

**Getting It**



**Built**



**Right**



**Site**



**Management**




**You make the choice:**



good vs bad site management affects image

- well run vs out of control project
- affect on regulatory agencies and enforcement actions
- Public relations

**Existing Trees**



Always:

- Arborist evaluation
- Critical root zone fencing
- Utility boring if necessary

Added measures at High Point Project:

- Valuation posted
- Contractor education/incentive



**Dust Control**  
Regulatory and Public Relations

**Erosion Control**  
filling compost sock



regulatory with increasingly public scrutiny of site TESC measures



Silt Fences: Tried and True and just plain tired?



Compost Sock Installation, Broadview Green Grid

note temp asphalt berm above to divert construction runoff from pavement to area behind compost sock, sheet flow filtered through sock



photo courtesy of S&R Design Co., 2005



Try to keep your runoff separate: dilution is NOT the solution to pollution!

photos courtesy of S&R Design Co., 2005



Broadview Green Grid Construction: after the "infamous" October 2003 Storm

Recommended Real World Practice: Lowest Swale in series left unfinished, no water left the site!



Broadview after the storm

## Real World: Construction "under traffic"



## D'Oh! Maintenance Needed



## Stabilizing for immediate service



Recommended:  
 •shredded tree trimming waste covered by  
 •2 layers jute, 30 degree angle to slope,  
 60 degrees to one another, pinned and keyed

## Small Sites or Large Development, challenges



High Point Swales – On going protection  
 of porous pavement and the  
 natural drainage swales pose sequencing  
 challenges

Sequencing...can/should facilities be completed before homes are built or  
 can/should facilities be rough excavated with sediment removal and final  
 grading after completion ?



## Construction: Orchestrating Chaos



*Tip: be involved!  
 You can't do this  
 from the office!*

- Communicating with the neighborhood about construction sequencing
- Specifying to your contractor neighbor relations

Communicate with the Neighborhood:

- Frequent, if only a few complain it is too often, that is just about right
- Easy to read

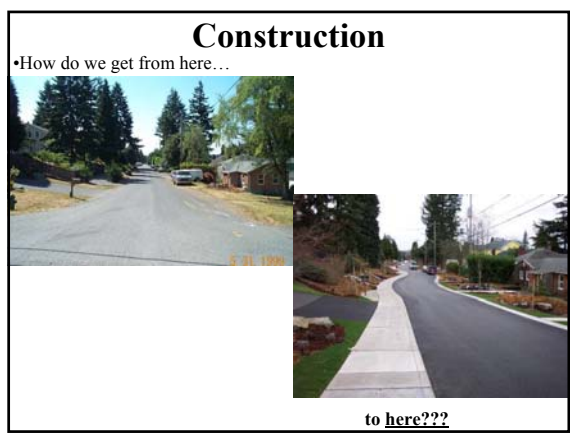


## Broadview Specifications: Sequencing

WSDOT / APWA Format Specifications:  
Section 1-08 "Prosecution and Progress"

### Work Execution Sequence & Restrictions

Avenues shall be constructed first. No more than 2 Avenues shall be constructed simultaneously. An Avenue shall be considered complete when it is ready for landscaping work and all critical location & elevation points verified by the Engineer. Ready for landscaping shall mean that all sidewalk, curb, driveway, pavement, soil, compost and mulch placement work is finished (ed.: aka Substantial Completion). 107<sup>th</sup> St between 3<sup>rd</sup> and 4<sup>th</sup> Avenues NW shall be constructed in the Summer when school is not in session.





Swale subgrade excavation

scarifying swale subgrade before amended soil placement



Amended Soil Placement

## Soil Placement Restrictions

- Broadview: Soil shall not be placed when the ground or soil is frozen, excessively wet or, in the opinion of the Engineer, in a condition detrimental to the work.

## Oops!



- Grading is critical
- Coordination between the Contractor and Engineer is important
- If it doesn't look right, ask.

## Finishing the Job: Fine grading requires finesse

- Small equipment or hand labor

### On Small Sites:

- If utilizing splash blocks and surface drainage then fine grading is critical



## Small Site: Fine Grading, give the water somewhere to go



## Poor Site Grading



# Plants needed!!!!



# A parade of flags....



# ...becomes a parade of plants!!!



## Planting

*neighbors pick their own plants*

City of Seattle **Plant Interest Survey**

As an official and authorized city partner to help coordinate the Broadview Street SW, the City has been awarded the opportunity to coordinate the planting of trees and shrubs along the project. We are looking for your input on what plants you would like to see planted along the project. We are looking for your input on what plants you would like to see planted along the project. We are looking for your input on what plants you would like to see planted along the project.

**Broadview**

July 14, 2013

Dear Neighbors,

As Broadview Street SW, we are looking for your input on what plants you would like to see planted along the project. We are looking for your input on what plants you would like to see planted along the project. We are looking for your input on what plants you would like to see planted along the project.

**Planting**

We are looking for your input on what plants you would like to see planted along the project. We are looking for your input on what plants you would like to see planted along the project. We are looking for your input on what plants you would like to see planted along the project.

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Plant Name	Color	Notes
Red	Red	
Green	Green	
Yellow	Yellow	
White	White	
Blue	Blue	
Purple	Purple	
Orange	Orange	
Pink	Pink	
Black	Black	
Grey	Grey	
Brown	Brown	
Dark Green	Dark Green	
Light Green	Light Green	
Dark Red	Dark Red	
Light Red	Light Red	
Dark Blue	Dark Blue	
Light Blue	Light Blue	
Dark Purple	Dark Purple	
Light Purple	Light Purple	
Dark Orange	Dark Orange	
Light Orange	Light Orange	
Dark Pink	Dark Pink	
Light Pink	Light Pink	
Dark Black	Dark Black	
Light Black	Light Black	
Dark Grey	Dark Grey	
Light Grey	Light Grey	
Dark Brown	Dark Brown	
Light Brown	Light Brown	
Dark Dark Green	Dark Dark Green	
Light Dark Green	Light Dark Green	
Dark Light Green	Dark Light Green	
Light Light Green	Light Light Green	
Dark Dark Red	Dark Dark Red	
Light Dark Red	Light Dark Red	
Dark Light Red	Dark Light Red	
Light Light Red	Light Light Red	
Dark Dark Blue	Dark Dark Blue	
Light Dark Blue	Light Dark Blue	
Dark Light Blue	Dark Light Blue	
Light Light Blue	Light Light Blue	
Dark Dark Purple	Dark Dark Purple	
Light Dark Purple	Light Dark Purple	
Dark Light Purple	Dark Light Purple	
Light Light Purple	Light Light Purple	
Dark Dark Orange	Dark Dark Orange	
Light Dark Orange	Light Dark Orange	
Dark Light Orange	Dark Light Orange	
Light Light Orange	Light Light Orange	
Dark Dark Pink	Dark Dark Pink	
Light Dark Pink	Light Dark Pink	
Dark Light Pink	Dark Light Pink	
Light Light Pink	Light Light Pink	
Dark Dark Black	Dark Dark Black	
Light Dark Black	Light Dark Black	
Dark Light Black	Dark Light Black	
Light Light Black	Light Light Black	
Dark Dark Grey	Dark Dark Grey	
Light Dark Grey	Light Dark Grey	
Dark Light Grey	Dark Light Grey	
Light Light Grey	Light Light Grey	
Dark Dark Brown	Dark Dark Brown	
Light Dark Brown	Light Dark Brown	
Dark Light Brown	Dark Light Brown	
Light Light Brown	Light Light Brown	

## Commissioning:

## Developing Operational Guides for Homeowners

**Website resources**

- Seattle Department of Public Works
- Seattle Department of Transportation
- Seattle Department of Public Utilities
- Seattle Department of Parks and Recreation
- Seattle Department of Neighborhoods
- Seattle Department of Construction and Inspections
- Seattle Department of Information Technology
- Seattle Department of Finance and Administrative Services
- Seattle Department of Public Health
- Seattle Department of Public Safety
- Seattle Department of Public Works
- Seattle Department of Transportation
- Seattle Department of Public Utilities
- Seattle Department of Parks and Recreation
- Seattle Department of Neighborhoods
- Seattle Department of Construction and Inspections
- Seattle Department of Information Technology
- Seattle Department of Finance and Administrative Services
- Seattle Department of Public Health
- Seattle Department of Public Safety

**Other publications available through websites**

- Seattle Department of Public Works
- Seattle Department of Transportation
- Seattle Department of Public Utilities
- Seattle Department of Parks and Recreation
- Seattle Department of Neighborhoods
- Seattle Department of Construction and Inspections
- Seattle Department of Information Technology
- Seattle Department of Finance and Administrative Services
- Seattle Department of Public Health
- Seattle Department of Public Safety

**Plant Identification and Information websites**

- Seattle Department of Public Works
- Seattle Department of Transportation
- Seattle Department of Public Utilities
- Seattle Department of Parks and Recreation
- Seattle Department of Neighborhoods
- Seattle Department of Construction and Inspections
- Seattle Department of Information Technology
- Seattle Department of Finance and Administrative Services
- Seattle Department of Public Health
- Seattle Department of Public Safety

**“How do I?...” for some this is their first time gardening!**

**Training Landscape Maintenance Crews**



- Don't make assumptions regarding intent
- Not all natural drainage soils are alike
- Filtration versus bioretention
- What is sand?
- What is topsoil?
- What is mulch?
- Ask????

**Semantics / Lessons Learned**

disperse porous convey integration  
 perforated swale gravel trench discharge

- Words mean different things to engineers, landscape architects, planners, architects, regulatory staff, contractors, owners, developers, builders and real estate agents
- Semantics can cause iterative discussions on **what these terms actually mean**
- When meanings affect construction bid prices, property values and maintenance practices understanding the intent of the terminology is not a minor consideration.