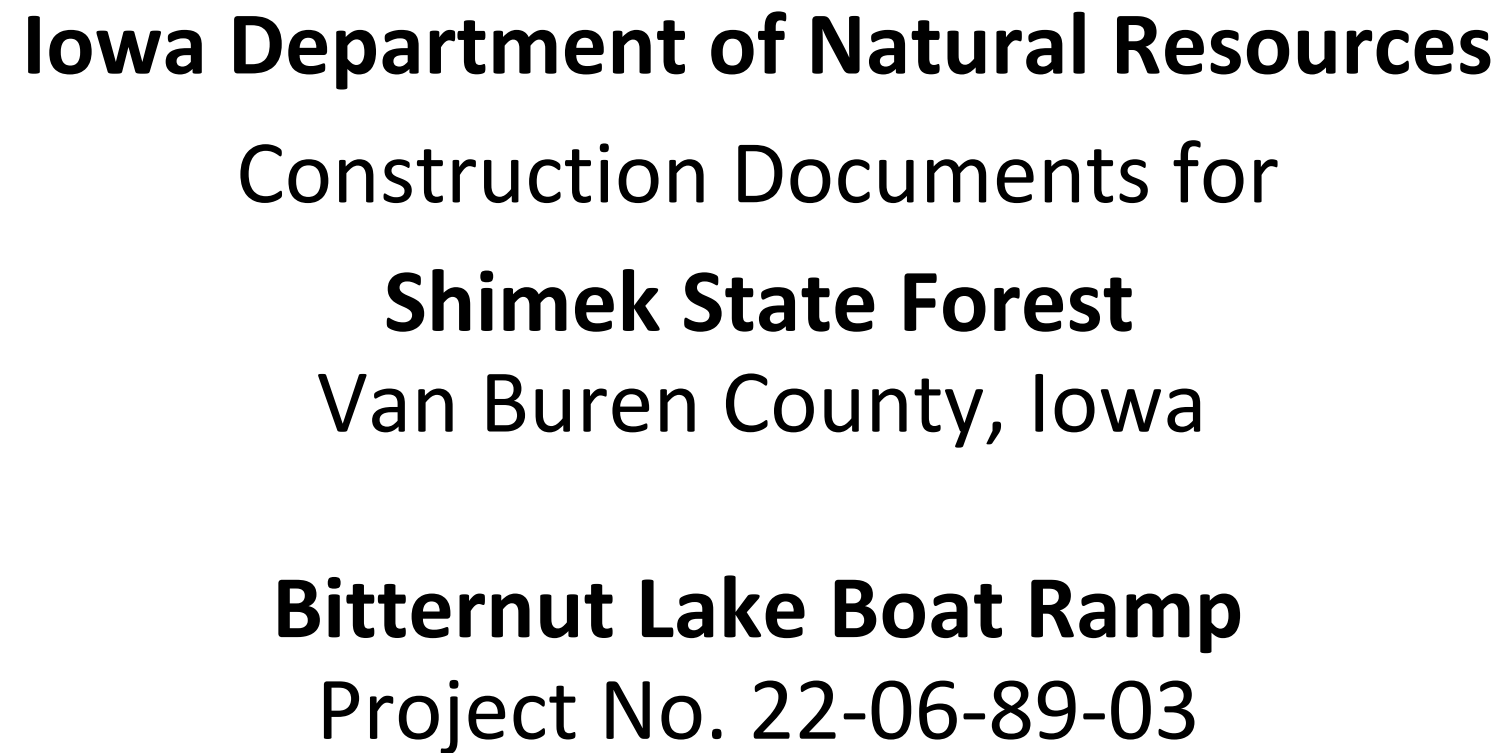
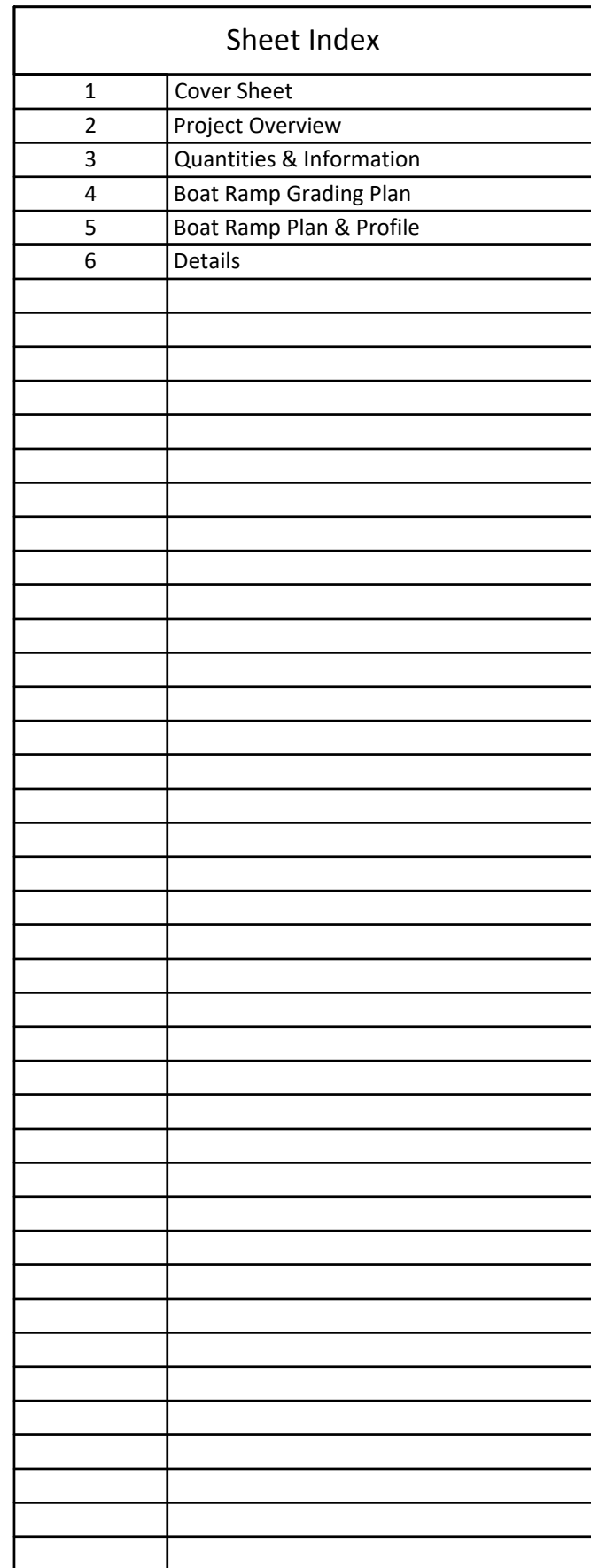




Project Location Map

The map shows the Fairfield area in Iowa. Key locations include Fairfield, Westwood, Hillsboro, Salem, Houghton, St. Paul, Pilot Grove, Denmark, West Point, Franklin, Fort Madison, and Nauvoo. Major roads are marked with numbers and colors. The project location is indicated by a black arrow pointing to a spot near the intersection of Highway 16 and Highway 27, just south of the Fairfield city limits. A small inset map of Iowa in the bottom left corner shows the project location within the state.



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Iowa Department of Natural Resources
Engineering Section - 6200 Park Ave., Suite 200 Des Moines, IA 50321-1270



Drawn by: MN	
Revision	Date

Bid Date:
mm/dd/yyyy

Project Number:
22-06-89-03

Bitternut Lake Boat Ramp
Shimek State Forest, Van Buren County

Project Overview

Sheet No:
2

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Estimated Quantities			
Item	Description	Quantity	Unit
1	Mobilization	1	LS
2	Clearing and Grubbing	1	LS
3	Silt Fence	120	LF
4	Excavation (Class 10) - Disposed Offsite	608	CY
5	Granular Subbase	74	Tons
6	PCC Pavement - 6" Depth, Reinforced (Boat Ramp)	152	SY
7	PCC Pavement - 6" Depth (ADA Stall)	89	SY
8	Erosion Stone, 6" (For Ditch)	23	Tons
9	Macadam - 9" Depth	312	Tons
10	Class A Road Stone - 3" Depth	112	Tons
11	ADA Signage and Painting	1	LS
12	Site Restoration	1	LS

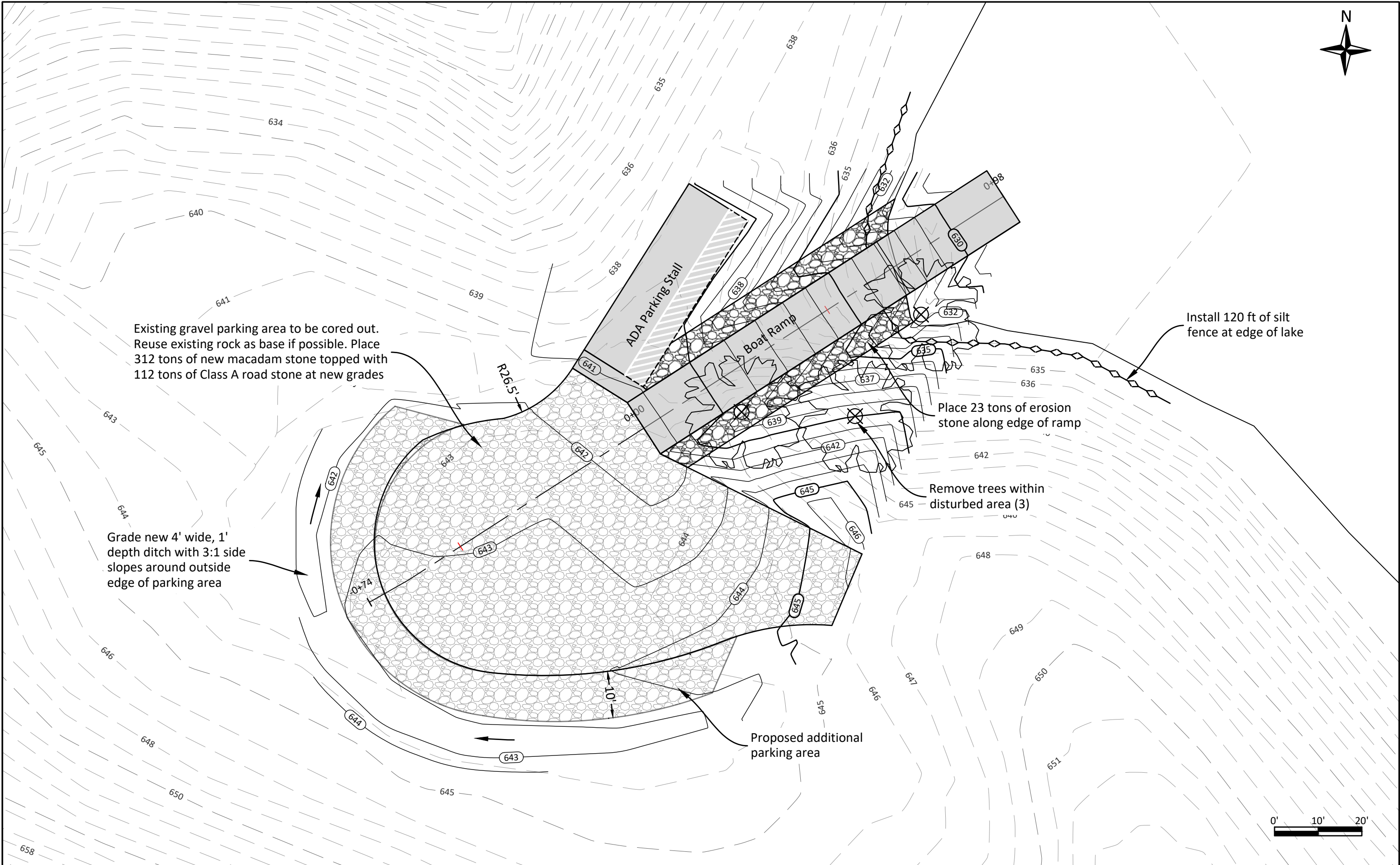
Estimate Reference Information	
1.	Mobilization - Payment per Iowa DOT 2533.
2.	Clearing and Grubbing - To be paid lump sum for removal of small trees/bushes (including 3 larger trees) within the disturbed area. Downed trees shall be taken to the gravel parking lot in the Bitternut campground. Stumps to be removed and disposed of offsite. Trees to be cut down during the October 1st - March 31st window.
3.	Silt Fence - Installation per Iowa DOT Section 4196, locations to be determined in the field by DNR Field Engineer.
4.	Excavation (Class 10) - Per Iowa DOT Section 2102. This item is for excavating a new boat ramp and parking area as shown in plans. Quantity calculated with AutoCAD surface information including a 25% fill factor. Excavated material is to be removed and disposed of offsite.
5.	Special Backfill - Place 6" of special backfill under the ADA parking stall and boat ramp concrete per Iowa DOT section 4132.
6.	PCC Pavement - 6" Depth, Reinforced - Use low DOT Class C4-Mix. Shall be reinforced by #4 bars, 24" O.C., each way. Grading necessary to meet plan elevations shall be incidental.
7.	PCC Pavement - 6" Depth, Non-reinforced - Use Class C4-Mix. Maximum 1.8% slope in all directions. Grading necessary to meet plan elevations shall be incidental.
8.	Erosion Stone, 6" Depth - Place 6 " of erosion stone in ditch along both sides of the boat ramp per Iowa DOT Section 4130.
9.	Macadam Stone, 9" Depth - To be used for the base of the new parking area per Iowa DOT Section 2210.
10	Class A Road Stone, 3" Depth - Install on top of the 9" of macadam stone in the parking area per Iowa DOT Section 4120.
11.	ADA Signage and Painting - a. Painting - Yellow, High Build Waterborne Paint, Pavement shall be power washed before painting. A minimum of a 7-day waiting period after paving shall be observed. Paint shall be 4" wide. Hatched ADA access areas shall have 2-foot spacing per MUTCD. b. Signage - Purchase ADA compliant handicap parking sign and supply to local park staff to install.
12.	Site Restoration - Site to be reestablished back to original condition including seeding and mulching all disturbed areas with Iowa DOT Type 2 Seeding Mix per Section 9010.

General Information	
1.	Verify actual locations and elevations with DNR Engineer.
2.	All work shall conform to and be performed in accordance with all applicable codes and ordinances.
3.	The contractor shall visit the site and inspect the project area and thoroughly familiarize themselves with the actual job conditions prior to bidding and the start of work. Failure to visit the project site shall not relieve the contractor from performing the work in accordance to the plans, specification, special provisions and contract.
4.	The contractor shall verify, at the site, all dimensions and conditions shown on the plans and shall notify the DNR Engineer of any discrepancies, omissions, and/or conflicts prior to proceeding with the work.
5.	It shall be the contractor's responsibility to provide waste areas or disposal sites for excess material (excavated material or broken concrete) which is not desirable to be incorporated into the work involved on this project. No payment for overhaul will be allowed for material hauled to these sites. No material shall be placed within the right-of-way, unless specifically stated in the plans or approved by the DNR Engineer.
6.	The contractor shall not disturb desirable grass areas and desirable trees outside the construction limits. The contractor will not be permitted to park or service vehicles and equipment or use these areas for storage of materials. Storage, parking and service areas will be subject to the approval of the DNR Engineer.
7.	Where utilities and fixtures are shown as Existing on the plans or encountered within the construction area, it shall be the responsibility of the contractor to notify the DNR Engineer of those utilities prior to the beginning of any construction. The contractor shall be afforded access to these facilities for necessary modification of services. Underground facilities, structures and utilities have been plotted from available surveys and records and therefore their locations must be considered approximate only. It is possible there may be others, the existence of which is presently not known or shown. It is the contractor's responsibility to determine their existence and exact location and to avoid damage thereto. No claims for additional compensation will be allowed to the contractor for any interference or delay caused by such work.
8.	The contractor shall shape graded area to maintain surface drainage. All elevations are to finish grade.
9.	The contractor is expected to have materials, equipment, and labor available on a daily basis to install and maintain erosion control features on the project. This may involve seeding, silt fence, rock ditch checks, silt basins or silt dikes.

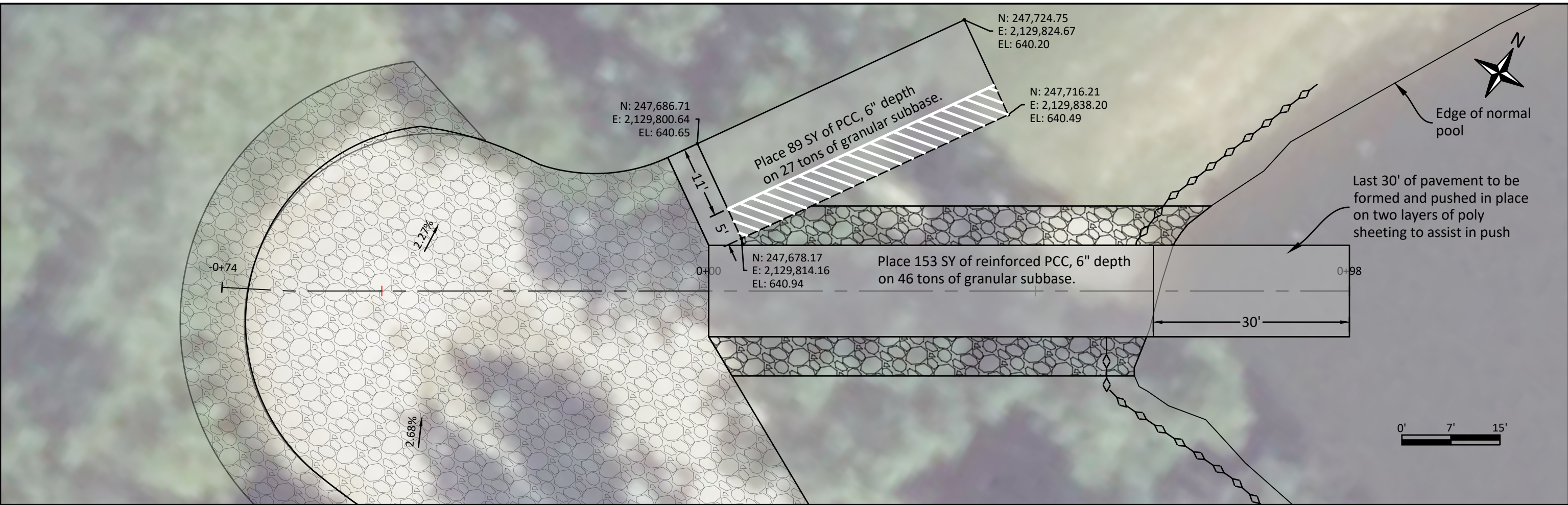


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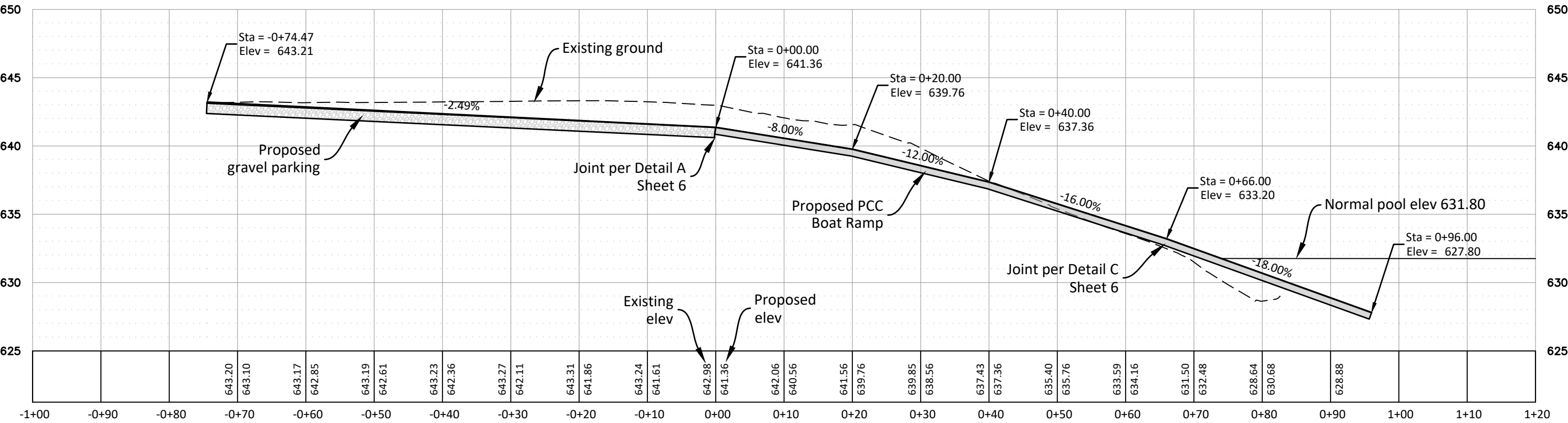
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Boat Ramp CL



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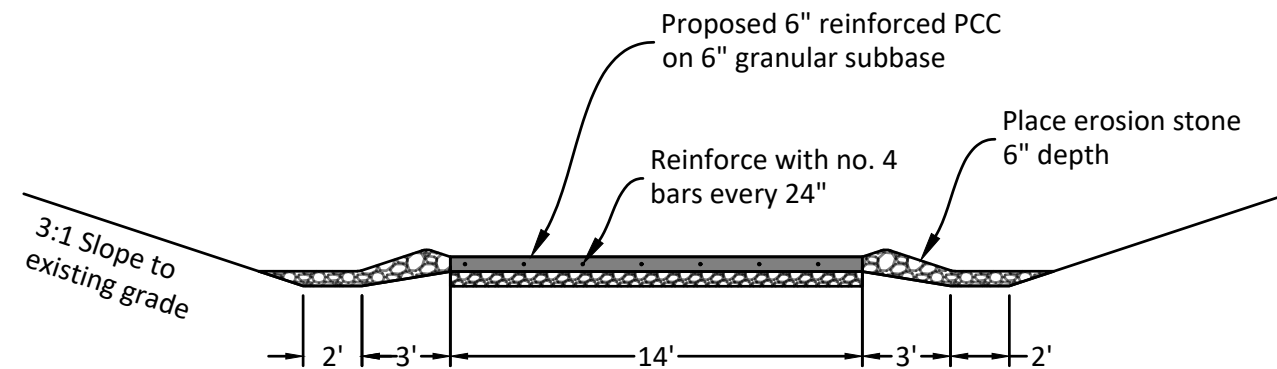
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Shimek State Forest, Van Buren County

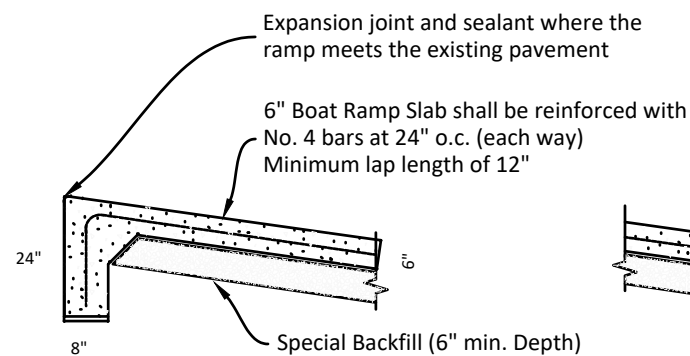
Boat Ramp Plan & Profile

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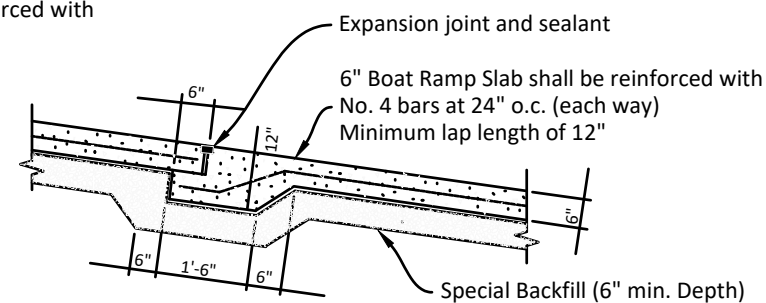
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Boat Ramp Typical Section

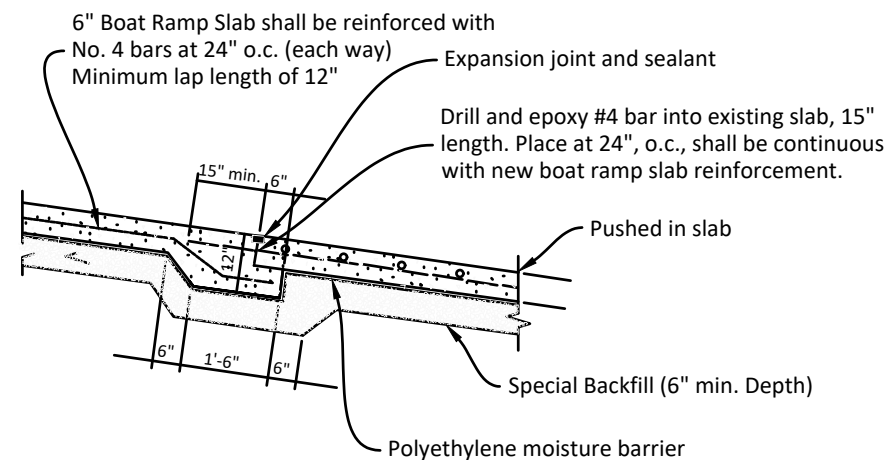


Detail A
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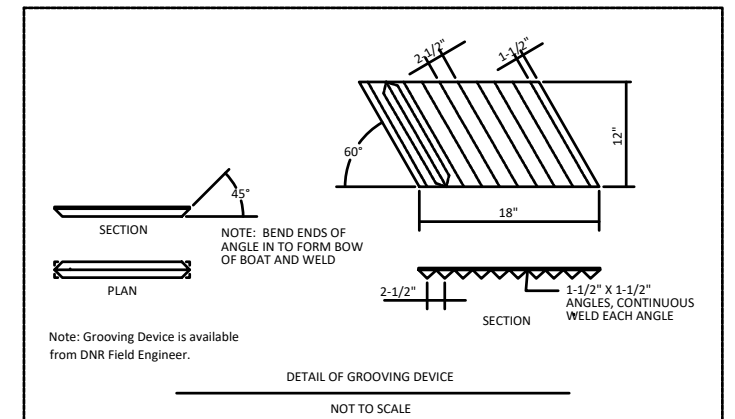


Detail B
Not to scale

Note:
Expansion joint material,
reinforcing steel, and tie
bars to be incidental to
boat ramp bid item.



Detail C
Not to scale



Note: Ramp finish shall be grooved diagonally to form a non-skid surface - min 1" depth, max. 2-1/2 between grooves and/or as directed by the inspector. On river ramps, grooves shall slope towards downstream side. **Grooving Device may be obtained from the DNR Field Engineer.**