PART 1 – GENERAL

A. All piping installed under the structural foundation shall be supported by the overhead slab using an approved suspension system.
B. The standard PlumbingVoid system is designed for trench depths down to 6 feet. A deep trench version is available for depths down to 10 feet.
C. Requirements for utility isolation should be harmonized between the Geotechnical, Structural, and MEP Engineers. The appropriate EOR is responsible for resolving conflicts between requirements.

1.01 RELATED DOCUMENTS

A. Project Geotechnical Report
B. Project Specification
C. Project Plumbing Drawing
D. Project Structural Drawing

1.02 SUMMARY

A. Provides a dimensionally stable underground void space that is independent of the overhead structural slab. The overhead slab shall support the weight of suspended pipes, including all imposed loads.
B. The system shall be designed to temporarily position and suspend the pipes to the specified height and slope until permanently anchored to the overhead structural slab via the utility hanger system.
C. The open bottom of the system is designed to receive the infill of vertical expansion from the underlying non-cohesive backfill. If vertical pressure is applied to the side panels of the system in contact with the soil, the uplifting soil pressure may lift the PlumbingVoid assembly causing the support washer on the hanger to deform and separate from the crossbar support, resulting in the pipe being totally independent of the PlumbingVoid system.

1.03 PRODUCT SPECIFICATION

A. The system shall have waterproof components.
B. The system must have industry-proven performance in inclement conditions.
C. The system shall be able to perform if submerged in water and maintain its structural integrity.
D. All independent components not included/supplied with the PlumbingVoid System should comply with the project specifications, independent of the PlumbingVoid System.
E. All vertical threaded rods must have an embed component secured toward the top end and be permanently affixed to the concrete slab to maintain the specified elevations. The embed component shall be approved by the structural engineer.
F. All System components shall be furnished by the system manufacturer.
G. The system shall be installed per the manufacturer's requirements and recommendations.
H. Acceptable Manufacturer: PlumbingVoid System or approved equal.
I. Designed for pipe diameters up to 12" in PVC or Cast Iron and depths of 6' maximum for standard assembly and 10' maximum for deep bury assembly.

1.04 SUBMITTALS

A. Product Data for the PlumbingVoid System
B. Plumbing Takeoff (may or may not be produced depending on the project).

1.05 QUALITY ASSURANCE

A. System to be installed per manufacturer's requirements.
B. System to be installed by experienced personnel or under the supervision of a person with experience with PlumbingVoid.

PART 2 – PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

A. The product is configured in 4-foot sections and detailed based on pipe size, pipe type, bury depth, and soil conditions.
B. PlumbingVoid is assembled using basic hand tools.
C. PlumbingVoid is easily modified to accommodate different transitions and changes in elevation.
D. The bottom of the trench should be lined with a minimum 6" approved non-cohesive fill (gravel, rock, etc.).
E. Proper hanger support washer selection is essential for decoupling and to prevent uplift damage.
F. Assemblies are currently available in the following sizes:
    a. 18x18 (1/2" or 3/4" thick side panels)
    b. 24x18, 32x18, 32x24 and 36x24. (3/4" thick side panels)
    c. Other sizes available upon request
G. PlumbingVoid Utility Isolation System available from:

VoidForm Products, LLC
6151 Cowley Rd.
Fort Worth, TX 76119
817-429-0888 (main)
www.voidform.com (website)
sales@voidform.com (email)

PART 3 INSTALLATION

3.01 SUBGRADE PREPARATION

A. Verify trench dimensions, grading lines, slopes, levels, and centers. Ensure that dimensions correlate with drawings.
B. Insert 6-inch non-cohesive fill at the bottom of the trench.

3.02 INSTALLATION

A. Shall be assembled in accordance with VoidForm Products installation instructions.
B. Connect a pair of 4-foot side panels with appropriate rod-connector assembly on both the top and bottom. Ensure that a double rod-connector assembly, with proper spacing for application, is installed on the top to support the washer/hanger assembly.
C. Install hanger assembly onto supporting double crossbar assembly.
D. Install rod-spacer bracket assemblies at a minimum of PVR above the gravel base and spaced 1’ on center.
E. Install double-rod spacer bracket assemblies at a minimum of PVR above the gravel base and at both ends of the 4-foot section which will allow adjoining 4-foot sections to be connected to each other.
F. Install connectors at both the top and bottom ends, on both sides, to connect adjoining sections.
G. Once adjoining sections have been connected, each with its own hanger assembly, insert pipe through hangers.
H. Connect sections throughout the trench to follow the pipe layout and design.
I. Adjust the slope of pipes using the adjustability of the nut located above the washer.
J. Install Top Caps.
K. Seal all gaps between connecting side panels, bulkheads, top caps and corners.
L. Backfill trench up to subgrade with non-cohesive fill.

END OF SECTION

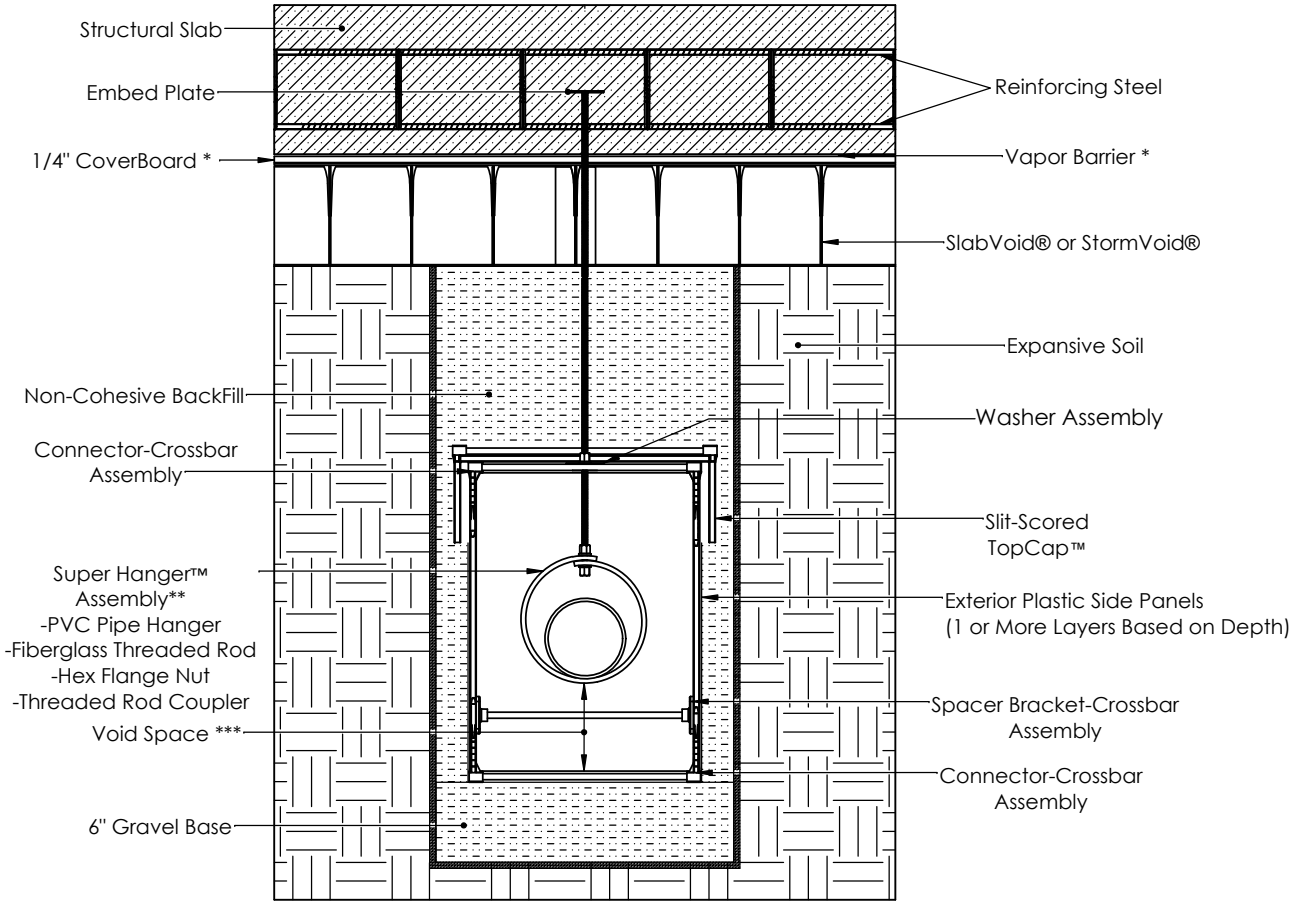
1.0 GENERAL NOTES
- 1.1 1/16" TOLERANCE FOR DIMENSIONS AND ASSEMBLAGE OF PARTS

2.0 DESIGN NOTES
- 2.1 PER VOIDFORM 22 1000 SPECIFICATION
- 2.2 THE PLUMBINGVOID® SYSTEM IS MADE USING CORROSION-PROOF MATERIALS
- 2.3 PANEL THICKNESSES AND ADDITIONAL LAYERS ARE DETERMINED BY STRENGTH REQUIREMENTS
- 2.4 * NOT INCLUDED AS PART OF PLUMBINGVOID SYSTEM
- 2.5 ** OPTIONAL SUPER HANGER™ ASSEMBLY CAN BE PURCHASED AS PART OF PLUMBINGVOID SYSTEM
- 2.6 ALTERNATIVE HANGER SYSTEMS NOT PROVIDED BY VOIDFORM CAN BE USED AT CUSTOMERS APPROVAL
- 2.7 *** THE VOID SPACE IS SPECIFIED BY THE STRUCTURAL / MEP ENGINEER

3.0 INSTALLATION REQUIREMENTS
- 3.1 PER VOIDFORM ASSEMBLY AND INSTALLATION MANUAL

4.0 PACKAGING
- 4.1 COMPONENTS PALLETIZED IN STANDARD 100 LF OF PLUMBINGVOID SYSTEM. SECTIONS MORE OR LESS THAN 100 LF ARE PALLETIZED SEPARATELY.

REV.	ECN	DESCRIPTION	BY	DATE
A		INITIAL RELEASE	GT	1-30-24



UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	GT	1-30-24
	CHECKED		
	ENG APPR.		
	COMMENTS:		
INTERPRET GEOMETRIC TOLERANCING PER:			
MATERIAL			
FINISH			
DO NOT SCALE DRAWING			

VoidForm

TITLE: VoidForm PlumbingVoid Detail

SIZE	DWG. NO.	REV
B	VFPV-100	A
SCALE:	WEIGHT:	SHEET 1 OF 1