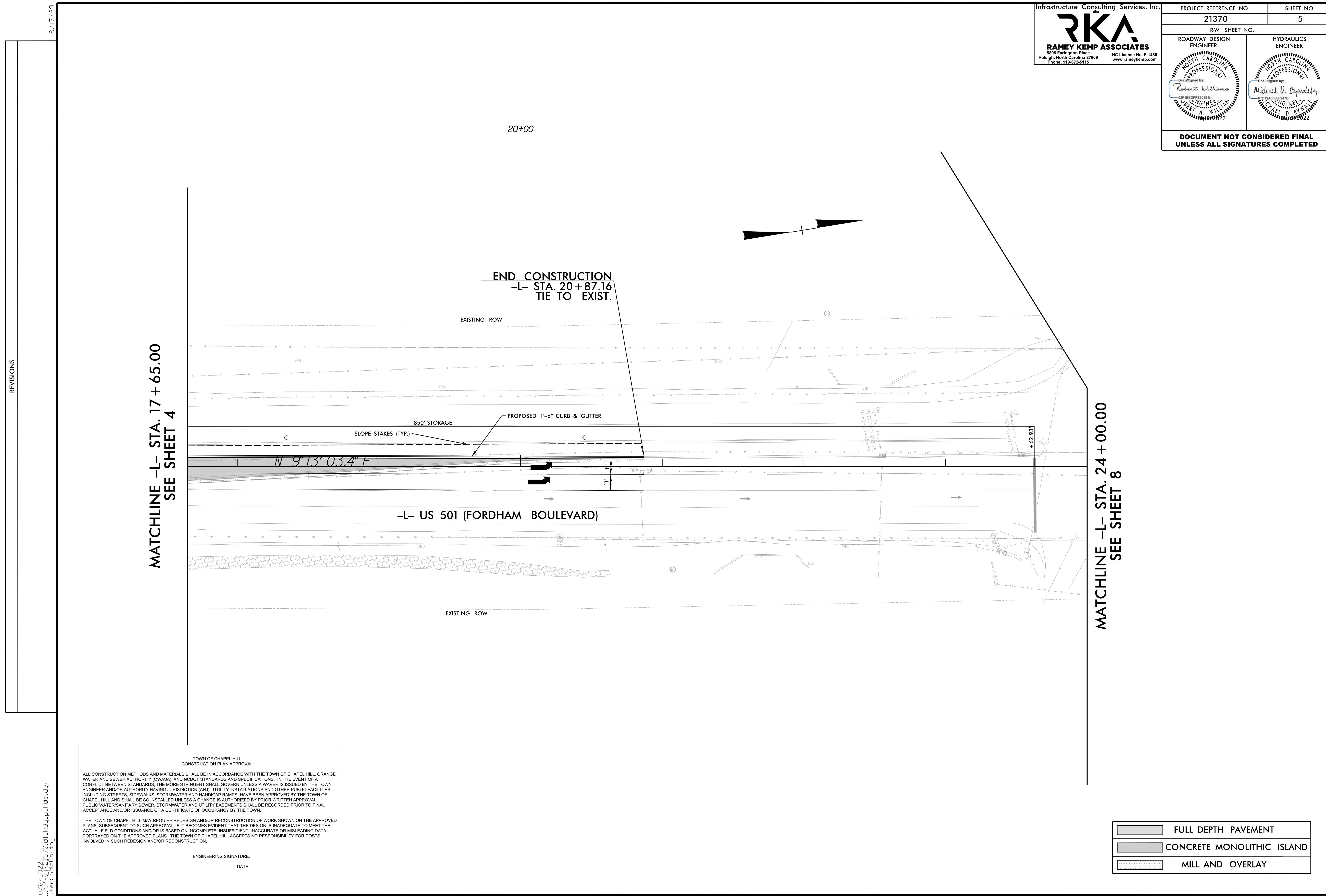
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ENGINEERING SIGNATURE:
DATE:

10/8/2022 370.01-Rd-514-04-06

<input type="checkbox"/>	FULL DEPTH PAVEMENT
<input type="checkbox"/>	CONCRETE MONOLITHIC ISLAND
<input type="checkbox"/>	MILL AND OVERLAY



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UNLESS ALL SIGNATURES COMPLETED**

REVISED

User: SMcCarthy
Host: Pro\Z13\0.0.1-Rdy-psh06.dgn

**TOWN OF CHAPEL HILL
CONSTRUCTION PLAN APPR**

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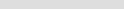
BEGIN **BEGIN P**
CONSTRU
Y1 STA. 1003
TIE TO

$PI\ Sta\ 1003+37.32$
 $\Delta\ =\ 27^{\circ}09'07.8''$
 $D\ =\ 9^{\circ}32'57.5''$
 $L\ =\ 284.34'$
 $T\ =\ 144.89'$
 $R\ =\ 600.00'$

END CONSTRUCTION
-Y1- STA. 1007 + 07.48
TIE TO EXIST.

24"R

24"RCP(E)=251.21
18"RCP(W)=251.10

-  FULL DEPTH PAVEMENT
-  CONCRETE MONOLITHIC ISLAND
-  MILL AND OVERLAY

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER. TRAFFIC CONTROL MAY BE REVISED BY THE NCDOT INSPECTOR IN THE FIELD IF NEEDED.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
US 15-501 (FORDHAM BOULEVARD)	MONDAY THRU FRIDAY 6AM TO 9AM; 4PM TO 7PM
SR 1750 (SOUTH ESTES DRIVE)	MONDAY THRU FRIDAY 6AM TO 9AM; 4PM TO 7PM

HOLIDAY

1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 7:00 P.M. DECEMBER 31st TO 6:00 A.M. JANUARY 2nd. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 6:00 A.M. THE FOLLOWING TUESDAY.
3. FOR EASTER, BETWEEN THE HOURS OF 7:00 P.M. THURSDAY AND 6:00 A.M. MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7:00 P.M. FRIDAY TO 6:00 A.M. TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 7:00 P.M. THE DAY BEFORE INDEPENDENCE DAY AND 6:00 A.M. THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 7:00 P.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 6:00 A.M. THE TUESDAY AFTER INDEPENDENCE DAY.

6. FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 P.M. FRIDAY TO 6:00 A.M. TUESDAY.
7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 P.M. TUESDAY AND 6:00 A.M. MONDAY.
8. FOR CHRISTMAS, BETWEEN THE HOURS OF 7:00 P.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 A.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
9. FOR CHRISTMAS PARADE, BETWEEN THE HOURS OF 7:00 P.M. THE (DAY) OF THE WEEK OF THE CHRISTMAS PARADE AND 6:00 A.M. THE FOLLOWING (DAY) AFTER THE WEEK OF THE CHRISTMAS PARADE.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- B) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.
- C) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.
- D) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- E) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.
- F) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.
- G) DO NOT INSTALL MORE THAN ONE SIMULTANEOUS LANE CLOSURE IN ANY ONE DIRECTION ON ALL ROADS.

PAVEMENT EDGE DROP OFF REQUIREMENTS

- H) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:
BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.
BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.
BACKFILL WITH SUITABLE COMPAKTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.
- I) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 200 FT IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.



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21370	TMP-1
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TOWN OF CHAPEL HILL
CONSTRUCTION PLAN APPROVAL
ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH THE TOWN OF CHAPEL HILL, ORANGE WATER AND SEWER AUTHORITY (OWASA), AND NCDOT STANDARDS AND SPECIFICATIONS. IN THE EVENT OF A CONFLICT BETWEEN STANDARDS, THE MORE STRINGENT SHALL GOVERN UNLESS A WAVER IS ISSUED BY THE TOWN ENGINEER AND/OR AUTHORITY HAVING JURISDICTION (AHA). UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING STREETS, SIDEWALKS, AND UTILITIES, SHALL HAVE BEEN APPROVED BY THE TOWN OF CHAPEL HILL AND SHALL BE SO INSTALLED UNLESS A CHANGE IS AUTHORIZED BY THE AHA. APPROVAL OF PUBLIC WATER/SANITARY SEWER, STORMWATER AND UTILITY EASEMENTS SHALL BE RECORDED PRIOR TO FINAL ACCEPTANCE AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE TOWN.

THE TOWN OF CHAPEL HILL MAY REQUIRE REDESIGN AND/OR RECONSTRUCTION OF WORK SHOWN ON THE APPROVED PLANS, SUBSEQUENT TO SUCH APPROVAL, IF IT BECOMES EVIDENT THAT THE DESIGN IS INADEQUATE TO MEET THE ACTUAL FIELD CONDITIONS AND/OR IS BASED ON INCOMPLETE, INSUFFICIENT, INACCURATE OR MISLEADING DATA PORTRAYED ON THE APPROVED PLANS. THE TOWN OF CHAPEL HILL ACCEPTS NO RESPONSIBILITY FOR COSTS INVOLVED IN SUCH REDESIGN AND/OR RECONSTRUCTION.

ENGINEERING SIGNATURE:
DATE:

GENERAL NOTES CONT.

TRAFFIC PATTERN ALTERATIONS

J) NOTIFY THE ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

K) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

L) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

M) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.

N) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

O) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.

P) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

Q) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
-L- US 15-501 (FORDHAM BOULEVARD)	PAINT	NONE
-Y1- SR 1750 (SOUTH ESTES DRIVE)	PAINT	NONE

R) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

S) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

T) TRACE THE EXISTING AND PROPOSED MONOLITHIC ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO REMOVAL AND INSTALLATION. PLACE CONES TO DELINEATE ANY EXISTING AND PROPOSED MONOLITHIC ISLANDS AFTER REMOVAL AND BEFORE INSTALLATION.

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUM
1150.01	FLAGGERS



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PROJECT REFERENCE NO.	SHEET NO.
21370	TMP-2
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<p style="text-align: center;">TOWN OF CHAPEL HILL CONSTRUCTION PLAN APPROVAL</p> <p>ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH THE TOWN OF CHAPEL HILL, ORANGE WATER AND SEWER AUTHORITY (OWASA), AND NC DOT STANDARDS AND SPECIFICATIONS. IN THE EVENT OF A CONFLICT BETWEEN STANDARDS, THE MORE STRINGENT SHALL GOVERN UNLESS A WAIVER IS ISSUED BY THE TOWN ENGINEER AND/OR AUTHORITY HAVING JURISDICTION (AHA). UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING STREETS, SIDEWALKS, AND UTILITIES, SHALL NOT BE INSTALLED UNTIL A HA HAS BEEN APPROVED BY THE TOWN OF CHAPEL HILL AND SHALL NOT BE INSTALLED UNLESS A CHANGE IS AUTHORIZED AND FOR WHICH APPROVAL PUBLIC WATER/SANITARY SEWER, STORMWATER AND UTILITY EASEMENTS SHALL BE RECORDED PRIOR TO FINAL ACCEPTANCE AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE TOWN.</p> <p>THE TOWN OF CHAPEL HILL MAY REQUIRE REDESIGN AND/OR RECONSTRUCTION OF WORK SHOWN ON THE APPROVED PLANS, SUBSEQUENT TO SUCH APPROVAL, IF IT BECOMES EVIDENT THAT THE DESIGN IS INADEQUATE TO MEET THE ACTUAL FIELD CONDITIONS AND/OR IS BASED ON INCOMPLETE, INSUFFICIENT, INACCURATE OR MISLEADING DATA PORTRAYED ON THE APPROVED PLANS. THE TOWN OF CHAPEL HILL ACCEPTS NO RESPONSIBILITY FOR COSTS INVOLVED IN SUCH REDESIGN AND/OR RECONSTRUCTION.</p> <p>ENGINEERING SIGNATURE: DATE:</p>

PHASING NOTES

BEFORE BEGINNING ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES (RSD 1101.01). FIELD VERIFY LOCATIONS WITH THE RESIDENT ENGINEER PRIOR TO INSTALLATION.

MAINTAIN VEHICULAR ACCESS TO ALL RESIDENCES, SCHOOLS, BUS STOPS, EMERGENCY SERVICES, AND BUSINESSES DURING THE LIFE OF THE CONTRACT, PRIOR TO INCORPORATION, OBTAIN WRITTEN APPROVAL FROM THE ENGINEER ON METHOD TO MAINTAIN ACCESS.

COMPLETE ANY PROPOSED OR TEMPORARY WIDENING IN SUCH A MANNER THAT NO PONDING OF WATER WILL OCCUR WITHIN THE TRAVEL LANE.

WHEN USING LANE CLOSURES (RSD 1101.02), RETURN TRAFFIC TO EXISTING AND/OR TEMPORARY TRAFFIC PATTERN UPON ACTIVITIES COMPLETION, UNLESS OTHERWISE NOTED IN THE PHASING PLANS.

WHEN PHASING STATES TO USE LANE CLOSURES, REFER TO THE FOLLOWING FOR ALL EXISTING AND PROPOSED ROADS:

- ALL TWO-LANE/TWO-WAY FACILITIES SEE RSD 1101.02 SHEET 1 OF 14
- ALL 3-LANE OR 5-LANE ROADWAYS SEE RSD 1101.02 SHEET 2 OF 14
- ALL MULTI-LANE FACILITIES POSTED < 60 MPH SEE RSD 1101.02 SHEET 3 OF 14
- ALL MULTI-LANE FACILITIES POSTED > 60 MPH SEE RSD 1101.02 SHEET 4 OF 14
- ALL UNDIVIDED MULTI-LANE FACILITIES SEE RSD 1101.02 SHEET 7 OF 14
- ALL ENTRANCE AND EXIT RAMPS SEE RSD 1101.02 SHEETS 9 AND 10 OF 14
- ALL ENTRANCE AND EXIT RAMPS SEE RSD 1101.02 SHEETS 9 AND 10 OF 14

COMPLETE PAVING UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE UNTIL STATED TO PLACE FINAL LAYER IN THE PHASING PLANS.

WHEN WEDGING OVER EXISTING PAVEMENT, WEDGE TO PROPOSED ELEVATION (LESS THE FINAL LAYER OF SURFACE COURSE), OR WEDGE AS NEEDED TO MAINTAIN TRAFFIC. MAINTAIN POSITIVE DRAINAGE AND MAINTAIN A MAXIMUM 0.04 ROLLOVER IN BOTH EXISTING AND/OR TEMPORARY TRAVEL LANES.

REPLACE MARKINGS AND RETURN TRAFFIC TO THE CURRENT TRAFFIC PATTERN AT THE END OF EACH WORK PERIOD UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER.

FOR ALL SHOULDER CLOSURES, SEE RSD 1101.04. WHEN PORTABLE CONCRETE BARRIER (PCB) IS PRESENT ON SHOULDERS, PLACE SHOULDER CLOSURE SIGNS & DEVICES IN ADVANCE OF PCB.

PHASING PLAN



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PHASE I

- STEP 1 -- INSTALL WORK ZONE ADVANCE WARNING SIGNS.
- STEP 2 -- AWAY FROM TRAFFIC, USING LANE CLOSURES AND FLAGGERS AS NEEDED, CLOSE NORTHBOUND AND SOUTHBOUND INSIDE THROUGH LANES ON US 15-501 (FORDHAM BOULEVARD). COMPLETE CONSTRUCTION OF NEW LEFT TURN LANES, CURB AND GUTTER, AND DRAINAGE IMPROVEMENTS ALONG -L- US 15-501 (FORDHAM BOULEVARD) FROM -L- STA. 13+63 +/- TO 20+87 +/- INCLUDING THE FINAL SURFACE COURSE.
- STEP 3 -- AWAY FROM TRAFFIC, USING LANE CLOSURES AND FLAGGERS AS NEEDED, INSTALL FINAL PAVEMENT MARKINGS AND MARKERS ALONG -L- US 15-501 (FORDHAM BOULEVARD).
- STEP 4 -- REMOVE ALL REMAINING TRAFFIC CONTROL DEVICES AND WORK ZONE SIGNS. OPEN ALL LANES ON -L- US 15-501 (FORDHAM BOULEVARD) TO TRAFFIC.

PHASE II

- STEP 1 -- INSTALL WORK ZONE ADVANCE WARNING SIGNS.
- STEP 2 -- AWAY FROM TRAFFIC, USING LANE CLOSURES AND FLAGGERS AS NEEDED, CLOSE WESTBOUND OUTSIDE THROUGH LANE ON SR 1750 (SOUTH ESTES DRIVE). COMPLETE CONSTRUCTION OF NEW RIGHT TURN LANES, SITE DRIVEWAYS, CURB AND GUTTER, AND DRAINAGE IMPROVEMENTS ALONG -Y1- SR 1750 (SOUTH ESTES DRIVE) FROM -Y1- STA. 1003+45 +/- TO 1020+31 +/- INCLUDING THE FINAL SURFACE COURSE.
- STEP 3 -- AWAY FROM TRAFFIC, USING LANE CLOSURES AND FLAGGERS AS NEEDED, INSTALL FINAL PAVEMENT MARKINGS AND MARKERS ALONG -Y1- SR 1750 (SOUTH ESTES DRIVE).
- STEP 4 -- REMOVE ALL REMAINING TRAFFIC CONTROL DEVICES AND WORK ZONE SIGNS. OPEN ALL LANES ON -Y1- SR 1750 (SOUTH ESTES DRIVE) TO TRAFFIC.

PHASE III

- STEP 1 -- INSTALL WORK ZONE ADVANCE WARNING SIGNS.
- STEP 2 -- AWAY FROM TRAFFIC, USING LANE CLOSURES AND FLAGGERS AS NEEDED, CLOSE WESTBOUND AND EASTBOUND INSIDE THROUGH LANES ON SR 1750 (SOUTH ESTES DRIVE). COMPLETE CONSTRUCTION OF NEW LEFT TURN LANES, CURB AND GUTTER, MEDIAN, AND DRAINAGE IMPROVEMENTS ALONG -Y1- SR 1750 (SOUTH ESTES DRIVE) FROM -Y1- STA. 1003+45 +/- TO 1007+08 +/- INCLUDING THE FINAL SURFACE COURSE.
- STEP 3 -- AWAY FROM TRAFFIC, USING LANE CLOSURES AND FLAGGERS AS NEEDED, INSTALL FINAL PAVEMENT MARKINGS AND MARKERS ALONG -Y1- SR 1750 (SOUTH ESTES DRIVE).
- STEP 4 -- REMOVE ALL REMAINING TRAFFIC CONTROL DEVICES AND WORK ZONE SIGNS. OPEN ALL LANES ON -Y1- SR 1750 (SOUTH ESTES DRIVE) TO TRAFFIC.

TOWN OF CHAPEL HILL
CONSTRUCTION PLAN APPROVAL

ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH THE TOWN OF CHAPEL HILL, ORANGE WATER AND SEWER AUTHORITY (OWASA), AND NCDOT STANDARDS AND SPECIFICATIONS. IN THE EVENT OF A CONFLICT BETWEEN STANDARDS, THE MORE STRINGENT SHALL GOVERN UNLESS A WAVER IS ISSUED BY THE TOWN ENGINEER AND/OR AUTHORITY HAVING JURISDICTION (AHA). UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING STREETS, SIDEWALKS, AND UTILITIES, SHALL HAVE BEEN APPROVED BY THE TOWN OF CHAPEL HILL AND SHALL BE SO INSTALLED UNLESS A CHANGE IS AUTHORIZED BY THE AHA APPROVAL. PUBLIC WATER/SANITARY SEWER, STORMWATER AND UTILITY EASEMENTS SHALL BE RECORDED PRIOR TO FINAL ACCEPTANCE AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE TOWN.

THE TOWN OF CHAPEL HILL MAY REQUIRE REDESIGN AND/OR RECONSTRUCTION OF WORK SHOWN ON THE APPROVED PLANS, SUBSEQUENT TO SUCH APPROVAL, IF IT BECOMES EVIDENT THAT THE DESIGN IS INADEQUATE TO MEET THE ACTUAL FIELD CONDITIONS AND/OR IS BASED ON INCOMPLETE, INSUFFICIENT, INACCURATE OR MISLEADING DATA PORTRAYED ON THE APPROVED PLANS. THE TOWN OF CHAPEL HILL ACCEPTS NO RESPONSIBILITY FOR COSTS INVOLVED IN SUCH REDESIGN AND/OR RECONSTRUCTION.

ENGINEERING SIGNATURE:
DATE:

PROJECT: UNIVERSITY PLACE OFFSITE ROADWAY**PAVEMENT MARKING PLAN
ORANGE COUNTY****LOCATION: US 15-501 (FORDHAM BOULEVARD) AT SR 1750 (S. ESTES DRIVE)**

PROJECT NO.	SHEET NO.
21370	PMP - 1
APPROVED: <i>William J. Hamilton</i> <small>AS0500D704648484</small>	
DATE: 10/6/2022	
SEAL	
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ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

<u>STD. NO.</u>	<u>TITLE</u>
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTILANE ROADWAYS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY

INDEX

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
PMP - 1	PAVEMENT MARKING PLAN COVER SHEET AND PAVEMENT MARKING SCHEDULE
PMP - 2 - 6	PAVEMENT MARKING DETAILS

TOWN OF CHAPEL HILL
CONSTRUCTION PLAN APPROVAL

ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH THE TOWN OF CHAPEL HILL, ORANGE WATER AND SEWER AUTHORITY DIVISION, AND CODES, STANDARDS AND REQUIREMENTS. IN THE EVENT OF A CONFLICT BETWEEN STANDARDS, THE MORE STRINGENT SHALL GOVERN UNLESS A WAIVER IS ISSUED BY THE TOWN ENGINEER AND/OR AUTHORITY HAVING JURISDICTION (A.H.J.). UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING STREETS, SIDEWALKS, STORMWATER AND HANDICAP RAMPS, HAVE BEEN APPROVED BY THE TOWN OF CHAPEL HILL AND SHALL BE SO INSTALLED UNLESS A CHANGE IS AUTHORIZED BY PRIOR WRITTEN APPROVAL. PUBLIC WATER/SANITARY SEWER, STORMWATER AND UTILITY EASEMENTS SHALL BE RECORDED PRIOR TO FINAL ACCEPTANCE AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE TOWN.

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ENGINEERING SIGNATURE:
DATE:

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

- A) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
ALL ROADS	THERMOPLASTIC	RAISED

- B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.
- D) STOP BAR LOCATION AT NON-SIGNALIZED INTERSECTIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER.
- E) REFER TO APPROVED SIGNAL PLANS FOR STOP BAR LOCATIONS AT SIGNALIZED INTERSECTIONS.

**PAVEMENT
MARKING SCHEDULE**

<u>SYMBOL</u>	<u>DESCRIPTION</u>
THERMOPLASTIC(4", 90 MILS)	
T2	WHITE SOLID LANE LINE
T3	10 FT. WHITE SKIP
T4	3 FT.-9 FT./SP WHITE MINISKIP
T10	YELLOW EDGELINE
THERMOPLASTIC(8", 90 MILS)	
T42	YELLOW DIAGONAL
T46	WHITE CROSSWALK LINE
THERMOPLASTIC(24", 90 MILS)	
T61	WHITE STOPBAR
T62	WHITE CROSSWALK LINE
THERMOPLASTIC PAVEMENT MARKING SYMBOLS (90 MILS)	
T70	LEFT TURN ARROW
T71	RIGHT TURN ARROW
T72	STRAIGHT ARROW
T74	COMBO. RIGHT/STRAIGHT ARROW
T103	24" YIELD LINE TRIANGLE

PLANS PREPARED BY: Ramey Kemp Associates

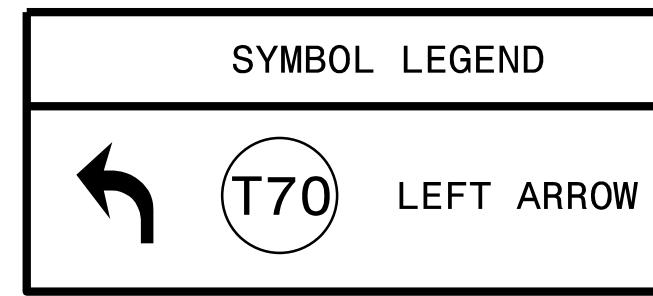
W. JASON HAMILTON, PE, PTOE PROJECT MANAGER
JOSHUA A. WENDT, E.I. PROJECT ENGINEER



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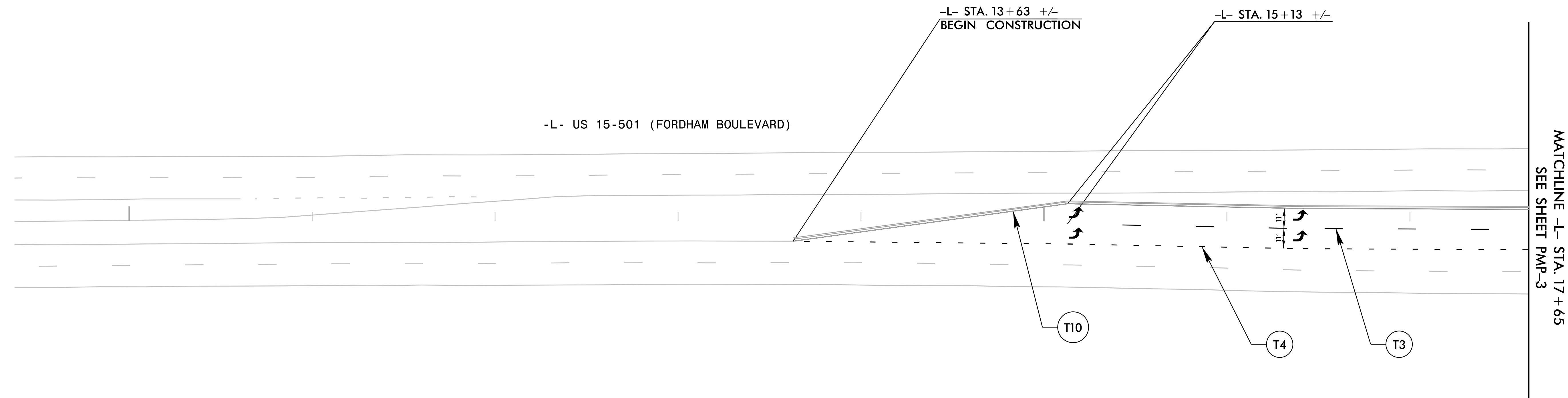
RKA
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PROJECT NO.	SHEET NO.
21370	PMP-2
Approved by:	
William J. Hamilton	
A05000704610484	
10/6/2022	
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NAD 83/2011

15+00



TOWN OF CHAPEL HILL
CONSTRUCTION PLAN APPROVAL

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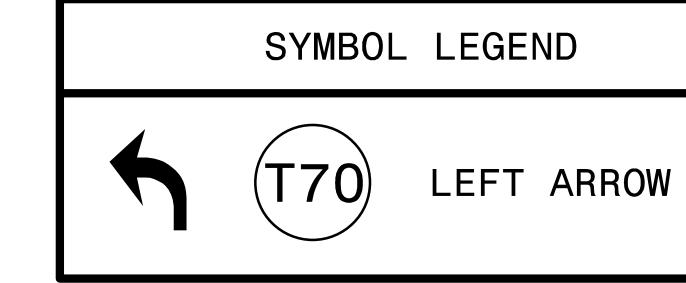
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PAVEMENT MARKING DETAIL

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PROJECT NO.	SHEET NO.
21370	PMP-3
Approved by: William J. Hamilton	
APPROVED: 10/6/2022	
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NAD 83/2011

MATCHLINE -L- STA. 17 + 65
SEE SHEET PMP-2

-L- US 15-501 (FORDHAM BOULEVARD)

MATCHLINE -L- STA. 24 + 00
SEE SHEET PMP-6

TOWN OF CHAPEL HILL
CONSTRUCTION PLAN APPROVAL

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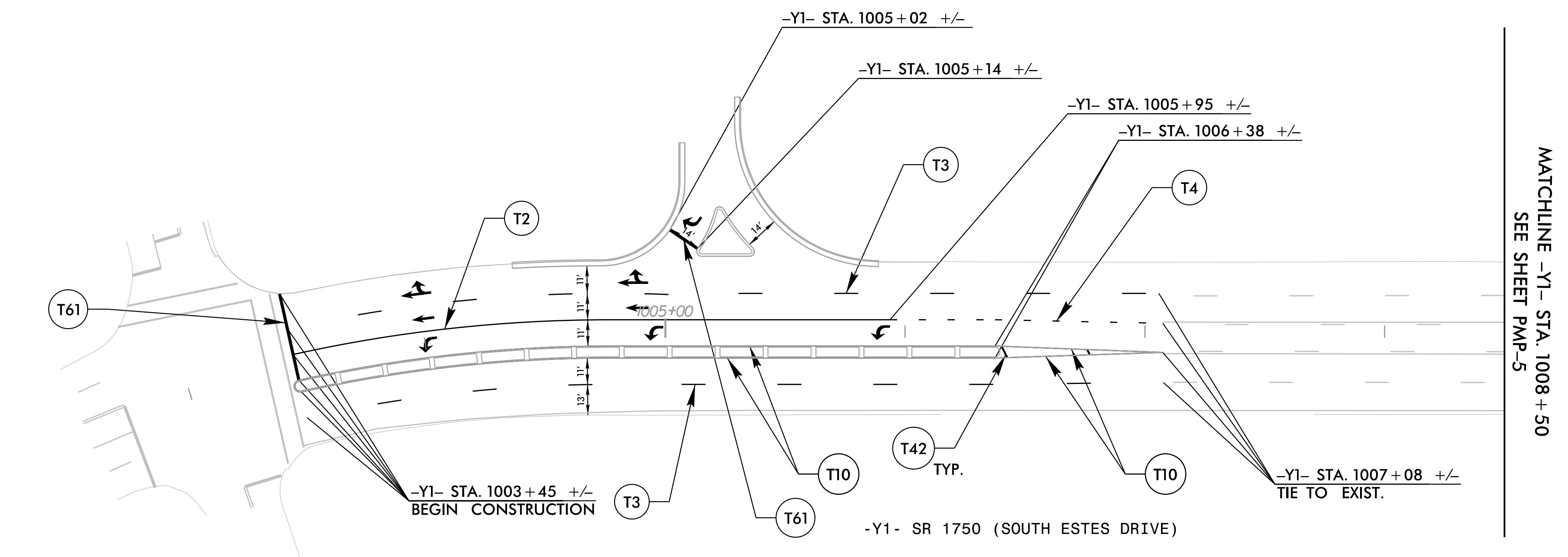
ENGINEERING SIGNATURE:
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PAVEMENT MARKING DETAIL

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PROJECT NO.	SHEET NO.
21370	PMP - 4
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William J. Hamilton	
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SYMBOL LEGEND	
	T70 LEFT ARROW
	T71 RIGHT ARROW
	T72 STRAIGHT ARROW
	T74 COMBO. RIGHT/STRAIGHT ARROW



TOWN OF CHAPEL HILL
CONSTRUCTION PLAN APPROVAL

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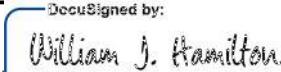
ENGINEERING SIGNATURE:
DATE:

10/6/2022 TC-pmp04.dgn
User: SMC/Carly

PAVEMENT MARKING DETAIL



RAMEY KEMP ASSOCIATES
5808 Faringdon Place
Raleigh, North Carolina 27609
Phone: 919-872-5115 NC License No. C-091
www.rameykemp.com

PROJECT NO.	SHEET NO.
21370	PMP - 5
DocuSigned by:	
APPROVED:	 William J. Hamilton A0560D704648484...
DATE:	10/6/2022
<p>SEAL</p>  <p>The seal is circular with a dotted border. The words "NORTH CAROLINA", "PROFESSIONAL", "SEAL", "32396", "ENGINEER", and "WILLIAM J. HAMILTON" are arranged in a circle around the center.</p>	
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>	



**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

SEE SHEET PMP-4

MATCHLINE -Y1- STA. 1008 + 50

-Y1- STA. 1010+31 +/-

-Y1- STA. 1009+99 +/-

-Y1- STA. 1009+90 +/-

-Y1- STA. 1010+41 +/-

-Y1- STA. 1010+52 +/-

-Y1- STA. 1010+88 +/-

-Y1- STA. 1011+04 +/-

-Y1- STA. 1012+55 +/-

-Y1- STA. 1013+55 +/-

T61

T2

T2

T4

T103

T46

T62

10'

100+00

12'

- Y1 - SR 1750 (SOUTH ESTES DRIVE)

REMOVE ANY EXISTING
PAVEMENT MARKINGS
THAT CONFLICT WITH
PROPOSED CROSSWALK

SEE SHEET PMP-6
WATERLINE - 11-31A.1014+65

WATCHING VI STYLES

**TOWN OF CHAPEL HILL
CONSTRUCTION PLAN APPROVAL**

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ENGINEERING SIGNATURE:

DATE:

PAVEMENT MARKING DETAIL



5808 Faringdon Place
Raleigh, North Carolina 27609
Phone: 919-872-5115

NC License No. C-0910
www.rameykemp.com

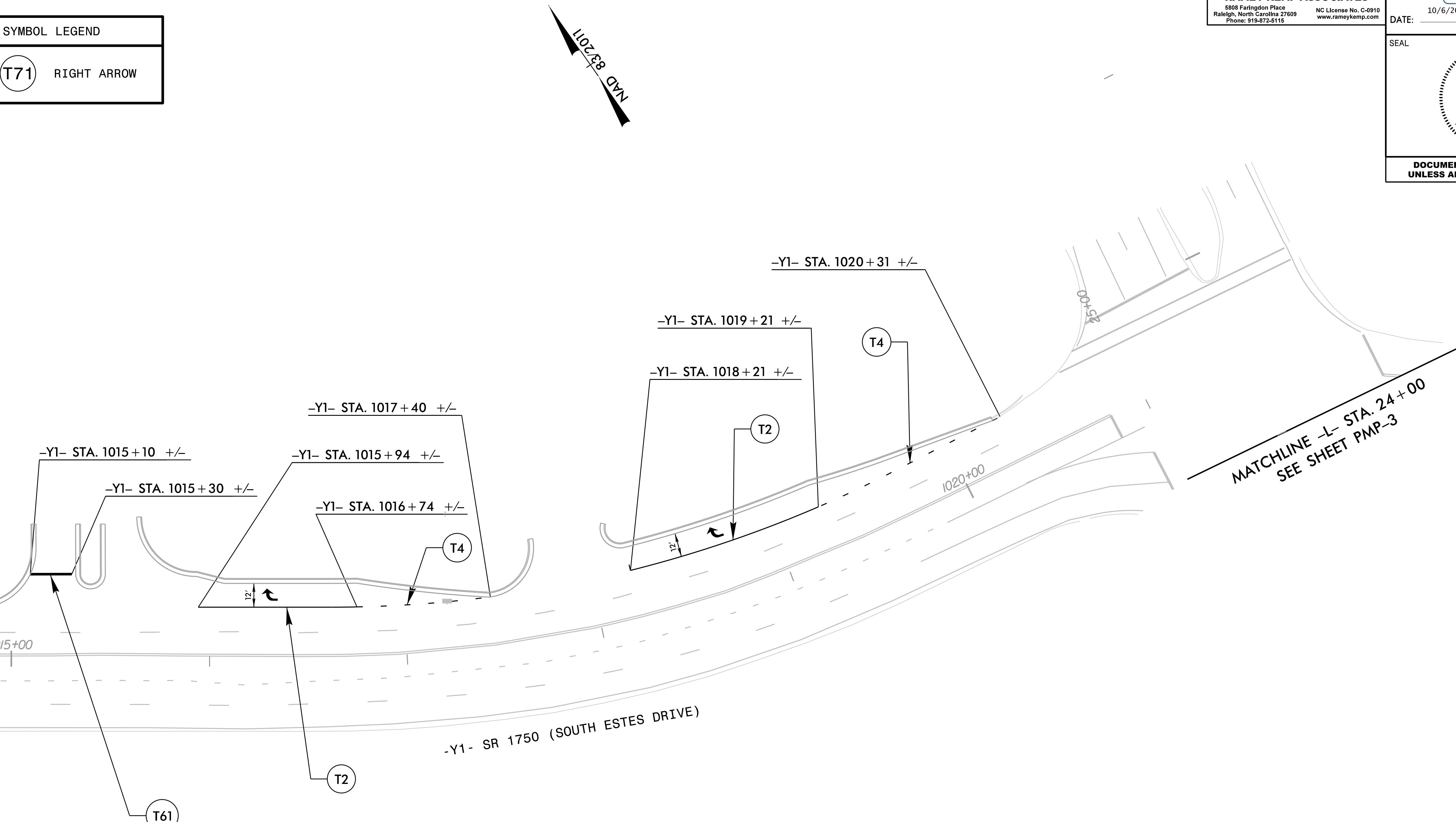
PROJECT NO.	SHEET NO.
21370	PMP - 6
DocuSigned by: 	
APPROVED:	_____
	A0560D704648434...
10/6/2022	
DATE:	



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UNLESS ALL SIGNATURES COMPLETED**

SYMBOL LEGEND

SEE SHEET PMP-5



TOWN OF CHAPEL CONSTRUCTION PLAN

CONSTRUCTION PLAN APPROVAL

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ENGINEERING SIGNATURE
DATE

PAVEMENT MARKING DETAIL

PROJECT: UNIVERSITY PLACE OFFSITE ROADWAY**SIGNING PLAN
ORANGE COUNTY****LOCATION: US 15-501 (FORDHAM BOULEVARD) AT SR 1750 (S. ESTES DRIVE)**

PROJECT NO.	SHEET NO.
21370	SIGN-1
Approved by: <i>William J. Hamilton</i> A0560D704646484	
DATE: 10/6/2022	
SEAL	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

GENERAL NOTES

- . SIGNS FURNISHED BY CONTRACTOR
- . IF REMOVAL OR RELOCATION OF SIGNS ON PRIVATE STREET (NON-STATE MAINTAINED) IS REQUIRED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL INFORM THE ENGINEER. THE WORK WILL BE COMPLETED BY OTHERS.
- . WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER
- . ALL EXISTING SIGNS ON "U" CHANNEL POST WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED ON PLANS.
- . WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERCTION SHALL IMMEDIATELY FOLLOW THE REMOVAL.
- . THE BACKGROUND FOR TYPE E & F SIGNS SHALL BE TYPE C REFLECTIVE SHEETING.

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
903.10	GROUND MOUNTED SIGN SUPPORTS
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.50	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS

PROJECT NOTES

1. RETAIN SIGN ASSEMBLY, TYPE E
2. RELOCATE SIGN ASSEMBLY, TYPE E
3. DISPOSE SIGN ASSEMBLY, TYPE E

INDEX

SHEET NO.	DESCRIPTION
SIGN-1	SIGNING PLAN COVER SHEET
SIGN-2	TYPE "E" SIGNS
SIGN-3-7	SIGNING DETAILS

PLANS PREPARED BY: Ramey Kemp Associates

W. JASON HAMILTON, PE, PTOE PROJECT MANAGER
JOSHUA A. WENDT, E.I. PROJECT ENGINEER

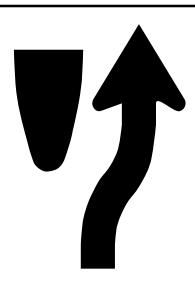
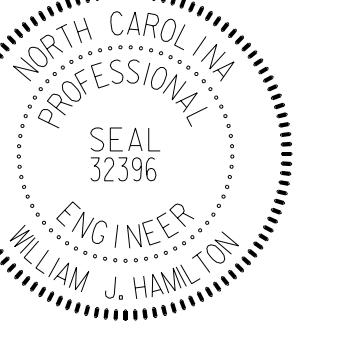
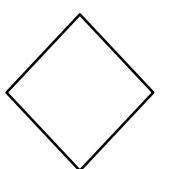
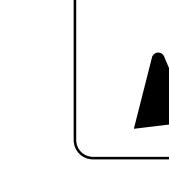
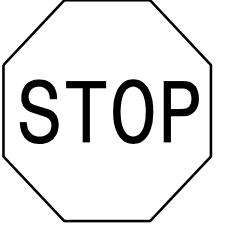
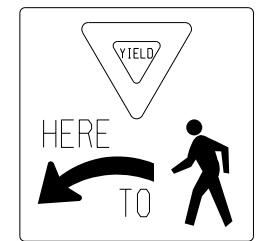
RKA
RAMEY KEMP ASSOCIATES
8808 Farnington Place
Raleigh, North Carolina 27609
Phone: 919-872-5115
NC License No. C-0910
www.rameykemp.com

TOWN OF CHAPEL HILL
CONSTRUCTION PLAN APPROVAL

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ENGINEERING SIGNATURE:
DATE:

<p>④01 QUANTITY REQ'D <u>4</u></p>  <p>24" X 30" R4-7</p> <p>ONE "U" POST PER SIGN</p>	<p>④06 QUANTITY REQ'D <u>2</u></p>  <p>36" X 36" W11-2</p> <p>ONE "U" POST PER SIGN</p>			<p>RKA RAMEY KEMP ASSOCIATES 5808 Faringdon Place Raleigh, North Carolina 27609 Phone: 919-872-5115 NC License No. C-0910 A05000704610494 10/6/2022 Approved by: <u>William J. Hamilton</u> Date: <u>10/6/2022</u></p> <p>SEAL</p>  <p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>
<p>④02 QUANTITY REQ'D <u>4</u></p>  <p>18" X 18" 0M1-3</p> <p>MOUNT BELOW SIGN 401 IN 4 INSTALLATIONS</p>	<p>④07 QUANTITY REQ'D <u>2</u></p>  <p>24" X 12" W16-7</p> <p>MOUNTED BELOW SIGN 406 IN 2 INSTALLATIONS</p>			
<p>④03 QUANTITY REQ'D <u>2</u></p>  <p>54" X 18" R6-1 (R)</p> <p>MOUNT ABOVE SIGN 404 IN 1 INSTALLATION</p>				
<p>④04 QUANTITY REQ'D <u>3</u></p>  <p>30" X 30" R1-1</p> <p>ONE "U" POST PER SIGN</p>				
<p>④05 QUANTITY REQ'D <u>2</u></p>  <p>18" X 18" R1-5L</p> <p>ONE "U" POST PER SIGN</p>			<p>TOWN OF CHAPEL HILL CONSTRUCTION PLAN APPROVAL</p> <p>ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH THE TOWN OF CHAPEL HILL, ORANGE WATER AND SEWER AUTHORITY (OWSA) AND LOCAL CODES AND SPECIFICATIONS. IN THE EVENT OF A CONFLICT BETWEEN STANDARDS, THE MORE STRINGENT SHALL GOVERN UNLESS A WAIVER IS ISSUED BY THE TOWN ENGINEER AND/OR AUTHORITY HAVING JURISDICTION (AHJ). UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING STREETS, SIDEWALKS, STORMWATER AND HANDICAP RAMPS, HAVE BEEN APPROVED BY THE TOWN OF CHAPEL HILL AND SHALL BE SO INSTALLED UNLESS A CHANGE IS AUTHORIZED BY PRIOR WRITTEN APPROVAL. PUBLIC WATER/SANITARY SEWER, STORMWATER AND UTILITY EASEMENTS SHALL BE RECORDED PRIOR TO FINAL ACCEPTANCE AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE TOWN.</p> <p>THE TOWN OF CHAPEL HILL MAY REQUIRE REDESIGN AND/OR RECONSTRUCTION OF WORK SHOWN ON THE APPROVED PLANS, SUBSEQUENT TO SUCH APPROVAL, IF IT BECOMES EVIDENT THAT THE DESIGN IS INADEQUATE TO MEET THE ACTUAL FIELD CONDITIONS AND/OR IS BASED ON INCOMPLETE, INSUFFICIENT, INACCURATE OR MISLEADING DATA PORTRAYED ON THE APPROVED PLANS. THE TOWN OF CHAPEL HILL ACCEPTS NO RESPONSIBILITY FOR COSTS INVOLVED IN SUCH REDESIGN AND/OR RECONSTRUCTION.</p> <p>ENGINEERING SIGNATURE: DATE:</p>	<p>TYPE "E" SIGNS</p>

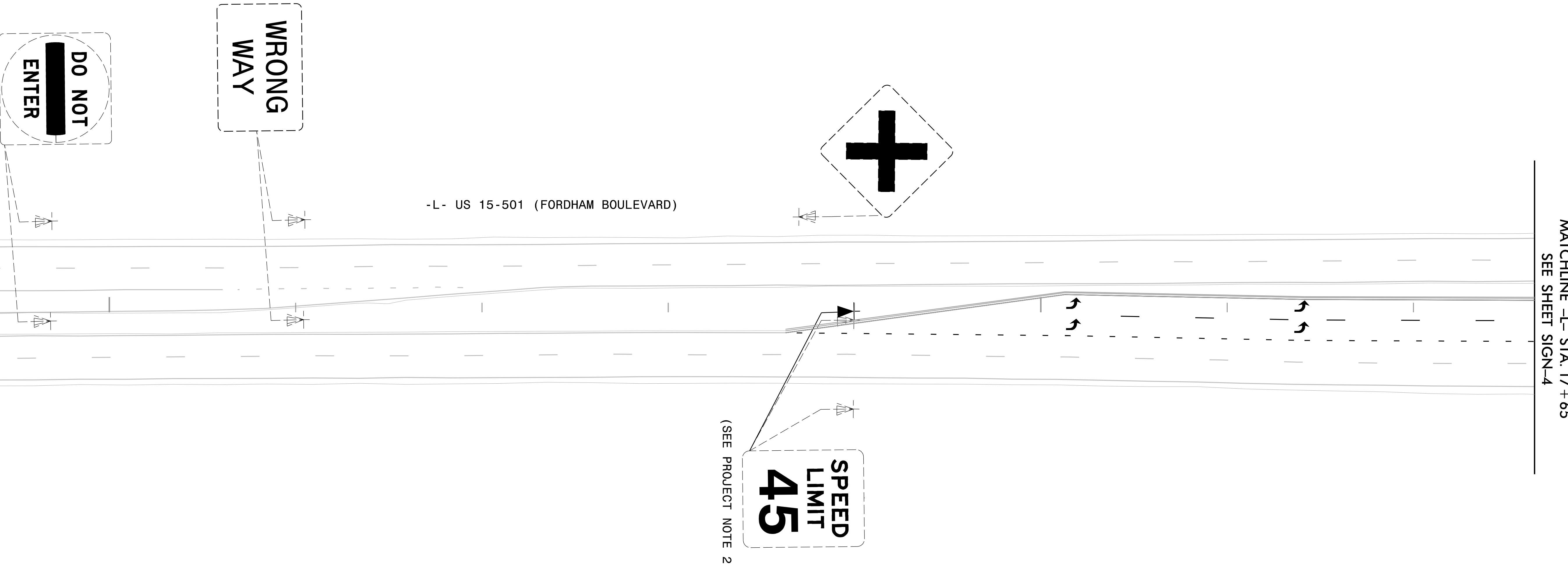


PROJECT NO.	SHEET NO.
21370	SIGN-3
Approved by:	
William J. Hamilton	
A05000704610484	
10/6/2022	
DATE:	
SEAL	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

SEE PROJECT NOTE 1 FOR ALL
EXISTING SIGN SYSTEMS THIS
SHEET UNLESS OTHERWISE NOTED

NAD 83/2011

15+00



MATCHLINE -L- STA. 17+65
SEE SHEET SIGN-4

TOWN OF CHAPEL HILL
CONSTRUCTION PLAN APPROVAL

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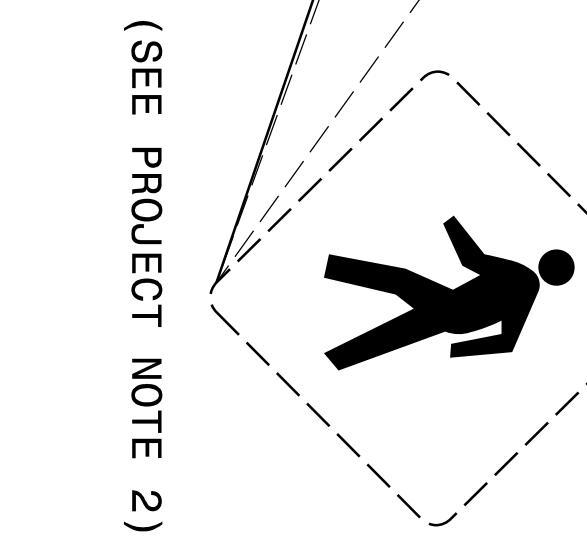
RKA
RAMEY KEMP ASSOCIATES
5808 Faringdon Place
Raleigh, North Carolina 27609
Phone: 919-872-5115

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Approved by:	
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NAD 83/2011

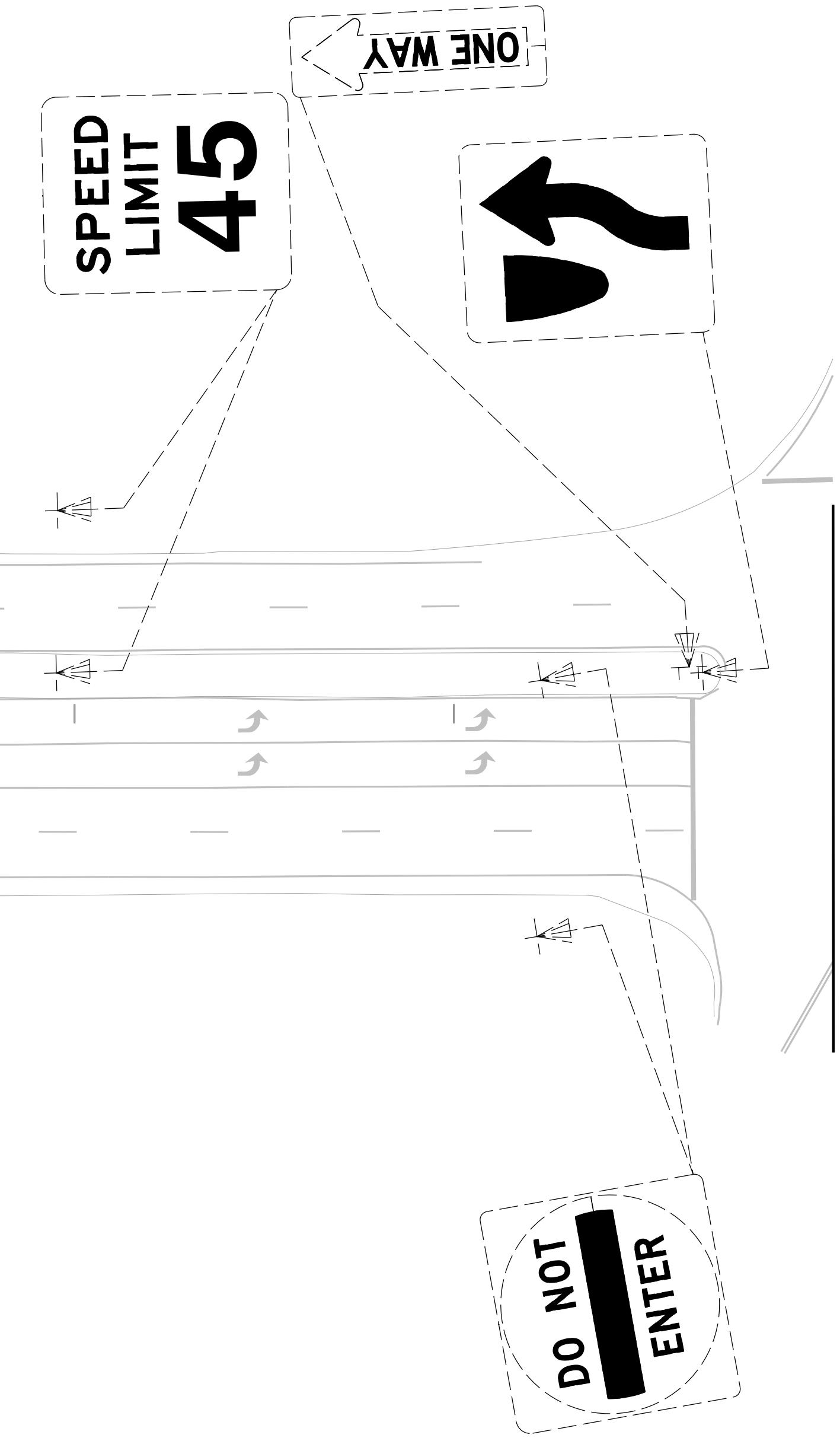
SEE PROJECT NOTE 1 FOR ALL
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SHEET UNLESS OTHERWISE NOTED

MATCHLINE -L- STA. 17+65
SEE SHEET SIGN-3



-L- US 15-501 (FORDHAM BOULEVARD)

WRONG WAY



TOWN OF CHAPEL HILL
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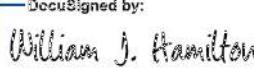
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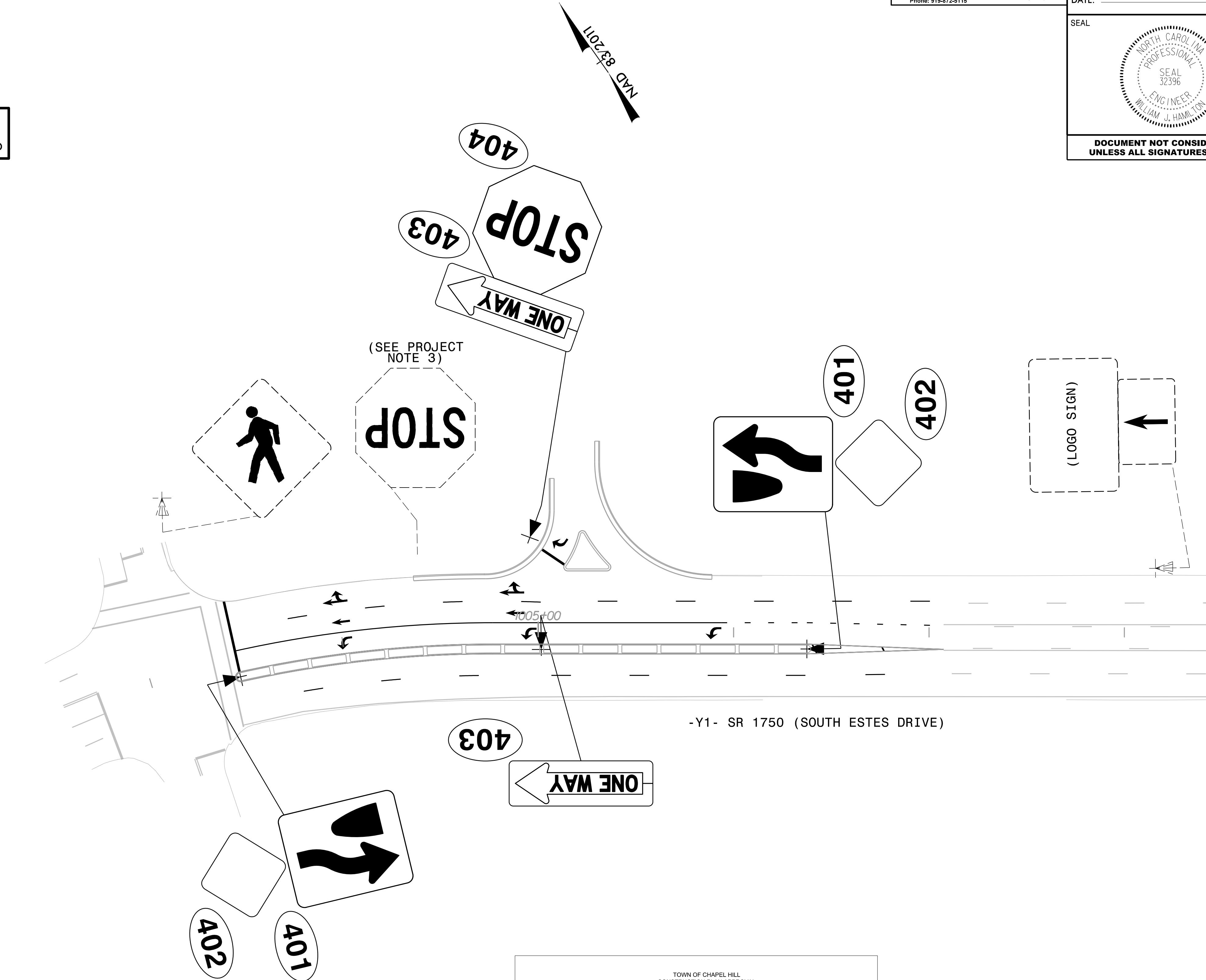


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PROJECT NO.	SHEET NO.
21370	SIGN-5
<p>DecuSigned by:  A0560D704648484...</p>	
ROVED:	10/6/2022
E:	
	
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>	

MATCHLINE -Y1- STA. 1008 + 50
SEE SHEET SIGN-6

SEE PROJECT NOTE 1 FOR ALL
EXISTING SIGN SYSTEMS THIS
SHEET UNLESS OTHERWISE NO



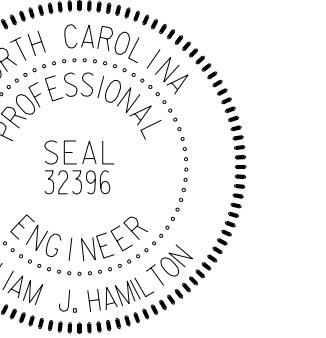
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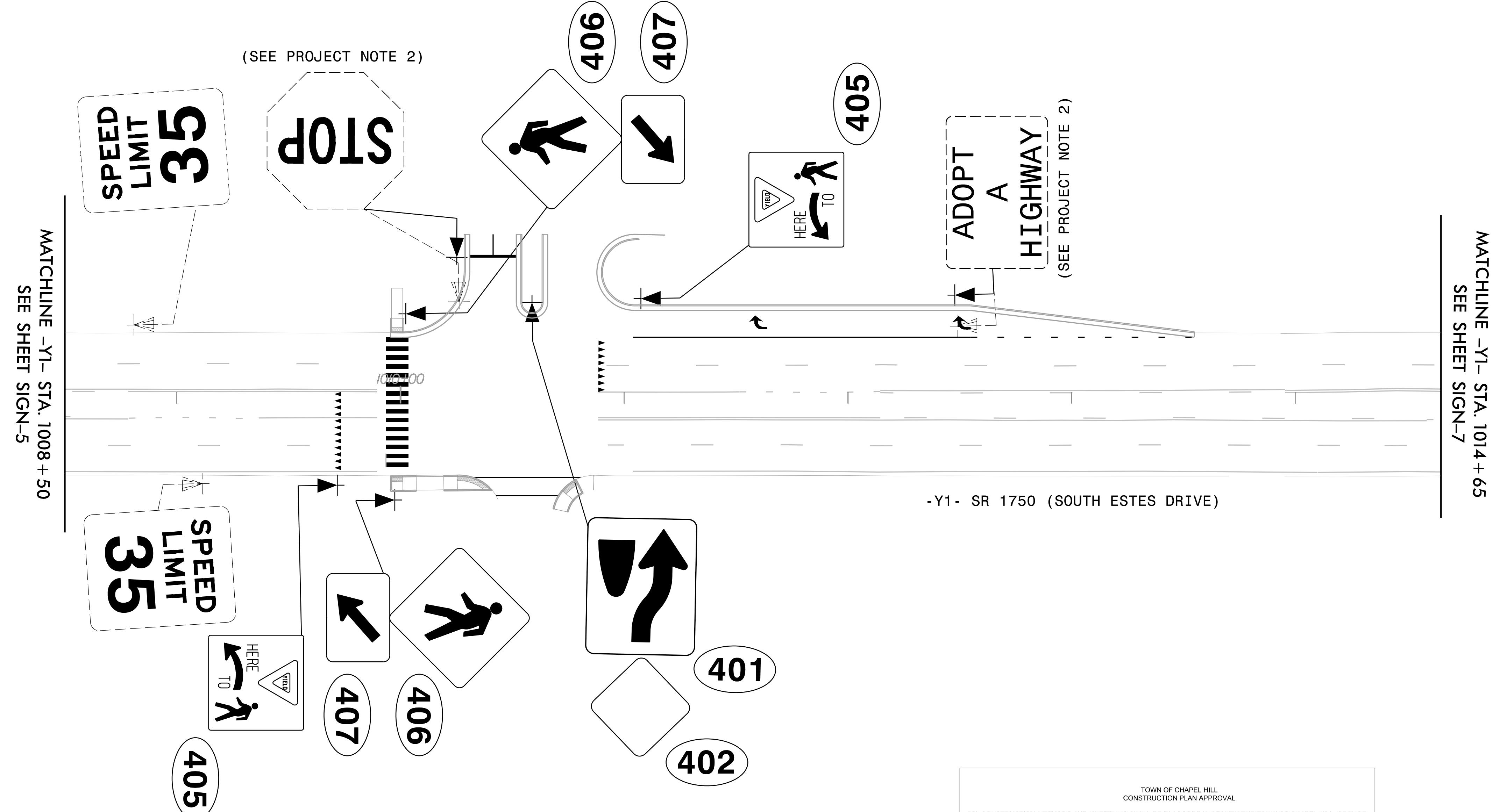
ENGINEERING SIGNAT

SIGNING DETAIL

PROJECT NO.	SHEET NO.
21370	SIGN-6
Approved by: William J. Hamilton	
APPROVED: A05000704610494 10/6/2022	
DATE:	
SEAL	
	
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NMD 8/2021

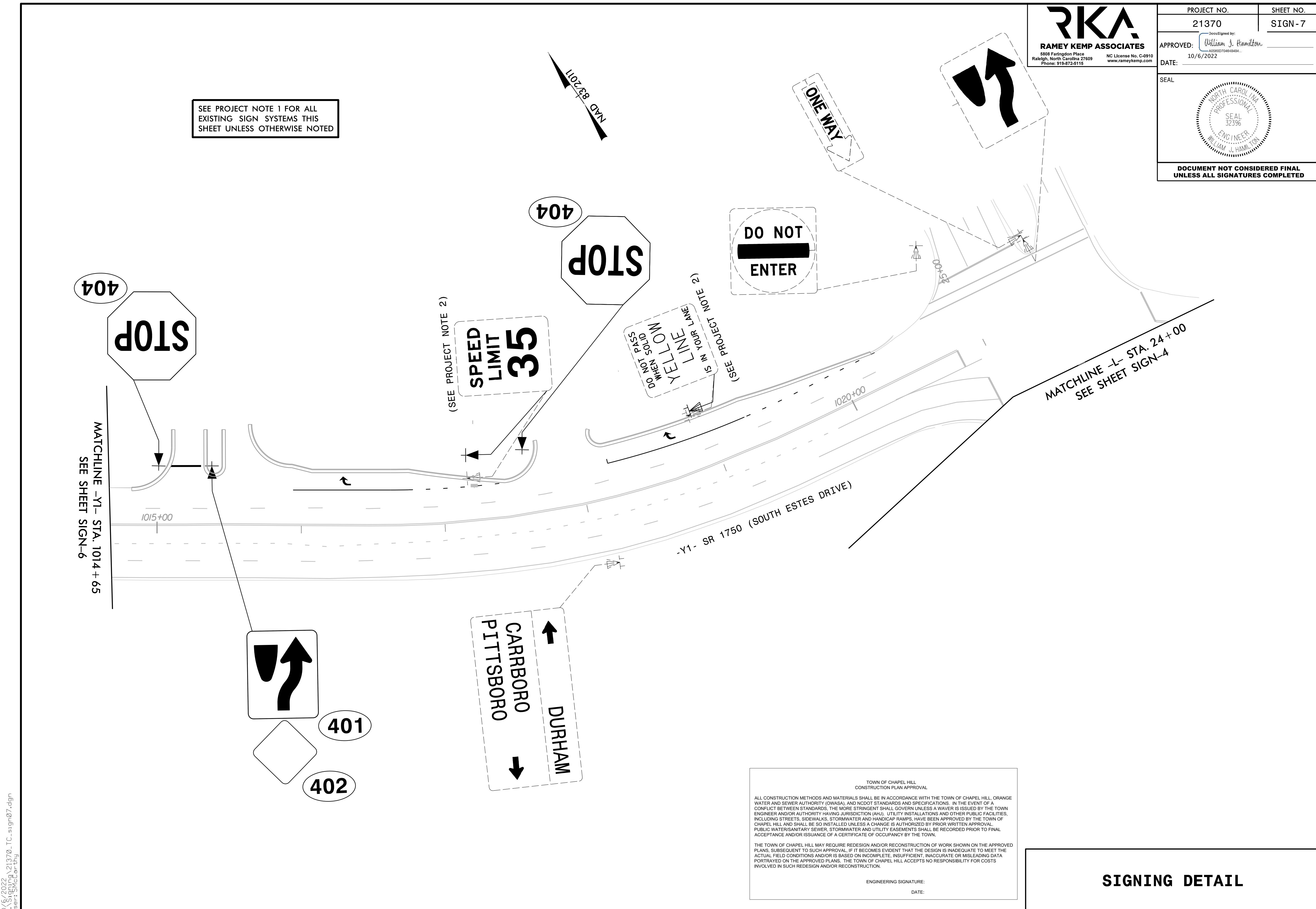


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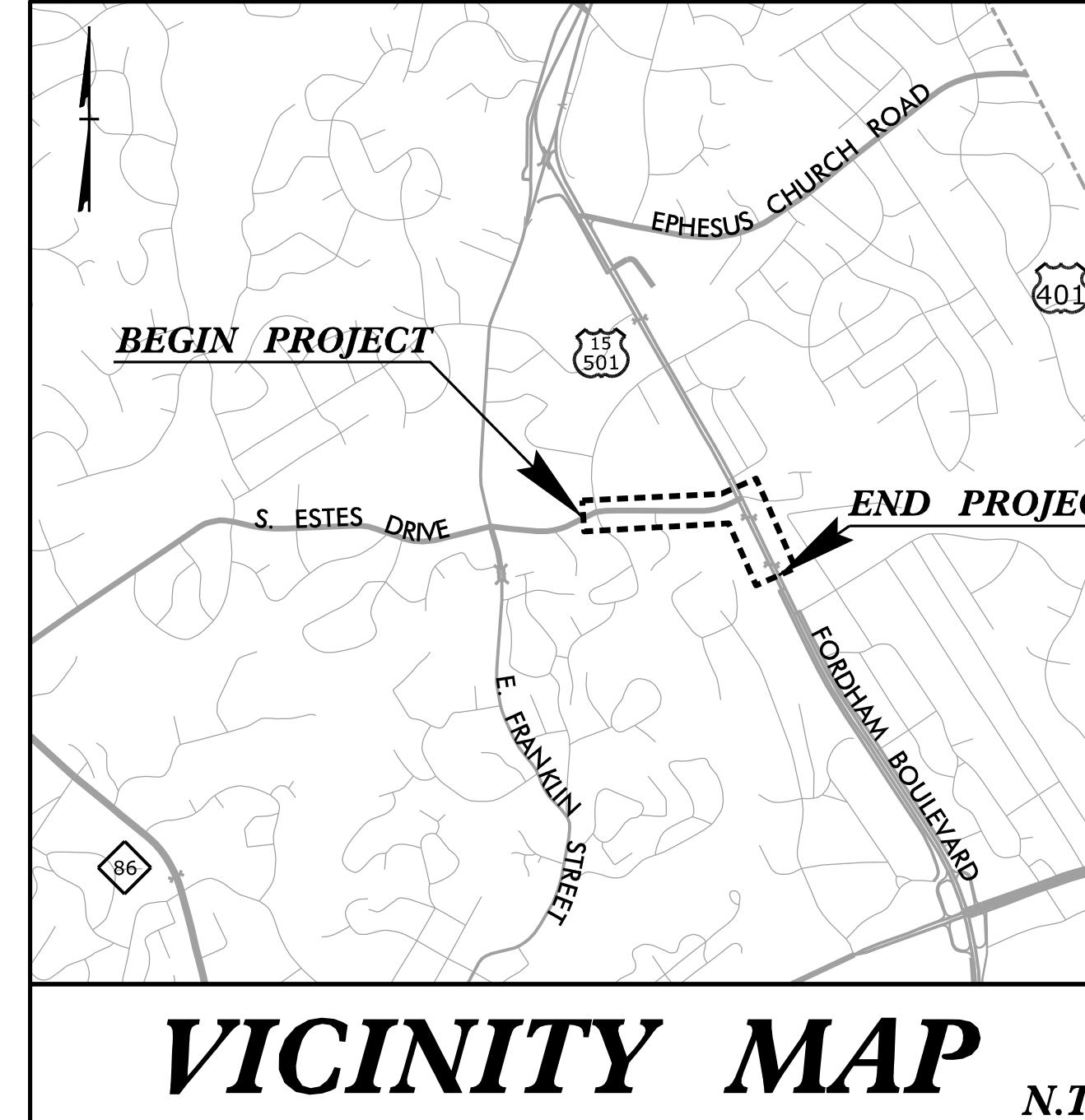
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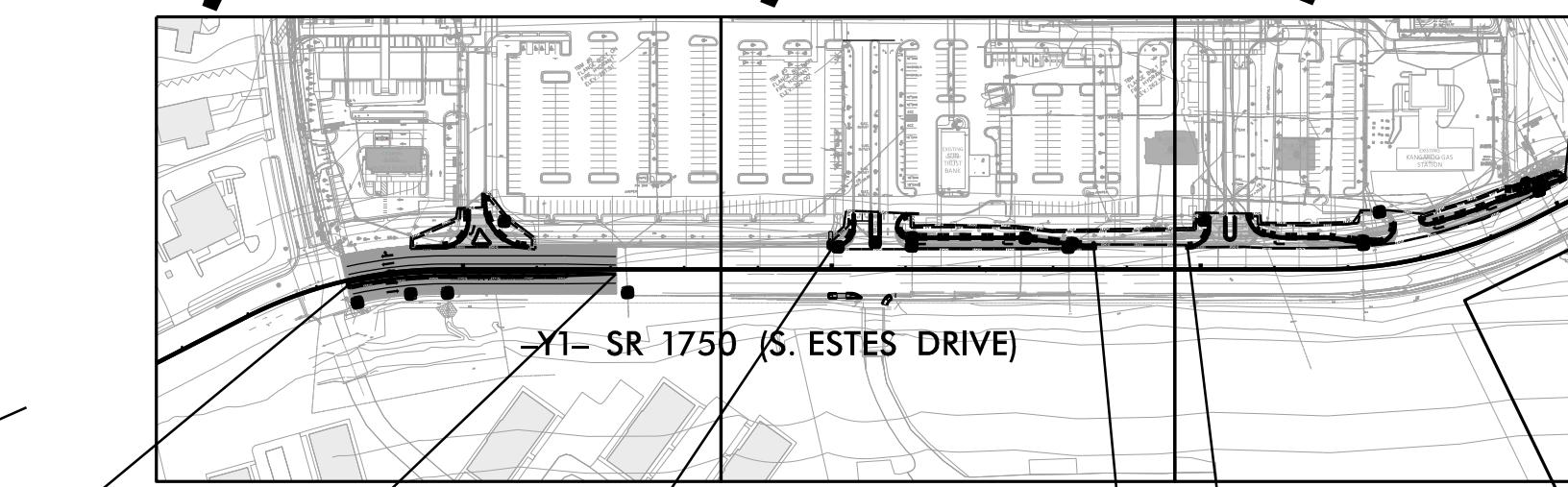
PROJECT: UNIVERSITY PLACE OFFSITE ROADWAY

09/08/99

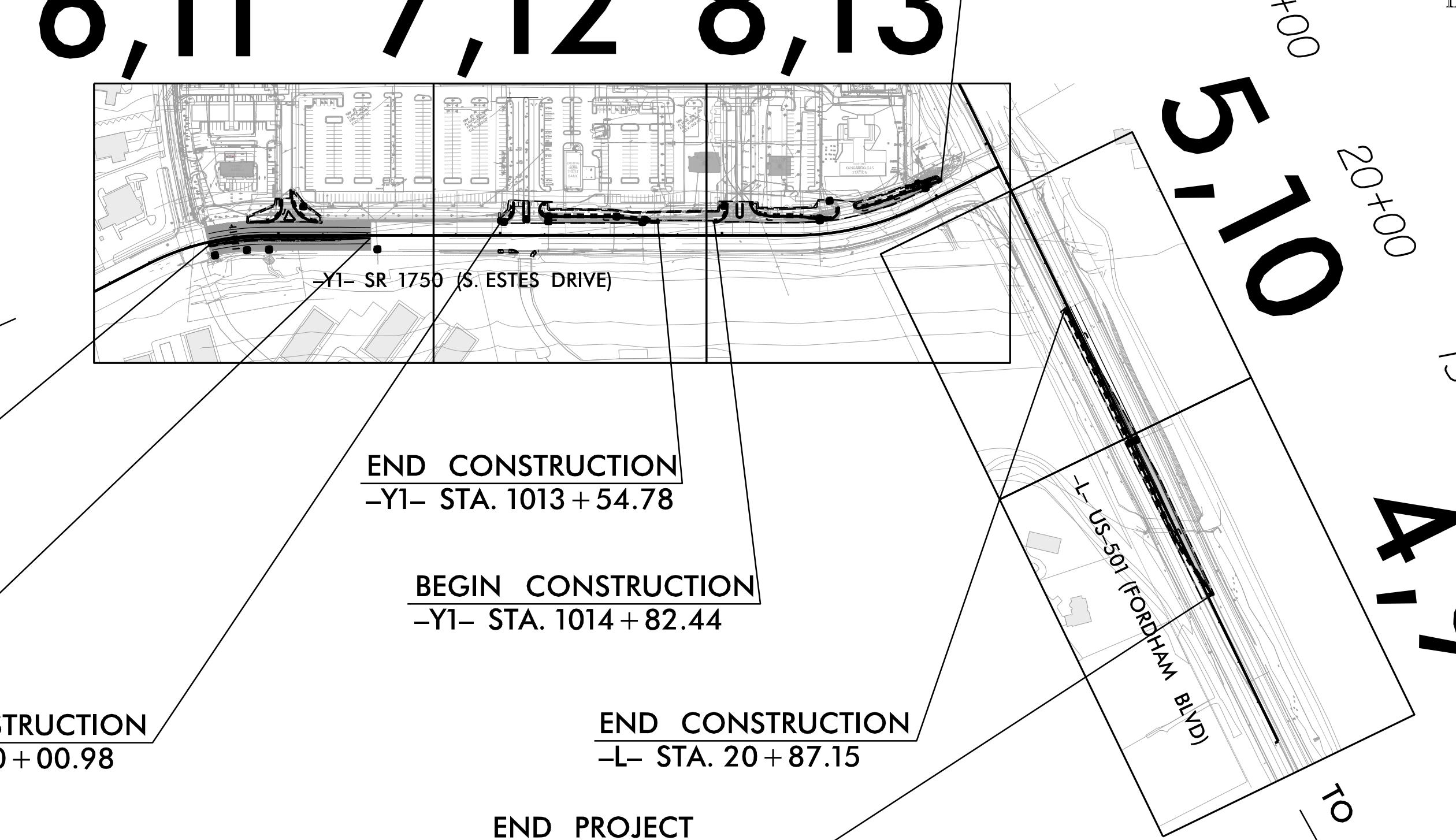
**ORANGE COUNTY****LOCATION: US 15-501 (FORDHAM BOULEVARD) AT SR 1750 (S. ESTES DRIVE)****TYPE OF WORK: EROSION CONTROL**

10/0+00 10/5+00

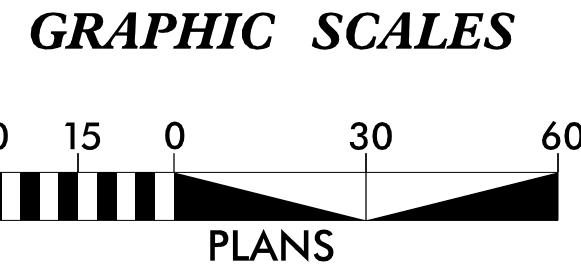
6,11 7,12 8,13

END CONSTRUCTION
-Y1- STA. 1020 + 26.23

TO CARRBORO

BEGIN PROJECT
BEGIN CONSTRUCTION
-Y1- STA. 1003 + 42.81END CONSTRUCTION
-Y1- STA. 1007 + 07.48BEGIN CONSTRUCTION
-Y1- STA. 1010 + 00.98END CONSTRUCTION
-Y1- STA. 1013 + 54.78BEGIN CONSTRUCTION
-Y1- STA. 1014 + 82.44END CONSTRUCTION
-L- STA. 20 + 87.15END PROJECT
BEGIN CONSTRUCTION
-L- STA. 13 + 62.93**BEFORE YOU DIG:**
1-800-632-4949

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II



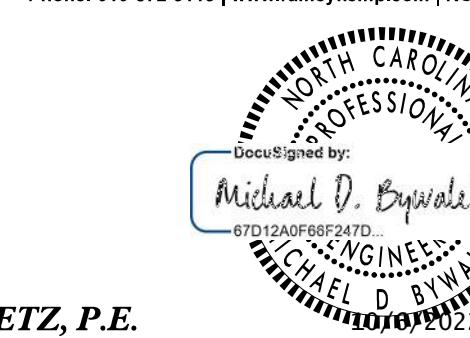
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY
WITH THE REGULATIONS SET FORTH BY THE
NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011
ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND
NATURAL RESOURCES DIVISION OF WATER QUALITY.

Prepared in the Office of:

RKA
RAMEY KEMP ASSOCIATES
5808 Faringdon Place Raleigh, North Carolina 27605
Phone: 919-872-5115 | www.rameykemp.com | NC License No. C-0910

Designed by:
SEAN V. McCARTHY
Reviewed by:
MICHAEL D. BYWALETZ, P.E.
NAME: MICHAEL D. BYWALETZ, P.E.
DATE: 10/06/2022

3876
LEVEL III CERTIFICATION NO.DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**EROSION AND SEDIMENT CONTROL MEASURES**

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	III III III
1606.01	Special Sediment Control Fence	Wavy line
1607.01	Gravel Construction Entrance	Gravel pile
1632.03	Rock Inlet Sediment Trap Type-C	Rock pile
SP.	Tree Protection Fence	TPF
SP.	Coir Fiber Wattle	CFW
SP.	Concrete Washout	CFW
	Limits of Disturbance	LOD



RECEIVING WATERS:
HAW RIVER (JORDAN LAKE)
CLASS: WS-V;NSW

CAPE FEAR RIVER BASIN

DISTURBED AREA = 1.15 AC.

**THIS PROJECT HAS
BEEN DESIGNED TO
SENSITIVE WATERSHED
STANDARDS.**

**ENVIRONMENTALLY
SENSITIVE AREA(S) EXIST
ON THIS PROJECT**

Refer To E.C. Special Provisions
for Special Considerations.

TOWN OF CHAPEL HILL
CONSTRUCTION PLAN APPROVAL
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ENGINEERING SIGNATURE:
DATE:

REVISIONS	

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes

Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
<ul style="list-style-type: none"> Temporary grass seed covered with straw or other mulches and tackifiers Hydroseeding Rolled erosion control products with or without temporary grass seed Appropriately applied straw or other mulch Plastic sheeting 	<ul style="list-style-type: none"> Permanent grass seed covered with straw or other mulches and tackifiers Geotextile fabrics such as permanent soil reinforcement matting Hydroseeding Shrubs or other permanent plantings covered with mulch Uniform and evenly distributed ground cover sufficient to restrain erosion Structural methods such as concrete, asphalt or retaining walls Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated Stormwater before discharging offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

- Maintain vehicles and equipment to prevent discharge of fluids.
- Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

- Never bury or burn waste. Place litter and debris in approved waste containers.
- Provide a sufficient number and size of waste containers (e.g. dumpster, trash receptacle) on site to contain construction and domestic wastes.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
- Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds.
- Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
- Dispose waste off-site at an approved disposal facility.
- On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, sized and placed appropriately for the needs of site.
- Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
- Provide stable stone access point when feasible.
- Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

HAZARDOUS AND TOXIC WASTE

- Create designated hazardous waste collection areas on-site.
- Place hazardous waste containers under cover or in secondary containment.
- Do not store hazardous chemicals, drums or bagged materials directly on the ground.

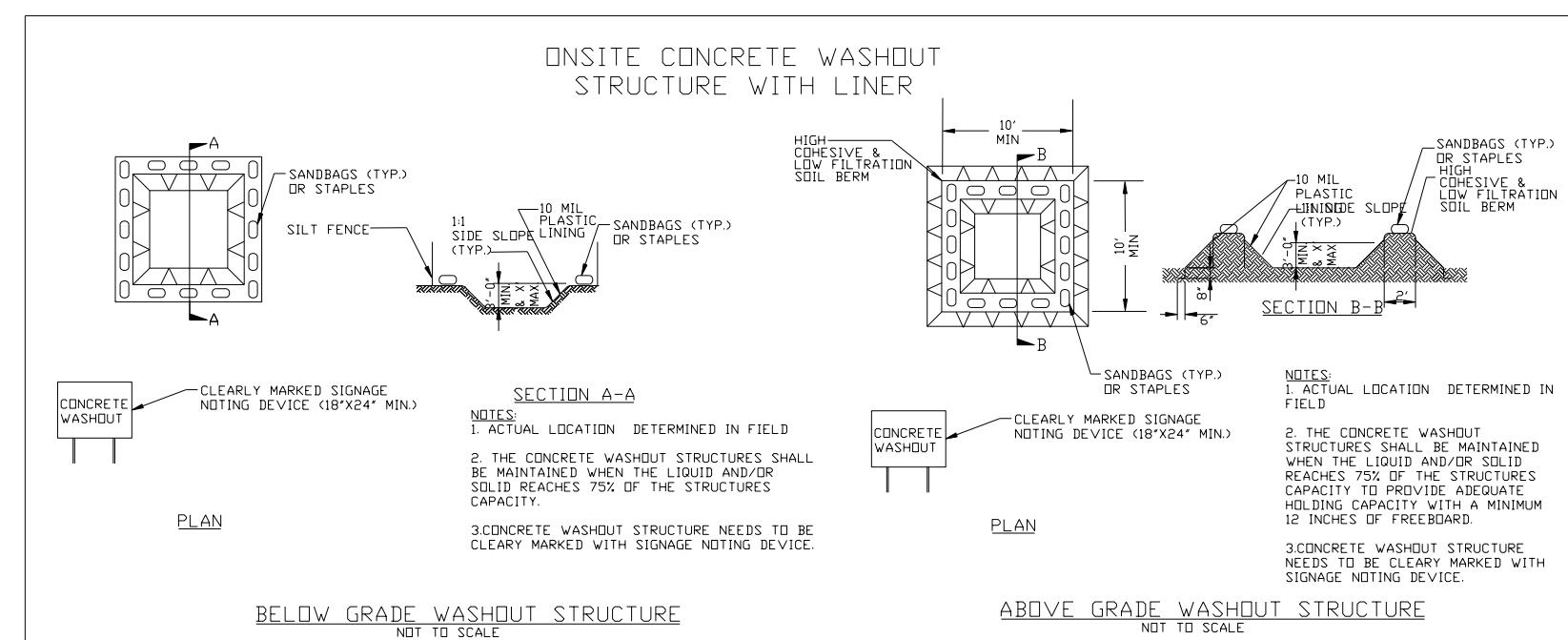


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21370	EC-2A
RW SHEET NO.	
MICHAEL D. BYWALETZ, P.E.	
LEVEL III NAME	
Michael D. Bywaletz MICHAEL D. BYWALETZ ENGINEER LEVEL III CERTIFICATION NO.	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

HERBICIDES, PESTICIDES AND RODENTICIDES

- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
- Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
- Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
- Do not stockpile these materials onsite.



CONCRETE WASHOUTS

- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
- Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
- Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
- Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
- Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
- Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
- Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
- At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

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ENGINEERING SIGNATURE:
DATE:

8/17/99

REVISIONS	
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PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those unattended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

- (a) This General Permit as well as the Certificate of Coverage, after it is received.
- (b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather).

Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

- (a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
- (b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,
- (c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,
- (d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,
- (e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- (f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.



RAMEY KEMP ASSOCIATES

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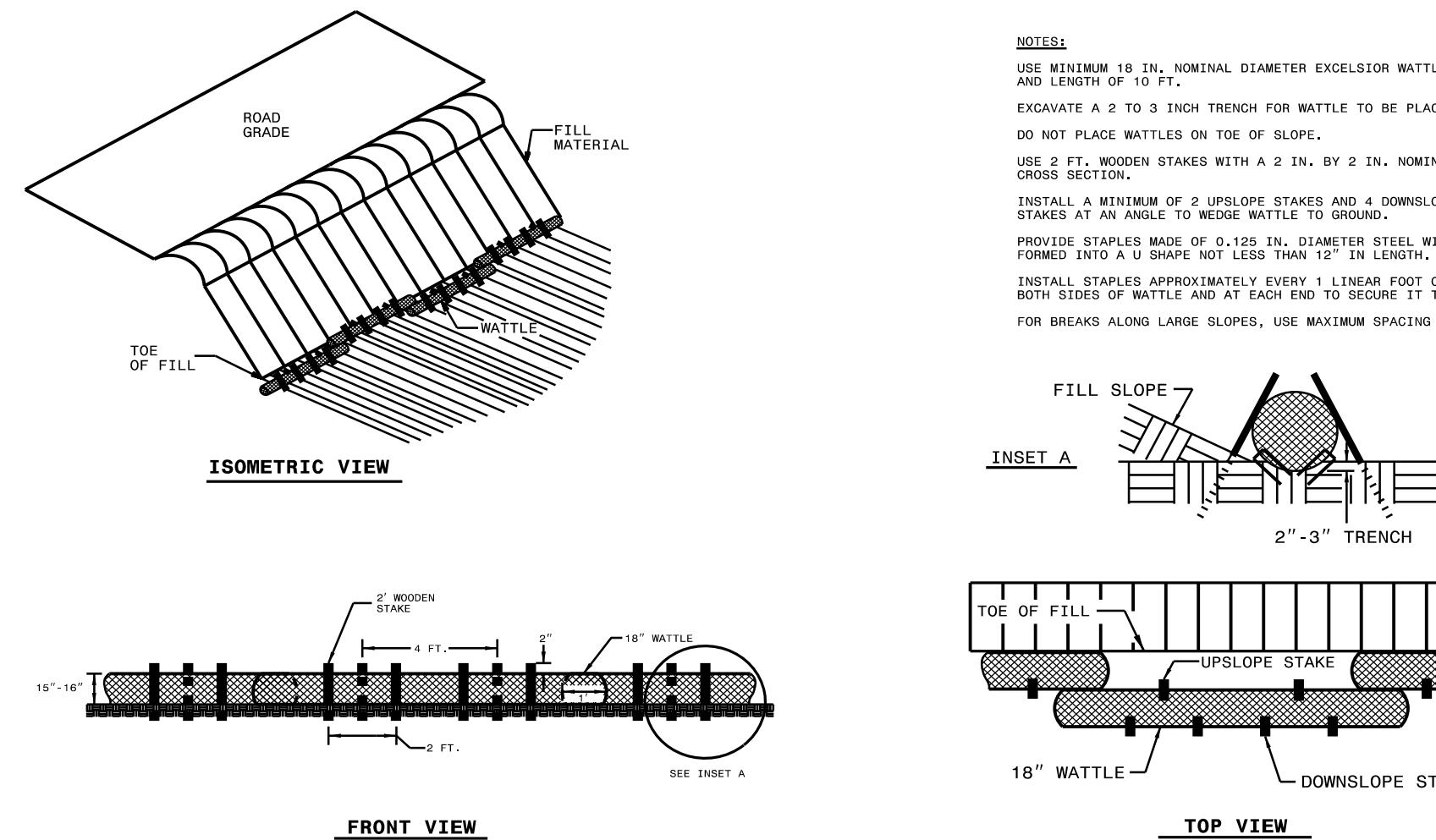
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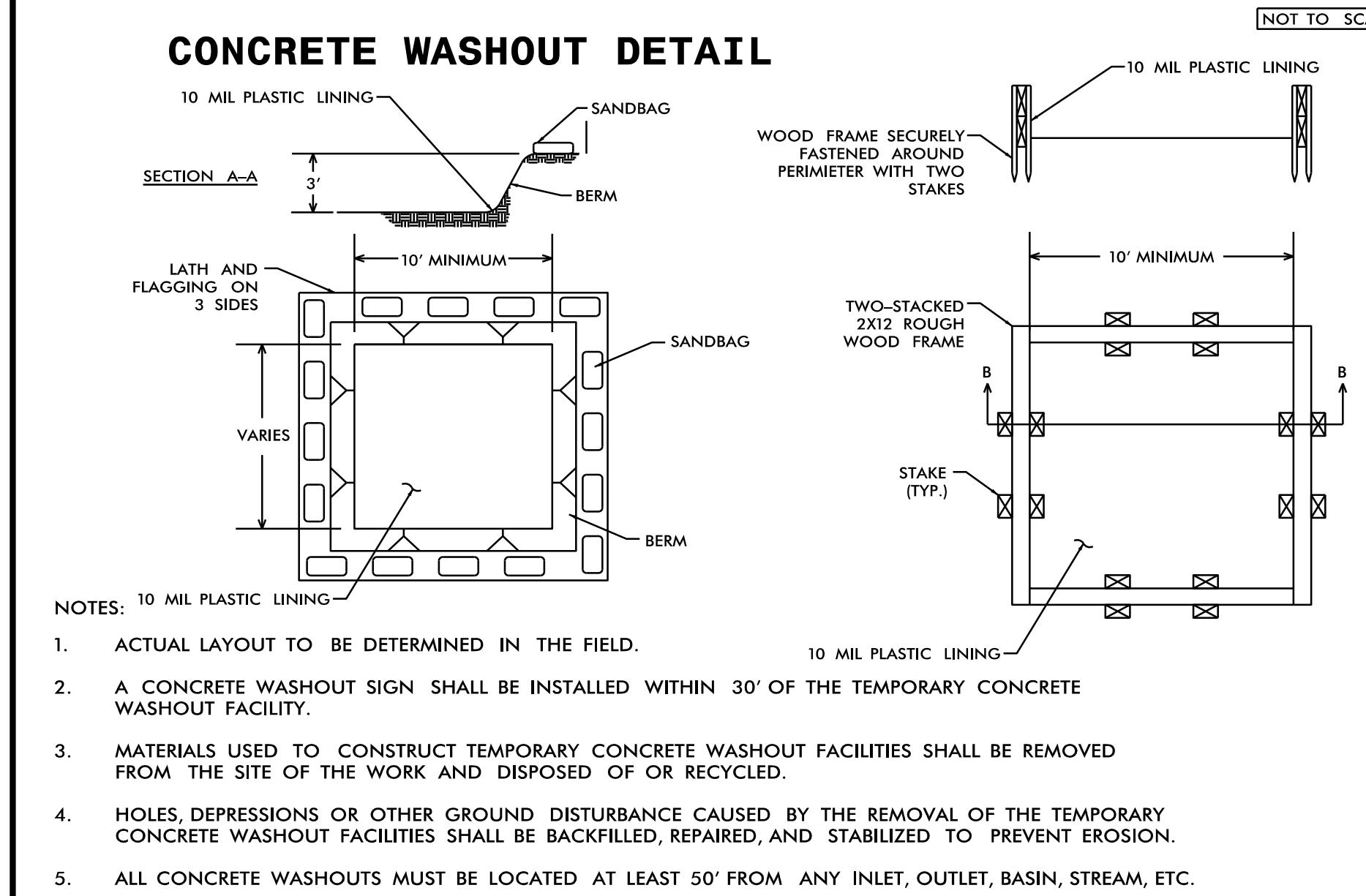
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ENGINEERING SIGNATURE: DATE:

8/17/99

WATTLE BARRIER DETAIL



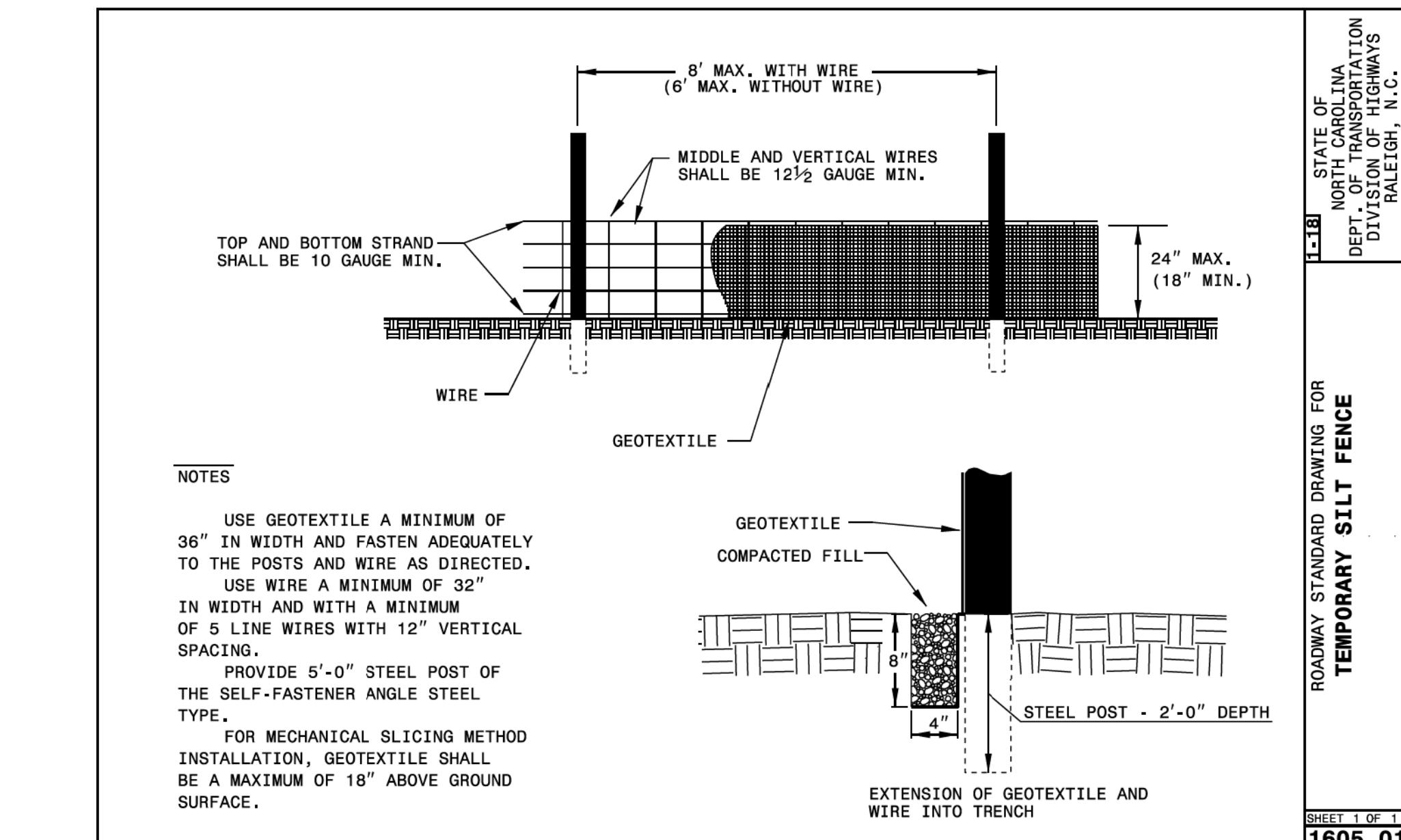
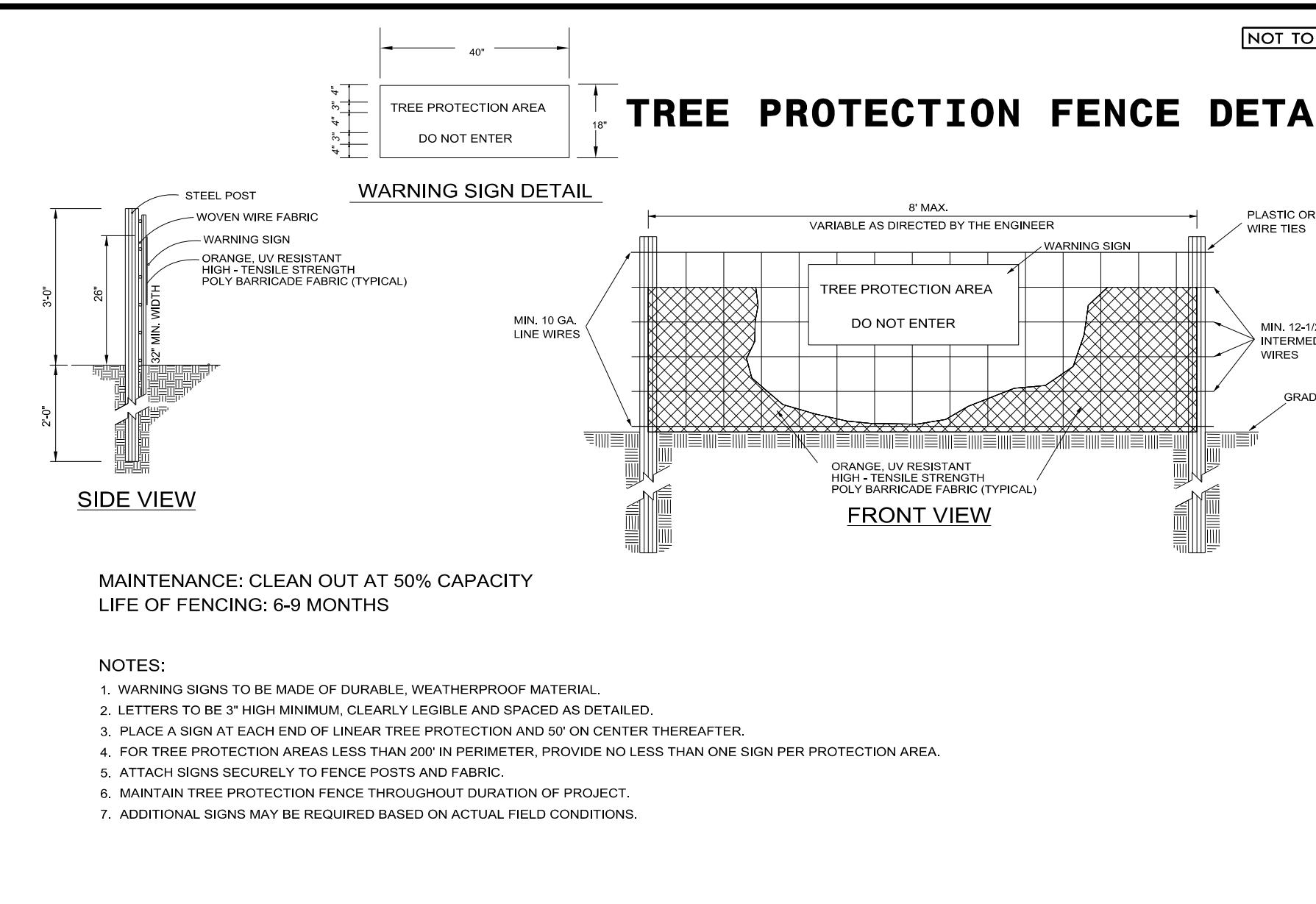
CONCRETE WASHOUT DETAIL



RKA
RAMEY KEMP ASSOCIATES
6808 Faringdon Place
Raleigh, North Carolina 27609
Phone: 919-872-5115

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REVISIONS



MAINTENANCE NOTES

WATTLE

THE UPSTREAM SIDE OF THE WATTLE SHOULD BE MAINTAINED TO ALLOW THE WATER TO FLOW THROUGH, REDUCE VELOCITY, DISTRIBUTE FLOCCULANT AND ALLOW SEDIMENTATION TO OCCUR. IF THE NATURAL FIBERS OF THE WATTLE BECOME TOO SATURATED WITH DEBRIS, SEDIMENT, ETC., AND REMOVAL OF THESE ITEMS IS NOT POSSIBLE, WATTERS SHOULD BE REPLACED. STAKES SHOULD BE USED TO ANCHOR THE WATTLE ADEQUATELY TO THE GROUND TO PREVENT SCOURING AND WASHOUT DURING STORM EVENTS. THE EXCELSIOR PAD BENEATH THE WATTERS IS CRITICAL TO THE PROPER FUNCTIONING OF THE WATTERS.

CONCRETE WASHOUT

REGULARLY INSPECT THE PERIMETER BARRIER FOR DAMAGE BUT WEEKLY AS A MINIMUM. REPLACE SANDBAG ANCHORS OR WOOD FRAME IF DAMAGED. REPLACE PLASTIC LINING IF DAMAGED AND NO LONGER WATERTIGHT. REMOVE CONCRETE AND REPAIR ANY DAMAGE TO LINER OR FRAME WHEN VOLUME HAS BEEN REDUCED BY HALF OF THE ORIGINAL VOLUME.

TEMPORARY SILT FENCE

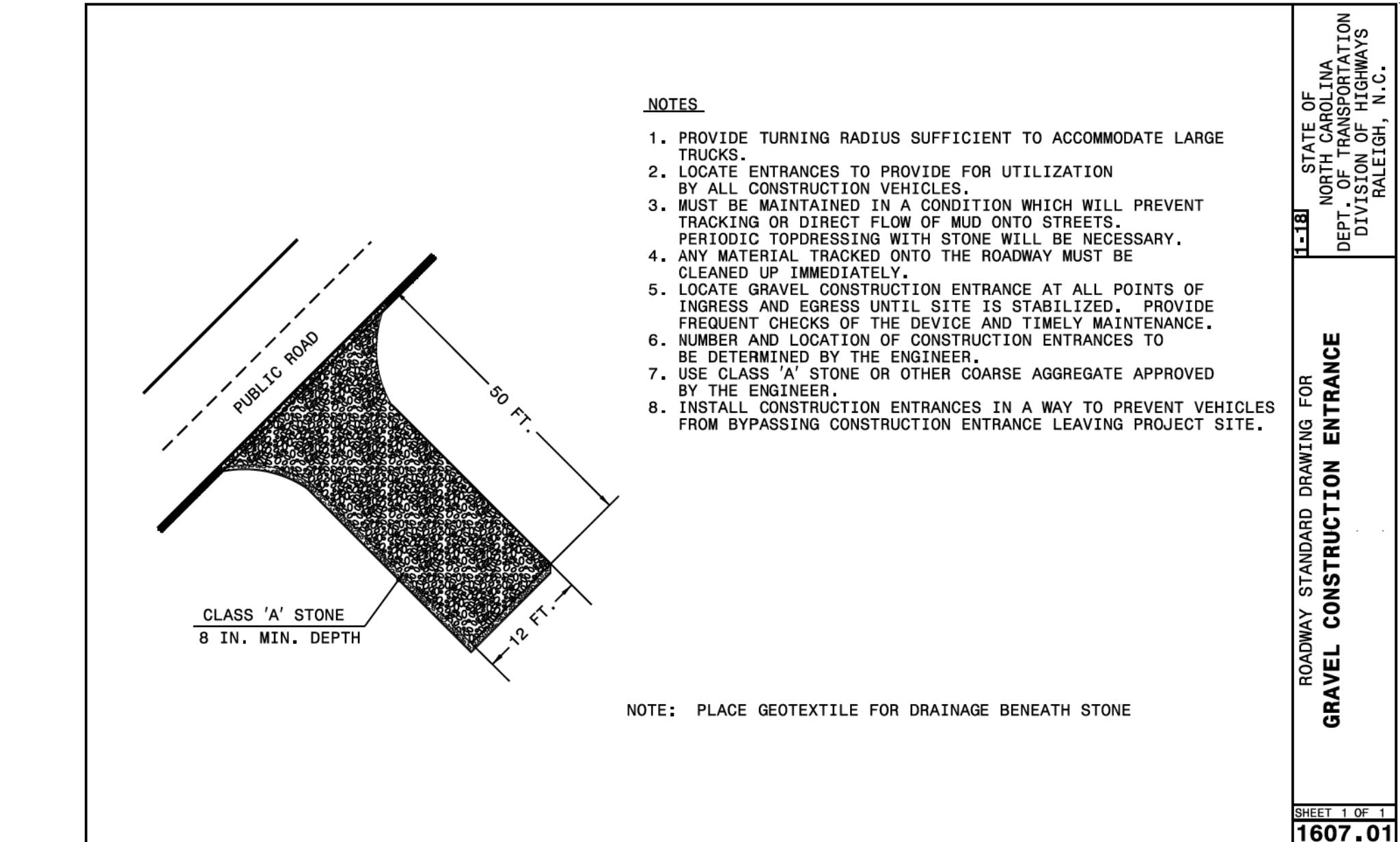
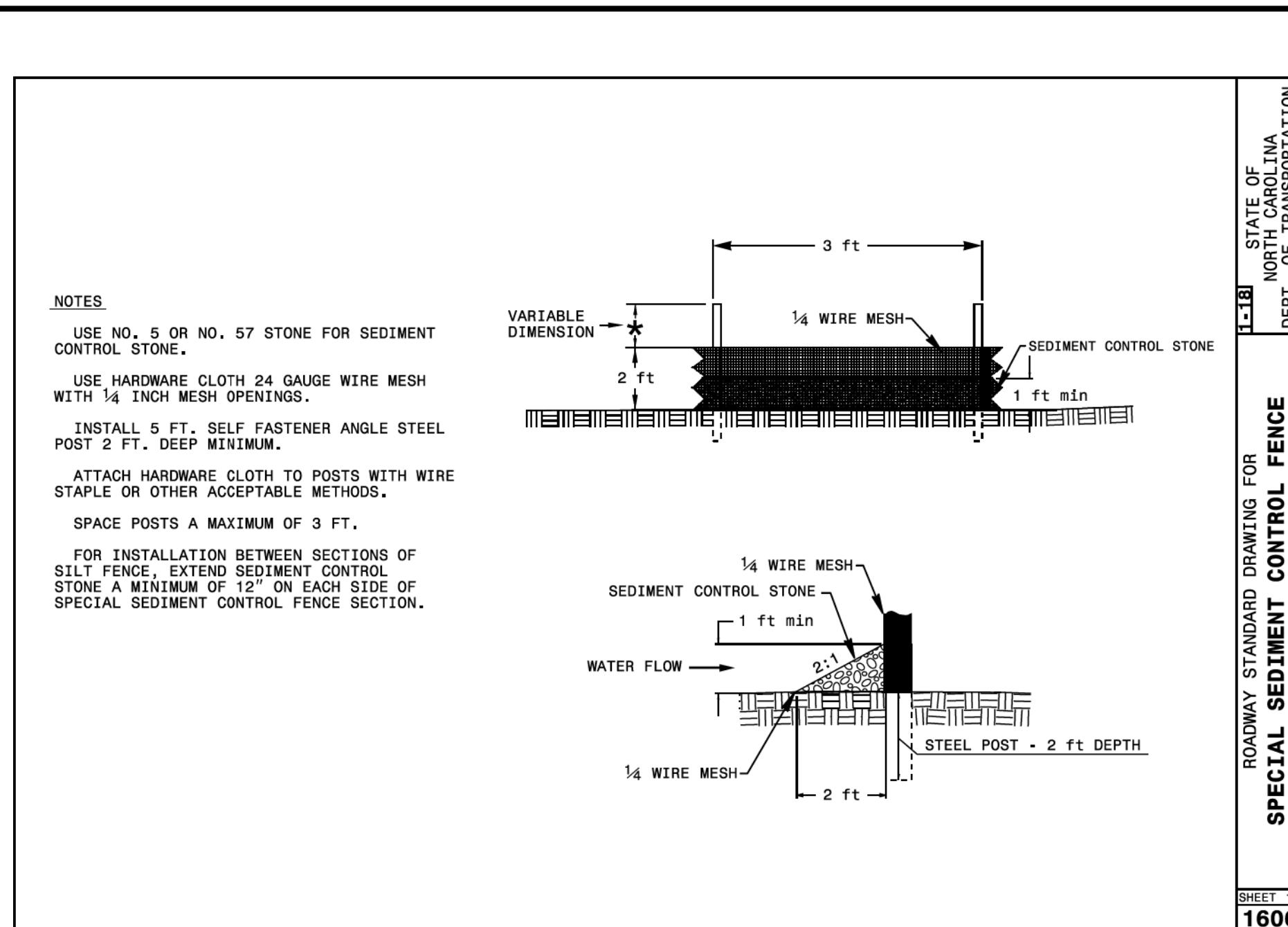
INSPECT THE SILT FENCE ON A REGULAR BASIS AND AFTER EACH SIGNIFICANT RAINFALL. MAKE ANY REPAIRS IMMEDIATELY. INSPECT THE SILT FENCE TO BE SURE THE BOTTOM OF THE GEOTEXTILE IS KEYED IN PROPERLY. AT A MINIMUM, REMOVE AND DISPOSE OF ALL SILT ACCUMULATIONS WHEN DEPTH REACHES 1/2 THE HEIGHT OF THE GEOTEXTILE. DO NOT UNDERMINE THE FENCE DURING CLEANOUT. DISPOSE OF SEDIMENT BY HAULING IT TO AN APPROVED WASTE SITE WITH APPROPRIATE PERIMETER PROTECTION. REMOVE AND REPLACE DETERIORATED OR CLOGGED SILT FENCE. REPLACE SILT FENCE REMOVED FOR ACCESS AT THE END OF EACH DAY'S OPERATION. INSTALL ADDITIONAL POSTS OR WIRE BACKING IF FENCE IS SAGGING.

TOWN OF CHAPEL HILL
CONSTRUCTION PLAN APPROVAL
ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH THE TOWN OF CHAPEL HILL, ORANGE WATER AND SEWER AUTHORITY (OWASA), AND NC DOT STANDARDS AND SPECIFICATIONS. IN THE EVENT OF A CONFLICT BETWEEN STANDARDS, THE MORE STRINGENT SHALL GOVERN UNLESS A WAVER IS ISSUED BY THE TOWN ENGINEER AND/OR AUTHORITY HAVING JURISDICTION (AHJ). UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING STREETS, NEWWATER, SEWER, AND OTHER UTILITIES, SHALL HAVE BEEN APPROVED BY THE TOWN OF CHAPEL HILL AND SHALL NOT BE INSTALLED UNLESS A WAVER IS ISSUED BY THE AHJ. FOR WAVER APPROVAL, PUBLIC WATER/SANITARY SEWER, STORMWATER AND UTILITY EASEMENTS SHALL BE RECORDED PRIOR TO FINAL ACCEPTANCE AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE TOWN.

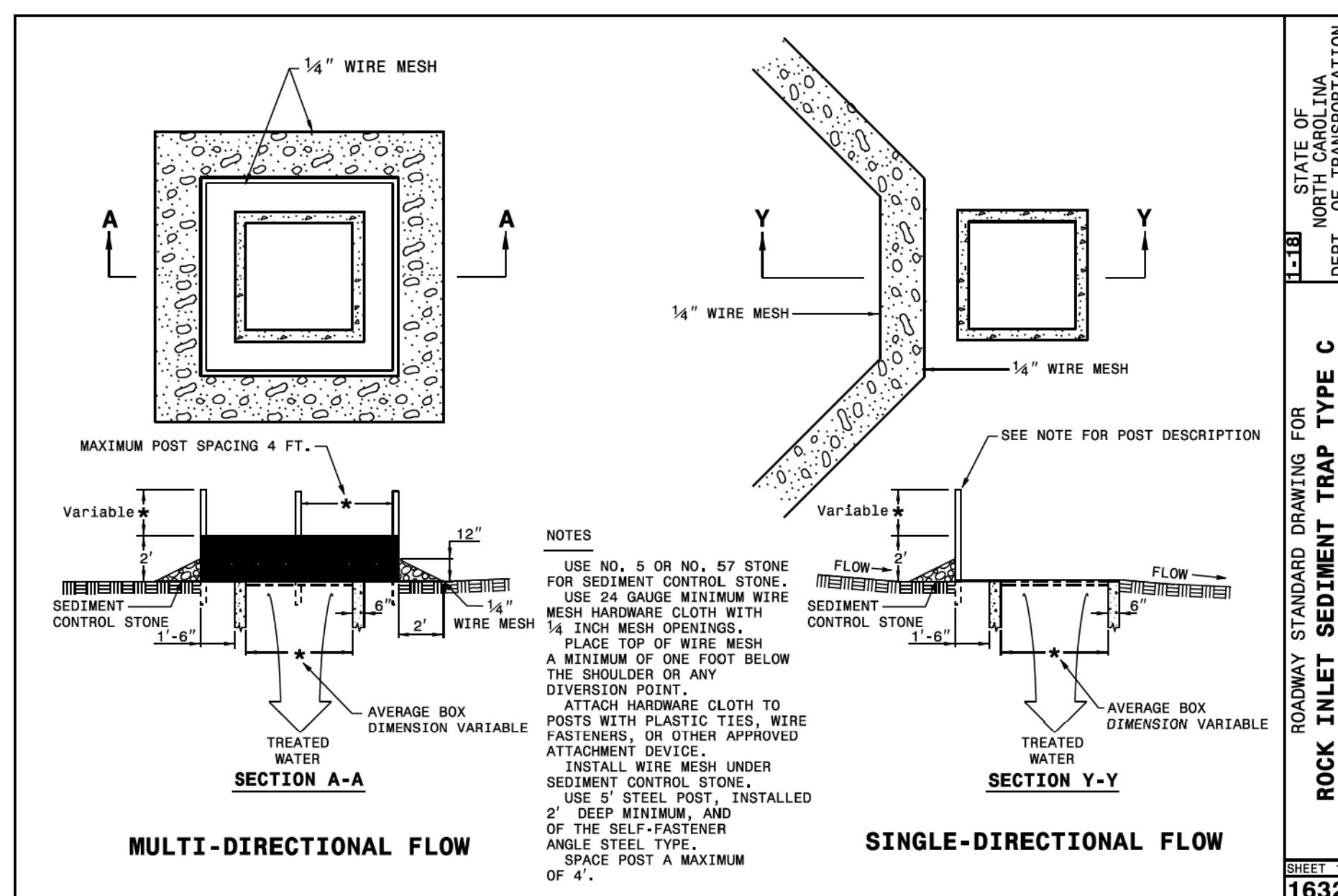
THE TOWN OF CHAPEL HILL MAY REQUIRE REDESIGN AND/OR RECONSTRUCTION OF WORK SHOWN ON THE APPROVED PLANS, SUBSEQUENT TO SUCH APPROVAL, IF IT BECOMES EVIDENT THAT THE DESIGN IS INADEQUATE TO MEET THE ACTUAL FIELD CONDITIONS AND/OR IS BASED ON INCOMPLETE, INSUFFICIENT, INACCURATE OR MISLEADING DATA PORTRAYED ON THE APPROVED PLANS. THE TOWN OF CHAPEL HILL ACCEPTS NO RESPONSIBILITY FOR COSTS INVOLVED IN SUCH REDESIGN AND/OR RECONSTRUCTION.

ENGINEERING SIGNATURE:
DATE:

8/17/99



REVISIONS



MAINTENANCE NOTES

SPECIAL SEDIMENT CONTROL FENCE

INSPECT THE DEVICE PERIODICALLY AND AFTER EACH SIGNIFICANT RAINFALL EVENT FOR DAMAGE AND SEDIMENT ACCUMULATION TO CONFIRM THE DEVICE IS FUNCTIONING PROPERLY. AT A MINIMUM, REMOVE SEDIMENT FROM THE DEVICE WHEN ACCUMULATIONS REACH ONE-HALF THE HEIGHT OF THE SEDIMENT CONTROL STONE. REPLACE OR CLEAN THE SEDIMENT CONTROL STONE AS NEEDED TO ALLOW WATER TO DRAIN THROUGH THE DEVICE BETWEEN RAINFALL EVENTS. REBUILD AND/OR REPAIR THE DEVICE WHEN IT IS DAMAGED. REPAIR AREAS WHERE SSCF BECOMES UNDERMINED DUE TO CONCENTRATED FLOWS.

CONSTRUCTION ENTRANCE

THE GRAVEL CONSTRUCTION ENTRANCE MUST BE MAINTAINED IN A CONDITION TO PREVENT TRACKING OR DIRECT FLOW OF MUD ONTO ADJACENT ROADWAYS. REPLACEMENT OF STONE MAY BE NECESSARY TO ENSURE THE GRAVEL ENTRANCE FUNCTIONS PROPERLY. REPLENISHMENT OF STONE MAY BE NECESSARY. FREQUENT CHECKS OF THE DEVICE AND TIMELY MAINTENANCE SHOULD BE COMPLETED. ANY MATERIAL TRACKED ONTO THE ROADWAY SHALL BE CLEANED UP IMMEDIATELY.

ROCK INLET SEDIMENT TRAP TYPE C

INSPECT THE DEVICE AFTER EACH SIGNIFICANT RAINFALL EVENT FOR DAMAGE, SEDIMENT ACCUMULATION AND PROPER FUNCTION. REMOVE SEDIMENT FROM THE DEVICE WHEN ACCUMULATIONS REACH ONE-HALF THE HEIGHT OF THE SEDIMENT CONTROL STONE. REPLACE OR CLEAN THE SEDIMENT CONTROL STONE AS NEEDED TO ALLOW WATER TO DRAIN THROUGH THE DEVICE BETWEEN RAINFALL EVENTS. REBUILD AND/OR REPAIR THE DEVICE WHEN IT IS DAMAGED. IF THE DEVICE IS TO REMAIN AFTER PROJECT COMPLETION, IT SHOULD BE CLEAN AND IN PROPER SHAPE AT THE TIME OF FINAL INSPECTION. IF IT IS REMOVED, ALL ACCUMULATED SILT SHOULD BE REMOVED TO KEEP IT FROM ENTERING THE DRAINAGE SYSTEM.

PROJECT REFERENCE NO.	SHEET NO.
21370	EC-3B
RW SHEET NO.	
MICHAEL D. BYWALETZ, P.E.	
LEVEL III NAME	
 RAMEY KEMP ASSOCIATES 6808 Faringdon Place Raleigh, North Carolina 27609 Phone: 919-872-5115 www.rameykemp.com	
Michael D. Bywaletz 	
3876	
LEVEL III CERTIFICATION NO.	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

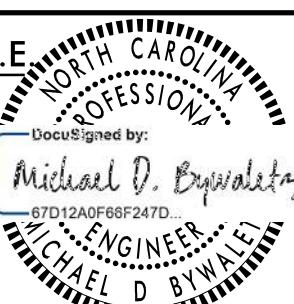
TOWN OF CHAPEL HILL CONSTRUCTION PLAN APPROVAL
ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH THE TOWN OF CHAPEL HILL, ORANGE WATER AND SEWER AUTHORITY (OWASA), AND NC DOT STANDARDS AND SPECIFICATIONS. IN THE EVENT OF A CONFLICT BETWEEN STANDARDS, THE MORE STRINGENT SHALL GOVERN UNLESS A WAIVER IS ISSUED BY THE TOWN ENGINEER AND/OR AUTHORITY HAVING JURISDICTION (AHJ). UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING STREETS, NEWWATER, SEWER, AND UTILITY EASEMENTS, HAVE BEEN APPROVED BY THE TOWN OF CHAPEL HILL AND SHALL SO BE INSTALLED UNLESS A CHANGE IS AUTHORIZED AND FOR WHICH APPROVAL PUBLIC WATER/SANITARY SEWER, STORMWATER AND UTILITY EASEMENTS SHALL BE RECORDED PRIOR TO FINAL ACCEPTANCE AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE TOWN.
THE TOWN OF CHAPEL HILL MAY REQUIRE REDESIGN AND/OR RECONSTRUCTION OF WORK SHOWN ON THE APPROVED PLANS, SUBSEQUENT TO SUCH APPROVAL, IF IT BECOMES EVIDENT THAT THE DESIGN IS INADEQUATE TO MEET THE ACTUAL FIELD CONDITIONS AND/OR IS BASED ON INCOMPLETE, INSUFFICIENT, INACCURATE OR MISLEADING DATA PORTRAYED ON THE APPROVED PLANS. THE TOWN OF CHAPEL HILL ACCEPTS NO RESPONSIBILITY FOR COSTS INVOLVED IN SUCH REDESIGN AND/OR RECONSTRUCTION.
ENGINEERING SIGNATURE: DATE:

CLEARING AND GRUBBING PHASE

NOTES:

1. CONTRACTOR TO INSTALL EROSION CONTROL MEASURES BEFORE CONSTRUCTION BEGINS AND MAINTAIN THROUGHOUT CONSTRUCTION.
2. CONTRACTOR IS TO KEEP ALL DEBRIS WITHIN THE WORK AREA AND OUTSIDE OF THE THROUGH LANES.
3. CONTRACTOR TO COORDINATE WITH ENGINEER IF FIELD CONDITIONS VARY FROM PLANS OR CONFLICTING EROSION CONTROL MEASURES ARE INSTALLED WITH THE ADJACENT SITE CONSTRUCTION.

RAMEY KEMP ASSOCIATES
5808 Faringdon Place
Raleigh, North Carolina 27609
Phone: 919-872-5115
NC License No. C-0910
www.rameykemp.com

PROJECT REFERENCE NO.	SHEET NO.			
21370	EC-4			
RW SHEET NO.				
MICHAEL D. BYWALETZ, P.E. LEVEL III NAME				
 <p>DocuSigned by: Michael D. Bywaletz 67D12A0F68F247D...</p> <p>10/6/2022</p>				
3876	LEVEL III CERTIFICATION NO.			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED				
<h2><i>GRAPHIC SCALES</i></h2>				
30	15	0	30	60
 <p>PLANS</p>				

REVISIONS

BEGIN CONSTRU
-L- STA. 13
TIE TO

COIR FIBER WATTLE (TYP.) —

-L- US 501 (FORDHAM BOULEVARD

ROCK INLET SEDIMENT TRA TYPE C (TYPE)

TOWN OF CHAPEL HILL
CONSTRUCTION PLAN APPROVAL

ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH THE TOWN OF CHAPEL HILL, CHAPEL HILL WATER AND SEWER AUTHORITY (OWASA), AND NCDOT STANDARDS AND SPECIFICATIONS. IN THE EVENT OF A CONFLICT BETWEEN STANDARDS, THE MORE STRINGENT SHALL GOVERN UNLESS A WAVER IS ISSUED BY THE ENGINEER AND/OR AUTHORITY HAVING JURISDICTION (AHJ). UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING STREETS, SIDEWALKS, STORMWATER AND HANDICAP RAMPS, HAVE BEEN APPROVED BY THE TOWN OF CHAPEL HILL AND SHALL BE SO INSTALLED UNLESS A CHANGE IS AUTHORIZED BY PRIOR WRITTEN APPROVAL. PUBLIC WATER/SANITARY SEWER, STORMWATER AND UTILITY EASEMENTS SHALL BE RECORDED PRIOR TO FINAL ACCEPTANCE AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE TOWN.

THE TOWN OF CHAPEL HILL MAY REQUIRE REDESIGN AND/OR RECONSTRUCTION OF WORK SHOWN ON THE APPROVED PLANS, SUBSEQUENT TO SUCH APPROVAL, IF IT BECOMES EVIDENT THAT THE DESIGN IS INADEQUATE TO MEET ACTUAL FIELD CONDITIONS AND/OR IS BASED ON INCOMPLETE, INSUFFICIENT, INACCURATE OR MISLEADING DATA PORTRAYED ON THE APPROVED PLANS. THE TOWN OF CHAPEL HILL ACCEPTS NO RESPONSIBILITY FOR COSTS INVOLVED IN SUCH REDESIGN AND/OR RECONSTRUCTION.

ENGINEERING SIGNATU

8/17/99

CLEARING AND GRUBBING PHASE

NOTES:

1. CONTRACTOR TO INSTALL EROSION CONTROL MEASURES BEFORE CONSTRUCTION BEGINS AND MAINTAIN THROUGHOUT CONSTRUCTION.
2. CONTRACTOR IS TO KEEP ALL WORKS WITHIN THE WORK AREA AND OUTSIDE OF THE THROUGH LANES.
3. CONTRACTOR TO COORDINATE WITH ENGINEER IF FIELD CONDITIONS VARY FROM PLANS OR CERTAIN EROSION CONTROL MEASURES ARE INSTALLED WITH THE ADJACENT SITE CONSTRUCTION.

RKA
RAMEY KEMP ASSOCIATES
5808 Faringdon Place
Raleigh, North Carolina 27609
Phone: 919-872-5115
NC License No. C-0910
www.rameykemp.com

PROJECT REFERENCE NO.	SHEET NO.
21370	EC-5
RW SHEET NO.	
3876	
LEVEL III NAME	
MICHAEL D. BYWALETZ, P.E.	
LEVEL III SIGNATURE	
Michael D. Bywaletz MICHAEL D. BYWALETZ 10/17/2022	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
GRAPHIC SCALES	
30 15 0 30 60	
PLANS	

MATCHLINE -L- STA. 17 + 65.00 SEE EC-4

END CONSTRUCTION
-L STA. 20 + 87.16
TIE TO EXIST.

-L- US 501 (FORDHAM BOULEVARD)

MATCHLINE -L- STA. 24 + 00.00 SEE EC-8

TOWN OF CHAPEL HILL
CONSTRUCTION PLAN APPROVAL

ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH THE TOWN OF CHAPEL HILL, ORANGE WATER AND SEWER AUTHORITY (OWASA), AND NCDOT STANDARDS AND SPECIFICATIONS. IN THE EVENT OF A CONFLICT BETWEEN STANDARDS, THE MORE STRINGENT SHALL GOVERN UNLESS A WAIVER IS ISSUED BY THE TOWN ENGINEER AND/OR AUTHORITY HAVING JURISDICTION (AHJ). UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING STRUCUTURES, EASEMENTS, AND OTHER WORKS, SHALL BE APPROVED BY THE TOWN OF CHAPEL HILL, AND SHALL BE SO INSTALLED UNLESS A CHANGE IS AUTHORIZED BY PRIOR WRITTEN APPROVAL. PUBLIC WATER/SANITARY SEWER, STORMWATER AND UTILITY EASEMENTS SHALL BE RECORDED PRIOR TO FINAL ACCEPTANCE AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE TOWN.

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ENGINEERING SIGNATURE:
DATE:

10/6/2022 10:01:45 AM
User: Smb-Car-Dty

8/17/99

CLEARING AND GRUBBING PHASE

NOTES: 1. CONTRACTOR TO INSTALL EROSION CONTROL MEASURES BEFORE CONSTRUCTION BEGINS AND MAINTAIN THROUGHOUT CONSTRUCTION.
2. CONTRACTOR IS TO KEEP ALL DEBRIS WITHIN THE WORK AREA OUTSIDE OF THE THROUGH LANES.
3. CONTRACTOR TO COORDINATE WITH ENGINEER IF FIELD CONDITIONS VARY FROM PLANS OR CONFLICTING EROSION CONTROL MEASURES ARE INSTALLED WITH THE ADJACENT SITE CONSTRUCTION.

REVISIONS

BEGIN CONSTRUCTION
-Y1- STA. 1003 +
TIE TO

257-
ROCK INLET SEDIMENT TRAP -
TYPE C (TRC)

**END CONSTRUCTION
-Y1- STA. 1007 + 07.48
TIE TO EXIST.**

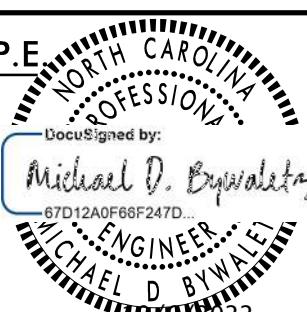
**TOWN OF CHAPEL HILL
CONSTRUCTION PLAN APPROVAL**

ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH THE TOWN OF CHAPEL HILL, OR WATER AND SEWER AUTHORITY (OWASA), AND NCDOT STANDARDS AND SPECIFICATIONS. IN THE EVENT OF A CONFLICT BETWEEN STANDARDS, THE MORE STRINGENT SHALL GOVERN UNLESS A WAVER IS ISSUED BY THE TOWN ENGINEER AND/OR AUTHORITY HAVING JURISDICTION (AHJ). UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING STREETS, SIDEWALKS, STORMWATER AND HANDICAP RAMPS, HAVE BEEN APPROVED BY THE TOWN OF CHAPEL HILL AND SHALL BE SO INSTALLED UNLESS A CHANGE IS AUTHORIZED BY PRIOR WRITTEN APPROVAL. PUBLIC WATER/SANITARY SEWER, STORMWATER AND UTILITY EASEMENTS SHALL BE RECORDED PRIOR TO FINAL ACCEPTANCE AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE TOWN.

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ENGINEERING SIGNATURE

The logo for RKA (Ramey Kemp Associates) features a large, stylized 'RKA' monogram in black. Below the monogram, the words 'EY KEMP ASSOCIATES' are written in a bold, black, sans-serif font. Underneath the company name, the address 'ingdon Place' is followed by 'th Carolina 27609' and the phone number '919-872-5115'. To the right, the text 'NC License No. C-0910' and the website 'www.rameykemp.com' are displayed.

PROJECT REFERENCE NO.	SHEET NO.
21370	EC-6
R/W SHEET NO.	
MICHAEL D. BYWALETZ, P.E. LEVEL III NAME	
 <p>DocuSigned by: Michael D. Bywaletz 67D12A0F66F247D...</p> <p>ENGINEER MICHAEL D. BYWALETZ 10/10/2022</p>	
3876 LEVEL III CERTIFICATION NO.	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
<h1><i>GRAPHIC SCALES</i></h1>	
 <p>30 15 0 30 60</p> <p>PLANS</p>	

MATCHLINE -Y1- STA. 1008 + 50.00
SEE EC-7