



May 2025
BCP No. C203154 - 101 East 150th Street, Bronx, NY
Remedial Action Workplan
File No. 41.0163097.00 R3

APPENDIX P

REQUEST TO IMPORT / REUSE FILL MATERIAL FORM



**NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION**



Request to Import/Reuse Fill or Soil

This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.

SECTION 1 – SITE BACKGROUND

The allowable site use is:

Have Ecological Resources been identified?

Is this soil originating from the site?

How many cubic yards of soil will be imported/reused?

If greater than 1000 cubic yards will be imported, enter volume to be imported:

SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone?

Does it contain less than 10%, by weight, material that would pass a size 10 sieve?

Does it contain less than 10%, by weight, material that would pass a size 100 sieve?

Is this virgin material from a permitted mine or quarry?

Is this material recycled concrete or brick from a DEC registered processing facility?

SECTION 3 - SAMPLING

Provide a brief description of the number and type of samples collected in the space below:

Example Text: 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.

If the material meets requirements of DER-10 section 5.4(e)5 (other material), no chemical testing needed.

SECTION 3 CONT'D - SAMPLING

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.

If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.

SECTION 4 – SOURCE OF FILL

Name of person providing fill and relationship to the source:

Location where fill was obtained:

Identification of any state or local approvals as a fill source:

If no approvals are available, provide a brief history of the use of the property that is the fill source:

Provide a list of supporting documentation included with this request:

The information provided on this form is accurate and complete.

Signature

Date

Print Name

Firm



APPENDIX Q

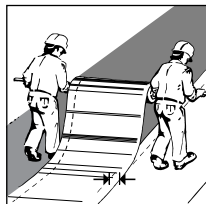
VAPOR BARRIER SYSTEM DETAILS

Preprufe® Waterproofing Membranes

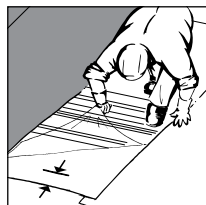
For complete application instructions refer to the technical data sheet for Preprufe found at graceconstruction.com.



(1) Clean surface



(2) Apply membrane



(3) Remove liner



(4) Roll laps

1. Prepare Substrate

- Substrates must be sound and solid to eliminate movement during the concrete pour.
- Substrates must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm).
- Substrates must be free of loose aggregate and sharp protrusions. (Picture 1)
- Surface does not need to be dry, but standing water must be removed.
- Applications may require the use of Hydroduct Drainage Composite or plywood to provide a suitable substrate over the soil retention system.

2. Horizontal Application

- Apply Preprufe membrane with the HDPE film side facing the prepared substrate and the treated white coating surface facing the concrete to be poured. (Picture 2)
- Overlap succeeding sheets by a minimum of 3 in. (75 mm).
- Remove release liner. (Picture 3)
- Roll side lap. (Picture 4)
- Overlap ends of membrane a minimum of 3 in. (75 mm).
- Center Preprufe Tape over end laps and roll firmly. (Refer to Detail Drawings #31 & #32)

- For vertical and horizontal applications in cool temperatures or damp conditions, gently warm side laps or use Preprufe Tape LT.

3. Vertical Application

- Apply Preprufe membrane in a convenient length with HDPE film side facing the prepared substrate.
- Fasten to substrate along the top edge with large head nails, roofing nails or staples. Top termination should be secured with termination bar and fasteners.
- For lengths greater than 8 ft (2.4 m), additional fastening at 2 ft (0.6 m) intervals along the uncoated edge prior to making the side lap is recommended. (Picture 6)
- Roll side lap.
- Overlap ends of membrane a minimum of 3 in. (75 mm).
- Center Preprufe Tape over end laps and roll firmly. If top termination is to be covered with concrete, a strip of tape should also be centered over the termination bar. (Refer to Detail Drawing #48 on page 138)
- Remove release liner.

4. Visual Work Inspection

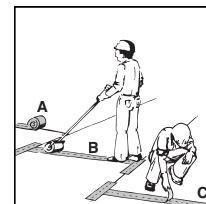
- Inspect the membrane for damage before placing of reinforcing steel, formwork and concrete.
- Repair slices and small punctures which are less than 0.5 in. (13 mm) by applying Preprufe Tape over the damages area and roll firmly.
- Repair holes and punctures greater than 0.5 in. (13 mm) by

applying a patch of Preprufe membrane to extend 6 in. (150 mm) beyond the damaged area. Seal the terminations of the patch with Preprufe Tape.

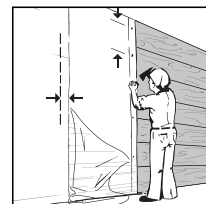
- Ensure plastic release liner is removed from all areas of Preprufe membrane and tape.
- Any exposed Preprufe needs to be protected with an approved protection course prior to backfilling.

5. Concrete Placement

- Cast concrete within 56 days (42 days in hot climates) of application of the membrane.
- Concrete must be placed carefully to avoid damage to the membrane.
- For shotcrete placement, contact your local Grace sales representative.



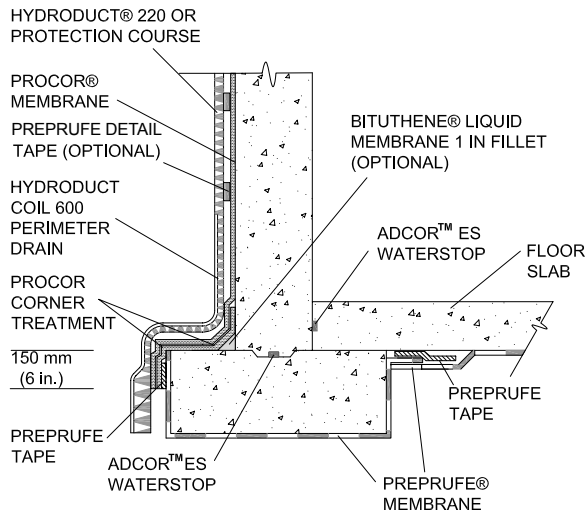
(5) Tape end laps



(6) Fasten to substrate

■ 1 Foundation Wall

Floor Slab at Footing Level (Option 1)



INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

1. Over rough surfaces, install a 1 inch fillet of Bituthene® Liquid Membrane in inside corner at the base of the wall.
2. Apply Preprufe® Tape at the termination of the Preprufe field membrane to ensure good adhesion with the Procor membrane.
3. Install a pre-treatment of 60 mils (1.5 mm) of Procor in the inside corner at the base of the wall, extending, at minimum, 6 in. (150 mm) onto the footing and 6 in. (150 mm) up the wall.
4. Install a pre-treatment of 60 mils (1.5 mm) of Procor on the outside corner of the footing, extending a down to completely cover the Preprufe Tape and a minimum of 6 in. (150 mm) onto the horizontal surface of the footing.
5. Install the field membrane in accordance with the Procor Data Sheet section on Installation. Extend Procor completely over Preprufe tape detail.
6. Apply Hydroduct 220 according to Hydroduct 220 Data Sheet.

Special Notes

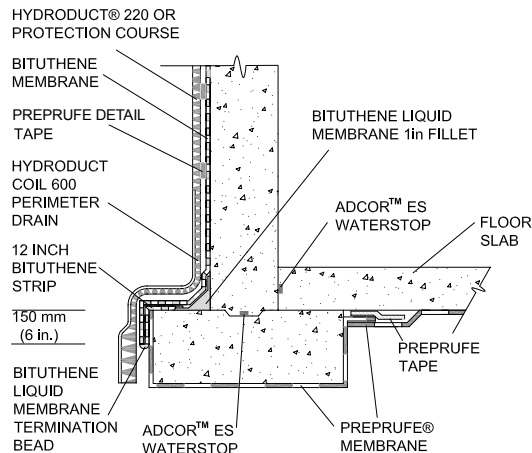
Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Provide temporary protection for Preprufe at the tie-in location until the Procor tie-in is installed. The tie-in should be completed and backfilled as soon as possible. An approved protection course must be used over the exposed Preprufe and the Procor prior to backfilling.

Ensure Adcor™ ES is encapsulated with 76.2 mm (3 in.) of concrete cover minimum. Apply Adcor ES according to the installation instructions found on the data sheet.

■ 2 Foundation Wall

Floor Slab at Footing Level (Option 2)



INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

1. Form a .75 in. (20 mm) fillet of Bituthene Liquid Membrane in corner extending 2.5 in. (65mm) onto wall and footing.
2. Apply a 12 in. (300 mm) Bituthene Strip centered over the outside corner of the footing.
3. Apply Bituthene membrane down wall, onto horizontal surface of footing, and around outside corner of footing.
4. Extend Bituthene a minimum of 6 in. (150 mm) down vertical surface of footing, lapping onto Preprufe membrane. Preprufe installation instructions can be found on the Preprufe Data Sheet at graceconstruction.com.
5. Apply bead of Liquid membrane or Mastic on all terminations.
6. Apply Preprufe, Bituthene and Hydroduct according to the installation instructions found on the data sheet.

Special Notes

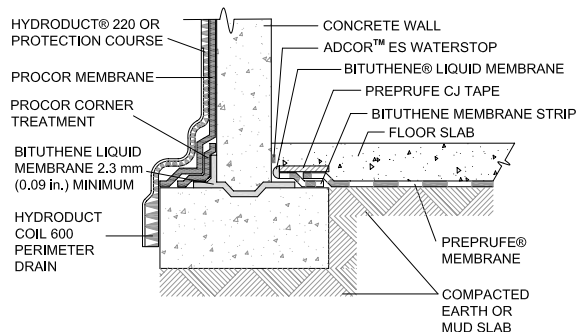
Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation. Provide temporary protection for Preprufe at the tie-in location until the Bituthene tie-in is installed. The tie-in should be completed and backfilled as soon as possible. An approved protection course must be used over the exposed Preprufe and the Bituthene prior to backfilling.

Ensure Adcor™ ES is encapsulated with 76.2 mm (3 in.) of concrete cover minimum. Apply Adcor ES according to the installation instructions found on the data sheet.

Prior to Membrane Installation, Review the Preprufe® Data Sheet

■ 3 Foundation Wall

Floor Slab at Footing Level (Option 3)



NOTE: THE FOOTING KEYWAY SHOULD BE FORMED TO CREATE A REGULAR AND UNIFORM SHAPE ALLOWING PROPER DETAILING OF THE BITUTHENE LIQUID MEMBRANE.

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

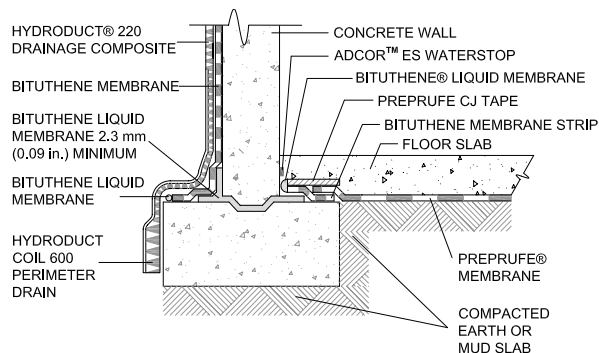
1. Apply 90 mil (2.3 mm) thick Bituthene® Liquid Membrane on horizontal surface of footing in keyway. Extend Liquid Membrane a minimum of 2.5 in. (65 mm) onto horizontal surface of footing on each side of foundation wall, and up external foundation wall surface a minimum of 2.5 in. (65 mm).
2. Install a pre-treatment of 60 mils (1.5 mm) of Procor in the inside corner at the base of the wall, extending, at minimum, 3 in. (75 mm) onto the footing and 3 in. (75 mm) up the wall.
3. Install the field membrane in accordance with the Procor Data Sheet section on Installation
4. Extend Procor field membrane over corner treatment and onto the horizontal surface of the footing.
5. Apply Hydroduct 220 according to Hydroduct 220 Data Sheet. Hydroduct may be adhered directly to freshly applied Procor by simply placing the Hydroduct in the Procor.
6. Apply a strip of Bituthene membrane onto the Liquid Membrane that extends beyond the internal foundation wall surface.
7. Install Preprufe® in accordance with the Preprufe Data Sheet. Overlap Preprufe onto the Bituthene Strip a minimum of 3 in. (75 mm).
8. Install Preprufe CJ Tape centered over the edge of the Preprufe and adhere to the Bituthene Strip and Preprufe.
9. Apply a termination seal of Bituthene Liquid Membrane along Preprufe CJ Tape and Bituthene Strip termination.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation. Ensure Adcor™ ES is encapsulated with 76.2 mm (3 in.) of concrete cover minimum. Apply Adcor ES according to the installation instructions found on the data sheet.

■ 4 Foundation Wall

Floor Slab at Footing Level (Option 4)



NOTE: THE FOOTING KEYWAY SHOULD BE FORMED TO CREATE A REGULAR AND UNIFORM SHAPE ALLOWING PROPER DETAILING OF THE BITUTHENE LIQUID MEMBRANE.

INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

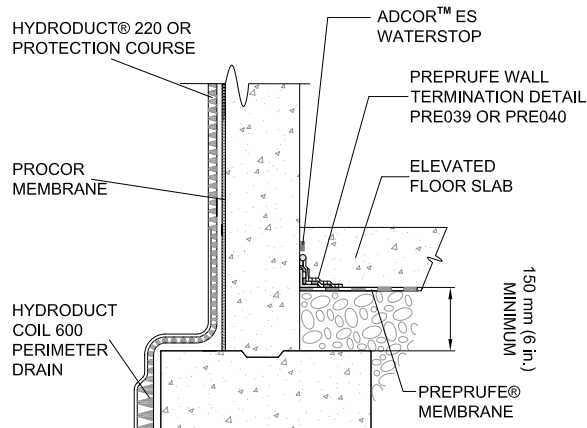
1. Apply Bituthene Liquid Membrane to a thickness of 90 mil (2.3 mm) on the horizontal surface of the footing in the keyway. Extend the Liquid Membrane a minimum of 2.5 in. (65 mm) onto the horizontal surface of the footing on each side of the foundation wall, and extend up the external foundation wall surface a minimum of 2.5 in. (65 mm).
2. Apply a strip of Bituthene membrane onto the Liquid Membrane that extends beyond the internal foundation wall surface.
3. Apply Preprufe® membrane in accordance with the Preprufe data sheet and overlap the Preprufe membrane onto the Bituthene Strip a minimum of 3 in. (75 mm).
4. Install Preprufe CJ Tape centered over the edge of the Preprufe membrane and adhere it to the Bituthene strip and Preprufe membrane.
5. Apply a termination seal of Bituthene Liquid Membrane along the Preprufe Tape and Bituthene Strip termination.
6. Install the Bituthene on the wall in accordance with the Bituthene Data Sheet section on installation.
7. Apply bead of Liquid Membrane or Mastic on all terminations.
8. Apply Preprufe and Hydroduct according to the installation instructions found on the data sheet.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation. Ensure Adcor™ ES is encapsulated with 76.2 mm (3 in.) of concrete cover minimum. Apply Adcor ES according to the installation instructions found on the data sheet.

■ 5 Foundation Wall

Elevated Floor Slab (Option 1)



NOTE: INTENDED FOR PROJECTS WITH PERMANENT DEWATERING OR NON-HYDROSTATIC CONDITIONS

INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

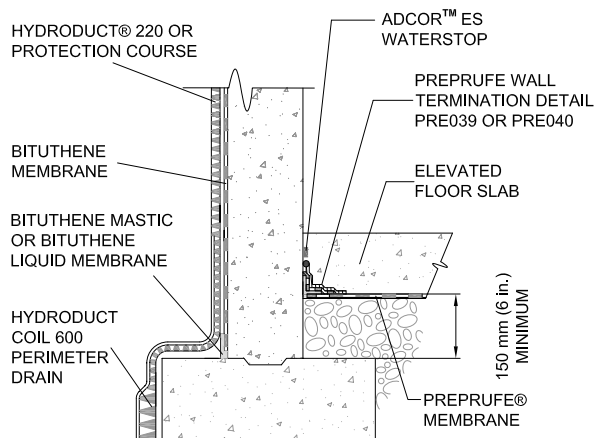
1. Install the Procor and Preprufe membranes in accordance with the Procor and Preprufe Data Sheet section on installation.
2. Apply Hydroduct 220 according to Hydroduct 220 Data Sheet. Hydroduct may be adhered directly to freshly sprayed Procor by simply placing the Hydroduct in the wet Procor.
3. Terminate the Preprufe at the foundation wall.
4. Apply Preprufe Wall Termination detail PRE039.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation. Ensure Adcor™ ES is encapsulated with 76.2 mm (3 in.) of concrete cover minimum. Apply Adcor ES according to the installation instructions found on the data sheet.

■ 6 Foundation Wall

Elevated Floor Slab (Option 2)



NOTE: INTENDED FOR PROJECTS WITH PERMANENT DEWATERING OR NON-HYDROSTATIC CONDITIONS

INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

1. Install the field membrane in accordance with the Bituthene Data Sheet section on Installation.
2. Apply membrane to within 1 in. (25 mm) of base of wall.
3. Apply Bituthene Liquid membrane in corner, extending over membrane a minimum of 1 in. (25 mm).
4. Terminate the Preprufe at the foundation wall.
5. Apply Preprufe Wall Termination detail PRE039.
6. Apply Hydroduct 220 according to Hydroduct 220 Data Sheet.

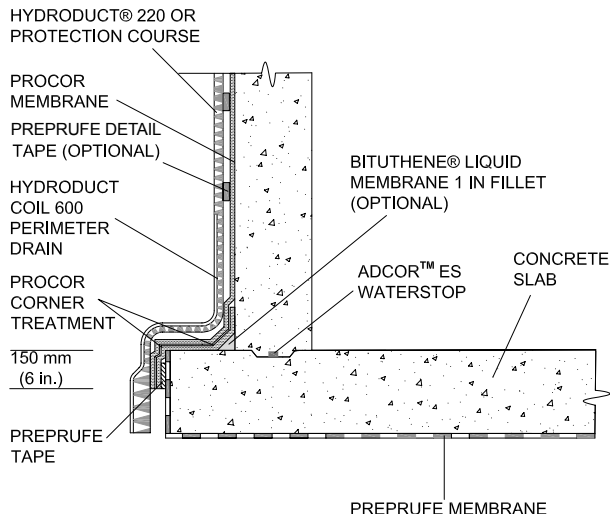
Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Ensure Adcor™ ES is encapsulated with 76.2 mm (3 in.) of concrete cover minimum. Apply Adcor ES according to the installation instructions found on the data sheet.

■ 7 Tie into Preprufe®

At Structural Slab



INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

1. Install Preprufe membrane in accordance with the Preprufe Data Sheet section on installation.
2. Over rough surfaces, apply a 1 in. (25 mm) fillet of Bituthene Liquid Membrane to inside corner at the base of the wall.
3. Install a pre-treatment of 60 mils (1.5 mm) of Procormembrane in the inside corner at the base of the wall, extending at minimum of 3 in. (75 mm) onto the footing and 3 in. (75 mm) up the wall.
4. Apply Preprufe Tape at the termination of the Preprufe field membrane to ensure good adhesion of the Procormembrane.
5. Install the field membrane in accordance with the Procormembrane Data Sheet section on Installation. Extend Procormembrane completely over Preprufe Tape detail.
6. Apply Hydroduct 220 according to Hydroduct 220 Data Sheet.

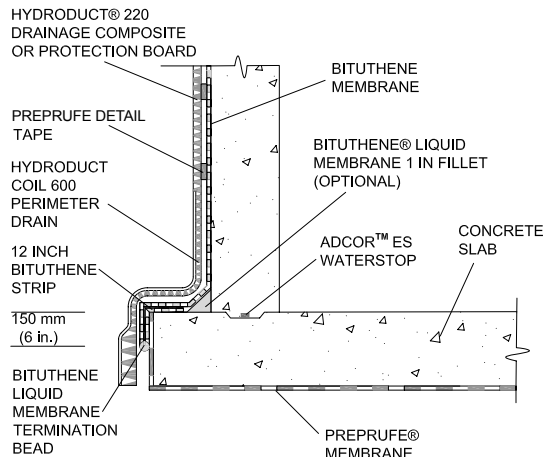
Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation. Provide temporary protection for Preprufe at the tie-in location until the Procormembrane tie-in is installed. The tie-in should be completed and backfilled as soon as possible. An approved protection course must be used over the exposed Preprufe and the Procormembrane prior to backfilling.

Ensure Adcor™ ES is encapsulated with 76.2 mm (3 in.) of concrete cover minimum. Apply Adcor ES according to the installation instructions found on the data sheet.

■ 8 Foundation Wall

Structural Slab



INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

1. Install Preprufe membrane in accordance with the Preprufe Data Sheet section on installation.
2. Install a .75 in. (20 mm) fillet of Bituthene Liquid Membrane in corner extending 2.5 in. (65 mm) onto wall and footing. Allow to cure.
3. Apply a 12 in. (300 mm) Bituthene strip centered over the outside corner of the footing.
4. Apply Bituthene membrane down wall, onto horizontal surface of the footing, and around the outside corner of the footing.
5. Extend Bituthene a minimum of 6 in. (150 mm) down vertical surface of footing, lapping onto Preprufe membrane. Do not apply primer to the back of the Preprufe for installation of the Bituthene.
6. Apply a bead of Liquid Membrane or Mastic on all terminations.
7. Apply Hydroduct 220 according to Hydroduct 220 Data Sheet.

Special Notes

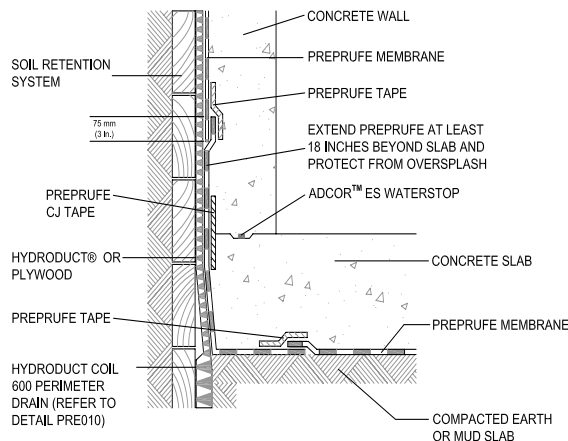
Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Provide temporary protection for Preprufe at the tie-in location until the Bituthene tie-in is installed. The tie-in should be completed and backfilled as soon as possible. An approved protection course must be used over the exposed Preprufe and the Bituthene prior to backfilling.

Ensure Adcor™ ES is encapsulated with 76.2 mm (3 in.) of concrete cover minimum. Apply Adcor ES according to the installation instructions found on the data sheet.

Prior to Membrane Installation, Review the Preprufe® Data Sheet

■ 9 Blind Side Wall to Slab Tie-in



Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

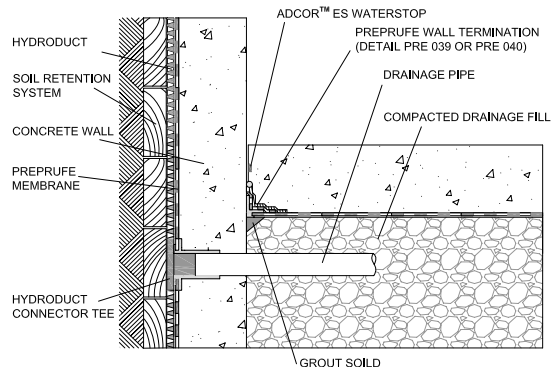
1. Install Preprufe Membrane over the mud slab or compacted earth as detailed in horizontal and vertical applications on the Preprufe Data Sheet.
2. Continue onto the vertical surface of the prepared soil retention system a minimum of 18 in. (450 mm) above the finished elevation of the structural floor slab. It is good practice to extend the Preprufe above the height of the rebar from the slab.
3. Apply Preprufe CJ Tape to the Preprufe membrane centered over the finished elevation of the concrete slab.
4. Secure the top of the membrane to temporarily hold it in place on the vertical substrate. Care should be taken to prevent damage to this exposed membrane from concrete back-splash as well as slag from rebar welding in wall forms, by keeping the release liner on and protected with protection board, plywood or other material.
5. If the exposed membrane above the slab is contaminated with concrete oversplash in the lap area, it must be cleaned down to good material before adhering Preprufe Tape.
6. Install Preprufe Membrane over the prepared vertical soil retention system according to standard application instructions on the Preprufe Data Sheet.
7. Unfasten the vertical length of the Preprufe Membrane that extends above the slab and tuck the Preprufe 160R behind the 18 in. (450 mm) length of Preprufe 300R, ensuring a minimum 3 in. (75 mm) lap.
8. Install Preprufe Tape centered over the lap.
9. Remove release liner and roll tape to ensure good adhesion using steel or vinyl cylindrical and Vee roller.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Ensure Adcor™ ES is encapsulated with 76.2 mm (3 in.) of concrete cover minimum. Apply Adcor ES according to the installation instructions found on the data sheet.

■ 10 Below Slab Drainage with Hydroduct® Connector Tee



NOTE: NOT INTENDED FOR HYDROSTATIC CONDITIONS

INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

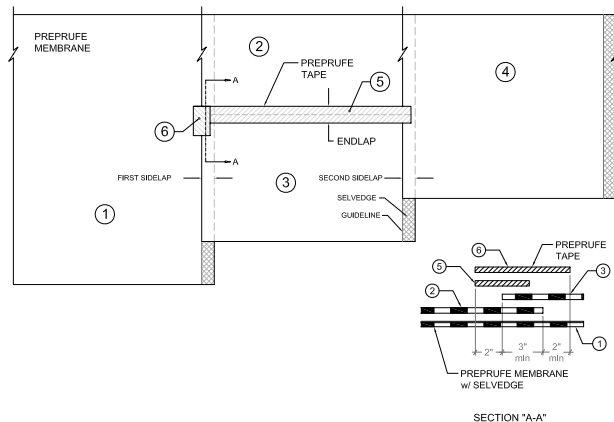
1. Install Preprufe Membrane over the compacted drainage fill as detailed in horizontal applications in the Preprufe Data Sheet.
2. Install Preprufe Membrane and Hydroduct on the soil retention system as detailed in vertical applications in the Preprufe Data Sheet.
3. Apply the Hydroduct Connector Tee to the face of the Hydroduct as described in the Hydroduct Coil 600 Data Sheet.
4. Connect a 4 in. drainage pipe on the connector tee and extend to an appropriate drainage area.
5. Seal all joints of the drainage system with 3 in. underground tape.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Ensure Adcor™ ES is encapsulated with 76.2 mm (3 in.) of concrete cover minimum. Apply Adcor ES according to the installation instructions found on the data sheet.

■ 31 End Lap Detail for Wall or Slab (Option 1) Tape applied after installation of side laps



NOTE: INSTALL PREPRUFE® MEMBRANE AND TAPE
IN ORDER AS SHOWN BY NUMBERS.

INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

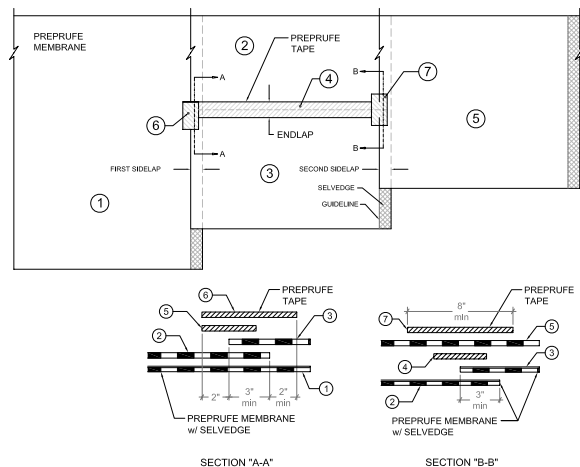
1. Apply Hydroduct® according to Hydroduct Data Sheet.
2. Install Preprufe Membrane and tape in order as shown by numbers.
3. Overlap the ends of the membrane a minimum of 3 in. (75 mm) and remove release liner from both membranes.
4. Apply Preprufe Tape over the end lap as shown and roll firmly.
5. Apply tape a minimum of 2 in. (50 mm) beyond all edges of membrane that are not sealed by the seldge.
6. Remove release liner from tape and discard.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

■ 32 End Lap Detail for Wall or Slab (Option 2)

Tape applied before installation
of 2nd side lap



NOTE: INSTALL PREPRUFE® MEMBRANE AND TAPE
IN ORDER AS SHOWN BY NUMBERS.

INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

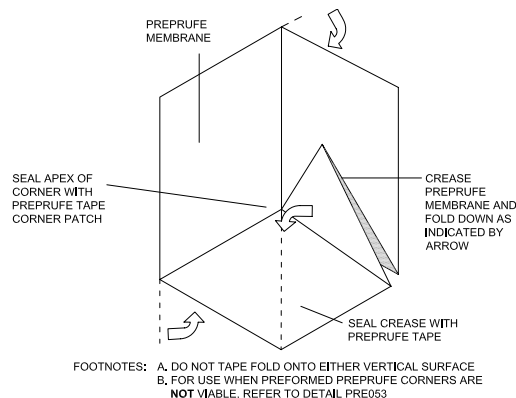
Detailing

1. Apply Hydroduct® according to Hydroduct Data Sheet.
2. Install Preprufe Membrane and tape in order as shown by numbers.
3. Overlap the ends of the membrane a minimum of 3 in. (75 mm) and remove release liner from both membranes.
4. Apply Preprufe Tape over the end lap as shown and roll firmly.
5. Apply tape a minimum of 2 in. (50 mm) beyond all edges of membrane that are not sealed by the selvedge.
6. Remove release liner from tape and discard.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

33 Inside Corner - Custom Formed



INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

1. Precut a square section of Preprufe membrane (minimum 12 in. [300 mm] x 12 in. [300 mm]).
2. Fold membrane as indicated on detail drawing, with release liner on.
3. Crease the fold with nominal hand pressure to ensure a close fit to the substrate profile and avoid hollows.
4. With the white coating facing towards the concrete, ensure that the apex of the corner is covered and sealed with Preprufe Tape.
5. Remove release liner and roll tape firmly using steel or vinyl cylindrical or Vee roller.
6. Seal corner detail to Preprufe field membrane using Preprufe Tape and roll firmly.
7. Apply Hydroduct® according to Hydroduct Data Sheet.

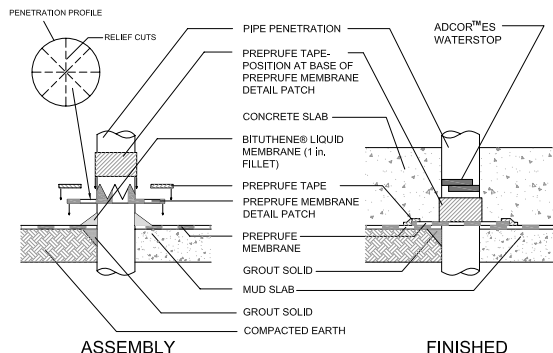
Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Prior to Membrane Installation, Review the Preprufe® Data Sheet

■ 34 Pipe Penetration

(For Wall or Slab)



*FOOTNOTES:

- ALL PENETRATIONS TO BE GROUTED.
- A MINIMUM OF 6 IN. (150 MM) IS REQUIRED BETWEEN PENETRATIONS TO ENSURE PROPER DETAILING.
- AVOID PLACEMENT OF MULTIPLE PENETRATIONS.
- A MINIMUM OF 6 IN. (150 MM) OF PIPE NEEDS TO BE EXPOSED AND FREE OF CONNECTIONS, OBSTRUCTIONS, HANGERS, ETC. TO ENSURE PROPER EXECUTION OF THE DETAIL.

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

1. All penetrations must be firmly secured and stable. Grout around all penetrations that are not stable. For compacted earth, extend grout a minimum of 3 in. (75 mm) in all directions. Clean loose dust or dirt from the penetration surface using a clean, dry cloth or brush.
2. Cut the field membrane tight to the penetration and remove release liner. If membrane is not within 0.5 in. (12 mm) of penetration and not more than 2 in. (50 mm) from penetration, apply Preprufe Tape to cover the gap. Roll firmly into place and remove release liner. If the membrane is greater than 2 in. (50 mm) from penetration, install more Preprufe Membrane to cover the gap repeating these instructions until Preprufe Membrane/Tape is within 0.5 in. (12 mm).
3. Mix and apply Bituthene Liquid Membrane around the penetration. Liquid Membrane should be placed to form a minimum 1 in. (25 mm) continuous fillet between the Preprufe Membrane/Tape and the base of the penetration. Cut "star" within trace of penetration to allow for patch to slide over penetration.
4. Cut a patch of Preprufe Membrane that is a minimum of 12 in. (300 mm) larger than the diameter or width of the penetration so that the patch extends 6 in. (150 mm) beyond the penetration in all directions. Remove the release liner and center the patch over penetration and trace/draw the penetration profile onto the patch. Using sheers or utility knife, make relief cuts through the membrane. Refer to relief cut figures on right. Triangles formed by making a relief cut is not to exceed 2 in. (50 mm) in height when placed over penetration, i.e. penetration diameters or widths greater than 4 in. (100 mm) need to be trimmed. Remove and discard release liner.
5. Slide the patch over penetration and press into the partially cured Liquid Membrane. Ensure that the patch is pressed firmly into the Liquid Membrane and is positioned directly onto the Preprufe Field Membrane/Tape below. Using a trowel, smooth out any Liquid Membrane that has flowed out of the relief cut.
6. Apply Preprufe Tape centered over the edges of the patch and roll firmly to form a tight seal to the Preprufe Field Membrane. Remove release liner from tape and discard.
7. Wrap the penetration with Preprufe Tape, positioning the tape at the base of the patch. Remove enough release liner to overlap Tape on to itself and roll/press firmly into place. Remove remaining release liner and discard. Repair small fishmouths by pressing firmly against penetration and repair large fishmouths by patching with Preprufe Tape.

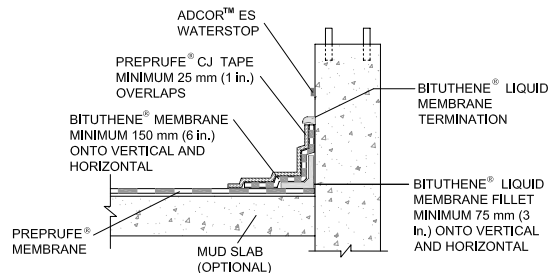
Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Ensure Adcor™ ES is encapsulated with 76.2 mm (3 in.) of concrete cover minimum. Apply Adcor ES according to the installation instructions found on the data sheet.

Prior to Membrane Installation, Review the Preprufe® Data Sheet

■ 35 Straight Edge Penetration



*FOOTNOTE: ALL PENETRATION TO BE GROUTED.

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

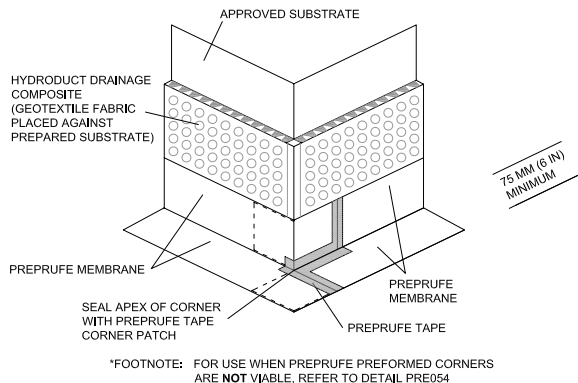
Detailing

1. All penetrations must be firmly secured and stable. Grout around all penetrations that are not stable. Clean loose dust or dirt from the penetration and the surrounding substrate surface using a clean, dry cloth or brush.
2. Cut the Preprufe Field Membrane within 0.5 in. (13 mm) of the penetration and remove release liner.
3. Apply Liquid Membrane to form a minimum 1 in. (25 mm) continuous fillet between the Preprufe Membrane and the base of the penetration. Extend a 90 mil (2.2 mm) continuous coating of Liquid Membrane overlapping a minimum of 3 in. (75 mm) onto the surface of the Preprufe Membrane and 3 in. (75 mm) onto the penetration.
4. Install a minimum 12 in. (300 mm) strip of Bituthene Membrane centered over the Liquid Membrane fillet so that the Bituthene Membrane extends 6 in. (150 mm) onto the penetration and Preprufe Membrane. For concrete penetrations, apply Bituthene Primer as per standard Grace instructions prior to installation of Bituthene Membrane.
5. Apply a strip of Preprufe CJ Tape onto the Bituthene Membrane and overlap onto the Preprufe Field Membrane by a minimum of 2 in. (50 mm). Apply a second strip of Preprufe CJ Tape starting at the top leading edge of the Bituthene Membrane and overlap onto the first strip of Preprufe CJ Tape by a minimum of 2 in. (50 mm).
6. Terminate the top leading edge of Preprufe CJ Tape and Bituthene Membrane with a bead of Bituthene Liquid Membrane.
7. Seal apex of all outside corners with Preprufe Tape corner patch as necessary.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation. Ensure Adcor™ ES is encapsulated with 76.2 mm (3 in.) of concrete cover minimum. Apply Adcor ES according to the installation instructions found on the data sheet.

36 Outside Corner - Custom Formed



INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

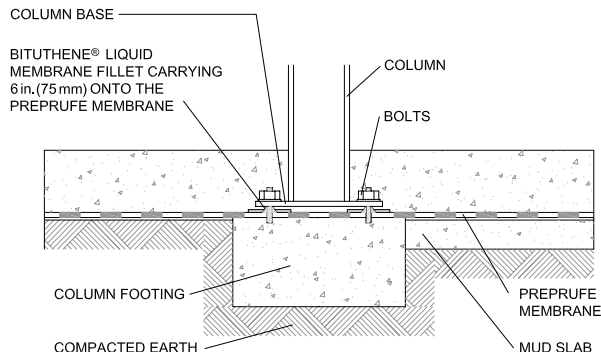
1. Fold the Preprufe membrane, ensuring a minimum 6 in. (75mm) return onto the horizontal, to allow tie-in to the Preprufe field membrane.
2. Crease the fold with nominal hand pressure to ensure a close fit to the substrate profile and avoid hollows or draping of the membrane.
3. Make relief cuts in the Preprufe Membrane in order to wrap around corner.
4. Seal the relief cuts with Preprufe Tape and ensure that the apex of the corner is covered and sealed with Preprufe Tape.
5. Remove release liner and roll tape to ensure good adhesion using steel or vinyl cylindrical or Vee roller.
6. Apply Hydroduct® according to Hydroduct Data Sheet.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

■ 37 Column

(Option 1)



INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

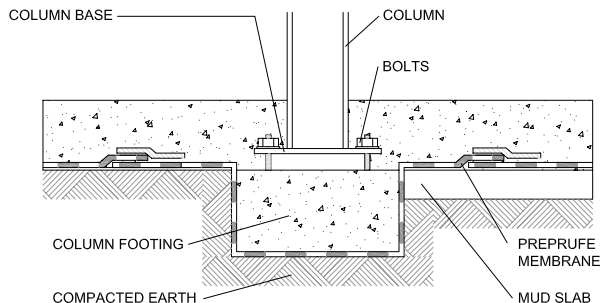
1. Place Preprufe membrane over the column footing and directly under the column.
2. Tie-in penetrations such as rebar and threaded rod that penetrate the membrane should be sealed with Bituthene Liquid Membrane.
3. Cut the membrane tight to the penetration and ensure the penetration is free from rust, dirt, dust, etc.
4. If membrane is not within 0.5 in. (13 mm) of penetration, apply Preprufe Tape to cover the gap.
5. Mix and apply Bituthene Liquid Membrane around the penetration.
6. Bituthene Liquid Membrane should be placed to form a minimum 1 in. (25 mm) continuous fillet around the penetration at the point of penetration.
7. Bituthene Liquid Membrane should be applied as a 90 mil (2.2 mm) continuous coating overlapping a minimum of 3 in. (75 mm) onto the surface of the Preprufe Membrane.
8. Apply Hydroduct® according to Hydroduct Data Sheet.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

■ 38 Column

(Option 2)



INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

1. Install the membrane following the vertical and horizontal application instructions on the Preprufe data sheet found at graceconstruction.com.
2. Place the Preprufe membrane below the column footing before it is poured.
3. When placing the membrane it is important to leave sufficient length (typically 18 in. [300 mm]) of Preprufe 300R beyond the footing to allow for tie-in to the Preprufe membrane that will be laid to waterproof the general slab area.
4. Leave release liner on this extra length and protect it from damage until the tie-in details are completed.
5. Apply Hydroduct® according to Hydroduct Data Sheet.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

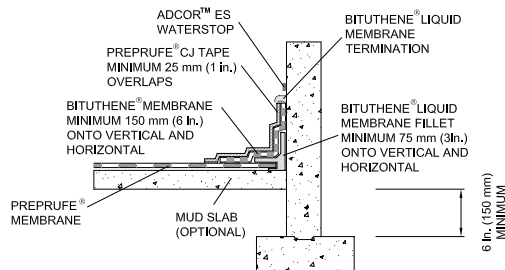
1. Install Preprufe 300R Membrane over mud slab.
2. For compacted earth, proper compaction is required. If the wall area is too small to allow proper compaction, the base of the wall should be grouted solid. Areas to receive Bituthene Liquid Membrane **MUST** be grouted solid.
3. Apply Bituthene Liquid Membrane on the mud slab from the base of the wall to a minimum of 0.5 in. (13 mm) under where the leading edge of the Preprufe Membrane will terminate.
4. Install Preprufe 300R Membrane within 0.5 in. (13 mm) of all vertical and horizontal intersections.
5. Apply Liquid Membrane to form a minimum 1 in. (25 mm) continuous fillet between the Preprufe Membrane and the wall. Extend a 90 mil (2.2 mm) continuous coating of Liquid Membrane overlapping a minimum of 3 in. (75 mm) onto the surface of the Preprufe Membrane and 3 in. (75 mm) onto the wall.
6. Install a minimum 12 in. (300 mm) strip of Bituthene Membrane centered over the Liquid Membrane fillet so that the Bituthene Membrane extends 6 in. (150 mm) onto the wall and 6 in. (150 mm) onto the Preprufe Membrane. Apply Bituthene Primer as per standard Grace instructions prior to installation of Bituthene Membrane.
7. Apply a strip of Preprufe CJ Tape onto the Bituthene Membrane and overlap onto the Preprufe Field Membrane by a minimum of 2 in. (50 mm). Apply a second strip of Preprufe CJ Tape starting at the top leading edge of the Bituthene Membrane and overlap onto the first strip of Preprufe CJ Tape by a minimum of 2 in. (50 mm).
8. Terminate the top leading edge of Preprufe CJ Tape and Bituthene Membrane with a bead of Bituthene Liquid Membrane.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Ensure Adcor™ ES is encapsulated with 76.2 mm (3 in.) of concrete cover minimum. Apply Adcor ES according to the installation instructions found on the data sheet.

■ 39 Wall Termination for Elevated Slab

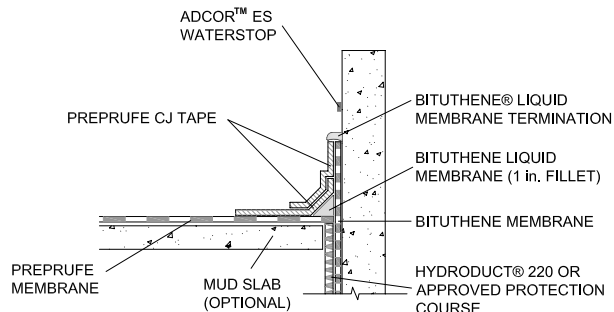


*FOOTNOTES:

- IF A MUDSLAB IS NOT USED, THE SUBSTRATE TO ACCEPT BITUTHENE LIQUID MEMBRANE MUST BE GROUTED SOLID TO PROVIDE AN ACCEPTABLE SUBSTRATE FOR THE LIQUID MEMBRANE.
- NOT INTENDED FOR HYDROSTATIC CONDITIONS.

Prior to Membrane Installation, Review the Preprufe® Data Sheet

■ 40 Wall Termination to Bituthene Membrane



Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than .05 in. (12 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation. Ensure the surface of the Bituthene Membrane is protected during Preprufe installation.

Detailing

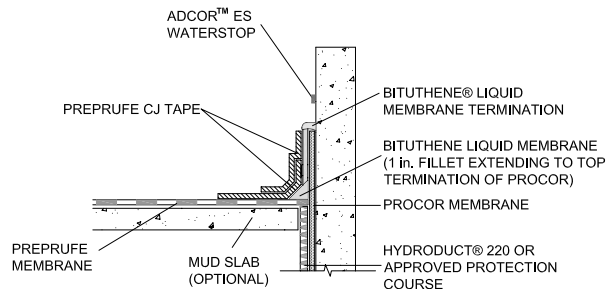
1. Install Preprufe 300R Membrane over the prepared substrate as outlined in the Preprufe Data Sheet found at graceconstruction.com.
2. For compacted earth, proper compaction is required. If the wall area is too small to allow proper compaction, the base of the wall should be grouted solid.
3. Install Preprufe 300R Membrane tight to all vertical and horizontal intersections.
4. Apply Bituthene Liquid Membrane to form a minimum 1 in. (25 mm) continuous fillet between the Preprufe membrane and the Bituthene membrane.
5. Starting a minimum of 4 in. (100 mm) from the edge of the Liquid Membrane fillet, apply Preprufe CJ Tape and extend it over the Liquid Membrane fillet and onto the Bituthene Membrane.
6. Apply a second strip of Preprufe CJ Tape starting at the top leading edge of the Bituthene Membrane and overlap onto the first strip of Preprufe CJ Tape by a minimum of 2 in. (50 mm).
7. Terminate the top leading edge of Preprufe CJ Tape and Bituthene Membrane with a bead of Bituthene Liquid Membrane.
8. Roll tape to ensure good adhesion using steel or vinyl cylindrical or Vee roller.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation. Ensure Adcor™ ES is encapsulated with 76.2 mm (3 in.) of concrete cover minimum. Apply Adcor ES according to the installation instructions found on the data sheet.

Prior to Membrane Installation, Review the Preprufe® Data Sheet

■ 41 Wall Termination to Procor Membrane



Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than .05 in. (12 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation. Ensure the surface of the Bituthene Membrane is protected during Preprufe installation.

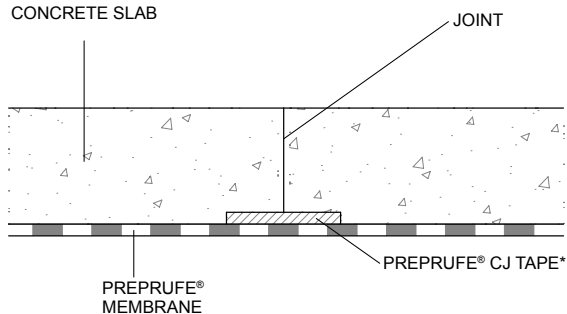
Detailing

1. Install Preprufe 300R Membrane over the prepared substrate as outlined in the Preprufe Data Sheet found at graceconstruction.com.
2. For compacted earth, proper compaction is required. If the wall area is too small to allow proper compaction, the base of the wall should be grouted solid.
3. Install Preprufe 300R Membrane tight to all vertical and horizontal intersections.
4. Apply Bituthene® Liquid Membrane to form a minimum 1 in. (25 mm) continuous fillet in the corner where the Preprufe and Procor meet. Extend the Bituthene Liquid Membrane vertically to the top leading edge of the Procor Membrane.
5. Starting a minimum of 4 in. (100 mm) from the edge of the Liquid Membrane fillet, apply Preprufe CJ Tape and extend it over the Liquid Membrane fillet and onto the Procor Membrane.
6. Apply a second strip of Preprufe CJ Tape starting at the top leading edge of the Procor Membrane and overlap onto the first strip of Preprufe CJ Tape by a minimum of 2 in. (50 mm).
7. Terminate the top leading edge of Preprufe CJ Tape and Procor Membrane with a bead of Bituthene Liquid Membrane.
8. Roll tape to ensure good adhesion using steel or vinyl cylindrical or Vee roller.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation. Ensure Adcor™ ES is encapsulated with 76.2 mm (3 in.) of concrete cover minimum. Apply Adcor ES according to the installation instructions found on the data sheet.

■ 42 Joint Contraction (Control) and Construction Joints



*NOTE: FOR JOINTS WITH EXPECTED MOVEMENT
NOT TO EXCEED 0.5 IN. (13MM).

INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than ½ inch. The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

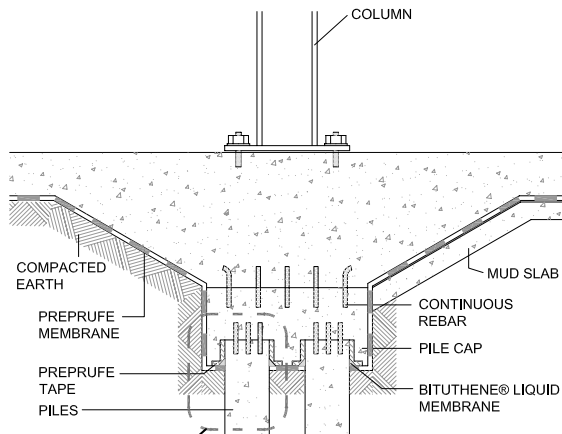
Detailing

1. Install Preprufe membrane according to standard horizontal and vertical application instructions on the Preprufe data sheet found at graceconstruction.com.
2. Preprufe CJ Tape should be applied to the surface of the Preprufe membrane and centered along the line of all contraction (control) and construction joints.
3. Remove release liner and roll tape to ensure good adhesion using steel or vinyl cylindrical Vee roller.
4. Ensure and damaged tape or membrane is repaired after removal of formwork or bulkhead.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

■ 43 Grade Beam Pile Cap (Option 1)



*NOTE: REFER TO PREPRUFE STRAIGHT EDGE PENETRATION DETAIL PRE 035 OR PREPRUFE PIPE PENETRATION DETAIL PRE 034 DEPENDING ON SHAPE OF PILE

INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

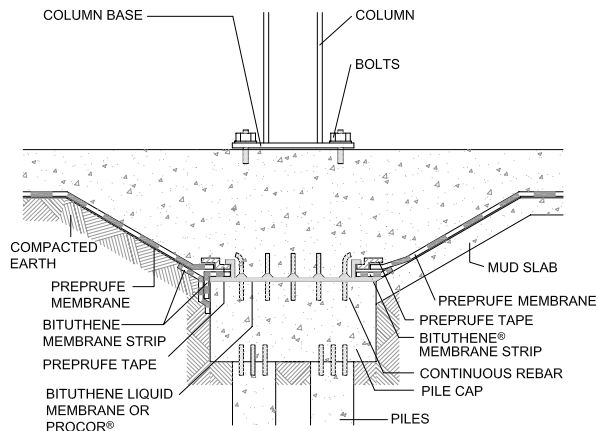
1. Install Preprufe Membrane over the prepared substrate in accord with standard installation instructions.
2. Preprufe Membrane is placed in the area formed for the pile cap before the concrete is poured.
3. When placing the membrane it is important to leave sufficient length (typically 12 in. [300 mm]) of Preprufe beyond the pile cap area to allow for tie-in to the Preprufe Membrane that will be laid to waterproof the general slab area.
4. Cut membrane within 0.5 in. (13 mm) of each pile and complete detail around each pile in accordance with Detail PRE 035 or Detail PRE 034 depending on shape of pile.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation. Piles must extend a minimum of 6 in. (150 mm) above the substrate to ensure proper execution of the detail.

■ 44 Grade Beam Pile Cap

(Option 2)



INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

1. To allow for proper tie-in between Preprufe Field Membrane and pile cap, a 6 in. (150 mm) ledge/shelf along the pile cap's perimeter is required.

For Mud Slabs

1. Clean loose dust or dirt from the pile cap and mud slab surface using a clean, dry cloth or brush.
2. Apply a continuous 90 mil (2.2 mm) coating of Bituthene Liquid Membrane or Procor over the top of the pile cap.
3. Place a 1 in. (25 mm) bead of Liquid Membrane or Procor around all penetrations at the point of penetration through the pile cap.
4. Prime along the edge of the mud slab a minimum of 6 in. (150 mm) from the edge of pile cap with a Bituthene Primer and allow to dry.
5. Align a 9 in. (225 mm) strip of Bituthene Membrane centered over the edge of the pile cap. Remove release liner and roll firmly onto the Liquid Membrane and primed mud slab.
6. Install Preprufe Membrane over the prepared substrate and terminate it 2 in. (50 mm) onto the pile cap.
7. Apply Preprufe Tape centered over the Preprufe Membrane termination. Remove the release liner and roll firmly.
8. Seal Bituthene Membrane and Preprufe Tape edge with a termination bead of Liquid Membrane.

(Continued on next page)

For Compacted Earth

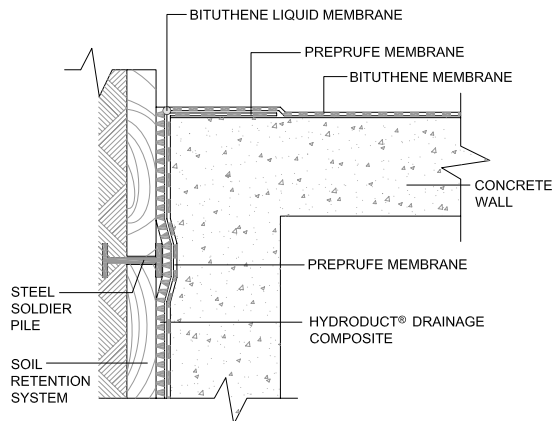
1. Apply a continuous 90 mil (2.2 mm) coating of Bituthene Liquid Membrane or Procor over the top of the pile cap.
2. Place a 1 in. (25 mm) bead of Liquid Membrane or Procor around all penetrations at the point of penetration through the pile cap.
3. Remove compacted earth away from sides of pile cap and remove formwork. Clean loose dust or dirt from the pile cap surface using a clean, dry cloth or brush.
4. Prime the sides of the pile cap a minimum of 6 in. (150 mm) from the top of pile cap with a Bituthene Primer and allow to dry.
5. Align a 9 in. (225 mm) strip of Bituthene Membrane centered over the outside edge (outside corner) of the pile cap. Remove release liner and roll firmly onto the Liquid Membrane and primed sides of pile cap.
6. Align a 12 in. (300 mm) strip of Bituthene Membrane centered over the outside edge (outside corner) of the pile cap.
7. Remove half of release liner by removing the RIPCORDER[®] Split Release on Demand or by scoring release liner along the center of the strip.
8. Roll firmly onto the sides of pile cap with the 9 in. (225 mm) strip of Bituthene Membrane and the remaining primed pile cap.
9. Leave the other half of the 12 in. (300 mm) strip with the release liner still in tact in order to receive the Preprufe Membrane.
10. Replace earth/fill and compact per standard back-filling instructions being careful not to damage the Bituthene strip including the non-bonded portion.
11. Invert the Bituthene strip, and remove the remaining release liner to expose the adhesive portion of the Bituthene.
12. Install Preprufe Membrane over the prepared substrate and terminate it 2 in. (50 mm) onto the pile cap.
13. Roll firmly onto the inverted Bituthene strip.
14. Apply Preprufe Tape centered over the Preprufe Membrane termination. Remove the release liner and roll firmly.
15. Seal Bituthene Membrane and Preprufe Tape edge with a termination bead of Liquid Membrane.
16. Apply Hydroduct[®] according to Hydroduct Data Sheet.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

■ 45 Tie Into Bituthene® Wall Waterproofing

Plan View



*NOTE: HYDRODUCT OR APPROVED PROTECTION COURSE NOT SHOWN FOR CLARITY OVER BITUTHENE.

INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

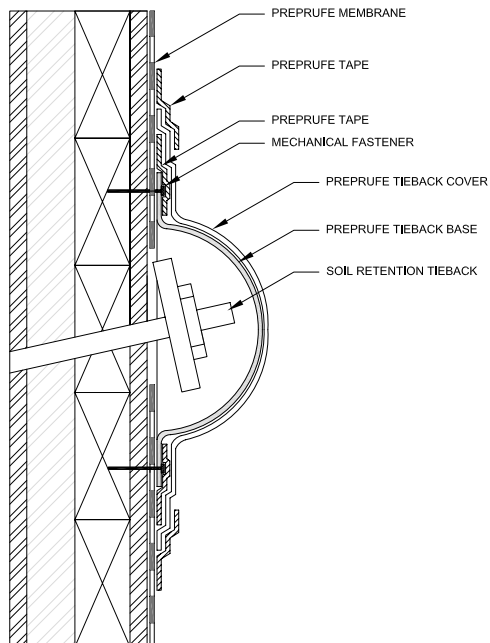
Detailing

1. Install Preprufe 160R over the prepared vertical surface.
2. Extend the Preprufe 160R Membrane 6 in. (150 mm) beyond the end of the blind-side wall.
3. As the foundation wall formwork is installed, fold the 12 in. (300 mm) piece of Preprufe 160R Membrane to form a sharp corner.
4. Secure it to the inside face of the exterior form panel using Preprufe Detail Tape or small head fasteners located close to the outer edge of the membrane.
5. Once the wall is poured and cured for seven days, remove the formwork and install the post applied waterproofing according to the manufacturers standard installation procedures.
6. Apply Hydroduct® according to Hydroduct Data Sheet.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation. Provide temporary protection for Preprufe at the tie-in location until the Bituthene tie-in is installed. The tie-in should be completed and backfilled as soon as possible.

■ 46 Preprufe Tie-Back Cover



INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

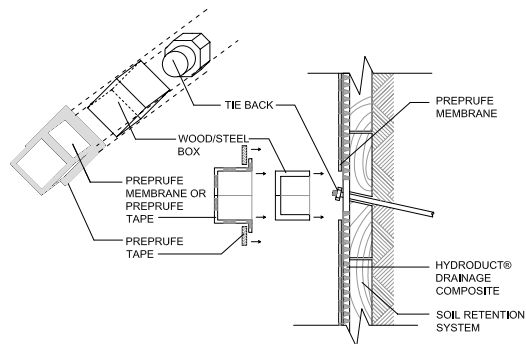
Detailing

1. Install Preprufe Membrane within 2 in. (50 mm) of tieback as per standard installation instructions.
2. Center the base over tieback head and secure base to soil retention system using appropriate fasteners. Fasteners should have a low profile head.
3. Apply Preprufe Tape centered over the edge of the base flange and roll firmly to form a tight seal. Remove release liner and discard.
4. Position the membrane cover over the base taking care to ensure the cover flange sits flat onto the Preprufe Membrane.
5. Apply Preprufe Tape centered over the edge of the cover flange and roll firmly to form a tight seal. Remove release liner and discard.
6. All Preprufe Tape should overlap onto surfaces of tape, membrane, base, cover, etc. a minimum of 2 in. (50 mm).
7. Apply Hydroduct® according to Hydroduct Data Sheet.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

■ 47 Soil Retention Tie-Back Cover – Custom Box Cover



*NOTE: FOR USE WHEN PREPRUFE TIE-BACK COVER IS NOT VIABLE.

INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

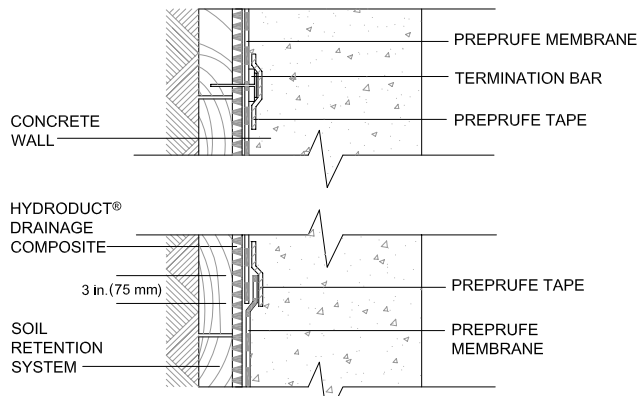
Detailing

1. Install Preprufe Membrane within 2 in. (50 mm) of tieback as per standard installation instructions.
2. Cover the tieback head with a box constructed of wood, steel or other material that will provide a sound, stable and smooth substrate for the Preprufe.
3. Position the custom cover to allow concrete to shed during placement and to improve consolidation.
4. Firmly secure the cover to the soil retention system.
5. Apply Preprufe CJ Tape and/or Preprufe Tape over the box providing a continuous layer of tape that overlaps onto the field membrane by a minimum of 3 in. (75 mm). Remove the release liners and apply Preprufe Tape centered over all outside edges and corners of box to provide double layer at edges and corners.
6. Roll firmly and remove release liner.
7. Apply Hydroduct® according to Hydroduct Data Sheet.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

■ 48 Top Termination and End Lap



INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

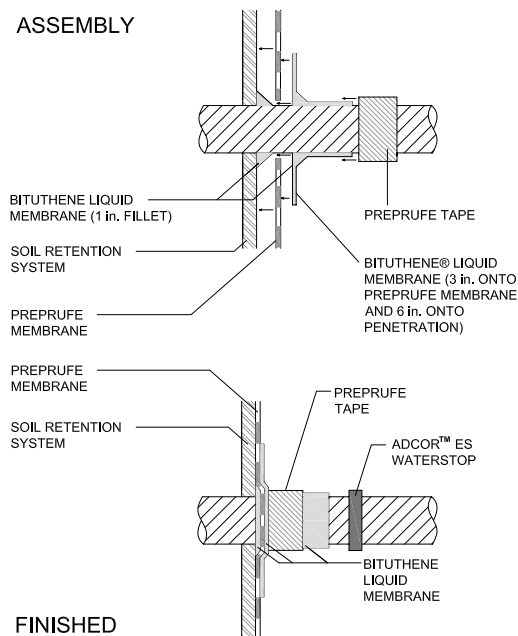
1. Apply Preprufe field membrane according to standard installation procedures.
2. Apply termination bar to Preprufe membrane.
3. Center Preprufe CJ Tape to cover termination bar and roll firmly.
4. Protect top of termination of membrane from exposure.
5. For end lap, overlap successive membrane rolls by 3 in. (75 mm).
6. Apply Preprufe Tape, centered over the lap.
(Refer to PRE 031 and PRE 032)
7. Apply Hydroduct® according to Hydroduct Data Sheet.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

■ 49 Rebar, Dowel, and All-Thread Penetration

ASSEMBLY



FINISHED

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

1. All penetrations must be firmly secured and stable. Grout around all penetrations that are not stable. Clean loose dust or dirt from the penetration and the surrounding substrate surface using a clean, dry cloth or brush.
2. Mix and apply Bituthene Liquid Membrane around the penetration. Liquid Membrane should be placed to form a minimum 1 in. (25 mm) continuous fillet between the substrate and the base of the penetration.
3. Cut the field membrane tight to the penetration and remove release liner. If membrane is not within 0.5 in. (12 mm) of penetration and not more than 2 in. (50 mm) from penetration, apply Preprufe Tape to cover the gap. Roll firmly into place and remove release. If the membrane is greater than 2 in. (50 mm) from penetration, install more Preprufe Membrane to cover the gap repeating these instructions until Preprufe Membrane/Tape is within 0.5 in. (12 mm).
4. Position the field membrane snug to the penetration so that it is a maximum of 0.5 in. (12 mm) from the base of the penetration and press firmly into the partially cured Liquid Membrane.
5. Apply Liquid Membrane to form a minimum 1 in. (25 mm) continuous fillet between the Preprufe Membrane and the base of the penetration. Extend a 90 mil (2.2 mm) continuous coating of Liquid Membrane overlapping a minimum of 3 in. (75 mm) onto the surface of the Preprufe Membrane and 6 in. (150 mm) onto the penetration.
6. Wrap the penetration with Preprufe Tape, positioning the tape at the base of the penetration. Remove enough release liner to overlap tape on to itself and roll/press firmly into place. Remove remaining release liner and discard.

Special Notes

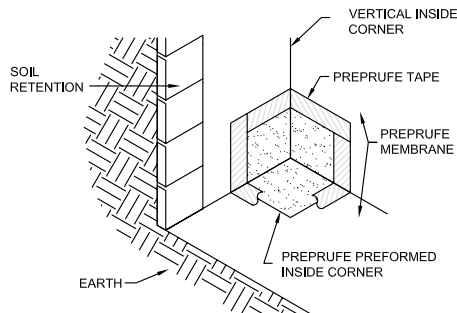
Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Ensure Adcor™ ES is encapsulated with 76.2 mm (3 in.) of concrete cover minimum. Apply Adcor ES according to the installation instructions found on the data sheet.

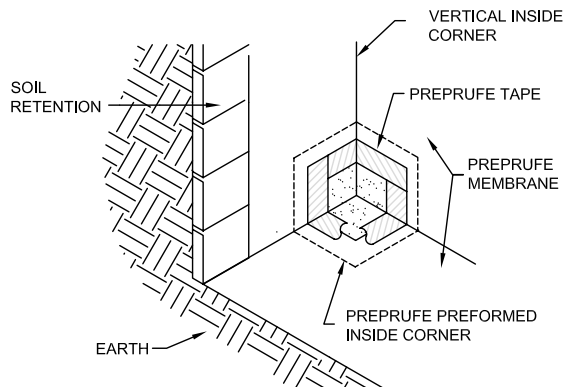
Prior to Membrane Installation, Review the Preprufe® Preformed Corners Data Sheet

■ 53 Preprufe® Preformed Corner Inside Corner (Options A and B)

Installation After Membrane – Option A



Installation Before Membrane – Option B



FOOTNOTE: USE DETAIL PRE033 WHEN PREPRUFE PREFORMED INSIDE CORNER IS NOT VIABLE

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than ½ inch. The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

Installation After Membrane – Option A

1. Install Preprufe membrane in accordance with the Preprufe data sheet section on installation.
2. Remove release liner from both sides of Preprufe Inside Corner and install tight against Preprufe membrane.
3. Ensure the Preprufe Preformed Inside Corner covers the Preprufe membrane by a minimum of 3 in. (75 mm) on all sides
4. Apply Preprufe Tape centered over all edges of the Preprufe Preformed Inside Corner, roll firmly in place, remove release liner and discard.

Installation Before Membrane – Option B

1. Install Preprufe Preformed Inside Corner tight against substrate, remove release liner and discard.
2. Apply Preprufe membrane over Preprufe Preformed Inside Corner ensuring a 3-5 in. (75-125 mm) overlap onto corner.
3. Apply Preprufe Tape centered over all edges of the Preprufe membrane, roll firmly in place, remove release liner and discard.

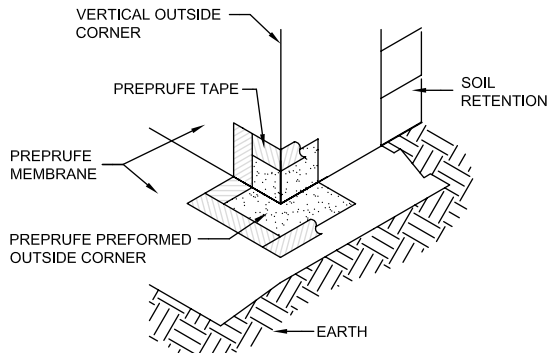
Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation. Preprufe Tape should overlap onto surfaces of tape, membrane, corner, etc. a minimum of 2 in. (50 mm).

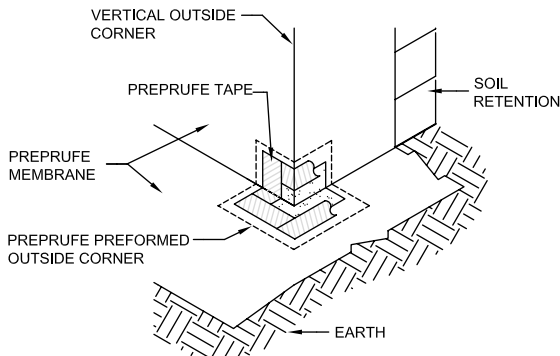
Prior to Membrane Installation, Review the Preprufe® Preformed Corners Data Sheet

■ 54 Preprufe® Preformed Corner Outside Corner (Options A and B)

Installation After Membrane – Option A



Installation Before Membrane – Option B



FOOTNOTE: USE DETAIL PRE036 WHEN PREPRUFE PREFORMED OUTSIDE CORNER IS NOT VIABLE

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than ½ inch. The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

Installation After Membrane – Option A

1. Install Preprufe membrane in accordance with the Preprufe data sheet section on installation.
2. Remove release liner from both sides of Preprufe Outside Corner and install tight against Preprufe membrane.
3. Ensure the Preprufe Preformed Outside Corner covers the Preprufe membrane by a minimum of 3 in. (75 mm) on all sides
4. Apply Preprufe Tape centered over all edges of the Preprufe Preformed Outside Corner, roll firmly in place, remove release liner and discard.

Installation Before Membrane – Option B

1. Install Preprufe Preformed Outside Corner tight against substrate, remove release liner and discard.
2. Apply Preprufe membrane over Preprufe Preformed Outside Corner ensuring a 3-5 in. (75-125 mm) overlap onto corner.
3. Apply Preprufe Tape centered over all edges of the Preprufe membrane, roll firmly in place, remove release liner and discard.

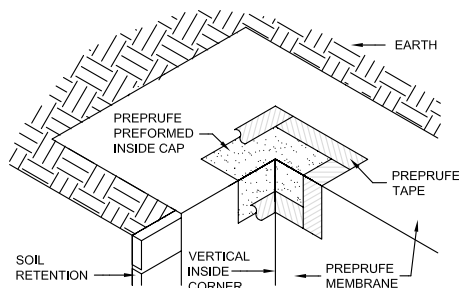
Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation. Preprufe Tape should overlap onto surfaces of tape, membrane, corner, etc. a minimum of 2 in. (50 mm).

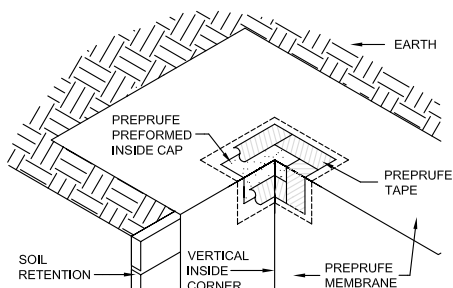
Prior to Membrane Installation, Review the Preprufe® Preformed Corners Data Sheet

■ 55 Preprufe® Preformed Corner Inside Cap (Options A and B)

Installation After Membrane – Option A



Installation Before Membrane – Option B



Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than ½ inch. The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

Installation After Membrane – Option A

1. Install Preprufe membrane in accordance with the Preprufe data sheet section on installation.
2. Remove release liner from both sides of Preprufe Inside Cap and install tight against Preprufe membrane.
3. Ensure the Preprufe Preformed Inside Cap covers the Preprufe membrane by a minimum of 3 in. (75 mm) on all sides
4. Apply Preprufe Tape centered over all edges of the Preprufe Preformed Inside Cap, roll firmly in place, remove release liner and discard.

Installation Before Membrane – Option B

1. Install Preprufe Preformed Inside Cap tight against substrate, remove release liner and discard.
2. Apply Preprufe membrane over Preprufe Preformed Inside Cap ensuring a 3-5 in. (75-125 mm) overlap onto cap.
3. Apply Preprufe Tape centered over all edges of the Preprufe membrane, roll firmly in place, remove release liner and discard.

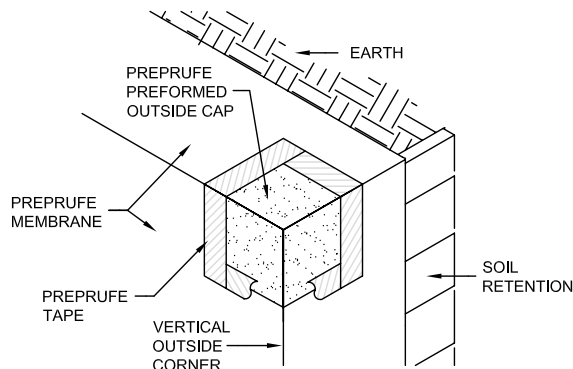
Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation. Preprufe Tape should overlap onto surfaces of tape, membrane, cap, etc. a minimum of 2 in. (50 mm).

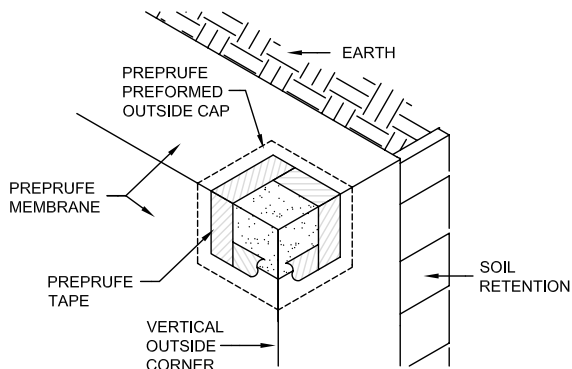
Prior to Membrane Installation, Review the Preprufe® Preformed Corners Data Sheet

■ 56 Preprufe® Preformed Corner Outside Cap (Options A and B)

Installation After Membrane – Option A



Installation Before Membrane – Option B



Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than ½ inch. The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

Installation After Membrane – Option A

1. Install Preprufe membrane in accordance with the Preprufe data sheet section on installation.
2. Remove release liner from both sides of Preprufe Outside Cap and install tight against Preprufe membrane.
3. Ensure the Preprufe Preformed Outside Cap covers the Preprufe membrane by a minimum of 3 in. (75 mm) on all sides
4. Apply Preprufe Tape centered over all edges of the Preprufe Preformed Outside Cap, roll firmly in place, remove release liner and discard.

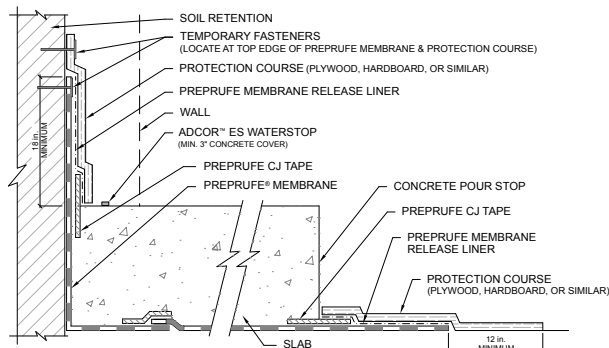
Installation Before Membrane – Option B

1. Install Preprufe Preformed Outside Cap tight against substrate, remove release liner and discard.
2. Apply Preprufe membrane over Preprufe Preformed Outside Cap ensuring a 3-5 in. (75-125 mm) overlap onto corner.
3. Apply Preprufe Tape centered over all edges of the Preprufe membrane, roll firmly in place, remove release liner and discard.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation. Preprufe Tape should overlap onto surfaces of tape, membrane, cap, etc. a minimum of 2 in. (50 mm).

■ 60 Temporary Protection During Construction Sequencing



INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than ½ inch. The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

1. Install Preprufe membrane in accordance with the Preprufe data sheet section on installation.
2. Extend the Preprufe a minimum of 12 in. (300 mm) past any steel extending from slab.
3. Cover exposed Preprufe membrane with release liner.
4. Apply protection course over Preprufe and release liner, extending a minimum of 12 in. (300 mm) past Preprufe membrane.
5. Remove protection course, release liner and repair the membrane if necessary prior to concrete pour.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Do not penetrate or damage the Preprufe during concrete placement, formwork and bulkhead erection and between construction phases.

Extend the Preprufe a minimum of 12 in. (300 mm) past any steel extending from slab.

Remove protection course and temporary fasteners just prior to tie-in to new Preprufe Membrane.

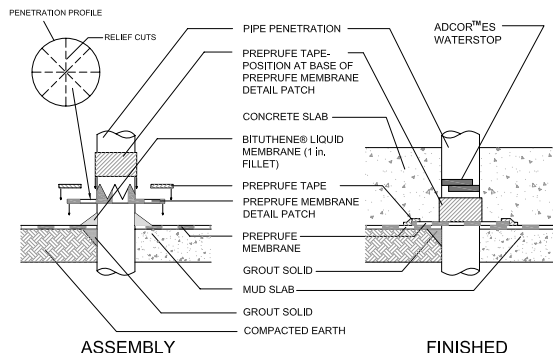
Ensure any fastener holes in the membrane are sealed with Preprufe Tape.

Hydroduct not shown for clarity.

Prior to Membrane Installation, Review the Preprufe® Data Sheet

■ 34 Pipe Penetration

(For Wall or Slab)



*FOOTNOTES:

- ALL PENETRATIONS TO BE GROUTED.
- A MINIMUM OF 6 IN. (150 MM) IS REQUIRED BETWEEN PENETRATIONS TO ENSURE PROPER DETAILING.
- AVOID PLACEMENT OF MULTIPLE PENETRATIONS.
- A MINIMUM OF 6 IN. (150 MM) OF PIPE NEEDS TO BE EXPOSED AND FREE OF CONNECTIONS, OBSTRUCTIONS, HANGERS, ETC. TO ENSURE PROPER EXECUTION OF THE DETAIL.

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 0.5 in. (13 mm). The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

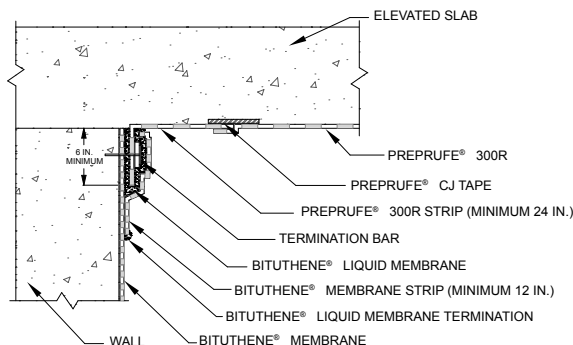
1. All penetrations must be firmly secured and stable. Grout around all penetrations that are not stable. For compacted earth, extend grout a minimum of 3 in. (75 mm) in all directions. Clean loose dust or dirt from the penetration surface using a clean, dry cloth or brush.
2. Cut the field membrane tight to the penetration and remove release liner. If membrane is not within 0.5 in. (12 mm) of penetration and not more than 2 in. (50 mm) from penetration, apply Preprufe Tape to cover the gap. Roll firmly into place and remove release liner. If the membrane is greater than 2 in. (50 mm) from penetration, install more Preprufe Membrane to cover the gap repeating these instructions until Preprufe Membrane/Tape is within 0.5 in. (12 mm).
3. Mix and apply Bituthene Liquid Membrane around the penetration. Liquid Membrane should be placed to form a minimum 1 in. (25 mm) continuous fillet between the Preprufe Membrane/Tape and the base of the penetration. Cut "star" within trace of penetration to allow for patch to slide over penetration.
4. Cut a patch of Preprufe Membrane that is a minimum of 12 in. (300 mm) larger than the diameter or width of the penetration so that the patch extends 6 in. (150 mm) beyond the penetration in all directions. Remove the release liner and center the patch over penetration and trace/draw the penetration profile onto the patch. Using sheers or utility knife, make relief cuts through the membrane. Refer to relief cut figures on right. Triangles formed by making a relief cut is not to exceed 2 in. (50 mm) in height when placed over penetration, i.e. penetration diameters or widths greater than 4 in. (100 mm) need to be trimmed. Remove and discard release liner.
5. Slide the patch over penetration and press into the partially cured Liquid Membrane. Ensure that the patch is pressed firmly into the Liquid Membrane and is positioned directly onto the Preprufe Field Membrane/Tape below. Using a trowel, smooth out any Liquid Membrane that has flowed out of the relief cut.
6. Apply Preprufe Tape centered over the edges of the patch and roll firmly to form a tight seal to the Preprufe Field Membrane. Remove release liner from tape and discard.
7. Wrap the penetration with Preprufe Tape, positioning the tape at the base of the patch. Remove enough release liner to overlap Tape on to itself and roll/press firmly into place. Remove remaining release liner and discard. Repair small fishmouths by pressing firmly against penetration and repair large fishmouths by patching with Preprufe Tape.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Ensure Adcor™ ES is encapsulated with 76.2 mm (3 in.) of concrete cover minimum. Apply Adcor ES according to the installation instructions found on the data sheet.

■ 61 Bituthene Tie-In with Elevated Slab



INSTALLATION INSTRUCTIONS

Prior to Membrane Installation, Review the Preprufe® Data Sheet

Surface Preparation

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than ½ inch. The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe® Data Sheet section on Surface Preparation.

Detailing

1. Install Preprufe membrane in accordance with the Preprufe data sheet section on installation.
2. Install Bituthene® Liquid Membrane from the top of the wall over the existing Bituthene® Membrane, extending down a minimum of 6 in. (150 mm).
3. While the Bituthene Liquid Membrane is still "wet" (uncured), embed 6 in. (150 mm) of a min. 24 in. (0.6 m) Preprufe 300R strip.
4. Install a termination bar through the Preprufe 300R securely into the vertical wall.
5. Re-flash over the edge of the Preprufe 300R with Bituthene Liquid Membrane and extend up over the termination bar ensuring the Preprufe 300R and the termination bar are fully encapsulated with Bituthene Liquid Membrane.
6. Install a 12 in. (300 mm) strip of Bituthene Membrane from the top of the wall extending down over the Bituthene Liquid Membrane/termination bar and onto the existing Bituthene Membrane.
7. Terminate the bottom edge, top edge and all seams of the Bituthene strip with Bituthene Liquid Membrane.
8. Protect the Preprufe 300R strip during backfill, placement and compaction.
9. Fold the Preprufe 300R strip back onto the compacted earth/gravel for tie-in with Preprufe 300R underslab.
10. Ensure that the Bituthene and vertically installed Preprufe are protected with an approved protection course prior to backfill.

Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation. Hydroduct or approved protection course not shown for clarity.



APPENDIX R

SUB-SLAB DEPRESSURIZATION SYSTEM / SOIL VAPOR EXTRACTION SYSTEM DETAILS

NOTES:

SUMMARY OF WORK:

1. INSTALLATION OF A SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS).
2. INSTALLATION OF A SOIL VAPOR EXTRACTION (SVE) SYSTEM.
3. CREATION OF STRUCTURAL OPENING THROUGH THE BUILDING FOR VERTICAL RISERS AND ELECTRICAL CONDUITS.
4. VAPOR BARRIER/ WATER PROOFING COORDINATION DURING SSDS INSTALLATION.

GENERAL NOTES:

1. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND CONDITIONS OF THE SITE.
2. DETAILS NOT SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER AND ACCEPTABLE CONSTRUCTION, INSTALLATION OR OPERATION OF ANY PART OF THE WORK SHALL BE INCLUDED IN THE WORK BY THE CONTRACTOR, AS IF HEREIN SPECIFIED OR INDICATED.
3. WORK SHALL BE EXECUTED IN FULL COMPLIANCE WITH THE APPLICABLE PROVISIONS OF ALL LAWS, BY-LAWS, STATUTES, ORDINANCES, CODES, RULES, REGULATIONS AND LAWFUL ORDERS OF PUBLIC AUTHORITIES BEARING ON THE PERFORMANCE AND EXECUTION OF THE WORK. THE CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER OF ANY PORTIONS OF THE WORK, IN THE CONTRACT DOCUMENTS THAT ARE AT VARIANCE WITH THE ABOVE.
4. THE CONTRACTOR SHALL PERFORM ALL CUTTING AND PATCHING REQUIRED TO COMPLETE THE WORK OR TO MAKE ITS PARTS FIT TOGETHER PROPERLY WITHOUT COMPROMISING THE QUALITY OF THE WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGE, COLLAPSE, DISTORTION, AND OFF ALIGNMENTS ACCORDING TO CODES AND STANDARDS OF GOOD PRACTICE.
6. THE CONTRACTOR SHALL COORDINATE OPENINGS IN THE FOUNDATION, INTERIOR AND EXTERIOR WALLS FOR THE INSTALLATION OF CONDUITS AND BOXES FOR ELECTRICAL EQUIPMENT.
7. WHERE MANUFACTURERS' NAMES AND PRODUCT NUMBERS ARE INDICATED ON THE DRAWINGS, IT SHALL BE CONSTRUED TO MEAN THE ESTABLISHING OF QUALITY AND PERFORMANCE STANDARDS OF SUCH ITEMS.
8. THE SUB-SLAB DEPRESSURIZATION SYSTEM COUPLES WITH THE REQUIREMENTS OF THE 2008 NYC MECHANICAL CODE SECTION 512, "SUBSLAB EXHAUST SYSTEMS".
9. THE SUB-SLAB DEPRESSURIZATION SYSTEM IS NOT A "HAZARDOUS EXHAUST SYSTEM" AS DEFINED BY THE 2008 NYC MECHANICAL CODE SECTION 510.

SSDS INSTALLATION NOTES:

1. IT IS THE INTENT OF THIS DRAWING TO INSTALL AN EFFECTIVE AND OPERABLE SUB-SLAB DEPRESSURIZATION SYSTEM IN GENERAL ACCORDANCE WITH THE CURRENT DEPARTMENT OF HEALTH VAPOR INTRUSION GUIDANCE DATED OCTOBER 2006, UPDATED 2017 TO MITIGATE THE POTENTIAL MIGRATION OF IMPACTED SOIL VAPORS INTO THE BUILDING.
2. SUB-SLAB VAPOR BARRIER SHOULD BE INSTALLED BENEATH THE ENTIRE BUILDING FOOTPRINT. THE VAPOR BARRIER WILL CONSIST OF A 46-MIL GCP VAPOR BARRIER (WPS-01) DIRECTLY BENEATH THE POURED FOUNDATION SLAB AND ABOVE AN UNDERLYING 12-INCH PERMEABLE AGGREGATE LAYER AND A 60-MIL GCP VAPOR BARRIER (WPS-02) ON THE EXTERIOR OF FOUNDATION WALL EXTENDING TO GROUND SURFACE.
3. INSTALLATION OF THE VAPOR BARRIER MATERIAL SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION RECOMMENDATIONS. PERFORM/INSTALL SEALS AROUND PERMANENT PENETRATION COMPATIBLE WITH THE VAPOR BARRIER AND IN ACCORDANCE WITH THE MATERIAL MANUFACTURER.
4. USE OF A VAPOR BARRIER DIRECTLY BELOW THE SLAB-ON-GRADE MAY PROMOTE SLAB CURLING. THE MOISTURE CONTENT OF THE SLAB-ON-GRADE CONCRETE SHALL BE CONTROLLED DURING CURING TO LIMIT THE SLAB CURLING TO TOLERABLE MEASUREMENTS.
5. THE INSTALLER IS TO FIELD VERIFY AS-BUILT CONDITIONS FOR VAPOR BARRIER PVC PIPING, GALVANIZED STEEL PIPING AND OTHER EQUIPMENT INCLUDING MATERIALS LOCATED ON THE ROOF FOR THE PURPOSE OF VERIFYING THE SUB-SLAB VAPOR MITIGATION PIPING LAYOUT. THE LAYOUT SHOWN ON THESE DRAWINGS IS SHOWN AS THE BASIS OF DESIGN OF THE INSTALLATION. GAS COLLECTION PIPING LOCATIONS SHALL BE RELOCATED, AS NECESSARY, TO AVOID FOUNDATIONS AND MINIMIZE INTERFERENCE WITH OTHER UTILITIES. FLOOR SLAB AND GRADE BEAM PENETRATION LOCATIONS ARE APPROXIMATE AND SHALL BE CONFIRMED BY THE MECHANICAL ENGINEER AND/OR ARCHITECT.
6. A MINIMUM 12-INCH THICK, CONTINUOUS GAS PERMEABLE AGGREGATE LAYER WILL BE INSTALLED DIRECTLY BENEATH THE VAPOR BARRIER. THE GAS PERMEABLE AGGREGATE LAYER SHALL CONSIST OF STONE MEETING THE FOLLOWING GRADATION (SIMILAR TO AASHTO NO. 5 STONE):

SIEVE SIZE	PERCENT PASSING BY WEIGHT
1-1/2 INCH	100
1-INCH	90-100
3/4-INCH	20-55
1/2-INCH	0-5

7. GAS PERMEABLE AGGREGATE SHALL BE UNIFORM IN QUALITY AND FREE OF WOOD, LOAM, CLAY, DIRT, ROOTS, BARK, AND ANY OTHER EXTRANEIOUS MATERIAL. MATERIAL SHALL NOT CONTAIN SALTS OR FOREIGN MATERIALS OF ANY KIND. NO ORGANIC MATERIALS WITH POTENTIAL FOR GROWTH (I.E., SEEDS OR GRASSES) ARE ALLOWED ON THE PREPARED SUBGRADE. THE PREPARED SUBGRADE SURFACES TO BE LINED SHALL BE FREE OF ALL ROCKS, STICKS, ROOTS, SHARP OBJECTS, OR CONSTRUCTION DEBRIS OF ANY KIND. NO STANDING WATER, EXCESSIVE MOISTURE, OR FROZEN GROUND SHALL BE ALLOWED.
8. WITHIN THE GAS PERMEABLE AGGREGATE LAYER WILL BE ROWS OF PVC GAS COLLECTION PIPING (OR APPROVED EQUIVALENT) APPROXIMATELY WHERE SHOWN ON THE PLAN. THE FINAL LAYOUT OF THE PVC GAS COLLECTION PIPING WILL BE COORDINATED WITH FINAL UTILITY LOCATIONS PRIOR TO INSTALLATION.
9. THE SOLID PIPING CONNECTING TO THE VERTICAL RISERS SHALL BE SLOPED MINIMUM OF 1% UNIFORMLY AWAY FROM THE VERTICAL RISERS TO FACILITATE DRAINAGE OF CONDENSATION OR PRECIPITATION WHICH MAY COLLECT WITHIN THE SYSTEM.
10. ALL PENETRATIONS IN THE VAPOR BARRIER SHALL BE SEALED ACCORDING TO MANUFACTURER RECOMMENDATIONS AND THE VAPOR BARRIER SHALL BE INSTALLED BY A LICENSED GCP PREPRUFE INSTALLER WITH EXPERIENCE ON AT LEAST THREE SIMILARLY SIZED PROJECTS.
11. FLOOR DRAINS AND AIR CONDITIONING OR REFRIGERATION DRAINS THAT DISCHARGE DIRECTLY INTO THE SOIL BELOW THE FOUNDATION SHOULD BE AVOIDED.

PIPING NOTES:

1. THE CONTRACTOR IS TO FIELD VERIFY AS-BUILT SSDS COMPONENT INSTALLATION CONDITIONS WITH A SURVEY ACCURATE TO ± 0.01 FEET IN THE VERTICAL DIRECTION AND ± 0.1 FEET IN THE HORIZONTAL DIRECTION.
2. THE SSDS VENT PIPING IS NOT EXHAUSTING AN INDUSTRIAL PROCESS. THE SOIL VAPOR EXHAUST DOES NOT REPRESENT A CLASSIFIED OR EXPLOSIVE ATMOSPHERE.
3. FLOOR PENETRATIONS INSTALLED POST SLAB CONSTRUCTION SHALL BE SEALED WITH AIRTIGHT/WATERTIGHT FOAM AND NON-SHRINK GROUT SEALANT AFTER APPROVAL OF SHOP DRAWINGS AND METHODS.

SAFETY NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE HEALTH AND SAFETY OF THEIR EMPLOYEES AND FOR PERFORMING THE WORK IN A SAFE MANNER IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS, INCLUDING SAFE CONDITIONS FOR WORK DONE AT ELEVATIONS OF SIX (6) FEET OR MORE ABOVE AN ADJACENT SURFACE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING THE SITE DURING ALL NON-WORKING HOURS TO PREVENT UNAUTHORIZED ENTRY INTO THE WORK AREA AND DIRECTING VEHICULAR TRAFFIC AWAY OR AROUND THE WORK AREA.
3. AS A SAFEGUARD, THE SSDS IS BEING INSTALLED TO MITIGATE THE POTENTIAL FOR VAPOR INTRUSION FROM VOLATILE ORGANIC COMPOUNDS IN SOIL VAPOR ENTERING THE BUILDING. DURING WORK ACTIVITIES THE CONTRACTOR MAY ENCOUNTER SOIL AND/OR SOIL VAPOR THAT IS IMPACTED BY VOLATILE ORGANIC COMPOUNDS.

SUBMITTALS

1. AT A MINIMUM, THE CONTRACTOR SHALL PROVIDE SUBMITTALS PRIOR TO THE START OF THE WORK FOR THE FOLLOWING ITEMS PROPOSED FOR USE:
 - a. SOURCE AND GRADATION RESULTS FOR THE GAS PERMEABLE AGGREGATE STONE
 - b. NON-WOVEN GEOTEXTILE (MIRAFI 160N, OR APPROVED EQUIVALENT)
 - c. RISER CLEANOUTS
 - d. SUB-SLAB MONITORING POINTS
 - e. EXHAUST FANS

SUCCESS ACADEMY CHARTER SCHOOLS

101 East 150th Street, Bronx, NY 10451

OWNER

Success Academy Charter Schools

95 Pine Street, New York, NY 10005

ARCHITECT

SOM

Skidmore, Owings & Merrill LLP
250 Greenwich St, New York, 10007

OWNER'S REPRESENTATIVE

DBI Projects

1261 Broadway 9th floor, New York, NY 10001

CIVIL ENGINEER

Philip Habib & Associates

102 Madison Avenue, New York, NY 10016

STRUCTURAL ENGINEER

LERA Consulting Structural Engineers

40 Wall Street, New York, NY 10005

MEPF ENGINEER

Ventrop Engineering Consulting Group, PLLC

369 W 34th Street, New York, NY 10001

VERTICAL TRANSPORTATION

Lerch Bates

1430 Broadway, New York, NY 10018

AV & IT

Align

55 Broad Street, New York, NY 10004

LIGHTING

SBLD Studio

575 Bloomfield Ave, Montclair, NJ 07042

CODE CONSULTING

Code Consulting, Inc.

215 West 40th Street, New York, NY 10018

FOOD SERVICES CONSULTANT

Davella Studios

450 Lexington Avenue - FL 4, New York, NY 10017

LANDSCAPE ARCHITECT

SWA/Balsley

31 W 27th Street, New York, NY 10001

GEO/TECHNICAL CONSULTANT

Mueser Rutledge Consulting Engineers

225 W 34th St. #6, New York, NY 10122

ENVIRONMENTAL CONSULTANT

GZA

104 West 29th Street, 10th Floor, New York, NY 10001

ENCLOSURE CONSULTANT

Hatfield Group

285 W Broadway, New York, NY 10013

SUSTAINABILITY CONSULTANT

Socotec

151 W 42nd Street, New York, NY 10036

ACoustics

Cerami & Associates

1001 Avenue of the Americas, New York, NY 10018

SIGNAGE AND WAYFINDING CONSULTANT

Pentagram

250 Park Avenue South, New York, NY 10003

SECURITY CONSULTANT

Introba (formerly Ross & Baruzzini)

1450 Broadway, Office 15-102, New York, NY 10018

HARDWARE CONSULTANT

arkaSpecs, Inc.

12 Phyllis Ln, Rock Tavern, NY 12575

THEATRICAL CONSULTANT

Harvey Marshall Berling Associates

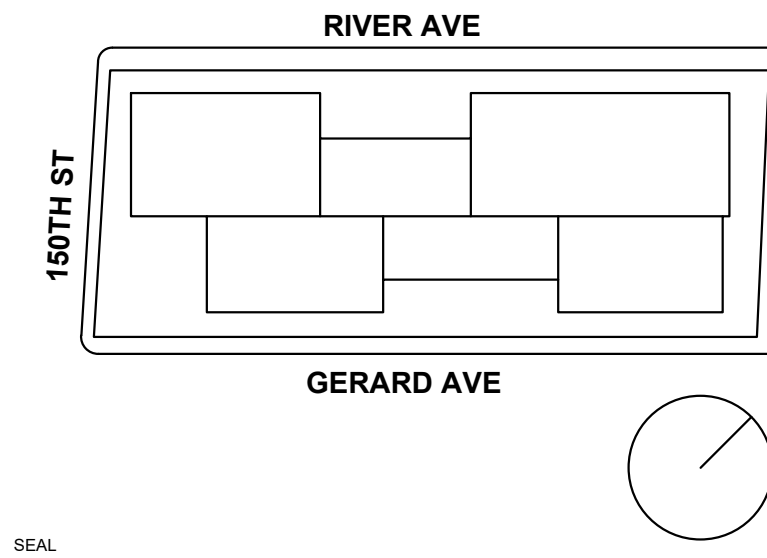
173 W 81st St, New York, NY 10024

COMMISSIONING

FST Technical Services

30 Broad Street, Suite 1500, New York, NY 10004

KEYPLAN



SEAL



1	04/04/2023	BULLETIN 18
2	05/24/2024	BULLETIN 09
3	03/05/2025	BULLETIN 06
4	08/11/2025	ADDENDUM 1
5	07/14/2025	ADDENDUM 2
6	06/26/2025	ADDENDUM 3
7	08/01/2025	ISSUED FOR CONSTRUCTION
8	08/01/2025	ISSUED FOR 80% CONSTRUCTION DOCUMENTS
9	11/18/2025	ISSUED FOR 90% CONSTRUCTION DOCUMENTS

NO.	DATE	DESCRIPTION
-----	------	-------------

DRAWING TITLE

SUB-SURFACE VAPOR MITIGATION SYSTEMS GENERAL NOTES

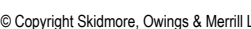
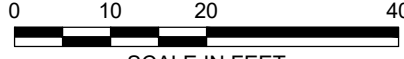
DRAWING NUMBER

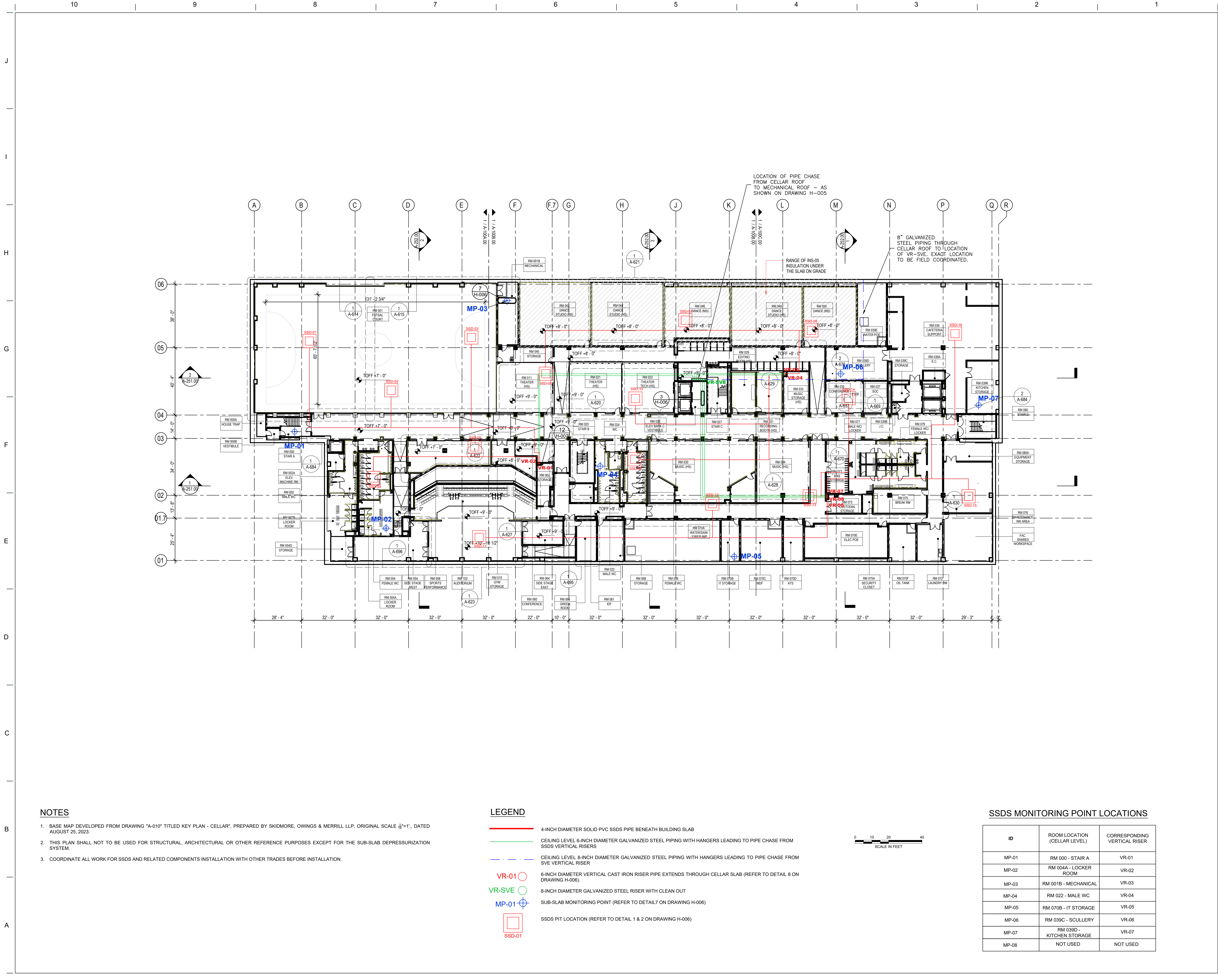
H-001

B-SCAN DRAWING NUMBER

NS APPLICATION NO.

#X006970361-11





NOTES

1. BASE MAP DEVELOPED FROM DRAWING "A-010" TITLED KEY PLAN - CELLAR", PREPARED BY SKIDMORE, OWINGS & MERRILL LLP, ORIGINAL SCALE $\frac{1}{16}''=1'$., DATED AUGUST 25, 2023.
2. THIS PLAN SHALL NOT TO BE USED FOR STRUCTURAL, ARCHITECTURAL OR OTHER REFERENCE PURPOSES EXCEPT FOR THE SUB-SLAB DEPRESSURIZATION SYSTEM.
3. COORDINATE ALL WORK FOR SSDS AND RELATED COMPONENTS INSTALLATION WITH OTHER TRADES BEFORE INSTALLATION.

LEGEND

- 4-INCH DIAMETER SOLID PVC SSDS PIPE BENEATH BUILDING SLAB
- CEILING LEVEL 6-INCH DIAMETER GALVANIZED STEEL PIPING WITH HANGERS LEADING TO PIPE CHASE FROM SSDS VERTICAL RISERS
- CEILING LEVEL 8-INCH DIAMETER GALVANIZED STEEL PIPING WITH HANGERS LEADING TO PIPE CHASE FROM SVE VERTICAL RISER
- VR-01 6-INCH DIAMETER VERTICAL CAST IRON RISER PIPE EXTENDS THROUGH CELLAR SLAB (REFER TO DETAIL 8 ON DRAWING H-006).
- VR-SVE 8-INCH DIAMETER GALVANIZED STEEL RISER WITH CLEAN OUT
- MP-01 SUB-SLAB MONITORING POINT (REFER TO DETAIL 7 ON DRAWING H-006)
- SSD-01 SSDS PIT LOCATION (REFER TO DETAIL 1 & 2 ON DRAWING H-006)



SSDS MONITORING POINT LOCATIONS

ID	ROOM LOCATION (CELLAR LEVEL)	CORRESPONDING VERTICAL RISER
MP-01	RM 000 - STAIR A	VR-01
MP-02	RM 004A - LOCKER ROOM	VR-02
MP-03	RM 001B - MECHANICAL	VR-03
MP-04	RM 022 - MALE WC	VR-04
MP-05	RM 070B - IT STORAGE	VR-05
MP-06	RM 039C - SCULLERY	VR-06
MP-07	RM 039D - KITCHEN STORAGE	VR-07
MP-08	NOT USED	NOT USED

SUCCESS ACADEMY CHARTER SCHOOLS

101 East 150th Street, Bronx, NY 10451

OWNER
Success Academy Charter Schools
95 Pine Street, New York, NY 10005

ARCHITECT

SOM

Skidmore, Owings & Merrill LLP
250 Greenwich St, New York, 10007

OWNER'S REPRESENTATIVE

DBI Projects
1261 Broadway 9th floor, New York, NY 10001

CIVIL ENGINEER

Philip Habib & Associates
102 Madison Avenue, New York, NY 10016

STRUCTURAL ENGINEER

LERA Consulting Structural Engineers
40 Wall Street, New York, NY 10005

MEPP ENGINEER

Ventrop Engineering Consulting Group, PLLC
369 W 34th Street, New York, NY 10001

VERTICAL TRANSPORTATION

Lerch Bates
1430 Broadway, New York, NY 10018

AV & IT

Align
55 Broad Street, New York, NY 10004

LIGHTING

SBLD Studio
575 Bloomfield Ave, Montclair, NJ 07042

CODE CONSULTING

Code Consulting, Inc.
215 West 40th Street, New York, NY 10018

FOOD SERVICES CONSULTANT

Davella Studios
450 Lexington Avenue - FL 4, New York, NY 10017

LANDSCAPE ARCHITECT

SWA/Balsley
31 W 27th Street, New York, NY 10001

GEOTECHNICAL CONSULTANT

Mueser Rutledge Consulting Engineers
225 W 34th St. #6, New York, NY 10122

ENVIRONMENTAL CONSULTANT

GZA
104 West 29th Street, 10th Floor, New York, NY 10001

ENCLOSURE CONSULTANT

Hatfield Group
285 W Broadway, New York, NY 10013

SUSTAINABILITY CONSULTANT

Socotec
151 W 42nd Street, New York, NY 10036

ACOUSTICS

Cerami & Associates
1001 Avenue of the Americas, New York, NY 10018

SIGNAGE AND WAYFINDING CONSULTANT

Pentagram
250 Park Avenue South, New York, NY 10003

SECURITY CONSULTANT

Introba (formerly Ross & Baruzzini)
1450 Broadway, Office 15-102, New York, NY 10018

HARDWARE CONSULTANT

arkaSpecs, Inc.
12 Phyllis Ln, Rock Tavern, NY 12575

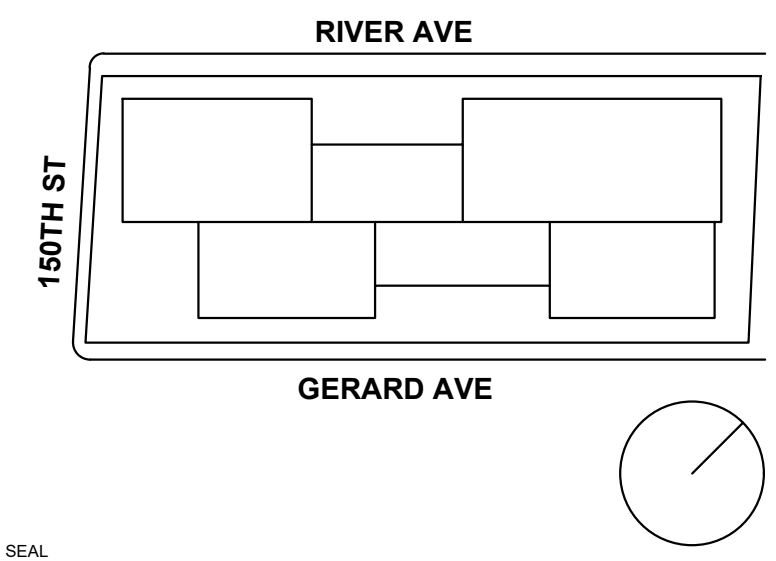
THEATRICAL CONSULTANT

Harvey Marshall Berling Associates
173 W 81st St, New York, NY 10024

COMMISSIONING

FST Technical Services
30 Broad Street, Suite 1500, New York, NY 10004

KEYPLAN



SEAL



NO.	DATE	DESCRIPTION
1	04/04/2023	BULLETIN 18
2	04/04/2023	BULLETIN 19
3	03/09/2024	BULLETIN 06
4	08/26/2023	BULLETIN 07
5	08/11/2023	ADDENDUM 1
6	07/11/2023	ADDENDUM 2
7	08/26/2023	ISSUED FOR CONSTRUCTION
8	09/10/2023	ISSUED FOR 50% CONSTRUCTION DOCUMENTS
9	11/19/2024	ISSUED FOR 30% CONSTRUCTION DOCUMENTS

DRAWING TITLE

SSDS RISER AND SVE RISER AND SSDS MONITORING POINT PLAN

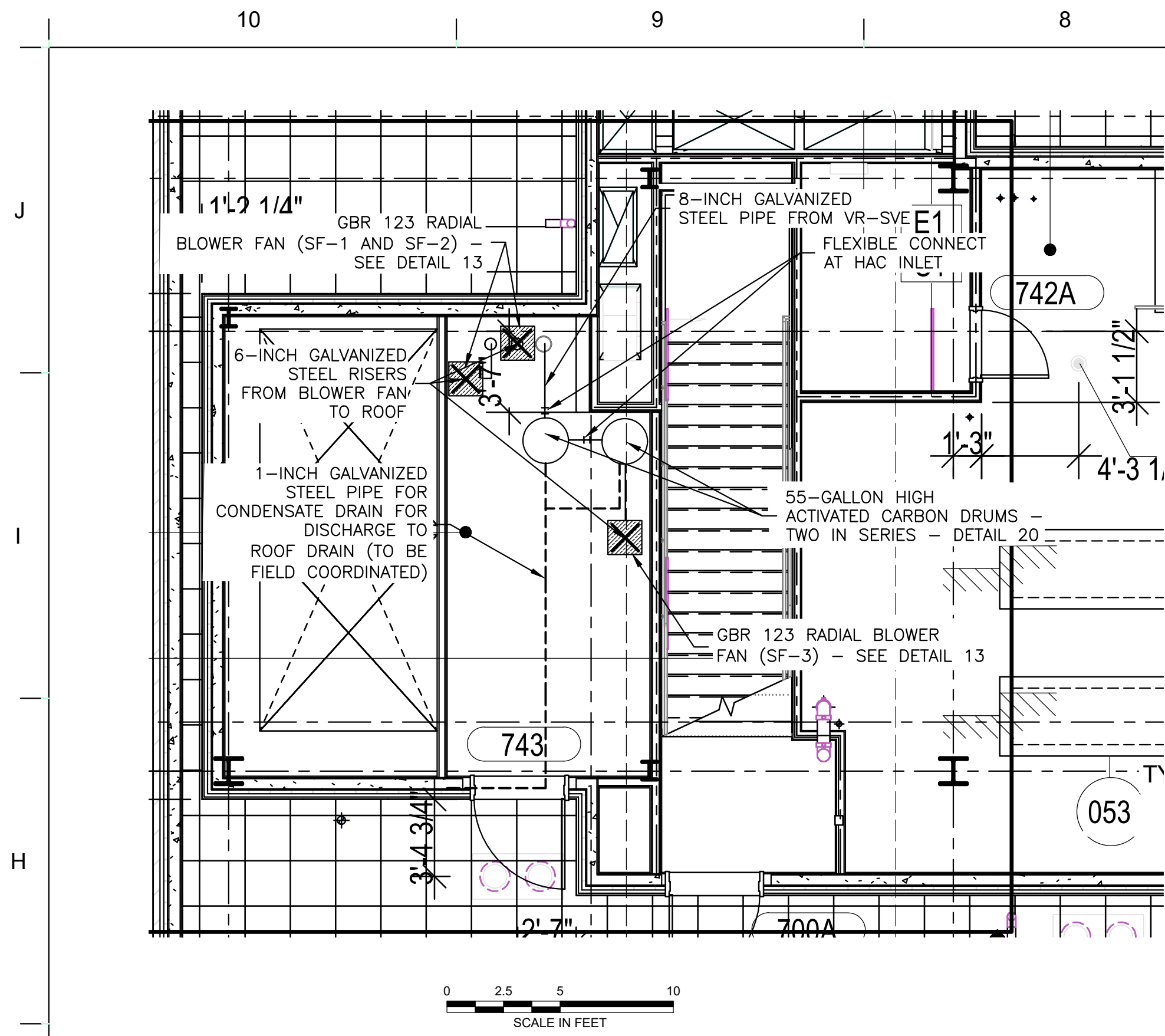
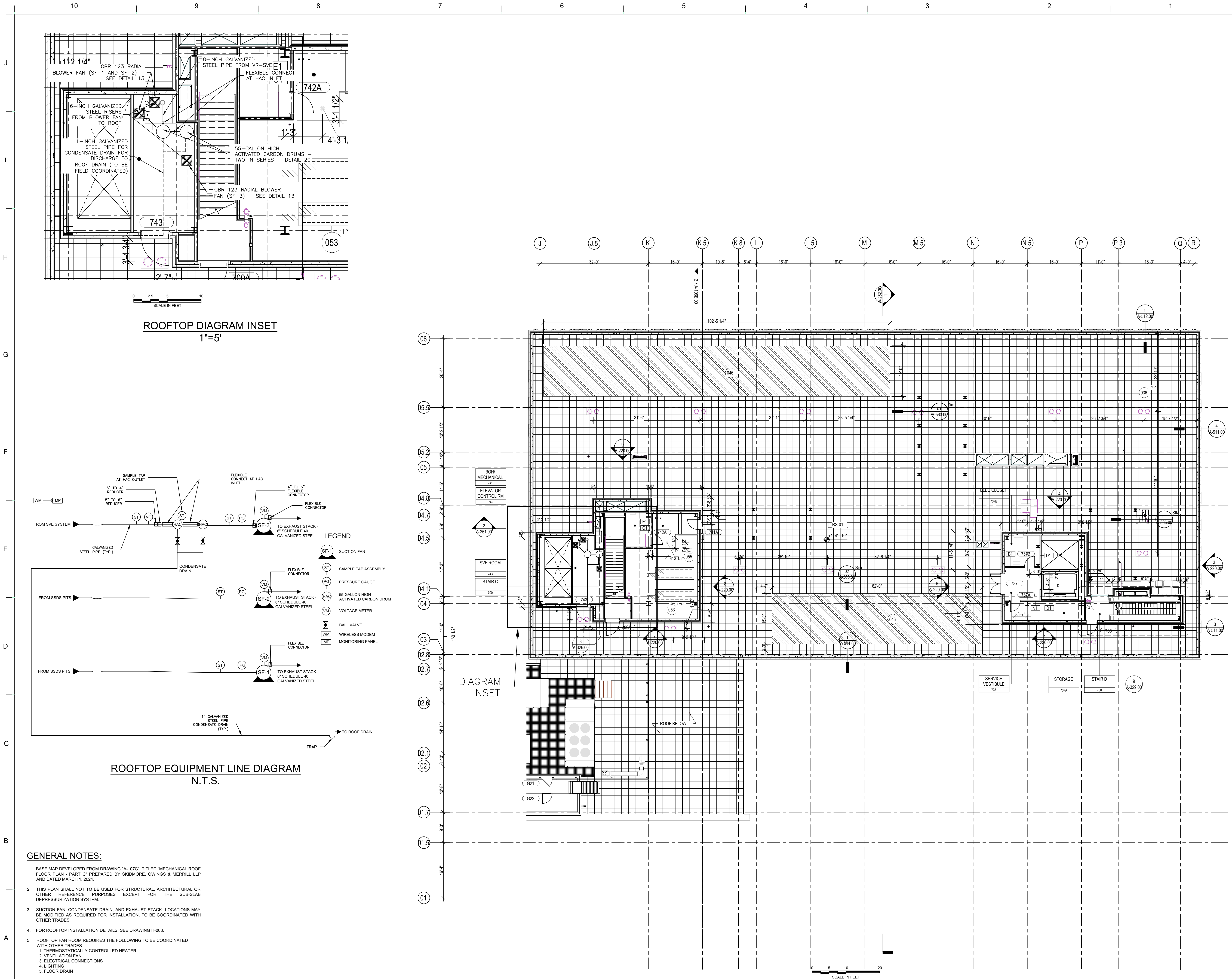
DRAWING NUMBER

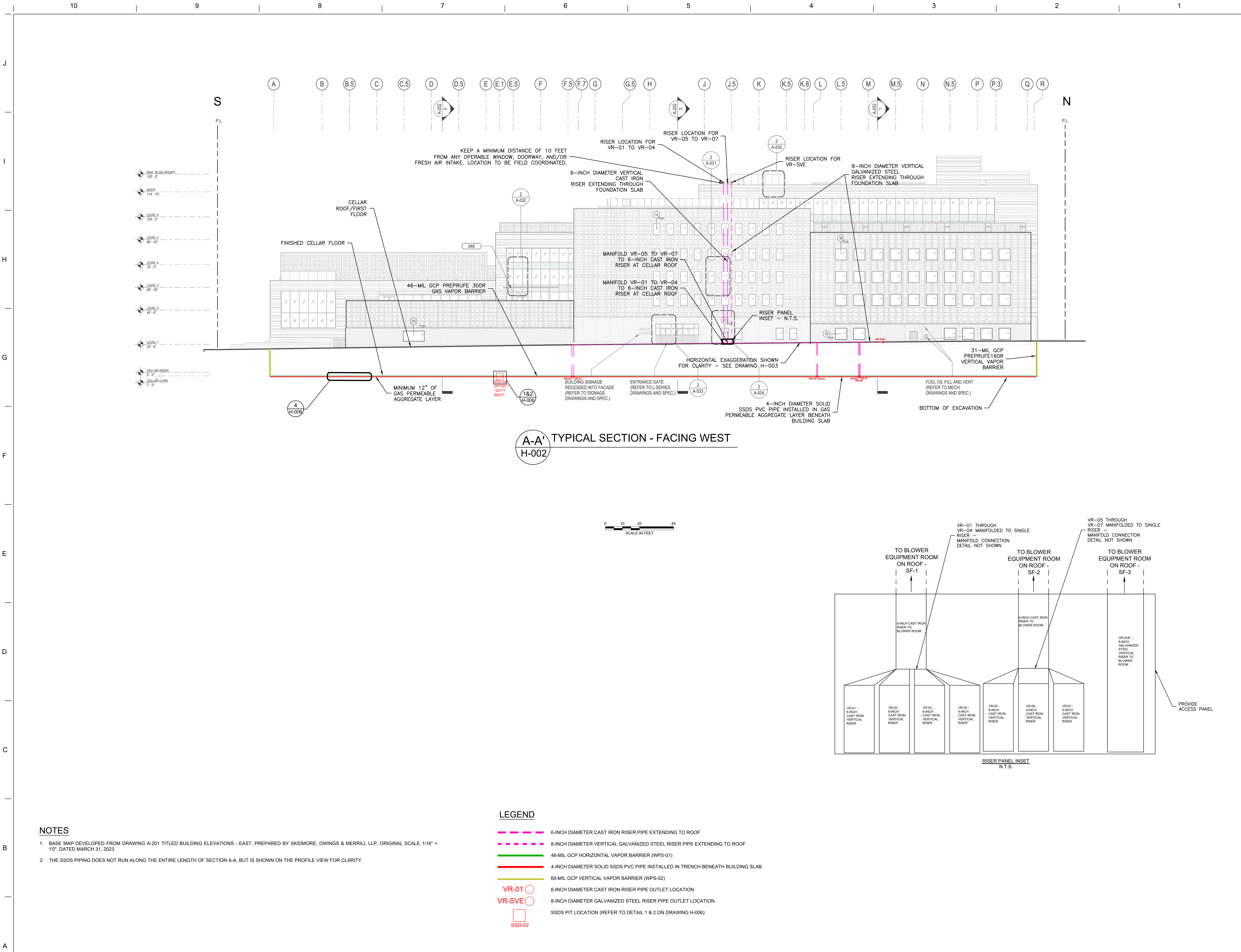
H-003

IS-CAN DRAWING NUMBER

NB APPLICATION NO.

#X0006970361-11



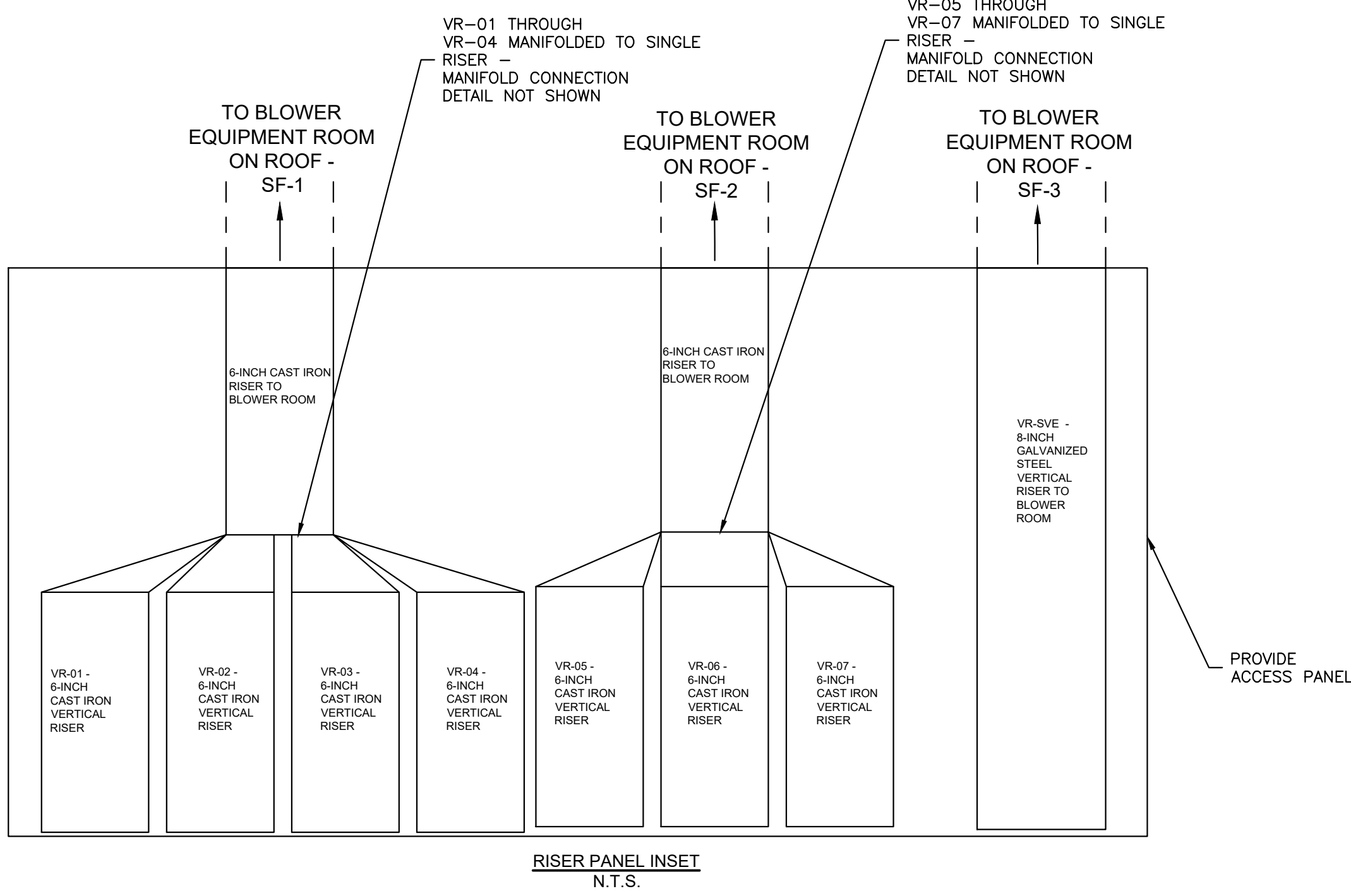


NOTES

- BASE MAP DEVELOPED FROM DRAWING A-201 TITLED BUILDING ELEVATIONS - EAST, PREPARED BY SKIDMORE, OWINGS & MERRILL LLP, ORIGINAL SCALE 1/16" = 1", DATED MARCH 31, 2023.
- THE SSDS PIPING DOES NOT RUN ALONG THE ENTIRE LENGTH OF SECTION A-A, BUT IS SHOWN ON THE PROFILE VIEW FOR CLARITY.

LEGEND

- 6-INCH DIAMETER CAST IRON RISER PIPE EXTENDING TO ROOF
- 8-INCH DIAMETER VERTICAL GALVANIZED STEEL RISER PIPE EXTENDING TO ROOF
- 46-MIL GCP HORIZONTAL VAPOR BARRIER (WPS-01)
- 4-INCH DIAMETER SOLID SSDS PVC PIPE INSTALLED IN TRENCH BENEATH BUILDING SLAB
- 60-MIL GCP VERTICAL VAPOR BARRIER (WPS-02)
- VR-01 6-INCH DIAMETER CAST IRON RISER PIPE OUTLET LOCATION
- VR-SVE 8-INCH DIAMETER GALVANIZED STEEL RISER PIPE OUTLET LOCATION
- SSD-02 SSD PIT LOCATION (REFER TO DETAIL 1 & 2 ON DRAWING H-006)



SUCCESS
ACADEMY
CHARTER
SCHOOLS

101 East 150th Street, Bronx, NY 10451

OWNER

Success Academy Charter Schools
95 Pine Street, New York, NY 10005

ARCHITECT

SOM

Skidmore, Owings & Merrill LLP
250 Greenwich St, New York, 10007

OWNER'S REPRESENTATIVE

DBI Projects
1261 Broadway 9th floor, New York, NY 10001
CIVIL ENGINEER

Philip Habib & Associates
102 Madison Avenue, New York, NY 10016
STRUCTURAL ENGINEER

LERA Consulting Structural Engineers
40 Wall Street, New York, NY 10005
MEP ENGINEER

Ventrop Engineering Consulting Group, PLLC
369 W 34th Street, New York, NY 10001
VERTICAL TRANSPORTATION

Lerch Bates
1430 Broadway, New York, NY 10018
AV & IT

Align
55 Broad Street, New York, NY 10004
LIGHTING

SBLD Studio
575 Bloomfield Ave, Montclair, NJ 07042
CODE CONSULTING

Code Consulting, Inc.
215 West 40th Street, New York, NY 10018
FOOD SERVICES CONSULTANT

Davella Studios
450 Lexington Avenue - FL 4, New York, NY 10017
LANDSCAPE ARCHITECT

SWA/Balsley
31 W 27th Street, New York, NY 10001
GEO TECHNICAL CONSULTANT

Mueser Rutledge Consulting Engineers
225 W 34th St #6, New York, NY 10122
ENVIRONMENTAL CONSULTANT

GZA
104 West 29th Street, 10th Floor, New York, NY 10001
ENCLOSURE CONSULTANT

Hatfield Group
285 W Broadway, New York, NY 10013
SUSTAINABILITY CONSULTANT

Socotec
151 W 42nd Street, New York, NY 10036
ACCESSORIES

Ceram & Associates
1001 Avenue of the Americas, New York, NY 10018
SIGNAGE AND WAYFINDING CONSULTANT

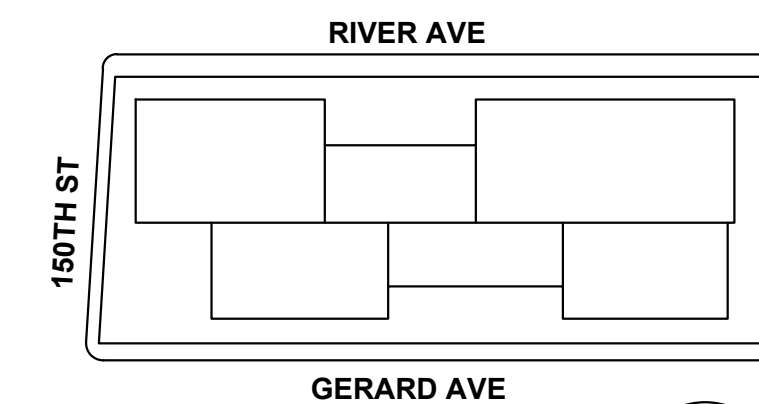
Pentagram
250 Park Avenue South, New York, NY 10003
SECURITY CONSULTANT

Introba (formerly Ross & Baruzzini)
1450 Broadway, Office 15-102, New York, NY 10018
HARDWARE CONSULTANT

arkaSpecs, Inc.
12 Phyllis Ln, Rock Tavern, NY 12575
THERMAL CONSULTANT

Harvey Marshall Berling Associates
173 W 81st St, New York, NY 10024
COMMISSIONING

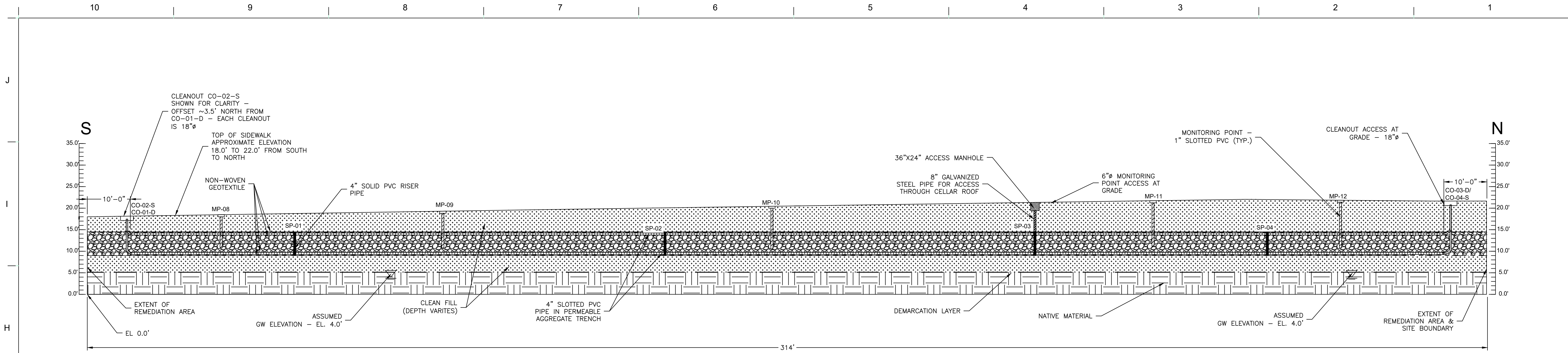
FST Technical Services
30 Broad Street, Suite 1500, New York, NY 10004
KEY PLAN



SEAL

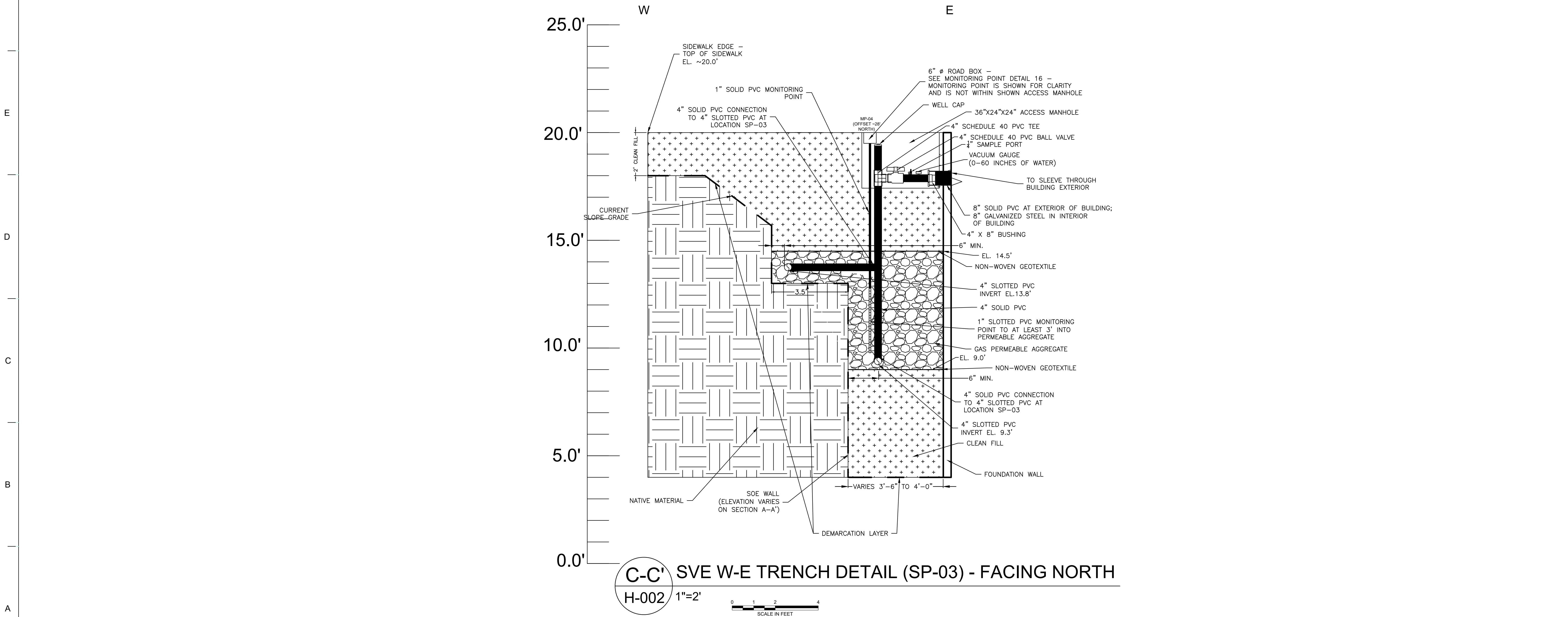


NO.	DATE	DESCRIPTION
1	04/04/2023	BULLETIN 18
2	05/24/2024	BULLETIN 19
3	08/08/2024	BULLETIN 20
4	08/11/2023	ADDENDUM 1
5	08/11/2023	ADDENDUM 2
6	08/11/2023	ADDENDUM 3
7	08/11/2023	ADDENDUM 4
8	08/11/2023	ADDENDUM 5
9	08/11/2023	ADDENDUM 6
10	08/11/2023	ADDENDUM 7
11	08/11/2023	ADDENDUM 8
12	08/11/2023	ADDENDUM 9
13	08/11/2023	ADDENDUM 10
14	08/11/2023	ADDENDUM 11
15	08/11/2023	ADDENDUM 12
16	08/11/2023	ADDENDUM 13
17	08/11/2023	ADDENDUM 14
18	08/11/2023	ADDENDUM 15
19	08/11/2023	ADDENDUM 16
20	08/11/2023	ADDENDUM 17
21	08/11/2023	ADDENDUM 18
22	08/11/2023	ADDENDUM 19
23	08/11/2023	ADDENDUM 20
24	08/11/2023	ADDENDUM 21
25	08/11/2023	ADDENDUM 22
26	08/11/2023	ADDENDUM 23
27	08/11/2023	ADDENDUM 24
28	08/11/2023	ADDENDUM 25
29	08/11/2023	ADDENDUM 26
30	08/11/2023	ADDENDUM 27
31	08/11/2023	ADDENDUM 28
32	08/11/2023	ADDENDUM 29
33	08/11/2023	ADDENDUM 30
34	08/11/2023	ADDENDUM 31
35	08/11/2023	ADDENDUM 32
36	08/11/2023	ADDENDUM 33
37	08/11/2023	ADDENDUM 34
38	08/11/2023	ADDENDUM 35
39	08/11/2023	ADDENDUM 36
40	08/11/2023	ADDENDUM 37
41	08/11/2023	ADDENDUM 38
42	08/11/2023	ADDENDUM 39
43	08/11/2023	ADDENDUM 40
44	08/11/2023	ADDENDUM 41
45	08/11/2023	ADDENDUM 42
46	08/11/2023	ADDENDUM 43
47	08/11/2023	ADDENDUM 44
48	08/11/2023	ADDENDUM 45
49	08/11/2023	ADDENDUM 46
50	08/11/2023	ADDENDUM 47
51	08/11/2023	ADDENDUM 48
52	08/11/2023	ADDENDUM 49
53	08/11/2023	ADDENDUM 50
54	08/11/2023	ADDENDUM 51
55	08/11/2023	ADDENDUM 52
56	08/11/2023	ADDENDUM 53
57	08/11/2023	ADDENDUM 54
58	08/11/2023	ADDENDUM 55
59	08/11/2023	ADDENDUM 56
60	08/11/2023	ADDENDUM 57
61	08/11/2023	ADDENDUM 58
62	08/11/2023	ADDENDUM 59
63	08/11/2023	ADDENDUM 60
64	08/11/2023	ADDENDUM 61
65	08/11/2023	ADDENDUM 62
66	08/11/2023	ADDENDUM 63
67	08/11/2023	ADDENDUM 64
68	08/11/2023	ADDENDUM 65
69	08/11/2023	ADDENDUM 66
70	08/11/2023	ADDENDUM 67
71	08/11/2023	ADDENDUM 68
72	08/11/2023	ADDENDUM 69
73	08/11/2023	ADDENDUM 70
74	08/11/2023	ADDENDUM 71
75	08/11/2023	ADDENDUM 72
76	08/11/2023	ADDENDUM 73
77	08/11/2023	ADDENDUM 74
78	08/11/2023	ADDENDUM 75
79	08/11/2023	ADDENDUM 76
80	08/11/2023	ADDENDUM 77
81	08/11/2023	ADDENDUM 78
82	08/11/2023	ADDENDUM 79
83	08/11/2023	ADDENDUM 80
84	08/11/2023	ADDENDUM 81
85	08/11/2023	ADDENDUM 82
86	08/11/2023	ADDENDUM 83
87	08/11/2023	ADDENDUM 84
88	08/11/2023	ADDENDUM 85
89	08/11/2023	ADDENDUM 86
90	08/11/2023	ADDENDUM 87
91	08/11/2023	ADDENDUM 88
92	08/11/2023	ADDENDUM 89
93	08/11/2023	ADDENDUM 90
94	08/11/2023	ADDENDUM 91
95	08/11/2023	ADDENDUM 92
96	08/11/2023	ADDENDUM 93
97	08/11/2023	ADDENDUM 94
98	08/11/2023	ADDENDUM 95
99	08/11/2023	ADDENDUM 96
100	08/11/2023	ADDENDUM 97
101	08/11/2023	ADDENDUM 98
102	08/11/2023	ADDENDUM 99
103	08/11/2023	ADDENDUM 100
104	08/11/2023	ADDENDUM 101
105	08/11/2023	ADDENDUM 102
106	08/11/2023	ADDENDUM 103
107	08/11/2023	ADDENDUM 104
108	08/11/2023	ADDENDUM 105
109	08/11/2023	ADDENDUM 106
110	08/11/2023	ADDENDUM 107
111	08/11/2023	ADDENDUM 108
112	08/11/2023	ADDENDUM 109
113	08/11/2023	ADDENDUM 110
114	08/11/2023	ADDENDUM 111
115	08/11/2023	ADDENDUM 112
116	08/11/2023	ADDENDUM 113
117	08/11/2023	ADDENDUM 114
118	08/11/2023	ADDENDUM 115
119	08/11/2023	ADDENDUM 116
120	08/11/2023	ADDENDUM 117
121	08/11/2023	ADDENDUM 118
122	08/11/2023	ADDENDUM 119
123	08/11/2023	ADDENDUM 120
124	08/11/2023	ADDENDUM 121
125	08/11/2023	ADDENDUM 122
126	08/11/2023	ADDENDUM 123
127	08/11/2023	ADDENDUM 124
128	08/11/2023	ADDENDUM 125
129	08/11/2023	ADDENDUM 126
130	08/11/2023	ADDENDUM 127
131	08/11/2023	ADDENDUM 128
132	08/11/2023	ADDENDUM 129
133	08/11/2023	ADDENDUM 130
134	08/11/2023	ADDENDUM 131
135	08/11/2023	ADDENDUM 132
136	08/11/2023	ADDENDUM 133
137	08/11/2023	ADDENDUM 134
138	08/11/2023	ADDENDUM 135
139	08/11/2023	ADDENDUM 136
140	08/11/2023	ADDENDUM 137
141	08/11/2023	ADDENDUM 138
142	08/11/2023	ADDENDUM 139
143	08/11/2023	ADDENDUM 140
144	08/11/2023	ADDENDUM 141
145	08/11/2023	ADDENDUM 142
146	08/11/2023	ADDENDUM 143
147	08/11/2023	ADDENDUM 144
148	08/11/2023	ADDENDUM 145
149	08/11/2023	ADDENDUM 146
150	08/11/2023	ADDENDUM 147
151	08/11/2023	ADDENDUM 148
152	08/11/2023	ADDENDUM 149
153	08/11/2023	ADDENDUM 150
154	08/11/2023	ADDENDUM 151
155	08/11/2023	ADDENDUM 152
156	08/11/2023	ADDENDUM 153
157	08/11/2023	ADDENDUM 154
158	08/11/2023	ADDENDUM 155
159	08/11/2023	ADDENDUM 156
160	08/11/2023	ADDENDUM 157
161	08/11/2023	ADDENDUM 158
162	08/11/2023	ADDENDUM 159
163	08/11/2023	ADDENDUM 160
164	08/11/2023	ADDENDUM 161
165	08/11/2023	ADDENDUM 162
166	08/11/2023	ADDENDUM 163
167	08/11/2023	ADDENDUM 164
168	08/11/2023	ADDENDUM 165
169	08/11/2023	ADDENDUM 166
170	08/11/2023	ADDENDUM 167
171	08/11/2023	ADDENDUM 168
172	08/11/2023	ADDENDUM 169
173	08/11/2023	ADDENDUM 170
174	08/11/2023	ADDENDUM 171
175	08/11/2023	ADDENDUM 172
176	08/11/2023	ADDENDUM 173
177	08/11/2023	ADDENDUM 174
178	08/11/2023	ADDENDUM 175
179	08/11/2023	ADDENDUM 176
180	08/11/2023	ADDENDUM 177
181	08/11/2023	ADDENDUM 178
182	08/11/2023	ADDENDUM 179
183	08/11/2023	ADDENDUM 180
184	08/11/2023	ADDENDUM 181
185	08/11/2023	ADDENDUM 182
186	08/11/2023	ADDENDUM 183
187	08/11/2023	ADDENDUM 184
188	08/11/2023	ADDENDUM 185
189	08/11/2023	ADDENDUM 186
190	08/11/2023	ADDENDUM 187
191	08/11/2023	ADDENDUM 188
192	08/11/2023	ADDENDUM 189
193	08/11/2023	ADDENDUM 190
194	08/11/2023	ADDENDUM 191
195	08/11/2023	ADDENDUM 192
196	08/11/2023	ADDENDUM 193
197	08/11/2023	ADDENDUM 194
198	08/11/2023	ADDENDUM 195
199	08/11/2023	ADDENDUM 196
200	08/11/2023	ADDENDUM 197
201	08/11/2023	ADDENDUM 198
202	08/11/2023	ADDENDUM 199
203	08/11/2023	ADDENDUM 200
204	08/11/2023	ADDENDUM 201
205	08/11/2023	ADDENDUM 202
206	08/11/2023	ADDENDUM 203
207	08/11/2023	ADDENDUM 204
208	08/11/2023	ADDENDUM 205
209	08/11/2023	ADDENDUM 206
210	08/11/2023	ADDENDUM 207
211	08/11/2023	ADDENDUM 208
212	08/11/2023	ADDENDUM 209
213	08/11/2023	ADDENDUM 210
214	08/11/2023	ADDENDUM 211
215	08/11/2023	ADDENDUM 212
216	08/11/2023	ADDENDUM 213
217	08/11/2023	ADDENDUM 214
218	08/11/2023	ADDENDUM 215
219	08/11/2023	ADDENDUM 216
220	08/11/2023	ADDENDUM 217
221	08/11/2023	ADDENDUM 218
222	08/11/2023	ADDENDUM 219
223	08/11/2023	ADDENDUM 220
224	08/11/2023	ADDENDUM 221
225	08/11/2023	ADDENDUM 222
226	08/11/2023	ADDENDUM 223
227	08/11/2023	ADDENDUM 224
228	08/11/2023	ADDENDUM 225
229	08/11/2023	ADDENDUM 226
230	08/11/2023	ADDENDUM 227
231	08/11/2023	ADDENDUM 228
232	08/11/2023	ADDENDUM 229
233	08/11/2023	ADDENDUM 230
234	08/11/2023	ADDENDUM 231
235	08/11/2023	ADDENDUM 232
236	08/11/2023	ADDENDUM 233
237	08/11/2023	ADDENDUM 234
238	08/11/2023	ADDENDUM 235
239	08/11/2023	ADDENDUM 236
240	08/11/2023	ADDENDUM 237
241	08/11/2023	ADDENDUM 238
242	08/11/2023	ADDENDUM 239
243	08/11/2023	ADDENDUM 240
244	08/11/2023	ADDENDUM 241



B-B' SVE S-N TRENCH DETAIL - FACING WEST
H-002 1"=10'

0 5 10 20
SCALE IN FEET



C-C' SVE W-E TRENCH DETAIL (SP-03) - FACING NORTH
H-002 1"=2'

0 1 2 4
SCALE IN FEET

**SUCCESS
ACADEMY
CHARTER
SCHOOLS**

101 East 150th Street, Bronx, NY 10451

OWNER

Success Academy Charter Schools

95 Pine Street, New York, NY 10005

ARCHITECT

SOM

Skidmore, Owings & Merrill LLP

250 Greenwich St, New York, NY 10007

OWNER'S REPRESENTATIVE

DBI Projects

1261 Broadway 9th floor, New York, NY 10001

CIVIL ENGINEER

Philip Habib & Associates

102 Madison Avenue, New York, NY 10016

STRUCTURAL ENGINEER

LERA Consulting Structural Engineers

40 Wall Street, New York, NY 10005

MEP ENGINEER

Vantrop Engineering Consulting Group, PLLC

369 W 34th Street, New York, NY 10001

VERTICAL TRANSPORTATION

Lerch Bates

1430 Broadway, New York, NY 10018

AV & IT

Align

55 Broad Street, New York, NY 10004

LIGHTING

SBLD Studio

575 Bloomfield Ave, Montclair, NJ 07042

CODE CONSULTING

Code Consulting, Inc.

215 West 40th Street, New York, NY 10018

FOOD SERVICES CONSULTANT

Davella Studios

450 Lexington Avenue - FL 4, New York, NY 10017

LANDSCAPE ARCHITECT

SWA/Balsley

31 W 27th Street, New York, NY 10001

GEOLOGICAL CONSULTANT

Musser Rutledge Consulting Engineers

225 W 34th St #6, New York, NY 10122

ENVIRONMENTAL CONSULTANT

GZA

104 West 29th Street, 10th Floor, New York, NY 10001

ENCLOSURE CONSULTANT

Hatfield Group

285 W Broadway, New York, NY 10013

SUSTAINABILITY CONSULTANT

Socotec

151 W 42nd Street, New York, NY 10036

ACQUISITION

Cerami & Associates

1001 Avenue of the Americas, New York, NY 10018

SIGNAGE AND WAYFINDING CONSULTANT

Pentagram

250 Park Avenue South, New York, NY 10003

SECURITY CONSULTANT

Introba (formerly Ross & Baruzzini)

1450 Broadway, Office 15-102, New York, NY 10018

HARDWARE CONSULTANT

arkaSpecs, Inc.

12 Phyllis Ln, Rock Tavern, NY 12575

THEATRICAL CONSULTANT

Harvey Marshall Berling Associates

173 W 81st St, New York, NY 10024

COMMISSIONING

FST Technical Services

30 Broad Street, Suite 1500, New York, NY 10004

KEYPLAN

RIVER AVE

150TH ST

GERARD AVE

SEAL



NO.	DATE	DESCRIPTION
9	04/04/2025	BULLETIN 15
7	03/02/2024	BULLETIN 15

SVE SECTIONS

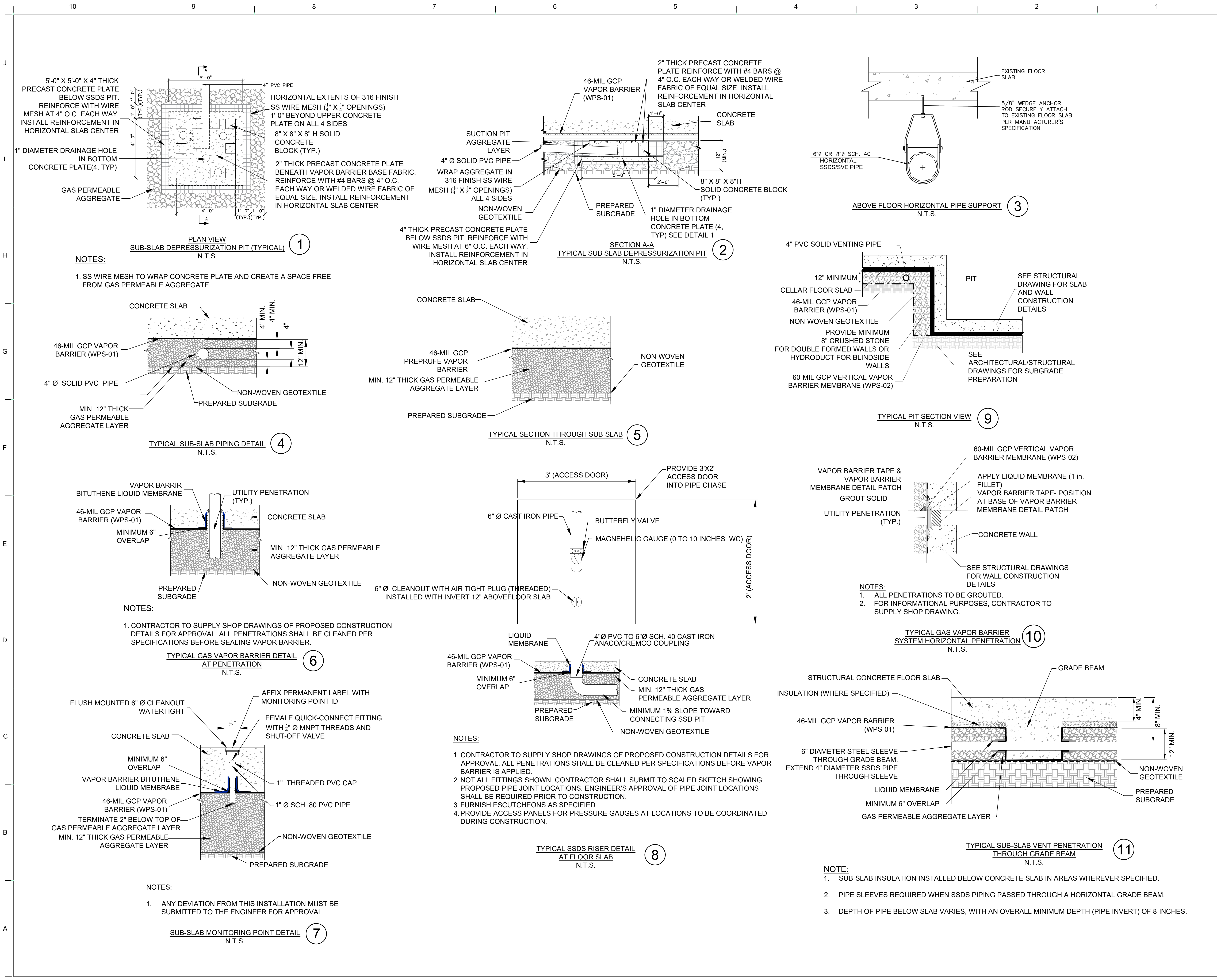
DRAWING NUMBER

H-006

B-SCAN DRAWING NUMBER

NO APPLICATION NO.

#X006970361-11



SUCCESS ACADEMY CHARTER SCHOOLS

101 East 150th Street, Bronx, NY 10451

OWNER

Success Academy Charter Schools
95 Pine Street, New York, NY 10005

ARCHITECT

SOM

Skidmore, Owings & Merrill LLP
250 Greenwich St, New York, 10007

OWNER'S REPRESENTATIVE

DBI Projects
1261 Broadway 9th floor, New York, NY 10001

Civil Engineer

Philip Habibi & Associates
102 Madison Avenue, New York, NY 10016

STRUCTURAL ENGINEER

LERA Consulting Structural Engineers
40 Wall Street, New York, NY 10005

MEFF ENGINEER

Ventrop Engineering Consulting Group, PLLC
369 W 34th Street, New York, NY 10001

VERTICAL TRANSPORTATION

Lorch Bates
1430 Broadway, New York, NY 10018

AS EIT

Align
55 Broad Street, New York, NY 10004

LIGHTING

SBLD Studio
575 Bloomfield Ave, Montclair, NJ 07042

CODE CONSULTING

Code Consulting, Inc.
215 West 40th Street, New York, NY 10018

FOOD SERVICES CONSULTANT

Davella Studios
450 Lexington Avenue - FL 4, New York, NY 10017

LANDSCAPE ARCHITECT

SWA/Balsley
31 W 27th Street, New York, NY 10001

GEOTECHNICAL CONSULTANT

Musser Rutledge Consulting Engineers
225 W 34th St. #6, New York, NY 10122

ENVIRONMENTAL CONSULTANT

GZA
104 West 29th Street, 10th Floor, New York, NY 10001

ENCLOSURE CONSULTANT

Hatfield Group
285 W Broadway, New York, NY 10013

SUBFAMILIARITY CONSULTANT

Socotec
151 W 42nd Street, New York, NY 10036

ACOUSTICS

Cerami & Associates
1001 Avenue of the Americas, New York, NY 10018

SIGNAGE AND WAYFINDING CONSULTANT

Pentagram
250 Park Avenue South, New York, NY 10003

SECURITY CONSULTANT

Introba (formerly Ross & Baruzzini)
1450 Broadway, Office 15-102, New York, NY 10018

HARDWARE CONSULTANT

arkaSpecs, Inc.
12 Phyllis Ln, Rock Tavern, NY 12575

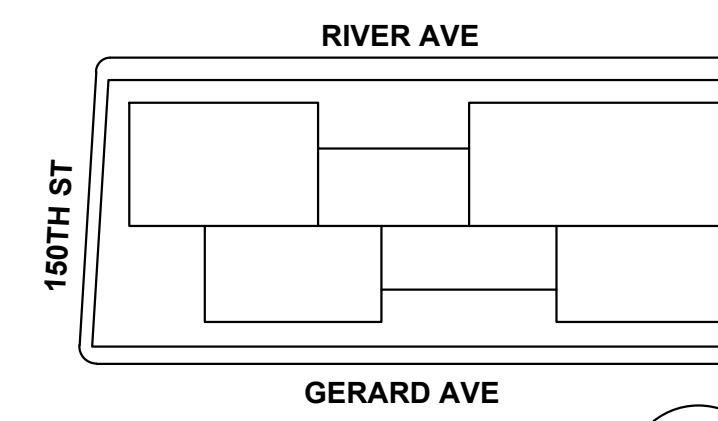
THEATRICAL CONSULTANT

Harvey Marshall Berling Associates
173 W 81st St, New York, NY 10024

COMMISSIONING

FST Technical Services
30 Broad Street, Suite 1500, New York, NY 10004

KEYPLAN



SEAL



NO.	DATE	DESCRIPTION
1	04/04/2023	BULLETIN 16
2	05/09/2023	BULLETIN 16
3	06/11/2023	ADDENDUM 1
4	06/26/2023	ISSUED FOR CONSTRUCTION
5	07/11/2023	ISSUED FOR 50% CONSTRUCTION DOCUMENTS
6	11/16/2023	ISSUED FOR 30% CONSTRUCTION DOCUMENTS

SSDS AND CHEMICAL VAPOR BARRIER DETAILS

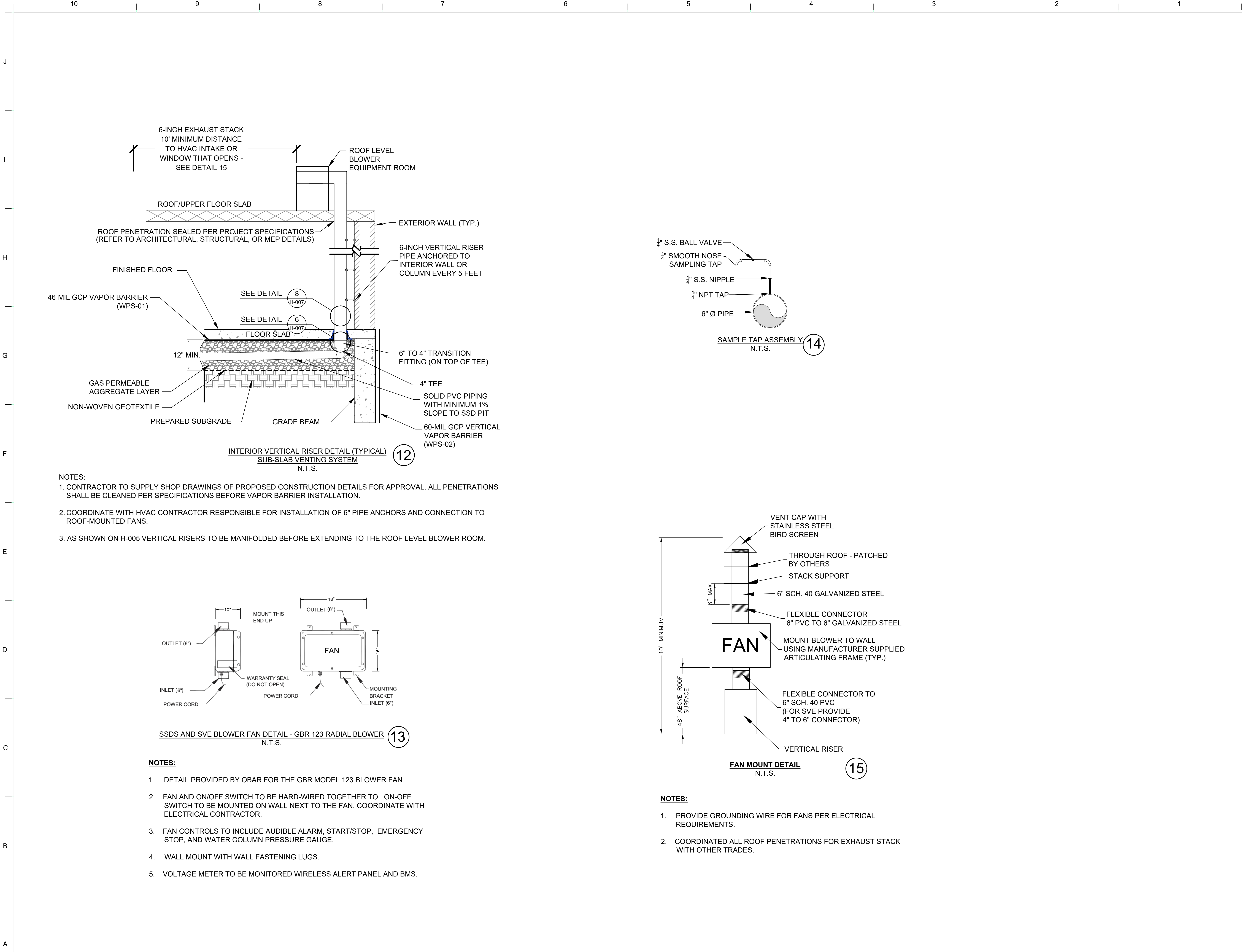
DRAWING NUMBER

H-007

B-SCAN DRAWING NUMBER

NE APPLICATION NO.

#X006970361-11



SUCCESS
ACADEMY
CHARTER
SCHOOLS

101 East 150th Street, Bronx, NY 10451

OWNER

Success Academy Charter Schools
95 Pine Street, New York, NY 10005

ARCHITECT

SOM

Skidmore, Owings & Merrill LLP
250 Greenwich St, New York, 10007

OWNER'S REPRESENTATIVE

DBI Projects
1261 Broadway 9th floor, New York, NY 10001

CIVIL ENGINEER

Philip Habib & Associates
102 Madison Avenue, New York, NY 10016

STRUCTURAL ENGINEER

LERA Consulting Structural Engineers
40 Wall Street, New York, NY 10005

MEPF ENGINEER

Ventrop Engineering Consulting Group, PLLC
369 W 34th Street, New York, NY 10001

VERTICAL TRANSPORTATION

Lerch Bates
1430 Broadway, New York, NY 10018

AV & IT

Align
55 Broad Street, New York, NY 10004

LIGHTING

SBLD Studio
575 Bloomfield Ave, Montclair, NJ 07042

CODE CONSULTING

Code Consulting, Inc.
215 West 40th Street, New York, NY 10018

FOOD SERVICES CONSULTANT

Davella Studios
450 Lexington Avenue - FL 4, New York, NY 10017

LANDSCAPE ARCHITECT

SWA/Balsley
31 W 27th Street, New York, NY 10001

GEOTECHNICAL CONSULTANT

Mueser Rutledge Consulting Engineers
225 W 34th St. #6, New York, NY 10122

ENVIRONMENTAL CONSULTANT

GZA

104 West 29th Street, 10th Floor, New York, NY 10001

ENCLOSURE CONSULTANT

Hatfield Group
285 W Broadway, New York, NY 10013

SUSTAINABILITY CONSULTANT

Socotec
151 W 42nd Street, New York, NY 10036

ACOUSTICS

Cerami & Associates
1001 Avenue of the Americas, New York, NY 10018

SIGNAGE AND WAYFINDING CONSULTANT

Pentagram
250 Park Avenue South, New York, NY 10003

SECURITY CONSULTANT

Introba (formerly Ross & Baruzzini)
1450 Broadway, Office 15-102, New York, NY 10018

WIREFRAME CONSULTANT

erkaSpecs, Inc.
12 Phyllis Ln, Rock Tavern, NY 12575

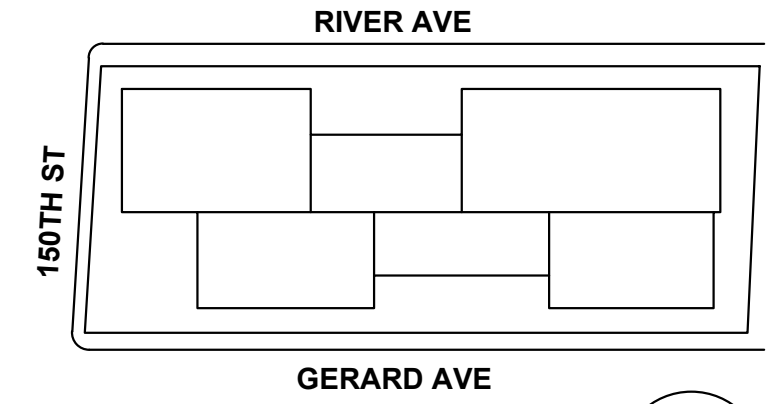
THEATRICAL CONSULTANT

Harvey Marshall Berling Associates
173 W 81st St, New York, NY 10024

COMMISSIONING

FST Technical Services
30 Broad Street, Suite 1500, New York, NY 10004

KEYPLAN



SEAL



9	04/04/2025	BULLETIN 10
8	05/24/2024	BULLETIN 09
7	03/05/2024	BULLETIN 08
6	08/11/2023	ADDENDUM 5
5	07/16/2023	ADDENDUM 4
4	05/26/2023	ISSUED FOR CONSTRUCTION
3	03/11/2023	ISSUED FOR 30% CONSTRUCTION DOCUMENTS
2	11/16/2022	ISSUED FOR 30% CONSTRUCTION DOCUMENTS

NO.	DATE	DESCRIPTION
-----	------	-------------

DRAWING TITLE

BLOWER EQUIPMENT
ROOM DETAILS

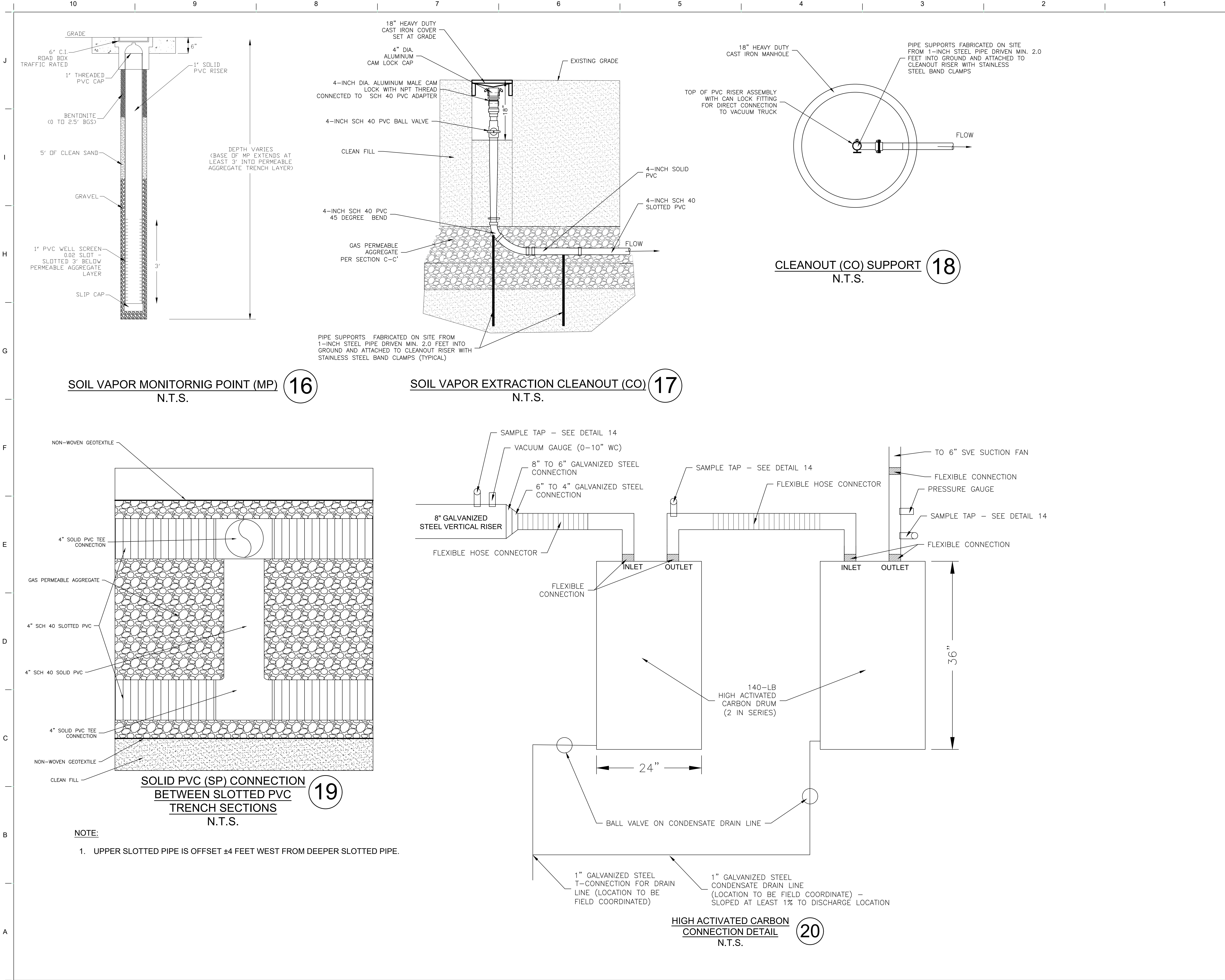
DRAWING NUMBER

H-008

B-SCAN DRAWING NUMBER

NB APPLICATION NO.

#X006970361-11



SUCCESS
ACADEMY
CHARTER
SCHOOLS

101 East 150th Street, Bronx, NY 10451

Success Academy Charter Schools
95 Pine Street, New York, NY 10005

ARCHITECT

SOM

Skidmore, Owings & Merrill LLP
250 Greenwich St, New York, 10007

OWNER'S REPRESENTATIVE

DBI Projects
1261 Broadway 9th floor, New York, NY 10001

CIVIL ENGINEER

Philip Habib & Associates
102 Madison Avenue, New York, NY 10016

STRUCTURAL ENGINEER

LERA Consulting Structural Engineers
40 Wall Street, New York, NY 10005

MEPP ENGINEER

Ventrop Engineering Consulting Group, PLLC
369 W 34th Street, New York, NY 10001

VERTICAL TRANSPORTATION

Lerch Bates
1430 Broadway, New York, NY 10018

AV & IT

Align
55 Broad Street, New York, NY 10004

LIGHTING

SBLD Studio
575 Bloomfield Ave, Montclair, NJ 07042

CODE CONSULTING

Code Consulting, Inc.
215 West 40th Street, New York, NY 10018

FOOD SERVICES CONSULTANT

Davella Studios
450 Lexington Avenue - FL 4, New York, NY 10017

LANDSCAPE ARCHITECT

SWA/Balslev
31 W 27th Street, New York, NY 10001

GEOTECHNICAL CONSULTANT

Mueser Rutledge Consulting Engineers
225 W 34th St. #6, New York, NY 10122

ENVIRONMENTAL CONSULTANT

GZA
104 West 29th Street, 10th Floor, New York, NY 10001

ENCLOSURE CONSULTANT

Hatfield Group
285 W Broadway, New York, NY 10013

SUSTAINABILITY CONSULTANT

Socotec
151 W 42nd Street, New York, NY 10036

ACOUSTICS

Cerami & Associates
1001 Avenue of the Americas, New York, NY 10018

SIGNAGE AND WAYFINDING CONSULTANT

Pentagram
250 Park Avenue South, New York, NY 10003

SECURITY CONSULTANT

Introba (formerly Ross & Baruzzini)
1450 Broadway, Office 15-102, New York, NY 10018

INTERIOR CONSULTANT

arkaSpecs, Inc.
12 Phyllis Ln, Rock Tavern, NY 12575

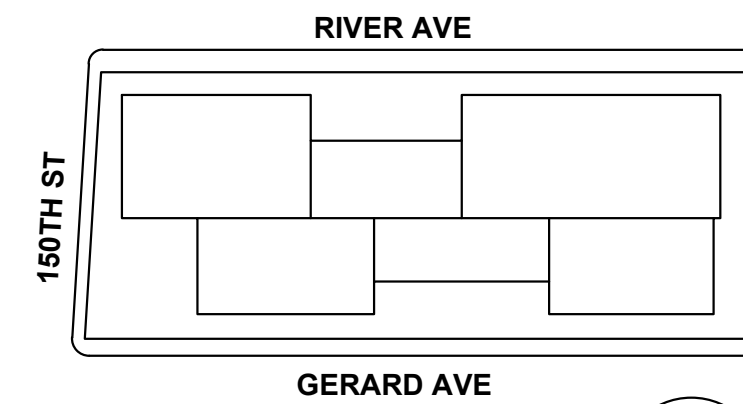
THEATRICAL CONSULTANT

Harvey Marshall Berling Associates
173 W 81st St, New York, NY 10024

COMMISSIONING

FST Technical Services
30 Broad Street, Suite 1500, New York, NY 10004

KEYPLAN



SEAL



NO.	DATE	DESCRIPTION
9	04/04/2025	BULLETIN 18
8	03/04/2024	BULLETIN 18
7	03/08/2024	BULLETIN 05

DRAWING TITLE

SVE SYSYTEM DETAILS

DRAWING NUMBER

H-009

B/S CAN DRAWING NUMBER

NB APPLICATION NO.

#X006970361-11



May 2025
BCP No. C203154 - 101 East 150th Street, Bronx, NY
Remedial Action Workplan
File No. 41.0163097.00 R3