Field Findings Report
Plum Borough School District
Plum High School Softball Field Project

Date: September 2, 2011 (Date of Field Investigation)

Project: Proposed Softball Field at Plum High School Project
Preliminary Wetland and Surface Water Field Reconnaissance Investigation

Field Staff: Tammy Sherwin and Kelly Eismont

FIELD FINDINGS

L.R. Kimball staff conducted a field investigation for the Plum Borough School District proposed Plum High School Softball Field Project on September 2, 2011. The purpose of the site investigation was to identify the presence/absence of palustrine wetlands and other regulated surface water features (ephemeral, intermittent and perennial streams) in accordance with the USACOE Wetland Delineation Manual (1987), Routine On-Site Determination Methodology and the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (USACOE, July 2010). An attached map (Photograph Location Map) depicts the area of investigation and location of site photographs. The area covered by the wetland/surface water assessment encompasses the area outlined on the included mapping, which is located adjacent to the existing on-site softball field.

The project area is located in Plum Borough, along Elicker Road, within the grounds of Plum High School, in Allegheny County, PA. Land uses surrounding the area of investigation consist primarily of school associated driveways, parking, and athletic fields, with an area of sloped forest land to the south and southeast of the site. The land use features exhibited within the property are predominantly comprised of open field vegetated with common herbaceous species. The project area appeared to have been graded at some point in the past, with silt fencing still visible along the sloped hillside to the south and southeast. What appeared to be fill/gravel materials were encountered throughout the site when attempting to obtain soil samples.

Site Soils:
As noted, the soils throughout the site contained fill/gravel materials that were assumed to be from previous grading and fill of the site. Three soil pits were dug on site in areas that appeared most likely to contain evidence of hydric soils and an adjacent area (for comparison). The soils in these areas were noted as having matrix colors of 10YR 3/3 to 10YR 4/4 and generally consisted of a silt loam or silty clay loam with rock fragments noted throughout. Refusal due to a rock layer was met at 6 to 10 inches at all three sites. One of the three soil pits was observed to fill with water, but did not exhibit hydric characteristics.

Site Hydrology:
There are no stream channels located within the project site. Drainage appears to have been affected by previous grading and fill, but travels in a general northwest to southeast direction across the site. A few areas were noted to contain standing water, but the soils in these areas did not indicate a length of inundation or saturation sufficient enough to develop hydric soils. It should also be noted that a significant rainfall event occurred the day previous to the site visit.

Site Vegetation:
The project site consists of a field with herbaceous vegetation present. A listing of the dominant vegetation is noted below:

Lanced-leaved goldenrod (*Solidago graminifolia*), Crown vetch, Canada thistle (*Cirsium arvense*), butter and eggs (*Linaria vulgaris*), Misc. grasses, Aster species (most likely small white aster – *Aster vimineus*), late goldenrod (*Solidago gigantea*)

Also noted in a few small pockets were the following species that are typically associated with wet conditions. It should be noted the soils in these areas did not meet hydric criteria: New York ironweed (*Vernonia noveboracensis*), dark green bulrush (*Scirpus geogrianus*), soft rush (*Juncus effusus*), Yellow sedge (*Carex flava*).

WATERWAYS

There were no waterways identified within the project area.

WETLANDS

There were no wetlands identified within the project area.

Low areas within the project area, including several tire ruts, were found to contain standing water of approximately ½ inch at the time of the site visit. This was attributed to significant rainfall the previous day, and the compacted fill material which impedes drainage in these areas. Soil samples were obtained in these areas, and while at least one pit was observed to fill with water, the soils themselves were noted as having colors of 10YR 4/4 to 10YR 3/3, with no evidence of sustained hydrology (i.e. reduced matrix and/or reduction/oxidation mottles were not present). It was determined that project area does not contain hydric soils, and does not meet wetland criteria.

CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE ACTIONS

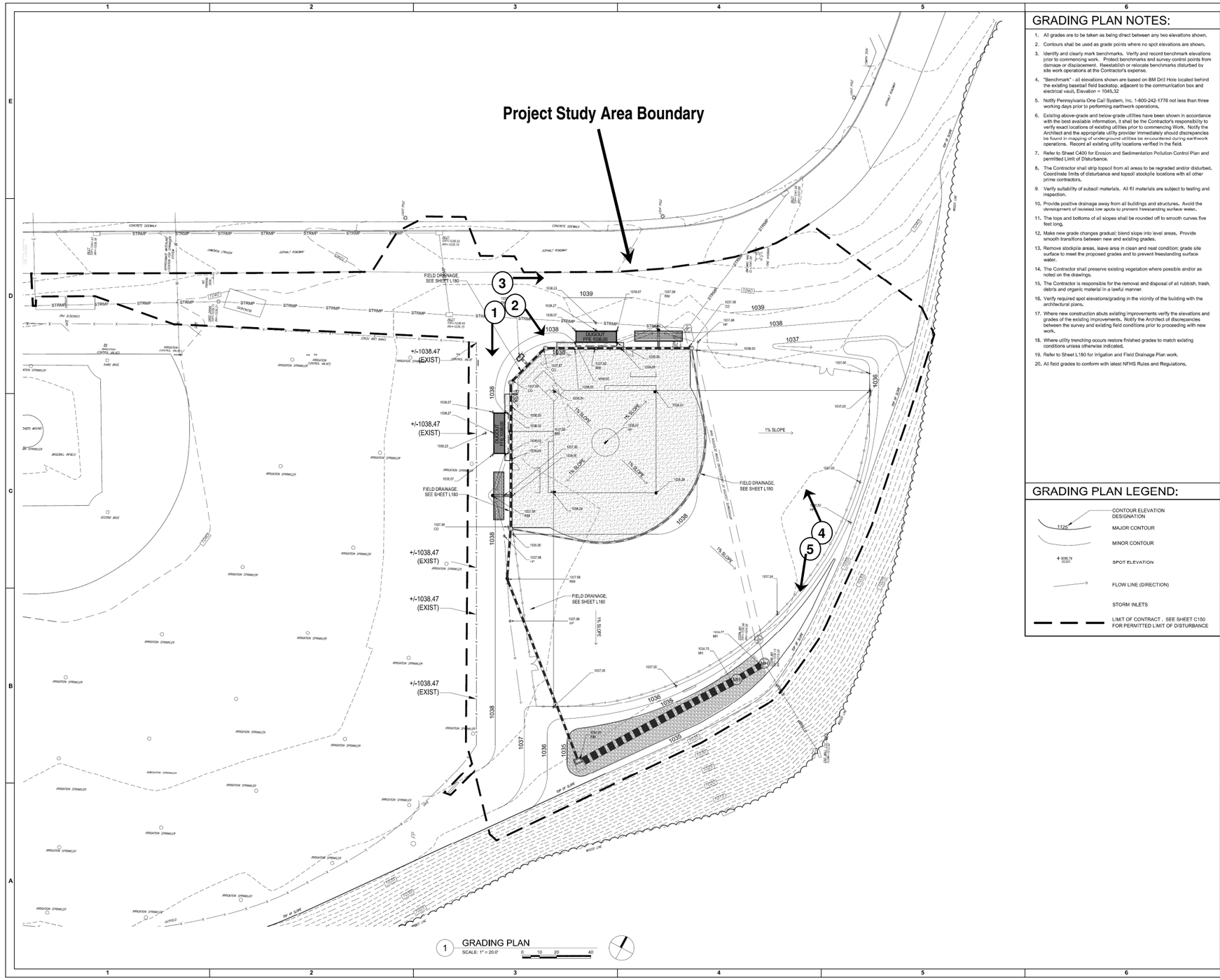
There were no wetlands or waterways identified within the project study area in accordance with the USACOE Wetland Delineation Manual (1987), Routine On-Site Determination Methodology and the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (USACOE, July 2010).

Proposed earth disturbances which exceed the defined study area limits should be investigated for the presence of wetlands and surface waters.

The information collected during the field investigations (i.e. photographs, field notes, mapping) have been retained within the project files at the following path: K:\EBG_PROJ\10-0778\TEAM\TR-ENV\Wetland Assessment.

Attachments: Photograph Location Map
Photograph Log

cc: Steve Ackerman, Tammy Sherwin, File (LRK)



GRADING PLAN NOTES:

1. All grades are to be taken as being direct between any two elevations shown.
2. Contours shall be used as grade points where no spot elevations are shown.
3. Identify and clearly mark benchmarks. Verify and record benchmark elevations prior to commencing work. Protect benchmarks and survey control points from damage or displacement. Reestablish or relocate benchmarks disturbed by site work operations at the Contractor's expense.
4. "Benchmark" - all elevations shown are based on BM Drill Hole located behind the existing baseball field backstop, adjacent to the communication box and electrical vault, Elevation = 1045.32
5. Notify Pennsylvania One Call System, Inc. 1-800-242-1776 not less than three working days prior to performing earthwork operations.
6. Existing above-grade and below-grade utilities have been shown in accordance with the best available information. It shall be the Contractor's responsibility to verify exact locations of existing utilities prior to commencing Work. Notify the Architect and the appropriate utility provider immediately should discrepancies be found in mapping of underground utilities be encountered during earthwork operations. Record all existing utility locations verified in the field.
7. Refer to Sheet C400 for Erosion and Sedimentation Pollution Control Plan and permitted Limit of Disturbance.
8. The Contractor shall strip topsoil from all areas to be regraded and/or disturbed. Coordinate limits of disturbance and topsoil stockpile locations with all other prime contractors.
9. Verify suitability of subsoil materials. All fill materials are subject to testing and inspection.
10. Provide positive drainage away from all buildings and structures. Avoid the development of isolated low spots to prevent freestanding surface water.
11. The tops and bottoms of all slopes shall be rounded off to smooth curves five feet long.
12. Make new grade changes gradual; blend slope into level areas. Provide smooth transitions between new and existing grades.
13. Remove stockpile areas, leave area in clean and neat condition; grade site surface to meet the proposed grades and to prevent freestanding surface water.
14. The Contractor shall preserve existing vegetation where possible and/or as noted on the drawings.
15. The Contractor is responsible for the removal and disposal of all rubbish, trash, debris and organic material in a lawful manner.
16. Verify required spot elevations/grading in the vicinity of the building with the architectural plans.
17. Where new construction abuts existing improvements verify the elevations and grades of the existing improvements. Notify the Architect of discrepancies between the survey and existing field conditions prior to proceeding with new work.
18. Where utility trenching occurs restore finished grades to match existing conditions unless otherwise indicated.
19. Refer to Sheet L180 for Irrigation and Field Drainage Plan work.
20. All field grades to conform with latest NFHS Rules and Regulations.

GRADING PLAN LEGEND:

- CONTOUR ELEVATION DESIGNATION (1125)
- MAJOR CONTOUR
- MINOR CONTOUR
- SPOT ELEVATION (+ 1036.79 GCDO)
- FLOW LINE (DIRECTION)
- STORM INLETS
- LIMIT OF CONTRACT , SEE SHEET C150 FOR PERMITTED LIMIT OF DISTURBANCE

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PROJECT NAME:

Plum Borough School District

NEW PLUM SOFTBALL FIELD

OWNER:

Plum Borough School District

900 Elicker Road
Plum, PA 15239

CONSULTANT

PROFESSIONAL

KEYPLAN

MARK	DATE	DESCRIPTION

ISSUE: 07/13/2011
PROJECT NO: 10 - 2200 - 0778
CAD DWG FILE: 100778_L130
DRAWN BY: RCS
CHECKED BY: CED

SHEET TITLE

GRADING PLAN

L130

BID DOCUMENTS

Photograph Location Map
for Preliminary Environmental Investigations

Conducted
September 2, 2011

Legend

1 → Photograph Location and Direction

Photograph 1: Looking southeast at the project area along the fence line of the existing ball field.

Photograph 2: Looking east at the project area.

Photograph 3: Looking northeast at the project area.

Photograph 4: Looking northwest at the project area.

Photograph 5: Looking south at the project area.