



Mr. Greg Fedner, P.E.
Plan Review Section Manager
City of Columbus, Division of Sewerage and Drainage
111 N. Front Street
Columbus, OH 43215

Re: Type III Variance Request Whetstone Sports Field Improvements, CC-20178

Mr. Fedner,

The following Type III Variance is requested from the City of Columbus Storm Water Drainage Manual (SWDM), revised December 2022, for the reference project:

1. Pursuant to Section 1.3.3 of the SWDM, grading within Stream Corridor Protection Zone is prohibited.

Project Background and Scope

The existing soccer fields are located within the Olentangy River Floodway/Stream Corridor Protection Zone (SCPZ) and the floodplain. Originally designed as two baseball fields with a shared outfield, the baseball portion fell into disuse and was eventually abandoned. Subsequently, the soccer community repurposed the fields. The turf has suffered from overuse, periodic flooding, and sediment deposition, resulting in poor conditions and an uneven playing surface.

The Columbus Recreation and Parks Department (CRPD) aims to improve the area by appropriately grading for soccer fields and implementing an enhanced drainage system to improve surface playability. While acknowledging that flooding will persist in the area, the drainage system is expected to enhance field drainage during non-flooding rainfall events. Upon completion of the project, CRPD has coordinated ongoing maintenance with their sports maintenance crew to ensure the continued upkeep of the improvements.

Safety is the primary concern of CRPD and these improvements allow for residents to engage in play safely. The speed at which sports are played today has changed and the risk of injury dramatically increases when field conditions are not optimal. Whetstone Park is one of our largest parks with close driving proximity to thousands of Columbus residents. The addition of appropriate drainage, and irrigation are critical to creating conditions where fields can be established and maintained at a level to which the department can promote and grow the participation in team sports at this location.

Due to the current conditions, even a relatively light rain fall causes the fields to close. These proposed improvements will also allow more consistent play on the fields, which contributes to a self-sustaining cost-recovery model, such that the return on the investment in fields goes towards supporting the maintenance, programing, and staffing of the fields.

Community Impact

Whetstone fields are part of the key recreational infrastructure of Columbus. These fields serve both passive and recreational purposes. When the park was developed in the early part of the 20th Century there wasn't the foresight nor understanding of what or how the sports fields at Whetstone Park would be



utilized. CRPD has provided hundreds of thousands of Columbus residents the opportunity to play, learn, and develop their athletic abilities on these fields.

There are over 1,500 youth annually who play soccer on these fields. In addition to soccer, Columbus residents play a multiple of other sports on the fields, including lacrosse and ultimate frisbee. Whetstone Park serves more than just soccer players; it serves as a park for nearly 5,000 people living within a 10-minute walking distance of the fields. Additionally, there's nearly 250,000 people living within a 10 minute-drive of these fields. Nearly 20% of those living within a 10-minute drive are under 18 years old and are CRPD's primary customer. The fields are also commonly used (by permit) by Whetstone High School for soccer, football, and Cross Country.

Currently, the lower fields at Whetstone Park are at a point where there's a critical need to improve and establish safe playing fields for the next generation/century of athletes of all levels and ages. The athletic fields play a pivotal role as the primary grounds for recreational soccer among young children, serving as their introduction to team sports. Over the past five years, the community has organized a travel soccer team, marking the first non-recreational soccer option within the local area. This offers local players to remain local and advance without having to leave Columbus to join a suburban team.

The proposed field improvements are crucial for CRPD to sustain and enhance these valuable services on a safe playing surface. Additionally, with improved field conditions, the department can explore the expansion of sports offerings, including field hockey, rugby, cricket, and other community center activities.

Exhibit Descriptions

The three required site exhibits have been prepared and can be found in Exhibit A. In all three scenarios, the impact is solely to the SCPZ and not directly into the river. The proposed improvements will only have temporary impact on the SCPZ and will, at a minimum, restore the area back to its current quality and function.

HEC-RAS modeling has been completed and the improvements achieve a no-rise for all grading modifications.

1. Full Compliance Alternative

Scope: The exhibit shows a site layout that is fully compliant with the SWDM. Due to the size of soccer fields and the extent of work required, a fully compliant plan would eliminate the project and no field improvements would be pursued.

Impact: No grading within the SCPZ prevents CRPD from improving the field area's drainage, leading to the persistence of holding stormwater in low spots along the southeastern edge and within the central low area of the field. There are currently no routes or possible routes to improve drainage without grading in the SCPZ due to the trails along the south and west acting as berms.

2. Minimal Impact

Scope: The minimal impact plan creates three (3) distinct large field areas with shallow swales between them to convey the water away from the fields and to the south of the site into catch basins. Per the National Federations of State High School Associations, natural turf fields with a sub-surface drain system should be sloped no less than one (1.0%) percent. Overall, the project proposes to lift the grade to the north approximately 12-inches and provide a 1.4% crowned slope across the fields with underdrains running parallel to the fields.

The grading within the area is considered a temporary impact and therefore would need a variance approval. The impacted area will be restored to an enhanced existing condition. The fields will maintain a lawn condition but will be planted with a more robust and durable seed type commonly used for sports fields. Two 4-inch trees will be removed by the temporary sediment basin. In accordance with Columbus Tree Mitigation, these trees will be

replaced on a one-for-one basis with two Sycamore trees planted at 2 and one-half inches per code.

Impact: Once construction is finished and the lawn is established, the fields will exhibit increased resilience for typical to large storm events and normal wear. The temporary impact on the SCPZ and floodplain during the construction and grading of the three fields allows CRPD to host 11v11 games and provides the flexibility to convert the larger fields into smaller youth fields as needed. The enhanced drainage will decrease the instances of game cancellations due to localized flooding, and the use of a more durable seed type will result in better turf recovery.

3. Preferred Alternate

Scope: The preferred alternate for the sports field improvements would be similar to the minimal impact alternate, with a portion of the disturbed area being seeded with a native seed mix to support the natural hydrologic processes. Grading for the improvements is required within the area and considered a temporary impact and therefore would need a variance for approval. Due to the EPA requirement of a temporary sediment basin, an area of approx. 16,000 square feet provides an opportunity to establish a native seeded area outside of the turfed sports fields. Four replacement trees planted at 2 and one-half inches are proposed within the native seeded area, equating to 10-inches of replaced caliper.

Impact: In addition to the more resilient fields, this alternate would provide increased biodiversity, encourage pollinator habitat, and support stormwater infiltration within the native seeded area.

Conclusion

We are requesting a Type III Variance from the City of Columbus SWDM with the goal of revitalizing the deteriorating existing fields and enhancing the surface quality to improve playability. The temporary impact will improve the quality of the fields, enabling more frequent use of the fields even after storm events.

With improved field conditions, CRPD anticipates even more demand and desire from the community. The department anticipates play time increasing from 150-200 hours per field space to 300-350 hours per field space. This will directly benefit the community in terms of participation and enjoyment of a high-quality park space. Numbers in each sport/activity will increase significantly and CRPD anticipates receiving interests from additional sporting activities.

We appreciate your consideration. Should you have any questions about the information presented or if you should need additional information, please do not hesitate to contact me.

Respectfully,

GPD Group

Angela Short, PLA Project Manager

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EXHIBIT A





