BENCHMARK

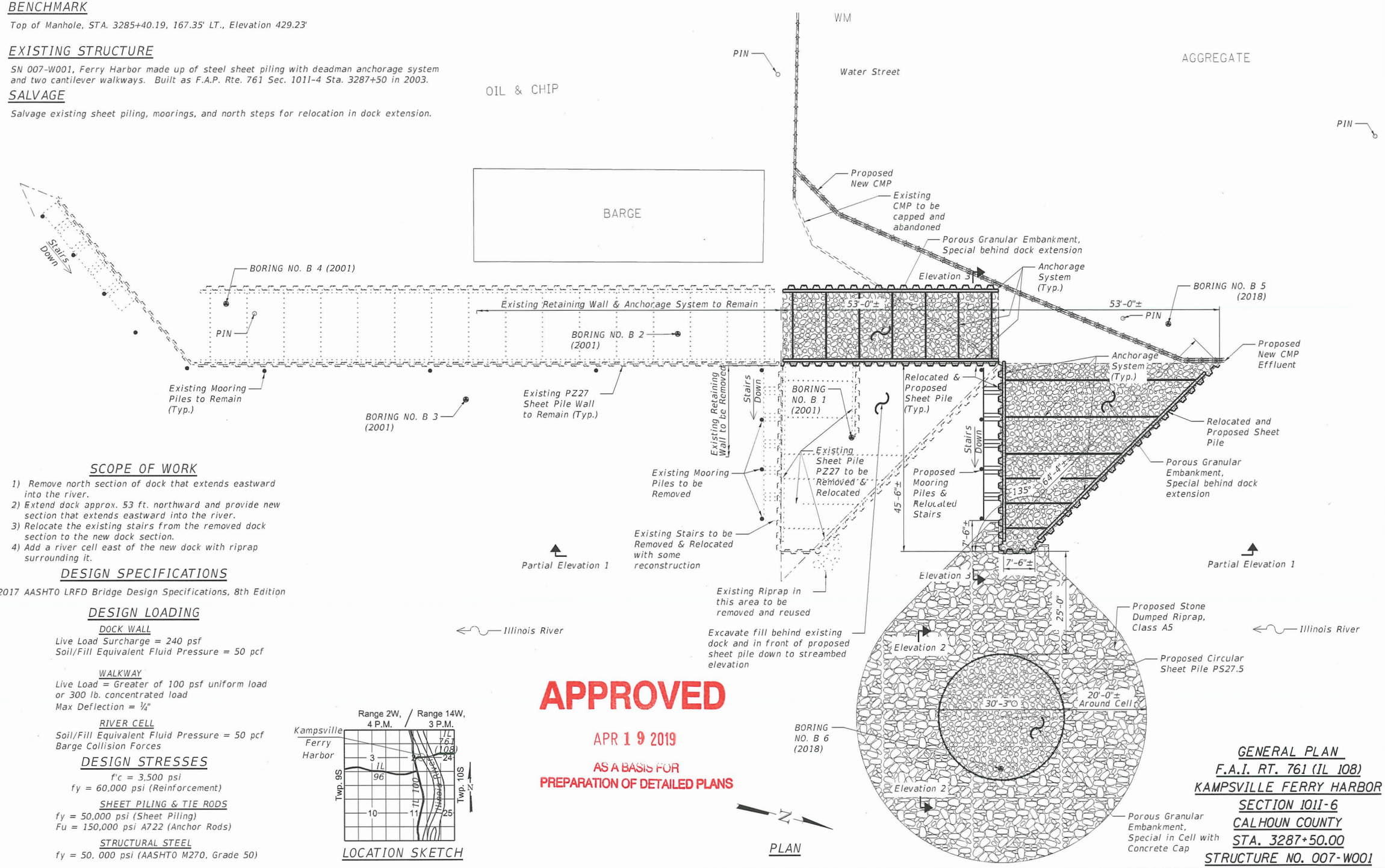
Top of Manhole, STA. 3285+40.19, 167.35' LT., Elevation 429.23'

EXISTING STRUCTURE

SN 007-W001, Ferry Harbor made up of steel sheet piling with deadman anchorage system and two cantilever walkways. Built as F.A.P. Rte. 761 Sec. 101I-4 Sta. 3287+50 in 2003.

SALVAGE

Salvage existing sheet piling, moorings, and north steps for relocation in dock extension.



PLAN

SCOPE OF WORK

1) Remove north section of dock that extends eastward into the river.
2) Extend dock approx. 53 ft. northward and provide new section that extends eastward into the river.
3) Relocate the existing stairs from the removed dock section to the new dock section.
4) Add a river cell east of the new dock with riprap surrounding it.

DESIGN SPECIFICATIONS

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

DESIGN LOADING

DOCK WALL

Live Load Surcharge = 240 psf
Soil/Fill Equivalent Fluid Pressure = 50 pcf

WALKWAY

Live Load = Greater of 100 psf uniform load or 300 lb. concentrated load
Max Deflection = ¼"

RIVER CELL

Soil/Fill Equivalent Fluid Pressure = 50 pcf
Barge Collision Forces

DESIGN STRESSES

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

SHEET PILING & TIE RODS

fy = 50,000 psi (Sheet Piling)
Fu = 150,000 psi A722 (Anchor Rods)

STRUCTURAL STEEL

fy = 50, 000 psi (AASHTO M270, Grade 50)

LOCATION SKETCH

APPROVED
APR 19 2019
AS A BASIS FOR
PREPARATION OF DETAILED PLANS

GENERAL PLAN
F.A.I. RT. 761 (IL 108)
KAMPSVILLE FERRY HARBOR
SECTION 101I-6
CALHOUN COUNTY
STA. 3287+50.00
STRUCTURE NO. 007-W001

BENTON & ASSOCIATES, INC.
CONSULTING ENGINEERS · LAND SURVEYORS
1978 WEST LAFAYETTE AVE.
JACKSONVILLE, IL 62650
PHONE: 217-245-4146 FAX: 217-245-4149
IL DESIGN FIRM REGISTRATION NO. 184-000852

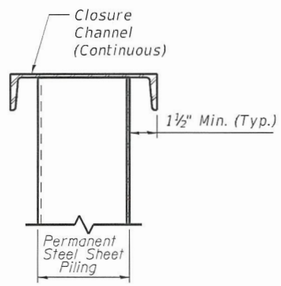
USER NAME =	DESIGNED - MBH	REVISED - 4/18/19 MBH
	CHECKED - RHB	REVISED -
PLOT SCALE =	DRAWN - MBH	REVISED -
PLOT DATE =	CHECKED - RHB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN
STRUCTURE NO. 007-W001
SHEET 1 OF 2 SHEETS

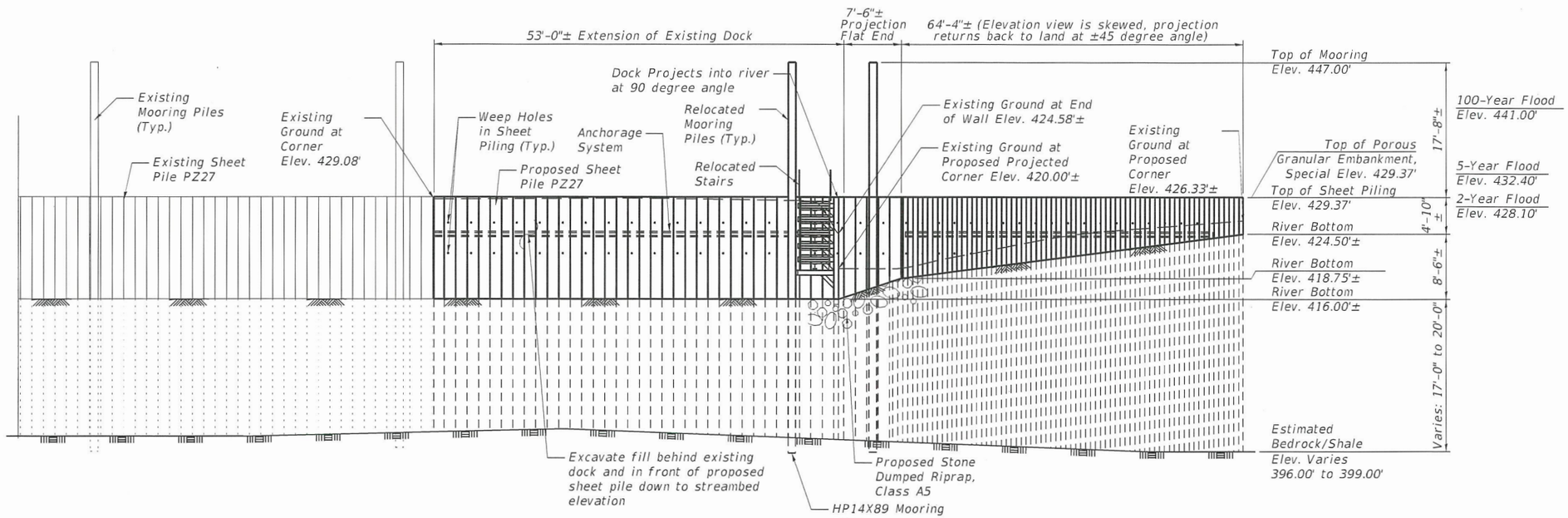
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
761	101I-6	CALHOUN	1	2
		CONTRACT NO. 76K91		
		ILLINOIS	FED. AID PROJECT	

MODEL: Layout1
FILE NAME: P:\10E2166-31\Design\Plans\007W001-76K91-TSL-001.dgn
4/18/2019 3:52:43 PM

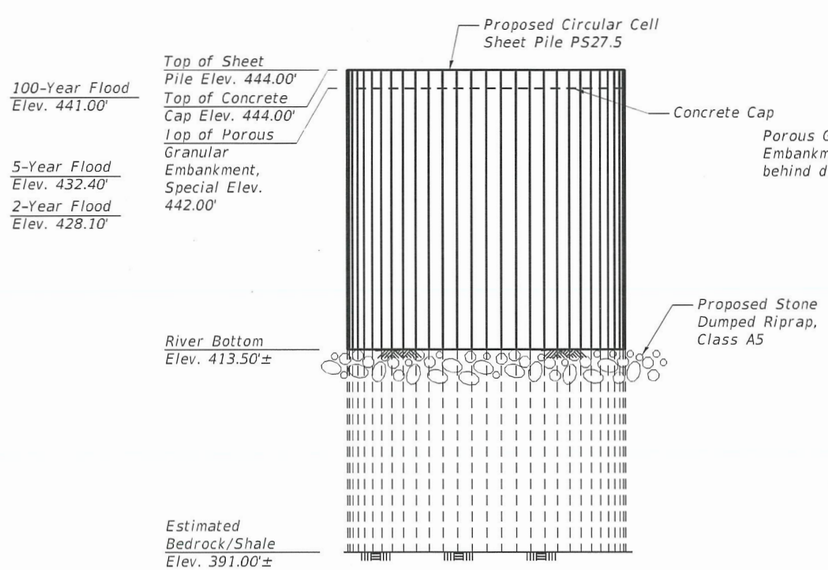


TYPICAL SECTION AT TOP OF SHEET PILING

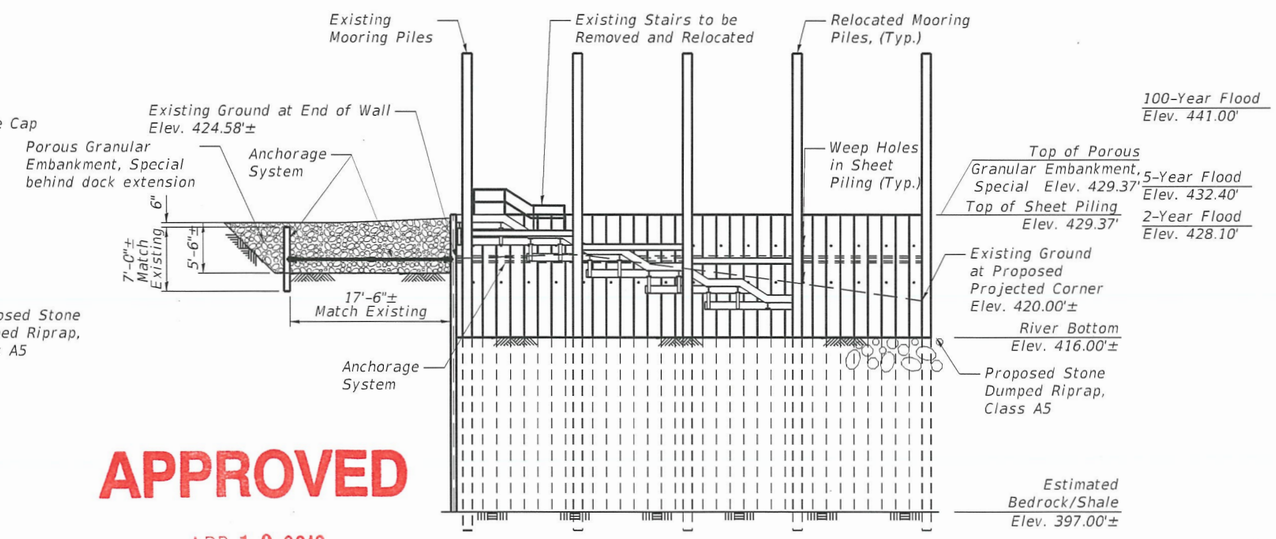
Note:
Channel size to be determined based on chosen section of permanent steel sheet piling.



PARTIAL ELEVATION 1



CIRCULAR CELL SHEET PILE
ELEVATION 2



STAIR
SECTION / ELEVATION 3

APPROVED
APR 19 2019
AS A BASIS FOR PREPARATION OF DETAILED PLANS

ELEVATIONS
F.A.I. RT. 761 (IL 108)
KAMPSVILLE FERRY HARBOR
SECTION 101I-6
CALHOUN COUNTY
STA. 3287+50.00
STRUCTURE NO. 007-W001

MODEL: Layout2
FILE NAME: P:\10E2166-31\Design\Plans\007W001-76K91-TSL-001.dgn

BENTON & ASSOCIATES, INC.
CONSULTING ENGINEERS | LAND SURVEYORS
1970 WEST LAFAYETTE AVE.
JACKSONVILLE, IL 62650
PHONE: 217-245-4164 FAX: 217-245-4149
IL DESIGN FIRM REGISTRATION NO. 184-000852

USER NAME = ____	DESIGNED - MBH	REVISED - 4/18/19 MBH
	CHECKED - RHB	REVISED - ____
PLOT SCALE = ____	DRAWN - MBH	REVISED - ____
PLOT DATE = ____	CHECKED - RHB	REVISED - ____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ELEVATIONS
STRUCTURE NO. 007-W001
SHEET 2 OF 2 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
761	101I-6	CALHOUN	2	2
		CONTRACT NO. 76K91		
		ILLINOIS	FED. AID PROJECT	

4/18/2019 3:49:39 PM