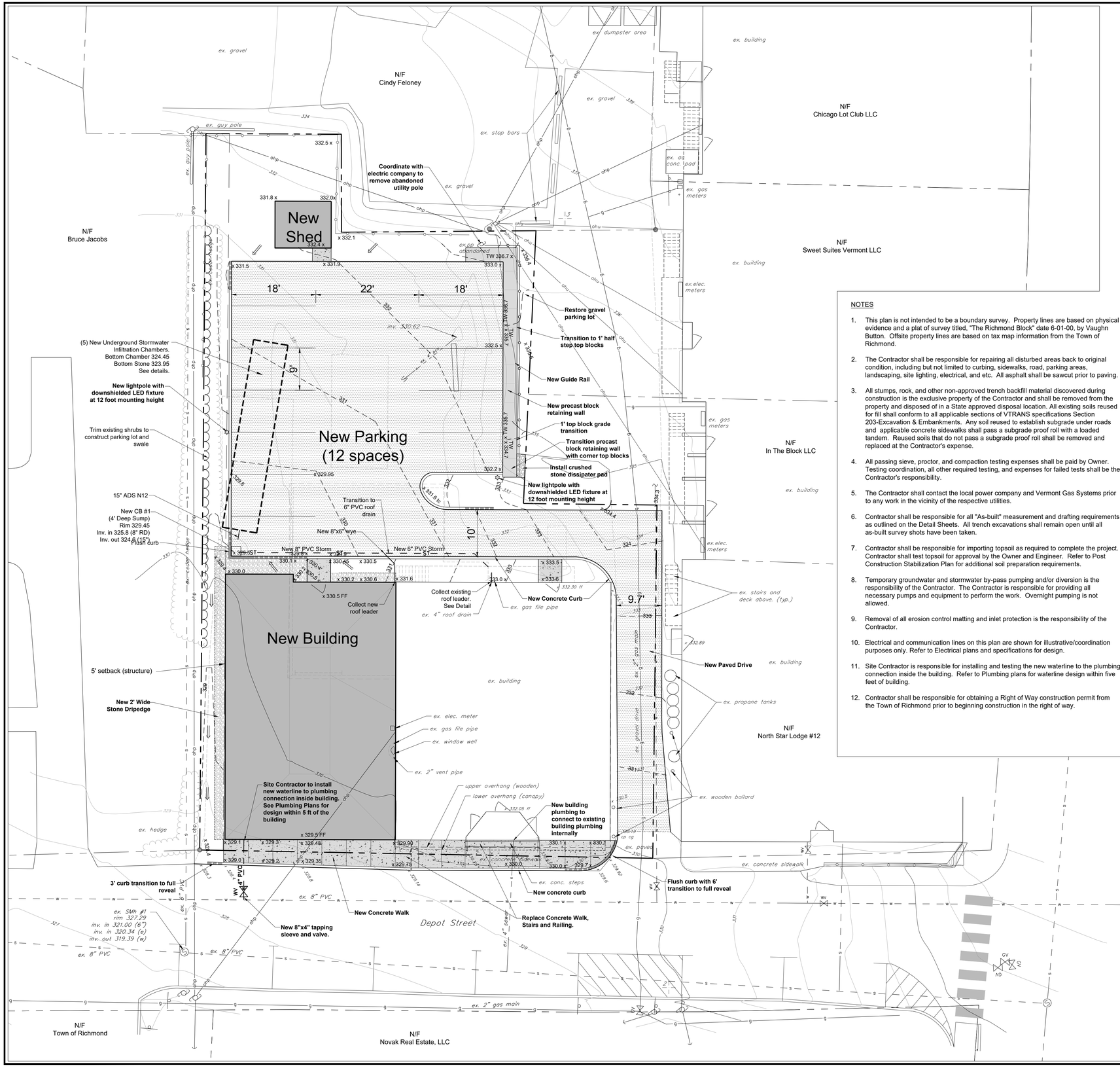
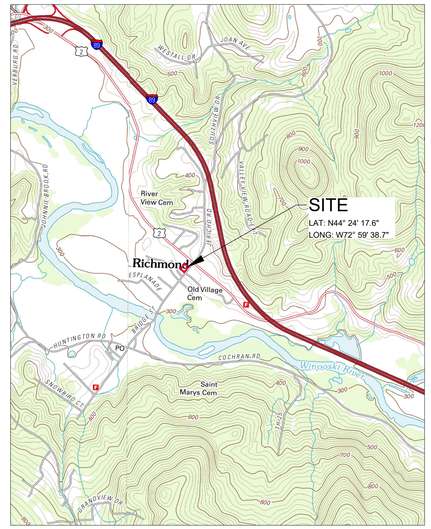


NOTES

1. This plan is not intended to be a boundary survey. Property lines are based on physical evidence and a plat of survey titled, "The Richmond Block" date 6-01-00, by Vaughn Button. Offsite property lines are based on tax map information from the Town of Richmond.
2. The Contractor shall be responsible for repairing all disturbed areas back to original condition, including but not limited to curbing, sidewalks, road, parking areas, landscaping, site lighting, electrical, and etc. All asphalt shall be sawcut prior to paving.
3. All stumps, rock, and other non-approved trench backfill material discovered during construction is the exclusive property of the Contractor and shall be removed from the property and disposed of in a State approved disposal location. All existing soils reused for fill shall conform to all applicable sections of VTRANS specifications Section 203-Excavation & Embankments. Any soil reused to establish subgrade under roads and applicable concrete sidewalks shall pass a subgrade proof roll with a loaded tandem. Reused soils that do not pass a subgrade proof roll shall be removed and replaced at the Contractor's expense.
4. All passing sieve, proctor, and compaction testing expenses shall be paid by Owner. Testing coordination, all other required testing, and expenses for failed tests shall be the Contractor's responsibility.
5. The Contractor shall contact the local power company and Vermont Gas Systems prior to any work in the vicinity of the respective utilities.
6. Contractor shall be responsible for all "As-built" measurement and drafting requirements as outlined on the Detail Sheets. All trench excavations shall remain open until all as-built survey shots have been taken.
7. Contractor shall be responsible for importing topsoil as required to complete the project. Contractor shall test topsoil for approval by the Owner and Engineer. Refer to Post Construction Stabilization Plan for additional soil preparation requirements.
8. Temporary groundwater and stormwater by-pass pumping and/or diversion is the responsibility of the Contractor. The Contractor is responsible for providing all necessary pumps and equipment to perform the work. Overnight pumping is not allowed.
9. Removal of all erosion control matting and inlet protection is the responsibility of the Contractor.
10. Electrical and communication lines on this plan are shown for illustrative/coordination purposes only. Refer to Electrical plans and specifications for design.
11. Site Contractor is responsible for installing and testing the new waterline to the plumbing connection inside the building. Refer to Plumbing plans for waterline design within five feet of building.
12. Contractor shall be responsible for obtaining a Right of Way construction permit from the Town of Richmond prior to beginning construction in the right of way.



LOCATION MAP
SCALE: 1" = 2,000 FT

LEGEND

- NEW LIGHT POLE AND BASE
- x363.9 — FINISH GRADE SPOT ELEVATION
- FINISH GRADE FLOW DIRECTION
- PRECONSTRUCTION EXCAVATION
- 330 — FINISH GRADE CONTOUR LINES (5 FOOT INTERVALS)
- FINISH GRADE CONTOUR LINES (1 FOOT INTERVALS)
- G — GV — PROPOSED GAS LINE/VALVE
- UGP — NEW UNDERGROUND POWER
- W — WV — NEW WATER LINE/SHUTOFF/VALVE
- NEW CHAIN-LINK FENCE
- NEW BUILDING
- NEW ASPHALT & SUBBASE
- NEW CONCRETE WALK
- x TW 300.0 — NEW CONCRETE WALL

PLANNING & ZONING INFORMATION

LANDOWNER/APPLICANT:
Jameson Partners LLC
734 Pitt Street, Mount Pleasant, SC 29464

RICHMOND ZONING DISTRICT:
Village Downtown (VD)

PARCEL NUMBER: DS0022

ACREAGE: 0.27 Acres

ZONING DATA
Zoned: Village Downtown District (VD)
Existing Land Use: Mixed Use Commercial/Residential
Proposed Land Use: Mixed Use Commercial/Residential

	Requirements	Provided
Min. Lot Area	0.125 ac	0.27 Acres
Min. Lot Frontage	50 ft	96.8 ft
Front Yard Setback	0 ft	±2 ft
Side Yard Setback	0 ft*	5 ft
Building Height	35 ft	35 ft
Max. Lot Coverage	80%	80%

Source: May 23, 2022 Revision of Town of Richmond Zoning Regulations
* 5 ft setback required for structures on district boundaries

Lot Coverage

Existing Lot Area = 0.27 Acres (11,899 s.f.)
Proposed Impervious Area = 9,514 s.f.
80% Lot Coverage Allowed = 9,519 s.f.
Proposed Lot Coverage = 80%

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STAMP:
STATE OF VERMONT
PATRICK M. REDMOND
No. 8105
LICENSED
PROFESSIONAL ENGINEER
FOR PERMIT REVIEW

Bar Scale 1" = 10'

Project:
22 Depot Street
Mixed Use Addition
Richmond, Vermont

Project No.	22280
Scale	1" = 10'
Drawn by	TJB
Checked by	
Date	06/15/2023

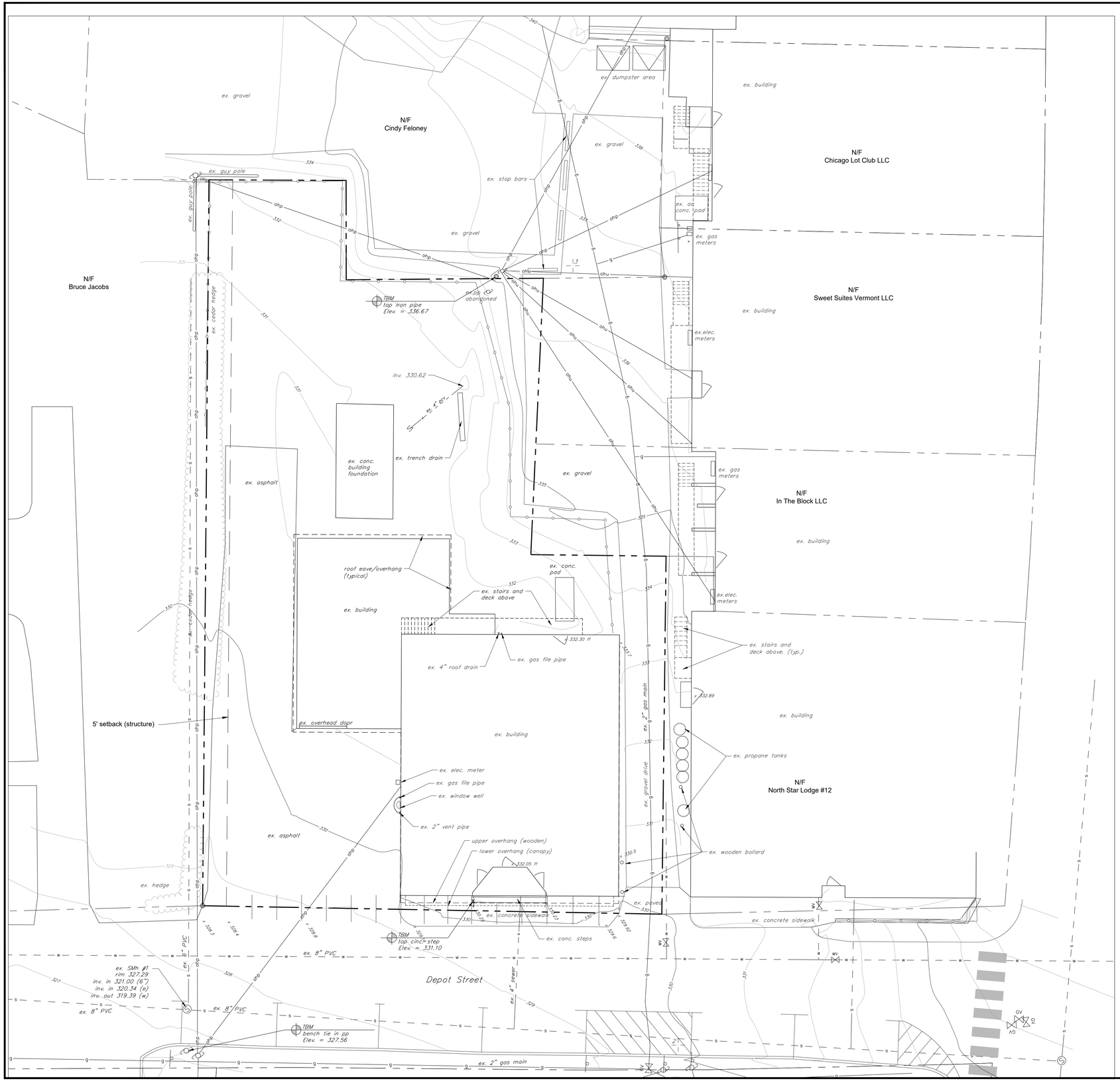
Revisions

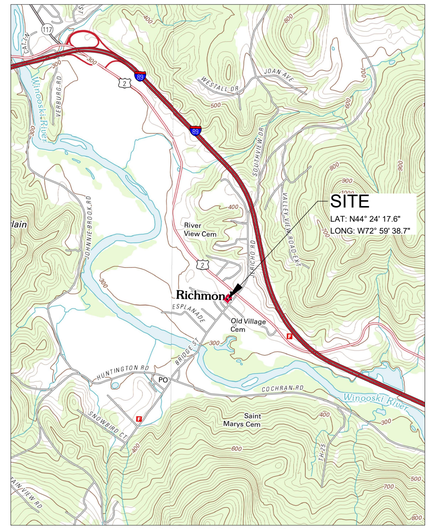
No.	Date	Description
1	06/23/2023	guide rail, curb revisions

Drawing Title
Overall Site Plan

Drawing No.
C-1.0

22280\DWGS\22280 base.dwg





LOCATION MAP

SCALE: 1" = 2,000 FT

LEGEND

- Survey Control Point
- Existing Sign
- Existing Light Pole
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Spot Grade Elevation
- Existing Contour
- Existing Gas Line/Valve
- Existing Sewer Line/Manhole
- Existing Sewer Forcemain
- Existing Storm Line/Manhole/Basin
- Existing Overhead Electric Line/Power Pole
- Existing Overhead Utility
- Existing Communications Line
- Existing Underground Electric & Telephone Line
- Existing Site Lite Line
- Existing Guardrail
- Existing Tree Line
- Existing Chain Link Fence
- Existing Stockade Fence
- Existing Underground Power
- Existing Water Line/Hydrant/Valve/Shutoff
- Approximate Property Line
- Existing Setback
- Existing Easement

NOTES

1. This plan is not intended to be a boundary survey. Property lines are based on physical evidence, a plat of survey "The Richmond Block" date 6-01-00, by Vaughn Button and tax map information from the Town of Richmond.
2. The horizontal coordinate system is based on NAD83 Vermont State Plane 4400 (US Survey Feet). Elevations are based on NAVD88 datum (US Survey Feet).
3. Existing conditions are based on a topographic survey completed by Krebs & Lansing in September 2022.
4. Utilities are based on visible structures located during the topographic survey and are not warranted to exact or complete. Contractor shall contact Dig Safe and other non-member utilities prior to beginning any excavation.

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STATE OF VERMONT
PATRICK M. REVOY
No. 8105
LICENSED
PROFESSIONAL ENGINEER
FOR PERMIT REVIEW

Vermont State Plane Grid North (NAD83)

0' 10' 20' 30'

Bar Scale 1" = 10'

Project:

22 Depot Street
Mixed Use Addition

Richmond, Vermont

Project No.	22280
Scale	1" = 10'
Drawn by	TJB
Checked by	
Date	04/27/2023

Revisions

No.	Date	Description

Drawing Title

Overall Existing Conditions Plan

Drawing No.

C-2.0

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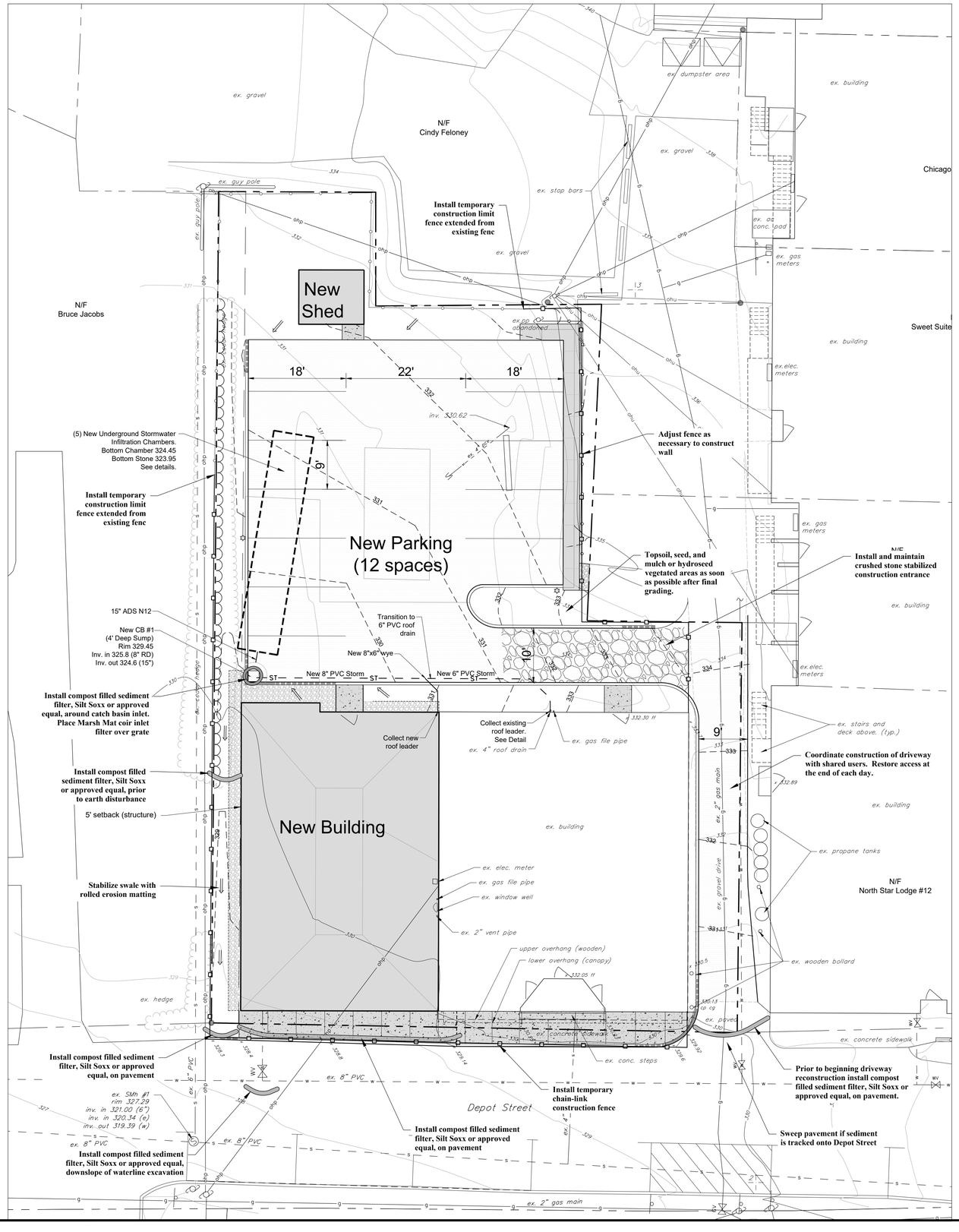

Erosion Prevention and Sediment Control Notes

1. Contractor shall be responsible for complying with all State and Local erosion prevention and sediment control standards and permit requirements during construction.
2. The limit of disturbance shall be clearly defined by Contractor's surveyor prior to clearing. Clearing and grubbing shall not begin until disturbance limits and sediment controls are in place. All roots, stumps and deleterious materials shall be removed from the site. The Contractor shall minimize the amount of disturbed land at any given time.
3. The erosion prevention and sediment control practices shown on these plans are the minimum required for the project. The Contractor shall employ and maintain as many best management practices as necessary to prevent soil from leaving the construction site. If evidence is found of sediment tracking or eroded soil leaving the construction site, the Engineer may direct Site Contractor to implement additional best management practices at no additional cost to Owner.
4. All areas of disturbance shall be permanently or temporarily stabilized as soon as possible and within 48 hours of final grading. All areas of disturbance shall be at least temporarily stabilized daily during winter construction unless the following exceptions apply:
   a. Stabilization is not required if earthwork is to continue in the area in the next 24 hours and there is no precipitation forecast in the next 24 hours.
   b. Stabilization is not required if the work is occurring in a self-contained excavation (i.e. no outlet) with a depth of 2 ft. or greater (e.g. house foundation excavation, utility trenches). Stabilization measures shall include mulch and netting, erosion control matting, crushed stone, gravel, or pavement.
6. Unless specifically indicated on the plans acceptable methods of stabilization shall include:
   - Mulching – Straw or Hay applied at 2 tons per acre Approximately 2" uniform thickness. Only allowed on relatively flat areas with minimum upslope watershed. Mulch must be properly secured with netting to prevent material from being blown away by wind (winathrow).
   - Hydroseeding* – Applied at the manufacturer's recommended application rate. Contractor shall provide evidence of proper application rate. Hydroseeding must be accompanied by erosion control matting in areas of concentrated flow.
   - Erosion control matting – S150BN matting must be applied to all slopes 3:1 (H:V) or greater (unless otherwise indicated).
   - Crushed stone or crushed gravel – Typically used for temporary access roads and construction staging areas.
7. The Contractor shall use water for dust control.
8. The Contractor shall provide inlet protection around all catch basins (existing or new) that collect construction site stormwater runoff. At a minimum, MarshMat, or approved equal, coir inlet filters shall be installed over all catch basin grates. Additional inlet control shall be installed as identified on the plans or as warranted during construction. Inlet protection must be maintained until final stabilization has been reached.
9. A stabilized construction entrance (See Detail) shall be installed and maintained at all construction access locations if construction vehicles travel off the existing hardscape. Contractor shall be responsible for installing crushed stone to provide stable areas for construction vehicle traffic, staging, and storage. The Contractor is responsible for providing and maintaining sufficient stone to prevent rutting and sediment tracking.
10. Any paved roads used by construction vehicles shall be swept daily, or at a greater frequency, if dirt or gravel is tracked from the site. The swept debris shall be immediately removed from face of curb if applicable.
11. All temporary erosion and sediment control measures shall be removed within 30 days after final stabilization or after the measures are no longer needed, unless otherwise authorized.
12. All sediment removed from sediment control practices shall be placed in an approved soil disposal area.
13. All areas that do not have established vegetation by October 15th must be stabilized in accordance with the Winter Stabilization requirements outlined in the Low Risk Site Handbook. See Details.
14. After permanent seeding the Contractor shall be responsible for watering to ensure adequate vegetative growth. Weed growth is not considered acceptable vegetative growth.
15. The location of temporary construction fencing and the temporary access shown on the plan are for schematic purposes only. The Contractor shall be responsible for providing all necessary temporary construction fencing, temporary roads, staging areas, etc., necessary to complete the work.
16. Water from dewatering activities that flows off site must be clear. Turbid, or visibly discolored water must not be pumped into storm sewers.

Legend

- Inlet Protection plus Marsh Mat Coir Inlet Filter
- Existing Catch Basin
- Existing Contours (328)
- Chain-link Construction limit barrier
- Orange Construction Fence
- Temporary Silt Fence
- Straw wattle (silt fence substitute only where indicated)
- Disturbance Limit Line
- Crushed stone for temporary site stabilization
- Erosion Control Matting
- 8" Silt Soxx by Filtrexx, or approved equal, sediment control barrier

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STAMP:

Vermont State Plane Grid North (NAD83)

0' 10' 20' 30'
Bar Scale 1" = 10'

Project:
22 Depot Street
Mixed Use Addition
Richmond,Vermont

Project No.	22280
Scale	1" = 10'
Drawn by	TJB
Checked by	
Date	04/27/2023

Revisions

No.	Date	Description

Drawing Title
Erosion Prevention & Sediment Control Plan

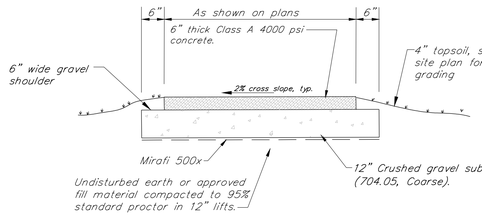
Drawing No.
C-3.0

22280\DWGS\22280 base.dwg

Concrete Notes

- All concrete used in the construction of concrete sidewalk shall be air entrained and made with Portland cement. The concrete shall meet section 541 of the State of Vermont Standard Specification for Construction for Class A concrete and have 28 day compressive strength of 4,000 psi.
- Broom finish concrete
- Construction joints shall be spaced max. 20' in all directions. Joint filler shall be resilient non-extruding cellular fiber joint, uniformly saturated with asphalt, offering a minimum of 70% recovery after compression.
- Score control joints 1-1/2" depth at intervals equal to width of sidewalk. All joints shall be saw cut.
- Apply SpecChem Cure Shield cure and seal product to all concrete surfaces, per the manufacturer's specifications.
- Concrete construction and curing shall conform to section 618.03 of the current VAOT Standard Specifications for Construction

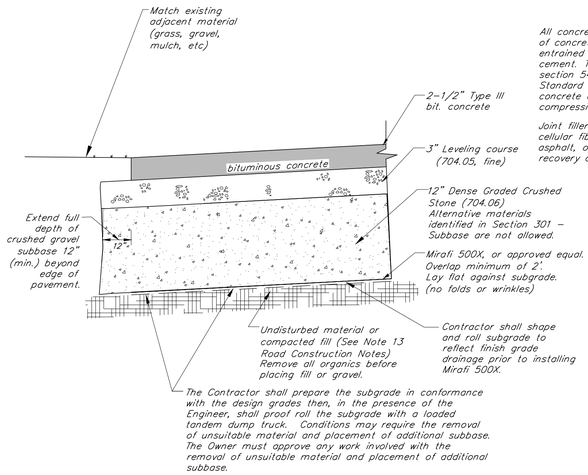
Note:
Owner or Contractor is not allowed to place deicing materials on newly poured concrete sidewalk for a period of 6 months.



New Concrete Sidewalk Detail

(For Concrete Walks 6ft. Wide or Less)

N.T.S.



Without Concrete Curb

N.T.S.

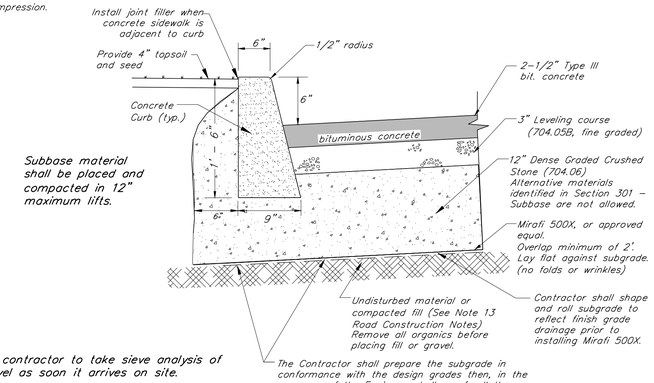
All concrete used in the construction of concrete curb shall be air entrained and made with Portland cement. The concrete shall meet section 541 of the State of Vermont Standard Specification for Class A concrete and have 28 day compressive strength of 4,000 psi.

Joint filler shall be resilient non-extruding cellular fiber joint, uniformly saturated with asphalt, offering a minimum of 70% recovery after compression.

Concrete Curb

- Broom finish concrete
- All joints to be tool finished
- Expansion/contraction joints every 20' with 1/2" joint filler.
- Score 1/3 total depth at 10' intervals
- Apply SpecChem Cure Shield EX cure and seal product to all concrete surfaces, per the manufacturer's specifications.
- Concrete may not be poured if frost is present or thawing in the subgrade, if the temperature is 40° F or less, or during unseasonable weather conditions.
- Concrete curb radii less than 200 ft shall be formed with flexible forms

The Engineer shall be contacted at least 24 hours prior to forming concrete curb to review layout.



Subbase material shall be placed and compacted in 12" maximum lifts.

The contractor to take sieve analysis of gravel as soon it arrives on site.

Travel over gravel with any vehicle tracking soil prior to placement of pavement is prohibited.

If gravel is contaminated after placement, the Site Contractor shall be responsible removal of all contaminated gravel and paying for all recommended sieve analysis as determined by the Engineer.

With Concrete Curb

Typical Road Cross Section Detail

N.T.S.

Construction Material Specifications

1. Unless otherwise indicated all civil site materials shall comply with the Vermont Agency of Transportation "Standard Specifications for Construction" 2018.
2. The Contractor shall follow Vermont Highway Specifications (2018) Section 203.11 for placing and spreading embankments.
3. Except where specified for the Gravel Wetland Embankment, Fill material for Embankment shall be clean, shall contain no stones greater than 3" in diameter, no frozen lumps, clay, organics, roots or contaminated material, shall meet the sieve indicated below, and shall be approved by the Engineer. Fill shall be placed in 12" lifts, wetted and compacted with satisfactory compaction equipment to 90% of maximum density (Standard Proctor).

Sieve	% Finer
4"	100
2"	85-100
#4	60-100
#200	30 maximum

4. Crushed Gravel for Subbase shall conform to Vermont Highway Specifications (2018) 704.05 and shall meet the following gradation requirements:

COARSE GRADED		FINE GRADED	
Sieve	% Finer	Sieve	% Finer
4"	95-100	2"	100
		1 1/2"	90-100
#4	30-60	#4	30-60
No. 100	0-12	No. 100	0-12
No. 200	0-6	No. 200	0-6

5. Dense Graded Crushed Stone for Subbase shall conform to Vermont Highway Specifications (2018) 704.06 and shall meet the following gradation requirements:.

Sieve	% Finer
3-1/2"	100
3"	90-100
2"	75-100
1"	50-80
1/2"	30-60
No. 4	15-40
No. 200	0-6

6 Drainage Aggregate, Drainage Rock, and Clean Crushed Stone for Drainage shall conform to Vermont Highway Specifications (2018) 704.16 and shall meet the following gradation requirements:.

Sieve	% Finer
1"	100
3/4"	90-100
3/8"	20-55
No. 4	0-10
No. 8	0-5

7. Sand Borrow and Cushion shall conform to Vermont Highway Specifications (2018) 703.03 and shall meet the following gradation requirements:.

Sieve	% Finer
3/4"	100
1/2"	70-100
No. 4	60-100
No. 100	0-20
No. 200	0-8

7. Portland Cement Concrete shall conform to the current edition of the Vermont AOT Standard Specifications for Construction Section 541 and shall meet the properties of the Concrete Class identified on the plans. Concrete specified with a 5,000 psi, 28-Day Compressive Strength shall meet the following mix design:

Max. water-cement ratio (lb./lb.)	0.44
Min. cement factor (lbs/C.Y.)	705
Entrained air content (%)	5 - 7
Slump (inches, before adding HRWR)	2 - 4

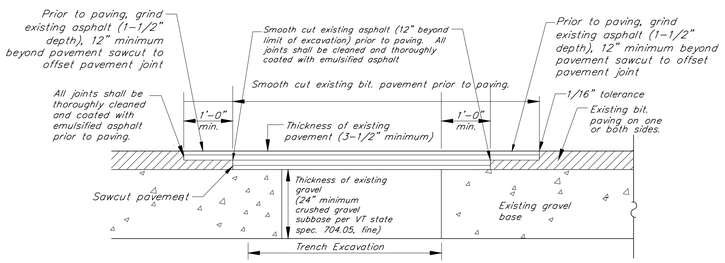
Use air entrained agent conforming to ASTM C260 with 5-7% total air. Use high range water reducing agent conforming to ASTM C494 in all concrete.

6. The Owner will pay for on site soils testing (compaction, sieve, and proctor). The Contractor shall pay for failing tests.

Signage Requirements

All signage and pavement marking include all necessary items to make product complete. All labor, materials, equipment and construction for signage and markings shall comply with AOT specifications. The location of each sign is shown on the plan or will be identified by the Owner or Engineer.

1. All sign posts shall be 2" square galvanized steel posts with anchors. Bottom of all signs to be 7 feet above nearest adjacent curb or pavement elevation.
2. All square tube steel posts and anchors shall be formed into a size and shape in such a manner that neither flash nor weld shall interfere with the telescoping properties, nor damage the galvanizing.
3. Anchors may be driven or set into a dug hole and backfilled. If driven, a driving cap shall be used. the dug hole installation method shall be utilized in areas with poor soil conditions or as directed by the engineer. Backfill shall be compacted as directed by the engineer.
4. The tops of sign posts shall be at or near the top of sign. The post shall not extend above the top of sign.
5. Sign posts shall be installed a minimum of one foot below ground, inside the anchor. The length of anchor exposed above ground shall not exceed four inches.
6. All sign panels shall have retroreflective backgrounds



1. Set up and maintain signs and other safety control devices.
2. Reshape hole and patch area by cutting with a concrete saw into square or rectangular shape and cut side faces vertically. Reshape downward solid material and around hole to sound pavement.
3. Backfill trench in 6" lifts and compact each lift to 95% of maximum density of optimum moisture content as determined by ASTM D698 standard proctor.
4. Remove all loose material and thoroughly sweep the hole area clean of mud and standing water.
5. Apply liquid asphalt tack to vertical faces in a uniform manner. Do not puddle tack coat on bottom of hole.
6. Fill top of hole with type IV bituminous concrete and compact in lifts no more than 2" thick. Each lift should be thoroughly compacted with a vibratory plate compactor or a partable roller. Experience has shown that 15 to 20 passes with a vibratory roller and mix temperature above 250F (121C) are necessary to ensure good compaction. Hand tamp should only be be used for small areas (less than 1 s.f.)
7. Clean up area. Do not leave excess fill or excavated material on the pavement. Remove safety signs.

Replacement of Existing Road Subbase and Bituminous Pavement

N.T.S.

Road Construction Notes

(All references to road shall apply to parking areas and sidewalks as well.)

1. New road shall be constructed to the line and grade shown on the drawings. The road and utility locations shall be as typically detailed unless otherwise shown.
2. All road and parking construction shall be completed in accordance with the Vermont Agency of Transportation "Standard Specifications for Construction" 2011, hereafter called Vermont Highway Specifications, specifications found on these plans, and project specifications. In case of conflict, the more stringent specification shall apply as determined by the Engineer.
3. The Contractor shall follow Vermont Highway Specifications (2011) Section 203.11 for placing and spreading embankments.
4. Fill material for road embankment shall meet Note #13 below and be approved by the Engineer. Fill shall be placed in 12" lifts, wetted and compacted with satisfactory compaction equipment to 95% of maximum density (Standard Proctor).
5. Road in fill sections shall be placed and compacted a minimum of 3 feet above top of any utility to be installed before trench is excavated for pipe placement. In trenches and cut sections, the Contractor shall provide all necessary sheeting, shoring and bracing to maintain compliance with all OSHA/VOSHA regulations.
6. Methods for construction of subgrade shall conform to Vermont Highway Specifications (2011) 203.12 or as determined by the Engineer.
7. Any subgrade or subbase disturbed by Contractor, or rendered unsuitable by construction machinery, shall be removed and replaced with approved granular backfill at the Contractor's expense. The subgrade shall be compacted to attain at least 95% of the maximum density (Standard Proctor) before placing road or embankment materials.
8. The Owner will pay for on site soils testing (compaction, sieve, and proctor). The Contractor shall pay for failing tests. The Contractor is fully responsible for coordinating all testing/inspections. Contractor shall provide minimum 24 hour notice to testing agency prior to placement of any item to be tested.
9. Sand borrow and cushion shall conform to Vermont Highway Specifications (2011) 703.03. Granular borrow shall conform to the Vermont Highway Specifications 703.04.
10. Gravel subbase for pavement shall conform to Vermont Highway Specifications (2011) 704.05, coarse. Substitute materials identified in VAOT Specifications Section 301 - Subbase are not allowed.
11. Leveling course shall conform to Vermont Highway Specifications (2011) 704.05, fine grading. Shoulders shall conform to Section 704.12, Aggregate for Shoulders.
12. Bituminous concrete pavement shall conform to Vermont Highway Specifications (2011) Section 404 and 406. Binder course shall be Type I + II, and finish wearing course shall be Type III, IV, or as detailed.
13. Embankment fill for all impervious areas, EXCLUDING BUILDINGS, shall be a sieve specification as follows:

Sieve	% Finer
4"	100
2"	85-100
#4	60-100
#200	30 maximum

14. Dense graded crushed stone, crushed gravel and sand borrow shall not be contaminated by work. Construction traffic shall not travel over exposed areas of this material.
15. Contractor is responsible for all pavement markings (ie. parking striping, handicap markings, stop bars, etc.) shown or implied on the Plans. Refer to pavement marking requirements below.

Pavement Marking Notes

1. Typical parking space is 9'-0" center of line to center of line marked with 4" wide White Paint.
2. ADA space shall have painted blue box with white stencil and trim per ADA requirements.
3. Paint for pavement markings shall be Hydrophast Waterborne Traffic Paint by Franklin Paint Company. It shall be reflective, VOC compliant fast drying, 100% acrylic waterborne traffic paint. Confirm paint color with Owner prior to application.
4. Traffic paint shall be applied with a uniform thickness and at a rate such that no pavement is visible after drying. Additional paint application will be required if underlying pavement is visible.

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STAMP:

Project:

22 Depot Street
Mixed Use Addition

Richmond,Vermont

Project No.	22280
Scale	1" = 10'
Drawn by	TJB
Checked by	
Date	04/27/2023

Revisions

No.	Date	Description

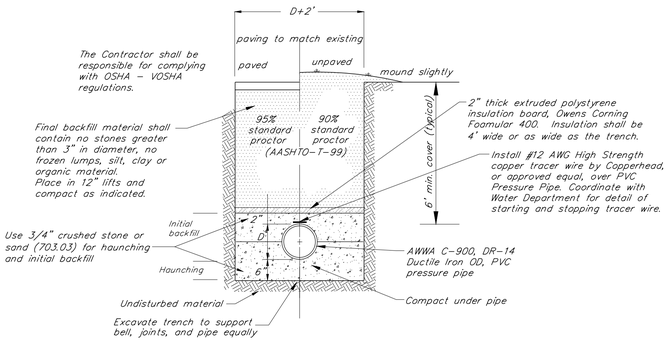
Drawing Title

Civil Details

Drawing No.

C-4.0

22280\.DWGS\22280 base.dwg

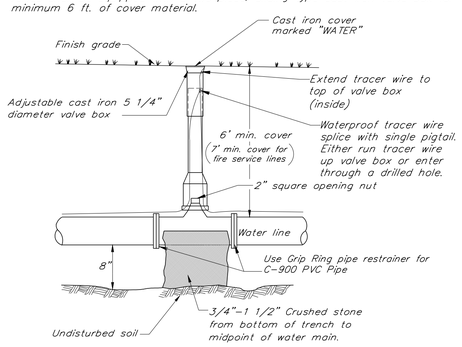


Typical Water Trench Detail C-900 PVC Pressure Pipe

N.T.S.

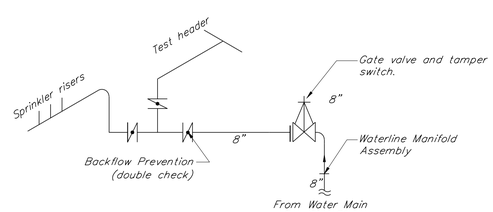
***The Contractor shall confirm all valve * specifications with Municipality before ordering.**

1. Gate valves shall be meet all requirements of A.W.W.A. C509 and C515 Standards (latest edition). Valves with mechanical joints of sizes as required on the plans.
2. All valves shall be of cast or ductile iron body and shall be coated with fusion bonded epoxy complying with AWWA C-550 and be NSF 61 approved. Valve shall have manufacturer's name, pressure rating, and manufacture date cast on the body.
3. All valves shall include non-rising stem, high strength bronze stem and nut, 100% coated wedge, "O" Ring Stem Seals above and below the thrust collar, a 2" square operating nut, mechanical joint ends, and corrosion resistant stainless steel body bolts and nuts.
4. Gate valves shall open counter-clockwise (left) and be designed for a minimum working pressure of 200 psi.
5. Valves shall be equipped with a two piece, sliding type cast iron valve box for a minimum 6 ft. of cover material.



Typical Resilient Wedge Gate Valve

N.T.S.



See plumbing/fire protection drawings for complete design and details of sprinkler system, domestic water must be isolated from sprinkler system with Watts Series 709 double check or approved equal.

Backflow Preventer Schematic

N.T.S.

Construction Notes

The Contractor will be responsible for all construction of water main, storm and sanitary sewer systems as shown on the plans. The Contractor will be responsible for all necessary adapters, fittings, etc. to make connections to the existing and proposed units. The Contractor shall be responsible for all work shown or implied on the plans and/or referenced in the specifications and permits. The Contractor shall submit, for approval by the Engineer, all types of materials and products used.

Water Main (Applies to new domestic water mains and services) (See also Fire Service Main Notes)

1. The pipe for water main shall conform to AWWA C-900-07, DR-14, ductile iron O.D. pressure pipe. Fittings shall conform to AWWA C110, 350 pounds working pressure. Valves shall be manufactured to meet all requirements of AWWA specification C509 or C515. Tracer wire shall be placed over the water line and shall extend from gate valve curb box to curb box or other approved above grade termination.
2. All pipe shall be installed in accordance with AWWA C600. The pipe shall be kept free of foreign matter and debris during installation. When the process of pipe laying has stopped, any open ends of pipe shall be plugged. There shall be a minimum of 6'-0" (1.82 m) cover over all pipe and service lines. Any pipe deflection shall not exceed fifty (50%) percent of recommended manufacturer's maximum deflection. Backfill materials and procedures shall be as detailed on the drawings. The Contractor shall be responsible for any and all sheeting and/or shoring necessary to comply with OSHA - VOSHA regulations.
3. The testing of the water main shall consist of the testing of all installed pipe, services and hydrants in accordance with AWWA C600. The testing shall consist of a pressure test and leakage test. All testing shall be done with potable water and in the presence of the Engineer, and representatives from the Town of Milton Water Department. The pressure test consists of maintaining a minimum internal pipe pressure of 200 psi (140,620 kg/m^2) for two (2) hours. The testing allowance shall be defined as the maximum quantity of makeup water that is added into a pipeline undergoing hydrostatic pressure testing, or any valved section thereof, in order to maintain pressure within +/- 5 psi of the specified test pressure (after the pipeline has been filled with water and the air has been expelled). No pipe installation will be accepted if the quantity of makeup water is greater than that determined by the following formula:

$$L = \frac{SD\sqrt{P}}{148{,}000}$$

L = testing allowance (makeup water), in gallons per hour
S = Length of pipe tested, in feet
D = Nominal pipe diameter, in inches
P = average test pressure during the hydrostatic test, in pounds per square inch (gauge)

4. Chlorinating of the system shall be accomplished after the water main has been successfully pressure tested and thoroughly flushed. Disinfecting shall be in accordance with AWWA C-651. The disinfecting process shall be deemed acceptable only after two consecutive sets of acceptable samples, taken from the flushed and disinfected main 24 hours apart, shows no evidence of bacteriological contamination. For proper disinfection use minimum 25 mg/l chlorine concentration for 24 hours. The concentration must remain above 10 mg/l. Tablet disinfecting is not acceptable.
5. The water main shall be thoroughly flushed with a minimum flow velocity of 2.5 ft/s to flush foreign materials out of the valves and hydrants. Prior to flushing, the Contractor shall contact the Owner, Fire Department in the municipality, the District Water Supply or Department of Public Works, and the Engineer.

Fire Service Main

1. The testing of the water main shall consist of the testing of all installed pipe, services and hydrants in accordance with NFPA 24. The testing shall consist of a pressure test and leakage test. All testing shall be done with potable water and in the presence of the Engineer. The pressure test consists of maintaining a minimum internal pipe pressure of 200 psi (140,620 kg/m^2) for two (2) hours. The amount of leakage at the joints shall not exceed 2 qt/hr per 100 gaskets or joints, irrespective of pipe diameter. If the pressure drops more than 5 psi (3515 kg/m^2) in the first hour, this constitutes failure of the test for the particular section of pipe. Failure of any test section will necessitate repair and/or replacement of the failed section.
2. Chlorinating of the system shall be accomplished after the water main has been successfully pressure tested and thoroughly flushed. Disinfecting shall be in accordance with AWWA C-651. The disinfecting process shall be deemed acceptable only after two samples of water from the flushed disinfected main, taken 24 hours apart, shows no evidence of bacteriological contamination. Use minimum 25 mg/l chlorine concentration for 24 hours. The concentration must remain above 10 mg/l. Tablet disinfecting is not acceptable.
3. Acceptable water main flushing requirements are provided below. Prior to flushing, the Contractor shall contact the Owner, Public Works Department of the municipality, and the Engineer.

   Underground piping, from the water supply to the system riser, and lead-in connections to the system riser shall be completely flushed before the connection is made to downstream fire protection system piping.

   The flushing operation shall be continued for a sufficient time to ensure thorough cleaning.

   The minimum rate of flow shall be not less than one of the following:

   (1) Hydraulically calculated water demand flow rate of the system, including any hose requirements. (provided by the mechanical/sprinkler consultant)

   (2) Flow necessary to provide a velocity of 10 ft/sec (3.1 m/sec) in accordance with the table.

   (3) Maximum flow rate available to the system under fire conditions.

Flow Required to Produce a Velocity of 10 ft/sec in Pipes

Pipe Size		Flow Rate	
in.	mm	gpm	L/min
4	102	390	1,476
6	152	880	3,331
8	203	1,560	5,905
10	254	2,440	9,235
12	305	3,520	13,323

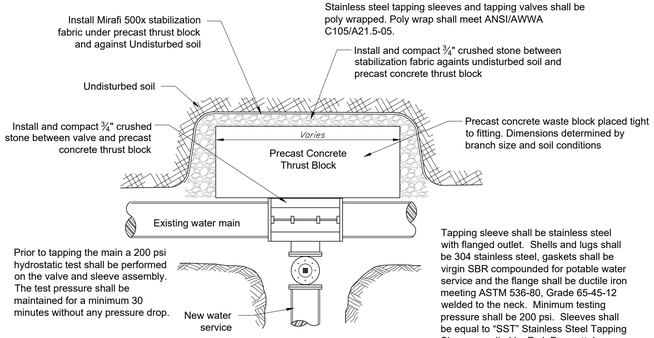
WATER & SEWER Testing and Contractor Coordination Requirements

1. All water lines and sewer lines shall be thoroughly tested by the Contractor in accordance with the Environmental Protection Rules (09/29/07), and the Chapter 21 Water Supply Rules (the more stringent rule shall apply).
2. All private or municipal waterlines shall be tested by the Contractor in accordance with the procedures outlined in AWWA C600 and/or NFPA 24.
3. The Contractor will be responsible for all construction of water main and sanitary sewer systems as shown on the plans. The Contractor will be responsible for all necessary adapters, fittings, etc. to make connections to the existing and proposed units. The Contractor shall be responsible for all work shown or implied on the plans and/or referenced in the specifications and permits. The Contractor shall submit, for approval by the Engineer, all types of materials and products used.
4. No water main shall be closer than ten (10) feet to any sanitary sewer or sanitary manhole and five (5) feet to any catch basin or storm sewer line. Provide minimum of 18" vertical separation between water main and storm/sanitary sewer crossing.
5. The Contractor shall be responsible for construction as-builts to service locations, and any water main fittings. As-builts shall be recorded in accordance with the outlined procedures.
6. **The Contractor shall be responsible for contacting the Engineer, Municipality, and Water District, when applicable, at least 48 hours prior to starting construction on any portion of the exterior water or sanitary systems. This notification requirement shall continue to the completion of the water and sanitary systems.**
7. Utility Testing. The Contractor shall be responsible for scheduling water and sanitary testing, with the Engineer, Municipality Public Works Department, and/or the Water District at a minimum of 48 hours prior to the test. Based on availability of Engineer's staff, the Engineer shall accommodate the testing schedule within 48 hours of the Contractor requested test date/time.
8. The Contractor must successfully pre-test the water and forcemain for 2 hours prior to scheduling the Engineer. The Contractor shall notify Engineer immediately if pre-test failed.
9. The Contractor shall immediately contact the Engineer if pre-scheduled testing and/or water/sewer construction is canceled. If Contractor does not contact Engineer and Engineer visits the site, the Contractor shall be responsible for Engineer's fees/mileage for site visit.
10. The Contractor shall coordinate water construction with the Milton Water Department. The Contractor shall leave thrust blocks and other required sections of new line exposed until the Water Department has inspected and approved them.

Contact the Town of Richmond Water Department and the Engineer at least 48 hours prior to tap.

Wet tap shall be installed by persons approved by the Town of Richmond Water Department

Stainless steel tapping sleeves and tapping valves shall be poly wrapped. Poly wrap shall meet ANSI/AWWA C105/A21.5-05.

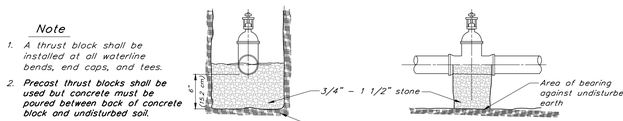


Tapping Sleeve and Valve Detail

N.T.S.

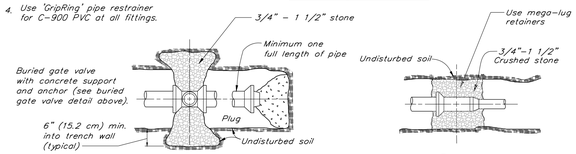
Note

1. A thrust block shall be installed at all waterline bends, end caps, and tees.
2. **Precast thrust blocks shall be used but concrete must be poured between back of concrete block and undisturbed soil.**
3. Redi-mix concrete (2,500 psi min) must be used where concrete is specified. Socrete is NOT acceptable.
4. Use 'GripRing' pipe restrainer for C-900 PVC at all fittings.

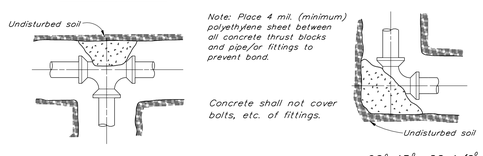


Section — Elevation

Anchorage of Valves



Valve/Dead End — Reducer



Tee — 90°, 45°, 22 1/2°, or 11 1/4° Bend

Minimum Area of Bearing Surface of Concrete Thrust Block (in square feet)

3"				4"				6"				8"				12"				SOIL CONDITION	SAFE BEARING LOAD(PSF)
ENDS & TEES	VALVES 90° ELB.	REDUC 45° ELB.	22.5° ELB.	ENDS & TEES	VALVES 90° ELB.	REDUC 45° ELB.	22.5° ELB.	ENDS & TEES	VALVES 90° ELB.	REDUC 45° ELB.	22.5° ELB.	ENDS & TEES	VALVES 90° ELB.	REDUC 45° ELB.	22.5° ELB.	ENDS & TEES	VALVES 90° ELB.	REDUC 45° ELB.	22.5° ELB.		
0.5	0.5	0.5	0.5	0.5	1.0	0.5	0.5	1.0	1.5	1.0	0.5	2.0	2.5	1.5	1.0	4.0	5.5	3.0	1.5	Sound shale	10,000
1.0	1.0	1.0	0.5	1.5	2.0	1.0	0.5	3.0	4.0	2.0	1.0	4.5	6.5	3.5	2.0	10.0	14.0	7.5	4.0	Cemented gravel & sand	4,000
1.0	1.0	1.0	0.5	2.0	0.5	1.5	1.0	3.5	5.0	3.0	1.5	6.0	8.5	5.0	2.5	13.0	18.5	10.0	5.0	Coarse & fine compact sand	3,000
1.5	2.5	1.5	1.0	2.5	3.5	2.0	1.0	5.5	7.5	4.0	2.0	9.0	13.0	7.0	3.5	20.0	27.5	15.0	8.0	Medium clay (can be spaded)	2,000
3.0	4.5	2.5	1.5	5.0	7.0	4.0	2.0	10.5	15.0	8.0	4.0	18.0	25.0	14.0	7.0	39.0	55.0	30.0	15.0	Soft clay	1,000

Maximum water pressure = 200 PSI (140,620 kg/m^2)

Thrust Block Details

N.T.S.

KREBS & LANSING
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164 Main Street, Suite 201
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STAMP:

Project:

22 Depot Street
Mixed Use Addition

Richmond,Vermont

Project No.	22280
Scale	1" = 10'
Drawn by	TJB
Checked by	
Date	04/27/2023

Revisions

No.	Date	Description

Drawing Title

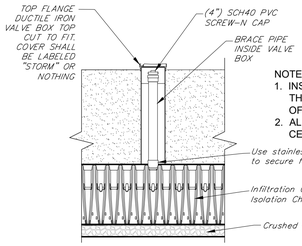
Civil Details

Drawing No.

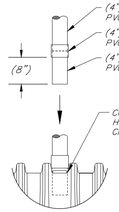
C-4.1

22280\DWGS\22280 base.dwg

One Inspection port shall be installed on the first pre-treatment isolation chamber after the catch basin

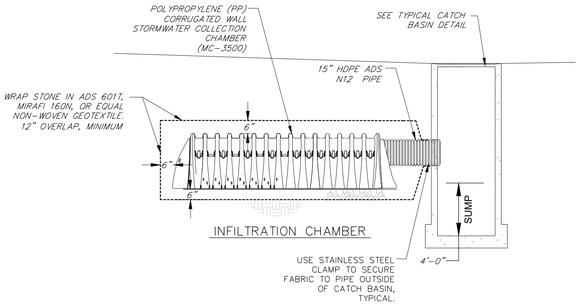


NOTES:
1. INSPECTION PORT MUST BE CONNECTED THROUGH KNOCK-OUT LOCATED AT CENTER OF CHAMBER.
2. ALL SCHEDULE 40 FITTINGS TO BE SOLVENT CEMENTED.



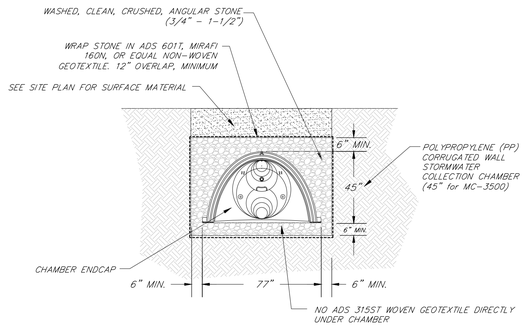
CONNECTION DETAIL
NTS

Typical Inspection Port Cross Section
N.T.S.

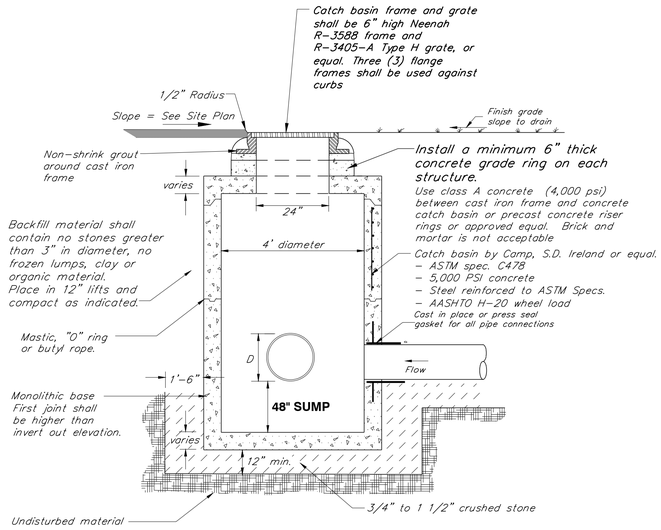


Stormtech Chamber System
N.T.S.

Infiltration System Construction Notes:
All upstream/upslope construction shall be complete and stabilized prior to allowing runoff to enter any infiltration systems. "Stabilized" shall mean paved surfaces, washed crushed stone, or vegetated areas that have established a dense and vigorous vegetative cover.



Typical Infiltration Chamber Cross Section
N.T.S.



Deep Sump Catch Basin
N.T.S.

AS-BUILT (RECORD) DRAWINGS FOR SITE UTILITIES

At the completion of the project the Contractor shall be responsible for providing the Owner with a complete Utility Record Drawing in AutoCAD and PDF format. The Record Drawing shall meets the specifications below:

Utility

Water
- All pipe sizes and types shall be provided.
- All water gate valves and shut-off valves shall be horizontally located with three (3) swing ties.
- All bends, fittings, caps, connections, etc. shall be horizontally located with three (3) swing ties and the top of pipe elevation shall be provided accurate to 0.1 ft.

Storm
- All manhole/CB/DI – rims, inverts, pipe sizes, and types shall be provided.
- Cleanouts and fittings (wye, reducers, etc.) shall be horizontally located with three (3) swing ties and the pipe invert elevation shall be provided accurate to 0.1 ft.
- Service pipe inverts shall be provided at the building with a horizontal measurement from a building corner.

Electric
- Horizontal alignment shall be accurately sketched on a Site Plan. The Site Plan shall be specific to electric and communication utilities only.
- Trench x-section (number and type conduit, encasement detail, conduit length, run direction) shall be provided for each run of conduit. If the cross-section changes mid run the location of the change must be indicated with a new cross section detail.

VT Gas
- Contractor shall be responsible for providing Owner with a complete "mark-up" plan showing the layout of VT Gas piping.

Site Lighting
- Contractor shall be responsible for providing to the Owner a complete "mark-up" plan showing the layout of the site lighting conduit from light pole to light pole.

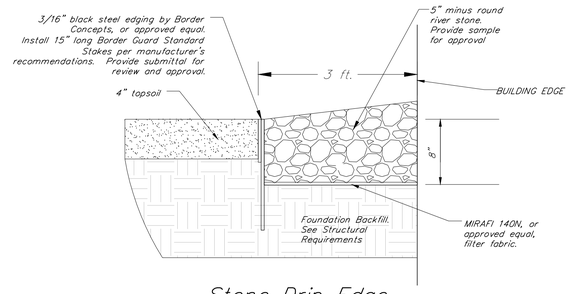
Other -
- Contractor shall be responsible for locating and identifying all existing utilities that are exposed in the process of installing new utilities.

Swing ties may be substituted with survey shots taken with survey equipment able to locate infrastructure with a horizontal accuracy of 1 ft and a vertical accuracy of 0.1 ft.

Construction Stakeout Notes

The Contractor shall be responsible for all construction stakeout for the project. The Engineer shall provide the Contractor an AutoCAD R2000 drawing of the site design. The drawing will include horizontal and vertical survey control. Additional survey control will be the responsibility of the Contractor.

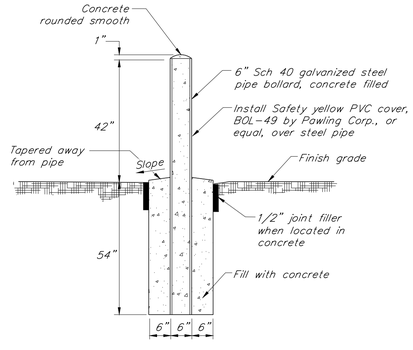
1. The Contractor shall be responsible for using proper survey equipment and having properly trained personnel to use this information. Any Contractor that does not have proper equipment or personnel shall subcontract the work to a competent consultant.
2. The horizontal control datum may be based on a coordinate system that is unique for this project. Project north may not refer to astronomic or magnetic north.
3. The Contractor shall check the integrity of survey control points by occupying a control point checking distance to back sight and checking distance and angle to another control point prior to any construction stakeout. The contractor shall not proceed with stakeout if either measured distances or angles do not match calculated values.
4. Graphical images of infrastructure in the AutoCAD drawing may not be in an accurate representation of its size. It is the Contractor's responsibility to verify size and shape of all items to be staked out.
5. After completion of radial stakeout with the survey transit, the Contractor shall check each stakeout point as necessary to verify the horizontal and vertical position of the point and that it is correct in relationship to the rest of the project.
6. The Contractor shall complete all construction stakeout to an accuracy of 0.1 feet (excluding building stakeout).



Stone Drip Edge
N.T.S.

Construction Notes

1. The methods and materials of construction shall conform to the latest standards of the Municipality and the State of Vermont. All work shall be in conformance with all permits and approvals issued for the project. In case of conflict, the more stringent specification shall apply as directed by Engineer. All work shall be done in a workmanlike manner and completed in the time specified by Owner.
2. The Contractor shall be responsible for all work and materials shown and required to make the job complete. These drawings do not show every fitting or appurtenance. Materials shall be as specified on the drawings. Manufacturer's product specifications shall be submitted for all materials to the Engineer for approval prior to installation.
3. The location and size of existing underground utilities is not warranted to be exact or complete. The Contractor shall field locate all utilities and shall contact the affected utility company, the Engineer and the Municipality prior to making any hook ups. The Contractor shall be solely responsible for all existing utilities and their uninterrupted services. The Contractor shall contact Dig Safe and other non-member utilities prior to any excavation.
4. All off-site backfill, sheeting and shoring, dewatering, clearing and grubbing, erosion control, dust control, traffic control, grading, and all incidentals shall be included as part of the required work.
5. Repair of all disturbed areas, grading, seeding, mulching, repair of roads and curbs, paving, and other incidentals are included as part of the required work. All disturbed areas shall be loamed and mulched until permanent ground cover is established.
6. The Contractor shall be responsible for all construction layout and shall verify all horizontal control and temporary bench marks before use.
7. The workers and public shall be protected by the Contractor from any and all hazards connected with the construction work. Open trenches, materials, or equipment within the working limits are to be guarded by the use of adequate barricades or flaggers. All barricades left in position overnight are to be properly lighted. Kerosene pots are not acceptable. When work narrows the usable pavement, flaggers shall be employed to aid the flow of traffic so that there will be no undue delays. The Contractor shall be held responsible for the safety of all workers and the general public and all damages to property occurring from or upon the work occasioned by negligence or shall be held responsible for the safety of all workers and the general public and all damages to property occurring from or upon the work occasioned by negligence or day or night within the working area. All work shall be in conformance to OSHA regulations, Title 19, Parts 1926.651 and 1926.652, and applicable to VOSHA regulations.
8. The Contractor shall sawcut all existing pavement to be removed. The Contractor shall minimize the pavement area disturbance. Contractor shall be responsible for all pavement repair and restoration necessary to complete the work.
9. Existing plantings are located in general areas as shown on the plans. Contractor shall protect plantings scheduled to remain so as not to damage these or their root systems.
10. Contractor shall comply with all permits and approvals issued for this project.
11. Contractor shall sign on as the Co-Permittee for the State of Vermont Erosion Prevention and Sediment Control permit for the project.
12. Slope stability upon unsaturated soil conditions. If during construction saturated soils are encountered, contact the Engineer immediately.



Bollard Detail
N.T.S.

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STAMP:

Project:
22 Depot Street
Mixed Use Addition
Richmond, Vermont

Project No.	22280
Scale	1" = 10'
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Checked by	
Date	04/27/2023

Revisions

No.	Date	Description

Drawing Title
Civil Details

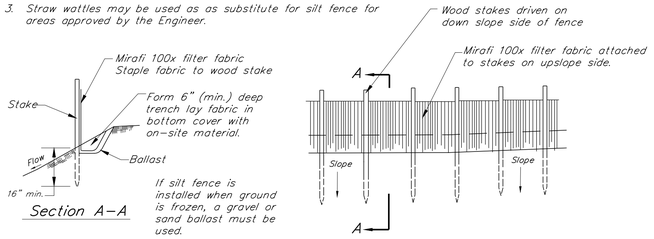
Drawing No.
C-4.2

22280\DWGS\22280 base.dwg

Notes

1. Contractor shall be responsible for the installation, maintenance, and removal of silt fence in all locations shown on the plans.
2. Maintenance shall be performed as needed and material removed when sediment reaches half of fabric height. Remove silt fence after successful establishment of vegetation.
3. Straw wattles may be used as as substitute for silt fence for areas approved by the Engineer.

Silt fence spacing chart	
Slope	silt fence spacing
5% to 10%	50 ft. or less
10% to 20%	25 ft. or less
> 20%	15 ft. or less



Typical Temporary Silt Fence

N.T.S.

SEEDING SPECIFICATIONS

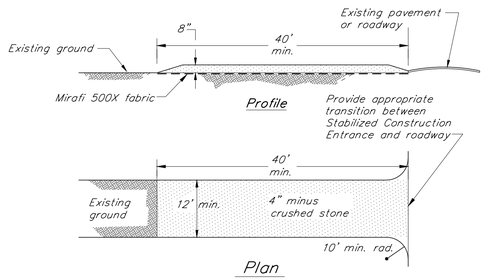
PERMANENT SEED MIX SHALL BE USED AS EARLY AS PRACTICABLE BETWEEN 5/15 AND 9/15 AND SHALL MEET THE FOLLOWING CRITERIA:

SEED	% WEIGHT
CREEPING RED FESCUE	40%
KENTUCKY BLUEGRASS	30%
PERRENNIAL RYEGRASS	30%

Refer to Post Construction Soil Restoration Plan for additional requirements

If hydroseeding is used for temporary stabilization measures for turf establishment. Specifications are:
Hydroseed Additives:
Fertilizer: 19-19-19 75 lbs per 1,000 gallons of water
Lime: 100 lbs. per 1,000 gallons of water
Mulch: 300 lbs. per 1,000 gallons of water.
Tacifer: 5 lbs. per 1,000 gallons of water.

1. Areas having soil compaction as a result of construction shall have any crushed stone removed and the subgrade shall be roto-tilled prior to placing topsoil. Refer to the Post Construction Soil Depth and Quality Requirements.
2. If hand seeding, only straw mulch is to be used and secured by netting either organic or inorganic. If inorganic is used, it must be removed before the first mowing.
3. Starter fertilizer shall be applied at the manufacturer's suggested rate at the time of seeding. Fertilizer application will not be allowed in sensitive areas and adjacent to drainage ways as determined by the Engineer.
4. Watering is to be done by the Contractor and is to last for the duration of the warranty period to maintain proper growth. All apparatus necessary to apply the water must be furnished by the Contractor (i.e. hoses, sprinklers, etc.).
5. Staking of all topsoiled areas to control foot traffic will be required. Unless otherwise specified, acceptable staking materials will be grade stakes and twine or string with flagging attached for visibility.
6. A guarantee through the first mowing is required with any sparse or bare areas larger than 1 sq. ft. to be redone.
7. The Contractor is responsible for the first mowing. After the first mowing and prior to the Owner taking responsibility for the lawn areas the Contractor and an Owner's Representative shall meet to inspect the vegetation establishment.
8. Contractor is responsible for all topsoil to complete the project as shown. If existing volume of topsoil is inadequate, the Contractor, at no cost to the Owner, shall purchase offsite approved topsoil as necessary.



Note:

- Contractor shall be responsible for the installation, maintenance, and removal of a stabilized construction entrance at each construction entrance for the project. The Construction Stabilized Entrance and its continued maintenance shall be a minimum measure to prevent tracking of sediment off-site.
- Contractor to use Mirafi 500x under stone for temporary construction roads.
- Stabilized construction entrances shall be repaired when voids are 80% filled with sediment. Repair shall include adding additional 4" minus crushed stone and/or removal of contaminated stone.

THIS DETAIL TO BE USED FOR ALL TEMPORARY STONE STABILIZATION AREAS IDENTIFIED ON THE PLANS

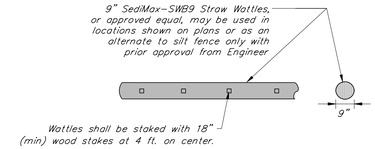
Temporary Stabilized Construction Entrance & Staging Areas

N.T.S.

Construction Limit Barriers

- Temporary chain-linked construction fence may be used to delineate construction limits where practical or where directed in the Contract Documents.
- Orange construction fence or snow fence shall be used to demarcate short-term construction activities.
- 3" thick orange polyester mesh webbing may be used to demarcate construction disturbance limits that are not proximate to environmentally sensitive areas (wetlands, RTE plants, etc.)

NOTE:
1. Contractor shall be responsible for the installation, maintenance, and removal of straw wattles in all locations shown on the plans.
2. Maintenance shall be performed as needed and material removed when sediment reaches half of product height. Remove wattle after successful establishment of vegetation.



Typical Straw Wattle Sediment Control

N.T.S.

GENERAL GRADING AND SITE WORK NOTES

1. ALL AREA DISTURBED AND ALL AREAS WITHIN THE CLEARING LIMITS SHALL BE GRADED AND COVERED WITH A MINIMUM OF 4" OF LOAM TOPSOIL. THE AREAS TO BE LOAMED SHALL BE FREE AND CLEAR OF ROOTS, WASTE MATERIAL AND OTHER DELETERIOUS MATERIAL. TOPSOIL SHALL BE SPREAD AND LIGHTLY COMPACTED TO A DEPTH OF 4". TOPSOIL SHALL BE APPROVED BY THE ENGINEER. ALL SIDE SLOPES ARE TO BE LOAMED.
2. ALL TURF ESTABLISHMENT SHALL BE IN ACCORDANCE WITH SECTION 651 OF THE VT STANDARD SPECIFICATIONS 2018 AND THE TOWN'S SPECIFICATIONS. MULCHING SHALL FOLLOW SEEDING BY NO MORE THAN 24 HOURS.
3. ALL CUT SLOPES SHALL BE NO STEEPER THAN 2.0H ON 1.0V. ALL FILL SLOPES SHALL BE NO STEEPER THAN 2.0H ON 1.0V.
4. THE CONTRACTOR SHALL NOT DISTURB ANY GROUND BETWEEN OCTOBER 15TH BETWEEN APRIL 15TH WINTER MONTHS, UNLESS APPROVED BY THE ENGINEER.
5. TEMPORARY SEDIMENT CONTROL MEASURES SHALL BE ERECTED PRIOR TO ANY CLEARING OR CONSTRUCTION. THESE MEASURES MAY BE ERECTED IN PHASES, BUT IN NO CASE SHALL GROUND DISTURBANCE PROCEED SEDIMENT CONTROL INSTALLATION. SPECIAL AREAS MAY BE DESIGNATED BY THE OWNER FOR PRESERVATION OF EXISTING TREES. THESE AREAS SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSURE NO DAMAGE IS DONE TO DESIGNATED TREES.
6. EXISTING PLANTINGS ARE LOCATED IN GENERAL AREAS AS SHOWN ON THIS PLAN. CONTRACTOR SHALL PROTECT PLANTINGS SO AS NOT TO DAMAGE THESE OR THEIR ROOT SYSTEMS.
7. SLOPE STABILITY BASED UPON UNSATURATED SOIL CONDITIONS. IF DURING CONSTRUCTION SATURATED SOILS ARE ENCOUNTERED, CONTACT THE ENGINEER IMMEDIATELY.

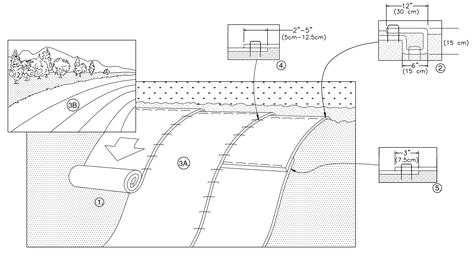
North American Green S150BN

Straw erosion control blanket shall be S150BN as manufactured by North American Green, Inc. or equivalent and shall have the following properties:

Straw: 100% (.50 lbs/sq.yd.) (.27 kg/m2)
Netting:
TOP - Leno woven 100% biodegradable organic jute
BOTTOM - 100% biodegradable organic jute
Weight:
TOP - approx. 9.35 lb/1000 s.f.
BOTTOM - approx. 7.7 lb/1000 s.f.
Thread: Biodegradable

Erosion control blanket shall be a machine-produced mat of 100% agricultural straw.
The blanket shall be of consistent thickness with the straw evenly distributed over the entire area of the mat. The blanket shall be covered on the top and bottoms sides with a 100% biodegradable woven natural fiber netting having an approximate 0.5" X 1.0" mesh and be sewn together on 1.5" centers with degradable thread.

Installed as per manufacturer's specifications.



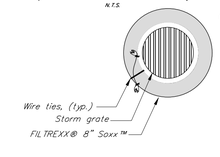
Rolled Erosion Control Matting

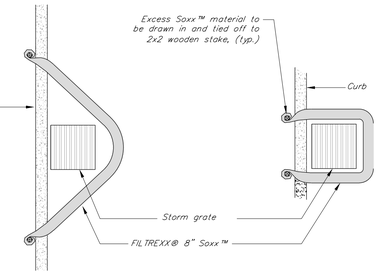
N.T.S.

Secure "Marsh Mat", or approved equal, coir inlet filter over catch basin.

Inlet Protection (Pavement Areas)

N.T.S.

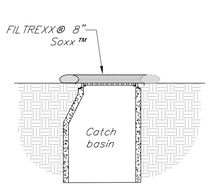


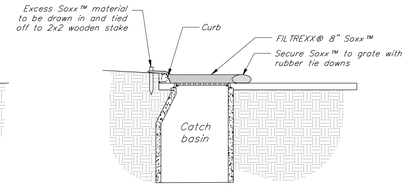


Drain Inlet Plan

Curbside Option "A" Plan

Curbside Option "B" Plan



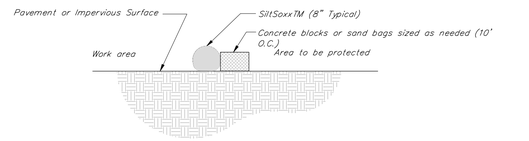


Drain Inlet Section

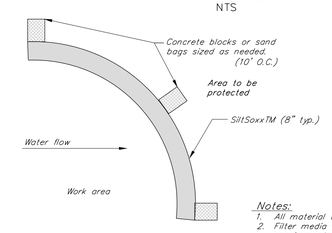
Curbside Section

NOTES:
1. All material to meet FILTREXX® specifications.
2. Filter Media™ fill to meet application requirements.
3. Compost material to be dispersed on site, as determined by engineer.

FILTREXX SiltSoxx Inlet Protection



SECTION
NTS

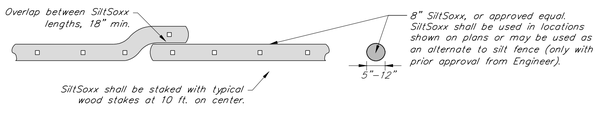


PLAN
NTS

Notes:
1. All material to meet specifications.
2. Filter media to meet application requirements.
3. Filter media to be dispersed on site, as determined by Engineer.

Installation on Pavement

1. Contractor shall be responsible for the installation, maintenance, and removal of SiltSoxx in all locations shown on the plans. SiltSoxx may be left in place if the contractor seeds and mulches over SiltSoxx for growth post construction.
2. Maintenance shall be performed as needed and additional SiltSoxx will be added when sediment reaches half of product height.
3. When installing lengths of SiltSoxx, lengths will overlap by minimum 18" when transitioning to a new length of SiltSoxx.
4. Contractor shall refer to all manufacturers specifications and details.
5. SiltSoxx is a product from a specific manufacturer (Filtrexx), other manufacturers with equal products may be used if approved by Engineer.



Typical FILTREXX SiltSoxx Sediment Control

N.T.S.

KREBS & LANSING
CONSULTING ENGINEERS
164 Main Street, Suite 201
Colchester, Vermont 05446
P: (802) 878-0375
www.krebsandlansing.com

STAMP:

Project:

22 Depot Street
Mixed Use Addition

Richmond,Vermont

Project No.	22280
Scale	1" = 10'
Drawn by	TJB
Checked by	
Date	04/27/2023

Revisions

No.	Date	Description

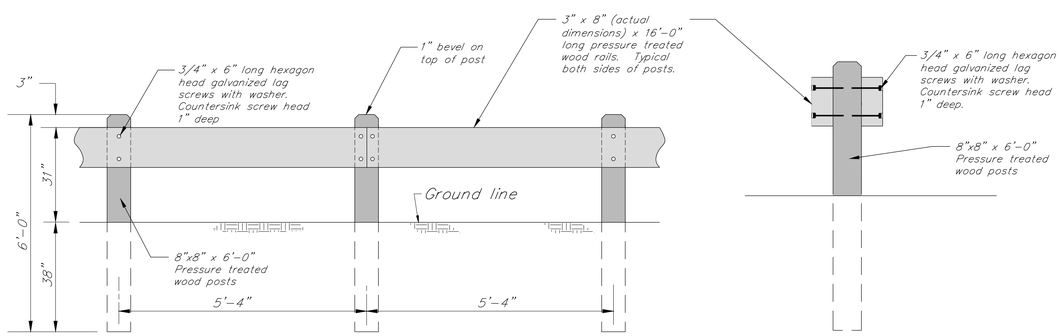
Drawing Title

Civil Details

Drawing No.

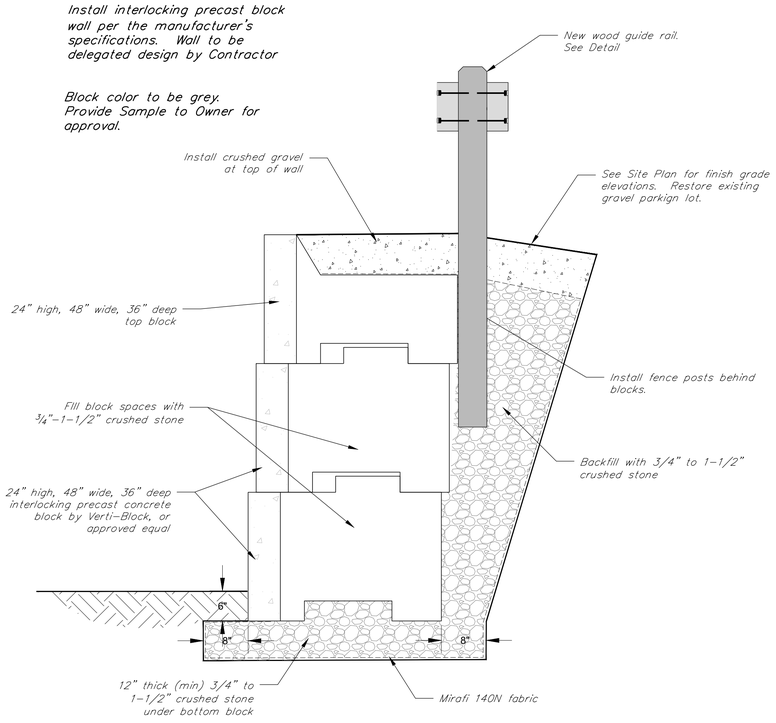
C-4.3

22280\DWGS\22280 base.dwg



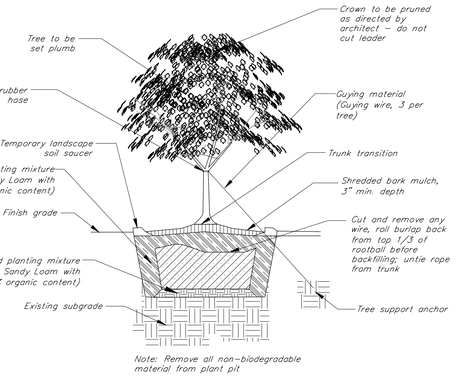
Guide Rail Detail

N.T.S.



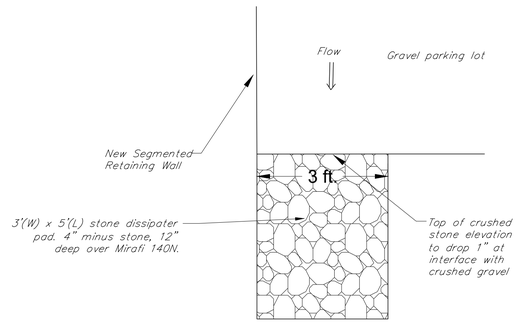
Verti-Block Precast Concrete Interlocking Wall Detail

N.T.S.



Tree Planting in Landscape Detail

N.T.S.



Energy Dissipater Pad

N.T.S.

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P: (802) 878-0375
www.krebsandlansing.com

STAMP:

Project:

22 Depot Street
Mixed Use Addition

Richmond,Vermont

Project No.	22280
Scale	not to scale
Drawn by	TJB
Checked by	
Date	04/27/2023

Revisions

No.	Date	Description
1	06/23/2023	guide rail to replace chain link fence

Drawing Title

Civil Details

Drawing No.

C-4.4

22280\DWGS\22280 base.dwg

N/F
Cindy Feloney

N/F
Chicago Lot Club LLC

N/F
Bruce Jacobs

N/F
Sweet Suites Vermont LLC

New Shed

New Parking
(12 spaces)

N/F
In The Block LLC

BRIDGE STREET

New Building

Existing Building

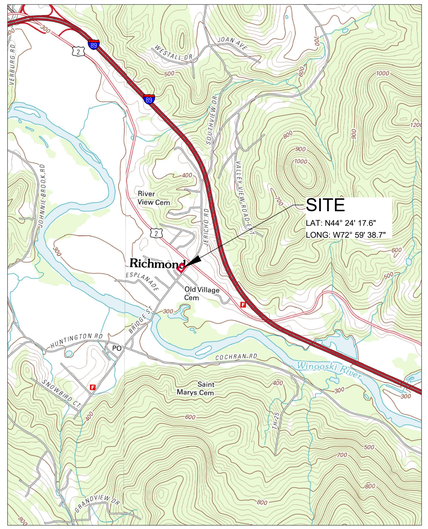
5' setback (structure)

N/F
North Star Lodge #12

DEPOT STREET

N/F
Town of Richmond

N/F
Novak Real Estate, LLC



LOCATION MAP

SCALE: 1" = 2,000 FT

LEGEND

- NEW LIGHT POLE AND BASE
- FINISH GRADE CONTOUR LINES (5 FOOT INTERVALS)
- FINISH GRADE CONTOUR LINES (1 FOOT INTERVALS)
- NEW CHAIN-LINK FENCE
- NEW BUILDING
- NEW ASPHALT & SUBBASE
- NEW CONCRETE WALK
- x TW 300.0 — NEW CONCRETE WALL

NOTES

1. This plan is not intended to be a boundary survey. Property lines are based on physical evidence, a plat of survey "The Richmond Block" date 6-01-00, by Vaughn Button and tax map information from the Town of Richmond.
2. The horizontal coordinate system is based on NAD83 Vermont State Plane 4400 (US Survey Feet). Elevations are based on NAVD88 datum (US Survey Feet).
3. Existing conditions are based on a topographic survey completed by Krebs & Lansing in September 2022.

PLANNING & ZONING INFORMATION

LANDOWNER/APPLICANT:
Jameson Partners LLC
734 Pitt Street, Mount Pleasant, SC 29464

RICHMOND ZONING DISTRICT:
Village Downtown (VD)

PARCEL NUMBER: DS0022

ACREAGE: 0.27 Acres

ZONING DATA

Zoned: Village Downtown District (VD)
Existing Land Use: Mixed Use Commercial/Residential
Proposed Land Use: Mixed Use Commercial/Residential

	Requirements	Provided
Min. Lot Area	0.125 ac	0.27 Acres
Min. Lot Frontage	50 ft	96.8 ft
Front Yard Setback	0 ft	±2 ft
Side Yard Setback	0 ft*	5 ft
Building Height	35 ft	35 ft
Max. Lot Coverage	80%	80%

Source: May 23, 2022 Revision of Town of Richmond Zoning Regulations
* 5 ft setback required for structures on district boundaries

Lot Coverage

Existing Lot Area = 0.27 Acres (11,899 s.f.)
Proposed Impervious Area = 9,514 s.f.
80% Lot Coverage Allowed = 9,519 s.f.
Proposed Lot Coverage = 80%

THE LOT WILL BE FULLY DEVELOPED AFTER THE 22 DEPOT STREET ADDITION PROJECT IS COMPLETE

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CONSULTING ENGINEERS
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Colchester, Vermont 05446
P: (802) 878-0375
www.krebsandlansing.com

STAMP:

Vermont State Plane Grid North (NAD83)

0' 10' 20' 30'
Bar Scale 1" = 10'

Project:

22 Depot Street
Mixed Use Addition

Richmond, Vermont

Project No.	22280
Scale	1" = 10'
Drawn by	DMR
Checked by	
Date	04/27/2023

Revisions

No.	Date	Description

Drawing Title

Master Development Plan

Drawing No.

C-5.0

22280\DWGS\22280 base.dwg

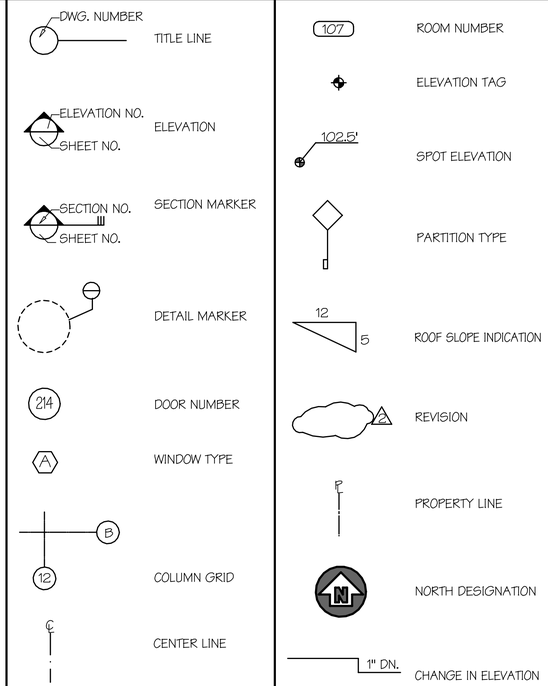
22 DEPOT STREET
RICHMOND, VERMONT

PERMIT SET - 07/01/2023

ABBREVIATIONS

ADD	ADDITIONAL	GA	GAGE	PVC	POLYVINYL CHLORIDE
A/C	AIR CONDITION(ING)	GALV	GALVANIZED		
AT	ACOUSTIC TILE	GC	GENERAL CONTRACTOR	QT	QUARRY TILE
ADJ	ADJUSTABLE	GL	GLASS		
AFF	ABOVE FINISH FLOOR	GYP	GYPSUM	R	RADIUS, RISER
ALUM	ALUMINUM			RD	ROOF DRAIN, ROAD
APROX	APPROXIMATE	H.HGT	HEIGHT	REINF	REINFORCEMENT
ARCH	ARCHITECTURAL	HC	HOLLOW CORE	REQD	REQUIRED
		HORIZ	HORIZONTAL	REV	REVISION
BD	BOARD	H/C	HANDICAP	RM	ROOM
BLDG	BUILDING	HM	HOLLOW METAL	RO	ROUGH OPENING
BLKG	BLOCKING	HVAC	HEATING, VENTILATION, & A/C		
BSMT	BASEMENT			S	SOUTH
		ID	INSIDE DIAMETER	SCH	SCHEDULE
CAB	CABINET	IN	INCH	SCW	SOLD CORE WOOD
CER	CERAMIC	INSUL	INSULATION, INSULATED	SECT	SECTION
CJ	CONTROL JOINT	INT	INTERIOR	SHT	SHEET
CL	CLEAR, CLEARANCE	INCL	INCLUDED	SIM	SIMILAR
CLG	CEILING			SL	SLOPE
C.H.	CEILING HEIGHT	JAN, JC	JANITOR'S CLOSET	SPEC	SPECIFICATION
CMU	CONCRETE MASONRY UNIT	JT	JOINT	SQ	SQUARE
COL	COLUMN			STD	STANDARD
CONC	CONCRETE	KIT	KITCHEN, KITCHENETTE	STL	STEEL
CONST	CONSTRUCTION			SUSP	SUSPENDED
CONT	CONTINUOUS	LAV	LAVATORY	S. STL	STAINLESS STEEL
CPT	CARPET	LAM	LAMINATE		
CT	CERAMIC TILE			T & G	TONGUE AND GROOVE
		MATL	MATERIAL	TEL	TELEPHONE
DET	DETAIL	MAX	MAXIMUM	TEMP	TEMPORARY
DIA	DIAMETER	MDO	MEDIUM DENSITY OVERLAY	TH, THK	THICK, THICKNESS
DIM	DIMENSION	MECH	MECHANICAL	THRSLD	THRESHOLD
DN	DOWN	MTL	METAL	TOS	TOP OF STEEL, SLAB
DS	DOWNSPOUT	MIN	MINIMUM	TOW	TOP OF WALL
DWG	DRAWING	MO	MASONRY OPENING	TYP	TYPICAL
E	EAST	N	NORTH	UNO	UNLESS NOTED OTHERWISE
EA	EACH	NIC	NOT IN CONTRACT		
ELEC	ELECTRICAL	NO	NUMBER	VCT	VINYL COMPOSITION TILE
ELEV	ELEVATION, ELEVATOR	NOM	NOMINAL	VERT	VERTICAL
EQ	EQUAL	NTS	NOT TO SCALE	VEST	VESTIBULE
EQUIP	EQUIPMENT			VIF	VERIFY IN FIELD
EXIST	EXISTING	OC	ON CENTER	VWC	VINYL WALL COVERING
EXP	EXPANSION	OD	OUTSIDE DIAMETER		
		OPNG	OPENING	W	WIDTH, WASTE, WATER, WEST
FD	FLOOR DRAIN	OPP	OPPOSITE	W/	WITH
FF	FINISHED FLOOR			W/O	WITHOUT
FEC	FIRE EXTINGUISHER W/ CABINET	PL	PLATE	WD	WOOD
F. EXT.	FIRE EXTINGUISHER W/O CABINET	PLYWD	PLYWOOD	WT	WEIGHT
FIN	FINISH	PRELIM	PRELIMINARY	WWF	WELDED WIRE FABRIC
FL	FLOOR, FLASHING	PSI	POUNDS PER SQUARE INCH	WWM	WELDED WIRE MESH
FT	FOOT, FEET	PTD	PAINTED		
FTG	FOOTING	P.T.	PRESSURE TREATED		

ARCHITECTURAL SYMBOLS



DRAWING INDEX

Rabideau Architects
550 Hinesburg Road
Suite 101
South Burlington, VT 05403
802.863.0222
Rabideau-Architects.com

BUILDING CODE EDITION: 2015 IBC AND 2015 NFPA 101

Building to be protected throughout by an approved automatic sprinkler system in accordance with 9.7.1.1(1) and supervised in accordance with 9.7.2 (NFPA 101 2015).

Building Use or Occupancy

Use and Occupancy Classification Group(s) in the Building:	IBC: R-2 NFPA: Apartment Building (2nd and 3rd floors)	IBC: B NFPA: Business (1st floor)	IBC: M NFPA: Mercantile (1st floor)
	(IBC:310.4) (NFPA: 6.1.8.1.5)	(IBC:303.4) (NFPA: 6.1.2.1)	(IBC:303.4) (NFPA: 6.1.2.1)

Building Conetruction Height and Area

Construction Type used in the design: Type VB	Occupancy group		
	R-2	B	M
Building Height in feet above grade plane (per IBC:Table 504.3)	60	60	60
Allowable number of stories above grade plane (per IBC:Table 504.4)	3	3	2
Allowable area in square feet (per IBC:Table 506.2)	21,000	27,000	27,000
Actual Building Area	2,045 S.F.	1,706 S.F.	1,706 S.F.
Actual Building Height (stories)	3	1	1
Actual Building Height (feet)	32'-8"	10'-8"	10'-8"

Required Occupancy Separation

Separated Occupancy Fire Ratings Required (NFPA: Table 6.1.14.4.1)	Apartment Buildings to Business or Mercantile = 1-hrs
Dwelling unit separation (NFPA: 30.3.7.2)	Vertical Separation between dwelling units = 1/2 hr
	Horizontal Separation between dwelling units = 1/2 hr
Non-Separated Occupancy (IBC:508.3) and (NFPA: 6.1.14.3)	N/A

Incidental Use Areas (per Table 509)

Room or Area	Fire Separation
Boiler rooms where equipment is over 15 psi and 10 hp	N/A
Furnace room where any piece of equipment is over 400,000 Btu per hour input	N/A

Hazardous Use Areas (per NFPA-101:Table 30.3.2.1.1)

Room or Area	Fire Separation
Boiler rooms serving more than a single dwelling unit	N/A
Storage rooms, outside of dwelling unit	N/A

Hazardous Use Areas (per NFPA-101:12.3.2)

Room or Area	Fire Separation
High preasure Boiler rooms, large transformer rooms, service equipment subject to explosion	N/A
Boiler rooms	N/A
Storage rooms	N/A

BUILDING CODE EDITION: 2015 IBC AND 2015 NFPA 101

Fire Resistance of Exterior Walls Based on Fire Separation Distance (IBC Table 602)

Wall Location	Fire Separation Distance:	Rating	
North	> 30 ft	1	
South	> 30 ft	0	
West	X < 5 ft	1	
East	5 ft </= X < 10 ft	1	

Maximum area of exterior wall openings based on fire separation distance and degree of opening protection (IBC Table 705.8)

Wall Location	Fire Separation Distance:	Allowable Area (UP, S)	Actual Area (UP, S)
North	> 30 ft	No Limit	
South	> 30 ft	No Limit	
West	X < 3 ft	NOT PERMITTED	0%
East	5 ft </= X < 10 ft	25%	20% Maximum

Fire Resistance Rating Requirements (per IBC:Table 601)	Rating Required
Structural Frame	0
Bearing Walls - Exterior	0
Bearing Walls - Interior	0
Nonbearing Walls & Partitions - Exterior	0
Nonbearing Walls & Partitions - Interior	0
Floor Construction	0
Roof Construction	0
Stair Enclosure (NFPA 101: 30.3.1.1.4)	1 hr.
Shaft Enclosure (NFPA-101:30.3.1.1.4)	1 hr.
Elevator enclosure (NFPA-101:30.3.1.1.4)	N/A
Elevator Machine room (NFPA-101:3005.4)	N/A
Corridors (NFPA-101:30.3.6.1.2)	1/2 hr.

New Stair Requirements (NFPA: Table 7.2.2.2.1.1(a))	Dimensional Criteria
Minimum Width	44 inches
Maximum Height of Risers	7 Inches
Minimum Height of Risers	4 Inches
Minimum Tread Depth	11 Inches
Minimum Headroom	6 feet 8 inches
Maximum Height Between Landings	12 feet

Arrangement of Means of Egress (NFPA: 30.2.5)	Distance
Common Path of Travel (w/ Sprinkler System)	Maximum 50 feet
Dead-end Corridors (w/ Sprinkler System)	Maximum 50 feet
Travel Distance within a dwelling unit (w/ Sprinkler System)	Maximum 125 feet
Distance from dwelling unit door to nearest exit (w/ Sprinkler System)	Maximum 200 feet

Occupant Load - Note: Mercantile (street floor) occupancy will have the largest occupant load at 1st floor, and therefore has been used in this table.

Use	Factor	First Floor Area	First Floor Occupant Load	Second Floor Area	Second Floor Occupant Load
Mercantile Use - Sales area on street floor	30	1,706 sf.	56.9	0.0	0.0
Apartment Buildings	200.0	280 sf.	1.4	2,045 sf.	10.2
Total (per floor)			58.3		10.2

Use	Factor	Third Floor Area	Third Floor Occupant Load		
Mercantile Use - Sales area on street floor	30	0.0	0.0		
Apartment Buildings	200.0	2,045 sf.	10.2		
Total (per floor)			10.2		

REVISIONS:
GENERAL REVISIONS — DATE: 06/16/2023
PERMIT SET — 07/01/23

CODE REVIEW

22 DEPOT STREET
MIXED USE BUILDING

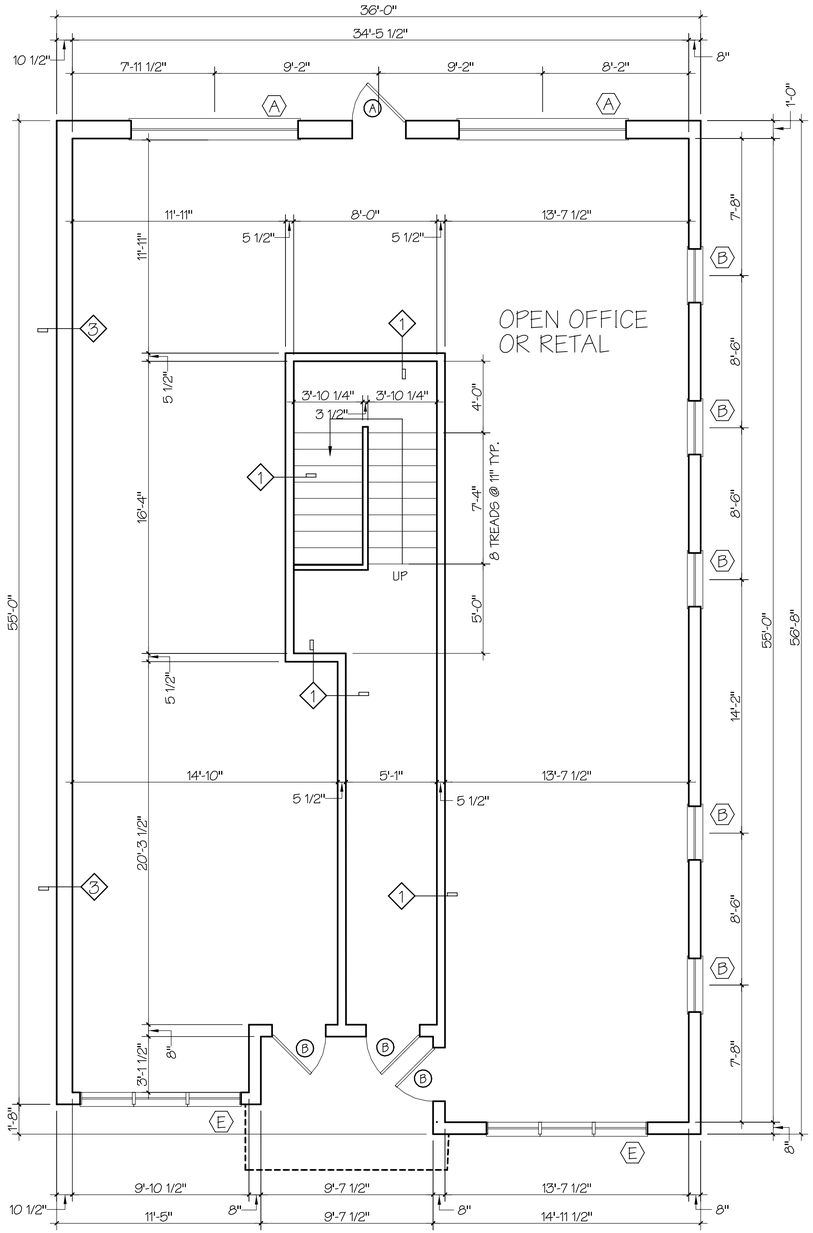
VERMONT
RICHMOND

Rabideau Architects
563 Hinesburg Road
Suite 101
South Burlington, VT 05403
802-658-0072
Rabideau-Architects.com

SHEET NUMBER

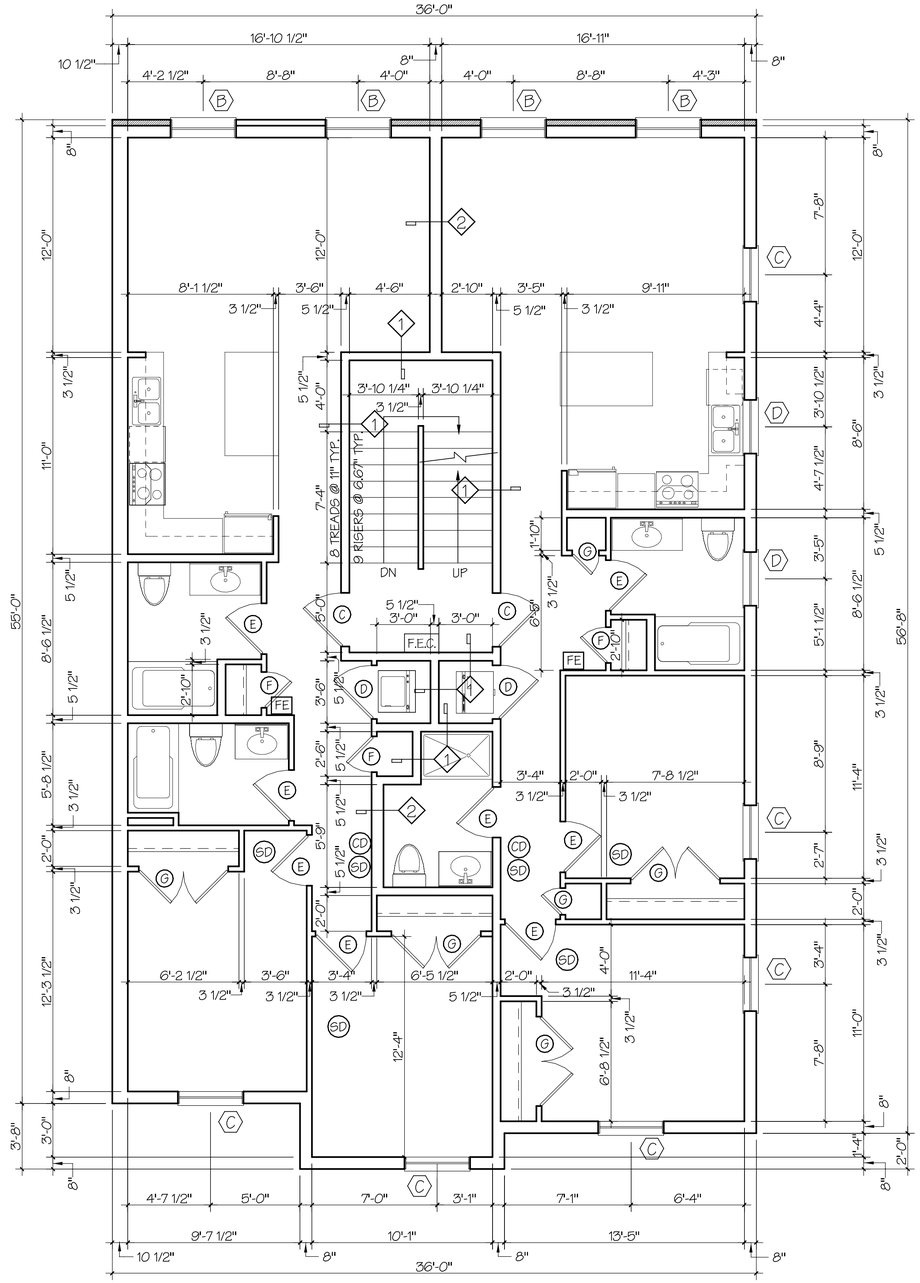
A001

DATE: 5/23/2022



FIRST FLOOR PLAN

SCALE: 3/16" = 1'-0"



SECOND FLOOR PLAN

SCALE: 1/4" = 1'-0"

SYMBOL LEGEND

(SD) PHOTOELECTRIC-ONLY SMOKE ALARMS ARE REQUIRED TO BE INSTALLED IN ALL SLEEPING ROOMS, OUTSIDE OF EACH SEPERATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE SLEEPING ROOMS AND ON EACH LEVEL OF A DWELLING, INCLUDING THE BASEMENT. ALARMS MUST BE HARD-WIRED INTO THE HOME ELECTRICAL SYSTEM, AND MUST ALSO HAVE A BATTERY BACKUP. ALL SMOKE ALARMS SHALL BE INTERCONNECTED; IF ONE SOUNDS AN ALARM, THEY ALL SOUND AN ALARM. MOUNT SMOKE ALARMS ON FLAT CEILING NO CLOSER THAN 4" FROM THE ADJOINING WALL SURFACE.MOUNT SMOKE ALARMS ON WALLS NO CLOSER THAN 4", AND NOT FURTHER THAN 12" FROM THE ADJOINING CEILING SURFACE. DO NOT INSTALL A SMOKE ALARM WITHING 36" OF A CEILING SUSPENDED FAN, A SUPPLY REGISTER, THE DOOR TO THE BATHROOM OR KITCHEN.	[FE] PER 2015, VERMONT FIRE & BUILDING SAFTEY CODE: NFPA 1, 13.6..3.1.14 PORTABLE FIRE EXTINGUISHERS INSIDE INDIVIDUAL APARTMENT OR CONDO UNITS SHALL BE PERMITTED TO BE 2-1/2 POUND DRY CHEMICAL CAPACITY.
	(CD) CARBON MONOXIDE (CO) DETECTORS SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS FOR ALL MULTI-FAMILY DWELLINGS. AN ADDITIONAL CO DETECTOR SHALL BE INSTALLED IN ANY SLEEPING ROOM THAT CONTAINS A FUEL-BURNING APPLIANCE. CO DETECTORS TO BE INSTALLED IN ACCORDANCE WITH NFPA 720. CO DETECTORS SHALL BE DIRECTLY WIRED TO A NON-DEDICATED ELECTRICAL BRANCH CIRCUIT FOR THE BUILDING WITH BATTERY BACK-UP.

GENERAL NOTES

NUMBER	DESCRIPTION
1	COMBINATION PHOTOELECTRIC SMOKE AND CARBON MONOXIDE (CO) ALARMS ARE ACCEPTABLE FOR NEW INSTALLATIONS OR REPLACEMENTS. COMBINATION SMOKE ALARMS THAT INCLUDE IONIZATION AND PHOTELECTRIC SENSORS IN THE SAME ALARM ARE NOT PERMITTED TO BE USED FOR NEW INSTALLATIONS OR REPLACEMENTS.
2	AT WALLS BETWEEN ADJACENT ROOMS, ELECTRICAL OUTLET LOCATIONS, INCLUDING TV AND TELEPHONE OUTLETS, SHALL BE OFFSET 6" MIN. HORIZONTALLY FOR INSTALLATION. ELECTRICAL CORDS SHOULD BE HIDDEN FROM VIEW. BACK TO BACK OUTLETS ARE NOT ALLOWED.

DATE:
06/16/2023
07/01/23

REVISIONS:
GENERAL REVISIONS
PERMIT SET

FIRST AND SECOND FLOOR PLANS

22 DEPOT STREET
MIXED USE BUILDING

RICHMOND VERMONT

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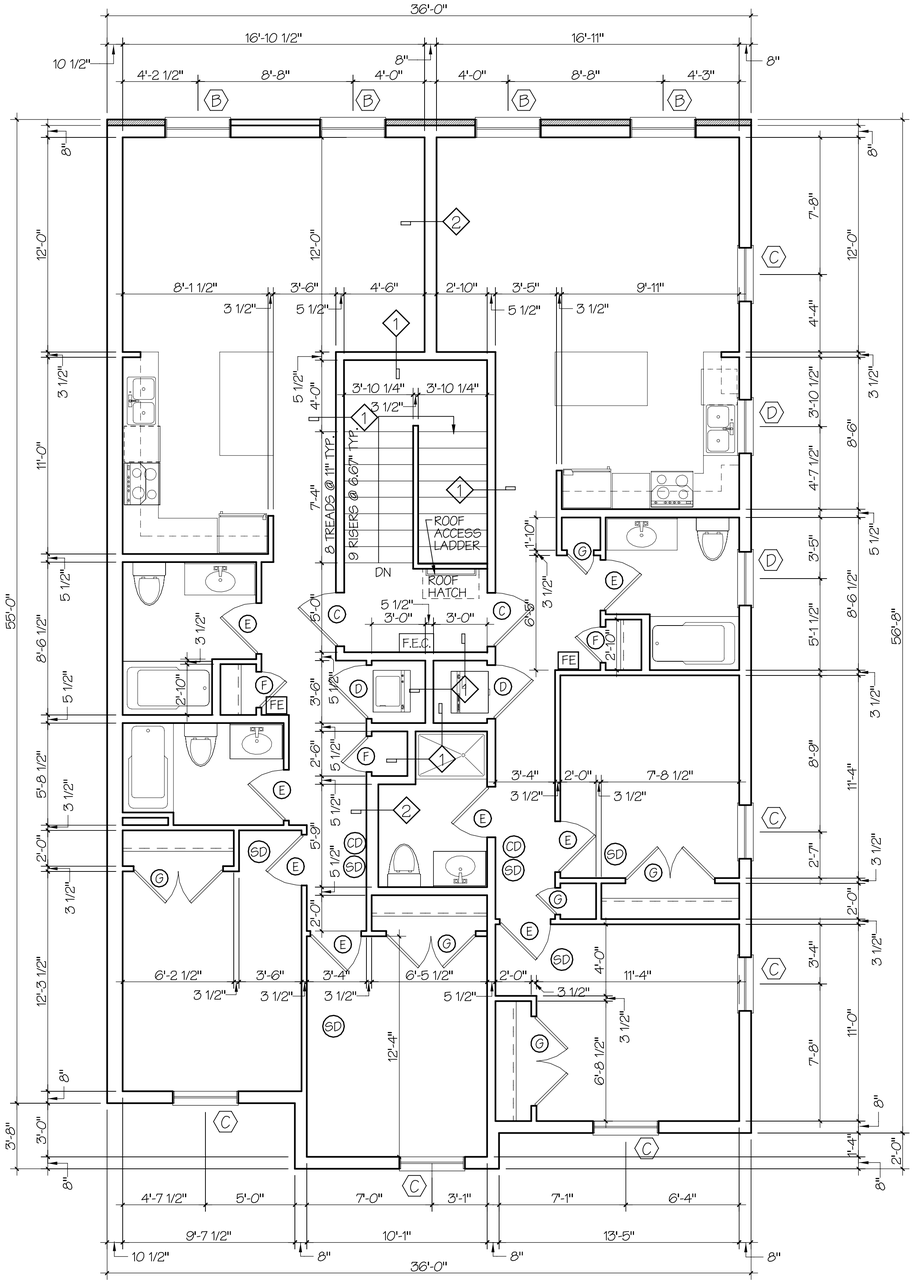
Rabideau Architects

SHEET NUMBER

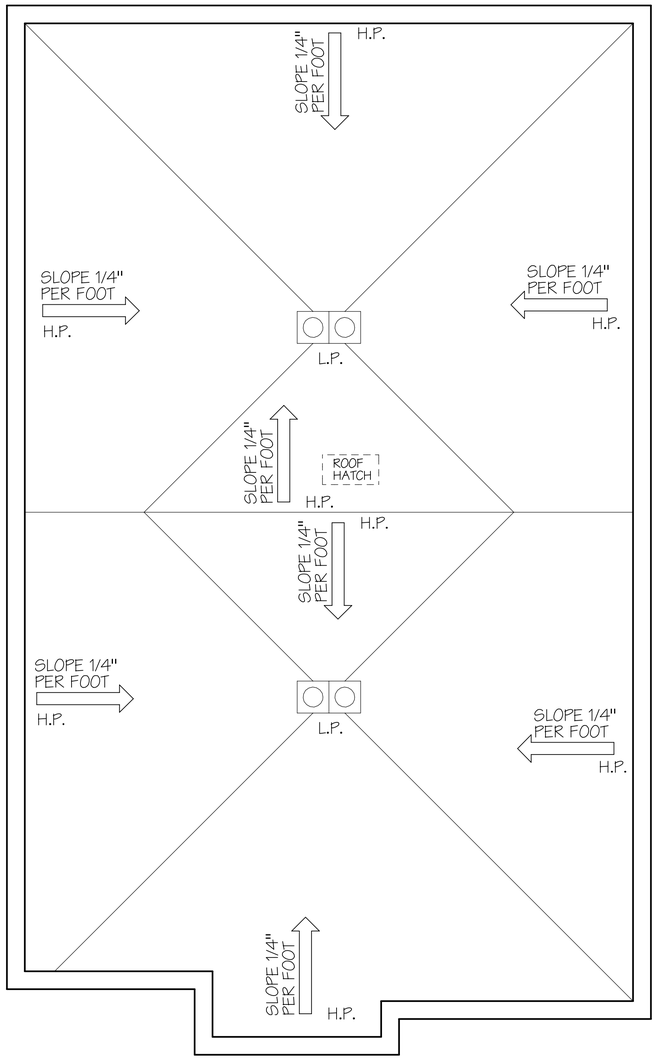
A101

DATE: 5/23/2022



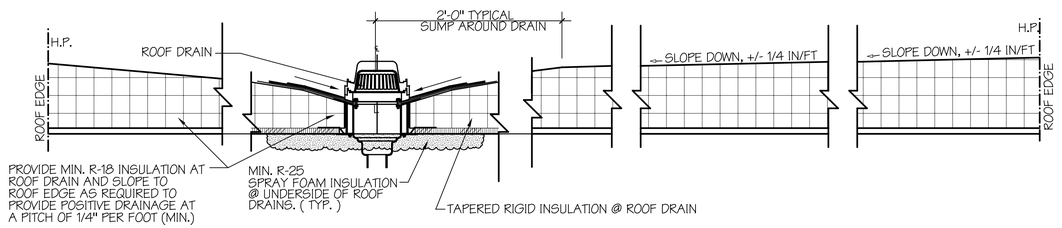
THIRD FLOOR PLAN

SCALE: 1/4" = 1'-0"



ROOF PLAN

SCALE: 1/4" = 1'-0"



ROOF DRAIN DETAIL

NOT TO SCALE

GENERAL NOTES:

1. ROOF MEMBRANE SHALL BE 60 MIL. SINGLE PLY RHINO-BONDED WHITE TPO.
2. SHEET METAL COPING / GRAVEL STOP SHALL BE PRE-FINISHED GALVALUME.
3. ROOF DRAINAGE AND WALK-WAY PADS WITHIN THE ROOF-TOP EQUIP. SPACE SHALL BE DETERMINED BASED ON LAYOUT OF MECHANICAL EQUIPMENT.
4. SEE SHEET A301, TYPICAL BUILDING SECTION, FOR DRAFTSTOPPING NOTES.
5. SECONDARY (EMERGENCY) ROOF DRAINS:
   SECONDARY (EMERGENCY OVERFLOW) DRAINS ARE REQUIRED IN ACCORDANCE WITH SECTION 1108.1, 1108.2, AND 1108.3 OF THE 2015 INTERNATIONAL PLUMBING CODE.

REVISIONS:
GENERAL REVISIONS 06/16/2023
PERMIT SET 07/01/23

THIRD FLOOR AND ROOF PLANS

22 DEPOT STREET MIXED USE BUILDING

RICHMOND VERMONT

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SHEET NUMBER

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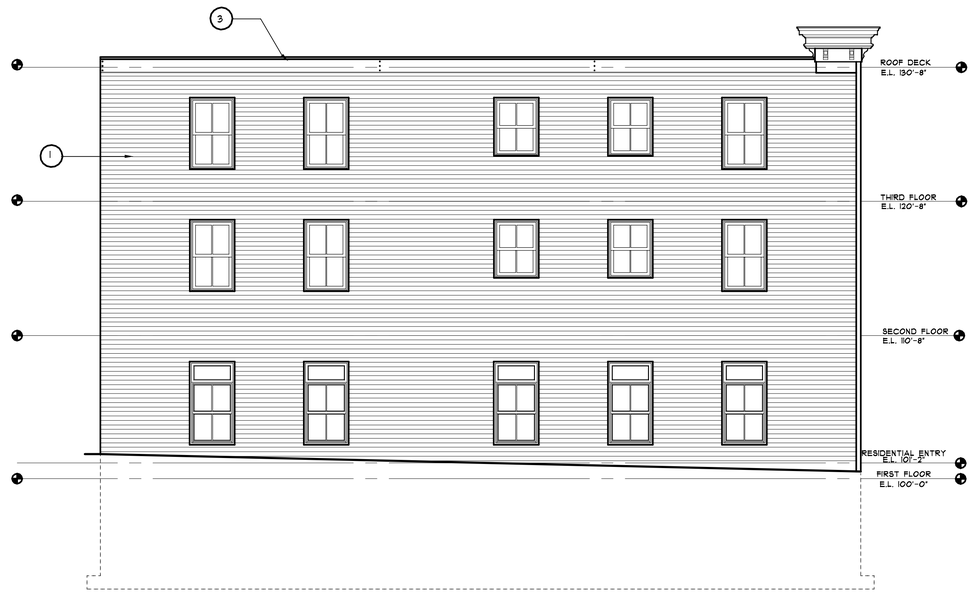
DATE: 5/23/2022

SOUTH ELEVATION: FACING DEPOT STREET

SCALE: 3/16" = 1'-0"



WEST ELEVATION:

SCALE: 3/16" = 1'-0"

NORTH ELEVATION: FACING PARKING LOT

SCALE: 3/16" = 1'-0"

EXTERIOR MATERIALS

1. EXTERIOR SIDING NUMBER ONE: FIBER COMPOSITE LAP SIDING WITH 6 INCH EXPOSURE OVER DRAINAGE FABRIC.
2. EXTERIOR SIDING NUMBER TWO: STANDARD MODULAR BRICK MASONRY IN A RUNNING BOND. PROVIDE TWO PART GALVANIZED STEEL EYE AND PINTLE MASONRY ANCHORS FOR EVERY TWO SQUARE FEET OF WALL AREA
3. PRE-FORMED ALUMINUM COPING WITH 8" EXPOSURE. FLUOROPOLYMER FINISH (BLACK)
4. CUT GRANITE WET COURSE AT GRADE
5. SHADOW BOX TRIM AT WINDOW UNIT FORMED FROM SHEET STOCK PRE-FINISHED GALVALUME 20 GAUGE - BLACK FLUOROPOLYMER FINISH
6. FYPON OR APPROVED EQUAL DECORATIVE CORNCIE

DATE:
06/16/2023
07/01/23

REVISIONS:
GENERAL REVISIONS
PERMIT SET

EXTERIOR ELEVATIONS

22 DEPOT STREET MIXED USE BUILDING

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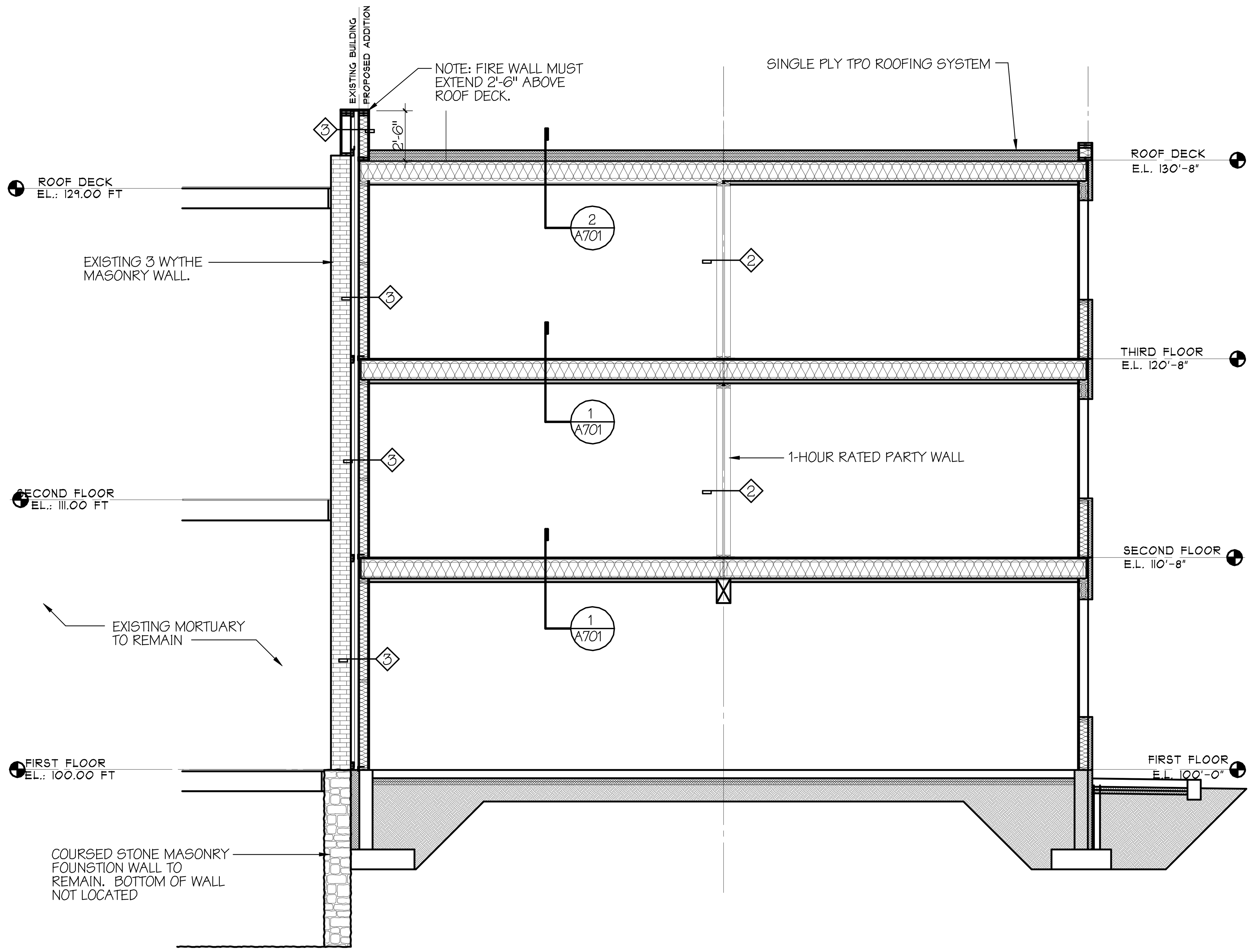
A201

DATE: 5/23/2022



DRAFTSTOPPING NOTES

ANY CONCEALED COMBUSTIBLE SPACE IN WHICH BUILDING MATERIALS HAVE A FLAME SPREAD INDEX GREATER THAN CLASS A ARE EXPOSED SHALL BE DRAFTSTOPPED AS FOLLOWS:

1. EVERY EXTERIOR AND INTERIOR WALL AND PARTITION SHALL BE FIRESTOPPED AT EACH FLOOR LEVEL, AT THE TOP STORY CEILING LEVEL, AND AT THE LEVEL OF SUPPORT FOR ROOFS.

2. EVERY UNOCCUPIED ATTIC SPACE SHALL BE SUBDIVIDED BY DRAFTSTOPS INTO AREAS NOT TO EXCEED 3000 SQUARE FEET.

3. ANY CONCEALED SPACE BETWEEN THE CEILING AND THE FLOOR OR ROOF ABOVE SHALL BE DRAFTSTOPPED FOR THE FULL DEPTH OF THE SPACE ALONG THE LINE OF SUPPORT FOR THE FLOOR OR ROOF STRUCTURAL MEMBERS AND, IF NECESSARY, AT OTHER LOCATIONS TO FORM AREAS NOT TO EXCEED 1000 SQUARE FEET FOR ANY SPACE BETWEEN THE CEILING AND FLOOR, AND 3000 SQUARE FEET FOR ANY SPACE BETWEEN THE CEILING AND ROOF.

THESE DRAFTSTOPPING REQUIREMENTS ARE NOT REQUIRED WHERE ANY OF THE FOLLOWING CONDITIONS ARE MET:

1. WHERE THE SPACE IS PROTECTED THROUGHOUT BY AN APPROVED AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 9.7.

2. WHERE CONCEALED SPACES SERVE AS PLENUMS.

3. WHERE THE INSTALLATION IS AN EXISTING INSTALLATION

DRAFTSTOPPING MATERIALS SHALL BE NOT LESS THAN 1/2 INCH THICK GYPSUM BOARD, 15/32 INCH THICK WOOD STRUCTURAL PANEL, OR OTHER APPROVED MATERIALS THAT ARE ADEQUATELY SUPPORTED.

THE INTEGRITY OF ALL DRAFTSTOPS SHALL BE MAINTAINED.

NFPA 101, 2015 EDITION, SECTION 8.6.11 - CONCEALED SPACES AND DRAFTSTOPS

FIRESTOPPING NOTES

THE CONTRACTOR SHALL INSURE THAT ALL TRADES INVOLVED IN THE WORK PROVIDE FIRESTOPPING TO SEAL ANY AND ALL PENETRATIONS, OPENINGS AND VOIDS IN, AROUND OR BETWEEN FIRE RATED ASSEMBLIES.

NOTE: FIRE AND DRAFTSTOPPING SHALL NOT BE CONCEALED FROM VIEW PRIOR TO BEING INSPECTED AND APPROVED.

FIRESTOPPING SHALL COMPLY WITH GOVERNING CODES SO THAT THE REQUIRED RATING OF AN ASSEMBLY IS NOT REDUCED OR ELIMINATED BY PENETRATIONS. IN GENERAL, FIRESTOPPING IS REQUIRED WHEREVER:

- PENETRATIONS OCCUR THROUGH FIRE RESISTANCE RATED ASSEMBLIES BY BUILDING SERVICE LINES SUCH AS PIPING, DUCTWORK, CONDUIT, ETC.
- JOINTS OCCUR IN OR VOIDS/GAPS OCCUR AROUND FIRE-RATED ASSEMBLIES.
- AIR PASSAGES ARE CONCEALED OR PASS VERTICALLY THROUGH FLOORS, SUCH AS SHAFTS, CEILING PLENUMS AND MECHANICAL, ELECTRICAL, POWER AND COMMUNICATION CHASES.
- CONCEALED SPACES WITH DRAFTSTOPPING EVERY 3,000 SQUARE FEET UNLESS THE BUILDING IS SPRINKLERED.
- PLENUMS CONCEALED WITHIN A FLOOR ASSEMBLY MUST BE FIRESTOPPED OVER/UNDER PERMANENT WALLS AND OTHERWISE TO LIMIT CLEAR-OPEN SPACES TO 100 SQUARE FEET.

NOTE: ANY AND ALL PENETRATIONS THAT PASS THROUGH A RATED ASSEMBLY MUST BE FIRE STOPPED BY MEANS OF A LISTED ASSEMBLY TO STOP THE SPREAD OF HEAT AND SMOKE PER NFPA 101: 8.3.5 (2015 EDITION)

CUT SHEETS MUST BE SUBMITED TO THE DIVISION OF FIRE SAFETY FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

NOTE: FIREBLOCKING IN COMBUSTIBLE CONSTRUCTION, FIREBLOCKING SHALL BE INSTALLED TO CUT OFF CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL) AND SHALL FORM AN EFFECTIVE BARRIER BETWEEN FLOORS, BETWEEN A TOP STORY AND A ROOF OR ATTIC SPACE. INTERNATIONAL BUILDING CODE 2015 EDITION, SECTION 718)

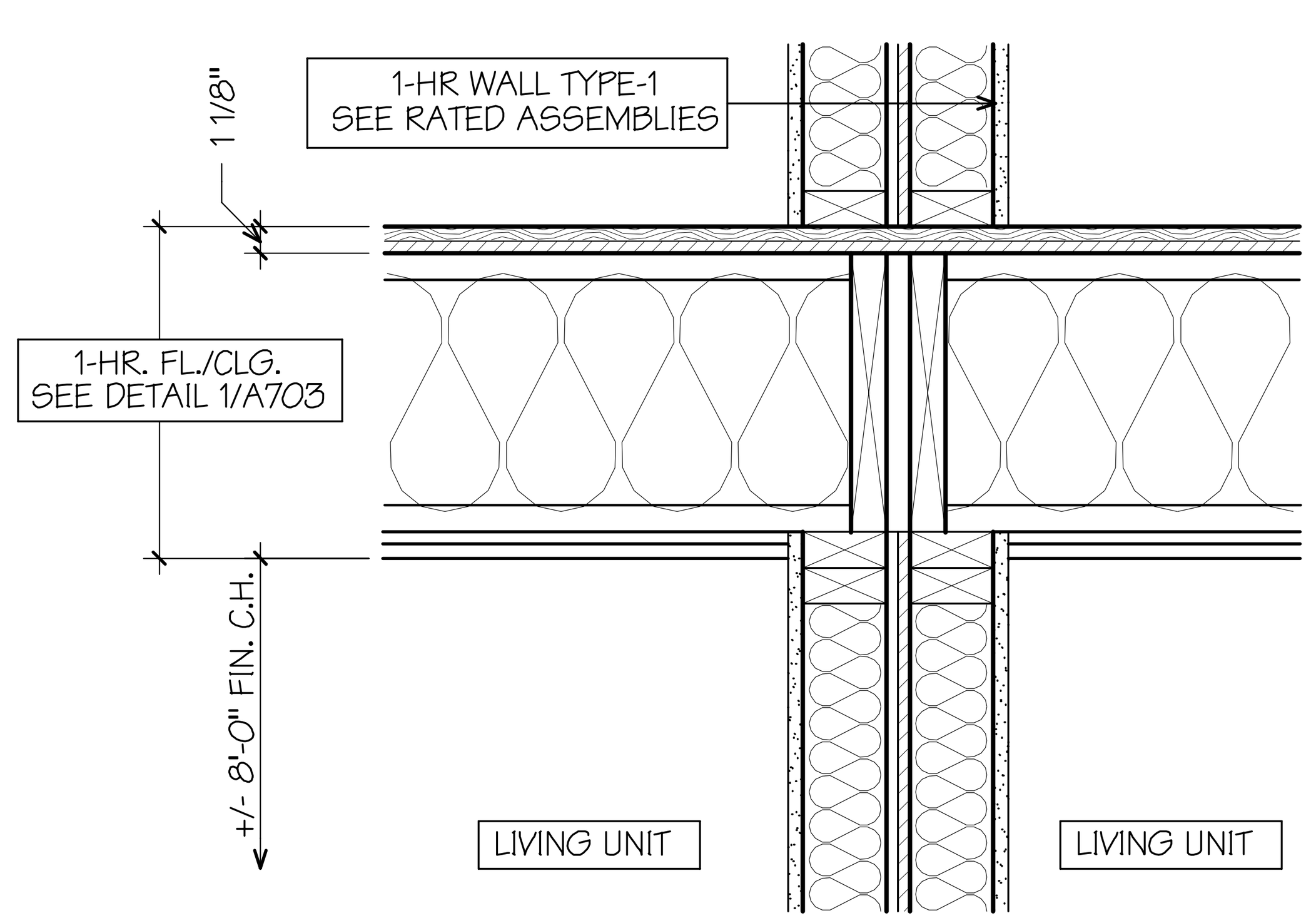
NOTE: AIR CONDITIONING, HEATING, VENTILATION DUCTWORK, AND RELATED EQUIPMENT SHALL BE IN ACCORDANCE WITH NFPA 90A, STANDARD FOR THE INSTALLATION OF AIR-CONDITIONING AND VENTILATING SYSTEMS, OR NFPA 90B, STANDARD FOR THE INSTALLATION OF WARM AIR HEATING AND AIR-CONDITIONING SYSTEMS, AS APPLICABLE, UNLESS SUCH INSTALLATIONS ARE APPROVED EXISTING INSTALLATIONS, WHICH SHALL BE PERMITTED TO BE CONTINUED IN SERVICE. (NFPA 101, 2015 EDITION, SECTION 9.2)

NOTE: ONLY PIPING (INCLUDING SPRINKLER PIPING), CONDUIT AND MECHANICAL EQUIPMENT ASSOCIATED WITH THE ELEVATOR MACHINE ROOM MAY PENETRATE

ALL BUILDINGS CONTAINING "LIGHTWEIGHT TRUSS CONSTRUCTION" ASSEMBLIES SHALL BE PROVIDED WITH SIGNAGE PERMANENTLY AFFIXED AT A HEIGHT OF 4 FT ABOVE THE GROUND LOCATED AT THE LEFT SIDE OF THE MAIN ENTRANCE, OR AT THE LOCATION OF THE REMORE FIRE ALARM ANNUNCIATION PANEL. THE SIGN SHALL BE TRIANGULAR IN SHAPE AND MEASURING 12 INCHES HORIZONTALLY AND 6" VERTICALLY AND OF A CONTRASTING COLOR TO THE BACKGROUND CONTAINING THE LETTER R FOR TRUSS ROOF. (VT FIRE & BUILDING SAFETY CODE, 1:10.1.1.4)

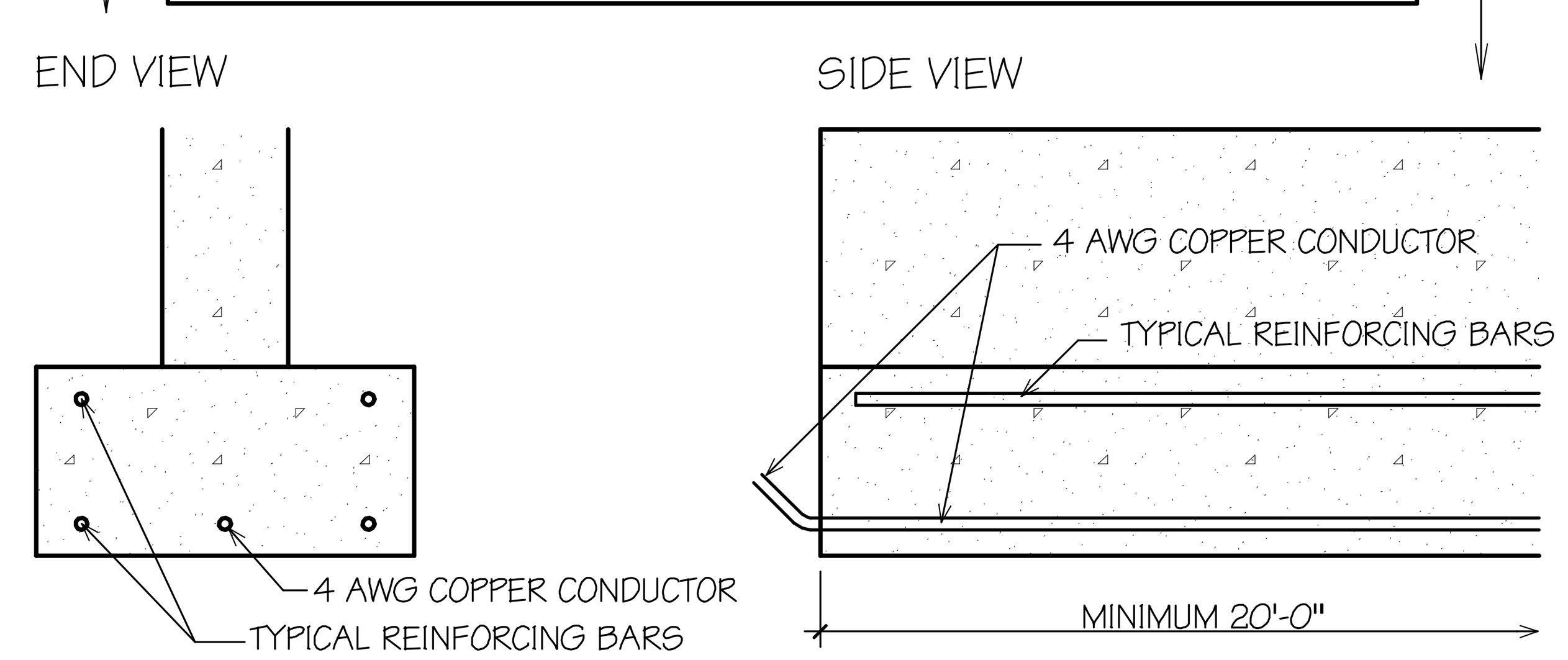
CLOTHES DRYERS SHALL BE EXHAUSTED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS. EXHAUST DUCTS SHALL NOT PENETRATE OR BE LOCATED WITHIN ANY FIRE BLOCKING, DRAFT STOPPING, OR ANY OTHER FIRE RATED ASSEMBLY UNLESS SUCH DUCT IS CONSTRUCTED OF 26 GAUGE GALVANIZED ROUND STEEL. (INTERNATIONAL MECHANICAL CODE SECTION 504.1-504.6)

THE BUILDING SHALL HAVE ADDRESS NUMBERS PLACED IN A POSITION TO BE PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. THE NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND. ADDRESS NUMBERS SHALL BE ARABIC NUMERALS OR ALPHABET LETTERS. (NFPA 1, 2015 EDITION, SECTION 10.11.1)

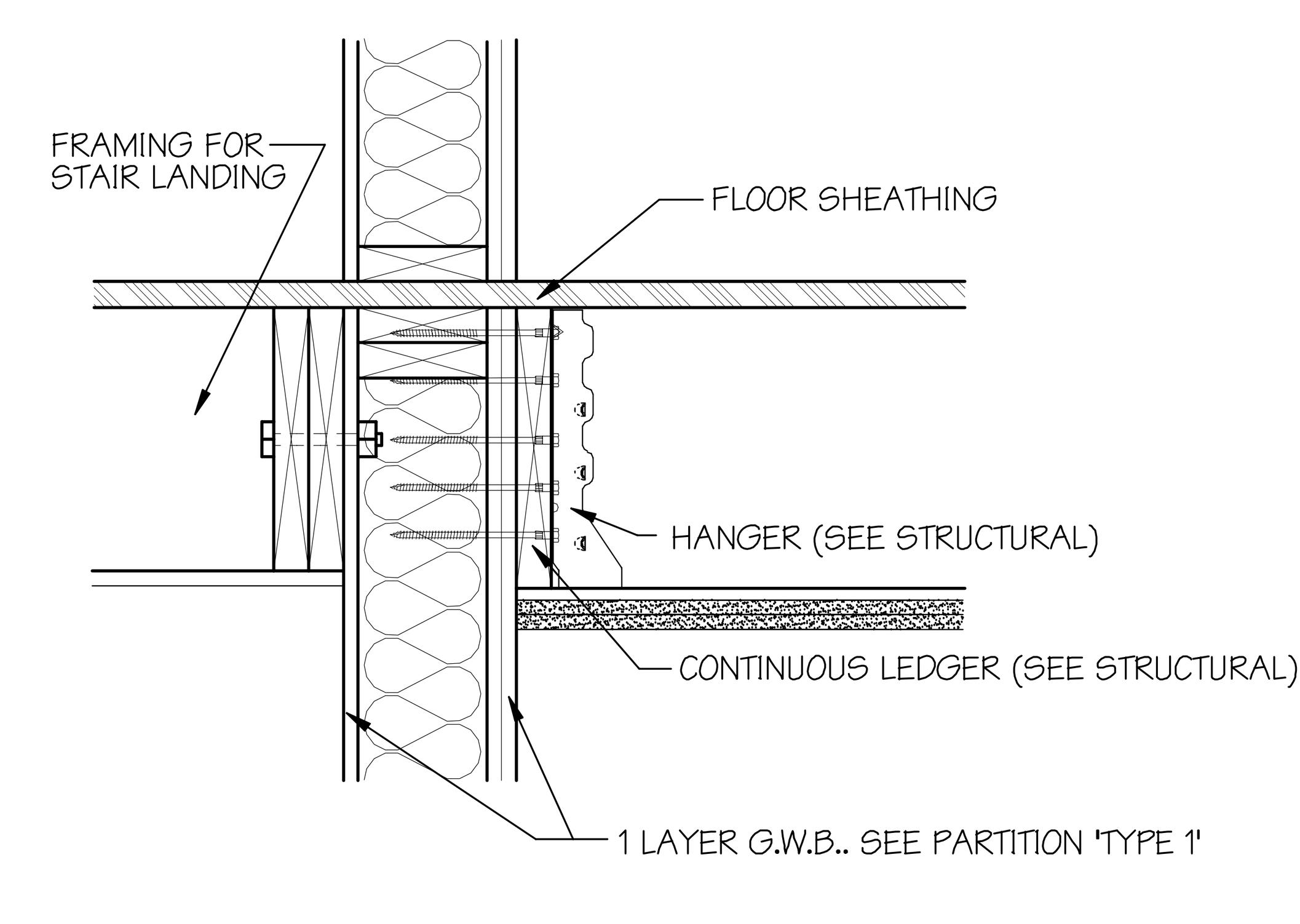


3 TYP. UNIT SEPARATION FIREBLOCKING DETAIL
SCALE: NOT TO SCALE

NOTE: BUILDING GROUND REQUIREMENT: AN ELECTRODE ENCASED IN AT LEAST 2" OF CONCRETE LOCATED WITHIN AND NEAR THE BOTTOM OF A CONCRETE FOUNDATION OR FOOTING THAT IS IN DIRECT CONTACT WITH THE EARTH. THE ELECTRODE MUST BE NO SMALLER THAN 4 AWG AND NOT EXTEND LESS THAN 20 FT OF BARE COPPER WIRE.



4 BUILDING GROUND DETAIL
SCALE: NOT TO SCALE



5 FLOOR TO WALL DETAIL @ STAIRS
SCALE: 1 1/2" = 1'-0"

DATE: 07/01/23

REVISIONS: PERMIT SET

BUILDING SECTION A-A

22 DEPOT STREET
MIXED USE BUILDING

RICHMOND VERMONT

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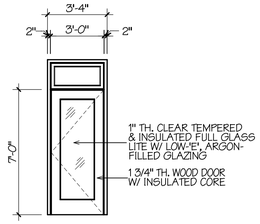
SHEET NUMBER

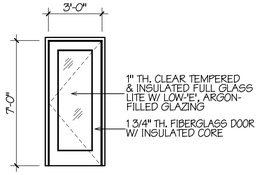
A301

DATE: 5/23/2022

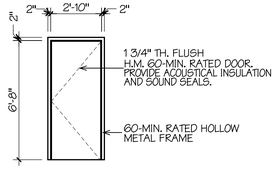
DOOR SCHEDULE



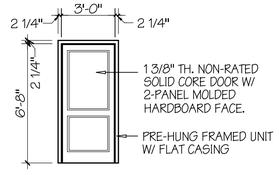
DOOR TYPE "A" (A)
SCALE: 1/4" = 1'-0"



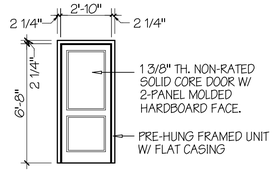
DOOR TYPE "B" (B)
SCALE: 1/4" = 1'-0"



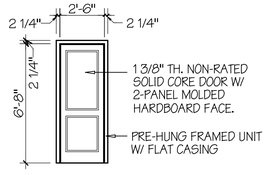
DOOR TYPE "C" (C)
SCALE: 1/4" = 1'-0"



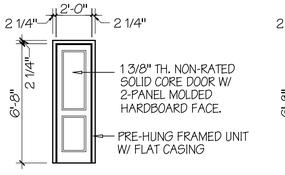
DOOR TYPE "D" (D)
SCALE: 1/4" = 1'-0"



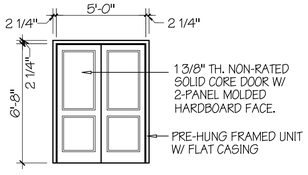
DOOR TYPE "E" (E)
SCALE: 1/4" = 1'-0"



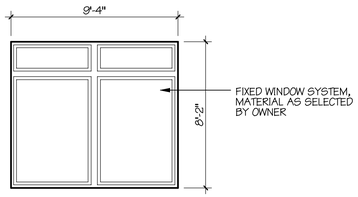
DOOR TYPE "F" (F)
SCALE: 1/4" = 1'-0"



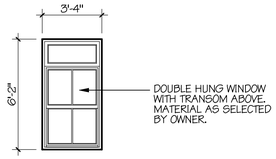
DOOR TYPE "G" (G)
SCALE: 1/4" = 1'-0"



DOOR TYPE "G" (G)
SCALE: 1/4" = 1'-0"



WINDOW TYPE "A" (A)
SCALE: 1/4" = 1'-0"



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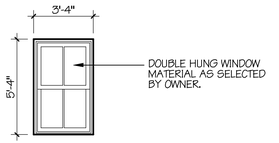
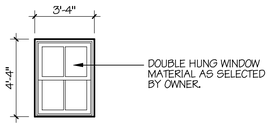
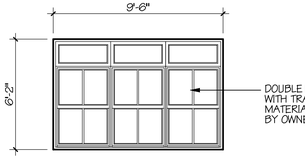
SCALE: 1/4" = 1'-0"



WINDOW TYPE "C" (C)
SCALE: 1/4" = 1'-0"



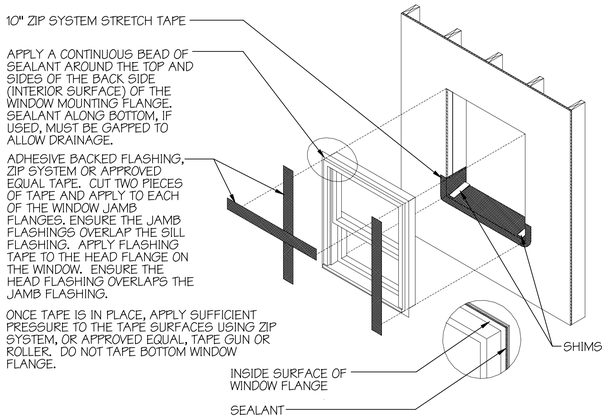
WINDOW TYPE "D" (D)
SCALE: 1/4" = 1'-0"

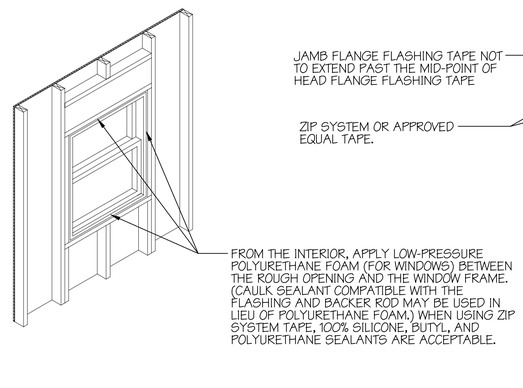


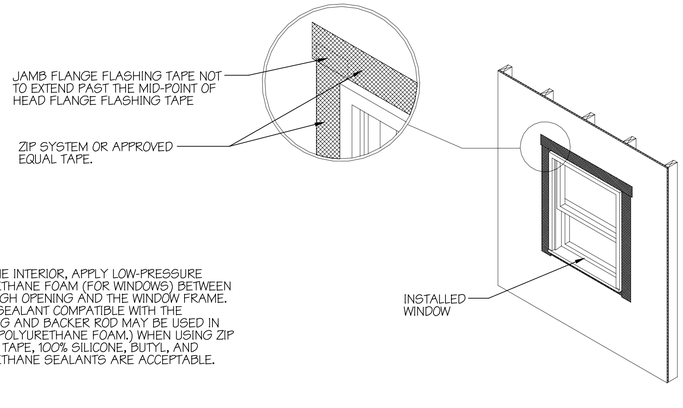
WINDOW TYPE "E" (E)
SCALE: 1/4" = 1'-0"

GENERAL NOTES FOR DOORS

1. WALL THICKNESSES MAY VARY FROM WHAT IS SHOWN ON FLOOR PLANS. DOOR SUPPLIER SHALL SUBMIT SHOP DRAWINGS FOR REQUIRED FRAME DEPTH PRIOR TO FABRICATION
2. RATED DOORS SHALL ONLY BE INSTALLED IN RATED FRAMES - ALL RATED COMPONENTS SHALL BE PERMANENTLY LABELED BY MANUFACTURER.
3. ROUGH OPENING SIZE REQUIREMENTS MAY VARY FROM MANUFACTURER TO MANUFACTURER. VERIFY ACTUAL R.O.'S BY BRAND WITH DOOR SUPPLIER PRIOR TO FRAMING.
4. ALL ROUGH OPENINGS SHALL BE AIR-SEALED WITH MINIMALLY EXPANDING FOAM UPON INSTALLATION OF DOOR.







WINDOW AND FLASHING INSTALLATION

SCALE: NOT TO SCALE

GENERAL NOTES

1. REFER TO WINDOW MANUFACTURER FOR WINDOW ATTACHMENT.
2. INSTALL SIDING AND FLASHING BELOW WINDOW PER MANUFACTURER'S RECOMMENDATION.
3. THESE SAME STEPS CAN BE USED FOR OTHER ACCESSORY OPENINGS, (I.E. DOORS, LOUVERS, ELECTRICAL AND MECHANICAL PENETRATIONS, ETC.)

DATE: 07/01/23

REVISIONS:
PERMIT SET

DOOR DETAILS

22 DEPOT STREET
MIXED USE BUILDING
RICHMOND VERMONT

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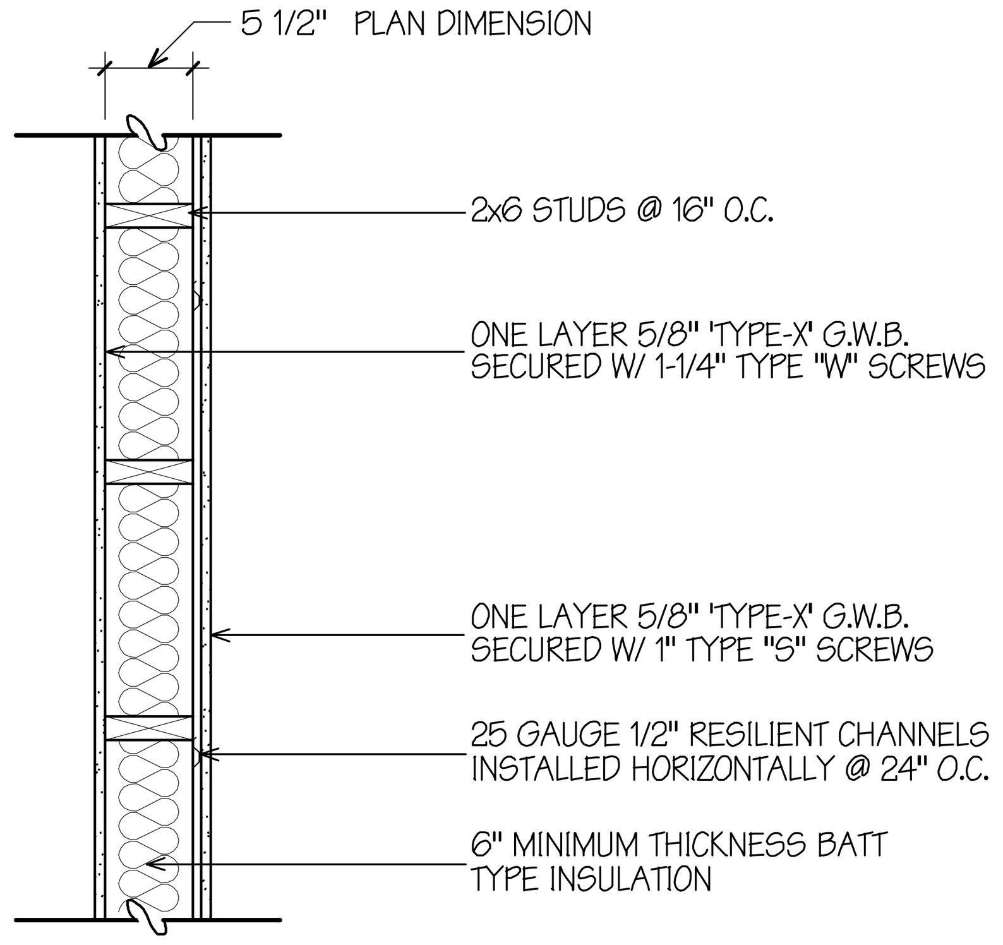
SHEET NUMBER

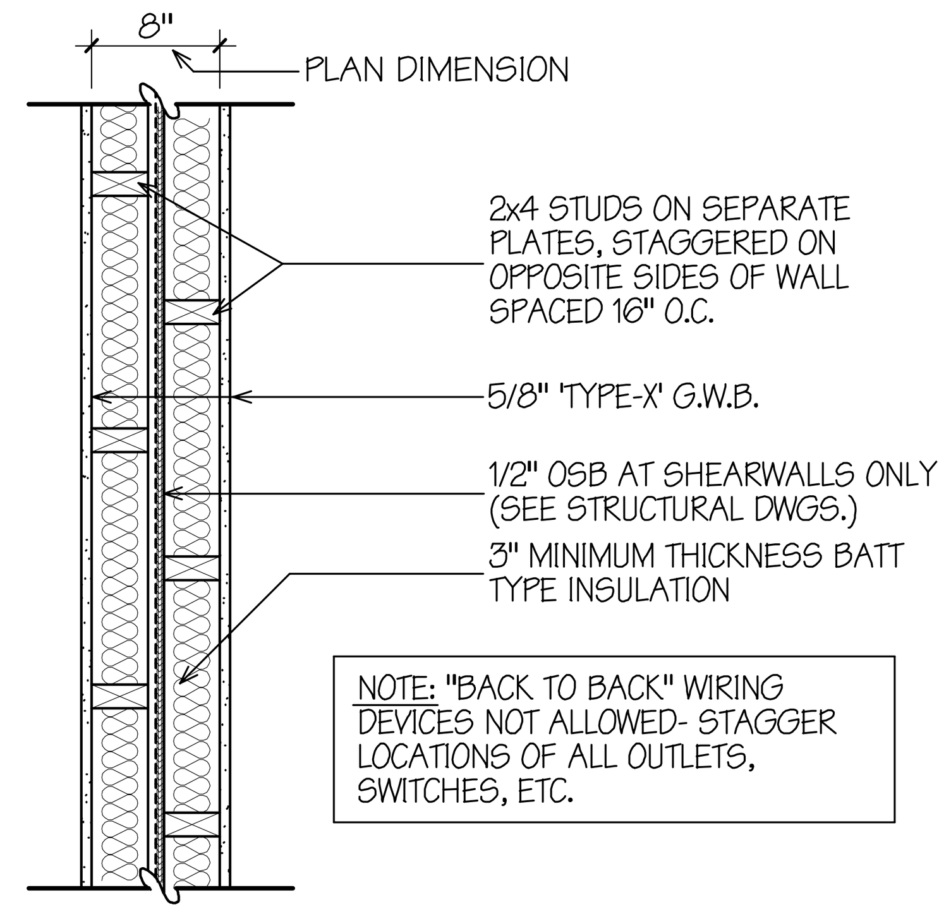
A601

DATE: 5/23/2022



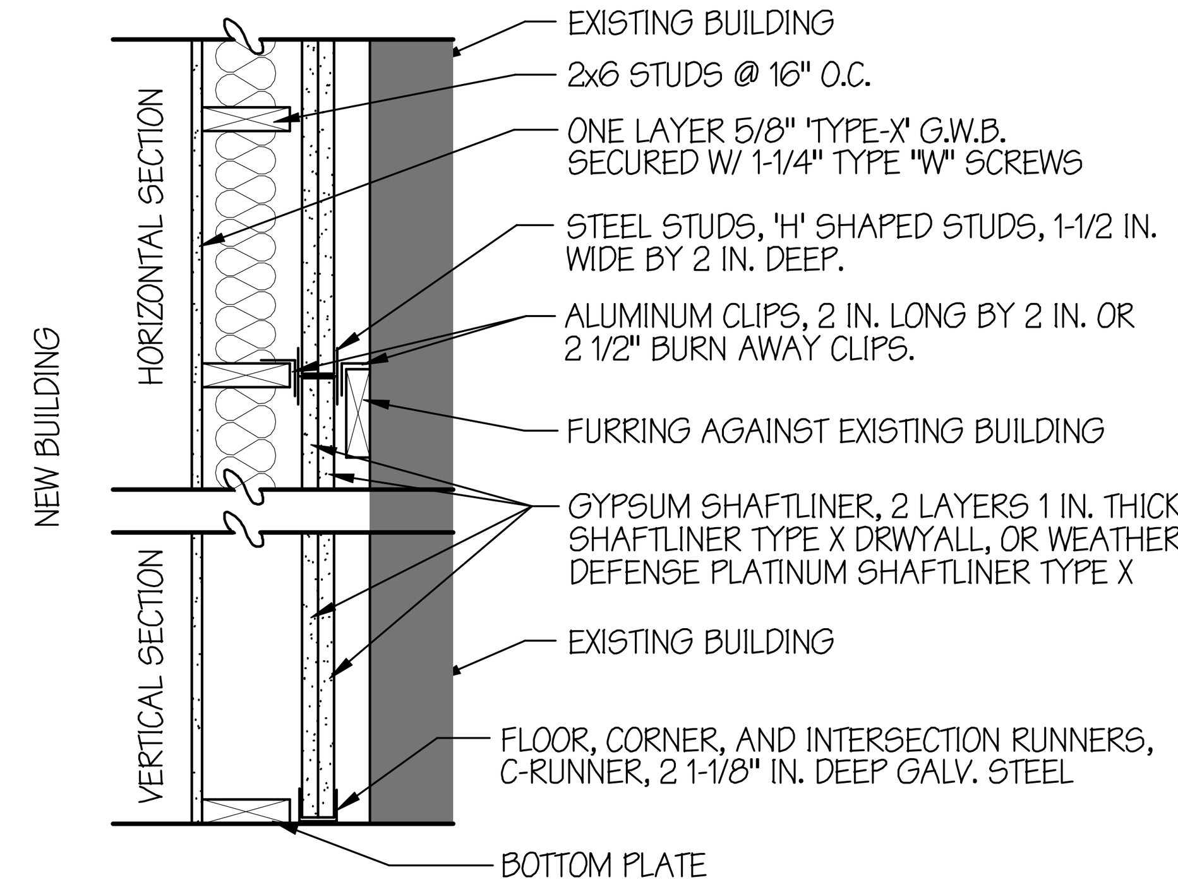
INTERIOR WALL ASSEMBLY ONE (1)

SCALE: 1" = 1'-0"
FIRE RATING: ONE HOUR
U.L. DESIGN # U311



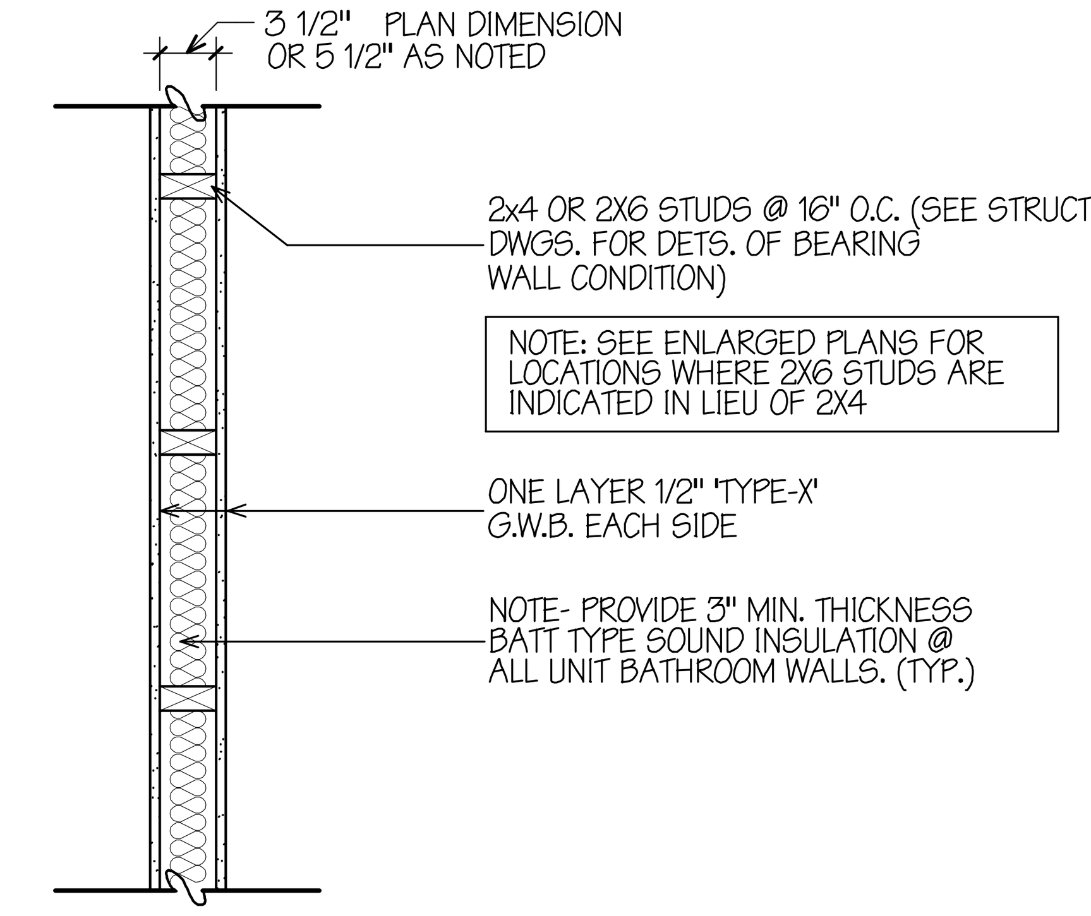
INTERIOR WALL ASSEMBLY TWO (2)

SCALE: 1" = 1'-0"
FIRE RATING: ONE HOUR, BEARING WALL
U.L. DESIGN # U341



FIRE WALL - ASSEMBLY THREE (3)

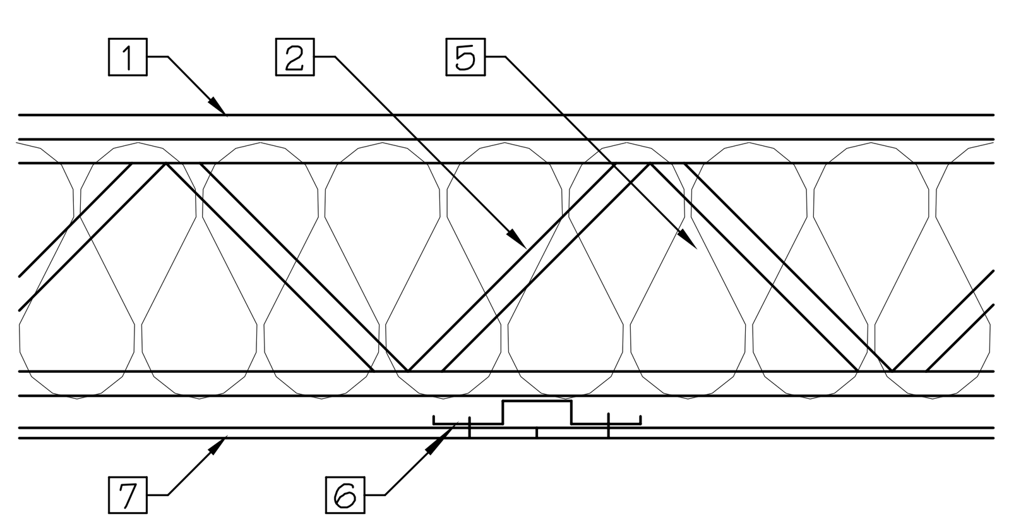
SCALE: 1" = 1'-0"
FIRE RATING: TWO HOURS
INTERTECH DESIGN NO. CD/WA 120-03
NOTE: APPROVED EQUAL FIRE WALL DESIGN WILL BE CONSIDERED



INTERIOR WALL ASSEMBLY FOUR (4)

SCALE: 1" = 1'-0"
USE FOR ALL NON RATED, MISCELLANEOUS PARTITIONS
FIRE RATING: NONE
NOTE: WALLS WITHOUT FLAGS ON FLOOR PLANS ARE 'TYPE 4'

U.L. DESIGN NO. P556
UNRESTRAINED ASSEMBLY RATING - 1 HR



1. FLOORING SYSTEM - 1 1/8 IN. THICH 'ADVANTEC' SHEATHING INSTALLED PER STRUCTRAL DRAWINGS.
2. TRUSSES - MINIMUM 12 IN. DEEP, PARALLEL CHORD TRUSSES, SPACED A MAX OF 24 IN. O.C., FABRICATED FROM 2 BY 4 LUMBER, WITH LUMBER ORIENTED VERTICALLY OR HORIZONTALLY.
3. AIR DUCT (NOT SHOWN) - ANY UL CLASS OR OR CLASS 1 AIR DUCT.
4. CEILING DAMPER (NOT SHOWN) - SEE U.L. DESIGN #L563 FOR CEILING DAMPER ASSEMBLIES.
5. BATTS AND BLANKETS - GLASS FIBER OR MINERAL WOOL INSULATION BEARING THE UL CLASSIFICATION MARKING AS TO SURFACE BURNING CHARACTERISTICS AND/OR FIRE RESISTANCE. FLOOR CAVITY MUST BE FILLED COMPLETELY.
6. RESILIENT CHANNELS - FORMED FROM MIN 25 MSG GALV STEEL INSTALLED PERPENDICULAR TO THE TRUSSES, SPACED 12 IN. O.C.
7. GYPSUM BOARD - NOM 5/8 IN. THICK TYPE 'C', 48 IN. WIDE GYPSUM PANELS, INSTALLED PERPENDICULAR TO RESILIENT CHANNELS.
8. FINISHING SYSTEM (NOT SHOWN) - VINYL, DRY OR PERMIXED JOINT COMPOUND, APPLIED IN TWO COATS TO JOINTS AND SCREW HEADS, WITH 2 IN. WIDE PAPER TAPE EMBEDDED IN FRIST LAYER OF COMPOUND OVER JOINTS.

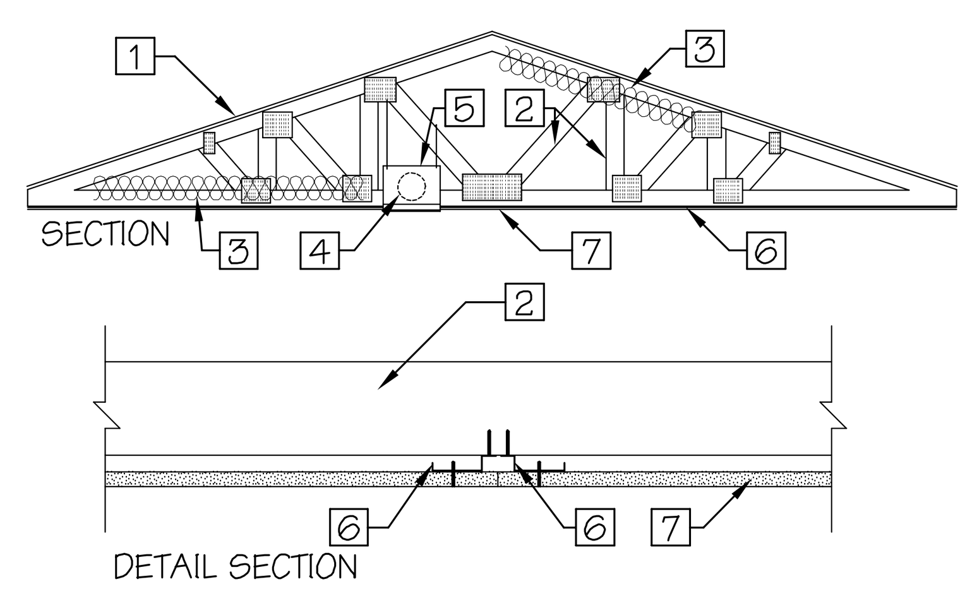
NOTE: PROVIDE LEVEL 4 FINISH AT ALL EXPOSED AREAS. PROVIDE A MIN. LEVEL 2 FINISH IN CONCEALED AREAS.

9. GRILLE (NOT SHOWN) - ALUMINUM OR STEEL GRILLE, INSTALLED IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS PROVIDED WITH THE CEILING DAMPER.

FLOOR/CEILING ASSEMBLY ONE (1/A701)

SCALE: N.T.S.

U.L. DESIGN NO. P544
UNRESTRAINED ASSEMBLY RATING - 1 HR



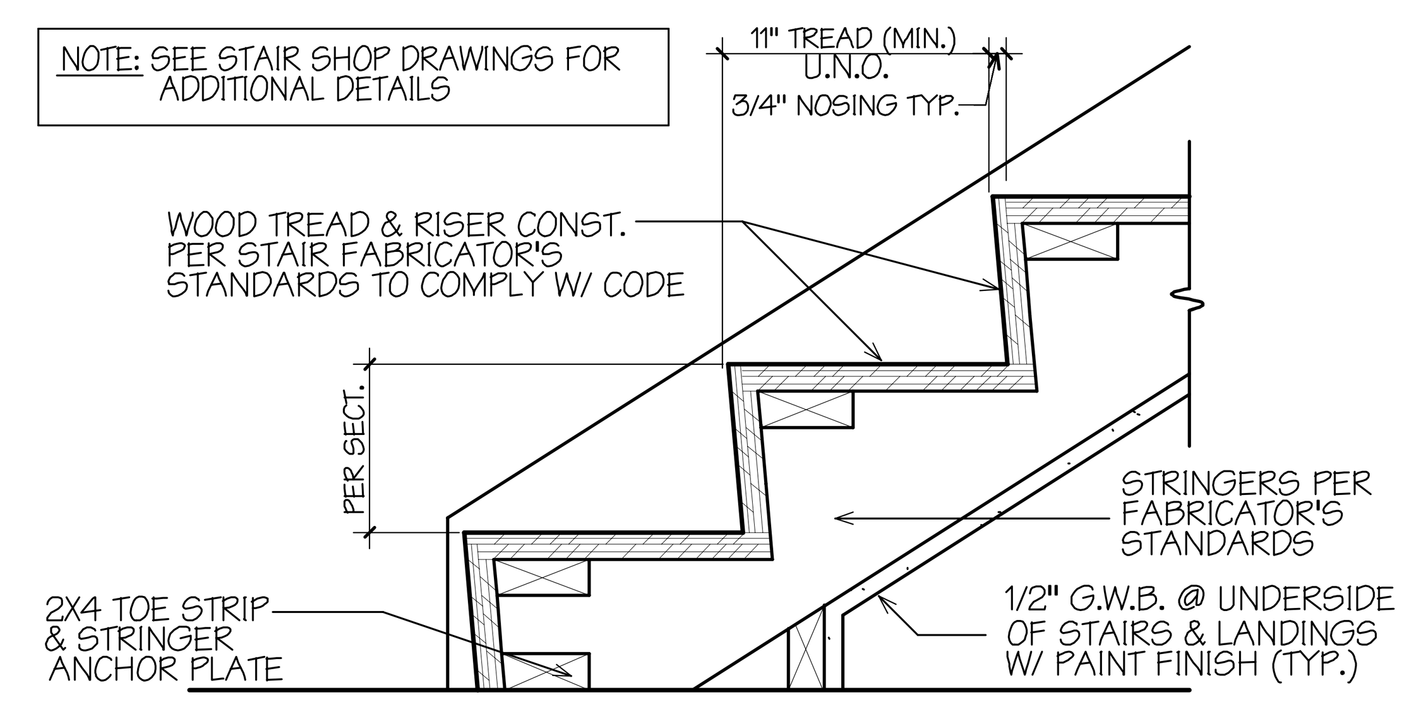
1. ROOFING SYSTEM - MEMBRANE ROOFING SYSTEM OVER 5/8" THICK 'ADVANTEC' SHEATHING (SEE STRUCTURAL DRAWINGS)
2. TRUSSES - PITCHED OR PARALLEL CHORD TRUSSES, SPACED A MAXIMUM OF 24 IN. O.C., FABRICATED FROM NOM 2 BY 4 LUMBER.
3. BATTS AND BLANKETS - GLASS FIBER INSULATION, FITTED IN THE CONCEALED SPACE, DRAPED OVER THE RESILIENT CHANNEL / GYPSUM BOARD CEILING MEMBRANE. FILL CAVITY COMPLETELY.
4. AIR DUCT - ANY UL CLASS 0 OR CLASS 1 FLEXIBLE AIR DUCT.
5. CEILING DAMPER - SEE UL DESIGN #P544 FOR CEILING DAMPER ASSEMBLIES.
6. RESILIENT CHANNELS - RESILIENT CHANNELS FORMED OF 25 MSG THICK GALV STEEL, SPACED 12 IN. O.C. AND INSTALLED PERPENDICULAR TO TRUSSES.
7. GYPSUM BOARD - NOM 5/8" THICK, TYPE 'C', INSTALLED WITH LONG DIMENSION PERPENDICULAR TO RESILIENT CHANNELS.
8. FINISHING SYSTEM - VINYL, DRY OR PREMIXED JOINT COMPOUND, APPLIED IN TWO COATS TO JOINTS AND SCREW HEADS, WITH 2" WIDE PAPER TAPE IMBEDDED IN FIRST LAYER.

NOTE: PROVIDE LEVEL 4 FINISH AT ALL EXPOSED AREAS, PROVIDE MIN. LEVEL 2 FINISH AT CONCEALED AREAS.

ROOF/CEILING ASSEMBLY ONE (2/A701)

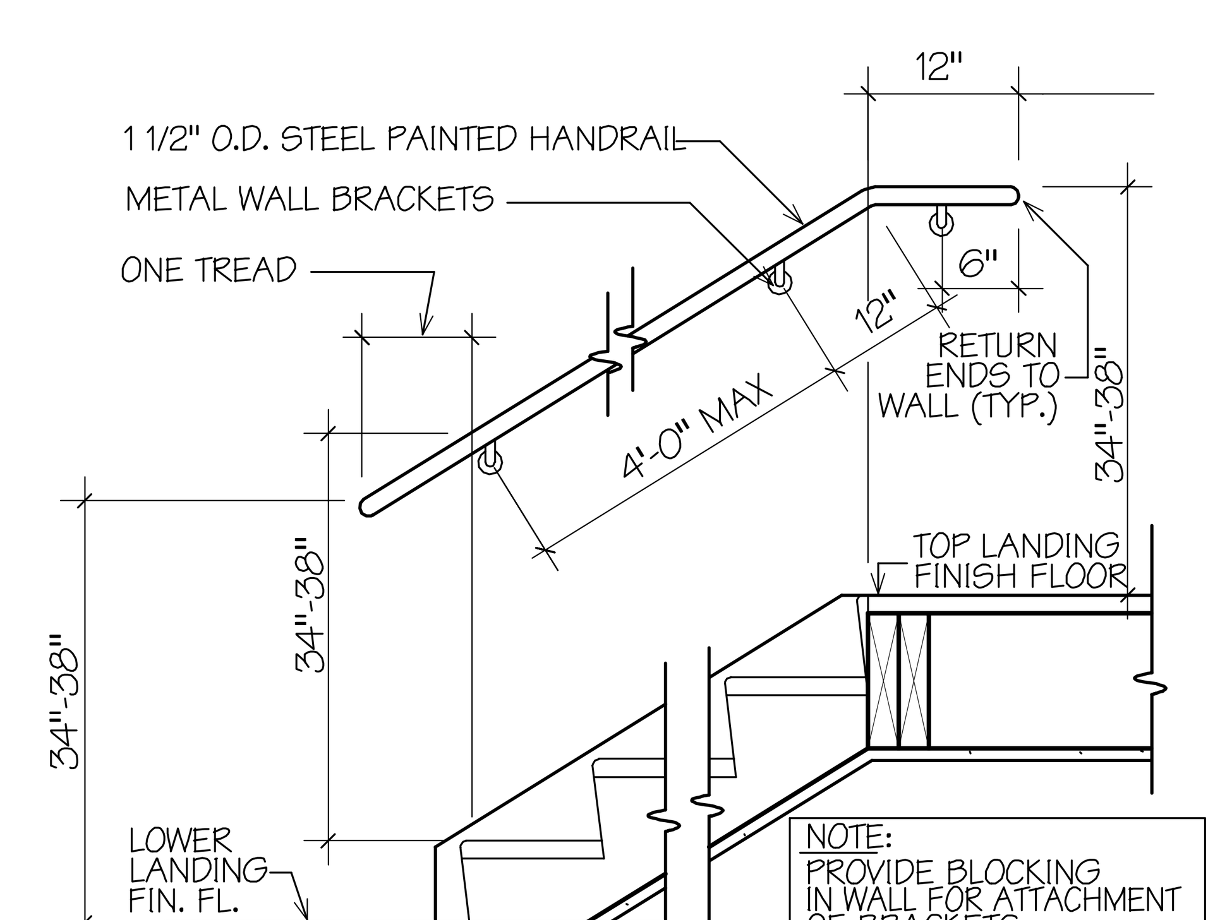
SCALE: N.T.S.

NOTE: REFER TO LISTED RATED ASSEMBLY FOR FULL REQUIREMENTS, DETAILED LISTED ASSEMBLIES PROVIDE ADDITIONAL INFORMATION OUTLINING ALLOWABLE PRODUCTS AND SPECIFIC INSTALLATION REQUIREMENTS.



TYPICAL LOWER LANDING DETAIL (3/A701)

SCALE: N.T.S.



TYPICAL STAIR & HANDRAIL DETAIL (4/A701)

SCALE: N.T.S.

NOTE: STAIRS AND RAMPS SHALL HAVE HANDRAILS ON BOTH SIDES, EXCEPT EXISTING STAIRS, EXISTING RAMPS, STAIRS WITHIN DWELLING UNITS AND WITHIN GUEST ROOMS, AND RAMPS WITHIN DWELLING UNITS AND GUEST ROOMS WHICH SHALL BE PERMITTED TO HAVE A HANDRAIL ON ONE SIDE ONLY.

REQUIRED GUARDS AND HANDRAILS SHALL CONTINUE FOR THE FULL LENGTH OF EACH FLIGHT OF STAIRS. AT TURNS OF NEW STAIRS, INSIDE HANDRAILS SHALL BE CONTINUOUS BETWEEN FLIGHTS AT LANDINGS.

NEW HANDRAILS ON STAIRS SHALL BE NOT LESS THAN 34 INCHES, AND NOT MORE 38 INCHES, ABOVE THE SURFACE OF THE TREAD, MEASURED VERTICALLY TO THE TOP OF THE RAIL FROM THE LEADING EDGE OF THE TREAD.

NEW HANDRAILS SHALL BE INSTALLED TO PROVIDE A CLEARANCE OF NOT LESS THAN 2 1/4 INCHES BETWEEN THE HANDRAIL AND THE WALL TO WHICH IT IS FASTENED.

HANDRAILS SHALL INCLUDE ONE OF THE FOLLOWING FEATURES:
1. CROSS SECTION WITH AN OUTSIDE DIAMETER OF NOT LESS THAN 1 1/4 INCHES AND NOT MORE THAN 2 INCHES.
2. SHAPE THAT IS OTHER THAN CIRCULAR WITH A PERIMETER DIMENSION OF NOT LESS THAN 4 INCHES, BUT NOT MORE THAN 6 1/4 INCHES, AND WITH THE LARGEST CROSS-SECTIONAL DIMENSION NOT MORE THAN 2 1/4 INCHES, PROVIDED THAT GRASPABLE EDGES ARE ROUNDED SO AS TO PROVIDE A RADIUS OF NOT LESS THAN 1/8 INCHES.

NEW HANDRAILS SHALL BE CONTINUOUSLY GRASPABLE ALONG THEIR ENTIRE LENGTH.

NEW HANDRAIL ENDS SHALL BE RETURNED TO THE WALL OR FLOOR OR SHALL TERMINATE AT NEWEL POSTS.

IN OTHER THAN DWELLING UNITS, NEW HANDRAILS THAT ARE NOT CONTINUOUS BETWEEN FLIGHTS SHALL EXTEND HORIZONTALLY, AT THE REQUIRED HEIGHT, NOT LESS THAN 12 INCHES BEYOND THE TOP RISER AND CONTINUE TO SLOPE FOR A DEPTH OF ONE TREAD BEYOND THE BOTTOM RISER.

WITHIN DWELLING UNITS, HANDRAILS SHALL EXTEND, AT THE REQUIRED HEIGHT, TO AT LEAST THOSE POINTS THAT ARE DIRECTLY ABOVE THE TOP AND BOTTOM RISERS.

NFPA 101, 2015 EDITION, SECTION 7.2.2.4.1

DATE: 07/01/23
REVISIONS: PERMIT SET

ASEEMBLY AND MISC. DETAILS

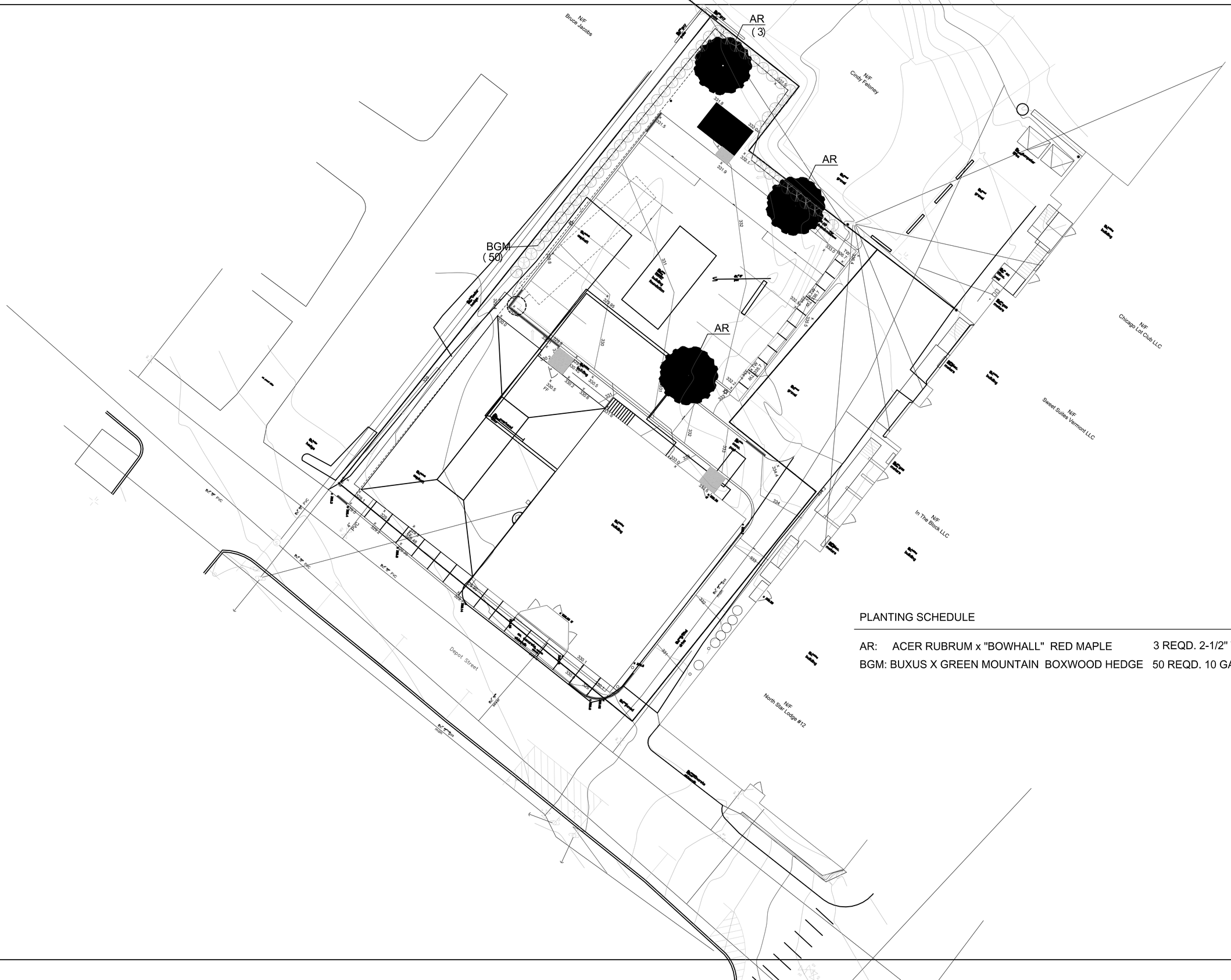
22 DEPOT STREET MIXED USE BUILDING

RICHMOND VERMONT

Rabideau Architects
550 Hinesburg Road
Suite 101
South Burlington, VT 05403
802.863.6222
Rabideau-Architects.com

SHEET NUMBER
A701

DATE: 5/23/2022



PLANTING SCHEDULE

AR:	ACER RUBRUM x "BOWHALL" RED MAPLE	3 REQD. 2-1/2" TO 31/2" CAL.
BGM:	BUXUS X GREEN MOUNTAIN BOXWOOD HEDGE	50 REQD. 10 GALLON

REVISIONS:

LANDSCAPE PLAN

22 DEPOT STREET

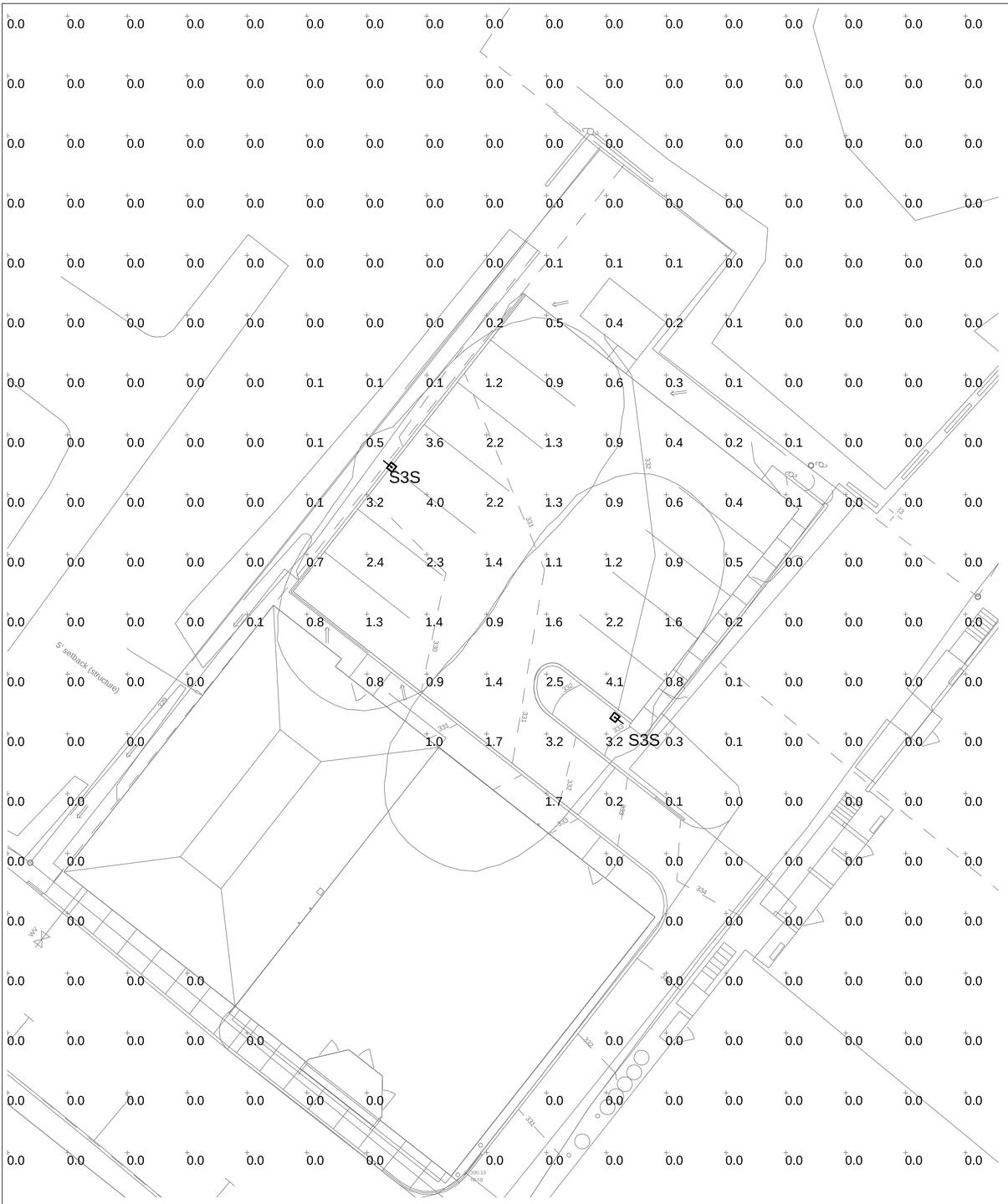
RICHMOND VERMONT

550 Hinesburg Road
Suite 101
South Burlington, VT 05403
802.863.0222
Rabideau-Architects.com
Rabideau Architects

PROJECT #
2206

SHEET NUMBER
L-1

DATE: 5/17/2023



JOB NAME: 22 DEPOT STREET - RICHMOND, VT
APEX LIGHTING SOLUTIONS
WORKPLANE/CALC PLANE: AT FINISH GRADE
MOUNTING HEIGHT: 12FT
APPS: LED
SALES: TC

Luminaire Schedule							
Qty	Label	Arrangement	Lumens	Input Watts	LLF	BUG Rating	Description
2	S3S	Single	4292	40	0.900	B1-U0-G2	GARDCO ECF-S-32L-365-WW-G2-AR-3-UNV-FINISH-HIS / MOUNTED TO TRA-CB-12-x-D1-NA

Calculation Summary						
Label	Grid Height	Avg	Max	Min	Avg/Min	Max/Min
CalcPts_1	0	0.11	4.1	0.0	N.A.	N.A.
PARKING LOT		1.53	4.1	0.4	3.83	10.25

GENERAL DISCLAIMER:

Calculations have been performed according to IES standards and good practice Some differences between measured values and calculated results may occur due to tolerances in calculation methods, testing procedures, component performance, measurement techniques and field conditions such as voltage and temperature variations. Input data used to generate the attached calculations such as room dimensions, reflectances, furniture and architectural elements significantly affect the lighting calculations. If the real environment conditions do not match the input data, differences will occur between measured values and calculated values.

* LLF Determined Using Current Published Lamp Data

NOTE TO REVIEWER:

Total Light Loss Factor (LLF) applied at time of design is determined by applying the Lamp Lumen Depreciation (LLD) from current lamp manufacturer's catalog, a Luminaire Dirt Depreciation Factor (LDD) based on IES recommended values and a Ballast Factor (BF) from current ballast specification sheets. Application of an incorrect Light Loss Factor (LLF) will result in forecasts of performance that will not accurately depict actual results.

For proper comparison of photometric layouts, it is essential that you insist all designers use correct Light Loss Factors.

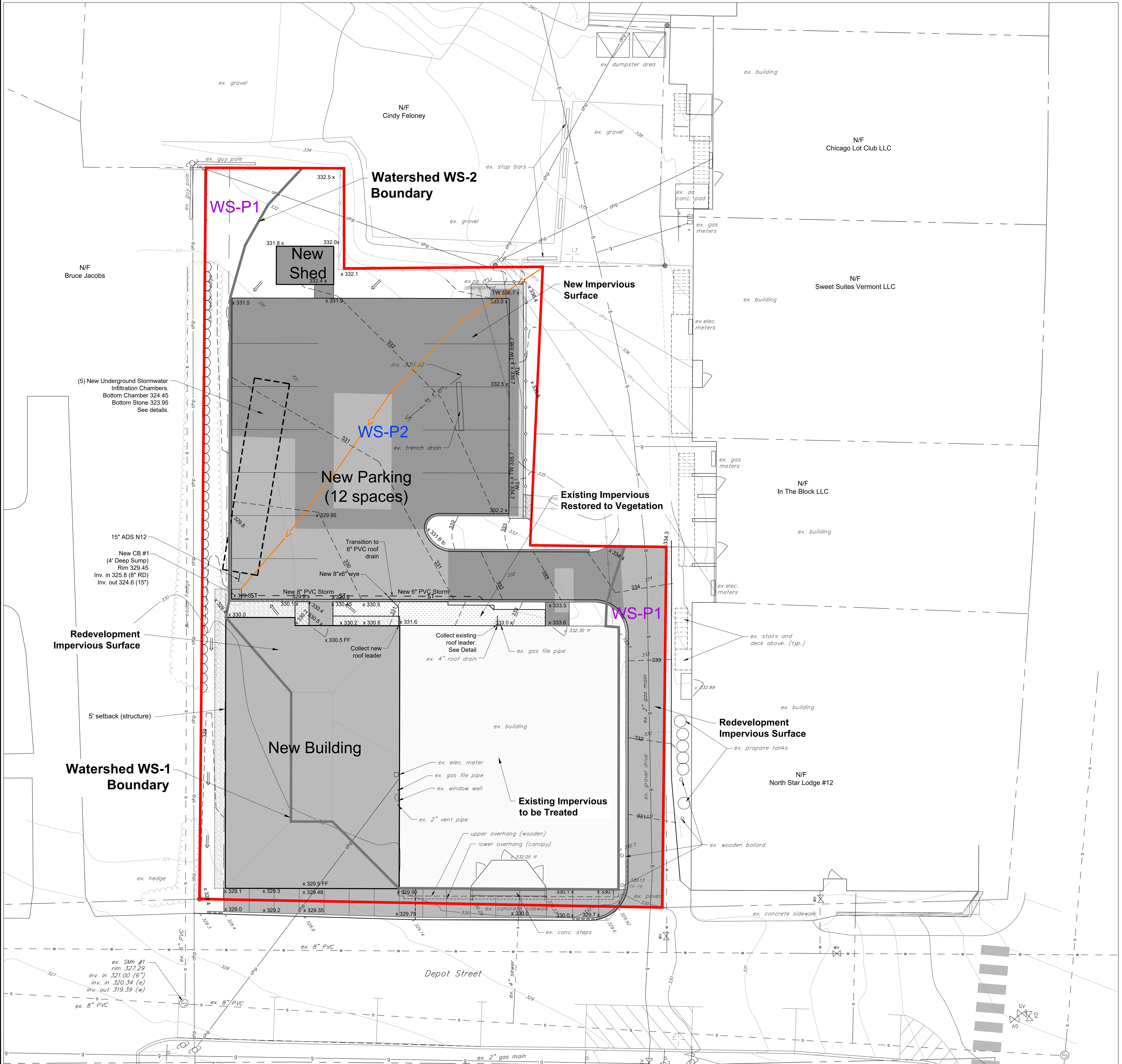
APEX LIGHTING SOLUTIONS
20-30 BEAVER ROAD, WETHERSFIELD, CT 06109
TELEPHONE 860.632.8766 / WWW.APEXLTG.COM

PROJECT TITLE:
22 DEPOT STREET
RICHMOND, VT

DRAWING TITLE:
SITE LIGHTING
PHOTOMETRIC CALCULATION

FILE NAME: 2023-04-17 SL-2 22 DEPOT STREET - RICHMOND, VT-LED.dwg

SCALE : 1"=10'-0"
DATE: 4/17/23
DRAWN BY: LED
SHEET:
SL-2



Soil Test Pit Log
22 Depot Street
22 Depot St, Richmond Vermont

Date: March 16, 2023
Weather: 38° F, clouds
Present: Cameron Goodrich, Krebs & Lansing Consulting Engineers, Inc.

NLTD = no ledge to depth
NWTD = no water to depth
HSWT = high seasonal water table

TP-1
0" - 12" 10YR 3/3 Dark Brown, gravely loamy sand, 25% gravels, loose single grain, structureless, some decaying cobbles, roots, worms
12" - 28" 10YR 5/6 Yellowish Brown, fine loamy sand, single grain, loose, structureless, few roots, few decaying cobbles
28" - 43" 2.5Y 5/4 Light Olive Brown, fine loamy sand, single grain, loose, few roots
43" - 48" 2.5YR 5/3 Light Olive Brown, fine sand, structureless, single grain, loose, prominent redox band at @48" interface
48" - 64" 2.5YR 5/3 Light Olive Brown, fine sand, structureless, single grain, loose, evidence of redox throughout layer, pockets of damp fine loamy sand
64" - 97" 2.5Y 4/4 Olive Brown, very coarse sandy, single grain, loose, structureless, salt and pepper sand, clean. No evidence of redox to depth suggests a perched water table above
NLTD, NWTD
HSWT Not Observed

INFILTRATION TESTING

Project Name:	22 Depot Street
Testing By:	CPG
Date:	3/16/2023
Depth of Test:	36 inches

Infiltration Testing using Borehole Infiltration Test per 2017 VSWMM Section 4.3.2.5
*** Alternative pre-soaking procedure per "Oregon State publication" was used**

**** The lowest rate of the 4 infiltration tests performed at each Test Site**
***** Using Factor of Safety of 2, Design Rate = Lowest Rate/2**

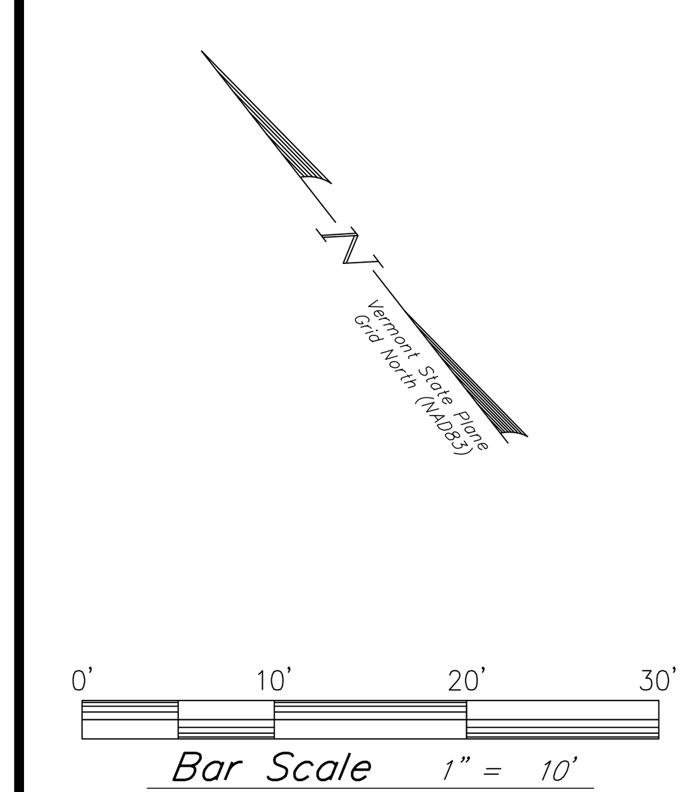
Test #	Lowest Rate** (in/hr)	Design Rate*** (in/hr)
IT-1	20	10

Impervious Area Legend

- NEW Impervious Areas
- Redevelopment Impervious
- EXISTING to be Treated
- Existing Impervious RESTORED to vegetation
- Watershed Limit
- Site Area Limits
- Post Development TC

KREBS & LANSING
CONSULTING ENGINEERS
164 Main Street, Suite 201
Colchester, Vermont 05446
P: (802) 878-0375
www.krebsandlansing.com

STAMP:



Project:
22 Depot Street
Mixed Use Addition
Richmond,Vermont

Project No.	22280
Scale	1" = 10'
Drawn by	CPG
Checked by	
Date	04/27/2023

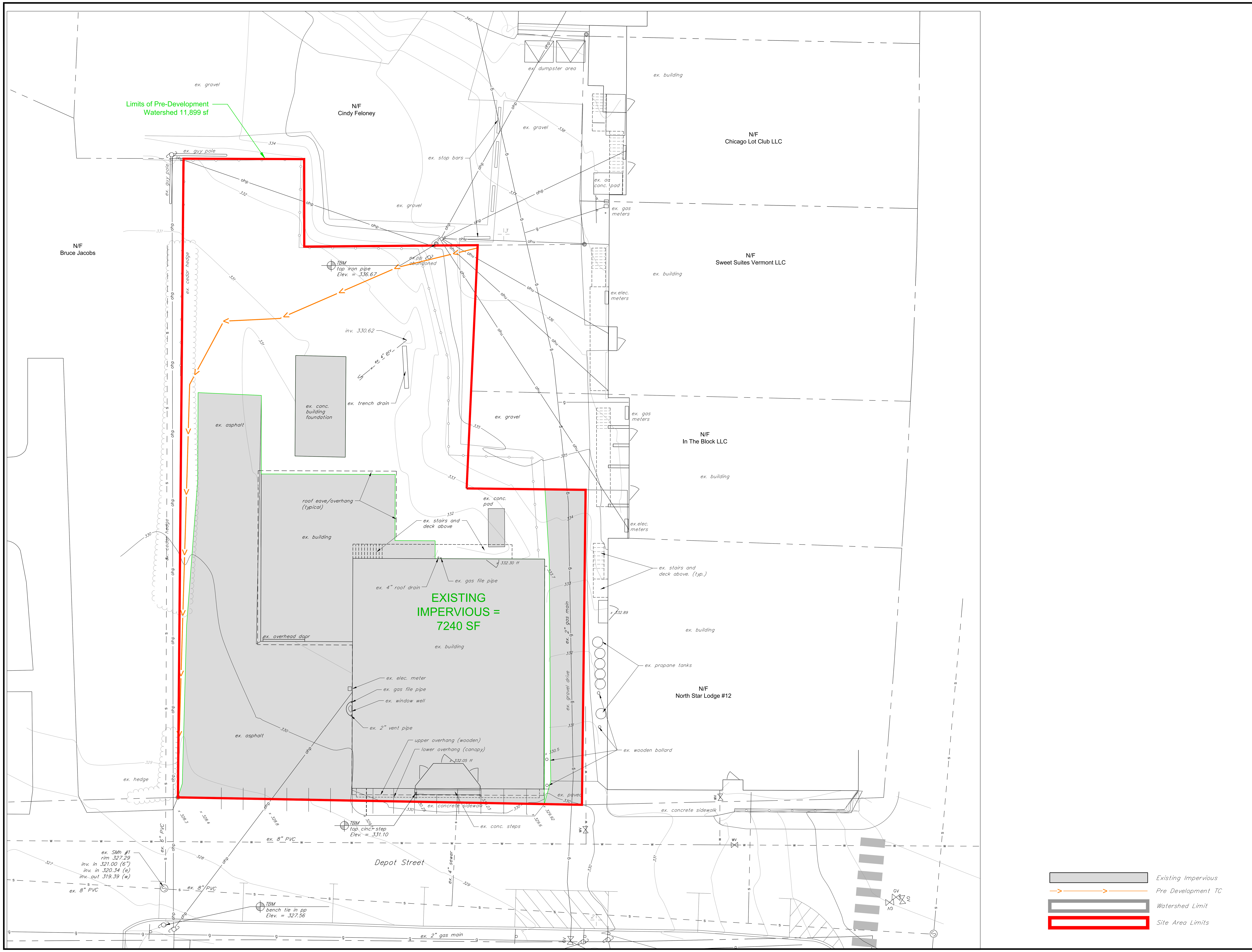
Revisions

No.	Date	Description

Drawing Title
Post Development Watershed Plan

Drawing No.
WS-POST

22280\DWGS\22280 base.dwg



KREBS & LANSING
CONSULTING ENGINEERS

164 Main Street, Suite 201
Colchester, Vermont 05446
P: (802) 878-0375
www.krebsandlansing.com

STAMP:

Project:

22 Depot Street
Mixed Use Addition

Richmond, Vermont

Project No.	22280
Scale	1" = 10'
Drawn by	CPG
Checked by	
Date	04/27/2023

Revisions

No.	Date	Description

Drawing Title

Pre Development Watershed Plan

Drawing No.

WS-PRE

22280\DWGS\22280 base.dwg

New Shed 332.4 x

x 332.1

x 331.9

TW 336.7 x

333.0 x

18' 22' 18'

x 336.4

TW 336.7 x TW 335.7

332.5 x

x 335.5

6'

331

TW 335.7 x TW 334.7

New Parking
(12 spaces)

332.2 x

x 329.95

x 331.6 tc

New Building

10'

x 334.3

x 334.4

329.8 x

x 329.9

330.1 x

x 330.45

x 330.5

x 330.4

x 330.2

x 330.5

x 330.2

x 330.6

x 331.6

333.0 x

x 333.5

x 333.6

x 330.5 FF

9.7'

ex. 4" roof drain

ex. gas file pipe

ex. building

ex. 2" gas main

ex. gravel drive

ex. elec. meter

ex. gas file pipe

ex. window well

0' 5' 10' 15' 25'

Bar Scale 1" = 5'

TW 334.7 x TW 334.7

332.2 x

x 334.4

334.3

x 333.5

x 333.6

333.0 x

9.7'

ex. gas file pipe

ex. building

ex. 2" gas main

ex. gravel drive

ex. elec. m

ex. wooden bollar

overhang (wooden)

ver overhang (canopy)

330.1 x

x 330.1

ex. paved

ex. concrete sidewalk

x 330.0

330.0 x

329.7 x

ex. conc. steps

WV

ex. 4" sewer

0' 5' 10' 15' 25'

Bar Scale 1" = 5'

KREBS & LANSING
CONSULTING ENGINEERS
164 Main Street, Suite 201
Colchester, Vermont 05446
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STAMP:

FOR PERMIT REVIEW

Project:

22 Depot Street
Mixed Use Addition

Richmond, Vermont

Project No.	22280
Scale	1" = 5'
Drawn by	TJB
Checked by	
Date	06/23/2023

Revisions

No.	Date	Description

Drawing Title

Turning Sketch

Drawing No.

T-1.0

22280\DWGS\22280_base.dwg