



NEW PHILADELPHIA CITY SCHOOL DISTRICT
BOARD OF EDUCATION SUMMARY

11/26/2019

- PHASE 1 ENVIRONMENTAL ASSESSMENT (ESA)

The Phase I ESA revealed no evidence of recognized environmental conditions (REC) in connection with the Subject Property. However, it did reveal four oil/gas wells, an above ground storage tank (AST) associated with the oil/gas wells, three (3) ASTs with fuel pumps, and records of various mining operations. No Phase II ESA is required.

Ohio has numerous oil/gas wells and these are often encountered in developing parcels. There is a 100 foot minimum setback from buildings for new wells but there is no regulation between existing wells and buildings. It is not uncommon to cap wells where there would be safety concerns.

The surface mining operations took place on the northern part of the property and there were also some underground coal mining activities along the northern boundary of the Subject Property in the forest to the north of the golf course

The Wetland Determination identified twenty-five (25) potential wetland features, nine (9) potential stream features (including Beaverdam Creek), and ten (10) potential pond features within the study area. Research from aerial photographs (dating back to 1959) and topographical maps (dating back to 1909) revealed no discernable swamps over those time periods. In 1994, with development of the golf course, pond features appeared and associated with these are wetlands.

Ponds that retain water (which are what currently exist) are known as retention ponds and these are typically not encouraged on school property because of the safety aspects. They would need to be fenced if they remain. In stormwater management and design, detention basins are more often incorporated and these detain and release stormwater in a controlled manner to either a sewer or a natural stream. Detention basins are usually dry, with mowable sides, but would have contained water in high rain events.

There are two reasons for flooding: firstly, the lower section is part of the floodway/flood plain of Beaverdam Creek, and secondly, there is currently an 8" diameter storm sewer that discharges from the Oak Shadows housing development into an irrigation pond on the golf course.



Addressing these flooding issues will be firstly through building the proposed schools outside of the floodway/flood plain, and at an elevation that is higher than the delineated floodway/flood plain limit. Secondly, the irrigation pond will be eliminated and the 8" storm sewer connected to discharge to the Beaverdam Creek.

- **SUBSURFACE INVESTIGATION REPORT**

In some, but not all, of the borings soft material (probably fill) was detected. This is often encountered and there are several methods of ground improvement available like geopiers for the building foundations and slabs, and chemical stabilization of pavement subgrades. These are not costly and have been included in other co-funded school projects and have not impacted the project budgets to any significant degree.

- **TRAFFIC**

It is recognized that that the proposed school project will increase traffic volumes on the surrounding roadways, the study, although not yet complete, will ultimately confirm whether there is sufficient roadway capacity to handle this additional traffic based on industry-accepted standards. It is to be noted that the parcel is not only of ample size but also has additional ingress/egress points to surrounding streets, apart from Oak Shadows Drive, to provide for appropriate traffic engineering design to minimize any impacts to surrounding areas.

We would need evaluate the entire vehicular route into and out of the site to look for potential conflict areas, and through various strategies to mitigate traffic volumes and safety on site, we would look to maximizing separation of buses, cars and pedestrians as well as staggering arrival and dismissal times.

- **ALTA SURVEY & TITLE SEARCH REPORT**

An ALTA land survey aims to collect and record data from property records as well as physical surveying, to fulfill the needs of title companies during insurance dealings. This is currently in process and has thus far not revealed any issues.

- **CONCLUSIONS**

After our investigations, GPD Group finds that there are no conditions that would inhibit the development of the proposed educational facility on the Oak Shadows Golf Course parcel. In fact, given the size of the parcel and its location in the gentle rolling valley, close to established housing developments and access routes, the parcel will provide the New Philadelphia City School District with an eminently suitable site for development, checking all the boxes for school site characteristics as recommended by the Ohio Facilities Construction Commission.