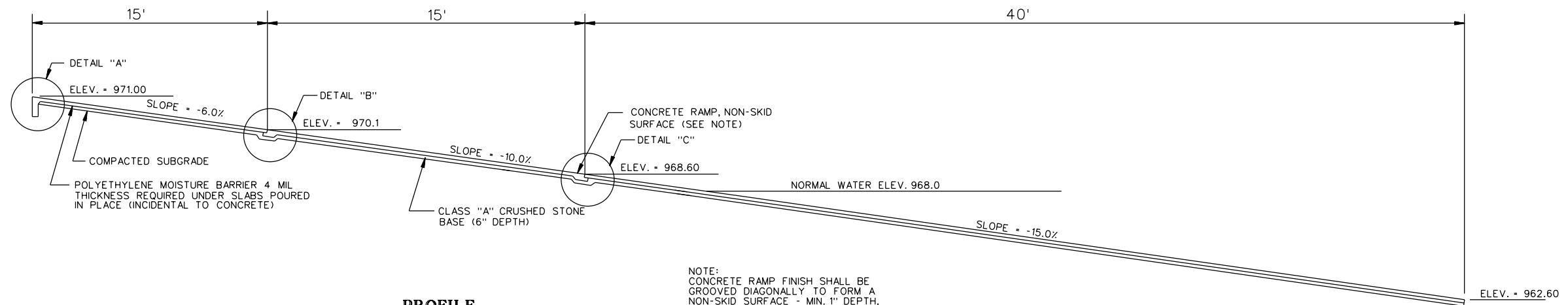


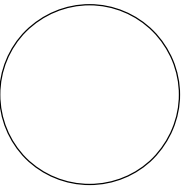
PLAN
NOT TO SCALE



PROFILE
NOT TO SCALE

NOTE:
CONCRETE 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.

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TYPICAL CROSS SECTIONS AND DETAILS

PCC PAVING FOR:
LAKE MANAWA STATE PARK
POTTAWATTAMIE COUNTY

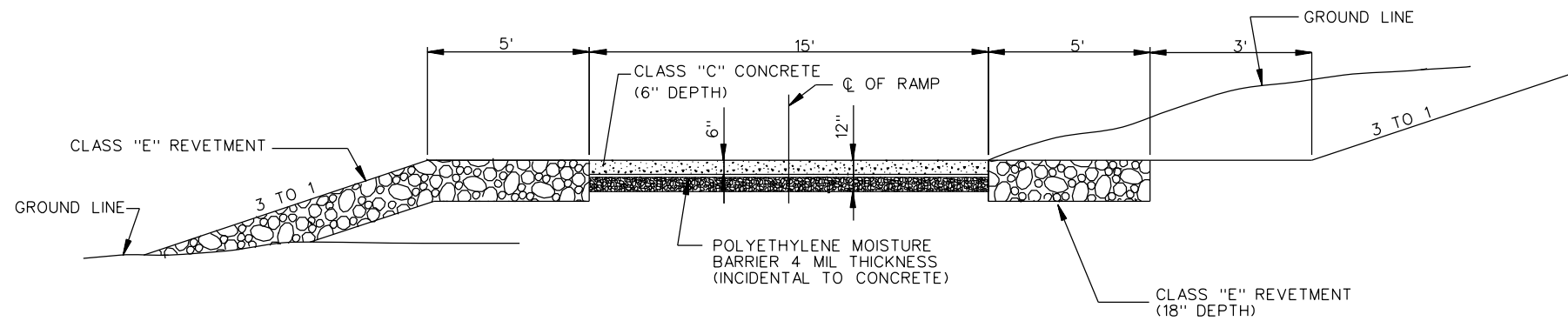
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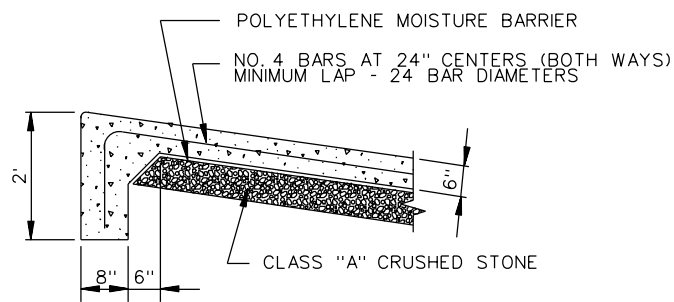
B.01



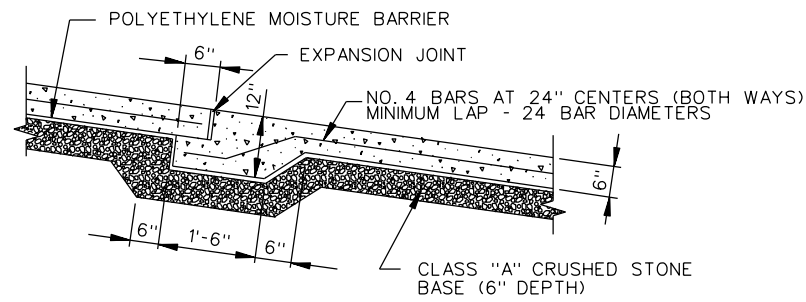
TYPICAL SECTION - FILL

TYPICAL SECTION - CUT

SECTION A - A
NOT TO SCALE

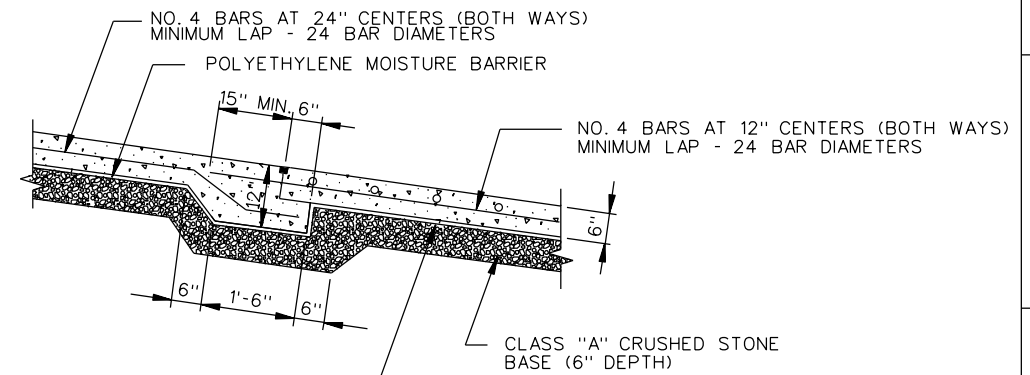


DETAIL "A"
NOT TO SCALE



DETAIL "B"
NOT TO SCALE

NOTE:
EXPANSION JOINT MATERIAL
REINFORCING STEEL AND TIE
BARS TO BE INCIDENTAL TO
CONCRETE BID ITEM.



DETAIL "C"
NOT TO SCALE

POLYETHYLENE MOISTURE BARRIER - TWO LAYERS
REQUIRED UNDER THIS SECTION OF RAMP IF RAMP
IS TO BE PUSHED INTO POSITION UNDERWATER

GENERAL NOTES

ALL CONCRETE SHALL CONFORM TO CLASS "C" MIX 4 I. D. O. T. SPECIFICATION SERIES 2015

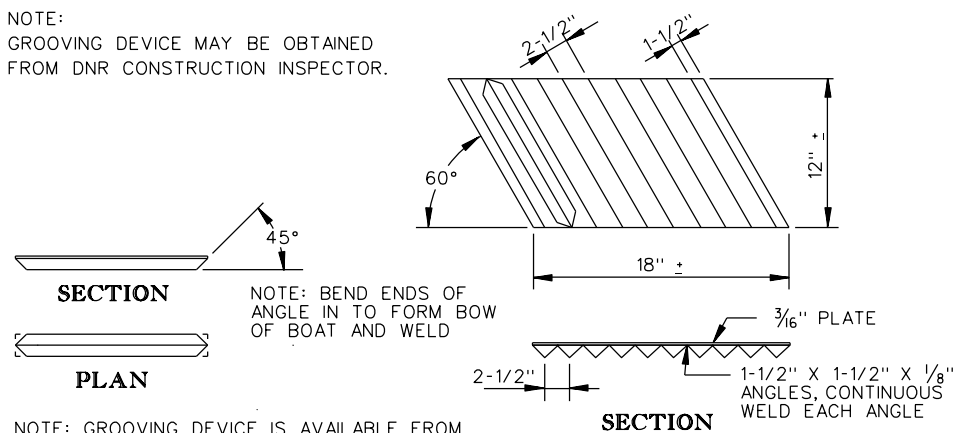
ALL EXPOSED EDGES OF CONCRETE TO BE BEVELED WITH 3/4" CHAMFER STRIPS

THE TOP 1" OF ALL EXPANSION JOINTS TO RECEIVE A SILICONE BASE POURING TYPE SEALER

EXPANSION JOINTS - 3/4" PREFORMED RESILIENT FILLER MATERIAL
REINFORCING STEEL - GRADE 40 - DEFORMED

THAT PORTION OF THE RAMP TO BE PLACED BELOW THE WATERLINE MAY BE FORMED ABOVE THE WATERLINE AND CAREFULLY PUSHED INTO POSITION UNDERWATER TO THE LOCATION AND ELEVATION AS SHOWN ON THE PLAN AND AS APPROVED BY THE ENGINEER. THE REMAINING SECTIONS OF THE RAMP SHALL BE FORMED AND POURED IN PLACE.

NOTE:
GROOVING DEVICE MAY BE OBTAINED
FROM DNR CONSTRUCTION INSPECTOR.

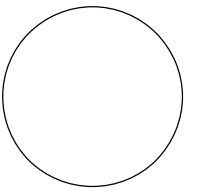


DETAIL OF GROOVING DEVICE

NOT TO SCALE

NOTE: GROOVING DEVICE IS AVAILABLE FROM
DNR CONSTRUCTION INSPECTOR.

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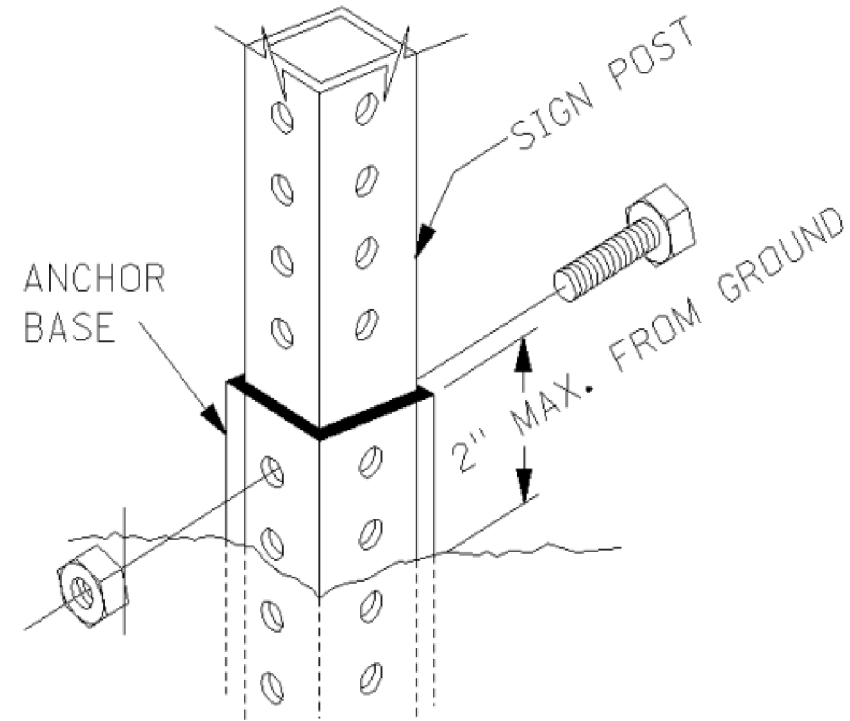
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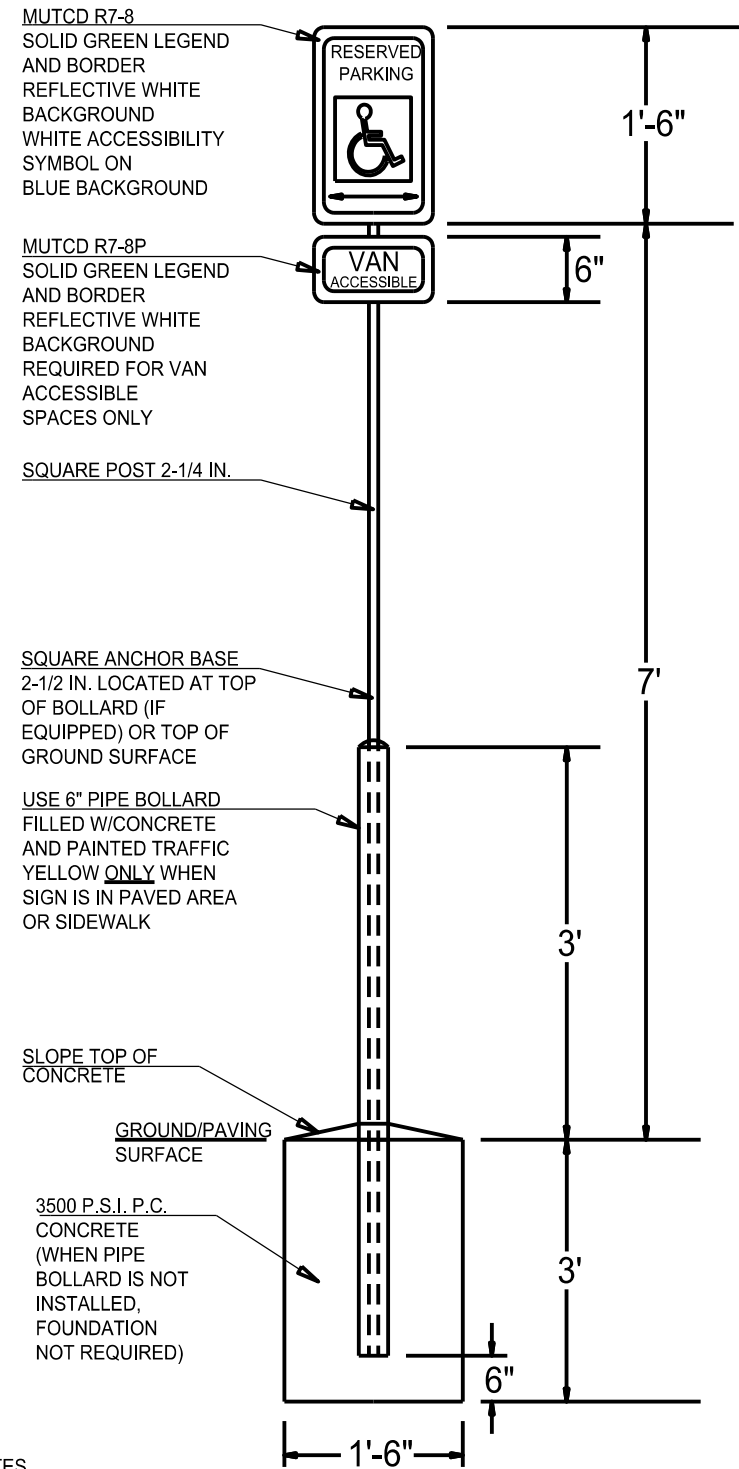
BREAK-AWAY TYPE STEEL POST DETAILS

SQUARE TUBE POST



ALL SIGN POST SHALL CONSIST OF SQUARE POSTS BOLTED TO AN EMBEDDED SQUARE ANCHOR BASE. ANCHOR DEPTH IS MINIMUM 30 INCHES. TUBULAR STEEL POSTS SHALL BE 2-1/2 IN. SQUARE TUBES. TUBULAR STEEL ANCHOR BASES SHALL BE 2-1/2 IN. SQUARE, AND SHALL FIT SNUGLY OVER THE 2-1/4 IN. POST SECTION.

ALL SQUARE TUBULAR STEEL POSTS AND STEEL ANCHOR BASES SHALL BE FORMED FROM 12 GAUGE GALVANIZED STEEL. ALL SIDES OF THE TUBES SHALL HAVE 7/16 IN. DIE PUNCHED CIRCULAR HOLES OR PERFORATED KNOCK-OUTS, AT 1 IN. CENTERS ALONG THEIR ENTIRE LENGTH.

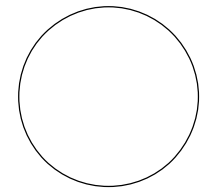


NOTES

1. 12"x18" ACCESSIBILITY SIGN (R7-8) SHALL BE MOUNTED 7' FROM FINISH GRADE TO BOTTOM EDGE OF SIGN FACE. MOUNTING HEIGHT MAY BE REDUCED TO 5' IF PLACED IN A LANDSCAPE AREA IN WHICH PEDESTRIANS ARE NOT EXPECTED TO USE.
2. BOLLARD MAY BE OMITTED IF INSTALLED IN LANDSCAPE AREAS. WHEN INSTALLED IN LANDSCAPE AREAS, MOUNTING POST SHALL BE DRIVEN A MINIMUM OF 3' BELOW FINISHED GRADE. ALTERNATE MOUNTING POSTS MUST BE APPROVED BY THE FIELD INSPECTOR PRIOR TO CONSTRUCTION.
3. SIGNAGE SHALL BE INSTALLED IN FRONT OF EACH ACCESSIBLE SPACE, CENTERED ON THE WIDTH OF THE SPACE.
4. REFER TO AMERICANS WITH DISABILITIES ACT AND ARCHITECTURAL BARRIERS ACT ACCESSIBILITY GUIDELINES (ADAAG), LATEST EDITION, FOR REQUIRED NUMBER OF ACCESSIBLE SPACE. PER ADAAG, ONE VAN ACCESSIBLE SPACE SHALL BE PROVIDED, MINIMUM, WITH ADDITIONAL VAN ACCESSIBLE SPACES PER ADAAG REQUIREMENTS.
5. ALL SIGNAGE SHALL BE ENGINEER GRADE .080 ALUMINUM REFLECTIVE SIGN MEETING THE REQUIREMENTS OF THE MUTCD AND ADAAG.

ADA SIGN DETAIL NOT TO SCALE

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ENGINEERING SERVICES - WALLACE BUILDING
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TYPICAL CROSS SECTIONS AND DETAILS

PCC PAVING FOR:

LAKE MANAWA STATE PARK

POTTAWATTAMIE COUNTY

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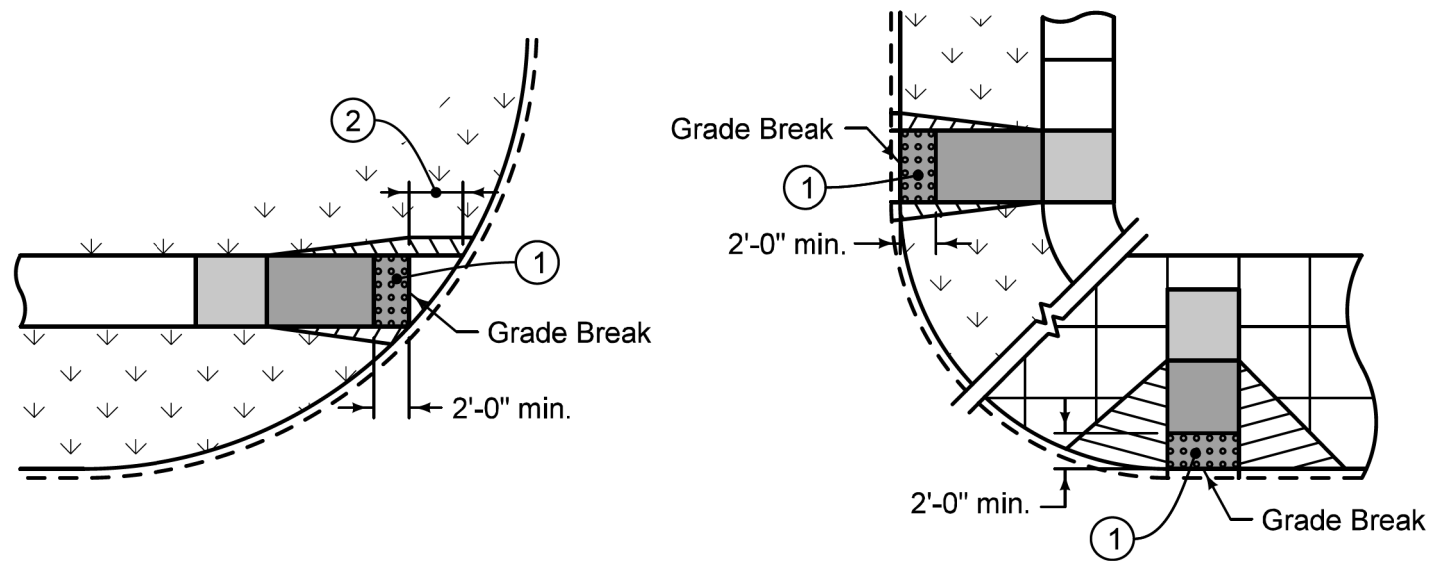
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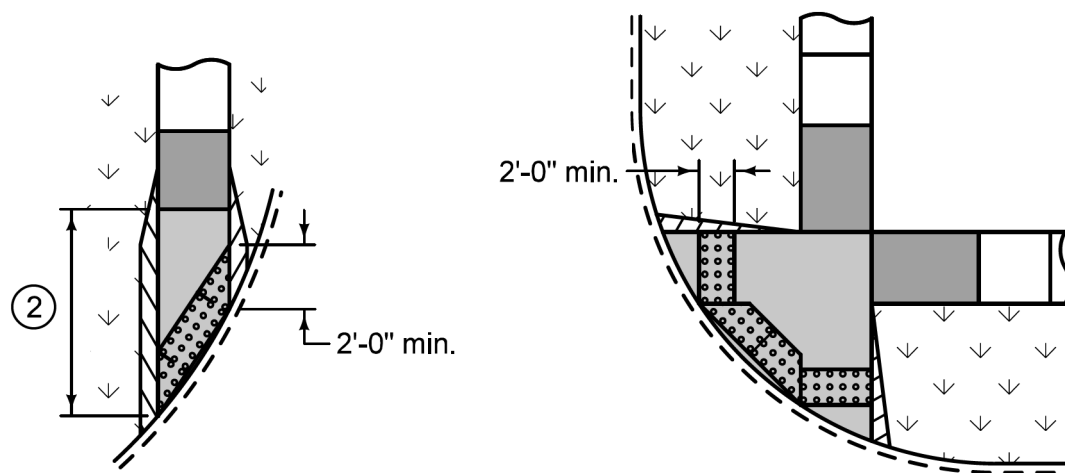
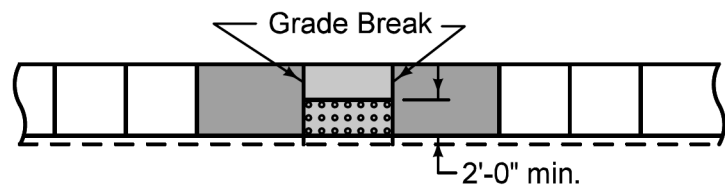
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PERPENDICULAR RAMPS





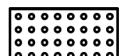
PARALLEL RAMPS

Provide a minimum 2 foot width of detectable warning surfaces in the direction of pedestrian travel across the full width of the curb ramp or turning space, exclusive of curbs or flares.

- ① When detectable warning is located on curb ramp surface, orient domes in the direction of pedestrian travel.
- ② When the distance between the grade break and the back of curb is less than 5 feet, place detectable warning surface at the bottom of the curb ramp.

Where one corner of the curb ramp is more than 5 feet from the back of curb, construct curb ramp as a parallel curb ramp. Move grade break back as required to place detectable warning on turning space at the back of curb.

Key

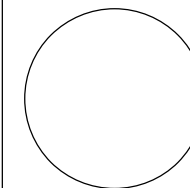
-  Curb Ramp
-  Turning Space
-  Detectable Warning

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	7030.210	
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SUDAS Standard Specifications

DETECTABLE WARNING PLACEMENT

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TYPICAL CROSS SECTIONS AND DETAILS

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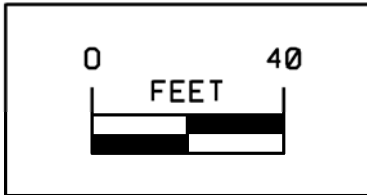
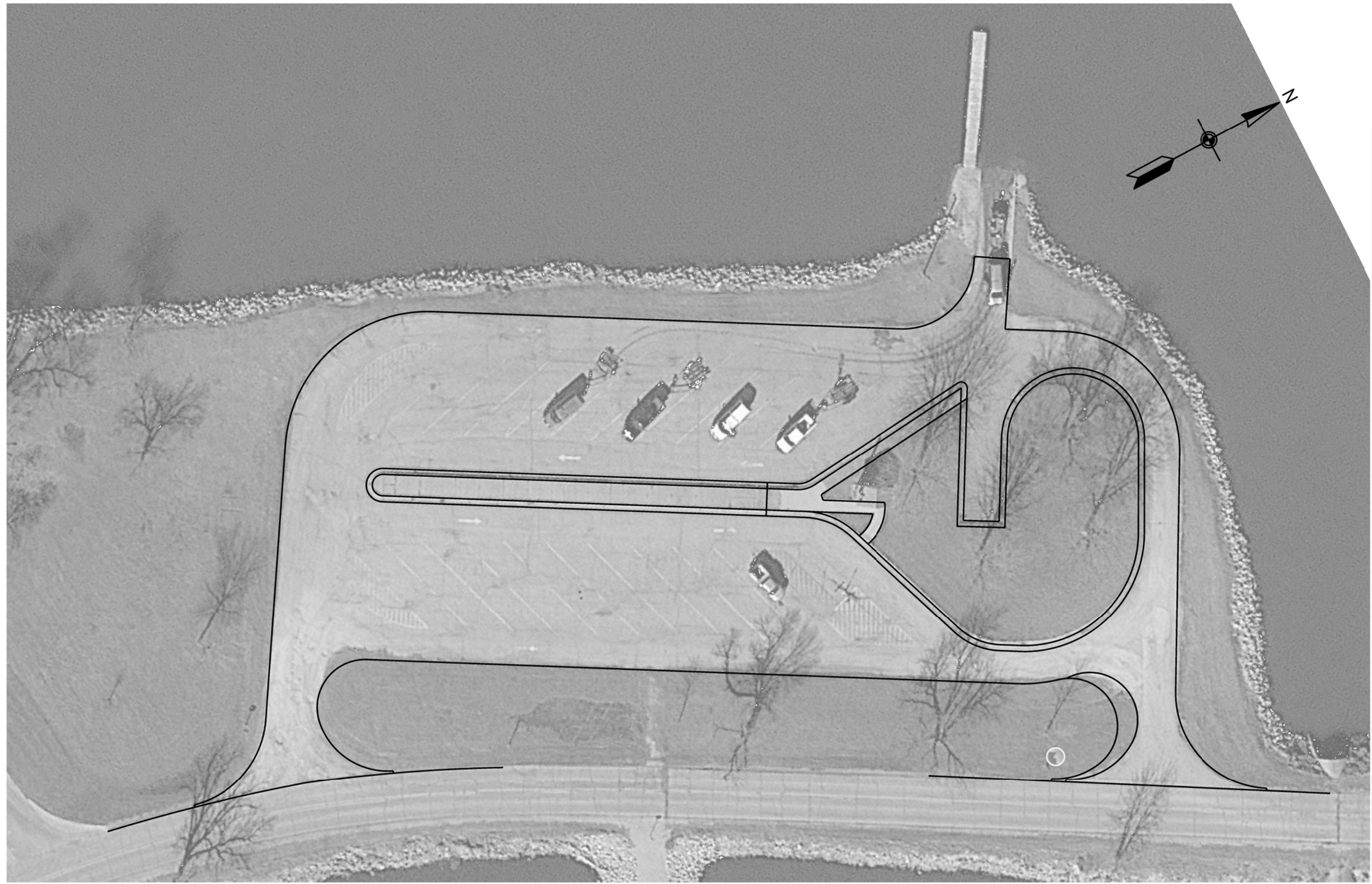
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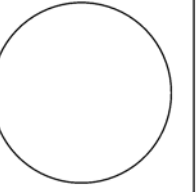
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NOTE:
 Remove all existing asphalt, concrete curb and gutter, and concrete pavement including boat ramp.
 Excavate site to accommodate 6" of base and 6" of PCC.

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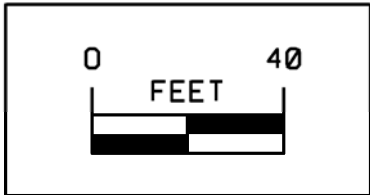
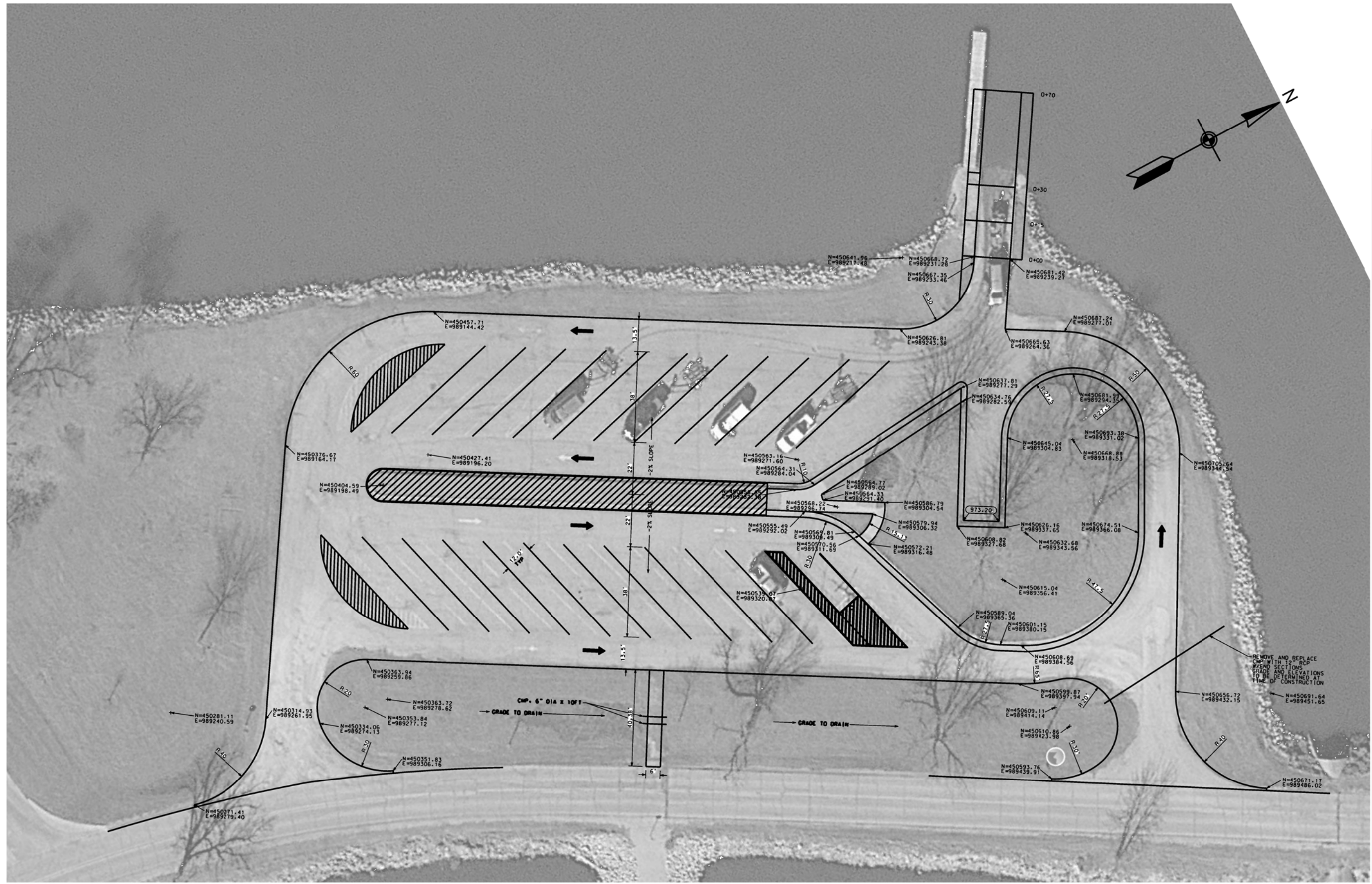


SITE PLAN

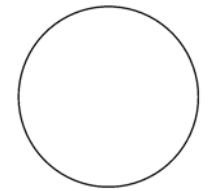
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SITE PLAN - LAYOUT

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D.02

