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Memorandum

To: Barrington Hills Park District

From: Walter Graft, P.E., GHA

Re: Tennis Court Drainage Review Countryside Elementary School Campus Project No. 5146.000

Date: May 20, 2016

As requested, Gewalt Hamilton Associates, Inc. (GHA) has conducted a site walk to review the drainage pattern around the existing six tennis courts. Below is a summary of our review and recommended improvements.

General

Please reference the Drainage and Photo Log Exhibit and supporting site photos.

Site Conditions / Drainage

The existing six tennis courts are located on the west side of the existing property in a relatively low portion of the site. An existing swale to collect and route storm water around the existing courts is clearly shown in the photos and on the drainage exhibit. Drainage continues southwesterly to a Lake well downstream of the tennis courts. The upstream area tributary to the tennis court drainage swale consists of undisturbed mowed turf areas.

The existing courts appear to have been reconstructed using a slip sheet design method at sometime in the past.

An existing evergreen hedge is located along the east, west and south side of the courts. Over the years, the evergreens have grown and dropped their needles raising the ground above the original court grade and matching the slip sheet court elevation. This could be prohibiting drainage within the stone layer from fully drying out.

Conclusion and Recommendation

The courts appear to have been designed with a clearly defined perimeter swale around them. Over the years it looks as though the perimeter evergreens have grown impeding the tennis court drainage from reaching the drainage swale. We would recommend that the existing evergreens and their root zone be completely removed and the spoil materials be removed exposing both the upper pavement surface and the original court pavement. This should assist with promoting positive drainage off of the surface and out of the sandwiched stone layer.

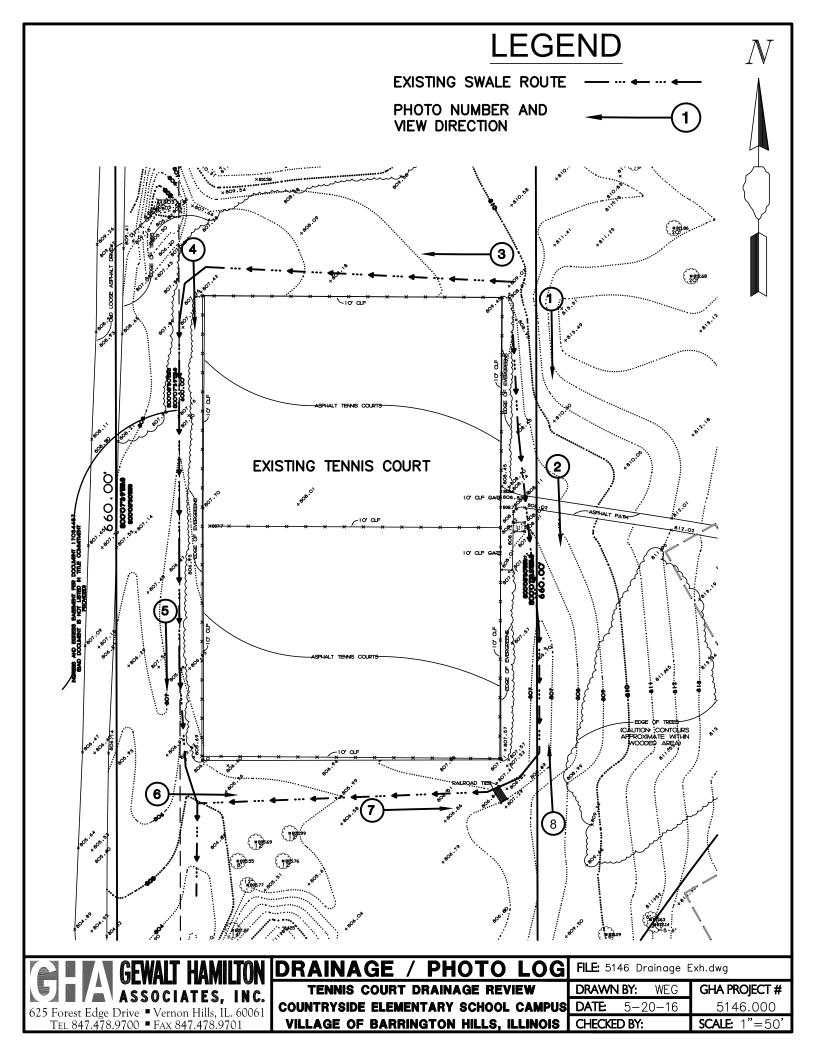




Photo 1 - Northeast Corner Looking South



Photo 2 – East Center Looking South



Photo 3 - Northeast Corner Looking West



Photo 4 – Northwest Corner Looking South



Photo 5 – West Center Looking South



Photo 6 – Southwest Corner Looking East



Photo 7 – South Center Looking East



Photo 8 - Southeast Corner Looking North