

Appendix B: Wetlands and Floodplains Statement of Finding

STATEMENT OF FINDINGS
FOR
EXECUTIVE ORDER 11990 “PROTECTION OF WETLANDS”
AND
EXECUTIVE ORDER 11988 “FLOODPLAIN MANAGEMENT”

(NPS Internal Review Draft)

**ENVIRONMENTAL ASSESSMENT AND PREPARATION OF SECTION 106 FOR PARK
IMPROVEMENTS TO BUZZARD POINT PARK**

Buzzard Point Park

Washington, DC

July, 2019

RECOMMENDED:

Tara Morrison Date
Superintendent, Buzzard Point Park

CERTIFICATION OF TECHNICAL ADEQUACY AND SERVICEWIDE CONSISTANCY:

Chief, Water Resources Division Date

APPROVED:

Robert Vogel Date
Regional Director, National Capital Region

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Introduction

The National Park Service (NPS) is proposing to implement improvements to Buzzard Point Park, which is a waterfront park located on an industrialized peninsula adjacent to the Anacostia River in the southwestern portion of the District of Columbia (DC). Since 1957, when jurisdiction of the park property was transferred from the U.S. Army Corps of Engineers (USACE) to the NPS, Buzzard Point Park has been managed by the National Capital Parks-East administrative unit of NPS. Beginning in 1976, Buzzard Point Park served primarily as a small marina operated by a concessionaire under contract with the NPS. In March of 2016, the marina was closed after the latest concessionaire's contract expired.

Seeking to transform Buzzard Point Park into a community waterfront amenity, the NPS began the planning phase of the current project following the closure of the marina. A Development Concept Plan was completed in March 2017 that included concept drawings for two potential preliminary alternatives, both of which were designed to take advantage of opportunities that the park property offers and maximize the ability of Buzzard Point Park to meet the needs of the greatest number of visitors. Utilizing public feedback and considering environmental impacts, consideration was narrowed down to one primary design alternative, which is the proposed action alternative described in this document. A sub-alternative of this primary design was also considered and is further described below.

The purpose of this combined Statement of Findings document is to comply with NPS wetland protection and floodplain management procedures. Executive Orders (EO) 11990 (Protection of Wetlands) and 11988 (Floodplain Management) require the NPS and other federal agencies to evaluate the potential impacts of actions in wetlands and floodplains. This document has been prepared in accordance with NPS Procedural Manual 77-1 to comply with EO 11990, and with NPS Procedural Manual 77-2 to comply with EO 11988.

Project Description

The NPS is proposing improvements to Buzzard Point Park in order to transform the park into a waterfront amenity for the surrounding community. Primary objectives for the project are to provide opportunities for the public to connect with the Anacostia River, provide green space as a refuge from the more urbanized surroundings, maximize the number of users that can experience the park, connect the ends of the Anacostia Riverwalk Trail (ART) for an enhanced trail user experience, enhance underutilized spaces, and repurpose the park to provide additional recreational opportunities for current and future users.

Buzzard Point has historically been a difficult portion of Washington, DC to access due to its location on an industrialized peninsula (**Figure 1**). Many of the existing streets are in poor condition and do not have accessible and connecting sidewalks. Pedestrians and bicyclists will have increasingly better access to the park as adjacent development projects rebuild streets in the surrounding area. Following the closure of the marina, efforts to remove the floating piers, docks, and piles were completed. However, the southern and western portions of the park where the old marina was located are currently fenced off and closed to the public. The eastern portion of the park, which features the Matthew Henson Center (MHC), remains open to the public. The existing site conditions can be seen in **Appendix A**.



BUZZARD POINT PARK

Environmental Assessment for Proposed
Buzzard Point Park Improvements
Washington, D.C.

0 75 150 Feet



FIGURE 1
Project Area Map of Buzzard Point Park

Proposed Action

The proposed action (Alternative B, see plans in **Appendix B**) would transform Buzzard Point Park into a linear waterfront and gateway park serving as the entrance to the Buzzard Point neighborhood. Major components of the proposed action include shoreline reconstruction, a pedestrian-only Riverwalk trail as well as a multi-use trail, multifunctional recreational areas, and landscaped and green space areas. Within the park is both the ART and a pedestrian promenade separated by landscape features including grass dunes and open lawn areas. The shoreline includes a terraced ledge to provide uninterrupted access to the water's edge. The NPS would repurpose the MHC to provide restrooms and other park support amenities, including handicap parking.

The entire central and southern section of the Park as well as portions of the northern section would be cleared of trees, overgrown vegetation, and remnant concrete or asphalt pads. Infrastructure in the southern portion of the Park, specifically the former marina office building, restroom facility, and remnant concrete boating ramp, would be completely demolished and removed from the site. Much of the Park would be regraded and replanted in accordance with final design plans.

Under the proposed action (Alternative B, Option 1), stone revetment would be placed along the length of the seawall in the Anacostia River to approximately the mean low water level (14 to 21 feet). The stone revetment would act to reinforce and protect the seawall from erosion and storm surge while improving the visual appearance of the shoreline and providing access to the river (**Figure 2**). On the landward side of the seawall, a passive walking trail would follow along the edge of the wall in the central section of the Park. An additional option (Option 2) under Alternative B is being considered that involves replacement of the seawall but does not include the stone revetment. Instead, a central trail overlook would be constructed over the river's edge (**Figure 3**). For the purposes of this Statement of Findings, Option 2 is treated as the proposed alternative.



Figure 2
Cross-section of proposed concrete seawall and revetment in Alternative B, Option 1



FIGURE 3
Cross-section of the proposed seawall and overlook trail plaza area in Alternative B, Option 2

On the landward side of the seawall, the ART would be extended through the Park, with an approximately eight-foot wide passive (walking) trail that is situated on top of the seawall, and an approximately ten-foot wide multi-use trail perched higher in elevation and running along the central portion of the Park. The multi-use trail would vary in width, up to approximately 16-feet in certain areas, to allow for access to recreational features along the trail without inhibiting flow/circulation.

The proposed trail would tie into the terminus of the existing ART at the southern end of the Park. At various locations throughout the Park, the ART would diverge to form the main multi-use trail, as well as the passive (walking) trail, in order to reconnect to recreational opportunities for visitors. These recreational opportunities would include walking, running, or cycling along the ART, a play area for children, level and mounded (elevated) lawns for observation of the river and of the Capitol Building (looking north along V Street, SW), a dock for users who wish to access the park from the river, and the MHC.

With respect to the MHC, the building will be expanded southward to accommodate restrooms with separate exterior access. The boat dock that is presently accessible by entering the building would also be rebuilt, with new exterior access provided from a separate walkway and pier from the passive (walking) trail. The Center itself would continue to offer educational opportunities that enhance visitor experience. Limited parking options would remain outside the building. Parking would be redesigned to be Americans with Disabilities Act (ADA) accessible.

Just beyond the MHC, the ART would continue its connection north of the Park. Signage would be posted for park visitors at the northern extent of the Park, also adjacent to V Street, SW (central), and near the round-about adjacent to 1st Street, SW in the southern tip of the park. Aside from accessing the Park via the ART, visitors would have ample parking options to select from at the nearby mixed-use development (residential and commercial uses with private and public parking access). Additionally, the Navy Yard Metro Station (Green Line) is located approximately 5,000 feet north of Buzzard Point Park.

Reconfiguration of Roadways and Trail

The reconnection of the ends of the ART on either side of the site will enhance the experience for trail users and eliminate the need for trail users to search out alternate routes (i.e. streets) to reach other parts of the trail. The Park improvements will be done simultaneously with the proposed street widening of Half Street SW, from which the MHC is accessed. This will provide greater accessibility to the proposed facilities and Park after the improvements are complete and the number of visitors increases.

Design Criteria

Executive Order (EO) 11988, Floodplain Management, requires federal agencies to both maximize avoidance of long and short term impacts to floodplains and avoid direct or indirect support of development in the floodplain wherever there is a practicable alternative. Moreover, EO 11988 directs each agency to “reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by floodplains.”

The National Park Service, Director’s Order #77-2 (NPS DO 77-2) applies to all NPS proposed actions that have the potential to adversely affect the natural resources and functions of floodplains or increase flood risks. As stated in DO 77-2, it is NPS’ policy to:

- Protect and preserve natural resources and functions of floodplains;
- Avoid long and short term adverse effects due to occupancy or modification of floodplains;
- Avoid direct and indirect support of floodplain development and actions that have the potential to adversely affect the natural resources and functions of floodplains or increase flood risks; and,
- Restore natural floodplain values previously affected by land use activities within floodplains whenever practicable.

Additionally, and in compliance with EO 11988, any new construction of structures or facilities approved to be located within the 100-year floodplain would require accepted flood-proofing and other flood protection measures to the facilities designed to be applied and would conform to the National Flood Insurance Program (NFIP). In this project, the existing MHC is the only facility that will be involved; however, flood protection and resistance measures would be incorporated into the design of any renovations to the Center.

The District of Columbia participates in the NFIP and has enacted floodplain regulations for all new developments and substantial improvements to a structure located partially or entirely within Special Flood Hazard Areas (100-year floodplain), as outlined in Title 20, Chapter 31 Flood Hazard Rules of the District of Columbia Municipal Regulations. The purpose of the Flood Hazard Rules is to promote public health, safety, and general welfare, and minimize losses due to flooding by:

- “Regulating uses, activities, and development which, acting alone or in combination with other existing or future uses, activities, and development, will cause unacceptable increases in flood heights, velocities, and frequencies;
- Restricting or prohibiting certain uses, activities, and development from locating within areas subject to flooding;
- Requiring all those uses, activities, and developments that do occur in flood-prone areas to be protected in order to prevent flood damage; and,
- Protecting individuals from buying lands and structures which are unsuited for intended purposes because of flood hazards.”

District of Columbia Municipal Regulation 20 also stipulates that habitable spaces in buildings that are located in a floodplain must be located at least 1.5 feet above the minimum elevation of the 100-year floodplain. For this project, the MHC would not be considered habitable, nor would there be any overnight occupation associated with the proposed action.

Site Description

The Buzzard Point Park consists of a collection of parcels owned by the NPS on the southwest waterfront in the District of Columbia. Comprised of approximately 7.72 acres in total, the parcels only feature 3.35 acres of park property on land. The overall site features approximately 1,500 linear feet of shoreline along the Anacostia River. Within the park boundaries are portions of Half Street SW, V Street SW, and First Street SW. The project area is depicted previously in **Figure 1**.

The existing site is served by public water and sewer, and electricity is supplied to the site through overhead lines on First and Half Street SW. These utilities currently serve the MHC the marina office, and the public restrooms facility.

A majority of the existing infrastructure at the park is related to the previous marina use of the property and is in the central portion of the site. A gravel driveway provides access to the site from Half Street. Two structures remain from the marina including an approximately 800 square-foot one-story frame building that housed the marina offices, and an approximately 600 square-foot building that housed the marina's restroom and shower facilities. A variety of paved surfaces occur in the old marina portion of the park including concrete walkways, bituminous walkways, and gravel. A concrete retaining wall is situated next to the old dock facilities and concrete boat ramp.

The MHC is located at the northeastern end of the park and features an approximately 3,600 square-foot two-story brick building accessed by Half Street. The building is a former Potomac Electric Power Company (PEPCO) facility that is currently being used by the Earth Conservation Corps through an agreement with PEPCO and the NPS. The building sits directly on the Anacostia River with a fixed and floating dock system on the waterfront.

The riverfront edge of the park consists of several different edge treatments, including a concrete platform at the former marina docks, stone seawall, concrete revetment wall, and vegetated areas. The former marina area features a concrete boat launch pad that extends into the river. The ramp is quite steep and does not meet current standards for boat ramps.

Areas of the site that are not developed with pavement or gravel feature either maintained lawn or naturalized vegetation. The areas immediately surrounding the Earth Conservation Center and former marina consist of maintained turf. Vegetated areas along the riverbanks and on top of the seawalls contain a variety of small trees, shrubs, and woody vines. The existing conditions and site layout are shown in **Appendix A**.

Floodplains

Floodplains are defined by the NPS Floodplain Management Guideline as “the lowland and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, and including, at a minimum, that area subject to temporary inundation by a regulatory flood.” The Buzzard Point Park project area occurs on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), Panel Number 1100010057C, dated September 27, 2010 (**Appendix C**). The majority of the project area is within a 100-year floodplain (FEMA Flood Hazard Zone AE), in which there is a 1% chance of flooding in a given year. According to the FEMA FIRM map, 100-year flood elevation in the project vicinity is approximately +11.00 feet (FEMA 2010). A small portion of the park in the northwestern end of the project area occurs within the 500-year (0.2% chance) floodplain zone. In the central and southwestern portions of the park, the 100-year floodplain extends much further inland beyond the park boundaries (**Figure 4**).

Floodplain values include the ability of the floodplain to absorb increased water flows, recharge groundwater, and provide floodplain habitat. Floodplain values in the project area are highly limited due to the urbanized nature of the floodplain area and the Buzzard Point peninsula as a whole. Several existing structures and other impervious surfaces occur throughout the 100-year floodplain in the park,

including the Earth Conservation Center, old marina, and roadways and parking areas. Vegetated portions of the park provide minimal floodplain value, as they consist primarily of maintained lawn and a narrow riparian fringe along the riverbank. Long-term stability of the shoreline along the length of the project area is of concern, particularly because Buzzard Point Park is situated close to the confluence of the Anacostia and Potomac Rivers, making the area prone to high wave energy and shoreline erosion.

Wetlands

One riverine wetland (WET-1, the Anacostia River) was identified and delineated in the study area based on the FGDC Wetlands Classification Standard during a field investigation on December 13, 2017 (**Figure 5**). No palustrine wetlands were observed, as all vegetated areas adjacent to the Anacostia River were dominated by vegetation more characteristic of uplands and lacked hydric indicators. WET-1 consists of the western side of the Anacostia River running alongside the eastern portion of the study area, and was classified as a R1UBV system (Riverine Tidal Unconsolidated Bottom, Permanent-Tidal). The riverward side of the WET-1 boundary (2.5 meters below low water elevation) was mapped using the 2013 bathymetric data (DDOE, 2013). The area of WET-1 mapped for the proposed project consisted of approximately 5.69 acres and was delineated as open ended, continuing further to the northeast and southwest. Observable substrate along the banks of the river included silt, cobbles, and boulders. Steep banks with heights of 6 to 8 feet or greater were observed throughout the study area. The deeper portions of the Anacostia River beyond the 2.5-meter wetland boundary line are considered deepwater habitat per the FGDC Wetlands Classification Standard. As stated in Procedural Manual 77-1, deepwater habitats under the FGDC Standard are not considered wetlands and are not regulated by the NPS per EO 11990.



FIGURE 4
Floodplain Map

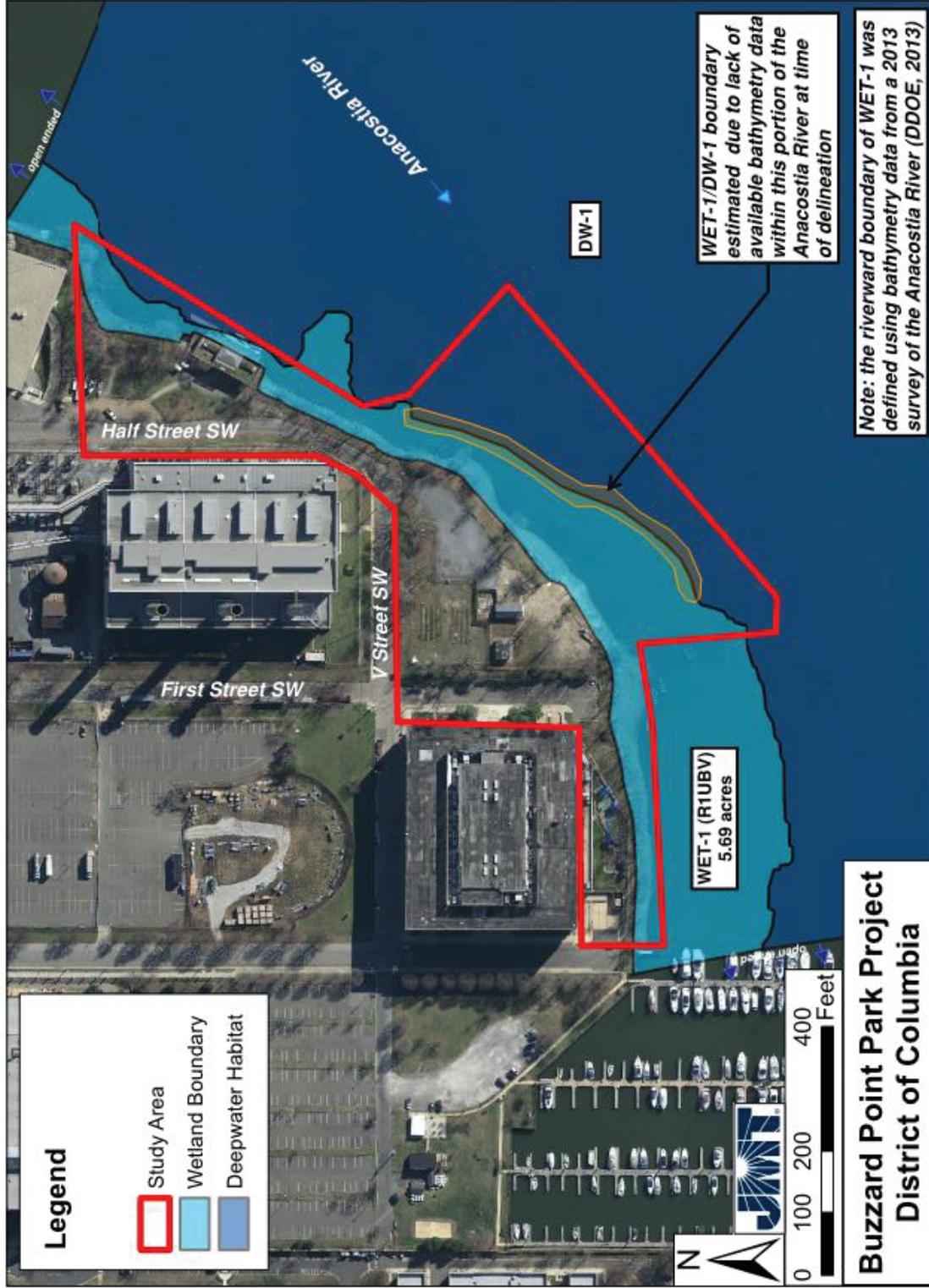


FIGURE 5
Wetlands Map

Wetlands Functions and Values Assessment

The riverine tidal wetland (Anacostia River) within the project area primarily functions to provide freshwater fish, shellfish, and other wildlife habitat, as well as recreational opportunities through boating. Many riverine wetland functions are highly limited due to the existing modification of the shoreline (e.g., stone seawall and concrete revetment walls) and overall urbanized landscape in the project vicinity. Please see **Table 1** below for a summary of the wetland functional assessment.

Based on the current impaired waters list per Section 303(d) of the U.S. Clean Water Act (CWA), the Lower Anacostia River is listed as fully supporting for the designated uses of ‘Navigation’ and ‘Protection and Propagation of Fish, Shellfish and Wildlife’, and is listed as not supporting for the designated uses of ‘Primary Contact Recreation’, ‘Secondary Contact Recreation and Aesthetic Enjoyment’, and ‘Protection of Human Health related to Consumption of Fish and Shellfish’. The primary factors contributing to non-compliance include high levels of *E. coli* and other bacteria, pollutants in the river sediments, and contaminated fish. Sources of pollution that continue to affect water quality in the Anacostia River include combined sewer overflows (CSOs), urban stormwater runoff/storm sewers, municipal point sources, and pollutants from upstream jurisdictions.

Table 1 – Functional Assessment of Riverine Wetland portion of Anacostia River

<u>Functional Value Parameter</u>	<u>Score</u>	<u>Explanation</u>
Flood Protection	Low	Based on the existing features, the proposed project should not result in any additional barriers to flood flow passage or increase the 100-year floodplain.
Water Quality	Low	The U.S. Environmental Protection Agency (US EPA) lists the Lower Anacostia River on the 303(d) list of impaired waters due primarily to high <i>E. coli</i> levels, pollutants in sediments, and toxin-contaminated fish.
Shoreline Erosion Control	Low	The existing river shoreline in the project area is lined in part with stone and concrete walls. Wave energy can be high in the vicinity of the project area due to the confluence of the Anacostia and Potomac rivers.
Aquatic Productivity	Medium	No palustrine wetlands are present adjacent to the river. However, Virginia Institute of Marine Sciences (VIMS) has recorded growing Submerged Aquatic Vegetation (SAV) populations along Buzzard Point Park between 2015 and 2017.
Fish and Wildlife Habitat	Medium	SAV population can provide cover for a variety of fish species.
Aesthetics	Low	Portions of river shoreline are lined with stone/concrete, and areas immediately adjacent to the park are heavily urbanized.
Recreation	Medium	Anacostia River is used for boating, but little public access to the river available in the project vicinity. The river is also not swimmable.

According to data from the VIMS, the presence of SAV has been recorded in the Anacostia River in the immediate vicinity of Buzzard Point Park from 2015 through 2017. The 2017 map depicted an SAV bed with moderate cover running from the southern side of the MHC to the southwestern end of the study area and continuing further west. Species noted included grassleaf mudplantain (*Heteranthera dubia*), coon's tail (*Ceratophyllum demersum*), American eelgrass (*Vallisneria spiralis*), and the non-native invasive waterhyacinth (*Hydrilla verticillata*). SAV serves as important habitat for aquatic life and can also improve water quality and sediment stabilization. SAV beds can benefit both juvenile and adult fish, and are suitable for refuge, feeding, and reproduction. A variety of fish species are known to inhabit the Anacostia River, including blueback herring, alewife, American shad, hickory shad, perch, catfishes, and striped bass.

Justification for Use of the Floodplain and Wetlands

While the site sits almost entirely within the 100-year floodplain of the Anacostia River, providing increased access to the water and increasing user amenities and function of the park is dependent upon its proximity to the Anacostia River and appropriate use of the floodplain. The Park is currently a public safety hazard, being in disrepair and closed off to the public. Much of the site is underutilized. Improving the site will bring increased recreational, educational, and environmental benefits to the community.

Proposed impacts to the Anacostia River would all occur in the portion of the river designated as a riverine wetland. The existing shoreline structures (e.g., concrete revetments and stone seawall) are in disrepair and need to be replaced. Under Option 2, stormwater management features would be built into the park to minimize impacts from erosion. Additionally, some wetland impacts would be avoided (compared to Option 1) because no revetment would be placed in the water along the newly built sea wall. Because the site occurs in the vicinity of the confluence of the Anacostia and Potomac rivers, wave action and river currents are strong and contribute to an increased potential for erosion, which will be addressed through sea wall design. Long-term stability of the Park must be addressed through design.

Alternatives

The environmental assessment prepared for this project considered three alternatives including the No-Action Alternative (Alternative A), the previously described proposed alternative (Alternative B, Option 2), and an alternative that includes revetment placement in the Anacostia River (Alternative B, Option 1). The alternatives to the proposed action (Option 2) are further described below.

Alternative B, Option 1

This alternative is largely similar to the proposed action (Alternative B, Option 2). Under Option 1, new stone revetment would be placed along the length of the seawall in the Anacostia River to approximately the mean low water level (14 to 21 feet). The stone revetment would act to reinforce and protect the seawall from erosion and storm surge while improving the visual appearance of the shoreline and providing access to the river. On the landward side of the seawall, a passive walking trail would follow along the edge of the wall in the central section of the Park. Construction activities in the 100-year floodplain would be similar to the proposed alternative; however, permanent impacts to the riverine wetland portion of the Anacostia River would be greater due to placement of the stone revetment in the river. In turn, this alternative would reduce scour protection of the river shoreline along Buzzard Point Park.

No-Action Alternative

Under the No-Action Alternative, no new facilities would be constructed in Buzzard Point Park. The Park would continue to be inaccessible to visitors due to the safety hazards of the deteriorating features. There would be no recreational opportunities since there would be no access for the community. Existing marina infrastructure, including the marina office, restrooms, concrete boat ramp, and concrete pad, would remain in disrepair and the space would remain underutilized since the facility is unmaintained and closed

off to visitors. The ART trail would not continue through the Park and would stay as is, with abrupt endings on the northern and southern sides of the Park. The MHC would remain open as a single use facility. The existing dock and restrooms at the facility would only be accessible from the inside of the building. Parking accommodations for the Center would remain the same, without Americans with Disabilities Act (ADA) accessibility. The northern portion of the Park would remain overgrown by trees and vegetation, with the view of the Anacostia River partially obstructed. No direct or indirect impacts to the floodplain or wetlands would occur under this alternative.

Project Impacts

Floodplain Impacts

Under both Alternative B options, existing trees, overgrown vegetation, and infrastructure associated with the Park and former marina (concrete, asphalt, buildings) would be demolished and removed, and the existing seawall would be removed and replaced with a reinforced concrete seawall. Other improvements would include an extension of the ART through the Park, a play area for children, level and mounded (elevated) lawns, a new dock, renovations to the MHC and existing dock, and ADA accessible parking.

Impervious surfaces under both Alternative B options include the passive and multi-use trails, public plaza, parking, and the MHC. Grading activities would raise and lower the elevations up to three feet in various locations in the 100-year floodplain; however, the final grading plan would be determined during final design, and site-specific studies would be utilized to adjust the final design and ensure there are no increases to the 100-year water surface elevation on adjacent properties.

Table 2 provides a comparison of impacts to the floodplain for the Alternative B options.

Table 1. Alternative B Floodplain Impacts

Impact	Alternative B, Option 1	Alternative B, Option 2
Temporary Disturbance within 100-year floodplain	156,900 square feet	157,900 square feet
Change in impervious surfaces within 100-year floodplain compared to existing conditions (Permanent Disturbance)	Increase from 52,350 square feet to 70,455 square feet	Increase from 52,350 square feet to 69,030 square feet
Change in impervious surfaces within 500-year floodplain compared to existing conditions (Permanent Disturbance)	Increase from 5,365 square feet to 8,590 square feet	Increase from 5,365 square feet to 8,590 square feet

Under both Alternative B options, impacts to natural functions of the floodplain such as flood storage, flood conveyance, groundwater recharge, habitat, and trapping of sediments would be direct and slightly adverse primarily due to the increase in impervious surfaces, although these functions are already limited under existing conditions. However, impacts to other natural functions of the floodplain such as reducing excessive erosion and removing pollutants from waters are expected to be direct and beneficial due to new features including stormwater management. With regard to flood risk, impacts from Alternative B would be negligible because an increase to the 100-year water surface is not expected and all infrastructure would be designed to resist flood flows and velocities.

When considering the relative magnitude of the Anacostia River floodplain, both options under Alternative B would have negligible direct and indirect impacts to functions of the floodplain and flood risk. Though impervious surfaces within the Park would increase about 20,000 square feet, or about 35%,

other aspects of the proposed changes would help to compensate for this impact. Demolition of the former marina office building, restroom facility, and concrete pads would create open space to then be regraded and replanted. Additionally, the varying widths of the trail extension allow for trail features to be worked around as opposed to taken out, i.e. the trail would be a smaller width to pass by present trees but then wider when there is open space to do so. This culmination of design features work to counterbalance the increase in impervious surfaces associated with the proposed alternative.

Wetland Impacts

Impacts to the riverine wetland portion of the Anacostia River would result from the removal of the concrete boat ramp and replacement of the stone seawall, as well as the placement of revetment along the shoreline in the proposed alternative. Approximately 26,690 square feet of total permanent wetland impacts are anticipated for Option 1 due to the placement of the stone revetment between the seawall and the mean low water level, plus the installation of the proposed overlook trail, dock, and plaza area over the riverine wetland. Total permanent wetland impacts would be reduced under the proposed alternative, Option 2, to 14,539 square feet, and would only result from the installation the proposed overlook trail, dock, and plaza areas that extend out over the river, which is expected to permanently impact and prohibit establishment of SAV underneath these areas.

Table 3 below provides a comparison of temporary and permanent wetland impacts for the Alternative B options.

Table 3. Alternative B Wetland Impacts to the Anacostia River

Impact	Alternative B, Option 1	Alternative B, Option 2
Temporary Disturbance	29,310 square feet	41,461 square feet
Permanent Disturbance from proposed stone revetment between seawall and mean low water level	17,500 square feet	0 square feet
Permanent Disturbance from proposed overlook trail, plaza, and dock areas over the river	7,292 square feet	11,896 square feet
Permanent Disturbance from proposed overlook at First Street, SW to non-NPS wetlands	1,898 square feet	2,643 square feet

Mitigation

Avoidance and minimization measures were incorporated throughout the project design to reduce impacts to sensitive resources. General mitigative measures would also include the use of standard best management practices and erosion and sediment control measures throughout the construction period.

Floodplain Mitigation

The proposed action would incorporate an adequate amount of improvements to the floodplain area to balance out the negative impacts resulting from an increase in impervious area. Consequently, it is not anticipated that the proposed action would significantly alter the natural and beneficial functions of the floodplain; therefore, no floodplain mitigation would be required. The project's proposed infrastructure would be designed to resist flood flows and velocities. Additionally, the design would ensure that there would be no increase to the 100-year water surface on adjoining properties.

As previously discussed, there is no overnight occupation of the MHC associated with the proposed action. Therefore, the potential impact on human health and life accompanying the daily use of the MHC would be mitigated using set procedures which include, but are not limited to, notification, evacuation, and closure by the appropriate authorities, as needed.

Wetland Mitigation

The NPS Procedural Manual 77-1 states that wetland compensation is required if adverse impacts to wetlands from the project total 0.1 acres or more. Given that permanent impacts to the riverine wetland area under the proposed alternative total approximately 14,539 square feet (0.334 acres), wetland mitigation would be required for the proposed project. Based on impacts to similar riverine wetland areas with mud and/or SAV bottoms on other projects completed by the NPS, it is anticipated that wetland mitigation would occur at a 10:1 ratio and likely involve invasive plant management. If wetland impacts ultimately total at least 0.1 acres, a more detailed wetland mitigation plan satisfying the requirements in NPS Procedural Manual 77-1 will need to be developed.

Compliance with Development Requirements

Communities that participate in the National Flood Insurance Program, such as Washington, DC, are required to enforce floodplain management regulations that meet the requirements of the National Flood Insurance Program. Furthermore, in order to comply with Executive Order 11988, Federal Agencies must demonstrate there are no reasonable alternatives outside of the floodplain and study ways to reduce the flood risk associated with the proposed action. Therefore, guidelines for regulated development in the 100-year floodplain so that there are minimal impacts to the floodplain, and adherence to general building and development requirements as outlined in the National Flood Insurance Program requirements will be followed.

Development in the floodway is also an issue to consider for compliance purposes. Development is generally not permitted in the floodway, and fill is prohibited in the floodway. The floodplain consists of two types of flood areas: the floodway and the flood fringe. The floodway is the area that encompasses the stream channel and is where floodwaters generally flow the fastest. By definition, it is the area where fill cannot be placed without resulting in a cumulative one-foot rise in the 100-year floodwater elevation. The flood fringe comprises the remainder of the floodplain that extends beyond the floodway area. According to the detailed hydraulic study for Washington, DC, the Anacostia River does not have a designated floodway (FEMA, 2010); however, given the location of the proposed development activities, it is anticipated that impacts within the presumed floodway would be negligible. Therefore, it is anticipated that the proposed actions under the preferred alternative would be able to comply with these requirements.

Conclusions

The proposed action would include activities located within the regulatory 100-year floodplain of the Anacostia River. However, no detriments to the floodplain are expected to result from the improvements. Avoidance of placing cut stone beyond the seawall, and the expansion of impervious areas would not cause any measurable effect to the floodplain due to the magnitude of the floodplain itself. There is no risk to human safety, since the MHC would not be permanently inhabited, and the site could be quickly evacuated in the case of flooding. The project would not increase the risk associated with flooding for the 100-year event and would not result in an increase to the 100-year water surface elevation. Therefore, it has been determined that the proposed action would be consistent with Executive Order 11988.

The riverine wetland area within the Anacostia River would also be permanently impacted by the proposed alternative due to the replacement of the stone seawall, removal of the existing concrete boat ramp, and shading impacts from overlooks and the boat ramp and dock. This project would adversely impact approximately 0.334 acres of riverine wetlands. A wetland mitigation plan would be developed to adequately compensate for the proposed adverse impacts in order to be consistent with Executive Order 11990.

STATEMENT OF FINDINGS
APPENDIX A:
EXISTING CONDITIONS

STATEMENT OF FINDINGS
APPENDIX B:
PROPOSED ALTERNATIVE PLAN

UNITED STATES DEPARTMENT OF THE INTERIOR
 NATIONAL PARK SERVICE
BUZZARD POINT PARK
IMPROVEMENTS

NATIONAL CAPITAL PARKS - EAST
 WASHINGTON D.C.

PMIS #243146
 IDIQ CONTRACT NO. P14PC00241
 TASK ORDER P17PD02269



Mark	Sheet	REVISION	Date	Initial	QUALITY DESIGN CERTIFICATION
36-438	REVISED PER NPS COMMENTS	10/22/16	MO	<input type="checkbox"/> Prepared in Accordance with Design Development (Title 1)	
35-236	REVISED PER NPS COMMENTS	11/02/16	MO	<input type="checkbox"/> Variance from Design Development (Title 1)	
35-234	REVISED PER NPS COMMENTS, PLAY AREA	02/11/17	MO	<input type="checkbox"/> Approved by Superintendent on _____ Date _____	
35-233	REVISED PER NPS COMMENTS	07/03/16	MO	<input type="checkbox"/> Completed Drawing, Not Reviewed by Design Development (Title 1)	
35-232	REVISED PER NPS COMMENTS			<input type="checkbox"/> Project Manager _____ Date _____	



30% DESIGN DRAWINGS
 UNITED STATES
 DEPARTMENT OF THE INTERIOR
 NATIONAL CAPITAL PARKS - EAST

TITLE OF DRAWING
COVER SHEET
 LOCATION WITHIN PARK
BUZZARD POINT PARK SITE
 NAME OF PARK
BUZZARD POINT PARK
 REGION
DISTRICT OF COLUMBIA
 DRAWING NO.
 PKG NO. _____ SHEET NO. **1** OF **14**

VICINITY MAP



SITE

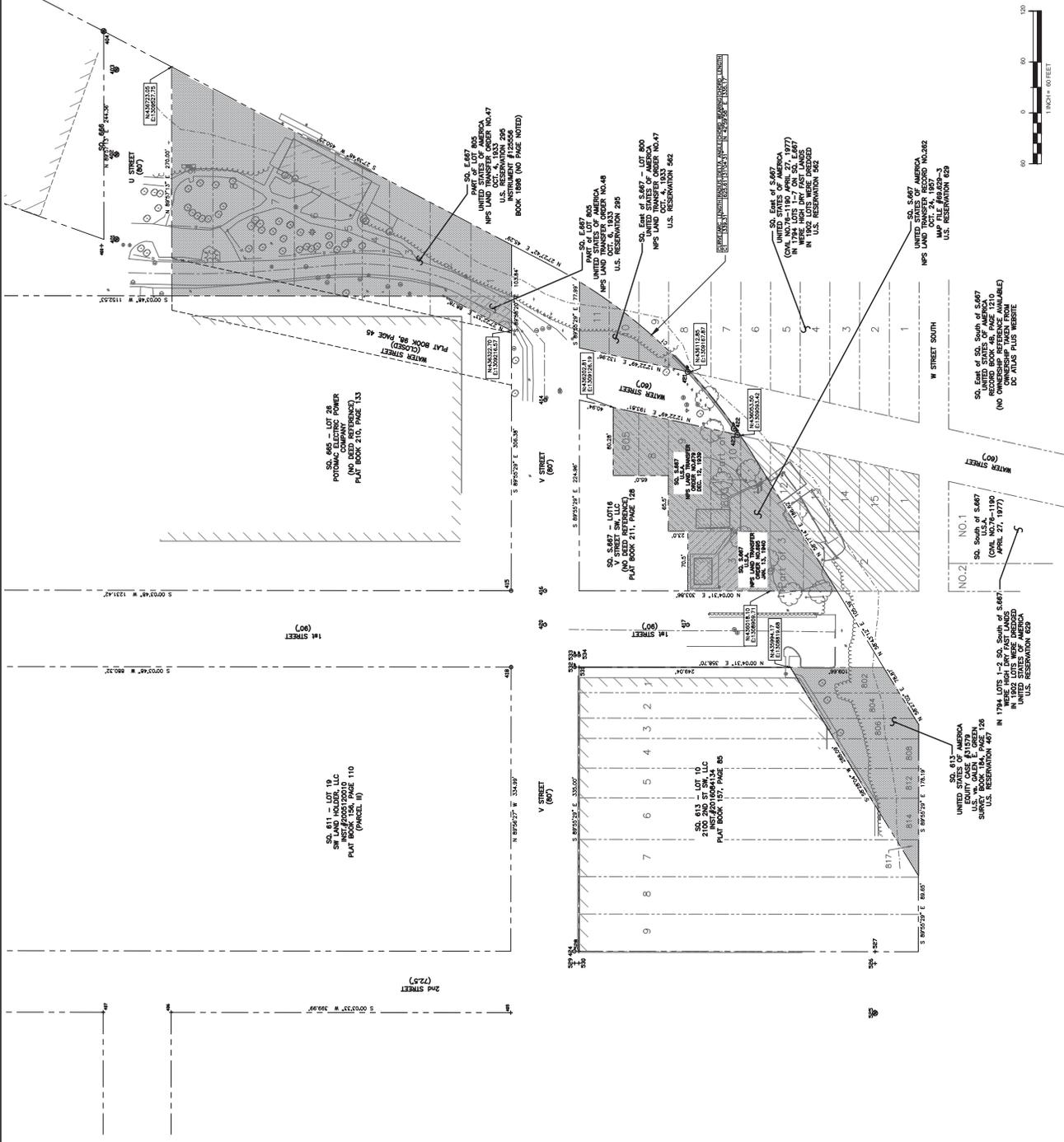
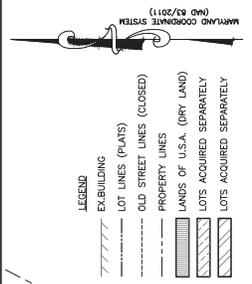
DISTRICT OF COLUMBIA



INDEX OF DRAWINGS

SHEET # OF #	SUB SHEET	SHEET TITLE
1 OF 14	S1	COVER SHEET
2 OF 14	S2	BOUNDARY SURVEY WORKSHEET
3 OF 14	S3	EXISTING CONDITIONS TOPOGRAPHIC WORKSHEET
4 OF 14	S4	EXISTING CONDITIONS BATHYMETRIC WORKSHEET
5 OF 14	S5	LAYOUT PLAN OPTION 1
6 OF 14	S6	LAYOUT PLAN OPTION 2
7 OF 14	S7	SECTIONS OPTION 1
8 OF 14	S8	SECTIONS OPTION 2
9 OF 14	S9	GRADING PLAN OPTION 1
10 OF 14	S10	GRADING PLAN OPTION 2
11 OF 14	S11	LAYOUT PLAN OPTION 1
12 OF 14	S12	LAYOUT PLAN OPTION 2
13 OF 14	S13	SECTIONS OPTION 1
14 OF 14	S14	SECTIONS OPTION 2





RECORDED PROPERTY MONUMENTATION

POINT	BOOK	PAGE	XCUT	DESCRIPTION
401	438505	80	1503116.95	XCUT
402	438505	80	1503116.95	XCUT
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499	438505	80	1503116.95	XCUT
500	438505	80	1503116.95	XCUT

NOTE: MONUMENTATION WAS LOCATED OUTSIDE OF THE SUBJECT PROPERTY AND MAY NOT BE PLOTTED HEREON. (NORTH TO "Q" STREET)

HEREBY CERTIFY THAT I AM A LICENSED LAND SURVEYOR IN THE DISTRICT OF COLUMBIA AND THAT I HAVE CONDUCTED THIS SURVEY IN COMPLIANCE WITH THE DISTRICT OF COLUMBIA MUNICIPAL REGULATIONS.

DAVID KEITH STICKLES
PROFESSIONAL LAND SURVEYOR, REGISTRATION NO. LS 901932

GENERAL NOTES

1. THE IMPROVEMENTS SHOWN HEREON ARE BASED ON A FIELD-RUN TOPOGRAPHIC SURVEY PERFORMED BY JOHNSON, MIRANDA & THOMPSON (JMT) IN JANUARY 2019 AND REFLECTS SITE CONDITIONS AS OF THAT DATE.
2. THE PROPERTY MONUMENTATION SHOWN HEREON WAS FIELD LOCATED BY JMT IN JANUARY & FEBRUARY 2019.
3. CORNER REFERENCE TO THE MARYLAND STATE PLANE COORDINATE SYSTEM (NAD 83(2011)) ZONE 18Q UTM EPOCH 2010 WAS DETERMINED BY MULTIPLE GPS RTK (KINET) OBSERVATIONS ON JANUARY 4, 5, & 12, 2018.
5. THIS BOUNDARY SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT.
6. EXISTING BOUNDARY SURVEY INFORMATION WAS PROVIDED BY THE DC SURVEYOR'S OFFICE.
7. NO REPRESENTATIONS ARE MADE BY THE UNDERSIGNED SURVEYOR AS TO THE EXISTENCE OR LOCATION OF ANY EASEMENT OR OTHER ENCUMBRANCES BEYOND THOSE SHOWN HEREON.
8. THE OWNER INFORMATION WAS TAKEN FROM PUBLIC RECORDS OF THE DISTRICT OF COLUMBIA WEB SERVICE "DC ATLAS PLUS" AND "DC PROPERTY QUEST".

DESIGNED: FELDMAN
DRAWN: FELDMAN
CHECKED: FELDMAN
DATE: 8-31-2018

SUB SHEET NO. S2

TITLE OF SHEET
BOUNDARY SURVEY WORKSHEET
SITE IMPROVEMENTS
AT BUZZARD POINT PARK

DRAWING NO. _____
PAPER NO. _____
SHEET 2 of 14

GENERAL NOTES

1. THIS SURVEY WAS BASED ON A FIELD-RUN TOPOGRAPHIC SURVEY PERFORMED BY JOHNSON, MIRMIRAN & THOMPSON (JMT) ON APRIL 23, 2018 AND REFLECTS SITE CONDITIONS AS OF THAT DATE.
2. COORDINATES ARE REFERENCED TO THE MARYLAND STATE COORDINATE SYSTEM (MS-CRS) AS DETERMINED BY GPS RTN (KEYNET) OBSERVATIONS ON APRIL 23, 2018.
3. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)(GEOID 128) AS DETERMINED BY GPS RTN (KEYNET) OBSERVATIONS COMBINED WITH ECHO SOUNDING READINGS ON APRIL 23, 2018.

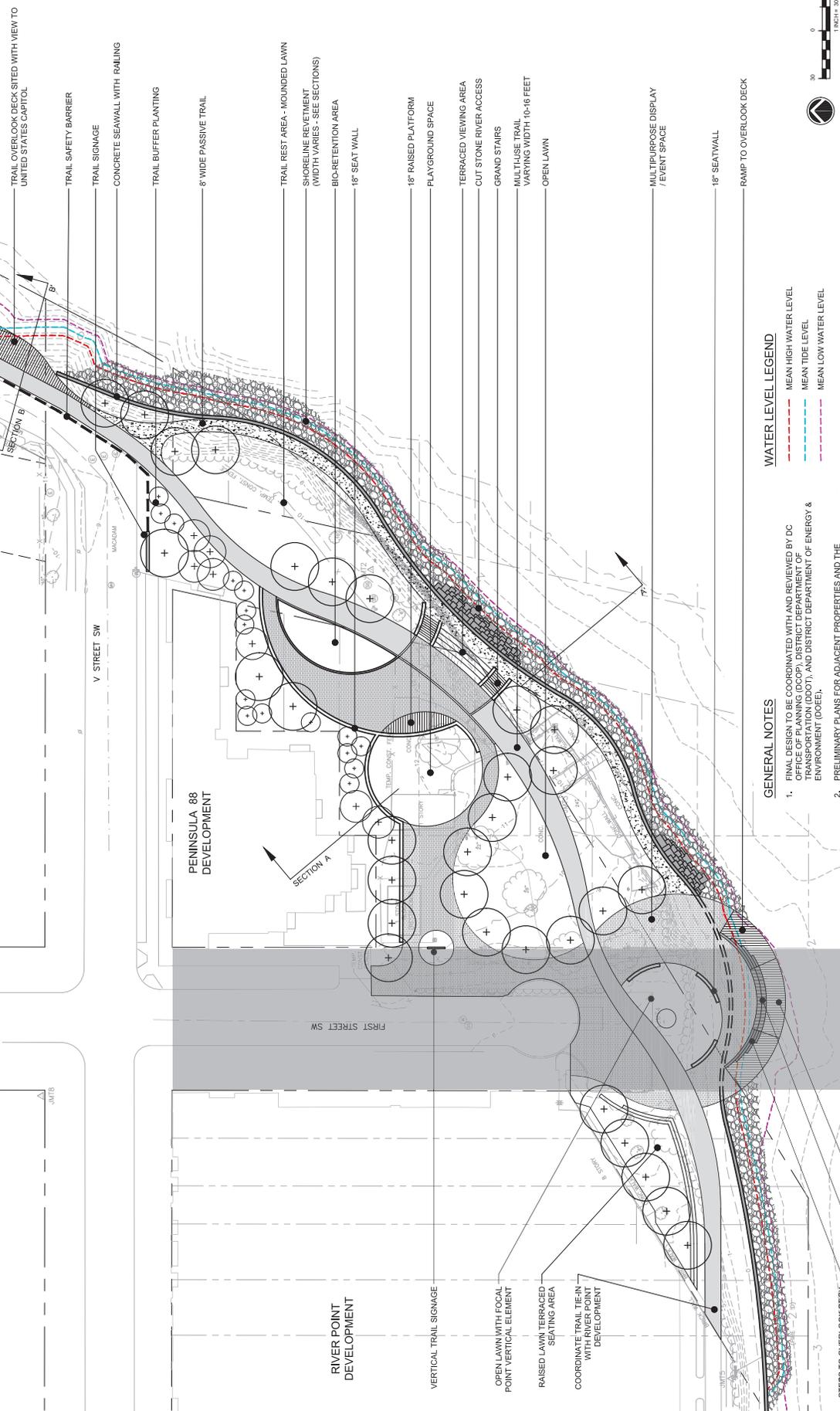


DESIGNED: FELDMAN GMB	TITLE OF SHEET EXISTING CONDITIONS BATHYMETRICS WORKSHEET	DRAWING NO.
FELDMAN	SUB SHEET NO. S4	PAISSING NO.
TECH. REVIEW:	SITE NO. SHEETS	SHEET
DATE: 8-31-2018	AT BUZZARD POINT PARK	4 of 14

NOTE:
FOR DETAILED TOPOGRAPHIC INFORMATION SEE SHEET 3 OF 11

MATCHLINE

MATCHLINE



TRAIL OVERLOOK DECK SITED WITH VIEW TO UNITED STATES CAPITOL

TRAIL SAFETY BARRIER

TRAIL SIGNAGE

CONCRETE SEAWALL WITH RAILING

TRAIL BUFFER PLANTING

8' WIDE PASSIVE TRAIL

TRAIL REST AREA - MOUNDED LAWN

SHORELINE RETENEMENT (WIDTH VARIES - SEE SECTIONS)

BIO-RETENTION AREA

18" SEAT WALL

18" RAISED PLATFORM

PLAYGROUND SPACE

TERRACED VIEWING AREA

CUT STONE RIVER ACCESS

GRAND STAIRS

MULTIUSE TRAIL VARYING WIDTH 10-16 FEET

OPEN LAWN

MULTIPURPOSE DISPLAY / EVENT SPACE

18" SEATWALL

RAMP TO OVERLOOK DECK

V STREET SW

PENINSULA 88 DEVELOPMENT

FIRST STREET SW

RIVER POINT DEVELOPMENT

VERTICAL TRAIL SIGNAGE

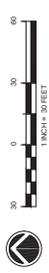
OPEN LAWN WITH FOCAL POINT VERTICAL ELEMENT

RAISED LAWN TERRACED SEATING AREA

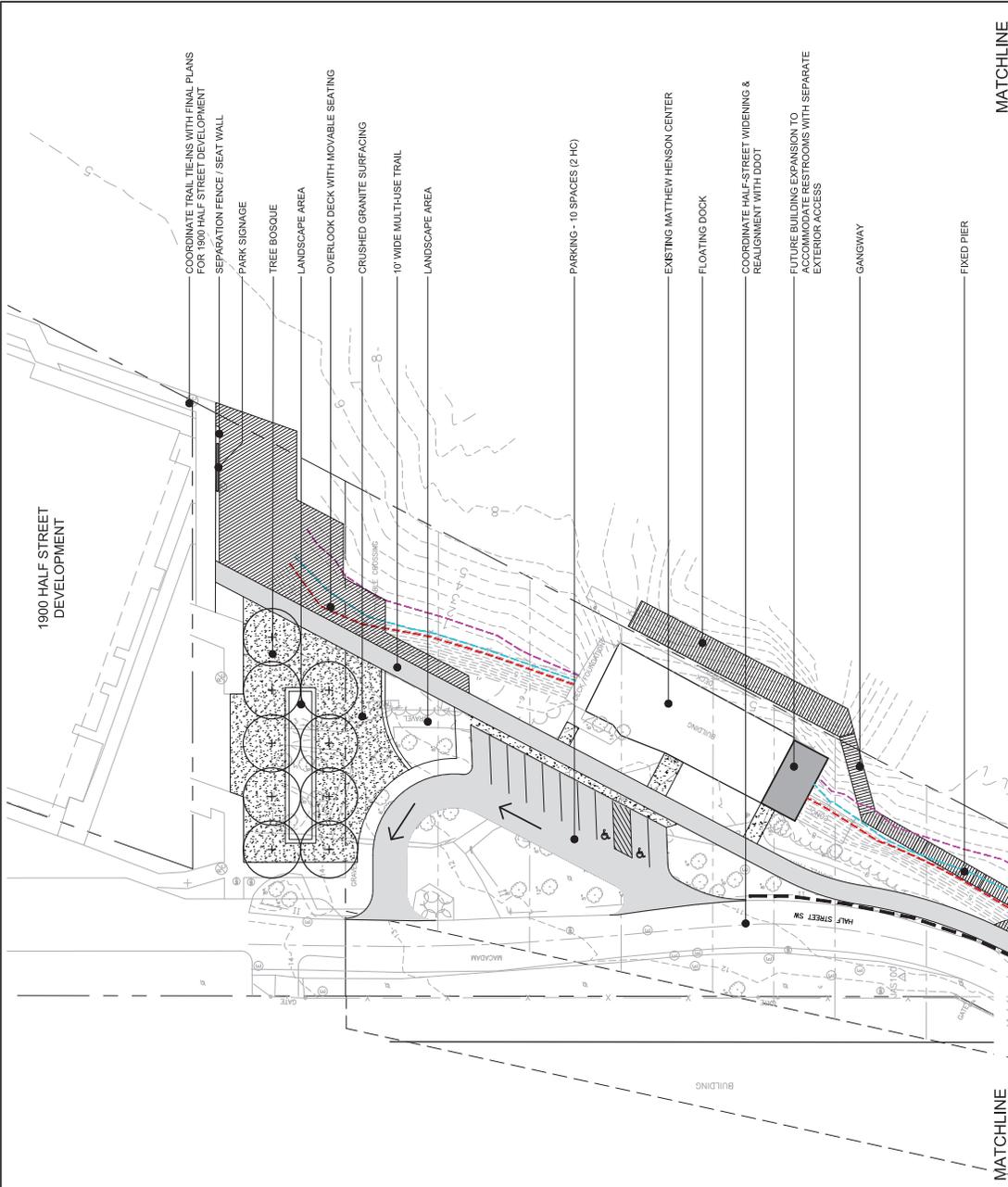
COORDINATE TRAIL TIE-IN WITH PENINSULA 88 DEVELOPMENT



- GENERAL NOTES**
- FINAL DESIGN TO BE COORDINATED WITH AND REVIEWED BY DC OFFICE OF PLANNING (DCOP), DISTRICT DEPARTMENT OF ENVIRONMENT (DDOT), AND DISTRICT DEPARTMENT OF ENERGY & ENVIRONMENT (DCEE).
 - PRELIMINARY PLANS FOR ADJACENT PROPERTIES AND THE DEVELOPMENT OF PENINSULA 88 DEVELOPMENT ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY; FINAL DESIGNS ARE SUBJECT TO CHANGE.
 - AREAS DESIGNATED AS BIO-RETENTION WILL SERVE TO RETAIN 6% OF SURFACE RUNOFF FROM PENINSULA 88 DEVELOPMENT, 6% OF SURFACE RETENTION, 18% OF AMENDED SOILS, AND 12% OF UNDERGROUND STONE STORAGE.



DESIGNED: AM	TITLE OF SHEET LAYOUT PLAN OPTION 1	DRAWING NO.
AS	SITE IMPROVEMENTS AT BUZZARD POINT PARK	SHEET 5 of 14
TECH. REVIEW: MG		
DATE: 8-31-2018	SUB SHEET NO. S5	PAIS/PGK NO.



1900 HALF STREET DEVELOPMENT

MATCHLINE

MATCHLINE

- COORDINATE TRAIL TIE INS WITH FINAL PLANS FOR 1900 HALF STREET DEVELOPMENT
- SEPARATION FENCE / SEAT WALL
- PARK SIGNAGE
- TREE BOSQUE
- LANDSCAPE AREA
- OVERLOOK DECK WITH MOVABLE SEATING
- CRUSHED GRANITE SURFACING
- 10' WIDE MULTI-USE TRAIL
- LANDSCAPE AREA
- PARKING - 10 SPACES (2 HC)
- EXISTING MATTHEW HENSON CENTER
- FLOATING DOCK
- COORDINATE HALF-STREET WIDENING & REALIGNMENT WITH DDOT
- FUTURE BUILDING EXPANSION TO ACCOMMODATE RESTROOMS WITH SEPARATE EXTERIOR ACCESS
- GANGWAY
- FIXED PIER



- GENERAL NOTES**
- FINAL DESIGN TO BE COORDINATED WITH AND REVIEWED BY DC OFFICE OF PLANNING (DCOP), DISTRICT DEPARTMENT OF TRANSPORTATION (DDOT), AND DISTRICT DEPARTMENT OF ENERGY & ENVIRONMENT (DDEE).
 - PRELIMINARY PLANS FOR ADJACENT PROPERTIES AND THE CUL-DE-SAC AT FIRST STREET PROVIDED BY DEVELOPERS AND DDOT. PLANS ARE SHOWN FOR CONTEXTUAL PURPOSES ONLY. FINAL DESIGNS ARE SUBJECT TO CHANGE.

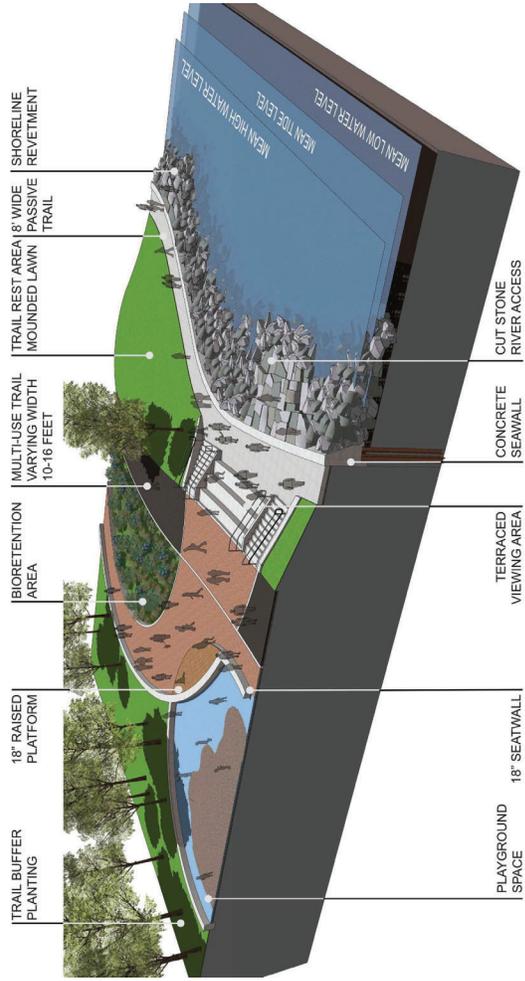
DESIGNED: AM	DATE: 8-31-2018	SUB SHEET NO. S6	TITLE OF SHEET LAYOUT PLAN OPTION 1	DRAWING NO.
AS MG	TECH. REVIEW: MG			PAISPKG NO.





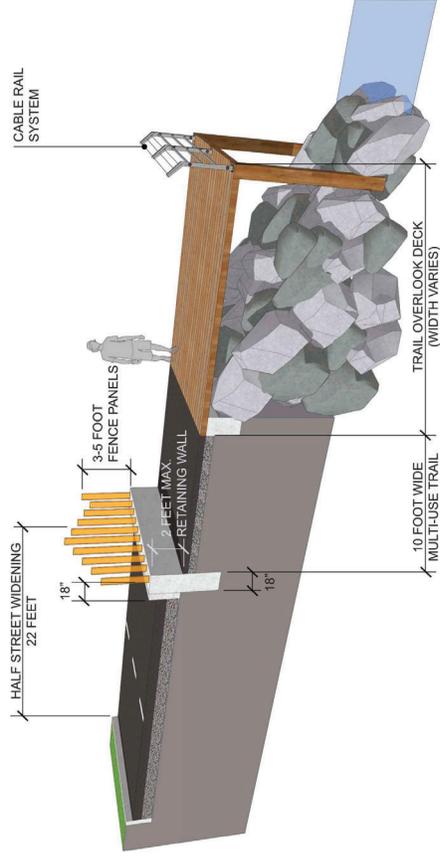
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NOT TO SCALE



ISOMETRIC SECTION A-A'

NOT TO SCALE



CROSS-SECTION B-B'

NOT TO SCALE

DESIGNED: AM
 6/20/18
 AS
 TECH. REVIEW: MG
 DATE: 8-31-2018

TITLE OF SHEET

SECTIONS
OPTION 1
 SITE IMPROVEMENTS
 AT BUZZARD POINT PARK

S7

SUB SHEET NO.

DRAWING NO.

PAIS/PGK NO.

SHEET

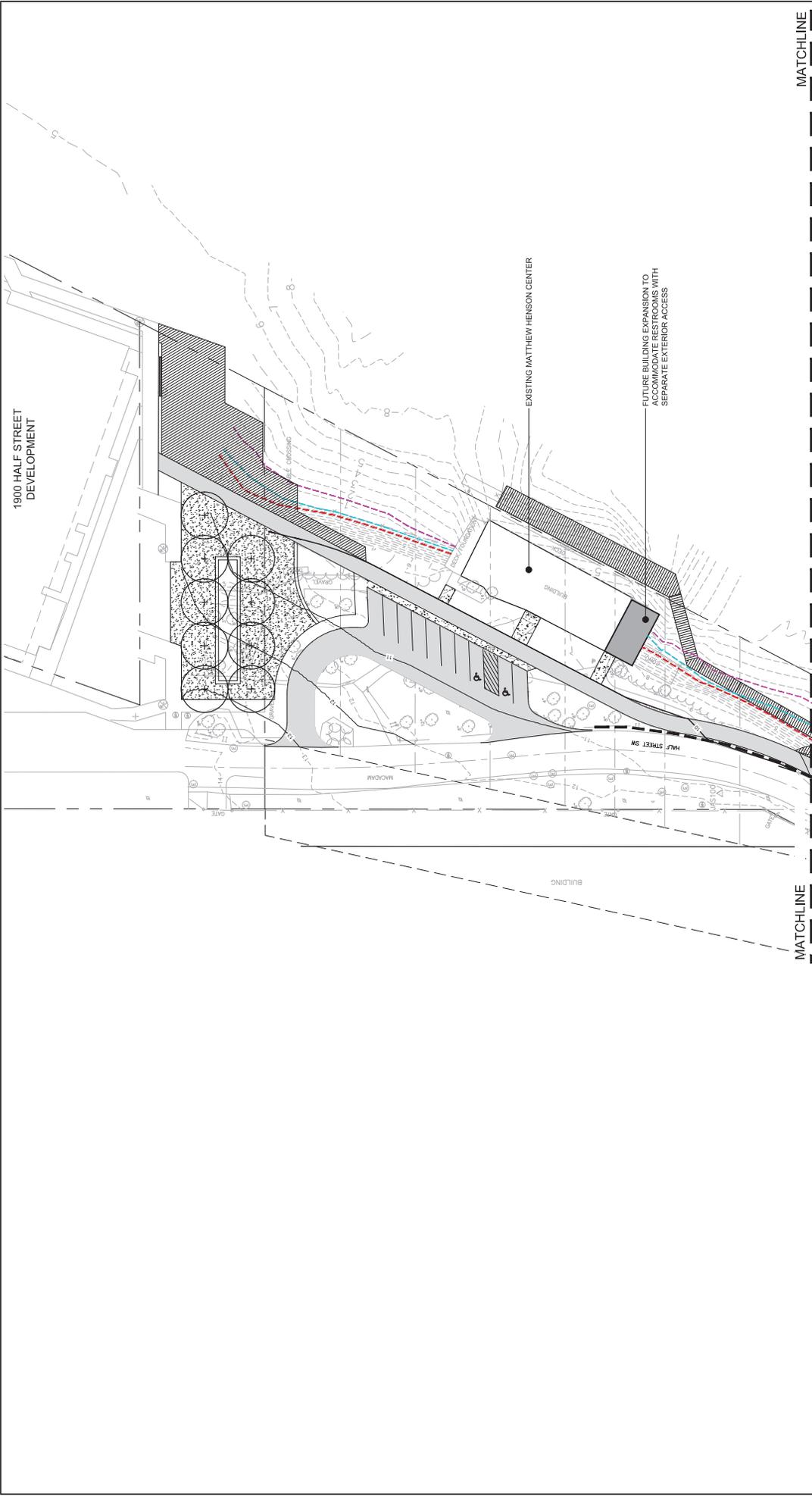
7 OF 14

MATCHLINE

MATCHLINE



DESIGNED: AM GDD	SUB SHEET NO. S8	TITLE OF SHEET GRADING PLAN OPTION 1 SITE IMPROVEMENTS AT BUZZARD POINT PARK	DRAWING NO. _____
AS TECH. REVIEW: MG			PLANS/PG. NO. _____
DATE: 8-31-2018			SHEET 8 of 14



MATCHLINE

MATCHLINE



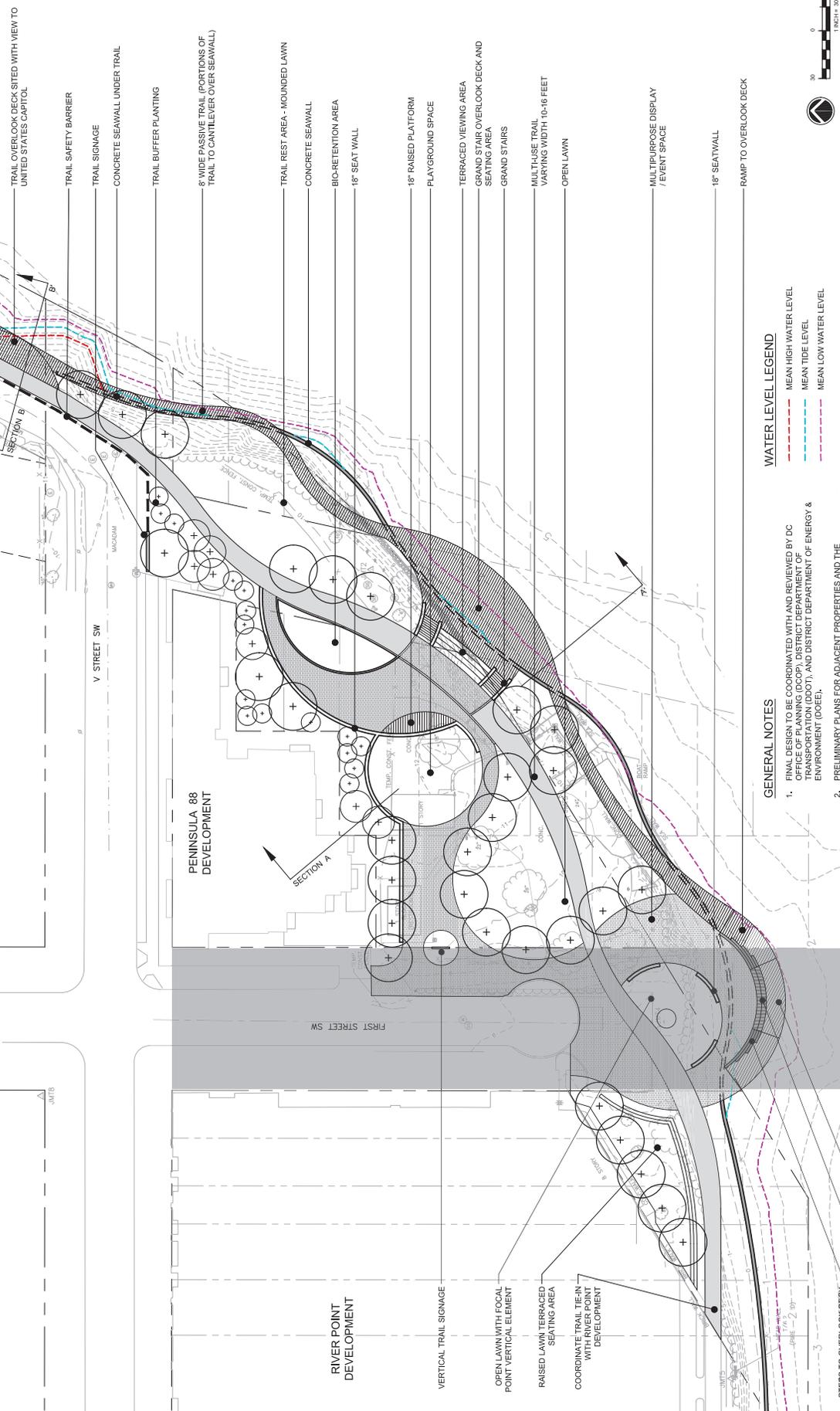
WATER LEVEL LEGEND

---	MEAN HIGH WATER LEVEL
---	MEAN TIDE LEVEL
---	MEAN LOW WATER LEVEL

DESIGNED: AM 6/20/18	SUB SHEET NO. S9	TITLE OF SHEET GRADING PLAN OPTION 1 SITE IMPROVEMENTS AT BUZZARD POINT PARK	DRAWING NO. _____
TECH. REVIEW: MG	DATE: 8-31-2018	PAUSE/ISSUE NO. _____	SHEET 9 of 14

MATCHLINE

MATCHLINE



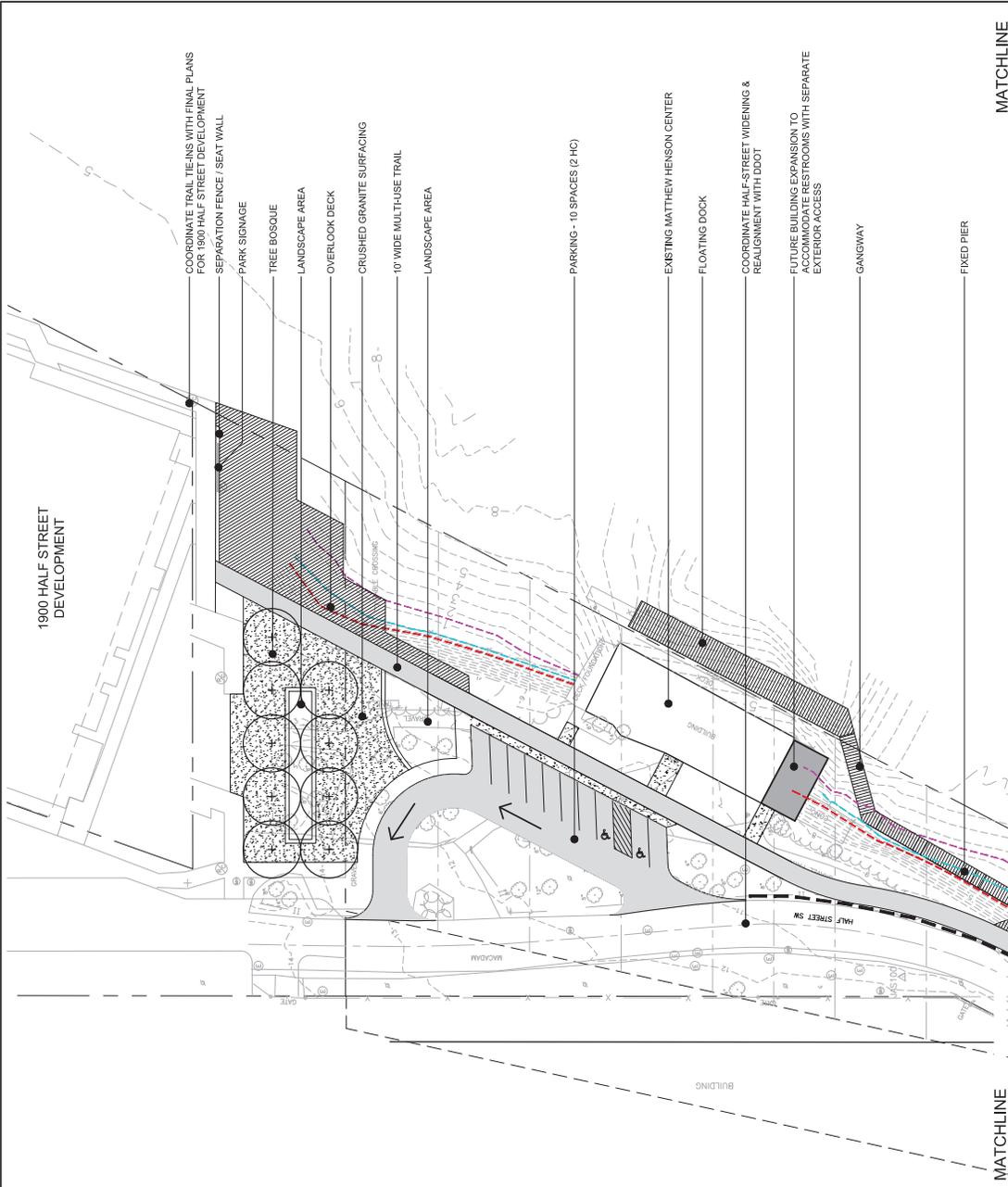
WATER LEVEL LEGEND

- MEAN HIGH WATER LEVEL
- MEAN TIDE LEVEL
- MEAN LOW WATER LEVEL

- GENERAL NOTES**
- FINAL DESIGN TO BE COORDINATED WITH AND REVIEWED BY DC OFFICE OF PLANNING (DCOP), DISTRICT DEPARTMENT OF ENVIRONMENT (DDE), AND DISTRICT DEPARTMENT OF ENERGY & ENVIRONMENT (DCEE).
 - PRELIMINARY PLANS FOR ADJACENT PROPERTIES AND THE COURSE OF THE RIVER ARE PROVIDED BY DEVELOPERS AND DCOT. CHANGES ARE SHOWN IN RED FOR CLARITY. PRELIMINARY DESIGNS ARE SUBJECT TO CHANGE.
 - AREAS DESIGNATED AS BIO-RETENTION WILL SERVE TO RETAIN 6% OF SURFACE RUNOFF FROM PENINSULA 88 DEVELOPMENT, 6% OF SURFACE RETENTION, 18% OF AMENDED SOILS, AND 12% OF UNDERGROUND STONE STORAGE.



DESIGNED: AM	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
AS		LAYOUT PLAN	
TECH REVIEW: MG	S10	OPTION 2	
DATE: 8-31-2018		SITE IMPROVEMENTS	
		AT BUZZARD POINT PARK	
			10 of 14



1900 HALF STREET DEVELOPMENT

COORDINATE TRAIL TIE INS WITH FINAL PLANS FOR 1900 HALF STREET DEVELOPMENT

SEPARATION FENCE / SEAT WALL

PARK SIGNAGE

TREE BOSQUE

LANDSCAPE AREA

OVERLOOK DECK

CRUSHED GRANITE SURFACING

10' WIDE MULTI-USE TRAIL

LANDSCAPE AREA

PARKING - 10 SPACES (2 HC)

EXISTING MATTHEW HENSON CENTER

FLOATING DOCK

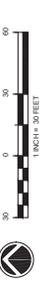
COORDINATE HALF-STREET WIDENING & REALIGNMENT WITH DDOT

FUTURE BUILDING EXPANSION TO ACCOMMODATE RESTROOMS WITH SEPARATE EXTERIOR ACCESS

GANGWAY

FIXED PIER

MATCHLINE



WATER LEVEL LEGEND

- MEAN HIGH WATER LEVEL
- MEAN TIDE LEVEL
- MEAN LOW WATER LEVEL

GENERAL NOTES

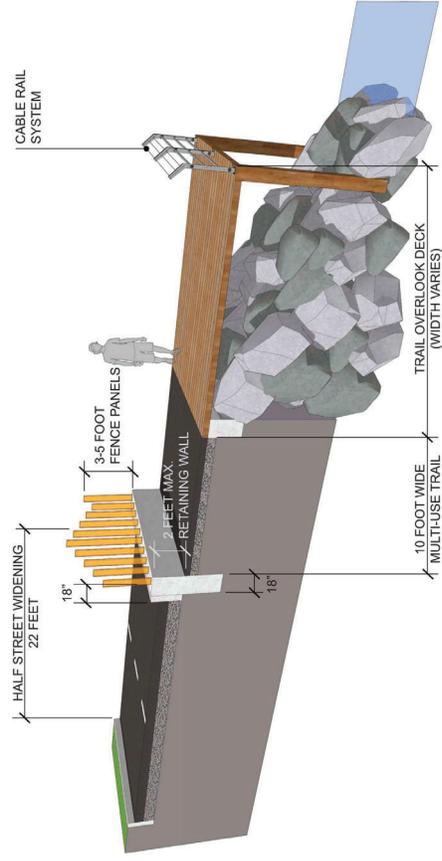
- FINAL DESIGN TO BE COORDINATED WITH AND REVIEWED BY DC OFFICE OF PLANNING (DCOP), DISTRICT DEPARTMENT OF TRANSPORTATION (DDOT), AND DISTRICT DEPARTMENT OF ENERGY & ENVIRONMENT (DCEE).
- PRELIMINARY PLANS FOR ADJACENT PROPERTIES AND THE CUL-DE-SAC AT FIRST STREET PROVIDED BY DEVELOPERS AND DDOT. PLANS ARE SHOWN FOR CONTEXTUAL PURPOSES ONLY. FINAL DESIGNS ARE SUBJECT TO CHANGE.

DESIGNED:	AM	SUB SHEET NO.	S11	TITLE OF SHEET	LAYOUT PLAN OPTION 2	DRAWING NO.	
TECH. REVIEW:	MG				SITE IMPROVEMENTS AT BUZZARD POINT PARK	PACKAGE NO.	
DATE:	8-31-2018					SHEET	11 of 14



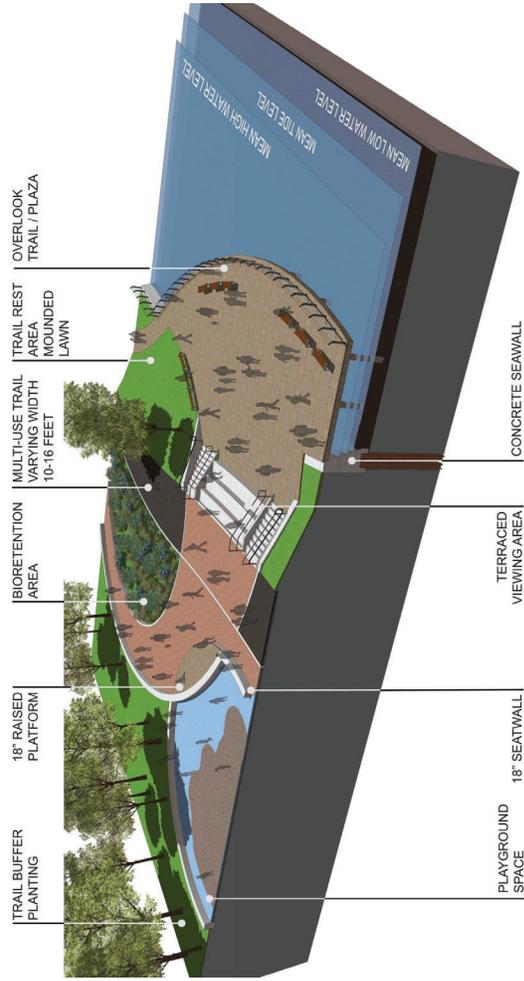
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NOT TO SCALE



CROSS-SECTION B-B

NOT TO SCALE



ISOMETRIC SECTION A-A

NOT TO SCALE

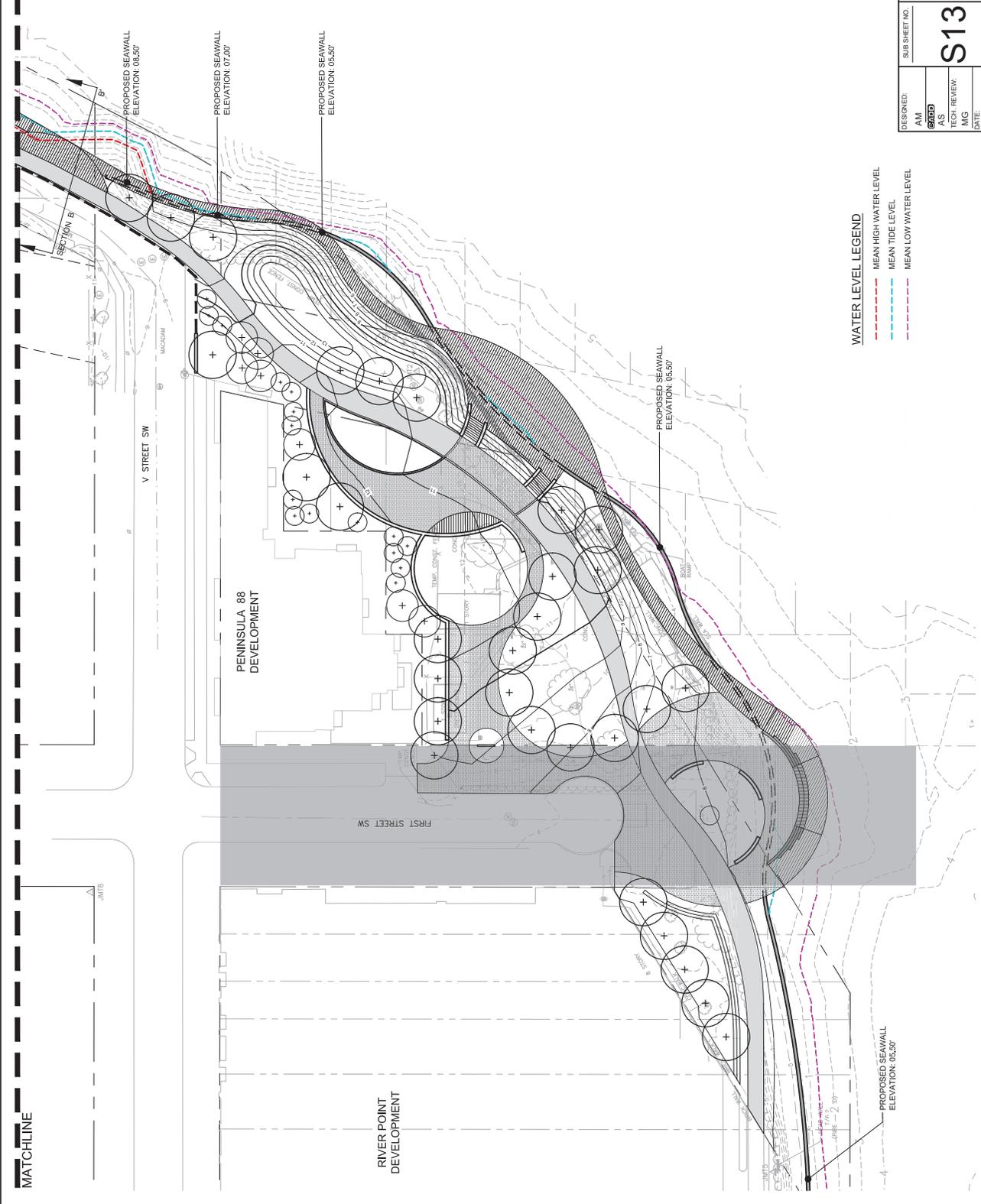
DESIGNED: AM
 SUB SHEET NO. 0600B
 AS
 TECH. REVIEW: MG
 DATE: 8-31-2018

TITLE OF SHEET
**SECTIONS
 OPTION 2**
 SITE IMPROVEMENTS
 AT BUZZARD POINT PARK

DRAWING NO.
 PAUSP/PG NO.
 SHEET
 12 OF 14

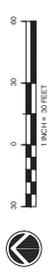
MATCHLINE

MATCHLINE

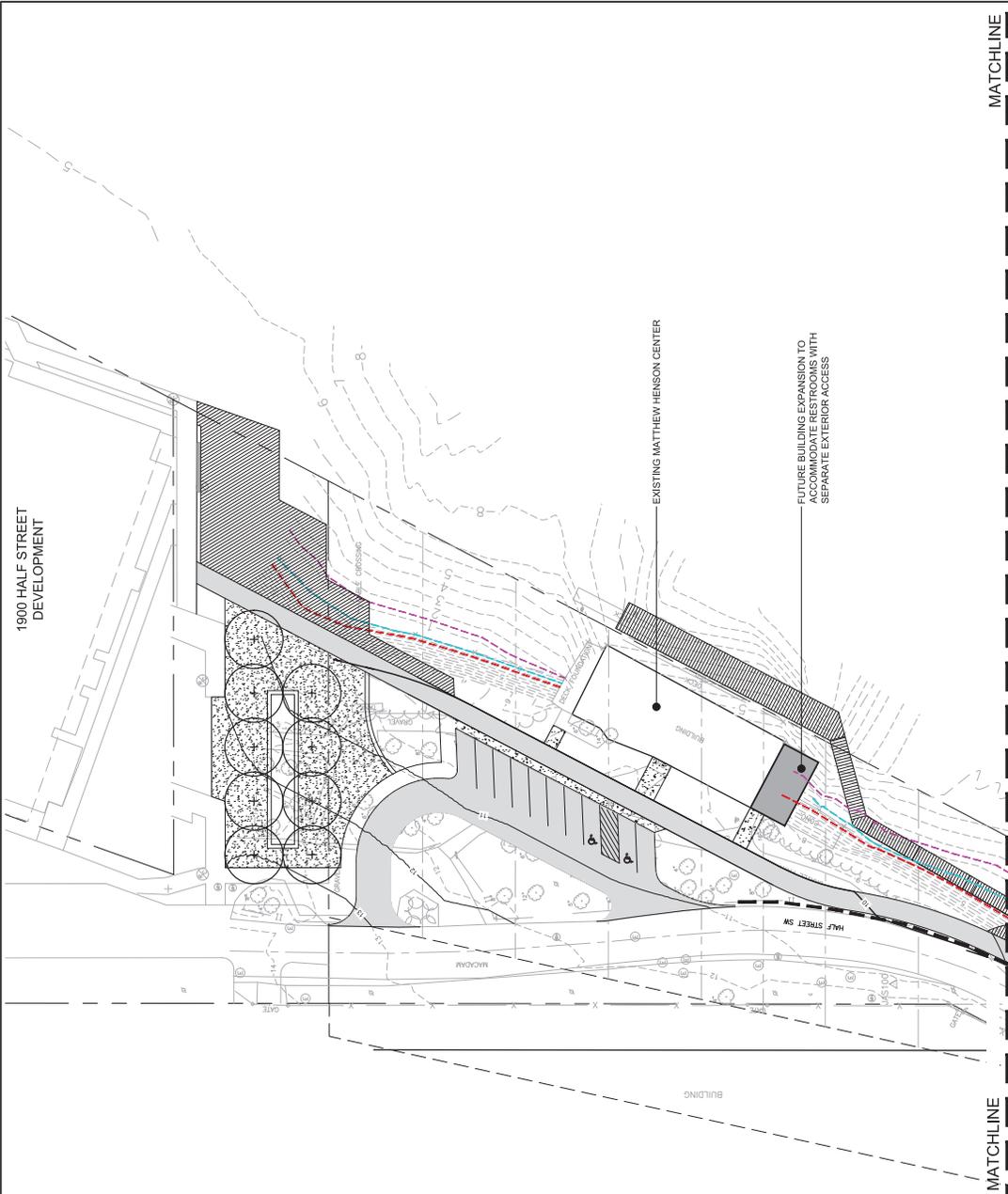


WATER LEVEL LEGEND

- MEAN HIGH WATER LEVEL
- MEAN TIDE LEVEL
- MEAN LOW WATER LEVEL



DESIGNED: AM GAD	SUB SHEET NO. S13	TITLE OF SHEET GRADING PLAN OPTION 2 SITE IMPROVEMENTS AT BUZZARD POINT PARK	DRAWING NO. _____
AS TECH. REVIEW: MG			PLANS/PG. NO. _____
DATE: 8-31-2018			SHEET 13 OF 14



MATCHLINE

MATCHLINE



WATER LEVEL LEGEND
 - - - - - MEAN HIGH WATER LEVEL
 - - - - - MEAN TIDE LEVEL
 - - - - - MEAN LOW WATER LEVEL

DESIGNED: AM 6/20/18	SUB SHEET NO. S14	TITLE OF SHEET GRADING PLAN OPTION 2 SITE IMPROVEMENTS AT BUZZARD POINT PARK	DRAWING NO. _____
TECH. REVIEW: MG			PAUSE/PG. NO. _____
DATE: 8-31-2018			SHEET 14 of 14

STATEMENT OF FINDINGS
APPENDIX C:
FEMA FLOOD INSURANCE RATE MAP

