WASHINGTON PARK

SITE PLAN

LEGAL DESCRIPTION (4316-100-001-0107):

BLOCK 100, KINGSTON MAP OF TOWN, ACCORDING TO THE PLAT RECORDED IN VOLUME 1 OF PLATS, PAGE 39, IN KITSAP COUNTY, WASHINGTON; EXCEPT THAT PORTION LYING EAST OF A LINE DESCRIBED AS FOLLOWS: BEGINNING AT A POINT 80.62 FEET WEST OF THE NORTHEAST CORNER OF SAID BLOCK 100; THENCE SOUTH 24°40'37" EAST 47.36 FEET OF THE TERMINUS OF SAID LINE.

SITE ADDRESS:

25882 WASHINGTON BLVD NE
KINGSTON, WA 98346

OWNER/APPLICANT:

PORT OF KINGSTON
JIM PIVARNIK
PO BOX 559
KINGSTON, WA 98346

SECTION LETTER
A / 15
DRAWING NUMBER ON WHICH SECTION APPEARS
ON PLAN

SECTION
xx" = 1'-0"
AT SECTION

DETAIL NUMBER
1 / 15
DRAWING NUMBER ON WHICH DETAIL APPEARS
ON PLAN

DETAIL
xx" = 1'-0"
1 / 12
AT DETAIL

SECTION INDICATORS:

VICINITY MAP
(NOT TO SCALE)
Sec. 25, Tn. 27N, Rn. 2E, W.M.

NOTE:
PARKING STRIPING AND BUS STOP RELOCATION TO BE COORDINATED WITH KITSAP COUNTY COMPLETE STREETS PROJECT.

(5) BIORETENTION PONDS
SEE PROFILE SHEET 7

EG/FG 36.70
CONCRETE RAMP DOWN TO EXISTING W/ PEDESTRIAN CURB

S24° 40' 37.00"E
47.4'

006–001

WASHINGTON BOULEVARD NE

9.0'
20.0'
45'
S65° 49' 23.00"W
205.6'

4" PAINTED TRAFFIC WHITE, PER MUTCD

4" PAINTED TRAFFIC WHITE, STRIPES EVERY 2.5' PER MUTCD

PAINTED HANDICAP SYMBOL PER MUTCD

ABANDON GREASE INTERCEPTORS SEE NOTE 3

POND #1
POND #2
POND #3
POND #4
POND #5

LANDSCAPE AREA

100–001

15.4'
N36° 30' 00.00"E

DATUM
NAVD88
0 10 20 FEET

Wash. Grid Sys., North Zone (NAD83)

NE STATE HIGHWAY SR104

COMMUNITY PLAZA

N25° 34' 56.00"W
62.2'

22' DIA ROOF
20' DIA FUTURE GAZEBO, 15' PEAK HEIGHT
*REQUIRES SEPARATE BUILDING PERMIT

115.0'
N50° 20' 00.00"E

5'

BIORETENTION POND #6 (102 SF)
BOTTOM EL=31.75

5'

EXIST RESTROOMS

18" TALL LANDSCAPE WALL

EXIST FENCE

80.0'
N59° 50' 00.00"E

EXIST BLOCK WALL

S25° 34' 56.00"E
80.0'

EXIST ECOLOGY BLOCK WALL

101–001

ADJOINERS:

4316-101-001-0006
KINGSTON FERRY AND MARINA
25864 WASHINGTON BLVD
KINGSTON, WA 98346

4316-100-001-0008
ISSA ANTOINE F & TANIA J
10809 NE WEST KINGSTON RD
KINGSTON, WA 98346

4316-006-007-0001
KUTZ DAVID J & JANICE C
PO BOX 569
KINGSTON, WA 98346

4316-006-003-0005
OHIO AVE PARTNERS INC
PO BOX 1224
KINGSTON, WA 98346

4316-006-001-0007
ROSS KAREN & NOWAK RICHARD
PO BOX 1519
KINGSTON, WA 98346

SHEET INDEX:

EARTHWORKS

SITE VOLUMES:	
65 CY CUT	
490 CY FILL	
NET 425 CY FILL	

VOLUMES ARE NEAT LINE QUANTITIES

SITE DATA

EXISTING SITE AREAS:

	IMPERVIOUS (SF)	PERVIOUS (SF)	TOTAL (SF)
GRAVEL	54		54
ASPHALT	7652		7652
CONCRETE	1351		1351
LANDSCAPE	6467	6521	
TOTAL	9057 (58.3%)	6467 (41.7%)	15524 (036 AC)

PROPOSED SITE AREAS:

	IMPERVIOUS (SF)	PERVIOUS (SF)	TOTAL (SF)
CONCRETE	4993		4993
LANDSCAPE	10531	10531	
TOTAL	4993 (32.2%)	10531(67.8%)	15524 (0.36 AC)

NEW + REPLACED IMPERVIOUS:

	NEW (SF)	REPLACED (SF)	TOTAL (SF)
GRAVEL	0	10	10
ASPHALT	0	2352	2352
CONCRETE	2185	446	2631
TOTAL	2185	2808	4993 (SF)

LOT COVERAGE BY BUILDINGS/STRUCTURES:

FUTURE GAZEBO = 380 SF (25000 SF MAX OF NON-RESIDENTIAL STRUCTURE COVERAGE ALLOWED)

IMPERVIOUS SURFACE COVERAGE:

4993 SF (32.2%) (85% MAX IMPERVIOUS COVERAGE ALLOWED)

TOTAL DISTURBED AREA FOR PROJECT: 0.36 AC

ZONING: URBAN VILLAGE CENTER (UVC)

SITE ACCESS: WASHINGTON BOULEVARD

PROPOSED USE: CONTINUED USE AS A PORT OF KINGSTON PARK

LAND USE PROCESS: NONE REQUIRED. PARKS ARE A PERMITTED USE IN THE UVC ZONE

SETBACKS: NONE

SANITARY SEWER: PROJECT WILL CONTINUE USE OF EXISTING PORT OF KINGSTON RESTROOMS.

DOMESTIC WATER: KITSAP PUD FOR IRRIGATION ONLY

STORMWATER: <5000SF IMPERVIOUS, ONSITE MANAGEMENT OF GAZEBO ROOF & SWPPP REQUIRED.

REFUSE MANAGEMENT: MANAGED BY PORT OF KINGSTON MAINTENANCE CREWS

CRITICAL AREAS: NO KNOWN CRITICAL AREAS ON SITE. SITE IS WITHIN A CATEGORY 1 AQUIFER RECHARGE AREA.

DESIGN BRK
DRAWN JKA
CHECKED BRK
SEC 25 T 27N R 2E
DISC NO ____ DATE 12/18/16
SCALE 1" = 10'

REV NO	REVISION DESCRIPTION	DATE	BY
1	REVISIONS PER COUNTY COMMENTS	10-20-17	DJB
2	REVISIONS PER COUNTY COMMENTS	12-21-17	DJB

MARK A. KORLMAN — STATE OF WASHINGTON — 19849 — REGISTERED PROFESSIONAL ENGINEER
12/21/17

SIGNATURE

TITLE WASHINGTON PARK
SITE PLAN

CLIENT PORT OF KINGSTON
JIM PIVARNIK
PO BOX 559
KINGSTON, WA
(360) 297-3545

TEAM 4 ENGINEERING
PROJECT MANAGEMENT • ENGINEERING • PLANNING
5819 NE MINDER RD
POULSBO, WA. 98370
(360) 297-5560
(360) 297-7951 (FAX)

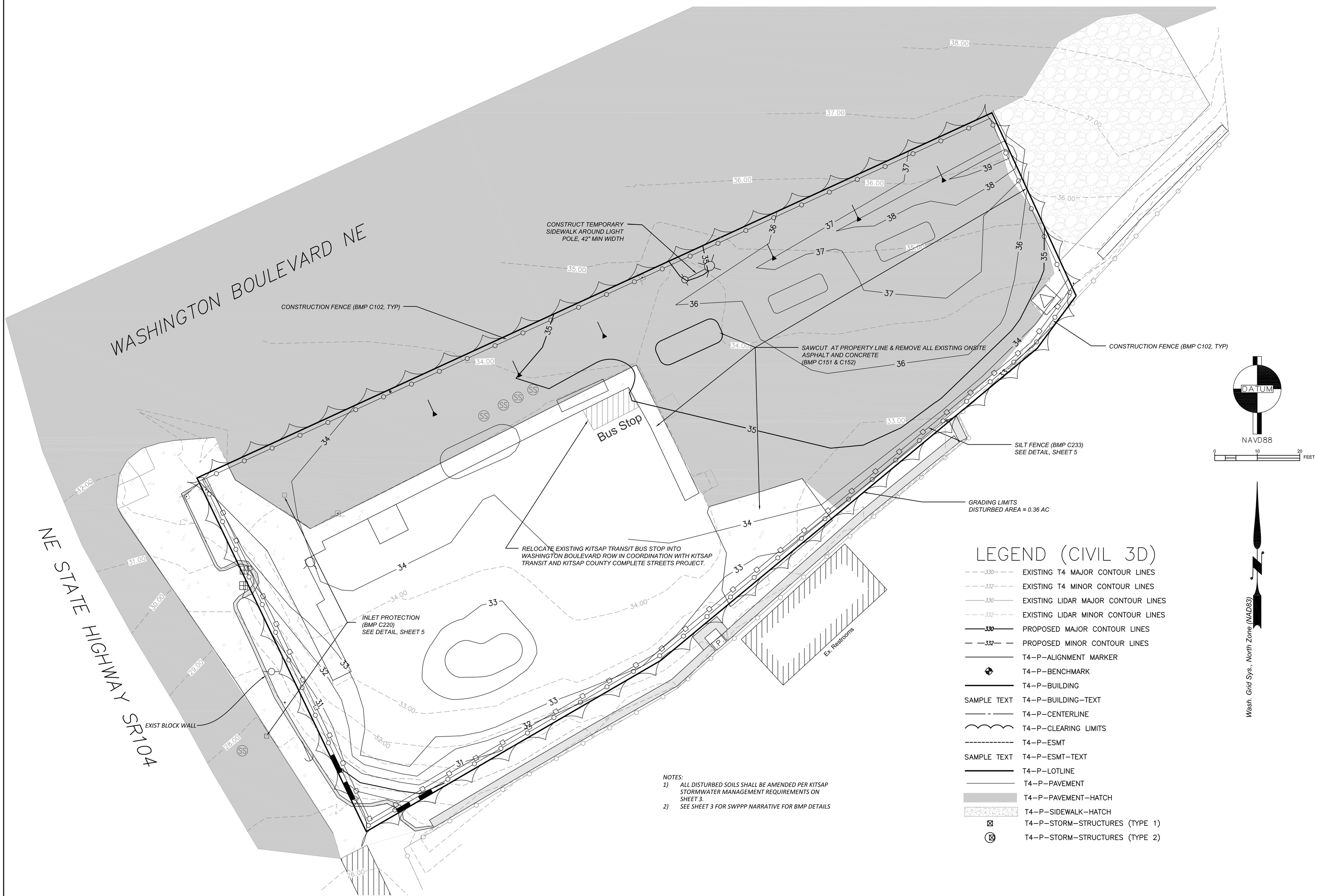
PROJECT MANAGER: BERNI KENWORTHY, PE

SHEET 1 OF 7

FILE NO 975

WASHINGTON PARK

TESC & DEMOLITION PLAN



LEGEND (CIVIL 3D)

330	EXISTING T4 MAJOR CONTOUR LINES
332	EXISTING T4 MINOR CONTOUR LINES
330	EXISTING LIDAR MAJOR CONTOUR LINES
332	EXISTING LIDAR MINOR CONTOUR LINES
330	PROPOSED MAJOR CONTOUR LINES
332	PROPOSED MINOR CONTOUR LINES
	T4-P-ALIGNMENT MARKER
	T4-P-BENCHMARK
	T4-P-BUILDING
SAMPLE TEXT	T4-P-BUILDING-TEXT
	T4-P-CENTERLINE
	T4-P-CLEARING LIMITS
	T4-P-ESMT
SAMPLE TEXT	T4-P-ESMT-TEXT
	T4-P-LOTLINE
	T4-P-PAVEMENT
	T4-P-PAVEMENT-HATCH
	T4-P-SIDEWALK-HATCH
	T4-P-STORM-STRUCTURES (TYPE 1)
	T4-P-STORM-STRUCTURES (TYPE 2)

NOTES:

1) ALL DISTURBED SOILS SHALL BE AMENDED PER KITSAP STORMWATER MANAGEMENT REQUIREMENTS ON SHEET 3.
2) SEE SHEET 3 FOR SWPPP NARRATIVE FOR BMP DETAILS

DESIGN	BRK
DRAWN	JKA
CHECKED	BRK
SEC 25 T 27N R 2E	
DISC NO	DATE 12/18/16
SCALE	1" =10'

REV NO	REVISION DESCRIPTION	DATE	BY
1	REVISIONS PER COUNTY COMMENTS	10-20-17	DJB
2	REVISIONS PER COUNTY COMMENTS	12-21-17	DJB

SIGNATURE: 12/21/17

TITLE: WASHINGTON PARK
TESC & DEMOLITION PLAN

CLIENT: PORT OF KINGSTON
JIM PIVARNIK
PO BOX 559
KINGSTON, WA
(360) 297-3545

PROJECT MANAGER: BERNI KENWORTHY, PE

TEAM 4 ENGINEERING
5819 NE MINDER RD
POULSBO, WA. 98370
(360) 297-5560
(360) 297-7951 (FAX)

SHEET 2 OF 7

FILE NO 975

WASHINGTON PARK
TESC & AMENDED SOILS NOTES

Standard Plan Notes

Construction Sequence

1. Apply for and pick up any right of way permits from Kitsap County Department of Public Works.
2. Construct stabilized construction entrance(s).
3. Construct filter fence barriers.
4. Install catch basin filter socks
5. Construct temporary sediment trap.
6. Construct runoff interception swales.
7. Clear and grade the minimum site area required for construction of the various phases of work.
8. Provide temporary hydroseeding or other source control stabilization measures on all disturbed soils.
9. Maintain all erosion and sedimentation control facilities to provide the required protection of downstream water quality.
10. All catch basins and conveyance lines shall be cleaned prior to paving. The cleaning operation shall not flush sediment laden water into the downstream system.
11. Provide permanent site stabilization.
12. Erosion and sedimentation control facilities shall not be removed until construction is complete and accepted by Kitsap County.

Drainage Notes

1. The contractor shall ensure that the drainage is installed and operational prior to commencement of paving work.
2. All steel pipe and parts shall be galvanized. All submerged steel pipes and parts shall be galvanized and have asphalt treatment #1 or better.
3. Drainage stubouts on individual lots shall be located with a five foot high 2" x 4" stake marked "STORM". The stubout shall extend above surface level and be secured to the stake.

Temporary Erosion and Sedimentation Control Maintenance Requirements

1. Erosion and sedimentation control facilities shall be inspected after each storm event and daily during prolonged rainfall.
2. Necessary repairs or replacement of facilities shall be accomplished promptly.
3. Sediment deposits shall be removed after each storm event or when the level of deposition reaches approximately one-half the maximum potential depth.
4. Sediment deposits remaining in place after the ESC facilities are no longer required shall be dressed to conform to the existing grade, prepared and seeded.
5. Temporary Erosion and Sedimentation Control facilities shall be maintained by: THE CONTRACTOR

Grading Notes

The contractor shall notify the engineer in the event or discovery of poor soils, groundwater or discrepancies in the existing conditions as noted on the plans.

1. Maximum slope steepness shall be 2:1 (Horizontal to Vertical) for cut and fill slopes.
2. Unless otherwise specified, all embankments in the Plan Set shall be constructed in accordance with Section 2-03.3(14)B of the WSDOT Standard Specifications. Embankment compactions shall conform to Section 2-03.3(14)C, Method B of said Standard Specifications.
3. Embankments designed to impound water shall be compacted to 95% maximum density per section 2-03.3(14)C, Method C of WSDOT Standard Specifications.
4. All areas receiving fill material shall be prepared by removing vegetation, non-complying fill, topsoil and other unsuitable material, by scarifying the surface to provide a bond with the new fill, and where slopes are steeper than 3 horizontal to 1 vertical and the height is greater than 5 ft., by benching into sound competent material as determined by a soils engineer.
5. Grading to be performed in compliance with KCSDM Chapter 11.

General Notes

1. All workmanship and materials shall conform to the MOST CURRENT Standard Specifications for Road, Bridge and Municipal Construction prepared by WSDOT and APWA as adopted by the Kitsap County Department of Public Works (KCPW).
2. Any revisions to the accepted construction plans shall be reviewed and approved by the County prior to implementation in the field.
3. The contractor shall maintain a set of the accepted construction drawings on-site at all times while construction is in progress.
4. It shall be the responsibility of the contractor to obtain all necessary permits rom the KCPW prior to commencing any work within County right-of-way.
5. The contractor shall be responsible for providing adequate traffic control at all times during construction alongside or within all public roadways. Traffic flow on existing public roadways shall be maintained at all times, unless permission is obtained from the KCPW for road closure and/or detours.
6. The location of existing utilities on this plan is approximate only. The contractor shall contract the "Underground Locate" center at 811, and non-subscribing individual utility companies 48 hours in advance of the commencement of any construction activity. The contractor shall provide for protection of existing utilities from damage caused by the contractor's operations.
7. Rockeries or other retaining facilities exceeding 4 ft. in height require a separate permit
8. A "Forestry Practices" permit may be required prior to clearing of the site.

Inspection Schedule

The Contractor shall notify Community Development to arrange for inspection of the various phases of work checked below. All inspections shall be completed prior to proceeding with the next phase of work.

1. Clearing limits.
2. Implementation of the various phases of the Erosion and Sedimentation Control Plan.
3. After rough grading
4. Inspection of sidewalks, curb and gutter prior to paving operations
4. Inspection of ADA ramps
5. Inspection of prepared sub-grade.
6. Final inspection.

The Contractor shall be responsible for all work performed and shall ensure that construction is acceptable to Kitsap County. If inspection is not called for prior to completion of any item of work so designated, special destructive and/or non-destructive testing procedures may be required to ensure the acceptability of the work. If such procedures are required, the Contractor shall be responsible for all costs associated with the testing and/or restoration of the work.

General Erosion and Sedimentation Control Notes

1. The following erosion and sedimentation control notes apply to all construction site activities at all times, unless otherwise specified on these plans:
2. Approval of this erosion and sedimentation control plan does not constitute an acceptance of the permanent road or drainage design.
3. The owner and his/her contractor shall be responsible at all times for preventing silt-laden runoff from discharging from the project site. Failure by the owner and/or contractor can result in a fine. The designated temporary contact person noted on this plan must be available for contact by telephone on a 24 hour basis throughout construction and until the project has been completed and accepted by the county.
4. The implementation of these ESC plans and the construction, maintenance, replacement and upgrading of these facilities is the responsibility of the owner and/or contractor from the beginning of construction until all construction is completed and accepted by the county and the site is stabilized.
5. Prior to beginning any work on the project site, a preconstruction conference must be held, and shall be attended by the general contractor, the project engineer, representatives from affected utilities, and a representative of Kitsap County.
6. The erosion and sedimentation control facilities shown on this plan are to be considered adequate basic requirements for the anticipated site conditions. During construction, deviations from this plan may be necessary in order to maintain water quality. Minor departures from this plan are permitted subject to the approval of the county inspector. However, except for emergency situations, all other deviations from this plan must be designed by the project engineer and approved by Kitsap County prior to installation.
7. All erosion and sedimentation control measures shall be inspected by the owner and/or contractor on a frequent basis and immediately after each rainfall, and maintained as necessary to insure their continued functioning. All sediment must be removed from silt fences, straw bales, sediment ponds, etc. prior to the sediment reaching 1/3 its maximum potential depth.
8. At no time shall concrete, concrete by-products, vehicle fluids, paint, chemicals, or other polluting matter be permitted to discharge to the temporary or permanent drainage system, or to discharge from the project site.
9. Permanent detention/retention ponds, pipes, tanks or vaults may only be used for sediment containment when specifically indicated on these plans.

Minimum Erosion and Sedimentation Control Requirements

1. Stabilization and sediment trapping. All exposed and unworked soils, including soil stockpiles, shall be stabilized by suitable application of BMPs that protect soil from the erosive forces of raindrop impact and flowing water. Applicable practices include, but are not limited to vegetative establishment, mulching, plastic covering, and the early application of gravel base on areas to be paved. From October 1 to April 30, no soils shall remain unstabilized for more than 2 days. From May 1 to September 30, no soils shall remain unstabilized for more than 7 days.
2. At all times of the year, the contractor shall have sufficient materials, equipment and labor on-site to stabilize and prevent erosion from all denuded areas within 12-hours as site and weather conditions dictate.
3. From October 1st to April 30th, the Project Engineer shall visit the development site a minimum of once per week for the purpose of inspecting the erosion and sedimentation control facilities, reviewing the progress of construction, and verifying the effectiveness of the erosion control measures being undertaken. The Project Engineer shall immediately inform the County of any problems or potential problems observed during said site visits, as well as of any recommended changes in the erosion control measures to be undertaken. When requested by the County, the Project Engineer shall provide the County with written records of said weekly site visits, including dates of visits and noted site observations.
4. In the event that ground on a project site is left bare after September 30th, the County may issue a Stop Work Order for the entire project until satisfactory controls are provided. In addition, the Owner will be subject to the penalties provided in Section 12.32 of the Kitsap County Code.
5. In the event that ground on a project site is left bare after September 30th, and the County is unsuccessful in contacting the Owner or his/her designated emergency contact person, the County may enter the project site and install temporary ground cover measures and bill the Owner for all expenses incurred by the County. These costs will be in addition to any monetary penalties levied against the Owner.
6. Delineation of clearing and easement limits. Clearing limits, setbacks, buffers, and sensitive or critical areas such as steep slopes, wetlands and riparian corridors shall be clearly marked in the field and inspected by Kitsap County Department of Community Development prior to commencement of land clearing activities. During the construction period, no disturbance beyond the flagged clearing limits shall be permitted. The flagging shall be maintained by the applicant/contractor for the duration of construction.
7. Protection of adjacent properties. Adjacent properties shall be protected from sediment deposition by appropriate use of vegetative buffer strips, sediment barriers or filters, dikes or mulching, or by a combination of these measures and other appropriate BMPs.
8. Timing and stabilization of sediment trapping measures. Sediment ponds and traps, perimeter dikes, sediment barriers and other BMPs intended to trap sediment on-site shall be constructed as a first step in grading. These BMPs shall be functional before land disturbing activities take place. Earthen structures such as dams, dikes, and diversions shall be stabilized according to the timing indicated in item (1) above.
9. Slope Stabilization. Cut and fill slopes shall be constructed in a manner that will minimize erosion. Roughened soil surfaces are preferred to smooth surfaces. Interceptors should be constructed at the top of long, steep slopes which have significant areas above that contribute runoff. Concentrated runoff should not be allowed to flow down the face of a cut or fill slope unless contained within an adequate channel or pipe slope drain. Wherever a slope face crosses a water seepage plane, adequate drainage or other protection should be provided. In addition, slopes should be stabilized in accordance with item (1) above.
10. Controlling off-site erosion. Properties and waterways downstream from development sites shall be protected from erosion due to increases in the volume, velocity, and peak flow rate of stormwater runoff from the development site by the implementation of appropriate BMPs to minimize adverse downstream impacts.
11. Stabilization of temporary conveyance channels and outlets. All temporary on-site conveyance channels shall be designed, constructed and stabilized to prevent erosion from the expected flow velocity from a 2-year frequency, 24-hour duration storm for the post-development condition. Stabilization adequate to prevent erosion of outlets, adjacent streambanks, slopes and downstream reaches shall be provided at the outlets of all conveyance systems.
12. Storm drain inlet protection. All storm drain inlets made operable during construction shall be protected so that stormwater runoff shall not enter the conveyance system without first being filtered or otherwise treated to remove sediment. After proper written application, the requirement for inlet protection may be waived by the County on a site-specific basis when the conveyance system downstream of the inlet discharges to an appropriate sediment containment BMP and the conveyance system can be adequately cleaned following site stabilization.
13. Underground utility construction. The construction of underground utility lines shall be limited, where feasible, to no more than 500 feet of open trench at any one time. Where consistent with safety and space considerations, excavated material shall be placed on the uphill side of the trench. Dewatering devices shall discharge to an appropriate sediment trap or pond, preceded by adequate energy dissipation, prior to runoff leaving the site.
14. Constructed access routes. Wherever construction vehicle access routes intersect paved roads, provisions must be made to minimize the transport of sediment (mud) onto the paved road by use of appropriate BMPs such as a Stabilized Construction Entrance. If sediment is transported onto a road surface, the roads shall be cleaned thoroughly, as a minimum, at the end of each day. Sediment shall be removed from roads by shoveling or sweeping and be transported to a controlled sediment disposal area. Street washing shall be allowed only after sediment is removed in this manner.
15. Removal of temporary BMPs. All temporary erosion and sediment control BMPs shall be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed. Trapped sediment shall be removed or stabilized on-site. Disturbed soil areas resulting from removal of temporary BMPs shall be permanently stabilized. The removal of temporary erosion and sediment control BMPs may not be required for those projects, such as single family plats, that will be followed by additional construction under a different permit. In these circumstances, the need for removing or retaining the measures will be evaluated on a site-specific basis.
16. Dewatering construction sites. Dewatering devices shall discharge into an appropriate sediment trap or pond, designed to accept such a discharge, preceded by adequate energy dissipation, prior to runoff leaving the site.
17. Control of pollutants other than sediment on construction sites. All pollutants other than sediment that occur on-site during construction shall be handled and legally disposed of in a manner that does not cause contamination of storm or surface waters. Pollutants of concern include, but are not limited to, fuels, lubricants, solvents, concrete bi-products and construction materials
18. Maintenance. All temporary and permanent erosion and sediment control BMPs shall be maintained and repaired as needed to assure continued performance of their intended function. All maintenance and repair shall be conducted in accordance with the Manual. The Applicant shall be responsible for assuring that any such facilities damaged during floods, storms or other adverse weather conditions are immediately returned to normal operating condition.
19. Financial liability. A performance covenant or performance surety, shall be required for all projects to ensure compliance with the approved erosion and sediment control plan, as outlined in Section 12.12 of the Kitsap County Code.

Design Standard: Amendment of Disturbed Soils

Application

Amend existing or imported soils to provide flow control (quantity) and water quality treatment. Use in new construction where soils have been disturbed, renovations where plant health is poor and near runoff source where pesticides would cause contamination. This technique can be used under conventional stormwater ponds, filter strips, bioretention area, or dispersion areas.

Naturally occurring (undisturbed) soil and vegetation provide important stormwater management functions including: water infiltration; nutrient, sediment, and pollutant adsorption; sediment and pollutant biofiltration; water interflow storage and transmission; and pollutant decomposition. These functions are largely lost when development strips away native soil and vegetation and replaces it with minimal soil and sod. Not only are these important stormwater management functions lost, but such landscapes themselves become pollution-generating pervious surfaces due to increased use of pesticides, fertilizers and other landscaping and household/industrial chemicals, the concentration of pet wastes, and pollutants that accompany roadside litter.

Establishing a minimum soil quality and depth is not the same as preservation of naturally occurring soil and vegetation. However, establishing a minimum soil quality and depth by amending disturbed soils with compost regains greater stormwater management functions in the post development landscape, provides increased treatment of pollutants and sediments that result from development and habitation, and minimizes the need for some landscaping chemicals, thus reducing pollution through prevention.

Variables

Application rates and techniques for incorporating amendments will vary with the use and plant requirements of the area. Landscape with high pedestrian traffic (notably lawns) during wet months will require specific amendments to prevent spongy soils.

Post construction soil quality and depth restoration is required on all sites wherever existing soil or vegetation is disturbed. Areas of sites where existing vegetation and soil are not compacted or disturbed do not have to be restored.

Advantages & Disadvantages (Whole System Perspective)

Native soil protection and amendments should be first LID strategies considered. Soil amendments improve the quality and health of the soil and plantings. Some of the issues include:

Advantages

- Reduced stormwater runoff / increased moisture retention;
- Reduced irrigation needs;
- Improved water quality through pollutant adsorption and biofiltration;
- Plant establishment and health;
- Improved infiltration;
- Increased sediment filtration;
- Reduced erosion;
- Reduced compaction;
- Reduced fertilizer/pesticide use.

Disadvantages

- Increased cost;
- Designating an area for staging materials and amending soils;
- Increased export and import costs;
- Foot-traffic issues associated with slow-draining soils.

Data Requirements

Determine soils quality, including organic material; hydrologic characteristics; soil texture, structure, and depth; and biota. Be careful using soils amendments in areas that will have the potential to become compacted.

Schematic

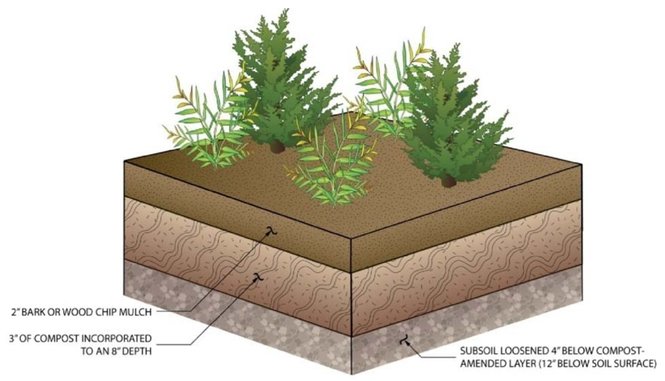


Figure 6.1: Cross Section of Planting Bed Soil Amendment. (Source: Seattle Public

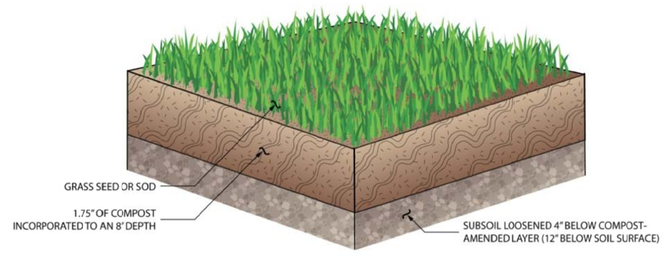


Figure 6.2: Cross Section of Turf Soil Amendment. (Source: Seattle Public Utilities/Seattle Department of Planning and Development)

Specification

It is important that the compost or other organic materials used to meet the soil quality and depth necessary be appropriate and beneficial to the plant cover to be established. Likewise, it is important that imported topsoils improve soil conditions and do not have an excessive percent of clay or silt fines that might restrict stormwater infiltration.

Soil Retention

The duff layer and native topsoil should be retained in an undisturbed state and protected from compaction to the maximum extent practical. In any areas requiring grading, remove and stockpile the duff layer and topsoil on site in a designated, controlled area, not adjacent to public resources and critical areas, to be reapplied to other portions of the site where feasible.

Soil Quality

All areas subject to clearing and grading that have not been covered by impervious surface, incorporated into a drainage facility or engineered as structural fill or slope shall, at project completion, demonstrate the following:

- A topsoil layer meeting these requirements:
  - o Topsoil shall have a minimum organic matter content by the loss-on-ignition test of 8 percent dry weight in planting beds, or 4 percent organic matter content in turf areas, and a pH from 6.0 to 8.0 or matching the pH of the original undisturbed soil. (Acceptable test methods for determining loss-onignition soil organic matter include the most current version of ASTM D2974 "Test Methods for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils" and TMECC 05.07A "Loss-On-Ignition Organic Matter Method");
  - o The topsoil layer shall have a minimum depth of 8 inches;
  - o Where tree roots limit the depth of incorporation of amendments, those root zones are exempted from this requirement only if they are fenced and protected from stripping of soil, grading, or compaction to the maximum extent practical;
  - o Subsoils below the topsoil layer should be scarified at least 4 inches, for a finished minimum depth of 12 inches of uncompacted soil, with some incorporation of the upper material to avoid stratified layers, where feasible;
- Planting beds must be mulched after planting with 2 inches of organic material such as wood chip, shredded leaves, compost, etc.;
- Quality of compost and other materials used to meet the organic content requirements:
  - o The organic content for "pre-approved" amendment rates can be met only using compost that meets the definition of "composted materials" in WAC 173-350 section 220. This code is available at the Dept. of Ecology's website: http://www.ecy.wa.gov/programs/swfa/compost/.
  - The compost must also have an organic matter content of 40 percent to 65 percent, and a carbon to nitrogen ratio below 25:1. The carbon to nitrogen ratio may be as high as 35:1 for plantings composed entirely of plants native to the Puget Sound Lowlands region;
  - o Calculated amendment rates may be met through use of composted materials as defined above; or other organic materials amended to meet the carbon to nitrogen ratio requirements, and meeting the contaminant standards of specified in WAC 173-350 section 220. The method for calculating custom amendment rates is established in the Building Soil manual referenced below;

The resulting soil should be conducive to the type of vegetation to be established.

General Installation Requirements

Implementation Options

The soil quality design guidelines listed above can be met by using one of the four methods listed below:

- Leave undisturbed vegetation and soil, protect from compaction by fencing and keeping materials storage and equipment off these areas during construction;
- Amend existing site topsoil or subsoil either at default "pre-approved" rates, or at custom calculated rates to meet the soil quality guidelines above based on specifiers' tests of the soil and amendment. The default pre-approved rates are:
  - o In planting beds, place 3 inches of compost and till in to an 8 inch depth;
  - o In turf areas, place 1.75 inches of compost and till in to an 8 inch depth;
- Stockpile existing topsoil during grading, and replace it prior to planting. Stockpiled topsoil must also be amended if needed to meet the organic matter or depth requirements, either at the default "pre-approved" rate or at a custom calculated rate (see Building Soil manual or website, below, for custom calculation method);Import topsoil mix of sufficient organic content and depth to meet the requirements. Imported soils should not contain excessive clay or silt fines (excessive is defined as more than 5% passing the No. 200 sieve) because that could restrict stormwater infiltration. The default pre-approved rates for imported topsoils are:
  - o For planting beds, a mix by volume of 35 percent compost with 65 percent mineral soil is pre-approved to achieve the requirement of 8 percent organic matter by loss-on-ignition test;
  - o For turf areas, a mix by volume of 20 percent compost with 80 percent mineral soil is pre-approved to achieve the requirement of 4 percent organic matter by loss-on-ignition test.

More than one method may be used on different portions of the same site. Soil that already meets the depth and organic matter quality standards, and is not compacted, does not need to be amended.

Soil Management Plan

A "Soil Management Plan" is required, including:

- A site map showing areas to be fenced and left undisturbed during construction, and areas that will be amended at the turf or planting bed rates;
- Calculations of the amounts of compost, compost amended topsoil, and mulch to be used on the site;
- Sample forms for the Soil Management Plan, and more guidance on these procedures, can be found in the Building Soil manual, available on the 3www.soilsforsalmon.org website.

Construction Specifications and Criteria

Minimum construction requirements include the following:

- Soil quality and depth should be established toward the end of construction and once established, should be protected from compaction, such as from large machinery use, and from erosion;
- Soil should be planted and mulched after installation;
- Inspection and verification procedures will include:
  - o Inspection of delivery tickets for compost, amended soil, and mulch to verify types and quantities match those specified on the Soil Management Plan;
  - o Digging or coring several holes to verify appearance of compost-amended soil to a minimum 8-inch depth and subsoil scarification or uncompacted soil to a minimum 12-inch depth;
  - o Use of a rod penetrometer (3/8 inch rod with handle) every 20 feet across site,to verify that the rod can b pushed into the soil at least 12 inches by the inspector's weight;
  - o Use of a shovel to scrape aside mulch on planting beds in several places to verify a minimum 2-inch mulch depth;
  - o Sample forms for Field Verification, can be found in the Building Soil manual or on the 3www.soilsforsalmon.org website;

Operations & Maintenance Requirement

Plant debris or its equivalent should be left on the soil surface through mulch-mowing of turf areas, and blowing shredded fall leaves into beds or annual mulching to replenish organic matter.

It should be possible to reduce use of irrigation, fertilizers, herbicides and pesticides. These activities should be adjusted where possible, rather than continuing to implement formerly established practices. In particular, regular use of soluble fertilizers, broadcast herbicides and insecticides degrades soil life and compacts soils. Instead, fertilization can be reduced, using slow-release or organic products, and integrated pest management techniques will minimize the need for pesticides.

Flow Credit

This standard is a required BMP for construction impacted soils, therefore there are no flow credits for implementing this standard.

Enhanced Treatment

Dispersion BMPs -see relevant Standards Sheets.

Permit Requirements – Refer to Jurisdiction Addenda in Appendix J

References

Material for this section was taken directly from Seattle Public Utilities' BMP for Post-Construction Soil Quality and Depth.

DESIGN BRK
DRAWN JKA
CHECKED BRK
SEC 25 T 27N R 2E
DISC NO DATE 12/18/16
SCALE AS NOTED

REV NO	REVISION DESCRIPTION	DATE	BY
1	REVISIONS PER COUNTY COMMENTS	10-20-17	DJB
2	REVISIONS PER COUNTY COMMENTS	12-21-17	DJB

BRENT A. KUHLMAN — STATE OF WASHINGTON — 19949 — REGISTERED PROFESSIONAL ENGINEER
12/21/17

PROJECT MANAGER BERNI KENWORTHY, PE

TEAM 4 ENGINEERING
5309 NE MINDER RD
POULSBO, WA. 98370
(360) 297-5560
(360) 297-7951 (FAX)

SIGNATURE

TITLE WASHINGTON PARK
TESC & AMENDED SOILS NOTES

CLIENT PORT OF KINGSTON
JIM PIVARNIK
PO BOX 559
KINGSTON, WA
(360) 297-3545

MITEL — PROJECT MANAGEMENT • ENGINEERING • PLANNING • CONSULTING

SHEET 3 OF 7

FILE NO 975

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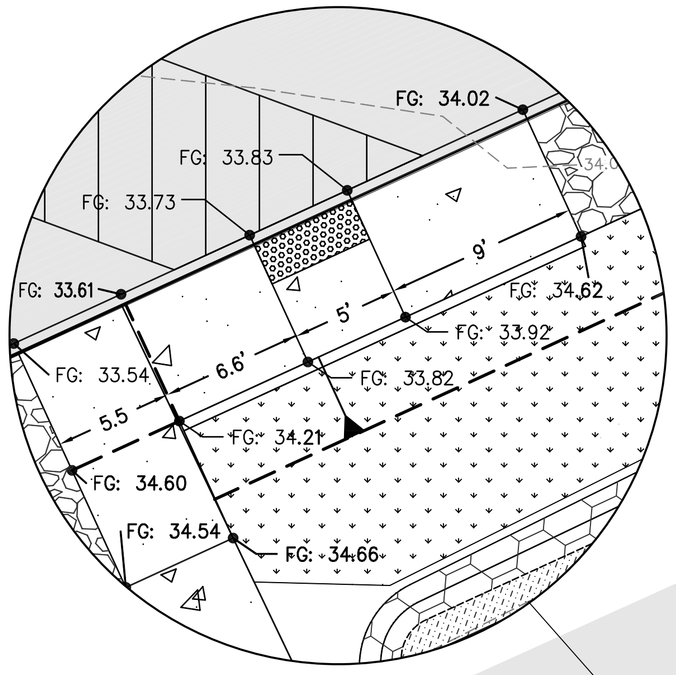
WASHINGTON PARK

GRADING & STORMWATER PLAN



WASHINGTON BOULEVARD NE

NE STATE HIGHWAY SR104

5' TEMPORARY GRAVEL PATH, CRUSHED SURFACING TOP COURSE

EG/FG 36.70 CONCRETE RAMP DOWN TO EXISTING W/ PEDESTRIAN CURB

EG/FG: 36.02

(5) BIORETENTION PONDS SEE PROFILE SHEET 7

EG/FG: 34.50

7/5 EXTRUDED CURB ALONG EXISTING PAVEMENT,

4" PAINTED TRAFFIC WHITE, PER MUTCD

EG/FG: 34.24

4" PAINTED TRAFFIC WHITE, STRIPES EVERY 2.5' PER MUTCD

PAINTED HANDICAP SYMBOL PER MUTCD

CB #1, TYPE 1 VANE GRATE RIM 33.45 12"ø IE=30.35

EG/FG: 33.51

ABANDON GREASE INTERCEPTORS SEE NOTE 3

POND #1

POND #2

POND #3

POND #4

POND #5

Bus Stop

LANDSCAPE AREA

EG: 33.16

EG: 32.98

8" PVC SD, 39.5 LF @ 8.0%

CB #2, TYPE 2-48" SOLID LID RIM 33.9 12"ø IE=28.68 (IN) 12"ø IE=28.58 (OUT)

FG: 34.5

22' DIA ROOF

20' DIA FUTURE GAZEBO, 15' PEAK HEIGHT *REQUIRES SEPARATE BUILDING PERMIT

FG: 33.64

COMMUNITY PLAZA

FG: 33.32

FG: 34.00

CB #4 Type 1, Standard RIM=32.15 IE IN(N,12")=27.34 IE IN(E,12")=27.34 IE OUT(S,12")=27.34

42.8 LF 12"ø N-12 SL=2.1%

BIORETENTION POND #6 (102 SF) BOTTOM EL=31.75

FG: 33.30

FG: 33.4

EXISTING TYPE 1 RIM 27.65 12"ø IE=26.17 (N, IN) 12"ø IE=26.07 (SE, OUT)

CB #3, TYPE 30 BEEHIVE GRATE BIORETENTION OVERFLOW RIM 32.25 12"ø IE=28.5

4/5

FG: 26.8

CONCRETE STAIRS
REMOVE SMALL LANDSCAPE WALL AS NEEDED
ADD SMALL BLOCK LANDSCAPE WALL AS NEEDED

9/5

CONCRETE LANDING

Ex. Restrooms

EXISTING FLOW

PROPOSED FLOW

NOTES:
1) SEE SHEETS 5-7 FOR STORMWATER AND CURB/GUTTER/SIDEWALK DETAILS
2) TOPOGRAPHY SURVEY BY TEAM 4 ENGINEERING
3) PUMP OUT AND ABANDON EXISTING GREASE INTERCEPTORS PER KITSAP COUNTY HEALTH REQUIREMENTS.

DATUM

NAVD88

0 10 20 FEET

Wash. Grid Sys., North Zone (NAD83)

DESIGN	BRK
DRAWN	JKA
CHECKED	BRK
SEC 25 T 27N R 2E	
DISC NO	DATE 12/18/16
SCALE	1" = 10'

REV NO	REVISION DESCRIPTION	DATE	BY
1	REVISIONS PER COUNTY COMMENTS	10-20-17	DJB
2	REVISIONS PER COUNTY COMMENTS	12-21-17	DJB

SIGNATURE: MARK A. KOHLMAN STATE OF WASHINGTON 19849 REGISTERED PROFESSIONAL ENGINEER 12/21/17

TITLE: WASHINGTON PARK
GRADING & STORMWATER PLAN

CLIENT: PORT OF KINGSTON
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KINGSTON, WA
(360) 297-3545

PROJECT MANAGER: BERNI KENWORTHY, PE

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SHEET 4 OF 7

FILE NO 975

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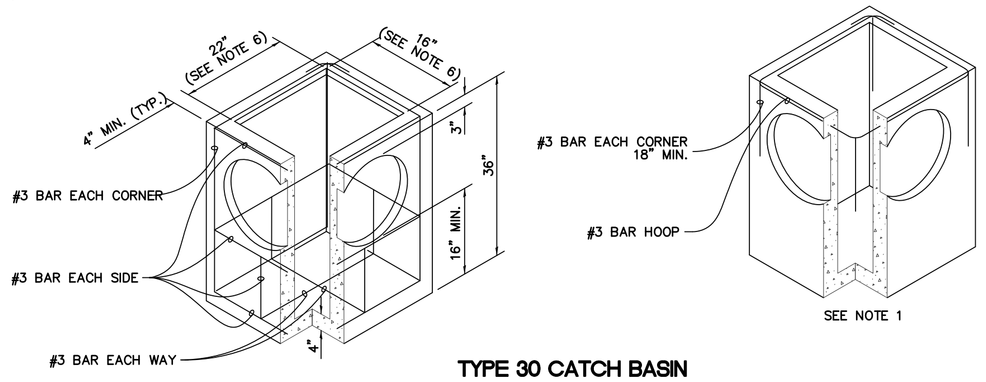
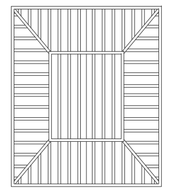
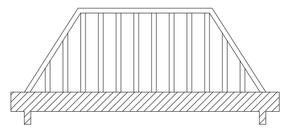
WASHINGTON PARK
DETAILS



TYPE 30 CATCH BASIN

DETAIL 1/4 — NTS

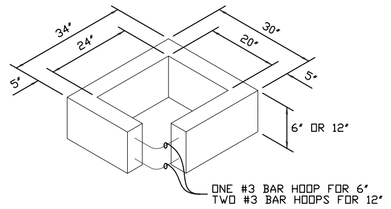




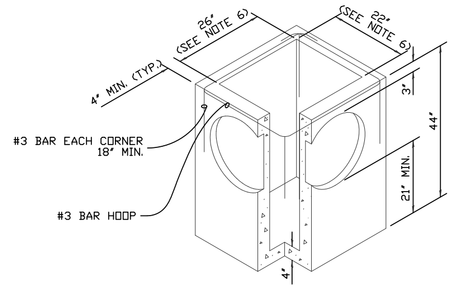
NOTES:
1. MATERIALS: DUCTILE IRON ASTM A536, H-20 RATING.

BEEHIVE GRATE

DETAIL 2/- — NTS



RECTANGULAR ADJUSTMENT SECTION



PRECAST BASE SECTION

NOTES

1. AS AN ACCEPTABLE ALTERNATE TO REBAR, WIRE MESH HAVING A MINIMUM AREA OF 0.12 SQUARE INCHES PER FOOT MAY BE USED. WIRE MESH SHALL NOT BE PLACED IN KNOCKOUTS.
2. THE KNOCKOUT DIAMETER SHALL NOT BE GREATER THAN 20". KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MINIMUM TO 2.5" MAXIMUM. PROVIDE A 1.5" MINIMUM GAP BETWEEN THE KNOCKOUT WALL AND THE OUTSIDE OF THE PIPE. AFTER THE PIPE IS INSTALLED, FILL THE GAP WITH JOINT MORTAR IN ACCORDANCE WITH STANDARD SPECIFICATION 9-04.3.
3. THE MAXIMUM DEPTH FROM THE FINISHED GRADE TO THE PIPE INVERT SHALL BE 5'.
4. FRAME AND GRATE MAY BE INSTALLED WITH FLANGE DOWN OR CAST INTO ADJUSTMENT SECTION.
5. THE PRECAST BASE SECTION MAY HAVE A ROUNDED FLOOR AND THE WALLS MAY BE SLOPED AT A RATE OF 1:24 OR STEEPER.
6. OPENING SHALL BE MEASURED AT THE TOP OF THE PRECAST BASE SECTION.

PIPE ALLOWANCES	
PIPE MATERIAL	MAXIMUM INSIDE DIAMETER
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	15"
CPSSP* (STD. SPEC. 9-05.20)	12"
SOLID WALL PVC (STD. SPEC. 9-05.12(1))	15"
PROFILE WALL PVC (STD. SPEC. 9-05.12(2))	15"

*CORRUGATED POLYETHYLENE STORM SEWER PIPE

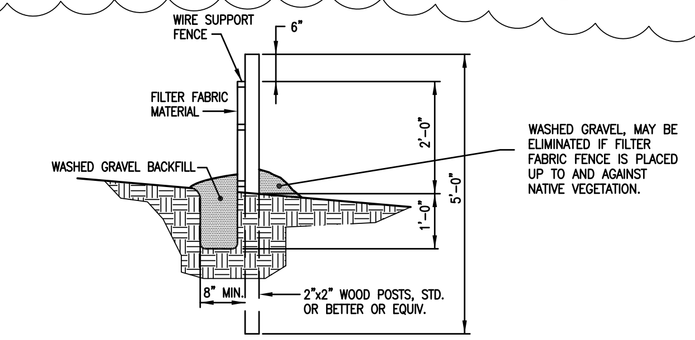
CATCH BASIN TYPE 1

SHEET 1 OF 1 SHEET

07-21-03

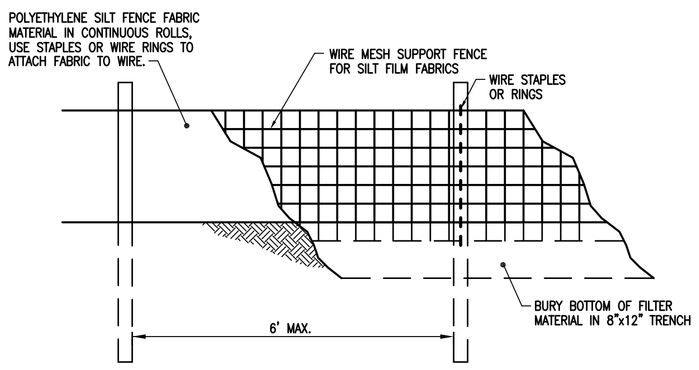
TYPE I CATCH BASIN

DETAIL 3/4 — NTS



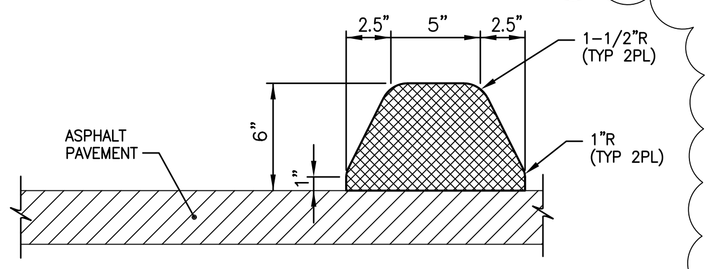
WASHED GRAVEL, MAY BE ELIMINATED IF FILTER FABRIC FENCE IS PLACED UP TO AND AGAINST NATIVE VEGETATION.

POLYETHYLENE SILT FENCE FABRIC MATERIAL IN CONTINUOUS ROLLS, USE STAPLES OR WIRE RINGS TO ATTACH FABRIC TO WIRE.



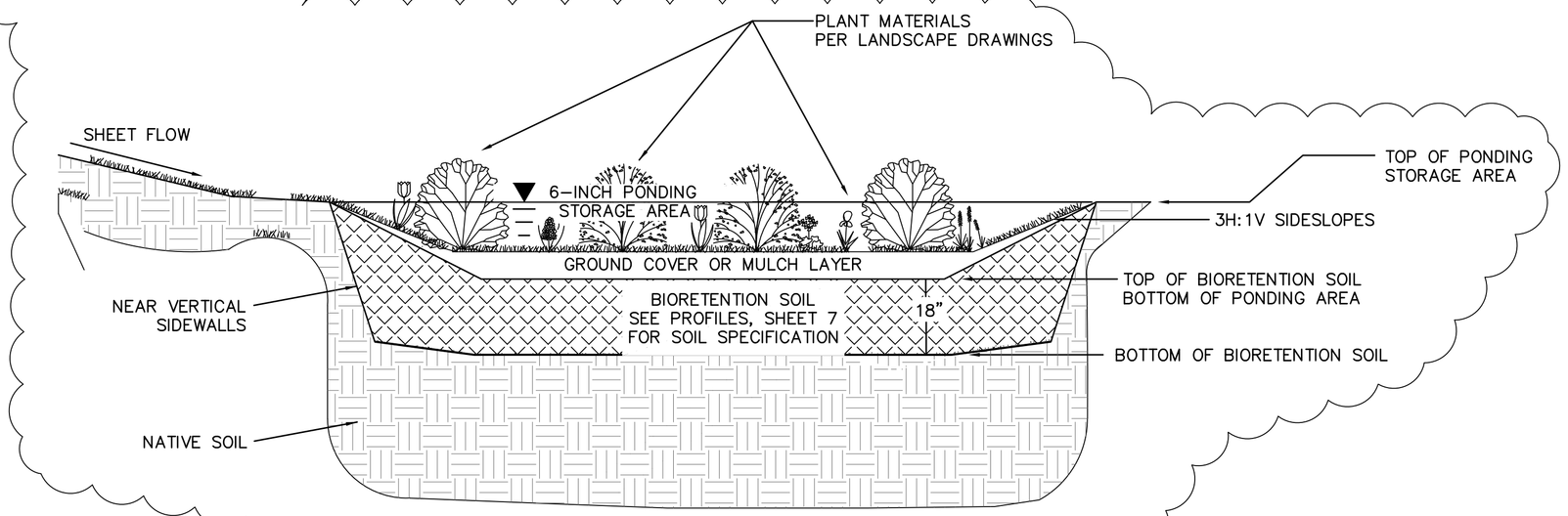
SILT FENCE

DETAIL 6/2 — NTS



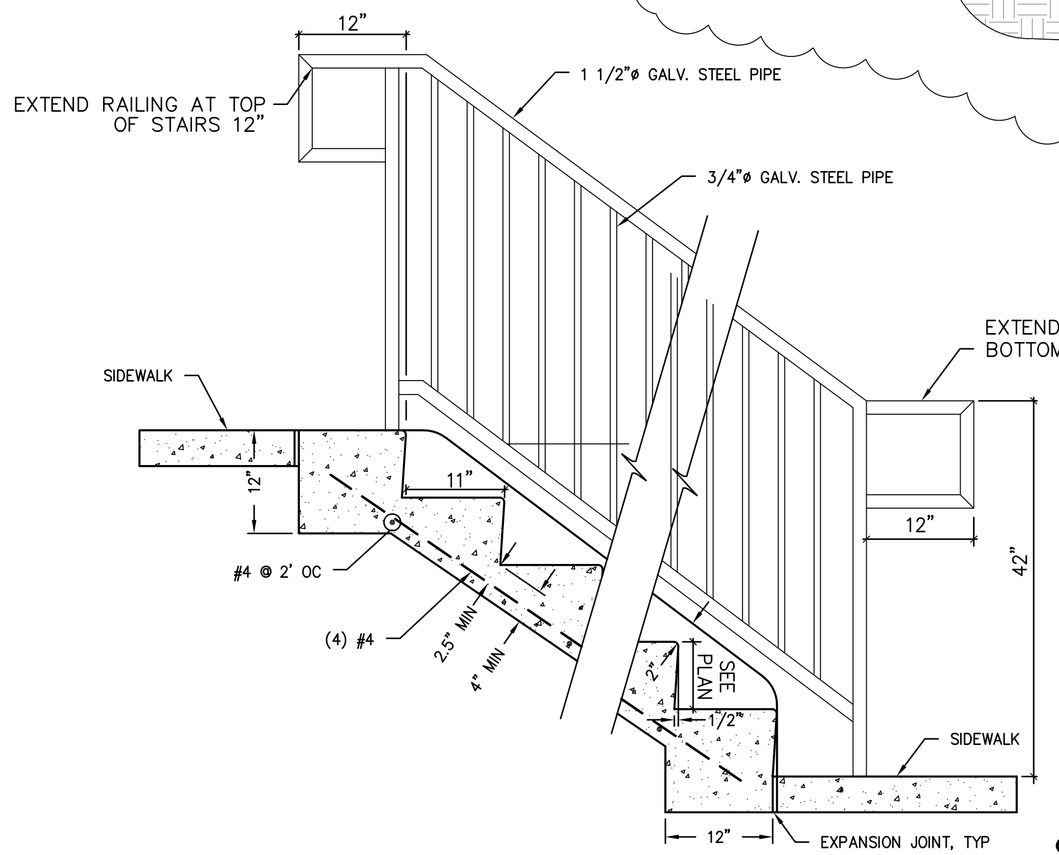
EXTRUDED CURB

DETAIL 7/4 — NTS



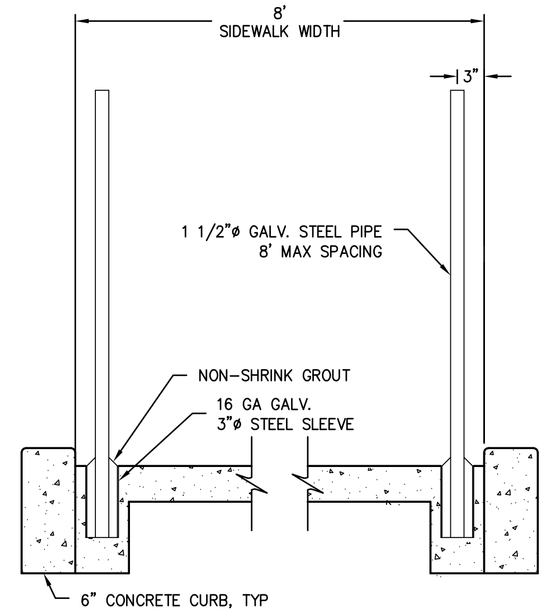
BIORETENTION SWALE

DETAIL 8/4 — NTS

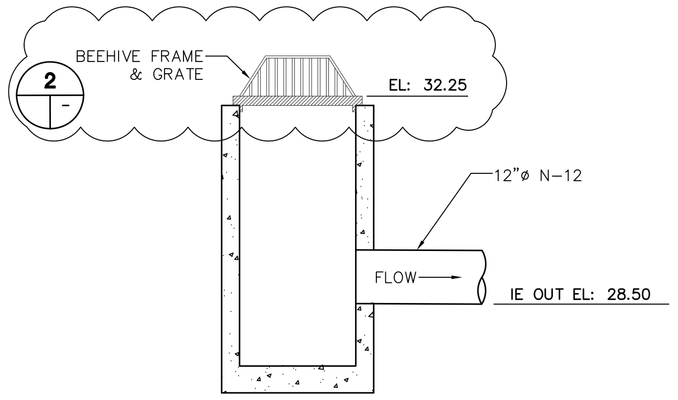


CONCRETE STAIRS

DETAIL 9/4 — NTS

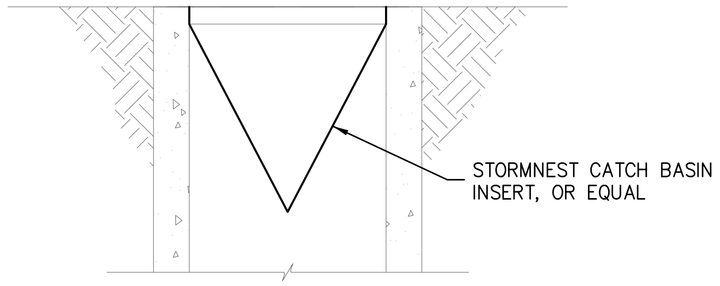


SECTION



CBH3 OVERFLOW CB

DETAIL 4/4 — NTS



CATCH BASIN INSERT

DETAIL 5/- — NTS

TABLE 2.1			
TEMPORARY EROSION CONTROL SEED MIX			
	% WEIGHT	% PURITY	% GERMINATION
CHEWINGS OR ANNUAL BLUE GRASS FESTUCA RUBRA VAR. COMMUTATA OR POA ANNA	40	98	90
PERRENIAL RYE LOLIUM PERENNE	50	98	90
REDTOP OR COLONIAL BENTGRASS AGROSTIS ALBA OR AGROSTIS TENIUS	5	92	85
WHITE DUTCH CLOVER TRIFOLIUM REPENS	5	98	90

TABLE 2.2			
LANDSCAPING SEED MIX			
	% WEIGHT	% PURITY	% GERMINATION
PERENNIAL RYE BLEND LOLIUM PERENNE	70	98	90
CHEWINGS AND RED FESCUE BLEND FESTUCA RUBRA VAR. COMMUTATA OR FESTUCA RUBRA	30	98	90

DESIGN BRK
DRAWN JKA
CHECKED BRK
SEC 25 T 27N R 2E
DISC NO — DATE 12/18/16
SCALE AS NOTED

REV NO	REVISION DESCRIPTION	DATE	BY
1	REVISIONS PER COUNTY COMMENTS	10-20-17	DJB
2	REVISIONS PER COUNTY COMMENTS	12-21-17	DJB

MARK A. KUHLMAN — STATE OF WASHINGTON — 36849 — REGISTERED PROFESSIONAL ENGINEER — 12/21/17

SIGNATURE

TITLE WASHINGTON PARK DETAILS

CLIENT PORT OF KINGSTON
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KINGSTON, WA
(360) 297-3545

PROJECT MANAGER BERNI KENWORTHY, PE

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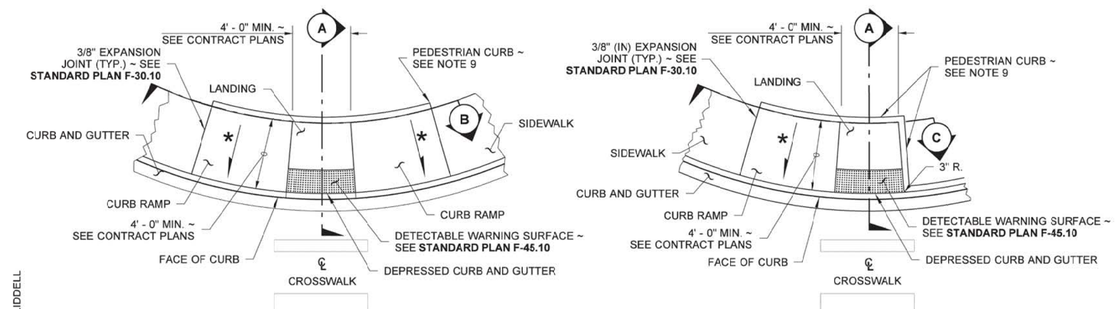
(360) 297-5560
(360) 297-7951 (FAX)

SHEET 5 OF 7

FILE NO 975

WASHINGTON PARK

DETAILS



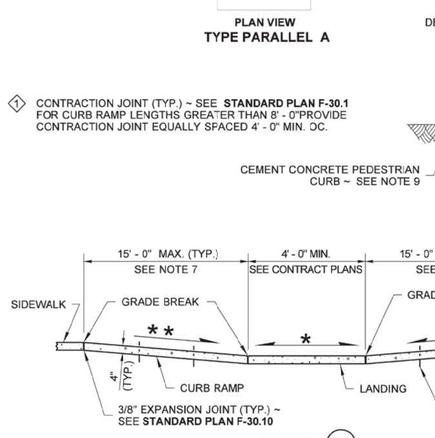
PLAN VIEW
TYPE PARALLEL A

PLAN VIEW
TYPE PARALLEL B

DRAWN BY: FERN LIDDELL

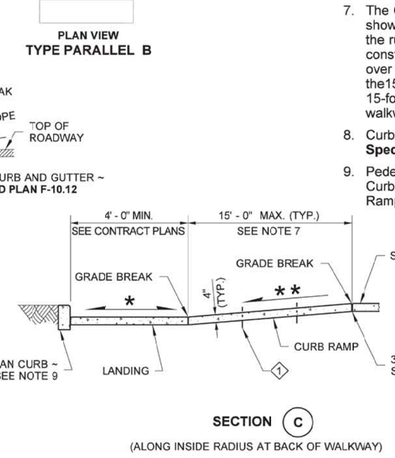
NOTES

1. At marked crosswalks, the connection between the landing and the roadway must be contained within the width of the crosswalk markings.
2. Where "GRADE BREAK" is called out, the entire length of the grade break between the two adjacent surface planes shall be flush.
3. Do not place Gratings, Junction Boxes, Access Covers, or other appurtenances on any part of the Curb Ramp or Landing, or in the Depressed Curb and Gutter where the Landing connects to the roadway.
4. See Contract Plans for the curb design specified. See **Standard Plan F-10.12** for Curb, Curb and Gutter, Depressed Curb and Gutter, and Pedestrian Curb details.
5. See **Standard Plan F-30.10** for Cement Concrete Sidewalk Details. See Contract Plans for width and placement of sidewalk.
6. The Bid Item "Cement Concrete Curb Ramp Type ___" does not include the adjacent Curb, Curb and Gutter, Depressed Curb and Gutter, Pedestrian Curb, or Sidewalks.
7. The Curb Ramp length is not required to exceed 15 feet (unless otherwise shown in the Contract Plans). When applying the 15-foot max. length, the running slope of the curb ramp is allowed to exceed 8.3%. Use a single constant slope from bottom of ramp to top of ramp to match into the sidewalk over a horizontal distance of 15 feet. Do not include abutting landing(s) in the15-foot max. measurement. When a ramp is constructed on a radius, the 15-foot max. length is measured on the inside radius along the back of the walkway.
8. Curb Ramps and Landings shall receive a broom finish. See **Standard Specifications 8-14.**
9. Pedestrian Curb may be omitted if the ground surface at the back of the Curb Ramp and/or Landing will be at the same elevation as the Curb Ramp or Landing and there will be no material to retain.



SECTION (A)

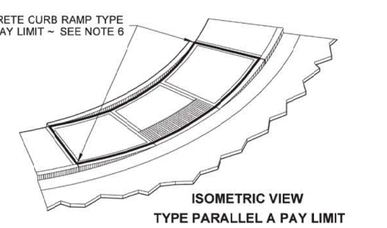
SECTION (B)
(ALONG INSIDE RADIUS AT BACK OF WALKWAY)



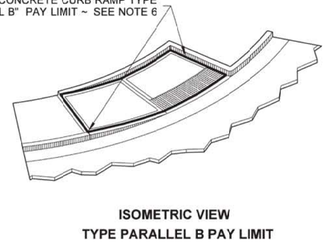
SECTION (C)
(ALONG INSIDE RADIUS AT BACK OF WALKWAY)

LEGEND

SLOPE IN EITHER DIRECTION	
*	1.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (2% MAX.)
**	7.5% OR FLATTER RECOMMENDED FOR DESIGN/ FORMWORK (8.3% MAX.) ~ SEE NOTE 7



ISOMETRIC VIEW
TYPE PARALLEL A PAY LIMIT



ISOMETRIC VIEW
TYPE PARALLEL B PAY LIMIT

R. SCOTT ZELLER — STATE OF WASHINGTON — 29682 — REGISTERED PROFESSIONAL ENGINEER

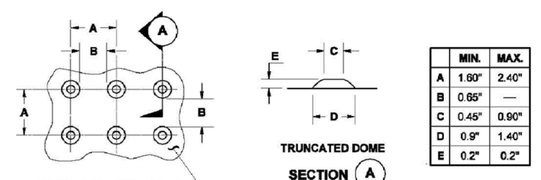
Zeller, Scott
Jun 24 2016 7:19 AM

PARALLEL CURB RAMP

STANDARD PLAN F-40.12-03

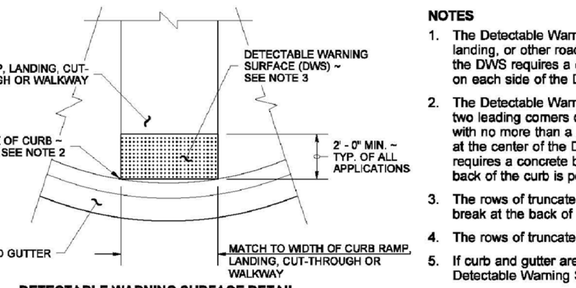
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Carpenter, Jeff
Jun 29 2016 2:27 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation



	MIN.	MAX.
A	1.60"	2.40"
B	0.65"	—
C	0.45"	0.90"
D	0.9"	1.40"
E	0.2"	0.2"

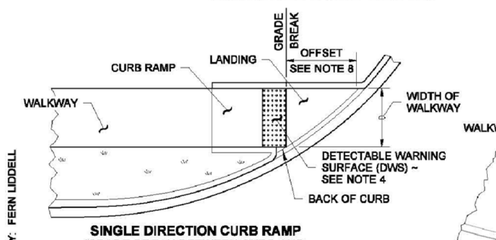
TRUNCATED DOME DETAILS



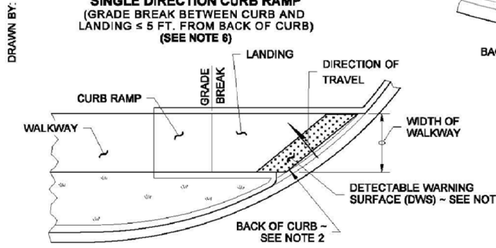
DETECTABLE WARNING SURFACE DETAIL

NOTES

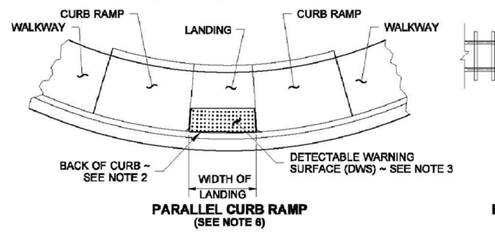
1. The Detectable Warning Surface (DWS) shall extend the full width of the curb ramp, landing, or other roadway entrance as applicable. Exception: If the Manufacturer of the DWS requires a concrete border around the DWS, a variance of up to 2 inches on each side of the DWS is permitted.
2. The Detectable Warning Surface (DWS) shall be placed at the back of curb, with the two leading corners of the DWS panel placed adjacent to the back of the curb, and with no more than a 2 inch gap between the DWS and the back of the curb measured at the center of the DWS panel. Exception: If the Manufacturer of the selected DWS requires a concrete border around the DWS, a variance of up to 2 inches from the back of the curb is permitted (measured at the leading corners of the DWS panel).
3. The rows of truncated domes shall be aligned to be perpendicular to the grade break at the back of curb.
4. The rows of truncated domes shall be aligned to be parallel to the direction of travel.
5. If curb and gutter are not present, such as a shared-use path connection, the Detectable Warning Surface shall be placed at the pavement edge.
6. See **Standard Plans** for sidewalk and curb ramp details.
7. If a curb ramp is required, the location of the Detectable Warning Surface must be at the bottom of the ramp and within the required distance from the rail.
8. When the grade break between the curb ramp and the landing is less than or equal to 5 ft. from the back of curb at all points, place the Detectable Warning Surface on the bottom of the curb ramp directly above the grade break.



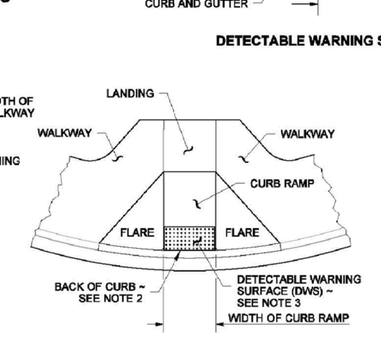
SINGLE DIRECTION CURB RAMP
(GRADE BREAK BETWEEN CURB AND LANDING ≤ 5 FT. FROM BACK OF CURB)
(SEE NOTE 6)



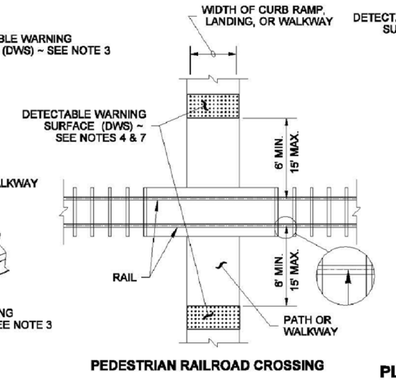
SINGLE DIRECTION CURB RAMP
(GRADE BREAK BETWEEN CURB AND LANDING > 5 FT. FROM BACK OF CURB)
(SEE NOTE 6)



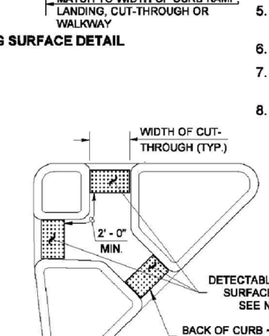
PARALLEL CURB RAMP
(SEE NOTE 6)



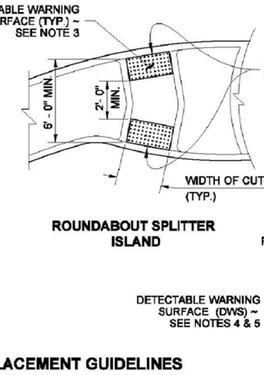
PERPENDICULAR CURB RAMP
(SEE NOTE 6)



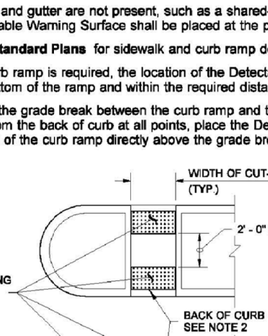
PEDESTRIAN RAILROAD CROSSING



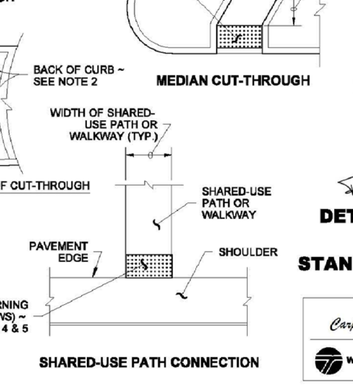
ISLAND CUT-THROUGH



ROUNDABOUT SPLITTER ISLAND



MEDIAN CUT-THROUGH



SHARED-USE PATH CONNECTION

PLACEMENT GUIDELINES

R. SCOTT ZELLER — STATE OF WASHINGTON — 29682 — REGISTERED PROFESSIONAL ENGINEER

Zeller, Scott
Jul 12 2016 4:23 PM

DETECTABLE WARNING SURFACE

STANDARD PLAN F-45.10-02

SHEET 1 OF 1 SHEET

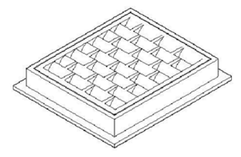
APPROVED FOR PUBLICATION
Carpenter, Jeff
Jul 15 2016 7:26 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation

DESIGN BRK
DRAWN JKA
CHECKED BRK
SEC 25 T 27N R 2E
DISC NO DATE 12/18/16
SCALE AS NOTED

REV NO	REVISION DESCRIPTION	DATE	BY
1	REVISIONS PER COUNTY COMMENTS	10-20-17	DJB
2	REVISIONS PER COUNTY COMMENTS	12-21-17	DJB

MARK A. KUHLMAN — STATE OF WASHINGTON — 36847 — REGISTERED PROFESSIONAL ENGINEER
12/21/17

DRAWN BY: LISA CYFORD

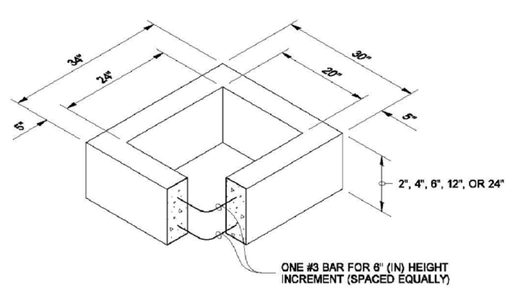


FRAME AND VANED GRATE

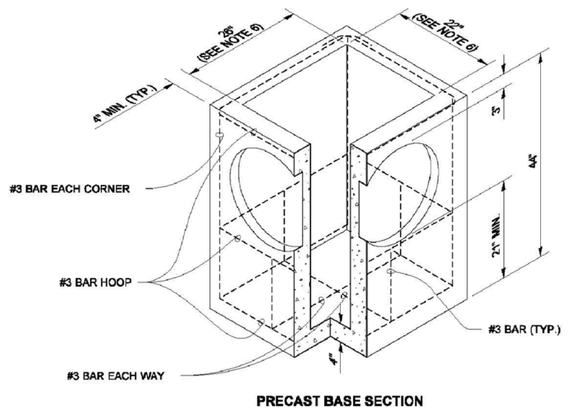
PIPE ALLOWANCES

PIPE MATERIAL	MAXIMUM INSIDE DIAMETER (INCHES)
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	18"
CPSSP ★ (STD. SPEC. SECT. 9-05.20)	12"
SOLID WALL PVC (STD. SPEC. SECT. 9-05.12(1))	15"
PROFILE WALL PVC (STD. SPEC. SECT. 9-05.12(2))	18"

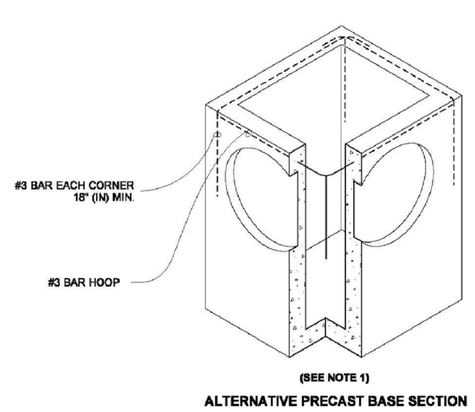
★ CORRUGATED POLYETHYLENE STORM SEWER PIPE



RECTANGULAR ADJUSTMENT SECTION



PRECAST BASE SECTION



ALTERNATIVE PRECAST BASE SECTION

NOTES

1. As acceptable alternatives to the rebar shown in the **PRECAST BASE SECTION**, fibers (placed according to the Standard Specifications), or wire mesh having a minimum area of 0.12 square inches per foot shall be used with the minimum required rebar shown in the **ALTERNATIVE PRECAST BASE SECTION**. Wire mesh shall not be placed in the knockouts.
2. The knockout diameter shall not be greater than 20" (in). Knockouts shall have a wall thickness of 2" (in) minimum to 2.5" (in) maximum. Provide a 1.5" (in) minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with **Standard Specification Section 9-04.3**.
3. The maximum depth from the finished grade to the lowest pipe invert shall be 5' (ft).
4. The frame and grate may be installed with the flange down, or integrally cast into the adjustment section with flange up.
5. The Precast Base Section may have a rounded floor, and the walls may be sloped at a rate of 1 : 24 or steeper.
6. The opening shall be measured at the top of the **Precast Base Section**.
7. All pickup holes shall be grouted full after the basin has been placed.

JULIE HEILMAN — STATE OF WASHINGTON — 31810 — REGISTERED PROFESSIONAL ENGINEER

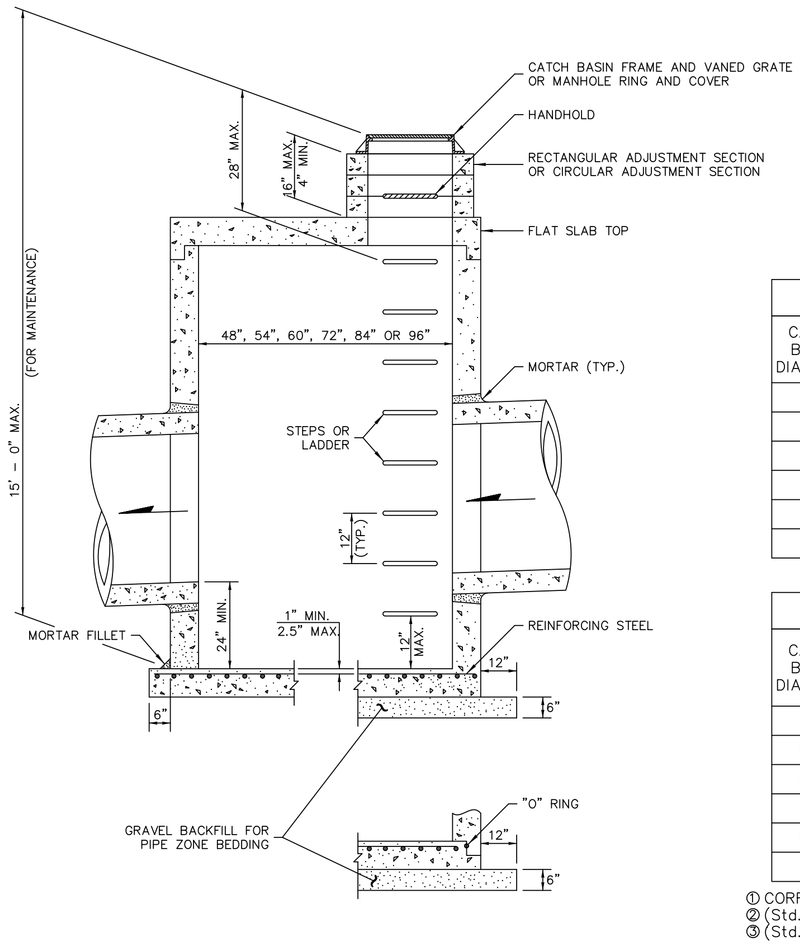
Heilman, Julie
Jun 25 2017 2:53 PM

CATCH BASIN TYPE 1

STANDARD PLAN B-5.20-02

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Umpleby, Joel
Jun 26 2017 6:40 AM
STATE DESIGN ENGINEER
Washington State Department of Transportation



1. No steps are required when height is 4' or less.
2. The bottom of the precast catch basin may be sloped to facilitate cleaning.
3. Frame and grate may be installed with flange down or cast into adjustment section.
4. Knockouts shall have a wall thickness of 2" minimum to 2.5" maximum. Provide a 1.5" minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with Std. Spec. 9-04.3.

CATCH BASIN DIAMETER	WALL THICKNESS	BASE THICKNESS	MAXIMUM KNOCKOUT SIZE	MINIMUM DISTANCE BETWEEN KNOCKOUTS	BASE REINFORCING STEEL in² /ft IN EACH DIRECTION	
					INTEGRAL	SEPARATE
48"	4"	6"	36"	8"	0.15	0.23
54"	4.5"	8"	42"	8"	0.19	0.19
60"	5"	8"	48"	8"	0.25	0.25
72"	6"	8"	60"	12"	0.24	0.35
84"	8"	12"	72"	12"	0.29	0.39
96"	8"	12"	84"	12"	0.29	0.39

CATCH BASIN DIAMETER	PIPE MATERIAL WITH MAXIMUM INSIDE DIAMETER				
	CONCRETE	ALL METAL	CPSSP ①	SOLID WALL PVC ②	PROFILE WALL PVC ③
48"	24"	30"	24"	27"	30"
54"	30"	36"	30"	27"	36"
60"	36"	42"	36"	36"	42"
72"	42"	54"	42"	36"	48"
84"	54"	60"	54"	36"	48"
96"	60"	72"	60"	36"	48"

① CORRUGATED POLYETHYLENE STORM SEWER PIPE (Std. Spec. 9-05.20)
② (Std. Spec. 9-05.12(1))
③ (Std. Spec. 9-05.12(2))

DATE	REVISION	BY
4/1/2004	ADDED 84" DIAMETER & MAX. HEIGHT	BB

SHEET 1 OF 1 SHEET

CATCH BASIN TYPE 2
WSDOT STD PLAN B-1e - DETAIL

PROJECT MANAGER: BERNI KENWORTHY, PE

SIGNATURE:

TITLE: WASHINGTON PARK
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SHEET 6 OF 7

FILE NO 975

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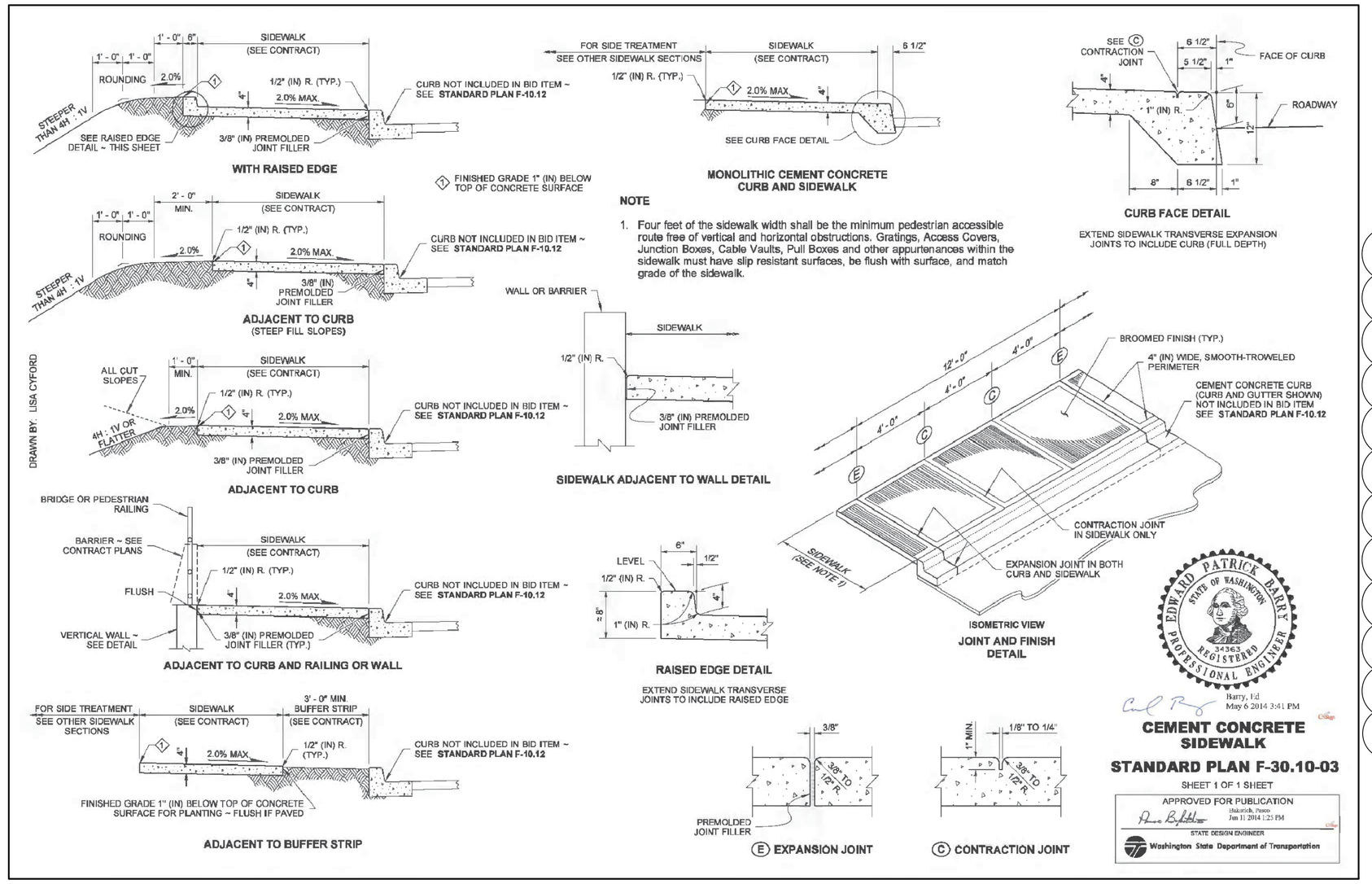
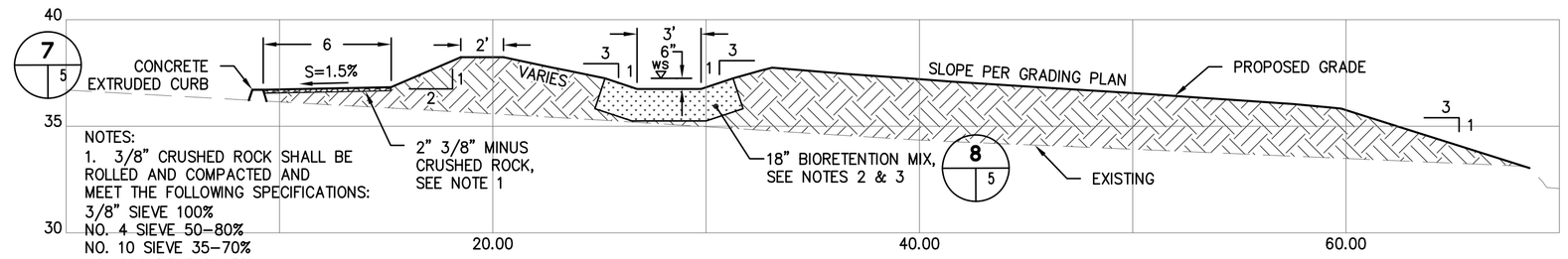
WASHINGTON PARK

DETAILS



DRAWN BY: LISA CYFORD



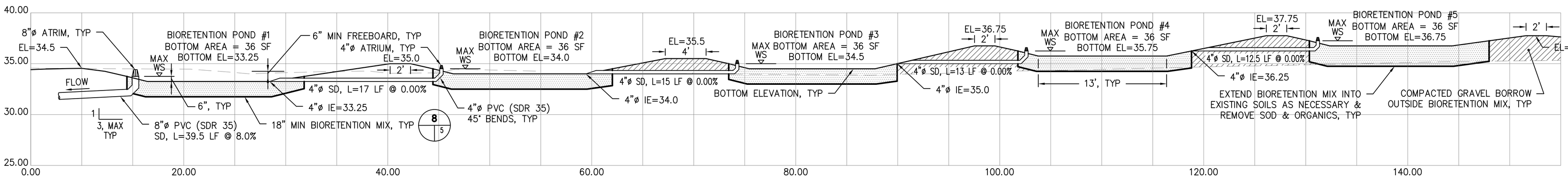
NOTES:

1. 3/8" CRUSHED ROCK SHALL BE ROLLED AND COMPACTED AND MEET THE FOLLOWING SPECIFICATIONS:
   3/8" SIEVE 100%
   NO. 4 SIEVE 50–80%
   NO. 10 SIEVE 35–70%
   NO. 200 SIEVE 8–15%

2. BIORETENTION AGGREGATE COMPONENT SHALL MEET THE FOLLOWNG SPECIFICATIONS:
   3/8" SIEVE 100%
   NO. 4 SIEVE 95–100%
   NO. 10 SIEVE 75–90%
   NO. 40 SIEVE 25–40%
   NO. 100 4–10%
   NO. 200 2–5%

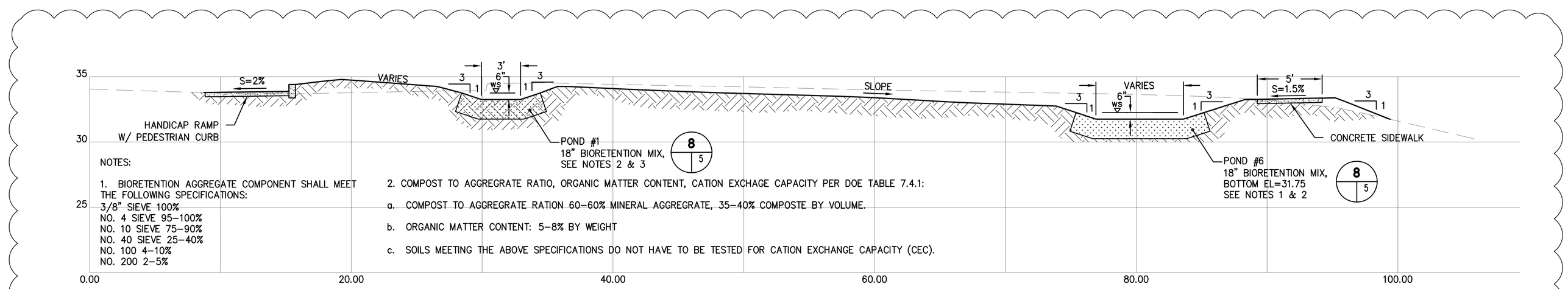
3. COMPOST TO AGGREGRATE RATIO, ORGANIC MATTER CONTENT, CATION EXCHAGE CAPACITY PER DOE TABLE 7.4.1:
   a. COMPOST TO AGGREGRATE RATION 60–60% MINERAL AGGREGRATE, 35–40% COMPOSTE BY VOLUME.
   b. ORGANIC MATTER CONTENT: 5–8% BY WEIGHT
   c. SOILS MEETING THE ABOVE SPECIFICATIONS DO NOT HAVE TO BE TESTED FOR CATION EXCHANGE CAPACITY (CEC).

SECTION A
1" = 5'



BIORETENTION POND PROFILES

SCALE: 1"=5'



NOTES:

1. BIORETENTION AGGREGATE COMPONENT SHALL MEET THE FOLLOWING SPECIFICATIONS:
   3/8" SIEVE 100%
   NO. 4 SIEVE 95–100%
   NO. 10 SIEVE 75–90%
   NO. 40 SIEVE 25–40%
   NO. 100 4–10%
   NO. 200 2–5%

2. COMPOST TO AGGREGRATE RATIO, ORGANIC MATTER CONTENT, CATION EXCHAGE CAPACITY PER DOE TABLE 7.4.1:
   a. COMPOST TO AGGREGRATE RATION 60–60% MINERAL AGGREGRATE, 35–40% COMPOSTE BY VOLUME.
   b. ORGANIC MATTER CONTENT: 5–8% BY WEIGHT
   c. SOILS MEETING THE ABOVE SPECIFICATIONS DO NOT HAVE TO BE TESTED FOR CATION EXCHANGE CAPACITY (CEC).

SECTION B
1" = 5'

DESIGN	BRK
DRAWN	JKA
CHECKED	BRK
SEC 25 T 27N R 2E	
DISC NO	DATE 12/18/16
SCALE	AS NOTED

REV NO	REVISION DESCRIPTION	DATE	BY
1	REVISIONS PER COUNTY COMMENTS	10-20-17	DJB
2	REVISIONS PER COUNTY COMMENTS	12-21-17	DJB

MARK A. KUHLMAN STATE OF WASHINGTON 19849 REGISTERED PROFESSIONAL ENGINEER
12/21/17

SIGNATURE:

TITLE: WASHINGTON PARK
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CLIENT: PORT OF KINGSTON
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KINGSTON, WA
(360) 297-3545

PROJECT MANAGER: BERNI KENWORTHY, PE

TEAM 4 ENGINEERING
5819 NE MINDER RD
POULSBO, WA. 98370
(360) 297-5560
(360) 297-7951 (FAX)

SHEET 7 OF 7

FILE NO 975

WASHINGTON PARK

LANDSCAPING PLAN

NOTES:
1. 17.500.020.D.1 - PLANT QUANTITIES TO BE DETERMINED BY REQUIRED SPACING.
2. 17.500.020.D.2 - ALL BEDS ARE TO RECEIVE GROUNDCOVER THOUGHOUT EXCEPT AS NOTED.

PLANT LIST

BOTANICAL NAME/COMMON NAME	QTY/SIZE	SPACING (per county code)
MALUS 'JEWELCOLE'RED JEWEL/ DWARF CRABAPPLE	7 / 2" CAL.	25' O.C.
TAXUS BACCATA 'STANDISHII' / GOLDEN COLUMNAR YEW	4 / 6' TALL	15' O.C.
MISCANTHUS SINENSIS 'MORNING LIGHT' / VARIEGATED MAIDEN GRASS	20 / 18"–24"	5' O.C.
CHAMAECYPARIS OBTUSA 'TEMPELHOF' / DWARF HINOKI CYPRESS	7 / 18"–24"	5' O.C.
AGAPANTHUS ORIENTALIS 'STORM CLOUD' / LILY OF THE NILE	30 / 12"–18"	3' O.C.
SESLARIA AUTUMNALIS /AUTUMN MOOR GRASS	226 / 12"–18"	3' O.C.
BERBERIS THUNBERGII 'CONCORD' / COMPACT BARBERRY	37 / 12"–18"	3' O.C.
BERBERIS 'CRIMSON RUBY' / COMPACT BARBERRY	41 / 12"–18"	3' O.C.
CAREX TENUICULMIS 'CAPPUCCINO' / NEW ZEALAND HAIR SEDGE	61 / 12"–18"	3' O.C.
TAXUS BACCATA 'REPANDENS' / SPREADING ENGLISH YEW	12 / 18"–24"	5' O.C.
TAXUS X MEDIA 'DENSIFORMIS' / DENSE SPREADING YEW	14 / 18"–24"	5' O.C.
SPIRAEA 'MAGIC CARPET' / SPIREA	30 / 12"–18"	3' O.C.
LAVANDULA 'HIDCOTE' / ENGLISH LAVENDER	54 / 12"–18"	3' O.C.
RUDBECKIA FULGIDA 'GOLDSTRUM' / BLACK EYED SUSAN	21 / 12"–18"	3' O.C.
SALVIA X SYLVESTRIS 'MAY NIGHT' / WOOD SAGE	37 / 12"–18"	3' O.C.
PINUS MUGO 'MOPS' / DWARF MUGO PINE	23 / 18"–24"	5' O.C.
SEDUM 'AUTUMN JOY' / STONECROP	54 / 12"–18"	3' O.C.
SEDUM 'VERA JAMESON' / DWARF STONECROP	52 / 12"–18"	3' O.C.
NEPETA 'WALKER'S LOW' / CATMINT	32 / 12"–18"	3' O.C.
CALLUNA VULGARIS 'WINTER CHOCOLATE' / HEATH	144 / 12"–18"	3' O.C.
FESTUCA GLAUCA 'BEYOND BLUE' / BLUE FESCUE	76 / 12"–18"	3' O.C.
ARUNCUS AETHUSIFOLIUS / DWARF GOAT'S BEARD	3 / 12"–18"	3' O.C.
JUNCUS EFFUSUS / SOFT RUSH	7 / 12"–18"	3' O.C.
CORNUS SERICEA 'KELSEYII' / KELSEY DOGWOOD	7 / 18"–24"	5' O.C.
DESCHAMPSIA CESPITOSA/TUFTED HAIRGRASS	32 / 12"–18"	3' O.C.
COTONEASTER DAMMERI / CREEPING COTONEASTER	50 / 1G	24" O.C.

ABBOTSFORD PIAZZA PAVERS: RUNNING BOND PATTERN, NATURAL GRAY COLOR.

SOD LAWN.

NEW REINFORCED CONCRETE STEPS, SIDEWALK & PAVER BORDERS––BROOM FINISH.

CEDAR WOOD–CHIPS: WITH SNAP–EDGING.

1–2 MAN SIZED ROUNDED WEATHERED GRANITE.

2–4 MAN SIZED ANGULAR GRAY BASALT BOULDERS WITH FLAT TOPS. (ALSO USING EXISTING BOULDERS ON SITE)

PICNIC TABLES: GREEN VALLEY SERIES BY WABASH VALLEY. SQUARE TABLES, CEDAR SEATS WITH BLACK FRAME: 2 ADA ACCESSIBLE 3–SEAT OPTION & 3 4–SEAT OPTION. (5 TOTAL)

BENCHES: URBANSCAPE BUTLER SERIES PARK BENCHES BY WABASH VALLEY––VERTICAL SLAT, FAUX WOOD FINISH. (5 TOTAL)

LIGHTPOSTS: WITH HANGING BASKETS TO MATCH EXISTING LIGHTPOSTS THROUGHOUT MARINA AND KINGSTON STREETS––GARMIRE GRT–10 POSTS. HOLOPHANE HPS 100W FIXTURES. (7 TOTAL)

TRASH RECEPTACLES: URBANSCAPE SERIES BY WABASH VALLEY––FAUX WOOD & SLAT WITH FLAT TOP. (2 TOTAL)

BIKE RACK: URBANSCAPE SERIES BY WABASH VALLEY–SERPENTINE BIKERACK IN BLACK (1 TOTAL)

DESIGN BRK
DRAWN JKA
CHECKED BRK
SEC 25 T 27N R 2E
DISC NO ____ DATE 12/18/16
SCALE 1" = 10'

REV NO	REVISION DESCRIPTION	DATE	BY
	REVISIONS PER COUNTY COMMENTS	10–20–17	DJB
2	REVISIONS PER COUNTY COMMENTS	12–21–17	DJB

STATE OF WASHINGTON · A. KUHLMAN · 19845 · REGISTERED PROFESSIONAL ENGINEER
12/21/17

PROJECT MANAGER: BERNI KENWORTHY, PE
SIGNATURE:

TITLE: WASHINGTON PARK
LANDSCAPING PLAN

CLIENT: PORT OF KINGSTON
JIM PIVARNIK
PO BOX 559
KINGSTON, WA
(360) 297–3545

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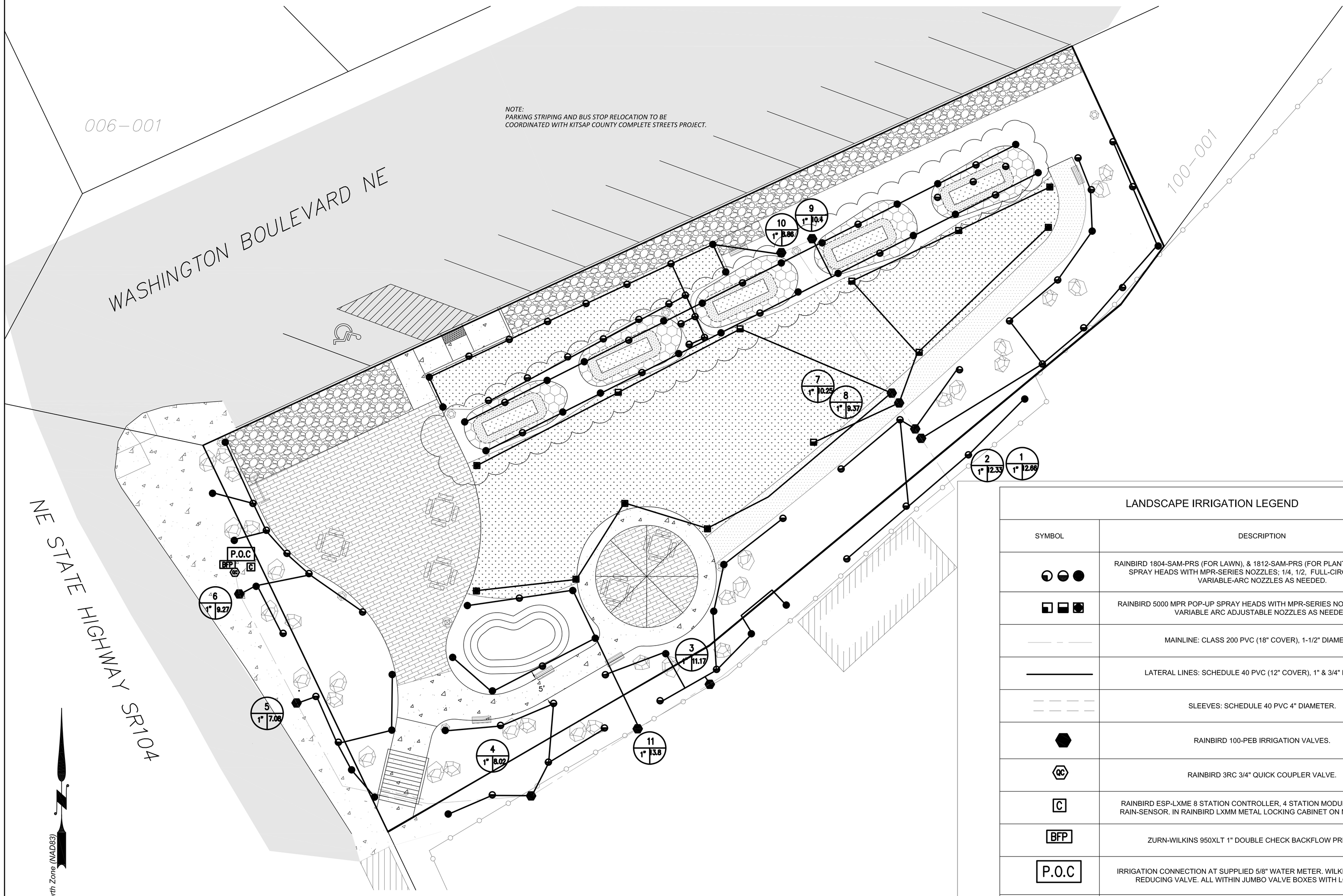
SHEET L1 OF L6

FILE NO 975

WASHINGTON PARK

IRRIGATION PLAN



LANDSCAPE IRRIGATION LEGEND

SYMBOL	DESCRIPTION
	RAINBIRD 1804-SAM-PRS (FOR LAWN), & 1812-SAM-PRS (FOR PLANTING BEDS) POP-UP SPRAY HEADS WITH MPR-SERIES NOZZLES; 1/4, 1/2, FULL-CIRCLE OR HE-VAN VARIABLE-ARC NOZZLES AS NEEDED.
	RAINBIRD 5000 MPR POP-UP SPRAY HEADS WITH MPR-SERIES NOZZLES; 1/4, 1/2, OR VARIABLE ARC ADJUSTABLE NOZZLES AS NEEDED.
	MAINLINE: CLASS 200 PVC (18" COVER), 1-1/2" DIAMETER.
	LATERAL LINES: SCHEDULE 40 PVC (12" COVER), 1" & 3/4" DIAMETER.
	SLEEVES: SCHEDULE 40 PVC 4" DIAMETER.
	RAINBIRD 100-PEB IRRIGATION VALVES.
QC	RAINBIRD 3RC 3/4" QUICK COUPLER VALVE.
C	RAINBIRD ESP-LXME 8 STATION CONTROLLER, 4 STATION MODULE, WITH RSDBEX RAIN-SENSOR. IN RAINBIRD LXMM METAL LOCKING CABINET ON METAL PEDESTAL.
BFP	ZURN-WILKINS 950XLT 1" DOUBLE CHECK BACKFLOW PREVENTER.
P.O.C	IRRIGATION CONNECTION AT SUPPLIED 5/8" WATER METER. WILKINS 600 PRESSURE REDUCING VALVE. ALL WITHIN JUMBO VALVE BOXES WITH LOCKING LIDS.
X / X X	X: VALVE STATION NUMBER. X: VALVE WATER FLOW IN GALLONS PER MINUTE. VALVE SIZE.
	IRRIGATION SYSTEM IS SHOWN DIAGRAMMATICALLY. SPRAYER HEADS TO BE SPACED APPROPRIATELY FOR HEAD TO HEAD COVERAGE BY CONTRACTOR. DESIGN ASSUMES A 5/8" WATER METER AND 60 PSI AVAILABLE PRESSURE.

REV NO	REVISION DESCRIPTION	DATE	BY
	REVISIONS PER COUNTY COMMENTS	10-20-17	DJB
2	REVISIONS PER COUNTY COMMENTS	12-21-17	DJB

DESIGN BRK
DRAWN JKA
CHECKED BRK
SEC 25 T 27N R 2E
DISC NO DATE 12/18/16
SCALE 1" = 10'

MARK A. KUHLMANN — STATE OF WASHINGTON — 19845 — REGISTERED PROFESSIONAL ENGINEER
12/21/17

SIGNATURE:

PROJECT MANAGER: BERNI KENWORTHY, PE

TITLE: WASHINGTON PARK
IRRIGATION PLAN

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SHEET L2 OF L6

FILE NO 975

WASHINGTON PARK
LANDSCAPING NOTES & DETAILS

GENERAL NOTES

A. PLANT MATERIAL

ALL PLANT MATERIAL SUPPLIED FOR THE PROJECT SHALL BE WASHINGTON GRADE NO. 1 AS PER STATE OF WASHINGTON DEPARTMENT OF AGRICULTURE ORDERS NUMBER 1229, 1230, AND 1322. PLANT MATERIAL QUALITY SIZE AND CONDITION SHALL BE DETERMINED BY STANDARDS SET FORTH IN THE AFOREMENTIONED STANDARDS AND THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARD ANSI Z60.1-1973.

B. PLANT PROTECTION

FOLLOWING DELIVERY OF PLANT MATERIAL CONTRACTOR SHALL PROTECT PLANTS, ROOTS, BALLS, AND TIPS AT ALL TIMES FROM INJURY IN HANDLING OR FROM SUN AND DRYING WINDS ON SITE UNTIL FINAL PLANTING. DELIVERED PLANTS NEED TO BE WELL WATERED DURING WAITING PERIOD PRIOR TO INSTALLATION.

C. SOILS

TILL ORGANIC MATERIAL (i.e. EMU COMPOST) INTO EXISTING SOIL, SPREAD 3-6 INCHES DEEP, TILLED TO A DEPTH OF 12 INCHES TO IMPROVE SOIL FERTILITY AND LOOSEN DIRT COMPACTED BY CONSTRUCTION ACTIVITY.

D. PLANTING/SPACING

PLANTING HOLES SHOULD BE APPROXIMATELY TWICE THE DIAMETER OF THE ROOTBALL AND DEEP ENOUGH TO CONTAIN ROOTBALL BUT NOT TOO DEEP TO ALLOW SETTLING. MIXING APPROX. 25% COMPOST WITH 75% NATIVE SOILS. TAMP SOIL LIGHTLY TO REMOVE AIR POCKETS AND WATER THOROUGHLY.

E. FERTILIZER

ALL FERTILIZER SHALL BE UNIFORM IN COMPOSITION, DRY, FREE FLOWING, AND DELIVERED TO THE SITE IN ORIGINAL, UNOPENED CONTAINERS, BARING THE MANUFACTURERS GUARANTEED ANALYSIS.
RATES:
AS NEEDED BASED ON SOIL ANALYSIS.

F. TREE STAKING

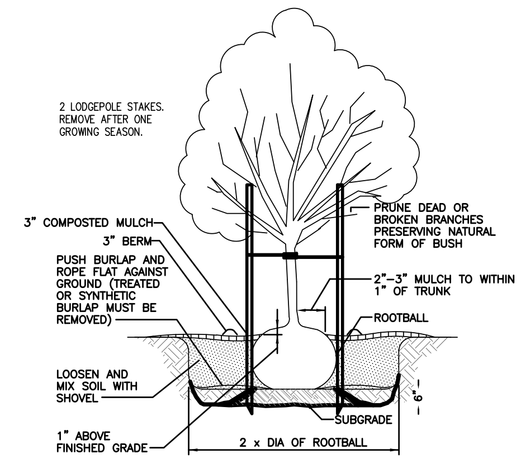
STAKE TREES USING TWO STAKES SET PERPENDICULAR TO PREVAILING WIND AND TIE LOOSELY TO TREE TRUNK LOW TO THE GROUND. REMOVE AFTER FIRST GROWING SEASON.

G. MULCHING

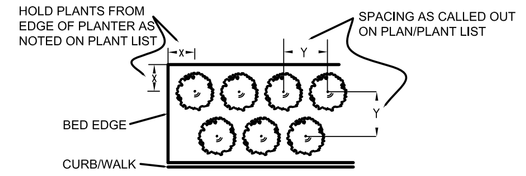
APPLY COMPOST TOPDRESSING TO ALL PLANTING BEDS 3" THICK MINIMUM IMMEDIATELEY AFTER PLANTING.

H. MAINTENANCE

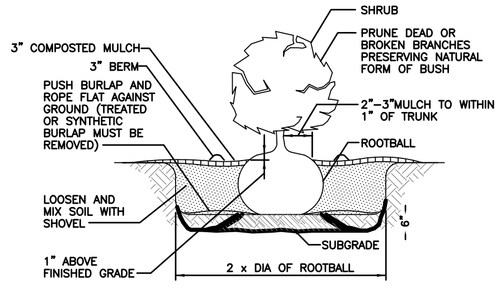
NEW LANDSCAPING SHALL BE MAINTAINED; BEDS WEEDED, PLANT MATERIAL PRUNED AND KEPT FREE OF PESTS, AND REPLACED AS NECESSARY. RESETTING PLANTS TO PROPER GRADES THROUGH INSTALLATION AND UNTIL ACCEPTANCE OF LANDSCAPE INSTALLATION.



TREE PLANTING/STAKING DETAIL



PLANT MATERIAL SPACING DETAIL



SHRUB PLANTING DETAIL

IRRIGATION NOTES

1. SYSTEM HAS BEED DESIGNED ASSUMING WATER PRESSURE OF BETWEEN 55-60 PSI. AND A 5/8" WATER METER.

2. ALL WORK TO BE DONE PER LOCAL CODES AND PER MANUFACTURER'S WRITTEN SPECIFICATIONS.

3. ALL VALVES TO BE PLACED IN IRRIGATION VALVE BOXES WITH LOCKING LIDS. SET BOXES 2 INCHES HIGHER THAN FINISH GRADE TO ENSURE THEY ARE NOT BURIED. DOUBLE BOX VALVES, WITH ADDITIONAL BOX BELOW LEVEL OF VALVE, AND FILL BOTTOM WITH APPROX. 4-6" LAYER OF PEA GRAVEL TO KEEP VALVES CLEAN AND EASY TO MAINTAIN.

4. MAINLINE PIPE TO BE BURIED 18" AND LATERALS TO BE BURIED 12". DRIPLINES AND DRIP-RINGS TO BE PLACED ON GRADE, AND BURIED BELOW MULCH LAYER (SEE DETAIL).

5. MAIN AND LATERAL LINES AS WELL AS SPRAYER HEADS ARE DRAWN DIAGRAMMATICALLY ON PLAN. ADJUST LOCATIONS AND SPACING AS NEEDED IN THE FIELD.

6. BACKFLOW PREVENTER TO BE TESTED BY CERTIFIED TESTER AT INSTALLATION. OWNER IS RESPONSIBLE FOR ANNUAL TESTS AFTER THE INITIAL INSPECTION.

7. SYSTEM WILL NEED TO BE WINTERIZED TO PREVENT BREAKAGE DURING FREEZING TEMPERATURES.

8. EACH VALVE BOX TO CONTAIN A MINIMUM OF 2 SPARE CONTROL WIRES. ROUTE SPARE WIRES FROM THE CONTROLLER TO THE LAST VALVE OF EACH MAINLINE BRANCH FOR FUTURE ADDITIONS AND/OR REPAIRS.

9. PROVIDE OWNER WITH 2 SETS OF 'AS-BUILT' DRAWINGS AND 2 SETS OF OPERATOR'S MANUALS UPON COMPLETION. INSTRUCT OWNER AS TO PROPER OPERATION OF IRRIGATION SYSTEM; CONTROLLER PROGRAMMING, AND MAINTENANCE REQUIREMENTS.

10. SYSTEM DESIGN IS DIAGRAMATIC. SYSTEM LAYOUT AND COMPONENTS WILL NEED TO BE FIELD VERIFIED AND ADJUSTED TO ON-SITE CONDITIONS BY INSTALLATION CONTRACTOR.

DESIGN BRK
DRAWN JKA
CHECKED BRK
SEC 25 T 27N R 2E
DISC NO ____ DATE 12/18/16
SCALE 1" = 10'

REV NO	REVISION DESCRIPTION	DATE	BY
	REVISIONS PER COUNTY COMMENTS	10-20-17	DJB
2	REVISIONS PER COUNTY COMMENTS	12-21-17	DJB

STATE OF WASHINGTON BERNARD A. KENWORTHY 18489 REGISTERED PROFESSIONAL ENGINEER
12/21/17

PROJECT MANAGER BERNI KENWORTHY, PE
SIGNATURE
TITLE WASHINGTON PARK
LANDSCAPING NOTES & DETAILS
CLIENT PORT OF KINGSTON
JIM PIVARNIK
PO BOX 559
KINGSTON, WA
(360) 297-3545

PROJECT MANAGEMENT ENGINEERING CONSULTING PLANNING

TEAM 4 ENGINEERING
5819 NE MINDER RD
POULSBO, WA. 98370
(360) 297-5560
(360) 297-7951 (FAX)

SHEET L3 OF L6
FILE NO 975

WASHINGTON PARK
CUT SHEETS

Square Table Series

model no:

GV230G
GV235G
GV240G

GREEN VALLEY

SQUARE TABLE, INGROUND – 4 SEAT, 3 SEAT AND 2 SEAT
PolyTuf* Plastic lumber Custom–Extruded – Cedar and Tudor

customer service:

ASSEMBLIES: If you find any parts missing or damaged, or if you're having difficulty assembling your furniture/equipment, call us at:

* Before calling, have your product model number available.

1–800–253–8619 (Inside U.S.A.)
260–352–2102 (Outside U.S.A.)
Monday thru Friday,
8:00 AM – 4:30 PM Eastern Time
(EXCEPT HOLIDAYS)

Any correspondence concerning our product should be sent directly to our Customer Service Manager at:

GREEN VALLEY
a division of Wabash Valley Mfg., Inc.
505 E. Main Street
P.O.Box 5
Silver Lake, IN 46982 U.S.A.
FAX: 260–352–2160
or email: cs@wabashvalley.com

maintenance:

Regular inspection and maintenance of all parts, and fasteners is necessary. Tighten all bolts and nuts. Inspect Tops, Seats, Legs, Braces and Fasteners periodically for wear or vandalism. Replace broken or worn parts immediately or take equipment out of service until repairs are made. Use genuine Green Valley replacement parts.

KEEP THIS ASSEMBLY/SPECIFICATION SHEET FOR FUTURE REFERENCE.

specifications:

NOTE: We reserve the right to change specifications without notice.

Framework assemblies are finished with powder coating; electrostatically applied and oven cured according to powder manufacturer's specifications. Fasteners are stainless steel to resist corrosion.

TABLE LEGS:
Main support is constructed of 4" x 4" x 11 gage structural steel tubing. Square mounting frame, for top, consists of 1/4" x 1 1/4" steel flat bar, 1 1/4" plate steel and 14 gage sheet steel. Seat assembly arm is constructed with a 2 7/8" od x 9 gage structural steel tubing. Cross tubing is 2 3/8" od x 12 gage structural steel tubing. Seat's mounting ears are 10 gage sheet steel. Mounting bracket, to the post, is 3/8" x 3 1/2" x 8" plate steel. Mounting plate covers are cast aluminum.

TABLE TOPS:
The top's frame is constructed of 10 gage flat sheet steel and 1/4" flat bar steel. The planks are made of PolyTuf* Plastic lumber consisting of recycled plastic.

TABLE SEATS:
The seat's frames are constructed of 10 gage formed sheet steel and 1/8" strip steel. The planks are made of PolyTuf* Plastic lumber consisting of recycled plastic.

GENERAL:
Square Picnic Table w/ four seats, ground space requirements are 77" square. The seats are 36" long x 9 1/2" wide and 19 3/8" to the top of the seat.

Square Picnic Table w/ three seats, ground space requirements are 77" x 62 1/8". The seats are 36" long x wide and 19 3/8" to the top of the seat.

Square Picnic Table w/ two seats, ground space requirements are 77" x 47 1/2". The seats are 36" long x 9 1/2" wide and 19 3/8" to the top of the seat.

NOTE: When Umbrellas are used on Tables, the Umbrellas must be secured.
Wabash Valley Umbrellas include an Umbrella Collar for securing.

Finished to Look Like Wood, but Act Like Metal

Our faux-wood finishes so closely resemble the real thing that it's hard to believe it's metal and not wood. The timeless beauty and tradition of wood without any of the headaches, such as cracking, warping or rotting. For superior strength and rigidity, we add reinforcements to the aluminum extrusions for all of our faux-wood-finished products.

AAMA 2604-05 Certification

Our seven-step powder-coat system exceeds AAMA 2604-05 (American Architectural Manufacturers Association) test specifications—one of the highest in the industry. Our coating stood up to some of the toughest test specifications, including adhesion, abrasion resistance, chemical resistance, corrosion resistance and fade resistance, to ensure that our products will last longer than anyone else's.

AAMA 2604-05 test Procedures and Performance Requirements

Test Requirements	Compliance
Salt-Spray Resistance: 3,000 hours per ASTM B 117	**Yes**
Weathering: Color Retention, 5-year south Florida sun, per ASTM D 2244 with a maximum 5delteE change	Yes
Weathering: Chalk resistance, 5-year south Florida sun, per ASTM D 4214 with a max rating of 8	**Yes**
Weathering: Gloss Retention, 5-year south Florida sun, per ASTM D 523 with a min of 30%	Yes
Weathering: Resistance to Erosion, 5-year south florida sun, with less than 10% film loss	**Yes**
Chemical Resistance: Muriatic Acid, Mortar, Nitric Acid, Detergent and Window Cleaner	Yes
Dry Film Hardness per ASTM D 3363 with no rupture	**Yes**
Adhesion: Dry Adhesion, Wet Adhesion and Boiling Water Adhesion using the cross hatch method with 0% failure	Yes

Seven Steps to Long-Lasting Furniture: Our Superior Powder-Coating Process

What's responsible for the good looks and durability of all our products? Our seven-step powder-coating process, which is unlike any other in the industry. While other companies also offer powder-coated products, our seven-step process ensures the highest quality and longevity for our products.

STEP 1—Shot-Blasting to White Metal
First, all of our metal is cleaned to white metal. We strip it to its purest form using our state-of-the-art shot-blast system. This process removes all the impurities from the metal, especially at the weld joints. It's more effective than traditional acid cleaning and also creates a more textured surface, allowing for better adhesion of the powder coat.

STEP 2—Five-Stage Chemical Pre-Treatment
Next, the metal goes through a five-stage chemical pre-treatment cleaning process. It is etched, rinsed and cleaned to eliminate any residue, then it's sealed—further promoting adhesion and encouraging corrosion prevention.

STEP 3—Pre-Heating
Prior to coating, the part is pre-heated so that it can be dried, warmed and then sent directly to the spray booth. With the part heated, it draws powder into the joints, corners and hard-to-reach places to ensure complete coating of the entire surface.

STEP 4—Zinc-Rich Epoxy Coating
After the pre-heating, a Zinc-Rich epoxy powder-coating is applied to provide the highest quality of corrosion control. It works as a prime coat to protect the metal from corrosion before it receives its topcoat.

STEP 5—Zinc-Rich Epoxy Coating Gel-Cure
Next, the Zinc-Rich epoxy coating is cured to a gel, allowing the polyester topcoat to combine with the Zinc-Rich epoxy, promoting better adhesion.

STEP 6—AAMA 2604-Compliant Polyester Topcoat
A polyester topcoat is then applied that's specially formulated to meet AAMA 2604 standards for fading, cracking, chalking, gloss retention, erosion resistance and chemical resistance. No one else in the industry uses this high standard of topcoat. It ensures that our products will maintain their beauty and durability for years to come.

STEP 7—Final Cure
Finally, the metal goes through a cure oven, which hardens the topcoat and completes the integrated bonding between the Zinc-Rich epoxy and AAMA 2604-Compliant Polyester Topcoat.

assembly procedures:

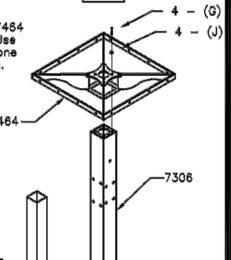
IMPORTANT: Assemblers should be reasonably skilled in the assembly of commercial grade/heavy duty fabricated steel equipment.

To ensure proper assembly, it is suggested that you take adequate time to locate and identify each part. To prevent scratching of the finished pieces, we recommend this unit to be assembled on a clean, flat, solid, surface with a drop cloth, allowing plenty of working room. Also please read the instructions and study the sketches very carefully. A little extra time spent before assembly will be well worth it in performing a complete, proper assembly. Please note that all parts have been precut and pre–drilled.

During the assembly process leave all bolts and nuts "finger tight", until the entire unit is completely assembled. This allows room for movement to level or adjust all seats, tops, benches, framework and braces if necessary. After final adjustment and leveling, permanently tighten all nuts, bolts and fasteners.

STEP 1
Slide 7464 onto end of 7306, matching the square opening with the square post until it rests on the top of the post. Secure 7464 to 7306 engaging four 3/8 x 1 1/4 hex head bolts and 3/8 flat washer into pre welded t–nuts inside post, see FIG. 1. Draw the bolts to a snug fit with wrenches.

FIG. 1



STEP 2
Re–Invert the top (16304) so it's upside down on a flat surface. Attach the 7306/7464 assembly to the inside of the top's center square mounting frame, see FIG. 2. Use eight 5/16 x 1 1/2 hex bolts and 5/16 nuts using two 3/8 flat washers and one 5/16 split washer per each bolt. Draw the fasteners to a snug fit with wrenches.

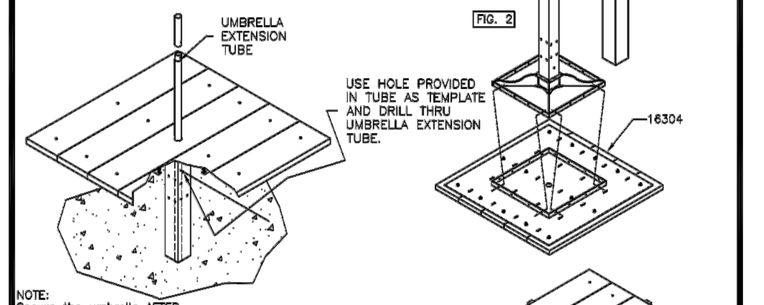
STEP 3
Prepare one foundation hole. Refer to product dimensions on page 5.

STEP 4
Re–Invert the table to its top side up position and place it in the footing hole. Block the table as shown in FIG. 3.

Before pouring concrete, make sure the table is level horizontally as well as vertically, and holds 30" to the top of the table.

Pour concrete to form the footing and let cure for 48 hours.

FIG. 2



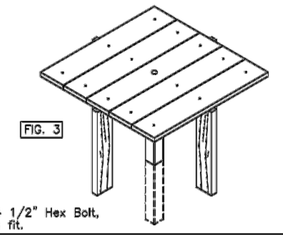
NOTE:
Secure the umbrella AFTER the seat arms are assembled.

UMBRELLA SECUREMENT
Insert the umbrella extension tube into the square inground/surface mount tube through the table top hole.

STEP A
Before drilling, be sure desired umbrella height is established.
Drill a #1/4" hole thru umbrella extension tube using the #3/8" hole directly under table top as a template.

STEP B
Secure umbrella extension to table leg tube using one 1/4–20 X 4 1/2" Hex Bolt, two 5/16" Flat Washers and one 1/4–20 Hex Nut. Tighten to snug fit.

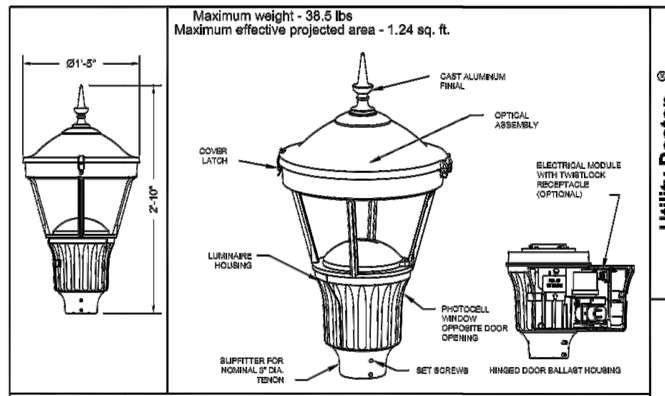
FIG. 3



installation:

WARNING: The proper installation for Green Valley products may depend upon many factors unique to the site, location, or use of a particular product. Consult with your contractor or other professional to determine your specific installation requirements.

Maximum weight - 38.5 lbs
Maximum effective projected area - 1.24 sq. ft.



Utility Postop® Series Luminaire Full Cutoff

DECORATIVE OUTDOOR

HOLOPHANE® LIGHTING SOLUTIONS FOR A BETTER WORLD™

ORDERING INFORMATION:

PTU	080HP	12	8	C3	8
PTU					

BALLAST TYPE (MODUL BASE)
050HP = 50W HPS
070HP = 70W HPS
100HP = 100W HPS
150HP = 150W 55V HPS
175MH = 175W MH *
175PM = 175W PMH ⓒ

BALLAST TYPE (MEDIUM BASE)
050HP = 50W HPS
070HP = 70W HPS
100HP = 100W HPS
150HP = 150W 55V HPS
70QMH = 70W MH (NOT AVAIL. W/ 480V)
100MH = 100W MH (NOT AVAIL. W/ 480V)
150MH = 150W MH (NOT AVAIL W/ 480V)
175DMH = 175W MH *

(COMPACT FLUORESCENT) **
26QPL = 26W COMPACT FLUORESCENT
32QPL = 32W COMPACT FLUORESCENT
70QPL = 70W COMPACT FLUORESCENT

* NOT AVAILABLE FOR SHIPMENT IN US AFTER 12/31/08 DUE TO EISA 2007 LEGISLATION.

** 120-277 VOLT ONLY, NOT AVAILABLE WITH OPTION HEVA LABEL.

VOLTAGES
12 = 120 VOLT
20 = 208 VOLT
24 = 240 VOLT
27 = 277 VOLT
34 = 347 VOLT (C.U.L.)
48 = 480 VOLT
MT = MULTITAP (120, 208, 240, 277 VOLT)

COLOR
A = AS SPECIFIED
B = BLACK
D = DARK GREEN RAL6005
E = BROWN GREEN RAL6003
F = DARK BRONZE RAL8019
H = DARK GREEN RAL6012
M = GREEN
W = WHITE
Z = BRONZE

OPTICS
C3 = ASYMMETRIC FULL CUTOFF, FLAT GLASS
C5 = SYMMETRIC FULL CUTOFF, FLAT GLASS

FINIAL (FACTORY INSTALLED)
B = BALL
S = SPIKE

OPTIONS
HEVA NEMA TWISTLOCK PHOTOCONTROL RECEPTACLE ONLY
L14 = 14 FEET OF PREWIRED LEADS
L20 = 20 FEET OF PREWIRED LEADS
L30 = 30 FEET OF PREWIRED LEADS
L40 = 40 FEET OF PREWIRED LEADS
L50 = 50 FEET OF PREWIRED LEADS
NE = NEMA LABEL
P = PROTECTED STARTER FOR HPS UNITS ONLY (NOT AVAILABLE W/ VOLTAGES CODES 08 OR 40)
P2T = DTL TWISTLOCK PHOTOCONTROL 120-277 VOLT (MUST BE USED WITH OPTION "H")
P4T = DTL TWISTLOCK PHOTOCONTROL 480 VOLT (MUST BE USED WITH OPTION "H")
PSO = SHORTING CAP (MUST BE USED WITH OPTION "H")

ACCESSORIES
LAMP = SEE APPROPRIATE LAMP AS LISTED IN SEE LAMP SHEET
K3-4 = PLUG-IN RCPA ACCIDENT STARTER FOR HPS UNITS
K3-5 = PLUG-IN REPLACEMENT PROTECTED STARTER FOR HPS UNITS
K3-7 = PLUG-IN REPLACEMENT STARTER FOR 70/100 MH UNITS
K3-SOPLUGIN = PLUG-IN REPLACEMENT STARTER FOR 175PM UNITS

PROJECT #:	
TYPE:	
DRAWN:	ACH
DATE:	12/14/09
DWG #:	LUM_PTU_FC

assembly procedures:

NOTE: Depending on the unit you have purchased, the following steps may differ.

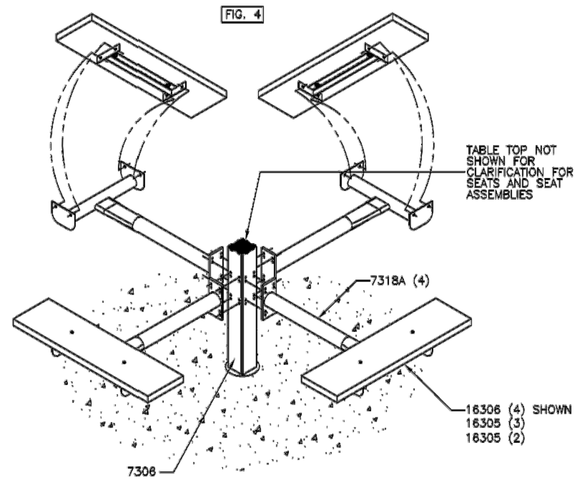
STEP 5
Attach each 7318A seat assembly arm to the 7306 inground post as shown in FIG. 4. Use four, per each seat assembly arm, 7/16" x 5 1/2" Hex head bolts. Complete attaching seat assembly arms using four 7/16" hex nuts, two 7/16" flat washers and one 7/16" split washer per each bolt.

STEP 6
Level the arms, then tighten fasteners with wrenches.

STEP 7
Attach (16305 – 2 or 3 SEATS) or (16306 – 4 SEATS) to the end of each 7318A seat assembly arm, aligning the seat's brackets to the outside of the seat assembly arm's brackets as shown in FIG. 4. Use four, per each seat, 5/16" x 1 1/2" hex head bolts and 5/16" nuts using two 3/8" flat washers and one 5/16" split washer per each bolt.

STEP 8
Level seats and top if necessary and tighten remaining fasteners with wrenches.

FIG. 4



If mounting plate covers QC301 are used place halves around legs and secure with two 1/4–20 x 1 screws, see FIG. 5. Draw to a snug fit being careful not to over tighten.

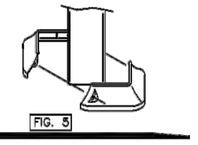
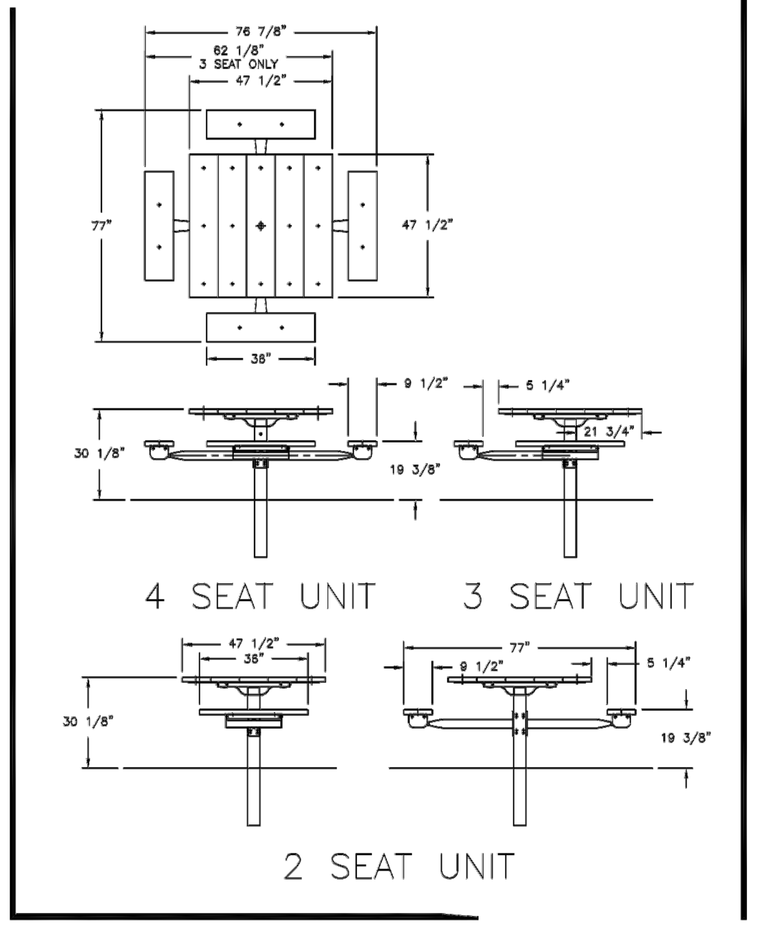


FIG. 5

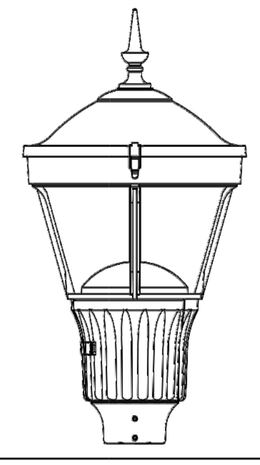
product dimensions:



LIGHTPOSTS:

TO MATCH PSE STREET LIGHTS INSTALLED THROUGHOUT KINGSTON IN 2002:

GARMIRE GRT–10 WITH 3" OD TENON, 10' TALL, ANCHOR BOLT BASE POLE WITH ANCHOR BOLTS, 3" X 7" HANDHOLE BASE COVER, GALVANIZED AND PAINTED BLACK.



FINIALS

BALL SPIKE

Utility Postop® Series Luminaire Full Cutoff

DECORATIVE OUTDOOR

HOLOPHANE® LIGHTING SOLUTIONS FOR A BETTER WORLD™

Specifications

GENERAL DESCRIPTION
The Utility Postop is designed for ease of maintenance with the plug-in electrical module common to each of the luminaires in Holophane's Utility Luminaire Series. A precision optical system maximizes post spacings while maintaining uniform illumination.

OPTICAL SYSTEM
The optical system consists of a precisely engineered segmented aluminum reflector located in the top cover. A gasket between the cover and ring along with a flat glass plate and gasket beneath the reflector create a sealed optical compartment that meets an IP rating. Optics designed to provide an I.E.S. Asymmetric or Symmetric full cutoff distribution are available.

LUMINAIRE HOUSING
The luminaire housing, cast of aluminum, anchors the optical system and provides an enclosure for the plug in electrical module. The electrical enclosure conforms to an IP55 rating. For use with units with an E.E.I.–N.E.M.A. twist lock photocell receptacle, the housing contains a glass "window" to allow light to reach the cell. The nickel plated lamp grip socket and the three station incoming line terminal block are pre-wired to a five conductor receptacle for ease in connecting the electrical module. A slipfitter will accept a 3" high by 2 7/8" to 3 1/8" O.D. pole tenon.

LUMINAIRE HOUSING DOOR
Cast of aluminum, the housing door is hinged and latched to the housing. The door forms the mount for the electrical module, and allows easy access during maintenance.

ELECTRICAL MODULE
The ballast components are mounted on a steel plate that is removable without the use of tools. A matching five conductor plug connects to the receptacle in the luminaire housing to complete the wiring. Where a starting aid is required, it is provided with a separate plug-in connector and can be replaced without the use of tools. For photoelectric operation, the electrical module is provided with an E.E.I.–N.E.M.A. twist lock photocell receptacle.

TOP COVER
The top cover, cast of aluminum, is attached to the top ring of the luminaire housing by a stainless steel hinge pin. The cover is latched by an overcenter, positive action, stainless steel latch which allows tool-less entry to the lamp chamber for relamping.

BALLASTS
(Refer to the Ballast Handbook for specific operating characteristics)
60 watt 120 volt High Pressure Sodium (HPS) ballasts are High Power Factor Reactor type. All other HPS ballasts are High Power Factor Autotransformer type.
175 watt Metal Halide (MH) ballasts are Peak Lead Autotransformer type. 70 and 100 watt MH units are available only with High Power Factor High Reactance type ballasts.

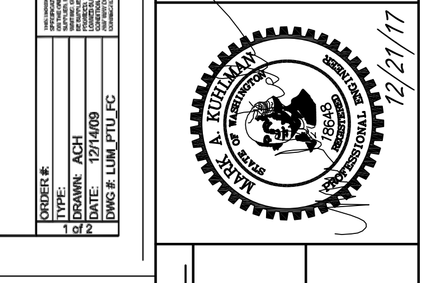
FINISH
The luminaire is finished with polyester powder paint applied to ensure maximum durability.

UL
The luminaire is UL listed as suitable for wet locations at a maximum of 40 degrees C ambient temperature.

PROJECT #:	
TYPE:	
DRAWN:	ACH
DATE:	12/14/09
DWG #:	LUM_PTU_FC

REV NO	REVISION DESCRIPTION	DATE	BY
2	REVISIONS PER COUNTY COMMENTS	12–21–17	DJB
	REVISIONS PER COUNTY COMMENTS	10–20–17	DJB

DESIGN BRK
DRAWN JKA
CHECKED BRK
SEC 25 T 27N R 2E
DISC NO DATE 12/18/16
SCALE 1" = 10'



SIGNATURE:

PROJECT MANAGER: BERNI KENWORTHY, PE

TEAM 4 ENGINEERING
5819 NE MINDER RD
POULSBO, WA 98370
(360) 297–5560
(360) 297–7951 (FAX)

TITLE WASHINGTON PARK
CUT SHEETS

CLIENT PORT OF KINGSTON
JIM PIVARNIK
PO BOX 559
KINGSTON, WA
(360) 297–3545

SHEET L4 OF L6

FILE NO 975

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WASHINGTON PARK
CUT SHEETS

Bulter Series

model no:

BU1112C, BU1113C,
BU1114C, BU1119C

urbanscape®
INSTRUMENTS TO SHAPE PUBLIC SPACE

PORTABLE & SURFACE MOUNT BENCHES – FAUX WOOD,
HORIZONTAL SLAT, VERTICAL SLAT, ROD

customer service:

ASSEMBLERS: If you find any parts missing or damaged, or if you're having difficulty assembling your furniture/equipment, call us at:

* Before calling, have your product model number available.

1–800–253–8619 (Inside U.S.A.)
260–352–2102 (Outside U.S.A.)
Monday thru Friday,
8:00 AM – 4:30 PM Eastern Time
(EXCEPT HOLIDAYS)

Any correspondence concerning our product should be sent directly to our Customer Service Manager at:

URBANSCAPE
a division of Wabash Valley Mfg., Inc.
505 E. Main Street
P.O.Box 5
Silver Lake, IN 46982 U.S.A.
FAX: 260–352–2160
or email: cs@wabashvalley.com

maintenance:

Regular inspection and maintenance of all parts, and fasteners is necessary. Tighten all bolts and nuts. Inspect Tops, Seats, Legs, Braces and Fasteners periodically for wear or vandalism. Replace broken or worn parts immediately or take equipment out of service until repairs are made. Use genuine Urbanscape replacement parts.

KEEP THIS ASSEMBLY/SPECIFICATION SHEET FOR FUTURE REFERENCE.

specifications:

NOTE: We reserve the right to change specifications without notice.

Framework assemblies are finished with powder coating; electrostatically applied and oven cured according to powder manufacturer's specifications. Fasteners are stainless steel to resist corrosion.

FRAMEWORK:
Bench legs are constructed of 2" wide cast aluminum.

SEATS AND PANELS:
Faux Wood and Horizontal Slat seat panels are extruded aluminum tube. Rod seat is 1/2" steel rod with supports of 1/4" sheet steel. Vertical Slat seat panels are 10 gage sheet steel with brackets of 1/4" sheet steel and supports of 1/8" strip steel.

GENERAL DIMENSIONS:
Bench ground space requirements are 34 7/8" deep x 72" long x 34 7/8" tall. The seat height is 17 7/8" and seat depth is 17". Arm height is 25 1/8".

NOTE: Minor scratches to the faux-wood furniture can be touched up using Wood Finish Touch-Up markers or pens. Some recommended touch-up markers are the MINWAX WOOD FINISH STAIN MARKERS. The cherry marker works well with the wheat faux-wood, the Provincial marker closely matches the weathered and Italia, and the Dark Walnut marker matches the espresso faux-wood. The touch-up markers can be obtained at a local hardware store or may also be obtained through Urbanscape by contacting customer service.

AI341B page 1

Finished to Look Like Wood, but Act Like Metal

Our faux-wood finishes so closely resemble the real thing that it's hard to believe it's metal and not wood. The timeless beauty and tradition of wood without any of the headaches, such as cracking, warping or rotting. For superior strength and rigidity, we add reinforcements to the aluminum extrusions for all of our faux-wood-finished products.

AAMA 2604-05 Certification

Our seven-step powder-coat system exceeds AAMA 2604-05 (American Architectural Manufacturers Association) test specifications—one of the highest in the industry. Our coating stood up to some of the toughest test specifications, including adhesion, abrasion resistance, chemical resistance, corrosion resistance and fade resistance, to ensure that our products will last longer than anyone else's.

AAMA 2604-05 test Procedures and Performance Requirements

Test Requirements	Compliance
Salt-Spray Resistance: 3,000 hours per ASTM B 117	**Yes**
Weathering: Color Retention, 5-year south Florida sun, per ASTM D 2244 with a maximum deltaE change	Yes
Weathering: Chalk resistance, 5-year south Florida sun, per ASTM D 4214 with a max rating of 8	**Yes**
Weathering: Gloss Retention, 5-year south Florida sun, per ASTM D 523 with a min of 30%	Yes
Weathering: Resistance to Erosion, 5-year south Florida sun, with less than 10% film loss	**Yes**
Chemical Resistance: Muriatic Acid, Mortar, Nitric Acid, Detergent and Window Cleaner	Yes
Dry Film Hardness per ASTM D 3363 with no rupture	**Yes**
Adhesion: Dry Adhesion, Wet Adhesion and Boiling Water Adhesion using the cross hatch method with 0% failure	Yes

Seven Steps to Long-Lasting Furniture: Our Superior Powder-Coating Process

What's responsible for the good looks and durability of all our products? Our seven-step powder-coating process, which is unlike any other in the industry. While other companies also offer powder-coated products, our seven-step process ensures the highest quality and longevity for our products.

STEP 1—Shot-Blasting to White Metal
First, all of our metal is cleaned to white metal. We strip it to its purest form using our state-of-the-art shot-blast system. This process removes all the impurities from the metal, especially at the weld joints. It's more effective than traditional acid cleaning and also creates a more textured surface, allowing for better adhesion of the powder coat.

STEP 2—Five-Stage Chemical Pre-Treatment
Next, the metal goes through a five-stage chemical pre-treatment cleaning process. It is etched, rinsed and cleaned to eliminate any residue, then it's sealed—further promoting adhesion and encouraging corrosion prevention.

STEP 3—Pre-Heating
Prior to coating, the part is pre-heated so that it can be dried, warmed and then sent directly to the spray booth. With the part heated, it draws powder into the joints, corners and hard-to-reach places to ensure complete coating of the entire surface.

STEP 4—Zinc-Rich Epoxy Coating
After the pre-heating, a Zinc-Rich epoxy powder-coating is applied to provide the highest quality of corrosion control. It works as a prime coat to protect the metal from corrosion before it receives its topcoat.

STEP 5—Zinc-Rich Epoxy Coating Gel-Cure
Next, the Zinc-Rich epoxy coating is cured to a gel, allowing the polyester topcoat to combine with the Zinc-Rich epoxy, promoting better adhesion.

STEP 6—AAMA 2604-Compliant Polyester Topcoat
A polyester topcoat is then applied that's specially formulated to meet AAMA 2604 standards for fading, cracking, chalking, gloss retention, erosion resistance and chemical resistance. No one else in the industry uses this high standard of topcoat. It ensures that our products will maintain their beauty and durability for years to come.

STEP 7—Final Cure
Finally, the metal goes through a cure oven, which hardens the topcoat and completes the integrated bonding between the Zinc-Rich epoxy and AAMA 2604-Compliant Polyester Topcoat.

Page 2

assembly procedures:

IMPORTANT: Assemblers should be reasonably skilled in the assembly of commercial grade/heavy duty fabricated steel equipment.

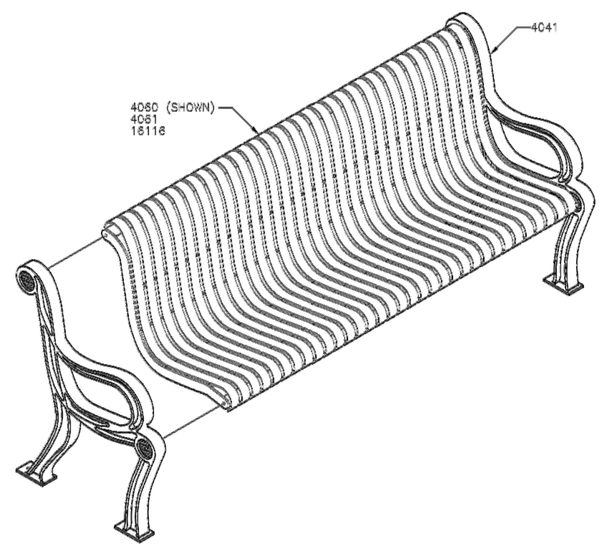
To ensure proper assembly, it is suggested that you take adequate time to locate and identify each part. To prevent scratching of the finished pieces, we recommend this unit to be assembled on a clean, flat, solid, surface with a drop cloth, allowing plenty of working room. **Also please read the instructions and study the sketches very carefully.** A little extra time spent before assembly will be well worth it in performing a complete, proper assembly. Please note that all parts have been preput and pre-drilled.

During the assembly process leave all bolts and nuts "finger tight", until the entire unit is completely assembled. This allows room for movement to level or adjust all seats, tops, benches, framework and braces if necessary. **After final adjustment and leveling, permanently tighten all nuts, bolts and fasteners.**

STEP 1
Attach seat (18118, 4080 or 4081) to leg (4041) using one 5/16 X 2 1/2 machine head screw, two flat washers, and one hex nut, per each bolt hole.

STEP 2
Repeat STEP 1 to complete installation for opposite side.

STEP 3
Level the seat and back, tighten with proper tools.

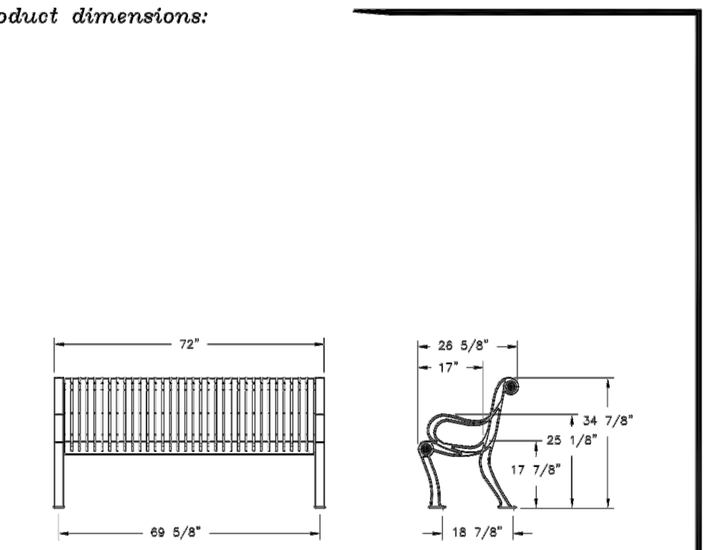


installation:

WARNING: The proper installation for Urbanscape products may depend upon many factors unique to the site, location, or use of a particular product. Consult with your contractor or other professional to determine your specific installation requirements.

AI341B page 3

product dimensions:



BU1112C/BU1113C
BU1114C/BU1119C

AI341B page 4

TF/PF & TG/PG–Trash/Planter

model no:

PF7532P, PG7533P, TF3C32I,
TF3C32P, TF3C32S, TF3D32I,
TF3D32P, TF3D32S, TF3F32I,
TF3F32P, TF3F32S, TG3C33I,
TG3C33P, TG3C33S, TG3D33I, TG3D33P,
TG3D33S, TG3F33I, TG3F33P, TG3F33S

urbanscape®
INSTRUMENTS TO SHAPE PUBLIC SPACE

INGROUND, PORTABLE & SURFACE RECEPTACLES & PLANTERS – FAUX WOOD & SLAT

customer service:

ASSEMBLERS: If you find any parts missing or damaged, or if you're having difficulty assembling your furniture/equipment, call us at:

* Before calling, have your product model number available.

1–800–253–8619 (Inside U.S.A.)
260–352–2102 (Outside U.S.A.)
Monday thru Friday,
8:00 AM – 4:30 PM Eastern Time
(EXCEPT HOLIDAYS)

Any correspondence concerning our product should be sent directly to our Customer Service Manager at:

URBANSCAPE
a division of Wabash Valley Mfg., Inc.
505 E. Main Street
P.O.Box 5
Silver Lake, IN 46982 U.S.A.
FAX: 260–352–2160
or email: cs@wabashvalley.com

maintenance:

Regular inspection and maintenance of all parts, and fasteners is necessary. Tighten all bolts and nuts. Inspect Tops, Seats, Legs, Braces and Fasteners periodically for wear or vandalism. Replace broken or worn parts immediately or take equipment out of service until repairs are made. Use genuine Urbanscape replacement parts.

KEEP THIS ASSEMBLY/SPECIFICATION SHEET FOR FUTURE REFERENCE.

specifications:

NOTE: We reserve the right to change specifications without notice.

Framework assemblies are finished with powder coating; electrostatically applied and oven cured according to powder manufacturer's specifications. Fasteners are stainless steel to resist corrosion.

RECEPTACLE LEGS:
Legs are contructed of 12 gage x 2 3/8" diameter structural steel tubing. Mounting plate consists of 10 gage sheet steel and gusset supports are 14 gage sheet steel. Base plate on surface mount leg is 7 gage plate steel.

RECEPTACLES/PLANTERS:
All tops, bottom, rings and domes are cast aluminum. Sides are aluminum tubing.

GENERAL DIMENSIONS:
Portable ground space requirements for trash receptacles with flat tops are 24 1/2" diameter x 31 3/4" tall. Portable ground space requirements for trash receptacles with domes are 24 1/2" diameter x 39 1/2" tall. Surface mount and inground ground space requirements for trash receptacles with domes are 24 1/2" diameter x 46 1/4" tall. Portable ground space requirements for trash receptacles with domes with ash trays are 24 1/2" diameter x 39" tall. Surface mount and inground ground space requirements for trash receptacles with domes with ash trays are 24 1/2" diameter x 45 3/4" tall. Planters are 24" diameter x 15" tall.

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AI358A page 1

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AAMA 2604-05 Certification

Our seven-step powder-coat system exceeds AAMA 2604-05 (American Architectural Manufacturers Association) test specifications—one of the highest in the industry. Our coating stood up to some of the toughest test specifications, including adhesion, abrasion resistance, chemical resistance, corrosion resistance and fade resistance, to ensure that our products will last longer than anyone else's.

AAMA 2604-05 test Procedures and Performance Requirements

Test Requirements	Compliance
Salt-Spray Resistance: 3,000 hours per ASTM B 117	**Yes**
Weathering: Color Retention, 5-year south Florida sun, per ASTM D 2244 with a maximum deltaE change	Yes
Weathering: Chalk resistance, 5-year south Florida sun, per ASTM D 4214 with a max rating of 8	**Yes**
Weathering: Gloss Retention, 5-year south Florida sun, per ASTM D 523 with a min of 30%	Yes
Weathering: Resistance to Erosion, 5-year south Florida sun, with less than 10% film loss	**Yes**
Chemical Resistance: Muriatic Acid, Mortar, Nitric Acid, Detergent and Window Cleaner	Yes
Dry Film Hardness per ASTM D 3363 with no rupture	**Yes**
Adhesion: Dry Adhesion, Wet Adhesion and Boiling Water Adhesion using the cross hatch method with 0% failure	Yes

Seven Steps to Long-Lasting Furniture: Our Superior Powder-Coating Process

What's responsible for the good looks and durability of all our products? Our seven-step powder-coating process, which is unlike any other in the industry. While other companies also offer powder-coated products, our seven-step process ensures the highest quality and longevity for our products.

STEP 1—Shot-Blasting to White Metal
First, all of our metal is cleaned to white metal. We strip it to its purest form using our state-of-the-art shot-blast system. This process removes all the impurities from the metal, especially at the weld joints. It's more effective than traditional acid cleaning and also creates a more textured surface, allowing for better adhesion of the powder coat.

STEP 2—Five-Stage Chemical Pre-Treatment
Next, the metal goes through a five-stage chemical pre-treatment cleaning process. It is etched, rinsed and cleaned to eliminate any residue, then it's sealed—further promoting adhesion and encouraging corrosion prevention.

STEP 3—Pre-Heating
Prior to coating, the part is pre-heated so that it can be dried, warmed and then sent directly to the spray booth. With the part heated, it draws powder into the joints, corners and hard-to-reach places to ensure complete coating of the entire surface.

STEP 4—Zinc-Rich Epoxy Coating
After the pre-heating, a Zinc-Rich epoxy powder-coating is applied to provide the highest quality of corrosion control. It works as a prime coat to protect the metal from corrosion before it receives its topcoat.

STEP 5—Zinc-Rich Epoxy Coating Gel-Cure
Next, the Zinc-Rich epoxy coating is cured to a gel, allowing the polyester topcoat to combine with the Zinc-Rich epoxy, promoting better adhesion.

STEP 6—AAMA 2604-Compliant Polyester Topcoat
A polyester topcoat is then applied that's specially formulated to meet AAMA 2604 standards for fading, cracking, chalking, gloss retention, erosion resistance and chemical resistance. No one else in the industry uses this high standard of topcoat. It ensures that our products will maintain their beauty and durability for years to come.

STEP 7—Final Cure
Finally, the metal goes through a cure oven, which hardens the topcoat and completes the integrated bonding between the Zinc-Rich epoxy and AAMA 2604-Compliant Polyester Topcoat.

Page 2

assembly procedures:

IMPORTANT: Assemblers should be reasonably skilled in the assembly of commercial grade/heavy duty fabricated steel equipment.

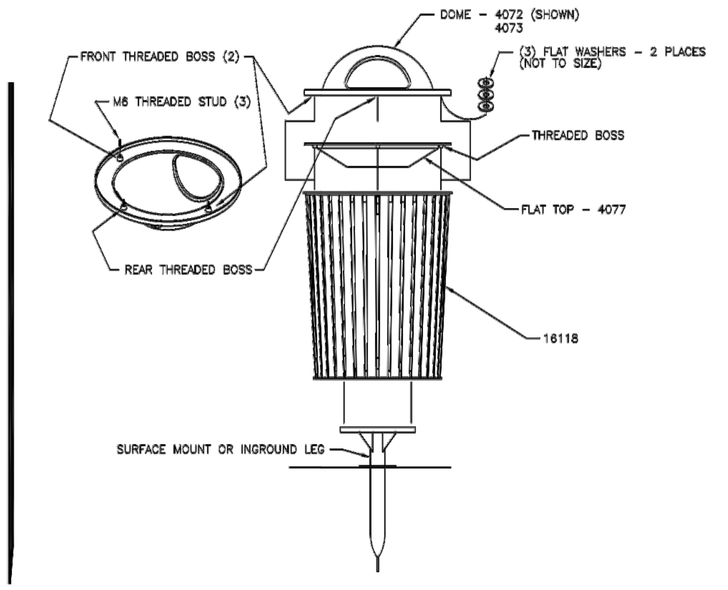
To ensure proper assembly, it is suggested that you take adequate time to locate and identify each part. To prevent scratching of the finished pieces, we recommend this unit to be assembled on a clean, flat, solid, surface with a drop cloth, allowing plenty of working room. Also please read the instructions and study the sketches very carefully. A little extra time spent before assembly will be well worth it in performing a complete, proper assembly. Please note that all parts have been preput and pre-drilled.

During the assembly process leave all bolts and nuts "finger tight", until the entire unit is completely assembled. This allows room for movement to level or adjust all seats, tops, benches, framework and braces if necessary. After final adjustment and leveling, permanently tighten all nuts, bolts and fasteners.

FLAT TOP INSTALLATION:
Install each M6 Threaded Stud into each threaded boss on Flat Top (4077). Tighten studs with regular screw driver. Attach Flat Top (4077) to receptacle (16118) using one flat washer, one M6 Hex Nut and one split washer per each threaded stud (3). Tighten nuts to a snug fit.

DOME TOP INSTALLATION:
Install each M6 Threaded Stud into each threaded boss on Dome (4072, 73). Tighten studs with regular screw driver. Attach dome to receptacle (16118) using three flat washers on each side of opening, two places, and none in the rear location. Assemble one M6 Hex Nut and one Split Washer per each threaded stud (3). NOTE: The flat washers must be placed between the dome and the trash receptacle (16118) to allow clearance for the receptacle doors. Tighten nuts to a snug fit.

LEG INSTALLATION:
See Leg Hardware Package instructions.



installation:

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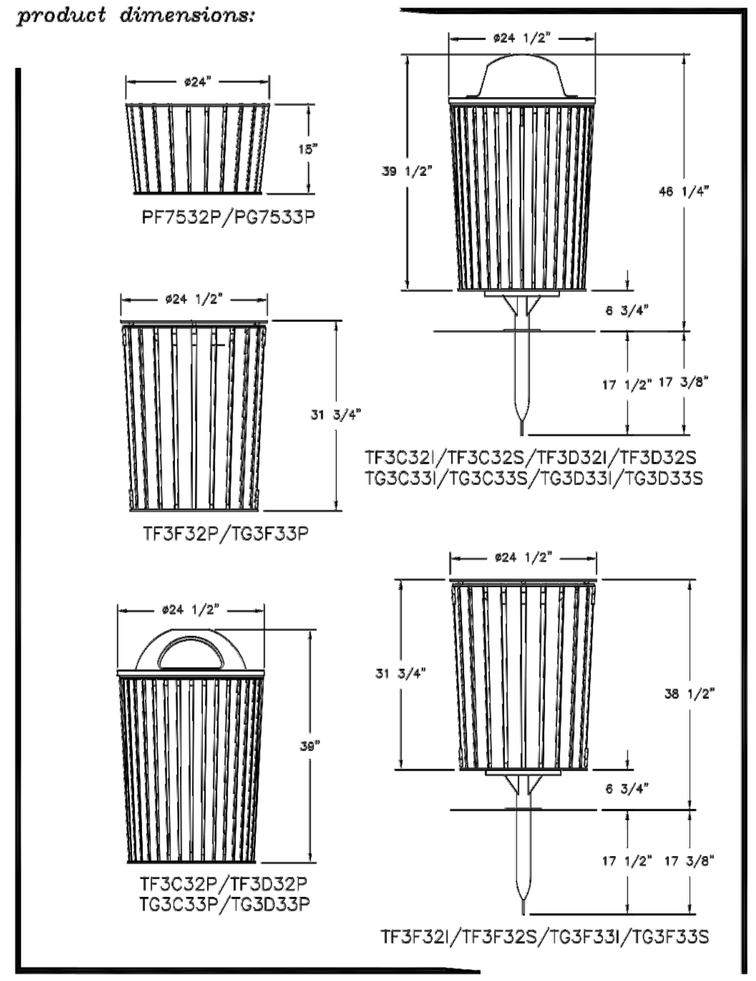
AI358A page 3

product dimensions:



AI358A page 4

PROJECT MANAGER: BERNI KENWORTHY, PE

TEAM 4 ENGINEERING
5819 NE MINDER RD
POULSBO, WA. 98370
(360) 297-5560
(360) 297-7951 (FAX)

SIGNATURE:

TITLE: WASHINGTON PARK
CUT SHEETS

CLIENT: PORT OF KINGSTON
JIM PIVARNIK
PO BOX 559
KINGSTON, WA
(360) 297-3545

SHEET L5 OF L6

FILE NO 975

REV NO	REVISION DESCRIPTION	DATE	BY
	REVISIONS PER COUNTY COMMENTS	10-20-17	DJB
2	REVISIONS PER COUNTY COMMENTS	12-21-17	DJB

DESIGN BRK
DRAWN JKA
CHECKED BRK
SEC 25 T 27N R 2E
DISC NO DATE 12/18/16
SCALE 1" = 10'

MARK A. KUHLMANN — EXPIRES 12/21/17

X:\ 975 Washington Park\Pacific Designs\WashingtonParkDec2017.dwg, 12/21/2017 12:13:45 PM, 1:1

WASHINGTON PARK
CUT SHEETS

Bike Rack Series
model no:

urbanscape®
INSTRUMENTS TO SHAPE PUBLIC SPACE

BRK538I
BRK538S

SERPENTINE BIKE RACK
SURFACE MOUNT, INGROUND

customer service:

ASSEMBLERS: If you find any parts missing or damaged, or if you're having difficulty assembling your furniture/equipment, call us at:

* Before calling, have your product model number available.

1-800-253-8619 (Inside U.S.A.)
260-352-2102 (Outside U.S.A.)
Monday thru Friday,
8:00 AM - 4:30 PM Eastern Time
(EXCEPT HOLIDAYS)

Any correspondence concerning our product should be sent directly to our Customer Service Manager at:

URBANSCAPE
a division of Wabash Valley Mfg., Inc.
505 E. Main Street
P.O.Box 5
Silver Lake, IN 46982 U.S.A.
FAX: 260-352-2160
or email: cs@wabashvalley.com

maintenance:

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specifications:

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Framework assemblies are finished with powder coating; electrostatically applied and oven cured according to powder manufacturer's specifications. Fasteners are stainless steel to resist corrosion.

FRAME:
The Bike Rack tube consists of 13 gage x 2 3/8" diameter mechanical steel tubing. The base plate for the surface mount unit is 7 gage thick x #6" steel plate.

GENERAL:
The overall ground space requirement for BRK538I is 50 3/8" x 2 3/8". The height of bike rack is 37 3/4". The space provided between loops is 13 5/8".

The overall ground space requirement for BRK538S is 54" x 6". The height of bike rack is 38". The space provided between loops is 13 5/8".

NOTE: SERPENTINE BIKE RACK SECURES UP TO 5 BIKES.

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AAMA 2604-05 test Procedures and Performance Requirements

Test Requirements	Compliance
Salt-Spray Resistance: 3,000 hours per ASTM B 117	Yes
Weathering: Color Retention, 5-year south Florida sun, per ASTM D 2244 with a maximum 5deltaE change	Yes
Weathering: Chalk resistance, 5-year south Florida sun, per ASTM D 4214 with a max rating of 8	Yes
Weathering: Gloss Retention, 5-year south Florida sun, per ASTM D 523 with a min of 30%	Yes
Weathering: Resistance to Erosion, 5-year south Florida sun, with less than 10% film loss	Yes
Chemical Resistance: Muriatic Acid, Mortar, Nitric Acid, Detergent and Window Cleaner	Yes
Dry Film Hardness per ASTM D 3363 with no rupture	Yes
Adhesion: Dry Adhesion, Wet Adhesion and Boiling Water Adhesion using the cross hatch method with 0% failure	Yes

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STEP 2—Five-Stage Chemical Pre-Treatment
Next, the metal goes through a five-stage chemical pre-treatment cleaning process. It is etched, rinsed and cleaned to eliminate any residue, then it's sealed—further promoting adhesion and encouraging corrosion prevention.

STEP 3—Pre-Heating
Prior to coating, the part is pre-heated so that it can be dried, warmed and then sent directly to the spray booth. With the part heated, it draws powder into the joints, corners and hard-to-reach places to ensure complete coating of the entire surface.

STEP 4—Zinc-Rich Epoxy Coating
After the pre-heating, a Zinc-Rich epoxy powder-coating is applied to provide the highest quality of corrosion control. It works as a prime coat to protect the metal from corrosion before it receives its topcoat.

STEP 5—Zinc-Rich Epoxy Coating Gel-Cure
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STEP 7—Final Cure
Finally, the metal goes through a cure oven, which hardens the topcoat and completes the integrated bonding between the Zinc-Rich epoxy and AAMA 2604-Compliant Polyester Topcoat.

assembly procedures:

IMPORTANT: Assemblers should be reasonably skilled in the assembly of commercial grade/heavy duty fabricated steel equipment.

To ensure proper assembly, it is suggested that you take adequate time to locate and identify each part. To prevent scratching of the finished pieces, we recommend this unit to be assembled on a clean, flat, solid, surface with a drop cloth, allowing plenty of working room. Also please read the instructions and study the sketches very carefully. A little extra time spent before assembly will be well worth it in performing a complete, proper assembly. Please note that all parts have been precut and pre-drilled.

During the assembly process leave all bolts and nuts "finger tight", until the entire unit is completely assembled. This allows room for movement to level or adjust all seats, tops, benches, framework and braces if necessary. After final adjustment and leveling, permanently tighten all nuts, bolts and fasteners.

Serpentine Bike Rack – Inground

STEP 1
Lay (4281) Serpentine Bike Rack on its' side and attach the (4282) inground extensions both sides. Be sure the extensions are tight and there are no gaps where the tubes mate.

STEP 2
Locate and prepare the installation site by digging two foundation holes 48" on center in accordance with your local building code, as shown in FIG. 1. Raise bike rack to its' upright position and place the legs in the footing holes. Block the bike rack as shown, maintaining the proper height both horizontally and verbally.

STEP 3
Before pouring the concrete, make sure the bike rack is level horizontally and vertically and holds 37 3/4" to the top of the rack. Mix the concrete to the manufacturers' instructions and fill the holes. Allow to cure according to concrete manufacturers' instructions.

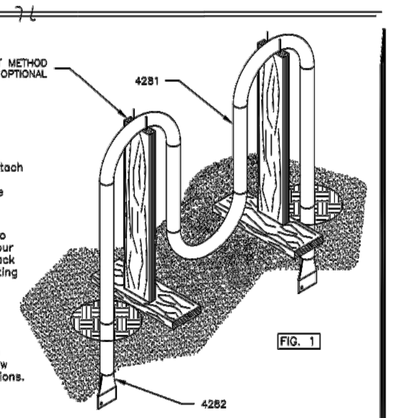

FIG. 1

Serpentine Bike Rack – Surface Mount

STEP 1
Place (4280) Serpentine Bike Rack in its' upright position. Determine the location of bike rack and place the foundations' securement hardware, not included, in its' chosen location.

STEP 2
When the foundations' securement hardware has been installed, place the unit in its' new location and secure to the foundation. See FIG. 2.

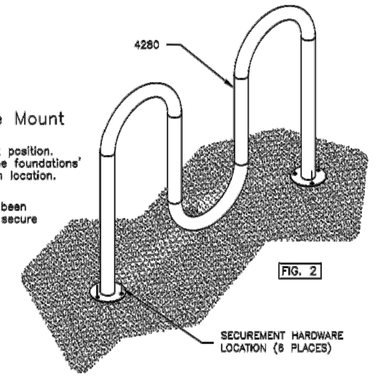

FIG. 2

installation:

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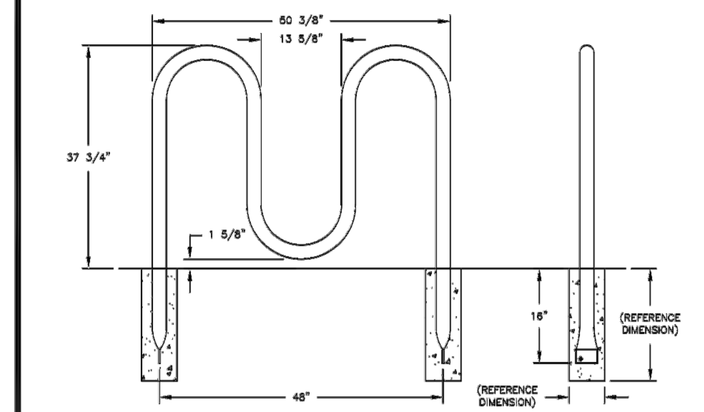
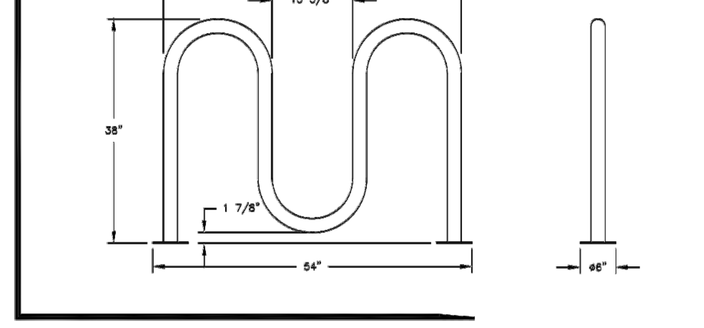
product dimensions:

BRK538I



BRK538S



REV NO	REVISION DESCRIPTION	DATE	BY
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DESIGN BRK
DRAWN JKA
CHECKED BRK
SEC 25 T 27N R 2E
DISC NO DATE 12/18/16
SCALE 1" = 10'

MARK A. KUHLMAN — STATE OF WASHINGTON — 19849 — REGISTERED PROFESSIONAL ENGINEER
12/21/17

SIGNATURE:

TITLE WASHINGTON PARK
CUT SHEETS

CLIENT PORT OF KINGSTON
JIM PIVARNIK
PO BOX 559
KINGSTON, WA
(360) 297-3545

TEAM 4 PROJECT MANAGEMENT ENGINEERING PLANNING CONSULTING

PROJECT MANAGER BERNI KENWORTHY, PE

TEAM 4 ENGINEERING
5819 NE MINDER RD
POULSBO, WA. 98370
(360) 297-5560
(360) 297-7951 (FAX)

SHEET L6 OF L6

FILE NO 975