

- 1. GENERAL LAYOUT FOR THE BUILDING DRAI DRAWINGS THAT WERE PREPARED BY BR+/ THORNTON TOMASETTI, WHICH INCLUDE TH
- CONTRACTOR SHALL REFER TO STRUCTURAL AND ARCHITECTURAL DRAWINGS FOR ALL FOUNDATION, FLOOR SLAB, WATERPROOFING, AND VAPOR BARRIER DETAILS. CONTRACTOR SHALL REFER TO MEP DRAWINGS FOR ALL SUB-SLAB PIPE DETAILS AND DISCHARGE DETAILS. CONTRACTOR SHALL REFER TO CIVIL DRAWINGS FOR GRADING, EXTERIOR UTILITIES, AND STORMWATER STRUCTURE DETAILS.
- CONTRACTOR SHALL HAVE AN APPROVED SET OF CONSTRUCTION DRAWINGS, SHOP DRAWINGS, AND SPECIFICATIONS ON SITE AT ALL TIMES DURING
- 4. ALL OF THE WORK SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE, AND CITY CODES, REGULATIONS, AND REQUIREMENTS. IN CASE OF CONFLICT, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.
- THE CONTRACTOR SHALL PROVIDE THE FOLLOWING CONSTRUCTION SUBMITTALS (MINIMUM) TO CARLIN-SIMPSON & ASSOCIATES LLC AND THE OWNER'S REPRESENTATIVE: 1) MATERIALS TO BE USED IN THE BUILDING DRAINAGE SYSTEM; 2) DAMP PROOFING AND WATERPROOFING MATERIALS AND INSTALLATION PROCEDURES; AND 3) DETAILS REGARDING BACKWATER CHECK VALVES. WORK SHALL NOT BEGIN UNTIL THE APPROPRIATE SUBMITTALS HAVE BEEN RECEIVED, REVIEWED, AND ACCEPTED IN WRITING BY THE ENGINEER.
- 1. A PERIMETER DRAIN OR FOOTING DRAIN, CONSISTING OF A SIX (6) INCH DIAMETER PERFORATED PVC PIPE WITH HOLES FACING DOWN, SHALL BE INSTALLED AROUND THE OUTSIDE PERIMETER OF THE BUILDING AS SHOWN ON THIS PLAN TO PREVENT WATER FROM ACCUMULATING AGAINST THE FOUNDATION WALLS.
- 2. THE PIPE SHALL CONSIST OF SDR-26 OR SCHEDULE 40 PVC.
- DAMP PROOFING IS REQUIRED FOR THE FOUNDATION WALLS WHERE THE
- MATERIALS AND PROCEDURES FOR REVIEW AND APPROVAL
- CLEAN 3/4-INCH CRUSHED STONE THAT IS WRAPPED IN A GEOTEXTILE FILTER FABRIC (MIRAFI 140N OR EQUIVALENT) AND EXTENDS TO APPROXIMATELY 12 INCHES BELOW THE SIDEWALK SUBGRADE ELEVATION. REFER TO THE TYPICAL FOOTING DRAIN DETAIL FOR MORE INFORMATION.
- AS INDICATED ON THIS PLAN. REFER TO THE CIVIL DRAWINGS FOR STRUCTURE DETAILS. A BACKWATER CHECK VALVE IS REQUIRED FOR THE DISCHARGE LOCATION. THE BACKWATER CHECK VALVE TYPE IS TO BE SELECTED BY THE CONTRACTOR AND SUBMITTED FOR APPROVAL BY THE MEP ENGINEER AND GEOTECHNICAL ENGINEER.

| INAGE PLANS WAS OBTAINED FROM |  |
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| A CONSULTING ENGINEERS PC AND |  |
| HE FOLLOWING:                 |  |
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PERIMETER DRAIN IS INSTALLED. CONTRACTOR TO SUBMIT DAMP PROOFING

4. THE FOOTING DRAIN PIPE SHALL BE SURROUNDED BY A MINIMUM OF 12 INCHES OF

THE FOOTING DRAIN PIPE SHALL BE PIPED INTO STORMWATER STRUCTURE DI B-4

C. SUB-SLAB DRAINAGE SYSTEM

- SUB-SLAB WATERPROOFING IS REQUIRED FOR THE ENTIRE BUILDING. THE WATERPROOFING MEMBRANE SHALL CONSIST OF PREPRUFE 300R BY GCP APPLIED TECHNOLOGIES OR AN ENGINEER-APPROVED EQUIVALENT
- 2. THE SUB-SLAB DRAINAGE SYSTEM SHALL CONSIST OF DRAIN LINES AS SHOWN ON THE BUILDING DRAINAGE PLAN. THE DRAINPIPES SHALL CONSIST OF FOUR (4) INCH DIAMETER RIGID WALL PERFORATED PVC PIPES WITH HOLES FACING DOWN, PLACED AT THE BOTTOM OF 12 INCHES OF CLEAN 3/4-INCH CRUSHED STONE GRAVEL. THIS CORRELATES TO A PIPE INVERT ELEVATION OF APPROXIMATELY +215.75. REFER TO THE TYPICAL SUB-SLAB DRAIN DETAIL FOR MORE INFORMATION.

3. THE PIPE SHALL CONSIST OF SDR-26 OR SCHEDULE 40 PVC.

- 4. A LAYER OF GEOTEXTILE FILTER FABRIC (MIRAFI 140N OR EQUIVALENT) SHALL BE PLACED BETWEEN THE SUBGRADE SOIL AND THE CRUSHED STONE TO PREVENT SOIL FROM CLOGGING THE PIPES. THE EDGES OF THE FILTER FABRIC SHALL BE FOLDED ON TOP OF THE CRUSHED STONE FILL. THE SUBGRADE SHALL BE GRADED ("PITCHED") TOWARDS THE UNDERDRAIN. ADJACENT FILTER FABRIC PANELS SHALL OVERLAP BY A MINIMUM OF 12 INCHES.
- THE SUB-SLAB DRAINS WILL CROSS THE NEW SHEAR WALLS AT SEVERAL LOCATIONS. SLEEVES WILL BE REQUIRED DURING SHEAR WALL CONSTRUCTION TO ALLOW FUTURE INSTALLATION OF THE DRAINAGE PIPES. REFER TO THE STRUCTURAL PLANS FOR PENETRATION DETAILS.
- 6. THE PERFORATED PVC DRAINPIPES SHALL CONNECT TO FOUR (4) INCH DIAMETER RIGID WALL SOLID PVC PIPES THAT DISCHARGE TO STORMWATER STRUCTURE DI B-4 OFF THE NORTHEAST CORNER OF THE BUILDING AND TO STRUCTURE DI-10 OFF THE SOUTHEAST SIDE OF THE BUILDING. SLEEVES THROUGH THE EXTERIOR WALLS WILL BE REQUIRED FOR THE DISCHARGE PIPES.
- BACKWATER CHECK VALVES ARE REQUIRED FOR BOTH DISCHARGE LOCATIONS. THE BACKWATER CHECK VALVE LOCATION AND TYPE ARE TO BE SELECTED BY THE CONTRACTOR AND SUBMITTED FOR APPROVAL BY THE MEP ENGINEER AND GEOTECHNICAL ENGINEER.
- 8. DRAIN PIPE LOCATIONS MAY BE FIELD ADJUSTED TO AVOID CONFLICTS WITH SUB-SLAB STRUCTURES AND UTILITIES PROVIDED THAT THE MINIMUM SPACING IS MAINTAINED AND THAT THE LOCATIONS ARE APPROVED BY THE GEOTECHNICAL ENGINEER.

D. QUALITY ASSURANCE AND INSPECTION

- 1. THE OWNER SHALL RETAIN, AT THEIR COST, CARLIN-SIMPSON & ASSOCIATES LLC TO PERFORM QUALITY ASSURANCE INSPECTION AND MONITORING SERVICES RELATED TO THE INSTALLATION OF BUILDING DRAINAGE SYSTEM.
- 2. CONTRACTOR SHALL ARRANGE FOR AND SCHEDULE ALL REQUIRED INSPECTIONS.
- 3. THE ABOVE FIELD INSPECTION AND MONITORING WILL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO MEET THE MORE STRINGENT OF THE CONSTRUCTION DRAWINGS, MANUFACTURER'S REQUIREMENTS, AND THE PROJECT SPECIFICATIONS.
- 4. CONTRACTOR SHALL TAKE PROMPT ACTION TO PREVENT OR CORRECT ANY CONDITIONS WHICH HAVE RESULTED OR COULD RESULT IN THE SUBMITTAL TO ENGINEER OF ITEMS OR SERVICES WHICH DO NOT CONFORM TO THE QUALITY PERFORMANCE OF THE CONTRACT, THE TESTS SPECIFIED IN THE CONTRACT AND OTHER TESTS AS MAY BE REQUIRED TO SUBSTANTIATE CONFORMANCE.

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| <br>Key Plan  |
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| No.         Date         Description           0         05.13.2022         100% CONSTRUCTION DOCUMENTS   |
| 0         05.20.2022         ISSUED FOR PERMIT           1         07.01.2022         100% CONSTRUCTION DOCUMENTS-1   |
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| SECTION 7209 OF THE NEW<br>YORK STATE EDUCATION LAW,<br>EXCEPT AS PROVIDED FOR BY   |
| SECTION 7209, SUBSECTION 2.<br>Vendor Name: Carlin-Simpson & Associates LLC   |
| Vendor Project No.: 20-166<br>Discipline: Geotechnical Drawn By: MRA  |
| BUILDING DRAINAGE   |
|   |
| Scale: AS SHOWN Floor:  |
| GT-300  |
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