

CLEVELAND AKRON AND COLUMBUS (CA&C) RAILWAY DEPOT STORMWATER MANAGEMENT DEMONSTRATION

MOUNT VERNON, OHIO

STORMWATER DEMONSTRATION PROJECT:

PROJECT REDUCES THE OVERALL AMOUNT OF RUNOFF FROM IMPERVIOUS PAVEMENT AREAS, BY PROMOTING INFILTRATION, DETAINING EXCESS STORMWATER TO BE RELEASED AT A SLOWER RATE AND IMPROVING THE WATER QUALITY OF RUNOFF THAT EVENTUALLY REACHES THE KOKOSING STATE SCENIC RIVER.

REDEVELOPED SITE TOTALS:

• PAVED AREA	9,794 SQ. FT.
• TURF AREA	16,628 SQ. FT.
• BIORETENTION/INFILTRATION SWALES & BASINS	3,761 SQ. FT.
• TOTAL SITE AREA	<u>30,183 SQ. FT.</u>

PASSIVE TREATMENT TRAIN:

• BIORETENTION/INFILTRATION SWALES	1,312 SQ. FT.
• BIORETENTION/INFILTRATION BASINS/RAIN GARDENS	2,449 SQ. FT.
• SUBTOTAL SWALES AND BASINS/RAIN GARDENS	3,761 SQ. FT.
• TURF AREA	16,628 SQ. FT.
• TOTAL REDEVELOPED TURF & BIORETENTION/ INFILTRATION SWALES AND BASINS/RAIN GARDENS	<u>20,389 SQ. FT.</u>

STORMWATER TREATMENT TRAIN:

- A SERIES OF ALTERNATIVE STORMWATER BEST MANAGEMENT PRACTICES (BMPs) THAT ADDRESS SITE-SPECIFIC STORMWATER RUNOFF AND REQUIRED WATER QUALITY IMPROVEMENTS.
- THE BMPs ASSOCIATED WITH THIS SITE INCLUDE TURF AREAS, BIORETENTION/INFILTRATION SWALES AND BIORETENTION/INFILTRATION BASINS OR RAIN GARDENS. ALL AREAS ARE PLANTED WITH NATURAL NATIVE VEGETATION.
- ADVANTAGES OF THE STORMWATER TREATMENT TRAIN AND BMPs INCLUDE:
 - PROVIDES OPEN SPACE WITH AESTHETIC AND EDUCATIONAL VALUE.
 - STORMWATER FLOOD CONTROL BY SLOWING DOWN RUNOFF AND STORING WATER INCLUDING WATER INFILTRATION INTO THE SOIL.
 - SPECIAL SOIL MIXES SUPPORT THE NATURAL NATIVE VEGETATION GROWTH ALONG WITH PROVIDING FOR WATER STORAGE.
 - IMPROVEMENT OF WATER QUALITY BY FILTERING POLLUTANTS FROM THE STORMWATER.

