

September 29, 2025

Town of Ledyard
Department of Land Use and Planning
Attn: Steve Masalin, Public Works Director/Town Engineer
741 Colonel Ledyard Highway
Ledyard, CT 06339

RE: **Response to Engineering Comments**
Application PZ25-4SITE, Habitat for Humanity of Eastern CT, Colby Drive

Dear Mr. Masalin:

Below is our response to the Memorandum for the Record for Application PZ#25-4Site regarding the Habitat for Humanity of Eastern CT site plan application located on Colby Drive in Ledyard, CT. Our response immediately follows each of the items and is reproduced in *italics font*.

Application/Plan Review Comments:

A. Stormwater Management Report

1. Paragraph 2.1, Methodology: TR-55 is cited as the basis of hydrologic analysis. The Ordinance Part 3, section 1, paragraph A.1 stipulates the Rational Method for drainage areas between 0 and 200 acres and allows for use of Modified Rational Method for drainage areas less than 20 acres. Both of these apply. The applicant should explain the viability of using the TR-55 method.

Benesch response: *In addition to being the industry standard, TR-55 is a more accurate methodology because The Rational Method does not take into consideration the time to peak of the individual sub-watersheds, not does it consider the detention provided by stormwater management systems. TR-55 employs the use of hydrographs, which more accurately depict cumulative peak flow where there are multiple watersheds. With this particular design, we are being overly conservative with our assumptions of "existing conditions," as detailed in the Stormwater Management Report.*

2. Paragraph 2.3.2, Existing Detention Basin Renovations: Repair of the existing outlet control structure is described. The plans now show complete replacement.

Benesch response: *The existing outlet control structure will be replaced. The Stormwater Management Report has been revised to reflect this.*

3. Gutter Flow Analysis: Documentation of this is not included in the submittal as described in Ordinance Part 3, Section 3.

Benesch response: *Gutter flow has been added within the storm sewers tabulation section of the Stormwater Management Report. (See Appendix C.)*

B. Stormwater Report/Plans Issues

1. Drainage Plan (Plan Sheet C3.1)

- A. Top of Frame Elevations: The elevations for the following structures do not seem to conform to the grading plan (the Storm Sewer Tabulations should also be revised accordingly):

DCCB-104A
AD-113
DCCB-126
CCB-205
CCB-206

Benesch response: *Tops of frames have been revised in accordance with the current Grading Plan and Storm Sewer Tabulation.*

- B. CCB-122 should be CLCB-122. The Storm Sewer Tabulation should be revised accordingly

Benesch response: *The Storm Sewer Tabulation has been revised accordingly.*

- C. The pipe from the emergency overflow should be 15" diameter to meet the minimum diameter stipulated by Stormwater Ordinance Part 4, Section 1, Paragraph B.1.

Benesch response: *The emergency overflow pipe has been revised accordingly.*

- D. The inverts and slope associated with the pipe from OCS-1 to MH-201 do not conform to those found in the Storm Sewer Tabulation (page 3, lines 1 and 9) of the Stormwater Management Report.

Benesch response: *The inverts and slope of the pipe have been revised within the Storm Sewer Tabulation to conform to the Grading & Drainage Plan.*

2. Drainage areas: The basin for AD-302 is not included.

Benesch response: *The Drainage Areas have been revised to include the area for AD-302.*

3. Storm Sewer Tabulation: The following disparities were noted:

- Page 1, Line 6: Pipe size should be 15".
- Page 2, No data is included for DCCB-126.
- Page 3, Line 2: The pipe size should be 15".
- Page 3, Line 6: The 43-foot length is excessive for the reconfigured pipe.
- Page 3, Lines 7 – 9 and Page 4, Line 3: The full capacity should be shown.

Benesch response: The noted disparities have been revised within the Storm Sewer Tabulation.

Sincerely,

A handwritten signature in black ink that reads "Will Walter".

Will Walter, PE
Senior Project Manager