



**US Army Corps
of Engineers**
Louisville District ®

Public Notice

Public Notice No
LRL-2015-417-sew

Open Date:
24 Jun 2015

Close Date:
9 Jul 2015

Please address all comments and inquiries to:
U.S. Army Corps of Engineers, Louisville District
ATTN: Mr. Sam Werner, CELRL-OPF-W
6855 State Road 66
Newburgh, Indiana 47630
lr.regulatorypubliccomment@usace.army.mil

Phone: 812-842-2768

This notice announces an application submitted for a Department of the Army (DA) Permit, subject to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899.

APPLICANT: Tennessee Valley Authority
7900 Metropolis Lake Road
West Paducah, Kentucky 42086

LOCATION: The proposed project is located on the Left Bank
of the Ohio River at mile 946.0 in McCracken
County, Kentucky.

Latitude: 37.1518341° North
Longitude: -88.777642 ° West
7.5 Minute Quad: Joppa, Illinois

PURPOSE: To remove, repair, and replace unsafe,
deteriorating mooring cells, to make the TVA
Shawnee Fossil Plant (SHF) waterfront usable
again.

DESCRIPTION OF WORK: The proposed project would modify an existing DA authorization (Permit #51-071) by removing/repairing/and or replacing 27 existing mooring cells that have fallen into disrepair at the TVA SHF. The work and subsequent barge mooring has been licensed to Southern Coal Handling-Four Rivers Terminal (FRT) with the agreement that Seventeen of the cells would be removed down to 1 foot below the river mudline at approximate elevation 277.0 feet above Mean Sea Level (MSL) Ohio River Datum (ORD). The remaining 10 mooring cells would either be replaced with pipe pile dolphins or repaired with a mooring wrap or new sheet pile in the case of unloader cells #10 and #17. The mooring cells that would be replaced with pipe pile dolphins would have the dolphins placed within the same footprint as the existing mooring cell. The pipe pile dolphins would be constructed of a 72 inch diameter by ½ inch thick Grade 2 steel main pipe driven to refusal or an elevation of 253.0 feet MSL (ORD). Two 24-inch diameter by 3/8 thick bracing pipes would be connected to the main vertical pipe at the top and splayed downward and landward at a 4:1 slope to elevation 258.0 feet MSL (ORD). The bracing pipes would be placed 60 degrees apart from each other. Additionally, there would be 14-inch diameter by 3/8 inch thick pipes welded horizontally in 10-foot intervals to brace the support and main pipes

together. The proposed work would be scheduled to occur over approximately 9 to 10 years at the rate of approximately 3 cells per year. Fleeting at the site would not be altered over the existing fleeting plan which consists of a maximum of 40 barges oriented no more than 4 barges wide. Encroachment into the river channel would not exceed 140 feet past the riverward edge of any of the mooring cells.

REVIEW PROCEDURES: A DA Permit cannot be issued if any legally required Federal, State, or local authorization or certification is denied.

Copies of this notice are sent to the appropriate Federal and State Fish and Wildlife Agencies. Their views and comments are solicited in accordance with the Fish and Wildlife Coordination Act of 1956. A mussel survey of the proposed project area was conducted by Third Rock Consultants in October 2014. The survey area included the proposed project area footprint as well as areas 50 meters upstream and 150 meters downstream. Results were reported in a report entitled, *Mussel Survey, Shawnee Fossil Plant, Ohio River (ORM 946), McCracken County, Kentucky*. A total of 527 live mussels from 19 unionoid species were present. No live Federally threatened or endangered species were located during the survey. However, one fresh dead and one worn relic shell of the Federally endangered *Potamilus Capax* (fat pocketbook) were found during the survey. Based on recent surveys near the proposed project site as well as community species richness and densities, it is reasonable to assume the presence of some of the Federally listed threatened or endangered mussel species. For this reason it has been determined that the proposed mooring cell removal/rehabilitation/replacement project may affect and is likely to adversely affect the Federally endangered fat pocketbook (*Potamilus capax*), sheepnose (*Plethobasus cyphus*), and the Federally threatened rabbitsfoot (*Quadrula cylindrica cylindrica*). The project may also affect but would not adversely modify designated critical habitat for the rabbitsfoot. Formal consultation has been requested with the U.S. Fish and Wildlife Service.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. A request for a public hearing must state the specific interest which might be damaged by issuance of the DA Permit.

The National Register of Historic Places (NRHP) has been examined, and it has been determined that there are no properties currently listed on the Register which would be directly affected by the proposed work. However, based on recent architectural assessments of the SHF plant, it has been determined that the SHF plant is eligible for listing in the NRHP under Criterion A, as the first coal-fired electrical plant built in Kentucky by TVA. Subsequently, TVA found that its proposed Emissions Control project (a separate project) would result in an adverse effect to the SHF plant. Kentucky SHPO has agreed and the applicant has notified the Advisory Council on Historic Properties (ACHP) on the

adverse effect finding. Kentucky SHPO and the applicant have executed an MOA effective February 27, 2015, which contained several comprehensive stipulations to mitigate the adverse effects of the Emissions Control Project. The current cell removal/rehabilitation/replacement project would result in an adverse effect to an NRHP eligible site due to the transfer of a contributing resource outside of Federal control. The applicant has consulted with the Kentucky SHPO and the ACHP regarding the adverse effect finding and further contends that because the mitigation required in the formerly executed MOA was inclusive of contributing resources, there would be no further mitigation required to mitigate any adverse effect because of the SHF plant riverfront rehabilitation project.

If we are made aware, as a result of comments received in response to this notice, or by other means, of specific archaeological, scientific, prehistorical, or historical sites or structures which might be affected by the proposed work, the District Engineer will immediately take the appropriate action necessary pursuant to the National Historic Preservation Act of 1966 - Public Law 89-665 as amended (including Public Law 96-515).

The decision whether to issue a permit will be based on an evaluation of the probable impact 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 reasonably may be 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; among those are conservation, economics, aesthetic values, general environmental concerns, historic values, fish and wildlife values, flood damage prevention, land use, navigation, recreation, water supply, water quality, energy needs, safety, food production, and in general, the needs and welfare of the public. In addition, the evaluation of the impact of the activity on the public interest will include application of the guidelines (40 CFR Part 230) promulgated by the Administrator, United States Environmental Protection Agency, under authority of Section 404(b) of the CWA.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. It is presumed that all interested parties and agencies will wish to respond; therefore, a lack of response will be interpreted as meaning that there is no objection to the proposed project. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. 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 used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also

used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Written statements received in this office on or before the closing date will become a part of the official record and will be considered in the determination on this permit request. Any objections which are received during this period will be forwarded to the applicant for possible resolution before the determination is made whether to issue or deny the requested DA Permit. A permit will be granted unless its issuance is found to be contrary to the public interest.

Information pertaining to this application is available for public examination during normal business hours upon prior request. Drawings are available on Louisville District's Internet site at <http://www.lrl.usace.army.mil/Missions/Regulatory.aspx>. All comments regarding this proposal should be addressed to Mr. Sam Werner, CELRL-OPF-W at the address noted above and should refer to the Public Notice Number LRL-2015-417-sew.

If you desire to submit your comments by email, you must comply with the following:

a) In the subject line of your email, type in **ONLY** the Public Notice ID No. LRL-2015-417-sew.

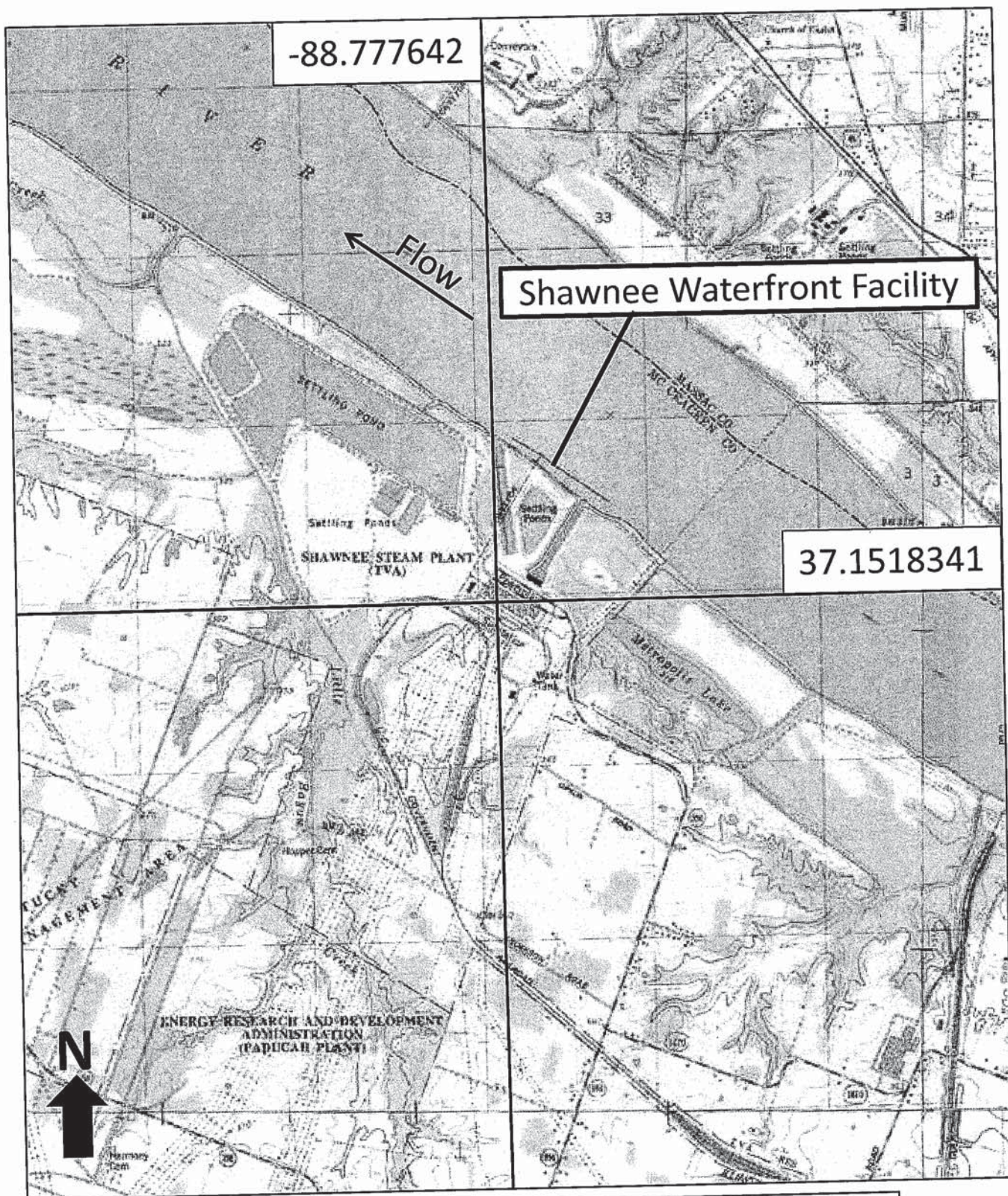
Example:

Subject: LRL-2015-417-sew

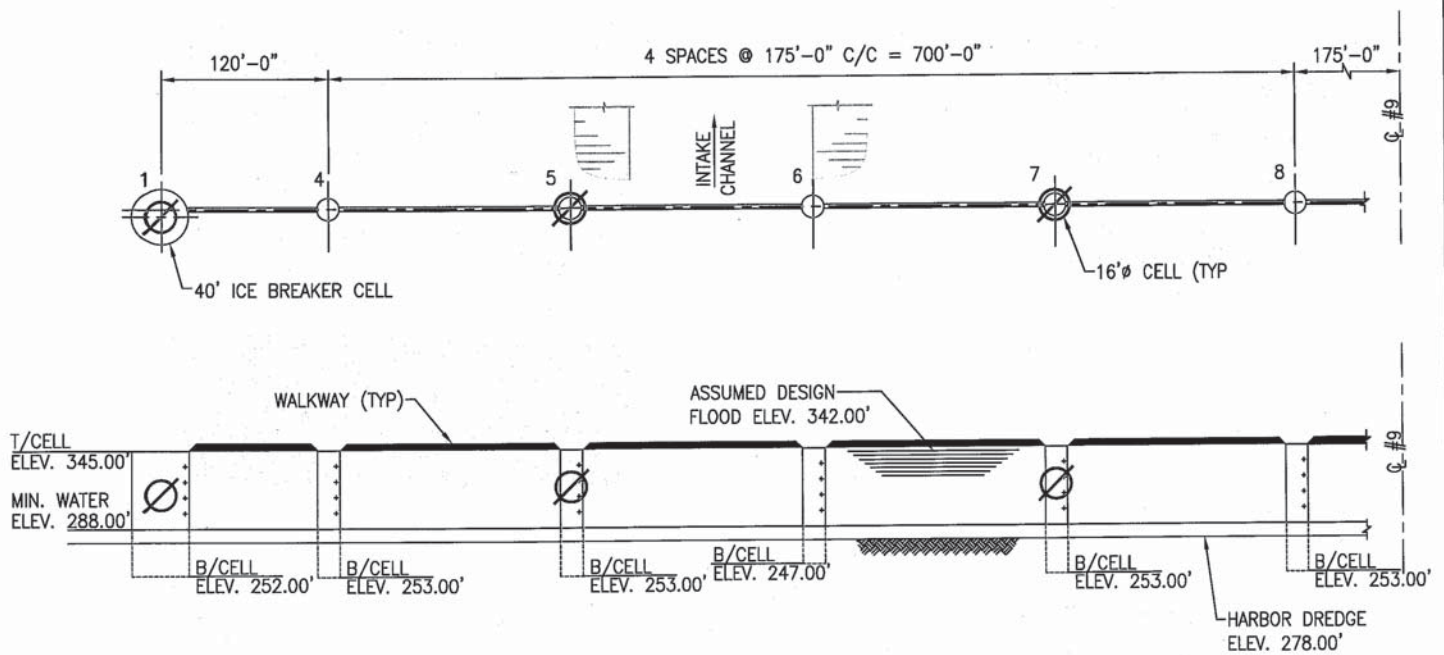
b) Provide your physical mailing address and telephone number.

c) Send your email to: lrl.regulatorypubliccomment@usace.army.mil.

d) If you are sending attachments greater than 1 Mb in size with your email, you must send a hard copy (CD or paper) to the Corps' physical address as well.



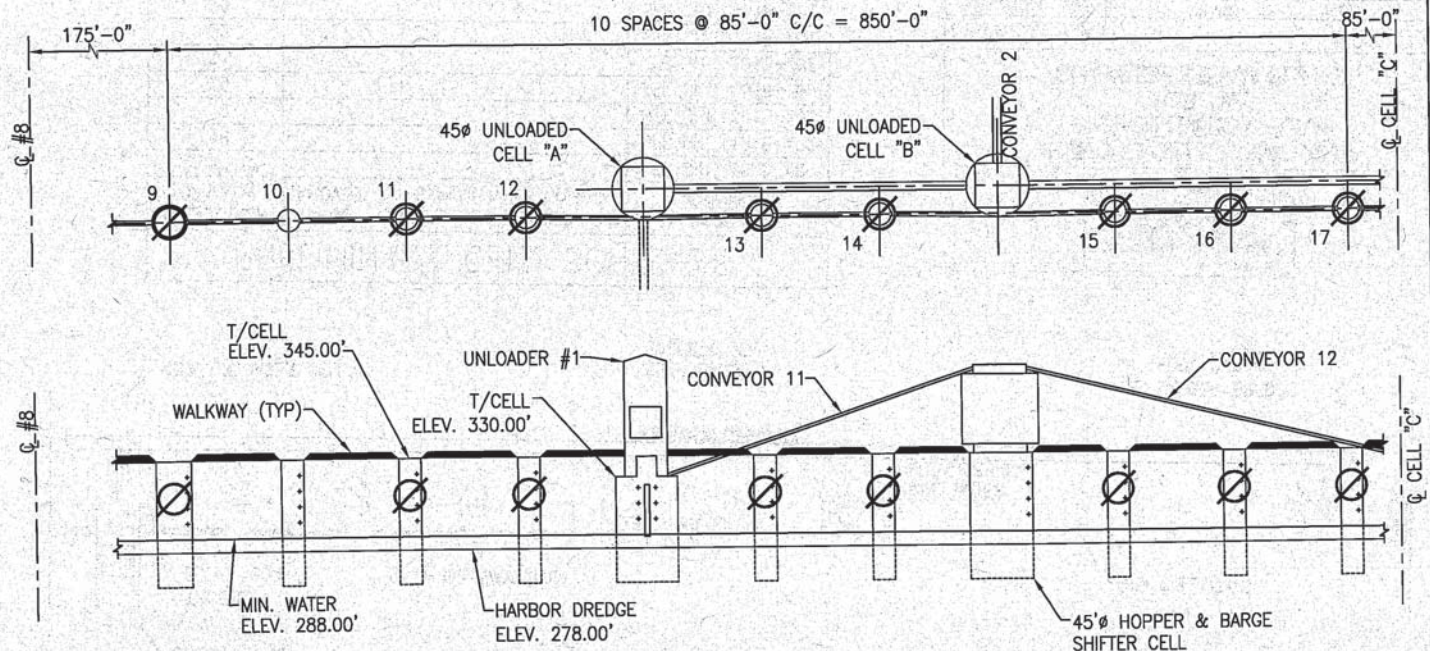
TVA Shawnee Fossil Plant
ID # LRL-2015-417-sew
Vicinity Map
Sheet 1 of 10



PRELIMINARY CELL SCHEDULE			
DESIGNATION OF CELL	TO BE REMOVED Ø	TO BE REPAIRED OR REPLACED w/ DOLPHIN	NOTES OR COMMENTS
1	✓		SEE SHT. 1818-L02
4		✓	SEE SHT. 1818-L0
5	✓		SEE SHT. 1818-L02
6		✓	SEE SHT. 1818-L0
7	✓		SEE SHT. 1818-L02
8		✓	SEE SHT. 1818-L0

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TVA Shawnee Fossil Plant
ID # LRL-2015-417-sew
Existing Cell and Demo/Rehabilitation Map
Sheet 2 of 10

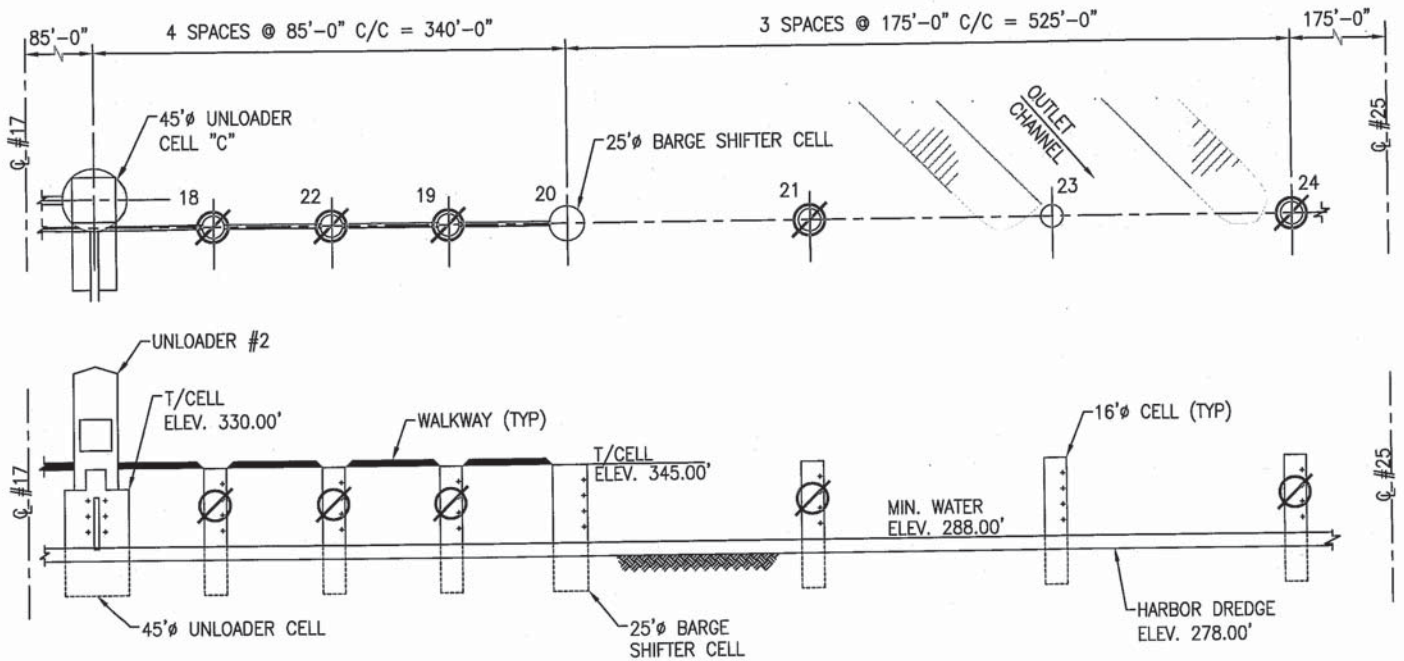


PRELIMINARY CELL SCHEDULE

DESIGNATION OF CELL	TO BE REMOVED \emptyset	TO BE REPAIRED OR REPLACED w/ DOLPHIN	NOTES OR COMMENTS
9	✓		SEE SHT. 1818-L02
10		✓	SEE SHT. 1818-L0
11	✓		SEE SHT. 1818-L02
12	✓		SEE SHT. 1818-L02
45' CELL "A"		✓	SEE SHT. 1818-L0
13	✓		SEE SHT. 1818-L02
14	✓		SEE SHT. 1818-L02
45' CELL "B"		✓	SEE SHT. 1818-L0
15	✓		SEE SHT. 1818-L02
16	✓		SEE SHT. 1818-L02
17	✓		SEE SHT. 1818-L02

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TVA Shawnee Fossil Plant
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Existing Cell and Demo/Rehabilitation Map
Sheet 3 of 10

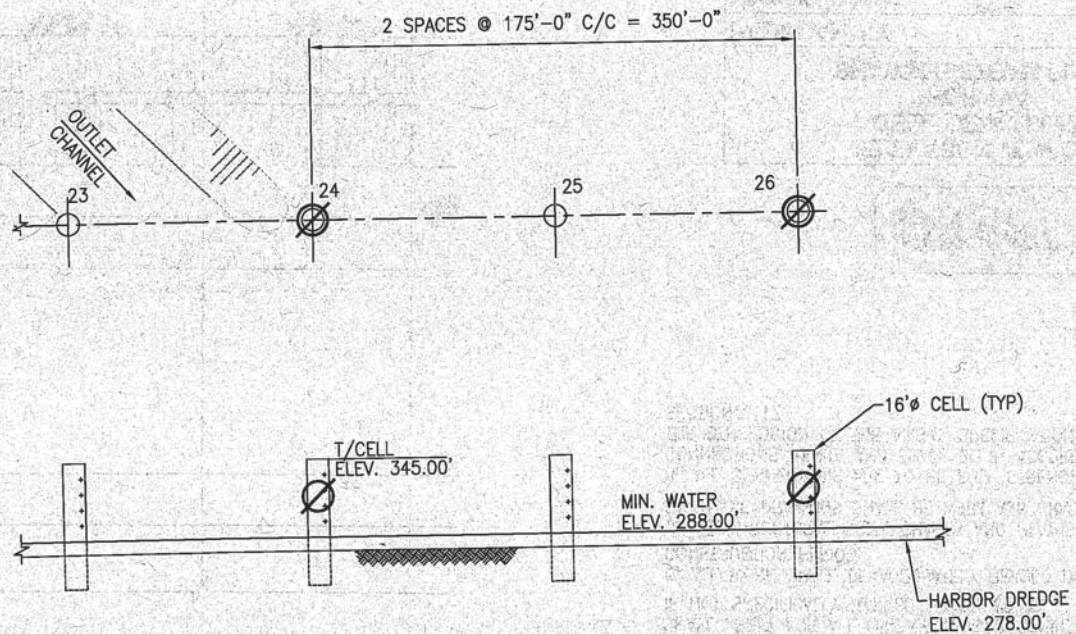


PRELIMINARY CELL SCHEDULE

DESIGNATION OF CELL	TO BE REMOVED <input checked="" type="checkbox"/>	TO BE REPAIRED OR REPLACED w/ DOLPHIN	NOTES OR COMMENTS
CELL "C"		<input checked="" type="checkbox"/>	SEE SHT. 1818-L0
18	<input checked="" type="checkbox"/>		SEE SHT. 1818-L02
19	<input checked="" type="checkbox"/>		SEE SHT. 1818-L02
20		<input checked="" type="checkbox"/>	SEE SHT. 1818-L0
21	<input checked="" type="checkbox"/>		SEE SHT. 1818-L02
22	<input checked="" type="checkbox"/>		SEE SHT. 1818-L02
23		<input checked="" type="checkbox"/>	SEE SHT. 1818-L0
24	<input checked="" type="checkbox"/>		SEE SHT. 1818-L02

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TVA Shawnee Fossil Plant
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Existing Cell and Demo/Rehabilitation Map
Sheet 4 of 10



PRELIMINARY CELL SCHEDULE			
DESIGNATION OF CELL	TO BE REMOVED Ø	TO BE REPAIRED OR REPLACED w/ DOLPHIN	NOTES OR COMMENTS
25		✓	SEE SHT. 1818-L02
26	✓		SEE SHT. 1818-L02

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TVA Shawnee Fossil Plant
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 Existing Cell and Demo/Rehabilitation Map
 Sheet 5 of 10

T/CELL
ELEV. 345.00'

LOW WATER
ELEV. 290.00'

MIN. WATER
ELEV. 288.00'

RIVER BOTTOM

HARBOR DREDGE
ELEV. 278.00'

CUT LINE
ELEV. 277.00'

PILE BOTTOM
ELEV. 253.00'

ELEVATION VIEW OF CELL

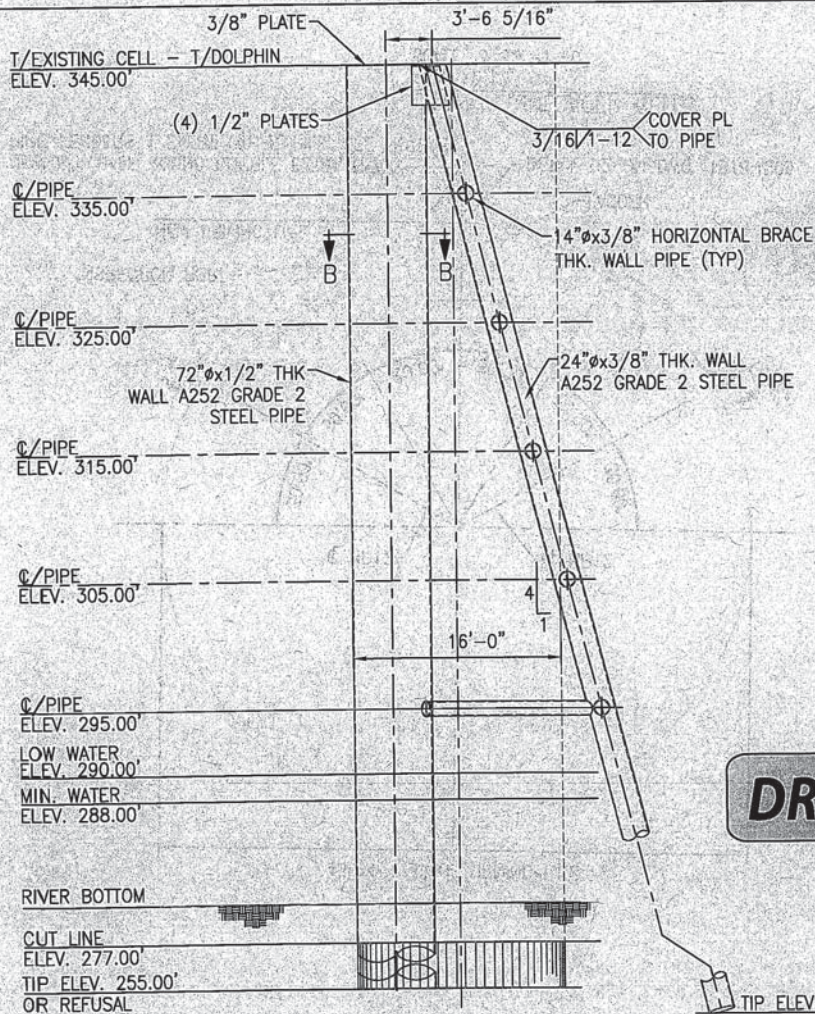
WALKWAY AND WALKWAY PIER ON CELLS #0,1,8,9,&16
NOT SHOWN FOR CLARITY
8" HALF ROUND FENDER PIPE NOT SHOWN FOR CLARITY

GENERAL NOTES

1. THE PIPE PILING SECTION USED IN THE CONSTRUCTION OF THE DOLPHINS IS TO CONFORM TO ASTM A-252 GRADE 2 STANDARD OF QUALITY.
2. PRIOR TO SETTING PILES, THE RIVER BOTTOM UNDER THE DOLPHIN AREA SHALL BE CLEAR OF DEBRIS.
3. ALL PIPE PILING ARE TO BE DRIVEN TO ELEVATION OR REFUSAL, WHICHEVER IS OBTAINED FIRST.
4. PIPE FILL MATERIALS TO BE FREE DRAINING, GRANULAR AND HAVE A DRY UNIT WEIGHT OF 104 PCF, AN ANGLE OF INTERNAL FRICTION OF APPROX. 34.5 DEGREES, AND A SUBMERGED UNIT WEIGHT OF 65 PCF.
5. WHERE A DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS, EVEN IF NOT SPECIFICALLY MARKED ON DRAWINGS.
6. ALL WORK SHALL BE ADEQUATELY BRACED DURING THE CONSTRUCTION PERIOD.
7. ALL STRUCTURAL STEEL SHAPES AND PLATES INDICATED ON THESE DRAWINGS SHALL BE ASTM A36 GRADE OR BETTER.
8. ALL CONNECTIONS ARE TO BE FULL STRENGTH WELDED CONNECTIONS, U.N.O. AND SHALL BE IN ACCORDANCE WITH THE 8TH EDITION OF THE A.I.S.C. SPECIFICATIONS FOR WELDS, SECTION 1.17.

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TVA Shawnee Fossil Plant
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Existing Cell and Demo/Rehabilitation
Sheet 6 of 10



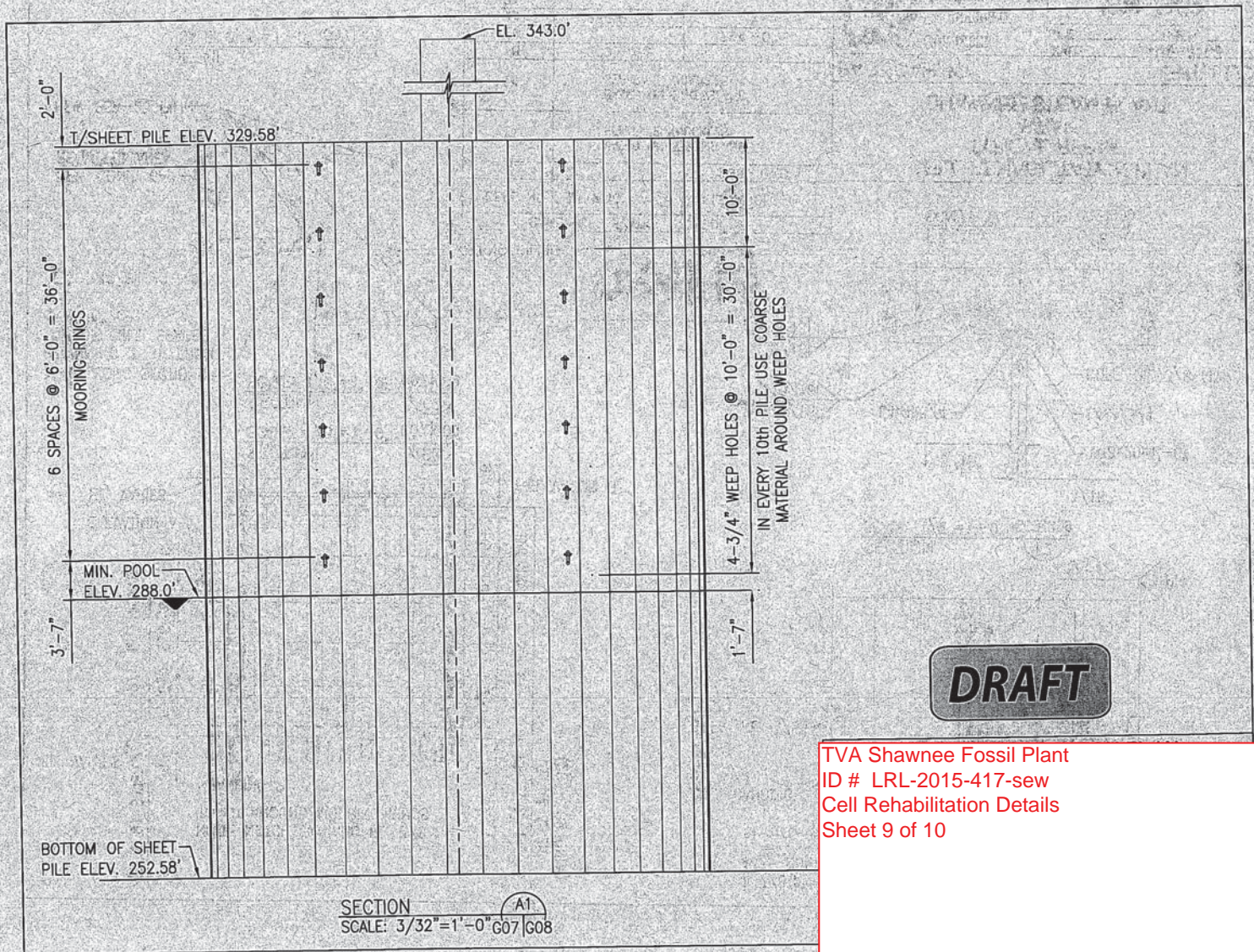
ELEVATION VIEW OF BARGE MOORING TRI-POD

GENERAL NOTES

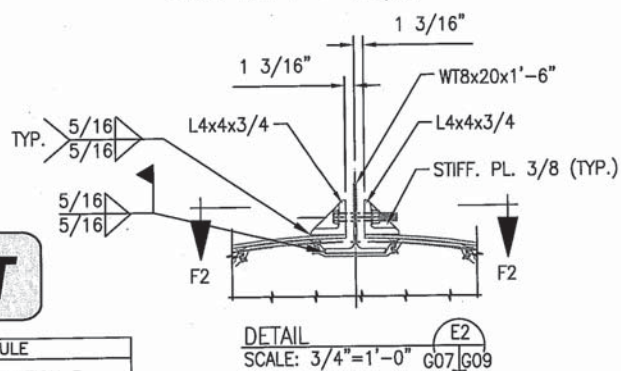
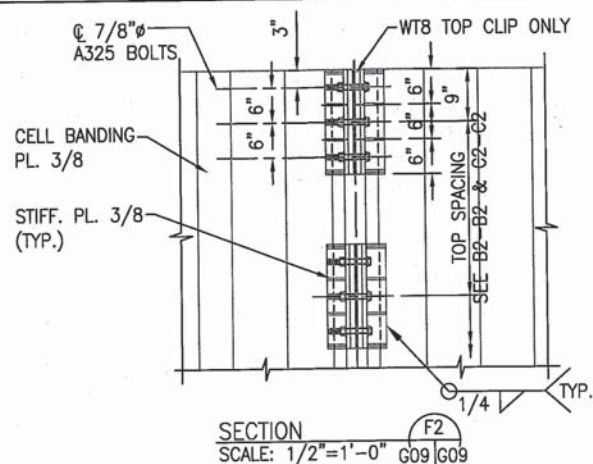
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TVA Shawnee Fossil Plant
ID # LRL-2015-417-sew
Pipe Pile Dolphin Details
Sheet 7 of 10



TVA Shawnee Fossil Plant
ID # LRL-2015-417-sew
Cell Rehabilitation Details
Sheet 9 of 10



DETAIL
SCALE: 3/4"=1'-0" G07 G09

BANDING ELEVATION SCHEDULE		
CELL NO.	ELEVATION A	ELEVATION B
3		295'-0"±
11	BASED ON STRESS AND SEPARATE KNUCKLES	
14	BASED ON STRESS AND SEPARATE KNUCKLES	
18	289'-0"±	
19		294'-0"±
23	289'-0"±	
24		
25		289'-0"±

TVA Shawnee Fossil Plant
ID # LRL-2015-417-sew
Cell Rehabilitation Details
Sheet 10 of 10