



Town of Beaufort, NC

701 Front St. - P.O. Box 390 - Beaufort, N.C. 28516
252-728-2141 - 252-728-3982 fax - www.beaufortnc.org

Town of Beaufort Planning Board Regular Meeting 6:00 PM Monday, August 15, 2022 - Train Depot, 614 Broad Street, Beaufort, NC 28516 Monthly Meeting

Call to Order

Roll Call

Agenda Approval

Minutes Approval

- [1.](#) PB Draft Minutes 07.18.22

Public Comment

New Business

- [1.](#) Preliminary Plat for Beau Coast Subdivision Phase IV

Commission / Board Comments

Staff Comments

Adjourn



Town of Beaufort, NC

701 Front St. - P.O. Box 390 - Beaufort, N.C. 28516
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Town of Beaufort Planning Board Regular Meeting 6:00 PM Monday, July 18, 2022 - Train Depot, 614 Broad Street, Beaufort, NC 28516 Minutes

Call to Order

Chair Neve called the July 18, 2022 Planning Board meeting to order at 6:00 p.m.

Roll Call

Chair Neve asked Secretary Anderson to conduct a roll call.

In attendance: Chair Neve, Vice Chair Merrill, Member Meelheim, Member Willis

Secretary Anderson declared a quorum present.

Also present for the meeting were Kyle Garner, Town Attorney Arey Grady, and Laurel Anderson.

Agenda Approval

Chair Neve asked if there were any changes to the Agenda and hearing none, he asked for a motion.

Vice-Chair Merrill made the motion to approve the agenda as presented and Member Meelheim made the second. Chair Neve took a vote that was unanimous.

Voting yea: Chair Neve, Vice-Chair Merrill, Member Meelheim, Member Willis

Minutes Approval

1. PB Draft Minutes for 6.20.22

Chair Neve asked if there were any changes to the Minutes from the June 20, 2022 meeting and hearing none, he asked for a motion.

Vice-Chair Merrill made the motion to approve the minutes and Member Willis made the second. Chair Neve took a vote that was unanimous.

Voting yea: Chair Neve, Vice-Chair Merrill, Member Meelheim, Member Willis

Public Comment

Chair Neve opened public comments asked if anyone would like to speak.

There were no requests to speak.

Old Business

- 1. Case # 22-13 Preliminary/Final Plat – 1791 Live Oak

Chair Neve introduced Case #22-13 and Mr. Garner explained that the applicant had returned to provide a letter of agreement to provide vehicular cross access with the property next door, and regarding the Special Use Permit, the Board of Commissioners (BOC) had placed a condition for the property line agreement to be resolved before a site plan could be submitted to the Planning Board.

Josh Johnson of Stroud Engineering, representing the applicant, stated that the property line agreement would be in place before the final plat went before the Board of Commissioners.

Member Meelheim expressed concern that the access letter seemed very informal. Town Attorney Arey Grady agreed but stated that when the final plat went before the BOC all necessary documents would have been submitted. After further discussion Mr. Johnson stated that there was access through the ABC store parking lot and the Board had requested auxiliary access that is still being worked out. Vice-Chair Merrill stated that it had been felt that access through the ABC parking lot was not appropriate. The Board then discussed the order in which the issues needed to be resolved, including the property line agreement, driveway access, and subdividing the property. Mr. Grady explained that there were protections to ensure that everything would be resolved before the final plat was signed.

Member Willis made a motion to approve Case# 22-13 with the following conditions:

- 1. *Provide a shared access agreement with Beaufort Spring Apartments.*
- 2. *Provide a boundary line agreement*

Chair Neve made the second and took a vote that did not pass.

Voting yea: Chair Neve, Member Willis

Voting nay: Vice-Chair Merrill, Member Meelheim

Vice-Chair Merrill made the motion to table the application until the shared access agreement and boundary line agreements had been worked out, and Member Meelheim made the second. Chair Neve took a vote that was unanimous.

Voting yea: Chair Neve, Vice-Chair Merrill, Member Meelheim, Member Willis

Public Hearing

- 1. Case #22-14: To recommend approval or denial to the Board of Commissioners for the rezoning of 312 Pollock Street from R-8 to TCA.

Chair Neve introduced the public hearing for Pollock Street rezoning and Mr. Garner explained that the applicant had originally proposed CS-MU (Cedar Street Multi-Use) zoning but after hearing concerns from the neighbors, had brought the application back as proposed TCA (Townhomes, Condominiums, and Apartments) zoning. Based on the acreage of .345 a total of 4 multi-family units would be allowed per the TCA density.

Doug Brady, 805 Front Steet, represented the applicant and explained that after hearing concerns about the application for CS-MU, he pulled his application and re-submitted the request as TCA. He felt that it would serve a need in the community for providing more affordable housing than R-8 zoning.

Chair Neve opened the floor for public discussion.

Phyllis Parker, 305 Pollock Street, stated that one concern was parking and the neighborhood is residential; they want it to stay that way and do not want commercial buildings. She also asked about the height of the proposed townhomes.

Kathleen Meredith, 315 Pollock Street Unit 2, asked about her residence being in CS-MU zoning, and Chair Neve explained that the TCA zoning was more restrictive and only residential building would be allowed.

Mr. Brady answered Ms. Parker's concern regarding parking for townhome residents and explained that parking will be provided at the rear of the townhomes and off the street. He also explained that residential building height was not to exceed 35' regardless of zoning.

Richard LeSesne, 323 Sea Hawk Street, encouraged the Board to ensure that stormwater drainage, water, sewer, and electrical demand would be considered. He also asked that emergency personnel would be able to access the area.

Chair Neve closed the public discussion and opened Board discussion. Vice-Chair Merrill pointed out that for CS-MU zoning, 1.5 parking spaces were required per unit, and TCA required 2 spaces. Chair Neve looked up and verified the requirements. Vice-Chair Merrill addressed Mr. Lesesne's concern regarding stormwater, explaining that the Planning and Engineering departments fully review and approve proposed site plans.

Vice-Chair Merrill made a motion to approve the rezoning from R-8 to TCA and Member Willis made the second. Chair Neve took a vote that was unanimous.

Voting yea: Chair Neve, Vice-Chair Merrill, Member Meelheim, Member Willis

Mr. Garner reminded the audience that there would be another public hearing regarding the rezoning with the Board of Commissioners, and the public would have another opportunity to speak at that meeting. Chair Neve explained that the Planning Board had approved the recommendation to the BOC for their final vote.

2. Case # 22-17: To recommend approval or denial to the Board of Commissioners for the rezoning of 1809 Live Oak from PUD to TCA.

Chair Neve introduced Case# 22-17 and Mr. Garner gave a summary of the application request to rezone 1809 Live Oak from PUD to TCA. In July 2019 the Board of Commissioners approved a CAMA Map amendment to Mixed Use as well as a Rezoning to a PUD with Master Plan. That plan consisted of 54 total residential units with a proposed 12,000 square foot daycare center. A breakdown of the residential units were 17 Townhomes and 37 single-family residential lots. At 15.04 acres the total number of units could be up to 180 units based on the maximum density of 12 units per acre in the TCA Zone. A CAMA Map Amendment is not needed since the classification was changed to Mixed Use in 2019 which allows high density residential. He further stated that as part of the original purchase by the Town in 2009, the Town is responsible for providing water and sewer and road access to the property.

Chase Cullipher of The Cullipher Group spoke for the applicant Britt Development, and stated that the CAMA Land Use Plan has already approved high density, that TCA zoning is transitional zoning, and their proposed use would meet the ordinance. There would be cross connectivity with Food Lion considered, and the development would create a great opportunity for building workforce housing.

Chair Neve opened the floor for public discussion.

Dale Britt, Morehead City, Britt Development, explained that the development would consist of fee simple townhomes with a common area and stormwater pond, and the townhomes would provide more affordable housing than is otherwise currently available in Beaufort.

Richard LeSesne, 323 Sea Hawk Street, spoke in favor of the development and asked that emergency personnel be able to access the area easily.

Chair Neve closed public discussion and opened Board discussion. Vice-Chair Merrill asked about the connectivity with Food Lion and Member Meelheim expressed her excitement about the project and the opportunity for more affordable housing. There was discussion about a buffer between the new development and existing developments, and Mr. Garner stated that there is at least a 25-foot ditch between them. Vice-Chair Merrill and Chair Neve discussed open space and the need for a public park in that section of town.

Member Meelheim made a motion to approve the rezoning from PUC to TCA and Member Willis made the second. Chair Neve took a vote that was unanimous.

Voting yea: Chair Neve, Vice-Chair Merrill, Member Meelheim, Member Willis

Commission / Board Comments

Member Meelheim thanked the staff for the additional historical information provided to the Board to support the meeting’s packet. Vice-Chair Merrill asked about paving Cedar Street and Mr. Garner said the Town is working with DOT who will be installing 13 stormwater features along the street, and the final paving should be completed by next summer. He also stated that the Town engineer, Greg Meshaw, had applied for a grant for pervious parking areas along Cedar St which will provide better permeability and cleaner water. Member Willis thanked the staff and Chair Neve pointed out that in the current LDO the Cedar Street Mixed Use zoning setbacks are confusing.

Staff Comments

Mr. Garner showed a map the Board had requested designating a buffer of 500 feet from the centerline of Live Oak Street for future mini-storage businesses.

Adjourn

Member Willis made the motion to adjourn and Member Meelheim made the second. Chair Neve took a vote that was unanimous.

Voting yea: Chair Neve, Vice-Chair Merrill, Member Meelheim, Member Willis

Chair Neve then declared the meeting adjourned.

Ryan Neve, Chair

Laurel Anderson, Board Secretary



Town of Beaufort, NC

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**Town of Beaufort Planning Board Regular Meeting
6:00 PM Monday, August 15, 2022 – 614 Broad Street**

AGENDA CATEGORY: New Business
SUBJECT: Preliminary Plat for Beau Coast Subdivision Phase IV

BRIEF SUMMARY:

The applicant wishes to Subdivide a 23.55 Acre Tract into 36 Lots (Single-Family). In addition to Planning Staff the Town Engineer and applicants Engineer will also be available to answer questions regarding the proposed infrastructure.

REQUESTED ACTION:

Recommendation to Board of Commissioners

EXPECTED LENGTH OF PRESENTATION:

10 Minutes

SUBMITTED BY:

Kyle Garner, AICP
Planning & Inspections Director

BUDGET AMENDMENT REQUIRED:

N/A



PLANNING BOARD STAFF REPORT

To: Beaufort Planning Board Members
From: Kyle Garner, AICP, Town Planner
Date: July 25, 2022
Project: Beaufort Coast Phase 4 – Preliminary Plat

THE QUESTION: Subdivide a 23.55 Acre Tract into 36 Single-Family Lots

BACKGROUND:

Location:	Off Avocet Drive
Owners:	Blue Treasure, LLC
Requested Action:	Subdivide a 23.55 acre tract into 36 lots
Existing Zoning	PUD
Size:	23.55 Acres
Amount of Wetlands:	5.65 Acres
Amount of Open Space:	6.87 Acres
Existing Land Use:	Undeveloped
Adjoining Land Use & Zoning:	North – By Turner Creek South – Beau Coast Phase 2-A, Zoned PUD East – Beau Coast Phase 2-B, Zoned PUD West – Town of Beaufort Public Utilities, Zoned R-20

SPECIAL INFORMATION: This preliminary plat runs concurrently with the Amendment to the Master Plan dated February 14, 2020.

Public Utilities & Works:

Water:	Town Water
Sanitary Sewer:	Town Sewer

OPTIONS:

1. Approve the request as presented.
2. Deny the request.
3. Table the request.

RECOMMENDATIONS:

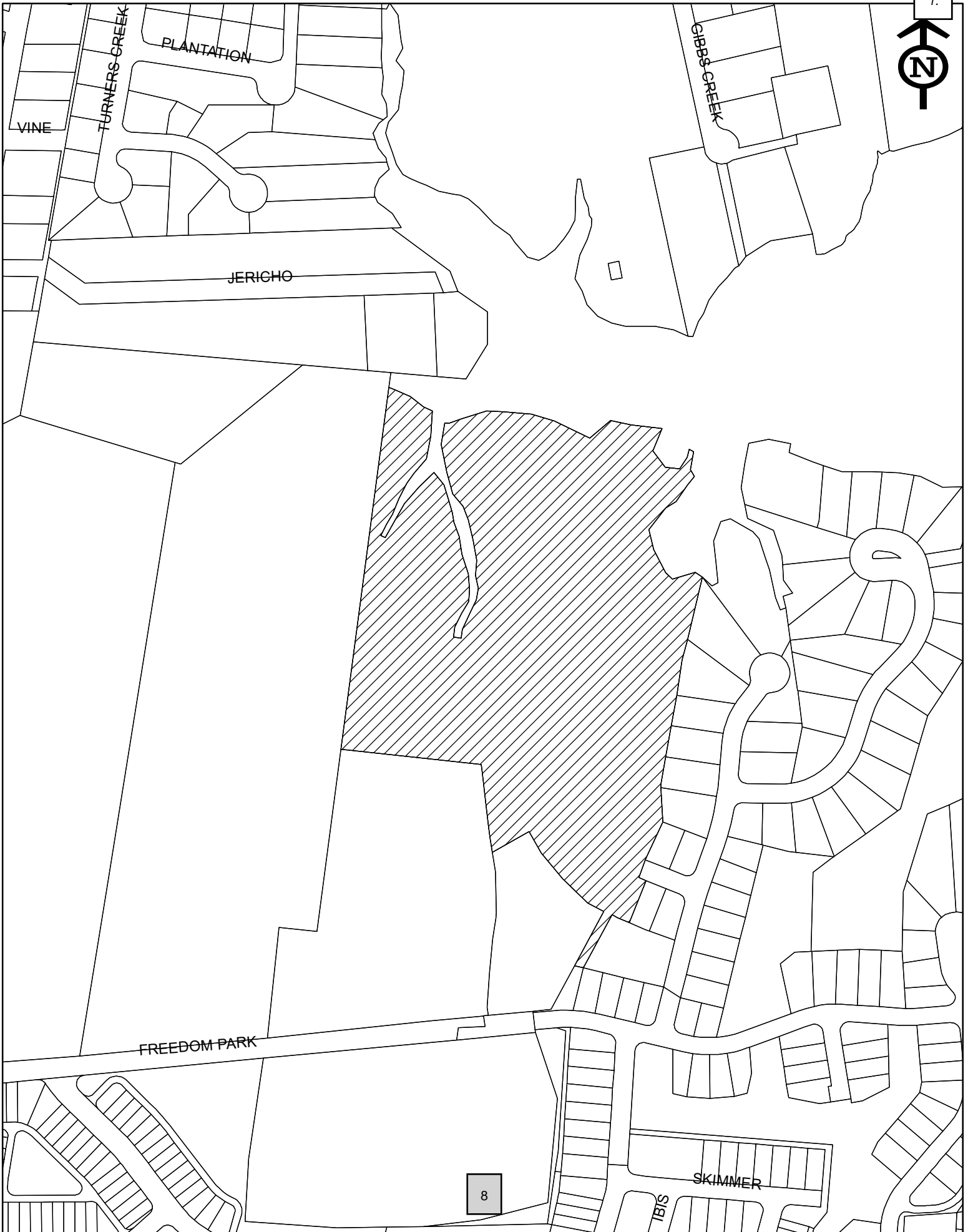
Staff recommends approval of the preliminary plans for Beau Coast Phase 4.

ATTACHMENTS:

- Vicinity Map
- Zoning Map
- Construction Drawings

Case #22-03 Vicinity Map - Preliminary Plat - Phase 4 - Beau Coast

1.



8

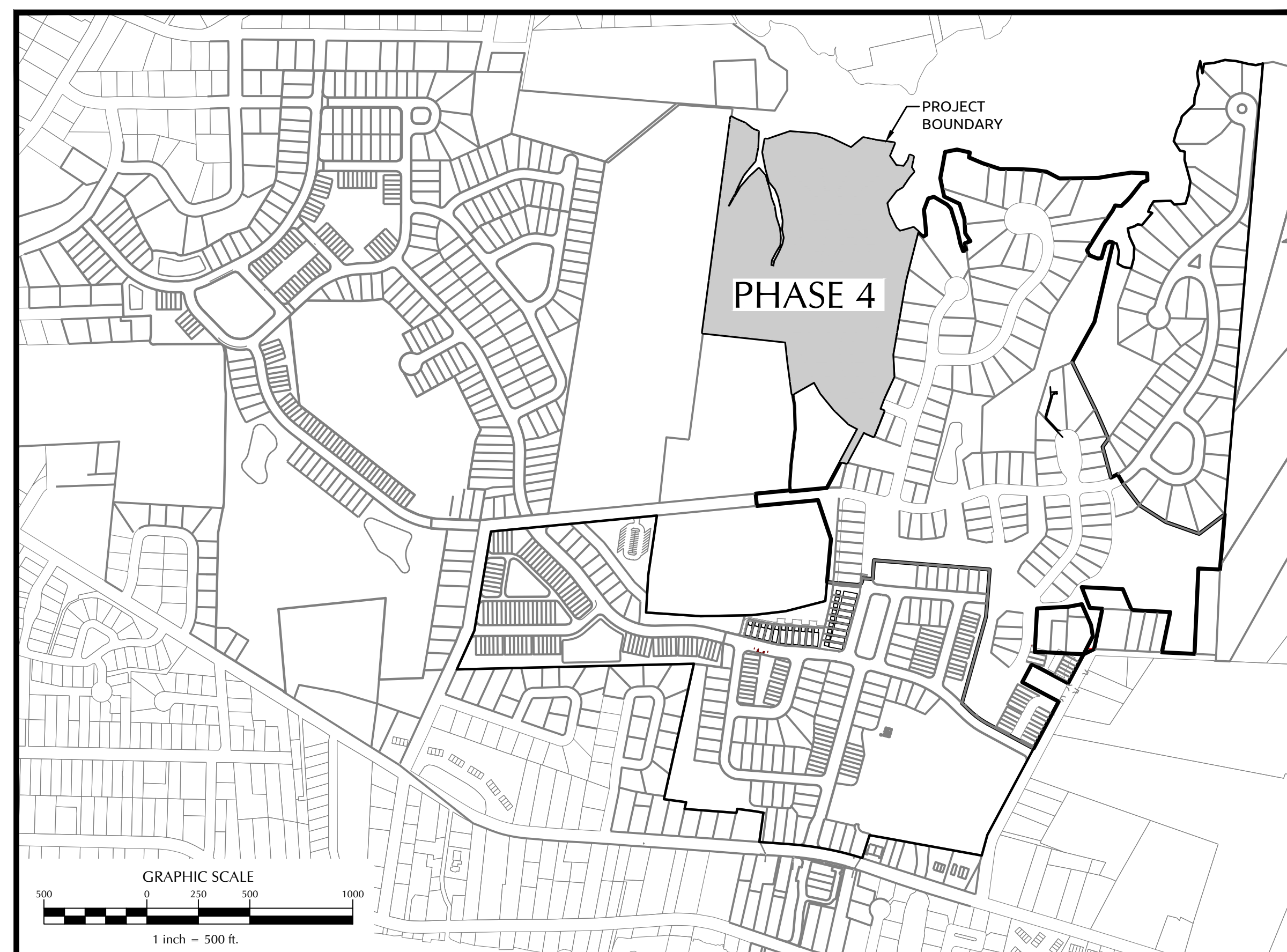
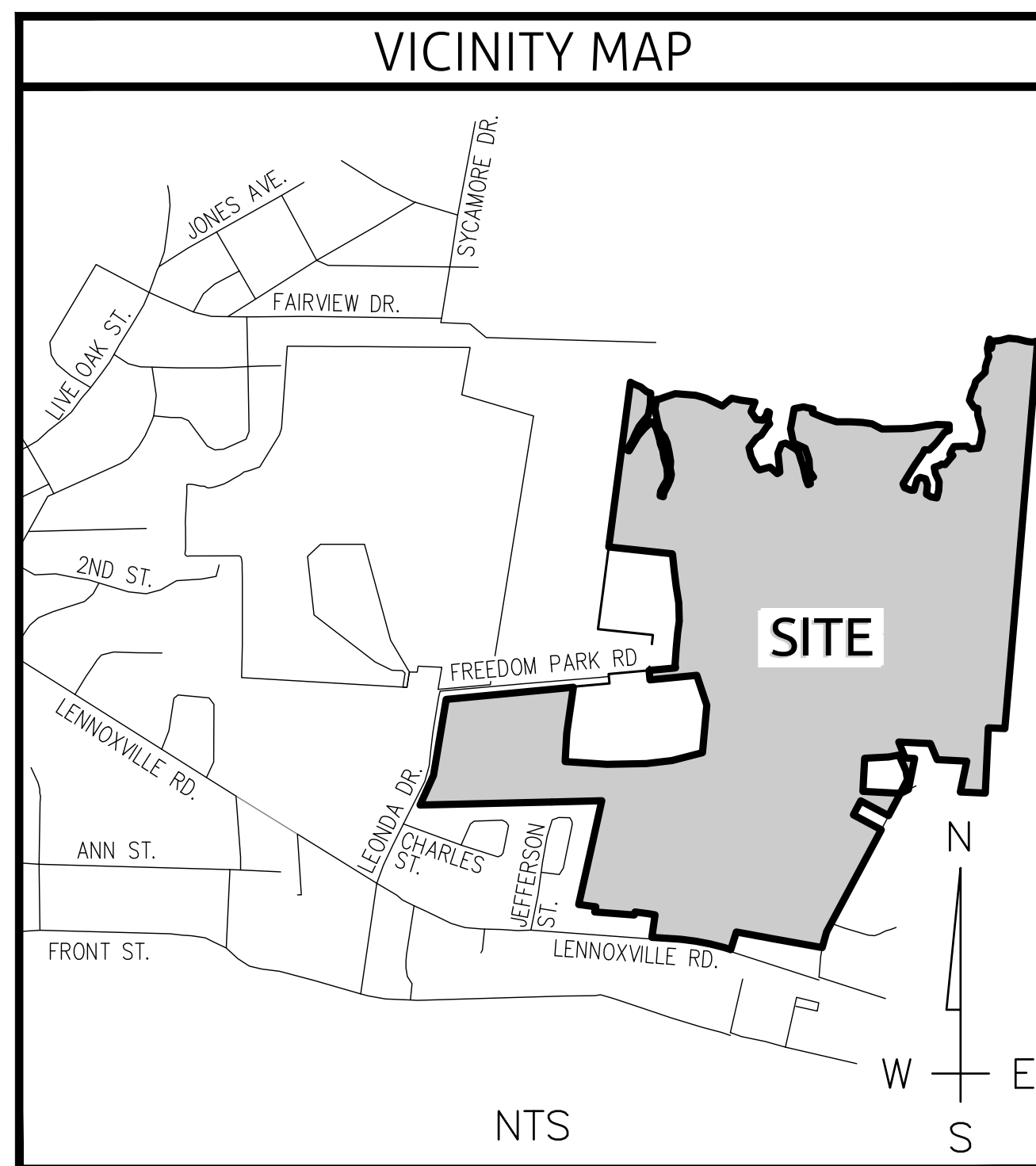
CONSTRUCTION DRAWINGS FOR

BEAU COAST

PHASE 4

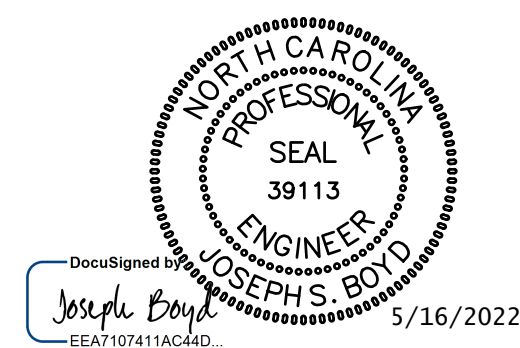
BEAUFORT, NC

MAY 2022



Sheet List Table	
Sheet Number	Sheet Title
C0.0	COVER
C0.1	PROJECT NOTES
C0.2	NCG01
C1.0	EXISTING CONDITIONS
C2.0	SITE PLAN
C3.0	LOT FIT PLAN
C4.0	ZONING PLAN
C5.0	UTILITY PLAN
C6.0	EROSION CONTROL PLAN
C7.0	STORMWATER MANAGEMENT PLAN
C8.0	BROWN PELICAN WAY PLAN AND PROFILES
C8.1	RUDDY DUCK COURT PLAN AND PROFILE
D1.0	WATER & SEWER DETAILS
D2.0	WATER & SEWER & ROADWAY DETAILS
D3.0	WATER DETAILS
D4.0	ROADWAY & DRAINAGE DETAILS
D5.0	EROSION CONTROL DETAILS
D6.0	EROSION CONTROL & SWALE CALCULATIONS DETAILS

LEGEND			
LINETYPE DESCRIPTION		LINETYPE DESCRIPTION	
EXISTING WATERLINE	---	PROPOSED UNDERGROUND ELECTRIC	UE
PROPOSED WATERLINE	W	EXISTING GASLINE	G
EXISTING STORM DRAINAGE	---	PROPOSED GASLINE	G
PROPOSED STORM DRAINAGE	---	SILT FENCE	SF
EXISTING SANITARY SEWER	SS	EXISTING FENCE	XX XX XX XX XX XX
PROPOSED SANITARY SEWER	SS	TREE PROTECTION	TP
PROPOSED FORCE MAIN	FM	SWALE	→→→→→→→→
EXISTING FORCE MAIN	FM	RIGHT-OF-WAY	---
EXISTING ELECTRIC (OVERHEAD)	E	WETLANDS	☀
PROPOSED ELECTRIC (OVERHEAD)	E	1' CONTOUR	-1-
EXISTING UNDERGROUND ELECTRIC	UE	5' CONTOUR	-5-
EXISTING EASEMENT	---	PROPOSED EASEMENT	---



PREPARED BY:

219 Station Road, Suite 101 | Wilmington, NC 28405 | t: 919.469.3340 | license #: C-0832 | www.withersravenel.com

DEVELOPER/OWNER

BLUE TREASURE, LLC
105 WESTON ESTATES WAY
CARY, NORTH CAROLINA 27513
919-481-3000

ATTN: KARL BLACKLEY

Table with multiple columns containing regulatory text, diagrams for concrete washouts (SECTION A-A and B-B), and lists of maintenance and environmental requirements. Includes sections like 'EQUIPMENT AND VEHICLE MAINTENANCE', 'PAINT AND OTHER LIQUID WASTE', and 'CONCRETE WASHOUTS'.

NCG-01 GROUND COVER & MATERIALS HANDLING

Table with regulatory text for 'DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT' under 'PART II, SECTION G, ITEM (4)'. Includes sub-sections (a) through (f).

Table with three main sections: 'PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING'. Section A: Self-Inspection, Section B: Recordkeeping, Section C: Reporting. Includes detailed tables for inspection frequency and reporting procedures.

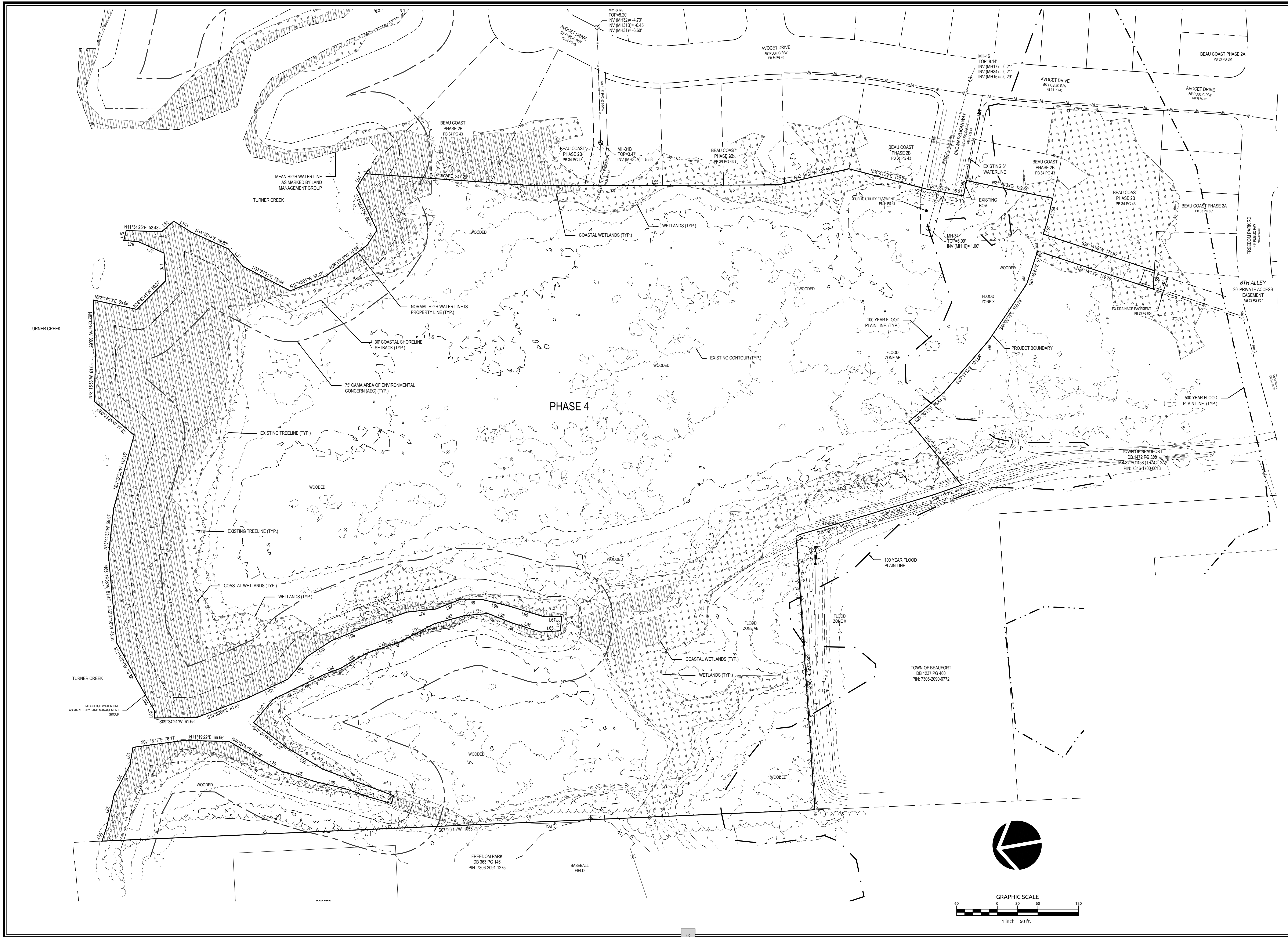
NCG-01 SELF INSPECTION

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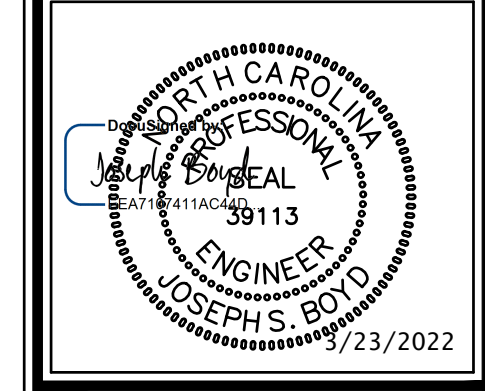
WithersRavenel logo and text: WithersRavenel Engineers | Planners | Surveyors

BEAU COAST PHASE 4 BEAUFORT, NC

Professional Engineer Seal for Joseph S. Boyd, No. 39113, expires 8/23/2022. Includes a revisions table and sheet number C0.2.

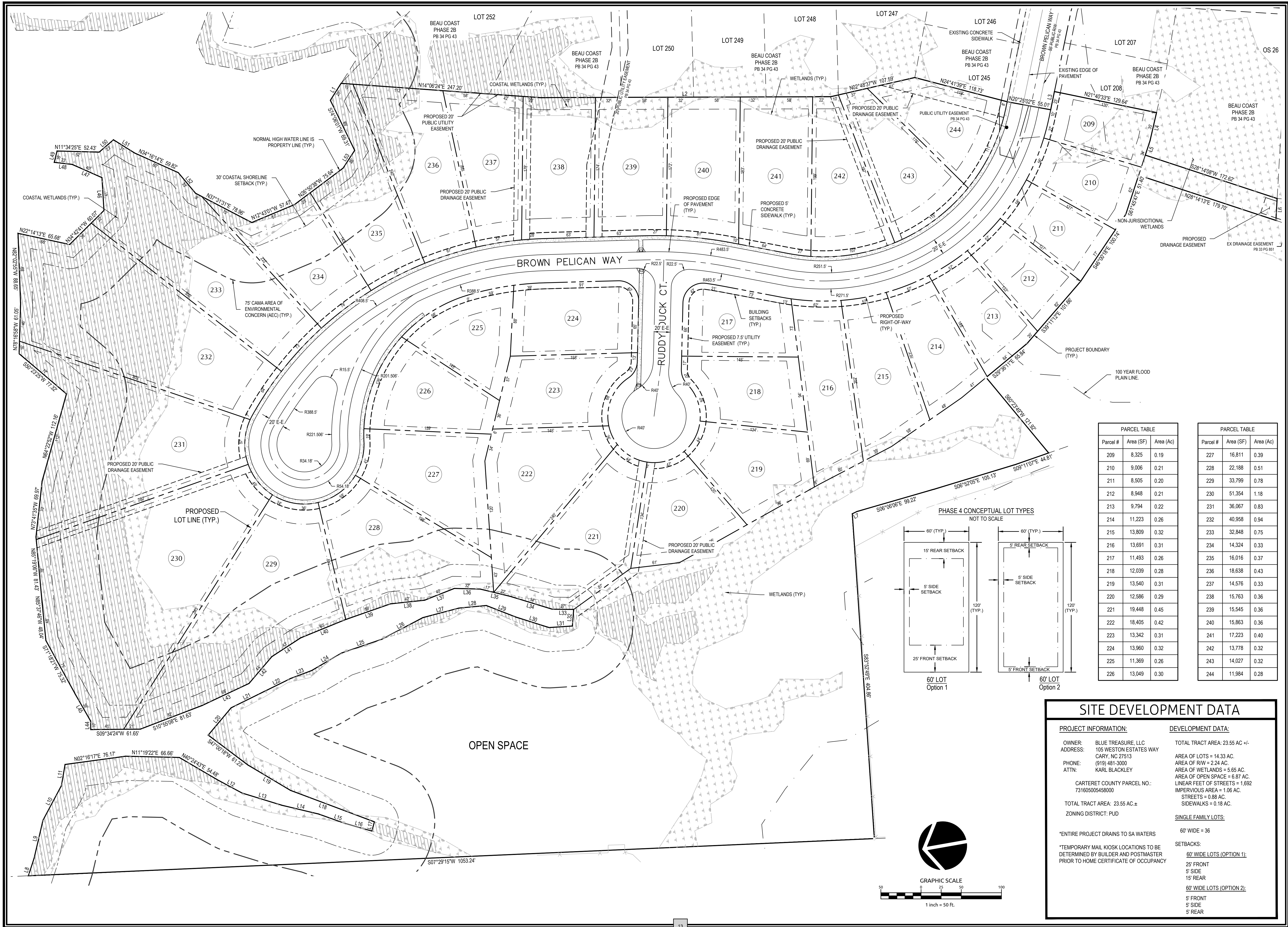


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Date	06/23/2021	Designer	JSB

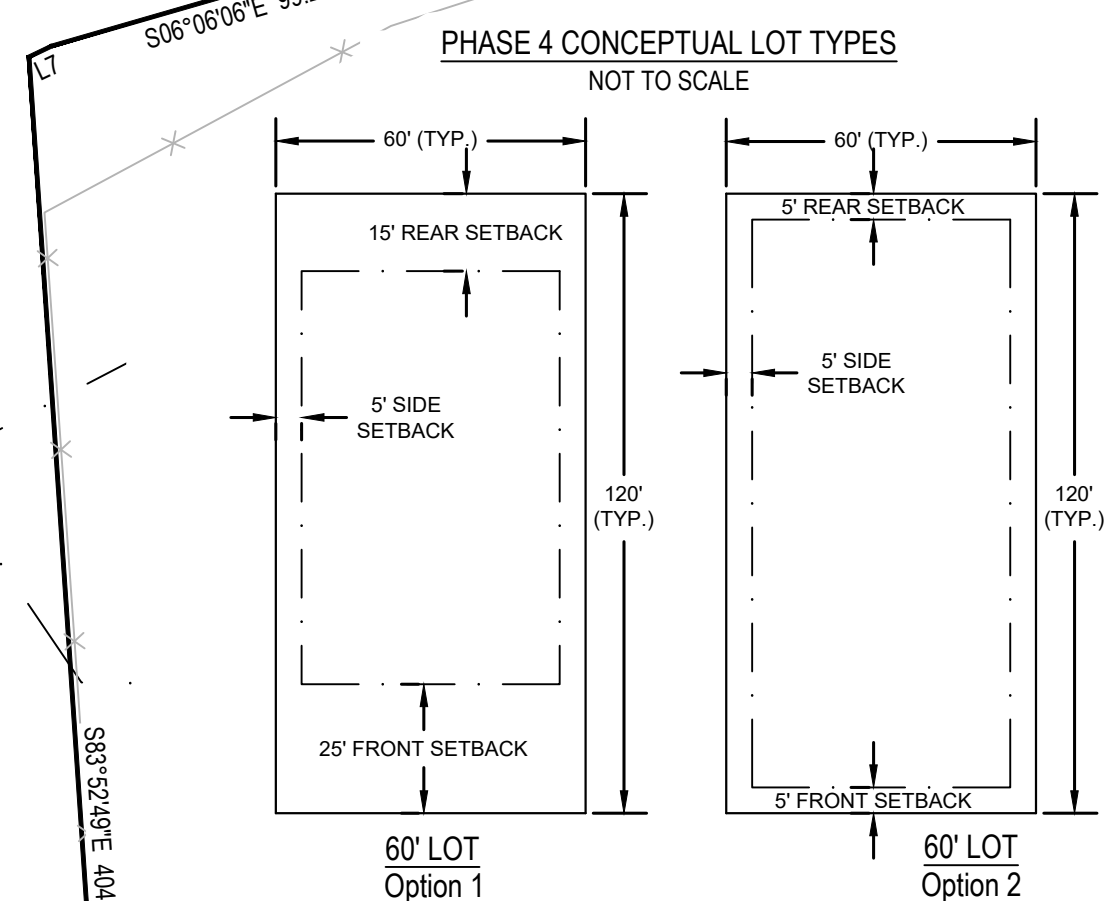


Revisions

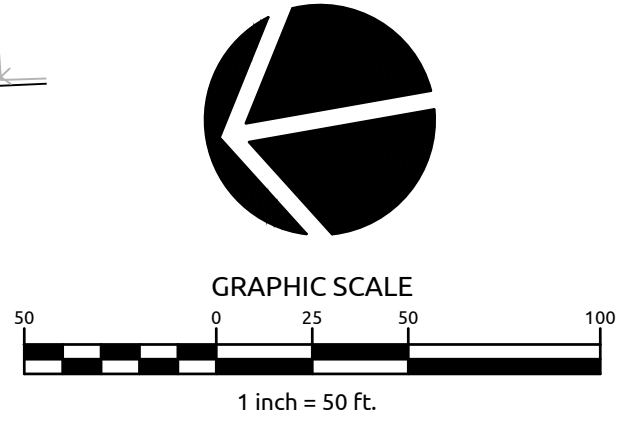
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PARCEL TABLE			PARCEL TABLE		
Parcel #	Area (SF)	Area (Ac)	Parcel #	Area (SF)	Area (Ac)
209	8,325	0.19	227	16,811	0.39
210	9,006	0.21	228	22,188	0.51
211	8,505	0.20	229	33,799	0.78
212	8,948	0.21	230	51,354	1.18
213	9,794	0.22	231	36,067	0.83
214	11,223	0.26	232	40,968	0.94
215	13,809	0.32	233	32,848	0.75
216	13,691	0.31	234	14,324	0.33
217	11,493	0.26	235	16,016	0.37
218	12,039	0.28	236	18,638	0.43
219	13,540	0.31	237	14,576	0.33
220	12,586	0.29	238	15,763	0.36
221	19,448	0.45	239	15,545	0.36
222	18,405	0.42	240	15,863	0.36
223	13,342	0.31	241	17,223	0.40
224	13,960	0.32	242	13,778	0.32
225	11,369	0.26	243	14,027	0.32
226	13,049	0.30	244	11,984	0.28



SITE DEVELOPMENT DATA	
PROJECT INFORMATION:	DEVELOPMENT DATA:
OWNER: BLUE TREASURE, LLC	TOTAL TRACT AREA: 23.55 AC +/-
ADDRESS: 105 WESTON ESTATES WAY	AREA OF LOTS = 14.33 AC.
CARY, NC 27513	AREA OF RW = 2.24 AC.
PHONE: (919) 481-3000	AREA OF WETLANDS = 5.65 AC.
ATTN: KARL BLACKLEY	AREA OF OPEN SPACE = 6.87 AC.
CARTERET COUNTY PARCEL NO.: 731605005458000	LINEAR FEET OF STREETS = 1,692
TOTAL TRACT AREA: 23.55 AC +/-	IMPERVIOUS AREA = 1.06 AC.
ZONING DISTRICT: PUD	STREETS = 0.88 AC.
	SIDEWALKS = 0.18 AC.
	SINGLE FAMILY LOTS:
	60' WIDE = 36
	SETBACKS:
	60' WIDE LOTS (OPTION 1):
	25' FRONT
	5' SIDE
	15' REAR
	60' WIDE LOTS (OPTION 2):
	5' FRONT
	5' SIDE
	5' REAR



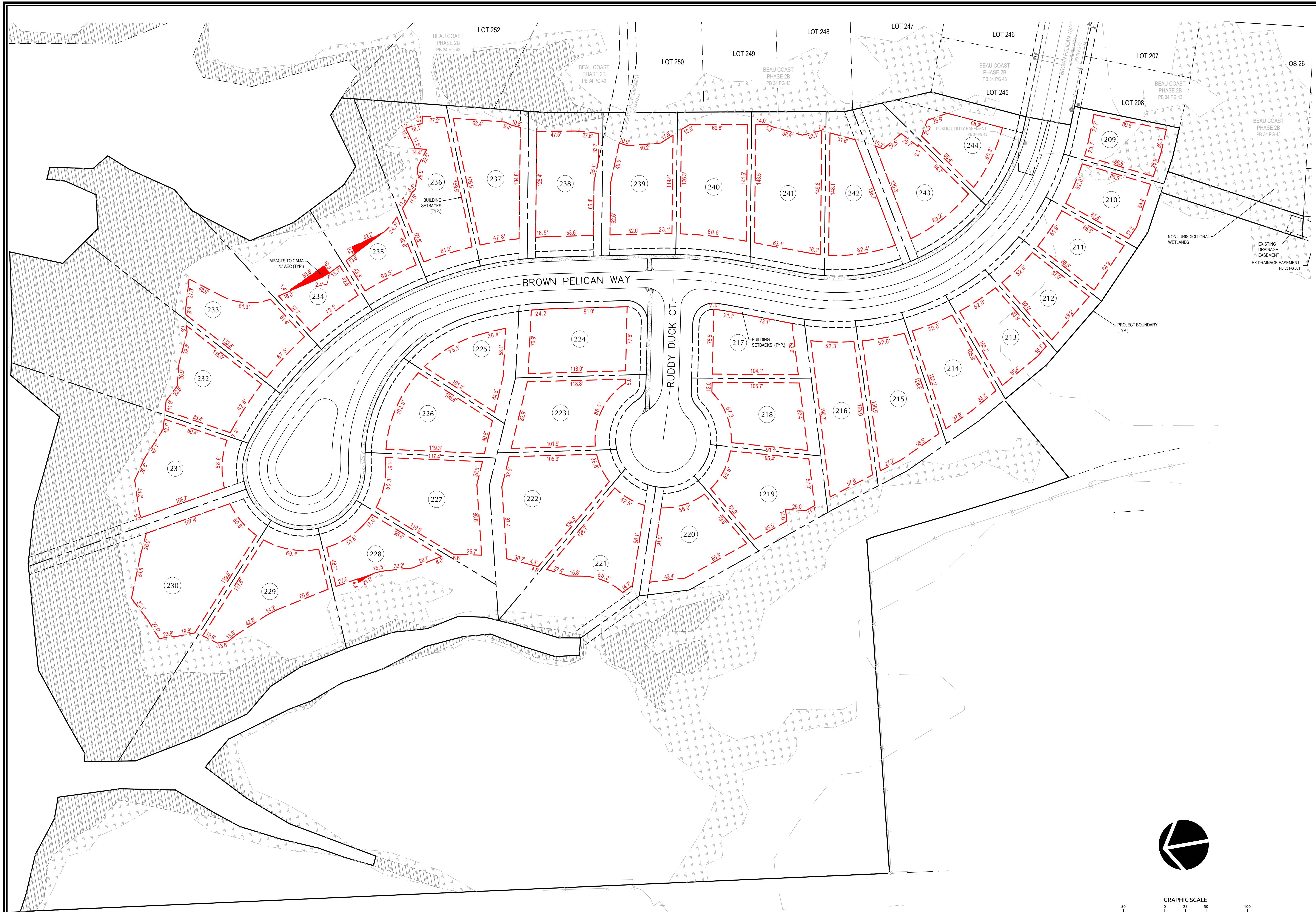
BEAU COAST PHASE 4
BEAUFORT, NC

SITE PLAN

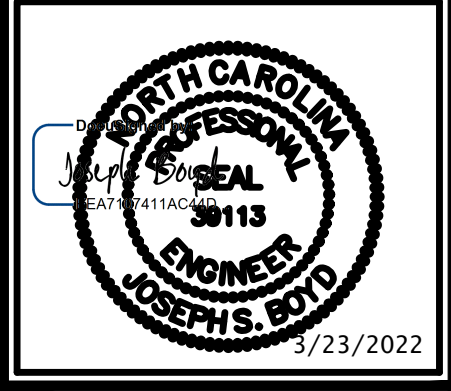
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Date 06/23/2021 Designer JSB

Revisions

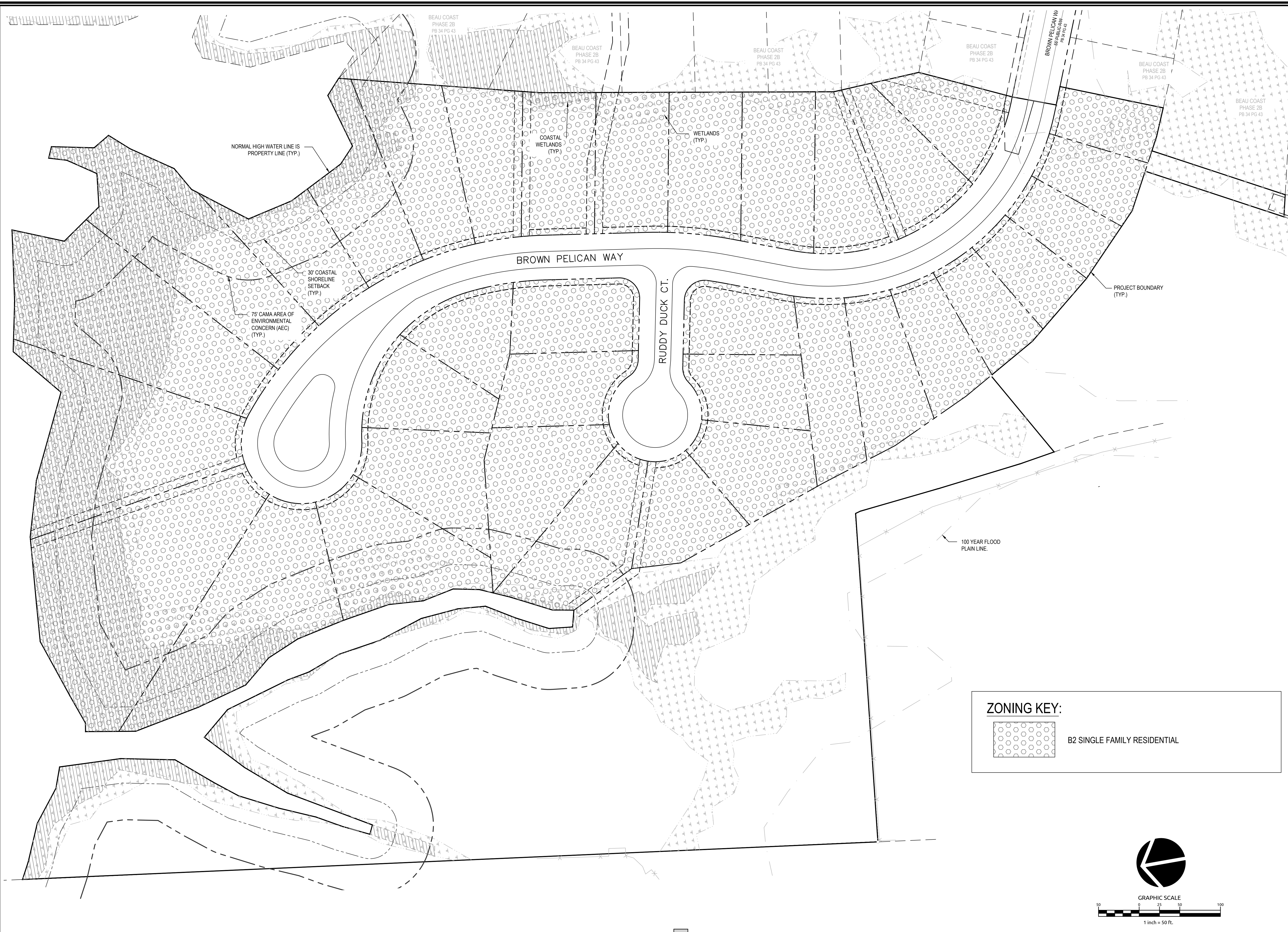
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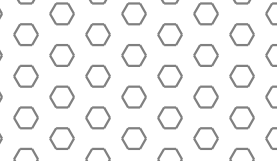
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 Date 06/23/2021 Designer JSB

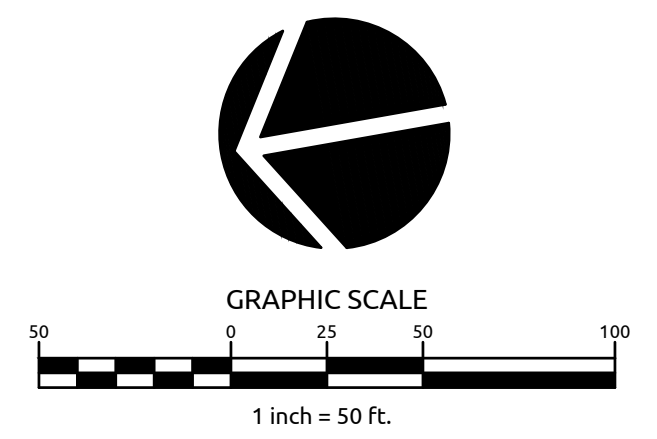


Revisions



ZONING KEY:

 B2 SINGLE FAMILY RESIDENTIAL



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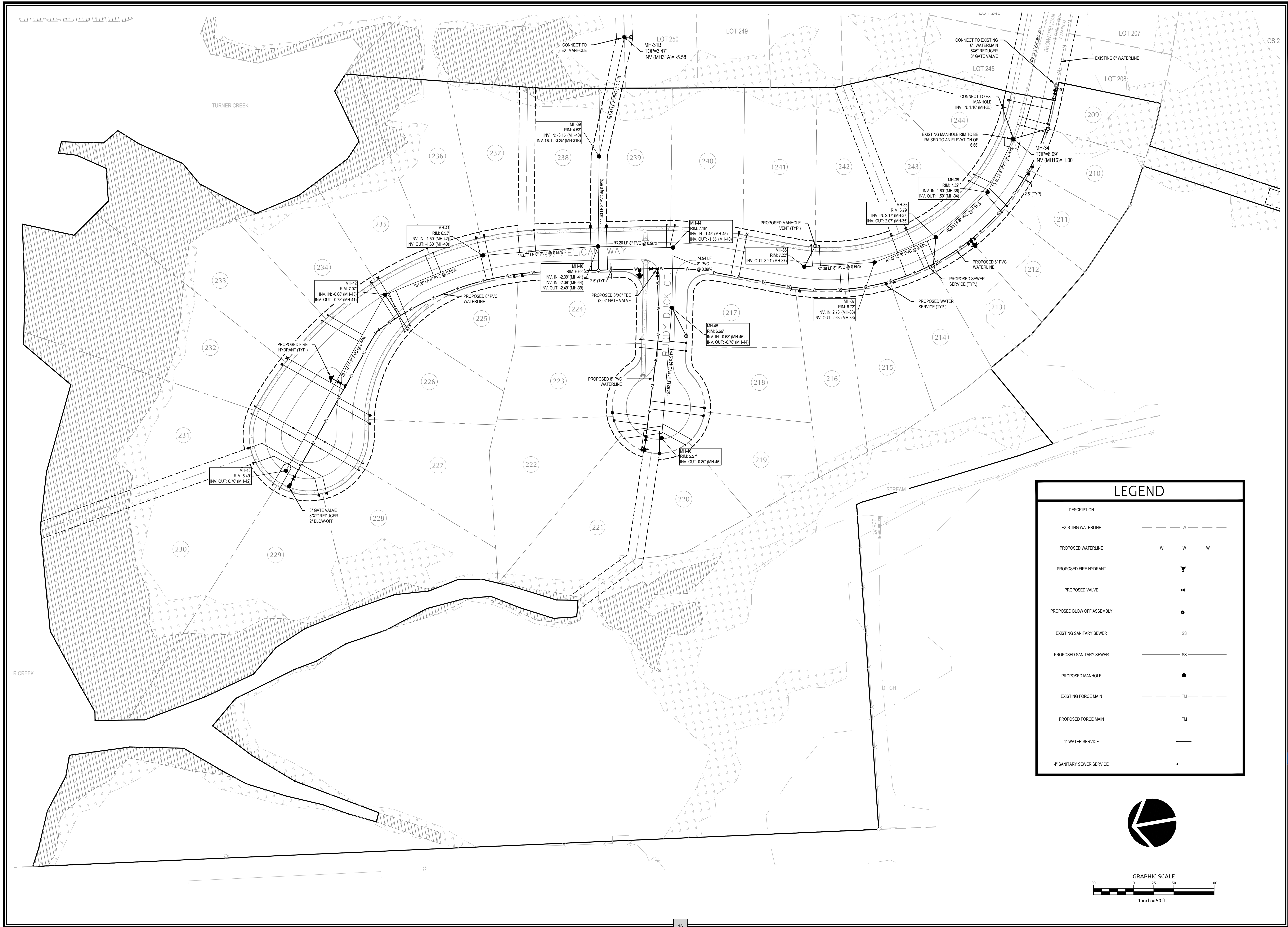
BEAU COAST PHASE 4
BEAUFORT, NC

ZONING PLAN

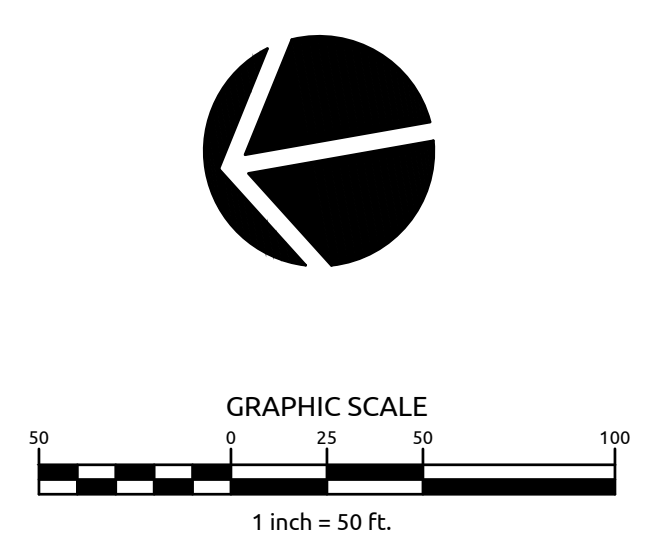
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Date	06/23/2021	Designer	JSB

Revisions	

Sheet No.
C4.0



LEGEND	
DESCRIPTION	
EXISTING WATERLINE	--- W ---
PROPOSED WATERLINE	--- W --- W --- W ---
PROPOSED FIRE HYDRANT	⌵
PROPOSED VALVE	⌵
PROPOSED BLOW OFF ASSEMBLY	●
EXISTING SANITARY SEWER	--- SS ---
PROPOSED SANITARY SEWER	--- SS ---
PROPOSED MANHOLE	●
EXISTING FORCE MAIN	--- FM ---
PROPOSED FORCE MAIN	--- FM ---
1" WATER SERVICE	—
4" SANITARY SEWER SERVICE	—



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BEAU COAST PHASE 4
 BEAUFORT, NC

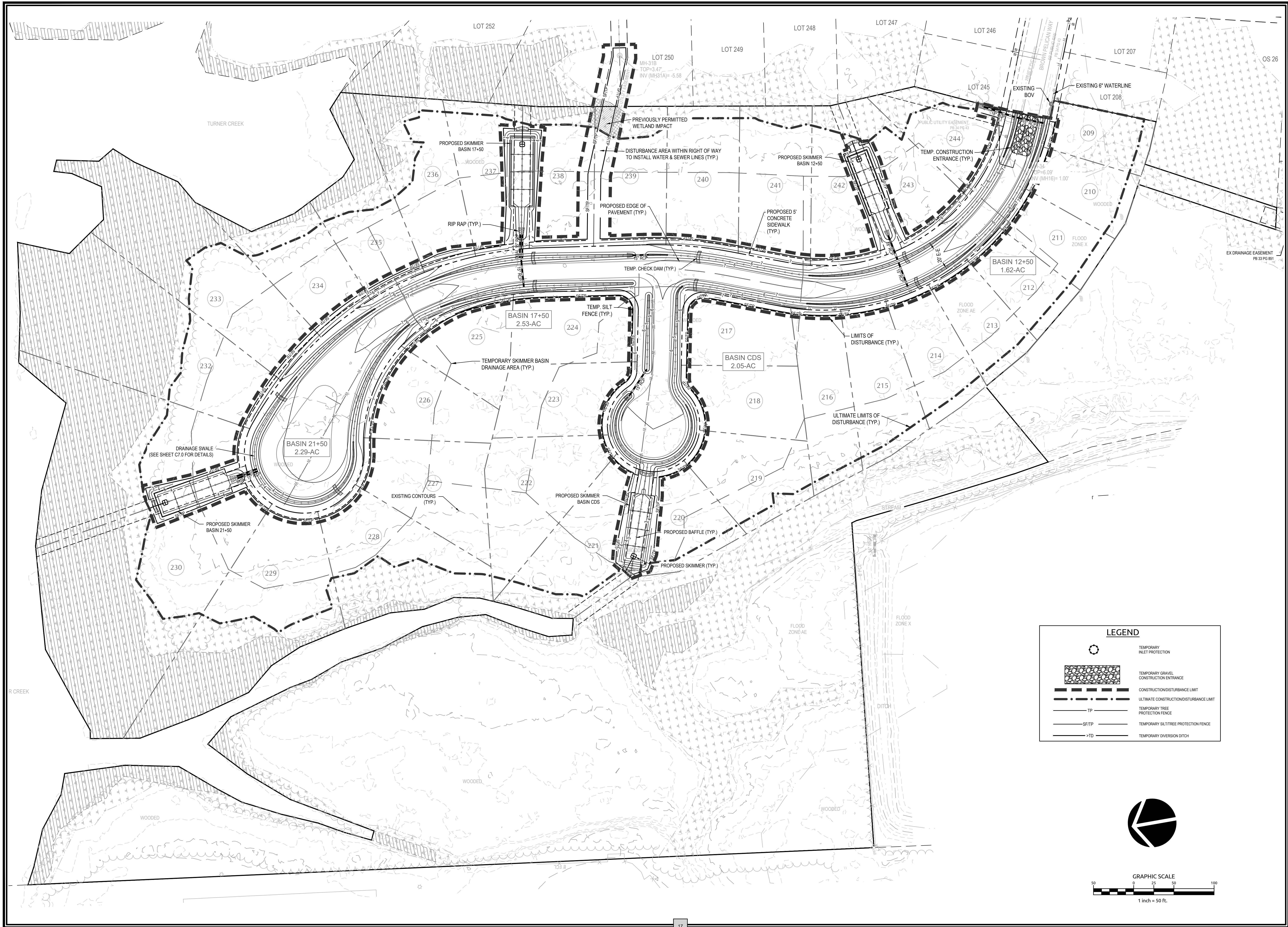
UTILITY PLAN

Job No.	060976.80	Drawn By	TMG
Date	06/23/2021	Designer	JSB

Revisions

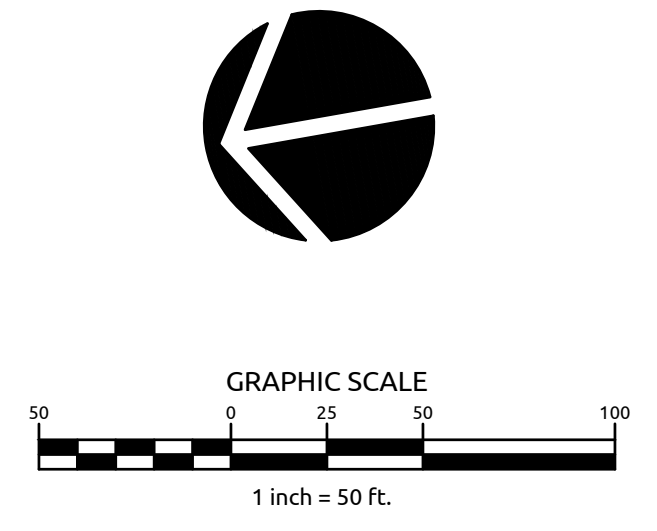
Sheet No.
C5.0

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LEGEND

	TEMPORARY INLET PROTECTION
	TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
	CONSTRUCTION/DISTURBANCE LIMIT
	ULTIMATE CONSTRUCTION/DISTURBANCE LIMIT
	TEMPORARY TREE PROTECTION FENCE
	TEMPORARY SILT/TREE PROTECTION FENCE
	TEMPORARY DIVERSION DITCH



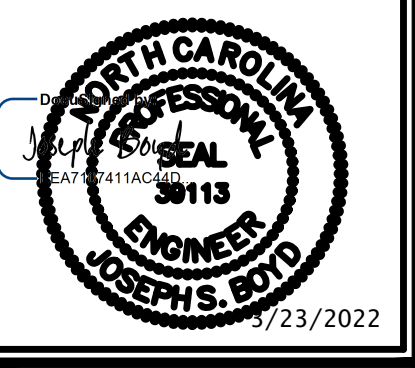
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BEAU COAST PHASE 4
BEAUFORT, NC

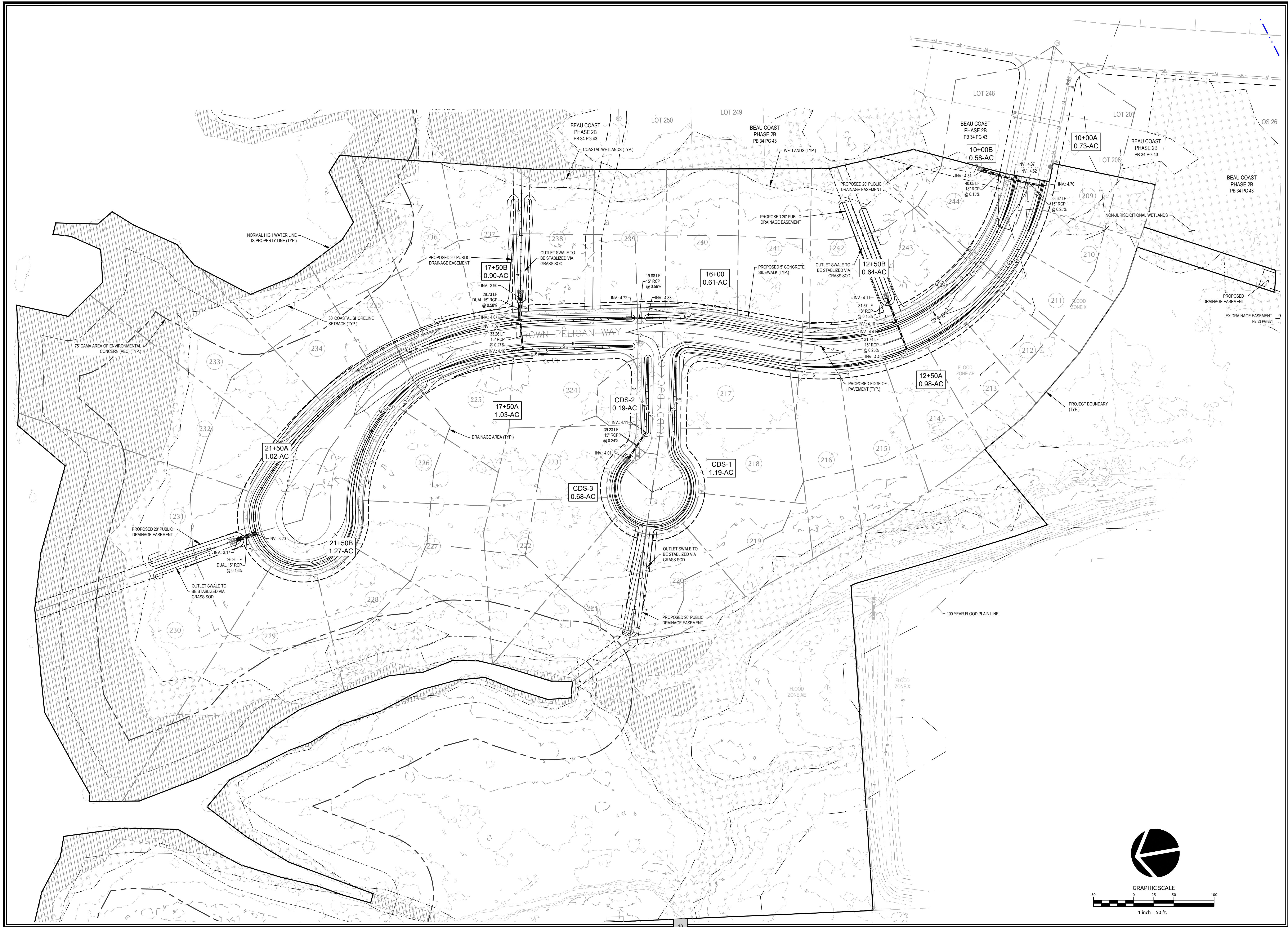
EROSION CONTROL PLAN

Job No. 060976.80 Drawn By TMC
Date 06/23/2021 Designer JSB

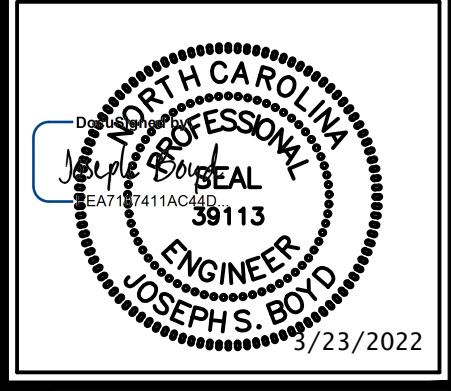


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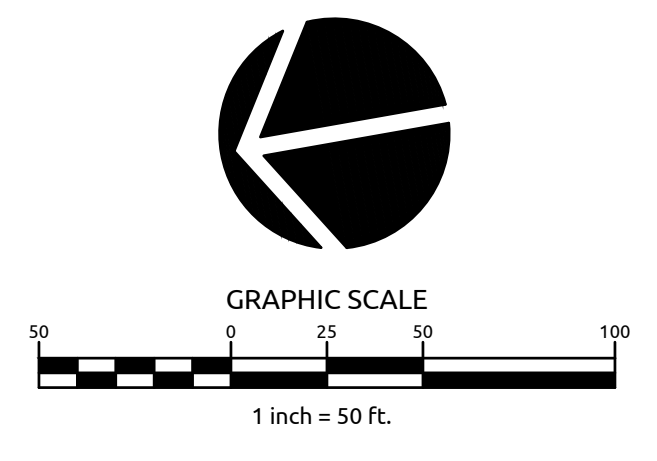
Sheet No.
C6.0



Job No.	060976.80	Drawn By	TMG
Date	06/23/2021	Designer	JSB



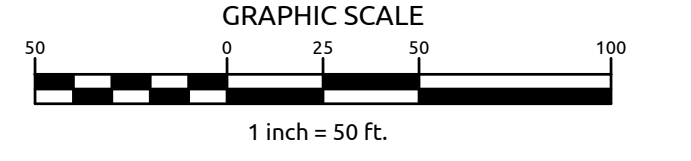
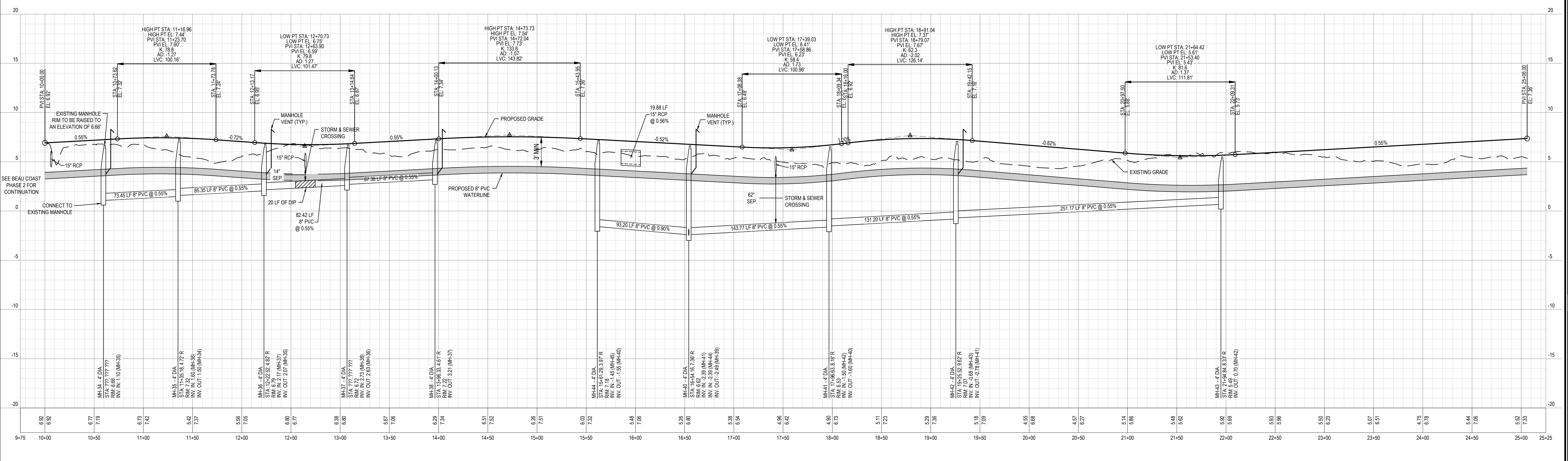
Revisions



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BROWN PELICAN WAY



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BEAU COAST PHASE 4
BEAUFORT, NC

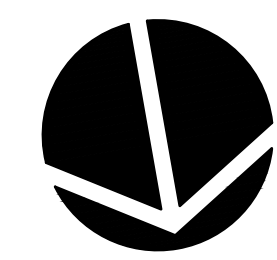
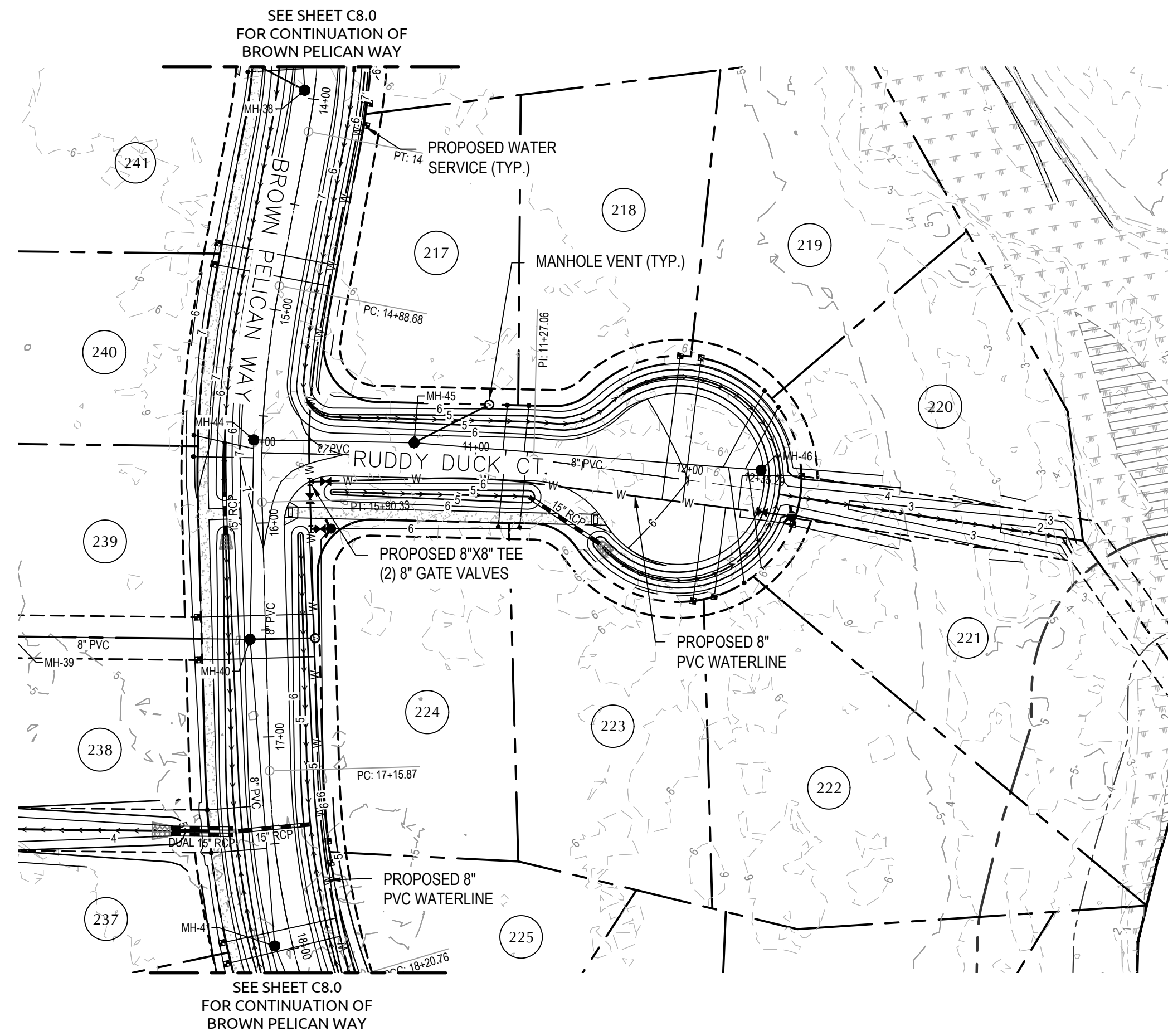
**BROWN PELICAN WAY
PLAN AND PROFILES**

Job No. 060976.80 Drawn By TMC
Date 06/23/2021 Designer JSB

Revisions	

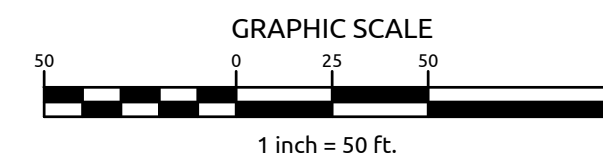
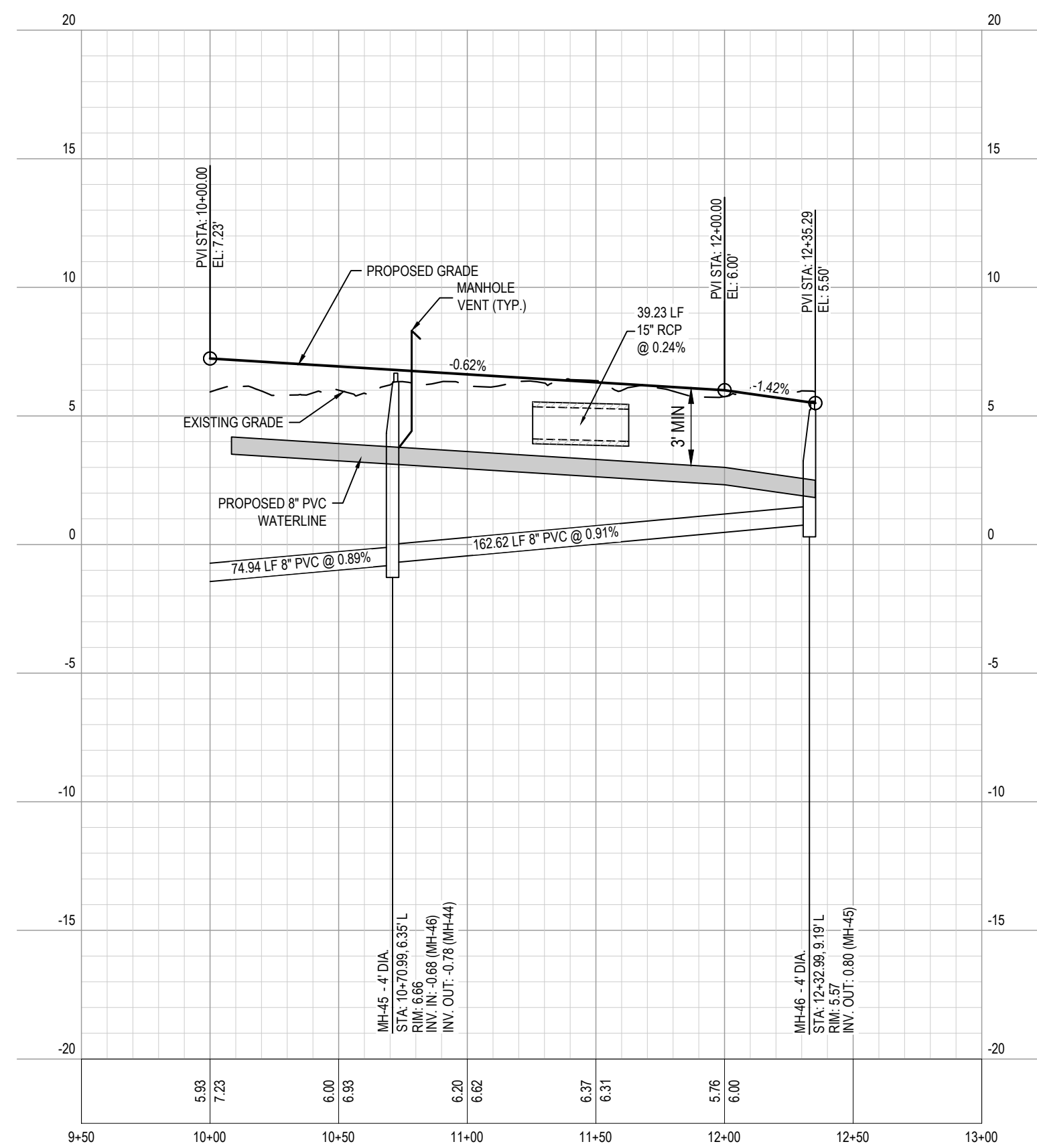
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I:\06\05\070\060976.80\Beau Coast Phase 4\CADD\Drawing\4404Brown Pelican Way Plan and Profiles.dwg - Monday, May 15, 2023 12:38:21 PM - BJOY, JOSEPH



SCALE:
 1" = 50' HORIZ.
 1" = 5' VERT.

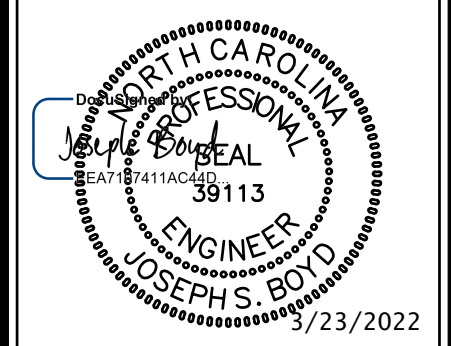
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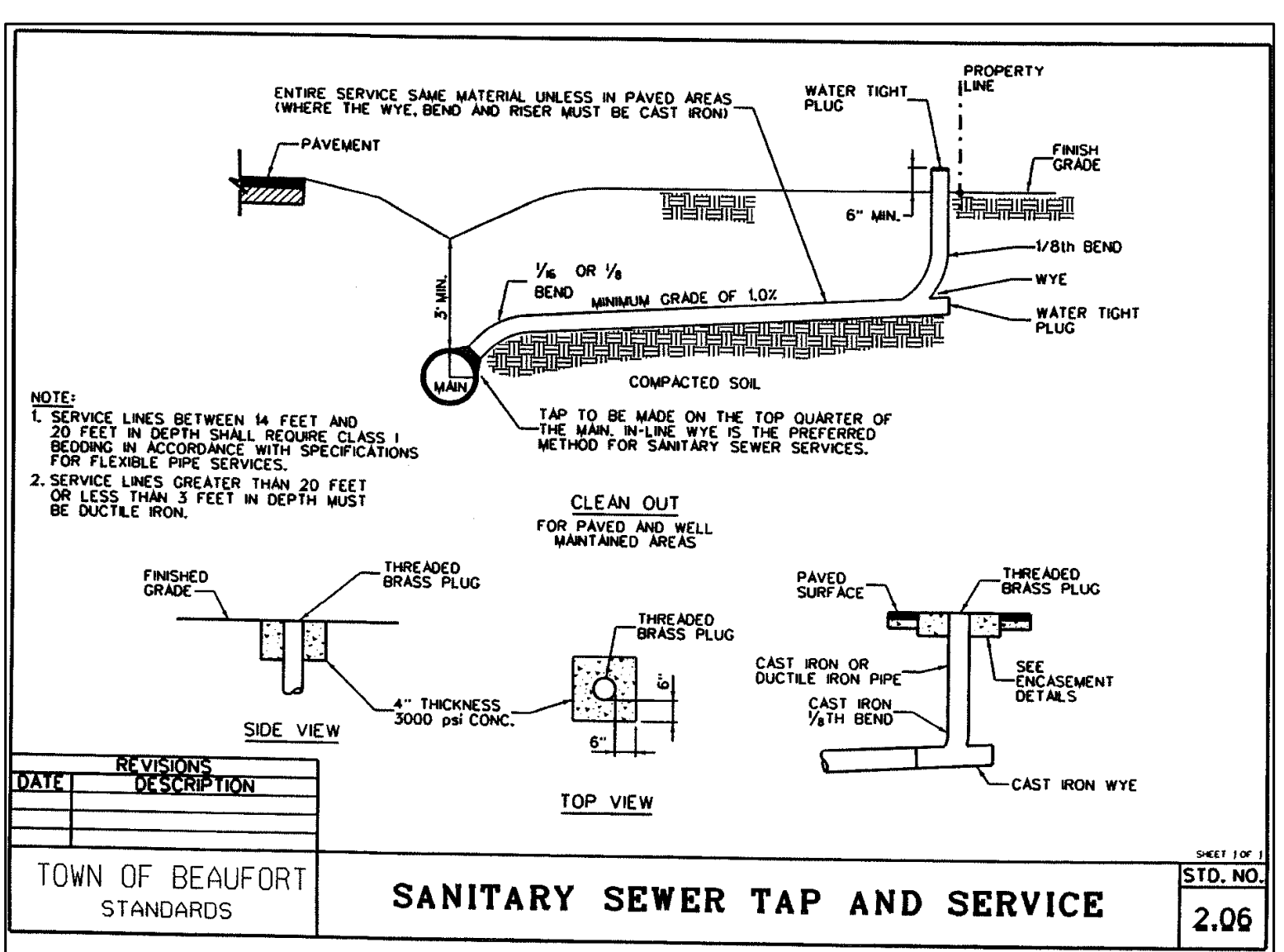
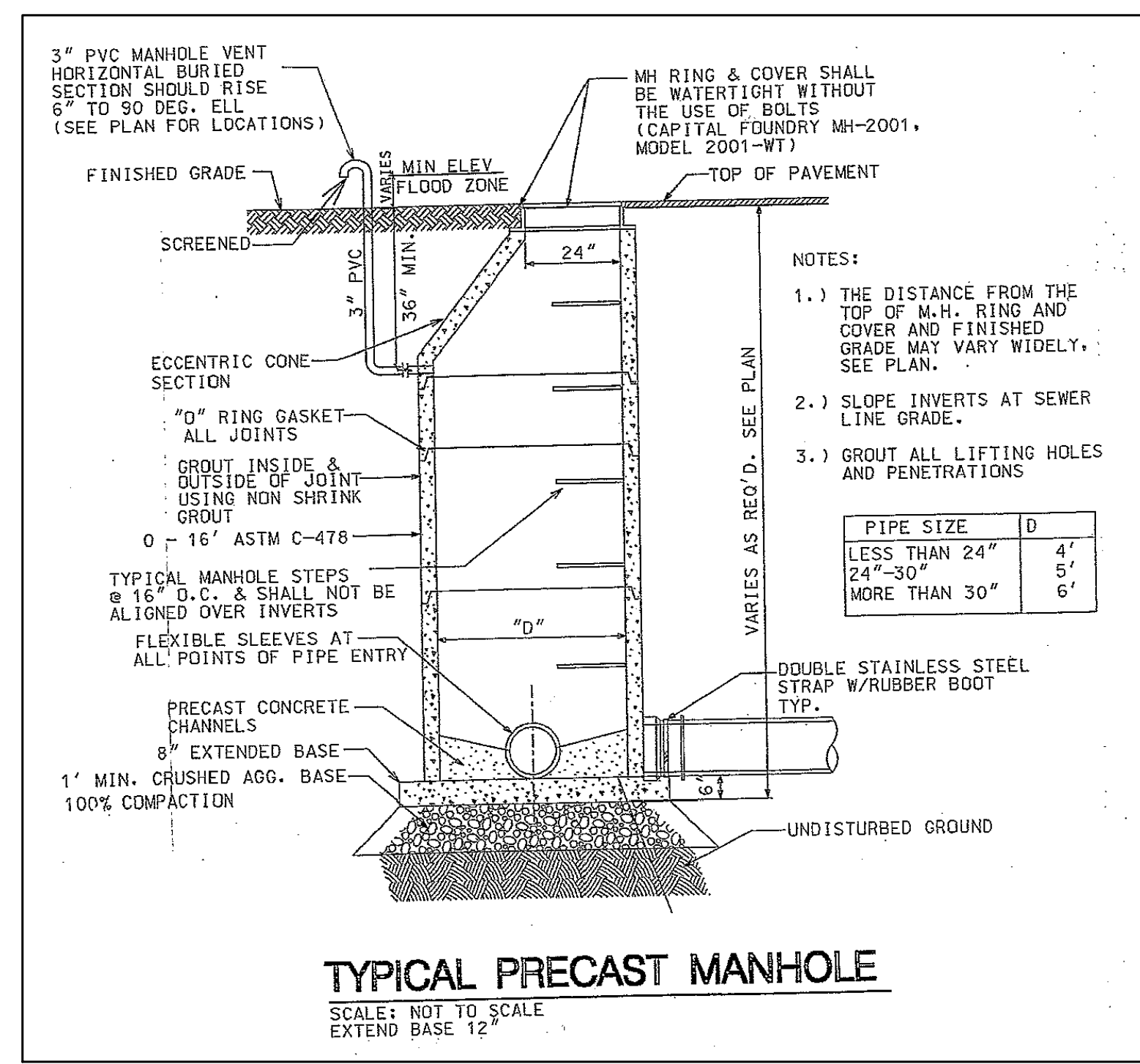
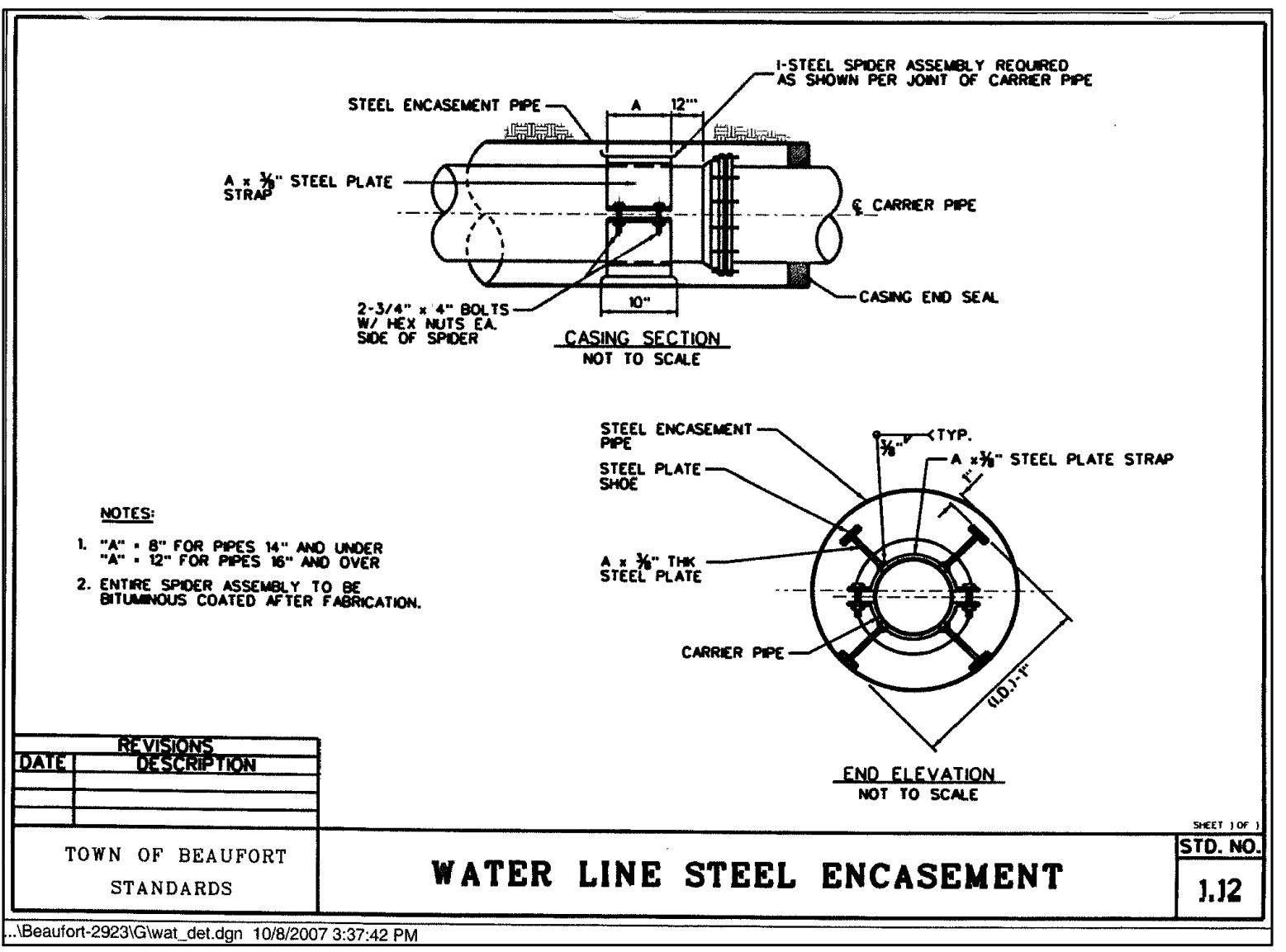
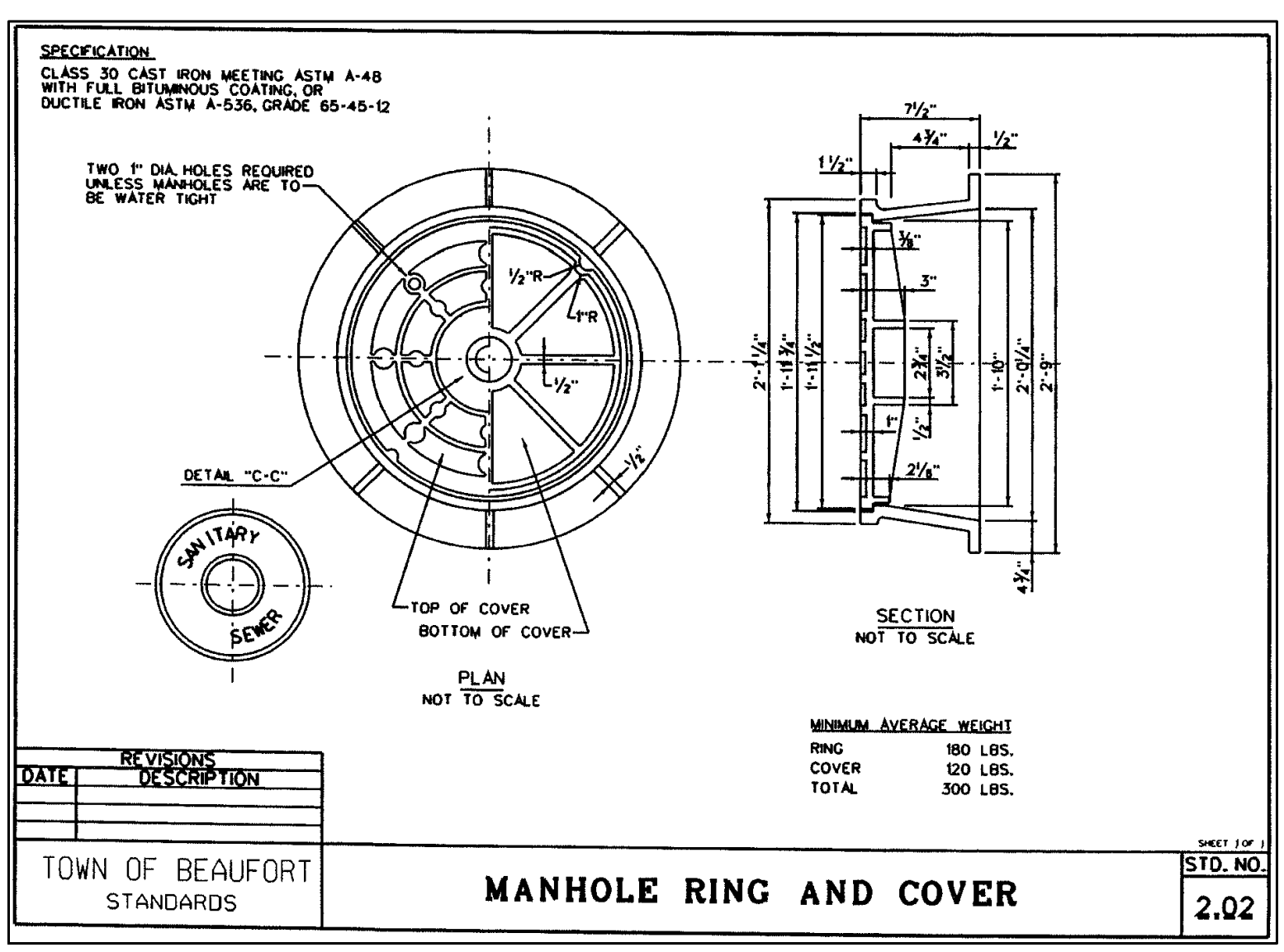
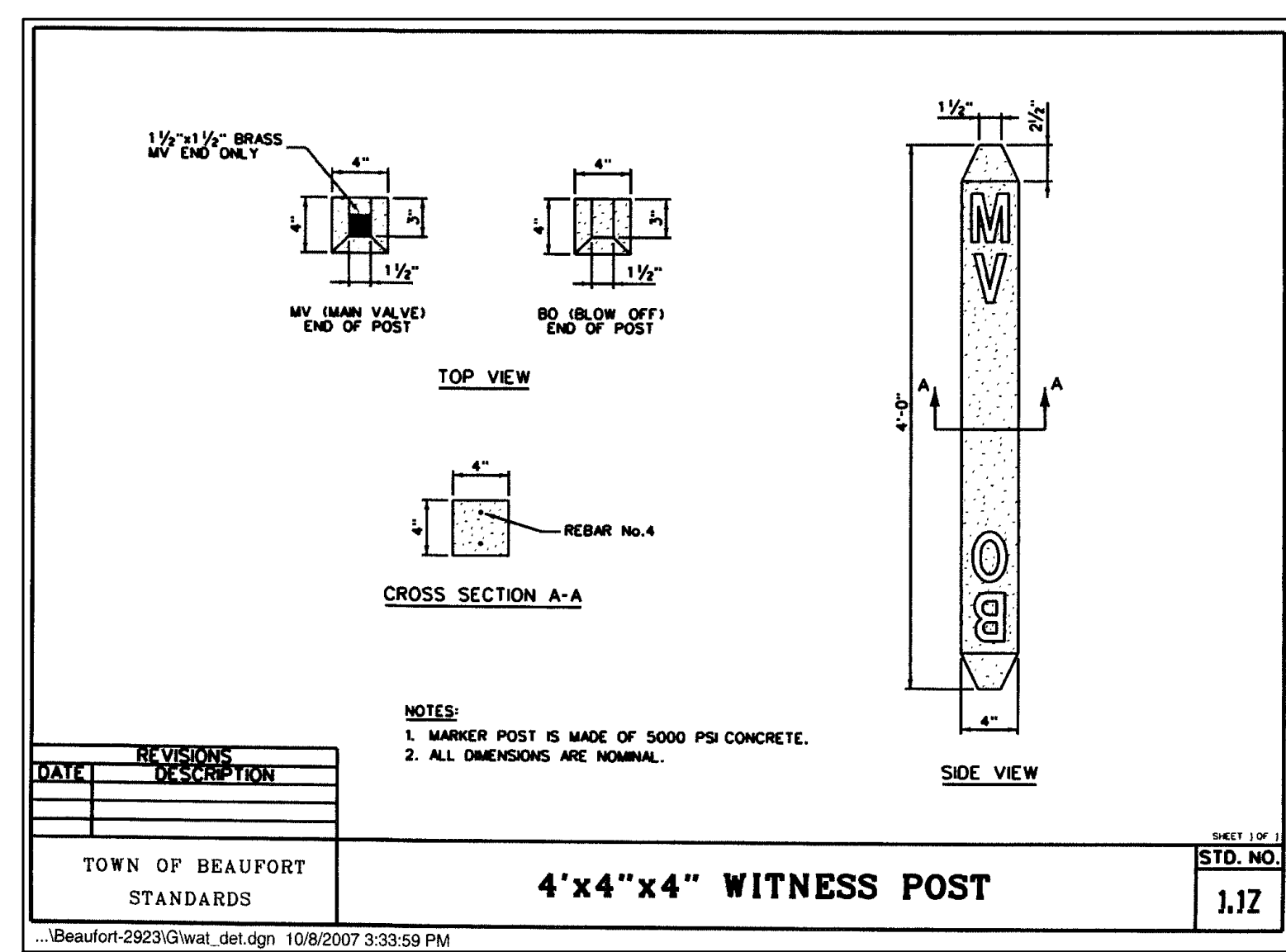
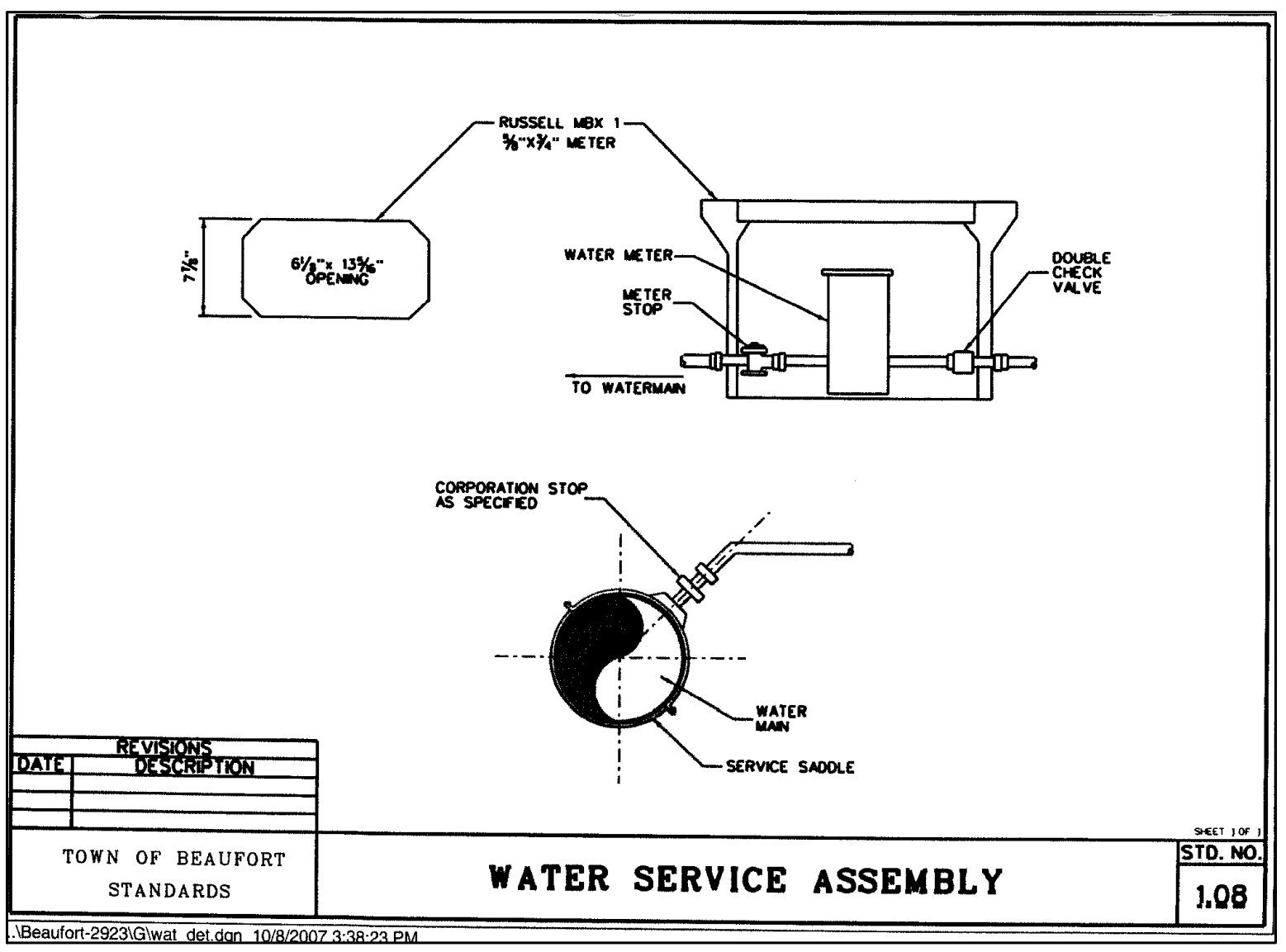
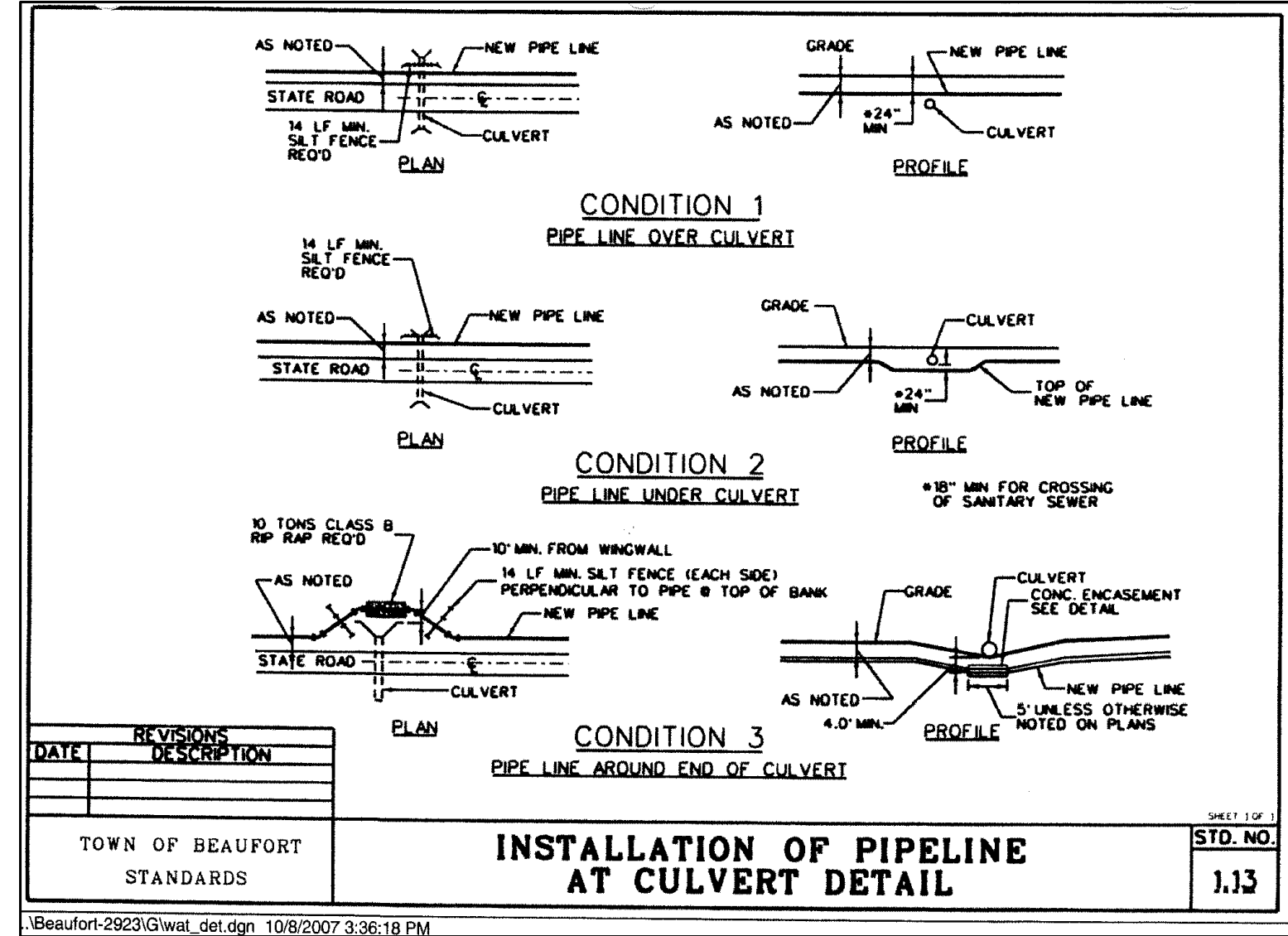
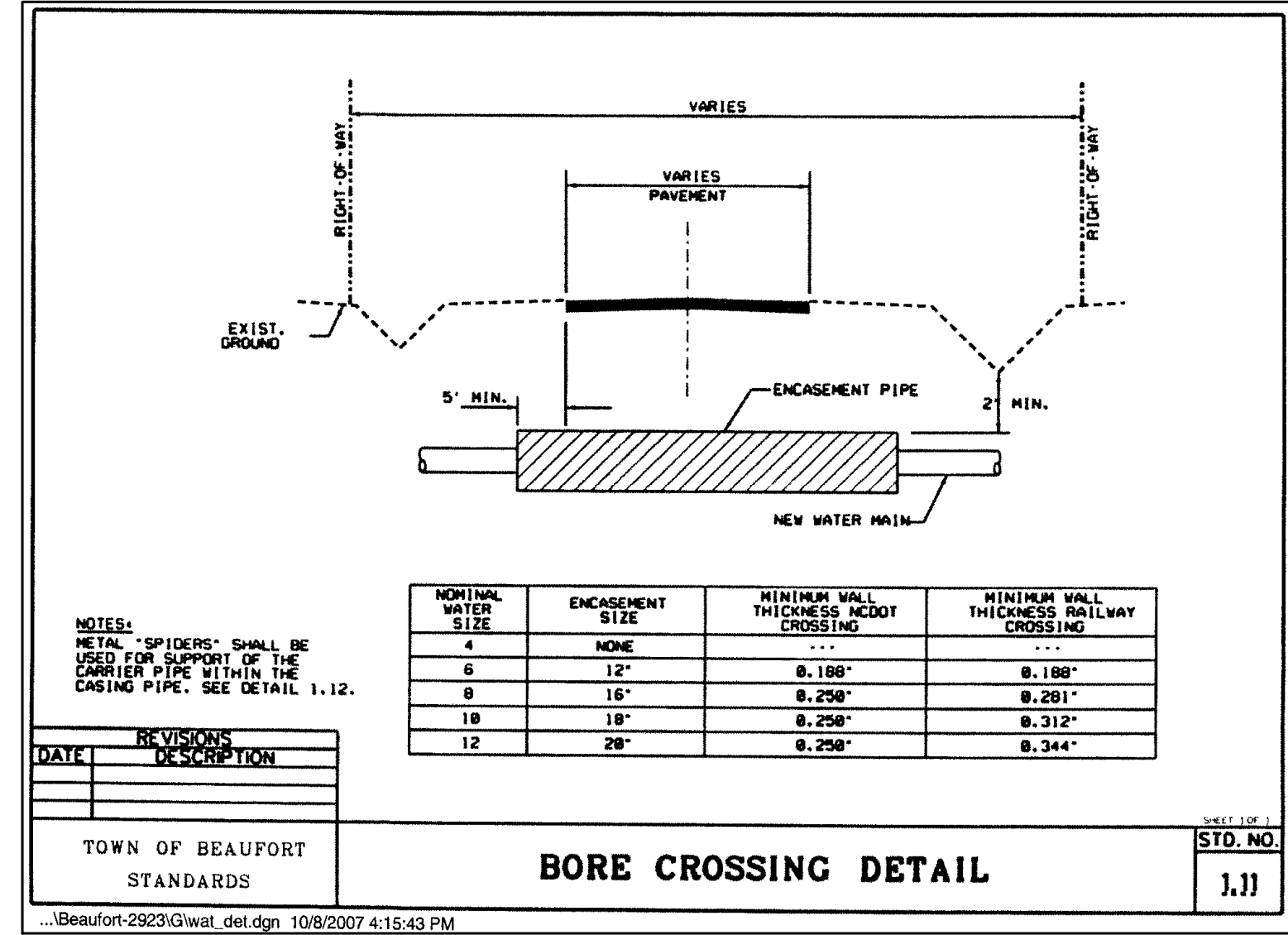
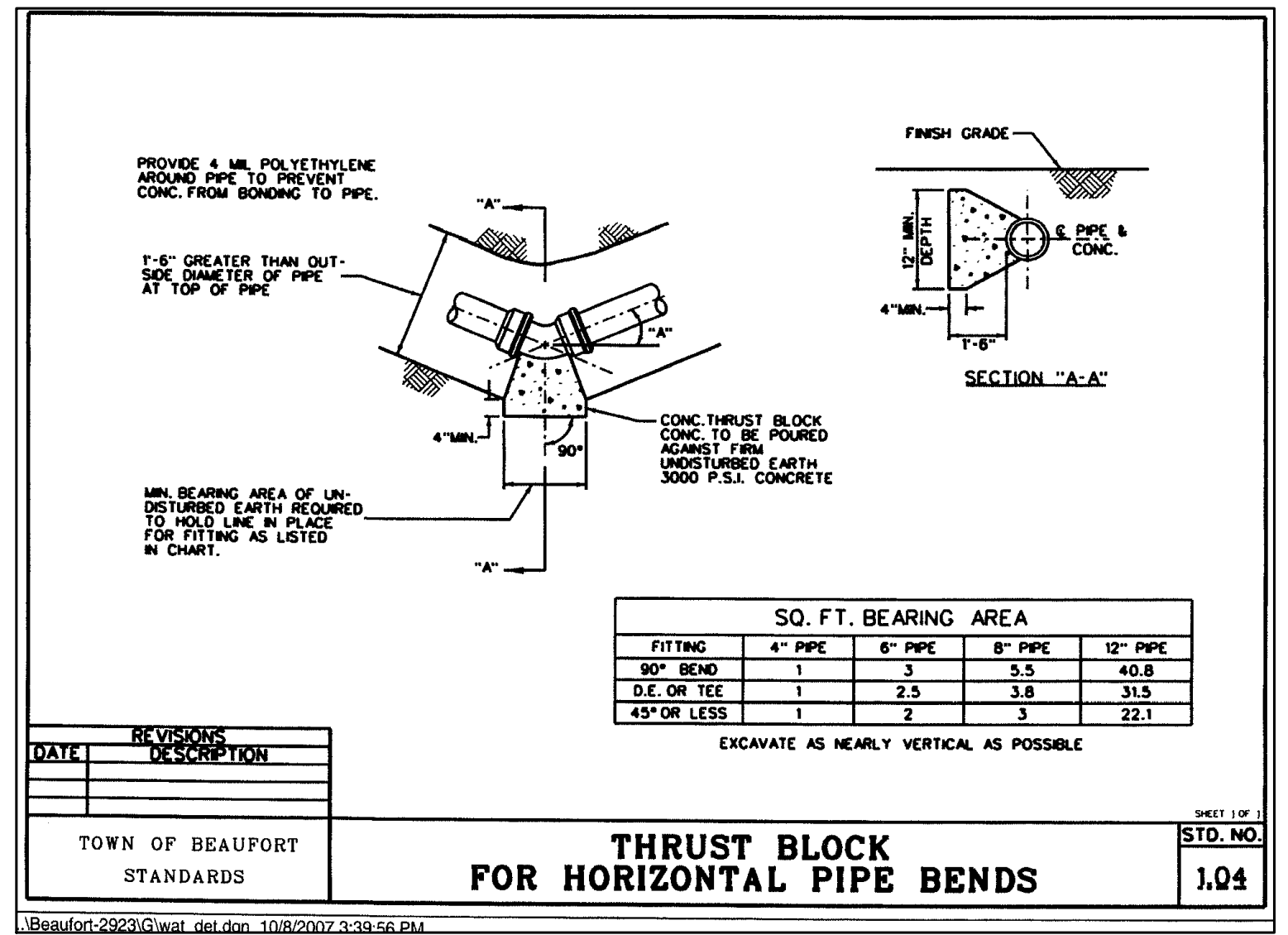
Job No.	060976.80	Drawn By	TMC
Date	06/23/2021	Designer	JSB



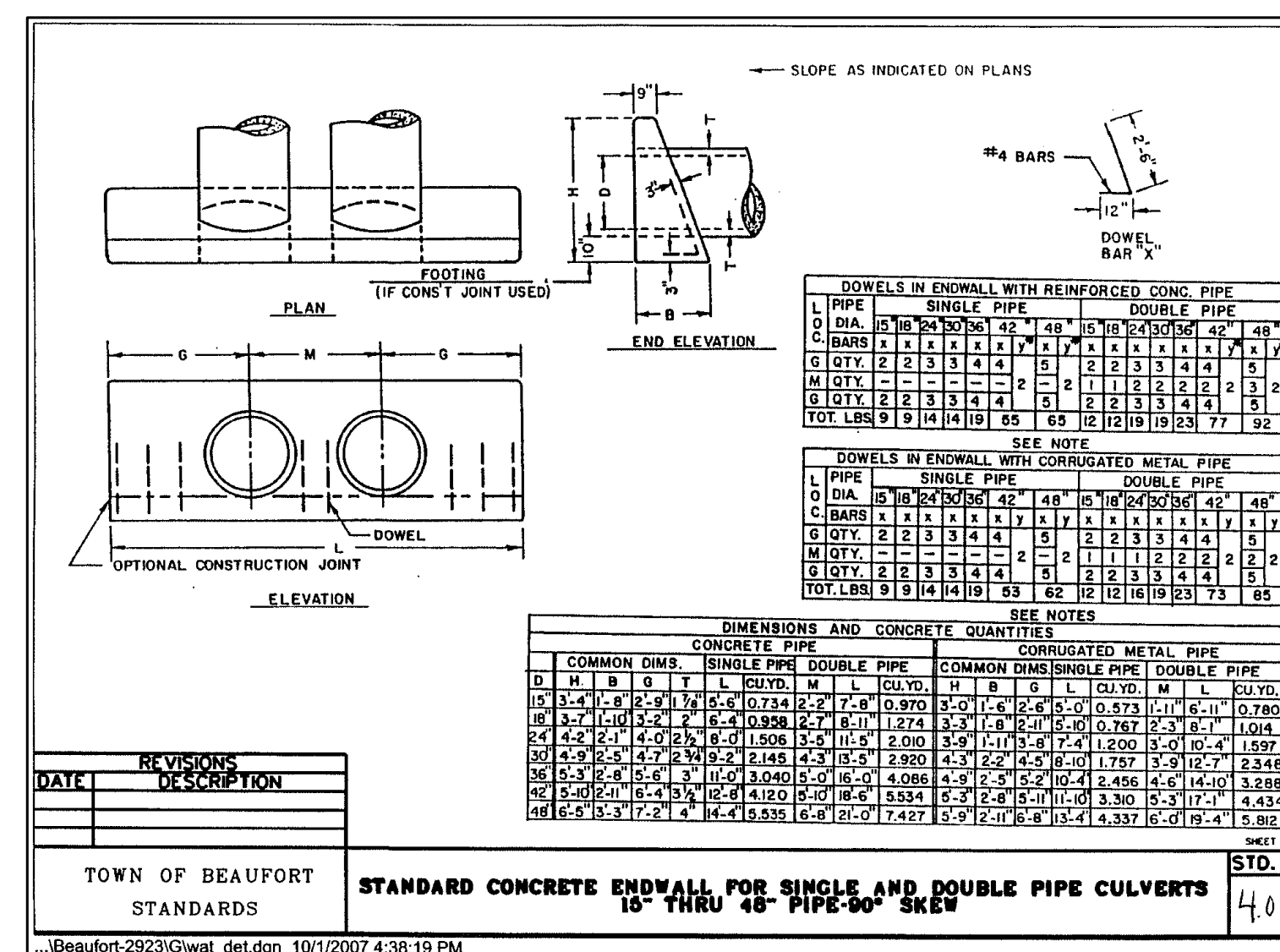
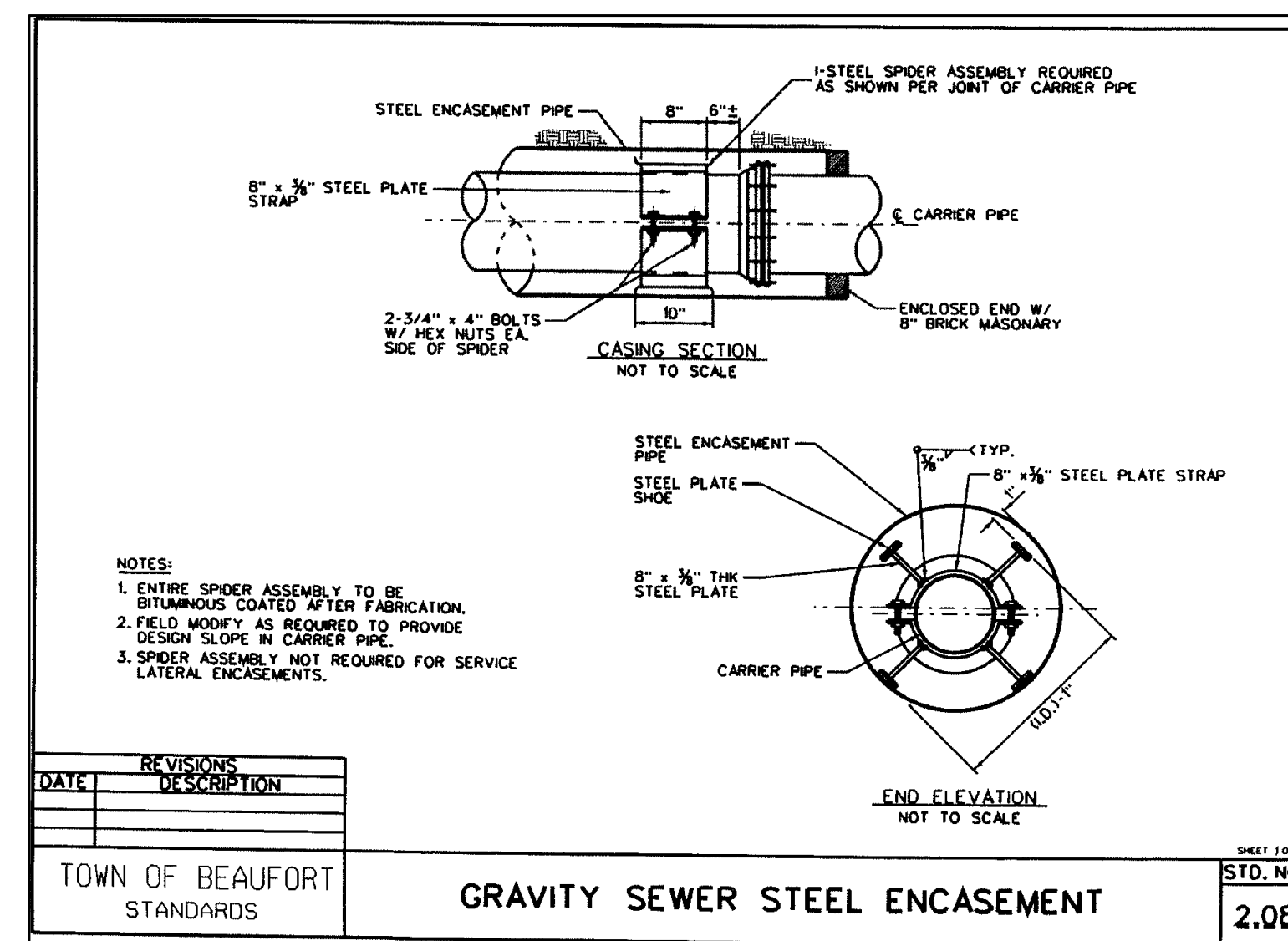
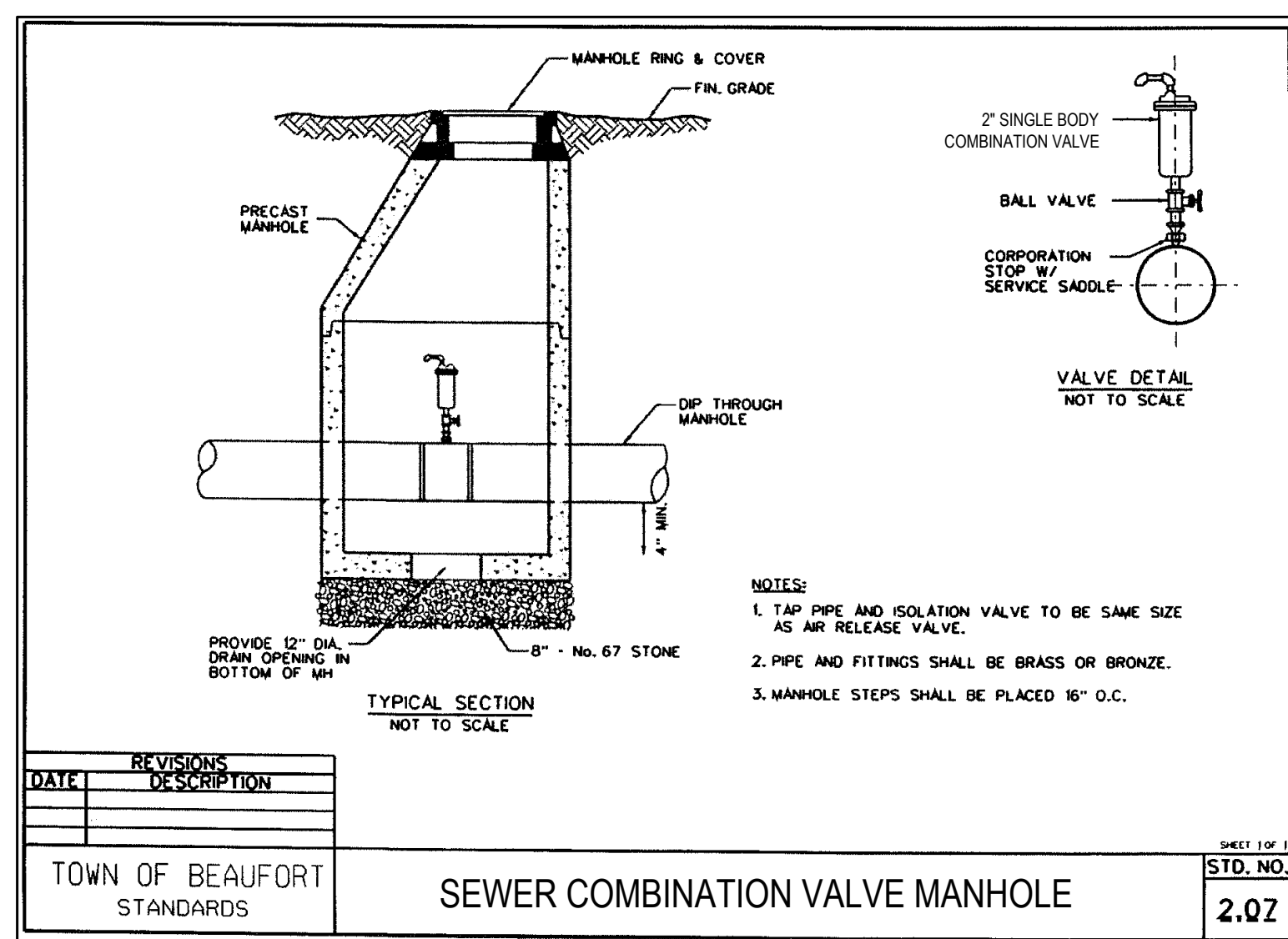
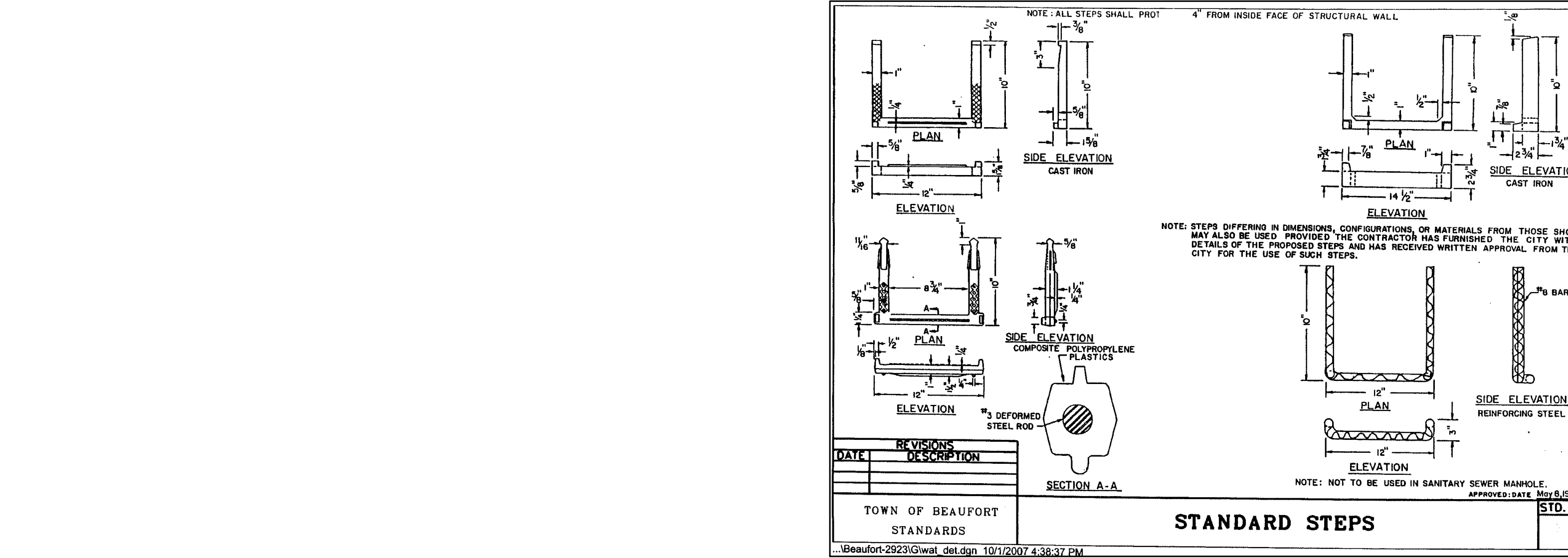
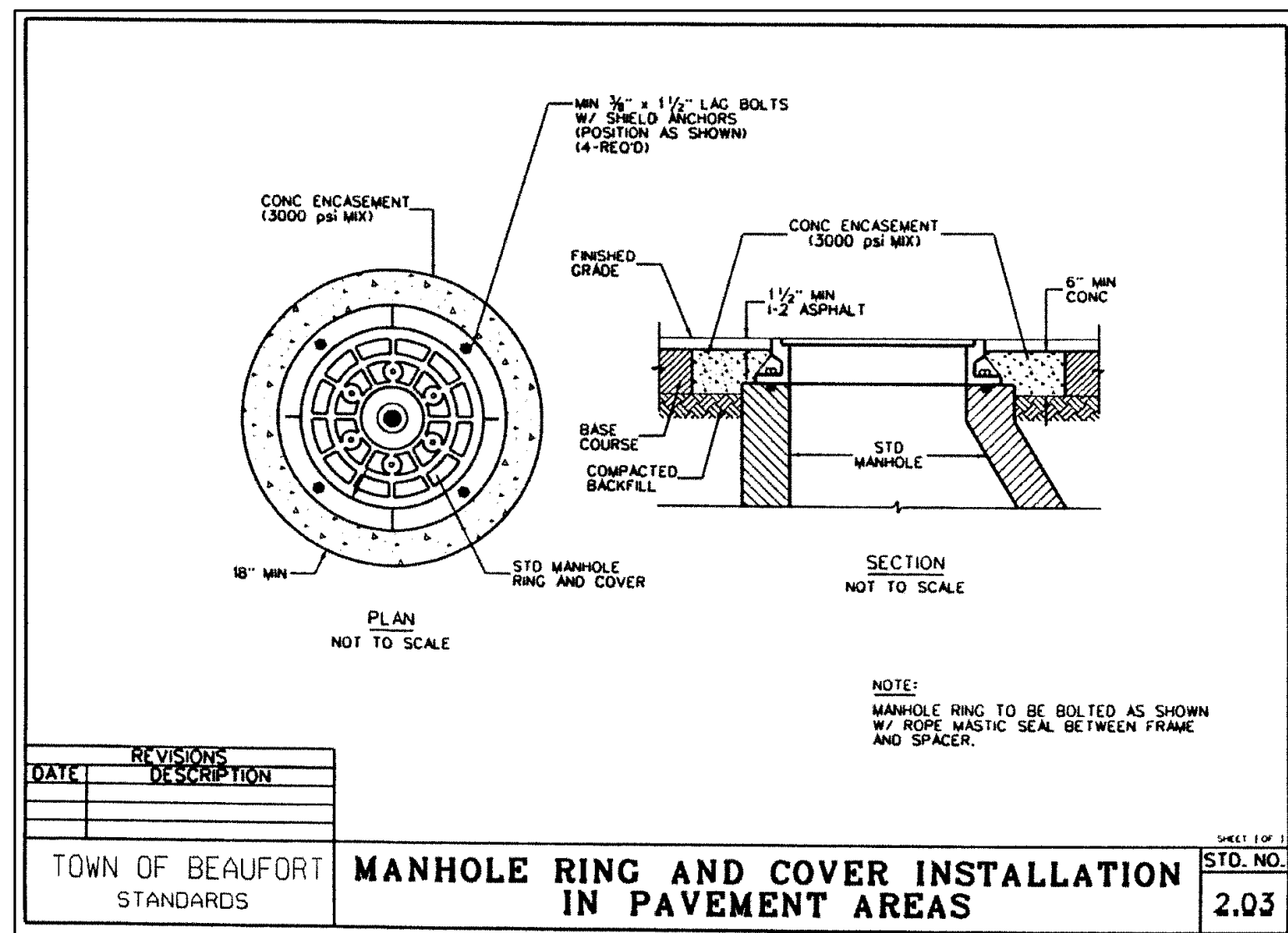
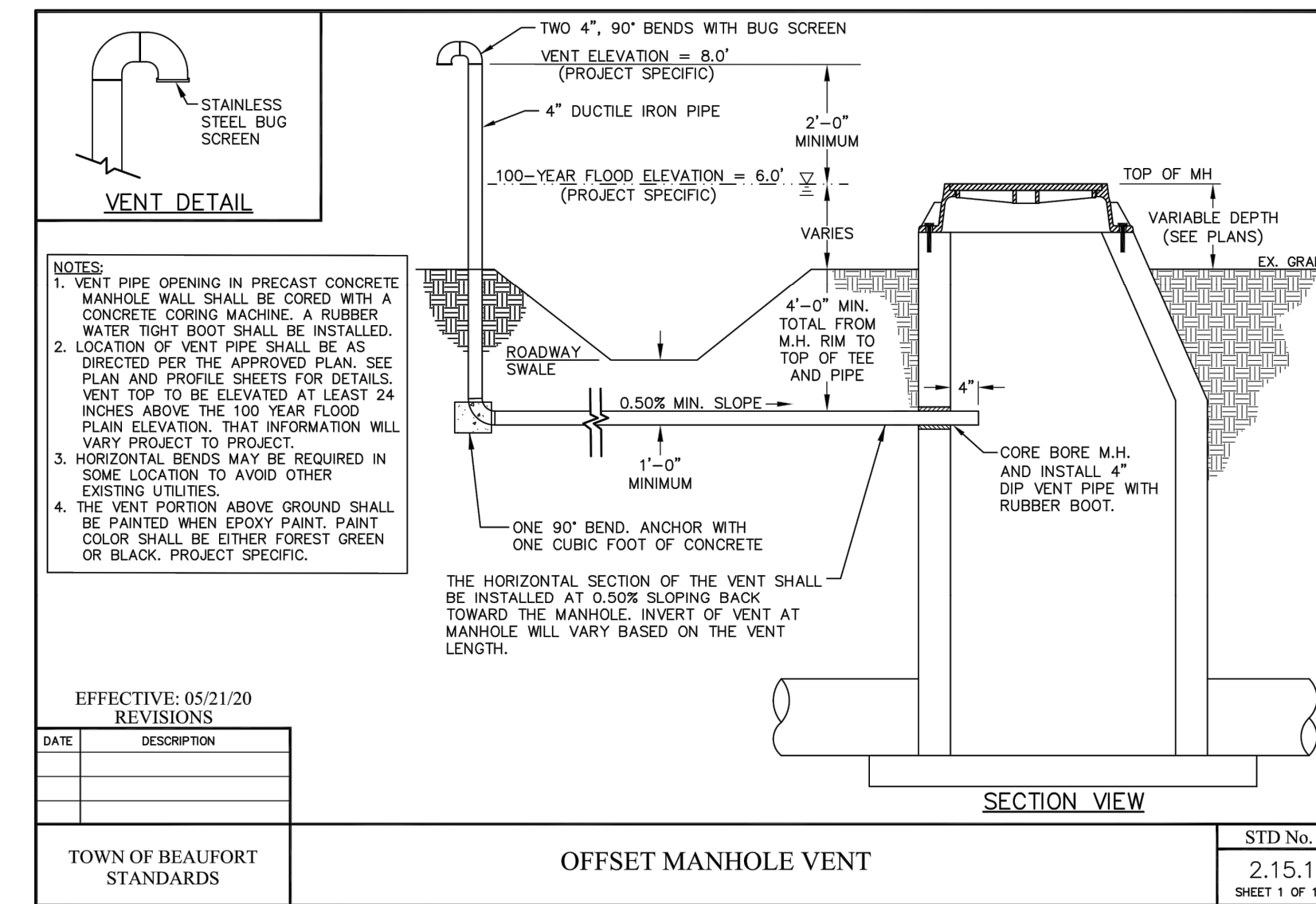
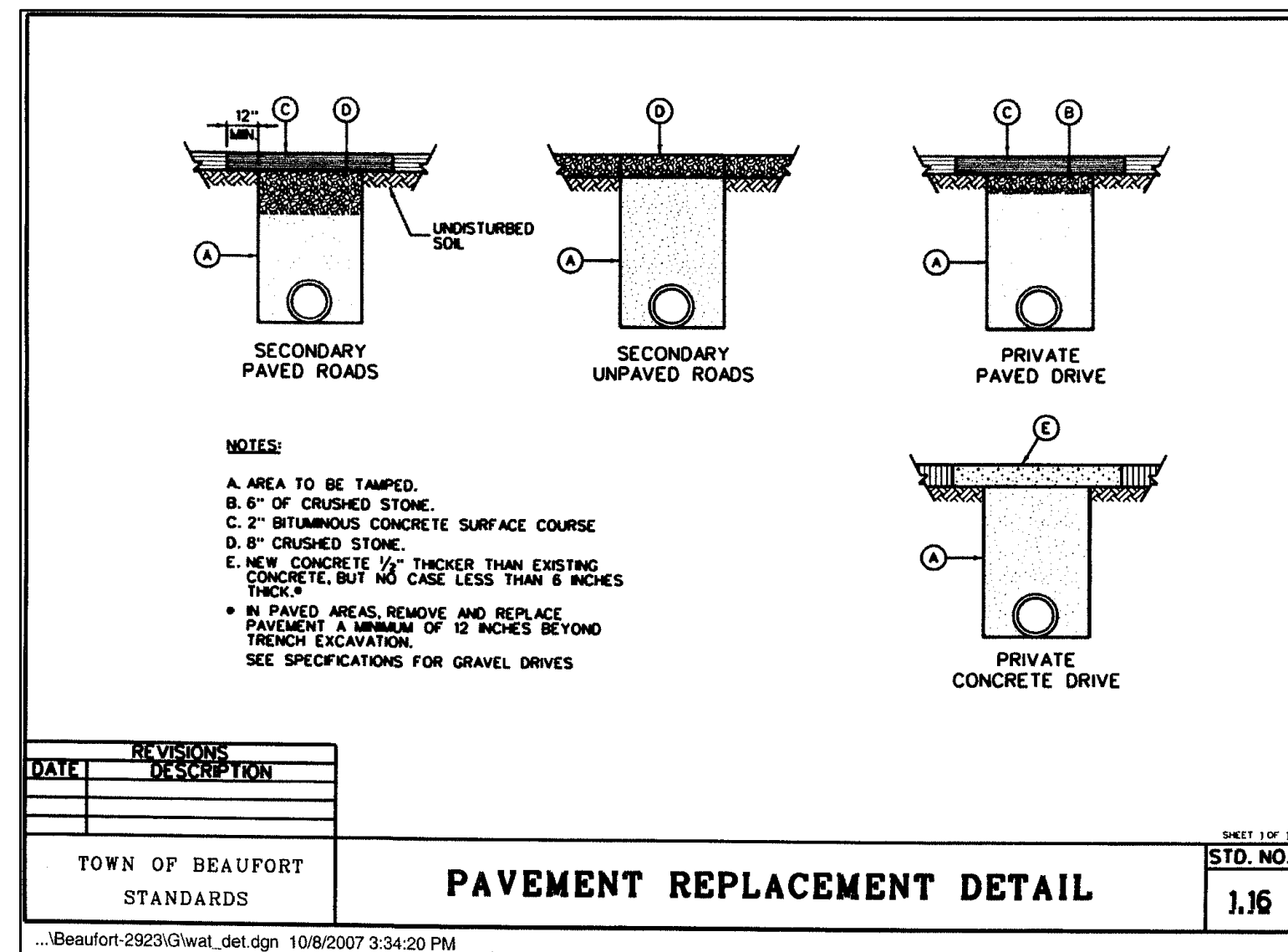
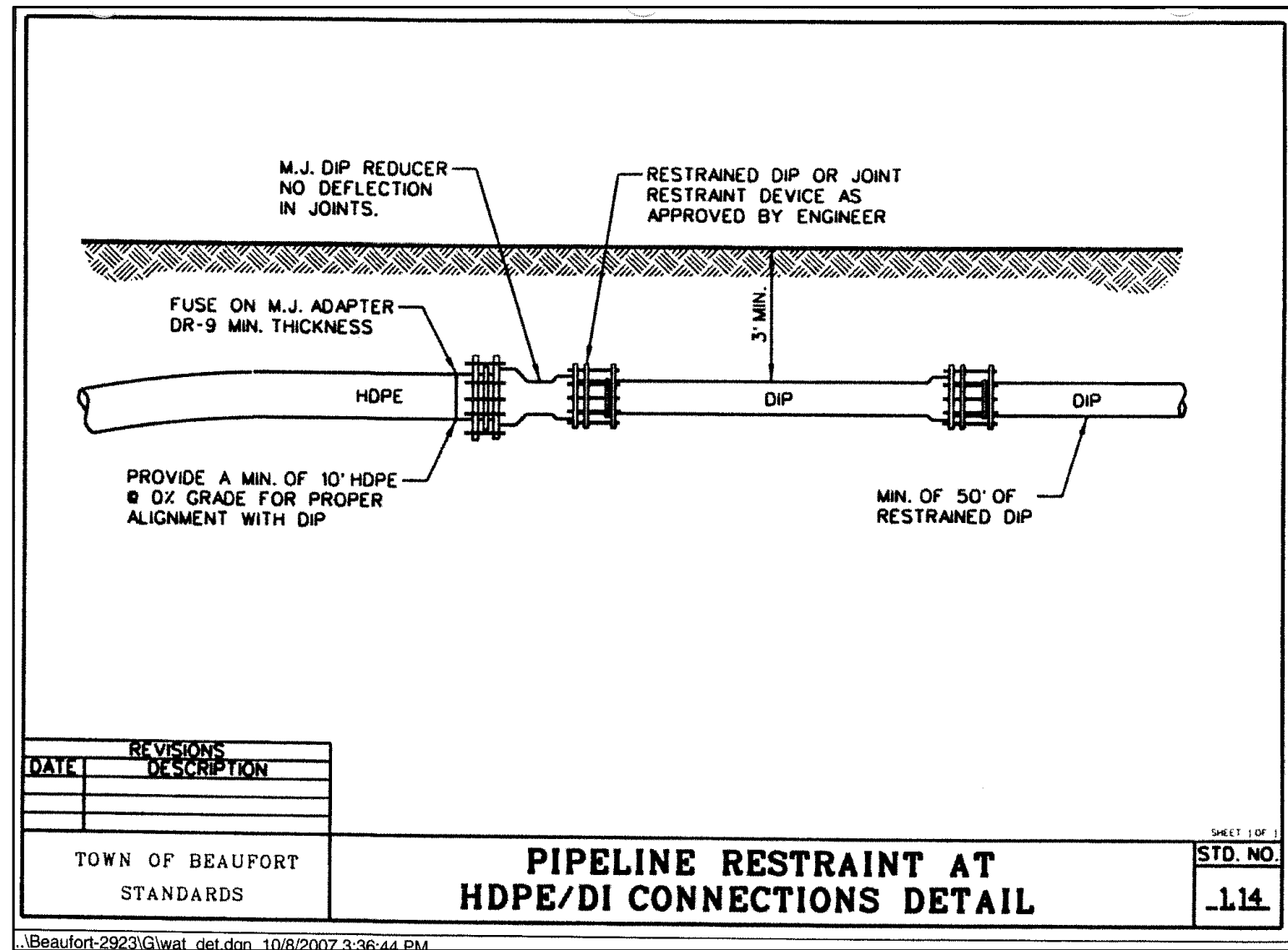
Revisions



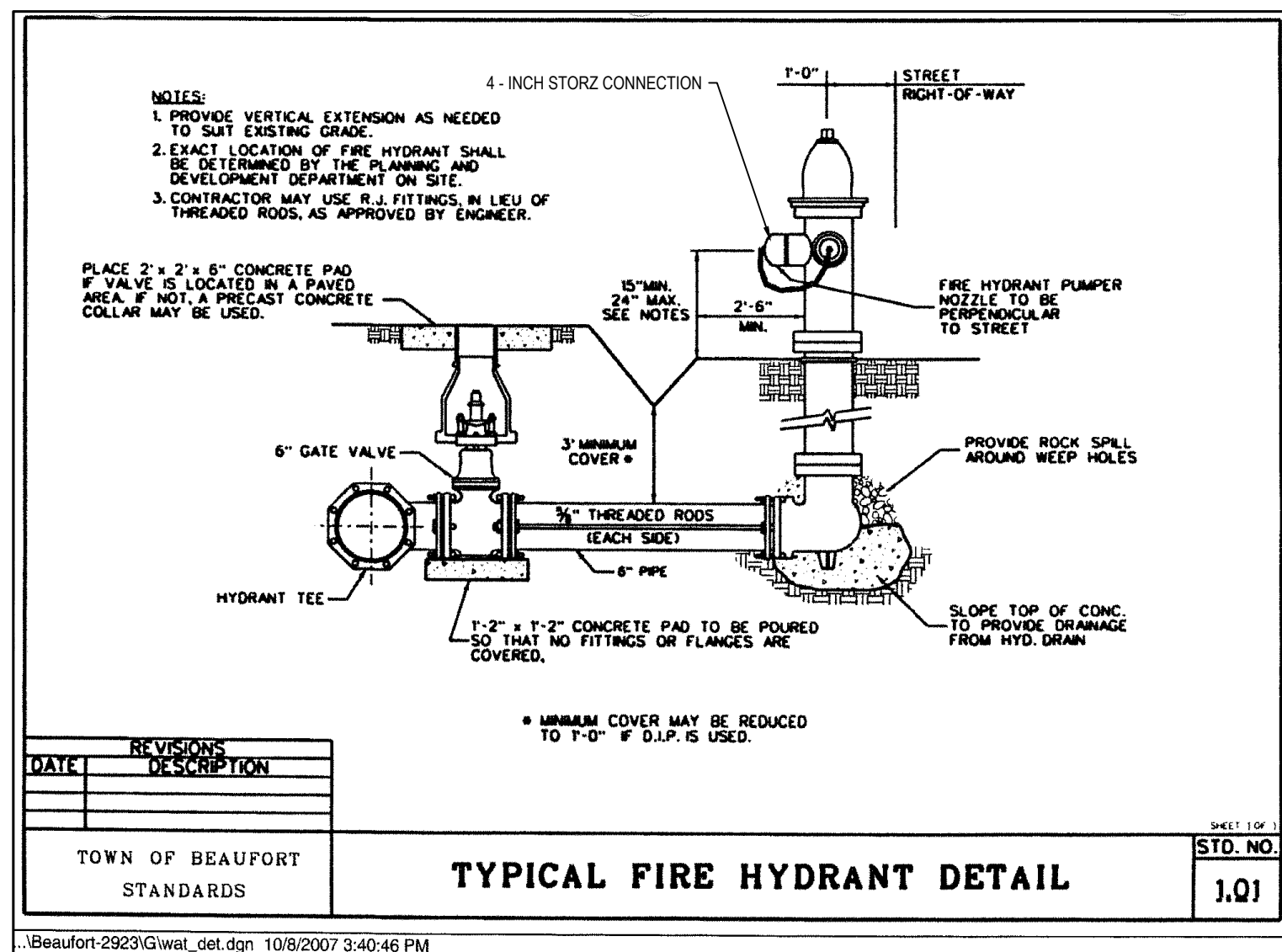
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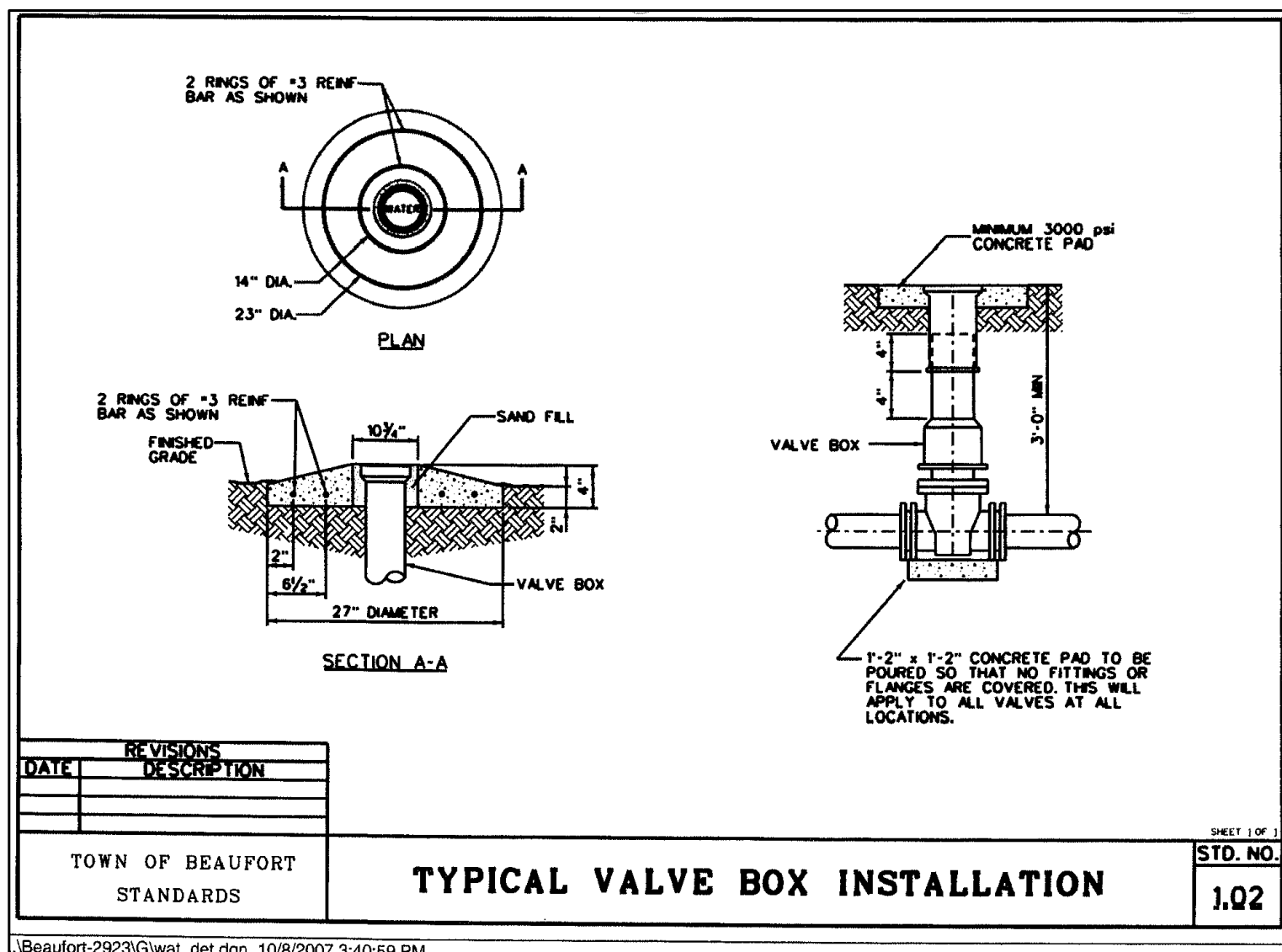
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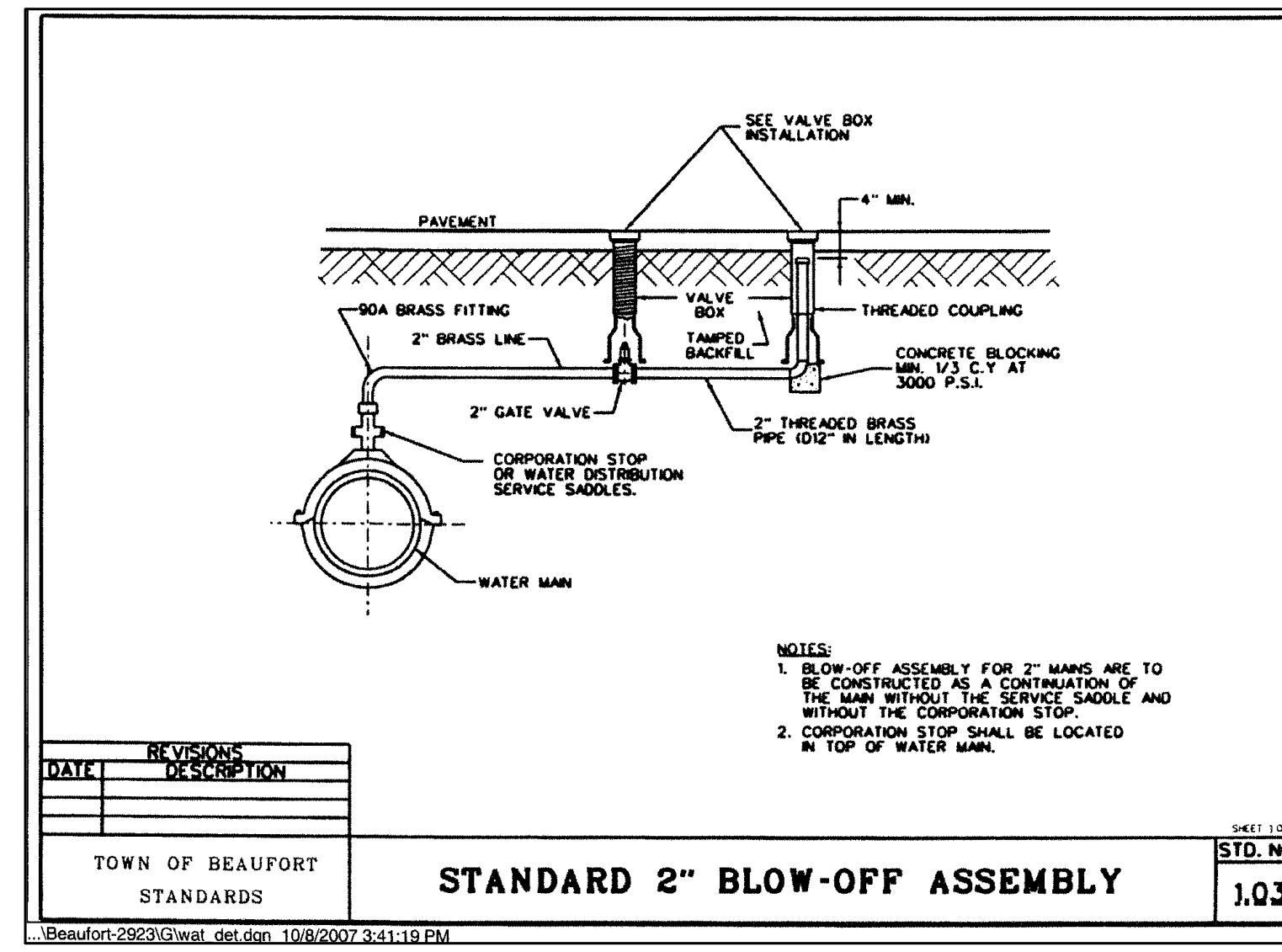
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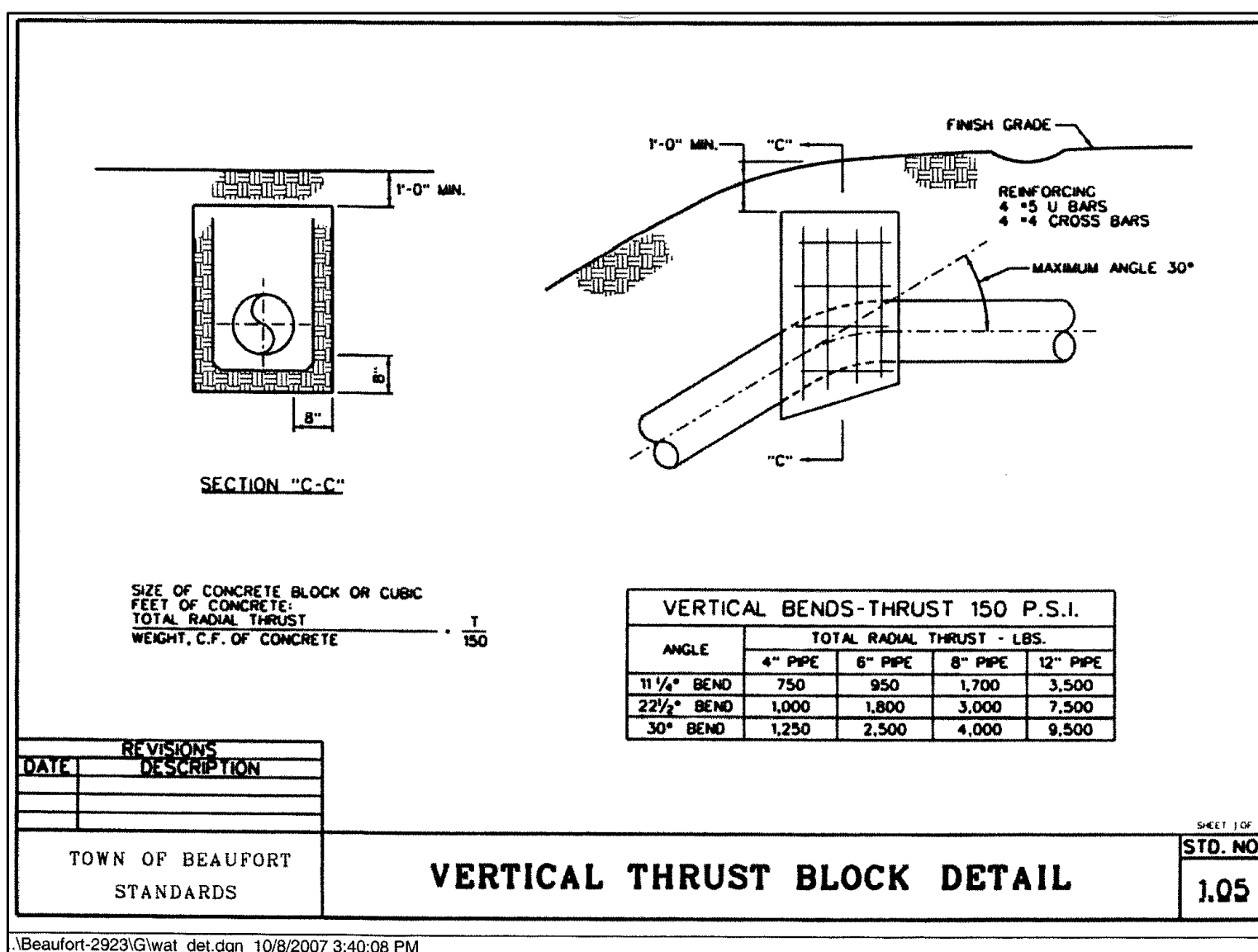
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TYPICAL FIRE HYDRANT DETAIL
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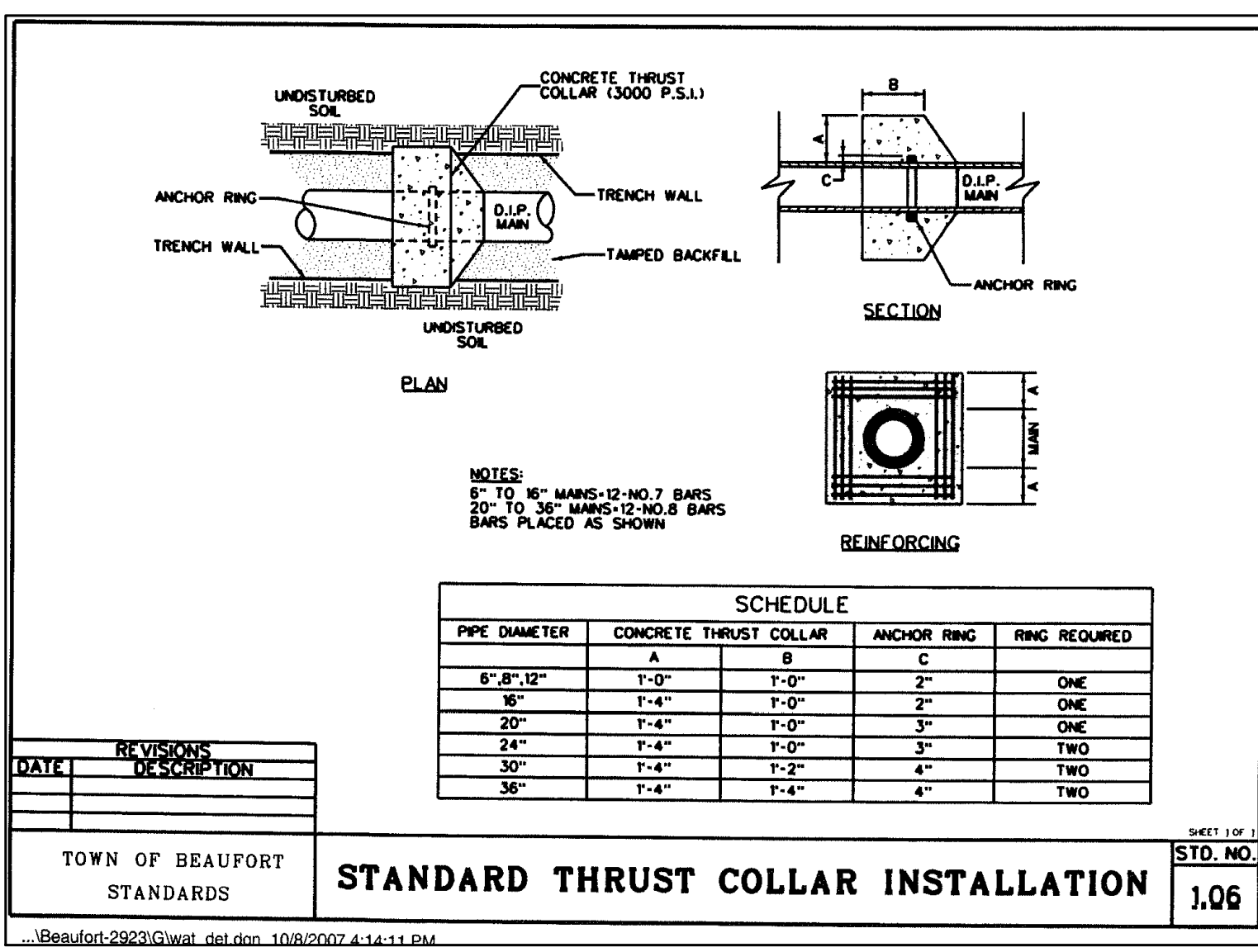
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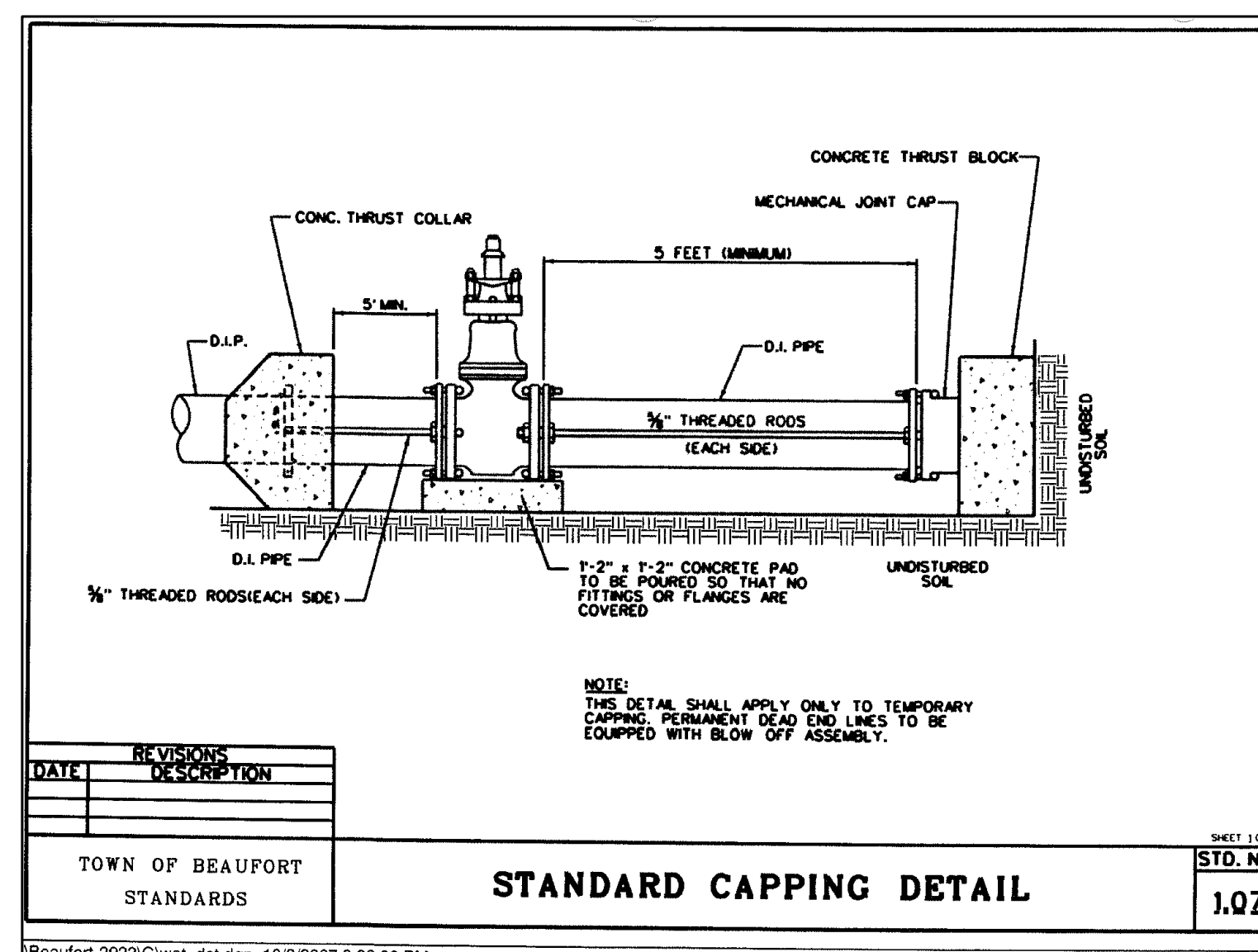
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STANDARD 2" BLOW-OFF ASSEMBLY
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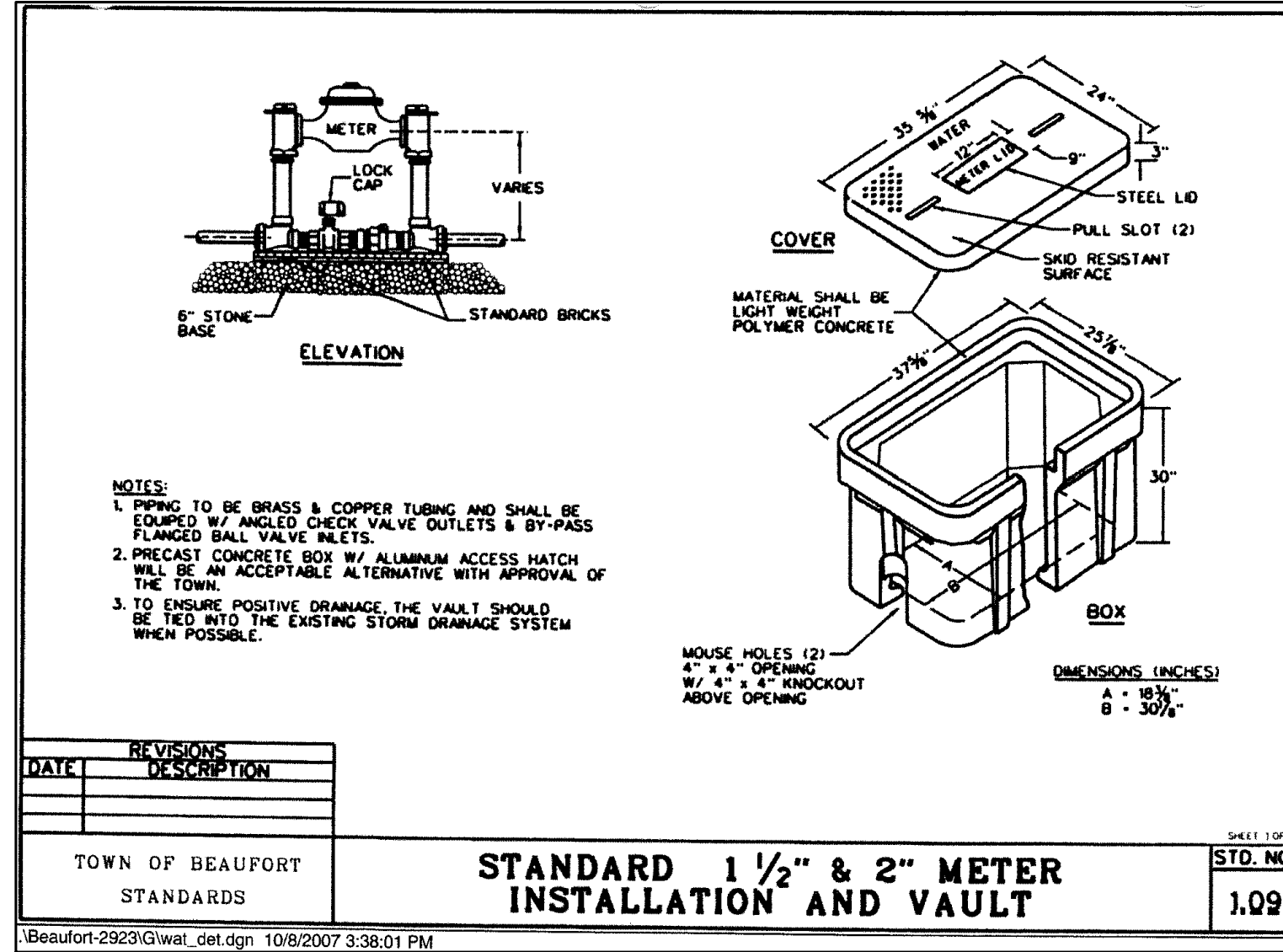
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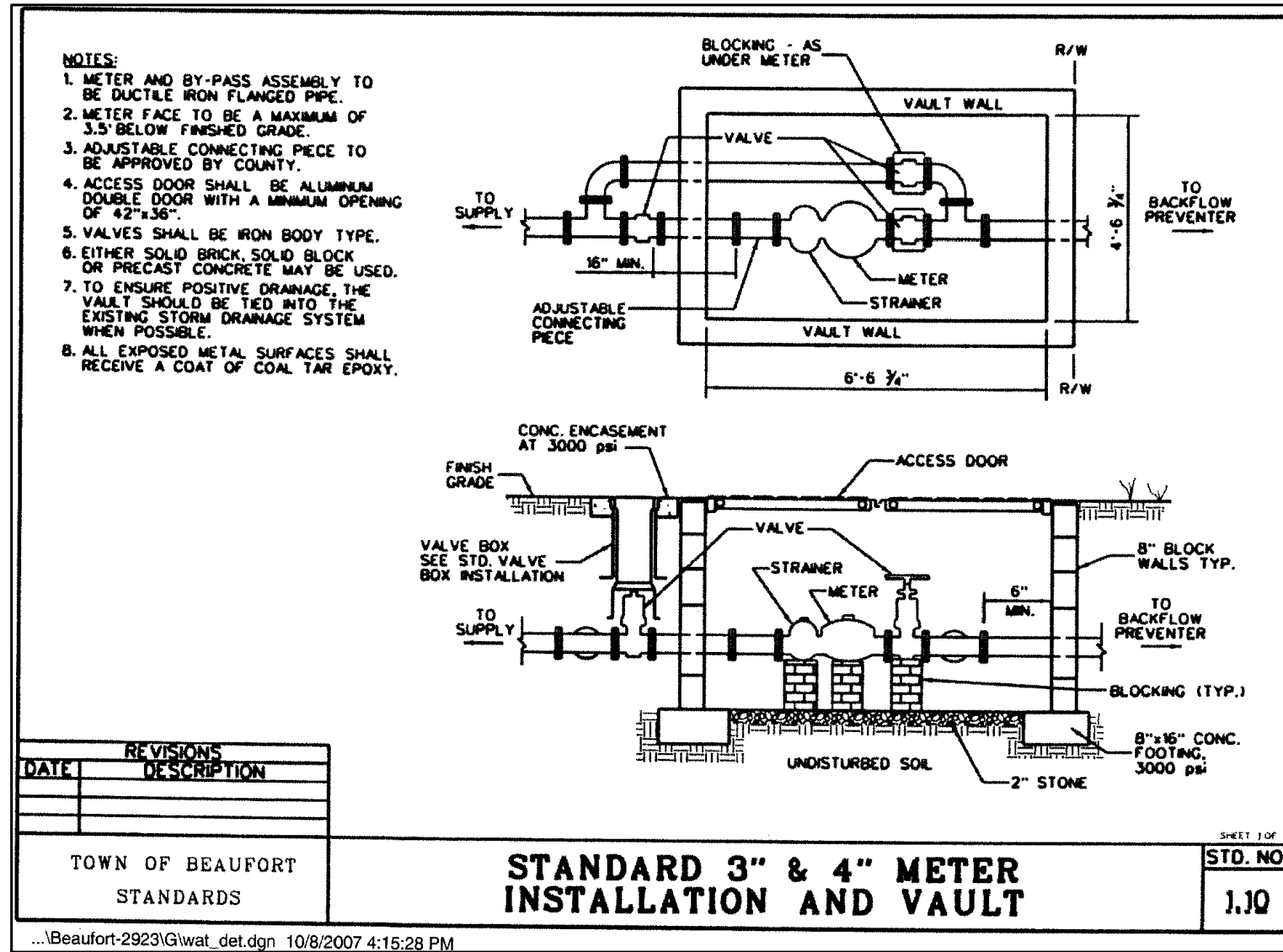
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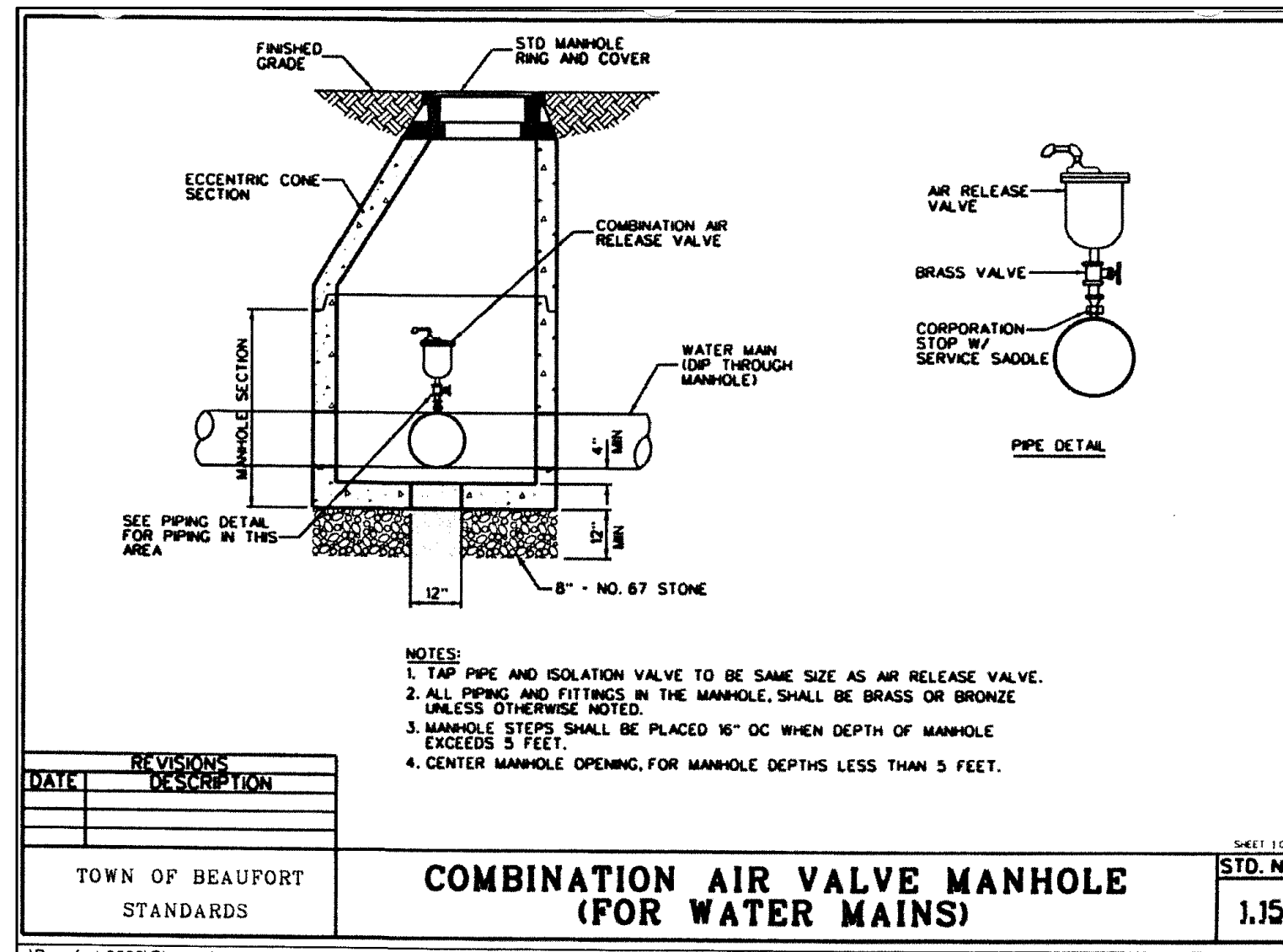
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REVISIONS
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STANDARD 1 1/2" & 2" METER INSTALLATION AND VAULT
 SHEET 1 OF 1
 STD. NO. 1.09

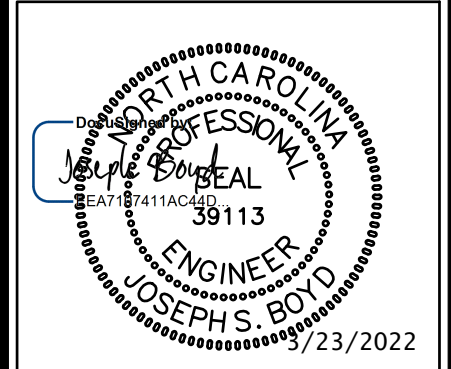


REVISIONS
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STANDARD 3" & 4" METER INSTALLATION AND VAULT
 SHEET 1 OF 1
 STD. NO. 1.10



REVISIONS
 DATE DESCRIPTION
 TOWN OF BEAUFORT STANDARDS
COMBINATION AIR VALVE MANHOLE (FOR WATER MAINS)
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TYPICAL DETAILS NOTE:
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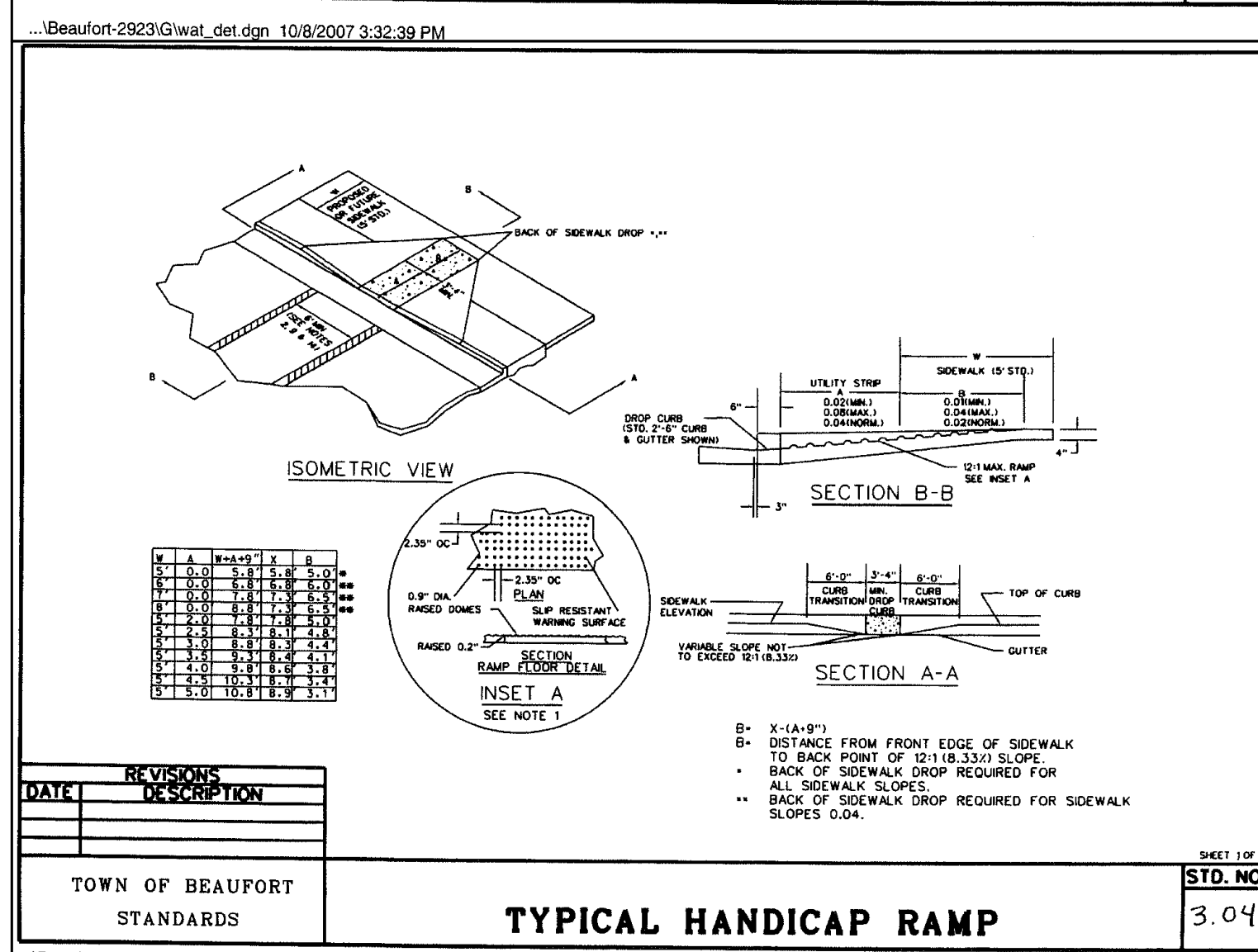
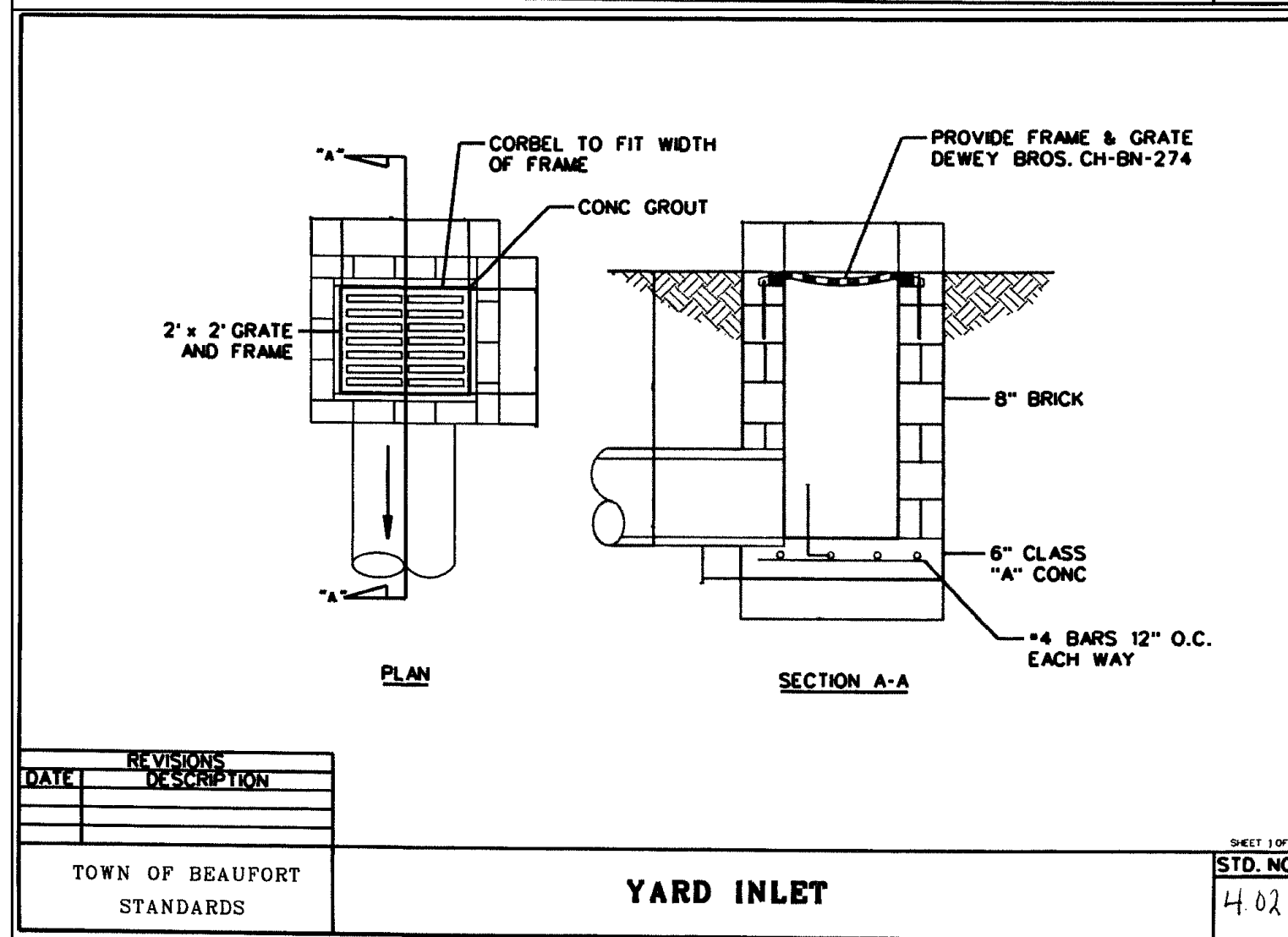
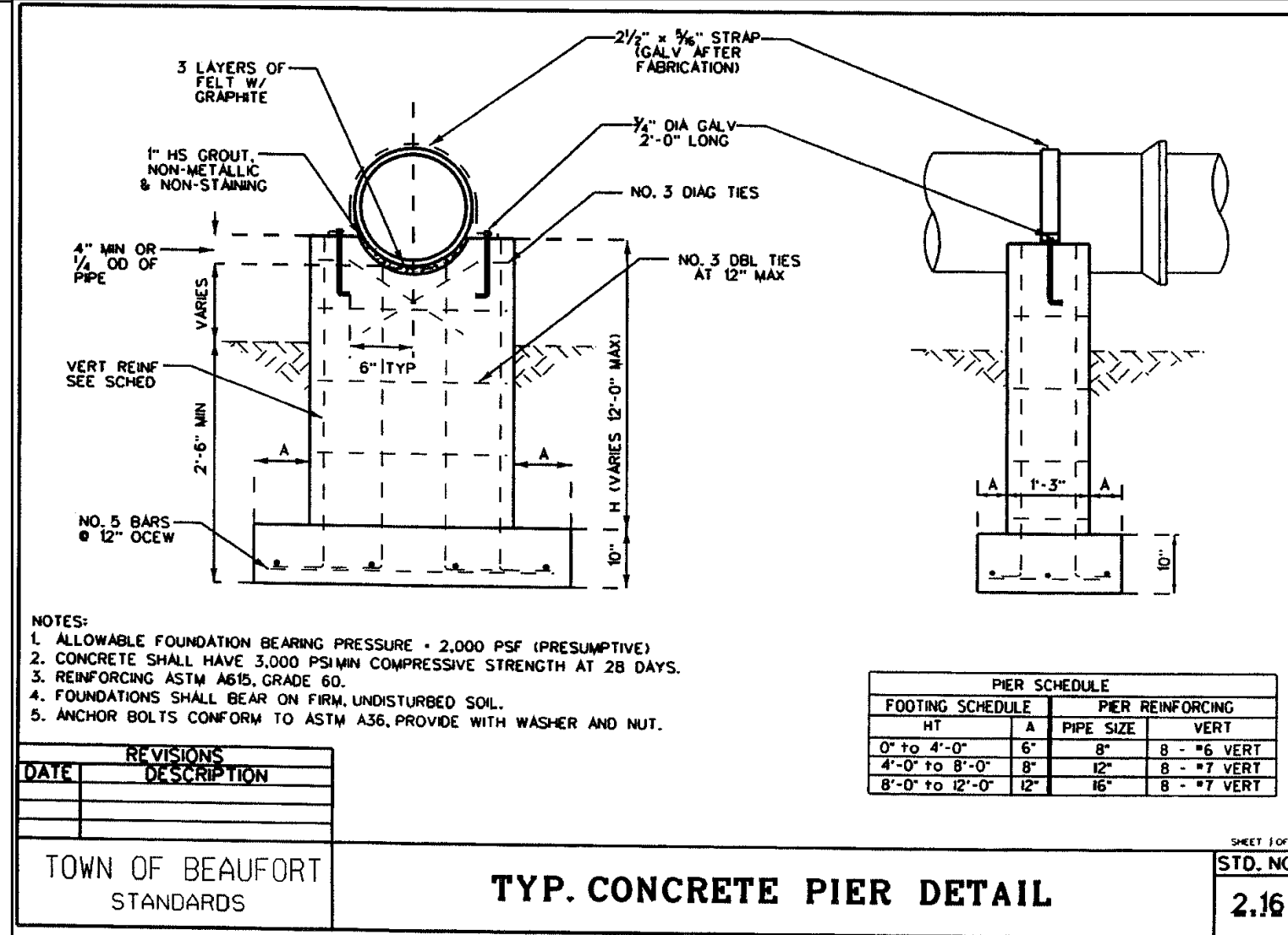
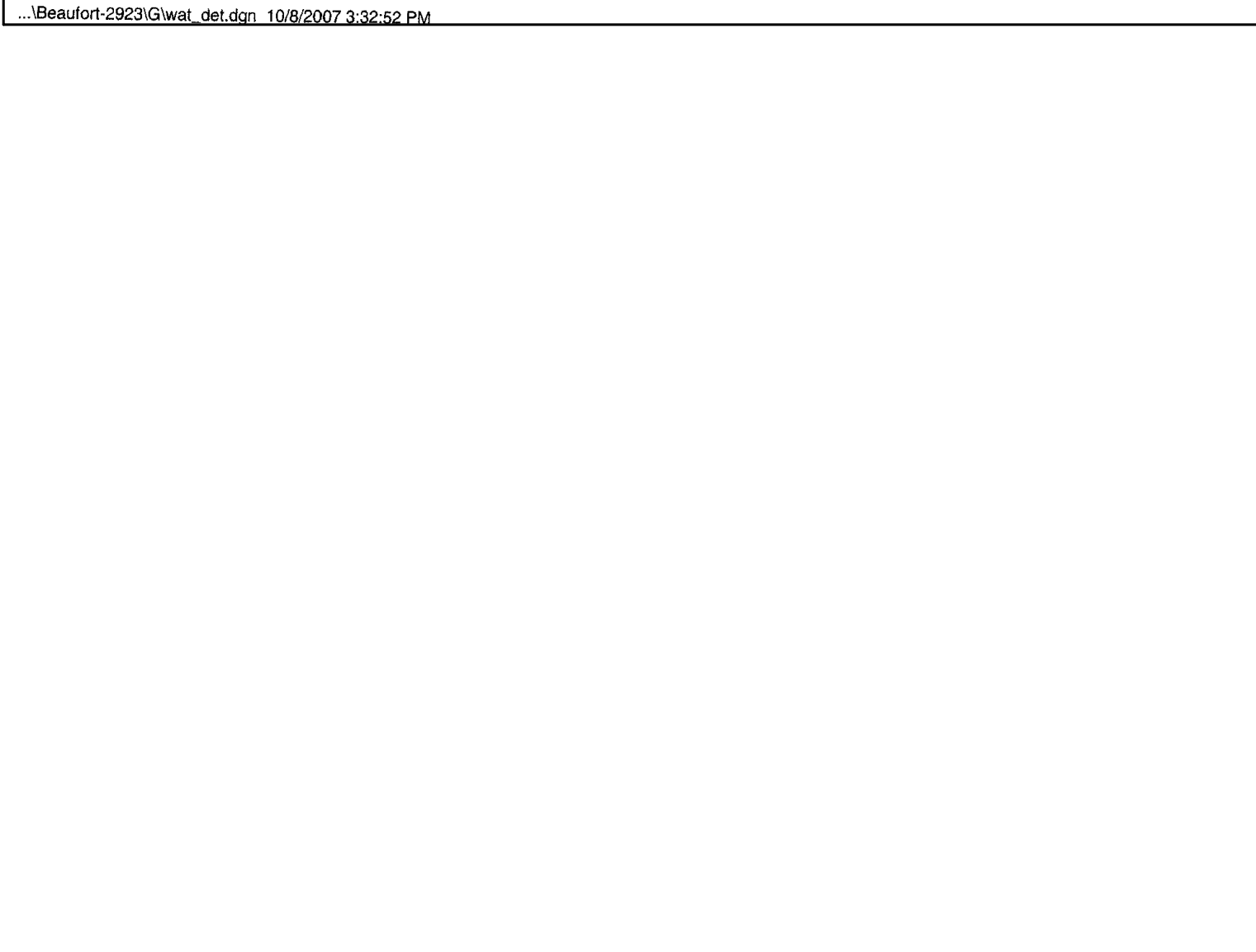
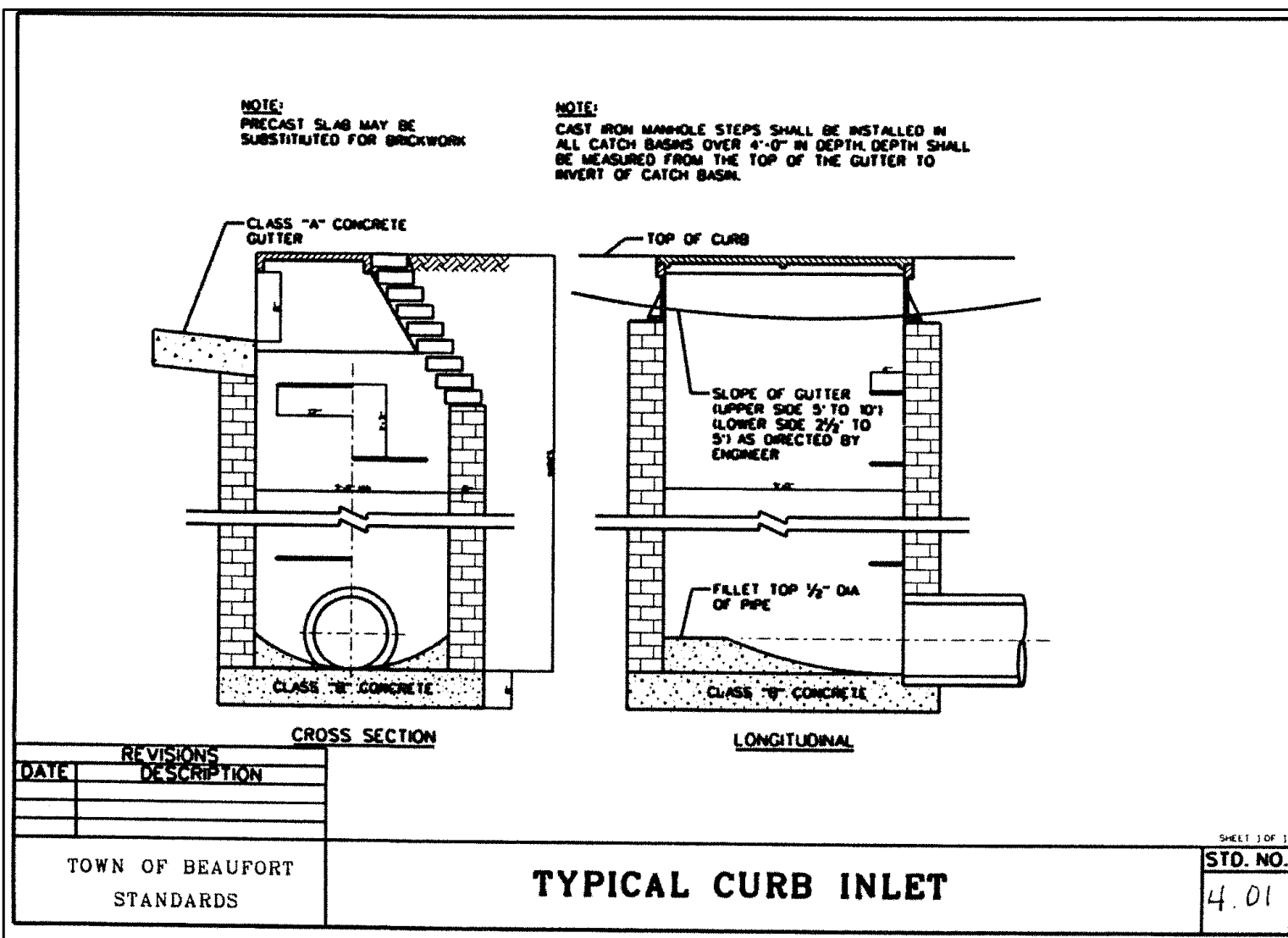
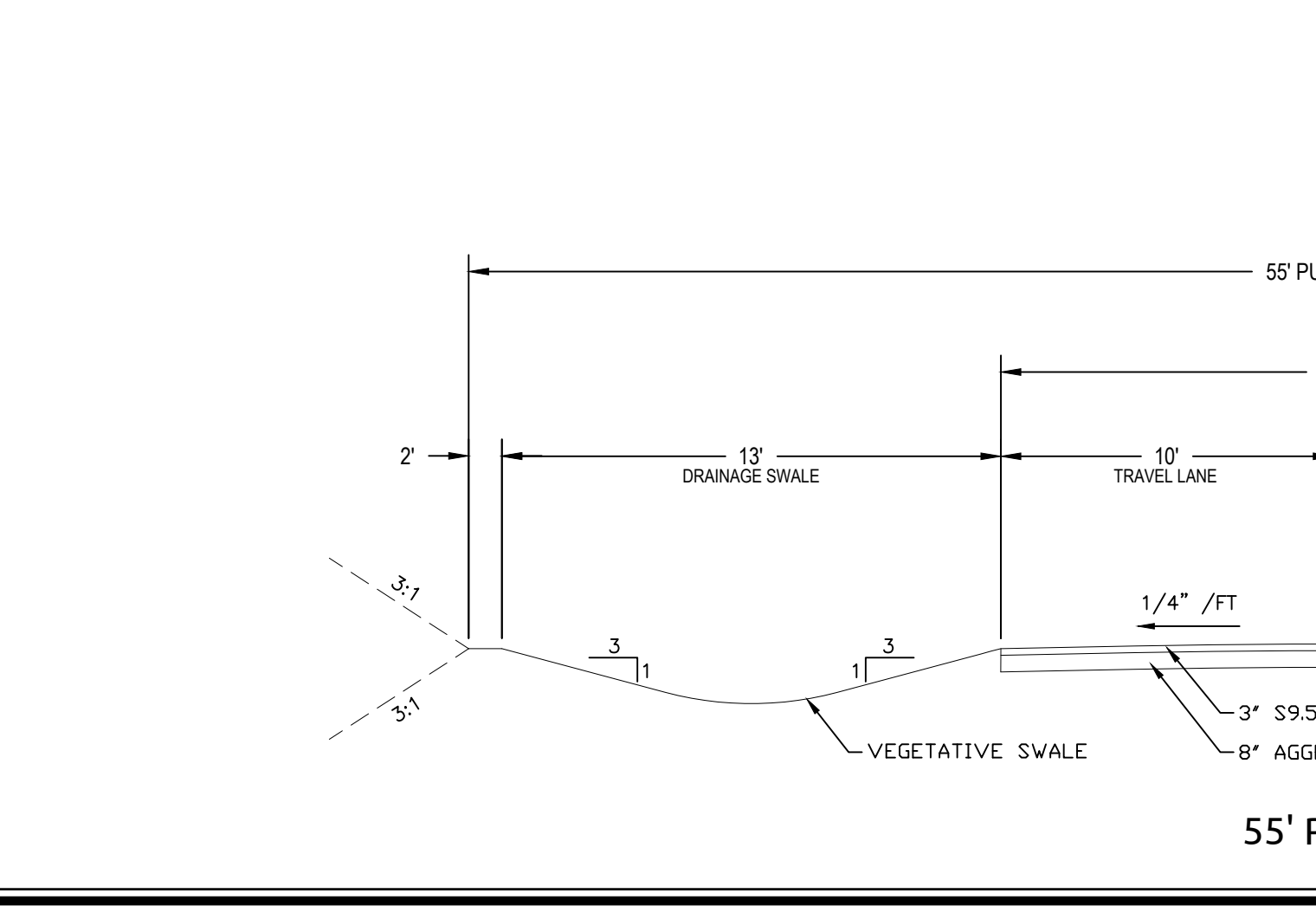
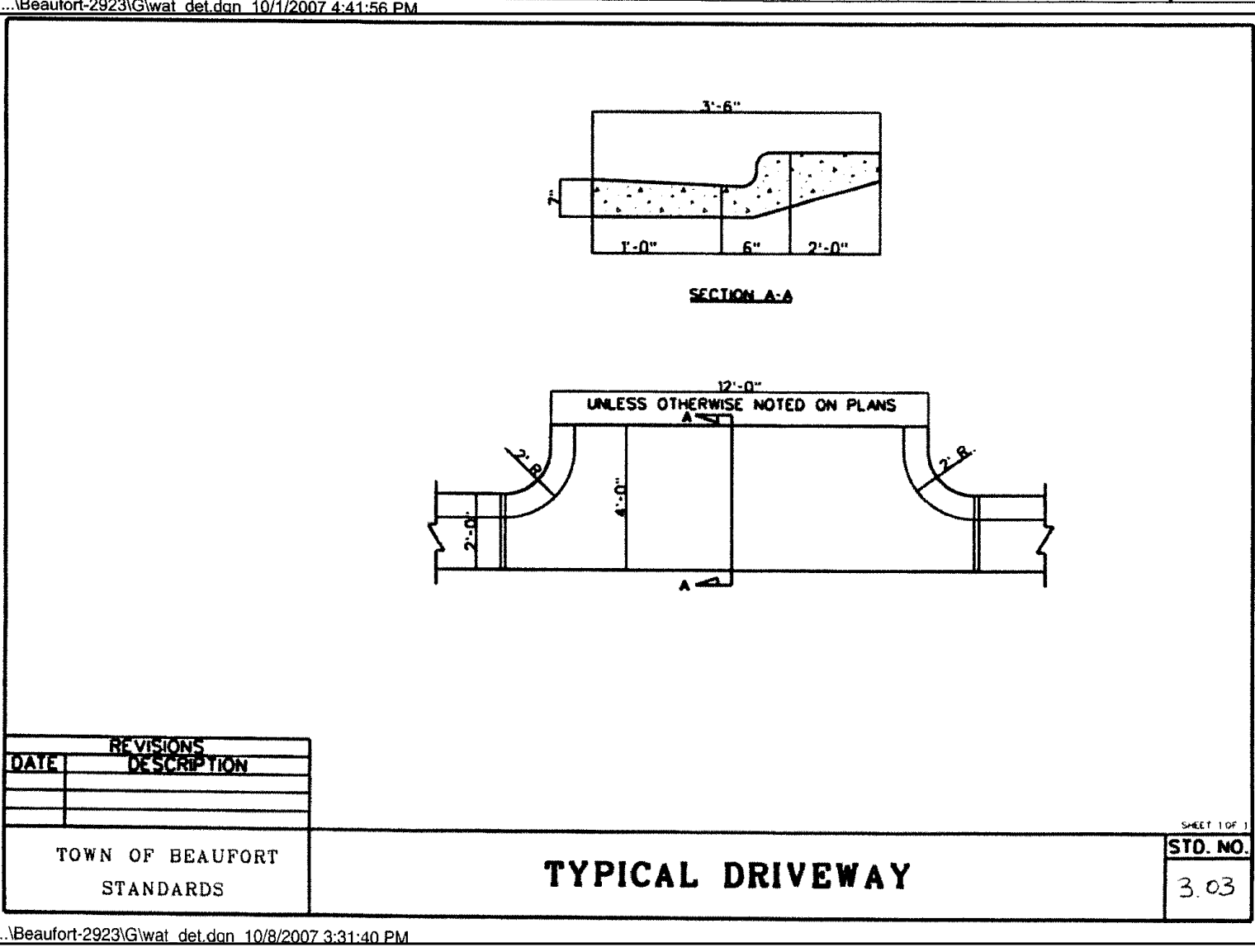
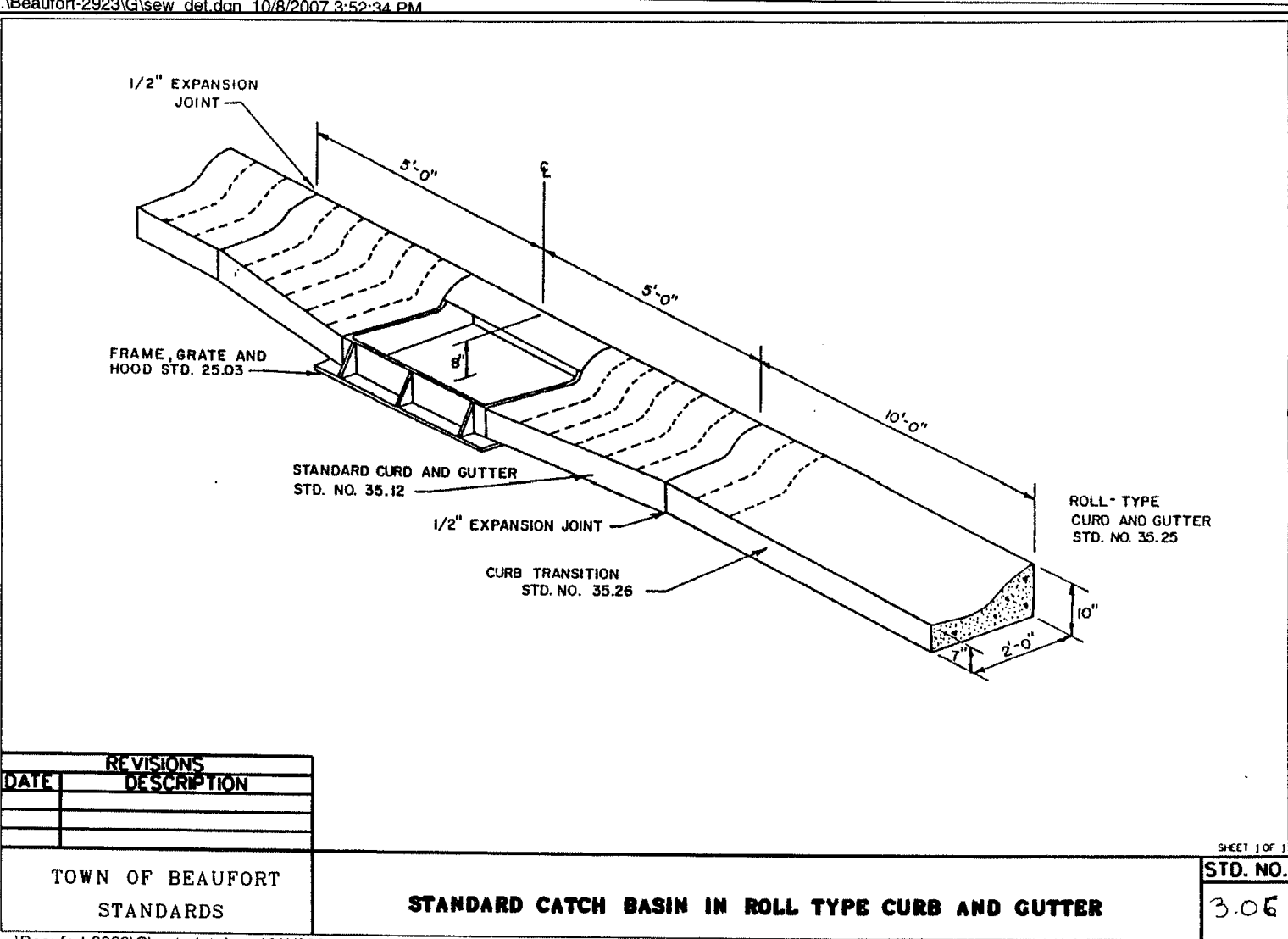
Revisions

LOW PRESSURE AIR TESTING FOR GRAVITY SEWER MAINS

MINIMUM TIME REQUIRED FOR A MAXIMUM 1.0 PSIG PRESSURE DROP FOR SIZE AND LENGTH OF PIPE INDICATED

PIPE DIAMETER (IN)	MINIMUM TIME (MIN:SEC)	LENGTH FOR MINIMUM TIME (FT)	SPECIFICATION TIME FOR LENGTH (L) SHOWN (MIN:SEC)									
			100 FT	150 FT	200 FT	250 FT	300 FT	350 FT	400 FT	450 FT		
4	3:46	597	2:08 L	3:46	3:46	3:46	3:46	3:46	3:46	3:46	3:46	3:46
6	5:40	390	1:05 L	5:40	5:40	5:40	5:40	5:40	5:40	5:42	6:24	
8	7:34	298	1:52 L	7:34	7:34	7:34	7:36	8:52	10:00	11:24		
10	9:26	239	2:37 L	9:26	9:26	9:26	9:53	11:52	13:51	15:49	17:48	
12	11:20	199	3:48 L	11:20	11:24	14:15	17:05	19:56	22:47	25:38		
15	14:10	159	5:32 L	14:10	17:40	22:15	26:42	31:09	35:36	40:04		
18	17:00	133	7:02 L	17:00	19:13	25:38	32:03	38:27	44:52	51:16	57:41	
21	19:50	114	10:47 L	19:50	26:18	34:54	43:27	52:21	61:00	69:48	78:31	
24	22:40	99	13:67 L	22:47	34:11	45:24	56:50	68:22	79:46	91:18	102:33	
27	25:30	88	17:28 L	25:37	43:16	57:41	72:07	86:32	100:57	115:22	129:48	
30	28:20	80	21:26 L	35:37	53:25	71:13	89:02	106:50	124:38	142:26	160:15	
33	31:10	72	25:02 L	43:05	64:28	86:18	107:43	129:16	150:43	172:21	193:53	
36	34:00	66	30:76 L	51:17	76:55	102:34	128:12	153:58	179:29	205:07	230:46	

NOTE:
THIS TABLE IS FROM UNIFORM CODE. THE TABLE IS BASED ON A 0.1 ALLOWABLE AIR LOSS RATE IN TEST SECTION + 8.80 US CUBIC FEET/MINUTE/SQUARE FEET. TO SHORTEN REQUIRED TEST TIME, A MAXIMUM PRESSURE DROP OF 0.5 PSIG MAY BE USED AND TIME REQUIREMENTS REDUCED BY HALF.



NOTE:
THE LOCATION OF THE PEDESTRIAN CROSSWALKS TO BE DETERMINED BY THE TOWN OF BEAUFORT PRIOR TO RECORDATION OF THE FINAL PLAT.

WithersRavenel
Engineers | Planners | Surveyors

219 Station Road | Ste. 101 | Wilmington, NC 28405 | P: 910.256.9277 | F: 910.256.9278 | www.withersravenel.com

BEAU COAST PHASE 4

BEAUFORT, NC

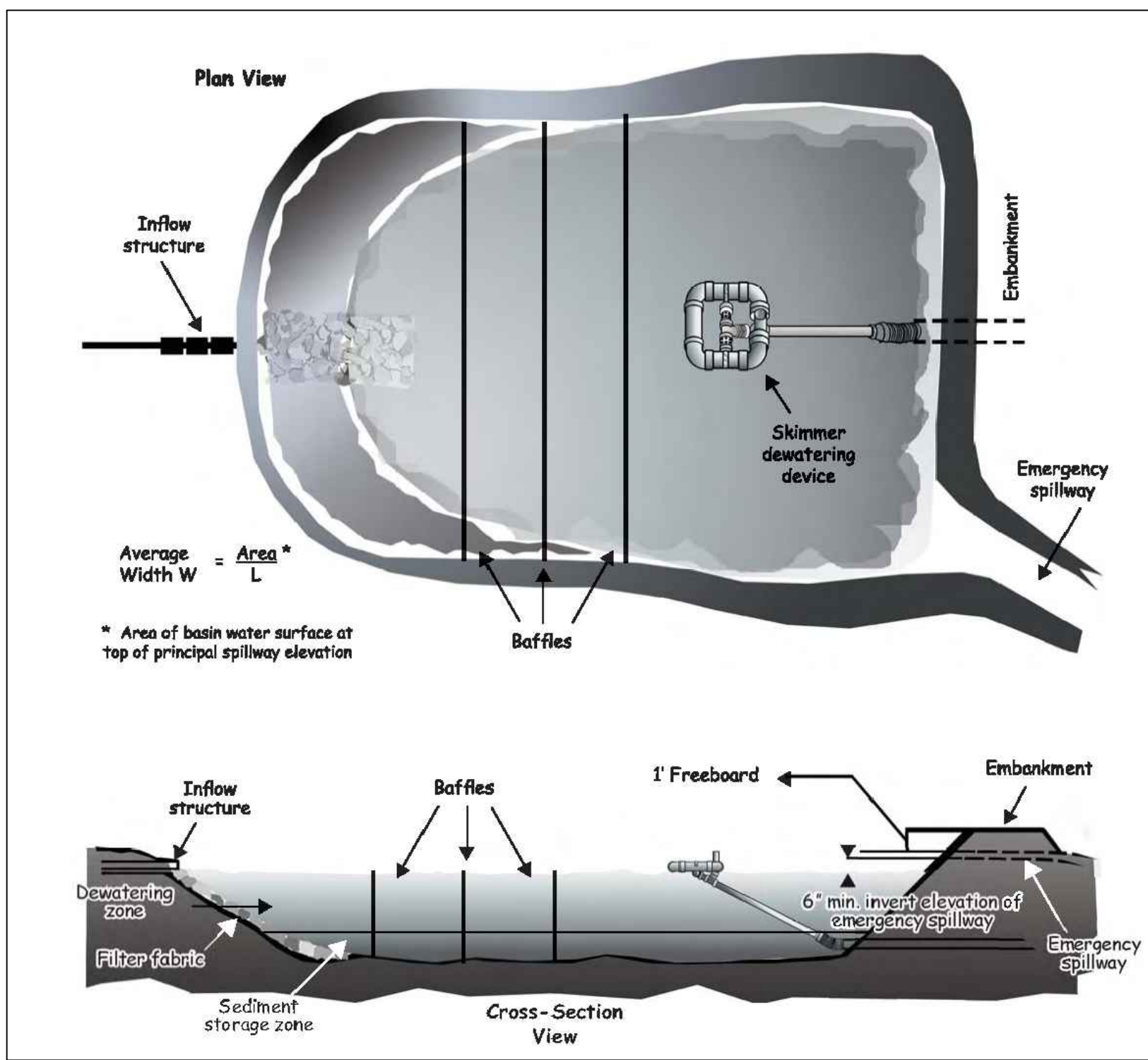
ROADWAY & DRAINAGE DETAILS

Job No. 060976.80 Drawn By TMG
Date 06/23/2021 Designer JSB

SOUTH CAROLINA PROFESSIONAL ENGINEER
JOSEPH S. BOYD
39113
06/23/2022

Revisions

Sheet No.
D4.0



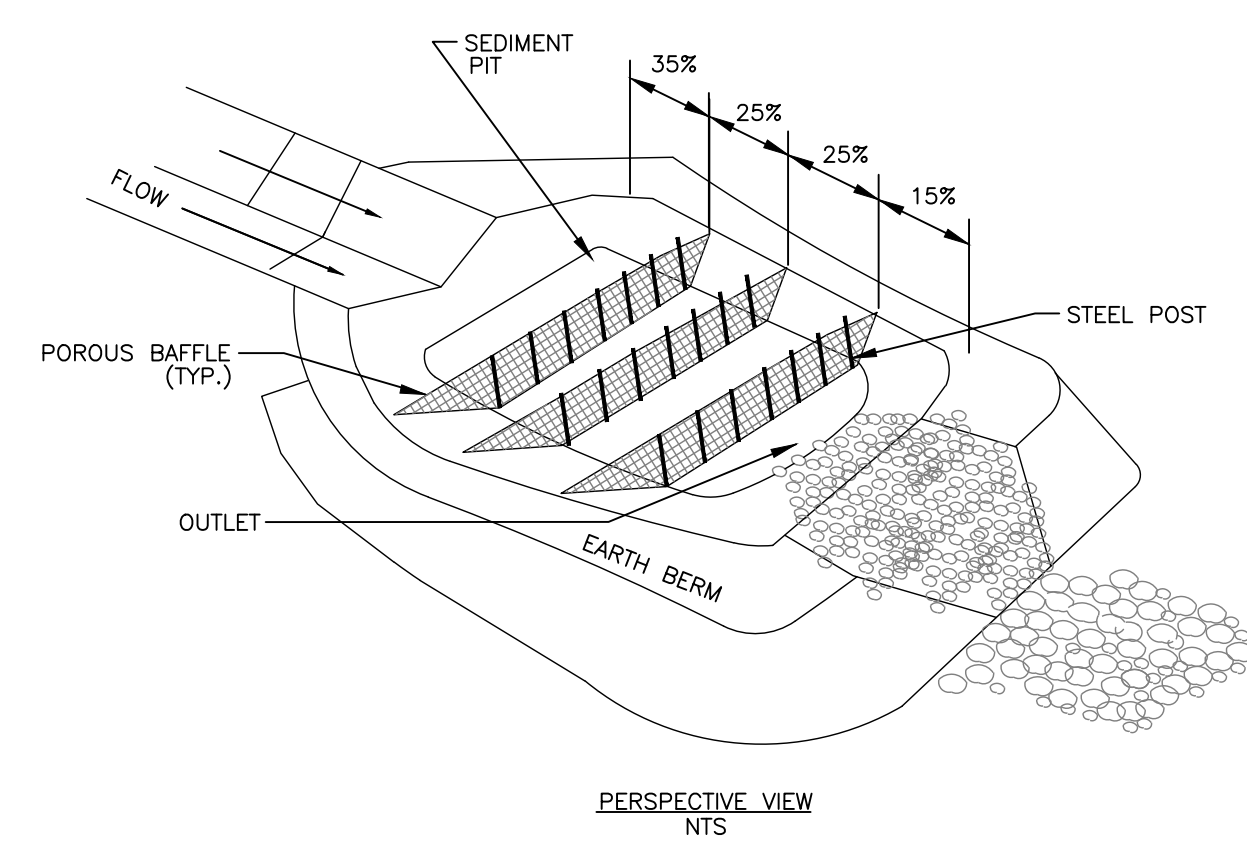
SKIMMER BASIN DETAIL
NTS

TEMPORARY SKIMMER BASIN DIMENSION TABLE

NUMBER	LENGTH(FT)	WIDTH(FT)	DEPTH(FT)
SKIMMER BASIN 12+50	72	24	2.0
SKIMMER BASIN 17+50	81	27	2.0
SKIMMER BASIN 21+50	87	29	2.0
SKIMMER BASIN CDS	81	27	2.0

NOTES:

1. ALL SIDE SLOPES OF THE SKIMMER BASIN ARE TO BE AT 3:1 GRADE AND SHALL BE STABILIZED WITHIN 7 DAYS.
2. SEE EROSION CONTROL DETAILS FOR MORE INFORMATION.



POROUS BAFFLE INSTALLATION DETAIL
NTS

SKIMMER BASIN MAINTENANCE:

INSPECT SKIMMER SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (ONE-HALF INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE-HALF THE HEIGHT OF THE FIRST BAFFLE. PULL THE SKIMMER TO ONE SIDE SO THAT THE SEDIMENT UNDERNEATH IT CAN BE EXCAVATED. EXCAVATE THE SEDIMENT FROM THE ENTIRE BASIN, NOT JUST AROUND THE SKIMMER OR THE FIRST CELL. MAKE SURE VEGETATION GROWING IN THE BOTTOM OF THE BASIN DOES NOT HOLD DOWN THE SKIMMER.

REPAIR THE BAFFLES IF THEY ARE DAMAGED. RE-ANCHOR THE BAFFLES IF WATER IS FLOWING UNDERNEATH OR AROUND THEM.

IF THE SKIMMER IS CLOGGED WITH TRASH AND THERE IS WATER IN THE BASIN, USUALLY JERKING ON THE ROPE WILL MAKE THE SKIMMER BOB UP AND DOWN AND DISLODGE THE DEBRIS AND RESTORE FLOW. IF THIS DOES NOT WORK, PULL THE SKIMMER OVER TO THE SIDE OF THE BASIN AND REMOVE THE DEBRIS. ALSO CHECK THE ORIFICE INSIDE THE SKIMMER TO SEE IF IT IS CLOGGED; IF SO REMOVE THE DEBRIS.

IF THE SKIMMER ARM OR BARREL PIPE IS CLOGGED, THE ORIFICE CAN BE REMOVED AND THE OBSTRUCTION CLEARED WITH A PLUMBER'S SNAKE OR BY FLUSHING WITH WATER. BE SURE AND REPLACE THE ORIFICE BEFORE REPOSITIONING THE SKIMMER.

CHECK THE FABRIC LINED SPILLWAY FOR DAMAGE AND MAKE ANY REQUIRED REPAIRS WITH FABRIC THAT SPANS THE FULL WIDTH OF THE SPILLWAY. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE SKIMMER AND POOL AREAS.

FREEZING WEATHER CAN RESULT IN ICE FORMING IN THE BASIN. SOME SPECIAL PRECAUTIONS SHOULD BE TAKEN IN THE WINTER TO PREVENT THE SKIMMER FROM PLUGGING WITH ICE.

MAINTENANCE

INSPECT BAFFLES AT LEAST WEEKLY AND AFTER EACH RAINFALL EVENT. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.

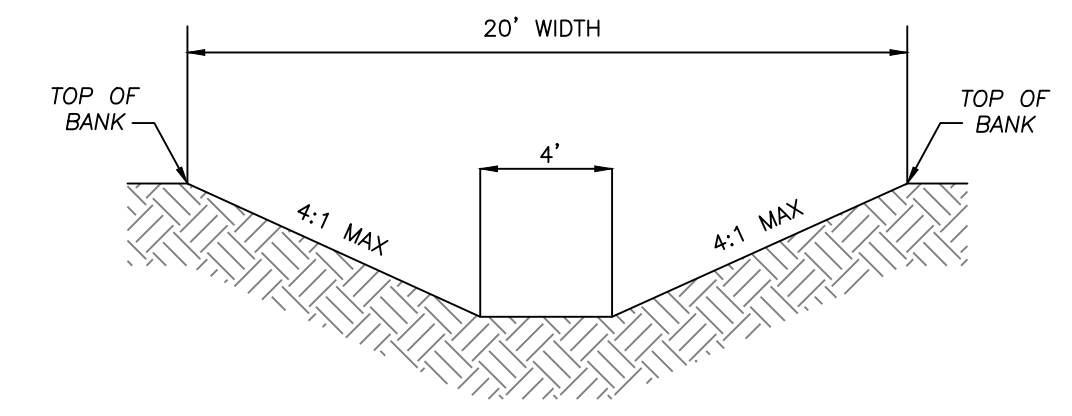
BE SURE TO MAINTAIN ACCESS TO THE BAFFLES. SHOULD THE FABRIC OF A BAFFLE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.

REMOVE SEDIMENT DEPOSITS WHEN IT REACHES HALF FULL TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE BAFFLES. TAKE CARE TO AVOID DAMAGING THE BAFFLES DURING CLEANOUT. SEDIMENT DEPTH SHOULD NEVER EXCEED HALF THE DESIGNED STORAGE DEPTH.

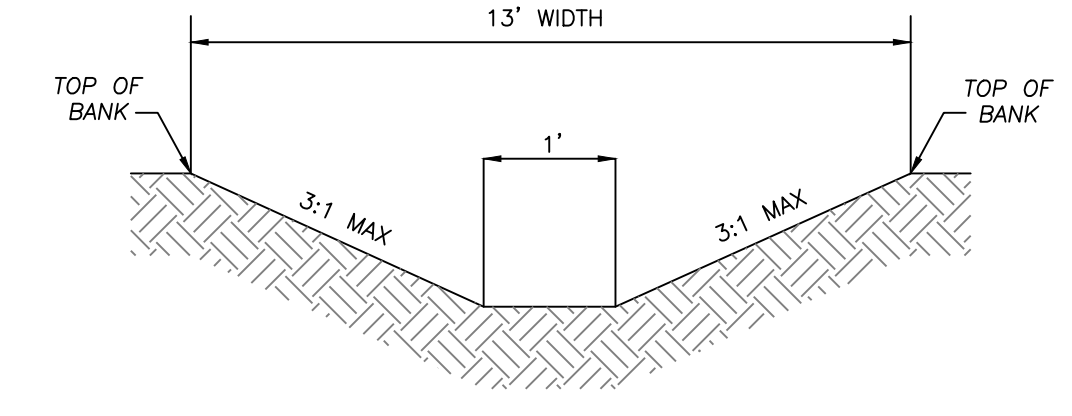
AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, REMOVE ALL BAFFLE MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, BRING THE AREA TO GRADE, AND STABILIZE IT.

CONSTRUCTION SPECIFICATION

1. GRADE THE BASIN SO THAT THE BOTTOM IS LEVEL FRONT TO BACK AND SIDE TO SIDE.
2. INSTALL POSTS OR SAW HORSES ACROSS THE WIDTH OF THE SEDIMENT TRAP.
3. STEEL POSTS SHOULD BE DRIVEN TO A DEPTH OF 24 INCHES, SPACED AT A MAXIMUM OF 4 FEET APART, AND INSTALLED UP THE SIDES OF THE BASIN AS WELL. THE TOP OF THE FABRIC SHOULD BE 6 INCHES HIGHER THAN THE INVERT OF THE SPILLWAY. TOPS OF BAFFLES SHOULD BE 2 INCHES LOWER THAN THE TOP OF THE BERM.
4. INSTALL AT LEAST THREE ROWS OF BAFFLES BETWEEN THE INLET AND OUTLET DISCHARGE POINT.
5. WHEN USING POSTS, ADD A SUPPORT WIRE OR ROPE ACROSS THE TOP OF THE MEASURE TO PREVENT SAGGING.
6. WRAP POROUS MATERIAL, LIKE JUTE BACKED BY COIR MATERIAL, OVER A SAWHORSE OR THE TOP WIRE. HAMMER REBAR INTO THE SAWHORSE LEGS FOR ANCHORING. THE FABRIC SHOULD HAVE FIVE TO TEN PERCENT OPENINGS IN THE WEAVE. ATTACH FABRIC TO A ROPE AND A SUPPORT STRUCTURE WITH ZIP TIES, WIRE, OR STAPLES.
7. THE BOTTOM AND SIDES OF THE FABRIC SHOULD BE ANCHORED IN A TRENCH OR PINNED WITH 8 INCH EROSION CONTROL MATTING STAPLES.
8. DO NOT SPLICE THE FABRIC, BUT USE A CONTINUOUS PIECE ACROSS THE BASIN.



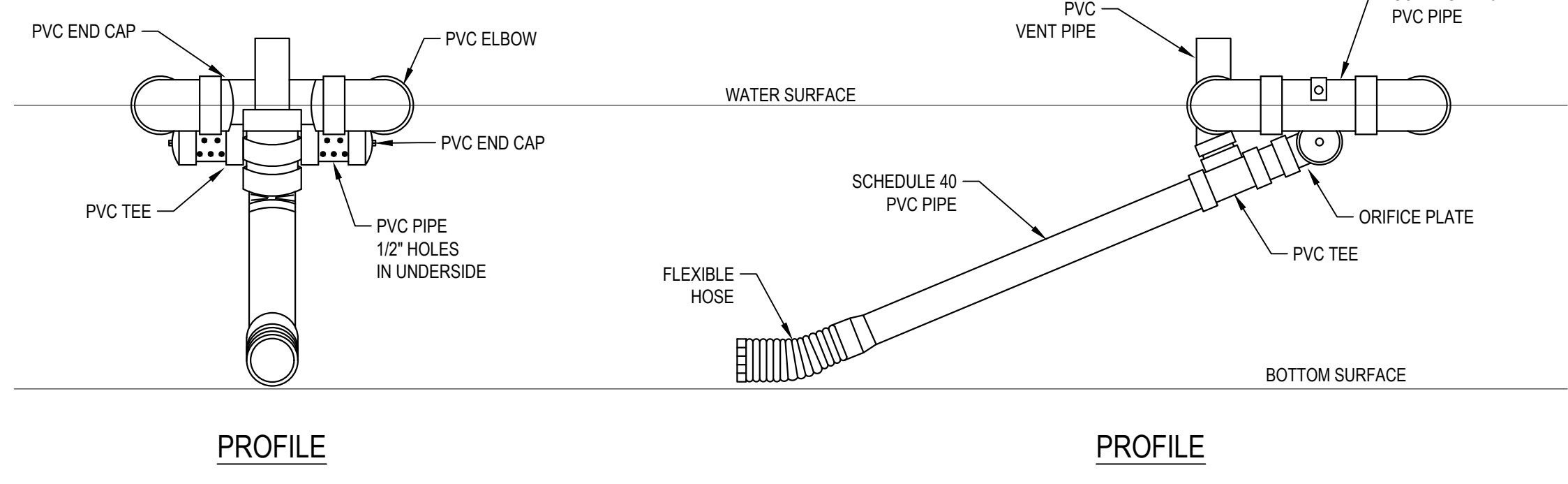
20' TRAPEZOIDAL SWALE CROSS SECTION DETAIL
NOT TO SCALE



13' TRAPEZOIDAL SWALE CROSS SECTION DETAIL
NOT TO SCALE

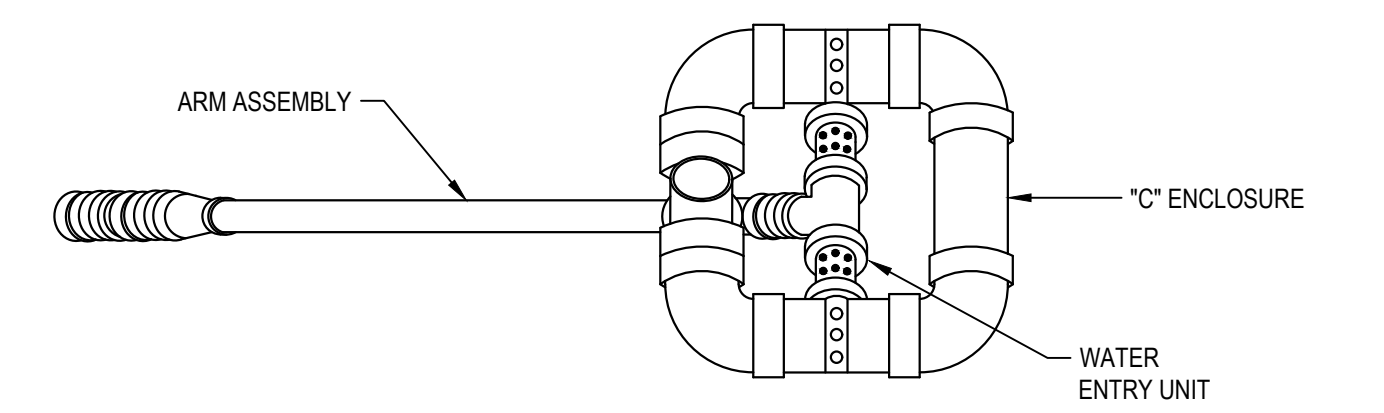
SWALE CALCULATIONS

SWALE NO.	DRAINAGE AREA (AC.)	STARTING ELEV.	ENDING ELEV.	LENGTH	AVERAGE SLOPE	CROSS SLOPE	SWALE TYPE	TEMPORARY LINER	SWALE LINER
10+00A	0.73	5.18	4.70	120	0.40%	4:1	20' TRAPEZOIDAL	EXCELSIOR MATTING	GRASS
10+00B	0.58	5.18	4.70	105	0.46%	3:1	13' TRAPEZOIDAL	EXCELSIOR MATTING	GRASS
12+50A	0.98	5.18	4.49	151	0.46%	3:1	13' TRAPEZOIDAL	EXCELSIOR MATTING	GRASS
12+50B	0.64	5.18	4.49	132	0.52%	3:1	13' TRAPEZOIDAL	EXCELSIOR MATTING	GRASS
12+50 (Comb.)	1.62	4.26	4.01	126	0.20%	4:1	20' TRAPEZOIDAL	EXCELSIOR MATTING	GRASS
16+00	0.61	5.04	4.89	194	0.08%	3:1	13' TRAPEZOIDAL	EXCELSIOR MATTING	GRASS
17+50A	1.03	5.06	4.16	143	0.63%	3:1	13' TRAPEZOIDAL	EXCELSIOR MATTING	GRASS
17+50B	0.90	5.11	4.16	156	0.61%	3:1	13' TRAPEZOIDAL	EXCELSIOR MATTING	GRASS
17+50 (Comb.)	2.53	3.89	2.42	134	1.10%	4:1	20' TRAPEZOIDAL	EXCELSIOR MATTING	GRASS
21+50A	1.02	5.11	3.17	300	0.65%	3:1	13' TRAPEZOIDAL	EXCELSIOR MATTING	GRASS
21+50B	1.27	5.06	3.17	364	0.52%	3:1	13' TRAPEZOIDAL	EXCELSIOR MATTING	GRASS
21+50 (Comb.)	2.29	3.17	2.64	108	0.49%	4:1	20' TRAPEZOIDAL	EXCELSIOR MATTING	GRASS
CDS-1	1.19	5.04	3.45	412	0.39%	3:1	13' TRAPEZOIDAL	EXCELSIOR MATTING	GRASS
CDS-2	0.19	4.77	4.20	91	0.63%	3:1	13' TRAPEZOIDAL	EXCELSIOR MATTING	GRASS
CDS-3	0.68	4.01	3.45	109	0.51%	3:1	13' TRAPEZOIDAL	EXCELSIOR MATTING	GRASS
CDS (Comb.)	2.05	3.45	1.69	142	1.24%	4:1	20' TRAPEZOIDAL	EXCELSIOR MATTING	GRASS



PROFILE

PROFILE

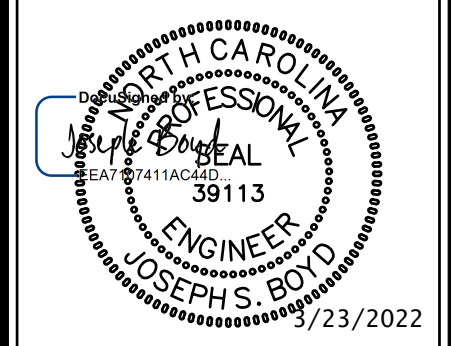


SKIMMER DETAIL
NTS

SKIMMER SIZING TABLE

NUMBER	SKIMMER SIZE (IN)	ORIFICE DIA. (IN)
SKIMMER BASIN 12+50	1.5	1.25
SKIMMER BASIN 17+50	1.5	1.25
SKIMMER BASIN 21+50	1.5	1.50
SKIMMER BASIN CDS	1.5	1.25

Job No. 080976.80 Drawn By TMG
Date 06/23/2021 Designer JSB



Revisions
