



PLANNING BOARD MEETING

Tuesday, May 24, 2022 at 6:00 PM

Town Hall - 41 South Main Street Randolph, MA 02368

AGENDA

In accordance with Governor Baker's Order Suspending Certain Provisions of the Open Meeting Law, G. L. c. 30A, § 20, relating to the 2020 COVID 19 emergency, the Planning Board shall meet remotely to avoid group congregation.

A. Call to Order - Roll Call

B. Chairperson Comments

C. Approval of Minutes

[1.](#) Minutes of 5-10-22

D. Public Speaks

E. Public Hearings

F. Old/Unfinished Business

G. New Business

[1.](#) 647 North Main Street - Tier 2 Project Review

H. Staff Report

I. Board Comments

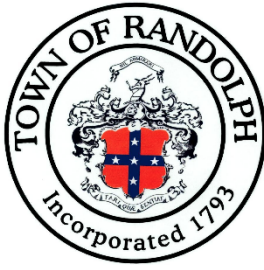
J. Adjournment

Notification of Upcoming Meeting Dates

6/14 and 6/28

7/12

8/23



PLANNING BOARD MEETING

Tuesday, May 10, 2022 at 6:00 PM

Town Hall - 41 South Main Street Randolph, MA 02368

DRAFT MINUTES

In accordance with Governor Baker's Order Suspending Certain Provisions of the Open Meeting Law, G. L. c. 30A, § 20, relating to the 2020 COVID 19 emergency, the Planning Board shall meet remotely to avoid group congregation.

A. Call to Order - Roll Call

PRESENT

Alexandra Alexopoulos
Steve Monteiro
Tony Plizga
Nereyda Santos

ABSENT

Peter Taveira

B. Chairperson Comments

No comments made.

C. Approval of Minutes

1. Minutes Of 4/26/22

A motion was made by Alexopoulos, seconded by Nereyda, that the Minutes of 4/26/22 be approved as amended. The motion passed by the following vote:
Voting Yea: Alexopoulos, Monteiro, Plizga, Santos

D. Public Speaks

No comments made.

E. Public Hearings

1. SUBDIVISION MODIFICATION - PERRY ESTATES

Planner gave an over view of the plan including summary of the first meeting and requests by the Planning Board for plan modifications. Also provided to the Board a

memo regarding suggested names for the street. Planner states that DPW provided email that the stormwater proposal is acceptable.

Gigi Munden (civil engineer)- updated the subdivision plan per the board members' comments. Some changes were the location of the discharge trench based on request from DPW. Will create an easement at the rear of the existing structure as part of stormwater management., details for the HMA berm, calling out granite curbing for the first 30 feet from Chestnut Street with a transition to Cape Cod berm for both sides of the street, updated the profile to show smooth grades, added the light pole location and details, added some statements regarding the HOA which includes the maintenance of snow removal, light and electricity and storm water system.

Chairman Plizga comments:

1) Homeowner's association notes need to be removed from the drawing; there should be a separate legal document. This road will not be accepted by the Town of Randolph because of the criteria involved and will remain as a private way in perpetuity.

2) Submit HOA agreement to Planner for review and approval before the Planning Board endorses the Plan. The language should include statements that HOA established to maintain proposed road including snow removal, stormwater management systems and streetlight and cost of electricity in perpetuity. If the Town of Randolph is requested to make repairs to the stormwater, the HOA shall bear the responsibility of the costs.

3) Where the road comes off of Chestnut Street, create a one foot minimum green space behind the berm. Reduces the road from 24 feet to 23 feet in very short segments but will provide some protection. This would only be on the EAST side of the property line. Reference it on the cross sections.

4) Add the street name to sheet 2 only and make note that it is to remain a private way.

5) On the signature block on the right hand side on sheet 2, we only need 2 blocks for signatures: Board of Health and the Planning Board.

6) Planner provided list of three potential names for a new street based on past practice. One name submitted by the property owner, one name that is based on flora/fauna and one name with some historic significance. Also provided the Board with the list of names that have been requested by various petitioners in the past. Reminded the Board that there is also a lengthy list of surnames from those men and women who lost their lives during the Civil War that could be considered. The Planner provided: Toby Lane, Laurel Lane and Talbot Lane and all have been vetted to ensure no conflict with existing street names. Board discussion about the choices and a decision to accept Toby Lane for a new street name.

7) Add cross section sheet as sheet #7 of the plans. Call out the road width at 23 feet instead of 24 to account for the greenspace behind the berm.

8) On the cross sections, correct berm shape to correspond to the other plan pages. Also on sheet #6 there is no width of berm referenced. It's 6 inches wide so make that

note. On granite curb detail, height should be at least 6 inches except at trans Note on plans.

Discussion about length of construction to incorporate in the decision. Board suggested 1 year, the owner asked for 2 years understanding that he could request an extension.

Additional discussion by Board members regarding process for recording the decision and conditions. Agreed not to repeat the waivers in the motion but to accept those that were requested on the Planning Board form.

A motion was made by Plizga, seconded by Alexopoulos, that the modifications to Perry Estates as shown on six (6) drawings dated May 4, 2022 and the cross sections dated May 2022 for 297 Chestnut Street be approved subject to the following conditions:

- The drawings be updated as discussed by the Board in this meeting and submitted prior to the Board's endorsement of the mylar
- Construction be completed within two (2) years of this decision
- Approval is subject to any conditions of the stormwater permit
- Submission of a Home Owner Association document for review and approval
- Establishment of a performance guarantee as outlined in Mass General Law
- The motion passed by the following vote:

Voting Yea: Alexopoulos, Monteiro, Plizga, Santos

F. Old/Unfinished Business

1. Project review checklist/reminder

Board members have a short discussion. Additional items added to the list would be to review pedestrian circulation, site accessibility and safety such as sidewalks and crosswalks. Also, a proposal should specify existing and proposed easements on a site plan. Request for modifications to be made by the Planner, send out to the Board and discuss again at the next meeting.

2. Master Plan Initiatives

Henry Cooke- Chairman of the Historical Commission and member of the Master Plan Implementation Committee was present for the meeting. The Commission is interested in a joint meeting with the Planning Board to discuss some of the initiatives that require joint actions from both boards, especially though which involve ordinances such as setback allowances, monitoring the impact of site plan and design review on historic resources and notifying the Historic Commission under the demolition delay ordinance. Their next meeting date is June 14 and Chairman Plizga has suggested that both boards meet on that date. Request to the Planner to set up a Zoom.

G. New Business

1. Preliminary subdivision review of 186 Canton Street

The Planner gave an over view of the plan. The applicant had previous casual discussion of the property and potential options. He has submitted a preliminary plan for review. The lot is on Canton Street approximately where Canton and Reed Streets split. It contains a single family 1 ½ story single family home. The applicant proposes subdividing the parcel to create a twenty (20) foot wide road way with a cul-de-sac to permit an additional lot. The result would create one lot that conforms with zoning and one lot that does not conform with zoning regulations regarding size and frontage. This is a preliminary plan so does not require abutter notification or public hearing notices. One neighbor did appear at Town Hall asking about the plan and the information was provided.

Robert Nichols: The road would be a 24 foot layout with 20 feet paved. Created that based on recommendations from the last meeting with the Board. The existing lot at about 30,000 square feet is large for only one house and the hope is to add another single family home to increase tax revenue and turn a blighted lot into something that adds value to the Town. Conducted an inventory of trees and there are about 17 trees with diameters greater than 6 inches which will remain. Tried to be thoughtful about the plans so that there is no clear-cutting of mature trees where possible.

Plizga: Request confirmation that the Board options are to APPROVE, APPROVE WITH CONDITIONS or DISAPPROVE and that the applicant could return with a definitive subdivision plan regardless OR the Board could vote to continue the meeting.

Planner confirms the information presented by Plizga also stating that if a preliminary plan is approved, the definitive must be filed within 7 months of approval to retain all of the applicable zoning and/or conditions.

Significant discussion by the Board with concern about creating a non-conforming lot, the location of the cul-de-sac as it relates to abutting properties. The Board and applicant discussed alternative options for relocating a turn-around or creating a hammerhead that would be sufficient for emergency apparatus access that would be improved for abutting properties and potentially reduce the non-conformity. Also discussed whether the lot size and frontage could accommodate a two-family home instead of subdividing it to create an additional lot, what set-backs would be required and where driveway access could be established.

The Board asked Mr. Nichols to review alternatives as discussed and have them evaluated by the Fire Department regarding access. The Planner can facilitate as necessary.

A motion was made by Plizga, seconded by Alexopoulos, to continue the preliminary subdivision review of 186 Canton Street to June 14. The motion passed by the following votes:

Voting Yea: Alexopoulos, Monteiro, Plizga, Santos

H. Staff Report

19 Highland Avenue- installation of facade. Installed the faux stone along the commercial portion of the structure. They started applying the cedar color paint.

Allen Street- Continued work on the foundation.

other updates:

Mexicali Grill- Planner will send a reminder by email or letter to them that they are committed to completing the painting modifications previous required by May 31.

I. Board Comments

J. Adjournment

Motion made by Alexopolous, seconded by Santos.

Voting Yea: Alexopoulos, Monteiro, Plizga, Santos

Meeting schedule

5/24/22

6/14/22 and 6/28/22

7/12/22 and 7/26/22

8/23/22

Development Impact Statement

Proposed Daycare Facility, 647 North Main Street, Randolph, MA

March 30, 2022

Section G, Item 1.

The 26,936 s.f. (0.618-acre) site at 647 North Main Street is the current location of an 18,067 s.f. paved parking area.

The project consists of the construction of a 72.5' x 89.0' (6,453+/- s.f.) single story daycare facility. In addition to the building construction, a small fenced in outdoor play area and 28 parking spaces are proposed.

Environmental Impact

Existing Conditions

The site currently contains 18,067 s.f. of pavement. Surface topography is relatively flat. Stormwater runoff from the site flows both into North Main Street and Orchard Street where it is collected into the Town's drainage system. The immediate area surrounding the site is completely developed with commercial and residential properties.

Environmental Impact Standards

- The proposed development will not create any significant emission of noise, dust, fumes, noxious gases, radiation, water pollutants, or any other similar significant adverse environmental impacts.
- The proposed development does not increase the potential for erosion, flooding or sedimentation. The existing 18,067 s.f. of pavement will be removed and the site will be re-developed with 11,030 s.f. of porous asphalt and a 6,453 s.f. building. Stormwater from the building roof will be collected and recharged via a buried stormwater management system. Porous asphalt is considered pervious, with stormwater treatment and recharge provided via the underlying sand and gravel layers below the surface. The reduction in impervious pavement and the provisions for stormwater recharge will result in decreased runoff from the site.
- Given that the site has been 100% previously developed, there are no unique natural features on the site.
- Since the area surrounding the site is completely developed via existing streets and developed lots, the design eliminates the requirement for fill. At most, one foot of fill will be placed underneath the building and one-half foot of fill will be needed in the high point of the parking lot.
- There is currently no existing vegetation on the site (other than overgrown weeds in the unpaved areas). Any areas on the site not otherwise covered in building or porous asphalt will be loamed, seeded and /or landscaped.

Community Impact

- The proposed site development will not impact the integrity of the zoning district (Orchard Street Business District). Considering a Fast Food Establishment or Restaurant are both allowable uses in this zoning district, the use of the site as a daycare facility is significantly less impactful with respect to noise, odors, hours of operation and all day vehicle trips. The structure and associated parking will enhance site conditions with no detriment to the neighborhood.
- The site development does not impact any historic properties or archeological resources.

Development Impact Statement

Proposed Daycare Facility, 647 North Main Street, Randolph, MA

March 30, 2022

Section G, Item 1.

- The site development does not place any unusual burden on the water system, sewage system, school system, fire or police protection, libraries, parks or recreation facilities.

Community Impact Standards

- The proposed building will be an aesthetically pleasing commercial building. No loading docks are proposed. The proposed dumpster will be located away from the residential homes on Orchard Street and will be surrounded by stockade fence to conceal it.
- The proposed development will not have any adverse impact on temperature levels or wind velocities on the site or adjoining properties.
- Site lighting will be vertically shielded wall pack lights mounted on the exterior building walls along with vertically shielded light poles. All lighting will minimize glare and light spillover to neighboring properties.

Traffic Impact

- Peak traffic to and from the site will occur in the early morning and mid-to-late afternoon. Anticipated vehicle trips would be 71 morning peak hour trips and 72 afternoon peak hour trips. Vehicles entering and exiting the site on North Main Street would be managed by new controls installed on the existing traffic lights.
- Please refer to the Traffic Impact Assessment dated December 2021, prepared by Gillon Associates for additional details.

Traffic Impact Assessment

For:

Child Care Facility

At:

647 North Main Street

In:

Randolph, Massachusetts

Prepared For:

Site Design Professionals, LLC
Sharon, Mass.

Prepared By:



December 2021

Child Care Facility

647 North Main Street (Route 28)
Randolph, Massachusetts

Gillon Associates Co.
111 River Street, N. Weymouth, MA 02191-2104
Telephone: (781) 589-7339
E-mail: jt.gillon@comcast.net

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EXECUTIVE SUMMARY

- **North Main Street carries approximately 25,000 vehicles per day in the vicinity of the site. Approximately seven percent of this daily volume occurs during both the morning and evening peak hour.**
- **This project is expected to generate approximately 71 morning driveway peak hour trips with 38 inbound and 33 outbound. This project is also expected to generate approximately 72 driveway evening peak hour trips with 34 inbound and 38 outbound.**
- **The signalized intersection on North Main Street opposite the Simon C. Fireman Community Life housing complex will be the site's main driveway. Current site plans call for adding a fourth leg to this existing "T"-type intersection. One option of modifying the intersection includes adding traffic signal heads to regulate the proposed new driveway.**
- **Increased traffic volume at this North Main Street / Senior Life driveway / Site driveway intersection is expected to result in virtually no noticeable increase in delay. The morning delay here is not expected to increase more than 0.8 seconds. The evening delay at this intersection is expected to increase only about 2.9 seconds. All approaches will continue to operate at their baseline or "Base" level with one exception. The N. Main Street southbound approach is expected to decrease slightly from an excellent "A" level with short or no delay to a "B" level with short delay. These Levels of Service indicate the intersection to have no noticeable increase in delay to Randolph motorists travelling these roadways.**
- **The un-signalized intersection of North Main Street at Vasey Road will continue to result in no additional delay on North Main Street. The additional 13 trips southbound and 15 trips northbound in the morning peak hour will have de minimis impact on this intersection. Similarly, the additional 15 trips southbound and 14 trips northbound in the evening peak hour will be equivalent to about one vehicle every four minutes in either direction and have minimal impact. However, there are extensive delays currently exiting Vasey Road, thus, the new site driveway onto Orchard Street will mitigate any possible impact from this project.**
- **The required stopping sight distance at the site driveway intersection on North Main Street is provided.**
- **Crash data for the entire Study Area was researched from the Massachusetts Department of Transportation records over the latest available three-year period. While only one crash was reported near the North Main Street driveway, eight crashes were reported within the Study Area. No fatality or personal injury crashes were reported. The crashes did involve property damage only. Most crashes occurred during daylight hours on dry pavement. This intersection crash history is not considered unusually high or uniquely hazardous.**

INTRODUCTION

Gillon Associates has evaluated the anticipated traffic impacts resulting from the construction of a new 6,453 Square-Foot Child Care facility to be located on the easterly side of North Main Street (State Route 28) in Randolph, Massachusetts (Figure 1).

The purpose of this report is to evaluate potential traffic impacts, which may be created by the expected addition of vehicular traffic either originating from or destined to the site. Specifically, this report assesses traffic operational characteristics of the following intersections:

- N. Main St. at Senior Life Driveway / Site Dr.
- N. Main St. at Vasey Road

This report provides an identification of the expected traffic generated by the project along with an assessment of existing, baseline, and projected traffic operating characteristics. Existing traffic volumes were identified by obtaining new volume from PDI., a traffic counting sub-contractor and adhering to the MassDOT protocol for assessing roadway traffic volume during and after the Covid-19 Pandemic. Pre-Covid counts were identified by previous MassDOT counts just north of the site and were increased by an identified normal growth factor for existing conditions notwithstanding the decrease due to Covid.

No Credit was taken for the previous land-use on this site. Site Generated traffic projections are based on similar land use and size.

PROJECT DESCRIPTION

The project includes preparing the site and building a new structure where a new modern 6,453 Square-Foot Child Care facility will be built (Figure 2).

EXISTING TRAFFIC CONDITIONS

Regional Roadway Network

North Main Street (Route 28) will continue to serve the site and provide access to both local and regional roadway facilities. North Main Street provides linkage to the north to Milton, Dorchester, and Route I-93 as well as the MBTA Rapid Rail Station at Ashmont. North Main Street also connects with Randolph Center and Brockton to the south.

Traffic Setting

The project is situated on the easterly side of North Main Street. Adjacent to the site, North Main Street has one lane of traffic in each direction. North Main Street has a roadway pavement width of approximately 39 feet adjacent to the site with sidewalk on both sides.

Existing Traffic Volumes

North Main Street carries approximately 25,000 vehicles per day in the vicinity of the site (Figure 3). Morning and evening peak hour traffic volumes were obtained from the sub-consultant and are provided for both morning and evening peak hours on Figures 4 and 5 respectively.

Although these counts were obtained recently, we also looked at pre and post traffic counts obtained in Randolph at the continuous traffic counting on North Main Street north of the site (Figure 6). These counts showed about a nineteen percent decrease in 2021 over the 2018 pre-covid counts. Therefore,

the North Main Street counts were increased by the 19 percent to conservatively adjust the North Main Street post covid count. The manual Covid-19 adjusted upward morning and evening turning movement counts for 2021 are provided on Figures 7 and 8 respectively.

FUTURE TRAFFIC CONDITIONS

In order to assess the future traffic demands on the adjacent roadways, the latent demand or normal growth in traffic volumes which will occur prior to occupying the new apartments has to be identified. This growth in traffic volume will be associated with normal increases due to new development and an increase of licensed drivers, as well as employment opportunities in the area.

Background Traffic Growth

The normal growth rate was established after reviewing the closest MassDOT counting station to the site. A conservative positive increase of one percent growth rate per year was adopted for this analysis based on MassDOT Station #6745 (Figure 9). The Base year, seven years out in the year 2028, traffic flow onto which the site related traffic will be added for analysis purposes are shown for weekday morning and evening peak hours on Figures 10 and 11 respectively.

Trip Generation and Distribution

It is expected that the proposed child care facility will exhibit the same general trip generating characteristics as in other suburban residential communities. In addition to local rates observed and compiled by this firm, the Institute of Transportation Engineers (ITE) provides data on a variety of land uses and there is a considerable amount of empirical data available. The ITE-Land-Use Code 565 was used for the child care center and no credit was taken for the previous use. Figure 12 provides a trip generation summary listing the ITE equations along with the resulting trip generation values for the new 6,453 square-foot child care center. This project is expected to generate approximately 71 morning driveway peak hour trips with 38 inbound and 33 outbound. This project is also expected to generate approximately 72 driveway evening peak hour trips with 34 inbound and 38 outbound.

Directional distribution trip assignments are shown on Figure 13. This projected directional distribution reflects the existing arrival and departure patterns at the site and the relation of major commuting corridors and the Interstate system. Site generated weekday morning and afternoon traffic volumes associated with the project are shown on Figures 14 and 15 respectively.

Projected weekday morning and evening peak hour traffic volumes representing a build condition for the site in the year 2028 for this child care project are provided on Figures 16 and 17 respectively.

TRAFFIC OPERATIONAL ANALYSIS

This section of the report provides a quantitative analysis of anticipated traffic operational characteristics for the build scenarios. These series of capacity analyses were conducted for weekday morning and evening peak hours to determine the potential impact of the proposed child care center.

Analysis Methodology and Findings

The analysis is based on the "Highway Capacity Manual" for both signalized and non-signalized intersections. This manual has been published by the Transportation Board of the National Research Council and approved by the National Academy of Sciences, National Academy of Engineering, and the Institute of Medicine. The latest Synchro Software version 11 was utilized in the assessment.

At un-signalized intersections the manual assumes that the through and right-turn movements along any main street will operate unrestricted but conflicting movements will be subjected to various periods of delay depending primarily on the frequency of adequate safe gaps to complete these movements. These periods of delay are generally categorized in "Levels of Service" (LOS) ranging from "A" for very short or no delays through "F" for extensive delays. The Massachusetts Highway Design Manual indicates that a "D" Level of Service is acceptable on roadways such as those in the study area. A table comparing levels of service and seconds of delay is provided in the Appendix of this report.

North Main Street at Senior Life / Site Drive

This signalized intersection which will be the site's main driveway is opposite the Simon C. Fireman Community Life housing complex. Current site plans call for adding a fourth leg to this existing "T"-type intersection. Figure 18 shows one option of modifying the intersection to include traffic signal heads to regulate the proposed new driveway.

As can be seen on Figure 19 and the calculations provided herein, increased traffic volume at this North Main Street / Senior Life driveway / Site driveway intersection is expected to result in virtually no noticeable increase in delay. The morning delay here is not expected to increase more than 0.8 seconds. The evening delay at this intersection is expected to increase only about 2.9 seconds. All approaches will continue to operate at their baseline or "Base" level with one exception. The N. Main Street southbound approach is expected to decrease slightly from an excellent "A" level with short or no delay to a "B" level with short delay. These Levels of Service indicate the intersection to have no noticeable increase in delay to Randolph motorists travelling these roadways.

North Main Street at Vasey Road

This un-signalized intersection will continue to result in no additional delay on North Main Street. The additional 13 trips southbound and 15 trips northbound in the morning peak hour will have de minimis impact on this intersection. Similarly, the additional 15 trips southbound and 14 trips northbound in the evening peak hour will be equivalent to about one vehicle every four minutes in either direction and have minimal impact. However, there are extensive delays currently exiting Vasey Road, thus, the new site driveway onto Orchard Street will mitigate any possible impact from this project.

Vasey Road at Orchard Street

This un-signalized intersection will continue to result in no delay on North Main Street, Vasey Road, or Orchard Street and there are sufficient gaps in this traffic stream to accommodate any increase in volumes from the site during both the morning and evening peak hours. All approaches will continue to operate with an "A" level of service with short or no delay.

SIGHT DISTANCE EVALUATION

The approaching northbound and southbound vehicle on North Main Street must be able to stop in time to avoid making contact with a vehicle slowing or stopping at the site entrance driveway. The required stopping sight distance from either a minor street or driveway is obtained from "A Policy on Geometric

Design of Highways and Streets" as published by the American Association of State Highway and Transportation Officials (AASHTO) 7th Edition published in 2018.

Unlike the minimum safe stopping distance (MSSD) along a section of roadway, stopping sight distance at a driveway is not measured along either the center line or gutter line of a roadway. On page 9-29 of the American Association of State Highway and Transportation Officials (AASHTO) manual, it is stated "If the available sight distance for an entering or crossing vehicle (at an intersection corner) is at least equal to the appropriate stopping sight distance for the major road, then drivers have sufficient sight distance to anticipate and avoid collisions."

The motorist leaving the minor roadway or driveway has an eye height of 3.5 feet and he must be able to see another object (approaching vehicle) with a height of 3.5 feet. The required stopping distance for each minor roadway or driveway is based on the following formula:

$$d = 1.47 Vt + 1.075 \frac{V^2}{a}$$

Where: V = Speed in miles per hour (mph)
t = perception & Reaction time (2.5 seconds)
a = deceleration of vehicle (11.2 ft/sec.²)

A speed survey was conducted on North Main Street where both the average northerly and southerly speed was calculated as 33 to 36 mph (Figure 20). However, the 85th percentile speed or speed at which all motorists were traveling at or below in the northbound direction was 38 mph and the 85th percentile southbound speed was calculated as 41 mph. This characteristic is commonly used as the roadway design speed. Therefore, the required stopping sight distance for the North Main Street driveway is computed as shown below:

$$d = 1.47 * 41 * 2.5 + 1.075 * \frac{(41)^2}{11.2}$$

$$d = 150.3 \text{ ft} + 161.3 = 312 \text{ feet}$$

There is over 450 feet of stopping sight distance available in both directions. Therefore, all through motorists, do have clear stopping sight distance and the driveway onto North Main Street is safe.

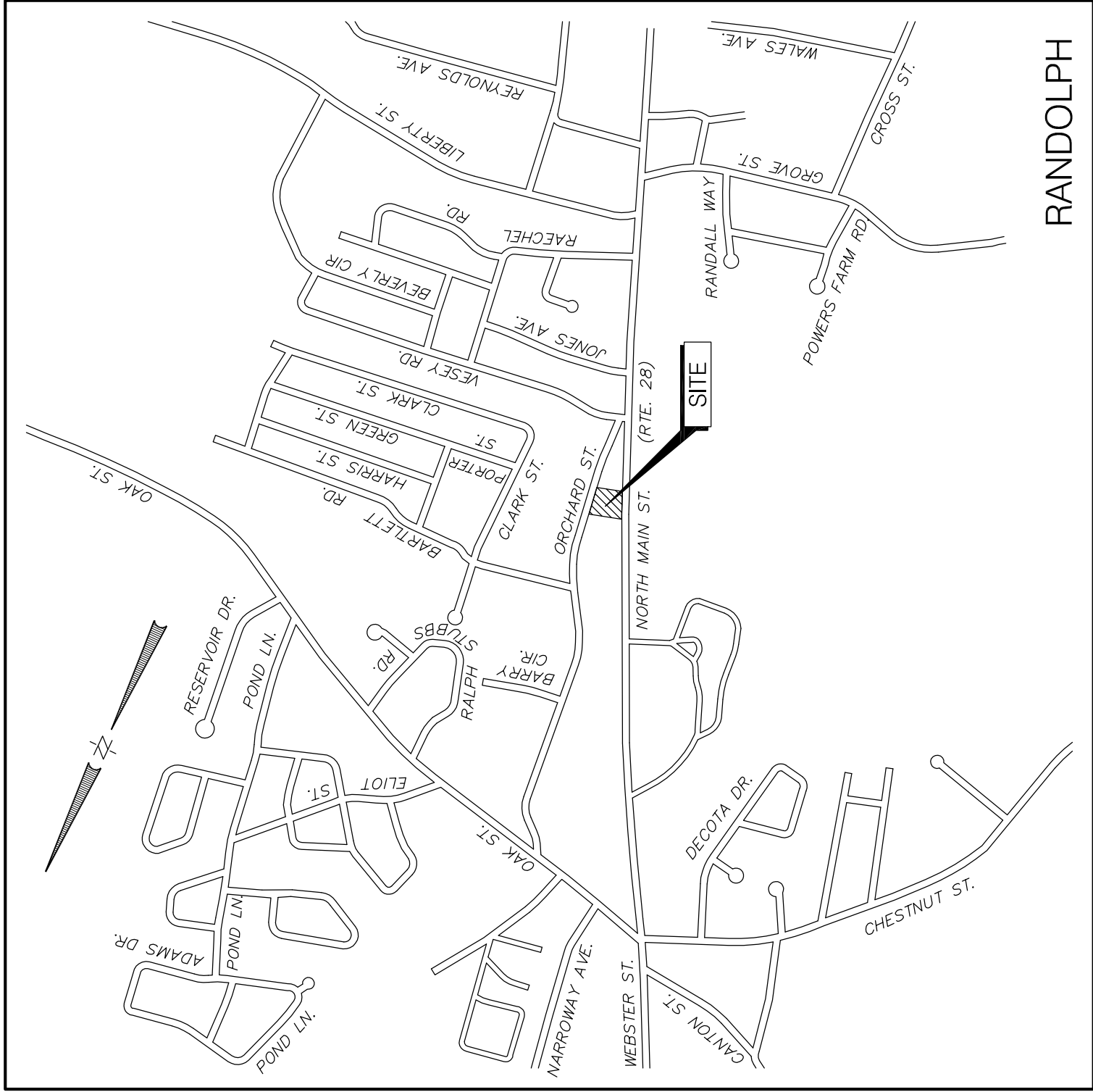
CRASH ASSESSMENT

Crash data for the entire Study Area was researched from the Massachusetts Department of Transportation records over the latest available three-year period. While only one crash was reported near the North Main Street driveway eight crashes were reported within the Study Area (Figure 21). No fatality or personal injury crashes were reported. The crashes did involve property damage only. Most crashes occurred during daylight hours on dry pavement. This intersection crash history is not considered unusually high or uniquely hazardous.

Site Plan for Proposed Daycare Facility 647 North Main Street In Randolph, Massachusetts

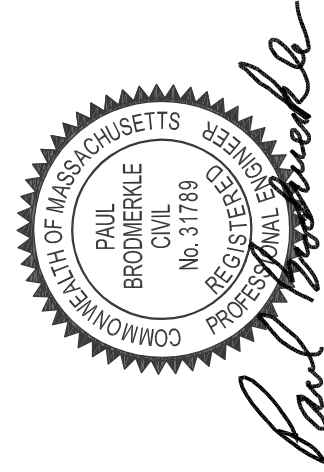
MARCH 9, 2022

Plan Index No.	Drawing Title
1 of 6	Cover Sheet
2 of 6	Existing Conditions
3 of 6	Site Layout/Landscape/Lighting Plan
4 of 6	Grading and Utilities Plan
5 of 6	Stormwater Management Plan
6 of 6	Site Details



Vicinity Map

Scale 1"=800'



Site Design Professionals, LLC

Civil Engineers

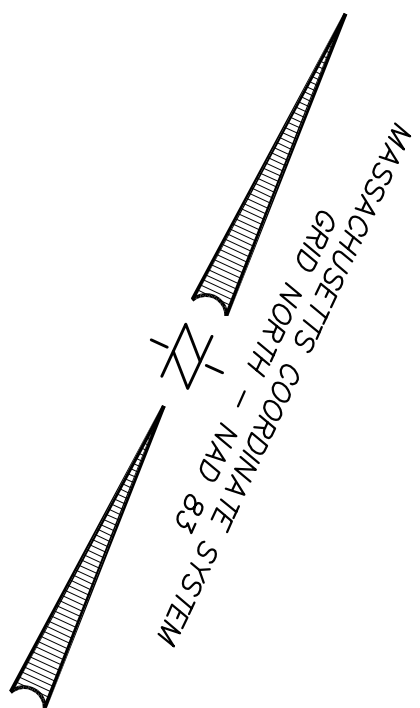
One Merchant Street - Suite 110
Sharon, MA 02067
Tel. 781-784-4020 - Fax. 781-784-4022

Land Surveyor:

Borderland Engineering Co., Inc.
61b Pleasant Street
Randolph, MA 02368
Tel. 781-963-9500 - Fax. 781-888-4131

Owner/Applicant:

Joseph M. McCarthy
14 Norton Street
Quincy, MA 02169



ORCHARD (PUBLC - VARIABLE WDT) STREET

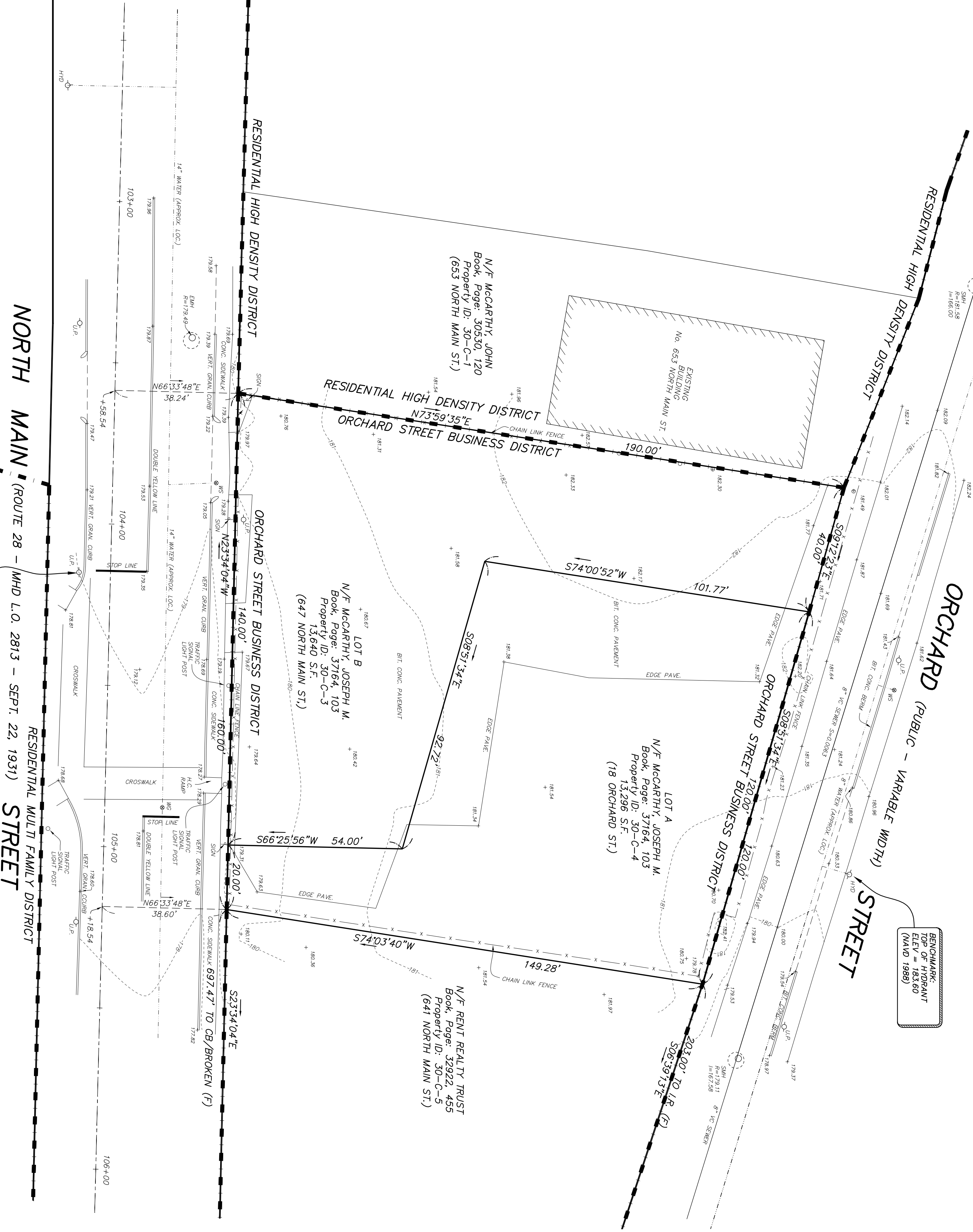
BENCHMARK
TOP OF HYDRANT
ELEV = 183.60
(MAYD 1988)

N/F MCCARTHY, JOHN
Book, Page: 30530, 120
Property ID: 30-C-1
(653 NORTH MAIN ST.)

LOT A
N/F MCCARTHY, JOSEPH M.
Book, Page: 37164, 103
Property ID: 30-C-4
13,296 S.F.
(18 ORCHARD ST.)

LOT B
N/F MCCARTHY, JOSEPH M.
Book, Page: 37164, 103
Property ID: 30-C-3
13,550 S.F.
(647 NORTH MAIN ST.)

N/F RENT REALTY TRUST
Book, Page: 32922, 455
Property ID: 30-C-5
(641 NORTH MAIN ST.)



BENCHMARK:
NAIL IN UTILITY POLE
ELEV = 188.54
(MAYD 1988)

NORTH MAIN (ROUTE 28 - MHD L.O. 2813 - SEPT. 22, 1931) STREET

RESIDENTIAL MULTIFAMILY DISTRICT

ORCHARD STREET BUSINESS DISTRICT

RESIDENTIAL HIGH DENSITY DISTRICT

ORCHARD STREET BUSINESS DISTRICT

RESIDENTIAL HIGH DENSITY DISTRICT

ORCHARD STREET BUSINESS DISTRICT

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ORCHARD STREET BUSINESS DISTRICT

RESIDENTIAL HIGH DENSITY DISTRICT

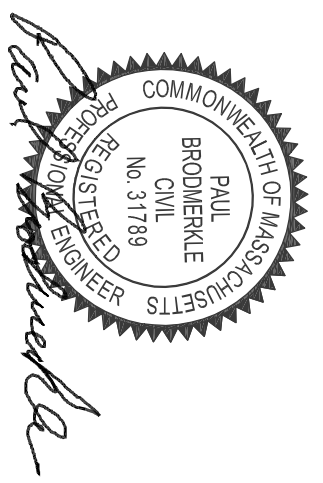
ORCHARD STREET BUSINESS DISTRICT

RESIDENTIAL HIGH DENSITY DISTRICT

ORCHARD STREET BUSINESS DISTRICT

RESIDENTIAL HIGH DENSITY DISTRICT

ORCHARD STREET BUSINESS DISTRICT



ASSESSOR'S REFERENCE:
MAP 30 / C / 3 & 4

OWNER/APPLICANT:
JOSEPH M. MCCARTHY
14 NORTON STREET
QUINCY, MA 02169

- PLAN REFERENCES:
1. PLAN BOOK 468 PAGE 544
 2. PLAN BOOK 412 PAGE 124
 3. PLAN BOOK 467 PAGE 483
 4. PLAN BOOK 609 PAGE 10
 5. PLAN BOOK D5676 PAGE 591
 6. MHD LAYOUTS #2713 & #2813

DEED REFERENCE:
BOOK 37164, PAGE 103

EXISTING CONDITIONS PLAN
647 NORTH MAIN STREET

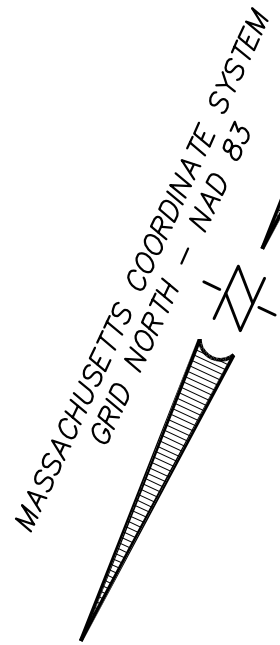
RANDOLPH, MA
IN
Site Design Professionals, LLC

Civil Engineers
One Merchant Street - Suite 110
Sharon, MA 02067
Tel. 781-784-4020 - Fax 781-784-4022

REVISIONS

NOTES:

1. PROPERTY LINE AND EXISTING CONDITIONS SURVEY BY BORDERLAND ENGINEERING, INC. IN JANUARY, 2021.
2. UTILITIES ARE PLOTTED FROM FIELD LOCATION AND ANY RECORD INFORMATION AVAILABLE, AND SHOULD BE CONSIDERED APPROXIMATE. OTHER UTILITIES MAY EXIST WHICH ARE NOT AVAILABLE. CONTRACTORS (IN ACCORDANCE WITH MASSACHUSETTS LAW) MUST CONTACT ALL UTILITY COMPANIES BEFORE EXCAVATING AND DRILLING. ALSO CALL DIG SAFE AT 1-888-DIG-SAFE.
3. THIS LAND IS SUBJECT TO ANY EASEMENTS, RIGHTS OF WAY, RESTRICTIONS, RESERVATIONS, OR OTHER LIMITATIONS WHICH MAY BE REVEALED BY AN EXAMINATION OF THE TITLE.
4. THE OFFSETS AS SHOWN ON THIS PLAN ARE NOT TO BE USED FOR THE ESTABLISHMENT OF PROPERTY LINES OR FOR THE ESTABLISHMENT OF ANY PROPOSED CONSTRUCTION.
5. THIS SITE DOES NOT FALL WITHIN A SPECIAL HAZARD FLOOD ZONE AS DESIGNATED BY FIRM COMMUNITY PANEL NUMBER 2502C0216E, EFFECTIVE DATE JUNE 17, 2012.



ORCHARD STREET (PUBLIC - VARIABLE WIDTH) STREET

RESIDENTIAL HIGH DENSITY DISTRICT

AMERICAN ARBORVITAE

PROPOSED 1-STORY BUILDING:

1 SPACE/200 S.F. 6,453 S.F./200= 33 SPACES REQUIRED

** RELIEF REQUESTED

26,936 S.F.

1-STORY BLDG.

FOOTPRINT=6,453 S.F.

T.O.F. EL.=184.0

SLAB EL.=183.0

LOT LINE TO BE REMOVED

LOT 1 (7) AZ

PROPOSED 10'-10" DUMPSITE WITH 6" HIGH VINYL FENCE ENCLOSURE AND SWING GATE

EXISTING PAVED DRIVEWAY/DRUB CUT TO BE USED FOR CONSTRUCTION TO REMAIN DURING CONSTRUCTION

N/F MCCARTHY, JOHN Book, Page: 30530, 120 Property ID: 30-C-1 (653 NORTH MAIN ST.)

N/F MCCARTHY, JOSEPH M. Book, Page: 37164, 103 Property ID: 30-C-4 (18 ORCHARD ST.)

N/F MCCARTHY, JOSEPH M. Book, Page: 37164, 103 Property ID: 30-C-3 (647 NORTH MAIN ST.)

N/F RENT REALTY TRUST Book, Page: 32922, 455 Property ID: 30-C-5 (647 NORTH MAIN ST.)

11,030 S.F. OF POROUS PAVEMENT

PROPOSED 10'-10" DUMPSITE WITH 6" HIGH VINYL FENCE ENCLOSURE AND SWING GATE

EXISTING PAVED DRIVEWAY/DRUB CUT TO BE USED FOR CONSTRUCTION TO REMAIN DURING CONSTRUCTION

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ZONING TABULATION

ZONING CLASSIFICATION: ORCHARD STREET BUSINESS DISTRICT (OSBD)

PROPOSED USE: DAYCARE FACILITY

ZONING ITEM

REQUIRED

PROVIDED

MINIMUM LOT AREA

MINIMUM LOT FRONTAGE

LOT WIDTH

LOT DEPTH

SETBACK FROM STREET

FRONT YARD SETBACK

SIDE YARD SETBACK

REAR YARD SETBACK

BUFFER STRIP TO STREET

BUFFER STRIP TO RESIDENTIAL

BUFFER STRIP TO COMMERCIAL

MAXIMUM BUILDING HEIGHT

MAXIMUM BLDG. LOT COVERAGE

IMPERVIOUS LOT COVERAGE

PERVIOUS POROUS PAVEMENT

GREEN AREA (OPEN SPACE)

PARKING SPACES

28 SPACES PROVIDED**

33 SPACES*

1 SPACE/200 S.F. 6,453 S.F./200= 33 SPACES REQUIRED

** RELIEF REQUESTED

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SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	BACKGROUND	LETTERING	NO. OF SIGNS REQUIRED
	WIDTH	HEIGHT				
R1-1	30"	30"	STOP	RED	WHITE	2
K2-2495	12"	18"	HANDICAPPED PARKING SPECIAL PLATE REQUIRED UNAUTHORIZED VEHICLES MAY BE REMOVED AT OWNER'S EXPENSE	BLUE	WHITE	2
R7-8b	12"	6"	VAN ACCESSIBLE	BLUE	WHITE	1
POROUS PAVEMENT SIGN	12"	18"	POROUS PAVEMENT AREA REQUIRING VACUUMING REPAIRS SANDING, SEAL HAZARDOUS WASTE REMOVAL NO PARKING	BLUE	WHITE	8

NOTE:
1. REFER TO STANDARD FOR ALL GIVING REQUIREMENTS, CONDITIONS, AND SCHEDULES.

2. REFER TO STANDARD FOR ALL GIVING REQUIREMENTS, CONDITIONS, AND SCHEDULES.

3. REFER TO STANDARD FOR ALL GIVING REQUIREMENTS, CONDITIONS, AND SCHEDULES.

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ASSESSOR'S REFERENCE:

MAP 30 / C / 3 & 4

OWNER/APPLICANT:

JOSEPH M. MCCARTHY

14 WORTON STREET

QUINCY, MA 02169

PLAN REFERENCES:

1. PLAN BOOK 468 PAGE 544

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3. PLAN BOOK 467 PAGE 483

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5. PLAN BOOK D5676 PAGE 591

6. MHD LAYOUTS #2713 & #2813

DEED REFERENCE:

BOOK 37164, PAGE 103

SITE LAYOUT/

LANDSCAPE/LIGHTING PLAN

647 NORTH MAIN STREET

IN

RANDOLPH, MA

SCALE: 1"=20'

MARCH 9, 2022

Site Design Professionals, LLC

Civil Engineers

One Merchant Street - Suite 110

Sharon, MA 02067

Tel. 781-784-4020 - Fax 781-784-4022

REVISIONS

0 10 20 40 60

CLIENT: 0023-04

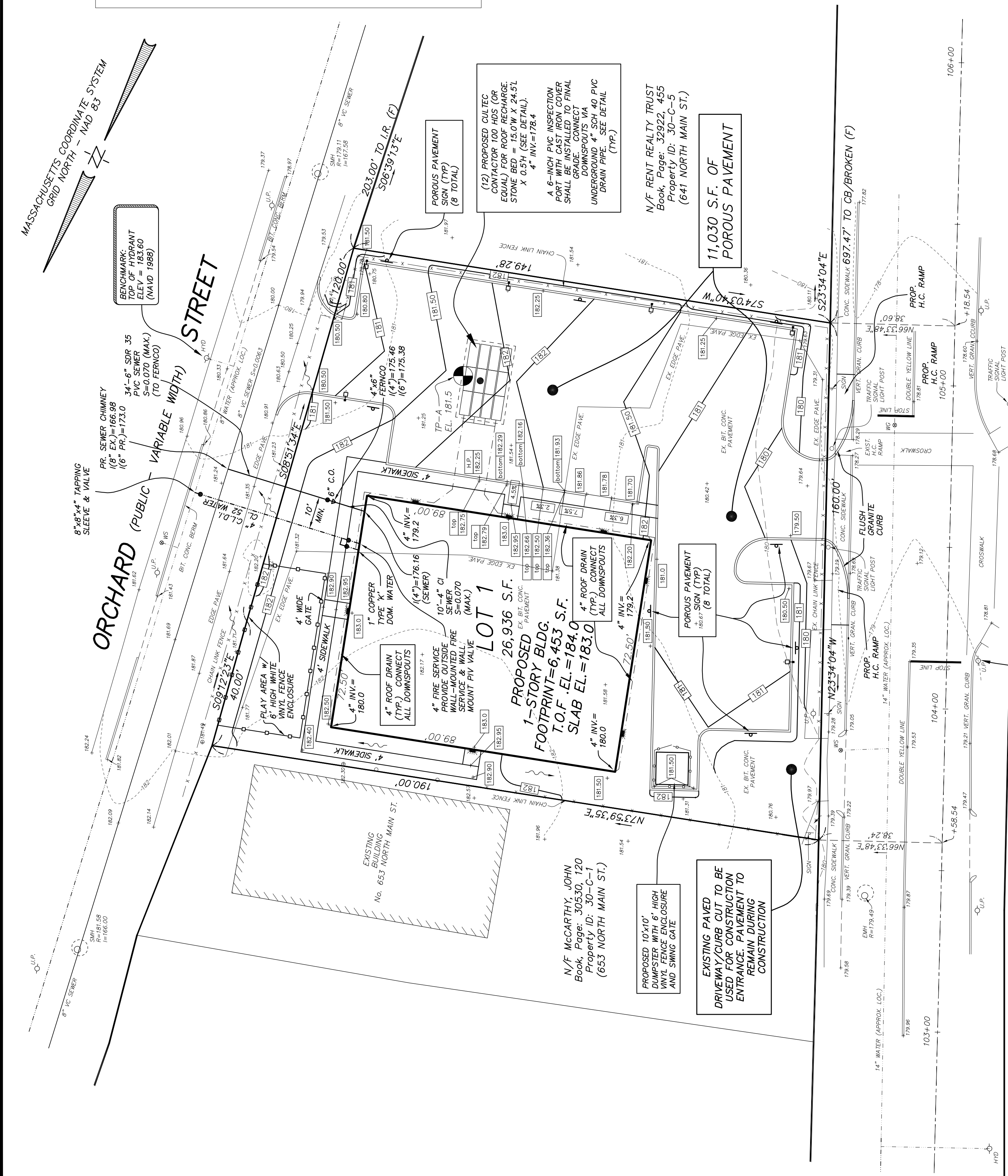
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SHEET 3 OF 6

DATE: 03/09/2022

PROJECT: 0023-04

DRAWN BY: JMM

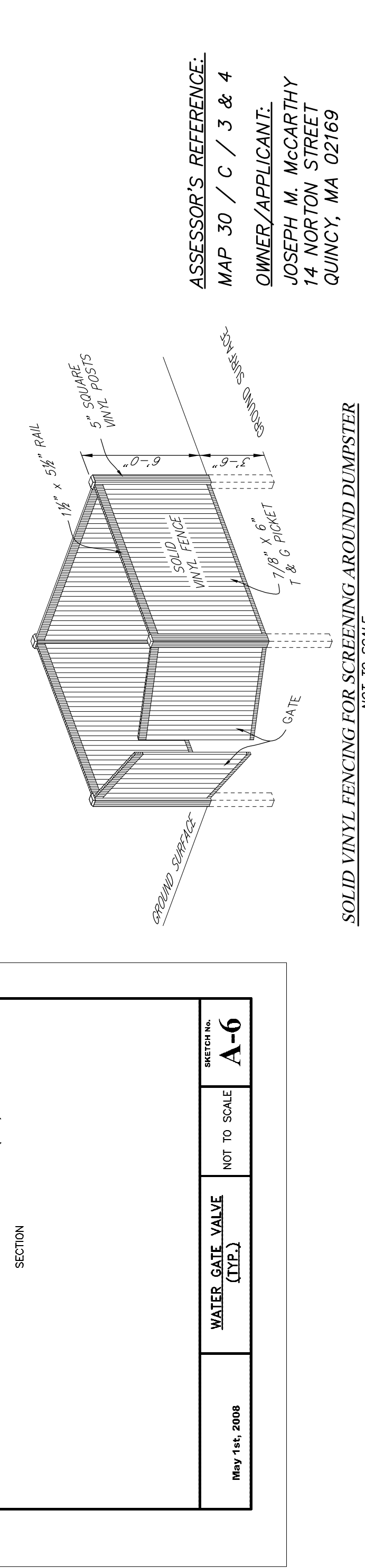
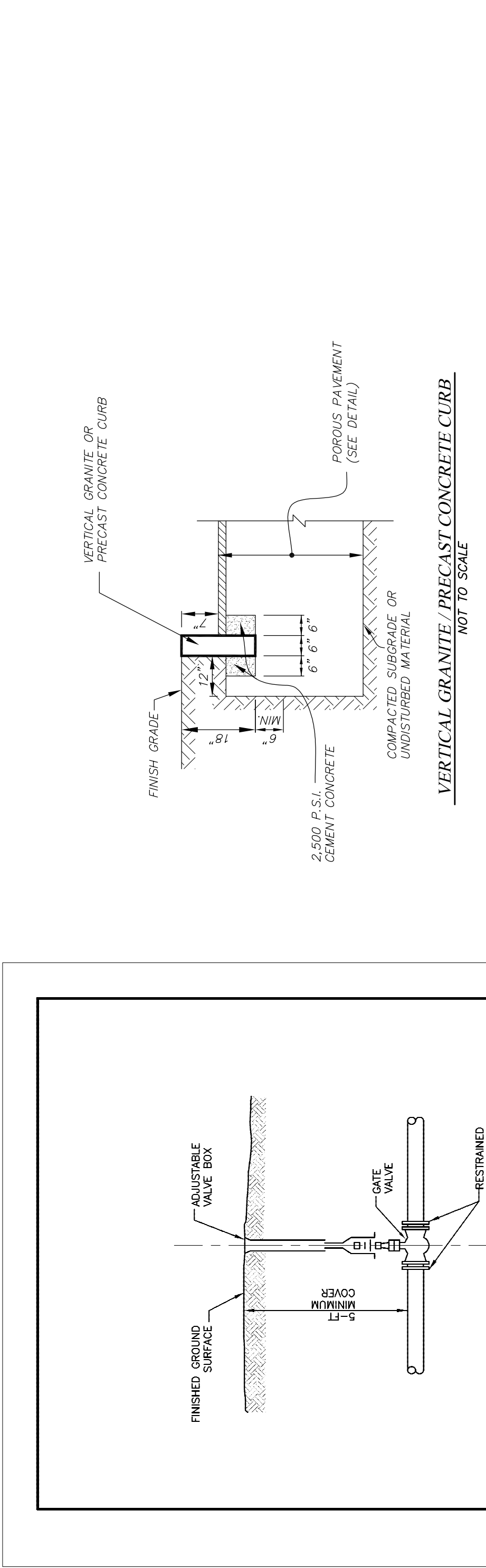
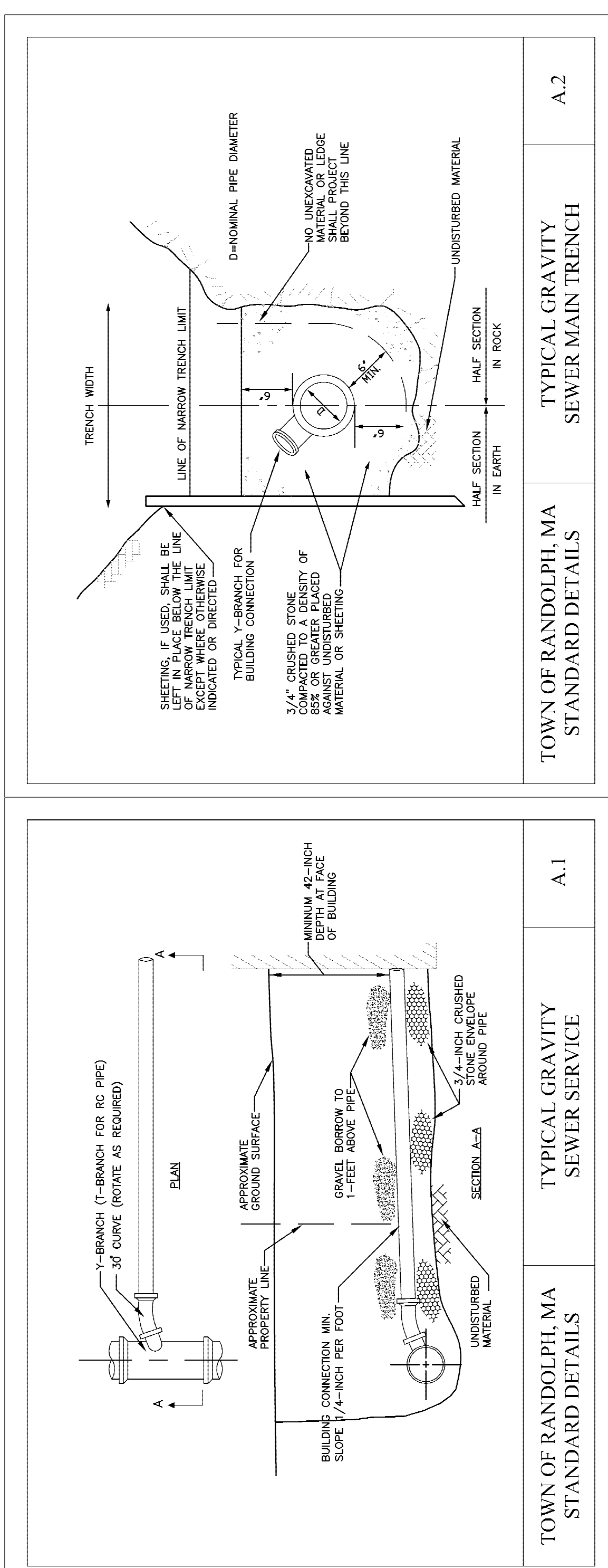


NORTH MAIN (ROUTE 28 - MHD L.O. 2813 - SEPT. 22, 1931) STREET

BENCHMARK
NAIL IN UTILITY POLE
ELEV. = 188.54
(MAY 1988)

- PLAN REFERENCES:
- 1. PLAN BOOK 468 PAGE 544
 - 2. PLAN BOOK 412 PAGE 124
 - 3. PLAN BOOK 467 PAGE 483
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DEED REFERENCE:
BOOK 37164, PAGE 103



GRADING AND UTILITIES PLAN
647 NORTH MAIN STREET
IN
RANDOLPH, MA
SCALE: 1"=20'
MARCH 9, 2022

Site Design Professionals, LLC

Civil Engineers
One Merchant Street - Suite 110
Sharon, MA 02067
Tel. 781-784-4020 - Fax 781-784-4022

REVISIONS	
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E:\Engineering\SDP-FR0015-00369 NORTH MAIN ST-RANDOLPH, MA\15-00369-0023-04-SEPT-1.dwg

PRE-DEVELOPMENT IMPERVIOUS SURFACES:

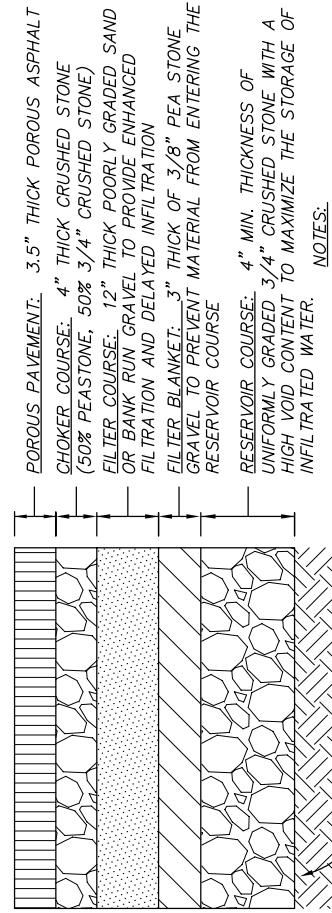
EXISTING PAVEMENT: 18,067 S.F.
POST-DEVELOPMENT IMPERVIOUS SURFACES:
PROPOSED ROOF: 6,453 S.F.
PROPOSED SIDEWALK/DUMPSTER PAD: 1080 S.F.
TOTAL: 7,533 S.F.

DECREASE OF 10,534 S.F. OF IMPERVIOUS SURFACE (REDEVELOPMENT PROJECT)
GROUNDWATER RECHARGE PROVIDED:

PROPOSED ROOF: 6,453 S.F. ROOF X 0.35-INCH ("GROUP B" SOIL OBSERVED IN TEST PIT) = 188 C.F. RECHARGE REQUIRED. 400 C.F. RECHARGE PROVIDED VIA 12 CULTEC CONTACTOR 100 HD CHAMBERS AND SURROUNDING STONE.

GROUNDWATER TREATMENT/RECHARGE PROVIDED:

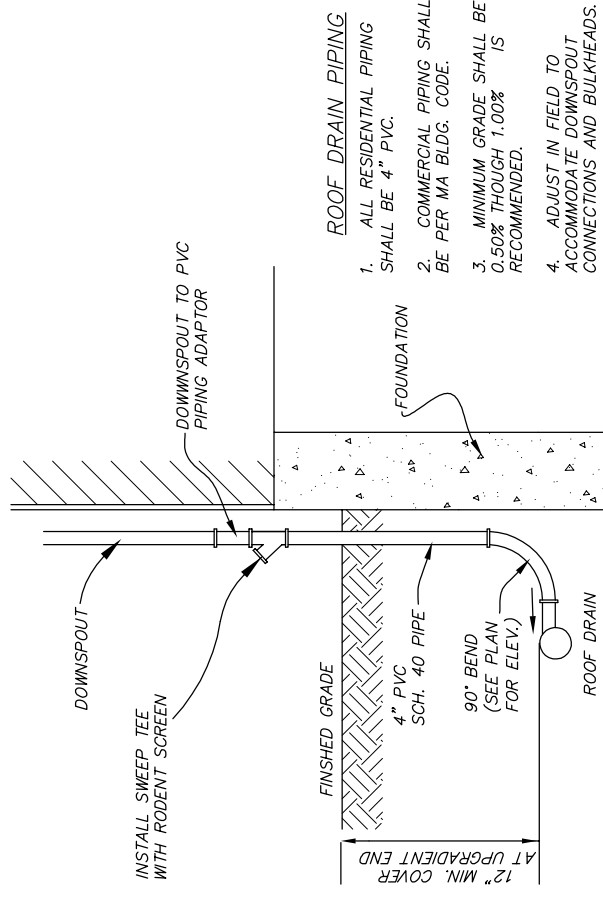
11,030 S.F. POROUS PAVEMENT X 0.5-INCH TREATMENT = 460 C.F. MIN. GROUNDWATER TREATMENT REQUIRED. 1,442 C.F. TREATMENT/RECHARGE PROVIDED (SEE POROUS PAVEMENT DETAIL)



1. REMOVE ALL FILL MATERIAL, TOPSOIL AND SUBSOIL (SEE TEST REPORT FOR DETAILS). 2. REFER TO MANUFACTURER'S GUIDANCE FOR INSTALLATION AND MAINTENANCE OF TREATMENT. NOTES SHOWN ON THIS SITE PLAN.

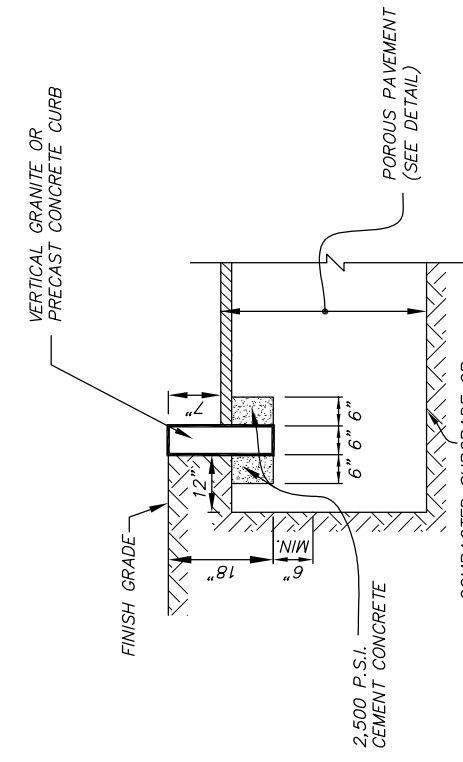
POROUS PAVEMENT

NOT TO SCALE



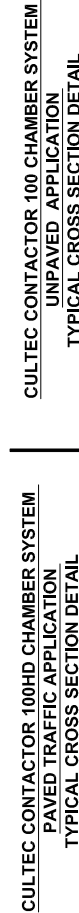
TYPICAL DOWNSPOUT DETAIL

NOT TO SCALE



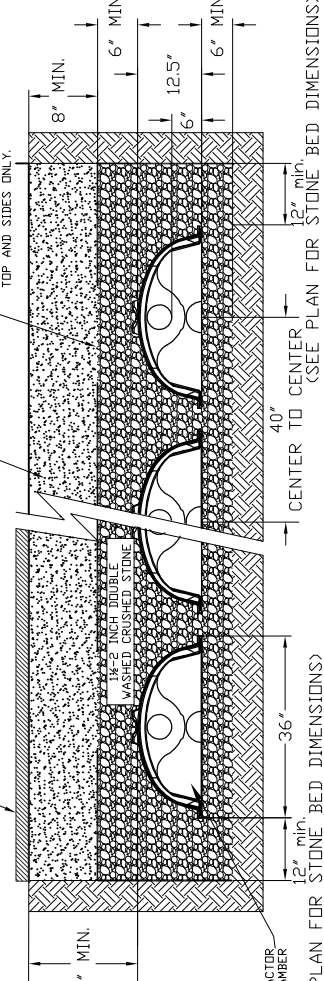
VERTICAL GRANITE/PRECAST CONCRETE CURB

NOT TO SCALE



CULTEC CONTACTOR 100 HD CHAMBER SYSTEM

TYPICAL DETAIL



CULTEC CONTACTOR 100 HD CHAMBER SYSTEM

TYPICAL DETAIL

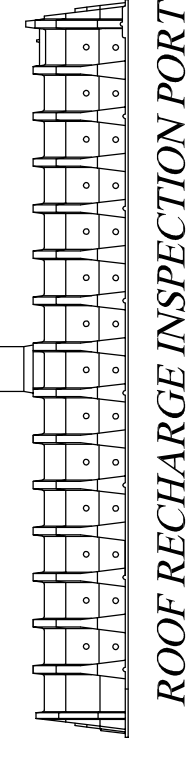
NOTE: ALL EXISTING TOPSOIL, SUBSOIL, FILL AND BURIED TOPSOIL/SUBSOIL MATERIAL SHALL BE REMOVED DOWN TO THE NATIVE CL LAYER (ELEVATION (VARS) REPAVEMENT MATERIAL LOCATED WITHIN 5' OF THE SIDES OF THE STONE SURROUNDING THE RECHARGE STRUCTURES (DOWN TO THE NATIVE CL LAYER) SHALL BE TYPICAL 2 PERCENT SAND. (174)

SEE TITLE 2 PERCENT SAND. (174)

CULTEC, Inc.
P.O. Box 290
Brookfield, CT 06804 USA
Tel: (860) 775-4455
Fax: (860) 453-1122
www.cultec.com

CULTEC CONTACTOR 100/100HD ROOF RECHARGE SYSTEM

NOT TO SCALE



ROOF RECHARGE INSPECTION PORT

NOT TO SCALE

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	HEIGHT	TEXT	BACKGROUND	LETTERING	No. OF SIGNS
POROUS PAVEMENT SIGN	12"	18"	POROUS PAVEMENT AREA RECHARGE REQUIRED SAFETY SEAL MAINTENANCE REQUIRED LONG TRAILS	BLUE	WHITE	8

POROUS PAVEMENT OPERATION AND MAINTENANCE.

FREQUENT CLEANING AND MAINTENANCE OF THE PAVEMENT SURFACE IS CRITICAL TO PREVENT CLOGGING.

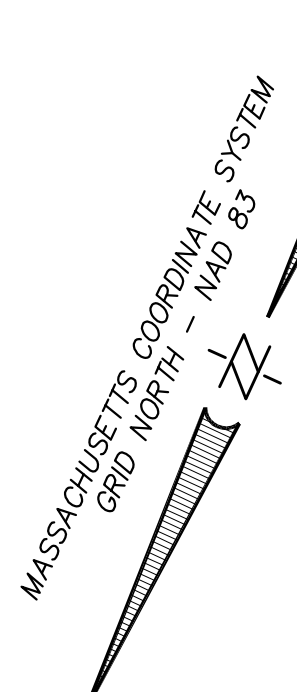
FOR PROPER MAINTENANCE:

- POST SIGNS IDENTIFYING POROUS PAVEMENT AREA (4 SIGNS SHOWN ON SITE PLAN).
- NO WINTER SANDING IS ALLOWED.
- MINIMIZE SALT USE DURING WINTER MONTHS.
- KEEP ADJACENT LANDSCAPED AREAS WELL MAINTAINED TO PREVENT SOIL FROM BEING TRANSPORTED ONTO THE PAVEMENT.
- CLEAN THE SURFACE SEMI-ANNUALLY (APRIL/OCTOBER) USING A HIGH VELOCITY VACUUM.
- MONITOR THE PAVED SURFACE TO MAKE SURE IT DRAINS PROPERLY AFTER STORM EVENTS.
- NEVER SEALCOAT OR REPAVE WITH IMPERMEABLE MATERIALS.
- INSPECT THE SURFACE ANNUALLY FOR DETERIORATION OR SPALLING.
- HANDLING OF HAZARDOUS MATERIALS IS PROHIBITED WITHIN THE POROUS PAVEMENT AREA.
- VEHICLES ARE PROHIBITED FROM THE POROUS PAVEMENT AREA.

TP-A	12/30/2020	181.54
A	SANDY LOAM TOPSOIL	181.0
B	SANDY LOAM SUBSOIL	179.8
C1	VF LOAMY SAND SUBSTRATUM	173.7
C2	M SAND SUBSTRATUM	171.3
122"	TRACE MOTTLING @66" (EL. 174.3)	
	NO WATER NO REFUSAL	

NOTES:

- PROPERTY LINE AND EXISTING CONDITIONS SURVEY BY BORDERLAND ENGINEERING, INC. IN JANUARY, 2021.
- UTILITIES ARE PLOTTED FROM FIELD LOCATION AND ANY CONFLICTS WITH EXISTING UTILITIES HAVE BEEN CONSIDERED APPROXIMATE. OTHER UTILITIES MAY EXIST WHICH ARE NOT EVIDENT OR FOR WHICH RECORD INFORMATION WAS NOT AVAILABLE. CONTRACTORS (IN ACCORDANCE WITH MASSACHUSETTS LAW) MUST CONTACT ALL UTILITY COMPANIES BEFORE EXCAVATING AND DRILLING. ALSO CALL DIG SAFE AT 1-888-DIG-SAFE.
- THIS LAND IS SUBJECT TO ANY EASEMENTS, RIGHTS OF WAY, RESTRICTIONS, RESERVATIONS, OR OTHER LIMITATIONS WHICH MAY BE REVEALED BY AN EXAMINATION OF THE TITLE.
- THE OFFSETS AS SHOWN ON THIS PLAN ARE NOT TO BE USED FOR THE ESTABLISHMENT OF PROPERTY LINES OR FOR THE ESTABLISHMENT OF ANY PROPOSED CONSTRUCTION.
- THIS SITE DOES NOT FALL WITHIN A SPECIAL HAZARD FLOOD ZONE AS DESIGNATED BY FIRM COMMUNITY PANEL NUMBER 25021002106E, EFFECTIVE DATE JUNE 17, 2012.



MASSACHUSETTS COORDINATE SYSTEM

GRID NORTH - 1440 83'

BENCHMARK
TOP OF HYDRANT
ELEV = 183.60
(NAD 1988)

PROPOSED ROW OF
COMPOST FILTER BERM
(TYP.)

ORCHARD (PUBLIC - VARIABLE WIDTH)
STREET

PROPOSED 10'x10' DUMPSTER WITH 6' HIGH VINYL FENCE ENCLOSURE AND SWING GATE

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Luminaire Schedule					
Symbol	Label	Qty	Part Number	LLF	Fixture Wattage
	WM1	7	Utopia Lighting # DWP2-2G-45LED-40K-UNV	0.900	44.78
	PM-T4	6	Utopia Lighting # LSL-3G-100LED-40K-T4-UNV	0.900	99.99
					Fixture Lumens
					6082
					13201

Calculation Summary						
Label	CalcType	Units	Avg	Max	Min	Avg/Min
Property Line	Illuminance	Fc	0.05	2.7	0.0	N.A.
Site Points	Illuminance	Fc	0.72	8.6	0.0	N.A.

NOTES:

- A. A LIGHT LOSS FACTOR OF 0.900 HAS BEEN APPLIED TO FIXTURES UNLESS OTHERWISE NOTED. REFER TO LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR AND LUMEN INFORMATION.
- B. SEE "MH" ON LIGHTING FIXTURE TAG LOCATED ON PLAN FOR MOUNTING HEIGHT INFORMATION.
- C. CALCULATION POINTS ARE TAKEN AT GRADE.
- D. CALCULATION RESULTS ARE BASED ON IES STANDARDS UNLESS OTHERWISE REQUESTED.

LED AREA / PARKING / STREET LIGHT

LSL-3G

Rev. 04/11 11-8-2010

Project Name:	
Type:	

FEATURES:

- Rugged One-piece die cast aluminum housing
- 120° emitting standard
- 120° emitting optional
- TLED - 5200°
- PF: >90%
- Low profile, 3.5" section need compact design
- 5 year warranty
- Housing is completely sealed against moisture and dust
- Corrosion resistant powder coat finish
- Operating temperature:
 - 40°C to 45°C (-40°F to 113°F)
- Suitable for mounting heights up to 50M.

MOUNTING:

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APPLICATION

In parking lot, urban roads, can be used in residential areas, educational, schools, and commercial areas, industrial areas, large up to 30FT in diameter.

CONFIGURATIONS

Series	Model	AC Input	Lumen Output (lm)	Lumen Efficiency (lm/W)	Lumen Output (lm)	Lumen Efficiency (lm/W)	B.U.D.
LSL	TAILED	70W	8500 lm	156 lm/W	9600 lm	137 lm/W	BS-M-052
	TAILED	100W	10500 lm	135 lm/W	13000 lm	138 lm/W	BS-M-052
	TAILED	150W	15500 lm	103 lm/W	20000 lm	138 lm/W	BS-M-052
	TAILED	200W	20500 lm	78 lm/W	25000 lm	125 lm/W	BS-M-053
	TAILED	250W	25500 lm	58 lm/W	30000 lm	120 lm/W	BS-M-053
	TAILED	300W	30500 lm	42 lm/W	40000 lm	137 lm/W	BS-M-053

ORDERING INFORMATION

MODEL	LED	COLOR TEMP.	DISTRIBUTION	VOLTAGE	FINISH
LSL-3G	TAILED 100LED 180LED 250LED 300LED	4000K 5000K	T3 Type A T5 Type B	UNV 180-270V (V) 100-240V (V)	BLANK 1-10V dimming (64)

EXAMPLE: LSL-3G-TAILED-4000-75-UNV-BLANK

FINISH	MOUNTING	OPTIONS
BZ CC Cyan Color GR BK Black White (not available in 120V, 240V, 277V, 300V, 347V, 360V, 380V, 400V, 440V, 480V, 520V, 577V, 600V, 660V, 720V, 760V, 800V, 850V, 900V, 960V, 1000V, 1050V, 1100V, 1150V, 1200V, 1250V, 1300V, 1350V, 1400V, 1450V, 1500V, 1550V, 1600V, 1650V, 1700V, 1750V, 1800V, 1850V, 1900V, 1950V, 2000V, 2050V, 2100V, 2150V, 2200V, 2250V, 2300V, 2350V, 2400V, 2450V, 2500V, 2550V, 2600V, 2650V, 2700V, 2750V, 2800V, 2850V, 2900V, 2950V, 3000V, 3050V, 3100V, 3150V, 3200V, 3250V, 3300V, 3350V, 3400V, 3450V, 3500V, 3550V, 3600V, 3650V, 3700V, 3750V, 3800V, 3850V, 3900V, 3950V, 4000V, 4050V, 4100V, 4150V, 4200V, 4250V, 4300V, 4350V, 4400V, 4450V, 4500V, 4550V, 4600V, 4650V, 4700V, 4750V, 4800V, 4850V, 4900V, 4950V, 5000V, 5050V, 5100V, 5150V, 5200V, 5250V, 5300V, 5350V, 5400V, 5450V, 5500V, 5550V, 5600V, 5650V, 5700V, 5750V, 5800V, 5850V, 5900V, 5950V, 6000V, 6050V, 6100V, 6150V, 6200V, 6250V, 6300V, 6350V, 6400V, 6450V, 6500V, 6550V, 6600V, 6650V, 6700V, 6750V, 6800V, 6850V, 6900V, 6950V, 7000V, 7050V, 7100V, 7150V, 7200V, 7250V, 7300V, 7350V, 7400V, 7450V, 7500V, 7550V, 7600V, 7650V, 7700V, 7750V, 7800V, 7850V, 7900V, 7950V, 8000V, 8050V, 8100V, 8150V, 8200V, 8250V, 8300V, 8350V, 8400V, 8450V, 8500V, 8550V, 8600V, 8650V, 8700V, 8750V, 8800V, 8850V, 8900V, 8950V, 9000V, 9050V, 9100V, 9150V, 9200V, 9250V, 9300V, 9350V, 9400V, 9450V, 9500V, 9550V, 9600V, 9650V, 9700V, 9750V, 9800V, 9850V, 9900V, 9950V, 10000V, 10050V, 10100V, 10150V, 10200V, 10250V, 10300V, 10350V, 10400V, 10450V, 10500V, 10550V, 10600V, 10650V, 10700V, 10750V, 10800V, 10850V, 10900V, 10950V, 11000V, 11050V, 11100V, 11150V, 11200V, 11250V, 11300V, 11350V, 11400V, 11450V, 11500V, 11550V, 11600V, 11650V, 11700V, 11750V, 11800V, 11850V, 11900V, 11950V, 12000V, 12050V, 12100V, 12150V, 12200V, 12250V, 12300V, 12350V, 12400V, 12450V, 12500V, 12550V, 12600V, 12650V, 12700V, 12750V, 12800V, 12850V, 12900V, 12950V, 13000V, 13050V, 13100V, 13150V, 13200V, 13250V, 13300V, 13350V, 13400V, 13450V, 13500V, 13550V, 13600V, 13650V, 13700V, 13750V, 13800V, 13850V, 13900V, 13950V, 14000V, 14050V, 14100V, 14150V, 14200V, 14250V, 14300V, 14350V, 14		

LED FULL CUT-OFF WALL PACK

DWP2-2G

FEATURES:

- Tempered UV coated lens provides outstanding protection against impact and glare control
- Polycarbonate lens provides superior protection against vandalism
- Housing with 3 pieces of 1/2" threaded hole for easier connections
- LED optics from 1 to 30 degree

MOUNTING:

- Suitable for junction box mounting and surface mounting

LED:

- Limited 3000 LED chips
- Beam angle: 120° (typical) (30° beam angle) (N)
- Lumen efficacy > 140 lm/W
- Color rendering index > 70
- Life span: 50,000 hrs

APPLICATION

The full-cutoff polycarbonate optical lens with UV stabilizers lens LED wall packs is ideal for parking lots, walkways, and building entryways and walkways.

CONFIGURATIONS

Series	LED	Lumen Output (lm)	Lumen Efficacy (lm/W)	Lumen Output (lm)	Lumen Efficacy (lm/W)
27 LED	2700 lm	137 lm/W	3760 lm	139 lm/W	
45 LED	4500 lm	142 lm/W	6450 lm	145 lm/W	
70 LED	8000 lm	140 lm/W	9000 lm	141 lm/W	
140 LED	16000 lm	133 lm/W	18000 lm	134 lm/W	
180 LED	18000 lm	130 lm/W	19000 lm	132 lm/W	

Photo (optional)
Photo (optional)

Weight

Model 2700 (1.1 lb)
Model 4500 (1.1 lb)
Model 7000 (1.2 lb)
Model 9000 (1.2 lb)

Large Size (10W, 15W)

Model 10000 (1.2 lb)
Model 12000 (1.2 lb)
Model 15000 (1.5 lb)

Medium Size (27W, 45W, 70W)

Model 2700 (4.8 lb)
Model 4500 (4.8 lb)
Model 7000 (4.8 lb)
Model 9000 (4.8 lb)

ELECTRICAL:

- 0-10V dimmable
- Input voltage: 120-277VAC, 50/60Hz
- Power factor: 0.95 (typical)
- <40°C to 45°C (40°F to 113°F)
- Surge protection: Line-Line IEC Line-Band 2kV
- Protection: Class II, Double Insulation, 0 class
- UL 1319 listed
- Power factor: 0.95

LISTING:

- DLC premium listed¹
- Listed to UL 1689 and UL 8750
- Suitable for wet location
- 5 years limited warranty

(27)

(45)

(70)

(90)

* All dimensions are in inches (millimeters).

ORDERING INFORMATION

MODEL	LED	COLOR TEMP.	VOLTAGE	FINISH
DWP2-2G	27 LED 2700 LED ¹ 45 LED 4500 LED ¹ 70 LED 7000 LED ¹ 90 LED 9000 LED ¹ 140 LED 14000 LED ¹ 180 LED 18000 LED ¹	-4K 4000K -6K 5000K	120-277V UNV ²	BZ CC CC

¹ Available in 3000K, 4000K, 5000K, 6000K, 7000K, 8000K, 9000K, 10000K, 12000K, 15000K, 18000K, 20000K, 22000K, 24000K, 26000K, 28000K, 3000K, 3500K, 4000K, 4500K, 5000K, 5500K, 6000K, 6500K, 7000K, 7500K, 8000K, 8500K, 9000K, 9500K, 10000K, 10500K, 11000K, 11500K, 12000K, 12500K, 13000K, 13500K, 14000K, 14500K, 15000K, 15500K, 16000K, 16500K, 17000K, 17500K, 18000K, 18500K, 19000K, 19500K, 20000K, 20500K, 21000K, 21500K, 22000K, 22500K, 23000K, 23500K, 24000K, 24500K, 25000K, 25500K, 26000K, 26500K, 27000K, 27500K, 28000K, 28500K, 29000K, 29500K, 3000K, 3500K, 4000K, 4500K, 5000K, 5500K, 6000K, 6500K, 7000K, 7500K, 8000K, 8500K, 9000K, 9500K, 10000K, 10500K, 11000K, 11500K, 12000K, 12500K, 13000K, 13500K, 14000K, 14500K, 15000K, 15500K, 16000K, 16500K, 17000K, 17500K, 18000K, 18500K, 19000K, 19500K, 20000K, 20500K, 21000K, 21500K, 22000K, 22500K, 23000K, 23500K, 24000K, 24500K, 25000K, 25500K, 26000K, 26500K, 27000K, 27500K, 28000K, 28500K, 29000K, 29500K, 3000K, 3500K, 4000K, 4500K, 5000K, 5500K, 6000K, 6500K, 7000K, 7500K, 8000K, 8500K, 9000K, 9500K, 10000K, 10500K, 11000K, 11500K, 12000K, 12500K, 13000K, 13500K, 14000K, 14500K, 15000K, 15500K, 16000K, 16500K, 17000K, 17500K, 18000K, 18500K, 19000K, 19500K, 20000K, 20500K, 21000K, 21500K, 22000K, 22500K, 23000K, 23500K, 24000K, 24500K, 25000K, 25500K, 26000K, 26500K, 27000K, 27500K, 28000K, 28500K, 29000K, 29500K, 3000K, 3500K, 4000K, 4500K, 5

The image contains two technical drawings. The top drawing is a plan view of a sewer cleanout. It shows a 6" PVC riser pipe with a 45-degree bend, a 45-degree wye, and a 6" PVC sewer branch. The cleanout is covered with a match casting ground cover. The bottom drawing is a cross-section of a sewer chimney. It shows a 6" PVC riser pipe with a 45-degree bend, a 45-degree wye, and a 6" PVC sewer branch. The chimney is surrounded by compacted screened gravel and has a 1" x 1" wall of earth or rock. The bottom rail includes reinforcing metal mesh.

SEWER CLEANOUT DETAIL
NOT TO SCALE

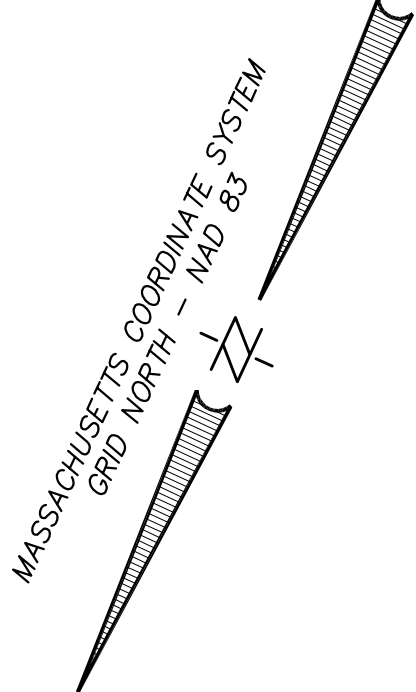
SEWER CHIMNEY DETAIL FOR PVC PIPE
NOT TO SCALE

VINYL FENCE DETAIL
NOT TO SCALE

SITE DETAILS
647 NORTH MAIN STREET
RANDOLPH, MA
SCALE AS SHOWN **MARCH 9, 2022**
Site Design Professionals, LLC

Civil Engineers
One Merchant Street - Suite 110
Sharon, MA 02067
781-784-4020 - Fax 781-784-4022

REVIEWS



CLIENT: 0023-04
SITE: 00369

