CP Futsal

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The Story

There is currently no open space suitable for the children to play and run around.

Our part is to design a futsal court that will be used by the Cumberland Pointe children.

This will provide a positive outlet for the children to express themselves and spend their time.

We have partnered with AROMA, WBCM for this project.

Successful solution:

-Stormwater Management System

-Construction Drawings

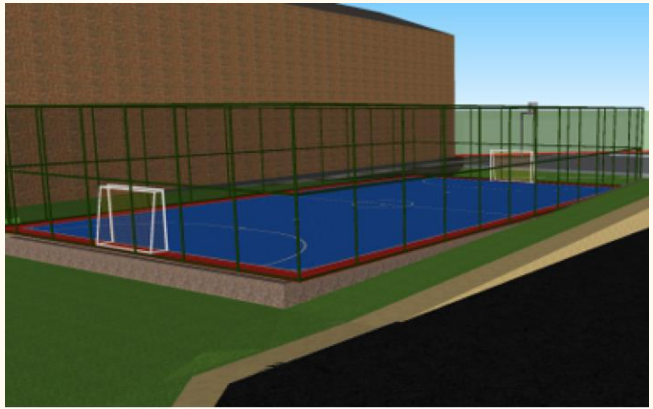
-Fundraising Renderings

- Field Design

Site Breakdown

Scope and Mission

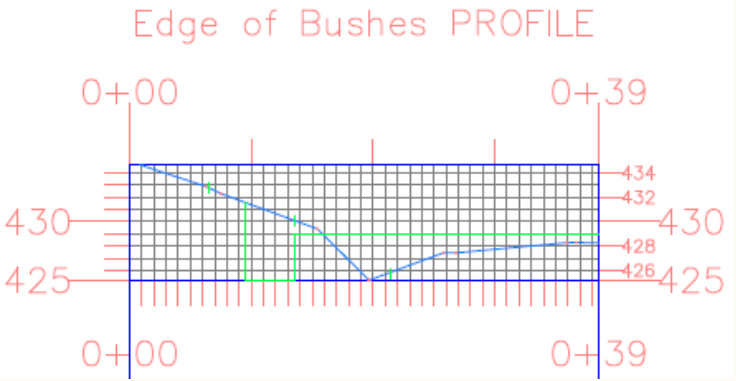
- We have worked on this project since it began
- Our mission is to finish it this spring

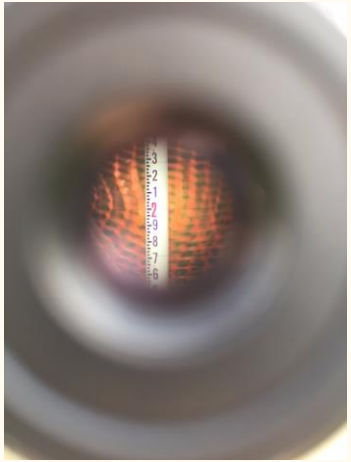


Site Survey & Earthwork Estimation

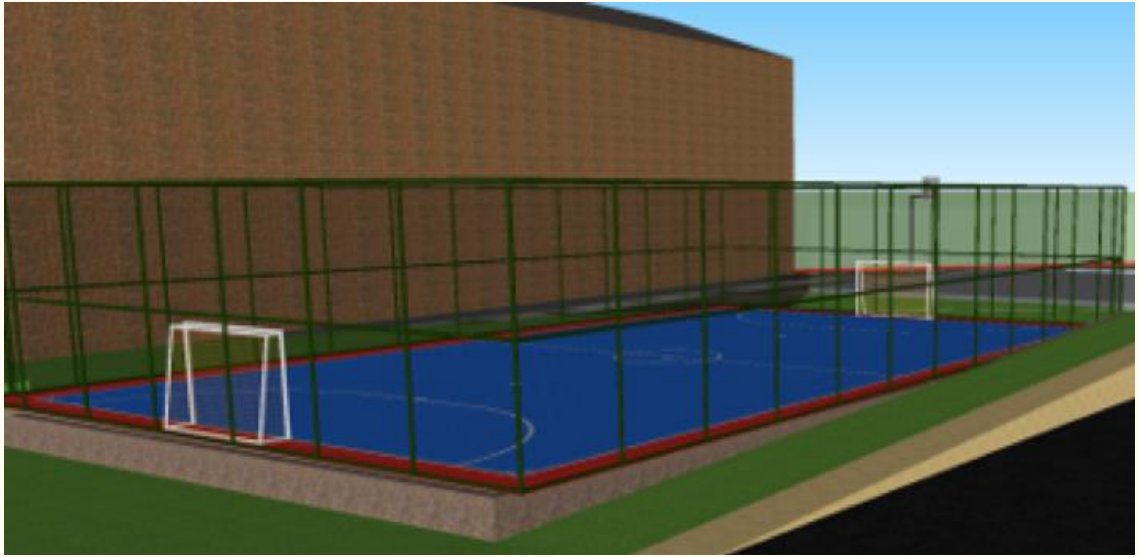
-Multiple site plan surveys performed

-Over 80 surveying points were taken





Retaining Wall Details

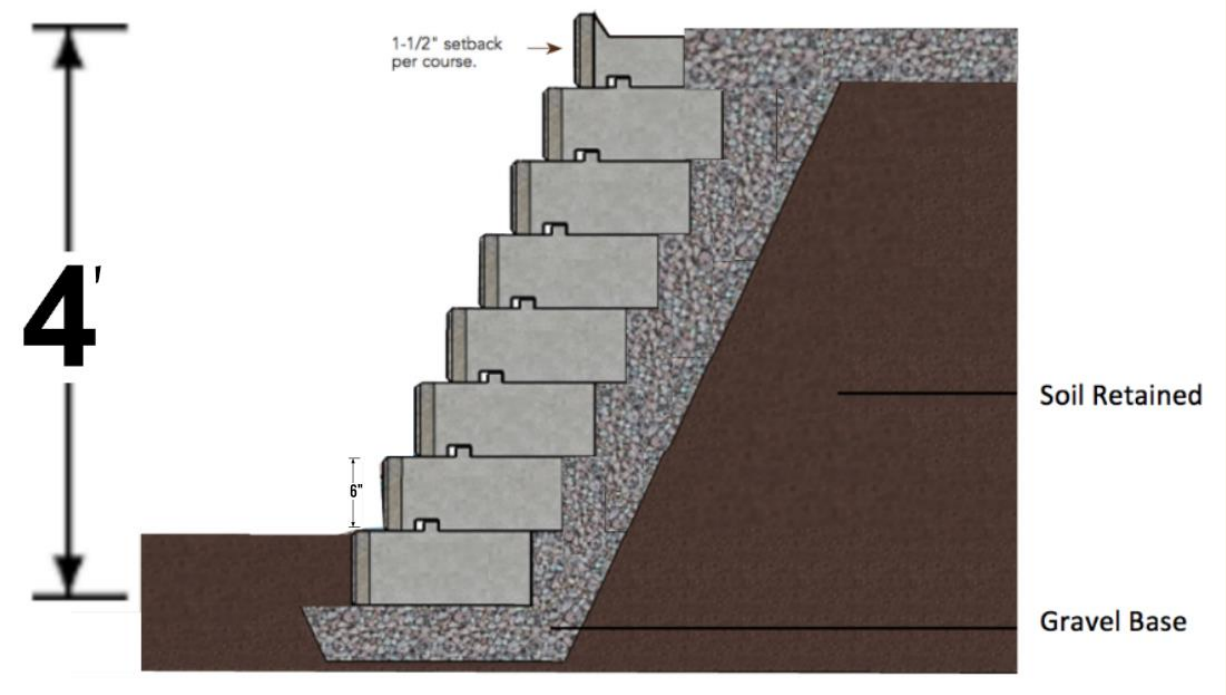


Southeast Wall: 0 ft above slab

Southwest Wall: 4 ft above slab

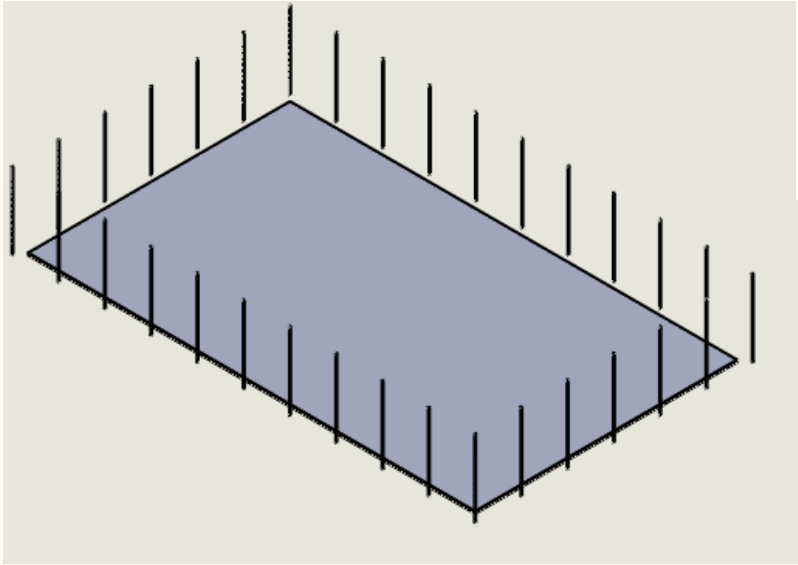
West Wall: 4 ft below slab

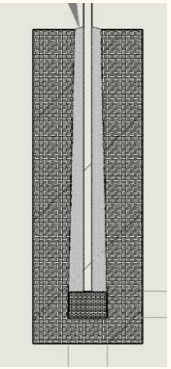
Retaining Wall



- 6 inch tall blocks
- 4 foot high wall
- 1 ½ in set back between levels
- Gravel drainage system

Fencing System





Fencing Layout with 25’ polls

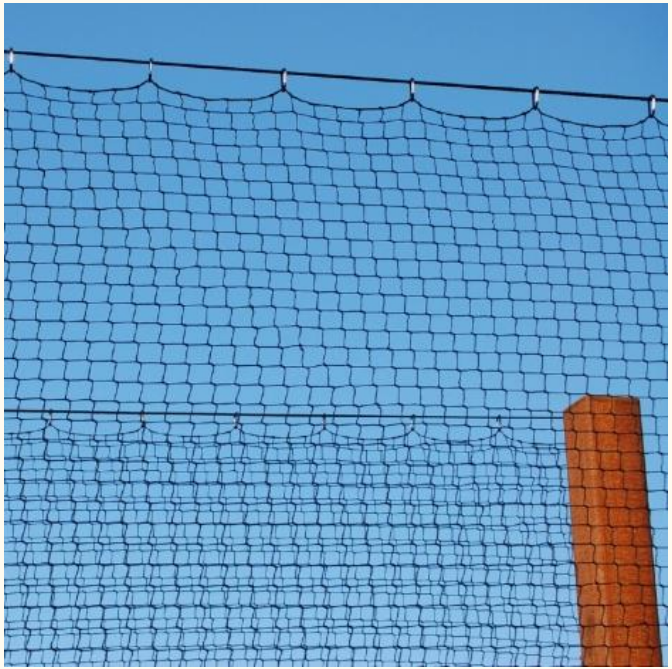
Poles sunk ⅓ of total length, 8.3 feet, with concrete reinforcement.

Hydraulic Earth Drill

Nylon Mesh

Square – no rope border needed, less give with soccer ball impact

Diamond – needs rope border, withstands impact better

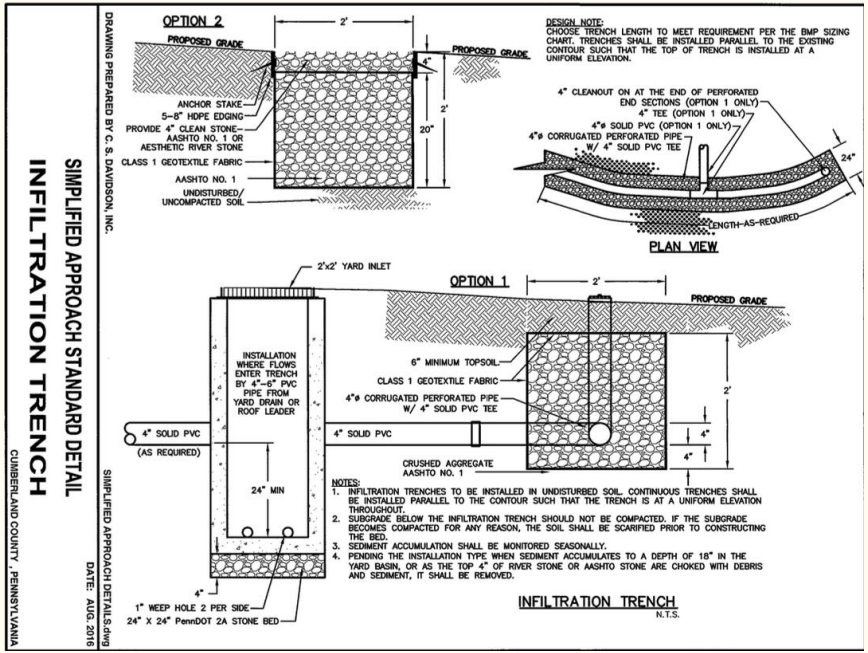


Stormwater Management

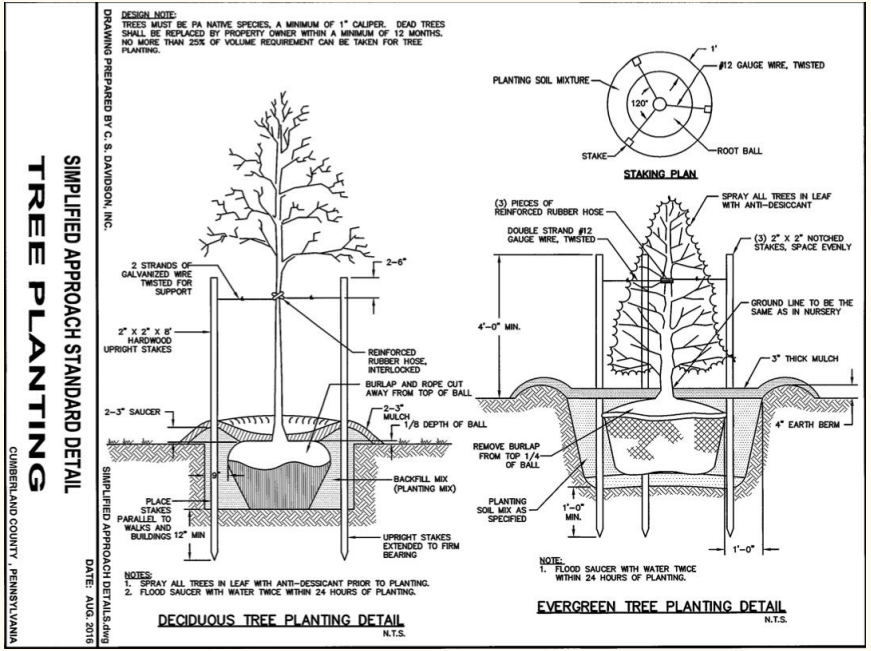
- Adding impervious area that we need to account for in terms of stormwater management
- We need to account for 1110 ft^3
- 4 step design plan

Design Aspect	Volume Accounted For (ft^3)
30 PA Native Trees	277
94' Infiltration Trench	150
25'x35' Upper Infiltration Bed	525
8'x53' Lower Infiltration Bed	250
TOTAL	**1202**

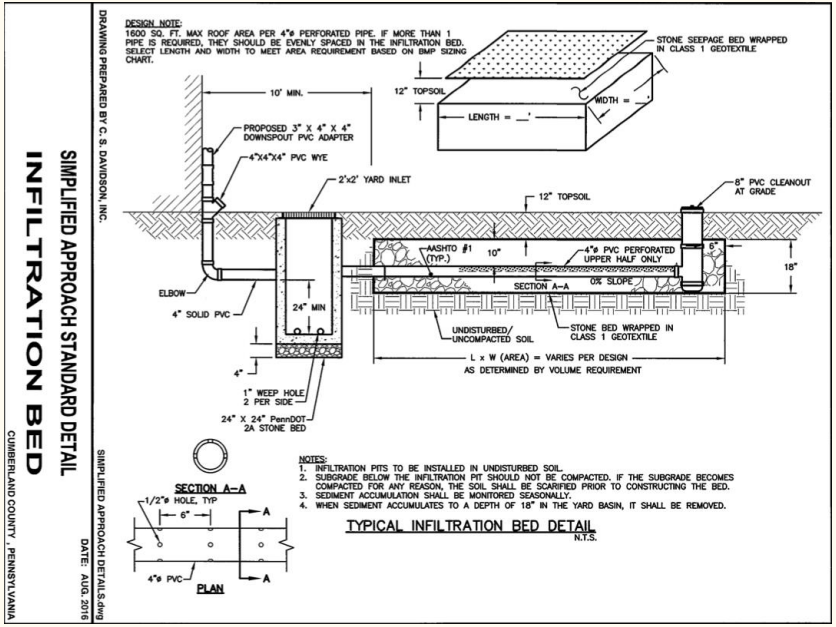
Infiltration Trench



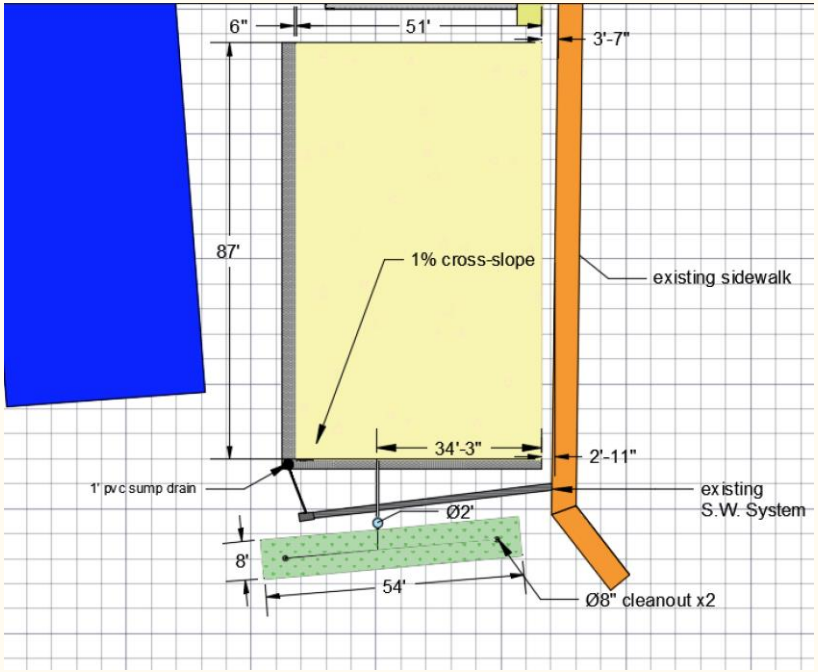
30 Native Trees



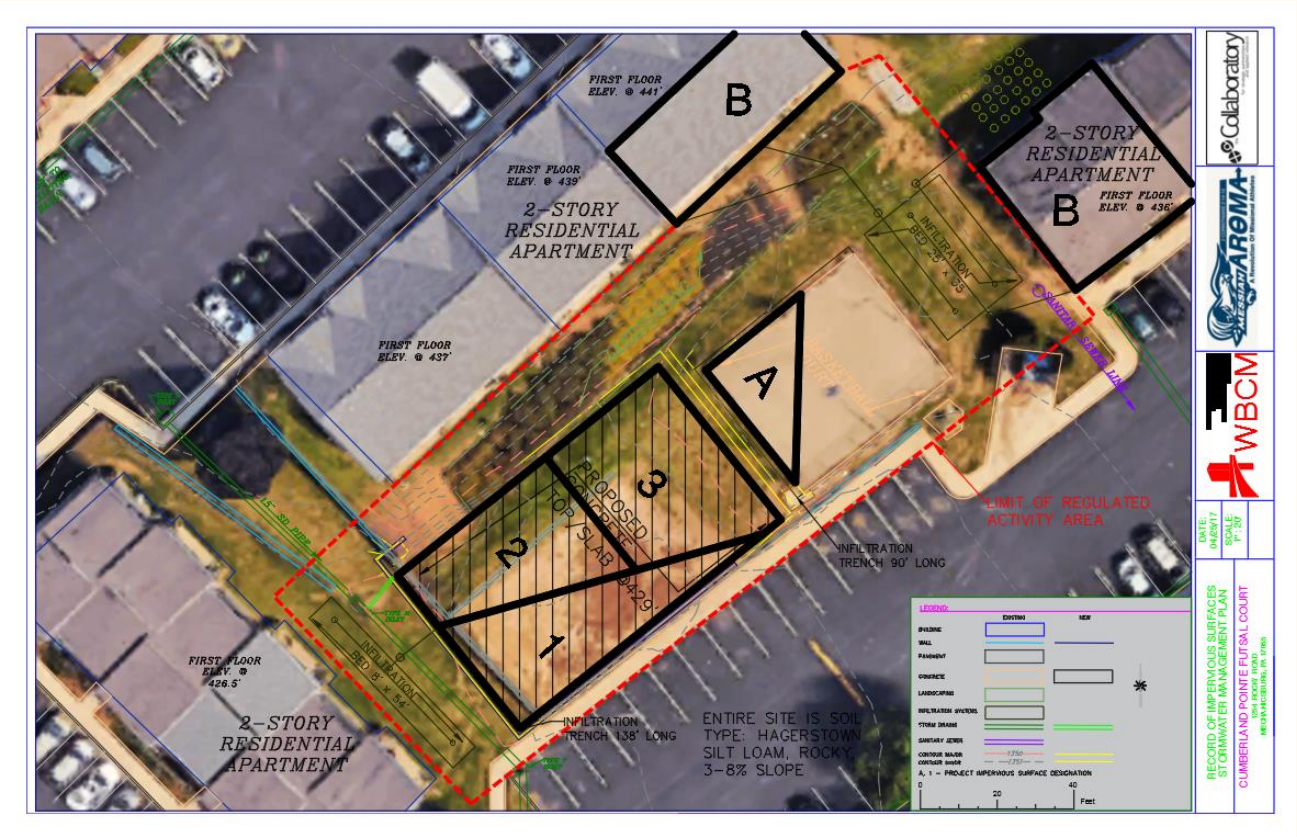
Upper Infiltration Bed



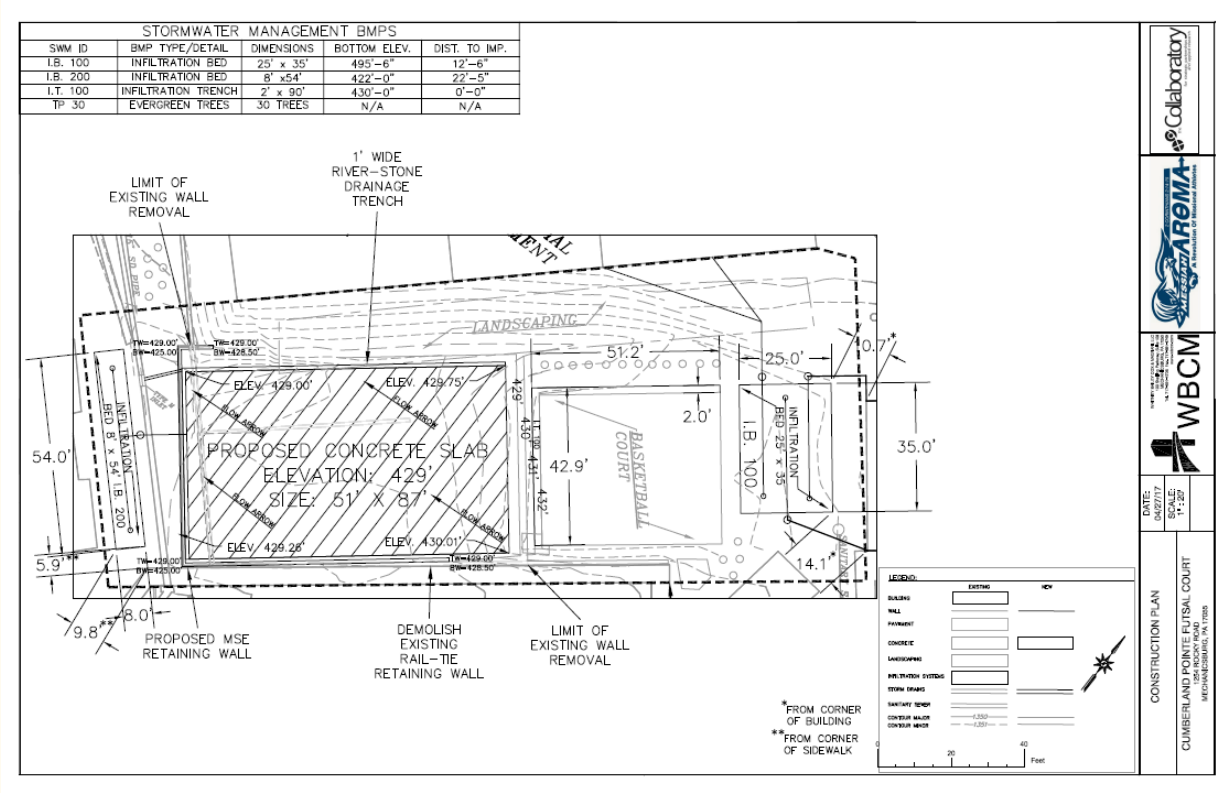
Lower Infiltration Bed



Stormwater Management Plan



Construction Plan



Construction Cost Estimation

Item	Lowest Cost	Highest Cost
Fencing / Nets	$3,700	$5,700
Stormwater System	$11,000	$12,000
Retaining Wall	$2,500	$3,000
Concrete Slab	$12,000	$12,700
Playing Surface	$12,348	$14,406
Permit	$35	$35
Equipment	$1000	$1,500
Playing Boards	$2,000	$16,000
Earth Work	$2,500	$5,000
Total	$47,083	$70,341

Fundraising Rendering

Acknowledgements

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Questions?