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REQUEST FOR INFORMATION

DATE: June 03, 2016 **NO.:** RFI-150

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: Confirm drain will handle full flow test.

Response Required By: June 10, 2016

Drawing / Spec Reference:

Information Requested:

Correspondence between fire protection and plumbing contractor attached for informational purposes. FP0501 section 7 states 2" main drain is to be routed to the area way on Level 0. Please confirm drains will handle the flow of a main drain full flow test.

Response: The 2" main drain needs to drain to exterior of the building, not the area way. The discharge is to be located and directed to allow runoff away from the building. Consideration is to be given to prevent ground erosion or damage to the surrounding area by use of a concrete splash block, slab or other means. Coordinate location of drain with the architect, civil engineer, landscape architect and other building trades as required.

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The referenced detail is being revised, it will be included in an up-coming addendum.

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.
Cc: Kathy Bathe, Paric Corporation

Answered By: Mark Davis, David Mason and Associates Date: June 8, 2016

Gates, Devin

From: Dana Mitchell <DMitchell@ahernfire.com>
Sent: Tuesday, May 31, 2016 4:04 PM
To: Peter DeLuca; Gates, Devin; Voypick, Joe; Szachnieski, Jason
Cc: Jason Lewis; Kurt Reuther
Subject: RE: Webster RFI 6

Follow Up Flag: Follow up
Flag Status: Flagged

There are different scenarios for testing and drainage that our systems will go through.
-Yearly main drain test. This will be a wide open test of the 2" drain valve after the backflow. At city pressure this will yield in the ballpark of 5-600 gpm for nearly a less than a minute.
-Monthly Inspection Test. This will be through the testanddrain on each system and yield about 65-70 GPM for nearly a minute.
-Draining for maintainance. This will be under the pressure of gravity and drain approximately 500-750 gallons on any given system. I am not sure how long this may take to drain. It could be throttled with the drain valve to not overcome the drain if you have two people in communication.

Dana Mitchell, CET
Senior CAD Designer

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From: Peter DeLuca [mailto:peterd@delucaplbg.com]
Sent: Tuesday, May 31, 2016 1:40 PM
To: 'Gates, Devin'; Dana Mitchell; 'Voypick, Joe'; Szachnieski, Jason
Cc: Jason Lewis; Kurt Reuther
Subject: RE: Webster RFI 6

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4 things with this situation:

1) Dana had referenced flow rates in the hundreds of gallons per minute. The area drain discharge piping was recently changed in the revision to connect to the draintile system. The draintile pumps as currently specified are 350GPM each. That is a high capacity – but I don't' know what volume of ground water is present. I would ask the engineer to verify the driantile pumps can accommodate the intended flow from the fire protection discharge line when flowing combined

with the groundwater flowrate. Ahern needs to clarify what their maximum likely flow would be when this line is discharging.

2) Area Drain connected to draintile system – as noted in 1), this area drain is connected to the underslab system. Introducing that much of a high flow into the draintile system could have deleterious effects to the ground's integrity – but I'm no soils nor structural engineer. I would suggest asking them to specifically verify that it is acceptable to have the underslab draintile system carrying that much drainage.

3) Fresh Air Intake – This is a main fresh air intake for the building's HVAC system. While there may not be much stagnant water, and it would only happen maybe once or twice a year, there will be a little stagnant water (and foul-smelling odors) when the fire protection system first discharges. There may be a short period of time when stagnant fumes are introduced into the building's outside air system.

4) Flooding of basement (NEW ISSUE!) – The area drain in this areawell is just a 4" drain with 4" drainage piping. A 4" pipe draining by gravity will only flow about 30 GPM. Given how much water is flowing out of the fire protection pipe, fire protection discharge water will accumulate in the area well very quickly, and will want to flow somewhere. The only other place for it to flow is through the louvers and into the basement. The basement does have floor drains, but those drains are only flowing to a sewage pump that has a specified capacity of just 25 gallons per minute. So water will also back up there – unless the louver has relatively watertight connections, in which case water will accumulate in the area well and the fresh air intake ductwork – and possibly the air handler, depending on the elevation of the ductwork between the outside air louver and the AHU.

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From: Gates, Devin [mailto:ddgates@paric.com]
Sent: Tuesday, May 31, 2016 12:55 PM
To: Dana Mitchell <DMitchell@ahernfire.com>; Peter Deluca <peterd@delucaplbg.com>; Voypick, Joe <javoypick@paric.com>
Cc: Jason Lewis <JLewis@ahernfire.com>; Kurt Reuther <KReuther@ahernfire.com>
Subject: RE: Webster RFI 6

Peter,

Before I submit this RFI for Ahern I'd like to get your buy in.

Thanks,

DEVIN GATES
SENIOR PROJECT ENGINEER

Cell: 314-348-8828

Main: 636-561-9500

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From: Dana Mitchell [mailto:DMitchell@ahernfire.com]
Sent: Tuesday, May 31, 2016 12:16 PM
To: Gates, Devin
Cc: Jason Lewis; Kurt Reuther
Subject: Webster RFI 6

Contract Drawing FP0501 Section 7 states 2" main drain is to be routed to the area way on Level 0. Conversations with the plumbing contractor state that the drains have been reduced and will not take the flow of a main drain full flow test. Please confirm intent and/or routing.

Dana Mitchell, CET
Senior CAD Designer

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