SHAWNEE JUSTICE CENTER

STORMWATER QUALITY BMP RETROFIT PROJECT

1 EXTENDED DRY DETENTION
- Sediment forebay added to collect silt
- Flow path of water lengthened to provide treatment of water

2 BIOSWALE
- Designed to drain to forebay
- Designed to allow for future road construction

3A, 3B BIORETENTION BASINS
- Basin divided to avoid existing utilities and existing trees
- Basin designed as entry feature to project

4A, 4B RAIN GARDENS
- 2 gardens provided to provide required treatment of drainage area
- Designed as natural garden entry feature to project

5 RAIN GARDEN
- Designed as focal point for area.
- Formal garden design to fit surrounding landscape

6 BIORETENTION BASIN
- Basin designed as entry feature to project
- Formal garden design to fit surrounding landscape

7 BIOSWALE
- Formal garden design to fit surrounding landscape
- Designed with numerous wildflowers for visual impact

8, 9 BIOSWALES
- Formal garden design to fit surrounding landscape

10 BIORETENTION
- Basin designed as entry feature to project
- Designed as natural garden to match existing lake

11 NATIVE GRASS
- Establish native grass for natural appearance

12A, 12B RAIN GARDENS
- Designed as natural garden to match existing lake
- Designed as focal point for trail

13 EXTENDED WET DETENTION
- Add sediment forebay that has an attractive appearance
- Modify outlet structure
- Reestablish edges with native grass

14 RAIN GARDEN
- Designed as natural garden to match existing lake
- Designed as focal point for trail

15 NATIVE GRASS
- Establish native grass for natural appearance

16 GRADE FOR FUTURE IMPROVEMENTS
- If acceptable to the City excess material from excavations can be placed and compacted in areas for future parking and drives.

17 TRAIL WITH SIGNAGE
- Trail designed with 5% to allow for easy pedestrian access without ramps
- Suggest trail to be 8' asphalt to allow vehicle access for maintenance around lake
- 3 signs proposed
- Provide 3 pads for future benches at key view points

Issues Addressed with This Plan
- Stormwater BMP features are designed to meet the requirements of the MARC BMP manual including forebays, soil mixes, underdrains, size for drainage area.
- The stormwater BMPs have been designed to prevent the disruption or relocation of existing utilities.
- The stormwater BMPs have been designed to provide visual focal points to the campus visitors and trail users.
- The trail has been graded at 5% to allow easy pedestrian access and easy maintenance access.
- Material from excavating the stormwater BMPs is proposed, if acceptable to staff, to be placed in areas where it will be needed to construct future improvements. The material will be compacted to the City standards.
- The stormwater BMPs have been designed to minimize the disturbance of existing trees.

N

0 150 300

SCALE: 1" =150'

SCHLAGEL & ASSOCIATES, P.A.
Engineers • Planners • Surveyors • Landscape Architects

Arbor Masters Tree & Landscape

McANANY CONSTRUCTION, INC.
ASPHALT PAVING • SITE DEVELOPMENT