



THIS DRAWING PREPARED AT THE  
RALEIGH OFFICE  
5410 Trinity Road, Suite 102 | Raleigh, NC 27607  
TEL 919.866.4951 | FAX 919.833.8124 | www.timmons.com

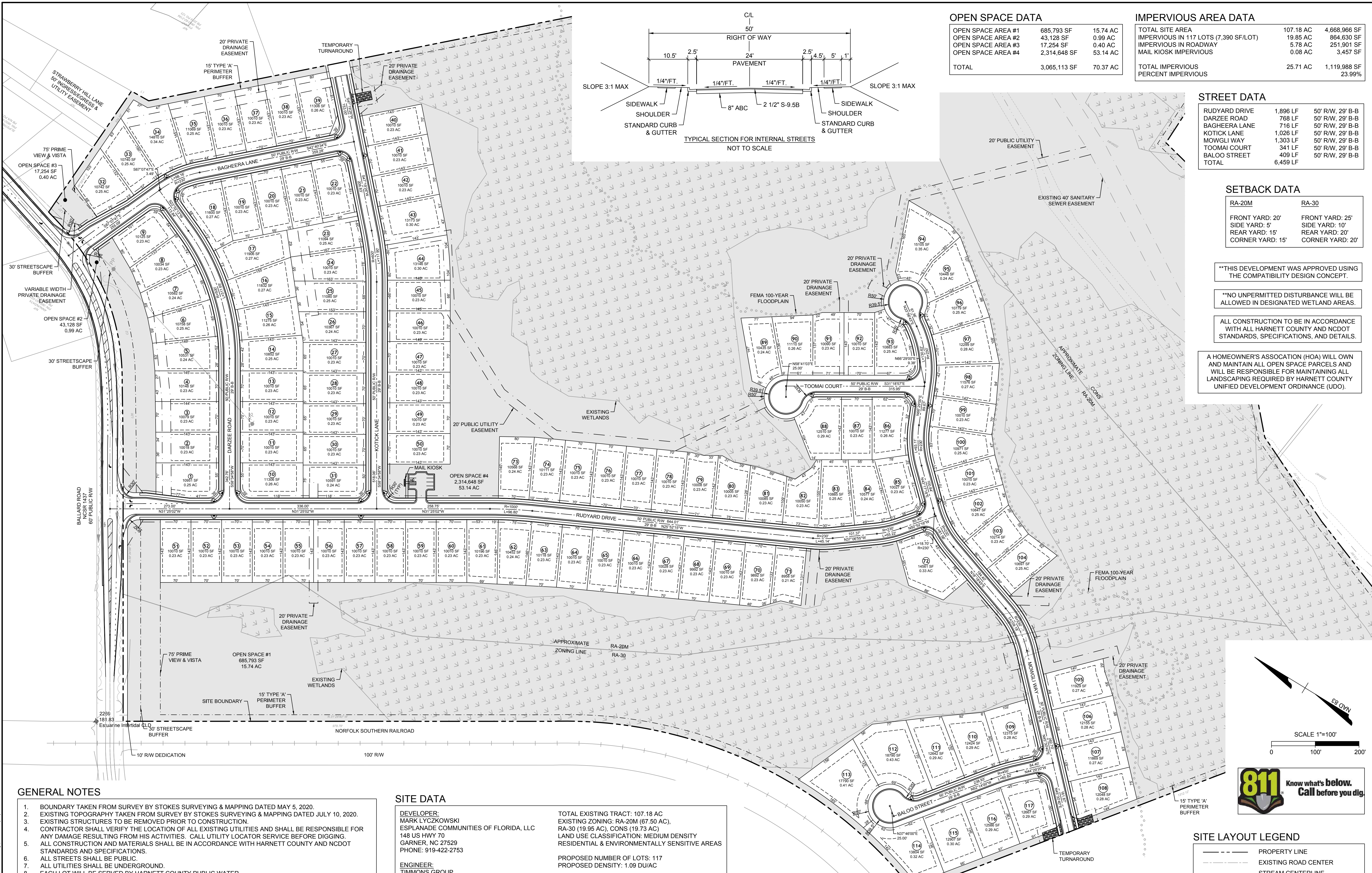
YOUR VISION ACHIEVED THROUGH OURS.  
DATE: 11/24/2020  
DRAWN BY: 331  
DESIGNED BY: 331  
CHECKED BY: M. ZACCARDO  
SCALE: AS SHOWN

REVISION  
INITIAL HWY SUBMITTAL  
ADDRESSING HWY COMMENTS DATED 10/13/2020

**TIMMONS GROUP**  
NORTH CAROLINA LICENSE NO. C-1652  
THE PRESERVE AT KIPLING CREEK  
HARNETT COUNTY, NORTH CAROLINA  
SITE PLAN

JOB NO. 44455  
SHEET NO. C2.0

These plans and associated documents are the exclusive property of TIMMONS GROUP and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of TIMMONS GROUP.



**OPEN SPACE DATA**

OPEN SPACE AREA #1	685,793 SF	15.74 AC
OPEN SPACE AREA #2	43,128 SF	0.99 AC
OPEN SPACE AREA #3	17,254 SF	0.40 AC
OPEN SPACE AREA #4	2,314,648 SF	53.14 AC
<b>TOTAL</b>	<b>3,065,113 SF</b>	<b>70.37 AC</b>

**IMPERVIOUS AREA DATA**

TOTAL SITE AREA	107.18 AC	4,668,966 SF
IMPERVIOUS IN 117 LOTS (7,390 SF/LOT)	19.85 AC	864,830 SF
IMPERVIOUS IN ROADWAY	5.78 AC	251,901 SF
MAIL KIOSK IMPERVIOUS	0.08 AC	3,457 SF
<b>TOTAL IMPERVIOUS</b>	<b>25.71 AC</b>	<b>1,119,988 SF</b>
<b>PERCENT IMPERVIOUS</b>		<b>23.99%</b>

**STREET DATA**

RUDYARD DRIVE	1,896 LF	50' RW, 29' B-B
DARZEE ROAD	768 LF	50' RW, 29' B-B
BAGHEERA LANE	716 LF	50' RW, 29' B-B
KOTICK LANE	1,026 LF	50' RW, 29' B-B
MOWLI WAY	1,303 LF	50' RW, 29' B-B
TOOMAI COURT	341 LF	50' RW, 29' B-B
BALOO STREET	409 LF	50' RW, 29' B-B
<b>TOTAL</b>	<b>6,459 LF</b>	

**SETBACK DATA**

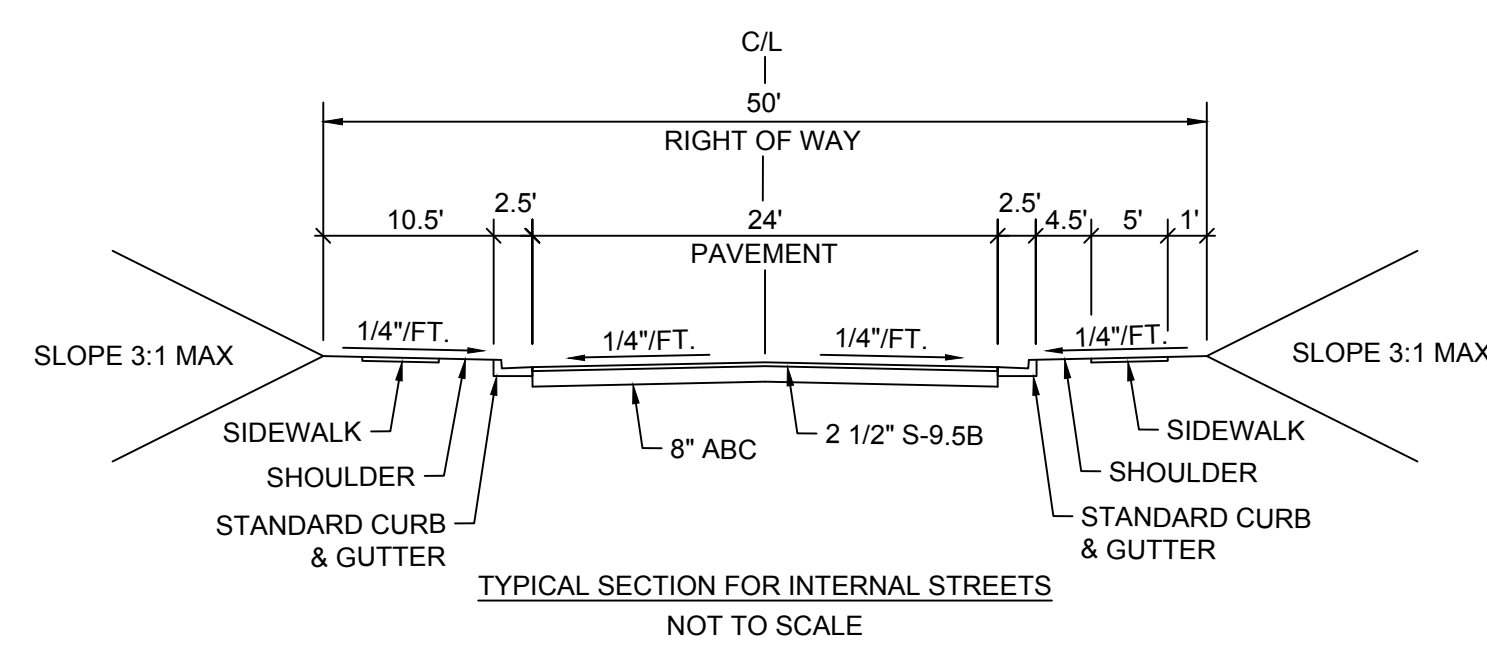
RA-20M	RA-30
FRONT YARD: 20'	FRONT YARD: 25'
SIDE YARD: 5'	SIDE YARD: 10'
REAR YARD: 15'	REAR YARD: 20'
CORNER YARD: 15'	CORNER YARD: 20'

\*\*THIS DEVELOPMENT WAS APPROVED USING THE COMPATIBILITY DESIGN CONCEPT.

\*\*NO UNPERMITTED DISTURBANCE WILL BE ALLOWED IN DESIGNATED WETLAND AREAS.

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL HARNETT COUNTY AND NCDOT STANDARDS, SPECIFICATIONS, AND DETAILS.

A HOMEOWNER'S ASSOCIATION (HOA) WILL OWN AND MAINTAIN ALL OPEN SPACE PARCELS AND WILL BE RESPONSIBLE FOR MAINTAINING ALL LANDSCAPING REQUIRED BY HARNETT COUNTY UNIFIED DEVELOPMENT ORDINANCE (UDO).



- GENERAL NOTES**
- BOUNDARY TAKEN FROM SURVEY BY STOKES SURVEYING & MAPPING DATED MAY 5, 2020.
  - EXISTING TOPOGRAPHY TAKEN FROM SURVEY BY STOKES SURVEYING & MAPPING DATED JULY 10, 2020.
  - EXISTING STRUCTURES TO BE REMOVED PRIOR TO CONSTRUCTION.
  - CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HIS ACTIVITIES. CALL UTILITY LOCATOR SERVICE BEFORE DIGGING.
  - ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH HARNETT COUNTY AND NCDOT STANDARDS AND SPECIFICATIONS.
  - ALL STREETS SHALL BE PUBLIC.
  - ALL UTILITIES SHALL BE UNDERGROUND.
  - EACH LOT WILL BE SERVED BY HARNETT COUNTY PUBLIC WATER.
  - EACH LOT WILL BE SERVED BY HARNETT COUNTY PUBLIC SEWER.
  - HARNETT COUNTY EROSION CONTROL PERMIT WILL BE REQUIRED, AND ALL EROSION CONTROL REGULATIONS WILL BE COMPLIED WITH.
  - CONSTRUCTION DRAWINGS MUST BE APPROVED PRIOR TO CONSTRUCTION.
  - SIGNAGE SHALL BE APPROVED PRIOR TO INSTALLATION.
  - STREET NAMES MUST BE APPROVED BY HARNETT COUNTY GIS PRIOR TO FINAL PLAT.
  - DEDICATED OPEN SPACE AREAS AND DRAINAGE EASEMENTS WILL BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
  - THE HOMEOWNERS ASSOCIATION WILL BE RESPONSIBLE FOR MAINTAINING THE STREET TREES.
  - THIS DEVELOPMENT IS WITHIN ONE MILE OF A VOLUNTARY AGRICULTURE DISTRICT.
  - HOMEOWNERS ASSOCIATION (HOA) IS RESPONSIBLE FOR MAINTENANCE OF PARKING AREAS, DRIVE AISLES, AND ALL LANDSCAPE BUFFERING.
  - A FOUNDATION SURVEY WILL BE REQUIRED ON ALL LOTS.
  - SIDEWALKS SHALL BE MAINTAINED BY HOMEOWNERS ASSOCIATION (HOA).
  - ALL REQUIRED LANDSCAPING CANNOT BE REMOVED AND COVENANTS SHALL REFLECT THIS REQUIREMENT.

**SITE DATA**

**DEVELOPER:**  
MARK LYCZKOWSKI  
ESPLANADE COMMUNITIES OF FLORIDA, LLC  
148 US HWY 70  
GARNER, NC 27529  
PHONE: 919-422-2753

**ENGINEER:**  
TIMMONS GROUP  
MIKE ZACCARDO, PE  
5410 TRINITY ROAD, STE. 102  
RALEIGH, NC 27607  
PHONE: 919-532-3281

**OWNER:**  
ADAMAH LLC  
32 WHITE OAKS RD  
HYDE PARK, NY 12538-1629

PIN: 0652-50-9919  
DB: 1891, PG: 110  
PB: 2000, PG: 378  
FIRM MAP: 3720064200J  
WATERSHED: WS-IV

TOTAL EXISTING TRACT: 107.18 AC  
EXISTING ZONING: RA-20M (67.50 AC), RA-30 (19.95 AC), CONS (19.73 AC)  
LAND USE CLASSIFICATION: MEDIUM DENSITY RESIDENTIAL & ENVIRONMENTALLY SENSITIVE AREAS

PROPOSED NUMBER OF LOTS: 117  
PROPOSED DENSITY: 1.09 DU/AC

RA-20M AREA: 67.50 AC  
MINIMUM REQUIRED LOT WIDTH: 70'  
MINIMUM LOT SIZE REQUIRED: 10,000 SF  
MINIMUM LOT SIZE PROVIDED: 10,005 SF  
AVERAGE LOT SIZE PROVIDED: 10,536 SF  
REQUIRED OPEN SPACE (20%): 13.50 AC

RA-30 AREA: 19.95 AC  
MINIMUM REQUIRED LOT WIDTH: 70'  
MINIMUM LOT SIZE REQUIRED: 12,500 SF  
MINIMUM LOT SIZE PROVIDED: 12,315 SF  
AVERAGE LOT SIZE PROVIDED: 13,662 SF  
REQUIRED OPEN SPACE (30%): 5.99 AC

TOTAL OPEN SPACE PROVIDED: 70.28 AC (65.57%)

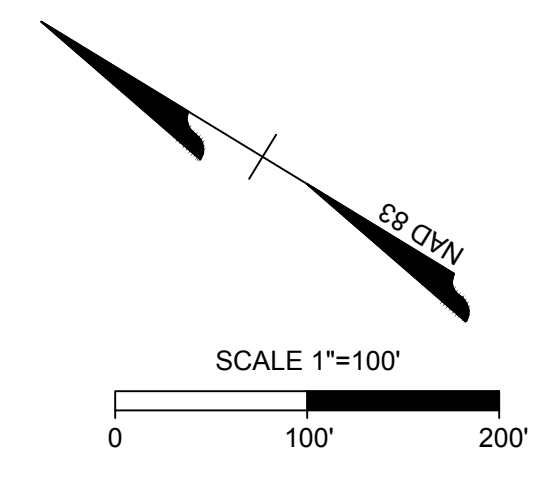
**OWNER CONSENT FORM**

AS THE OWNER OF RECORD, I HEREBY FORMALLY CONSENT TO THE PROPOSED DEVELOPMENT SHOWN ON THIS SITE PLAN AND ALL REGULATIONS AND REQUIREMENTS OF THE HARNETT COUNTY ORDINANCES.

OWNER SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

**SITE LAYOUT LEGEND**

	PROPERTY LINE
	EXISTING ROAD CENTER
	STREAM CENTERLINE
	PROPOSED PERIMETER BUFFER
	PROPOSED ESMT
	PROPOSED RIGHT-OF-WAY
	PROPOSED LOT LINE
	BUILDING SETBACK
	PROPOSED ROAD CENTER
	PROPOSED EOP
	OPEN SPACE
	WETLANDS





THIS DRAWING PREPARED AT THE  
**RALEIGH OFFICE**  
 5410 Trinity Road, Suite 102 | Raleigh, NC 27607  
 TEL 919.866.9511 FAX 919.833.8124 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

DATE 11/24/2020  
 DRAWN BY 331  
 DESIGNED BY 331  
 CHECKED BY M. ZACCARDO  
 SCALE AS SHOWN

# TIMMONS GROUP

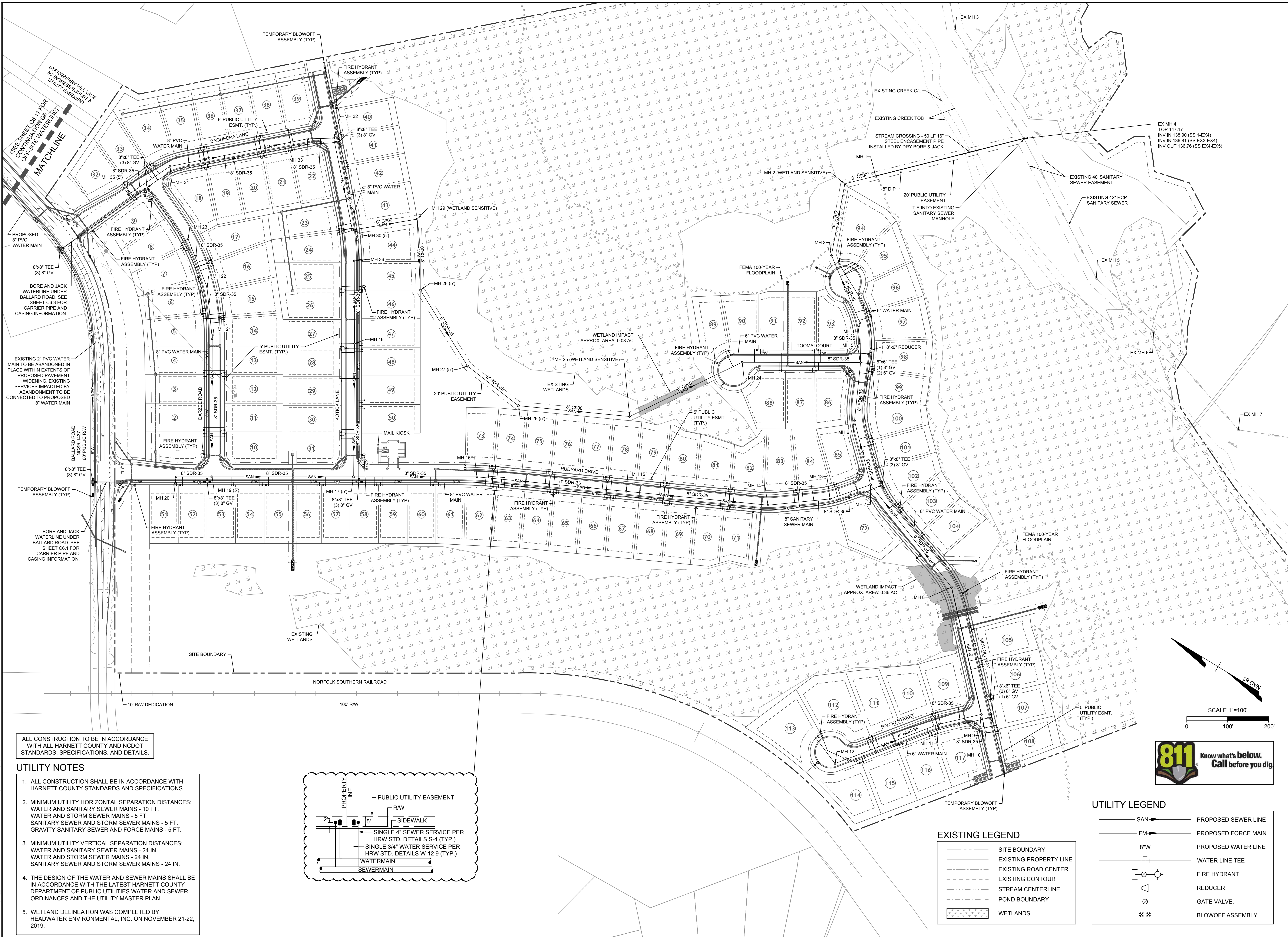
NORTH CAROLINA LICENSE NO. C-1652

## THE PRESERVE AT KIPLING CREEK

HARNETT COUNTY, NORTH CAROLINA  
 UTILITY PLAN

JOB NO. 44455  
 SHEET NO. C3.0

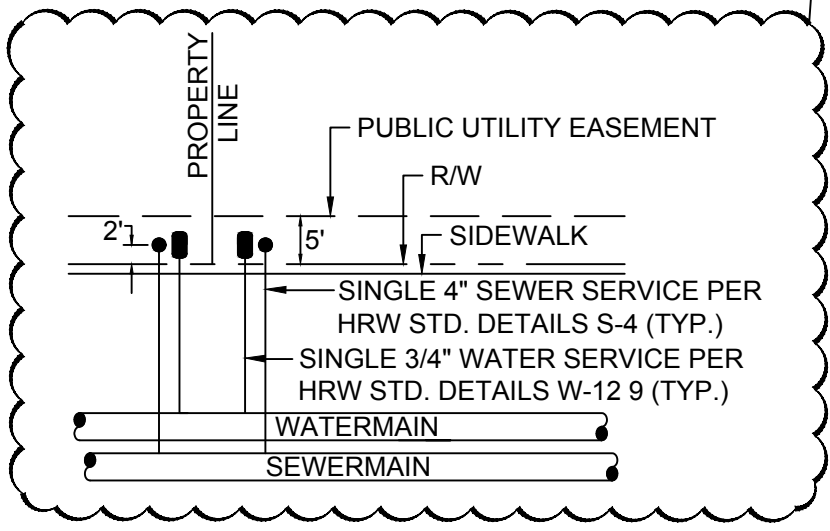
These plans and associated documents are the exclusive property of TIMMONS GROUP and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of TIMMONS GROUP.



ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL HARNETT COUNTY AND NCDOT STANDARDS, SPECIFICATIONS, AND DETAILS.

**UTILITY NOTES**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH HARNETT COUNTY STANDARDS AND SPECIFICATIONS.
- MINIMUM UTILITY HORIZONTAL SEPARATION DISTANCES:  
 WATER AND SANITARY SEWER MAINS - 10 FT.  
 WATER AND STORM SEWER MAINS - 5 FT.  
 SANITARY SEWER AND STORM SEWER MAINS - 5 FT.  
 GRAVITY SANITARY SEWER AND FORCE MAINS - 5 FT.
- MINIMUM UTILITY VERTICAL SEPARATION DISTANCES:  
 WATER AND SANITARY SEWER MAINS - 24 IN.  
 WATER AND STORM SEWER MAINS - 24 IN.  
 SANITARY SEWER AND STORM SEWER MAINS - 24 IN.
- THE DESIGN OF THE WATER AND SEWER MAINS SHALL BE IN ACCORDANCE WITH THE LATEST HARNETT COUNTY DEPARTMENT OF PUBLIC UTILITIES WATER AND SEWER ORDINANCES AND THE UTILITY MASTER PLAN.
- WETLAND DELINEATION WAS COMPLETED BY HEADWATER ENVIRONMENTAL, INC. ON NOVEMBER 21-22, 2019.



**EXISTING LEGEND**

---	SITE BOUNDARY
- - -	EXISTING PROPERTY LINE
- · - · -	EXISTING ROAD CENTER
- · - · -	EXISTING CONTOUR
- · - · -	POND CENTERLINE
- · - · -	SEWER MAIN
- · - · -	WETLANDS

**UTILITY LEGEND**

---	SAN	PROPOSED SEWER LINE
---	FM	PROPOSED FORCE MAIN
---	8"W	PROPOSED WATER LINE
+		WATER LINE TEE
⊗		FIRE HYDRANT
△		REDUCER
⊗		GATE VALVE
⊗		BLOWOFF ASSEMBLY

S:\3114455-Kipling\_Creek\DWG\Sheet\C3.0-UTIL.dwg | Plotted by Tyler Cross

**EXISTING LEGEND**

- SITE BOUNDARY
- - - EXISTING PROPERTY LINE
- - - EXISTING ROAD CENTER
- - - EXISTING CONTOUR
- - - STREAM CENTERLINE
- - - POND BOUNDARY
- [Pattern] WETLANDS

SCALE 1"=60'



ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL HARNETT COUNTY AND NCDOT STANDARDS, SPECIFICATIONS, AND DETAILS.



THIS DRAWING PREPARED AT THE  
**RALEIGH OFFICE**  
 5410 Trinity Road, Suite 102 | Raleigh, NC 27607  
 TEL 919.866.4951 | FAX 919.833.8124 | www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

REVISION DESCRIPTION  
 INITIAL HRW SUBMITTAL  
 ADDRESSING HRW COMMENTS DATED 10/13/2020

DATE 11/24/2020  
 DRAWN BY 331  
 DESIGNED BY 331

CHECKED BY M. ZACCARDO  
 SCALE AS SHOWN

DATE 09/14/2020  
 INITIAL HRW SUBMITTAL  
 ADDRESSING HRW COMMENTS DATED 10/13/2020

DATE 11/24/2020  
 DRAWN BY 331  
 DESIGNED BY 331

CHECKED BY M. ZACCARDO  
 SCALE AS SHOWN

JOB NO. 44455  
 SHEET NO. C4.2

# TIMMONS GROUP

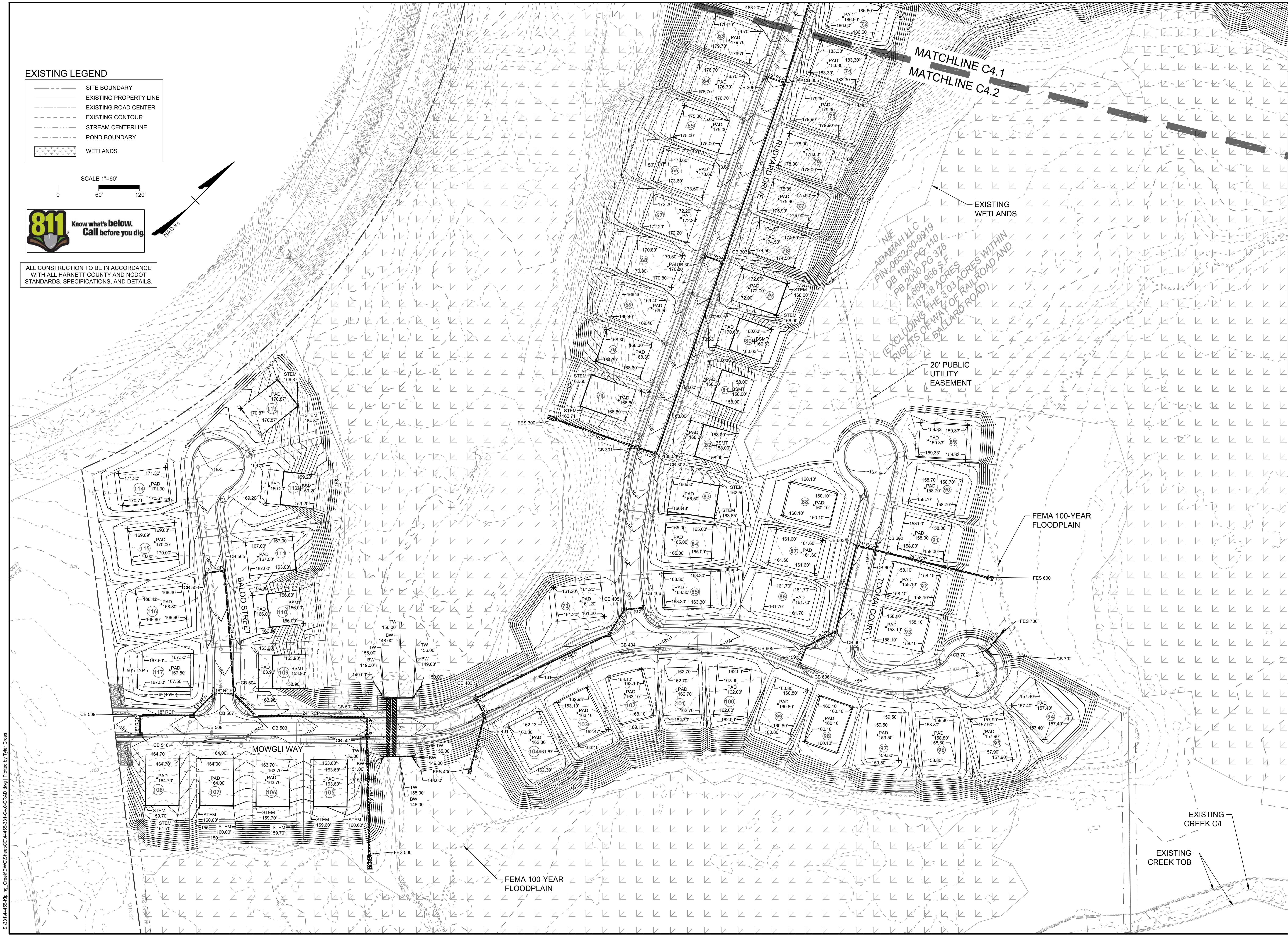
NORTH CAROLINA LICENSE NO. C-1652

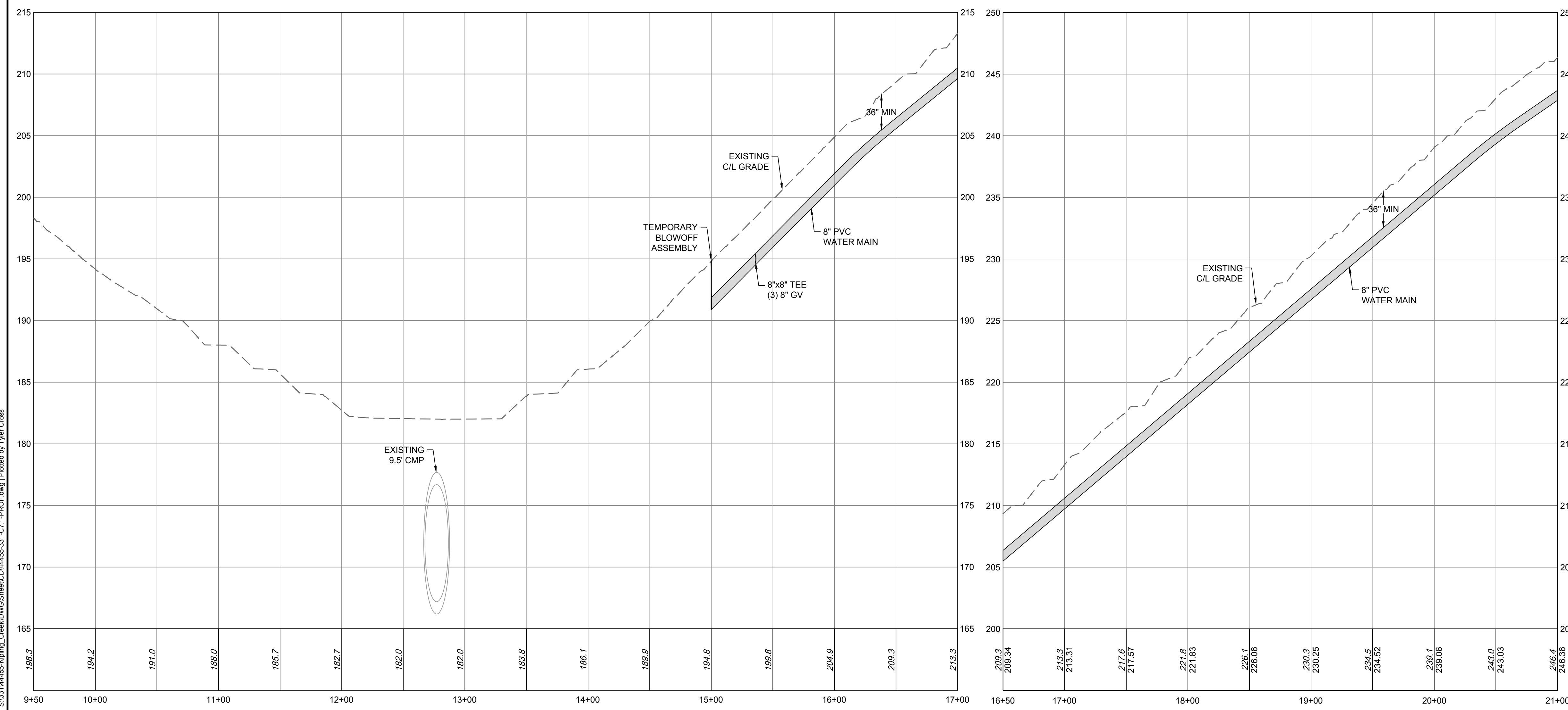
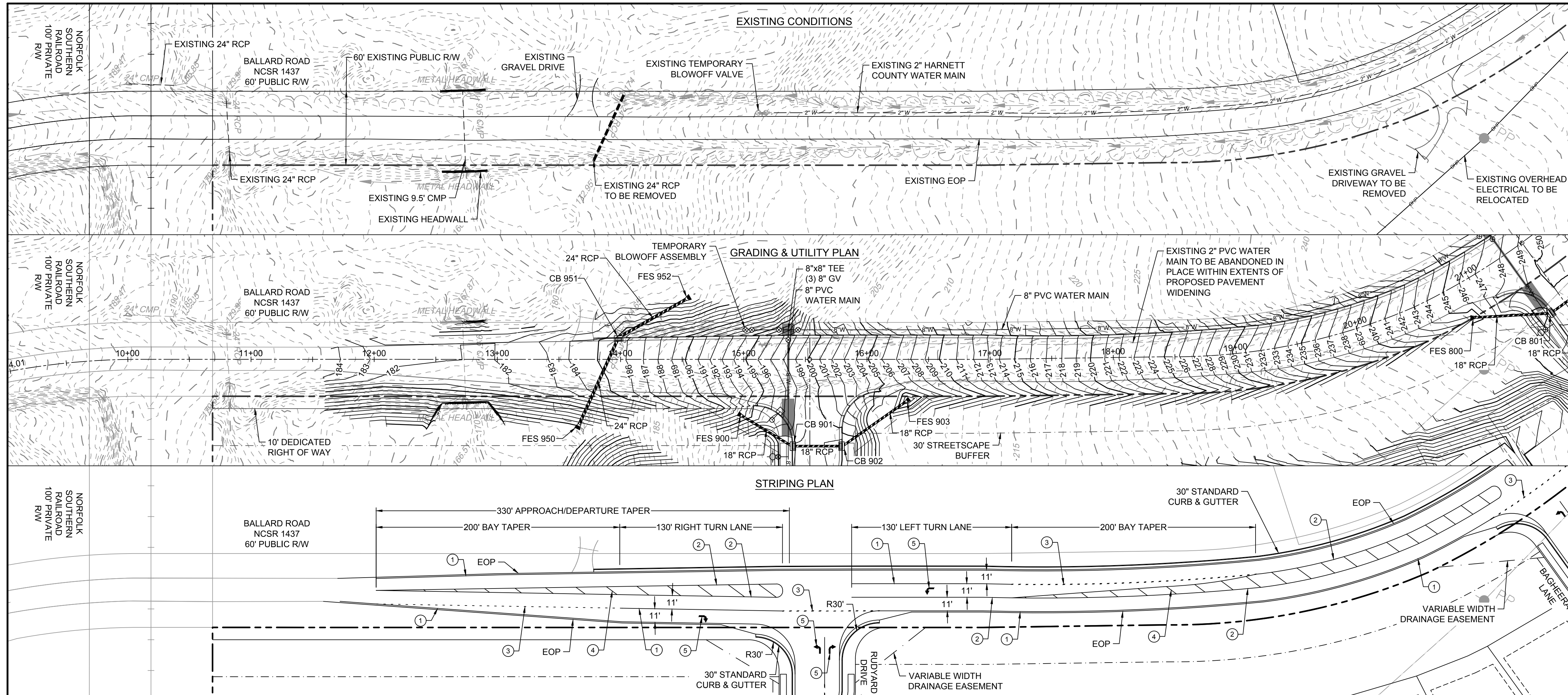
## THE PRESERVE AT KIPLING CREEK

HARNETT COUNTY, NORTH CAROLINA

### DETAILED GRADING & DRAINAGE PLAN - SHEET 2 OF 2

These plans and associated documents are the exclusive property of TIMMONS GROUP and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of TIMMONS GROUP.





**SIGNAGE AND STRIPING SCHEDULE**

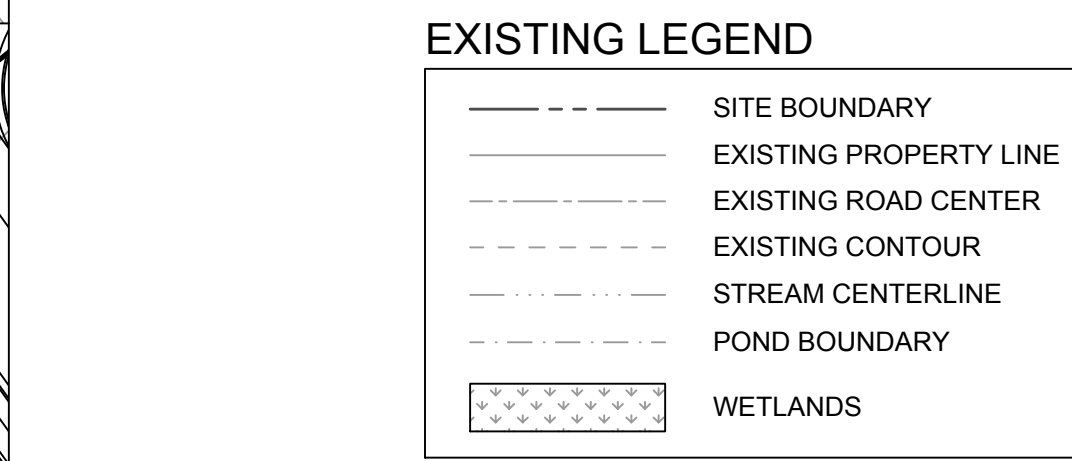
- ① 4" SINGLE SOLID WHITE LINE
- ② 4" DOUBLE SOLID YELLOW LINE
- ③ 4" WHITE SINGLE DASHED LINE MINI-SKIP @ 3" LINE, 9" SPACE
- ④ 8" YELLOW DIAGONAL PAVEMENT MARKING (45° SPACING)
- ⑤ DIRECTIONAL PAVEMENT MARKINGS
- ⑥ NCDOT R101 STOP SIGN MOUNTED ON POST PER SPECIFICATIONS

**NOTES:**

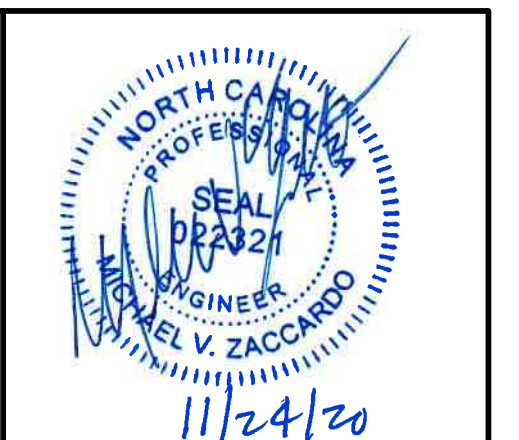
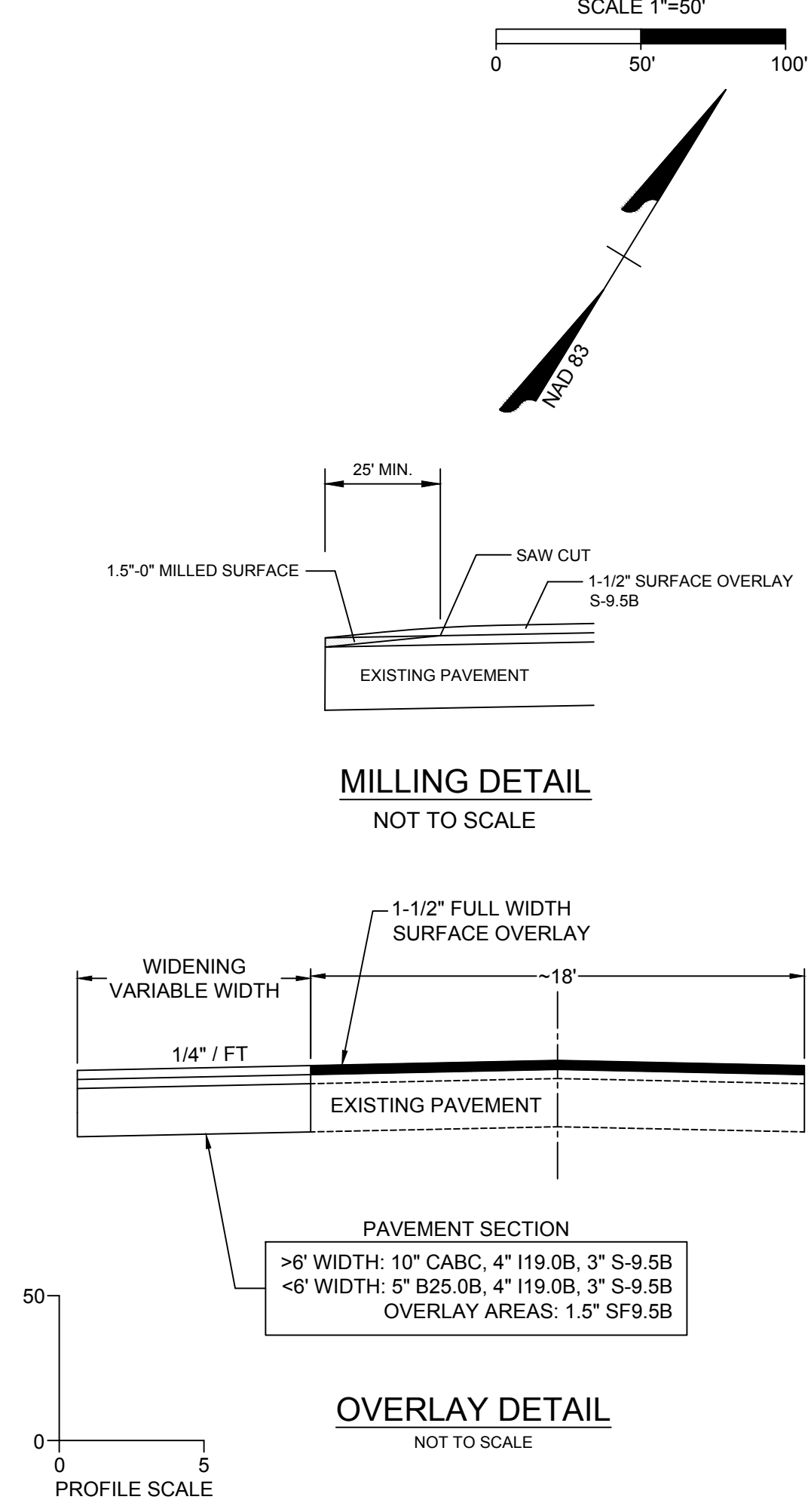
- COORDINATE ALL STRIPING OF ROADS WITHIN NCDOT ROW WITH NCDOT PRIOR TO FINAL PAINT STRIPING
- ALL MARKINGS WILL CONFORM WITH NCDOT STANDARD 1205 "PAVEMENT MARKINGS"
- ALL EXISTING PAVEMENT MARKINGS SHALL BE ERADICATED PER NCDOT SPECIFICATIONS PRIOR TO PLACEMENT OF MARKING SHOWN HEREIN.

**TRAFFIC CONTROL NOTES**

- ALL SITE SIGNAGE SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND NCDOT STANDARDS.
- ALL SIGNS SHALL BE MOUNTED WITH 5-FT MIN. VERTICAL CLEARANCE TO THE BOTTOM OF THE SIGN ON 2-LB. GALV. STEEL U-CHANNEL POST SET IN 3-FT DEEP X 12-IN DIA. CONCRETE FOOTING.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH WAKE COUNTY STANDARDS AND SPECIFICATIONS.
- ALL SIGNAGE SHALL BE FIELD STAKED AND THE LOCATIONS APPROVED BY NCDOT INSPECTOR PRIOR TO SIGN INSTALLATION.
- CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AS REQUIRED BY NCDOT.



ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL HARNETT COUNTY AND NCDOT STANDARDS, SPECIFICATIONS, AND DETAILS.



THIS DRAWING PREPARED AT THE  
**RALEIGH OFFICE**  
 5410 Trinity Road, Suite 102 | Raleigh, NC 27607  
 TEL 919.866.9511 FAX 919.833.8124 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

DATE: 11/24/2020  
 DRAWN BY: 331  
 DESIGNED BY: 331  
 CHECKED BY: M. ZACCARDO  
 SCALE: AS SHOWN

**TIMMONS GROUP**

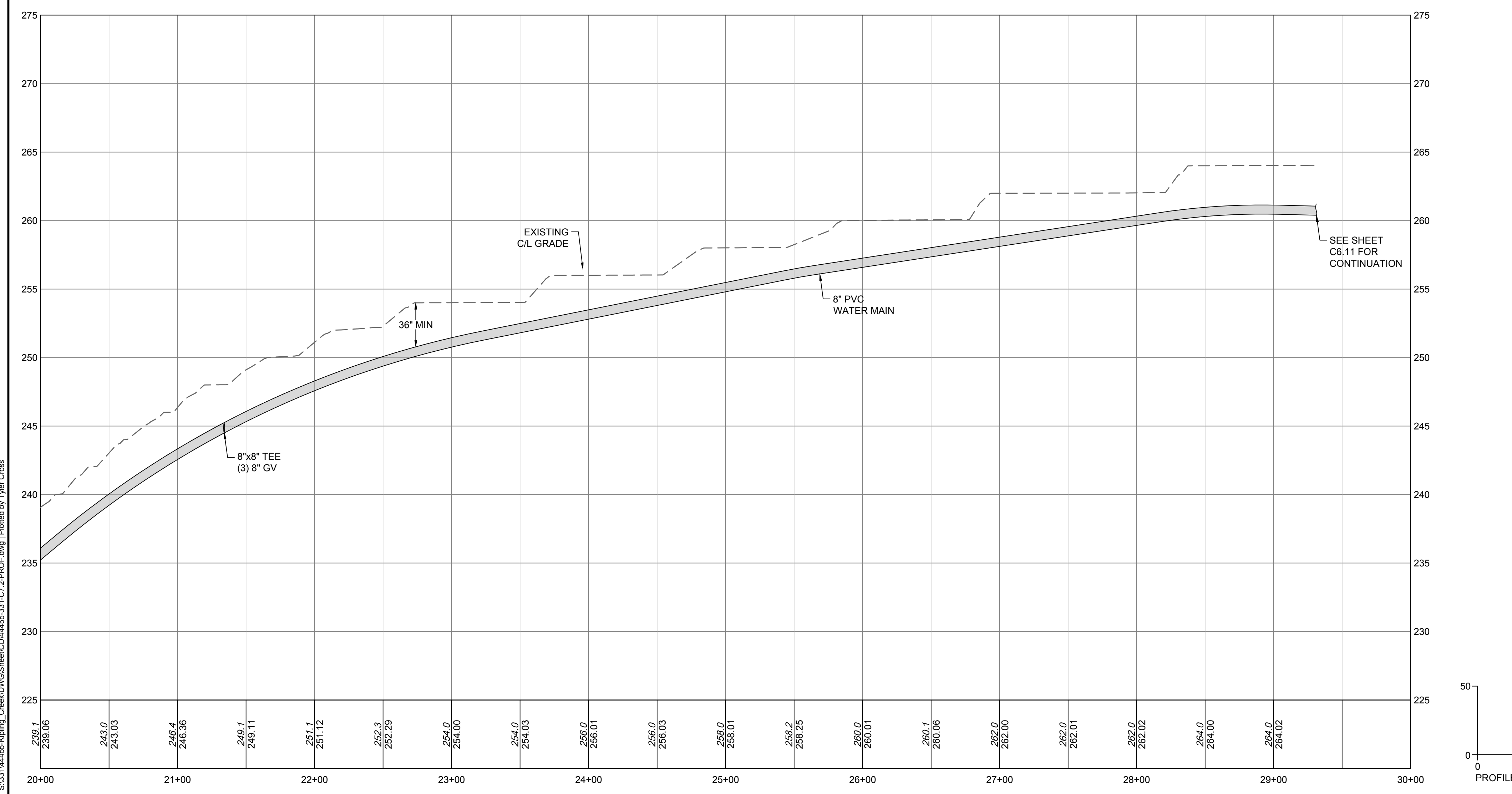
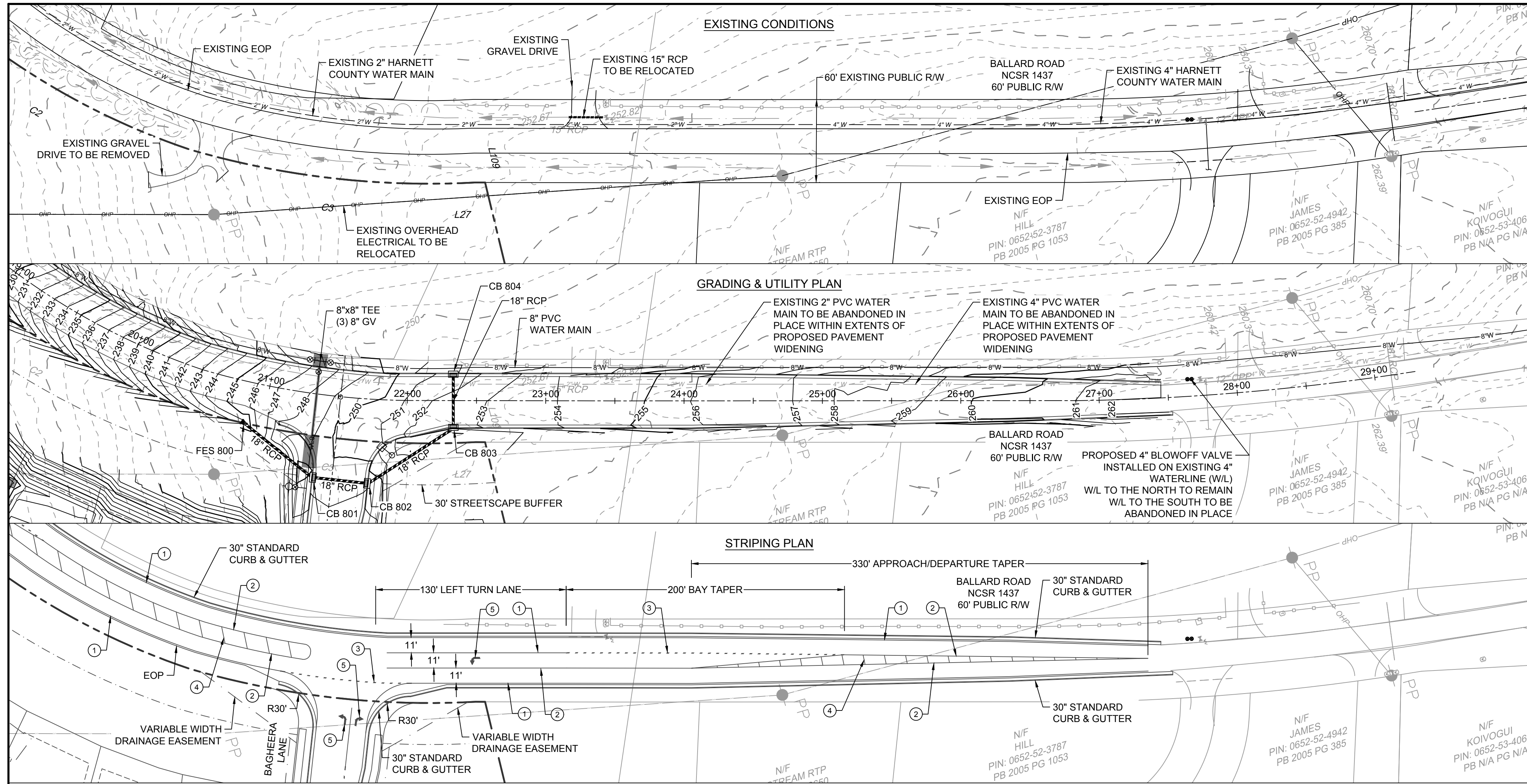
NORTH CAROLINA LICENSE NO. C-1652

**THE PRESERVE AT KIPLING CREEK**  
 HARNETT COUNTY, NORTH CAROLINA

**BALLARD ROAD WIDENING (9+50 TO 21+00) PLAN & PROFILE**

JOB NO. 44455  
 SHEET NO. C7.1

S:\3314455-Kipling\_Creek\DWG\Sheet\CD44455-331-C7-1.PRF - Aug | Plotted by Tyler Cross



**SIGNAGE AND STRIPING SCHEDULE**

- 4" SINGLE SOLID WHITE LINE
- 4" DOUBLE SOLID YELLOW LINE
- 4" WHITE SINGLE DASHED LINE MINI-SKIP @ 3" LINE, 9" SPACE
- 8" YELLOW DIAGONAL PAVEMENT MARKING (45° SPACING)
- DIRECTIONAL PAVEMENT MARKINGS
- NCDOT R101 STOP SIGN MOUNTED ON POST PER SPECIFICATIONS

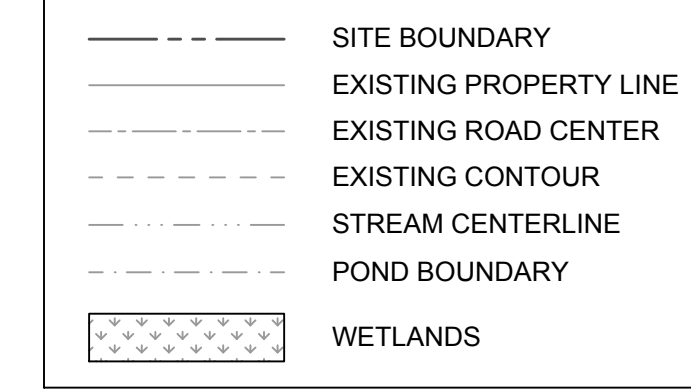
**NOTES:**

- COORDINATE ALL STRIPING OF ROADS WITHIN NCDOT ROW WITH NCDOT PRIOR TO FINAL PAINT STRIPING
- ALL MARKINGS WILL CONFORM WITH NCDOT STANDARD 1205 "PAVEMENT MARKINGS"
- ALL EXISTING PAVEMENT MARKINGS SHALL BE ERADICATED PER NCDOT SPECIFICATIONS PRIOR TO PLACEMENT OF MARKING SHOWN HEREIN.

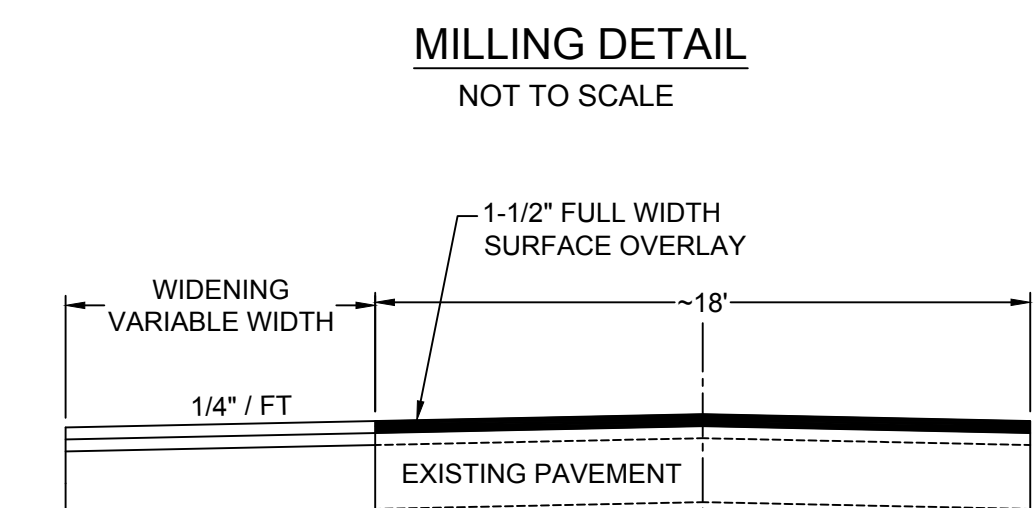
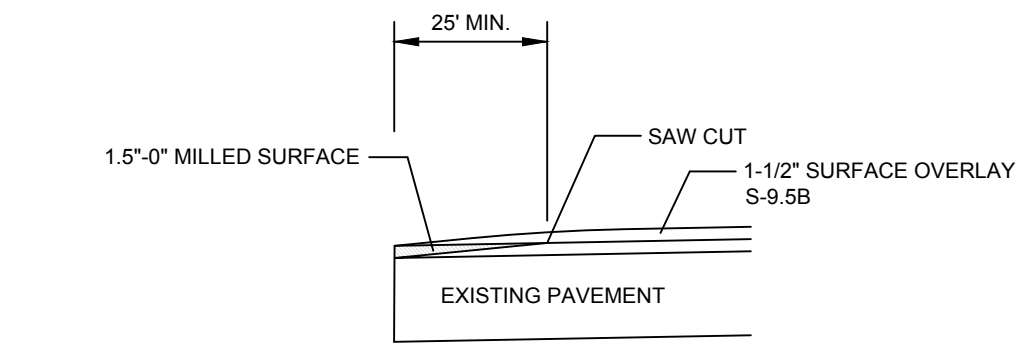
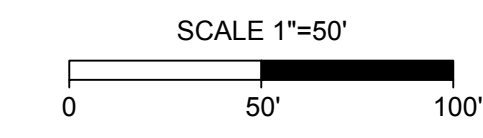
**TRAFFIC CONTROL NOTES**

- ALL SITE SIGNAGE SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND NCDOT STANDARDS.
- ALL SIGNS SHALL BE MOUNTED WITH 5-FT MIN. VERTICAL CLEARANCE TO THE BOTTOM OF THE SIGN ON 2-LB. GALV. STEEL U-CHANNEL POST SET IN 3-FT DEEP X 12-IN DIA. CONCRETE FOOTING.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH WAKE COUNTY STANDARDS AND SPECIFICATIONS.
- ALL SIGNAGE SHALL BE FIELD STAKED AND THE LOCATIONS APPROVED BY NCDOT INSPECTOR PRIOR TO SIGN INSTALLATION.
- CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AS REQUIRED BY NCDOT.

**EXISTING LEGEND**

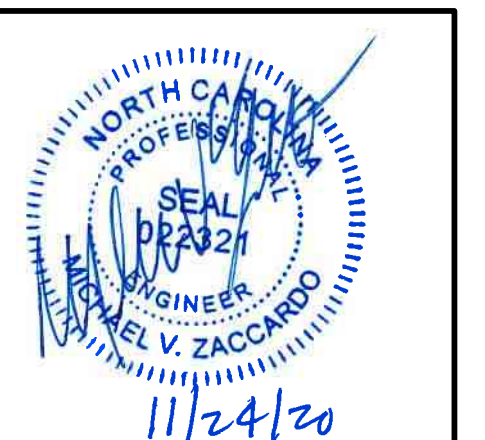


ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL HARNETT COUNTY AND NCDOT STANDARDS, SPECIFICATIONS, AND DETAILS.



**PAVEMENT SECTION**

- >6' WIDTH: 10" CABG, 4" I19.0B, 3" S-9.5B
- <6' WIDTH: 5" B25.0B, 4" I19.0B, 3" S-9.5B
- OVERLAY AREAS: 1.5" SF9.5B



THIS DRAWING PREPARED AT THE  
**RALEIGH OFFICE**  
5410 Trinity Road, Suite 102 | Raleigh, NC 27607  
TEL 919.866.9511 FAX 919.833.8124 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

DATE: 09/14/2020  
DATE: 11/24/2020

REVISION DESCRIPTION  
INITIAL HW SUBMITTAL  
ADDRESSING HW COMMENTS DATED 10/13/2020

DATE: 11/24/2020

DRAWN BY: 331

DESIGNED BY: 331

CHECKED BY: M. ZACCARDO

SCALE: AS SHOWN

**TIMMONS GROUP**

NORTH CAROLINA LICENSE NO. C-1652

**THE PRESERVE AT KIPLING CREEK**  
HARNETT COUNTY, NORTH CAROLINA

**BALLARD ROAD WIDENING (20+00 TO 30+00) PLAN & PROFILE**

JOB NO. 44455


SHEET NO. C7.2

These plans and associated documents are the exclusive property of TIMMONS GROUP and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of TIMMONS GROUP.



**DUKE ENERGY**

Outdoor Lighting  
**Roadway LED**



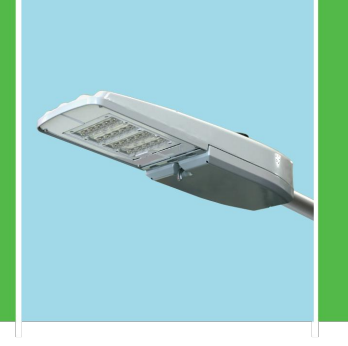
The Roadway LED is a green solution and great fit for streets, walkways, parking lots. This energy-efficient luminaire delivers the light where it is needed while increasing visibility and reducing light pollution. Choose low to medium light output on wood or fiberglass poles for residential or existing poles. Available with one to four fixture per pole, depending on the fixture/pole combination selected.

LED Light Emitting Diode	60   70   110   150   200   280 watts
Mounting heights	15, 20, 25, 30, 35
Colors	Bronze Black Gray Green
Poles	Style A, C Wood

For additional information, visit [www.dukeenergy.com/lighting](http://www.dukeenergy.com/lighting) or call us toll free: 800.544.8000 (24 hrs) or 800.521.2222 (9-5)

**DUKE ENERGY**

Outdoor Lighting  
**Roadway LED**



The Roadway LED is a green solution and great fit for streets, walkways, parking lots. This energy-efficient luminaire delivers the light where it is needed while increasing visibility and reducing light pollution. Choose low to medium light output on wood or fiberglass poles for residential or existing poles. Available with one to four fixture per pole, depending on the fixture/pole combination selected.

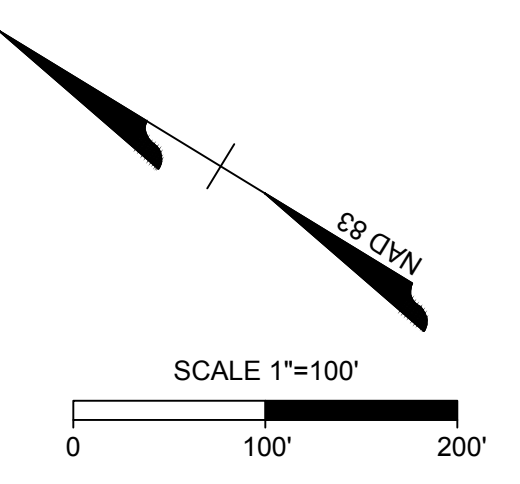
LED Light Emitting Diode	60   70   110   150   200   280 watts
Mounting heights	15, 20, 25, 30, 35
Colors	Bronze Black Gray Green
Poles	Style A, C Wood

For additional information, visit [www.dukeenergy.com/lighting](http://www.dukeenergy.com/lighting) or call us toll free: 800.544.8000 (24 hrs) or 800.521.2222 (9-5)



**LIGHTING LEGEND**

- LED STREET LIGHTS (9,500 LUMENS LED 75 ROADWAY LIGHT)
- ALUMINUM POLE - HEIGHT 30'



THIS DRAWING PREPARED AT THE  
**RALEIGH OFFICE**  
5410 Trinity Road, Suite 102 | Raleigh, NC 27607  
TEL 919.866.4951 | FAX 919.833.8124 | www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

DATE	09/14/2020
DATE	11/24/2020
REVISION DESCRIPTION	INITIAL HRV SUBMITTAL
ADDRESSING HRV COMMENTS DATED	10/13/2020

DRAWN BY	331
DESIGNED BY	331
CHECKED BY	M. ZACCARDO
SCALE	AS SHOWN

# TIMMONS GROUP

NORTH CAROLINA LICENSE NO. C-1652

## THE PRESERVE AT KIPLING CREEK

HARNETT COUNTY, NORTH CAROLINA

### LIGHTING PLAN

JOB NO.	44455
SHEET NO.	C10.0

These plans and associated documents are the exclusive property of TIMMONS GROUP and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of TIMMONS GROUP.



THIS DRAWING PREPARED AT THE  
**RALEIGH OFFICE**  
 5414 Trinity Road, Suite 102 | Raleigh, NC 27607  
 TEL 919.866.9511 FAX 919.833.8124 www.timmons.com

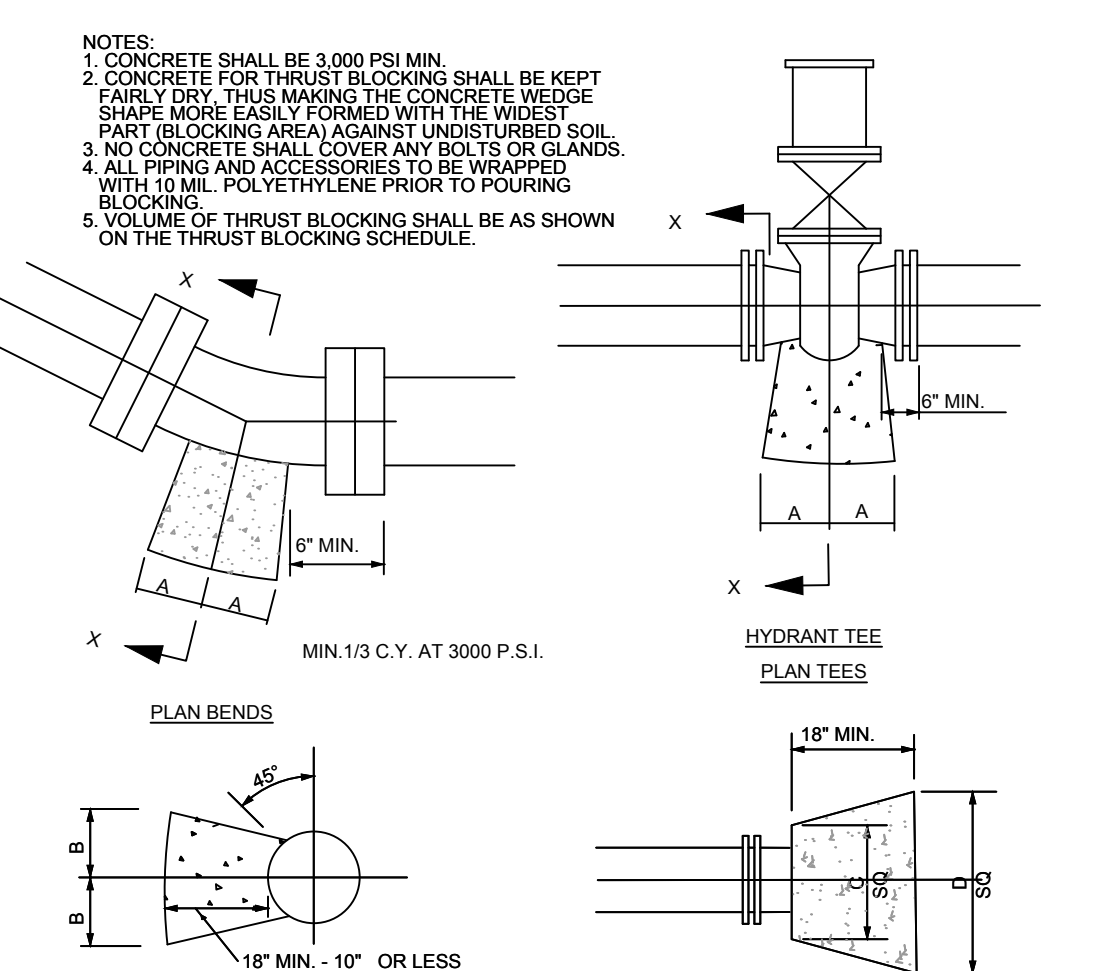
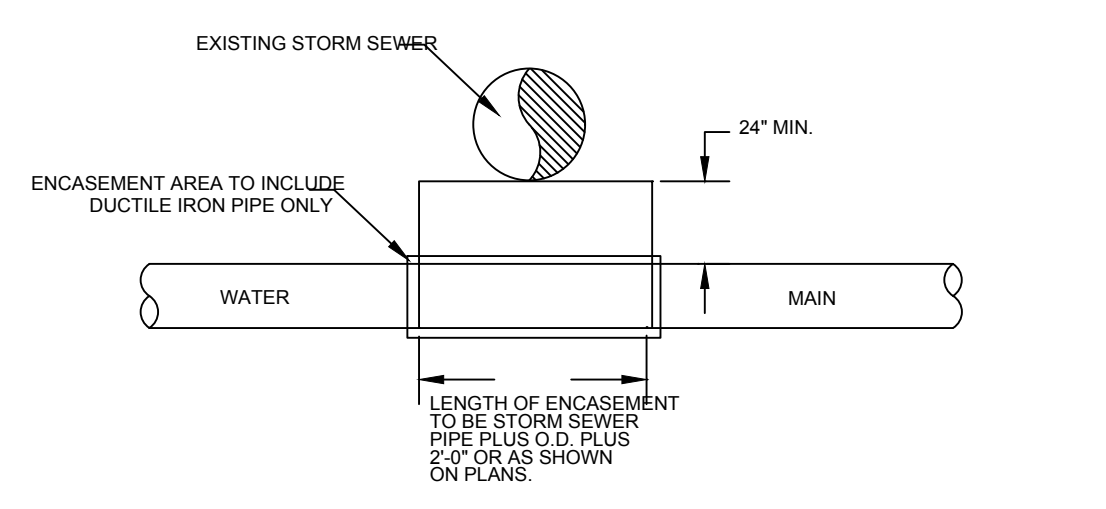
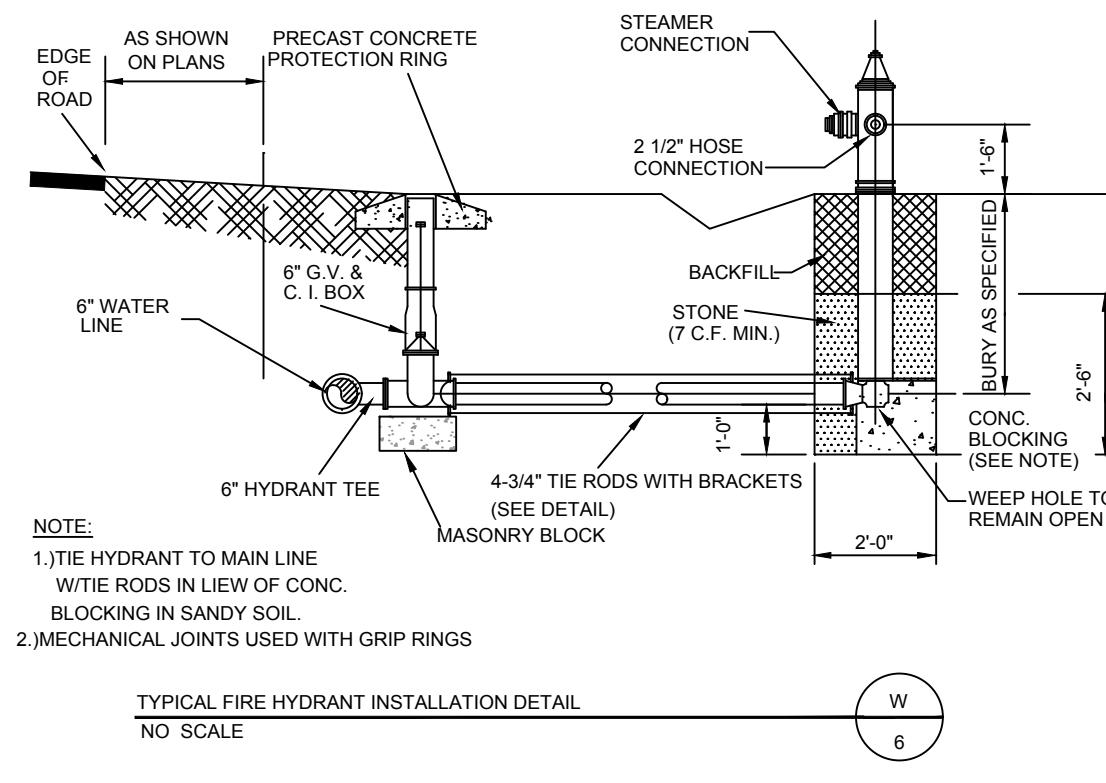
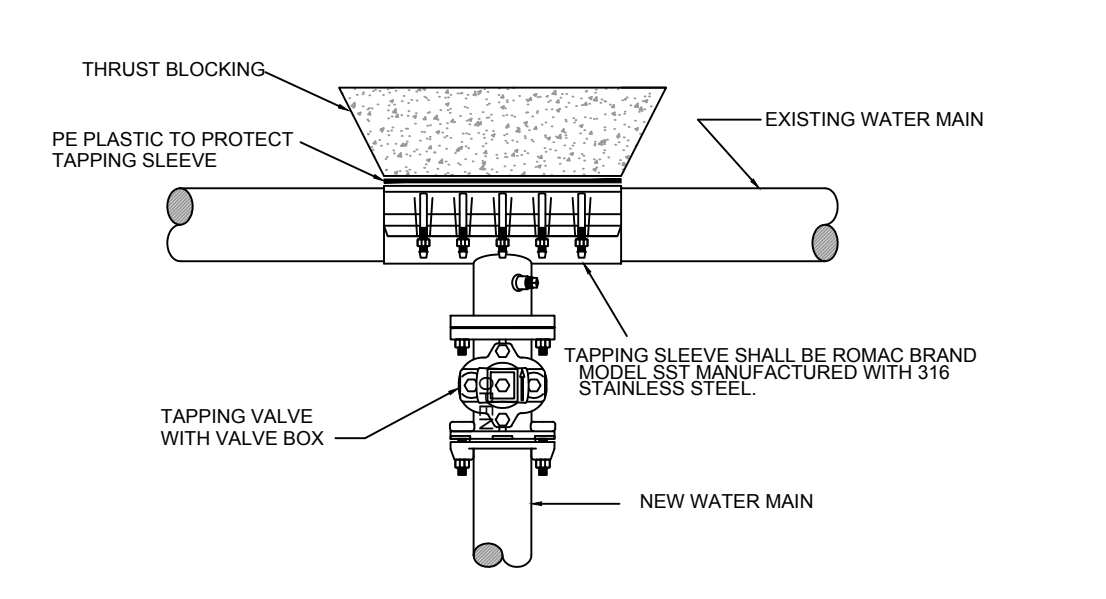
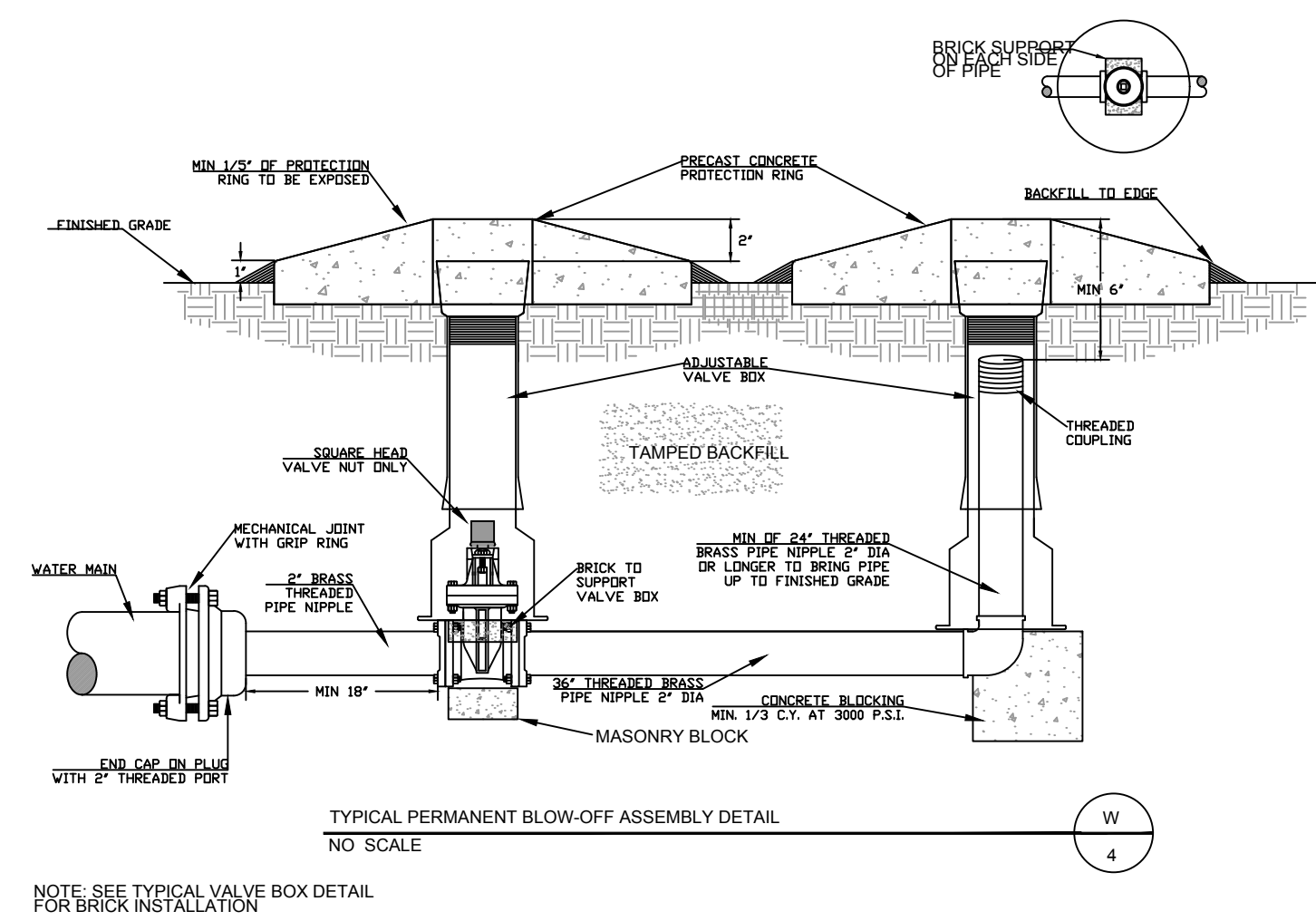
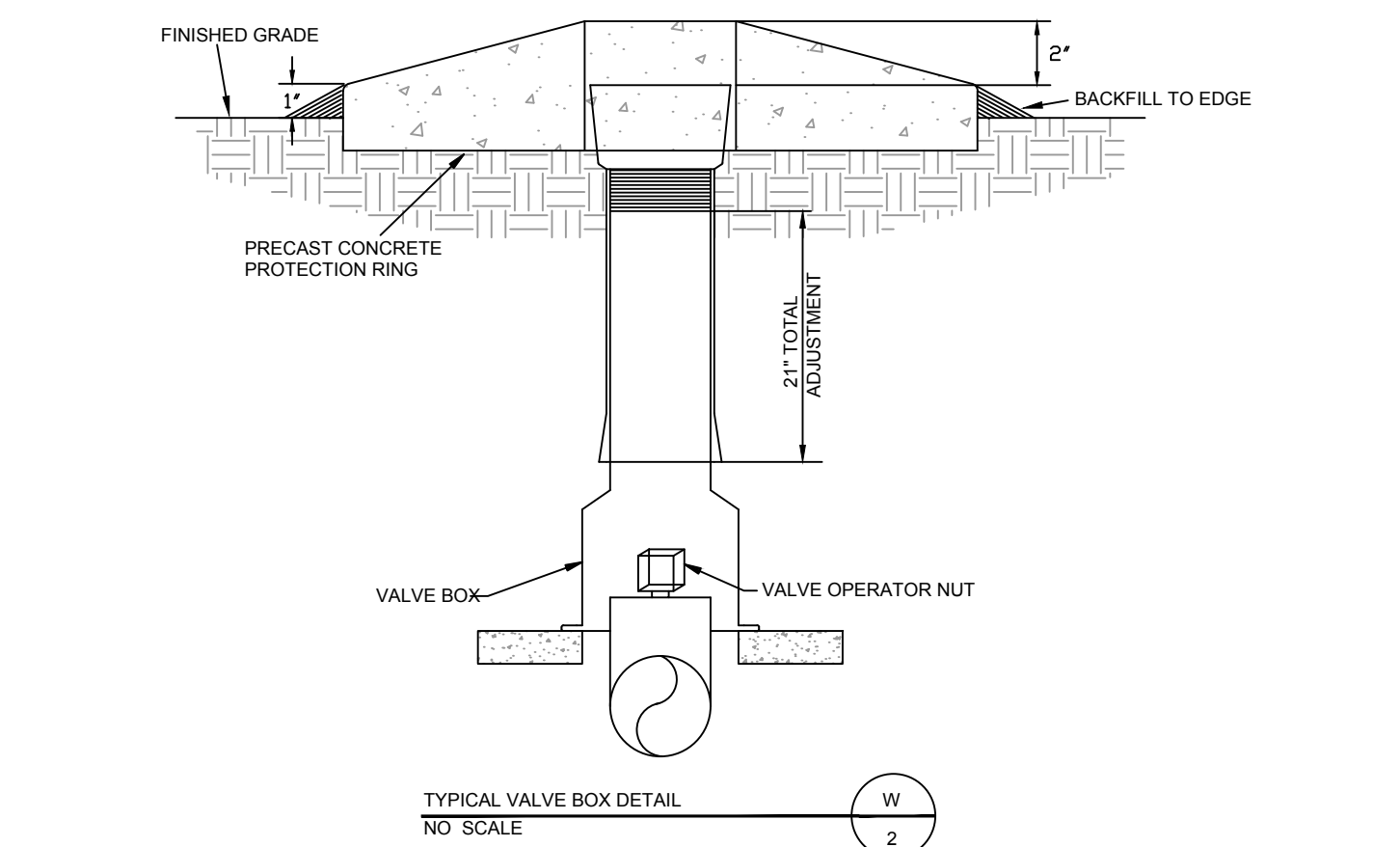
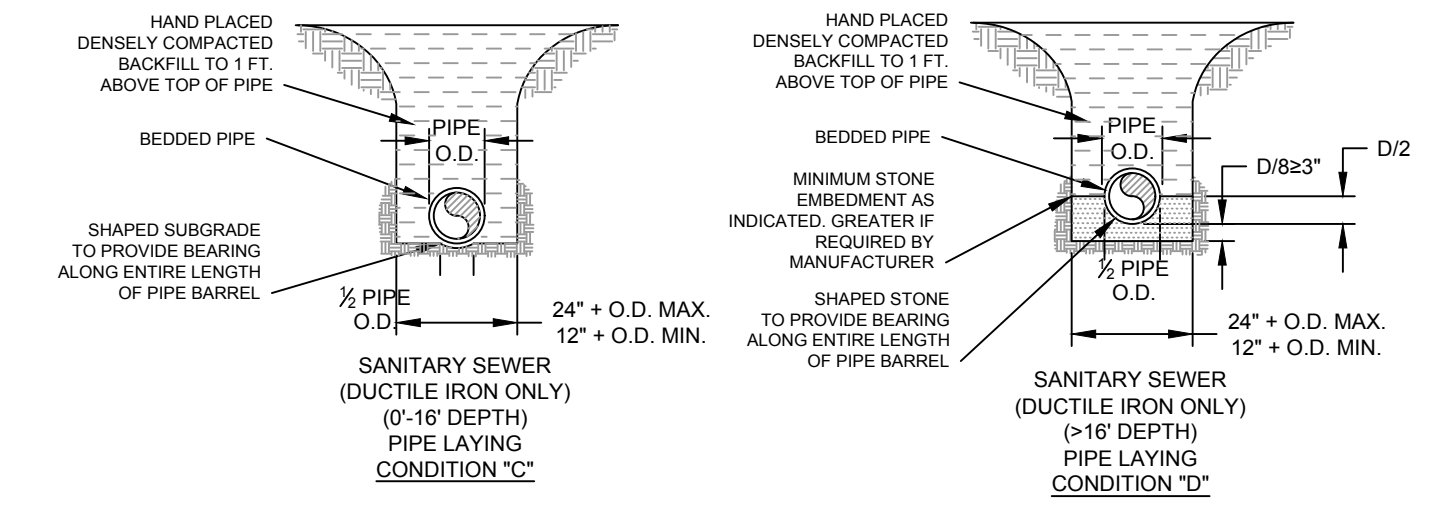
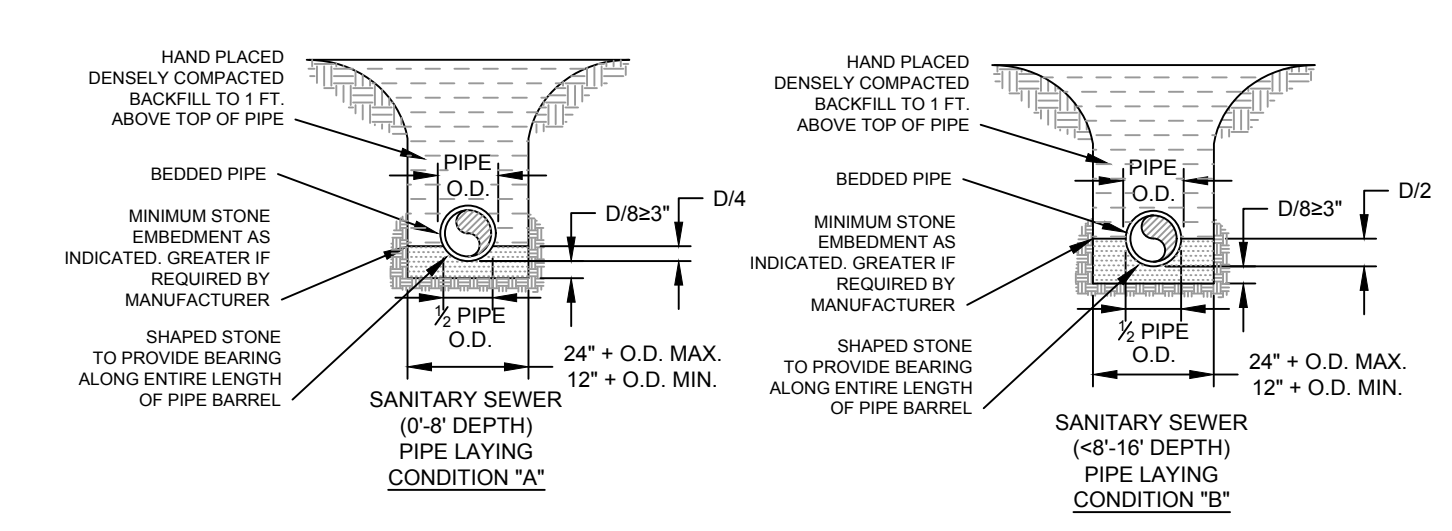
YOUR VISION ACHIEVED THROUGH OURS.

DATE: 11/24/2020  
 DRAWN BY: 331  
 DESIGNED BY: 331  
 CHECKED BY: M. ZACCARDO  
 SCALE: AS SHOWN

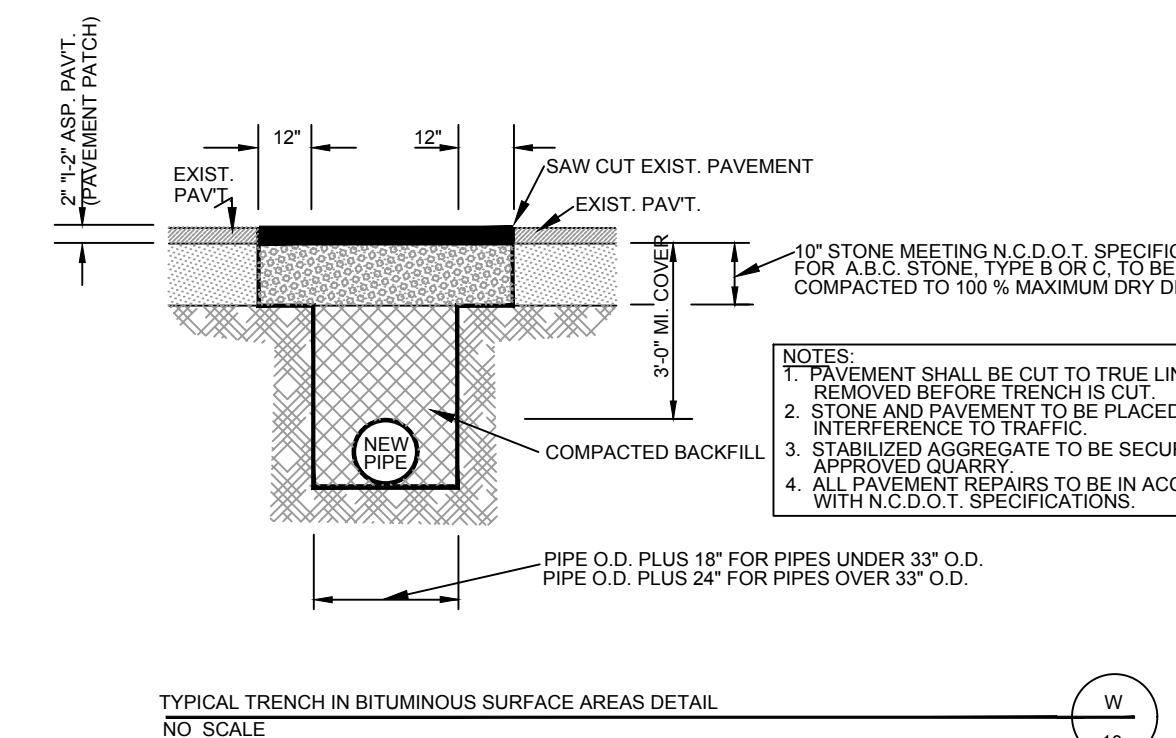
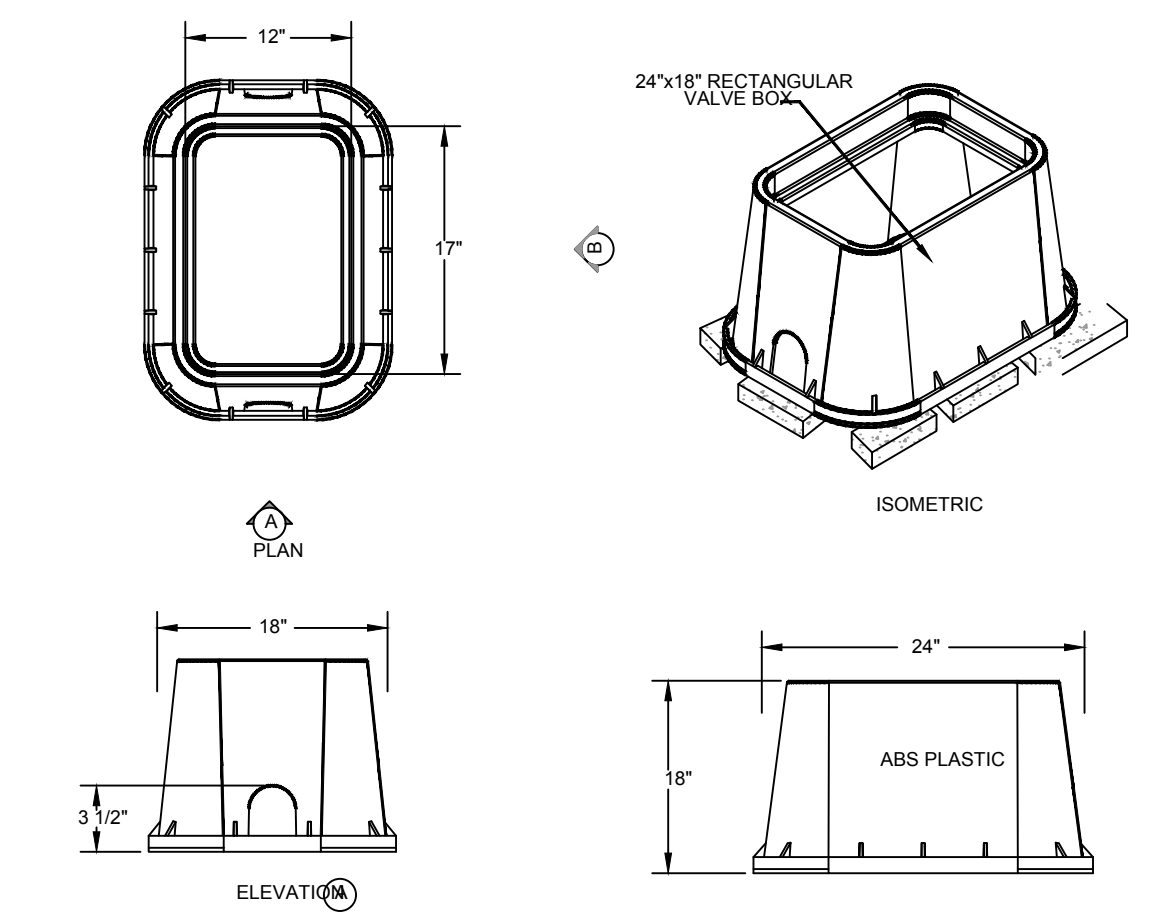
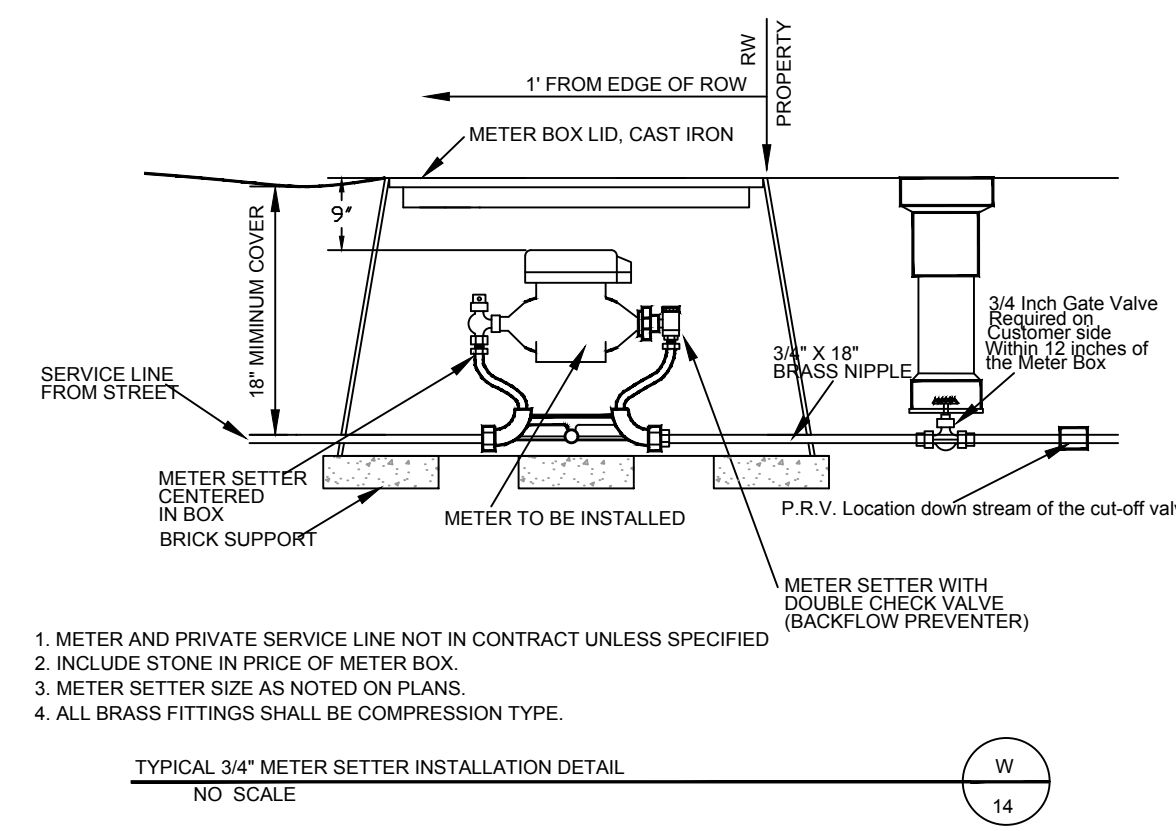
# TIMMONS GROUP

NORTH CAROLINA LICENSE NO. C-1652  
 THE PRESERVE AT KIPLING CREEK  
 HARNETT COUNTY, NORTH CAROLINA  
**NOTES & DETAILS**

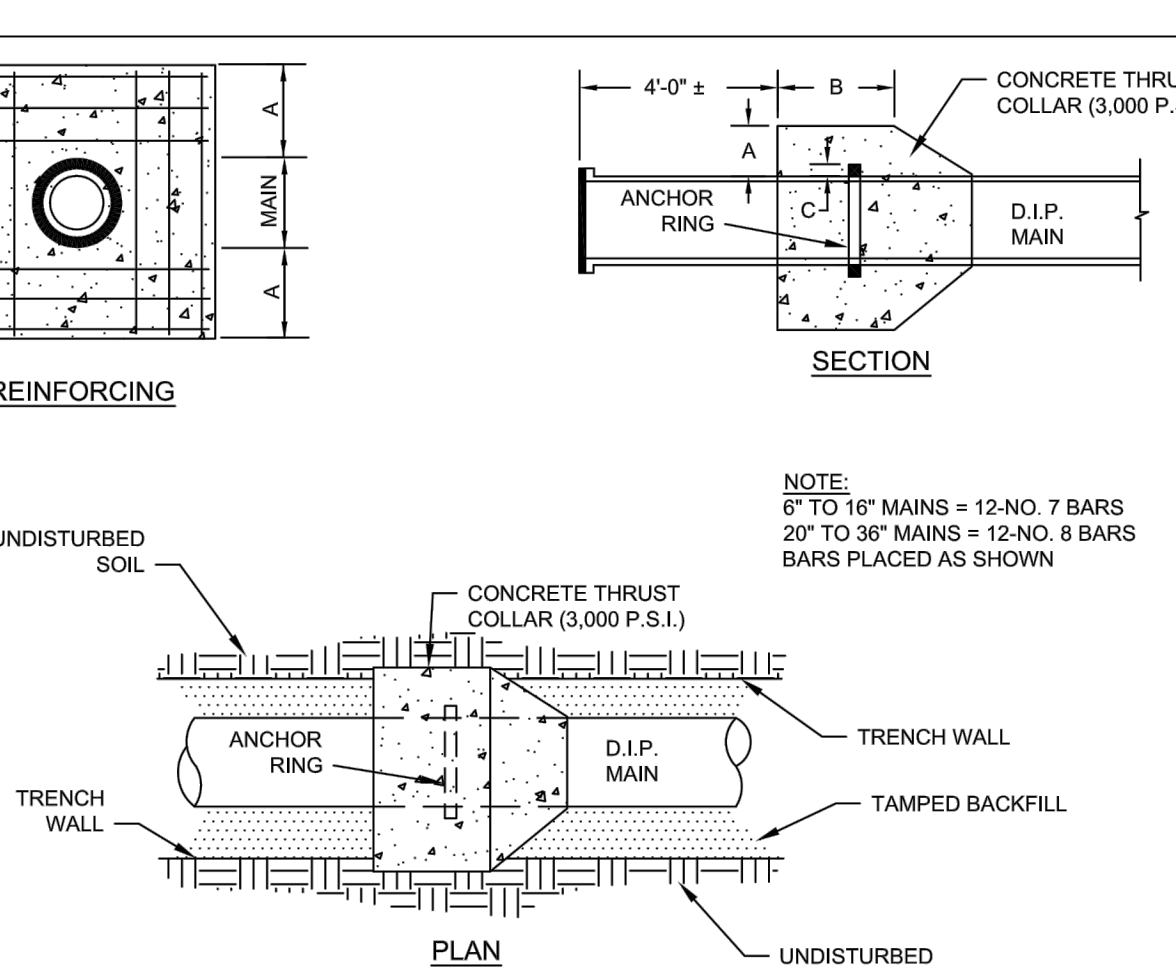
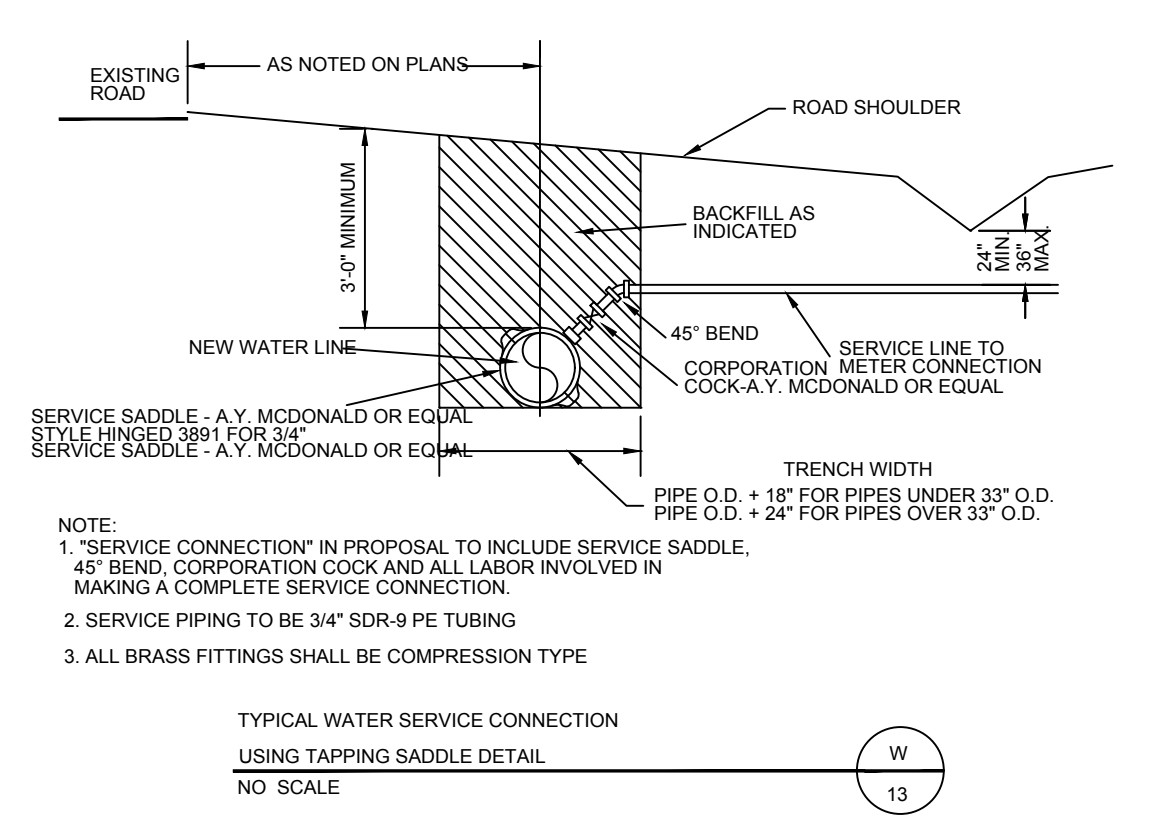
These plans and associated documents are the exclusive property of TIMMONS GROUP and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of TIMMONS GROUP.



PIPE SIZE	90° BEND		45° BEND		22 1/2° BEND		11 1/4° BEND		TEE		PLUG
	A	B	A	B	A	B	A	B	C	D	
4"	8"	12"	8"	8"	8"	8"	8"	8"	8"	10"	18"
6"	10"	12"	8"	8"	8"	8"	8"	8"	10"	12"	18"
8"	15"	13"	10"	10"	8"	8"	8"	8"	10"	12"	24"
10"	16"	14"	10"	12"	8"	10"	8"	10"	11"	14"	25"
12"	20"	18"	12"	14"	8"	12"	8"	12"	14"	16"	30"
14"	22"	18"	14"	16"	10"	14"	10"	14"	16"	18"	34"
16"	26"	20"	16"	18"	12"	16"	12"	16"	18"	20"	36"

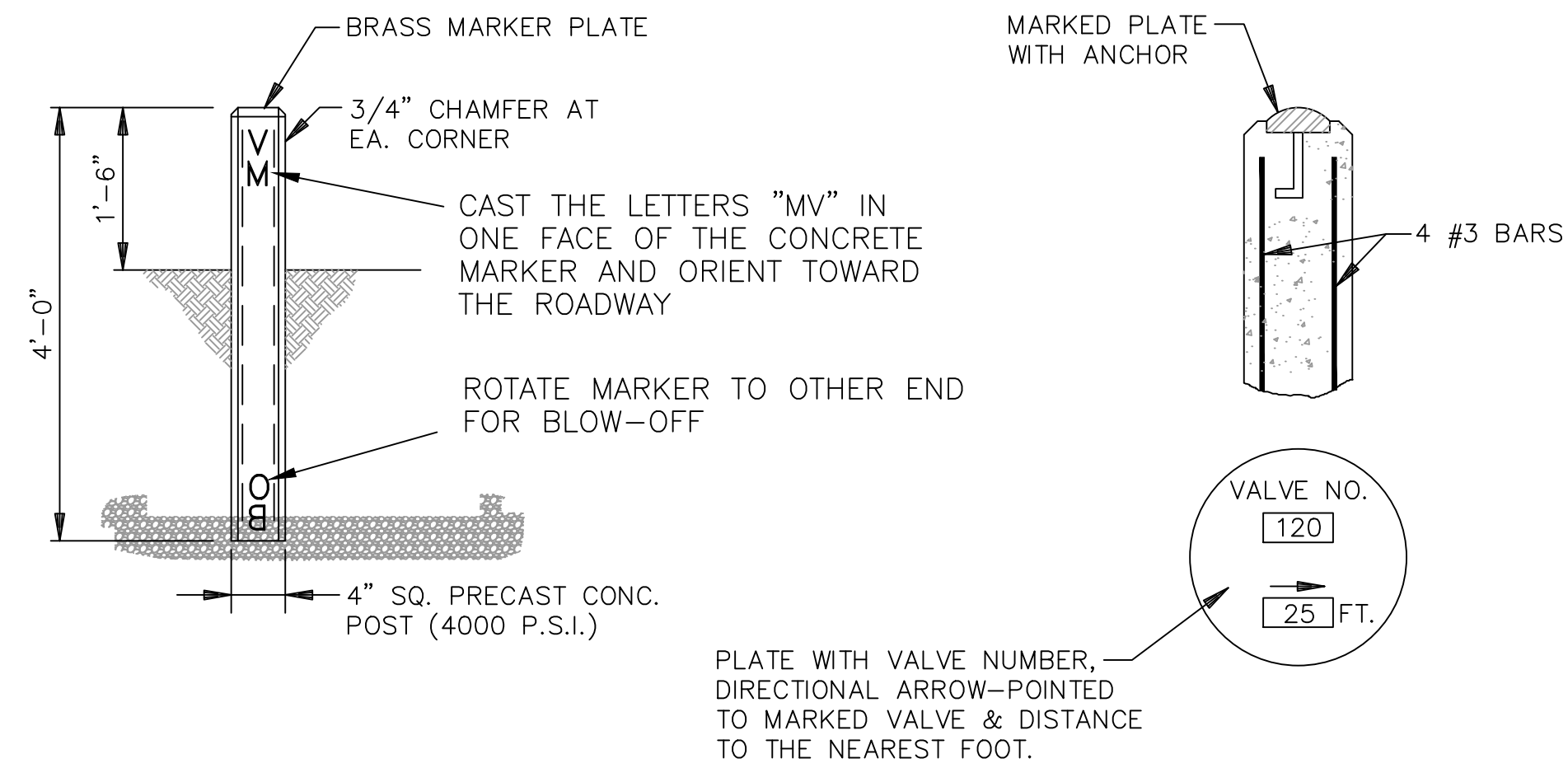


LAYING CONDITIONS	DESCRIPTION	PROJECT USE
TYPE 1	FLAT BOTTOM UNDISTURBED EARTH TRENCH. LOOSE BACKFILL	NOT USED.
TYPE 2	FLAT BOTTOMED UNDISTURBED EARTH TRENCH. BACKFILL LIGHTLY CONSOLIDATED TO CENTERLINE OF PIPE.	NOT USED.
TYPE 3	PIPE BEDDED IN 4\"/>	
TYPE 4	PIPE BEDDED IN SAND, GRANULAR MATERIAL OR GRADED GRAVEL TO THE DEPTH OF 18\"/>	
TYPE 5	PIPE BEDDED TO ITS CENTERLINE IN COMPACTED GRANULAR MATERIAL 4\"/>	



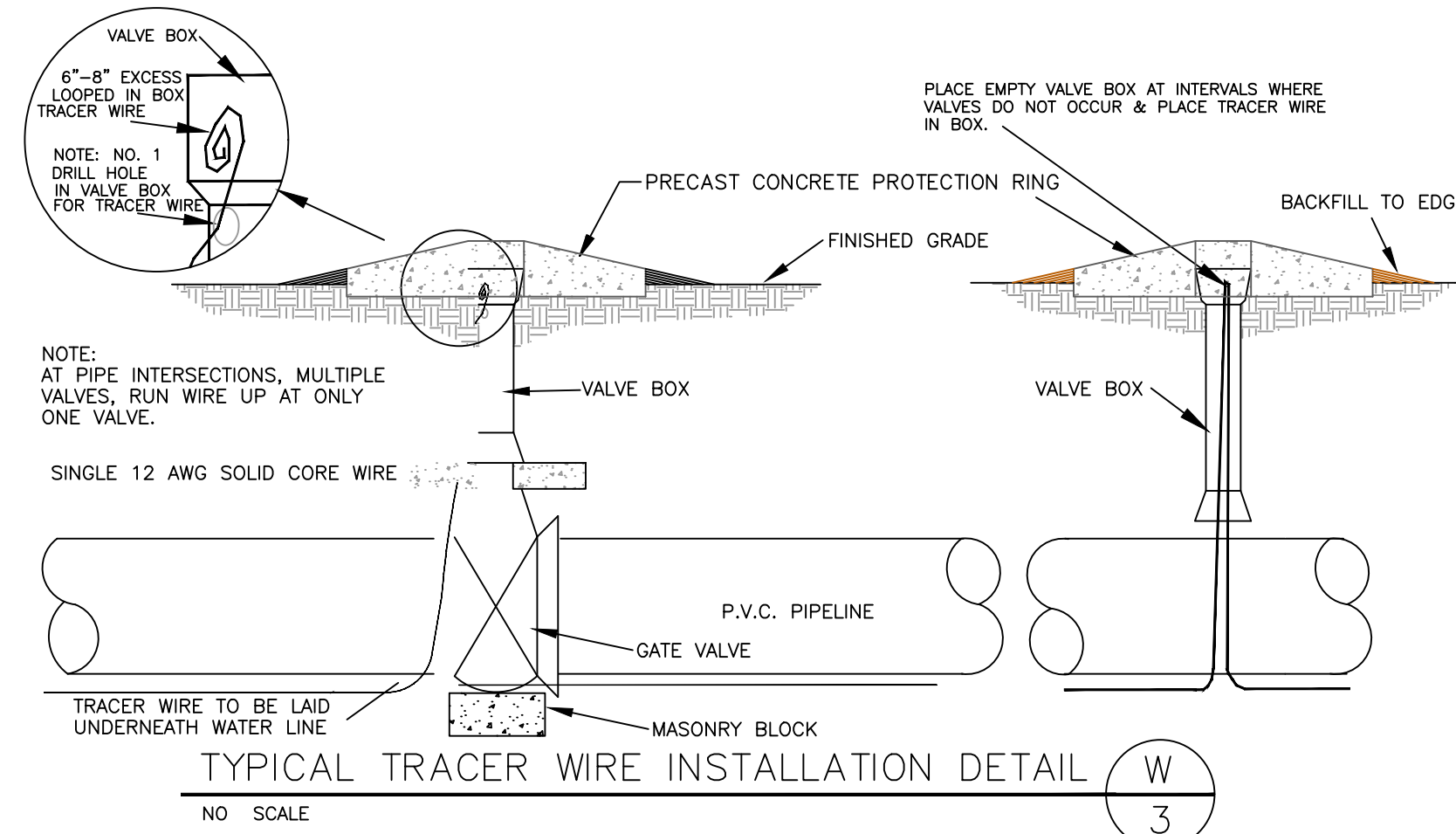
PIPE DIAMETER	CONCRETE THRUST COLLAR		ANCHOR COLLAR	RINGS REQUIRED
	A	B		
6", 8", 12"	1'-0"	1'-0"	2"	ONE
16"	1'-4"	1'-0"	2"	ONE
20"	1'-4"	1'-0"	3"	ONE
24"	1'-4"	1'-0"	3"	TWO
30"	1'-4"	1'-2"	4"	TWO
36"	1'-4"	1'-4"	4"	TWO

S:\3114455-Kipling\_Creek\DWG\Sheets\CD44455-331-C11-1-INTD.dwg | Printed by Tyler Cross



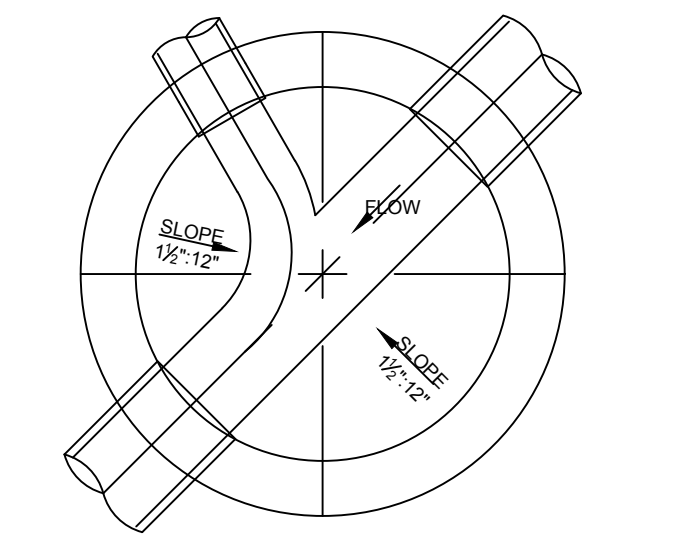
TYPICAL VALVE MARKER DETAIL W 1

NOTES:  
PAINT MARKER BLUE AFTER INSTALLATION

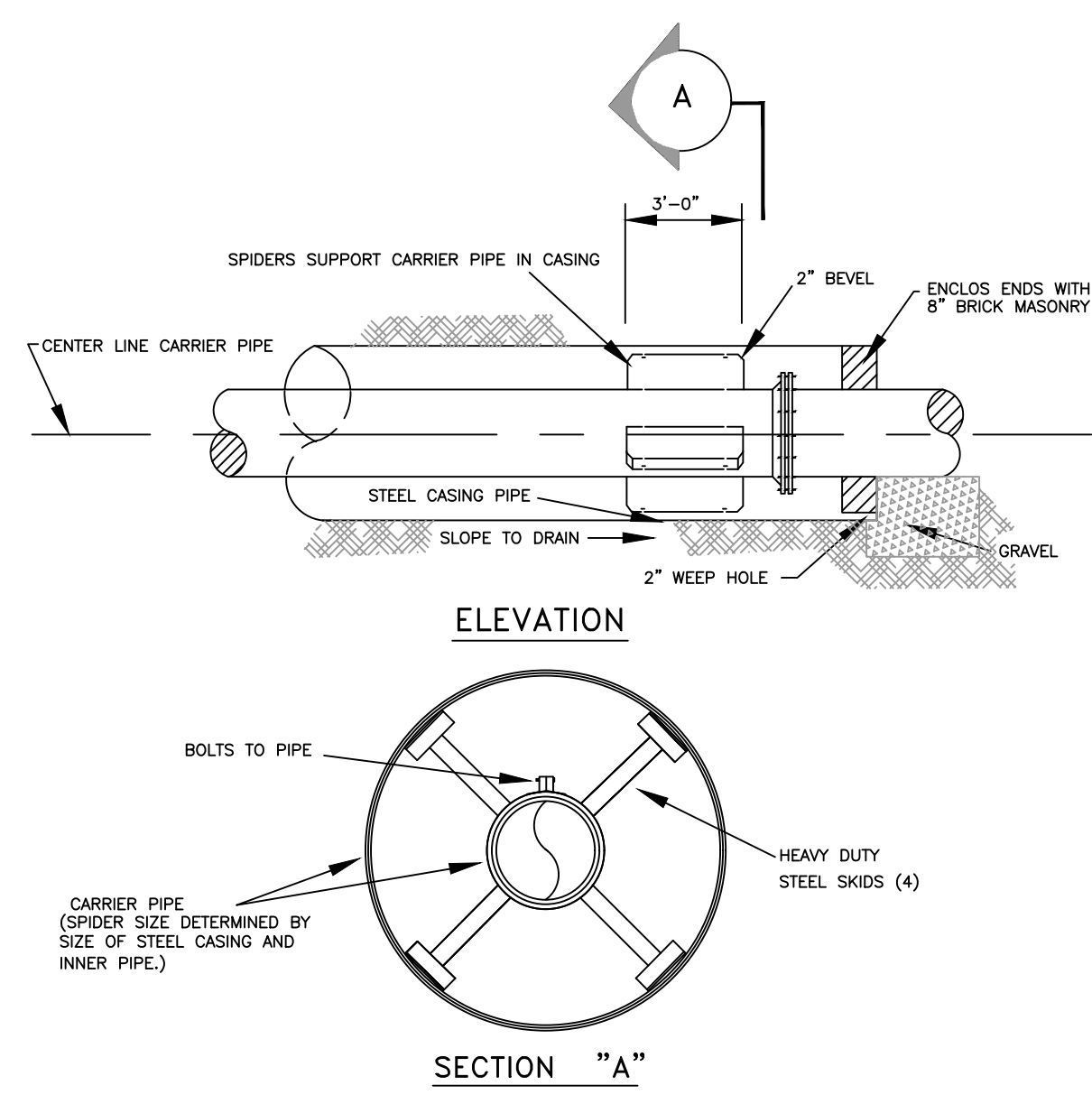


NOTES:  
1. DRILL HOLE IN VALVE BOX TO INSERT TRACER WIRE. BRING UP TO INSIDE AND ROLL UP AT LEAST 6"-8" EXCESS  
2. PLACE TRACER WIRE IN VALVE BOX AT 1,000' INTERVALS OR AS NOTED ON THE PLANS, TYPICAL.  
3. DO NOT SPLICE WIRE WHEN BEGINNING A NEW SPOOL. INSTEAD INSTALL A VALVE BOX AND ATTACH EACH WIRE WITH A BRASS SCREW TO THE VALVE BOX.

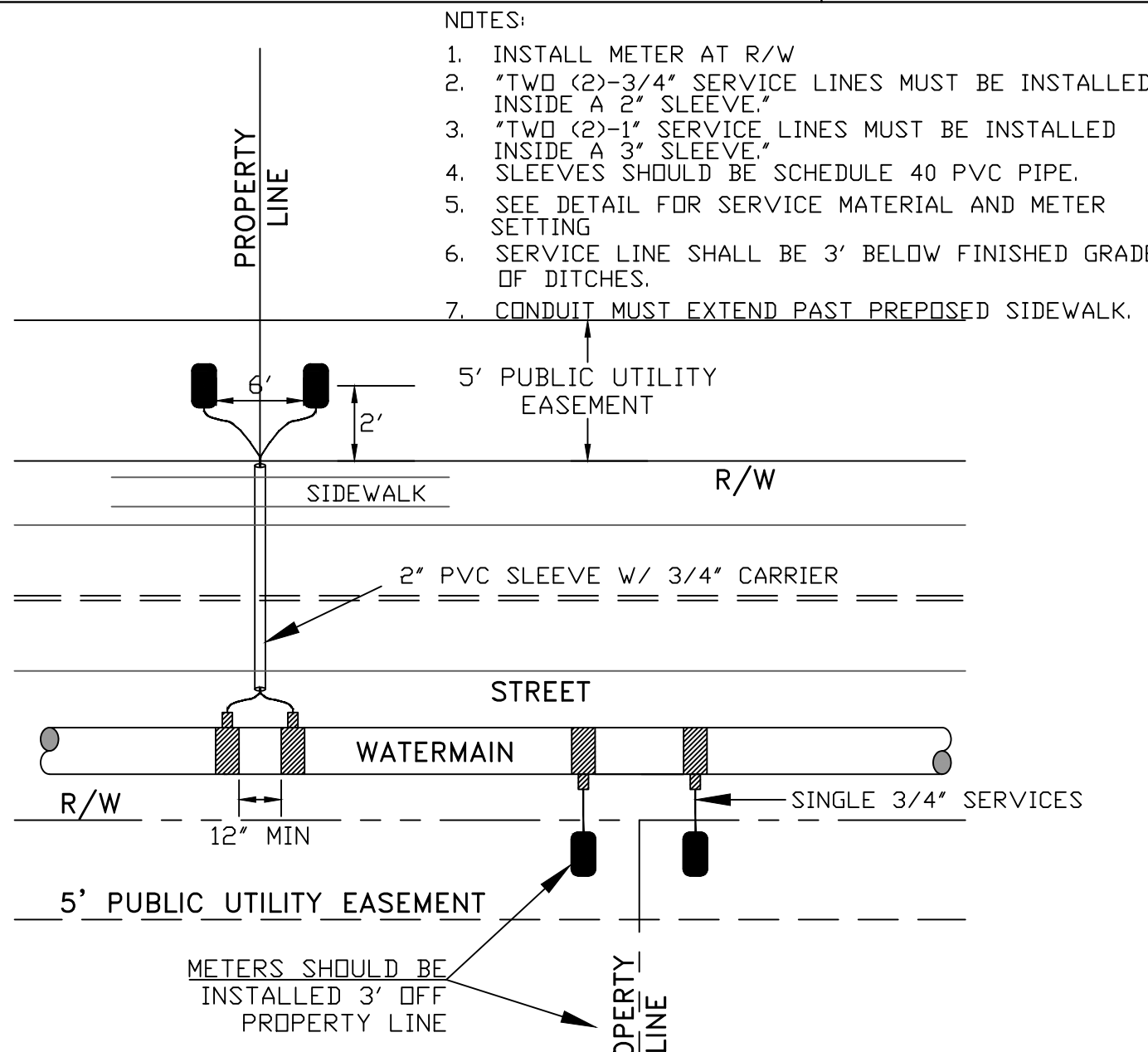
NOTE:  
1. THE FLOW CHANNEL THROUGH MANHOLES SHOULD BE MADE TO CONFORM IN SHAPE AND SLOPE TO THE SEWER MAIN.  
2. CHANGE IN DIRECTION OF THE CHANNEL SHALL NOT BE EXCEEDED 90 DEGREES.  
3. SEE DETAIL S-24 FOR TYPICAL MANHOLE STRUCTURE.



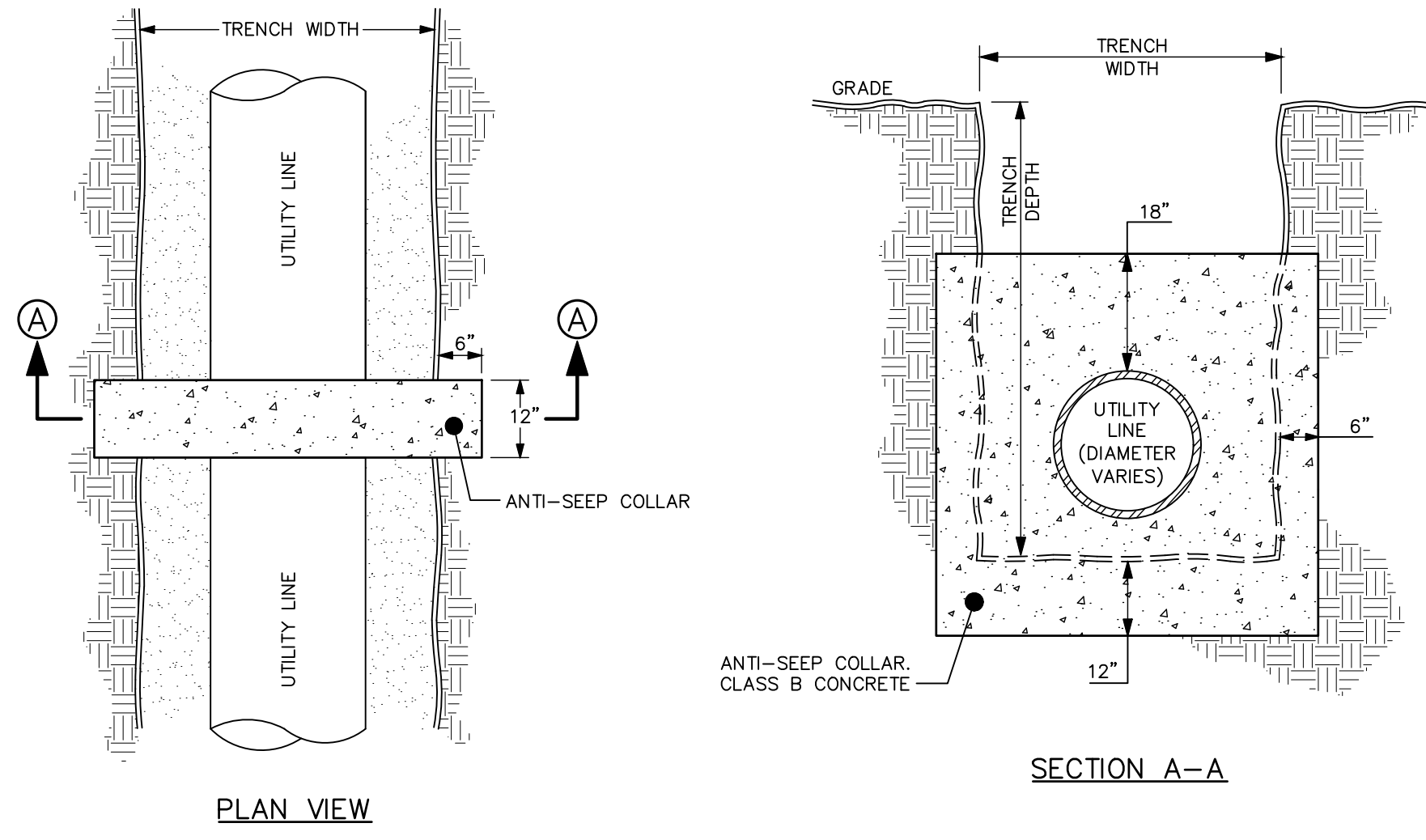
TYPICAL MANHOLE INVERT DETAIL S 28



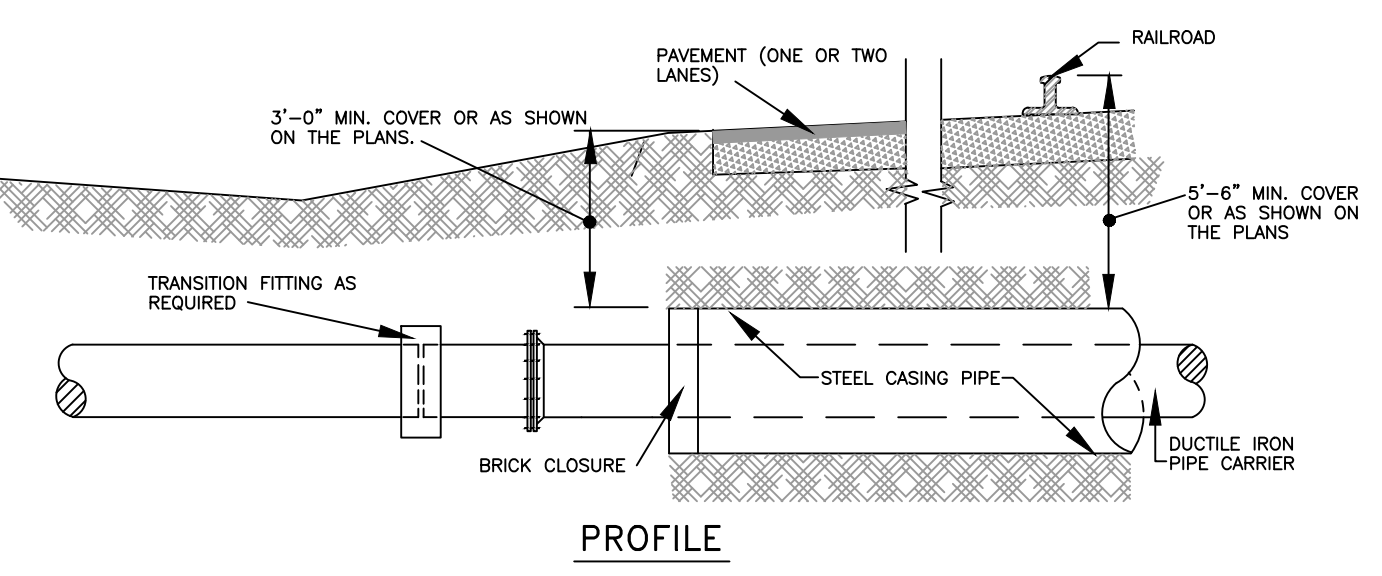
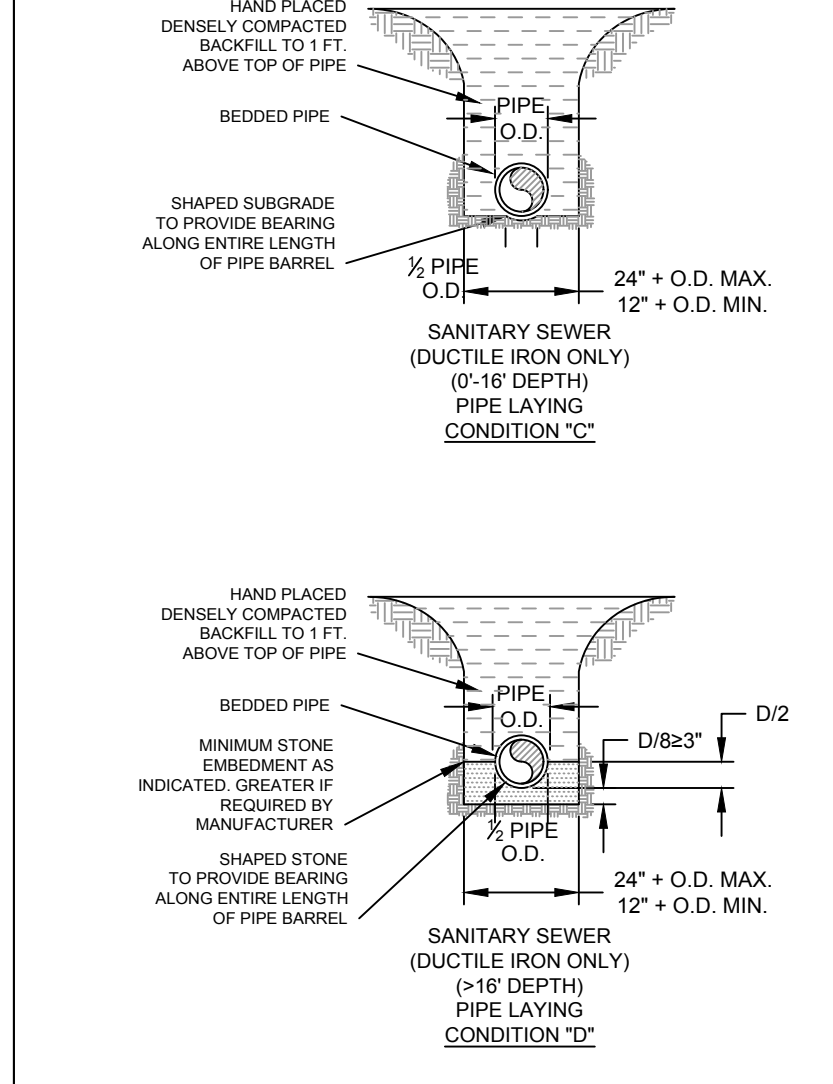
TYPICAL BORING & JACKING DETAIL S 20



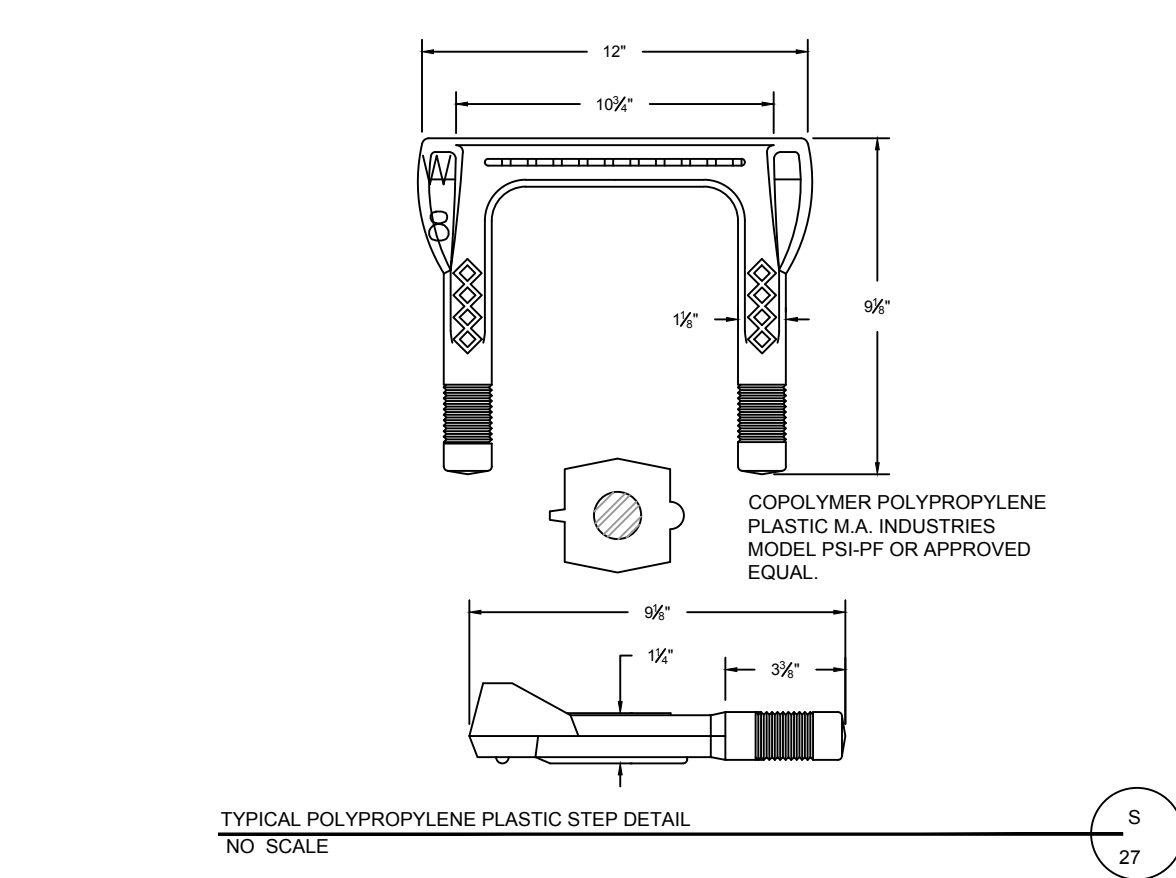
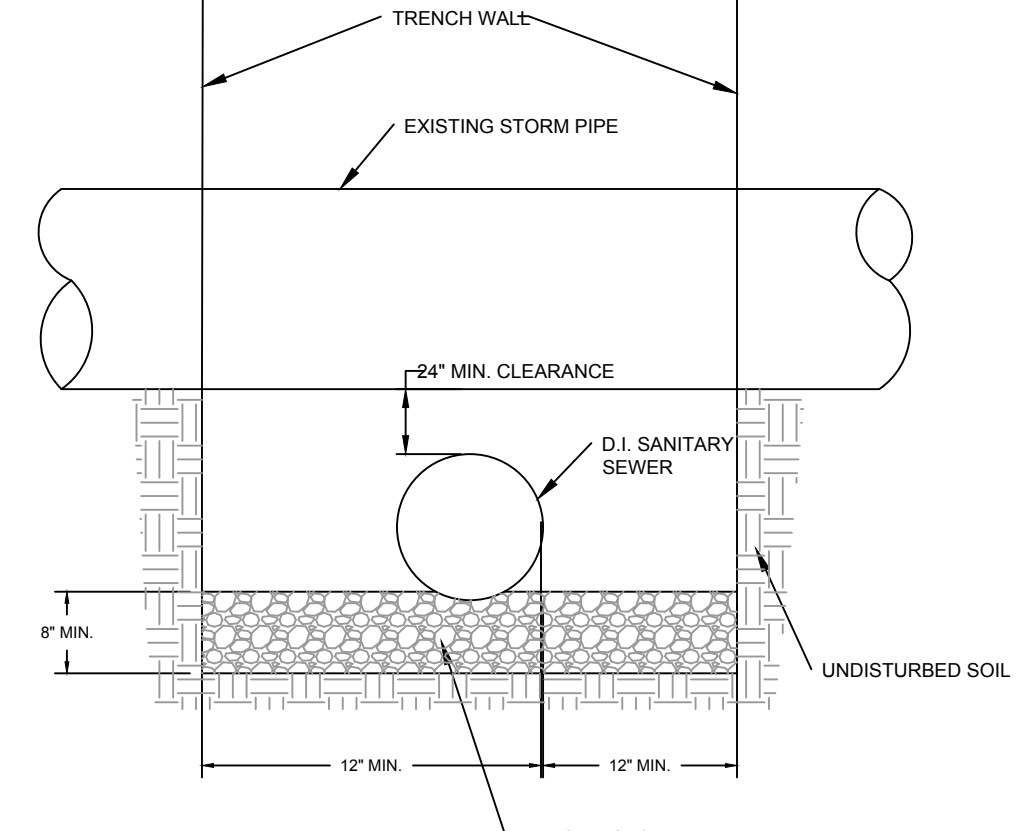
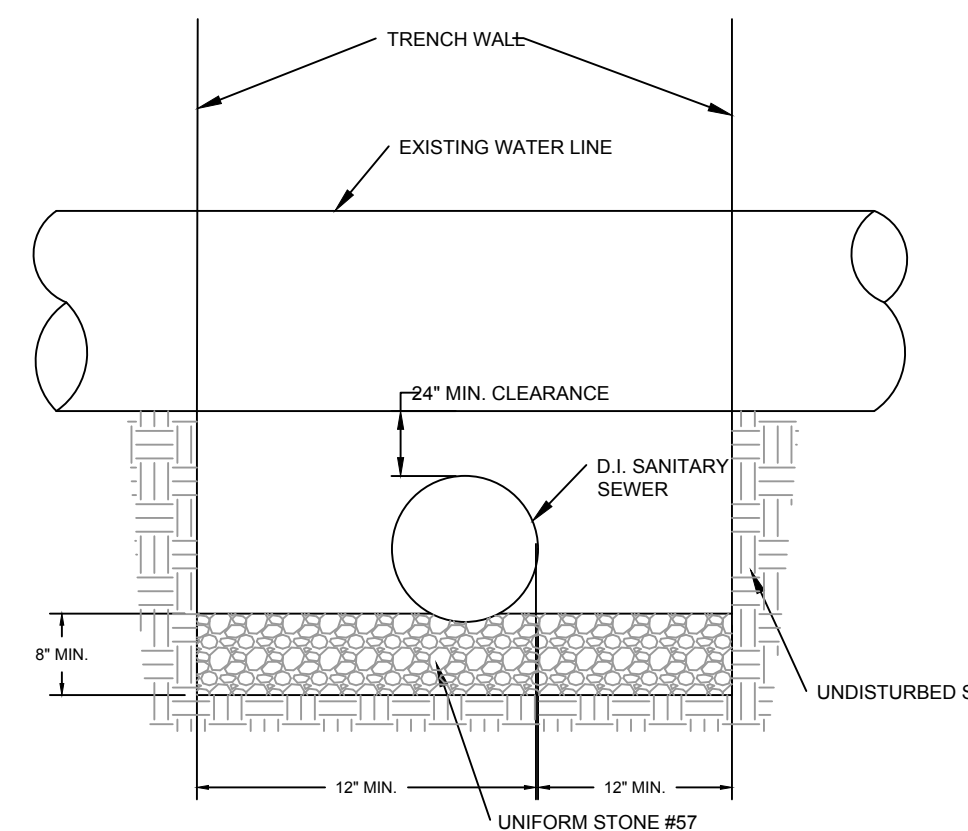
TYPICAL DOMESTIC WATER SERVICE INSTALLATION DETAIL W 12



ANTI-SEEP COLLAR DETAIL S 17



TYPICAL SEWER SERVICE CONNECTION DETAIL S 29



THIS DRAWING PREPARED AT THE  
RALEIGH OFFICE  
5410 Trinity Road, Suite 102, Raleigh, NC 27607  
TEL 919.866.9951 FAX 919.833.8124 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

REVISION DESCRIPTION  
INITIAL HW SUBMITTAL  
ADDRESSING HW COMMENTS DATED 10/13/2020

DATE 09/14/2020  
DATE 11/24/2020

DESIGNED BY 331  
CHECKED BY M. ZACCARDO  
SCALE AS SHOWN

**TIMMONS GROUP**

NORTH CAROLINA LICENSE NO. C-1652

THE PRESERVE AT KIPLING CREEK

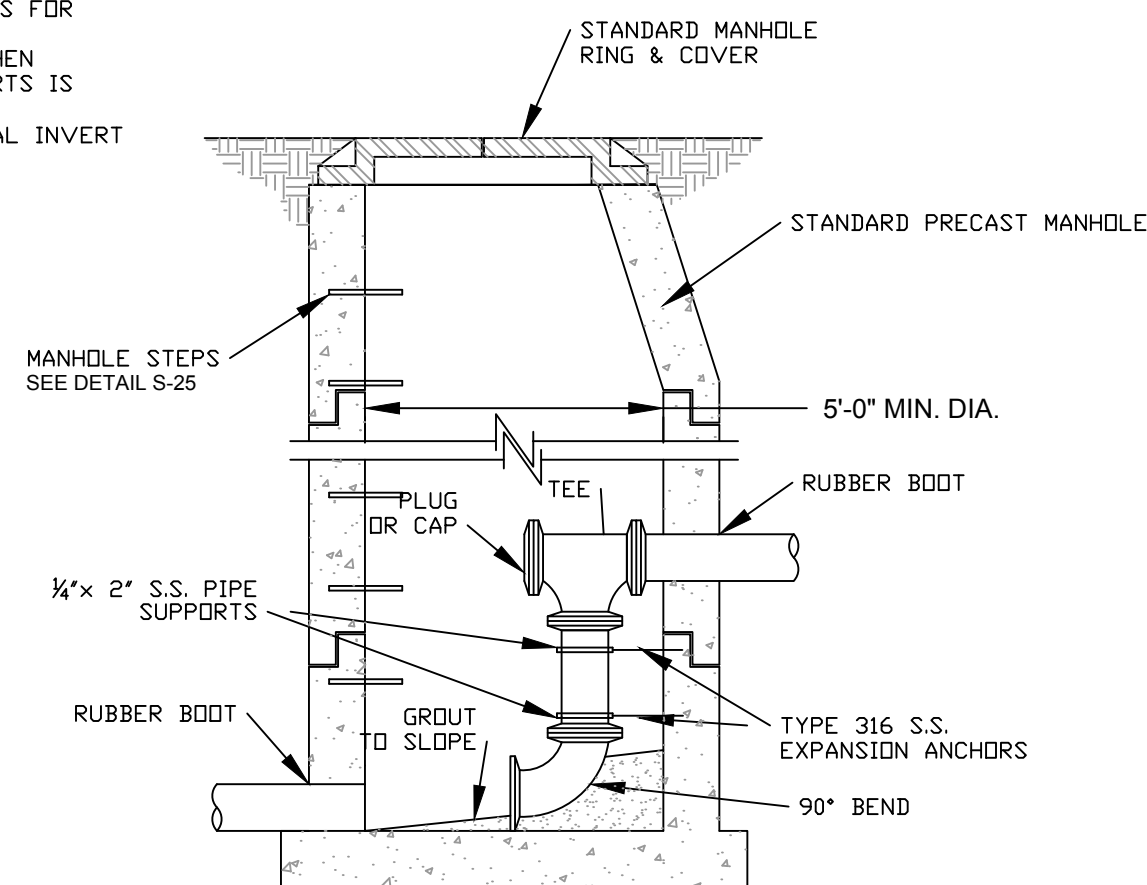
HARNETT COUNTY, NORTH CAROLINA

NOTES & DETAILS

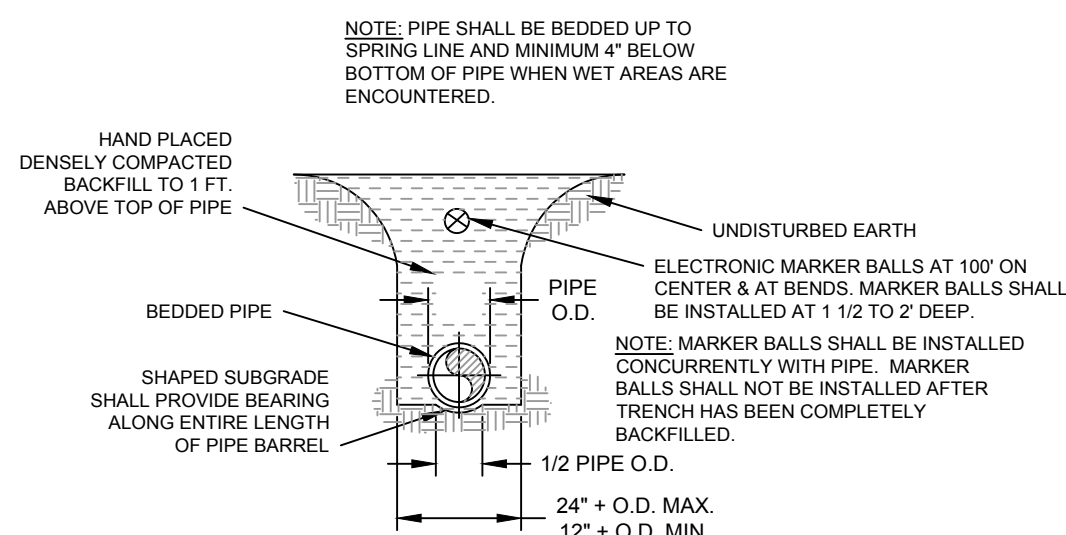
JOB NO. 44455  
SHEET NO. C11.2



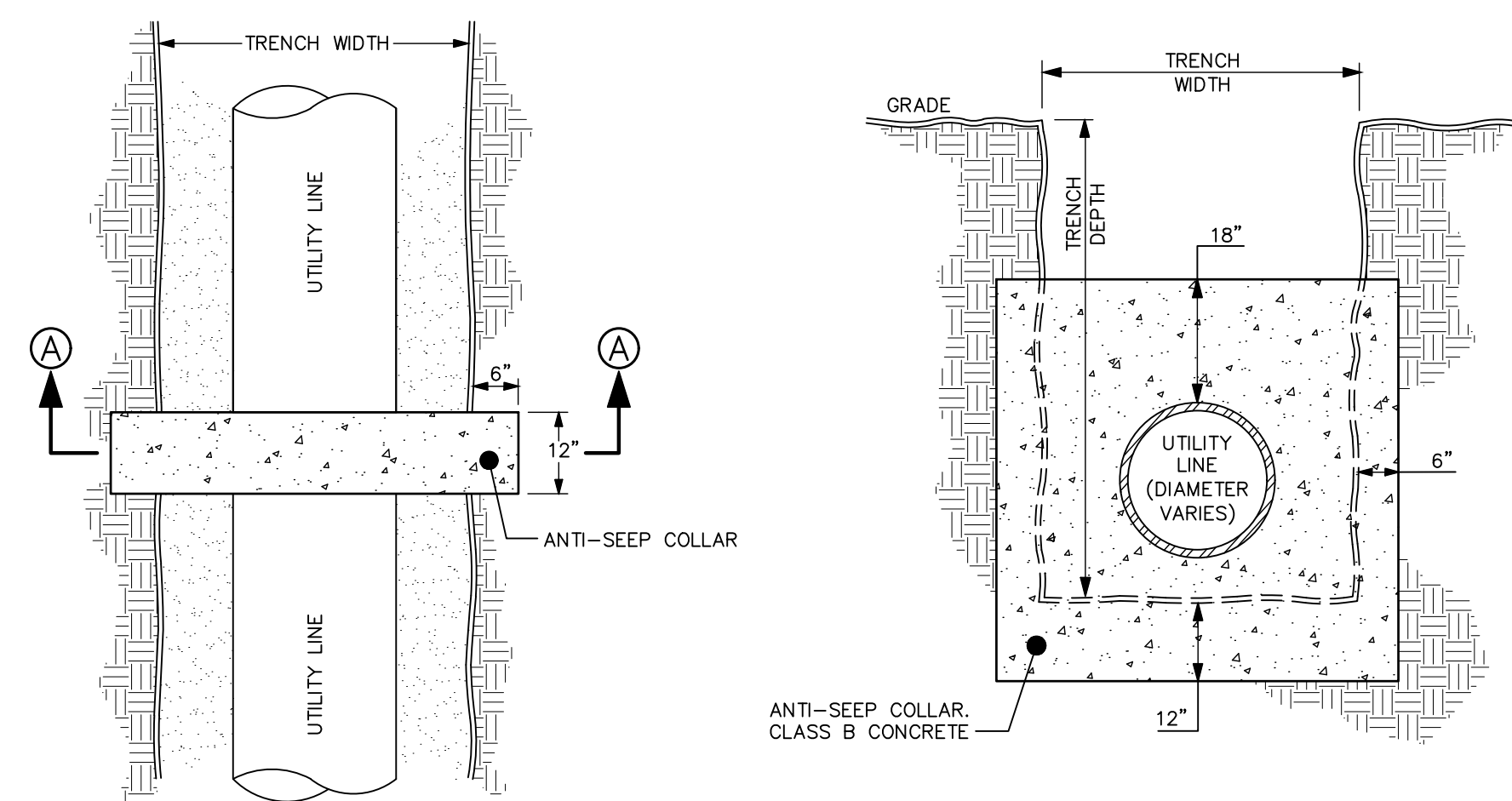
- NOTE:  
 1. PIPE SIZE FOR DROP TO EQUAL INFLOW SEWER PIPE SIZE.  
 2. FITTINGS FOR DROPS SHALL BE C-900 OR SCHEDULE 40 PVC.  
 3. SAW-CUT OR DRILL ALL HOLES FOR PIPE AND BOLTS.  
 4. DROP-MANHOLE MANDATORY WHEN DIFFERENTIAL BETWEEN INVERTS IS GREATER THAN 24".  
 5. SEE DETAIL S-28 FOR TYPICAL INVERT



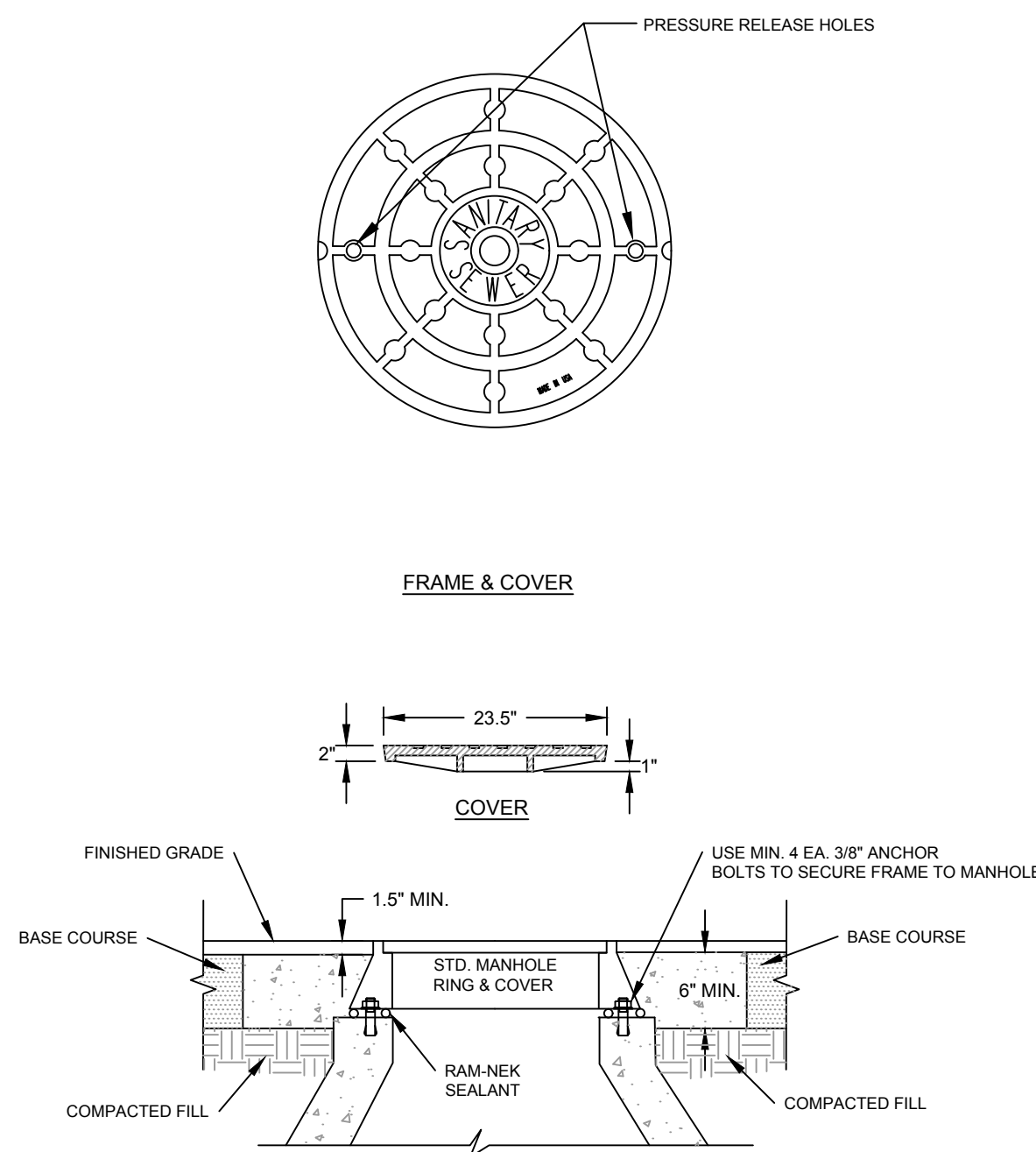
TYPICAL INSIDE DROP MANHOLE DETAIL S-25  
 NO SCALE



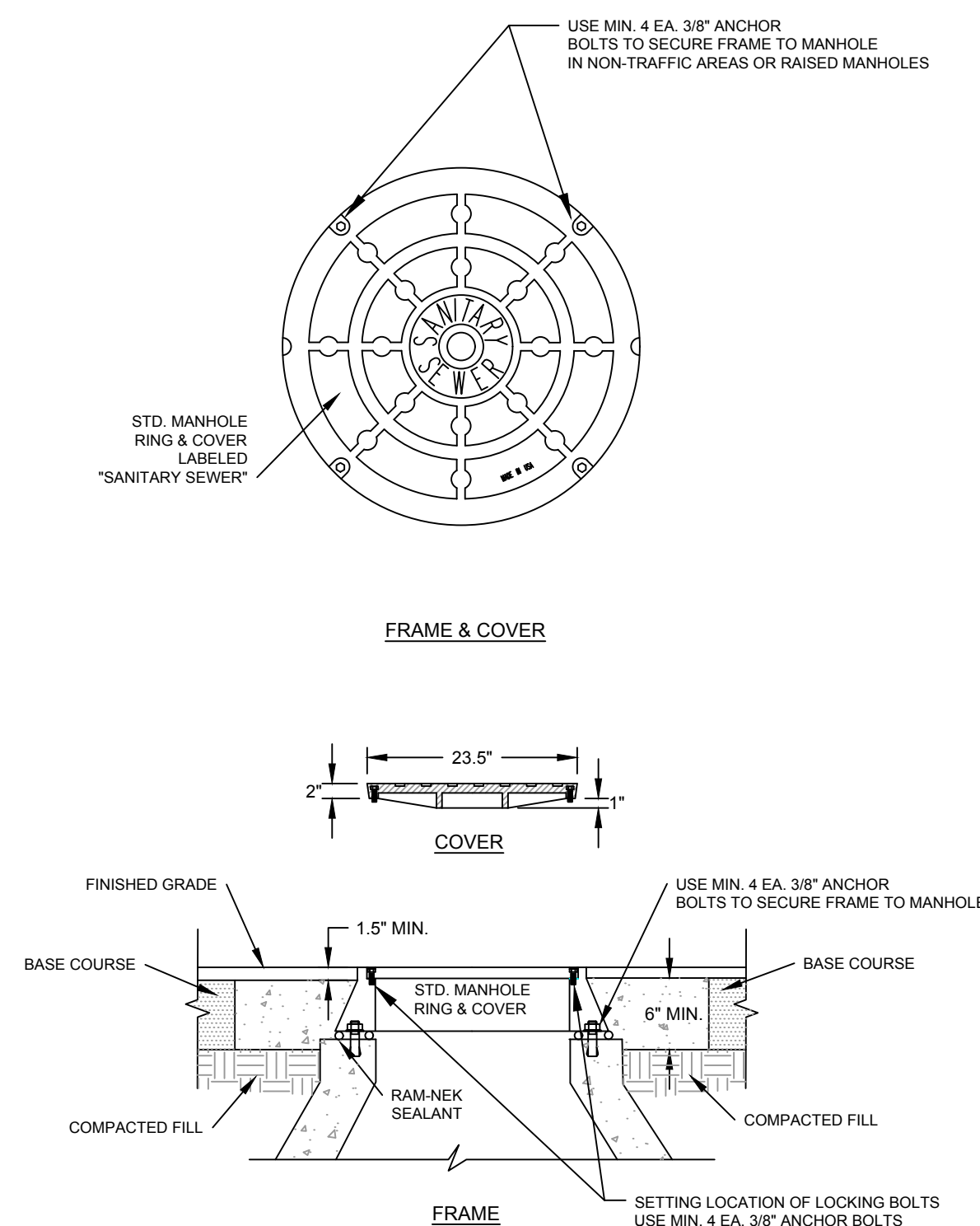
TYPICAL PIPE LAYING CONDITION DETAILS S-18  
 NO SCALE



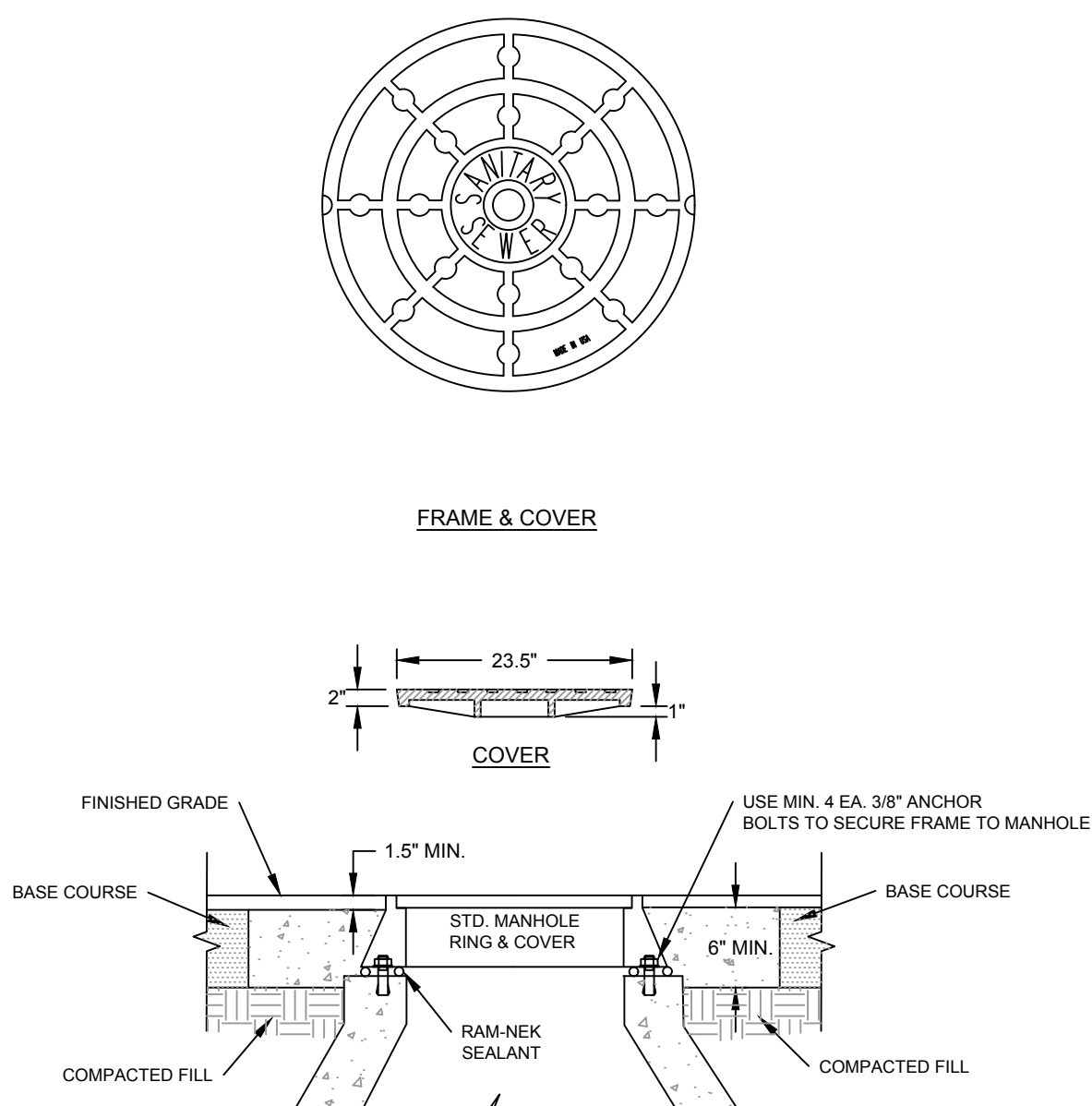
ANTI-SEEP COLLAR DETAIL  
 NO SCALE



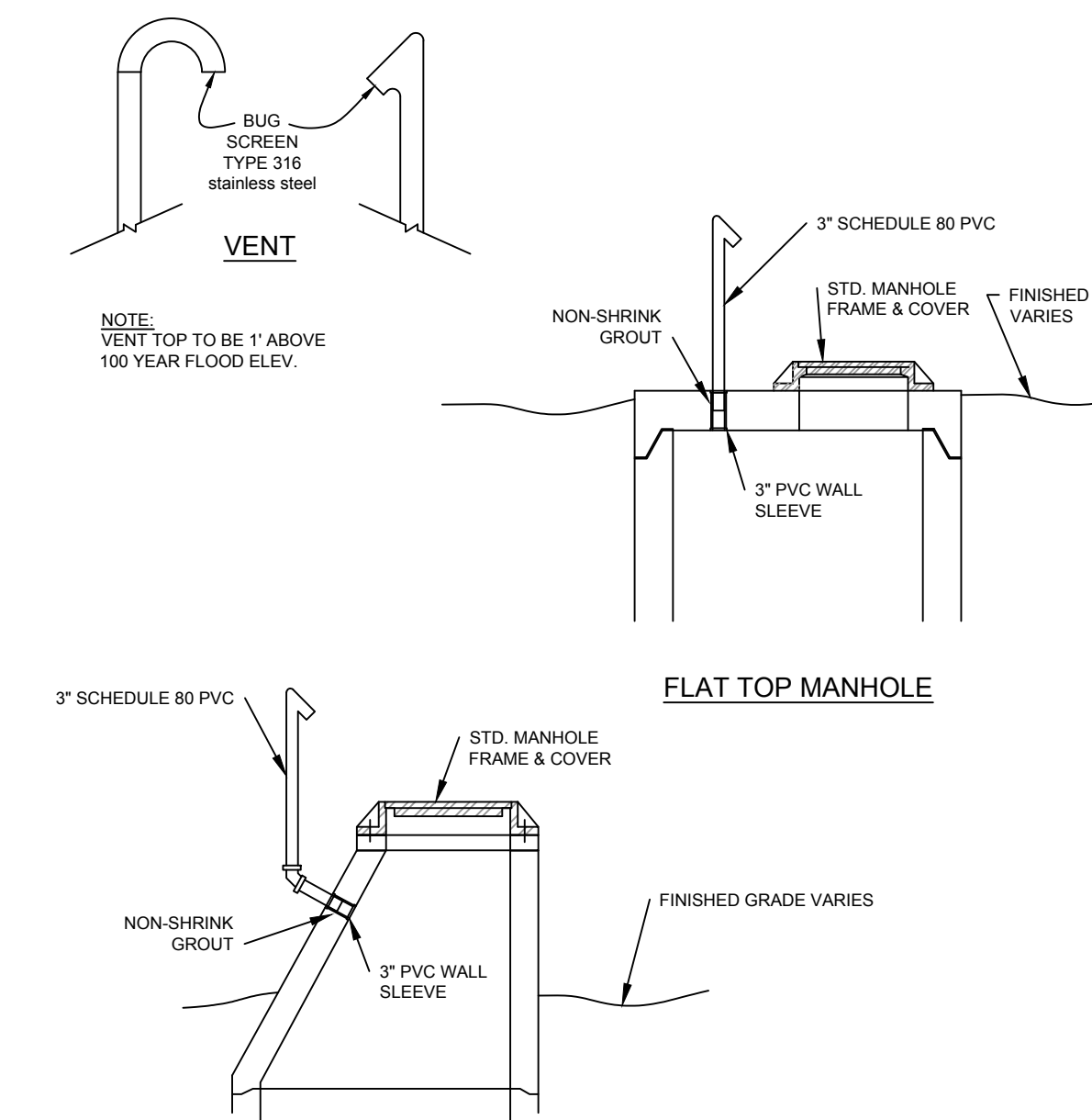
TYPICAL PRESSURE RELEASE MANHOLE FRAME & COVER DETAIL S-20  
 NO SCALE



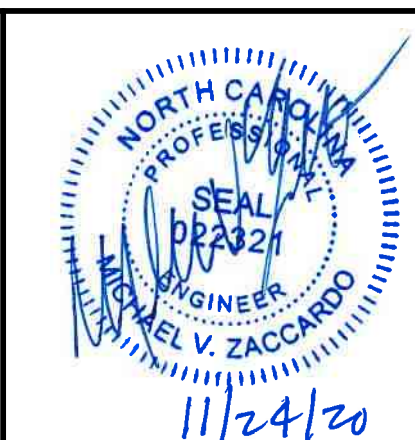
TYPICAL LOCKABLE MANHOLE FRAME & COVER DETAIL S-22  
 NO SCALE



TYPICAL STANDARD MANHOLE FRAME & COVER DETAIL S-21  
 NO SCALE



TYPICAL VENTED MANHOLE DETAIL S-23  
 NO SCALE



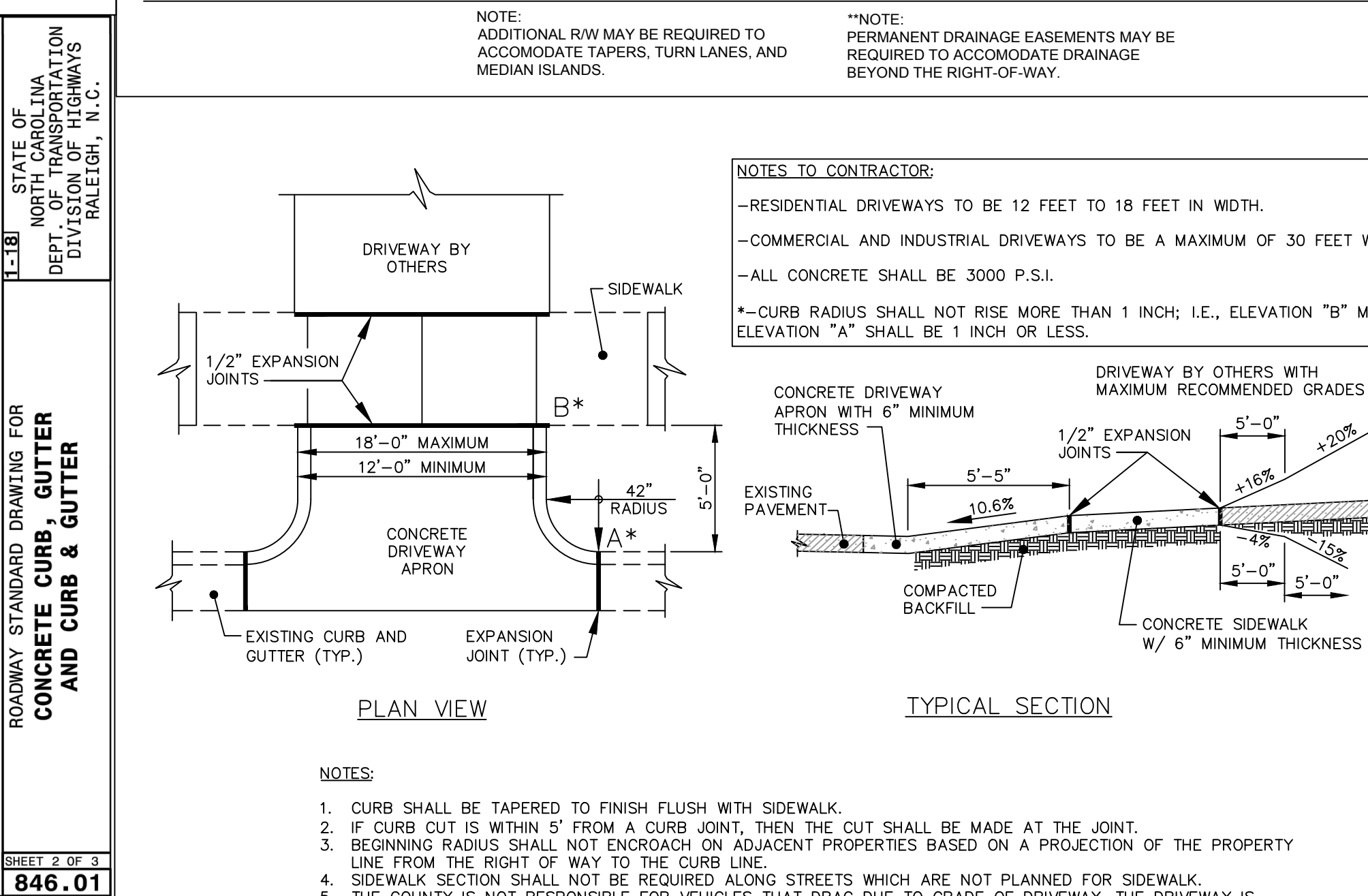
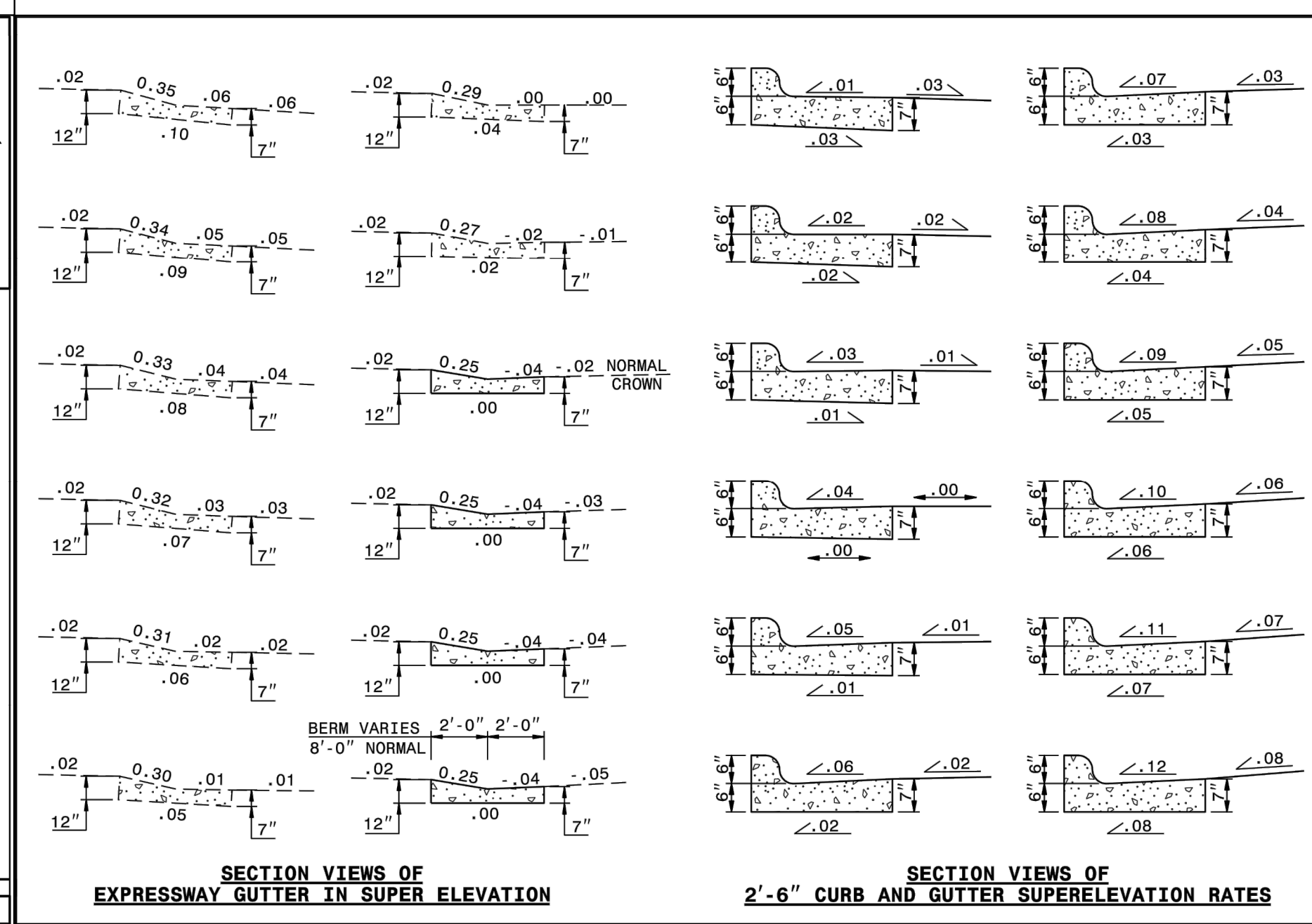
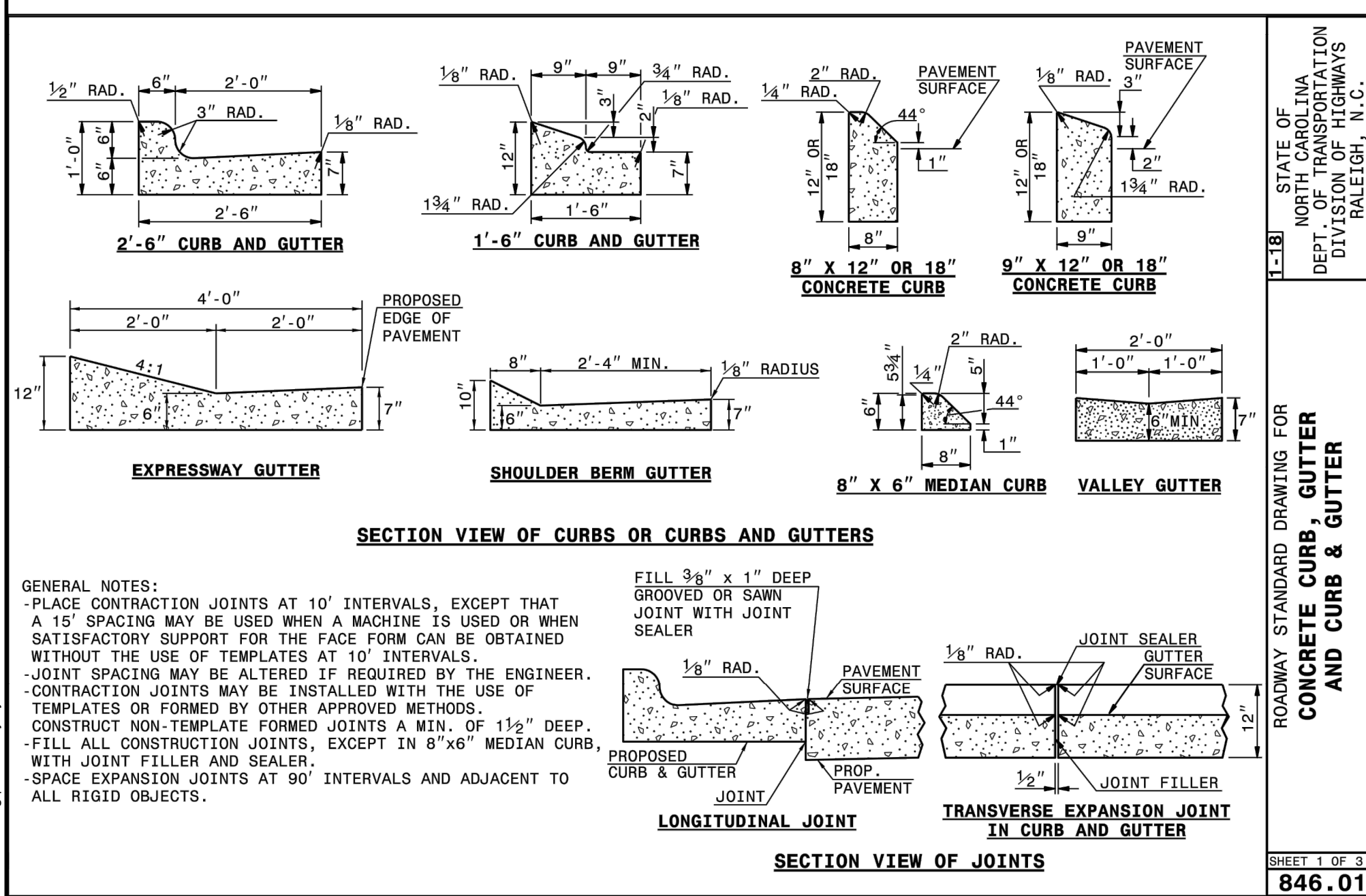
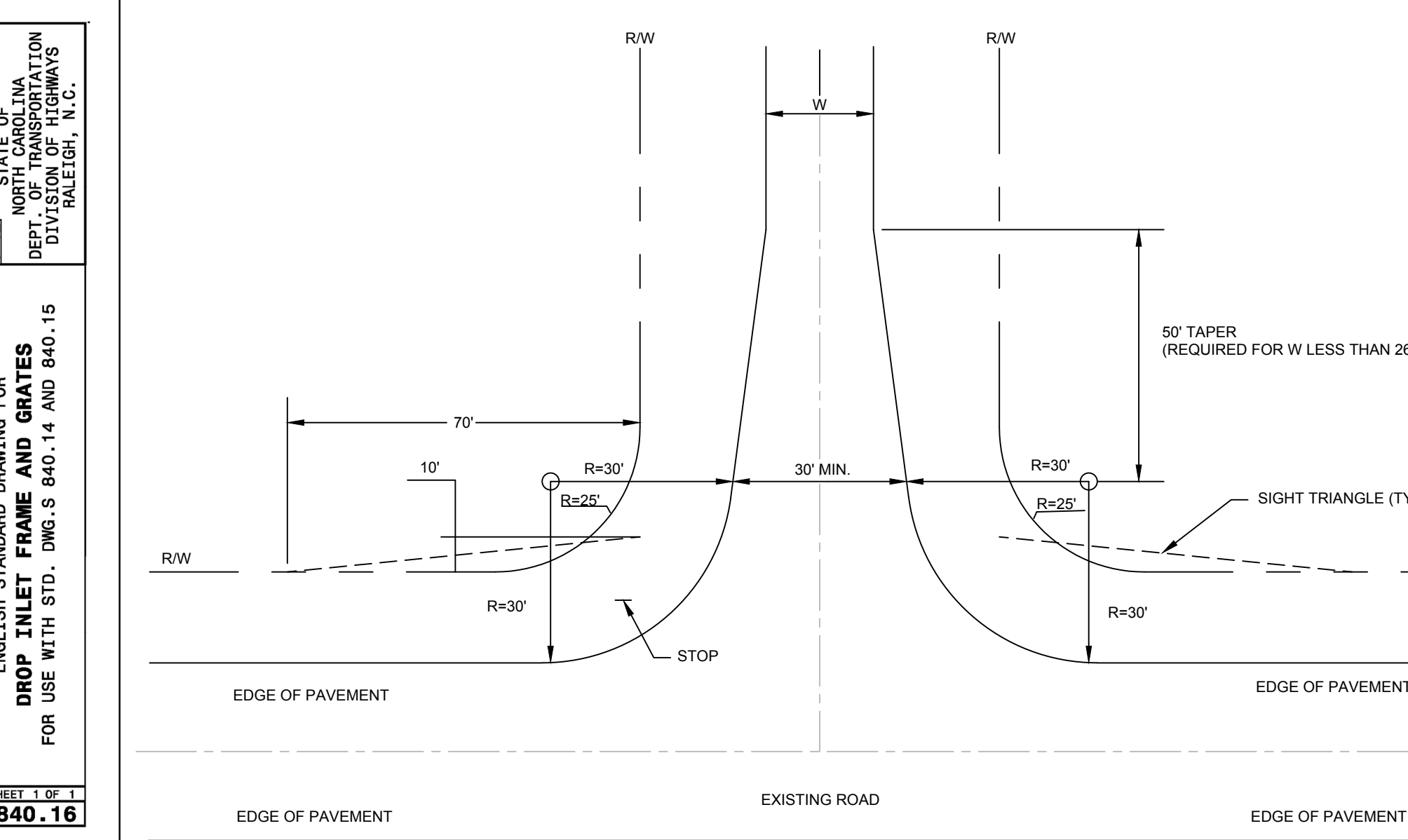
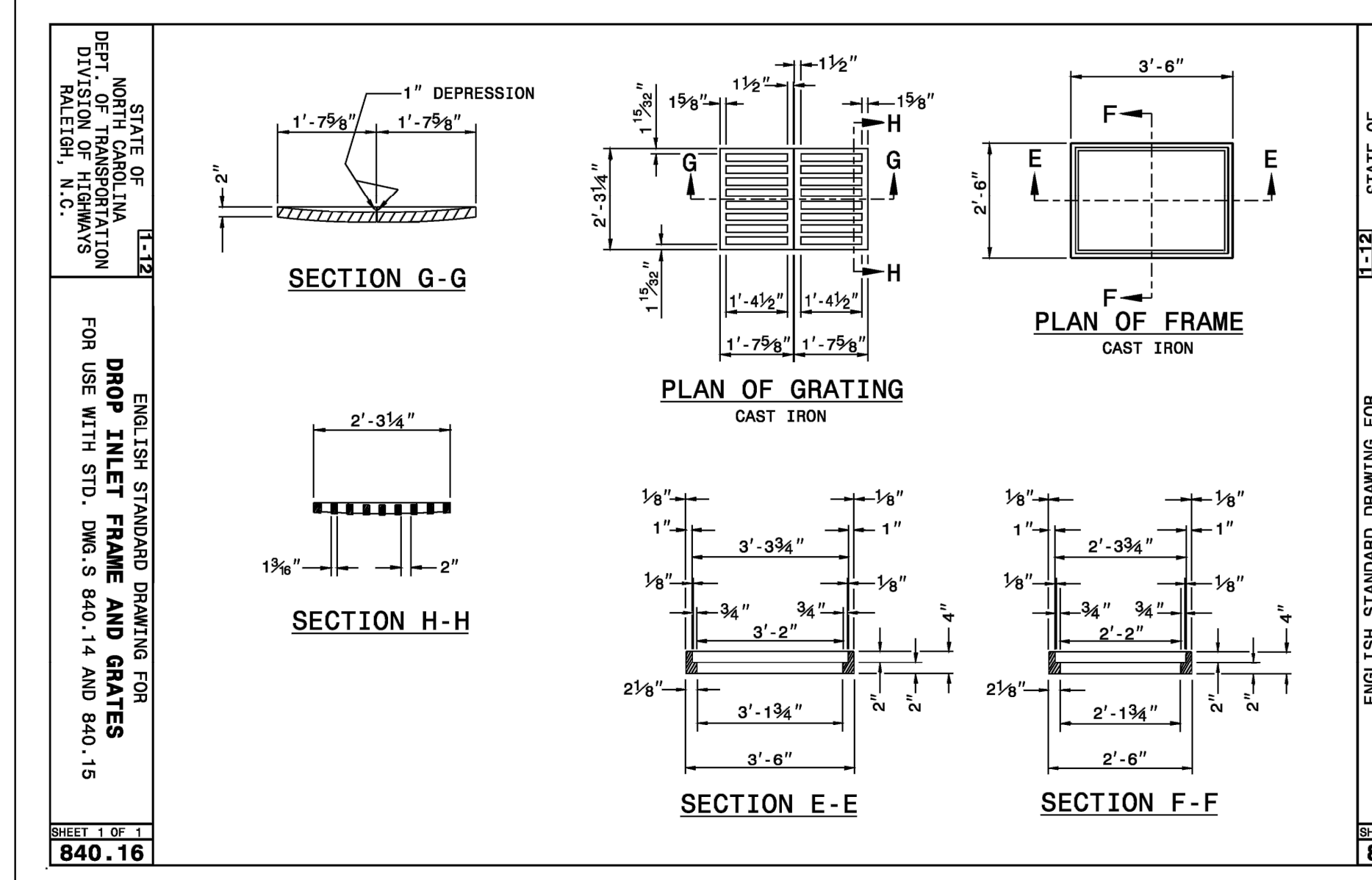
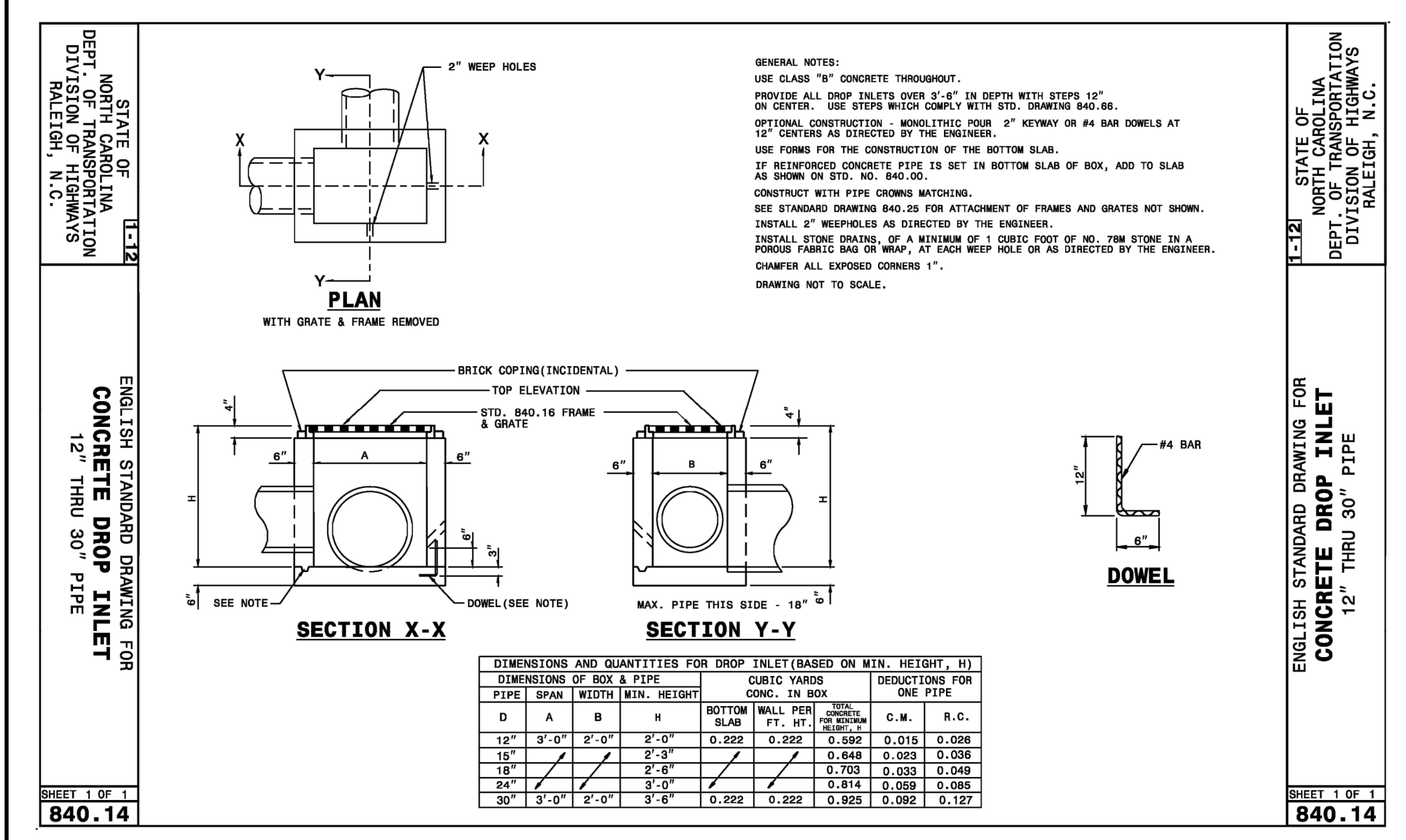
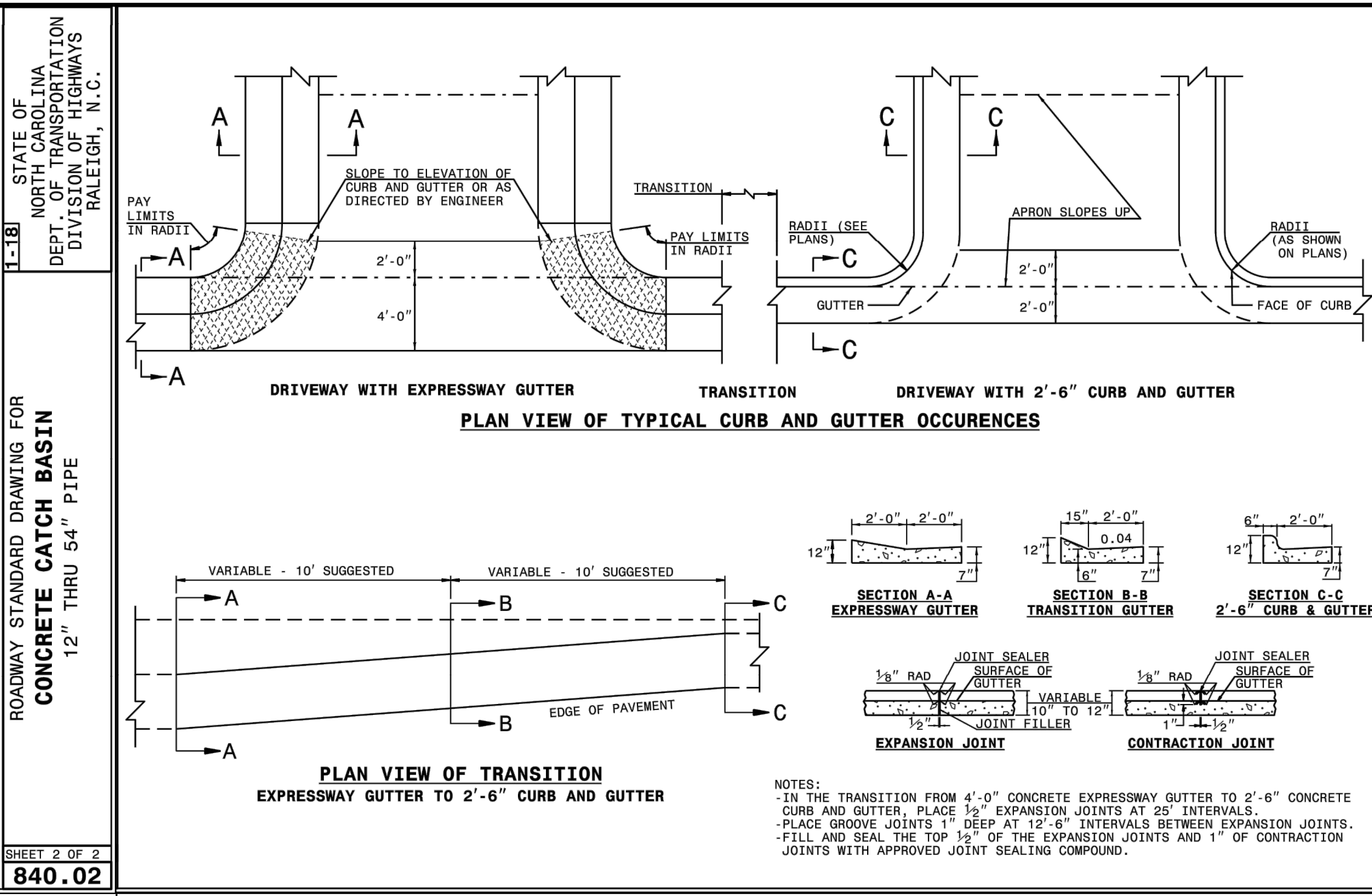
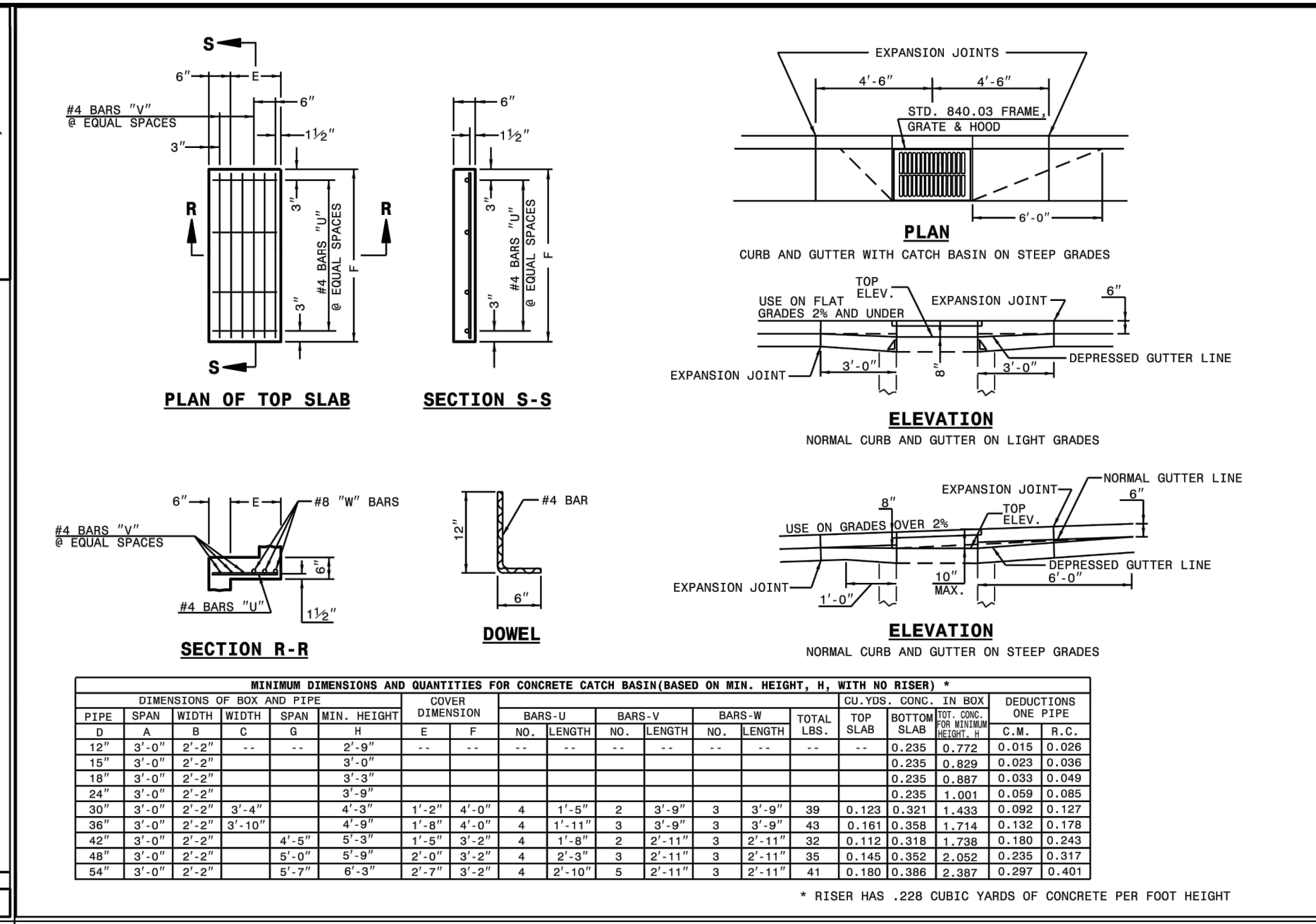
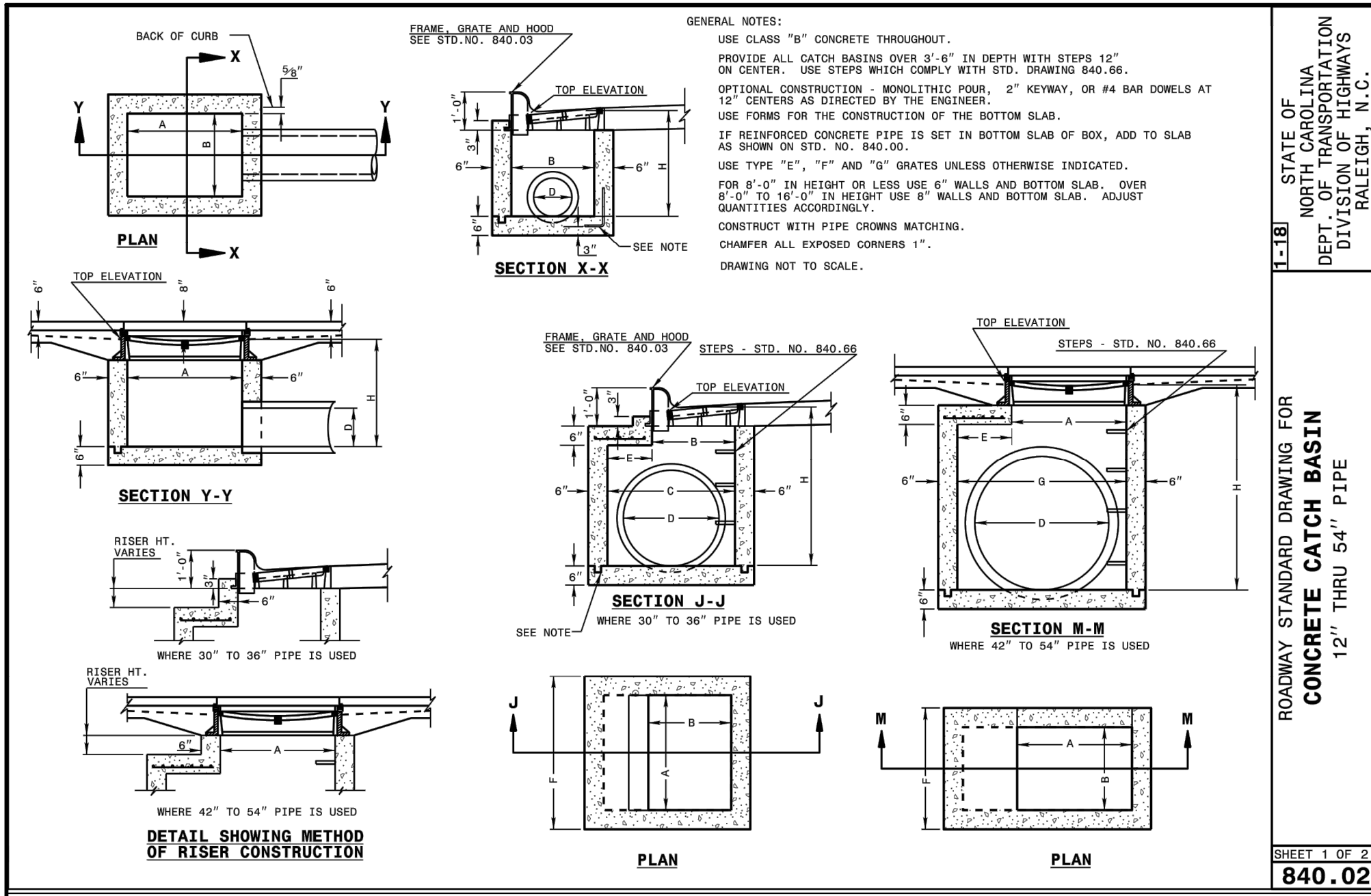
THIS DRAWING PREPARED AT THE  
**RALEIGH OFFICE**  
 5410 Trinity Road, Suite 102 | Raleigh, NC 27607  
 TEL 919.866.9511 FAX 919.866.9514 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

REVISION DESCRIPTION	DATE
INITIAL HWY SUBMITTAL	09/14/2020
ADDRESSING HWY COMMENTS DATED 10/13/2020	11/24/2020
DATE	11/24/2020
DRAWN BY	331
DESIGNED BY	331
CHECKED BY	M. ZACCARDO
SCALE	AS SHOWN

**TIMMONS GROUP**  
 NORTH CAROLINA LICENSE NO. C-1652  
**THE PRESERVE AT KIPLING CREEK**  
 HARNETT COUNTY, NORTH CAROLINA  
**NOTES & DETAILS**

JOB NO.	44455
SHEET NO.	C11.3



STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N. C.

ROADWAY STANDARD DRAWING FOR  
CONCRETE CURB, GUTTER  
AND CURB & GUTTER

SHEET 3 OF 3  
846.01

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N. C.

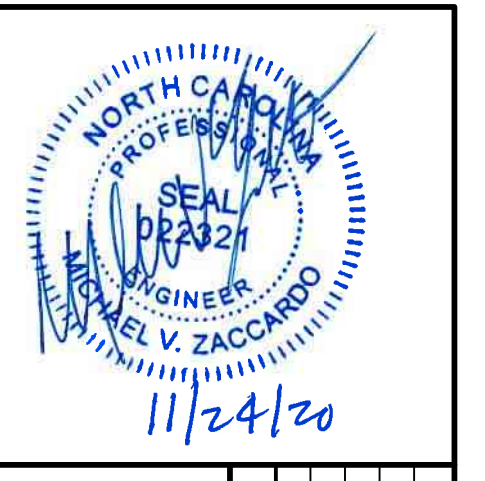
ENGLISH STANDARD DRAWING FOR  
CONCRETE DROP INLET  
12" THRU 54" PIPE

SHEET 1 OF 1  
840.14

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N. C.

ENGLISH STANDARD DRAWING FOR  
DROP INLET FRAME AND GRATES  
FOR USE WITH STD. DIM. S. 840.14 AND 840.15

SHEET 1 OF 1  
840.16



THIS DRAWING PREPARED AT THE  
RALEIGH OFFICE  
5410 Trinity Road, Suite 102 | Raleigh, NC 27607  
TEL 919.866.9511 FAX 919.933.8124 www.timmons.com

REVISION  
INITIAL HWY SUBMITTAL  
DATE 11/24/2020  
ADDRESSING HWY COMMENTS DATED 10/13/2020

YOUR VISION ACHIEVED THROUGH OURS.

DATE 11/24/2020  
DRAWN BY 331  
DESIGNED BY 331  
CHECKED BY M. ZACCARO  
SCALE AS SHOWN

**TIMMONS GROUP**  
NORTH CAROLINA LICENSE NO. C-1652  
THE PRESERVE AT KIPLING CREEK  
HARNETT COUNTY, NORTH CAROLINA  
NOTES & DETAILS

JOB NO. 44455  
SHEET NO. C11.4

S:\331\4455-Kipling\_Creek\DWG\Sheet\C11.4-INTD.dwg | Printed by Tyler Cross

These plans and associated documents are the exclusive property of TIMMONS GROUP and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of TIMMONS GROUP.