



**CAVANARO CONSULTING**

- Land Use Planning
- Civil Engineering
- Construction Permitting

July 2, 2021

Mr. Kevin Ellis  
Planning Board Chair  
Town of Hingham Planning Board  
210 Central Street  
Hingham, MA 02043

RE: **Response to Review Comments**  
**40 Harborview Drive – Hingham, MA 02043**  
**Site Plan Review – Raze and Rebuild Single Family Home.**

Dear Planning Board:

The purpose of this letter is to address comments received regarding the single family home project located at 40 Harborview Drive.

**Comments from Chessia Consulting Services LLC. Dated June 29, 2021**

In response to the comments from Mr. Chessia dated June 29, 2021, other than any comments regarding the landscape plan, only a few items are outstanding:

Inspections required for infiltration systems.

Long Term Operation and Maintenance plan has been revised to add inspections during large storm events for the next two years. See attached.

Gutter downspout locations should be shown.

A gutter downspout location and area plan has been provided, see attached.

Gutter downspout sizing should reflect maximum roof area and minimum gutter length to ensure gutters are operating properly.

The gutter sizing calculation has been revised for the largest roof area, 480 s.f. with a minimum gutter length of 11 l.f., the same gutter as previously submitted was called out, a 4" x4" gutter, 6"x6" gutters were installed.

**Comments from Michael Clancy, Building Inspector. Dated June 30, 2021**

This response only addresses the comments regarding the General Plan review:

A landscape plan has been submitted under separate cover.

The Long Term Operation and Maintenance plan has been revised to add inspections during large storm events for the next two years.

**Cavanaro Consulting, Inc.**  
**Response to Peer Review Comments**  
40 Harborview Drive - Hingham, MA 02043  
**Site Plan Review**  
7/2/21  
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A downspout sketch has been provided to accurately depict the locations.

We appreciate the thoughtful comments.

If any questions arise, please do not hesitate to contact us.

Sincerely,

**Cavanaro Consulting, Inc.**



Brendan P. Sullivan, P.E., P.L.S.  
Project Engineer

Enclosures

cc: A. Fleury  
File 19.122

**Long Term Operation and Maintenance Plan**  
**Proposed Residential Redevelopment**  
**40 Harbor View Drive – Hingham, MA 02043**  
**Stormwater Management System's Owner: APF Development Group, LLC.**  
**System Owner's Address: 213 Wompatuck Road, Hingham, MA 02043**  
**Party responsible for Operations and Maintenance: Owners of 40 Harbor View Drive**

**Operation and Maintenance Plan After Construction:**

***Subsurface Infiltration System:***

Inspect inspection port at least quarterly and after every major storm event during the first year. Inspections after every major storm event shall take notice of any water standing after 72 hours after the storm ended. After the first year, inspections must be done at least twice yearly. Remove any debris or sediment within reach that may be clogging the system.

**Inspections required for both subsurface systems after rain events of 1 inch or more within 24 hours for the first two years to determine if the system is working and to provide this information to the Planning Board.**

**Roof Drain cleaning:**

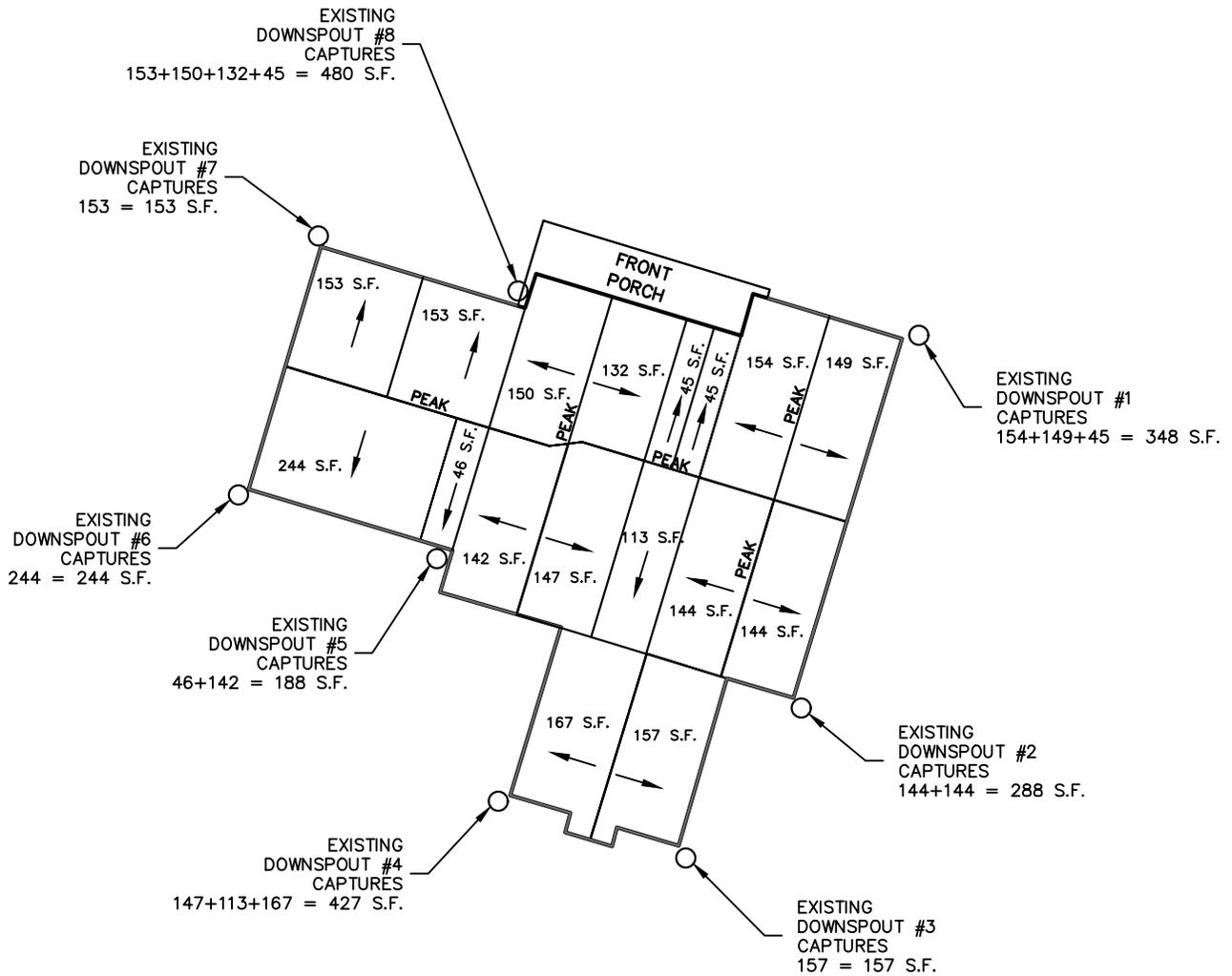
All roof drains shall be cleaned and inspected in late winter or early spring after the snow melts. Inspections should include the gutters, downspouts and all accessible piping. Any visible debris should be removed from inlets and outlets.

***Snow Management***

Any snow and ice buildup on the proposed roof drains will be removed in a timely fashion.

**Estimated Operation and Maintenance Budget:**

Maintenance cost will be approximately \$2,000.00 per year.



## DOWNSPOUT SKETCH

DRAWING NO.

**CAVANARO CONSULTING**  
 687 MAIN STREET  
 P.O. BOX 5175  
 NORWELL, MASSACHUSETTS 02061  
 PHONE: 781.659.8187  
 FAX: 781.659.8186



PREPARED FOR:  
**APF DEVELOPMENT GROUP LLC**  
 40 HARBOR VIEW DRIVE  
 HINGHAM, MA 02043

PROJECT NO. : 19122  
 DATE : 7.1.21  
 DRAWN BY : BPS  
 CHECKED BY : CCH

# DS

SHEET NO. 1 OF 1  
 FILENAME: X:\PROJECTS\

## NORTHCLAD® GUTTER SIZE REQUIREMENT CALCULATOR

This calculator uses current data to calculate the required size of gutter as well as number and size of downspouts based on your input.

We recommend using this calculator as a basic tool to begin determining the requirements for your drainage system, however, all information should be verified by hand prior to ordering or installing your gutter system.

To use this calculator, simply enter the information in the form on the left, and your data will be output on the right side.



MASSACHUSETTS -- BOSTON

**Rainfall Intensity (10yr) = 5.3 in./hr.**  
**Rainfall Intensity (100yr) = 7.2 in./hr.**  
**Drainable Area (10yr) = 230 sq. ft.**  
**Drainable Area (100yr) = 170 sq. ft.**  
**Year Setting = 100 yr.**  
**Plan Area = 484 sq. ft.**  
**Gutter length = 11 ft.**  
**Max Gutter Served by Each DS = 11 ft.**

**Design Area = 532.4 sq. ft.**  
**Minimum Number of DS = 1**  
**Max Roof Area Served by Each DS = 532.4 sq. ft.**

**Min. Gutter Width = 4 in.**  
**Min. Gutter Depth = 4 in.**  
**Recommended Product: [NorthClad® Gs 600 Series](#)**

**Min. Ds Size = 3 in. dia.**  
**Recommended Product: NorthClad® Gs 44 Square DS**