

February 11, 2021

Mr. George J. Saraceno, CSM, ENV SP
Senior Civil Engineer
Town of Wellesley
Department of Public Works – Engineering Division
20 Municipal Way
Wellesley, MA 02481

Re: 35 Rice Street, Wellesley, MA LHR-20-05

Dear Mr., Saraceno

Please see replies to engineer's memo dated December 10, 2020 with subsequent highlights and comments from Engineering.

Memo Don McCauley
December 10, 2020

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The Town may not want an easement.

private property at 35 Rice Street. We recommend that the Town prepare a drain easement for the portion of drainage on private property at 35 Rice Street for future maintenance needs. The Applicant's designer has proposed to provide on-site storm water mitigate for roof runoff. The system includes two storm water infiltration systems that collect roof runoff via downspouts and 4-inch collector drains that run from the house to the infiltration systems. A Stormwater Management Executive Summary was provided by Thomas Ryder, P.E. The results of the HydroCAD analysis show a reduction in the 2-yr, 10-yr, 50-yr and 100-yr design storm events for the pre versus post development conditions. The on-site drainage system consists of two on-site infiltration system, 3 Cultec chambers for each system. We recommend that the designer provide a complete printout of the HydroCAD analysis as we note that during the 100-yr storm event, the peak elevation over the infiltration system is 136.83', which is 10-inches above finished grade in the rear yard. The soils for the area are identified by the National Resource Conservation Service Soil Survey consists of Merrimac-Urban land complex, with a 0 to 8 percent slope and Hydrological Group A, a well-draining soil. The HydroCAD design uses an infiltration rate from Rawls table of 8.27in/hr. for loamy sand soils. The Proposed Site Plan has a note that soil types and water mottles to be verified in the field at the time of demolition of the existing house. We recommend that test pits and a soil evaluation be performed to verify that the design location and depth to groundwater and/or ledge. The DPW would prefer to be on-site to inspect the test pits.

- Further test pits will be performed as weather permits with town representatives not withstanding approval from planning board. If PBR can make their approval conditional on this item.

Provided below is summary of our review of the project.

SITE PREPARATION

- The Applicant's engineer shall provide a separate Site Preparation Plan or Construction Management Plan (CMP) that shows the sedimentation and erosion controls, concrete washout area, materials staging area, anti-track construction entrance, placement of temporary chain link fence, tree protection and on-site parking. We recommend that the general contractor maximize on-site parking for the project to minimize traffic constraints on Rice Street. In addition to the CMP, a separate written CMP shall be provided that shows the sequence of work, work hours, truck routes and emergency contact information.

GENERAL

- We recommend revising the Title Sheet provided by JFF Design as the title says "Proposed Additions/Renovations For".
- Provide a copy of the cut and fill calculations for the project.
 - ◆ Both memo and graphic versions of the cut / fill calculations are included in our current supplement #5
- The plan notes that the plan elevations are on the Town of Wellesley datum. A benchmark was set by the project surveyor using the hydrant spindle elevation of 135.34' and labeled as TBM-A.
- The proposed curb cuts for the circular driveway will require a Street Occupancy Permit with the DPW. The plans should provide a cross section of the proposed driveways within the Rice Street layout. The driveways appear to be single width driveways and are spaced 20 feet apart as required by the Town of Wellesley Policy Governing Driveway Aprons and Curb Cuts. Provide dimensions for the proposed bituminous concrete driveway, especially at the street line of Rice Street.
 - ◆ The width of the driveway as it crosses the property line is 13'-0" wide. We have included a dimensioned sketch as part of this memo reply. This memo reply is also being provided to the Planning Department for proper filing protocol.

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- We recommend that a cross section of the house foundation be provided to show the proposed basement finish floor elevation and the first floor elevation. Including in the cross section shall be any notes pertaining to waterproofing the foundation as necessary.
- Street utility cuts on Rice Street will require milling and paving at the discretion of the Town of Wellesley Street Occupancy Permit inspector. We recommend that the Site Plan show the limits of the milling and paving and label accordingly.
 - ◆ As shown on the revised survey included in our current supplement #5
- The plans should clarify the proposed driveway surface as the architectural plan shows pavers and the Civil site drawings show bituminous concrete. The Town of Wellesley does not allow pavers to be installed in the public-right-of-way.

STORMWATER

- The Storm water Management Executive Summary shall include a copy of the Operation and Maintenance (O&M) Plan for the proposed on-site drainage system. The O&M plan shall include a note that annual inspection of the drainage system is required and shall be submitted to the Town Engineer annually.
- Provide calculations for total suspended solids and total phosphorus removal for the proposed infiltration systems.
 - ◆ Included in our January 28th submittal.
- Show the location of the inspection ports for the proposed infiltration systems on the Proposed Site Plan and include on the leaching chamber details.
 - ◆ As shown on the revised survey included in our current supplement #5
- Show the proposed location of the silt sock on the plans as well as providing a silt sack for the catch basin at the rear of the property. A detail of the silt sack should also be included.
 - ◆ Currently shown on site plans per our 12/07/2020 submittal

WATER & SEWER

- We recommend relocated the proposed water and sewer services so that they are not located under the slab of the garage, which may create a problem for future maintenance.
- The proposed sanitary sewer connection shall be shown as a straight line connection from

the house to the main in the street without any bends. A sewer connection detail shall be provided on a separate detail sheet.

- A copy of the water service connection detail shall be provided and shown on a detail sheet.

- ◆ Terry

- The water and sewer service connections must have a 10-foot wide separation per MADEP requirements and Town of Wellesley sewer regulations.

The Proposed Site Plan shall be revised to show 1" K copper pipe for the proposed water service.

On the Proposed Site Plan, clarify the proposed invert elevations for the sewer pipe at the sewer manhole and at the main, revise the pipe slope accordingly.

- ◆ As shown on the revised survey included in our current supplement #5

DEWATERING

- Dewatering on the site must be approved by the Town Engineer in the event that an offsite discharge is required.

- Provide a plan that shows the potential location for dewatering the site using a filter bag and provide as a detail.

- ◆ As shown on the revised survey included in our current supplement #5

LANDSCAPING

- The Tree Protection Plan shows that a single 27.5" Maple tree is proposed to be removed from the site.

- The plans should include details for shrub and tree planting as well as tree protection details.

- ◆ Please see attached details for tree and shrub plantings and the tree protection details on the revised plans.

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CONCLUSION AND RECOMMENDATIONS

We feel that the designer should consider biological treatment of storm water runoff in addition to the proposed infiltration systems, such as a rain garden. Prior to construction, the general contractor for the project should locate and determine the depth of the existing telephone service in the sidewalk and protect during installation of the utilities and driveway curb cuts. As a result of construction at the site, we recommend replacing the existing concrete sidewalk along the entire frontage of the lot. In addition to the sidewalk work, the treelawn area should be loamed and seeded.

- ◆ We included a proposed rain garden for water run off of the entire driveway surface in our latest supplement #5.

- ◆ We will ensure GC will confirm all utilities during their site survey prior to commencement of construction. We assume this can be approved by the PBR as a condition of the approval.

- ◆ We propose to replace the entire concrete sidewalk per engineering specifications for the entire width of the lot. We assume this can be approved by the PBR as a condition of the approval.

- ◆ We will provide loam and seed at the entire treelawn area of the entire width of the lot. We assume this can be approved by the PBR as a condition of the approval.

We would recommend that the Applicant's designer respond to the comments/recommendations in the conclusion above.

Please let us know if you have any questions or comments.

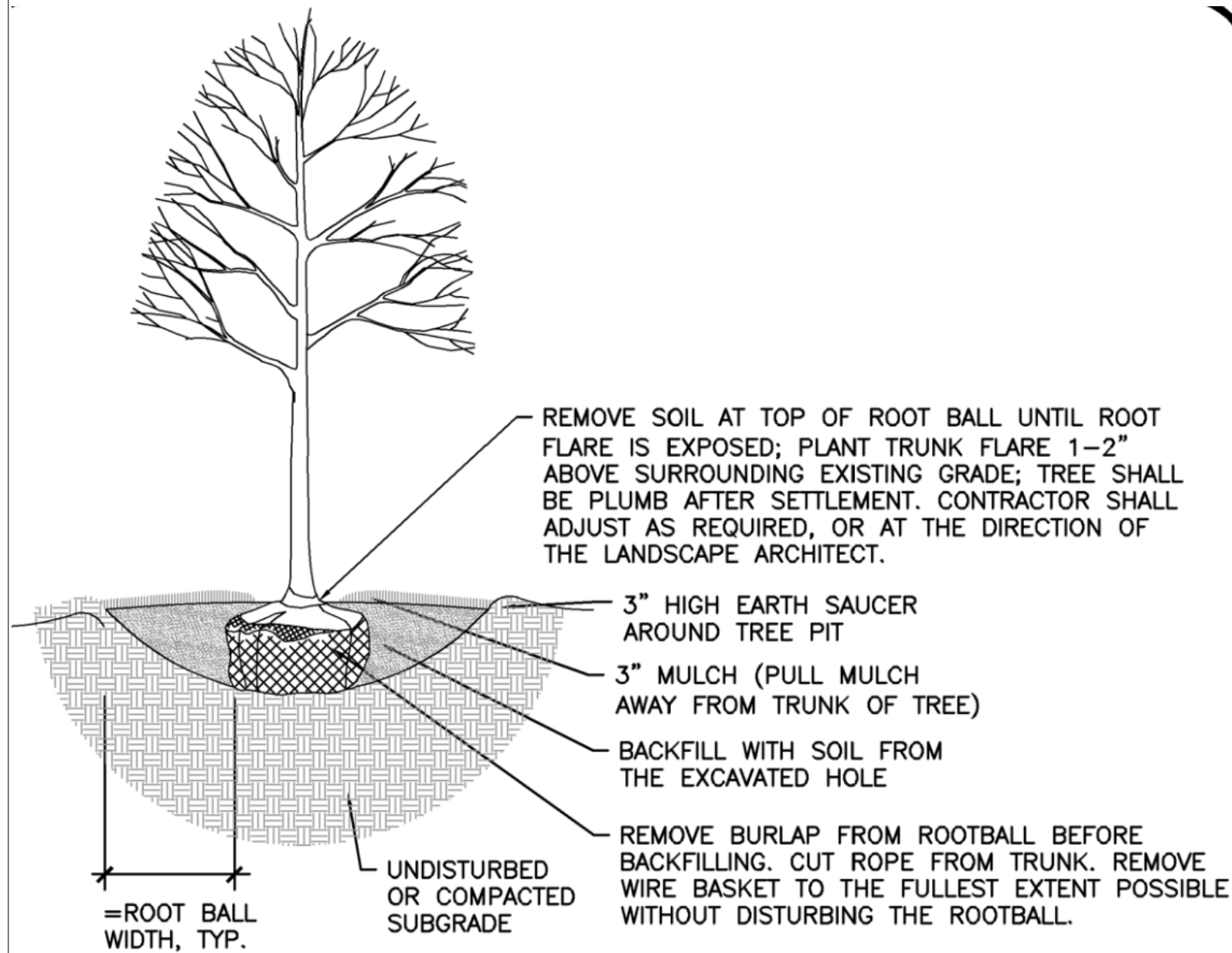
Sincerely,

George J. Saraceno

Senior Civil Engineer

Very truly yours,

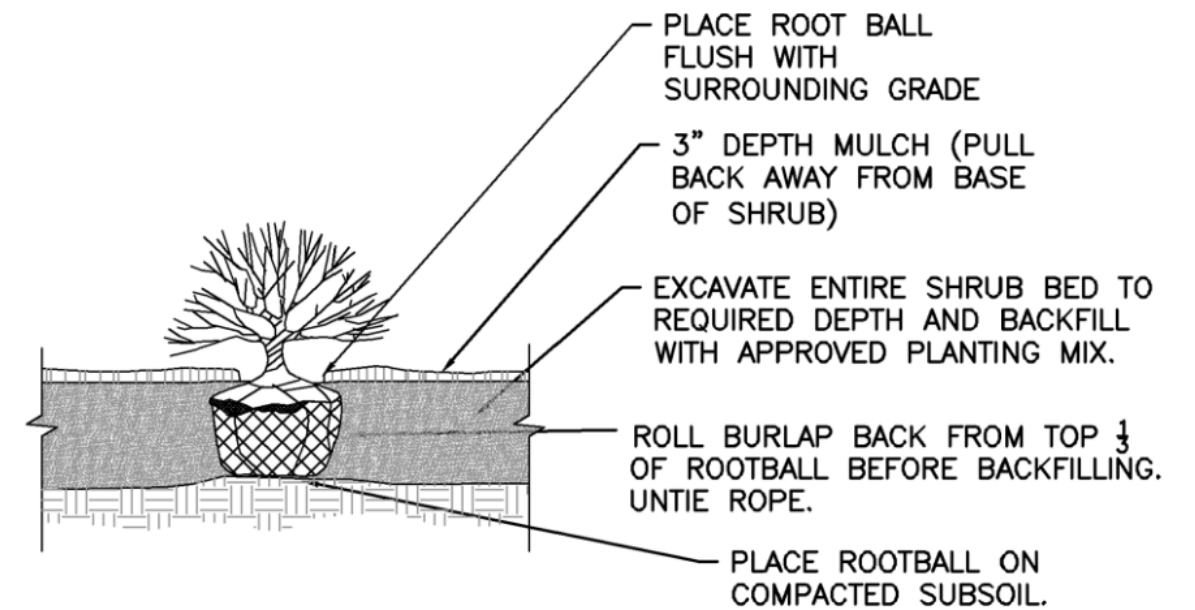
Joseph F. Fournier, Jr., AIA



TREE PLANTING

NOT TO SCALE

1



SHRUB PLANTING

NOT TO SCALE

2



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FAX 781-899-3050
EMAIL: ARCHITECTS@JFFDESIGN.COM

24 WARWICK AVENUE
WALTHAM, MA 02452

PROJECT:

PROPOSED NEW HOUSE FOR:
Pei-Yi Lin Residence
GLORIA & VINCENT CHANG
35 RICE STREET WELLESLEY, MA 02481

DRN BY: JFF

SCALE:

DATE: FEBRUARY 10, 2021

JOB #: 202008

DRAWING NUMBER:

SK04

DRAWING CONTENTS:

PLANTING DETAILS

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