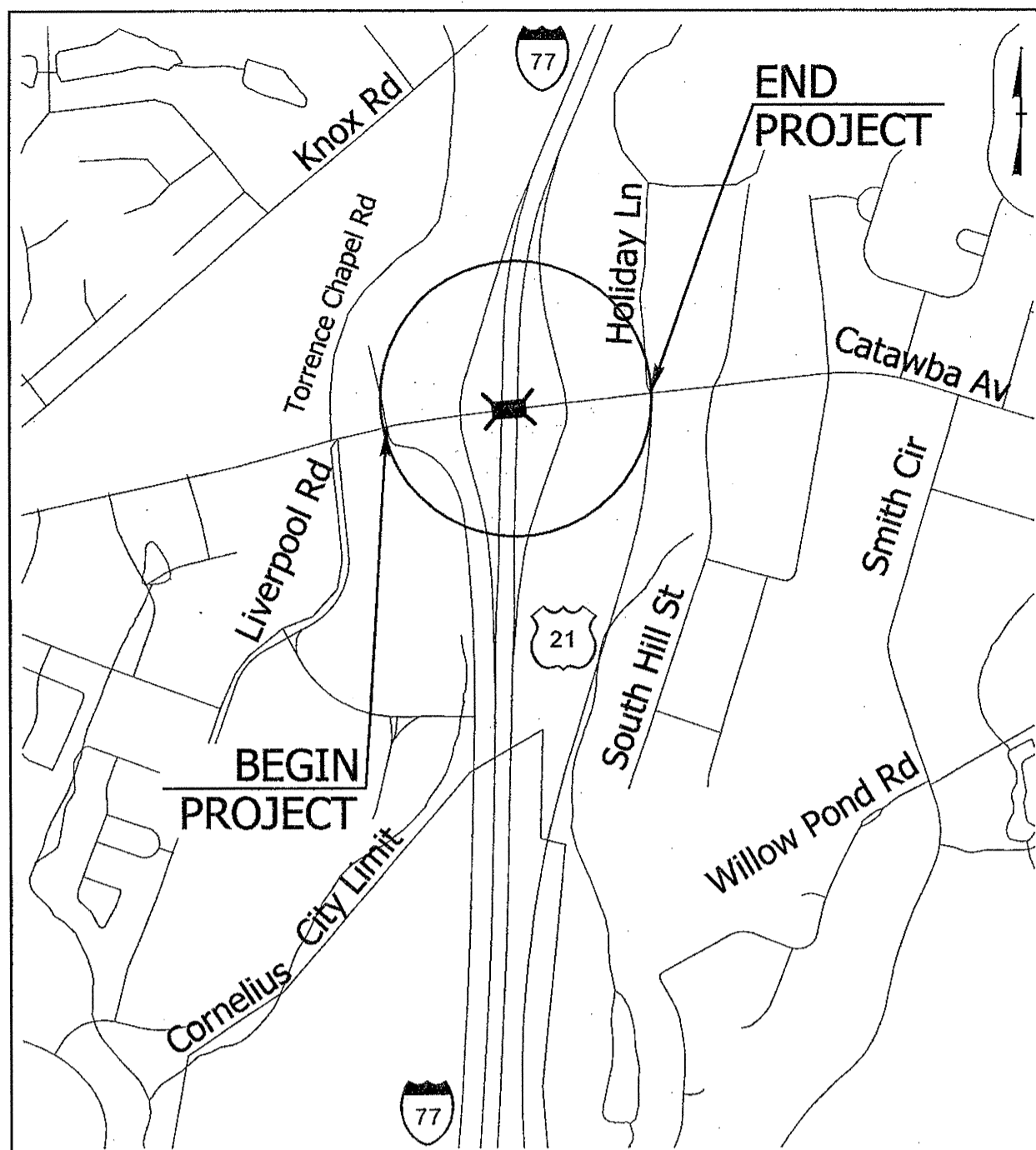


CONTRACT: TIP PROJECT: I-4733



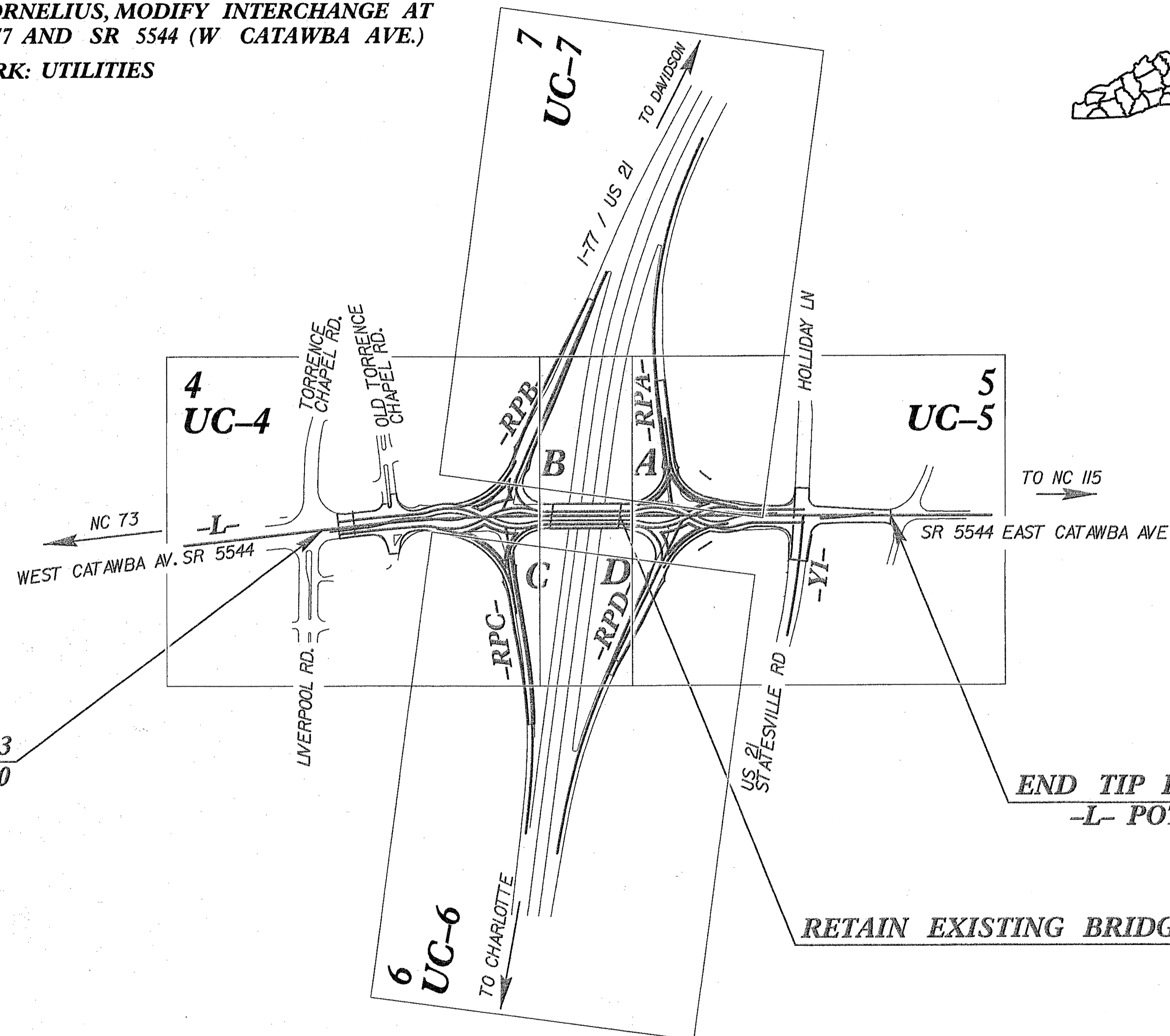
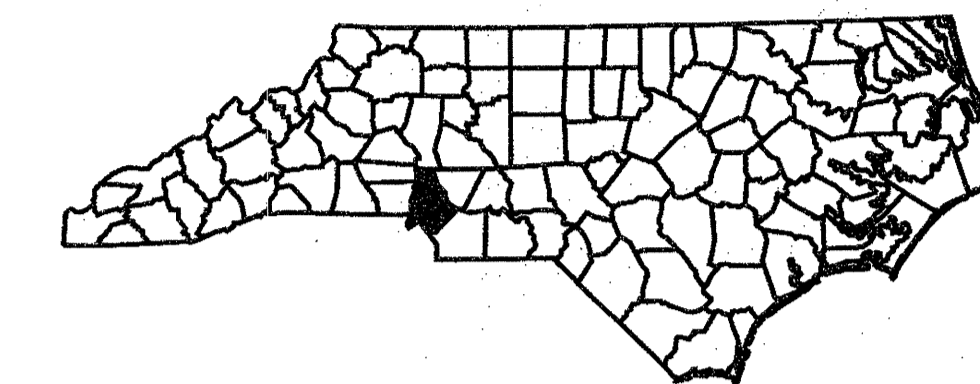
VICINITY MAP SHOWING LOCATION OF PROJECT I-4733

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

MECKLENBURG COUNTY

LOCATION: CORNELIUS, MODIFY INTERCHANGE AT I-77 AND SR 5544 (W CATAWBA AVE.)
TYPE OF WORK: UTILITIES

T.I.P. NO.	SHEET NO.
I-4733	UC-1

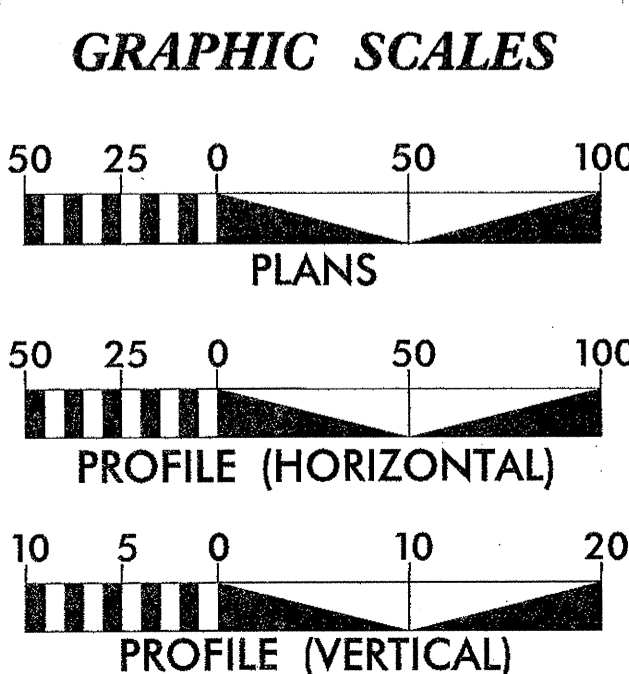


BEGIN TIP PROJECT I-4733
-L- POT STA. 14 + 48.00

END TIP PROJECT I-4733
-L- POT STA. 32 + 80.00

THERE IS AN EXISTING FULL CONTROL OF ACCESS FROM OLD TORRENCE CHAPEL ROAD TO US 21 ON THIS PROJECT
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD

CONTRACT:



SHEET NO.	DESCRIPTION
UC-1	TITLE SHEET
UC-2	UTILITY SYMBOLOGY SHEET
UC-2A	PERMIT SHEET
UC-3	NOTES SHEET
UC-4 THRU UC-7	UTILITY CONSTRUCTION SHEETS

WATER AND SEWER OWNERS ON PROJECT

WATER - CHARLOTTE-MECKLENBURG UTILITY DEPARTMENT
SEWER - CHARLOTTE-MECKLENBURG UTILITY DEPARTMENT

SEAL

CNB 03/07/13

**DIVISION OF HIGHWAYS
UTILITIES UNIT
UTILITIES ENGINEERING**

1591 MAIL SERVICES CENTER
RALEIGH NC 27699-1591
PHONE (919) 707-6690
FAX (919) 250-4151

Roger Worthington, P.E. UTILITIES SECTION ENGINEER
Ron Wilkins, P.E. UTILITIES SQUAD LEADER PROJECT ENGINEER
Kevin Hinde, P.E. UTILITIES PROJECT DESIGNER (Hinde Engineering)

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITIES PLAN SHEET SYMBOLS

PROJECT REFERENCE NO. I-4733	SHEET NO. UC-2
DESIGNED BY: CLS	
DRAWN BY: BKA	
CHECKED BY: KSH	
APPROVED BY:	
REVISER:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151
UTILITY CONSTRUCTION PLANS ONLY	

PROPOSED WATER SYMBOLS

Water Line (Sized as Shown)	----- 12" WL -----
11 1/4 Degree Bend	----- +-----
22 1/2 Degree Bend	----- +-----
45 Degree Bend	----- +X-----
90 Degree Bend	----- +-----
Plug	----- +-----
Tee	----- +-----
Cross	----- +-----
Reducer	----- >-----
Gate Valve	----- GV-----
Butterfly Valve	----- BV-----
Tapping Valve	----- TGV-----
Line Stop	----- LS-----
Line Stop with Bypass	----- LS/BP-----
Blow Off	----- BO-----
Fire Hydrant	----- FHH-----
Relocate Fire Hydrant	----- FHH-----
Remove Fire Hydrant	----- REM FH-----
Water Meter	----- PWM-----
Relocate Water Meter	----- PWM-----
Remove Water Meter	----- REM WM-----
Water Pump Station	----- PST(W)-----
RPZ Backflow Preventer	----- RRPZ-----
DCV Backflow Preventer	----- DBEP-----
Relocate RPZ Backflow Preventer	----- RRPZ-----
Relocate DCV Backflow Preventer	----- DBEP-----

PROPOSED SEWER SYMBOLS

Gravity Sewer Line (Sized as Shown)	----- 12" SS -----
Force Main Sewer Line (Sized as Shown)	----- 12" FSS -----
Manhole (Sized per Note)	----- •-----
Sewer Pump Station	----- PST(SS)-----

PROPOSED MISCELLANEOUS UTILITIES SYMBOLS

Power Pole	----- o-----
Telephone Pole	----- o-----
Joint Use Pole	----- o-----
Telephone Pedestal	----- TEL PED-----
Utility Line by Others (Type as Shown)	----- PROP O/H POW LINE-----
Trenchless Installation	----- 12" TL INSTALL-----
Encasement by Open Cut	----- 24" ENCAS BY OC-----
Encasement	----- 24" ENCASMENT-----

Thrust Block	----- I-----
Air Release Valve	----- AR-----
Utility Vault	----- UV-----
Concrete Pier	----- CP-----
Steel Pier	----- SP-----
Plan Note	----- NOTE-----
Pay Item Note	----- PAY ITEM-----

EXISTING UTILITIES SYMBOLS

Power Pole	----- •-----	*Underground Power Line	----- P-----
Telephone Pole	----- •-----	*Underground Telephone Cable	----- T-----
Joint Use Pole	----- •-----	*Underground Telephone Conduit	----- TC-----
Utility Pole	----- •-----	*Underground Fiber Optics Telephone Cable	----- T FO-----
Utility Pole with Base	----- □-----	*Underground TV Cable	----- TV-----
H-Frame Pole	----- •-----	*Underground Fiber Optics TV Cable	----- TV FO-----
Power Transmission Line Tower	----- X-----	*Underground Gas Pipeline	----- G-----
Water Manhole	----- ⊙-----	Aboveground Gas Pipeline	----- A/G Gas-----
Power Manhole	----- ⊙-----	*Underground Water Line	----- W-----
Telephone Manhole	----- ⊙-----	Aboveground Water Line	----- A/G Water-----
Sanitary Sewer Manhole	----- ⊙-----	*Underground Gravity Sanitary Sewer Line	----- SS-----
Hand Hole for Cable	----- □-----	Aboveground Gravity Sanitary Sewer Line	----- A/G Sanitary Sewer-----
Power Transformer	----- Z-----	*Underground SS Forced Main Line	----- FSS-----
Telephone Pedestal	----- □-----	Underground Unknown Utility Line	----- TUTL-----
CATV Pedestal	----- □-----	SUE Test Hole	----- ⊙-----
Gas Valve	----- ◇-----	Water Meter	----- ⊙-----
Gas Meter	----- ◇-----	Water Valve	----- ⊙-----
Located Miscellaneous Utility Object	----- ⊙-----	Fire Hydrant	----- ◇-----
Abandoned According to Utility Records	----- AATUR-----	Sanitary Sewer Cleanout	----- ⊙-----
End of Information	----- E.O.I.-----		

*For Existing Utilities
Utility Line Drawn from Record (Type as Shown) -----
Designated Utility Line (Type as Shown) -----

NORTH CAROLINA
DEPT. OF TRANSPORTATION
ENGINEERING DIVISION
RALEIGH, NORTH CAROLINA

INTERCHANGE MODIFICATION AT
I-77 AND SR 5544 (W. CATANBA AVE.)

Designed By: CLS	Checked By: KSH	Date: 2-22-13	Sheets: UC-2	Of: UC-7
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HINDE ENGINEERING
License No. C-2639
7520 E. Independence Blvd., Suite 230 Charlotte, NC 28227

CVB 03/07/13

PROJECT REFERENCE NO. I-4733	SHEET NO. UC-2A
DESIGNED BY: CLS	
DRAWN BY: BKA	
CHECKED BY: KSH	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION

APPLICATION FOR PERMIT FOR WATER MAIN EXTENSION

PROJECT NAME: I-4733 - CORNELIUS, MODIFY INTERCHANGE AT
I-77 AND SR 5544 (W CATAWBA AVE.)

CMUD PROJECT NO.: 529-12-037

PROJECT DESCRIPTION: 334 LF 8" WATER MAIN & 18 LF 6" WATER MAIN & FITTINGS

DESIGNED BY: FIRM: HINDE ENGINEERING, INC.

ENGINEER: KEVIN S. HINDE, P.E. DESIGNED BY: CLINT L. STEVENS, E.I.

ADDRESS: 7520 EAST INDEPENDENCE BLVD., SUITE 230
CHARLOTTE, NORTH CAROLINA 28227

PHONE: 704-814-4407

THIS APPLICATION IS MADE UNDER AND IN FULL ACCORD WITH THE PROVISIONS OF CHAPTER 130A-317 OF THE NORTH CAROLINA GENERAL STATUTES, AND SUCH OTHER STATUTES AS RELATED TO PUBLIC WATER SYSTEMS. CMUD HAS BEEN GRANTED AUTHORITY TO ISSUE PERMITS FOR EXTENSION OF WATER MAINS PURSUANT TO ISA NCAC 18C.0801. THE APPLICANT AGREES THAT NO SIGNIFICANT CHANGE OR DEVIATION FROM THE PLANS AND SPECIFICATIONS APPROVED BY CMUD WILL BE MADE WITHOUT THE WRITTEN CONSENT AND APPROVAL OF CMUD OR ITS AUTHORIZED REPRESENTATIVE. A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF NORTH CAROLINA SHALL SUBMIT A STATEMENT REFLECTING THAT ADEQUATE OBSERVATIONS DURING AND UPON COMPLETION OF CONSTRUCTION INDICATES THAT CONSTRUCTION WAS COMPLETED IN ACCORDANCE WITH APPROVED PLANS AND SPECIFICATIONS.

113-008

PERMIT NO. _____ DATE 3/6/13

APPROVED: *Barry Shearin*
 BARRY SHEARIN, P.E., CHIEF ENGINEER

CHARLOTTE MECKLENBURG UTILITY DEPARTMENT
 5100 BROOKSHIRE BLVD.
 CHARLOTTE, NORTH CAROLINA 28216

NORTH CAROLINA DEPT. OF TRANSPORTATION ENGINEERING DIVISION RALEIGH, NORTH CAROLINA

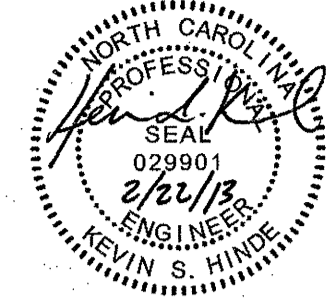
INTERCHANGE MODIFICATION AT I-77 AND SR 5544 (W. CATAWBA AVE.)

Designed By:	Checked By:	Date:	Sheet:	Of:
CLS	KSH	2-22-13	UC-2A	UC-7

HINDE ENGINEERING
 License No. C-2639
 7520 E. Independence Blvd., Suite 230 Charlotte, NC 28227

Handwritten initials and date: MB 03/07/13

UTILITY CONSTRUCTION

PROJECT REFERENCE NO. 1-4733	SHEET NO. UC-3
DESIGNED BY: CLS	
DRAWN BY: BKA	
CHECKED BY: KSH	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	

GENERAL NOTES:

1. THE PROPOSED UTILITY CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENTS OF THE NC DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2012.
2. THE EXISTING UTILITIES BELONG TO CHARLOTTE-MECKLENBURG UTILITY DEPARTMENT.
3. ALL WATER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL AND NATURAL RESOURCES, DIVISION OF ENVIRONMENTAL HEALTH. ALL SEWER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES, DIVISION OF WATER QUALITY. PERFORM ALL WORK IN ACCORDANCE WITH THE APPLICABLE PLUMBING CODES.
4. THE UTILITY OWNER OWNS THE EXISTING UTILITY FACILITIES AND WILL OWN THE NEW UTILITY FACILITIES AFTER ACCEPTANCE BY THE DEPARTMENT. THE DEPARTMENT OWNS THE CONSTRUCTION CONTRACT AND HAS ADMINISTRATIVE AUTHORITY. COMMUNICATIONS AND DECISIONS BETWEEN THE CONTRACTOR AND UTILITY OWNER ARE NOT BINDING UPON THE DEPARTMENT OR THIS CONTRACT UNLESS AUTHORIZED BY THE ENGINEER. AGREEMENTS BETWEEN THE UTILITY OWNER AND CONTRACTOR FOR THE WORK THAT IS NOT PART OF THIS CONTRACT OR IS SECONDARY TO THIS CONTRACT ARE ALLOWED, BUT ARE NOT BINDING UPON THE DEPARTMENT.
5. PROVIDE ACCESS FOR THE DEPARTMENT PERSONNEL AND THE OWNER'S REPRESENTATIVES TO ALL PHASES OF CONSTRUCTION. NOTIFY DEPARTMENT PERSONNEL AND THE UTILITY OWNER TWO WEEKS PRIOR TO COMMENCEMENT OF ANY WORK AND ONE WEEK PRIOR TO SERVICE INTERRUPTION. KEEP UTILITY OWNERS' REPRESENTATIVES INFORMED OF WORK PROGRESS AND PROVIDE OPPORTUNITY FOR INSPECTION OF CONSTRUCTION AND TESTING.

6. THE PLANS DEPICT THE BEST AVAILABLE INFORMATION FOR THE LOCATION, SIZE, AND TYPE OF MATERIAL FOR ALL EXISTING UTILITIES. MAKE INVESTIGATIONS FOR DETERMINING THE EXACT LOCATION, SIZE, AND TYPE MATERIAL OF THE EXISTING FACILITIES AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED UTILITIES AND FOR AVOIDING DAMAGE TO EXISTING FACILITIES. REPAIR ANY DAMAGE INCURRED TO EXISTING FACILITIES TO THE ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE DEPARTMENT.
7. MAKE FINAL CONNECTIONS OF THE NEW WORK TO THE EXISTING SYSTEM WHERE INDICATED ON THE PLANS, AS REQUIRED TO FIT THE ACTUAL CONDITIONS, OR AS DIRECTED.
8. MAKE CONNECTIONS BETWEEN EXISTING AND PROPOSED UTILITIES AT TIMES MOST CONVENIENT TO THE PUBLIC, WITHOUT ENDANGERING THE UTILITY SERVICE, AND IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS. MAKE CONNECTIONS ON WEEKENDS, AT NIGHT, AND ON HOLIDAYS IF NECESSARY.
9. ALL UTILITY MATERIALS SHALL BE APPROVED PRIOR TO DELIVERY TO THE PROJECT. SEE 1500-7, " SUBMITTALS AND RECORDS" IN SECTION 1500 OF THE STANDARD SPECIFICATIONS.


LIST OF STANDARD DRAWINGS

- 1515.01 WATER METER
- 1515.02 FIRE HYDRANT
- 1520.01 SEWER CLEAN OUT

PROJECT SPECIFIC NOTES:

1. ALL 12-INCH AND SMALLER DIAMETER PIPE SHALL BE DUCTILE IRON PRESURE CLASS 350, UNLESS OTHERWISE NOTED ON THE UTILITY CONSTRUCTION PLANS.
2. ALL 16-INCH AND LARGER DIAMETER PIPE SHALL BE DUCTILE IRON PRESSURE CLASS 250, UNLESS OTHERWISE NOTED ON THE UTILITY CONSTRUCTION PLANS.
3. VALVES ON WATER MAINS SMALLER THAN 16-INCH IN DIAMETER SHALL BE DIRECT BURY GATE VALVES, UNLESS OTHERWISE NOTED ON THE UTILITY CONSTRUCTION PLANS.
4. VALVES ON WATER MAINS 16-INCHES IN DIAMETER AND LARGER SHALL BE BUTTERFLY VALVES, UNLESS OTHERWISE NOTED ON THE UTILITY CONSTRUCTION PLANS.
5. DUCTILE IRON RESTRAINED JOINT PIPE SHALL BE USED IN LIEU OF THRUST BLOCKING ON PROPOSED WATER LINE RELOCATIONS.
6. WALL BLOCKING SHALL BE USED ON EXISTING WATER LINES AT THE PROPOSED RELOCATION TIE-IN POINTS.
7. CONTRACTOR SHALL CONNECT ALL WATER LINES AND SERVICE CONNECTIONS USING NECESSARY FITTINGS.
8. ALL BACKFLOW PREVENTORS ARE THE RESPONSIBILITY OF THE PROPERTY OWNER.
9. THE CHARLOTTE-MECKLENBURG UTILITY DEPARTMENT (CMUD) STANDARD DETAILS LOCATED ON THEIR WEBSITE AT <http://charmeck.org/city/charlotte/Utilities/ConstructionProjects/Pages/Design%20Manual.aspx> SHALL SUPERCEDE ANY CMUD DETAILS SHOWN IN THIS PLAN SET.
10. FOR THE FIRE HYDRANTS TO BE REMOVED, THE CONTRACTOR SHALL CONTACT CHARLOTTE-MECKLENBURG UTILITY DEPARTMENT TO DETERMINE A SUITABLE LOCATION TO STOCKPILE THE FIRE HYDRANT AND ASSOCIATED ITEMS.
11. CONTRACTOR IS REQUIRED TO CONTACT BILL DEAL, PE, OF CHARLOTTE-MECKLENBURG UTILITY DEPARTMENT, AT (980) 722-0786 AT LEAST 1 WEEK PRIOR TO ANY WATER AND SEWER CONSTRUCTION.

UTILITY CONSTRUCTION

NORTH CAROLINA DEPT. OF TRANSPORTATION ENGINEERING DIVISION RALEIGH, NORTH CAROLINA				
INTERCHANGE MODIFICATION AT I-77 AND SR 5544 (W. CATAWBA AVE.)				
Designed By:	Checked By:	Date:	Sheet:	Of:
CLS	KSH	2-22-13	UC-3	UC-7
 HINDE ENGINEERING <small>License No. C-2639 7520 E. Independence Blvd., Suite 230 Charlotte, NC 28227</small>				

CLS 03/13/13

SCALE: 0 50 100

PROJECT REFERENCE NO.	SHEET NO.
I-4733	UC-4
DESIGNED BY: CLS	
DRAWN BY: BKA	
CHECKED BY: KSH	
APPROVED BY:	
REVISER:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION



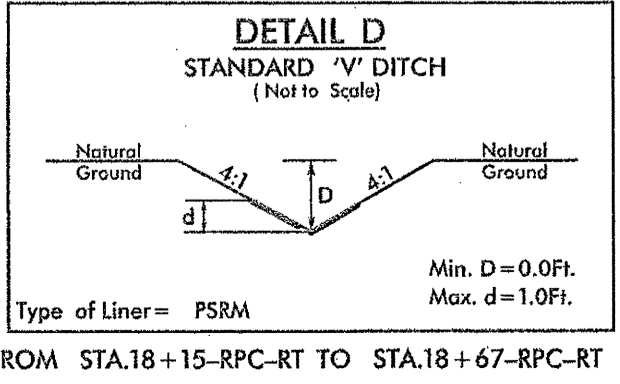
-L- POT Sta. 10+00.00 10

**BEGIN TIP PROJECT I-4733
BEGIN CONSTRUCTION
-L- POT STA. 14+69.00**

**BEGIN 1.5" MILLING FOR 50'
BEGIN 1.5" OVERLAY
TRANSITION TO 3" OVERLAY
-L- STA. 15+00.00**

**BEGIN 3" OVERLAY
-L- STA. 15+50.00**

RELOCATE FIRE HYDRANT



NORTH CAROLINA DEPT. OF TRANSPORTATION ENGINEERING DIVISION RALEIGH, NORTH CAROLINA

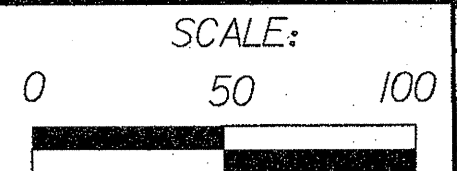
INTERCHANGE MODIFICATION AT I-77 AND SR 5544 (W. CATWBA AVE.)

Designed By:	Checked By:	Date:	Sheet:	Of:
CLS	KSH	2-22-13	UC-4	UC-7

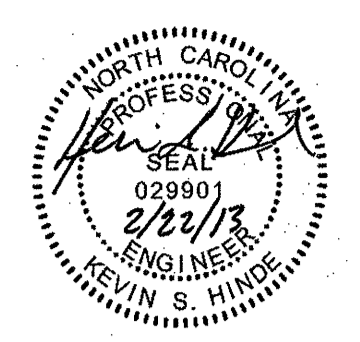
HINDE ENGINEERING

License No. C-2839
7520 E. Independence Blvd., Suite 230 Charlotte, NC 28227

01033/13

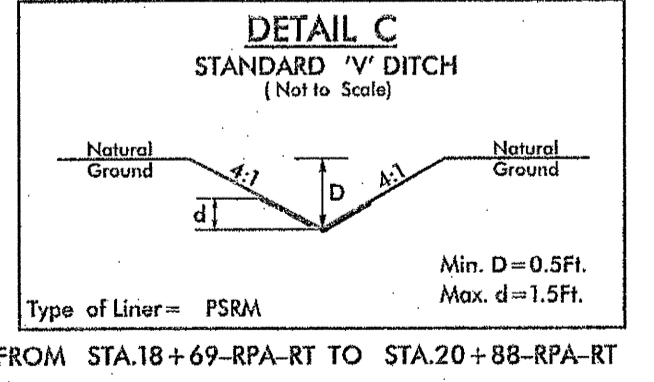
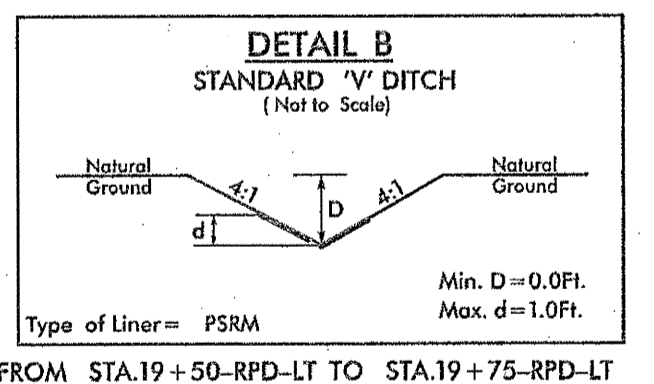
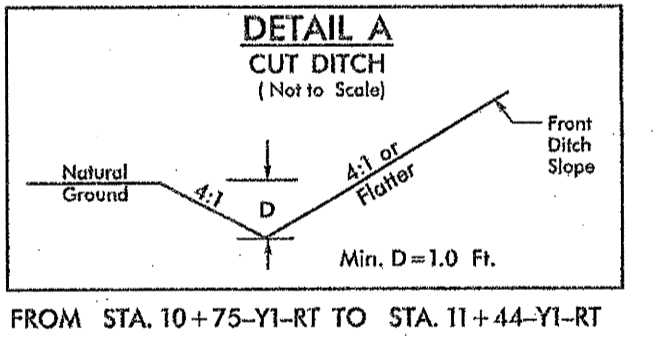
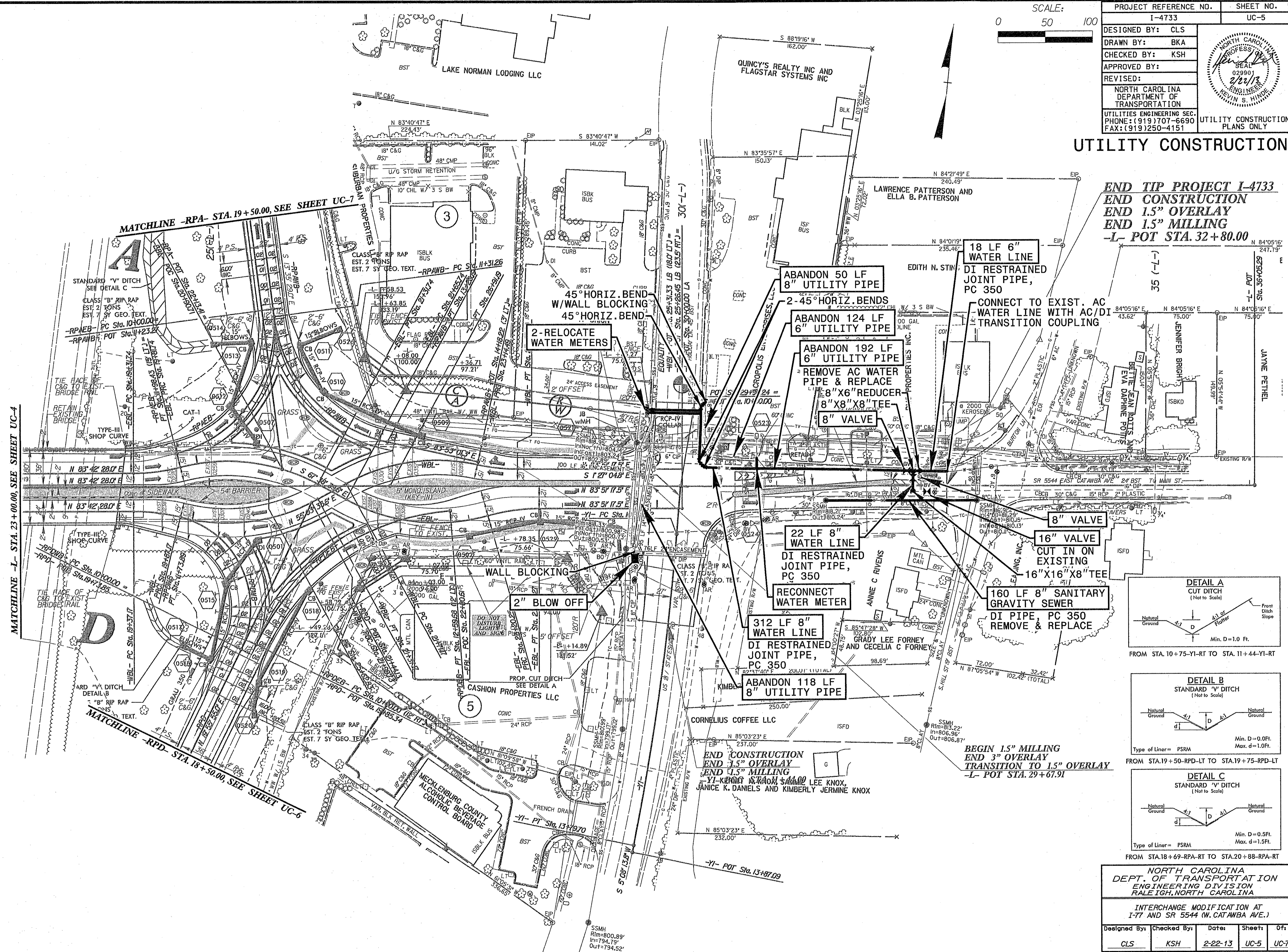


PROJECT REFERENCE NO.	I-4733	SHEET NO.	UC-5
DESIGNED BY:	CLS		
DRAWN BY:	BKA		
CHECKED BY:	KSH		
APPROVED BY:			
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		UTILITY CONSTRUCTION PLANS ONLY	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151			



UTILITY CONSTRUCTION

**END TIP PROJECT I-4733
END CONSTRUCTION
END 1.5" OVERLAY
END 1.5" MILLING
-L- POT STA. 32+80.00**



NORTH CAROLINA DEPT. OF TRANSPORTATION ENGINEERING DIVISION RALEIGH, NORTH CAROLINA

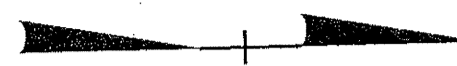
INTERCHANGE MODIFICATION AT I-77 AND SR 5544 (W. CATAWBA AVE.)

Designed By:	Checked By:	Date:	Sheet:	Of:
CLS	KSH	2-22-13	UC-5	UC-7



UB03/01/13

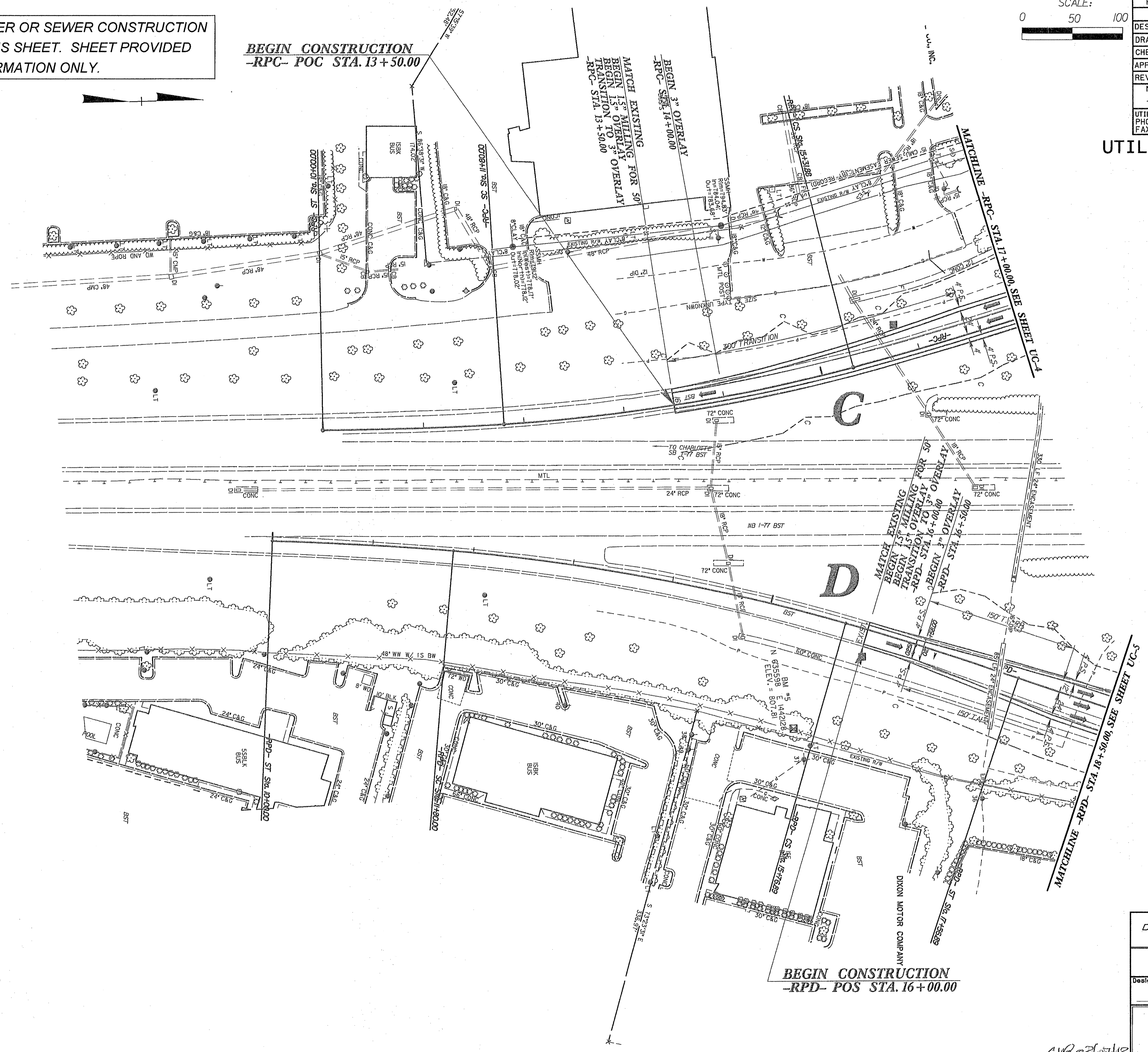
NO PROPOSED WATER OR SEWER CONSTRUCTION ANTICIPATED ON THIS SHEET. SHEET PROVIDED FOR EXISTING INFORMATION ONLY.



SCALE: 0 50 100

PROJECT REFERENCE NO. 1-4733	SHEET NO. UC-6
DESIGNED BY: CLS	
DRAWN BY: BKA	
CHECKED BY: KSH	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION



BEGIN CONSTRUCTION
-RPC- POC STA. 13+50.00

MATCH EXISTING
BEGIN 15' MILLING FOR 3\"/>

MATCH EXISTING
BEGIN 15' MILLING FOR 3\"/>

BEGIN CONSTRUCTION
-RPD- POS STA. 16+00.00

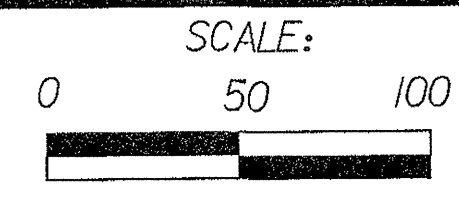
MATCHLINE -RPD- STA. 18+50.00, SEE SHEET UC-5

NORTH CAROLINA DEPT. OF TRANSPORTATION ENGINEERING DIVISION RALEIGH, NORTH CAROLINA				
INTERCHANGE MODIFICATION AT I-77 AND SR 5544 (W. CATAWBA AVE.)				
Designed By:	Checked By:	Date:	Sheet:	Of:
CLS	KSH	2-22-13	UC-6	UC-7

HINDE ENGINEERING
License No. C-2639
 7520 E. Independence Blvd., Suite 230, Charlotte, NC 28227

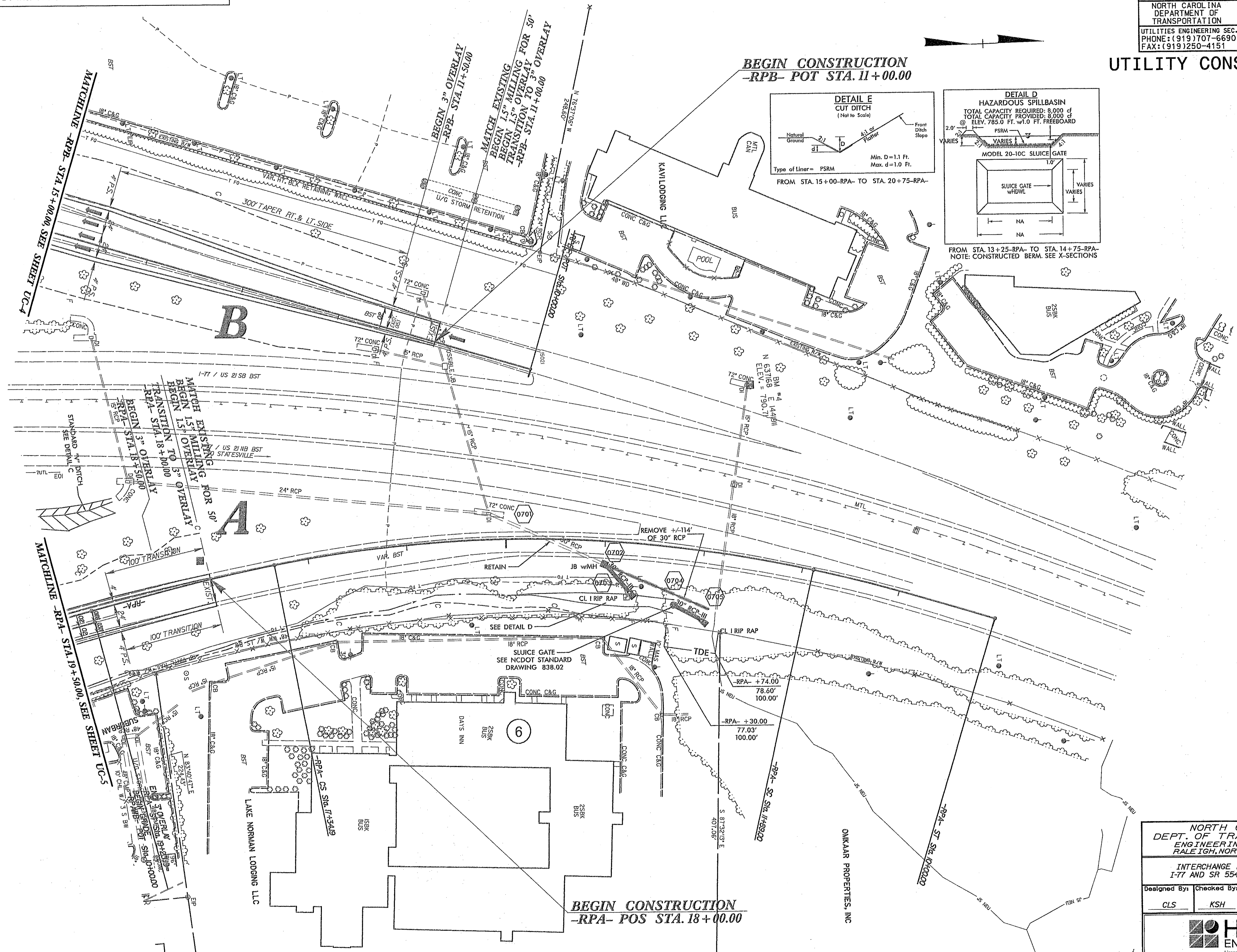
CMB 2/27/13

NO PROPOSED WATER OR SEWER CONSTRUCTION ANTICIPATED ON THIS SHEET. SHEET PROVIDED FOR EXISTING INFORMATION ONLY.



PROJECT REFERENCE NO. I-4733	SHEET NO. UC-7
DESIGNED BY: CLS	
DRAWN BY: BKA	
CHECKED BY: KSH	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION



B

A

6

NORTH CAROLINA DEPT. OF TRANSPORTATION ENGINEERING DIVISION RALEIGH, NORTH CAROLINA

INTERCHANGE MODIFICATION AT I-77 AND SR 5544 (W. CATANBA AVE.)

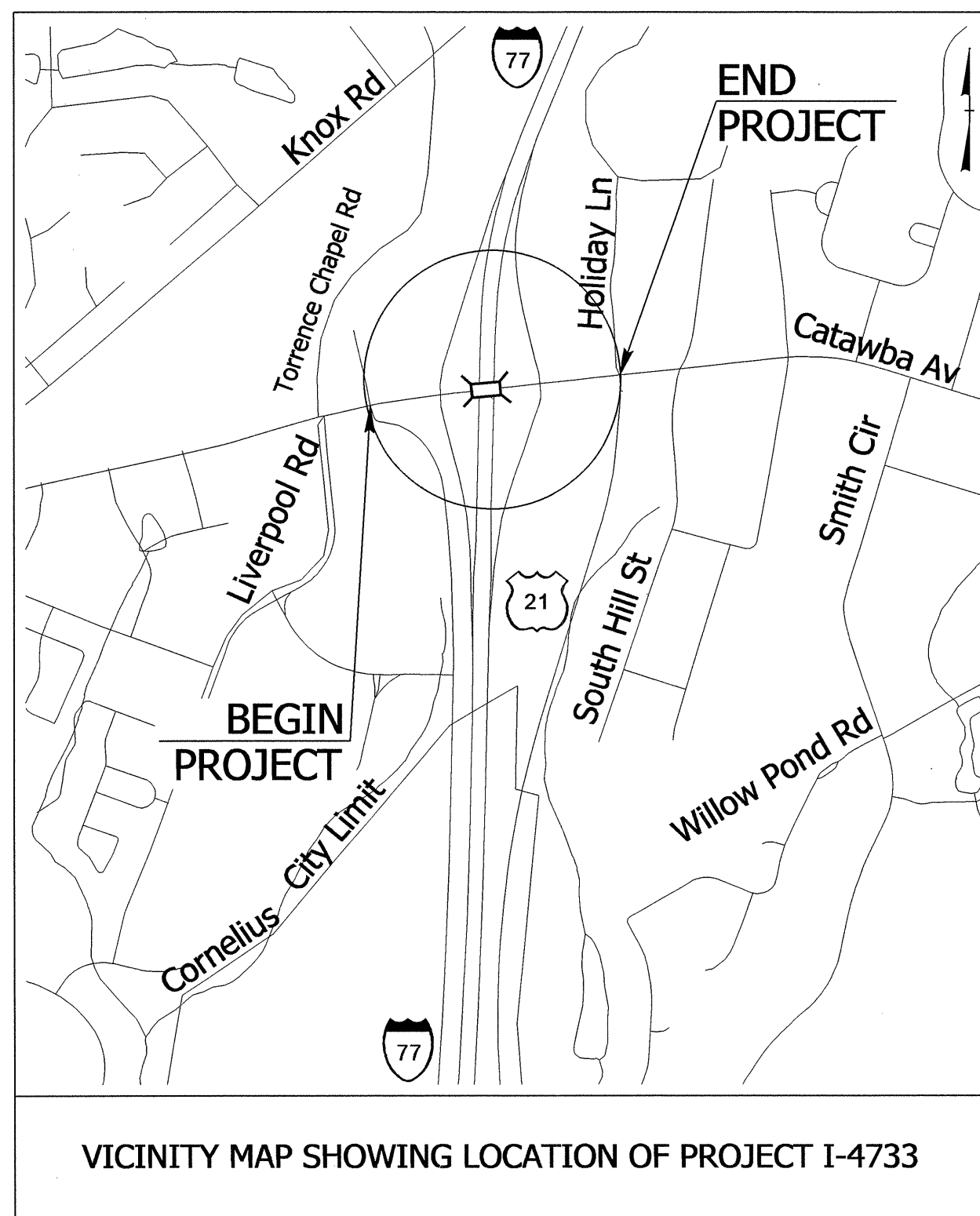
Designed By: CLS	Checked By: KSH	Date: 2-22-13	Sheet: UC-7	Of: UC-7
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HINDE ENGINEERING
 License No. C-2639
 7520 E. Independence Blvd., Suite 230 Charlotte, NC 28227

CWB 03/07/13

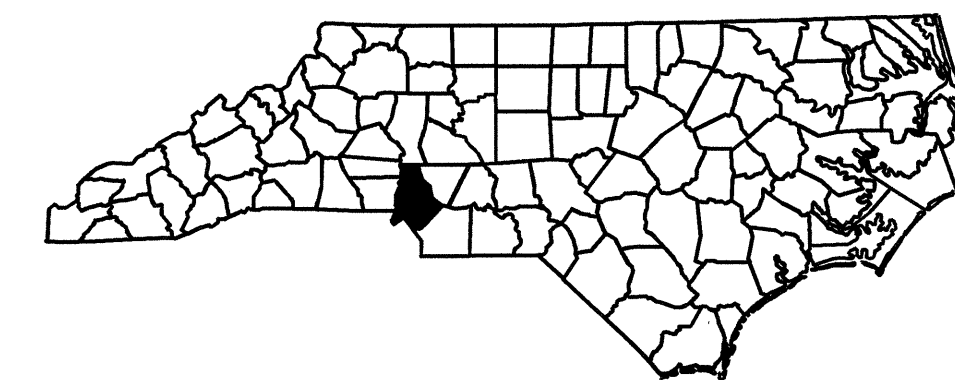
TIP PROJECT: I-4733

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

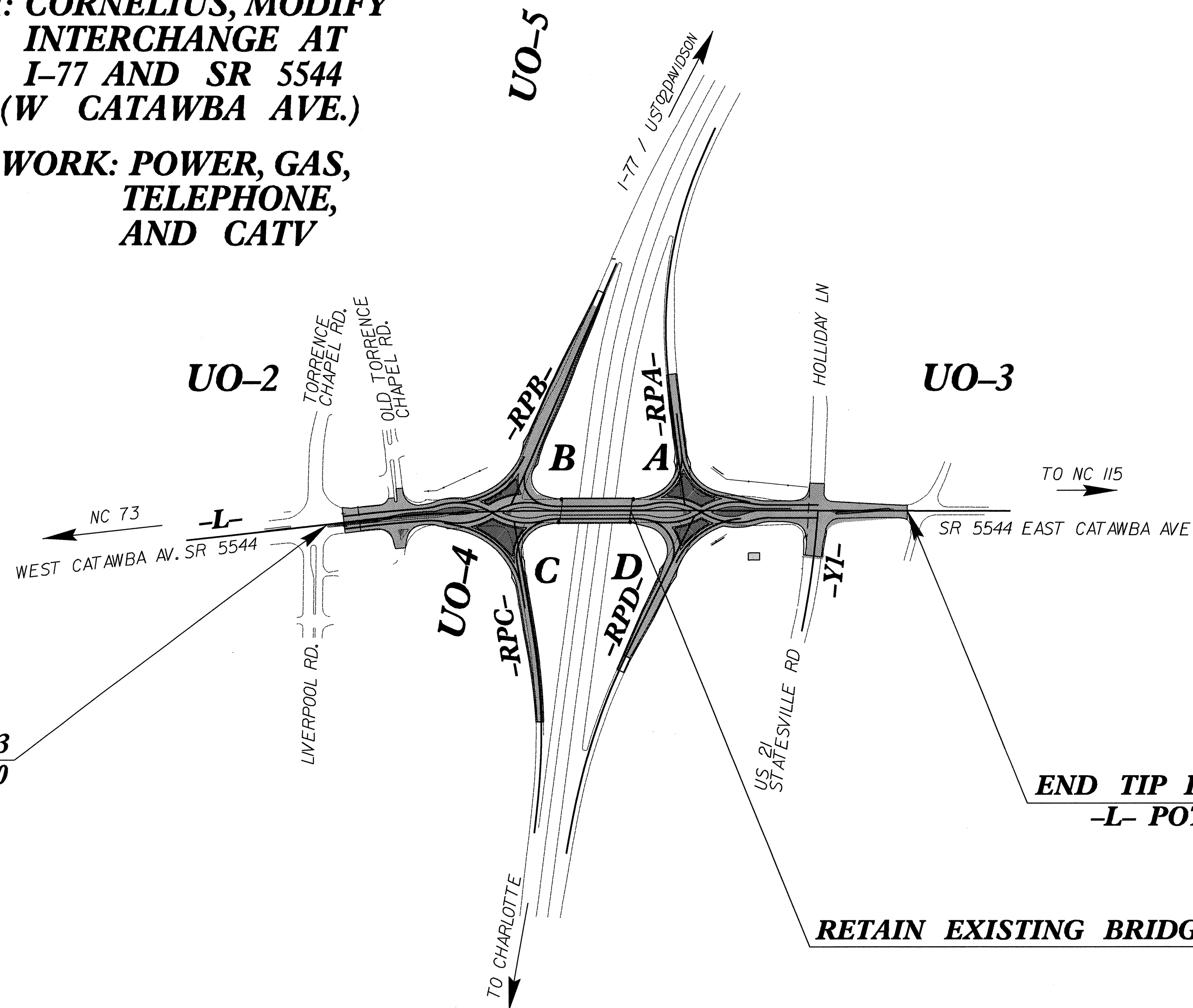
T.I.P. NO.	SHEET NO.
I-4733	UO-1



UTILITIES BY OTHERS PLANS

LOCATION: CORNELIUS, MODIFY INTERCHANGE AT I-77 AND SR 5544 (W CATAWBA AVE.)

TYPE OF WORK: POWER, GAS, TELEPHONE, AND CATV



BEGIN TIP PROJECT I-4733
-L- POT STA. 14+48.00

END TIP PROJECT I-4733
-L- POT STA. 32+80.00

RETAIN EXISTING BRIDGE

PLANS PREPARED BY:



RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE, SUITE 350
RALEIGH, NORTH CAROLINA 27609
NC LICENSE NO. F-0112
1-888-521-4455 OR 919-878-9560

GRAPHIC SCALES

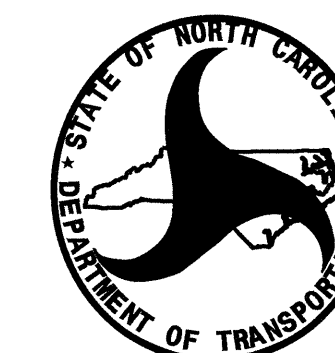


INDEX OF SHEETS

SHEET NO.	DESCRIPTION
UO-1	TITLE SHEET
UO-2 THROUGH UO-5	UTILITIES BY OTHERS SHEETS

UTILITY OWNERS ON PROJECT

- (1) ENERGY UNITED - POWER (DISTRIBUTION)
- (2) AT&T - TELEPHONE
- (3) PIEDMONT NATURAL GAS - NATURAL GAS
- (4) PSNC - NATURAL GAS
- (5) TIME WARNER TELECOM - ISP
- (6) MI COMMUNICATION - ISP



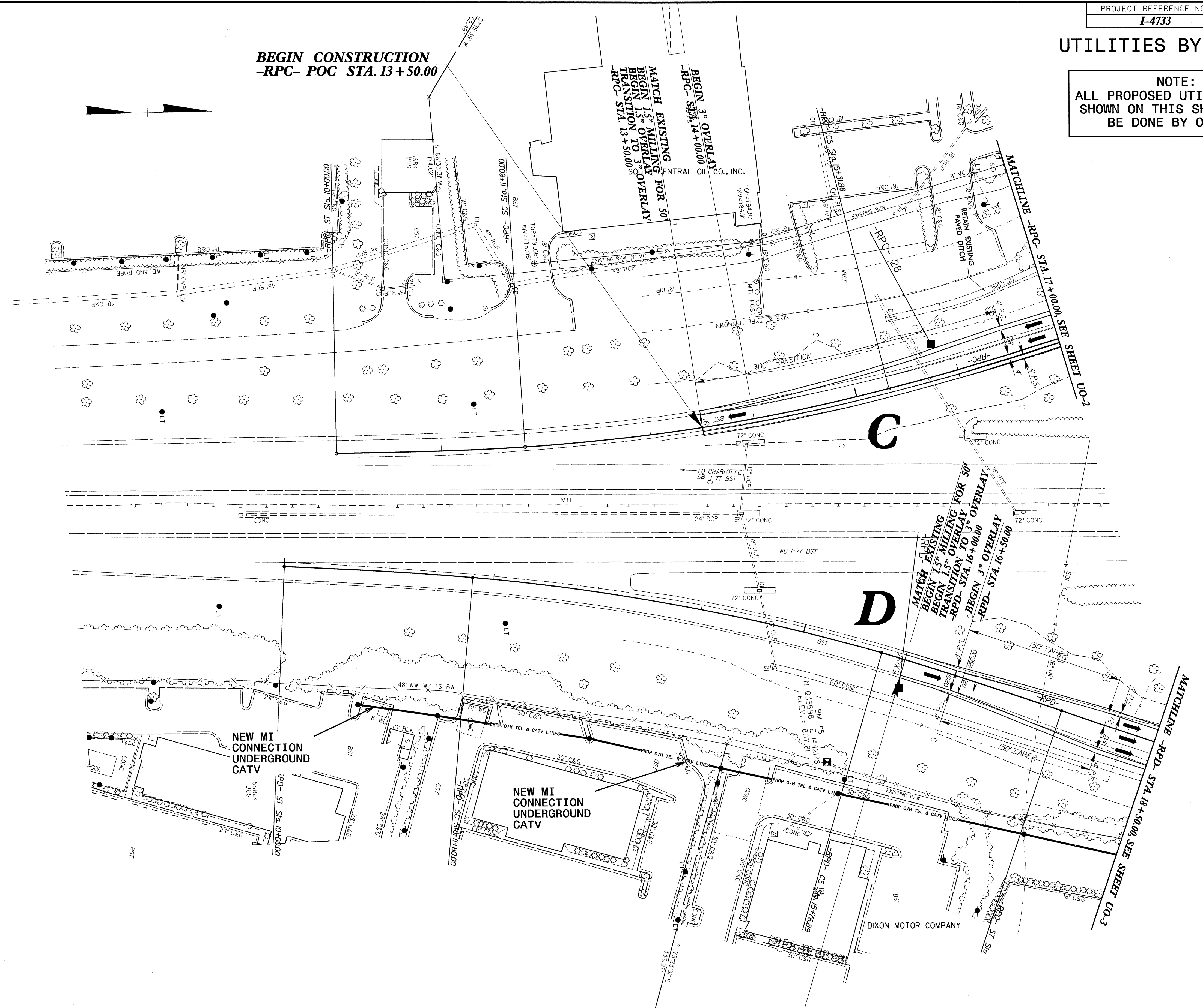
PREPARED IN THE OFFICE OF:
DIVISION OF HIGHWAYS
UTILITIES UNIT
UTILITIES ENGINEERING

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UTILITIES BY OTHERS

NOTE:
ALL PROPOSED UTILITY WORK
SHOWN ON THIS SHEET WILL
BE DONE BY OTHERS



BEGIN CONSTRUCTION
-RPC- POC STA. 13+50.00

MATCH EXISTING FOR 50'
BEGIN 1.5" MILLING
BEGIN 1.5" OVERLAY
TRANSITION TO 3" OVERLAY
-RPC- STA. 13+50.00

BEGIN 3" OVERLAY
-RPC- STA. 14+00.00

MATCH EXISTING FOR 50'
BEGIN 1.5" MILLING FOR 50'
TRANSITION TO 3" OVERLAY
-RPD- STA. 16+00.00
BEGIN 3" OVERLAY
-RPD- STA. 16+50.00

NEW MI CONNECTION
UNDERGROUND
CATV

NEW MI CONNECTION
UNDERGROUND
CATV

DIXON MOTOR COMPANY

BEGI -RPI UTILITY OWNERS ON PROJECT

- AT&T - TELEPHONE
- TIME WARNER TELECOM - ISP
- MI CONNECTION - ISP
- ENERGY UNITED - POWER
- PIEDMONT NATURAL GAS - NATURAL GAS
- PSNC - NATURAL GAS

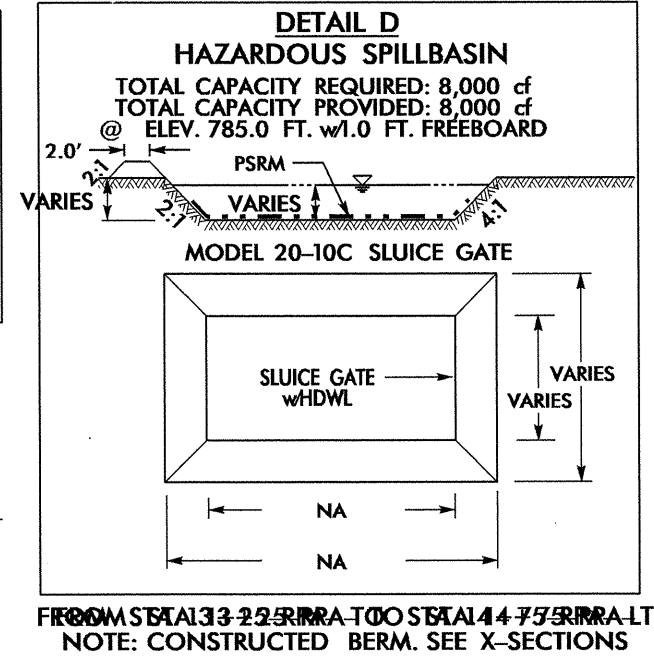
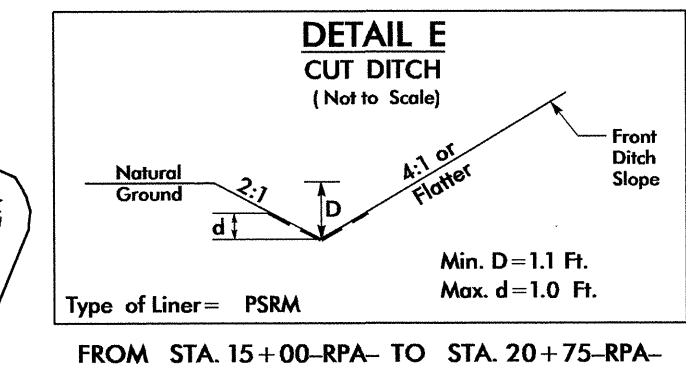
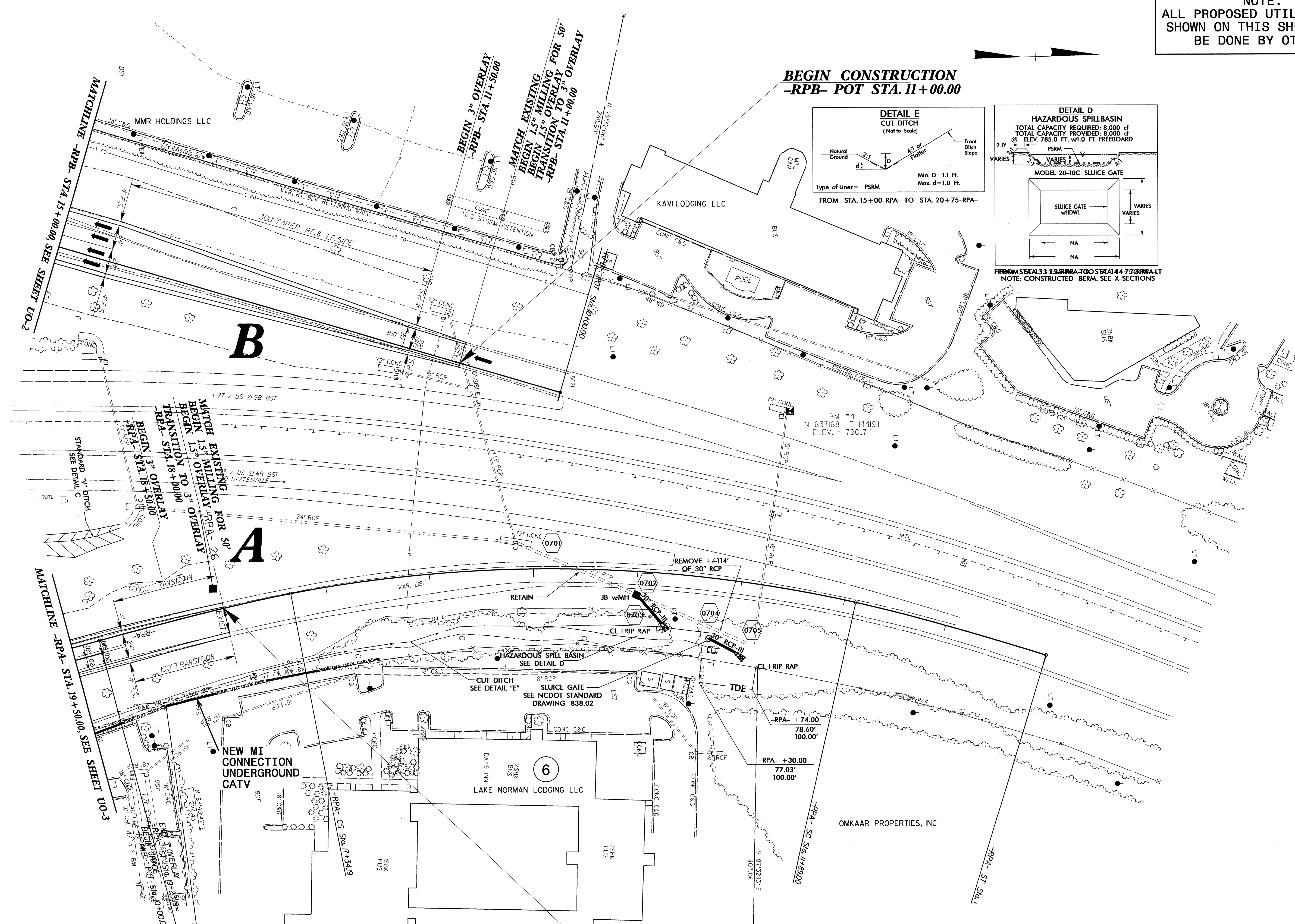
PLANS PREPARED BY:

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UTILITIES BY OTHERS

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UTILITY OWNERS ON PROJECT

AT&T - TELEPHONE
TIME WARNER TELECOM - ISP
MI CONNECTION - ISP
ENERGY UNITED - POWER
PIEDMONT NATURAL GAS - NATURAL GAS
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