### Bay Colony Group, Inc.

Professional Civil Engineers & Land Surveyors

4 School Street, PO Box 9136
Foxborough, Massachusetts 02035
Telephone (508) 543-3939 • Fax (508) 543-8866
E-mail: mailbox@baycolonygroup.com

December 8, 2023

Mr. Robert W. Boette, Chairman Foxborough Conservation Commission 40 South Street Foxboro, MA 02035

RE: 81 Ridge Road Foxborough, MA

Dear Mr. Boette,

On behalf of our client, Arthur J. Dooley, we are submitting herewith a Request for Determination of Applicability pursuant to Chapter 131, S.40, Wetlands Protection Act and Chapter 267 Foxborough Wetlands Protection Bylaw for the repair of a failed septic system at 81 Ridge Road Foxborough, MA. Enclosed please find 8 copies of the WPA Form 1 – Request for Determination of Applicability (RFDA), which includes the sewage disposal system design plan and a check in the amount of \$75 for the Town fee.

The property is an existing 2-bedroom home on a 10,338+/- sf lot located on the north side of Ridge Road about 0.7 miles north of where it intersects Chestnut Street. The existing system consists of a septic tank, distribution box and flow diffusers located in-between the existing home and garage. The property slopes from Ridge Road down to the Neponset Reservoir, the elevation of Ridge Road is about 280' and the elevation of the water is at 267.0' recorded on November 20, 2023. The lot contains a shared driveway with 79 Ridge Road.

The proposed work consists of constructing a new system in accordance with the State Sanitary Code. The new system will utilize the existing 1,500-gallon septic tank before it is gravity feed to a 1,000-gallon pump chamber. In order to provide additional environmental protection, we are proposing the use of an alternative system to treat the effluent from the system. We have chosen the Presby Environmental, Inc. Enviro-Septic Wastewater Treatment System. The system will provided enhanced treatment and the effluent will be reduced in strength, considerably below that of a standard septic tank effluent. The system will consist of 210' of Enviro-Septic lines on a 32' x 13.5' system sand bed. The leaching system will be installed to the south of the existing garage and will be about 126' from the water surface. Erosion control will be installed prior to the

start of construction and will consist of a 12" silt sock, which will remain until the system is completed. Due to the small size of the lot and the location of the bank, three waivers were requested from the Foxborough Board of Health as a condition of approval of the design. One of the restrictions is that, because the site is a two-bedroom home and lies within the Zone 2 of a Water Resource Protection District, a deed restriction limiting the site to no more than 2 bedrooms will be recorded in the Registry of Deeds prior to the Board of Health's issuance of a Certificate of Compliance.

We expect to start construction of the system shortly after all approvals are granted and to complete construction within 2 weeks of start of work, weather permitting.

Thank you for your consideration and please feel free to contact me should you have any questions or concerns that you would like us to address prior to the public hearing.

Very truly yours,

BAY COLONY GROUP, INC.

Cameron Gray Project Engineer

William R. Buckley, Jr., P.E.

**Project Manager** 

encl.



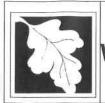
# Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands

WPA Form 1- Request for Determination of Applicability
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
Foxborough Wetlands Protection Bylaw, Chapter 267



#### A. General Information

| mportant:<br>When filling out  | 1. | ☐ Applicant or ☑ Property Owner's Representative:  |                    |                        |  |  |  |
|--------------------------------|----|--|--------------------|------------------------|--|--|--|
| orms on the                    |    | Bay Colony Group, Inc.   | William Buckle     | cklov Ir               |  |  |  |
| computer, use only the tab key |    | Name / Firm  |                    | ame (if applicable)    |  |  |  |
| o move your                    |    | 4 School Street  |                    | ( /-/ /-               |  |  |  |
| cursor - do not                |    | Mailing Address  |                    |                        |  |  |  |
| ise the return<br>ey.          |    | Foxborough   | MA                 | 02035                  |  |  |  |
| ey.                            |    | City/Town  | State              | Zip Code               |  |  |  |
| Tab                            |    | 508.543.3939   |                    | aycolonygroup.com      |  |  |  |
|                                |    | Phone Number   | Email Address      | ay octorry group to    |  |  |  |
| return                         | 2. | Property Owner (if different from Applicant):  |                    |                        |  |  |  |
| <u> </u>                       |    | Sean Flaherty  |                    |                        |  |  |  |
|                                |    | Name   | E-Mail Address / F | hone Number            |  |  |  |
|                                |    | 22 Alice Bradley Lane  |                    |                        |  |  |  |
|                                |    | Mailing Address  |                    |                        |  |  |  |
|                                |    | Foxborough   | MA                 | 02035                  |  |  |  |
|                                |    | City/Town  | State              | Zip Code               |  |  |  |
|                                | 2  | -  |                    | ·                      |  |  |  |
|                                | ٥. | Foxborough Wetlands Protection Bylaw filing fee enclosed:  |                    |                        |  |  |  |
|                                |    | Single Family House: \$75 ☐ Industrial / Other: \$200 ☐ I  | Habitat Restoratio | n / Scout Project: \$0 |  |  |  |
|                                | В. | Determinations   |                    |                        |  |  |  |
|                                | 1. | I request that Foxborough Conservation Commission make the following determination(s).   |                    |                        |  |  |  |
|                                |    | a. whether the <b>area</b> depicted on plan(s) and/or map(s) referenced below is an area subject to the jurisdiction of the State Wetlands Protection Act. |                    |                        |  |  |  |
|                                |    | b. whether the <b>work</b> depicted on plan(s) referenced below is   | subject to the W   | etlands Protection     |  |  |  |
|                                |    | Act.   |                    |                        |  |  |  |
|                                |    | c. whether the area and/or work depicted on plan(s) refere<br>jurisdiction of the Foxborough Wetlands Protection Bylav                                     |                    | bject to the           |  |  |  |
|                                | C. | Project Description  |                    |                        |  |  |  |
|                                | 1. | a. Project Location (use maps and plans to identify the location   | n of the area sub  | iect to this request): |  |  |  |
|                                |    | 81 Ridge Road Foxborough 034   |                    | 014                    |  |  |  |
|                                |    |  | /lap/Plat Number   | Parcel/Lot Number      |  |  |  |
|                                |    |  | •                  | entrial atali          |  |  |  |
|                                |    | b. Area Description (i.e. back yard, lawn, wooded area, conse  |                    | •                      |  |  |  |
|                                |    | An existing 10,338+/- sf parcell of land located on the north side of Ridge Road about 0.7 miles from the intersection with Chestnut Street                |                    |                        |  |  |  |
|                                |    | c. Plan and/or Map Reference (Hint: hand-draw your proposed project onto an Assessor's map, Google map or MassGIS aerial photo.)                           |                    |                        |  |  |  |
|                                |    | Sewage Disposal System Design  | - ,                | 12/4/2023              |  |  |  |
|                                |    | Title  |                    | Date                   |  |  |  |
|                                |    |  |                    |                        |  |  |  |
|                                |    | Title  |                    | Date                   |  |  |  |
|                                |    |  |                    |                        |  |  |  |



#### Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands

### WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40 Foxborough Wetlands Protection Bylaw, Chapter 267



### C. Project Description (continued)

2. a. Detailed Description of Proposed Work, shown in the above plans:

Replacement of a failed septic system with a new septic system constructed in accordance with the 310 CMR 15.00 State Sanitary Code (Title 5). The new system will consist of an existing 1,500 gallon septic tank, a 1,000 gallon pump chamber and enviro-septic wastewater treatment system. The leaching field will be about 126' from the Neponset Reservoir

b. Identify provisions (*if any*) of the MA Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work.

310 CMR 10.03(3)

| 3. | a. | Riverfront | Requirements | (if applicable) |
|----|----|------------|--------------|-----------------|
|----|----|------------|--------------|-----------------|

| J. ( | a.   | KIVE   | Tront Requirements (ii applicable)   |  |  |
|------|--|--------|--|--|--|
|      | If the proposed project is located within 200 feet of a river, indicate the one classification be that best describes the project: |        |  |  |  |
|      | For lots recorded on or before 8/1996:   |        |  |  |  |
|      |  |        | Single family house on a lot recorded on or before 8/1/96  |  |  |
|      |  |        | Project, other than a single family house or public project, where the applicant owned the lot before $8/7/96$   |  |  |
|      |  | For le | For lots recorded after 8/1/96:  |  |  |
|      |  |        | Single family house on a lot recorded after 8/1/96   |  |  |
|      |  |        | Expansion of an existing structure on a lot recorded after 8/1/96  |  |  |
|      | Other Projects:  |        |  |  |  |
|      |  |        | Municipal project  |  |  |
|      |  |        | District, county, state, or federal government project   |  |  |
|      |  |        | Public project where funds were appropriated prior to 8/7/96   |  |  |
|      |  |        | Residential subdivision; institutional, industrial, or commercial project  |  |  |
|      |  |        | Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision  |  |  |
|      |  |        | New agriculture or aquaculture project   |  |  |
|      |  |        | Project required to evaluate off-site alternatives in more than one municipality for an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. ACOE or 401 Water Quality Certification from the MassDEP.  |  |  |
|      |  | D      | the state of the s |  |  |

 b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting one of the classifications above (use additional paper and/or attach appropriate documents, if necessary).

Evidence:



## **Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Wetlands

### WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40 Foxborough Wetlands Protection Bylaw, Chapter 267



**Foxborough** 

### D. Signatures and Submittal Requirements

| Name and Address of Property Owner:  |                         |   |               |
|--|-------------------------|---|---------------|
| Sean Flaherty  |                         |   |               |
| Name   |                         |   |               |
| 22 Alice Bradley   | Foxborough              | MA  | 02035         |
| Mailing Address  | City/Town               | State   | Zip Code      |
| I hereby certify under the penalties of perjury<br>Applicability and accompanying plans, docur<br>best of my knowledge.  |                         |   |               |
| I further certify that the property owner, if diff<br>Regional Office <i>(see below)</i> were sent a com<br><i>documentation)</i> simultaneously with the subr | nplete copy of this Red | quest (including all a                        | ppropriate    |
| Failure by the applicant to send copies in a ti<br>Determination of Applicability.   | imely manner may res    | ult in dismissal of th                        | e Request for |
| I also understand that notification of this Req<br>Conservation Office) at my expense in accor<br>Protection Act regulations.  Signatures:                     |                         | 0.05(3)(b)(1) of the V                        | Vetlands      |
| Signature of Applicant Signature of Representative (if any)  |                         | Date Date                                     | 9/2023        |
| Tax Collector's Release and Signature: The the Conservation Commission and is in good betterments or other municipal charges as re                             | d standing with respec  | t to any taxes, fees,<br>orough Treasurer's ( | assessments,  |
| Signature of Foxborough Tax Collector or Agent   |                         | Date  |               |
|  |                         |   |               |

#### Submittal Requirements:

#### For the Conservation Commission:

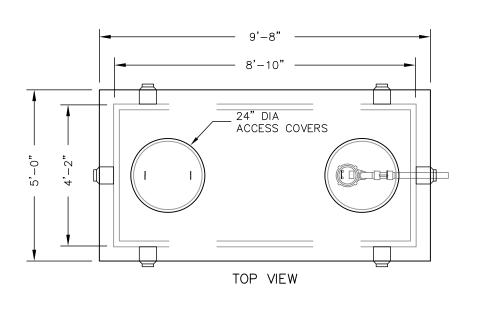
One (1) original and seven (7) copies of this completed Request (including all plans, other documentation, and Town filing fee payment), by mail or hand delivery to:

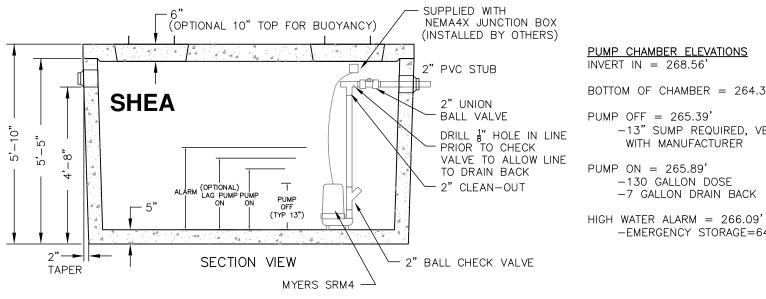
> **Foxborough Conservation Commission** 40 South Street Foxborough, MA 01035

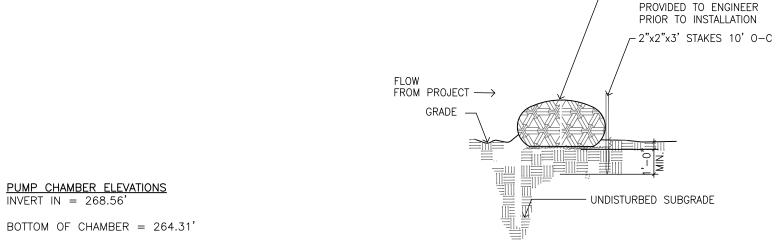
#### For MassDEP:

One (1) copy of the completed Request (including all documentation; no State filing fee is required) by certified mail or hand delivery to:

> MassDEP, Southeast Regional Office 20 Riverside Drive Lakeville, MA 02347

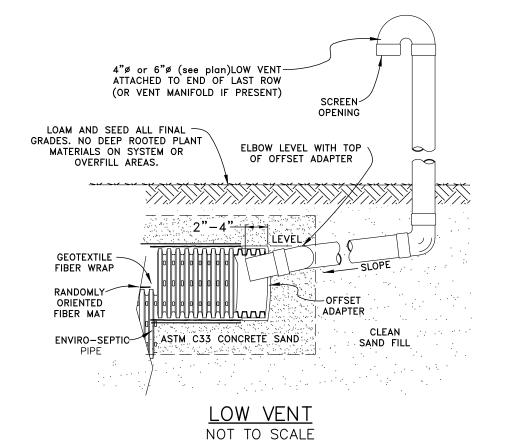


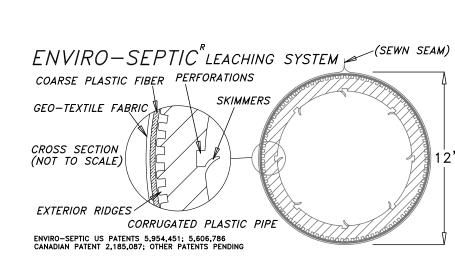


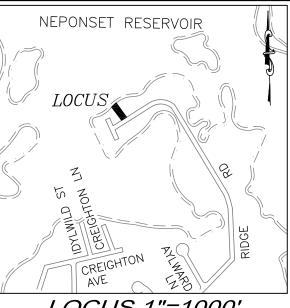


SILT SOCK EROSION CONTROL

NOT TO SCALE

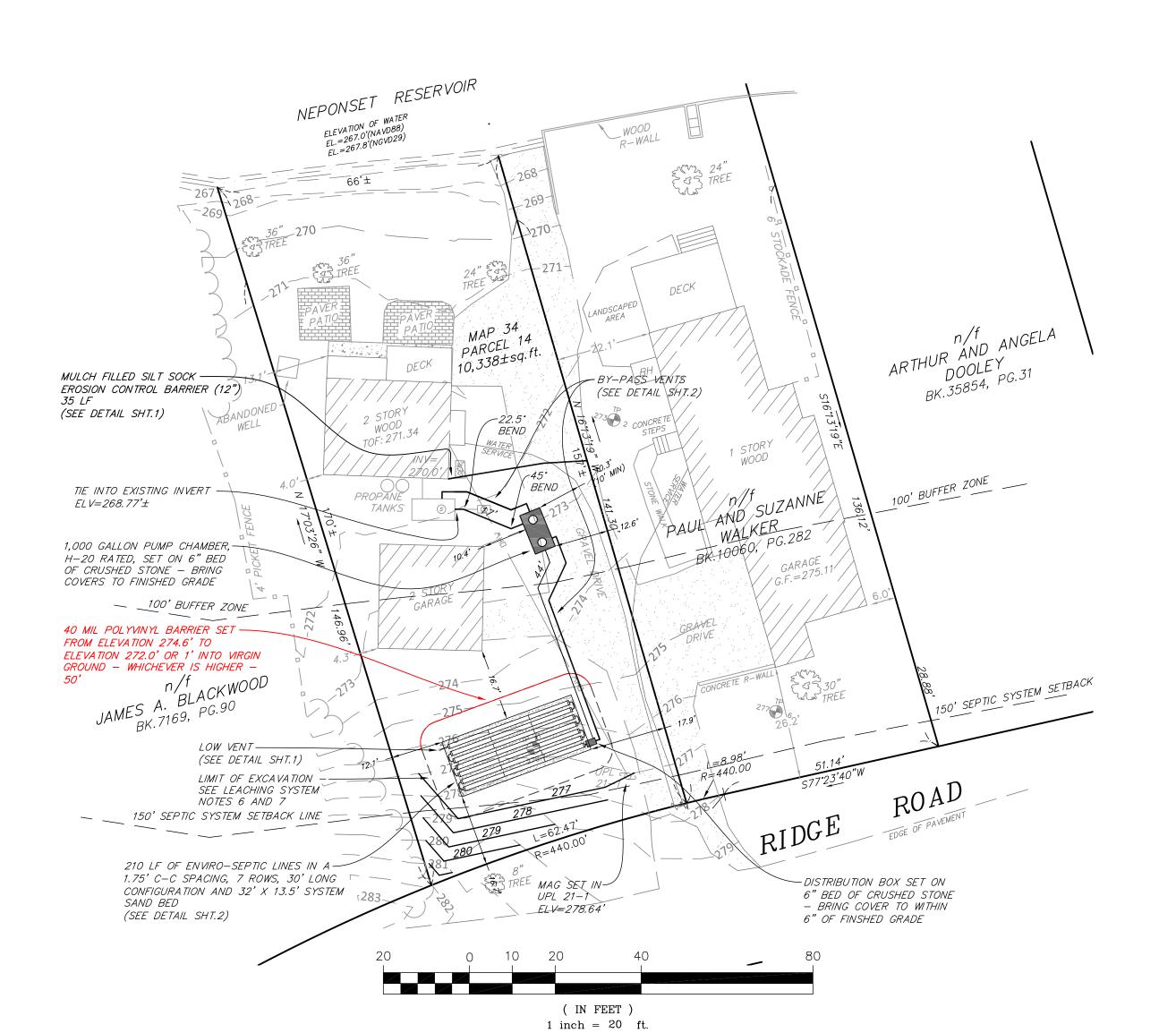






LOCUS 1"=1000"

### 1,000 GALLON PUMP CHAMBER SHEA PC1000P4S OR EQUIV



-13" SUMP REQUIRED, VERIFY

-EMERGENCY STORAGE=641 GAL

WITH MANUFACTURER

-7 GALLON DRAIN BACK

-130 GALLON DOSE

BUOYANCY CALCULATIONS 1,000 GALLON PUMP CHAMBER WEIGHT OF TANK = 7.4 TONS (MANUFACTURERS SPEC)
WEIGHT OF EARTH = 120 LB/C.F. x 5' x 9.67' x 3.5' = 20,307 LB = 10.2 TONS FORCE OF BUOYANCY = 62.4 LB/C.F. x 5' x 9.67' x 3.32' = 6,939 LBS = 3.5 TONS DOWNWARD FORCE = 17.6 TONS UPWARD FORCE = 3.5 TONS (TANK EMPTY) SAFETY FACTOR = 5.0

### WAIVERS REQUESTED:

-12" DIA. SILT SOCK W/CLEAN NATIVE SPECIES MULCH.

MIXTURE TO BE

310 CMR 15.00 (TITLE 5) REGULATIONS: 310 CMR 15.221(7) -PUMP CHAMBER HAS 4' OF COVER WHERE THE MAXIMUM COVER IS 3'

#### FOXBOROUGH BOARD OF HEALTH REGULATIONS: - LEACHING FIELD 126' FROM AN INLAND BANK WHERE

150' IS REQUIRED -SEPTIC TANK 75' FROM AN INLAND BANK WHERE 100' *IS REQUIRED* 

### **DESIGN DATA:**

1. ESTIMATED HYDRAULIC LOADING: 2 BEDROOMS AT 110 GPD/BEDROOM = 220 G.P.D. GARBAGE DISPOSAL <u>NOT</u> ALLOWED WITH DESIGN 2. SEPTIC TANK SIZE: AVERAGE DAILY FLOW =  $\underline{220}$  x 200% =  $\underline{440}$  GALLONS

SEPTIC TANK PROVIDED =  $\underline{1500}$  GALLONS. 3. DESIGN PERCOLATION RATE = 2 M.P.I. SOIL CLASS =\_\_ EFFLUENT LOADING RATE = 0.74 GPD/SF

4. REQUIRED SAND BED AREA = <u>400</u> SF <u>(MINIMUM 3 BEDROOM DESIGN PER TITLE 5)</u> DESIGN SAND BED AREA = 432 SF

5. ENVIRO-SEPTIC PIPE REQUIRED = <u>210</u> LF <u>(MINIMUM 3 BEDROOM DESIGN PER TITLE 5)</u> ENVIRO-SEPTIC PIPE PROVIDED = 210 LF

INSTALL  $\underline{210}$  LF OF ENVIRO-SEPTIC PIPE IN  $\underline{Z}$  LINES THAT ARE  $\underline{30}$  LF LONG

#### SOIL TEST DATA: EST DATA: TEST PIT #1 1.29.2023 GND ELEV: 276.7' TOP WELL ENDING PERCOLATION TESTS TEST PIT No.1 TEST PIT No. TEST PIT No. DATE: 11.29.2023 DATE: DEPTH OF PERC 32" (274.0') START PRESOAK BURIED A+B 48" (272.4') END PRESOAK 24 GALS @ 0831 TIME @ 12" C SAND; 2.5Y5/4; COARSE, TIME @ 9" GRAVELLY, COBBLY, FEW STONES TIME @ 6" TIME (9"-6")152" (264.0') -CALC. RATE WATER WEEPING @ 126" (266.2) DESIGN RATE 2 MPI WATER STANDING @ 144" (264.7') COULD NOT SOAK NOTES BASIS OF GNDWTR BASIS OF GNDWTR DIRECT READING ADJUSTMENT: ADJUSTMENT: SCS SOIL TYPE: HINCKLEY LS SCS SOIL TYPE: SOIL EVALUATOR: | RICHARD LESLIE SOIL EVALUATOR: WITNESS: WITNESS: KEVIN DUQUETTE 7. Fill shall be placed gradually in layers and compacted as required to achieve an in place PUMPING EQUIPMENT.

### CONSTRUCTION NOTES:

### GENERAL CONSTRUCTION NOTES:

. All work shall conform to the latest edition of the Commonwealth of Massachusetts regulations governing the installation of subsurface sewage disposal systems, as published in the Code of Massachusetts Regulations and referred to as "Title 5", and any additional requirements of the Board of Health.

. Both the Contractor and Designer must certify construction and prepare as—built plans showing locations and elevations. Contractor shall coordinate his work with the Designer to allow inspection and collection of elevations and loations of the system components, including an open hole inspection of the foundation excavation. Components shall not be backfilled until inspection and approval is obtained from the Board of Health, Designer and Owner. Vehicular traffic, parking of vehicles, stockpiling of materials, and storage of equipment over leaching area prohibited at all times. System shall be staked and flagged or otherwise barricaded from time of installation until Certificate of Compliance is issued. Magnetic tape

shall be placed over all components. LEACHING FIELD NOTES: . Contractor shall strip and stockpile A and B horizons and any other unsuitable material. Excavated material shall remain on site and be used as required for final grading. Excess material shall be removed from the site.

2. Stone used in leaching system shall consist of double washed 3/4" to 1-1/2" stone free of dust, iron, silt and other deleterious material. 3. Smeared or compacted surfaces of the leaching excavation shall be scarified prior to placemen 4. Leaching pipe shall be schedule 40 PVC with solvent welded joints. Holes shall be 3/8 inch

diameter to 5/8 inch diameter spaced at least every six inches and ends shall be capped.

Leaching stone shall be covered with a 2 inch layer of double washed 1/8" to 1/2" peastone. Stone shall be free of dust, fines, iron, silt and other deleterious material. 6. Contractor shall provide certified Title 5 fill material as required to replace topsoil, subsoil, contaminated soil to a depth of \_\_\_\_48"\_\_\_ and other unsuitable material if found in or within 5' of the leaching area. Any required fill for the leaching area shall conform to the

requirements of Title 5 as repeated below: Fill for systems constructed in fill shall consist of select on-site or imported soil material. The fill shall be comprised of clean granular sand, free from organic matter and deleterious substances, and shall not contain Remediation Waste as that term is defined in 310 CMR 40.0000. Mixtures and layers of different classes of soils shall not be used. The fill shall not contain any material larger than 2 inches. A sieve analysis,

using a #4 sieve, shall be performed on a representative sample of the fill. Up to 45 % by weight of the sample may be retained on the sieve. Sieve analysis shall also be performed on the fraction of the fill passing the #4 sieve, such analysis must demonstrate that the material meets the specifications in 310 CMR 15.255(3) and a plot of the sieve analysis shall fall on or between the lines shown on the graph in 310 CMR 15.255(3).

density acceptable to the Board of Health and Engineer. Fill shall only be placed when the excavation is dry. The bottom of the excavation shall be scarified prior to placement of fill. After the fill is in place, the owner will collect at least one sample and have a sieve analysis performed. If the fill does not pass the analysis, the contractor shall remove all fill and replace with appropriate material at no additional cost to the owner.

If vents are required, the header invert shall be above the invert of the distribution piping. An activated carbon filter with exchangable container shall be provided on the header. The vent shall be backfilled to prevent seepage of water in to the system and shall be constructed to prevent precipitation or animal access. Vent shall slope upward to outlet. . All soil absorption systems shall have a minimum of one (1) inspection port consisting

of a perforated four (4) inch pipe placed vertically down into the stone to the naturally occurring soil or sand fill below the stone. The pipe shall be capped with a screw type cap and accessible to within three (3) inches of finish grade. DISTRIBUTION BOX NOTES:

. Distribution box shall be watertight precast concrete with an influent baffle and watertight, removable cover. Unused outlets shall be plugged for future use.

<sup>2.</sup> A minimum 6" sump below outlet invert and minimum 12" inside dimensions shall be provided.  $^{3}$ . Distribution box shall be set level on 6" of 3/4" stone. Verify by filling distribution box with water and observe that all outlets are at same elevation. SEPTIC TANK NOTES:

Septic tank shall be watertight, 1,500 gallon capacity. P. Tank shall be set level on 6" of 3/4" stone.

3. Inside length to width ratio shall be equal to or greater than 1.5, with a

ratio of 2:1 preferred. 4. Tank shall be constructed of reinforced watertight precast concrete and

310 CMR 15.00 (Title 5) and are not meant as stand-alone documents.

shall have manufacturers quality control seal affixed thereon. i. The outlet tee shall be equipped with A1800 Zabel filter (or engineer approved equivalent). DESIGNER NOTES:

No variations from this plan shall be made without written direction from the Designer, Owner and Board of Health Agent.

The contractor shall notify the Designer of any discrepancies between the plan and actual site conditions, should they exist, before installation of the system. These plans are meant to be used by a contractor with an in-depth knowledge of

4. Notwithstanding anything shown or not shown on these drawings, the Owner and Contractor are responsible for complying with the current edition of the Massachusetts Building Code regarding foundation drainage, backfilling and waterproofing and are responsible for ensuring that water does not enter the basement through the walls or floor.

1. THE PUMP CHAMBER ELEVATIONS HAVE BEEN CALCULATED BASED ON A

1,000 GALLON, H-20 RATED, PRECAST CONCRETE TANK WITH INSIDE DIMENSIONS OF 8'-10" LONG BY 4'-2" WIDE. USE OF A PUMP CHAMBER WITH DIFFERENT DIMENSIONS WILL REQUIRE RECALCULATION OF THE LEVEL SWITCH FLEVATIONS. HE PUMP CHAMBER IS A STANDARD 1,000 GALLON PUMP CHAMBER MANUFACTURED BY SHEA CONCRETE PRECAST, ROCHESTER, MA. 2. PUMPS SHALL BE FLOOR MOUNTED SUBMERSIBLE SEWAGE PUMP MYERS MODEL SRM4 OR APPROVED EQUAL. PUMP SHALL DISCHARGE 25 GALLONS PER MINUTE AT A TOTAL DYNAMIC HEAD OF 9 FEET. PUMP MOTOR SHALL BE 4/10-HORSEPOWER, 1650 RPM, SINGLE PHASE. 3. CONTROLS SHALL CONSIST OF A POLE MOUNTED SIMPLEX CONTROL PANEL

4X ENCLOSURE. INCLUDE ALL CABLES, CONDUIT, PAC1 LIQUID LEVEL CONTROL SWITCH (AS MANUFACTURED BY CSI CONTROLS) OR EQUIVALENT (NO FLOAT SWITCHES) HIGH LEVEL ALARM WITH BUZZER AND LIGHT, AND ALL OTHER ELECTRICAL APPURTENANCES REQUIRED TO MAKE A COMPLETE AND WORKING INSTALLATION IN ACCORDANCE WITH TITLE 5 AND ALL OTHER APPLICABLE STATE AND LOCAL CODES AND REGULATIONS. THE ALARM SHALL BE POWERED BY A CIRCUIT SEPARATE FROM THE CIRCUIT TO THE PUMPS.

LOCATED OUTSIDE THE BUILDING. CONTROLS SHALL BE MOUNTED IN A NEMA

4. DISCHARGE PIPING AND APPURTENANCES SHALL BE DUCTILE IRON OR PVC SDR 21 OR STRONGER FOR ALL DISCHARGE PIPING, FITTINGS, CHECK VALVES, GATE VALVES, AND OTHER APPURTENANCES (SEE DETAILS). FURNISH AND INSTALL ALL APPURTENANCES REQUIRED FOR A COMPLETÉ AND WORKING INSTALLATION IN ACCORDANCE WITH TITLE 5. ALL WIRING AND SPECIFICATIONS SHALL BE ACCORDING TO STATE AND

LOCAL CODE. WHERE THERE IS A CONFLICT BETWEEN THESE PLANS AND THE CODE, THE MORE STRINGENT REQUIREMENT SHALL GOVERN. 6. THE PUMPS, PUMP MOTORS, GUIDE RAIL ASSEMBLY, ACCESS HATCH, CONTROLS, AND LEVEL SWITCHES SHALL BE SUPPLIED BY THE PUMP MANUFACTURER TO INSURE COMPATIBILITY OF ALL COMPONENTS. THE SPECIFIED PUMPING EQUIPMENT SHALL BE PURCHASED FROM THE SAME VENDOR TO ENSURE COMPATIBILITY. OTHER PUMPING SYSTEMS MAY BE ACCEPTED UPON REVIEW OF MANUFACTURER'S LITERATURE. COORDINATE ACCESS HATCH WITH PUMP

7. MANUFACTURER SHALL SUPPLY 3 OPERATION AND MAINTENANCE MANUALS WHICH EXPLAIN THE OPERATION OF THE EQUIPMENT AND CONTAIN SUGGESTED ROUTINE MAINTENANCE ACTIVITIES. THE MANUFACTURER'S REPRESENTATIVE SHALL PROVIDE A MINIMUM OF 4-HOURS OF TRAINING TO THE OWNER'S MAINTENANCE

VERIFIED, THE CONTRACTOR MAY PROCEED WITH COMPLETION OF THE LEACHING

MANUFACTURER AND PRECAST CONCRETE COMPANY TO INSURE PROPER OPENING

8. PUMPING EQUIPMENT SHALL BE TESTED PRIOR TO COVERING THE SYSTEM. THE ENGINEER SHALL BE NOTIFIED OF THE TESTING DATE. CONTRACTOR SHALL SUPPLY CLEAN WATER TO TEST THE OPERATION OF THE PUMPS AND FORCE MAIN. THE PUMP MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE DURING TESTING TO TROUBLE SHOOT ANY PROBLEMS WITH THE PUMPING EQUIPMENT. AFTER SUCCESSFUL OPERATION OF THE PUMPS IS

### SEWAGE DISPOSAL SYSTEM DESIGN

PROPERTY ADDRESS: 81 RIDGE ROAD FOXBOROUGH, MA 02035 PREPARED FOR: ARTHUR J. DOOLEY 508.922.0320 ASSESSORS MAP/PARCEL: MAP 034, PARCEL 014 75 RIDGE ROAD FOXBOROUGH, MA 02035

BENCHMARK DESCRIPTION: MAG SET IN UTILITY POLE 21-1 BENCHMARK ELEVATION AND DATUM: EL=278.64 (NAVD 88)

THERE ARE NO PUBLIC WELLS OR SURFACE WATER SUPPLIES WITHIN 400' OF THE PROPOSED SYSTEM. THERE ARE NO PRIVATE WELLS WITHIN 200' OF OF THE PROPOSED SYSTEM. THERE ARE BORDERING VEGETATED WETLANDS WITHIN 150' OF THE PROPOSED SYSTEM.

THERE ARE NO WETLANDS BORDERING A SURFACE WATER SUPPLY OR TRIBUTARIES TO SAME. THERE ARE NO STREAMS AS DEFINED BY THE RIVERS ACT WITHIN 200' OF THE PROPOSED SYSTEM. THERE ARE NO OPEN, SURFACE OR SUBSURFACE DRAINS THAT INTERCEPT HIGH GROUND WATER ON THE LOT.

THERE ARE NO OTHER OPEN, SURFACE OR SUBSURFACE DRAINS ON THE LOT. THE SYSTEM DOES NOT LIE WITHIN A REGULATORY FLOODWAY NOR WITHIN A 100 YEAR FLOOD ZONE. WASTEWATER FROM THE PROPERTY WILL CONSIST OF DOMESTIC WASTE ONLY.

## SCHEDULE OF ELEVATIONS

Finished Grade Above Structure

Top of foundation

Inv. of pipe @ foundation =  $\underline{270.0\pm}$   $\underline{271.3}$ 

Inv. @ septic tank outlet = <u>268.77±</u> <u>271.9</u>

Inv. @ septic tank inlet =  $\underline{269.02\pm}$ 

Inv. @ pump chamber inlet = <u>268.56</u> Inv. @ leaching structure(in) = 273.58 \_276.4 Inv. @ dist. box inlet Bottom of leaching structure = 273.00 276.8 Inv. @ dist. box outlet = 273.75 276.4 Elevation of sand bottom = 272.50

THIS SEWAGE DISPOSAL SYSTEM WAS DESIGNED IN ACCORDANCE WITH THE COMMONWEALTH OF MASSACHUSETTS ENVIRONMENTAL CODE OF REGULATIONS (TITLE 5) AND THE BOARD OF HEALTH REGULATIONS OF THE TOWN/CITY OF

*FOXBOROUGH* ZONE CLASSIFICATION: R-40NITROGEN SENSITIVE AREA ?: YES BUILDING SET-BACKS: FRONT: <u>35'</u> SIDE: <u>15'</u> REAR: <u>30'</u>



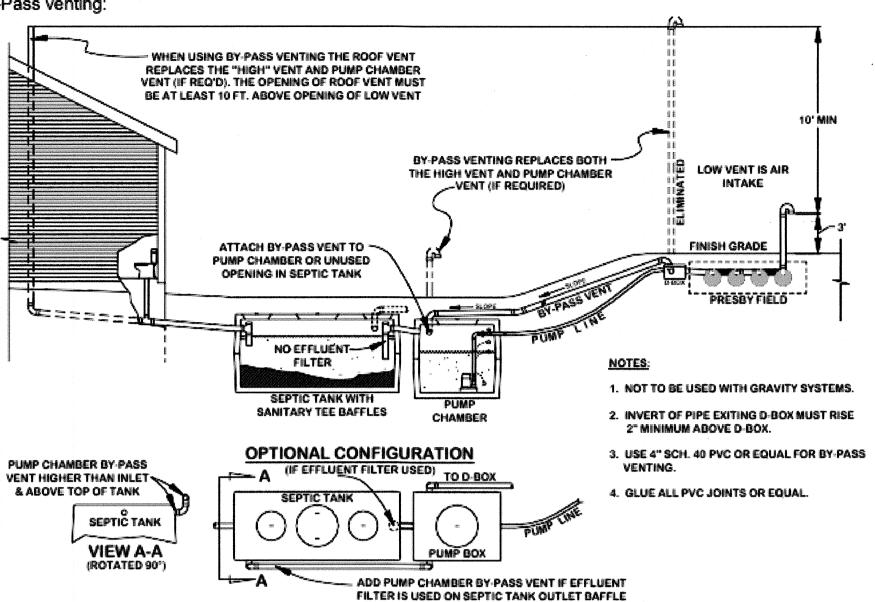
BAY COLONY GROUP, INC. FOUR SCHOOL STREET FOXBOROUGH, MA 02035 (508) 543-3939

DECEMBER 4, 2023 1"=20' Checked by:WBJ Jesigned by: CG JOB NUMBER 1/2/24-REVISE CALCULATIONS *23–0173* 

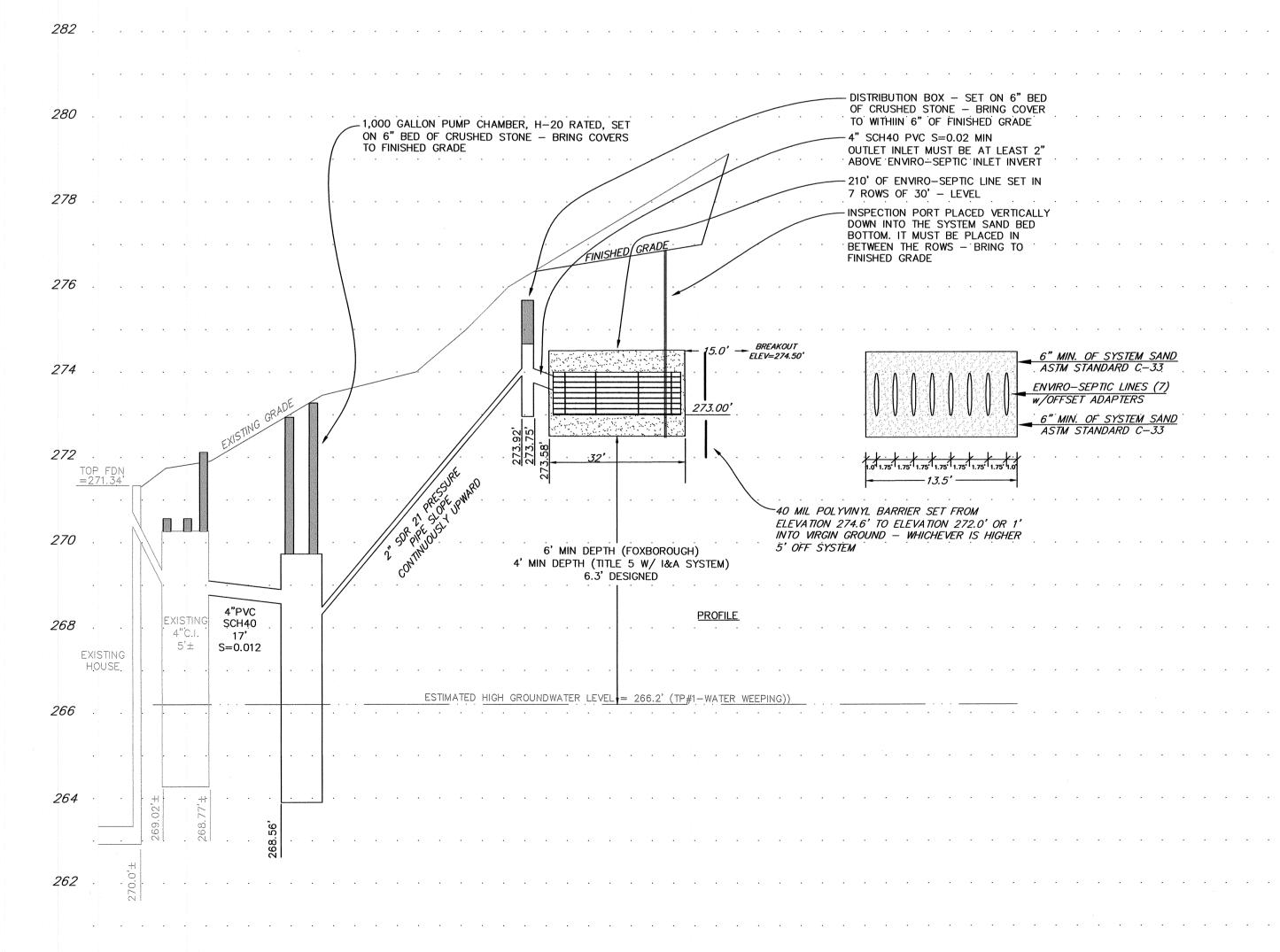
SHEET 1 OF 2

27.9 By-Pass Venting

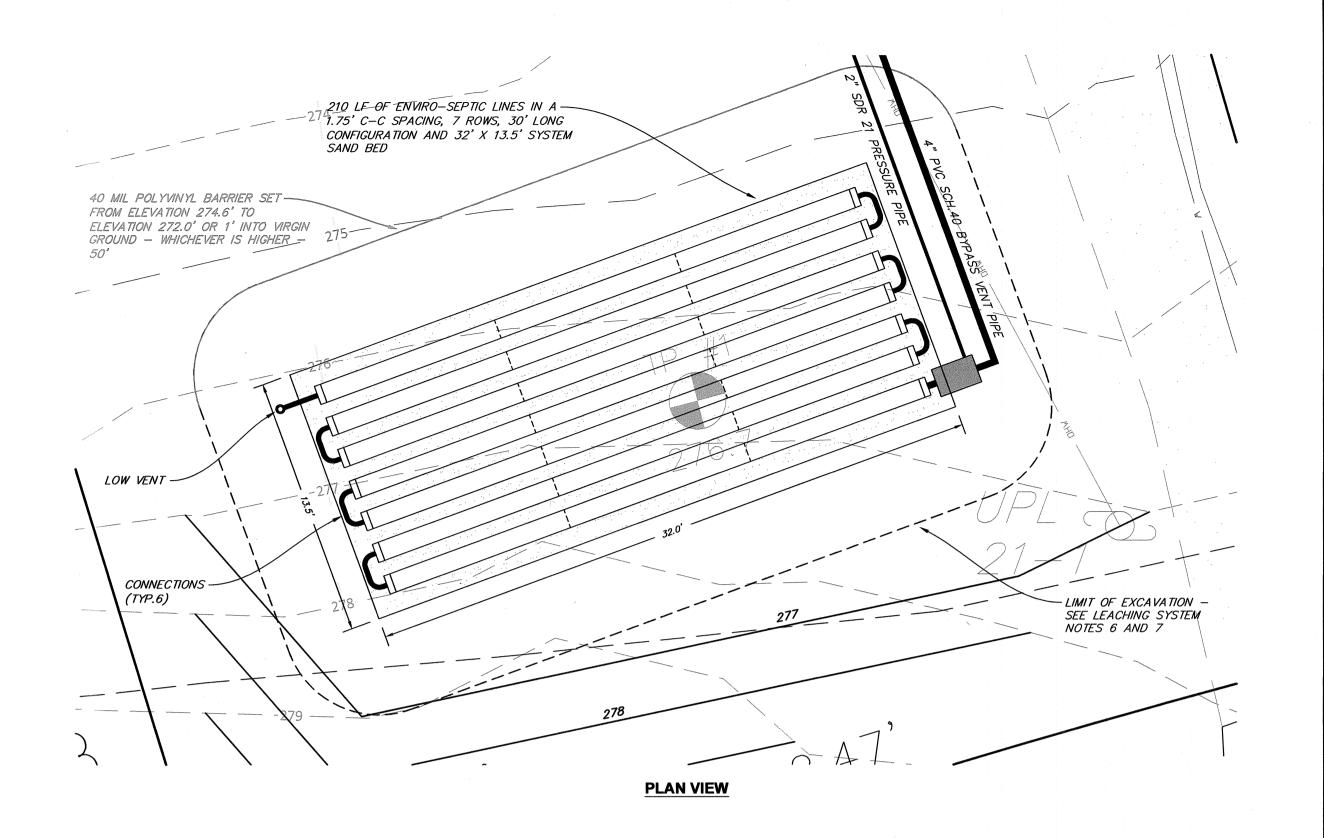
By-Pass venting is used to eliminate the need for a High vent at the field and can also replace the need for a pump chamber vent. There must be at least 10 ft. of elevation between the roof stack and low vent openings. Illustration of By-Pass venting:



BY-PASS VENTING NOT TO SCALE



PROFILE SCALE: HORIZONTAL: 1"=20' / VERTICAL: 1"=2'



PRESBY ENVIRO-SEPTIC FIELD SCALE 1"=5'

|               |   |                                  |   |                            |                                   | : :                    |        |                        |
|---------------|---|----------------------------------|---|----------------------------|-----------------------------------|------------------------|--------|------------------------|
|               | SEWAGE  | DISP                             | OSAL  | SYSTEM                     | DESIGN                            |                        |        |                        |
| PREPARED FOR: | ARTHUR J. DOOLEY 508.922.0320<br>75 RIDGE ROAD FOXBOROUGH, MA 02035   |                                  |   | TY ADDRESS:<br>ORS MAP/PAF | 81 RIDGE ROAD I                   |                        |        | 2035                   |
|               | THIS SEWAGE DISPOSAL SYSTEM WAS DESIGNED IN ACCORDANCE WITH THE COMMONWEALTH OF MASSACHUSETTS ENVIRONMENTAL CODE OF REGULATIONS (TITLE 5) AND THE BOARD OF HEALTH REGULATIONS OF THE TOWN/CITY OF | MASSICE TO THE REPORT OF MASSICE | BAY CO<br>FOUR                                  |                            | GROUP,<br>L STREE<br>MA 0203      | T                      |        |                        |
|               | FOXBOROUGH  |                                  | WILLIAM R.<br>BUCKLEY, JR<br>CIVIL<br>No. 35813 | S                          | Date: DECEMBER 4 Designed by: CG  | 7, 2023<br>Drawn by: ( | Scale: | 1"=20' Checked by:WBJr |
|               | ZONE CLASSIFICATION: <u>R-40</u> NITROGEN SENSITIVE AREA ?: <u>YES</u> BUILDING SET-BACKS:  | 7                                | PO SSOIS<br>PEGISTERED<br>ESSIONAL ENGI         |                            | Revisions:<br>1/2/24-REVISE CALCU | <u> </u>               | .G     | JOB NUMBER 23-0173     |

BUILDING SET-BACKS:

FRONT: <u>35'</u> SIDE: <u>15'</u> REAR: <u>30'</u>

SHEET 2 OF 2