



DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS, KANSAS CITY DISTRICT  
635 FEDERAL BLDG  
601 E. 12TH STREET  
KANSAS CITY MO 64106-2824

CENWK-PMP

June 1, 2020

**JOINT PUBLIC NOTICE  
U.S. ARMY CORPS OF ENGINEERS  
AND  
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
VALLEY CREEK FLOOD RISK MANAGEMENT FEASIBILITY STUDY  
VALLEY CREEK  
JEFFERSON COUNTY, ALABAMA  
A FEDERALLY AUTHORIZED PROJECT**

Interested persons are hereby notified that the U.S. Army Corps of Engineers (USACE), Kansas City District proposes a plan for flood risk management at Valley Creek in Jefferson County, Alabama. This public notice is issued in accordance with rules and regulations published in the Federal Register on 26 April 1988. These regulations provide for the review of federally authorized projects under the Clean Water Act (33 U.S.C. 1344) whenever dredged or fill materials may enter waters of the United States.

The recipient of this notice is specifically requested to review the proposed action as it may impact water quality relative to the requirements of Section 404(b)(1) of the Clean Water Act. Comments on any other potential impacts also are requested.

**WATERWAY AND LOCATION:** Valley Creek in Jefferson County, Alabama from its origins in central Birmingham near 5th Avenue and 7th Streets to just downstream of the Jefferson County Wastewater Treatment facility. Within the study area, Valley Creek flows through the cities of Birmingham, Fairfield, Midfield, Lipscomb, Brighton, Hueytown, and Bessemer.

**DESCRIPTION OF THE PROPOSED ACTION:** The proposed action includes construction of three overbank detention basins each with an inlet weir, containment berm, and outlet structure. Recreation features are included in the conceptual plan. Detention basin 1 (VD1) comprises approximately 10.0 acres on the left overbank of Valley Creek downstream of Center Street. There is one home on the property and minor roadways. Figures 2 and 3 display a general grading plan and associated profile and section, respectively. Detention basin 2 (VD2) comprises 13.6 acres on left overbank downstream of Princeton Parkway. The area includes three homes and minor roadways. Figures 4 and 5 display a general grading plan and associated profile and section, respectively. Detention basin 4 (VD4) comprises 16.4 acres on left overbank at Lincoln Ave. Figures 6 and 7 display a general grading plan and associated profile and section, respectively.

Site preparation includes clearing, grubbing, and stripping at each area. Each site consists primarily of grasses, shrubs, and trees. Approximately 2.1 acres of clearing and grubbing and 7.1 acres of stripping would be required at VD1. Approximately 4.7 acres of clearing and

grubbing and 14.2 acres of stripping would be required at VD2. Approximately 4.0 acres of clearing and grubbing and 11.9 acres of stripping would be required at VD4. VD4 contains an area of NWI-mapped forested wetland. Demolition and removal of structures and pavement would be required as necessary.

Following site preparation, the basins would be excavated, and soil hauled to the containment berm locations for placement and compaction or hauled to a designated disposal location. Excavation will be to a desired elevation to maximize depth and storage volume as well as provide appropriate slope to allow the basin to naturally drain by gravity. It is anticipated all excavation can be achieved prior to encountering bedrock. It is assumed there is sufficient quantity of suitable material for building the containment berm on-site based on the volume of material excavated compared to the volume of material required for the containment berm. Containment berms would follow the perimeter of the basin and range in height from 2-feet to 6-feet depending on the existing ground elevation. Top width is currently 10-foot wide with aggregate surfacing.

The sites would need armoring for erosion protection on both channel and detention sides of the embankments. The armoring suggested is of the articulated concrete block (ACB) or articulated concrete mat (ACM) type. Though the berms will be armored, some grass will grow in the interstitial of the ACB/ACM. Additional armoring would be needed at the outlet toe of the spillway for each site. The stone applicable for these sites (based on overtopping velocities at the spillway) is Alabama Department of Transportation (ALDOT) Class V riprap (D50 = 1000 pounds). This stone will need to be choked with a smaller size, likely a Class II. Filter material required for appropriate grading is also included in the plan. This would be in the form of a poorly graded gravel layer, topped with an AASHTO #57 stone or similar. A filter fabric may also be required below the base (filter) layer.

Outlet structures are assumed to be 36-inch reinforced concrete pipe culverts. Other types of culverts could be employed if needed based on site constraints. Additional protection at the inlets and outlets of these features is required, approximately 100 cubic yards for each culvert (both upstream and downstream protection included). Alabama DOT Class II riprap will be suitable for this application based on culvert outflow expectations.

**WATER QUALITY CERTIFICATION:** Pursuant to Section 401 of the Clean Water Act, a state water quality certification is required for the proposed activities. Following this 30-day public notice, USACE, Kansas City District will request water quality certification from the Alabama Department of Environmental Management. A decision on state water quality certification will be made by the Alabama Department of Environmental Management.

**USE BY OTHERS:** The proposed project may have a temporary negative impact on recreational activities due to the presence of construction equipment; however, these impacts will be minor cumulatively and individually. Recreation features (i.e. trails) are incorporated into the proposed project; therefore, beneficial impacts to recreation are anticipated.

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) CONSIDERATIONS:** In accordance with the requirements of the NEPA, potential impacts have been disclosed for the proposed action in the following Draft Integrated Feasibility Report and Environmental Assessment, Valley Creek Feasibility Study, Bessemer and Birmingham, Alabama. This documentation is available for

review at USACE, Mobile District's study website at <https://www.sam.usace.army.mil/Missions/Planning-Environmental/Environment-Resources/Inland-Environment/Valley-Creek-Flood-Risk-Management-Study/>. The Environmental Assessment will be updated based upon comments received.

**SECTION 404(b)(1) EVALUATION REPORT:** Water quality impacts associated with the proposed action have been addressed in the Section 404 (b)(1) Evaluation Report. This report was prepared in accordance with guidelines promulgated by the U.S. Environmental Protection Agency (EPA) under Section 404 (b)(1) of the Clean Water Act. The Section 404(b)(1) Evaluation Report is available for review at the Mobile District's website at <https://www.sam.usace.army.mil/Missions/Planning-Environmental/Environment-Resources/Inland-Environment/Valley-Creek-Flood-Risk-Management-Study/>, and will be finalized upon completion of the coordination of this notice.

**CULTURAL/HISTORIC RESOURCES CONSIDERATIONS:** USACE has prepared a Programmatic Agreement (PA) to fulfill its National Historic Preservation Act Section 106 compliance responsibilities at this stage of project planning. The PA identifies the procedures that will be followed in evaluation of historic properties that may be affected by the proposed action. Any identified historic properties within the project footprints would be evaluated in compliance with the PA. If it is determined that project activities will result in adverse effects, USACE, in consultation with SHPO, Concurring Parties, and Federally Recognized Indian Tribes, would develop a Historic Properties Treatment Plan (HPTP) to resolve all adverse effects resulting from the project, which would be appended to the PA. HPTP shall outline the minimization and mitigation measures necessary to resolve the adverse effects to Historic Properties. Proposed mitigation measures may include, but are not limited to, data recovery, oral history, historic markers, interpretive brochures, and publications, depending on their criterion for eligibility. Development of appropriate measures shall include consideration of historic property types and provisions for avoidance or protection of historic properties where possible. If it is determined that archaeological and/or tribal monitors are appropriate, HPTP shall include a Monitoring Plan. If adverse effects are identified, HPTP would be in effect before construction commences. USACE would submit HPTP for review to the SHPO, Concurring Parties, and Federally Recognized Indian Tribes.

Consultations regarding the PA are being conducted with the Alabama State Historic Preservation Officer (SHPO), Federally Recognized Tribes, National Park Service (NPS), and the Advisory Council on Historic Preservation (ACHP). Any comments received from the SHPO, Tribes, the NPS, and the ACHP will be addressed in this EA or as appropriate the National Park Service and the Advisory Council on Historic Preservation.

**ENDANGERED/THREATENED SPECIES:** In compliance with Section 7 of the Endangered Species Act of 1973 (ESA), the proposed action is being coordinated with the U.S. Fish and Wildlife Service (USFWS) through official correspondence. USACE, Kansas City District has determined that federally protected bat species may be affected but are not likely to be adversely affected by the proposed action. USFWS recommended that tree clearing occur from October 15 to March 31 to avoid impacts to spring/summer roosting and maternity colonies of the Indiana bat and northern long-eared bat. USFWS stated if all tree removal for the project is restricted to occur between those dates, no further consultation is necessary on the federally listed bat species. USACE intends to comply with the identified seasonal restrictions for tree

clearing and will incorporate those restrictions in all construction contracts. Should compliance with the seasonal restrictions not prove feasible, USACE would perform all required habitat surveys and additional consultation with USFWS prior to clearing trees.

**CLEAN AIR ACT:** Air quality in the vicinity of the proposed action would not be significantly affected. The equipment and machinery would generate some air pollution during construction activities, such as increased particulate levels from the burning of fossil fuels. However, these impacts would be negligible. The project area is in attainment with the National Ambient Air Quality Standards parameters. The proposed action would not affect the attainment status of the project area or the region. A State Implementation Plan conformity determination (42 United States Code 7506(c)) is not required since the project area is in attainment for all critical pollutants.

**EVALUATION:** The decision whether to proceed with the proposed action will be based on evaluation of the probable impact, including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits which may be reasonably expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and in general, the needs and welfare of the people.

Inasmuch as the proposed work would involve the discharge of materials into waters of the U.S., designation of the proposed disposal site associated with this Federal project is being made through application of guidelines promulgated by the Administrator of the EPA in conjunction with the Secretary of the Army.

**COORDINATION:** USACE, Kansas City District is soliciting comments from the general public; Federal, State, and local agencies, and officials; American Indian Tribes, and other interested parties in order to consider and evaluate the impacts of the proposed activity. Any comments received will be used by USACE, Kansas City District to determine whether or not to proceed with the proposed action. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are also used to determine the need for a public hearing and to determine the overall public interest in the proposed activity and in preparing an EA and/or an EIS pursuant to the NEPA compliance.

Among the agencies receiving copies of the Public Notice are:

- Region 4, U.S. Environmental Protection Agency
- U.S. Department of the Interior, Fish and Wildlife Service, Daphne, Alabama
- Alabama Department of Conservation and Natural Resources
- Alabama Department of Environmental Management
- Alabama State Historic Preservation Officer

We request that you communicate the information contained in this notice to any other parties who may have an interest in the proposed action.

**PUBLIC HEARING:** Any person who may be affected by the discharge of this fill material may request a public hearing. The request must be submitted in writing to the District Engineer within the comment period of this public notice. The request must clearly set forth the interest which may be affected and the manner in which the interest may be affected by this activity.

**CORRESPONDENCE:** The study area is within South Atlantic Division, Mobile District's Area of Responsibility, but the study is being led by Kansas City District. Correspondence concerning this 30-day public notice should refer to Public Notice No. 2020-002-CW and should be directed to the U.S. Army Corps of Engineers, Kansas City District, Room 538, 601 E. 12th Street, Kansas City, MO 64106, Attention: CENWK-PMP-F, Mr. Cassidy Garden. Mr. Garden may be contacted via phone at (816) 389-3851 or via email at [cassidy.c.garden@usace.army.mil](mailto:cassidy.c.garden@usace.army.mil) for additional information.

JENNIFER SWITZER  
U.S. Army Corps of Engineers  
Kansas City District  
Chief of Planning

**Enclosures**

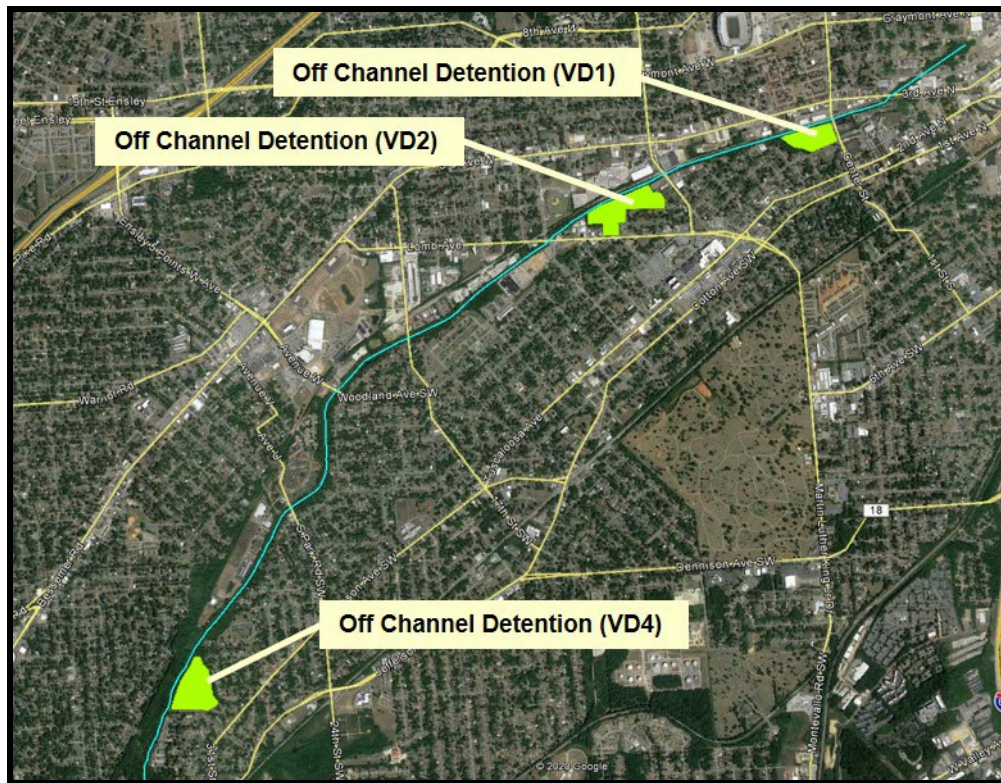
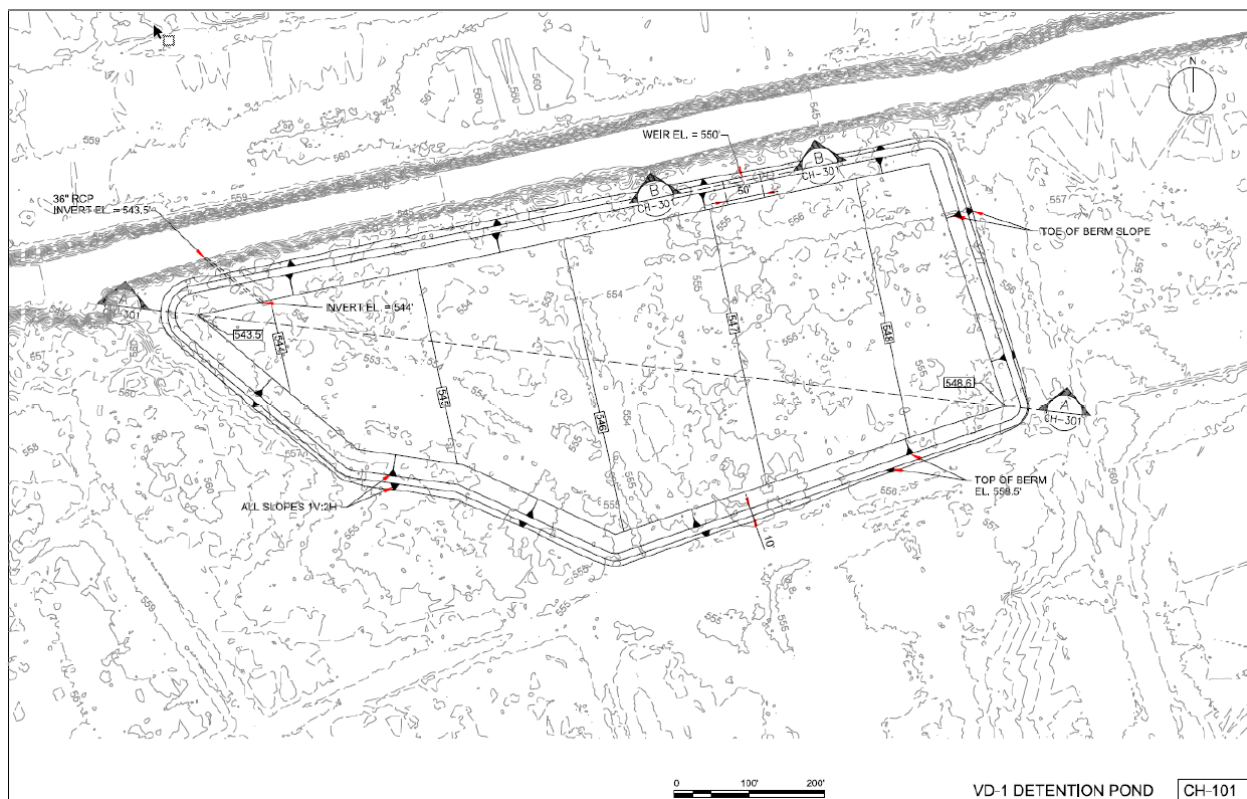
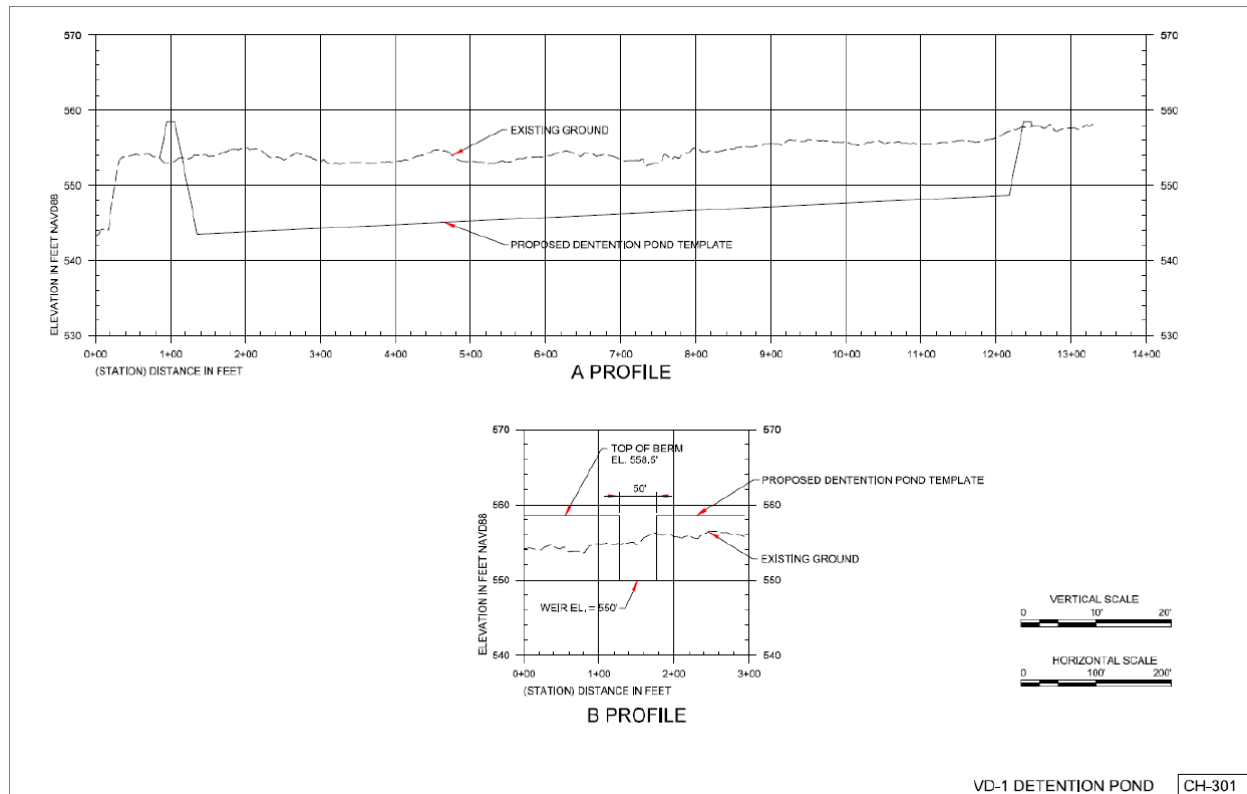


Figure 1. Location of Off Channel Detention Areas in Birmingham, AL.



**Figure 2. Conceptual plan of Overbank Detention Basin VD1**



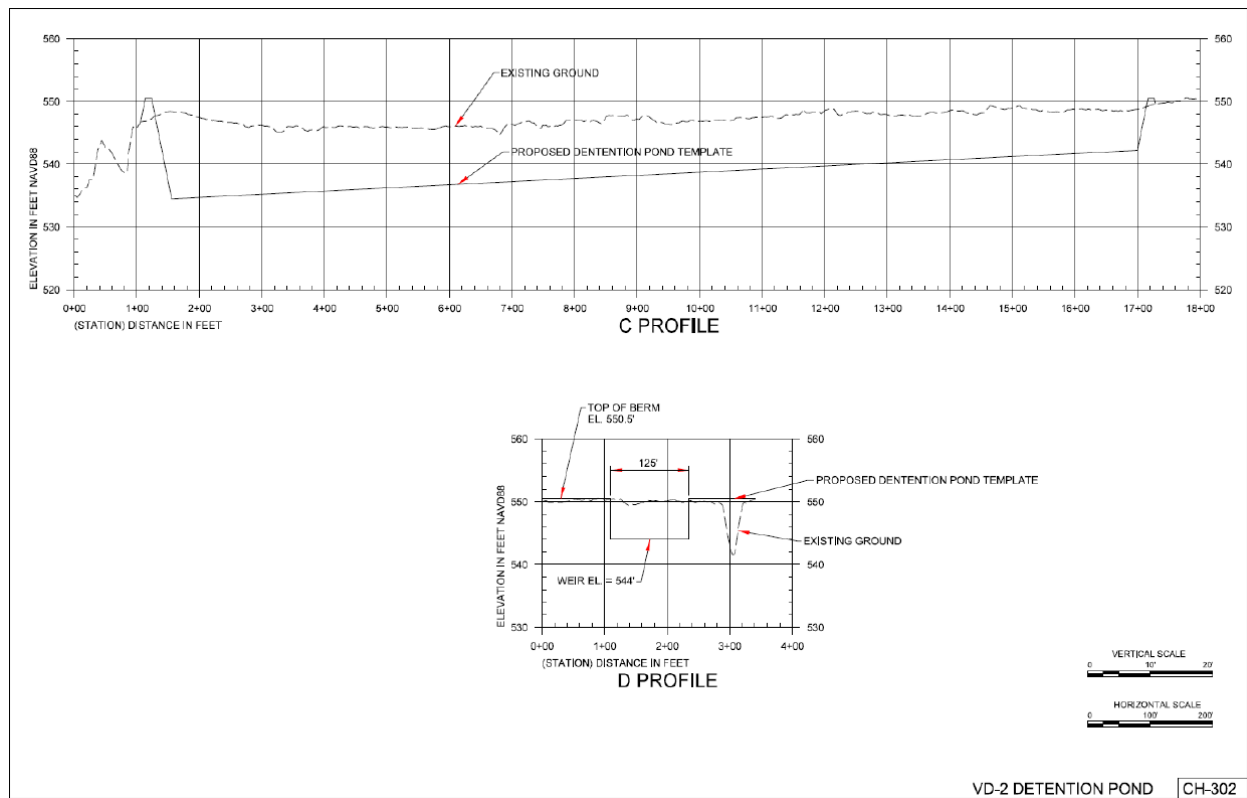
**Figure 3. Conceptual Profile and Section Detail of Basin and Lateral Inflow Weir at VD1**





**Figure 4. Conceptual plan of Overbank Detention Basin VD2**





**Figure 5. Conceptual Profile and Section Detail of Basin and Lateral Inflow Weir at VD1**

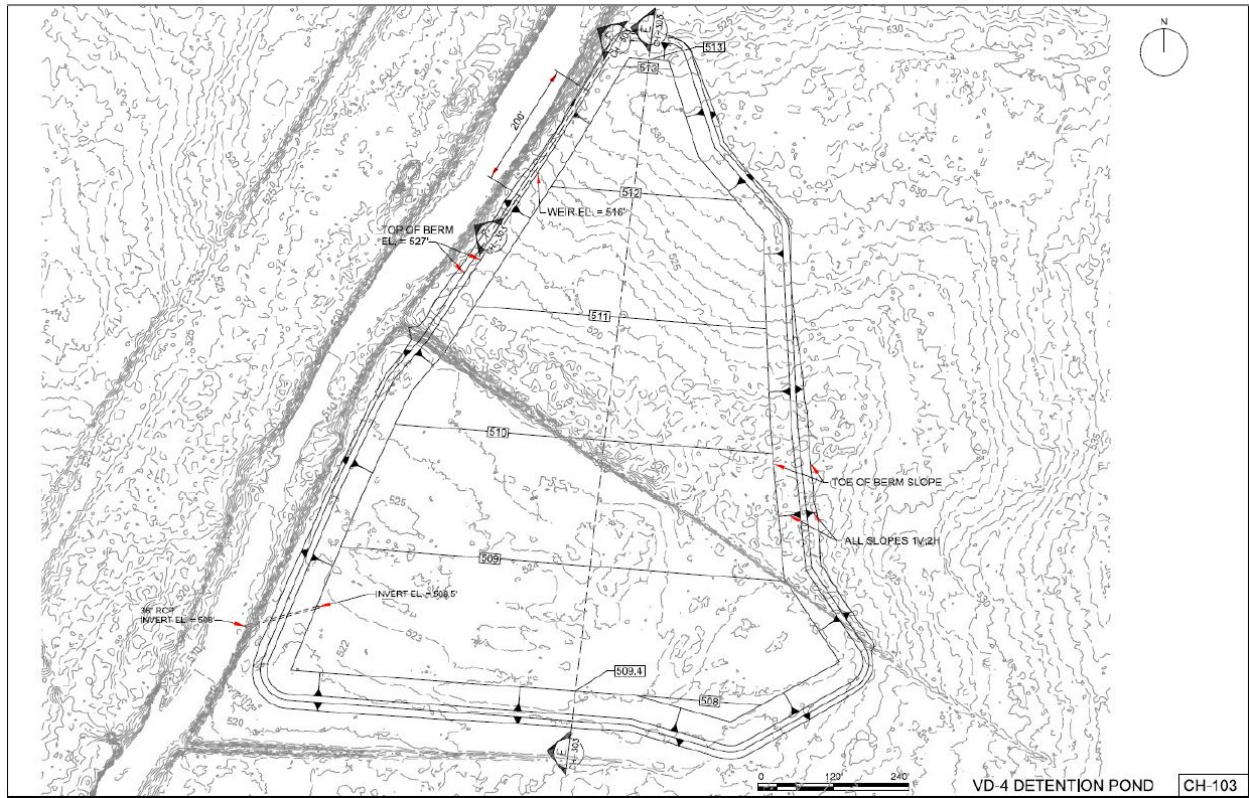
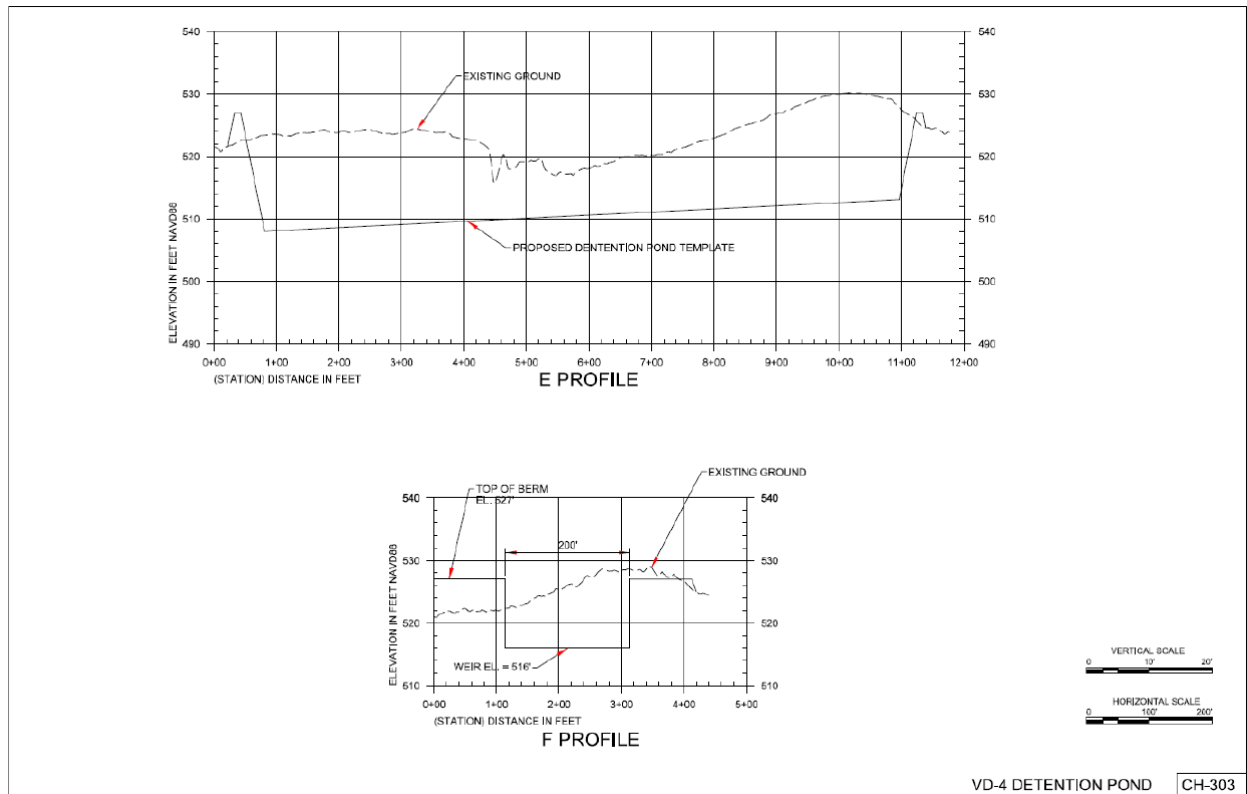


Figure 6. Conceptual plan of Overbank Detention Basin VD4



**Figure 7. Conceptual Profile and Section Detail of Basin and Lateral Inflow Weir at VD4**