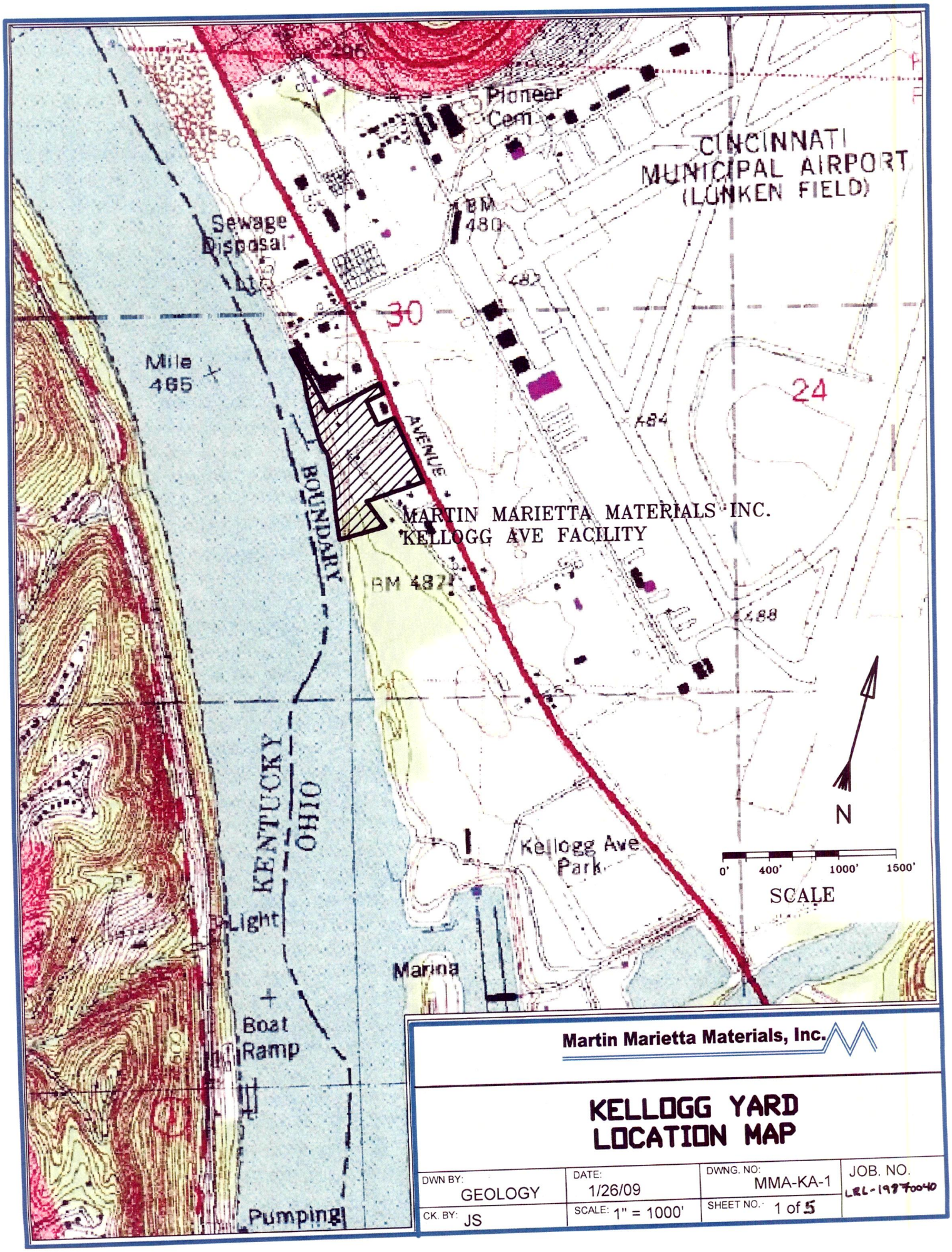
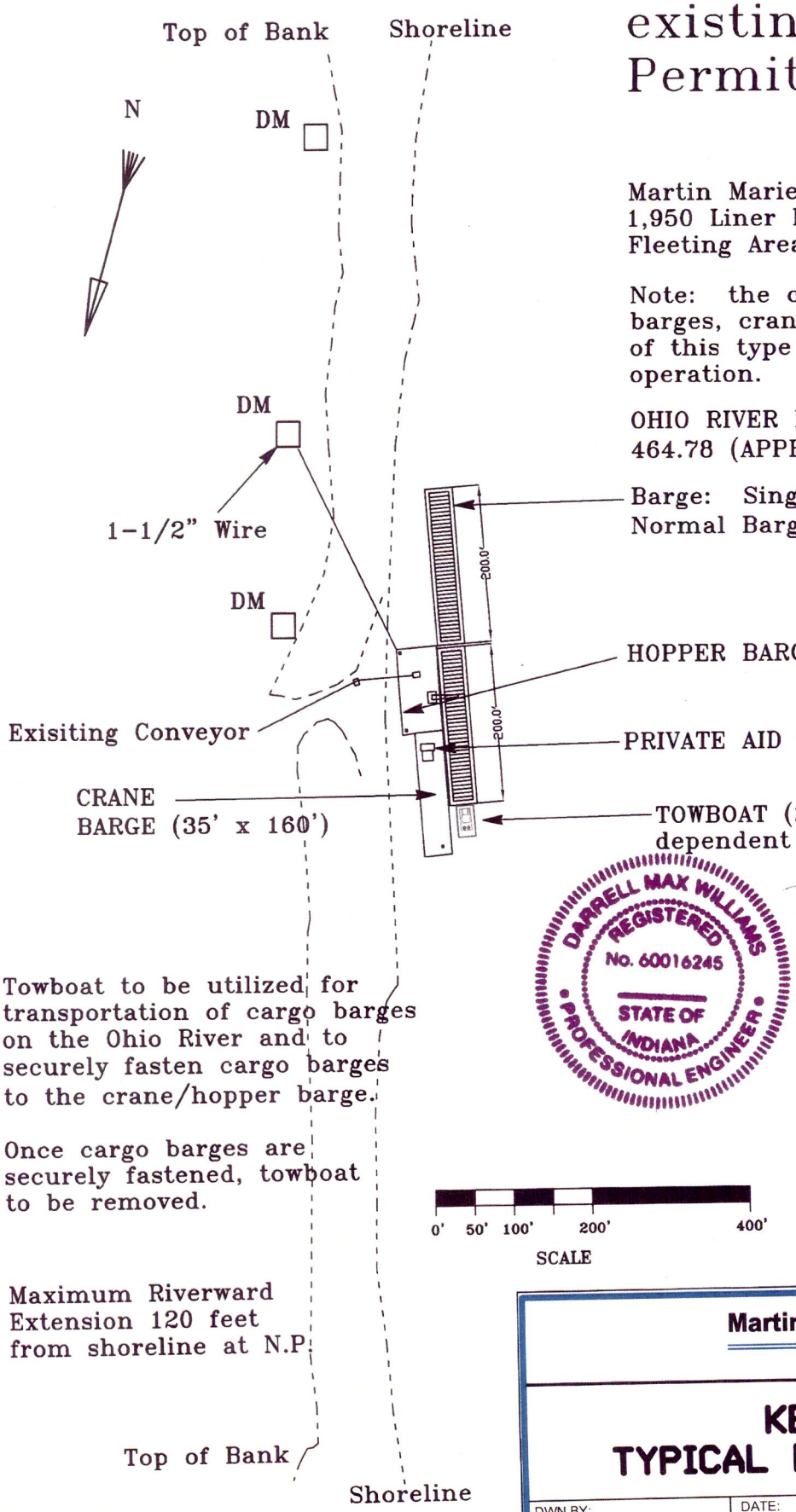


Martin Marietta Materials, Inc.

KELLOGG YARD LOCATION MAP

DWN BY: GEOLOGY	DATE: 1/26/09	DWNG. NO: MMA-KA-1	JOB. NO. LRL-19970040
CK. BY: JS	SCALE: 1" = 1000'	SHEET NO.: 1 of 5	

Modification of existing Army Corps Permit 198790040



Martin Marietta Materials owns
1,950 Liner Feet of Shoreline
Fleeting Area 600 linear feet

Note: the configuration of barges, crane barge are typical of this type of unloading operation.

OHIO RIVER MILE
464.78 (APPROX.)

Barge: Single width
Normal Barge (35' x 200')

HOPPER BARGE (52' X 110')

PRIVATE AID TO NAVIGATION

TOWBOAT (22' X 40')
dependent on make & model

DARRELL MAX WILLIAMS
REGISTERED
No. 60016245
STATE OF
INDIANA
PROFESSIONAL ENGINEER

Darrell Max Williams
5/6/09

Towboat to be utilized for transportation of cargo barges on the Ohio River and to securely fasten cargo barges to the crane/hopper barge.

Once cargo barges are securely fastened, towboat to be removed.

Maximum Riverward Extension 120 feet from shoreline at N.P.

0' 50' 100' 200' 400'
SCALE

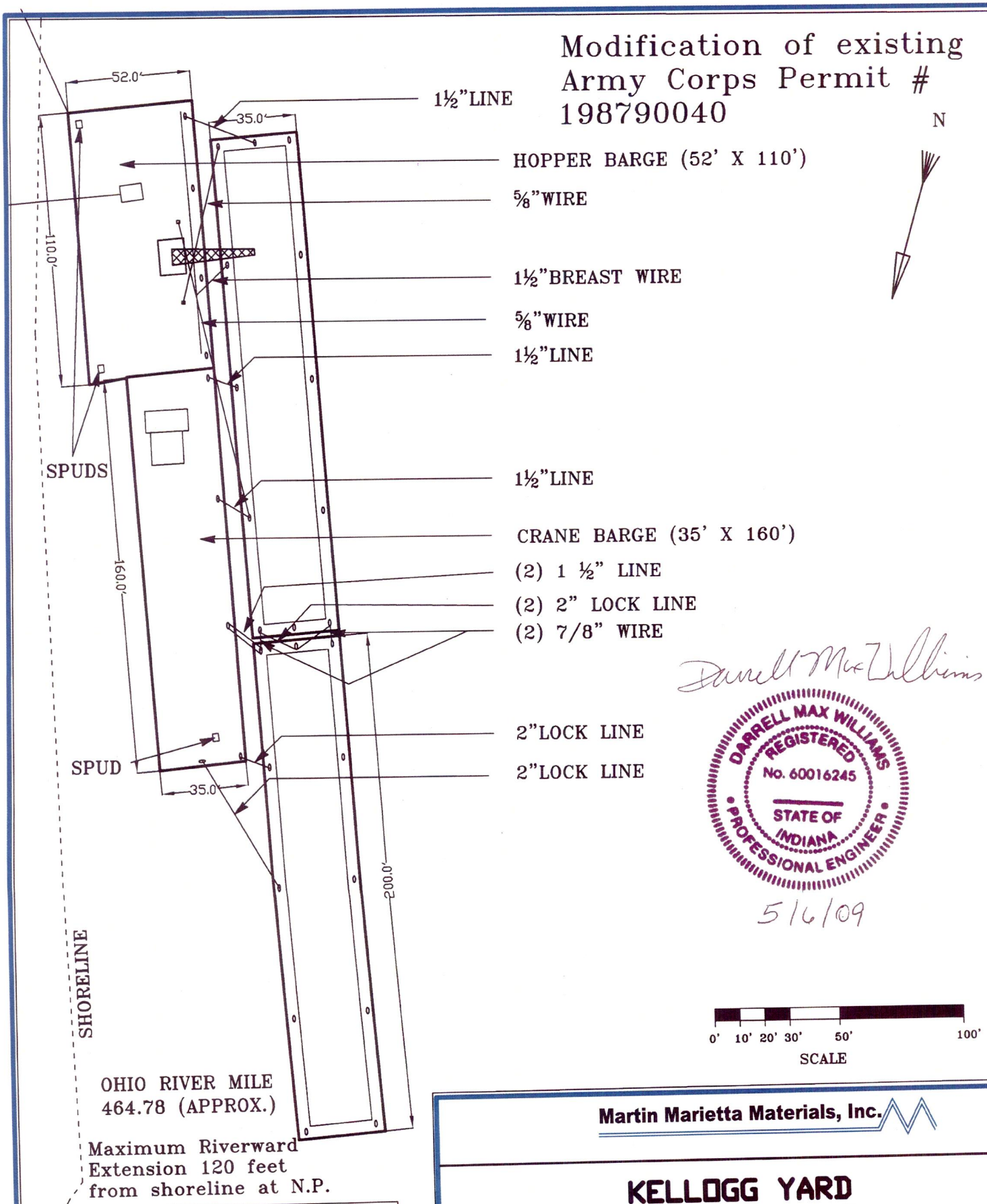
Normal Pool	455.0
Ordinary High Water	469.7
Base Flood Elevation	501.5
High Water Elevation	512.1

Martin Marietta Materials, Inc.

KELLOGG YARD
TYPICAL MOORING & FLEETING

DWN BY: GEOLOGY	DATE: 1/26/09	DWNG. NO: MMA-KA-2	JOB. NO. LRL-198790040
CK. BY: JS	SCALE: 1" = 200'	SHEET NO. 2 of 5	

Modification of existing Army Corps Permit # 198790040



Darrell Max Williams

DARRELL MAX WILLIAMS
REGISTERED
No. 60016245
STATE OF INDIANA
PROFESSIONAL ENGINEER

5/6/09

OHIO RIVER MILE
464.78 (APPROX.)

Maximum Riverward Extension 120 feet from shoreline at N.P.

Normal Pool	455.0
Ordinary High Water	469.7
Base Flood Elevation	501.5
High Water Elevation	512.1

Martin Marietta Materials, Inc.

KELLOGG YARD NIGHT MOORING

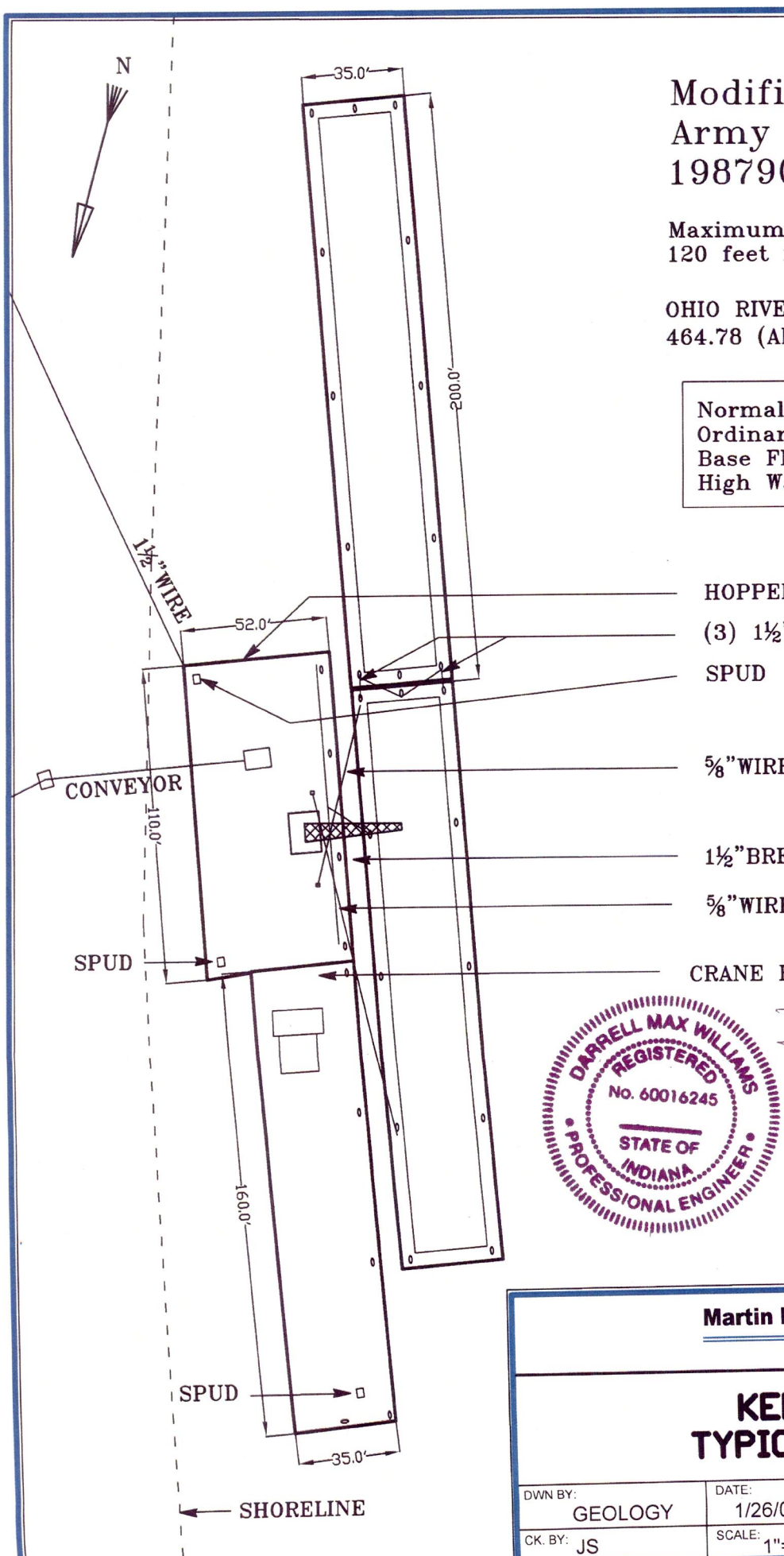
DWN BY:	DATE:	DWNG. NO:	JOB. NO.
GEOLOGY	1/26/09	MMA-KA-3	LRL-198790040
CK. BY: JS	SCALE: 1" = 50'	SHEET NO.: 3 of 5	

Modification of existing Army Corps Permit # 198790040

Maximum Riverward Extension
120 feet from shoreline at N.P.

OHIO RIVER MILE
464.78 (APPROX.)

Normal Pool	455.0
Ordinary High Water	469.7
Base Flood Elevation	501.5
High Water Elevation	512.1



DARRELL MAX WILLIAMS
REGISTERED
No. 60016245
STATE OF INDIANA
PROFESSIONAL ENGINEER

Darrell Max Williams
5/6/09

0' 10' 20' 30' 50' 100'
SCALE

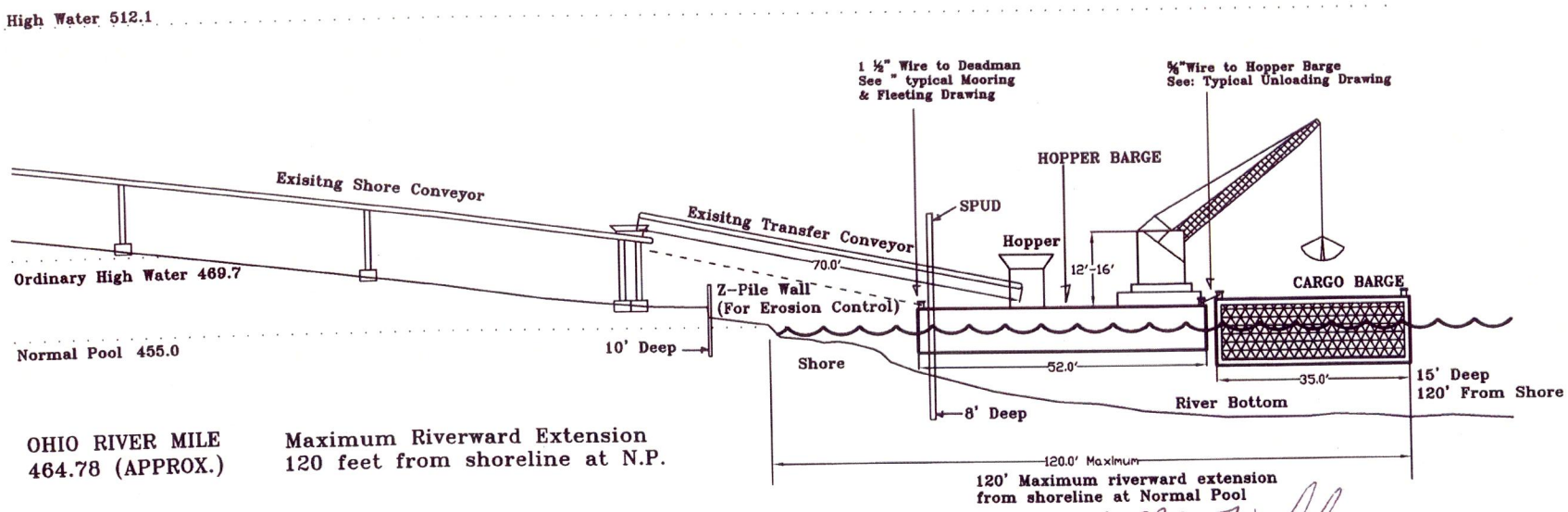
Martin Marietta Materials, Inc.

KELLOGG YARD TYPICAL UNLOADING

DWN BY:	DATE:	DWNG. NO:	JOB. NO.
GEOLOGY	1/26/09	MMA-KA-4	LRL-198790040
CK. BY: JS	SCALE: 1"=50'	SHEET NO.: 4 of 5	

CROSS SECTION LOOKING UPSTREAM

Modification of existing Army Corps Permit # 198790040



OHIO RIVER MILE 464.78 (APPROX.)

Maximum Riverward Extension 120 feet from shoreline at N.P.

Hopper Barge Equipped with two Spud 15" x 12" x 44' Long

Crane Barge Equipped with one Spud 15" x 12" x 44' Long

Normal Pool	455.0
Ordinary High Water	469.7
Base Flood Elevation	501.5
High Water Elevation	512.1

Darrell McWilliams

DARRELL MAX WILLIAMS REGISTERED No. 60016245 STATE OF INDIANA PROFESSIONAL ENGINEER

5/6/09

Towboat to be utilized for transportation of cargo barges on the Ohio River and to securely fasten cargo barges to the crane/hopper barge. Once cargo barges are securely fastened, towboat to be removed.

Note: The configuration of cargo barges and crane barge are typical of this type of unloading operation. This drawing represents a typical configuration while crane barge is in the process of unloading.

0' 10' 20' 30' 50' 100'

SCALE

Martin Marietta Materials, Inc.

KELLOGG YARD CROSS SECTION

DWN BY:	DATE:	DWNG. NO:	JOB. NO.
GEOLOGY	1/26/09	MMA-KA-5	LRL-198790040
CK. BY: JS	SCALE: 1" = 30'	SHEET NO.: 5 of 5	