



PARIC CORPORATION
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St. Louis, MO 63146
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REQUEST FOR INFORMATION **DATE:** August 29, 2016 **NO.:** RFI-258

To: Cannon Design

Attn: Kelvin Patel

From: Paric Corporation

Requested By: Joe Voypick

Project Name: 15051-Webster University Interdisciplinary Science Building Project No.: 15051

Subject: Backfill Details

Response Required By: September 05, 2016

Drawing / Spec Reference:

Information Requested:

Please confirm if the attached backfill details are accurate based on conference calls held on Friday 8/26/16 with Akins, DMA, Cannon and Paric. Please note the interior backfill detail will only be utilized on the foundation walls at L-0 that fall within the L-1 slab on grade area (highlighted in yellow). All other walls on L-0 and L-1 will follow the backfill exterior foundation wall detail. Also, please advise of a waterproofing termination detail at the top of the interior walls as circled on the attached sketch.

Response:

AT-REST PRESSURES FOR THE DESIGN OF THE TEMPORARY SHORING OF WALLS SHALL BE AS FOLLOWS:
AT-REST PRESSURE = 74 PCF AT EXISTING 3/16" SCREENINGS – EXTENDS UP TO APPROX 4'-0" ABOVE ELEV 72'-0", OR 76'
AT-REST PRESSURE = 63 PCF AT LIMITED ¾" CLEAN GRANULAR BACKFILL – PROVIDED FROM APPROX 76' TO 86'
WHERE THE ENTIRE WALL IS BACKED WITH A COLUMN OF ¾" CLEAN GRANULAR BACKFILL, AT-REST PRESSURE = 63 PCF FOR FULL HEIGHT
THESE PRESSURES ARE BASED ON THE BACKFILL AND DRAINAGE SYSTEM AS DETAILED ON THE ATTACHED SHEETS.

SHORING DESIGN IS THE RESPONSIBILITY OF THE CONTRACTOR'S SPECIALTY ENGINEER AS STATED IN THE "SPECIALTY STRUCTURAL ENGINEER" SECTION OF THE GENERAL NOTES ON SHEET S0001.
MEANS AND METHODS AND ENGINEERING BY OTHER PARTIES IS NOT THE RESPONSIBILITY OF THE ENGINEER OF RECORD.

ARCHITECT'S RESPONSE:

This information is provided as an interpretation of the Contract Documents for implementation. It is not an authorization for change to the Contract Sum or Contract Time. If this information results in a claim for a change to the Contract, the Contractor shall notify the [Construction Manager][Architect] of a change through the change process.

SEE MARKUPS ON THE ATTACHED BACKFILL DETAILS (REVISED PER CONFERENCE CALL ON TUESDAY 09/06/2016).

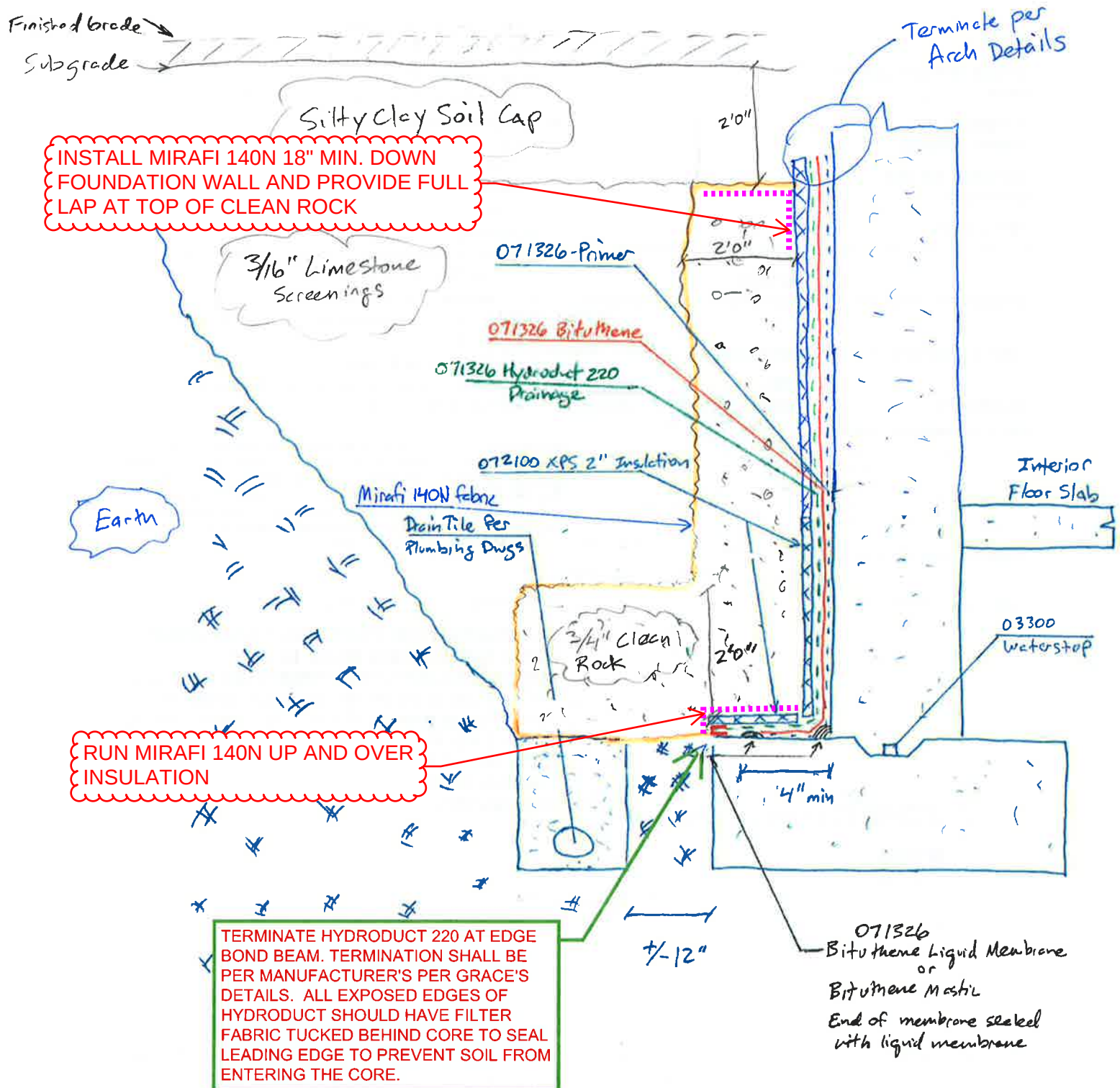
SEE DETAIL-3 FOR WATERPROOFING TERMINATION DETAIL AT THE TOP OF INTERIOR FOUNDATION WALLS.

Answered By: Kelvin Patel (CD) & Jill Walker (DMA)

Date: 09/08/2016

RE: Backfill Exterior Foundation Wall Detail

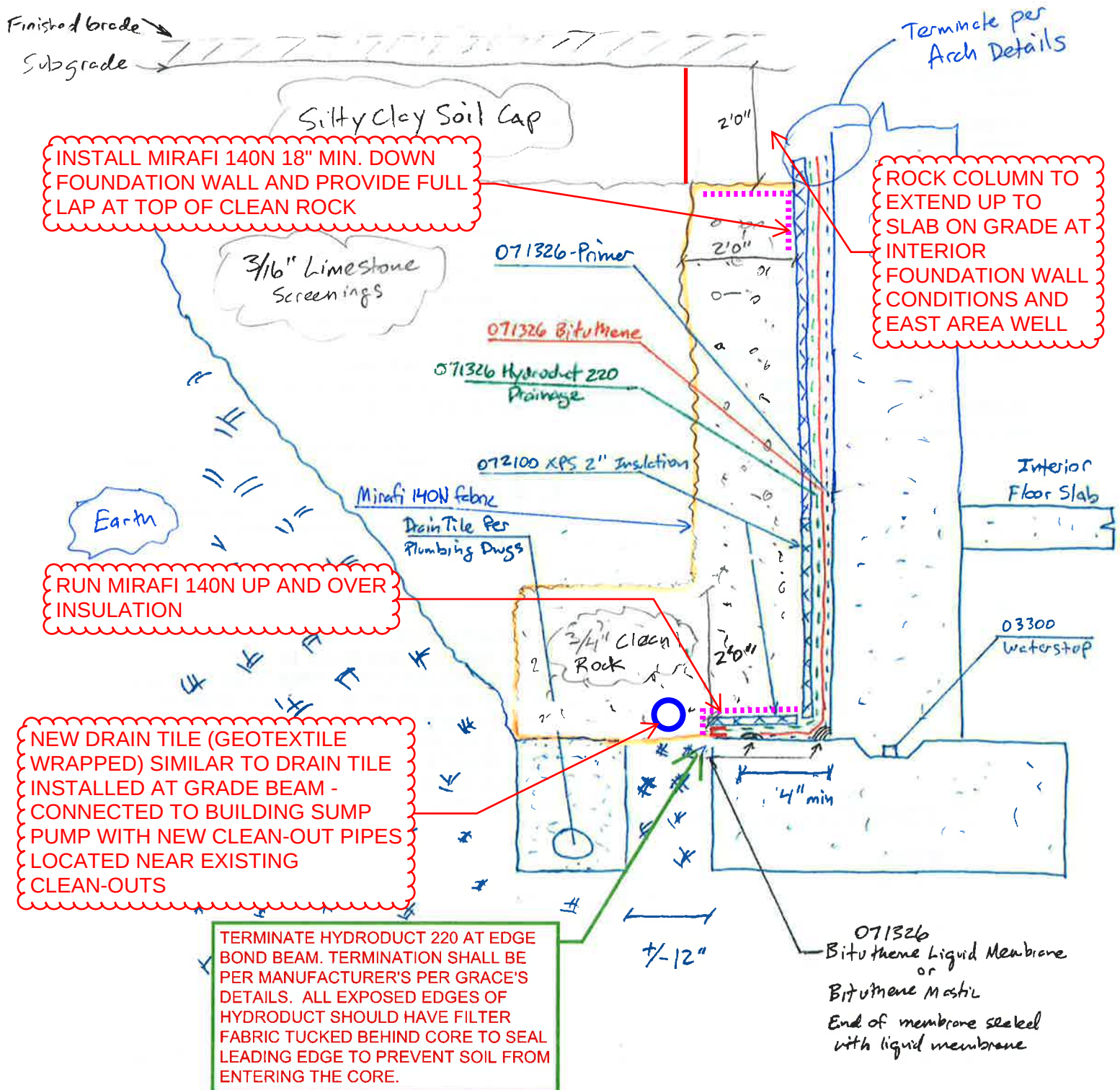
DETAIL-1A:
TYPICAL DETAIL AT ENTIRE
LEVEL 01.



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RE: Backfill Exterior & Interior Foundation Wall Detail

DETAIL-1B:
TYPICAL DETAIL AT LEVEL 00
(NORTH, EAST & WEST SIDES)



SEE DETAIL-3

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DETAIL-2:
TYPICAL DETAIL AT LEVEL 00
(SOUTH SIDE ONLY)

RE: Backfill Interior Foundation Wall Detail

3/4" CLEAN ROCK
GRANULAR FILL

Arch. - please
provide detail

L-1 Slab on Grade

L-1 Slab on Deck

INSTALL MIRAFI 140N 18" MIN. DOWN
FOUNDATION WALL AND PROVIDE FULL
LAP AT TOP OF CLEAN ROCK

MIRAFI 140N FABRIC WRAP FOR
GRANULAR FILL

INSTALL MIRAFI 140N 24" MIN. UP
AGAINST FOUNDATION WALL

6"-8" FILL - ABOVE MIRAFI FABRIC
(UNDER NEW DRAIN TILE)

NEW DRAIN TILE (GEOTEXTILE
WRAPPED) SIMILAR TO DRAIN TILE
INSTALLED AT GRADE BEAM -
CONNECTED TO BUILDING SUMP
PUMP WITH NEW CLEAN-OUT PIPES
LOCATED NEAR EXISTING
CLEAN-OUTS

EXISTING BACKFILL PER PARIC

TERMINATE HYDRODUCT 220 AT EDGE
BOND BEAM. TERMINATION SHALL BE
PER MANUFACTURER'S PER GRACE'S
DETAILS. ALL EXPOSED EDGES OF
HYDRODUCT SHOULD HAVE FILTER
FABRIC TUCKED BEHIND CORE TO SEAL
LEADING EDGE TO PREVENT SOIL FROM
ENTERING THE CORE.

071326-Primer

071326 Bituthene

071326 Hydroduct 220
Drainage

072100 XPS 2" Insulation

Drain Tile Per
Plumbing Dwg's

Terminate Hydroduct
by turning down @
vertical face where
possible +/- 2"

L-0
Interior
Floor Slab

03300
Waterstop

071326
Bituthene Liquid Membrane
or
Bituthene Mastic
End of membrane sealed
with liquid membrane

1/2" 12"

4" min

MIN. 2'-0"

2'-0"

6"-8"

5"

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RE: ~~Backfill Interior Foundation Wall Detail~~

DETAIL-3:
TYPICAL DETAIL AT JUNCTION OF
WATERPROOFING & VAPOR
BARRIER AT INTERIOR
FOUNDATION WALL.

TURN VAPOR BARRIER UP FOUNDATION WALL ON TOP OF BITUMEN STRIP-IN AND TAPE/SEAL PER MANUFACTURER'S RECOMMENDATIONS. PERFORM PULL TEST TO ENSURE ADHESION.

Arch. - please provide detail

L-1 Slab on Grade

L-1 Slab on Deck

LIQUID MEMBRANE INSTALLED OVER TERM BAR. PER MANUFACTURER'S REQUIREMENTS. INSTALL LIQUID MEMBRANE 8" UP FOUNDATION WALL. INSTALL A 12" BITUMEN STRIP-IN OVER LIQUID MEMBRANE.

INSTALL NEW SST TERM BAR

3/16" Limestone Screenings

071326-Primer

071326 Bituthene

071326 Hydroduct 220 Drainage

072100 XPS 2" Insulation

Drain Tile Per Plumbing Dwg's

Terminate Hydroduct by turning down @ vertical face where possible +/- 2"

L-0 Interior Floor Slab

03300 Waterstop

4" min

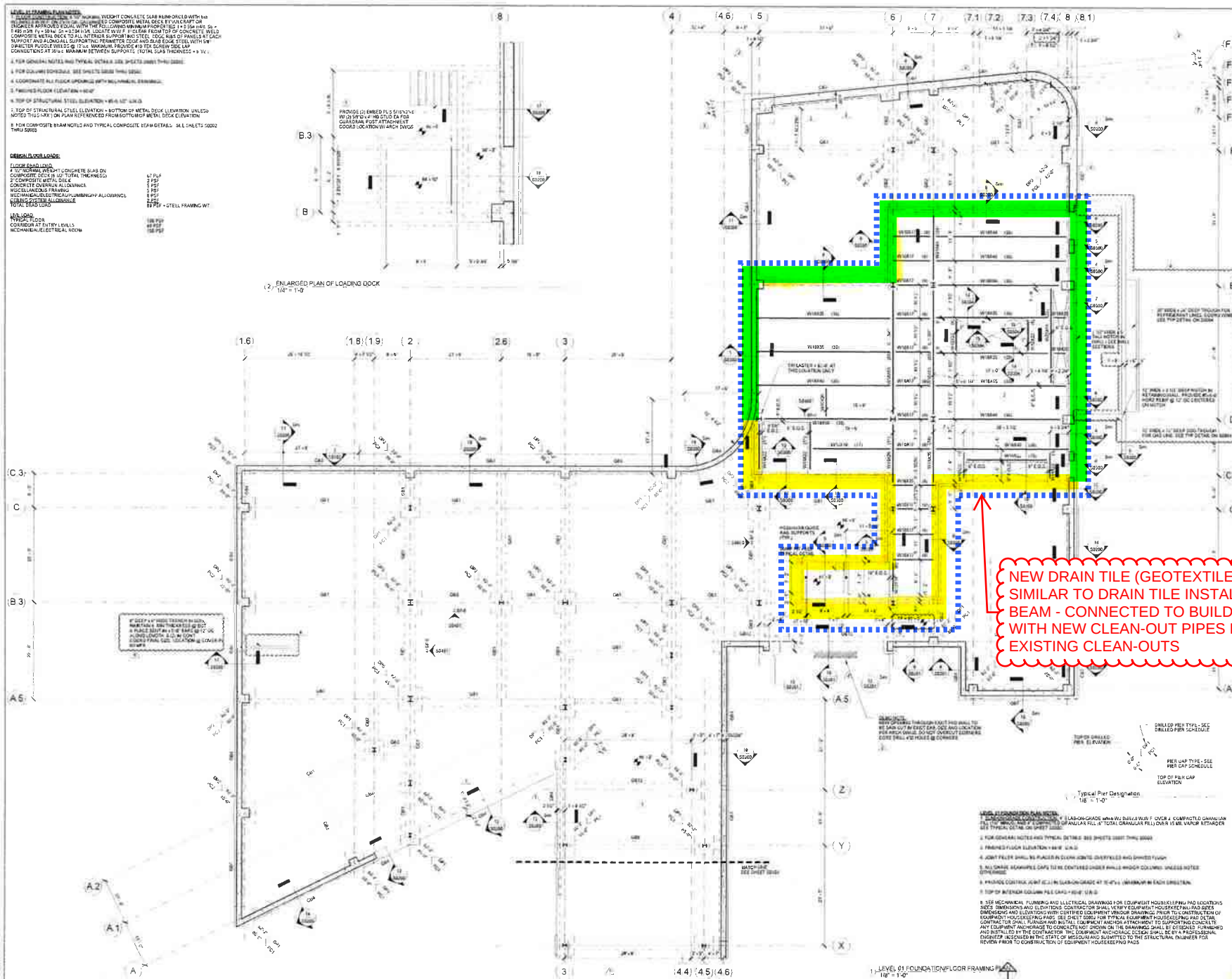
+/- 12"

TERMINATE HYDRODUCT 220 AT EDGE BOND BEAM. TERMINATION SHALL BE PER MANUFACTURER'S PER GRACE'S DETAILS. ALL EXPOSED EDGES OF HYDRODUCT SHOULD HAVE FILTER FABRIC TUCKED BEHIND CORE TO SEAL LEADING EDGE TO PREVENT SOIL FROM ENTERING THE CORE.

071326 Bituthene Liquid Membrane or Bituthene Mastic
End of membrane sealed with liquid membrane

BACKFILL DETAIL PER DETAIL-1B FOR EXTERIOR & INTERIOR FOUNDATION WALL

BACKFILL DETAIL PER DETAIL-2 FOR INTERIOR FOUNDATION WALL



Webster
UNIVERSITY

Webster University
Interdisciplinary Science
Building

CANNON DESIGN

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William Tate & Associates, Inc.

1900 Madison Road, Suite 100
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Fath Group

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KNOX Architects

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SWT Design

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Webb Engineering Services, Inc.

1400 S. Indivine, Suite 201
St. Louis, MO 63104
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CONFORMED SET 01 JUL 2019

ADDENDUM 1-11 13 MAY 2019
ADDENDUM 1-6 12 APR 2019
ADDENDUM 1-7 18 MAR 2019
ADDENDUM 1-8 10 APR 2019

ISSUED FOR CONSTRUCTION (SPT) 10 APR 2019

Rev. Description Date

Drawn By

LEVEL 01
FOUNDATION/FLOOR
FRAMING PLAN

Sheet No. 0101/01 Checked By

S0101