

CEEn-2017CPST-004

Arrowhead Center—Project Coordination, Planning & Program Management Team A

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### Project Description:

Team Arrow was tasked with overseeing the creation of a detailed preliminary master plan for the development of the four parcels belonging to Fritzi Realty at the intersection of Arrowhead Trail Road and Main Street in Spanish Fork, Utah. Figure 1 shows the existing conditions of the Arrowhead site.



Figure 1: Existing Arrowhead Site

The Spanish Fork River runs along the northeast edge of parcel A, and a portion of that parcel is a protected wetland. Parcels A, B, and D are all undeveloped, and the Arrowhead historic building (built in 1925) covers the majority of the land on parcel C. The original preliminary Master plan created by Fritzi Realty proposed high density residential on parcels A and B and low to medium density single family residential on parcels C and D. The option to retain the historic building was also proposed as a possibility.

### Approach:

Term Projects from the CEEen 201 class were used to generate ideas for the four parcels. From their designs Team Arrow created a unique preliminary master plan to be presented to Fritzi Realty. Economic benefits, public and city preferences, and commercial/ residential demand were all taken into consideration while designing the proposed master plan.

### Solution:

Rapid development in northern Utah County has led to excessive vehicular congestion in the area; Spanish Fork offers a desirable location that is near Interstate 15, yet in a less congested area. Office space was determined to be the best use for both parcels A and B due to the high speed traffic on US192.

Residential use was determined to be the most appropriate use for both parcels C and D. A commercial strip was designed on the north-eastern strip of parcel C in order to set the residential area further back from the busy Arrowhead Trail Road. In order to maximize land use, townhomes were designed bordering the commercial strip. Single family lots roughly 1/4 acre in size cover the rest of the space in both parcels C and D.

Sketchup and AutoCAD were used to generate site plans and create a more realistic view of the proposed land use. See figures 2 and 3.



Figure 2: SketchUp Model of Proposed Site Plan

## Team Arrow

### PRELIMINARY PLAN

#### SPANISH FORK, UTAH

##### Commercial on plot A

- Roughly 68,000 ft<sup>2</sup> of building
- 8.65 acres

##### Commercial on plot B

- Roughly 92,000 ft<sup>2</sup> of building
- 9.2 acres

##### Commercial on plot C

- Left side - Roughly 15,000 ft<sup>2</sup> of building
- Right side - Roughly 12,000 ft<sup>2</sup> of building
- 4 total acres

##### Residential on plot C/D

- 81 single family plots
- 22.9 total acres
- Average lot size on C is 0.33 acres
- Average lot size on Dis 0.25 acres

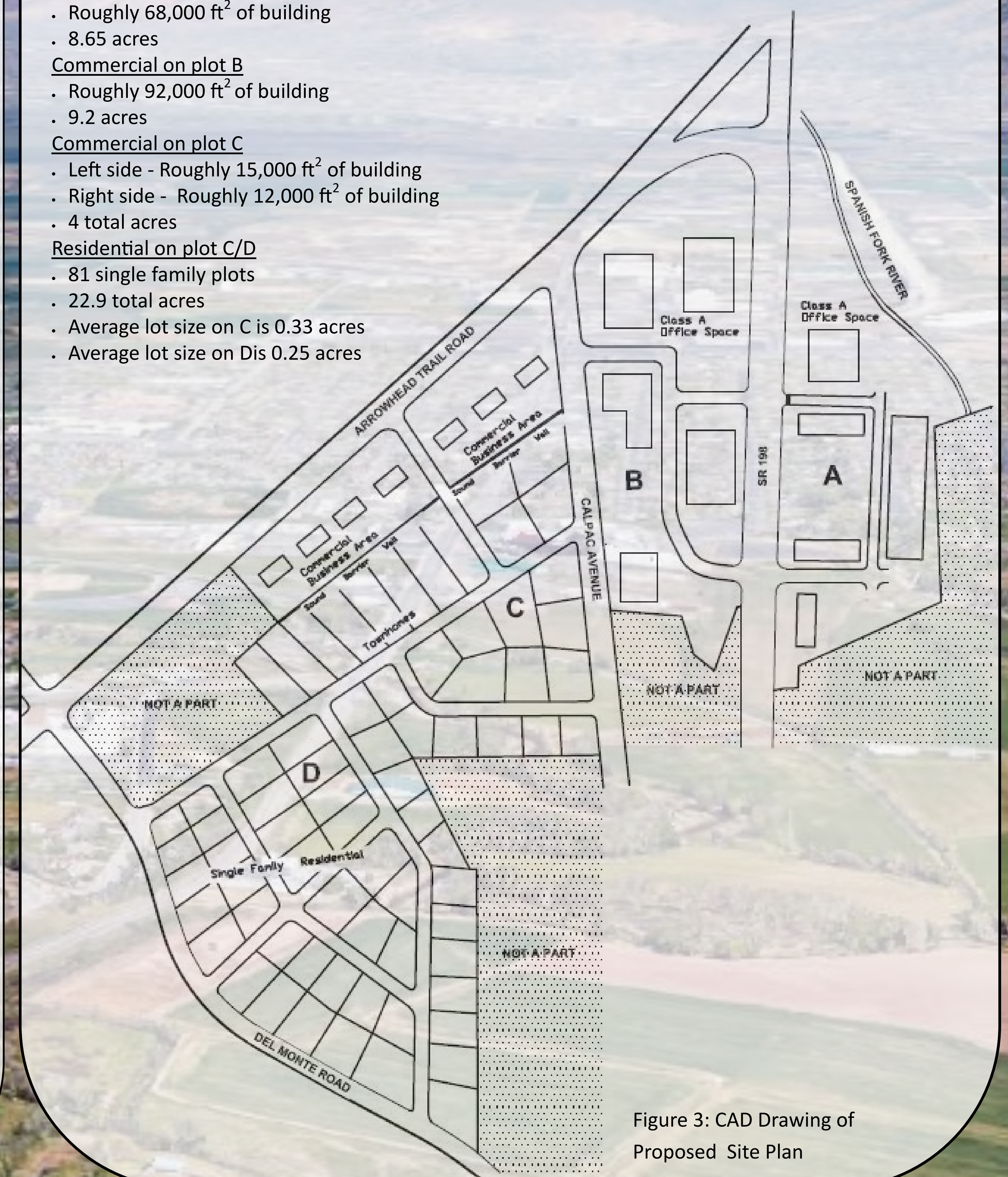


Figure 3: CAD Drawing of Proposed Site Plan