

19-21 Main Street  
Renderings+Landscaping Update



**Michael Behrendt** <mbehrendt@ci.durham.nh.us>  
To: Mike Sievert (msievert@horizonsengineering.com), Monica Kieser, Pete Murphy (petermurphy6@comcast.net), Tim Phoenix, 'Timothy Murphy'

 Fri, May 13 at 3:08 PM 

All,

Here are the main items from the Planning Board's discussion of 19 Main Street on Wednesday.

- The review is continued to June 8. I expect the board to start deliberations soon.
  - The board said you don't need to update the traffic study. I suggest the parameter be renting to anybody but having a minimum lease term to be finalized (one week, one month, etc.). You noted the number of spaces is reduced from 180 when the study was done to 150 now so that should offset any small increase in peak traffic from renting to nonstudents.
  - The board will talk about grading, development of regional impact, and other issues on June 8.
- As the board requested please prepare a view from Chesley Drive and from the Urso residence.
- Please have Robbi Woodburn attend the meeting on June 8. The board would like to talk with her about the planting plan for the slope. Board members were concerned about using just a grass mix. Some asked about using native groundcovers and plants that would support pollinators (bees, butterflies, etc.).
- James Bubar asked about using a more yellow light in the light poles.

Thanks.

**Michael Behrendt**

Durham Town Planner

Town of Durham





Architect Nick Isaak renderings, 12/15/2021





Toomerfs, Feb/March 2022





Tangram 3DS  
21 Rogers Road, Suite One  
Kittery, Maine 03904

-To whom it may concern,

The following is a description of the step-by-step process used to create the 3D renderings and screenshots of the proposed project at **19** and **21** Main Street, Durham, NH.

### **1 - Photography**

On-site photography was taken to survey the area and capture photos from the desired locations on Chesley Dr. and the backyard of the Urso property. The perspectives taken from Chesley Dr. are captured at eye level. The perspectives taken from Urso's backyard are elevated to approximately 9' to show the view from the rear picture window.

### **2 - Modeling the Existing Conditions**

The existing conditions in the 3D model were created using the provided LiDAR scan data, provided CAD data for neighboring property footprints, Google Maps aerial imagery to locate existing trees, and our own photography for reference. This allowed for the creation of accurate topology and locations of abutting properties.

### **3 - Camera-Match**

To accurately render the proposed project into the selected photos, the 3D model must be accurately matched to the photos. To do so, the 3D camera settings were adjusted to match the real-world camera settings. Then the 3D camera was placed within the 3D environment at the same locations where the photos were taken. Then fine adjustments were made to the 3D camera's location and rotation so that the 3D models of existing elements (rock walls, trees, property footprints) could be matched with the same elements within the photos. The 3D environment was accurately matched to the photographs once the 3D elements were aligned to the same elements in the photos.



#### **4 - Modeling the Proposed Conditions**

A detailed 3D model of the proposed project was created using the information from the CAD drawings and plans. This model was then placed accurately within the existing conditions 3D model.

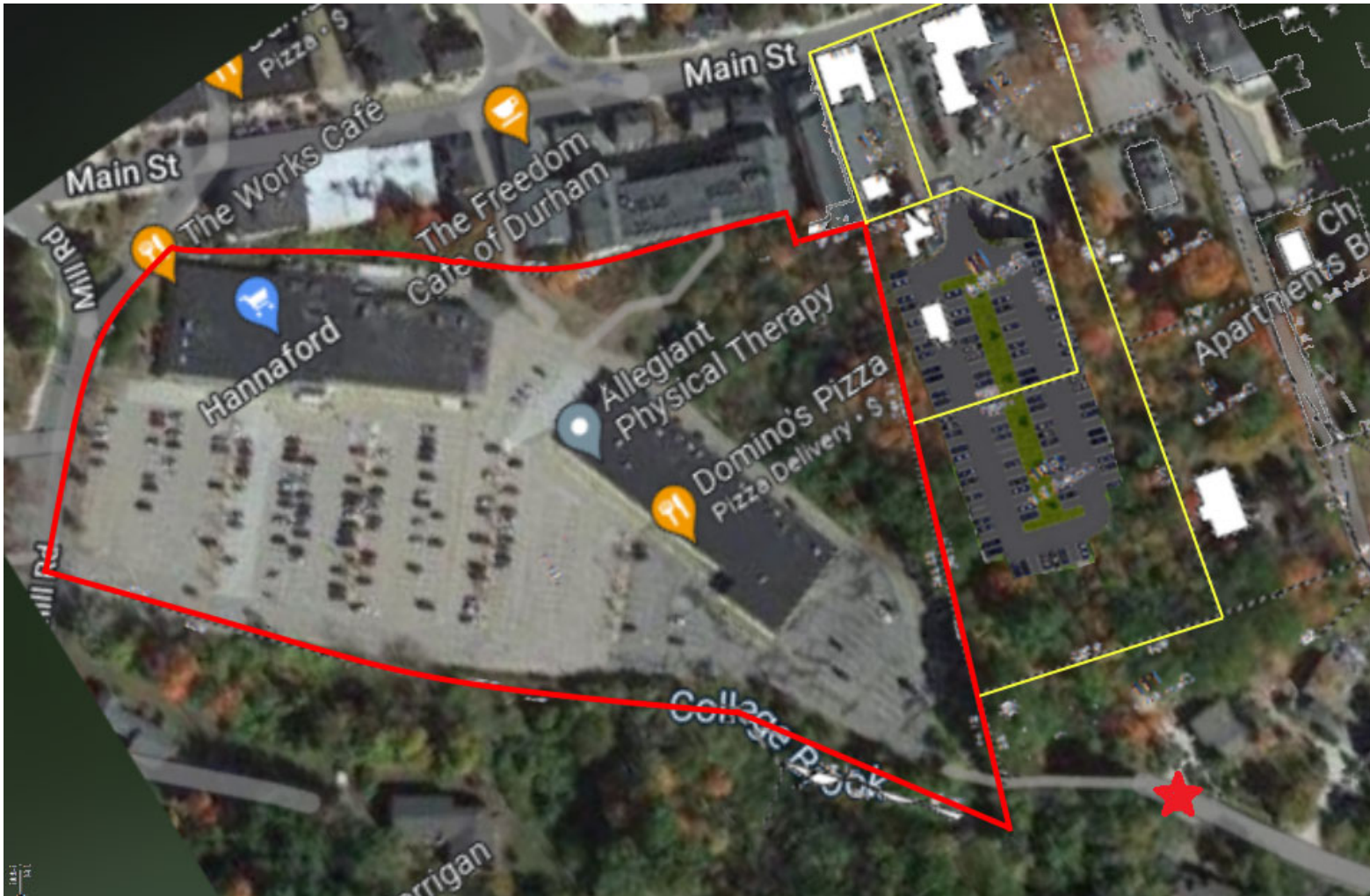
#### **5 - Rendering and Post-Production**

The proposed conditions model was rendered using accurate sunlight angles and shadows. It was then overlaid over the photo perspectives. Then, using our eye and knowledge of the project, the proposed conditions were masked into the photos. Attention was taken to mask over the trees which would be removed and avoid the trees which would remain.

##### **- Statement of Accuracy**

The 3D models produced for the renderings as topographical views are derived from highly accurate information and are felt to be representative of topography, size, scale, and location. However, the process for masking the models into the photos to create the renderings is challenging because of the number of trees and heavy screening by foliage in the native pictures and is therefore subjective. Our artists used their best judgement to overlay the vegetation as accurately as possible. Ultimately these renderings are part scientific and part artistic representations and are our best impression of what the proposed conditions will look like based on the data available.

# Rendering from End of Chesley Drive















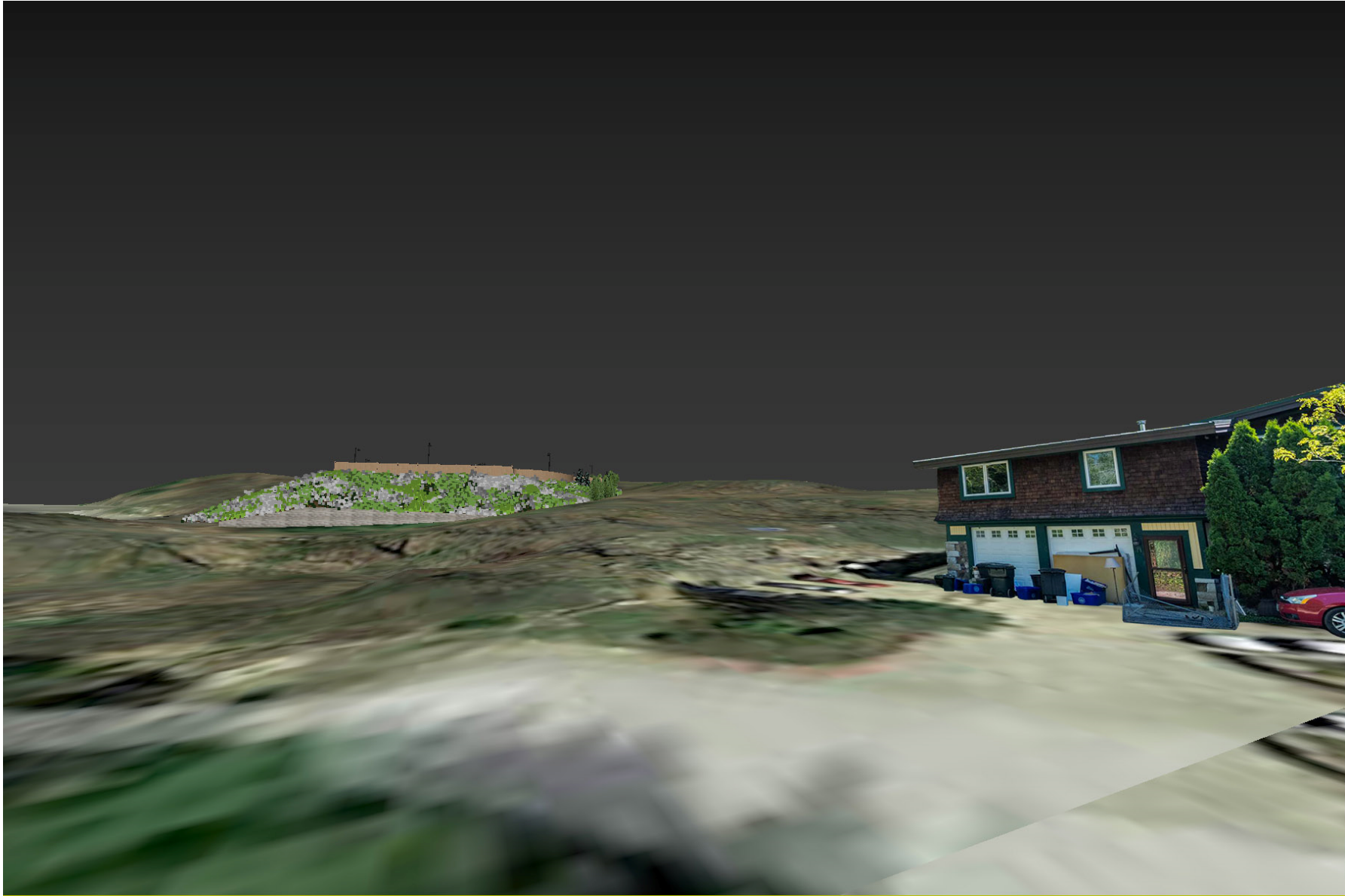
Pre





Post

















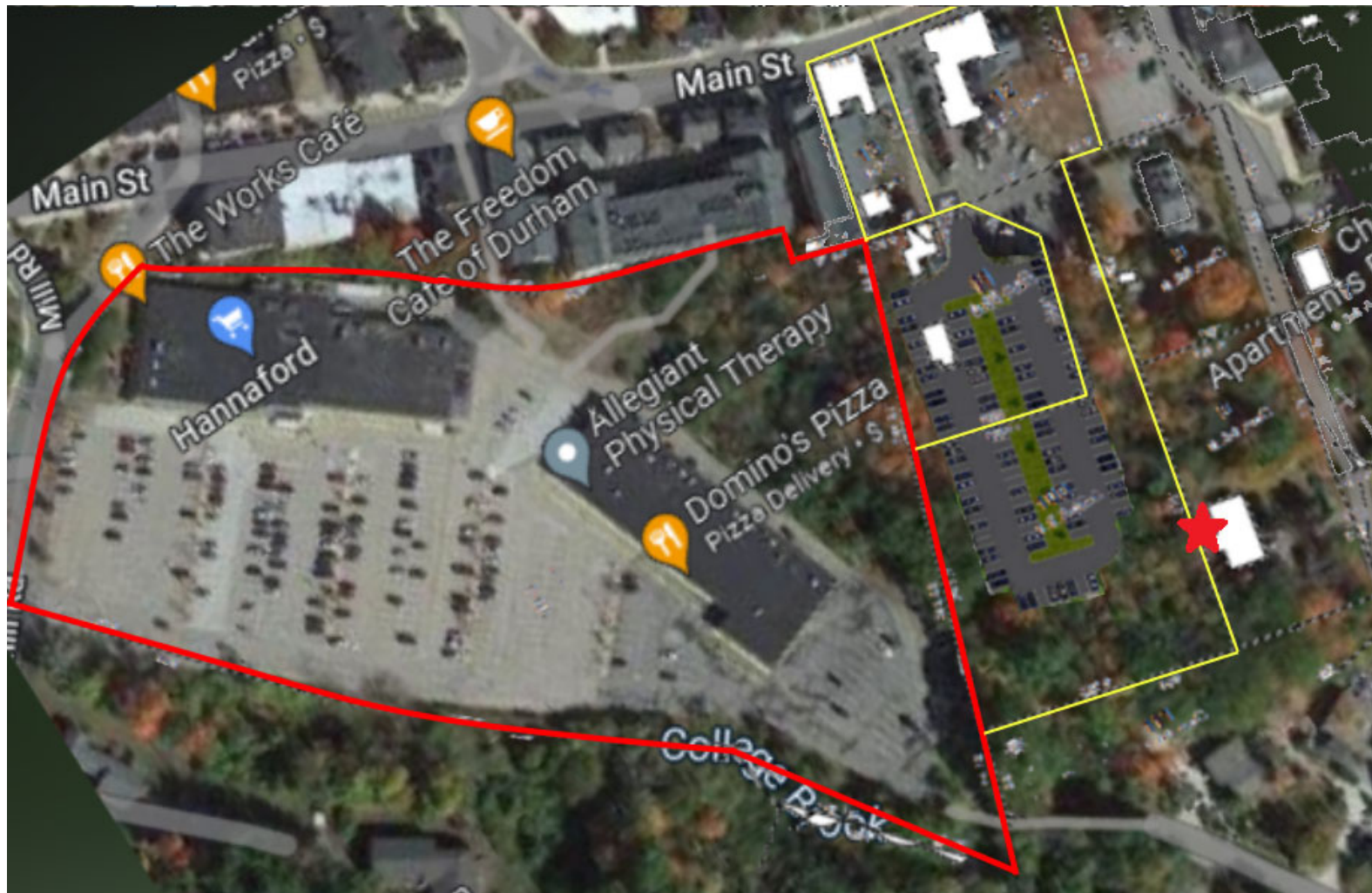








# Rendering Behind 5 Smith Park Lane (Urso)







**Pre**





**Post**



