

BUILDING #7 CONSTRUCTION PLANS

EASTGATE 540

390 SPECTRUM DRIVE

KNIGHTDALE, NORTH CAROLINA

ZMA-10-20

AM PEAK HOUR TOTAL TRIPS						
ITE LAND USE CODE	USE	UNITS	ITE MANUAL RATES*			
			ADT	AM ENTER	AM EXIT	AM TOTAL
150	WAREHOUSING	204,220 SF	368	38	12	50

PM PEAK HOUR TOTAL TRIPS						
ITE LAND USE CODE	USE	UNITS	ITE MANUAL RATES*			
			ADT	PM ENTER	PM EXIT	PM TOTAL
150	WAREHOUSING	204,220 SF	368	14	38	52

*ITE TRIP GENERATION, 10th EDITION

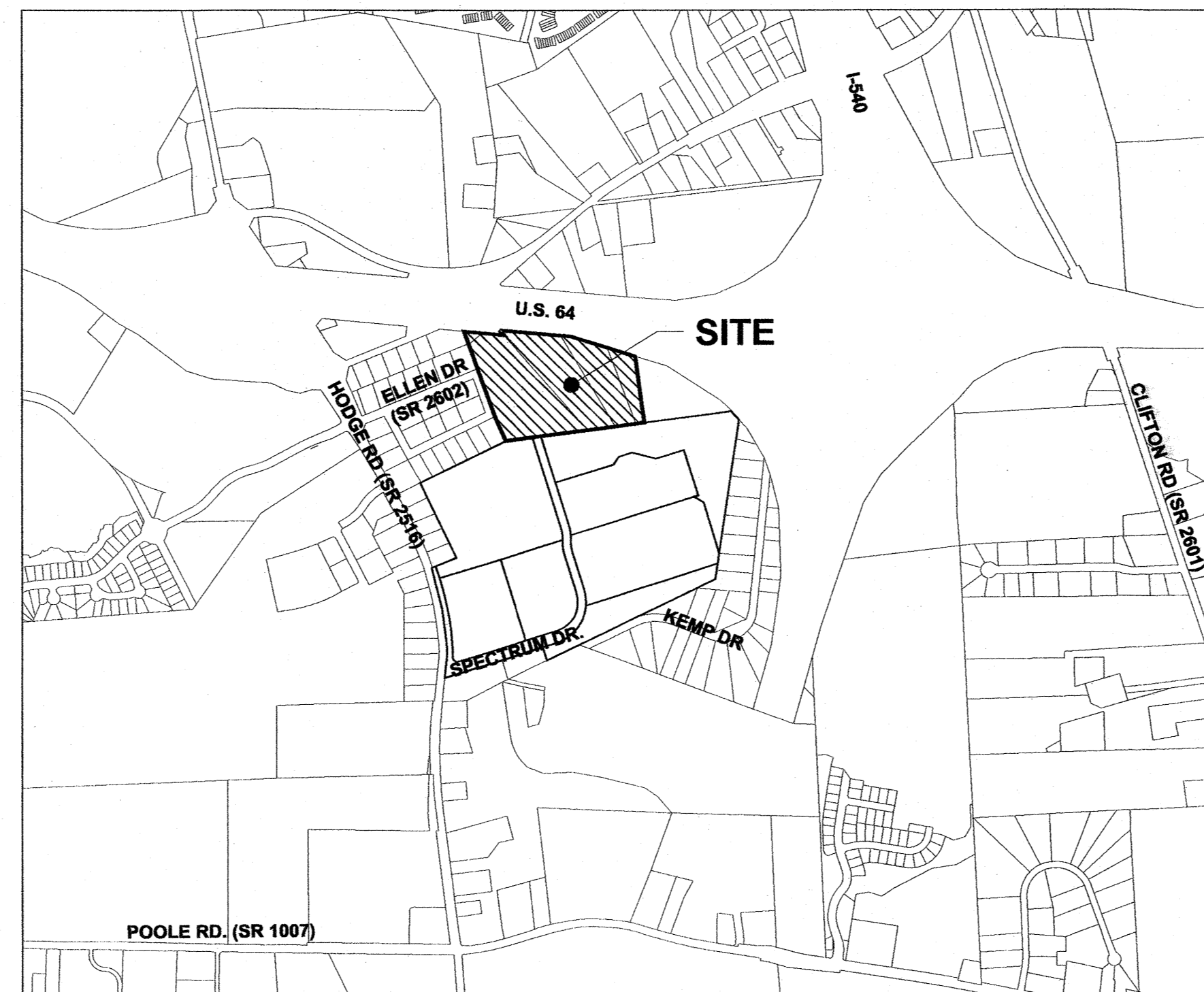
WATER & SEWER

- CONTRACTOR SHALL VERIFY LOCATIONS, ELEVATIONS, AND SIZES OF EXISTING PUBLIC UTILITIES PRIOR TO ANY EXCAVATIONS, GRADING, OR INSTALLATION OF UNDERGROUND UTILITIES ON OR ADJACENT TO THE PROJECT.
- ALL SANITARY SEWER AND WATER LOCATED OUTSIDE THE PROPOSED STREET RIGHT-OF-WAY SHALL BE PROVIDED WITH STANDARD EASEMENT WIDTHS AS PER CITY OF RALEIGH REQUIREMENTS AND SHALL BE DEDICATED TO THE CITY OF RALEIGH ON THE FINAL PLAT.
- NO SERVICES SHALL BE BENT OR INSTALLED IN SUCH A WAY THAT DOES NOT COMPLY WITH CITY STANDARDS.
- A PLAT FOR ALL CITY OF RALEIGH SANITARY SEWER EASEMENTS WILL BE SUBMITTED TO CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT FOR REVIEW PRIOR TO RECORDING AND PRIOR TO THE ISSUANCE OF BUILDING PERMITS FROM THE TOWN OF KNIGHTDALE.

GENERAL NOTES

- THIS PROJECT IS AN ADDENDUM TO THE PREVIOUSLY APPROVED MASTER PLANS TITLED "MASTER PLAN HODGE ROAD BUSINESS PARK" (ZCP-15-15) WHICH WAS APPROVED BY TOWN COUNCIL ON OCTOBER 15, 2015.
- IMPACTS TO EXISTING WETLANDS APPROVED BY USAGE ACTION ID SAW-2014-02127.
- 401 WATER QUALITY APPROVED BY NCDEQ (DWR #20151256 V4).
- THIS PROJECT WILL AMEND THE EXISTING UTILITY ALLOCATION AGREEMENT (DB 16530, PG 1938) TO INCLUDE THIS SITE.
- SEE TRAFFIC IMPACT ANALYSIS REPORT TITLED "EASTGATE 540" DATED MARCH 22, 2021, PREPARED BY VHB ENGINEERING NC, OC, FOR DETAILED ANALYSIS.
- THE FOLLOWING MODIFICATIONS MADE DURING PREPARATION OF THE CONSTRUCTION AND/OR BUILDING PERMIT PLANS THAT DO DIFFER FROM THE APPROVED MASTER PLAN SHALL NOT REQUIRE THE MASTER PLAN TO BE AMENDED BY SUBMITTED TO THE TOWN FOR APPROVAL, HOWEVER MAY BE SUBJECT TO ADDITIONAL CONSTRUCTION DRAWING REVIEW, APPROVAL, PRE-CONSTRUCTION MEETINGS, AND/OR ISSUANCE OF A CONSTRUCTION IMPROVEMENT PERMIT.

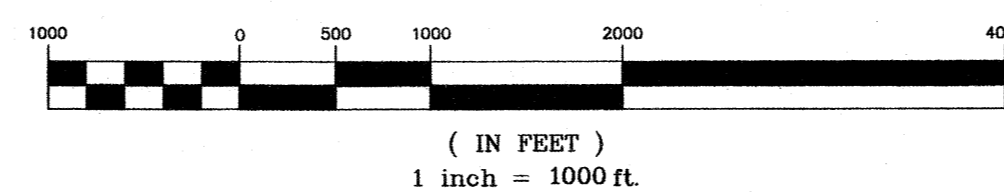
- NUMBER AND LOCATION OF DOCK DOORS
- NUMBER AND LOCATION OF FUTURE PARKING SPACES
- NUMBER AND LOCATION OF FUTURE TRAILER PARKING SPACES
- LOCATION OF INDIVIDUAL SUITE INGRESS AND EGRESS



VICINITY MAP

SCALE: 1"=1,000'

GRAPHIC SCALE



SITE DATA TABLE

SITE ACREAGE:	± 20.234 ACRES (LOT 7)
EXISTING ZONING:	RT (RURAL TRANSITION)
PROPOSED ZONING:	M1 CONDITIONAL DISTRICT
OVERLAY DISTRICT:	SHOD (SPECIAL HIGHWAY OVERLAY DISTRICT)
EXISTING LAND USE:	AGRICULTURE, FORESTRY
PROPOSED LAND USE:	MANUFACTURING/WAREHOUSE/STORAGE (UDO 2.3.C.6)
WATERSHED:	LOWER NEUSE RIVER
PROPOSED NO. BUILDINGS:	1
TOTAL BUILDING AREA:	204,220 SF
FRONT SETBACK (MIN.) **:	10 FT
SIDE SETBACK (MIN.) **:	6 FT
CORNER SIDE SETBACK (MIN.) **:	10 FT
REAR SETBACK (MIN.) **:	10 FT
MAXIMUM HEIGHT:	5 STORIES

** FRONT, REAR, AND SIDE SETBACKS FROM OSP, RR, GR, UR, RMX, NMX, TC, AND HB DISTRICTS SHALL BE A MINIMUM OF 50 FT.

OWNER

HODGE ROAD BUILDING 7, LLC
440 S. CHURCH STREET
SUITE 800
CHARLOTTE, NC 28202
PHONE (704) 295-0455

CONTRACTOR

FRAMPTON CONSTRUCTION
3227 BENCHMARK DRIVE
LADSON, SC 29456
PHONE (678) 794-7514

DEVELOPER

TRINITY CAPITAL ADVISORS, LLC
440 S. CHURCH STREET
SUITE 800
CHARLOTTE, NC 28202
PHONE (704) 295-0455

ENGINEER/SURVEYOR

ADVANCED CIVIL DESIGN, INC.
51 KILMAYNE DRIVE, SUITE 102
CARY, NC 27511
PHONE (919) 481-6290
FAX (919) 336-5127

INDEX OF DRAWINGS

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ZMA-10-20

IMPROVEMENT QUANTITIES

	RALEIGH	KNIGHTDALE
PHASE NUMBER(S)	N/A	4
BUILDING NUMBER	N/A	7
NUMBER OF LOT(S)	N/A	1 (EX)
NUMBER OF UNITS	N/A	0
LIVABLE BUILDINGS	N/A	0
OPEN SPACE	N/A	0
NUMBER OF OPEN SPACE LOTS	N/A	0
PUBLIC GRAVITY SEWER 8" (LF)	486	0
NUMBER OF SEWER STUBS/TIES (EA)	2	0
PUBLIC WATER 12" (LF)	128	0
NUMBER OF WATER STUBS/TIES (EA)	3	0
PUBLIC STREET (LF)	N/A	217
PUBLIC SIDEWALK (LF)	N/A	217
PUBLIC CURB & GUTTER (LF)	N/A	441
PUBLIC CURB & GUTTER (LF)	N/A	441
TREE PROTECTION FENCE (LF)	N/A	3,779

ATTENTION CONTRACTORS

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

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

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

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

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

City of Raleigh Development Approval
Lorena Sample@raleighnc.gov
Raleigh Water Review Officer

SITE PERMITTING APPROVAL

Water and Sewer Permits (if applicable)

The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # S-4871

The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # W-3817

Town Approved Standards Shall Control. In the event of a conflict or inconsistency between these construction drawings and the Town of Knightdale's Approved Standards for this project, the Approved Standards shall control. Town of Knightdale Approved Standards shall mean all development documents necessary for approval for the Property including, but not limited to, any special use permit, subdivision plan, site plan, subdivision plat(s), phasing schedule, Development Agreement, Utility Allocation Agreement, Annexation Agreement, the Town of Knightdale Standard Specification and Details Manual and applicable provisions of the North Carolina State Building Code.

Professional Design Engineer Certification. These improvements shall be constructed in accordance with the following drawings and with the Standard Specifications of the Town of Knightdale. I, Cameron M. Rice, PE, certify that the Standard Specifications of the Town of Knightdale have been thoroughly checked and found to be applicable to this project. All exceptions to the applicable Town standards have been previously approved by the Town of Knightdale and said exceptions are shown on Sheet(s) _____ of these drawings.

Seal: Cameron M. Rice PE
Date: 10/4/2021

Seal: Cameron M. Rice PE
Date: 10/4/2021

Town Certification. This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: [Signature] Date: 10/12/2021
Development Services Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.
By: [Signature] Date: 10.13.21
Administrator

PLAN PREPARED BY:
51 Kilmayne Drive, Suite 102
Cary, North Carolina 27511
PH 919.481.6290
Fax 919.336.5127
Firm License # C-2788
ADVANCED CIVIL DESIGN
ENGINEERS & SURVEYORS

PLAN PREPARED FOR:
TRINITY CAPITAL

390 Spectrum Drive, Knightdale, NC 27545 - Wake County
EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
FOR
TRINITY CAPITAL ADVISORS, LLC
COVER SHEET

PROFESSIONAL SEAL
Cameron M. Rice
Professional Engineer
No. 10000
State of North Carolina
10/04/2021

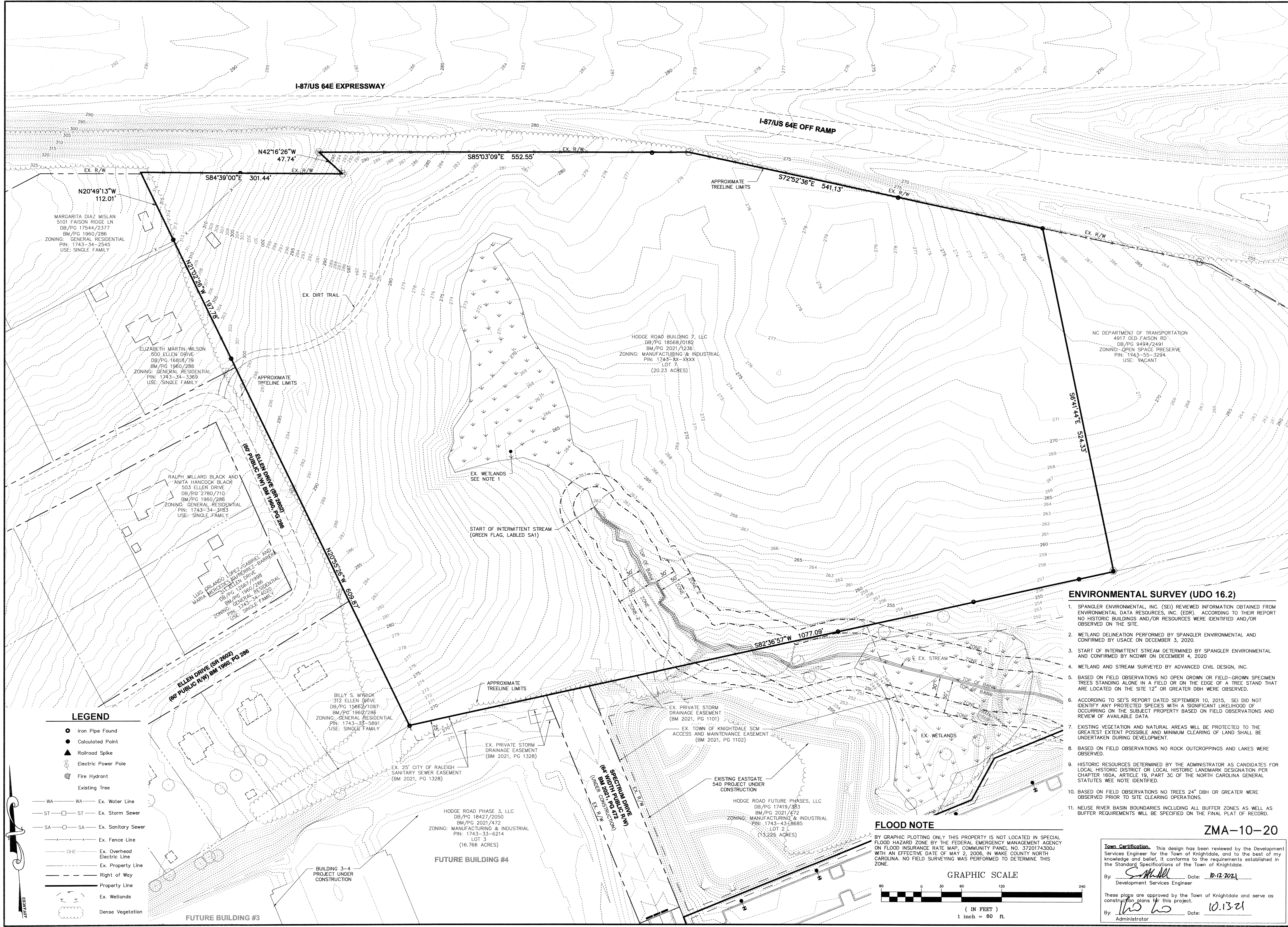
Issue Date:	PROGRESS SET TO CONTRACTOR
06/11/2021	TOWN SUBMITTAL #1
06/18/2021	TOWN SUBMITTAL #2
08/10/2021	TOWN SUBMITTAL #3
09/14/2021	TOWN SUBMITTAL #4

Date: 10/04/2021
Scale: 1" = 1,000'

Drawn By: JLB
Checked By: CMR

Project Number:
20-0006-988

Drawing Number:
C.1.0



ENVIRONMENTAL SURVEY (UDO 16.2)

- SPANGLER ENVIRONMENTAL, INC. (SEI) REVIEWED INFORMATION OBTAINED FROM ENVIRONMENTAL DATA RESOURCES, INC. (EDR). ACCORDING TO THEIR REPORT NO HISTORIC BUILDINGS AND/OR RESOURCES WERE IDENTIFIED AND/OR OBSERVED ON THE SITE.
- WETLAND DELINEATION PERFORMED BY SPANGLER ENVIRONMENTAL AND CONFIRMED BY USACE ON DECEMBER 3, 2020.
- START OF INTERMITTENT STREAM DETERMINED BY SPANGLER ENVIRONMENTAL AND CONFIRMED BY NCDWR ON DECEMBER 4, 2020
- WETLAND AND STREAM SURVEYED BY ADVANCED CIVIL DESIGN, INC.
- BASED ON FIELD OBSERVATIONS NO OPEN GROWN OR FIELD-GROWN SPECIMEN TREES STANDING ALONE IN A FIELD OR ON THE EDGE OF A TREE STAND THAT ARE LOCATED ON THE SITE 12" OR GREATER DBH WERE OBSERVED.
- ACCORDING TO SEI'S REPORT DATED SEPTEMBER 10, 2015, SEI DID NOT IDENTIFY ANY PROTECTED SPECIES WITH A SIGNIFICANT LIKELIHOOD OF OCCURRING ON THE SUBJECT PROPERTY BASED ON FIELD OBSERVATIONS AND REVIEW OF AVAILABLE DATA.
- EXISTING VEGETATION AND NATURAL AREAS WILL BE PROTECTED TO THE GREATEST EXTENT POSSIBLE AND MINIMUM CLEARING OF LAND SHALL BE UNDERTAKEN DURING DEVELOPMENT.
- BASED ON FIELD OBSERVATIONS NO ROCK OUTCROPPINGS AND LAKES WERE OBSERVED.
- HISTORIC RESOURCES DETERMINED BY THE ADMINISTRATOR AS CANDIDATES FOR LOCAL HISTORIC DISTRICT OR LOCAL HISTORIC LANDMARK DESIGNATION PER CHAPTER 160A, ARTICLE 19, PART 3C OF THE NORTH CAROLINA GENERAL STATUTES WERE NOTE IDENTIFIED.
- BASED ON FIELD OBSERVATIONS NO TREES 24" DBH OR GREATER WERE OBSERVED PRIOR TO SITE CLEARING OPERATIONS.
- NEUSE RIVER BASIN BOUNDARIES INCLUDING ALL BUFFER ZONES AS WELL AS BUFFER REQUIREMENTS WILL BE SPECIFIED ON THE FINAL PLAT OF RECORD.

FLOOD NOTE

BY GRAPHIC PLOTTING ONLY THIS PROPERTY IS NOT LOCATED IN SPECIAL FLOOD HAZARD ZONE BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY ON FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 3720174300J WITH AN EFFECTIVE DATE OF MAY 2, 2006, IN WAKE COUNTY NORTH CAROLINA. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE.

GRAPHIC SCALE

(IN FEET)
1 inch = 60 ft

PLAN PREPARED BY: **ADVANCED CIVIL DESIGN ENGINEERS**
51 Kimmey Drive, Suite 103
Cary, North Carolina 27513
PH: 919.468.6500
FAX: 919.338.9377
Firm License # C-2708

PLAN PREPARED FOR: **TRINITY CAPITAL**

390 Spectrum Drive, Knightdale, NC 27545 - Wake County

EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
FOR
TRINITY CAPITAL ADVISORS, LLC
EXISTING CONDITIONS PLAN

Issue Dates:
06/11/2021 - PROGRESS SET TO CONTRACTOR
06/18/2021 - TOWN SUBMITTAL #1
08/10/2021 - TOWN SUBMITTAL #2
09/14/2021 - TOWN SUBMITTAL #3
10/04/2021 - TOWN SUBMITTAL #4

Date: 10/04/2021
Scale: 1" = 60'

Drawn By: JLB
Checked By: CMR

Project Number:
20-0006-988

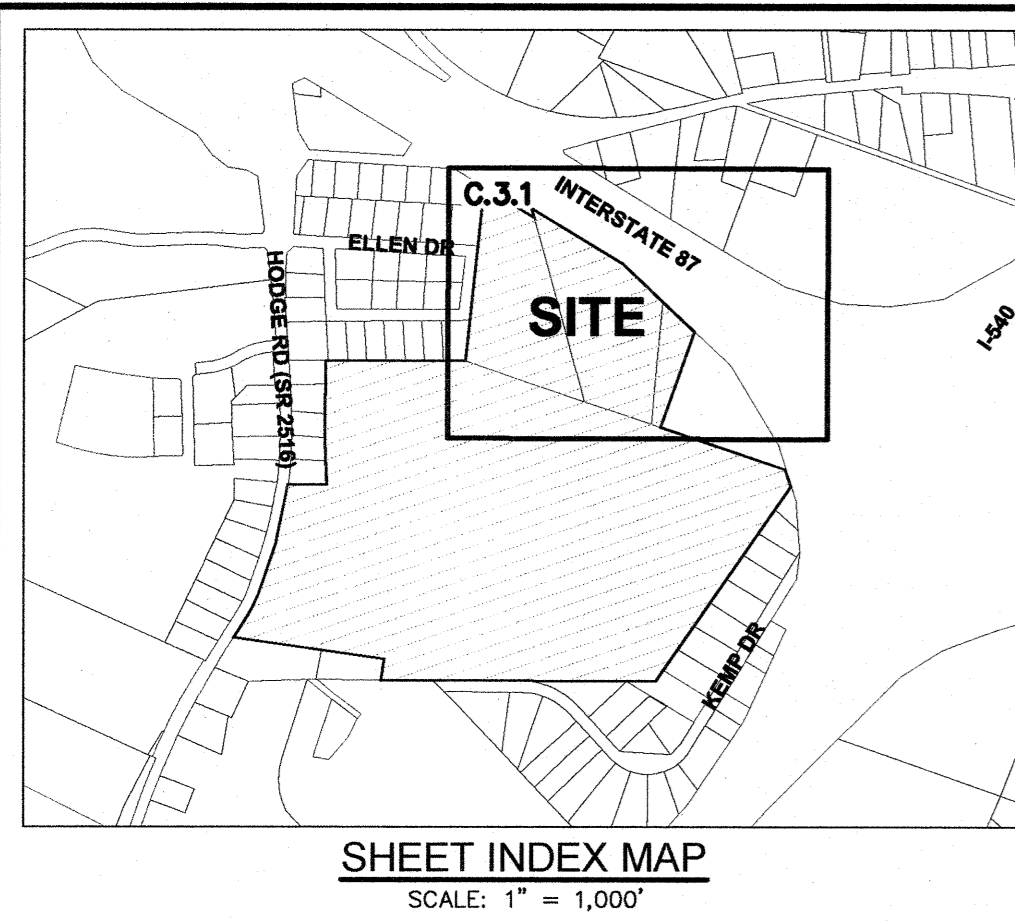
Drawing Number:
C.2.0

Town Certification. This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: *[Signature]* Date: 10.12.2021
Development Services Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: *[Signature]* Date: 10.13.21
Administrator



LEGEND

- Iron Pipe Found
- Calculated Point
- ▲ Railroad Spike
- ⊕ Electric Power Pole
- ⊙ Fire Hydrant
- ⊗ Existing Tree
- ⊘ Dense Vegetation
- ⊙ Existing Tree Cover Area Utilized
- ⊙ Type B Buffer Yard (UDO 8.7.A.2)
- Ex. Fence Line
- Ex. Overhead Electric Line
- Ex. Property Line
- Right of Way
- Property Line
- ⊙ Ex. Wetlands
- ⊙ Proposed Additional Space For Tree Area
- ⊙ Type A Buffer Yard (UDO 8.7.A.1)

FLOOD NOTE

BY GRAPHIC PLOTTING ONLY THIS PROPERTY IS NOT LOCATED IN SPECIAL FLOOD HAZARD ZONE BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY ON FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 3720174300J WITH AN EFFECTIVE DATE OF MAY 2, 2006, IN WAKE COUNTY NORTH CAROLINA. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE.

GENERAL NOTES

- BOUNDARY INFORMATION PLOTTED USING RECORDS OBTAINED FROM THE WAKE COUNTY REGISTER OF DEEDS.
- TOPOGRAPHIC SURVEY PROVIDED BY WAKE COUNTY GIS.
- PRELIMINARY WETLAND LOCATIONS PROVIDED BY SPANGLER ENVIRONMENTAL.
- BUFFER DETERMINATION PER SURFACE WATER DETERMINATION LETTER NBRRO#14-384 DATED NOVEMBER 4, 2014.
- PROTECTED SPECIES HABITAT ASSESSMENT REPORT PROVIDED BY SPANGLER ENVIRONMENTAL.

TREE COVER AREA CALCULATIONS

PERIMETER OF SITE: 7,858 FEET
 REQUIRED TREE COVER AREA: 7,858 FT X 20 FT = 157,160 SF
 REQUIRED AREA % OF TOTAL LOT AREA: 157,160 SF / 3,425,599 SF = 4.59%
 4.59% OF TOTAL LOT AREA (< 10% MAX)
 EXISTING TREE COVER AREA TO BE UTILIZED: 96,628 SF
 ADDITIONAL SPACE REQUIRED: 157,160 SF - 96,628 SF = 60,532 SF
 RE-PLANTED AREA REQUIRED: 125% OF CALCULATED ADDITIONAL SPACE
 125% X 60,532 SF = 75,665 SF
 RE-PLANTED AREA PROVIDED: 260,216 SF
 260,216 SF > 75,665 SF

TOWN OF KNIGHTDALE WATER ALLOCATION POLICY

PROPOSED BUILDING #7 WILL BE A PART OF THE EASTGATE 540 PROJECT. NOTWITHSTANDING THE TOWN'S WATER ALLOCATION POLICY (ORDINANCE # 15-10-05-001) REQUIREMENT OF 50 POINTS, DUE TO THE UNIQUE CONTRIBUTION TO THE TOWN'S TAX BASE, THE PROJECT SHALL ONLY BE REQUIRED TO ACHIEVE 47 TOTAL POINTS TO MERIT WATER ALLOCATION.
 CALCULATIONS ARE SHOWN BELOW:
 PROPOSED WAREHOUSE/DISTRIBUTION CENTER - 1,183,820 SF
 1,183,820 SF > 500,000 SF (REQUIRED)
 POINTS EARNED: 41 POINTS
 ABATEMENT OF ANY EXISTING NON-CONFORMING STRUCTURES
 POINTS EARNED: 2 POINTS
 SIGNAGE OR STRIPING IMPROVEMENTS (KEMP DRIVE AT HODGE ROAD)
 POINTS EARNED: 1 POINT
 EXCLUSIVE USE OF XERISCAPING TECHNIQUES AND DROUGHT-TOLERANT SPECIES
 POINTS EARNED: 3 POINTS
 TOTAL POINTS: 41 + 2 + 1 + 3 = 47 POINTS

SITE DATA TABLE

TOTAL SITE ACREAGE: 98.875 ACRES
 ZONED: M1 (MANUFACTURING & INDUSTRIAL)
 EXISTING LAND USE: SINGLE FAMILY, AGRICULTURE
 PROPOSED LAND USE: STORAGE - WAREHOUSE, INDOOR STORAGE
 WATERSHED: LOWER NEUSE RIVER
 PROPOSED NO. BUILDINGS: 7
 TOTAL BUILDING AREA: 1,184,091 SF
 FRONT SETBACK (MIN.) **: 10 FT
 SIDE SETBACK (MIN.) **: 10 FT
 CORNER SIDE SETBACK (MIN.) **: 10 FT
 REAR SETBACK (MIN.) **: 10 FT
 MAXIMUM HEIGHT: 5 STORIES
 ** FRONT, REAR, SIDE SETBACKS FROM OSP, RR, GR, UR, RMX, NMX, TC, AND HB DISTRICTS SHALL BE A MINIMUM OF 50 FT.

PARKING CALCULATIONS

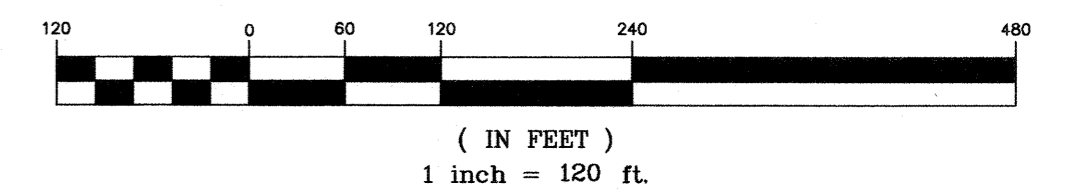
USE TYPE: STORAGE - WAREHOUSE, INDOOR STORAGE
 MAXIMUM NO. OF PARKING SPACES: 0.7 PER KSF GFA
 MINIMUM NO. OF PARKING SPACES: 0.5 X MAXIMUM
 **KSF = 1,000 SF; GFA = GROSS FLOOR AREA

NOTE: THE MAXIMUM NUMBER OF SPACES CAN BE EXCEEDED BY NO MORE THAN 15% IF THE EXCEEDING SPACES ARE NO MORE THAN 30 FEET FROM THE BASE OF A LARGE SHADE TREE PER THE TOWN OF KNIGHTDALE UDO SECTION 10.3E(2).

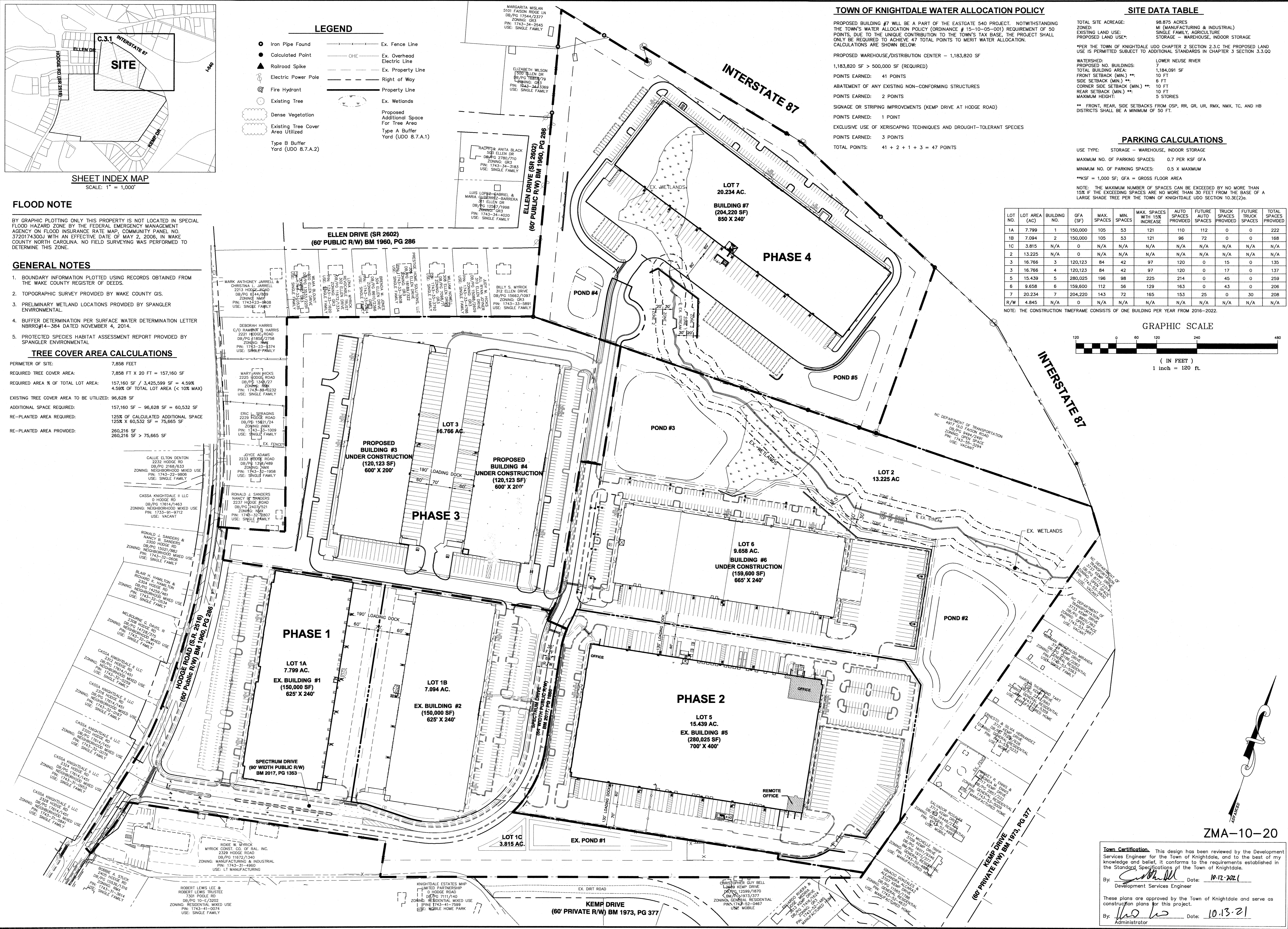
LOT NO.	LOT AREA (AC)	BUILDING NO.	GFA (SF)	MAX. SPACES	MIN. SPACES	MAX. SPACES WITH 15% INCREASE	AUTO SPACES PROVIDED	FUTURE AUTO SPACES	TRUCK SPACES PROVIDED	FUTURE TRUCK SPACES	TOTAL SPACES PROVIDED
1A	7.799	1	150,000	105	53	121	110	112	0	0	222
1B	7.094	2	150,000	105	53	121	96	72	0	0	168
1C	3.815	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	13.225	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3	16.766	3	120,123	84	42	97	120	0	15	0	135
3	16.766	4	120,123	84	42	97	120	0	17	0	137
5	15.439	5	280,025	196	98	225	214	0	45	0	259
6	9.658	6	159,600	112	56	129	163	0	43	0	206
7	20.234	7	204,220	143	72	165	153	25	0	30	208
R/W	4.845	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

NOTE: THE CONSTRUCTION TIMEFRAME CONSISTS OF ONE BUILDING PER YEAR FROM 2016-2022.

GRAPHIC SCALE



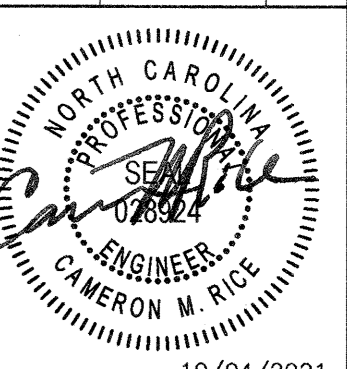
C:\19-0001-988NC\Drawings\Site Construction\BUILDING #7 CONSTRUCTION PLANS\0001-988ncp003.dwg OVERALL SITE PLAN Oct 04, 2021 - 2:44:18pm c/ice



PLAN PREPARED BY:
 51 Kinyard Drive, Suite 102
 Cary, North Carolina 27511
 ph 919.481.0990
 for 919.336.3277
 Firm License # C-2798
ADVANCED CIVIL DESIGN ENGINEERS & SURVEYORS

PLAN PREPARED FOR:
TRINITY CAPITAL

390 Spectrum Drive, Knightdale, NC 27545 - Wake County
EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
 FOR
TRINITY CAPITAL ADVISORS, LLC
OVERALL SITE PLAN



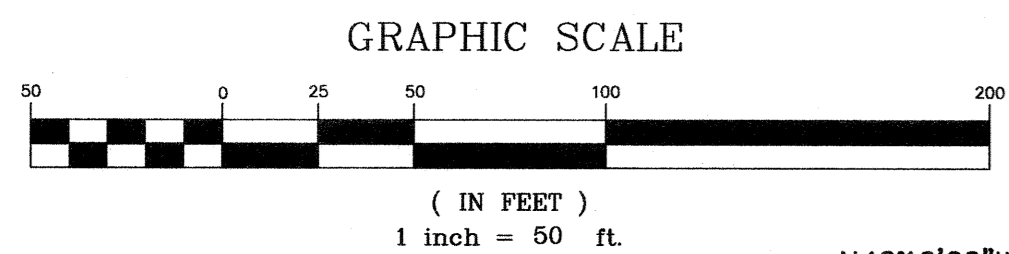
10/04/2021

Issue Date:	Progress Set to Contractor
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ZMA-10-20

Town Certification. This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.
 By: *[Signature]* Date: 10-12-2021
 Development Services Engineer
 By: *[Signature]* Date: 10-13-21
 Administrator

Date: 10/04/2021
 Scale: 1" = 120'
 Drawn By: JLB
 Checked By: CMR
 Project Number: 20-0006-988
 Drawing Number: **C.3.0**



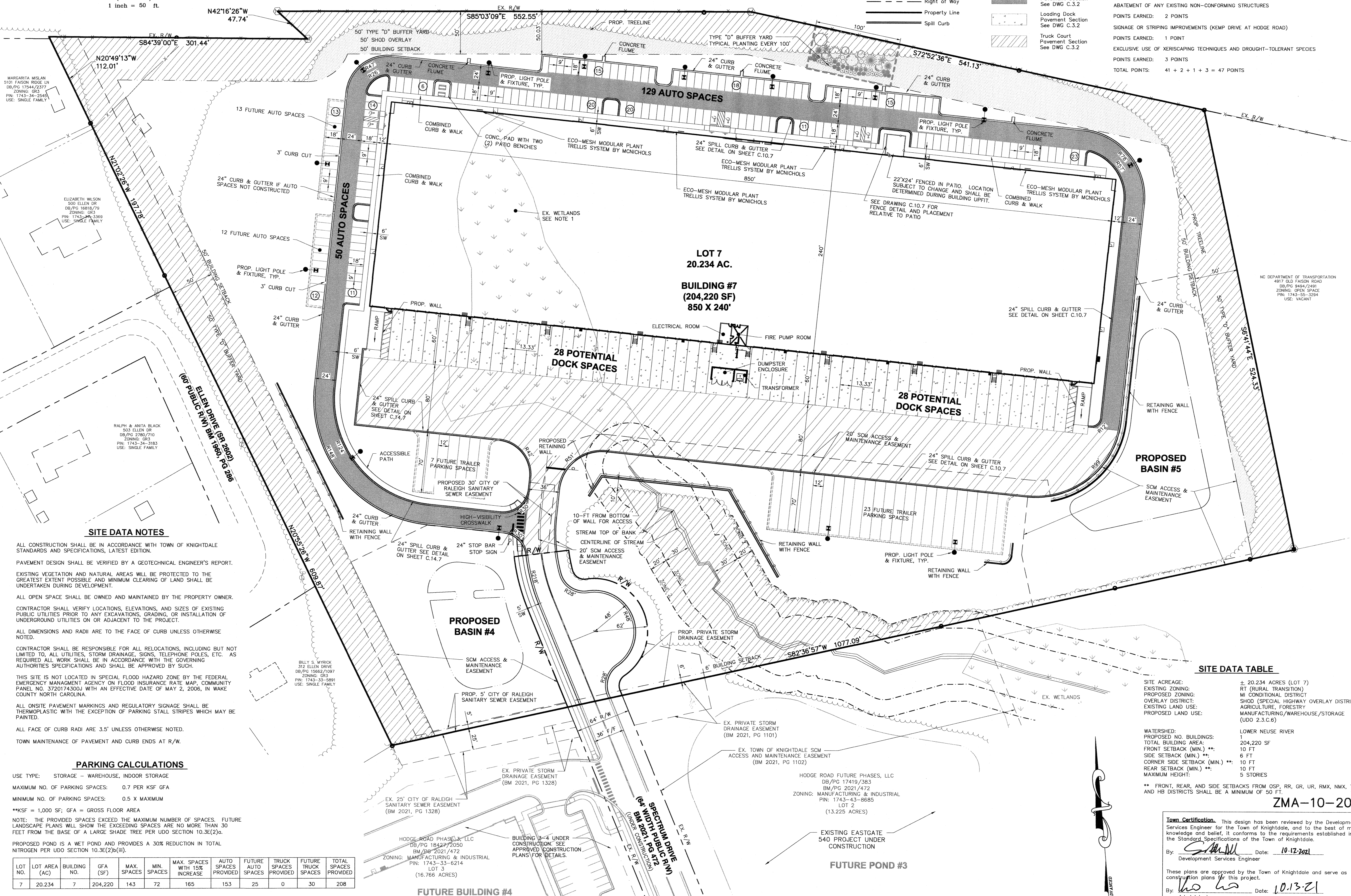
- THE APPROVED 404 USACE INDIVIDUAL PERMIT (SAW-2014-02127) HAS BEEN REVISED TO INCLUDE IMPACTS TO BUFFERS, STREAMS, AND WETLANDS FOR THIS PROJECT.
- PROJECT SHALL BE COMPLIANT WITH SECTIONS 8.5-8.11 OF THE UDO.
- OUTDOOR STORAGE IS NOT PERMITTED.
- A TIA OR UPDATED TIA WILL BE REQUIRED.
- THE UAA WILL NEED TO BE UPDATED.
- PARKING LOT REQUIRED TO HAVE CURB AND GUTTER PER UDO 10.48.

- Iron Pipe Found
- Calculated Point
- Railroad Spike
- Ex. Fence Line
- Ex. Property Line
- Right of Way
- Property Line
- Spill Curb
- Buffer Yard D Replanted Areas in this Phase
- Existing Tree Cover Area
- Standard Duty Pavement Section See DWG C.3.2
- Heavy Duty Pavement Section See DWG C.3.2
- Loading Dock Pavement Section See DWG C.3.2
- Truck Court Pavement Section See DWG C.3.2

PROPOSED BUILDING #7 WILL BE A PART OF THE EASTGATE 540 PROJECT. NOTWITHSTANDING THE TOWN'S WATER ALLOCATION POLICY (ORDINANCE # 15-10-05-001) REQUIREMENT OF 50 POINTS, DUE TO THE UNIQUE CONTRIBUTION TO THE TOWN'S TAX BASE, THE PROJECT SHALL ONLY BE REQUIRED TO ACHIEVE 47 TOTAL POINTS TO MERIT WATER ALLOCATION. CALCULATIONS ARE SHOWN BELOW:

PROPOSED WAREHOUSE/DISTRIBUTION CENTER - 1,204,220 SF
 1,204,220 SF > 500,000 SF (REQUIRED)

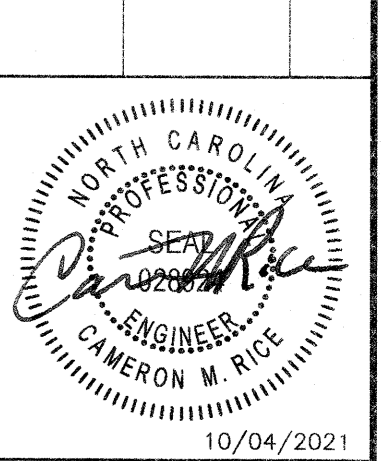
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PLAN PREPARED BY:
 TRINITY CAPITAL
 CIVIL DESIGN
 ENGINEERS

PLAN PREPARED FOR:
 EASTGATE 540
 BUILDING #7 CONSTRUCTION PLANS
 FOR
 TRINITY CAPITAL ADVISORS, LLC
 SITE PLAN

390 Spectrum Drive, Knightdale, NC 27545 - Wake County



Issue Dates:

Date	Progress Set to Contractor	Town Submittal #1	Town Submittal #2	Town Submittal #3	Town Submittal #4
06/17/2021	PROGRESS SET TO CONTRACTOR	06/18/2021	08/10/2021	09/14/2021	10/04/2021

Date: 10/04/2021
 Scale: 1" = 50'
 Drawn By: JLB
 Checked By: CMR
 Project Number: 20-0006-988
 Drawing Number: C.3.1

SITE DATA NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH TOWN OF KNIGHTDALE STANDARDS AND SPECIFICATIONS, LATEST EDITION.

PAVEMENT DESIGN SHALL BE VERIFIED BY A GEOTECHNICAL ENGINEER'S REPORT.

EXISTING VEGETATION AND NATURAL AREAS WILL BE PROTECTED TO THE GREATEST EXTENT POSSIBLE AND MINIMUM CLEARING OF LAND SHALL BE UNDERTAKEN DURING DEVELOPMENT.

ALL OPEN SPACE SHALL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER.

CONTRACTOR SHALL VERIFY LOCATIONS, ELEVATIONS, AND SIZES OF EXISTING PUBLIC UTILITIES PRIOR TO ANY EXCAVATIONS, GRADING, OR INSTALLATION OF UNDERGROUND UTILITIES ON OR ADJACENT TO THE PROJECT.

ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TELEPHONE POLES, ETC. AS REQUIRED ALL WORK SHALL BE IN ACCORDANCE WITH THE GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH.

THIS SITE IS NOT LOCATED IN SPECIAL FLOOD HAZARD ZONE BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY ON FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 3720174300J WITH AN EFFECTIVE DATE OF MAY 2, 2006, IN WAKE COUNTY NORTH CAROLINA.

ALL ONSITE PAVEMENT MARKINGS AND REGULATORY SIGNAGE SHALL BE THERMOPLASTIC WITH THE EXCEPTION OF PARKING STALL STRIPES WHICH MAY BE PAINTED.

ALL FACE OF CURB RADI ARE 3.5' UNLESS OTHERWISE NOTED.

TOWN MAINTENANCE OF PAVEMENT AND CURB ENDS AT R/W.

PARKING CALCULATIONS

USE TYPE: STORAGE - WAREHOUSE, INDOOR STORAGE

MAXIMUM NO. OF PARKING SPACES: 0.7 PER KSF GFA

MINIMUM NO. OF PARKING SPACES: 0.5 X MAXIMUM

**KSF = 1,000 SF; GFA = GROSS FLOOR AREA

NOTE: THE PROVIDED SPACES EXCEED THE MAXIMUM NUMBER OF SPACES. FUTURE LANDSCAPE PLANS WILL SHOW THE EXCEEDING SPACES ARE NO MORE THAN 30 FEET FROM THE BASE OF A LARGE SHADE TREE PER UDO SECTION 10.3E(2)(j).

PROPOSED POND IS A WET POND AND PROVIDES A 30% REDUCTION IN TOTAL NITROGEN PER UDO SECTION 10.3E(2)(ii).

LOT NO.	LOT AREA (AC)	BUILDING NO.	GFA (SF)	MAX. SPACES	MIN. SPACES	MAX. SPACES WITH 15% INCREASE	FUTURE AUTO SPACES PROVIDED	TRUCK SPACES PROVIDED	FUTURE TRUCK SPACES	TOTAL SPACES PROVIDED
7	20.234	7	204,220	143	72	165	153	25	0	208

SITE DATA TABLE

SITE ACREAGE: ± 20.234 ACRES (LOT 7)
 EXISTING ZONING: RT (RURAL TRANSITION)
 PROPOSED ZONING: MI (CONDITIONAL DISTRICT)
 OVERLAY DISTRICT: SHOD (SPECIAL HIGHWAY OVERLAY DISTRICT)
 EXISTING LAND USE: AGRICULTURE, FORESTRY
 PROPOSED LAND USE: MANUFACTURING/WAREHOUSE/STORAGE (UDO 2.3.C.6)

WATERSHED: LOWER NEUSE RIVER
 PROPOSED NO. BUILDINGS: 1
 TOTAL BUILDING AREA: 204,220 SF
 FRONT SETBACK (MIN.) **: 10 FT
 SIDE SETBACK (MIN.) **: 6 FT
 CORNER SIDE SETBACK (MIN.) **: 10 FT
 REAR SETBACK (MIN.) **: 10 FT
 MAXIMUM HEIGHT: 5 STORIES

** FRONT, REAR, AND SIDE SETBACKS FROM OSP, RR, GR, UR, RMX, NMX, TC, AND HB DISTRICTS SHALL BE A MINIMUM OF 50 FT.

ZMA-10-20

Town Certification. This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

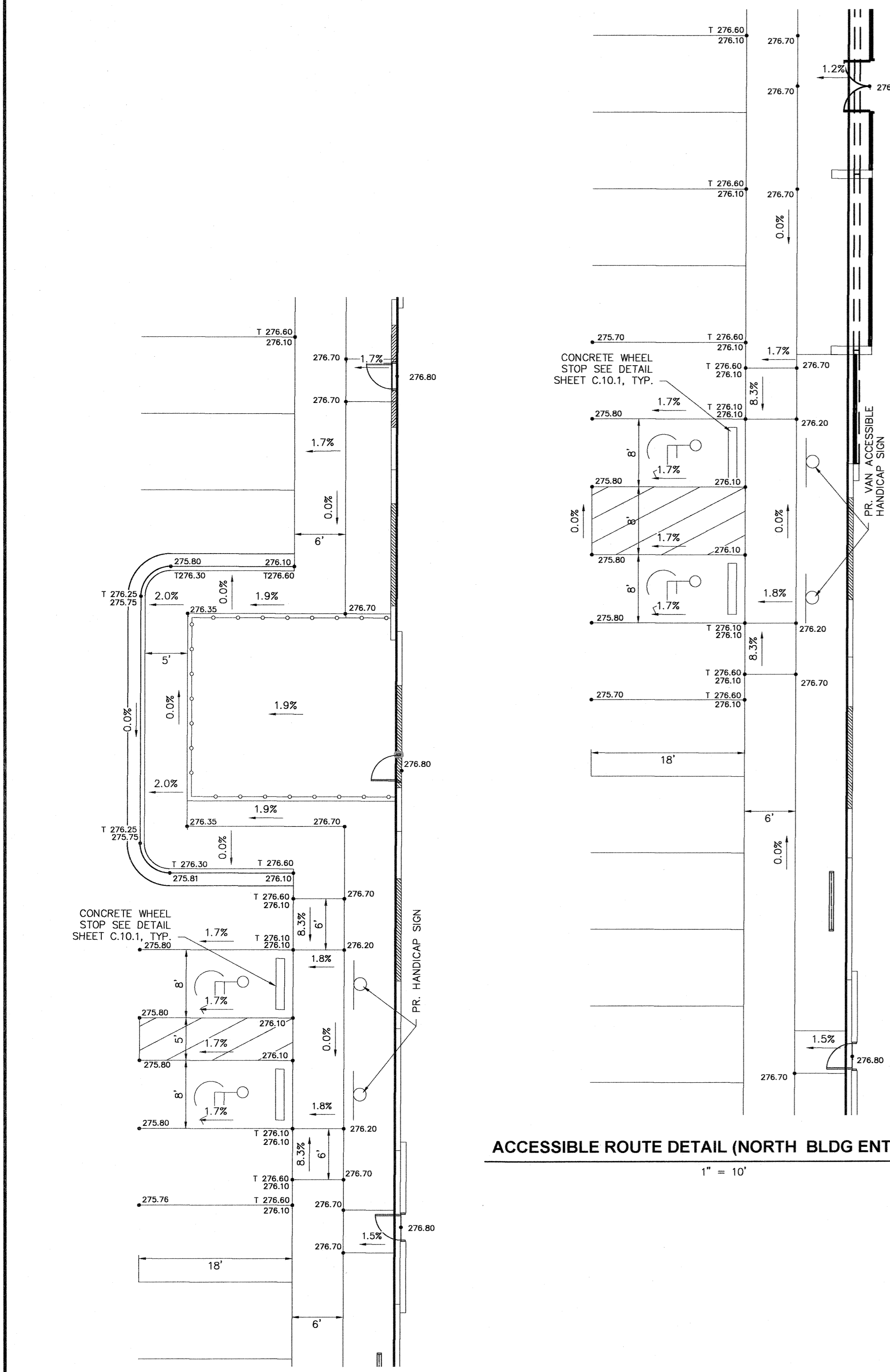
By: *[Signature]* Date: 10-12-2021
 Development Services Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: *[Signature]* Date: 10-13-21
 Administrator

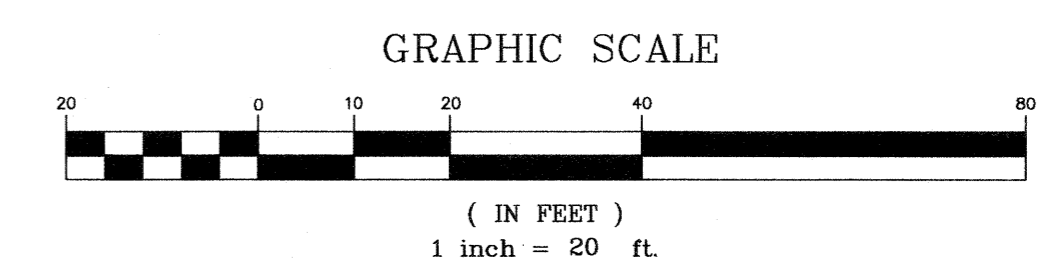
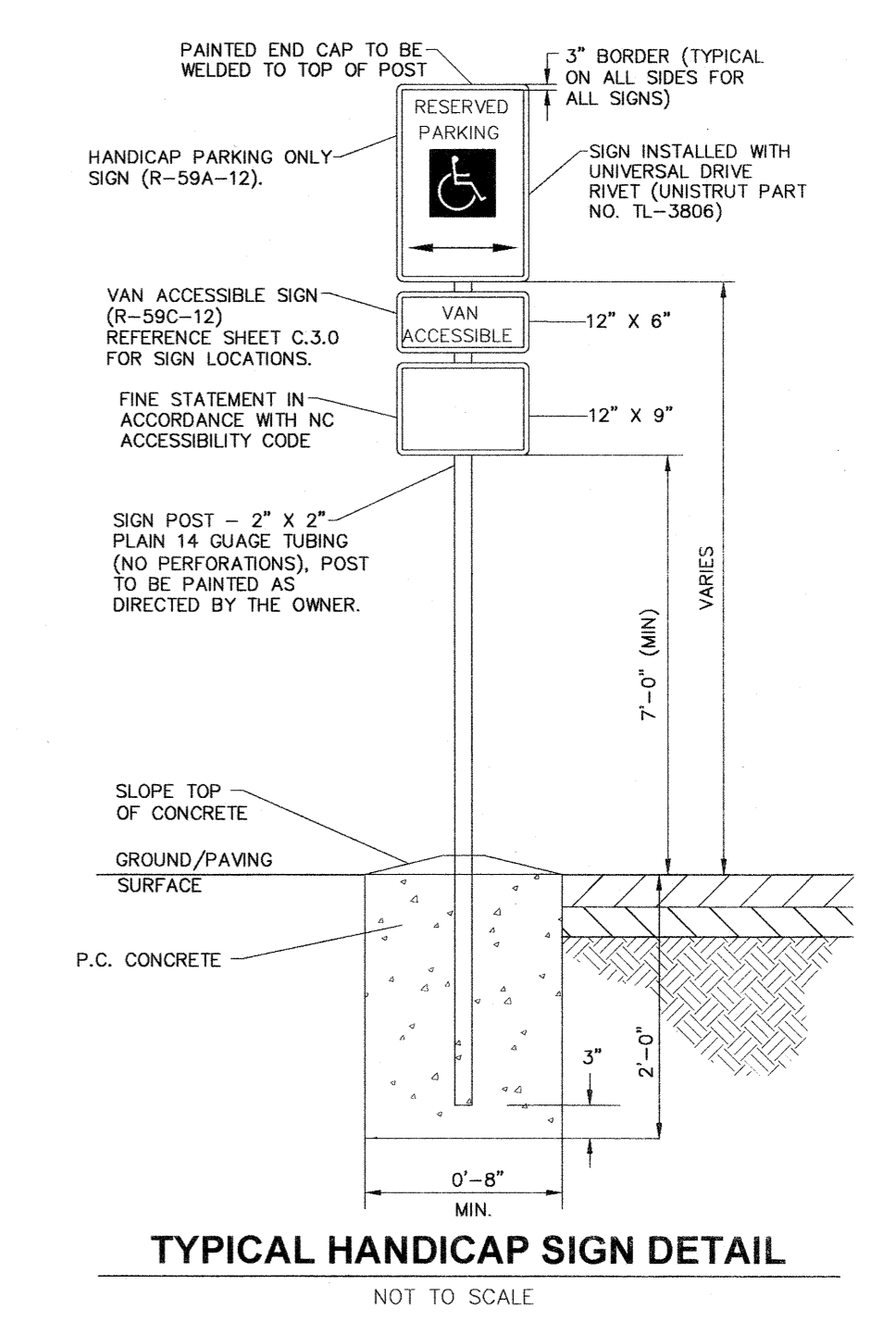
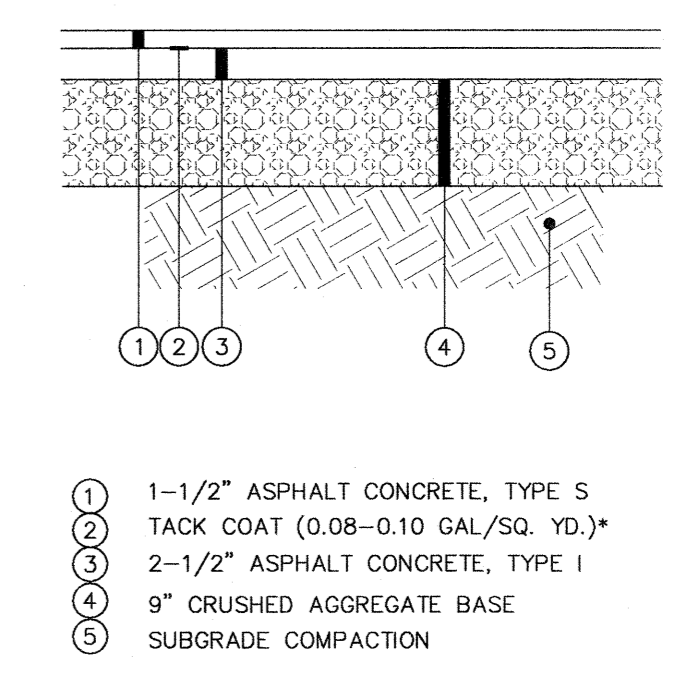
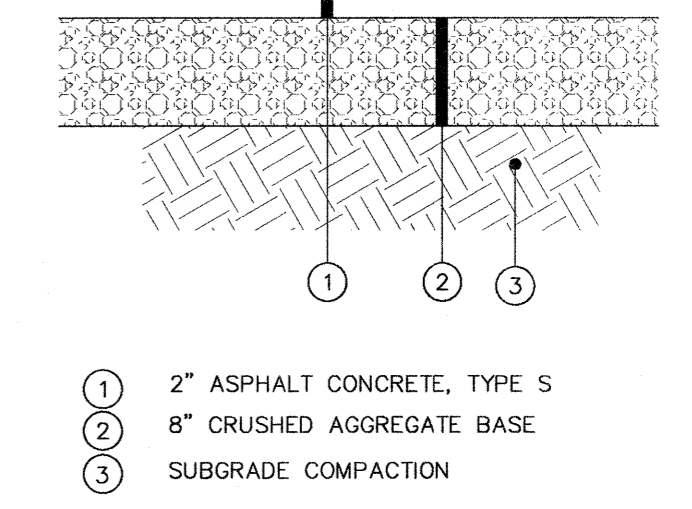
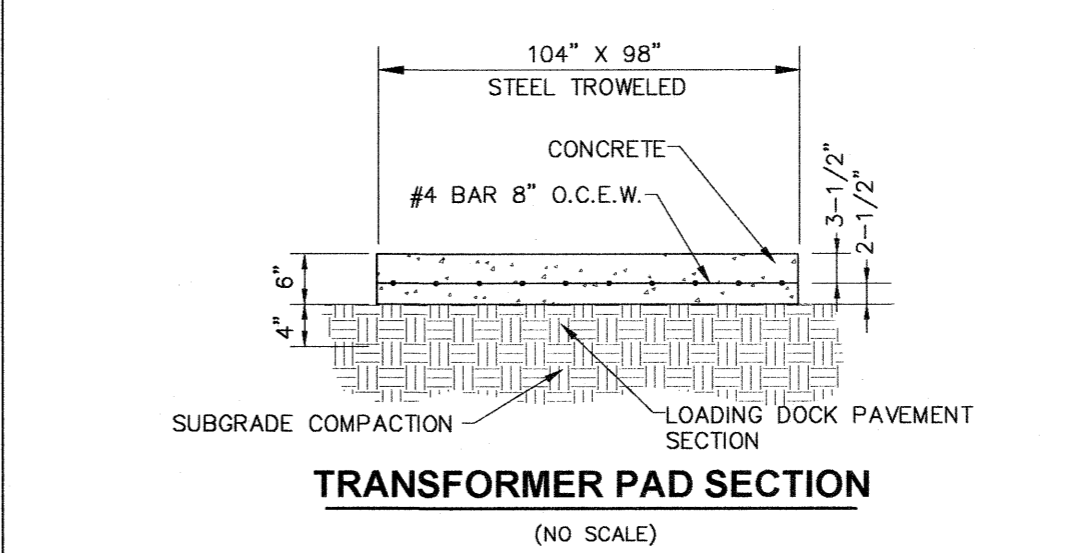
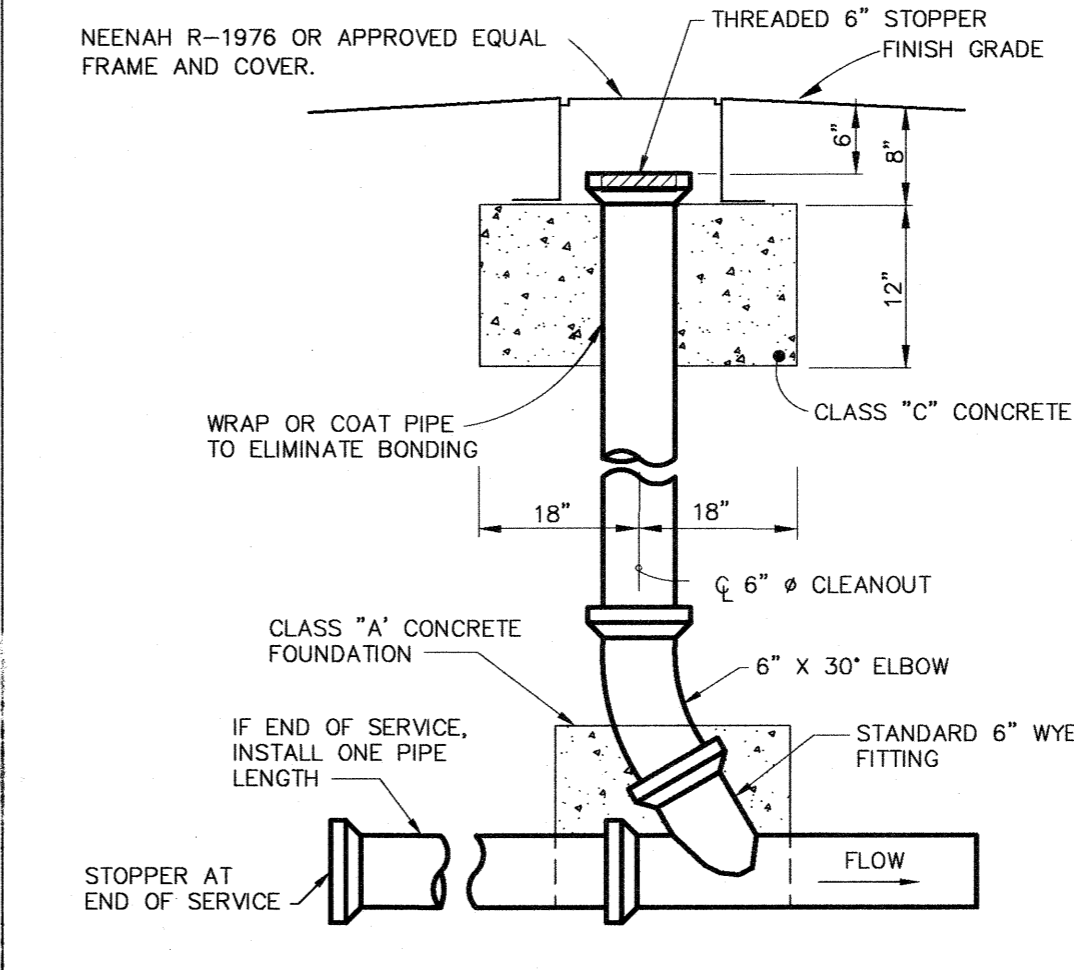
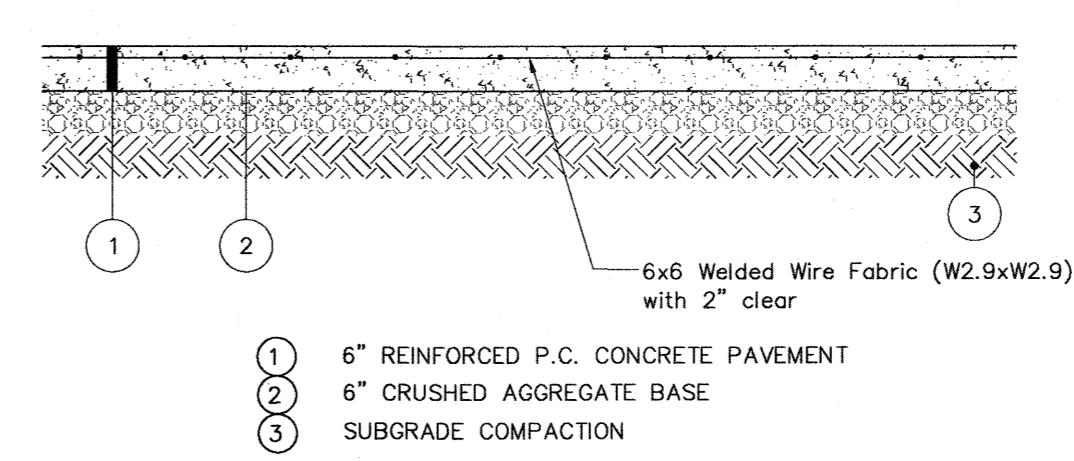
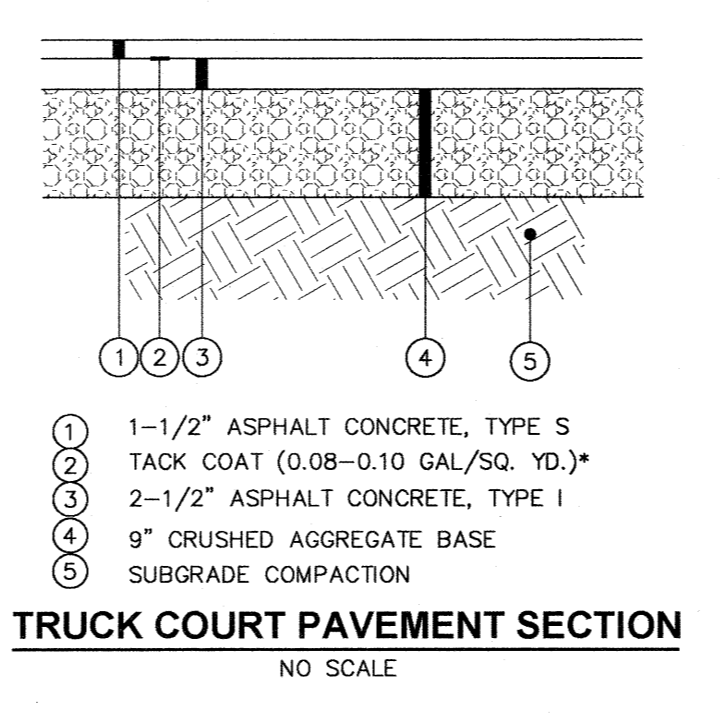
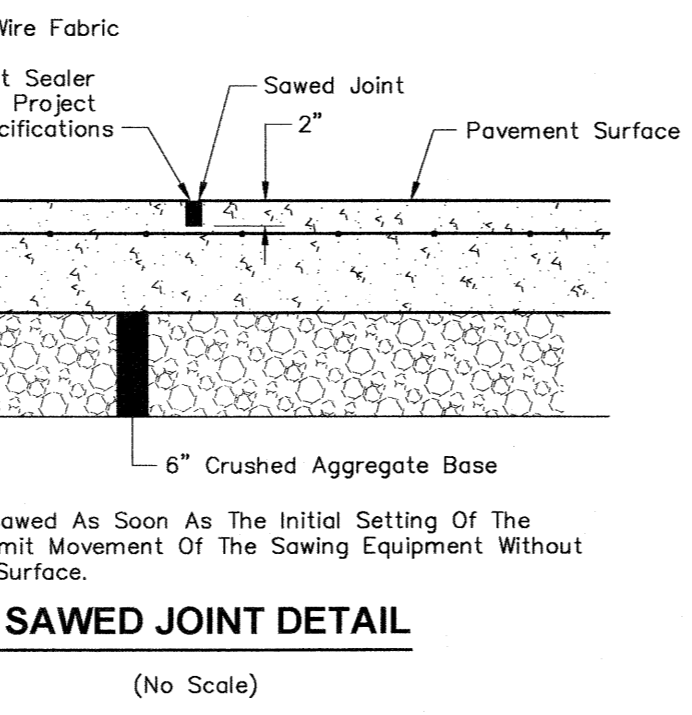
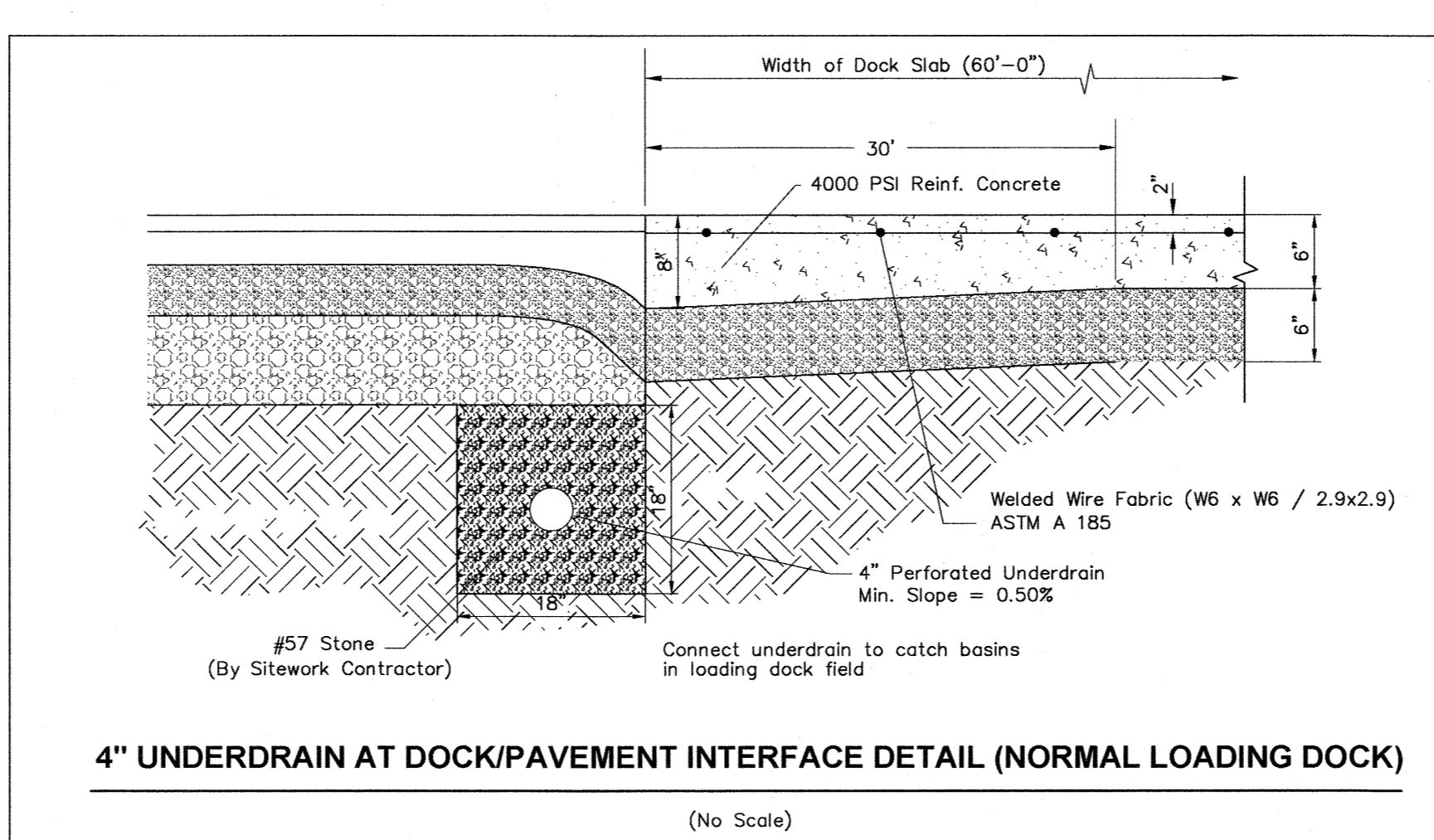
C:\19-0001-988\CV\DWG\Production Drawings\ASITE CONSTRUCTION\BUILDING #7 CONSTRUCTION PLANS\0001-988\p003.1.dwg SITE PLAN Oct 04, 2021 - 1:49:12pm cric

C:\19-0001-988NC\DWG\Production Drawings\SITE CONSTRUCTION\BUILDING #7 CONSTRUCTION PLANS\001-988-003.2.dwg SITE DETAILS AND TYPICAL SECTIONS Oct 04, 2021 - 1:50:22pm crice



ACCESSIBLE ROUTE DETAIL (NORTH BLDG ENTRANCE AND PATIO)
1" = 10'

ACCESSIBLE ROUTE DETAIL (NORTH WEST BLDG COR)
1" = 10'



ZMA-10-20

Town Certification. This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: *[Signature]* Date: 10-12-2021
Development Services Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: *[Signature]* Date: 10-13-21
Administrator

PLAN PREPARED BY: **ADVANCED CIVIL DESIGN ENGINEERS**
51 Kilmorye Drive, Suite 102
Cary, North Carolina 27511
ph 919.466.6990
fax 919.336.0122
Firm License # C-2799

PLAN PREPARED FOR: **TRINITY CAPITAL**

390 Spectrum Drive, Knightdale, NC 27545 - Wake County

EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
FOR
TRINITY CAPITAL ADVISORS, LLC
SITE DETAILS AND TYPICAL SECTIONS

Issue Dates:
06/11/2021 - PROGRESS SET TO CONTRACTOR
06/18/2021 - TOWN SUBMITTAL #1
08/10/2021 - TOWN SUBMITTAL #2
09/14/2021 - TOWN SUBMITTAL #3
10/04/2021 - TOWN SUBMITTAL #4

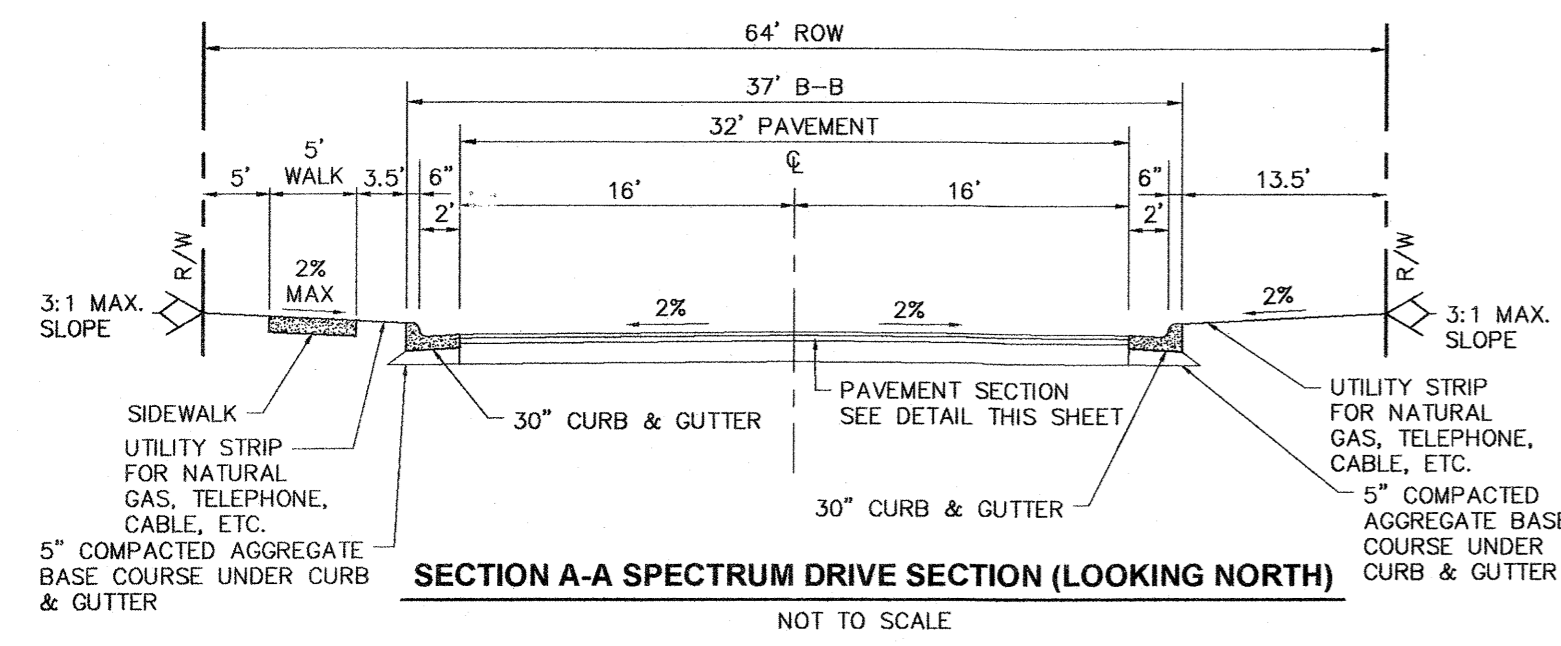
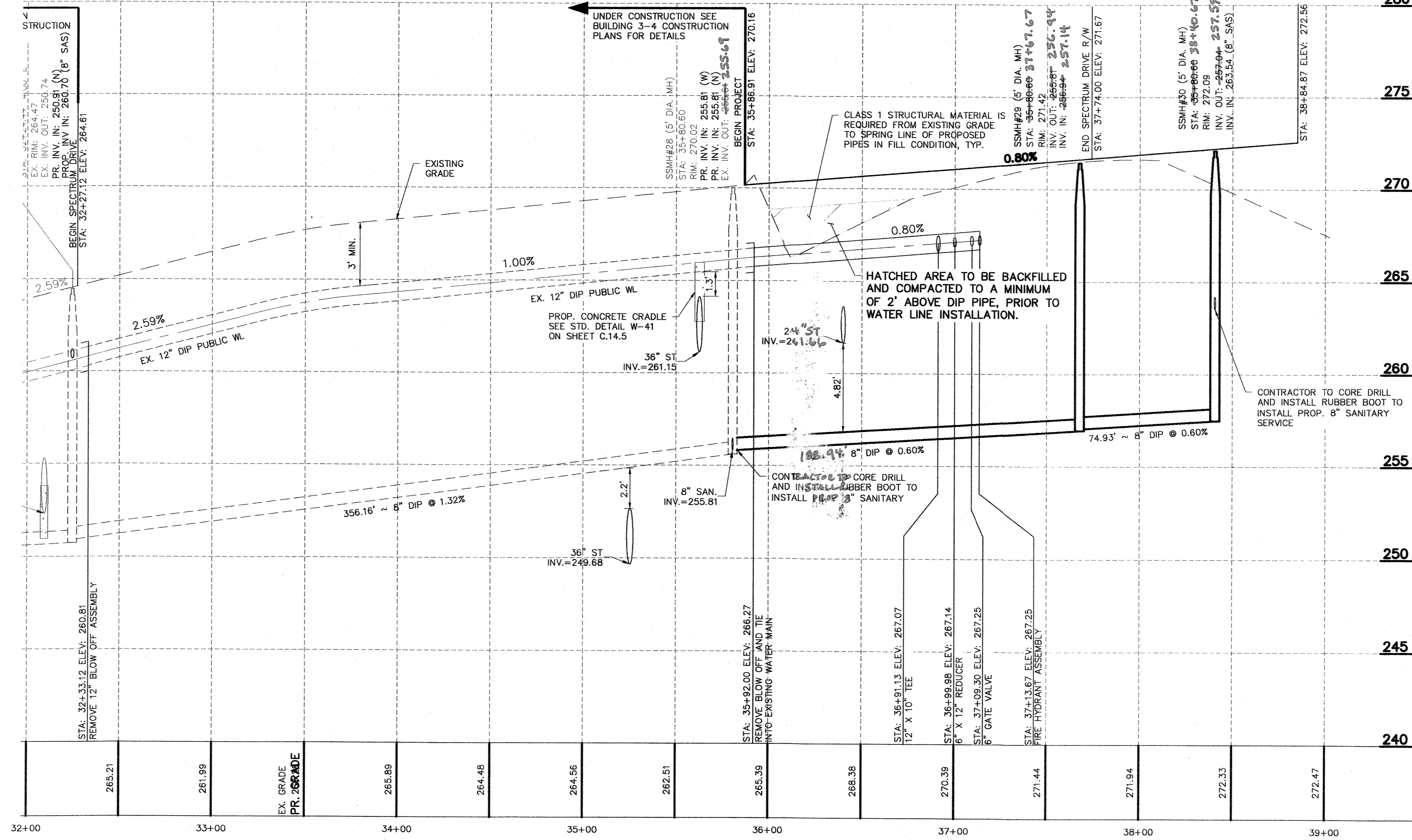
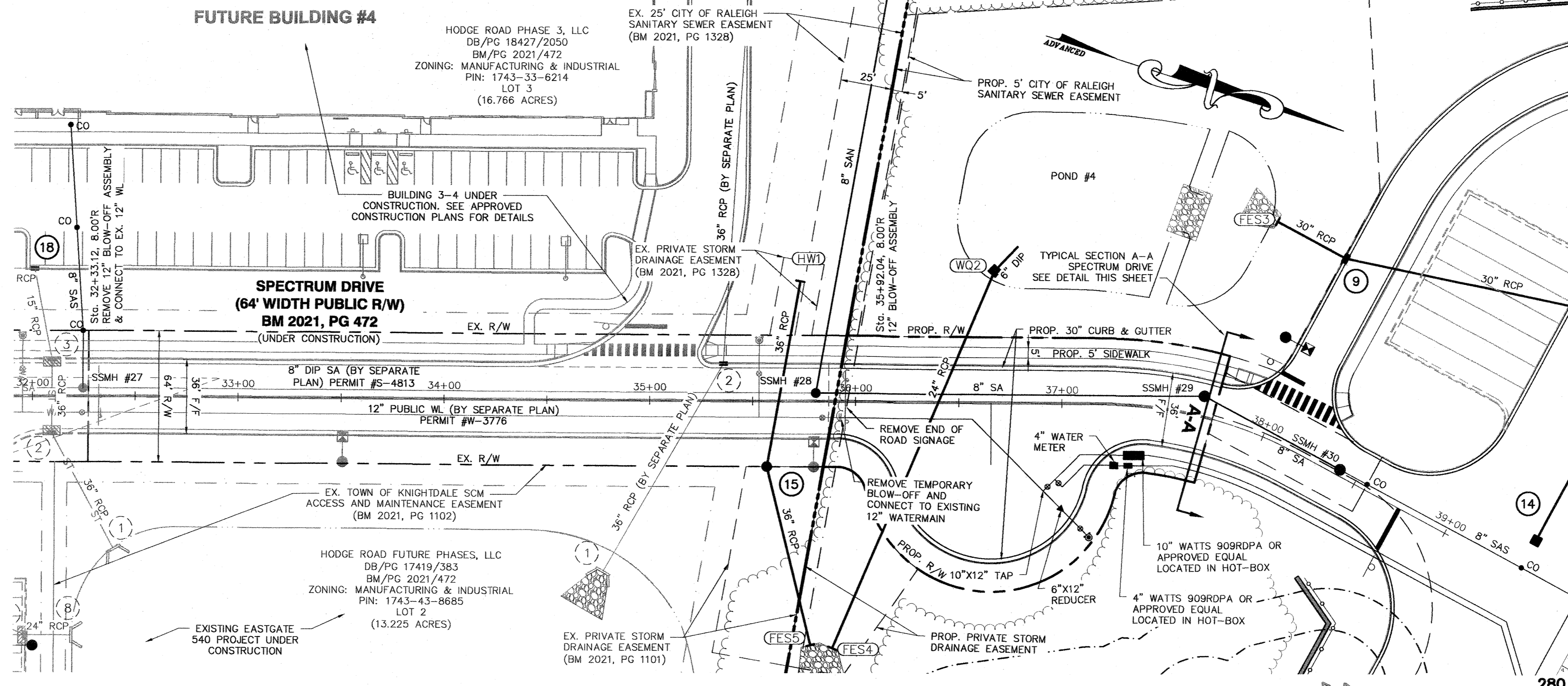
10/04/2021

Date: 10/04/2021
Scale: AS NOTED

Drawn By: JLB
Checked By: CMR

Project Number:
20-0006-988

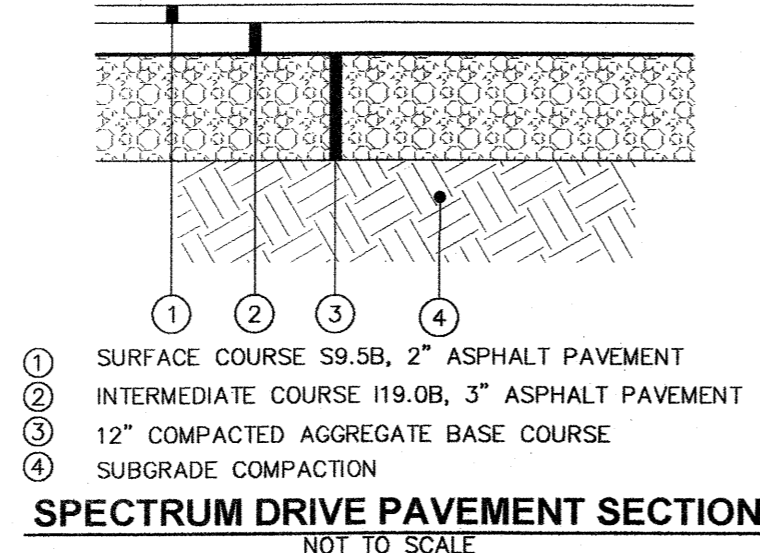
Drawing Number:
C.3.2



SEE CONSTRUCTION PLANS TITLED "EASTGATE 540 BUILDING 6 CONSTRUCTION PLANS" FOR PREVIOUSLY APPROVED PHASE OF SPECTRUM DRIVE (STA 28+65 TO 32+27). THE BUILDING 6 IMPROVEMENTS ARE SHOWN HEREIN FOR REFERENCE ONLY AND ARE NOT BEING APPROVED WITH THE BUILDINGS 3 & 4 CONSTRUCTION PLANS. WATER & SEWER PERMIT #'S FROM REFERENCED PLANS ARE W-3736 & S-4743.

LEGEND

● Iron Pipe Found	— X — Ex. Fence Line	— — — Right of Way
○ Calculated Point	— WA — Ex. Water Line	— — — Property Line
▲ Railroad Spike	— GAS — Ex. Gas Line	— — — Ex. Pavement Removal
⊕ Ex. Electric Power Pole	— OHE — Ex. Overhead Electric Line	— 8" WA — Prop. Water Line
⊕ Fire Hydrant	— — — Ex. Property Line	— 12" STM — Prop. Storm Sewer
⊕ Prop. Power Pole	— — — Ex. Right of Way	— 8" SAN — Prop. Sanitary Sewer



CITY OF RALEIGH — PLANS AUTHORIZED FOR CONSTRUCTION
Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.
City of Raleigh Development Approval
Lorena Sample@raleighnc.gov
Raleigh Water Review Officer

SITE PERMITTING APPROVAL
Water and Sewer Permits (if applicable)
The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.
City of Raleigh Public Utilities Department Permit # **S-4871**
The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.
City of Raleigh Public Utilities Department Permit # **W-3817**

Professional Engineer
Cameron M. Rice
Date: 10-13-21
Date: 10-13-21

PLAN PREPARED BY: **ADVANCED CIVIL DESIGN**
51 Kilmorynne Drive, Suite 102
Cary, North Carolina, 27511
ph 919.461.0290
for 919.336.9127
Firm License # C-2798
ENGINEERS & SURVEYORS

PLAN PREPARED FOR: **TRINITY CAPITAL**

390 Spectrum Drive, Knightdale, NC 27545 — Wake County
EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
FOR
TRINITY CAPITAL ADVISORS, LLC
SPECTRUM DRIVE PLAN & PROFILE

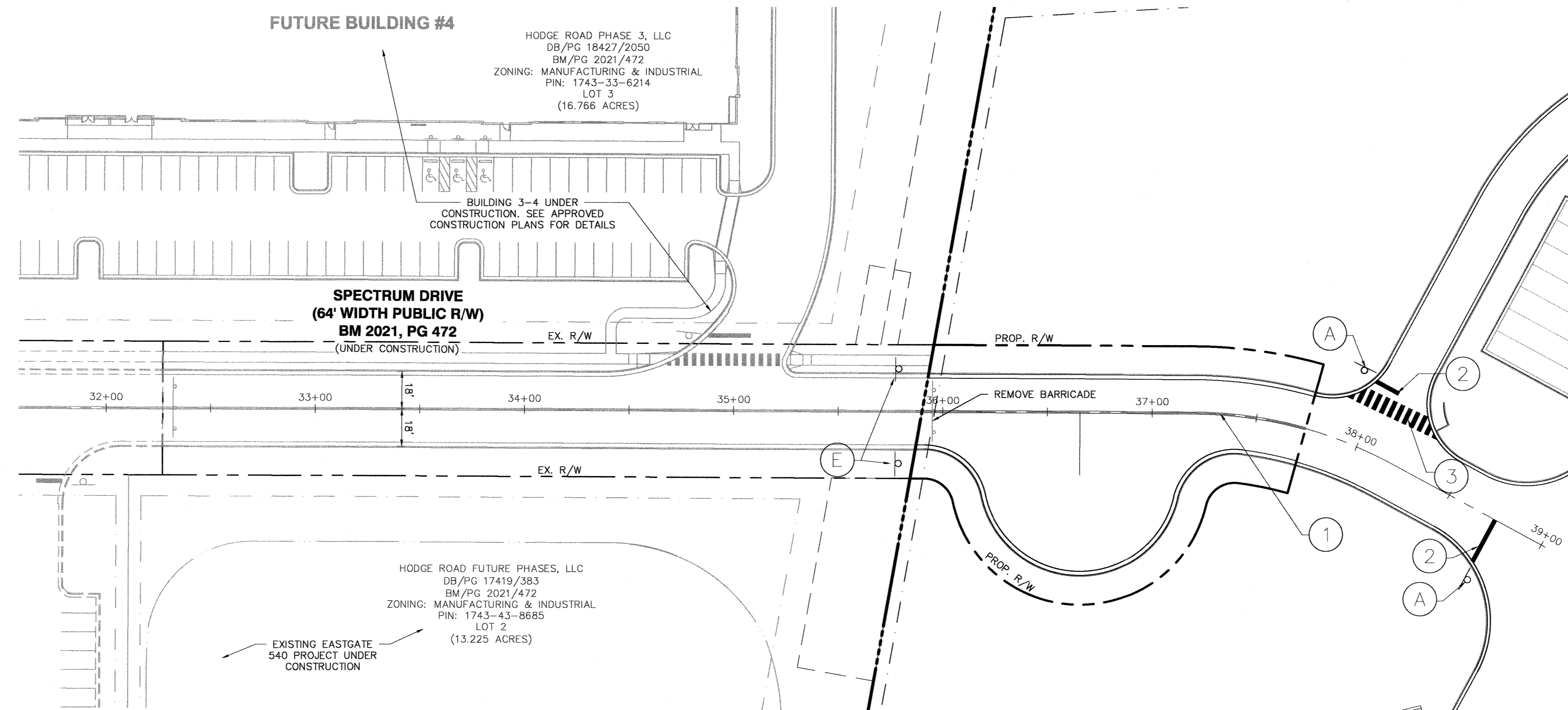
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09/14/2021 — TOWN SUBMITTAL #3
10/04/2021 — TOWN SUBMITTAL #4

Date: 10/04/2021
Scale: H:1"=40', V:1"=4'

Drawn By: JLB
Checked By: CMR

Project Number:
20-0006-988

Drawing Number:
C.3.3

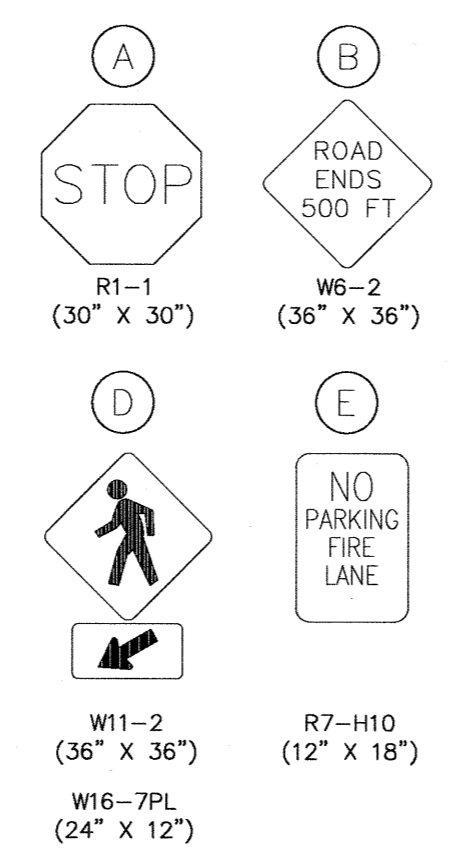


SIGNAGE & STRIPING LEGEND

- ① 4" DOUBLE YELLOW LINE
- ② 24" STOP BAR LINE
- ③ 24" WHITE CROSSWALK LINE

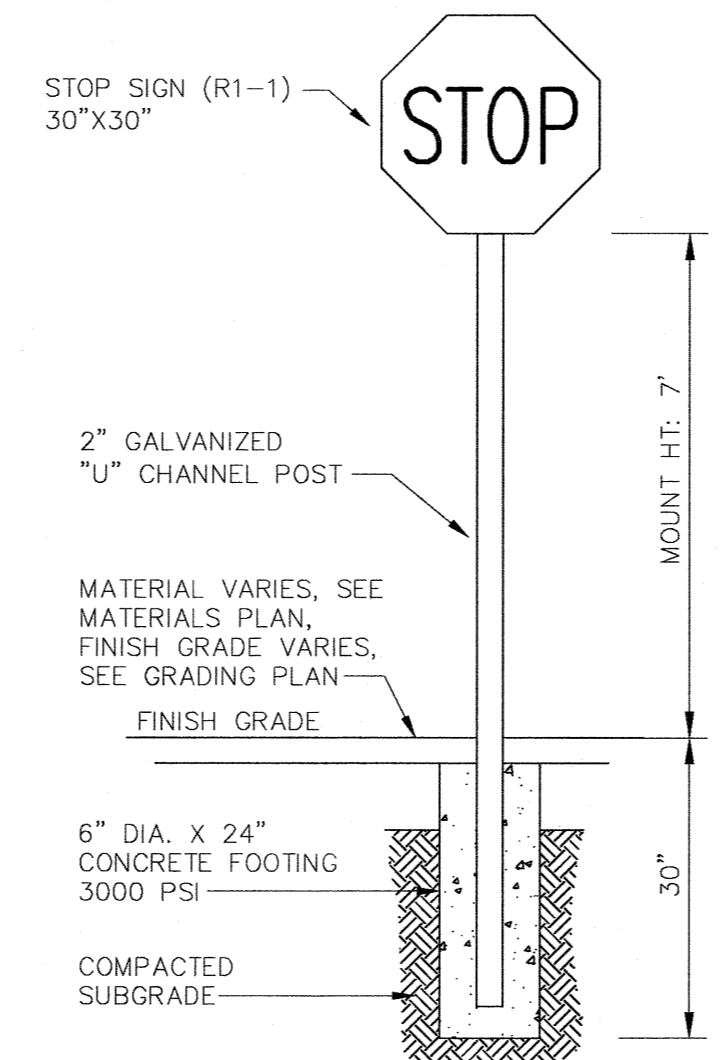
PROJECT NOTES

1. SIGNS SHOULD BE LABELED PER PART 2 OF THE 2009 MUTCD MANUAL. SIGN POSTS AND MOUNTING HEIGHTS SHALL BE PER PART 2 OF THE 2009 MUTCD MANUAL.
2. STRIPING SHALL BE INSTALLED PER PART 3 OF THE 2009 MUTCD MANUAL.
3. ALL PAVEMENT MARKINGS WITHIN THE FUTURE PUBLIC RIGHT-OF-WAY SHALL BE THERMOPLASTIC.
4. ROAD ENDS 500 FEET SIGN IS A TEMPORARY SIGN AND SHOULD BE RELOCATED AFTER EACH ROAD EXTENSION PHASE TO THE LOCATION AS INDICATED ON THE PLAN.

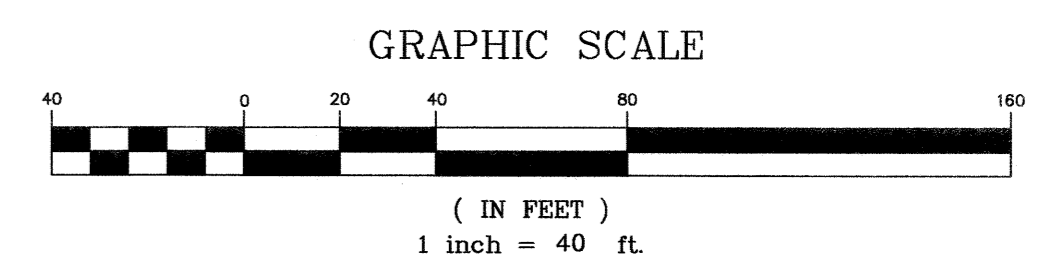


NOTES:

1. SIGN SHOULD BE LABELED PER PART 2 OF THE 2009 MUTCD MANUAL. SIGN POSTS AND MOUNTING HEIGHTS SHALL BE PER PART 2 OF THE 2009 MUTCD MANUAL.
2. ALL SIGNS SHALL HAVE REFLECTIVE SHEETING IN ACCORDANCE WITH ASTM D4956-09 WHICH MEETS MUTCD'S NEW SIGN RETROREFLECTIVITY REQUIREMENTS.



STOP SIGN DETAIL
NOT TO SCALE



ZMA-10-20

Town Certification. This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: *[Signature]* Date: 10-12-2021
Development Services Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: *[Signature]* Date: 10.13.21
Administrator

PLAN PREPARED BY: **ADVANCED CIVIL DESIGN ENGINEERS**
 PLAN PREPARED FOR: **TRINITY CAPITAL**
 390 Spectrum Drive, Knightdale, NC 27545 - Wake County
EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
 FOR
TRINITY CAPITAL ADVISORS, LLC
SPECTRUM DRIVE SIGNAGE AND MARKING PLAN
 Issue Dates:
 06/11/2021 - PROGRESS SET TO CONTRACTOR
 06/18/2021 - TOWN SUBMITTAL #1
 08/10/2021 - TOWN SUBMITTAL #2
 09/14/2021 - TOWN SUBMITTAL #3
 10/04/2021 - TOWN SUBMITTAL #4
 Date: 10/04/2021
 Scale: 1"=40'
 Drawn By: JLB
 Checked By: CMR
 Project Number: 20-0006-988
 Drawing Number: **C.3.4**

SITE PERMITTING APPROVAL

I-87/US 64E EXPRESSWAY (R/W VARIES)

WATER & SEWER

LEGEND

TOWN OF KNIGHTDALE WATER ALLOCATION POLICY

Water and Sewer Permits (if applicable)

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

City of Raleigh Public Utilities Department Permit # S-4871

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

City of Raleigh Public Utilities Department Permit # W-3817

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

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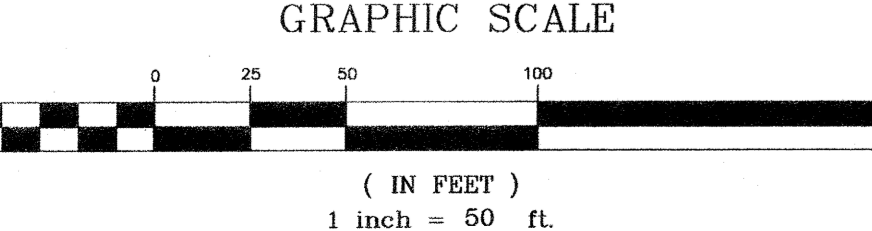
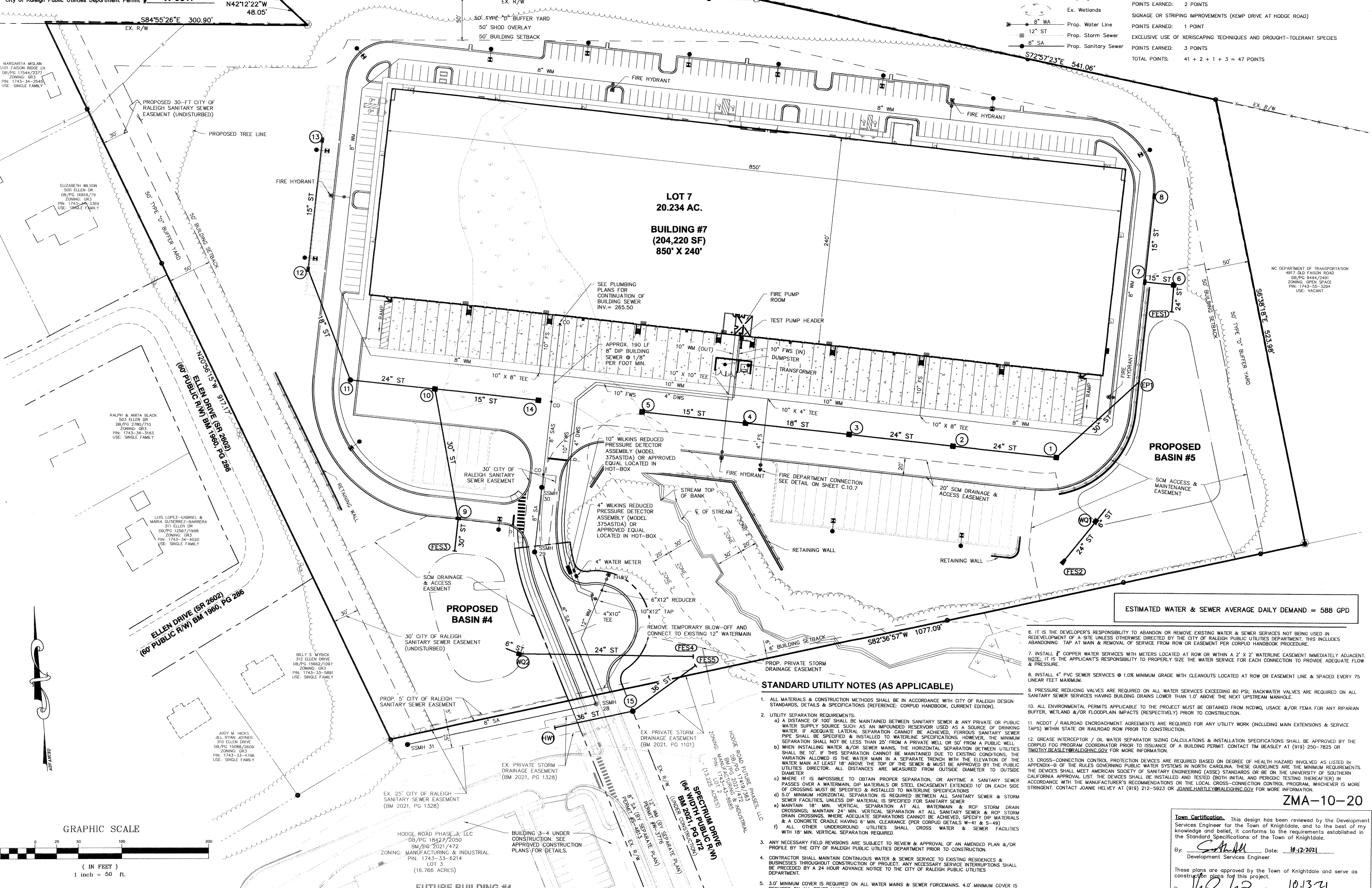
City of Raleigh Development Approval

City of Raleigh Water Review Officer: Lorea Samper-Ralston, S85°00'29"E 552.70'

- 1. CONTRACTOR SHALL VERIFY LOCATIONS, ELEVATIONS, AND SIZES OF EXISTING PUBLIC UTILITIES PRIOR TO ANY EXCAVATIONS, GRADING, OR INSTALLATION OF UNDERGROUND UTILITIES ON OR ADJACENT TO THE PROJECT.
2. BUILDING WILL BE CONNECTED TO THE CITY OF RALEIGH WATER AND SANITARY SEWER SYSTEMS.
3. ALL SANITARY SEWER AND WATER LOCATED OUTSIDE THE PROPOSED STREET RIGHT-OF-WAY SHALL BE PROVIDED WITH STANDARD EASEMENT WIDTHS AS PER CITY OF RALEIGH REQUIREMENTS AND SHALL BE DEDICATED TO THE CITY OF RALEIGH ON THE FINAL PLAT.
4. NO SERVICES SHALL BE BENT OR INSTALLED IN SUCH A WAY THAT DOES NOT COMPLY WITH CITY STANDARDS.

- Iron Pipe Found
Calculated Point
Railroad Spike
Electric Power Pole
Fire Hydrant
Ex. Fence Line
Ex. Water Line
Ex. Gas Line
Ex. Overhead Electric Line
Ex. Property Line
Right of Way
Property Line
Ex. Wetlands
Prop. Water Line
Prop. Storm Sewer
Prop. Sanitary Sewer

PROPOSED BUILDING #7 WILL BE A PART OF THE EASTGATE 540 PROJECT. NOTWITHSTANDING THE TOWN'S WATER ALLOCATION POLICY (ORDINANCE # 15-10-05-001), REQUIREMENT OF 50 POINTS, DUE TO THE UNIQUE CONTRIBUTION TO THE TOWN'S TAX BASE, THE PROJECT SHALL ONLY BE REQUIRED TO ACHIEVE 47 TOTAL POINTS TO MERIT WATER ALLOCATION. CALCULATIONS ARE SHOWN BELOW:
PROPOSED WAREHOUSE/DISTRIBUTION CENTER - 1,204,000 SF
POINTS EARNED: 41 POINTS
ABATEMENT OF ANY EXISTING NON-CONFORMING STRUCTURES
POINTS EARNED: 2 POINTS
SIGNAGE OR STRIPING IMPROVEMENTS (KEMP DRIVE AT HODGE ROAD)
POINTS EARNED: 1 POINT
EXCLUSIVE USE OF XERISCAPING TECHNIQUES AND DROUGHT-TOLERANT SPECIES
POINTS EARNED: 3 POINTS
TOTAL POINTS: 41 + 2 + 1 + 3 = 47 POINTS



STANDARD UTILITY NOTES (AS APPLICABLE)

- 1. ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION).
2. UTILITY SEPARATION REQUIREMENTS:
a) A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 25' FROM A PRIVATE WELL OR 50' FROM A PUBLIC WELL.
b) WHEN INSTALLING WATER &/OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
c) WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENCASEMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS.
d) 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER.
e) MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & RCP STORM DRAIN CROSSINGS. MAINTAIN 24" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORM & A CONCRETE CRADLE HAVING 6" MIN. CLEARANCE (PER CORPUD DETAILS W-41 & S-46)
f) ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
3. ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR PROFILE BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT FOR CONSTRUCTION.
4. CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
5. 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCEMAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.

- 6. IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE.
7. INSTALL 2" COPPER WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2' X 2' WATERLINE EASEMENT IMMEDIATELY ADJACENT. NOTE: IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW & PRESSURE.
8. INSTALL 4" PVC SEWER SERVICES @ 1.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75 LINEAR FEET MAXIMUM.
9. PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI. BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM MANHOLE.
10. ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDWQ, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
11. NCDOT / RAILROAD ENCRoACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION.
12. GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS & INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE CORPUD FOG PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT. CONTACT TIM BEASLEY AT (919) 250-7825 OR TIMOTHY.BEASLEY@RALEIGHNC.GOV FOR MORE INFORMATION.
13. CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX-B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA. THESE GUIDELINES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS OR BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST. THE DEVICES SHALL BE INSTALLED AND TESTED (BOTH INITIAL AND PERIODIC TESTING THEREAFTER) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM, WHICHEVER IS MORE STRINGENT. CONTACT JOANIE HELVEY AT (919) 212-5923 OR JOANIE.HARTLEY@RALEIGHNC.GOV FOR MORE INFORMATION.

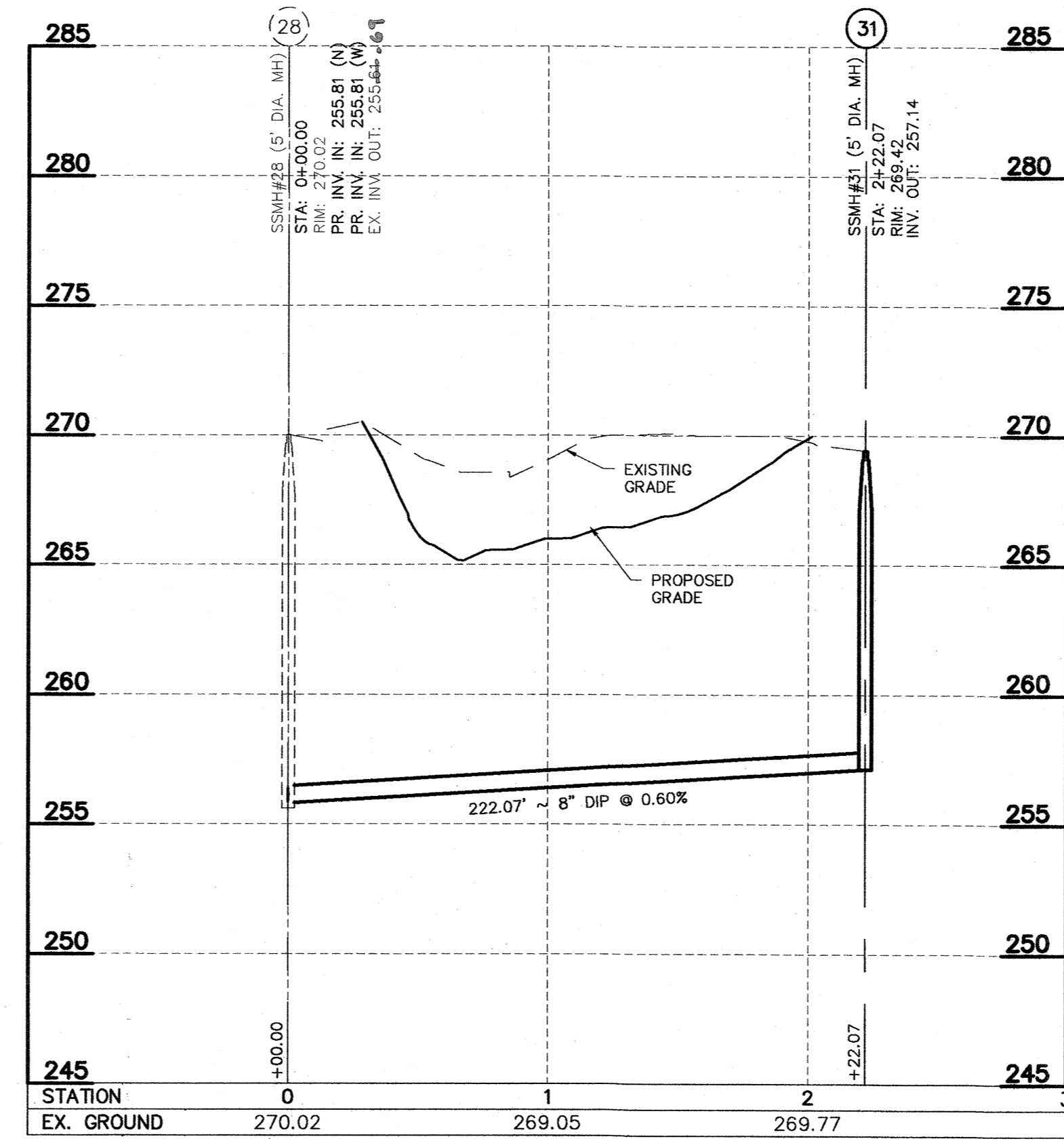
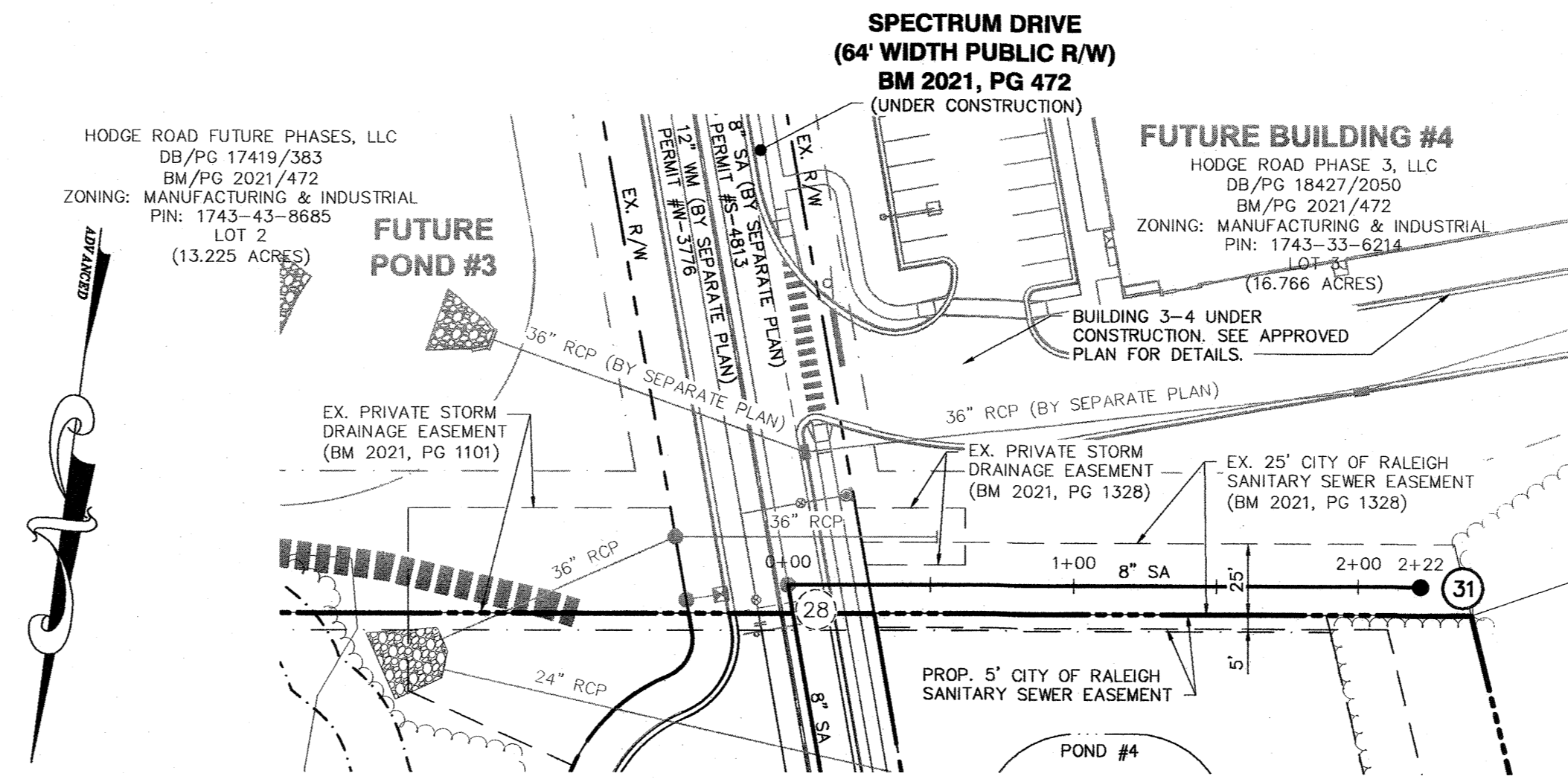
ESTIMATED WATER & SEWER AVERAGE DAILY DEMAND = 588 GPD

ZMA-10-20

Town Certification. This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.
By: [Signature] Date: 10-12-2021
Development Services Engineer
These plans are approved by the Town of Knightdale and serve as construction plans for this project.
By: [Signature] Date: 10-13-21
Administrator

Vertical sidebar containing project information: EASTGATE 540, BUILDING #7 CONSTRUCTION PLANS FOR TRINITY CAPITAL ADVISORS, LLC, UTILITY PLAN. Includes logos for Trinity Capital and Advanced Civil Design Engineers, and a table of issue dates and submittals.

C:\18-0001-888NC\DWG\Production Drawings\Site Construction\BUILDING #7 CONSTRUCTION PLANS\001-888nc004.dwg SPECTRUM DRIVE PLAN & PROFILE Oct 04, 2021 - 2:58:36pm etce



LEGEND

● Iron Pipe Found	—X— Ex. Fence Line	— — — — — Right of Way
● Calculated Point	—WA— Ex. Water Line	— — — — — Property Line
▲ Railroad Spike	—GAS— Ex. Gas Line	— — — — — Ex. Pavement Removal
⊕ Ex. Electric Power Pole	—OHE— Ex. Overhead Electric Line	—●— 8" WA Prop. Water Line
⊕ Fire Hydrant	— — — — — Ex. Property Line	—■— 12" STM Prop. Storm Sewer
⊕ Prop. Power Pole	— — — — — Ex. Right of Way	—●— 8" SAN Prop. Sanitary Sewer

WATER & SEWER

- CONTRACTOR SHALL VERIFY LOCATIONS, ELEVATIONS, AND SIZES OF EXISTING PUBLIC UTILITIES PRIOR TO ANY EXCAVATIONS, GRADING, OR INSTALLATION OF UNDERGROUND UTILITIES ON OR ADJACENT TO THE PROJECT.
- BUILDING WILL BE CONNECTED TO THE CITY OF RALEIGH WATER AND SANITARY SEWER SYSTEMS.
- ALL SANITARY SEWER AND WATER LOCATED OUTSIDE THE PROPOSED STREET RIGHT-OF-WAY SHALL PROVIDED WITH STANDARD EASEMENT WIDTHS AS PER CITY OF RALEIGH REQUIREMENTS AND SHALL DEDICATED TO THE CITY OF RALEIGH ON THE FINAL PLAN.
- NO SERVICES SHALL BE BENT OR INSTALLED IN SUCH A WAY THAT DOES NOT COMPLY WITH CITY STANDARDS.

ESTIMATED WATER & SEWER AVERAGE DAILY DEMAND = 588 GPD

CITY OF RALEIGH — PLANS AUTHORIZED FOR CONSTRUCTION

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

City of Raleigh Development Approval *[Signature]*
Raleigh Water Review Officer

SITE PERMITTING APPROVAL

Water and Sewer Permits (if applicable)

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

City of Raleigh Public Utilities Department Permit # **S-4871**

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

City of Raleigh Public Utilities Department Permit # **W-3817**

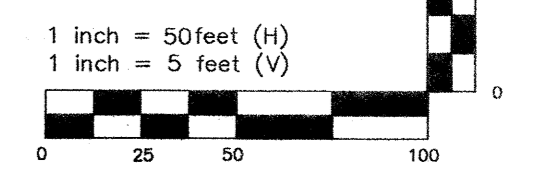
ZMA-10-20

Town Certification. This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: *[Signature]* Date: **10-12-2021**
Development Services Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: *[Signature]* Date: **10.13.21**
Administrator



PLAN PREPARED BY: **ADVANCED CIVIL DESIGN ENGINEERS SURVEYORS**
51 Wilmore Drive, Suite 102
Cory, North Carolina 27511
ph 919.481.0290
fax 919.336.5127
Firm License # C-2798

PLAN PREPARED FOR: **TRINITY CAPITAL**

390 Spectrum Drive, Knightdale, NC 27545 — Wake County
EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
FOR
TRINITY CAPITAL ADVISORS, LLC
SANITARY PLAN & PROFILE

Issue Dates:
06/11/2021 — PROGRESS SET TO CONTRACTOR
06/18/2021 — TOWN SUBMITTAL #1
06/10/2021 — TOWN SUBMITTAL #2
09/14/2021 — TOWN SUBMITTAL #3
10/04/2021 — TOWN SUBMITTAL #4

Date: 10/04/2021
Scale: H: 1"=50', V: 1"=5'

Drawn By: JLB
Checked By: CMR

Project Number:
20-0006-988

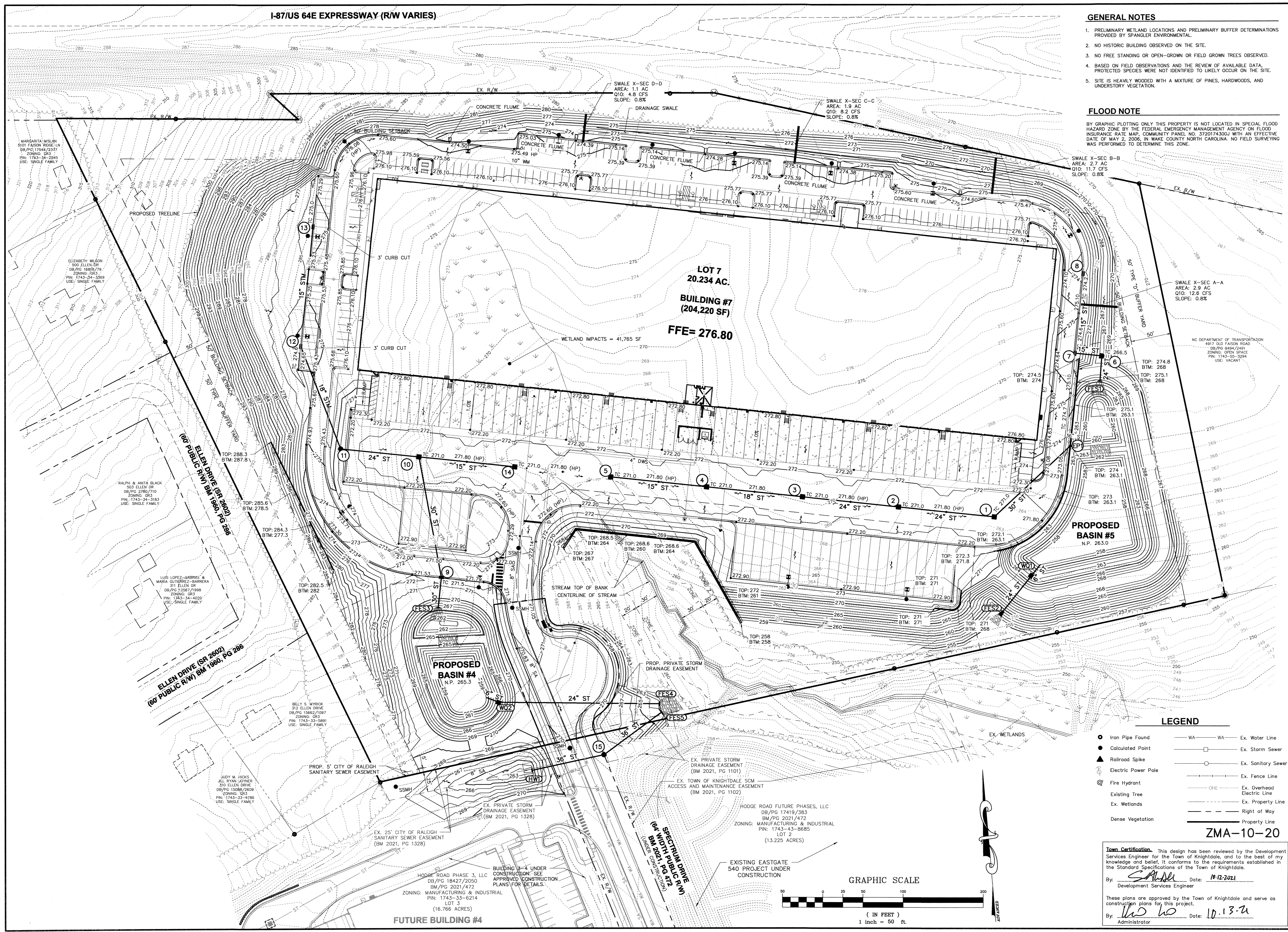
Drawing Number:
C.4.1

GENERAL NOTES

1. PRELIMINARY WETLAND LOCATIONS AND PRELIMINARY BUFFER DETERMINATIONS PROVIDED BY SPANGLER ENVIRONMENTAL.
2. NO HISTORIC BUILDING OBSERVED ON THE SITE.
3. NO FREE STANDING OR OPEN-GROWN OR FIELD GROWN TREES OBSERVED.
4. BASED ON FIELD OBSERVATIONS AND THE REVIEW OF AVAILABLE DATA, PROTECTED SPECIES WERE NOT IDENTIFIED TO LIKELY OCCUR ON THE SITE.
5. SITE IS HEAVILY WOODED WITH A MIXTURE OF PINES, HARDWOODS, AND UNDERSTORY VEGETATION.

FLOOD NOTE

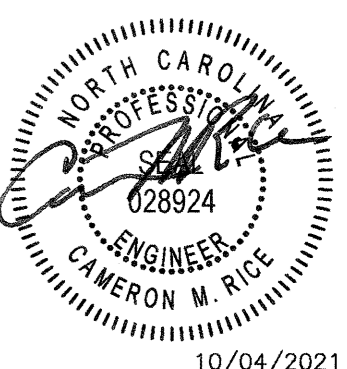
BY GRAPHIC PLOTTING ONLY THIS PROPERTY IS NOT LOCATED IN SPECIAL FLOOD HAZARD ZONE BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY ON FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 37201743000 WITH AN EFFECTIVE DATE OF MAY 2, 2006, IN WAKE COUNTY NORTH CAROLINA. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE.



PLAN PREPARED BY:
 51 Kimoyne Drive, Suite 102
 Cary, North Carolina 27511
 ph 919.481.0990
 fax 919.336.0327
 Firm License # C-2798
ADVANCED CIVIL DESIGN
 ENGINEERS & SURVEYORS

PLAN PREPARED FOR:
TRINITY CAPITAL

390 Spectrum Drive, Knightdale, NC 27545 - Wake County
EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
 FOR
TRINITY CAPITAL ADVISORS, LLC
GRADING AND DRAINAGE PLAN



Issue Dates:	08/11/2021 - PROGRESS SET TO CONTRACTOR
	06/18/2021 - TOWN SUBMITTAL #1
	06/10/2021 - TOWN SUBMITTAL #2
	09/14/2021 - TOWN SUBMITTAL #3
	10/04/2021 - TOWN SUBMITTAL #4
Date:	10/04/2021
Scale:	1" = 50'
Drawn By:	JLB
Checked By:	CMR
Project Number:	20-0006-988
Drawing Number:	C.5.0

LEGEND

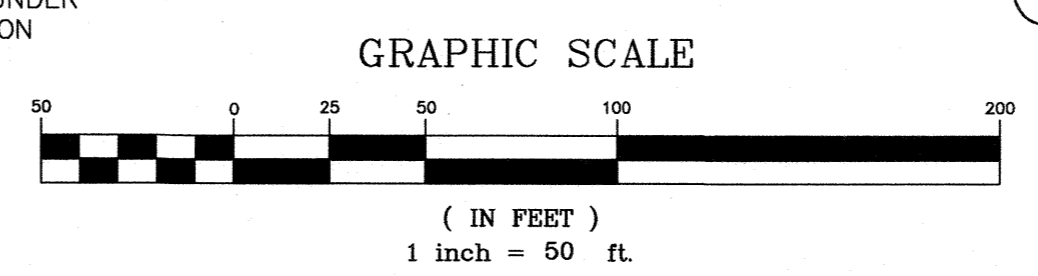
- Iron Pipe Found
- Calculated Point
- ▲ Railroad Spike
- ⊕ Electric Power Pole
- ⊕ Fire Hydrant
- Existing Tree
- Ex. Wetlands
- Dense Vegetation
- WA — Ex. Water Line
- SS — Ex. Storm Sewer
- SS — Ex. Sanitary Sewer
- FL — Ex. Fence Line
- OH — Ex. Overhead Electric Line
- PR — Ex. Property Line
- RL — Right of Way
- PL — Property Line

ZMA-10-20

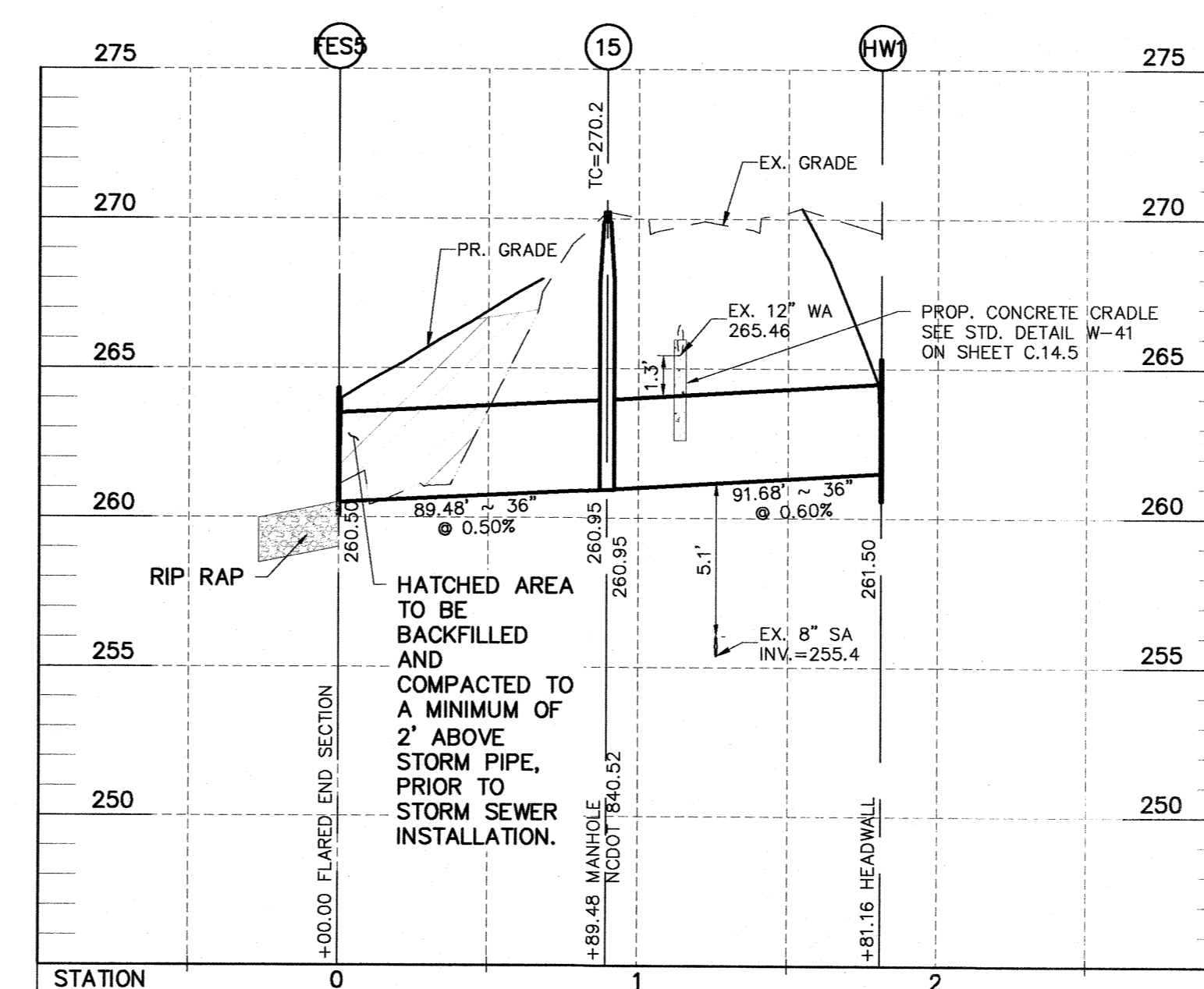
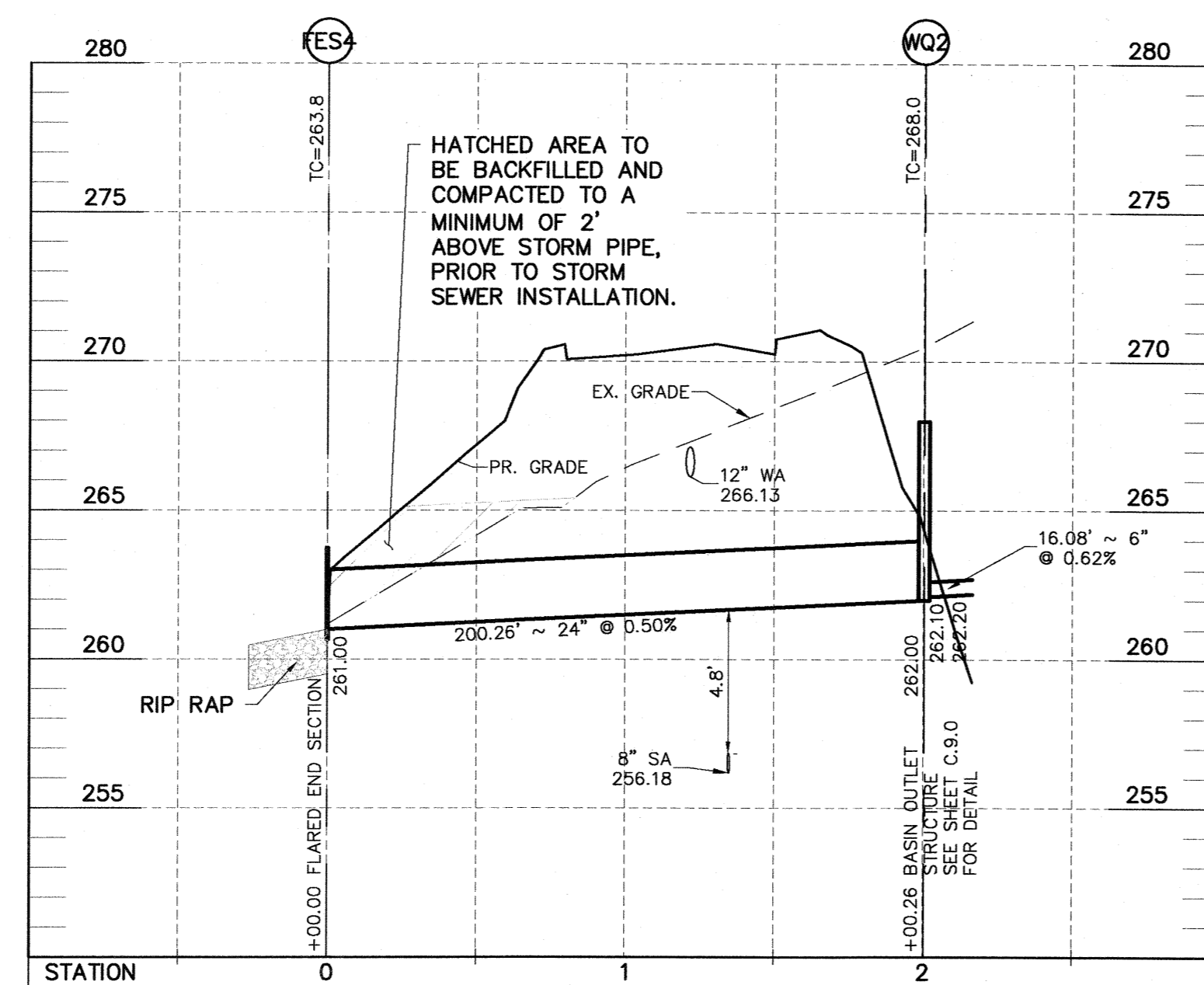
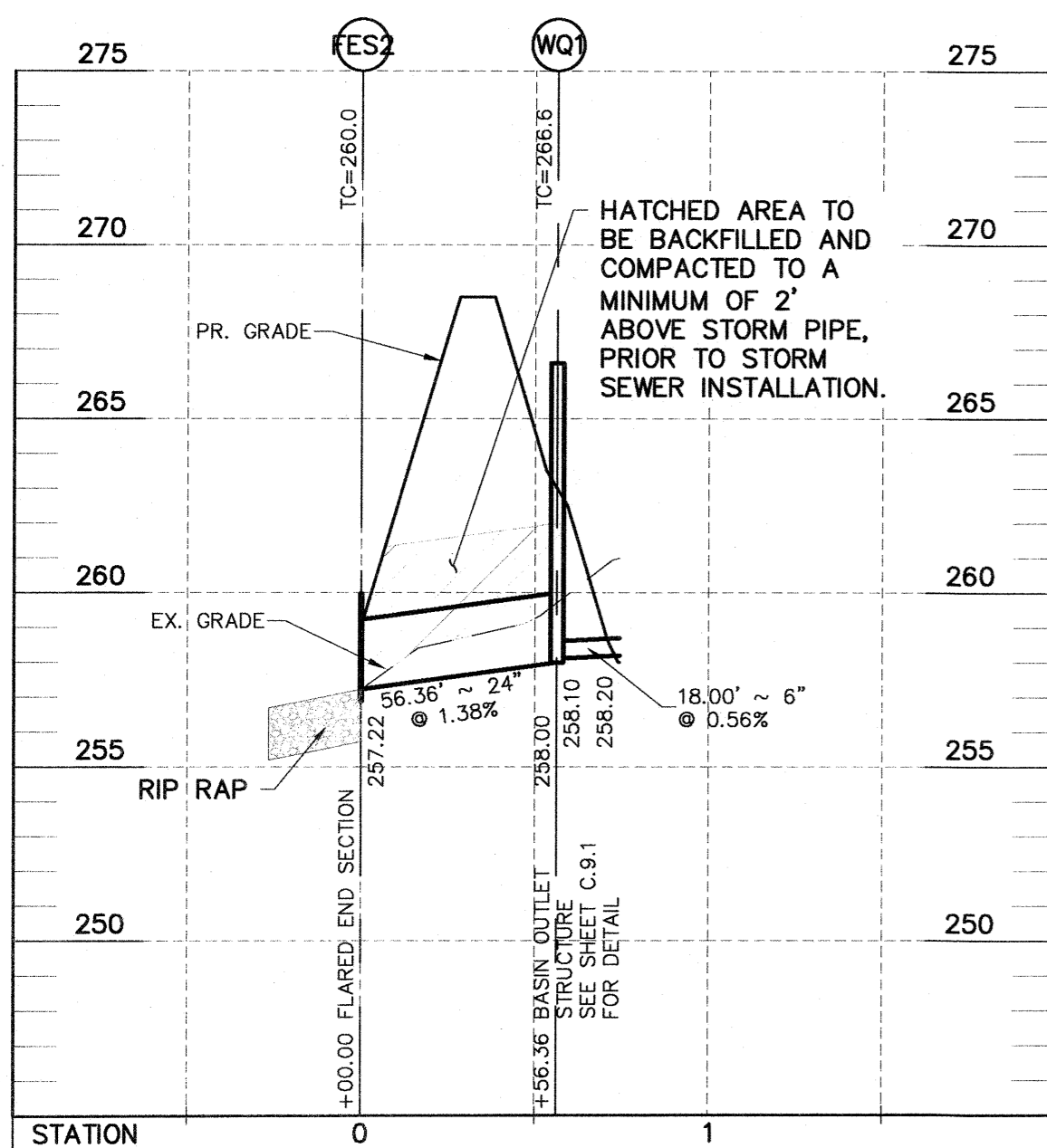
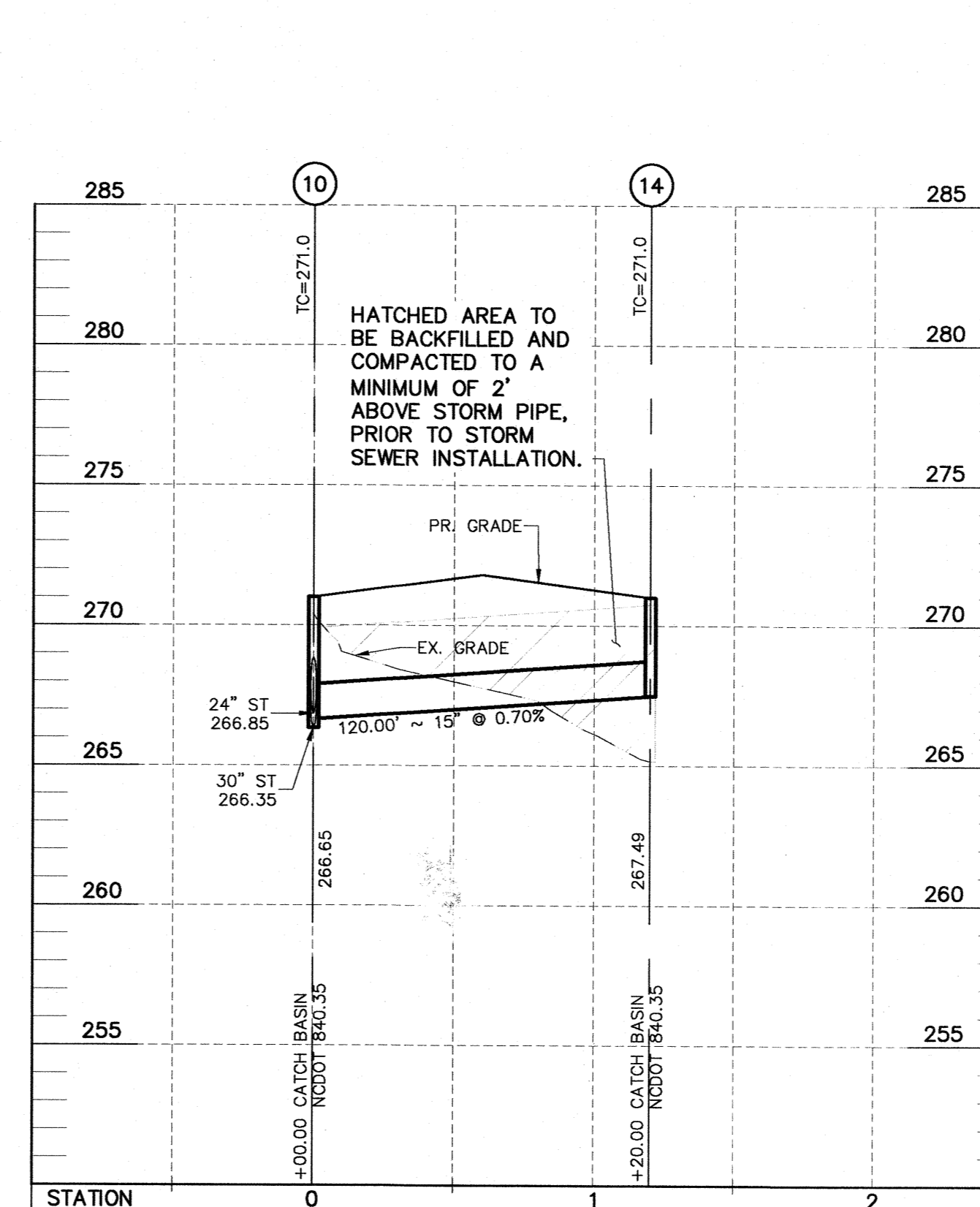
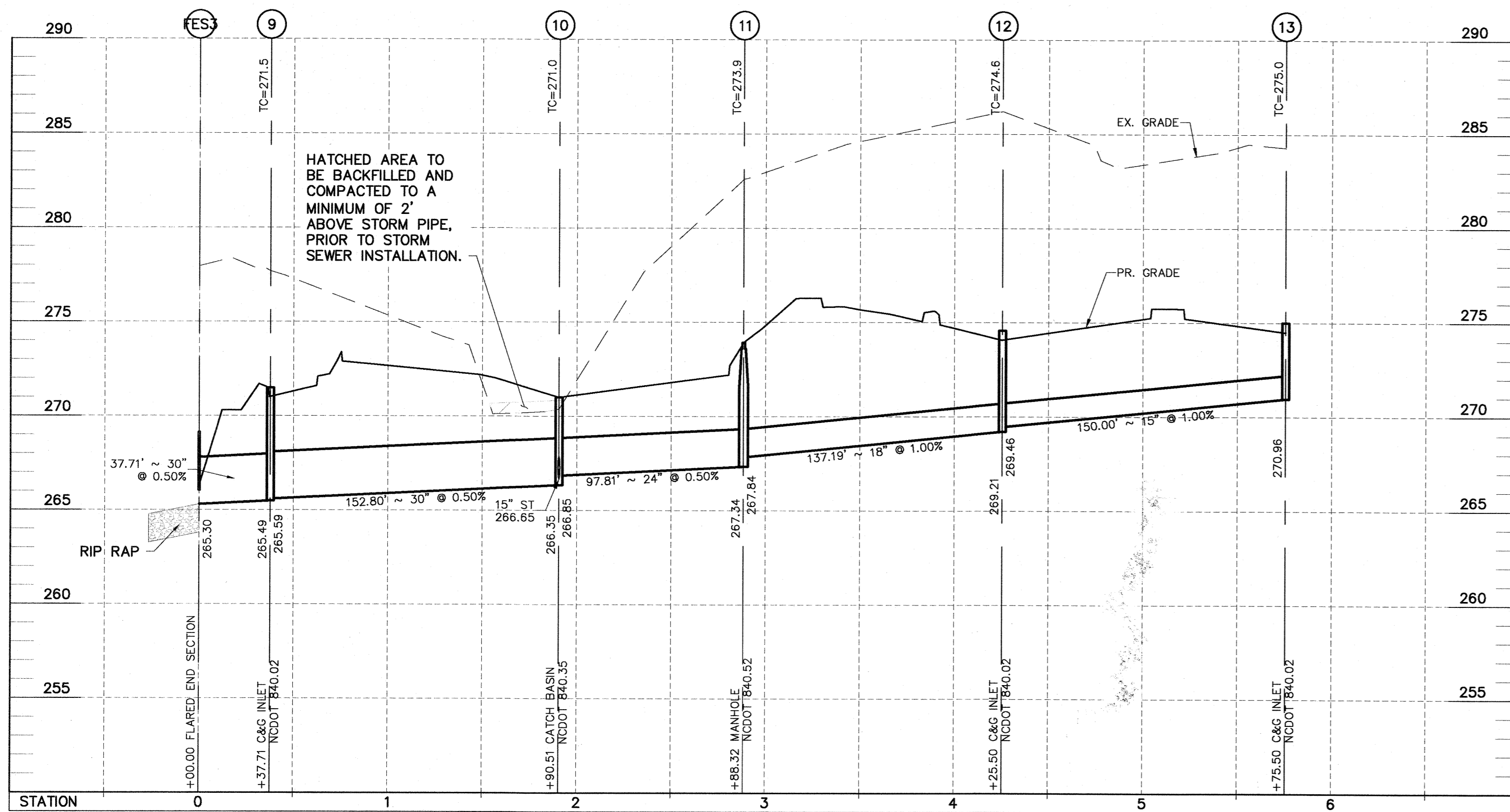
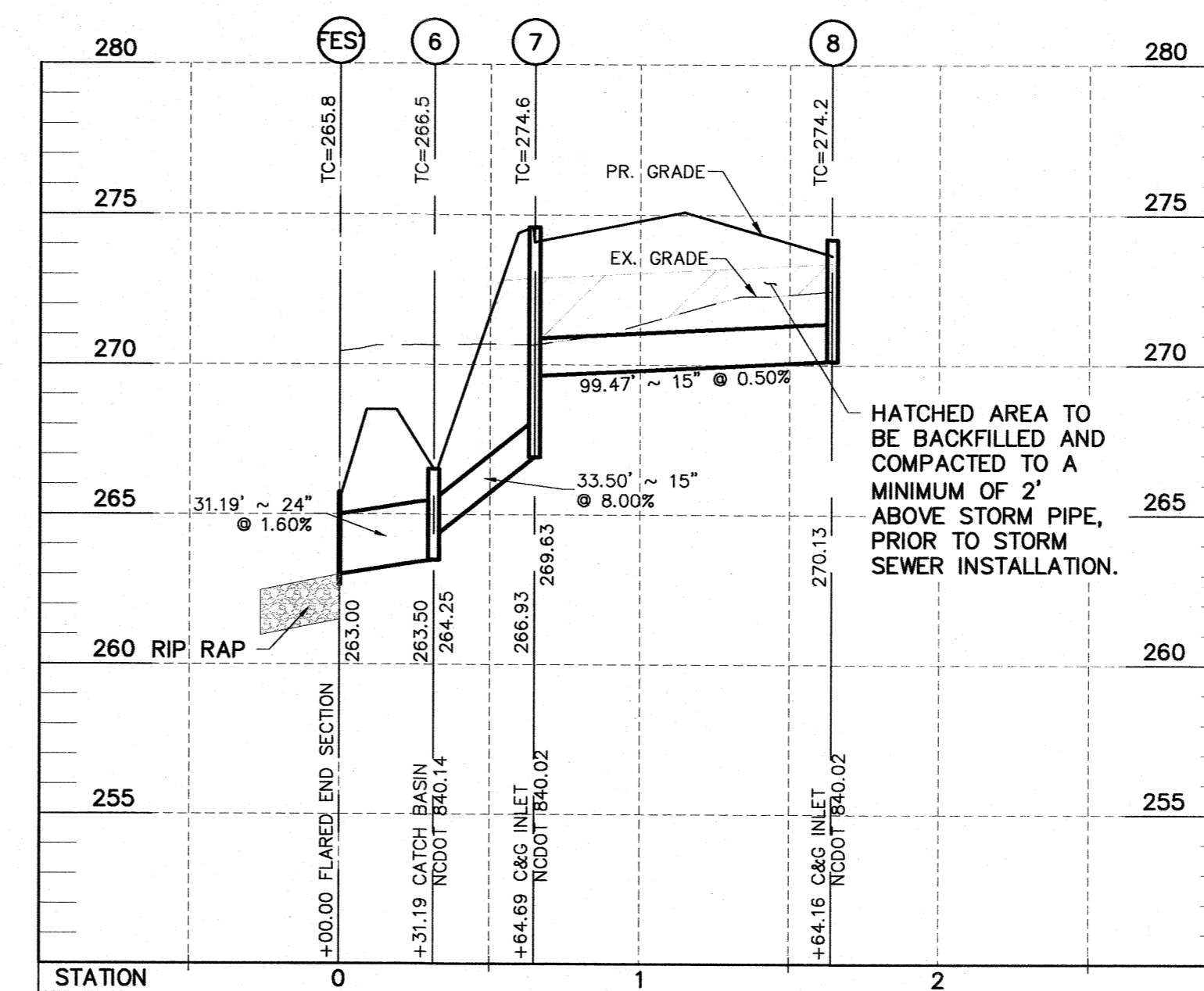
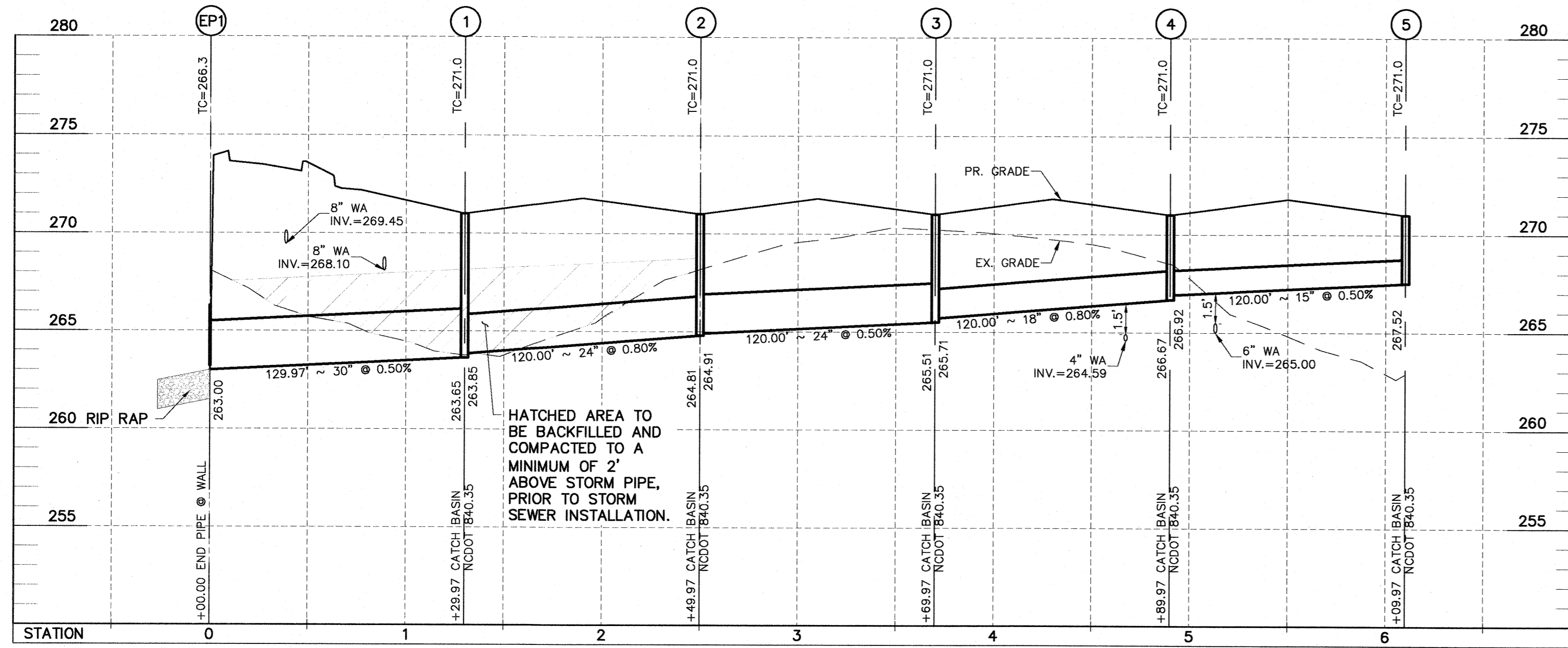
Town Certification. This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: *S. Allen* Date: 10-12-2021
 Development Services Engineer

By: *W. W.* Date: 10-13-21
 Administrator

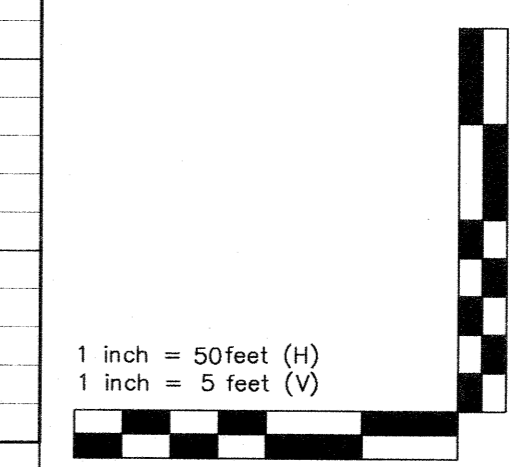


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- NOTES:
- CONTRACTOR SHALL FIELD VERIFY INVERT ELEVATIONS IN EXISTING STRUCTURES.
 - THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF THE LADDER STEPS WITHIN THE EXISTING STRUCTURES IF THE FIELD VERIFIED LOCATION IS IN CONFLICT WITH THE WORK TO BE PERFORMED, THE LADDER STEPS SHALL BE MOVED. PRICE TO BE INCLUDED IN THE UNIT PRICE BID FOR VARIOUS SEWER ITEMS.
 - CONSTRUCTION AND MATERIALS TO MEET ALL TOWN OF KNIGHTDALE AND/OR NCDOT STANDARDS AND SPECIFICATIONS
 - ALL TRENCH BACKFILL SHALL BE IN ACCORDANCE WITH TOWN OF KNIGHTDALE AND/OR NCDOT STANDARDS AND SPECIFICATIONS.

LEGEND
 — PROPOSED PROFILE GRADE
 - - - EXISTING GROUND @ C. PIPE



Town Certification. This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: *Sarah All* Date: 10-12-2021
 Development Services Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: *W. L. W.* Date: 10-13-21
 Administrator

PLAN PREPARED BY:
 51 Kilmorye Drive, Suite 102
 Cary, North Carolina 27511
 Ph: 919.461.6290
 Fax: 919.461.6290
 Firm License # C-2788
ADVANCED CIVIL DESIGN ENGINEERS & SURVEYORS

PLAN PREPARED FOR:
TRINITY CAPITAL

390 Spectrum Drive, Knightdale, NC 27545 - Wake County
EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
 FOR
TRINITY CAPITAL ADVISORS, LLC
STORM SEWER PROFILES

10/04/2021

Issue Dates:
 09/11/2021 - PROGRESS SET TO CONTRACTOR
 06/18/2021 - TOWN SUBMITTAL #1
 08/10/2021 - TOWN SUBMITTAL #2
 09/14/2021 - TOWN SUBMITTAL #3
 10/04/2021 - TOWN SUBMITTAL #4

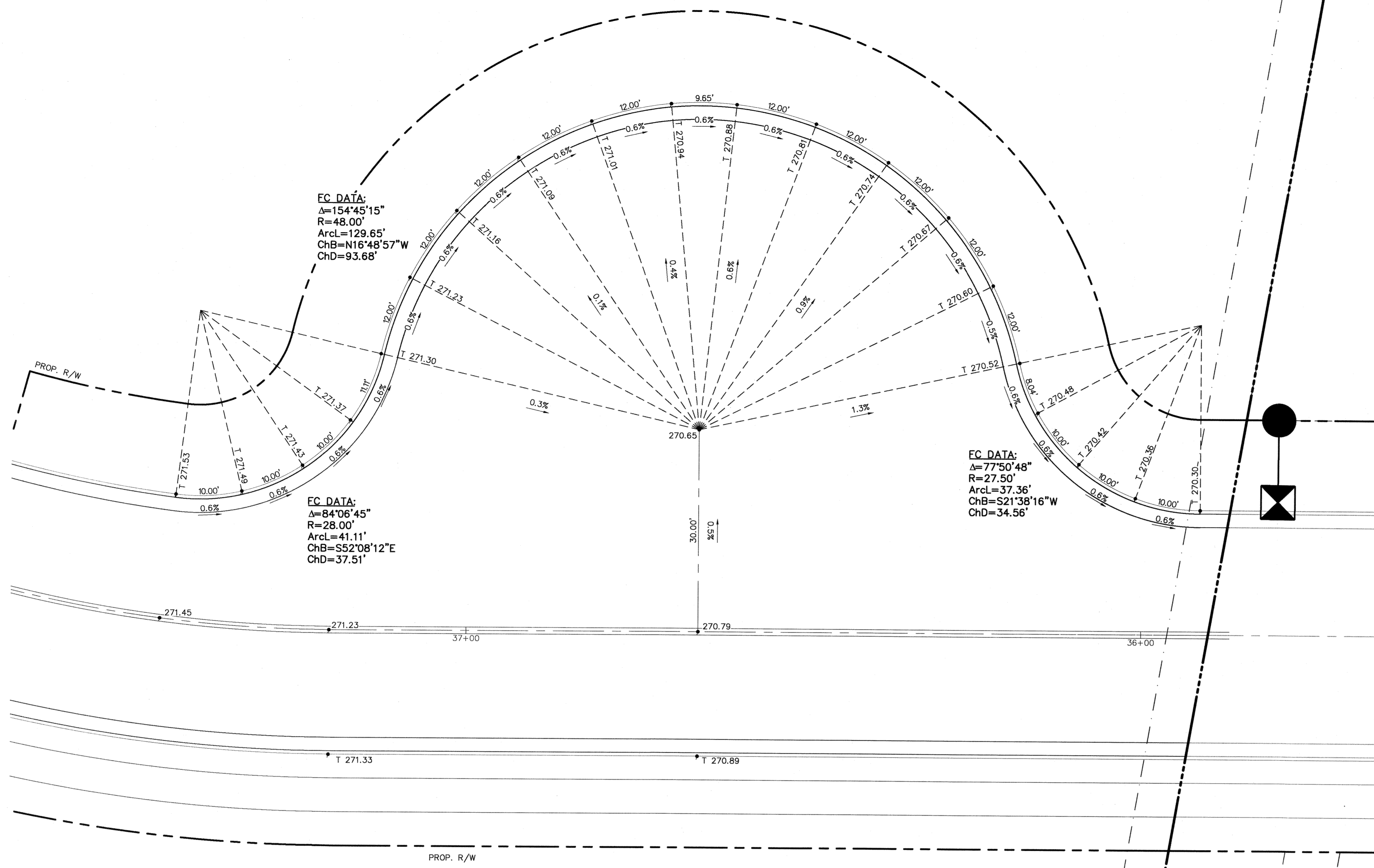
Date: 10/04/2021
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Drawn By: JLB
 Checked By: CMR

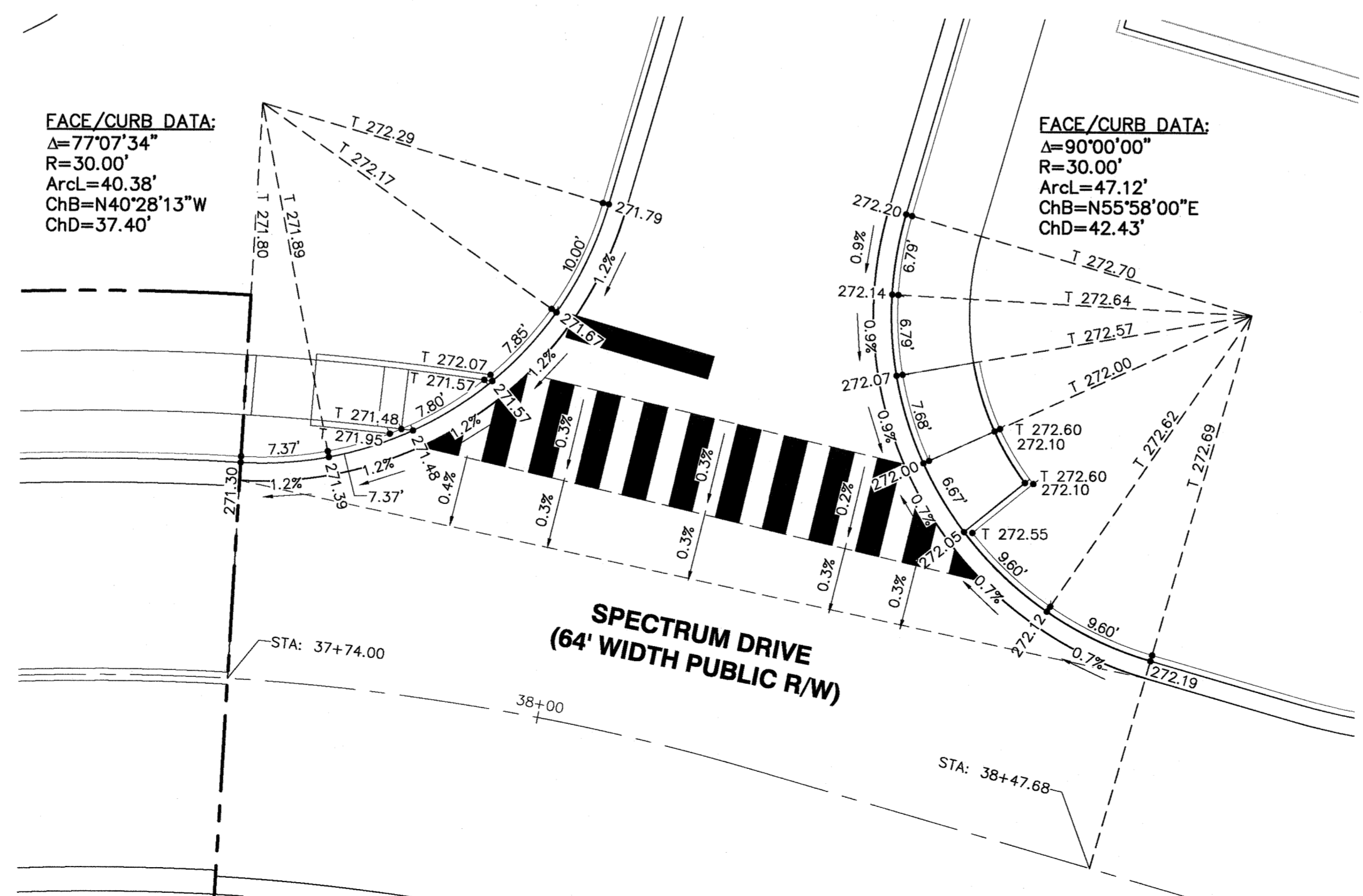
Project Number:
20-0006-988

Drawing Number:
C.5.1

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SPECTRUM DRIVE CUL-DE-SAC DETAIL
SCALE: 1" = 10'

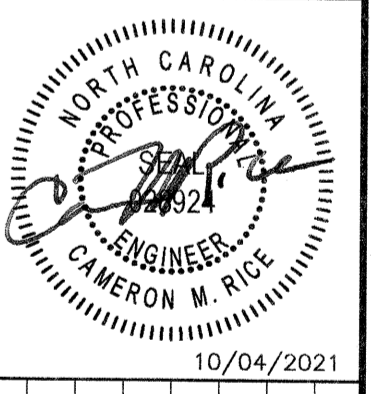


SPECTRUM DRIVE CROSS WALK DETAIL
SCALE: 1" = 10'

PLAN PREPARED BY:
51 Kilmayne Drive, Suite 102
Cary, North Carolina 27511
ph 919.481.6290
fax 919.336.5127
Firm License # C-2796
ADVANCED
CIVIL DESIGN
ENGINEERS SURVEYORS

PLAN PREPARED FOR:
TRINITY CAPITAL
ENGINEERS SURVEYORS

390 Spectrum Drive, Knightdale, NC 27545 - Wake County
EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
FOR
TRINITY CAPITAL ADVISORS, LLC
INTERSECTION DETAILS



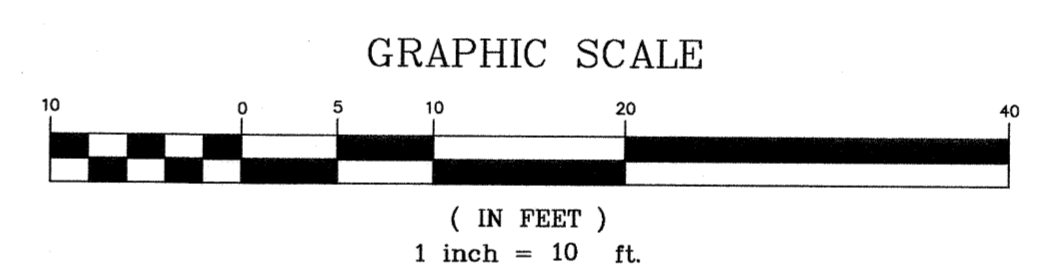
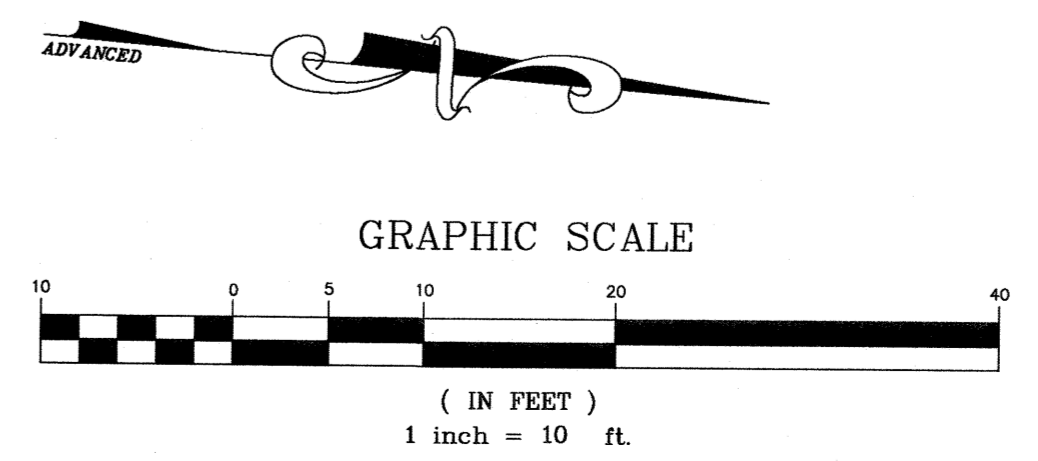
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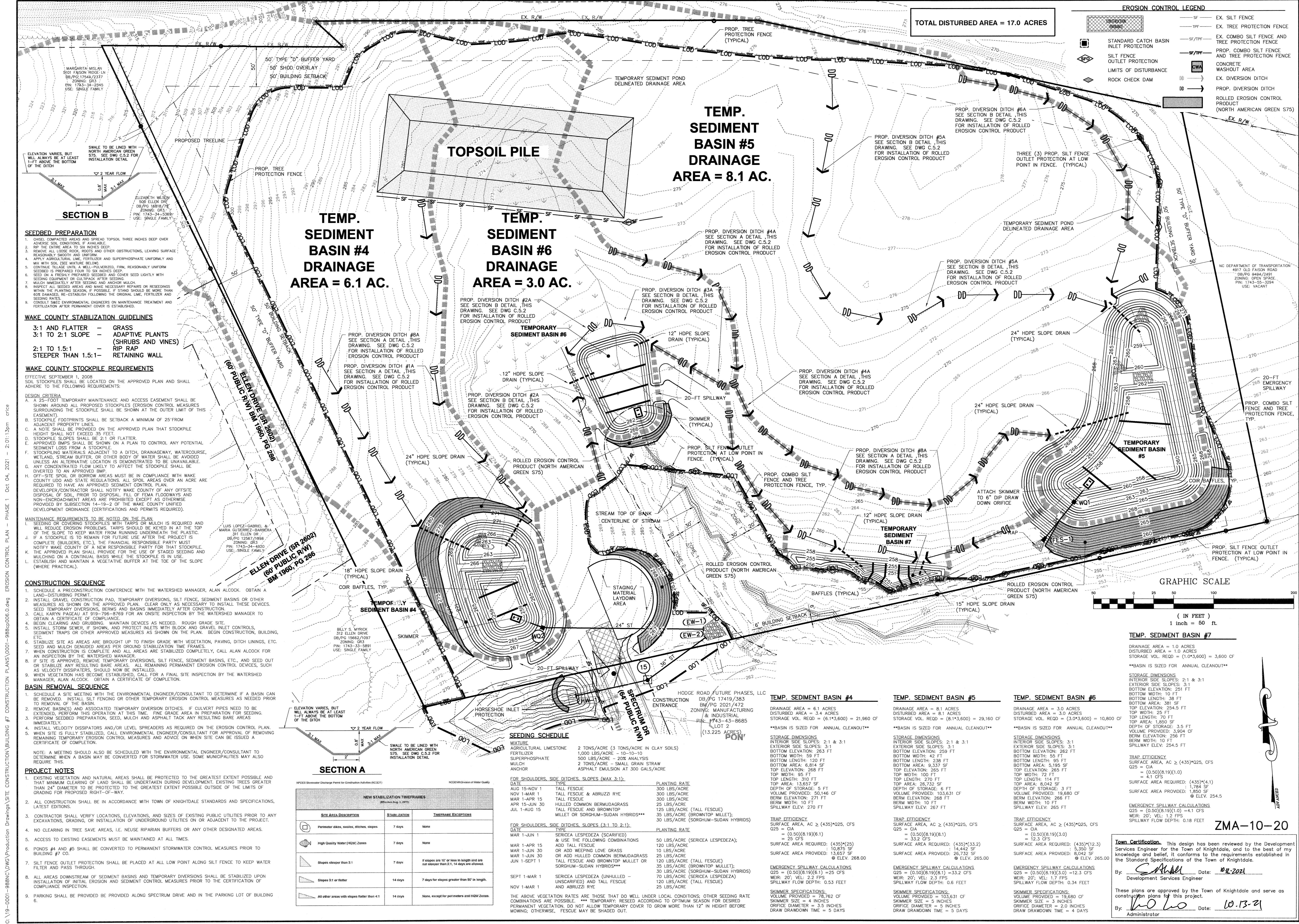
06/11/2021	PROGRESS SET TO CONTRACTOR
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09/14/2021	TOWN SUBMITTAL #3
10/04/2021	TOWN SUBMITTAL #4

ZMA-10-20

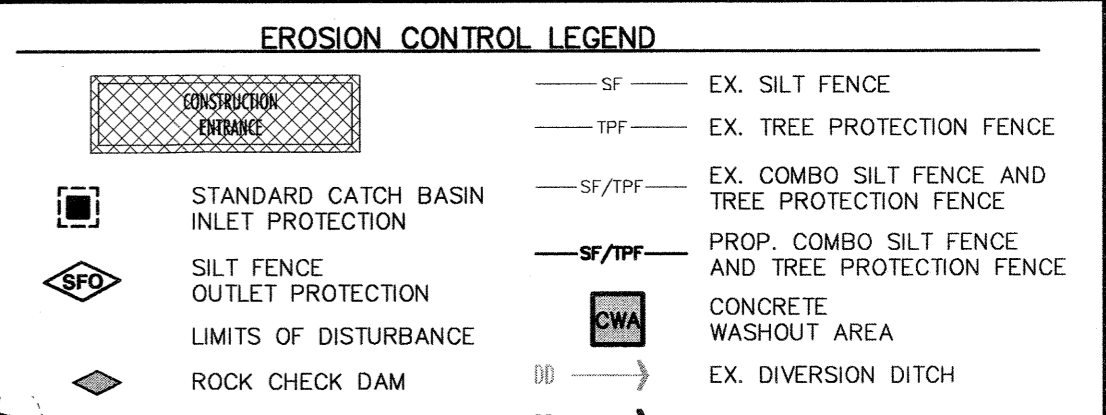
Town Certification. This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.
By: *S. Miller* Date: 10-12-2021
Development Services Engineer
By: *W. L. W.* Date: 10-13-21
Administrator

Date: 10/04/2021
Scale: 1" = 10'
Drawn By: JLB
Checked By: CMR
Project Number:
20-0006-988
Drawing Number:
C.5.2





TOTAL DISTURBED AREA = 17.0 ACRES



SEEDBED PREPARATION

1. CHESEBROUGH COMPACTED AREAS AND SPREAD TOPSOIL THREE INCHES DEEP OVER ADJACENT SOIL CONDITIONS (AWAY FROM AREA).
2. RIP THE ENTIRE AREA TO SIX INCHES DEEP.
3. REMOVE ALL LOGS, ROCKS, ROOTS AND OTHER OBSTRUCTIONS, LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
4. APPLY AGRICULTURAL LIMESTONE AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE MIXTURE BELOW).
5. CONTINUE TILLAGE UNTIL WELL-AERATED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED FOUR TO SIX INCHES DEEP.
6. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH MULCH.
7. SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
8. INSPECT ALL SEEDING AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON. IF POSSIBLE, IF STAND SHOULD BE MORE THAN ONE YEAR DAMAGED, RE-ESTABLISH FOLLOWING THE ORIGINAL LINE, FERTILIZER AND SEEDING RATES.
9. CONSULT SPACE ENVIRONMENTAL ENGINEERS ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

WAKE COUNTY STABILIZATION GUIDELINES

- 3:1 AND FLATTER - GRASS**
3:1 TO 2:1 SLOPE - (SHRUBS AND VINES)
- 2:1 TO 1.5:1 - RIP RAP**
STEEPER THAN 1.5:1 - RETAINING WALL

WAKE COUNTY STOCKPILE REQUIREMENTS

EFFECTIVE SEPTEMBER 1, 2008
 SOIL STOCKPILES SHALL BE LOCATED ON THE APPROVED PLAN AND SHALL ADHERE TO THE FOLLOWING REQUIREMENTS:

- DESIGN CRITERIA**
- A 25-FOOT TEMPORARY MAINTENANCE AND ACCESS EASEMENT SHALL BE SHOWN AROUND ALL PROPOSED STOCKPILES (EROSION CONTROL MEASURES SURROUNDING THE STOCKPILE SHALL BE SHOWN AT THE OUTER LIMIT OF THIS EASEMENT).
 - STOCKPILE FOOTPRINTS SHALL BE SETBACK A MINIMUM OF 25' FROM ADJACENT PROPERTY LINES.
 - A NOTE SHALL BE PROVIDED ON THE APPROVED PLAN THAT STOCKPILE HEIGHT SHALL NOT EXCEED 35 FEET.
 - STOCKPILE SLOPES SHALL BE 2:1 OR FLATTER.
 - APPROVED BMPs SHALL BE SHOWN ON A PLAN TO CONTROL ANY POTENTIAL SEDIMENT LOSS FROM A STOCKPILE.
 - STOCKPILING MATERIALS ADJACENT TO A DITCH, DRAINAGEWAY, WATERCOURSE, WETLAND, STREAM BUFFER, OR OTHER BODY OF WATER SHALL BE AVOIDED UNLESS AN ALTERNATIVE LOCATION IS DEMONSTRATED TO BE UNAVAILABLE.
 - ANY CONCENTRATED FLOW LIKELY TO AFFECT THE STOCKPILE SHALL BE DIVERTED TO AN APPROVED BMP.
 - OFF-SITE SPILL OR BORROW AREAS MUST BE IN COMPLIANCE WITH WAKE COUNTY UDD AND STATE REGULATIONS. ALL SPILL AREAS OVER AN ACRE ARE REQUIRED TO HAVE AN APPROVED SEDIMENT CONTROL PLAN.
 - DEVELOPER/CONTRACTOR SHALL NOTIFY WAKE COUNTY OF ANY OFFSITE DISPOSAL OF SOIL. PRIOR TO DISPOSAL, FILL OF FEMA FLOODWAYS AND NON-ENCROACHMENT AREAS ARE PROHIBITED EXCEPT AS OTHERWISE PROVIDED BY SUBSECTION 14-19-2 OF THE WAKE COUNTY UNIFIED DEVELOPMENT ORDINANCE (CERTIFICATIONS AND PERMITS REQUIRED).

- MAINTENANCE REQUIREMENTS TO BE NOTED ON THE PLAN**
1. SEEDING OR COVERING STOCKPILES WITH TAPPS OR MULCH IS REQUIRED AND WILL REDUCE EROSION PROBLEMS. TAPPS SHOULD BE KEPT IN AT THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE PLASTIC.
 2. IF A STOCKPILE IS TO REMAIN AFTER THE PROJECT IS COMPLETE (BUILDERS, ETC.), THE FINANCIAL RESPONSIBLE PARTY MUST NOTIFY WAKE COUNTY OF A NEW FINANCIAL PARTY FOR THAT STOCKPILE.
 3. THE APPROVED PLAN SHALL PROVIDE MULCHING AND MULCHING ON A CONTINUAL BASIS WHILE THE STOCKPILE IS IN USE.
 4. ESTABLISH AND MAINTAIN A VEGETATIVE BUFFER AT THE TOE OF THE SLOPE (WHERE PRACTICAL).

CONSTRUCTION SEQUENCE

1. SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH THE WATERSHED MANAGER, ALAN ALCOCK. OBTAIN A LAND-DISTURBING PERMIT.
2. INSTALL GRAVEL CONSTRUCTION PAD, TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS OR OTHER MEASURES AS SHOWN ON THE APPROVED PLAN. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES. SEED TEMPORARY DIVERSIONS, BERMS AND BASINS IMMEDIATELY AFTER CONSTRUCTION.
3. CALL KARYN PAGEAU AT 919-796-8789 FOR AN ON-SITE INSPECTION BY THE WATERSHED MANAGER TO OBTAIN CERTIFICATE OF COMPLIANCE.
4. BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE.
5. INSTALL STORM SEWER, IF SHOWING, WITH SLOTTED AND GRAVEL INLET CONTROLS. SEDIMENT TRAPS OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN. BEGIN CONSTRUCTION, BUILDING, ETC.
6. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. SEED AND MULCH DENuded AREAS PER GROUND STABILIZATION TIME FRAMES.
7. WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL ALAN ALCOCK FOR AN INSPECTION BY THE WATERSHED MANAGER.
8. IF SITE IS APPROVED, REMOVE TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS, ETC., AND SEED OUT OR STABILIZE ANY REMAINING BARE AREAS. ALL REMAINING PERMANENT EROSION CONTROL MEASURES, SUCH AS VELOCITY DISSIPATORS, SHOULD NOW BE INSTALLED.
9. WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE WATERSHED MANAGER, ALAN ALCOCK. OBTAIN A CERTIFICATE OF COMPLETION.

BASEIN REMOVAL SEQUENCE

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

NOTE: A MEETING SHOULD ALSO BE SCHEDULED WITH THE ENVIRONMENTAL ENGINEER/CONSULTANT TO DETERMINE WHEN A BASIN MAY BE CONVERTED FOR STORMWATER USE. SOME MUNICIPALITIES MAY ALSO REQUIRE THIS.

PROJECT NOTES

1. EXISTING VEGETATION AND NATURAL AREAS SHALL BE PROTECTED TO THE GREATEST EXTENT POSSIBLE AND THAT MINIMUM CLEARING OF LAND SHALL BE UNDERTAKEN DURING DEVELOPMENT. EXISTING TREES GREATER THAN 24" DIAMETER TO BE PROTECTED TO THE GREATEST EXTENT POSSIBLE OUTSIDE OF THE LIMITS OF GRADING FOR PROPOSED RIGHT-OF-WAY.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH TOWN OF KNIGHTDALE STANDARDS AND SPECIFICATIONS, LATEST EDITIONS.
3. CONTRACTOR SHALL VERIFY LOCATIONS, ELEVATIONS, AND SIZES OF EXISTING PUBLIC UTILITIES PRIOR TO ANY EXCAVATIONS, GRADING, OR INSTALLATION OF UNDERGROUND UTILITIES ON OR ADJACENT TO THE PROJECT.
4. NO CLEARING IN TREE SAVE AREAS, I.E. NEUSE RIPARIAN BUFFERS OR ANY OTHER DESIGNATED AREAS.
5. ACCESS TO EXISTING EASEMENTS MUST BE MAINTAINED AT ALL TIMES.
6. PONDS #4 AND #5 SHALL BE CONVERTED TO PERMANENT STORMWATER CONTROL MEASURES PRIOR TO BUILDING #7 OUT.
7. SILT FENCE OUTLET PROTECTION SHALL BE PLACED AT ALL LOW POINTS ALONG SILT FENCE TO KEEP WATER FILTER AND PASS THROUGH THE FENCE.
8. ALL AREAS DOWNSTREAM OF SEDIMENT BASINS AND TEMPORARY DIVERSIONS SHALL BE STABILIZED UPON INSTALLATION OF INITIAL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO THE CERTIFICATION OF COMPLIANCE INSPECTION.
9. PARKING SHALL BE PROVIDED AS PROVIDED ALONG SPECTRUM DRIVE AND IN THE PARKING LOT OF BUILDING #6.

TEMP. SEDIMENT BASIN #4
DRAINAGE AREA = 6.1 AC.

TEMP. SEDIMENT BASIN #6
DRAINAGE AREA = 3.0 AC.

TEMP. SEDIMENT BASIN #5
DRAINAGE AREA = 8.1 AC.

TEMPORARY SEDIMENT BASIN #4

TEMPORARY SEDIMENT BASIN #6

TEMP. SEDIMENT BASIN #4

TEMP. SEDIMENT BASIN #5

TEMP. SEDIMENT BASIN #6

NEW STABILIZATION TIMEFRAMES
(Effective Aug. 3, 2011)

Site Area Description	Stabilization	Threshold Exceptions
Perimeter dikes, swales, ditches, slopes	7 days	None
High Quality Water (H2O) Zones	7 days	None
Slopes steeper than 3:1	7 days	If slopes are 10' or less in length and do not exceed 2:1, 14 days are allowed.
Slopes 3:1 or flatter	14 days	7 days for slopes greater than 60' in length.
All other areas with slopes flatter than 4:1	14 days	None, except for primers and H2O zones.

SEEDING SCHEDULE

DATE	TYPE	PLANTING RATE
AUG 15-NOV 1	TALL FESCUE	300 LBS/ACRE
NOV 1-MAR 1	TALL FESCUE & ABRUZZI RYE	300 LBS/ACRE
MAR 1-APR 15	TALL FESCUE	300 LBS/ACRE
APR 15-JUN 30	HULLED COMMON BERMUDAGRASS	25 LBS/ACRE
JUL 1-AUG 15	TALL FESCUE AND BROWNTOP MILLET OR SORGHUM-SUDAN HYBRIDS***	125 LBS/ACRE (TALL FESCUE) 35 LBS/ACRE (BROWNTOP MILLET); 30 LBS/ACRE (SORGHUM-SUDAN HYBRIDS)

FOR SHOULDERS, SIDE DITCHES, SLOPES (3:1 TO 2:1):

DATE	TYPE	PLANTING RATE
MAR 1-JUN 1	SERICA LESPEDEZA (SCARIFIED) & USE THE FOLLOWING COMBINATIONS	50 LBS/ACRE (SERICA LESPEDEZA); 120 LBS/ACRE
MAR 1-APR 15	OR ADD TALL FESCUE	10 LBS/ACRE
MAR 1-JUN 30	OR ADD WEEPING LOVE GRASS	25 LBS/ACRE
MAR 1-JUN 30	OR ADD HULLED COMMON BERMUDAGRASS	120 LBS/ACRE (TALL FESCUE)
JUN 1-SEPT 1	TALL FESCUE AND BROWNTOP MILLET OR SORGHUM-SUDAN HYBRIDS***	35 LBS/ACRE (BROWNTOP MILLET); 30 LBS/ACRE (SORGHUM-SUDAN HYBRIDS)

SEPT 1-MAR 1: SERICA LESPEDEZA (UNHULLED - UNSCARIFIED) AND TALL FESCUE
 NOV 1-MAR 1: AND ABRUZZI RYE

THE ABOVE VEGETATION RATES ARE THOSE THAT DO WELL UNDER LOCAL CONDITIONS, OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE. ***TEMPORARY: RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW MORE THAN 12" IN HEIGHT BEFORE MOWING OTHERWISE, FESCUE MAY BE SHADED OUT.

TEMP. SEDIMENT BASIN #7

DRAINAGE AREA = 1.0 ACRES
 DISTURBED AREA = 1.0 ACRES
 STORAGE VOL. REQ'D = (1.0x3,600) = 3,600 CF

****BASIN IS SIZED FOR ANNUAL CLEANOUT****

STORAGE DIMENSIONS
 INTERIOR SIDE SLOPES: 2:1 & 3:1
 EXTERIOR SIDE SLOPES: 3:1
 BOTTOM ELEVATION: 251 FT
 BOTTOM WIDTH: 10 FT
 TOP LENGTH: 38 FT
 TOP WIDTH: 25 FT
 TOP ELEVATION: 254.5 FT
 TOP AREA: 1,850 SF
 DEPTH OF STORAGE: 3.5 FT
 VOLUME PROVIDED: 3,904 CF
 DEPTH OF STORAGE: 2.56 FT
 TOP ELEVATION: 256 FT
 BOTTOM WIDTH: 10 FT
 SPILLWAY ELEV.: 254.5 FT

TRAP EFFICIENCY
 SURFACE AREA, AC ≥ (435)*025, CFS
 025 = CIA
 = (0.50)(8.19)(1.0)
 = 4.1 CFS

SURFACE AREA REQUIRED: (435)*(4.1) = 1,784 SF
 SURFACE AREA PROVIDED: 1,850 SF
 @ ELEV. 254.5

EMERGENCY SPILLWAY CALCULATIONS
 Q25 = (0.50)(8.19)(1.0) = 4.1 CFS
 WEIR: 20" VEL.: 1.2 FPS
 SPILLWAY FLOW DEPTH: 0.18 FEET

TRAP EFFICIENCY
 SURFACE AREA, AC ≥ (435)*025, CFS
 025 = CIA
 = (0.50)(8.19)(3.0)
 = 12.3 CFS

SURFACE AREA REQUIRED: (435)*(12.3) = 5,320 SF
 SURFACE AREA PROVIDED: 8,042 SF
 @ ELEV. 265.00

EMERGENCY SPILLWAY CALCULATIONS
 Q25 = (0.50)(8.19)(3.0) = 12.3 CFS
 WEIR: 20" VEL.: 2.3 FPS
 SPILLWAY FLOW DEPTH: 0.34 FEET

SKIMMER SPECIFICATIONS
 VOLUME PROVIDED = 103,631 CF
 SKIMMER SIZE = 3 INCHES
 ORIFICE DIAMETER = 2.0 INCHES
 DRAW DRAWDOWN TIME = 4 DAYS

ZMA-10-20

PLAN PREPARED BY: **TRINITY CAPITAL ADVISORS, LLC**
 390 Spectrum Drive, Knightdale, NC 27545 - Wake County

EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
FOR
TRINITY CAPITAL ADVISORS, LLC
EROSION CONTROL PLAN - PHASE 1

51 Kimmaya Drive, Suite 102
 Cary, North Carolina 27511
 PH 919.468.0980
 FAX 919.336.9277
 Firm License # C-796

10/04/2021

Issue Dates:
 06/11/2021 - PROGRESS SET TO CONTRACTOR
 06/18/2021 - TOWN SUBMITTAL #1
 08/10/2021 - TOWN SUBMITTAL #2
 08/14/2021 - TOWN SUBMITTAL #3
 10/04/2021 - TOWN SUBMITTAL #4

Date: 10/04/2021
 Scale: 1" = 50'

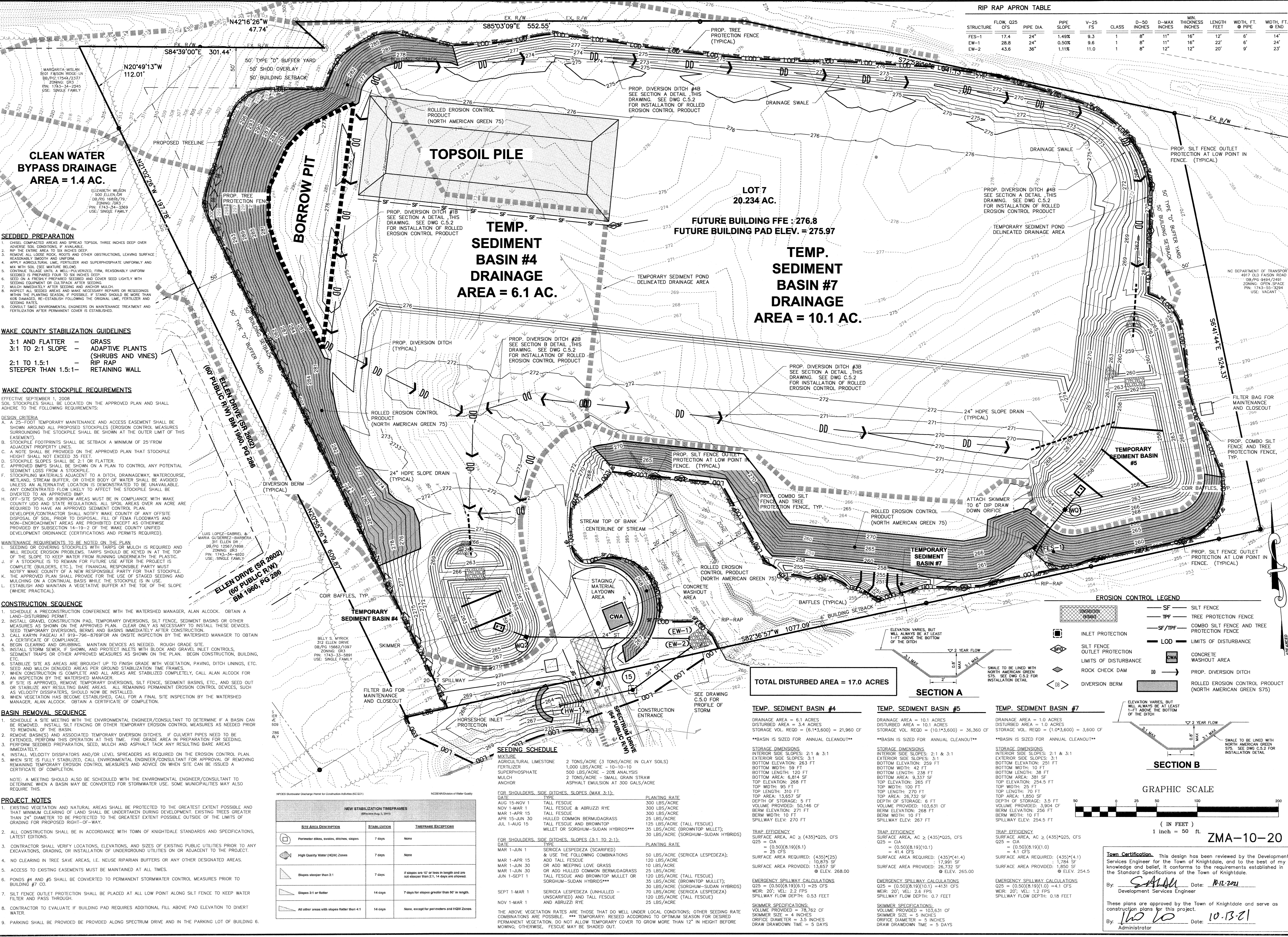
Drawn By: JLB
 Checked By: CMR

Project Number: 20-0006-988
 Drawing Number: C.6.0

By: *[Signature]* Date: 10.13.21
 Development Services Engineer
 Administrator

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

C:\19-0001-988NC\Production Drawings\19-0001-988\CONSTRUCTION PLANS\001-988\CONSTRUCTION BUILDING #7 CONSTRUCTION PLAN - PHASE 2 04 Oct 2021 - 2:01:54pm.crc



RIP RAP APRON TABLE

STRUCTURE	FLOW, Q25 CFS	PIPE DIA.	PIPE SLOPE	V-25 FS	CLASS	D-50 INCHES	D-MAX INCHES	MIN. THICKNESS INCHES	LENGTH FEET	WIDTH, FT. @ PIPE	WIDTH, FT. @ END
FES-1	17.4	24"	1.49%	9.3	1	8"	11"	16"	12'	6'	14'
EW-1	28.8	36"	0.50%	9.6	1	8"	11"	16"	22'	6'	24'
EW-2	43.6	36"	1.11%	11.0	1	8"	12"	12"	20'	6'	23'

- SEEDING PREPARATION**
1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL THREE INCHES DEEP OVER ADVERSE SOIL CONDITIONS IF AVAILABLE.
 2. RIP THE ENTIRE AREA TO SIX INCHES DEEP.
 3. REMOVE ALL LOGS, ROCK, ROOTS AND OTHER OBSTRUCTIONS, LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
 4. APPLY AGRICULTURAL LIME, FERTILIZER AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE MIXTURE BELOW).
 5. CONTINUE TILLAGE TO A WELL-FRAGMENTED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED FOUR TO SIX INCHES DEEP.
 6. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
 7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH TO PROTECT ALL SEEDING AREAS AND MAKE NECESSARY REPAIRS OR RESEEDING WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE MORE THAN SIX INCHES HIGH, RE-ESTABLISH FOLLOWING THE ORIGINAL FERTILIZER AND SEEDING RATES.
 8. CONSULT SRAE ENVIRONMENTAL ENGINEERS ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

- WAKE COUNTY STABILIZATION GUIDELINES**
- 3:1 AND FLATTER - GRASS
 - 3:1 TO 2:1 SLOPE - ADAPTIVE PLANTS (SHRUBS AND VINES)
 - 2:1 TO 1.5:1 - RIP RAP
 - STEEPER THAN 1.5:1 - RETAINING WALL

- WAKE COUNTY STOCKPILE REQUIREMENTS**
- EFFECTIVE SEPTEMBER 1, 2008
SOIL STOCKPILES SHALL BE LOCATED ON THE APPROVED PLAN AND SHALL ADHERE TO THE FOLLOWING REQUIREMENTS:

- DESIGN CRITERIA**
- A. A 25'-FOOT TEMPORARY MAINTENANCE AND ACCESS EASEMENT SHALL BE SHOWN AROUND ALL PROPOSED STOCKPILES (EROSION CONTROL MEASURES SURROUNDING THE STOCKPILE SHALL BE SHOWN AT THE OUTER LIMIT OF THIS EASEMENT).
 - B. STOCKPILE FOOTPRINTS SHALL BE SETBACK A MINIMUM OF 25' FROM ADJACENT PROPERTY LINES.
 - C. A NOTE SHALL BE PROVIDED ON THE APPROVED PLAN THAT STOCKPILE HEIGHT SHALL NOT EXCEED 35 FEET.
 - D. STOCKPILE SLOPES SHALL BE 2:1 OR FLATTER.
 - E. APPROVED BMPs SHALL BE SHOWN ON A PLAN TO CONTROL ANY POTENTIAL SEDIMENT LOSS FROM A STOCKPILE.
 - F. STOCKPILE MATERIALS SHALL BE STORED TO A DITCH, DRAINAGEWAY, WATERCOURSE, WETLAND, STREAM BUFFER, OR OTHER BODY OF WATER SHALL BE AVOIDED UNLESS AN ALTERNATIVE LOCATION IS DEMONSTRATED TO BE UNAVAILABLE. ANY CONTAMINATED RUNOFF LIKELY TO AFFECT THE STOCKPILE SHALL BE DIVERTED TO AN APPROVED BMP.
 - G. OFF-SITE SPILL OR BLOWOFF AREAS MUST BE IN COMPLIANCE WITH WAKE COUNTY UDO AND STATE REGULATIONS. ALL SPILL AREAS OVER AN ACRE ARE REQUIRED TO HAVE AN APPROVED SEDIMENT CONTROL PLAN.
 - H. DEVELOPER/CONTRACTOR SHALL NOTIFY WAKE COUNTY OF ANY OFFSITE DISPOSAL OF SOIL PRIOR TO DISPOSAL. FILL OF FEMA FLOODWAYS AND NON-ENCROACHMENT AREAS ARE PROHIBITED EXCEPT AS OTHERWISE PROVIDED BY SUBSECTION 14-19-2 OF THE WAKE COUNTY UNIFIED DEVELOPMENT ORDINANCE (CERTIFICATIONS AND PERMITS REQUIRED).

- MAINTENANCE REQUIREMENTS TO BE NOTED ON THE PLAN**
- I. SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED AND WILL REDUCE EROSION PROBLEMS. TARPS SHOULD BE KEPT IN AT THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE PLASTIC.
 - J. IF A STOCKPILE IS TO REMAIN FOR FUTURE USE AFTER THE PROJECT IS COMPLETE (BRIDGES, ETC.), THE FINANCIAL RESPONSIBLE PARTY MUST NOTIFY WAKE COUNTY OF A NEW RESPONSIBLE PARTY FOR THAT STOCKPILE.
 - K. THE APPROVED PLAN SHALL PROVIDE FOR THE USE OF STAGED SEEDING AND MULCHING ON A CONTINUAL BASIS WHILE THE STOCKPILE IS IN USE.
 - L. ESTABLISH AND MAINTAIN A VEGETATIVE BUFFER AT THE TOE OF THE SLOPE (WHERE PRACTICAL).

- CONSTRUCTION SEQUENCE**
1. SCHEDULE A PRECONSTRUCTION CONFERENCE WITH THE WATERSHED MANAGER, ALAN ALCOCK. OBTAIN A LAND-DISTURBING PERMIT.
 2. INSTALL GRAVEL CONSTRUCTION PAD, TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS OR OTHER MEASURES AS SHOWN ON THE APPROVED PLAN. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES. SEED TEMPORARY DIVERSIONS, BERMS AND BASINS IMMEDIATELY AFTER CONSTRUCTION.
 3. CALL KATE PARRISH AT 919-276-4800 FOR AN ON-SITE INSPECTION BY THE WATERSHED MANAGER TO OBTAIN A CERTIFICATE OF COMPLIANCE.
 4. BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE.
 5. INSTALL STORM DRAINAGE, IF SHOWN, AND PROTECT INLETS WITH BLOCK AND GRAVEL INLET CONTROLS, SEDIMENT TRAPS OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN. BEGIN CONSTRUCTION, BUILDING, ETC.
 6. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. SEED AND MULCH DENUDATED AREAS PER GRASS STABILIZATION TIME FRAMES.
 7. WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL ALAN ALCOCK FOR AN INSPECTION BY THE WATERSHED MANAGER.
 8. IF SITE IS APPROPRIATE, REMOVE DIVERSIONS, SILT FENCE, SEDIMENT BASINS, ETC., AND SEED OR STABILIZE ANY RESULTING BARE AREAS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES, SUCH AS VELOCITY DISSIPATORS, SHOULD NOW BE INSTALLED.
 9. WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE WATERSHED MANAGER, ALAN ALCOCK. OBTAIN A CERTIFICATE OF COMPLETION.

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

NOTE: A MEETING SHOULD ALSO BE SCHEDULED WITH THE ENVIRONMENTAL ENGINEER/CONSULTANT TO DETERMINE WHEN A BASIN MAY BE CONVERTED FOR STORMWATER USE. SOME MUNICIPALITIES MAY ALSO REQUIRE THIS.

PROJECT NOTES

1. EXISTING VEGETATION AND NATURAL AREAS SHALL BE PROTECTED TO THE GREATEST EXTENT POSSIBLE AND THAT MINIMUM CLEARING OF LAND SHALL BE UNDERTAKEN DURING DEVELOPMENT. EXISTING TREES GREATER THAN 24" DIAMETER TO BE PROTECTED TO THE GREATEST EXTENT POSSIBLE OUTSIDE OF THE LIMITS OF GRADING FOR PROPOSED RIGHT-OF-WAY.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH TOWN OF KNIGHTDALE STANDARDS AND SPECIFICATIONS, LATEST EDITIONS.
3. CONTRACTOR SHALL VERIFY LOCATIONS, ELEVATIONS, AND SIZES OF EXISTING PUBLIC UTILITIES PRIOR TO ANY EXCAVATIONS, GRADING, OR INSTALLATION OF UNDERGROUND UTILITIES ON OR ADJACENT TO THE PROJECT.
4. NO CLEARING IN TREE SAVE AREAS, I.E. NEUSE RIPARIAN BUFFERS OR ANY OTHER DESIGNATED AREAS.
5. ACCESS TO EXISTING EASEMENTS MUST BE MAINTAINED AT ALL TIMES.
6. PONDS #4 AND #5 SHALL BE CONVERTED TO PERMANENT STORMWATER CONTROL MEASURES PRIOR TO BUILDING #7 CO.
7. SILT FENCE OUTLET PROTECTION SHALL BE PLACED AT ALL LOW POINTS ALONG SILT FENCE TO KEEP WATER FILTER AND PASS THROUGH.
8. CONTRACTOR TO EVALUATE IF BUILDING PAD REQUIRES ADDITIONAL FILL ABOVE PAD ELEVATION TO DIVERT WATER.
9. PARKING SHALL BE PROVIDED ALONG SPECTRUM DRIVE AND IN THE PARKING LOT OF BUILDING 6.

NEW STABILIZATION TIMEFRAMES
(Effective Aug. 3, 2011)

SITE AREA DESCRIPTION	STABILIZATION	TEMPERATURE EXCEPTIONS
Perimeter ditches, swales, ditches, slopes	7 days	None
High Quality Water (HQW) Zones	7 days	None
Slopes steeper than 3:1	7 days	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed.
Slopes 2:1 or flatter	14 days	7 days for slopes greater than 30' in length.
All other areas with slopes flatter than 4:1	14 days	None, except for perimeters and HQW Zones.

FOR SHOULDERS, SIDE DITCHES, SLOPES (MAX 3:1):

DATE	TYP.	PLANTING RATE
AUG 15-NOV 1	TALL FESCUE	300 LBS/ACRE
NOV 1-MAR 1	TALL FESCUE & ABRUZZI RYE	300 LBS/ACRE
MAR 1-APR 15	TALL FESCUE	300 LBS/ACRE
APR 15-JUN 30	HULLED COMMON BERMUDAGRASS	25 LBS/ACRE
JUN 1-JUN 30	TALL FESCUE AND BROWNTOP	125 LBS/ACRE (TALL FESCUE)
JUL 1-AUG 15	MILLET OR SORGHUM-SUDAN HYBRIDS***	35 LBS/ACRE (BROWNTOP MILLET); 30 LBS/ACRE (SORGHUM-SUDAN HYBRIDS)

FOR SHOULDERS, SIDE DITCHES, SLOPES (3:1 TO 2:1):

DATE	TYP.	PLANTING RATE
MAR 1-JUN 1	SERICA LESPEDEZA (SCARIFIED) & USE THE FOLLOWING COMBINATIONS	50 LBS/ACRE (SERICA LESPEDEZA); 120 LBS/ACRE (TALL FESCUE)
MAR 1-APR 15	OR ADD WEEDING LOVE GRASS	10 LBS/ACRE
MAR 1-JUN 30	OR ADD HULLED COMMON BERMUDAGRASS	25 LBS/ACRE
JUN 1-SEPT 1	TALL FESCUE AND BROWNTOP MILLET OR SORGHUM-SUDAN HYBRIDS***	120 LBS/ACRE (TALL FESCUE); 35 LBS/ACRE (BROWNTOP MILLET); 30 LBS/ACRE (SORGHUM-SUDAN HYBRIDS)
SEPT 1-MAR 1	SERICA LESPEDEZA (UNHULLED) & TALL FESCUE AND ABRUZZI RYE	120 LBS/ACRE (TALL FESCUE); 25 LBS/ACRE
NOV 1-MAR 1		

THE ABOVE VEGETATION RATES ARE THOSE THAT DO WELL UNDER LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE. ***TEMPORARY RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW MORE THAN 12" IN HEIGHT BEFORE MOWING; OTHERWISE, FESCUE MAY BE SHADED OUT.

TEMP. SEDIMENT BASIN #4
DRAINAGE AREA = 6.1 ACRES
DISTURBED AREA = 3.4 ACRES
STORAGE VOL. REQD = (6.1*3,600) = 21,960 CF
BASIN IS SIZED FOR ANNUAL CLEANOUT

STORAGE DIMENSIONS
INTERIOR SIDE SLOPES: 2:1 & 3:1
EXTERIOR SIDE SLOPES: 3:1
BOTTOM ELEVATION: 263 FT
BOTTOM WIDTH: 59 FT
BOTTOM LENGTH: 238 FT
BOTTOM AREA: 6,814 SF
TOP ELEVATION: 268 FT
TOP WIDTH: 95 FT
TOP LENGTH: 310 FT
TOP AREA: 18,857 SF
DEPTH OF STORAGE: 5 FT
VOLUME PROVIDED: 50,148 CF
BERM ELEVATION: 271 FT
BERM WIDTH: 10 FT
SPILLWAY ELEV: 270 FT

TEMP. SEDIMENT BASIN #5
DRAINAGE AREA = 10.1 ACRES
DISTURBED AREA = 10.1 ACRES
STORAGE VOL. REQD = (10.1*3,600) = 36,360 CF
BASIN IS SIZED FOR ANNUAL CLEANOUT

STORAGE DIMENSIONS
INTERIOR SIDE SLOPES: 2:1 & 3:1
EXTERIOR SIDE SLOPES: 3:1
BOTTOM ELEVATION: 259 FT
BOTTOM WIDTH: 42 FT
BOTTOM LENGTH: 238 FT
BOTTOM AREA: 9,337 SF
TOP ELEVATION: 265 FT
TOP WIDTH: 100 FT
TOP LENGTH: 270 FT
TOP AREA: 18,857 SF
DEPTH OF STORAGE: 6 FT
VOLUME PROVIDED: 103,631 CF
BERM ELEVATION: 268 FT
BERM WIDTH: 10 FT
SPILLWAY ELEV: 267 FT

TEMP. SEDIMENT BASIN #7
DRAINAGE AREA = 1.0 ACRES
DISTURBED AREA = 1.0 ACRES
STORAGE VOL. REQD = (1.0*3,600) = 3,600 CF
BASIN IS SIZED FOR ANNUAL CLEANOUT

STORAGE DIMENSIONS
INTERIOR SIDE SLOPES: 2:1 & 3:1
EXTERIOR SIDE SLOPES: 3:1
BOTTOM ELEVATION: 251 FT
BOTTOM WIDTH: 10 FT
BOTTOM LENGTH: 38 FT
BOTTOM AREA: 381 SF
TOP ELEVATION: 254.5 FT
TOP WIDTH: 25 FT
TOP LENGTH: 70 FT
TOP AREA: 1,850 SF
DEPTH OF STORAGE: 3.5 FT
VOLUME PROVIDED: 3,904 CF
BERM ELEVATION: 246 FT
BERM WIDTH: 10 FT
SPILLWAY ELEV: 254.5 FT

TRAP EFFICIENCY
SURFACE AREA, AC @ (435)*Q25, CFS
Q25 = QA
= (0.50)(8.19)(10.1)
= 41.4 CFS
SURFACE AREA REQUIRED: (435)(41.4)
= 17,991 SF
SURFACE AREA PROVIDED: 26,732 SF @ ELEV. 265.00

EMERGENCY SPILLWAY CALCULATIONS
Q25 = (0.50)(8.19)(10.1) = 41.31 CFS
WEIR: 20"; VEL: 2.2 FPS
SPILLWAY FLOW DEPTH: 0.53 FEET

SKIMMER SPECIFICATIONS:
VOLUME PROVIDED = 78,762 CF
SKIMMER SIZE = 4 INCHES
ORIFICE DIAMETER = 3.5 INCHES
DRAW DOWNTIME = 5 DAYS

TRAP EFFICIENCY
SURFACE AREA, AC @ (435)*Q25, CFS
Q25 = QA
= (0.50)(8.19)(10.1)
= 41.4 CFS
SURFACE AREA REQUIRED: (435)(41.4)
= 17,991 SF
SURFACE AREA PROVIDED: 26,732 SF @ ELEV. 265.00

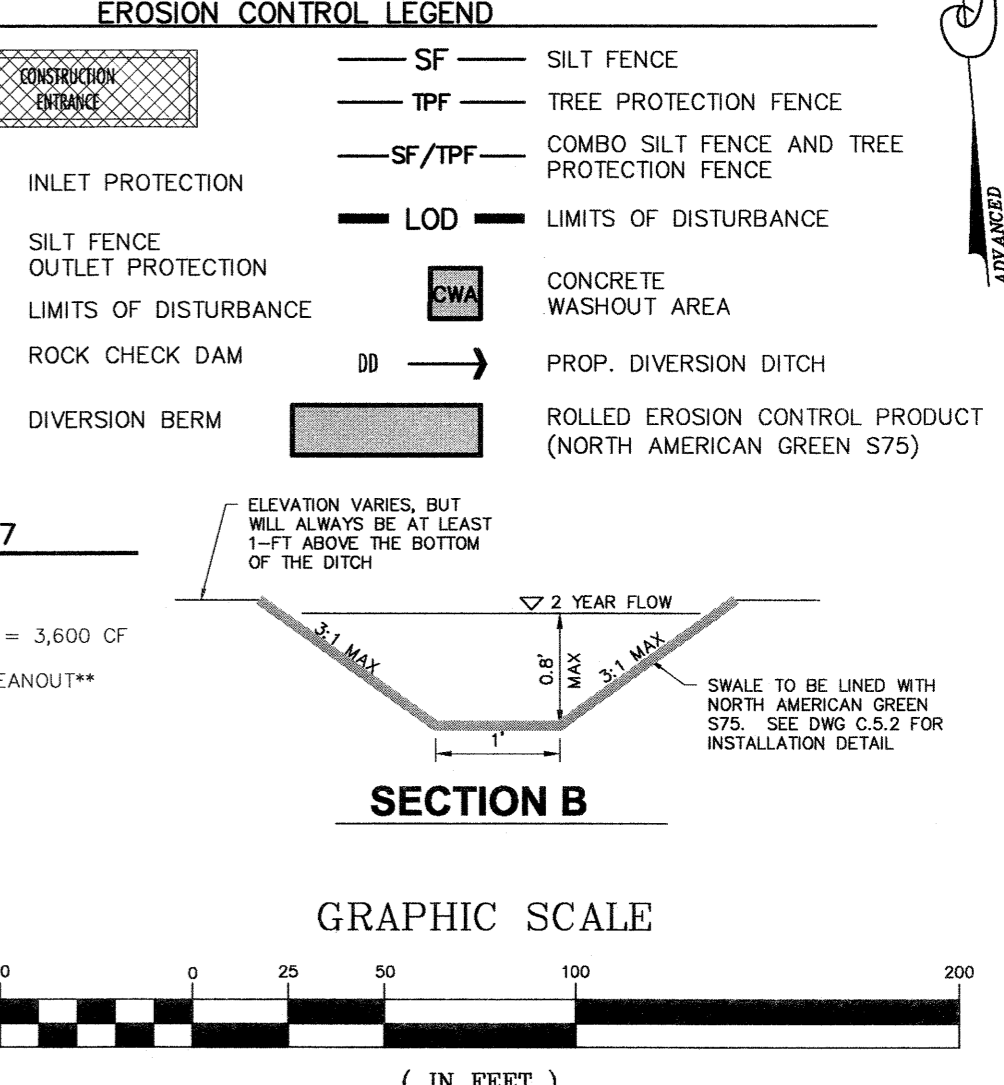
EMERGENCY SPILLWAY CALCULATIONS
Q25 = (0.50)(8.19)(10.1) = 41.31 CFS
WEIR: 20"; VEL: 2.2 FPS
SPILLWAY FLOW DEPTH: 0.53 FEET

SKIMMER SPECIFICATIONS:
VOLUME PROVIDED = 103,631 CF
SKIMMER SIZE = 5 INCHES
ORIFICE DIAMETER = 5 INCHES
DRAW DOWNTIME = 5 DAYS

TRAP EFFICIENCY
SURFACE AREA, AC @ (435)*Q25, CFS
Q25 = QA
= (0.50)(8.19)(1.0)
= 4.1 CFS
SURFACE AREA REQUIRED: (435)(4.1)
= 1,784 SF
SURFACE AREA PROVIDED: 1,850 SF @ ELEV. 254.5

EMERGENCY SPILLWAY CALCULATIONS
Q25 = (0.50)(8.19)(1.0) = 4.1 CFS
WEIR: 20"; VEL: 1.2 FPS
SPILLWAY FLOW DEPTH: 0.18 FEET

SKIMMER SPECIFICATIONS:
VOLUME PROVIDED = 103,631 CF
SKIMMER SIZE = 5 INCHES
ORIFICE DIAMETER = 5 INCHES
DRAW DOWNTIME = 5 DAYS



PLAN PREPARED BY: **ADVANCED CIVIL DESIGN**
51 Kinross Drive, Suite 102, Cary, North Carolina, 27513
PH: 919.481.6900
FAX: 919.332.9278
Firm License # C-2798

PLAN PREPARED FOR: **TRINITY CAPITAL**

390 Spectrum Drive, Knightdale, NC 27545 - Wake County

EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
FOR
TRINITY CAPITAL ADVISORS, LLC
EROSION CONTROL PLAN - PHASE 2

Issue Dates:
06/11/2021 - PROGRESS SET TO CONTRACTOR
06/18/2021 - TOWN SUBMITTAL #1
08/10/2021 - TOWN SUBMITTAL #2
09/14/2021 - TOWN SUBMITTAL #3
10/04/2021 - TOWN SUBMITTAL #4

Date: 10/04/2021
Scale: 1" = 50'

Drawn By: JLB
Checked By: CMR

Project Number: 20-0006-988

Drawing Number: C.6.1

Town Certification: This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: *SALAH* Date: 10-13-21
Development Services Engineer

By: *lho to* Date: 10-13-21
Administrator

I-87/US 64E EXPRESSWAY (RW VARIES)

LANDSCAPE NOTES

- AT TIME OF INSTALLATION, CANOPY TREES SHALL BE A MINIMUM OF 2" CALIPER AND 8' IN HEIGHT; UNDERSTORY TREES SHALL BE A MINIMUM OF 1 1/4" CALIPER AND 6' IN HEIGHT; AND SHRUBS SHALL BE AT LEAST 18" IN HEIGHT AND A 3 GALLON CONTAINER SIZE.
- ANY ABOVE GROUND UTILITIES HAVE TO BE SCREENED IN ACCORDANCE WITH UDO SECTION 8.7.
- 40-60% OF CANOPY TREES AND 40-60% OF UNDERSTORY TREES HAVE TO BE EVERGREEN PER UDO SECTION 8.6.

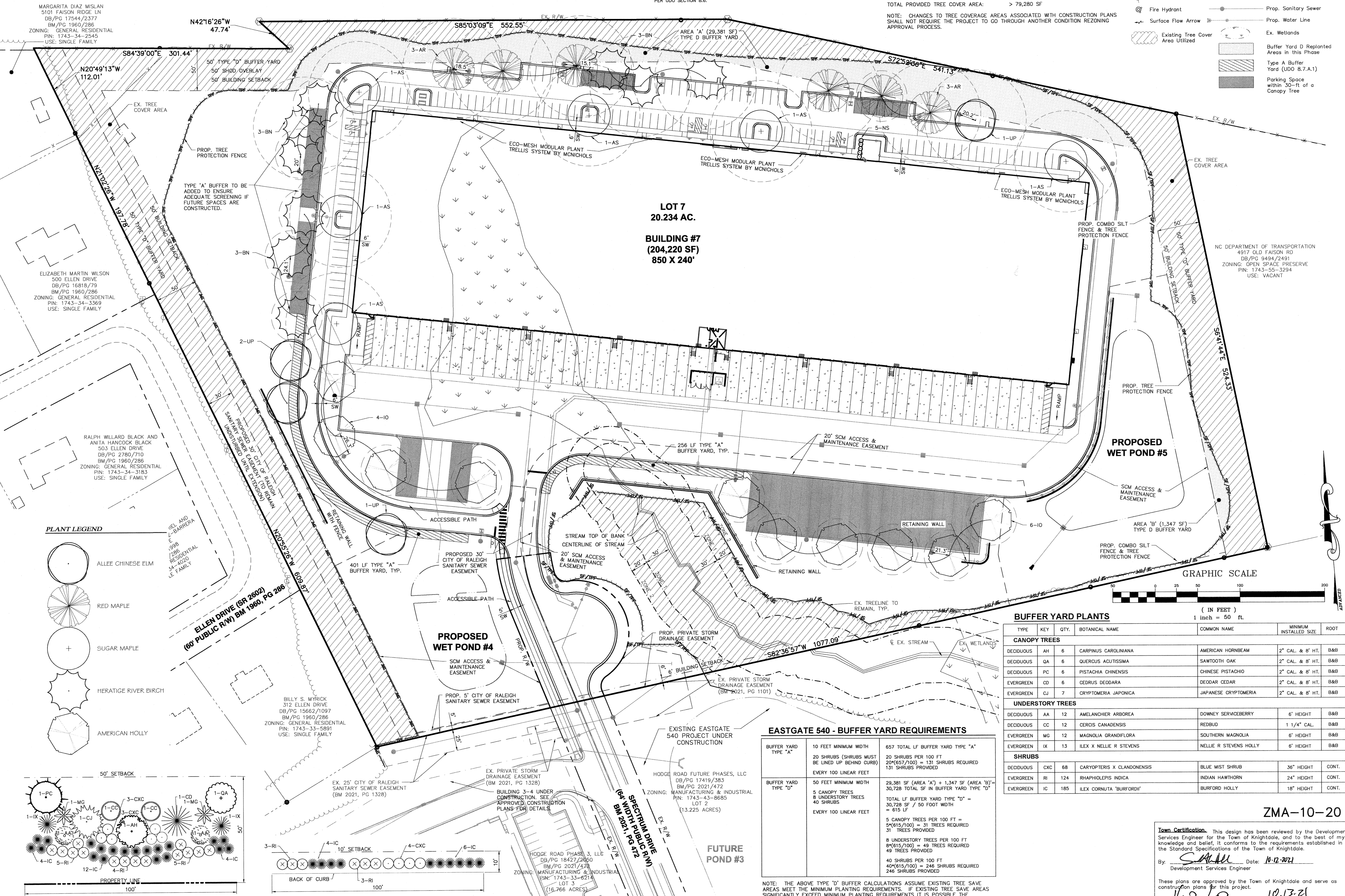
TREE COVER AREA CALCULATIONS

PERIMETER OF SITE:	3,964 FEET
REQUIRED TREE COVER AREA:	3,964 FT X 20 FT = 79,280 SF
PROVIDED TREE COVER AREA:	33,016 SF (STREAM BUFFER)
PROVIDED TREE COVER AREA:	> 79,280 (50-FT TYPE A BUFFER)
TOTAL PROVIDED TREE COVER AREA:	> 79,280 SF

NOTE: CHANGES TO TREE COVER AREAS ASSOCIATED WITH CONSTRUCTION PLANS SHALL NOT REQUIRE THE PROJECT TO GO THROUGH ANOTHER CONDITION ZONING APPROVAL PROCESS.

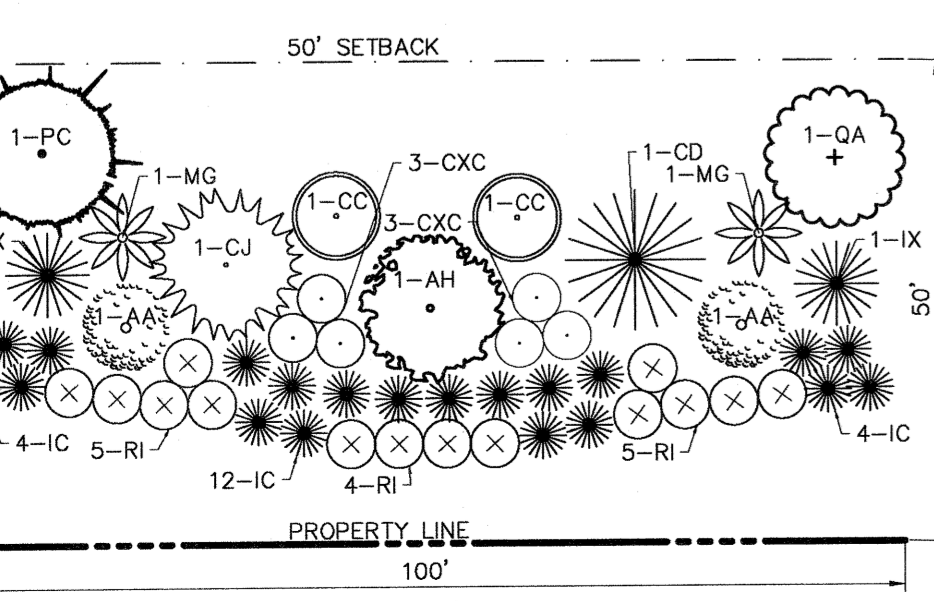
LEGEND

- Iron Pipe Found
- Calculated Point
- ▲ Railroad Spike
- ⊕ Electric Power Pole
- ⊕ Fire Hydrant
- Surface Flow Arrow
- ▨ Existing Tree Cover Area Utilized
- Ex. Fence Line
- Ex. Property Line
- Property Line (Not Surveyed)
- Proposed Storm Sewer
- Prop. Sanitary Sewer
- Prop. Water Line
- Ex. Wetlands
- ▨ Buffer Yard D Replanted Areas in this Phase
- ▨ Type A Buffer Yard (UDO 8.7.A.1)
- ▨ Parking Space within 30-ft of a Canopy Tree



PLANT LEGEND

- ALLEE CHINESE ELM
- RED MAPLE
- SUGAR MAPLE
- HERATIGE RIVER BIRCH
- AMERICAN HOLLY



BUFFER YARD PLANTS

TYPE	KEY	QTY.	BOTANICAL NAME	COMMON NAME	MINIMUM INSTALLED SIZE	ROOT
CANOPY TREES						
DECIDUOUS	AH	6	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	2" CAL. & 8' HT.	B&B
DECIDUOUS	QA	6	QUERCUS ACUTISSIMA	SAWTOOTH OAK	2" CAL. & 8' HT.	B&B
DECIDUOUS	PC	6	PISTACHIA CHINENSIS	CHINESE PISTACHIO	2" CAL. & 8' HT.	B&B
EVERGREEN	CD	6	CEDRUS DEODARA	DEODAR CEDAR	2" CAL. & 8' HT.	B&B
EVERGREEN	CJ	7	CRYPTOMERIA JAPONICA	JAPANESE CRYPTOMERIA	2" CAL. & 8' HT.	B&B
UNDERSTORY TREES						
DECIDUOUS	AA	12	AMELANCHIER ARBOREA	DOWNY SERVICEBERRY	6' HEIGHT	B&B
DECIDUOUS	OC	12	CERCIS CANADENSIS	REDBUD	1 1/4" CAL.	B&B
EVERGREEN	MG	12	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	6' HEIGHT	B&B
EVERGREEN	IX	13	ILEX X NELLIE R STEVENS	NELLIE R STEVENS HOLLY	6' HEIGHT	B&B
SHRUBS						
DECIDUOUS	CX	68	CARYOPTERIS X CLANDONENSIS	BLUE MIST SHRUB	36" HEIGHT	CONT.
EVERGREEN	RI	124	RHAPHIOLEPIS INDICA	INDIAN HAWTHORN	24" HEIGHT	CONT.
EVERGREEN	IC	185	ILEX CORNUTA 'BURFORDI'	BURFORD HOLLY	18" HEIGHT	CONT.

ZMA-10-20

Town Certification. This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: *S. Miller* Date: 10-12-2021
Development Services Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.
By: *W. L. D.* Date: 10.13.21
Administrator

PLAN PREPARED BY: **ADVANCED CIVIL DESIGN ENGINEERS**

PLAN PREPARED FOR: **TRINITY CAPITAL**

390 Spectrum Drive, Knightdale, NC 27545 - Wake County

EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
FOR
TRINITY CAPITAL ADVISORS, LLC
LANDSCAPE PLAN

10/04/2021

Issue Dates:
06/17/2021 - PROGRESS SET TO CONTRACTOR
06/18/2021 - TOWN SUBMITTAL #1
08/10/2021 - TOWN SUBMITTAL #2
09/14/2021 - TOWN SUBMITTAL #3
10/04/2021 - TOWN SUBMITTAL #4

Date: 10/04/2021
Scale: 1" = 50'

Drawn By: JLB
Checked By: CMR

Project Number:
20-0006-988

Drawing Number:
C.7.0

STREET LIGHTING STANDARDS

- NUMERICAL POINT-BYPOINT FC GRID MAXIMUM 25 FOOT BY 25 FOOT THAT INDICATES THE MINIMUM, MAXIMUM, AND AVERAGE FC LEVELS WITHIN THE LIGHTED AREA OF THE SITE AND THE AVERAGE TO MINIMUM RATIO FOR THE DETERMINATION OF UNIFORMITY.
- PUBLIC STREET LIGHTING IS EXEMPT OF MAXIMUM ALLOWABLE LIGHT LEVELS AT THE PROPERTY LINE.
- FIXTURE TO BE FULL CUTOFF.
- FIXTURE SHALL BE LED WITH A MINIMUM COLOR RENDERING INDEX (CRI) VALUE OF 70 OR BETTER.
- FIXTURE SHALL HAVE A "WHITE LIGHT" CORRELATED COLOR TEMPERATURE NOT EXCEEDING 4,000K (DEGREES KELVIN).
- POLE/FIXTURE SHALL BE LOCATED OUTSIDE LANDSCAPE ISLANDS.
- FIXTURE MOUNTING HEIGHT NO GREATER THAN 37 FEET ABOVE GRADE.
- AVERAGE MAXIMUM SPACING BETWEEN STREET LIGHTS SHALL BE 300 FT.
- MINIMUM INITIAL DELIVERED LUMEN LEVELS SHALL BE 28,500 LUMENS.
- BUG RATING SHALL NOT EXCEED B3, U3, AND G3.
- LIGHTS SHALL BE ALTERNATELY STAGGERED ON EACH SIDE OF THE STREET.
- LIGHTING SHALL BE PLACED AT ALL STREET INTERSECTIONS, IN STREET CURVES, AND AT THE END OF ANY STREET.

GENERAL PARKING LOT LIGHTING STANDARDS

- FIXTURE TO BE FULL CUTOFF.
- FIXTURE SHALL BE LED WITH A MINIMUM COLOR RENDERING INDEX (CRI) VALUE OF 70 OR BETTER. THE FIXTURE MAY ALSO NOT EXCEED A COLOR TEMPERATURE OF 4,000K.
- POLE/FIXTURE SHALL BE LOCATED OUTSIDE LANDSCAPE ISLANDS.
- FIXTURE MOUNTING HEIGHT NO GREATER THAN 37 FEET ABOVE GRADE.
- ALL OUTDOOR LIGHTING FIXTURES SHALL BE DESIGNED AND LOCATED SUCH THAT THE MAXIMUM LIGHT LEVEL SHALL BE 0.5 MAINTAINED FC AT ANY PROPERTY LINE UNLESS OTHERWISE PERMITTED BY THIS CHAPTER OR WHERE THE REQUIRED BY THE NC BUILDING CODE AS A COMPONENT OF THE MINIMUM REQUIREMENTS FOR A MEANS OF EGRESS SYSTEM.
- OUTDOOR PARKING FACILITIES MINIMUM LIGHT LEVEL SHALL BE NO LESS THAN 0.6 FOOT CANDLES.
- LED OR OTHER BUG-RATED FIXTURES EXCEEDING 7,250 INITIAL DELIVERED LUMENS OR 9,000 SOURCE LUMENS AS MAY APPLY, SHALL NOT EXCEED A RATING OF B3, U0, AND G2 FOR PARKING LOTS AND GENERAL SITE LIGHTING.
- PARKING AREA LIGHTING FIXTURES WITHIN 25 FEET OF ANY PUBLIC STREET RIGHT-OF-WAY OR ADJACENT TO RESIDENTIAL PROPERTY LINE MUST BE A FORWARD THROW FIXTURE (TYPE IV LIGHT DISTRIBUTION AS DEFINED BY IESNA).
- ADDITIONAL SHIELDING MAY BE NECESSARY IN ACCORDANCE WITH CHAPTER 11.4.G ONCE LIGHTS ARE INSTALLED IN SPILLAGE OR GLARE IS AN ISSUE.

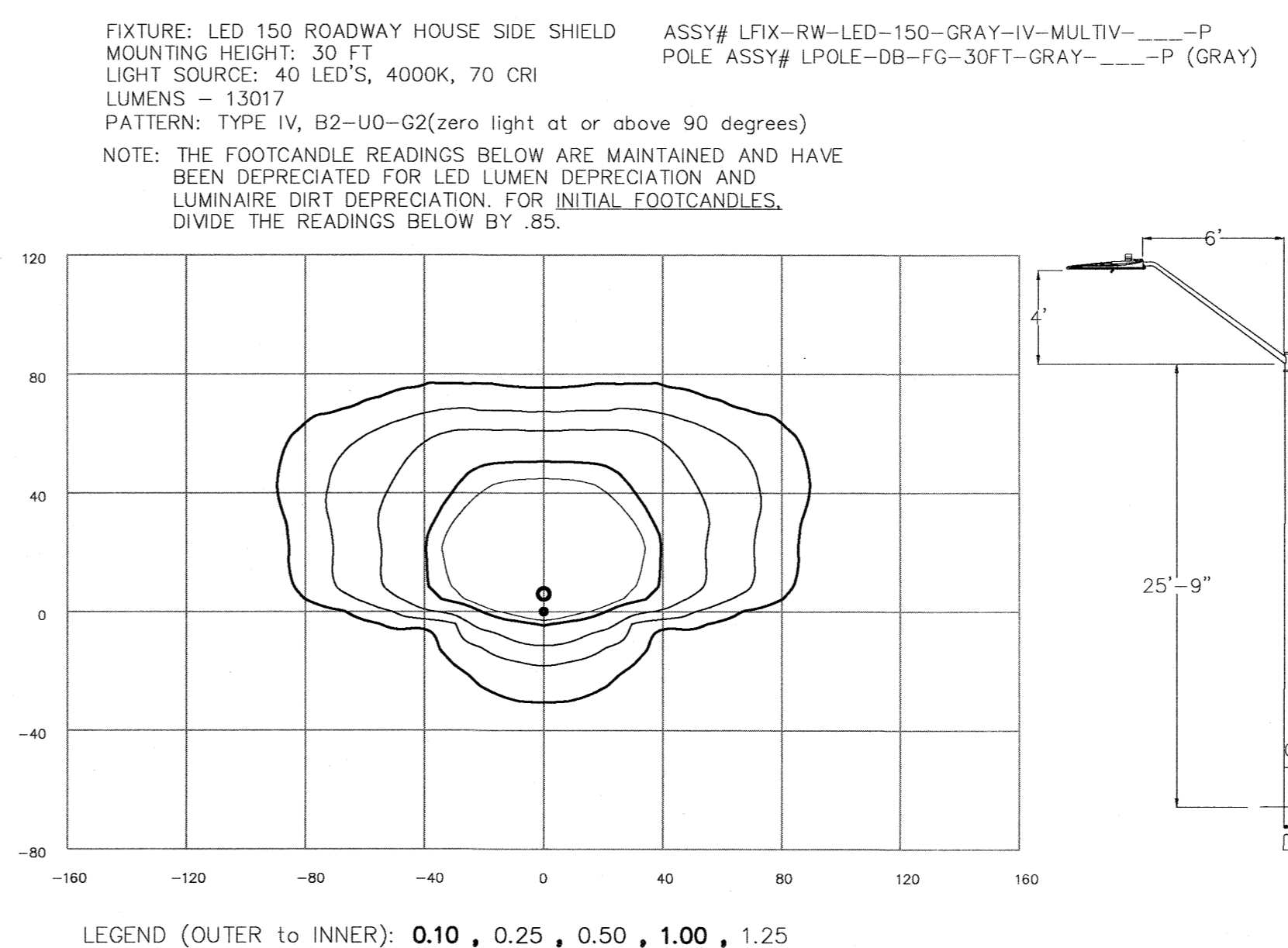
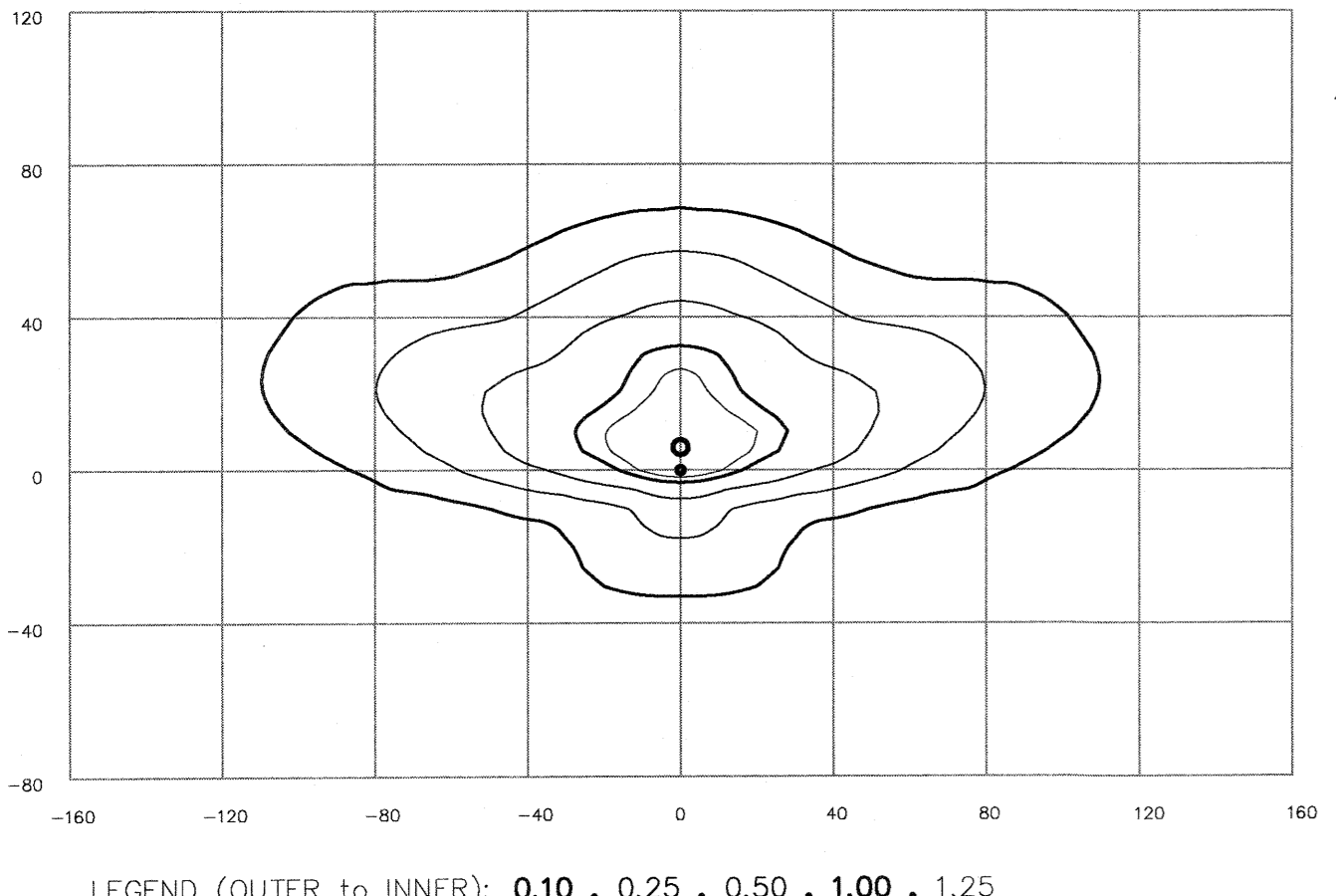
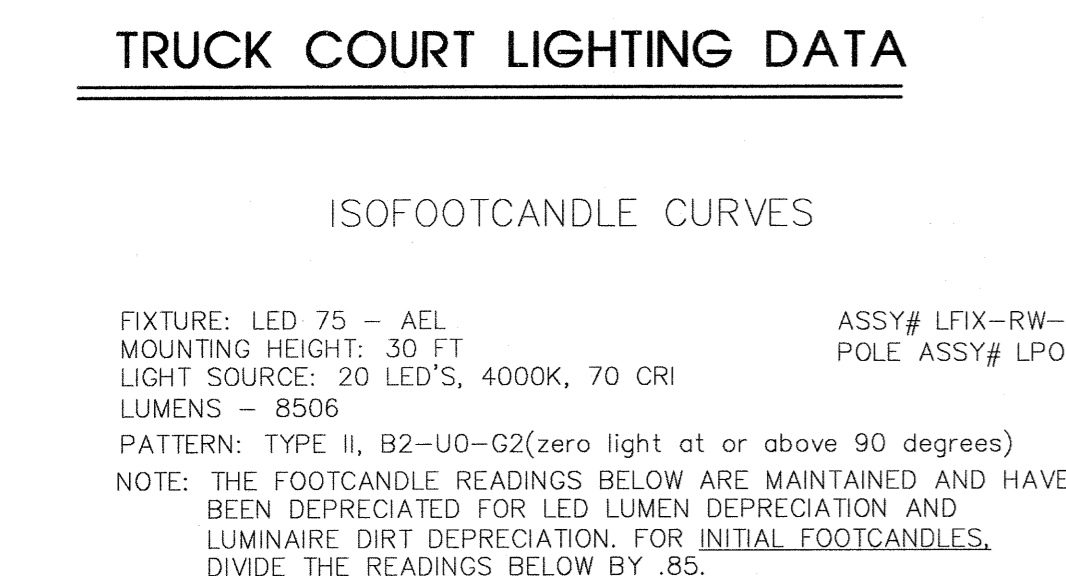
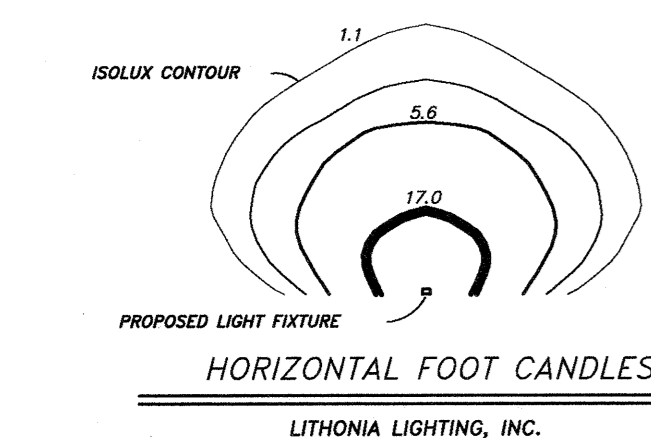
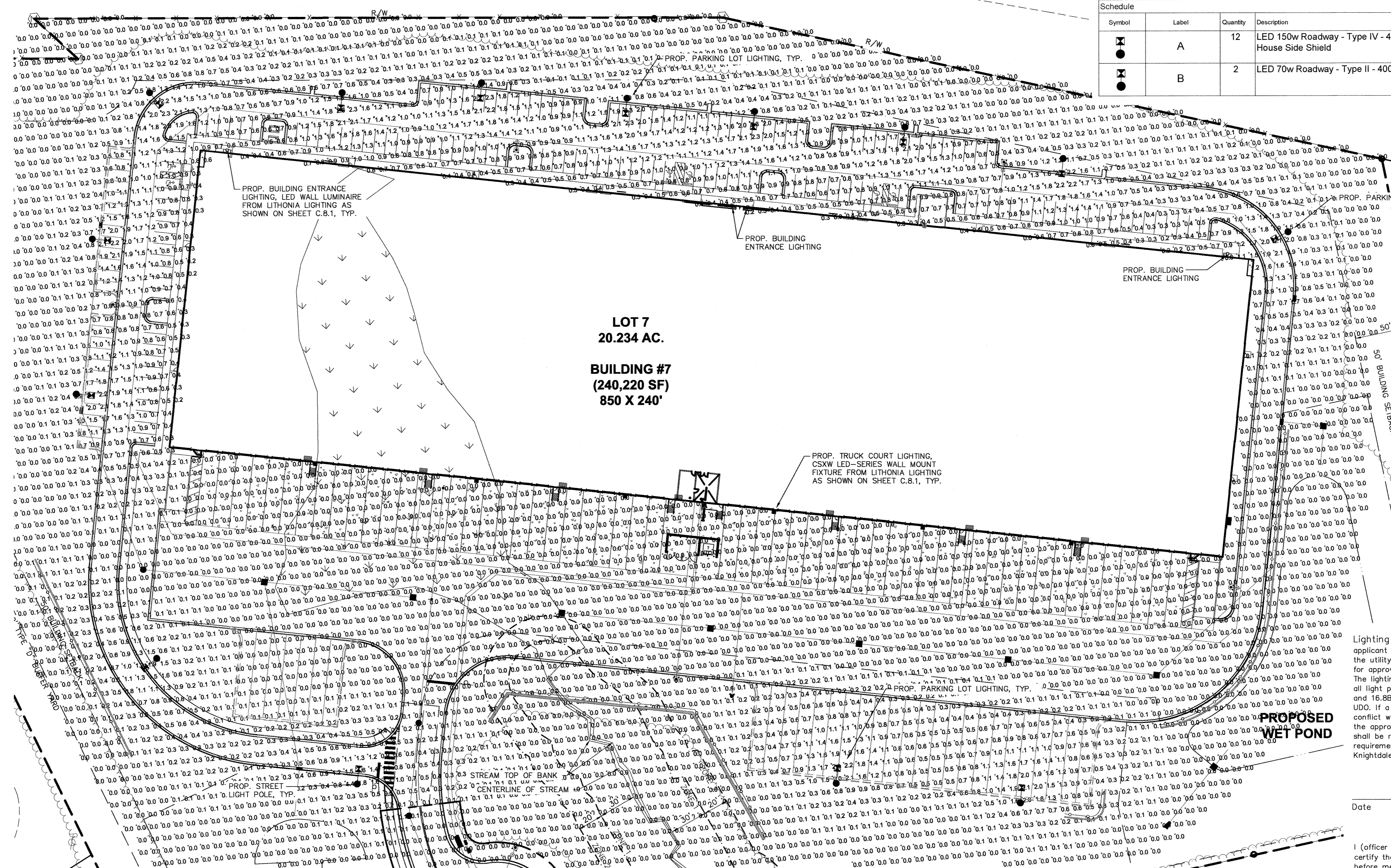
Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Parking	⊗	1.1 fc	2.3 fc	0.3 fc	7.7:1	3.7:1

Schedule

Symbol	Label	Quantity	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor
⊗	A	12	LED 150w Roadway - Type IV - 4000K - House Side Shield	1	13017	0.85
⊗	B	2	LED 70w Roadway - Type II - 4000K	1	8506	0.85

I-87/US 64E EXPRESSWAY (R/W VARIES)



Lighting Plan Certification: I hereby certify I am the applicant and that a Lighting Plan shall be submitted by the utility provider to the Knightdale Planning Department for approval prior to the installation of all required lighting. The lighting plan shall designate the proposed locations of all light poles and shall be in compliance with sections 8.10 and 16.8B as well as Chapter 11 of the Town of Knightdale UDO. If a proposed light pole location should present a conflict with existing or proposed vegetation according to the approved construction drawings, the Landscaping Plan shall be revised to comply with the Town of Knightdale UDO requirements. All revisions are subject to Town of Knightdale approval.

Date: _____ Applicant: _____
 I (officer authorized to take acknowledgments) do hereby certify that _____ personally appeared before me this day and acknowledged the due execution of this certificate. Witness my hand and (where an official seal is required by law) official seal this _____ day of _____ A.D., _____ year.
 Official Seal: _____ Notary: _____
 Commission Expires: _____

PLAN PREPARED BY: **ADVANCED CIVIL DESIGN ENGINEERS SURVEYORS**
 91 Klemm Drive, Suite 102
 Cary, North Carolina 27510
 PH 919-461-0290
 FAX 919-336-9127
 License # C-2790

PLAN PREPARED FOR: **TRINITY CAPITAL**
 390 Spectrum Drive, Knightdale, NC 27545 - Wake County

EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
FOR
TRINITY CAPITAL ADVISORS, LLC
LIGHTING PLAN

Issue Dates:
 06/11/2021 - PROGRESS SET TO CONTRACTOR
 06/18/2021 - TOWN SUBMITTAL #1
 08/10/2021 - TOWN SUBMITTAL #2
 09/14/2021 - TOWN SUBMITTAL #3
 10/04/2021 - TOWN SUBMITTAL #4

Date: 10/04/2021
 Scale: 1" = 50'

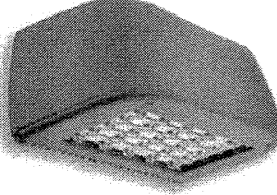
Drawn By: JLB
 Checked By: CMR

Project Number:
20-0006-988

Drawing Number:
C.8.0

Town Certification: This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.
 By: *[Signature]* Date: 10.13.21
 Development Services Engineer
 These plans are approved by the Town of Knightdale and serve as construction plans for this project.
 By: *[Signature]* Date: 10.13.21
 Administrator

CSXW LED LED Wall Luminaire



Specifications

Height: 2'-10" (610mm)
 Width: 16'-3/4" (414mm)
 Depth: 9.5" (241mm)
 Weight: 30 lbs (13.6kg)
 Inset: 2 1/2" (63.5mm)

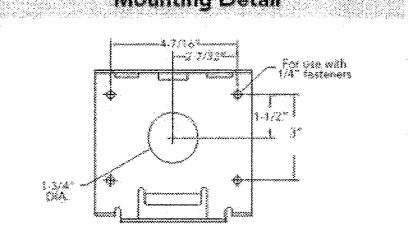
Introduction

The Contour™ Series luminaires offer traditional square fixtures with softened edges for a versatile look that complements many applications. The CSXW LED combines the latest in LED technology with the familiar aesthetic of the Contour™ Series for stylish, high-performance illumination that lasts. It is ideal for replacing 100-400W metal halide in wall-mounted applications with typical energy savings of 80% and expected service life of over 100,000 hours.

Ordering Information EXAMPLE: CSXW LED 300 700 40K T3M MVOLT DOBXD

Order #	LED	Power	Color	Temp	Beam	Mount	Finish
CSXWLED	300	700	40K	T3M	MVOLT	DOBXD	

Mounting Detail



Accessories

- CSXWLED-0100: Back box for outdoor applications, dark bronze
- CSXWLED-0101: Back box for outdoor applications, white

Notes

- Configure with CSXWLED-0100 or CSXWLED-0101 for outdoor use.
- LEDs are mounted on the luminaire body. Do not touch the LEDs.
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Performance Data

Lumen Output

Temp	Beam	Power	LM/W	LM/Ft²	LM/Ft
3000K	30°	700W	114	12.5	1.5

Lumen Ambient Temperature Multipliers

Temp	Multiplier
30°C	1.00
35°C	0.95
40°C	0.90
45°C	0.85
50°C	0.80

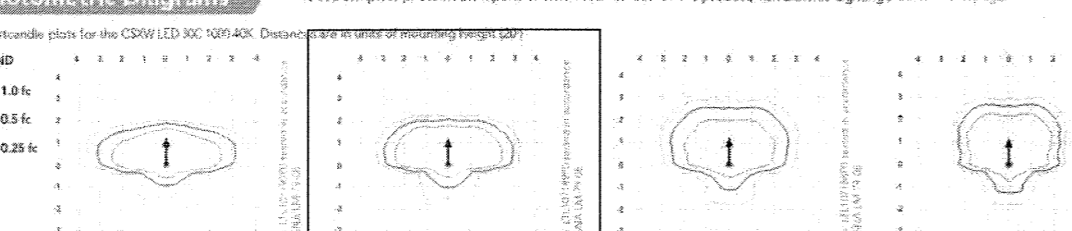
Projected LED Lumen Maintenance

Temp	Beam	Power	LM/W	LM/Ft²	LM/Ft
3000K	30°	700W	114	12.5	1.5

Electrical Load

Temp	Beam	Power	VA	W	PF
3000K	30°	700W	1000	700	0.70

Photometric Diagrams



FEATURES & SPECIFICATIONS

INTENDED USE

Commercial and industrial applications for wall mounting.

CONSTRUCTION

Die-cast aluminum housing with integral mounting arm.

LED'S


High quality LED chips with 50,000 hour life expectancy.

OPTICS

Optimized beam spread for uniform illumination.

One Lithonia Way • Corvallis, Georgia 30012 • Phone: 800.279.8041 • www.lithonia.com

LIL LED LED Wall Luminaire



Specifications

Standard: 5" (127mm)
 With Battery Pack (EL): 5-7/8" (149mm)

Height: 5-1/8" (133mm)
 Depth: 2-3/4" (70mm)
 Weight: 1.5 lbs (0.7kg)

Introduction

LIL LED is a compact and energy efficient wall luminaire ideal for replacing small incandescent and CFL luminaires. Photocell and battery pack options make LIL LED great for installations above doors, balconies, garage or warehouse entrances, and security applications. Whether directly mounting to a recessed junction box, or using the back box accessory for conduit entry/through wiring, LIL LED has you covered!

Ordering Information EXAMPLE: LIL LED 40K MVOLT WH

Order #	LED	Power	Color	Temp	Beam	Mount	Finish
LILLED	40K	MVOLT	WH				

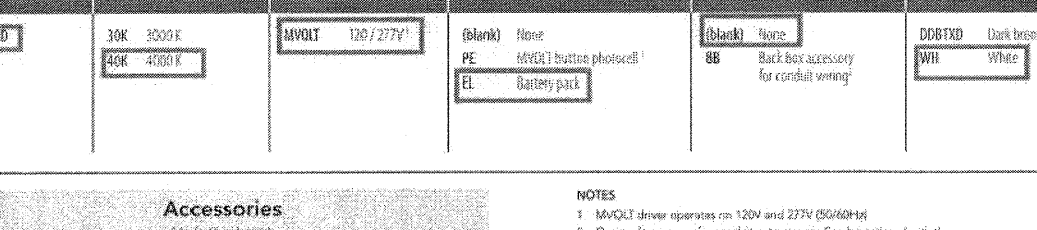
Accessories

- LILLED-0100: Back box for outdoor applications, dark bronze
- LILLED-0101: Back box for outdoor applications, white

Notes

- Configure with LILLED-0100 or LILLED-0101 for outdoor use.
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Photometric Diagrams



FEATURES & SPECIFICATIONS

INTENDED USE

Commercial and industrial applications for wall mounting.

CONSTRUCTION

Die-cast aluminum housing with integral mounting arm.

LED'S

High quality LED chips with 50,000 hour life expectancy.

OPTICS

Optimized beam spread for uniform illumination.

One Lithonia Way • Corvallis, Georgia 30012 • Phone: 800.279.8041 • www.lithonia.com

Performance Data

Lumen Output

Temp	Beam	Power	LM/W	LM/Ft²	LM/Ft
3000K	30°	40W	100	11.0	1.4

Lumen Ambient Temperature Multipliers

Temp	Multiplier
30°C	1.00
35°C	0.95
40°C	0.90
45°C	0.85
50°C	0.80

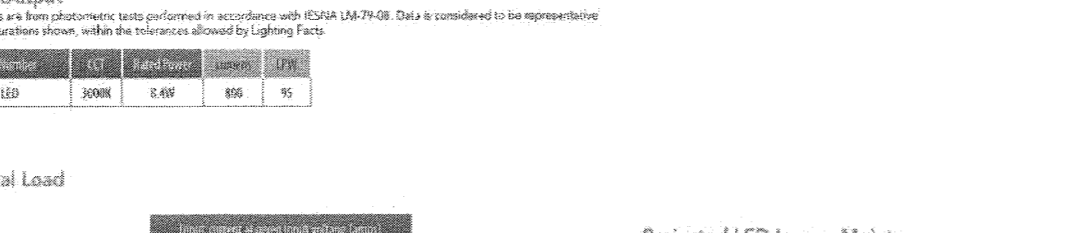
Projected LED Lumen Maintenance

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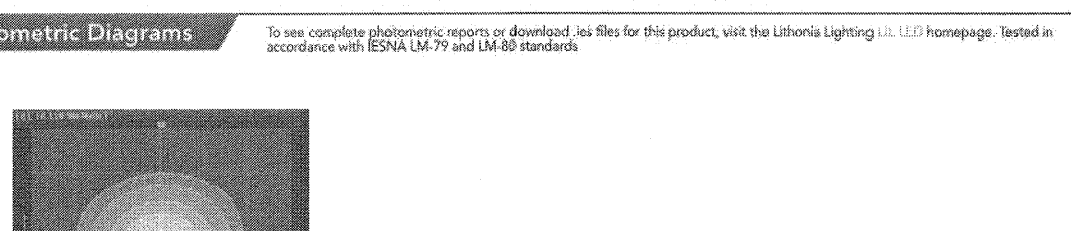
Electrical Load

Temp	Beam	Power	VA	W	PF
3000K	30°	40W	50	40	0.80

Lighting Facts Labels



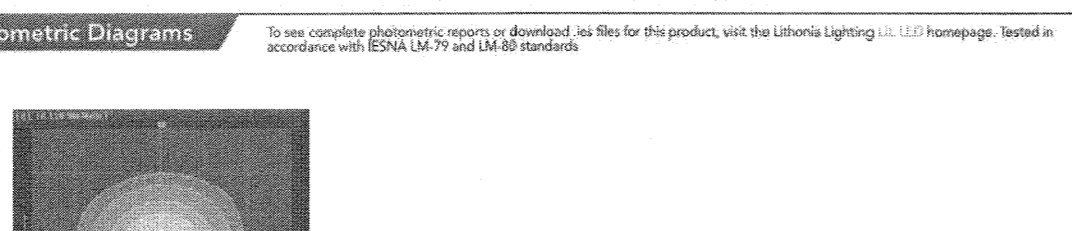
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Photometric Diagrams




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Photometric Diagrams



FEATURES & SPECIFICATIONS

INTENDED USE

Commercial and industrial applications for wall mounting.

CONSTRUCTION

Die-cast aluminum housing with integral mounting arm.

LED'S

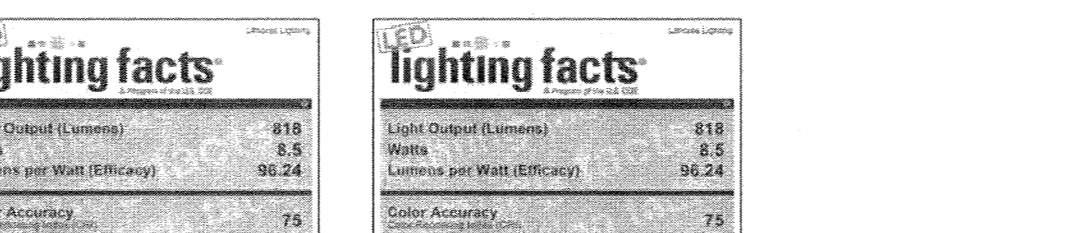
High quality LED chips with 50,000 hour life expectancy.

OPTICS

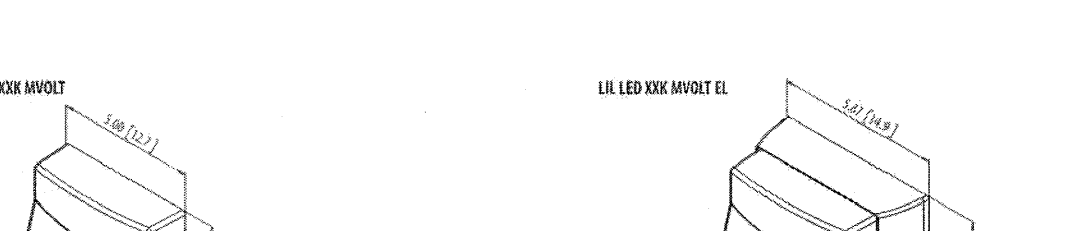
Optimized beam spread for uniform illumination.

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Lighting Facts Labels



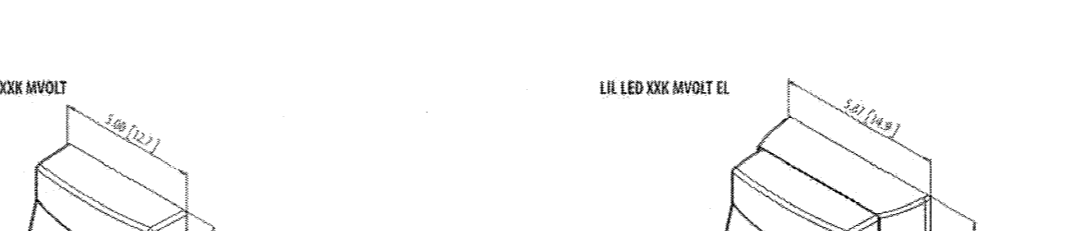
Photometric Diagrams



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Photometric Diagrams



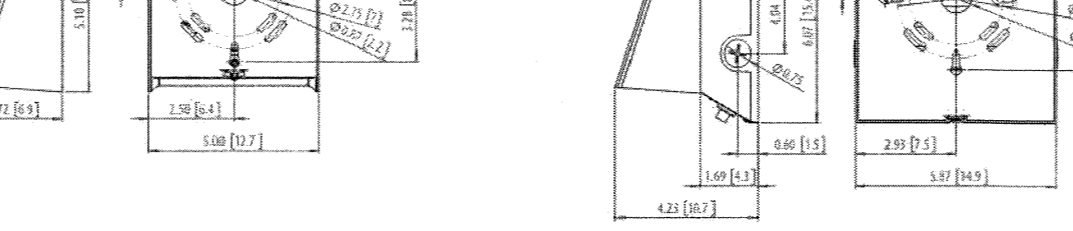
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Photometric Diagrams



FEATURES & SPECIFICATIONS

INTENDED USE

Commercial and industrial applications for wall mounting.

CONSTRUCTION

Die-cast aluminum housing with integral mounting arm.

LED'S

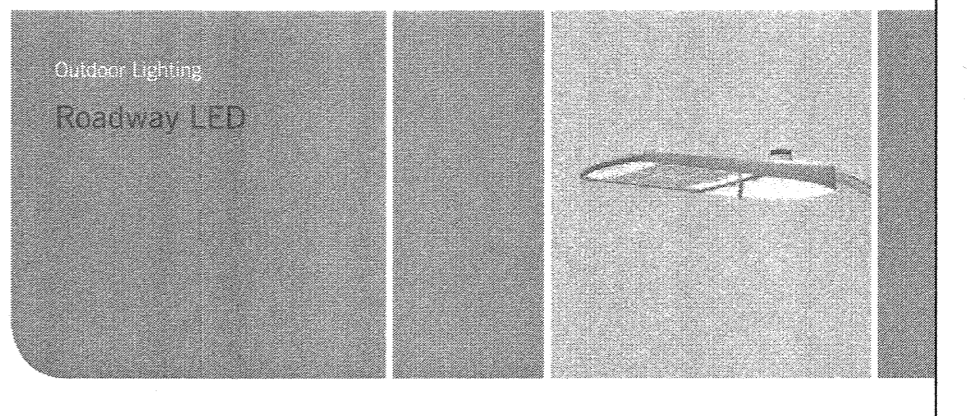
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OPTICS

Optimized beam spread for uniform illumination.

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Outdoor Lighting Roadway LED



Light Source: LED (integrated)

Lumens: 4,000 - 25,000 (actual dependent)

Color Temperature: 4,000K

Warm up and cool down time: Instant on (no warm-up or cool-down)

Color Rendering Index: 90+ (actual dependent)

Beam Spread: 30°

Mounting Height: 25' - 35'

Color: Black

Material: Steel (optional conditions) Wood

Poles available:

Material	Mounting Height	Color
Steel	25, 30, 35	Black (additional cost)
Wood	25, 30, 35	Standard
Aluminum	25, 30, 35	Gray

Features:

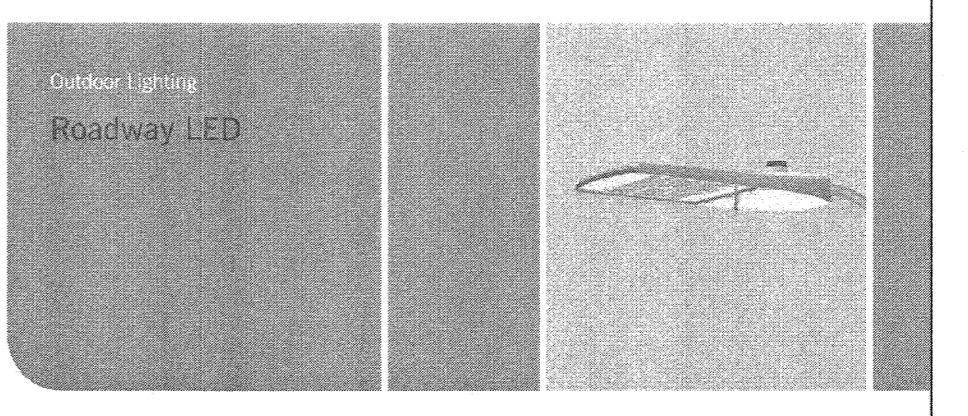
- Little to no installation cost.
- Design services by lighting professionals included.
- Electricity included.
- Maintenance included.
- Warranty included.
- Backed by over 40 years of experience.

Benefits:

- Free-up capital for other projects.
- Meets industry standards and lighting ordinances.
- Eliminates high and unexpected repair bills.
- Less expensive than traditional service.
- Why? Yes.
- Convenience and savings for you.
- Provides hassle-free installation and service.
- A name you can trust today... and tomorrow.

PARKING LOT LIGHTING CUT SHEETS

ROADWAY LIGHTING CUT SHEETS



Light Source: LED (integrated)

Lumens: 4,000 - 25,000 (actual dependent)

Color Temperature: 4,000K

Warm up and cool down time: Instant on (no warm-up or cool-down)

Color Rendering Index: 90+ (actual dependent)

Beam Spread: 30°

Mounting Height: 25' - 35'

Color: Black

Material: Steel (optional conditions) Wood

Poles available:

Material	Mounting Height	Color
Steel	25, 30, 35	Black (additional cost)
Wood	25, 30, 35	Standard
Aluminum	25, 30, 35	Gray

Features:

- Little to no installation cost.
- Design services by lighting professionals included.
- Electricity included.
- Maintenance included.
- Warranty included.
- Backed by over 40 years of experience.

Benefits:

- Free-up capital for other projects.
- Meets industry standards and lighting ordinances.
- Eliminates high and unexpected repair bills.
- Less expensive than traditional service.
- Why? Yes.
- Convenience and savings for you.
- Provides hassle-free installation and service.
- A name you can trust today... and tomorrow.

Lighting Plan Certification: I hereby certify I am the applicant and that a Lighting Plan shall be submitted by the utility provider to the Knightdale Planning Department for approval prior to the installation of all required lighting. The lighting plan shall designate the proposed locations of all light poles and shall be in compliance with sections 8.10 and 16.5B as well as Chapter 11 of the Town of Knightdale UDC. If a proposed light pole location should present a conflict with existing or proposed vegetation according to the approved construction drawings, the Landscaping UDO shall be revised to comply with the Town of Knightdale UDO requirements. All revisions are subject to Town of Knightdale approval.

Date: _____ Applicant: _____

I (officer authorized to take acknowledgments) do hereby certify that _____ personally appeared before me this day and acknowledged the due execution of this certificate. Witness my hand and (where an official seal is required by law) official seal this _____ day of _____ A.D., _____ year.

Official Seal: _____ Notary: _____

Commission Expires: _____

Town Certification: This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: *Sarah M. [Signature]* Date: 10.12.2021
 Development Services Engineer

By: *[Signature]* Date: 10.13.21
 Administrator

ZMA-10-20

Issue Date: 06/11/2021 - PROGRESS SET TO CONTRACTOR
 06/18/2021 - TOWN SUBMITTAL #1
 08/10/2021 - TOWN SUBMITTAL #2
 09/14/2021 - TOWN SUBMITTAL #3
 10/04/2021 - TOWN SUBMITTAL #4

Date: 10/04/2021
 Scale: NOT TO SCALE

Drawn By: JLB
 Checked By: CMR

Project Number: 20-0006-988

Drawing Number: C.8.1

C:\19-001-988NC\DWG\Production Drawings\SITE CONSTRUCTION BUILDING #7 CONSTRUCTION PLANS\001-988NC\001.dwg LIGHTING DETAILS Oct 04, 2021 2:03:34pm cfc

390 Spectrum Drive, Knightdale, NC 27545 - Wake County

EASTGATE 540

BUILDING #7 CONSTRUCTION PLANS

FOR

TRINITY CAPITAL ADVISORS, LLC

LIGHTING DETAILS

PLAN PREPARED BY: TRINITY CAPITAL

PLAN PREPARED FOR: EASTGATE 540

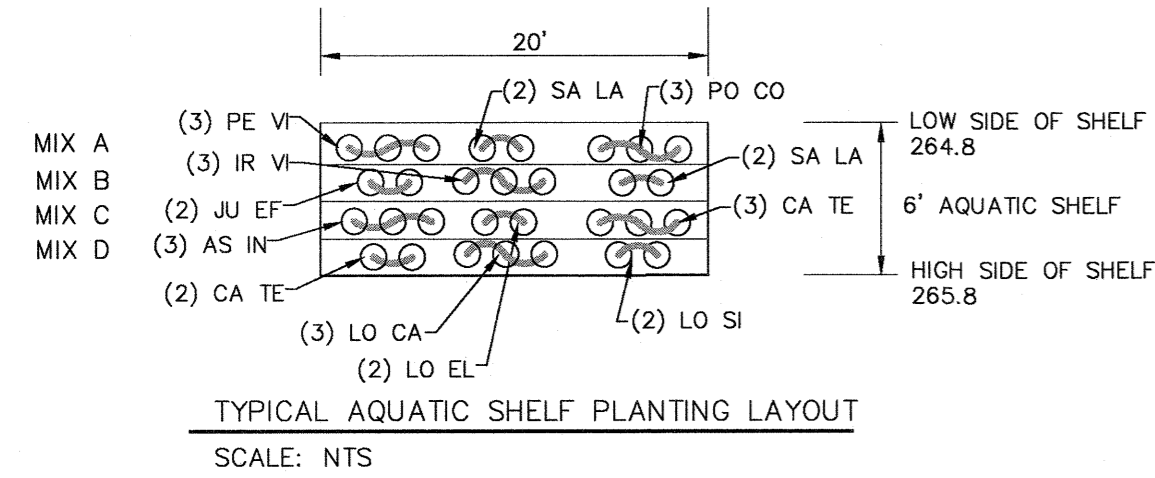
51 Kilmorye Drive, Suite 102
 Cary, North Carolina 27513
 ph 919.461.6690
 fax 919.461.6699
 Firm License # CC-2798

ADVANCED CIVIL DESIGN ENGINEERS

PROFESSIONAL ENGINEER

PAUL W. MERRITT

10/04/2021

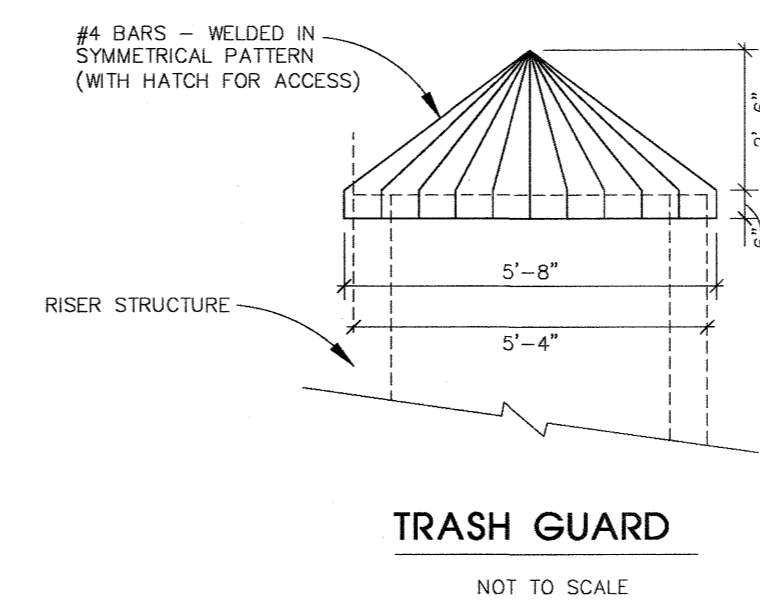
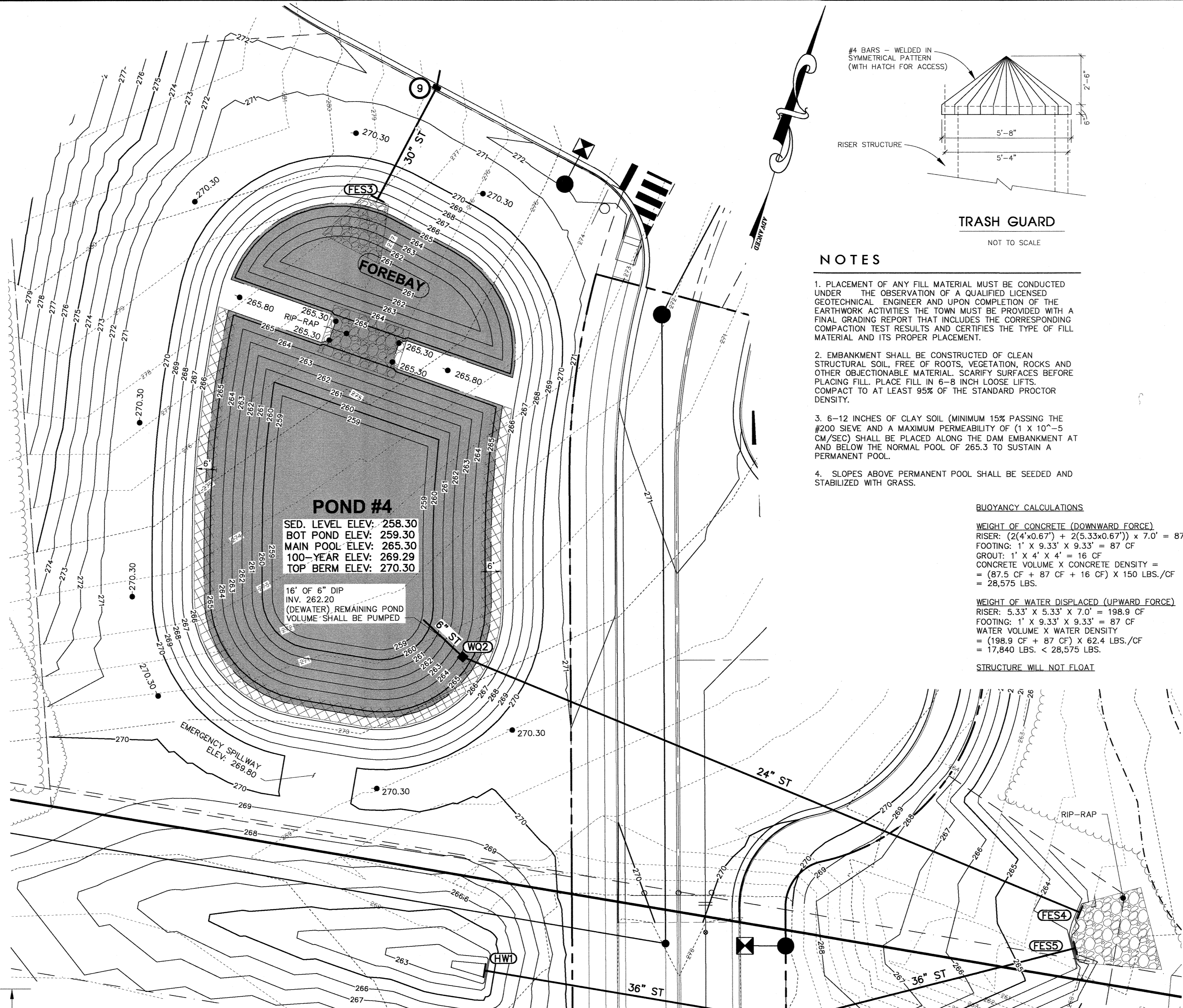


CODE	QTY.	BOT. NAME / COMMON NAME	SIZE	COND	SPACING
MIX A EMERGENT DEEP (6"-3" BELOW WATER LEVEL)					
PE VI	41	Peltandra virginica	18"	plug	24" o.c.
		Arrow Arum			Field Locate
SA LA	27	Sagittaria latifolia	9"	plug	24" o.c.
		Broad-Leaf Arrowhead			Field Locate
PO CO	41	Pontederia cordata	9"	plug	24" o.c.
		Pickering Weed			Field Locate
MIX B EMERGENT SHALLOW (3"-0" BELOW WATER LEVEL)					
IR VI	41	Iris virginica	18"	plug	24" o.c.
		Blue Flag Iris			Field Locate
JU EF	27	Juncus effusus	9"	plug	24" o.c.
		Common Rush			Field Locate
SA LA	27	Sagittaria latifolia	9"	plug	24" o.c.
		Broad-Leaf Arrowhead			Field Locate
MIX C EDGE (0"-3" ABOVE WATER LEVEL)					
AS IN	41	Asclepias incarnata	24"	plug	24" o.c.
		Swamp Milkweed			Field Locate
CA TE	41	Carex Tenara	18"	plug	24" o.c.
		Quill Sedge			Field Locate
LO EL	27	Labelia Elongata	18"	plug	24" o.c.
		Longleaf Labelia			Field Locate
MIX D SATURATED (3"-8" ABOVE WATER LEVEL)					
CA TE	27	Carex Tenara	18"	plug	24" o.c.
		Quill Sedge			Field Locate
LO CA	41	Labelia cardinalis	18"	plug	24" o.c.
		Cardinal Flower			Field Locate
LO SI	27	Labelia siphilitica	24"	plug	24" o.c.
		Great Blue Labelia			Field Locate

NOTE: SIZE INDICATED AT TIME OF PLANTING.

STORMWATER MANAGEMENT SUMMARY - ANALYSIS POINT #1

RETURN EVENT (YR)	PRE-DEV. RELEASE RATE (CFS)	POST-DEV. RELEASE RATE (CFS)	STORAGE PROVIDED IN POND (CF)	MAX. WATER SURFACE IN POND ELEV. (FT)
1	6.18	0.21	21,721	267.09
2	12.95	0.70	26,012	267.41
10	43.99	13.18	39,176	268.32
100	92.86	33.05	55,297	269.34



- NOTES**
1. PLACEMENT OF ANY FILL MATERIAL MUST BE CONDUCTED UNDER THE OBSERVATION OF A QUALIFIED LICENSED GEOTECHNICAL ENGINEER AND UPON COMPLETION OF THE EARTHWORK ACTIVITIES THE TOWN MUST BE PROVIDED WITH A FINAL GRADING REPORT THAT INCLUDES THE CORRESPONDING COMPACTION TEST RESULTS AND CERTIFIES THE TYPE OF FILL MATERIAL AND ITS PROPER PLACEMENT.
 2. EMBANKMENT SHALL BE CONSTRUCTED OF CLEAN STRUCTURAL SOIL, FREE OF ROOTS, VEGETATION, ROCKS AND OTHER OBJECTIONABLE MATERIAL. SCARIFY SURFACES BEFORE PLACING FILL. PLACE FILL IN 6-8 INCH LOOSE LIFTS. COMPACT TO AT LEAST 95% OF THE STANDARD PROCTOR DENSITY.
 3. 6-12 INCHES OF CLAY SOIL (MINIMUM 15% PASSING THE #200 SIEVE AND A MAXIMUM PERMEABILITY OF (1×10^{-5}) CM/SEC) SHALL BE PLACED ALONG THE DAM EMBANKMENT AT AND BELOW THE NORMAL POOL OF 265.3 TO SUSTAIN A PERMANENT POOL.
 4. SLOPES ABOVE PERMANENT POOL SHALL BE SEEDED AND STABILIZED WITH GRASS.

BUOYANCY CALCULATIONS

WEIGHT OF CONCRETE (DOWNWARD FORCE)
RISER: $(2'4" \times 0.67') \times 2(5.33 \times 0.67') \times 7.0' = 87.5$ CF
FOOTING: $1' \times 9.33' \times 9.33' = 87$ CF
GROUT: $1' \times 4' \times 4' = 16$ CF
CONCRETE VOLUME X CONCRETE DENSITY = $(87.5 \text{ CF} + 87 \text{ CF} + 16 \text{ CF}) \times 150 \text{ LBS./CF} = 28,575$ LBS.

WEIGHT OF WATER DISPLACED (UPWARD FORCE)
RISER: $5.33' \times 5.33' \times 7.0' = 198.9$ CF
FOOTING: $1' \times 9.33' \times 9.33' = 87$ CF
WATER VOLUME X WATER DENSITY = $(198.9 \text{ CF} + 87 \text{ CF}) \times 62.4 \text{ LBS./CF} = 17,840$ LBS. < 28,575 LBS.

STRUCTURE WILL NOT FLOAT

WET DETENTION POND; BASIN SIZING, CALCULATIONS, AND REQUIREMENTS

REQUIRED SURFACE AREA FOR PERMANENT POOL

TOTAL DRAINAGE AREA TO BASIN: 8.1 AC
IMPERVIOUS AREA DRAINING TO BASIN: 3.3 AC
PERCENT IMPERVIOUS COVER: 40.7%
MAIN POOL AVG. DEPTH (SUBMERGED - TABLE 1): 4.5 FT
SURFACE AREA/DRAINAGE AREA RATIO (SA/DA): 1.19
REQUIRED SURFACE AREA: SA = $(1.19/100) \times (8.1 \text{ AC}) \times (43,560 \text{ SF/AC}) = 4,199$ SF
PROVIDED SURFACE AREA: SA = 8,726 SF
MAIN POOL SURFACE AREA ELEV: 265.3

SURFACE AREA PROVIDED > SURFACE AREA REQUIRED
8,726 SF > 4,199 SF

AVERAGE DEPTH WHEN SHELF PARTIALLY/FULLY SUBMERGED (EQUATION #3)

Dm = MAXIMUM WATER DEPTH FROM MAIN POOL TO BOTTOM SHELF (FT)
Pp = PERIMETER OF MAIN POOL (FT)
Ws = WIDTH OF SUBMERGED PORTION OF SHELF (FT)
Da = AVERAGE DEPTH (FT)
Vp = MAIN POOL VOLUME (CF)
Vs = SUBMERGED SHELF VOLUME (CF)
Ab = SUBMERGED SHELF AREA (SF)

Vs = $0.5 \cdot Dm \cdot Pp \cdot Ws$
Vs = $0.5 \cdot 0.5 \cdot 360 \cdot 3$
Vs = 270 CF

Da = $[Vp - Vs] / Ab$
Da = $[33,550 - 270] / 7,804$
Da = 4.3

SIMPLE METHOD FOR RUNOFF VOLUME

Rv = RUNOFF COEFFICIENT (UNITLESS)
Io = IMPERVIOUS FRACTION (UNITLESS)
Dd = DESIGN VOLUME (CF)
Rd = DESIGN STORM DEPTH (IN)
A = DRAINAGE AREA (AC)

Rv = $0.05 + 0.9 \cdot (Io)$
Rv = $0.05 + 0.9 \cdot (.41)$
Rv = 0.419

Dv = $3630 \cdot Rd \cdot Rv \cdot A$
Dv = $3630 \cdot 1 \cdot 0.419 \cdot 8.1$
Dv = 12,320 CF

VOLUME FROM 1-INCH PROVIDED BETWEEN ELEVATIONS 265.3 AND 267.2
PROVIDED VOLUME FROM 1" OF RUNOFF = 23,140 CF

VOLUME PROVIDED > VOLUME REQUIRED
23,140 CF > 12,320 CF

SIMPLE METHOD FOR RUNOFF VOLUME REQUIREMENT CALCULATIONS

REQUIREMENT: CONTROL AND TREAT THE DIFFERENCE IN STORMWATER RUNOFF VOLUME LEAVING THE PROJECT SITE BETWEEN THE PRE- AND POST-DEVELOPMENT CONDITIONS FOR, AT A MINIMUM, THE 1-YEAR, 24-HOUR STORM. RUNOFF VOLUME DRAWDOWN TIME SHALL BE BETWEEN 24 AND 120 HOURS.

ANALYSIS POINT #1:
1-YEAR, 24-HOUR PRE-DEVELOPMENT VOLUME: 27,540 CF
1-YEAR, 24-HOUR POST-DEVELOPMENT VOLUME W/O DETENTION: 96,597 CF
REQUIRED VOLUME TO BE CONTROLLED AND TREATED: $(96,597 \text{ CF} - 27,540 \text{ CF}) = 69,057$ CF
VOLUME PROVIDED: POND #4 = 23,140 CF POND #5 = 46,866 TOTAL = 70,006 CF

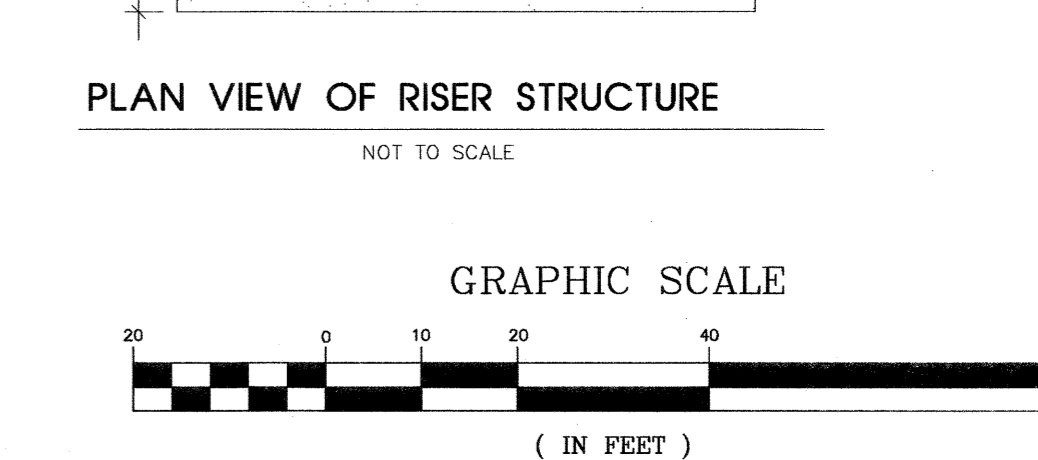
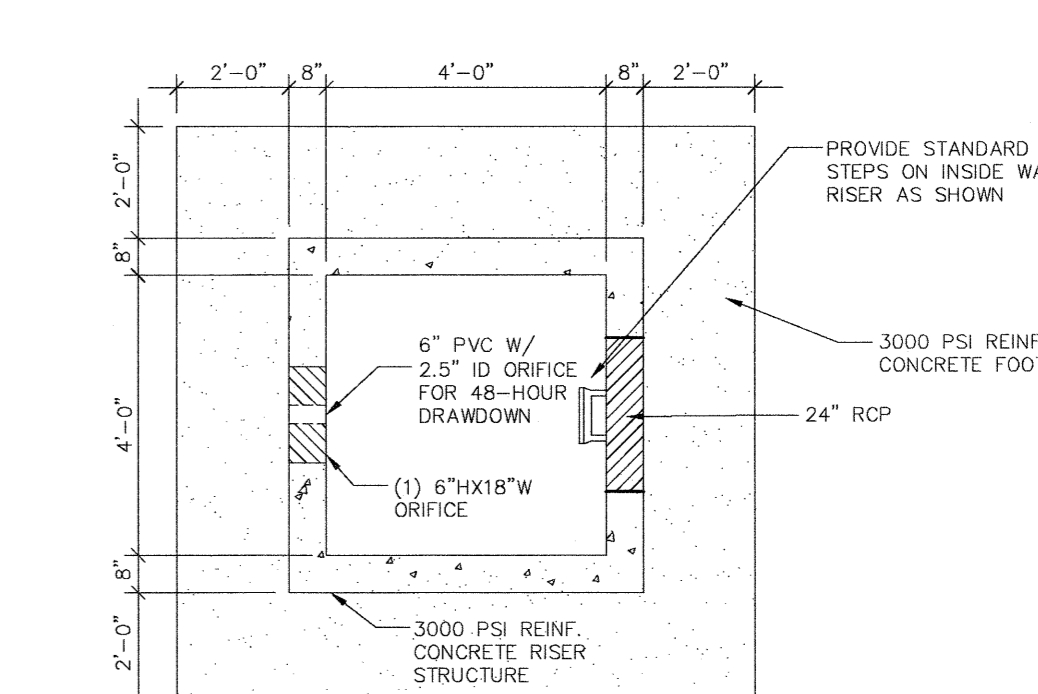
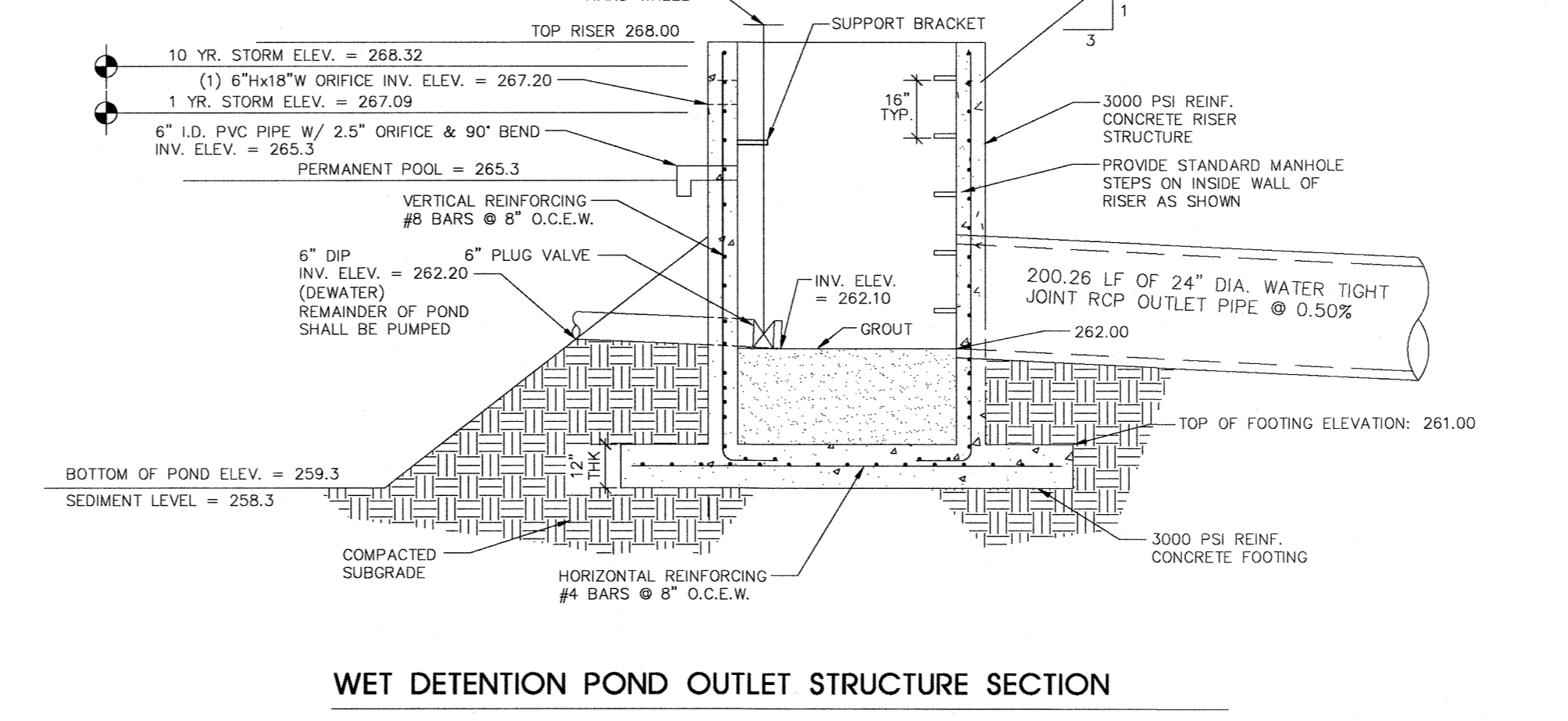
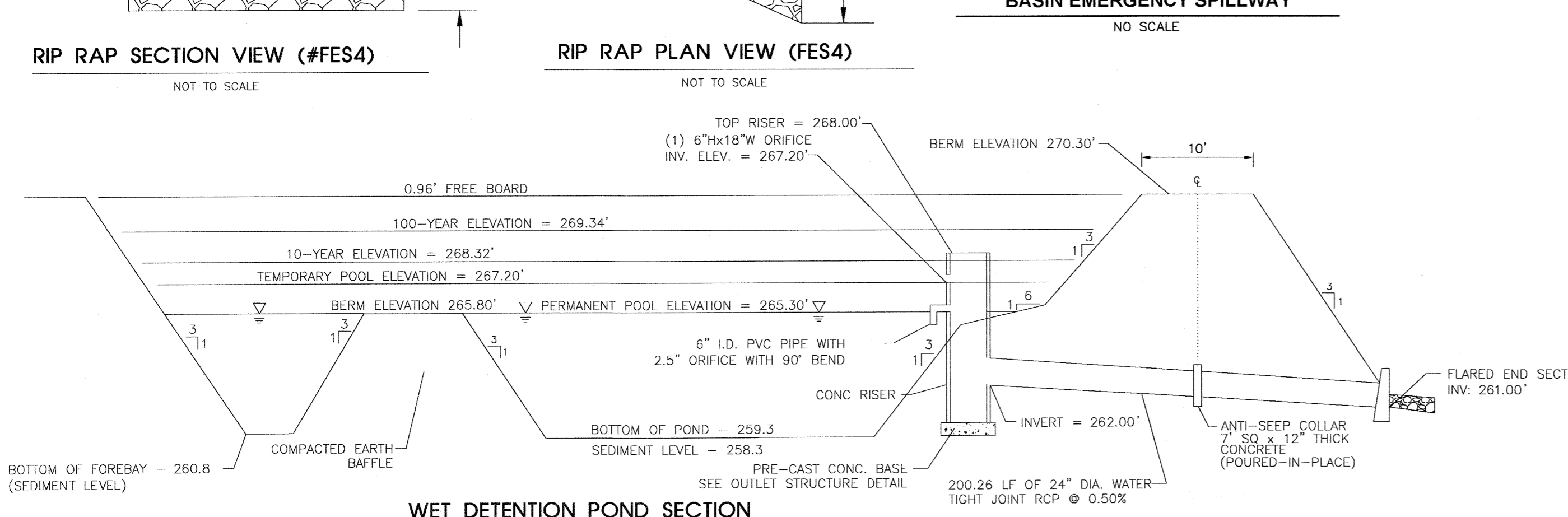
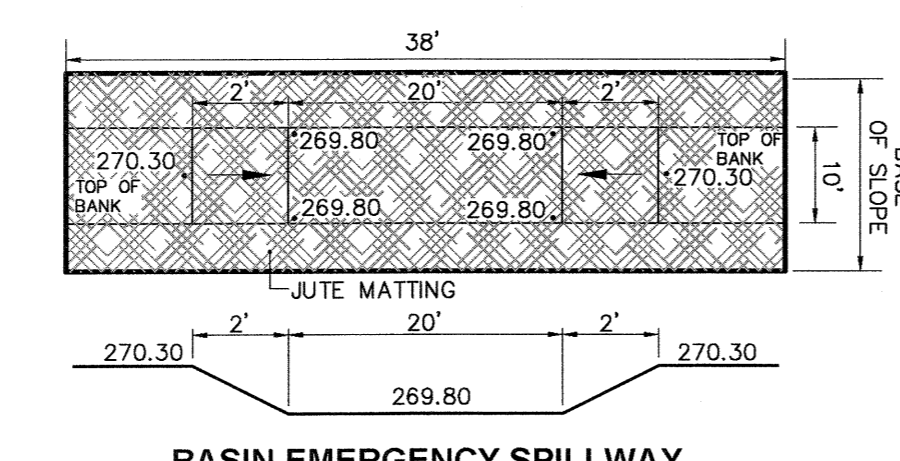
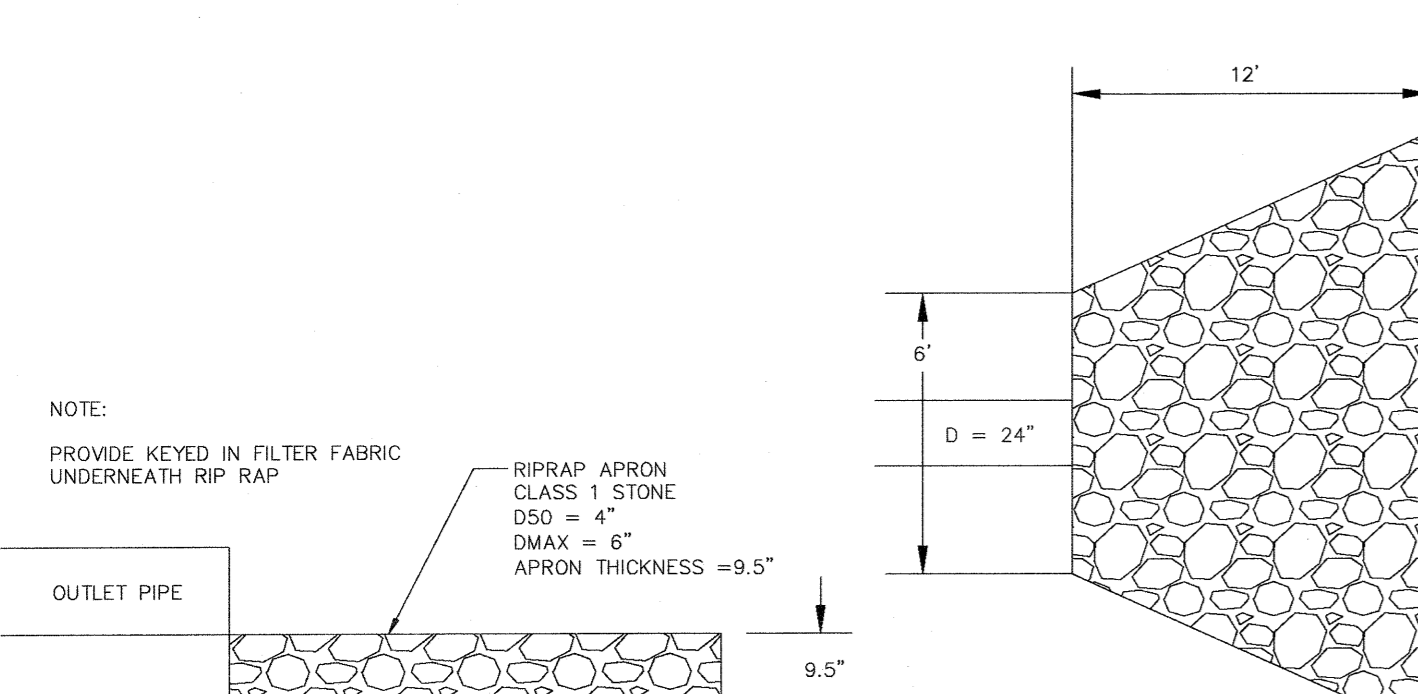
VOLUME DRAWDOWN TIME: 100 HOURS

BASIN REQUIREMENTS

MAIN POND BOTTOM ELEV.: 259.3
MAIN POND BOTTOM SEDIMENT ELEV.: 258.3
FOREBAY BOTTOM ELEVATIONS: 261.8
FOREBAY BOTTOM SEDIMENT ELEV.: 260.8
MAIN POND PERMANENT POOL ELEV.: 265.3
TEMPORARY POOL ELEV.: 267.2
LOWER VEGETATIVE SHELF ELEV.: 264.8
UPPER VEGETATIVE SHELF ELEV.: 265.8
MAIN POND BERM ELEVATION: 270.3
MAIN POND EMERGENCY SPILLWAY ELEV.: 269.8
FOREBAY BERM ELEVATION: 265.8
FOREBAY SPILLWAY ELEV.: 265.3

MAIN POND VOLUME: 33,550 CF (259.3 TO 265.3)
FOREBAY VOLUME: 5,331 CF (261.8 TO 265.3)
FOREBAY VOLUME PERCENTAGE = $5,331 / 33,550 = 15.9\%$

INTERIOR MAIN POOL SIDE SLOPES BELOW PERMANENT POOL: 3:1
INTERIOR BASIN SIDE SLOPES ABOVE PERMANENT POOL: 3:1
EXTERIOR FOREBAY SLOPES: 3:1
EXTERIOR BASIN SIDE SLOPES: 3:1



ZMA-10-20

Town Certification. This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: *[Signature]* Date: 10-12-2021
Development Services Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: *[Signature]* Date: 10-13-21
Administrator

PLAN PREPARED BY: **TRINITY CAPITAL CIVIL DESIGN ENGINEERS**

PLAN PREPARED FOR: **TRINITY CAPITAL**

390 Spectrum Drive, Knightdale, NC 27545 - Wake County

EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
FOR
TRINITY CAPITAL ADVISORS, LLC
WET POND #4 PLAN

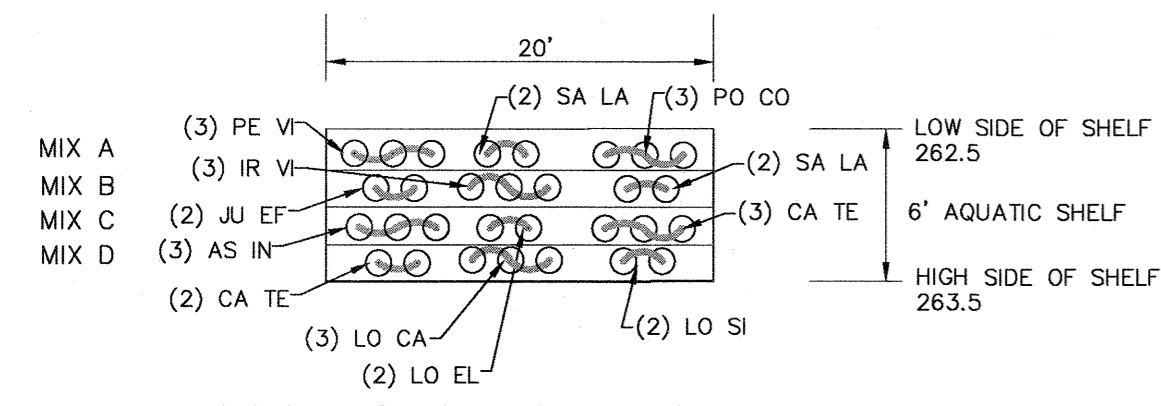
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06/18/2021 - TOWN SUBMITTAL #1
08/10/2021 - TOWN SUBMITTAL #2
08/14/2021 - TOWN SUBMITTAL #3
10/04/2021 - TOWN SUBMITTAL #4

Date: 10/04/2021
Scale: H: 1" = 20'

Drawn By: JLB
Checked By: CMR

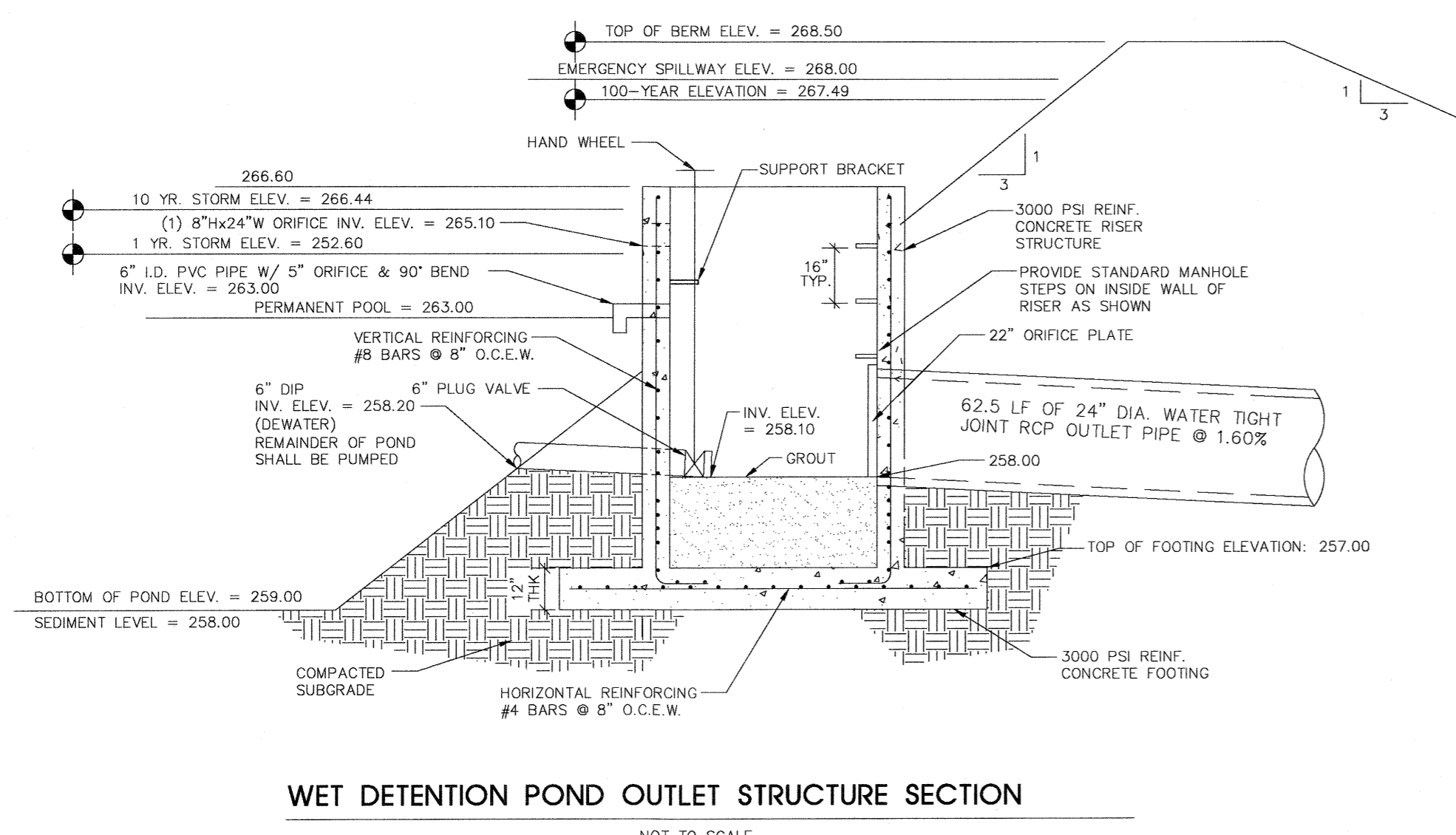
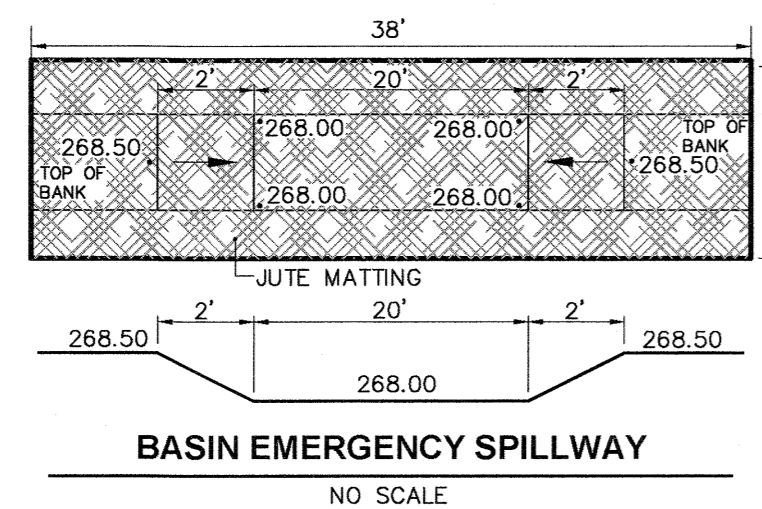
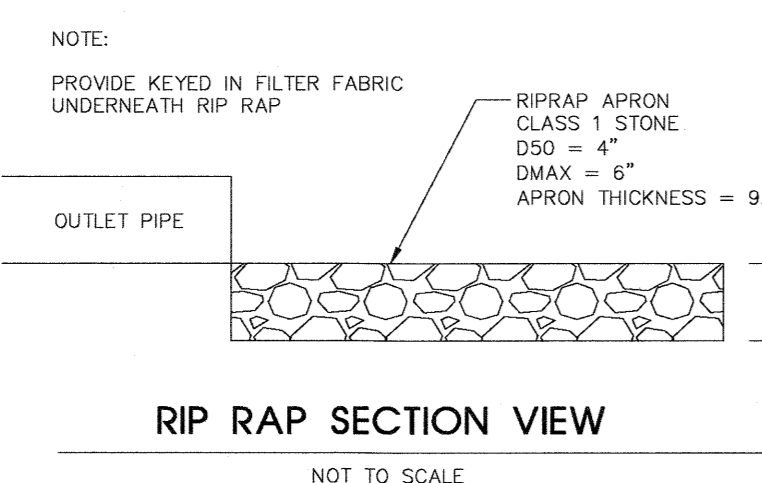
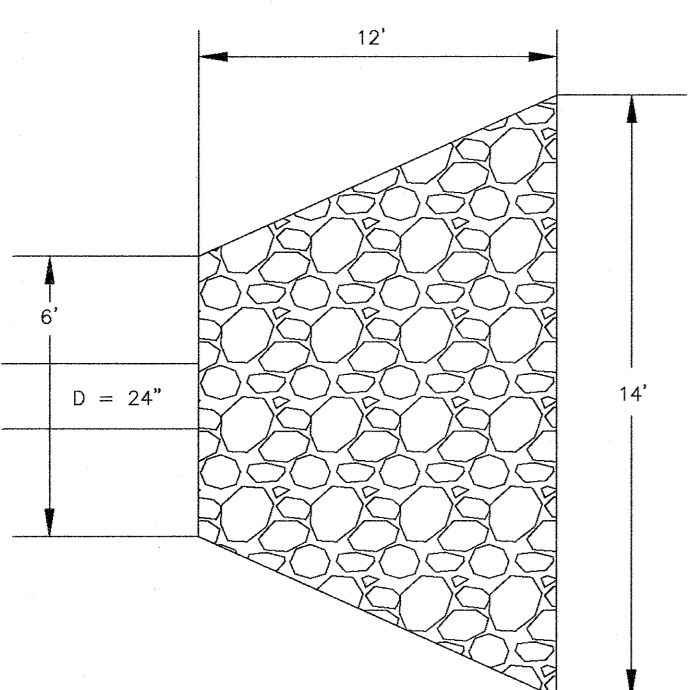
Project Number: 20-0006-988
Drawing Number: C.9.0

NORTH CAROLINA PROFESSIONAL ENGINEER
CABERON M. RICE
028924
10/04/2021



CODE	QTY.	BOT. NAME / COMMON NAME	SIZE	COND	SPACING
MIX A EMERGENT DEEP (6"-3" BELOW WATER LEVEL)					
PE VI	69	Peltandra virginica	18"	plug	24" o.c.
		Arrow Arum			Field Locate
SA LA	46	Sagittaria latifolia	9"	plug	24" o.c.
		Broad-Leaf Arrowhead			Field Locate
PO CO	69	Pontederia cordata	9"	plug	24" o.c.
		Pickeral Weed			Field Locate
MIX B EMERGENT SHALLOW (3"-0" BELOW WATER LEVEL)					
IR VI	69	Iris virginica	18"	plug	24" o.c.
		Blue Flag Iris			Field Locate
JU EF	46	Juncus effusus	9"	plug	24" o.c.
		Common Rush			Field Locate
SA LA	46	Sagittaria latifolia	9"	plug	24" o.c.
		Broad-Leaf Arrowhead			Field Locate
MIX C EDGE (0"-3" ABOVE WATER LEVEL)					
AS IN	69	Asclepias incarnata	24"	plug	24" o.c.
		Swamp Milkweed			Field Locate
CA TE	69	Carex tenera	18"	plug	24" o.c.
		Quill Sedge			Field Locate
LO EL	46	Lobelia elongata	18"	plug	24" o.c.
		Longleaf Lobelia			Field Locate
MIX D SATURATED (3"-6" ABOVE WATER LEVEL)					
CA TE	46	Carex tenera	18"	plug	24" o.c.
		Quill Sedge			Field Locate
LO CA	69	Lobelia cardinalis	18"	plug	24" o.c.
		Cardinal Flower			Field Locate
LO SI	46	Lobelia siphilitica	24"	plug	24" o.c.
		Great Blue Lobelia			Field Locate

NOTE: SIZE INDICATED AT TIME OF PLANTING.



WET DETENTION POND: BASIN SIZING, CALCULATIONS, AND REQUIREMENTS

TOTAL SURFACE AREA FOR PERMANENT POOL
 TOTAL DRAINAGE AREA FOR BASIN: 9.8 AC
 IMPERVIOUS AREA DRAINING TO BASIN: 6.9 AC
 PERCENT IMPERVIOUS COVER: 70.4%
 MAIN POOL AVG. DEPTH (SUBMERGED - TABLE 1): 3.5 FT
 SURFACE AREA/DRAINAGE AREA RATIO (SA/DA): 2.32
 REQUIRED SURFACE AREA: SA = (2.32/100)*(9.8 AC)*(43,560 SF/AC) = 9,904 SF
 PROVIDED SURFACE AREA: SA = 15,329 SF
 MAIN POOL SURFACE AREA ELEV.: 263.0
 SURFACE AREA PROVIDED > SURFACE AREA REQUIRED
 15,329 SF > 9,904 SF

AVERAGE DEPTH WHEN SHELF PARTIALLY/FULLY SUBMERGED (EQUATION #3)
 Dm = MAXIMUM WATER DEPTH FROM MAIN POOL TO BOTTOM SHELF (FT)
 Pp = PERIMETER OF MAIN POOL (FT)
 Ws = WIDTH OF SUBMERGED PORTION OF SHELF (FT)
 Da = AVERAGE DEPTH (FT)
 Vp = MAIN POOL VOLUME (CF)
 Vs = SUBMERGED SHELF VOLUME (CF)
 Ab = SUBMERGED SHELF AREA (SF)
 Vs = 0.5 * Dm * Pp * Ws
 Vs = 0.5 * 0.5 * 528 * 3
 Vs = 396 CF
 Da = (Vp - Vs) / Ab
 Da = (46,849 - 396) / 13,779
 Da = 3.4

SIMPLE METHOD FOR RUNOFF VOLUME
 Rv = RUNOFF COEFFICIENT (UNITLESS)
 Ia = IMPERVIOUS FRACTION (UNITLESS)
 Dv = DESIGN VOLUME (CF)
 Rd = DESIGN STORM DEPTH (IN)
 A = DRAINAGE AREA (AC)
 Rv = 0.05 + .9 * (Ia)
 Rv = 0.05 + .9 * (.704)
 Rv = 0.684
 Dv = 3630 * Rd * Rv * A
 Dv = 3630 * 1 * 0.684 * 9.8
 Dv = 24,333 CF
 VOLUME FROM 1-INCH PROVIDED BETWEEN ELEVATIONS 263.0 AND 265.1
 PROVIDED VOLUME FROM 1" OF RUNOFF = 46,866 CF
 VOLUME PROVIDED > VOLUME REQUIRED
 46,866 CF > 24,333 CF

TOWN OF KNIGHTDALE VOLUME REQUIREMENT CALCULATIONS
 REQUIREMENT: CONTROL AND TREAT THE DIFFERENCE IN STORMWATER RUNOFF VOLUME LEAVING THE PROJECT SITE BETWEEN THE PRE- AND POST-DEVELOPMENT CONDITIONS FOR, AT A MINIMUM, THE 1-YEAR, 24-HOUR STORM. RUNOFF VOLUME DRAWDOWN TIME SHALL BE BETWEEN 24 AND 120 HOURS.
 ANALYSIS POINT #1:
 1-YEAR, 24-HOUR PRE-DEVELOPMENT VOLUME: 27,540 CF
 1-YEAR, 24-HOUR POST-DEVELOPMENT VOLUME W/O DETENTION: 96,597 CF
 REQUIRED VOLUME TO BE CONTROLLED AND TREATED: (96,597 CF - 27,540 CF) = 69,057 CF
 VOLUME PROVIDED: POND #4 = 23,140 CF POND #5 = 46,866 TOTAL = 70,006
 VOLUME DRAWDOWN TIME: 100 HOURS

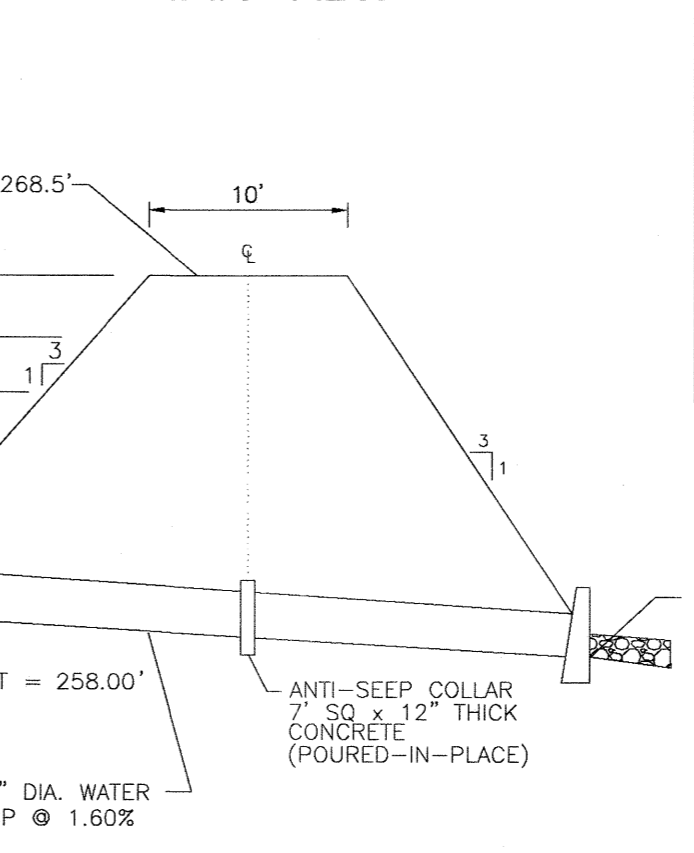
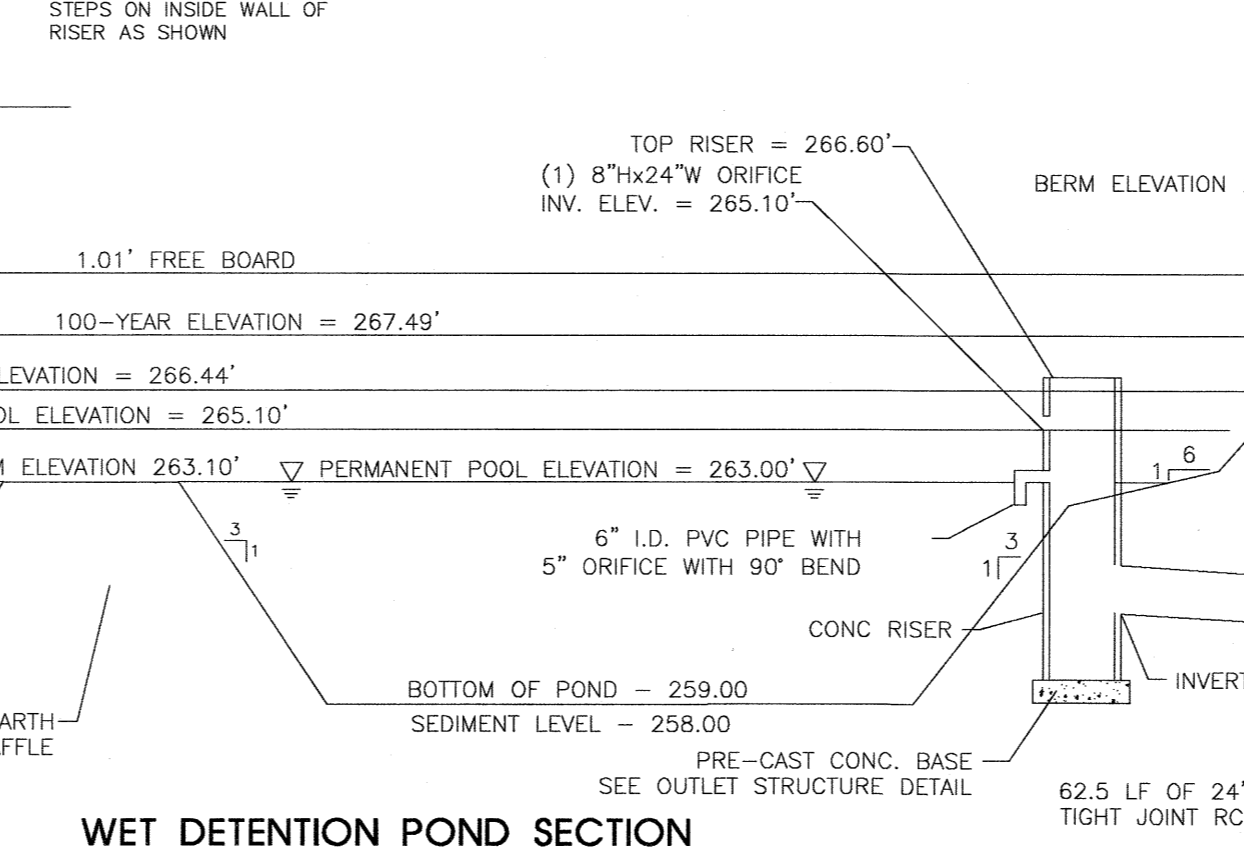
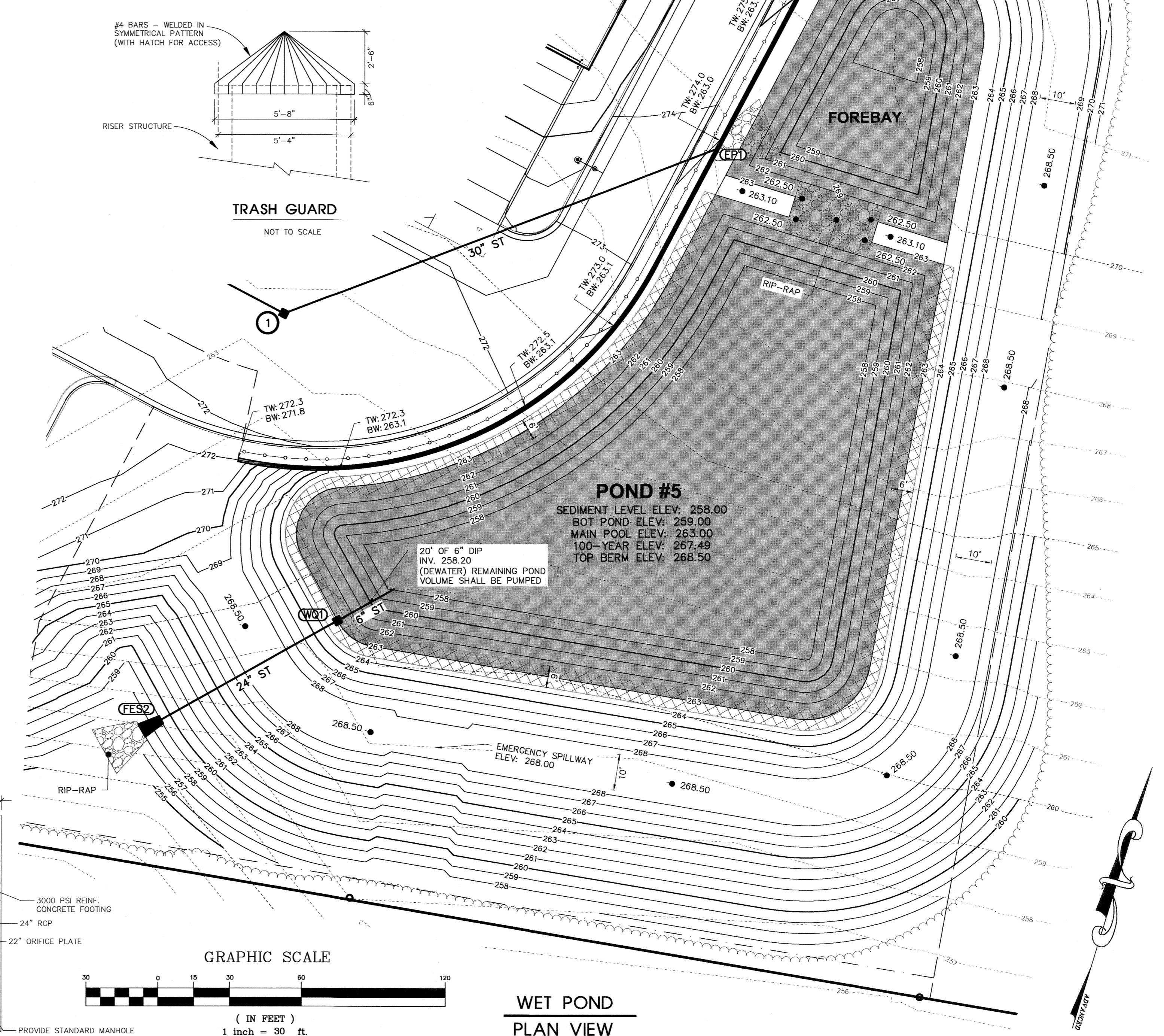
BASIN REQUIREMENTS
 MAIN POND BOTTOM ELEV.: 259.0
 MAIN POND BOTTOM SEDIMENT ELEV.: 258.0
 FOREBAY BOTTOM ELEVATIONS: 259.0
 FOREBAY BOTTOM SEDIMENT ELEV.: 258.0
 MAIN POND PERMANENT POOL ELEV.: 263.0
 TEMPORARY POOL ELEV.: 265.1
 LOWER VEGETATIVE SHELF ELEV.: 262.5
 UPPER VEGETATIVE SHELF ELEV.: 263.5
 MAIN POND BERM ELEVATION: 268.5
 MAIN POND EMERGENCY SPILLWAY ELEV.: 268.0
 FOREBAY BERM ELEVATION: 263.1
 FOREBAY SPILLWAY ELEV.: 262.5
 MAIN POND VOLUME: 46,849 CF (259.0 TO 263.0)
 FOREBAY VOLUME: 7,649 CF (259.0 TO 262.5)
 FOREBAY VOLUME PERCENTAGE = 7,649 / 46,849 = 16.3%
 INTERIOR MAIN POOL SIDE SLOPES BELOW PERMANENT POOL: 3:1
 INTERIOR BASIN SIDE SLOPES ABOVE PERMANENT POOL: 3:1
 INTERIOR FOREBAY SLOPES: 3:1
 EXTERIOR BASIN SIDE SLOPES: 3:1

BUOYANCY CALCULATIONS

WEIGHT OF CONCRETE (DOWNWARD FORCE)
 RISER: (2(4'x0.67') + 2(5.33x0.67')) x 9.6' = 115.8 CF
 FOOTING: 1' x 9.33' x 9.33' = 87 CF
 GROUT: 1' x 4' x 4' = 16 CF
 CONCRETE VOLUME X CONCRETE DENSITY = (115.8 CF + 87 CF + 16 CF) x 150 LBS./CF = 32,820 LBS.
WEIGHT OF WATER DISPLACED (UPWARD FORCE)
 RISER: 5.33' x 5.33' x 9.6' = 272.7 CF
 FOOTING: 1' x 9.33' x 9.33' = 87 CF
 WATER VOLUME X WATER DENSITY = (272.7 CF + 87 CF) x 62.4 LBS./CF = 22,445 LBS. < 32,820 LBS.
 STRUCTURE WILL NOT FLOAT

NOTES

1. PLACEMENT OF ANY FILL MATERIAL MUST BE CONDUCTED UNDER THE OBSERVATION OF A QUALIFIED LICENSED GEOTECHNICAL ENGINEER AND UPON COMPLETION OF THE EARTHWORK ACTIVITIES THE TOWN MUST BE PROVIDED WITH A FINAL GRADING REPORT THAT INCLUDES THE CORRESPONDING COMPACTION TEST RESULTS AND CERTIFIES THE TYPE OF FILL MATERIAL AND ITS PROPER PLACEMENT.
2. EMBANKMENT SHALL BE CONSTRUCTED OF CLEAN STRUCTURAL SOIL, FREE OF ROOTS, VEGETATION, ROCKS AND OTHER OBJECTIONABLE MATERIAL. SCARIFY SURFACES BEFORE PLACING FILL. PLACE FILL IN 6-8 INCH LOOSE LIFTS. COMPACT TO AT LEAST 95% OF THE STANDARD PROCTOR DENSITY.
3. 6-12 INCHES OF CLAY SOIL (MINIMUM 15% PASSING THE #200 SIEVE AND A MAXIMUM PERMEABILITY OF (1 x 10⁻⁵ CM/SEC) SHALL BE PLACED ALONG THE DAM EMBANKMENT AT AND BELOW THE NORMAL POOL OF 263.0 TO SUSTAIN A PERMANENT POOL.
4. SLOPES ABOVE PERMANENT POOL SHALL BE SEEDED AND STABILIZED WITH GRASS.



STORMWATER MANAGEMENT SUMMARY - ANALYSIS POINT #1

RETURN EVENT (YR)	PRE-DEV. RELEASE RATE (CFS)	POST-DEV. RELEASE RATE (CFS)	STORAGE PROVIDED IN POND (CF)	MAX. WATER SURFACE IN POND ELEV. (FT)
1	6.18	0.84	40,997	264.86
2	12.95	1.53	51,790	265.50
10	43.99	7.61	80,781	266.44
100	92.86	37.22	109,005	267.49

Town Certification. This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.
 By: *[Signature]* Date: 10-12-2021
 Development Services Engineer
 These plans are approved by the Town of Knightdale and serve as construction plans for this project.
 By: *[Signature]* Date: 10.13.21
 Administrator

PLAN PREPARED BY: **ADVANCED CIVIL DESIGN ENGINEERS**
 51 Kilmorye Drive, Suite 102
 Cary, North Carolina 27511
 PH 919.481.0990
 FAX 919.336.9327
 Firm License # C-2798

PLAN PREPARED FOR: **TRINITY CAPITAL**
 390 Spectrum Drive, Knightdale, NC 27545 - Wake County

EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
 FOR
TRINITY CAPITAL ADVISORS, LLC
WET POND #5 PLAN

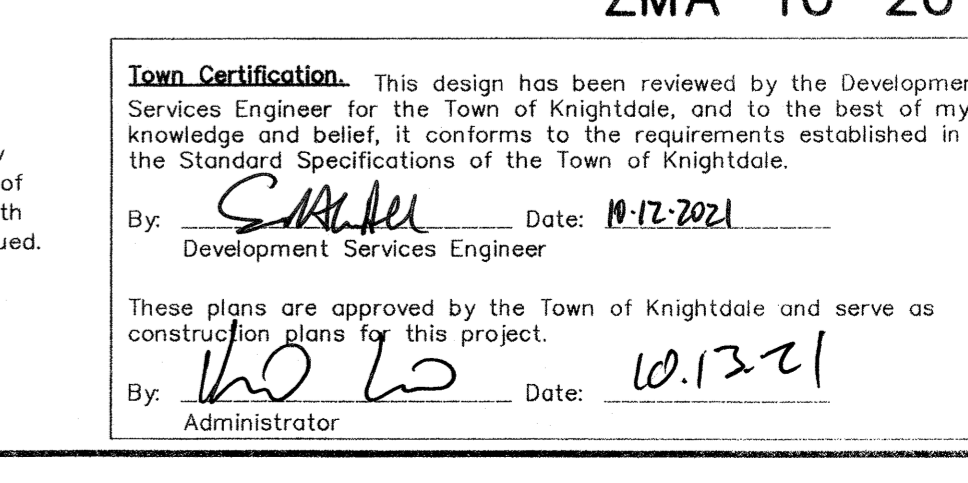
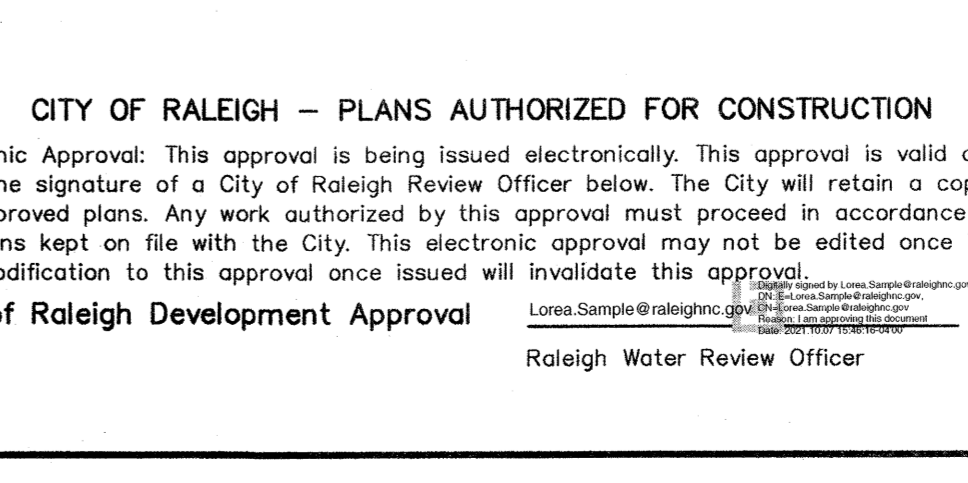
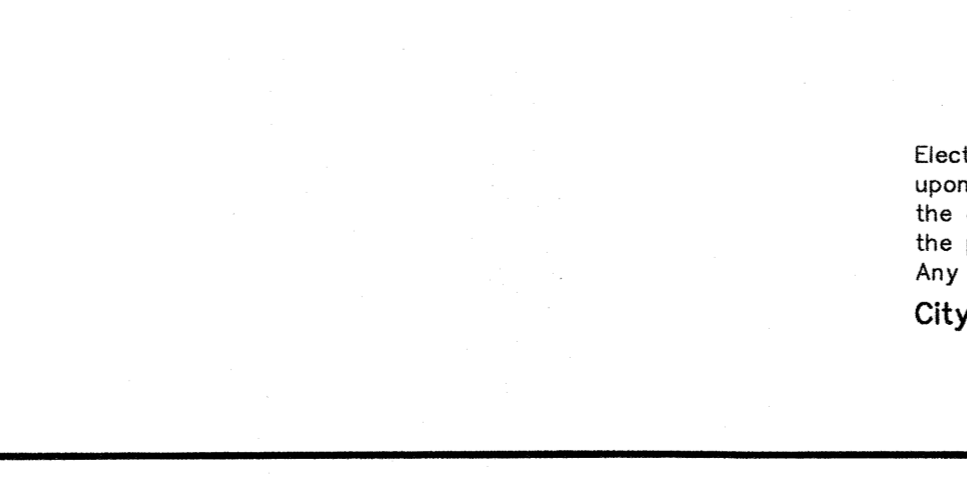
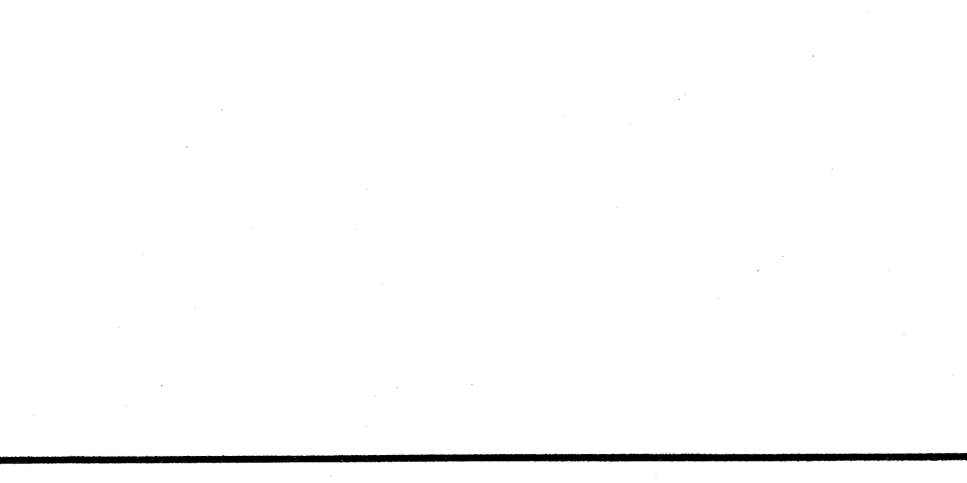
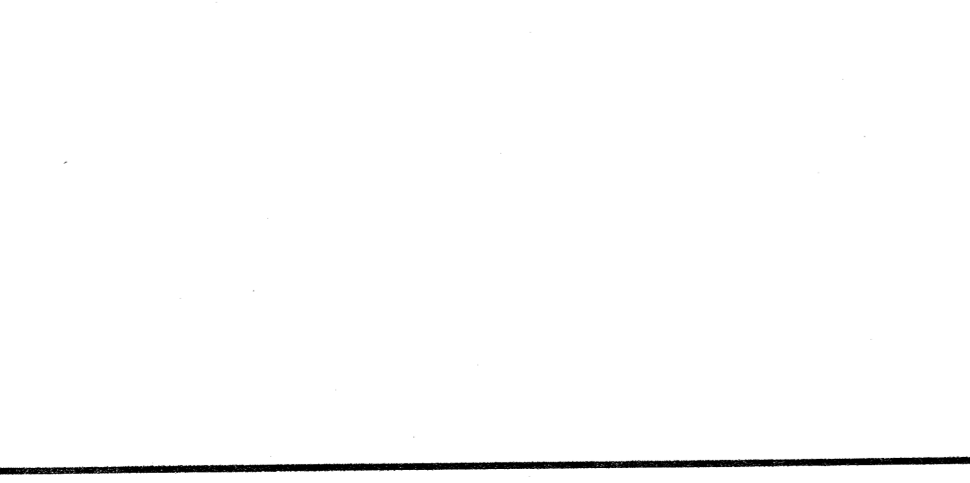
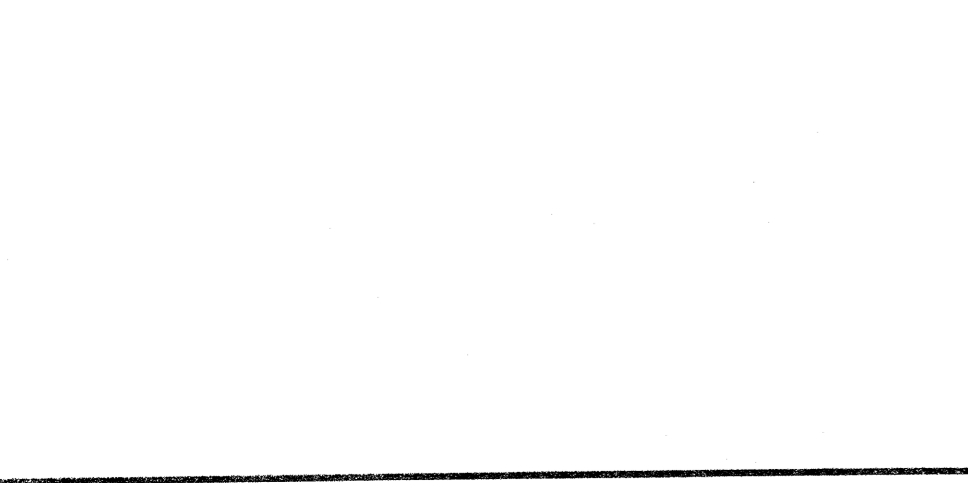
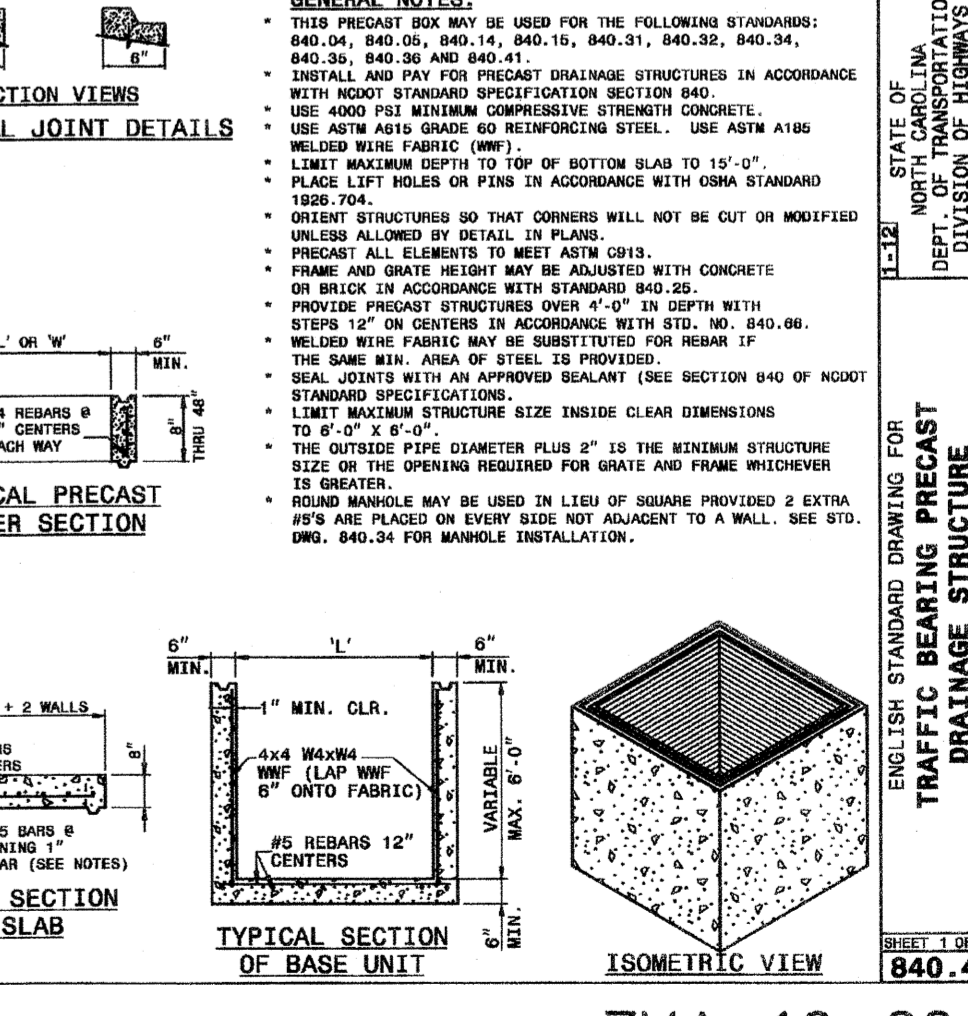
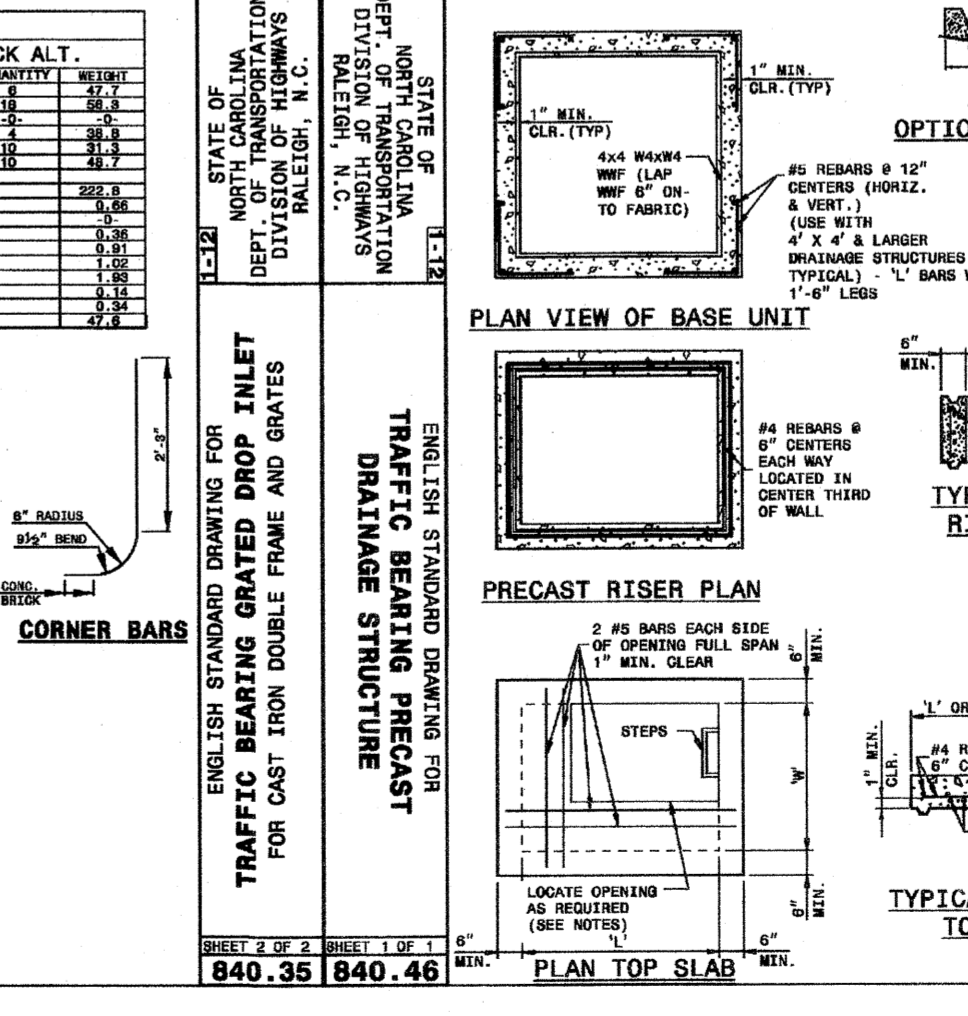
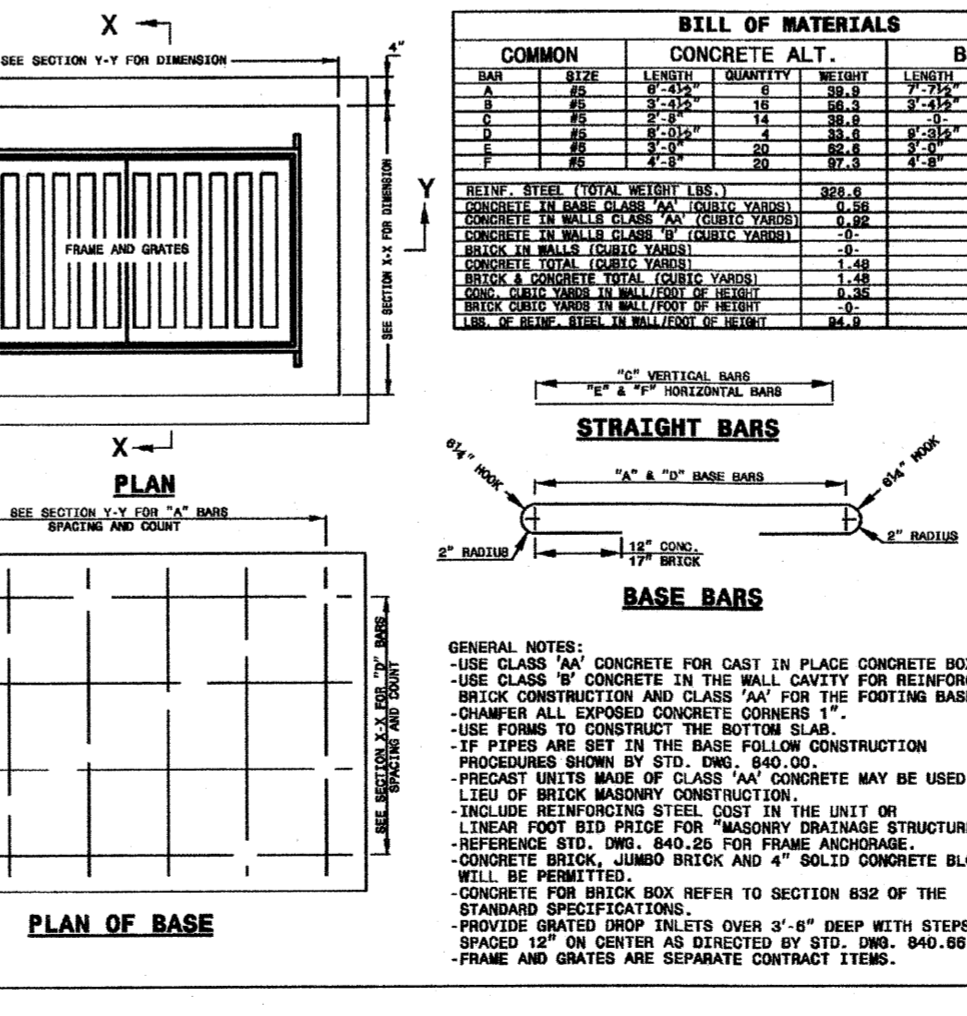
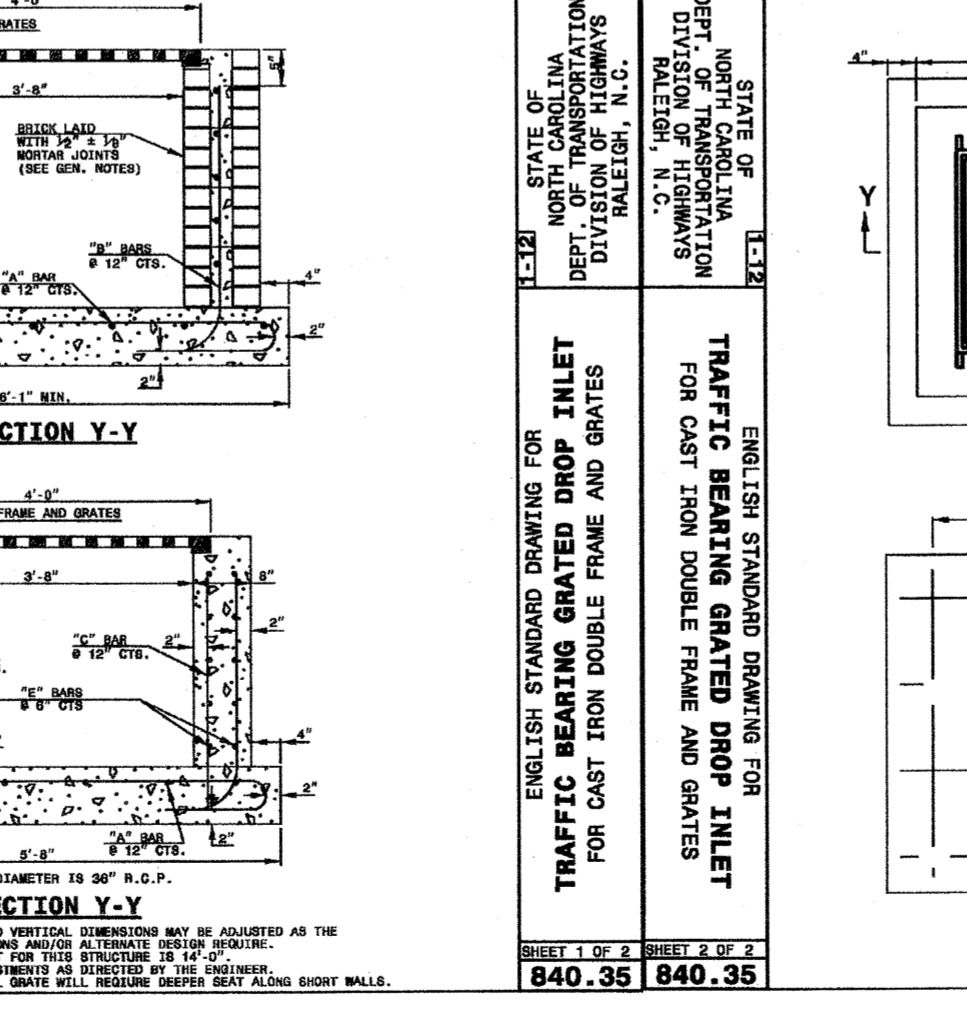
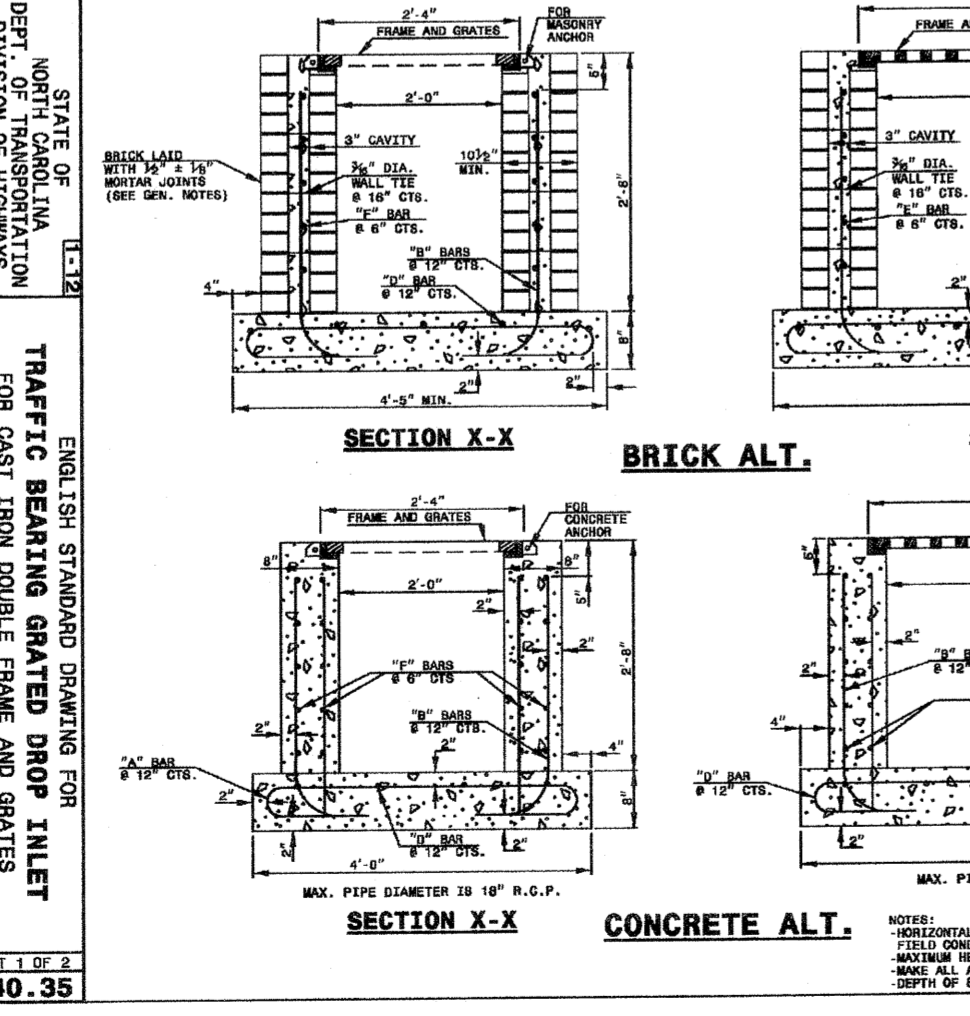
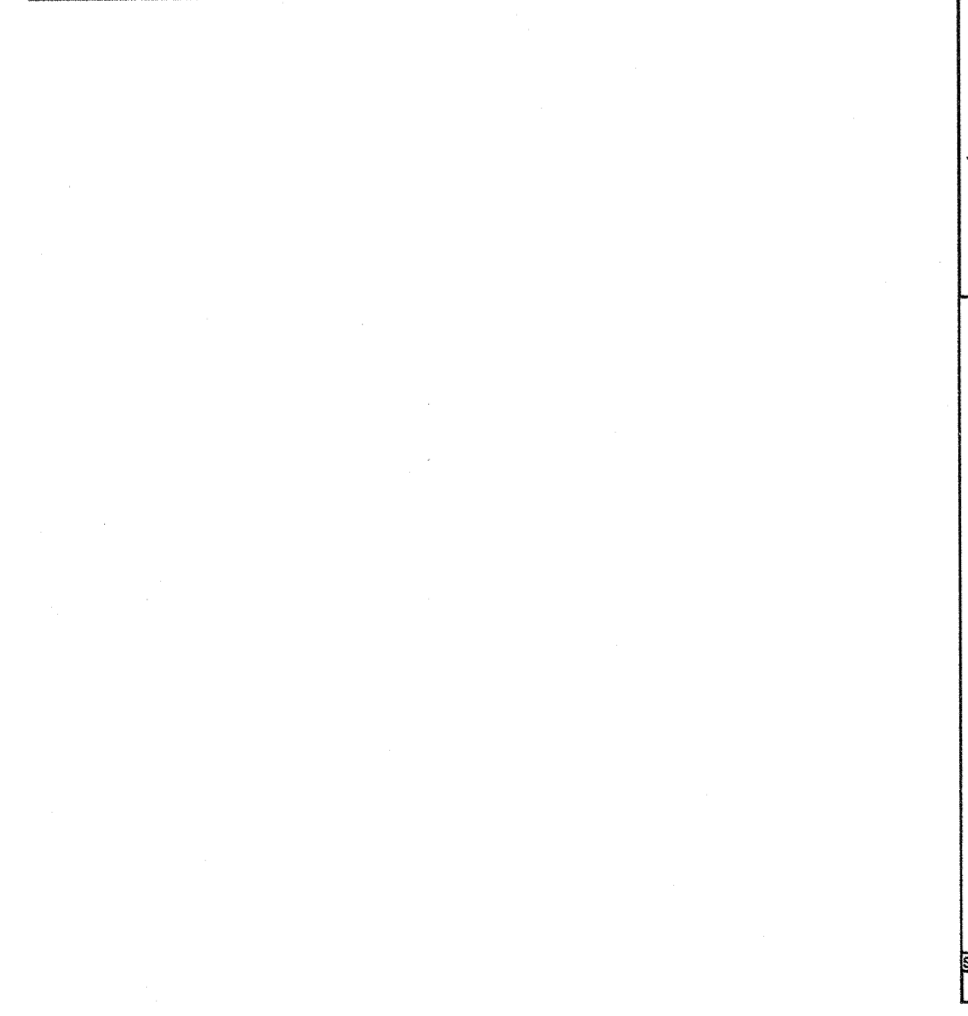
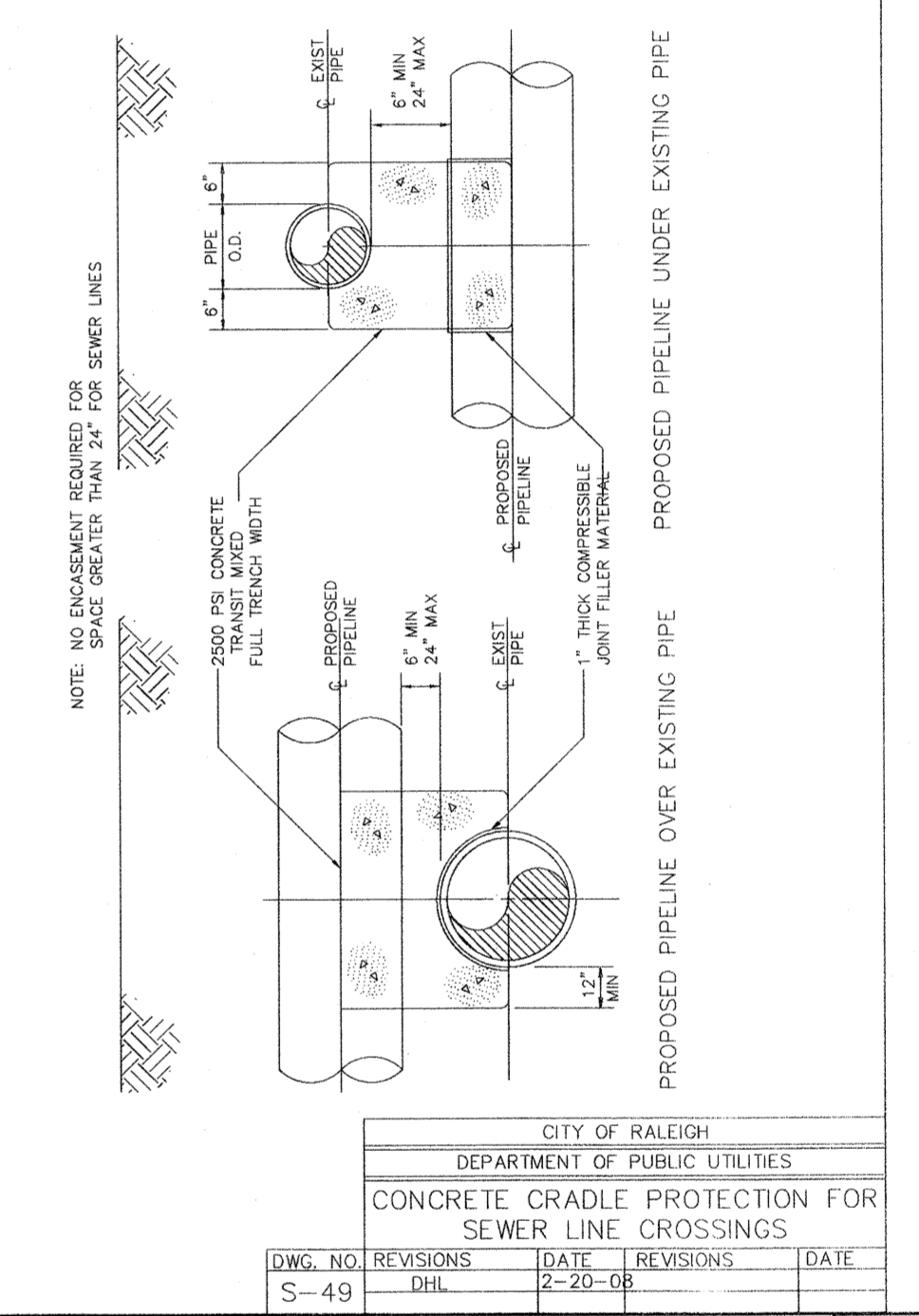
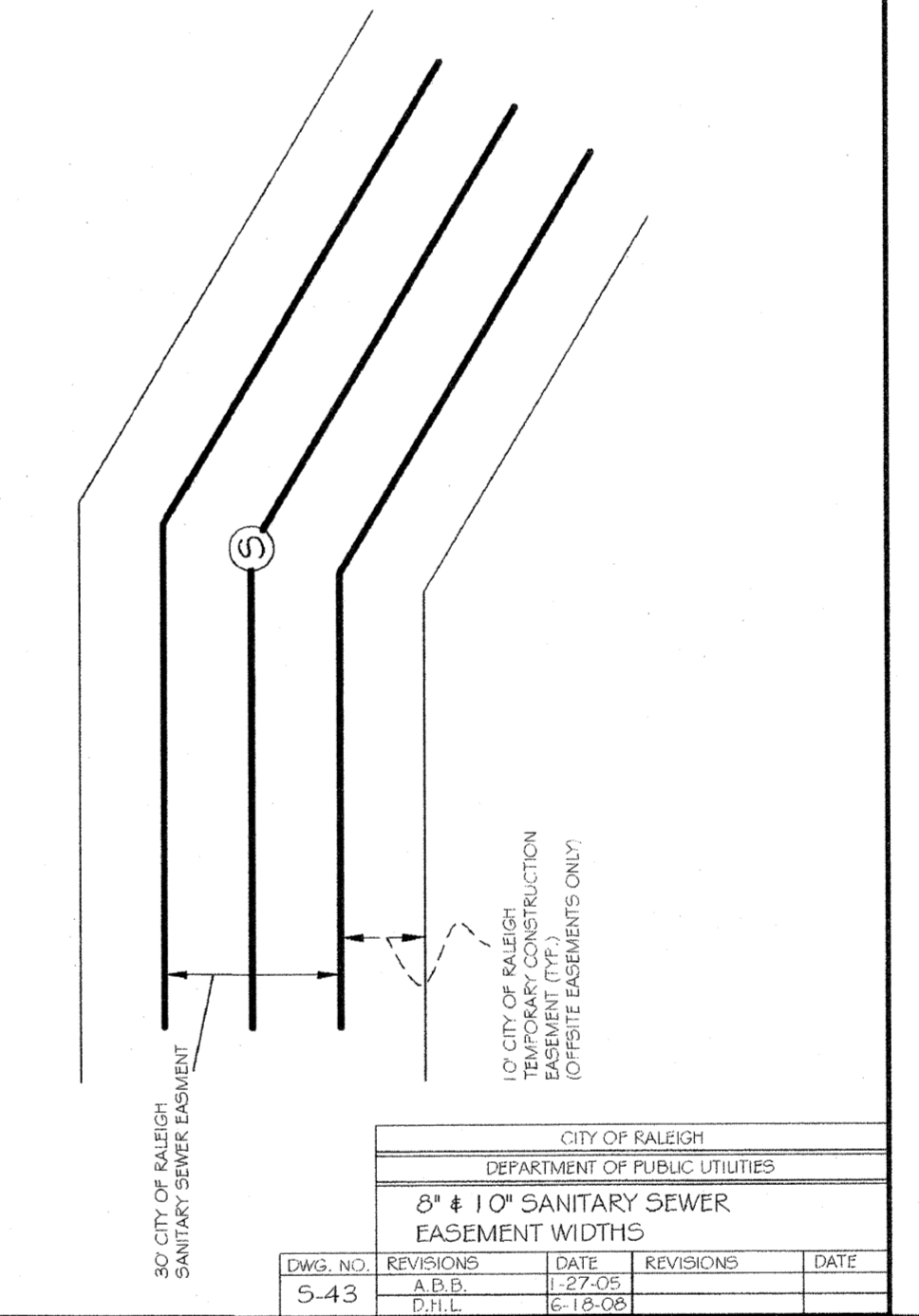
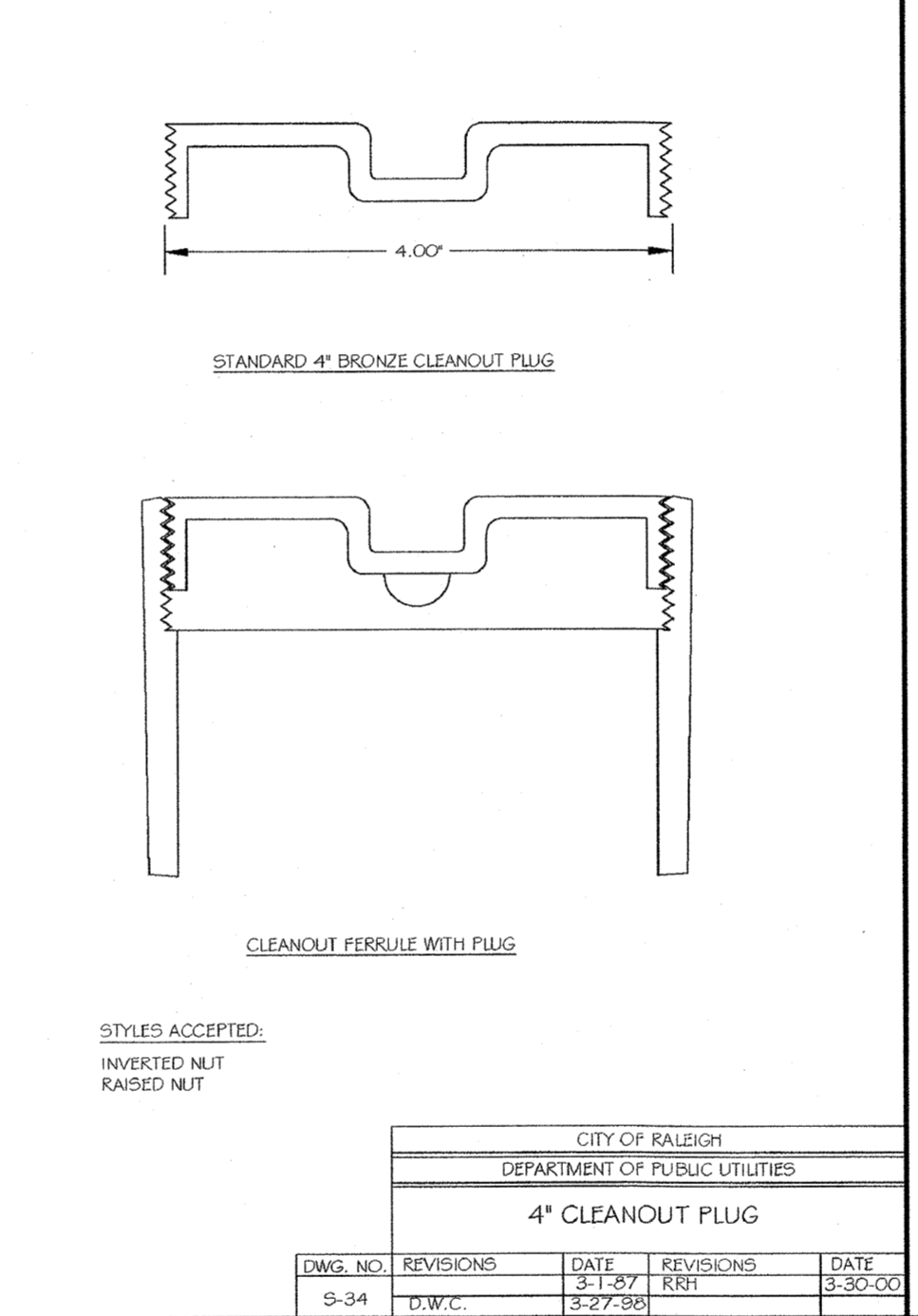
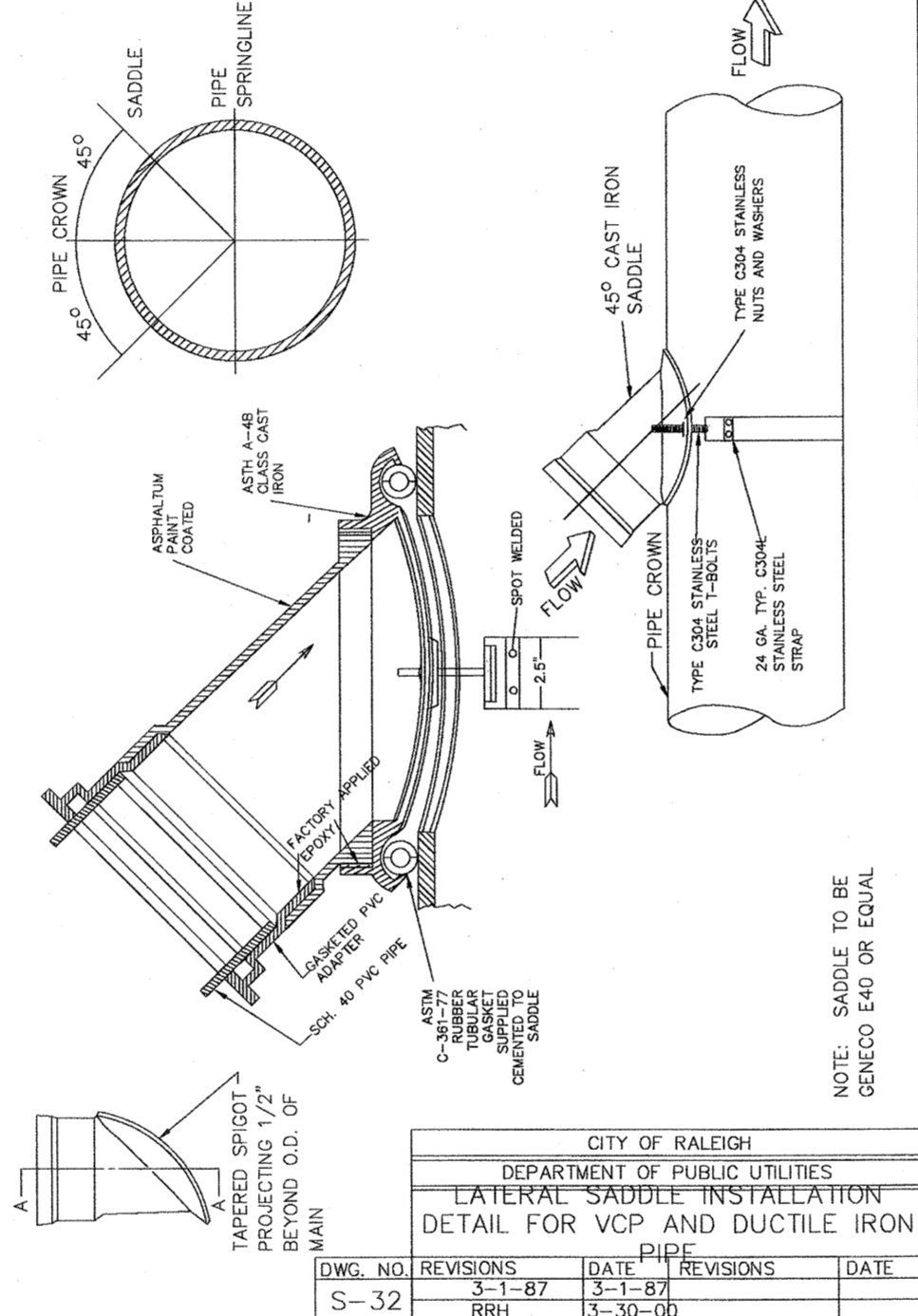
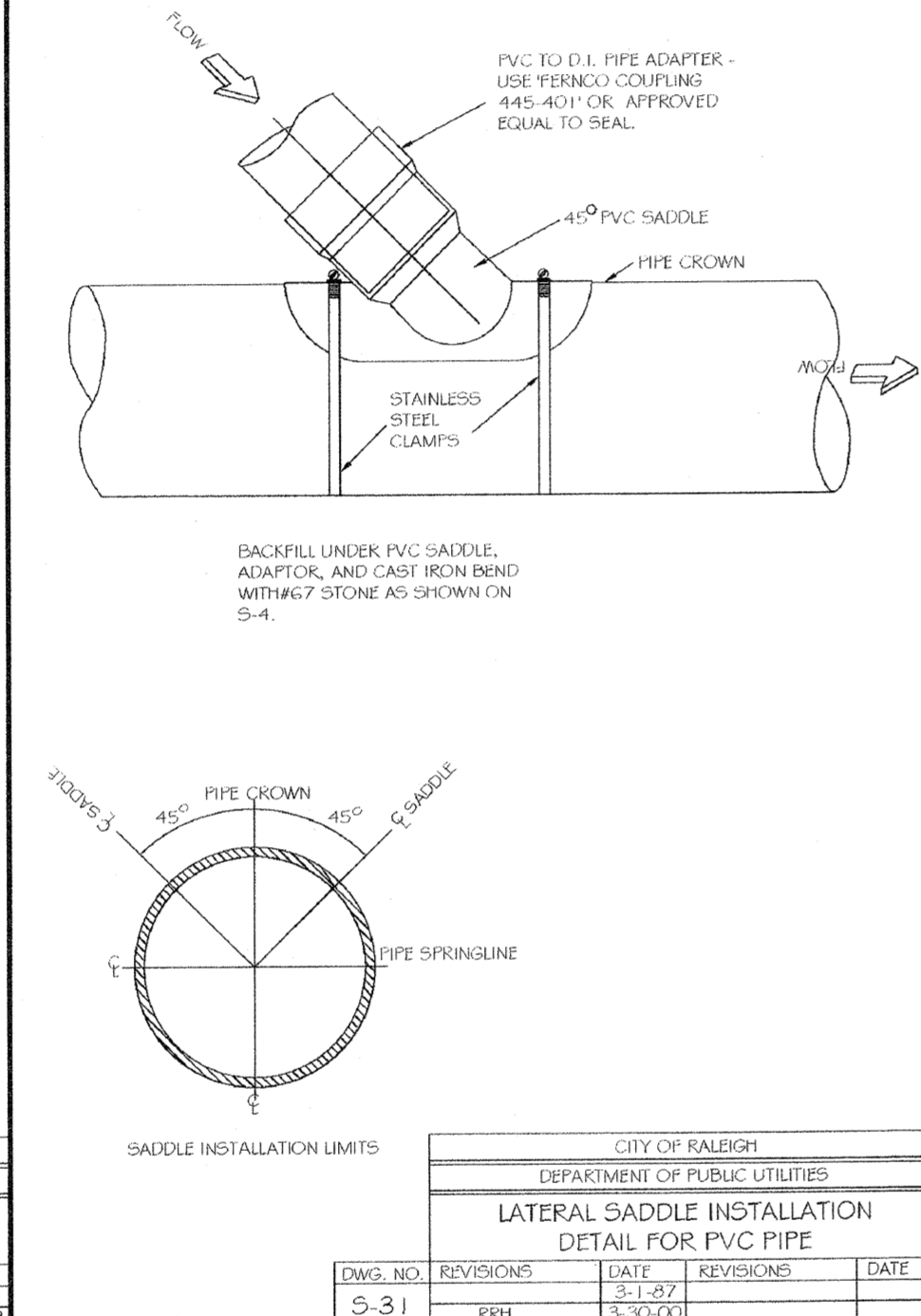
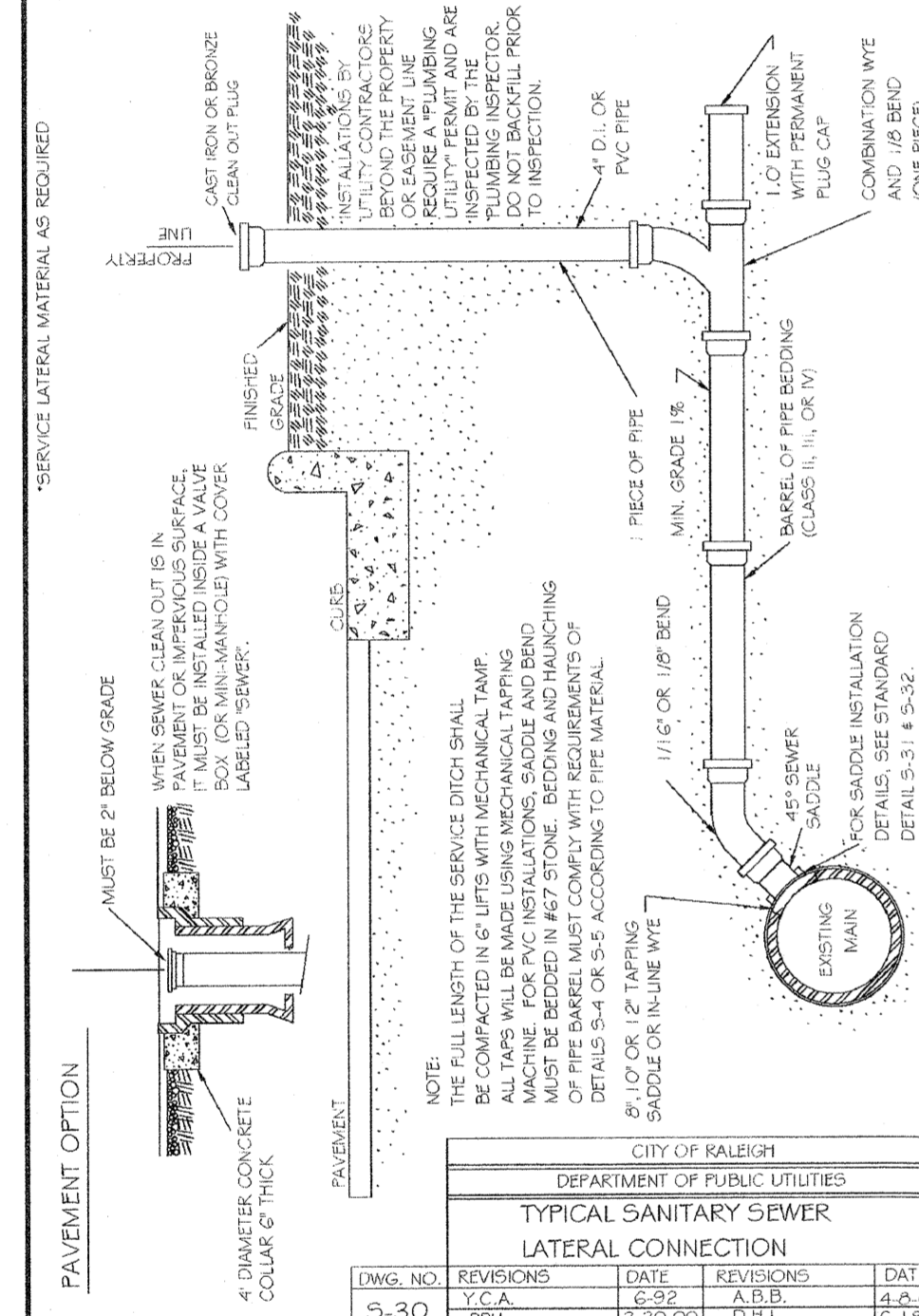
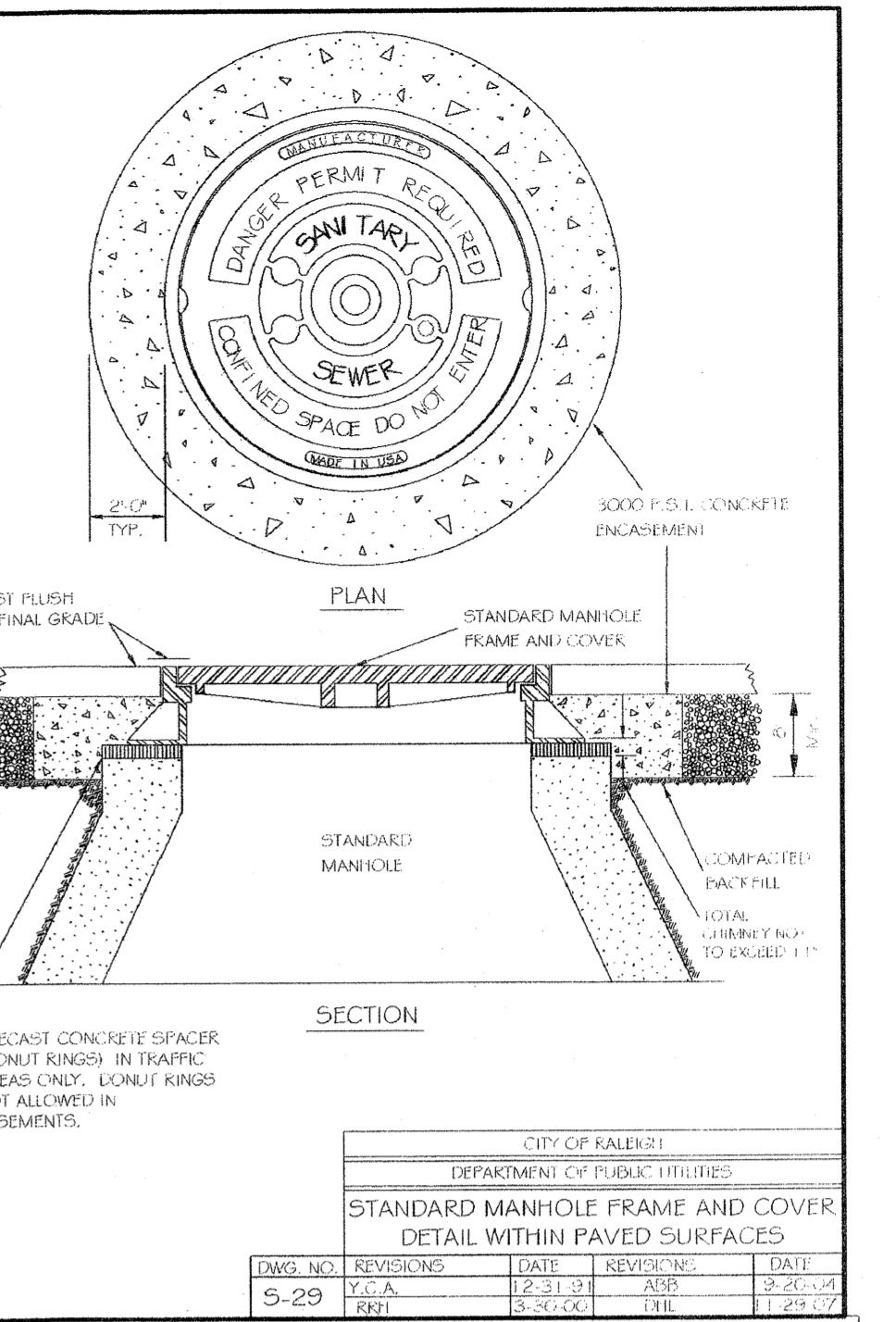
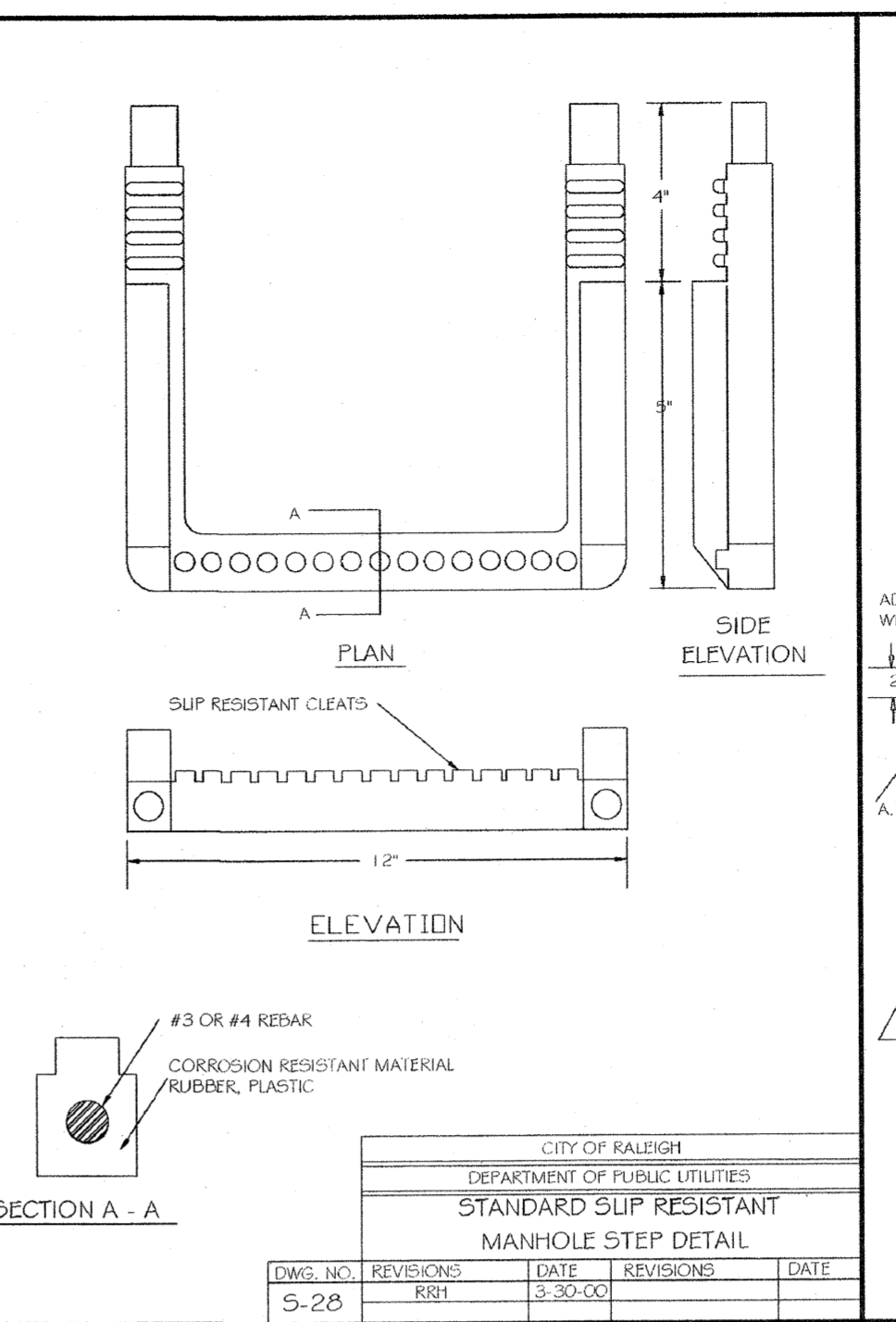
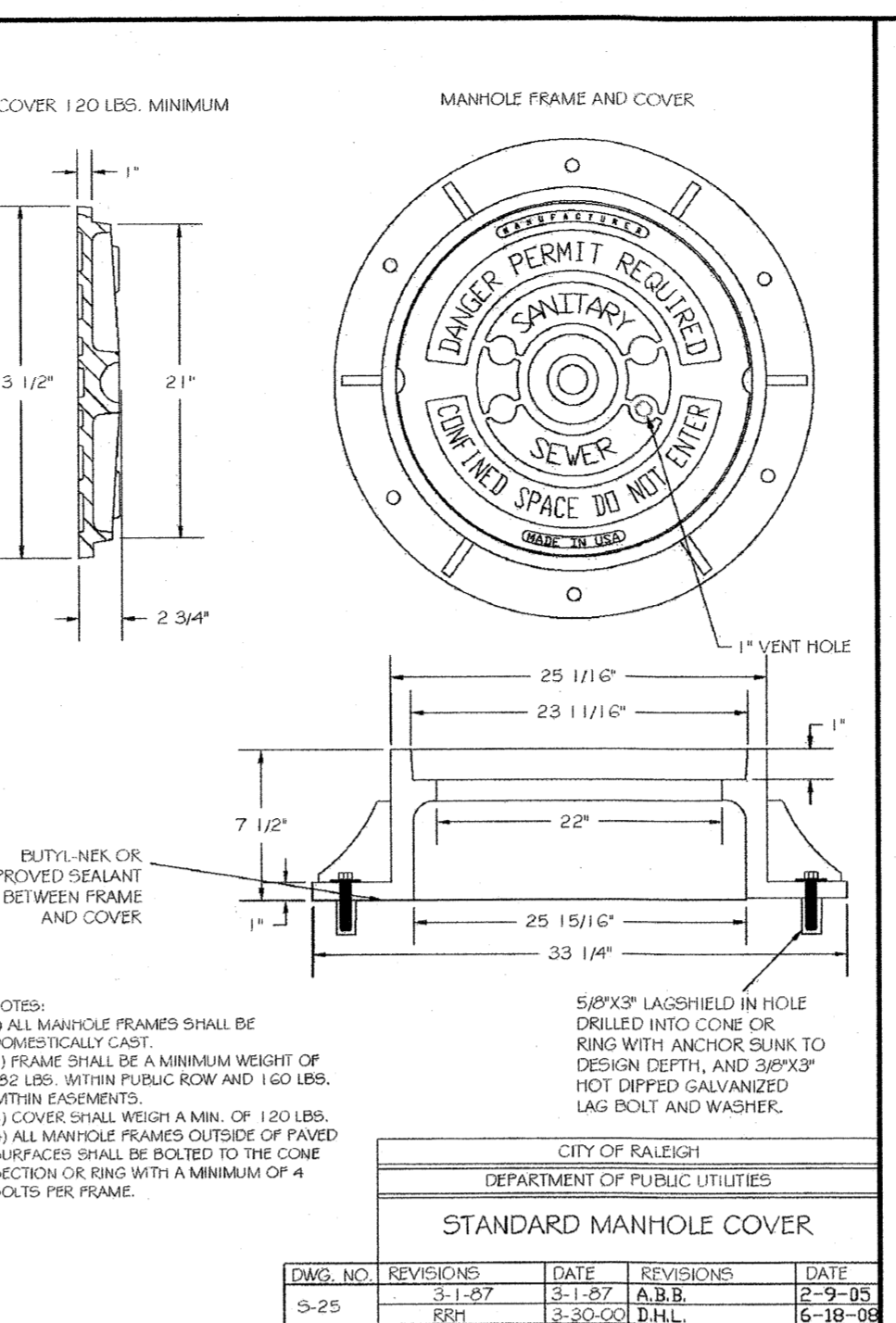
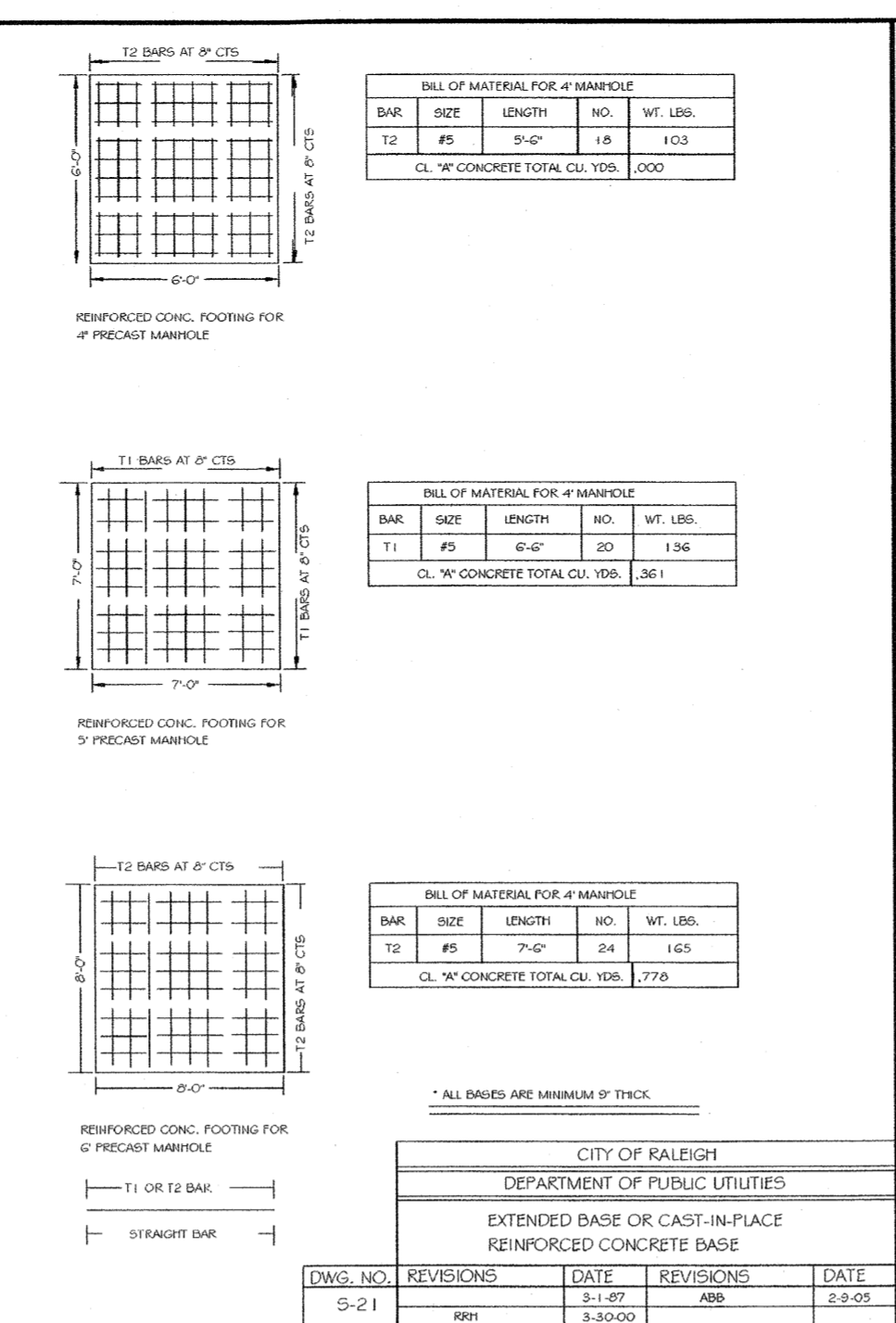
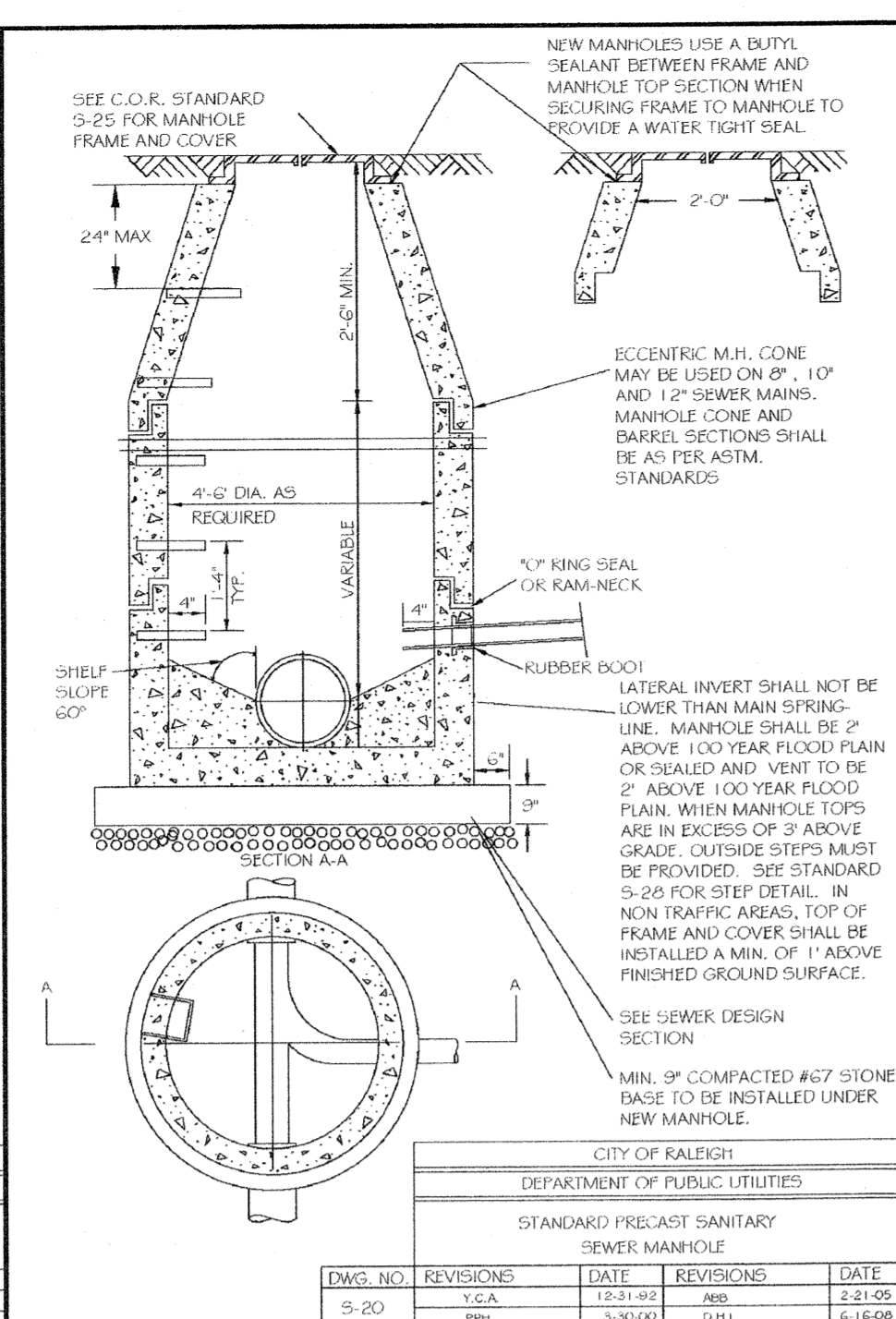
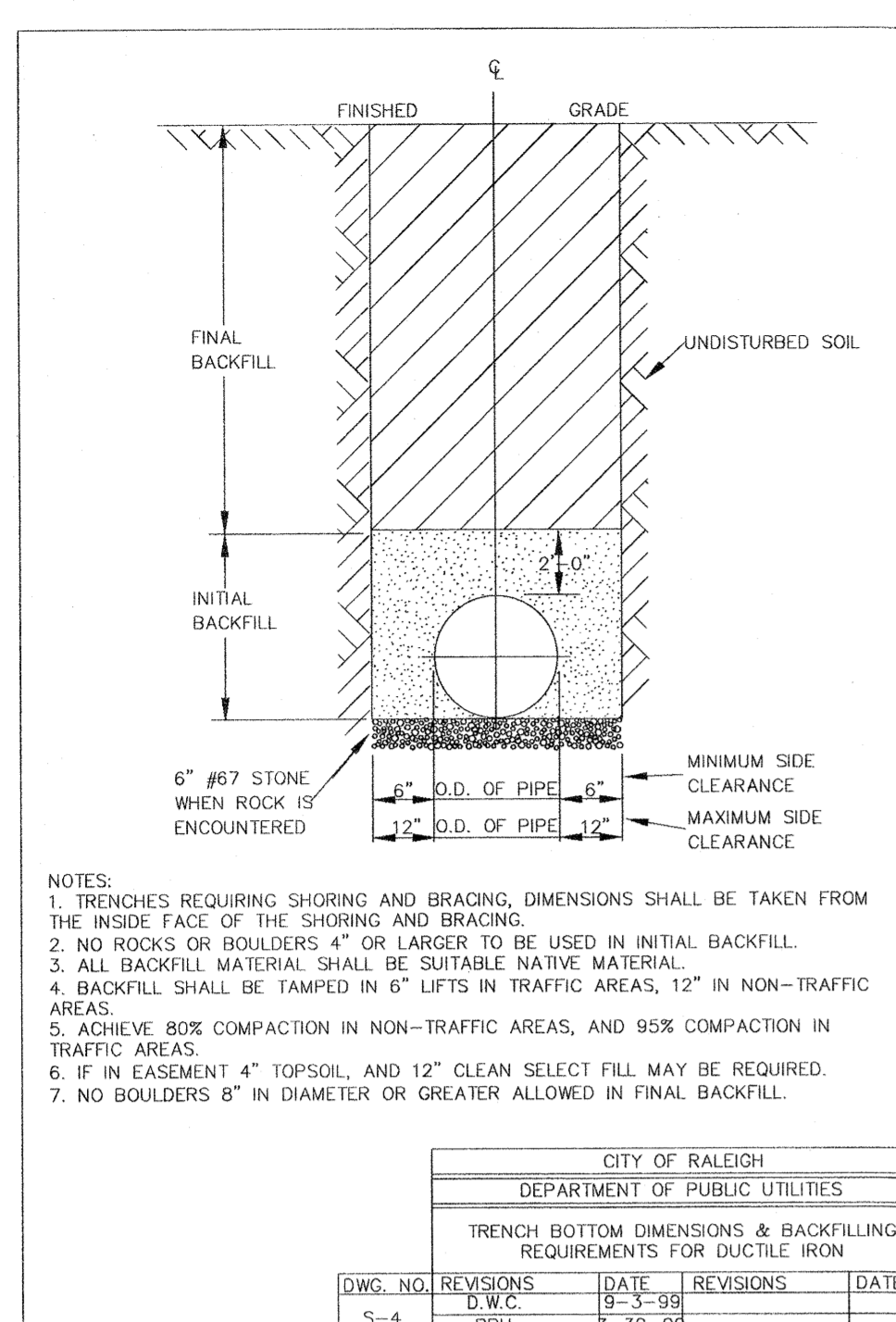
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 06/11/2021 - PROGRESS SET TO CONTRACTOR
 06/18/2021 - TOWN SUBMITTAL #1
 09/10/2021 - TOWN SUBMITTAL #2
 09/14/2021 - TOWN SUBMITTAL #3
 10/04/2021 - TOWN SUBMITTAL #4

Date: 10/04/2021
 Scale: H: 1" = 30'

Drawn By: JLB
 Checked By: CMR

Project Number:
20-0006-988

Drawing Number:
C.9.1



390 Spectrum Drive, Knightdale, NC 27545 - Wake County

EASTGATE 540

BUILDING #7 CONSTRUCTION PLANS

FOR

TRINITY CAPITAL ADVISORS, LLC

DETAILS

PLAN PREPARED BY: TRINITY CAPITAL ADVANCED CIVIL DESIGN ENGINEERS

51 Kingsport Drive, Suite 102
 Cary, North Carolina 27511
 PH: 919.481.6290
 FAX: 919.336.9327
 E-MAIL: info@trinitycapital.com
 License # C-2798

Issue Dates:
 06/11/2021 - PROGRESS SET TO CONTRACTOR
 06/18/2021 - TOWN SUBMITTAL #1
 06/10/2021 - TOWN SUBMITTAL #2
 09/14/2021 - TOWN SUBMITTAL #3
 10/04/2021 - TOWN SUBMITTAL #4

Date: 10/04/2021
 Scale: NOT TO SCALE

Drawn By: JLB
 Checked By: CMR

Project Number:
 20-0006-988

Drawing Number:
 C.10.0

10/04/2021

028924

SEAL

ENGINEER

CHEMUN N. RICE

STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR TRAFFIC BEARING PRECAST DRAINAGE STRUCTURE

840.46

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

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

City of Raleigh Development Approval

Loza Sample @ raleigh.gov

Raleigh Water Review Officer

Date: 10-12-2021

Development Services Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

Date: 10.13.21

Administrator

Town Certification. This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

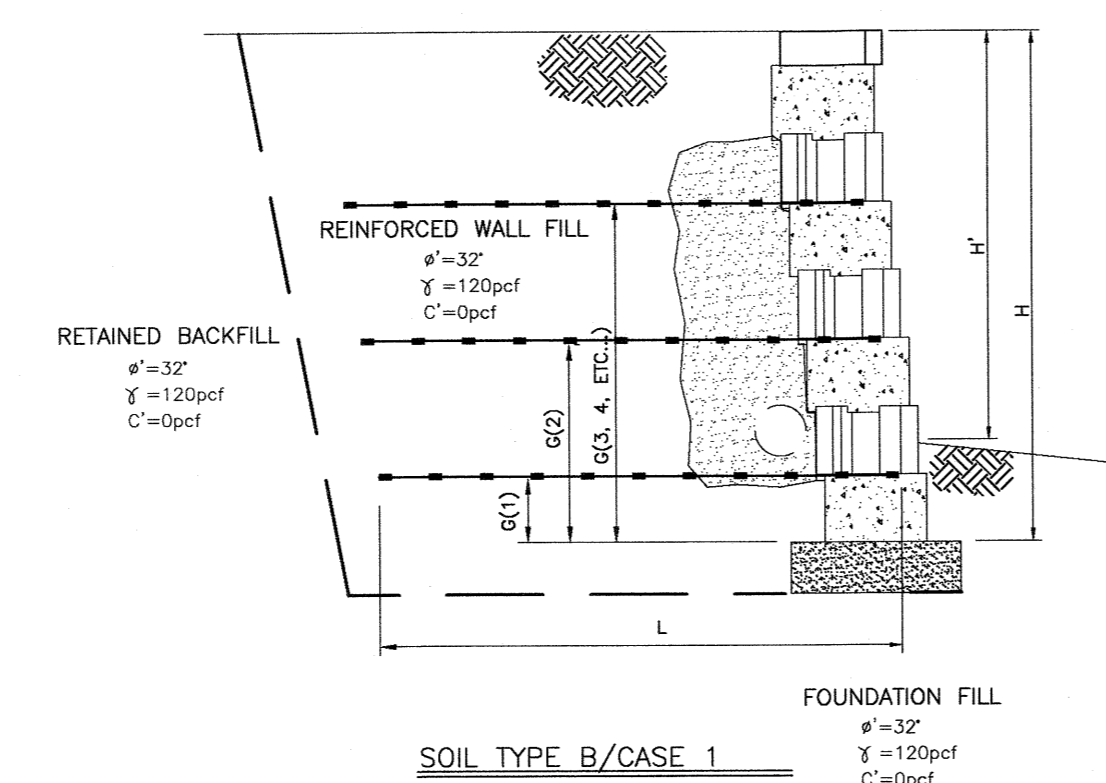
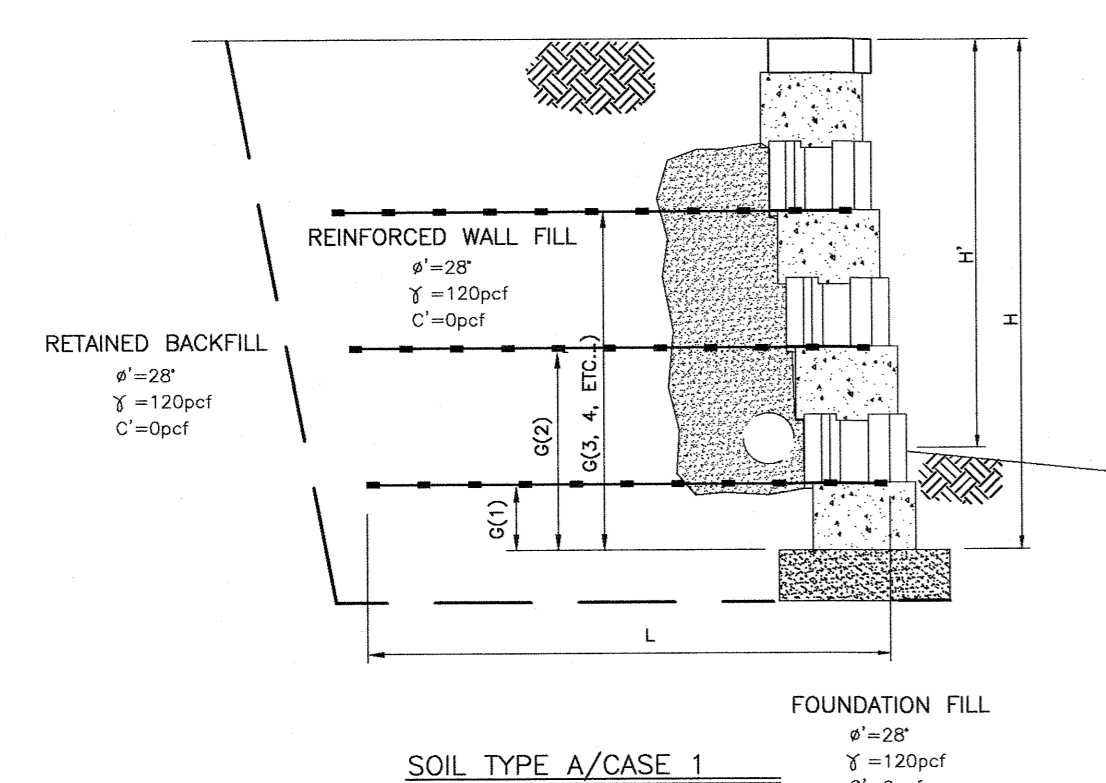
By: *[Signature]* Date: 10-12-2021
 Development Services Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

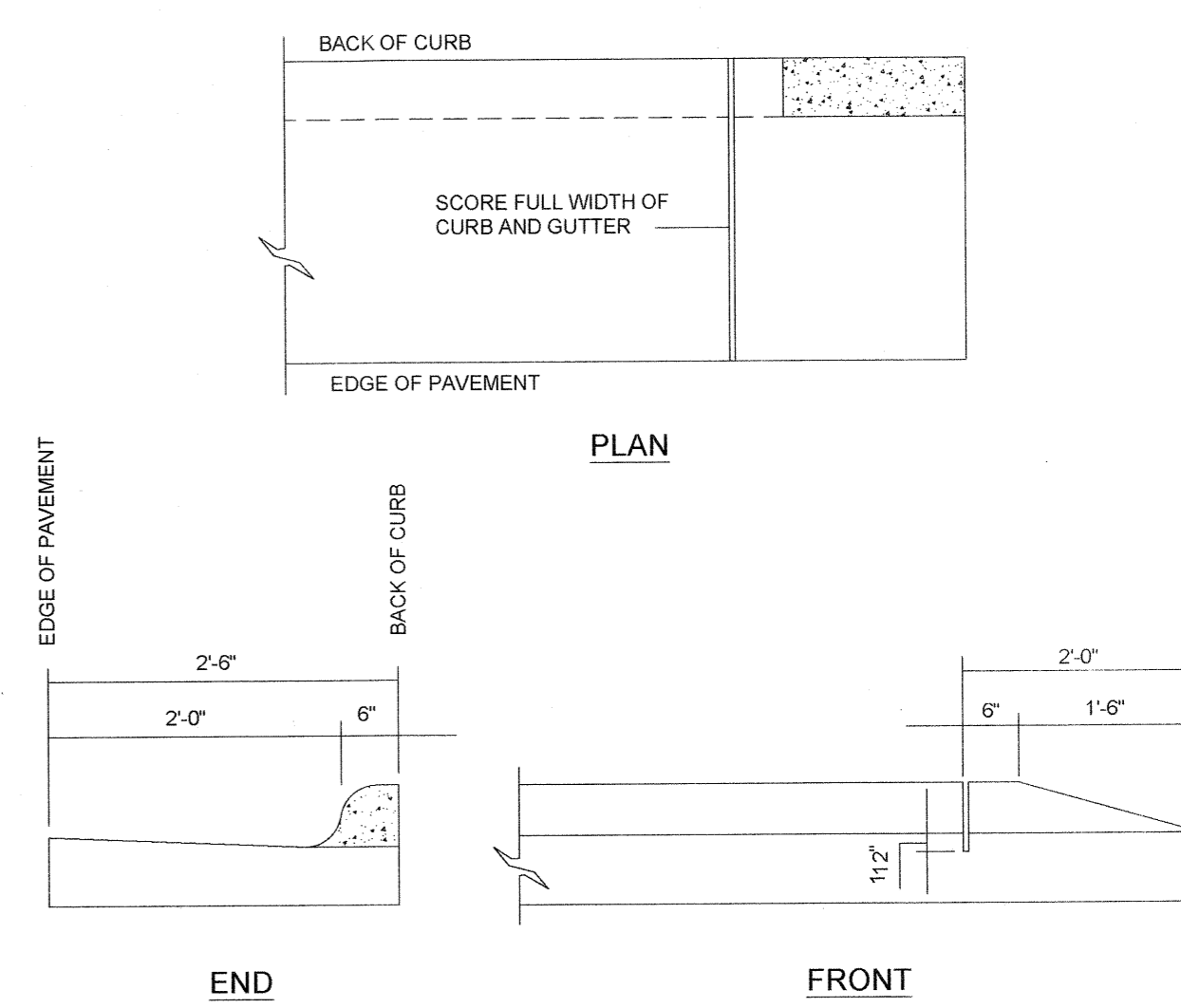
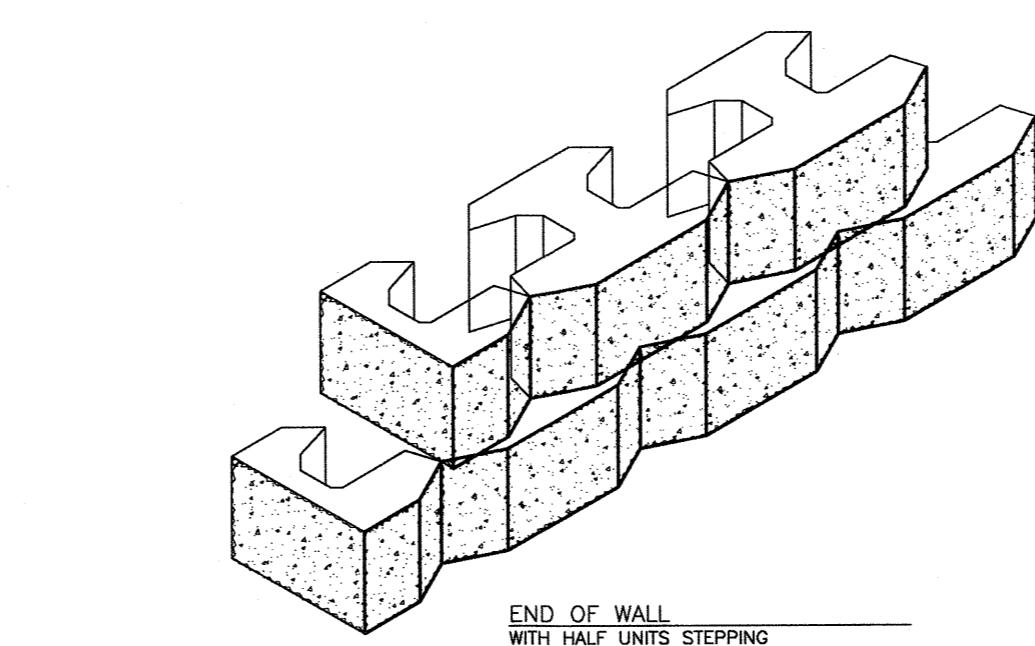
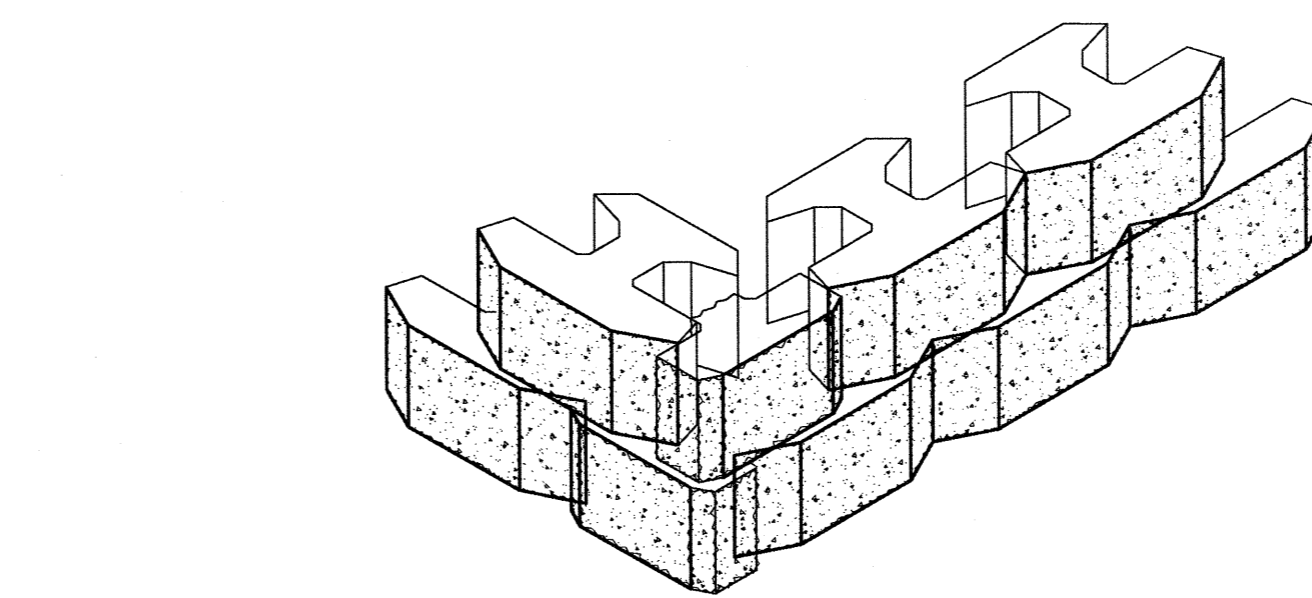
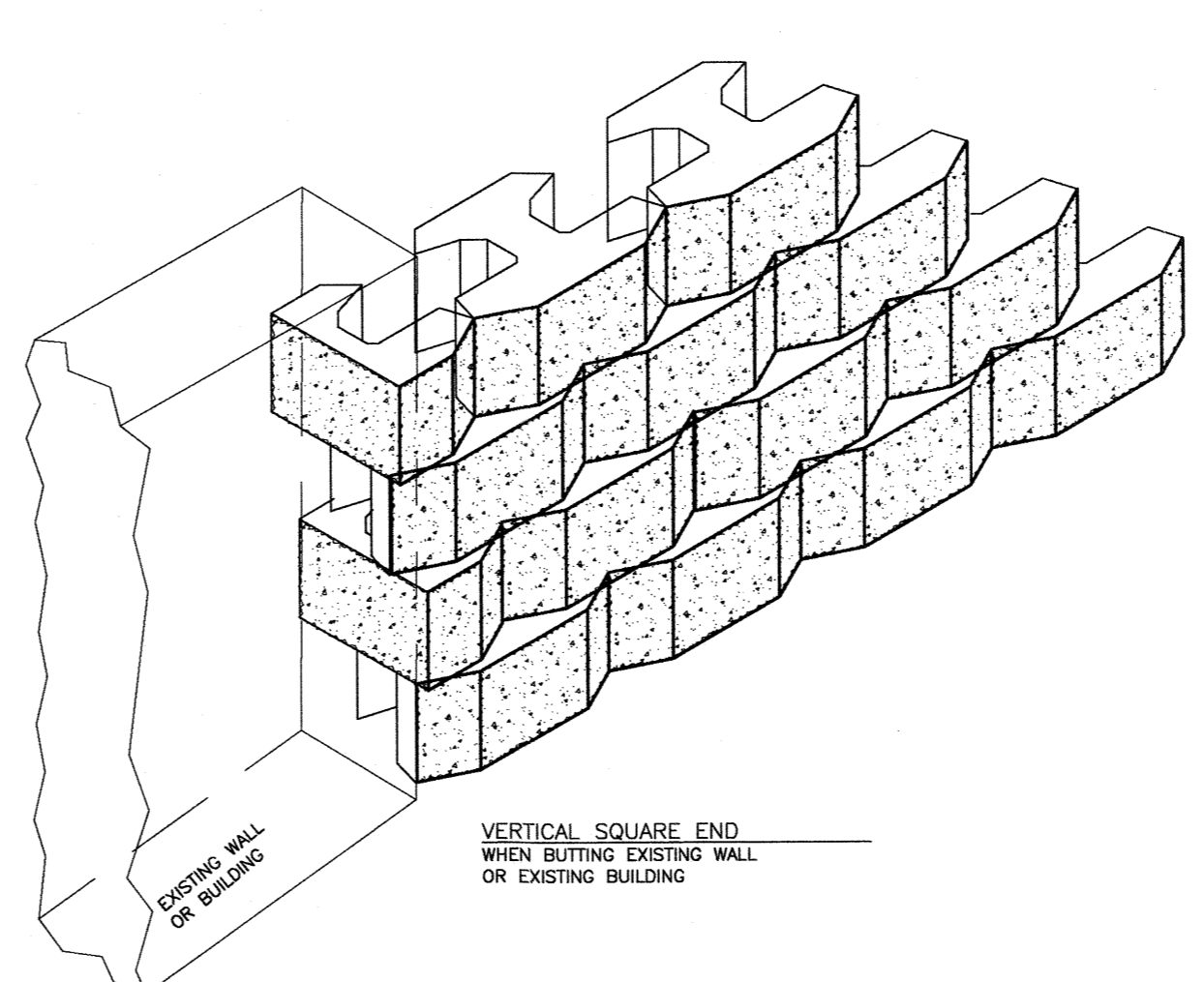
By: *[Signature]* Date: 10.13.21
 Administrator

ZMA-10-20

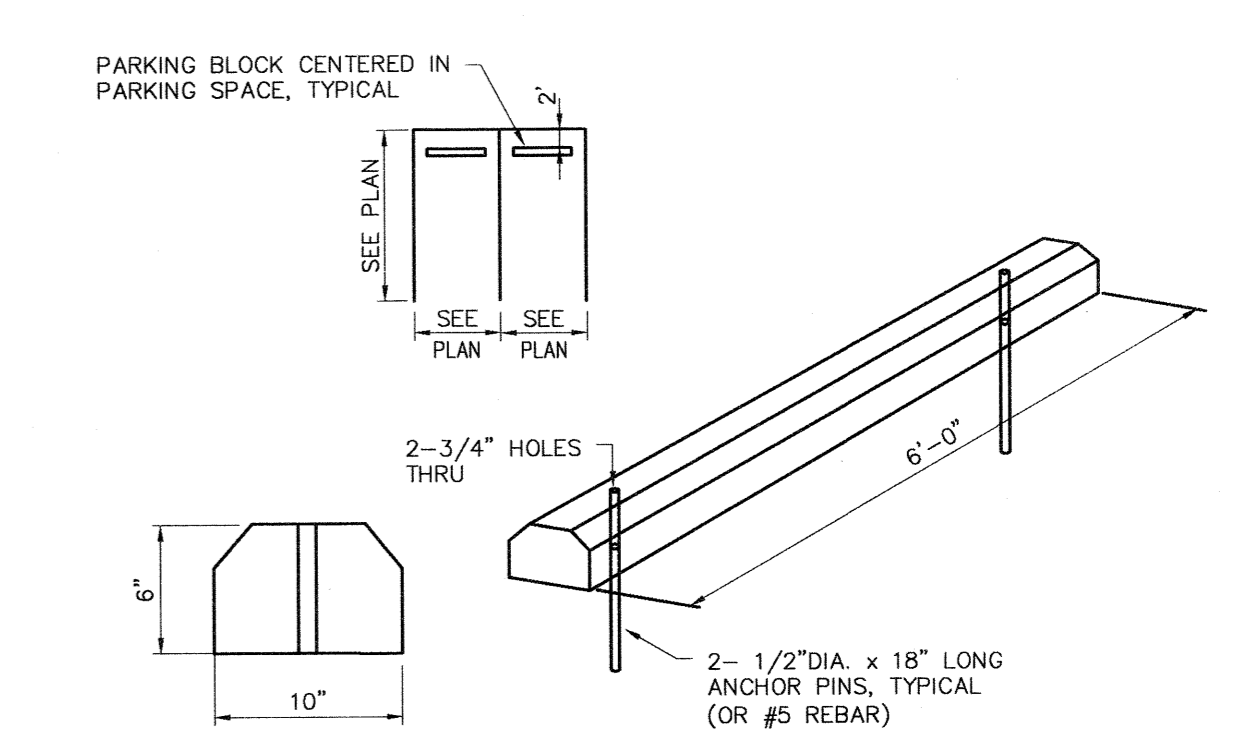
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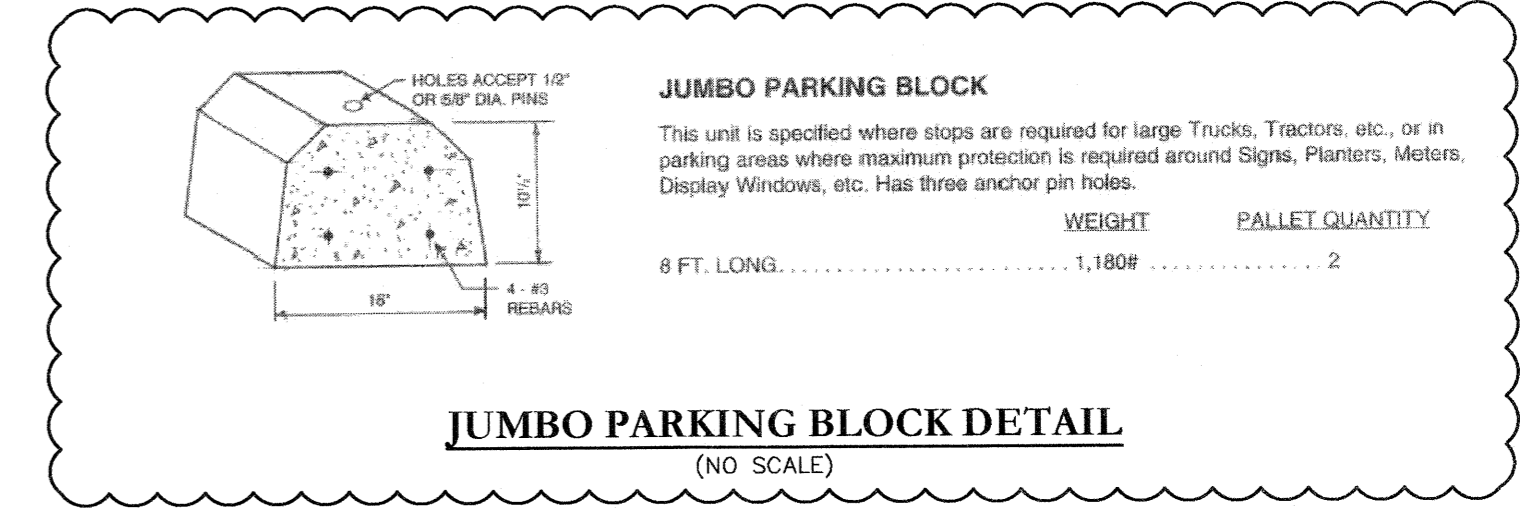
HEIGHT CONVERSION		
NO. OF BLOCKS ABOVE LEVELING PAD	HEIGHT ABOVE LEVELING PAD	GEGRID LEVEL
1	0'-0"	0'-0"
2	1'-0"	1'-0"
3	2'-0"	2'-0"
4	3'-0"	3'-0"
5	4'-0"	4'-0"
6	5'-0"	5'-0"
7	6'-0"	6'-0"
8	7'-0"	7'-0"
9	8'-0"	8'-0"
10	9'-0"	9'-0"
11	10'-0"	10'-0"
12	11'-0"	11'-0"
13	12'-0"	12'-0"
14	13'-0"	13'-0"
15	14'-0"	14'-0"
16	15'-0"	15'-0"
17	16'-0"	16'-0"
18	17'-0"	17'-0"
19	18'-0"	18'-0"
20	19'-0"	19'-0"
21	20'-0"	20'-0"
22	21'-0"	21'-0"
23	22'-0"	22'-0"
24	23'-0"	23'-0"
25	24'-0"	24'-0"
26	25'-0"	25'-0"
27	26'-0"	26'-0"
28	27'-0"	27'-0"
29	28'-0"	28'-0"
30	29'-0"	29'-0"
31	30'-0"	30'-0"
32	31'-0"	31'-0"
33	32'-0"	32'-0"
34	33'-0"	33'-0"
35	34'-0"	34'-0"
36	35'-0"	35'-0"
37	36'-0"	36'-0"
38	37'-0"	37'-0"
39	38'-0"	38'-0"



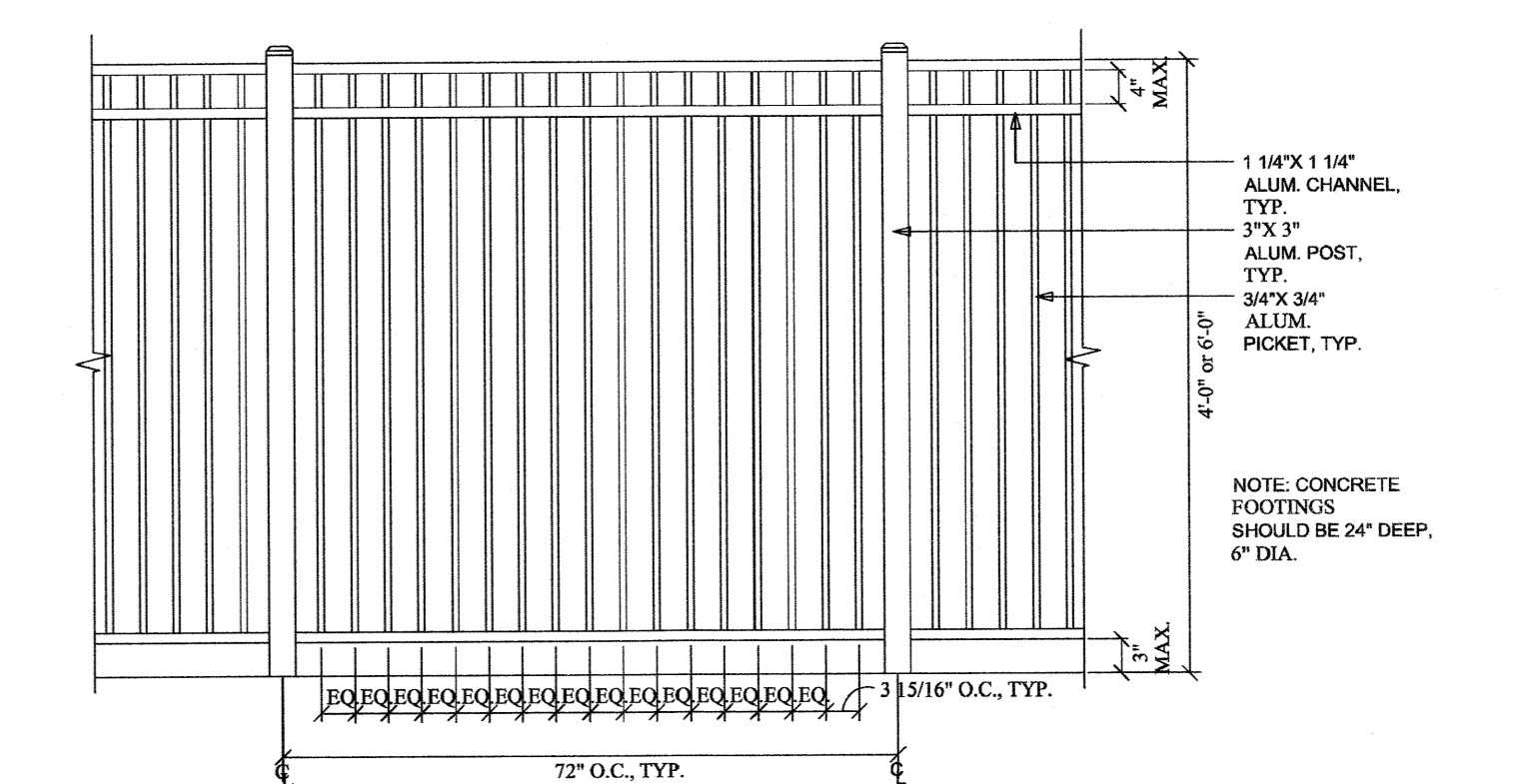
END CURB & GUTTER DETAIL
(NO SCALE)



CONCRETE WHEEL STOP DETAIL
(NO SCALE)



JUMBO PARKING BLOCK DETAIL
(NO SCALE)



FENCING
SCALE: NONE

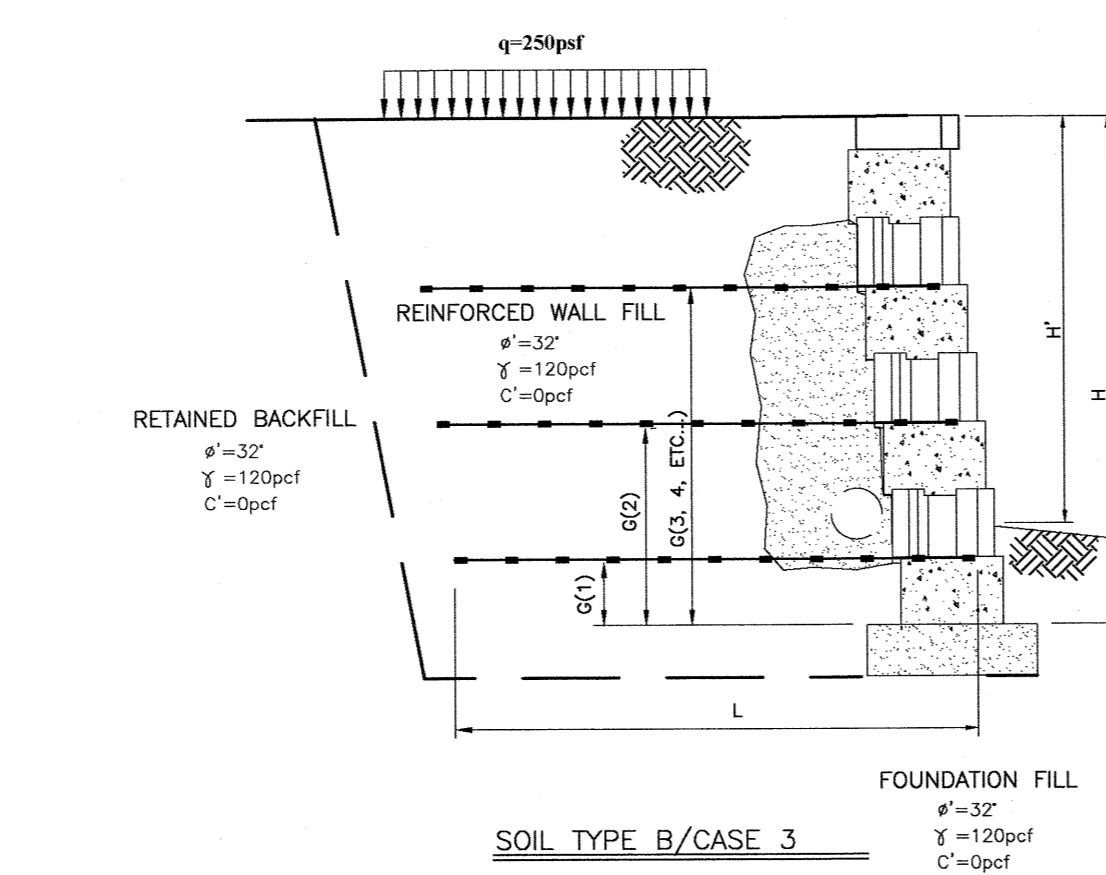
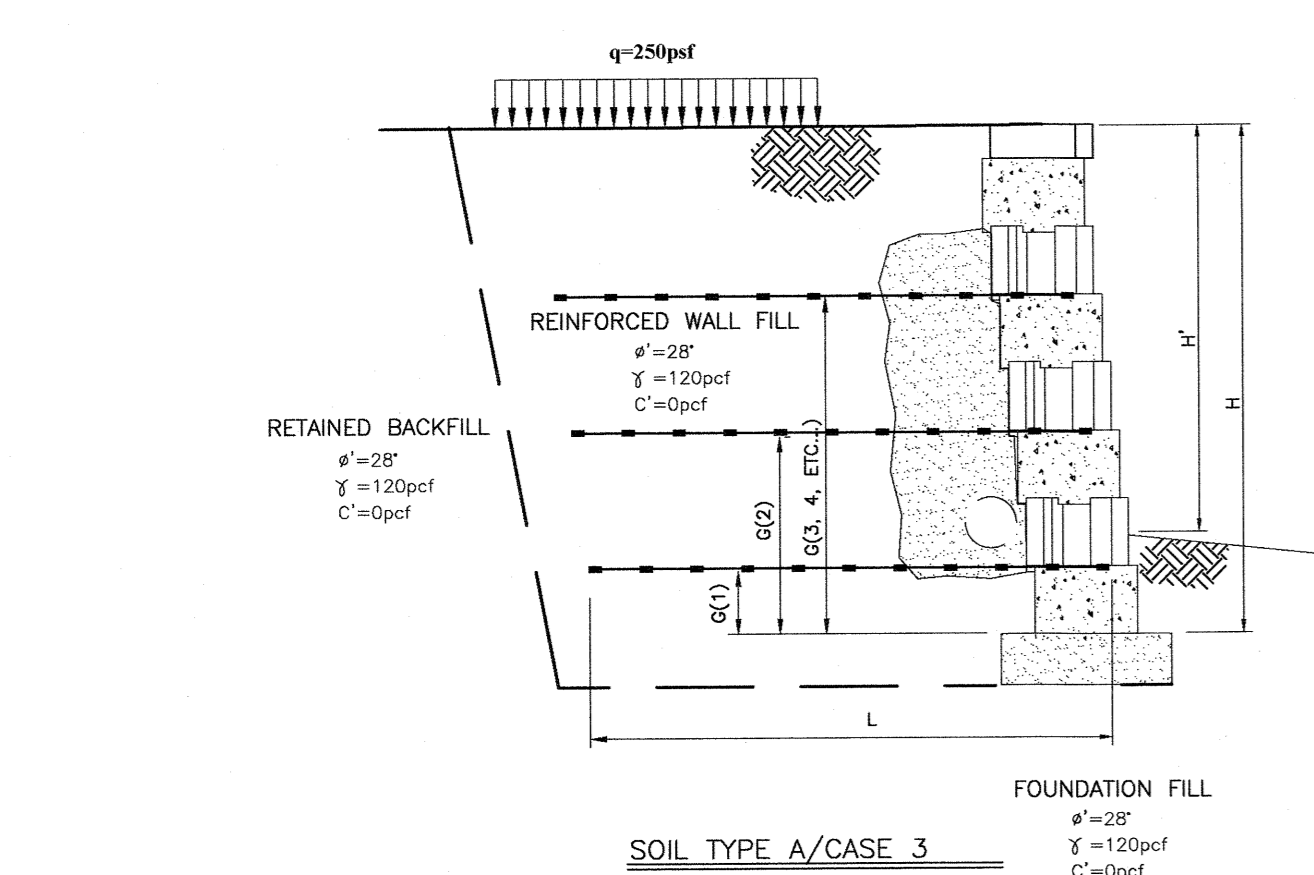
RETAINING WALL FENCE DETAIL
(NO SCALE)

SOIL TYPE A/CASE 1

TOTAL HEIGHT	EXPOSED HEIGHT	NO. LAYERS	TYPE	1	2	3	4	5	6	7	8	9	10	11	12	13
2'-0"	1'-6"	0	N/A	N/A	-	-	-	-	-	-	-	-	-	-	-	-
2'-6"	2'-0"	0	N/A	N/A	-	-	-	-	-	-	-	-	-	-	-	-
4'-6"	4'-0"	1	A	2'-0"	-	-	-	-	-	-	-	-	-	-	-	-
7'-0"	6'-0"	4	A	2'-0"	2'-0"	4'-0"	6'-0"	-	-	-	-	-	-	-	-	-
9'-0"	8'-0"	4	B	1'-0"	3'-0"	5'-0"	7'-0"	-	-	-	-	-	-	-	-	-
11'-0"	10'-0"	5	B	1'-0"	3'-0"	5'-0"	7'-0"	9'-0"	-	-	-	-	-	-	-	-
13'-0"	12'-0"	7	B	0'-6"	2'-0"	3'-6"	5'-6"	7'-6"	9'-6"	11'-6"	-	-	-	-	-	-
15'-0"	14'-0"	8	B	0'-6"	2'-0"	3'-6"	5'-6"	7'-6"	9'-6"	11'-6"	13'-0"	-	-	-	-	-
17'-6"	16'-0"	11	B	0'-6"	1'-6"	2'-6"	3'-6"	5'-0"	6'-6"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	-	-
19'-6"	18'-0"	10	C	0'-6"	2'-6"	4'-6"	6'-6"	8'-6"	10'-6"	12'-6"	14'-6"	16'-6"	18'-6"	-	-	-
21'-6"	20'-0"	11	C	0'-6"	2'-6"	4'-6"	6'-6"	8'-6"	10'-6"	12'-6"	14'-6"	16'-6"	18'-6"	20'-6"	-	-

SOIL TYPE B/CASE 1

TOTAL HEIGHT	EXPOSED HEIGHT	NO. LAYERS	TYPE	1	2	3	4	5	6	7	8	9	10	11	12	13
2'-0"	1'-6"	0	N/A	N/A	-	-	-	-	-	-	-	-	-	-	-	-
2'-6"	2'-0"	0	N/A	N/A	-	-	-	-	-	-	-	-	-	-	-	-
4'-6"	4'-0"	1	A	2'-6"	-	-	-	-	-	-	-	-	-	-	-	-
7'-0"	6'-0"	3	A	2'-0"	4'-0"	6'-0"	-	-	-	-	-	-	-	-	-	-
9'-0"	8'-0"	4	A	0'-6"	2'-0"	3'-6"	5'-6"	7'-6"	9'-6"	-	-	-	-	-	-	-
11'-0"	10'-0"	6	B	0'-6"	2'-0"	4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	-	-	-	-	-	-
13'-0"	12'-0"	7	B	0'-6"	2'-0"	4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	-	-	-	-	-
15'-0"	14'-0"	8	B	0'-6"	2'-0"	4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	-	-	-	-
17'-6"	16'-0"	9	B	0'-6"	2'-0"	3'-6"	5'-0"	7'-0"	9'-0"	11'-0"	13'-0"	15'-0"	-	-	-	-
19'-6"	18'-0"	9	C	0'-6"	2'-6"	4'-6"	6'-6"	8'-6"	10'-6"	12'-6"	14'-6"	16'-6"	18'-6"	-	-	-
21'-6"	20'-0"	10	C	0'-6"	2'-6"	4'-6"	6'-6"	8'-6"	10'-6"	12'-6"	14'-6"	16'-6"	18'-6"	20'-6"	-	-



HEIGHT CONVERSION		
NO. OF BLOCKS ABOVE LEVELING PAD	HEIGHT ABOVE LEVELING PAD	GEGRID LEVEL
1	0'-0"	0'-0"
2	1'-0"	1'-0"
3	2'-0"	2'-0"
4	3'-0"	3'-0"
5	4'-0"	4'-0"
6	5'-0"	5'-0"
7	6'-0"	6'-0"
8	7'-0"	7'-0"
9	8'-0"	8'-0"
10	9'-0"	9'-0"
11	10'-0"	10'-0"
12	11'-0"	11'-0"
13	12'-0"	12'-0"
14	13'-0"	13'-0"
15	14'-0"	14'-0"
16	15'-0"	15'-0"
17	16'-0"	16'-0"
18	17'-0"	17'-0"
19	18'-0"	18'-0"
20	19'-0"	19'-0"
21	20'-0"	20'-0"
22	21'-0"	21'-0"
23	22'-0"	22'-0"
24	23'-0"	23'-0"
25	24'-0"	24'-0"
26	25'-0"	25'-0"
27	26'-0"	26'-0"
28	27'-0"	27'-0"
29	28'-0"	28'-0"
30	29'-0"	29'-0"
31	30'-0"	30'-0"
32	31'-0"	31'-0"
33	32'-0"	32'-0"
34	33'-0"	33'-0"
35	34'-0"	34'-0"
36	35'-0"	35'-0"
37	36'-0"	36'-0"
38	37'-0"	37'-0"
39	38'-0"	38'-0"

SOIL TYPE A/CASE 3

TOTAL HEIGHT	EXPOSED HEIGHT	NO. LAYERS	TYPE	1	2	3	4	5	6	7	8	9	10	11	12	13
2'-0"	1'-6"	0	N/A	N/A	-	-	-	-	-	-	-	-	-	-	-	-
2'-6"	2'-0"	0	N/A	N/A	-	-	-	-	-	-	-	-	-	-	-	-
4'-6"	4'-0"	2	A	1'-0"	2'-0"	-	-	-	-	-	-	-	-	-	-	-
7'-0"	6'-0"	4	A	0'-6"	2'-0"	4'-0"	6'-0"	-	-	-	-	-	-	-	-	-
9'-0"	8'-0"	5	A	0'-6"	2'-0"	3'-6"	5'-6"	7'-6"	-	-	-	-	-	-	-	-
11'-0"	10'-0"	6	B	0'-6"	2'-0"	4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	-	-	-	-	-	-
13'-0"	12'-0"	7	B	0'-6"	2'-0"	3'-6"	5'-6"	7'-6"	9'-6"	11'-6"	-	-	-	-	-	-
15'-0"	14'-0"	7	B	0'-6"	2'-0"	3'-6"	5'-6"	7'-6"	9'-6"	11'-6"	13'-0"	-	-	-	-	-
17'-6"	16'-0"	8	C	1'-0"	3'-0"	5'-0"	7'-0"	9'-0"	11'-0"	13'-0"	15'-0"	-	-	-	-	-
19'-6"	18'-0"	10	C	0'-6"	2'-0"	4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	-	-	-
21'-6"	20'-0"	11	C	0'-6"	2'-0"	3'-6"	5'-0"	7'-0"	9'-0"	11'-0"	13'-0"	15'-0"	17'-0"	19'-0"	-	-

SOIL TYPE B/CASE 3

TOTAL HEIGHT	EXPOSED HEIGHT	NO. LAYERS	TYPE	1	2	3	4	5	6	7	8	9	10	11	12	13
2'-0"	1'-6"	0	N/A	N/A	-	-	-	-	-	-	-	-	-	-	-	-
2'-6"	2'-0"	0	N/A	N/A	-	-	-	-	-	-	-	-	-	-	-	-
4'-6"	4'-0"	2	A	1'-0"	2'-0"	-	-	-	-	-	-	-	-	-	-	-
7'-0"	6'-0"	4	A	0'-6"	2'-0"	4'-0"	6'-0"	-	-	-	-	-	-	-	-	-
9'-0"	8'-0"	5	A	0'-6"	2'-0"	3'-6"	5'-6"	7'-6"	-	-	-	-	-	-	-	-
11'-0"	10'-0"	6	B	0'-6"	2'-0"	4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	-	-	-	-	-	-
13'-0"	12'-0"	7	B	0'-6"	2'-0"	3'-6"	5'-6"	7'-6"	9'-6"	11'-6"	-	-	-	-	-	-
15'-0"	14'-0"	8	B	0'-6"	2'-0"	3'-6"	5'-6"	7'-6"	9'-6"	11'-6"	13'-0"	-	-	-	-	-
17'-6"	16'-0"	8	C	1'-0"	3'-0"	5'-0"	7'-0"	9'-0"	11'-0"	13'-0"	15'-0"	-	-	-	-	-
19'-6"	18'-0"	9	C	1'-0"	3'-0"	5'-0"	7'-0"	9'-0"	11'-0"	13'-0"	15'-0"	17'-0"	-	-	-	-
21'-6"	20'-0"	10	C	1'-0"	3'-0"	5'-0"	7'-0"	9'-0"	11'-0"	13'-0"	15'-0"	17'-0"	19'-0"	-	-	-

GENERAL NOTES

- ACTUAL SITE CONDITIONS MAY VARY THE QUANTITY OF GEGRID REQUIRED. COMPACTION SHALL BE TO 95% STANDARD PROCTOR DENSITY.
- GEGRID SHALL EXTEND TO THE FRONT OF THE UNITS.
- FOR SPECIFIC INSTALLATION DETAILS SEE TYPICAL SECTION SHEET 005.
- MINIMUM EMBEDMENT OF BASE SHALL BE 8" FOR WALLS UNDER 4' HIGH AND 16" FOR LARGER WALLS.
- DETERMINATION OF FINAL DESIGN SHALL BE MADE BY A QUALIFIED ENGINEER.
- PROVIDE LATERAL DRAINAGE. TYP. SHALL BE ESTABLISHED IMMEDIATELY AFTER COMPLETION OF THE RETAINING WALL.
- CONTRACTOR MAY OPT FOR AN UNREINFORCED CONCRETE LEVELING PAD, 2" THICK OVER 4" COMPACTED GRANULAR BASE.
- FOLLOW APPLICABLE STATE AND LOCAL BUILDING CODES FOR FINAL WALL INSTALLATION.

DESIGN PARAMETERS

- FS FOR SLIDING IS 1.5
- FS FOR OVERTURNING IS 2.0
- ALLOWABLE SOIL BEARING PRESSURE IS 3000 PSF

GRID	LONG TERM ALLOWABLE DESIGN STRENGTH
A	750
B	1200
C	2200

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A	750
B	1200
C	2200

RETAINING WALL DETAILS
NOT TO SCALE

DETAILS SHOWN ON THIS DRAWING ARE FOR GENERAL INFORMATION ONLY
FINAL DESIGN PER SOILS REPORT & WALL SUPPLIER ENGINEER

PLAN PREPARED BY:
ADVANCED CIVIL DESIGN
ENGINEERS & SURVEYORS
51 Kilmayne Drive, Suite 102
Cary, North Carolina 27511
ph 919.481.8290
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License # C-2798

PLAN PREPARED FOR:
TRINITY CAPITAL

350 Spectrum Drive, Knightdale, NC 27545 - Wake County
EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
FOR
TRINITY CAPITAL ADVISORS, LLC
DETAILS

NO. 107
NORTH CAROLINA
REGISTERED PROFESSIONAL
ENGINEER
CAMERON M. RICE

10/04/2021

Issue Dates:	06/11/2021 - PROGRESS SET TO CONTRACTOR
	06/16/2021 - TOWN SUBMITTAL #1
	08/10/2021 - TOWN SUBMITTAL #2
	09/14/2021 - TOWN SUBMITTAL #3
	10/04/2021 - TOWN SUBMITTAL #4

Date: 10/04/2021
Scale: NOT TO SCALE

Drawn By: JLB
Checked By: CMR

Project Number:
20-0006-988

Drawing Number:
C.10.1

ZMA-10-20

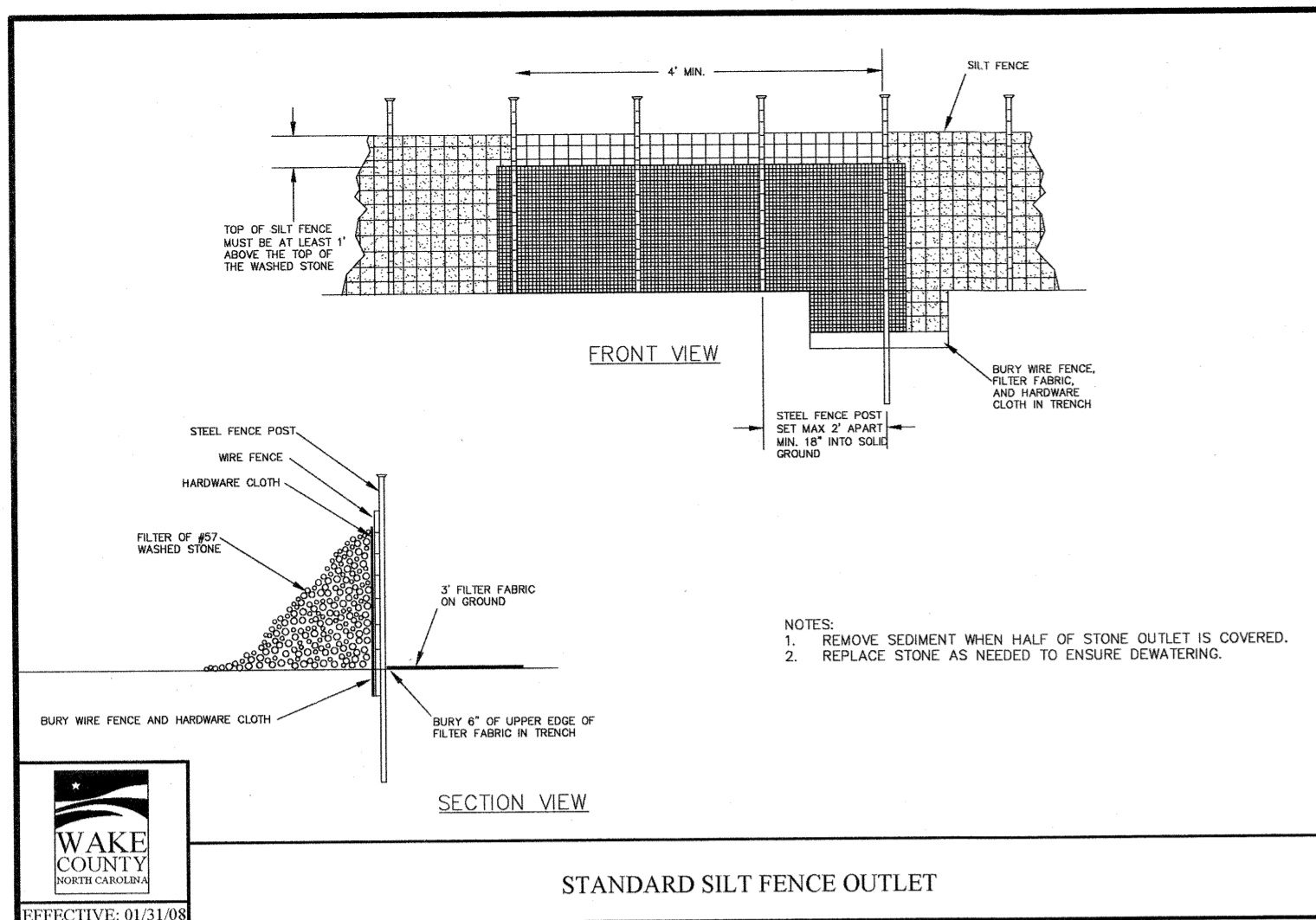
Town Certification. This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: *[Signature]* Date: 10-12-2021
Development Services Engineer

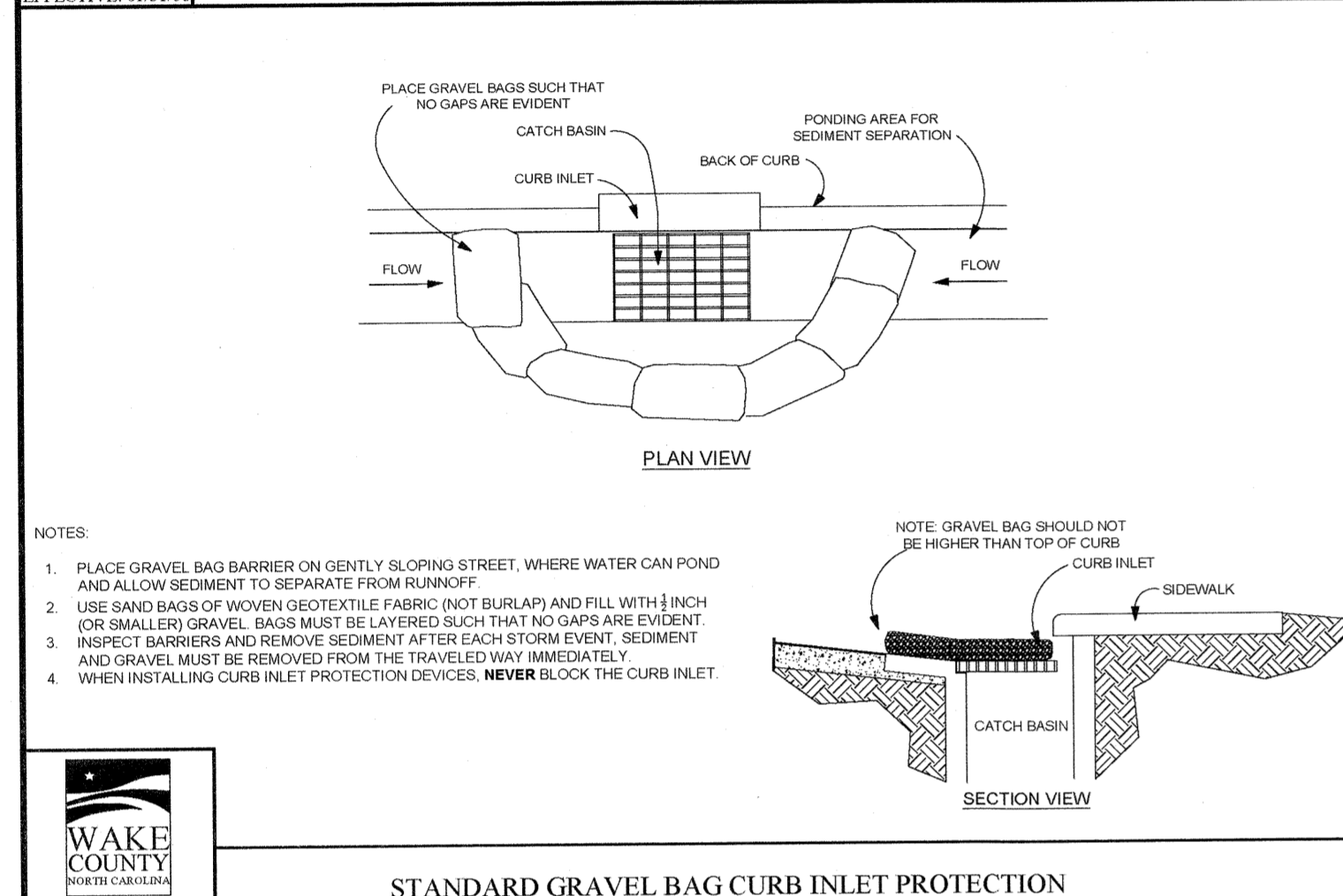
These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: *[Signature]* Date: 10-13-21
Administrator

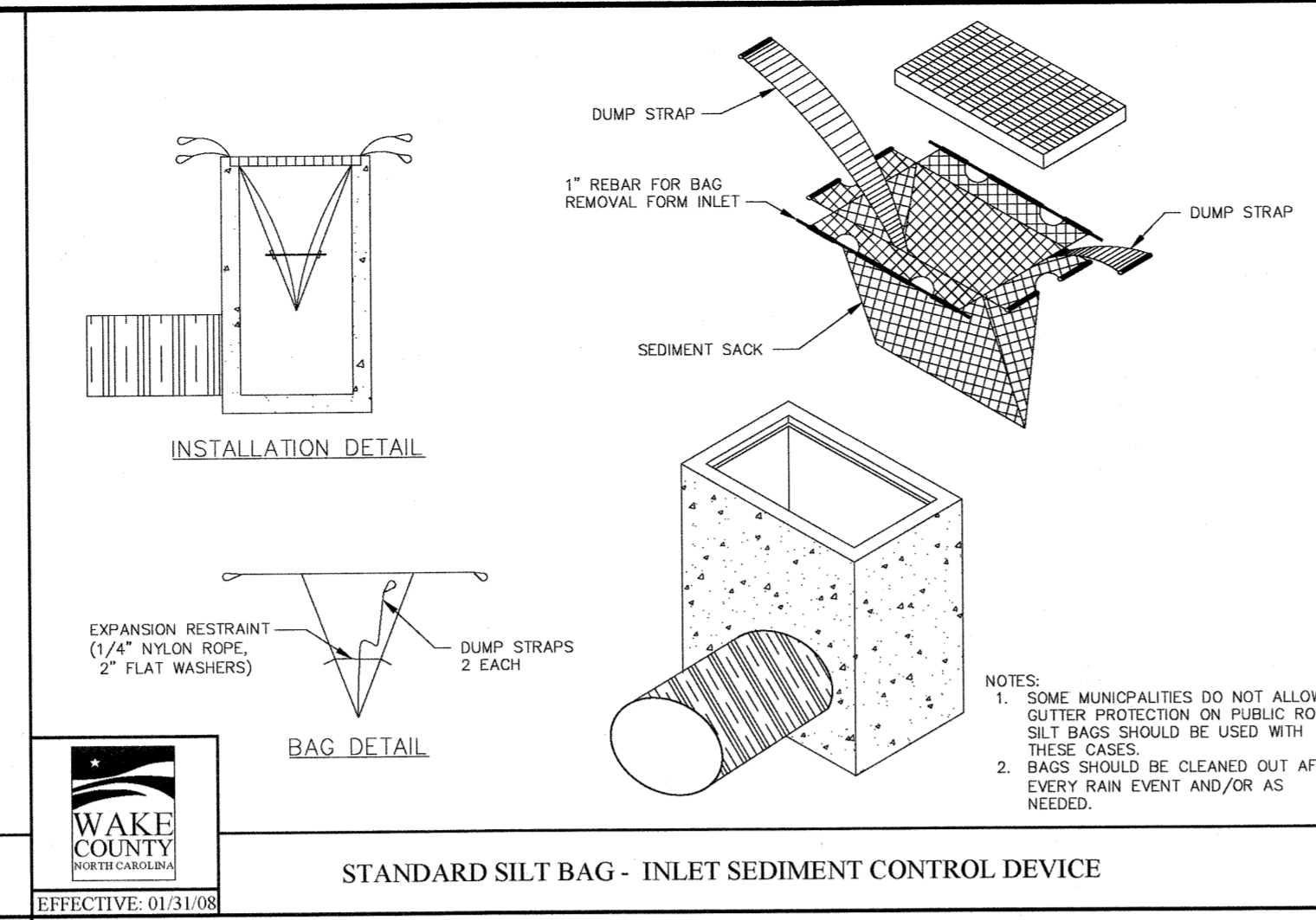
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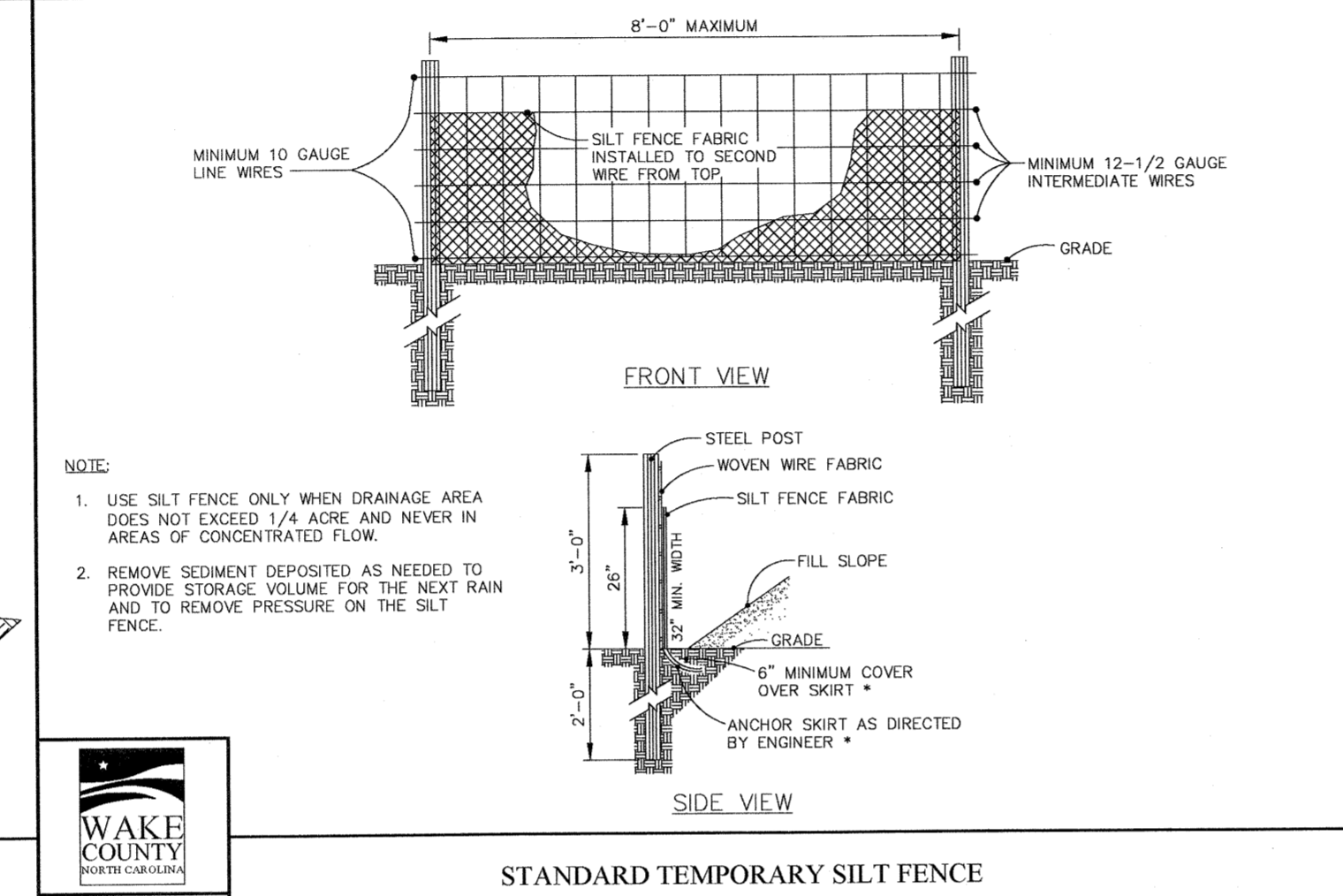
STANDARD SILT FENCE OUTLET



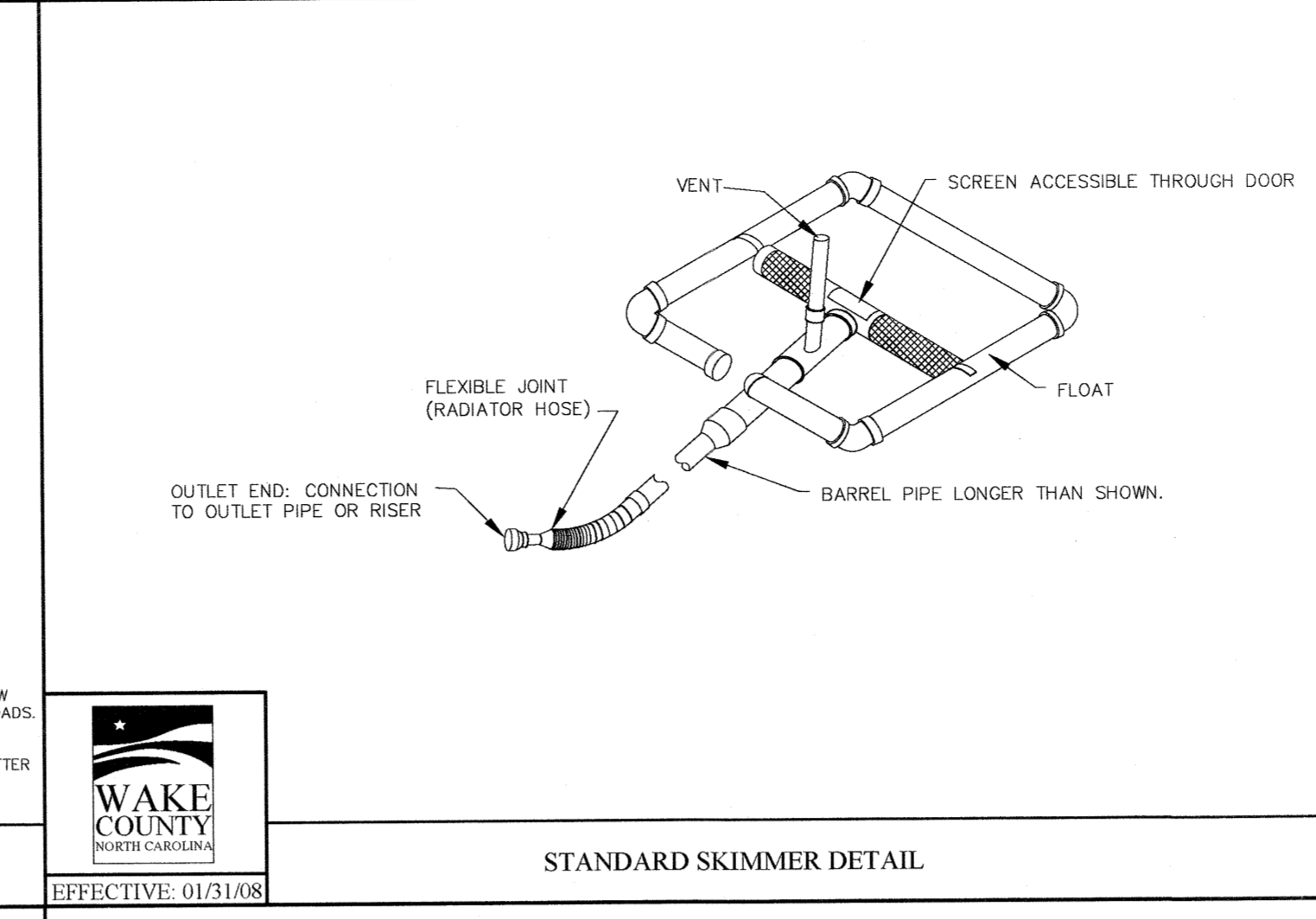
STANDARD GRAVEL BAG CURB INLET PROTECTION



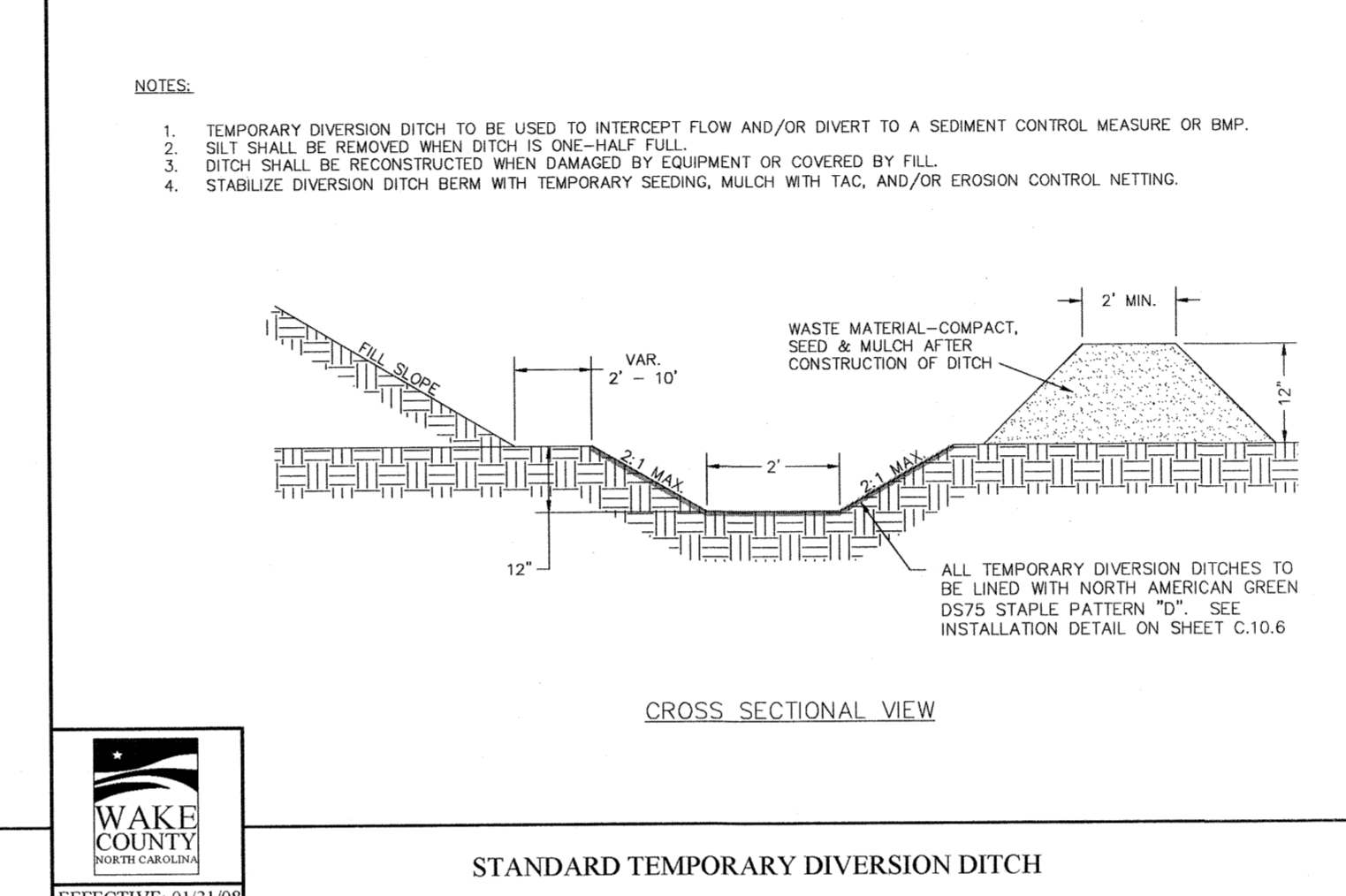
STANDARD SILT BAG - INLET SEDIMENT CONTROL DEVICE



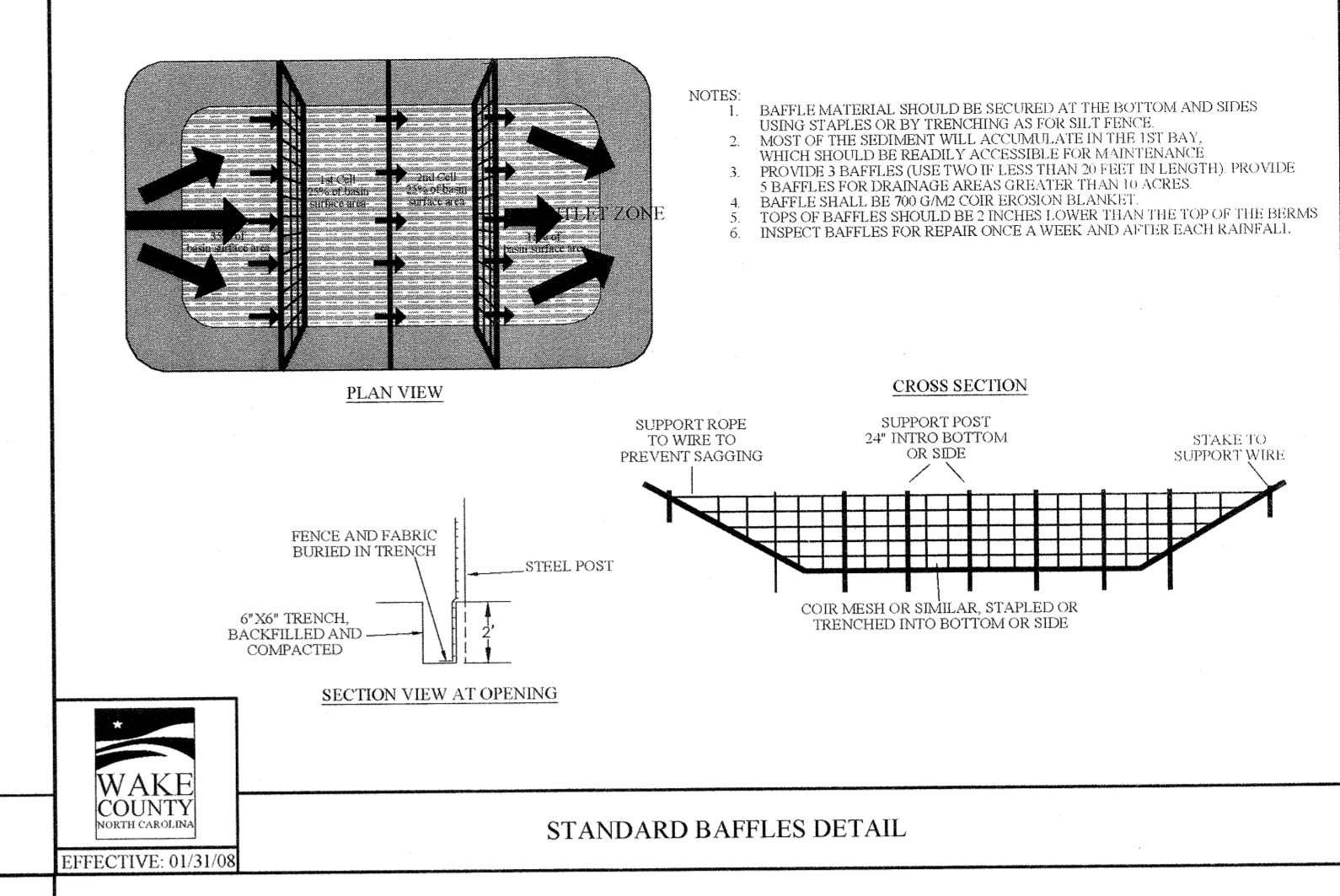
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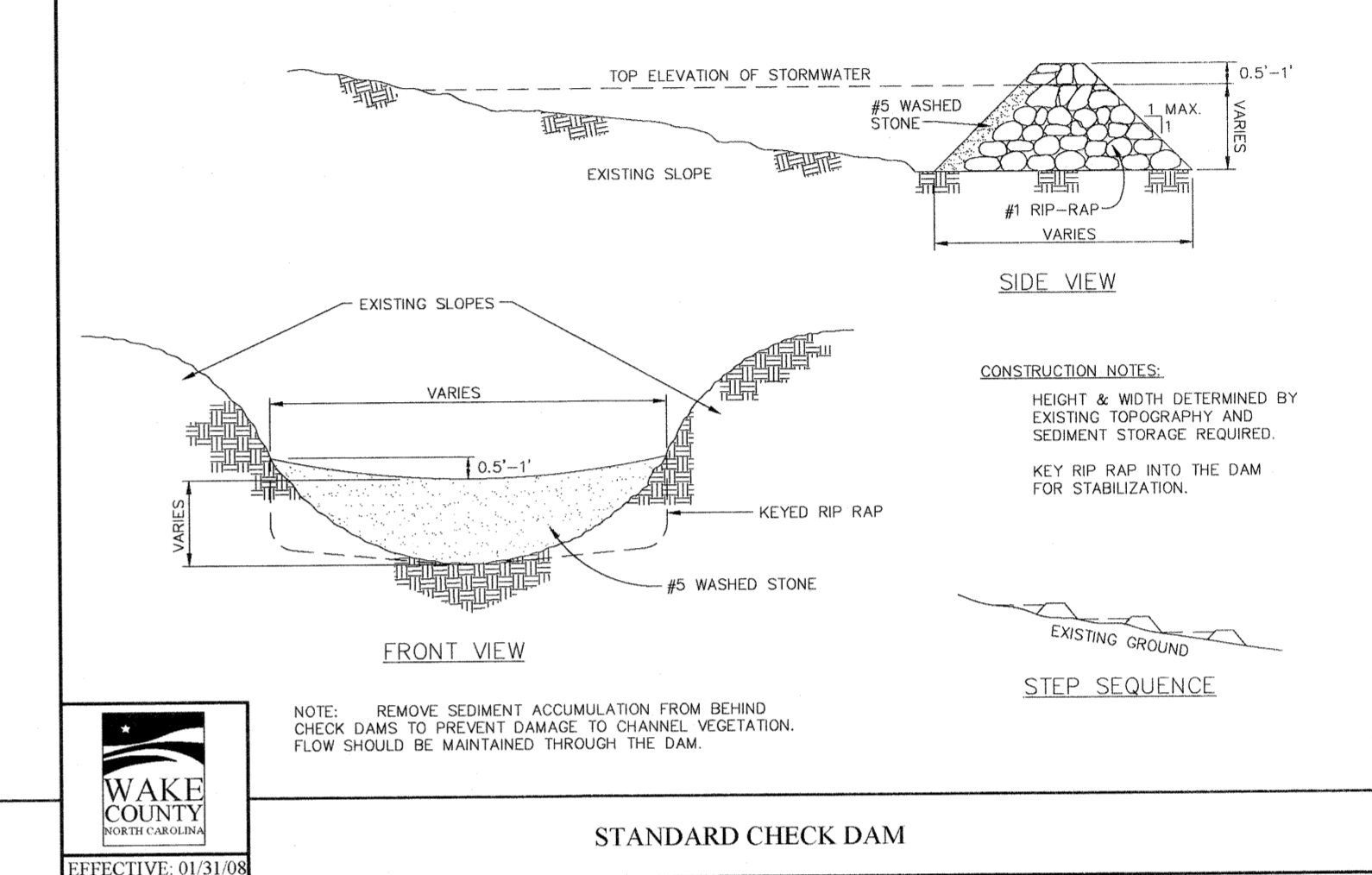
STANDARD SKIMMER DETAIL



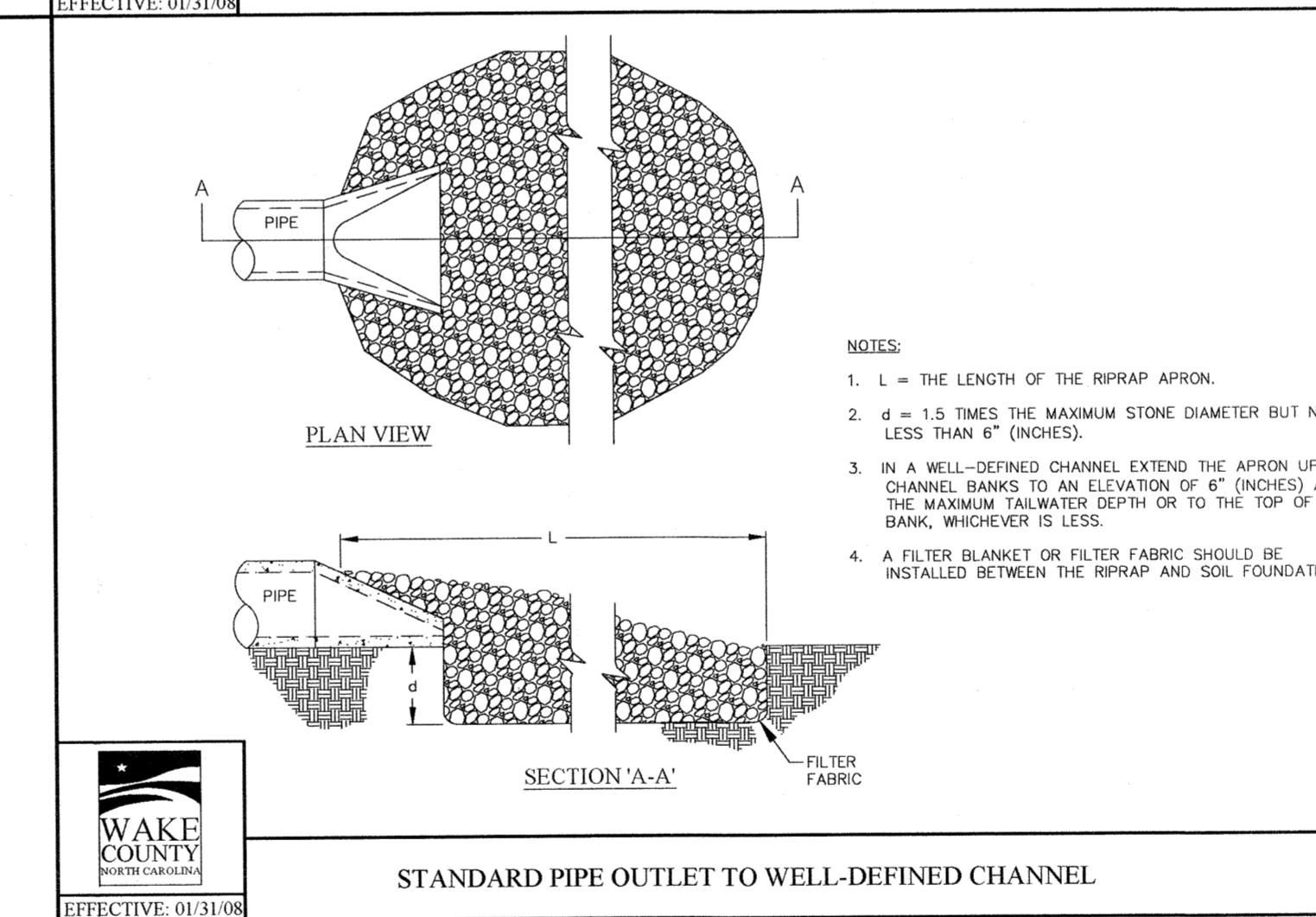
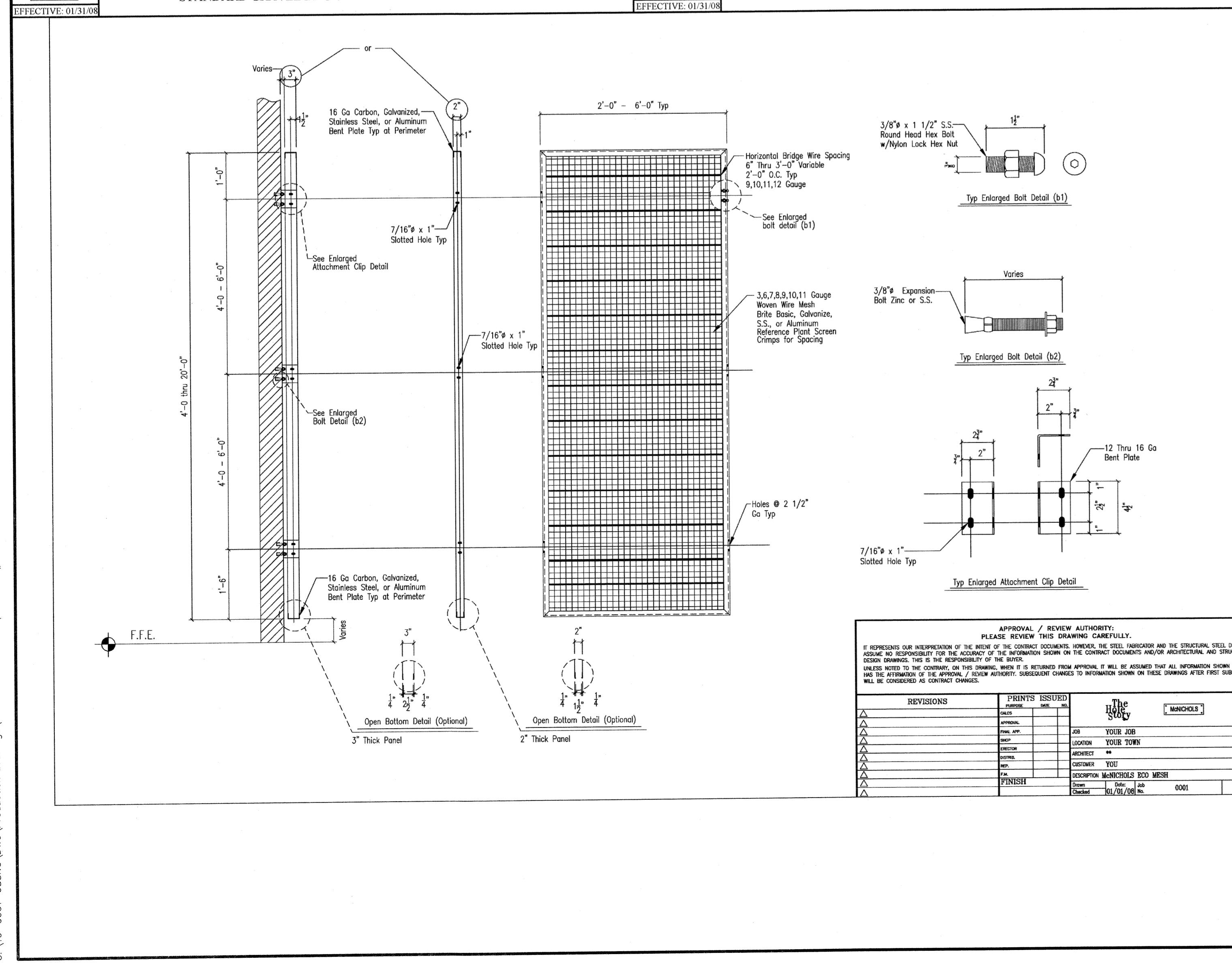
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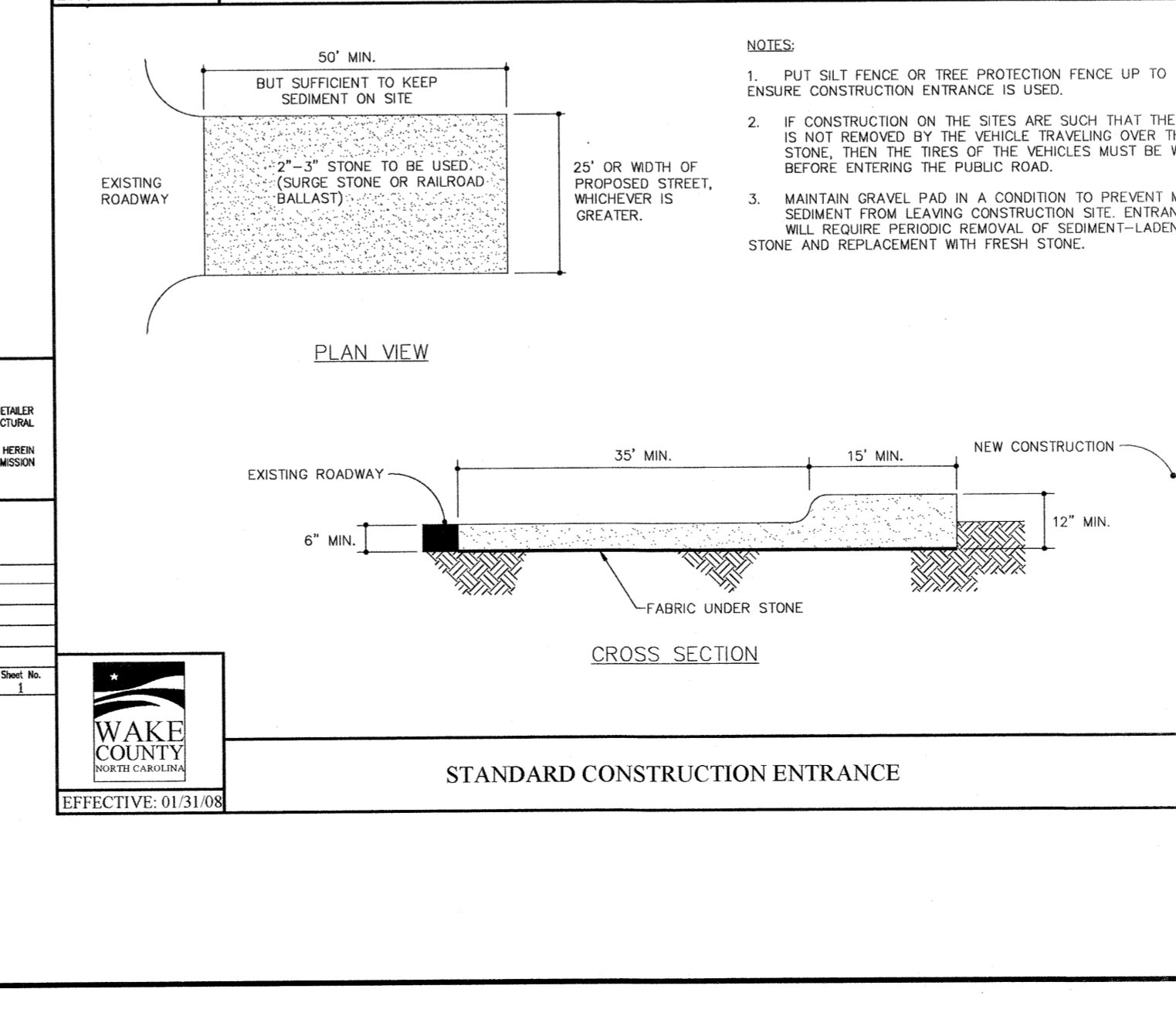
STANDARD BAFFLES DETAIL



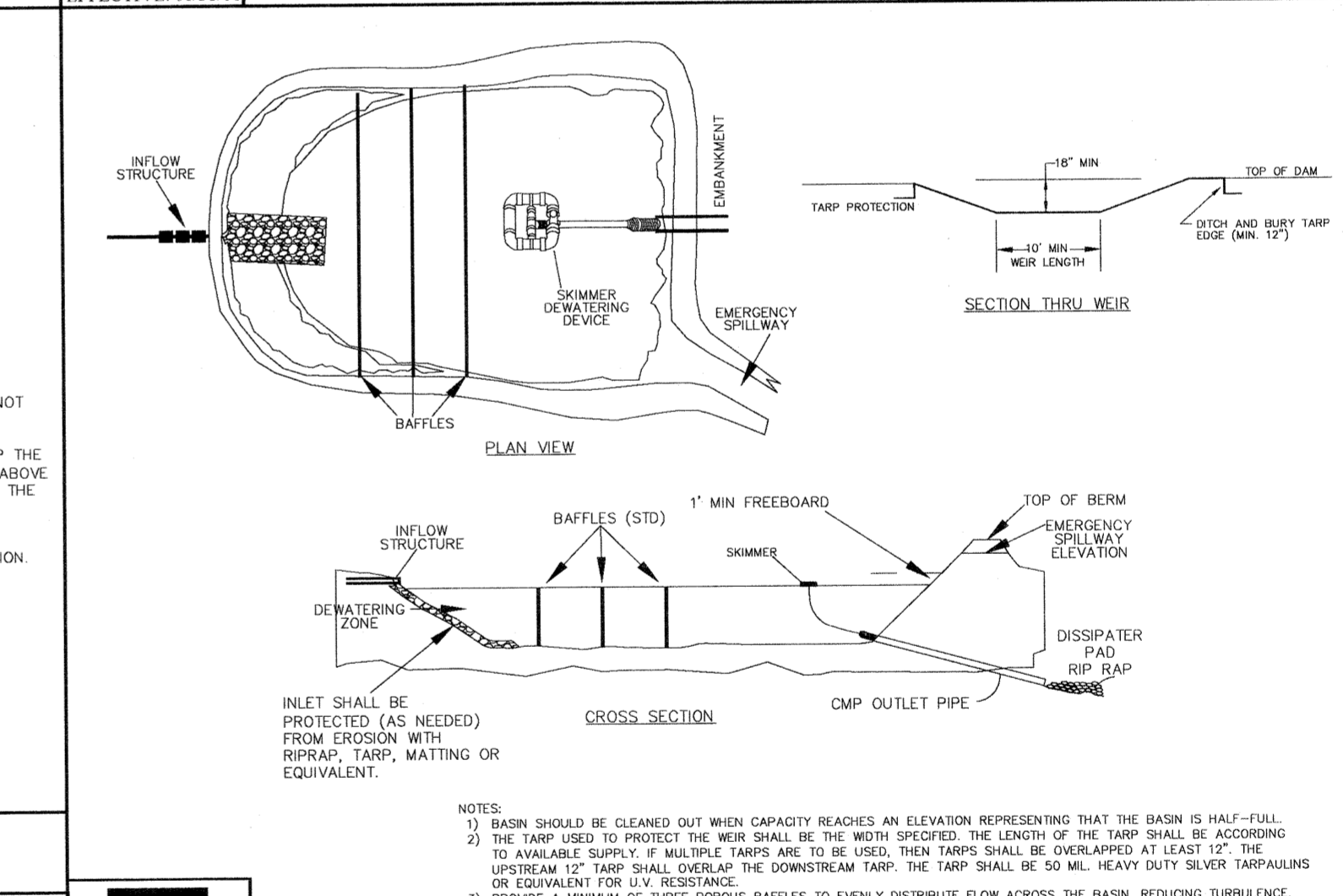
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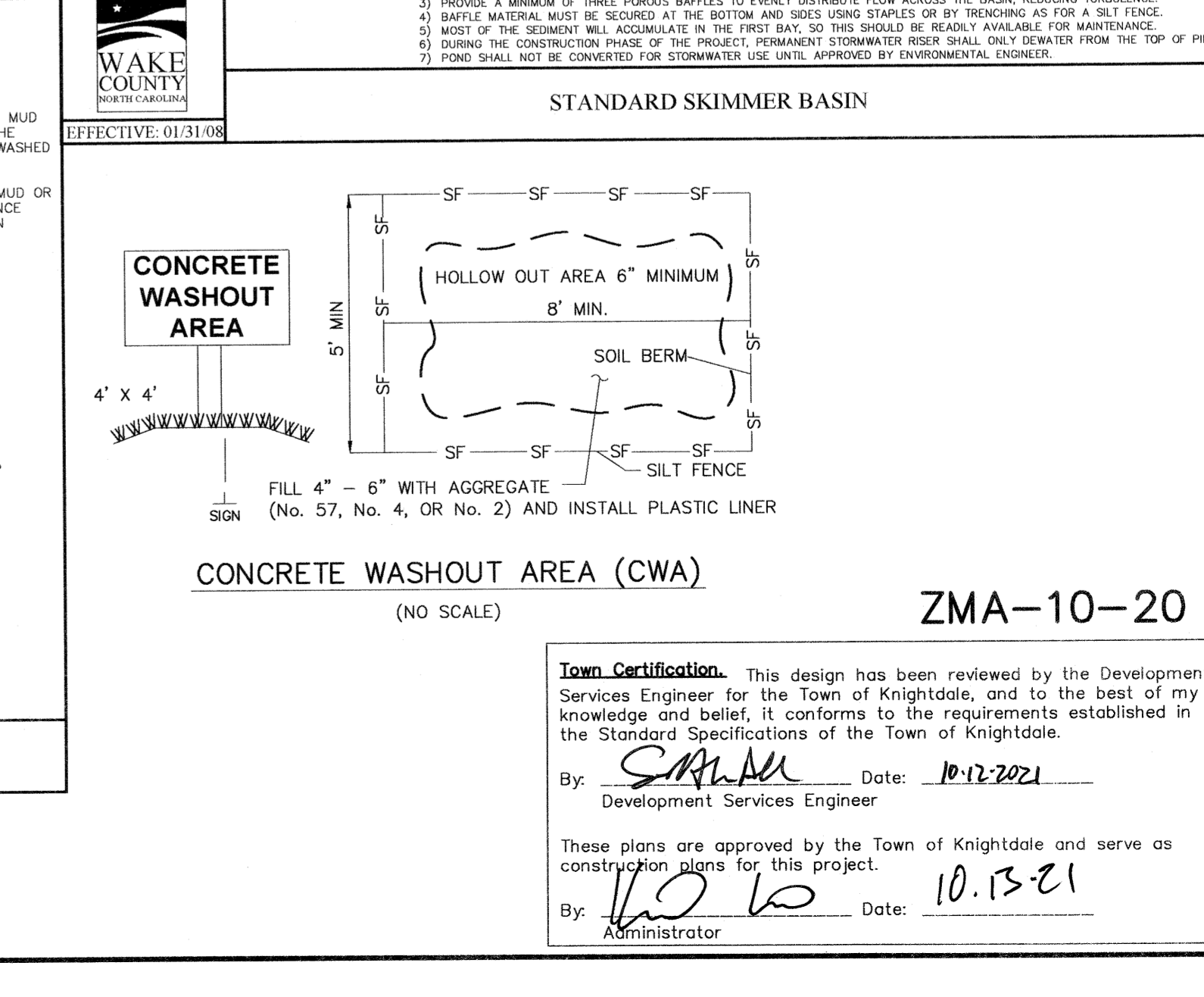
STANDARD PIPE OUTLET TO WELL-DEFINED CHANNEL



STANDARD CONSTRUCTION ENTRANCE



STANDARD SKIMMER BASIN



CONCRETE WASHOUT AREA (CWA)

ZMA-10-20

Town Certification. This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: *[Signature]* Date: 10-12-2021
Development Services Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: *[Signature]* Date: 10-13-21
Administrator

PLAN PREPARED BY: **ADVANCED CIVIL DESIGN ENGINEERS**

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Lic: License # C-2798

PLAN PREPARED FOR: **TRINITY CAPITAL**

390 Spectrum Drive, Knightdale, NC 27545 - Wake County

EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
FOR
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Issue Dates:
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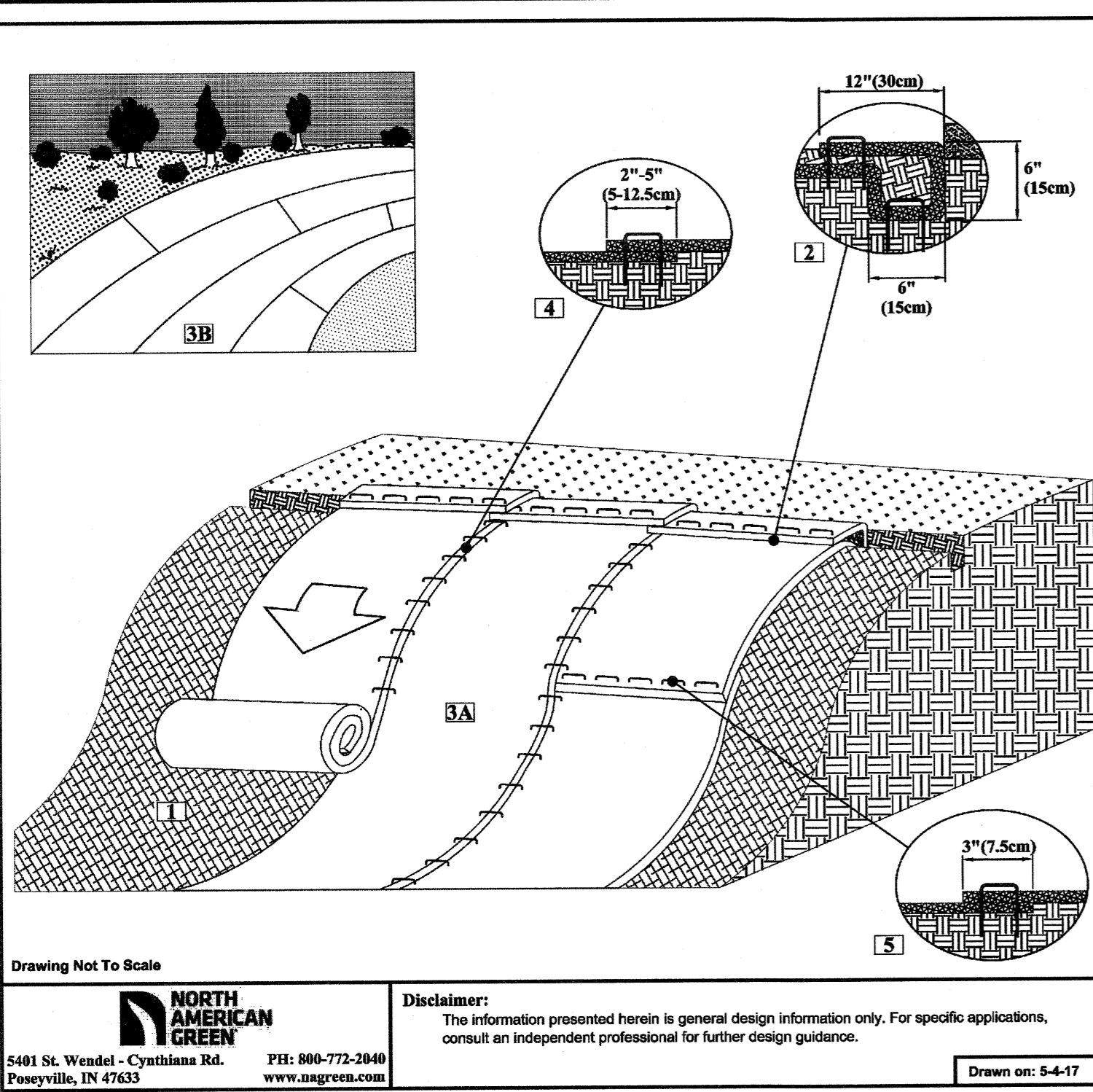
Date: 10/04/2021
Scale: NOT TO SCALE

Drawn By: JLB
Checked By: CMR

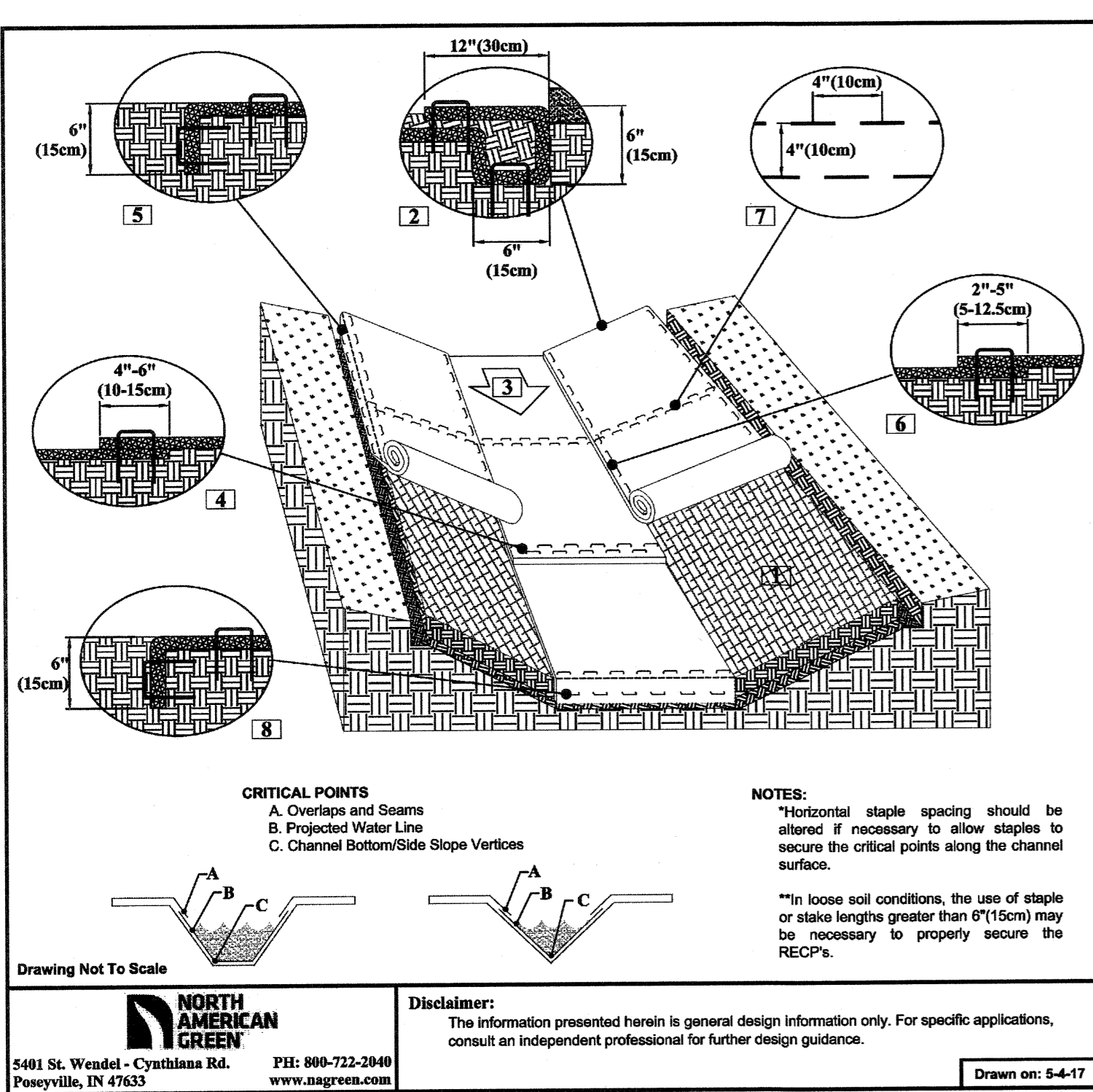
Project Number:
20-0006-988

Drawing Number:
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SLOPE INSTALLATION DETAIL
1. Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed.
2. Begin at the top of the slope by anchoring the RECPs in a 6" (15cm) deep x 6" (15cm) wide trench with approximately 12" (30cm) of RECPs extended beyond the up-slope portion of the trench. Anchor the RECPs with a row of staples/stakes spaced approximately 12" (30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and fold the remaining 12" (30cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12" (30cm) apart across the width of the RECPs.
3. Roll the RECPs (A) down or (B) horizontally across the slope. RECPs will be secured by staples/stakes in appropriate locations as shown in the staple pattern guide.
4. The edges of parallel RECPs must be stapled with approximately 2" (5.1cm) overlap, depending on the RECPs type.
5. Consecutive RECPs applied down the slope must be end overlapped (Shingle style) with an approximate 2" (5.1cm) overlap. Staple through overlapping RECPs at approximately 12" (30cm) apart across entire RECPs width.



CHANNEL INSTALLATION DETAIL
1. Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed.
2. Begin at the top of the channel by anchoring the RECPs in a 6" (15cm) deep x 6" (15cm) wide trench with approximately 12" (30cm) of RECPs extended beyond the up-slope portion of the trench. Anchor the RECPs with a row of staples/stakes spaced approximately 12" (30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and fold the remaining 12" (30cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12" (30cm) apart across the width of the RECPs.
3. Roll center RECPs in direction of water flow in bottom of channel. RECPs will be secured with appropriate site against the soil surface. All RECPs must be securely fastened to soil surface by stapling staples/stakes in appropriate locations as shown in the staple pattern guide.
4. These consecutive RECPs and end-over-end (Shingle style) with a 4"-6" overlap. Use a double row of staples staggered 4" apart and 4" on center to secure RECPs.
5. Full length edge of RECPs at top of side slopes must be anchored with a row of staples/stakes spaced approximately 12" (30cm) apart in a 6" (15cm) deep x 6" (15cm) wide trench. Backfill and compact the trench after stapling.
6. Adjacent RECPs must be overlapped approximately 2" (5.1cm) (Shingle style) and secured with a row of staples/stakes spaced approximately 12" (30cm) apart in a 6" (15cm) deep x 6" (15cm) wide trench. Backfill and compact the trench after stapling.
7. In high flow channel applications a staple check slot is recommended at 30 foot (9.1m) intervals. Use a double row of staples staggered 4" apart and 4" on center over entire width of the channel.
8. The terminal end of the RECPs must be anchored with a row of staples/stakes spaced approximately 12" (30cm) apart in a 6" (15cm) deep x 6" (15cm) wide trench. Backfill and compact the trench after stapling.

CRITICAL POINTS
A. Overlaps and Seams
B. Projected Water Line
C. Channel Bottom/Side Slope Vertices

NOTES:
*Horizontal staple spacing should be altered if necessary to allow staples to secure the critical points along the channel surface.
**In loose soil conditions, the use of staple or stake lengths greater than 6" (15cm) may be necessary to properly secure the RECPs.

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

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 -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
(d) Slopes 3:1 to 4:1	14	-10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-10 days for Falls Lake Watershed unless there is zero slope

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
• 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	• 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

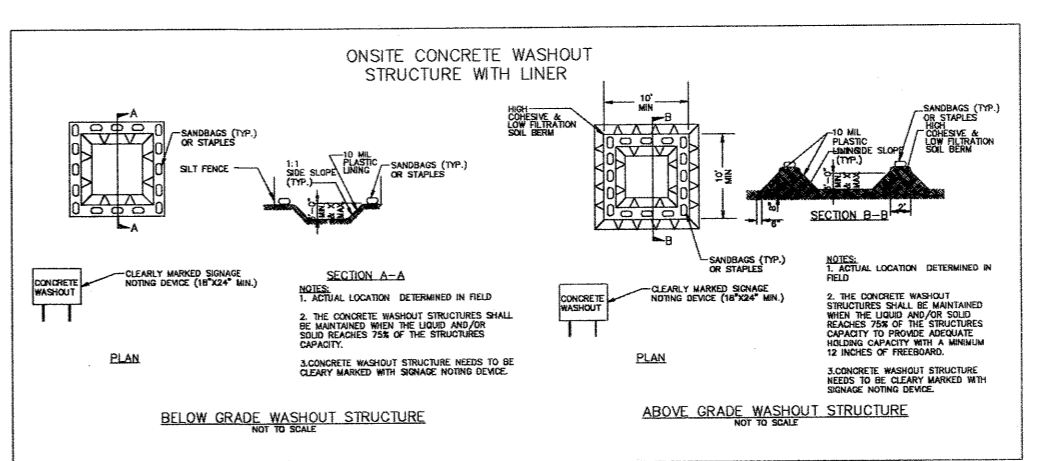
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, 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 sandbags.
- 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 stockpiles 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.



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.

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.

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.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

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-measuring device approved by the Division.
(2) EESC 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 outfalls (S/Os)	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 sediments 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 on 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 EESC measures, dewatering 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. EESC Plan Documentation
The approved EESC plan as well as any approved deviation shall be kept on the site. The approved EESC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the EESC plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each EESC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved EESC plan.	Initial and date each EESC measure on a copy of the approved EESC plan or complete, date and sign an inspection report that lists each EESC measure shown on the approved EESC plan. This documentation is required upon the initial installation of the EESC measures or if the EESC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved EESC 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 EESC plan.	Initial and date a copy of the approved EESC 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 EESC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to EESC measures.	Initial and date a copy of the approved EESC 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 EESC 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:

- This General Permit as well as the Certificate of Coverage, after it is received.
- 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 III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported
Permittees shall report the following occurrences:

- Visible sediment deposition in a stream or wetland.
- Oil spills:
 - They are 25 gallons or more,
 - They are less than 25 gallons but cannot be cleaned up within 24 hours,
 - They cause sheen on surface waters (regardless of volume), or
 - They are within 100 feet of surface waters (regardless of volume).
- Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 113.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.
- Anticipated bypasses and unanticipated bypasses.
- Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements
After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	• Within 24 hours , an oral or electronic notification. • Within 7 calendar days , a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. • If the stream is named on the NC 303(d), as if impaired for sediment related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired waters conditions.
(b) Oil spills and release of hazardous substances per Item 1(b) (i) above	• Within 24 hours , an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses (40 CFR 122.41(m)(3))	• A report at least ten days before the date of the bypass, if possible. The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses (40 CFR 122.41(m)(3))	• Within 24 hours , an oral or electronic notification. • Within 7 calendar days , a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment (40 CFR 122.41(i)(7))	• Within 24 hours , an oral or electronic notification, a report that contains a description of the noncompliance, and its causes, the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue, and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. [40 CFR 122.41(i)(6)]. • Division staff may waive the requirement for a written report on a case-by-case basis.

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:

- The EESC 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 EESC plan authority has approved these items.
- 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.
- 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, wet tanks, and filtration systems.
- 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.
- Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- 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.

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19

PLAN PREPARED BY: TRINITY CAPITAL CIVIL DESIGN ENGINEERS

390 Spectrum Drive, Knightdale, NC 27545 - Wake County

EASTGATE 540

BUILDING #7 CONSTRUCTION PLANS

FOR

TRINITY CAPITAL ADVISORS, LLC

DETAILS

Issue Dates: 06/17/2021 - PROGRESS SET TO CONTRACTOR, 06/18/2021 - TOWN SUBMITTAL #1, 08/10/2021 - TOWN SUBMITTAL #2, 09/14/2021 - TOWN SUBMITTAL #3, 10/04/2021 - TOWN SUBMITTAL #4

Date: 10/04/2021
Scale: NOT TO SCALE

Drawn By: JLB
Checked By: CMR

Project Number: 20-0006-988

Drawing Number: C.10.3

By: [Signature] Date: 10-13-21
Administrator

By: [Signature] Date: 10-12-2021
Development Services Engineer

This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

ZMA-10-20

TOWN OF KNIGHTDALE STANDARD DETAILS

PROJECT IDENTIFICATION SIGN

STANDARD NO. 1.01

NOTES:

1. ALL CONCRETE SHALL BE 3000 P.S.I.
2. MORTAR JOINTS SHALL BE 1/2" THICK.
3. BASE SLABS SHALL BE FORMED PRIOR TO PLACING OF CONCRETE.
4. USE TYPE "A" GRATE AT SAG POINTS, OTHERWISE USE TYPE "B" OR "C" FOR THE APPROPRIATE FLOW DIRECTION.
5. MASONRY UNITS MAY BE JUMBO BRICK, CONCRETE BRICK OR SOLID CONCRETE BLOCK.
6. ALL WALLS GREATER THAN 6" IN DEPTH SHALL BE CONSTRUCTED 12" THICK.

TOWN OF KNIGHTDALE STANDARD DETAILS

STANDARD CURB INLET

STANDARD NO. 5.05

NOTES:

1. MORTAR JOINTS SHALL BE 1/2" THICK.
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TOWN OF KNIGHTDALE STANDARD DETAILS

STANDARD CURB INLET

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TOWN OF KNIGHTDALE STANDARD DETAILS

PLANT PROTECTIVE FENCING

STANDARD NO. 2.10

NOTES:

1. REMOVE ALL BARRIERS UPON COMPLETION OF PROJECT.
2. LANDSCAPING PLANS SHALL SHOW LOCATIONS OF ALL TREE PROTECTION FENCES.
3. ALL PLANTS TO BE SAVED SHALL BE PROTECTED BY FENCING AS SHOWN IN THIS DETAIL.
4. CONTRACTOR SHALL CALL FOR INSPECTION AND APPROVAL OF PROTECTIVE FENCING PRIOR TO BEGINNING ANY CONSTRUCTION OR GRADING.
5. CONTRACTOR SHALL CALL FOR INSPECTION AND APPROVAL OF PROTECTIVE FENCING PRIOR TO BEGINNING ANY CONSTRUCTION OR GRADING.
6. PROTECTIVE FENCING SHALL BE LOCATED 5' OUTSIDE DIAPHRANE OF TREES AND 1' MINIMUM OUTSIDE SHRUBS OR OTHER PLANTS.

TOWN OF KNIGHTDALE STANDARD DETAILS

ROOT CROWN DEPTHS

STANDARD NO. 3.21

NOTES:

1. A ROOT COLLAR EXCAVATION FOR ALL TREES SPECIFIED WILL BE DONE BY THE TOWN TO ENSURE THAT TREES WERE NOT PLANTED/GROWN TOO DEEPLY AT SOURCE (NURSERY). LANDSCAPE CONTRACTOR SHALL HAVE SUPPLIER MARK GROUND LEVEL LINE ABOVE ROOT BALL IF TOWN DETERMINES THAT THERE IS EXCESSIVE SOIL OVER THE ROOT CROWN. THESE TREES WILL BE REJECTED.

TOWN OF KNIGHTDALE STANDARD DETAILS

TREE PLANTING (FOR SINGLE AND MULTI-STEM TREES)

STANDARD NO. 3.25

FOR EXAMPLE: CALIPER	HEIGHT (RANGE)	MAX. HEIGHT	MIN. ROOT BALL DIA.	MIN. ROOT BALL DEPTH
2"	12-14"	18"	24"	21"
3"	14-16"	18"	32"	21"

NOTES:

1. REMOVE WIRE OR NYLON TWINE FROM BALL.
2. SOAK ROOT BALL AND PLANT PIT IMMEDIATELY AFTER INSTALLATION.

TOWN OF KNIGHTDALE STANDARD DETAILS

STANDARD DROP INLET WITH GRATE AND FRAME

STANDARD NO. 5.04

NOTES:

1. EITHER SOLID BRICK, SOLID BLOCK, OR PRECAST CONCRETE MAY BE USED.
2. PRECAST CONCRETE WALLS SHALL BE 6" THICK MINIMUM.
3. ALL CONCRETE SHALL BE 3000 P.S.I.
4. FOR 24" PIPE AND LARGER USE PIPE DIA. PLUS 12" AS INSIDE DIMENSIONS.

TOWN OF KNIGHTDALE STANDARD DETAILS

STANDARD REINFORCED CONCRETE HEADWALL WITH WING WALLS

STANDARD NO. 5.06

NOTES:

1. SEE STANDARD DETAIL 5.09 FOR DIMENSIONS.
2. PLACE 1 CUBIC FOOT OF WASHED STONE BEHIND EACH WEEP HOLE.

TOWN OF KNIGHTDALE STANDARD DETAILS

STANDARD REINFORCED CONCRETE HEADWALL WITH WING WALLS

STANDARD NO. 5.06

NOTES:

1. SEE STANDARD DETAIL 5.09 FOR DIMENSIONS.
2. PLACE 1 CUBIC FOOT OF WASHED STONE BEHIND EACH WEEP HOLE.

TOWN OF KNIGHTDALE STANDARD DETAILS

TREE PLANTING ISLAND IN PARKING LOTS

STANDARD NO. 3.23

NOTES:

1. 300 SF MIN. TOTAL REQUIRED AREA PER TREE.
2. FOR NEW PLANTING AREAS, REMOVE ALL PAVEMENT, GRAVEL SUB-BASE AND CONSTRUCTION DEBRIS BEFORE PREPARING SOIL AND PLANTING TREES.
3. REMOVE COMPACTED SOIL AND ADD 24" NEW OR TOPSOIL/PLANTING MIX OR UNCOMPACT AND AMEND TOP 24" OF EXISTING SOIL TO MEET TOPSOIL/PLANTING MIX STANDARDS FOR TREES.

ROADWAY STANDARD DRAWING FOR CONCRETE ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS

15" THROUGH 48" PIPE - 90° SKEW

838.01

GENERAL NOTES:

1. CHAMFER ALL CORNERS 1" OR HAVE A RADIUS OF 1".
2. PLACE 2 #6 "Y" BARS IN THE TOP OF ALL ENDWALL FOR PIPE CULVERTS 42" AND OVER WITH A MINIMUM OF 3" COVER AND A LENGTH OF 6" LESS THAN ENDWALL LENGTH.
3. CONSTRUCT BOTTOM SLAB WITH FORMS.
4. DO NOT INTERPRET WALL THICKNESS (T) SHOWN FOR THE THICKNESS ACCEPTABLE, BUT IS USED IN COMPUTING ENDWALL QUANTITIES.
5. WHEN THE CONTRACTOR ELECTS TO USE A CONSTRUCTION JOINT AT THE BOTTOM OF THE PIPE, PLACE BAR "X" DOWELS IN THE BASE AS SHOWN ON PLANS. SPACE BARS APPROXIMATELY ON 12" CENTERS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. WHEN THE CONTRACTOR ELECTS TO USE A CONSTRUCTION JOINT AT THE BOTTOM OF THE PIPE AND POUR THE BASE SEPARATELY LEAVE THE POUR ROUGH. USE CLASS "B" CONCRETE.

ROADWAY STANDARD DRAWING FOR CONCRETE ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS

15" THROUGH 48" PIPE - 90° SKEW

838.01

GENERAL NOTES:

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STANDARD DRAWING FOR CONCRETE ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS

15" THROUGH 48" PIPE - 90° SKEW

838.01

PIPE SIZE	SHELL THICKNESS	WALL THICKNESS	SLAB THICKNESS	DIMENSIONS FOR SINGLE PIPE HEADWALLS													
				A	B	C	D	E	F	G	H	I	J	K			
18"	2 1/2"	8"	6"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
24"	2 1/2"	8"	6"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"
30"	3 1/2"	8"	6"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"
36"	4 1/2"	8"	6"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"
42"	5 1/2"	8"	6"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"
48"	6 1/2"	8"	6"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"
54"	7 1/2"	8"	6"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"
60"	8 1/2"	8"	6"	24'-0"	24'-0"	24'-0"	24'-0"	24'-0"	24'-0"	24'-0"	24'-0"	24'-0"	24'-0"	24'-0"	24'-0"	24'-0"	24'-0"
66"	9 1/2"	8"	6"	26'-0"	26'-0"	26'-0"	26'-0"	26'-0"	26'-0"	26'-0"	26'-0"	26'-0"	26'-0"	26'-0"	26'-0"	26'-0"	26'-0"
72"	10 1/2"	8"	6"	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"
78"	11 1/2"	8"	6"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"
84"	12 1/2"	8"	6"	32'-0"	32'-0"	32'-0"	32'-0"	32'-0"	32'-0"	32'-0"	32'-0"	32'-0"	32'-0"	32'-0"	32'-0"	32'-0"	32'-0"
90"	13 1/2"	8"	6"	34'-0"	34'-0"	34'-0"	34'-0"	34'-0"	34'-0"	34'-0"	34'-0"	34'-0"	34'-0"	34'-0"	34'-0"	34'-0"	34'-0"
96"	14 1/2"	8"	6"	36'-0"	36'-0"	36'-0"	36'-0"	36'-0"	36'-0"	36'-0"	36'-0"	36'-0"	36'-0"	36'-0"	36'-0"	36'-0"	36'-0"
102"	15 1/2"	8"	6"	38'-0"	38'-0"	38'-0"	38'-0"	38'-0"	38'-0"	38'-0"	38'-0"	38'-0"	38'-0"	38'-0"	38'-0"	38'-0"	38'-0"
108"	16 1/2"	8"	6"	40'-0"	40'-0"	40'-0"	40'-0"	40'-0"	40'-0"	40'-0"	40'-0"	40'-0"	40'-0"	40'-0"	40'-0"	40'-0"	40'-0"
114"	17 1/2"	8"	6"	42'-0"	42'-0"	42'-0"	42'-0"	42'-0"	42'-0"	42'-0"	42'-0"	42'-0"	42'-0"	42'-0"	42'-0"	42'-0"	42'-0"
120"	18 1/2"	8"	6"	44'-0"	44'-0"	44'-0"	44'-0"	44'-0"	44'-0"	44'-0"	44'-0"	44'-0"	44'-0"	44'-0"	44'-0"	44'-0"	44'-0"

TOWN OF KNIGHTDALE STANDARD DETAILS

TREE PLANTING ISLAND IN PARKING LOTS

STANDARD NO. 3.23

NOTES:

1. 300 SF MIN. TOTAL REQUIRED AREA PER TREE.
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ADVANCED CIVIL DESIGN ENGINEERS

TRINITY CAPITAL

BUILDING #7 CONSTRUCTION PLANS

TRINITY CAPITAL ADVISORS, LLC

DETAILS

390 Spectrum Drive, Knightdale, NC 27545 - Wake County

EASTGATE 540

Issue Date: 06/11/2021 - PROGRESS SET TO CONTRACTOR
06/18/2021 - TOWN SUBMITTAL #1
06/10/2021 - TOWN SUBMITTAL #2
09/14/2021 - TOWN SUBMITTAL #3
10/04/2021 - TOWN SUBMITTAL #4

Date: 10/04/2021
Scale: NOT TO SCALE

Project Number: 20-0006-988
Drawing Number: C.10.4

Drawn By: JLB
Checked By: CMR

By: *[Signature]* Date: 10-12-2021
Development Services Engineer

By: *[Signature]* Date: 10-13-21
Administrator

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

Town Certification: This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

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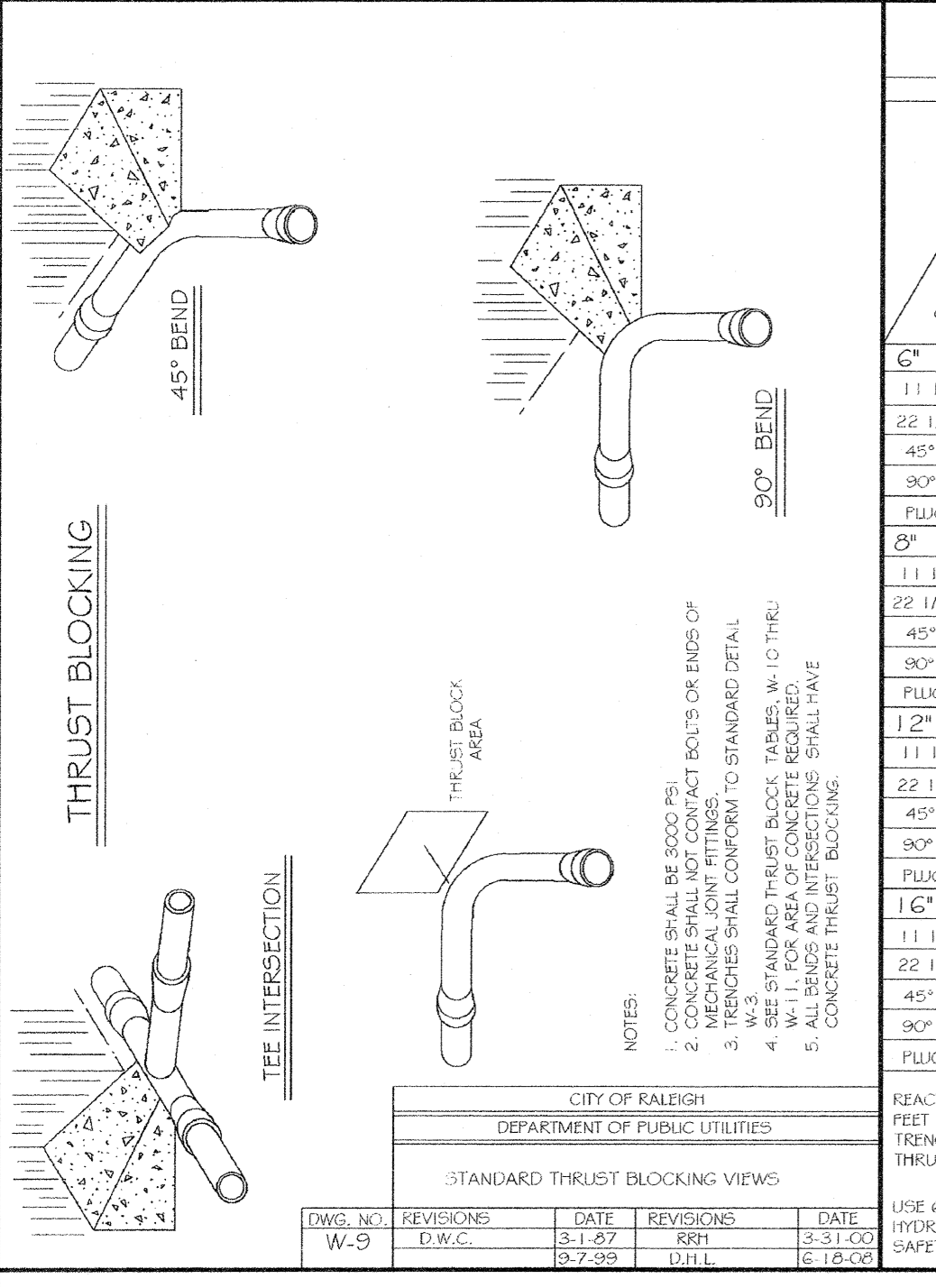
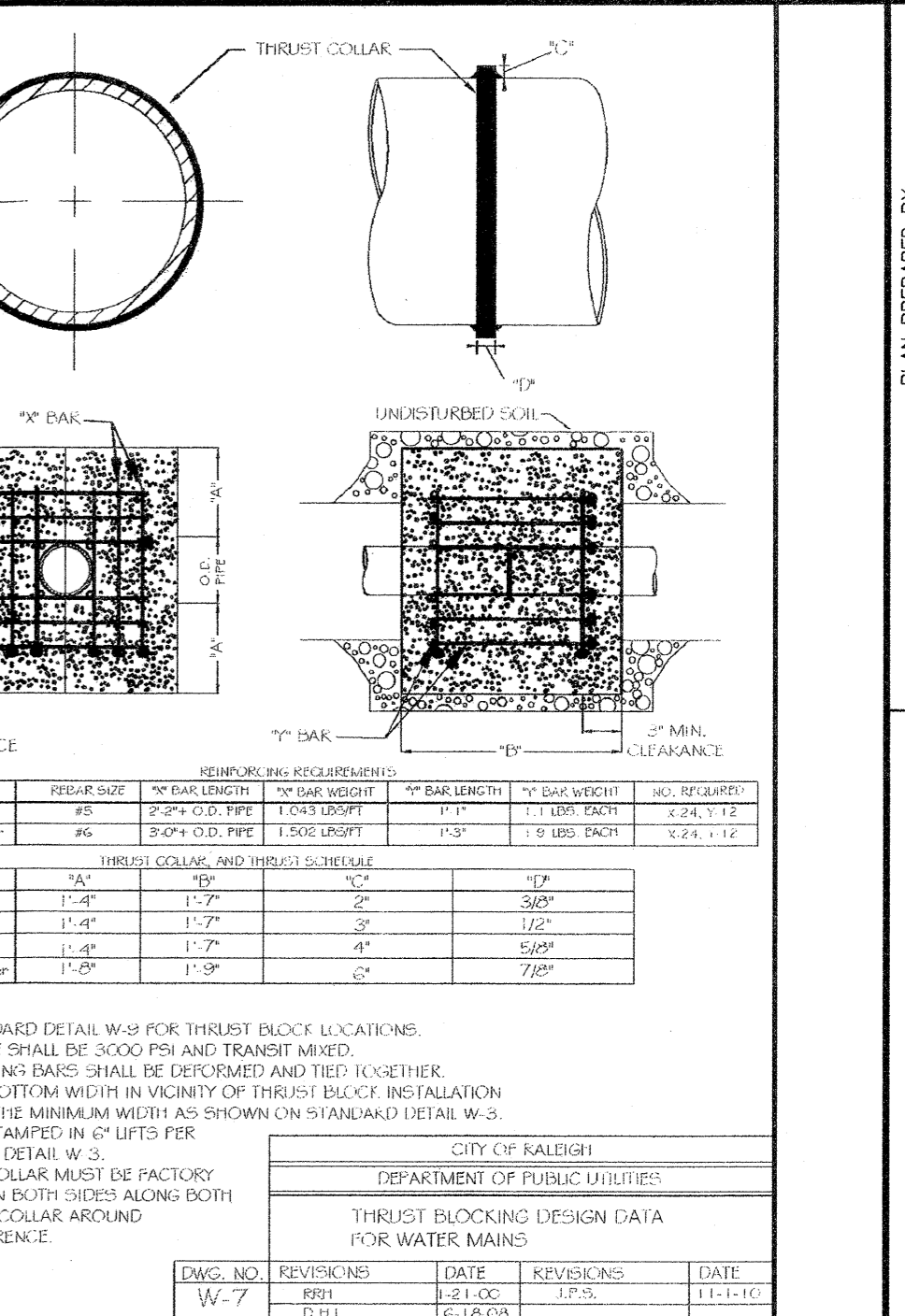
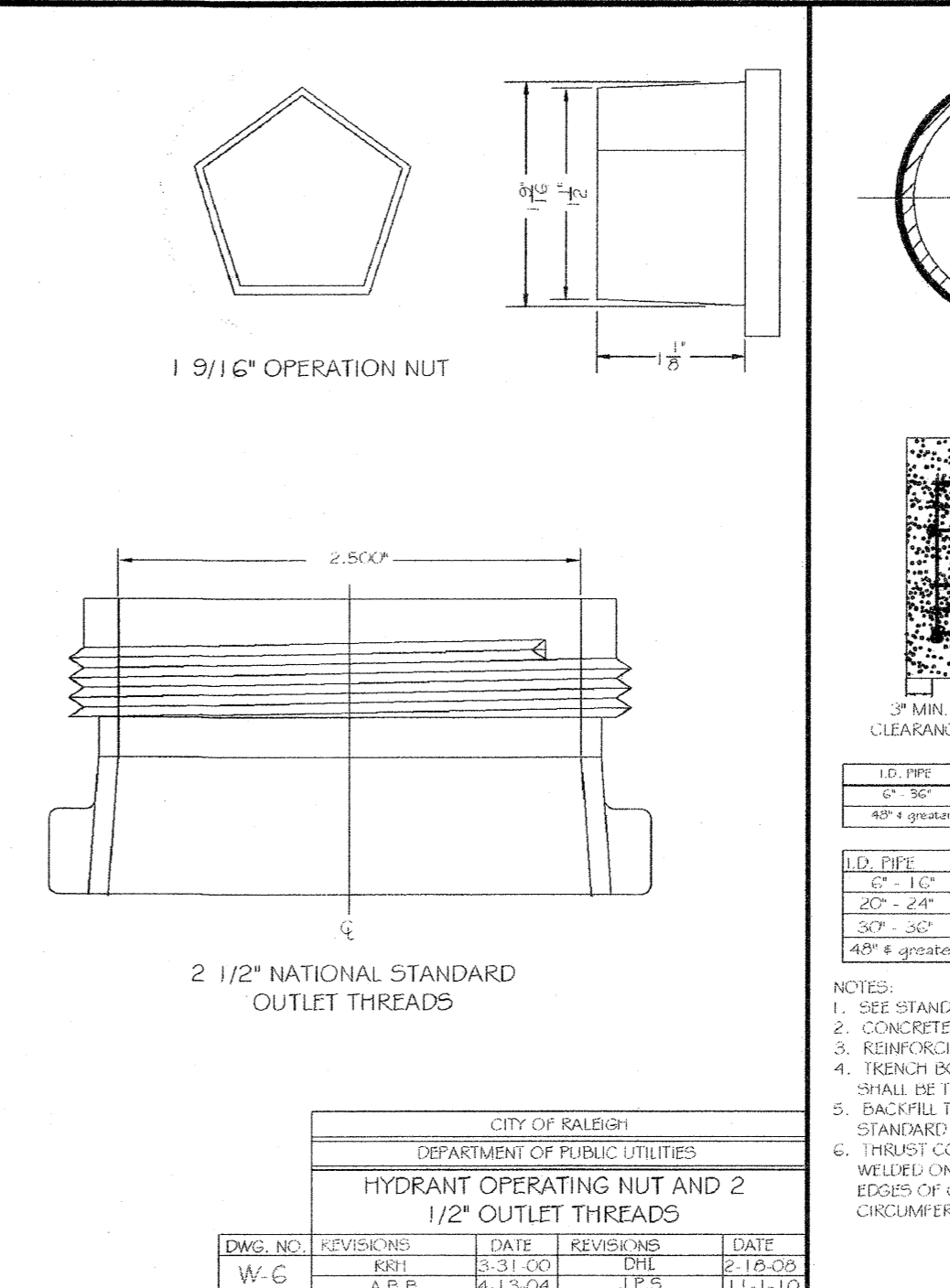
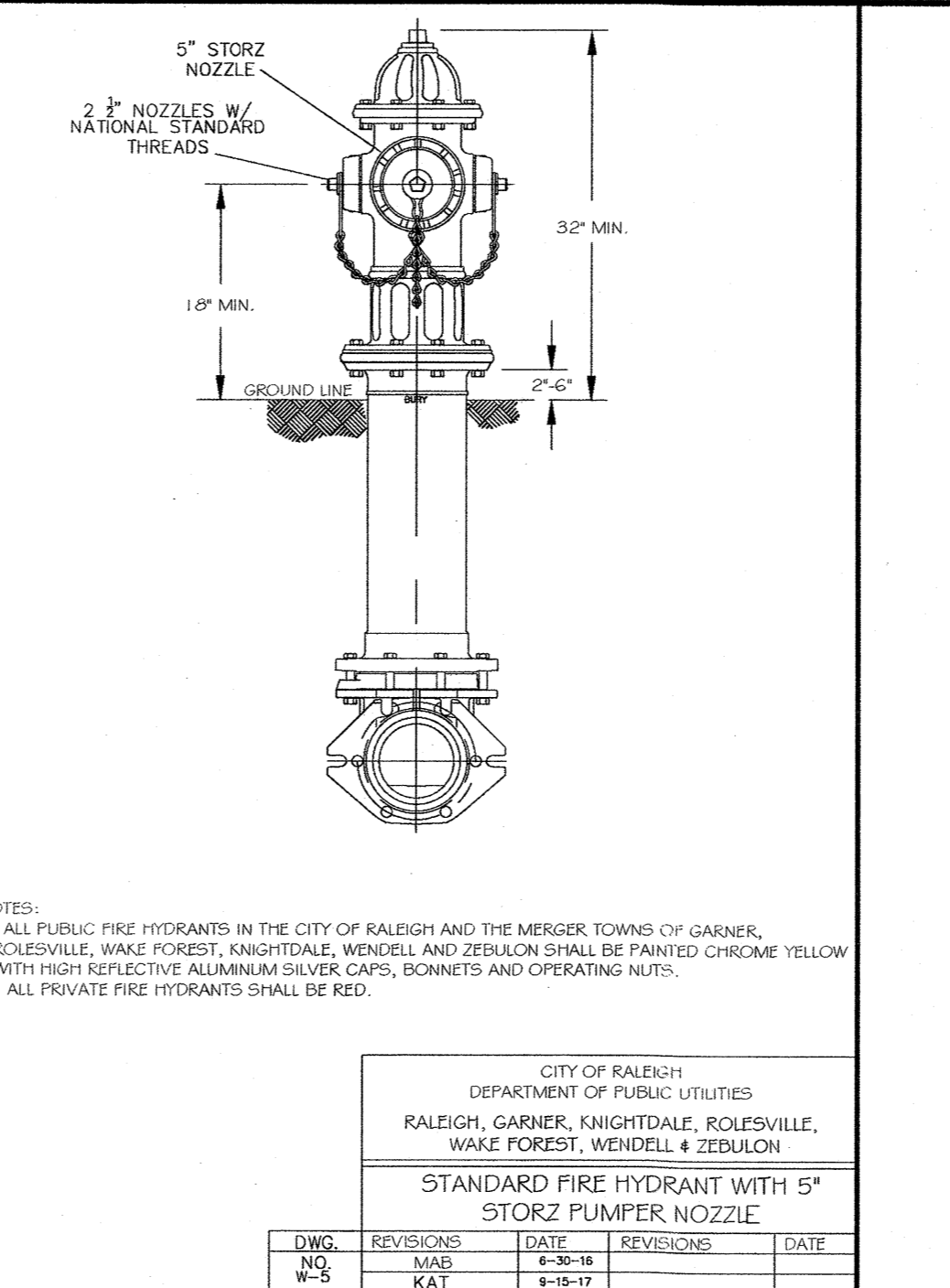
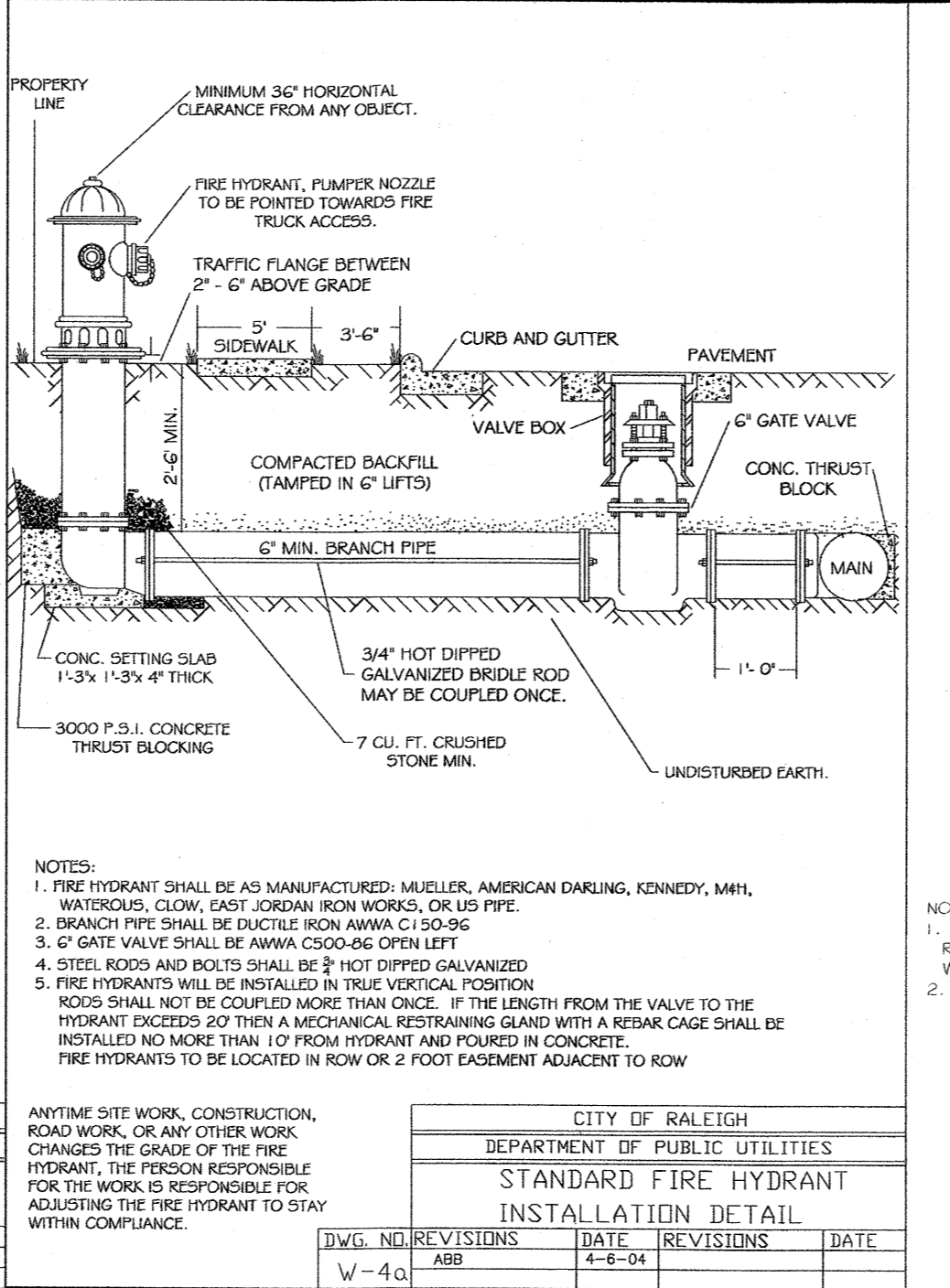
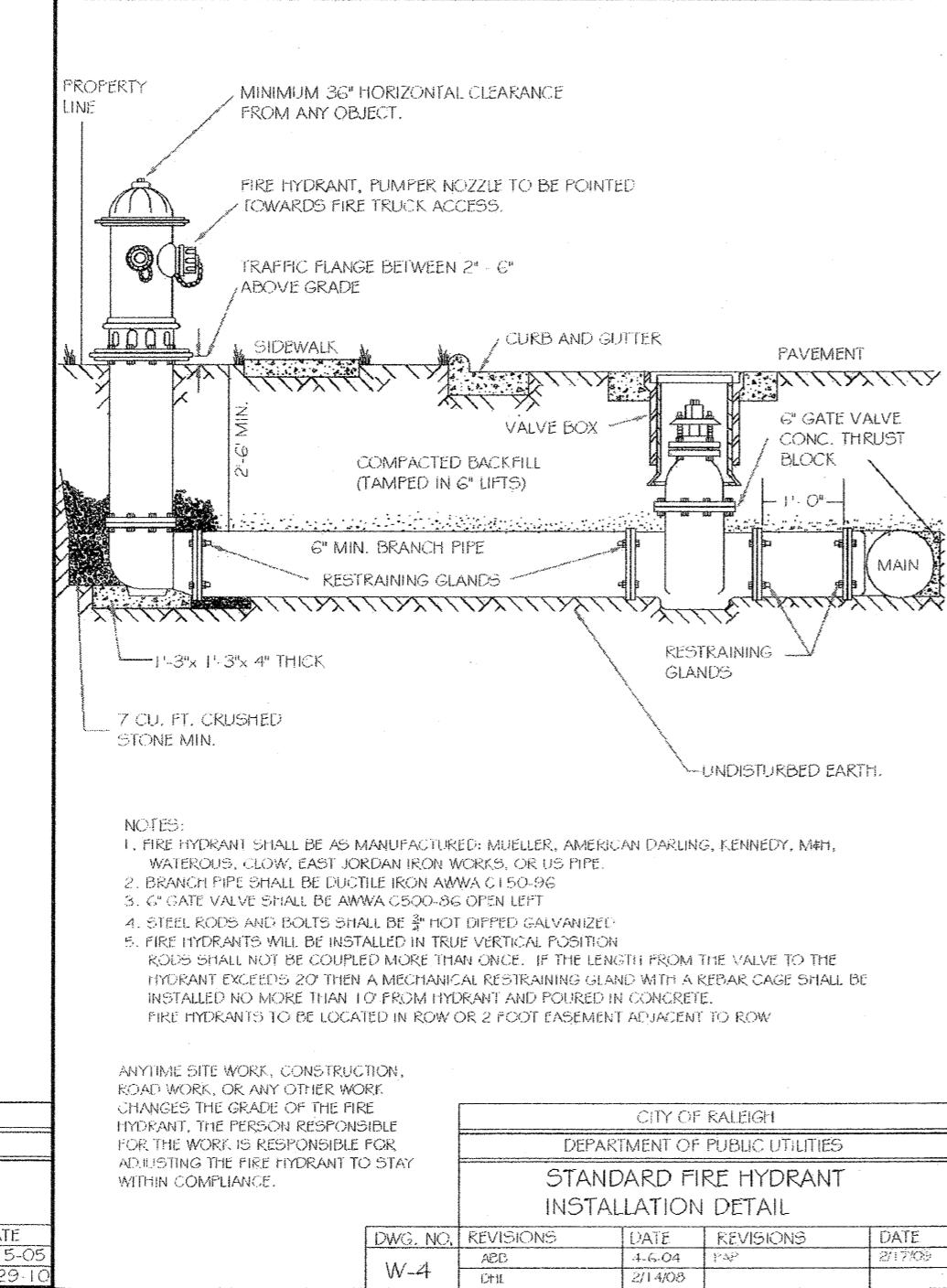
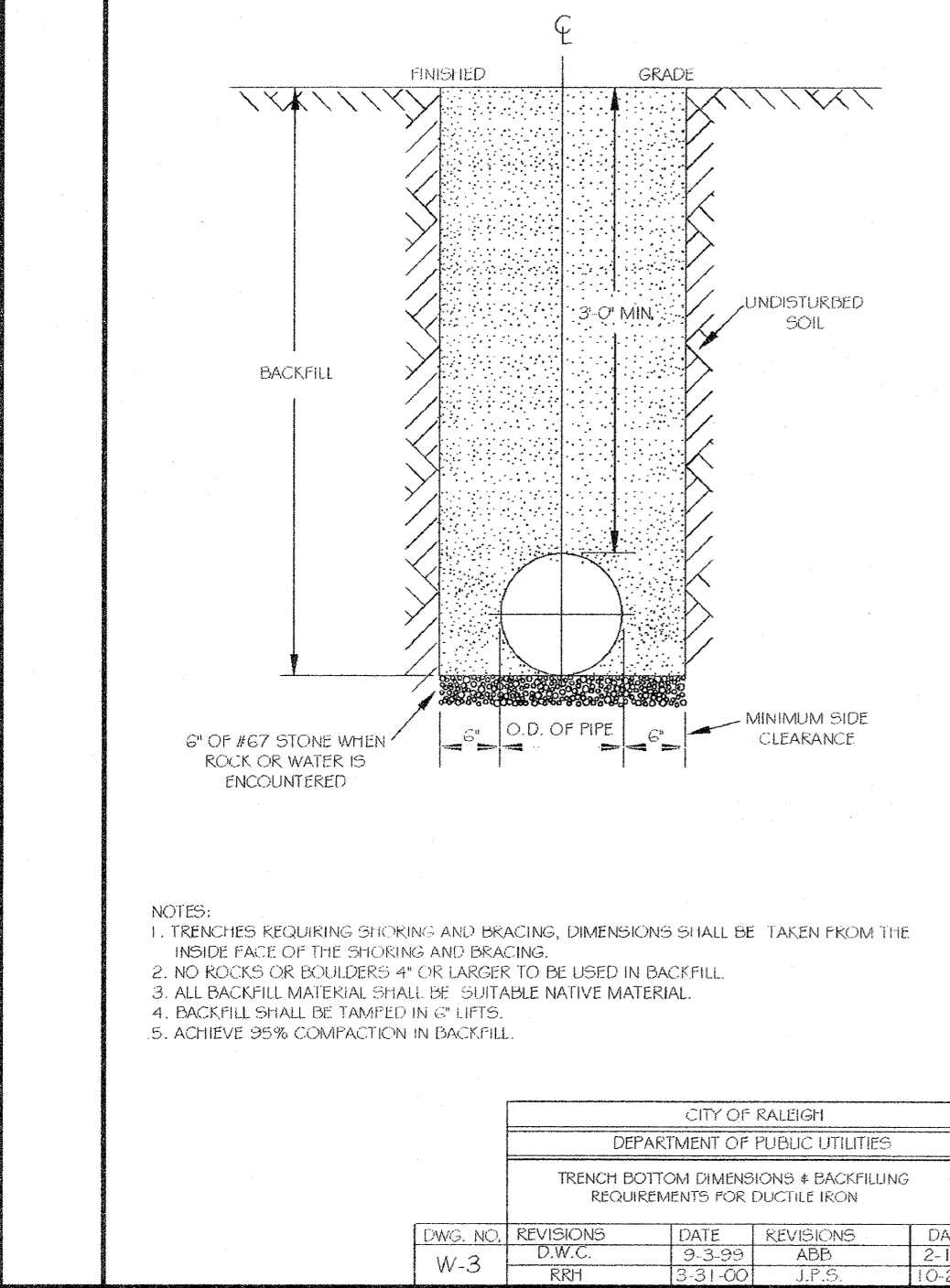
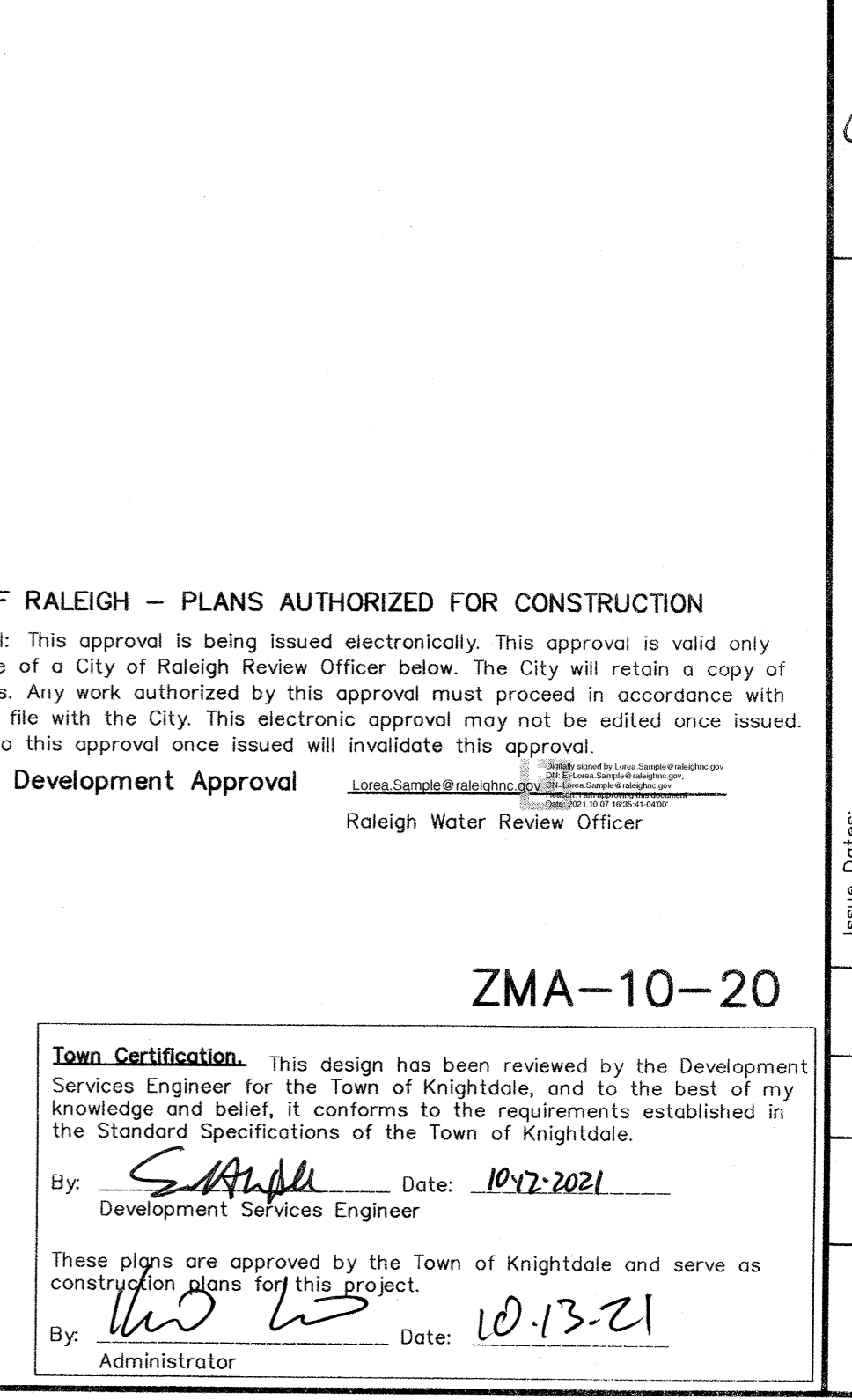
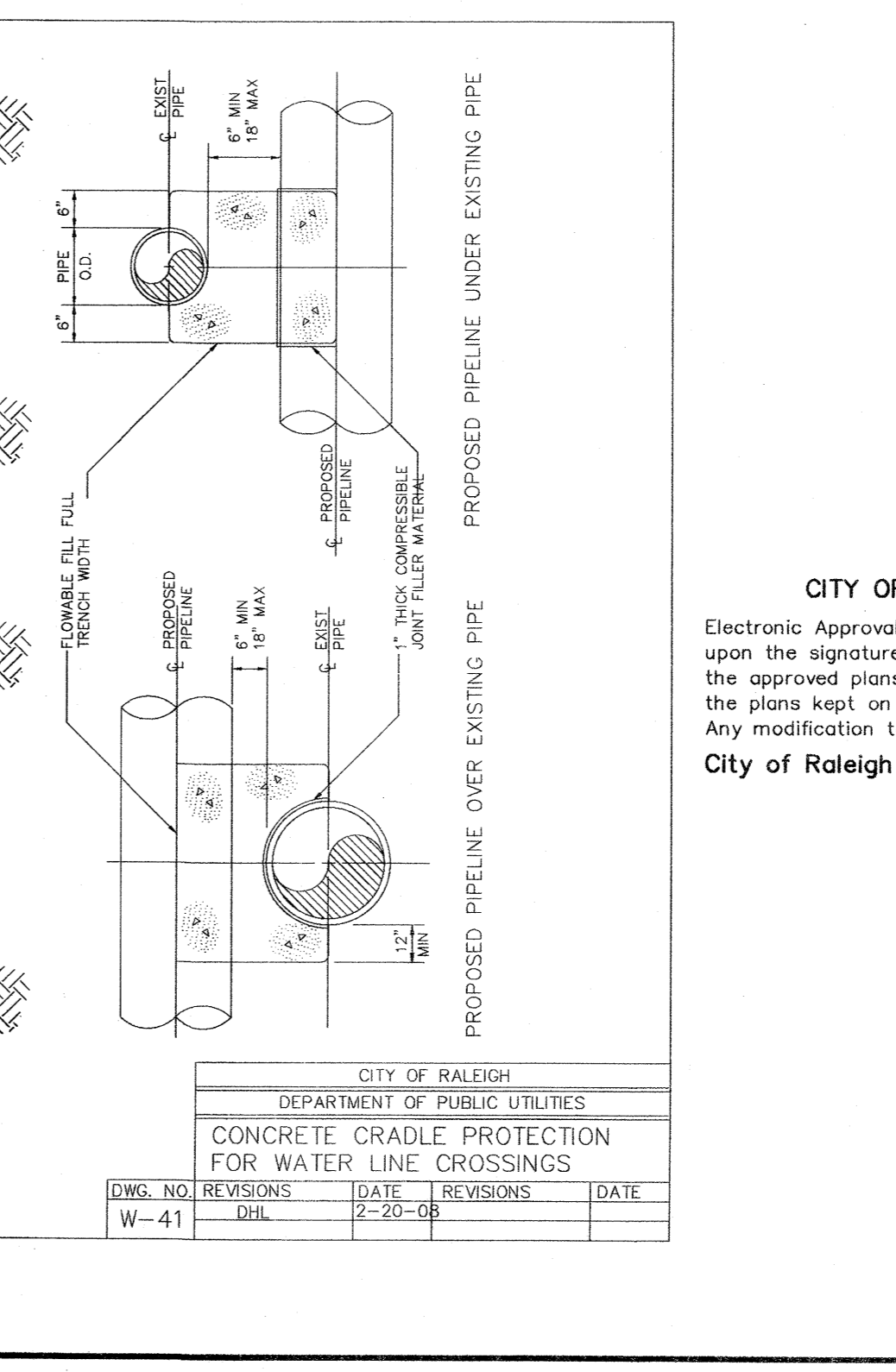
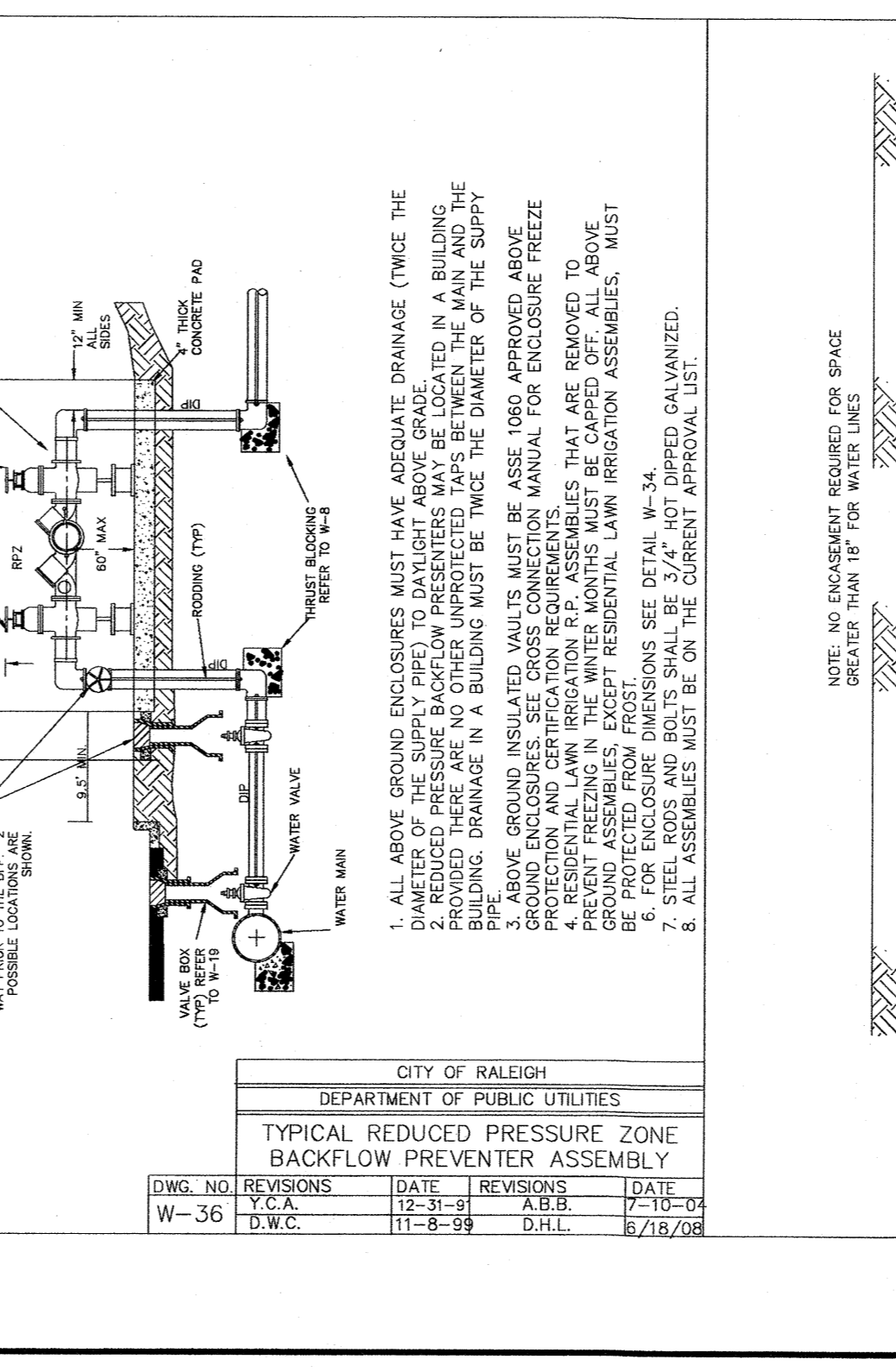
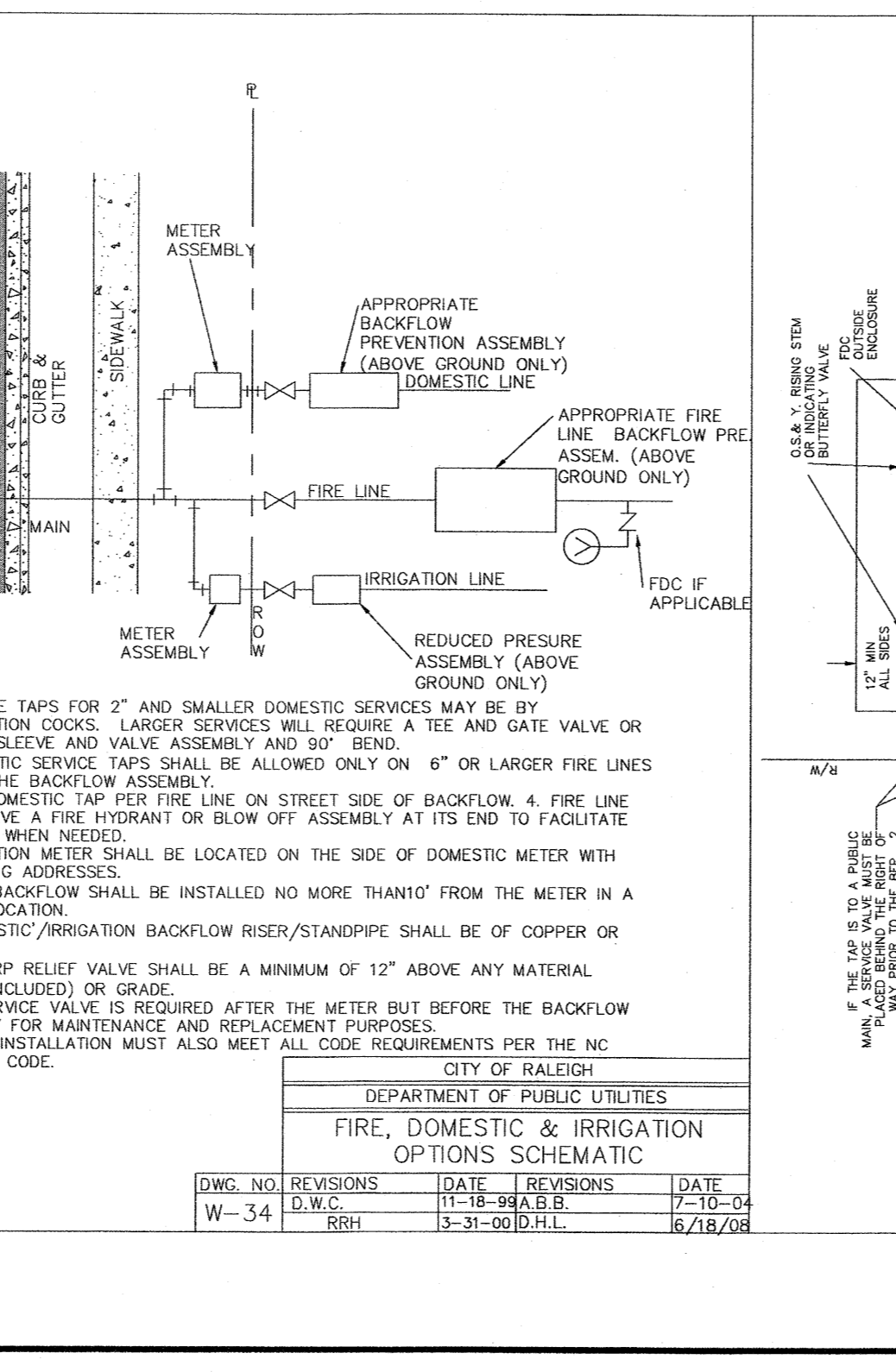
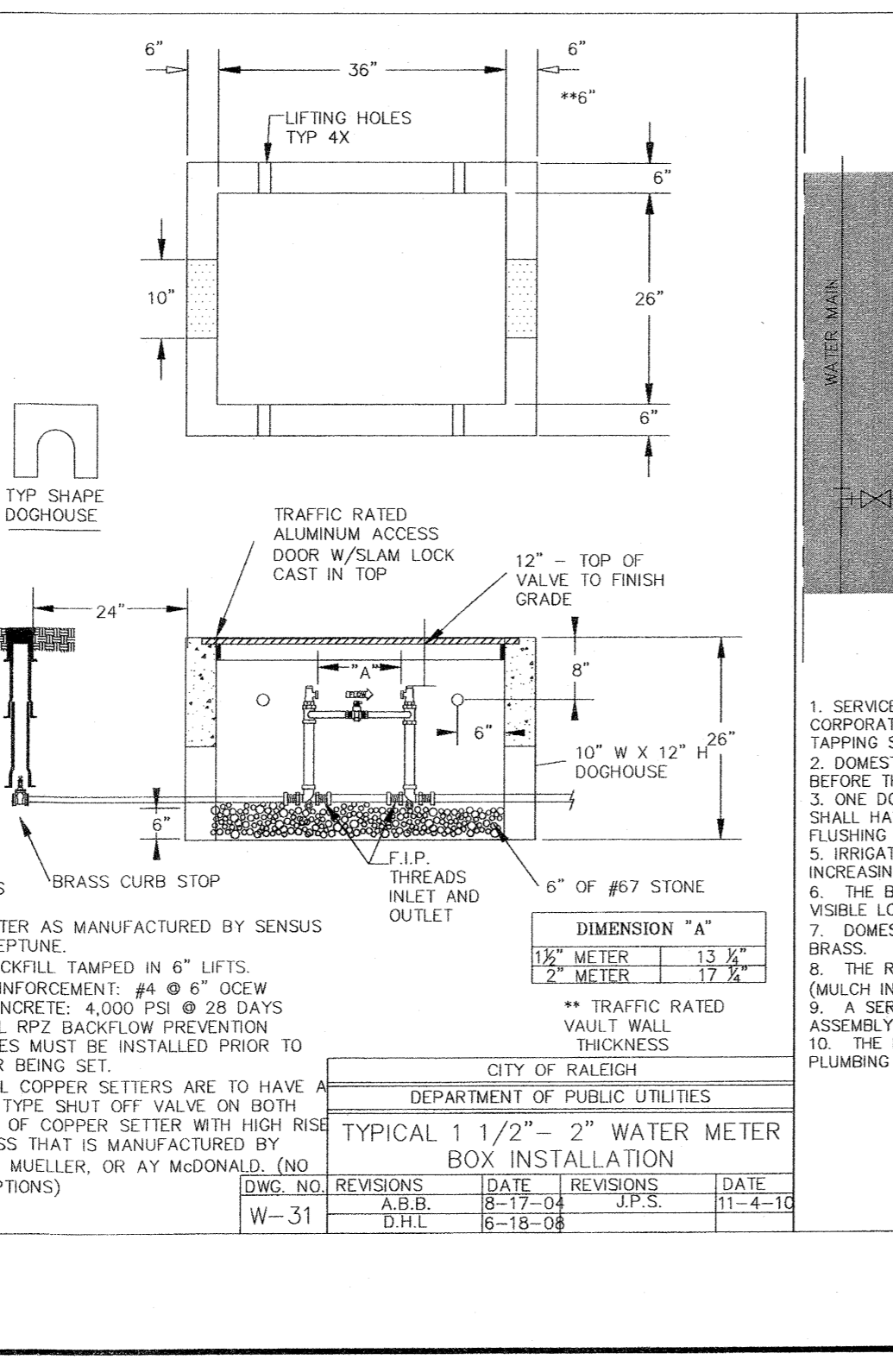
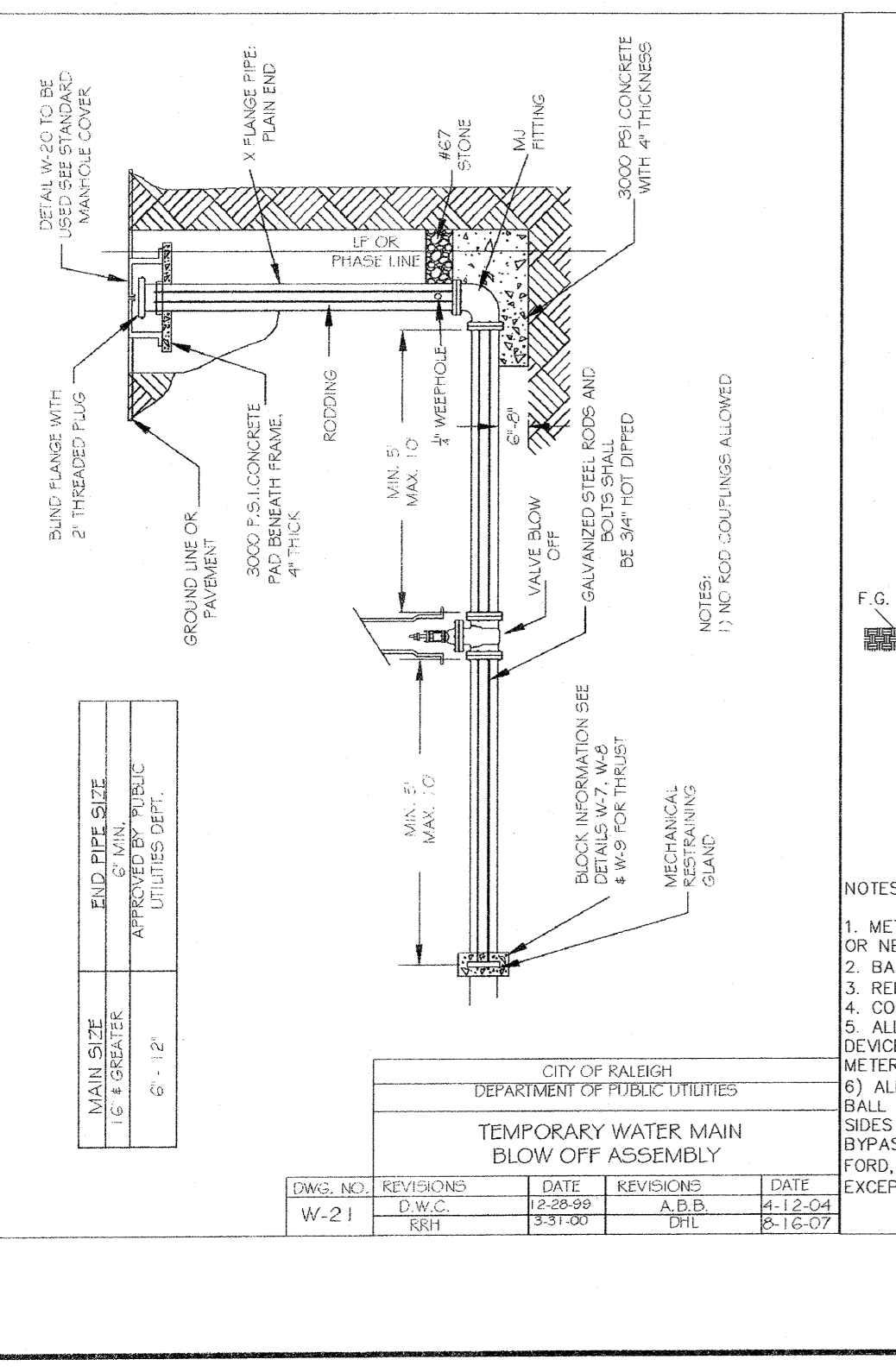
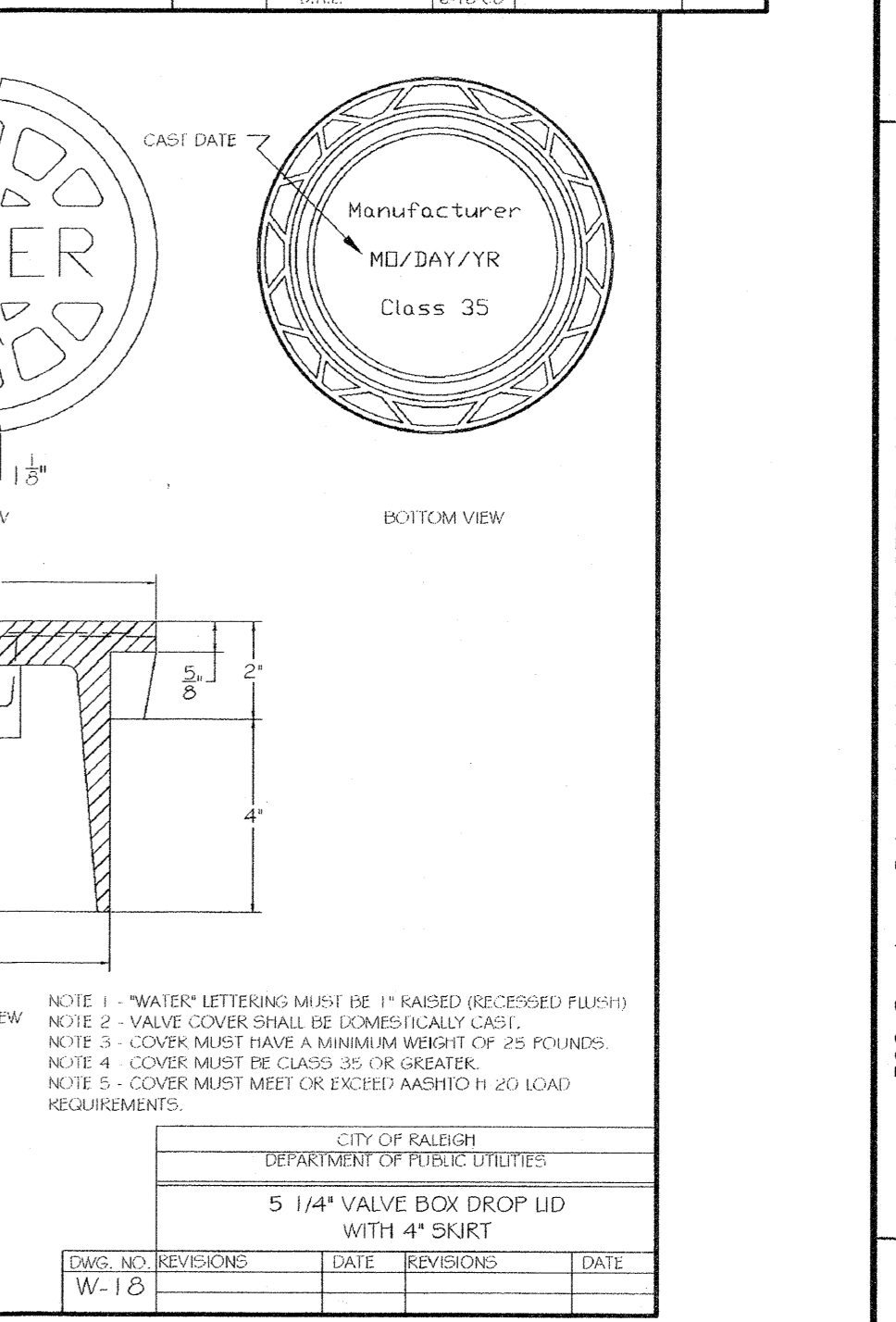
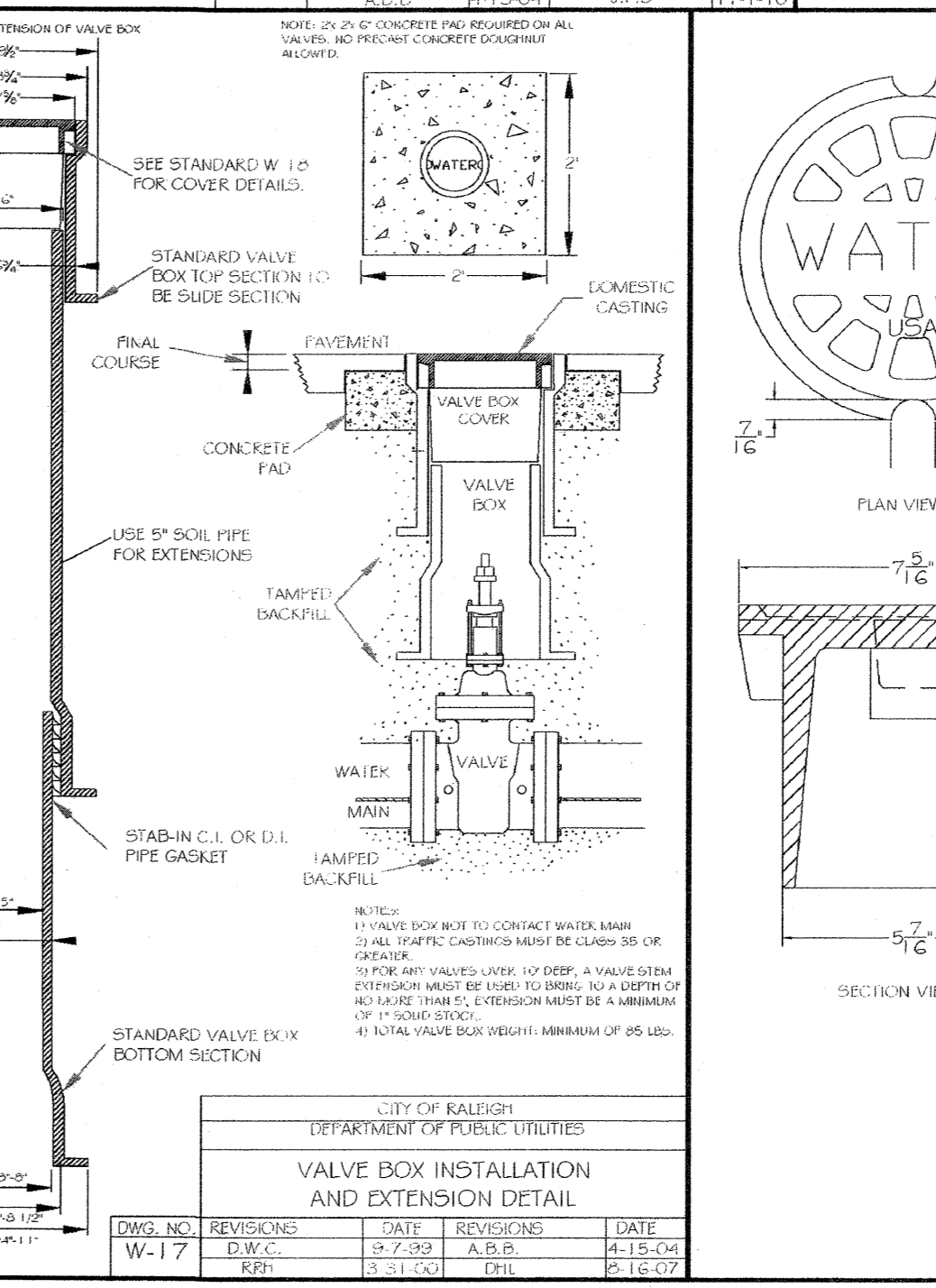
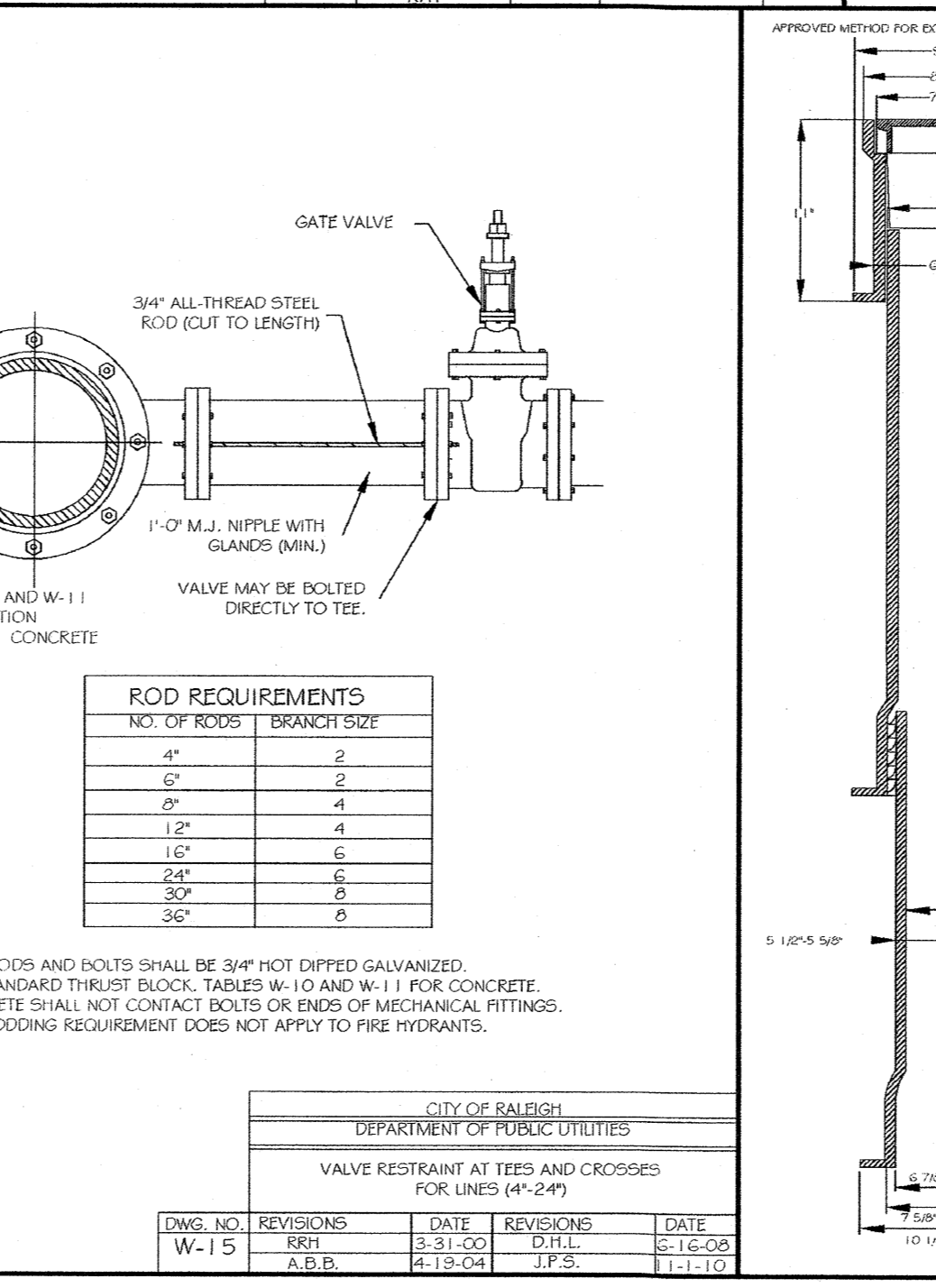
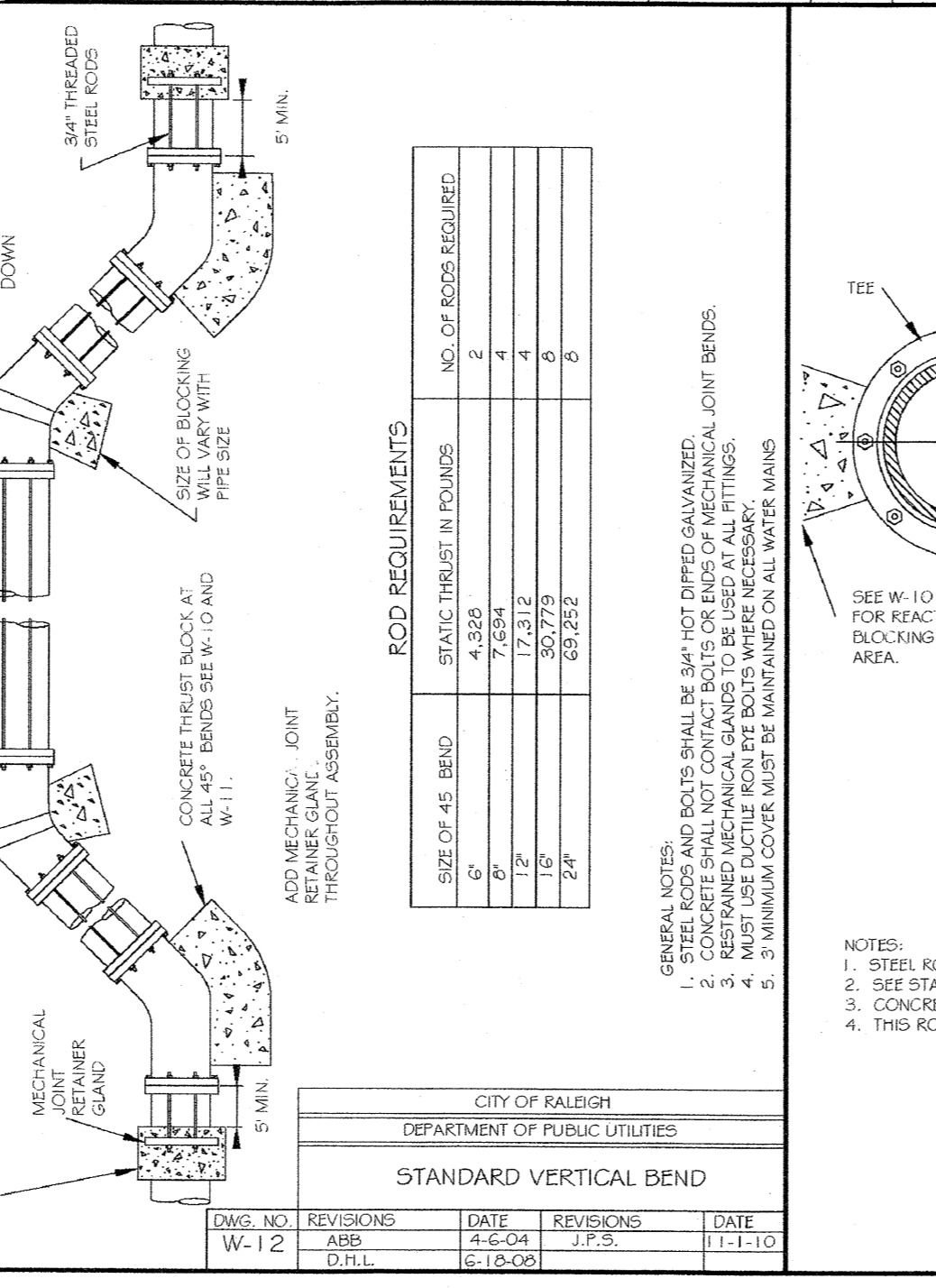
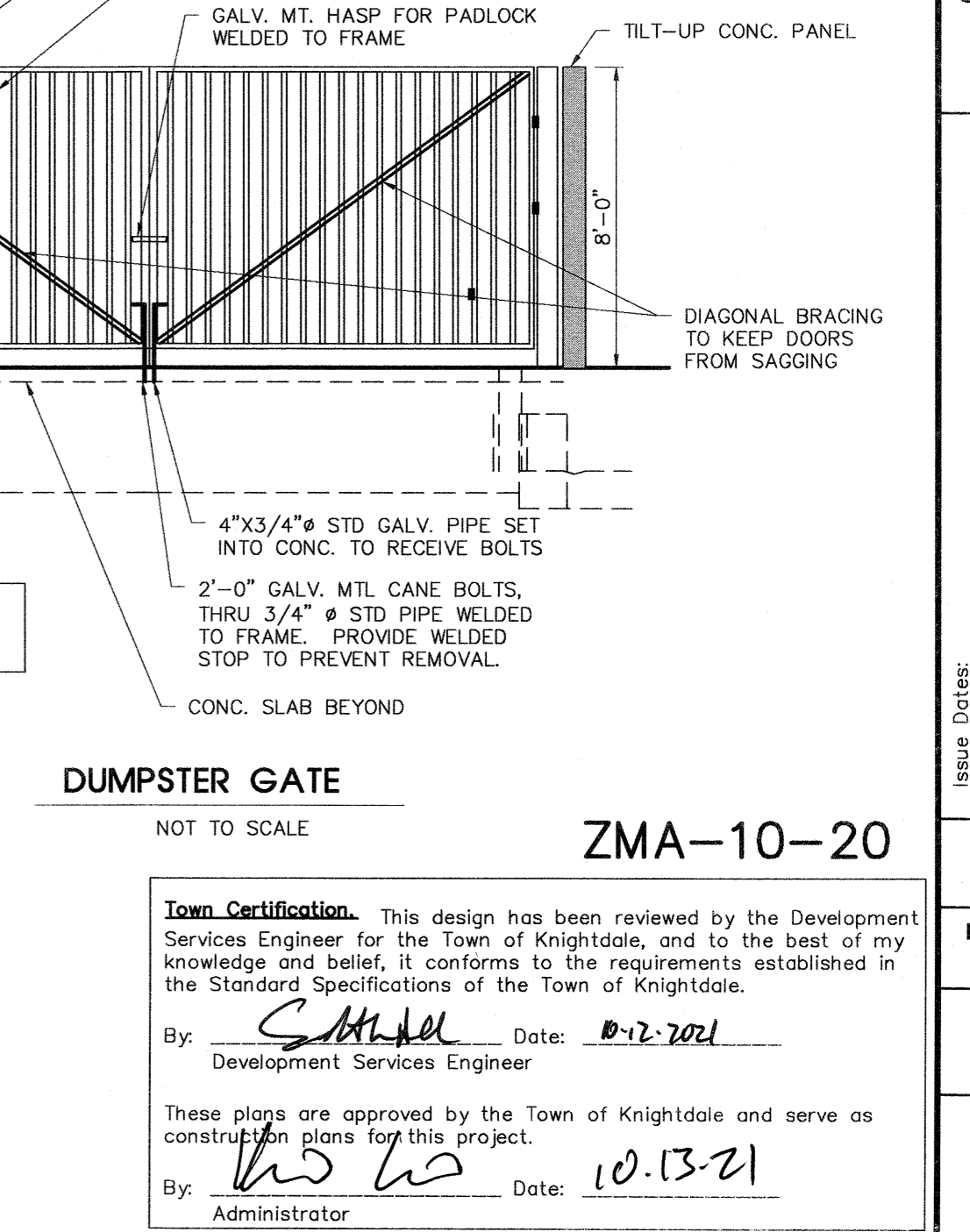
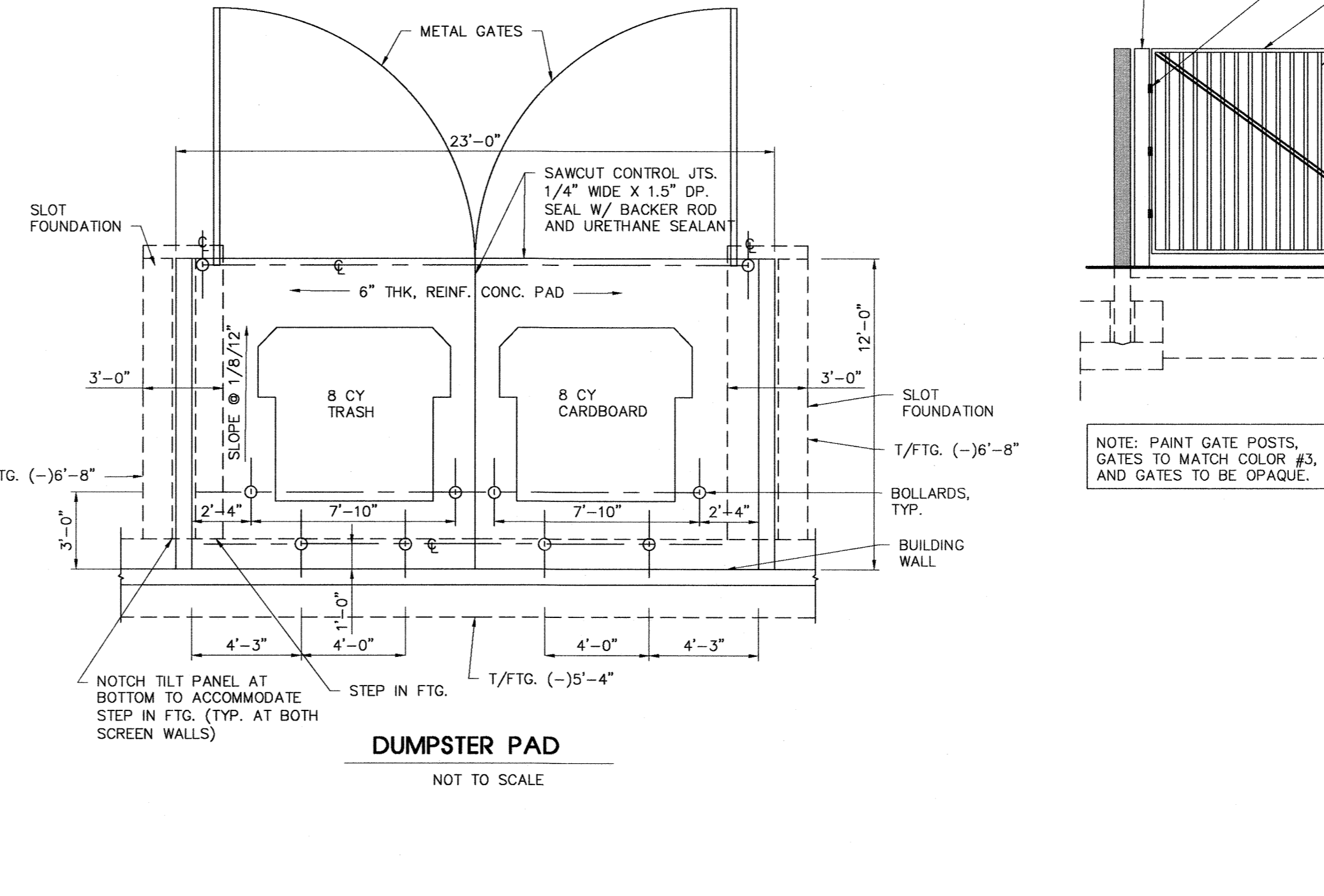
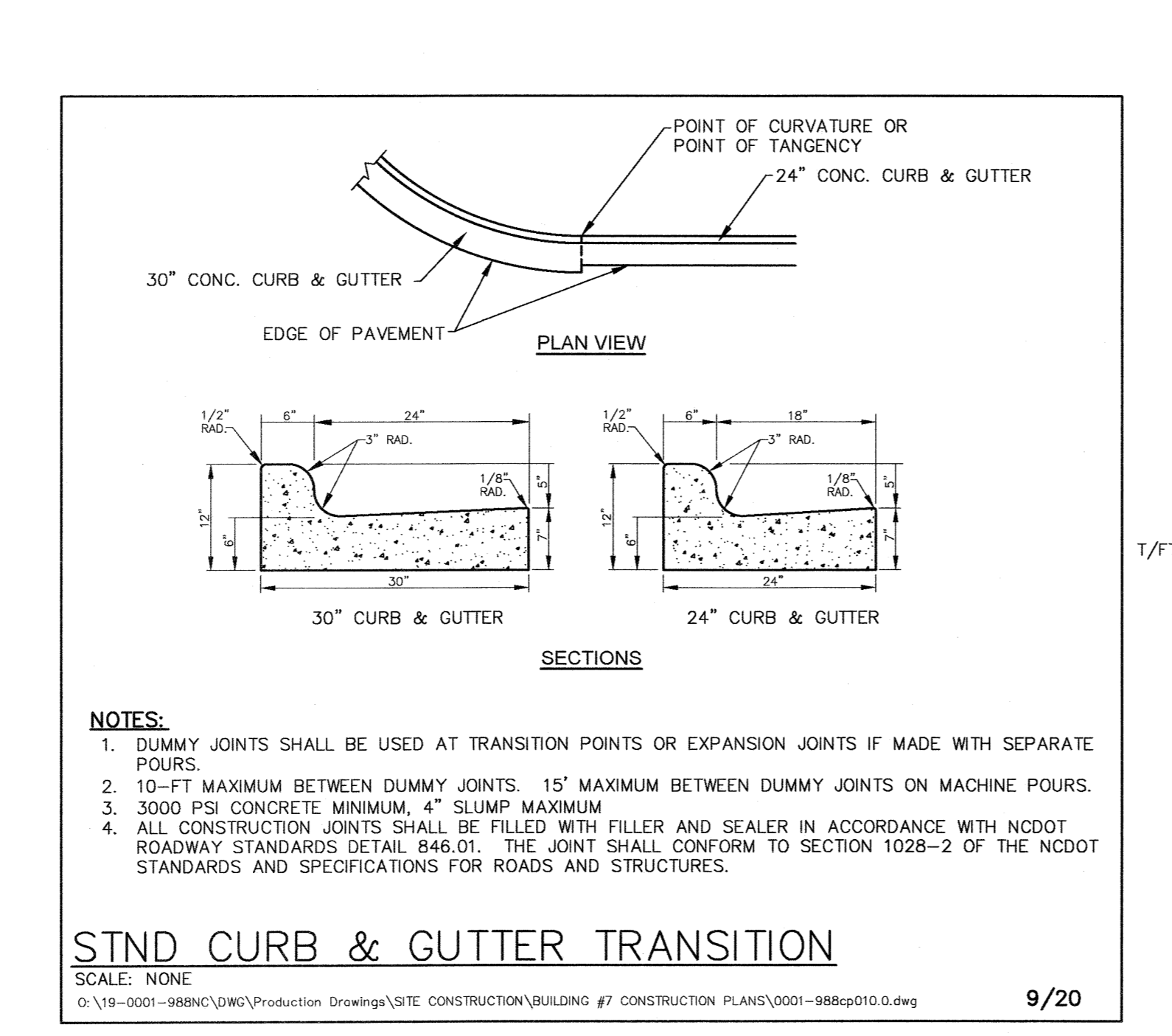
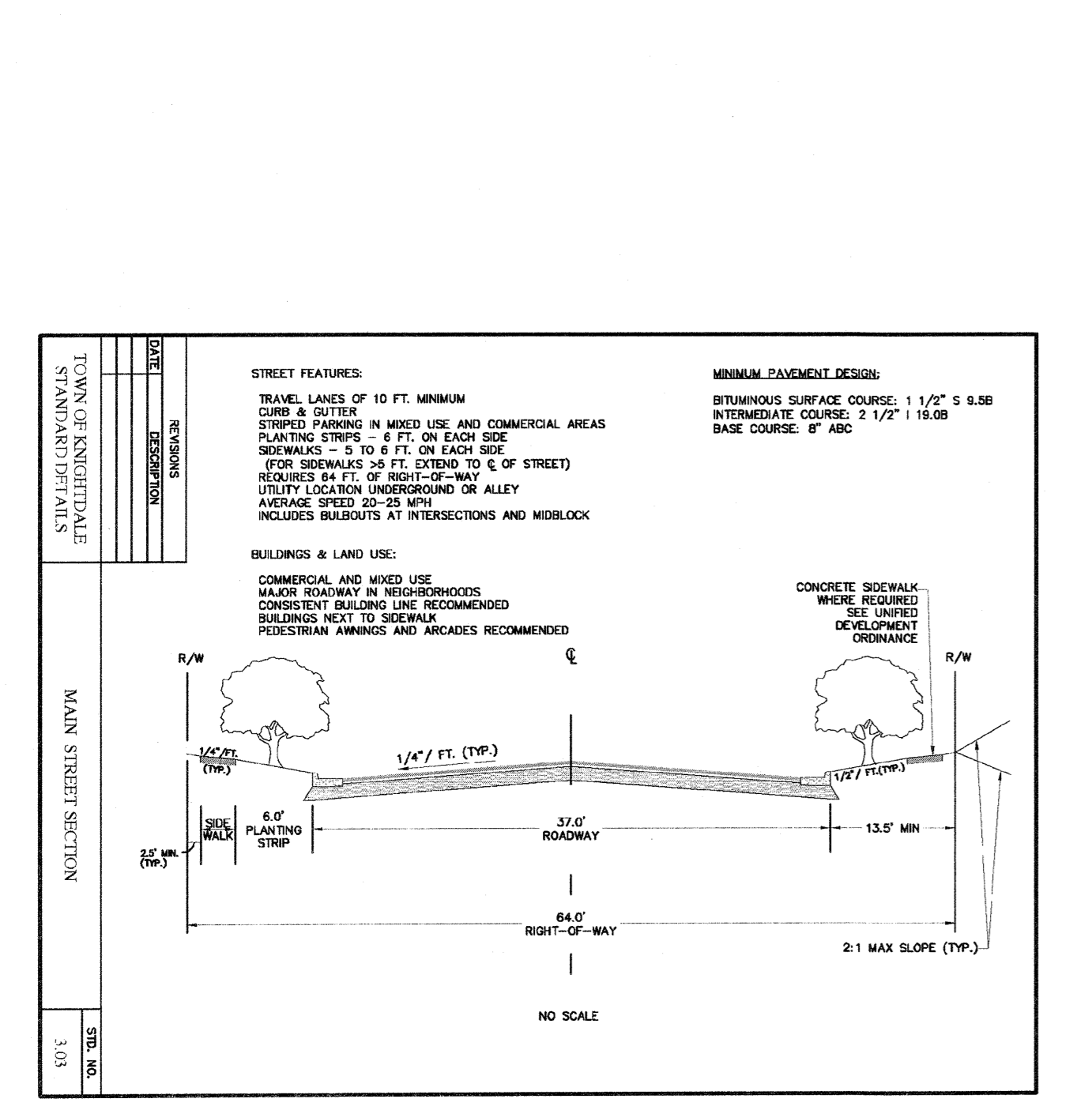
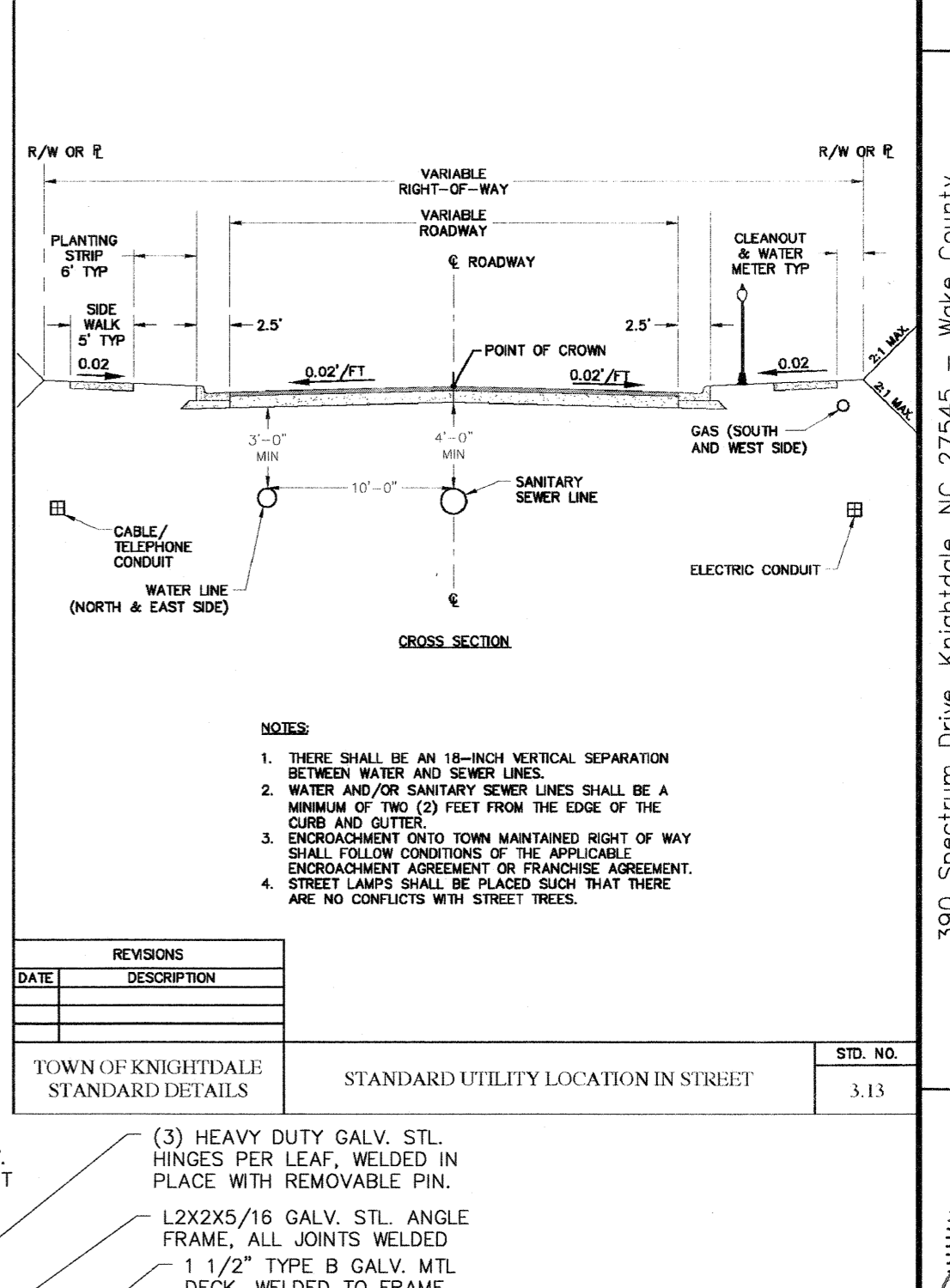
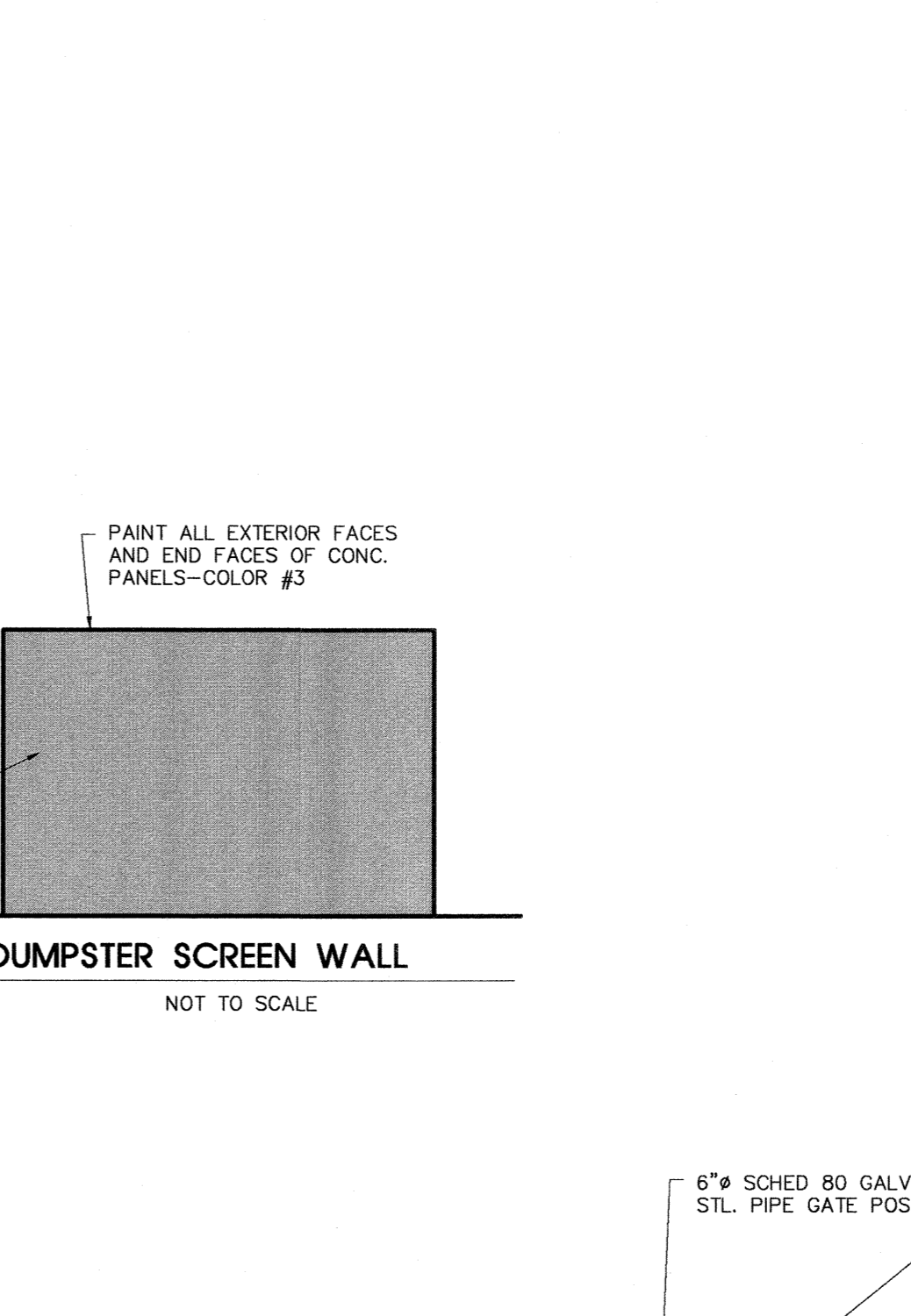
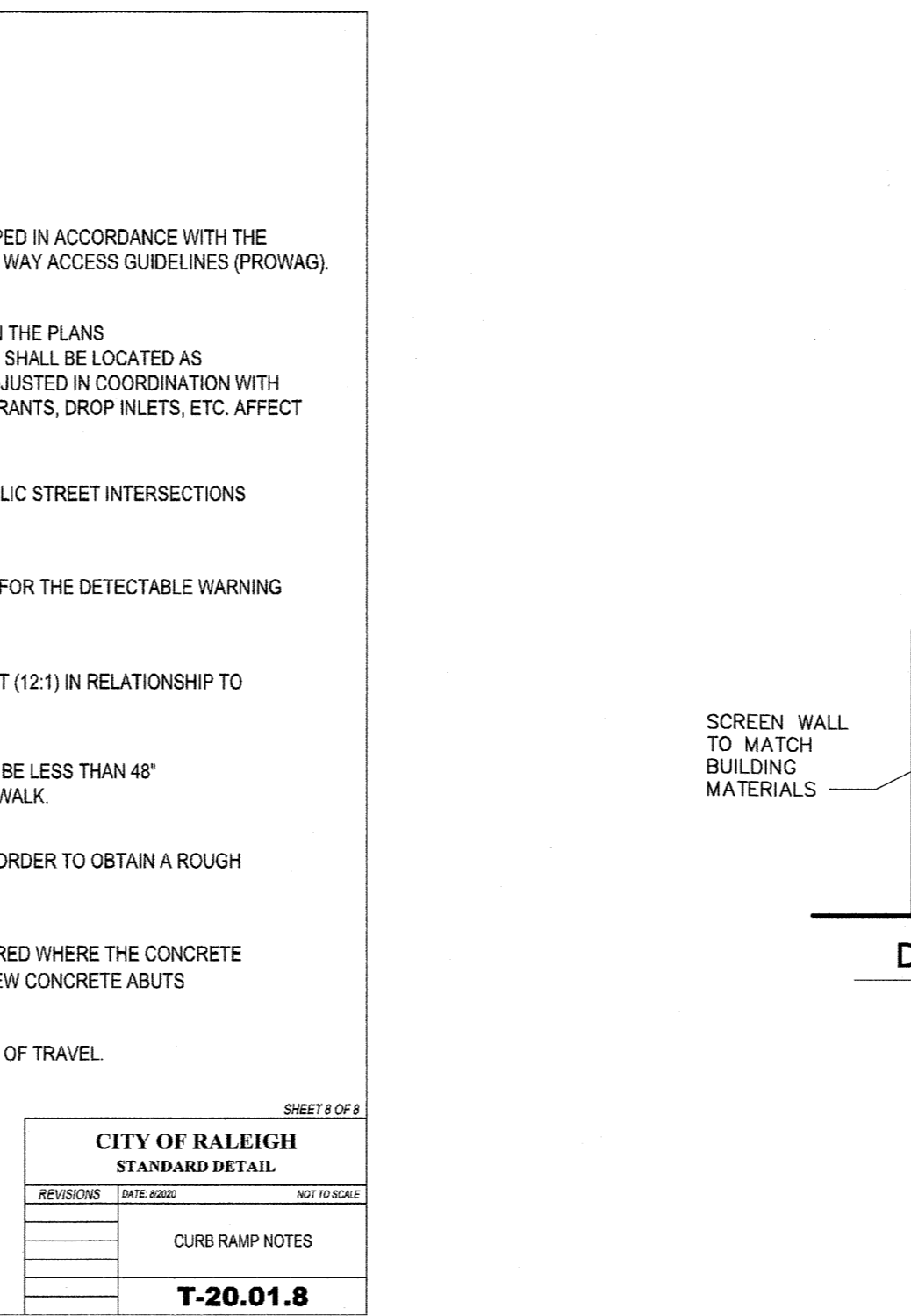
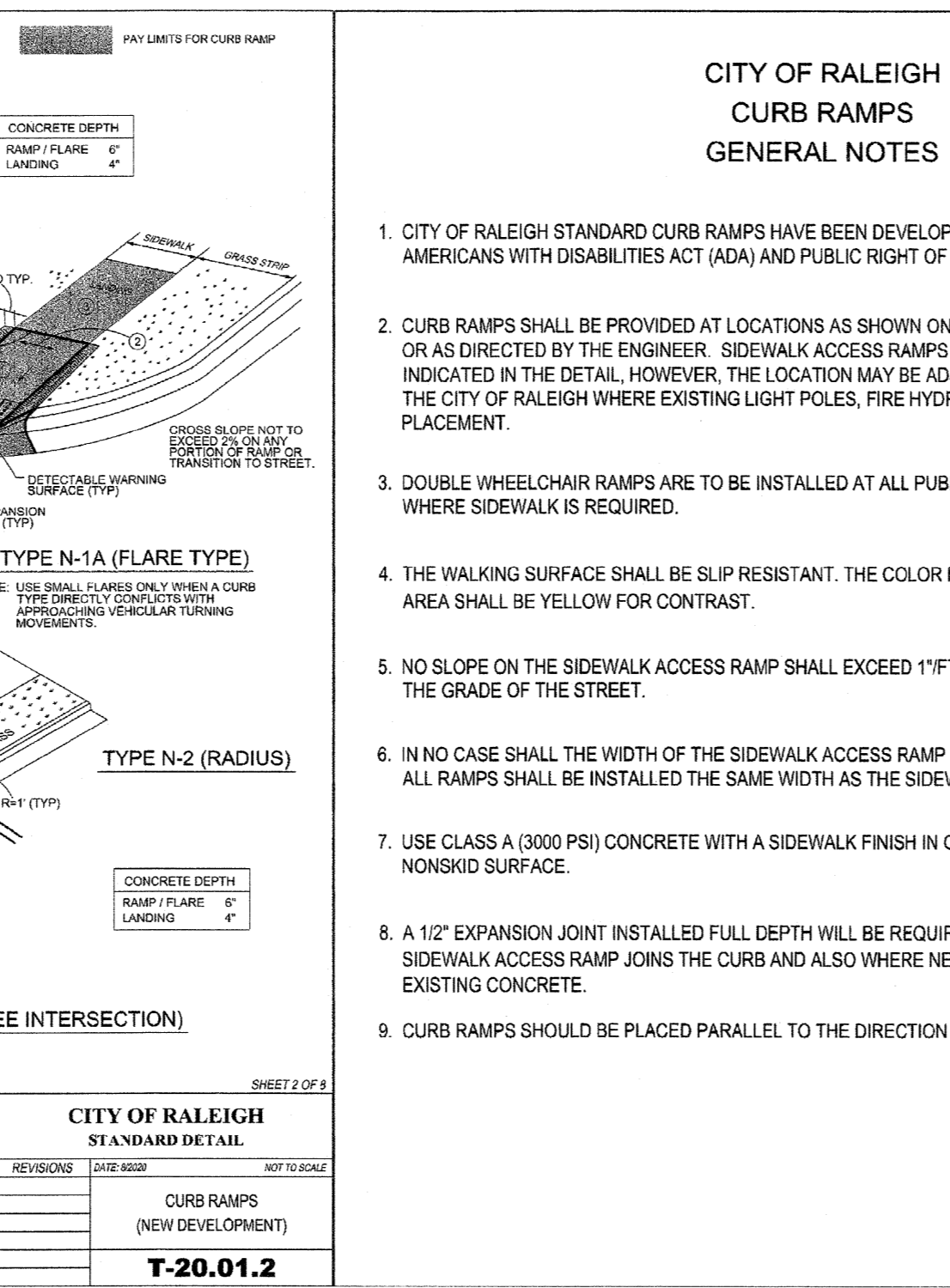
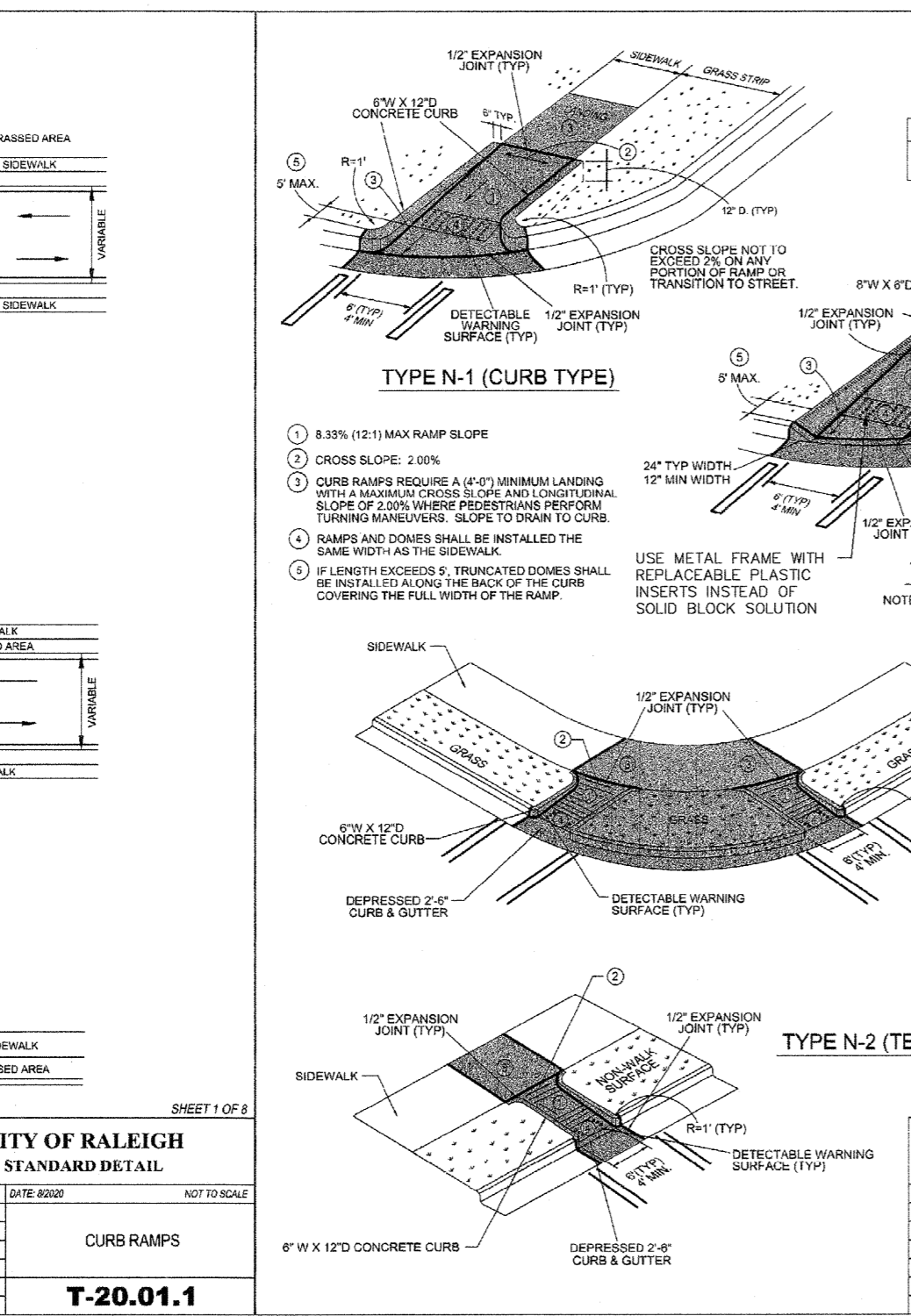
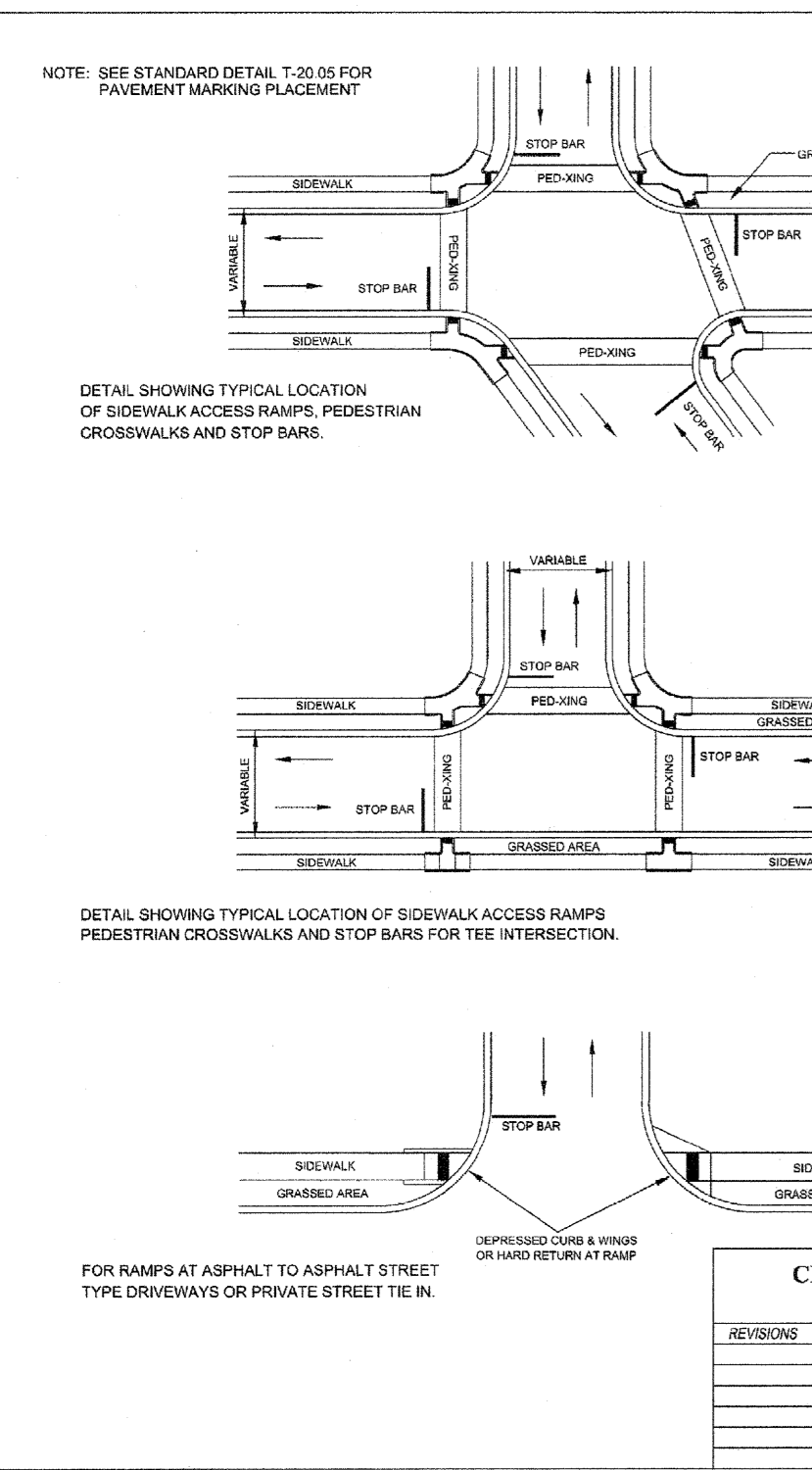
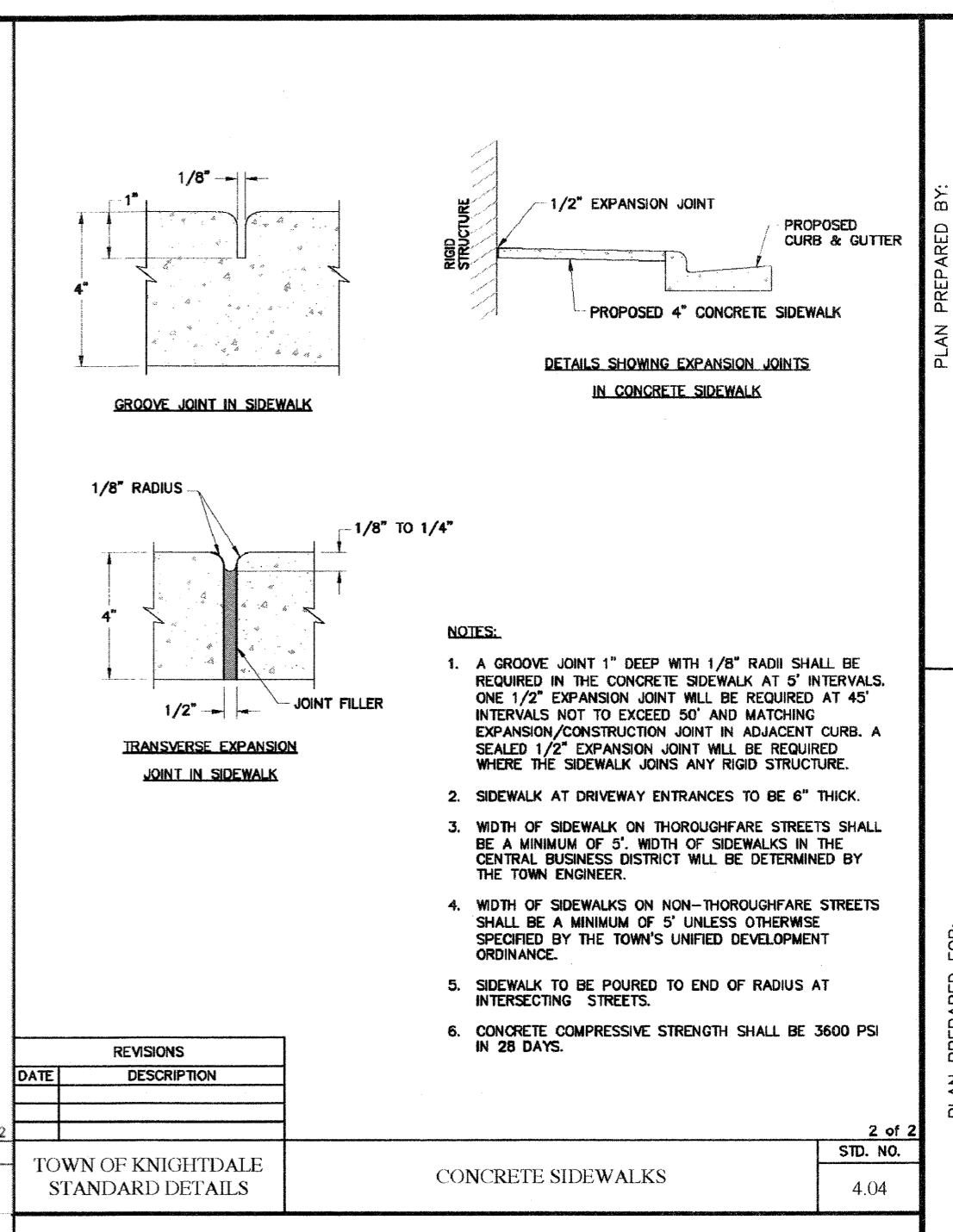
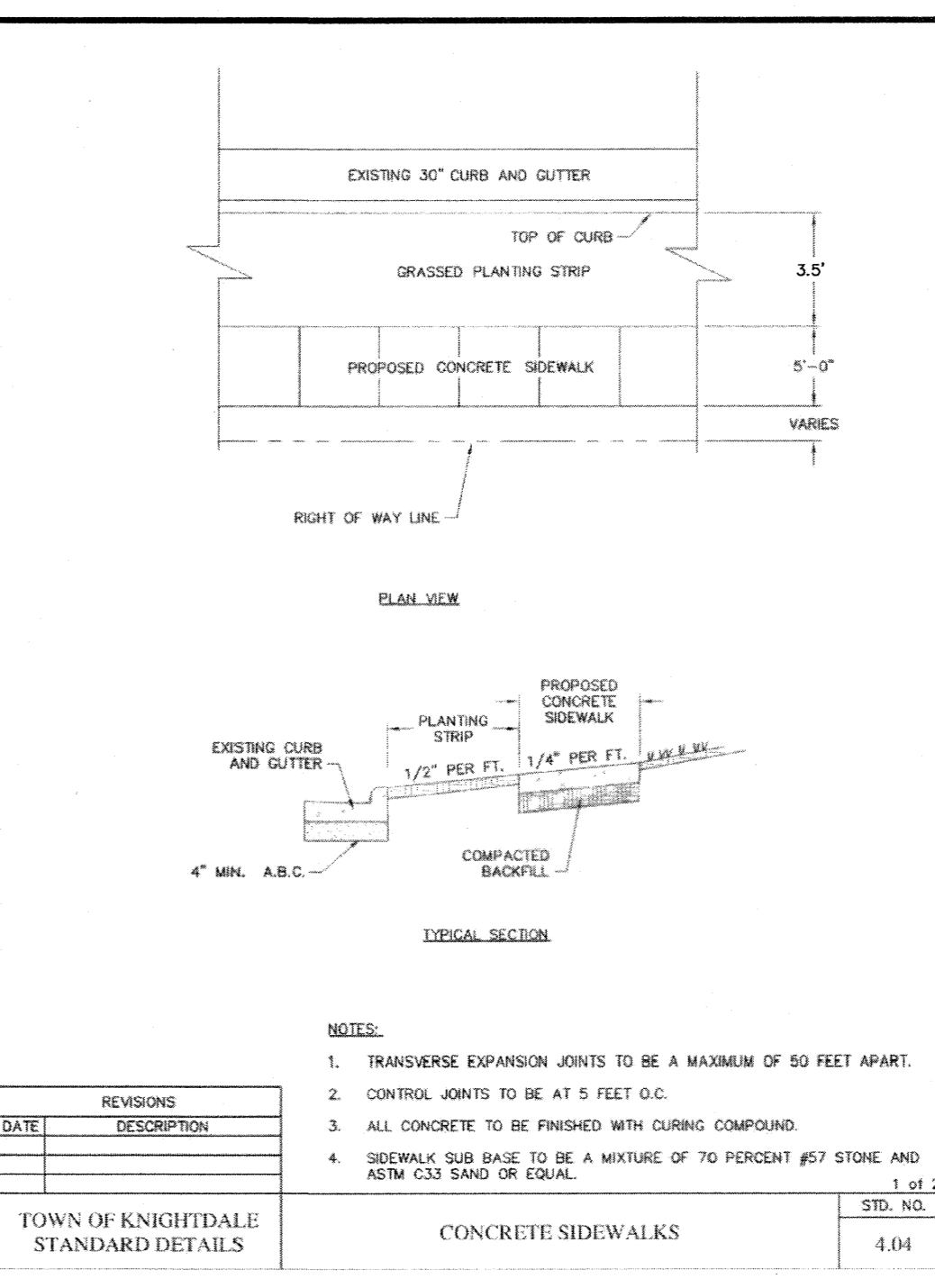
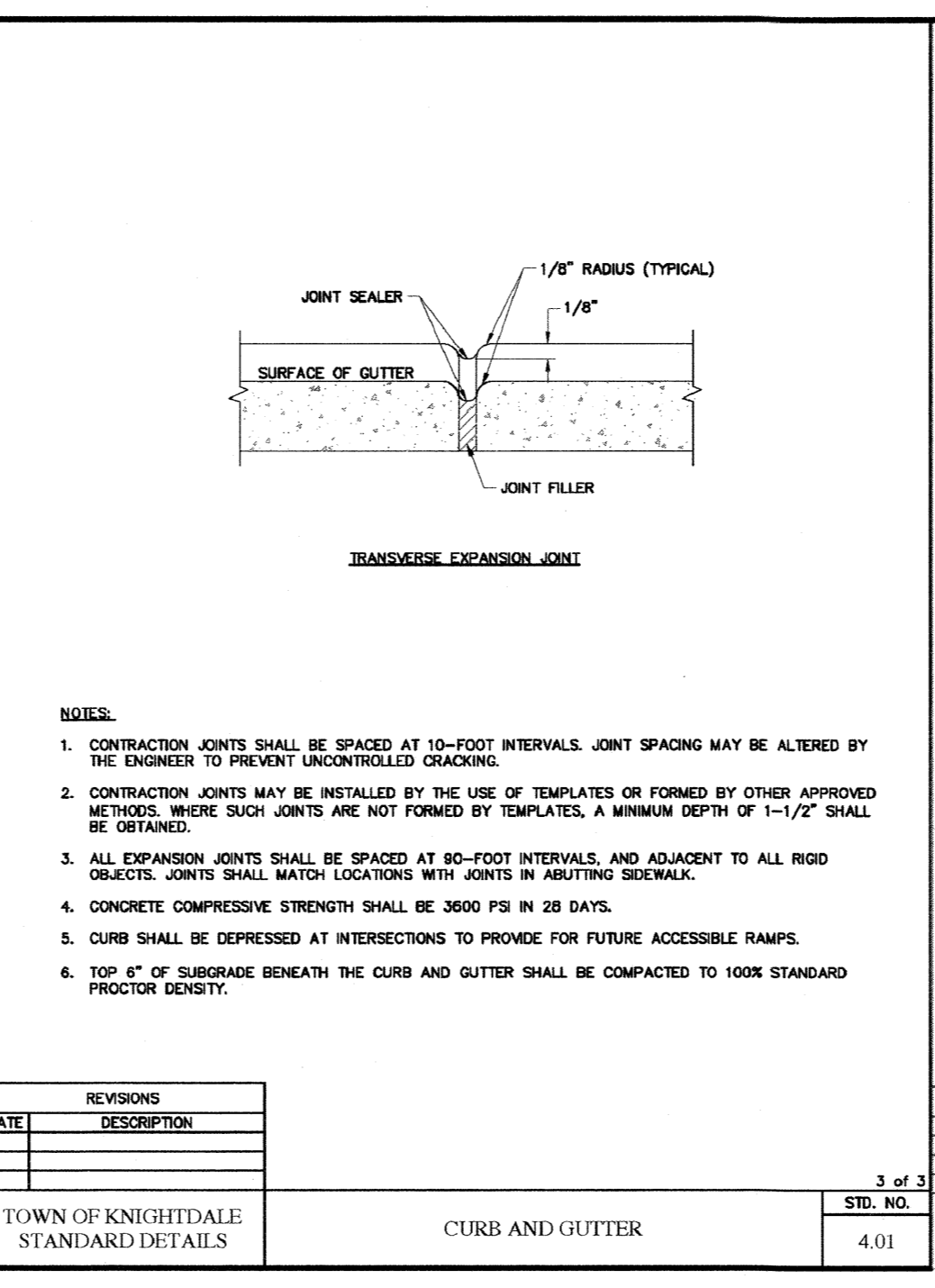
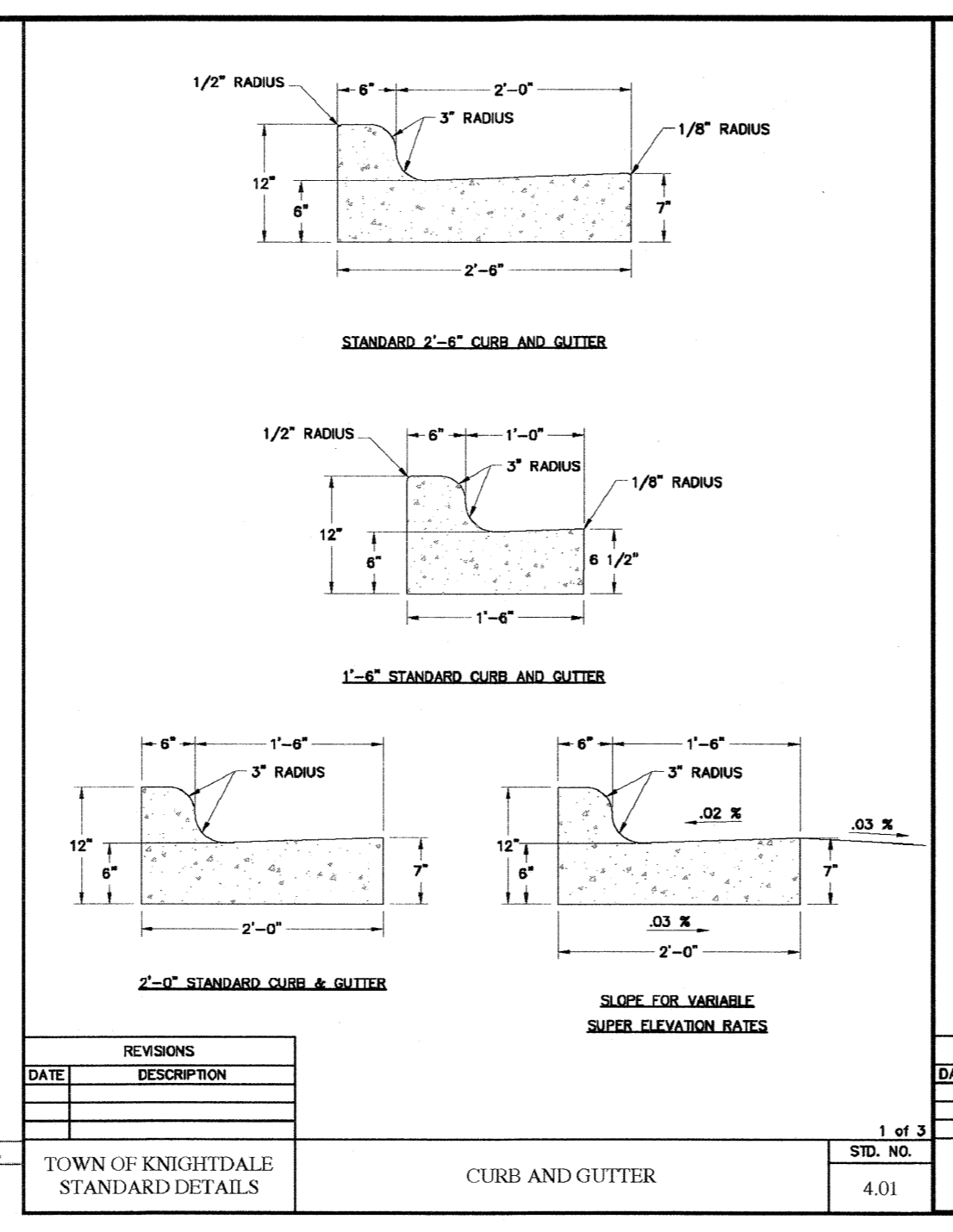
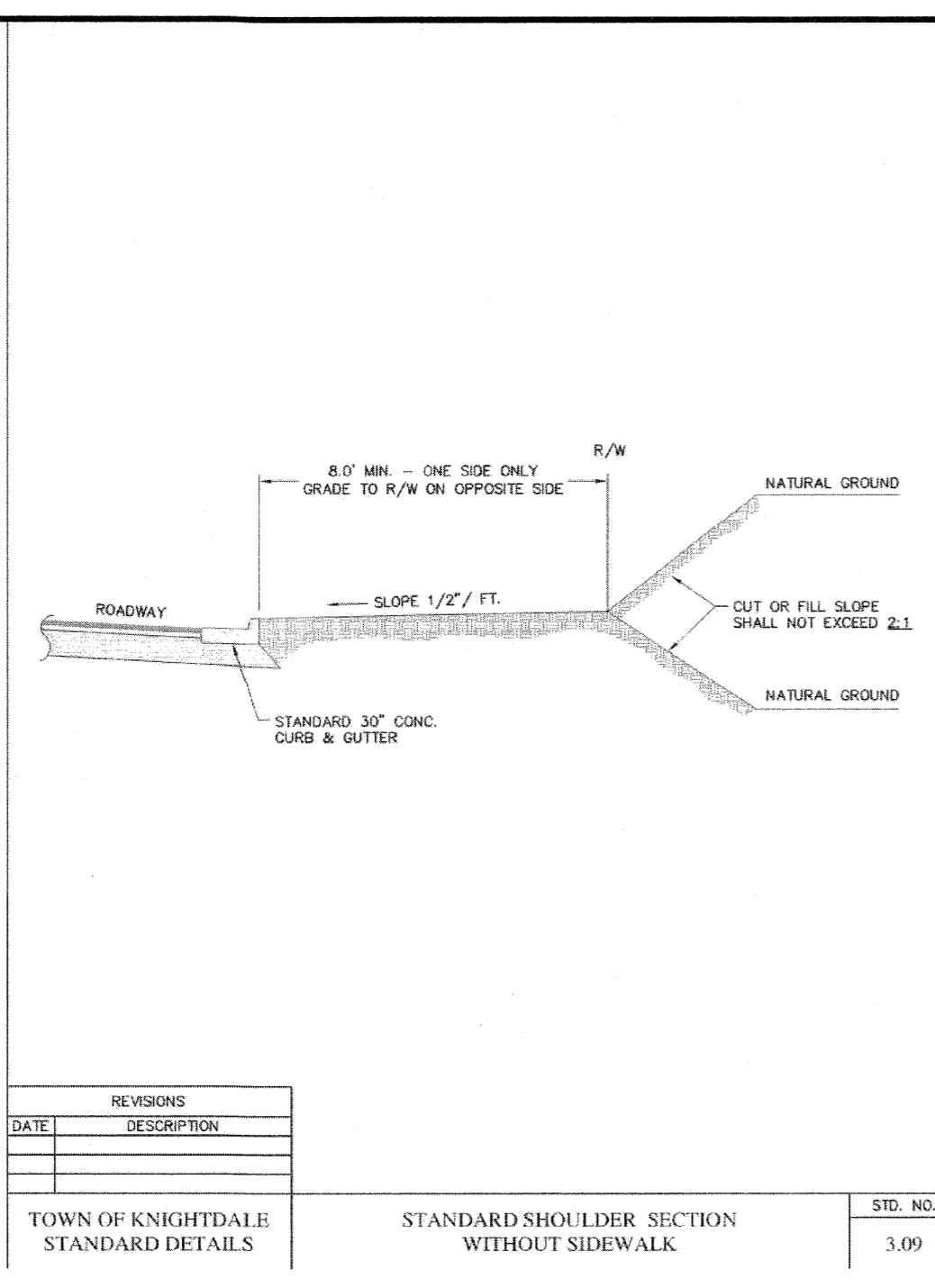
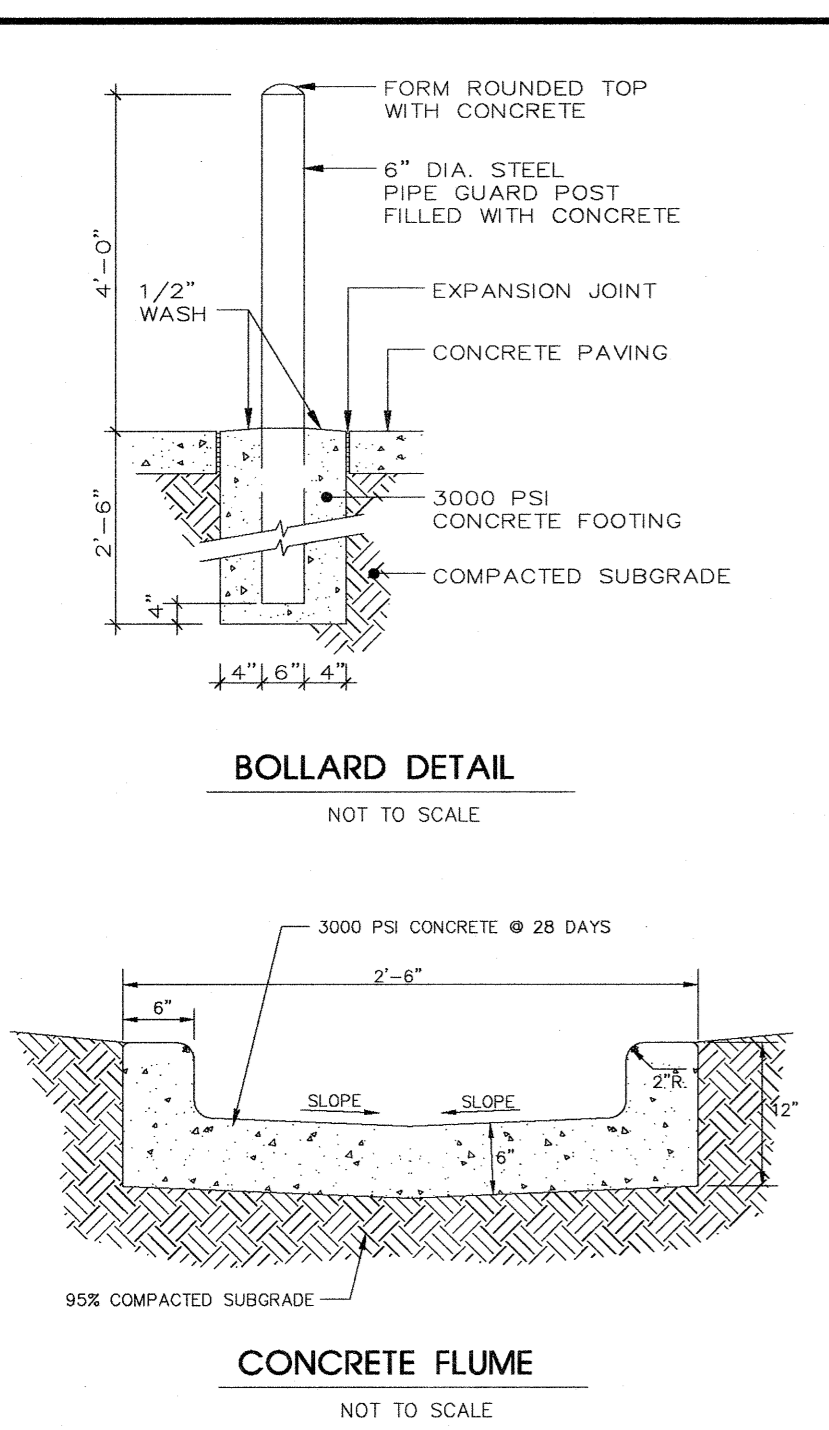


Table with columns for pipe size, bend angle, and reaction bearing areas. Includes a section for rod requirements.



PLAN PREPARED BY: TRINITY CAPITAL ENGINEERS
EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
FOR TRINITY CAPITAL ADVISORS, LLC
DETAILS
390 Spectrum Drive, Knightdale, NC 27545 - Wake County
Date: 10/04/2021
Scale: NOT TO SCALE
Drawn By: JLB
Checked By: CMR
Project Number: 20-0006-988
Drawing Number: C.10.5



51 Kilmorye Drive, Suite 102
Cary, North Carolina 27511
PH 919.486.6990
FAX 919.336.5127
Firm License # C-1798

ADVANCED CIVIL DESIGN ENGINEERS

PLAN PREPARED BY: **TRINITY CAPITAL**

PLAN PREPARED FOR: **TOWN OF KNIGHTDALE**

390 Spectrum Drive, Knightdale, NC 27545 - Wake County

EASTGATE 540
BUILDING #7 CONSTRUCTION PLANS
FOR
TRINITY CAPITAL ADVISORS, LLC
DETAILS

Issue Dates:
06/11/2021 - PROGRESS SET TO CONTRACTOR
06/18/2021 - TOWN SUBMITTAL #1
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10/04/2021 - TOWN SUBMITTAL #4

Date: 10/04/2021
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Drawn By: JLB
Checked By: CMR

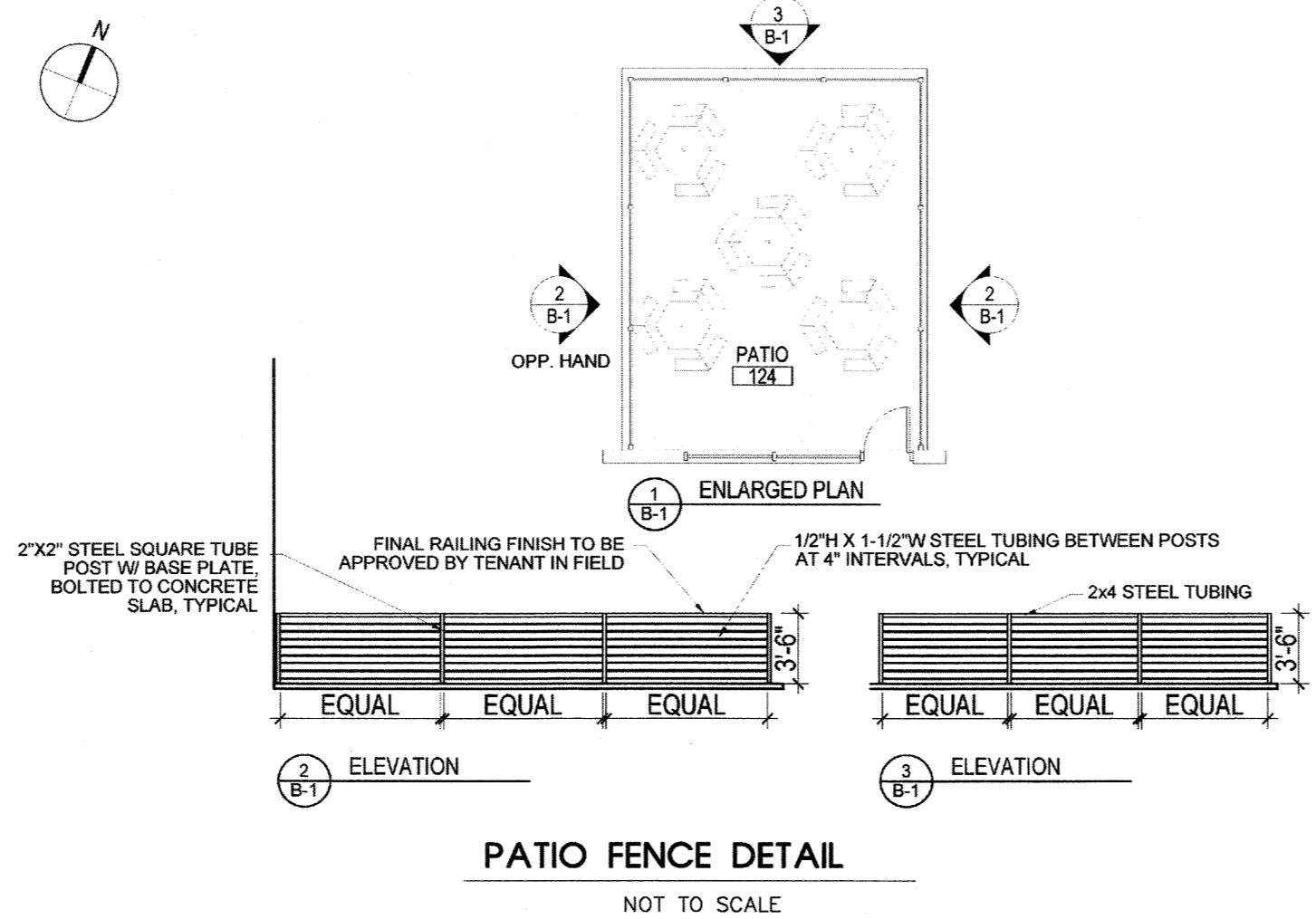
Project Number: 20-0006-988
Drawing Number: C.10.6

Town Certification: This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: *[Signature]* Date: 10.13.21
Development Services Engineer

By: *[Signature]* Date: 10.13.21
Administrator

EXTERIOR HANDRAIL SCALE: NTS



2"x2" STEEL SQUARE TUBE POST W/ BASE PLATE BOLTED TO CONCRETE SLAB, TYPICAL

FINAL RAILING FINISH TO BE APPROVED BY TENANT IN FIELD

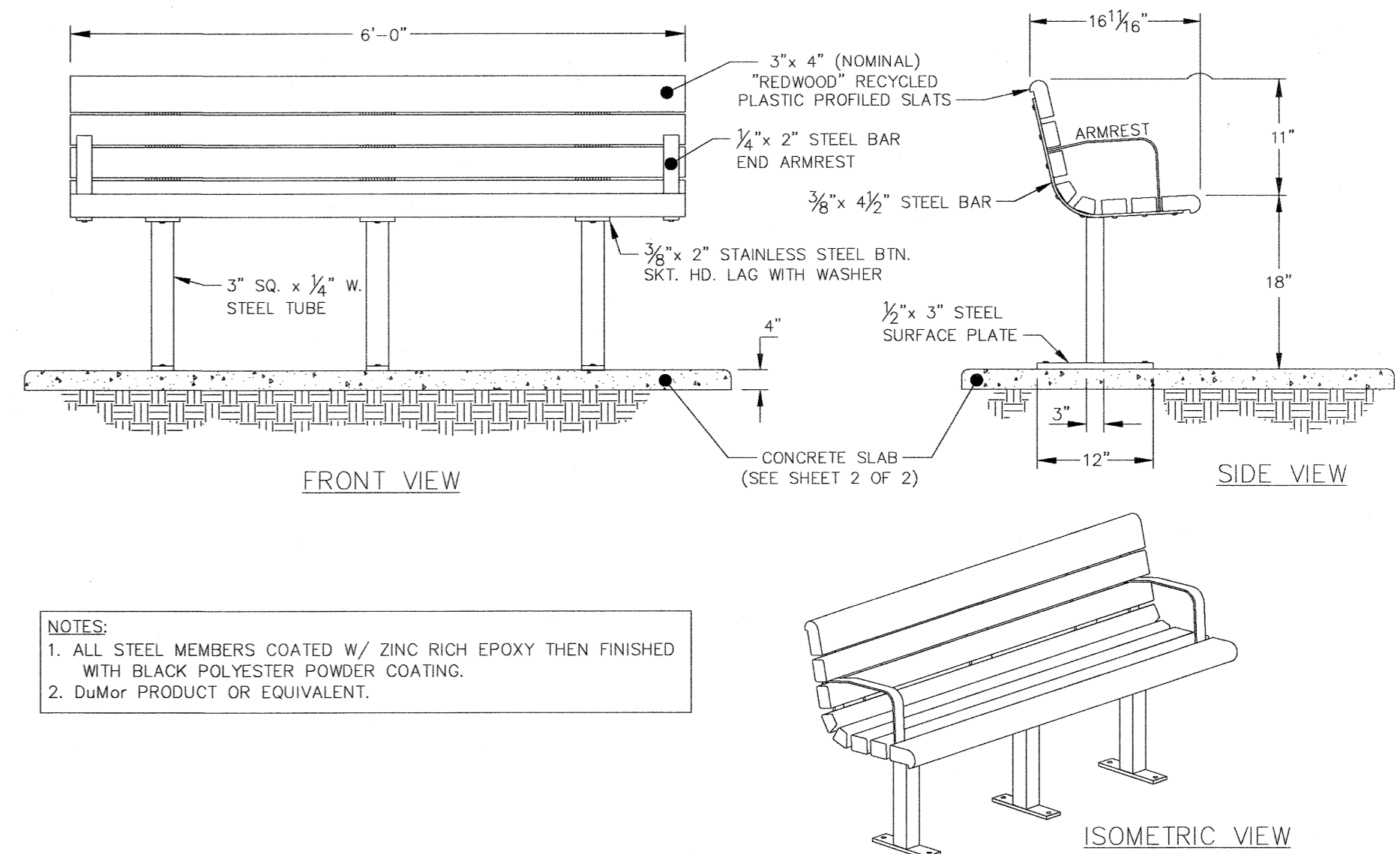
1/2" X 1-1/2" W STEEL TUBING BETWEEN POSTS AT 4" INTERVALS, TYPICAL

2x4 STEEL TUBING

ELEVATION

ELEVATION

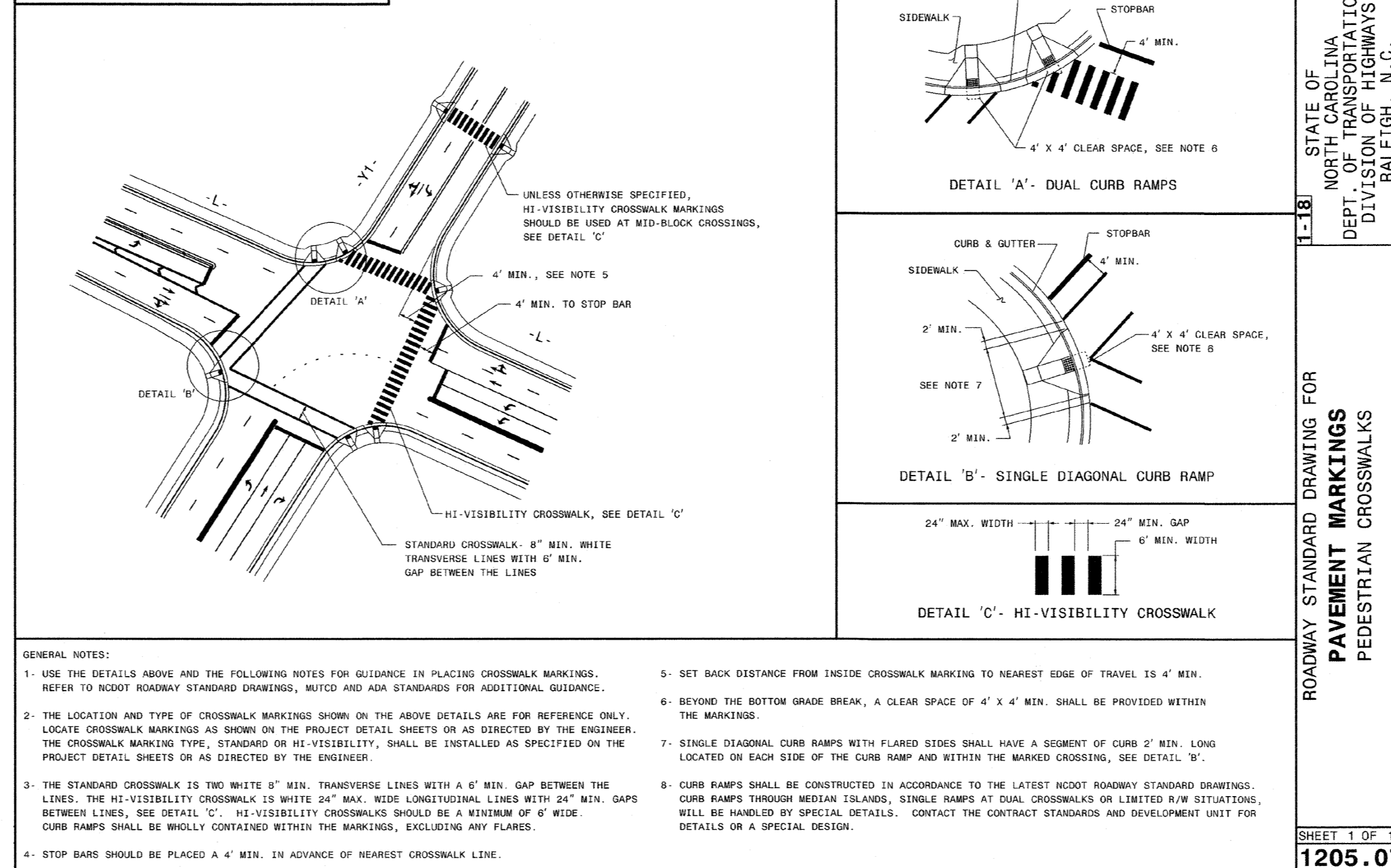
PATIO FENCE DETAIL NOT TO SCALE



NOTES:

1. ALL STEEL MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED WITH BLACK POLYESTER POWDER COATING.
2. DuMor PRODUCT OR EQUIVALENT.

CROSSWALK PLACEMENT GUIDANCE



UNLESS OTHERWISE SPECIFIED, HI-VISIBILITY CROSSWALK MARKINGS SHOULD BE USED AT MID-BLOCK CROSSINGS, SEE DETAIL 'C'.

4' MIN. TO STOP BAR

4' X 4' CLEAR SPACE, SEE NOTE 6

2' MIN. TO STOP BAR

2' MIN. TO STOP BAR

24" MAX. WIDTH, 24" MIN. GAP, 6" MIN. WIDTH

HI-VISIBILITY CROSSWALK, SEE DETAIL 'C'

STANDARD CROSSWALK, 8" MIN. WHITE TRANSVERSE LINES WITH 6" MIN. GAP BETWEEN THE LINES

GENERAL NOTES:

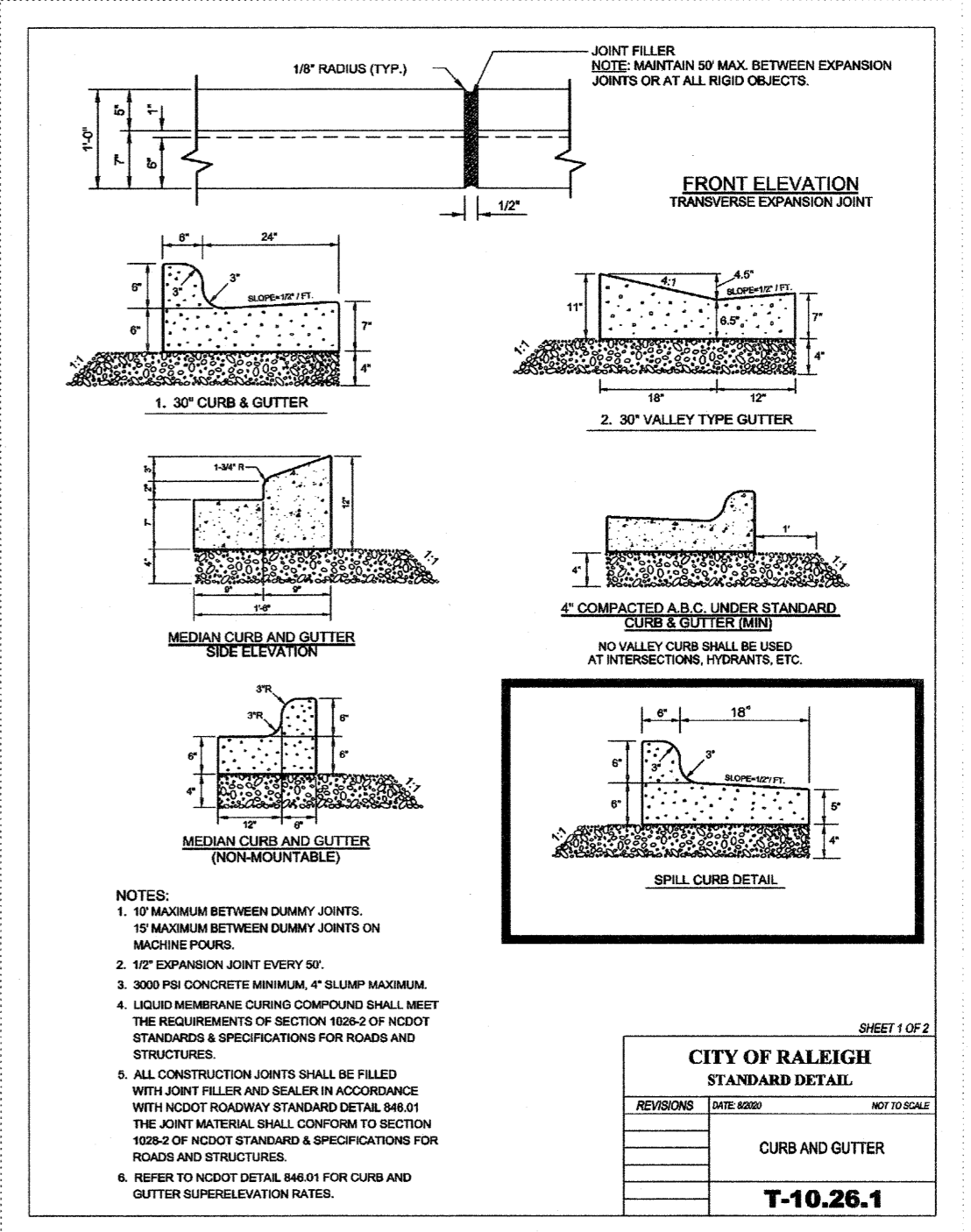
1. USE THE DETAILS ABOVE AND THE FOLLOWING NOTES FOR GUIDANCE IN PLACING CROSSWALK MARKINGS. REFER TO ROADWAY STANDARD DRAWINGS, MUTCD AND ADA STANDARDS FOR ADDITIONAL GUIDANCE.
2. THE LOCATION AND TYPE OF CROSSWALK MARKINGS SHOWN IN THE ABOVE DETAILS ARE FOR REFERENCE ONLY. LOCATE CROSSWALK MARKINGS AS SHOWN ON THE PROJECT DETAIL SHEETS OR AS DIRECTED BY THE ENGINEER. THE CROSSWALK MARKING TYPE, STANDARD OR HI-VISIBILITY, SHALL BE INSTALLED AS SPECIFIED ON THE PROJECT DETAIL SHEETS OR AS DIRECTED BY THE ENGINEER.
3. THE STANDARD CROSSWALK IS TWO WHITE 8" MIN. TRANSVERSE LINES WITH A 6" MIN. GAP BETWEEN THE LINES. THE HI-VISIBILITY CROSSWALK IS WHITE 24" MAX. WIDE LONGITUDINAL LINES WITH 24" MIN. GAPS BETWEEN LINES, SEE DETAIL 'C'. HI-VISIBILITY CROSSWALKS SHOULD BE A MINIMUM OF 6' WIDE. CURB RAMP SHALL BE FULLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLANGES.
4. STOP BARS SHOULD BE PLACED A 4' MIN. IN ADVANCE OF NEAREST CROSSWALK LINE.
5. SET BACK DISTANCE FROM INSIDE CROSSWALK MARKING TO NEAREST EDGE OF TRAVEL IS 4' MIN. BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE OF 4' X 4' MIN. SHALL BE PROVIDED WITHIN THE MARKINGS.
6. SINGLE DIAGONAL CURB RAMP WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 2' MIN. LONG LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING, SEE DETAIL 'B'.
7. CURB RAMP SHALL BE CONSTRUCTED IN ACCORDANCE TO THE LATEST AASHTO ROADWAY STANDARD DRAWINGS. CURB RAMP THROUGH MEDIAN ISLANDS, SINGLE RAMP AT DUAL CROSSWALKS OR LIMITED R/W SITUATIONS, WILL BE HANDLED BY SPECIAL DETAILS. CONTACT THE CONTRACT STANDARDS AND DEVELOPMENT UNIT FOR DETAILS ON A SPECIAL DESIGN.

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

ROADWAY STANDARD DRAWING FOR PAVEMENT MARKINGS PEDESTRIAN CROSSWALKS

SHEET 1 OF 1

1205.07



FRONT ELEVATION

1. 30" CURB & GUTTER

2. 30" VALLEY TYPE GUTTER

3. COMPACTED A.B.C. LAYER STANDARD CURB & GUTTER RAMP

4. SPILL CURB DETAIL

NOTES:

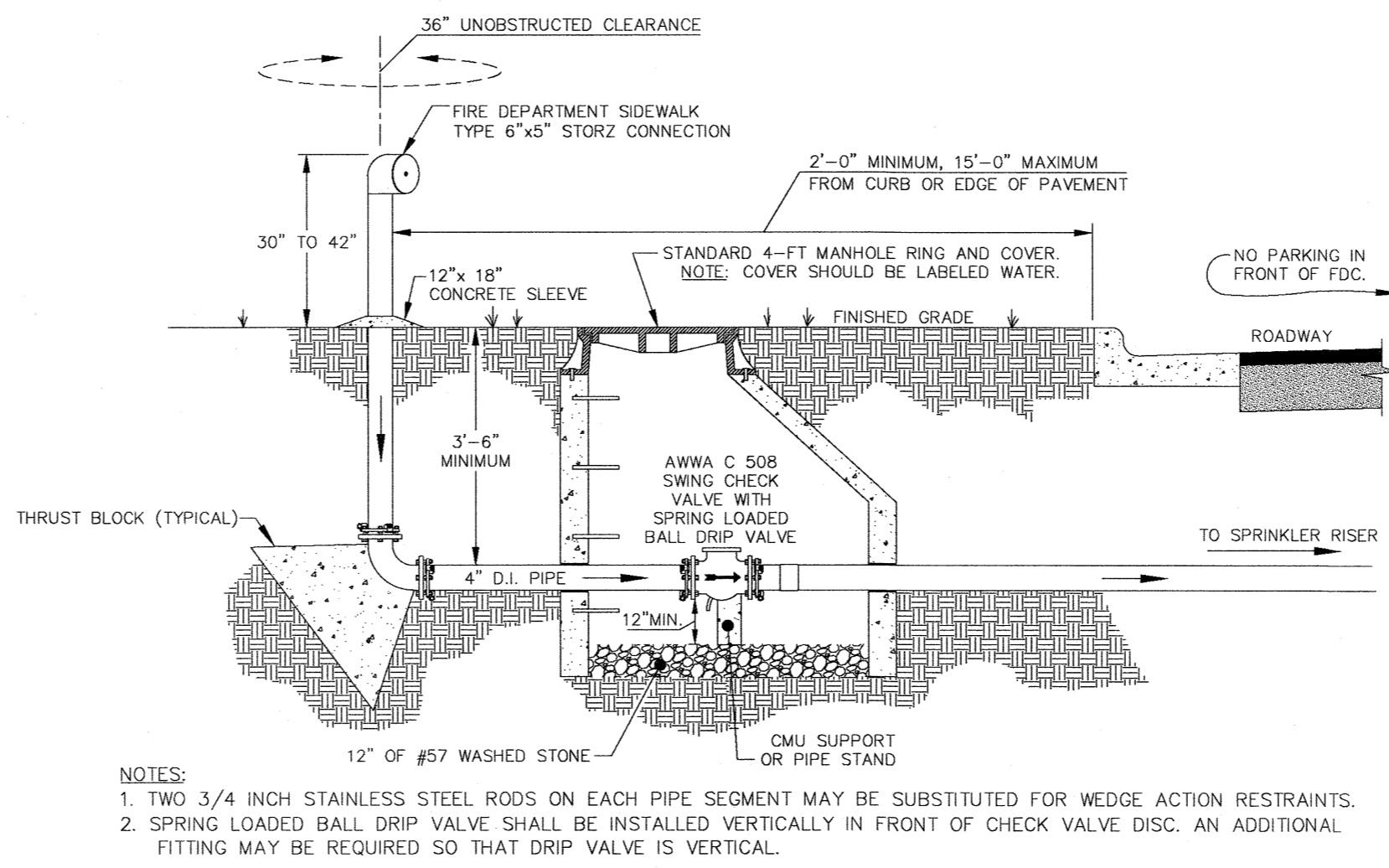
1. 1/2" MAXIMUM BETWEEN DUMMY JOINTS.
2. 1/2" MAXIMUM BETWEEN DUMMY JOINTS ON MEDIAN PORTALS.
3. 300 PSI CONCRETE MINIMUM 4" SLAB MAXIMUM.
4. LIQUID MEMBRANE CURING COMPOUND SHALL MEET THE REQUIREMENTS OF SECTION 505 OF MOTOR STANDARDS & SPECIFICATIONS FOR ROADS AND STRUCTURES.
5. ALL CONSTRUCTION JOINTS SHALL BE FILLED WITH JOINT FILLER AND SEALER IN ACCORDANCE WITH AASHTO ROADWAY STANDARD DRAWINGS. THE JOINT MATERIAL SHALL CONFORM TO SECTION 505 OF MOTOR STANDARDS & SPECIFICATIONS FOR ROADS AND STRUCTURES.
6. REFER TO ROADWAY STANDARD DRAWINGS FOR CURB AND GUTTER SUPERELEVATION RATES.

CITY OF RALEIGH STANDARD DETAIL

REVISIONS

DATE

NO. 10-26.1



36" UNOBSTRUCTED CLEARANCE

FIRE DEPARTMENT SIDEWALK TYPE 6" X 5" STORZ CONNECTION

2'-0" MINIMUM, 15'-0" MAXIMUM FROM CURB OR EDGE OF PAVEMENT

12" X 18" CONCRETE SLEEVE

STANDARD 4-FT MANHOLE RING AND COVER. NOTE: COVER SHOULD BE LABELED WATER.

3'-6" MINIMUM

AWWA C 508 SWING CHECK VALVE WITH SPRING LOADED BALL DRIP VALVE

12" OF #57 WASHED STONE

CMU SUPPORT OR PIPE STAND

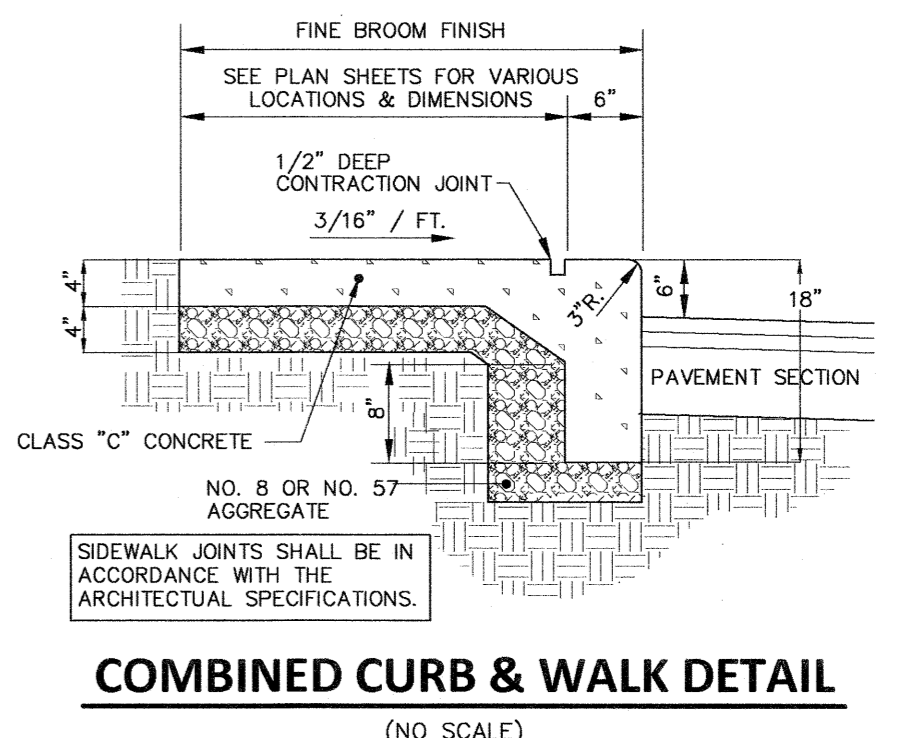
NO PARKING IN FRONT OF FDC.

TO SPRINKLER RISER

NOTES:

1. TWO 3/4 INCH STAINLESS STEEL RODS ON EACH PIPE SEGMENT MAY BE SUBSTITUTED FOR WEDGE ACTION RESTRAINTS.
2. SPRING LOADED BALL DRIP VALVE SHALL BE INSTALLED VERTICALLY IN FRONT OF CHECK VALVE DISC. AN ADDITIONAL FITTING MAY BE REQUIRED SO THAT DRIP VALVE IS VERTICAL.

CURB SIDE FIRE DEPARTMENT CONNECTION (NO SCALE)



COMBINED CURB & WALK DETAIL (NO SCALE)

Town Certification. This design has been reviewed by the Development Services Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: *SALMA* Date: 10-12-2021
Development Services Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: *[Signature]* Date: 10-13-21
Administrator

PLAN PREPARED BY: ADVANCED CIVIL DESIGN ENGINEERS

51 Kilmorye Drive, Suite 102
Cary, North Carolina 27511
ph 919.466.6990
fax 919.336.9798
Firm License # C-2798

PLAN PREPARED FOR: TRINITY CAPITAL

390 Spectrum Drive, Knightdale, NC 27545 - Wake County

EASTGATE 540

BUILDING #7 CONSTRUCTION PLANS FOR TRINITY CAPITAL ADVISORS, LLC DETAILS

Issue Dates:

06/11/2021	PROGRESS SET TO CONTRACTOR
06/18/2021	TOWN SUBMITTAL #1
09/10/2021	TOWN SUBMITTAL #2
09/14/2021	TOWN SUBMITTAL #3
10/04/2021	TOWN SUBMITTAL #4

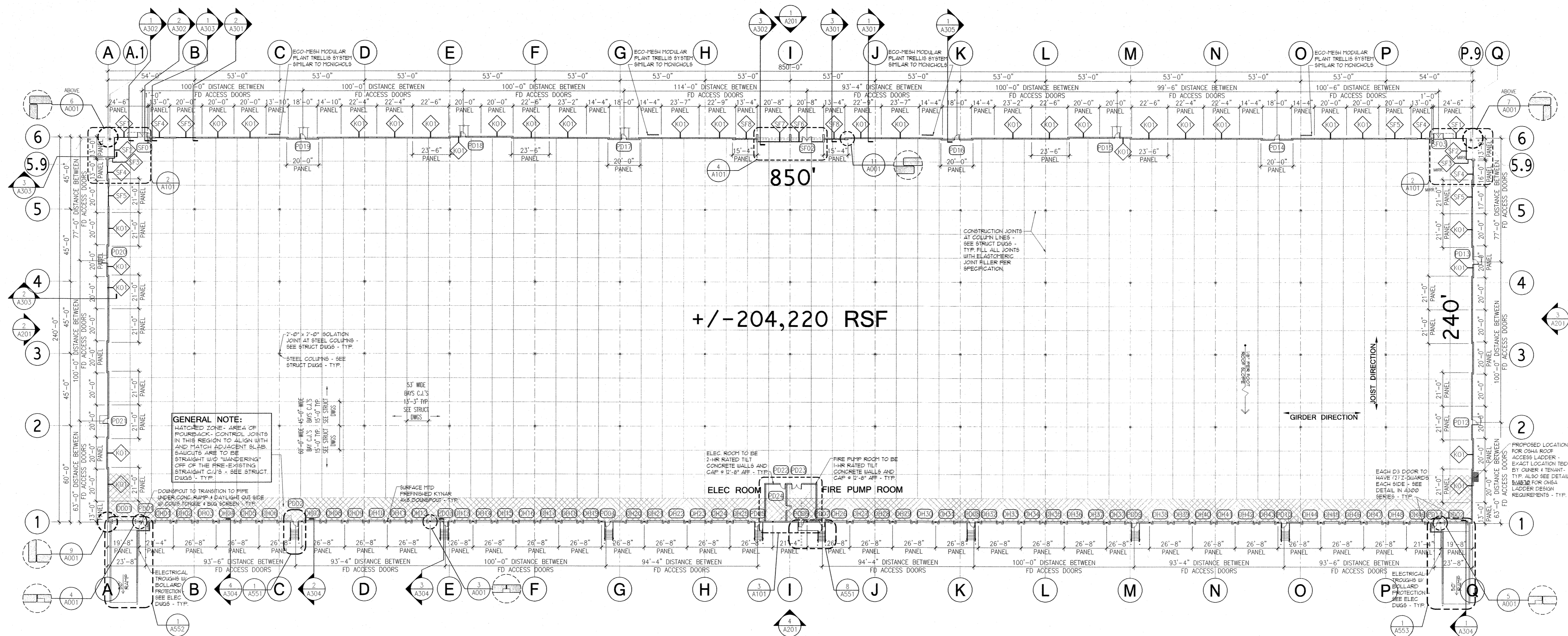
Date: 10/04/2021
Scale: NOT TO SCALE

Drawn By: JLB
Checked By: CMR

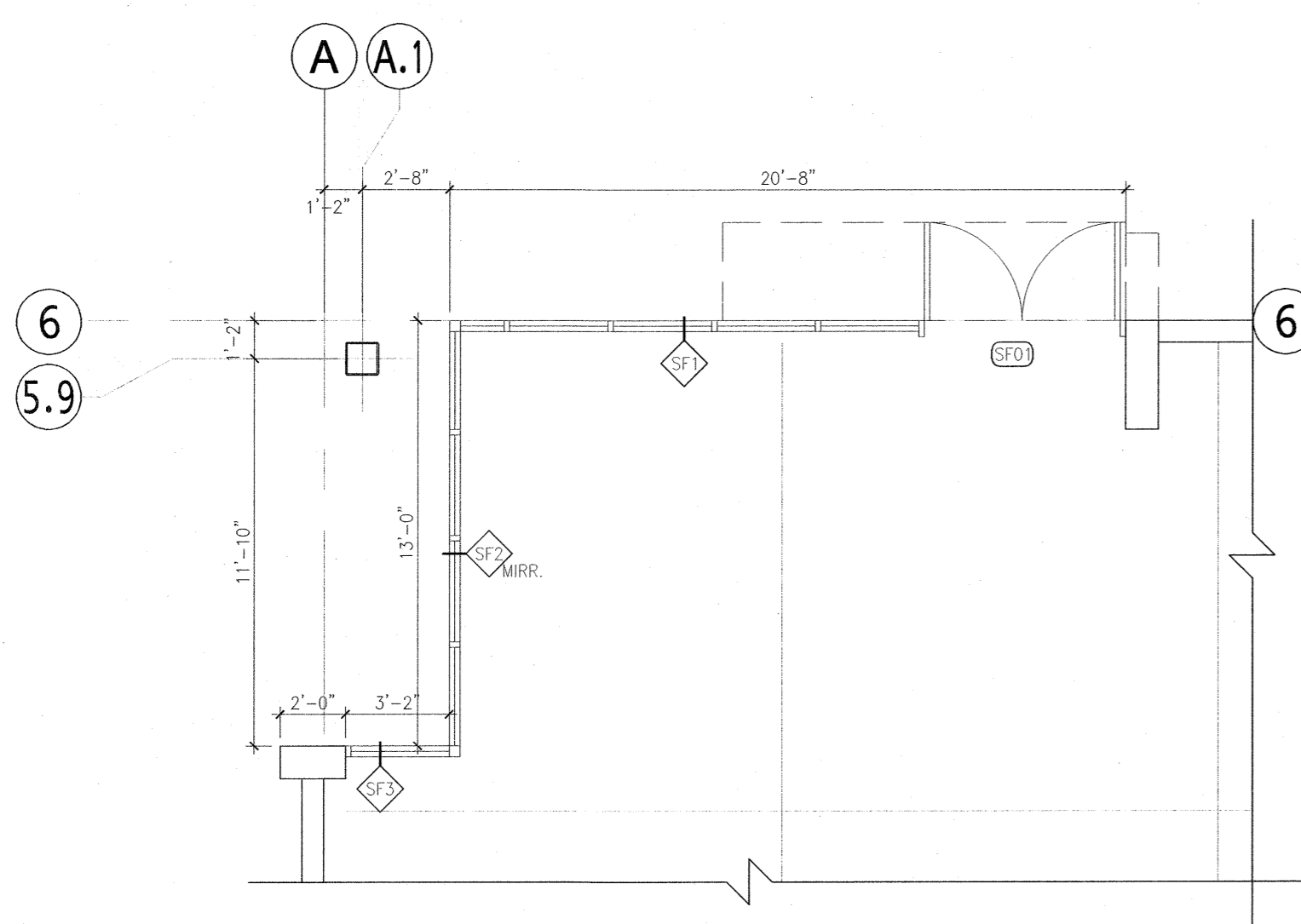
Project Number: 20-0006-988

Drawing Number: C.10.7

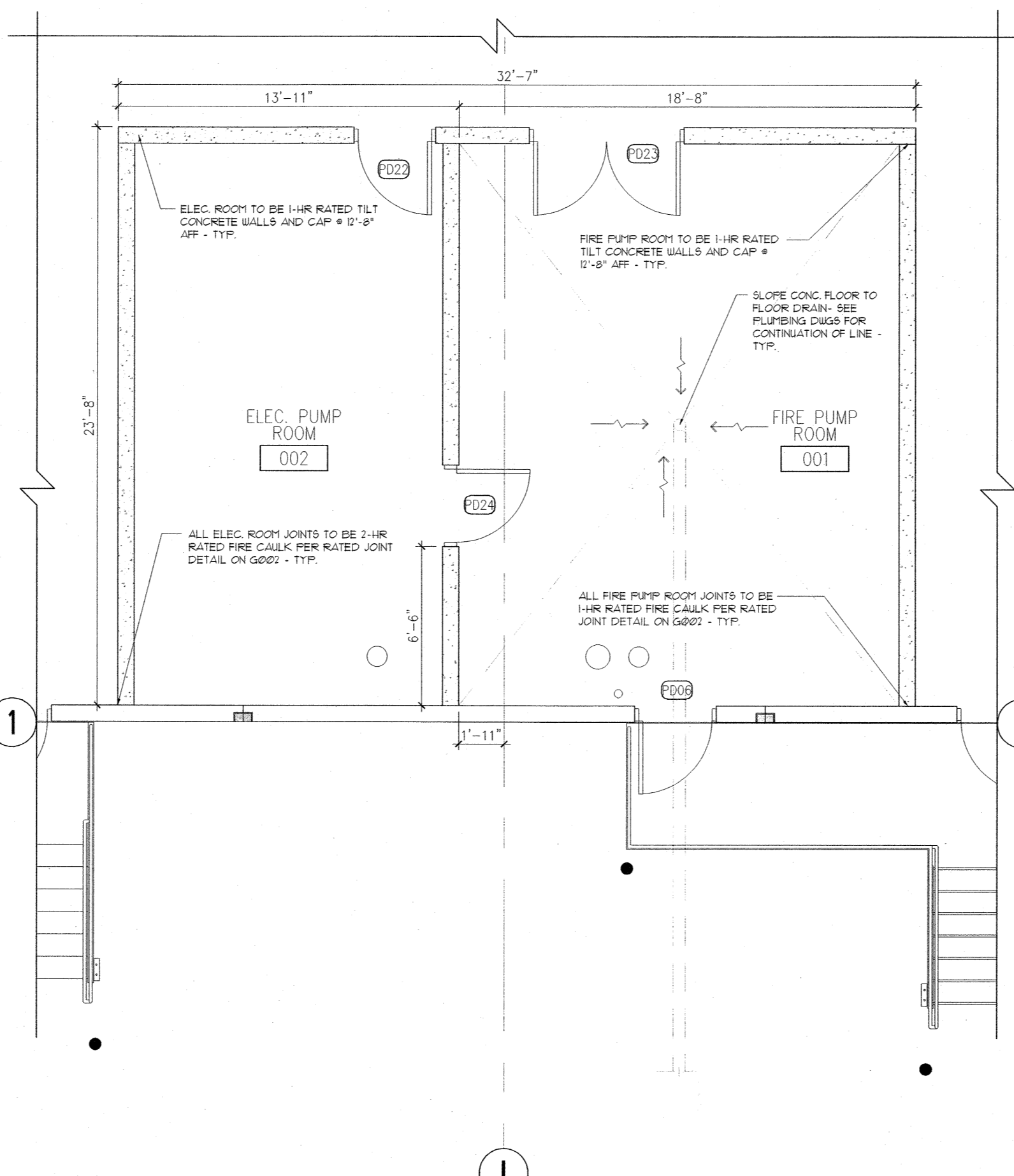
ZMA-10-20



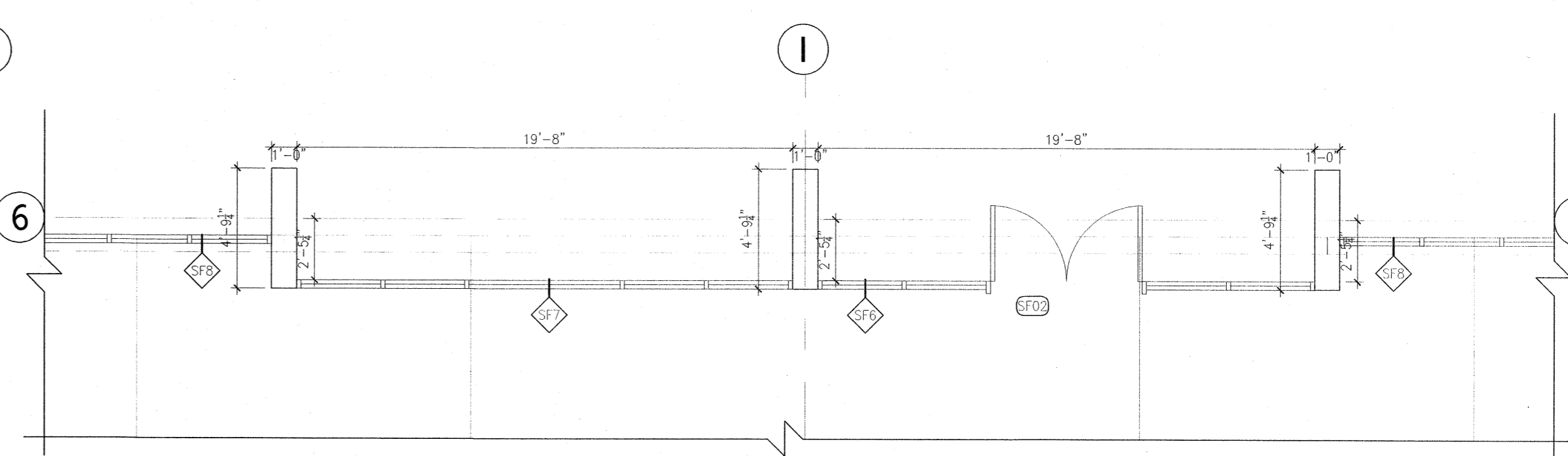
1 OVERALL FLOOR PLAN
 SCALE: 1" = 30'-0"
 PLAN NORTH TRUE NORTH



2 ENLARGED FLOOR PLAN
 SCALE: 1/4" = 1'-0" (OPPOSITE CORNER SIM. & MIRRORED)



3 PUMP ROOM / ELECTRICAL ROOM
 SCALE: 1/4" = 1'-0"



4 ENLARGED FLOOR PLAN
 SCALE: 1/4" = 1'-0"

FOR SITE APPROVAL ONLY

Town Certification: This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: *[Signature]*
 Development Services Engineer
 Date: 10.12.2021

These plans are approved by the Town of Knightdale and serve as construction plans for the project.

By: *[Signature]*
 Administrator
 Date: 10.13.21

architects
msa
 merriman schmitt
 interior design
 610 EAST MOREHEAD ST.
 SUITE 200
 CHARLOTTE, NC 28202
 704.377.1177
 704.377.3060 (fax)

DEVELOPER / OWNER:
 TRINITY CAPITAL

FRAMPTON
 CONSTRUCTION

SEALS:
 MERRIMAN SCHMITT ARCHITECTS, INC.
 CERT. NO. 50785
 CHARLOTTE, N.C.
 STEPHEN A. SCHMITT
 REGISTERED ARCHITECT
 6479
 CHARLOTTE, N.C.
 06/07/21

SPECULATIVE INDUSTRIAL BUILDING
 EASTGATE 540 LOT 7
TRINITY CAPITAL ADVISORS
 390 SPECTRUM DRIVE
 KNIGHTDALE, NC

DRAWING STATUS:
 PRELIMINARY
 NOT FOR CONSTRUCTION
 ISSUED FOR BIDDING
 ISSUED FOR CONSTRUCTION

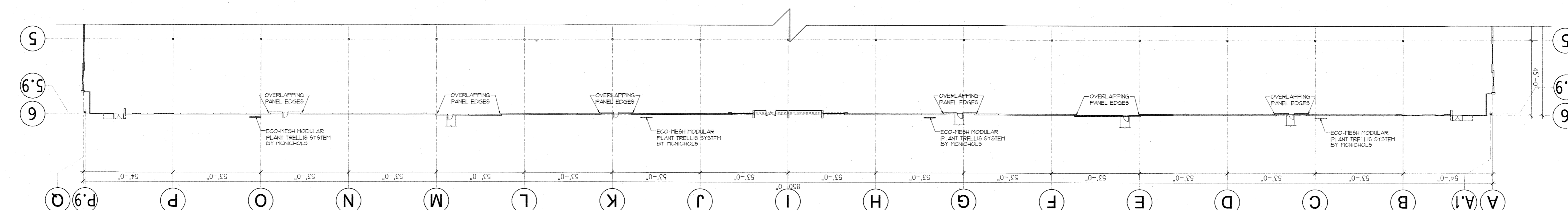
OWNER / CLIENT SIGNATURE: _____
 DATE: _____

NO.	DATE	REVISION

FILE NAME: _____
 PROJECT NO.: C20165
 SHEET TITLE: OVERALL FLOOR PLAN
 SHEET: _____

A101

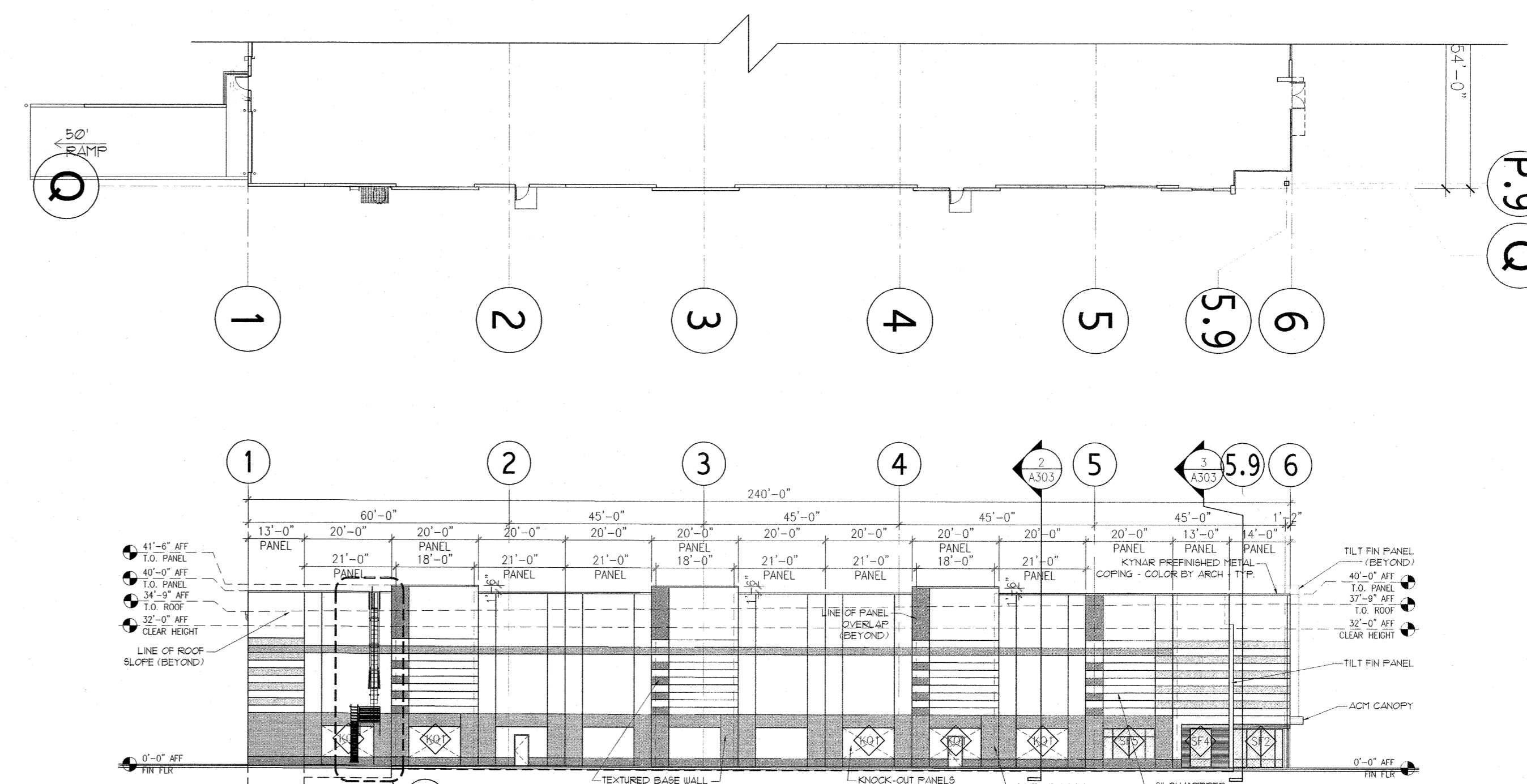
MIN. 32' CLEAR UNDER STRUCTURE - TYP.



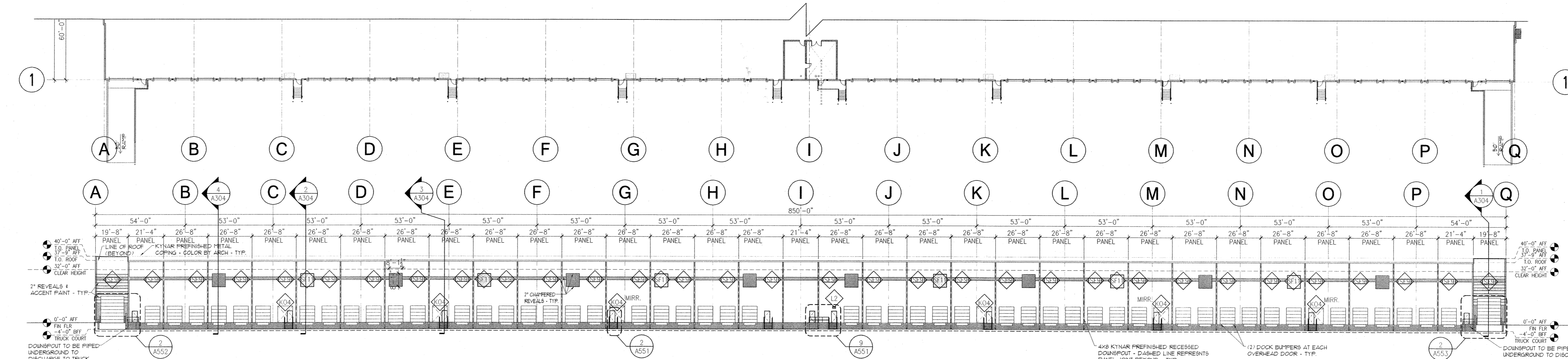
1 FRONT ELEVATION
SCALE: 1" = 30'-0"



2 SIDE ELEVATION
SCALE: 1" = 20'-0"



3 SIDE ELEVATION
SCALE: 1" = 20'-0"



4 REAR ELEVATION
SCALE: 1" = 30'-0"

FOR SITE APPROVAL ONLY

Town Certification: This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: *[Signature]*
Developer/Professional Engineer
Date: 10.12.2021

These plans are approved by the Town of Knightdale and serve as construction plans for the project.

By: *[Signature]*
Administrator
Date: 10.13.21

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6479
CHARLOTTE, N.C.
06/07/21

SPECULATIVE INDUSTRIAL BUILDING
EASTGATE 540 LOT 7
TRINITY CAPITAL ADVISORS
390 SPECTRUM DRIVE
KNIGHTDALE, NC

DRAWING STATUS:
 PRELIMINARY
 NOT FOR CONSTRUCTION
 ISSUED FOR BIDDING
 ISSUED FOR CONSTRUCTION

OWNER / CLIENT SIGNATURE: _____
DATE: _____

FILE NAME: _____
PROJECT NO.: C20165
SHEET TITLE: ENLARGED ELEVATIONS
SHEET 1

MIN. 32' CLEAR UNDER STRUCTURE - TYP.