

KNOXVILLE SOUTH WATERFRONT, TENNESSEE PUBLIC IMPROVEMENTS



*TVA Section 26A/USACE Section 404
Joint Permit Application*

Application by: City of Knoxville



JULY 11 2008

JOINT APPLICATION FORM

Department of the Army/TVA

The Department of the Army (DA) permit program is authorized by **Section 10 of the Rivers and Harbors Act of 1899** and **Section 404 of the Clean Water Act (P.L. 95-217)**. These laws require permits authorizing structures and work in or affecting navigable waters of the United States and the discharge of dredged or fill material into waters of the United States. **Section 26a of the Tennessee Valley Authority Act**, as amended, prohibits the construction, operation, or maintenance of any structure affecting navigation, flood control, or public lands or reservations across, along, or in the Tennessee River or any of its tributaries until plans for such construction, operation, and maintenance have been submitted to and approved by the Tennessee Valley Authority (TVA).

Name and Address of Applicant: City of Knoxville c/o South Waterfront Director, Dave Hill City County Building, Suite 503, 400 Main Street, Knoxville, 37920 Telephone Number: Home _____ Office 865 215 3764	Name, Address, and Title of Authorized Agent: Telephone Number: Home _____ Office _____
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Location where activity exists or will occur (*include Stream Name and Mile, if known*):

South Shore of Fort Loudoun Lake from: mile 647.36 to mile 647.68, mile 648.02 to 648.44 and mile 649.01 to 649.13 (Baker Creek)

Application submitted to <input checked="" type="checkbox"/> DA <input checked="" type="checkbox"/> TVA	
Date activity is proposed to commence: <u>Nov 2008</u>	Date activity is proposed to be completed: <u>2018</u>

Describe in detail the proposed activity, its purpose and intended use (*private, public, commercial, or other*). Describe structures to be erected including those placed on fills, piles, or floating platforms. Also describe the type, composition, and quantity of materials to be discharged or placed in the water; the means of conveyance; and the source of discharge or fill material. Please attach additional sheets if needed.

The proposals form part of a series of Phase 1 Knoxville South Waterfront Public Improvement Projects. These projects are part of a wider vision to transform and revitalize the predominantly undervalued industrial riverfront on the southern banks of Fort Loudoun, with an aim to improve the recreational, cultural, civic and economic value of the area.

A series of public open spaces and water based recreational facilities focused on the riverfront will be connected by a public pedestrian/cyclist waterfront route. A number of structures along the river will provide for recreational lake users. These include kayak ramps and storage areas, floating docks and riverfront decks. Additional land based facilities include informal sports areas and a childrens' play area.

For additional details see attached sheets.

Application is hereby made for approval of the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. **I agree that, if this application is approved by TVA, I will comply with the attached terms and conditions and any special conditions that may be imposed by TVA at the time of approval. Please note the U.S. Army Corps of Engineers may impose additional conditions or restrictions.**

Date

Signature of Applicant

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of The United States knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both. The appropriate DA fee will be assessed when a permit is issued.

Names, addresses, and telephone numbers of adjoining property owners, lessees, etc., whose properties also join the waterway:
See attached sheets 46-53

List of previous DA/TVA permits/approvals DA _____ TVA _____
Permit Number *Date*

Is any portion of the activity for which authorization is sought now complete? Yes No *(If "Yes" attach explanation)*
Month and year the activity was completed: _____ . Indicate the existing work on the drawings.

List all approvals or certifications required by other federal, interstate, state, or local agencies for any structures, construction, discharges, deposits, or other activities described in this application.

Issuing Agency	Type Approval	Identification No.	Date of Application	Date of Approval

Has any agency denied approval for the activity described herein or for any activity directly related to the activity described herein?
 Yes No *(If "Yes" attach explanation)*

Project plans or drawings should accompany the application. These should be on paper suitable for reproduction no larger than 11 x 17 inches or contained on a 3-1/2 inch floppy computer disc in "dx" format, and should be submitted to the appropriate TVA and U.S. Army Corps of Engineers offices. An application that is not complete will be returned for additional information.

U.S.A.C.E. Offices		TVA Office Location
U.S. Army Corps of Engineers Eastern Regulatory Field Office Spring Cress Business Park 501 Adessa Blvd., Suite 250 Lenoir City, Tennessee 37771 (865) 986-7296	U.S. Army Corps of Engineers Savannah District The Plaza, Suite 130 1590 Adamson Parkway Morrow, Georgia 30260-1763 (678) 422-2729	Tennessee Valley Authority Little Tennessee Watershed Team 260 Interchange Park Drive, LCB 1A-LCT Lenoir City, TN 37772-5664 (865) 632-1300
U.S. Army Corps of Engineers Regulatory Branch 3701 Bell Road Nashville, Tennessee 37214 (615) 369-7500	U.S. Army Corps of Engineers Western Regulatory Field Office 2042 Beltline Road, SW, Bldg C, Suite 415 Decatur, Alabama 35602 (256) 350-5620	
U.S. Army Corps of Engineers Norfolk District P.O. Box 338 Abingdon, Virginia 24212 (276) 623-5259	U.S. Army Corps of Engineers Asheville Regulatory Field Office 151 Patton Avenue, Room 208 Asheville, North Carolina 28801-5006 (828) 271-4856	

Privacy Act Statement
This information is being requested in accordance with Section 26a of the TVA Act as cited on the front page of this form. Disclosure of the information requested is voluntary; however, failure to provide any required information or documents may result in a delay in processing your application or in your being denied a Section 26a permit. An application that is not complete will be returned for additional information. TVA uses this information to assess the impact of the proposed project on TVA programs and the environment and to determine if the project can be approved. Information in the application is made a matter of public record through issuance of a public notice if warranted. Routine uses of this information include providing to federal, state, or local agencies, and to consultants, contractors, etc., for use in program evaluations, studies, or other matters involving support services to the program; to respond to a congressional inquiry concerning the application or Section 26a program; and for oversight or similar purposes, corrective action, litigation or law enforcement.

Burden Estimate Statement
Public reporting burden for this collection of information is estimated to average 1.5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Agency Clearance Officer, Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402; and to the Office of Management and Budget, Paperwork Reduction Project (3316-0060), Washington, D.C. 20503.



SCALE: XX=XXX' APPROX.



SCALE: XX=XXX' APPROX.

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

LOCATION PLAN



SCALE: N.T.S.
SHEET 3 OF 53
DATE: 05/02/08



KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS
 TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION
 APPLICATION BY: CITY OF KNOXVILLE
 PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SITE PHOTOS
 SCALE: N.T.S.
 SHEET 4 OF 53
 DATE: 05/02/08



LOWER SECTION - Area 1-5
Looking west from Gay Street Bridge



LOWER SECTION - Area 3-5
Looking east from Henley Bridge



MIDDLE SECTION - Area 6-7
Looking west from the river



MIDDLE SECTION - Area 9
Looking west from the river



UPPER SECTION - Area 12-13
Looking northwest along Island Home Avenue



UPPER SECTION - Area 14
Looking north from Island Home Avenue

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

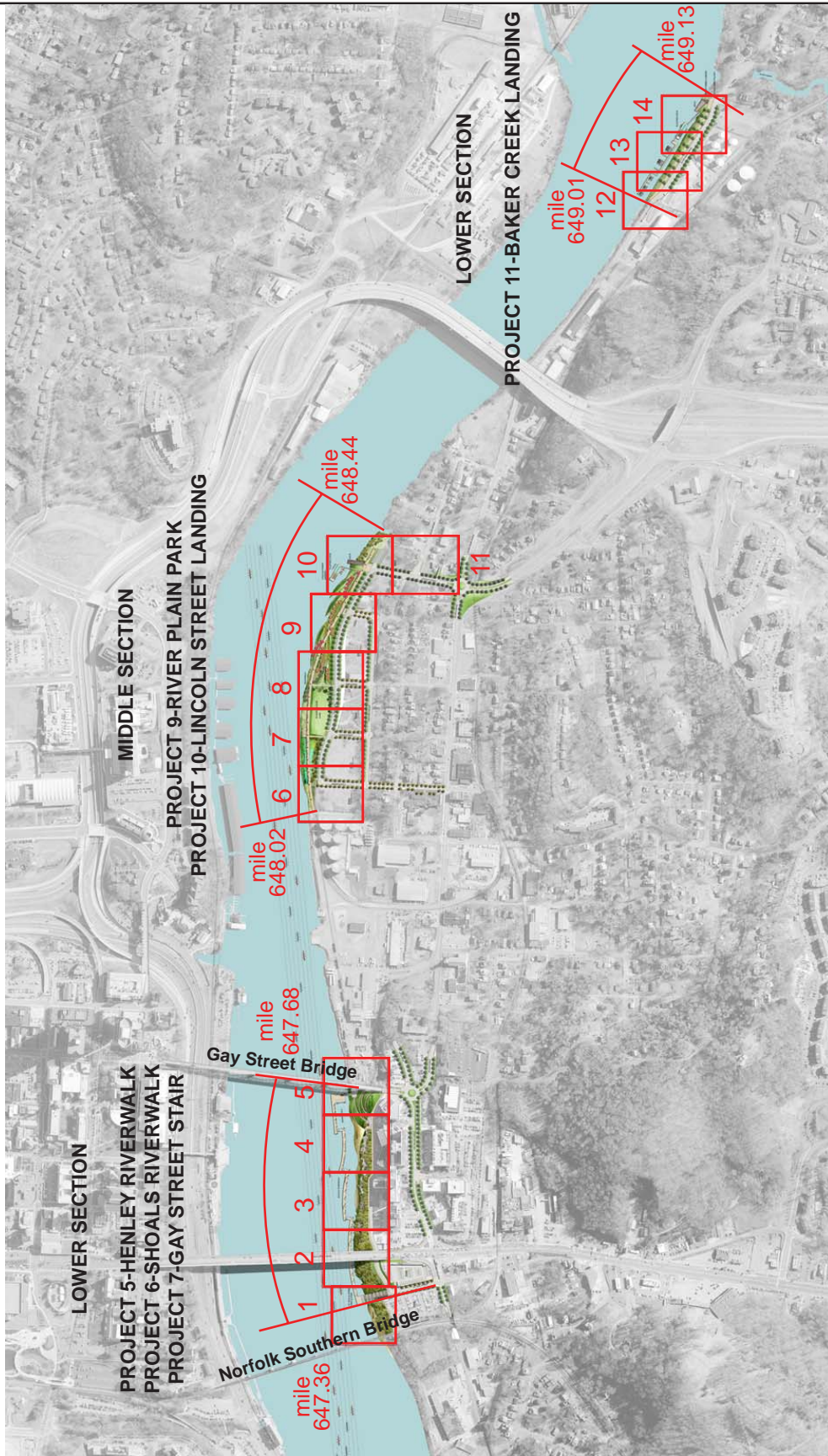
TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SITE PHOTOS

SCALE: N.T.S.
SHEET 5 OF 53
DATE: 05/02/08



KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

PROJECT ILLUSTRATIVE PLAN



SCALE: N.T.S.
 SHEET 6 OF 53
 DATE: 05/02/08

1. Background

Evolving out of an extensive community envisioning process, the Knoxville South Waterfront Vision and Action Plan was adopted by City of Knoxville Council in 2006. The 20 year goal of the plan is to transform the south side of the downtown riverfront with a careful balance of development, preservation and enhancement. The Plan proposes to transform the predominantly under-valued industrial properties and revitalize them to improve the riverfront's environmental value, recreational value, cultural resource value, civic value and economic value. Other implementation steps have been taken, including the City's establishment of a Redevelopment District and the adoption of Form-based Development Codes for the South Waterfront.

The City is now shifting from a long-term planning focus to that of a short-term project design and implementation focus. The Action Plan identified and budgeted several public improvement projects that would assist in achieving the City's goals in the next 5 years. These public projects were selected based on their ability;

- to improve roads and open space hand-in-hand with development by private property owners
- to be separable incase funding is not available or the market changes,
- to geographically distribute equitably between neighborhoods,
- to set the benchmark standards for years to come.

The City of Knoxville has worked closely with the local community and stakeholders throughout the visioning and design process. A number of parcels of land currently in private ownership are affected by the proposed project. Through the cooperation of these landowners, the project is able to move forward into the next stages. Consents from each affected landowner has been gained and is included as part of the permit application.

2. Project Description

The projects that form this application extend from slightly east of the Norfolk Southern Railroad Bridge at mile 647.36 to Baker Creek at Mile 649.13. The projects are:

Lower Section

- Project 5 - Henley Riverwalk
- Project 6 - Shoals Riverwalk
- Project 7 - Gay Street Stair

Middle Section

- Project 9 - River Plain Park
- Project 10 - Lincoln Landing

Upper Section

- Project 11 - Baker Creek Landing

Specifically, the projects involve the following features from the west to the east end of the project area:

LOWER SECTION

Projects 5, 6, and 7 – Henley Gateway, Shoals Riverwalk, and Gay Street Stair (See Plan Areas 1-5)

- Construction of a series of four 20' wide pile supported floating walkways spanning a total length of 1544 LF from just east of the Norfolk Southern Railroad Bridge (*mile 647.36*) to the Gay Street Bridge (*mile 647.68*). The walkways will be supported by steel pipe guide piles anchored into the existing rock, with a top elevation of 827.00. At the western extent of these walkways a 95' x 64' floating dock will define a kayak training area located landward of the walkway. The docks are connected and accessed from the shore via ADA accessible gangways. (*see plan areas 1-5*)

	<p style="text-align: center;">KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION APPLICATION BY: CITY OF KNOXVILLE</p> <p style="text-align: center;">PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT</p>	<p style="text-align: center;">PROJECT DESCRIPTION</p> <p style="text-align: right;">SHEET 7 OF 53 DATE: 05/02/08</p>
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- Excavation of the existing bank and construction of a concrete staircase, timber deck and concrete landing. The staircase will connect the proposed St.Paul Street extension with the floating dock. The concrete landing will be constructed on a sheet pile wall and will be connected to the dock by an ADA accessible gangway. Approximately 378 CY of fill material will be placed riverward of the normal pool shoreline to create the landing area. An additional 129 CY of fill will be placed between the normal pool and the 100 year flood elevation. (see plan area 1)
- Removal of invasive plant species from 2.35 AC of existing riverbank east of Henley Bridge (mile 647.45). Following removal, 830 LF of slope will be stabilized and planted with native woody species. (see plan areas 2-4)
- Stabilization of 295 LF of riverbank in the vicinity of the riverside viewing area. The riverbank will be planted with grasses and native woody species. (see plan areas 4-5)
- Construction of an at grade paved overlook in the vicinity of the Gay Street Bridge (mile 647.69). The paved space will provide a landing point for an ADA accessible gangway connecting to the floating dock. An at grade walkway will provide water access for kayakers and a flight of stairs will connect the area to the Gay Street Bridge. Approximately 635 CY of fill material will be placed riverward of the normal pool shoreline. An additional 1142 CY of fill will be placed between the normal pool and the 100 year flood elevation. (see plan area 5)

MIDDLE SECTION

**Projects 9 and 10 – River Plain Park and Lincoln Street Landing
(See Plan Areas 6-11)**

- Construction of approximately 1920 LF of at grade riverfront walkway at 822.00 elev, extending from the eastern boundary of the marathon asphalt plant (mile 648.02) to the proposed kayak landing north of Lincoln Street (mile 648.44). (see plan areas 6-10)
- Rehabilitation/enhancement of approximate 0.95 AC of existing degraded wetland. Exact acreages of enhancement will be determined following a comprehensive delineation of the existing wetland. Additional wetland areas will also be created adjacent to the existing wetland (exact acreages to be determined). The wetland will serve as a storm water retention facility capturing run off from adjacent future streets and development as well as an ecological resource. (see plan areas 6-7)
- Regrading of existing river floodplain to create a series of landforms and recreational lawn areas. In total approximately 499 CY of material will be filled riverward of the existing normal pool elevation. In addition 12,005 CY of material will be placed between the existing normal pool elevation and the proposed right of way. The area will be planted with native and ornamental tree species, grasses and lawn. 2235 LF of riverbank will be regraded, stabilized and planted with native woody species. (see plan areas 7-10)
- Construction of a 115' x 25' pile supported timber pier and a 80' x 30' concrete kayak ramp. 106 CY of material will be placed riverward of the normal pool elevation behind a sheet pile wall to create the kayak ramp. The ramp will provide row boat, kayak and scull lay down facilities. Kayak storage will be created under the proposed pier. (see plan area 10)
- Construction of a 30' x 120' pile supported dock, connected to the proposed kayak ramp by an ADA gangway. The dock will allow for transient row boat, scull and kayak docking. A boat house structure on the dock will provide storage for single sculls. (see plan area 10)
- Construction of 1600 LF of road and sidewalk running parallel to Langford Avenue and connecting to the northern end of Lincoln Street. Lincoln Street will be upgraded from Sevier Avenue north to the river and a surface parking area for 20 cars will be constructed adjacent to the kayak landing. (see plan area 11)

	<p align="center">KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION APPLICATION BY: CITY OF KNOXVILLE PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT</p>	<p align="center">PROJECT DESCRIPTION</p> <p align="right">SHEET 8 OF 53 DATE: 05/02/08</p>
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UPPER SECTION

**Projects 11 – Baker Creek Landing
(See Plan Areas 12-14)**

- Construction of a 30' x 95' pile supported timber pier and an 85' x 20' concrete kayak ramp. 677 CY of material will be placed riverward of the normal pool elevation behind a sheet pile wall to create the kayak ramp. An additional 592 CY of material will be placed behind the normal pool elevation. The ramp will provide row boat; kayak and scull lay down facilities. Kayak storage will be created under the proposed pier. (see plan area 14)
- Construction of 835 LF of at grade walkway at the top of the existing river bank (mile 649.01 to 649.13) at elevation 827.50. The existing stabilized riverbank will be retained. Additional native planting on the slope is proposed. The adjacent road, Island Home Avenue will be realigned and widened. (see plan area 12-14)

* A 20 slip marina connected to the boat ramp by a floating dock and ADA accessible gangways is part of a separate permit application by a private property owner. An illustrative layout of the marina has been included in this permit application document for information purposes (see plan area 12-14).

3. Applicants Supporting Studies

A number of supporting studies have been commissioned as part of the project. The purpose of these studies is to inform the design process, inform the permit application process, comply with lead federal agency requirements and determine if any eligible resources could be significantly impacted by the proposed project. The following studies were carried out:

Archaeological Investigation/Cultural Resource Assessment – through a combination of research and fieldwork the aim of the study was to determine the presence of any resources on the project site, how severely those resources had been disturbed, and whether any resources were eligible for listing on the National Register of Historic Places.

Ecological Assessment – through a combination of research and fieldwork the aim of the study was to determine the presence of any resources on the project site, how severely those resources had been disturbed, and whether any resources were significant and threatened.

Hydraulic Investigation Report – hydraulic and hydrological modeling studies were carried out using HecRas software to evaluate impacts of proposed projects on river flood elevations.

Sidescan Sonar Survey of Tennessee River– a survey of southern shoreline of the river within the project area using sonar technology was carried out to identify and record any submerged or sunken features.

Knoxville South Waterfront Traffic Study – carried out during the Knoxville South Waterfront masterplanning and visioning process. The study identifies existing traffic activity and patterns, analyses traffic growth, distribution and potential traffic impacts resulting from the implementation of the Knoxville South Waterfront Vision Plan.

The findings from these studies are described in the *Cultural Context and Archaeological Research Design and Phase 1 Survey Results Report, Existing Natural Resources and Ecological Evaluation Report, Hydraulic Investigation Report, Sidescan Sonar Survey Results and the Knoxville South Waterfront Traffic Study report*. These reports are included with this application.

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4. Environmental and Public Interest Factors Considered

4.1 Physical/chemical Characteristics and Anticipated Changes

Substrate – the existing substrate consists of sand, silty clay and fine sediment which provide shallow water habitat for fish spawning and feeding. The proposed works do not include any dredging within the river. Discharge of fill material would result in the loss of 1420 LF of shallow water habitats within the area being permitted.

Current, circulation or drainage patterns – The proposed floating docks, piers and kayak ramps would be exposed to high flows and to debris/drift accumulation. The design of these structures has been carefully considered to reduce the opportunity for debris and drift accumulation. No considerable changes in water circulation are expected as a result of the proposed works.

Suspended particles and turbidity - The proposed works do not include any dredging that would result in major short term impacts on turbidity. Filling and bank excavation operations will have minor temporary impacts. Erosion management practices will be used during construction to reduce these impacts to a minimum and turbidity levels should return to normal post construction. Whenever practical excavation will be carried out during winter periods and silt control structures will be installed prior to any soil disturbing activities. Floating silt screens extending from the water surface to the bottom of bank will be installed prior to activities. Silt control measures will be left in place until sediment has visibly settled.

Water quality – The proposed works do not include any dredging that would result in major short term water quality impacts. Filling and bank excavation activities will have a minor temporary impact on water quality. Erosion management practices will be used during construction to reduce these impacts to a minimum (see measures outlined above) and water quality should return to normal condition post construction. Proposed storm water retention facilities will significantly increase the quality of storm water run off prior to discharge into the river. Storm drainage best practices are proposed for city storm drains discharging into the river within the project area.

Storm, wave and erosion buffers – Existing and proposed bank stabilization will serve as a wave and erosion buffer. Motor boat use will be restricted at the proposed docks and landings so increased wave action and erosion is not anticipated in these areas.

Shore erosion and accretion patterns - Severe shoreline erosion has occurred in much of the area being permitted. The location of parcel boundaries within the river suggests depths of erosion up to 80'. If an accretion pattern exists currently, it would likely not be affected by the presence of the docks, rip rap placement and construction of storm water outfalls. Throughout the project approximately 3455 LF of riverbank will be stabilized and rip rap installed below 818.00 elev. to protect the riverbank from erosion.

4.2 Biological Characteristics and Anticipated Changes

Habitat for fish and other aquatic organisms - A number of aquatic feeding and spawning areas are located within the project area. The construction of the kayak landings and regrading of the riverbank will adversely impact 1420 LF of shallow water habitats. This impact would be temporary as aquatic organisms would successfully recolonize after construction. Installation of rip rap along the river bank will provide 3455 LF of additional potential habitat for aquatic species. The proposed floating docks and piers will also provide additional attachment surfaces and shading for fish and aquatic organisms.

Wildlife habitat - The majority of the project site has been in industrial use for several decades. The surrounding area is also mainly in industrial and residential use. As a result of continued human activity in the area wildlife habitat values are low. There are no USFWS designated critical habitats within or adjacent to the project area and none of the habitats observed during ecological research present favorable habitats for any protected species.

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listed by the USFWS and TDEC Division of Natural areas. A number of mud/sand flats and shoals along the shoreline provide habitats and spawning areas for fish and other aquatic organisms. A wetland area (approximately 1.5AC) is located within the River Plain Park project area a smaller wetland (0,125 AC) is located in the vicinity of this project. During the next stages of design for the proposed park every effort will be made to limit impacts on the existing wetland. Enhancement the existing and creation of new wetland will be carried out to increase the aquatic resource value of this habitat. Exact acreages of wetland enhancement and creation will be determined following an accurate delineation of the existing wetland. As part of the proposed riverbank works 3.45AC of native woody vegetation will be planted along the shoreline to provide additional potential wildlife habitat. Further detailed information on natural and ecological resources in the vicinity of the permit application area can be found in the *Existing Natural Resources and Ecological Evaluation Report*.

Endangered or threatened species - No federally or state listed endangered or threatened species or potential critical habitats for listed species have been observed or are known to exist on the project site.

4.3 Human Use Characteristics and Anticipated Changes

Existing and potential water supplies, water conservation - The nearest municipal water intake is located at mile 649.00 in the vicinity of the proposed marina and boat landing. Proposed fill activities would result in short term increases in suspended particulates and turbidity. Construction would follow best management practices to minimize water quality impacts. Water conservation (storing, saving reducing or recycling water) would not be affected by the proposed action.

Water related recreation - The proposals will provide substantial recreation opportunities specifically:

- kayaking, rowing, sculling
- fishing
- kayak polo
- running, jogging
- walking
- cycling
- informal sports
- children’s play

The proposed works would not adversely impact existing recreational usage of the river.

Aesthetics - The proposals are located in a primarily degraded industrial riverfront area. The proposed works will transform these neglected areas into visually attractive public open spaces improving the aesthetic quality of the riverfront. Associated redevelopment of the surrounding areas that will likely occur as a result of these public improvements will have further positive aesthetic impacts.

Traffic/transportation patterns - As part of the proposed project a new road will be constructed to provide access to the proposed public park and kayak landing and to future mixed use developments associated with the redevelopment of this area. Local streets leading to the recreation facilities would experience a moderate increase in traffic. These access streets will be upgraded as part of the proposed project to accommodate traffic increases. On street parking and a 20 car surface parking area will provide for visitors. The proposed upgrades and parking proposals were informed by a number of traffic and transportation studies carried out as part of the initial masterplanning process.

Navigation – The proposed activities do not extend into the navigation channel. The floating dock between the Henley and Gay Street bridges maintains a min. distance of 50’ from the existing rowing lanes. There are no barge terminals located in the immediate vicinity of the proposals. The closest terminal is located at the marathon asphalt plant, 1000’ upstream of the proposed floating walkway and 2500’ downstream of the Lincoln Street Landing. It is not anticipated that the proposed project will have any adverse impacts on navigation.

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Safety – It is not anticipated that this project will result in any unsafe watercraft related situations. The location of proposed kayak landings and floating docks has been carefully considered to minimize conflicts with recreational boaters and river traffic. The floating dock between the Henley and Gay Street bridges maintains a min. distance of 50' from the existing rowing lanes. Motor boat usage of the floating docks and ramps will be restricted to further avoid conflicts between boat users. The detailed design of the walkway will be carefully considered to create a safe environment for all users. The walkway maintains a width of 20' to allow adequate space for both cycle and pedestrian traffic and reduce any potential conflicts between users. All floating facilities will be securely anchored into existing rock using steel pipe guide piles extending to elevation 827.00 providing stability under normal conditions and preventing them from floating free during flood conditions. Floor elevations will be a minimum of 2 ft above the normal pool elevation of 813.00. A safety kick rail will be installed along the length of the walkway and handrails will be installed on bridges and gangways connecting the walkways. Safety measures such as lifebuoys and help phones will be installed as necessary.

Air quality - The proposed activity would not result in any direct emissions impacting air quality. Overall air quality should improve as a result of increased tree and vegetation cover in the area.

Noise - Noise levels would increase slightly during construction. Following construction there would be a minor long term increase above background levels due to increased recreational usage of the area.

Historic properties and cultural values - The Knoxville South Waterfront was until the late 19th century a sparsely developed rural area. Following the construction of the Gay Street Bridge the waterfront developed into a predominantly industrial area with associated residential dwellings. Initial archaeological research and field surveys suggest the project area has a low potential to contain significant archaeological resources. A Sidescan Sonar Survey of the river bank from Goose Creek (*mile 646.66*) to Baker Creek (*mile 649.13*) has been conducted. No significant archaeological features were identified during analysis of this survey. There is potential for the presence of some archaeological resources associated with prehistoric settlements along the Tennessee River, as well as the area's Civil War heritage and its more recent industrial heritage. Additional field investigations are planned to coincide with later phases of the project. There are no historic properties listed within the Knoxville South Waterfront Phase 1 Project Area, however there are a number of NHRP historic districts in the vicinity. Both the Gay and Henley Street bridges are eligible for NHRP listing. Further detailed information on archaeological and cultural resources in the vicinity of the permit application area can be found in the *Cultural Context and Archaeological Research Design and Phase 1 Survey Results Report*.

Land use classification - A mix of commercial and industrial land uses exist on the properties affected by the proposed works. Following implementation of the proposals the land would be reclassified for public use as open space.

Conservation - No critical habitats for listed species would be affected by this proposal. Exact existing wetland losses will be determined following an accurate delineation of the wetland area. It is anticipated that approximately 0.55 AC of existing wetland will be lost as part of the proposals however every effort will be made during the next stages of design to limit these losses where possible. The remaining 0.95 AC of this wetland will be enhanced and additional wetland created to improve its aquatic resource function. Wherever possible existing shallow water habitats will be conserved or losses will be mitigated. Further detailed information on ecological resources in the vicinity of the permit application area can be found in the *Existing Natural Resources and Ecological Evaluation Report*.

Economics - The proposed projects are part of the first phase of the South Knoxville Waterfront Project, a 20 year plan to regenerate this area. In total an estimated \$139 million of public improvements are planned. It is anticipated that the open space improvements will encourage private development in the area, generating up to \$814 million in private investment. As a result the local economic base would experience long term benefits associated with additional tax revenues, employment and increased property values.

Consideration of private property - Consent to apply for the permit has been received from all landowners affected by the proposed activities.

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4.4 Cumulative and Secondary Impacts

The proposed works included in this permit application are the first foreseeable projects with land owner consent of the Phase 1 South Knoxville Waterfront Public Improvements Projects. The projects create new waterfront open space based for both the local and wider community. Additional kayak landings and docks, bank stabilization, at grade walkways, road improvements and a pedestrian bridge are included in later first phase projects. In addition a marina is proposed in the vicinity of Project 11- Baker Creek Landing by a private property owner. Collectively the projects would significantly improve pedestrian riverfront access and water based recreation facilities on this stretch of river. The overall 20 year improvement plan for the Knoxville South Waterfront aims to create a continuous riverfront walkway from Goose Creek to Baker Creek allowing access to significant water based recreational facilities including kayak/boat docks, piers and marinas. The proposed plans would have significant positive socio economic and environmental impacts. Water traffic on this stretch of river will inevitably increase as a result, however careful design will limit the conflicts between various types of water traffic.

5. Comparison of Alternatives

No Action – this alternative is one that results in no construction work or work requiring a USACE or TVA permit. No action would be brought by denial of the permit or withdrawal of the permit application. The environmental impacts described would not occur but shoreline impacts would continue. Conversely the expected socio economic benefit would not be achieved.

Proposed Action – this alternative consists of the proposal described in this permit application. The proposed project would have various impacts as outlined in the previous section.

Alternatives not considered in detail – other practicable alternatives involving different designs, materials, or sites exist. However, the resultant degree of impact would be commensurate or higher than the impacts of the proposed action. All the alternative designs would require USACE/TVA permits and would be subject to the agencies review process. The following alternatives were considered:

Kayak ramps –The ramps are an important resource for kayak and boat users, providing water access, lay down and kayak storage facilities. Construction of a pile supported boat ramp was considered as an alternative to reduce fill requirements. The alternative was rejected due to cost of construction, debris accumulation issues and resulting higher maintenance costs. *(located at Project 7-Shoals Riverwalk, Project 10-Lincoln Street Landing and Project 11-Baker Creek Landing - see plan areas 5, 10 and 14)*

Riverside viewing area – Alternatives to reduce fill requirements in this area were considered and rejected. In order to provide an at grade accessible ramp access for kayak access to the existing beach and water’s edge the fill requirements need to be maintained as shown. *(located at Project 7-Shoals Riverwalk - see plan areas 4- 5)*

6. Minimization and Mitigation of Impacts

Fill Material - The volume of soil cut along the river bank below the normal pool elevation is 92 CY and the volume filled is 2295 CY. Between the normal pool and the 100-year flood elevation 9744 CY of material will be cut and 13,868 CY of material will be filled. The fill will be placed over 0.46 AC of existing open-water area, while 0.04 AC of existing upland areas will be converted to open-water. A number of measures to reduce amount of fill material were used:

- The proposed grade of slopes at the riverside viewing area has been increased where possible to reduce the amount of fill material in the river.

	<p align="center">KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION APPLICATION BY: CITY OF KNOXVILLE</p> <p align="center">PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT</p>	<p align="center">PROJECT DESCRIPTION</p> <p align="right">SHEET 13 OF 53 DATE: 05/02/08</p>
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- The elevation of the proposed road adjacent to River Plain Park has been lowered to reduce fill material requirements in the vicinity of the park.
- Decks at Lincoln Street and Baker Creek Landing will be installed as pile supported structures to minimize fill and promote potential for shaded aquatic habitat.
- Design of landforms within the park area has been carefully considered to limit fill requirements where possible.

Loss of Shallow water habitat - Approximately 1420 LF of shallow water habitat will be lost due to construction of the kayak landing structures and regrading activities. To mitigate these losses, proposed rip rap installation will provide 3455 LF of additional potential habitat for aquatic species. Planting of native species along the riverbank would provide an additional 3,300 LF of shaded water edge significantly increasing potential aquatic habitats. Installation of pile supported structures and floating walkway will also provide additional potential shaded aquatic habitats.

Loss of Wetland – Exact existing wetland losses will be determined following an accurate delineation of the wetland area. It is anticipated that approximately 0.55 AC of existing wetland will be lost as a result of filling operations required to construct the proposed new road and pedestrian walkway associated with the proposed park and associated adjacent development. Every effort will be made during the next stages of design of the park to limit these losses where possible. The exact type of mitigation for these losses will be considered in greater detail following delineation of the wetland. It is anticipated that measures would likely include enhancement and creation of wetland to increase the aquatic resource function of the wetland will be carried out with exact acreages to be determined based on Nashville District mitigation ratio requirements.

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SHEET 14 OF 53
DATE: 05/02/08

PUBLIC CONSULTATION

PUBLIC WORKSHOPS AND COMMUNITY MEETINGS

Vision Plan and Development Code (Form-Based Code Zoning Regulations)

Public Workshops

Location: Kerbela Shriners Temple, 315 Mimosa Avenue, Knoxville

Dates:

- November 2005
- December 2005
- February 2006
- April 2006
- August 2006

Community Meetings

Location: Drop-In Center. 906 Sevier Ave. Knoxville

Dates:

- August 25th, 2006
- August 31st, 2006
- September 5th, 2006
- September 11th, 2006
- September 14th, 2006
- September 20th, 2006
- October 11th, 2006
- November 6th, 2006
- December 13th, 2006
- January 10th, 2007

Phase 1 Public Improvements Schematic Design

Public Workshop/Open House

Location: City Council Building, 400 Main Street, Knoxville & Kerbela Shriners Temple, 315 Mimosa Avenue

Dates:

- June 18, 2007
- November 13, 2007

Community Meeting

Location: South Knoxville Elementary School, 801 Sevier Avenue, Knoxville

Dates:

- December 12, 2007

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

PUBLIC CONSULTATION

SHEET 15 OF 53
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EXHIBITIONS

Vision Plan and Development Code (Form-Based Code Zoning Regulations)

Vision Plan and Model and Illustrative information on display for public review and comment.

Location: Drop-In Center, 906 Sevier Ave, Knoxville.

Dates: April 2006 - January 2007

Final Adopted Vision plan and model on display

Location: Knoxville South Waterfront Department, City Council Building, 400 Main Street, Knoxville

Dates: January 2007-ongoing

Phase 1 Public Improvements Schematic Design

Schematic Design Proposals for first phase of the project on display for public review and comment

Location: Chamber of Commerce on Market Square: 17 Market Square, #201 Knoxville

Dates: January 2008-April 2008

NEWSLETTER

A monthly newsletter providing an update on the project and notification of upcoming meetings/events is mailed and emailed to over 850 members of the local community. All issues to date are in PDF format on the KSW

website: <http://www.cityofknoxville.org/southwaterfront/>

Dates: October 2007- ongoing

WEBSITE

The Knoxville South Waterfront Project web page on the City of Knoxville website provides an overview of the project along with news and updates on the project, PDF versions of the monthly newsletter and contact information for the Knoxville South Waterfront Department. <http://www.cityofknoxville.org/southwaterfront/>

Dates: ongoing

The following plans and documents are available for download in PDF format:

- Vision Plan
- Action Plan and Financial Strategy Report
- Development Code
- Redevelopment Plan
- Phase 1 Public Improvements – Schematic Design Plans and Renderings
- Background/Related Studies including Feasibility and Traffic Impact Studies

PUBLIC COMMENTS

Throughout the various stages of the Knoxville South Waterfront Project the public has been directly involved and continually informed and updated on the progress of the project. Workshops and design charrettes have enabled the public to participate directly and shape the final design of the South Waterfront. The Knoxville South Waterfront website and more recent newsletter keep the local community updated on progress and maintains public interest and support for the project. All public comments from the various workshops, community meetings and public events have been recorded, reviewed by the design team and taken into account in the design process.

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

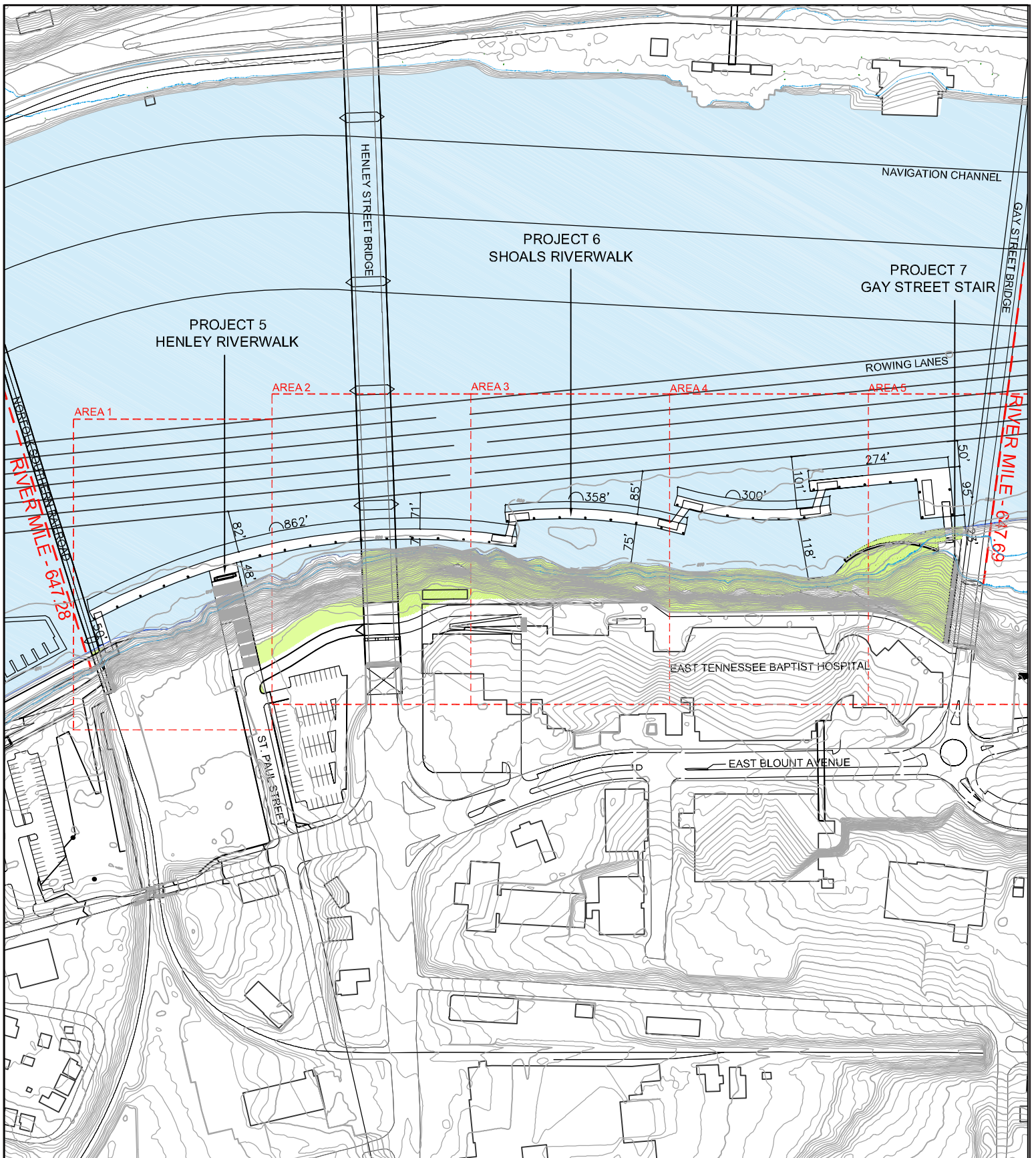
TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

PUBLIC CONSULTATION

SCALE: N.T.S.
SHEET 16 OF 53
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KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

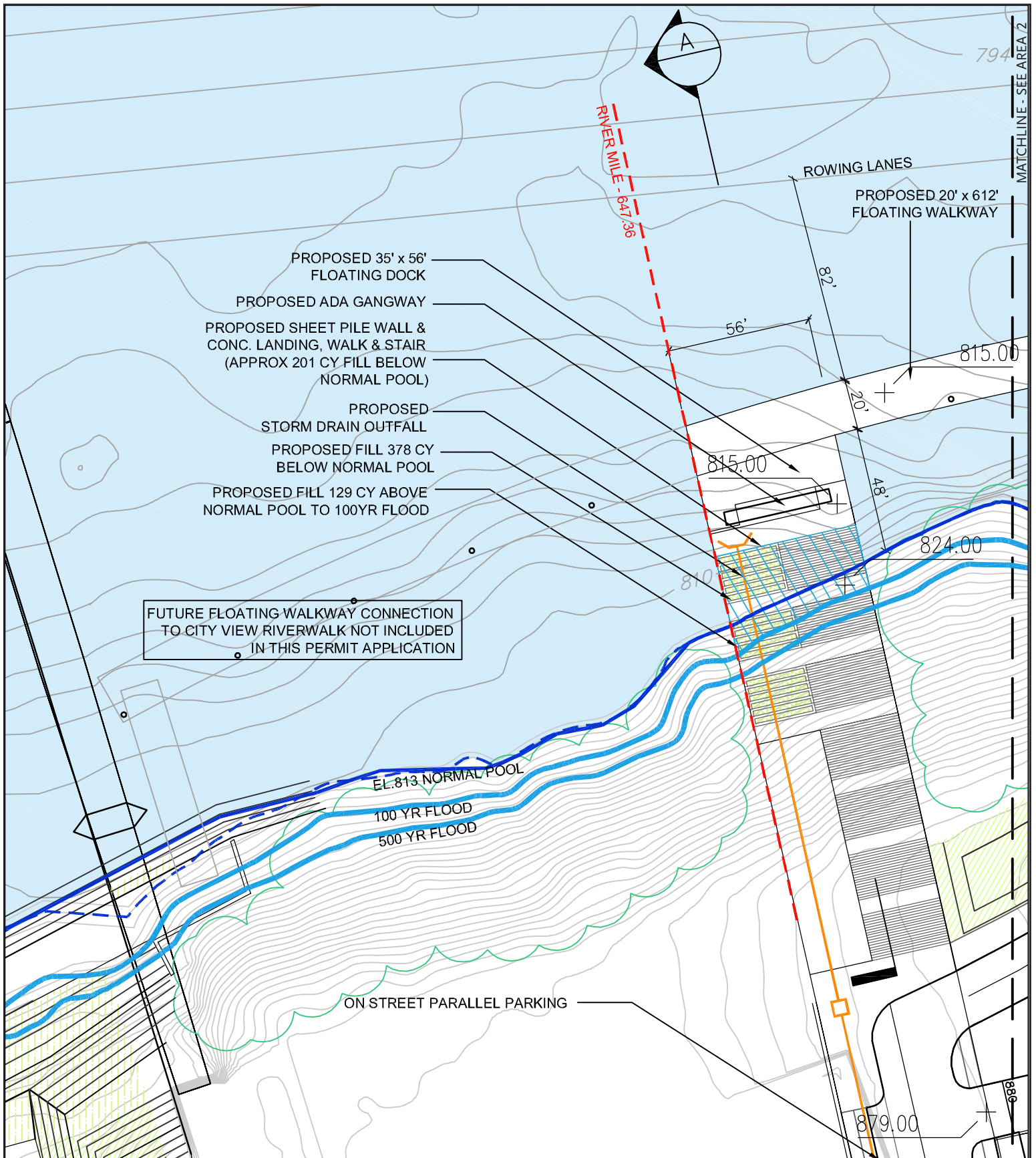
KEY PLAN - LOWER SECTION AREAS 1 to 5

**Project 5-Henley Riverwalk
Project 6-Shoals Riverwalk
Project 7-Gay Street Stair**







SCALE: 1"=250'

SHEET 17 OF 53
DATE: 05/02/08





LEGEND

-  EXISTING NORMAL POOL
-  PROPOSED NORMAL POOL
-  100 & 500 YR. FLOOD
-  PROPOSED DREDGE AREA
-  PROPOSED CUT AREA (+2' DEEP)
-  PROPOSED FILL AREA (+2' DEEP)

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

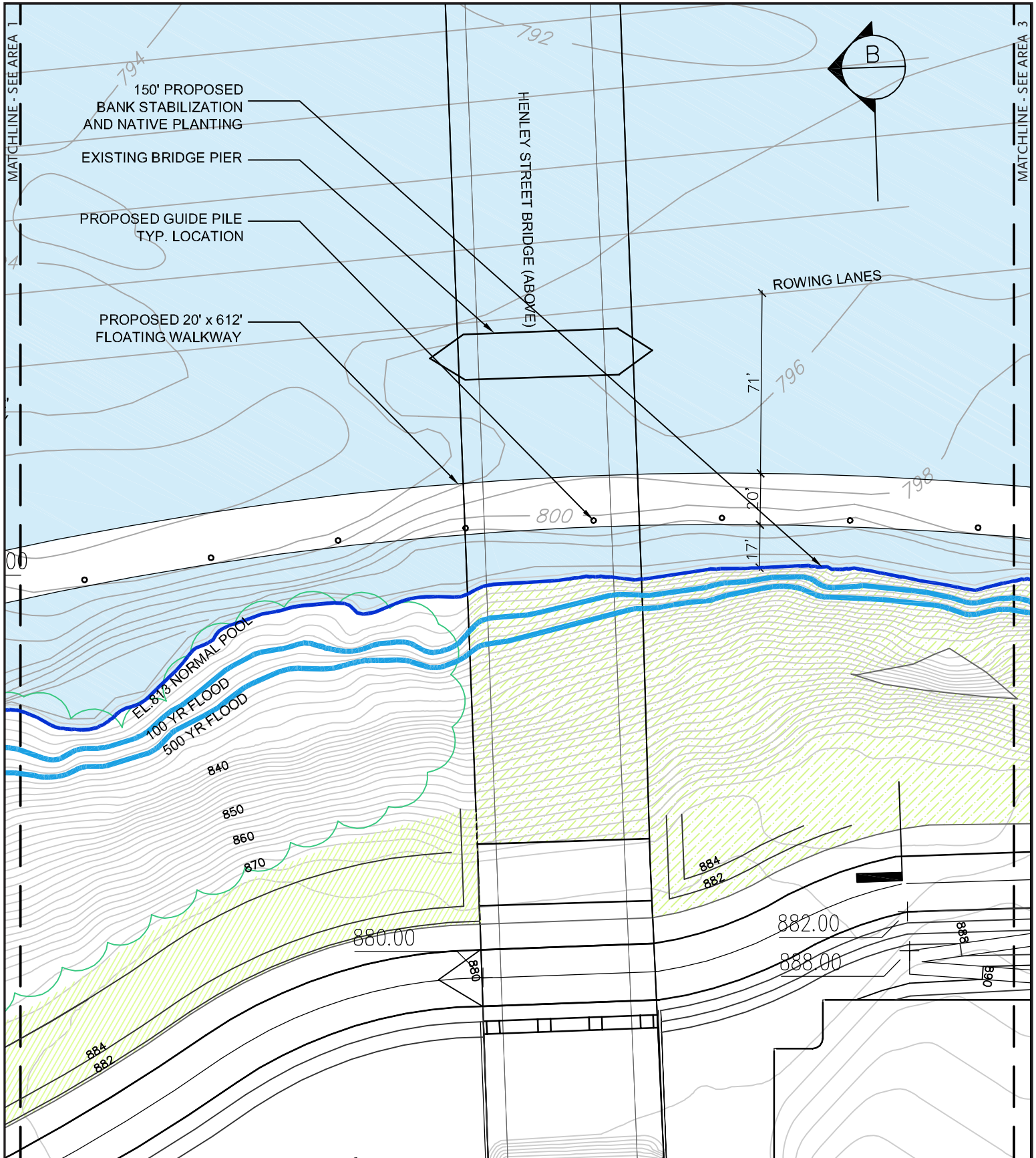
PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SITE PLAN AREA 1

DATUM: NAVD 88
SCALE: 1"=50'



SHEET 18 OF 53
DATE: 05/02/08



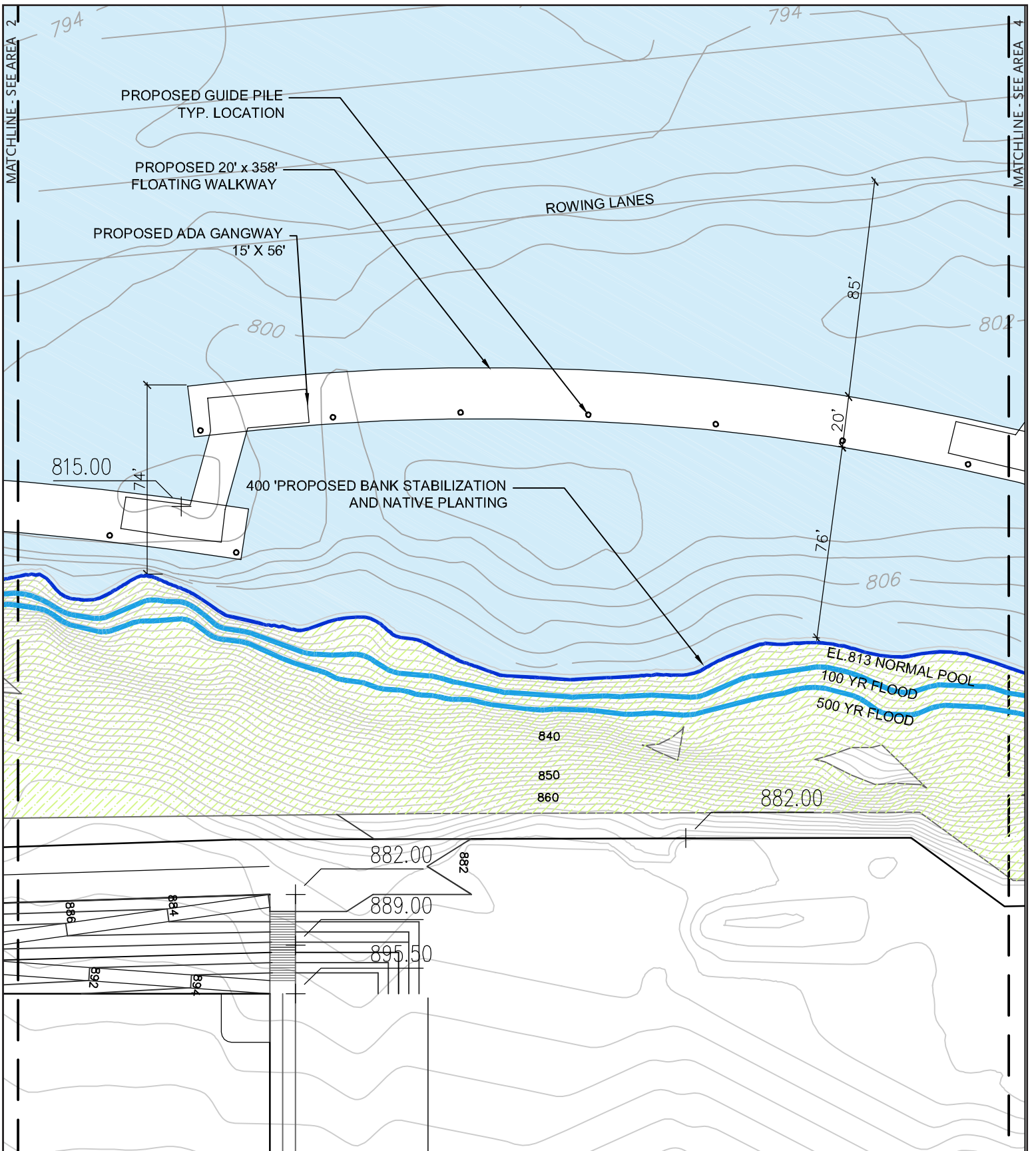
LEGEND

	EXISTING NORMAL POOL
	PROPOSED NORMAL POOL
	100 & 500 YR. FLOOD
	PROPOSED DREDGE AREA
	PROPOSED CUT AREA (+2' DEEP)
	PROPOSED FILL AREA (+2' DEEP)







KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS
 TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION
 APPLICATION BY: CITY OF KNOXVILLE
 PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SITE PLAN AREA 2
 DATUM: NAVD 88
 SCALE: 1"=50'

SHEET 19 OF 53
 DATE: 05/02/08



LEGEND

-  EXISTING NORMAL POOL
-  PROPOSED NORMAL POOL
-  100 & 500 YR. FLOOD
-  PROPOSED DREDGE AREA
-  PROPOSED CUT AREA (+2' DEEP)
-  PROPOSED FILL AREA (+2' DEEP)

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

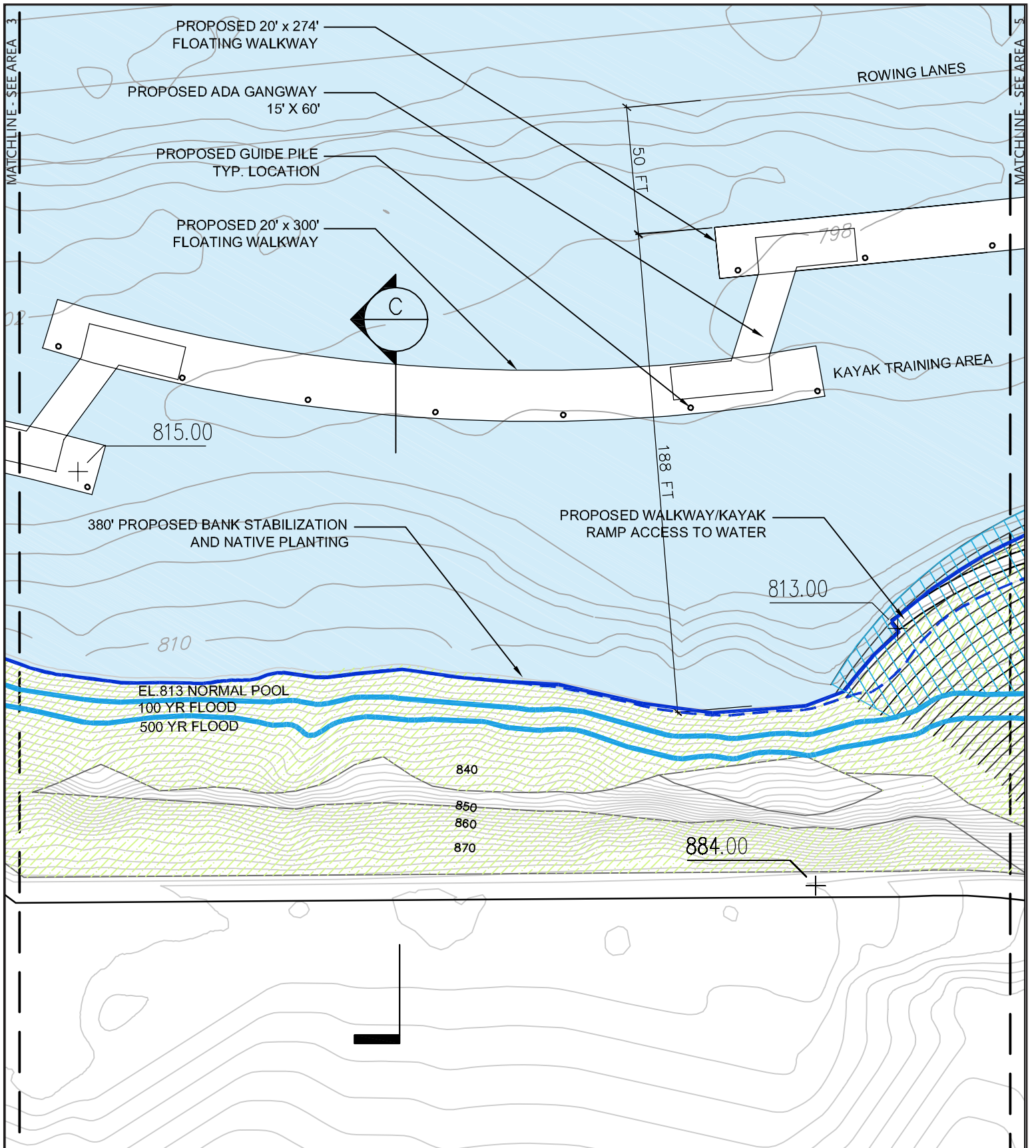
PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SITE PLAN AREA 3







DATUM: NAVD 88
SCALE: 1"=50'



SHEET 20 OF 53
DATE: 05/02/08



LEGEND

-  EXISTING NORMAL POOL
-  PROPOSED NORMAL POOL
-  100 & 500 YR. FLOOD
-  PROPOSED DREDGE AREA
-  PROPOSED CUT AREA (+2' DEEP)
-  PROPOSED FILL AREA (+2' DEEP)

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

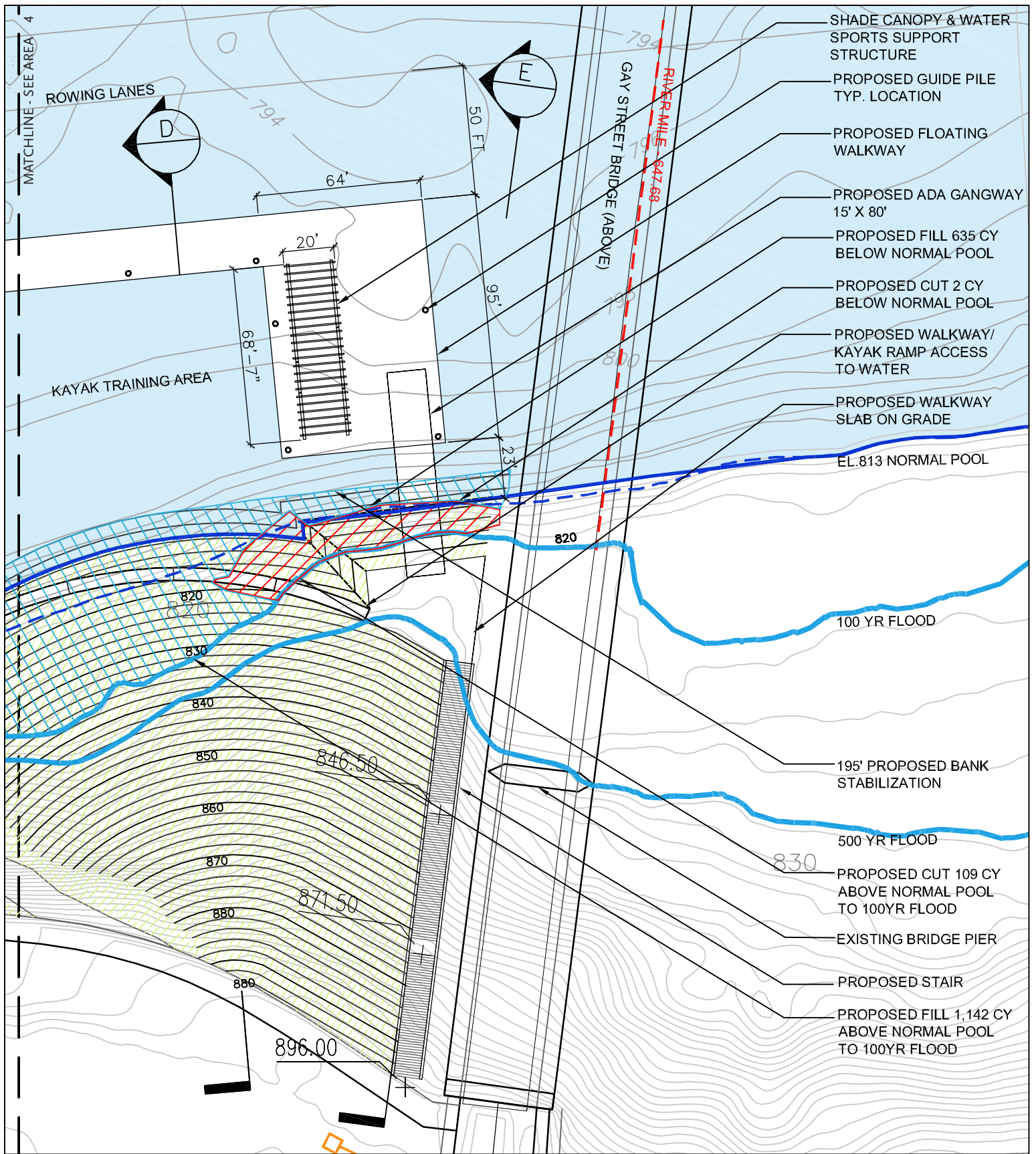
PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SITE PLAN AREA 4

DATUM: NAVD 88
SCALE: 1"=50'



SHEET 21 OF 53
DATE: 05/02/08



- SHADE CANOPY & WATER SPORTS SUPPORT STRUCTURE
- PROPOSED GUIDE PILE TYP. LOCATION
- PROPOSED FLOATING WALKWAY
- PROPOSED ADA GANGWAY 15' X 80'
- PROPOSED FILL 635 CY BELOW NORMAL POOL
- PROPOSED CUT 2 CY BELOW NORMAL POOL
- PROPOSED WALKWAY/ KAYAK RAMP ACCESS TO WATER
- PROPOSED WALKWAY SLAB ON GRADE
- EL. 813 NORMAL POOL

- 100 YR FLOOD
- 195' PROPOSED BANK STABILIZATION
- 500 YR FLOOD
- PROPOSED CUT 109 CY ABOVE NORMAL POOL TO 100YR FLOOD
- EXISTING BRIDGE PIER
- PROPOSED STAIR
- PROPOSED FILL 1,142 CY ABOVE NORMAL POOL TO 100YR FLOOD

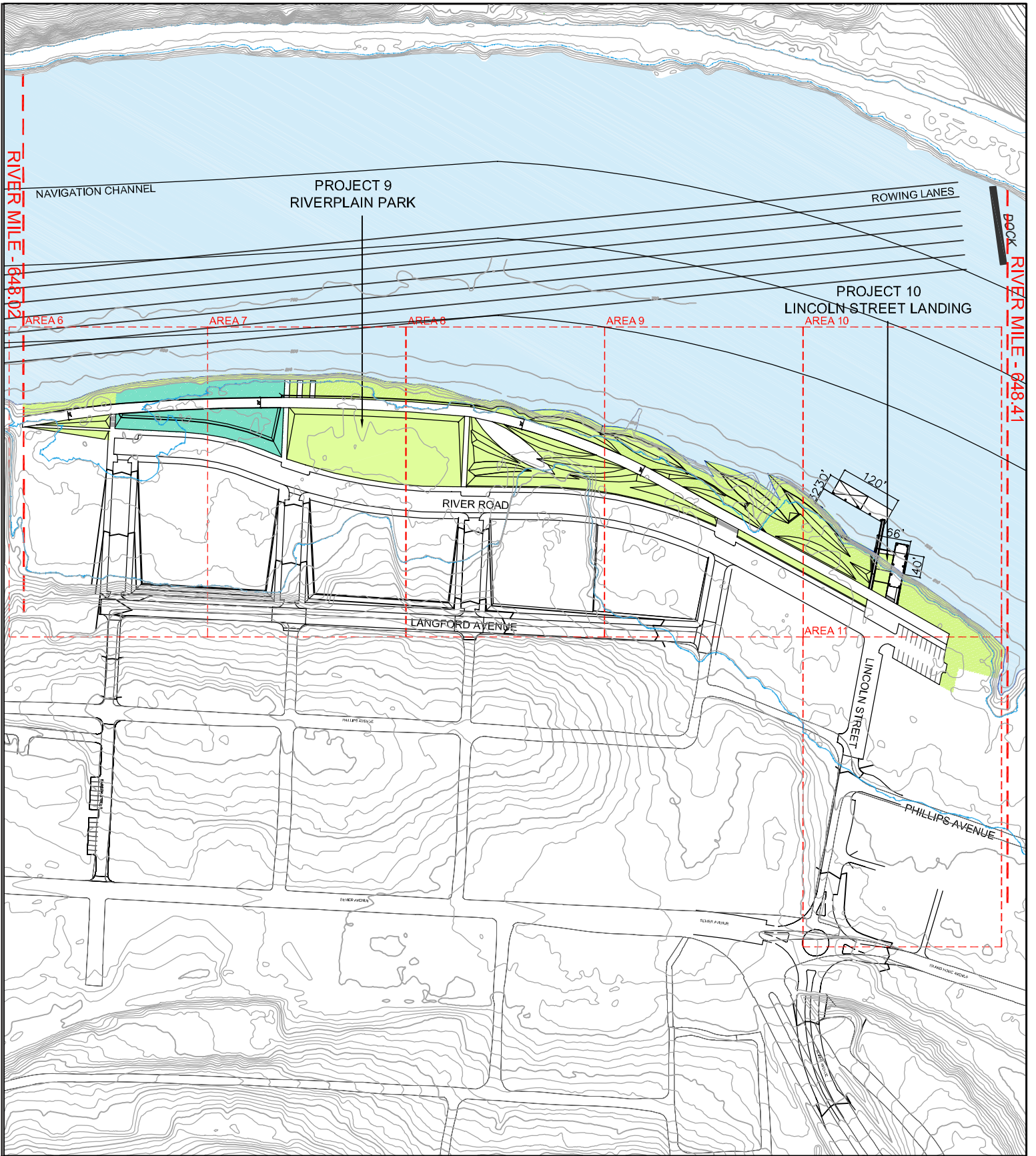
LEGEND

- EXISTING NORMAL POOL
- PROPOSED NORMAL POOL
- 100 & 500 YR. FLOOD
- PROPOSED DREDGE AREA
- PROPOSED CUT AREA (+2' DEEP)
- PROPOSED FILL AREA (+2' DEEP)

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS
 TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION
 APPLICATION BY: CITY OF KNOXVILLE
 PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SITE PLAN AREA 5
 DATUM: NAVD 88
 SCALE: 1"=50'

 SHEET 22 OF 53
 DATE: 05/02/08



KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

KEY PLAN - MIDDLE SECTION AREAS 6 to 11

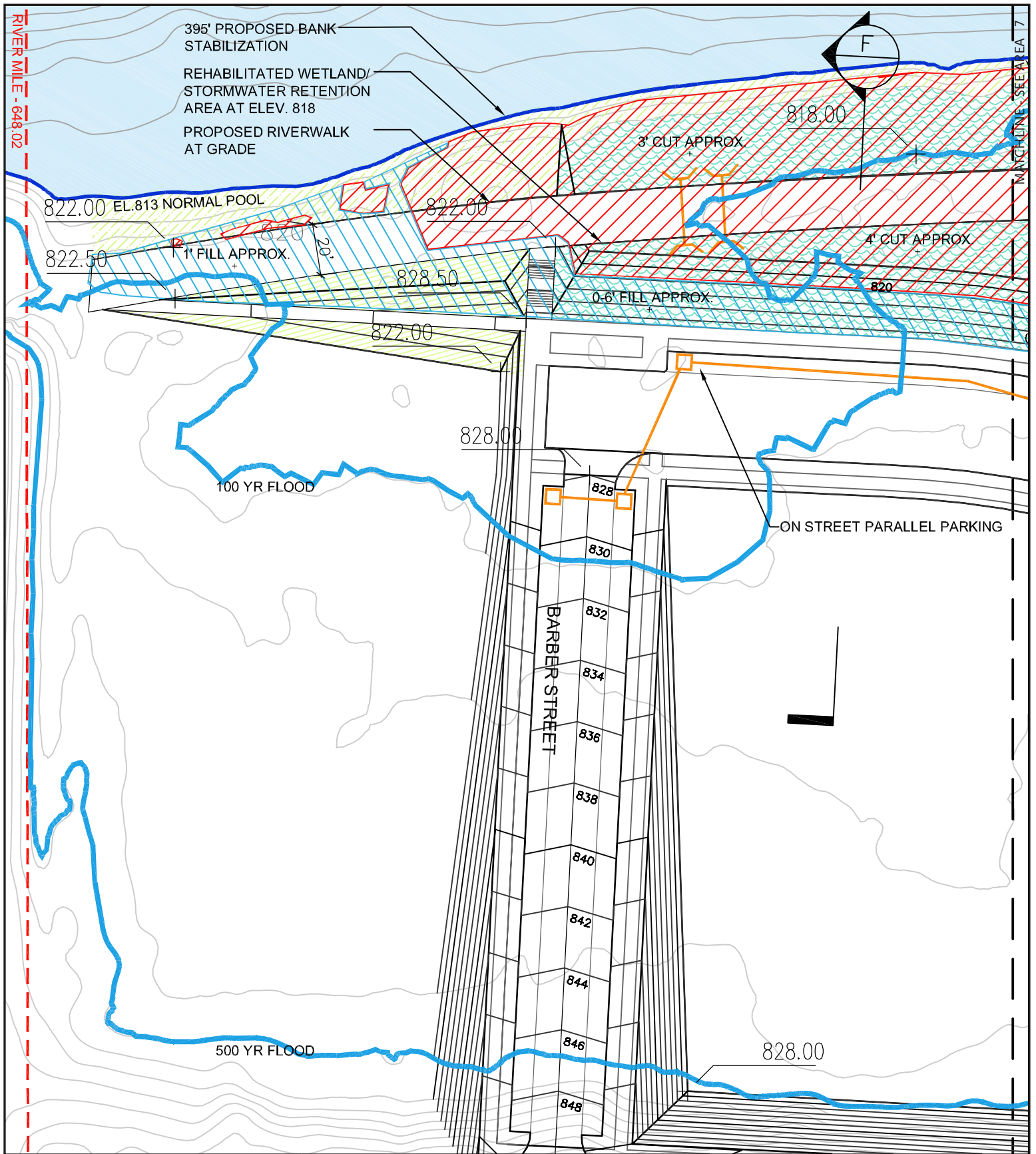
**Project 9-River Plain Park
Project 10-Lincoln Street Landing**

SCALE: 1"=250'

SHEET 23 OF 53

DATE: 05/02/08





RIVER MILE - 648.02

MANCINI - SEE AREA 7

395' PROPOSED BANK STABILIZATION
 REHABILITATED WETLAND/
 STORMWATER RETENTION
 AREA AT ELEV. 818
 PROPOSED RIVERWALK
 AT GRADE

818.00

3' CUT APPROX

822.00 EL. 813 NORMAL POOL

822.00

4' CUT APPROX

822.50

1' FILL APPROX.

828.50

0.6' FILL APPROX.

820

827.00

828.00

100 YR FLOOD

ON STREET PARALLEL PARKING

BARBER STREET

828

830

832

834

836

838

840

842

844







846

848

828.00

500 YR FLOOD

LEGEND

-  EXISTING NORMAL POOL
-  PROPOSED NORMAL POOL
-  100 & 500 YR. FLOOD
-  PROPOSED DREDGE AREA
-  PROPOSED CUT AREA (+2' DEEP)
-  PROPOSED FILL AREA (+2' DEEP)

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

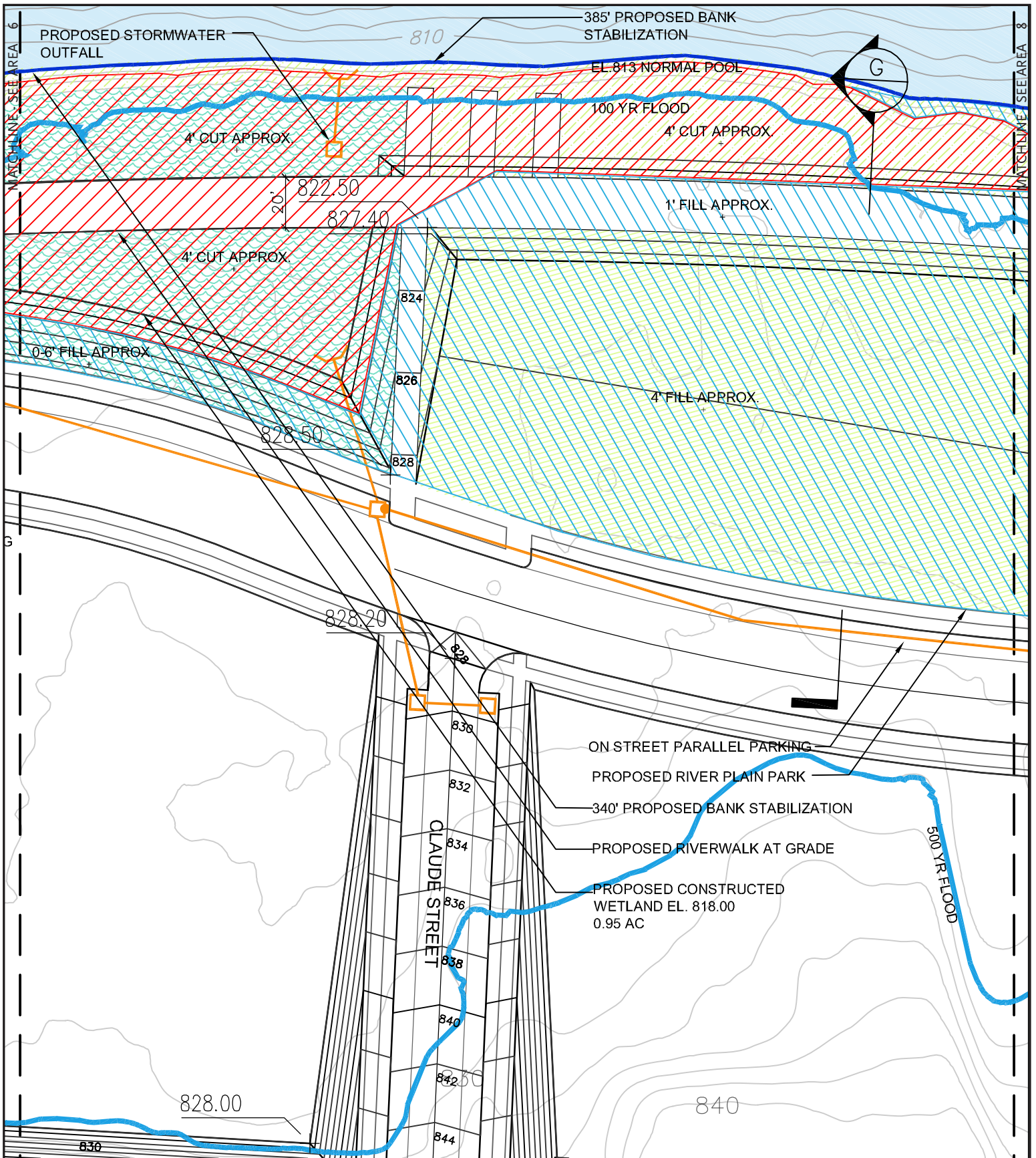
PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SITE PLAN AREA 6

DATUM: NAVD 88
 SCALE: 1"=50'



SHEET 24 OF 53
 DATE: 05/02/08



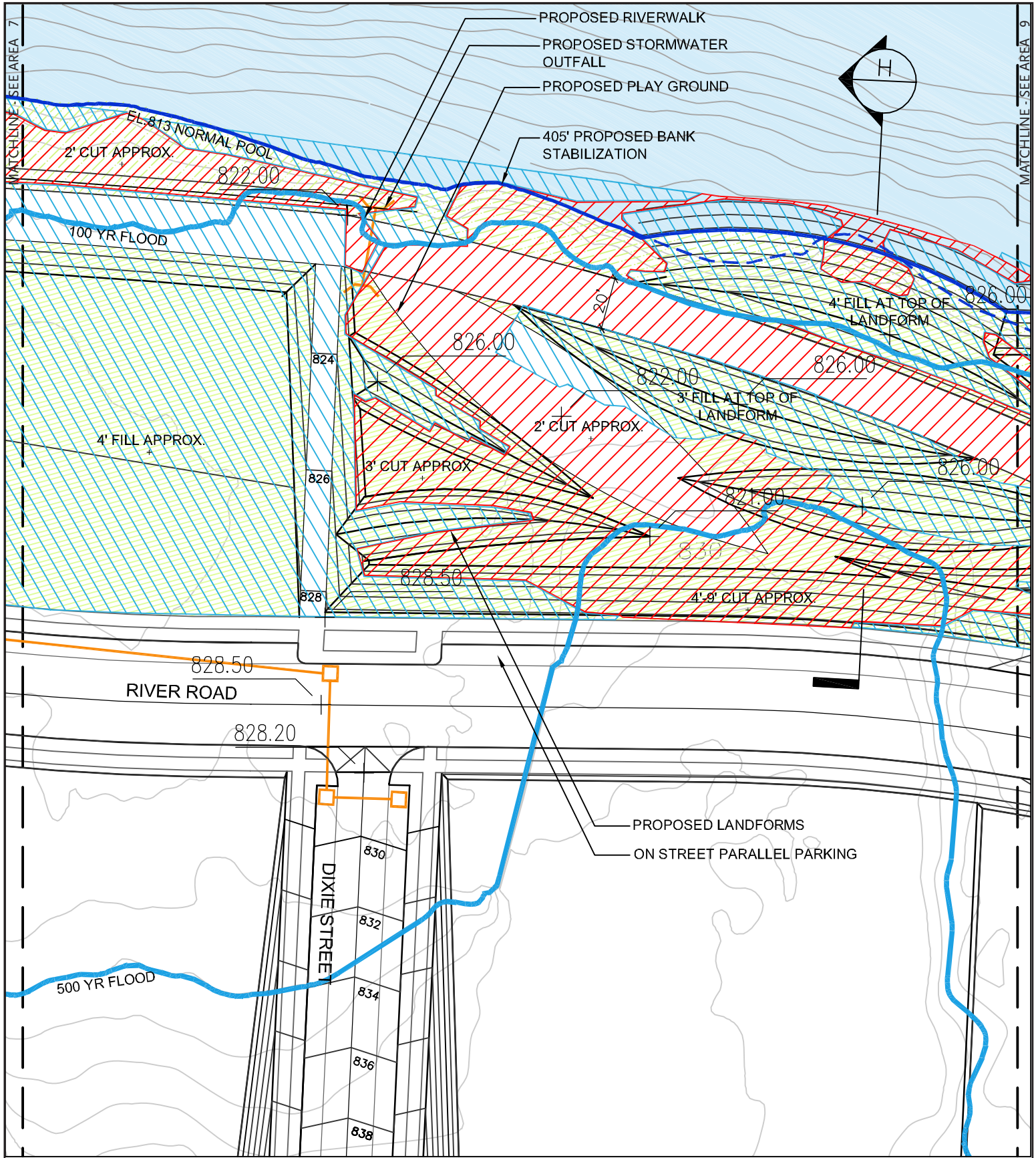
LEGEND

	EXISTING NORMAL POOL
	PROPOSED NORMAL POOL
	100 & 500 YR. FLOOD
	PROPOSED DREDGE AREA
	PROPOSED CUT AREA (+2' DEEP)
	PROPOSED FILL AREA (+2' DEEP)

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS
 TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION
 APPLICATION BY: CITY OF KNOXVILLE
 PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SITE PLAN AREA 7
 DATUM: NAVD 88
 SCALE: 1"=50'

 SHEET 25 OF 53
 DATE: 05/02/08



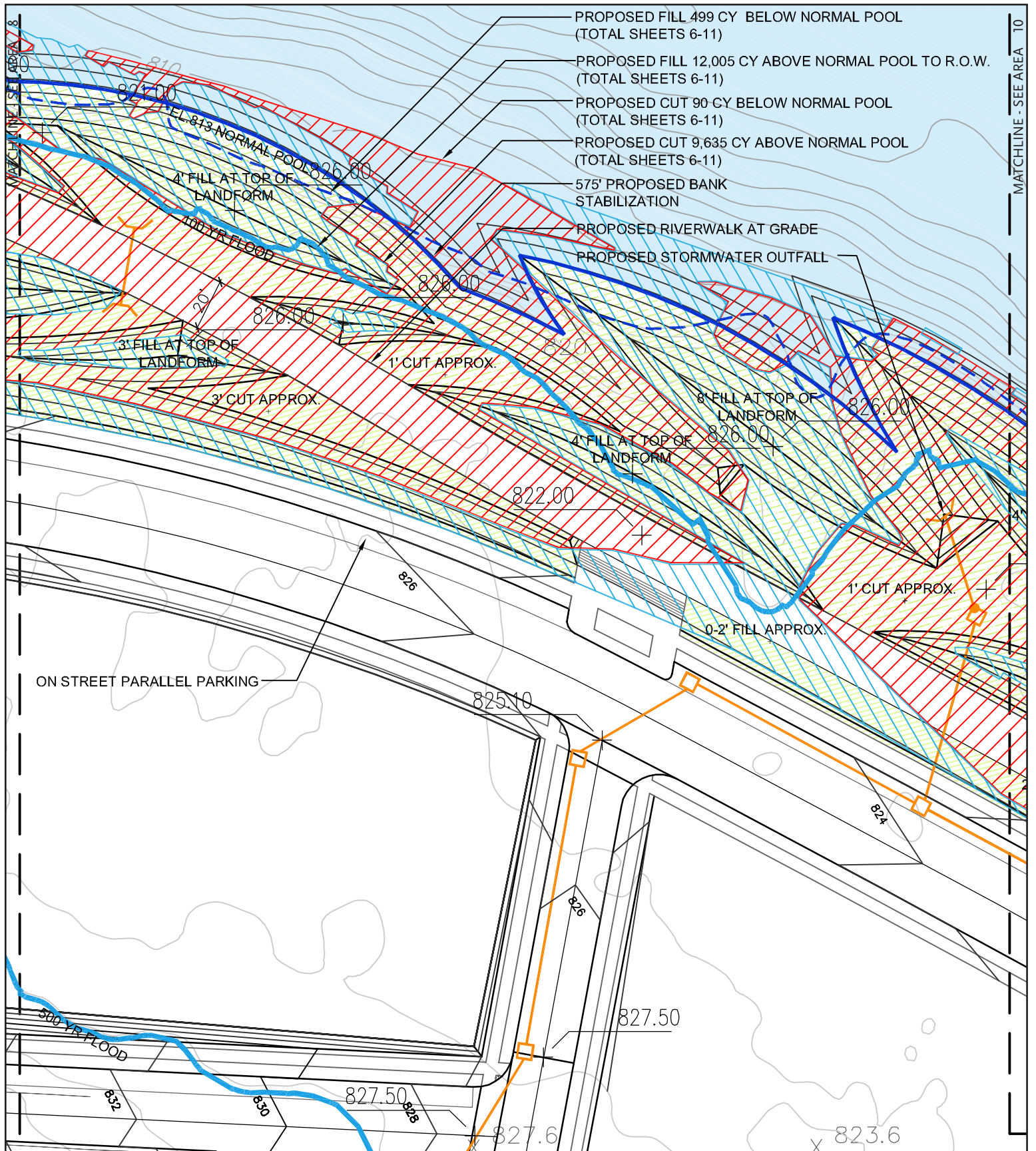
LEGEND

	EXISTING NORMAL POOL
	PROPOSED NORMAL POOL
	100 & 500 YR. FLOOD
	PROPOSED DREDGE AREA
	PROPOSED CUT AREA (+2' DEEP)
	PROPOSED FILL AREA (+2' DEEP)

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS
 TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION
 APPLICATION BY: CITY OF KNOXVILLE
 PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SITE PLAN AREA 8
 DATUM: NAVD 88
 SCALE: 1"=50'

SHEET 26 OF 53
 DATE: 05/02/08



- PROPOSED FILL 499 CY BELOW NORMAL POOL (TOTAL SHEETS 6-11)
- PROPOSED FILL 12,005 CY ABOVE NORMAL POOL TO R.O.W. (TOTAL SHEETS 6-11)
- PROPOSED CUT 90 CY BELOW NORMAL POOL (TOTAL SHEETS 6-11)
- PROPOSED CUT 9,635 CY ABOVE NORMAL POOL (TOTAL SHEETS 6-11)
- 575' PROPOSED BANK STABILIZATION
- PROPOSED RIVERWALK AT GRADE
- PROPOSED STORMWATER OUTFALL

MATCHLINE - SEE AREA 10

LEGEND

- EXISTING NORMAL POOL
- PROPOSED NORMAL POOL
- 100 & 500 YR. FLOOD
- x x x x PROPOSED DREDGE AREA
- / / / / PROPOSED CUT AREA (+2' DEEP)
- / / / / PROPOSED FILL AREA (+2' DEEP)

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

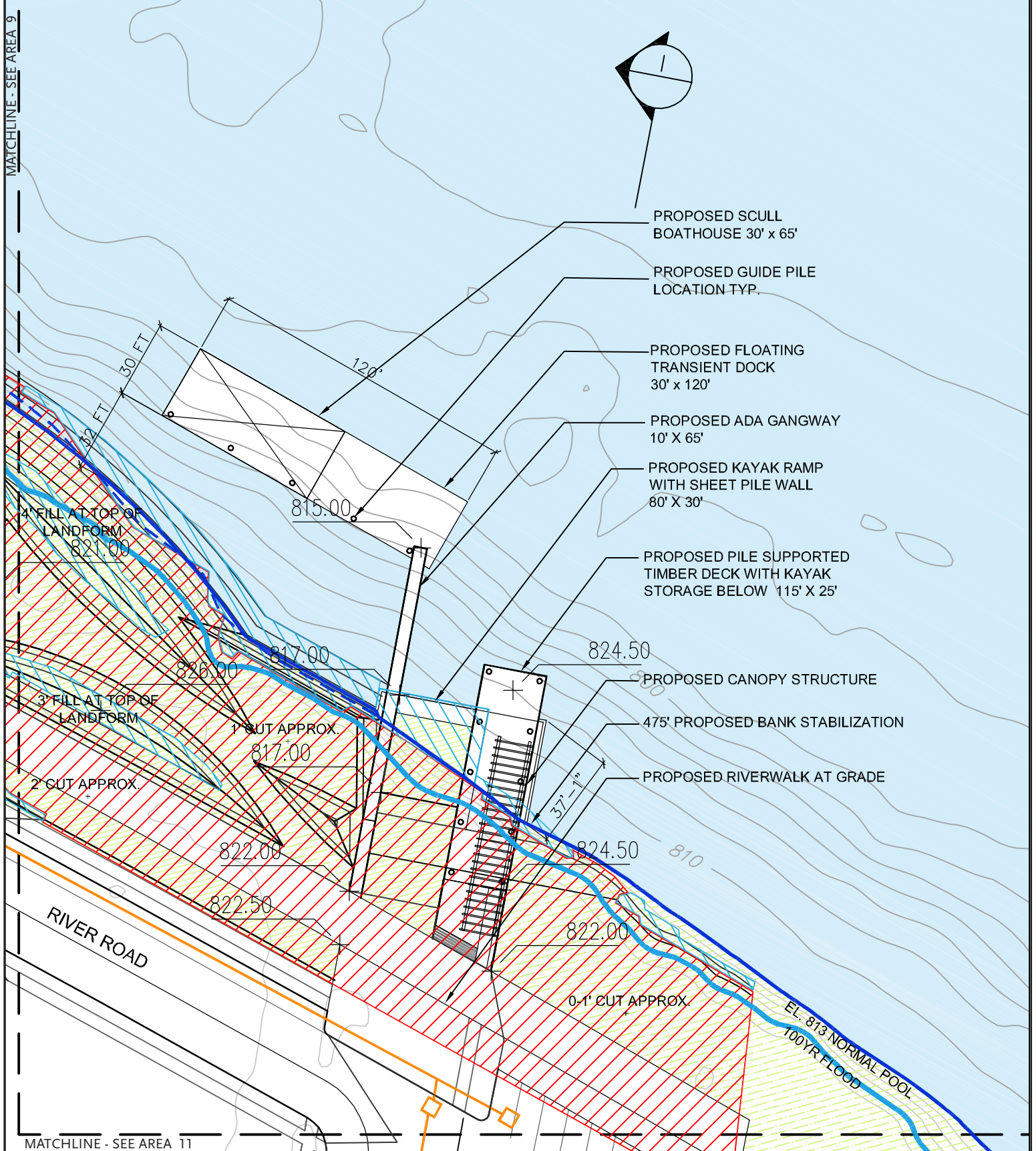
APPLICATION BY: CITY OF KNOXVILLE

PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SITE PLAN AREA 9

DATUM: NAVD 88
SCALE: 1"=50'

SHEET 27 OF 53
DATE: 05/02/08



MATCHLINE - SEE AREA 9

MATCHLINE - SEE AREA 11

LEGEND

- EXISTING NORMAL POOL
- PROPOSED NORMAL POOL
- 100 & 500 YR. FLOOD
- x x x x PROPOSED DREDGE AREA
- / / / / PROPOSED CUT AREA (+2' DEEP)
- / / / / PROPOSED FILL AREA (+2' DEEP)

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS


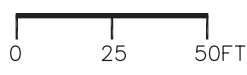
TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

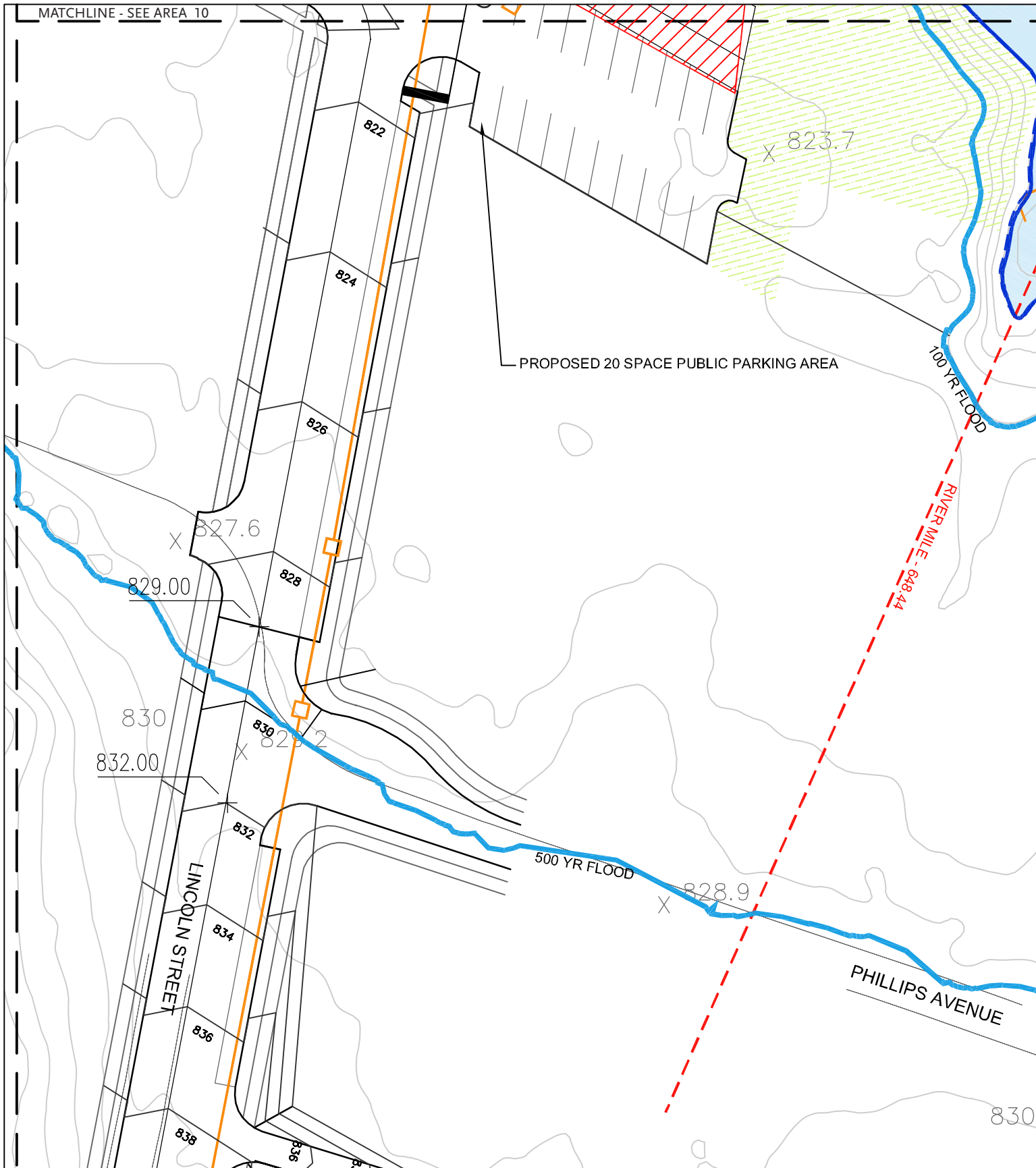
SITE PLAN AREA 10

DATUM: NAVD 88
SCALE: 1"=50'










SHEET 28 OF 53
DATE: 05/02/08

MATCHLINE - SEE AREA 10



LEGEND

-  EXISTING NORMAL POOL
-  PROPOSED NORMAL POOL
-  100 & 500 YR. FLOOD
-  PROPOSED DREDGE AREA
-  PROPOSED CUT AREA (+2' DEEP)
-  PROPOSED FILL AREA (+2' DEEP)

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

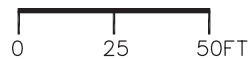
TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

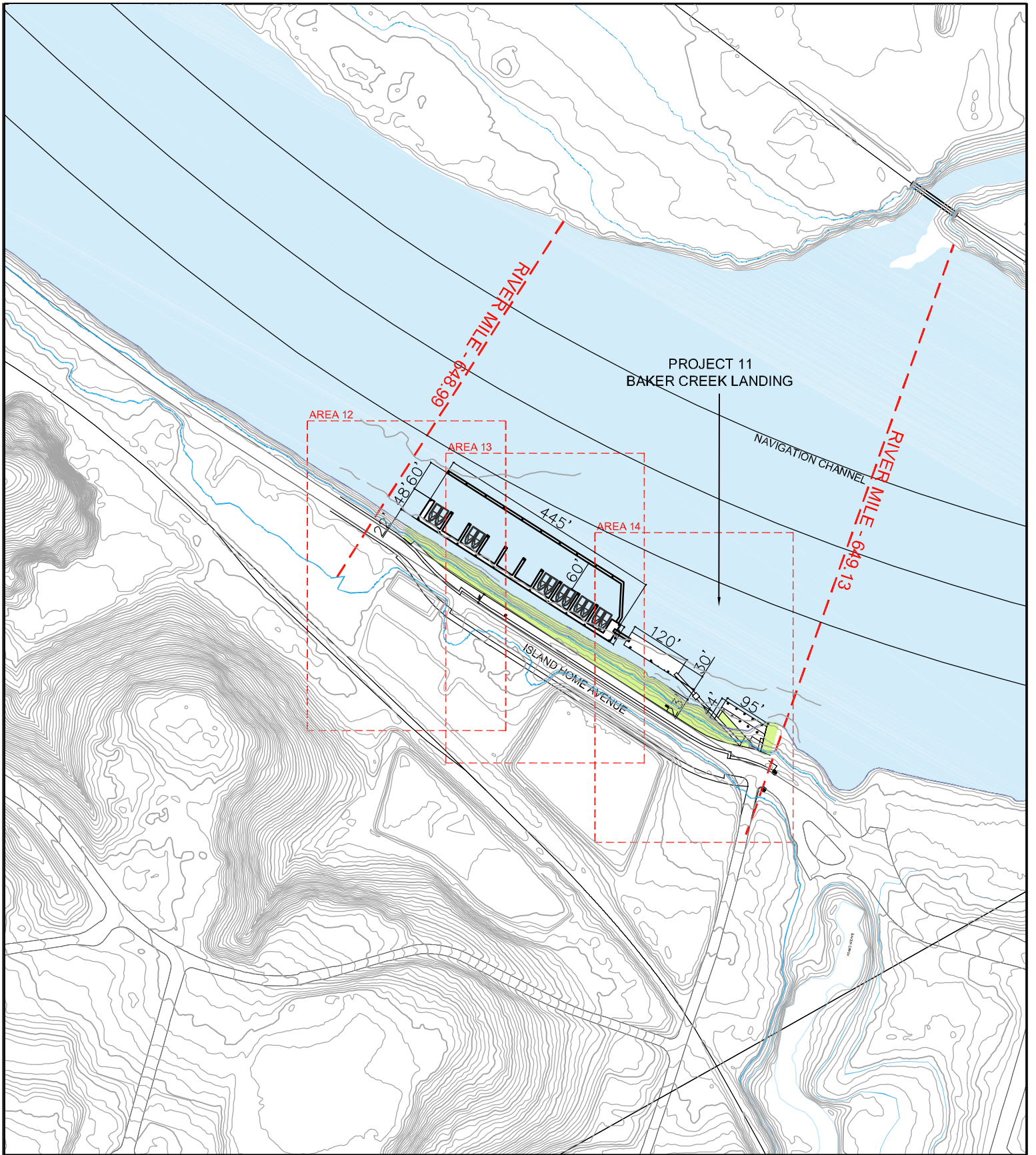
PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SITE PLAN AREA 11

DATUM: NAVD 88
SCALE: 1"=50'



SHEET 29 OF 53
DATE: 05/02/08



KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

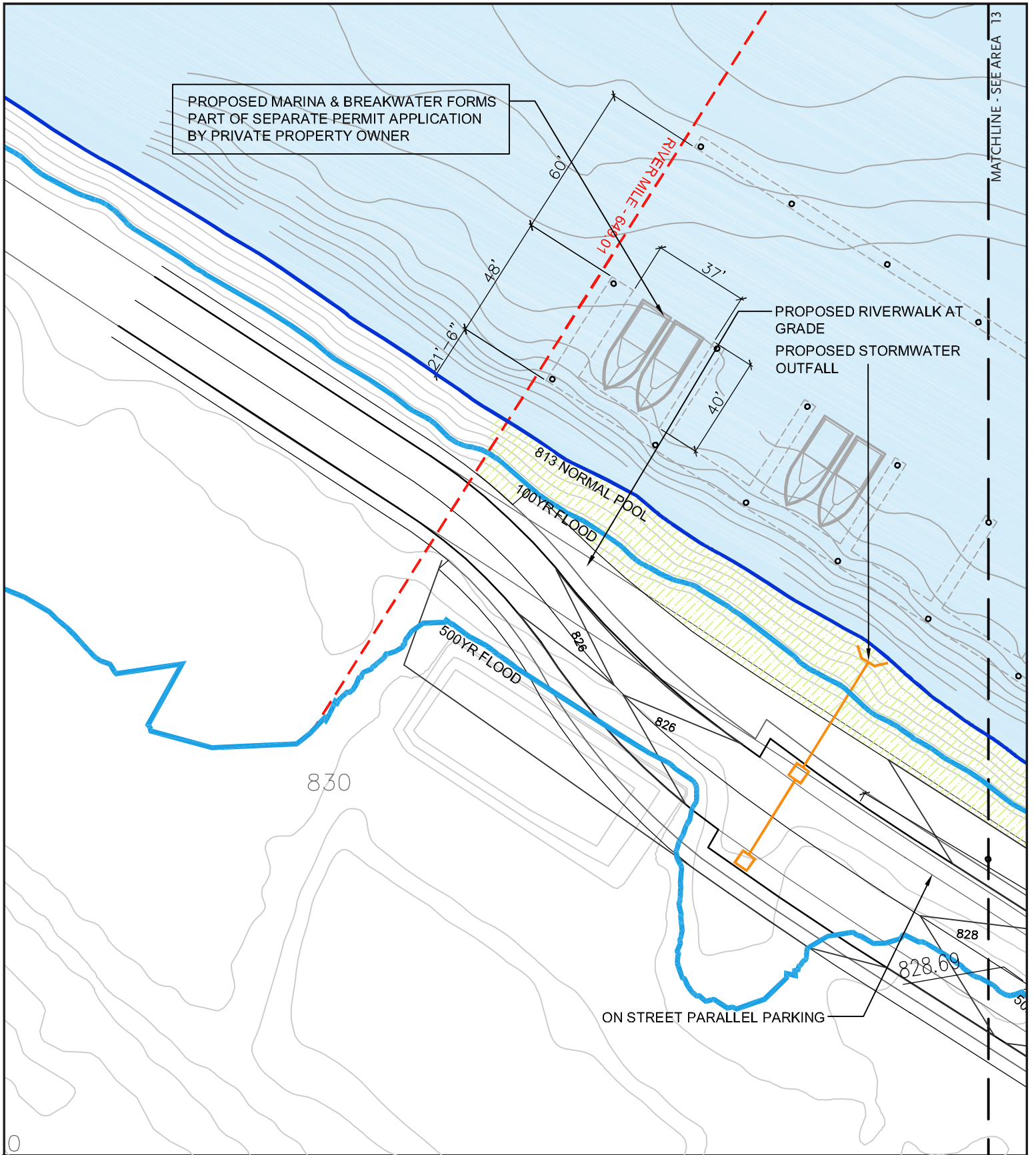
PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

KEY PLAN - UPPER SECTION AREAS 12 to 14

Project 11-Baker Creek Landing



SCALE: 1"=250'
SHEET 30 OF 53
DATE: 05/02/08



LEGEND

- EXISTING NORMAL POOL
- PROPOSED NORMAL POOL
- 100 & 500 YR. FLOOD
- x x x x PROPOSED DREDGE AREA
- PROPOSED CUT AREA (+2' DEEP)
- PROPOSED FILL AREA (+2' DEEP)

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

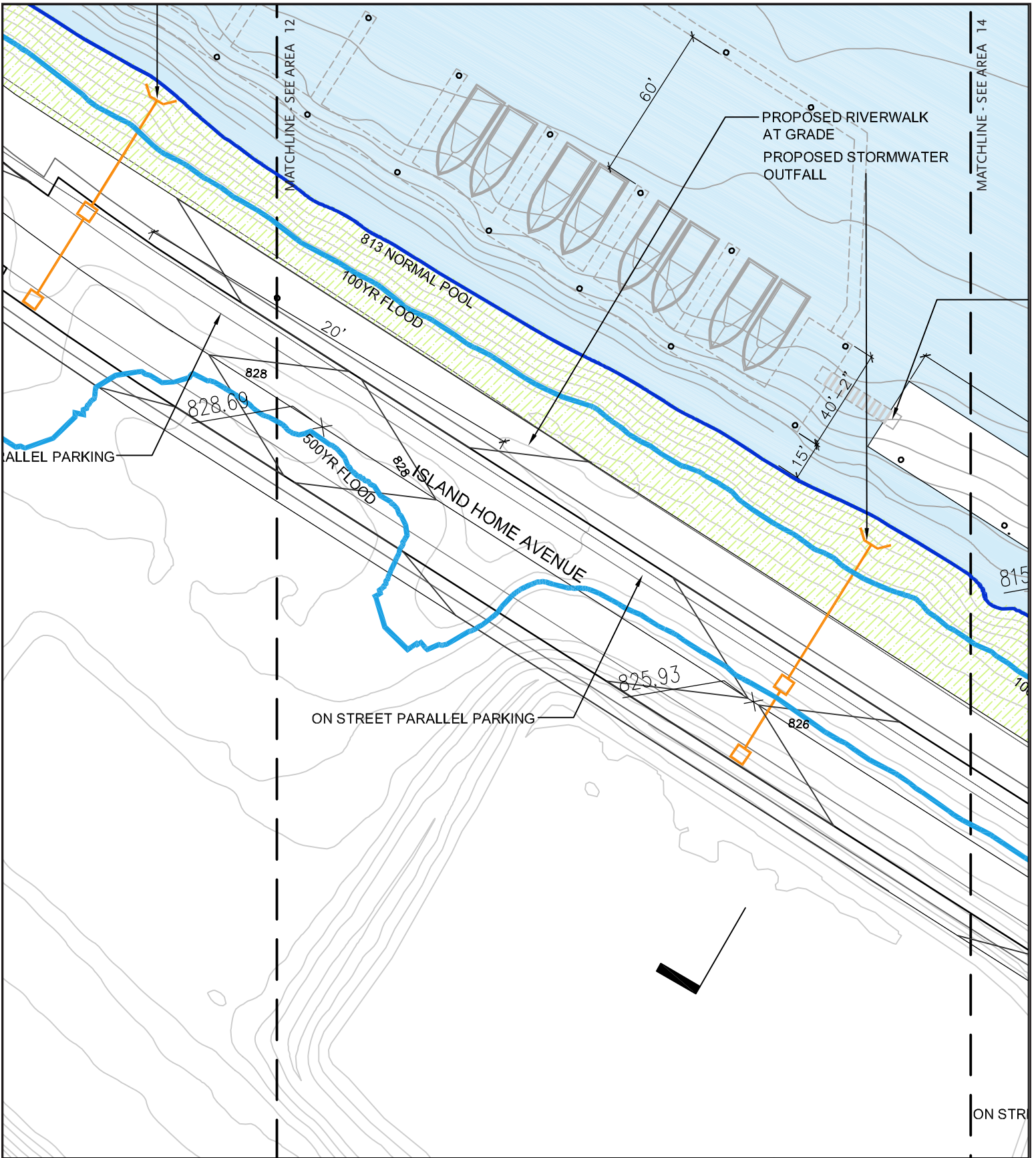
PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SITE PLAN AREA 12

DATUM: NAVD 88
SCALE: 1"=50'



SHEET 31 OF 53
DATE: 05/02/08



LEGEND

- EXISTING NORMAL POOL
- PROPOSED NORMAL POOL
- 100 & 500 YR. FLOOD
- PROPOSED DREDGE AREA
- PROPOSED CUT AREA (+2' DEEP)
- PROPOSED FILL AREA (+2' DEEP)

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

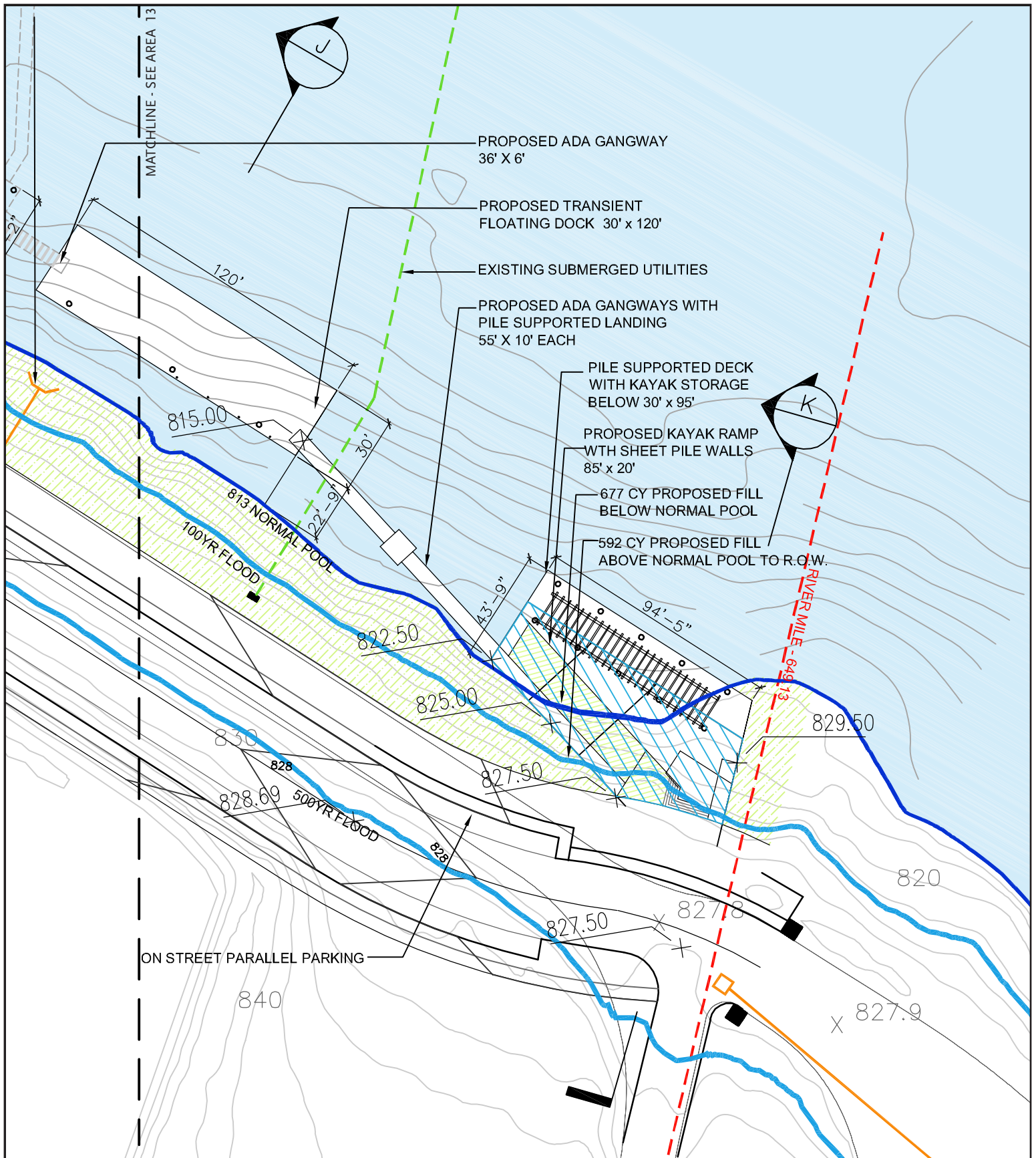
PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SITE PLAN AREA 13

DATUM: NAVD 88
SCALE: 1"=50'



SHEET 32 OF 53
DATE: 05/02/08



LEGEND

- EXISTING NORMAL POOL
- PROPOSED NORMAL POOL
- 100 & 500 YR. FLOOD
- x x x x PROPOSED DREDGE AREA
- PROPOSED CUT AREA (+2' DEEP)
- PROPOSED FILL AREA (+2' DEEP)

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

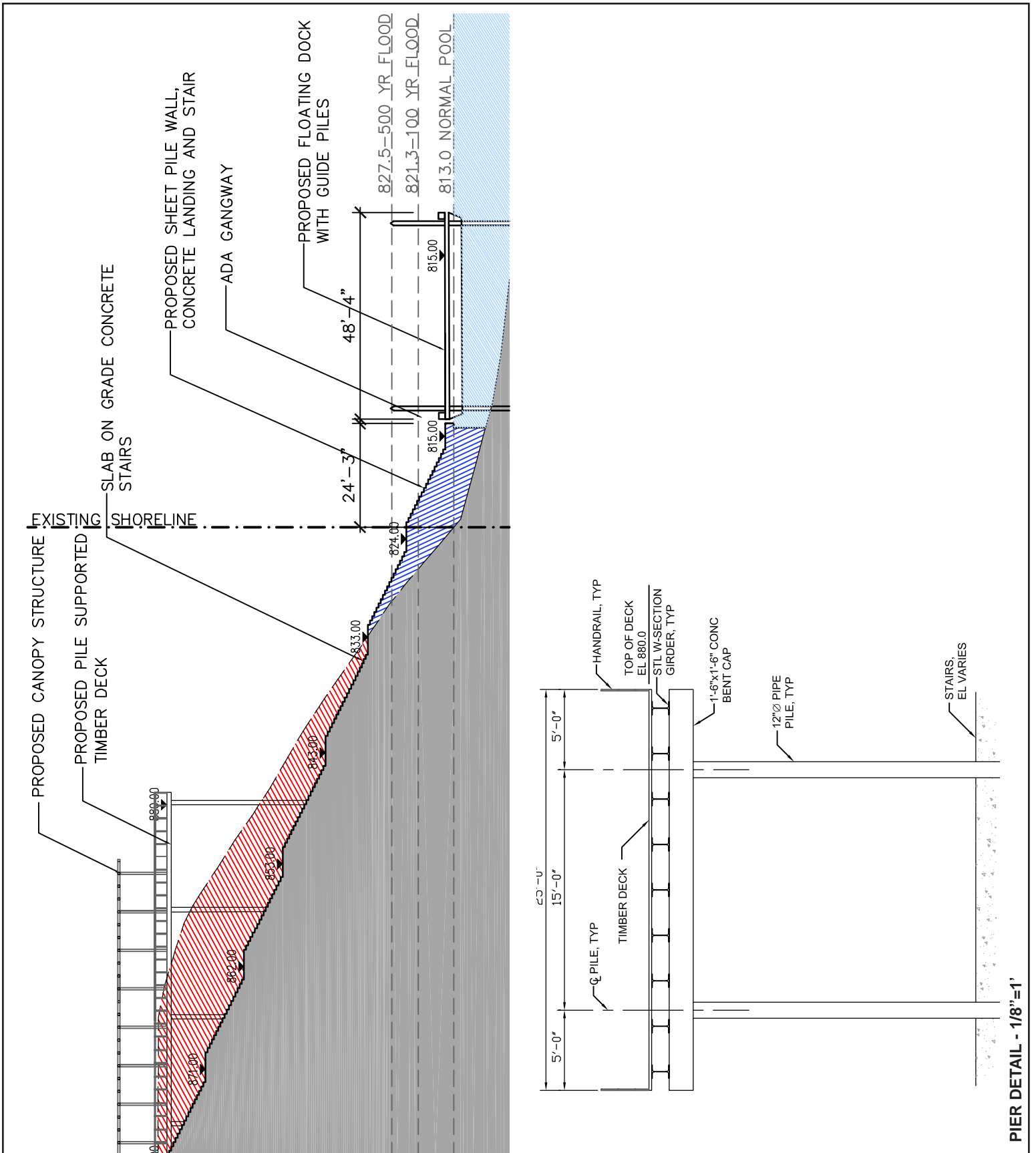
PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SITE PLAN AREA 14

DATUM: NAVD 88
SCALE: 1"=50'



SHEET 33 OF 53
DATE: 05/02/08



PIER DETAIL - 1/8"=1'

LEGEND

- PROPOSED DREDGE AREA
- PROPOSED CUT AREA
- PROPOSED FILL AREA

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

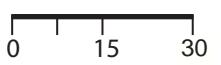
TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

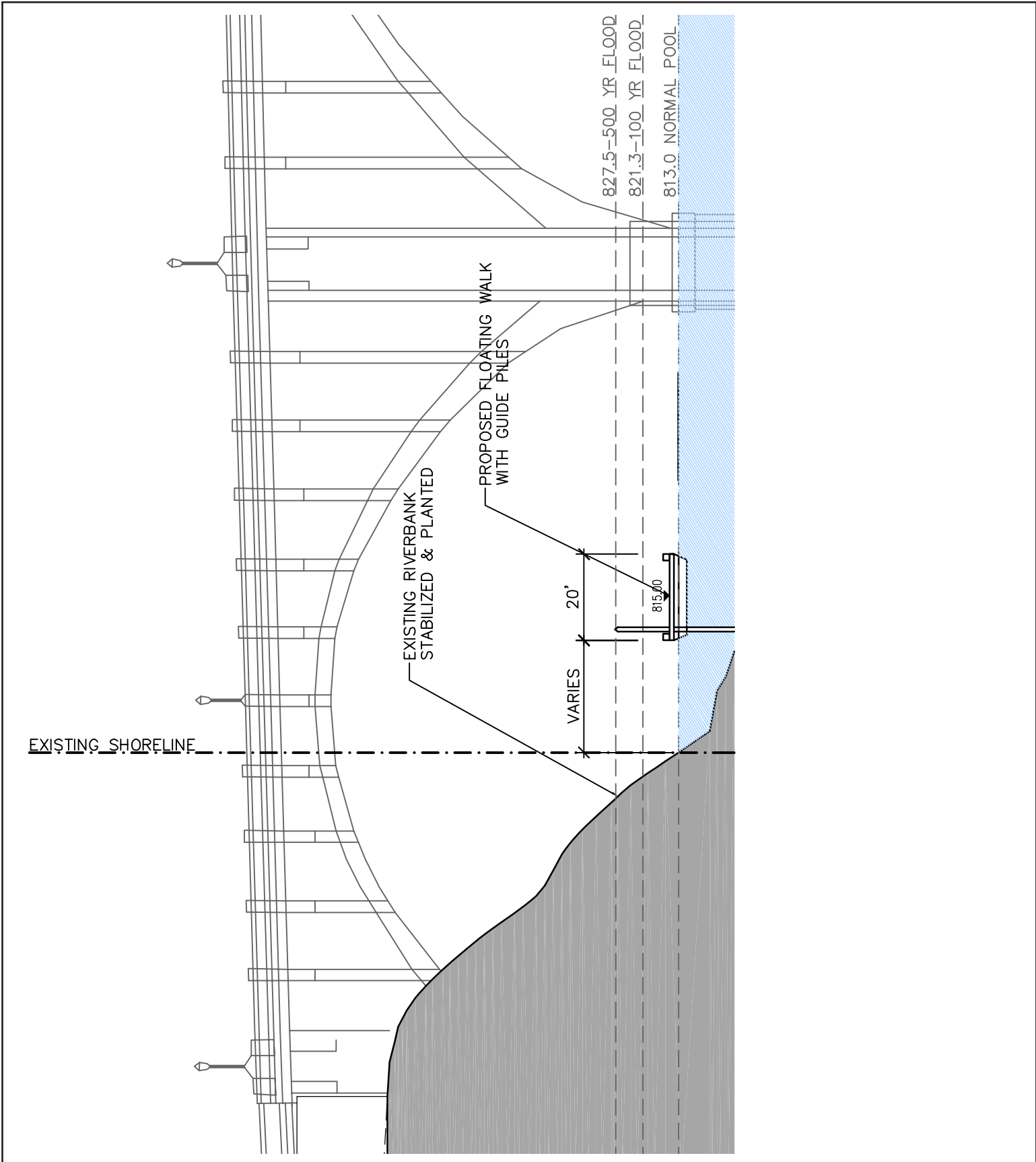
PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SECTION A

DATUM: NAVD 88
SCALE: 1"=30'



SHEET 34 OF 53
DATE: 05/02/08



EXISTING SHORELINE

EXISTING RIVERBANK
STABILIZED & PLANTED

PROPOSED FLOATING WALK
WITH GUIDE PILES



VARIES

20'

815.00

827.5 - 500 YR FLOOD
821.3 - 100 YR FLOOD
813.0 NORMAL POOL

LEGEND

-  PROPOSED CUT AREA
-  PROPOSED FILL AREA

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

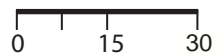
TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

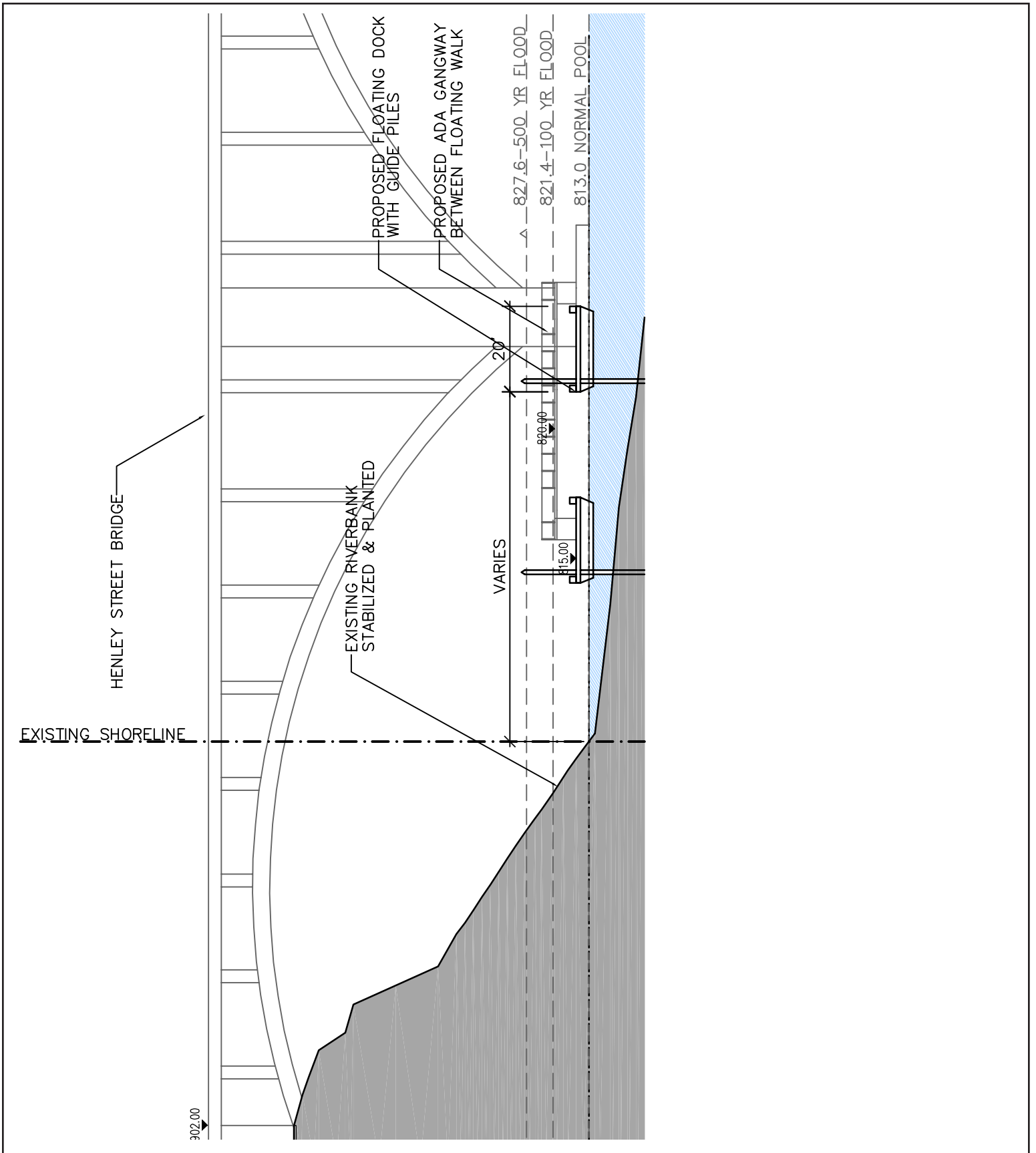
PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SECTION B




DATUM: NAVD 88
SCALE: 1"=30'



SHEET 35 OF 53
DATE: 05/02/08



LEGEND

-  PROPOSED DREDGE AREA
-  PROPOSED CUT AREA
-  PROPOSED FILL AREA

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

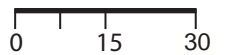
TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

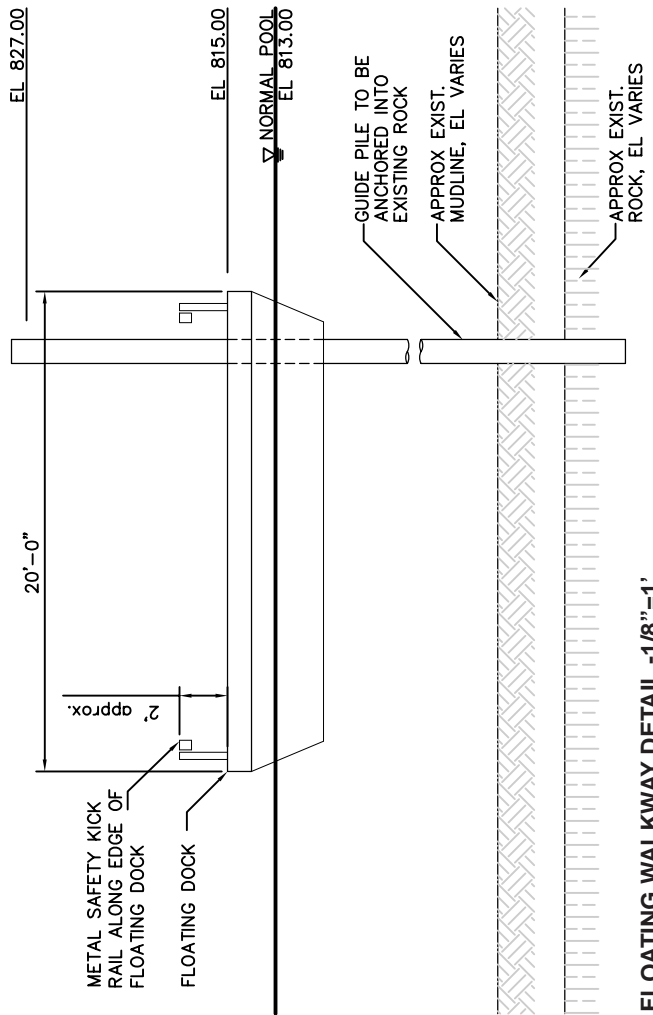
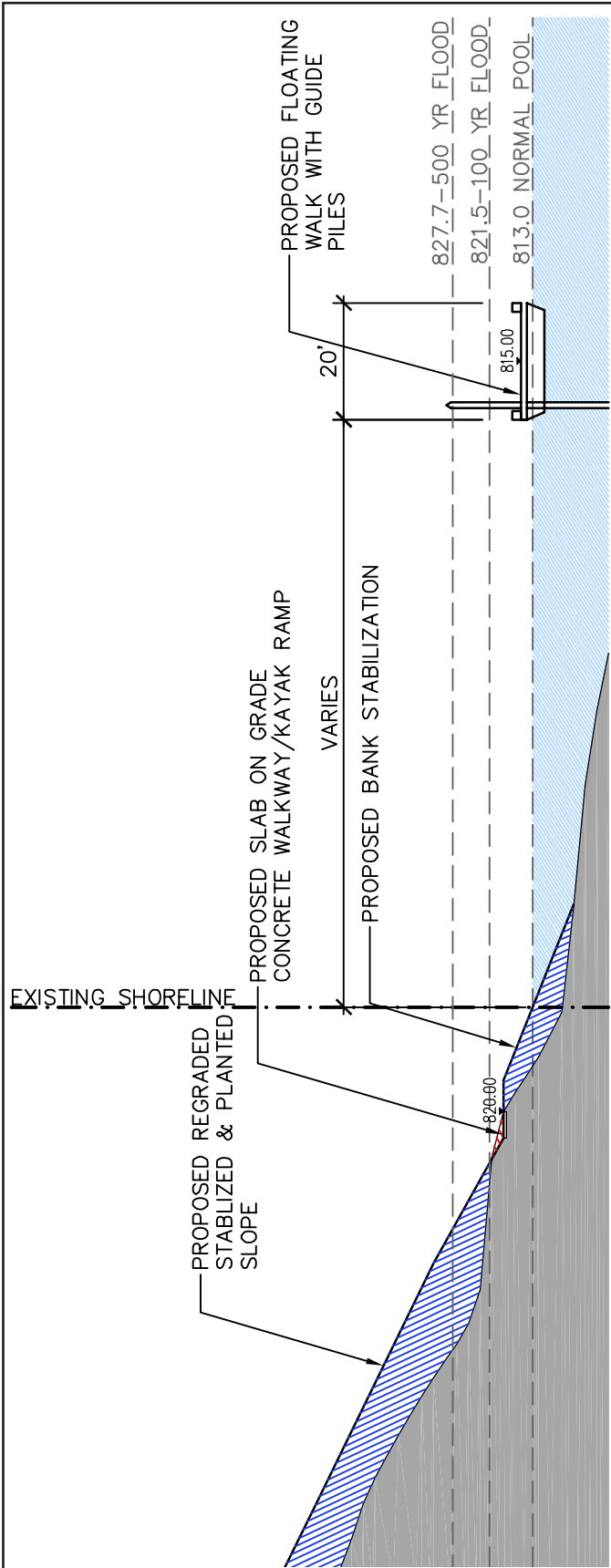
PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SECTION C

DATUM: NAVD 88
SCALE: 1"=30'



SHEET 36 OF 53
DATE: 05/02/08



FLOATING WALKWAY DETAIL - 1/8" = 1'

LEGEND

- PROPOSED CUT AREA
- PROPOSED FILL AREA

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

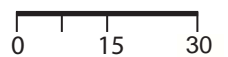
TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

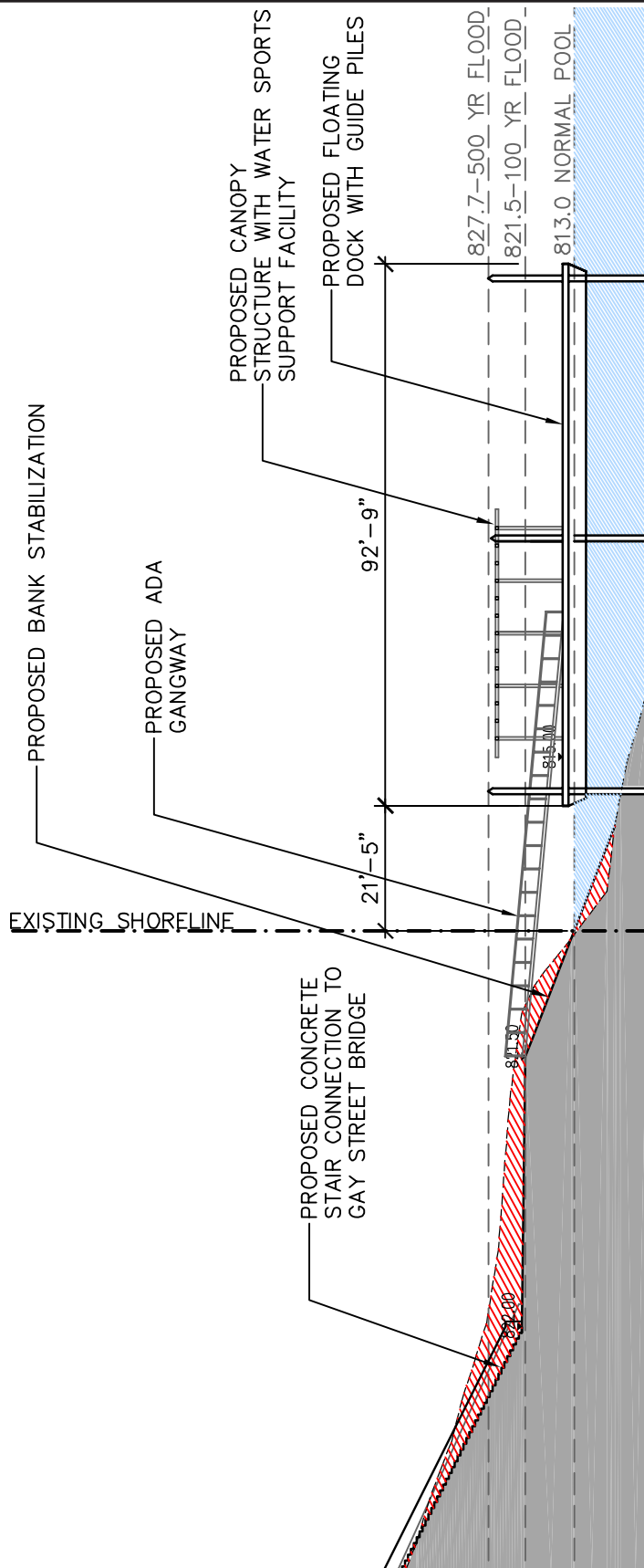
PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SECTION D




DATUM: NAVD 88
SCALE: 1"=30'



SHEET 37 OF 53
DATE: 05/02/08



LEGEND

-  PROPOSED DREDGE AREA
-  PROPOSED CUT AREA
-  PROPOSED FILL AREA

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

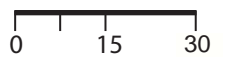
TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

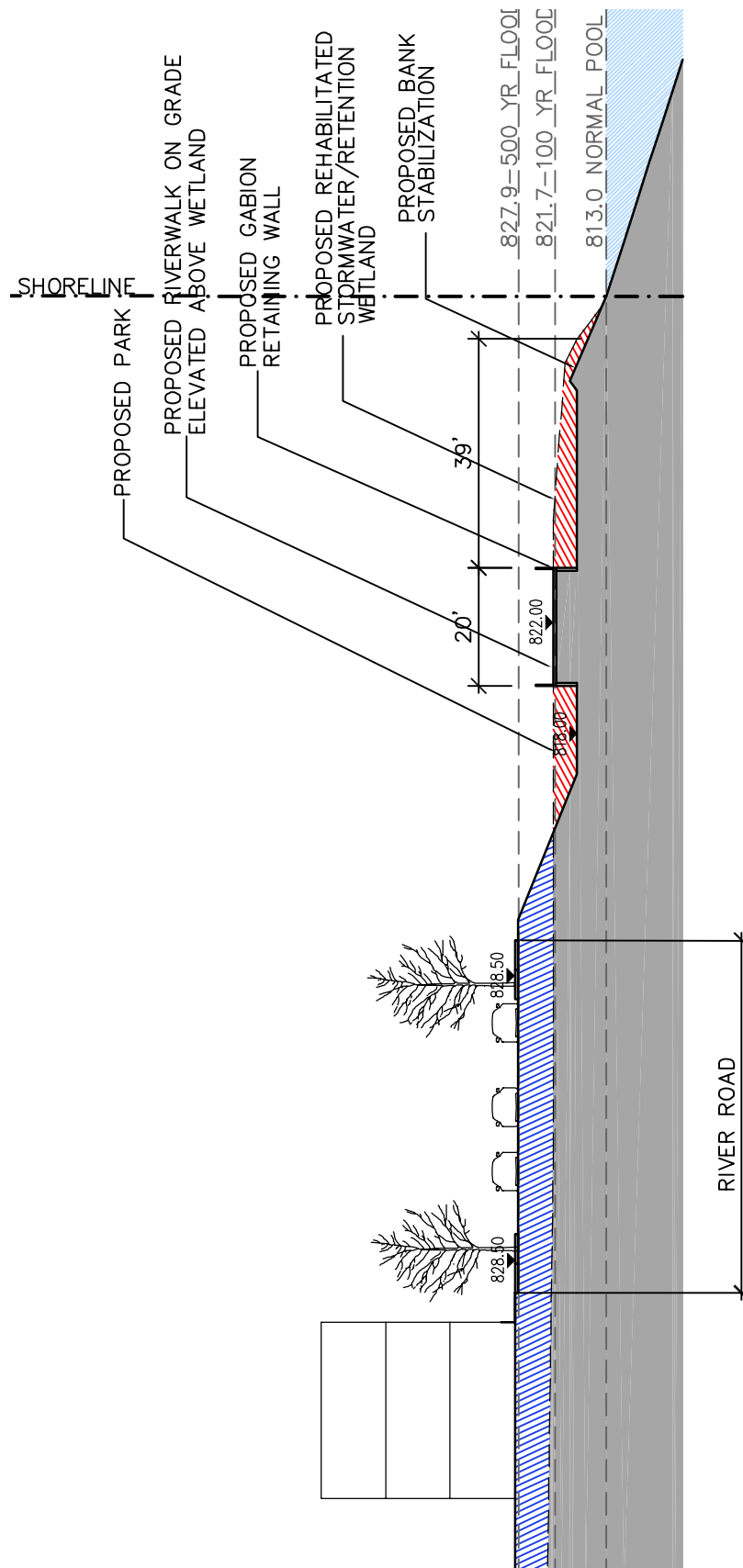
PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SECTION E

DATUM: NAVD 88
SCALE: 1"=30'



SHEET 38 OF 53
DATE: 05/02/08



LEGEND

-  PROPOSED CUT AREA
-  PROPOSED FILL AREA

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

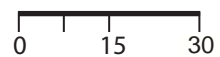
TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

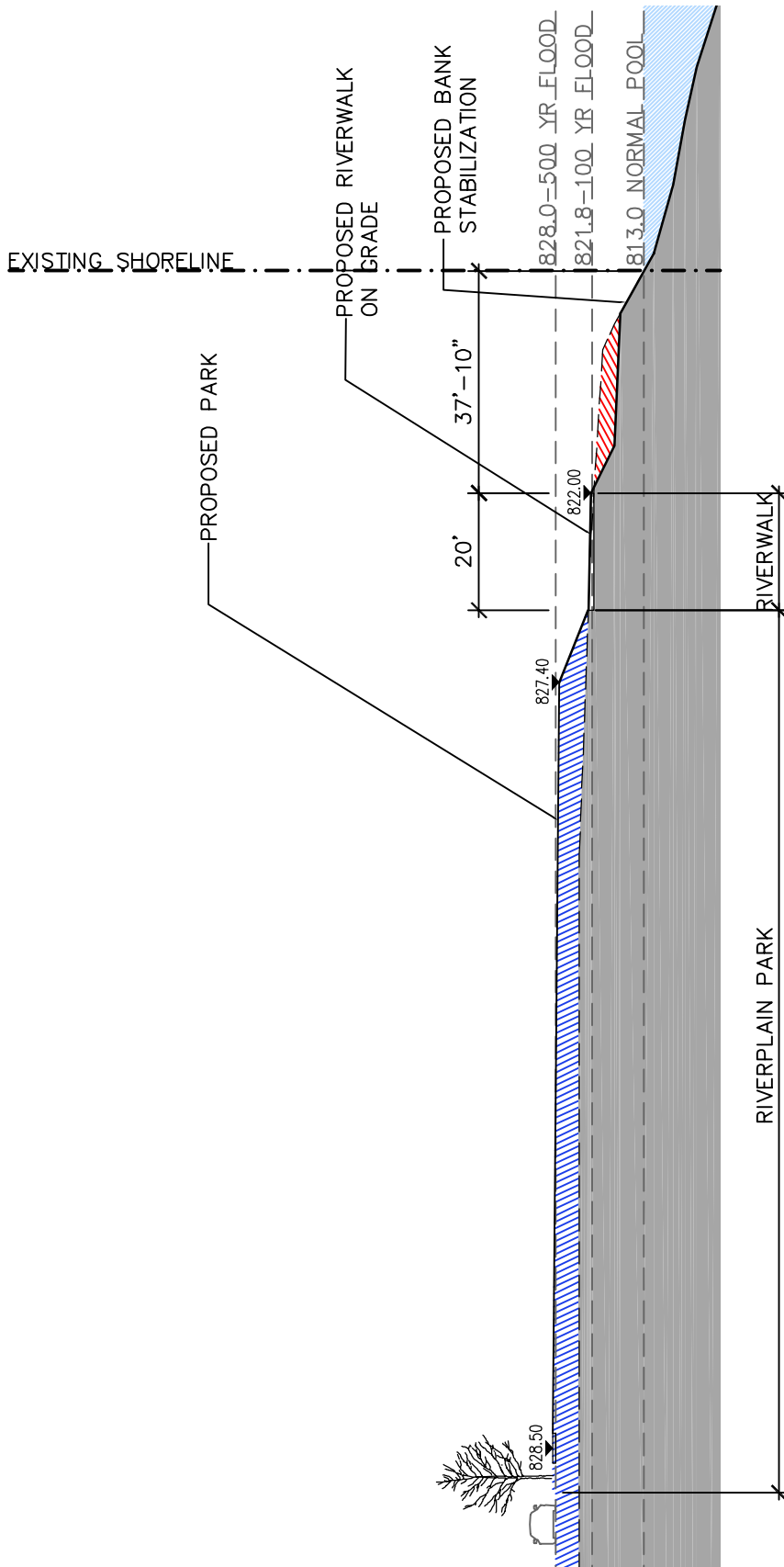
PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SECTION F




DATUM: NAVD 88
SCALE: 1"=30'



SHEET 39 OF 53
DATE: 05/02/08



LEGEND

-  PROPOSED DREDGE AREA
-  PROPOSED CUT AREA
-  PROPOSED FILL AREA

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

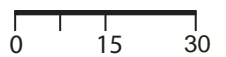
TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

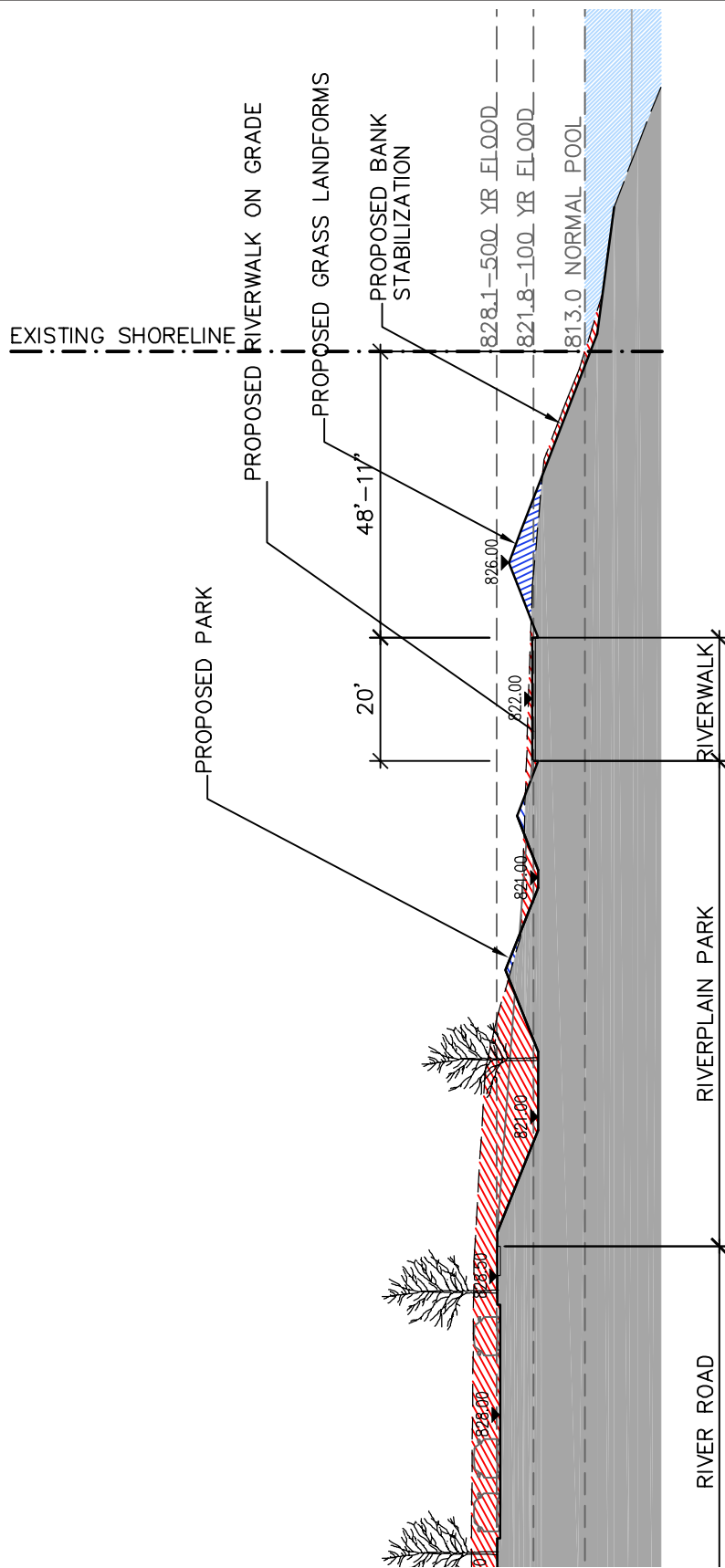
PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SECTION G



DATUM: NAVD 88
SCALE: 1"=30'



SHEET 40 OF 53
DATE: 05/02/08



LEGEND

-  PROPOSED CUT AREA
-  PROPOSED FILL AREA

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

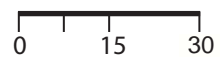
TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

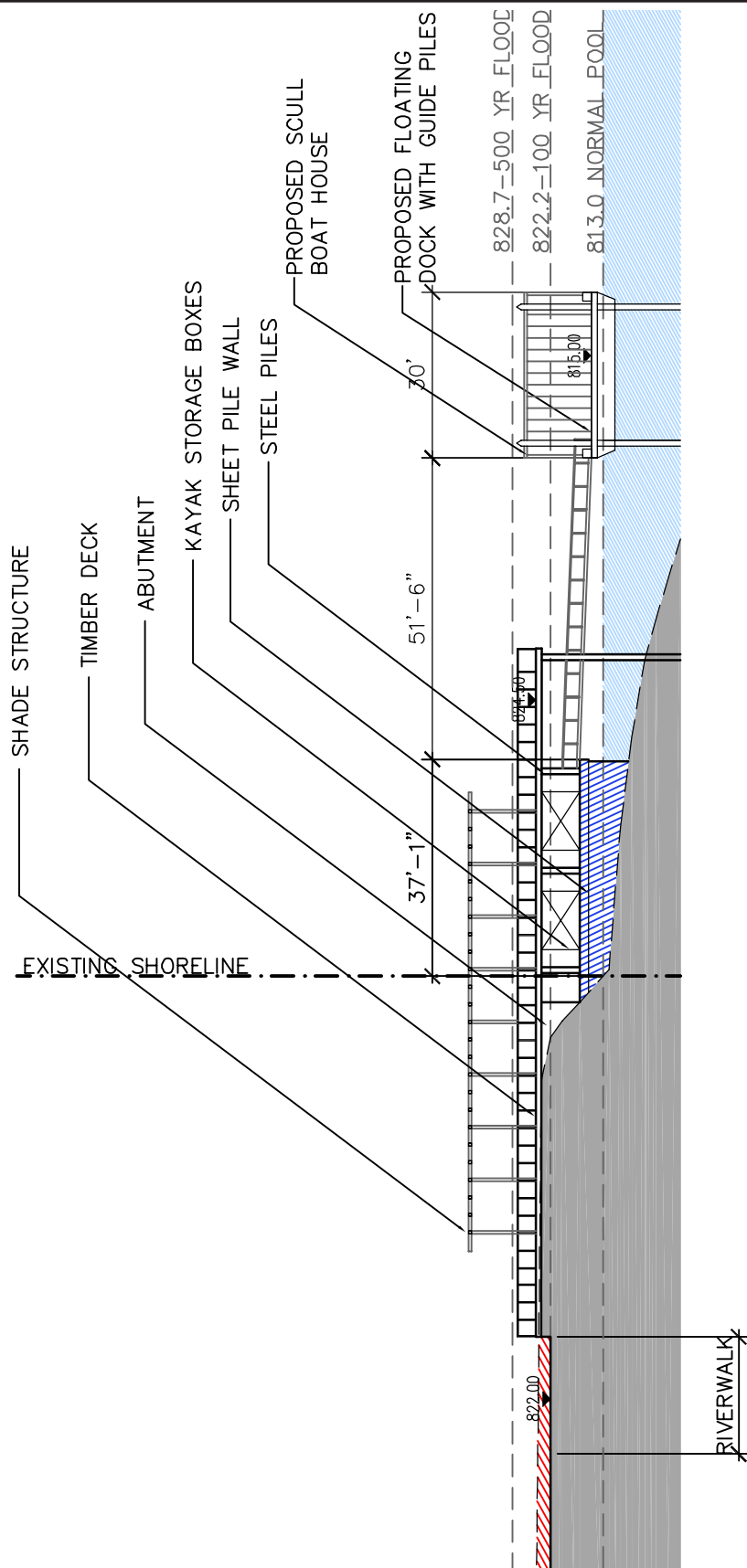
PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SECTION H




DATUM: NAVD 88
SCALE: 1"=30'



SHEET 41 OF 53
DATE: 05/02/08



LEGEND

-  PROPOSED DREDGE AREA
-  PROPOSED CUT AREA
-  PROPOSED FILL AREA

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

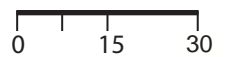
TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

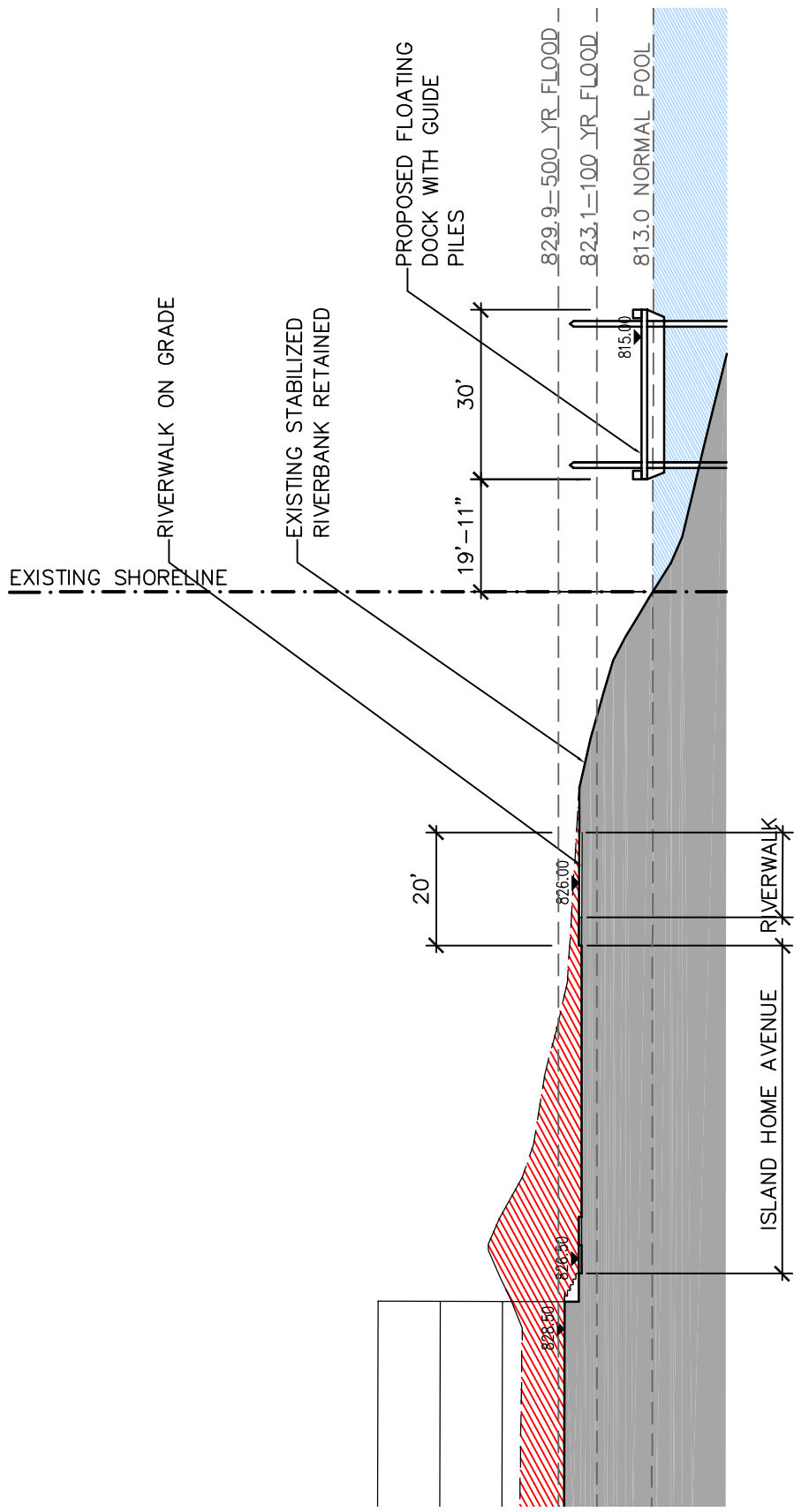
PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SECTION I

DATUM: NAVD 88
SCALE: 1"=30'



SHEET 42 OF 53
DATE: 05/02/08



LEGEND

- PROPOSED CUT AREA
- PROPOSED FILL AREA

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

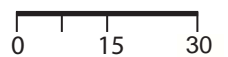
TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

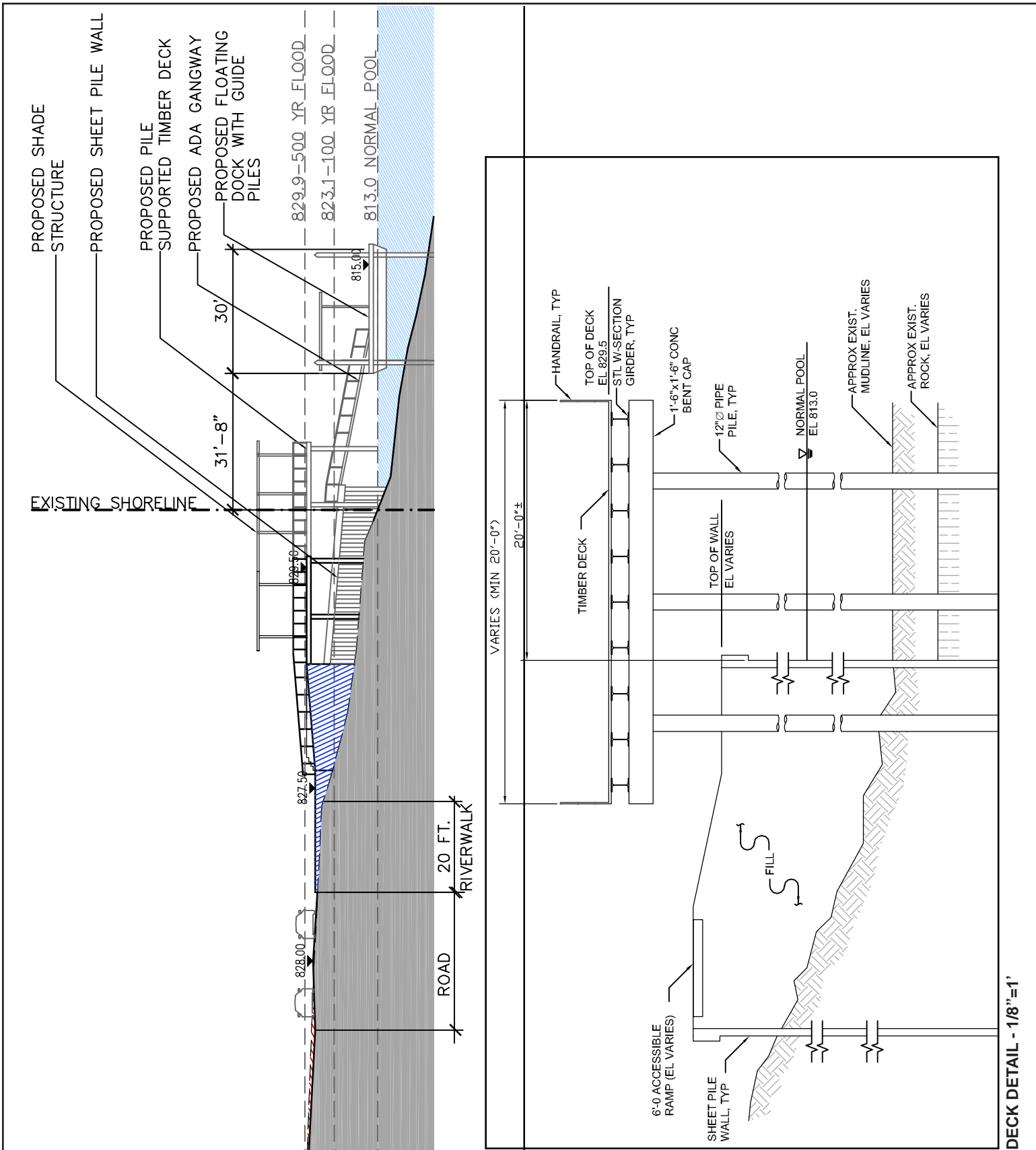
PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

SECTION J




DATUM: NAVD 88
SCALE: 1"=30'



SHEET 43 OF 53
DATE: 05/02/08



LEGEND

-  PROPOSED DREDGE AREA
-  PROPOSED CUT AREA
-  PROPOSED FILL AREA

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS

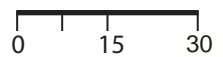
TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

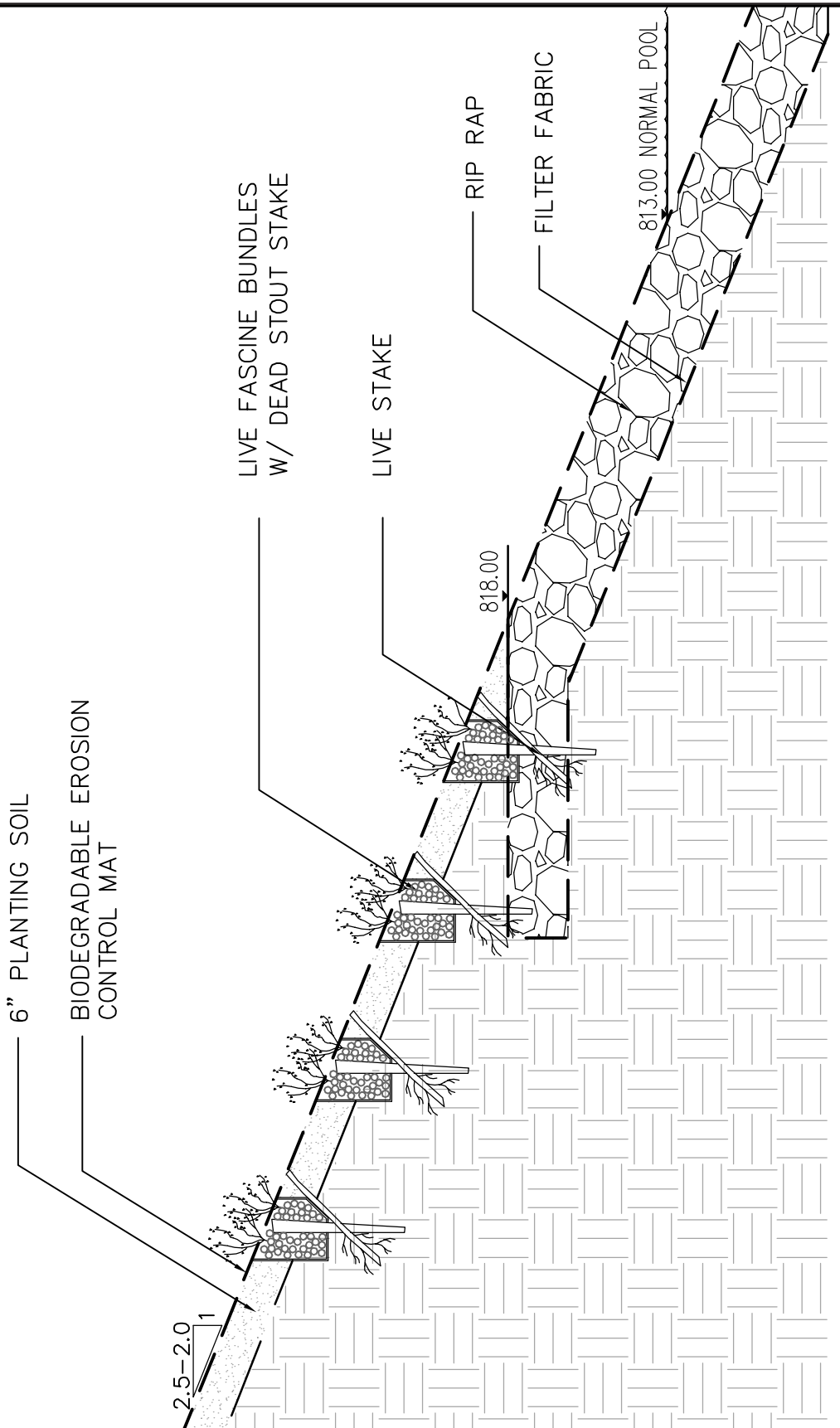
SECTION K

DATUM: NAVD 88
SCALE: 1"=30'



SHEET 44 OF 53
DATE: 05/02/08

DECK DETAIL - 1/8"=1'



1 BIO ENGINEERED SLOPE FOR BANK STABILIZATION
 SCALE: 1/16" = 1' - 0"

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS
 TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION
 APPLICATION BY: CITY OF KNOXVILLE
 PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

BANK STABILIZATION DETAIL
 DATUM: NAVD 88
 SCALE: 1/16"=1'
 SHEET 45 OF 53
 DATE: 05/02/08

LAND OWNERS AFFECTED BY WORKS WITHIN 1:500 FLOOD LINE (Consent to permit application provided)

Area	Landowner	Address	Telephone
1,2,3,4,5	East Tennessee Baptist Hospital	P.O. Box 1788 Knoxville, TN, 37901	(865) 632-5962
5	Tennessee Department of Transport	James K. Polk Building 505 Deaderick Street, Suite 700 Nashville, TN 37243-0349	(615) 741-2848
6,7,8	Gulf and Ohio Railroad	P.O. Box 2408, 422 West Cumberland Ave., Knoxville, TN, 37901	(865) 525-9400
6,7	Riverfront Properties & 531 Corporation	507 S Gay Street, Ste. 908 Knoxville TN, 37902	(865) 637-2683
8	Cardinal Investment Properties LLC	810 W. Clinch Avenue, 7th Floor, Sunsphere Knoxville, TN, 37902	(865) 971-4680
9,10,11	Ronald L Conley	P.O. Box 50234 Knoxville, TN, 37950	(865) 691-4680
12,13,14	Camden Management Properties	1465 Northside Drive, Ste.116, Atlanta, GA, 30318	(404) 603-3899

LAND OWNERS ADJACENT TO WORKS WITHIN 1:500 FLOOD LINE

Area	Landowner	Address	Telephone
1	Norfolk Southern Railroad	7208 Old Rutledge Pike Knoxville, TN 37924	(865) 521-1481
6	Marathon Ashland Petroleum LLC	539 S Main Street, Findlay, OH, 45840	(419) 421-3262
9	Herschel L & Nancy Dunlap	1003 Phillips Avenue, Knoxville, TN 37920	(865) 573-7205
9	Robert Lee & Phyllis S Nuchols	1013 Phillips Avenue, Knoxville, TN 37920	(865) 577-5433
11	Fred H & Larry W Jones	1011 Valley Avenue, Knoxville TN 37920	(865) 573-6102
11	Wayne Burton	1107 Phillips Avenue , Knoxville TN 37920	(865) 573-6611
12	Jerry L and Teresa Hatmaker	1640 Island Home Pike, Knoxville, TN 37920	(865) 690-3668
12	Ambrister ASA Attorney	125 Alton Rd, Nashville, TN 37205	(615) 352-6677

KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS
 TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION
 APPLICATION BY: CITY OF KNOXVILLE

 PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT

LAND OWNERSHIP

 SHEET 46 OF 53
 DATE: 05/02/08



CITY OF KNOXVILLE
SOUTH WATERFRONT PROJECT
JOINT USACE SECTION 404 / TVA SECTION 26A
PERMIT CONSENT FORM

Camden Management Properties ("the Owner") hereby grants permission and consent to the City of Knoxville ("the City") or its agents in submitting and obtaining joint USACE Section 404 / TVA Section 26A permits for shoreline construction affecting the Owner's property located at 1720 Island Home Ave. (Parcels 095OD011 and 095OD012), Knoxville, Tennessee ("the Property").

In consideration of the Owner's permission and consent provided above, the City agrees:

(1) to make available a copy of the application and permit(s) undertaken on the property with the understanding that related studies and investigations can be used for no other purposes without the written approval of their authors and the City; and

(2) that joint USACE Section 404 / TVA Section 26A permits obtained affecting the Property do not affect the Owner's property rights nor do they obligate the Owner or the City to actually construct any of the improvements related to the permit(s); and

(3) that the Owner shall not be represented as supporting the permit or project, and is able to submit independent comments at Owner's sole discretion when USACE / TVA required public comment opportunities are announced; and

(4) that the Owner will hold final permit approval, which is transferable by sale, and that any time extensions of permits affecting the property will require separate permission and consent from the Owner at the time the extension is sought.

This 31 day of January, 2008

CMP Island Home
 (NAME OF OWNER)

By: [Signature]

Its: member

	<p align="center">KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION APPLICATION BY: CITY OF KNOXVILLE</p> <p align="center">PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT</p>	<p align="center">LAND OWNER CONSENT</p> <p align="right">SHEET 47 OF 53 DATE: 05/02/08</p>
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CITY OF KNOXVILLE
SOUTH WATERFRONT PROJECT
JOINT USACE SECTION 404 / TVA SECTION 26A
PERMIT CONSENT FORM

East Tennessee Baptist Hospital ("the Owner") hereby grants permission and consent to the City of Knoxville ("the City") or its agents in submitting and obtaining joint USACE Section 404 / TVA Section 26A permits for shoreline construction affecting the Owner's property located at 303 W. Blount Ave. (Parcel 109AA003), 0 W. Blount Ave. (Parcel 109AA00301), and 137 E. Blount Ave. (Parcel 109AA002), Knoxville, Tennessee ("the Property").

In consideration of the Owner's permission and consent provided above, the City agrees:

(1) to make available a copy of the application and permit(s) undertaken on the property with the understanding that related studies and investigations can be used for no other purposes without the written approval of their authors and the City; and

(2) that joint USACE Section 404 / TVA Section 26A permits obtained affecting the Property do not affect the Owner's property rights nor do they obligate the Owner or the City to actually construct any of the improvements related to the permit(s); and

(3) that the Owner shall not be represented as supporting the permit or project, and is able to submit independent comments at Owner's sole discretion when USACE / TVA required public comment opportunities are announced; and

(4) that the Owner will hold final permit approval, which is transferable by sale, and that any time extensions of permits affecting the property will require separate permission and consent from the Owner at the time the extension is sought.

This 27th day of February, 2008

(NAME OF OWNER)

By: [Signature]

Its: President + CEO

	KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION APPLICATION BY: CITY OF KNOXVILLE PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT	LAND OWNER CONSENT SHEET 48 OF 53 DATE: 05/02/08
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CITY OF KNOXVILLE
SOUTH WATERFRONT PROJECT
JOINT USACE SECTION 404 / TVA SECTION 26A
PERMIT CONSENT FORM

Tennessee Department of Transportation ("the Owner") hereby grants permission and consent to the City of Knoxville ("the City") or its agents in submitting and obtaining joint USACE Section 404 / TVA Section 26A permits for shoreline construction affecting the Owner's property located at 0 South Gay Street (right of way under and along sides of the Gay Street Bridge where it abuts the south side of the TN riverbank), Knoxville, Tennessee ("the Property").

In consideration of the Owner's permission and consent provided above, the City agrees:

(1) to make available a copy of the application and permit(s) undertaken on the property with the understanding that related studies and investigations can be used for no other purposes without the written approval of their authors and the City; and

(2) that joint USACE Section 404 / TVA Section 26A permits obtained affecting the Property do not affect the Owner's property rights nor do they obligate the Owner or the City to actually construct any of the improvements related to the permit(s); and

(3) that the Owner shall not be represented as supporting the permit or project, and is able to submit independent comments at Owner's sole discretion when USACE / TVA required public comment opportunities are announced; and

(4) that the Owner will hold final permit approval, which is transferable by sale, and that any time extensions of permits affecting the property will require separate permission and consent from the Owner at the time the extension is sought.

This 19 day of March, 2008

(NAME OF OWNER)

By: Fred B. Cannon

Its: _____

**KNOXVILLE SOUTH WATERFRONT PUBLIC
IMPROVEMENTS**

TVA SECTION 26A/ USACE SECTION 404 JOINT
PERMIT APPLICATION

APPLICATION BY: CITY OF KNOXVILLE

PURPOSE: REDEVELOPMENT OF FORT
LOUDON LAKE SOUTH WATERFRONT

LAND OWNER CONSENT

SHEET 49 OF 53
DATE: 05/02/08



CITY OF KNOXVILLE
SOUTH WATERFRONT PROJECT
JOINT USACE SECTION 404 / TVA SECTION 26A
PERMIT CONSENT FORM

Gulf & Ohio Railroad ("the Owner") hereby grants permission and consent to the City of Knoxville ("the City") or its agents in submitting and obtaining joint USACE Section 404 / TVA Section 26A permits for shoreline construction affecting the Owner's property located at between Gay Street and Dixie Street along the South side of the TN River, Knoxville, Tennessee ("the Property").

In consideration of the Owner's permission and consent provided above, the City agrees:

(1) to make available a copy of the application and permit(s) undertaken on the property with the understanding that related studies and investigations can be used for no other purposes without the written approval of their authors and the City; and

(2) that joint USACE Section 404 / TVA Section 26A permits obtained affecting the Property do not affect the Owner's property rights nor do they obligate the Owner or the City to actually construct any of the improvements related to the permit(s); and

(3) that the Owner shall not be represented as supporting the permit or project, and is able to submit independent comments at Owner's sole discretion when USACE / TVA required public comment opportunities are announced; and

(4) that the Owner will hold final permit approval, which is transferable by sale, and that any time extensions of permits affecting the property will require separate permission and consent from the Owner at the time the extension is sought.

This 31 day of JANUARY, 2008

(NAME OF OWNER)

By: Knoxville & Holston River Railroad Co, Inc
Holliman (Pete Chausser)
 Its: Chausser

	<p align="center">KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION APPLICATION BY: CITY OF KNOXVILLE</p> <p align="center">PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT</p>	<p align="center">LAND OWNER CONSENT</p> <p align="right">SHEET 50 OF 53 DATE: 05/02/08</p>
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**CITY OF KNOXVILLE
SOUTH WATERFRONT PROJECT
JOINT USACE SECTION 404 / TVA SECTION 26A
PERMIT CONSENT FORM**

Mike Conley ("the Owner") hereby grants permission and consent to the City of Knoxville ("the City") or its agents in submitting and obtaining joint USACE Section 404 / TVA Section 26A permits for shoreline construction affecting the Owner's property located at 701 Langford Ave. (Parcel 0905QB030), Knoxville, Tennessee ("the Property").

In consideration of the Owner's permission and consent provided above, the City agrees:

(1) to make available a copy of the application and permit(s) undertaken on the property with the understanding that related studies and investigations can be used for no other purposes without the written approval of their authors and the City; and

(2) that joint USACE Section 404 / TVA Section 26A permits obtained affecting the Property do not affect the Owner's property rights nor do they obligate the Owner or the City to actually construct any of the improvements related to the permit(s); and

(3) that the Owner shall not be represented as supporting the permit or project, and is able to submit independent comments at Owner's sole discretion when USACE / TVA required public comment opportunities are announced; and

(4) that the Owner will hold final permit approval, which is transferable by sale, and that any time extensions of permits affecting the property will require separate permission and consent from the Owner at the time the extension is sought.

This 23rd day of Feb, 2008

(NAME OF OWNER) RIVERFRONT PROPERTIES

By: [Signature]
Its: [Signature]

	<p align="center">KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION APPLICATION BY: CITY OF KNOXVILLE</p> <p align="center">PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT</p>	<p align="center">LAND OWNER CONSENT</p> <p align="right">SHEET 51 OF 53 DATE: 05/02/08</p>
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CITY OF KNOXVILLE
SOUTH WATERFRONT PROJECT
JOINT USACE SECTION 404 / TVA SECTION 26A
PERMIT CONSENT FORM

Cardinal Investment Properties, LLC ("the Owner") hereby grants permission and consent to the City of Knoxville ("the City") or its agents in submitting and obtaining joint USACE Section 404 / TVA Section 26A permits for shoreline construction affecting the Owner's property located at 901 Langford Avenue (Parcel 095OB028), Knoxville, Tennessee ("the Property").

In consideration of the Owner's permission and consent provided above, the City agrees:

(1) to make available a copy of the application and permit(s) undertaken on the property with the understanding that related studies and investigations can be used for no other purposes without the written approval of their authors and the City; and

(2) that joint USACE Section 404 / TVA Section 26A permits obtained affecting the Property do not affect the Owner's property rights nor do they obligate the Owner or the City to actually construct any of the improvements related to the permit(s); and

(3) that the Owner shall not be represented as supporting the permit or project, and is able to submit independent comments at Owner's sole discretion when USACE / TVA required public comment opportunities are announced; and

(4) that the Owner will hold final permit approval, which is transferable by sale, and that any time extensions of permits affecting the property will require separate permission and consent from the Owner at the time the extension is sought.

This 6th day of March, 2008

(NAME OF OWNER)

By: [Signature]

Its: [Signature]

	KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION APPLICATION BY: CITY OF KNOXVILLE PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT	LAND OWNER CONSENT SHEET 52 OF 53 DATE: 05/02/08
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**CITY OF KNOXVILLE
SOUTH WATERFRONT PROJECT
JOINT USACE SECTION 404 / TVA SECTION 26A
PERMIT CONSENT FORM**

Ron Conley ("the Owner") hereby grants permission and consent to the City of Knoxville ("the City") or its agents in submitting and obtaining joint USACE Section 404 / TVA Section 26A permits for shoreline construction affecting the Owner's property located at 939 Langford Ave. (Parcel 095OB027), 1015 Phillips Ave (Parcel 095OB019), and 1101 Phillips Ave. (Parcel 095OB016), Knoxville, Tennessee ("the Property").

In consideration of the Owner's permission and consent provided above, the City agrees:

(1) to make available a copy of the application and permit(s) undertaken on the property with the understanding that related studies and investigations can be used for no other purposes without the written approval of their authors and the City; and

(2) that joint USACE Section 404 / TVA Section 26A permits obtained affecting the Property do not affect the Owner's property rights nor do they obligate the Owner or the City to actually construct any of the improvements related to the permit(s); and

(3) that the Owner shall not be represented as supporting the permit or project, and is able to submit independent comments at Owner's sole discretion when USACE / TVA required public comment opportunities are announced; and

(4) that the Owner will hold final permit approval, which is transferable by sale, and that any time extensions of permits affecting the property will require separate permission and consent from the Owner at the time the extension is sought.

This 11th day of Feb., 2008

(NAME OF OWNER)

By: Ronald Conley

Its: owner

	<p align="center">KNOXVILLE SOUTH WATERFRONT PUBLIC IMPROVEMENTS TVA SECTION 26A/ USACE SECTION 404 JOINT PERMIT APPLICATION APPLICATION BY: CITY OF KNOXVILLE</p> <p align="center">PURPOSE: REDEVELOPMENT OF FORT LOUDON LAKE SOUTH WATERFRONT</p>	<p align="center">LAND OWNER CONSENT</p> <p align="right">SHEET 53 OF 53 DATE: 05/02/08</p>
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