Avoidance and Minimization Analysis

AVOIDANCE AND MINIMIZATION ANALYSIS

ABINGDON BUSINESS PARK
HARFORD COUNTY, MARYLAND

Site Description

The Abingdon Business Park encompasses approximately 330 acres located south of Interstate 95, west of Abingdon Road, and east of Van Bibber Road in the Abingdon area of Harford County, Maryland. The project site is identified on Tax Map 61 as Parcels 158, 178, 529, and 574 (Lot 12); and on Tax Map 62 as Parcel 63. A *Site Location Map* of the subject site and vicinity is attached as *Figure 1*. The subject site is zoned as CI (Commercial Industrial) and primarily consists of wooded lands.

According to the U.S. Geological Survey Quadrangle Map of Edgewood, Maryland (*Figure 2*), drainage from the site contributes to Haha Branch, which is a tributary of Bush River. Bush River contributes to the Chesapeake Bay. In the vicinity of the review area, nontidal tributaries to Bush River are classified in the Code of Maryland Regulations (COMAR) 26.08.02.08 as Designated Use "Class I: Water Contact Recreation, Protection of Aquatic Life" waters. Regulated resources were identified on-site and consist of perennial, intermittent, and ephemeral stream channels, forested wetlands, 25' nontidal wetland buffer, and a 100-year floodplain.

Project Purpose

The Port of Baltimore provides the State of Maryland with a prized economic engine which allows many companies routes of distribution from the Mid-Atlantic coast. Many of these companies require large-scale warehouse facilities to organize, store, and distribute their products. The proposed Abingdon Business Park will provide a location close to the Port of Baltimore that has land available to meet the need of these companies and has relatively easy access to Interstate 95. The project will be anchored by an approximate 1,000,000-square-foot distribution warehouse on Lot 1 near the northern portion of the site. The Applicant also plans to construct two ~500,000 square foot distribution warehouses, and three approximate 100,000-square-foot distribution warehouses. Eight warehouse facilities are proposed on Lots 6, 7, and 8 which will encompass between 25,000 and 60,500 square feet. Lots 4 and 5, which are located on the western portion of the site adjacent to Van Bibber Road, are proposed for mixed commercial development including retail space, a gas station, restaurants, and a hotel.

To develop this site, unavoidable impacts to waters of the U.S., nontidal wetlands, 25-foot wetland buffers, and the 100-year floodplain are anticipated. Proposed impacts have been avoided and minimized to the maximum extent practicable.

Avoidance, Minimization, and Design Considerations

Between November 2017 and May 2018, GTA's wetland scientists performed a wetland delineation of the project site. Approximately 3.25 acres of nontidal wetlands and 28,048 linear feet of stream channels on the subject site. Due to the extensive network of wetlands and streams that divide many areas of uplands, it was not feasible to completely avoid impacts to wetlands and streams on-site. The project's team consisting of the Applicant, Morris & Ritchie Associates, Inc. (MRA) and GTA, made efforts during the design of the project to minimize and avoid impacts to the delineated regulatory resources within the subject site.

During early conceptual layouts of the central portion of the proposed development in 2017 and 2018, the Applicant proposed three primary warehouse buildings, including a 110,000 square-foot warehouse, a 600,000 square-foot warehouse, and a 500,000 square-foot warehouse, interior roadways and parking lots, and stormwater management areas. The configuration of the warehouses and associated parking lots were generally unconsolidated across the site, which resulted in a need for additional interior roadways and overall, larger areas of disturbance. Proposed interior roadways required additional stream crossings and greater impacts to regulated resources. To minimize and avoid impacts to streams and wetlands, the buildings were reduced in size and reconfigured within the subject site. The reconfiguration of the proposed primary warehouses resulted in a reduction in required interior roads, which otherwise would cross streams within the central portions of the subject site. Where stream crossings were unavoidable for interior roadways, crossings are proposed at the narrowest portions of the regulated resources to minimize impacts to the maximum extent practicable. Additionally, parking areas were originally dispersed around the proposed primary warehouse buildings to separate truck and car traffic and parking, which is preferred by most warehouse end-users. MRA reconfigured the parking areas to abut the proposed buildings to reduce the development envelope and minimize the need for additional interior roadways and associated regulated resource crossings.

The project was designed with a primary site access road that crosses the subject site from east to west. The primary site access road (Edgewood Road) provides site access from Van Bibber Road from the west, and site access from Abingdon Road from the east. As proposed Edgewood Road crosses Haha Branch on the western portion of the subject site. Haha Branch meanders along the majority of the western subject site boundary; accordingly, crossing Haha Branch is required in order to gain access to the site from the west. During the design of the project, MRA evaluated crossing Haha Branch with various culvert configurations. A culvert would require additional road grading and result in larger areas of impacts to Haha Branch. A culvert would also result in permanent impacts to Haha Branch. Furthermore, construction of a culvert crossing would require permanent impacts to the floodplain due to the need for road grading. To minimize impacts associated with site grading and to avoid permanent impacts to Haha Branch, the Applicant proposes to construct an approximately 220 foot long bridge to span this area.

Two other road crossings are proposed along Edgewood Road within the subject site. These two other crossing locations were designed with concrete culverts with large wingwalls to cross intermittent streams. The large wingwalls reduce the need for road grading and result in less impacts to regulated resources. Generally, Edgewood Road was designed to cross the intermittent streams at their narrowest location and are located in areas were other regulated resources, including floodplains and wetlands, are not present.

Where feasible, the project design team proposed retaining walls to limit the extent of grading into regulated resources. Retaining walls are proposed on the southern portions of Lots 3 and 8 to avoid impacts to wetlands and minimize impacts to streams. A retaining wall is also proposed along Edgewood Road to remove proposed grading from a wetland.

During the design of the project, the project design team made efforts to configure the proposed stormwater management and environmental site design (ESD) facilities to minimize impacts to wetlands and streams. The facilities are configured to avoid impacts to connected wetlands. Additionally, efforts were made to propose stormwater outfalls into streams and wetlands in an effort to maintain hydrologic conditions within these resources following the development of the subject site.

The location of existing sanitary sewer tie-ins, site topography, and the extent of streams and wetlands on-site significantly constrains the alignment of the proposed gravity-fed sanitary sewer system, resulting in impacts at two proposed crossings. However, consideration has been taken to avoid impacting additional resources at these crossings. The sewer system was designed to avoid crossing Haha Branch; specifically, one of the two crossings locations is located near Haha Branch and was designed to cross an intermittent oxbow stream but avoid crossing Haha Branch to tie into the existing sewer utility that parallels Haha Branch. The second sewer crossing was designed to cross the narrowest portion of an intermittent stream on the central portion of the subject site.

Avoidance and Minimaztion Summary

Due to the extensive network of wetlands and waters that divide many areas of uplands, it was not feasible to completely avoid impacts to wetlands and waters on-site. The proposed site layout avoids impacts to approximately 92% of wetlands and waters located within the project site.

Impacts to regulated resources have been minimized to the maximum extent practicable. The Applicant considered numerous building and infrastructure configurations to maximize the available space and accommodate businesses seeking regional warehouse distribution centers while minimizing the impact to regulated resources. Site design primarily utilizes upland areas for buildings, roadways, parking areas, stormwater management, and utilities.