

SHEET INDEX

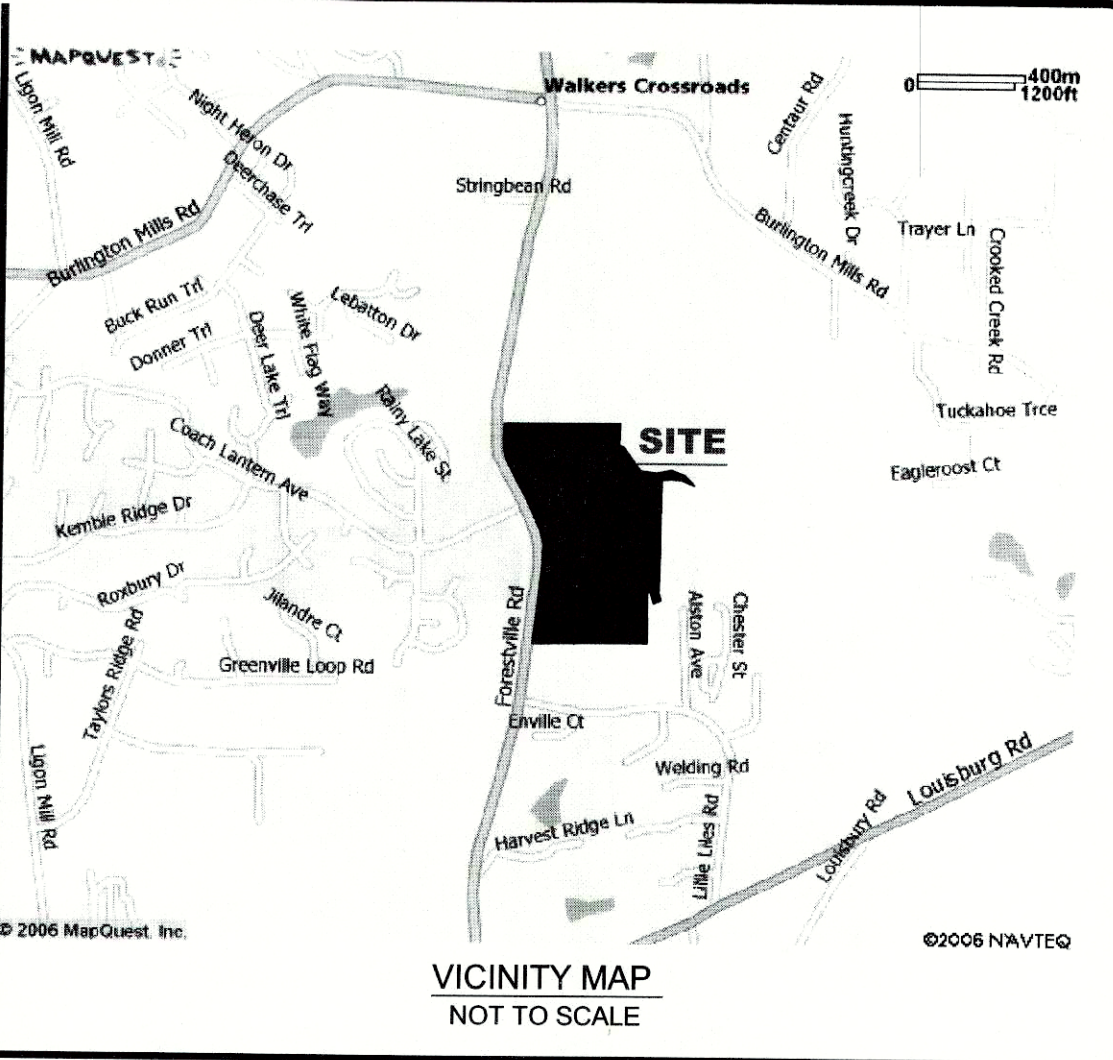
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DRAYTON RESERVE SUBDIVISION PHASE II

REVIEW DRAWINGS

DATE: 8-7-2014

FORESTVILLE ROAD, TOWN OF ROLESVILLE
WAKE COUNTY, NORTH CAROLINA



PUBLIC
WATER DISTRIBUTION / EXTENSION SYSTEM
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-3264
Authorization to Construct Ben Bule
Date 10/14/14

PUBLIC
SEWER COLLECTION / EXTENSION SYSTEM
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City of Raleigh
Public Utilities Department Permit # S-3986
Authorization to Construct Ben Bule
Date 10/14/14

ATTENTION CONTRACTORS

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

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

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

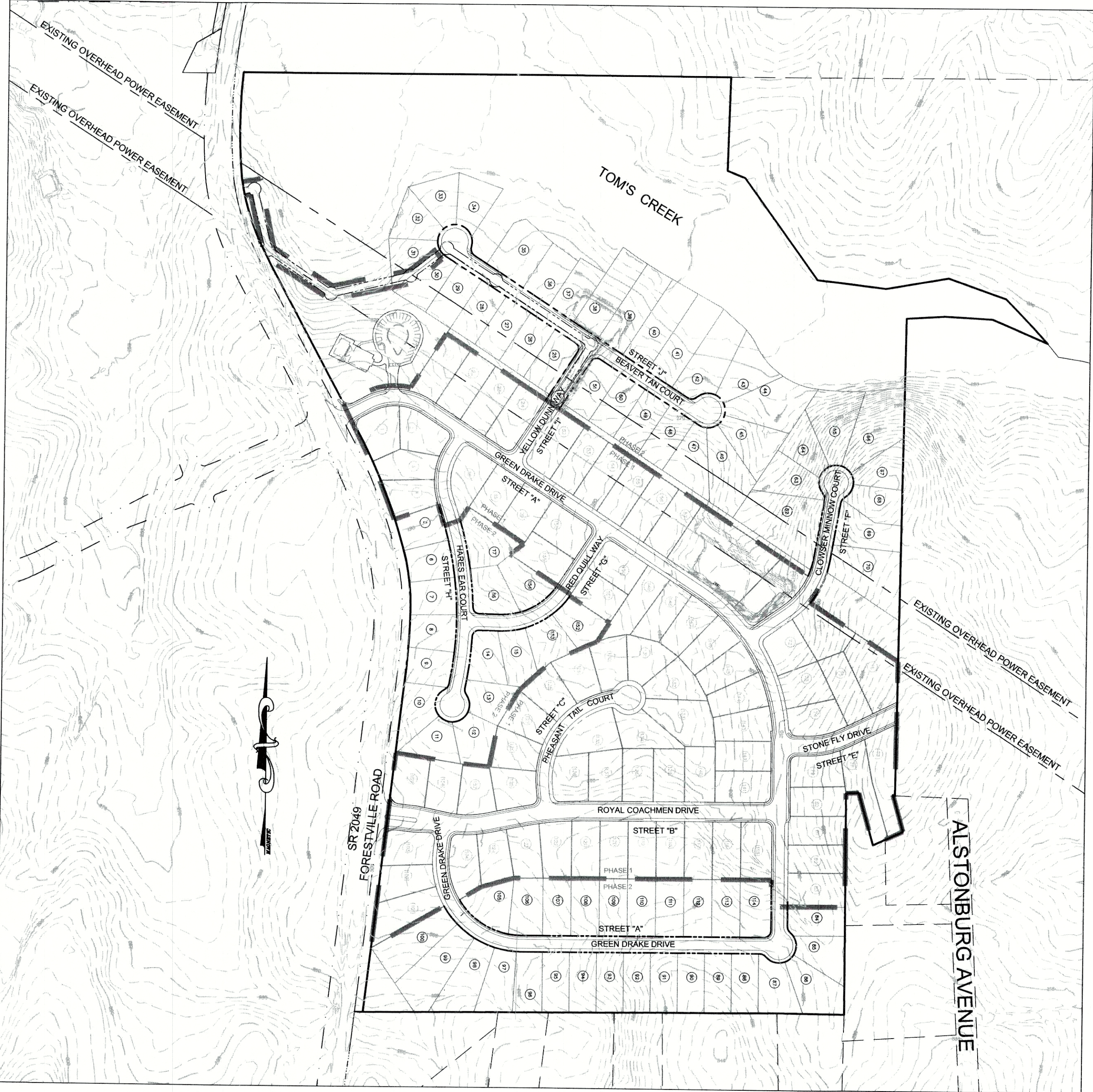
APPROVED
Town of Rolesville Planning Department
Staff PLS Date 8/19/14
*See Zoning Permit for Applicable Conditions and/or Details
YCMS 8/19/14



DEVELOPER:
RYLAND HOMES
4625 CREEKSTONE DR. SUITE 100
DURHAM, NORTH CAROLINA 27703
(919) 218-0309

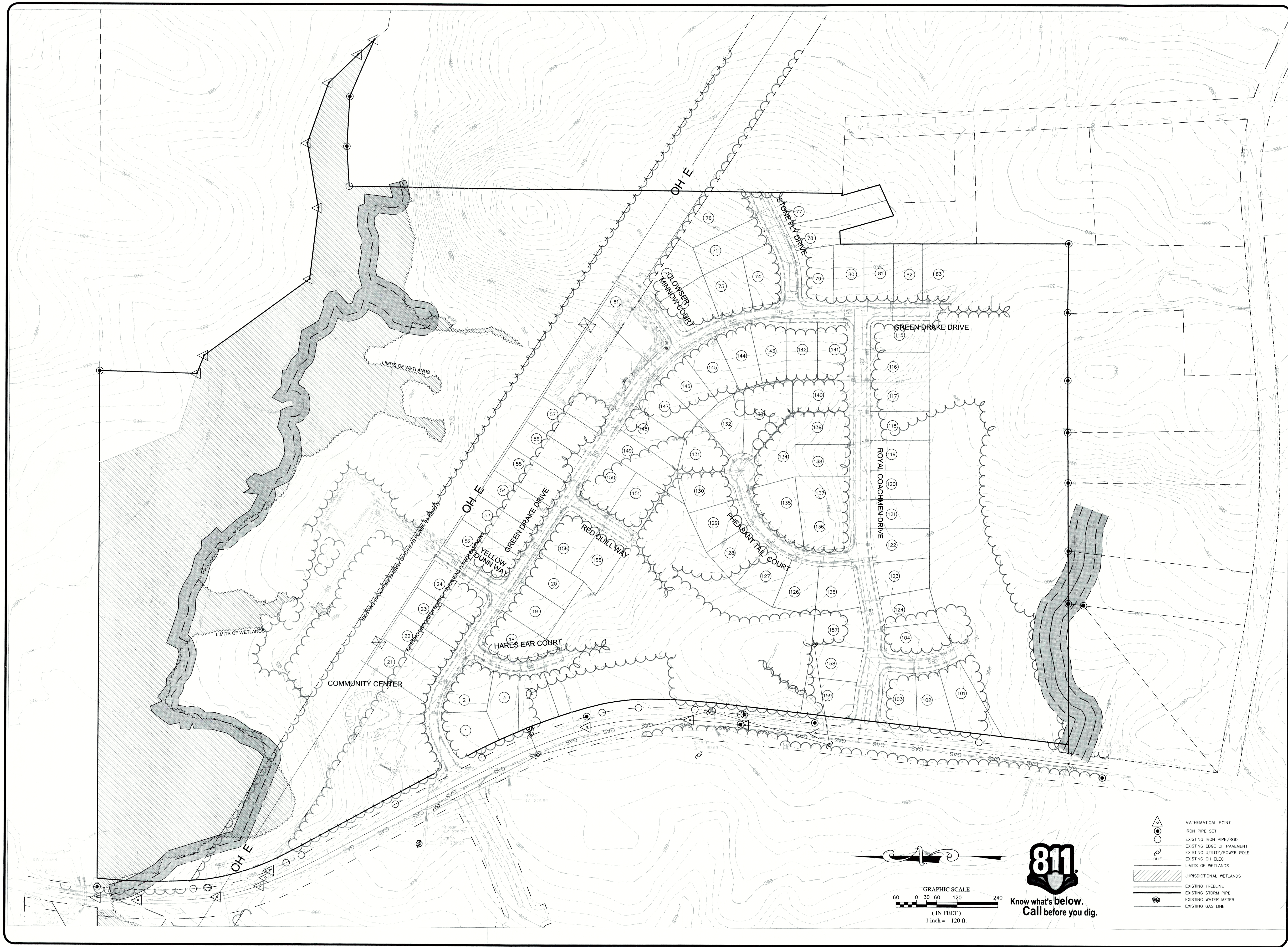
GENERAL NOTES:

- CONSTRUCTION ON THIS PROJECT SHALL BE IN ACCORDANCE WITH LOCAL STANDARDS AS FOLLOWS:
UTILITIES: CITY OF RALEIGH
ROADWAY AND STORM DRAINAGE: TOWN OF ROLESVILLE
EROSION CONTROL: WAKE COUNTY
- THE GRADE LINES DENOTE THE FINISHED ELEVATIONS OF THE PROPOSED FINISHED PAVEMENT. GRADE LINES MAY BE ADJUSTED AT THEIR BEGINNING, ENDING, AND AT STRUCTURES AS DIRECTED BY THE ENGINEER IN ORDER TO PROVIDE A PROPER TIE-IN.
- UNDERGROUND UTILITIES MAY EXIST ON, ALONG OR WITHIN CONFLICT OF THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING NC-ONE-CALL OR THE APPROPRIATE UTILITY COMPANIES PRIOR TO ANY EXCAVATION. **THE CONTRACTOR MUST FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.** IN CASE OF CONFLICT, NOTIFY ENGINEER AND DO NOT CONSTRUCT.
- THE EARTHWORK ON THIS PLAN DOES NOT NECESSARILY BALANCE; OFFSITE BORROW OR WASTE MAY BE REQUIRED.
- ALL PIPE INVERTS TO BE VERIFIED IN THE FIELD AND ADJUSTED BY THE ENGINEER IF NECESSARY.
- ALL CONCRETE PIPES SHALL BE REINFORCED CLASS III.
- THE CONTRACTOR SHALL PERFORM ALL CONSTRUCTION IN ACCORDANCE WITH LOCAL CITY, COUNTY AND STATE BUILDING CODES.
- THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE DEMOLITION OF ALL EXISTING ON SITE FACILITIES, ABOVE AND BELOW GROUND. THE CONTRACTOR IS ALSO RESPONSIBLE FOR REMOVAL OF ALL WASTE RESULTING FROM DEMOLITION, AS WELL AS GRADING AND FILLING OF ALL DEPRESSIONS TO INSURE THAT THE SITE REMAINS AESTHETICALLY ACCEPTABLE.
- THE CONTRACTOR SHALL OBSERVE ALL REQUIRED SAFETY PRECAUTIONS IN THE PERFORMANCE OF ALL WORK IN ACCORDANCE WITH OSHA.
- THE CONTRACTOR SHALL GRADE, SEED AND SOD OR OTHERWISE PROVIDE TEMPORARY AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, ESPECIALLY SLOPES. SEE EROSION CONTROL INSTRUCTIONS, IF APPLICABLE.
- ALL PROPOSED UTILITIES TO BE UNDERGROUND THROUGHOUT THE SITE IF ALLOWED BY LOCAL CODES.
- WORK WITHIN PUBLIC RIGHT-OF-WAYS SHALL BE IN ACCORDANCE WITH ALL STATE AND LOCAL REQUIREMENTS, NOTIFICATIONS, STANDARDS AND POLICIES.
- ANY SUBSTITUTIONS, CHANGES, OR MODIFICATIONS SHALL BE APPROVED BY THE PROJECT ENGINEER, PLANNING DEPARTMENT STAFF, AND DEVELOPER.
- PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS NECESSARY TO CONSTRUCTION. THE CONTRACTOR SHALL READ ALL PERMITS AND ENSURE THAT CONSTRUCTION COMPLIES WITH THE PERMITS. REQUIRED PERMITS MAY INCLUDE, BUT ARE NOT LIMITED TO: CITY/COUNTY APPROVALS/PERMITS, NCDOT PERMITS, DRIVEWAY PERMITS, RIGHT OF WAY ENCROACHMENT AGREEMENTS, EROSION CONTROL PERMITS, NCDENR PERMITS, WATER PERMITS, SEWER PERMITS, ENVIRONMENTAL PERMITS, WETLAND DISTURBANCE PERMITS, STREAM CROSSING PERMITS, POWER EASEMENT ENCROACHMENT AGREEMENTS, USACE/DWQ PERMITS, AND STORMWATER PERMITS. IF THE CONTRACTOR HAS QUESTIONS ABOUT PERMIT LANGUAGE, OR THE NEED FOR A PERMIT, HE MUST CONTACT THE DEVELOPER AND THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.
- THE GRADING CONTRACTOR MUST MAINTAIN COPIES OF THE EROSION CONTROL PERMIT AND THE NPDES PERMIT ONSITE. HE MUST READ AND FOLLOW THE CONDITIONS OF THOSE PERMITS.
- THE CONTRACTOR MUST VERIFY ALL FIELD ELEVATIONS PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY VARIATION OF FIELDS ELEVATIONS.
- SEE PLAT "DRAYTON RESERVE SUBDIVISION PHASE 1-A FINAL PLAT" BY WILLIAM H. MCCARTHY, JR., PLS, DATED JULY 2, 2009, AND RECORDED IN BM 2009/764-775 (FOR UTILITY EASEMENTS)

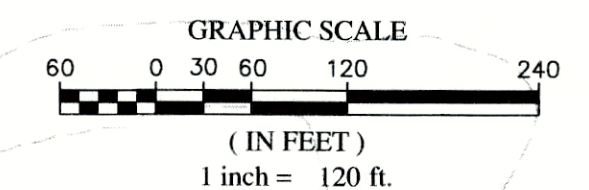


SITE MAP / AERIAL
NTS

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7	6	5	4	3	2	1	
PROJECT ENGINEER/ARCHITECT MH		PROJECT MANAGER MH		DRAWN BY JLK		SCALE	
Review Drawings Drayton Reserve Subdivision TOWN OF ROLESVILLE WAKE COUNTY, NORTH CAROLINA							
TITLE SHEET							
PROJECT NO. 14-0036							
DRAWING NAME: 14-0036 BASE							
SHEET NO. C-1							



- MATHEMATICAL POINT
- IRON PIPE SET
- EXISTING IRON PIPE/ROD
- EXISTING EDGE OF PAVEMENT
- EXISTING UTILITY/POWER POLE
- EXISTING OH ELEC
- LIMITS OF WETLANDS
- JURISDICTIONAL WETLANDS
- EXISTING TREELINE
- EXISTING STORM PIPE
- EXISTING WATER METER
- EXISTING GAS LINE



811
Know what's below.
Call before you dig.

Review Drawings
Drayton Reserve Subdivision
TOWN OF ROLESVILLE
WAKE COUNTY, NORTH CAROLINA

EXISTING CONDITIONS

PROJECT NO.
14-0036
DRAWING NAME:
14-0036 BASE
SHEET NO.
C-2

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PUBLIC WATER DISTRIBUTION / EXTENSION SYSTEM
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-3264*
Authorization to Construct *Baye Buh*
Date *09/14/14*

PUBLIC SEWER COLLECTION / EXTENSION SYSTEM
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.

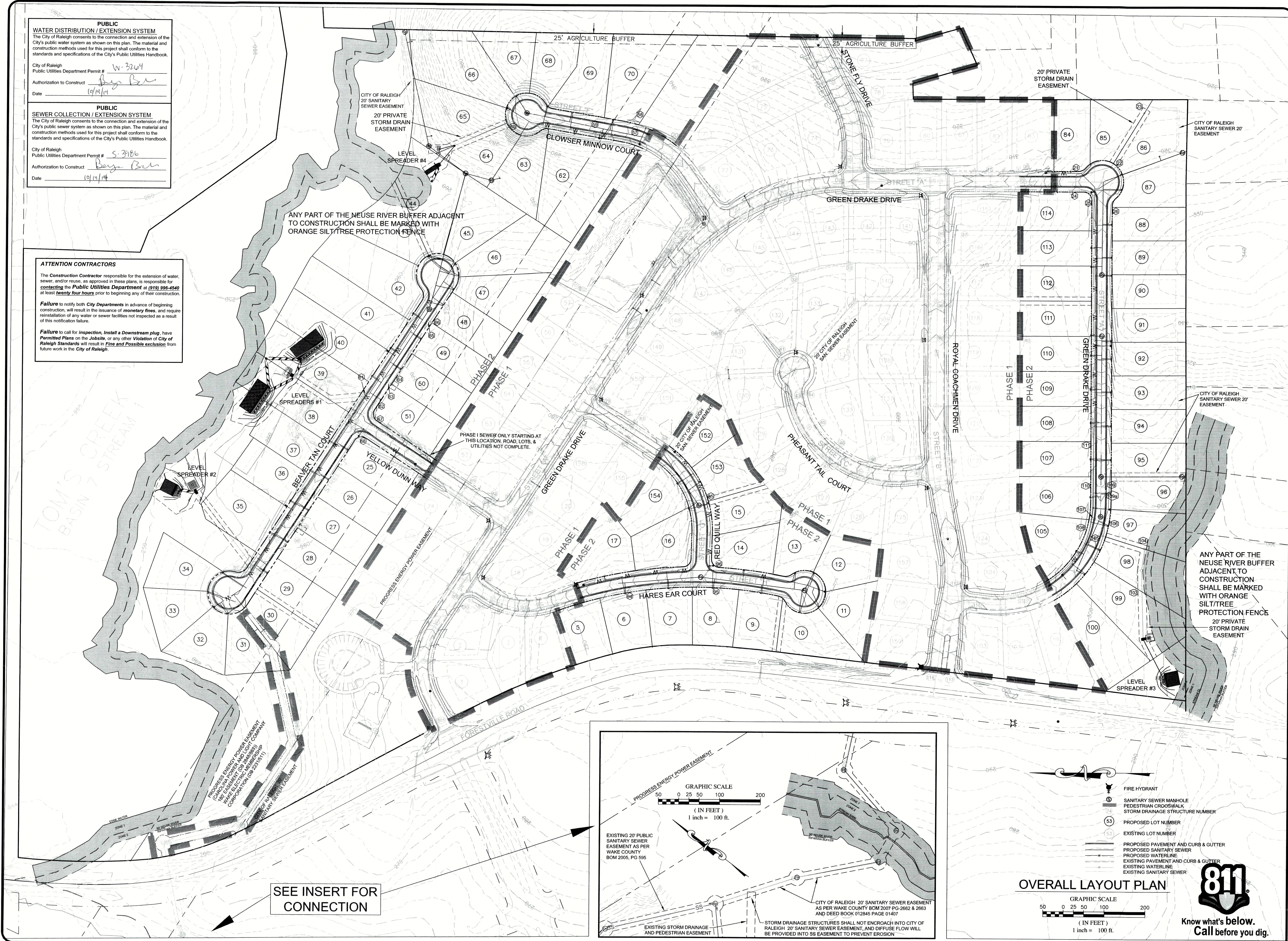
City of Raleigh
Public Utilities Department Permit # *S-39186*
Authorization to Construct *Baye Buh*
Date *09/14/14*

ATTENTION CONTRACTORS

The Construction Contractor responsible for the extension of water, sewer, and/or roads, as approved in these plans, is responsible for contacting the **Public Utilities Department at (919) 296-4540** at least **twenty four hours** prior to beginning any of their construction.

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

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REVISIONS	
NO.	DATE
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PROJECT MANAGER
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MATTHEW W. HASTING

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Review Drawings
Drayton Reserve Subdivision
TOWN OF ROLESVILLE
WAKE COUNTY, NORTH CAROLINA

OVERALL SHEET

PROJECT NO.
14-0036

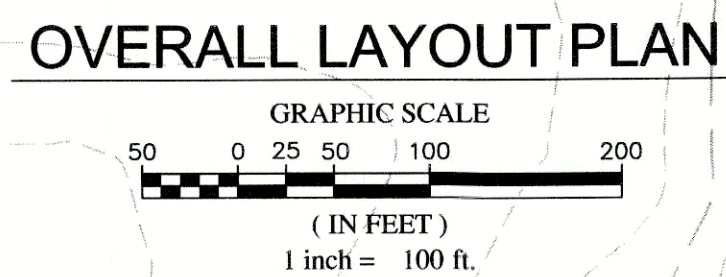
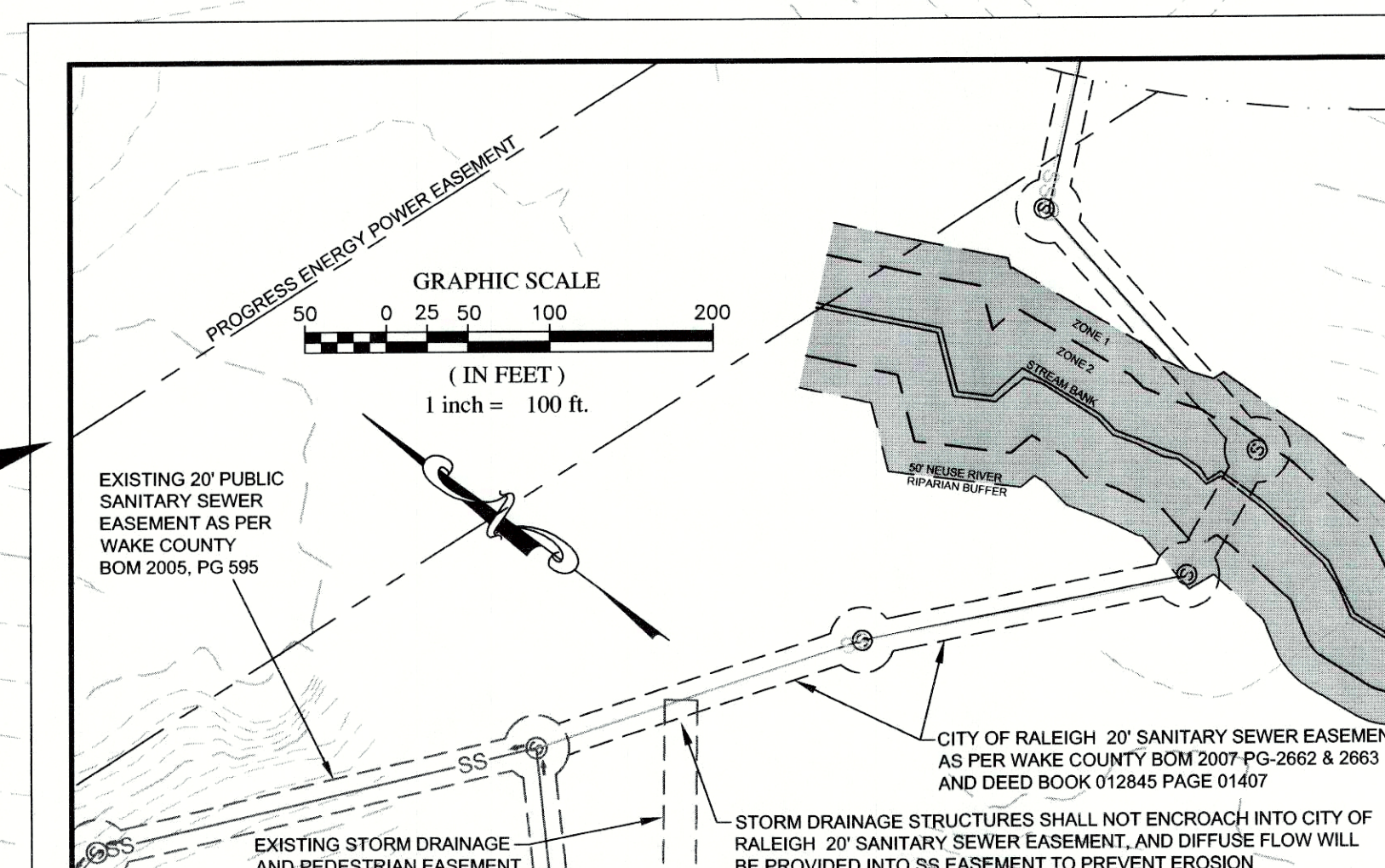
DRAWING NAME:
14-0036 BASE

SHEET NO.
C-3A

811
Know what's below.
Call before you dig.

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 **Fine and Possible exclusion** from future work in the **City of Raleigh**.

SEE INSERT FOR
CONNECTION



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Review Drawings
Drayton Reserve Subdivision
TOWN OF ROLESVILLE
WAKE COUNTY, NORTH CAROLINA

OVERALL SHEET - DISTURBED AREAS

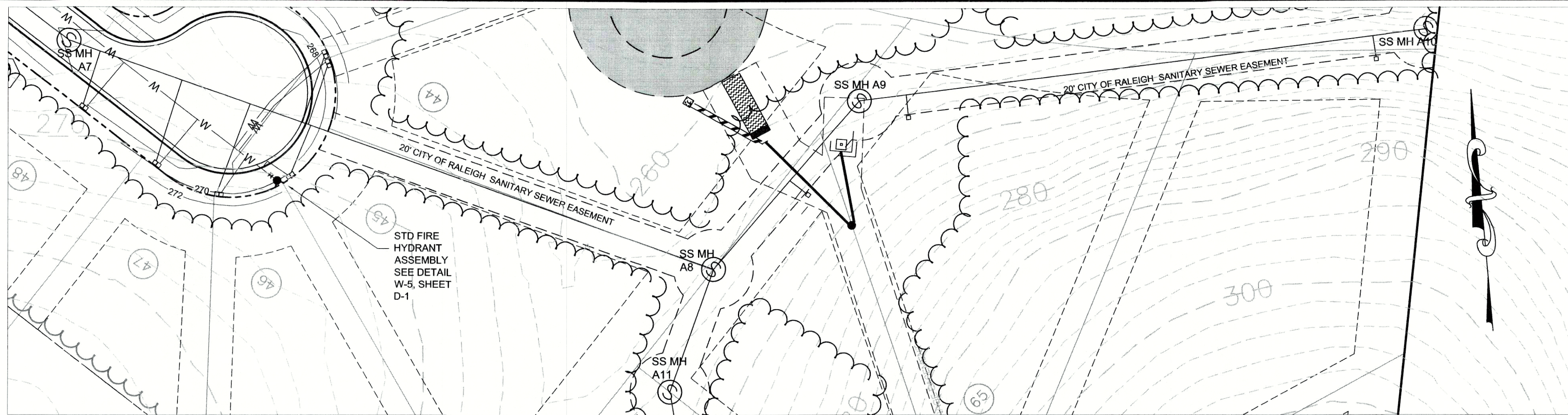
PROJECT NO.
14-0036

DRAWING NAME:
14-0036 BASE

SHEET NO.
C-3B

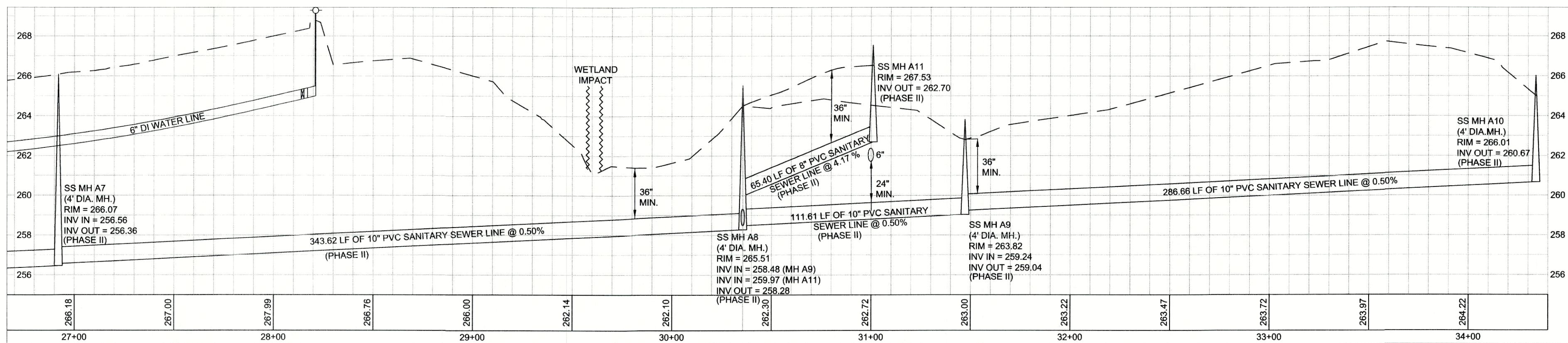
SANITARY
SEWER
PLAN

SCALE: 1" = 40'



SANITARY
SEWER
PROFILE

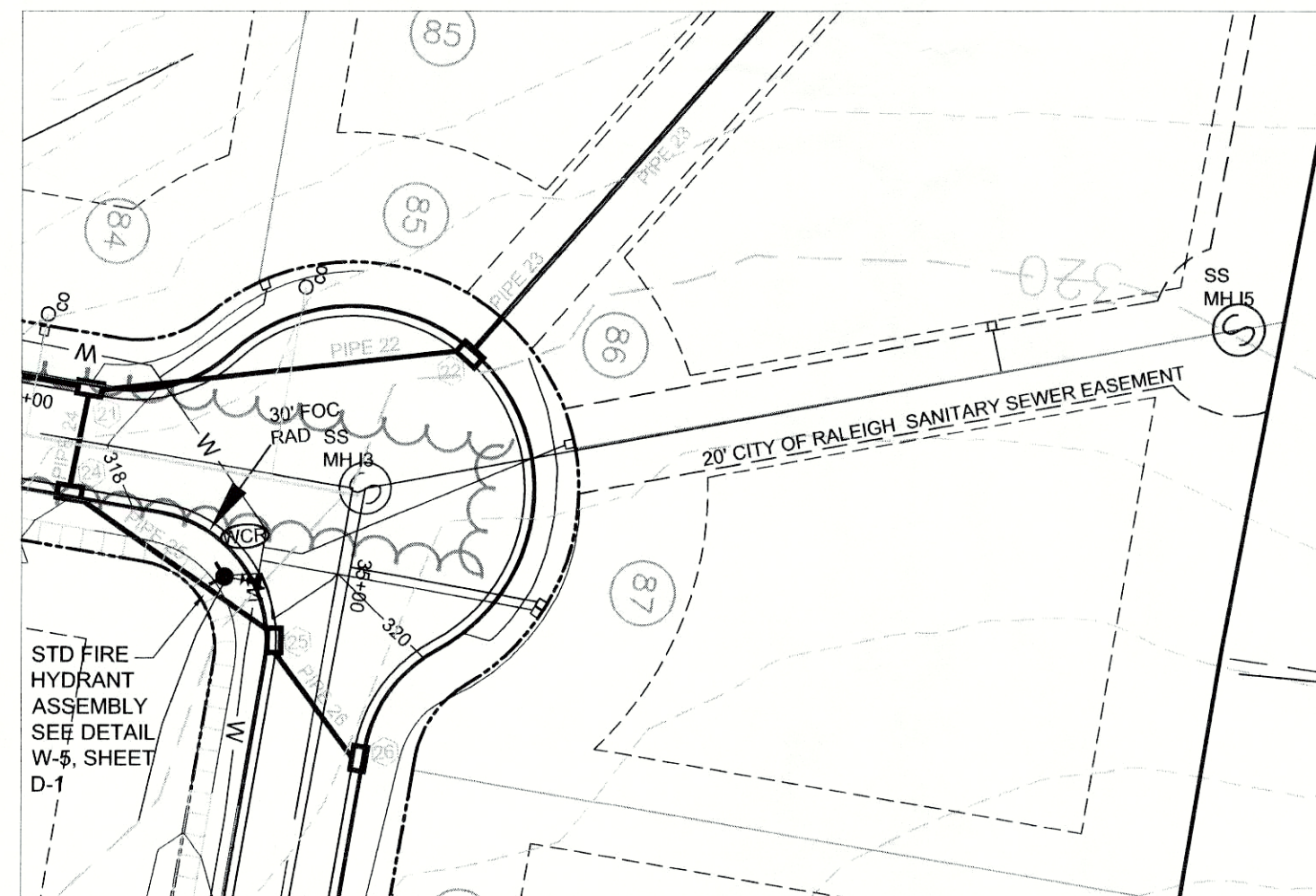
HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 4'



BEAVER TAN COURT

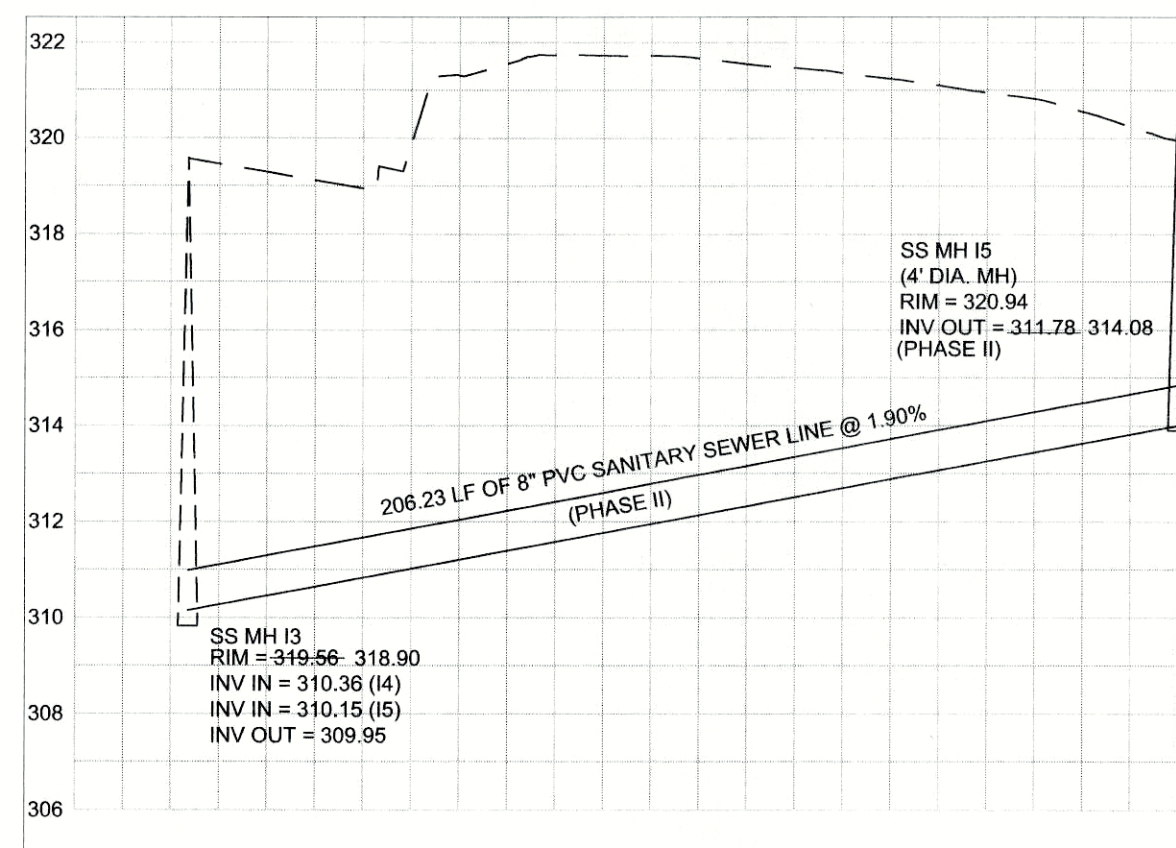
SANITARY
SEWER
PLAN

SCALE: 1" = 40'

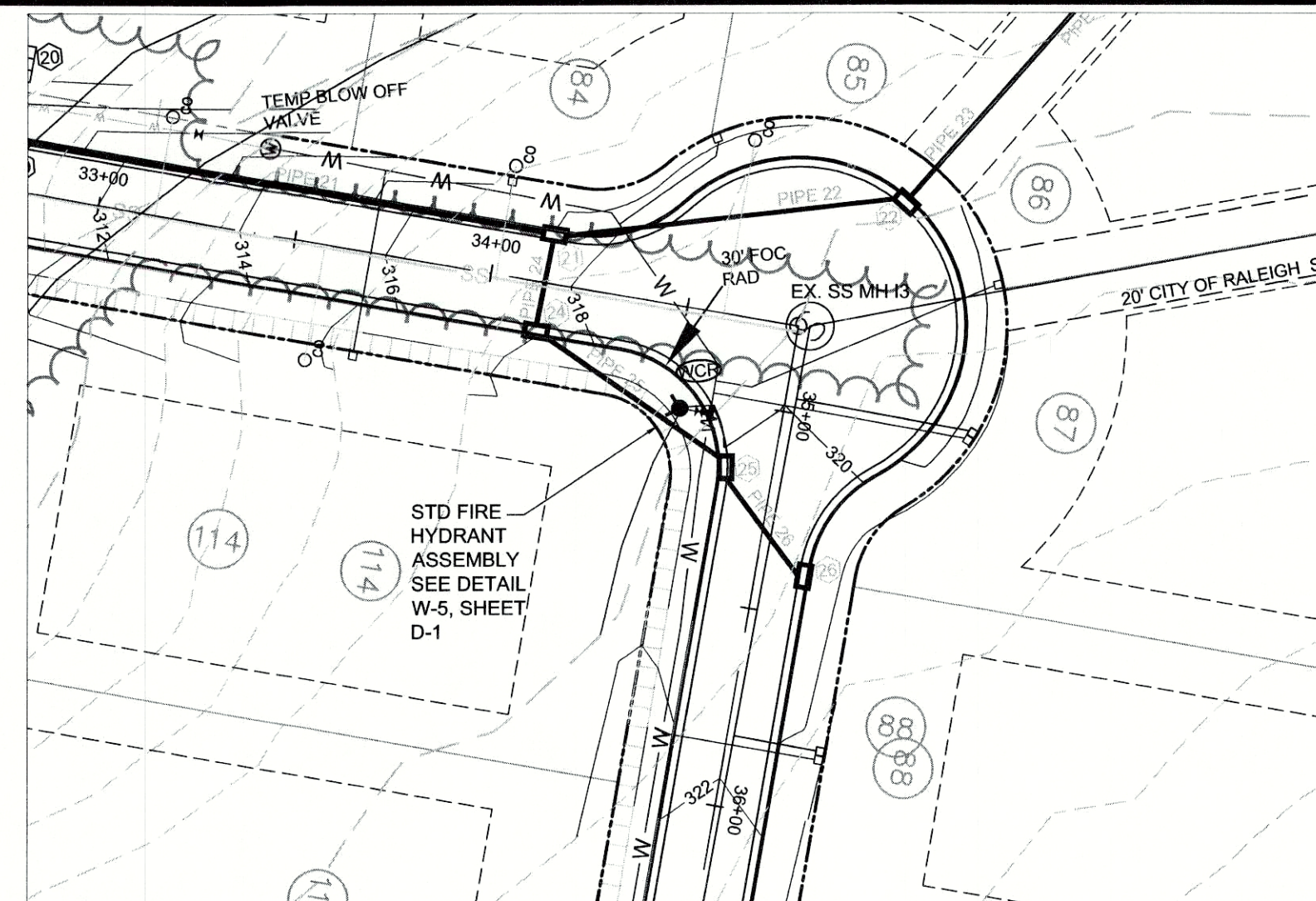


SANITARY
SEWER
PROFILE

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 4'

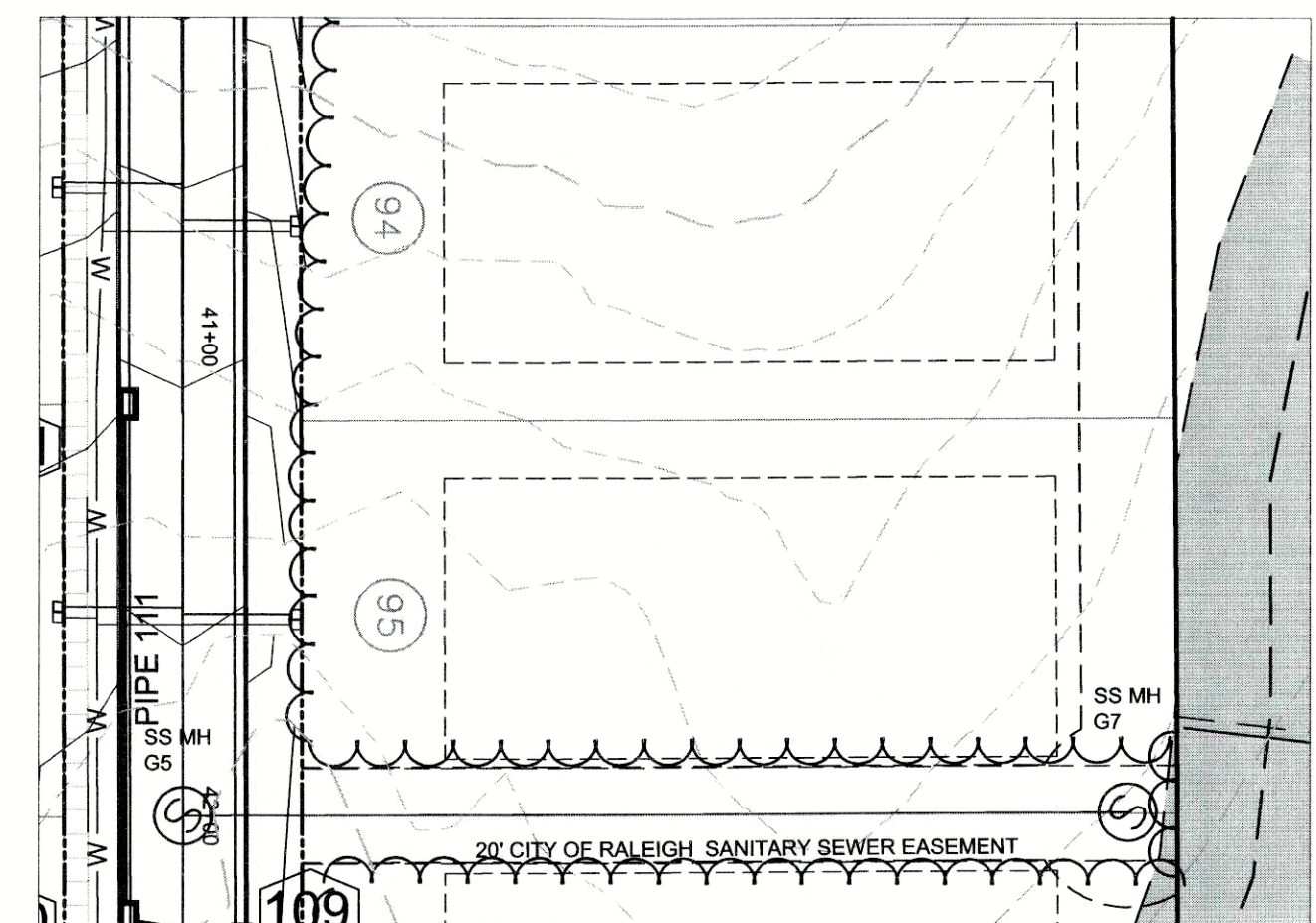


GREEN DRAKE DRIVE



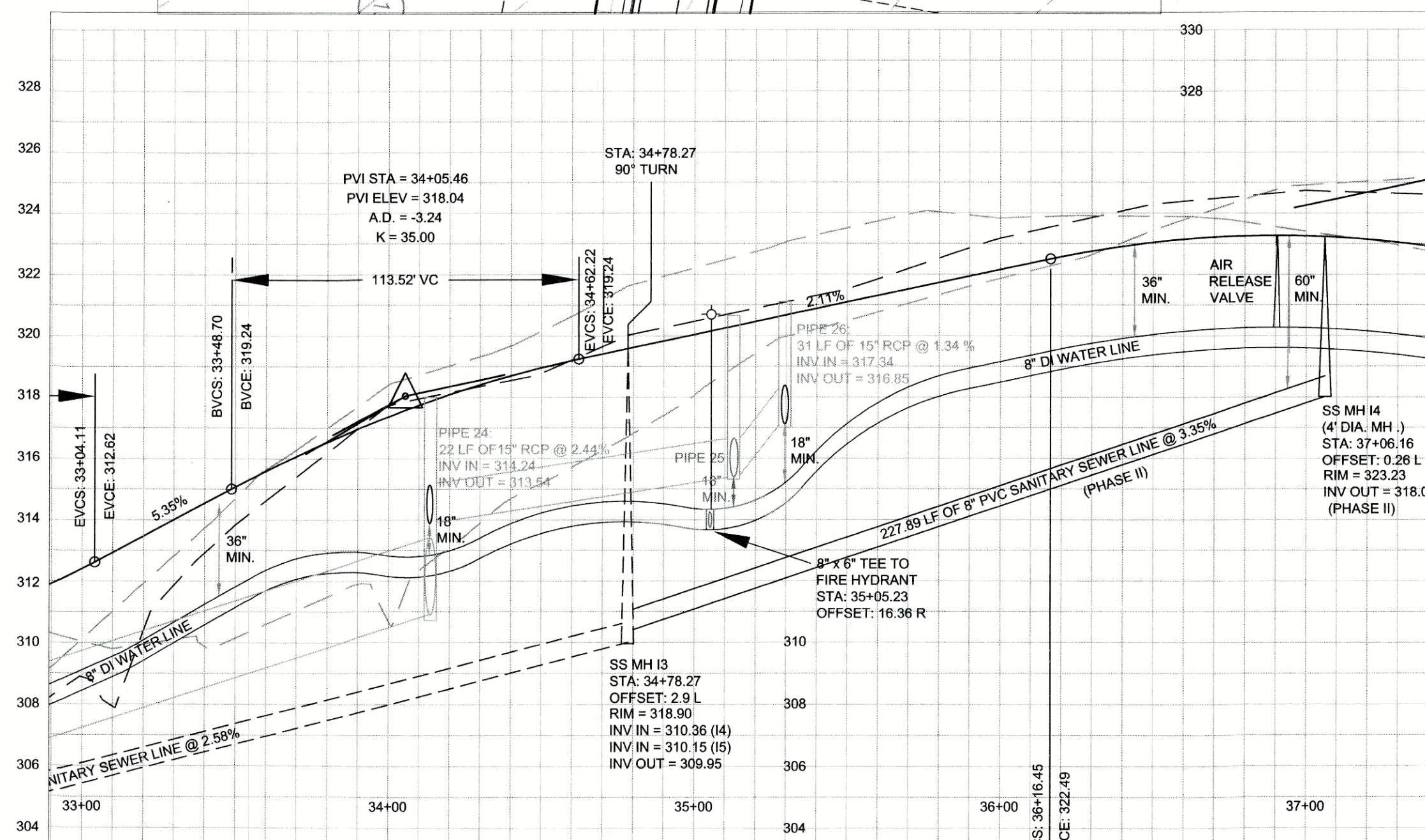
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PLAN

SCALE: 1" = 40'

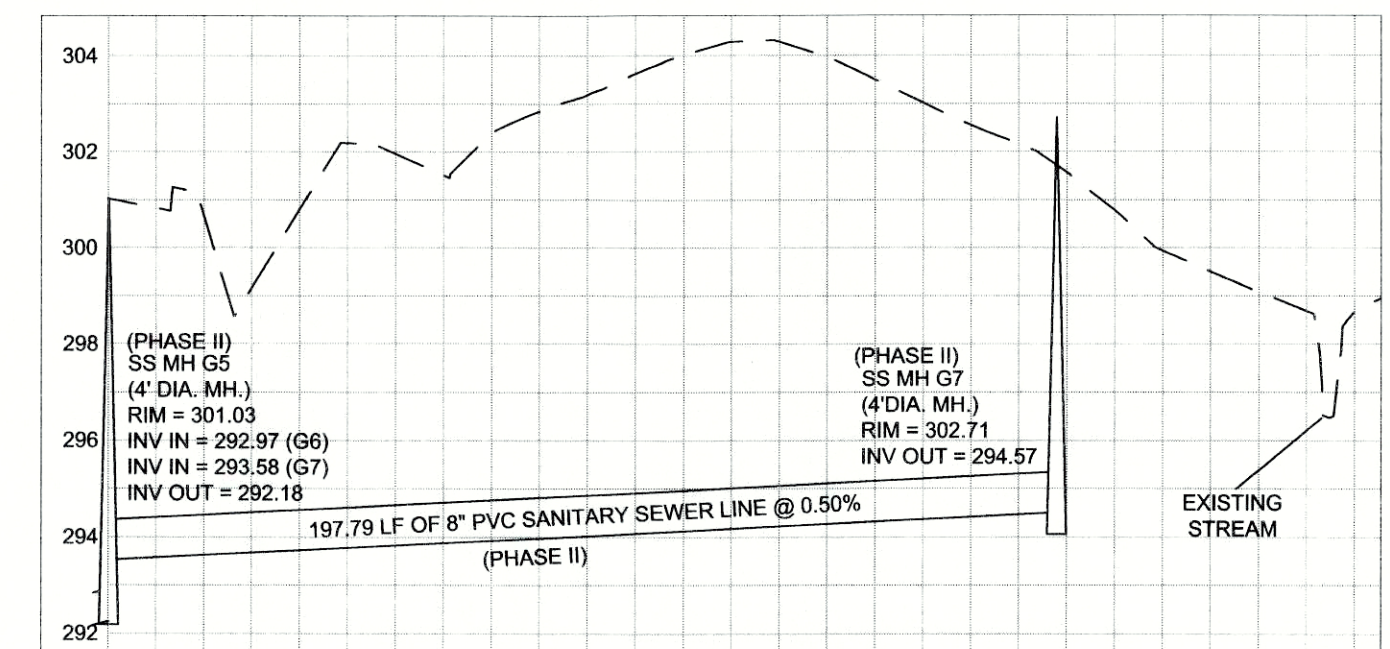


SANITARY
SEWER
PROFILE

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 4'



GREEN DRAKE DRIVE



GREEN DRAKE DRIVE

PUBLIC
WATER DISTRIBUTION / EXTENSION SYSTEM
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City of Raleigh
Public Utilities Department Permit # W-3264
Authorization to Construct [Signature]
Date 10/14/14

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Public Utilities Department Permit # S-3986
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Date 10/14/14

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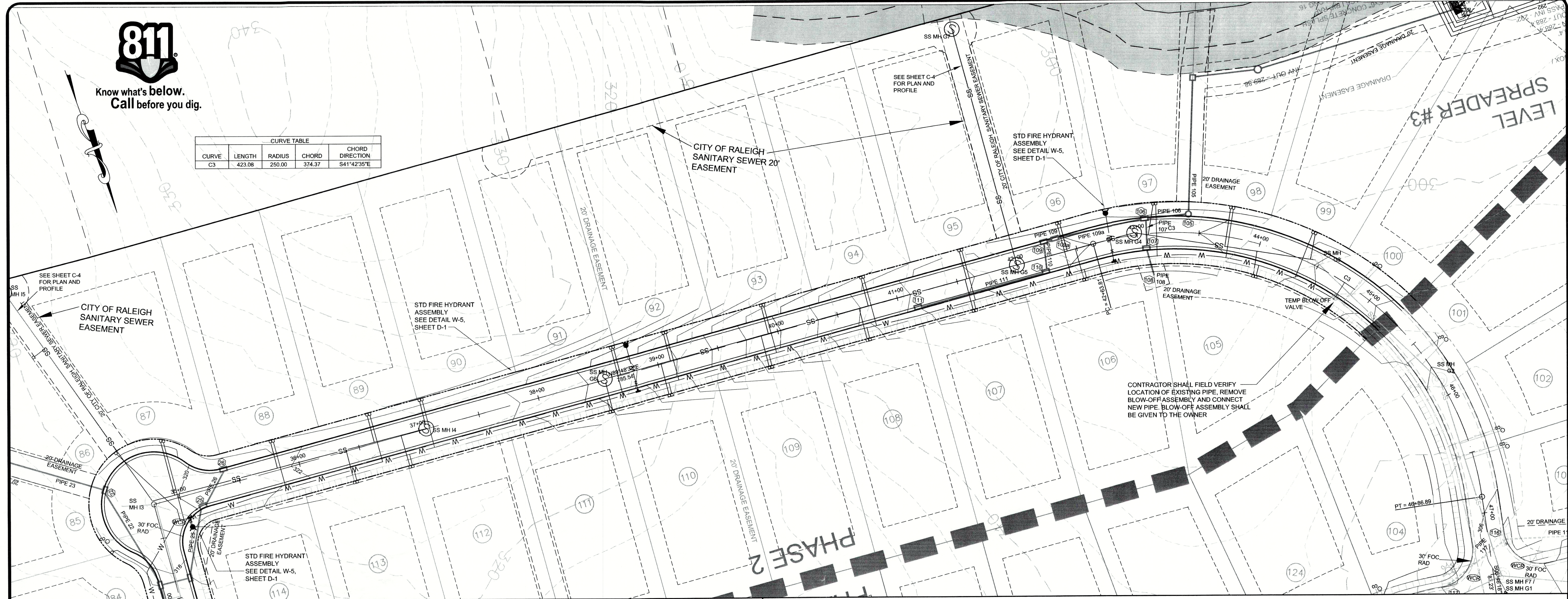
Review Drawings
Drayton Reserve Subdivision
TOWN OF ROLESVILLE
WAKE COUNTY, NORTH CAROLINA
PLAN & PROFILE

PROJECT NO.
14-0036
DRAWING NAME:
14-0036 BASE
SHEET NO.
C-4



Know what's below.
Call before you dig.

CURVE TABLE			
CURVE	LENGTH	RADIUS	CHORD
C3	423.08	250.00	374.37
CHORD DIRECTION S41°42'35"E			



(GREEN DRAKE DRIVE)

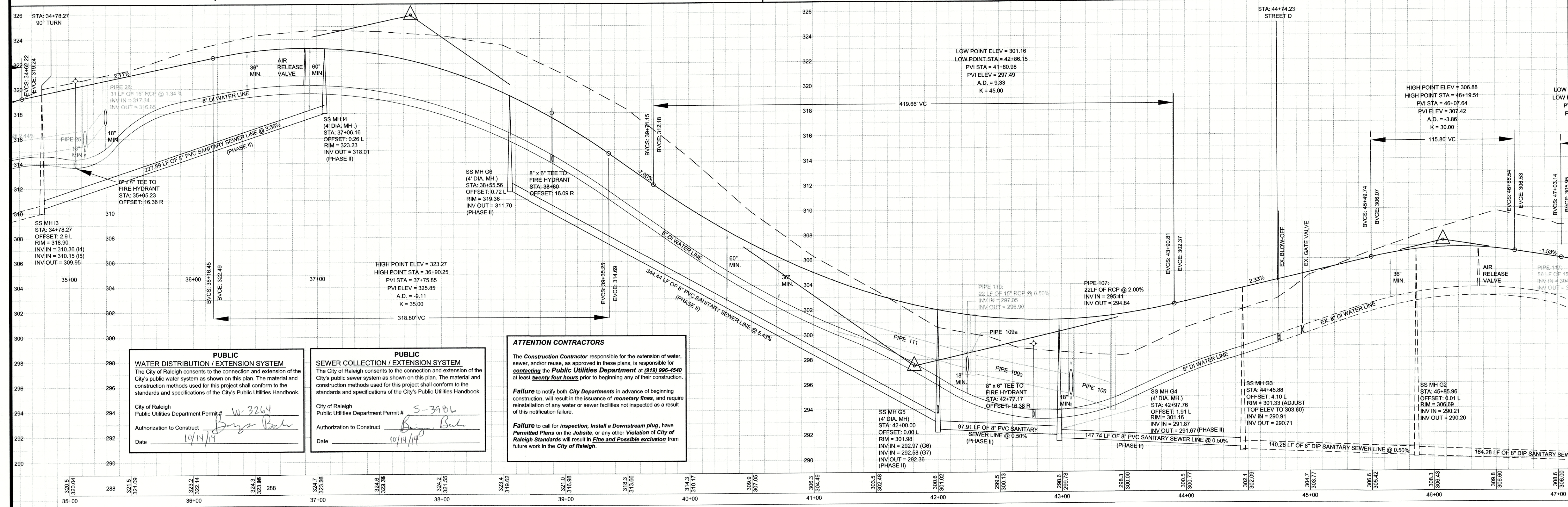
SCALE: 1" = 40'

PLAN - STREET "A"

PROFILE - STREET "A"

SCALE: 1" = 40' HOR.
1" = 4' VERT.

(GREEN DRAKE DRIVE)



PUBLIC WATER DISTRIBUTION / EXTENSION SYSTEM
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City of Raleigh
Public Utilities Department Permit # W-3264
Authorization to Construct [Signature]
Date 10/14/14

PUBLIC SEWER COLLECTION / EXTENSION SYSTEM
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City of Raleigh
Public Utilities Department Permit # S-3906
Authorization to Construct [Signature]
Date 10/14/14

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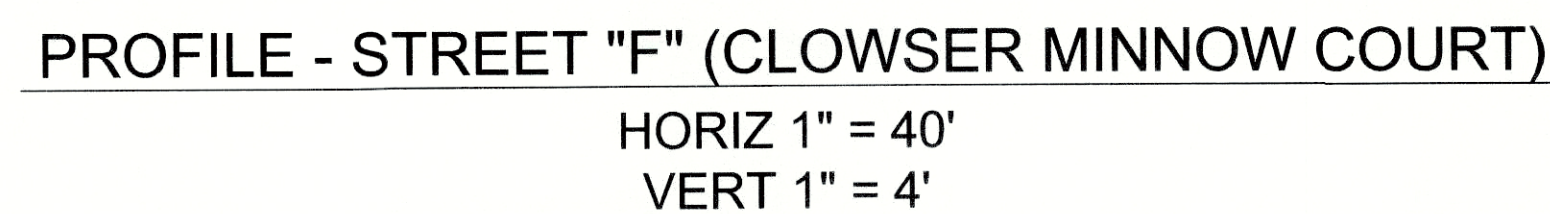
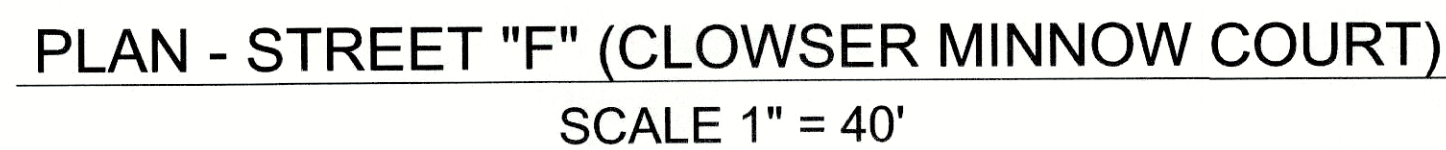
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PROJECT MANAGER
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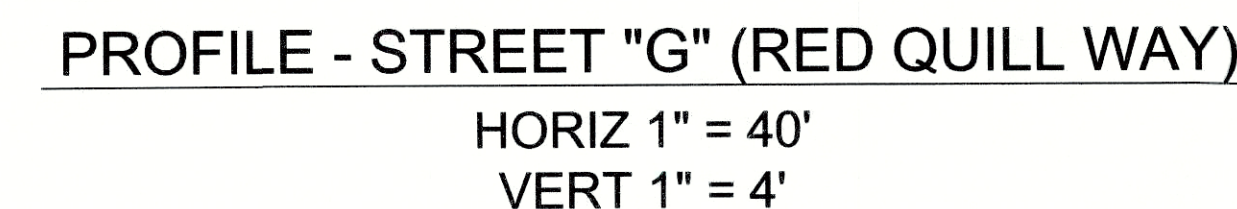
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Review Drawings
Drayton Reserve Subdivision
TOWN OF ROLESVILLE
WAKE COUNTY, NORTH CAROLINA
PLAN & PROFILE

PROJECT NO.
14-0036
DRAWING NAME:
14-0036 BASE
SHEET NO.
C-5

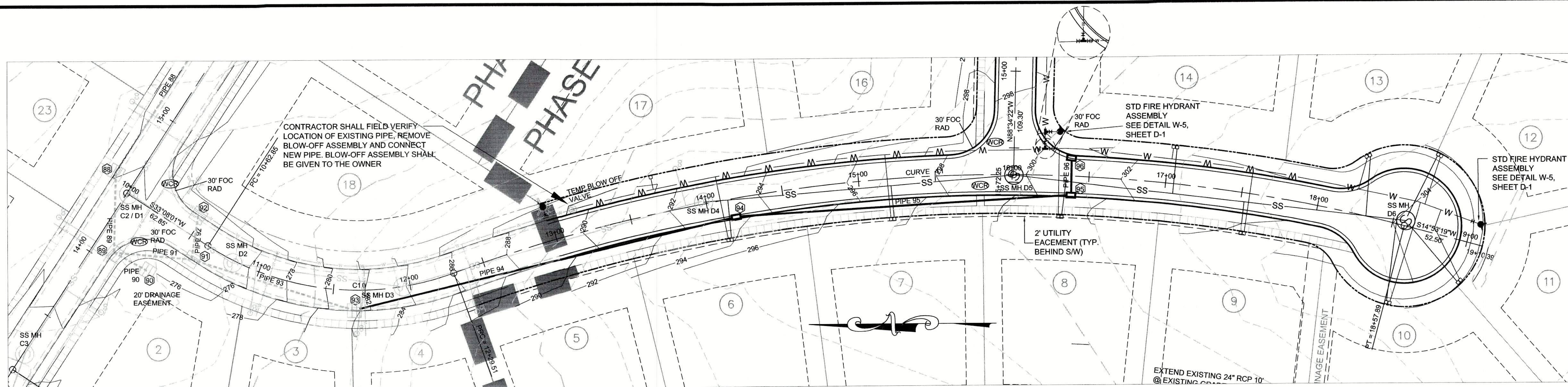


PLAN - STREET "G" (RED QUILL WAY)
SCALE 1" = 40'

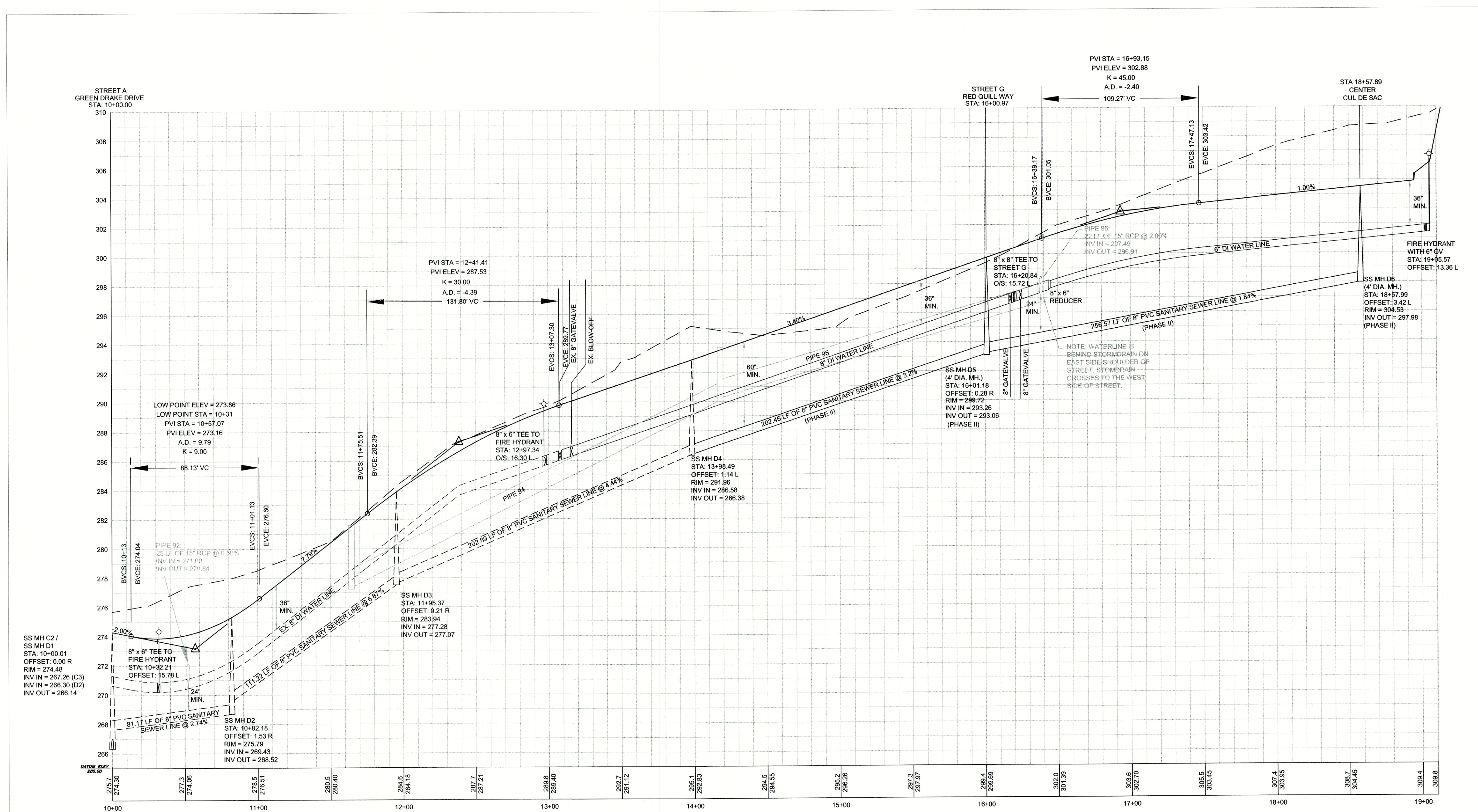


PROJECT NO.
14-0036
DRAWING NAME:
14-0036 BASE
SHEET NO.
C-6

CURVE TABLE				
CURVE	LENGTH	RADIUS	CHORD	CHORD DIRECTION
C10	166.66	180.00	160.77	S06°36'30"W
C11	628.38	1034.42	618.76	N02°30'51"W



PLAN - STREET "H" (HARES EAR COURT)
SCALE 1" = 40'



PROFILE - STREET "H" (HARES EAR COURT)
HORIZ 1" = 40'
VERT 1" = 4'

PUBLIC WATER DISTRIBUTION / EXTENSION SYSTEM
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City of Raleigh
Public Utilities Department Permit # W-3264
Authorization to Construct [Signature]
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City of Raleigh
Public Utilities Department Permit # S-2986
Authorization to Construct [Signature]
Date 10/14/14

ATTENTION CONTRACTORS

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

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

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

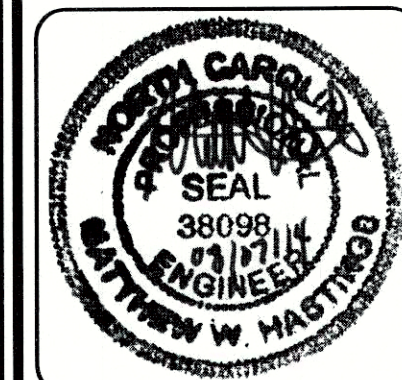


Know what's below.
Call before you dig.

DATE	BY	REVISIONS
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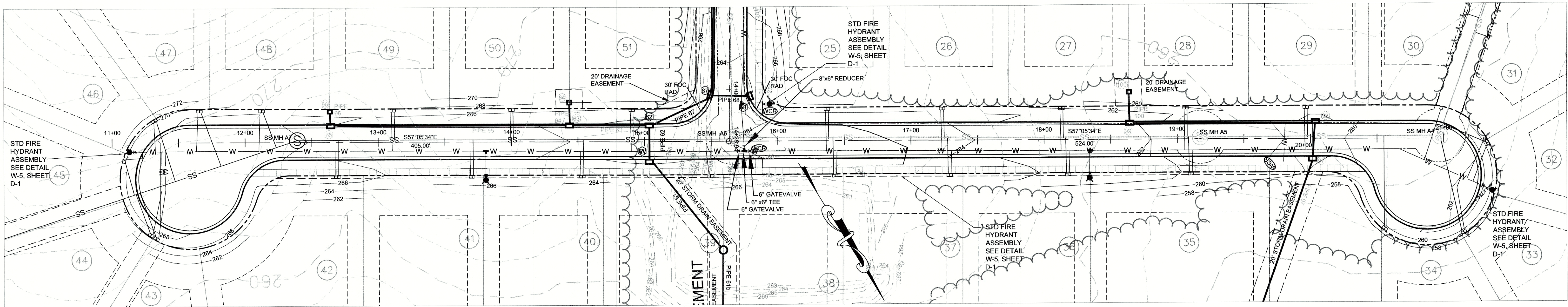
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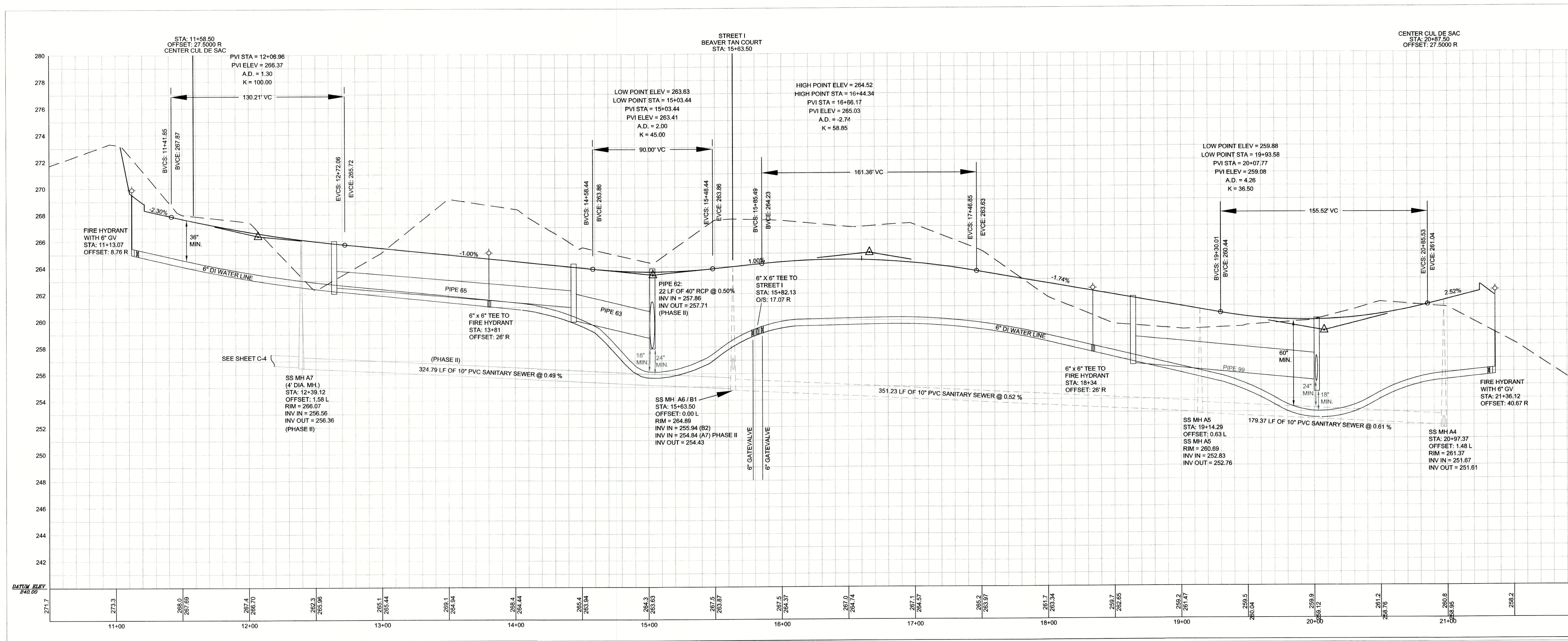
Review Drawings
Drayton Reserve Subdivision
TOWN OF ROLESVILLE
WAKE COUNTY, NORTH CAROLINA
PLAN & PROFILE

PROJECT NO.
14-0036
DRAWING NAME:
14-0036 BASE
SHEET NO.
C-7



PLAN - STREET "J" (BEAVER TAN COURT)

SCALE 1" = 40'



PROFILE - STREET "J" (BEAVER TAN COURT)

HORIZ 1" = 40'

VERT 1" = 4'

PUBLIC
WATER DISTRIBUTION / EXTENSION SYSTEM
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-3264
Authorization to Construct Bayan Belu
Date 10/14/14

PUBLIC
SEWER COLLECTION / EXTENSION SYSTEM
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-3986
Authorization to Construct Bayan Belu
Date 10/14/14

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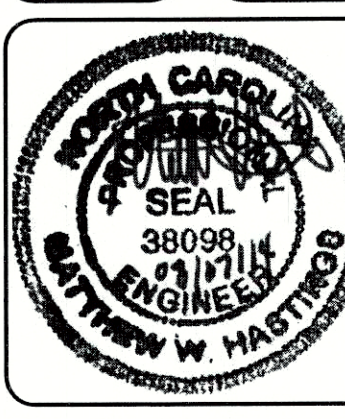


Review Drawings
Drayton Reserve Subdivision
TOWN OF ROLESVILLE
WAKE COUNTY, NORTH CAROLINA
PLAN & PROFILE

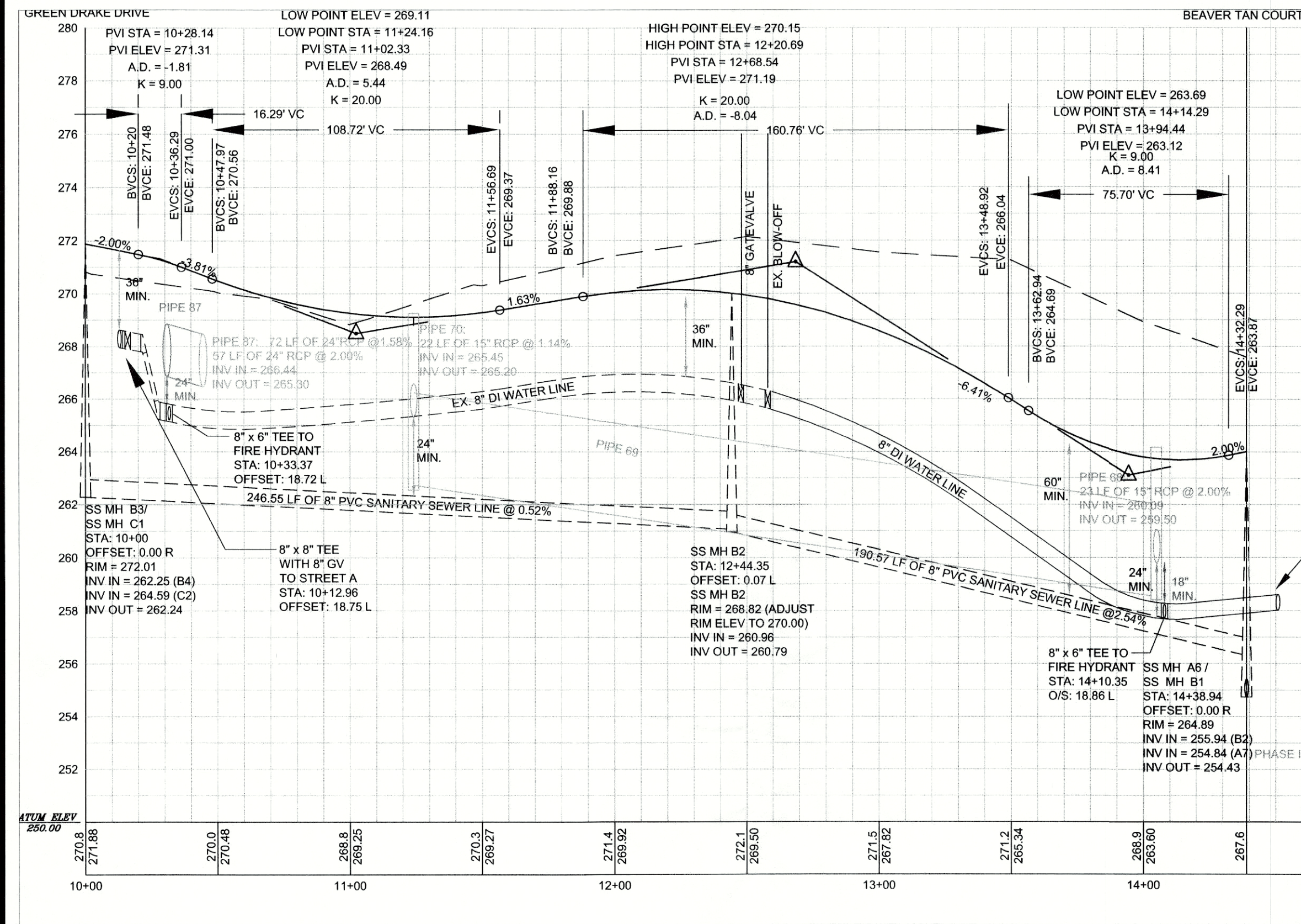
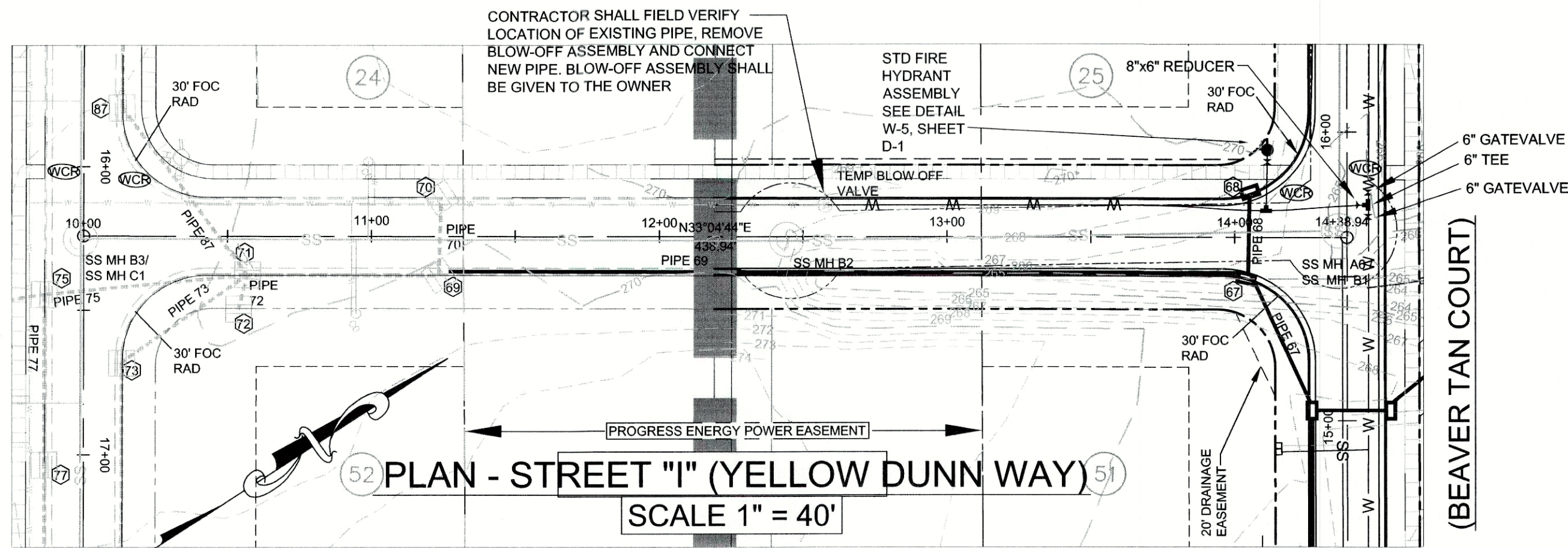
PROJECT NO.
14-0036
DRAWING NAME:
14-0036 BASE
SHEET NO.
C-8

REVISIONS	DATE	BY
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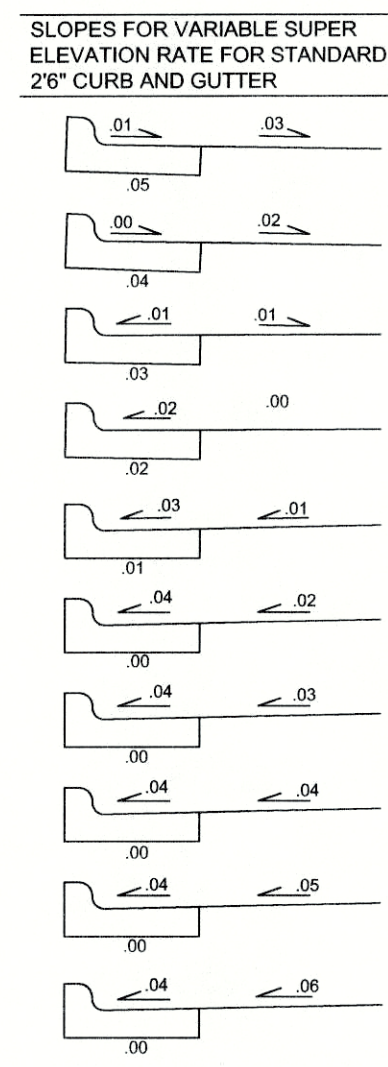


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PROFILE - STREET "I" (YELLOW DUNN WAY)

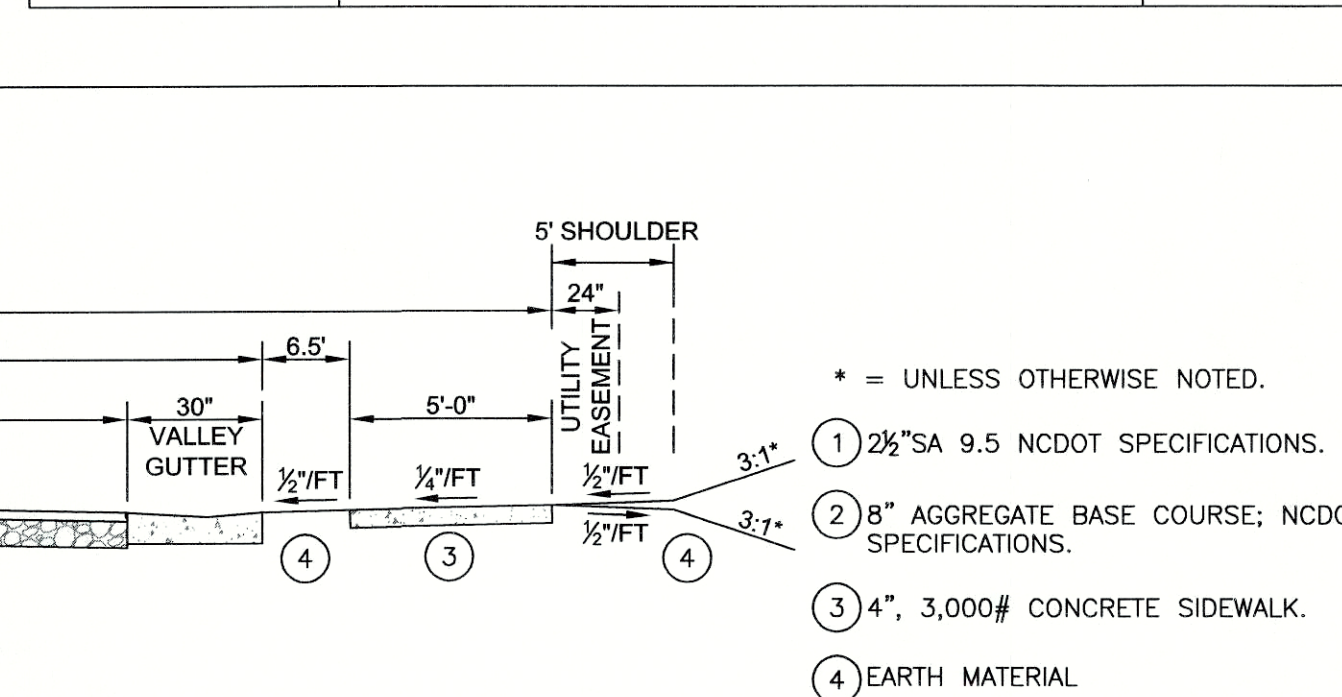
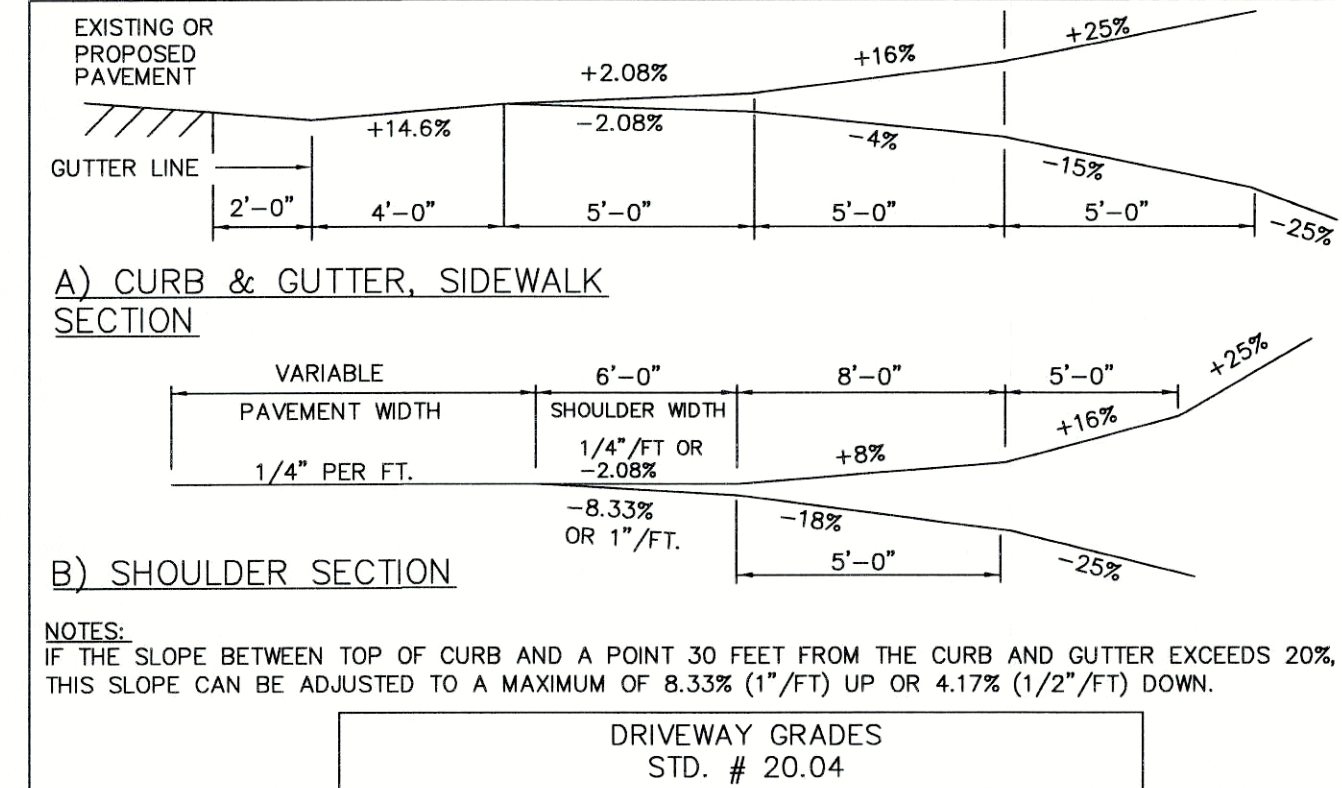
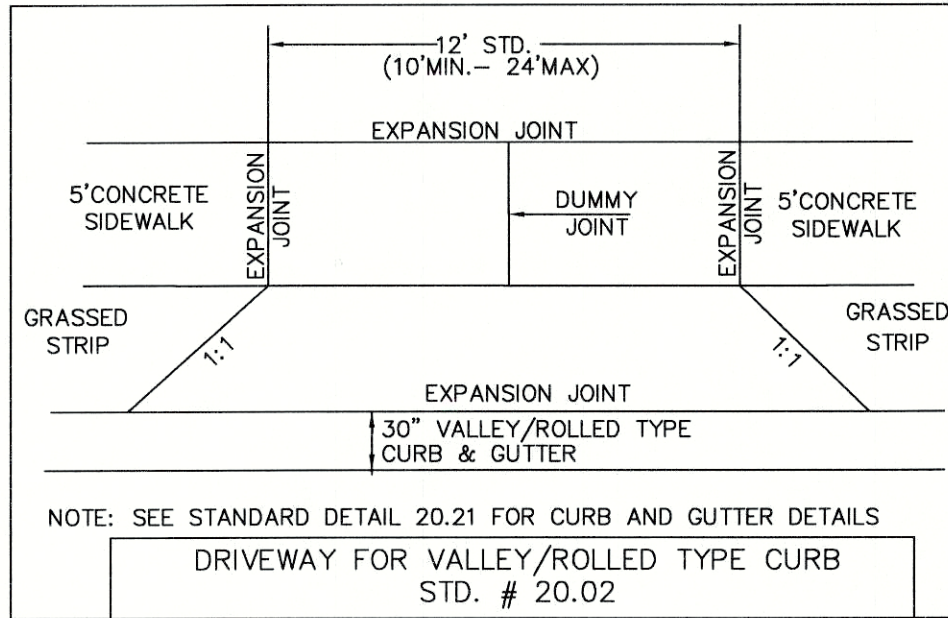
HORIZ 1" = 40'
VERT 1" = 4'



- NOTES:
- 10' MAXIMUM BETWEEN CONSTRUCTION JOINTS. 15' MAXIMUM BETWEEN CONSTRUCTION JOINTS ON MACHINE POURS.
 - 12\"/>

CURB AND GUTTERS
STD. # 20.21

CONTRACTOR SHALL FIELD VERIFY LOCATION OF EXISTING PIPE, REMOVE BLOW-OFF ASSEMBLY AND CONNECT NEW PIPE. BLOW-OFF ASSEMBLY SHALL BE GIVEN TO THE OWNER.

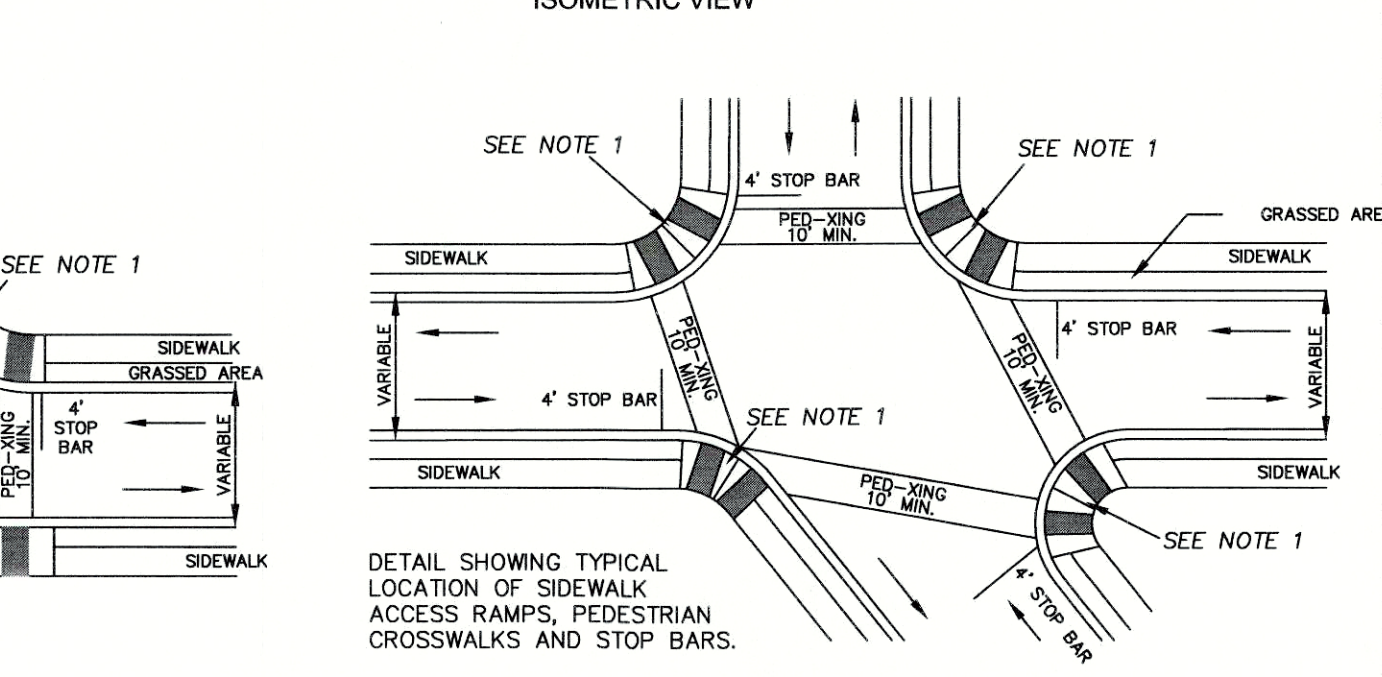
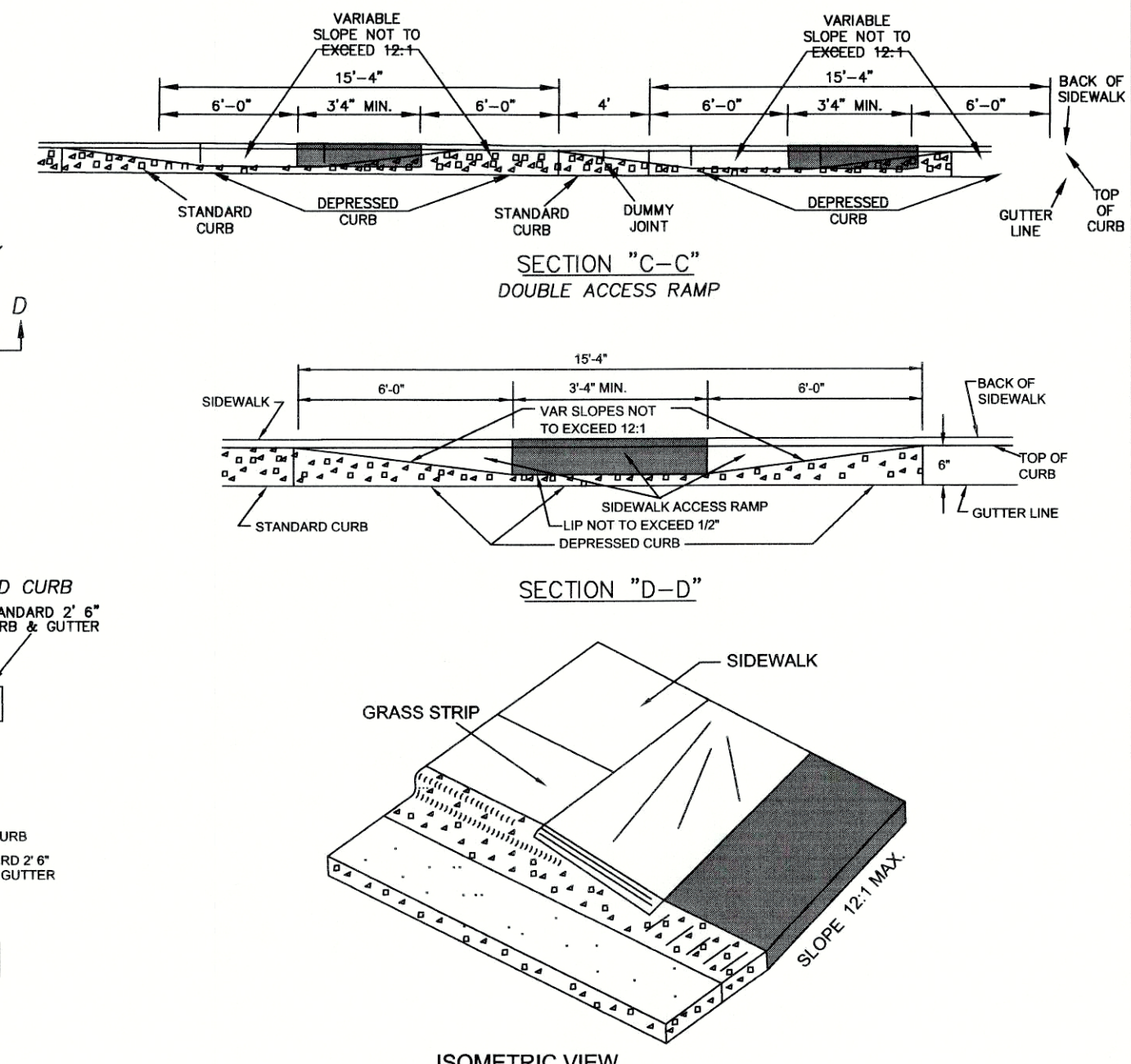
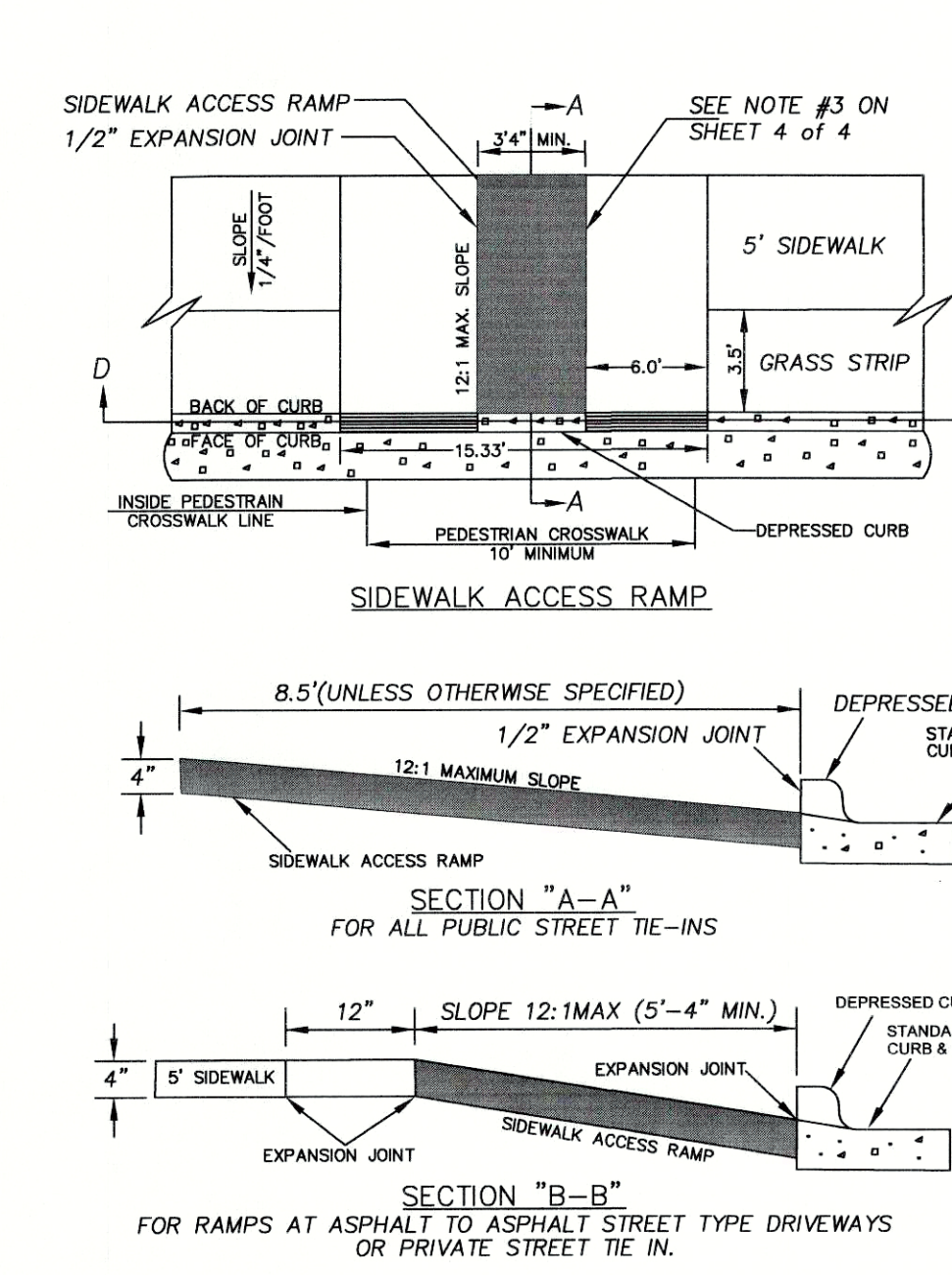
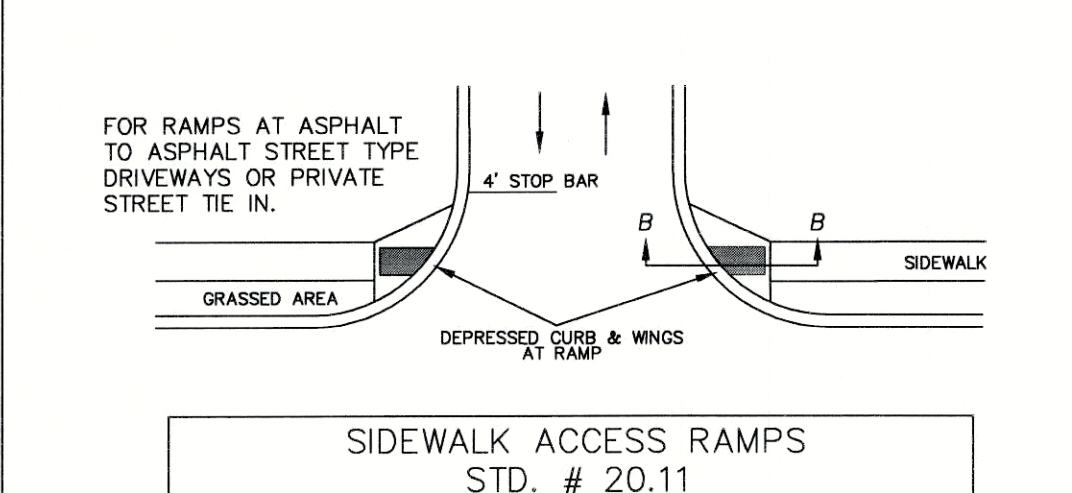


NOTE:

1. REFERENCE: SITE DETAILS - 01/SHEET 1B FOR ADDITIONAL ROADWAY DETAILS/DIMENSIONS.

CITY OF RALEIGH SIDEWALK ACCESS RAMPS GENERAL NOTES

1. NORTH CAROLINA GENERAL STATUTE 136-44.14 REQUIRES THAT ALL STREET CURBS BEING CONSTRUCTED OR RECONSTRUCTED FOR MAINTENANCE PROCEDURES, TRAFFIC OPERATIONS, REPAIRS, CORRECTIONS OF UTILITIES OR ALTERED FOR ANY REASON AFTER SEPTEMBER 1, 1973 SHALL PROVIDE SIDEWALK ACCESS RAMPS FOR THE PHYSICALLY HANDICAPPED AT ALL INTERSECTIONS WHERE BOTH CURB AND GUTTER AND SIDEWALKS ARE PROVIDED AND AT OTHER POINTS OF PEDESTRIAN FLOW.
2. IN ADDITION, SECTION 228 OF THE 1973 FEDERAL AID HIGHWAY SAFETY ACT REQUIRES PROVISION OF DEPRESSED CURBS ON ANY CURB CONSTRUCTED AFTER JULY 1, 1976 WHETHER A SIDEWALK IS PROPOSED INITIALLY OR IS PLANNED FOR A FUTURE DATE.
3. THE AMERICANS WITH DISABILITIES ACT (ADA) OF 1990 EXTENDS TO INDIVIDUALS WITH DISABILITIES COMPREHENSIVE CIVIL RIGHTS PROTECTION SIMILAR TO THOSE PROVIDED TO PERSONS ON THE BASIS OF RACE, SEX, NATIONAL ORIGIN AND RELIGION UNDER THE CIVIL RIGHTS ACT OF 1964. THE ADOPTED SIDEWALK ACCESS RAMPS HAVE BEEN DESIGNED TO COMPLY WITH TITLE III OF THE ADA, THAT BECAME EFFECTIVE ON JANUARY 26, 1992 AND AS AMENDED. THE ADA REQUIREMENTS FOR DETECTABLE WARNING SURFACES WERE SUSPENDED EFFECTIVE MAY 12, 1994.
4. NO SLOPE ON THE SIDEWALK ACCESS RAMP SHALL EXCEED 1\"/>



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PUBLIC WATER DISTRIBUTION / EXTENSION SYSTEM
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PUBLIC SEWER COLLECTION / EXTENSION SYSTEM
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REVISIONS	DATE	BY
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Review Drawings
Drayton Reserve Subdivision
TOWN OF ROLESVILLE
WAKE COUNTY, NORTH CAROLINA
PLAN & PROFILE
AND DETAILS

PROJECT NO.
14-0036
DRAWING NAME:
14-0036 BASE
SHEET NO.
C-9

STORM DRAINAGE SPREAD CALCULATIONS

INLET #	PEAK Q10 @ Tc = 5 min.	LANE WIDTH (ft)	ROADWAY LONG. SLOPE (%)	Manning N	SAG CONDITIONS	INLET TYPE	FLOW DEPTH ON GRADE (ft)	SPREAD (ft)	FLOW DEPTH AT SAG (ft)	SPREAD (ft)
Inlet #4	1.76	20	2.90	0.011		VALLEY	0.19	7.28		
Inlet #5	0.74	20	2.80	0.011		STD	0.15	5.28		
Inlet #7	0.91	20	7.00	0.011		VALLEY	0.14	4.78		
Inlet #8	0.86	20	7.00	0.011		VALLEY	0.14	4.67		
Inlet #9	0.35	20	4.00	0.011		STD	0.11	3.58		
Inlet #10	1.45	13	NA	0.011	YES	STD			0.17	2.59
Inlet #11	1.56	13	NA	0.011	YES	STD			0.18	3.03
Inlet #12	1.02	13	8.50	0.011		VALLEY	0.14	4.82		
Inlet #13	1.37	13	9.00	0.011		VALLEY	0.15	5.35		
Inlet #15	2.70	20	1.00	0.011		VALLEY	0.25	8.32		
Inlet #16	0.58	20	1.00	0.011		STD	0.16	5.84		
Inlet #17	2.69	13	NA	0.011	YES	VALLEY			0.20	7.84
Inlet #18	1.39	13	NA	0.011	YES	VALLEY			0.13	4.28
Inlet #19	0.29	13	4.05	0.011		VALLEY	0.11	3.29		
Inlet #21	0.33	13	4.10	0.011		VALLEY	0.11	3.46		
Inlet #22	1.60	37	NA	0.011	YES	VALLEY			0.14	4.91
Inlet #24	0.33	13	4.10	0.011		VALLEY	0.11	3.47		
Inlet #25	0.75	13	2.11	0.011		STD	0.16	5.62		
Inlet #26	2.31	13	2.11	0.011		VALLEY	0.21	4.62		
Inlet #27	1.38	20	NA	0.011	YES	VALLEY			0.13	4.24
Inlet #28	2.34	20	NA	0.011	YES	VALLEY			0.18	6.96
Inlet #29	0.75	20	5.90	0.011		VALLEY	0.14	4.58		
Inlet #34	2.05	20	NA	0.011	YES	VALLEY			0.17	6.20
Inlet #35	1.91	20	NA	0.011	YES	VALLEY			0.16	5.79
Inlet #36	0.48	20	5.00	0.011		VALLEY	0.12	3.93		
Inlet #38	1.89	20	3.60	0.011		VALLEY	0.19	7.17		
Inlet #39	2.66	20	2.10	0.011		VALLEY	0.22	8.97		
Inlet #42	2.74	13	NA	0.011	YES	VALLEY			0.20	7.96
Inlet #43	0.20	13	2.10	0.011		VALLEY	0.11	3.18		
Inlet #45	0.40	13	1.10	0.011		VALLEY	0.14	4.97		
Inlet #47	2.65	13	3.50	0.011		VALLEY	0.21	8.16		
Inlet #48	0.26	13	5.00	0.011		VALLEY	0.10	2.91		
Inlet #49	0.27	13	5.00	0.011		STD	0.10	2.95		
Inlet #50	0.51	20	3.30	0.011		STD	0.13	4.39		
Inlet #51	0.94	20	NA	0.011	YES	STD			0.13	1.61
Inlet #52	4.86	20	NA	0.011	YES	2 x VALLEY			0.19	7.18
Inlet #54	1.76	13	NA	0.011	YES	VALLEY			0.15	5.37
Inlet #55	1.31	13	NA	0.011	YES	VALLEY			0.12	4.03
Inlet #56	0.91	13	3.60	0.011		VALLEY	0.15	5.44		
Inlet #57	1.53	13	4.36	0.011		VALLEY	0.17	6.40		
Inlet #59	0.85	13	4.36	0.011		VALLEY	0.15	5.10		
Inlet #60	1.54	13	NA	0.011	YES	VALLEY			0.14	4.73
Inlet #61	2.35	13	NA	0.011	YES	VALLEY			0.18	6.98
Inlet #62	0.28	13	NA	0.011	YES	VALLEY			0.04	0.53
Inlet #63	0.34	13	1.00	0.011		VALLEY	0.14	4.78		
Inlet #65	0.27	13	1.00	0.011		VALLEY	0.13	4.36		
Inlet #67	0.98	13	NA	0.011	YES	STD			0.13	1.66
Inlet #68	0.65	13	NA	0.011	YES	STD			0.10	1.26
Inlet #69	1.51	13	NA	0.011	YES	VALLEY			0.14	4.64
Inlet #70	0.55	13	NA	0.011	YES	VALLEY			0.07	0.83
Inlet #71	0.30	13	3.70	0.011		STD	0.11	3.40		
Inlet #73	0.69	20	NA	0.011	YES	STD			0.10	1.31
Inlet #74	2.46	20	3.70	0.011		VALLEY	0.20	7.86		
Inlet #75	1.60	20	NA	0.011	YES	VALLEY			0.14	4.91
Inlet #77	1.15	20	1.20	0.011		VALLEY	0.19	7.31		
Inlet #78	0.27	20	4.02	0.011		STD	0.11	3.13		
Inlet #79	0.29	13	2.00	0.011		STD	0.12	3.83		
Inlet #80	1.22	20	4.02	0.011		STD	0.16	5.96		
Inlet #81	0.32	13	NA	0.011	YES	VALLEY			0.05	0.58
Inlet #82	2.05	13	NA	0.011	YES	VALLEY			0.17	6.18
Inlet #84	1.25	13	3.20	0.011		VALLEY	0.17	6.29		
Inlet #85	1.35	13	8.20	0.011		VALLEY	0.15	5.41		
Inlet #87	0.64	20	1.40	0.011		STD	0.16	5.70		
Inlet #88	1.50	20	1.49	0.011		STD	0.20	7.75		
Inlet #89	1.22	20	1.60	0.011		STD	0.18	7.08		
Inlet #91	0.82	13	3.10	0.011		VALLEY	0.15	5.38		
Inlet #92	1.37	13	NA	0.011	YES	STD			0.16	2.31
Inlet #93	1.83	13	7.80	0.011		VALLEY	0.17	6.13		
Inlet #94	2.06	13	3.43	0.011		VALLEY	0.19	7.47		
Inlet #95	1.08	13	3.43	0.011		VALLEY	0.16	5.87		
Inlet #96	0.87	13	3.43	0.011		STD	0.15	5.41		
Inlet #97	1.16	13	NA	0.011	YES	VALLEY			0.11	3.53
Inlet #98	2.30	13	NA	0.011	YES	VALLEY			0.18	6.85
Inlet #99	0.75	13	3.50	0.011		VALLEY	0.15	5.09		
Inlet #101	0.50	20	NA	0.011	YES	STD			0.08	1.05
Inlet #102	0.50	20	NA	0.011	YES	STD			0.08	1.05
Inlet #106	0.95	13	NA	0.011	YES	VALLEY			0.21	2.17
Inlet #107	1.98	13	NA	0.011	YES	VALLEY			0.22	2.67
Inlet #109a	2.22	13	1.90	0.011		VALLEY	0.28	5.87		
Inlet #109	2.22	13	1.90	0.011		VALLEY	0.21	5.02		
Inlet #110	0.52	13	1.90	0.011		VALLEY	0.19	2.00		
Inlet #111	2.72	13	4.40	0.011		VALLEY	0.23	3.37		
Inlet #112	1.55	13	NA	0.011	YES	VALLEY			0.14	4.76
Inlet #113	2.74	20	NA	0.011	YES	STD			0.26	7.05
Inlet #114	1.89	20	NA	0.011	YES	STD			0.20	4.25
Inlet #116	1.11	13	NA	0.011	YES	STD			0.14	1.80
Inlet #117	0.47	20	3.70	0.011		STD	0.13	4.16		

STORM PIPING SCHEDULE

PIPE #	FROM	To	Q10 (cfs)	PIPE		
				dia. in	Length feet	MATERIAL
Pipe #59	CI 59	CI 57	0.85	15.00	110	HDPE or RCP
Pipe #58	YI 58	CI 57	5.14	15.00	24	HDPE or RCP
Pipe #57	CI 57	CI 56	7.52	18.00	94	HDPE or RCP
Pipe #56	CI 56	JB 53	8.42	18.00	31	HDPE or RCP
Pipe #55	CI 55	CI 54	1.31	15.00	26	HDPE or RCP
Pipe #54	CI 54	JB 53	3.07	15.00	47	HDPE or RCP
Pipe #53	JB 53	FES 53	11.49	24.00	34	HDPE or RCP
Pipe #52	D-CI 52	CI 51	4.86	15.00	41	HDPE or RCP
Pipe #51	CI 51	CI 49	5.80	15.00	28	HDPE or RCP
Pipe #50	CI 50	CI 49	0.51	15.00	54	HDPE or RCP
Pipe #49	CI 49	CI 48	6.57	18.00	122	HDPE or RCP
Pipe #48	CI 48	JB 46	6.83	18.00	82	HDPE or RCP
Pipe #47	CI 47	JB 46	2.65	15.00	27	HDPE or RCP
Pipe #46	JB 46	CI 45	9.48	24.00	70	HDPE or RCP
Pipe #45	CI 45	CI 43	9.88	24.00	85	HDPE or RCP
Pipe #44	YI 44	CI 43	4.91	15.00	6	HDPE or RCP
Pipe #43	CI 43	CI 42	14.99	24.00	88	HDPE or RCP
Pipe #42	CI 42	YI 41	17.73	24.00	18	HDPE or RCP
Pipe #41	YI 41	YI 31	25.07	30.00	133	HDPE or RCP
Pipe #40	YI 40	CI 39	1.91	15.00	180	HDPE or RCP
Pipe #39	CI 39	CI 38	4.57	15.00	80	HDPE or RCP
Pipe #38	CI 38	CI 35	6.46	18.00	87	HDPE or RCP
Pipe #37	YI 37	CI 36	6.23	18.00	27	HDPE or RCP
Pipe #36	CI 36	CI 35	6.71	18.00	75	HDPE or RCP
Pipe #35	CI 35	CI 34	15.08	24.00	40	HDPE or RCP
Pipe #34	CI 34	YI 33	17.13	24.00	193	HDPE or RCP
Pipe #33	YI 33	YI 32	20.19	24.00	138	HDPE or RCP
Pipe #32	YI 32	YI 31	22.15	30.00	148	HDPE or RCP
Pipe #31	YI 31	YI 30	48.53	36.00	68	HDPE or RCP
Pipe #30	YI 30	CI 28	49.57	36.00	165	HDPE or RCP
Pipe #29	CI 29	CI 28	0.75	15.00	100	HDPE or RCP
Pipe #28	CI 28	CI 27	52.66	36.00	39	HDPE or RCP
Pipe #27	CI 27	JB 2	54.04	36.00	51	HDPE or RCP
Pipe #26	CI 26	CI 25	2.31	15.00	33	HDPE or RCP
Pipe #25	CI 25	CI 24	2.90	15.00	51	HDPE or RCP
Pipe #24	CI 24	CI 21	3.22	15.00	21	HDPE or RCP
Pipe #23	YI 23	CI 22	23.95	30.00	150	HDPE or RCP
Pipe #22	CI 22	CI 21	25.46	30.00	84	HDPE or RCP
Pipe #21	CI 21	CI 19	28.99	30.00	135	HDPE or RCP
Pipe #20	YI 20	CI 19	9.36	24.00	15	HDPE or RCP
Pipe #19	CI 19	CI 17	38.62	36.00	65	HDPE or RCP
Pipe #18	CI 18	CI 17	1.39	15.00	25	HDPE or RCP
Pipe #17	CI 17	CI 15	42.52	36.00	172	HDPE or RCP
Pipe #16	CI 16	CI 15	0.58	15.00	38	HDPE or RCP
Pipe #15	CI 15	JB 14	45.59	36.00	112	HDPE or RCP
Pipe #14	JB 14	CI 11	45.59	36.00	27	HDPE or RCP
Pipe #13	CI 13	CI 12	1.37	15.00	74	HDPE or RCP
Pipe #12	CI 12	CI 11	2.40	15.00	100	HDPE or RCP
Pipe #11	CI 11	CI 10	49.41	36.00	40	HDPE or RCP
Pipe #10	CI 10	CI 9	50.73	36.00	27	HDPE or RCP
Pipe #9	CI 9	CI 7	51.05	36.00	130	HDPE or RCP
Pipe #8	CI 8	CI 7	0.86	15.00	40	HDPE or RCP
Pipe #7	CI 7	CI 5	52.73	36.00	139	HDPE or RCP
Pipe #6	FES 6	CI 5	9.82	24.00	32	HDPE or RCP
Pipe #5	CI 5	JB 3	63.22	42.00	80	HDPE or RCP
Pipe #4	CI 4	JB 3	1.76	15.00	40	HDPE or RCP
Pipe #3	JB 3	JB 2	64.99	42.00	151	HDPE or RCP
Pipe #2	JB 2	YI 1	119.03	48.00	13	HDPE or RCP
Pipe #1	YI 1	FES 1	120.77	48.00	135	HDPE or RCP
Pipe #60	CI 60	SPBX 4	1.54	15.00	171	HDPE or RCP

PIPE #	FROM	To	Q10 (cfs)	PIPE		
PIPE #	FROM	To	Q10 (cfs)	dia.	Length	MATERIAL
				in	feet	
Pipe #96	CI 96	CI 95	0.87	15.00	21	HDPE or RCP
Pipe #95	CI 95	CI 94	1.95	15.00	212	HDPE or RCP
Pipe #94	CI 94	CI 93	4.01	15.00	114	HDPE or RCP
Pipe #93	CI 93	CI 91	5.83	15.00	105	HDPE or RCP
Pipe #92	CI 92	CI 93	1.37	15.00	28	HDPE or RCP
Pipe #91	CI 91	CI 89	8.02	18.00	41	HDPE or RCP
Pipe #90	YI 90	CI 89	7.44	18.00	14	HDPE or RCP
Pipe #89	CI 89	CI 88	16.68	24.00	58	HDPE or RCP
Pipe #88	CI 88	CI 87	18.18	24.00	130	HDPE or RCP
Pipe #87	CI 87	CI 71	18.82	24.00	57	HDPE or RCP
Pipe #86	YI 86	CI 84	13.03	24.00	160	HDPE or RCP
Pipe #85	CI 85	CI 84	1.35	15.00	160	HDPE or RCP
Pipe #84	CI 84	CI 81	15.58	24.00	90	HDPE or RCP
Pipe #83	YI 83	CI 81	5.29	15.00	9	HDPE or RCP
Pipe #82	CI 82	CI 81	2.05	15.00	26	HDPE or RCP
Pipe #81	CI 81	CI 79	23.23	30.00	85	HDPE or RCP
Pipe #80	CI 80	CI 79	1.22	15.00	28	HDPE or RCP
Pipe #79	CI 79	CI 78	24.71	30.00	60	HDPE or RCP
Pipe #78	CI 78	CI 77	24.96	30.00	212	HDPE or RCP
Pipe #77	CI 77	CI 75	26.03	30.00	54	HDPE or RCP
Pipe #76	YI 76	CI 75	11.67	24.00	15	HDPE or RCP
Pipe #75	CI 75	CI 71	39.18	36.00	72	HDPE or RCP
Pipe #74	CI 74	CI 73	2.46	15.00	141	HDPE or RCP
Pipe #73	CI 73	CI 71	3.15	15.00	40	HDPE or RCP
Pipe #72	YI 72	CI 71	3.58	15.00	8	HDPE or RCP
Pipe #71	CI 71	CI 69	65.00	36.00	64	HDPE or RCP
Pipe #70	CI 70	CI 69	0.55	15.00	26	HDPE or RCP
Pipe #69	CI 69	CI 67	66.94	42.00	275	HDPE or RCP
Pipe #68	CI 68	CI 67	0.65	15.00	21	HDPE or RCP
Pipe #67	CI 67	CI 62	68.48	42.00	49	HDPE or RCP
Pipe #66	YI 66	CI 65	3.49	15.00	8	HDPE or RCP
Pipe #65	CI 65	CI 63	3.77	15.00	174	HDPE or RCP
Pipe #64	YI 64	CI 63	5.58	15.00	15	HDPE or RCP
Pipe #63	CI 63	CI 62	9.69	24.00	54	HDPE or RCP
Pipe #62	CI 62	CI 61	78.42	42.00	21	HDPE or RCP
Pipe #61	CI 61	FES 61	80.55	42.00	85	HDPE or RCP
Pipe # 61b	JB 61B	SPBX 1	80.55	42.00	95	HDPE or RCP
Pipe #61c	JB 61C	SK Basin	80.55	42.00	80	HDPE or RCP
Pipe #100	YI 100	CI 99	13.84	24.00	20	HDPE or RCP
Pipe #99	CI 99	CI 98	14.59	24.00	133	HDPE or RCP
Pipe #97	CI 97	SPBX 2	15.75	30.00	224	HDPE or RCP
Pipe #102	CI 102	CI 101	0.50	15.00	39	RCP
Pipe #101	CI 101	JB	0.99	15.00	75	RCP
Pipe #111	CI 111	CI 110	2.54	15.00	101	HDPE or RCP
Pipe #110	CI 110	CI 109	2.96	15.00	22	HDPE or RCP
Pipe #109	CI 109	CI 109a	5.48	18.00	2	HDPE or RCP
Pipe #109a	CI 109a	CI 106	8.00	18.00	82	HDPE or RCP
Pipe #108	FES 108	CI 107	9.31	24.00	20	HDPE or RCP
Pipe #107	CI 107	CI 106	11.30	24.00	22	HDPE or RCP
Pipe #106	CI 106	JB 105	19.46	24.00	31	HDPE or RCP
Pipe #105	JB 105	JB 104	19.38	24.00	106	HDPE or RCP
Pipe #104	JB 104	JB 103	19.14	15.00	48	HDPE or RCP
Pipe #103	JB 103	SPBX 3	19.02	24.00	160	HDPE or RCP
Pipe #117	CI 117	CI 116	0.47	15.00	56	HDPE or RCP
Pipe #116	CI 116	JB 115	1.58	15.00	27	HDPE or RCP
Pipe #115	JB 115	CI 113	1.58	15.00	149	HDPE or RCP
Pipe #114	CI 114	CI 113	1.89	15.00	63	RCP
Pipe #113	CI 113	FES 113	6.21	18.00	394	RCP

STABILIZATION TIMEFRAMES (Effective Aug 3, 2015)

SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
Perimeter dikes, 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 3:1 or flatter	14 days	7 days for slopes greater than 50' in length.
All other areas with slopes flatter than 4:1	14 days	None, except for perimeter and HQW Zones.

EROSION CONTROL SEQUENCE

- NOTES:
- MAINTAIN ALL EROSION CONTROL DEVICES UNTIL INSTRUCTED OTHERWISE. OBTAIN EROSION CONTROL OFFICER APPROVAL PRIOR TO REMOVING ANY OF THE EROSION CONTROL DEVICES.
 - NO DISTURBED AREA IS TO BE LEFT WITHOUT PROTECTIVE COVER (MULCH OR STRAWTACK) FOR MORE THAN 15 DAYS. SEE ITEM 6. BELOW.
 - SCHEDULE A PRECONSTRUCTION CONFERENCE WITH THE ENVIRONMENTAL ENGINEER, GLENN JOHNSON, (919-868-6411), OBTAIN A LAND-DISTURBING PERMIT.
 - 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.
 - CALL (919) 868-6411 FOR AN ONSITE INSPECTION BY THE ENVIRONMENTAL ENGINEER TO OBTAIN A CERTIFICATE OF COMPLIANCE.
 - BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE.
 - INSTALL STORM SEWER, IF SHOWN, AND PROTECT INLETS WITH BLOCK AND GRAVEL INLET CONTROLS, SEDIMENT TRAPS OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN. BEGIN CONSTRUCTION, BUILDINGS, ETC.
 - STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. SEED AND MULCH DENURED AREAS WITHIN FIFTEEN (15) DAYS OF COMPLETION OF ANY PHASE OF CONSTRUCTION.
 - WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL (919) 868-6411 FOR AN INSPECTION BY THE ENVIRONMENTAL ENGINEER.
 - IF SITE IS APPROVED, REMOVE TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS, ETC., AND SEED OUT OR STABILIZE ANY RESULTING BARE AREAS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES SUCH AS VELOCITY DISSIPATORS, SHOULD NOW BE INSTALLED.
 - WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE ENVIRONMENTAL ENGINEER, GLENN JOHNSON. OBTAIN A CERTIFICATE OF COMPLETION.

DISTURBED AREA PHASE II : 9.5 AC

LEGEND:

- LIMITS OF WETLANDS
- SILT FENCE (SF)
- DIVERSION DITCH (DD)
- CHECK DAM (CD)
- PIPE INLET PROTECTION (IP)
- CATCH BASIN INLET PROTECTION (CBIP)
- NOTE: INLET PROTECTION SHOULD BE ON ALL IN PHASE II AS WELL AS THE CLOSEST INLETS IN PHASE I
- CONSTRUCTION LIMITS
- RIPRAP DISSIPATOR APRON
- CONSTRUCTION ENTRANCE
- CLEARING LIMITS
- SILT FENCE ROCK OUTLET
- LEVEL SPREADER

EROSION / SEDIMENT CONTROL DEVICES MAINTENANCE:

PERIODICALLY CHECK ALL GRADED AREAS AND THE SUPPORTING EROSION AND SEDIMENTATION CONTROL DEVICES, ESPECIALLY AFTER HEAVY RAINFALLS. PROMPTLY REMOVE ALL SEDIMENT FROM DIVERSIONS AND OTHER WATER-DISPOSAL DEVICES. IF WASHOUTS OR BREAKS OCCUR, REPAIR THEM IMMEDIATELY.

SEE DETAIL SHEET FOR SPECIFIC MAINTENANCE REQUIREMENTS FOR EACH TYPE OF EROSION AND SEDIMENTATION CONTROL DEVICES USED.

DIVERSION/CHANNEL GENERAL NOTE:

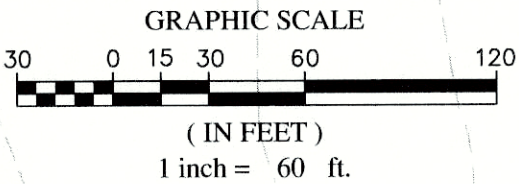
- DIVERSIONS > 2% SLOPE SHALL BE LINED WITH EXCELSIOR MATTING OR EQUAL.
- DIVERSIONS < 2% SLOPE SHALL BE LINED WITH STRAW NETTING OR EQUAL.

LEVEL SPREADER SCHEDULE

LS#	Q (1"/hr) (CFS)	ground cover	req. length per CFS	required length
1	15.3	Thick Cover	10	(2) 80'
2	2.98	Thick Cover	10	30'
3	3.35	Thick Cover	10	34'
4	0.455	Thick Cover	10	10'

CHANNELS

CHANNEL	DRAINAGE AREA (AC.)	Cc	Q25 (CFS)	SLOPE	LINING
1	0.25	0.45	7.19	1.0%	SEED, NORTH AMERICAN GREEN S75
2	0.42	0.45	7.19	2.0%	SEED, NORTH AMERICAN GREEN C125
3	2.87	0.45	7.19	1.5%	SEED, NORTH AMERICAN GREEN S75
4	1.22	0.45	7.19	1.0%	SEED, NORTH AMERICAN GREEN S75
5	0.71	0.45	7.19	1.5%	SEED, NORTH AMERICAN GREEN S75
6	1.58	0.45	7.19	1.0%	SEED, NORTH AMERICAN GREEN S75
7	0.477	0.45	7.19	1.0%	SEED, NORTH AMERICAN GREEN S75
8	0.68	0.45	7.19	5.0%	SEED, NORTH AMERICAN GREEN C125
9	1.03	0.45	7.19	1.0%	SEED, NORTH AMERICAN GREEN S75
10	1.57	0.45	7.19	2.0%	SEED, NORTH AMERICAN GREEN S75



BY	DATE	REVISIONS
		7
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Review Drawings
Drayton Reserve Subdivision
TOWN OF ROLESVILLE
WAKE COUNTY, NORTH CAROLINA
EROSION CONTROL PLAN 1

PROJECT NO.
14-0036
DRAWING NAME:
14-0036 BASE
SHEET NO.
C-11



LEGEND:

- LIMITS OF WETLANDS
- SILT FENCE (SF)
- DIVERSION DITCH (DD)
- CHECK DAM (CD)
- PIPE INLET PROTECTION
- CATCH BASIN INLET PRO. (IP)
- NOTE: INLET PROTECTION SHOULD BE ON ALL IN PHASE II AS WELL AS THE CLOSEST INLETS IN PHASE I
- CONSTRUCTION LIMITS
- RIPRAP DISSIPATOR APRON
- CONSTRUCTION ENTRANCE
- CLEARING LIMITS
- SILT FENCE ROCK OUTLET
- LEVEL SPREADER

EROSION / SEDIMENT CONTROL DEVICES MAINTENANCE:

PERIODICALLY CHECK ALL GRADED AREAS AND THE SUPPORTING EROSION AND SEDIMENTATION CONTROL DEVICES, ESPECIALLY AFTER HEAVY RAINFALLS. PROMPTLY REMOVE ALL SEDIMENT FROM DIVERSIONS AND OTHER WATER-DISPOSAL DEVICES. IF WASHOUTS OR BREAKS OCCUR, REPAIR THEM IMMEDIATELY.

SEE DETAIL SHEET FOR SPECIFIC MAINTENANCE REQUIREMENTS FOR EACH TYPE OF EROSION AND SEDIMENTATION CONTROL DEVICES USED.

EROSION CONTROL SEQUENCE

- NOTES:
- MAINTAIN ALL EROSION CONTROL DEVICES UNTIL INSTRUCTED OTHERWISE. OBTAIN EROSION CONTROL OFFICER APPROVAL PRIOR TO REMOVING ANY OF THE EROSION CONTROL DEVICES.
 - NO DISTURBED AREA IS TO BE LEFT WITHOUT PROTECTIVE COVER (MULCH OR STRAW/TACK) FOR MORE THAN 15 DAYS. SEE ITEM 6. BELOW.
 - SCHEDULE A PRECONSTRUCTION CONFERENCE WITH THE ENVIRONMENTAL ENGINEER, GLENN JOHNSON, (919-868-6411), OBTAIN A LAND-DISTURBING PERMIT.
 - 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.
 - CALL (919) 868-6411 FOR AN ON-SITE INSPECTION BY THE ENVIRONMENTAL ENGINEER TO OBTAIN A CERTIFICATE OF COMPLIANCE.
 - BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE.
 - INSTALL STORM SEWER, IF SHOWN, AND PROTECT INLETS WITH BLOCK AND GRAVEL INLET CONTROLS, SEDIMENT TRAPS OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN. BEGIN CONSTRUCTION, BUILDINGS, ETC.
 - STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. SEED AND MULCH DENUDED AREAS WITHIN FIFTEEN (15) DAYS OF COMPLETION OF ANY PHASE OF CONSTRUCTION.
 - WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL (919) 868-6411 FOR AN INSPECTION BY THE ENVIRONMENTAL ENGINEER.
 - IF SITE IS APPROVED, REMOVE TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS, ETC., AND SEED OUT OR STABILIZE ANY RESULTING BARE AREAS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES SUCH AS VELOCITY DISSIPATORS, SHOULD NOW BE INSTALLED.
 - WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE ENVIRONMENTAL ENGINEER, GLENN JOHNSON, OBTAIN A CERTIFICATE OF COMPLETION.

DISTURBED AREA: 9.5 AC

SLOPE DRAIN

CONTRACTOR SHALL INSTALL 6"x6"x12" THICK CLASS B RIP RAP APRON

CONTRACTOR SHALL INSTALL 12" LONG TRANSITION FROM 6" TO 12" WIDE 18" THICK CLASS B RIP RAP APRON

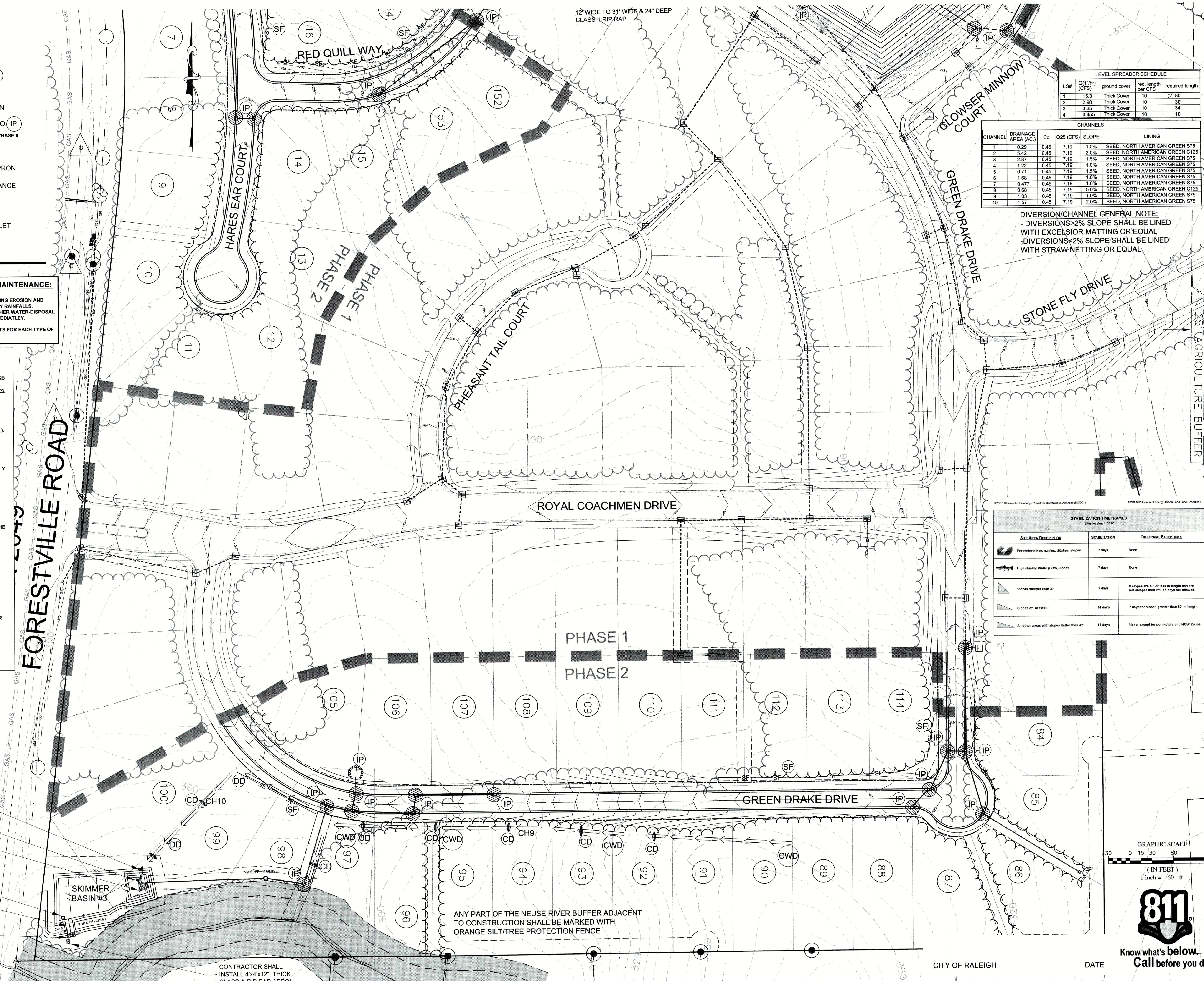
1.5" SKIMMER W/ 1.2" ORIFACE

EMERGENCY SPILLWAY 10' WIDE BOTTOM WIDTH WITH MINIMUM 2:1 SIDE SLOPES

CONTRACTOR SHALL CLASS B RIP RAP APRON 6' LONG TRANSITIONING FROM 18" TO 12" WIDE APRON 12" DEEP

SKIMMER BASIN #3

CONTRACTOR SHALL INSTALL 4"x4"x12" THICK CLASS A RIP RAP APRON



LEVEL SPREADER SCHEDULE

LSW	Q (17hr) (CFS)	ground cover	req. length per CFS	required length
1	15.3	Thick Cover	10	(2) 80'
2	2.98	Thick Cover	10	30'
3	3.35	Thick Cover	10	34'
4	0.455	Thick Cover	10	10'

CHANNELS

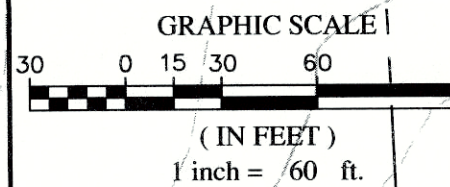
CHANNEL	DRAINAGE AREA (AC.)	Cc	Q25 (CFS)	SLOPE	SEED, NORTH AMERICAN GREEN S75
1	0.29	0.45	7.19	1.0%	SEED, NORTH AMERICAN GREEN S75
2	5.42	0.45	7.19	2.0%	SEED, NORTH AMERICAN GREEN S75
3	2.87	0.45	7.19	1.5%	SEED, NORTH AMERICAN GREEN S75
4	1.22	0.45	7.19	1.0%	SEED, NORTH AMERICAN GREEN S75
5	0.71	0.45	7.19	1.5%	SEED, NORTH AMERICAN GREEN S75
6	1.88	0.45	7.19	1.0%	SEED, NORTH AMERICAN GREEN S75
7	0.477	0.45	7.19	1.0%	SEED, NORTH AMERICAN GREEN S75
8	0.68	0.45	7.19	5.0%	SEED, NORTH AMERICAN GREEN S75
9	1.03	0.45	7.19	1.0%	SEED, NORTH AMERICAN GREEN S75
10	1.57	0.45	7.19	2.0%	SEED, NORTH AMERICAN GREEN S75

DIVERSION/CHANNEL GENERAL NOTE:

- DIVERSIONS-2% SLOPE SHALL BE LINED WITH EXCELSIOR MATTING OR EQUAL
- DIVERSIONS-2% SLOPE SHALL BE LINED WITH STRAW NETTING OR EQUAL

STABILIZATION TIMEFRAMES (Effective Aug. 1, 2015)

SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
Perimeter dikes, 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 3:1 or flatter	14 days	7 days for slopes greater than 50' in length.
All other areas with slopes flatter than 4:1	14 days	None, except for protectors and HQW Zones.



7 6 5 4 3 2 1

DATE

BY

REVISIONS

NO.	DESCRIPTION	DATE	BY
1			
2			
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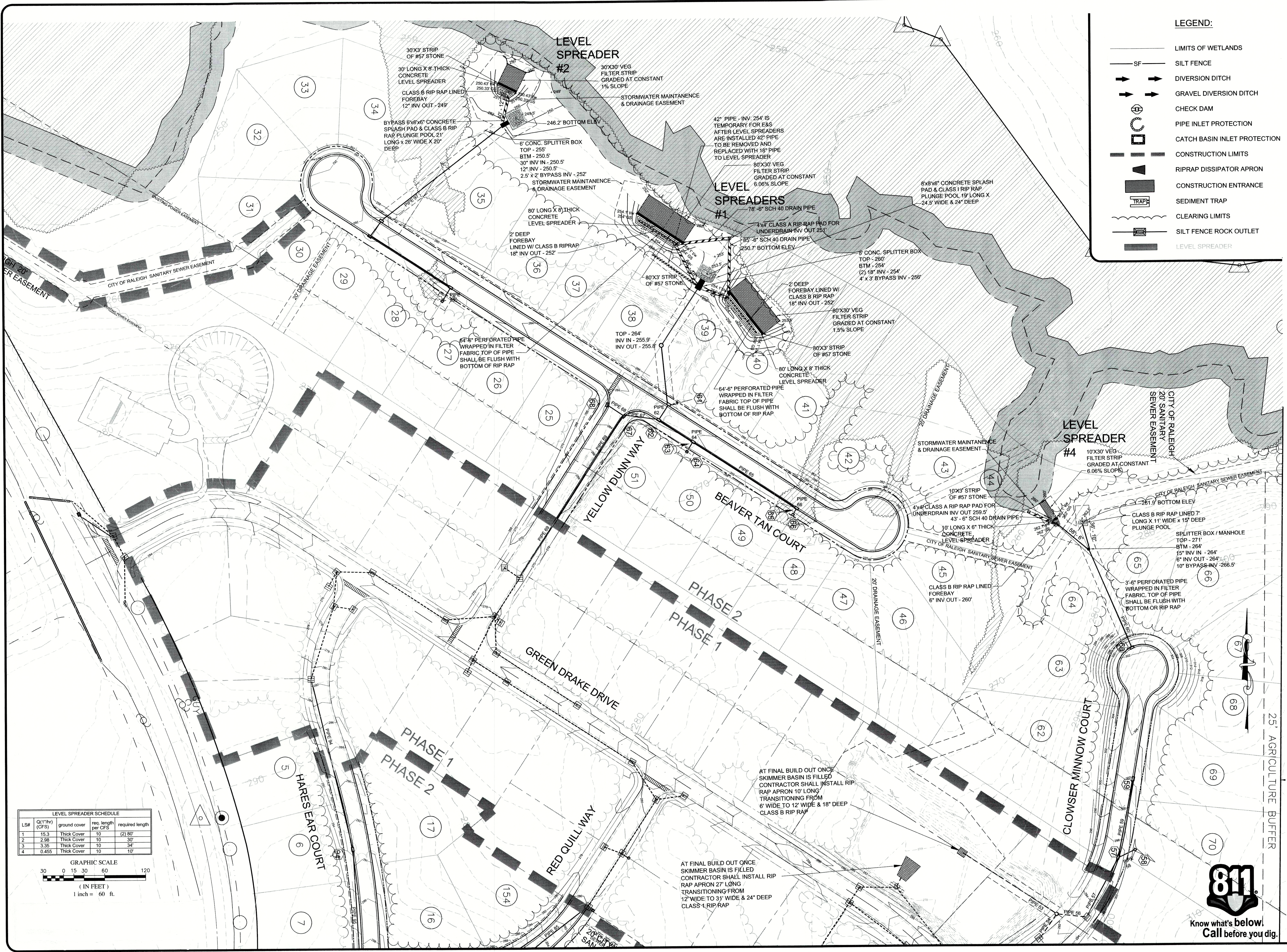
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Drayton Reserve Subdivision
TOWN OF ROLESVILLE
WAKE COUNTY, NORTH CAROLINA

EROSION CONTROL PLAN2

PROJECT NO.
14-0036

DRAWING NAME:
14-0036 BASE

SHEET NO.
C-12

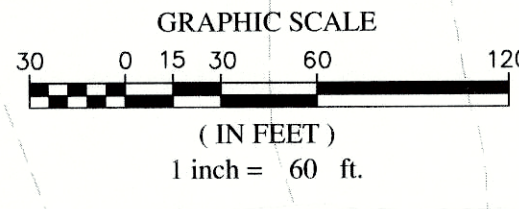


LEGEND:

- LIMITS OF WETLANDS
- SILT FENCE
- DIVERSION DITCH
- GRAVEL DIVERSION DITCH
- CHECK DAM
- PIPE INLET PROTECTION
- CATCH BASIN INLET PROTECTION
- CONSTRUCTION LIMITS
- RIPRAP DISSIPATOR APRON
- CONSTRUCTION ENTRANCE
- SEDIMENT TRAP
- CLEARING LIMITS
- SILT FENCE ROCK OUTLET
- LEVEL SPREADER

LEVEL SPREADER SCHEDULE

LS#	Q (1/1hr) (CFS)	ground cover	req. length per CFS	required length
1	15.3	Thick Cover	10	(2) 90'
2	2.98	Thick Cover	10	30'
3	3.35	Thick Cover	10	34'
4	0.455	Thick Cover	10	10'



DATE

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7	6	5	4	3	2	1
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WAKE COUNTY, NORTH CAROLINA

STORMDRAIN PLAN1

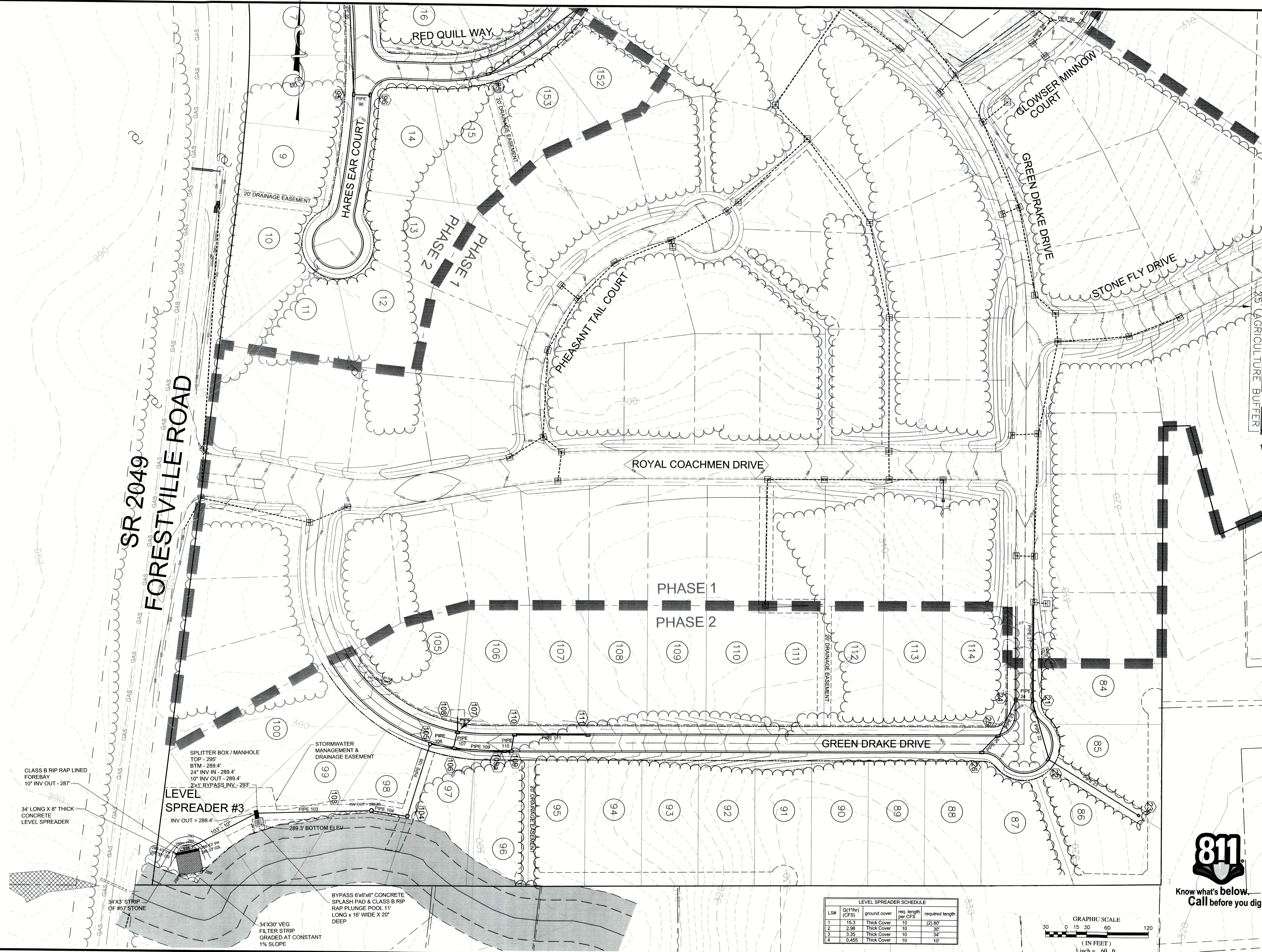
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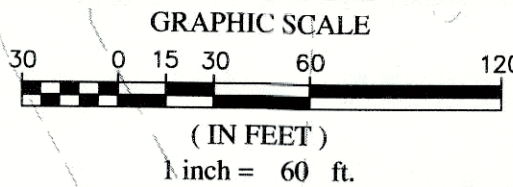
SHEET NO.
C-13

Know what's below.
Call before you dig.

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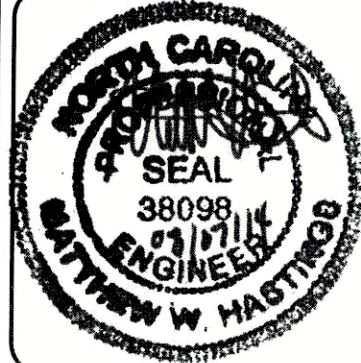
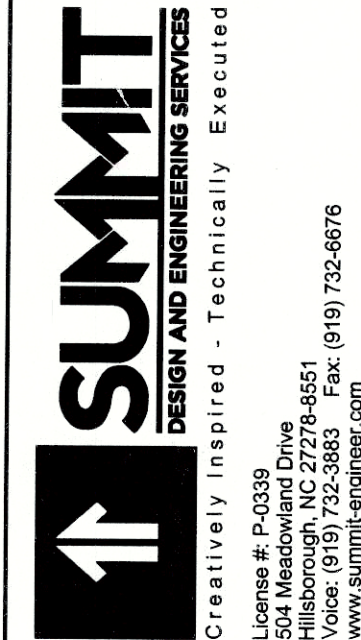
LEVEL SPREADER SCHEDULE				
LS#	Q(1"hr) (CFS)	ground cover	req. length per CFS	required length
1	15.3	Thick Cover	10	(2) 80'
2	2.98	Thick Cover	10	30'
3	3.35	Thick Cover	10	34'
4	0.455	Thick Cover	10	10'



Review Drawings
Drayton Reserve Subdivision
TOWN OF ROLESVILLE
WAKE COUNTY, NORTH CAROLINA

STORMDRAIN PLAN2

PROJECT NO.
14-0036
DRAWING NAME:
14-0036 BASE
SHEET NO.
C-14



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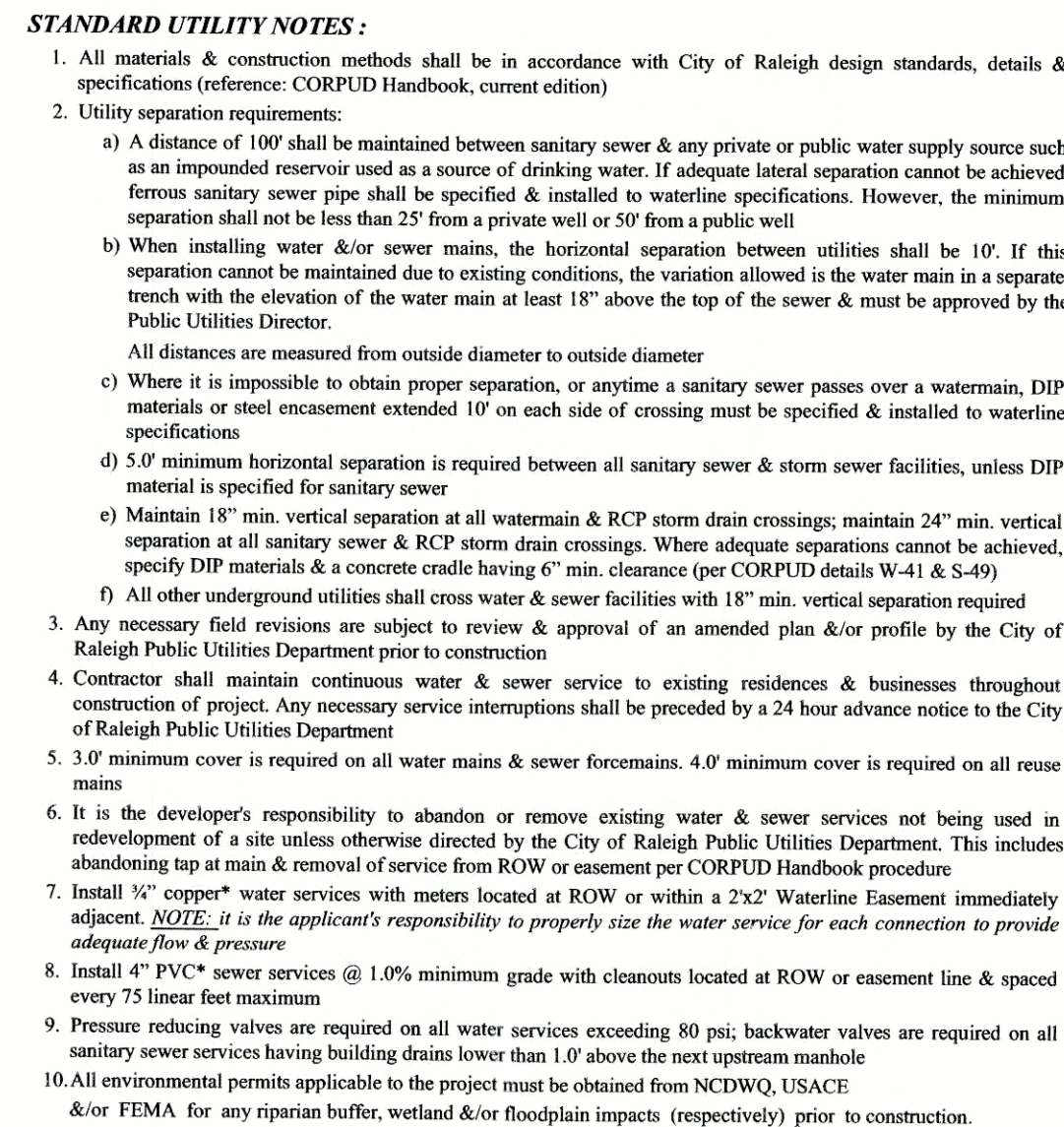
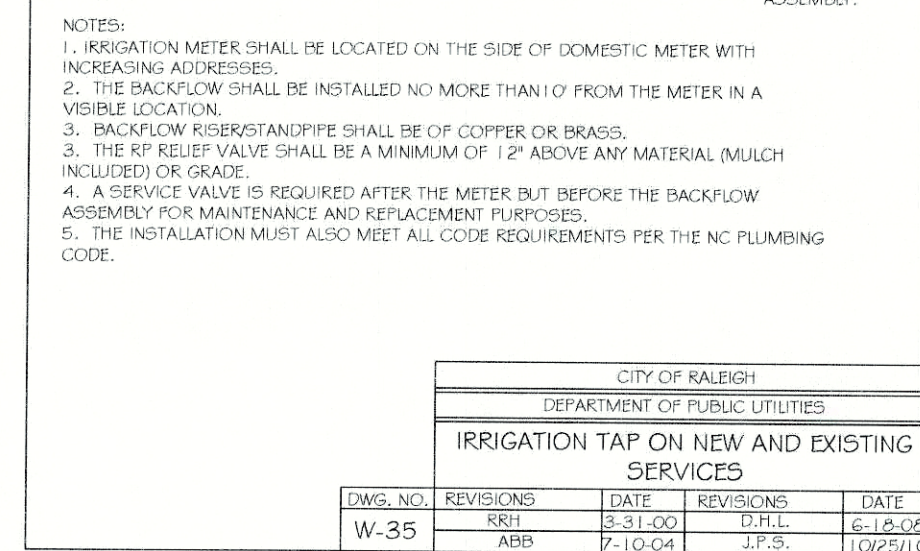
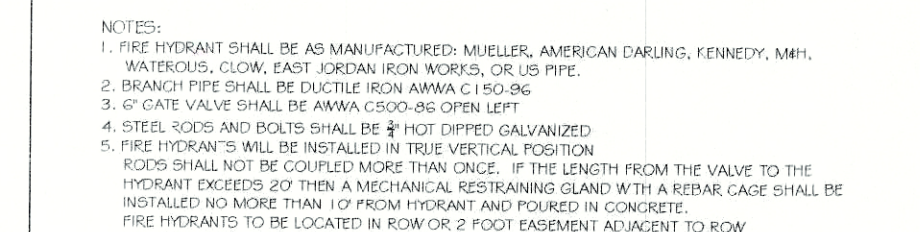
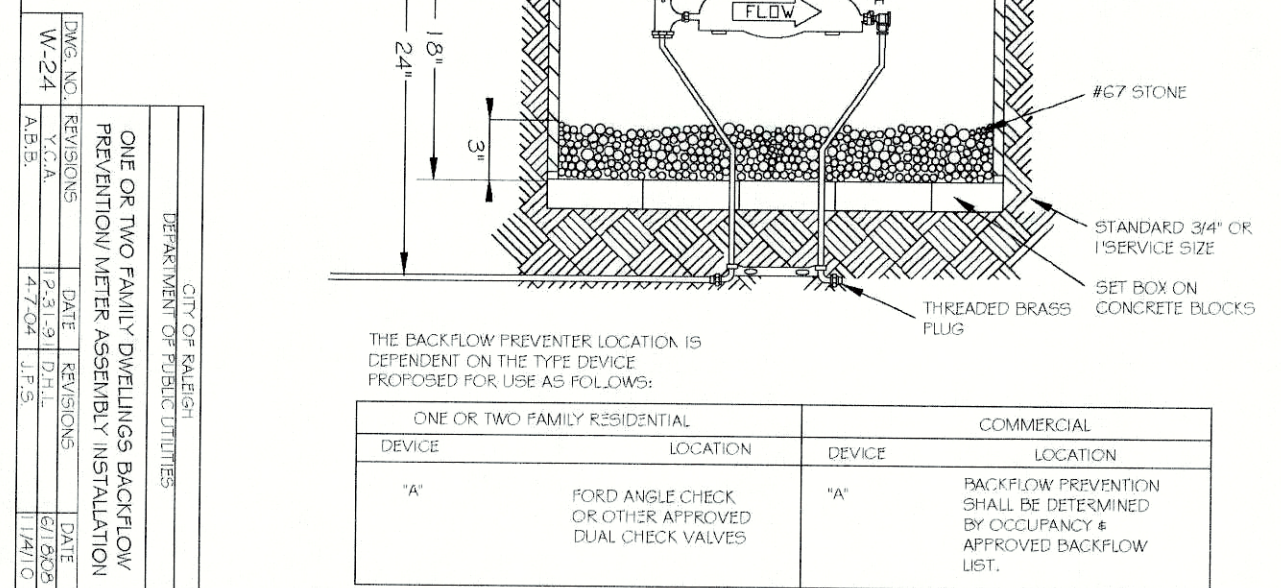
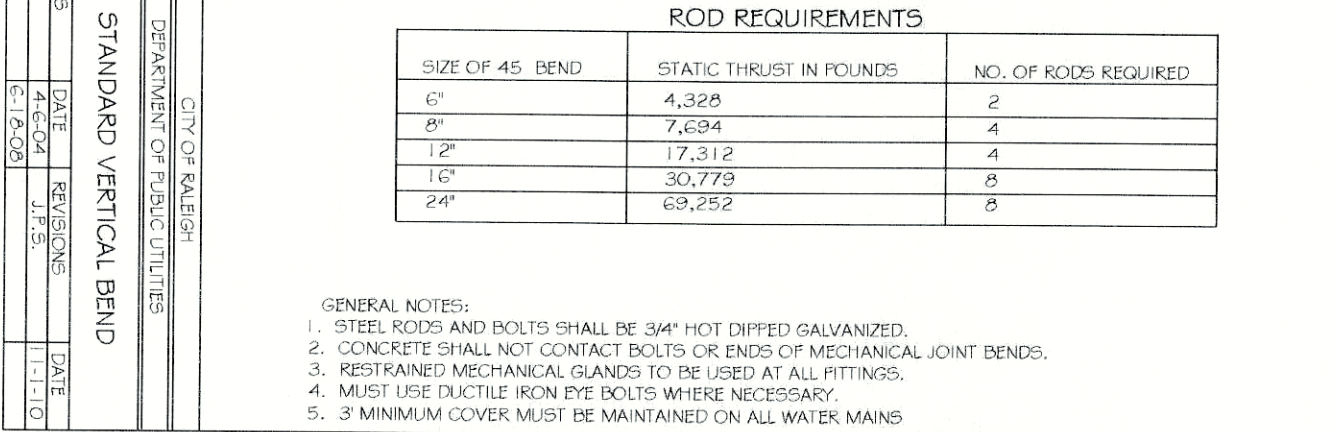
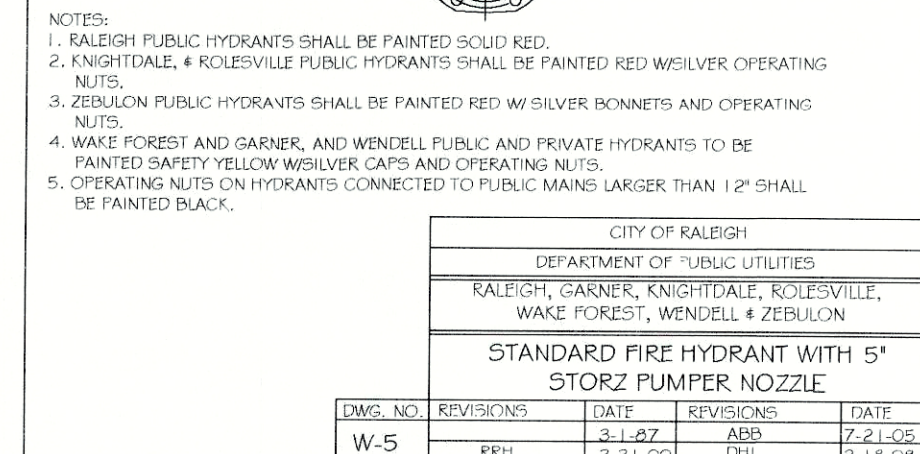
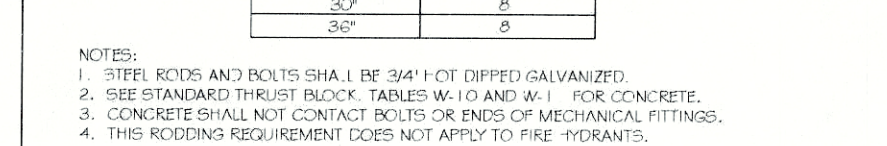
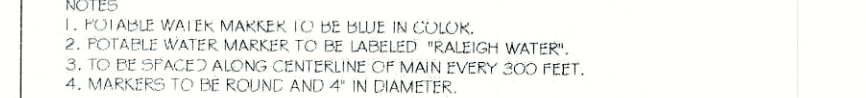
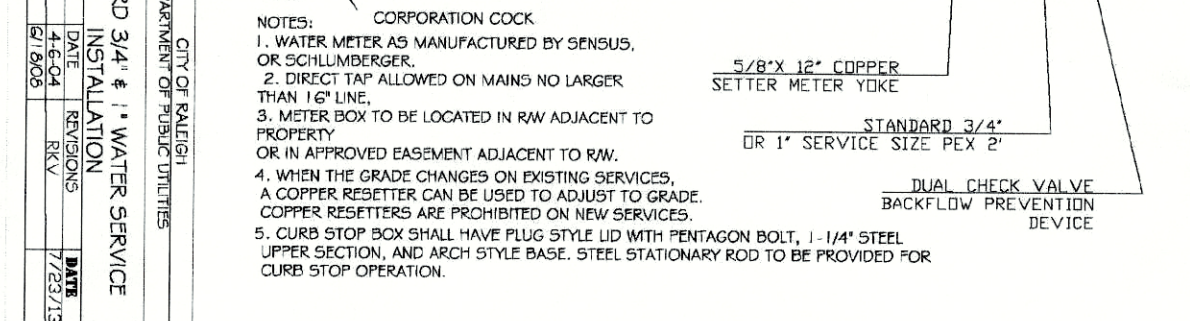
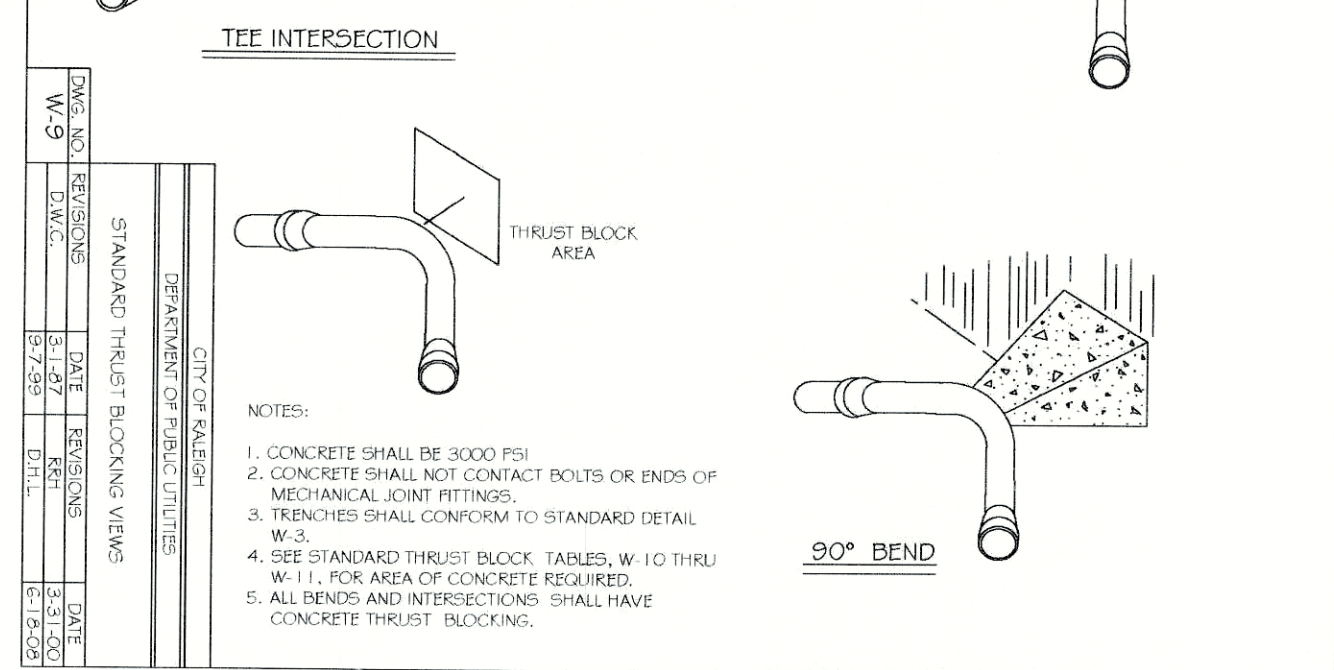
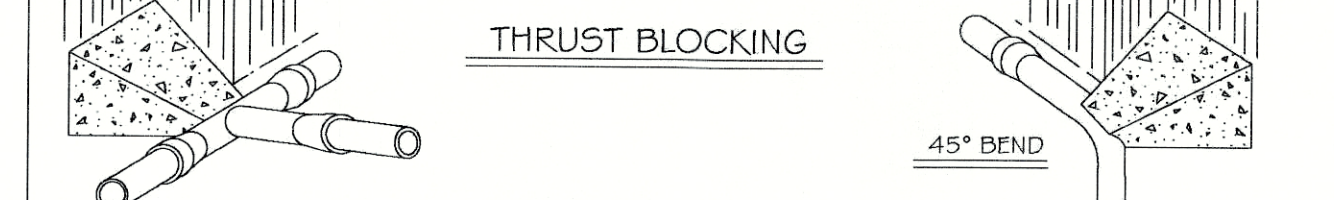
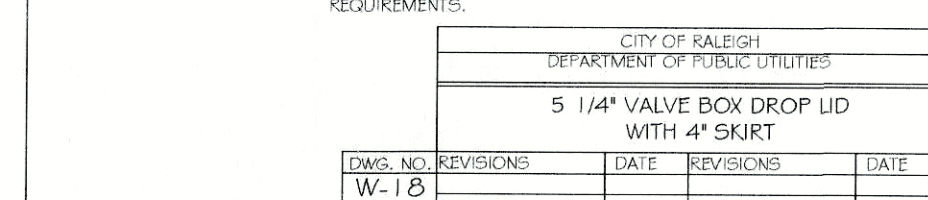
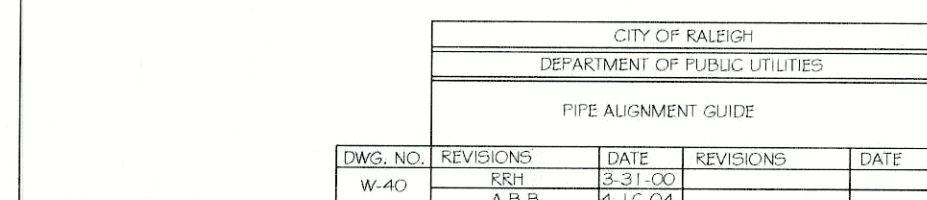
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REACTION BEARING AREAS ARE IN SQUARE FEET MEASURED IN A VERTICAL PLANE IN THE TRENCH SIDE AT AN ANGLE OF 90° TO THE THRUST VECTOR. USE 6" - 90° BEND VALUE FOR HYDRANTS FOR ADDITIONAL SAFETY FACTOR.	CITY OF RALEIGH			
	DEPARTMENT OF PUBLIC UTILITIES			
	THRUST BLOCKING DESIGN			
	QUANTITY TABLE			
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-10	D.W.C.	6-23-92		

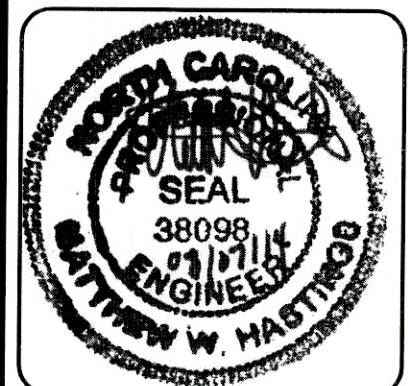
REACTION BEARING AREAS ARE 30 SQUARE FEET MEASURED IN A VERTICAL PLANE IN THE TRENCH SIDE AT AN ANGLE OF 90° TO THE THRUST VECTOR.

USE 0° - 90° BEND VALUE FOR HYDRANTS FOR ADDITIONAL SAFETY FACTOR.

CITY OF RALEIGH					
DEPARTMENT OF PUBLIC UTILITIES					
THRUST BLOCKING					
DESIGN QUANTITY TABLE					
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE	
W-11	D.W.C.	6-23-99			



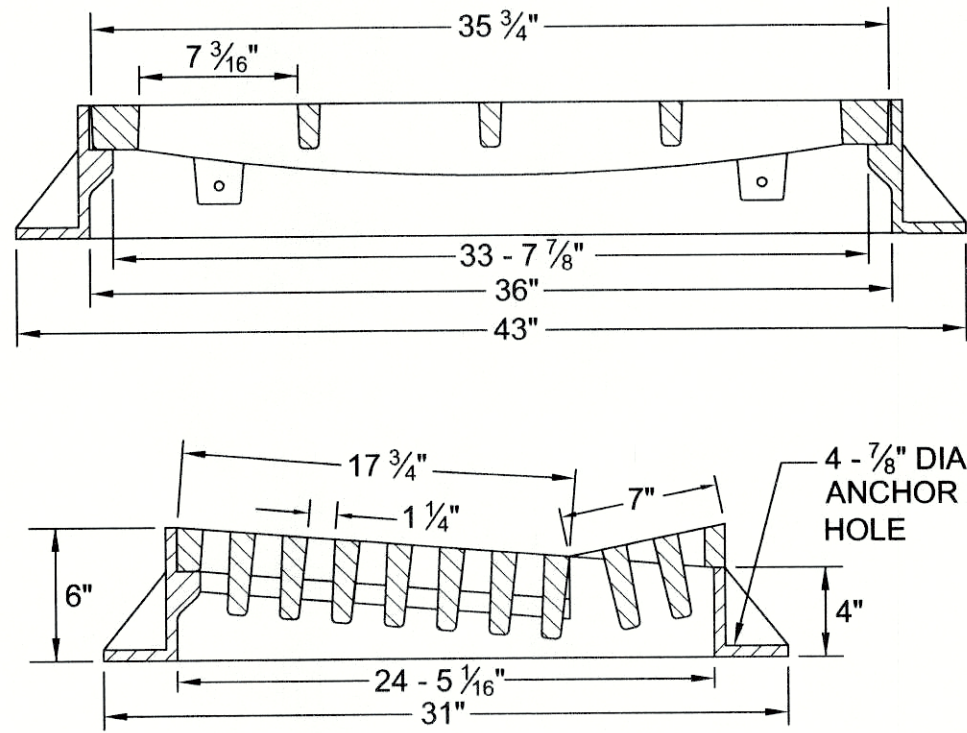
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PROJECT MANAGER	MH
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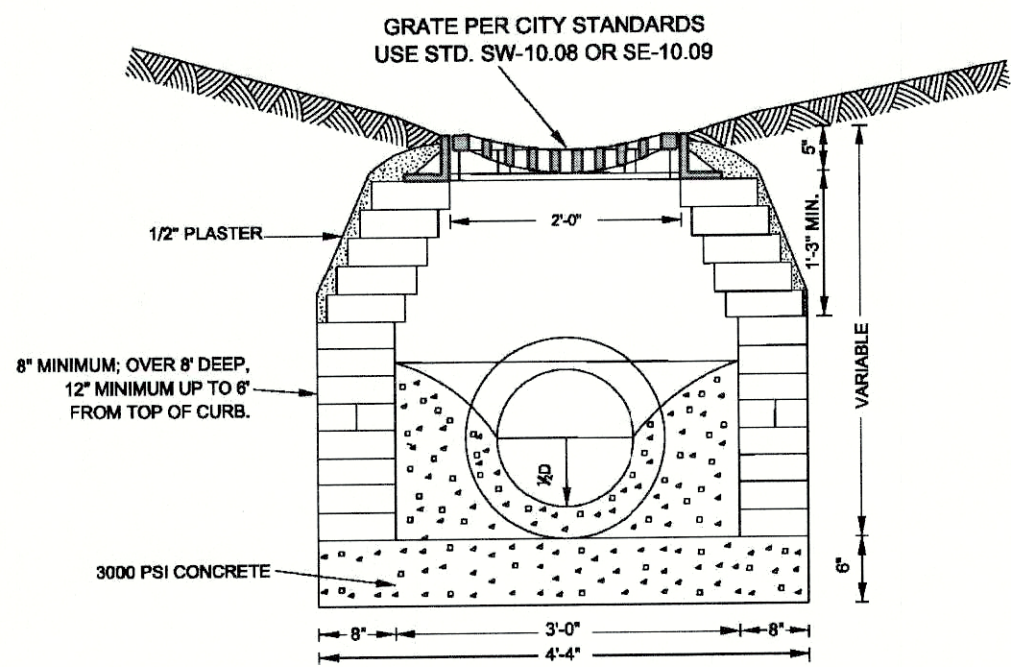
Review Drawings
Drayton Reserve Subdivision
 TOWN OF ROLESVILLE
 WAKE COUNTY, NORTH CAROLINA

UTILITIES DETAILS

PROJECT NO.
14-0036
DRAWING NAME:
14-0036 BASE
SHEET NO.
D-1

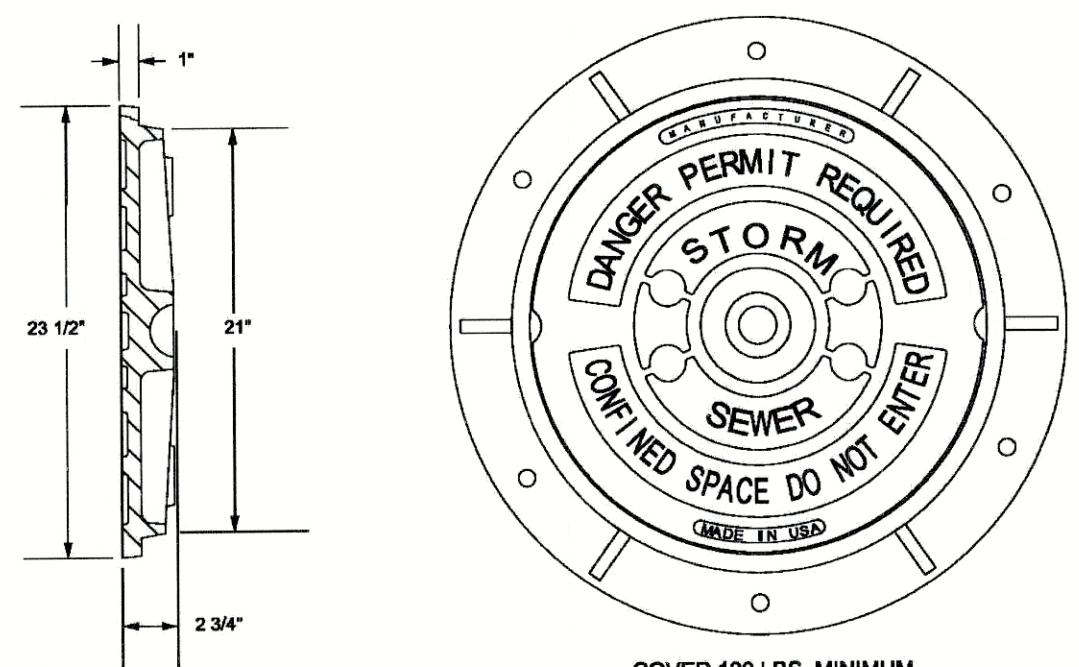


VALLEY GUTTER INLET FRAME AND GRATE
USF 5120 FRAME AND 6167 GRATES OR APPROVED EQUIVALENT



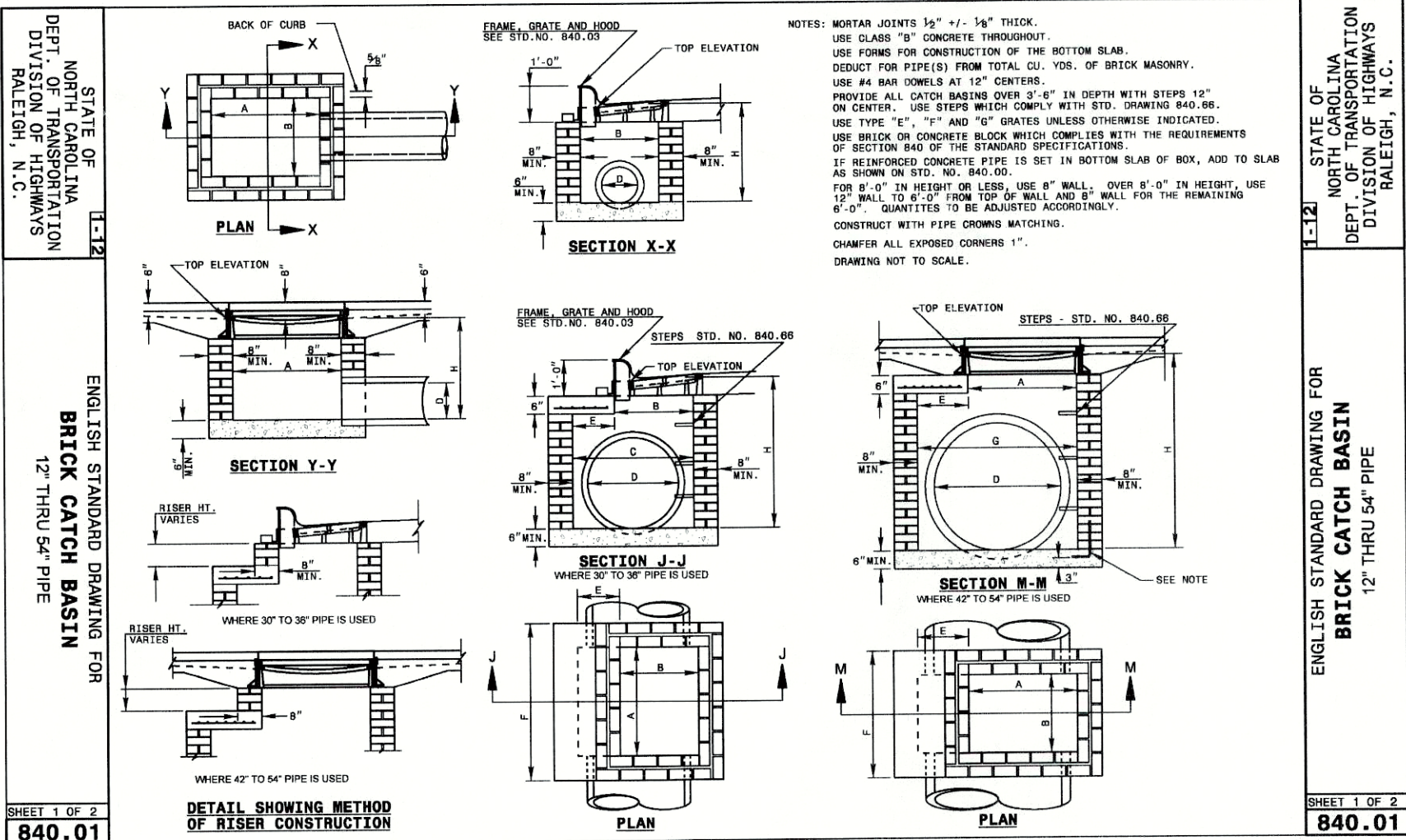
- NOTES:
1. FOR 24" RCP A LARGER USE PIPE DIAMETER PLUS 12" FOR MINIMUM INSIDE DIMENSION.
 2. 24" X 24" CASTING WITH 12", 16" & 18" PIPE 24" X 36" CASTING USED WITH 24" PIPE OR LARGER, IF PLACED WITHIN PUBLIC ROW CASTING MUST BE TRAFFIC BEARING TYPE PER NCDOT STANDARDS.
 3. USE 4" X 4" X 8" OR 4" X 8" X 16" SOLID CONCRETE BLOCK, CAST IN PLACE OR PRECAST CONCRETE TO MEET N.C.D.O.T. STANDARDS ACCEPTABLE.
 4. FOR STEP REQUIREMENT, SEE NOTE 2 ON STANDARD SW-10.13.

CITY OF RALEIGH
PUBLIC WORKS DEPARTMENT
STANDARD
DROP INLET
SW-10.03

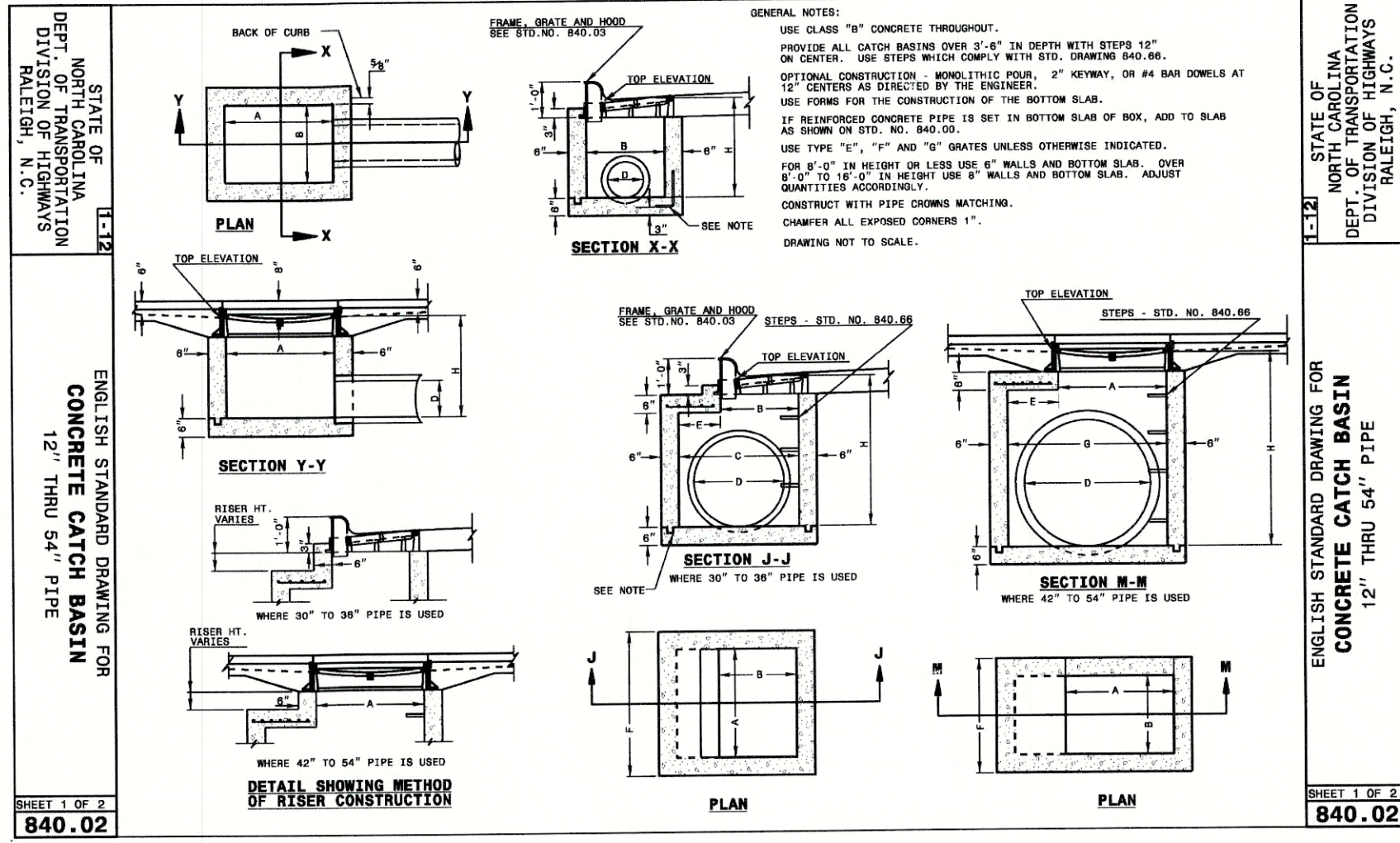


- NOTES:
- 1) ALL MANHOLE FRAMES SHALL BE DOMESTICALLY CAST.
 - 2) FRAME SHALL BE A MINIMUM WEIGHT OF 182 LBS. WITHIN PUBLIC ROW AND 160 LBS. WITHIN EASEMENTS.
 - 3) COVER SHALL WEIGH A MINIMUM OF 120 LBS.
 - 4) ALL MANHOLE FRAMES OUTSIDE OF PAVED SURFACES SHALL BE BOLTED TO THE CONE SECTION OR RING WITH A MINIMUM OF 4 BOLTS PER FRAME.

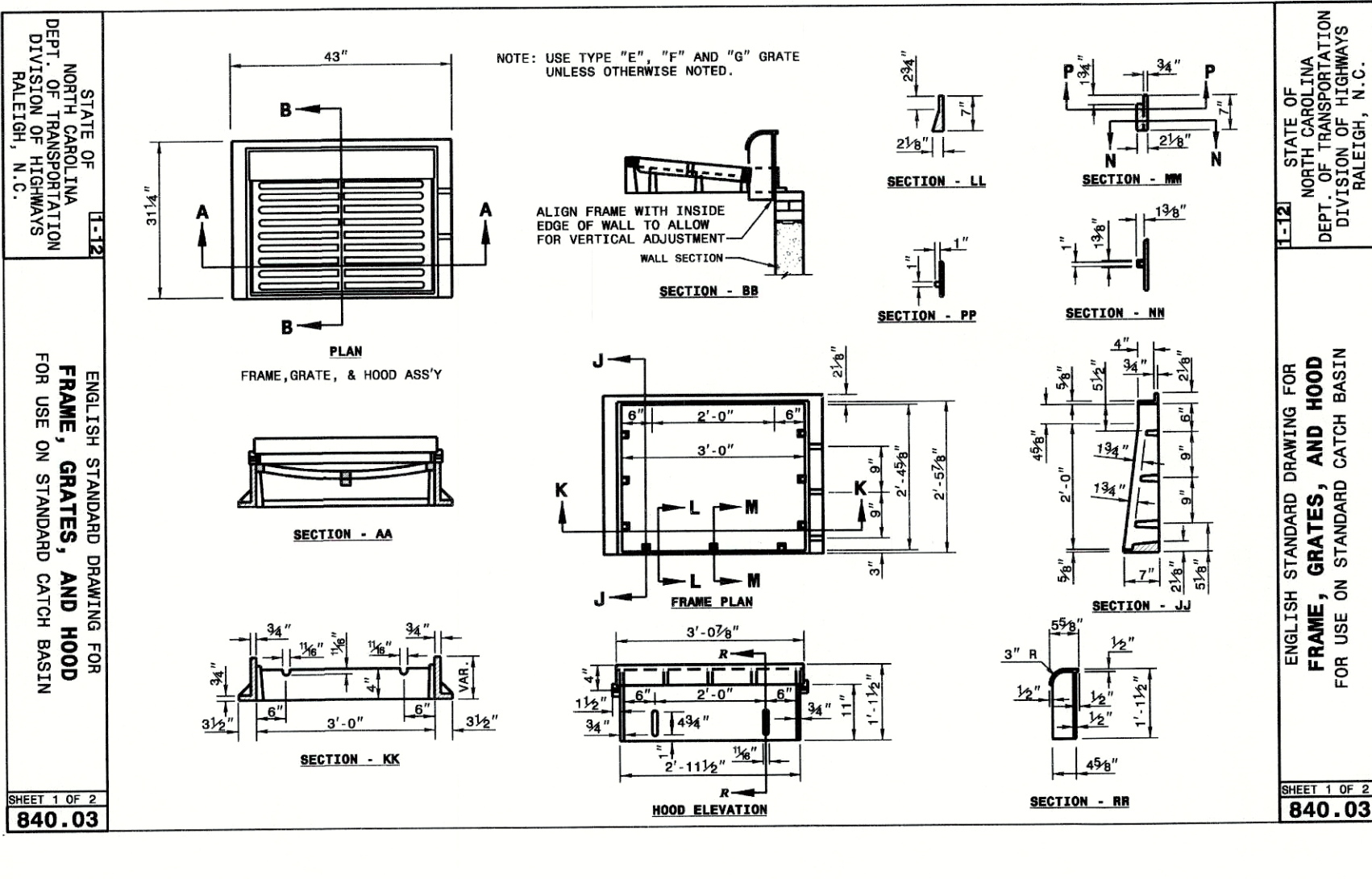
CITY OF RALEIGH
PUBLIC WORKS DEPARTMENT
STANDARD STORM
MANHOLE COVER
SW-10.10



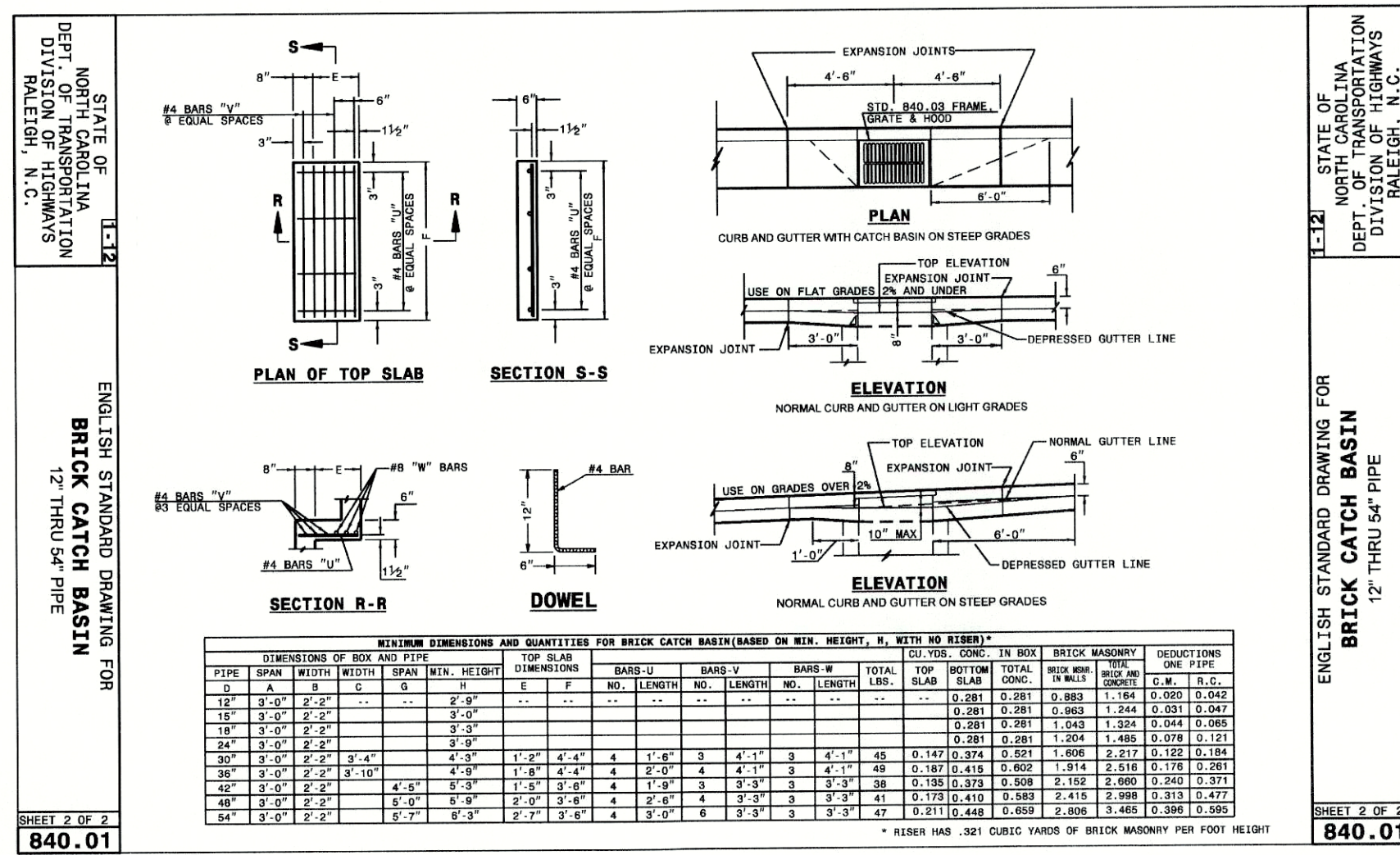
ENGLISH STANDARD DRAWING FOR
BRICK CATCH BASIN
12" THRU 54" PIPE



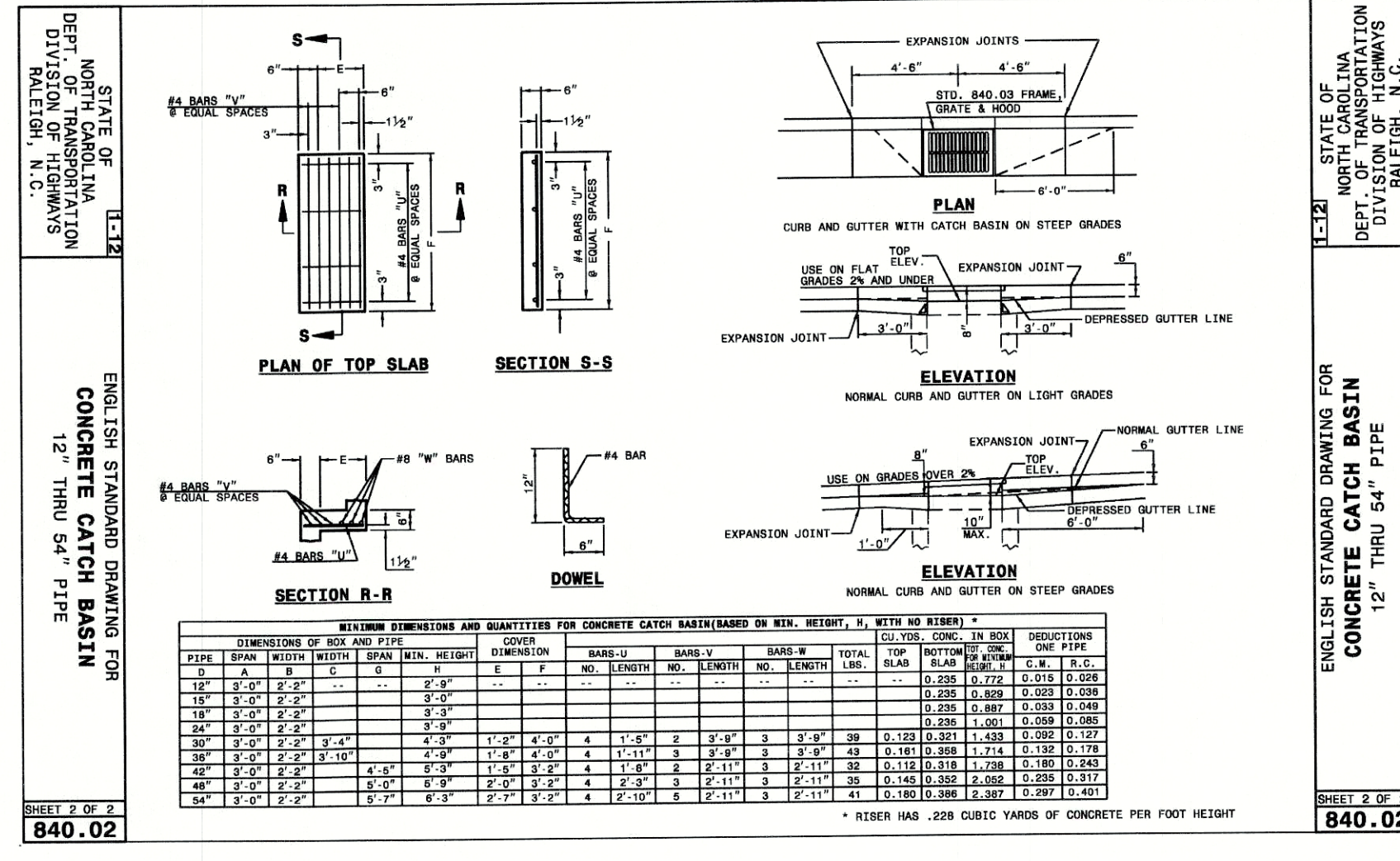
ENGLISH STANDARD DRAWING FOR
CONCRETE CATCH BASIN
12" THRU 54" PIPE



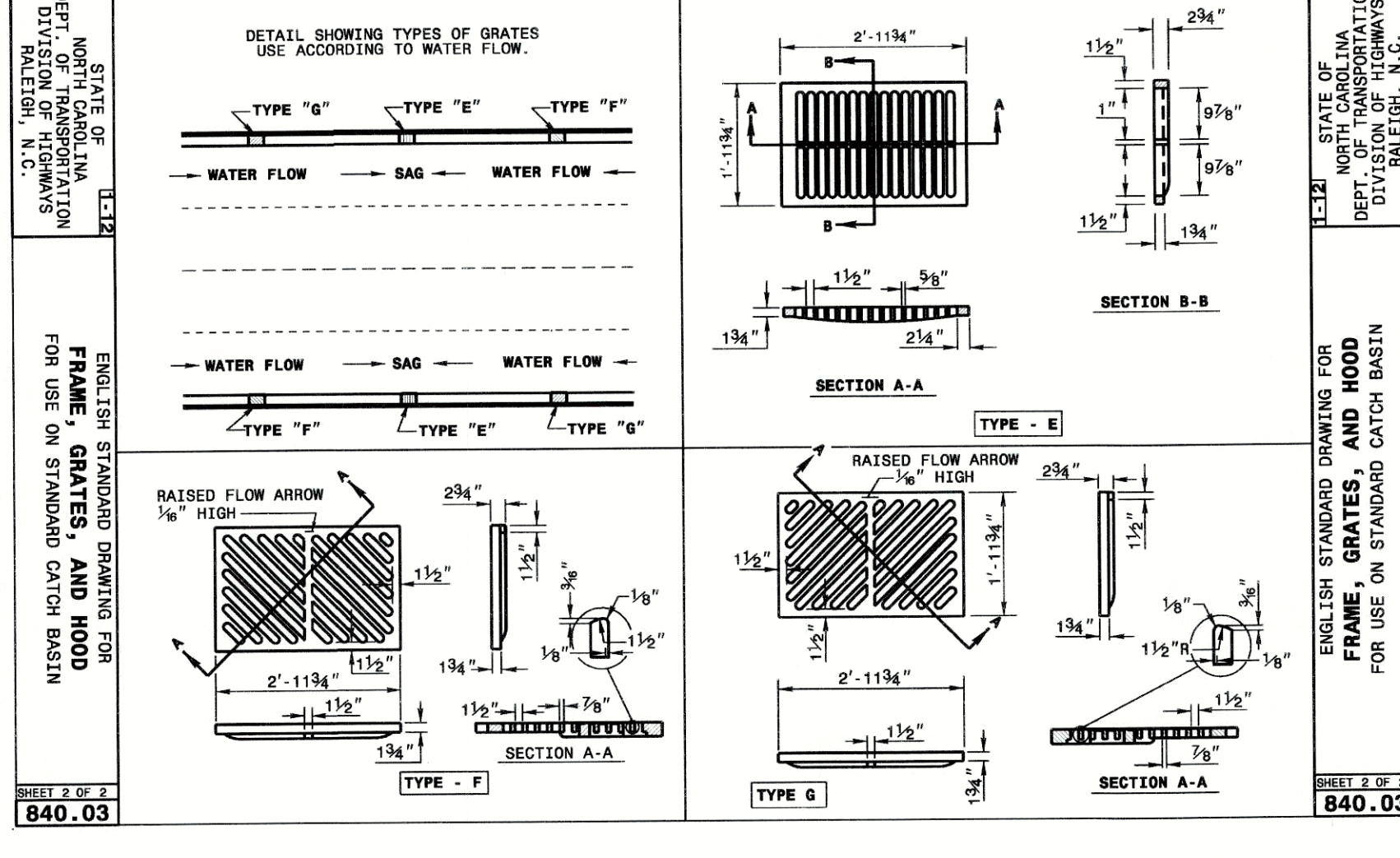
ENGLISH STANDARD DRAWING FOR
FRAME, GRATES, AND HOOD
FOR USE ON STANDARD CATCH BASIN



ENGLISH STANDARD DRAWING FOR
BRICK CATCH BASIN
12" THRU 54" PIPE



ENGLISH STANDARD DRAWING FOR
CONCRETE CATCH BASIN
12" THRU 54" PIPE



ENGLISH STANDARD DRAWING FOR
FRAME, GRATES, AND HOOD
FOR USE ON STANDARD CATCH BASIN

Review Drawings
Drayton Reserve Subdivision
TOWN OF ROLESVILLE
WAKE COUNTY, NORTH CAROLINA

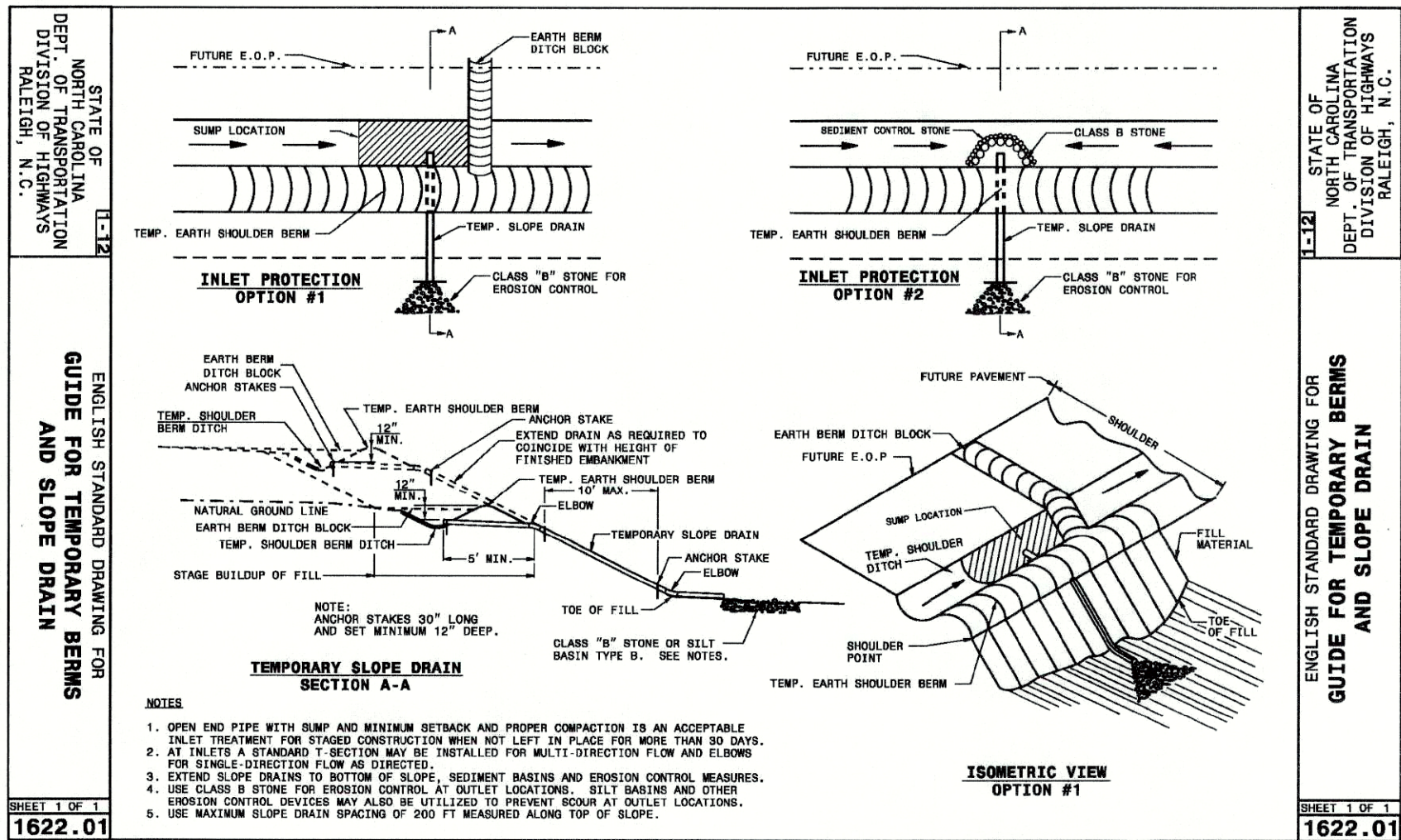
UTILITIES DETAILS

PROJECT NO.
14-0036
DRAWING NAME:
14-0036 BASE
SHEET NO.
D-3

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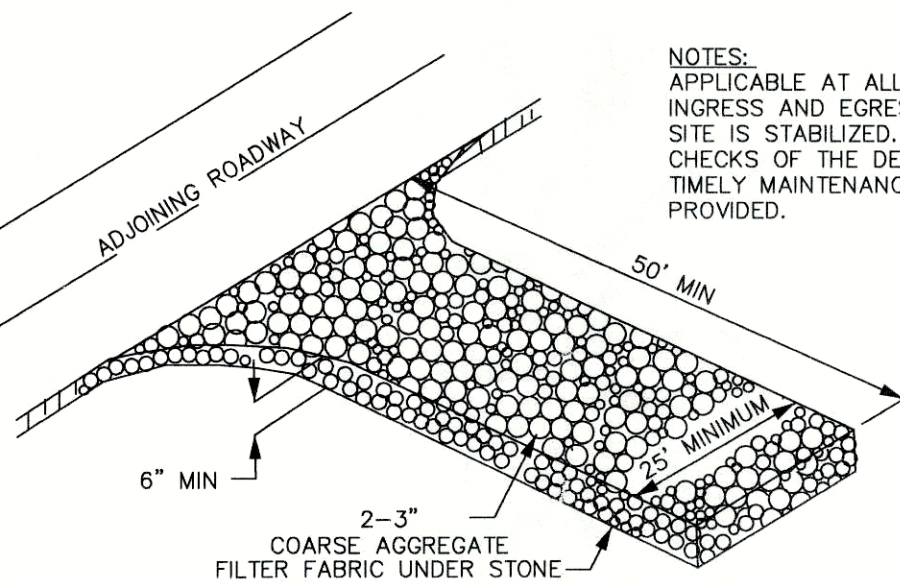


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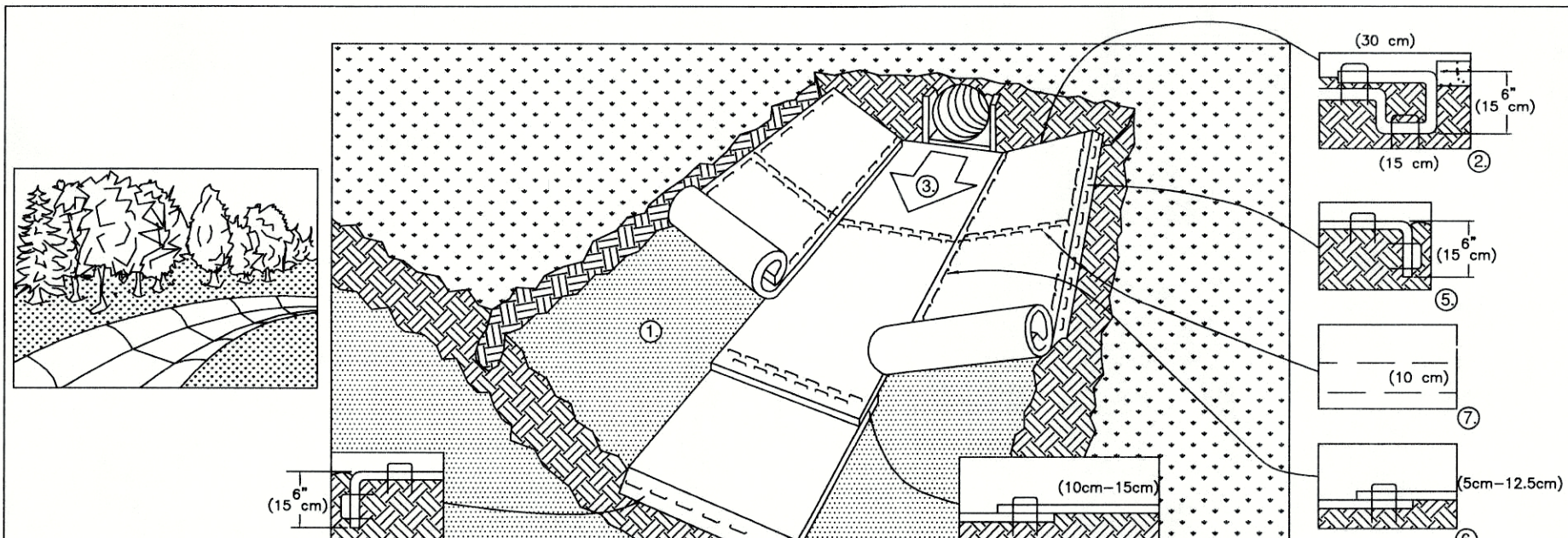


SLOPE DRAINS

- NOTES:**
1. WASHED STONE PAD TO BE 50' X 25' X 6" THICK. MINIMUM. IF THE ADJOINING ROADWAY IS WIDER THAN 25', THEN THE WASHED STONE SHALL BE AS WIDE AS THE ADJOINING ROADWAY.
 2. TURNING RADIUS SUFFICIENT TO ACCOMMODATE LARGE TRUCKS IS TO BE PROVIDED.
 3. ENTRANCE(S) SHOULD BE LOCATED TO PROVIDE FOR MAXIMUM UTILITY BY ALL CONSTRUCTION VEHICLES. MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF MUD ONTO STREETS.
 4. PERIODIC TOP DRESSING WITH STONE (2" THICK) WILL BE NECESSARY. KEEP STONE HANDY. ANY MATERIAL WHICH STILL MAKES IT ONTO THE ROAD MUST BE CLEANED UP IMMEDIATELY.



2- TEMPORARY STONE CONSTRUCTION ENTRANCE / EXIT

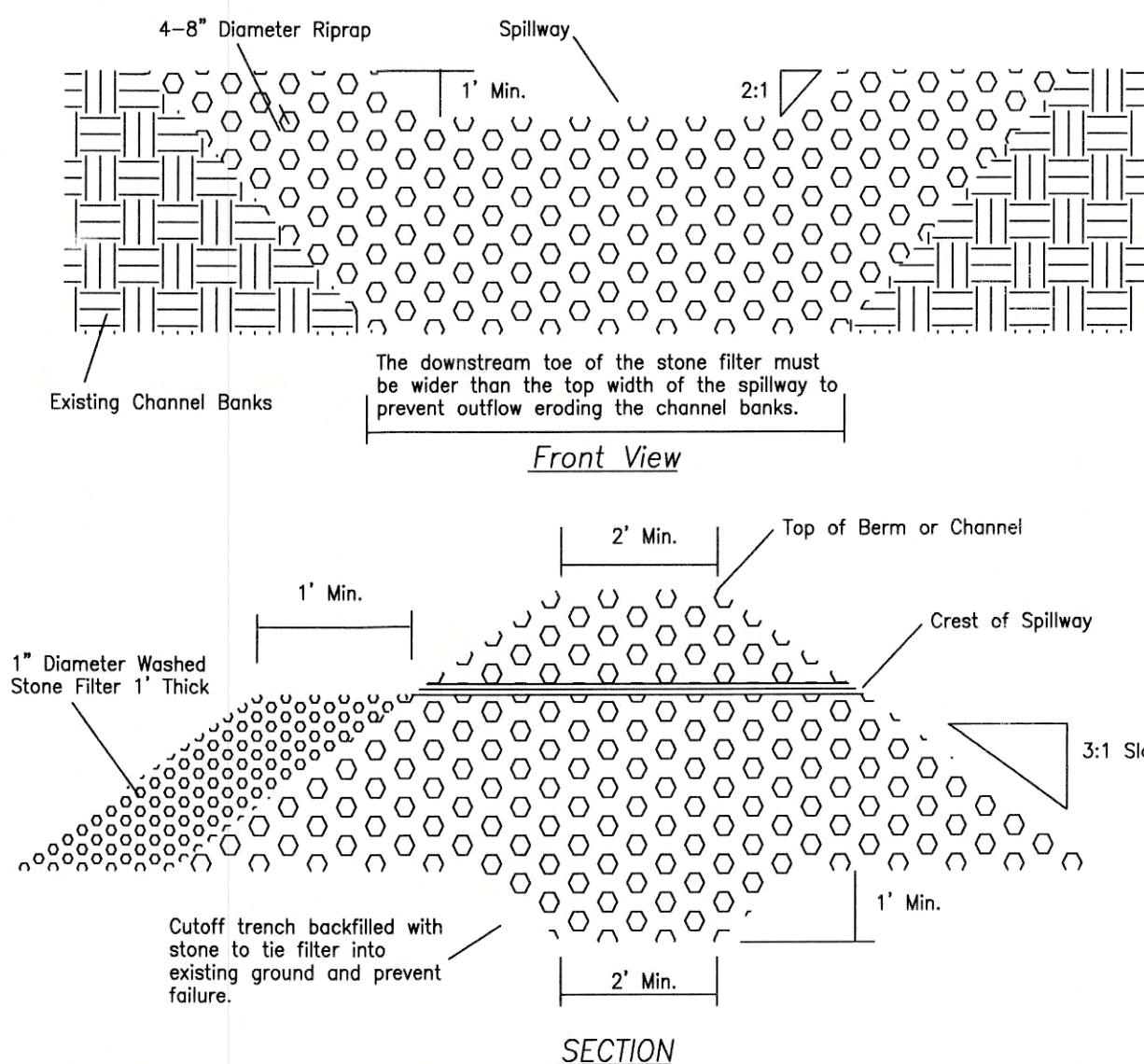


1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE TOP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4" (10cm-15cm) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10cm) APART AND 4" (10cm) ON CENTER TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (5cm-12.5cm) (DEPENDING ON BLANKET TYPE) AND STAPLED. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE BLANKET BEING OVERLAPPED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9m-12m) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10cm) APART AND 4" (10cm) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

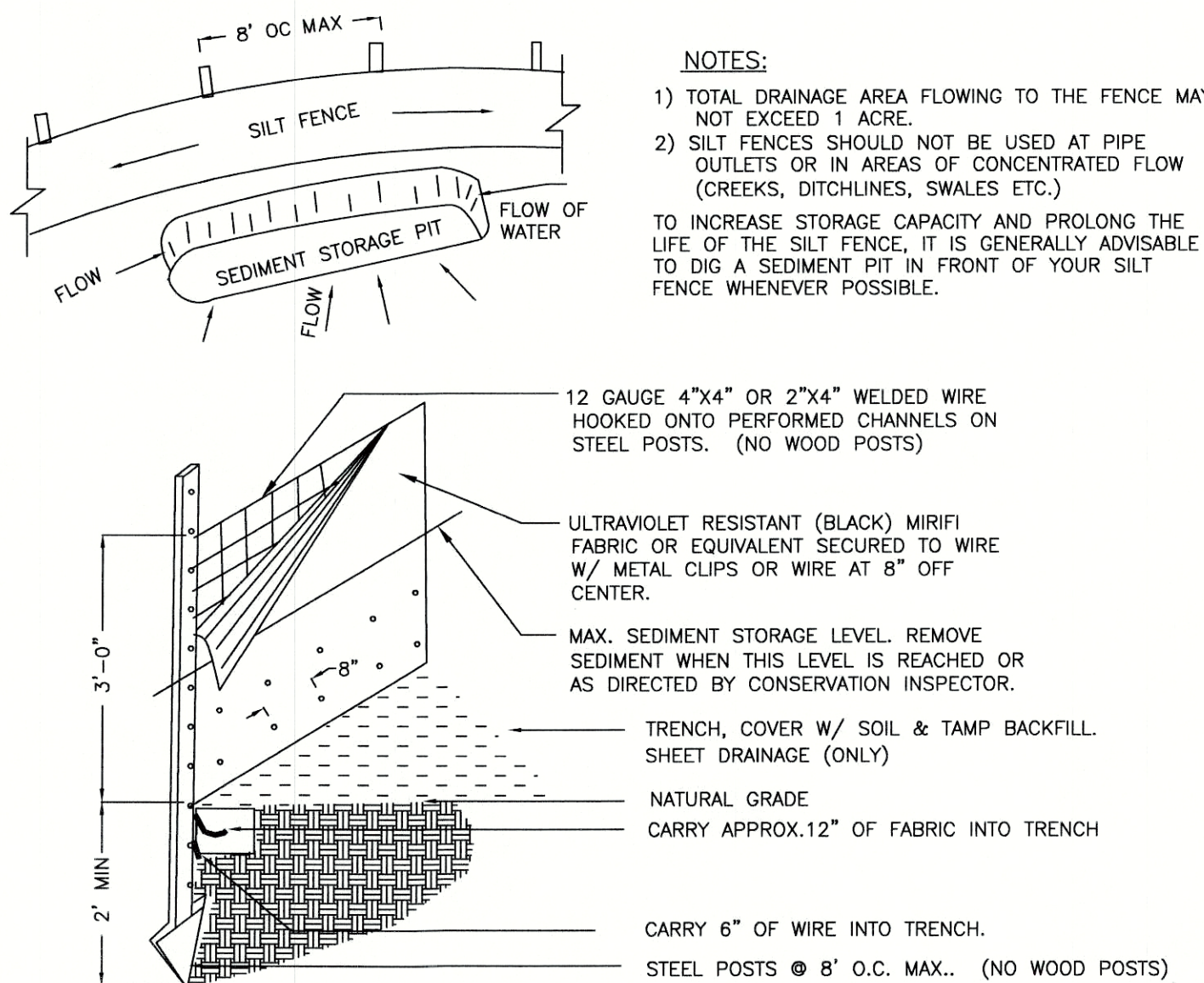


- CRITICAL POINTS**
1. OVERLAPS AND SEAMS
 2. PROJECTED WATER LINE
 3. CHANNEL BOTTOM/SIDE SLOPE VERTICES
- MAINTENANCE:**
- DURING THE ESTABLISHMENT PERIOD, INSPECT CHANNELS ONCE A WEEK AND AFTER EVERY RAINFALL. REMOVE SIGNIFICANT SEDIMENT ACCUMULATION. INSPECT CHANNELS AFTER EVERY HEAVY RAINFALL EVENT. REMOVE ALL SIGNIFICANT SEDIMENT ACCUMULATION, AND KEEP VEGETATION IN A HEALTHY, VIGOROUS CONDITION.

3- INSTRUCTIONS FOR DITCH LINER

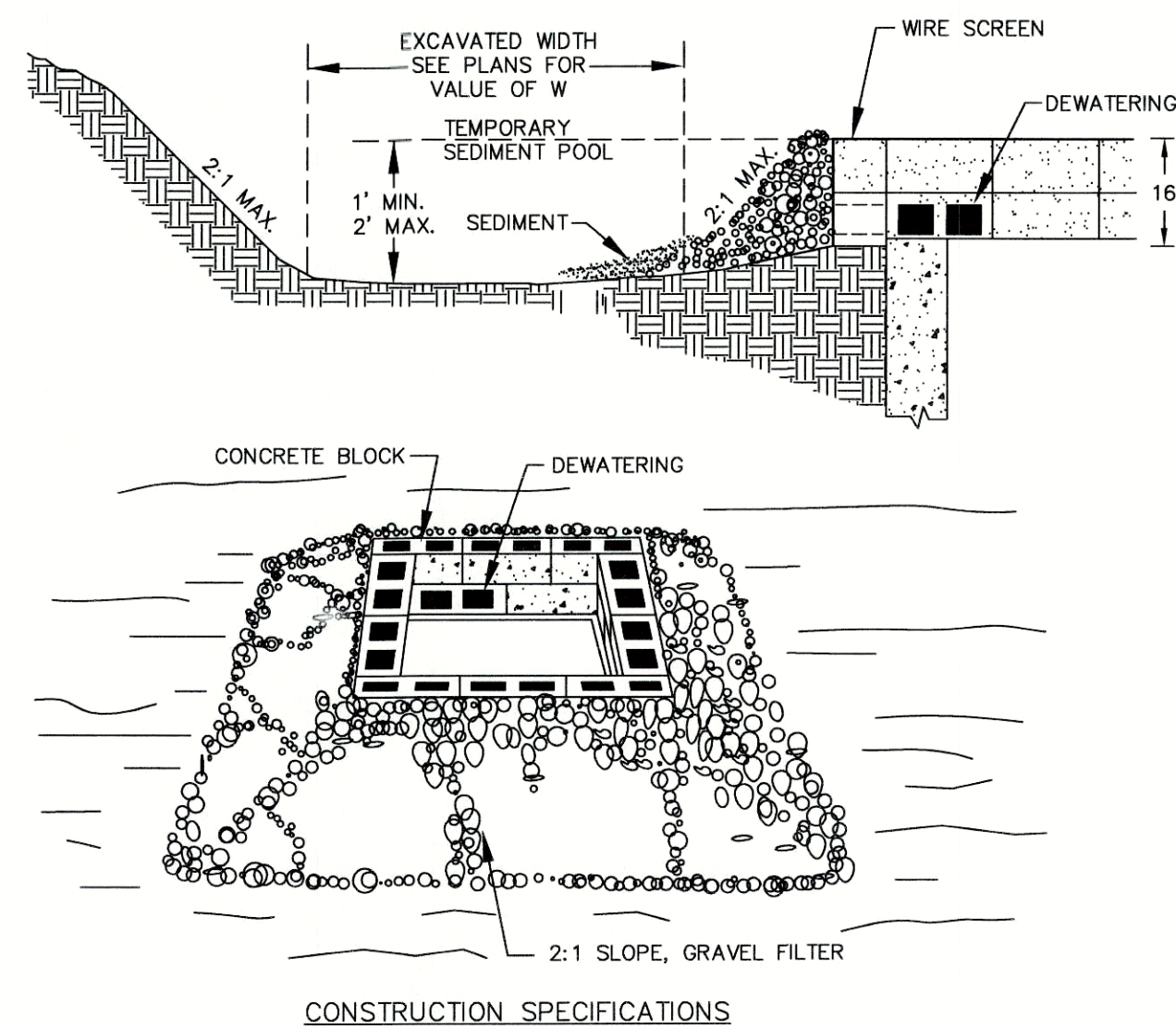


5- TEMPORARY CHECK DAM



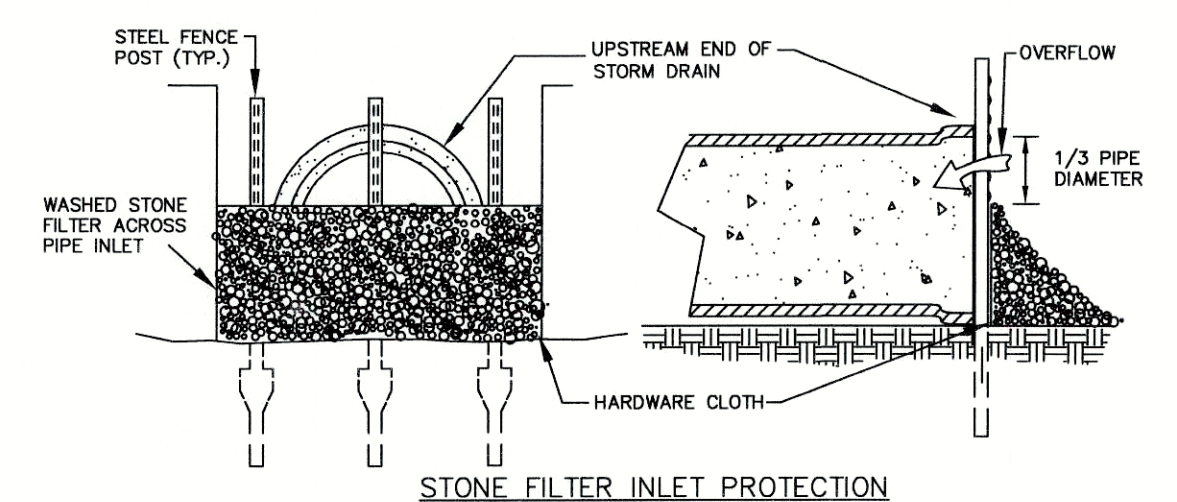
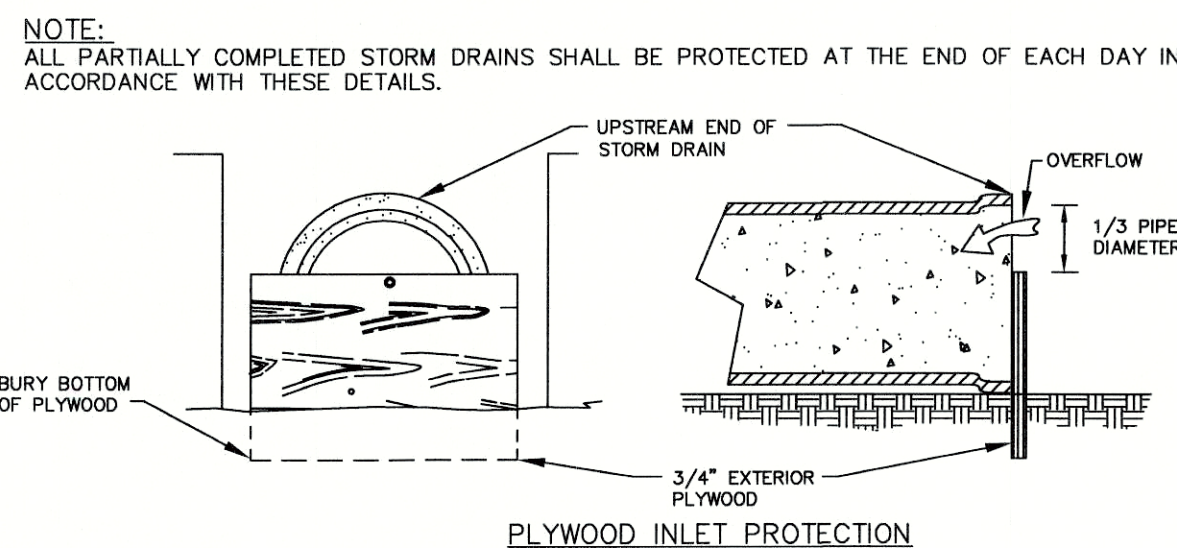
- NOTES:**
1. TOTAL DRAINAGE AREA FLOWING TO THE FENCE MAY NOT EXCEED 1 ACRE.
 2. SILT FENCES SHOULD NOT BE USED AT PIPE OUTLETS OR IN AREAS OF CONCENTRATED FLOW (CREEKS, DITCHLINES, SWALES, ETC.).
- TO INCREASE STORAGE CAPACITY AND PROLONG THE LIFE OF THE SILT FENCE, IT IS GENERALLY ADVISABLE TO DIG A SEDIMENT PIT IN FRONT OF YOUR SILT FENCE WHENEVER POSSIBLE.
- 12 GAUGE 4"x4" OR 2"x4" WELDED WIRE HOOKED ONTO PERFORMED CHANNELS ON STEEL POSTS. (NO WOOD POSTS)
- ULTRAVIOLET RESISTANT (BLACK) MIRIFABRIC OR EQUIVALENT SECURED TO WIRE W/ METAL CLIPS OR WIRE AT 8" OFF CENTER.
- MAX. SEDIMENT STORAGE LEVEL. REMOVE SEDIMENT WHEN THIS LEVEL IS REACHED OR AS DIRECTED BY CONSERVATION INSPECTOR.
- TRENCH, COVER W/ SOIL & TAMP BACKFILL. SHEET DRAINAGE (ONLY)
- NATURAL GRADE
- CARRY APPROX. 12" OF FABRIC INTO TRENCH
- CARRY 6" OF WIRE INTO TRENCH.
- STEEL POSTS @ 8' O.C. MAX.. (NO WOOD POSTS)

6- TEMPORARY SILT FENCE



- CONSTRUCTION SPECIFICATIONS**
- 1.) LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE. ON ITS SIDE IN THE BOTTOM ROW TO ALLOW POOL DRAINAGE. THE FOUNDATION SHOULD BE EXCAVATED AT LEAST 2 INCHES BELOW THE CREST OF THE STORM DRAIN. PLACE THE BOTTOM ROW OF BLOCKS AGAINST THE EDGE OF THE STORM DRAIN FOR LATERAL SUPPORT AND TO AVOID WASHOUTS WHEN OVERFLOW OCCURS. IF NEEDED, GIVE LATERAL SUPPORT TO SUBSEQUENT ROWS BY PLACING 2 X 4 WOOD STUDS THROUGH BLOCK OPENINGS.
 - 2.) CAREFULLY FIT HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS OVER ALL BLOCK OPENINGS TO HOLD GRAVEL IN PLACE.
 - 3.) USE CLEAN RAP, 3/4- TO 1 1/2-INCH IN DIAMETER, PLACED 2 INCHES BELOW THE TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER AND SMOOTH IT TO AN EVEN GRADE. DOT #57 WASHED STONE IS RECOMMENDED.

7- BLOCK AND GRAVEL DROP INLET PROTECTION

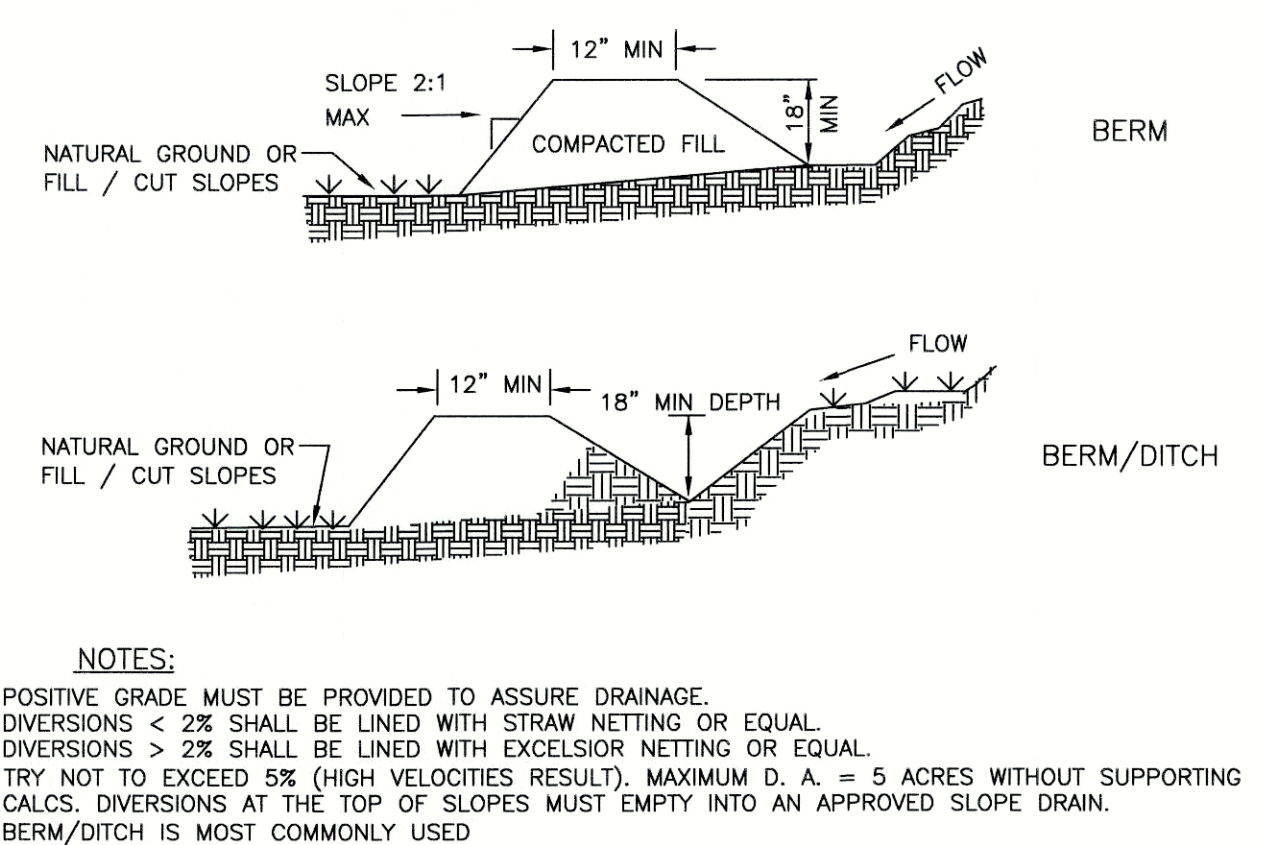


8- TEMPORARY IN TRENCH PIPE PROTECTION

TO BE USED IN TRENCHES WHEN PIPE INSTALLATION IS INTERRUPTED BY RAINFALL

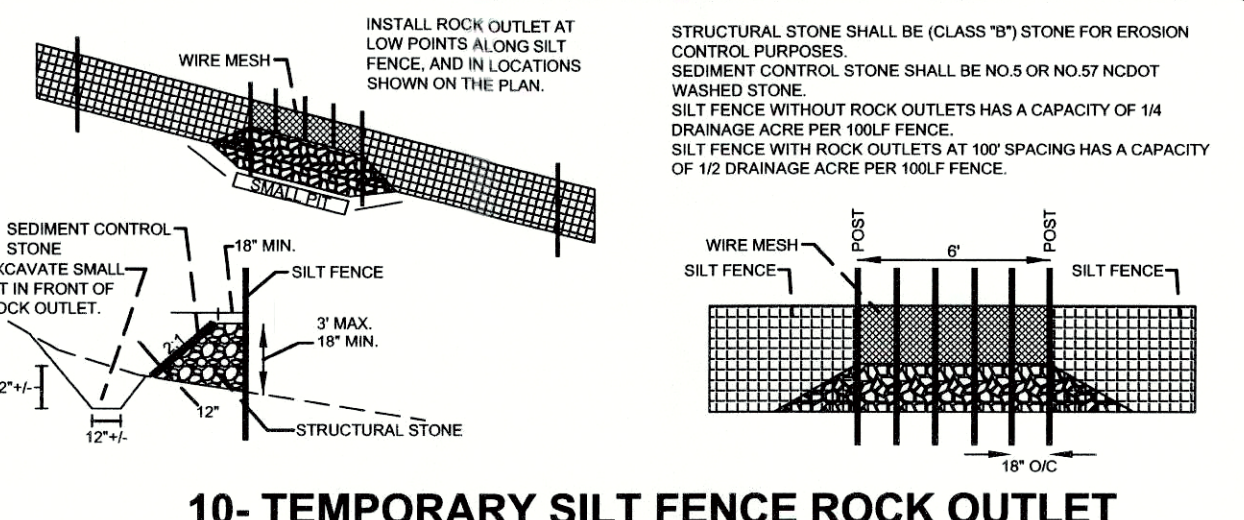
- SUFFICIENT TO DIRECT ALL SEDIMENT-LADEN STORMWATER INTO A SEDIMENT CONTROL DEVICE. MUST BE INSTALLED PRIOR TO CLEARING AND GRUBBING OF THE AREA (OR IN CONJUNCTION WITH THIS OPERATION IF SEDIMENT CONTROLS AND DIVERSIONS ARE INSTALLED AS EACH CRITICAL POINT IS REACHED).

- A- DIVERSIONS SHOULD BE LOCATED TO MINIMIZE DAMAGES BY CONSTRUCTION OPERATIONS. B- DIVERSIONS SHOULD BE SEEDED IMMEDIATELY IF THEY ARE TO REMAIN IN PLACE OVER 30 DAYS. C- CHECK DEVICE AFTER EACH RAIN, BUT ONCE A WEEK REGARDLESS REPAIR AS NECESSARY.

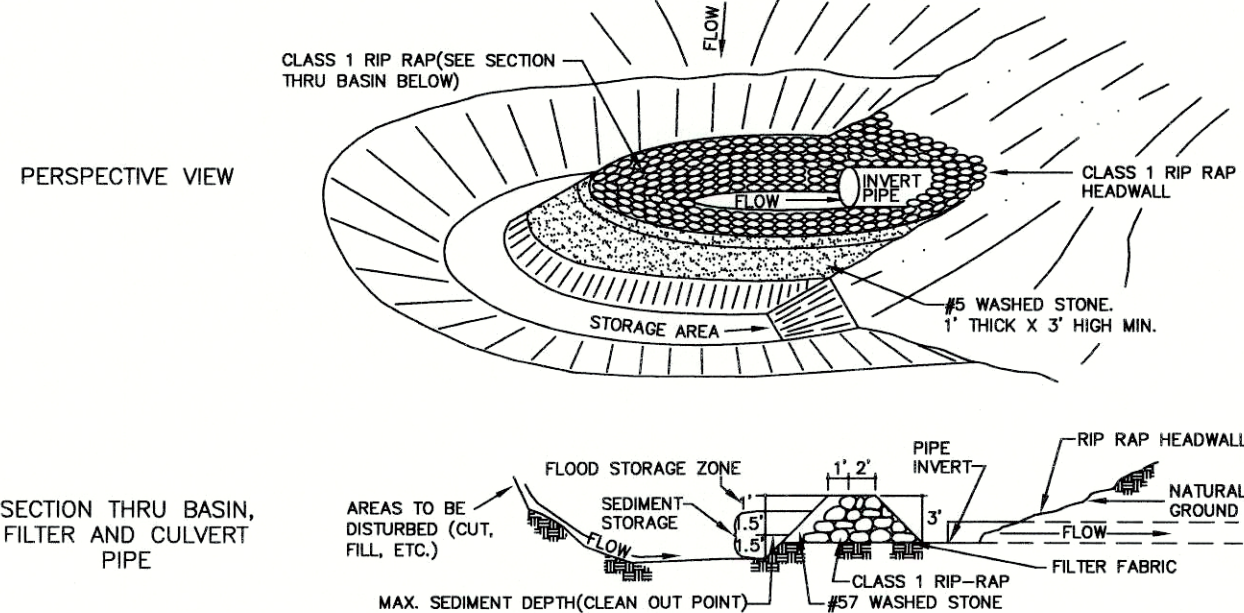


- NOTES:**
- POSITIVE GRADE MUST BE PROVIDED TO ASSURE DRAINAGE. DIVERSIONS < 2% SHALL BE LINED WITH STRAW NETTING OR EQUAL. DIVERSIONS > 2% SHALL BE LINED WITH EXCELSIOR NETTING OR EQUAL. TRY NOT TO EXCEED 5% (HIGH VELOCITIES RESULT). MAXIMUM D. A. = 5 ACRES WITHOUT SUPPORTING CALCS. DIVERSIONS AT THE TOP OF SLOPES MUST EMPTY INTO AN APPROVED SLOPE DRAIN. BERM/DITCH IS MOST COMMONLY USED.

9- TEMPORARY DIVERSION DITCH / BERM TEMPORARY CLEAN WATER DIVERSIONS

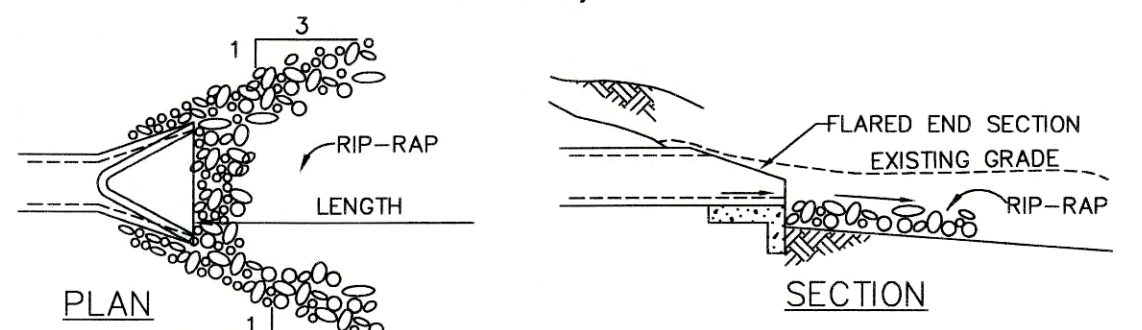


10- TEMPORARY SILT FENCE ROCK OUTLET



- MAINTENANCE:**
- INSPECT, CLEAN AND PROPERLY MAINTAIN THE INLET PROTECTION AFTER EVERY STORM UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED. TO PROVIDE SATISFACTORY BASIN EFFICIENCY, REMOVE SEDIMENT WHEN THE SEDIMENT STORAGE AREA IS HALF FULL. SPREAD ALL EXCAVATED MATERIAL EVENLY OVER THE SURROUNDING LAND AREA OR STOCKPILE AND STABILIZE IT APPROPRIATELY.

11- TEMPORARY HORSESHOE INLET PROTECTION (ARC FILTER)



- MAINTENANCE:**
- INSPECT RIPRAP OUTLET STRUCTURES AFTER HEAVY RAINS TO SEE IF ANY EROSION AROUND OR BELOW THE RIPRAP HAS TAKEN PLACE OR IF STONES HAVE BEEN DISLODGED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.

12- RIPRAP @ FES

Shoulders, Side Ditches, Slopes (Max 3:1)

DATE	TYPE	PLANTING RATE
Aug 15 - Nov 01	Tall Fescue	300 lbs/acre
Nov 01 - Mar 01	Tall Fescue	300 lbs/acre
	and Abruzzi Rye	25 lbs/acre
Mar 01 - Apr 15	Tall Fescue	300 lbs/acre
Apr 15 - Jun 30	Hulled Common Bermudagrass	25 lbs/acre
Jul 01 - Aug 15	Tall Fescue	120 lbs/acre
	and ***Browntop Millet	35 lbs/acre
	or ***Sorghum-Sudan Hybrids	30 lbs/acre
Slopes (3:1 to 2:1)		
Mar 01 - Jun 01	Seciraea Lespedeza (scarified) AND:	50 lbs/acre
(Mar 01 - Apr 15)	Add Tall Fescue	120 lbs/acre
(Mar 01 - Jun 30)	or Add Weeping Lovegrass	10 lbs/acre
(Mar 01 - Jun 30)	or Add Hulled Common Bermudagrass	25 lbs/acre
Jun 01 - Sep 01	***Tall Fescue	120 lbs/acre
	and ***Browntop Millet	35 lbs/acre
	or ***Sorghum-Sudan Hybrids	30 lbs/acre
Sep 01 - Mar 01	Seciraea Lespedeza (unhulled-unscarified)	70 lbs/acre
	and Tall Fescue	120 lbs/acre
(Nov 01 - Mar 01)	Add Abruzzi Rye	25 lbs/acre

- Consult Conservation Engineer or Soil Conservation Service for additional information concerning other alternatives for vegetation of denuded areas. The above vegetation rates are those which do well under local conditions; other seeding rate combinations are possible. ***Temporary - Reseeded at optimum season for desired permanent vegetation. Do not allow temporary cover to grow over 12" in height before mowing, otherwise fescue may be shaded out.

SEEDING SCHEDULE

- 1.) CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.
- 2.) RIP THE ENTIRE AREA TO 6 INCHES DEPTH.
- 3.) REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
- 4.) APPLY AGRICULTURAL LIME, FERTILIZER, AND UNIFORMITY AND MIX WITH SOIL (SEE BELOW).
- 5.) CONTINUE TILLAGE UNTIL A WELL-PULVERIZED, FIRM REASONABLY UNIFORM SEEDBED IS PREPARED 4 TO 6
- 6.) SEED ON A FRESHLY PREPARED SEEDBED AND SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK
- 7.) MULCH IMMEDIATELY AFTER SEEDING AND
- 8.) INSPECT ALL SEEDED AREAS AND MAKE NECESSARY RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. STAND SHOULD BE OVER 60% DAMAGED, REESTABLISH ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
- 9.) CONSULT CONSERVATION INSPECTOR ON MAINTENANCE AND FERTILIZATION AFTER PERMANENT COVER IS

- * APPLY:
- AGRICULTURAL LIMESTONE - 2 TONS/ ACRES (3 TONS/ ACRE IN CLAY SOILS)
- FERTILIZER - 1,000 lbs. / ACRE -10-10-10
- SUPERPHOSPHATE- 500 lbs> / ACRE -20% ANALYSIS
- MULCH -2 TONS / ACRE (5000 LBS/AC FOR STEEP SLOPES) - SMALL GRAIN STRAW
- ANOTHER - ASPHALT EMULSION @ 300 GALS/ ACRE

SEEDBED PREPARATION

- MAINTENANCE:**
- NEW SEEDLINGS SHOULD BE INSPECTED FREQUENTLY AND MAINTENANCE PERFORMED AS NEEDED. IF RILLS AND GULLIES DEVELOP, THEY MUST BE FILLED, RE-SEED, AND MULCHED AS SOON AS POSSIBLE. DIVERSIONS MAY BE NEEDED UNTIL NEW PLANTS TAKE HOLD. DAMAGE TO VEGETATION FROM DISEASE, INSECTS, TRAFFIC, ETC., CAN OCCUR AT ANY TIME. HERBICIDES AND REGULAR MOWING MAY BE NEEDED TO CONTROL WEEDS, DUST AND SPRAYS MAY BE NEEDED TO CONTROL INSECTS. WEEK OR MORE DAMAGED SPOTS MUST BE REIMED, FERTILIZED, MULCHED, AND RESEED AS PROMPTLY AS POSSIBLE.

REVISIONS

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PROJECT ENGINEER/ARCHITECT
MH
PROJECT MANAGER
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DRAWN BY
JLK
SCALE

SEAL
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NORTH CAROLINA
ENGINEER
MATTHEW W. HASTING

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Hillsborough, NC 27278-4551
Voice: (919) 732-3683 Fax: (919) 732-6676
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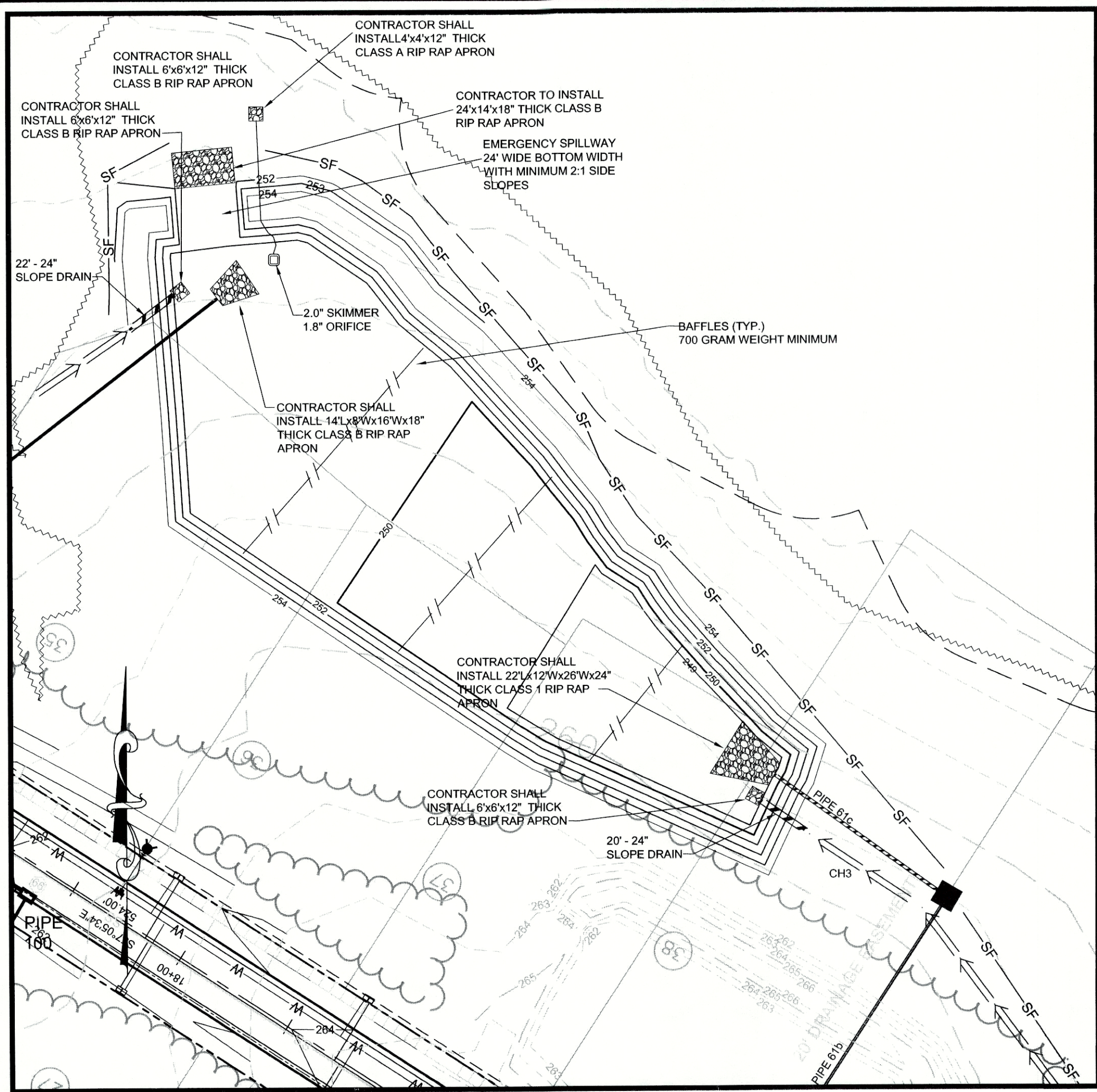
Review Drawings
Drayton Reserve Subdivision
TOWN OF ROLESVILLE
WAKE COUNTY, NORTH CAROLINA

EROSION CONTROL DETAILS

PROJECT NO.
14-0036

DRAWING NAME:
14-0036 BASE

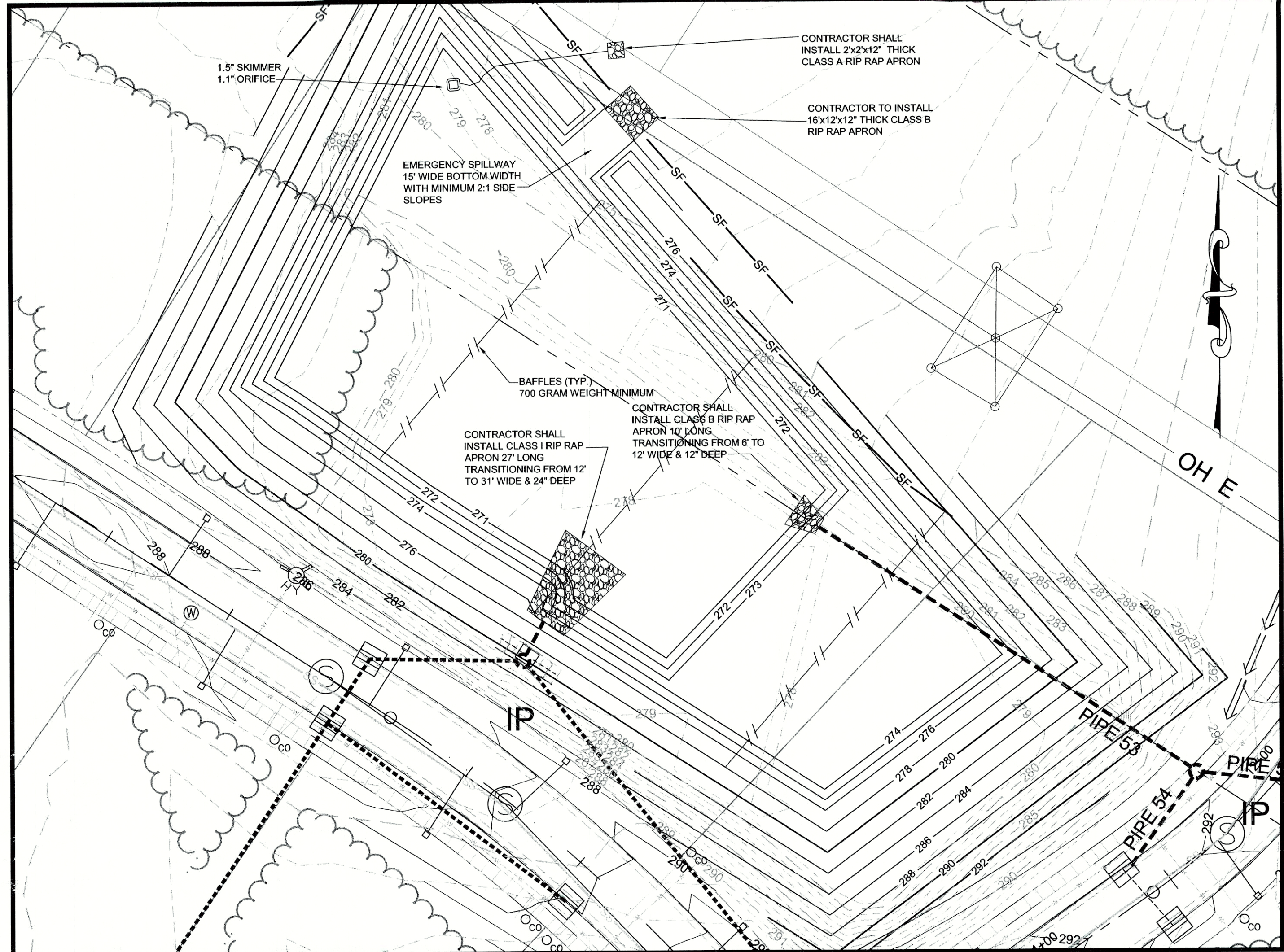
SHEET NO.
D-4



SKIMMER BASIN #1 DETAIL

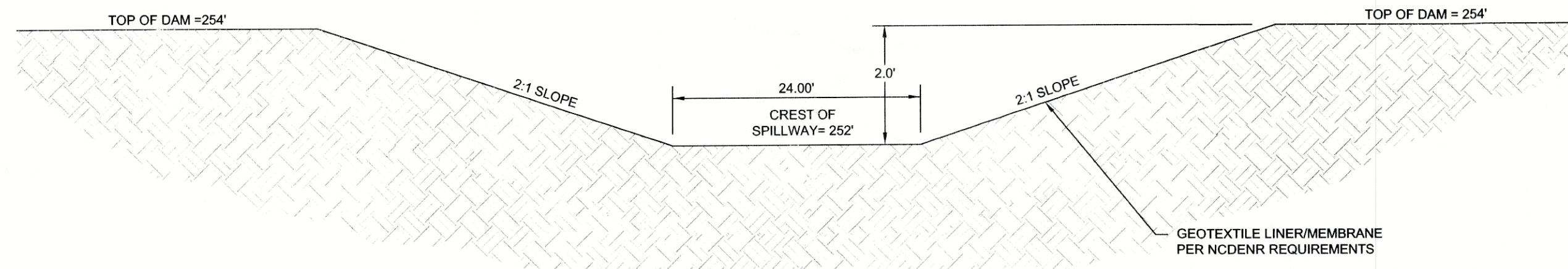
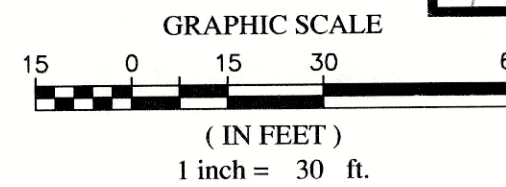
SCALE: 1" = 40'

DRAYTON RESERVE SUBDIVISION			
SKIMMER BASIN SCHEDULE			
7/9/2014			
PHASE II			
1. SKIMMER BASIN #1			
DRAINAGE AREA (acres):	26.8		
Q10: (CIA) 0.57'4.85 in/hr*26.8 acres			
Q10 (cfs):	74.09		
BASIN INFORMATION	REQUIRED	PROVIDED @ 252'	
SURFACE AREA (sf):	24079	27167	
VOLUME (cf):	8694	53403.5	
DEPTH (ft):	2	3	
WEIR WIDTH (ft):		24	
TOP BANK ELEV (ft):		254	
BOTTOM BASIN ELEV (ft):		249	
WEIR ELEV (ft):		252	
DESIGN STORM ELEV (ft):		252.49	
SKIMMER SIZE (in):		2	
ORIFACE SIZE (diameter - in):		1.8	
Baffle Spacing (Equidistant, ft):		75	
Basin Dewatering Time, days	2	3	
Basin Width		95	
Basin Length		325	
2. SKIMMER BASIN #2			
DRAINAGE AREA (acres):	32.76		
Q10: (CIA) 0.52'4.85 in/hr*32.76 acres			
Q10 (cfs):	82.62		
BASIN INFORMATION	REQUIRED	PROVIDED @ 274'	
SURFACE AREA (sf):	26852	30181	
VOLUME (cf):	2655	87135.5	
DEPTH (ft):	2	3	
WEIR WIDTH (ft):		15	
TOP BANK ELEV (ft):		276	
BOTTOM BASIN ELEV (ft):		271	
WEIR ELEV (ft):		274	
DESIGN STORM ELEV (ft):		274.48	
SKIMMER SIZE (in):		1.5	
ORIFACE SIZE (diameter - in):		1.1	
Baffle Spacing (Equidistant, ft):		50	
Basin Dewatering Time, days	2	3	
Basin Width		125	
Basin Length		275	



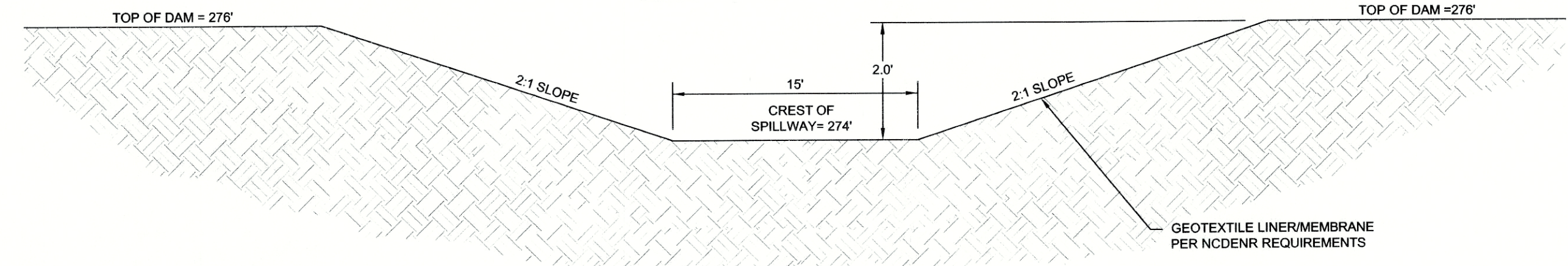
SKIMMER BASIN #2 DETAIL

SCALE: 1" = 30'



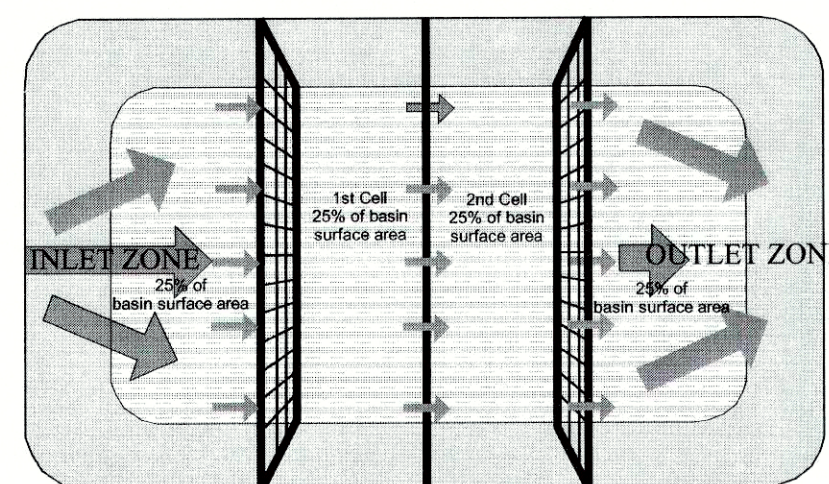
SKIMMER BASIN #1 EMERGENCY SPILLWAY

NOT TO SCALE

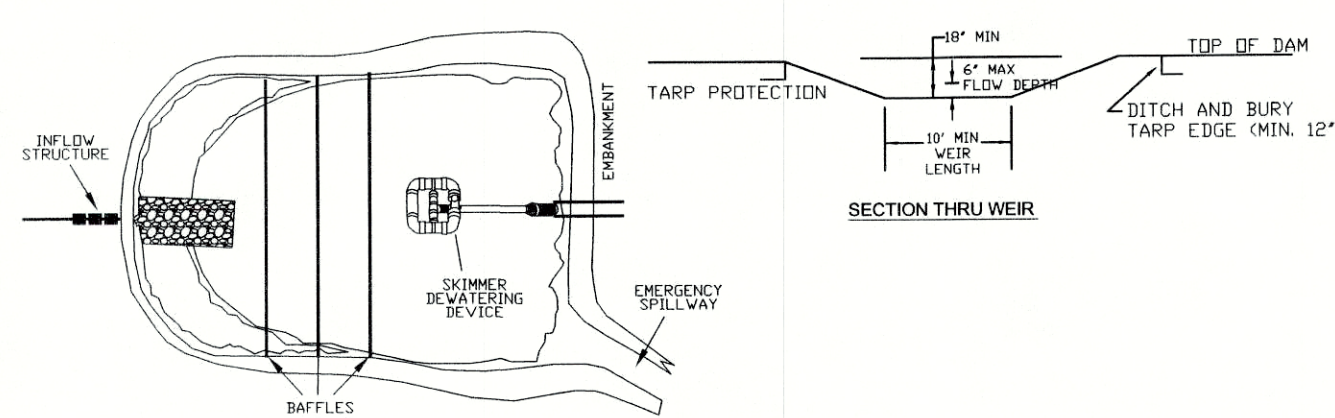


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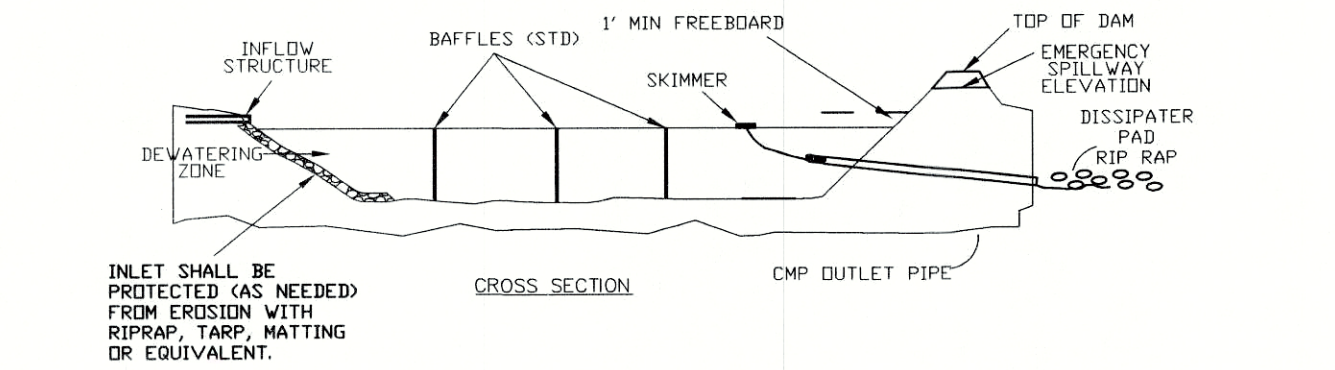
NOT TO SCALE



PLAN VIEW



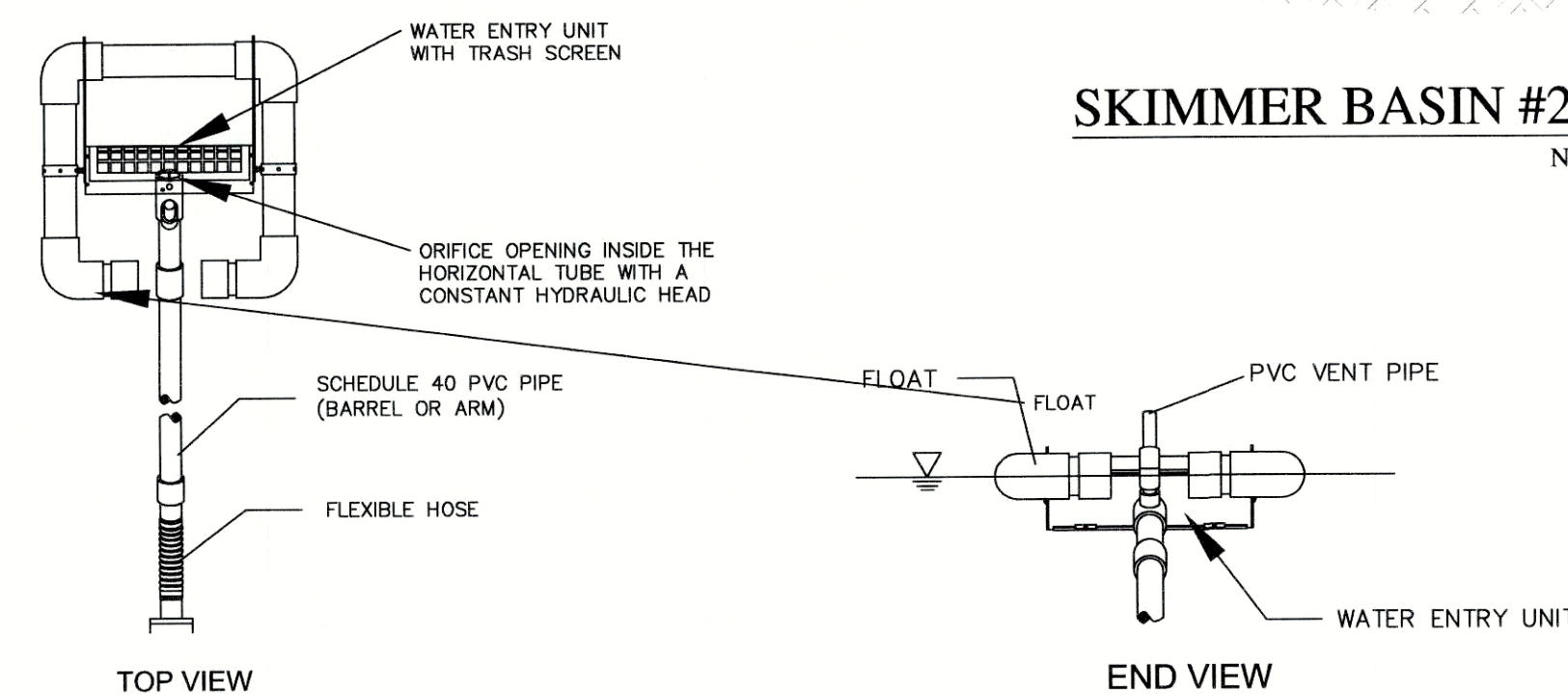
PLAN VIEW



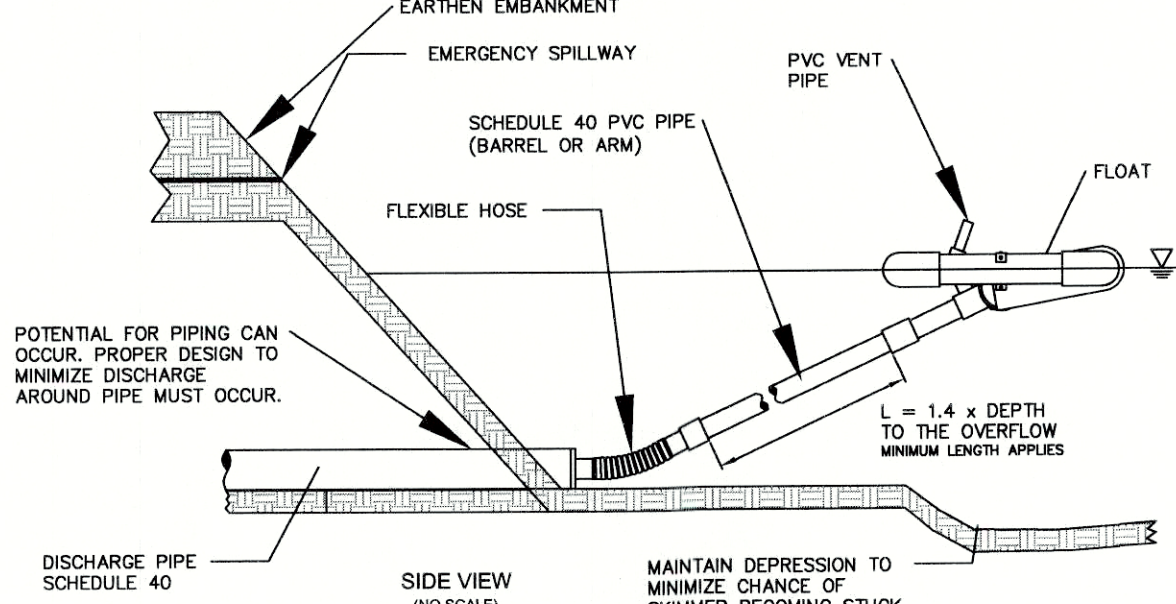
CROSS SECTION

- NOTES:
1. BASIN SHOULD BE CLEANED OUT WHEN CAPACITY REACHES AN ELEVATION REPRESENTING THAT THE BASIN IS HALF-FULL.
 2. THE TARP USED TO PROTECT THE WEIR SHALL BE THE WIDTH SPECIFIED. THE LENGTH OF THE TARP SHALL BE ACCORDING TO AVAILABLE SUPPLY. IF MULTIPLE TARPS ARE TO BE USED, THEN TARPS SHALL BE OVERLAPPED AT LEAST 12". THE UPSTREAM 12" TARP SHALL OVERLAP THE DOWNSTREAM TARP. THE TARP SHALL BE 50 MIL. HEAVY DUTY SILVER TARPULINS OR EQUIVALENT FOR U.V. RESISTANCE.
 3. PROVIDE A MINIMUM OF THREE POROUS BAFFLES TO EVENLY DISTRIBUTE FLOW ACROSS THE BASIN, REDUCING TURBULENCE.
 4. BAFFLE MATERIAL MUST BE SECURED AT THE BOTTOM AND SIDES USING STAPLES OR BY TRENCHING AS FOR A SILT FENCE.
 5. MOST OF THE SEDIMENT WILL ACCUMULATE IN THE FIRST BAY, SO THIS SHOULD BE READILY AVAILABLE FOR MAINTENANCE.
 6. DURING THE CONSTRUCTION PHASE OF THE PROJECT, PERMANENT STORMWATER RISER SHALL ONLY DEWATER FROM THE TOP OF PIPE.
 7. POND SHALL NOT BE CONVERTED FOR STORMWATER USE UNTIL APPROVED BY ENVIRONMENTAL ENGINEER.

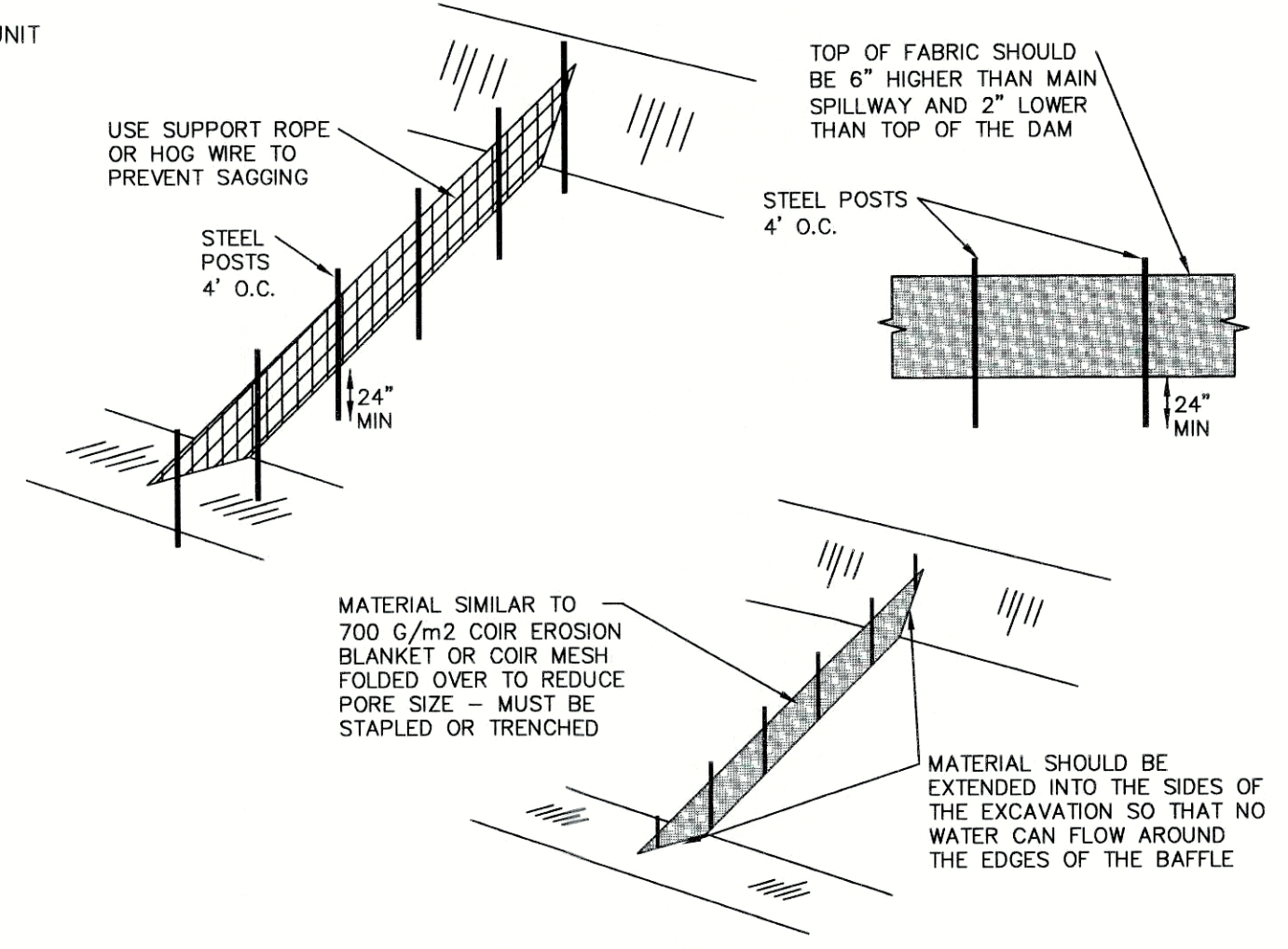
SKIMMER BASIN



- GENERAL NOTES:
1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING AROUND DISCHARGE PIPE.
 2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
 3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
 4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
 5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
 6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
 7. EIGHT SIZES OF SKIMMERS ARE AVAILABLE. REFER TO THE FLOW SHEET, CUT SHEET, AND INSTRUCTIONS ON WEB SITE FOR EACH SIZE.



SKIMMER



POROUS BAFFLES INSTALLATION

7	6	5	4	3	2	1	DATE	BY

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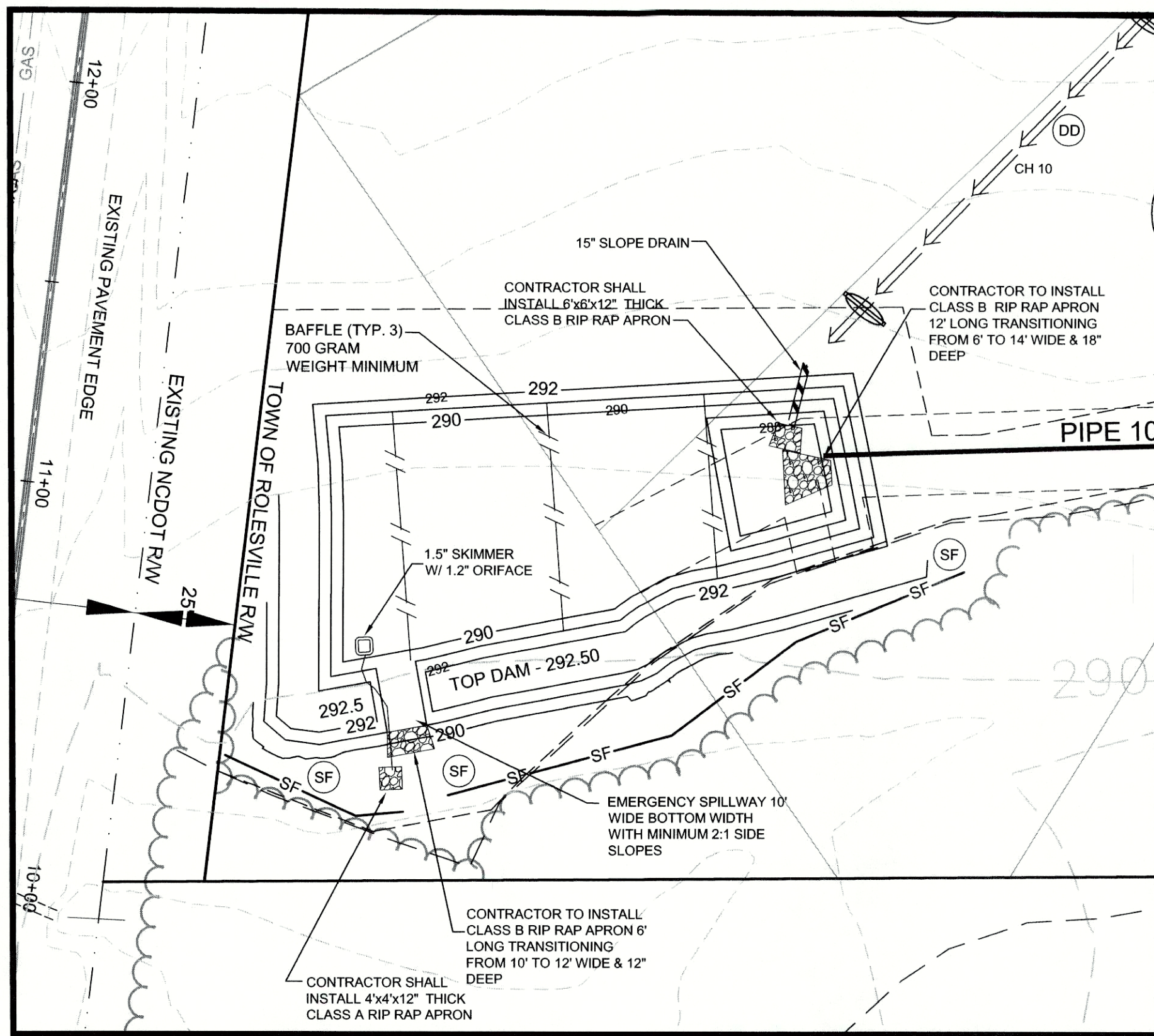
PROJECT ENGINEER/ARCHITECT
MH
PROJECT MANAGER
MH
DRAWN BY
JLK
SCALE



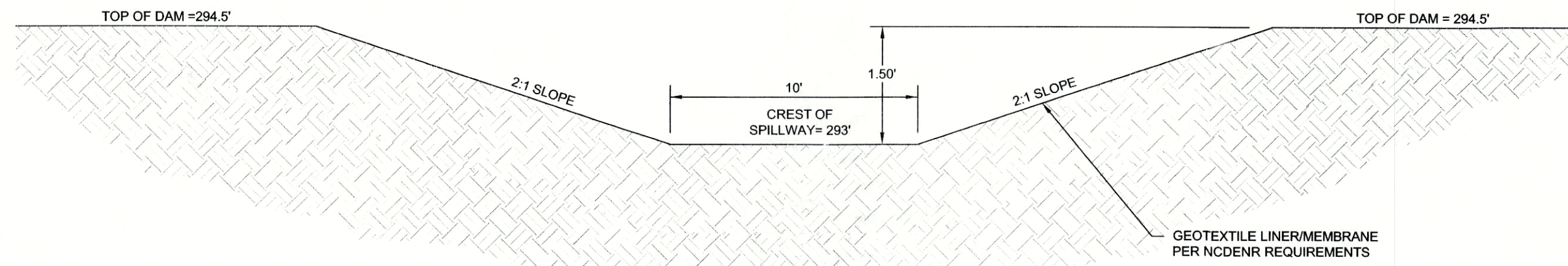
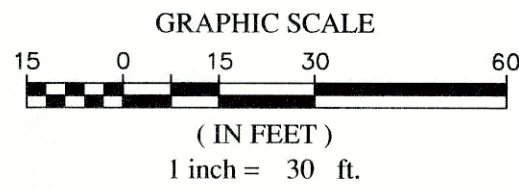
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Drayton Reserve Subdivision
TOWN OF ROLESVILLE
WAKE COUNTY, NORTH CAROLINA
EROSION CONTROL
SKIMMER BASIN DETAILS

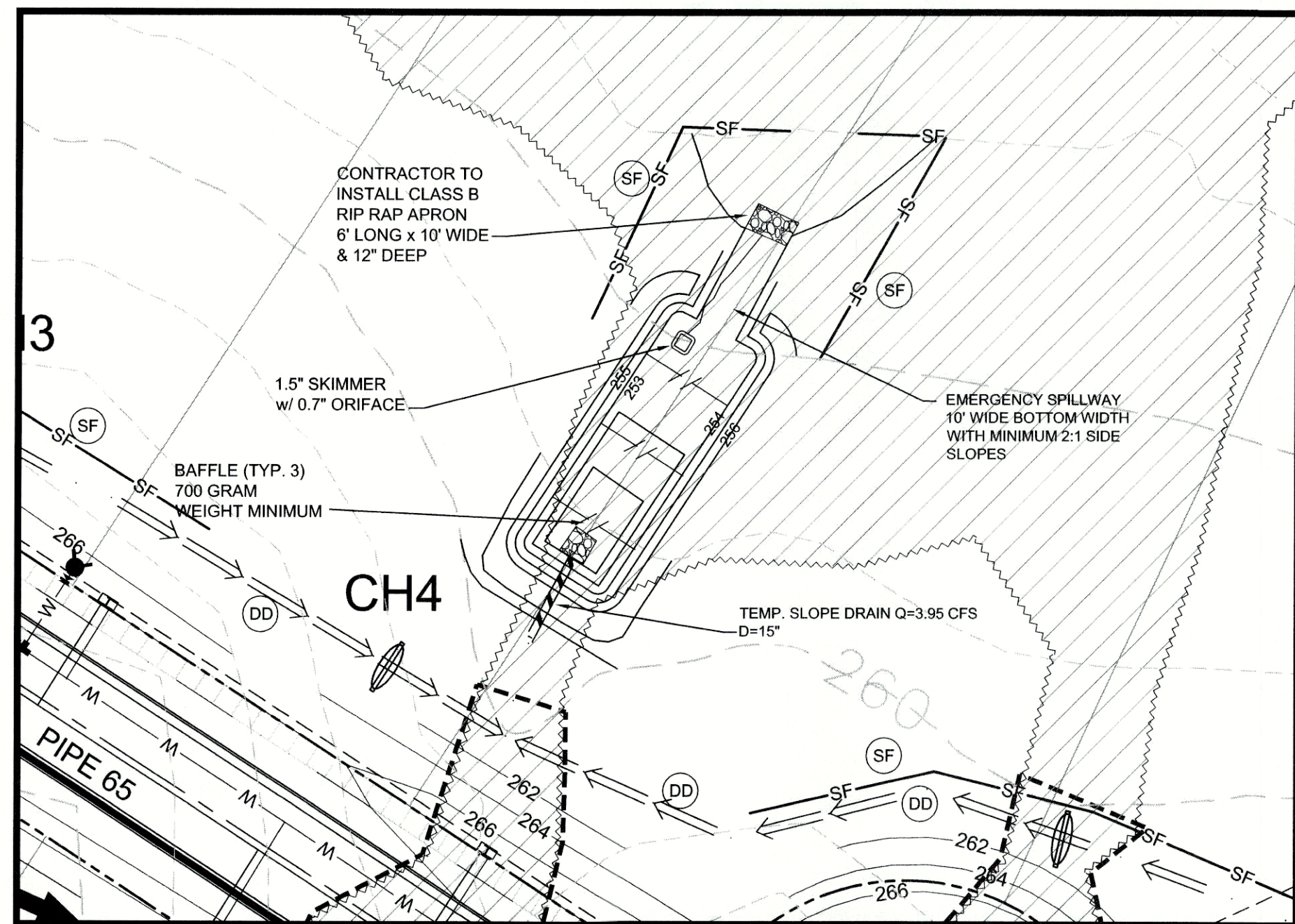
PROJECT NO.
14-0036
DRAWING NAME:
14-0036 BASE
SHEET NO.
D-5



SKIMMER BASIN #3 DETAIL
SCALE: 1" = 30'



SKIMMER BASIN #3 EMERGENCY SPILLWAY
NOT TO SCALE

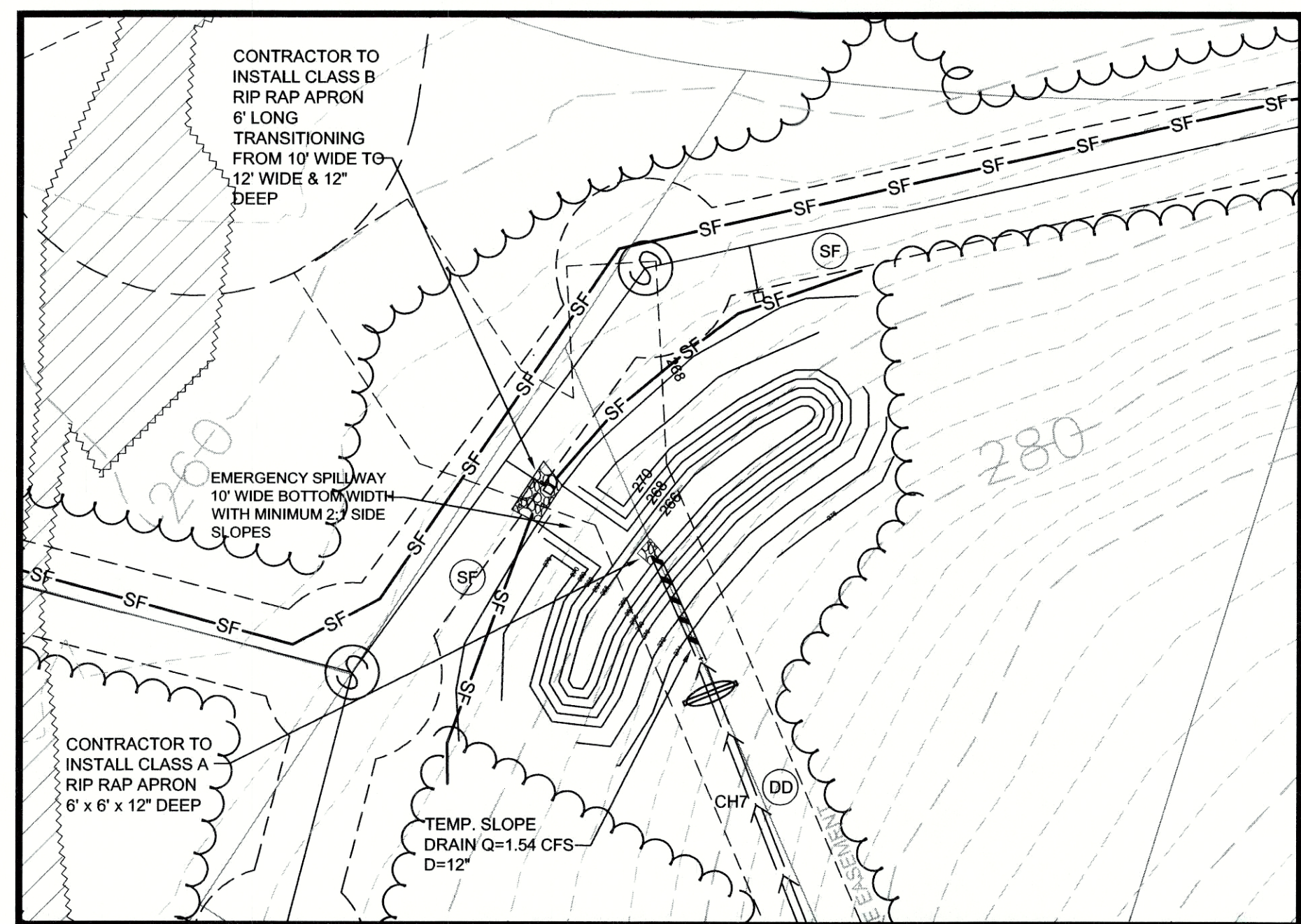


SKIMMER BASIN #4 DETAIL
SCALE: 1" = 30'

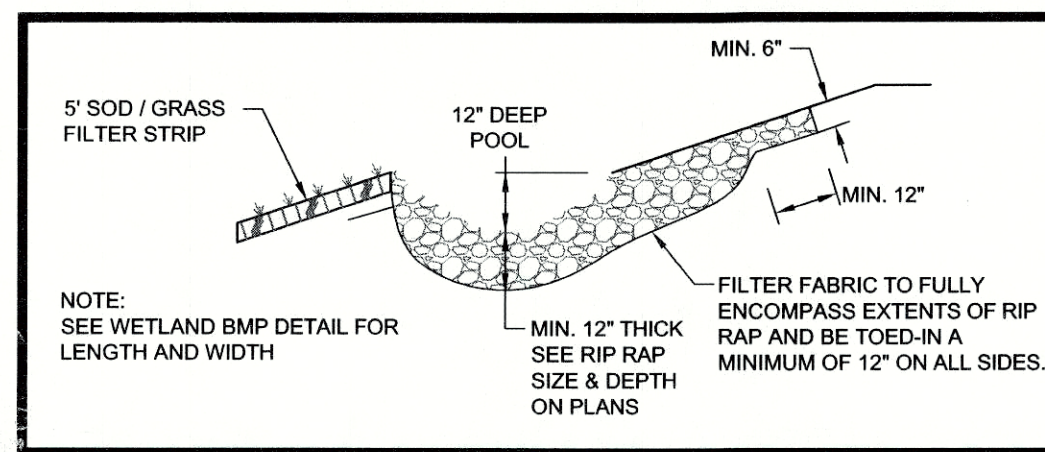
DRAYTON RESERVE SUBDIVISION			
SKIMMER BASIN SCHEDULE			
7/9/2014			
PHASE II			
3. SKIMMER BASIN #3			
DRAINAGE AREA (acres):	5.78		
Q10: (CIA) 0.57*5.75 in/hr*5.78 acres			
Q10 (cfs):	18.94		
BASIN INFORMATION		REQUIRED	PROVIDED @ 293'
SURFACE AREA (sf):	6157		6975
VOLUME (cf):	3186		10568.5
DEPTH (ft):	2		3
WEIR WIDTH (ft):			10
TOP BANK ELEV (ft):			294.5
BOTTOM BASIN ELEV (ft):			290
WEIR ELEV (ft):			293
DESIGN STORM ELEV (ft):			293.3
SKIMMER SIZE (in):			1.5
ORIFACE SIZE (diameter - in):			1.2
Baffle Spacing (Equidistant, ft):			25
Basin Dewatering Time, days	2		3
Basin Width			62
Basin Length			138
4. SKIMMER BASIN #4			
DRAINAGE AREA (acres):	1.31		
Q10: (CIA) 0.5*5.75 in/hr*1.31 acres			
Q10 (cfs):	3.77		
BASIN INFORMATION		REQUIRED	PROVIDED @ 254'
SURFACE AREA (sf):	1225		1379
VOLUME (cf):	972		1434
DEPTH (ft):	2		2
WEIR WIDTH (ft):			10
TOP BANK ELEV (ft):			256
BOTTOM BASIN ELEV (ft):			252
WEIR ELEV (ft):			254
DESIGN STORM ELEV (ft):			254.34
SKIMMER SIZE (in):			1.5
ORIFACE SIZE (diameter - in):			0.7
Baffle Spacing (Equidistant, ft):			16
Basin Dewatering Time, days	2		3
Basin Width			22
Basin Length			64

PHASE II

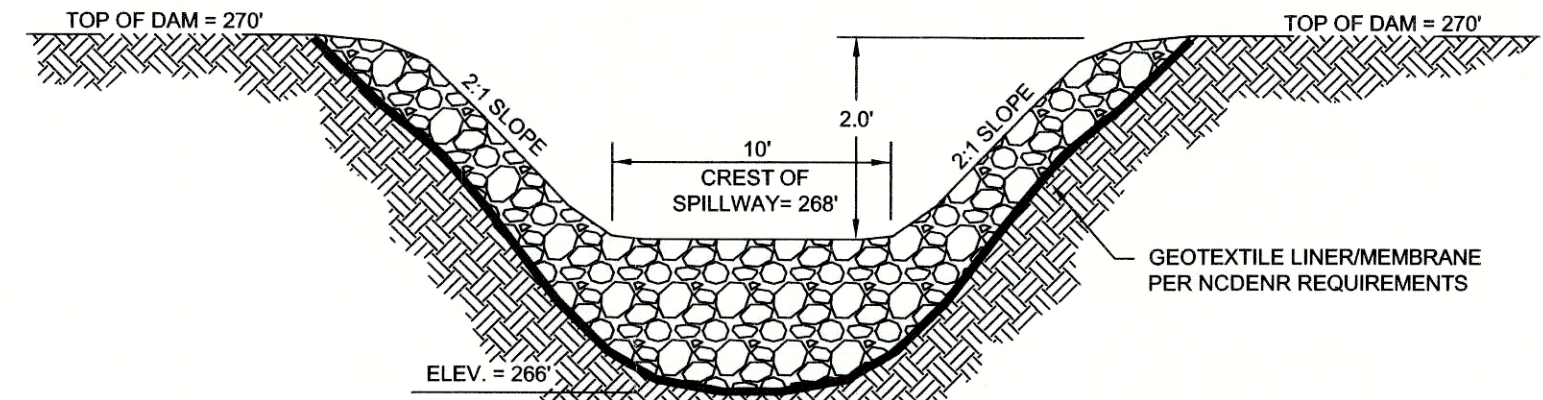
1. SEDIMENT TRAP #1			
DRAINAGE AREA (acres):	0.64		
Q10: (CIA) 0.50*7.19 in/hr*0.64 acres			
Q10 (cfs):	2.3		
BASIN INFORMATION		REQUIRED	PROVIDED @ 268'
SURFACE AREA (sf):	1001		1175
VOLUME (cf):	1548		1591
DEPTH (ft):	1.5		2
WEIR WIDTH (ft):			10
TOP BANK ELEV (ft):			270
BOTTOM TRAP ELEV (ft):			266
WEIR ELEV (ft):			268
DESIGN STORM ELEV (ft):			268



SEDIMENT TRAP #1 DETAIL
SCALE: 1" = 30'



RIP RAP PLUNGE POOL
NOT TO SCALE

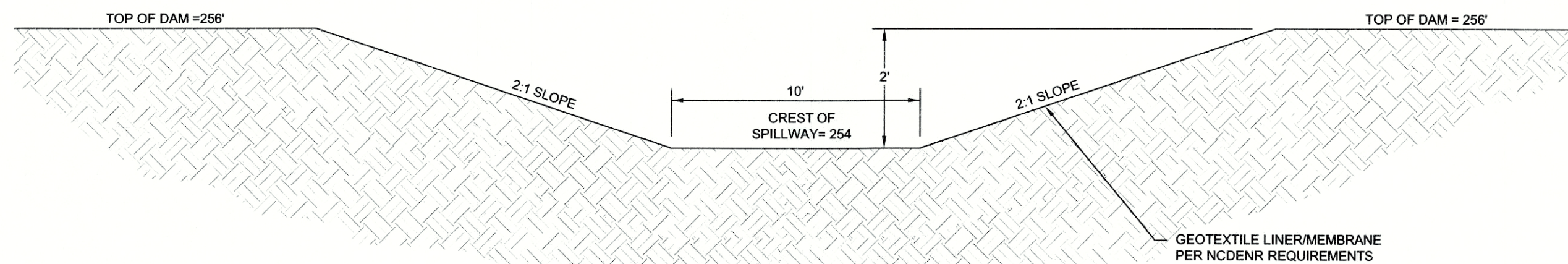


SEDIMENT TRAP #1 EMERGENCY SPILLWAY
NOT TO SCALE

NPDES Stormwater Discharge Permit for Construction Activities (NCS01)

NC DENR/Division of Energy, Mineral and Land Resources

STABILIZATION TIMEFRAMES		
(Effective Aug. 3, 2011)		
SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
Perimeter dikes, 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 3:1 or flatter	14 days	7 days for slopes greater than 50' in length.
All other areas with slopes flatter than 4:1	14 days	None, except for perimeters and HQW Zones.



SKIMMER BASIN #4 EMERGENCY SPILLWAY
NOT TO SCALE



REVISIONS	DATE	BY
7		
6		
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1		

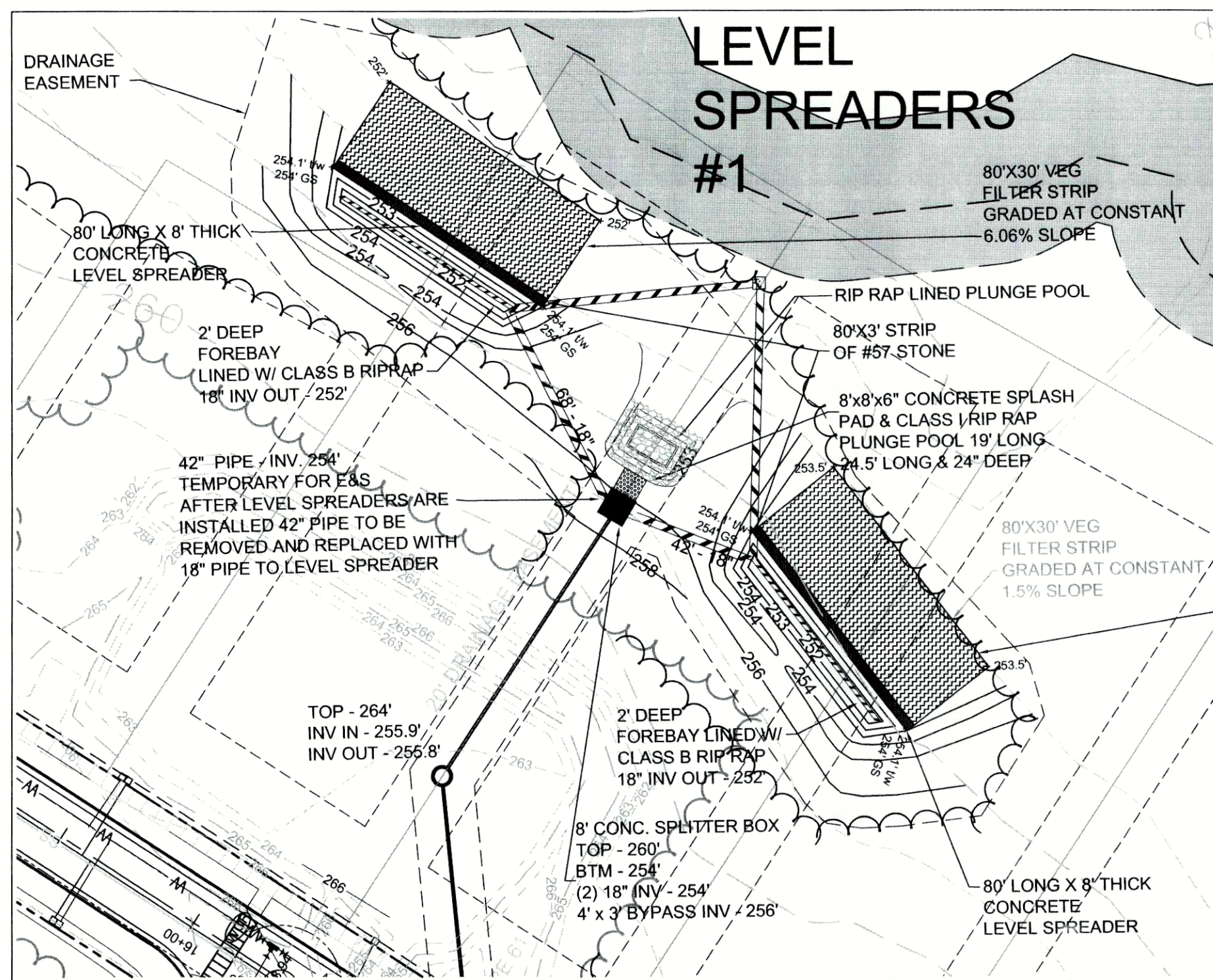
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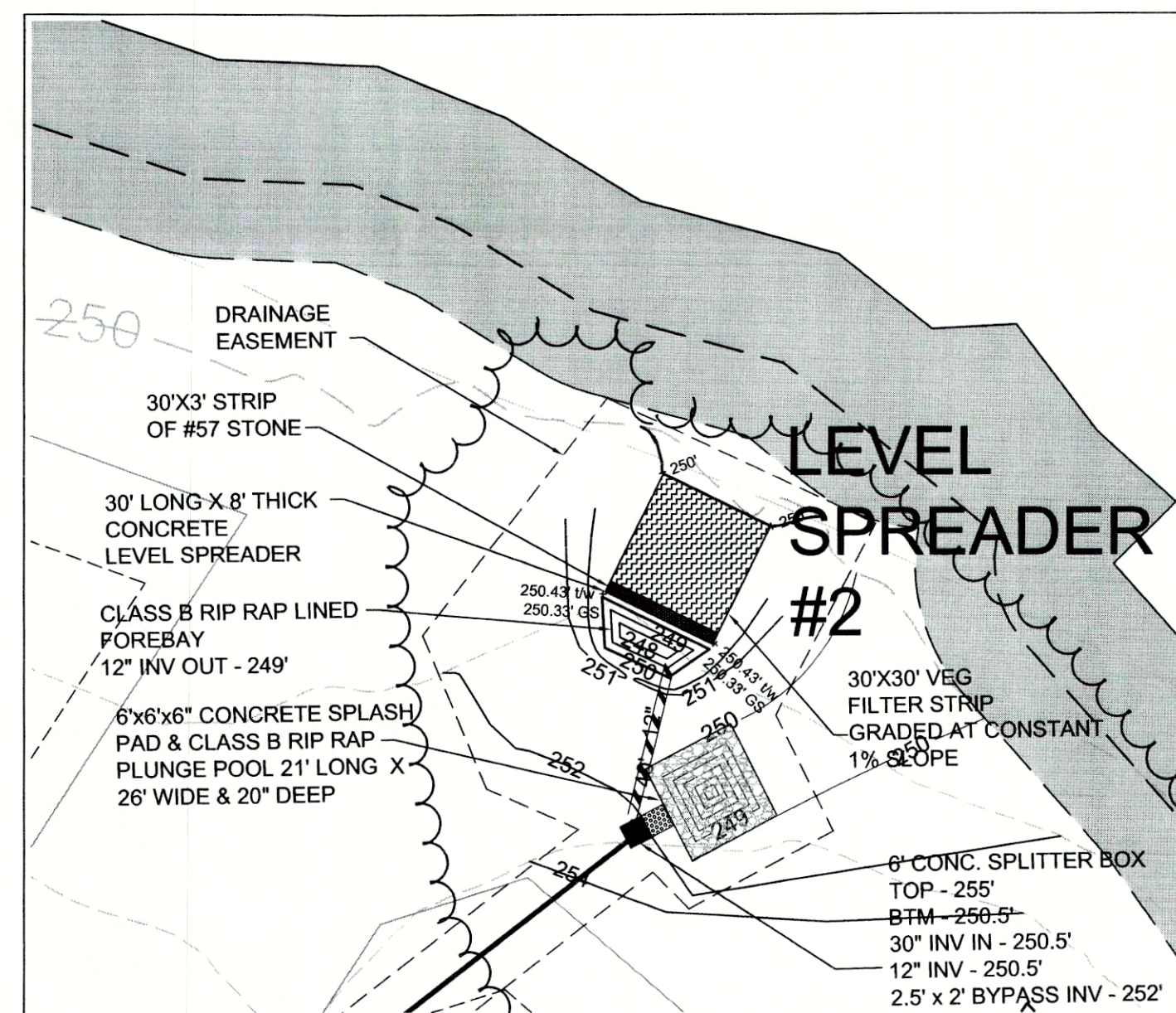
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Review Drawings
Drayton Reserve Subdivision
TOWN OF ROLESVILLE
WAKE COUNTY, NORTH CAROLINA
**EROSION CONTROL - SKIMMER BASIN
& SEDIMENT TRAP DETAILS**

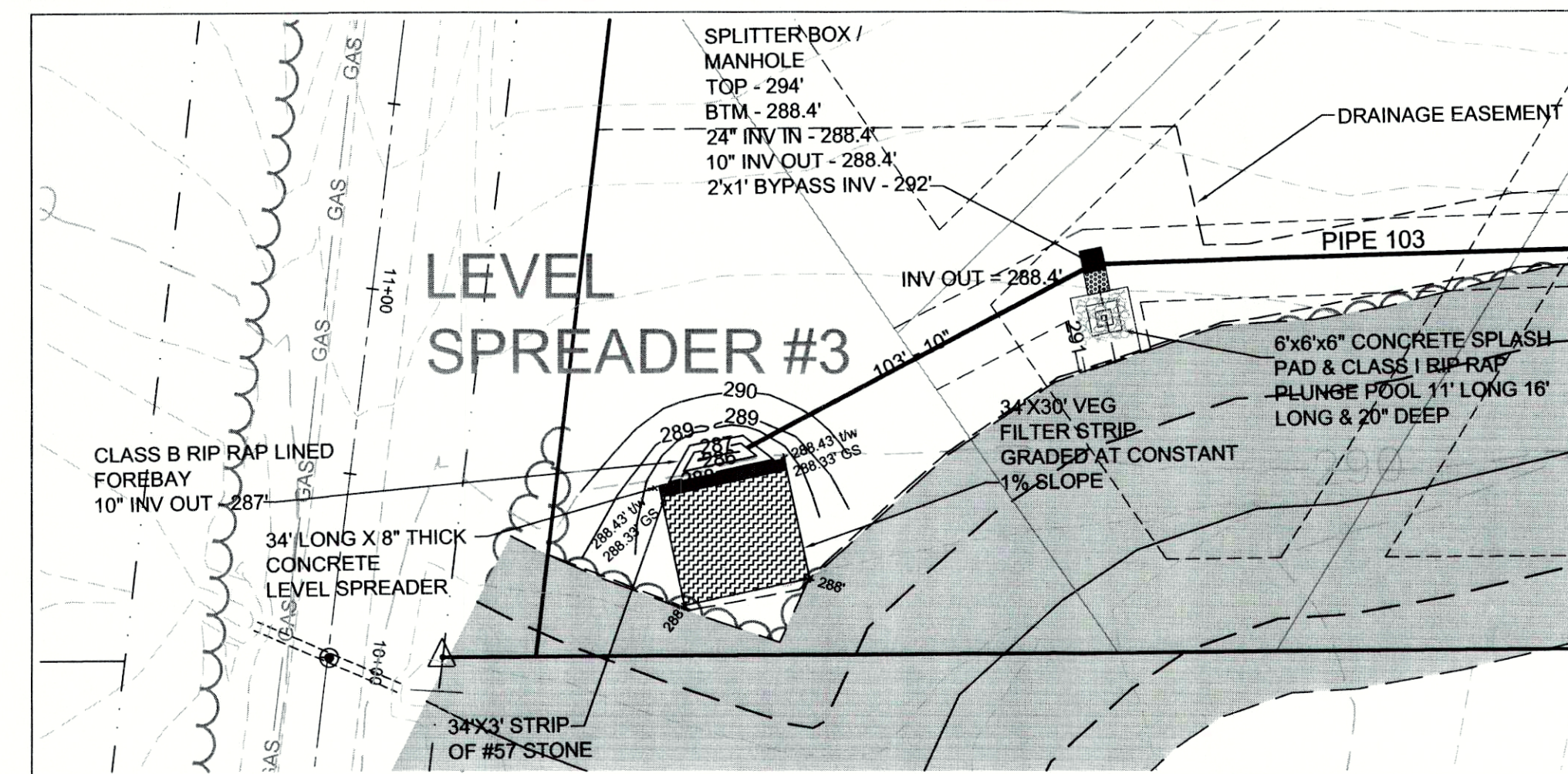
PROJECT NO.	14-0036
DRAWING NAME:	14-0036 BASE
SHEET NO.	D-6



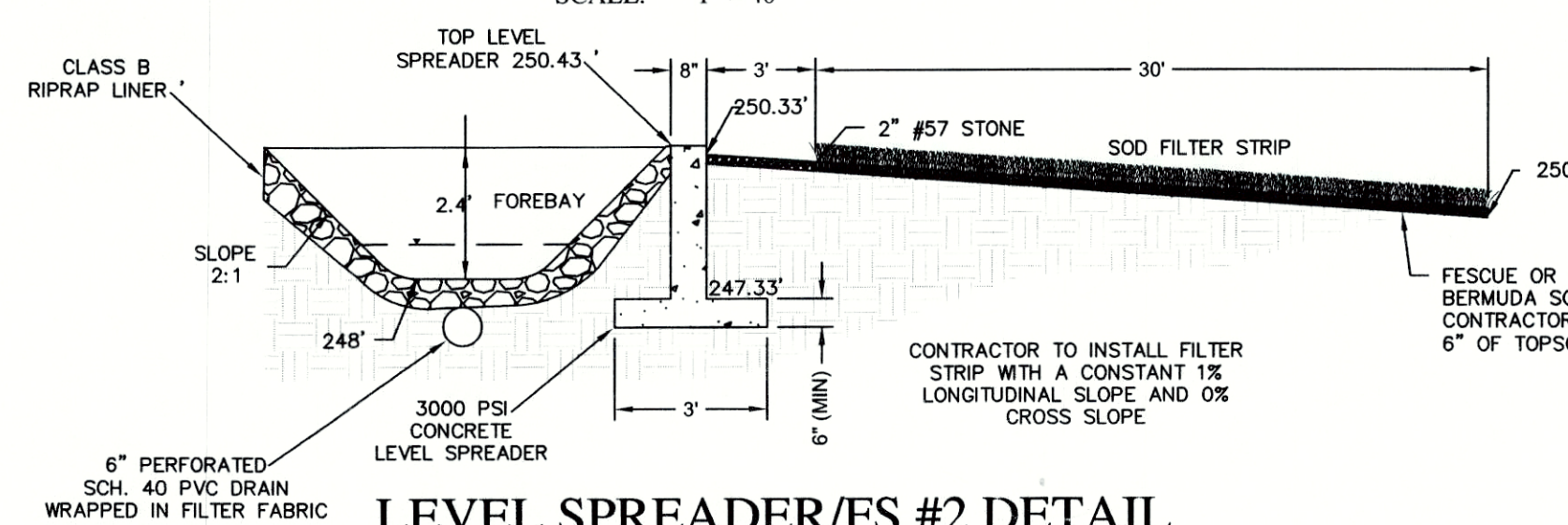
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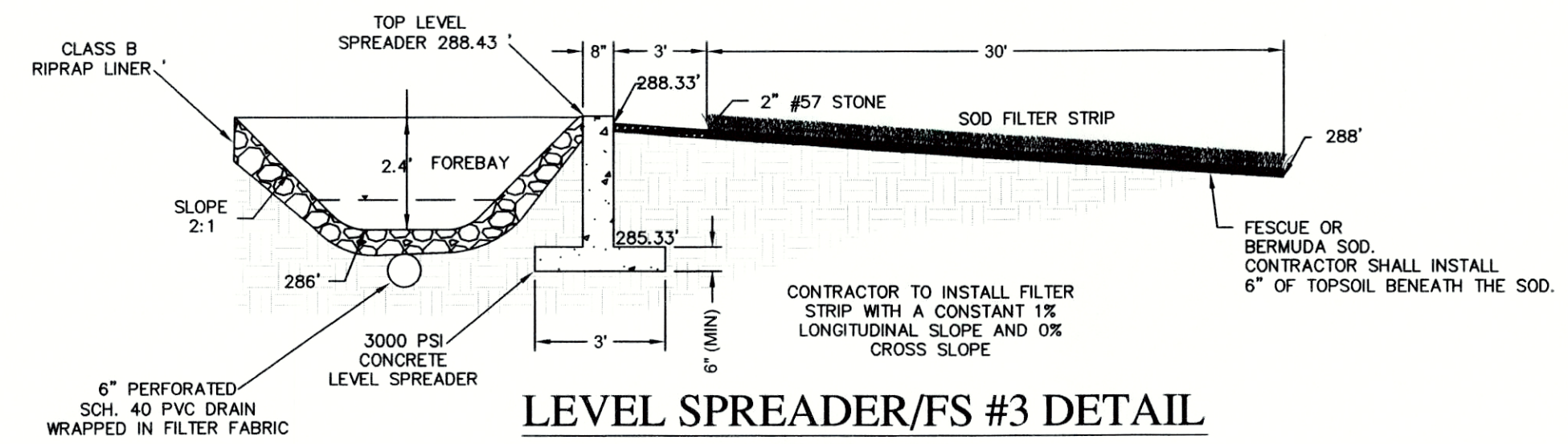
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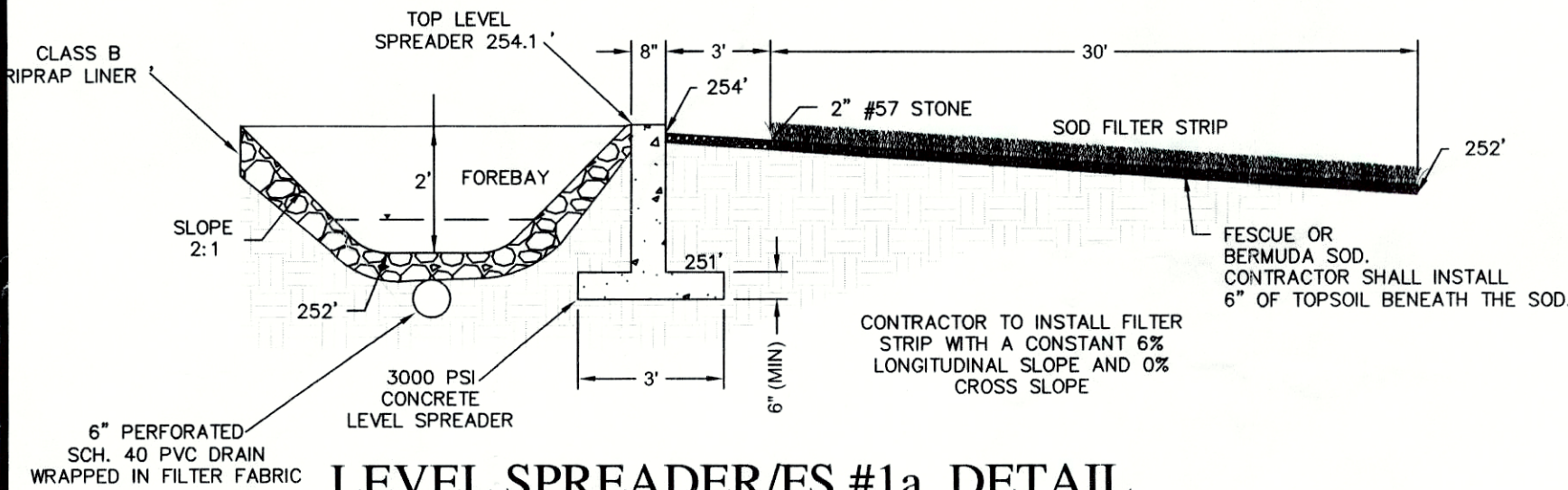
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SCALE: 1" = 40'



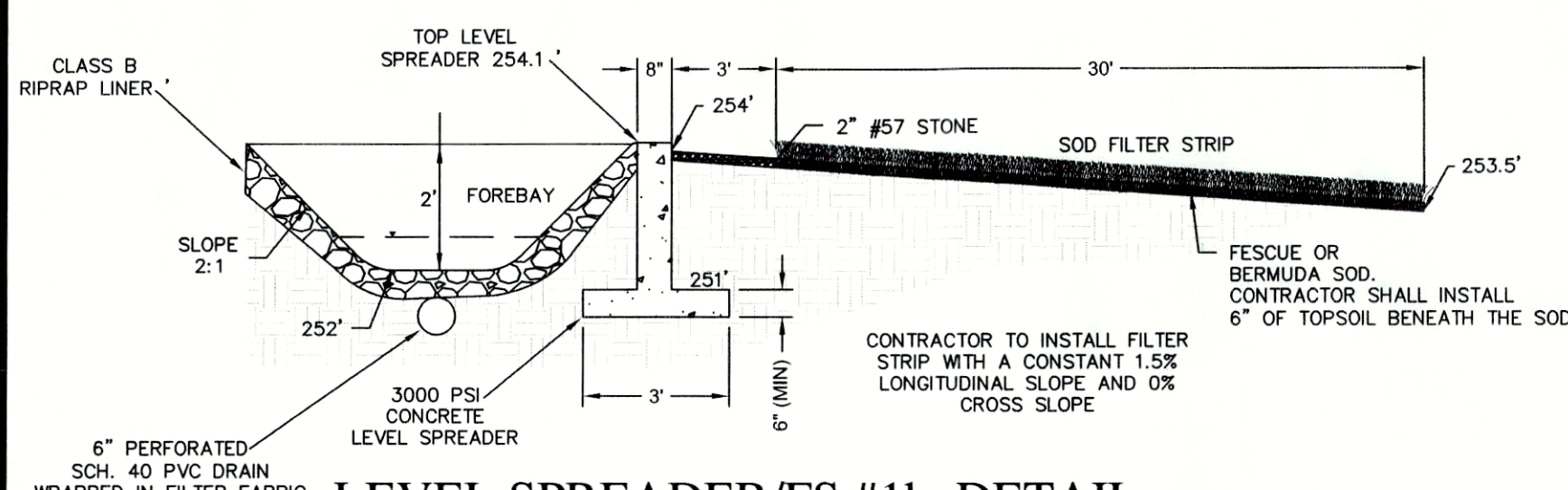
LEVEL SPREADER/FS #2 DETAIL
SCALE: NTS



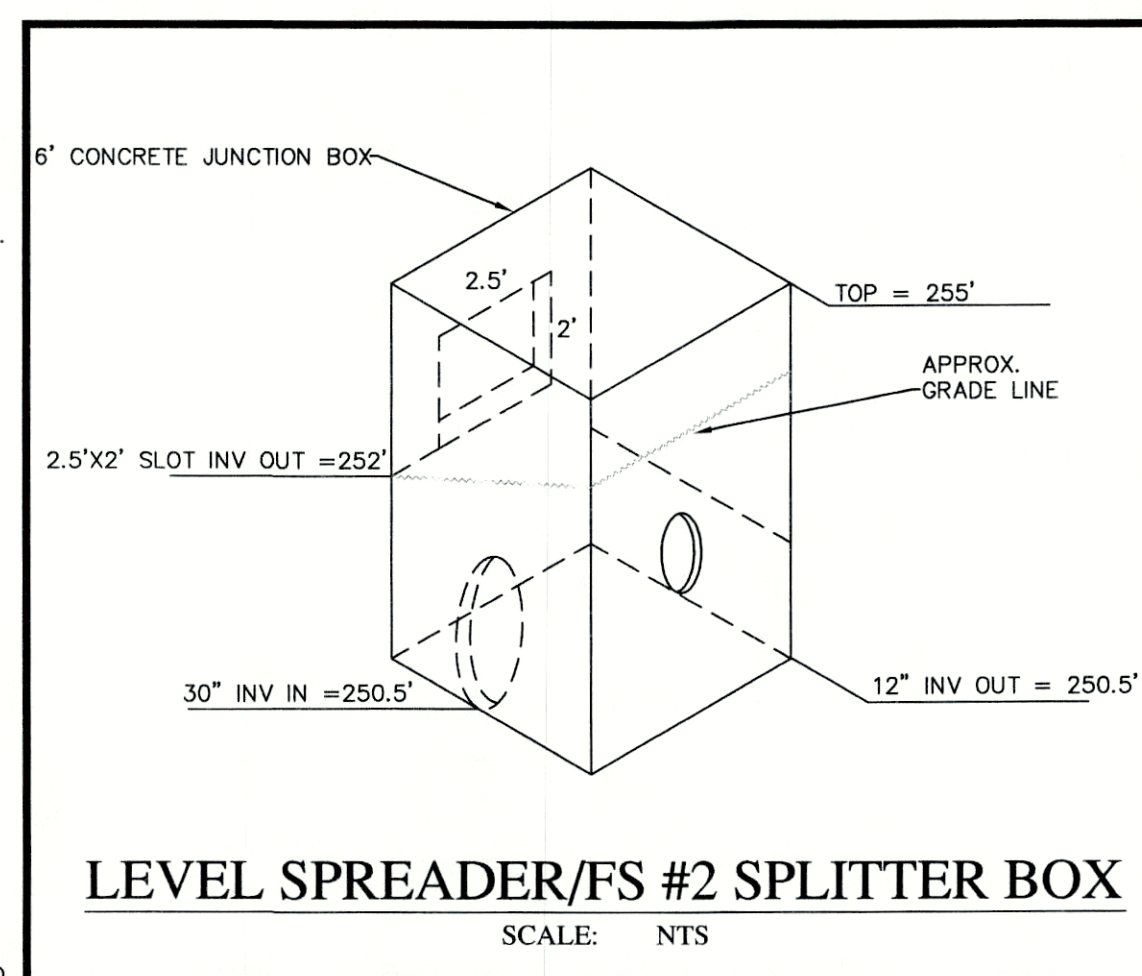
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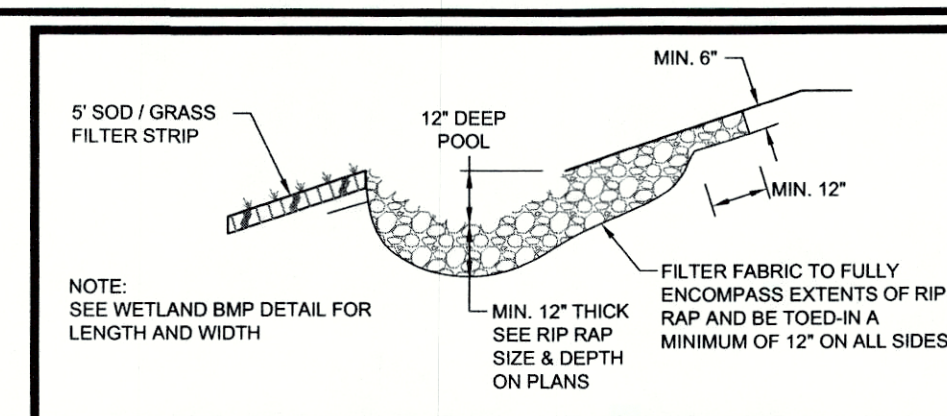
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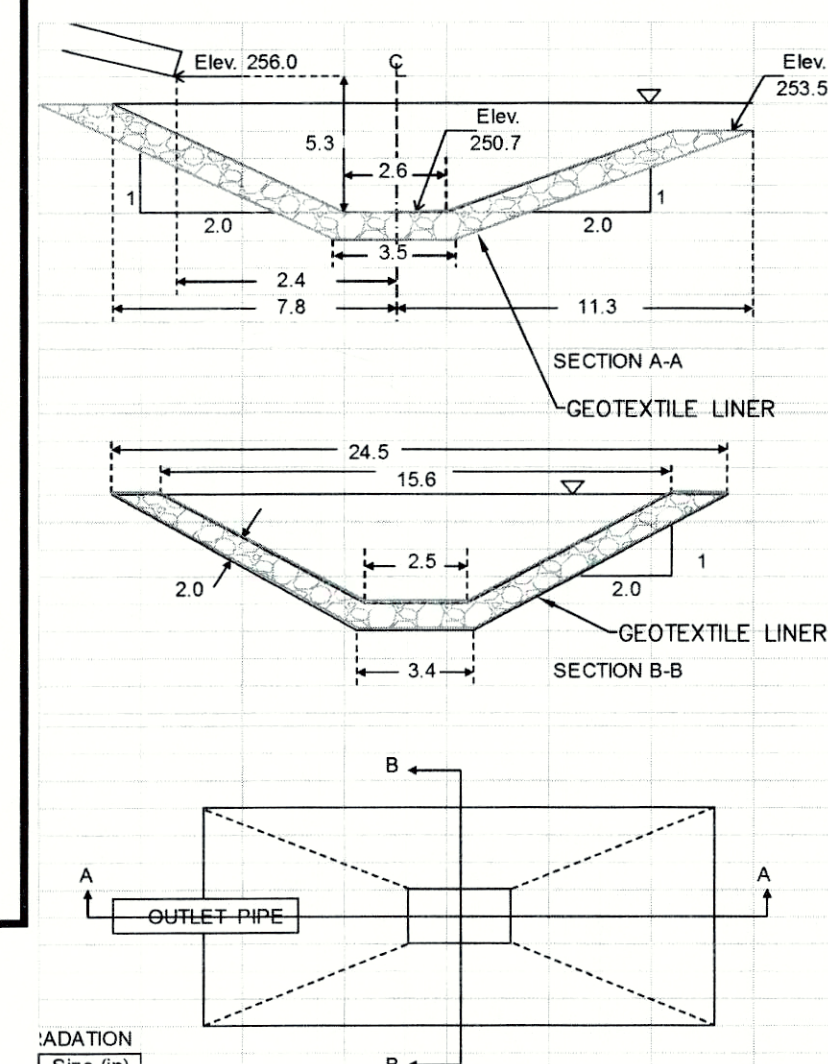
LEVEL SPREADER/FS #1b DETAIL
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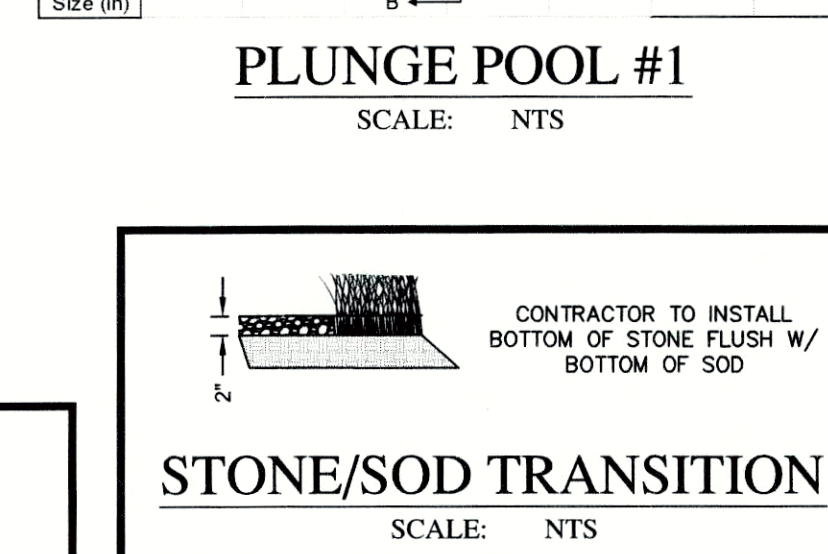
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SCALE: NTS



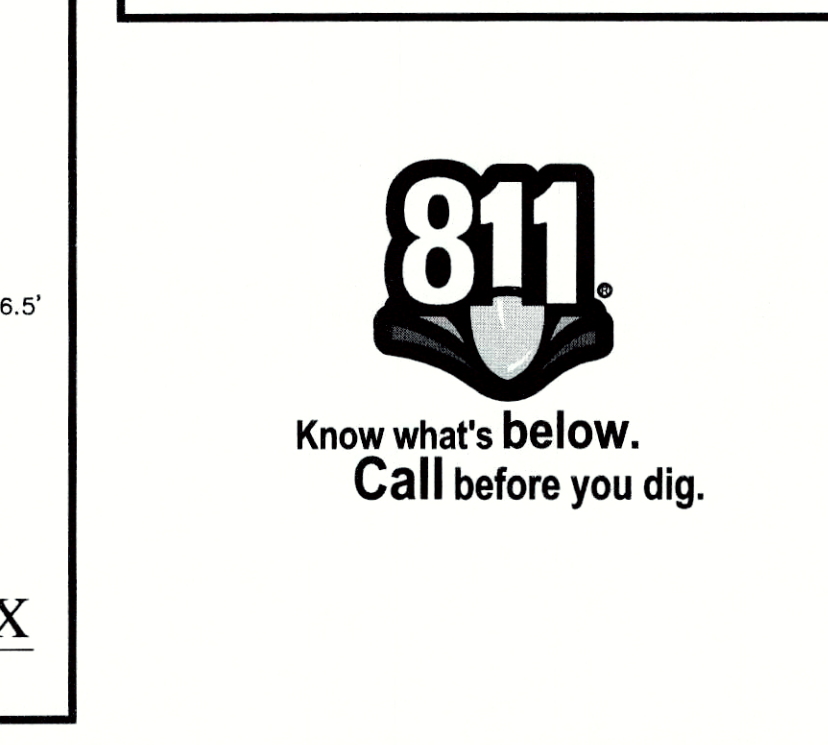
RIP RAP PLUNGE POOL
NOT TO SCALE



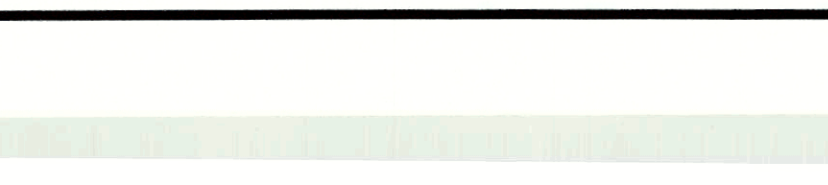
PLUNGE POOL #1
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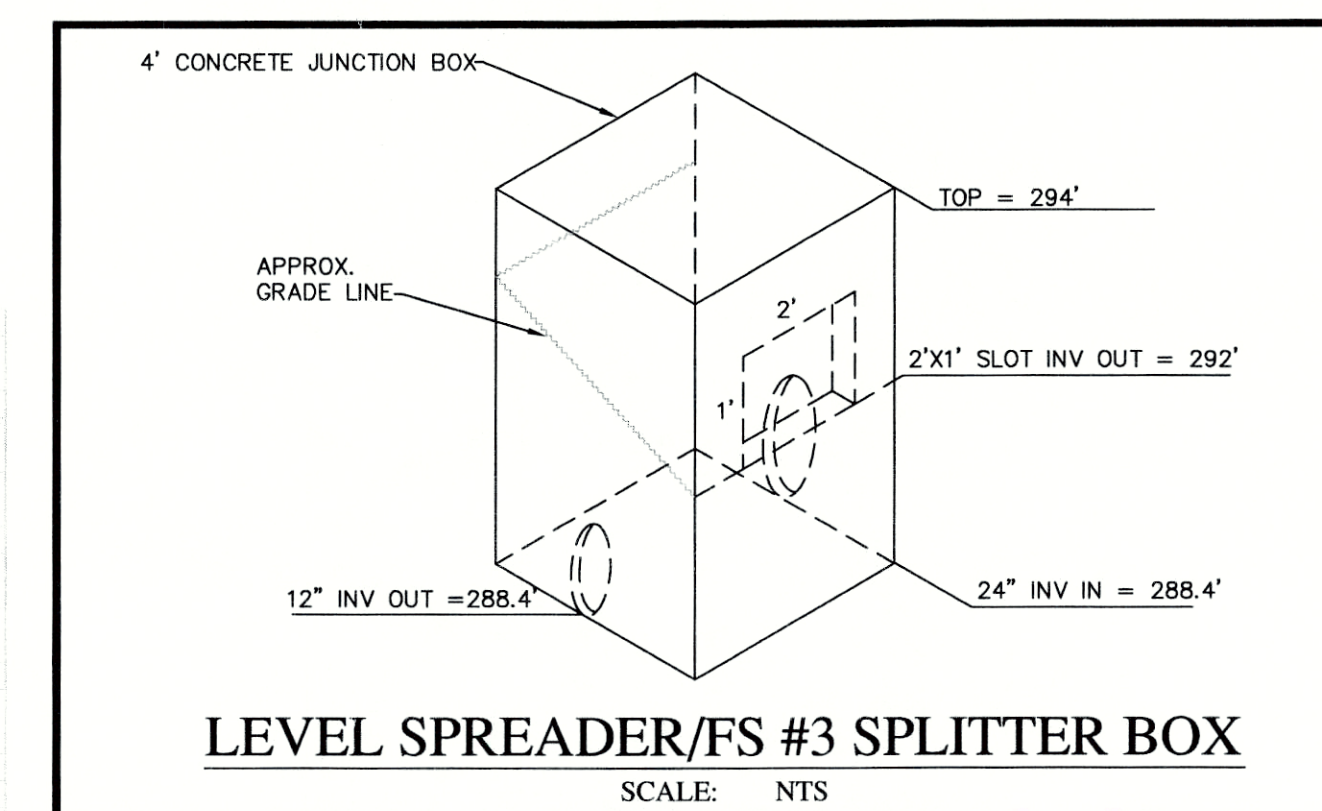
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SCALE: NTS



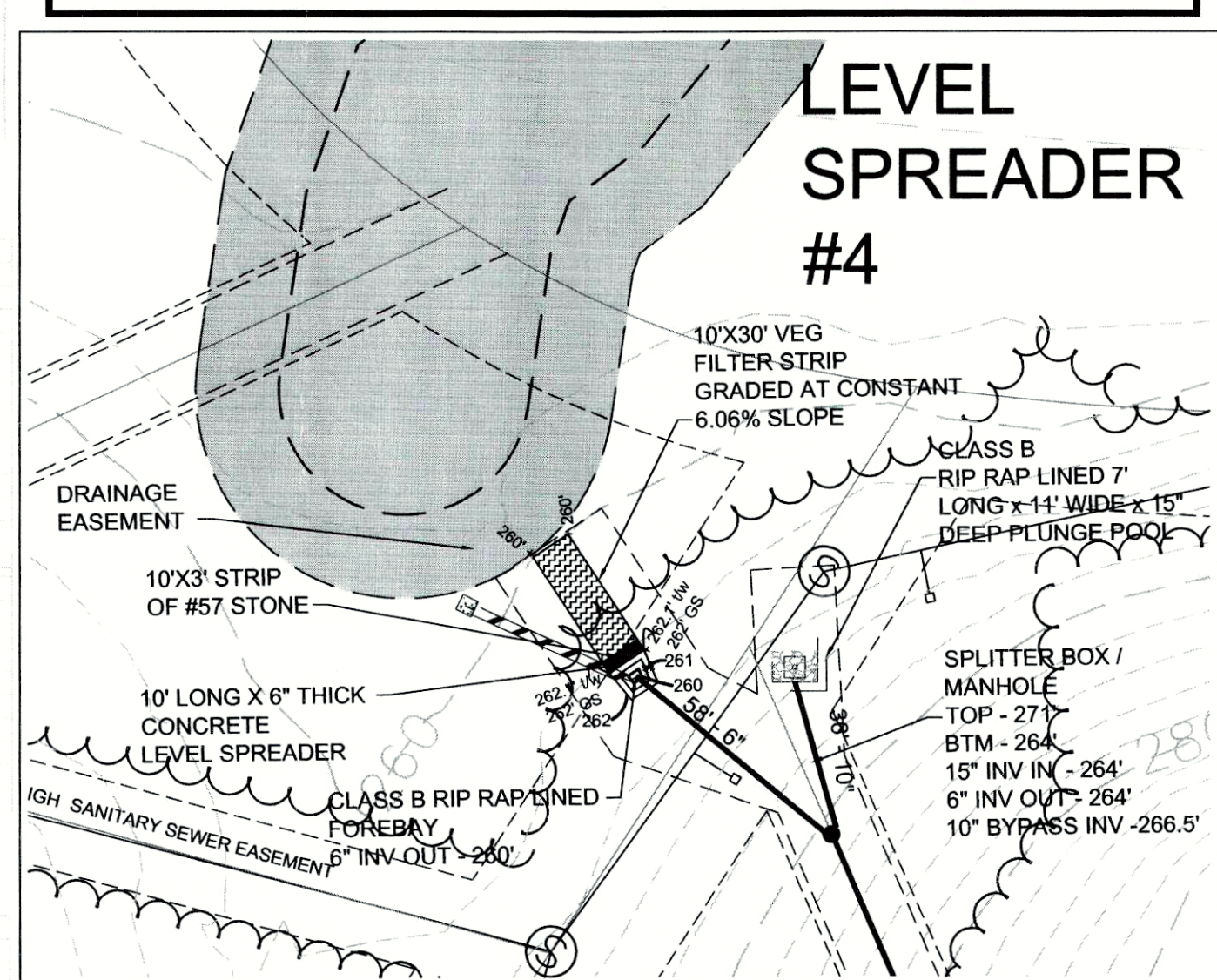
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SCALE: NTS



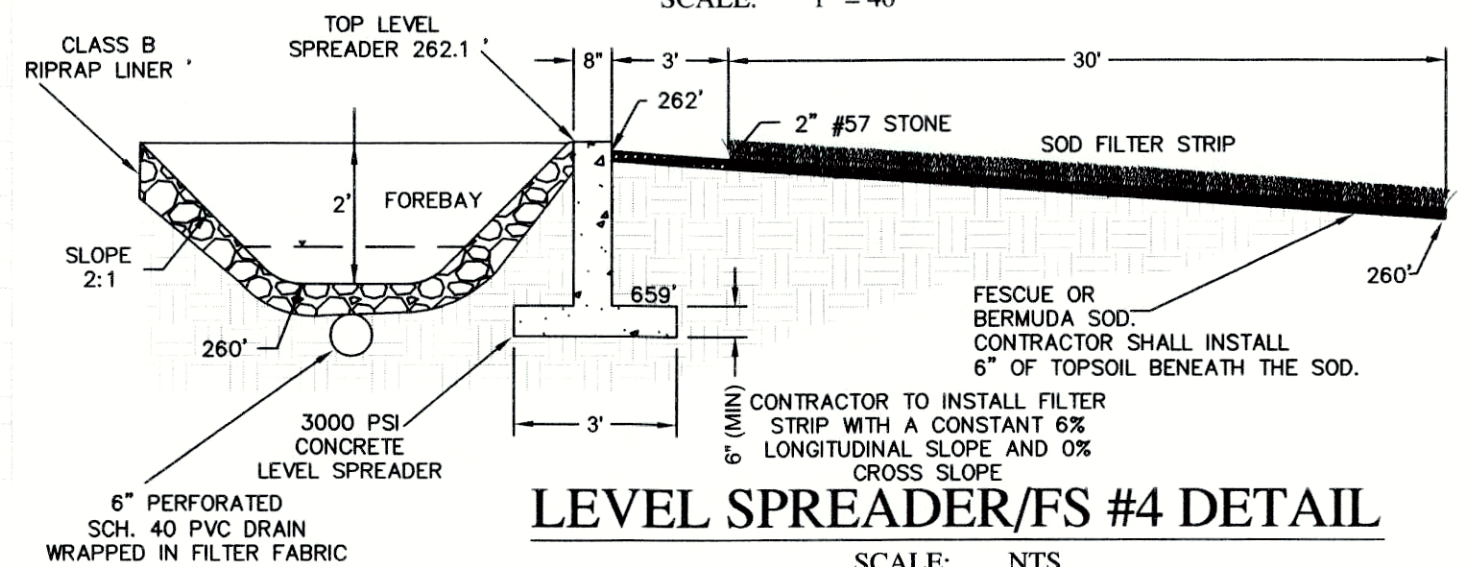
PLUNGE POOL #4
SCALE: NTS



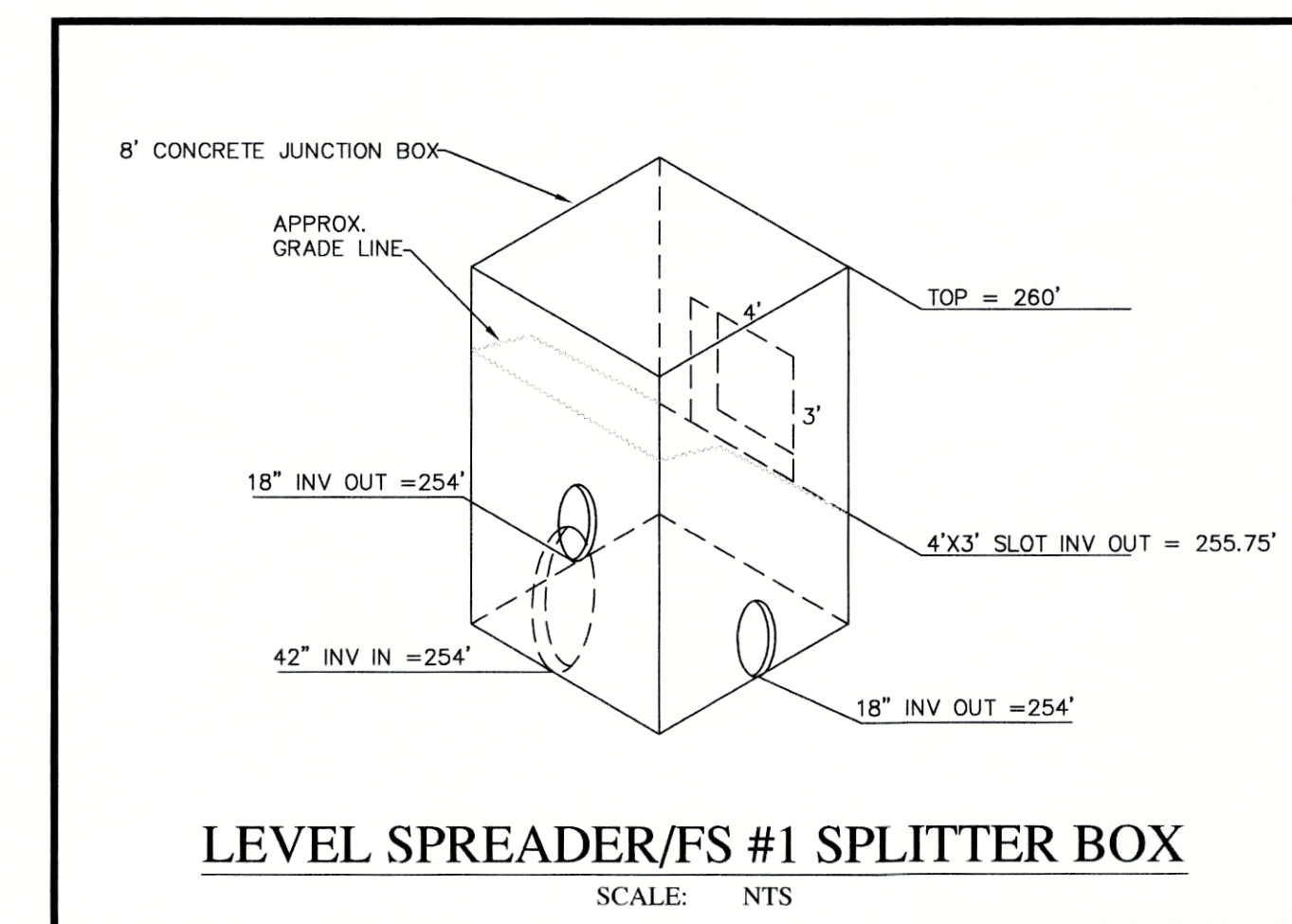
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SCALE: NTS



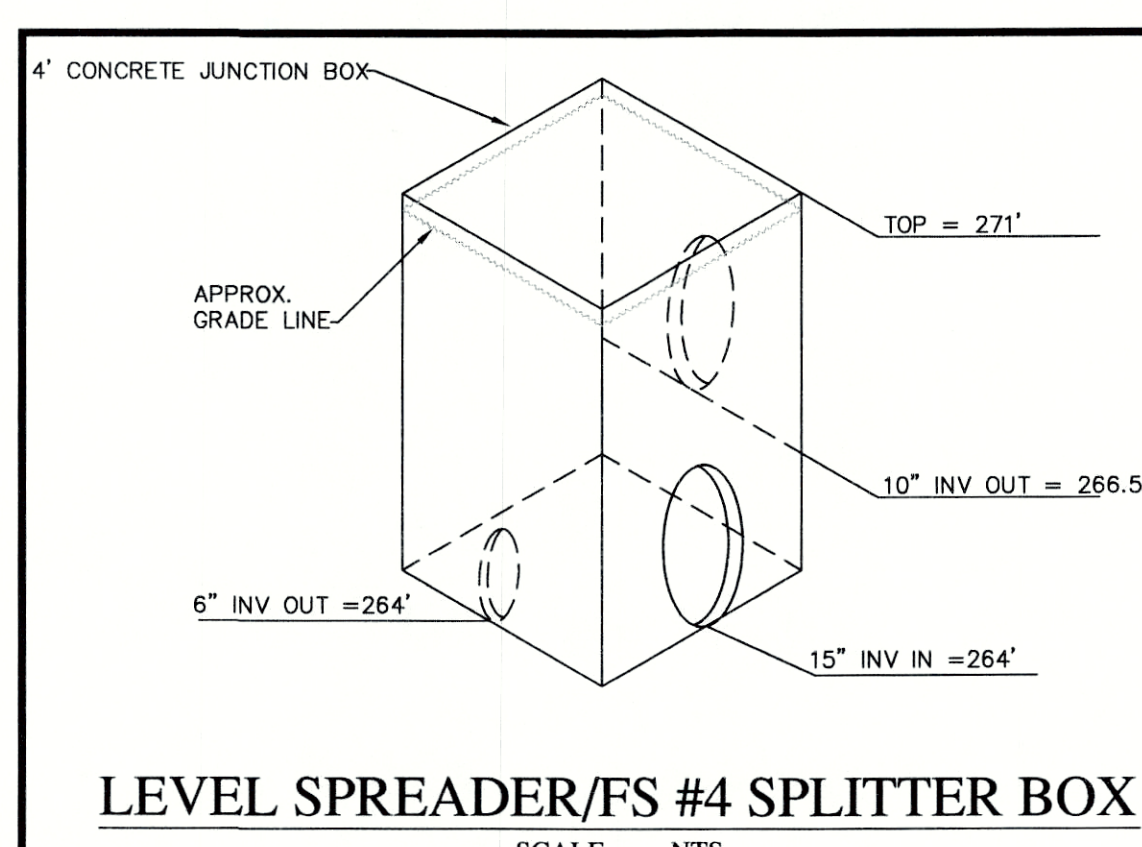
LEVEL SPREADER/FS #4
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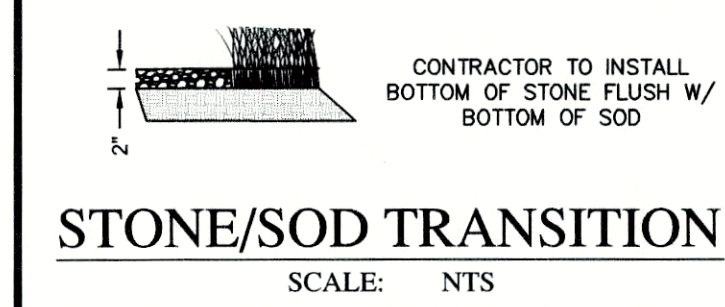
LEVEL SPREADER/FS #4 DETAIL
SCALE: NTS



LEVEL SPREADER/FS #1 SPLITTER BOX
SCALE: NTS



LEVEL SPREADER/FS #4 SPLITTER BOX
SCALE: NTS



STONE/SOD TRANSITION
SCALE: NTS



Know what's below.
Call before you dig.

NO.	REVISIONS	DATE	BY
7			
6			
5			
4			
3			
2			
1			

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TOWN OF ROLESVILLE
WAKE COUNTY, NORTH CAROLINA
LEVEL SPREADER DETAILS

PROJECT NO.
14-0036
DRAWING NAME:
14-0036 BASE
SHEET NO.
D-7