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To: HRSD – Matt Poe (MPoe@hrsd.com)

From: Hazen and Sawyer (Prepared by Troy McPherson, Rebecca Haley, and Maddie Brouse)

## **Alternative Properties for Tabb Pressure Reducing Station and Offline Storage Facility**

### **1. Alternatives Analysis**

The current site proposed for the Tabb Pressure Reducing Station (PRS) and Offline Storage Facility (OLSF) is located on a 26-acre Rural Residential zoned parcel to the west of Tabb High School and east of residential neighborhoods comprised of other Rural Residential zoned single-family homes. On September 20, 2021, HRSD requested Hazen analyze any potential alternative site locations in the project vicinity. An analysis was performed using property size, zoning, and location proximity to the current site to determine potential alternative parcels for the PRS and OLSF. Criteria were developed based on preferred site conditions for the tanks and pump station.

#### **1.1 Analysis Criteria**

A set of initial desired criteria was established to determine viability of alternative project sites. Proximity to the existing site is important for connection to the existing force main system. A large site is necessary to provide space for all facilities with additional room for buffer from neighboring parcels. Based on these considerations the following list of criteria was developed:

- Single parcel, minimum of 7.5 acres
- Within a one-mile radius of the originally selected site
- Vacant parcels only

#### **1.2 Results**

Within one mile of the current proposed site (900 Yorktown Road), three sites met the criteria described in **Section 1.1**. A summary of these parcels is listed in **Table 1-1**.

**Table 1-1: Summary of Site Alternatives**

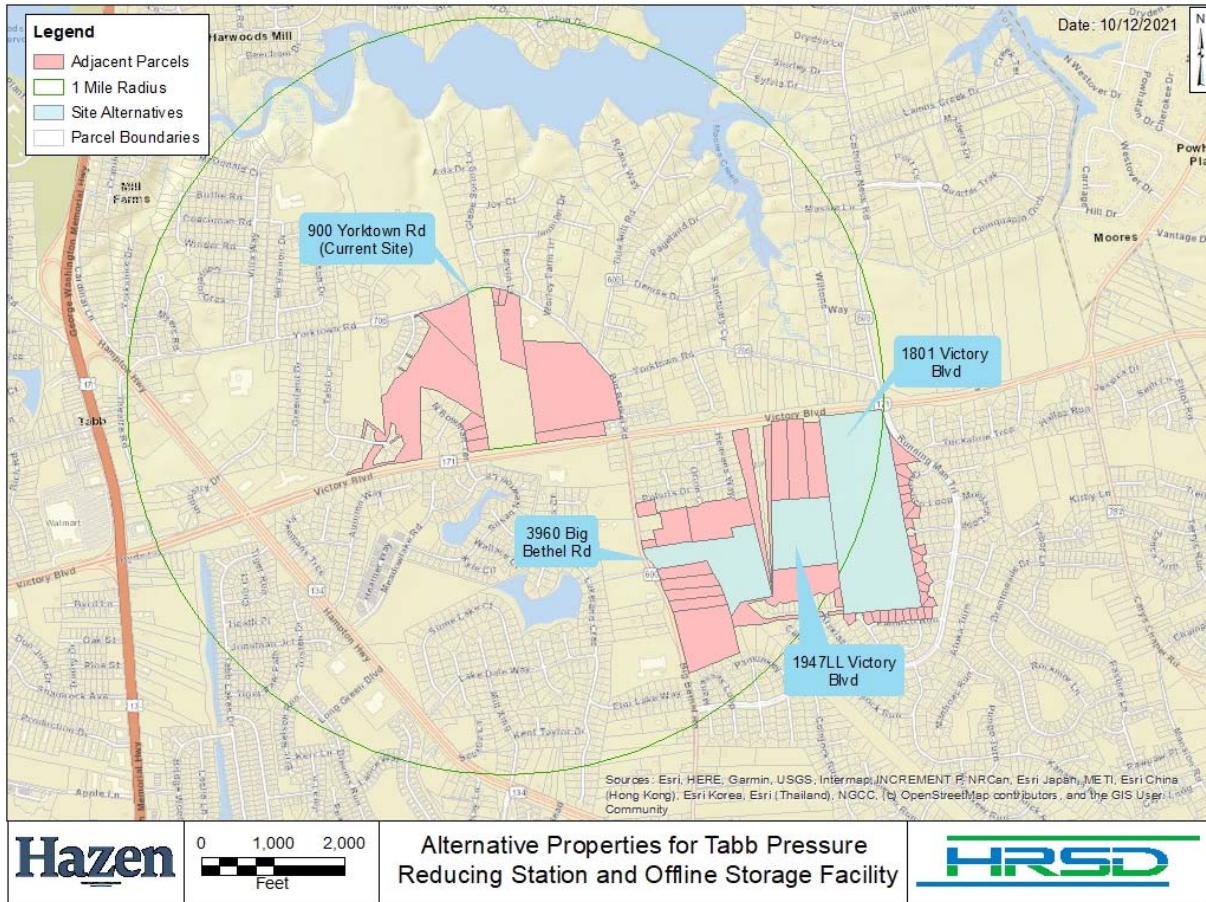
Parel Address	Area	Zoning
1801 Victory Blvd	64.1 AC	R20 – Medium Density Single Family Residential
1947LL Victory Blvd	19.8 AC	R20 – Medium Density Single Family Residential
3960 Big Bethel Rd	22.39 AC	R20 – Medium Density Single Family Residential

- All parcels are residentially zoned and have residential units on the adjacent properties. There were no parcels that met the criteria zoned industrial or commercial. The parcel at 1801 Victory Blvd contains Resource Management Areas in the northeast corner of the site which could limit the areas where the site would be accessed from Running Man Trail. There is sufficient remaining area to construct underground utilities, route a force main pipe, and construct a site entrance.
- 1947LL Victory Blvd is set back from the road and would require the most piping to get utilities and force main piping to the site. This site would require an ingress/egress easement or the acquisition of another parcel to gain access.
- The parcel at 3960 Big Bethel Road is crossed by a Dominion Power Easement on the west side of the lot where site access and utilities would be accessed off Big Bethel Road.

To construct any of the three alternatives at least 3,000 additional linear feet of pipe would be required to connect to the existing intersection of the James River and York River Treatment Plant force main networks. This additional piping would significantly impact the intersection of Big Bethel Rd and Victory Blvd during construction.

**Figure 1-1** on the next page shows a summary of the analysis.

### Figure 1-1: Summary of Analysis



## 2. Considerations

The alternative sites were compared to the existing site with respect to the number of churches, schools and residential units located adjacent to the proposed property. **Table 1-2** is a summary of those findings.

**Table 1-2: Parcels Adjacent to Each Site**

Parel	Residential Units	Churches	Schools
900 Yorktown Road (Current Site)	6	1	1
1801 Victory Blvd	27	0	0
1947LL Victory Blvd*	5	0	0
3960 Big Bethel Rd	12	0	0

\*Requires an easement through neighboring residential property or the acquisition of another parcel to gain access

All sites provide sufficient space for the development of the facilities and allow for a sufficient tree buffer. However, survey would need to be performed at the alternative sites to determine where new facilities could be located and more accurately assess the potential property use. Hazen did not reach out to any of the property owners of the alternative sites to determine if purchase would be feasible. Due to the large parcel size, 1801 Victory Blvd is adjacent to several large neighborhoods and therefore the largest number of residential properties. 1947LL Victory Blvd neighbors the least number of parcels due to its location away from the road which requires an egress/ingress easement to provide a path for utilities and site access for staff. The 3960 Big Bethel Rd parcel is also adjacent to existing residents.

## 2.1 Conclusion

All three alternative sites result in similar impact to surrounding residential properties as the existing site. The required piping to connect any of the alternatives to the existing HRSD facilities at 900 Yorktown Road would create significant impact to the properties along the pipe route as well as to all motoring public in the area. Based on this analysis, the existing site at 900 Yorktown Road is the least impacting and for that reason recommended for the HRSD proposed pressure reducing station and off-line storage tank.