

**TOWN OF BROOKLYN
PLANNING AND ZONING COMMISSION
Special Meeting Agenda
Tuesday, August 15, 2023 6:30 p.m.**

3 WAYS TO ATTEND: IN-PERSON, ONLINE, AND BY PHONE

MEETING LOCATION: Tiffany Street Community Center, 31 Tiffany Street, Brooklyn, CT	
Click link below: https://us06web.zoom.us/j/84765564828	or Go to https://www.zoom.us/join Enter meeting ID: 847 6556 4828
Dial: 1-646-558-8656 Enter meeting number: 847 6556 4828, then press #, Press # again to enter meeting	

- I. Call to Order**
- II. Roll Call**
- III. Seating of Alternates**
- IV. Adoption of Minutes:** Meeting August 2, 2023
- V. Public Commentary**
- VI. Unfinished Business:**
 - a. **Reading of Legal Notices:**
 - b. **Continued Public Hearings: None.**
 - c. **New Public Hearings:**
 - 1. **SP 15-006 mod:** Special Permit modification for Self-Storage Facility and Commercial Space (35,460 s.f. in three buildings) at 538 Providence Road, Applicant: Townsend Development Associates, LLC.
 - 2. **SP 22-006:** Special Permit for State Route Business Enterprise for Craftsperson at 481 Pomfret Road, Applicant: Mindy Delp.
 - 3. **ZRC 23-005/ZC 23-002/SRC 23-001:** Floodplain Overlay Zoning Regulation and Map Update, Subdivision Regulation Update (FEMA/NFIP), Applicant: PZC.
 - d. **Other Unfinished Business:**
 - 1. **SP 15-006 mod:** Special Permit modification for Self-Storage Facility and Commercial Space (35,460 s.f. in three buildings) at 538 Providence Road, Applicant: Townsend Development Associates, LLC.
 - 2. **SP 22-006:** Special Permit for State Route Business Enterprise for Craftsperson at 481 Pomfret Road, Applicant: Mindy Delp.
 - 3. **ZRC 23-005/ZC 23-002/SRC 23-001:** Floodplain Overlay Zoning Regulation and Map Update, Subdivision Regulation Update (FEMA/NFIP), Applicant: PZC.
 - 4. **SP 23-003:** Special Permit for 5,955 s.f. building addition and related parking modifications for online grocery pick-up at 450 Providence Road, Applicant: Walmart. ***Awaiting Sept. 6 public hearing***
 - 5. **SD 23-001:** Two-lot subdivision including 3 acres on Day Street (Map 43/Lot 6), Applicant: Jeff Weaver.
- VII. New Business:**
 - a. **Applications:**
 - 1. **SP 23-004:** Special Permit for above-ground propane storage and outside display of merchandise at 564 Providence Road, Applicant: Sholes Aces Hardware.
 - b. **Other New Business: None.**
- VIII. Reports of Officers and Committees**
- IX. Public Commentary**
- X. Adjourn**

**TOWN OF BROOKLYN
PLANNING AND ZONING COMMISSION
Special Meeting
Wednesday, August 2, 2023 6:30 p.m.**

3 WAYS TO ATTEND: IN-PERSON, ONLINE, AND BY PHONE

MEETING LOCATION: Tiffany St. Community Center, 31 Tiffany Street, Brooklyn, CT		
Click link below: https://us06web.zoom.us/j/87925438541	or	Go to https://www.zoom.us/join Enter meeting ID: 879 2543 8541
Dial: 1-646-558-8656		
Enter meeting number: 879 2543 8541, then press #, Press # again to enter meeting		

MINUTES

- I. Call to Order** – Michelle Sigfridson, Chair, called the meeting to order at 6:37 p.m.
- II. Roll Call** – Michelle Sigfridson, Carlene Kelleher, Allen Fitzgerald, John Haefele, Lisa Herring, Seth Pember (all present in person).
Gil Maiato and Brian Simmons were absent with notice.
Karl Avanecean was absent.
- Staff Present (in person):** Jana Roberson, Town Planner and Director of Community Development; Austin Tanner, First Selectman.
- Also Present in Person:** Paul Archer, Archer Surveying; J.S. Perreault, Recording Secretary.
- Present via Zoom:** Bob Kelleher.
- III. Seating of Alternates** – None.
- IV. Adoption of Minutes:** Meeting July 18, 2023
- Motion was made by A. Fitzgerald to accept the Minutes of the Special Meeting of July 18, 2023, as presented.
Second by J. Haefele. No discussion.
Motion carried by voice vote (5-0-0). M. Sigfridson abstained.
- V. Public Commentary** – None.
- VI. Unfinished Business:**
- a. **Reading of Legal Notices:** None.
 - b. **Continued Public Hearings:** None.
 - c. **New Public Hearings:** None.
 - d. **Other Unfinished Business:**
 1. **SP 15-006 mod:** Special Permit modification for Self-Storage Facility and Commercial Space (35,460 s.f. in three buildings) at 538 Providence Road, Applicant: Townsend Development Associates, LLC. ***Awaiting Aug. 15 public hearing***
 2. **SP 22-006:** Special Permit for State Route Business Enterprise for Craftsperson at 481 Pomfret Road, Applicant: Mindy Delp. ***Awaiting Aug. 15 public hearing***

3. **ZRC 23-005/ZC 23-002/SRC 23-001:** Floodplain Overlay Zoning Regulation and Map Update, Subdivision Regulation Update (FEMA/NFIP), Applicant: PZC. ***Awaiting Aug. 15 public hearing***

VII. New Business:

a. Applications:

1. **SP 23-003:** Special Permit for 5,955 s.f. building addition and related parking modifications for online grocery pick-up at 450 Providence Road, Applicant: Walmart.

J. Roberson explained that it is a very large plan set and that only four sheets were included in hard-copy packets to Commission Members (Existing Conditions, Proposed Site Plan, Lumen Plan), but that the entire plans set is available to them in the digital packet. She will get color plans for the public hearing.

Motion was made by A. Fitzgerald to schedule the public hearing for SP 23-003: Special Permit for 5,955 s.f. building addition and related parking modifications for online grocery pick-up at 450 Providence Road, Applicant: Walmart for the special meeting of the Planning and Zoning Commission to be held on September 6, 2023 at 6:30 p.m. at the Tiffany Street Community Center, 31 Tiffany Street, Brooklyn, CT and via Zoom.

Second by C. Kelleher. No discussion.

Motion carried unanimously by voice vote (6-0-0).

2. **SD 23-001:** Two-lot subdivision including 3 acres on Day Street (Map 43/Lot 6), Applicant: Jeff Weaver.

Paul Archer, Archer Surveying, represented the Applicant and gave an overview:

- This is the fourth phase to come before the PZC.
- Proposing a 50-foot access strip – remaining land on Lot 6 and 2 building lots on either side of the 50-foot access. He indicated the two lots and explained that ½ of the lot is in the R-30 Zone and the other half is in the RA Zone. They are proposing that all of the houses to be built will be inside the R-30 Zone.
- He referred to and explained about a similar subdivision done in 2011 or 2012 (Craig Dunlop). He said that there had been a clarification that the zone that you use is where the houses are.
- He explained that they are proposing everything in the R-30 Zone: 50-foot access strip; pipe coming across.
- They have IWWC approval and Health Department approval. Syl Pauley has reviewed the proposal for the IWWC. Ms. Roberson stated that she will double check with Syl Pauley as she is not sure if he has seen the revised plans. Mr. Archer stated that they have accomplished everything on Mr. Pauley's punch list of six items. Mr. Archer showed Ms. Roberson the letter that he had received from Mr. Pauley back in June and Ms. Roberson stated that she has a copy. Mr. Archer stated that he made the corrections prior to IWWC approval.
- Mr. Archer stated that all of the other lots had been fee-in-lieu of open space and that the Conservation Commission did not want land and he does not feel that they would want land with this proposal either. Mr. Archer explained that they had an appraisal done in August 2022 on four other lots amounting to 1/2 acre more than these lots. He asked the

Commission to consider allowing that appraisal to be used for this proposal instead of getting a new appraisal, keeping the same value of \$90,000 is probably higher than these lots would appraise at. He provided a copy to Ms. Roberson.

There was discussion and Ms. Sigfridson and Mr. Fitzgerald stated that they did not have a problem with it. Ms. Roberson asked if the Applicant is comfortable with it and Mr. Archer stated that Mr. Weaver is comfortable with it.

- Mr. Archer summarized: A simple, two-lot subdivision; 50-foot access strip; bigger lot (50+ acres) will own the access strip; the two houses will have right-of-way over the access strip.

Ms. Roberson stated that she tried to get an answer to the zone boundary question, but has not yet received an answer from the new Land Use Attorneys (Rich Robers and Ken Slater with Halloran & Sage). She said that she does not have a problem with it as long as the Attorneys concur. She explained that when they did the second subdivision in the sequence, Jeff Weaver had requested a zone boundary change and it was granted. This is, potentially, a way of handling it. Ms. Roberson noted that page 3 and page of the plans, show a different zone boundary. She said that the correct zone boundary is on page 3 and the old zone boundary is on page 4. She indicated it on the plan. She said that she will follow-up with Mr. Archer after she hears from the Attorneys and that there may also be some other corrections involving setbacks.

Ms. Roberson stated that no public hearing is required. She stated that she was anticipating that the PZC would refer it to the Conservation Commission, but can choose not to. There was discussion and the Commission Members do not feel it is necessary.

Ms. Roberson stated that she cannot recommend action at this time. Continued to the August 15, 2023 meeting. There was discussion regarding the zone boundary issue. Ms. Sigfridson stated that the Applicant is suggesting that the standards for the R-30 Zone be applied for the PZC's consideration of this Application. Ms. Roberson is double checking with the Attorneys. Discussion continued.

Ms. Roberson asked if the Commission wanted to take action on the decision to accept the appraisal or just by consensus. Ms. Sigfridson stated by consensus.

b. Other New Business:

1. Discussion of potential subdivision on Wauregan Road.

Paul Archer, Archer Surveying, represented the property owner and presented both Conventional Subdivision and Conservation Subdivision (both were included in packets to Commission Members):

- J. Roberson displayed the area on Google Earth.
- Mr. Archer explained that, originally, there were 17 acres and with the first-time split Tetreault Builders removed the parcel with the house (2 acres), leaving 14.9 acres.
- Conservation Subdivision:
Mr. Archer explained that they would propose a 430-foot, private driveway with seven lots off the driveway, each lot being as close to an

acre as they can get it. There has been no soil testing yet, but they feel that there is good soil out there and he does not see it as an issue at all. He indicated a stone wall that runs southerly which would be the edge of the right-of-way where they would put the cuts. Ms. Roberson noted that the stone wall is at the edge of the field and is not the property line which goes beyond into the woods.

He does not feel that there would be any problem with sight lines.

He indicated where they would be proposing 7+ acres of open space (which is above the required 40 percent).

- Conventional Subdivision:

Mr. Archer explained that they would propose one 50-foot access strip with four frontage lots and three rear lots. These would be 2+ acre lots.

Mr. Archer indicated the wetlands which have been delineated by Joe Theroux. Mr. Archer stated that they took all of the wetlands into account when looking at the designs.

They would be looking for fee-in-lieu of open space.

He said that the biggest issue would be driveways out on the State road.

He has concern as to whether sight lines could be met.

Mr. Archer stated that the developer, Mark Tetreault, could go either way, but would like to know how the Commission feels before moving forward.

There was discussion regarding how many driveway cuts are allowed and about traffic on the road. Regarding drainage, Mr. Archer stated that the land slopes away from the State road. There was discussion regarding agricultural contouring and Ms. Roberson commented about disturbed soils and she stated that there would be potential for no septic system there. Mr. Archer indicated the area where it would be.

Regarding Conservation Subdivision, there was discussion regarding a cut out triangle of land. Mr. Archer explained that it is not part of the seven acres and stated that it would be added to one of two lots which he indicated.

Regarding the existing house, Mr. Archer explained that it has already been sold. There was discussion.

Ms. Roberson explained about Conservation Subdivision vs. Conventional Subdivision. Mr. Archer explained that these are conceptuels.

There was discussion about the road and Mr. Archer stated that they could make it a Town road or a private road. For the private road option, he indicated where they would put a couple of catch basins. He said with the Conservation Subdivision you don't have to meet the drainage and all that stuff, you can sheet flow. You still need the 50-foot right-of-way and indicated which house would, technically, own the 50-foot right-of-way and the others would have rights over the 50-foot right-of-way. He said that it would be like a condo association to pay for the maintenance of the road. The maintenance agreement would get recorded.

Ms. Roberson commented that she checked the farmland soils layer and prior to the agricultural contouring, prime farmland was closer to the road. She likes that on one, there are a couple hundred feet of frontage being maintained as an open

field and on the other, there is a house there. She said that there are a lot of things to balance.

Ms. Sigfridson commented that there is an alternative, third option, to cluster all of the houses in the back. Mr. Archer explained that it would not be cost effective as it would take too much road to get there.

Ms. Roberson suggested that, for the Conventional Subdivision, there could be two shared driveways going to six rear cluster lots while maintaining the frontage. She said that there could also still be one frontage house. Mr. Archer explained about how he feels about the drive in with the beautiful stone wall. Ms. Roberson displayed and orientated the drive along the road (Google Earth). There was discussion about how water collects when it rains (very wet, high water). There was discussion regarding the wood line on Lot 1 and Mr. Archer said that his guess is that the developer would not clear cut. Mr. Pember stated that they will need to get rid of some because the front end of the stone wall will need to be rebuilt. There will need to be two holes in the stone wall to go through.

Ms. Roberson stated that she checked the Flood Zone and elevation.

There was discussion regarding the two barns which stayed with the existing house. There was discussion regarding the farm stand.

Consensus was for the Conservation Subdivision.

VIII. Reports of Officers and Committees

a. Staff Reports

- Ms. Roberson stated that the new part-time, Land Use and Building Office Assistant, Theresa “Terri” Mahana, has started. She will be the Recording Secretary for IWWC and ZBA.
- Margaret Washburn’s Report dated July 31, 2023 (attached) was included in packets to Commission Members.
There was discussion about a property on Route 169 near the old Brooklyn Oil. It looks like they are rebuilding the front of the building and no permit was obtained for the work being done. Ms. Roberson will speak with Ms. Washburn.
- There was discussion about a property on the east side of Route 169, heading north, where approximately ½ acre was cleared. Ms. Roberson will speak with the property owner.
- There was discussion about the spa business on Day Street. The lighted “Open” sign is noticed to be on as late as 9 p.m. on Friday, Saturday or Sunday. Ms. Roberson will look into it.
- There was discussion about a blight situation on Day Street.

b. Budget Update – Included in packets to Commission Members.

c. Correspondence – Referral from the Town of Canterbury for a zone change (included in packets to Commission Members).

d. Chairman’s Report – None.

IX. Public Commentary

- **Paul Archer**, Archer Surveying, represented Ace Hardware. The Application was submitted on Thursday.
Ms. Roberson stated that the public hearing will be scheduled for September 6, 2023. The need for a public hearing is due to a 1,000 gallon, above-ground propane tank being proposed in the Groundwater Overlay District.
The propane can't be located in the CL&P easement and he indicated the location where they want to put it with a black chain-link fence around it.
The Applicant wants to put a dumpster in the back of the building. However, the dumpsters of the other businesses in the plaza are not screened. Therefore, Mr. Archer asked the Commission how they should propose the dumpster and if the Commission is going to require screening. He asked if the Commission wants to see the dumpster on the site plan. There was discussion and it was expressed that, going forward, they all should be required to be screened at such time that they come before the PZC. Mr. Archer stated that he will modify the plan to show screened dumpsters. He said that the Applicant will not have a problem with it.

There was discussion regarding parking and Ms. Roberson explained that it is a non-issue because there is way more parking there than the current standards require.

There was discussion regarding the propane tank. Mr. Pember stated that, if they are going to drive around back, he feels that they will need lanes/signage. Mr. Archer indicated that they can have signs made for two or three spaces to show where propane customers should park. Discussion continued. Mr. Archer stated that he does not think that the Applicant will have a problem with designating spaces.

Mr. Archer stated that he will show, on the plan, the rough area where they would like outside display area. He asked if there is anything else the Commission would want to see on the plan. There was discussion regarding outside display and Mr. Pember stated that it had already been determined, during the previous discussion, where it was going to be and the pallet locations were going to be marked out on the plan. Discussion continued regarding concern for the sidewalk being blocked and about what other businesses do.

Ms. Roberson stated that the public hearing will be scheduled for September 6, 2023 (at the August 15th meeting).

X. Adjourn

M. Sigfridson adjourned the meeting at 7:52 p.m.

Respectfully submitted,

J.S. Perreault
Recording Secretary

**TOWN OF BROOKLYN
PLANNING AND ZONING COMMISSION
NOTICE OF PUBLIC HEARING**

The Planning and Zoning Commission will hold a public hearing on August 15, 2023, starting at 6:30 p.m. via Zoom and in-person at the Tiffany Street Community Center, 31 Tiffany Street Brooklyn, CT on the following:

- **SP 15-006 mod:** Special Permit modification for Self-Storage Facility and Commercial Space (35,460 s.f. in three buildings) at 538 Providence Road, Applicant: Townsend Development Associates, LLC.
- **SP 22-006:** Special Permit for State Route Business Enterprise for Craftsperson at 481 Pomfret Road, Applicant: Mindy Delp.
- **ZRC 23-005/ZC 23-002/SRC 23-001:** Floodplain Overlay Zoning Regulation and Map Update, Subdivision Regulation Update (FEMA/NFIP), Applicant: PZC.

Please publish August 2nd and 9th.

PLANNING AND ZONING COMMISSION
RECEIVED TOWN OF BROOKLYN
CONNECTICUT

Received Date JUN - 6 2023

Application #SP 15-006 MOD
Check # 629

APPLICATION FOR SPECIAL PERMIT

Name of Applicant Townsend Development Associates, LLC Phone 860-208-6839
Mailing Address ~~13309 Palmers Creek Terrace, Lakewood Ranch, FL 34202~~ 6458 Watercrest Way Unit 401 Phone _____
Name of Engineer/Surveyor Clough Harbour Associates, LLP (CHA)
Address 400 Capital Boulevard, Suite 301, Rocky Hill, CT 06067
Contact Person Pete Parent, PE Phone 860-885-1052 Fax _____

Name of Attorney _____
Address _____
Phone _____ Fax _____

Property location/address 538 Providence Road
Map# 41 Lot# 16 Zone PC Total Acres 7.49+/-
Sewage Disposal: Private _____ Public X Existing X Proposed _____
Water: Private _____ Public X Existing X Proposed _____

Proposed Activity Modification to existing approved Special Permit to construct approx. 16,100 SF of Self-Storage in two buildings, and 19,360 SF of commercial space.

Compliance with Article 4, Site Plan Requirements _____

Is parcel located within 500 feet of an adjoining Town? No

The following shall accompany the application when required:

Fee \$ _____ State Fee (\$60.00) _____ 3 copies of plans _____ Sanitary Report _____
4.5.5 Application/ Report of Decision from the Inland Wetlands Commission
4.5.5 Applications filed with other Agencies
12.1 Erosion and Sediment Control Plans

The owner and applicant hereby grant the Brooklyn Planning and Zoning Commission, the Board of Selectman, Authorized Agents of the Planning and Zoning Commission or Board of Selectman, permission to enter the property to which the application is requested for the purpose of inspection and enforcement of the Zoning regulations and the Subdivision regulations of the Town of Brooklyn

Applicant: Townsend Development Associates, LLC Date 5/1/23
Owner: Alan Taj Date 5/1/23

*Note: All consulting fees shall be paid by the applicant

PUBLIC HEARING
AUG. 15, 2023 AT 6:30 PM
TIFFANY ST. COMM. CENTER
31 TIFFANY STREET
SPECIAL PERMIT MODIFICATION
SELF STORAGE & COMMERCIAL SPACE





July 29, 2023

RE: Notice of Special Permit Modification Application for 538 Providence Road, File No. SP 15-006 MOD

Dear Property Owner:

Townsend Development Associates, LLC has filed an Application with the Town of Brooklyn Planning & Zoning Commission to modify the previously approved Site Plan for their property at 538 Providence Road (Map 41, Lot 16) to include a Self-Storage Facility and Commercial Space.

The Planning and Zoning Commission will hold a Public Hearing on this Application on August 15, 2023, at 6:30 PM in the Tiffany Street Community Center at 31 Tiffany Street, Brooklyn, CT and via Zoom.

This notice is being sent to you in compliance with Sections 9.D.4.4.b and 9.I.6.2 of the Town of Brooklyn Zoning Regulations, which requires that Abutting Property Owners and Property Owners Across the Street from the subject parcel be notified of the Special Permit Application.

If you have any questions regarding this application or would like additional information, feel free to contact me at pparent@chacompanies.com or at 860-885-1052

Thank You,

A handwritten signature in blue ink, appearing to read 'Pete Parent', is written over a light blue horizontal line.

Pete Parent, P.E.
Project Manager

**TOWN OF BROOKLYN
PLANNING AND ZONING COMMISSION
NOTICE OF PUBLIC HEARING**

The Planning and Zoning Commission will hold a public hearing on August 15, 2023, starting at 6:30 p.m. via Zoom and in-person at the Tiffany Street Community Center, 31 Tiffany Street Brooklyn, CT on the following:

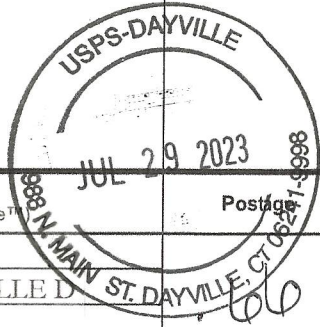
- **SP 15-006 mod:** Special Permit modification for Self-Storage Facility and Commercial Space (35,460 s.f. in three buildings) at 538 Providence Road, Applicant: Townsend Development Associates, LLC.
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Please publish August 2nd and 9th.



Certificate of Mailing — Firm

Name and Address of Sender CHA 400 Capital Boulevard Suite 301 Rocky Hill, CT 06067	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here <i>Postmark with Date of Receipt.</i>		
	Postmaster, per (name of receiving employee)				



USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	MARQUIS GARY W & MICHELLE D 43 WESTVIEW DR BROOKLYN, CT 06234	60	1.95		
2.	BROOKLYN TOWN OF PO BOX 356 BROOKLYN, CT 06234-0356				
3.	MERCHANT DAWN L 33 PLAZA ST BROOKLYN, CT 06234-2546				
4.	BAGLEY KATHLEEN 27 PLAZA ST BROOKLYN, CT 06234				
5.	LEWIS SHANE E 23 PLAZA ST BROOKLYN, CT 06234				
6.	ROUSSEAU ROLLANDE G 19 PLAZA ST BROOKLYN, CT 06234				



Certificate of Mailing — Firm

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	Postmaster, per (name of receiving employee)				

USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	FINNEGAN MORGAN 30 PLAZA ST BROOKLYN, CT 06234				
2.	ROSS ROBERT & MORTON TERESA 24 PLAZA ST BROOKLYN, CT 06234-1608				
3.	DERICO DAWN & ROGUE-DURAN ISAIAS 20 PLAZA ST BROOKLYN, CT 06234				
4.	OSJ OF BROOKLYN LLC 375 COMMERCE PARK RD NORTH KINGSTON, RI 02852				
5.	MCDONALDS CORPORATION PO BOX 182571 COLUMBUS, OH 43218				
6.	ALAR 2 LLC 1 CVS DRIVE #00942LO2 WOONSOCKET, RI 02895				



Certificate of Mailing — Firm

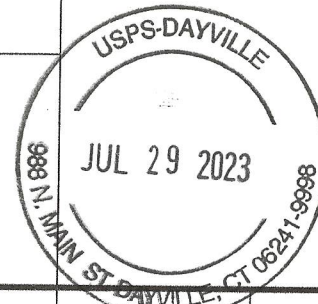
Name and Address of Sender CHA 400 Capital Boulevard Suite 301 Rocky Hill, CT 06067	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here <i>Postmark with Date of Receipt.</i>		
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USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	ALAR 2 LLC PO BOX 1308 PITTSFIELD, MA 01202-1308				
2.	KCTT PROPERTIES LLC 520 PROVIDENCE RD BROOKLYN, CT 06234				
3.	CASEY BRIAN & ETHIER EILEEN 9 ALLEN HILL RD BROOKLYN, CT 06234-0156				
4.	BROOKLYN FIRE DISTRICT 15 SO MAIN ST BROOKLYN, CT 06234-1547				
5.	BREVIN PROPERTIES LLC 414 PUTNAM PIKE DAYVILLE, CT 06241-0000				
6.	JMN PROPERTIES LLC 131 DAY ST BROOKLYN, CT 06234				



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	Postmaster, per (name of receiving employee)				



USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	SUKI PROPERTY LLC PO BOX 21049 JUNEAU, AK 99802				
2.	REGIS RICHARD R 8 ELLA GRASSO TURNPIKE WINDSOR LOCKS, CT 06096				
3.					
4.					
5.					
6.					



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07/29/2023 10:55 AM

Product	Qty	Unit Price	Price
First-Class Mail® Letter Brooklyn, CT 06234 Weight: 0 lb 0.50 oz Estimated Delivery Date Mon 07/31/2023 Cert of Mailing	1	\$0.66	\$0.66
Total		\$1.95	\$2.61
First-Class Mail® Letter Brooklyn, CT 06234 Weight: 0 lb 0.50 oz Estimated Delivery Date Mon 07/31/2023 Cert of Mailing	1	\$0.66	\$0.66
Total		\$1.95	\$2.61
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Total		\$1.95	\$2.61

First-Class Mail® 1 \$0.66
 Letter
 Brooklyn, CT 06234
 Weight: 0 lb 0.50 oz
 Estimated Delivery Date Mon 07/31/2023
 Cert of Mailing \$1.95
 Total \$2.61

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 Letter
 Brooklyn, CT 06234
 Weight: 0 lb 0.50 oz
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 Cert of Mailing \$1.95
 Total \$2.61

First-Class Mail® 1 \$0.66
 Letter
 Brooklyn, CT 06234
 Weight: 0 lb 0.50 oz
 Estimated Delivery Date Mon 07/31/2023
 Cert of Mailing \$1.95
 Total \$2.61

First-Class Mail® 1 \$0.66
 Letter
 North Kingstown, RI 02852
 Weight: 0 lb 0.50 oz
 Estimated Delivery Date Mon 07/31/2023
 Cert of Mailing \$1.95
 Total \$2.61

First-Class Mail® 1 \$0.66
 Letter
 Columbus, OH 43218
 Weight: 0 lb 0.50 oz
 Estimated Delivery Date Tue 08/01/2023
 Cert of Mailing \$1.95
 Total \$2.61

First-Class Mail® 1 \$0.66
 Letter
 Woonsocket, RI 02895
 Weight: 0 lb 0.50 oz
 Estimated Delivery Date Mon 07/31/2023
 Cert of Mailing \$1.95
 Total \$2.61

First-Class Mail® 1 \$0.66
 Letter
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 Weight: 0 lb 0.50 oz
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First-Class Mail® 1 \$0.66
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 Total \$2.61

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 Letter
 Brooklyn, CT 06234
 Weight: 0 lb 0.50 oz
 Estimated Delivery Date Mon 07/31/2023
 Cert of Mailing \$1.95
 Total \$2.61

First-Class Mail® 1 \$0.66
 Letter
 Brooklyn, CT 06234
 Weight: 0 lb 0.50 oz
 Estimated Delivery Date Mon 07/31/2023
 Cert of Mailing \$1.95
 Total \$2.61

First-Class Mail®	1	\$0.66
Letter		
Dayville, CT 06241		
Weight: 0 lb 0.50 oz		
Estimated Delivery Date		
Mon 07/31/2023		
Cert of Mailing		\$1.95
Total		\$2.61
First-Class Mail®	1	\$0.66
Letter		
Brooklyn, CT.06234		
Weight: 0 lb 0.50 oz		
Estimated Delivery Date		
Mon 07/31/2023		
Cert of Mailing		\$1.95
Total		\$2.61
First-Class Mail®	1	\$0.66
Letter		
Juneau, AK 99802		
Weight: 0 lb 0.50 oz		
Estimated Delivery Date		
Thu 08/03/2023		
Cert of Mailing		\$1.95
Total		\$2.61
First-Class Mail®	1	\$0.66
Letter		
Windsor Locks, CT 06096		
Weight: 0 lb 0.50 oz		
Estimated Delivery Date		
Mon 07/31/2023		
Cert of Mailing		\$1.95
Total		\$2.61

Grand Total: \$52.20

Debit Card Remit \$52.20

Card Name: MasterCard
Account #: XXXXXXXXXXXXX8831
Approval #: 805440
Transaction #: 889
Receipt #: 030303
Debit Card Purchase: \$52.20
AID: A0000000042203 Contactless
AL: US Debit

The timeliness of service to or from destinations outside the contiguous US may be affected by the limited availability of transportation.

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or scan this code with your mobile device,



or call 1-800-410-7420.

UFN: 081768-0241
Receipt #: 840-50600092-2-4769124-2
Clerk: 61

Drainage Report

**Townsend Development Associates
Route 6, Brooklyn, CT**

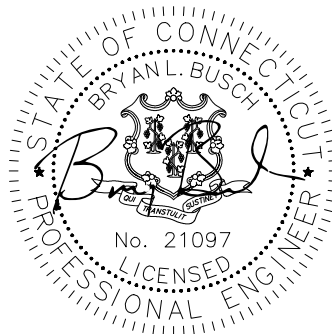
CHA Project Number: 080849.000

*Prepared for:
Townsend Development Associates, LLC
13309 Palmers Creek Terrace
Lakewood Ranch, FL 34202*

Prepared by:



*400 Capital Boulevard, Suite 301
Rocky Hill, CT 06067
Phone: (860) 257-4557*



05/24/2023

May 24, 2023

TABLE OF CONTENTS

- A. Summary
- B. Water Quality Volume Calculations
- C. Proposed Conditions Drainage Calculations
- D. Design Plans (Includes Construction Period Pollution Prevention and Erosion & Sedimentation Control Plan and Post Construction Operation and Maintenance Plan)
- E. Soils Mapping
- F. Hydrologic Data
- G. Drainage & Conservation Easement Documents

SUMMARY

SUMMARY

Townsend Development Associates proposes to modify their previously approved commercial development on 10-acres located west of Day Street on the north side of Route 6 in Brooklyn, Connecticut. A national pharmacy chain and bank are currently located along Route 6, and a medical office and spa are located interior to the site, per the previously approved designs. The remaining area of the site was filled to sub grade during the original construction. The revised design includes the construction of a self-storage facility and a mixed-use commercial building, currently envisioned as a grocery store and restaurant.

The proposed development will consist of approximately 19,360 square feet of commercial building space and 16,040 square feet of self-storage space with associated parking and access driveways. The majority of the storm flows from the parking areas will be collected by a series of catch basins and routed through hydrodynamic separators. Stormwater will discharge to the northwest wetland and the existing drainage swale along the northern boundary.

The revised development represents a reduction in overall site impervious area versus the originally approved plan. This reduction in impervious area will reduce the overall peak flows from the site versus the original plan and will improve the efficiency of the hydrodynamic separators (One existing and one proposed).

As part of an agreement between a previous property Owner and the Town of Brooklyn (See Section G), the proposed stormwater treatment system is not required to attenuate peak flows versus existing conditions, but must only treat the runoff for water quality (80% Total Suspended Solids removal). Because peak stormwater flow reduction is not a requirement, pre-development stormwater analysis has not been provided. Post development peak stormwater flows are indicated in Table No. 1.

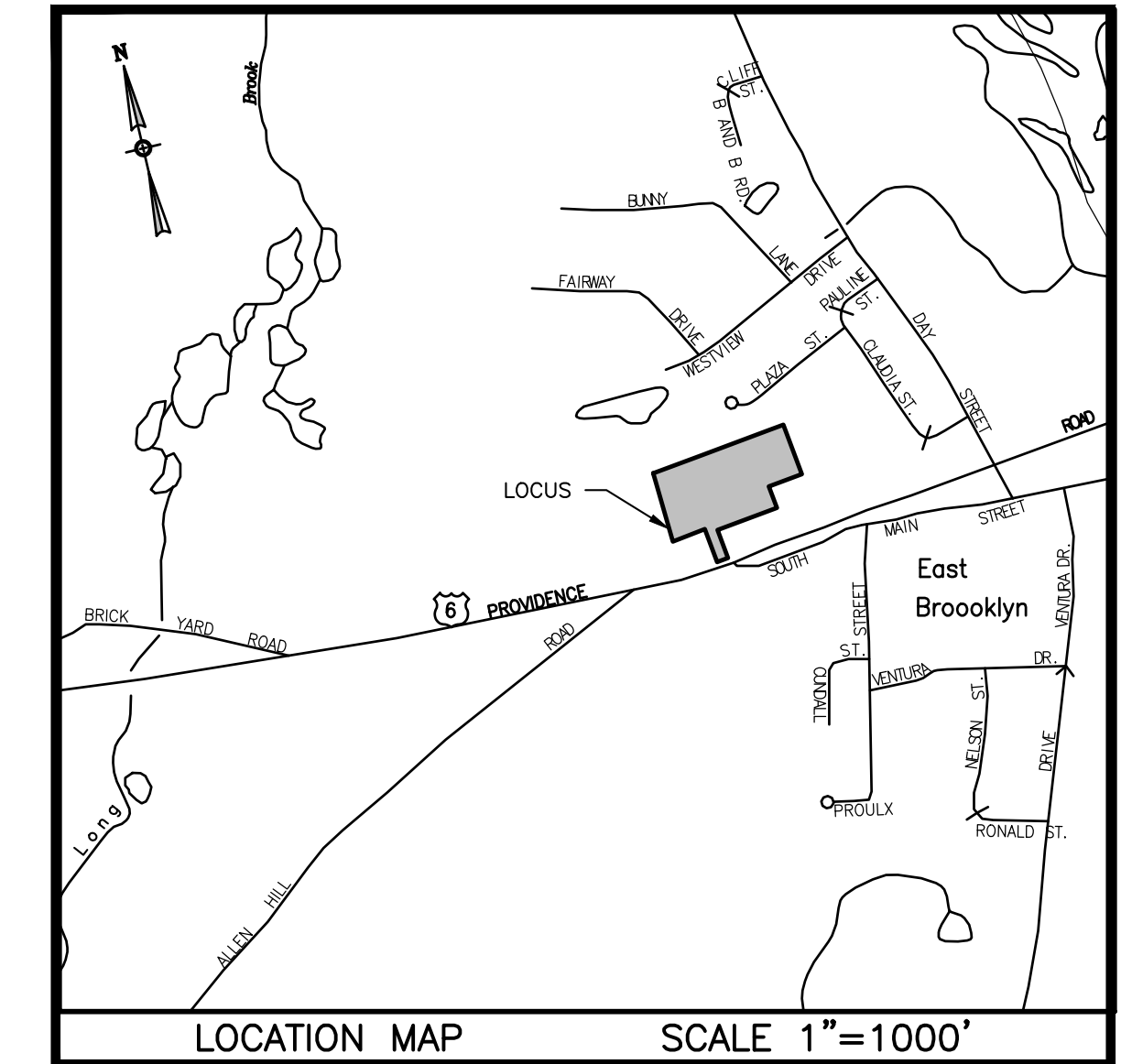
CHA utilized a computer model, HydroCAD®, to perform drainage calculations. The model used the Soil Conservation Service TR-20 method with NOAA 24-hour rainfall data to calculate the runoff. The drainage system was designed for the 10-year storm while the 25-year storm was used for the design of the storm drainage outlet protection. The design point for calculations is the wetland at the northwest corner of the site. Calculations for the 2, 10, 25, and 100-year storm events are provided. Peak storm flows for proposed conditions are listed in Table 1-1.

Table 1-1. Proposed Peak Storm Flows

Storm Event	Proposed Peak Flow to Northwest Wetland
2 Year Storm	24.0 cfs
10 Year Storm	37.6 cfs
25 Year Storm	46.1 cfs
100 Year Storm	59.1 cfs

SPECIAL PERMIT SITE DEVELOPMENT PLAN

PREPARED FOR
TOWNSEND DEVELOPMENT ASSOCIATES, LLC
PROVIDENCE ROAD (U.S. ROUTE 6)
BROOKLYN, CONNECTICUT
MAY 5, 2023
REVISED JULY 21, 2023



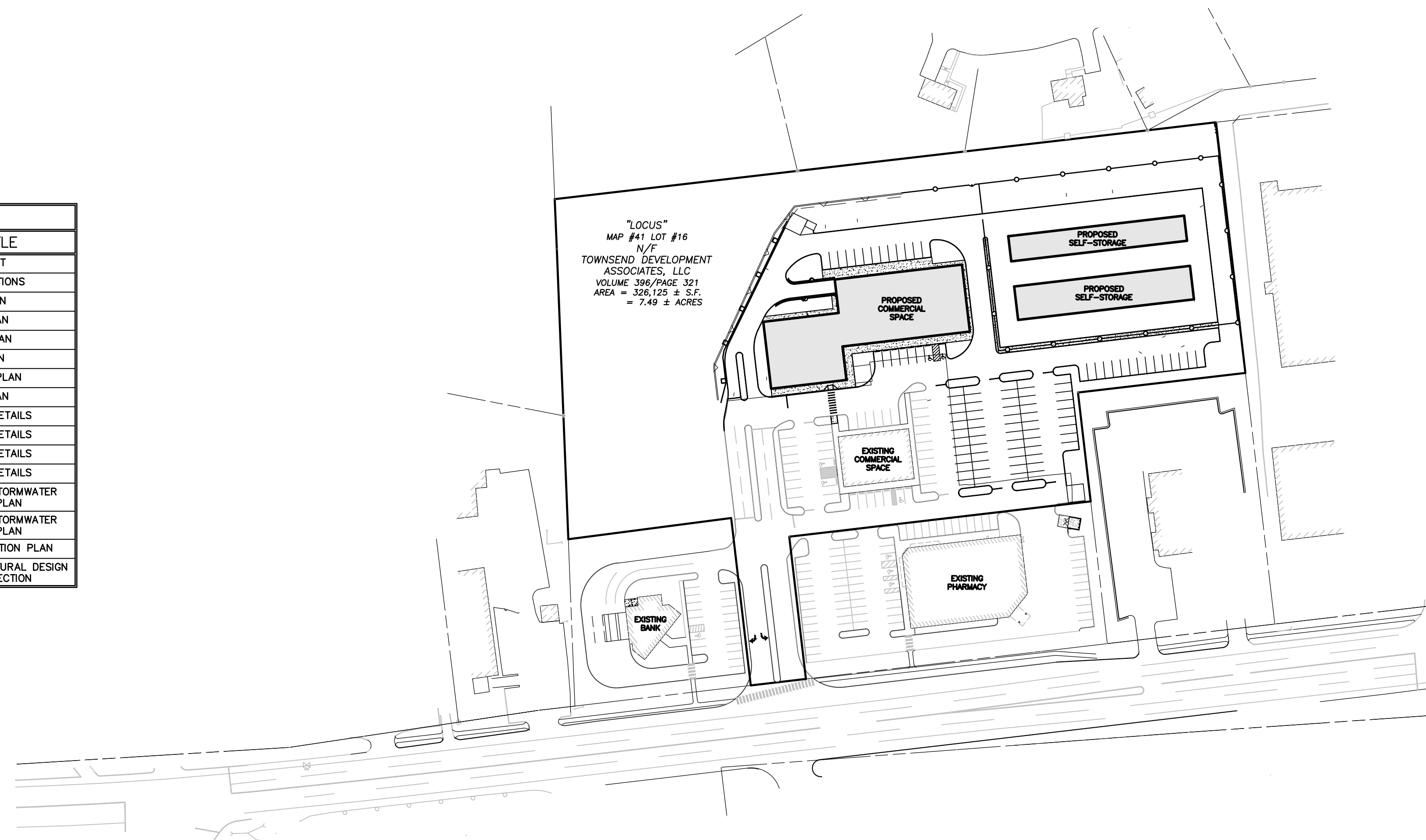
PROPERTY OWNER & APPLICANT: TOWNSEND DEVELOPMENT ASSOCIATES, LLC
169 BARRETT HILL ROAD
BROOKLYN, CT 06234

ZONING DISTRICT: PC = PLANNED COMMERCIAL ZONE

EXISTING USES: COMMERCIAL/MEDICAL OFFICE

PROPOSED USES: 19,640 S.F. COMMERCIAL SPACE
16,100 S.F. SELF STORAGE SPACE

DRAWING INDEX	
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	EXISTING CONDITIONS
3	LAYOUT PLAN
4	GRADING PLAN
5	DRAINAGE PLAN
6	UTILITY PLAN
7	LANDSCAPING PLAN
8	LIGHTING PLAN
9	CONSTRUCTION DETAILS
10	CONSTRUCTION DETAILS
11	CONSTRUCTION DETAILS
12	CONSTRUCTION DETAILS
13	E&S CONTROL AND STORMWATER MAINTENANCE PLAN
14	E&S CONTROL AND STORMWATER MAINTENANCE PLAN
15	TURNING DEMONSTRATION PLAN
16	CONCEPTUAL ARCHITECTURAL DESIGN ELEVATIONS & SECTION



"LOCUS"
MAP #41 LOT #16
N/F
TOWNSEND DEVELOPMENT ASSOCIATES, LLC
VOLUME 396/PAGE 321
AREA = 326,125 ± S.F.
= 7.49 ± ACRES

100 50 0 100
GRAPHIC SCALE IN FEET

SCALE: 1"=100'

Drawing Copyright © 2015

CHIA
400 Capital Boulevard, Suite 301
Rocky Hill, CT 06067
860-257-4557 | www.chacompanies.com

DIMENSIONAL REQUIREMENTS		
ZONING CRITERIA	REQUIRED	PROVIDED
LOT SIZE	30,000 SF	±326,125 SF
LOT FRONTAGE	100 FEET	65.92 FEET (REAR LOT)
FRONT YARD SETBACK	30 FEET / 45 FEET*	50.8 FEET
SIDE YARD SETBACK	20 FEET	30.4 FEET
REAR YARD SETBACK	20 FEET	105.7 FEET
LOT COVERAGE	65% IMPERVIOUS	±54% IMPERVIOUS
BUILDING HEIGHT	30 FEET / 40 FEET**	<30 FEET

* IF PARKING OR DRIVEWAY IS BETWEEN BUILDINGS AND STREET
** 30' FOR 1 & 2 STORY BUILDINGS, 40' FOR 3 STORY BUILDINGS

SELF STORAGE REQUIREMENTS		
ZONING CRITERIA	REQUIRED	PROVIDED
LOT	SITED ON A REAR LOT	SITED ON A REAR LOT
SETBACK	150' TO STREET LINE	>200' TO PLAZA STREET
DENSITY	4,000 SF/ACRE	±1,965 SF/ACRE
MAXIMUM BUILDING SIZE	>20,000 SF	8,400 SF

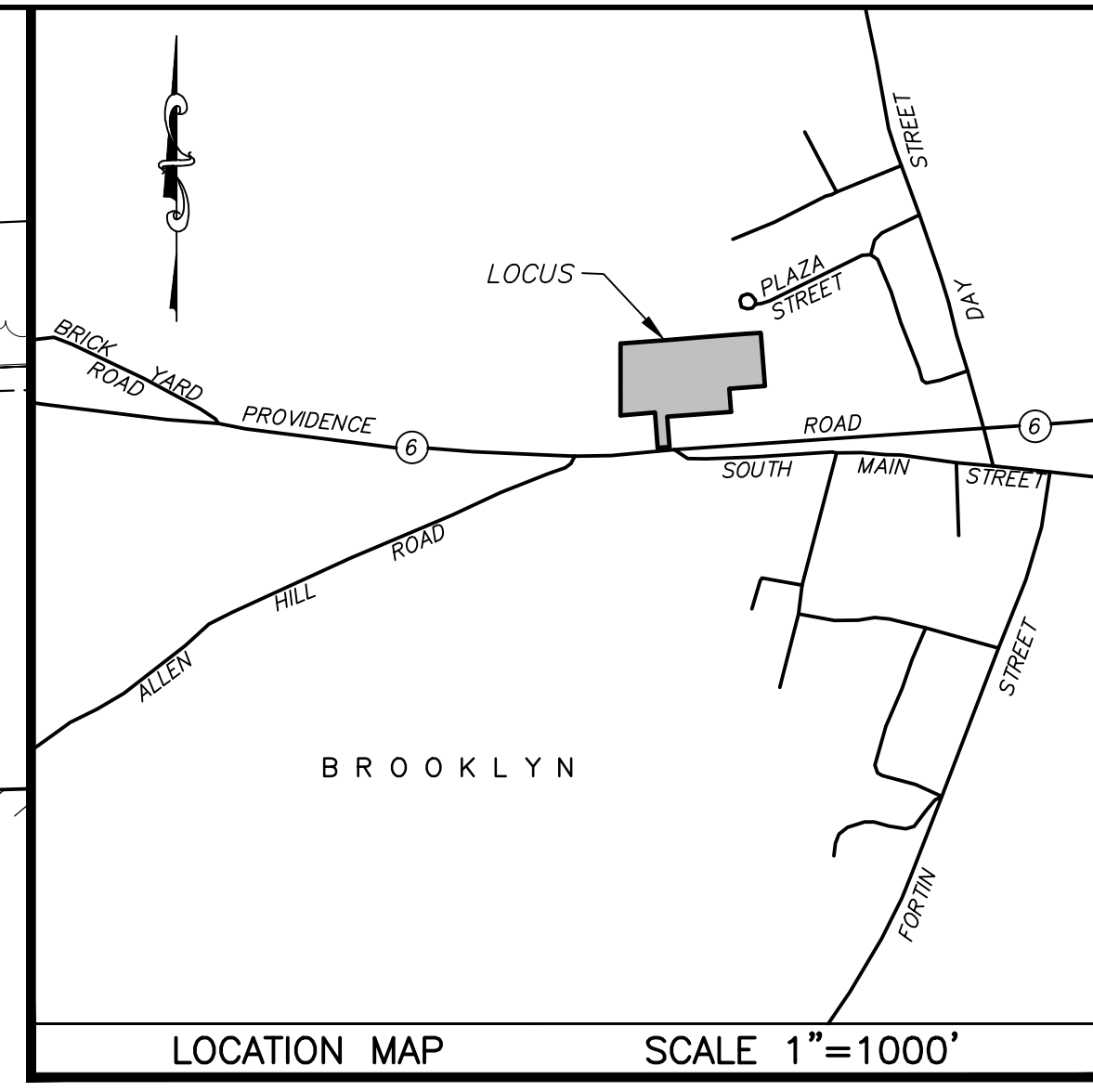
PARKING CALCULATIONS			
BUILDING	PARKING REQUIREMENT	SPACES REQUIRED	SPACES PROVIDED
RETAIL USES (7.B.2.2)		38 SPACES	
PERSONAL SERVICES USES (7.B.2.2)	3 SPACES PER 1,000 SF	8 SPACES (EXISTING USE)	
LICENSED HEALTH SERVICES (7.B.2.4)		8 SPACES (EXISTING USE)	
RESTAURANT USES (7.B.2.5)	1 SPACE PER 3 SEATS	80 SPACES (ASSUMING 240 SEATS)	
	TOTAL	134 SPACES	134 SPACES (41 EXISTING)

PER ADA STANDARDS, PARKING AREAS WITH 101 TO 150 PARKING SPACES MUST PROVIDE A MINIMUM OF 5 ACCESSIBLE PARKING SPACES. THERE ARE 3 EXISTING AND TWO PROPOSED ACCESSIBLE SPACES TO MEET THIS REQUIREMENT.

ADJACENT POTENTIAL OVERFLOW PARKING			
BUILDING	GROSS SQUARE FOOTAGE	SPACES REQUIRED	SPACES PROVIDED
PHARMACY PRIOR APPROVAL	13,225 SF	67 SPACES	73 SPACES
BANK PRIOR APPROVAL	3,000 SF	15 SPACES	21 SPACES
	TOTAL	83 SPACES	94 SPACES

PER SECTION 8-26c OF THE CONNECTICUT GENERAL STATUTES, AS AMENDED APPROVAL AUTOMATICALLY EXPIRES IF ALL PHYSICAL IMPROVEMENTS REQUIRED BY THIS PLAN ARE NOT COMPLETE BY THIS DATE.

REVIEWED BY THE TOWN ENGINEER FIRST SELECTMAN _____ DATE _____	ENDORSED BY THE BROOKLYN INLAND WETLANDS COMMISSION CHAIRMAN OR SECRETARY _____ DATE _____	APPROVED BY THE BROOKLYN PLANNING & ZONING COMMISSION CHAIRMAN OR SECRETARY _____ DATE _____
---	---	---



- MAP REFERENCES**
- "SUBDIVISION MAP PREPARED FOR TOWNSEND DEVELOPMENT ASSOCIATES, LLC PROVIDENCE PIKE (US ROUTE #6) BROOKLYN, CONNECTICUT", SCALE: 1"=40', DATED: APRIL 2008, SHEET NO. 2, PREPARED BY ARCHER SURVEYING L.L.C.
 - "COMPILED PLAN MAP SHOWING EASEMENT AREA TO BE GRANTED TO THE CONNECTICUT LIGHT AND POWER COMPANY ACROSS THE PROPERTY OF TOWNSEND DEVELOPMENT ASSOCIATES, LLC LOT #16 (PROVIDENCE ROAD) U.S. ROUTE #6 BROOKLYN, CT", SCALE: 1"=40', DATED: NOVEMBER 6, 2007, PREPARED BY CME ASSOCIATES, INC.
 - "EASEMENT MAP SURVEY, TOWN OF BROOKLYN MAP SHOWING EASEMENT ACQUIRED FROM TOWNSEND DEVELOPMENT ASSOCIATES, LLC BY THE STATE OF CONNECTICUT, PROVIDENCE ROAD & SOUTH MAIN STREET (ROUTE 6)", SCALE: 1"=20', DATED: JULY 2007, PREPARED BY CME ASSOCIATES, INC.
 - "SITE DEVELOPMENT PLAN PREPARED FOR TOWNSEND DEVELOPMENT ASSOCIATES, LLC, LOT #16 (PROVIDENCE ROAD) U.S. ROUTE #6 BROOKLYN, CT", SCALE: 1"=40', DATED: OCTOBER 10, 2006, REVISED JANUARY 3, 2007, PREPARED BY CME ASSOCIATES, INC.

NOTES

- THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS PREPARED AND ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.
- THE TYPE OF SURVEY PERFORMED IS AN IMPROVEMENT LOCATION SURVEY CONFORMING TO THE STANDARDS OF ACCURACY FOR A HORIZONTAL CLASS A-2 AND VERTICAL CLASS T-2 AND IS A DEPENDENT RESURVEY OF THE SUBJECT PROPERTY.
- THIS SURVEY WAS PREPARED TO DEPICT THE EXISTING CONDITIONS OF THE SUBJECT PROPERTY.
- THE SUBJECT PARCEL WAS CONVEYED TO TOWNSEND DEVELOPMENT ASSOCIATES, LLC, THROUGH A CONVEYANCE DATED ON SEPTEMBER 20, 2006 AND IS RECORDED IN VOLUME 396, PAGE 321 OF THE BROOKLYN LAND RECORDS.
- THE SUBJECT PROPERTY IS SHOWN ON THE BROOKLYN TAX ASSessor MAP No. 19 AS LOT 16 OF BLOCK 41 AND HAS BEEN ASSIGNED ADDRESS OF PROVIDENCE PIKE ROUTE 6, BROOKLYN, CONNECTICUT.
- TOTAL AREA OF PROPERTY = 7.49 ± ACRES (326,125 ± SQUARE FEET).
- SITE IS LOCATED IN (PC) PLANNED COMMERCIAL ZONE.
- UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED AND NOTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR GOVERNMENTAL AGENCIES, FROM PAROL TESTIMONY AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO CME ASSOCIATES, INC. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455.

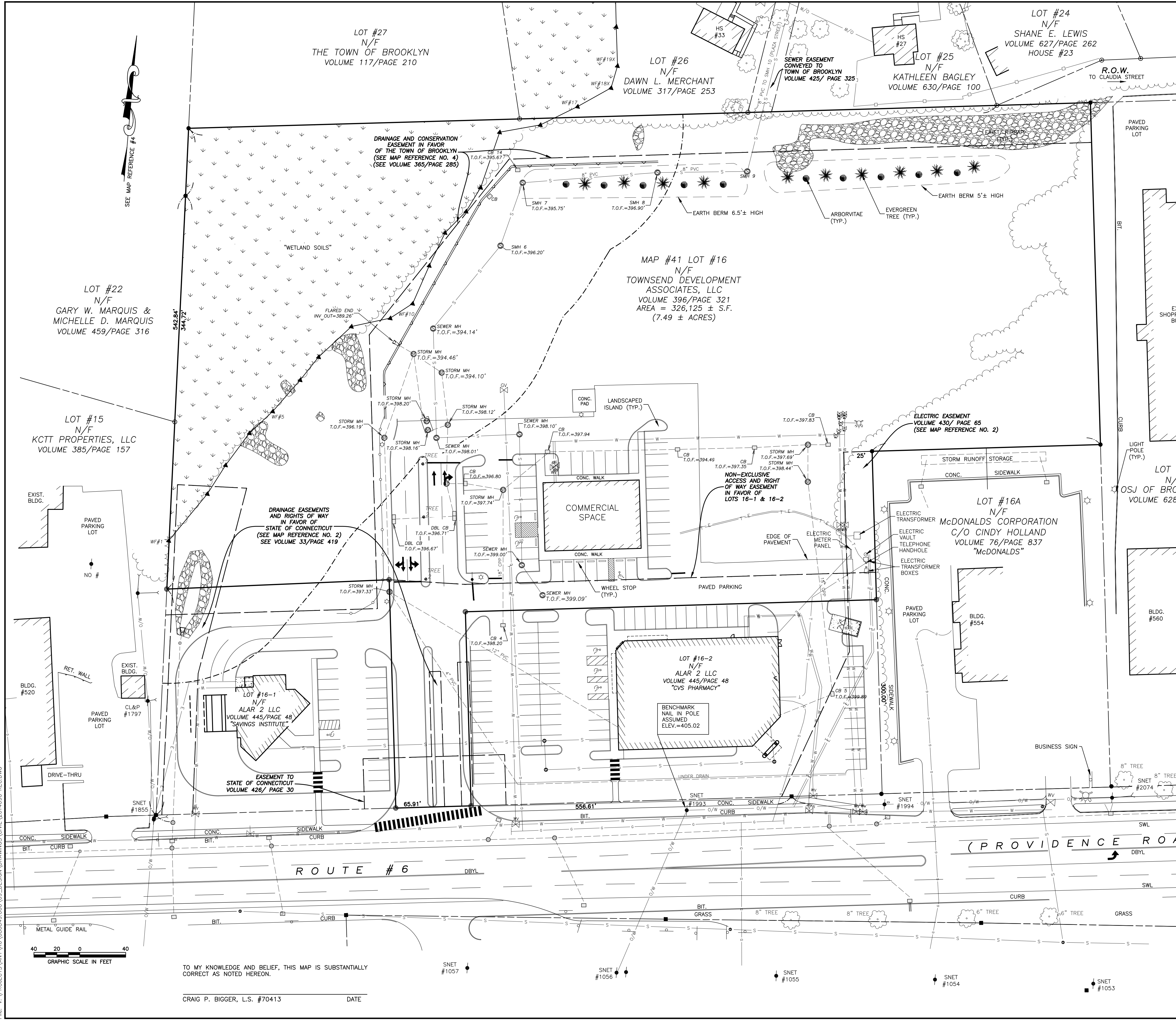
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION."

LEGEND

PROPERTY LINE	---
ABUTTERS LINE	---
EDGE OF PAVEMENT	---
EXISTING CONTOUR	---
RETAINING WALL	---
LIMITS OF INLAND WETLANDS	WLF#
WOOD FENCE	---
CHAIN LINK FENCE	---
TREE LINE	---
OVERHEAD WIRES	O/W
ELECTRIC	E
GAS	G
SANITARY	S
TELEPHONE	T
WATER	W
SINGLE LIGHT POLE	---
DOUBLE LIGHT POLE	---
NOW OR FORMERLY	N/F
UTILITY POLE	---
BOUNDARY POINT	---
DRILL HOLE	---
IRON MONUMENT	---
HYDRANT	---
WATER VALVE	---
CONNECTICUT HIGHWAY DEPARTMENT MONUMENT (CHD)	---

EXISTING CONDITIONS

Designed By:	Drawn By:	Checked By:
PMP	PMP	PMP
Issue Date:	Project No:	Scale:
05/05/2023	080849	1" = 40'



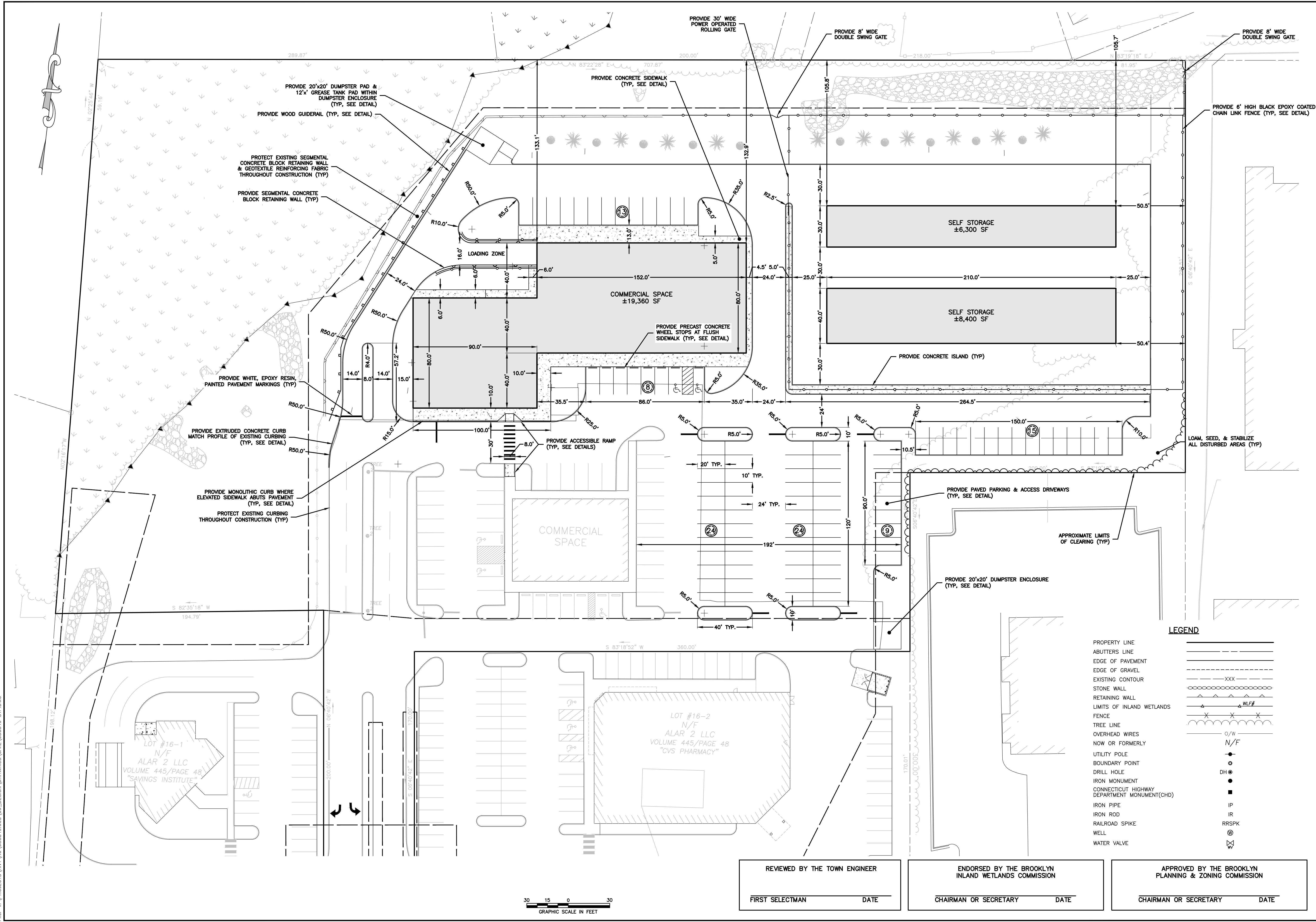
TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

CRAIG P. BIGGER, L.S. #70413 DATE

File: V:\PROJECTS\ANY\K6\080849\000\09_DESIGN\DRAWINGS\CIVIL\2014090_REC.DWG

SITE DEVELOPMENT PLAN
 PREPARED FOR:
**TOWNSEND
 DEVELOPMENT
 ASSOCIATES**
 PROVIDENCE ROAD (RT 6)
 BROOKLYN, CT

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED. THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



LEGEND

- PROPERTY LINE
- ABUTTERS LINE
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- EDGE OF GRAVEL
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- STONE WALL
- RETAINING WALL
- LIMITS OF INLAND WETLANDS
- FENCE
- TREE LINE
- OVERHEAD WIRES
- NOW OR FORMERLY
- UTILITY POLE
- BOUNDARY POINT
- DRILL HOLE
- IRON MONUMENT
- CONNECTICUT HIGHWAY DEPARTMENT MONUMENT(CHD)
- IRON PIPE
- IRON ROD
- RAILROAD SPIKE
- WELL
- WATER VALVE

No.	Submittal / Revision	App'd.	By	Date
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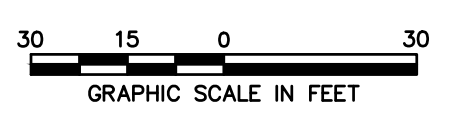
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Issue Date: 05/05/2023	Project No: 080849	Scale: 1" = 30'

Drawing No.:

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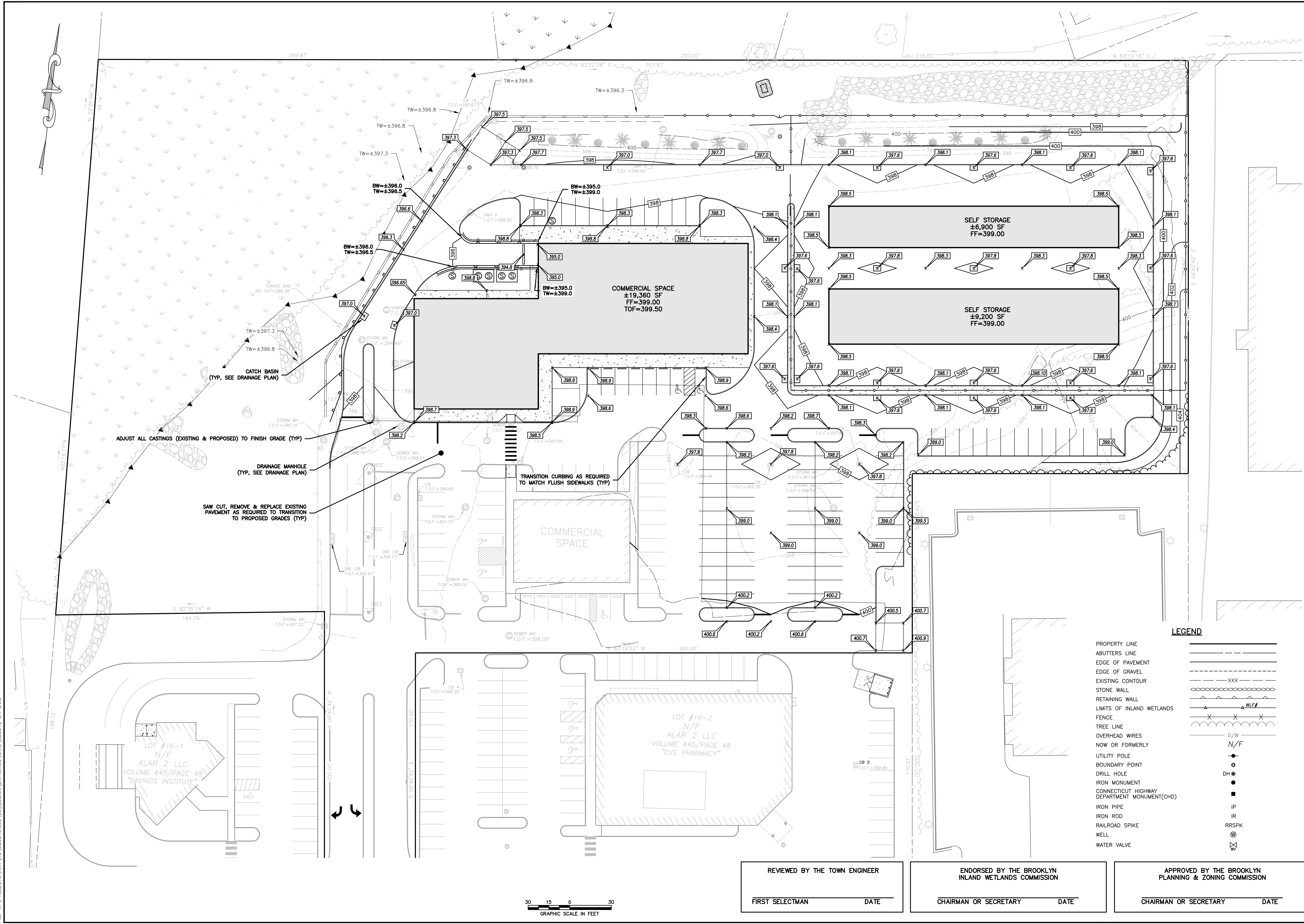
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FIRST SELECTMAN _____ DATE _____	CHAIRMAN OR SECRETARY _____ DATE _____	CHAIRMAN OR SECRETARY _____ DATE _____



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SITE DEVELOPMENT PLAN
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 DEVELOPMENT
 ASSOCIATES
 PROVIDENCE ROAD (RT 6)
 BROOKLYN, CT

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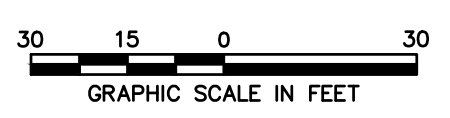
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1	REVIEW COMMENTS	PMP		07/21/2023

GRADING PLAN

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Issue Date: 05/05/2023	Project No: 080849	Scale: 1" = 30'

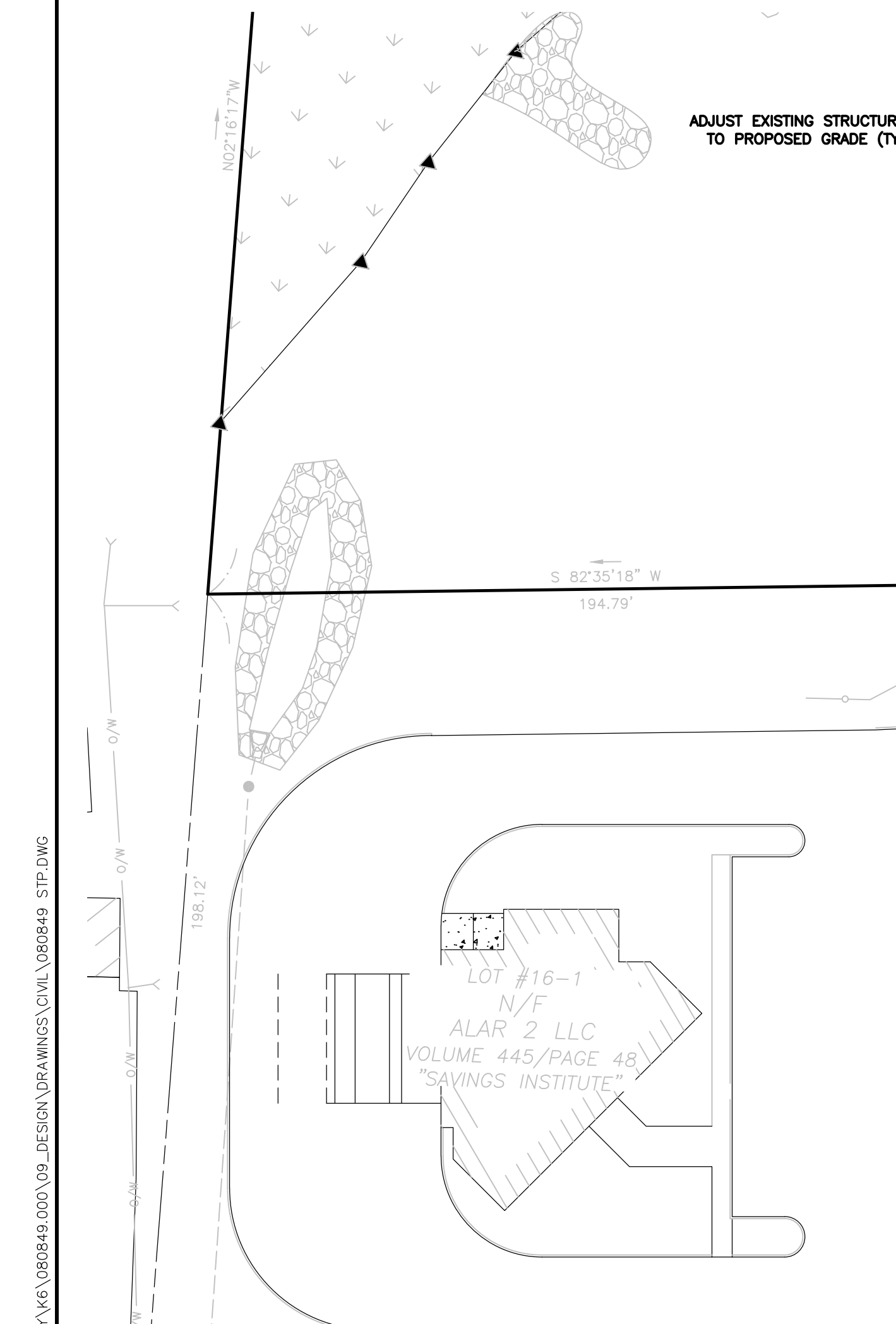
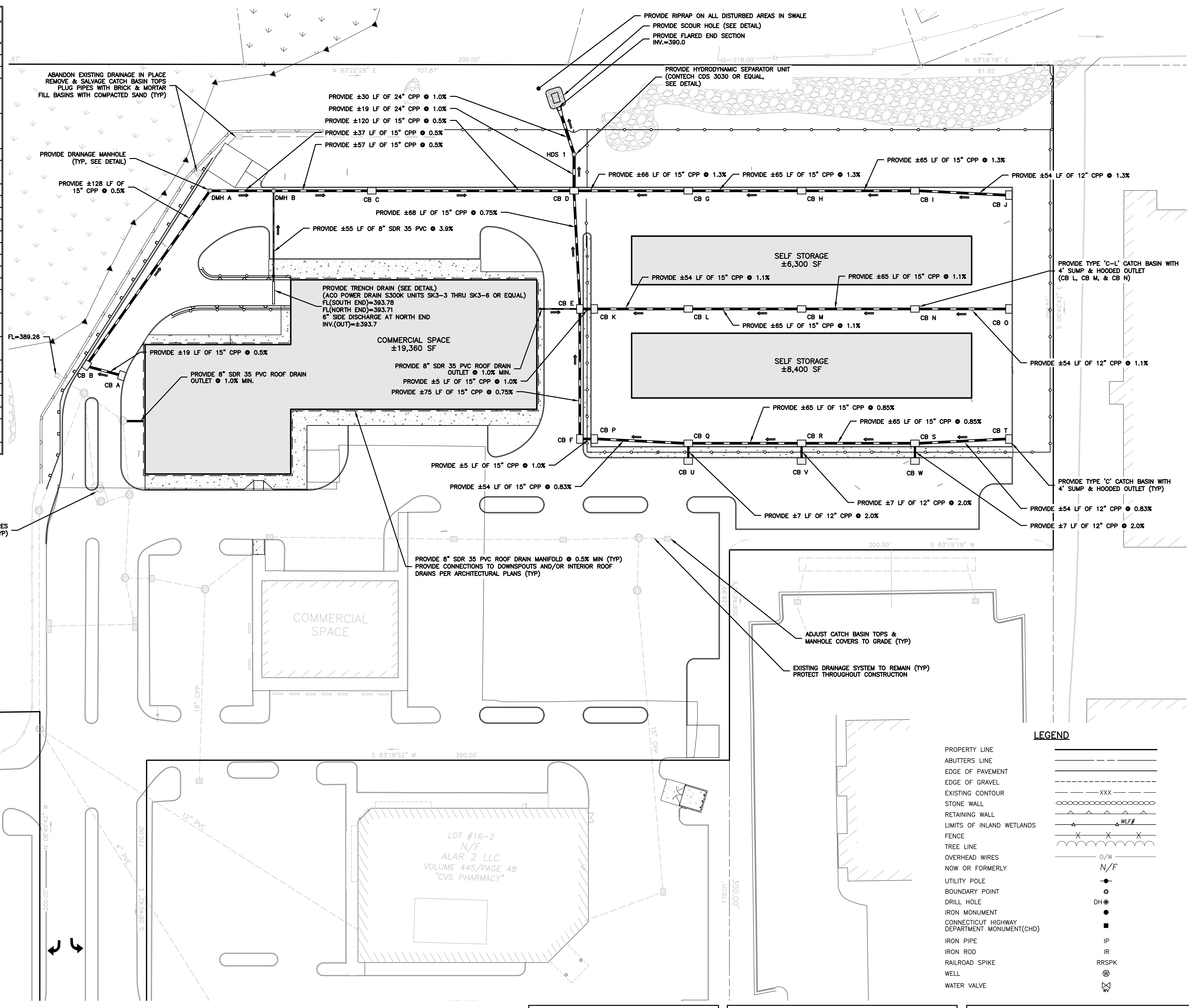
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REVIEWED BY THE TOWN ENGINEER FIRST SELECTMAN _____ DATE _____	ENDORSED BY THE BROOKLYN INLAND WETLANDS COMMISSION CHAIRMAN OR SECRETARY _____ DATE _____	APPROVED BY THE BROOKLYN PLANNING & ZONING COMMISSION CHAIRMAN OR SECRETARY _____ DATE _____
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STRUCTURE	TOP OF FRAME	INVERT IN	INVERT OUT
CB A	±397.0	-	392.60 (CB B)
CB B	±397.0	392.50 (CB A)	392.45 (DMH A)
CB C	±397.0	391.20 (DMH B)	391.15 (CB D)
CB D	±397.0	390.55 (CB C)	390.50 (HDS 1)
		390.55 (CB G)	
		391.10 (CB F)	
CB E	±397.6	391.10 (CB K)	391.05 (CB D)
		±393.4 (RD)	
CB F	±397.6	391.70 (CB P)	391.65 (CB E)
CB G	±397.6	391.50 (CB H)	391.40 (CB D)
		±393.2 (RD)	
CB H	±397.6	392.45 (CB I)	392.35 (CB G)
CB I	±397.6	393.40 (CB J)	393.30 (CB H)
CB J	±397.6	-	394.10 (CB I)
CB K	±397.6	391.25 (CB L)	391.20 (CB E)
CB L	±397.8	391.95 (CB M)	391.85 (CB K)
CB M	±397.8	392.75 (CB N)	392.65 (CB L)
CB N	±397.8	393.55 (CB O)	393.45 (CB M)
CB O	±397.6	-	394.15 (CB N)
CB P	±397.6	391.85 (CB Q)	391.80 (CB F)
		392.35 (CB R)	
CB Q	±397.6	394.45 (CB U)	392.30 (CB P)
		392.95 (CB S)	
CB R	±397.6	394.45 (CB V)	392.90 (CB Q)
		393.55 (CB T)	
CB S	±397.6	394.45 (CB W)	393.50 (CB R)
CB T	±397.6	-	394.00 (CB S)
CB U	±397.6	-	394.60 (CB Q)
CB V	±397.6	-	394.60 (CB R)
CB W	±397.6	-	394.60 (CB S)
DMH A	±397.0	391.80 (CB B)	391.75 (DMH B)
		391.55 (TD)	
DMH B	±397.7	391.55 (DMH A)	391.50 (CB C)
HDS 1	±397.0	390.3 (CB D)	390.3 (OUTLET)



LEGEND

PROPERTY LINE	---
ABUTTERS LINE	---
EDGE OF PAVEMENT	---
EDGE OF GRAVEL	---
EXISTING CONTOUR	XXX
STONE WALL	---
RETAINING WALL	---
LIMITS OF INLAND WETLANDS	WLF
FENCE	X X X
TREE LINE	---
OVERHEAD WIRES	O/W
NOW OR FORMERLY	N/F
UTILITY POLE	●
BOUNDARY POINT	○
DRILL HOLE	DH ●
IRON MONUMENT	●
CONNECTICUT HIGHWAY DEPARTMENT MONUMENT(CHD)	■
IRON PIPE	IP
IRON ROD	IR
RAILROAD SPIKE	RRSPK
WELL	⊗
WATER VALVE	⊕



REVIEWED BY THE TOWN ENGINEER FIRST SELECTMAN _____ DATE _____	ENDORSED BY THE BROOKLYN INLAND WETLANDS COMMISSION CHAIRMAN OR SECRETARY _____ DATE _____	APPROVED BY THE BROOKLYN PLANNING & ZONING COMMISSION CHAIRMAN OR SECRETARY _____ DATE _____
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DRAINAGE PLAN

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Issue Date: 05/05/2023	Project No: 080849	Scale: 1" = 30'

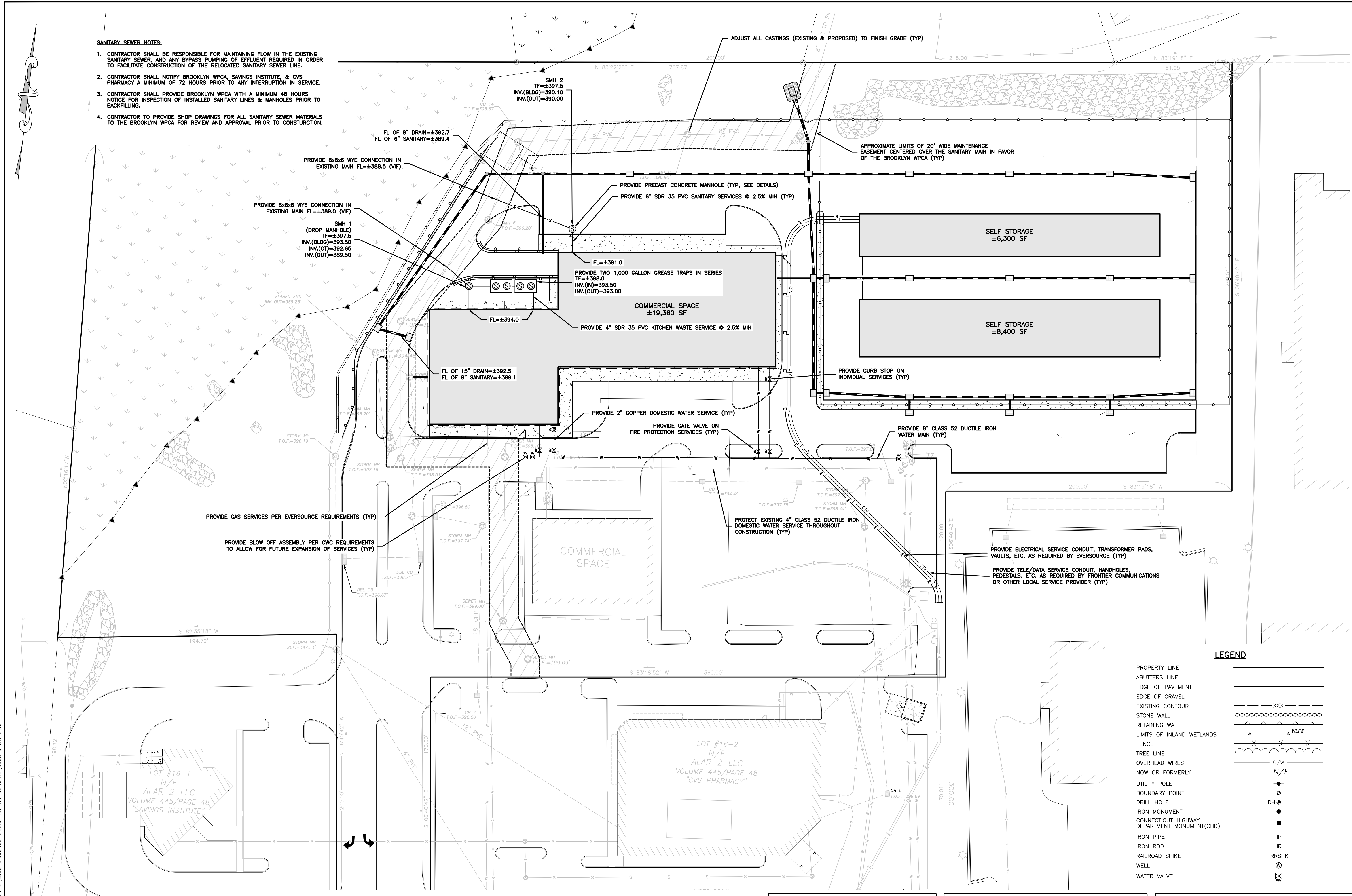
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SITE DEVELOPMENT PLAN
 PREPARED FOR:
 TOWNSEND
 DEVELOPMENT
 ASSOCIATES
 PROVIDENCE ROAD (RT 6)
 BROOKLYN, CT

THIS IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER ANY ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

- SANITARY SEWER NOTES:**
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING FLOW IN THE EXISTING SANITARY SEWER, AND ANY BYPASS PUMPING OF EFFLUENT REQUIRED IN ORDER TO FACILITATE CONSTRUCTION OF THE RELOCATED SANITARY SEWER LINE.
 - CONTRACTOR SHALL NOTIFY BROOKLYN WPCA, SAVINGS INSTITUTE, & CVS PHARMACY A MINIMUM OF 72 HOURS PRIOR TO ANY INTERRUPTION IN SERVICE.
 - CONTRACTOR SHALL PROVIDE BROOKLYN WPCA WITH A MINIMUM 48 HOURS NOTICE FOR INSPECTION OF INSTALLED SANITARY LINES & MANHOLES PRIOR TO BACKFILLING.
 - CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ALL SANITARY SEWER MATERIALS TO THE BROOKLYN WPCA FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.



LEGEND

- PROPERTY LINE
- ABUTTERS LINE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- EXISTING CONTOUR
- STONE WALL
- RETAINING WALL
- LIMITS OF INLAND WETLANDS
- FENCE
- TREE LINE
- OVERHEAD WIRES
- NOW OR FORMERLY
- UTILITY POLE
- BOUNDARY POINT
- DRILL HOLE
- IRON MONUMENT
- CONNECTICUT HIGHWAY DEPARTMENT MONUMENT(CHD)
- IRON PIPE
- IRON ROD
- RAILROAD SPIKE
- WELL
- WATER VALVE

No.	Submittal / Revision	App'd.	By	Date
1	REVIEW COMMENTS	PMP		07/21/2023

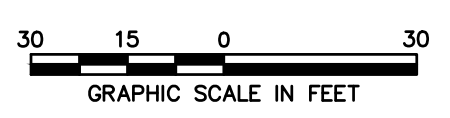
UTILITY PLAN

Designed By: PMP	Drawn By: PMP	Checked By: PMP
Issue Date: 05/05/2023	Project No: 080849	Scale: 1" = 30'

Drawing No.:

6

REVIEWED BY THE TOWN ENGINEER	ENDORSED BY THE BROOKLYN INLAND WETLANDS COMMISSION	APPROVED BY THE BROOKLYN PLANNING & ZONING COMMISSION
FIRST SELECTMAN _____ DATE _____	CHAIRMAN OR SECRETARY _____ DATE _____	CHAIRMAN OR SECRETARY _____ DATE _____



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SITE DEVELOPMENT PLAN
 PREPARED FOR:
 TOWNSEND
 DEVELOPMENT
 ASSOCIATES
 PROVIDENCE ROAD (RT 6)
 BROOKLYN, CT

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED. THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

PLANTING SCHEDULE				
PLAN LABEL	COMMON NAME Botanical Name	QUANTITY	SIZE	NOTES
SHRUBS				
AC	JUNIPER BUSH <i>Juniperus Andorae Compacta</i>	27	2 GAL.	CONT.
BK	DWARF KOREAN BOXWOOD <i>Buxus Koreana</i>	26	18"-24" HT.	CONT.
FI	FORSYTHIA <i>Forsythia 'spring glory' x intermedia</i>	3	2 GAL.	CONT.
KL	OLYMPIC FIRE MOUNTAIN LAUREL <i>Kalmia latifolia 'Olympic Fire'</i>	4	24"-30" HT.	B&B
MP	BAYBERRY <i>Myrica pensylvanica</i>	7	2'-3" HT.	CONT.
RP	PJM <i>Rhododendron</i>	4	2 GAL.	CONT.
RY	RHODODENDRON <i>Rhododendron 'Commonwealth'</i>	4	24"-30" HT.	B&B
VD	ARROWHEAD VIBURNUM <i>Viburnum dentatum</i>	15	24"-30" HT.	CONT.
TREES				
PCC	CALLERY PEAR <i>Pyrus calleryana 'chanticleer'</i>	3	2.5"-3" CAL.	B&B
CA	WHITE HYBRID DOGWOOD <i>Cornus rugida 'Celestial'</i>	11	2.5"-3" CAL.	B&B
GT	UPRIGHT PYRAMIDAL THORNLESS HONEY LOCUST <i>Gleditsia triacanthos inermis 'Skyline'</i>	4	2.5"-3" CAL.	B&B
PP	COLORADO BLUE SPRUCE <i>Picea Pungens</i>	2	3" CAL.	B&B
TP	GREEN GIANT ARBORVITAE <i>Thuja Standishii x plicata</i>	5	3" CAL.	B&B
	MULCHED BED	-	-	-
	GRASS SEEDED AREA	-	-	-

B&B = BALLED AND BURLAPPED
 CAL = CALIPER
 CONT. = CONTAINER
 GAL. = GALLON
 HT. = HEIGHT

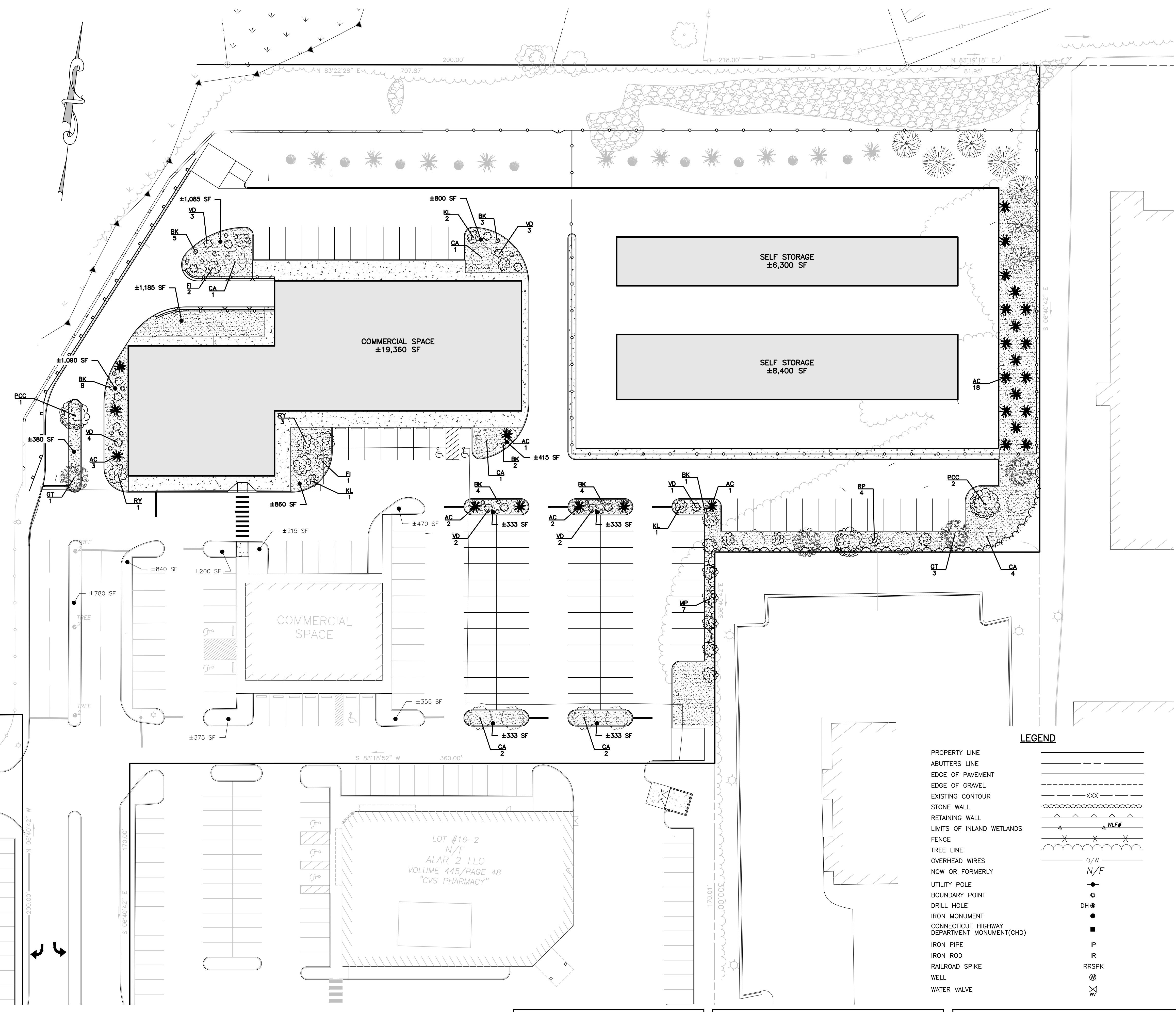
SEEDING: SEEDING SHALL TAKE PLACE BETWEEN MARCH 15 AND MAY 31 OR AUGUST 15 AND OCTOBER 15 ONLY. SEED SHALL BE PURE, LIVE, FRESH SEED FROM COMMERCIAL SOURCES MEETING AND LABELED IN ACCORDANCE WITH STATE AND FEDERAL RULES AND REGULATIONS. THE SEED MIXTURE SHALL BE:

PROPORTION BY TYPE	WEIGHT	PUR.	GERM.
PALMER PERENNIAL RYEGRASS	20%	99%	90%
RANGER PERENNIAL RYEGRASS	20%	99%	90%
BARON KENTUCKY BLUEGRASS	30%	95%	85%
MERION KENTUCKY BLUEGRASS	30%	95%	85%
INERT MATERIALS	2.5% (MAXIMUM)		

SEEDED AREAS SHALL, AT A MINIMUM, INCLUDE ALL AREAS OF THE SITE THAT HAVE BEEN DISTURBED OR ARE BARREN UNLESS OTHERWISE NOTED ON THE PLANS. SEED SHALL BE APPLIED AT A MINIMUM RATE OF 4 LBS. PER 1000 SQUARE FEET. PROVIDE 6" GOOD QUALITY FERTILE LOAM OR REUSE EXISTING SOIL AND PROVIDE ADDITIONAL LOAM AS REQUIRED FOR MINIMUM 6" DEPTH.

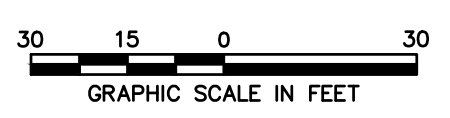
LANDSCAPE CALCULATIONS:
 TOTAL REQUIRED PARKING = 134 SPACES
 10 SQ FT OF LANDSCAPING PER PARKING SPACE
 THEREFORE, 1,340 SQ FT OF LANDSCAPING REQUIRED
 GREATER THAN 4,000 SQ FT PROVIDED

1 DECIDUOUS TREE PER 100 SQ FT OF LANDSCAPING
 THEREFORE, 14 TREES REQUIRED
 20 DECIDUOUS TREES PROVIDED PLUS 4 CONIFEROUS TREES



LEGEND

PROPERTY LINE	---
ABUTTERS LINE	---
EDGE OF PAVEMENT	---
EDGE OF GRAVEL	---
EXISTING CONTOUR	XXX
STONE WALL	---X---X---
RETAINING WALL	---X---X---
LIMITS OF INLAND WETLANDS	---WLF---
FENCE	X X X
TREE LINE	---X---X---
OVERHEAD WIRES	O/W
NOW OR FORMERLY	N/F
UTILITY POLE	●
BOUNDARY POINT	○
DRILL HOLE	DH ●
IRON MONUMENT	●
CONNECTICUT HIGHWAY DEPARTMENT MONUMENT(CHD)	■
IRON PIPE	IP
IRON ROD	IR
RAILROAD SPIKE	RRSPK
WELL	⊗
WATER VALVE	⊕



REVIEWED BY THE TOWN ENGINEER	ENDORSED BY THE BROOKLYN INLAND WETLANDS COMMISSION	APPROVED BY THE BROOKLYN PLANNING & ZONING COMMISSION
FIRST SELECTMAN _____ DATE _____	CHAIRMAN OR SECRETARY _____ DATE _____	CHAIRMAN OR SECRETARY _____ DATE _____

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1	REVIEW COMMENTS	PMP		07/21/2023

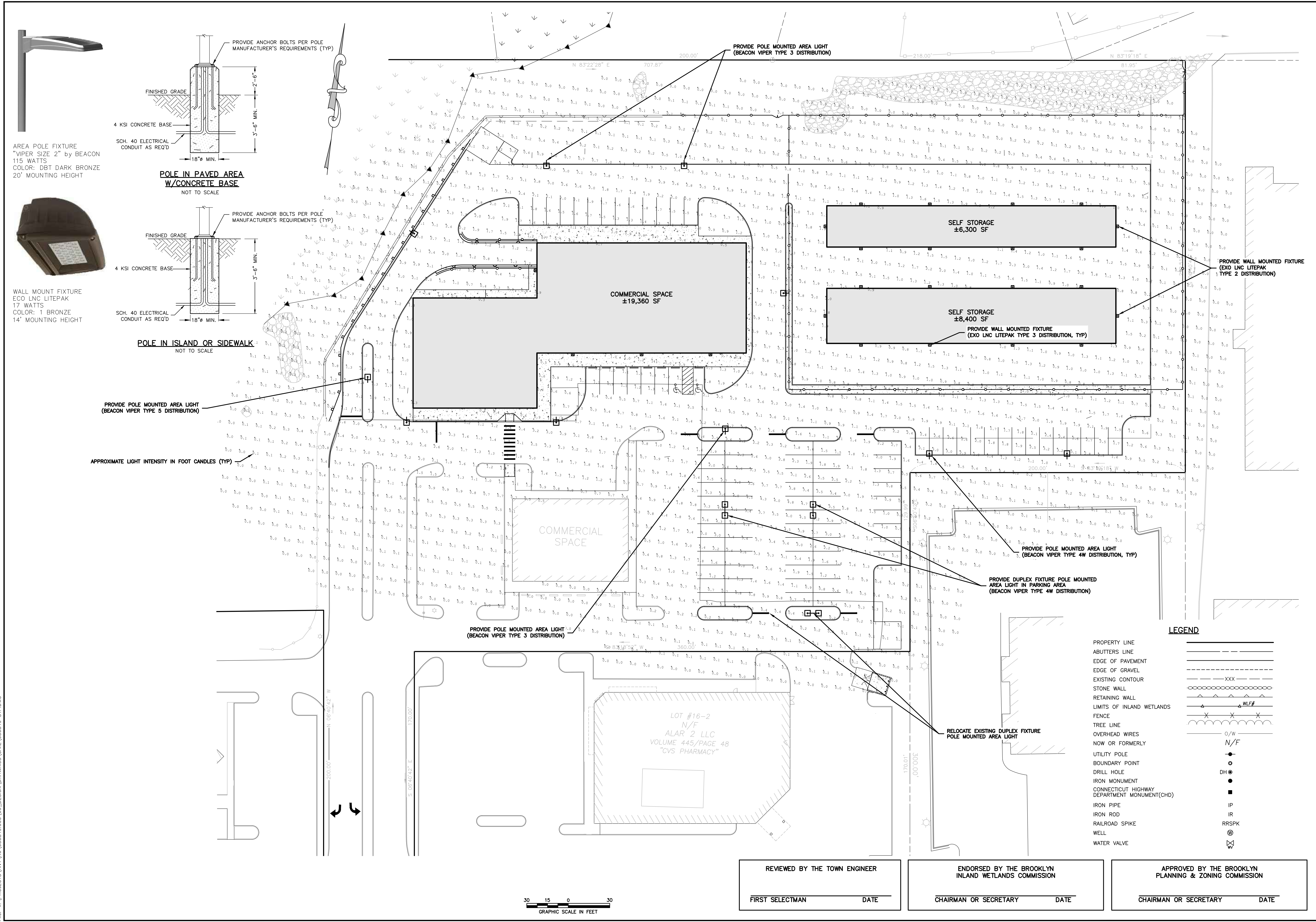
LANDSCAPE PLAN

Designed By: PMP
 Drawn By: PMP
 Checked By: PMP

Issue Date: 05/05/2023
 Project No: 080849
 Scale: 1" = 30'

Drawing No.: **7**

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER ANY ITEM IN ANY WAY IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED. THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



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LIGHTING PLAN

No.	Submittal / Revision	App'd. By	Date
1	REVIEW COMMENTS	PMP	07/21/2023

Designed By:	Drawn By:	Checked By:
PMP	PMP	PMP

Issue Date:	Project No:	Scale:
05/05/2023	080849	1" = 30'

Drawing No.:

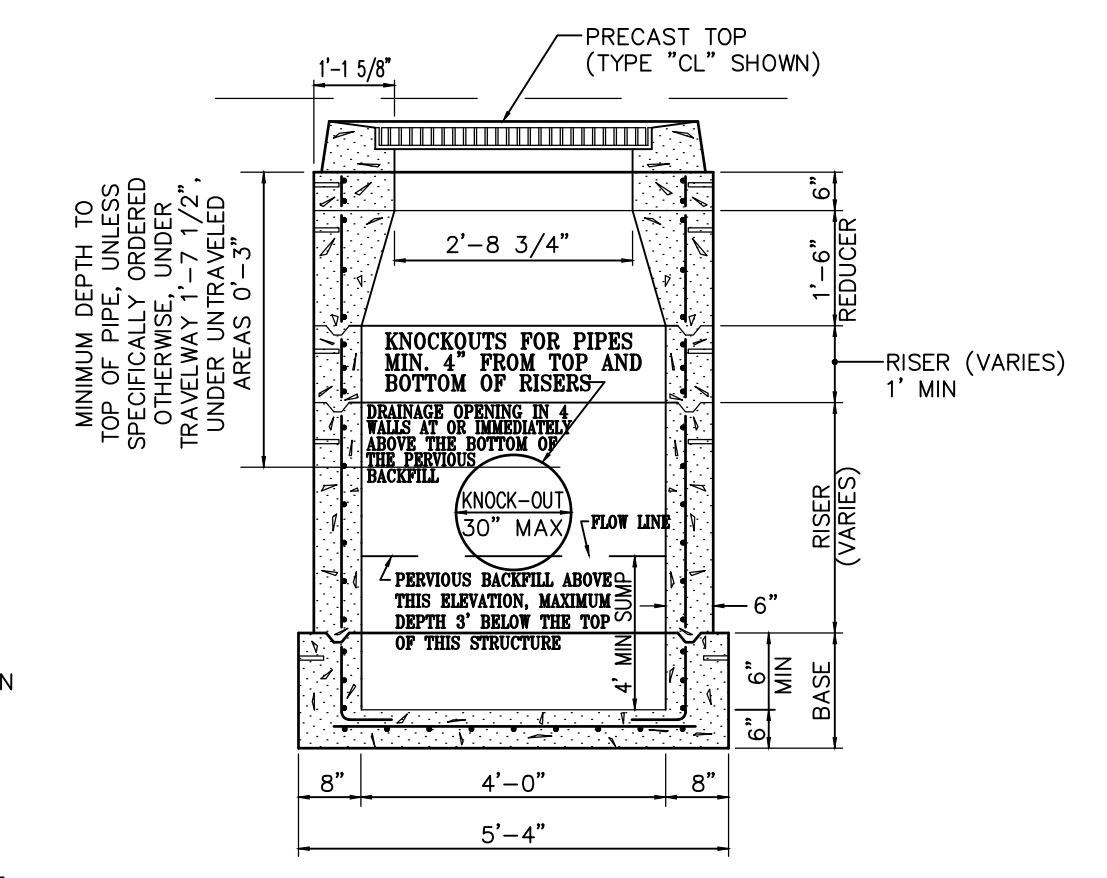
8

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED. THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

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1	REVIEW COMMENTS	PMP	07/21/2023

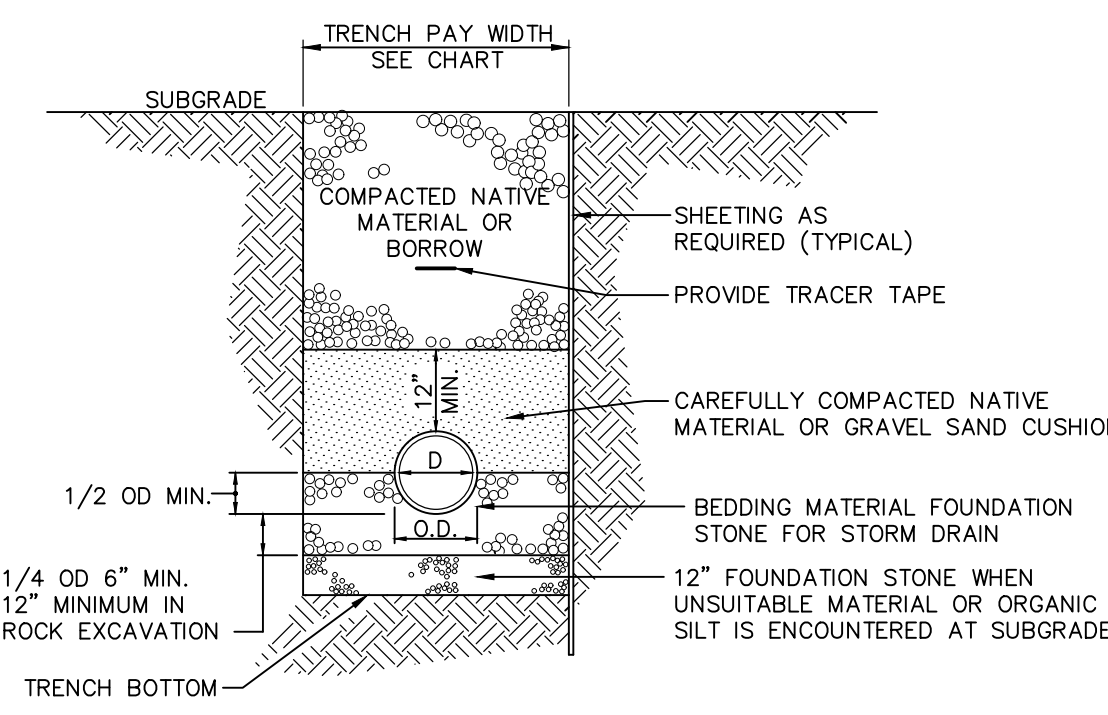
CONSTRUCTION DETAILS

Designed By:	Drawn By:	Checked By:
PMP	PMP	PMP
Issue Date:	Project No:	Scale:
05/05/2023	080849	AS NOTED



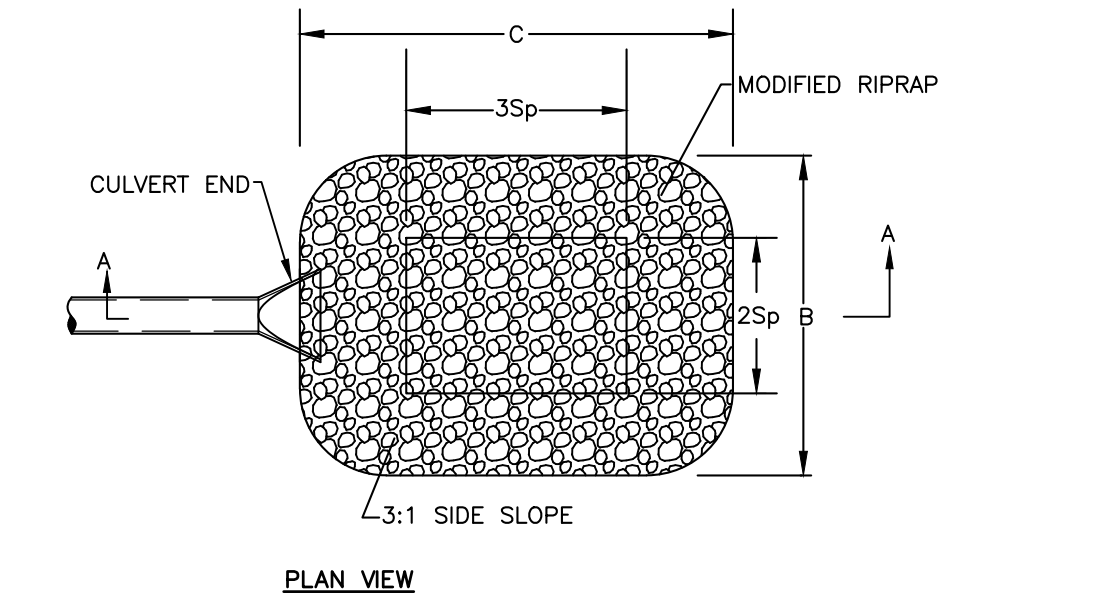
TYPE "C" OR "CL" STANDARD CATCH BASIN CROSS SECTION
 NOT TO SCALE

NOTE: CATCH BASINS MUST BE PROVIDED WITH AN OUTLET HOOD ("ELIMINATOR" BY GROUNDWATER RESCUE INC. OR EQUAL)

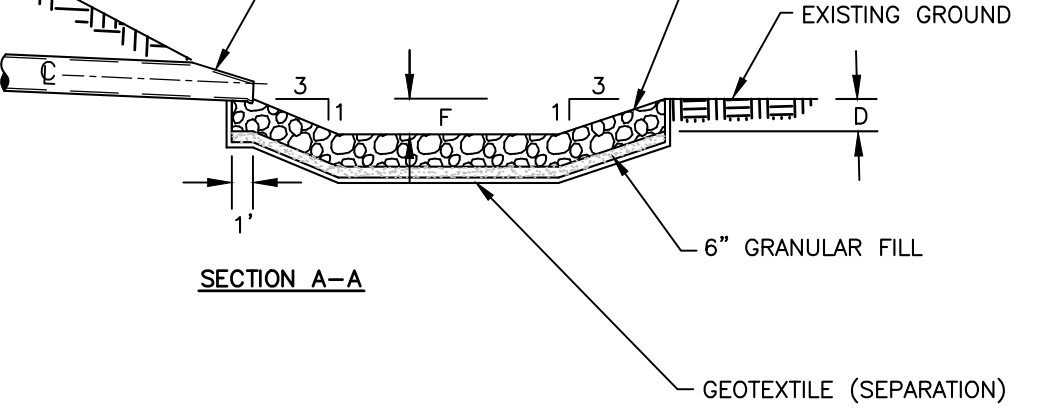


TRENCH SECTION FOR SANITARY SEWER & STORM DRAINS
 NOT TO SCALE

NOTE: BACKFILL MATERIAL TO BE PLACED IN 12" MAXIMUM LIFTS & COMPACTED TO 95% MAXIMUM DRY DENSITY (AS DETERMINED BY THE MODIFIED PROCTOR METHOD)

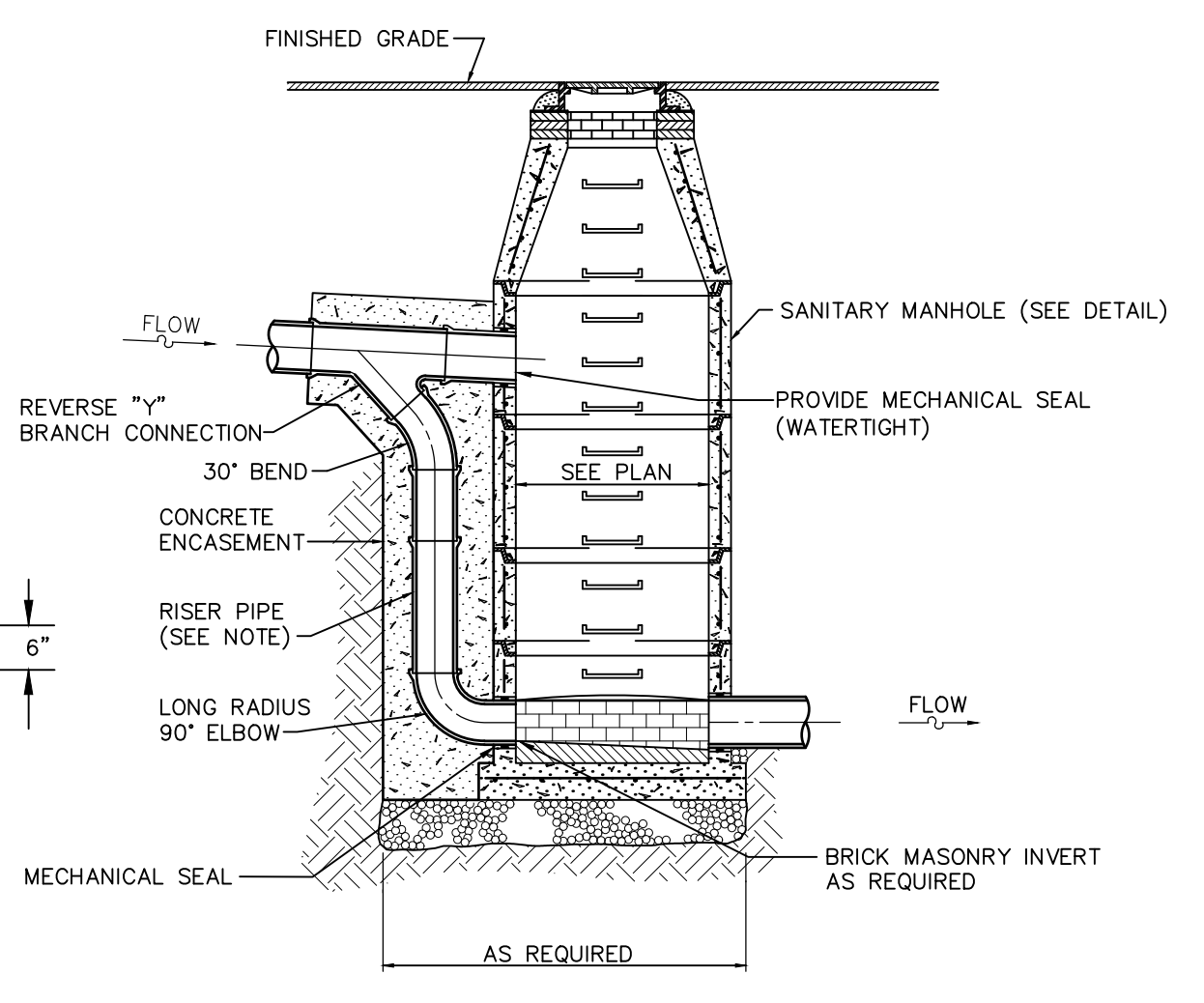


PREFORMED SCOUR HOLE TYPE 1
 NTS



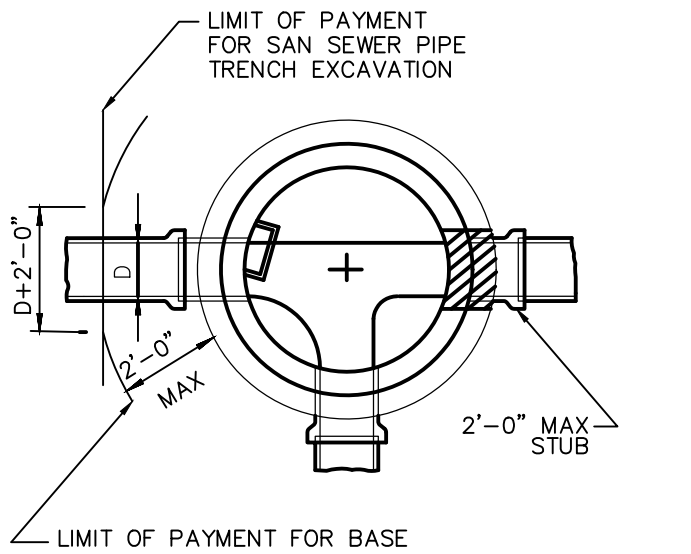
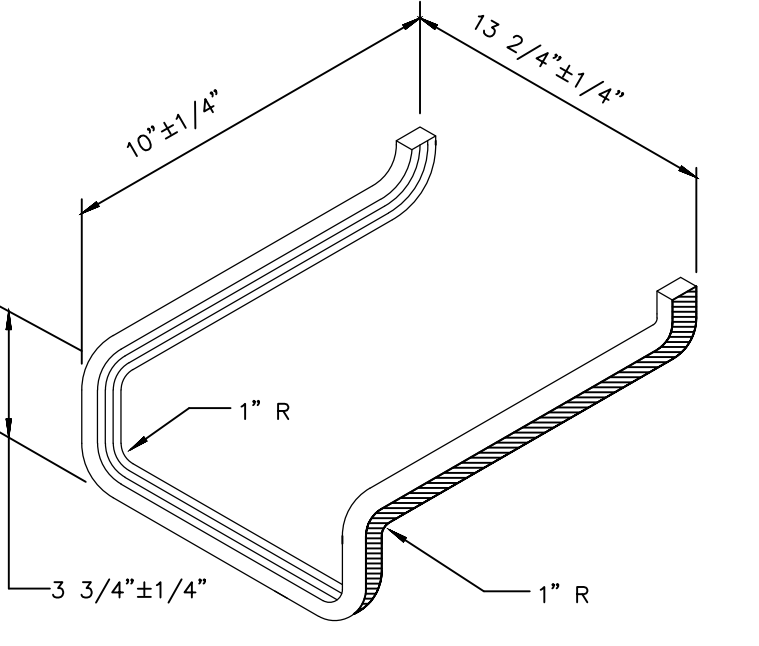
SECTION A-A

LOCATION	B	C	D	F	2Sp	3Sp
24" OUTLET	10'	12'	1'	1'	4'	6'



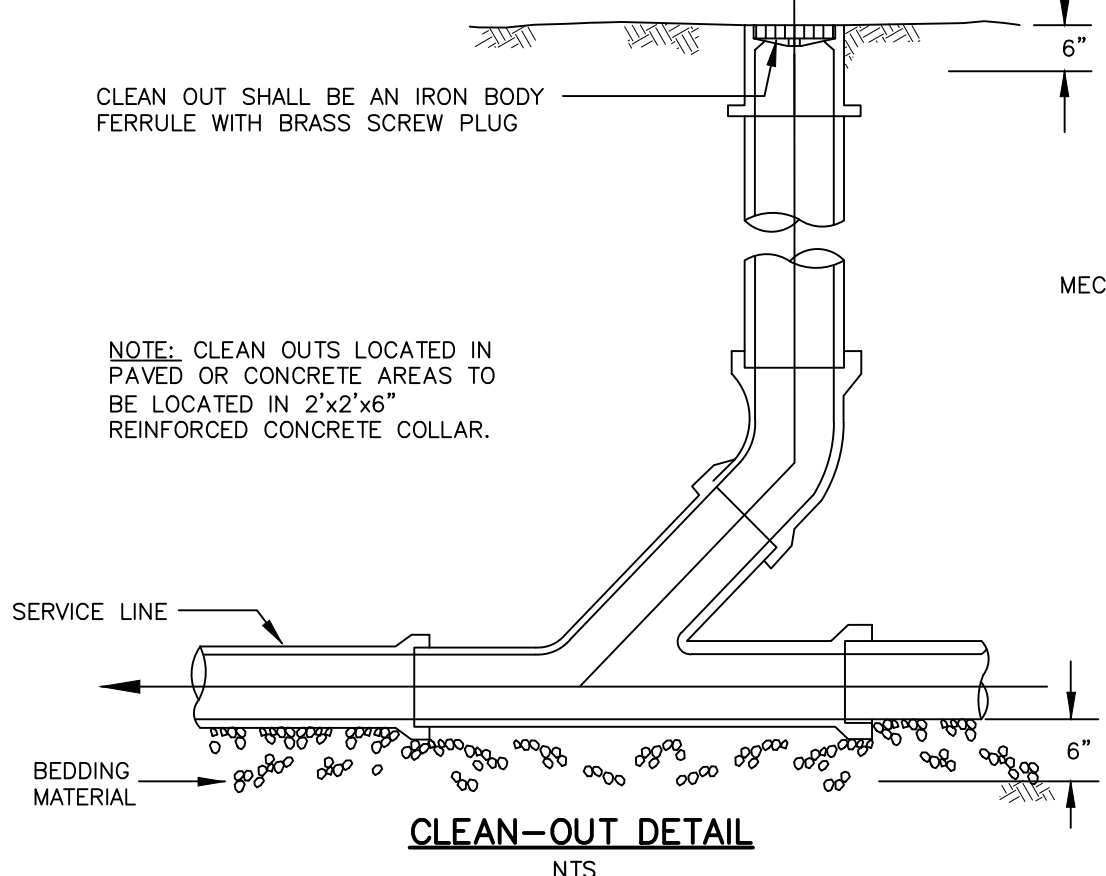
DROP MANHOLE CROSS SECTION
 NOT TO SCALE

NOTE: USE 8" RISER PIPE AND BENDS FOR INCOMING SEWER OF 12" OR LESS. FOR INCOMING SEWER LARGER THAN 12", THE RISER PIPE AND BENDS SHALL BE 10"



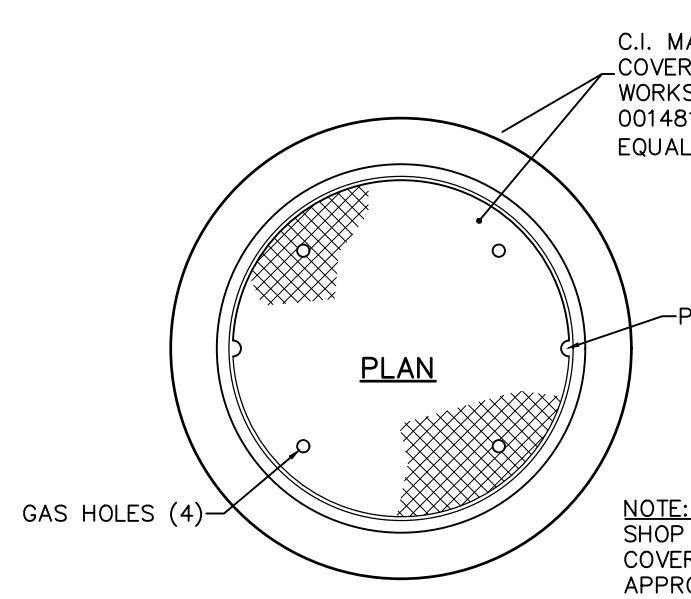
SANITARY MANHOLE
 NTS

NOTE:
 1. ALCOA #6061-T6 DROP FRONT DESIGN STEP OR APPROVED EQUAL.
 2. PORTION OF ALUMINUM MH STEP TO BE EMBEDDED IN CONC SHALL BE COATED WITH A BITUMINOUS MATERIAL.

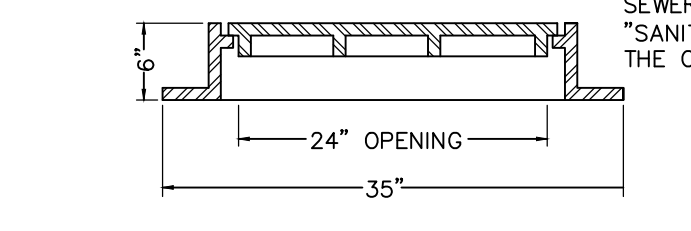


CLEAN-OUT DETAIL
 NTS

NOTE: CLEAN OUTS LOCATED IN PAVED OR CONCRETE AREAS TO BE LOCATED IN 2'x2'x6" REINFORCED CONCRETE COLLAR.

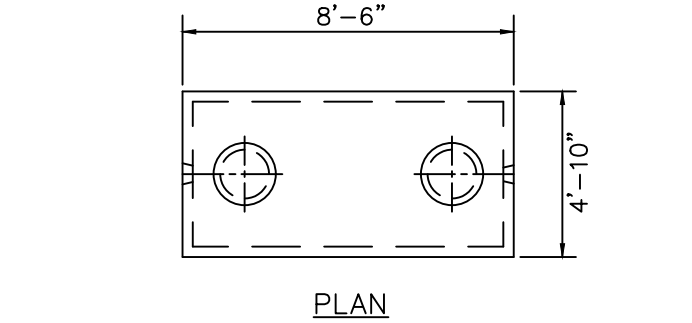


STANDARD MANHOLE FRAME AND COVER
 NOT TO SCALE

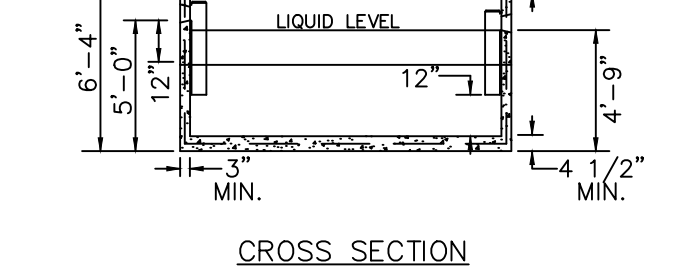


CROSS SECTION

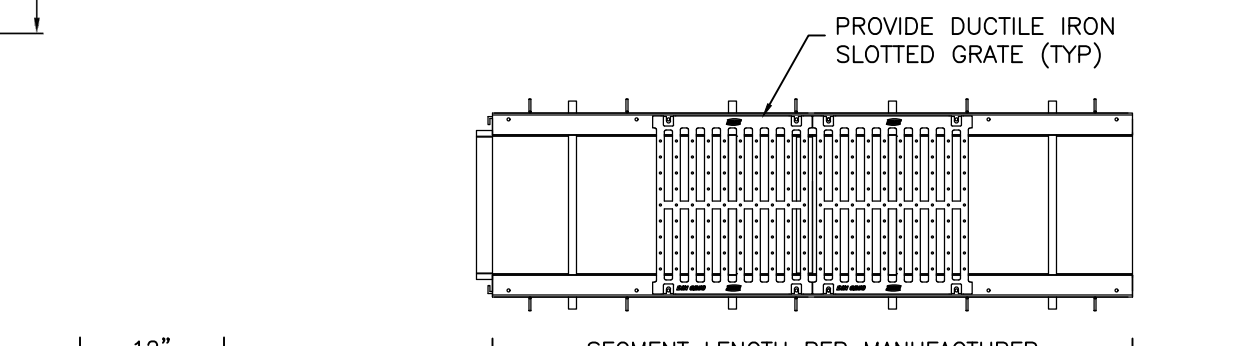
NOTE: CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF FRAME & COVER SHOWING CASTING FOR APPROVAL
 DRAINAGE MANHOLE SHALL HAVE "DRAINAGE" OR "STORM" IMPRINTED ON COVER
 SEWER MANHOLE SHALL HAVE "SANITARY SEWER" IMPRINTED ON THE COVER



H2O LOAD RATED 1000 GALLON GREASE TRAP
 NOT TO SCALE

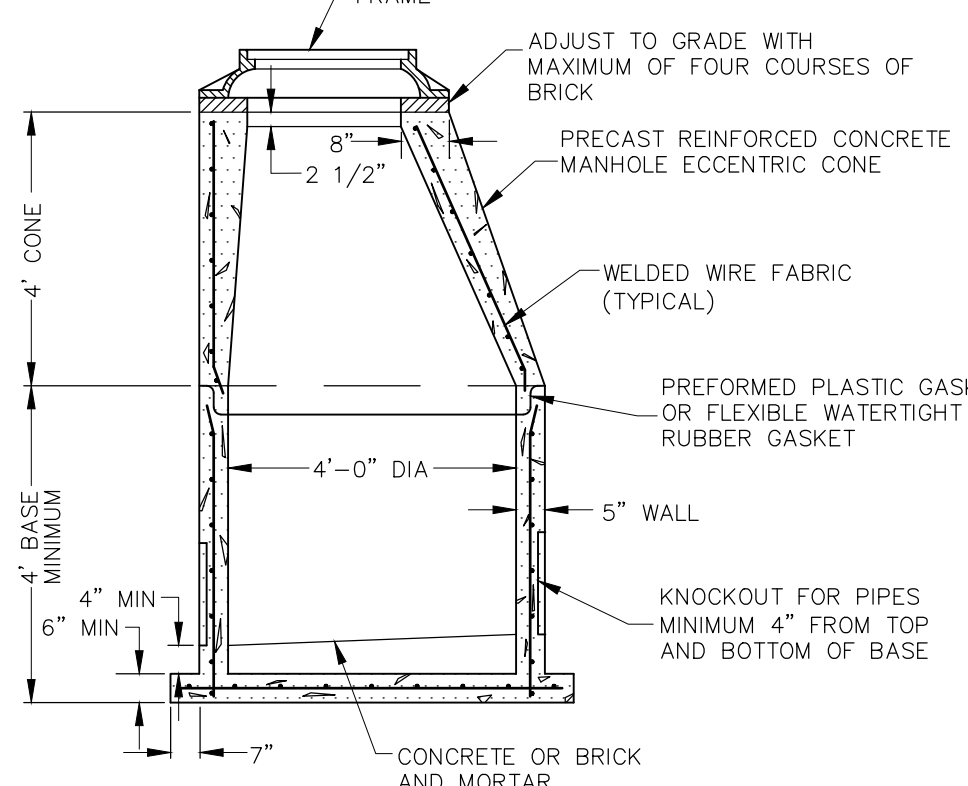


CROSS SECTION

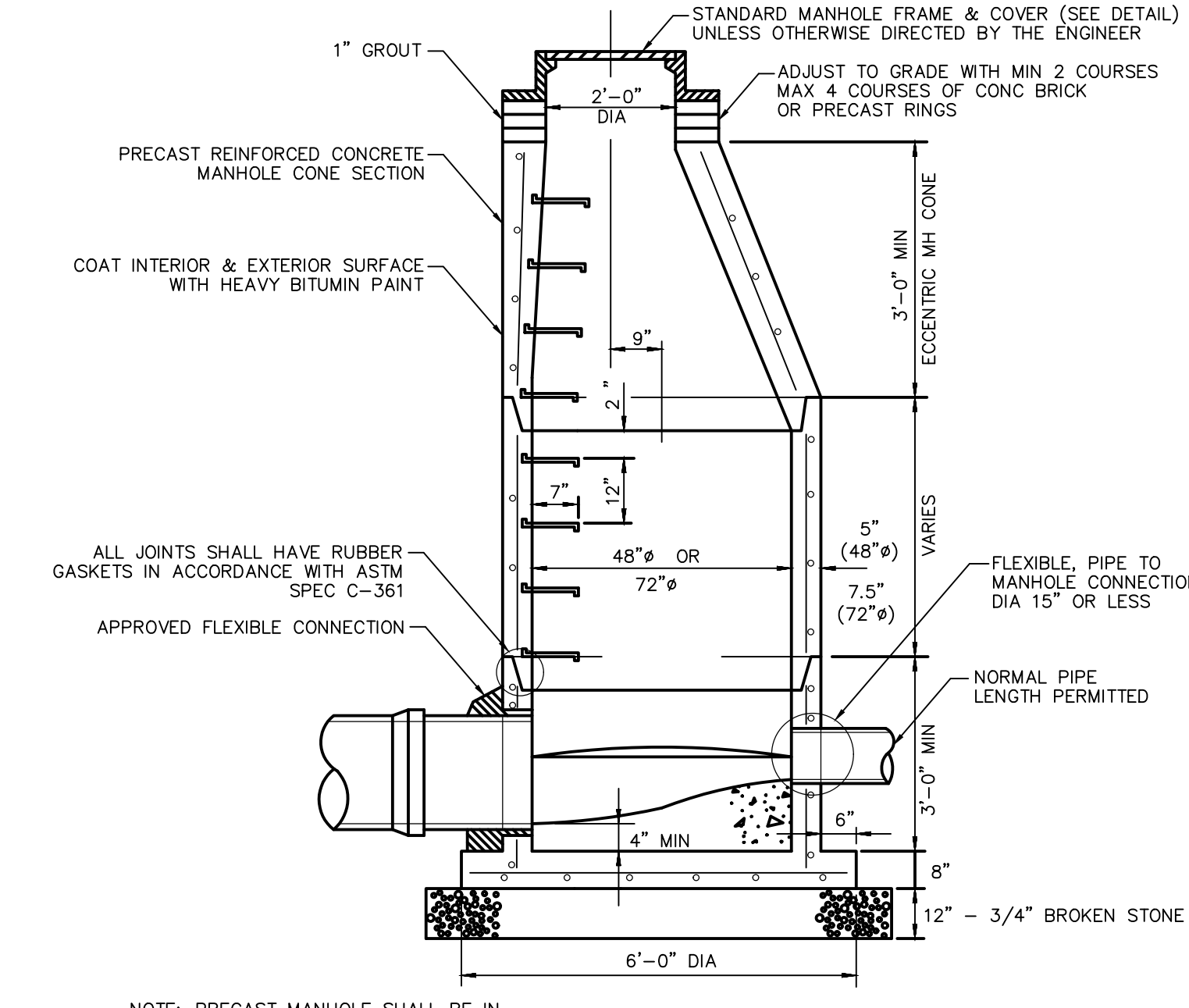


TRENCH DRAIN
 NTS

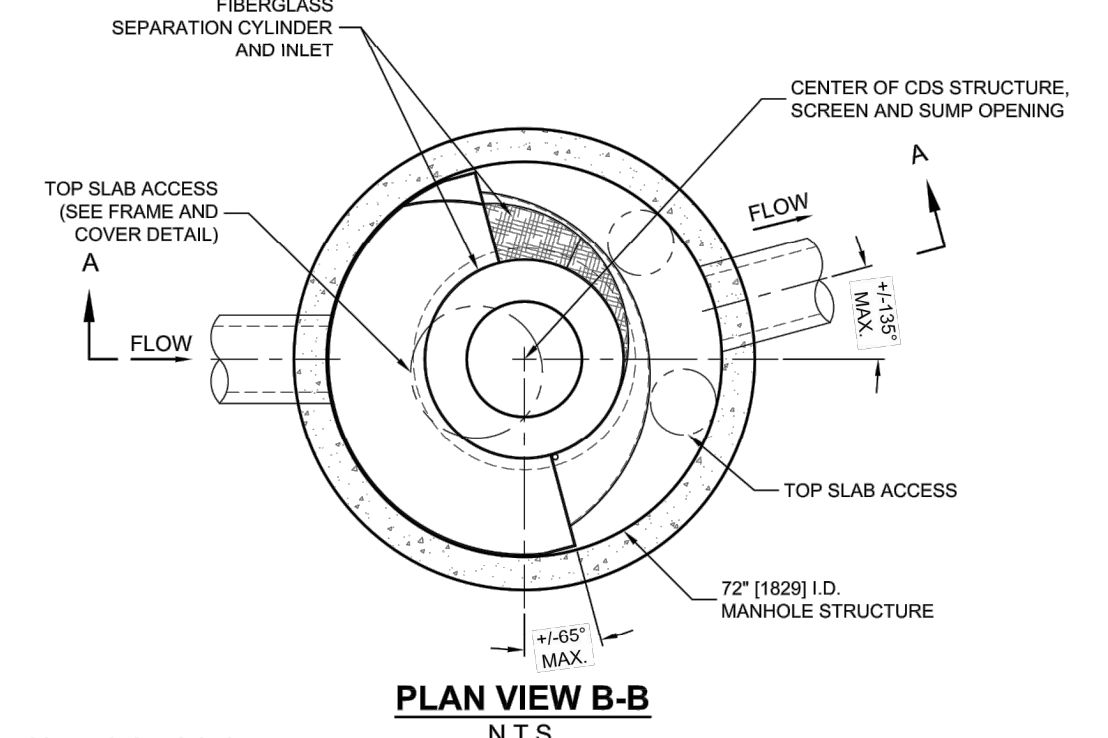
NOTE: STRUCTURE TO MEET H-20 LOADING REQUIREMENTS



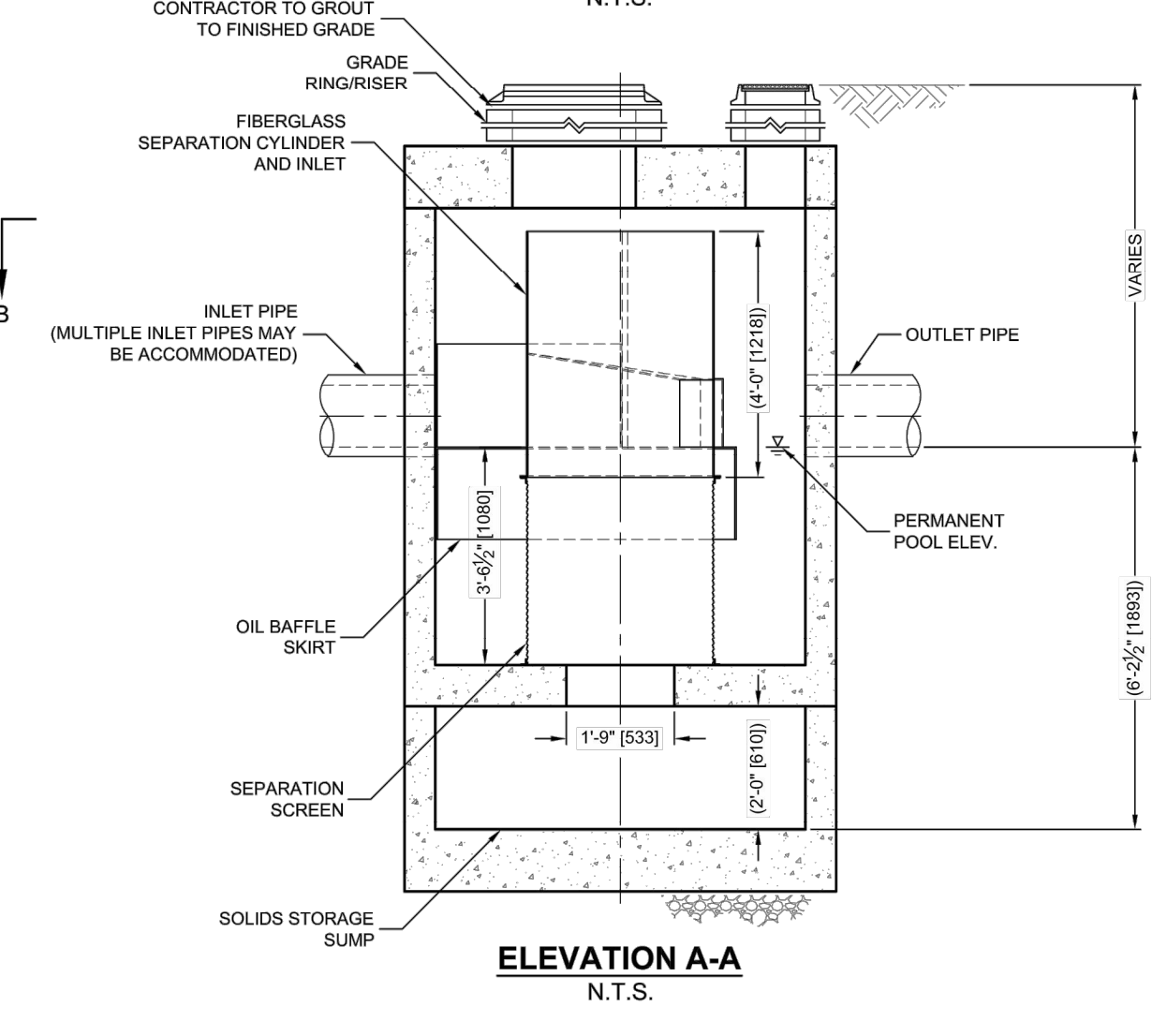
DRAINAGE MANHOLE CROSS SECTION
 NOT TO SCALE



NOTE: PRECAST MANHOLE SHALL BE IN ACCORDANCE WITH ASTM C-478



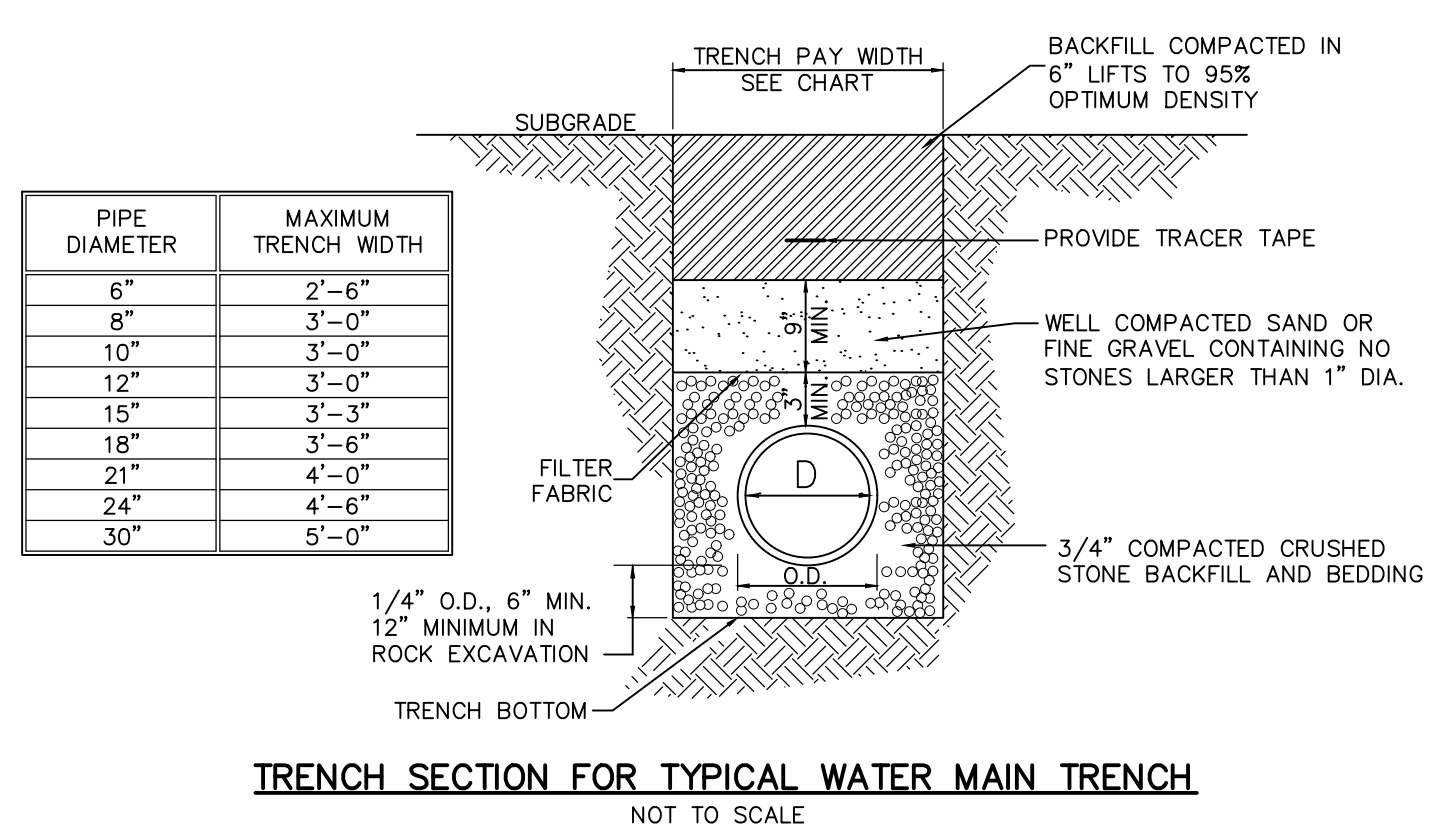
PLAN VIEW B-B
 N.T.S.



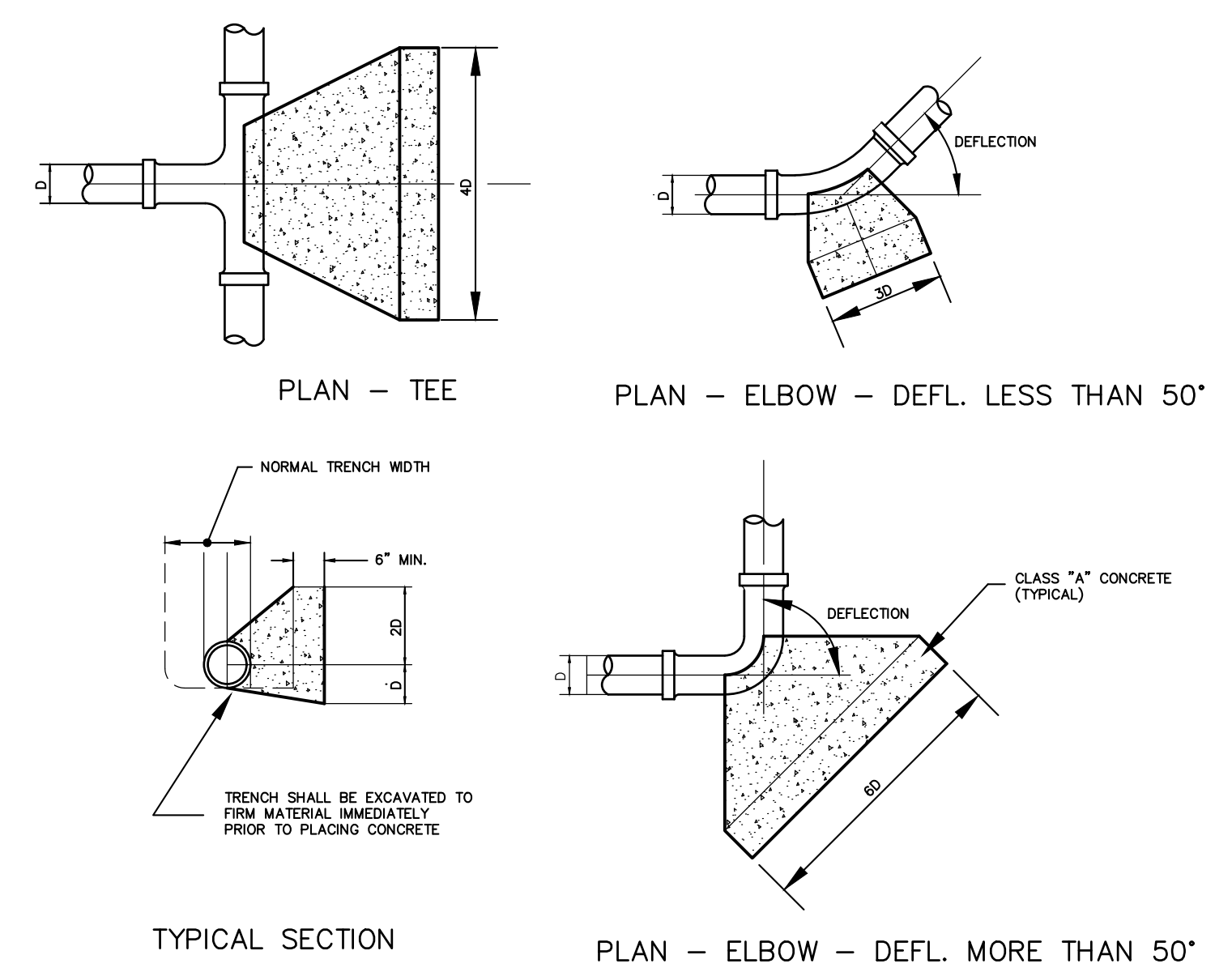
ELEVATION A-A
 N.T.S.

HYDRODYNAMIC SEPARATOR
 NTS

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TRENCH SECTION FOR TYPICAL WATER MAIN TRENCH
 NOT TO SCALE

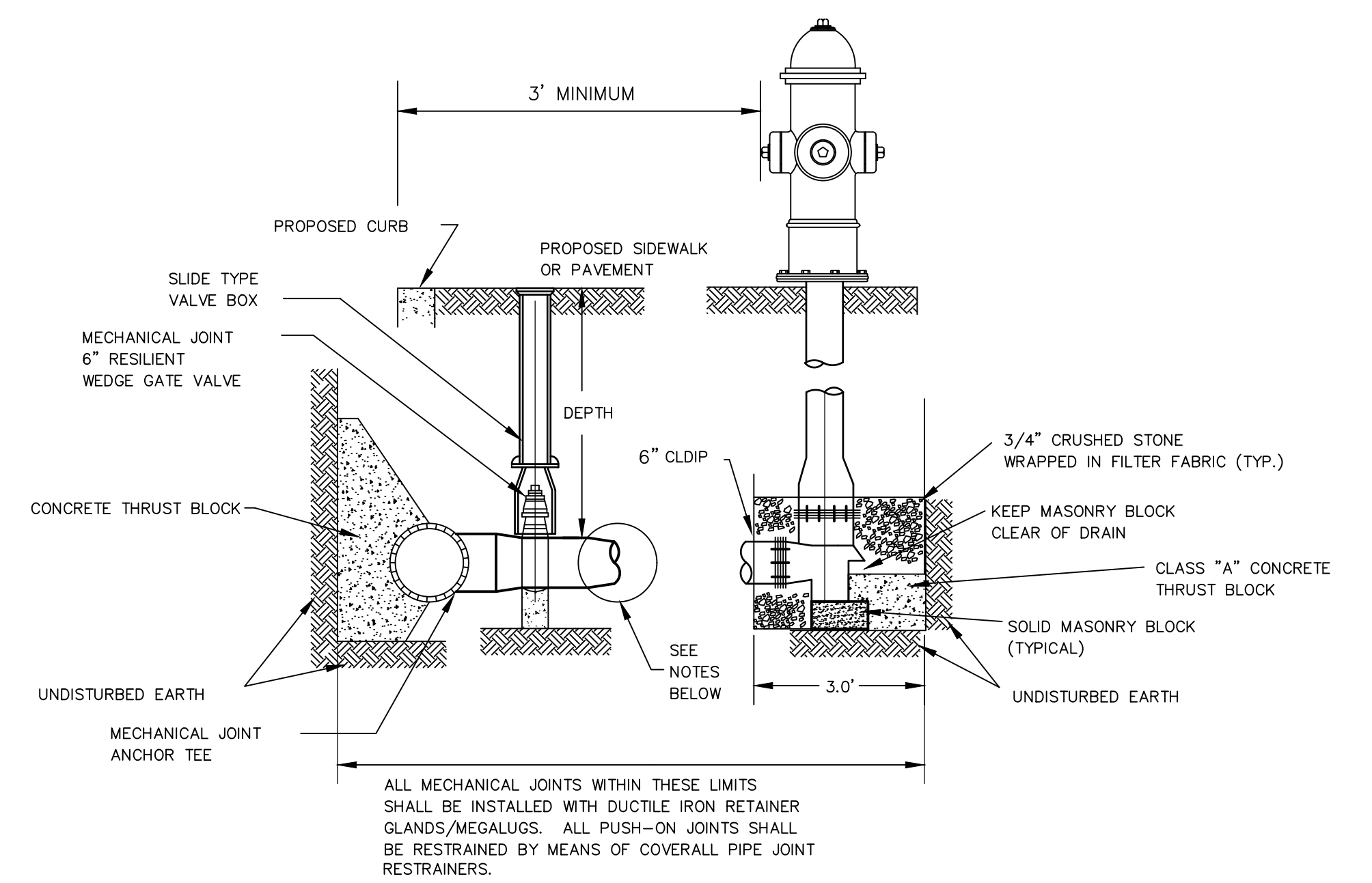


TYPICAL SECTION

PLAN - ELBOW - DEFL. MORE THAN 50°

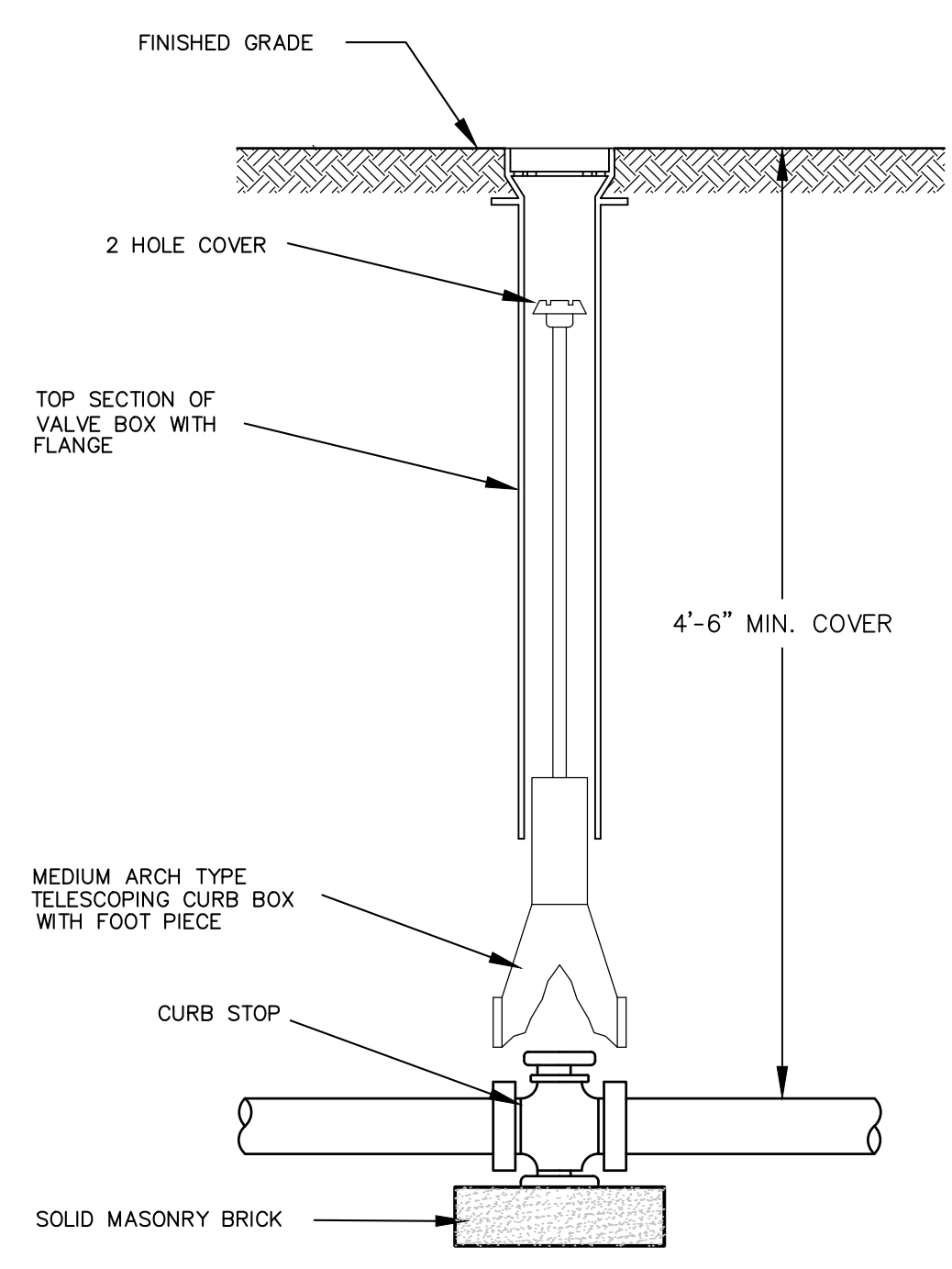
CONCRETE THRUST BLOCKS
 NOT TO SCALE

NOTE: THRUST BLOCK DIMENSIONS ASSUME:
 ALLOWABLE SOIL BEARING PRESSURE = 1,650 PSI
 WATER MAIN WORKING PRESSURE = 150 PSI



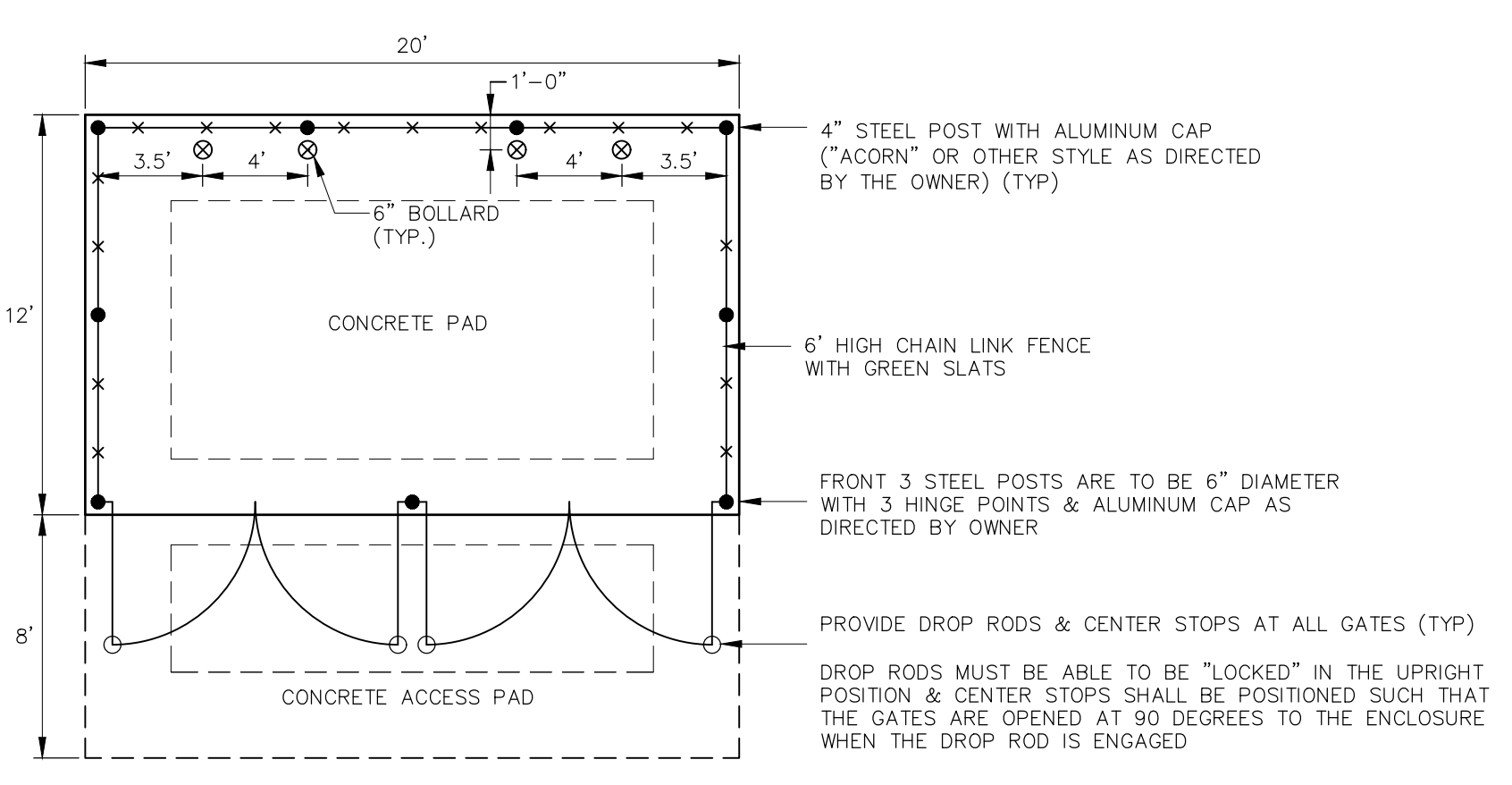
NOTE: HYDRANTS SHALL BE SET AT BACK OF SIDEWALKS ALLOWING 3.0' MINIMUM TO FACE OF CURB.

HYDRANT DETAIL
 NOT TO SCALE

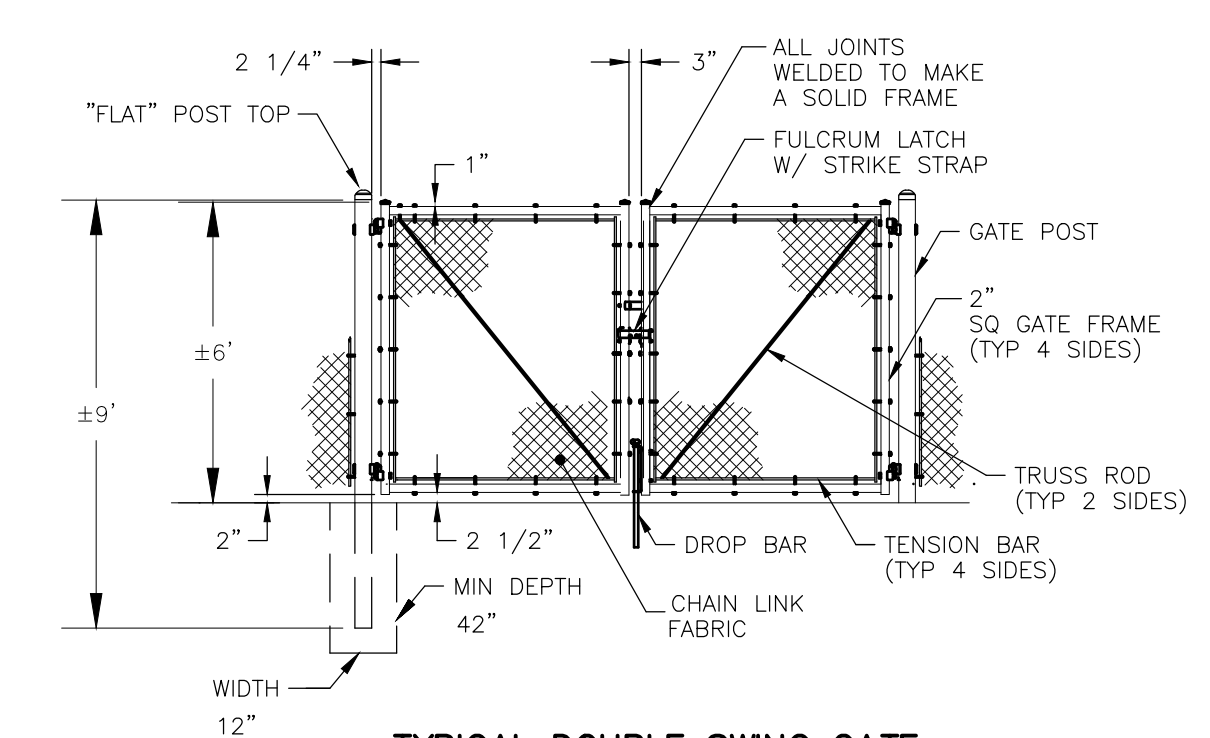


CURB STOP
 NTS

- NOTES:
- GATE TO BE REINFORCED WITH GALVANIZED STEEL TUBING AND SHEATHED WITH MATERIALS CONSISTENT IN TYPE AND COLOR TO THE REMAINDER OF THE DUMPSTER ENCLOSURE.
 - GATE POSTS AND BOLLARDS SHALL BE SET IN PLACE PRIOR TO CASTING SLAB.
 - ENTIRE SLAB SHALL BE CAST ON MINIMUM OF 6" CRUSHED STONE OR COMPACTED GRAVEL.
 - CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AND SHALL BE PLACED IN ACCORDANCE WITH ACI 318-02.
 - WELDED WIRE REINFORCEMENT SHALL CONFORM TO ASTM A 185.
 - STEEL REINFORCING SHALL HAVE A YIELD STRENGTH OF 60ksi.

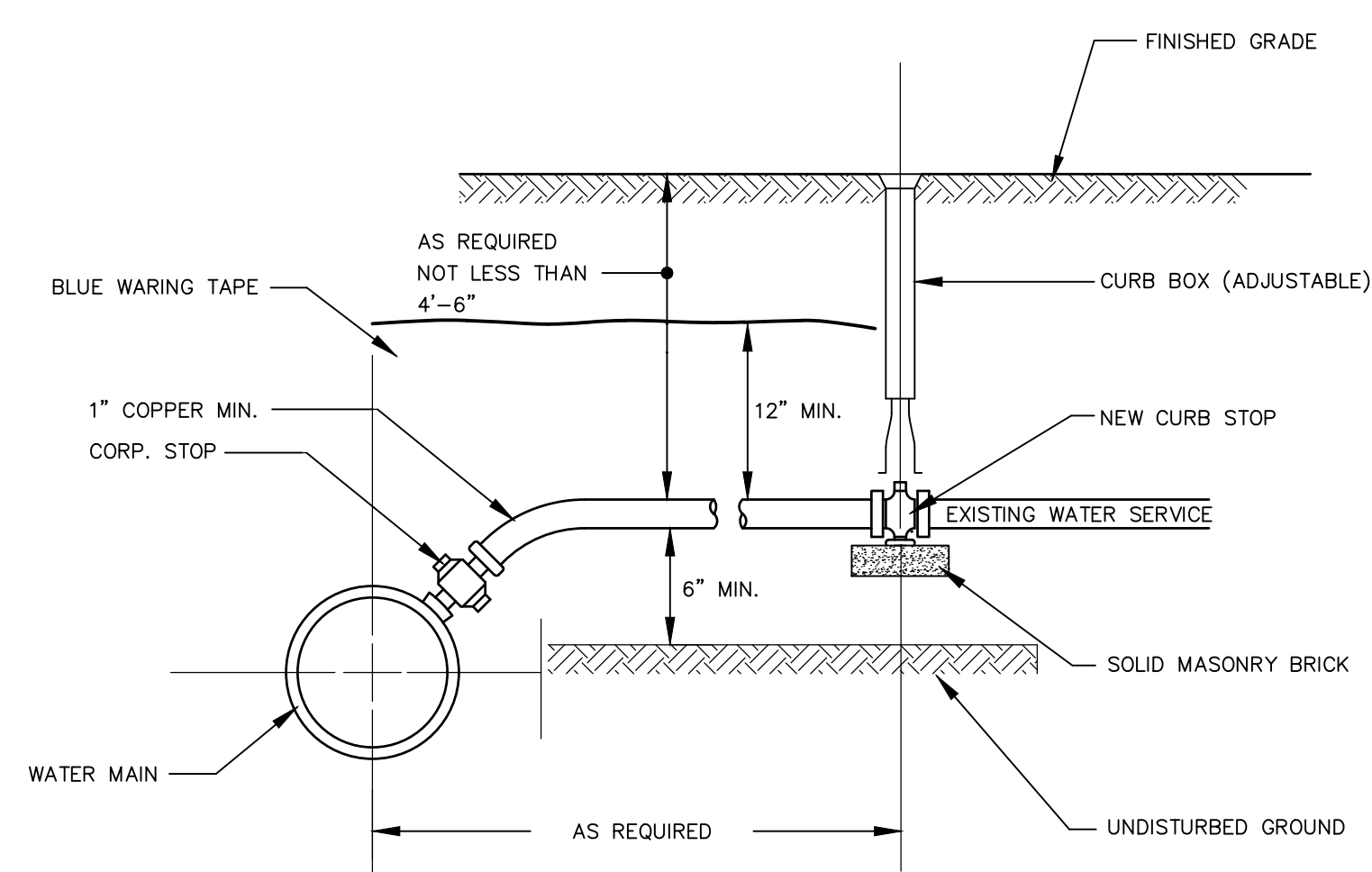


DUMPSTER ENCLOSURE DETAIL
 NOT TO SCALE



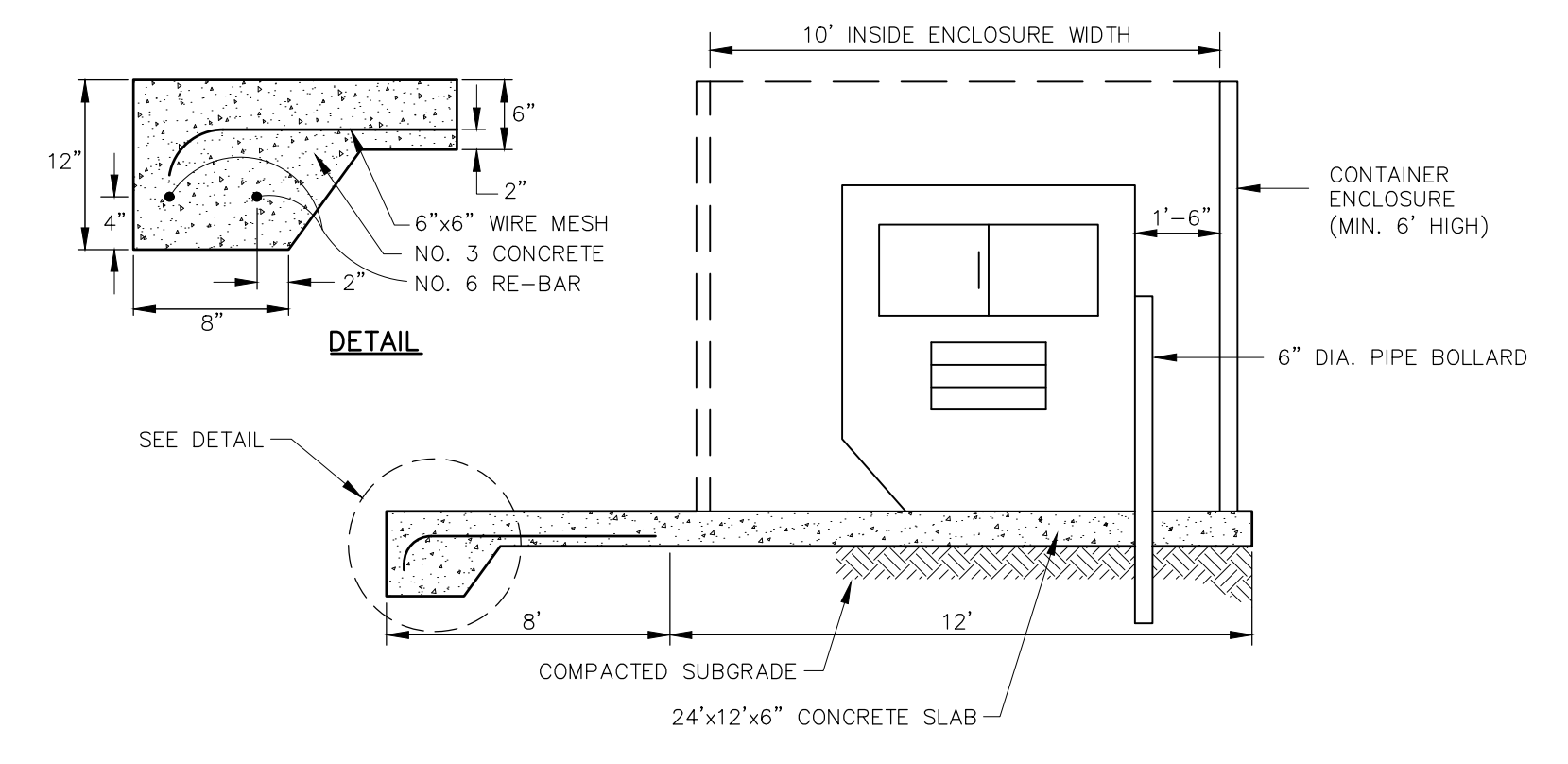
TYPICAL DOUBLE SWING GATE
 NOT TO SCALE

- NOTE:
- ALL FENCE COMPONENTS SHALL BE BLACK PVC COATED
 - PROVIDE DROP BAR FOR EACH GATE & GROUND INSERT TO STABILIZE GATES IN BOTH CLOSED & OPEN CONDITIONS. PROVIDE LATCH POSTS TO STABILIZE GATES IN OPEN POSITION IF GROUND ELEVATIONS VARY.

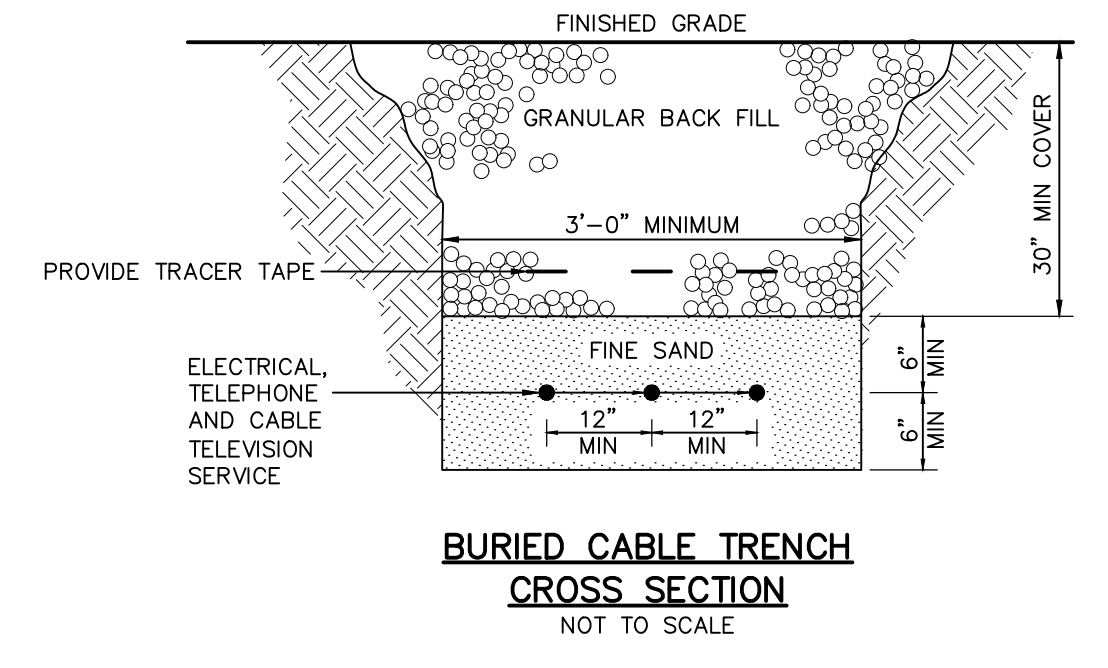


CORPORATION CURB STOP
 NTS

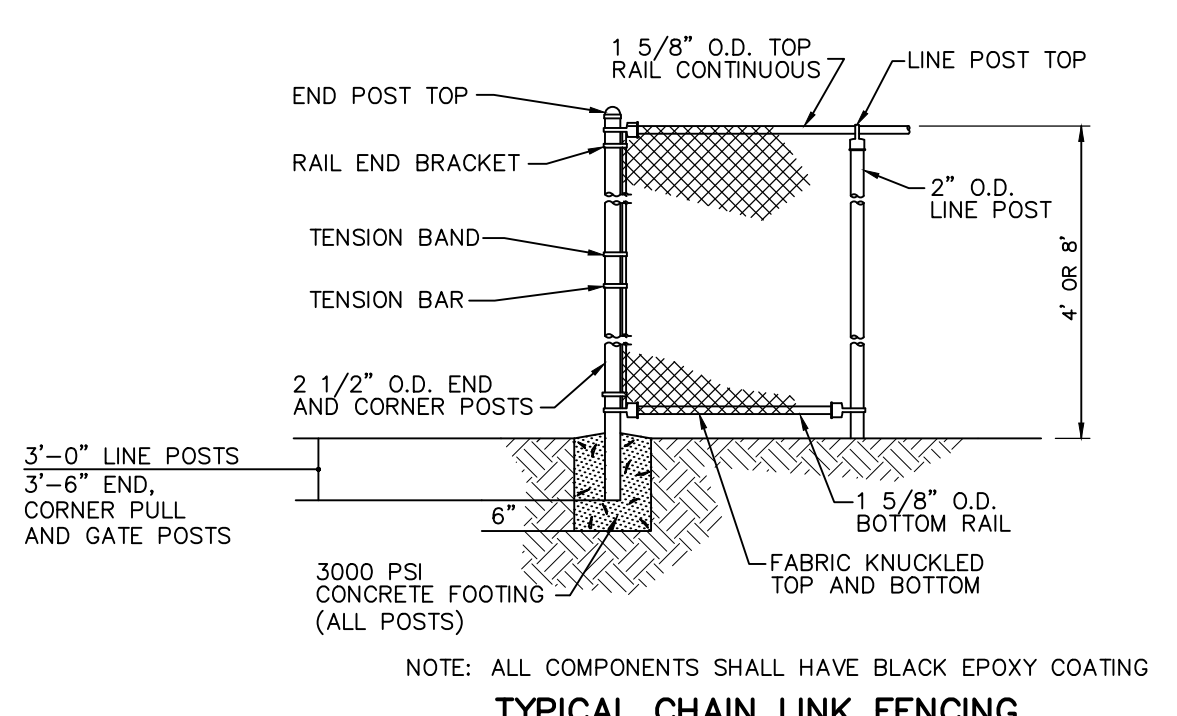
NOTE:
 WATER SERVICE PIPE TO BE INSTALLED IN A BED OF FINE AGGREGATE SAND 6" MINIMUM BED AND 12" MINIMUM COVER AND BLUE WARNING TAPE ON TOP OF THE 12" FINE AGGREGATE BED.



DUMPSTER PAD SECTION
 NOT TO SCALE



BURIED CABLE TRENCH CROSS SECTION
 NOT TO SCALE



TYPICAL CHAIN LINK FENCING
 NOT TO SCALE

NOTE: ALL COMPONENTS SHALL HAVE BLACK EPOXY COATING

REVIEWED BY THE TOWN ENGINEER

 FIRST SELECTMAN DATE

ENDORSED BY THE BROOKLYN INLAND WETLANDS COMMISSION

 CHAIRMAN OR SECRETARY DATE

APPROVED BY THE BROOKLYN PLANNING & ZONING COMMISSION

 CHAIRMAN OR SECRETARY DATE

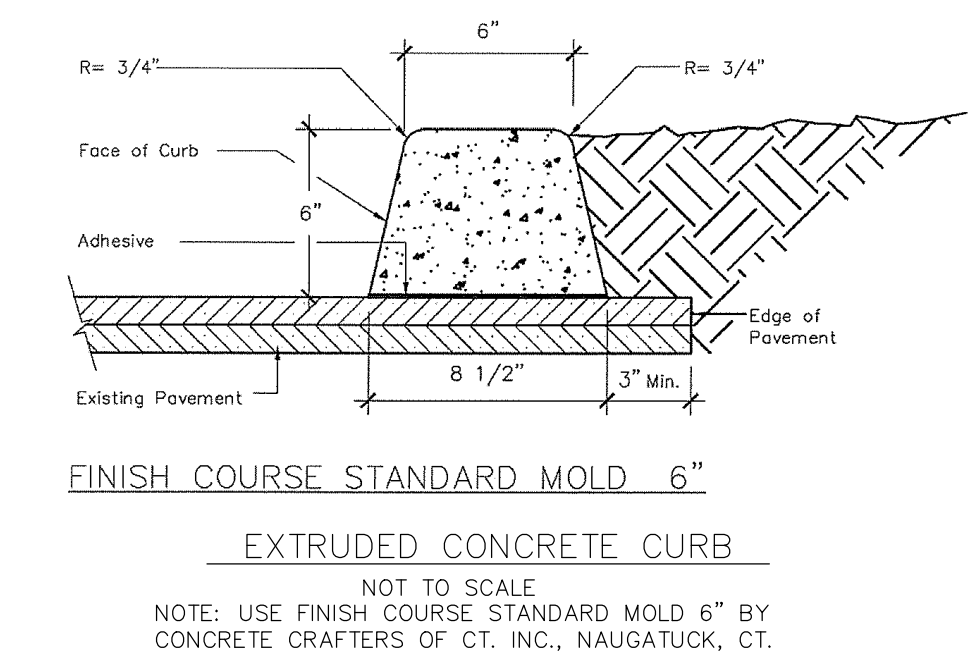
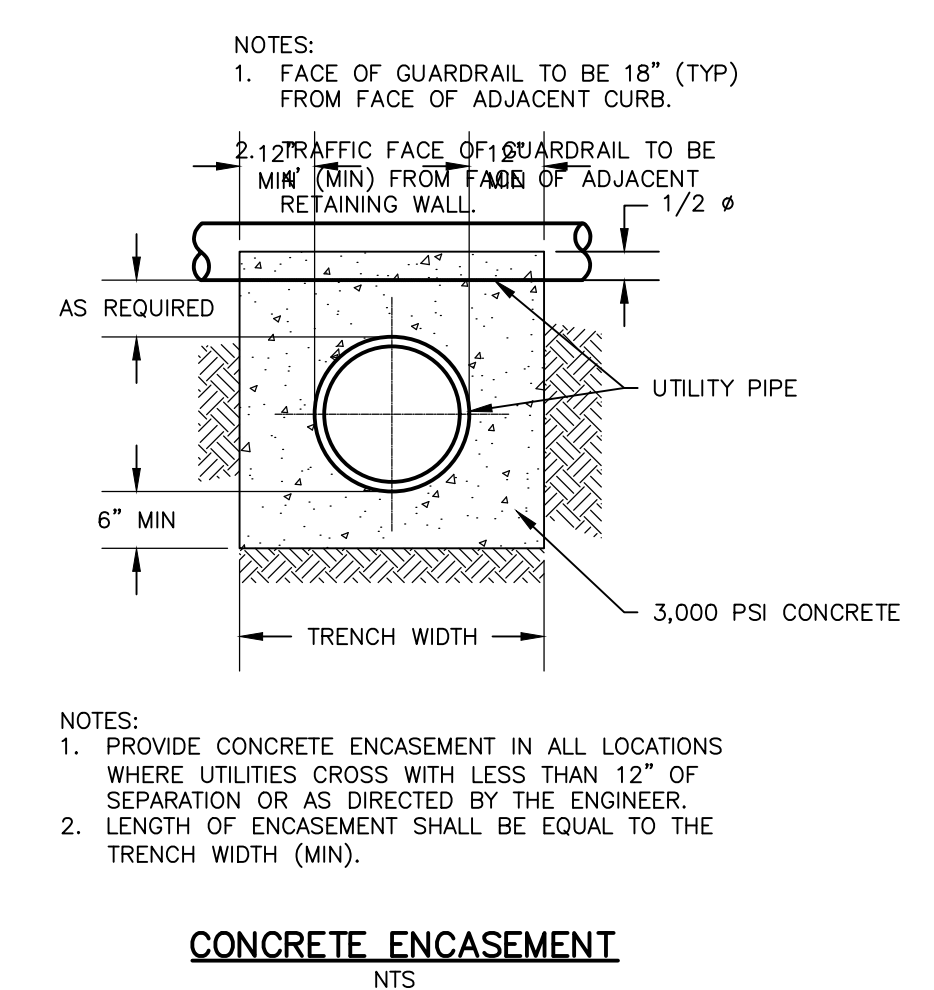
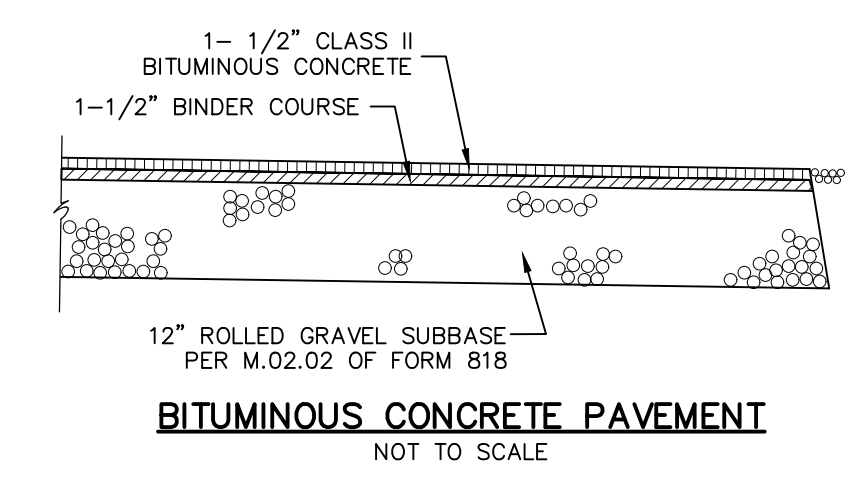
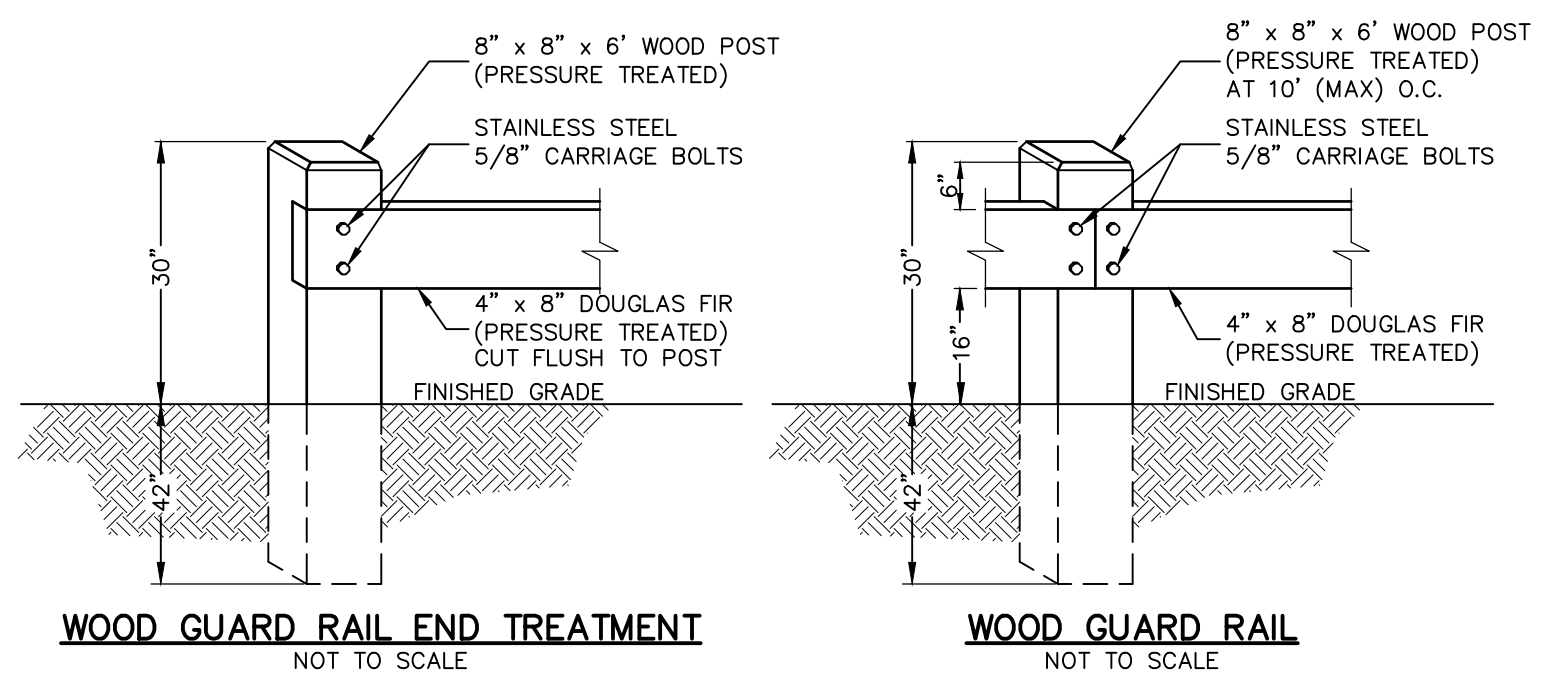
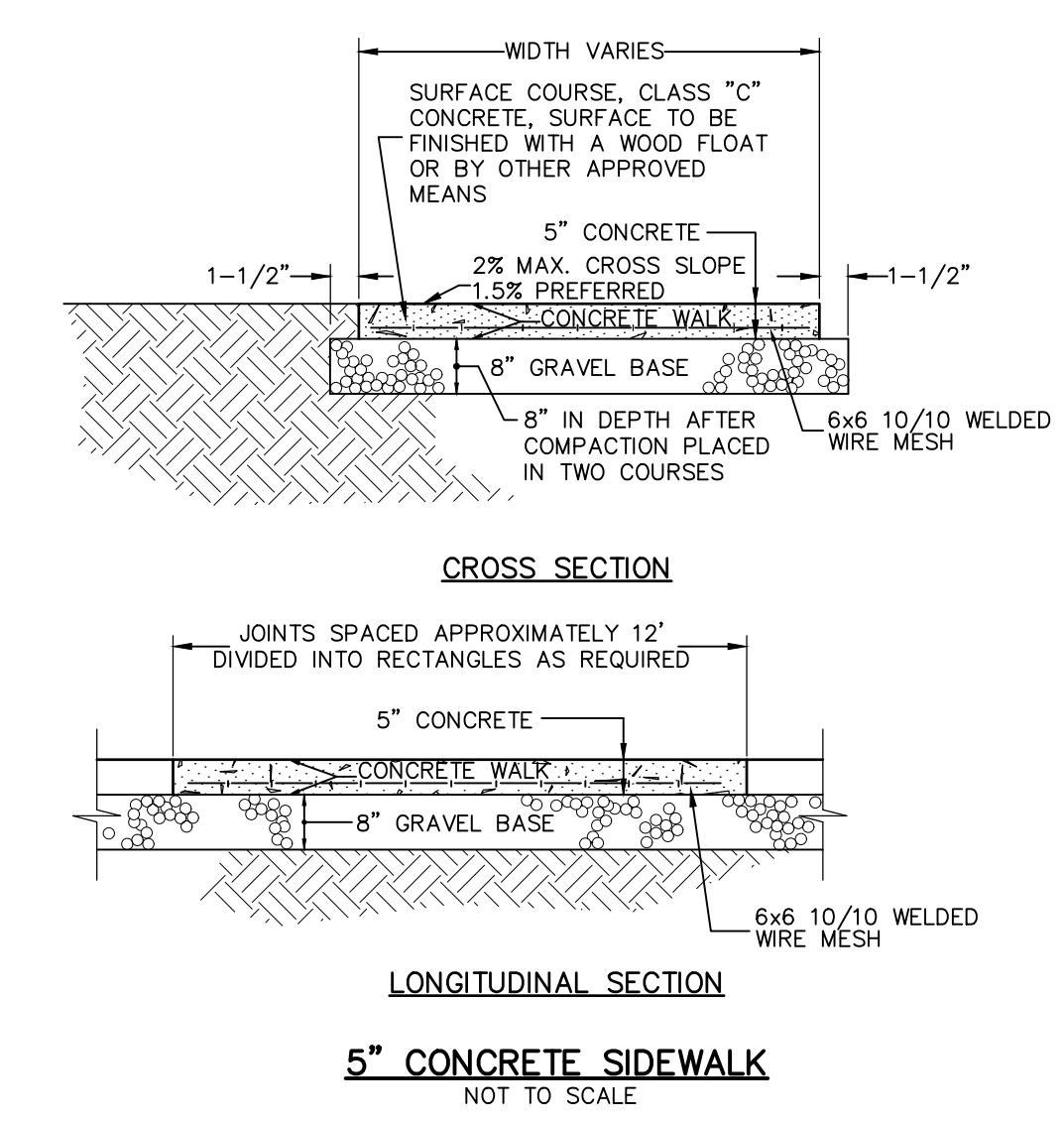
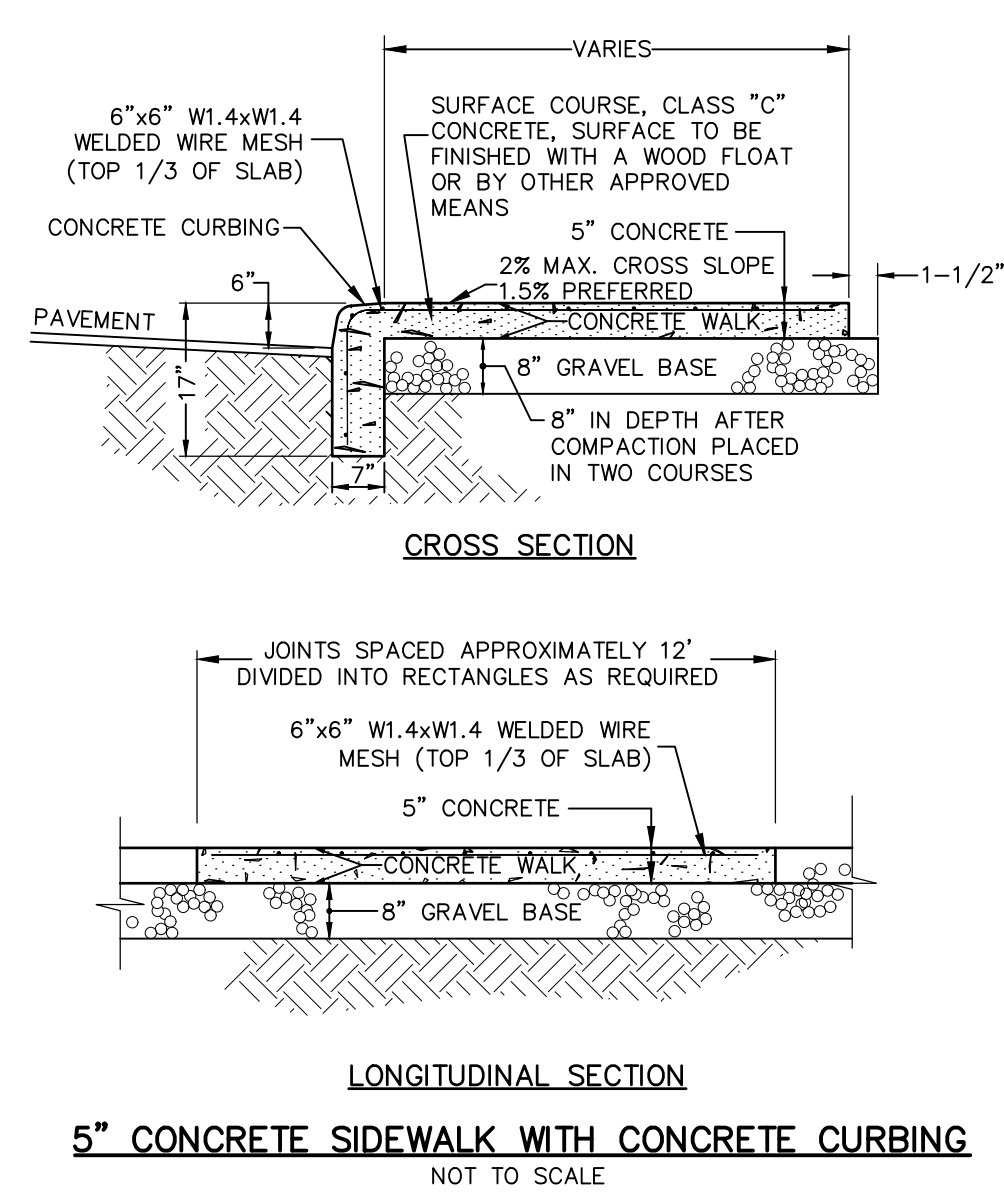
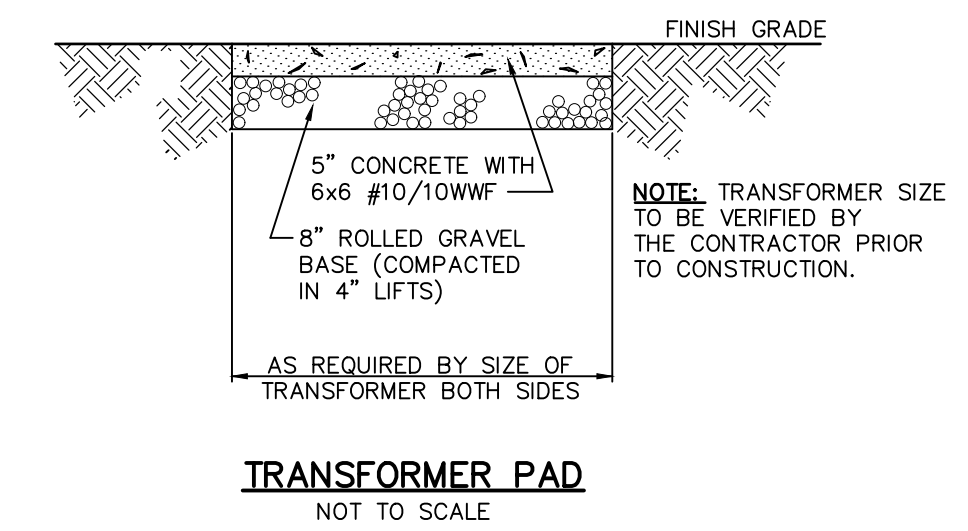
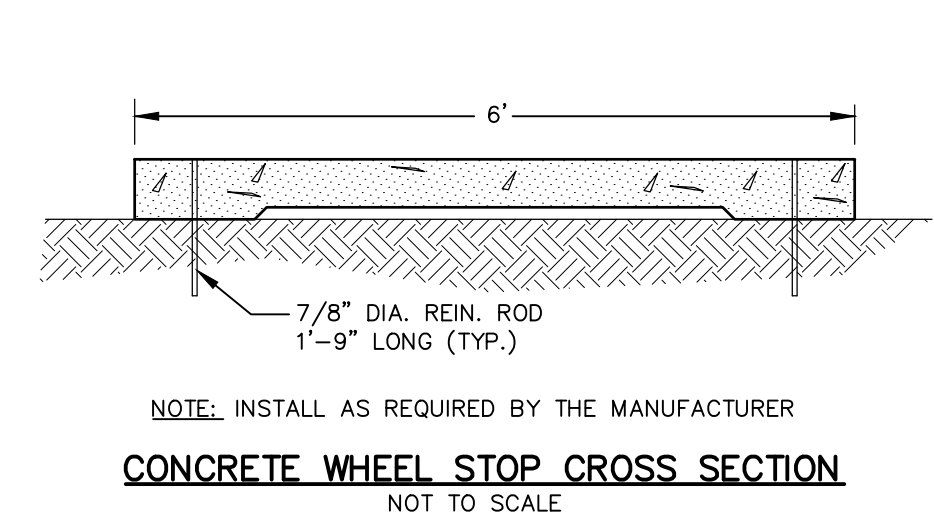
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No.	Submittal / Revision	App'd. By	Date
1	REVIEW COMMENTS	PMP	07/21/2023

CONSTRUCTION DETAILS

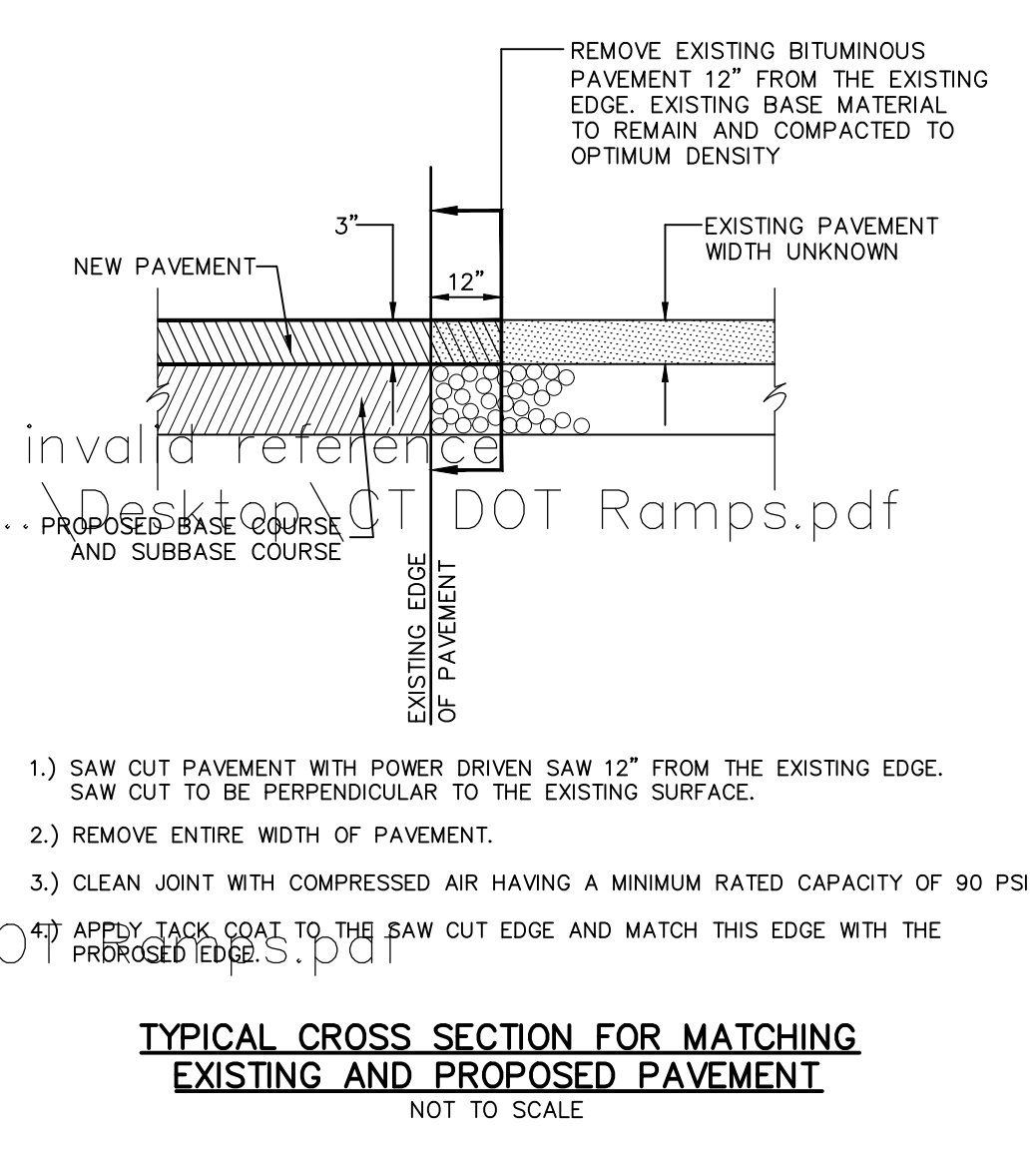
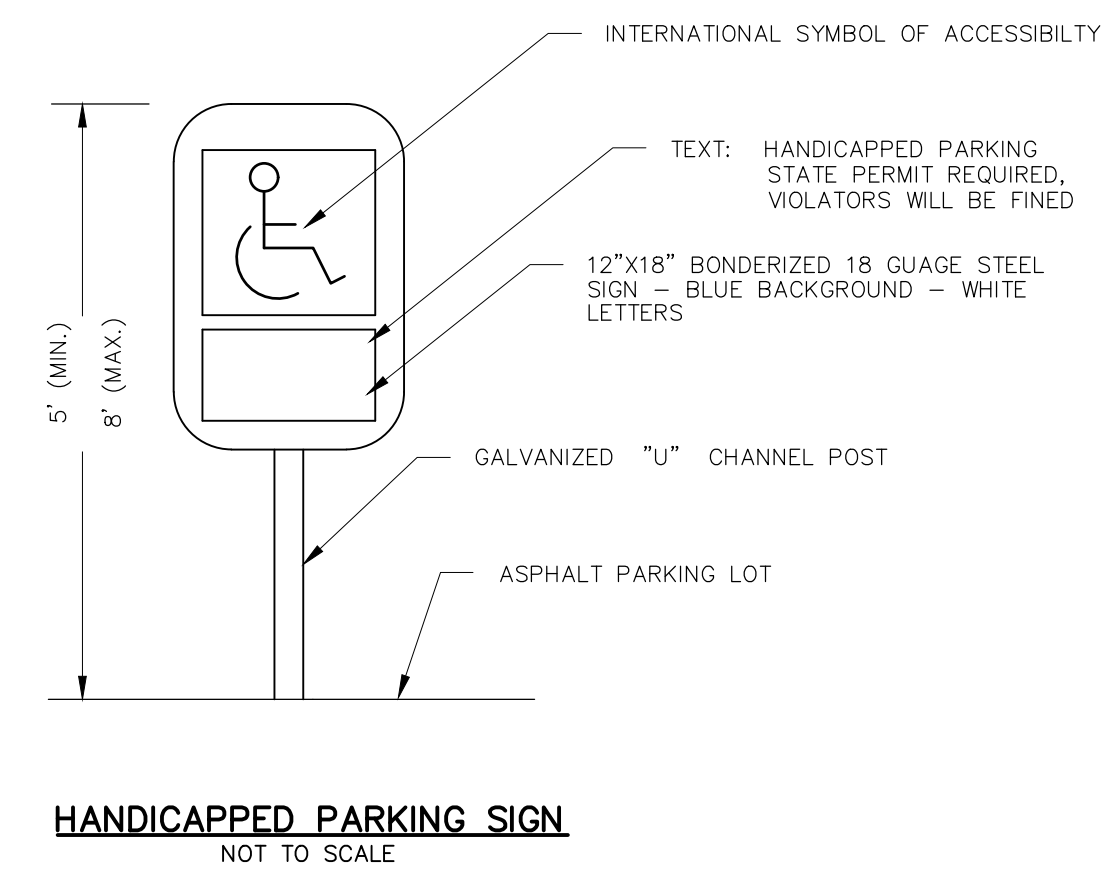
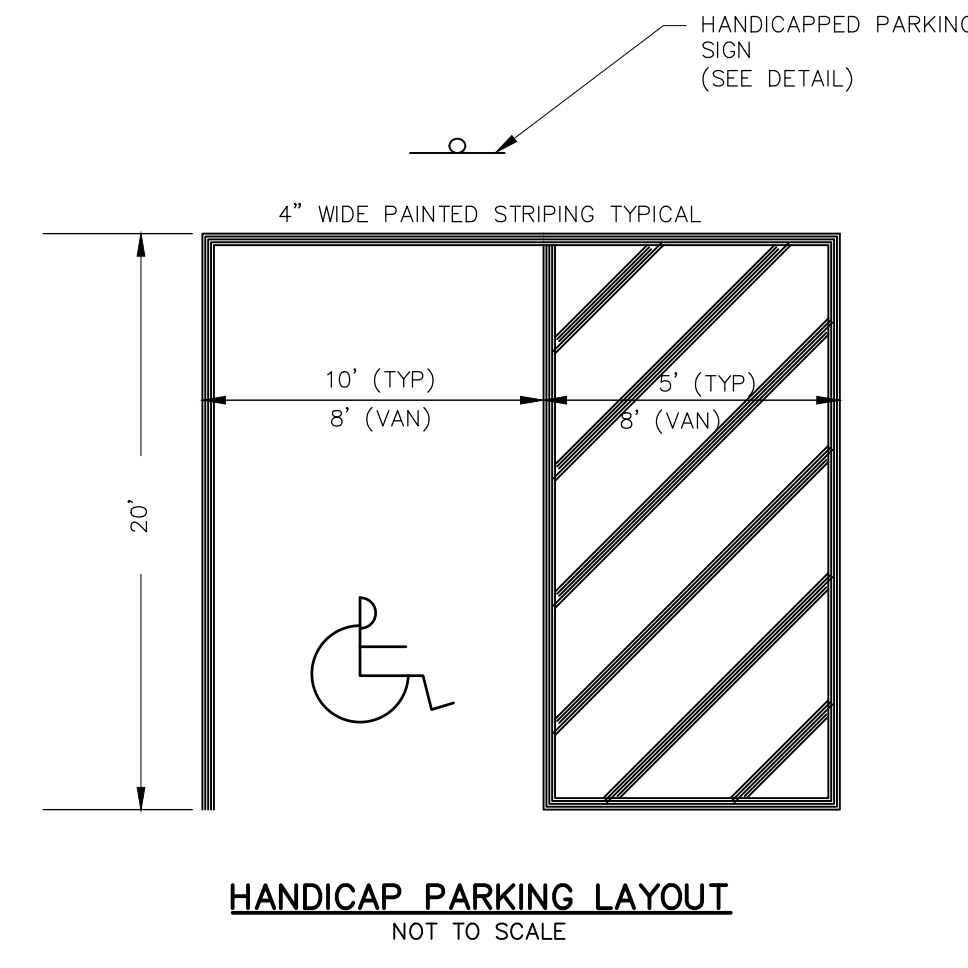
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PMP	PMP	PMP

Issue Date:	Project No:	Scale:
05/05/2023	080849	AS NOTED



**ACCESSIBLE RAMP
 (CT DOT TYPE 8)**
 NOT TO SCALE

**ACCESSIBLE RAMP
 (CT DOT TYPE 16)**
 NOT TO SCALE



REVIEWED BY THE TOWN ENGINEER

 FIRST SELECTMAN DATE

ENDORSED BY THE BROOKLYN
 INLAND WETLANDS COMMISSION

 CHAIRMAN OR SECRETARY DATE

APPROVED BY THE BROOKLYN
 PLANNING & ZONING COMMISSION

 CHAIRMAN OR SECRETARY DATE

No.	Submittal / Revision	App'd. By	Date
1	REVIEW COMMENTS	PMP	07/21/2023

CONSTRUCTION DETAILS

Designed By:	Drawn By:	Checked By:
PMP	PMP	PMP
Issue Date:	Project No:	Scale:
05/05/2023	080849	AS NOTED

Missing or invalid reference
 File: ...\\...\\DOT\\CT DOT Ramps.pdf
 Sheet: 7

reference
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No.	Submittal / Revision	App'd. By	Date
1	REVIEW COMMENTS	PMP	07/21/2023

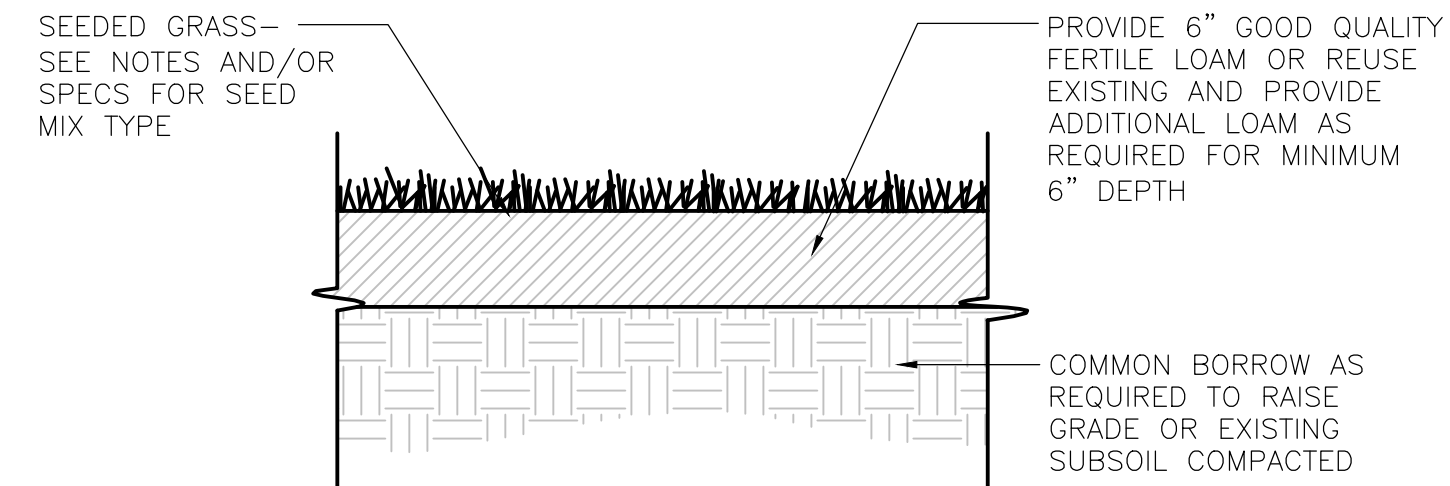
CONSTRUCTION DETAILS

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PMP	PMP	PMP
Issue Date:	Project No.:	Scale:
05/05/2023	080849	AS NOTED

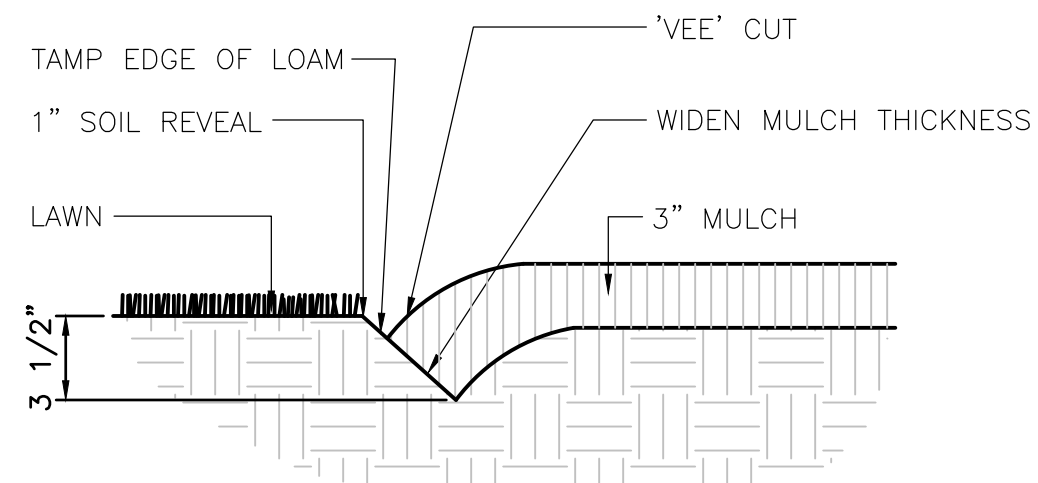
Drawing No.:

GENERAL NOTES:

- ALL PLANT MATERIAL MUST BE TAGGED IN THE GROUND, AT THE NURSERY BY THE LANDSCAPE ARCHITECT. ALL PLANT MATERIAL SHALL BE COMMERCIALY OBTAINED AND SHALL MEET THE AMERICAN ASSOCIATION OF NURSERYMAN STANDARDS FOR NURSERY STOCK, LATEST EDITION, AND ITS AMENDMENTS. PLANT ONLY DURING SEASON NORMAL TO THE PARTICULAR VARIETY. ALL PLANT INSPECTIONS WILL BE AT THE EXPENSE OF THE CONTRACTOR. PERMANENT SEALS WILL BE REQUIRED.
- COVER ALL PLANTING BEDS WITH 3" SHREDDED HARDWOOD BARK MULCH WITHIN A SEVENTY-TWO HOUR PERIOD AFTER PLANTING. SEE PLAN FOR BED LAYOUT.
- ALL EXISTING AND PROPOSED TREES SHOWN IN LAWN AREAS SHALL RECEIVE A 6" DIAMETER MULCH BED. MULCH SHALL BE PLACED TO A DEPTH OF 3". REMOVE ALL SOD, ROOTS, STICKS AND STONES PRIOR TO PLACEMENT OF MULCH.
- ALL PLANT MATERIALS FURNISHED BY THE CONTRACTOR SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE OF LANDSCAPE WORK.
- STAKE ALL TREES OVER 5' AS SHOWN ON DETAILS.
- REMOVE STAKES AT THE END OF THE GUARANTEE PERIOD.
- THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE SITE CLEAN OF MISCELLANEOUS DEBRIS THROUGHOUT THE CONSTRUCTION PERIOD. ALL WASTE MATERIAL IS TO BE DISPOSED OF IMMEDIATELY TO AN OFF-SITE LOCATION, UNLESS OTHERWISE INDICATED ON THE PLANS.
- THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS, AND SHALL OBTAIN ALL NECESSARY PERMITS FOR THIS PROJECT.
- LAYOUT: ALL NOTES AND DIMENSIONS ARE TYPICAL UNLESS OTHERWISE NOTED. ALL DIMENSIONS ARE SQUARE (PARALLEL OR PERPENDICULAR) UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY THE OWNER/OWNER'S REPRESENTATIVE IMMEDIATELY IN THE EVENT OF ANY DISCREPANCIES FOUND IN THE CONTRACT DOCUMENTS AND/OR IN THE FIELD, OR OF CONDITIONS UNCOVERED IN THE WORK WHICH ARE NOT REFLECTED IN THE PLANS.
- LOAM: LOAM MOVED DURING THE COURSE OF CONSTRUCTION SHALL BE RETAINED AND DISTRIBUTED WITHIN THE SITE IN ACCORDANCE WITH THE LANDSCAPE PLAN. STOCKPILED LOAM SHALL NOT BE MIXED WITH ANY SUBSOIL OR UNSUITABLE MATERIALS. ALL EXCESS LOAM SHALL REMAIN ON THE PROPERTY OF THE OWNER. NEW LOAM IF REQUIRED TO PROVIDE THE SPECIFIED DEPTH, SHALL BE A FERTILE, FRIABLE MEDIUM TEXTURED SANDY LOAM FREE OF MATERIAL TOXIC TO HEALTHY PLANT GROWTH. LOAM SHALL ALSO BE FREE OF ALL STUMPS, ROOTS, STONES AND OTHER EXTRANEIOUS MATTER AN INCH (1") OR GREATER IN DIAMETER. THE PH SHALL BE BETWEEN 5.5 AND 7.5 WHEN TESTED.
- LAWN PREPARATION: REMOVE ALL DEBRIS AND OTHER INORGANIC MATERIALS ON THE PREPARED SUBGRADE, RESHAPE AND DRESS ANY DAMAGED OR ERODED AREA PRIOR TO SPREADING THE LOAM. SCARIFY AND LOOSEN SUBGRADE IN ANY AREAS WHERE COMPACTION MAY HAVE OCCURRED. SPREAD STOCKPILED AND OFF-SITE LOAM ON ALL DISTURBED AREAS TO PRODUCE A DEPTH OF 6". FINE GRADE LOAMED AREAS TO PRODUCE A SMOOTH AND UNBROKEN FINISH GRADE TO THE REQUIRED DEPTH. APPLY A STARTER FERTILIZER (10-20-10) AT A RATE OF 20 LBS. PER 1000 SQUARE FEET AND LIME AT A RATE OF 40 LBS. PER 1000 SQUARE FEET. ONCE SPREAD, THE FERTILIZER AND LIME SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM. THE LOAM SHALL BE ROLLED, AND DEPRESSION SHALL BE TOP DRESSED AND RAKED TO CREATE A SMOOTH SURFACE.
- PROTECTION OF EXISTING PLANTINGS: MAXIMUM EFFORT SHOULD BE MADE TO SAVE TREE OR OTHER PLANT SPECIMENS WHICH ARE LARGE FOR THEIR SPECIES, RARE TO THE AREA, OR OF SPECIAL HORTICULTURAL OR LANDSCAPE VALUE. CONTACT OWNER/LANDSCAPE ARCHITECT BEFORE REMOVING ANY SPECIMEN OF THIS TYPE UNLESS OTHERWISE NOTED ON THE PLANS. NO MATERIAL OR TEMPORARY SOIL DEPOSITS SHALL BE PLACED WITHIN THE DRIP LINE OF SHRUBS OR TREES DESIGNATED ON THE LANDSCAPE PLAN TO BE RETAINED. PROTECTIVE BARRIERS ARE TO BE INSTALLED AROUND EACH PLANT AND/OR GROUP OF PLANTS THAT ARE TO REMAIN ON THE SITE. BARRIERS SHALL NOT BE SUPPORTED BY THE PLANTS THEY ARE PROTECTING, BUT SHALL BE SELF SUPPORTING. THEY SHALL BE OF MINIMUM OF FOUR FEET (4') HIGH AND CONSTRUCTED OF A DURABLE MATERIAL, SUCH AS SNOW OR SILT FENCE, THAT WILL LAST UNTIL CONSTRUCTION IS COMPLETED.
- PRUNING: THE CONTRACTOR SHALL CAREFULLY PRUNE BRANCHES IN THE WAY OF CONSTRUCTION BY USING ONLY APPROVED METHODS AND TOOLS. THE USE OF AXES FOR TRIMMING OR SPURS FOR CLIMBING WILL NOT BE PERMITTED.
- EXISTING UTILITIES: IN ACCORDANCE WITH "CALL BEFORE YOU DIG" AT (1-800-922-4455), THE CONTRACTOR SHALL CONTACT ALL APPLICABLE UTILITY COMPANIES AND VERIFY UTILITY LINE LOCATIONS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY/ALL UTILITY DAMAGE. RECORD LOCATIONS OF "CALL BEFORE YOU DIG" UTILITY LINE MARKINGS ON PROJECT RECORD DOCUMENTS.
- DISTURBED AREAS: ANY AREAS DISTURBED DURING THE COURSE OF CONSTRUCTION ARE TO BE RESTORED TO ORIGINAL (OR BETTER) CONDITION BY CONTRACTOR BEFORE COMPLETION OF THE PROJECT, AND ARE SUBJECT TO APPROVAL BY LANDSCAPE ARCHITECT AND OWNER. ALL GRASS AREAS DISTURBED DURING CONSTRUCTION SHALL BE YORK RAKED TO REMOVE STONES AND LOAMED AND SEEDED AS PER SPECIFICATIONS.
- DRAINAGE SYSTEMS: CONTRACTOR IS RESPONSIBLE FOR GENERAL CLEAN-OUT OF ALL CATCH BASINS, MANHOLES, AND/OR OTHER DRAINAGE FEATURES ON THE SITE WHICH HAVE ACCUMULATED SEDIMENT AS A RESULT OF CONSTRUCTION ACTIVITIES.
- CLEANING: CONTRACTOR IS RESPONSIBLE FOR KEEPING SITE CLEAN OF MISCELLANEOUS DEBRIS THROUGHOUT THE CONSTRUCTION PERIOD. ALL WASTE MATERIAL IS TO BE DISPOSED OF IMMEDIATELY TO AN OFF-SITE LOCATION, UNLESS OTHERWISE INDICATED ON THE PLAN.
- PLANT MATERIAL SUBSTITUTIONS ALL PLANT SUBSTITUTIONS ARE SUBJECT TO APPROVAL BY LANDSCAPE ARCHITECT AND OWNER.
- IRRIGATION TO BE PROVIDED ON ALL PLANTING BEDS AND LAWN AREAS. IRRIGATION PLAN BY OTHERS.

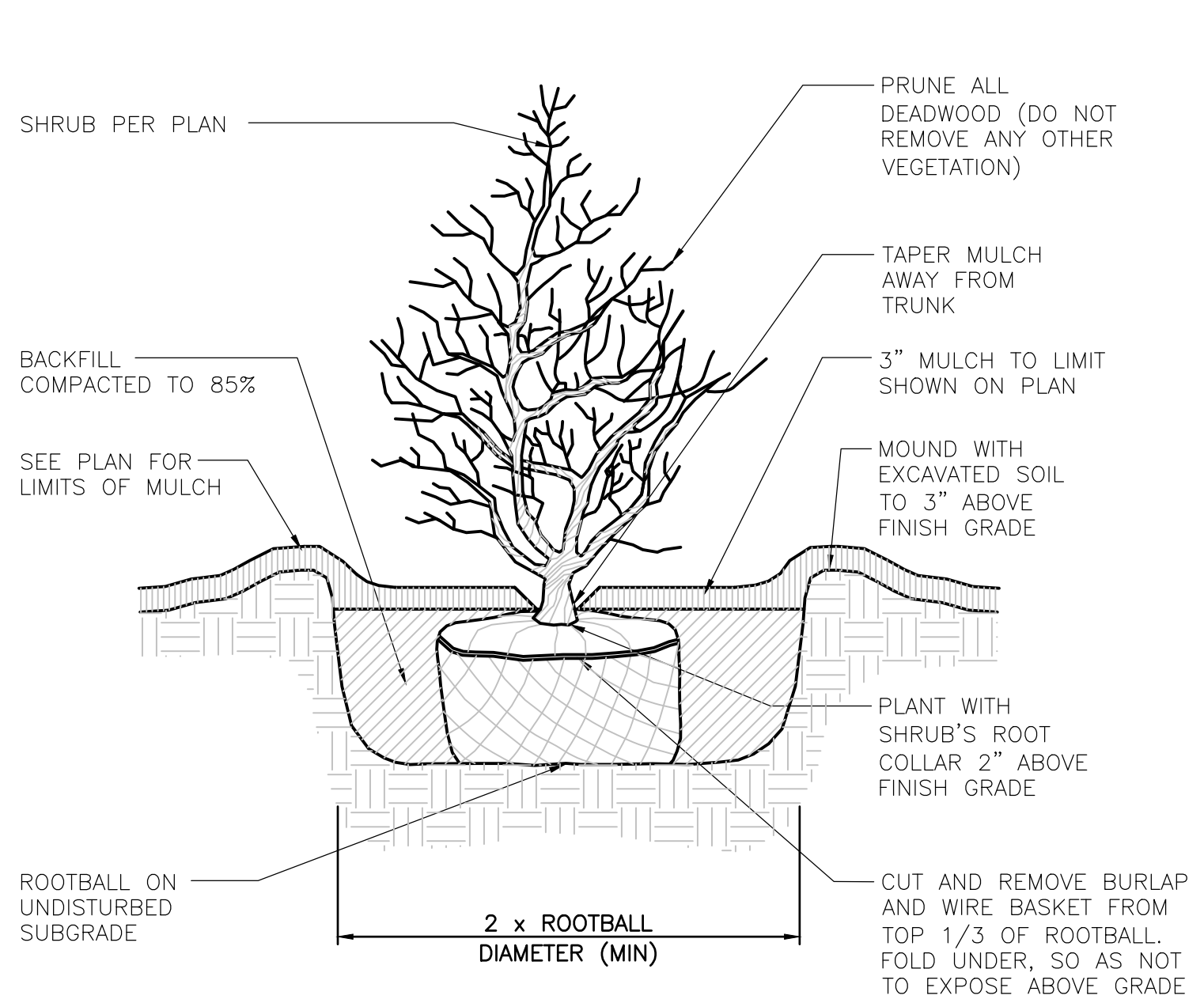


LOAM AND SEED DETAIL
NOT TO SCALE

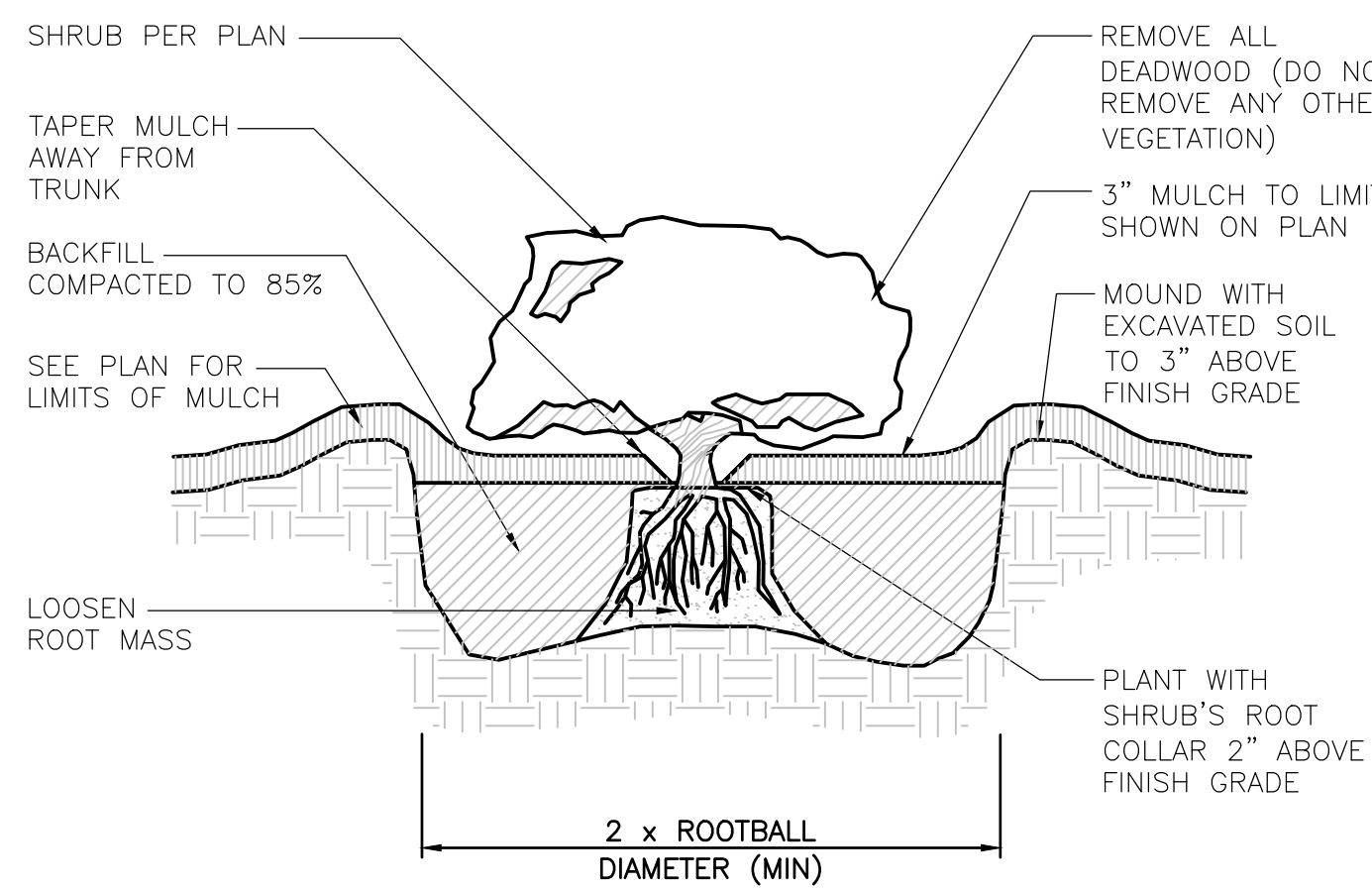


NOTE: LOCATE BEDLINE AS SHOWN ON PLAN.

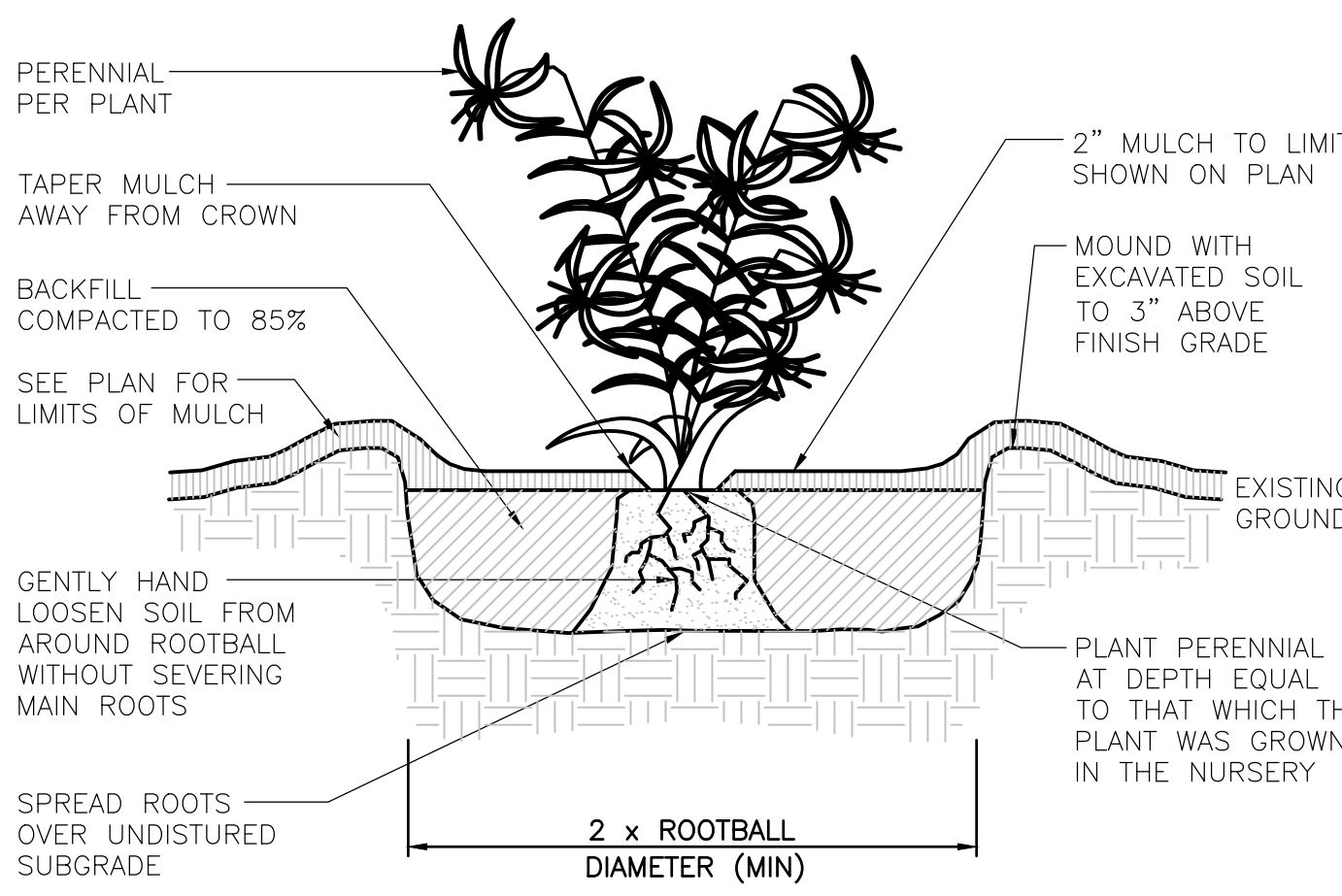
BEDLINE EDGE DETAIL
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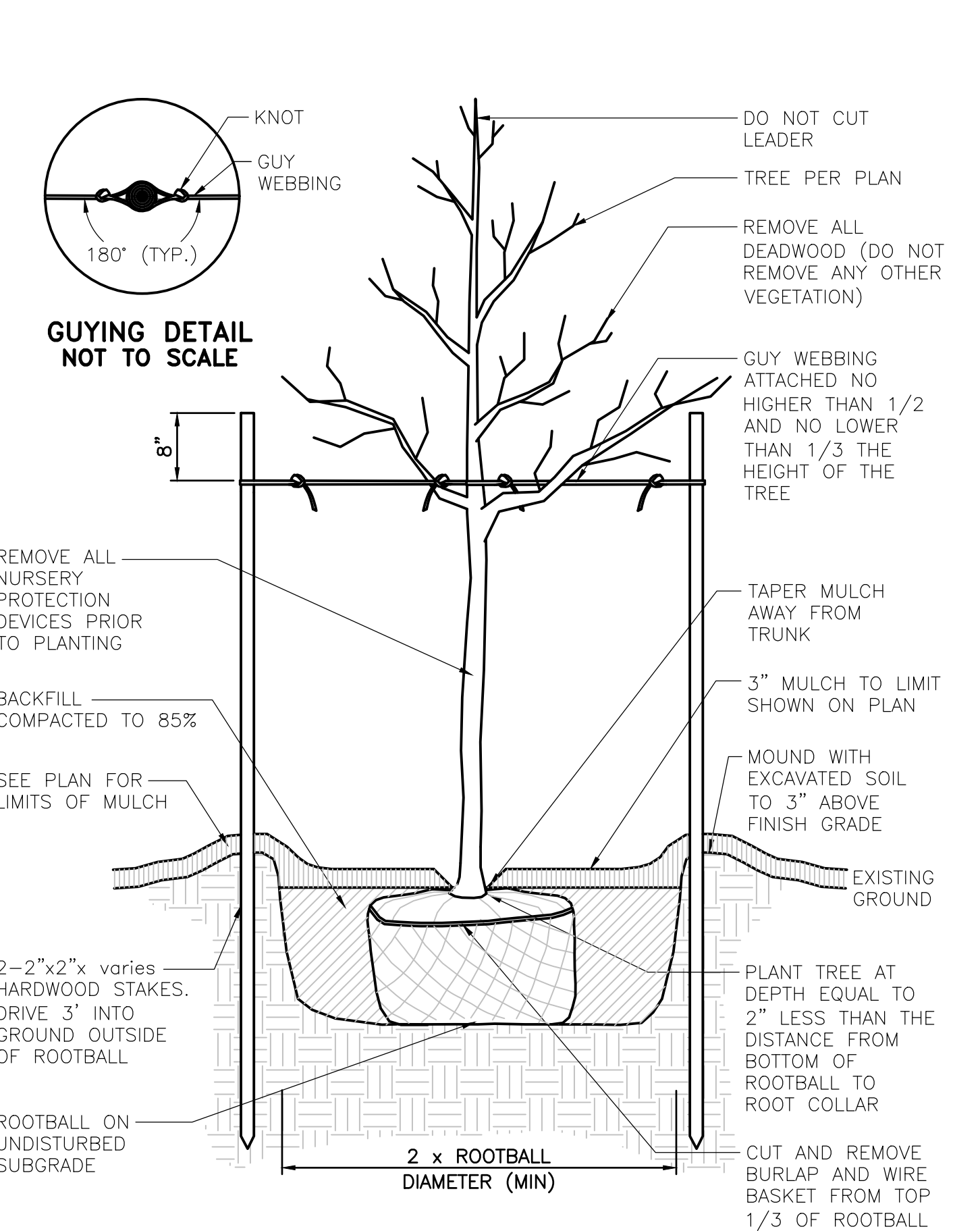
SHRUB PLANTING DETAIL
NOT TO SCALE



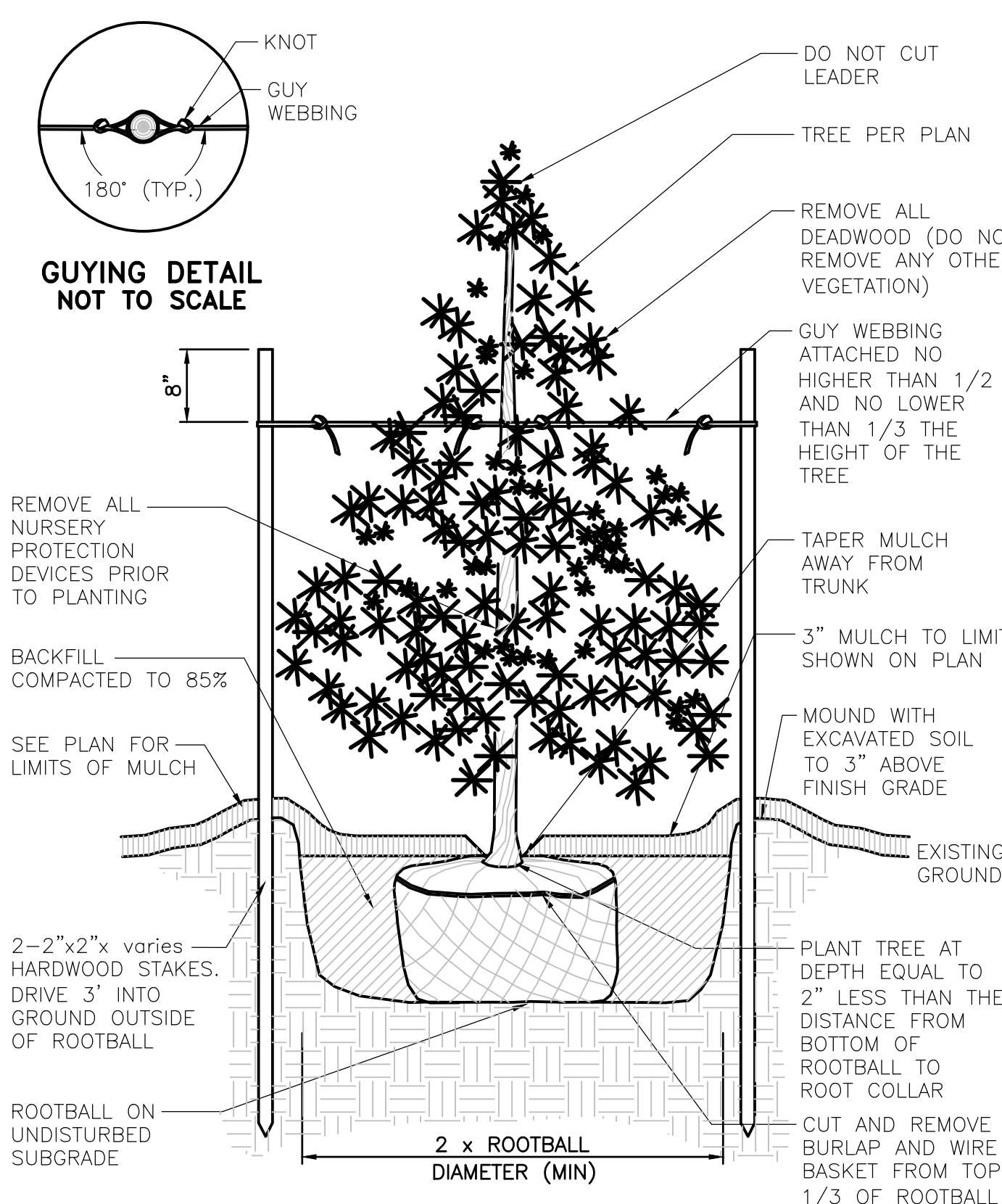
CONTAINER GROWN TREE AND
SHRUB PLANTING DETAIL
NOT TO SCALE



PERENNIAL PLANTING DETAIL
NOT TO SCALE



DECIDUOUS TREE
STAKING AND PLANTING DETAIL
NOT TO SCALE



EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE

NOTE:
1. AFTER THE GUARANTEE PERIOD THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF STAKES AND GUY WEBBING.

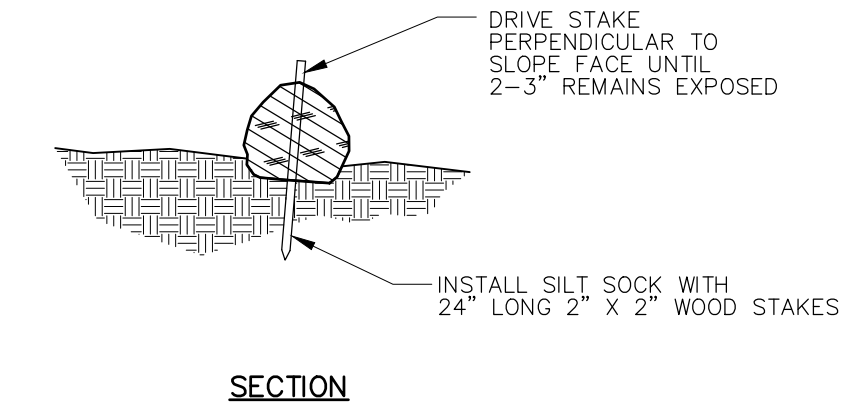
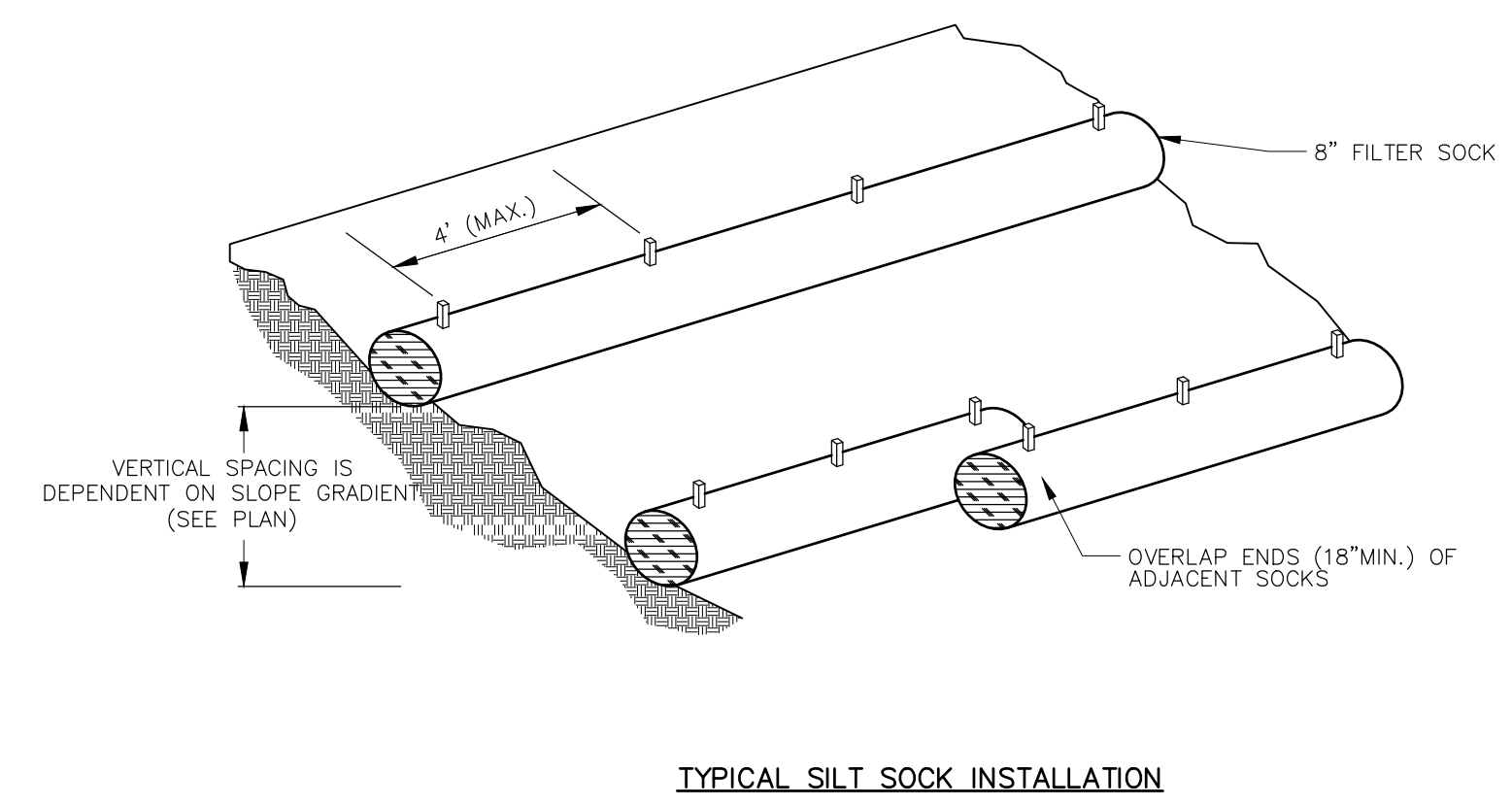
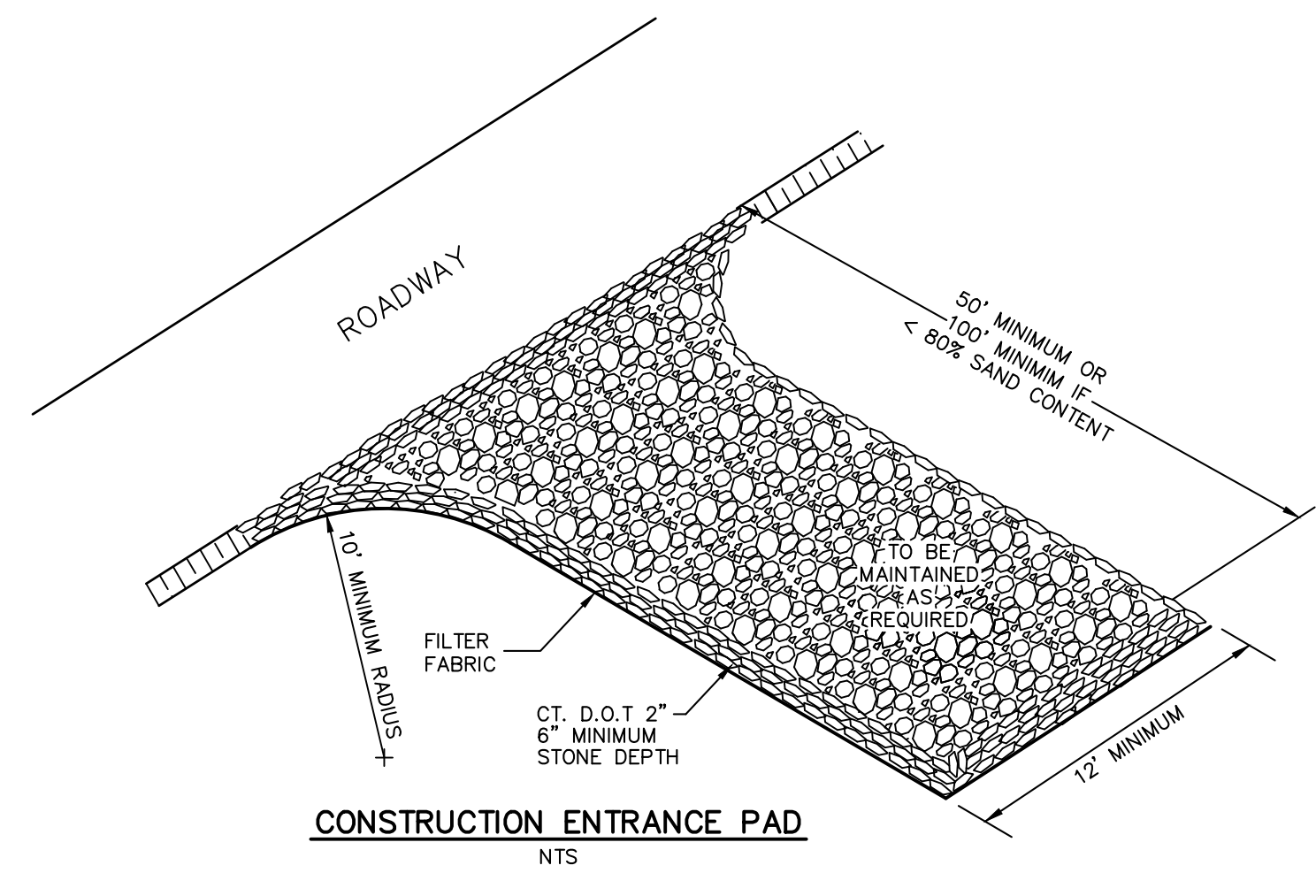
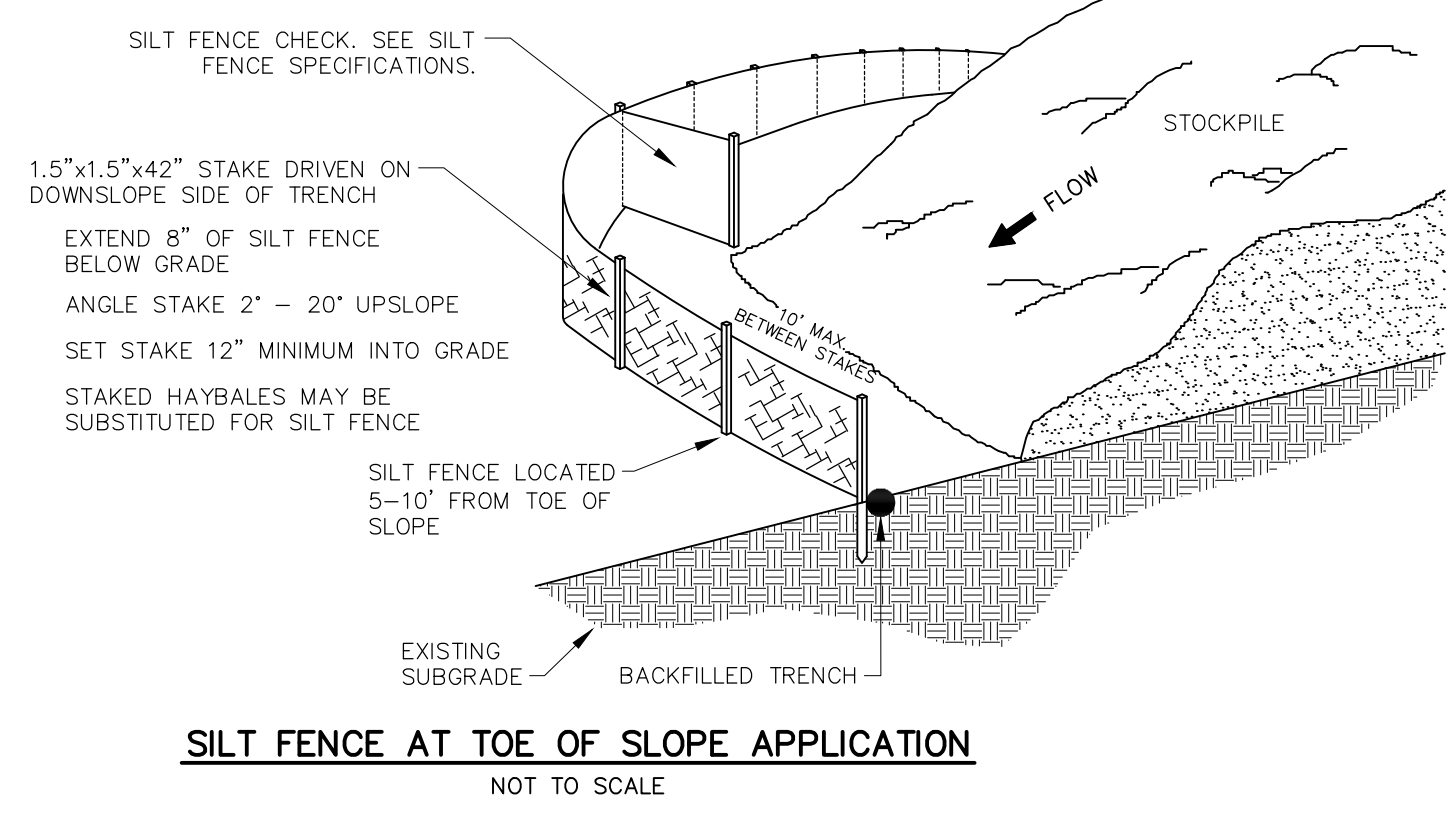
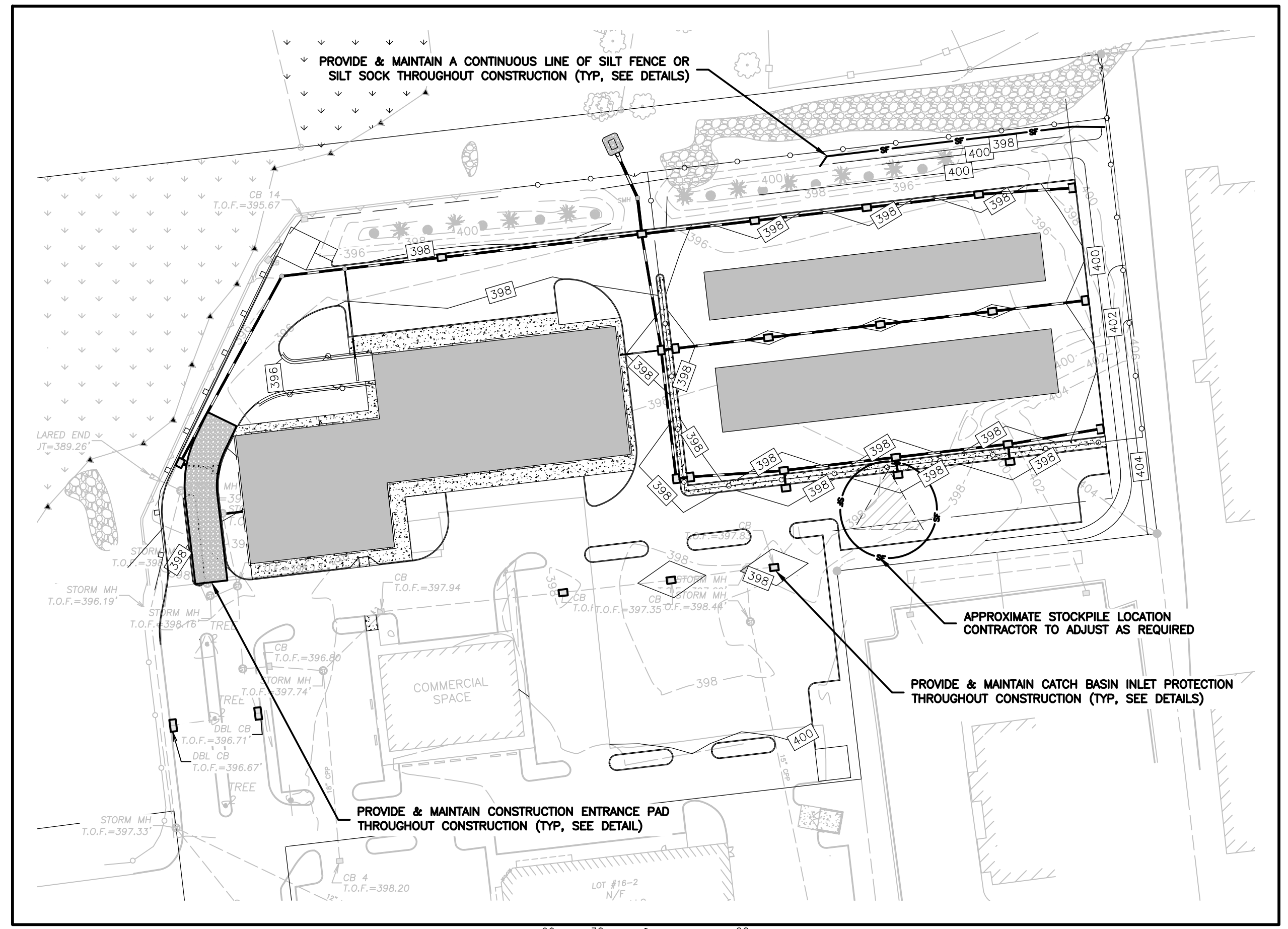
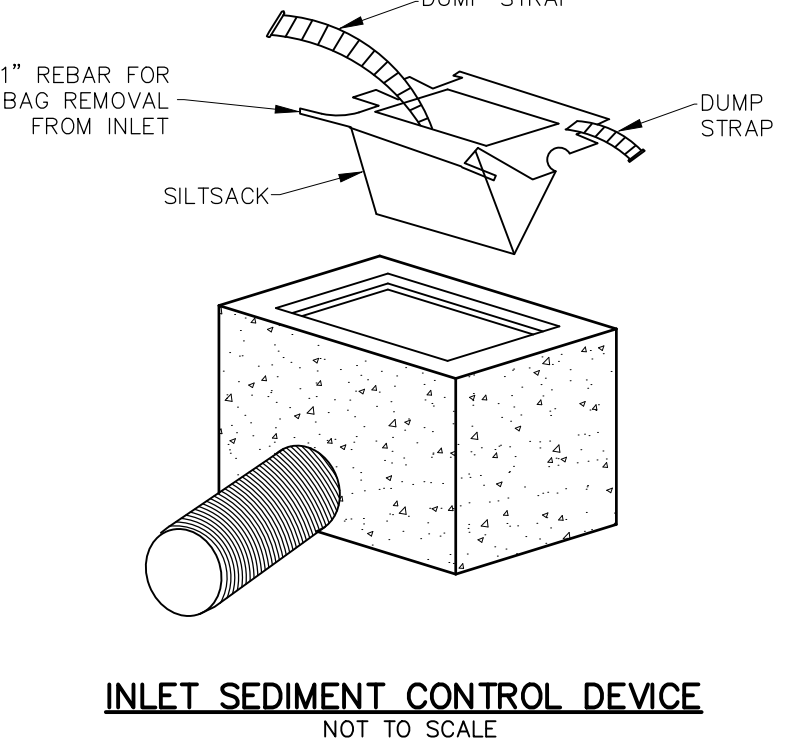
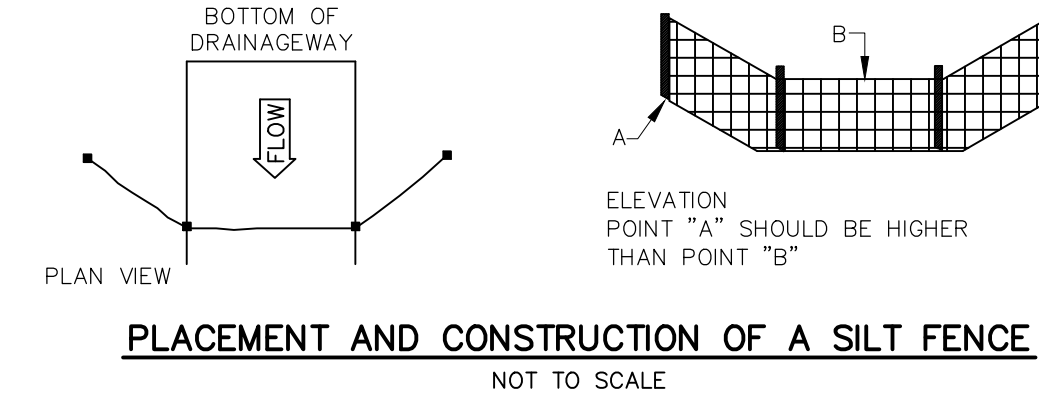
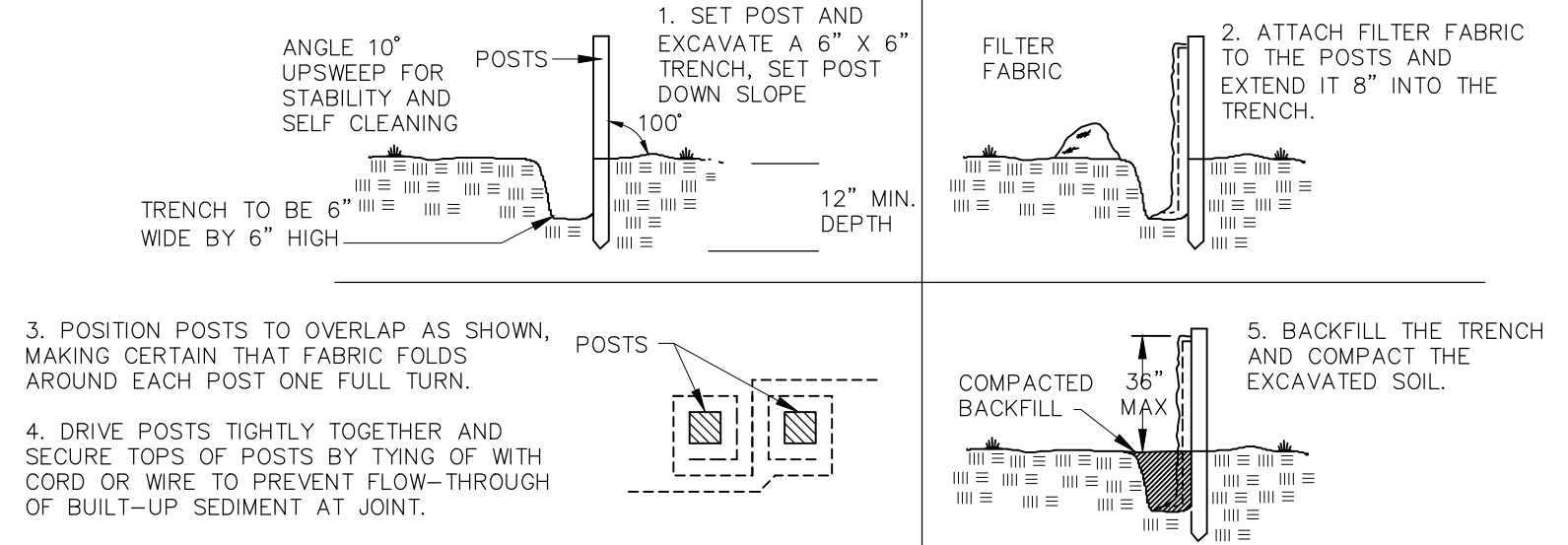
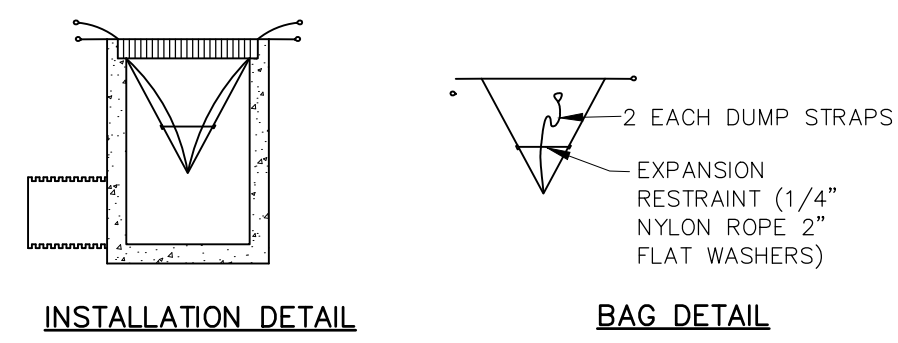
NOTE:
1. AFTER THE GUARANTEE PERIOD THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF STAKES AND GUY WEBBING.

REVIEWED BY THE TOWN ENGINEER
FIRST SELECTMAN _____ DATE _____

ENDORSED BY THE BROOKLYN
INLAND WETLANDS COMMISSION
CHAIRMAN OR SECRETARY _____ DATE _____

APPROVED BY THE BROOKLYN
PLANNING & ZONING COMMISSION
CHAIRMAN OR SECRETARY _____ DATE _____

EROSION AND SEDIMENTATION CONTROL DETAILS



SILT SOCK INSTALLATION
NOT TO SCALE

SITE DEVELOPMENT PLAN
PREPARED FOR:
TOWNSEND DEVELOPMENT ASSOCIATES
PROVIDENCE ROAD (RT 6)
BROOKLYN, CT

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED. THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

No.	Submittal / Revision	App'd. By	Date
1	REVIEW COMMENTS	PMP	07/21/2023

E&S CONTROL AND STORMWATER MAINTENANCE PLAN

Designed By: PMP
Drawn By: PMP
Checked By: PMP
Issue Date: 05/05/2023
Project No: 080849
Scale: AS NOTED

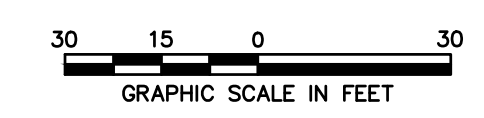
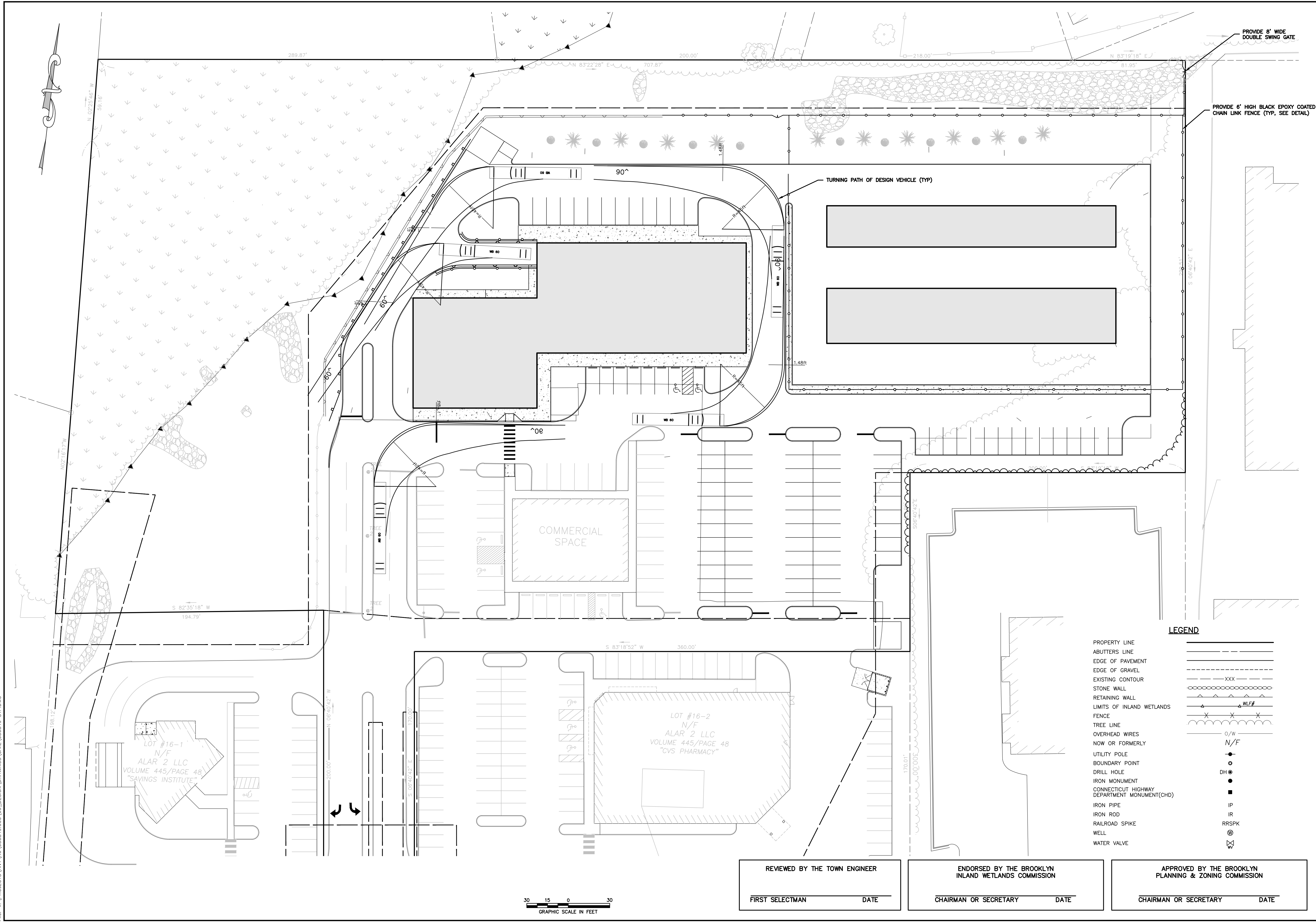
REVIEWED BY THE TOWN ENGINEER
FIRST SELECTMAN DATE

ENDORSED BY THE BROOKLYN INLAND WETLANDS COMMISSION
CHAIRMAN OR SECRETARY DATE

APPROVED BY THE BROOKLYN PLANNING & ZONING COMMISSION
CHAIRMAN OR SECRETARY DATE

SITE DEVELOPMENT PLAN
 PREPARED FOR:
 TOWNSEND
 DEVELOPMENT
 ASSOCIATES
 PROVIDENCE ROAD (RT 6)
 BROOKLYN, CT

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED. THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



REVIEWED BY THE TOWN ENGINEER FIRST SELECTMAN _____ DATE _____	ENDORSED BY THE BROOKLYN INLAND WETLANDS COMMISSION CHAIRMAN OR SECRETARY _____ DATE _____	APPROVED BY THE BROOKLYN PLANNING & ZONING COMMISSION CHAIRMAN OR SECRETARY _____ DATE _____
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No.	Submittal / Revision	App'd. By	Date
1	REVIEW COMMENTS	PMP	07/21/2023

TURNING DEMONSTRATION PLAN

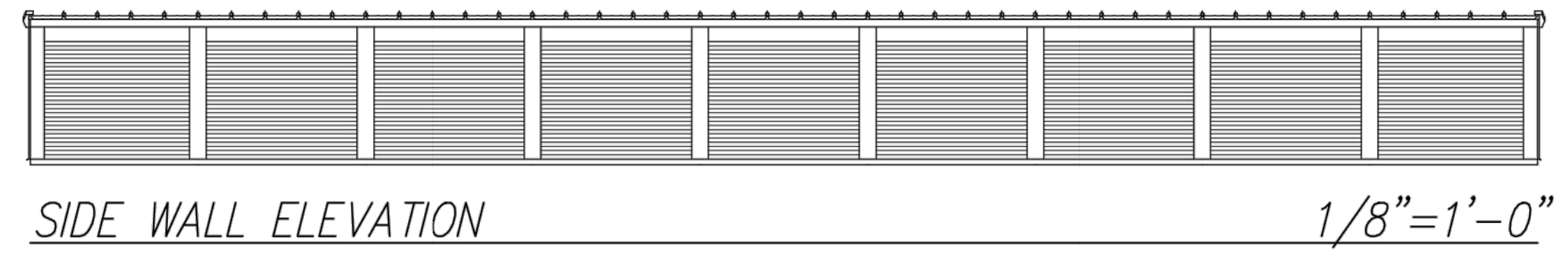
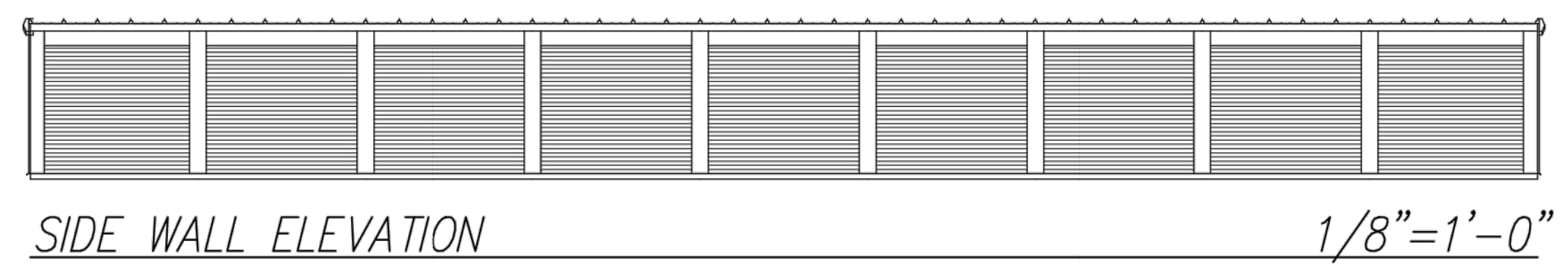
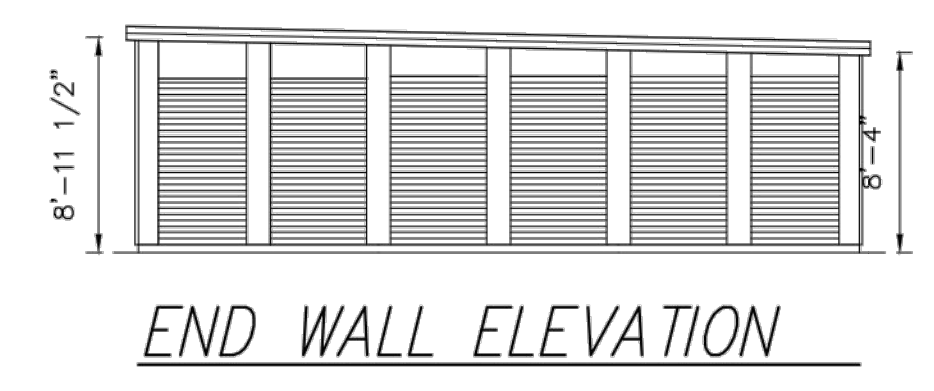
Designed By: PMP	Drawn By: PMP	Checked By: PMP
Issue Date: 05/05/2023	Project No: 080849	Scale: 1" = 30'

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SITE DEVELOPMENT PLAN
 PREPARED FOR:
 TOWNSEND
 DEVELOPMENT
 ASSOCIATES
 PROVIDENCE ROAD (RT 6)
 BROOKLYN, CT



COMMERCIAL BUILDING CONCEPT ELEVATION
 SCALE: 1/8" = 1'0"



SELF-STORAGE BUILDINGS CONCEPT ELEVATIONS

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

No.	Submittal / Revision	App'd.	By	Date

CONCEPTUAL
 ARCHITECTURAL DESIGN
 ELEVATIONS

Designed By: PMP	Drawn By: PMP	Checked By:
Issue Date: 05/05/2023	Project No: 080849	Scale: AS NOTED

Drawing No.:
15

NORTHEASTERN CONNECTICUT COUNCIL OF GOVERNMENTS

DRAINAGE REPORT REVIEW FOR COMPLIANCE WITH ZONING REGULATION 7.H. – STORMWATER MANAGEMENT

PERTAINING TO A

SPECIAL PERMIT SITE DEVELOPMENT PLAN

(ASSESSOR'S MAP 41, LOT 16)

PROVIDENCE ROAD (ROUTE 6)

BROOKLYN, CT

(July 10, 2023)

The comments contained herein pertain to my review of a Drainage Report, consisting of four hundred fifty-five (455) pages Prepared for Townsend Development Associates, LLC, Providence Road (Route 6), Brooklyn, Connecticut, Dated: May 24, 2023,” prepared by engineering consultant CHA. The purpose of this review is to determine whether or not portions of Brooklyn Zoning Ordinance 7.H., Stormwater Management, have been met for this commercial project.

7.H.3.1a. Pollutant Reduction in accordance with 2004 Connecticut Stormwater Quality Manual (CSQM) Section 7.4

The CHA Drainage Report addresses pollutant reduction with Water Quality Volume calculations using the CSQM formula.

7.H.3.1b. Groundwater Recharge and Runoff Volume Reduction in accordance with 2004 Connecticut Stormwater Quality Manual Section 7.5

A “groundwater recharge calculation” could not be found in the Drainage Report. CHA needs to address this and submit this as an addendum to their Report.

It should be noted that the expanded drainage system serving this development is a “closed system,” having one outlet in an existing swale along the north edge of the property, which flows in a northwesterly direction to a wetland. However, the swale and wetland will provide an unknown quantity of groundwater recharge.

The “runoff volume reduction” is in the Report but not identified as such and utilizes an identical calculation as the “water quality volume” formula in the CSQM and also found in the CHA Report. In essence, they are one in the same.

7.H.3.1c. Peak Flow Control in accordance with 2004 Connecticut Stormwater Quality Manual Section 7.6 for the 10-year, 25-year and 100-year storm events

The Drainage Report provides calculations for the 2, 10, 25 and 100-year storm events for the post-development condition. The Report does not evaluate the pre-development condition that would be used to see if the “peak flow control” is met. However, in the Summary of the consultant’s Report it is stated that *“As part of an agreement between a previous property Owner and the Town of Brooklyn (see Section G), the proposed stormwater treatment system is not require to attenuate peak flows versus existing conditions, but must only treat the runoff for water quality (80% Total Suspended Solids removal). Because peak stormwater flow reduction is not a requirement, pre-development stormwater analysis has not been provided.”*

I believe this agreement pertains to the serpentine water quality basin to the rear of the Berkshire Bank and is not be applicable to this project, which does not empty into the serpentine basin—the basin only treats drainage captured along Providence Road (Route 6) collected in the State of Connecticut drainage system. I base this on what I have gleaned from the plans and evaluation of the serpentine basin included in the CHA Report, especially the J&D Civil Engineers’ report “Evaluation and Selection of BMP’s,” dated April 2003 with revision date of May 2003, which was to be used as a part of a Town of Brooklyn Stormwater Management Plan.

Because the drainage from the expansion of development on the Townsend property does not empty into the serpentine basin, it is my opinion that the consultant needs to calculate the pre-development condition to evaluate existing condition vs. the developed condition to meet the requirement of 7.H.3.1c. and submit it for review.

7.H.3.2.

The CHA drainage design incorporates an additional Hydrodynamic Separator to one that already functions in the existing drainage system and some hooded catch basins will be constructed. These enhancements to the drainage system serve to reduce Total Suspended Solids, hydrocarbons and other deleterious floatables from discharging into the environment at the system outfall.

7.H.4. Modifications

To the best of my knowledge, CHA has not requested any modifications or waivers involving the stormwater system.

By: *Syl Pauley, Jr., P.E.*
Syl Pauley, Jr., P.E., NECCOG Regional Engineer

NORTHEASTERN CONNECTICUT COUNCIL OF GOVERNMENTS

ENGINEERING SITE PLAN & DRAINAGE REPORT REVIEW

PERTAINING TO A

SPECIAL PERMIT SITE DEVELOPMENT PLAN

(ASSESSOR'S MAP 41, LOT 16)

PROVIDENCE ROAD (ROUTE 6)

BROOKLYN, CT

(July 5, 2023)

The comments contained herein pertain to my review of a set of plans, consisting of fifteen (15) sheets (sheet 15 architectural missing), entitled "Special Permit Site Development Plan Prepared for Townsend Development Associates, LLC, Providence Road (Route 6), Brooklyn, Connecticut, Dated: May 5, 2023, Revised: N/A," prepared by CHA and Drainage Report, dated May 24, 2023, by CHA.

Drawing No. 2 (Sheet 1 of 1) – Improvement Location Plan

1. Are all of the abutting property owners shown on the 2017 plan present today? If not, a new large scale plan or drawing needs to be included in the plan set with current owners, similar to the "inset site installation drawing" included in Drawing No. 13.

Drawing No. 3 – Layout Plan

1. Not all sidewalks shown are dimensioned. All sidewalk widths need to be specified on the plan.
2. If the sidewalk at the south end of the proposed crosswalk is not flush with the pavement, a sidewalk ramp will need to be constructed there and a construction detail provided — see Type 17 on CT DOT "Sheet 6 – Sidewalk Ramps."
3. The layout plan is missing some dimensions for curb radii, tangents, aisle widths, loading zone width, etc. All dimensions need to be shown to be able to call this a true layout plan. Scaling dimensions off the plan where no dimensions are shown is unacceptable as this is prone to reading error and distortion in a paper printing process.
4. The "Commercial Space" building footprint is missing dimensions; however, the "Self Storage" units do have dimensions shown. Add all dimensions to the commercial space.
5. The wood guard rail end treatments on the west side of the development need to be described on this plan or on the Construction Details plan.
6. If the wood guard rail is struck by a vehicle, has the impact to the segmental retaining wall adjacent to the posts been evaluated? The distance a post will be located from the back side of the wall needs to be shown in a construction detail. Furthermore, has the condition of the wall been inspected with respect to the development of this project and in consideration of the traffic (vibration) of heavy construction vehicles travelling close by?

7. If a tractor-trailer truck will be delivering merchandise/supplies to the restaurant and commercial space, a diagram needs to be submitted showing that it can maneuver throughout the site, especially for the 60± foot long loading zone to the rear of the restaurant portion of the proposed building.
8. Will this development be phased construction?

Drawing No. 4 – Grading Plan

1. Elevations need to be shown for the top of wall on each side of the Loading Zone.
2. What does the bold line around the scour hole at the rear of the property represent? This needs to be clarified on the plan.
3. Elevations on the entire top of the existing wall at the west boundary of the property need to be included on the plan.
4. There is inadequate information identifying existing contour lines to evaluate the proposed grading. The plan must be updated to include existing elevations on all existing contour lines and resubmitted for review.

Drawing No. 5 – Drainage Plan

1. Direction of flow arrows need to be included on the plan.

Drawing No. 6 – Utility Plan

1. For the restaurant operation, it is not evident from the plan where a bulk fat/oil/grease (FOG) recovery tank will be located on the site close to the restaurant. This location needs to be added to the plan in an enclosed area.
2. Who is going to be responsible for the maintenance of certain utilities (water, gas, electric, telephone, cable, etc.) on site? If utility companies will be responsible for maintenance and ownership, are easements necessary for their infrastructure on private property? If so, they need to be shown on the plan similar to the sewer maintenance easement.
3. In addition to the Brooklyn Water Pollution Control Authority, has the Killingly Water Pollution Control Authority provided written approval on accepting the additional anticipated sewage flow for from the proposed development?

Drawing No. 9 – Construction Details

1. In the “1,000 Gallon Grease Trap” detail, add a note that it is H2O load rated. Also, show risers at each access opening noting material spec and dimensions. It is not anticipated that buoyancy needs to be taken into account.

Drawing No. 11 – Construction Details

1. The “Depressed Curb Ramp” detail is lacking information in order to construct it. The ramp needs a “landing” and shall be modeled after a Connecticut Department of Transportation

(CT DOT) 48" wide ramp with landing detail drawing that can be found on their "Sheet 1 - Sidewalk Ramps."

2. In the "Typical Cross Section for Matching Existing and Proposed Pavement," the thickness of the new pavement is shown to be 3¼". Is this correct, as I have never ever seen pavement thickness called out to the quarter (1/4) inch? Incidentally, in the "Bituminous Concrete Pavement" detail, the total pavement thickness is only three (3) inches. Which detail is correct?
3. Any reference to State of Connecticut Department of Transportation Form 816 shall be changed to the most recent publication, Form 818.
4. In the "Concrete Encasement" detail, the length of concrete encasement on each side of the centerline of the crossing needs to be specified.
5. In the "Wood Guard Rail" detail, the depth of bury of the wood post needs to be specified as well as typical spacing between posts. Also, metal fasteners need to be specified as stainless steel.
6. Termination ends of the guard rail need to be shown in a construction detail.
7. There is a "Finish Course Standard Mold 6" Concrete Lip Curbing Detail" on this plan sheet, however, where this is located is not shown on any of the site plans. Where is this used? If it is not used it should be removed.

Drawing No. 13 – E&S Control and Stormwater Maintenance Plan

1. Any reference to State of CT DOT Form 816 shall be changed to the most recent publication, Form 818.
2. Straw wattles need to be installed in a shallow trench due to their light weight, which minimizes movement from heavy rain. Furthermore, the contractor responsible for digging the trench may neglect to dig the trench and will result in an improper installation. To avoid this and for better sediment control, replace straw wattles with silt socks, which are heavier and do not require a shallow trench to install but do need to be staked when installed on a bed of earth, and revise the detail and inset site installation drawing to reflect this.
3. The "construction entrance pad" location in the site inset drawing is unacceptable. It is in conflict with traffic movements generated by the existing pharmacy (Lot 16-2) and existing commercial space. Movement of heavy equipment to and from the construction site presents a safety hazard, accumulation of site debris (mud, rocks, etc.) that have the potential to damage customer vehicles, has a tight if not undoable turning egress movement, and poses an impediment to active businesses. The construction entrance needs to be relocated to the paved driveway with a center island along the west boundary line of the site to be developed to minimize these impacts as much as possible.

Drainage Report

1. No comments.

By: *Syl Pauley, Jr., P.E.*

Syl Pauley, Jr., P.E., NECCOG Regional Engineer



July 28, 2023

Jana Butts Roberson, AICP
Director of Community Development / Town Planner
Town of Brooklyn
69 South Main Street, Suite 22
Brooklyn, CT 06234

RE: **Special Permit Modification**
Townsend Development Associates, LLC
SP 15-006

Jana,

Below is an itemized response to the July 5, 2023 and July 10, 2023 Review Comments received from Northeastern Connecticut Council of Governments. For clarity original comments are in normal text and CHA responses are in **Bold**.

July 5, 2023 - Engineering Site Plan & Drainage Report Review

Drawing No. 2 (Sheet 1 of 1) – Improvement Location Plan

1. Are all of the abutting property owners shown on the 2017 plan present today? If not, a new large scale plan or drawing needs to be included in the plan set with current owners, similar to the "inset site installation drawing" included in Drawing No. 13.
Drawing 2 has been updated to revise the current Owners.

Drawing No. 3 – Layout Plan

1. Not all sidewalks shown are dimensioned. All sidewalk widths need to be specified on the plan.
Additional dimensions have been added to the plan set.
2. If the sidewalk at the south end of the proposed crosswalk is not flush with the pavement, a sidewalk ramp will need to be constructed there and a construction detail provided — see Type 17 on CT DOT "Sheet 6 – Sidewalk Ramps."
A new sidewalk ramp and detail are now provided.
3. The layout plan is missing some dimensions for curb radii, tangents, aisle widths, loading zone width, etc. All dimensions need to be shown to be able to call this a true layout plan. Scaling dimensions off the plan where no dimensions are shown is unacceptable as this is prone to reading error and distortion in a paper printing process.
Additional dimensions have been added to the plan set.

4. The “Commercial Space” building footprint is missing dimensions; however, the “Self Storage” units do have dimensions shown. Add all dimensions to the commercial space.

Additional dimensions have been added to the plan set.

5. The wood guard rail end treatments on the west side of the development need to be described on this plan or on the Construction Details plan.

An end treatment detail has been added to Sheet 11 of the plan set.

6. If the wood guard rail is struck by a vehicle, has the impact to the segmental retaining wall adjacent to the posts been evaluated? The distance a post will be located from the back side of the wall needs to be shown in a construction detail. Furthermore, has the condition of the wall been inspected with respect to the development of this project and in consideration of the traffic (vibration) of heavy construction vehicles travelling close by?

On similar previous projects, a minimum separation of 3'-3" from the face of retaining wall to the back of the guardrail posts (±4' from face of wall to traffic face of guardrail) has been required by the wall designer/manufacturer to handle the potential impact loads. The location of the proposed guardrail has been moved to be 18-inches from face of curb to face of guardrail, providing at least 4' from face of existing retaining wall to face of proposed guardrail. Notes have been added to the wood guardrail detail to clarify this.

The condition of the existing wall has been visually inspected, and no apparent defects were noted. This wall is the result of modern construction (c. 2007) associated with the original development approval granted to Townsend Development Associates, and was originally intended to have the paved roadway immediately adjacent to the back of the wall. The completion of the site development is not anticipated to negatively impact the existing wall.

7. If a tractor-trailer truck will be delivering merchandise/supplies to the restaurant and commercial space, a diagram needs to be submitted showing that it can maneuver throughout the site, especially for the 60± foot long loading zone to the rear of the restaurant portion of the proposed building.

A Turning Demonstration Plan has been added to the Plan Set.

8. Will this development be phased construction?

At this time, it is anticipated that the Self-Storage facility would begin construction as soon as feasible following anticipated approvals. The Commercial Space is still seeking defined tenants and would likely follow a construction season, or more, behind.

Drawing No. 4 – Grading Plan

1. Elevations need to be shown for the top of wall on each side of the Loading Zone.

Provided.

2. What does the bold line around the scour hole at the rear of the property represent? This needs to be clarified on the plan.

This line has been removed.

3. Elevations on the entire top of the existing wall at the west boundary of the property need to be included on the plan.
Existing top of wall elevations are now provided.
4. There is inadequate information identifying existing contour lines to evaluate the proposed grading. The plan must be updated to include existing elevations on all existing contour lines and resubmitted for review.
Additional contour labels have been added.

Drawing No. 5 – Drainage Plan

1. Direction of flow arrows need to be included on the plan.
Flow arrows have been added to the plan set.

Drawing No. 6 – Utility Plan

1. For the restaurant operation, it is not evident from the plan where a bulk fat/oil/grease (FOG) recovery tank will be located on the site close to the restaurant. This location needs to be added to the plan in an enclosed area.
The Dumpster Area has been expanded to accommodate this tank.
2. Who is going to be responsible for the maintenance of certain utilities (water, gas, electric, telephone, cable, etc.) on site? If utility companies will be responsible for maintenance and ownership, are easements necessary for their infrastructure on private property? If so, they need to be shown on the plan similar to the sewer maintenance easement.
Utility Providers already have mains extended onto the property. Based on initial conversations with Connecticut Water and Eversource, easements are not expected to be required for the service connections.
3. In addition to the Brooklyn Water Pollution Control Authority, has the Killingly Water Pollution Control Authority provided written approval on accepting the additional anticipated sewage flow for from the proposed development?
The proposed Project has not yet been reviewed by the Brooklyn or Killingly WPCA; however, the proposed development represents a decrease in anticipated flows based on the previously approved developments, as the Self-Storage facility will not generate any discharge.

Drawing No. 9 – Construction Details

1. In the “1,000 Gallon Grease Trap” detail, add a note that it is H20 load rated. Also, show risers at each access opening noting material spec and dimensions. It is not anticipated that buoyancy needs to be taken into account.
Provided.

Drawing No. 11 – Construction Details

1. The “Depressed Curb Ramp” detail is lacking information in order to construct it. The ramp needs a “landing” and shall be modeled after a Connecticut Department of Transportation (CT DOT) 48” wide ramp with landing detail drawing that can be found on their “Sheet 1 - Sidewalk Ramps.”
CT DOT details are now provided.
2. In the “Typical Cross Section for Matching Existing and Proposed Pavement,” the thickness of the new pavement is shown to be 3¼”. Is this correct, as I have never ever seen pavement thickness called out to the quarter (1/4) inch? Incidentally, in the “Bituminous Concrete Pavement” detail, the total pavement thickness is only three (3) inches. Which detail is correct?
The Matching Existing and Proposed Pavement detail has been modified to 3-inches.
3. Any reference to State of Connecticut Department of Transportation Form 816 shall be changed to the most recent publication, Form 818.
References to 816 have been revised to 818 throughout.
4. In the “Concrete Encasement” detail, the length of concrete encasement on each side of the centerline of the crossing needs to be specified.
A note has been added to the detail.
5. In the “Wood Guard Rail” detail, the depth of bury of the wood post needs to be specified as well as typical spacing between posts. Also, metal fasteners need to be specified as stainless steel.
Depth of Bury and spacing for the posts are now specified.
6. Termination ends of the guard rail need to be shown in a construction detail.
A detail is now provided on Sheet 11 of the plan set.
7. There is a “Finish Course Standard Mold 6” Concrete Lip Curbing Detail” on this plan sheet, however, where this is located is not shown on any of the site plans. Where is this used? If it is not used it should be removed.
This detail is for the Extruded Concrete Curb proposed for the site. The title of the detail has been revised for clarity.

Drawing No. 13 – E&S Control and Stormwater Maintenance Plan

1. Any reference to State of CT DOT Form 816 shall be changed to the most recent publication, Form 818.
References to 816 have been revised to 818 throughout.

2. Straw wattles need to be installed in a shallow trench due to their light weight, which minimizes movement from heavy rain. Furthermore, the contractor responsible for digging the trench may neglect to dig the trench and will result in an improper installation. To avoid this and for better sediment control, replace straw wattles with silt socks, which are heavier and do not require a shallow trench to install but do need to be staked when installed on a bed of earth, and revise the detail and inset site installation drawing to reflect this.

The straw wattle has been replaced with a silt sock as suggested.

3. The “construction entrance pad” location in the site inset drawing is unacceptable. It is in conflict with traffic movements generated by the existing pharmacy (Lot 16-2) and existing commercial space. Movement of heavy equipment to and from the construction site presents a safety hazard, accumulation of site debris (mud, rocks, etc.) that have the potential to damage customer vehicles, has a tight if not undoable turning egress movement, and poses an impediment to active businesses. The construction entrance needs to be relocated to the paved driveway with a center island along the west boundary line of the site to be developed to minimize these impacts as much as possible.

Construction Entrance has been relocated as indicated.

Drainage Report

1. No comments.
Acknowledged.

July 10, 2023 - Drainage Report Review for Compliance with Zoning Regulation 7.H. – Stormwater Management

7.H.3.1a. Pollutant Reduction in accordance with 2004 Connecticut Stormwater Quality Manual (CSQM) Section 7.4

1. The CHA Drainage Report addresses pollutant reduction with Water Quality Volume calculations using the CSQM formula.

Acknowledged.

7.H.3.1b. Groundwater Recharge and Runoff Volume Reduction in accordance with 2004 Connecticut Stormwater Quality Manual Section 7.5

1. A “groundwater recharge calculation” could not be found in the Drainage Report. CHA needs to address this and submit this as an addendum to their Report.

It should be noted that the expanded drainage system serving this development is a “closed system,” having one outlet in an existing swale along the north edge of the property, which flows in a northwesterly direction to a wetland. However, the swale and wetland will provide an unknown quantity of groundwater recharge.

The “runoff volume reduction” is in the Report but not identified as such and utilizes an identical calculation as the “water quality volume” formula in the CSQM and also found in the CHA Report. In essence, they are one in the same.

Pursuant to the design calculations prepared by J&D (attached and included in the Drainage Report) the design of the water quality swales included “Full Build Out of Klotz Property”. Based

on these calculations, the Retention Basin (serpentine swale) provides water quality treatment (and recharge) of ±42,000 CF, based on 0.5-inches of runoff from ±21 acres of collected impervious area, that was previously untreated. Pursuant to the CSQM Section 7.5.1, the required Groundwater Recharge Volume for sites on Hydrologic Soil Group 'B' (portion of the developed lot is mapped as 'D') would be 0.25-inches from the impervious areas. Therefore, the existing water quality swale is believed to satisfy the groundwater recharge volume requirements for the proposed development.

7.H.3.1c. Peak Flow Control in accordance with 2004 Connecticut Stormwater Quality Manual Section 7.6 for the 10-year, 25-year and 100-year storm events

1. The Drainage Report provides calculations for the 2, 10, 25 and 100-year storm events for the post-development condition. The Report does not evaluate the pre-development condition that would be used to see if the “peak flow control” is met. However, in the Summary of the consultant’s Report it is stated that “As part of an agreement between a previous property Owner and the Town of Brooklyn (see Section G), the proposed stormwater treatment system is not required to attenuate peak flows versus existing conditions, but must only treat the runoff for water quality (80% Total Suspended Solids removal). Because peak stormwater flow reduction is not a requirement, pre-development stormwater analysis has not been provided.”

I believe this agreement pertains to the serpentine water quality basin to the rear of the Berkshire Bank and is not applicable to this project, which does not empty into the serpentine basin—the basin only treats drainage captured along Providence Road (Route 6) collected in the State of Connecticut drainage system. I base this on what I have gleaned from the plans and evaluation of the serpentine basin included in the CHA Report, especially the J&D Civil Engineers’ report “Evaluation and Selection of BMP’s,” dated April 2003 with revision date of May 2003, which was to be used as a part of a Town of Brooklyn Stormwater Management Plan.

Because the drainage from the expansion of development on the Townsend property does not empty into the serpentine basin, it is my opinion that the consultant needs to calculate the pre- development condition to evaluate existing condition vs. the developed condition to meet the requirement of 7.H.3.1c. and submit it for review.

The Drainage and Conservation Easement Documents, included as an attachment to the Drainage Report, include:

1. **Drainage and Conservation Easement (on file in the Town’s Land Records, Book 365 Pages 0285 through 0288)**
2. **Sheets 4 and 5 of the Plan Set entitled “Klotz Property Regional BMP’s, Town of Brooklyn, CT, Stormwater Management Plan, Prepared by J&D Civil Engineers, Dated June 2003.**
3. **Evaluation and Selection of BMP’s, Town of Brooklyn Stormwater Management Plan, Prepared by J&D Civil Engineers, Dated April 2003, Revised June 2003.**

Based on these documents, and the previous approvals granted for development of the Townsend Development Property, the Applicant, and their Consulting Engineer, believe that both the serpentine swale and the linear swale along the northern boundary are included in this agreement and that the only stormwater treatment required of the development is pretreatment prior to

discharge to the Town's Regional Water Quality Swales. The following excerpts from the Drainage and Conservation Easement are provided to support this, with commentary in italics below:

- **Article I Grantor's Rights and Responsibilities, Item a. states: "The Grantor shall allow the Grantee to construct the water quality swales as shown on the plan entitled, "Klotz Property Regional BMP's, Town of Brooklyn, CT Stormwater Management Plan Sheets 4 & 5, by J&D Civil Engineers, Scale 1" = 40', dated June 30, 2003.**

Sheet 4 of the J&D Plan Set clearly shows both swales being constructed on the Townsend Development Property, and Sheet 5 includes cross sections of both swales.

Also noted:

- 1. The Limits of the Easement described in Schedule 'A' (Book 365, Page 289, attached) and depicted on the existing conditions plan, clearly include the limits of both swales.*
 - 2. This Item of the Easement indicates swales (plural) where other items (Article 1.c. for example) are singular and specific to one swale.*
 - 3. Both Swales were constructed at the same time by the same Contractor and would require the Town to have an easement for construction on private property.*
- **Article I Grantor's Rights and Responsibilities, Item f. states: "Grantor shall have the right to discharge its stormwater runoff into the water quality swales and the drainage and conservation easement in one or more locations subject to the approval of appropriate Town Commissions.**
 - **Article I Grantor's Rights and Responsibilities, Item g. states: "Grantor shall provide pre-treatment of stormwater from the developed portion of the Grantor's property prior to discharging to the water quality swales. The following performance standards for stormwater discharge shall apply.**
- 1. Stormwater management conveyance systems must be designed to remove 80% on the annual average load of Total Suspended Solids (TSS). It shall be presumed that this standard is met when stormwater management best practices (BMPs) are sized to treat 0.5 inches of runoff times the impervious area of the post-development project site. TSS removal rates of BMPs must be documented from current EPA or Connecticut DEP design guidelines.**
 - 2. Rooftop runoff except from flat industrial roofs made of galvanized metal or copper, may be considered uncontaminated and not require pre-treatment prior to discharge to the drainage and conservation easement.**
- **Article II Grantee's Rights and Responsibilities, Item c. states: "To allow the Grantor to discharge stormwater from the developed portion of the property into the Town's regional stormwater quality swales in one or more locations subject to the approval of appropriate Town Commissions. The Grantor shall not be required to construct stormwater detention facilities to reduce peak discharges.**

7.H.3.2.

1. The CHA drainage design incorporates an additional Hydrodynamic Separator to one that already functions in the existing drainage system and some hooded catch basins will be constructed. These enhancements to the drainage system serve to reduce Total Suspended Solids, hydrocarbons and other deleterious floatables from discharging into the environment at the system outfall.

Acknowledged.

7.H.4. Modifications

1. To the best of my knowledge, CHA has not requested any modifications or waivers involving the stormwater system.

Acknowledged, no modifications or waivers are requested.

Please contact me (pparent@chacompanies.com, 860-885-1052) if you have any questions or additional comments.

Thank You,

Pete Parent, P.E.



STATE OF CONNECTICUT)
) ss: 10th July " 2005
 COUNTY OF NEW LONDON)

Personally appeared NANCY S KLOTZ, President of THE DOWNES-PATTERSON CORPORATION, signer and sealer of the foregoing instrument and acknowledged the same to be her free act and deed, and the free act and deed of THE DOWNES-PATTERSON CORPORATION, before me.

[Signature]

Commissioner of the Superior Court
 Notary Public

STATE OF CONNECTICUT)
) ss: August 2, 2005
 COUNTY OF WINDHAM)

Personally appeared Yvonne J. Jones of the TOWN OF BROOKLYN, signer and sealer of the foregoing instrument and acknowledged the same to be his/her free act and deed, and the free act and deed of the TOWN OF BROOKLYN, before me

[Signature]

Commissioner of the Superior Court
 Notary Public 10/31/05

Attachment A

Description of Drainage and Conservation Easement: A tract of land shown as "Drainage and Conservation Easement in favor of the Town of Brooklyn" on a plan prepared by I & D Civil Engineers, No. Grosvenordale, CT, entitled "Compilation Plan showing Drainage and Conservation Easement to be granted to the Town of Brooklyn by Downes Patterson Corporation, Route 6 - East Main Street, Brooklyn, CT", date August 7, 2003, scale 1" = 50' bounded and described as follows:

Beginning at the north westerly corner of herein described drainage and conservation easement, bounded northerly by n/Town of Brooklyn and westerly by n/f Kenneth and Cindy Cardini;

- Thence N 70° 13' 16" E 707.58' to an iron pipe;
- Thence N 70° 13' 16" E 81.17' to a point which is the north east corner of said easement;
- Thence S 19° 34' 12" E 35.00' to a point;
- Thence S 70° 13' 16" W 509.11' to a point;
- Thence S 30° 24' 11" W 196.48' to a point;
- Thence S 19° 49' 27" E 240.00' to a point;
- Thence S 70° 10' 33" W 185.51' to a point;
- Thence N 15° 25' 28" W 367.33' to an iron pipe;
- Thence N 15° 25' 28" W 59.16' to the corner at the point of beginning.

Received for record this 31st day
 of August 2005, A.D. at 2:46 P. M.

JOB NO. 01146
DATE 4/10/03
BY JJB
D BY _____

J & D CIVIL ENGINEERS
401 RAVENELLE ROAD
North Grosvenordale, CT 06255
(860) 923-2920 FAX (860) 923-3487

SHEET NO. 1 OF 2
JOB _____
SUBJECT DRAINAGE
CLIENT BROOKLYN

STORMWATER QUALITY CALCULATIONS

SEE WATERSHED MAP

INSTALL STRUCTURAL BMP'S BETWEEN COMMERCIAL DEVELOPMENT + LARGE WETLAND IN DRAINAGE BASINS F-2 + E.

TOTAL DRAINAGE AREA UP TO WETLAND IS

$$22 \text{ AC} + 17 \text{ AC} = 39 \text{ AC}$$

(F-1) (PORTION F-2 UP TO WETLAND)

FOR RUNOFF VOLUME TO BE TREATED TO WATER QUALITY SWALE ^(WQV)

IMPERVIOUS AREA* = 21 ACRES

* ASSUMES FULL BUILD OUT OF KLOTZ PROPERTY

• IF TREAT 0.5 IN RUNOFF VOLUME TO BE TREATED:

$$\frac{(0.5 \text{ IN})(21 \text{ AC})(43560 \text{ FT}^2/\text{AC})(\text{FT})}{12 \text{ IN}} = \underline{\underline{38,115 \text{ FT}^3}}$$
$$= \underline{\underline{0.88 \text{ AC-FT}}}$$

• IF TREAT 1" RUNOFF VOLUME =

$$\underline{\underline{76,230 \text{ FT}^3}}$$
$$\underline{\underline{1.75 \text{ AC-FT}}}$$

FOR WQV TO BE TREATED FOR SEDIMENT TRAP (FOREBAY) FROM 'JOB LOT' PROPERTY

IMPERVIOUS D.A = 6.8 AC

MA DEP GUIDELINES RECOMMEND TREATING 0.1"

$$\frac{0.1 \text{ IN} (6.8 \text{ AC})(43560 \text{ FT}^2/\text{AC})(\text{FT})}{12 \text{ IN}} = \underline{\underline{2470 \text{ FT}^3}}$$

JOB NO. 01146
DATE _____
BY _____
CH'D BY _____

J & D CIVIL
ENGINEERS
401 RAVENELLE ROAD
North Grosvenordale, CT 06255
(860) 923-2920 FAX (860) 923-3487

SHEET NO. 2 OF 2

JOB _____
SUBJECT _____
CLIENT _____

DESIGN SEDIMENT FOREBAY FOR RUNOFF FROM
'JOB LOT' PLAZA

COMMENTS: CONC BOTTOM PREFERABLE FOR MAINTAINENCE
OPEN UNIT EASIER TO MAINTAIN BUT
NOT AS SAFE

IF DEPTH = 4' THE BOTTOM AREA = $\frac{2470}{4} = 617 \text{ FT}^2$
OR ABOUT 15' x 40'

WITH THIS LARGE SIZE CONC BOTTOM OR CLOSED
UNITS PROBABLY NOT FINANCIALLY FEASIBLE
∴ DESIGN OPEN, RIPRAP UNIT SIMILAR TO
POT'S

SEE DESIGN PLAN: SET BOTTOM ELEV @ 221 w/
OVERFLOW EL INTO STORMWATER
QUALITY SWALE @ 225.0

CHECK SIZE OF WATER QUALITY SWALE

EFFECTIVE SIZE FROM EL 218-222

<u>ELEV.</u>	<u>AREA (FT²)</u>	<u>AVE AREA</u>	<u>VOL (FT³)</u>	<u>CUM VOL (FT³)</u>
218	3100		0	
220	9820	6460	12,920	12,920
222	19,440	14,630	29,260	42,180

∴ STORAGE / SIZE = 42,180 FT³

> 38,115 ∴ OK → GOOD

Jana Roberson

From: Syl Pauley <Syl.pauley@neccog.org>
Sent: Monday, August 07, 2023 11:10 AM
To: Margaret Washburn
Cc: Jana Roberson
Subject: Townsend Route 6 Self-Storage / Commercial Development

Hi Margaret,

I have reviewed CHA's July 28, 2023 response to my review comments of July 5 & 10, which were prepared by Peter Parent, P.E., and the revised plans with revision date of July 21, 2023. Mr. Parent addressed all of my comments and the plans were revised accordingly. Therefore, I find the revised plans to be satisfactory and have no additional comments.

Syl

PLANNING AND ZONING COMMISSION
TOWN OF BROOKLYN
CONNECTICUT

Received Date 11/14/22

Application #SP 22-006
Check # _____

APPLICATION FOR SPECIAL PERMIT

Name of Applicant Mindy J. Delp Phone 203-577-8788
Mailing Address 481 Pomfret Road, Brooklyn, CT 06834 Phone _____

Name of Engineer/Surveyor _____
Address _____
Contact Person _____ Phone _____ Fax _____

Name of Attorney _____
Address _____
Phone _____ Fax _____

Property location/address 481 Pomfret Road, Brooklyn, CT 06834
Map# 27 Lot# 4 Zone RA/Scenic Total Acres 3 acres
Sewage Disposal: Private Public Existing _____ Proposed _____
Water: Private Public Existing _____ Proposed _____

Proposed Activity Retail shop selling locally made craft items.
State Route Business Enterprise

Compliance with Article 4, Site Plan Requirements

Is parcel located within 500 feet of an adjoining Town? NO

The following shall accompany the application when required:

- Fee \$ _____ State Fee (\$60.00) _____ 3 copies of plans _____ Sanitary Report _____
4.5.5 Application/ Report of Decision from the Inland Wetlands Commission
4.5.5 Applications filed with other Agencies
12.1 Erosion and Sediment Control Plans

The owner and applicant hereby grant the Brooklyn Planning and Zoning Commission, the Board of Selectman, Authorized Agents of the Planning and Zoning Commission or Board of Selectman, permission to enter the property to which the application is requested for the purpose of inspection and enforcement of the Zoning regulations and the Subdivision regulations of the Town of Brooklyn

Applicant: Mindy J. Delp Date 8/1/22

Owner: Mindy J. Delp Date 8/1/22

*Note: All consulting fees shall be paid by the applicant

November 1, 2022

To the Planning and Zoning Commission;

I am writing a letter to express my desire to open a craft shop, to be housed in an existing historic outbuilding on my property. I believe I've read all the relevant parts of the Zoning regulations that apply and that I was referred to in order to write this proposal, and will address them below. But before I get to that, I would like to give you a more general overview of the intent of this project.

As a craftsman, I am only too well aware of how difficult it is to make any kind of a living doing craft. Most galleries take a significant amount of the selling price of your work, up to and including 50%, in exchange for allowing you to show your work in their shop. Thus you need to price items high in order to make money, and that of course in turn reduces the probability that you will sell them at all. Making a living wage as a craftsman is very difficult.

With that in mind, my intent for this craft shop is threefold:

1. This venture is a labor of love, and the primary intent is to help other local artisans in the area to recoup most of the value of their sales. Since I own and run another business that supports me, I don't need to make money via the craft shop beyond what it takes to pay for utilities for it; therefore I plan to take very little, if any, commission on articles that I sell, which is highly uncommon. In this way, the local artisans that show and sell their work at my shop will be able to keep all or most of the money the sale of their wares generates.
2. Having moved to this area fairly recently, I would like to connect and possibly collaborate with other local artisans,
3. Having a craft shop is a lifelong dream of mine, one that I can finally realize now that I am retired from a full time job.

I will be selling primarily quilts and other quilted items (eg, table runners; wall hangings) and also handmade one-of-a-kind jewelry. Other artisans who have expressed their interest to me in displaying their work include a woodworker, a potter, a knitter, and a painter.

I should also mention that another outbuilding on my property, adjacent to the one I am proposing here for use, was previously approved for use and issued a Special Permit as an art gallery by Normand Chartier, for the production, display, and sale of paintings. (He did not, however, register the permit). Although some of the details of his previously submitted site plan, like the width of the driveway, were inaccurate, the rest of the diagram sketch of the property layout he provided to the Planning and Zoning Commission is accurate and remains the same. (See pages 6-9). Also, for a better physical perspective of the building here proposed for a craft shop, please refer to pages 10 and 11, which show the building previously used as Norm's art gallery and the adjacent building that I am proposing here for my use.

I'll try to address the relevant items in the Brooklyn Zoning Regulations that I was directed to in my previous email correspondences with persons in the Zoning and Planning office. Having read the regulations, it seems Section 6.B, State Route Business Enterprise, and 5.A, Scenic Route Overlay Zone are most applicable to the project I am proposing,

Section 6.B.2 State Route Business Enterprise

Section 6.B.2.1.

1. My property is located at 481 Pomfret Road, which is Scenic Highway Route 169.
2. This section shall only authorize the following uses:
 - a. Adult Day Care Center
 - b. Art Studio
 - c. Antiques Sales
 - d. Craftsperson, including accessory sales of craft items created by the craftsperson**
 - e. Offices, Business or Administrative

Section 6.B.2.2

1. Establishment of a State Route Business Enterprise requires granting of a Special Permit by the Commission in accordance with Section 9.D of these regulations. (See below)

Section 9.D.3.1

9.D.3. SUBMISSION REQUIREMENTS 1. Each application for a Special Permit shall be accompanied by a complete Site Plan application in accordance with Section 9.C **unless the Zoning Enforcement Officer finds that there are no physical changes proposed to the site or any building or structure and the submission of a Site Plan application is not necessary for the Commission to evaluate the proposal. I additionally request a waiver of the site plan requirement in accordance with Section 9.D.3.5**

Nothing about the property or buildings has changed since Normand Chartier's site plan for the adjacent building was approved. Further, the only physical change proposed herein to the site is the sign attached to the building, so I'd like to suggest that this site and building is in compliance with the above section such that a site plan will not be necessary for the Commission to evaluate this proposal. If the Commission feels that attaching a sign to the building is in fact enough of a physical change to necessitate a Site Plan, then I propose to paint the Barn Quilt **directly on the building**

Section 6.B.2.3

1. "State Route Business Enterprises shall be limited to a gross floor area not to exceed 2400 square feet per lot".

This permit application is submitted for use of a building measuring 30 feet long X 23 feet wide (total 690 square feet) of which 11 feet X 14 ½ feet (total 159.5 feet) is a workroom and not a part of the shop per se. Whether including the workroom or not, the building in question is far less than the allowable 2400 square feet.

2. "State Route Business Enterprises shall:
 - a. maintain the residential character of the buildings and the lot and the neighborhood
 - b. be developed in a manner that will minimize the conflict of such use with the surrounding residential uses and its cultural and historical heritage
 - c. not negatively impact the value of surrounding residential property."

Since there will be no changes to the exterior of the building or the lot, it will maintain it's current cultural and historical heritage; there should be no conflict with the surrounding residential uses. Regarding the cultural and historical heritage, the building was constructed in the early 1800's (there is some question as to whether it was in 1803, when the highways in this part of Connecticut were incorporated, or in 1809, which the plaque on the building states). While the exterior of the building is not changing, the interior development of the building has been greatly improved for functional use, including replacing the wet basement dirt floor with a poured concrete floor and drainage system, and installing mini-splits for temperature regulation (both heat and cooling).

3. There will be no change in lot size, shape or dimension due to proposed use.
4. In order to accommodate the required "buffer 50 feet in width", the proposed parking area will be the area labeled **P** in the diagram on page 9.
5. A craft shop typically doesn't draw many customers; I doubt there would ever be more than one or 2 cars present at a time. There should be no impact on or impediment to vehicular traffic in the public roadway.
6. I anticipate the shop will be open from 10:00 am to 5:00 pm, on Saturday and Sunday, and possibly one or two weekdays if demand dictates. I also anticipate that the shop will be open each year beginning in May and ending in October, with a possible "pop up" date in November to attract Christmas gift customers. These proposed hours and dates are flexible, pending the Zoning Commission's recommendations.

Addressing other relevant sections of the Brooklyn Zoning Regulations:

Section 5.A, Scenic Route 169 Overlay Zone

5.A.1 – The proposed shop qualifies as a State Route Business Enterprise in accordance with Section 6.B.2.d, “Craftsperson including accessory sales of craft items created by the craftsperson”. Although I expect to make many of the items that will be offered for sale (jewelry, quilts, and pottery), since the primary goal of the proposed shop is to help other local craftspersons support their businesses this proposal requests permission for craft items created by craftspersons other than myself to be sold also.

5.A.2 – The proposed shop will be housed in a building that is visible from Route 169.

5.A.3 – Permitted uses within the Scenic Route 169 Overlay Zone are the same as those allowed in section 3.C; in this case 3.C.2.6 State Route Business Enterprise in accordance with Section 6.B.2. Also re: 3.C.3.2.1: there is sufficient room for approximately 2 off street parking spaces.

5.A.4 – The building in question has existed on site, as is, since the early 1800’s; no changes to the exterior of the building are proposed except for a “Barn Quilt” sign. These signs are quite common in Lancaster, Pennsylvania where I lived before moving to Connecticut, and are used to decorate old buildings and barns. (See example see illustrations, pages 12-15). As you can see from the old barns in the illustrations, having a quilt sign on this old building would be quite in keeping with the historic character of this 1800’s building.

5.A.5.1-5 – There will be no changes to the orientation or layout of the building, open space surrounding the building, a nearby significant mature magnolia tree or any of the many stone walls currently present on the property.

5.A.5.6 -There will only be 1 exterior sign, and as described elsewhere in this application, it will be a barn quilt and be very much compatible with the old building it will be on.

5.A.5.12 – The Barn Quilt sign will be painted on wood.

Since there is no part of Section 7 describing sign regulations in the State Route Business Enterprise Zone or Scenic Route 169 Overlay Zone, it seems appropriate to follow the guidelines set forth in Section 7.A.3.

7.A.3.3. NEIGHBORHOOD BUSINESS ZONE / RESTRICTED BUSINESS ZONE:

- a. Wall Sign - Wall signs shall be permitted provided that: a. The aggregate area of all wall signs shall not exceed one (1) square foot per lineal foot of facade upon which it is attached.

- b. Such signs are mounted to the wall (roofs and overhangs not included).
- c. Such signs are mounted parallel to the face of the building with no part thereof (including any illuminating devices) projecting more than 12 inches beyond the face of the building.
- d. No such sign shall extend or project higher than the wall upon which it is located.

The proposed quilt wall sign will be in compliance with all these requirements; the size of the quilt wall sign will be approximately 5 ft x 5 ft, or 25 square feet, which is well within the restricted size for the facade it will be attached to, which measures 30 lineal feet long x 1 ½ stories high. (See pages 12-15 for examples of Barn Quilts.) There is currently no plan for illuminating the sign.

Finally, I've included in this proposal some examples of my own work that would be sold in the shop, both jewelry (pg 16) and small quilts for use as warm throw blankets or wall hangings (pgs 17-20).

Thank you for your time and consideration, and I look forward to your response to this proposal, and to the next steps to make this hope a reality.

Normand

TOWN OF BROOKLYN

Chartiers

PLANNING AND ZONING COMMISSION

original application

for art studio/gallery

APPLICATION FOR SITE PLAN REVIEW

OFFICE USE ONLY

APPLICATION NUMBER PR 97.6

DATE OF PRE-APPLICATION APPROVAL _____

DAY OF RECEIPT _____ MAD _____

FEE \$100 CHECK # 2857

RECEIVED FROM N. CHARTIER

APPLICANT: Normand L. Chartier PHONE: 779-1104
 ADDRESS: 481 Pomfret Rd. (Rt. 169)
Brooklyn, CT 06234
 OWNER: SAME PHONE: _____

PROPERTY LOCATION: 481 POMFRET RT (RT. 169)
 MAP: #27 LOT: 4 ZONE: R/A
 PROPOSED ACTIVITY: SEASONAL, PART TIME,
ART GALLERY

IF CHANGE OF USE, PREVIOUS USE: VACANT OLD BARN
 AREA OF PROPOSED STRUCTURE(S) OR EXPANSION: _____

UTILITIES: SEPTIC ON SITE MUNICIPAL
 WATER PRIVATE WELL CRYSTAL WATER

DOES APPLICATION REQUIRE A SPECIAL PERMIT? No
 VARIANCES OBTAINED: NONE
 DATE: _____ COMMENTS: _____

PLANNING AND ZONING COMMISSION
TOWN OF BROOKLYN
CONNECTICUT 06234

HOME OCCUPATION PERMIT

PERMIT # ZR SPR-97-6 DATE 2 JULY 97
APPLICANT'S NAME NORMAN CHARTIER PHONE 779-1104
ADDRESS 481 POMFRET ROAD
OWNER OF LAND SAME PHONE SAME
ADDRESS SAME
STREET LOCATION OF PROPERTY SAME
PROPOSED ACTIVITY SEASONAL, PART-TIME ART
GALLERY

If landowner and applicant are not the same, written permission of the landowner must be obtained and attached.

If approved, this occupation must be carried on according to the definition of Home Occupation as it appears in Section 4. Definitions in the Zoning Regulations of the Town of Brooklyn.

THIS BOX FOR OFFICE USE ONLY

APPROVED _____ DISAPPROVED _____ DATE _____

REASON FOR DISAPPROVAL _____

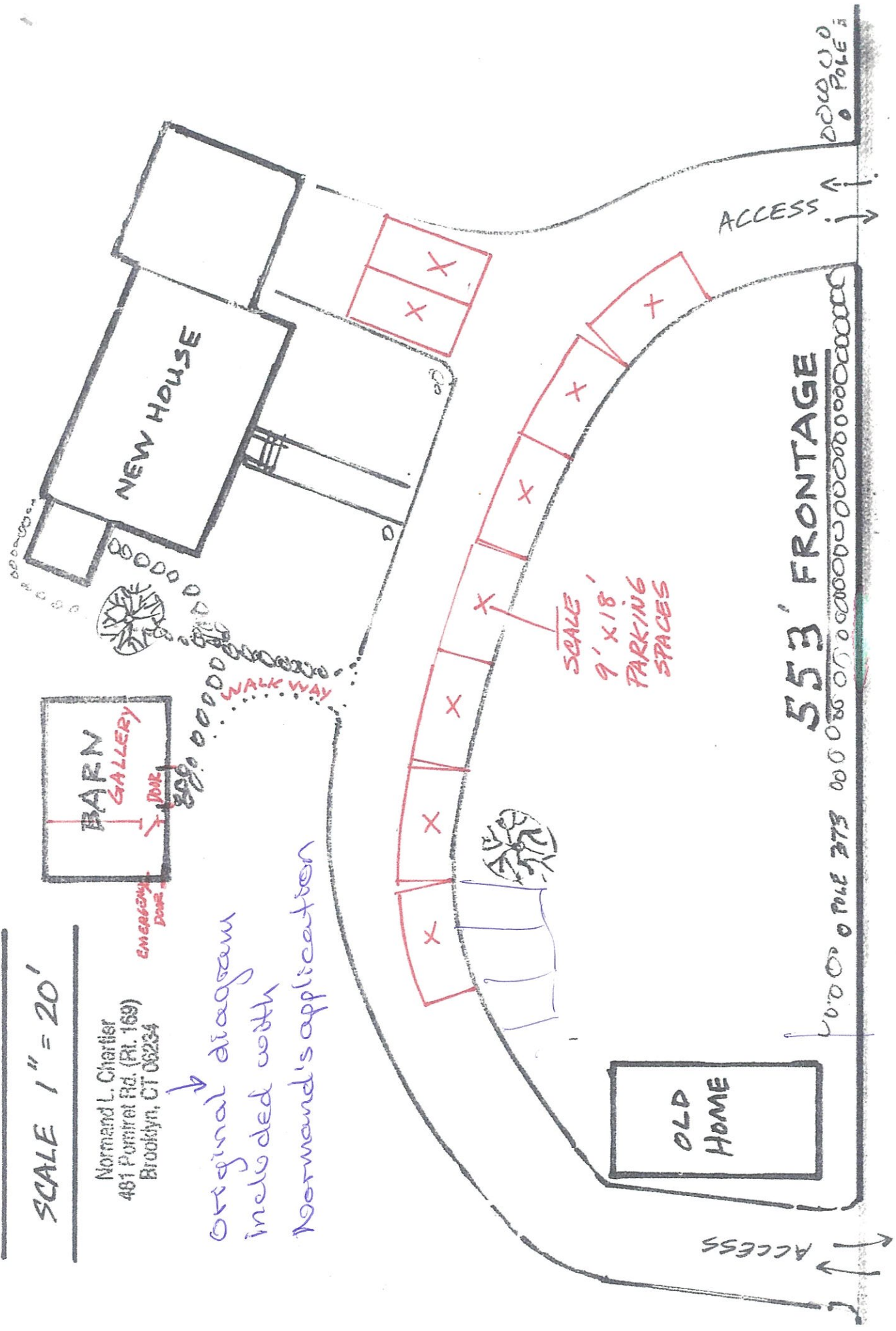
MAP _____ LOT _____ ZONE _____

ZONING ENFORCEMENT OFFICER

SCALE 1" = 20'

Normand L. Chartier
481 Pomfret Rd. (Rt. 169)
Brooklyn, CT 06234

original diagram
included with
Normand's application



ROUTE 169
-8-

Building
proposed
for craft
shop



Adjacent barn
previously
approved as art
studio/gallery
for Normand
Chartier

This is the building proposed for a craft store

This was Normand Charvet's Art studio/gallery



proposed barn
apilt sign

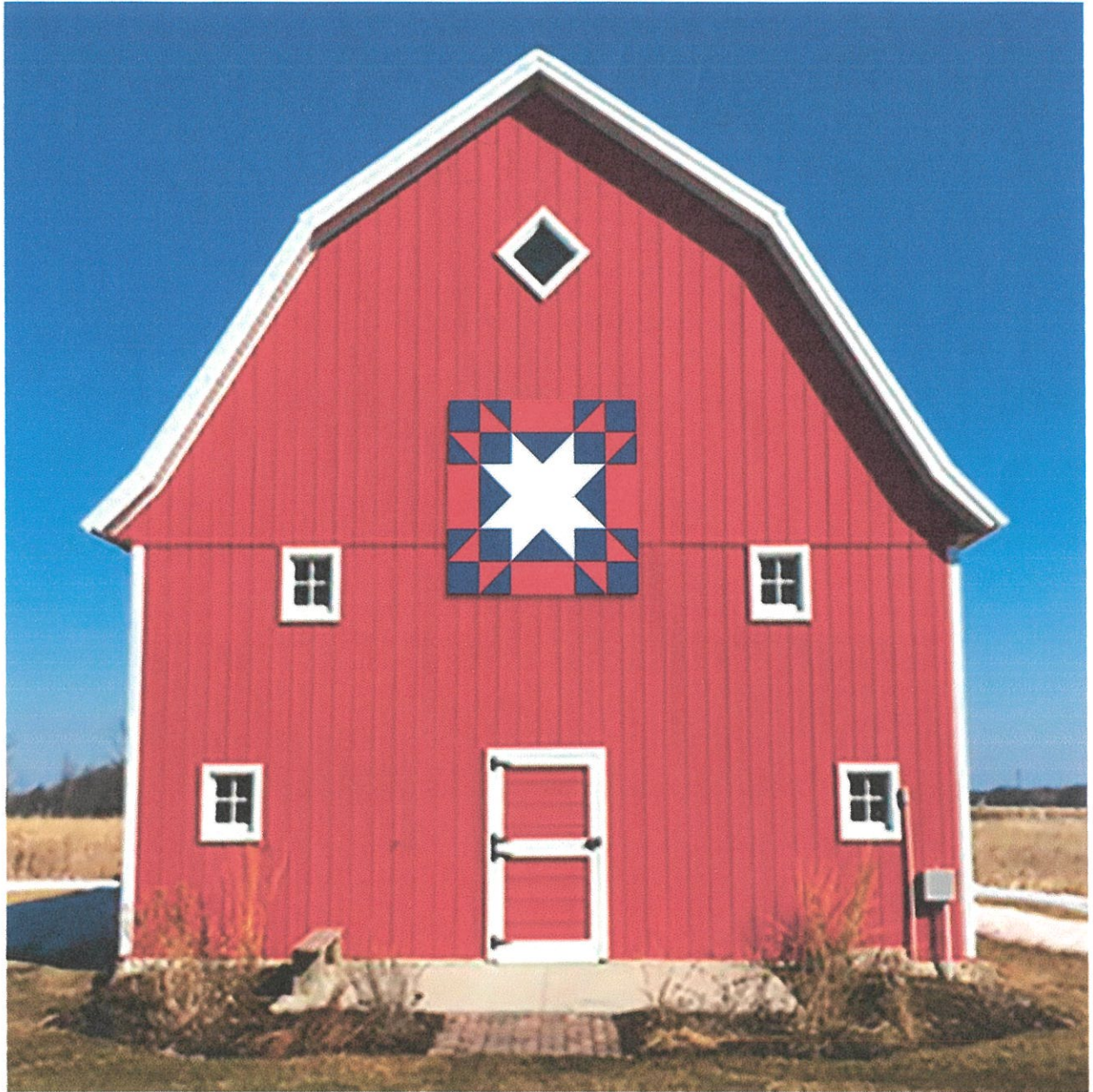
- 11 -

FOLLOWING THE BARN QUILT TRAIL

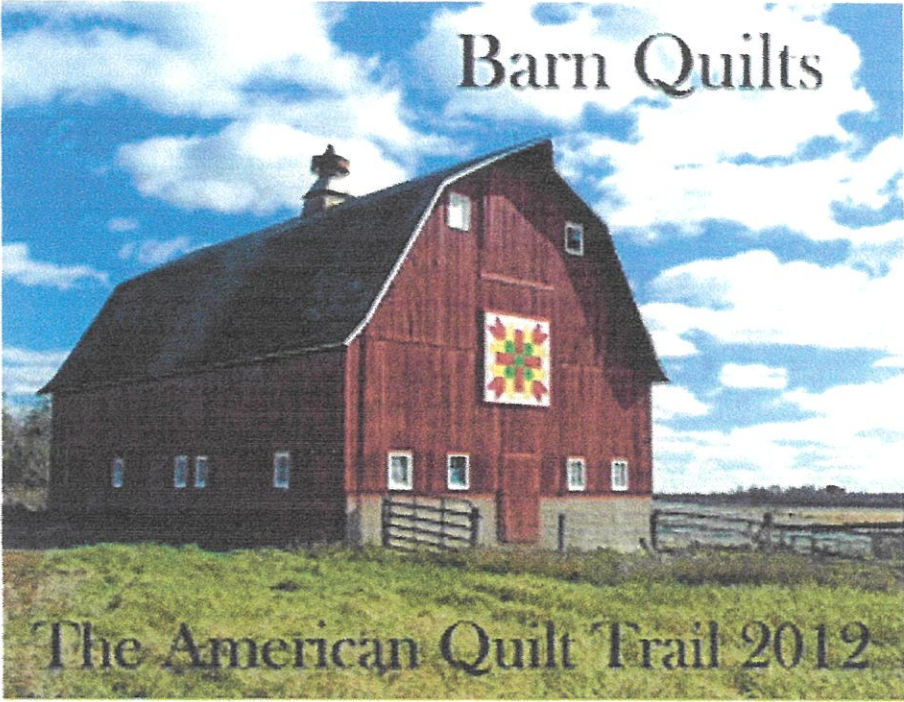
Suzi Parron

FOREWORD BY
DONNA SUE GROVES





-13-







16







18-



-19-





**TOWN OF BROOKLYN
PLANNING AND ZONING COMMISSION**

**REQUEST FOR CHANGE
IN
ZONING REGULATIONS**

Date 7/4/23 Check # _____ Application #ZRC 23-005

Application Fee: \$250 _____ State Fee: \$60 _____ Publication Fee: \$600 _____

Public Hearing Date 8/15/23 Commission Action _____ Effective Date _____

Name of Applicant BROOKLYN PZC Phone _____

Mailing Address _____

REQUEST TO AMEND ARTICLE(S) SEC. 5.D. SECTION(S) _____

If more than one Article is requested please attach separate sheet for each one

PARAGRAPH TO CHANGE _____ OF THE ZONING REGULATIONS

REQUEST TO CHANGE:

FLOODPLAIN OVERLAY ZONE

REASON FOR REQUEST:

REQUIRED FOR PARTICIPATION IN THE NATIONAL
FLOOD INSURANCE PROGRAM (NFIP).

Note: A petition may be filed at the Hearing by 20% or more of the area lots included in such a change within 500 ft of the property under Section 16.5 of the Zoning Regulations

5.D FLOODPLAIN OVERLAY ZONE

5.D.1. PURPOSE

The Floodplain Overlay Zone is established to help inform people of the location of flood hazard areas within the Town of Brooklyn as identified by the Federal Emergency Management Agency (FEMA).

5.D.2 APPLICABILITY

The provisions of the Floodplain Overlay Zone, **including this section 5.D and Appendix D – Floodplain Management Regulations**, and the requirements of the ~~Brooklyn Flood Damage Prevention Ordinance (Brooklyn Town Code Chapter XII – Flood Damage Prevention)~~ shall apply in addition to the requirements of the underlying zone or any other zoning district.

5.D.3 BOUNDARIES

The official boundaries of the Floodplain Overlay Zone are shown on the Flood Hazard Boundary ~~Insurance~~ **Rate Map (FIRM)** for Brooklyn, as amended, which is on file in the Town Clerk's office.

5.D.4 PROVISIONS

1. Unless otherwise permitted by the **Floodplain Overlay Zone** ~~Brooklyn Flood Damage Prevention Ordinance~~, any proposal for a development within the Floodplain Overlay Zone shall include references to any base flood elevation data available from FEMA.
2. Unless otherwise permitted by the **Floodplain Overlay Zone** ~~Brooklyn Flood Damage Prevention Ordinance~~, residential structures within the Floodplain Overlay Zone shall have the lowest floor, including basement, elevated to or above base flood elevation **plus one (1.0) foot**.
3. Unless otherwise permitted by the **Floodplain Overlay Zone** ~~Brooklyn Flood Damage Prevention Ordinance~~, non-residential structures within the Floodplain Overlay Zone shall have the lowest floor ~~level~~, including basement, **dry** flood-proofed or elevated to ~~level of~~ **or above** the base flood elevation **plus one (1.0) foot**.
4. Unless otherwise permitted by the **Floodplain Overlay Zone** ~~Brooklyn Flood Damage Prevention Ordinance~~, new and replacement water supply systems within the Floodplain Overlay Zone shall be designed to eliminate infiltration of floodwaters into the systems.
5. Unless otherwise permitted by the **Floodplain Overlay Zone** ~~Brooklyn Flood Damage Prevention Ordinance~~, new and replacement on-site septic systems within the Floodplain Overlay Zone shall be located to avoid impairment during flooding, and all utilities shall be located to avoid flood damage.
6. In the event of a conflict with provisions in other Sections of these Regulations, the more restrictive provision shall apply.

10.D APPENDIX D – FLOODPLAIN MANAGEMENT REGULATIONS

NATIONAL FLOOD INSURANCE PROGRAM (NFIP) Inland/Riverine Community (AE and A Zones only) Level “D” Community

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1.0 STATUTORY AUTHORIZATION AND PURPOSE

1.1 STATUTORY AUTHORIZATION

The Legislature of the State of Connecticut has in Title 7, Chapter 98, Section 7-148(c)(7)(A) and in Title 8, Chapter 124, Section 8-2 of the General Statutes delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the Planning and Zoning Commission of the Town of Brooklyn, Connecticut, does ordain as follows:

1.2 FINDING OF FACT

The flood hazard areas of the Town of Brooklyn are subject to periodic flood inundation which results in the loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

These flood losses are caused by the cumulative effect of obstructions in the floodplains causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or hazards to other lands which are inadequately elevated, floodproofed, or otherwise unprotected from flood damage. Uncontrolled development and use of the floodplains can adversely affect the community.

The Town of Brooklyn has voluntarily participated in the National Flood Insurance Program (NFIP) since January 1, 1976. The NFIP is founded on a mutual agreement between the federal government and each participating community. Local, state and federal governments must share roles and responsibilities to meet the goals and objectives of the NFIP. The community's role is of paramount importance. Property owners are able to receive federally-subsidized flood insurance only if the community enacts and enforces the minimum floodplain regulations required for participation in the NFIP.

1.3 STATEMENT OF PURPOSE

It is the purpose of this regulation to regulate floodplain development, promote public health, safety, and general welfare, and minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- 1.3.1 To protect human life and health, and prevent damage to property;
- 1.3.2 To minimize expenditure of public funds for costly flood control projects;
- 1.3.3 To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- 1.3.4 To minimize prolonged business interruptions and other economic disruptions;
- 1.3.5 To minimize damage to public facilities, infrastructure and utilities, such as water and gas mains, electric, telephone and sewer lines, and streets and bridges, located in the floodplain;
- 1.3.6 To help maintain a stable tax base by providing for the sound use and development of flood hazard areas in such a manner as to minimize flood damage and flood blight areas;
- 1.3.7 To ensure that potential buyers are notified that property is in a flood hazard area;
- 1.3.8 To prevent increase in flood heights that could increase flood damage and result in conflicts between property owners;
- 1.3.9 To ensure that those who occupy the flood hazard areas assume responsibility for their actions;
and
- 1.3.10 To discourage development in a floodplain if there is any practicable alternative to locate the activity, use or structure outside of the floodplain.

1.4 OBJECTIVES

In order to accomplish its purposes, this regulation includes objectives, methods and provisions that:

- 1.4.1 Restrict or prohibit uses which are dangerous to health, safety and property due to flood or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
- 1.4.2 Require that uses vulnerable to floods, including facilities that serve such uses, be protected against flood damage at the time of initial construction;
- 1.4.3 Control the alteration of natural floodplains, stream channels, and natural protective barriers that are involved in the accommodation of flood waters;
- 1.4.4 Control filling, grading, dredging and other development which may increase erosion or flood damage; and
- 1.4.5 Prevent or regulate the construction of barriers or obstructions which will unnaturally divert flood waters or which may increase flood hazards to other lands.

2.0 DEFINITIONS

Unless specifically defined below, words and phrases used in this regulation shall have the same meaning as they have in common usage and to give this regulation its most reasonable application.

Area of Shallow Flooding (*for a community with AO or AH Zones only*) - A designated AO, AH, AR/AO, AR/AH, or VO zone on a community's Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Base Flood – The flood having a one (1) percent chance of being equaled or exceeded in any given year, also referred to as the one hundred (100) year flood, as published by the Federal Emergency Management Agency (FEMA) as part of a Flood Insurance Study (FIS) and depicted on a Flood Insurance Rate Map (FIRM).

Base Flood Elevation (BFE) – The elevation of the crest of the base flood or 100-year flood. The height in relation to mean sea level expected to be reached by the waters of the base flood at pertinent points in the floodplains of coastal and riverine areas.

Basement – Any area of the building having its floor subgrade (below ground level) on all sides.

Building – see definition for “Structure”.

Cost – As related to substantial improvements, the cost of any reconstruction, rehabilitation, addition, alteration, repair or other improvement of a structure shall be established by a detailed written contractor's estimate. The estimate shall include, but not be limited to: the cost of materials (interior finishing elements, structural elements, utility and service equipment); sales tax on materials, building equipment and fixtures, including heating and air conditioning and utility meters; labor; built-in appliances; demolition and site preparation; repairs made to damaged parts of the building worked on at the same time; contractor's overhead; contractor's profit; and grand total. Items to be excluded include: cost of plans and specifications, survey costs, permit fees, outside improvements such as landscaping, sidewalks, fences, yard lights, irrigation systems, pole-mounted solar panels, and detached structures such as garages, sheds, and gazebos.

Development – Any man-made change to improved or unimproved real estate, including but not limited to the construction of buildings or structures; the construction of additions, alterations or substantial improvements to buildings or structures; the placement of buildings or structures; mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment; the storage, deposition, or extraction of materials; and

the installation, repair or removal of public or private sewage disposal systems or water supply facilities.

Existing Manufactured Home Park or Subdivision – A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured home are to be affixed (including, as a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before September 7, 2023, the effective date of the floodplain management regulations adopted by the community.

Expansion to an Existing Manufactured Home Park or Subdivision – The preparation of additional sites by the construction of facilities for servicing the lots on which the manufacturing homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Federal Emergency Management Agency (FEMA) - The federal agency that administers the National Flood Insurance Program (NFIP).

Finished Living Space (*optional definition, include only if used in regulation language for fully enclosed areas below BFE*) – As related to fully enclosed areas below the base flood elevation (BFE), a space that is, but is not limited to, heated and/or cooled, contains finished floors, has sheetrock walls that may or may not be painted or wallpapered, and other amenities such as furniture, appliances, bathrooms, fireplaces and other items that are easily damaged by floodwaters and expensive to clean, repair or replace. Unfinished enclosed areas below the BFE should comply with FEMA Technical Bulletin 2, Flood-Damage Resistant Materials Requirements.

Flood or Flooding – A general and temporary condition of partial or complete inundation of normally dry land areas from either the overflow of inland or tidal waters, or the unusual and rapid accumulation/runoff of surface waters from any source.

Flood Insurance Rate Map (FIRM) – The official map of a community on which the Federal Emergency Management Agency (FEMA) has delineated both the special flood hazard areas (100-year floodplain) and the insurance risk premium zones applicable to a community.

Flood Insurance Study (FIS) – The official study of a community in which the Federal Emergency Management Agency (FEMA) has conducted an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations.

Floodway – The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1.0) foot. For the purposes of these regulations, the term “Regulatory Floodway” is synonymous in meaning with the term “Floodway”.

Functionally Dependent Use or Facility – A use or facility that cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities. The term does not include seafood processing facilities, long-term storage, manufacturing, sales or service facilities.

Highest Adjacent Grade (HAG) (*for community with AO/AH zones*) – The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Historic Structure – Any structure that is: (a) Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; (b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historic significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; (c) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or (d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either: (1) By an approved state program as determined by the Secretary of the Interior or (2) Directly by the Secretary of the Interior in states without approved programs.

Lowest Floor – The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant

enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area is not considered a building's lowest floor, provided that such an area meets the design requirements specified in Section 5.3.1.3 of this regulation.

Manufactured Home – A structure, transportable in one (1) or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term also includes park trailers, travel trailers, recreational vehicles and other similar vehicles or transportable structures placed on a site for one hundred and eighty (180) consecutive days or longer and intended to be improved property.

Manufactured Home Park or Subdivision – A parcel or contiguous parcels of land divided into two (2) or more manufactured home lots for rent or sale.

Market Value – As related to substantial improvement and substantial damage, the market value of the structure shall be determined by **(choose one of the following: an independent appraisal by a professional appraiser; the property's tax assessment, minus land value; the replacement cost minus depreciation of the structure; the structure's Actual Cash Value)** prior to the start of the initial repair or improvement, or in the case of damage, the value of the structure prior to the damage occurring.

Mean Sea Level (MSL) – The North American Vertical Datum (NAVD) of 1988 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map (FIRM) are referenced.

New Construction – Structures for which the "start of construction" commenced on or after September 7, 2023, the effective date of the floodplain management regulations, and includes any subsequent improvements to such structures.

New Manufactured Home Park or Subdivision – A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after September 7, 2023, the effective date of the floodplain management regulation adopted by the community.

Recreational Vehicle – A vehicle which is: (a) built on a single chassis; (b) four hundred (400) square feet or less when measured at the largest horizontal projection; (c) designed to be self-propelled or permanently towable by a light duty truck; and (d) designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal use.

Special Flood Hazard Area (SFHA) – The land in the floodplain within a community subject to a one (1) percent or greater chance of flooding in any given year. SFHAs are determined utilizing the base flood elevations (BFE) provided on the flood profiles in the Flood Insurance Study (FIS) for a community. BFEs provided on Flood Insurance Rate Map (FIRM) are only approximate (rounded up or down) and should be verified with the BFEs published in the FIS for a specific location. SFHAs include, but are not necessarily limited to, the land shown as Zones A, A1-30, AE, AO, AH on a FIRM. The SFHA is also called the Area of Special Flood Hazard.

Start of Construction – For other than new construction or substantial improvements under the Coastal Barrier Resources Act (P.L. 97-348), includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, substantial improvement or other improvement was within one hundred and eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation, or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erections of temporary forms; not does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure – A walled and roofed building which is principally above ground, including a manufactured home, a gas or liquid storage tank, or other man-made facilities or infrastructures.

Substantial Damage – Damage of any origin sustained by a structure, whereby the cost of restoring the structure to its pre-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial Improvement – Any combination of repairs, reconstruction, rehabilitation, alterations, additions or other improvements to a structure, taking place during a ten (10) year period, in which the cumulative cost equals or exceeds fifty (50) percent of the market value of the structure before the “start of construction” of the improvement. This term includes structures that have incurred “substantial damage”, regardless of the actual repair work performed. For purposes of this definition, “substantial improvement” is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either: (1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or (2) Any alteration of a “historic structure”, provided that the alteration will not preclude the structure’s continued designation as a “historic structure”.

Variance - A grant of relief by a community from the terms of the floodplain management regulation that allows construction in a manner otherwise prohibited and where specific enforcement would result in unnecessary hardship.

Violation – Failure of a structure or other development to be fully compliant with the community’s floodplain management regulations. A structure or other development without required permits, lowest floor elevation documentation, flood-proofing certificates or required floodway encroachment calculations is presumed to be in violation until such time as that documentation is provided.

Water Surface Elevation – The height, in relation to the North American Vertical Datum (NAVD) of 1988 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

3.0 GENERAL PROVISIONS

3.1 AREAS TO WHICH THIS REGULATION APPLIES

This regulation shall apply to all Special Flood Hazard Areas (SFHA) within the Town of Brooklyn.

3.2 BASIS FOR ESTABLISHING THE SPECIAL FLOOD HAZARD AREAS (SFHA)

The Special Flood Hazard Areas (SFHA) identified by the Federal Emergency Management.

3.3 STRUCTURES ALREADY IN COMPLIANCE

A structure or development already in compliance with this regulation shall not be made non-compliant by any alteration, modification, repair, reconstruction or improvement and must also comply with other applicable local, state, and federal regulations. No structure or land shall hereafter be located, extended, converted, modified or structurally altered without full compliance with the terms of this regulation and other applicable regulations.

3.4 ABROGATION AND GREATER RESTRICTIONS

This regulation is not intended to repeal, abrogate or impair any existing easements, covenants, or deed restrictions. However, where this regulation and another ordinance, regulation easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

3.5 INTERPRETATION

In the interpretation and application of this regulation, all provisions shall be: 1) considered as minimum requirements; 2) liberally construed in favor of the governing body, and; 3) deemed neither to limit nor repeal any other powers granted under State statutes.

3.6 WARNING AND DISCLAIMER OF LIABILITY

The degree of flood protection required by this regulation is considered the minimum reasonable for regulatory purposes and is based on scientific and engineering consideration and research. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This regulation does not imply nor guarantee that land outside the Special Flood Hazard Area or uses permitted in such areas will be free from flooding and flood damages. This regulation shall not create liability on the part of the Town of Brooklyn or by any officer or employee thereof for any flood damages that result from reliance on this regulation or any administrative decision lawfully made thereunder.

The Town of Brooklyn, its officers and employees shall assume no liability for another person's reliance on any maps, data or information provided by the Town of Brooklyn.

3.7 SEVERABILITY

If any section, subsection, paragraph, sentence, clause, or phrase of this regulation should be declared invalid for any reason whatsoever, such decision shall not affect the remaining portions of this regulation, which shall remain in full force and effect; and to this end the provisions of this regulation are hereby declared to be severable.

4.0 ADMINISTRATION

4.1 DESIGNATION OF THE LOCAL ADMINISTRATOR

The Zoning Enforcement Officer is hereby appointed to administer, implement and enforce the provisions of this regulation.

4.2 CERTIFICATION

Where required under this regulation, a registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of this regulation. Such certification must be provided to the Zoning Enforcement Officer.

4.3 ESTABLISHMENT OF THE FLOOD MANAGEMENT SECTION OF THE ZONING PERMIT

The flood management section of the Zoning Permit must be completed in conformance with the provisions of this regulation prior to the commencement of any development activities. Permits issued under this regulation shall expire if actual construction of a permitted structure does not commence within one hundred and eighty (180) days of the permit approval date.

4.4 PERMIT APPLICATION PROCEDURES

A zoning permit is hereby established for all construction and other development to be undertaken in Special Flood Hazard Areas in this community. Prior to any development activities, application for a zoning permit shall be made to the Zoning Enforcement Officer on forms provided and may include, but not be limited to, plans in duplicate drawn to scale showing, at a minimum, the property lines and location of the parcel; the nature, location, dimensions, and elevations of the area in question; limit and extent of the 100-year floodplain and/or floodway boundary and base flood elevation(s); existing and proposed structures, fill, storage of materials, drainage facilities and the location of the foregoing. Specifically, the following information is required to be submitted to the Zoning Enforcement Officer:

4.4.1 Application Stage

The applicant shall provide at least the following information, where applicable. Additional information may be required on the permit application form.

- 4.4.1.1 Base flood elevation (BFE) for the site in question as determined in the FEMA Flood Insurance Study (FIS) or Flood Insurance Rate Map (FIRM). The FIS flood profiles provide more accurate BFE data than the FIRM. The extent of the 100-year floodplain and floodway must be depicted with a boundary line on any site plans and shown in relation to existing and proposed structures or development;
- 4.4.1.2 Elevation in relation to mean sea level of the proposed lowest floor, including basement, of all new construction, substantial improvements or repairs to structures that have sustained substantial damage;
- 4.4.1.3 Elevation in relation to mean sea level to which any non-residential new construction, substantial improvements or repair to structures that have sustained substantial damage will be dry flood-proofed;
- 4.4.1.4 Description of the extent to which any watercourse will be altered or relocated as a result of the proposed development. Computations by a registered professional engineer must be submitted that demonstrate that the altered or relocated segment will provide equal or greater conveyance than the original stream segment. The applicant must submit any maps, computations or other materials required by the Federal Emergency Management Agency (FEMA) in order to officially amend or revise the Flood Insurance Rate Map. The applicant must pay any fees or other costs assessed by FEMA for this purpose. The applicant must also provide assurances that the conveyance capacity of the altered or relocated stream segment will be maintained;
- 4.4.1.5 A statement and supporting documentation (all costs of project, market value of structure, etc.) verifying that the proposed alterations to an existing structure meets or

does not meet the criteria of the substantial improvement and/or substantial damage definition. If a development meets the definition of substantial improvement and/or substantial damage, the structure must be brought into compliance with all floodplain regulations as if it was new construction;

- 4.4.1.6 Where applicable the following certifications by a registered professional engineer or architect are required, and must be provided to the Zoning Enforcement Officer. The design and methods of construction must be certified to be in accordance with accepted standards of practice and with the provisions of Section 5.3.
- (a) Non-residential flood-proofing must meet the provisions of Section 5.3.1.2;
 - (b) Fully enclosed areas below the base flood elevation (BFE) must meet the minimum design criteria in Section 5.3.1.3;
 - (c) No (0.00) increase in floodway water surface elevations are allowed. Any development in a floodway must meet the provisions of Section 5.3.4;

4.4.2 Construction Stage

Upon completion of the applicable portion of construction, the applicant shall provide verification to the Zoning Enforcement Officer of the following as is applicable:

- 4.4.2.1. Lowest floor elevation shall be verified for:
- (a) A structure in Zones A, AE, A1-30, AO or AH is the top of the lowest floor (including basement);
 - (b) A non-residential structure which has been dry flood-proofed is the elevation to which the flood-proofing is effective (Note: For insurance purposes, a dry flood-proofed, non-residential structure is rated based on the elevation of its lowest floor unless it is floodproofed to one foot above the BFE.);
- 4.4.2.2. Deficiencies detected by the review of the above listed shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed. Failure to submit the survey or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.

4.5 DUTIES AND RESPONSIBILITIES OF THE LOCAL ADMINISTRATOR

Duties of the Zoning Enforcement Officer shall include, but not be limited to:

- 4.5.1 Review all permit applications for completeness, particularly with the requirements of Section 4.4.1.
- 4.5.2 Review all permit applications to determine whether the proposed development and building sites will be reasonably safe from flooding.
- 4.5.3 Review all development permits to assure that the permit requirements of this regulation have been satisfied.
- 4.5.4 Review all permit applications to assure that all necessary federal or state permits have been received. Require that copies of such permits be provided and maintained on file with the permit application. Such permits include, but are not limited to, Coastal Area Management (CAM) Permit, Water Diversion Permit, Dam Safety Permit, and Army Corps of Engineers 401 and 404 Permits.
- 4.5.5. Notify the regional planning agency and affected municipality at least thirty-five (35) days prior to a public hearing if any change of regulation or use of a flood zone will affect an area within five hundred (500) feet of another municipality.
- 4.5.6. Notify the adjacent communities and the Department of Energy and Environmental Protection (DEEP), Inland Water Resources Division, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
- 4.5.7. Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.
- 4.5.8. Obtain, record and maintain the elevation (in relation to mean sea level) of the lowest floor (including basement) of all new construction, substantial improvements or repair to a structure that has sustained substantial damage.

- 4.5.9. Obtain, record and maintain the elevation (in relation to mean sea level) to which the new construction, substantial improvement or repair to a structure that has sustained substantial damage has been flood-proofed.
- 4.5.10. When flood-proofing is utilized for a particular structure, the Zoning Enforcement Officer shall obtain certification from a registered professional engineer or architect, in accordance with Section 5.3.1.2.
- 4.5.11. Where interpretation is needed as to the exact location of boundaries of the area of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Zoning Enforcement Officer shall make necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this regulation.
- 4.5.12. Require the applicant to provide base flood elevation data for all proposed development, including manufactured home parks and subdivisions.
- 4.5.13. When base flood elevation data or floodway data have not been provided in accordance with Section 3.2 and Section 4.4, the Zoning Enforcement Officer shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source in order to administer the provisions of Section 5.0.
- 4.5.14. All records pertaining to the provisions of this regulation shall be obtained and maintained in the office of the Zoning Enforcement Officer.
- 4.5.15. Upon completion of the permitted development and prior to issuance of a Certificate of Occupancy (CO), necessary as-built surveys (prepared by a Connecticut Licensed Professional as per Connecticut State Statutes) and engineering and architectural certifications shall be provided to the Zoning Enforcement Officer demonstrating compliance with the approved plans and standards set forth in Section 4.4.

5.0 PROVISIONS FOR FLOOD HAZARD REDUCTION

5.1 GENERAL STANDARDS

In all Special Flood Hazard Areas (SFHAs) the following provisions are required:

- 5.1.1 New construction, substantial improvements, and structures that have sustained substantial damage shall be constructed using methods and practices that minimize flood damage.
- 5.1.2. New construction, substantial improvements, and structures that have sustained substantial damage shall be constructed with materials and utility equipment that are flood-damage resistant and conform to the provisions of FEMA Technical Bulletin 2, Flood Damage-Resistant Material Requirements. This includes, but is not limited to, flooring, interior and exterior walls, wall coverings and other materials installed below the base flood elevation plus one (1.0) foot.
- 5.1.3 New construction, substantial improvements, and repairs to structures that have sustained substantial damage shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
- 5.1.4 New construction, substantial improvements and repair to structures that have sustained substantial damage cannot be constructed or located entirely or partially over water unless they are a functionally dependent use or facility.
- 5.1.5 The bottom of all electrical, heating, plumbing, ventilation and air conditioning equipment, appliances, fixtures and components, HVAC duct work and duct systems, and any other utility service equipment, facilities, machinery, or connections servicing a structure shall be elevated one (1.0) foot above the base flood elevation (BFE). This includes, but is not limited to, furnaces, oil or propane tanks, air conditioners, heat pumps, hot water heaters, ventilation duct work, washer and dryer hook-ups, electrical junction boxes, and circuit breaker boxes. Systems, fixtures, equipment and components shall not be mounted on or penetrate through breakaway walls intended to fail under flood loads. Connections or other equipment that must be located below the BFE plus 1.0 foot elevation are permitted only when no other elevation alternative is

available and provided they are designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of the base flood event. Electrical wiring systems that must be located below the BFE plus 1.0 foot shall conform to the standards for wet locations.

- 5.1.6 New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- 5.1.7 New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharges from the system into flood waters.
- 5.1.8 On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- 5.1.9 Underground tanks shall be anchored to prevent flotation, collapse and lateral movement under conditions of the base flood. Above-ground storage tanks which are located outside or inside of a structure must be elevated one (1.0) foot above the base flood elevation (BFE) or shall be securely anchored to prevent flotation, collapse or lateral movement under conditions of the base flood. Where elevated on platforms, the platforms shall be cantilevered from or knee braced to the building or shall be supported on elevated foundations that conform to the standards for the particular flood zone as described in Section 5.3. Anchored tanks must have the top of the fill pipe located at least one (1.0) foot above the BFE and have a screw fill cap that does not allow for the infiltration of flood water.
- 5.1.10 In any portion of a watercourse that is altered or relocated, the flood carrying capacity must be maintained. Notify adjacent communities and the Connecticut Department of Energy and Environmental Protection (CTDEEP), Land and Water Resources Division (LWRD) prior to any alteration or relocation of a watercourse.
- 5.1.11 If any portion of a structure lies within the Special Flood Hazard Area (SFHA), the entire structure is considered to be located within the SFHA and must meet the construction requirements of the flood zone. The structure includes any structurally attached additions, garages, decks, porches, sunrooms, patios or any other structure attached to the main structure.
- 5.1.12 If a structure lies within two or more flood zones, the construction standards of the most restrictive zone apply to the entire structure (i.e., VE zone is more restrictive than AE zone; structure must be built to the highest BFE). The structure includes any structurally attached additions, garages, decks, porches, patios, sunrooms, or any other structure attached to the main structure.
- 5.1.13 Compensatory Storage. The water holding capacity of the floodplain, except those areas which are tidally influenced, shall not be reduced. Any reduction caused by filling, new construction or substantial improvements involving an increase in footprint to the structure, shall be compensated for by deepening and/or widening of the floodplain. Storage shall be provided on-site, unless easements have been gained from adjacent property owners; it shall be provided within the same hydraulic reach and a volume not previously used for flood storage; it shall be hydraulically comparable and incrementally equal to the theoretical volume of flood water at each elevation, up to and including the 100-year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall have an unrestricted hydraulic connection to the same waterway or water body. Compensatory storage can be provided off-site if approved by the municipality.

- 5.1.14 Equal Conveyance. Within the floodplain, except those areas which are tidally influenced, as designated on the Flood Insurance Rate Map (FIRM) for the community, encroachments resulting from filling, new construction or substantial improvements involving an increase in footprint of the structure, are prohibited unless the applicant provides certification by a registered professional engineer demonstrating, with supporting hydrologic and hydraulic analyses performed in accordance with standard engineering practice, that such encroachments shall not result in any (0.00 feet) increase in flood levels (base flood elevation). Work within the floodplain and the land adjacent to the floodplain, including work to provide compensatory storage shall not be constructed in such a way so as to cause an increase in flood stage or flood velocity.

5.2 STANDARDS FOR WATERCOURSES WITHOUT ESTABLISHED BASE FLOOD ELEVATIONS (UN-NUMBERED A ZONE), ADOPTED FLOODWAYS AND/OR FLOOD MAPPING

- 5.2.1 The Zoning Enforcement Officer shall require base flood elevation (BFE) data be provided with any application for new construction, substantial improvement, repair to structures which have sustained substantial damage or other development in Zone A without a FEMA-published BFE (un-numbered A Zone). A registered professional engineer must determine the BFE in accordance with accepted hydrologic and hydraulic engineering practices and document the technical methods used. Studies, analyses and computations shall be submitted in sufficient detail to allow thorough review and approval. The Zoning Enforcement Officer shall obtain, review and reasonably utilize any BFE and floodway data available from a federal, state or other source, including data developed for subdivision proposals, as criteria for requiring that new construction, substantial improvements, repair to structures which have sustained substantial damage or other development in un-numbered A Zones on the community's Flood Insurance Rate Map (FIRM) meet the standards in Section 4.4 and Section 5.3. If no BFE can be determined, the lowest floor, including basement, must be elevated to two (2) feet above the highest adjacent grade next to the structure.
- 5.2.2 When BFEs have been determined within Zones A1-30 and AE on the community's FIRM but a regulatory floodway has not been designated, the Zoning Enforcement Officer must require that no new construction, substantial improvements, repair to structures which have sustained substantial damage or other development, including fill, shall be permitted which will increase the water surface elevation of the base flood more than one (1.0) foot at any point within the community when all existing and anticipated development is considered cumulatively with the proposed development.
- 5.2.3 The Zoning Enforcement Officer may request floodway data of an applicant for watercourses without FEMA-published floodways. When such data is provided by an applicant or whenever such data is available from any other source (in response to the municipality's request or not), the community shall adopt a regulatory floodway based on the principle that the floodway must be able to convey the waters of the base flood without increasing the water surface elevation more than one (1.0) foot at any point within the community.
- 5.2.4 The Zoning Enforcement Officer shall obtain, review and reasonably utilize any BFE and floodway data available from a federal, state or other source, as criteria for requiring that new construction, substantial improvements, repair to structures which have sustained substantial damage or other development in any area of potential, demonstrable or historical flooding within the community meet the standards in Section 4.4 and Section 5.3.
- 5.2.5 Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Program regulations, a community may approve certain development in Zones A1-30, AE, AH, on the community's FIRM which increases the water surface elevation of the base flood by more than one (1.0) foot, provided that the community first completes all of the provisions required by Section 65.12.

5.3 SPECIFIC STANDARDS

5.3.1 Construction Standards in Special Flood Hazard Areas (SFHA), Zones A, A1-30, AE.

5.3.1.1 Residential Construction.

All new construction, substantial improvements, and repair to structures that have sustained substantial damage which are residential structures shall have the bottom of the lowest floor, including basement, elevated one (1.0) foot above the base flood elevation (BFE). Electrical, plumbing, machinery or other utility equipment that service the structure must be elevated one (1.0) foot above the BFE.

5.3.1.2 Non-Residential Construction.

All new construction, substantial improvements, and repair to structures that have sustained substantial damage which are commercial, industrial or non-residential structures shall:

- (a) Have the bottom of the lowest floor, including basement, elevated one (1.0) foot above the base flood elevation (BFE); or
- (b) In lieu of being elevated, non-residential structures may be dry flood-proofed to one (1.0) foot above the BFE provided that together with all attendant utilities and sanitary facilities the areas of the structure below the required elevation are watertight with walls substantially impermeable to the passage of water, and provided that such structures are composed of structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. A registered professional engineer or architect shall review and/or develop structural design specifications and plans for the construction, and shall certify that the design and methods of construction are in accordance with acceptable standards of practice for meeting the provisions of this section. Such certification shall be provided to the Zoning Enforcement Officer on the FEMA Floodproofing Certificate, Form 81-65.
- (c) The bottom of all electrical, plumbing, machinery or other utility equipment that service the structure must be elevated one (1.0) foot above the BFE.

5.3.1.3 Fully Enclosed Areas Below The Base Flood Elevation Of Elevated Buildings.

All new construction, substantial improvements, or repair to structures that have sustained substantial damage, whether residential or non-residential, that include fully enclosed areas formed by a foundation and other exterior walls shall have the lowest floor elevated to one (1.0) foot above the base flood elevation (BFE). The elevated building shall be designed to preclude finished living space below the lowest floor and be designed to allow for the entry and exit of flood waters to automatically equalize hydrostatic flood forces on exterior walls (wet flood-proofing). Designs for complying with this requirement must either be certified by a registered professional engineer or architect as meeting the requirements of ASCE 24 Section 2.6.2.2, or meet the following minimum criteria listed in sections (a)-(h) below:

- (a) Provide a minimum of two (2) openings (hydraulic flood vents) having a total net area of not less than one square inch for every one square foot of enclosed area subject to flooding. The enclosed area is measured on the exterior of the enclosure walls. These hydraulic openings must be located on at least two different exterior walls of each enclosed area. If the structure has more than one enclosed area, openings must be installed in the exterior walls of each enclosed area so that flood waters can enter directly from the outside;

- (b) The bottom of all openings shall be no higher than one (1.0) foot above the higher of either the final interior grade or floor elevation, or the finished exterior grade adjacent to the outside of the foundation wall. At least one side of the structure's fully enclosed area must be at or above grade. Fill placed around the foundation walls must be graded so that the elevation inside the enclosed area is equal to or higher than the adjacent outside elevation on at least one side of the building. The finished floor of the enclosed area shall be no lower than the bottom of the foundation openings. The foundation slab of a residential structure, including the slab or a crawlspace, must be set equal to the outside finished grade on at least one side of the building;
- (c) The openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic entry and exit of flood waters in both directions without any external influence or control such as human intervention, including the use of electrical and other non-automatic mechanical means. These coverings must not block or impede the automatic flow of floodwaters into and out of the enclosed area. Other coverings may be designed and certified by a registered professional engineer or approved by the Zoning Enforcement Officer;
- (d) Openings shall not be less than three (3) inches in any direction in the plane of the wall;
- (e) The area cannot be used as finished living space. Use of the enclosed area shall be the minimum necessary and shall only be used for the parking of vehicles, building access or limited storage. Access to the enclosed area shall be the minimum necessary to allow for the parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator). The enclosed area shall not be used for human habitation;
- (f) All interior walls, floor, and ceiling materials located below one (1.0) foot above the BFE shall be unfinished and resistant to flood damage-resistant in accordance with FEMA Technical Bulletin 2, Flood Damage-Resistant Requirements.
- (g) Electrical, plumbing, HVAC ductwork, machinery or other utility equipment and connections that service the structure (including, but not limited to, furnaces, oil or propane tanks, air conditioners, heat pumps, hot water heaters, ventilation, washers and dryer hook-ups, electrical junction boxes, circuit breaker boxes and food freezers) are prohibited in the fully enclosed area below the BFE plus one (1.0) foot. Utilities or service equipment located in this enclosed area, even if elevated one (1.0) foot above the BFE in the space, will subject the structure to increased flood insurance rates.
- (h) A residential building with a structurally attached garage having the floor slab below the BFE is considered an enclosed area below the BFE and must meet the standards of Sections 5.3.1.3 (a)-(g). A garage attached to a residential structure, constructed with the garage floor slab below the BFE, must be designed to allow for the automatic entry and exit of floodwaters in both directions. Flood openings or vents are required in the exterior walls of the garage or in the garage doors. Garage doors that must be manually opened do not meet the flood vent opening requirements in Section 5.3.1.3 (a)-(c). In addition to the automatic entry of floodwaters, the areas of the garage below BFE plus one (1.0) foot must be constructed with flood damage-resistant materials per the requirements of FEMA Technical Bulletin 2. Garages attached to non-residential structures must also meet the aforementioned requirements or be dry floodproofed as per the requirements of Section 5.3.1.2.

5.3.2 Manufactured (Mobile) Homes and Recreational Vehicles (RVs).

- 5.3.2.1 In all Special Flood Hazard Areas (SFHA), any manufactured (mobile) homes to be newly placed, undergoing a substantial improvement or repaired as a result of substantial damage, shall be elevated so that the bottom of the frame is located one (1.0) foot above the base flood elevation (BFE). The manufactured home must also meet all the construction standards per Section 5.3.1. The foundation and anchorage of manufactured homes to be located in floodways shall be designed and constructed in accordance with ASCE24. This includes SFHAs outside a manufactured home park or subdivision, in a new manufactured home park or subdivision, in an existing manufactured home park or subdivision, in an expansion to an existing manufactured home park or subdivision, or on a site in an existing park which a manufactured home has incurred substantial damage as a result of a flood.
- 5.3.2.2 All manufactured (mobile) homes within a SFHA shall be placed on a permanent foundation which itself is securely anchored and to which the structure is securely anchored so that it will resist flotation, lateral movement and hydrostatic pressures. Anchoring may include, but not be limited to, the use of over-the-top or frame ties to ground anchors.
- 5.3.2.3 All manufactured (mobile) homes within a SFHA shall be installed using methods and practices which minimize flood damage. Adequate access and drainage should be provided. Elevation construction standards include piling foundations placed no more than ten (10) feet apart, and reinforcement is provided for piers more than six (6) feet above ground level.
- 5.3.2.4 Recreational vehicles placed on sites within a SFHA shall either (i) be on the site for fewer than 180 consecutive days, and (ii) be fully licensed and ready for highway use, OR (iii) meet all the general standards of Section 5.1 and the elevation and anchoring requirement of Section 5.3.2.1, 5.3.2.2, and 5.3.2.3. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

5.3.3 Floodways

Located within Special Flood Hazard Areas (SFHA) are areas designated as floodways on the community's Flood Insurance Rate Maps (FIRM) or Flood Boundary and Floodway Maps (FBFM). Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and has erosion potential, no encroachments, including fill, new construction, substantial improvements, repairs to substantially damaged structures and other developments shall be permitted unless certification, with supporting technical data, by a registered professional engineer is provided demonstrating, through hydrologic and hydraulic analyses performed in accordance with standard engineering practice, that encroachments shall not result in any (0.00 feet) increase in flood levels during occurrence of the base flood discharge published by FEMA. Buildings and structures meeting the standard above and located in whole or in part in the floodway shall be designed and constructed in accordance with ASCE 24. Fences in the floodway must be aligned with the flow and be of an open design. A permit may be given which allows encroachments resulting in increases in base flood elevations provided the community first obtains a conditional floodway revision by meeting the requirements of C.F.R. 44, Chapter 1, Subsection 65.12.

5.3.4 Standards for Development in Areas of Shallow Flooding (Zones AO and AH)

Located within the Special Flood Hazard Areas (SFHA) are areas designated as shallow flooding areas (AO and AH Zones). These areas have flood hazards associated with base flood depths of one (1) to three (3) feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate. In AO and AH zones, the following provisions apply:

- 5.3.4.1 For residential structures, all new construction, substantial improvements and repair to structures that have sustained substantial damage shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as one (1.0) foot above the depth number specified on the Flood Insurance Rate Map (FIRM). If no depth number is specified, the lowest floor, including basement, shall be elevated at least three (3.0) feet above the highest adjacent grade.
- 5.3.4.2 For non-residential structures, all new construction, substantial improvements and repair to structures that have sustained substantial damage shall:
- (a) Have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as one (1.0) foot above the depth number specified on the Flood Insurance Rate Map (FIRM). If no depth number is specified, the lowest floor, including basement, shall be elevated at least three (3.0) feet above the highest adjacent grade; or
- (b) Together with attendant utility and sanitary facilities be completely flood-proofed to above the highest adjacent grade at least as high as one (1.0) foot above the depth number specified on the FIRM, or if no depth number is specified at least three (3.0) feet above the highest adjacent grade, so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Designs for complying with this requirement must be certified by either a registered professional engineer or architect.
- 5.3.4.3 On-site drainage for all proposed structures in AO and AH Zones located on slopes shall provide adequate drainage paths to guide flood waters around and away from such structures.
- 5.3.4.4 Fully enclosed areas below the lowest floor in AO and AH Zones must comply with the provisions of Section 5.3.1.3 for hydraulic flood vents.

6.0 DESIGN STANDARDS FOR SUBDIVISION PROPOSALS

If a proposed subdivision, including the placement of a manufactured home park or subdivision, is located in a Special Flood Hazard Area (SFHA) the following requirements shall apply:

- 6.1 All subdivision proposals shall be consistent with the need to minimize flood damage;
- 6.2 All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
- 6.3 All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards; and
- 6.4 The Zoning Enforcement Officer shall require the applicant to provide BFE data for all subdivision proposals, including manufactured home parks and subdivisions, as per Section 4.5.12. In all special flood hazard areas where base flood elevation (BFE) data is not available, the applicant shall provide a hydrologic and hydraulic engineering analysis performed by a registered professional engineer that generates BFEs for all subdivision proposals and other proposed development, including manufactured home parks and subdivisions.

7.0 VARIANCE PROCEDURES

7.1 ESTABLISHMENT OF VARIANCE PROCESS

- 7.1.1 The Zoning Board of Appeals, as established by the Town of Brooklyn, shall hear and decide appeals and requests for variances from the requirements of this regulation.
- 7.1.2 The Zoning Board of Appeals shall hear and decide appeals when it is alleged there is an error in any requirement, decision or determination made by the Zoning Enforcement Officer in the enforcement or administration of this regulation.

- 7.1.3 Any person aggrieved by the decision of the Zoning Board of Appeals or any person owning land which abuts or is within a radius of one hundred (100) feet of the land in question may appeal within fifteen (15) days after such decision to the State Superior Court of Windham County, as provided in Section 8-8 of the General Statutes of Connecticut.
- 7.1.4 The Zoning Enforcement Officer shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency (FEMA) in its biennial report.

7.2 SPECIFIC SITUATION VARIANCES

- 7.2.1 Buildings on a Historic Register: Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places, the State Inventory of Historic Places, or any locally-adopted historic district without regard to the procedures set forth in the remainder of this section and provided the proposed reconstruction, rehabilitation or restoration will not result in the structure losing its historical designation.
- 7.2.2 Functionally Dependent Use or Facility: Variances may be issued for new construction and substantial improvements and other development necessary for the conduct of a functionally dependent use or facility provided the structure or other development is protected by methods that minimize flood damage, creates no additional threat to public safety and meet all the requirements of Section 7.4.
- 7.2.3 Floodway Prohibition: Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

7.3 CONSIDERATIONS FOR GRANTING OF VARIANCES

In passing upon such applications, the Zoning Board of Appeals shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this regulation and the items listed below as 7.3.1 – 7.3.11. Upon consideration of these factors and the purposes of this regulation, the Zoning Board of Appeals may attach such conditions to the granting of variances as it deems necessary to further the purposes of this regulation.

- 7.3.1 The danger that materials may be swept onto other lands to the injury of others;
- 7.3.2 The danger to life and property due to flooding or erosion damage;
- 7.3.3 The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- 7.3.4 The importance of the services provided by the proposed facility to the community;
- 7.3.5 The necessity of the facility to waterfront location, in the case of a functionally dependent facility;
- 7.3.6 The availability of alternative locations not subject to flooding or erosion damage for the proposed use;
- 7.3.7 The compatibility of the proposed use with existing and anticipated development;
- 7.3.8 The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
- 7.3.9 The safety access to the property in times of flood for ordinary and emergency vehicles;
- 7.3.10 The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and
- 7.3.11 The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water

systems, and streets and bridges.

7.4 CONDITIONS FOR VARIANCES

- 7.4.1 Variances shall only be used upon a determination that the variance is the minimum necessary to afford relief considering the flood hazard; and in the instance of a historical building, a determination that the variance is the minimum necessary as not to destroy the historic character and design of the building and result in the loss of historic designation of the building. Variances pertain to a piece of property and are not personal in nature. A properly issued variance is granted for a parcel of property with physical characteristics so unusual that complying with the regulation would create an exceptional hardship to the applicant or the surrounding property owners. Those characteristics must be unique to that property and not be shared by adjacent parcels. For example, economic or financial hardship is not sufficient cause for a variance, nor are inconvenience, aesthetic considerations, physical handicaps, personal preferences or disapproval of one's neighbors.
- 7.4.2 Variances shall only be used upon (i) a showing of good and sufficient cause, (ii) a determination that failure to grant the variance would result in exceptional hardship, and; (iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance, damage the rights or property values of other persons in the area, cause fraud on or victimization of the public, or conflict with existing local laws, ordinances or regulations. Only hardships that are based on unusual or unique physical characteristics of the property in question, characteristics that are not shared by adjacent parcels, shall qualify to meet subsection (ii) above. Claims of hardship based on the structure, on economic gain or loss, or on personal or self-created circumstances are not sufficient cause for the granting of a variance.
- 7.4.3 No variance may be issued within a regulatory floodway that will result in any increase in the 100-year flood levels. A variance may be issued for new construction, substantial improvements and other development necessary for the conduct of a "functionally dependent use" provided that there is good and sufficient cause for providing relief; and the variance does not cause a rise in the 100-year flood level within a regulatory floodway. The structure and other development must be protected by methods that minimize flood damages.
- 7.4.4 Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation below the base flood elevation (BFE), and that the cost of flood insurance will be commensurate with the increased risk resulting from the lowest floor elevation up to amounts as high as \$25 for \$100 of insurance coverage.

8.0 ENFORCEMENT

- 8.1 Each Zoning Permit shall authorize, as a condition of approval, the Zoning Enforcement Officer or designated agents to make regular inspections of the subject property. The Zoning Enforcement Officer or designated agents are also authorized to inspect any property in a Special Flood Hazard Area (SFHA) where it appears that violations of these regulations may be taking place.
- 8.2 If the Zoning Enforcement Officer finds that any person is undertaking any construction, substantial improvement, filling, or any other activity or maintaining a condition which in violation of these regulations, the Zoning Enforcement Officer shall:
- 8.2.1 Issue a written order by certified mail, return receipt requested, to the subject property owner, ordering that the activity cease and ordering the property owner to either seek to obtain a Zoning Permit prior to continuing with the activity or, if appropriate, ordering that all violations and/or obstructions be removed from the Special Flood Hazard Area (SFHA) immediately.
- 8.2.2 Notify the Building Official and request that any building permit(s) in force be revoked or suspended and that a stop work order be issued.

- 8.2.3 The Zoning Enforcement Officer may suspend or revoke a Floodplain Development Permit if it is found that the applicant has not complied with the terms, conditions or limitations set forth in the permit or has exceeded the scope of work as set forth in the application including application plans. Prior to revoking any permit, the Zoning Enforcement Officer shall issue notice to the permittee, personally or by certified mail, return receipt requested, setting forth the facts or conduct which warrants the intended action.
- 8.2.4 Failure to comply with any written order issued under this section shall be considered a violation of these regulations and is subject to the penalties described in Section 10.0.
- 8.2.5 In the event violations or obstructions are not promptly removed from the Special Flood Hazard Area (SFHA), the Zoning Enforcement Officer may cause such removal and remediation work to be performed utilizing bond money held in escrow pursuant to Section 3.0 of this regulation, or may direct the Road Foreman to cause such work to be done and to place a lien against the property.
- 8.2.6 Any person subjected to enforcement action pursuant to this regulation, may appeal any requirement, decision, or determination of the Zoning Enforcement Officer to the Zoning Board of Appeals, in accordance with Section 6.0 of this regulation. Such person shall provide such information as necessary including appropriate certifications from a registered professional engineer or architect in order to substantiate the claim that the requirement, decision, or determination of the Zoning Enforcement Officer was in error or unwarranted.

9.0 PENALTIES FOR VIOLATION

- 9.1 Any violation of the provisions of this regulation or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grant of variances or special exceptions, shall constitute a misdemeanor. Any person who violates this regulation or fails to comply with any of its requirements shall, upon conviction thereof, be fined a penalty of \$250.00 per day or imprisoned for not more than ten (10) days for each day of violation, or both, and in addition shall pay all costs and reasonable legal fees involved in the case. Nothing herein contained shall prevent the Town of Brooklyn from taking such lawful action as is necessary to prevent or remedy any violation.

PLANNING AND ZONING COMMISSION

REQUEST FOR CHANGE
IN
ZONING BOUNDARY

Date 7/4/23

FEE \$ 250.00

State Fee \$ 60.00

Application # ZC 23-002

Check # N/A

Public Hearing Date _____ Commission Action _____
Effective Date _____

Name of Applicant BROOKLYN PZC Phone _____

Mailing Address 69 S. MAIN ST.

Applicants Interest in the Property TOWN-WIDE FEMA FLOODMAP UPDATE

Property Owner _____ Phone _____

Mailing Address _____

MAP _____	LOT _____	LOT SIZE _____
MAP _____	LOT _____	LOT SIZE _____
MAP _____	LOT _____	LOT SIZE _____

More lots , repeat above on separate sheet

ZONE: R10___ R30___ RA___ VCD___ NC___ RB___ PC___ I___

REQUEST CHANGE: FROM _____ TO _____

REQUEST CHANGE: FROM _____ TO _____

REQUEST CHANGE: FROM _____ TO _____

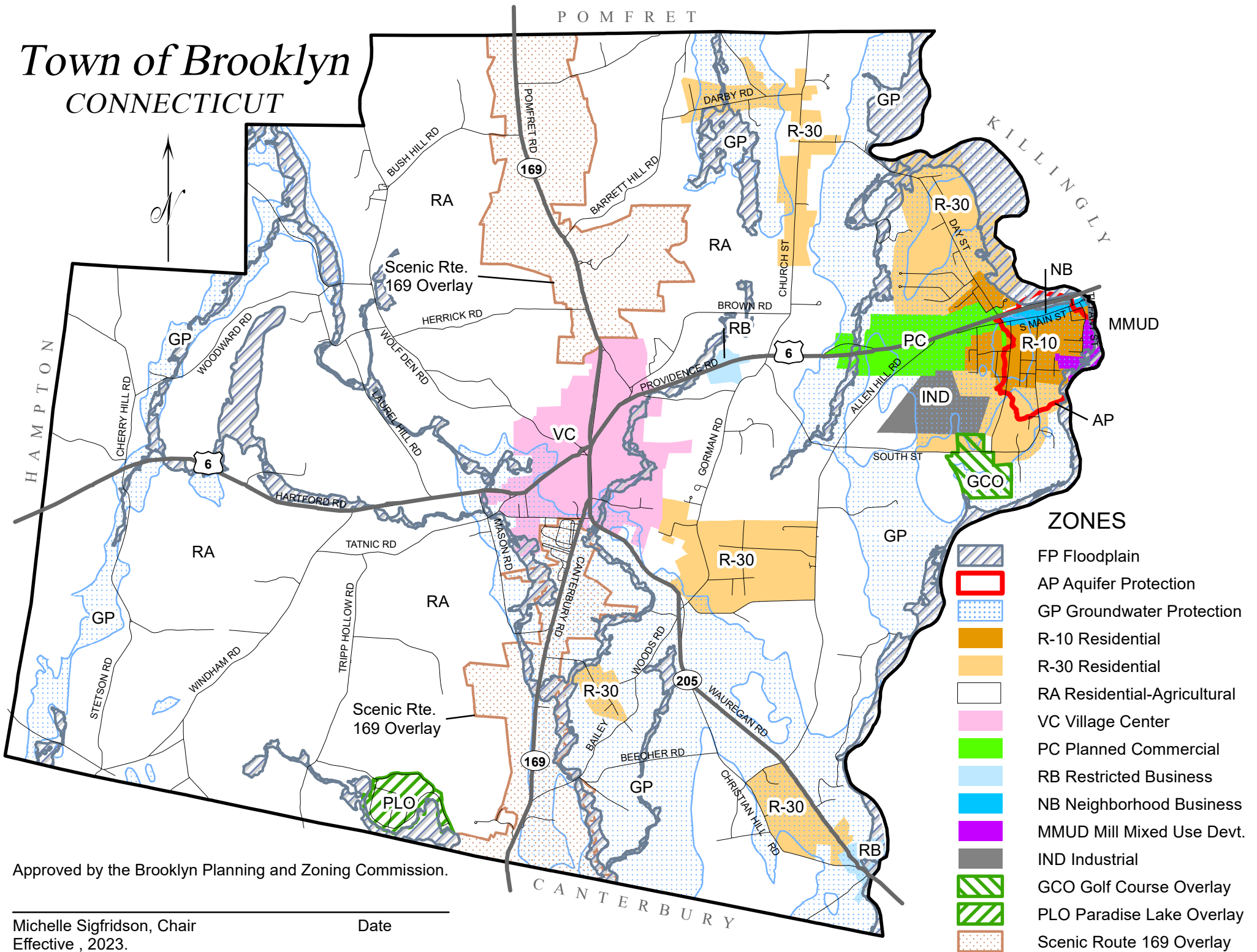
More changes , repeat above on separate sheet

REASON FOR REQUEST: REQUIRED FOR PARTICIPATION IN THE
NATIONAL FLOOD INSURANCE PROGRAM (NFIP).

Note: A petition may be filed at the Hearing by 20% or more of the area lots included in such a change within 500 ft of the property under Section 16.5 of the Zoning Regulations

Town of Brooklyn

CONNECTICUT



Approved by the Brooklyn Planning and Zoning Commission.

Michelle Sigfridson, Chair
Effective , 2023.

Date

TOWN OF BROOKLYN
PLANNING & ZONING
REQUEST FOR CHANGE IN
SUBDIVISION REGULATIONS

Date 7/1/23

FEE \$250.00 _____

State Fee \$60.00 _____

Application # SRC 23-001

Check # N/A

Public Hearing Date 8/15/23 Commission Action _____ Effective Date _____

Name of Applicant BROOKLYN PZC Phone _____
Mailing Address _____

REQUEST TO AMEND SECTION (S) SEC. 7 - SPECIAL FLOOD HAZARD AREAS/
If more than one Article is requested please attach separate sheet for each one FLOODWAYS

PARAGRAPH TO CHANGE _____ OF THE SUBDIVISION REGULATIONS AND RELATED

REQUEST TO CHANGE TO:

REASON FOR REQUEST:

SECTION 2 – GENERAL PROVISIONS

- 2.4 Any land to be subdivided shall be of such character that it can be used for building purposes without danger to health and safety. Land subject to flooding shall not be put to any use which will aggravate flood hazard conditions and shall comply with ~~Town Flood Damage Prevention Ordinance~~ **the Brooklyn Floodplain Overlay Zone.**

SECTION 7- SPECIAL FLOOD HAZARD AREAS/FLOODWAYS

- 7.0 Special Flood Hazard Areas/Floodways: when the subdivision includes land in a special flood hazard area ~~of regulated~~ **or regulatory** floodway, **the lots, roads, drainage and other improvements shall be** reasonably safe from damage and shall conform to the Brooklyn ~~Flood Damage Prevention Ordinance~~ **Floodplain Overlay Zone** and to the following:
- 7.1 The lots and such improvements **on subdivision proposals** shall be consistent with the need to minimize flood damage within the special flood hazard area and shall be capable of use without danger from flooding or flood related damages.
- 7.2 All **public** utilities and facilities **on subdivision proposals**, such as sanitary sewer systems, water supply systems and electric and gas systems shall be located and constructed to minimize or eliminate flood damage.
- 7.3 The storm drainage required under Section 10.11 shall be designed to reduce exposure to flood hazards. **All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards.**
- 7.4 Streets shall be of such elevation or shall be suitably protected so as to allow reasonable emergency access during flood conditions.
- 7.5 The applicant shall provide base flood elevation (BFE) data for all subdivision proposals, including manufactured home parks and subdivisions. In all special flood hazard areas where base flood elevation (BFE) data is not available, the applicant shall provide a hydrologic and hydraulic engineering analysis performed by a registered professional engineer that generates BFEs for all subdivision proposals and other proposed development, including manufactured home parks and subdivisions.**

RECEIVED

JUL 27 2023

PLANNING AND ZONING COMMISSION
TOWN OF BROOKLYN
CONNECTICUT

Received Date _____

Application # SD 23-001
Check # 3121

APPLICATION FOR SUBDIVISION/RESUBDIVISION

Name of Applicant JEFF WEAVER Phone _____
Mailing Address P.O. Box 9, BROOKLYN CT 06231
Applicants Interest in the Property owner

Property Owner JEFF WEAVER Phone _____
Mailing Address P.O. Box 9, BROOKLYN CT

Name of Engineer/Surveyor ARCHER SURVEYING LLC
Address 18 PROVIDENCE RD BROOKLYN CT
Contact Person PAUL ARCHER Phone 979-2240 Fax _____

Name of Attorney _____
Address _____
Phone _____ Fax _____

Subdivision Re subdivision _____
Property location DA/ ST
Map # 43 Lot # 6 Zone R-30/2A Total Acres 3± Acres to be Divided 3±
Number of Proposed Lots 2 Length of New Road Proposed 0
Sewage Disposal: Private Public _____

Note: Hydrological report required by Section 11.6.2

Length of new Sewer proposed: Sanitary _____ Storm _____
Water: Private _____ Public _____

Is parcel located within 500 feet of an adjoining Town? No

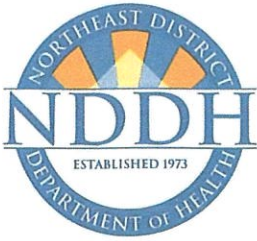
The following shall accompany the application when required:

- 4.2.2 Fee \$ _____ State (\$60.00) _____
- 4.2.3 Sanitary Report _____
- 4.2.5, 3 copies of plans _____
- 4.2.4 Application/ Report of Decision from the Inland Wetlands Com. & the Conservation Com.
- 4.2.6 Erosion & Sediment Control Plans
- 4.2.7 Certificate of Public Convenience and Necessity
- 4.2.8 Applications filed with other Agencies

The owner and applicant hereby grant the Brooklyn Planning and Zoning Commission, the Board of Selectman, Authorized Agents of the Planning and Zoning Commission or Board of Selectman, permission to enter the property to which the application is requested for the purpose of inspection and enforcement of the Zoning regulations and the Subdivision regulations of the Town of Brooklyn

Applicant: JEFF WEAVER / JAW Date 7-26-23
Owner: JEFF WEAVER / JAW Date 7-26-23

*Note: All consulting fees shall be paid by the applicant



NORTHEAST DISTRICT DEPARTMENT OF HEALTH

69 SOUTH MAIN STREET · UNIT 4 · BROOKLYN, CT 06234
PHONE (860) 774-7350 · FAX (860) 774-1308 · WEB SITE WWW.NDDH.ORG

May 10, 2023

Jeffrey Weaver
PO Box 9
Brooklyn, CT 06234

SUBJECT: FILE #23000175 -- DAY STREET MAP #43, LOT #6 (PART 4) BROOKLYN, CT

Dear Jeffrey Weaver:

Upon review of the subdivision plan (ARCHER SURVEYING LLC, WEAVER, PROT #233015, DRAWN 05/01/2023) submitted to this office on 05/03/2023 for the above referenced subdivision, The Northeast District Department of Health concurs with the feasibility of this parcel of land for future development. Additionally, approval to construct individual subsurface sewage disposal systems may be granted based on compliance with appropriate regulations and the Technical Standards as they apply to individual building lots with the following notations:

1. Lots:1 and 2 require that a Professional Engineer design and submit individual plot plan(s) for review and approval prior to construction.
2. Proposed lots are based on 2 bedroom multi-family homes at the locations tested. If the number of bedrooms are increased, septic system sizes will require an increase per the Technical Standards.
3. If the proposed septic area is moved, additional testing may be required
4. Footing drain on lot #2 must be relocated on Professional Engineer Design to meet 25 foot separation distance to septic system.

Be advised you must receive approval from the appropriate commissions in the Town of Brooklyn prior to construction of these lots.

This letter is NOT to be construed as an APPROVAL TO CONSTRUCT the septic system and DOES NOT indicate that the Northeast District Department of Health endorses approval for issuance of any building permit.

Should you have any questions, please feel free to contact the sanitarian that reviewed your plan.

Sincerely,

Donovan Moe, EHS
Environmental Health Specialist ~ NDDH

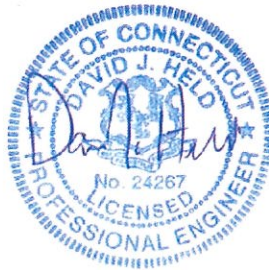
cc: Town of Brooklyn; Archer Surveying, LLC

**Driveway Culvert Design
Proposed 2 Lot Resubdivision
Brooklyn, CT**

Prepared for

Jeffrey Weaver

7/11/2023

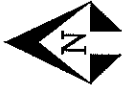


Prepared by:

Provost & Rovero, Inc.

Design Summary

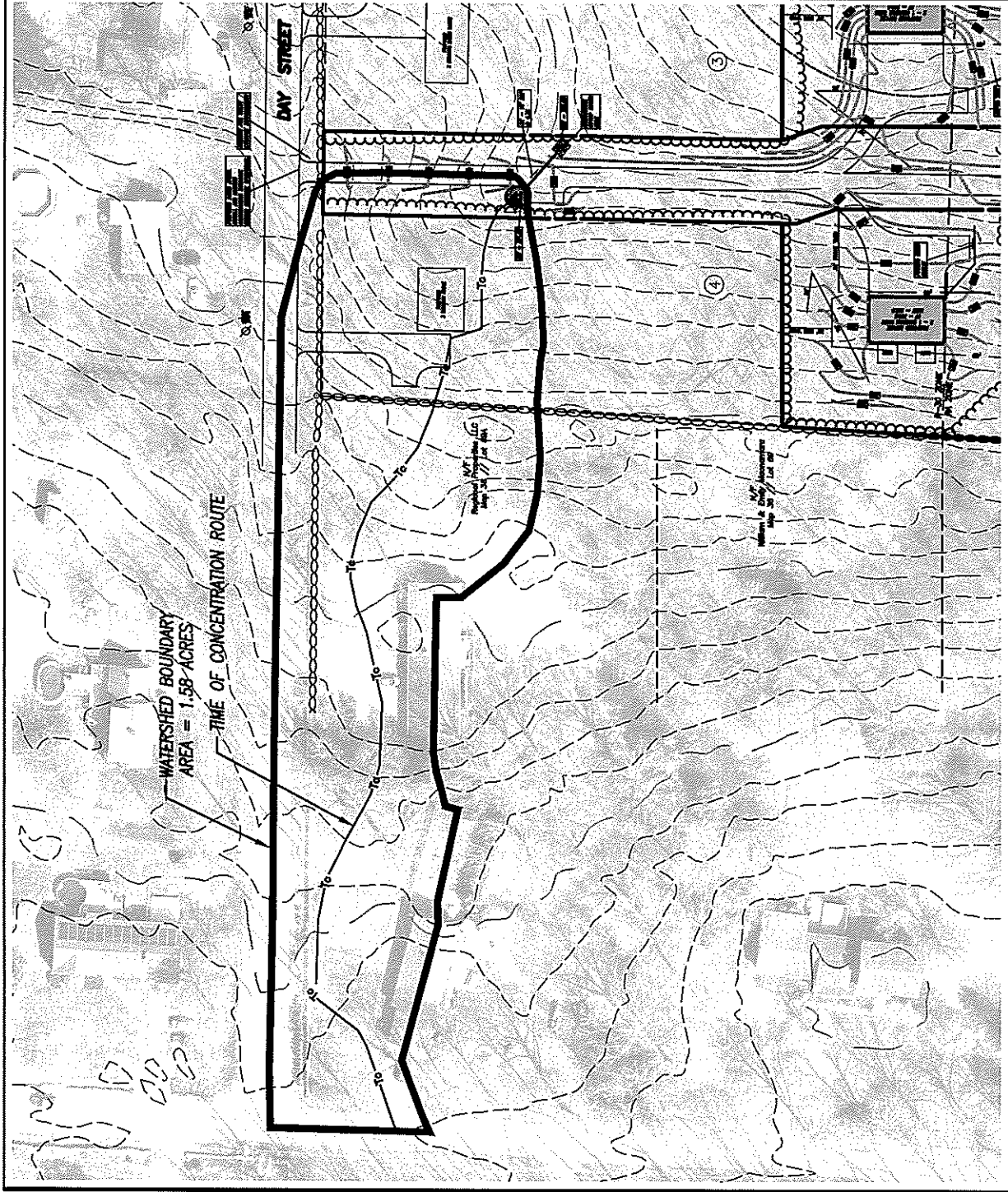
A culvert is proposed to convey periodic flows under the shared driveway serving proposed lots 1 and 2. This culvert has been designed to convey a 10 year design storm. The design flow rate has been determined with the Rational method utilizing ConnDOT IDF data. The culvert has been designed utilizing Federal Highway Administration methodology and Carlson Hydrology software. Watershed mapping and calculation reports are attached hereto.



WATERSHED MAP
PREPARED FOR
JEFFREY WEAVER
PROPOSED 2 LOT RESUBDIVISION
DAY STREET
BROOKLYN, CONNECTICUT

SCALE: 1" = 80'
JOB NO: 233015 DATE: 7/1/2023
DRAWN BY: DAI

Provost & Dovo, Inc.
57 EAST MAIN ST., P.O. BOX 191, PLAINFIELD, CT.



Time of Concentration (Tc)

Tue Jul 11 10:58:57 2023

Project: WEAVER
Location: DAY STREET
Developed

By: DJH
Checked:
Date: 07/11/23
Date:

Sheet Flow

Segment ID: SHEET FLOW

Manning's Roughness Coeff. (n):	0.240	
Flow Length, L (total L <= 100 ft):	100.00	ft
Two-yr 24-hr Rainfall, P:	3.20	in
Land Slope, s:	2.50	%
Tc:	0.218	hr (13.1 min)

Shallow Concentrated Flow

Segment ID: SHALLOW CONC.

Surface Description:	Unpaved	
Flow Length, L:	530.00	ft
Watercourse Slope, s:	7.70	%
Average Velocity, V:	4.48	ft/s
Tc:	0.033	hr (2.0 min)
 Total Tc:	 0.250	 hr (15.0 min)

1.Data:

Drainage Area	A = 1.58	acre
Runoff Coefficient	C = 0.40	
Time of Concentration	0.25	hrs
Rainfall ID:	Connecticut DOT	
Return Period:	10 YEAR	
Rainfall Intensity:	I = 4.00	in/hr
2.Peak Discharge:	Qp = 2.53	cfs

Design Parameters

Section

Shape:	Circular
Material:	Concrete
Diameter:	15.00 in
Manning's n:	0.0130
Number of Barrels:	1

Inlet

Inlet Type:	Square Edge with Headwall
Ke:	0.50

Inverts

Inlet Invert Elevation:	291.000	ft
Outlet Invert Elevation:	289.500	ft
Length:	32.000	ft
Slope:	4.69	%

Culvert Calculation

Discharge:	2.53	cfs
Headwater Elevation:	291.901	ft
Tailwater Elevation:	0.500	ft
Downstream Velocity:	8.66	ft/s
Downstream Flow Depth:	0.360	ft
Flow Control Type:	Inlet Control, Unsubmerged	



PREFORMED SCOUR HOLE DESIGN (English Units)

Client: Jeff Weaver
 Project: Day Street Subdivision
 Proj. No: 233015
 Return Period for Design (yr.): 10

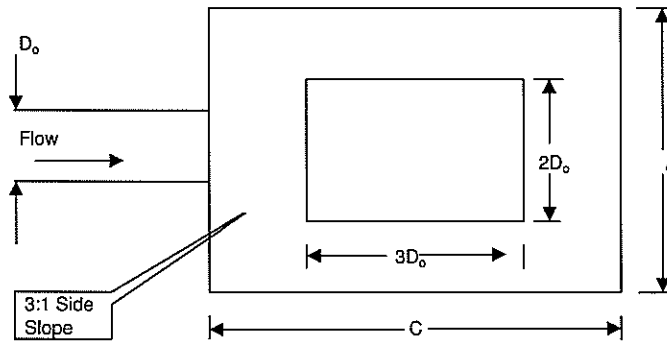
Prepared By: DJH
 Checked By:

Date: 7/11/2023
 Date:

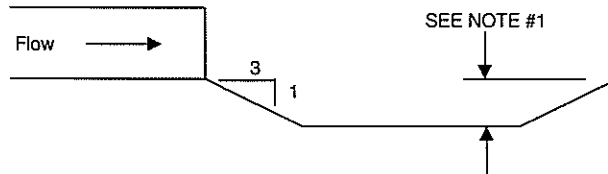
Outlet Location	Pipe Dia. (D_o) (ft)	Q in System (ft^3/s)	critical depth (ft)	TW (ft)	basin depression (ft)	Riprap depth (in)	Length C (ft)	Width A (ft)	Riprap Size (d_{50}) (in)	ConnDOT Riprap Size Required
Driveway culvert	1.25	2.53	1.00	1.125	0.625	12	7.5	6.3	0.3	modified

Notes:

- The basin depression should be between $.5D_o$ and D_o .
- Reference: "Loose Riprap Protection, Minnesota Technical Release 3, July 1989, U.S.D.A. Soil Conservation Service".



PLAN VIEW



SECTION VIEW

ARCHER SURVEYING LLC
48 PROVIDENCE RD
BROOKLYN, CT 06234

3121

51-7433/2111
6

CHECK ARMOR


7-27-23

Date

Pay to the Order of Tony of Brooklyn \$ 460.00

Nine hundred Sixty and 00/100 Dollars

Photo Deposit Details on back

 Jewett City Savings Bank
111 Main St. P.O. Box 335 Jewett City, CT 06351

[Signature]

For Weaver

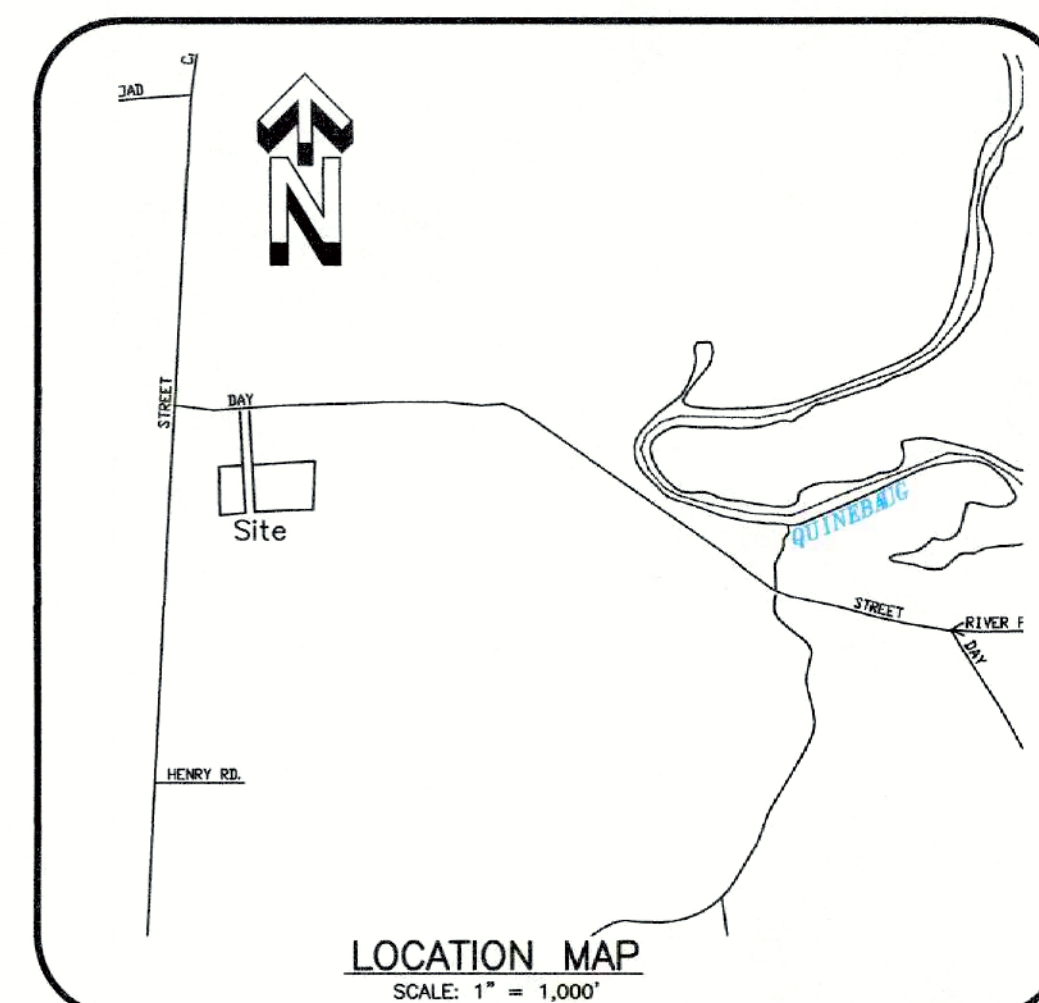
2 LOT SUBDIVISION

PREPARED FOR

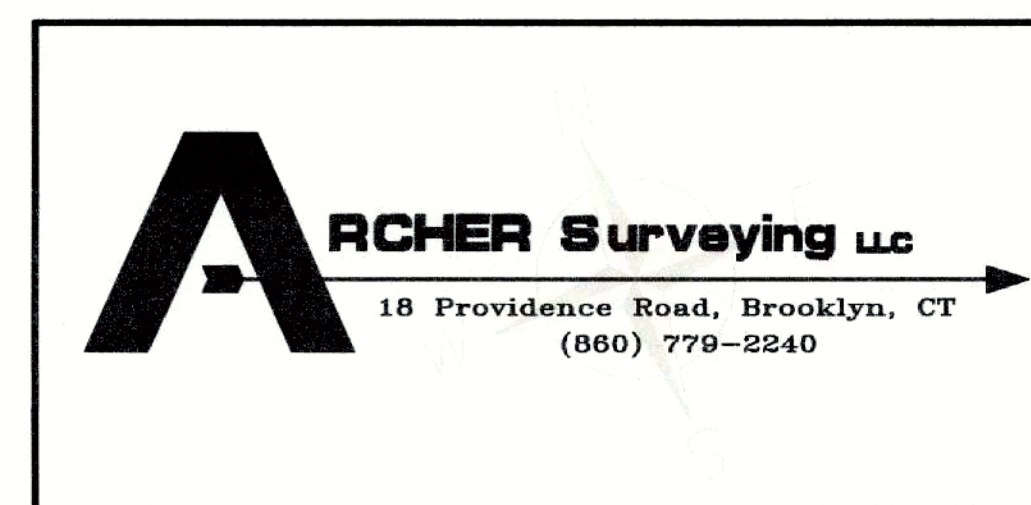
Jeffrey Weaver

Day Street
Brooklyn, Connecticut

May 1, 2023



PREPARED BY



INDEX OF DRAWINGS

COVER SHEET	SHEET 1 OF 6
EXISTING CONDITION	SHEET 2 OF 6
SUBDIVISION	SHEET 3 OF 6
SITE DEVELOPMENT PLAN	SHEET 4 OF 6
DETAIL SHEET #1	SHEET 5 OF 6
HISTORY & PARCEL MAP	SHEET 6 OF 6

APPROVED BY THE BROOKLYN
INLAND WETLANDS COMMISSION

CHAIRMAN _____ DATE _____
Expiration date per section 22A-42A of the Connecticut
General Statutes. Date: _____

APPROVED BY THE BROOKLYN
PLANNING AND ZONING COMMISSION

CHAIRMAN _____ DATE _____
Expiration date per section 8.26C of the Connecticut
General Statutes. Date: _____

Notes

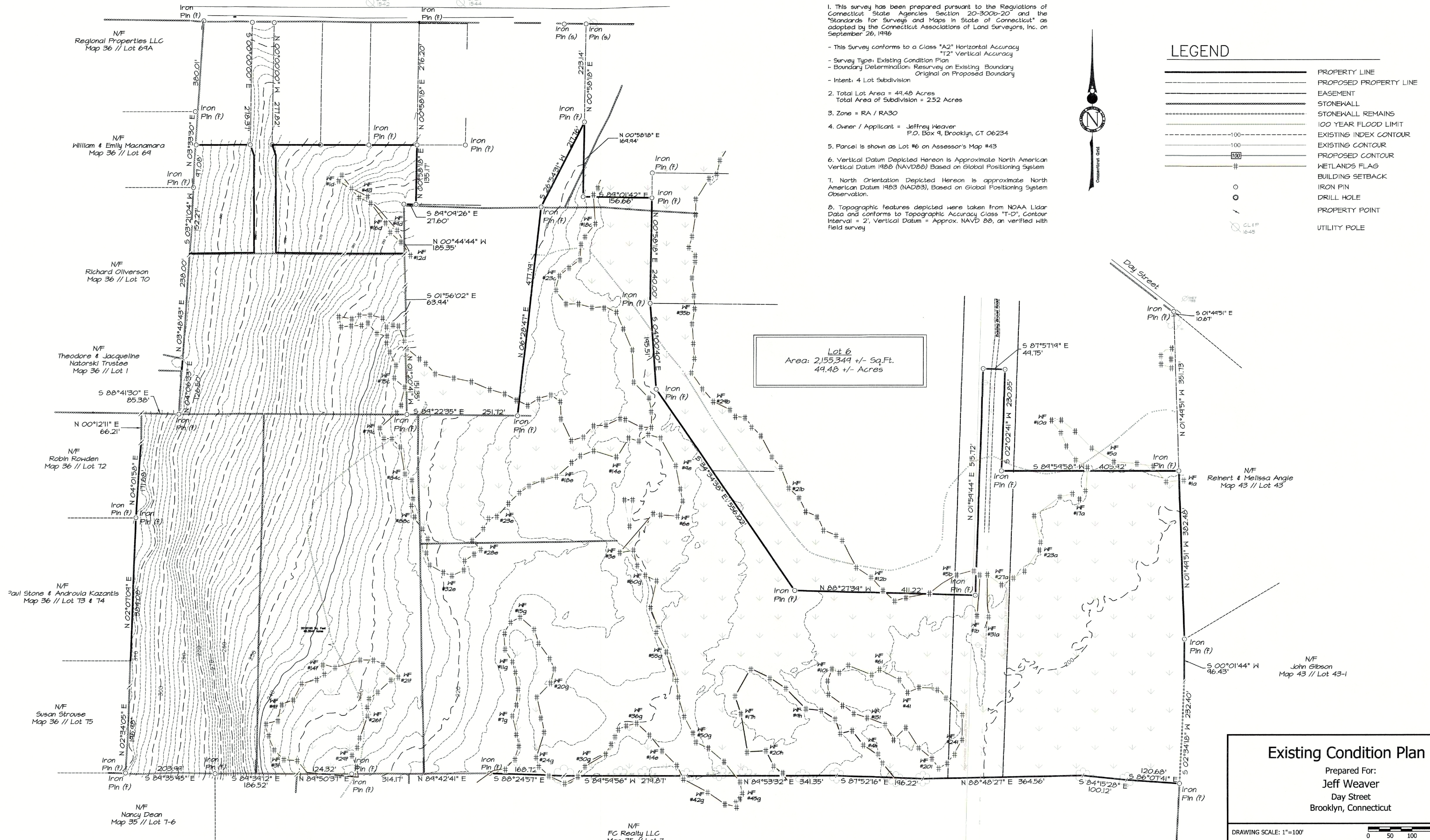
- This survey has been prepared pursuant to the Regulations of Connecticut State Agencies Section 20-300b-20 and the "Standards for Surveys and Maps in State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996.
 - This Survey conforms to a Class "A2" Horizontal Accuracy
 - "T2" Vertical Accuracy
 - Survey Type: Existing Condition Plan
 - Boundary Determination: Resurvey on Existing Boundary
 - Intent: 4 Lot Subdivision
- Total Lot Area = 44.48 Acres
Total Area of Subdivision = 2.52 Acres
- Zone = RA / RA30
- Owner / Applicant = Jeffrey Weaver
P.O. Box 4, Brooklyn, CT 06234
- Parcel is shown as Lot #6 on Assessor's Map #43
- Vertical Datum Depicted Hereon is Approximate North American Vertical Datum 1988 (NAVD88) Based on Global Positioning System
- North Orientation Depicted Hereon is approximate North American Datum 1983 (NAD83), Based on Global Positioning System Observation.
- Topographic features depicted were taken from NOAA Lidar Data and conforms to Topographic Accuracy Class "T-D", Contour Interval = 2', Vertical Datum = Approx. NAVD 88, as verified with field survey



LEGEND

- PROPERTY LINE
- PROPOSED PROPERTY LINE
- EASEMENT
- STONEWALL
- STONEWALL REMAINS
- 100 YEAR FLOOD LIMIT
- EXISTING INDEX CONTOUR
- EXISTING CONTOUR
- PROPOSED CONTOUR
- WETLANDS FLAG
- BUILDING SETBACK
- IRON PIN
- DRILL HOLE
- PROPERTY POINT
- UTILITY POLE

Lot 6
 Area: 2,155,349 +/- Sq.Ft.
 49.48 +/- Acres



MAP REFERENCE:

- Division of Property - First Time Split, Prepared for Jeff Weaver, Day Street, Brooklyn, Connecticut, Date: June 2018, Scale: 1"=100', Prepared by Archer Surveying LLC
- 10 Lot Subdivision, Prepared for Jeff Weaver, Day Street, Brooklyn, Connecticut, Date: May 2018, Scale: 1"=60', Prepared by Archer Surveying LLC
- 6 Lot Subdivision, Prepared for Jeff Weaver, Day Street, Brooklyn, Connecticut, Date: February 2020, Scale: 1"=50', Prepared by Archer Surveying LLC

To My Knowledge and Belief this Map is substantially Correct as noted hereon.

Paul M. Archer LLS #10013 Date

No Certification is expressed or implied unless this map bears the embossed seal of the land surveyor whose signature appears hereon.

REVISIONS	
7/16	MISC

Existing Condition Plan

Prepared For:
Jeff Weaver
 Day Street
 Brooklyn, Connecticut

DRAWING SCALE: 1"=100'

ARCHER Surveying LLC
 18 Providence Road, Brooklyn, CT
 (860) 779-2240 / (860) 928-1921

LOUIS J. SOJA, JR.
 LAND SURVEYOR

Sheet No. x Project No. 2212 Date: May 1, 2023



Notes

- This survey has been prepared pursuant to the Regulations of Connecticut State Agencies Section 20-300b-20 and the "Standards for Surveys and Maps in State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996.
 - This Survey conforms to a Class "A-2" Horizontal Accuracy Class "T-2" Vertical Accuracy
 - Survey Type: Subdivision Plan
 - Boundary Determination: Resurvey on Existing Boundary Original on Proposed Boundary
 - Intent: 4 Lot Subdivision
- Total Lot Area = 49.48 Acres
Total Area of Subdivision = 2.52 Acres
- Zone = R-30 / RA
- Owner / Applicant = Jeffrey Weaver
P.O. Box 9, Brooklyn, CT 06234
- Parcel is shown as Lot #6 on Assessor's Map #43
- This Subdivision does include land areas within the Federal Emergency Management Agency's 100 year Flood hazard area
- Wetlands shown were flagged in the field by Joseph Theroux, Certified Soil Scientist in April 2018 and field located by Archer Surveying LLC
- There are not Known endangered species or species of special concern on the subject property nor within 2 miles of the subject property per the December 2006 Natural Diversity Data Base Mapping
- Parcel does not lie within an aquifer protection area
- The Subdivision Regulations of the Town of Brooklyn are a part of this plan. Approval of this plan is contingent on completion of the requirements of said regulations, excepting any variances or modifications are on file in the office of the commission.
- North orientation, bearings and coordinate values shown are based on North American Datum of 1983 (NAD83)
- Passive Solar Energy techniques were considered in the design of the subdivision

MAP REFERENCE:

- Division of Property - First Time Split, Prepared for Jeff Weaver, Day Street, Brooklyn, Connecticut, Date: June 2018, Scale: 1"=100', Prepared by Archer Surveying LLC
- 10 Lot Subdivision, Prepared for Jeff Weaver, Day Street, Brooklyn, Connecticut, Date: May 2018, Scale: 1"=60', Prepared by Archer Surveying LLC
- 6 Lot Subdivision, Prepared for Jeff Weaver, Day Street, Brooklyn, Connecticut, Date: February 2020, Scale: 1"=50', Prepared by Archer Surveying LLC
- 4 Lot Subdivision, Prepared for Jeff Weaver, Day Street, Brooklyn, Connecticut, Date: July 2021, Scale: 1"=50', Prepared by Archer Surveying LLC

To My Knowledge and Belief this Map is substantially Correct as noted hereon.

Paul M. Archer LLS #10013 Date

No Certification is expressed or implied unless this map bears the embossed seal of the land surveyor whose signature appears hereon.

N/F Regional Properties LLC
Map 36 // Lot 64A

N/F William & Emily Macnamara
Map 36 // Lot 64

N/F Richard Olliverson
Map 36 // Lot 10

Lot 6
Area: 2,019,196 +/- Sq.Ft.
46.35 +/- Acres

Proposed Lot 1
Area: 75,915 +/- Sq.Ft.
1.74 +/- Acres

Proposed Lot 2
Area: 34,065 +/- Sq.Ft.
0.78 +/- Acres

Zone: R-30
Zone: RA

Property is along the northerly Face of the Stone Wall

LEGEND

	EXISTING PROPERTY LINE		100 YEAR FLOOD LIMIT
	PROPOSED PROPERTY LINE		EXISTING INDEX CONTOUR
	EXISTING EASEMENT LINE		EXISTING CONTOUR
	ZONE LINE		WETLANDS FLAG
	STONEWALL		BUILDING SETBACK
	STONEWALL REMAINS		IRON PIN FOUND
	UTILITY POLE		PROPERTY POINT

REVISIONS	

Subdivision Plan
"2 Lot Subdivision"

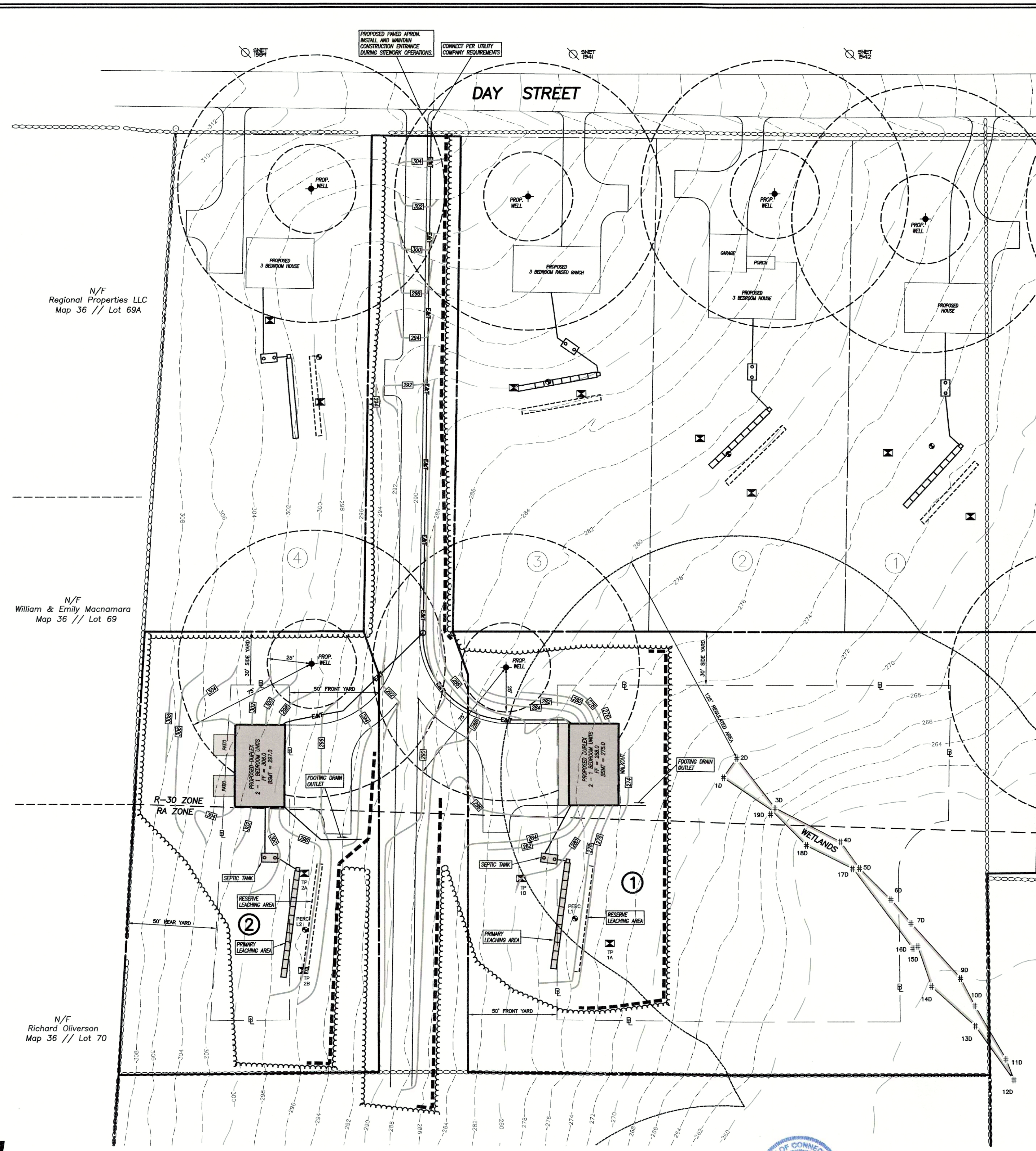
Prepared For:
Jeffrey Weaver
Day Street
Brooklyn, Connecticut

DRAWING SCALE: 1"=40'

18 Providence Road, Brooklyn, CT
(860) 779-2240 / (860) 928-1921

LOUIS J. SOJA, JR.
LAND SURVEYOR AND PLANNER

Sheet No. 3 of 6 Project No. 2212 Date: May 1, 2023



N/F
Regional Properties LLC
Map 36 // Lot 69A

N/F
William & Emily Macnamara
Map 36 // Lot 69

N/F
Richard Oliverson
Map 36 // Lot 70

SEPTIC SYSTEM DESIGN DATA - LOT 1

Percolation Rate = 3.33 min. / in.
 2 bedroom duplex requires = 660 s.f. effective leaching area
 Effective Leaching area = 11.0 s.f. / l.f. of trench
 Length Required = 660/11.0 = 60 l.f.
 Length Provided = 12 units @ 5 l.f. = 60 l.f.
 Min. Leaching System Spread (MLSS) = 20.0 x 2.0 x 1.0 = 40'
 MLSS Provided = 60'

LEACHING FIELD
 60 l.f. Mantis 536-8 leaching units (12 units @ 5 l.f. each)
 Maximum depth into existing grade = 6"

SEPTIC SYSTEM DESIGN DATA - LOT 2

Percolation Rate = 3.33 min. / in.
 2 bedroom duplex requires = 660 s.f. effective leaching area
 Effective Leaching area = 11.0 s.f. / l.f. of trench
 Length Required = 660/11.0 = 60 l.f.
 Length Provided = 12 units @ 5 l.f. = 60 l.f.
 Min. Leaching System Spread (MLSS) = 26.0 x 2.0 x 1.0 = 52'
 MLSS Provided = 60'

LEACHING FIELD
 60 l.f. Mantis 536-8 leaching units (12 units @ 5 l.f. each)
 Maximum depth into existing grade = 2"

LEGEND

- ☒ TEST PIT
- # WETLAND FLAG
- STONE WALL
- EXISTING INDEX CONTOUR
- - - EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED UTILITIES
- PROPOSED CLEARING LIMITS
- PROPOSED SILT FENCE
- BUILDING SETBACK LINE



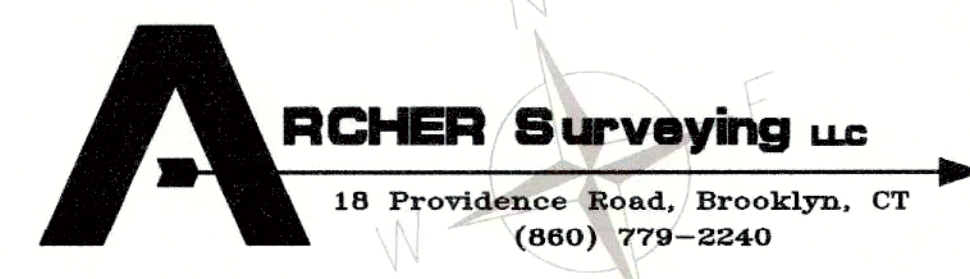
SURVEY NOTES:

- This survey has been prepared pursuant to the Regulations of Connecticut State Agencies Section 20-300b-1 through 20-300b-20 as amended on October 26, 2018; This map was prepared from record research, other maps, limited field measurements and other sources. It is not to be construed as a Property/Boundary or Limited Property/Boundary Survey and is subject to such facts as said surveys may disclose.
 - This survey conforms to a Class "C" horizontal accuracy.
 - Topographic features conform to a Class "T-2" accuracy.
 - Survey Type: General Location Survey.
- The subject parcel is shown as a portion of lot #6, on assessor's map #43.
- Zone: R-30 & RA.
- Owner of record: Jeffrey Weaver, P.O. Box 9, Brooklyn, CT 06234
- The intent of this survey is to show the residential development of the subject property.
- Elevations based on NAVD 1988. Contour interval = 2'.
- North orientation is referenced to Connecticut State Plane Coordinates, NAD83.
- The locations of existing utilities are based on surface evidence and other sources of information. Before any construction is to commence contact "CALL BEFORE YOU DIG" at 1-800-922-4455.
- Wetlands were flagged in the field by Joseph Theroux, certified soil scientist in April, 2018.

Site Development Plan

Prepared For:
 Jeffrey Weaver
 Day Street
 Brooklyn, Connecticut

DRAWING SCALE: 1"=30'



Provost & Dovero, Inc.

Civil Engineering • Surveying • Site Planning
 Structural • Mechanical • Architectural Engineering
 57 East Main Street, P.O. Box 191
 Plainfield, Connecticut 06374
 (860) 230-0856 • FAX: (860) 230-0860
 info@provostinc.com
 www.provostinc.com

REVISIONS	
DATE	DESCRIPTION

TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.



PAUL M. ARCHER LLS #70013 DATE
 ENGINEER 5/1/2023

NO CERTIFICATION IS EXPRESSED OR IMPLIED UNLESS THIS MAP BEARS THE EMBOSSED SEAL OF THE LAND SURVEYOR WHOSE SIGNATURE APPEARS HEREON.



EROSION AND SEDIMENT CONTROL PLAN:

REFERENCE IS MADE TO:

1. Connecticut Guidelines for Soil Erosion and Sediment Control 2002 (2002 Guidelines).
2. Soil Survey of Windham County Connecticut, U.S.D.A. Soil Conservation Service 1983.

DEVELOPMENT SCHEDULE (Individual Lots):

1. Prior to any work on site, the limits of disturbance shall be clearly flagged in the field by a Land Surveyor licensed in the State of Connecticut. Once the limits of clearing are flagged, they shall be reviewed and approved by an agent of the Town.
2. Install and maintain erosion and sedimentation control devices as shown on these plans. All erosion control devices shall be inspected by an agent of the Town. Any additional erosion control devices required by the Town's Agent shall be installed and inspected prior to any construction on site. (See silt fence installation notes.)
3. Install construction entrance.
4. Construction will begin with clearing, grubbing and rough grading of the proposed site. The work will be confined to areas adjacent to the proposed building, septic system and driveway. Topsoil will be stockpiled on site and utilized during that grading.
5. Begin construction of the house, septic system and well.
6. Disturbed areas shall be seeded and stabilized as soon as possible to prevent erosion.
7. The site will be graded so that all possible trees on site will be saved to provide buffers to adjoining lots.

DEVELOPMENT CONTROL PLAN:

1. Development of the site will be performed by the individual lot owner, who will be responsible for the installation and maintenance of erosion and sediment control measures required throughout construction.
2. The sedimentation control measures shall remain in place from start of construction until permanent vegetation has been established. The representative for the Town of Brooklin will be notified when sediment and erosion control structures are initially in place. Any additional soil erosion control measures requested by the Town or its agent, shall be installed immediately. Once the proposed development, seeding and planting have been completed, the representative shall again be notified to inspect the site. The control measures will not be removed until this inspection is complete.
3. All strippling is to be confined to the immediate construction area. Topsoil shall be stockpiled so that slopes do not exceed 2 to 1. A hay bale sediment barrier is to surround each stockpile and a temporary vegetative cover shall be provided.
4. Dust control will be accomplished by spraying with water and if necessary, the application of calcium chloride.
5. The proposed planting schedule is to be adhered to during the planting of disturbed areas throughout the proposed construction site.
6. Final stabilization of the site is to follow the procedures outlined in "Permanent Vegetative Cover". If necessary a temporary vegetative cover is to be provided until a permanent cover can be applied.

SILT FENCE INSTALLATION AND MAINTENANCE:

1. Dig a 6" deep trench on the uphill side of the barrier location.
2. Position the posts on the downhill side of the barrier and drive the posts 1.5 feet into the ground.
3. Lay the bottom 6" of the fabric in the trench to prevent undermining and backfill.
4. Inspect and repair barrier after heavy rainfall.
5. Inspections will be made at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater to determine maintenance needs.
6. Sediment deposits are to be removed when they reach a height of 1 foot behind the barrier or half the height of the barrier and are to be deposited in an area which is not regulated by the inland wetlands commission.
7. Replace or repair the fence within 24 hours of observed failure. Failure of the fence has occurred when sediment fails to be retained by the fence because:
 - the fence has been overlapped, undercut or bypassed by runoff water,
 - the fence has been moved out of position (rocked over), or
 - the geotextile has decomposed or been damaged.

HAY BALE INSTALLATION AND MAINTENANCE:

1. Bales shall be placed as shown on the plans with the ends of the bales tightly abutting each other.
2. Each bale shall be securely anchored with at least 2 stakes and gaps between bales shall be hedged with straw to prevent water from passing between the bales.
3. Inspect bales at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inches or greater to determine maintenance needs.
4. Remove sediment behind the bales when it reaches half the height of the bale and deposit in an area which is not regulated by the inland wetlands commission.
5. Replace or repair the barrier within 24 hours of observed failure. Failure of the barrier has occurred when sediment fails to be retained by the barrier because:
 - the barrier has been overlapped, undercut or bypassed by runoff water,
 - the barrier has been moved out of position, or
 - the hay bales have decomposed or been damaged.

TEMPORARY VEGETATIVE COVER:

SEED SELECTION

Grass species shall be appropriate for the season and site conditions. Appropriate species are outlined in Figure T5-2 in the 2002 Guidelines.

TIMING CONSIDERATIONS

Seed with a temporary seed mixture within 7 days after the suspension of grading work in disturbed areas where the suspension of work is expected to be more than 30 days but less than 1 year.

SITE PREPARATION

Install needed erosion control measures such as diversions, grade stabilization structures, sediment basins and grassed waterways.

Grade according to plans and allow for the use of appropriate equipment for seedbed preparation, seeding, mulch application, and mulch anchoring.

SEEDBED PREPARATION

Loosen the soil to a depth of 3-4 inches with a slightly roughened surface. If the area has been recently loosened or disturbed, no further roughening is required. Soil preparation can be accomplished by tracking with a bulldozer, discing, harrowing, raking or dragging with a section of chain link fence. Avoid excessive compaction of the surface by equipment traveling back and forth over the surface. If the slope is tracked, the track marks shall be perpendicular to the anticipated direction of the flow of surface water.

If soil testing is not practical or feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 300 pounds per acre or 15 pounds per 1,000 square feet of 10-10-10 or equivalent. Additionally, lime may be applied using rates given in Figure T5-1 in the 2002 Guidelines.

SEEDING

Apply seed uniformly by hand cyclone seeder, drill, cultipacker type seeder or hydroseeder at a minimum rate for the selected species. Increase seeding rates by 10% when hydroseeding.

MULCHING

Temporary seedings made during optimum seeding dates shall be mulched according to the recommendations in the 2002 Guidelines. When seeding outside of the recommended dates, increase the application of mulch to provide 85%-100% coverage.

MAINTENANCE

Inspect seeded area at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for seed and mulch movement and soil erosion.

Where seed has moved or where soil erosion has occurred, determine the cause of the failure. Repair eroded areas and install additional controls if required to prevent recurrence of erosion.

Continue inspections until the grasses are firmly established. Grasses shall not be considered established until a ground cover is achieved which is mature enough to control soil erosion and to survive severe weather conditions (approximately 80% vegetative cover).

PERMANENT VEGETATIVE COVER:

Refer to Permanent Seeding Measure in the 2002 Guidelines for specific applications and details related to the installation and maintenance of a permanent vegetative cover. In general, the following sequence of operations shall apply:

1. Topsoil will be replaced once the excavation and grading has been completed. Topsoil will be spread to a minimum compacted depth of 4".
2. Once the topsoil has been spread, all stones 2" or larger in any dimension will be removed as well as debris.
3. Apply agricultural ground limestone at a rate of 2 tons per acre or 100 lbs. per 1,000 s.f. Apply 10-10-10 fertilizer or equivalent at a rate of 300 lbs. per acre or 7.5 lbs. per 1,000 s.f. Work lime and fertilizer into the soil to a depth of 4".
4. Inspect seedbed before seeding. If traffic has compacted the soil, retilt compacted areas.
5. Apply the chosen grass seed mix. The recommended seeding dates are: April 1 to June 15 & August 15 - October 1.
6. Following seeding, firm seedbed with a roller. Mulch immediately following seeding. If a permanent vegetative stand cannot be established by September 30, apply a temporary cover on the topsoil such as netting, mat or organic mulch.

EROSION AND SEDIMENT CONTROL NARRATIVE:

PRINCIPLES OF EROSION AND SEDIMENT CONTROL

The primary function of erosion and sediment controls is to absorb erosional energies and reduce runoff velocities that force the detachment and transport of soil and/or encourage the deposition of eroded soil particles before they reach any sensitive area.

KEEP LAND DISTURBANCE TO A MINIMUM

The more land that is in vegetative cover, the more surface water will infiltrate into the soil, thus minimizing stormwater runoff and potential erosion. Keeping land disturbance to a minimum not only involves minimizing the extent of exposure at any one time, but also the duration of exposure. Phasing, sequencing and construction scheduling are interrelated. Phasing divides a large project into distinct sections where construction work over a specific area occurs over distinct periods of time and each phase is not dependent upon a subsequent phase in order to be functional. A sequence is the order in which construction activities are to occur during any particular phase. A sequence should be developed on the premise of "first things first" and "last things last" with proper attention given to the inclusion of adequate erosion and sediment control measures. A construction schedule is a sequence with time lines applied to it and should address the potential overlap of actions in a sequence which may be in conflict with each other.

- Limit areas of clearing and grading. Protect natural vegetation from construction equipment with fencing, tree armoring, and retaining walls or tree wells.
- Route traffic patterns within the site to avoid existing or newly planted vegetation.
- Phase construction so that areas which are actively being developed at any one time are minimized and only that area under construction is exposed. Clear only those areas essential for construction.
- Sequence the construction of storm drainage systems so that they are operational as soon as possible during construction. Ensure all outlets are stable before outletting storm drainage flows into them.
- Schedule construction so that final grading and stabilization is completed as soon as possible.

SLOSH THE FLOW

Detachment and transport of eroded soil must be kept to a minimum by diverting and reducing the erosive energy of water. The erosive energy of water increases as the volume and velocity of runoff increases. The volume and velocity of runoff increases due to development as a result of reduced infiltration rates caused by the removal of existing vegetation, removal of topsoil, compaction of soil and the construction of impervious surfaces.

- Use diversions, stone ditches, silt fences and similar measures to break flow lines and dissipate storm water energy.
- Avoid diverting one drainage system into another without calculating the potential for downstream flooding or erosion.

KEEP CLEAN RUNOFF SEPARATED

Clean runoff should be kept separated from sediment laden water and should not be directed over disturbed areas without additional controls. Additionally, prevent the mixing of clean off-site generated runoff with sediment laden runoff generated on-site until after adequate filtration of on-site waters has occurred.

- Segregate construction waters from clean water.
- Divert site runoff to keep it isolated from wetlands, watercourses and drainage ways that flow through or near the development until the sediment in that runoff is trapped or detained.

REDUCE ON SITE POTENTIAL INTERNALLY AND INSTALL PERIMETER CONTROLS

While it may seem less complicated to collect all waters to one point of discharge for treatment and just install a perimeter control, it can be more effective to apply internal controls to many small sub-drainage basins within the site. By reducing sediment loading from within the site, the chance of perimeter control failure and the potential off-site damage that it can cause is reduced. It is generally more expensive to correct off-site damage than it is to install proper internal controls.

- Control erosion and sedimentation in the smallest drainage area possible. It is easier to control erosion than to contend with sediment after it has been carried downstream and deposited in unwanted areas.
- Direct runoff from small disturbed areas to adjoining undisturbed vegetated areas to reduce the potential for concentrated flows and increase settlement and filtering of sediments.
- Concentrated runoff from development should be safely conveyed to stable outlets using rip rapped channels, waterways, diversions, storm drains or similar measures.
- Determine the need for sediment basins. Sediment basins are required on larger developments where major grading is planned and where it is impossible or impractical to control erosion at the source. Sediment basins are needed on large and small sites when sensitive areas such as wetlands, watercourses, and streets would be impacted by off-site sediment deposition. Do not locate sediment basins in wetlands or permanent or intermittent watercourses. Sediment basins should be located to intercept runoff prior to its entry into the wetland or watercourse.
- Grade and landscape around buildings and septic systems to divert water away from them.

SEPTIC SYSTEM CONSTRUCTION NOTES

1. The building, septic system and well shall be accurately staked in the field by a licensed Land Surveyor in the State of Connecticut, prior to construction.

2. Topsoil shall be removed and in the area of the primary leaching field scarified, prior to placement of septic fill. Septic fill specifications are as follows:
 - Max. percent of gravel (material between No. 4 & 3 inch sieves) = 45%

GRADATION OF FILL (MINUS GRAVEL)

SIEVE SIZE	PERCENT PASSING (WET SIEVE)	PERCENT PASSING (DRY SIEVE)
No. 4	100%	100%
No. 10	10% - 100%	10% - 100%
No. 40	10% - 50%	10% - 15%
No. 100	0% - 20%	0% - 5%
No. 200	0% - 5%	0% - 2.5%

Fill material shall be approved by the sanitarian prior to placement. It shall be compacted in 6" lifts and shall extend a minimum of ten feet (10') beyond the last leaching trench before tapering off.

3. Septic tank shall be two compartment precast 1500 gallon tank with gas deflector and outlet filter as manufactured by Jolley Precast, Inc. or equal.
4. Distribution boxes shall be 4 hole precast concrete as manufactured by Jolley Precast, Inc. or equal.

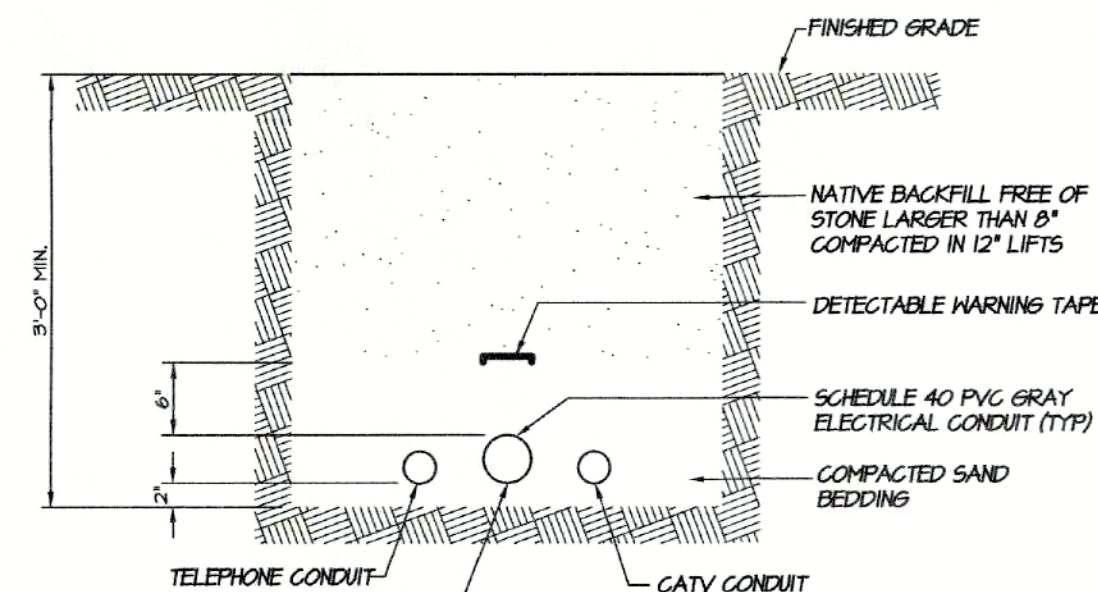
5. All precast structures such as septic tanks, distribution boxes, etc. shall be set level on six inches (6") of compacted gravel base at the elevations specified on the plans.

6. Solid distribution pipe shall be 4" diameter PVC meeting ASTM D-3034 SDR 35 with compression gasketed joints. It shall be laid true to the lines and grades shown on the plans and in no case have a slope less than 0.125 inches per foot.

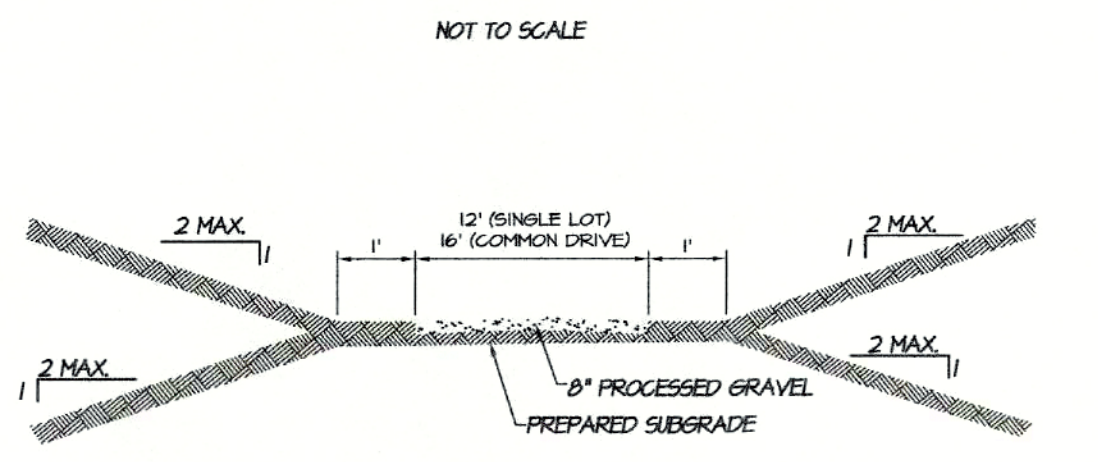
7. Perforated distribution pipe shall be 4" diameter PVC meeting ASTM D-2724 or ASTM D-3350, 1500 lb. minimum crush.

8. Sewer pipe from the foundation wall to the septic tank shall be schedule 40 PVC meeting ASTM D 1785. It shall be laid true to the grades shown on the plans and in no case shall have a slope less than 0.25 inches per foot.

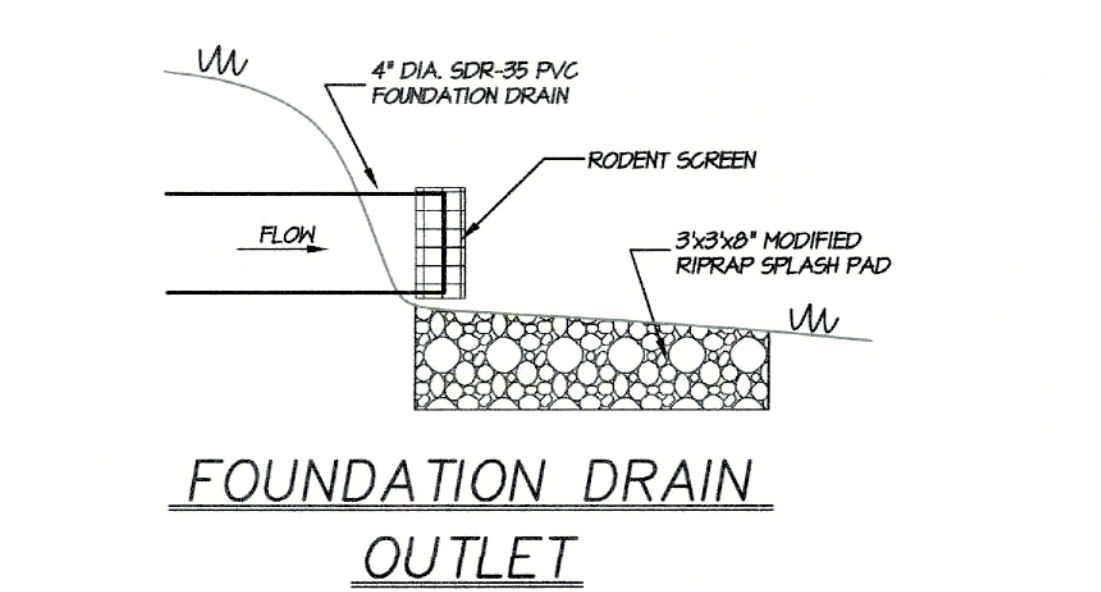
9. Force main pressure pipe from pump chamber to the leaching field shall be 2" diameter pvc meeting ASTM D 2241 SDR 21.
10. Solid footing drain outlet pipe shall be 4" Diameter PVC meeting ASTM D 3034, SDR 35 with compression gasketed joints. Footing drain outlet pipe shall not be backfilled with free draining material, such as gravel, broken stone, rock fragments, etc.



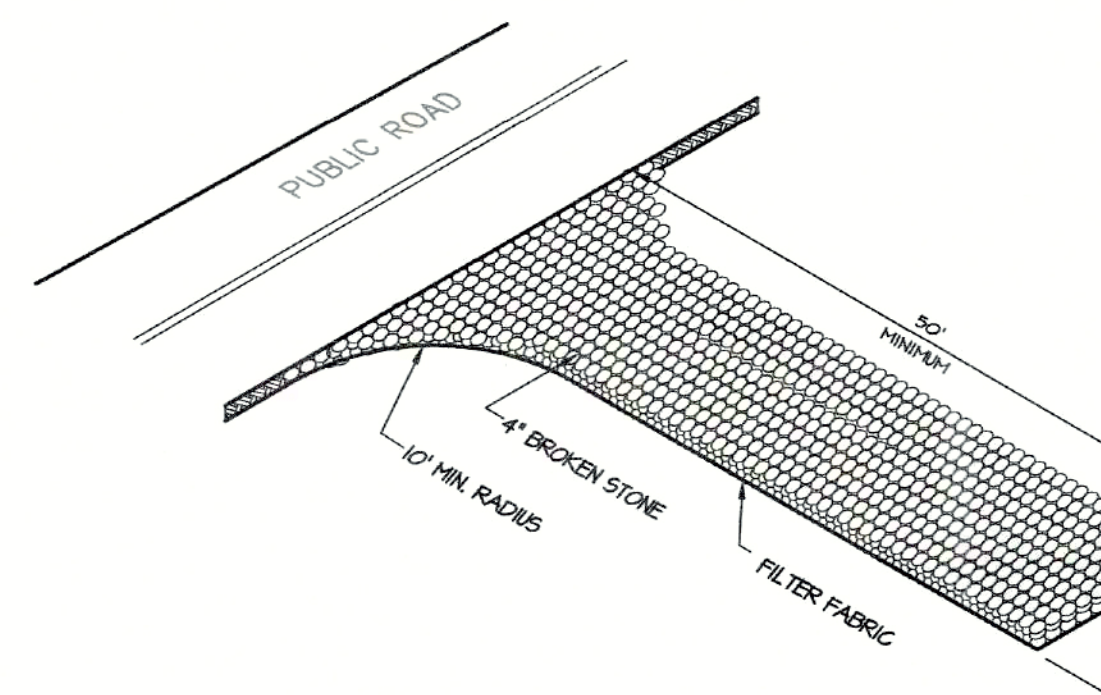
NOTE: CONTRACTOR SHALL PROVIDE SILTCLAY DAMS AT 100' INTERVALS ALONG PROPOSED UTILITY TRENCH TO AVOID TRANSPORTING INTERCEPTED WATER.



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TEST PIT OBSERVATIONS 2/16/2023

Observed by: Donovan Moe, NDDH

TEST PIT	DEPTH	PROFILE
1A	0-12"	topsoil
	12-36"	brown sandy loam
	36-48"	tan fine sandy loam with pockets of rotten rock
	48-96"	wet gray sandy loam with rotten rock
	Mottling	36"
	GWT	48" (seepage)
1B	0-6"	topsoil
	6-30"	brown sandy loam to a tan fine sandy loam
	30-87"	compact gray mottled sandy loam with fines
	87-93"	groundwater
	Mottling	30"
	GWT	87" (seepage @ 42")
1C	Ledge	N/A
	Roots	16"
	Restrictive	36"

PERCOLATION TESTS 2/13/2023

Observed by: Donovan Moe, NDDH

Parc L1
Depth: 24"

TIME	DEPTH
12:13	2.75"
12:18	12"
12:28	18.5"
12:33	20.5"
12:38	22"

Percolation Rate: 3.33 min/inch

TEST PIT OBSERVATIONS 2/16/2023

Observed by: Donovan Moe, NDDH

TEST PIT	DEPTH	PROFILE
2A	0-5"	topsoil
	05-26"	brown sandy loam w/fines
	26-95"	Compact Gray Sandy Loam
	Mottling	26"
	GWT	N/A
	Ledge	N/A
2B	0-6"	topsoil
	6-26"	brown sandy loam w/fines
	26-88"	compact gray mottled sandy loam with fines
	88-94"	groundwater
	Mottling	26"
	GWT	88"
2C	Ledge	N/A
	Roots	20"
	Restrictive	26"

PERCOLATION TESTS 2/13/2023

Observed by: Donovan Moe, NDDH

Parc L2
Depth: 20"

TIME	DEPTH
12:47	1"
12:49	5"
12:52	8"
12:55	10"
1:00	13"
1:05	15"
1:10	16.5"
1:15	18"

Percolation Rate: 3.33 min/inch

Detail Sheet
"2 Lot Subdivision"

Prepared For:
Jeffrey Weaver
Day Street
Brooklyn, Connecticut

DRAWING SCALE: 1"=40'

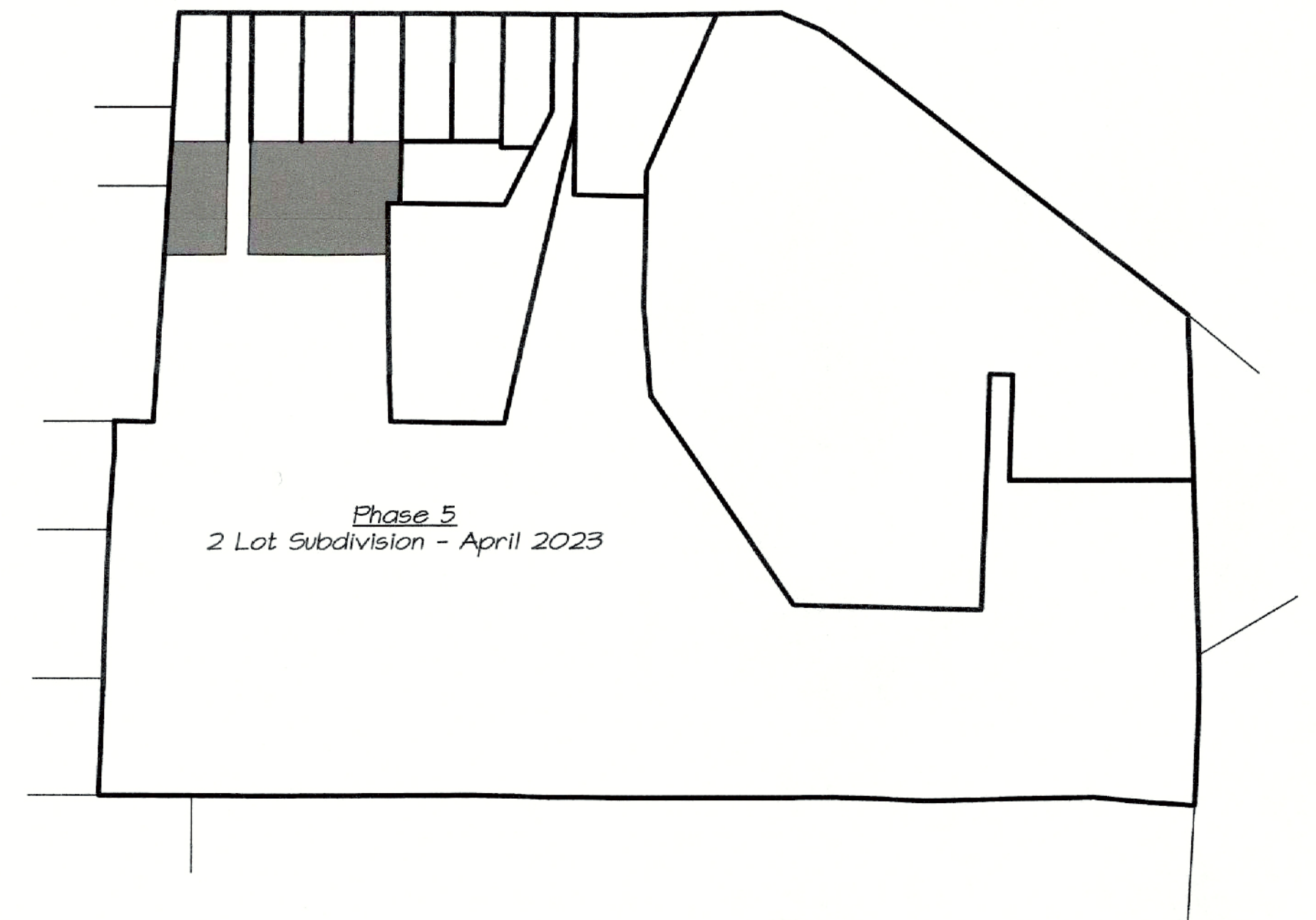
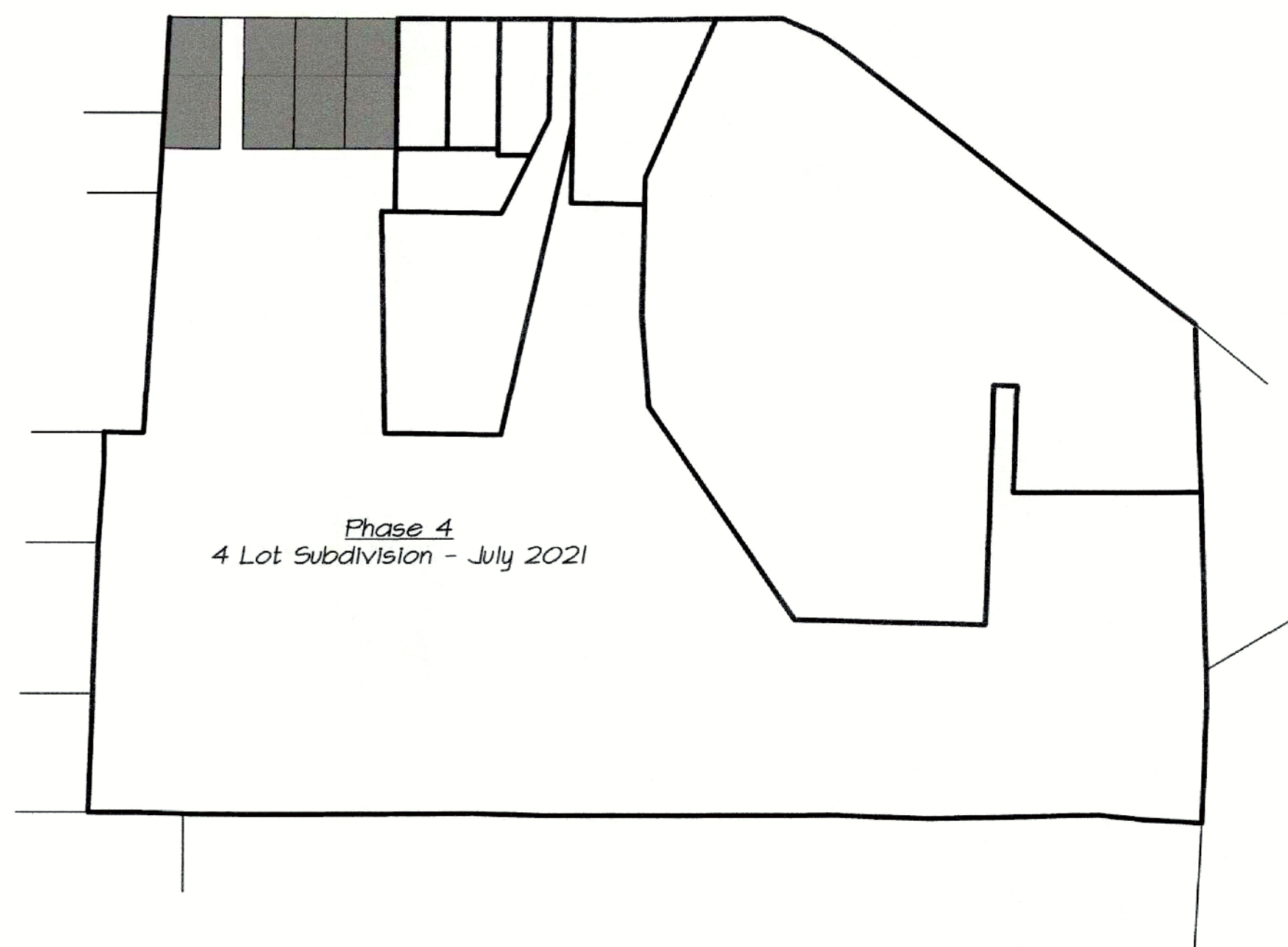
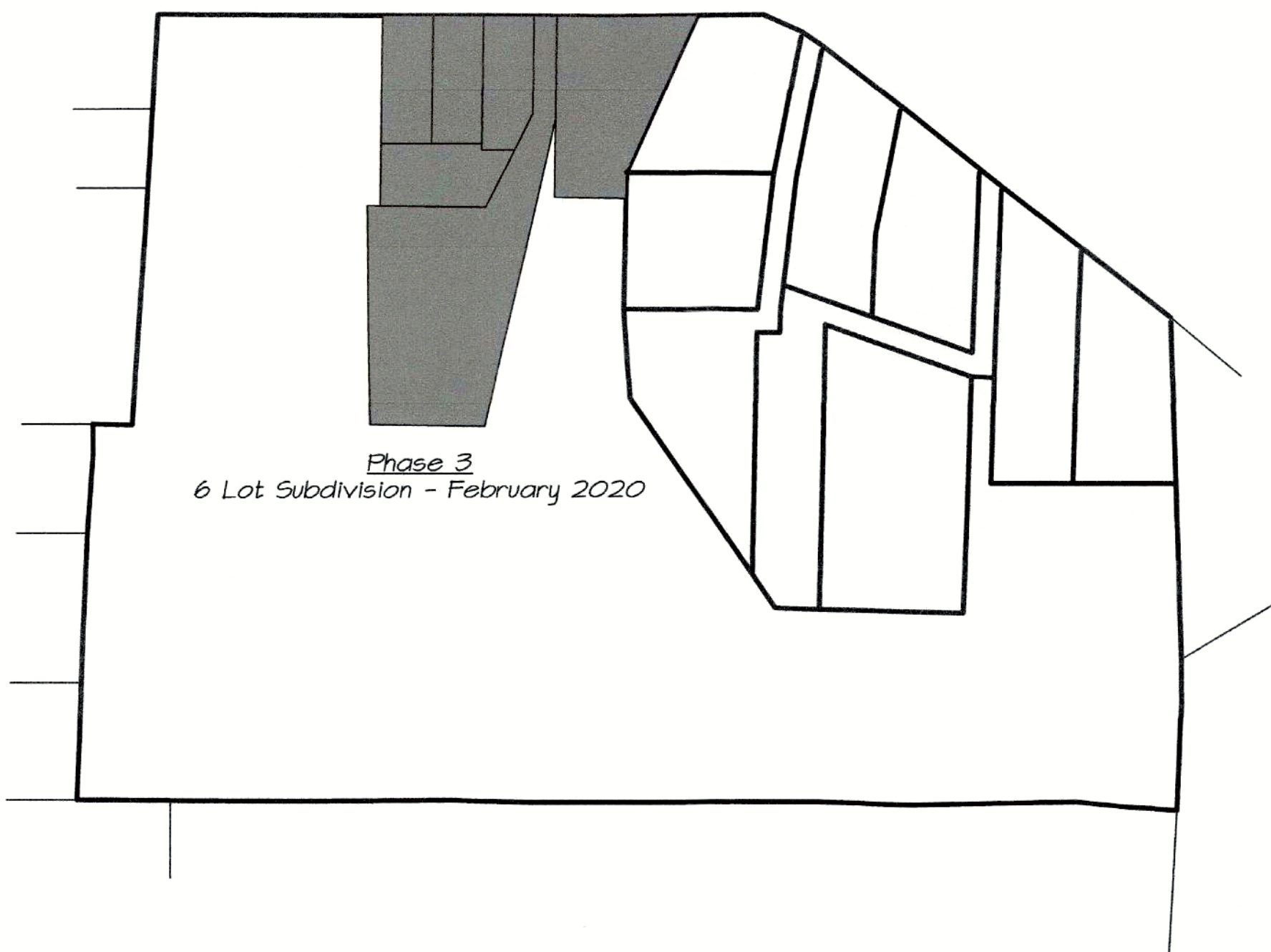
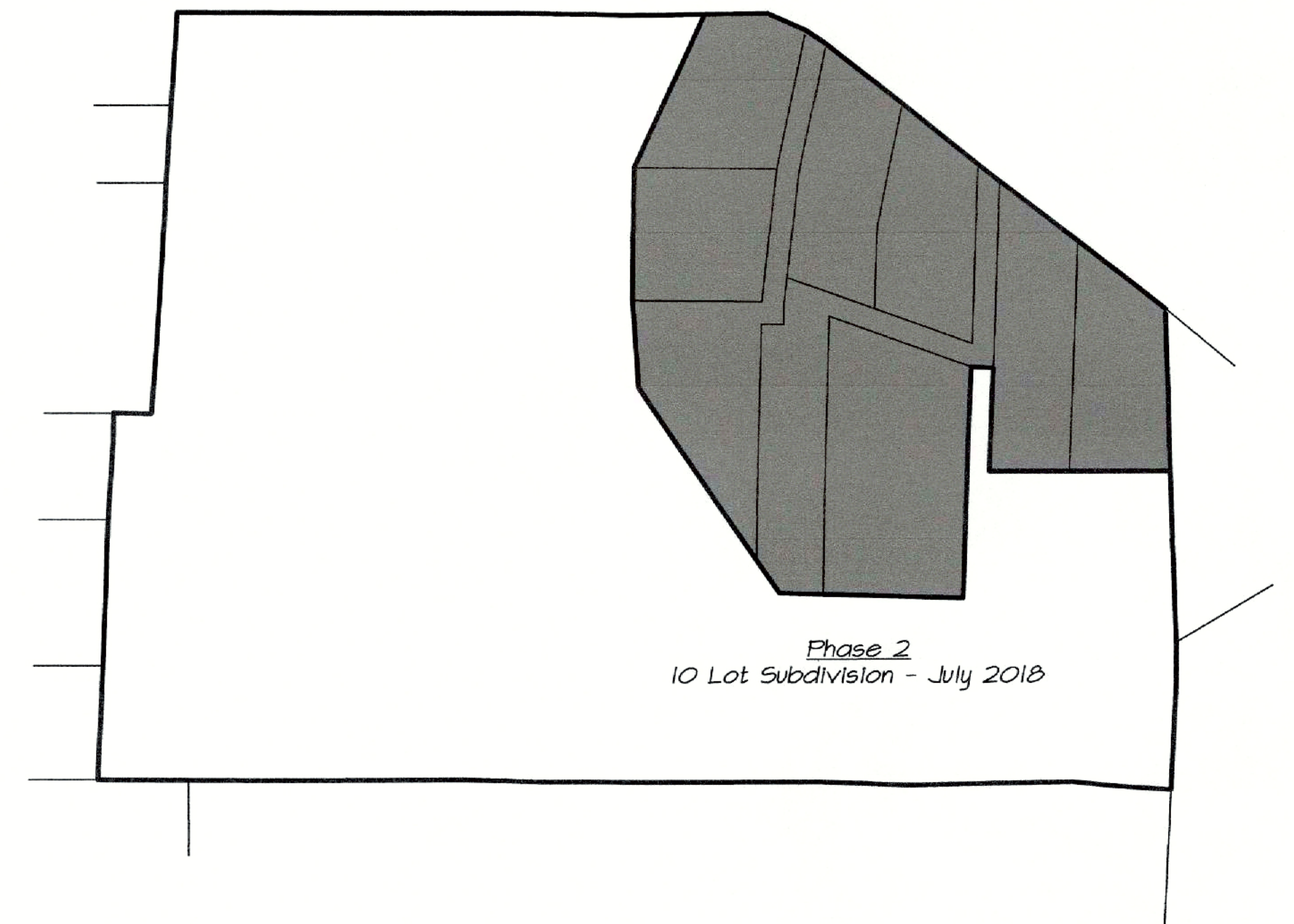
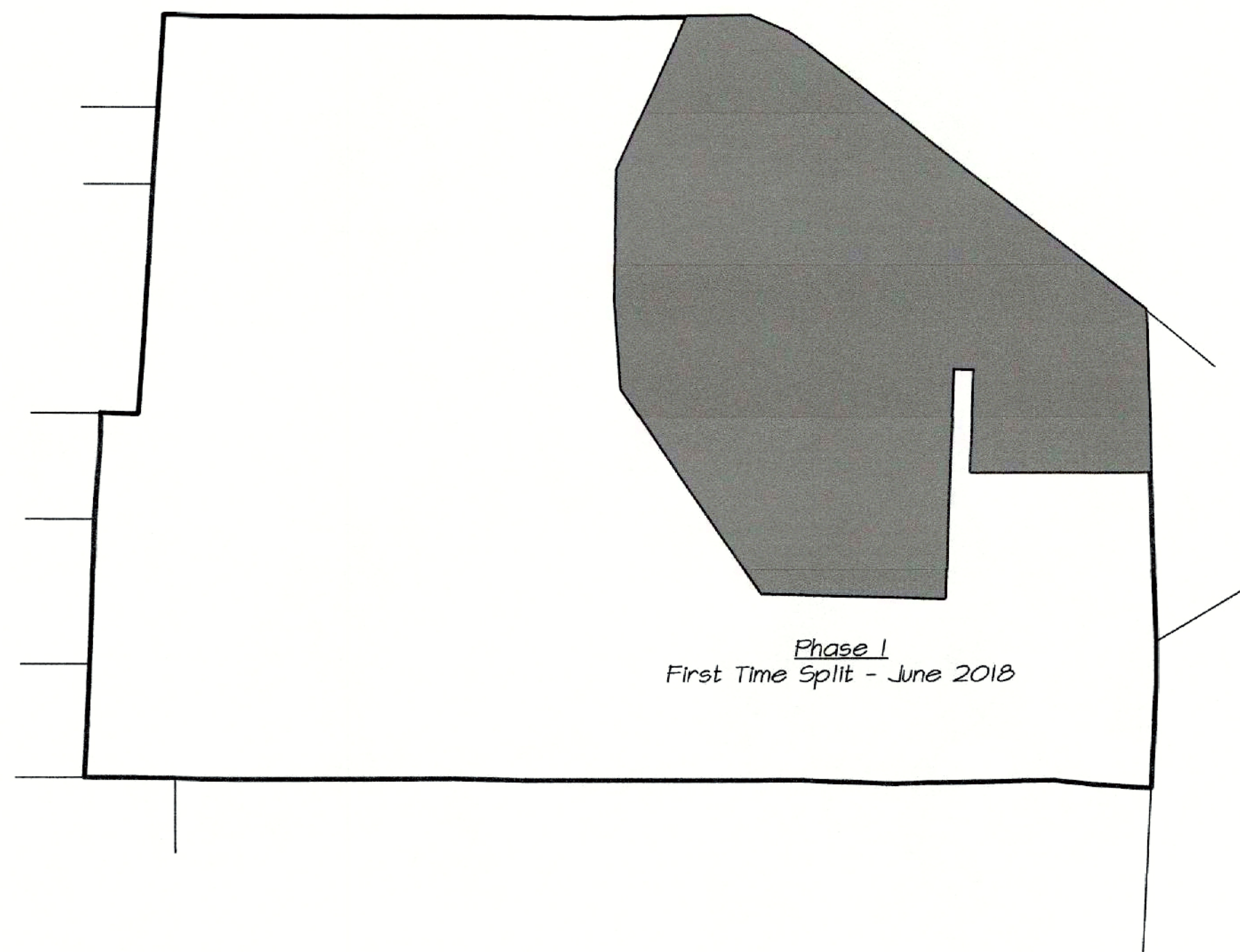
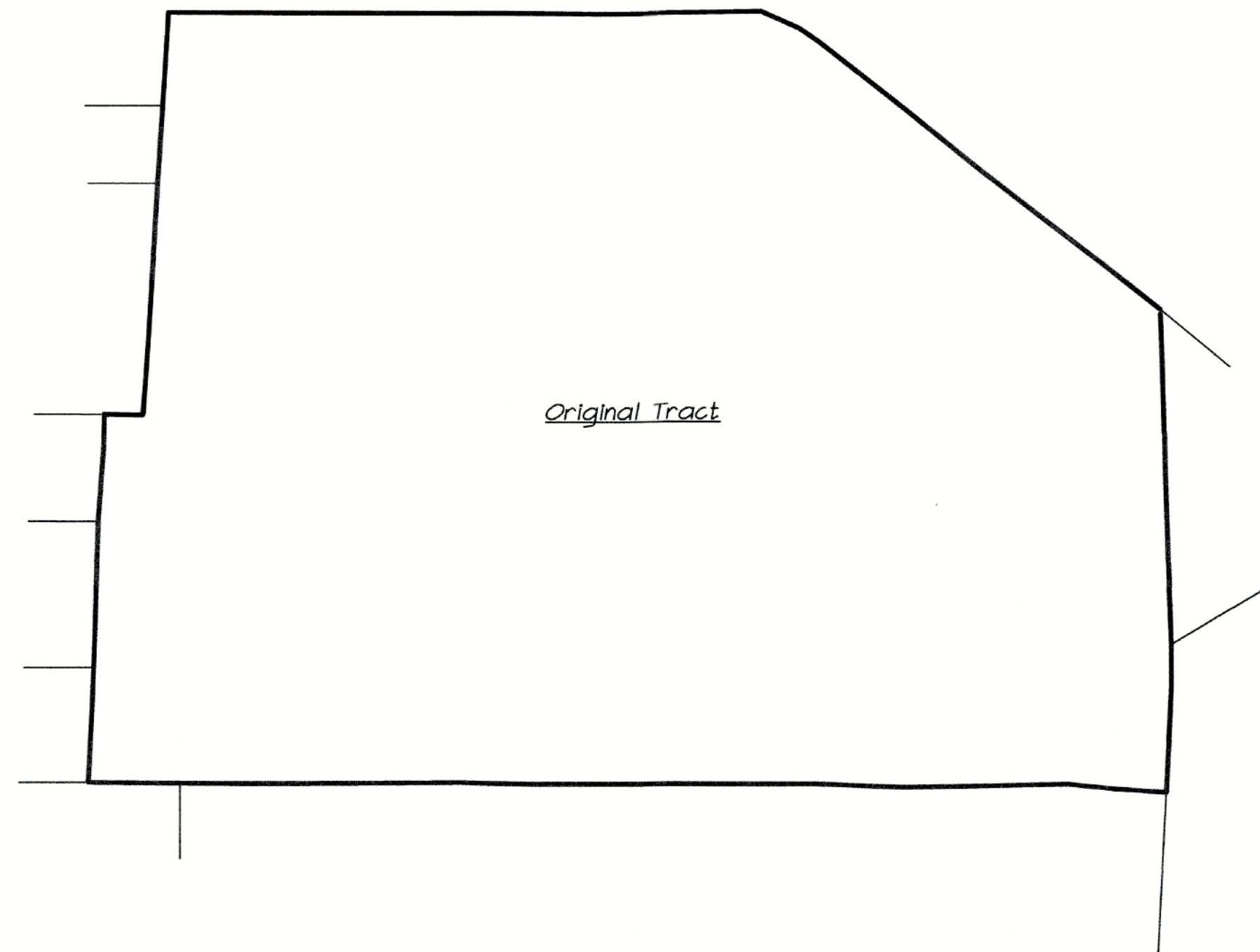
ARCHER Surveying LLC
18 Providence Road, Brooklyn, CT
(860) 779-2240 / (860) 926-1921

KWP **AMERICAN**
SURVEYING - ENGINEERING - GIS PLANNING

LOUIS J. SOJA, JR.
LAND SURVEYOR - LAND PLANNER

NO.	REVISIONS

Sheet No. 5 of 6 Project No. 2212 Date: May 1, 2023



Grantor	Grantee	Date	Vol. / Pg.
	Michael & Sara Lancer	October 1969	48 / 266
Michael & Sara Lancer	Harold Lancer	July 1989	96 / 379
Harold Lancer	Harold Lancer Trustee	July 1997	184 / 89
Harold Lancer Trustee	Jeffrey Weaver	April 2018	608 / 299
Jeffrey A Weaver	Jeffrey A Weaver	June 2018	611 / 81

History Plan
 "2 Lot Subdivision"
 Prepared For:
 Jeffrey Weaver
 Day Street
 Brooklyn, Connecticut

ARCHER Surveying LLC
 18 Providence Road, Brooklyn, CT
 (860) 779-2240

REVISIONS	
DATE	DESCRIPTION

RECEIVED

PLANNING AND ZONING COMMISSION
TOWN OF BROOKLYN
CONNECTICUT

Received Date JUL 31 2023
Action Date _____

Application #SP 23-004
Check# 1002

APPLICATION FOR SPECIAL PERMIT

Name of Applicant Shole's Supply CT LLC Phone _____
Mailing Address 633 WASHINGTON ST, COVENTRY RI Phone 401-822-2212

Name of Owner _____ Phone _____
Mailing Address _____ Phone _____

Name of Engineer/Surveyor Arcton Surveying LLC
Address 18 Providence Rd, Brooklyn CT
Contact Person PAUL ARCTON Phone 979-2240 Fax _____

Property location/address 564 Providence Rd - Route 6
Map # 41 Lot # 17 Zone PC Total Acres 9.97

Proposed Activity - PROPOSED ACE HARDWARE STORE w/OUTSIDE DISPLAY
* PROPANE FILLING STATION

Change of Use: Yes No _____ If Yes, Previous Use _____
Area of Proposed Structure(s) or Expansion _____

Utilities - Septic: On Site _____ Municipal Existing _____ Proposed _____
Water: Private _____ Public Existing _____ Proposed _____

Compliance with Article 4, Site Plan Requirements

The following shall accompany the application when required:

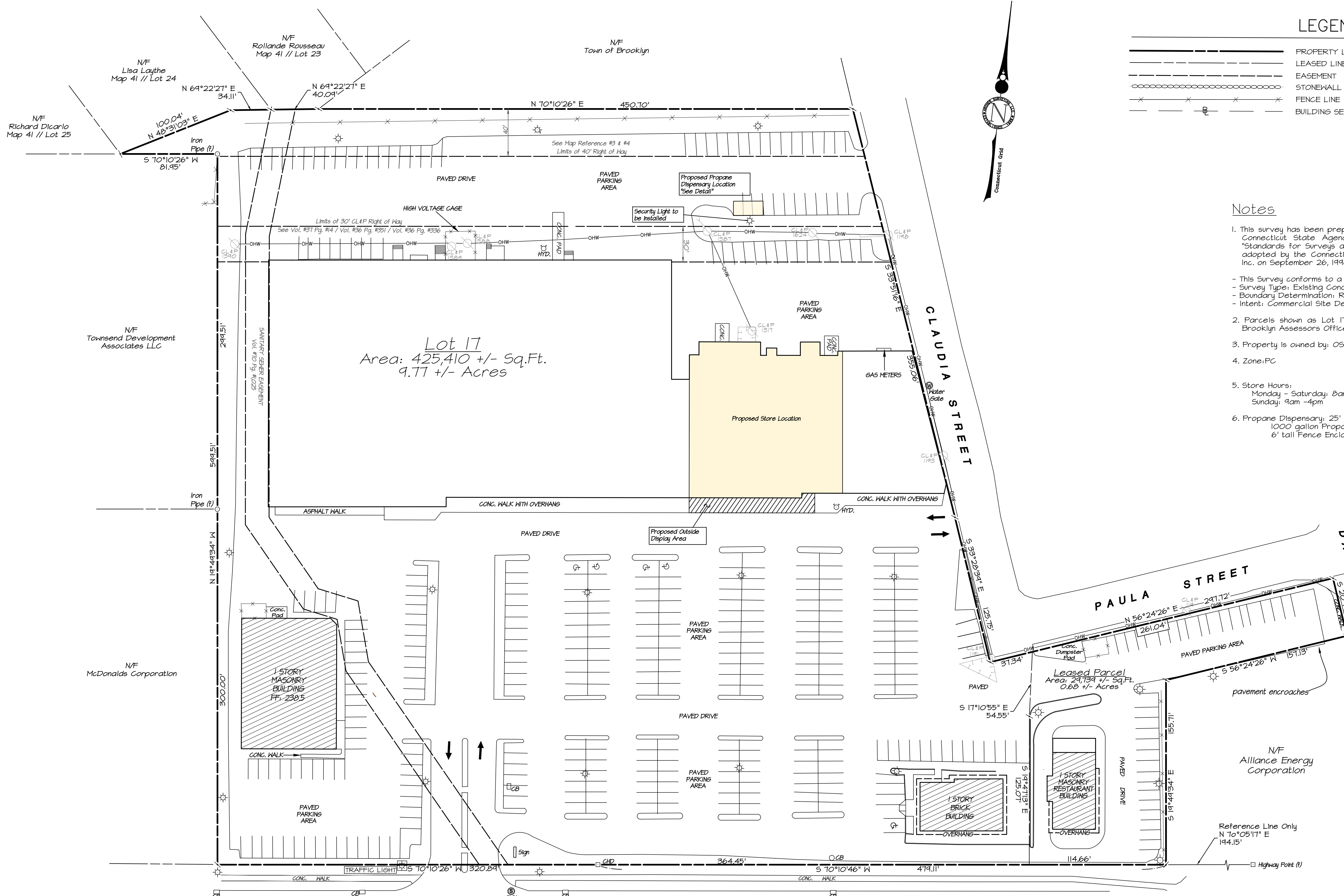
- Fee\$ _____ State Fee (\$60.00) _____ 3 copies of plans _____ Sanitary Report _____
- 4.5.5 Application/ Report of Decision from the Inland Wetlands Commission
- 4.5.5 Applications filed with other Agencies
- 12.1 Erosion and Sediment Control Plans
- See also Site Plan Review Worksheet

Variances obtained _____ Date _____

The owner and applicant hereby grant the Brooklyn Planning and Zoning Commission, the Board of Selectman, Authorized Agents of the Planning and Zoning Commission or Board of Selectman, permission to enter the property to which the application is requested for the purpose of inspection and enforcement of the Zoning regulations and the Subdivision regulations of the Town of Brooklyn

• Applicant: Andrew Shole Date 7-31-23
- Owner: Andrew Shole Date 7-31-23

* Note: Any consulting fees will be paid by the applicant



LEGEND

—	PROPERTY LINE	○	IRON PIN FOUND
- - -	LEASED LINE	⊙	DRILL HOLE FOUND
- · - · -	EASEMENT	□	MONUMENT FOUND
⊘	STONEWALL	⌵	PROPERTY POINT
— x — x — x — x —	FENCE LINE	⊙	LIGHT STANDARD
— —	BUILDING SETBACK	⊙	FIRE HYDRANT
		⊙	UTILITY POLE

- Notes**
- This survey has been prepared pursuant to the Regulations of Connecticut State Agencies Section 20-300b-20 and the "Standards for Surveys and Maps in State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996
 - This Survey conforms to a Class "A-2" Horizontal Accuracy
 - Survey Type: Existing Conditions Plan
 - Boundary Determination: Resurvey
 - Intent: Commercial Site Development
 - Parcels shown as Lot 17, on Assessors Tax Map 41 of the Brooklyn Assessors Office
 - Property is owned by: OSJ of Brooklyn LLC
 - Zone: PC
 - Store Hours:
 - Monday - Saturday: 8am - 7pm
 - Sunday: 9am - 4pm
 - Propane Dispensary: 25' x 12' 1000 gallon Propane Tank 6' tall Fence Enclosure with 2 gates on Concrete Pad

Lot 17
 Area: 425,410 +/- Sq.Ft.
 9.77 +/- Acres

Site Development Plan
 Prepared For:
Sholes Ace Hardware & Supply
 564 Providence Road (Route 6)
 Brooklyn, Connecticut

DRAWING SCALE: 1"=40'

ARCHER Surveying LLC
 18 Providence Road, Brooklyn, CT
 (860) 779-2240 / (860) 928-1921

LOUIS J. SOJA, JR.
 LAND SURVEYOR - LAND PLANNER

Archer Surveying LLC
 18 Providence Road, Brooklyn, CT
 DAVID A. SMITH, P.E. 14173 DATE 7/31/2023
 NOT VALID UNLESS SEAL IS AFFIXED HERETO

To my knowledge and belief, this map is substantially correct as noted herein.

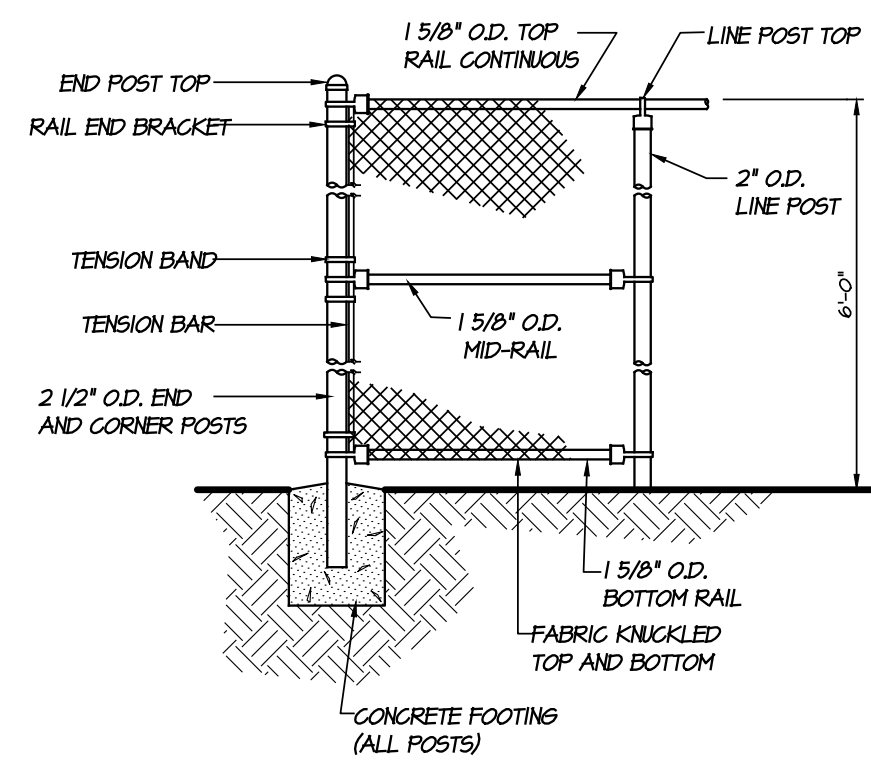
[Signature]
 7/31/2023
 Paul M. Archer, Conn. L.S. #70013

No certification is expressed or implied unless this map bears the embossed seal of the land surveyor whose signature appears hereon.

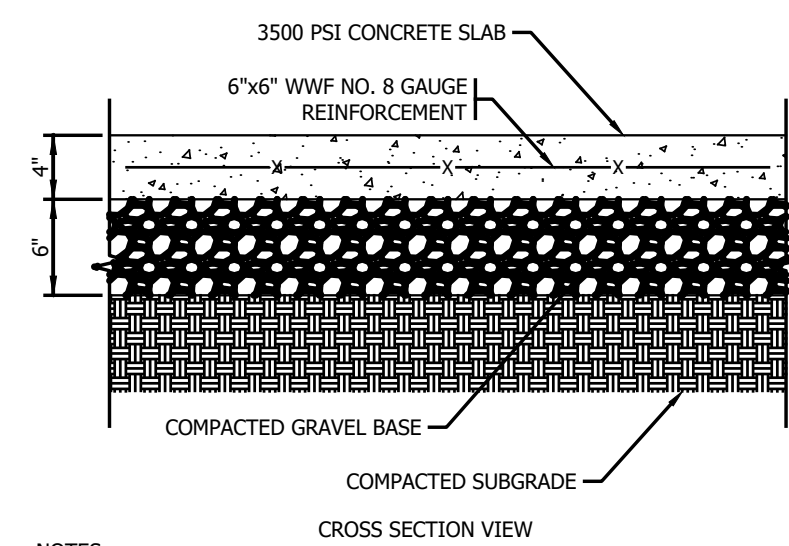
REVISIONS	
DATE	DESCRIPTION

Map References

- Boundary Survey Prepared for OSJ of Brooklyn, 504 Providence Road, Brooklyn, Connecticut, Date: December 2019, Prepared by Archer Surveying LLC



CHAIN LINK FENCE DETAIL
NOT TO SCALE



CONCRETE PAD DETAIL
NOT TO SCALE

Bollard, Model R-1009-40-R

General Description:
R-1009-40-R ASTM C40 removable crash-rated bollards can be depended upon for exceptional stopping power and impact resistance. The R-1009-40-R is independently tested against ASTM C40 P1 with the ability to withstand a vehicle up to 5000 pounds traveling at 30 mph. No assembly or specialty subgrade is required, making for a very easy-to-install crash-rated bollard. To install, simply set the pre-assembled bollard into the site and pour concrete. Removing the crash-rated bollard is straightforward: Insert a lifting handle through the top of the bollard, and lift the bollard out of the bollard sleeve using a forklift or other equipment. To increase aesthetics, place bollard covers over crash-rated bollards.

Specifications:
Height: 66"
Body Diameter: 16"
Weight: 126 lbs
Material: Steel

Notes:

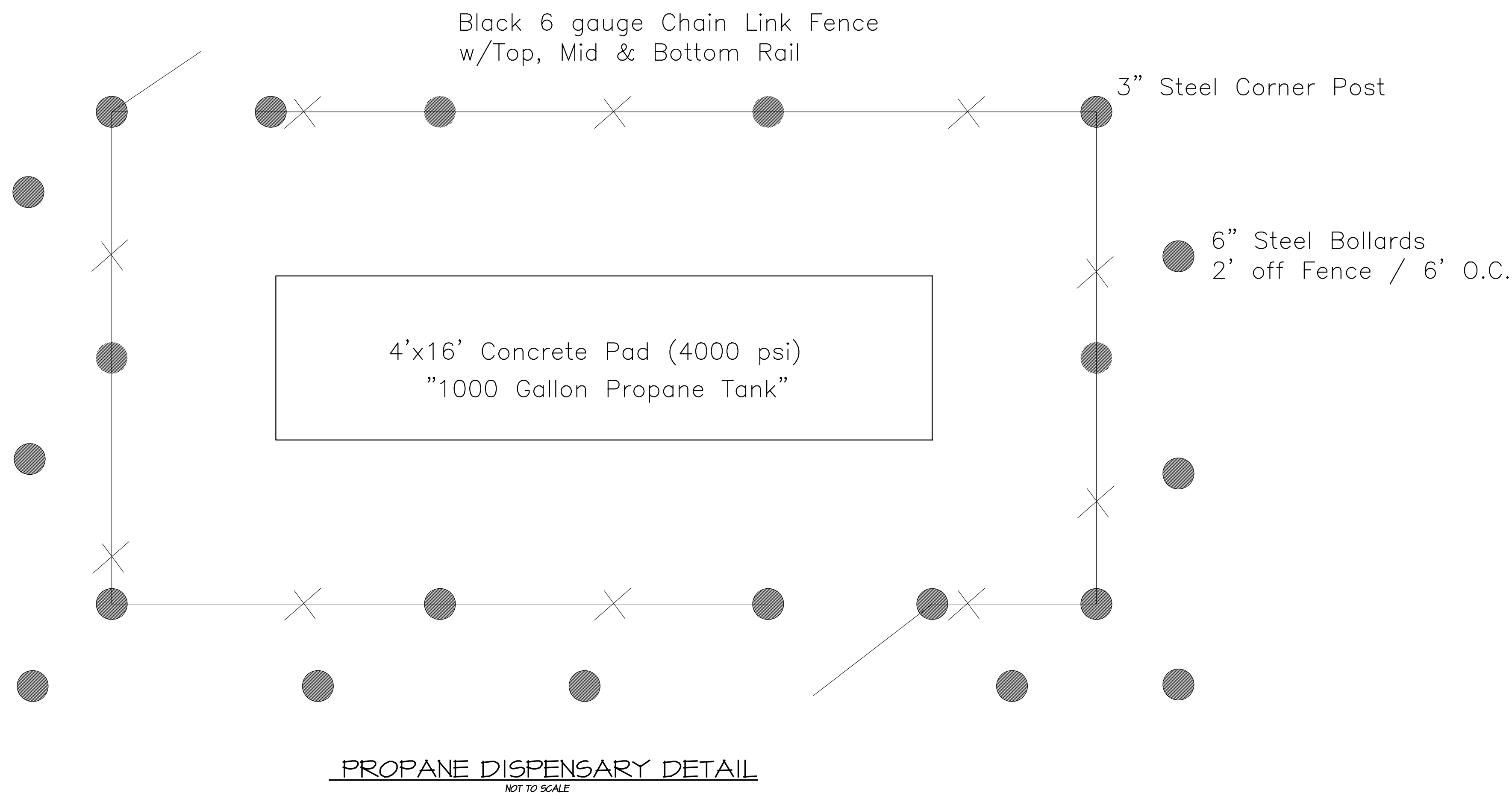
- Embedment details are for reference illustration only. Minimum foundation sizes depend on local soil conditions, weather conditions, and engineering requirements.
- Bollard is provided as shown, with parts listed below. Concrete foundation and/or installation not provided by Reliance Foundry.
- This drawing is not drawn to scale. Dimensions provided herein is for reference only. Please consult Reliance Foundry sales professionals if any dimension is critical to your particular installation.
- Reliance Foundry reserves the right to amend design and specifications without prior notice for product improvement.

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	R-1009-40-R	Removable Sleeve
2	2	REBAR 63	REBAR 1/2\"/>
3	1	R-1009-40-R Cap (Optional)	R-1009-40-R Cap (Optional)
4	1	R-1009-40-R Removable Bollard	R-1009-40-R Removable Bollard

RELIANCE FOUNDRY
Unit 207, 6455 - 148 Street, Surrey, BC V3S 7G2, Canada
1-877-789-3245 info@reliance-foundry.com
www.reliance-foundry.com

Bollard R-1009-40-R

DATE: 07/27/2023
REV: ADZ



PROPANE DISPENSARY DETAIL
NOT TO SCALE

Detail Sheet
Prepared For:
Sholes Ace Hardware & Supply
564 Providence Road (Route 6)
Brooklyn, Connecticut

ARCHER Surveying LLC
18 Providence Road, Brooklyn, CT
(860) 779-2240 / (860) 928-1921

KWP **LOUIS J. SOJA, JR.**
SURVEYING - ENGINEERING - SITE PLANNING
LAND SURVEYING - LAND PLANNING

REVISIONS	
DATE	DESCRIPTION