

INTERVENTION:

Whittier Peninsula to Scioto Audubon Metro Park

Columbus and Franklin County Metro Parks
and Burgess & Niple, Inc.



BURGESS & NIPLÉ

Engineers ■ Planners ■ Environmental Scientists

INTERVENTION



Metro Parks

- Ohio Revised Code 1545
 - Metropolitan Park District, separate governmental agency
 - Not the State, not the City, not the County

BURGESS & NIPLÉ

Engineers ■ Architects ■ Planners

For more than 100 years, Burgess & Niple has led the development of infrastructure in rural and urban regions. Our success is driven by a passion for advancing the built environment with exceptional concern for quality of life, safety and sustainability.

B&N's team of in-house professionals includes planners, engineers, environmental scientists, geologists, architects, surveyors and much more. Our work spans the world and ranges from complex, urban renewal projects to finding potable water for arid, rural villages.

1938 Aerial



1950 Aerial



1957 Aerial



1964 Aerial



1980 Aerial



2004 Aerial



Partnerships

- Participation of Metro Parks began in 2004
- Partnership with City of Columbus, Audubon Ohio, Metro Parks to Redevelop Whittier Peninsula
- Successful City of Columbus Rec and Parks and Audubon Ohio partnerships to build upon

Clean Ohio Program

- Coincides with development of Clean Ohio program
- Metro Parks active participant in portions of Clean Ohio involved in land acquisitions, trail development, farmland preservation=
GREENSIDE
- During legislative process, lobbied to get Park Districts listed as eligible entity on the brownfield side of Clean Ohio

Funding Sources

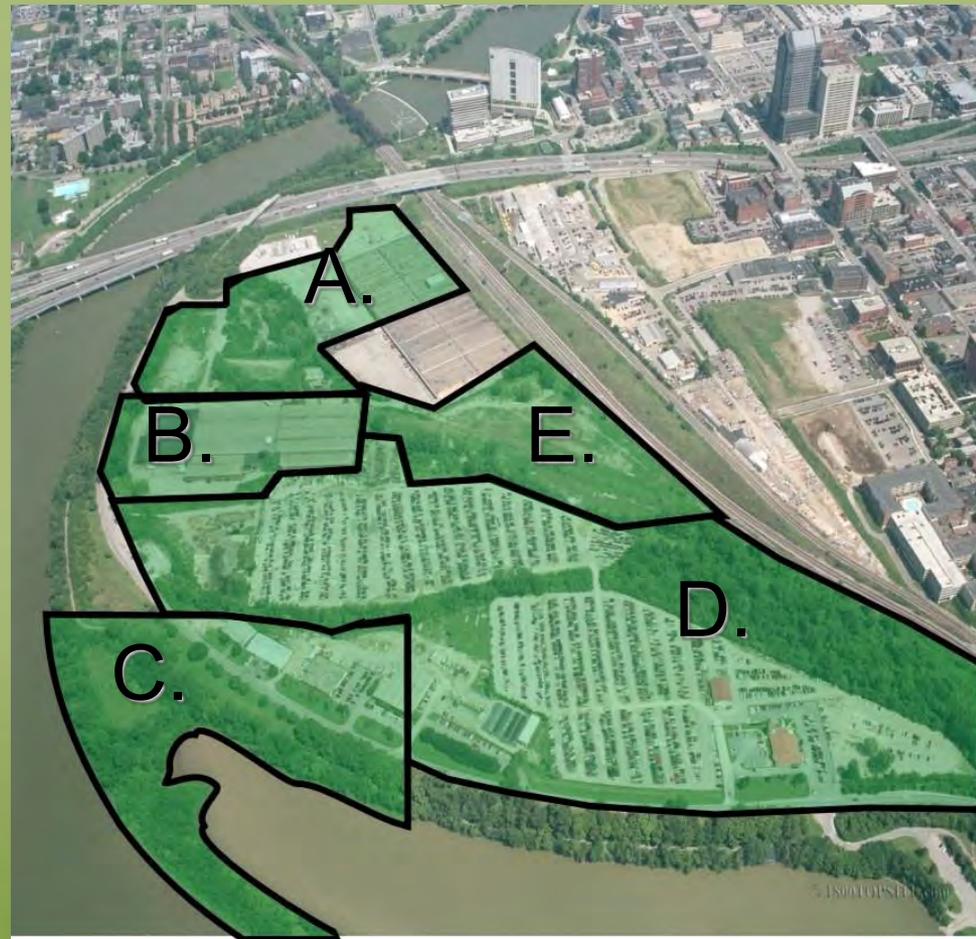
- Clean Ohio Program
 - Clean Ohio Assistance Fund \$742,000
 - Clean Ohio Brownfield Revitalization Pilot Program \$1.5M
- US EPA Grants
 - Brownfield Cleanup Revolving Loan Fund \$200,000
 - Brownfield Assessment Grant \$200,000

Funding Sources

- City of Columbus contributions
 - Funds for environmental cleanup
 - Donation of impound lot property to Metro Parks
- Metro Parks
 - Funds from Capital Improvement Budget
 - \$12 Million

Whittier Peninsula 4-5 Separate NFAs

- A. Northern Tier – ODOD
BCRLF Funded
- B. Lazarus Steel – ODOD
COAF Funded
- C. Audubon Carve Out
- D. Southern Tier –
USEPA Brownfield Assessment
Grant and Future CORF Projects
- E. CSX Property – USEPA
Brownfield Assessment Grant
and Future CORF Projects



Benefits to each member of partnership

- Audubon Ohio had an initiative to put nature centers in urban areas to serve underrepresented groups-Strategic Goal
- City of Columbus had acquired much of the land on the peninsula, was limited by funds for development/operations and “Clean Hands” principles

Metro Parks Benefits to Partnership

■ Strategic Goals

- Commitment of building Metro Parks within I270 in 1999 Levy
- Desire to participate in revitalization of downtown Columbus in terms of residential opportunities, Pressure to be “downtown”
- Providing service to demographic that we struggled with-Young Professionals
- Challenge











ODOD Video

Dynamic/Adaptive Process

- Initial Plan for mix of Metro Park and affordable housing
 - Housing fell through as developers lacked interest
 - Most of peninsula is urban fill
- Consulting team for Metro Parks same as Grange Insurance Audubon Center
- Partnership of construction
 - Nature Center parking lot



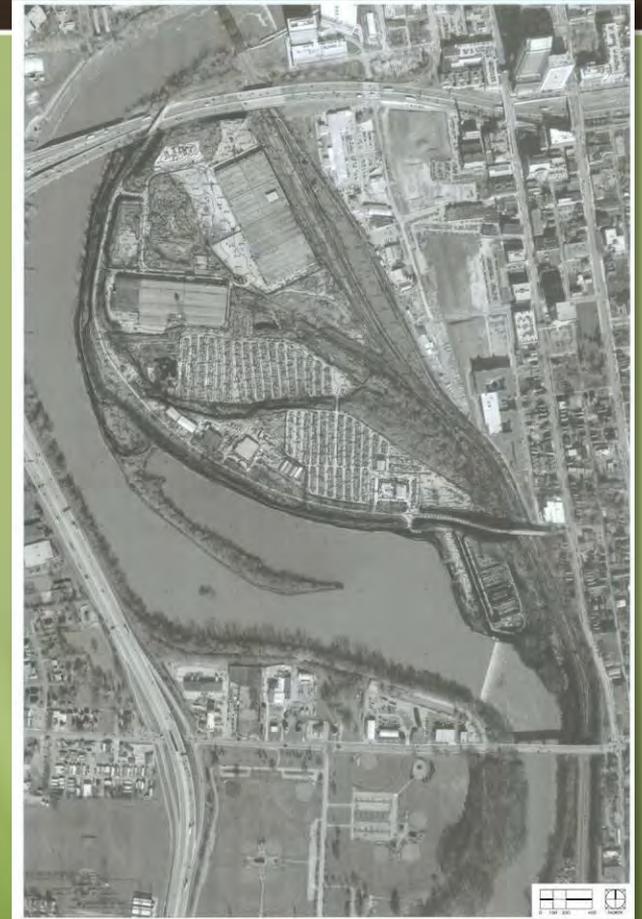
Current Development – Scioto Audubon Metro Park

- Nature Trails
- Wildlife Habitat
- Active outdoor pursuits
 - Bicycle Trails
 - Climbing Wall
 - Playground
 - Athletic Fields



Development Plan Coordination

- Ohio EPA
- Army Corps of Engineers
- ODOT
- Brewery District Commission
- City Departments
- Ohio DOD
- USEPA

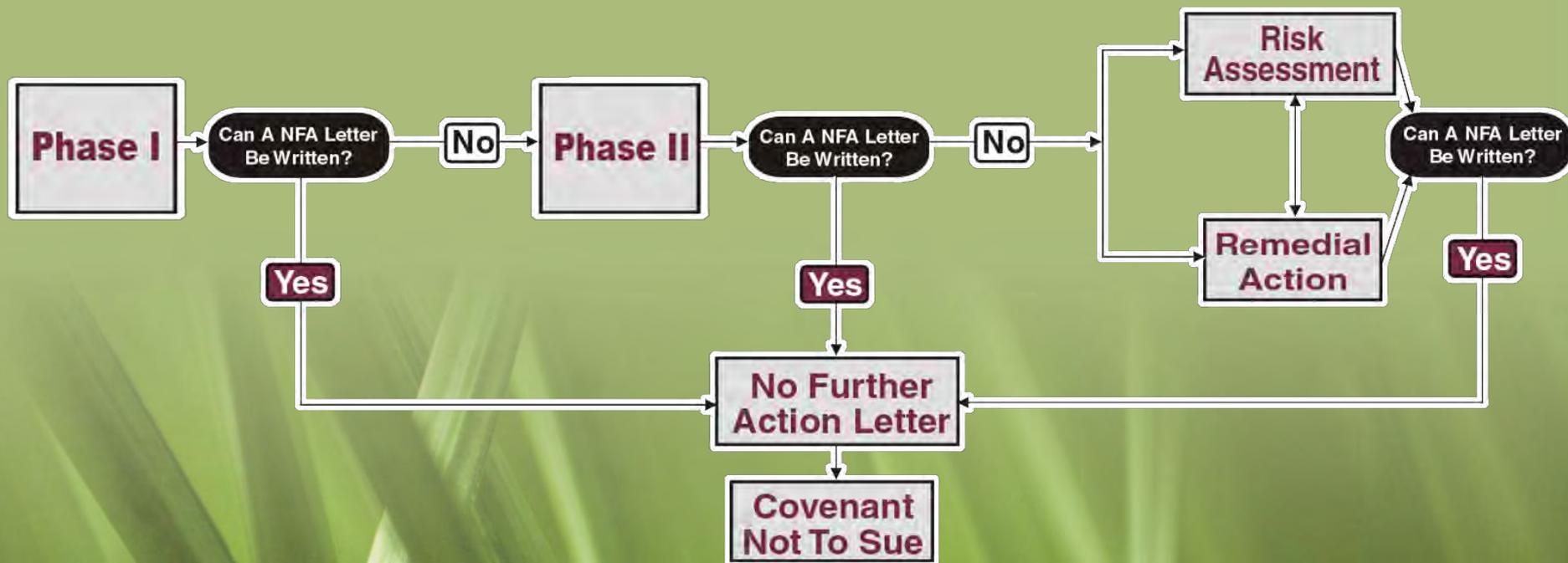




Environmental Impacts?

VAP Process

- VAP is a privatized voluntary cleanup program – it's Ohio's brownfield cleanup program



History of Whittier Peninsula

■ Northern Tier

- Foundry
- RR Maintenance & Switch Yard
- Concrete Manufacturing
- Asphalt Plant
- Electrostatic Painting
- Vehicle Maintenance

■ Southern Tier

- Scrap Yard
- Municipal Dump
- Sand & Gravel
- Concrete Manufacturing
- City of Columbus Impound Lots

Determination of Compliance with Applicable Standards

- Soil
 - Modified Standards for Recreations Land Use
 - Commercial or Industrial Land Use
 - Construction and Excavation Activities
- Groundwater
- Surface water
- Sediments
- Air – both indoor and outdoor

Chemicals Of Concern

- Metals - Arsenic, Lead, Barium
- Polynuclear aromatic hydrocarbons (PAHs)
- PCBs
- Total Petroleum Hydrocarbons (TPH)
- Volatile Organic Compounds (VOCs)

Completion of Remedial Activities

- Remedies-
 - > 2 foot cover
 - excavation
- Deed restrictions/institutional controls-
Groundwater Use Restrictions
- Operations and Maintenance Agreements

Integrate Remediation Into Redevelopment

- Soil
 - Geotechnical Issues
 - Soil Management – Grading – Cut and Fill
 - Cap Soils –
 - Parking Lots
 - Buildings
 - Institutional Controls
 - Restrict land use
- Groundwater
 - Restrict groundwater use

Northern Tier – Areas of Concern



Northern Tier – Areas of Concern & Design



Northern Tier – Areas of Concern & Final Design



Scioto Audubon Metro Park

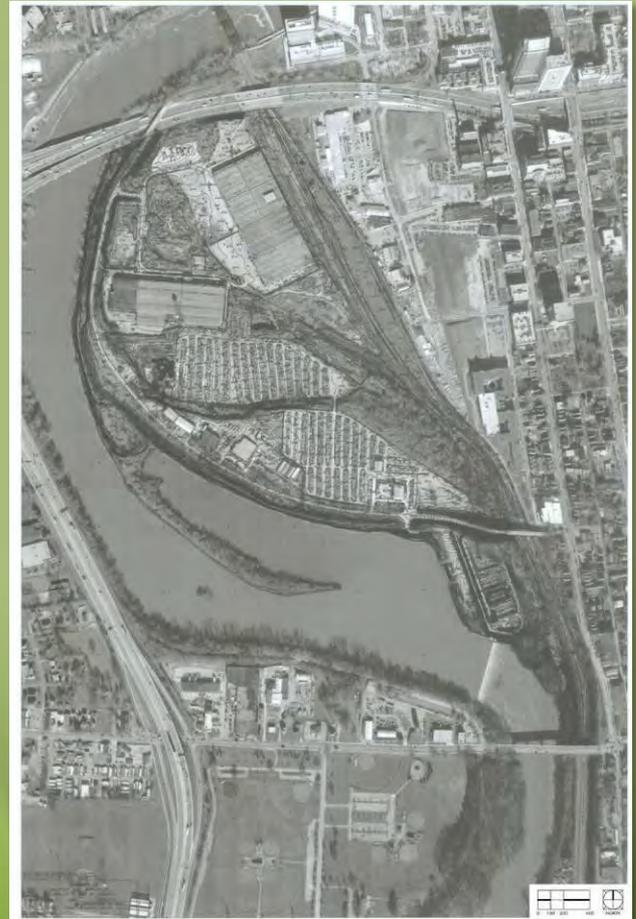
- Wetlands
- Trails/Roads
- Athletic Pursuits
- Dog Park



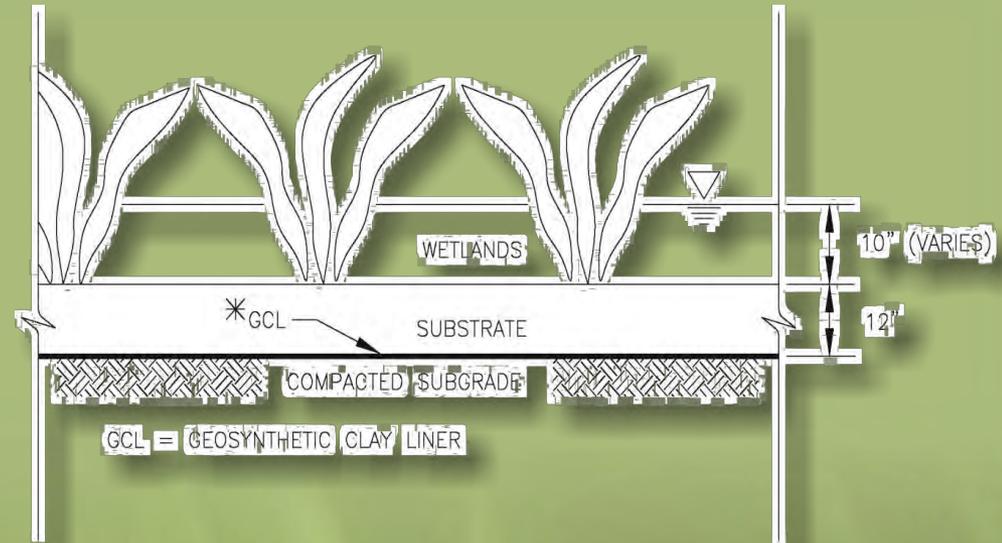
Site Development Challenges

- Environmental Mitigation
- Geotechnical Issues
- Storm Water
- Utilities
- Facility Demo/Material

Reuse



Wetlands Creation



Wetlands Creation



Site Demolition/Material Reuse

- Facility Reuse Planning
- Building Materials
- Asphalt
- Steel & Copper (off-site)



Park Amenities Development

- Reuse of existing infrastructure



Grange Insurance Audubon Center



Grange Insurance Audubon Center Environmental Challenges

- Environmental Mitigation
 - Cover Placement
 - Contractor RMP
 - Groundwater Protection
- Structural/Geotechnical
- Utilities/Storm Water Management



Storm Water Management



Impervious Surface Reductions



Vegetated Filter Strips

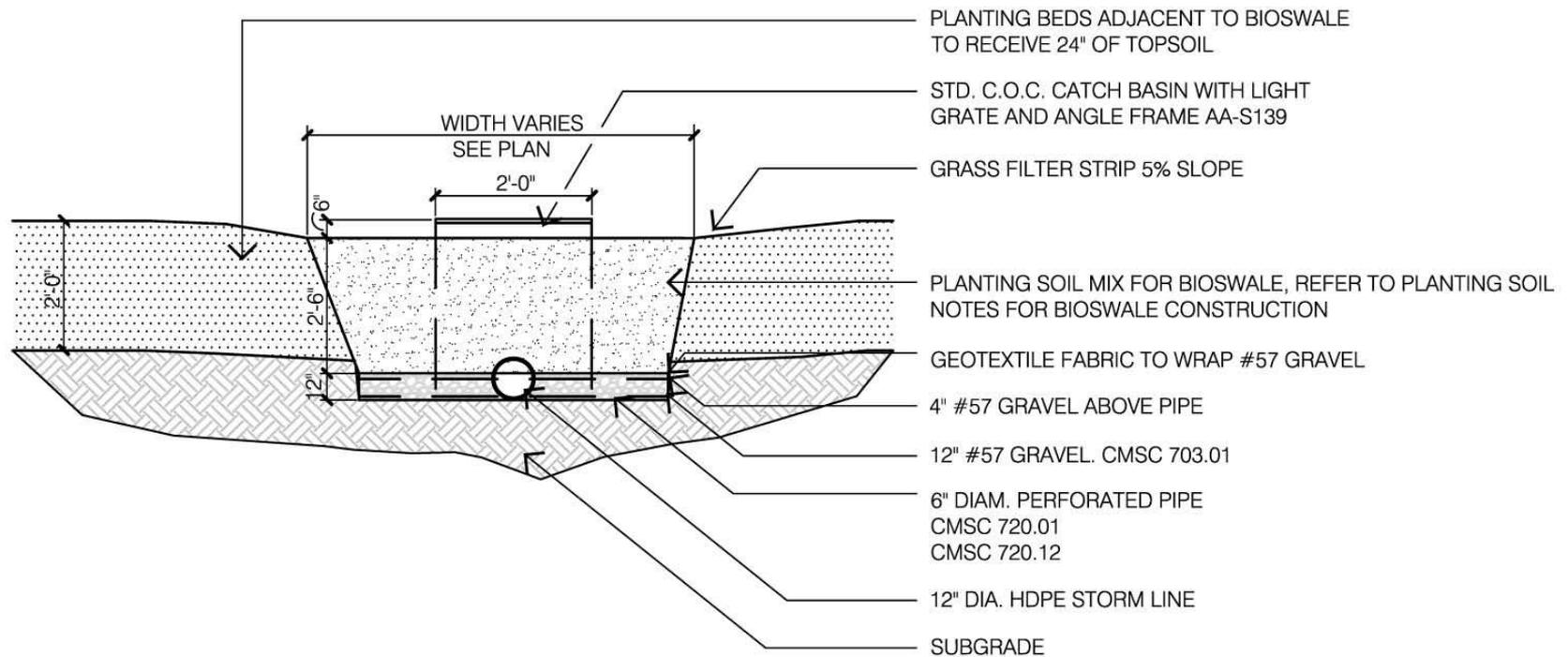
- Linear (roadway/trails) construction



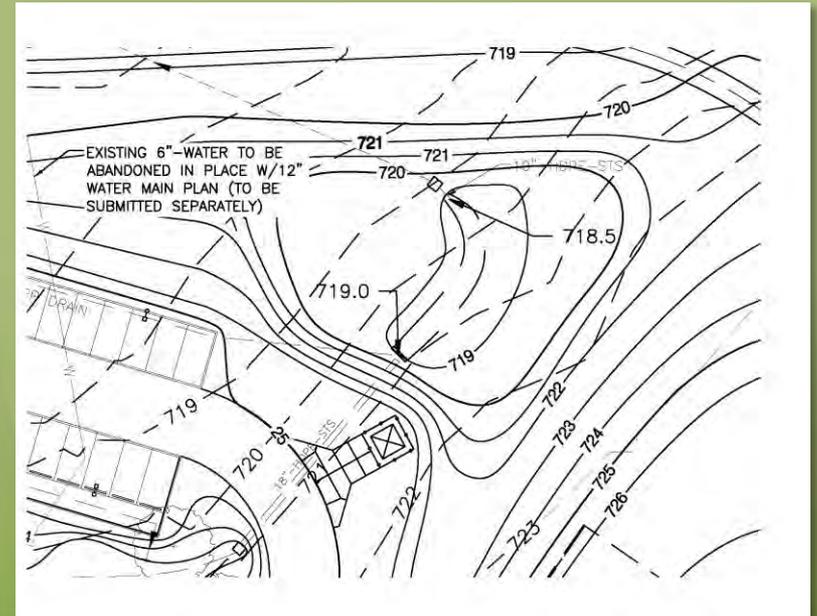
Bioretention Swale



Bioretention Swale



Dry Detention Basin/Rain Gardens

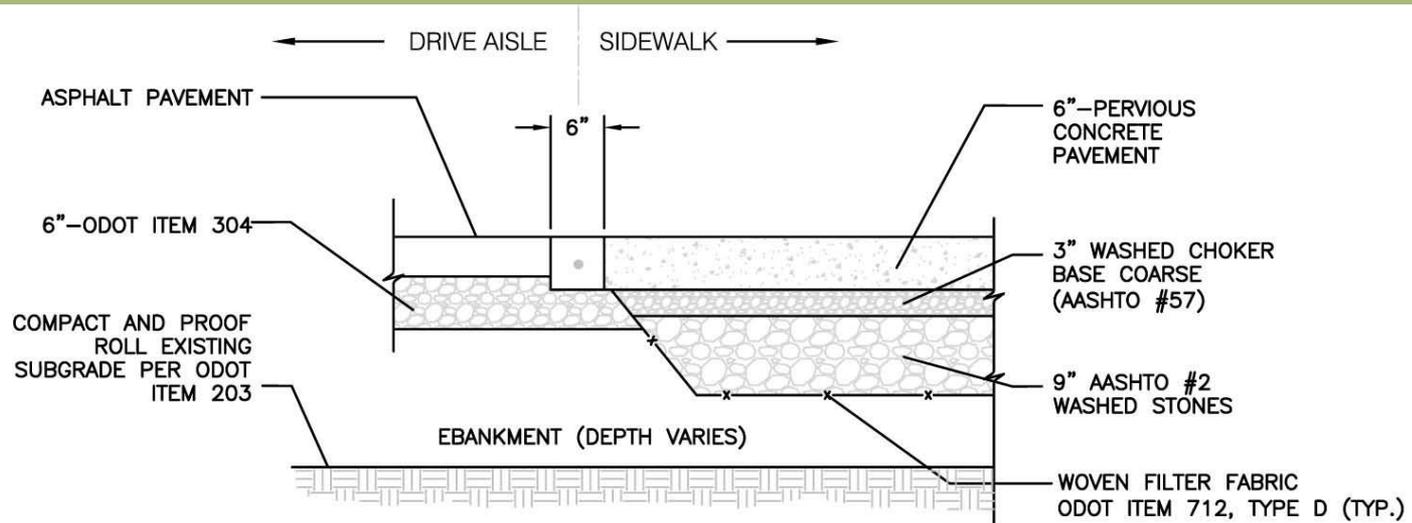


Pervious Pavements



Pervious Pavements

- Filtration for TSS reduction



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POROUS CONCRETE PAVEMENT

SCALE: SCALE: $3/4" = 1'-0"$

Geothermal Well Development

- Two Major Obstacles
- Geology/Hydrogeology
 - Voids/Fractures
 - Water Management
- Environmental



Thank You

Questions?







































