Environmental Protection

NEW YORK CITY
ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION

NR-107 - NORTH RIVER WASTEWATER RESOURCE RECOVERY FACILITY
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

BOROUGH OF MANHATTAN

BID SET

OCTOBER 2026



LOCATION PLAN



SITE PLAN

Kenneth Moriarty
Digitally signed by Kenneth Moriarty
Date: 2026.10.19 14:16:52 -04'00'

KENNETH MORIARTY, P.E.
ASSISTANT COMMISSIONER, WASTEWATER CAPITAL PROGRAM
BUREAU OF ENGINEERING DESIGN AND CONSTRUCTION

Ana Barrio
Digitally signed by Ana Barrio
Date: 2026.10.20 14:34:49 -04'00'

ANA BARRIO
DEPUTY COMMISSIONER
BUREAU OF ENGINEERING DESIGN AND CONSTRUCTION

Last Saved By: AcostaML Last Date Saved: 10/14/2026 8:54 AM
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches) Plot Style Table: BEDC_Acad(N).ctb
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129586\GM-G-001.00.dwg Date & Time Plotted: 10/14/2026 8:56 AM Plot Scale: 1:1

G - GENERAL

DWG No.	DESCRIPTION
G-001.00	COVER SHEET
G-002.00	LIST OF DRAWINGS
G-003.00	MARINE GENERAL NOTES, LEGENDS, ABBREVIATIONS - SHEET 1 OF 2
G-004.00	MARINE GENERAL NOTES, LEGENDS, ABBREVIATIONS - SHEET 2 OF 2
G-100.00	SITE PLAN FOR REFERENCE ONLY
G-101.00	CONSTRUCTION STAGING PLAN FOR REFERENCE ONLY
G-102.00	FEMA FIRM
G-103.00	TURBIDITY CONTROL MEASURES FOR REFERENCE ONLY
G-104.00	NYC TAX MAP

CR - CAISSON JACKETING

DWG No.	DESCRIPTION
CR-S-001.00	CAISSONS GENERAL ARRANGEMENT PLAN
CR-S-101.00	CAISSON REHABILITATION PLAN
CR-S-102.00	CAISSON REHABILITATION PLAN PHASE 1 - DIGESTER AND PLANT RAMPS
CR-S-103.00	CAISSON REHABILITATION PLAN PHASE 2 - FINAL TANKS
CR-S-104.00	CAISSON REHABILITATION PLAN PHASE 3 - AERATION TANKS
CR-S-105.00	CAISSON REHABILITATION PLAN PHASE 4 - PRELIMINARY TANKS AND MAIN BUILDING
CR-S-200.00	CAISSON REHABILITATION SCHEDULE PHASE 1 - SHEET 1 OF 2
CR-S-201.00	CAISSON REHABILITATION SCHEDULE PHASE 1 - SHEET 2 OF 2
CR-S-202.00	CAISSON REHABILITATION SCHEDULE PHASE 2 - SHEET 1 OF 2
CR-S-203.00	CAISSON REHABILITATION SCHEDULE PHASE 2 - SHEET 2 OF 2
CR-S-204.00	CAISSON REHABILITATION SCHEDULE PHASE 3 - SHEET 1 OF 2
CR-S-205.00	CAISSON REHABILITATION SCHEDULE PHASE 3 - SHEET 2 OF 2
CR-S-206.00	CAISSON REHABILITATION SCHEDULE PHASE 4 - SHEET 1 OF 2
CR-S-207.00	CAISSON REHABILITATION SCHEDULE PHASE 4 - SHEET 2 OF 2
CR-S-300.00	CAISSON JACKETING DETAILS

UR - UNDERDECK REPAIRS

DWG No.	DESCRIPTION
UR-S-001.00	UNDERDECK REPAIRS GENERAL PHASING AND ARRANGEMENT PLAN (EL +6.65')
UR-S-101.00	UNDERDECK REPAIR PLAN - PHASE 1 WEST
UR-S-102.00	UNDERDECK REPAIR PLAN - PHASE 1 EAST
UR-S-103.00	UNDERDECK REPAIR PLAN - PHASE 1 PLANT ACCESS RAMPS
UR-S-104.00	UNDERDECK REPAIR PLAN - PHASE 2 WEST
UR-S-105.00	UNDERDECK REPAIR PLAN - PHASE 2 EAST
UR-S-106.00	UNDERDECK REPAIR PLAN - PHASE 3 WEST
UR-S-107.00	UNDERDECK REPAIR PLAN - PHASE 3 EAST
UR-S-108.00	UNDERDECK REPAIR PLAN - PHASE 4 WEST
UR-S-109.00	UNDERDECK REPAIR PLAN - PHASE 4 EAST
UR-S-200.00	UNDERDECK TYPICAL EXISTING SECTIONS - 1
UR-S-201.00	UNDERDECK TYPICAL EXISTING SECTIONS - 2
UR-S-202.00	UNDERDECK TYPICAL EXISTING SECTIONS - 3
UR-DS-100.00	UNDERDECK DEMO DETAILS SHEET 1 OF 2
UR-DS-101.00	UNDERDECK DEMO DETAILS SHEET 2 OF 2
UR-S-300.00	UNDERDECK CONCRETE REPAIR DETAILS - 1
UR-S-301.00	UNDERDECK CONCRETE REPAIR DETAILS - 2
UR-S-302.00	PHASE 1 CONCRETE REPAIR SCHEDULE
UR-S-303.00	PHASE 1 TYPE 4 STEEL BAR PENETRATION REPAIR SCHEDULE
UR-S-304.00	PHASE 1 TYPE 7 CORE HOLE REPAIR SCHEDULE
UR-S-305.00	PHASE 1 TYPE 8 PVC PIPE REPAIR SCHEDULE
UR-S-306.00	PHASE 2 CONCRETE REPAIR SCHEDULE
UR-S-307.00	PHASE 2 TYPE 4 STEEL BAR PENETRATION REPAIR SCHEDULE
UR-S-308.00	PHASE 2 TYPE 7 CORE HOLE REPAIR SCHEDULE
UR-S-309.00	PHASE 2 TYPE 8 PVC PIPE REPAIR SCHEDULE
UR-S-310.00	PHASE 3 CONCRETE REPAIR SCHEDULE
UR-S-311.00	PHASE 3 TYPE 4 STEEL BAR PENETRATION REPAIR SCHEDULE
UR-S-312.00	PHASE 3 TYPE 7 CORE HOLE REPAIR SCHEDULE
UR-S-313.00	PHASE 3 TYPE 8 PVC PIPE REPAIR SCHEDULE
UR-S-314.00	PHASE 4 CONCRETE REPAIR SCHEDULE
UR-S-315.00	PHASE 4 TYPE 4 STEEL BAR PENETRATION REPAIR SCHEDULE
UR-S-316.00	PHASE 4 TYPE 7 CORE HOLE REPAIR SCHEDULE
UR-S-400.00	EXPANSION JOINT REPAIR PLAN
UR-S-401.00	EXPANSION JOINT REPAIR DETAILS - 1
UR-S-402.00	EXPANSION JOINT REPAIR SCHEDULE
UR-S-410.00	OUTFALL DETAILS

UR - UNDERDECK REPAIRS (CONT.)

DWG No.	DESCRIPTION
UR-S-500.00	MEMBRANE INSTALLATION DETAILS - SHEET 1 OF 3
UR-S-501.00	MEMBRANE INSTALLATION DETAILS - SHEET 2 OF 3
UR-S-502.00	MEMBRANE INSTALLATION DETAILS - SHEET 3 OF 3
UR-S-510.00	MEMBRANE PHASE 1 REPAIR SCHEDULE SHEET 1 OF 8
UR-S-511.00	MEMBRANE PHASE 1 REPAIR SCHEDULE SHEET 2 OF 8
UR-S-512.00	MEMBRANE PHASE 1 REPAIR SCHEDULE SHEET 3 OF 8
UR-S-513.00	MEMBRANE PHASE 1 REPAIR SCHEDULE SHEET 4 OF 8
UR-S-514.00	MEMBRANE PHASE 1 REPAIR SCHEDULE SHEET 5 OF 8
UR-S-515.00	MEMBRANE PHASE 1 REPAIR SCHEDULE SHEET 6 OF 8
UR-S-516.00	MEMBRANE PHASE 1 REPAIR SCHEDULE SHEET 7 OF 8
UR-S-517.00	MEMBRANE PHASE 1 REPAIR SCHEDULE SHEET 8 OF 8
UR-S-518.00	MEMBRANE PHASE 2 REPAIR SCHEDULE SHEET 1 OF 14
UR-S-519.00	MEMBRANE PHASE 2 REPAIR SCHEDULE SHEET 2 OF 14
UR-S-520.00	MEMBRANE PHASE 2 REPAIR SCHEDULE SHEET 3 OF 14
UR-S-521.00	MEMBRANE PHASE 2 REPAIR SCHEDULE SHEET 4 OF 14
UR-S-522.00	MEMBRANE PHASE 2 REPAIR SCHEDULE SHEET 5 OF 14
UR-S-523.00	MEMBRANE PHASE 2 REPAIR SCHEDULE SHEET 6 OF 14
UR-S-524.00	MEMBRANE PHASE 2 REPAIR SCHEDULE SHEET 7 OF 14
UR-S-525.00	MEMBRANE PHASE 2 REPAIR SCHEDULE SHEET 8 OF 14
UR-S-526.00	MEMBRANE PHASE 2 REPAIR SCHEDULE SHEET 9 OF 14
UR-S-527.00	MEMBRANE PHASE 2 REPAIR SCHEDULE SHEET 10 OF 14
UR-S-528.00	MEMBRANE PHASE 2 REPAIR SCHEDULE SHEET 11 OF 14
UR-S-529.00	MEMBRANE PHASE 2 REPAIR SCHEDULE SHEET 12 OF 14
UR-S-530.00	MEMBRANE PHASE 2 REPAIR SCHEDULE SHEET 13 OF 14
UR-S-531.00	MEMBRANE PHASE 2 REPAIR SCHEDULE SHEET 14 OF 14
UR-S-532.00	MEMBRANE PHASE 3 REPAIR SCHEDULE SHEET 1 OF 15
UR-S-533.00	MEMBRANE PHASE 3 REPAIR SCHEDULE SHEET 2 OF 15
UR-S-534.00	MEMBRANE PHASE 3 REPAIR SCHEDULE SHEET 3 OF 15
UR-S-535.00	MEMBRANE PHASE 3 REPAIR SCHEDULE SHEET 4 OF 15
UR-S-536.00	MEMBRANE PHASE 3 REPAIR SCHEDULE SHEET 5 OF 15
UR-S-537.00	MEMBRANE PHASE 3 REPAIR SCHEDULE SHEET 6 OF 15
UR-S-538.00	MEMBRANE PHASE 3 REPAIR SCHEDULE SHEET 7 OF 15
UR-S-539.00	MEMBRANE PHASE 3 REPAIR SCHEDULE SHEET 8 OF 15
UR-S-540.00	MEMBRANE PHASE 3 REPAIR SCHEDULE SHEET 9 OF 15
UR-S-541.00	MEMBRANE PHASE 3 REPAIR SCHEDULE SHEET 10 OF 15
UR-S-542.00	MEMBRANE PHASE 3 REPAIR SCHEDULE SHEET 11 OF 15
UR-S-543.00	MEMBRANE PHASE 3 REPAIR SCHEDULE SHEET 12 OF 15
UR-S-544.00	MEMBRANE PHASE 3 REPAIR SCHEDULE SHEET 13 OF 15
UR-S-545.00	MEMBRANE PHASE 3 REPAIR SCHEDULE SHEET 14 OF 15
UR-S-546.00	MEMBRANE PHASE 3 REPAIR SCHEDULE SHEET 15 OF 15
UR-S-547.00	MEMBRANE PHASE 4 REPAIR SCHEDULE SHEET 1 OF 7
UR-S-548.00	MEMBRANE PHASE 4 REPAIR SCHEDULE SHEET 2 OF 7
UR-S-549.00	MEMBRANE PHASE 4 REPAIR SCHEDULE SHEET 3 OF 7
UR-S-550.00	MEMBRANE PHASE 4 REPAIR SCHEDULE SHEET 4 OF 7
UR-S-551.00	MEMBRANE PHASE 4 REPAIR SCHEDULE SHEET 5 OF 7
UR-S-552.00	MEMBRANE PHASE 4 REPAIR SCHEDULE SHEET 6 OF 7
UR-S-553.00	MEMBRANE PHASE 4 REPAIR SCHEDULE SHEET 7 OF 7

FR - SLUDGE DOCK FENDERING REPLACEMENT AND REPAIRS

DWG No.	DESCRIPTION
FR-S-100.00	EXISTING FENDERING AND MOORING - ARRANGEMENT PLAN
FR-S-101.00	EXISTING FENDERING AND MOORING - PLAN, ELEVATION AND SECTIONS - SHEET 1
FR-S-102.00	EXISTING FENDERING AND MOORING - PLAN, ELEVATION AND SECTIONS - SHEET 2
FR-S-103.00	EXISTING FENDERING AND MOORING - PLAN, ELEVATION AND SECTIONS - SHEET 3
FR-S-104.00	EXISTING FENDERING AND MOORING - PLAN, ELEVATION AND SECTIONS - SHEET 4
FR-DS-200.00	EXISTING FENDERING AND MOORING - DEMOLITION PLAN
FR-DS-201.00	EXISTING FENDERING AND MOORING - DEMOLITION - PLAN, ELEVATION AND SECTIONS - SHEET 1
FR-DS-202.00	EXISTING FENDERING AND MOORING - DEMOLITION - PLAN, ELEVATION AND SECTIONS - SHEET 2
FR-DS-203.00	EXISTING FENDERING AND MOORING - DEMOLITION - PLAN, ELEVATION AND SECTIONS - SHEET 3
FR-DS-204.00	EXISTING FENDERING AND MOORING - DEMOLITION - PLAN, ELEVATION AND SECTIONS - SHEET 4
FR-DS-205.00	EXISTING FENDERING AND MOORING - DEMOLITION - PLAN, ELEVATION AND SECTIONS - SHEET 5
FR-S-300.00	FENDERING AND MOORING - ARRANGEMENT PLAN
FR-S-301.00	FENDERING AND MOORING - TYPE B FENDER LAYOUT - SHEET 1
FR-S-302.00	FENDERING AND MOORING - TYPE B FENDER LAYOUT - SHEET 2

FR - SLUDGE DOCK FENDERING REPLACEMENT AND REPAIRS (CONT.)

DWG No.	DESCRIPTION
FR-S-303.00	FENDERING AND MOORING - TYPE B FENDER LAYOUT - SHEET 3
FR-S-400.00	FENDERING AND MOORING - FENDER SYSTEM DETAILS - TYPE A FENDER - SHEET 1
FR-S-401.00	FENDERING AND MOORING - FENDER SYSTEM DETAILS - TYPE A FENDER - SHEET 2
FR-S-402.00	FENDERING AND MOORING - FENDER SYSTEM DETAILS - TYPE B FENDER - SHEET 1
FR-S-403.00	FENDERING AND MOORING - FENDER SYSTEM DETAILS - TYPE B FENDER - SHEET 2
FR-S-404.00	FENDERING AND MOORING - FENDER SYSTEM DETAILS - TYPE C FENDER
FR-S-405.00	FENDERING AND MOORING - FENDER SYSTEM DETAILS - TYPE D FENDER
FR-S-406.00	FENDERING AND MOORING - FENDER SYSTEM DETAILS - DEBRIS FENCE DETAILS
FR-S-500.00	FENDERING AND MOORING - BOLLARD DETAILS
FR-S-501.00	FENDERING AND MOORING - CLEAT DETAILS
FR-S-600.00	FENDERING AND MOORING - MISCELLANEOUS DETAILS - SHEET 1
FR-S-601.00	FENDERING AND MOORING - MISCELLANEOUS DETAILS - SHEET 2
FR-S-800.00	SOUTH DOCK DECK REPAIRS PLAN
FR-S-801.00	SLUDGE DOCK DECK REPAIRS PLAN
FR-S-802.00	SOUTH DOCK DECK REPAIRS - DEMOLITION DETAILS / PHOTOS
FR-S-803.00	SLUDGE DOCK DECK REPAIRS PHOTOS
FR-S-804.00	SOUTH DOCK DECK REPAIRS DETAILS
FR-S-805.00	SOUTH DOCK AND SLUDGE DOCK DECK REPAIRS DETAILS
FR-S-806.00	SECURITY FENCE DETAILS

SD - ELECTRICAL

DWG No.	DESCRIPTION
SD-E-001.00	ELECTRICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS
SD-E-002.00	ELECTRICAL MCC 5-4 PARTIAL SINGLE LINE DIAGRAM MODIFICATIONS
SD-E-101.00	EXISTING SLUDGE DOCK LIGHTING AND HEAT TRACE DEMOLITION PLAN
SD-E-201.00	SLUDGE DOCK LIGHTING AND HEAT TRACE PLAN
SD-E-301.00	ELECTRICAL DETAILS SHEET 1 OF 2
SD-E-302.00	ELECTRICAL DETAILS SHEET 2 OF 2

FR - MECHANICAL

DWG No.	DESCRIPTION
FR-M-001.00	GENERAL NOTES, SYMBOLS AND ABBREVIATIONS
FR-M-100.00	TEMPORARY SLUDGE TRANSFER PROCESS PHASE 1
FR-M-101.00	TEMPORARY SLUDGE TRANSFER PROCESS PHASE 2
FR-M-201.00	TEMPORARY SLUDGE TRANSFER PROCESS DETAILS

IB - ICEBREAKER RECONSTRUCTION

DWG No.	DESCRIPTION
IB-S-101.00	ICEBREAKERS GENERAL ARRANGEMENT
IB-S-201.00	ICEBREAKERS EXISTING PLAN AT EL. -1.35'
IB-S-202.00	ICEBREAKERS EXISTING SECTIONS - SHEET 1
IB-S-203.00	ICEBREAKERS EXISTING SECTIONS - SHEET 2
IB-DS-301.00	ICEBREAKER DEMOLITION
IB-S-401.00	ICEBREAKER PLAN AT EL. +2.00'
IB-S-402.00	ICEBREAKER TOP RAIL SUPPORT FRAMING PLAN
IB-S-403.00	ICEBREAKER SECTIONS - SHEET 1
IB-S-404.00	ICEBREAKER SECTIONS - SHEET 2
IB-S-405.00	ICEBREAKER PILE SCHEDULE - SHEET 1
IB-S-406.00	ICEBREAKER PILE SCHEDULE - SHEET 2
IB-S-501.00	ICEBREAKER CONNECTION DETAILS - SHEET 1
IB-S-502.00	ICEBREAKER CONNECTION DETAILS - SHEET 2
IB-S-503.00	ICEBREAKER CONNECTION DETAILS - SHEET 3

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: ILKER TUTUNCU, PE
DRAWN BY: MARIA ACOSTA
CHECKED BY: ALAN WALLER, PE
DESIGN LEAD: ILKER TUTUNCU, PE
SECTION MANAGER: FELIPE PULIDO, PE

Jacobs

STATE OF NEW YORK — ILKER TUTUNCU — LICENSED PROFESSIONAL ENGINEER

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

LIST OF DRAWINGS

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. G-002.00

Last Saved By: AcostaML Last Date Saved: 9/18/2026 10:20 AM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches) Plot Style Table: BEDC_Acad(N).ctb
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129586\GM-G-002.00.dwg
Date & Time Plotted: 10/20/2026 3:22 PM Plot Scale: 1:1

GENERAL NOTES :

1. EACH BIDDER SHALL INSPECT THE SITE AND CAREFULLY EXAMINE AND ANALYZE THE PROVISIONS AND REQUIREMENTS OF THE CONTRACT AND UNDERSTAND ALL THINGS REQUIRED FOR THE PERFORMANCE OF THIS CONTRACT.

2. THE EXISTING CONDITIONS AND DIMENSIONS SHOWN HEREIN ARE SUBSTANTIALLY DERIVED FROM RECORD DRAWINGS AND FIELD INSPECTIONS. NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES IN DIMENSIONS, CONDITIONS, AND/OR OBSTRUCTIONS THAT VARY FROM THE CONTRACT DRAWINGS.

3. CAREFULLY EXAMINE ALL CONTRACT DOCUMENTS AND SITE CONDITIONS AND UNDERSTAND THE CHARACTER, QUALITY, AND QUANTITY OF WORK CALLED FOR, INCLUDING ALL CONDITIONS OF THE CONTRACT. CAREFULLY COMPARE AND CHECK ALL CONTRACT DOCUMENTS FOR OMISSIONS AND DISCREPANCIES AND VERIFY BY FIELD MEASUREMENTS ALL DIMENSIONS AND ELEVATIONS OF THE EXISTING STRUCTURES THAT MAY BE REQUIRED TO PERFORM THE WORK .

4. TAKE ALL NECESSARY PRECAUTIONS, INCLUDING BUT NOT LIMITED TO, INSTALLING TEMPORARY SUPPORTS, SHORING, AND BRACING SO AS TO ENSURE THAT THE DEMOLITION AND CONSTRUCTION OPERATIONS PROCEED IN A SAFE MANNER. ALL TEMPORARY SUPPORTS, SHORING, AND BRACING REQUIRED FOR STABILITY SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK .

5. ANY EXISTING PART OF THE OWNER'S PROPERTY AND/OR ADJACENT PROPERTIES WHICH IS TO REMAIN, WHETHER WITHIN OR OUTSIDE THE CONSTRUCTION SITE, THAT IS DAMAGED BECAUSE OF THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO ITS ORIGINAL CONDITION TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AND PROPERTY OWNER AT THE EXPENSE OF THE CONTRACTOR.

6. LOCATION OF THE EXISTING UTILITIES AND SUBSTRUCTURES ON THE CONTRACT DRAWINGS ARE APPROXIMATE. LOCATE UTILITIES PRIOR TO COMMENCEMENT OF WORK. NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES.

7. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL PERMIT REQUIREMENTS.

8. DISPOSAL OF ANY HAZARDOUS OR CONTAMINATED MATERIALS, GROUND WATER, OR SOIL ENCOUNTERED SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS.

9. ALL QUALITY CONTROL, INSPECTION AND TESTING SHALL BE MADE BY AN OWNER / ENGINEER APPROVED LABORATORY UNDER CONTRACT TO THE OWNER.

10. SPECIAL INSPECTIONS SHALL BE MADE AND WITNESSED BY OR UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER (PE) LICENSED IN NY STATE RETAINED BY THE OWNER , AND ACCEPTABLE TO THE ENGINEER OF RECORD. THE INSPECTING P.E. SHALL BE INDEPENDENT OF THE CONTRACT.

11. VERTICAL CONTROL: ELEVATIONS SHOWN ARE BASED ON NAVD88 UNLESS OTHERWISE NOTED.

12. HORIZONTAL CONTROL: NORTH AMERICAN DATUM OF 1983 (NAD 83) NEW YORK LONG ISLAND STATE PLANE.

13. TIDAL DATA IS AS FOLLOWS (BASED ON NOAA/NOS STA. NO. 8518750, THE BATTERY, NY HARBOR).

WATER LEVEL		EL. (NAVD88, FT)
500 YEAR FLOOD		+12.90
100 YEAR FLOOD (PFIRM)		+9.70
MEAN HIGHER HIGH WATER	(MHHW)	+2.28
MEAN HIGH WATER	(MHW)	+1.96
BOROUGH OF MANHATTAN DATUM		+1.65
NAVD88		0.00
MEAN LOW WATER	(MLW)	-2.57
MEAN LOWER LOW WATER	(MLLW)	-2.77

14. SEA LEVEL RISE ESTIMATE = 2.99FT. (BASED ON THE HIGHER END OF THE MIDDLE RANGE SCENARIO, 25TH - 75TH PERCENTILE, FOR YEAR 2075, NPCC 2015).

15. TIDAL DATA IS PER NOAA AVERAGES BASED ON THE 1983-2001 TIDAL EPOCH AND NOT GUARANTEED TO REPRESENT CONDITIONS WHICH MAY OCCUR DURING CONSTRUCTION. ACTUAL WATER LEVELS WILL VARY FROM LEVELS INDICATED. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN ESTIMATES OF WATER LEVELS WHICH MAY OCCUR DURING EXECUTION OF THE PROJECT SCOPE.

16. CONTRACTOR BARGES AND OPERATIONS SHALL BE COORDINATED AND POSITIONED TO ENSURE THAT THE OWNER'S ONSITE OPERATIONS ARE NOT IMPEDED.

SPECIAL INSPECTIONS :

1. SPECIAL INSPECTION REQUIREMENTS PER LOCAL AND/OR STATE BUILDING CODES SHALL BE FULFILLED AND SHALL BE COORDINATED BY THE OWNER. THE CONTRACTOR SHALL INFORM THE OWNER OF THE PROGRESS OF WORK AND PROVIDE ADEQUATE NOTICES AS TO WHEN SPECIAL INSPECTIONS ARE TO OCCUR SUCH AS TO NOT DELAY THE SCHEDULE. THE FOLLOWING SPECIAL INSPECTIONS SHALL BE PERFORMED:

MECHANICAL DEMOLITION:	BC 1704.20.4
FLOOD ZONE COMPLIANCE:	BC 1704.29/BC G105
STRUCTURAL STEEL - WELDING:	BC 1704.3.1
STRUCTURAL STEEL - DETAILS:	BC 1704.3.2
STRUCTURAL STEEL - HIGH STRENGTH BOLTING:	BC 1704.3.3
CONCRETE - CAST-IN-PLACE:	BC 1704.4
POST - INSTALLED ANCHORS (BB# 2014-018, 2014-019):	BC 1704.32
CONCRETE DESIGN MIX:	BC 1905.3, BC 1913.5
CONCRETE SAMPLING AND TESTING:	BC 1905.6, BC 1913.10
ENERGY CODE COMPLIANCE INSPECTIONS, WILL BE REVIEWED IN COORDINATION WITH DOB:	BC 110.3.5

CONCRETE REINFORCEMENT:

1. REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60, UNLESS OTHERWISE NOTED.

2. REINFORCING BARS SHALL BE EPOXY COATED IN ACCORDANCE WITH ASTM A775.

3. WELDING OF REINFORCING BARS IS PROHIBITED, UNLESS OTHERWISE NOTED. IF APPROVED BY ENGINEER, REBAR TO BE WELDED SHALL COMPLY TO ASTM A706.

4. FIELD BENDING OF PARTIALLY EMBEDDED REINFORCEMENT IS PROHIBITED.

DEMOLITION AND DISPOSAL:

1. DEMOLITION AND DISPOSAL SHALL BE PERFORMED IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL PERMIT AND BUILDING CODE REQUIREMENTS.

2. THE CONTRACTOR SHALL TAKE REASONABLE CARE IN REMOVING ELEMENTS SELECTED TO BE DEMOLISHED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. DAMAGE OR DESTRUCTION BY THE CONTRACTOR TO EXISTING ELEMENTS DESIGNATED TO REMAIN SHALL BE REPAIRED OR REPLACED IN-KIND AT THE DISCRETION OF THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST.

3. PRIOR TO COMMENCEMENT OF SELECTIVE DEMOLITION, THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION WASTE MANAGEMENT PLAN AS DETAILED IN SPECIFICATION 01733 CONSTRUCTION WASTE MANAGEMENT.

4. PRIOR TO COMMENCEMENT OF DEMOLITION, THE CONTRACTOR SHALL CLEARLY MARK THE LIMITS OF THE DEMOLITION FOR REVIEW BY THE OWNER'S REPRESENTATIVE. COMPLETELY REMOVE ITEMS DESIGNATED LEAVING SURFACES CLEAN, SOUND, AND READY TO RECEIVE NEW MATERIALS AS SPECIFIED IN THE CONTRACT DOCUMENTS.

5. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING THE COURSE OF DEMOLITION AND CONSTRUCTION.

6. THE CONTRACTOR SHALL SUBMIT A DISPOSAL CERTIFICATE TO THE OWNER'S REPRESENTATIVE CERTIFYING LEGAL AND PROPER DISPOSAL. THE MANIFEST SHALL INDICATE THE TYPE OF MATERIAL, QUANTITY AND DISPOSAL FACILITY AS REQUIRED IN SPECIFICATION 01733 CONSTRUCTION WASTE MANAGEMENT.

7. REMOVE DEMOLITION DEBRIS PROMPTLY FROM THE SITE VIA BARGE. TRANSPORTATION OF DEMOLITION DEBRIS BY LAND FROM THE SITE IS PROHIBITED. STOCKPILING OF MATERIAL ONSITE, BEYOND THE END OF THE SHIFT WHEN THE MATERIAL WAS GENERATED, SHALL NOT BE ALLOWED ON THE PROPERTY.

TEMPORARY WORK:

1. LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO PERFORM THE WORK THAT, UPON COMPLETION, ARE NOT A PART OF THE WORK, SHALL BE FURNISHED, INSTALLED, AND SUBSEQUENTLY REMOVED FROM THE SITE BY THE CONTRACTOR.

2. DURING EXECUTION OF THE WORK, THE CONTRACTOR IS REQUIRED TO INSTALL AND MAINTAIN REQUIRED SEDIMENTATION AND EROSION CONTROL MEASURES TO PROTECT ADJACENT WATERWAYS, STREETS, AND PROPERTIES. MEASURES INCLUDE BUT ARE NOT LIMITED TO, CONTAINMENT BOOMS AND TURBIDITY CURTAINS IN ACCORDANCE WITH STATE REGULATORY AUTHORIZATIONS. TEMPORARY MATERIALS AND EQUIPMENT SHALL CONFORM TO REQUIREMENTS FOR TEMPORARY WORK.

3. TEMPORARY WORK SHALL BE SUBJECT TO THE REQUIREMENTS OF THE BUILDING CODE OF THE STATE OF NEW YORK, LATEST EDITION, AND APPLICABLE LOCAL BUILDING CODES.

4. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SAFE SLOPES UNDERWATER.

SPALL REPAIR:

1. THE CONTRACTOR SHALL PERFORM SPALL REPAIRS UTILIZING MARINE CONCRETE, SHOTCRETE, OR CEMENTITIOUS, NON-SHRINK GROUT AS THE PRIMARY REPAIR MATERIAL AS INDICATED ON THE CONTRACT DRAWINGS AND SPECIFICATIONS.

2. CONTRACTOR SHALL FOLLOW ALL MANUFACTURER RECOMMENDATIONS FOR THE PLACEMENT OF THE REPAIR MATERIAL.

3. FOR CAST-IN-PLACE CONCRETE, SEE NOTES (CAST IN PLACE CONCRETE).

4. SHOTCRETE SHALL BE WET-MIX OR DRY-MIX WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 5,000 PSI.

5. SHOTCRETE CEMENT SHALL CONFORM TO ASTM C150, TYPE II, C595.

6. CEMENTITIOUS NON-SHRINK GROUT SHALL HAVE A MINIMUM 28-DAY STRENGTH OF 7,000 PSI AND CONFORM TO ASTM C109.

7. CONTRACTOR SHALL SUBMIT PROPOSED EQUIPMENT AND METHOD OF INSTALLATION TO THE ENGINEER FOR APPROVAL.

NYC Environmental Protection BEDC/HD

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: ILKER TUTUNCU, PE
DRAWN BY: MARIA ACOSTA
CHECKED BY: ALAN WALLER, PE
DESIGN LEAD: ILKER TUTUNCU, PE
SECTION MANAGER: FELIPE PULIDO, PE

Jacobs

NYC Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MARINE GENERAL NOTES, LEGENDS, ABBREVIATIONS - SHEET 1 OF 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. G-003.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129586\GM-G-003.00.dwg
Last Date Saved: 10/20/2026 3:19 PM
Date & Time Plotted: 10/20/2026 3:22 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

CAST-IN-PLACE CONCRETE :

1. ALL WORK AND DETAILING FOR CAST-IN-PLACE CONCRETE SHALL CONFORM TO LATEST ACI SPECIFICATIONS. MINIMUM CONCRETE COVER SHALL BE 3 INCHES, UNLESS OTHERWISE NOTED.
2. PORTLAND CEMENT SHALL CONFORM TO ASTM C150, TYPE II. ADMIXTURES CONTAINING CHLORIDE IONS ARE PROHIBITED.
3. ALL CAST-IN-PLACE CONCRETE SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS:

   5,000 PSI AT 28 DAYS, UNLESS OTHERWISE NOTED.
4. CEMENTITIOUS / EPOXY GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 7,000 PSI AT 28 DAYS, UNLESS OTHERWISE NOTED.
5. MAXIMUM COARSE AGGREGATE SIZE FOR TREMIED OR PUMPED CONCRETE SHALL BE 3/8 INCH
6. ALL CAST-IN-PLACE CONCRETE SHALL BE AIR ENTRAINED IN CONFORMANCE WITH ASTM C260. COLD AND HOT WEATHER REQUIREMENTS SHALL BE FOLLOWED AS OUTLINED IN ACI.
7. ALL CAST-IN-PLACE FINISHED SURFACES SHALL BE STEEL TROWELED, UNLESS OTHERWISE NOTED.
8. PROVIDE 1 INCH CHAMFER AT EACH EXPOSED EDGE AND/OR CORNER, UNLESS OTHERWISE NOTED.
9. ALL CONCRETE SHALL BE NORMAL WEIGHT CONCRETE. MAXIMUM WATER / CEMENT RATIO BY WEIGHT SHALL BE 0.40.

STRUCTURAL STEEL:

1.	STEEL H-PILING (FOR ICEBREAKERS)	ASTM A572, GRADE 50
2.	WIDE FLANGE, WT SHAPES, AND CHANNELS	ASTM, A992, GRADE 50
3.	ANGLES, PLATES, AND BARS	ASTM A572, GRADE 50, UON
4.	HOLLOW STRUCTURAL SHAPES	ASTM A500, GRADE 50, UON
5.	HIGH STRENGTH (HS) BOLTS	ASTM F3125, GRADE A325
6.	ANCHOR BOLTS AND THREADED RODS	ASTM F1554, GRADE 55, UON

7. PROVIDE ERECTION AIDS, AS REQUIRED, TO PERFORM FIELD WELDING. WHEN WELDING IS COMPLETE, REMOVE ERECTION AIDS, PLUG HOLES WITH WELD WHERE APPLICABLE, GRIND SMOOTH, AND RESTORE COATINGS TO ORIGINAL THICKNESS AND COATING MATERIAL TYPE.
8. FABRICATE AND ERECT STRUCTURAL STEEL IN ACCORDANCE WITH THE REQUIREMENTS OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), ANSI/AISC 303, "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".
9. PERFORM WELDING IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY (AWS) D1.1, "STRUCTURAL WELDING CODE", AND D3.6 "UNDERWATER WELDING CODE."
10. WELD CONNECTIONS WITH CLASS E-70 SERIES ELECTRODES. PROVIDE FIELD CONNECTIONS WITH HIGH STRENGTH BOLDED CONNECTIONS EXCEPT WHERE NOTED.
11. PROTECT AGAINST GALVANIC CORROSION BETWEEN DISSIMILAR MATERIALS THROUGH , ISOLATION WASHERS/PADS, OR OTHER ENGINEER APPROVED MEANS.
12. UNLESS OTHERWISE NOTED, PROVIDE A WASHER BENEATH THE NUT AT EVERY BOLTED CONNECTION.

DESIGN VESSELS:

PARAMETER		NORTH RIVER	HUNTS POINT / PORT RICHMOND / ROCKAWAY	RED HOOK	SLUDGE BARGE (UDALLS COVE)
CAPACITY (ft^3)		102,000	140,000	150,000	500,000
GROSS TONNAGE (LT)		2,617	3,000	3,834	5,736
LENGTH OVERALL, LOA (ft)		324.0	300.0	350.5	380.0
LENGTH b/w PERPENDICULARS, LBP (ft)		300.0	290.0	332.0	378.0
BREADTH (ft)		49.5	70.0	53.2	85.0
DEPTH (ft)		21.5	18.5	21.5	30.0
DRAFT (ft)	EMPTY CONDITION	7.5	7.5	7.5	6.0
	50% LOADED CONDITION	10.4	10.2	12.3	14.6
	FULLY LOADED CONDITION	15.0	14.0	16.0	21.5
DISPLACEMENT (LT) (*)	EMPTY CONDITION	1,920	3,884	3,571	4,982
	50% LOADED CONDITION	3,036	4,830	4,732	12,125
	FULLY LOADED CONDITION	4,615	6,590	6,373	17,850

(*) DISPLACEMENTS ARE ESTIMATED FROM VESSEL DATA PROVIDED BY NYCDEP.

THE COMPLETED FENDERING AND MOORING SYSTEMS HAVE BEEN DESIGNED TO WITHSTAND THE FOLLOWING DESIGN LOADS IN CONJUNCTION WITH ELEVATIONS INDICATED ON THE CONTRACT DRAWINGS:

DESIGN ENVIRONMENTAL CONDITIONS:

SIGNIFICANT WAVE HEIGHT	4.1 FT
PEAK PERIOD	3.7 SEC
CURRENT VELOCITY	2.05 KNOTS
WIND SPEED (UFC MOORING TYPE IIA)	50 KNOTS

BERTHING CRITERIA:

IN ACCORDANCE WITH PIANC 2002	
BERTHING IMPACT POINT	QUARTER POINT
ANGLE OF APPROACH	15 DEGREES

APPROACH VELOCITY AND ABNORMAL FACTORS:

PARAMETER		NORTH RIVER	HUNTS POINT / PORT RICHMOND / ROCKAWAY	RED HOOK	SLUDGE BARGE (UDALLS COVE)
BERTHING VELOCITY (ft./sec)	EMPTY CONDITION	1.25	1.25	1.25	0.75
	50% LOADED CONDITION (*)	1.25	1.25	1.25	0.75
	FULLY LOADED CONDITION (**)	0.75	0.75	0.75	0.50
ABNORMAL FACTOR (C_{ab})	EMPTY CONDITION	1.25	1.25	1.25	1.50
	50% LOADED CONDITION (*)	1.25	1.25	1.25	1.50
	FULLY LOADED CONDITION (**)	1.00	1.00	1.00	1.00

(*) 50% LOADED BERTHING CONDITION IS CONSIDERED AN UNCOMMON BERTHING CONDITION.
(**) FULLY LOADED BERTHING CONDITION IS CONSIDERED AS AN EMERGENCY BERTHING CONDITION.

MOORING LOADS:

BASED ON BOLLARD FOUNDATION CAPACITY	74 KIPS

FENDERING:

1. EACH RUBBER FENDER UNIT SHALL BE COMPRISED OF (4) 600MM RUBBER FENDER LEGS.
2. FENDER PANEL SYSTEM SHALL BE A CONTINUOUS FENDER PANEL SYSTEM.
3. FENDER PANELS SHALL HAVE BUILT-IN SAFETY LADDERS, AS SHOWN ON THE CONTRACT DRAWINGS.
4. FENDER PERFORMANCE REQUIREMENTS:

RATED TOTAL ENERGY ABSORPTION	376.2 KIP-FT.
RATED TOTAL REACTION FORCE	411.4 KIP
MANUFACTURING TOLERANCE	+/- 10%
VESSEL HULL PRESSURE	<43.5 PSI

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: I. TUTUNCU, PE
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

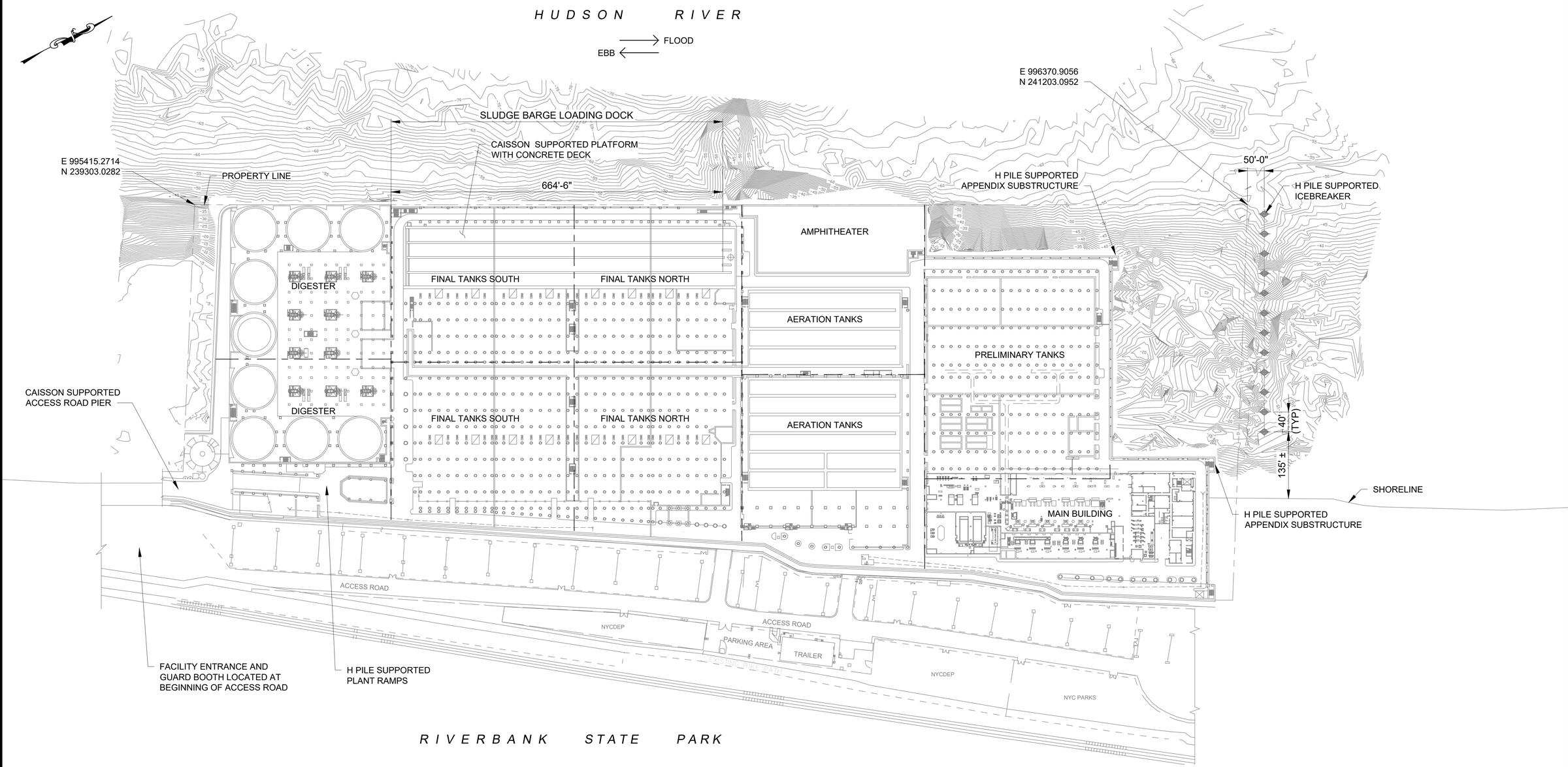
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MARINE GENERAL NOTES, LEGENDS, ABBREVIATIONS - SHEET 2 OF 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. G-004.00

Last Saved By: AcostaML
Last Date Saved: 10/20/2026 3:19 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129586\GM-G-004.00.dwg
Date & Time Plotted: 10/20/2026 3:22 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb



SITE PLAN AT EL +6.65

SCALE: 1"=100'-0"

0 100 200 FT.
1"=100'

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: I. TUTUNCU, PE
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

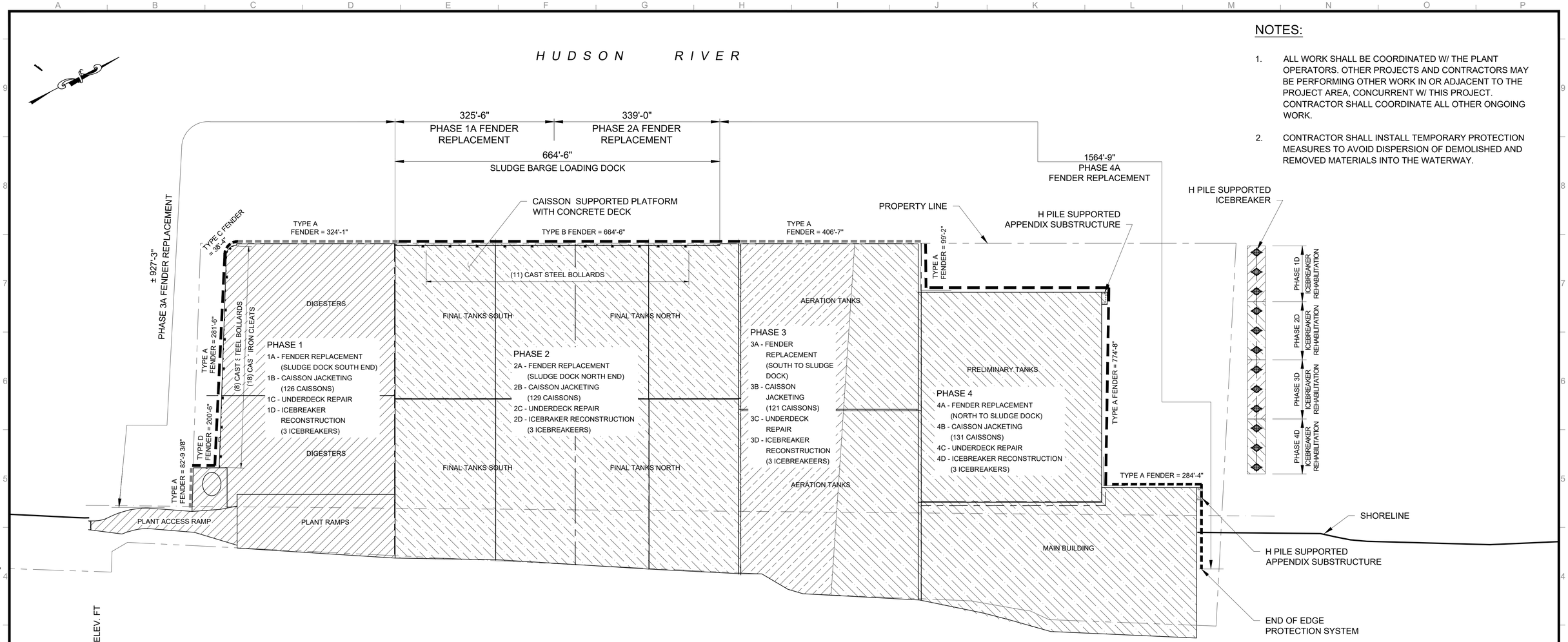
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

SITE PLAN

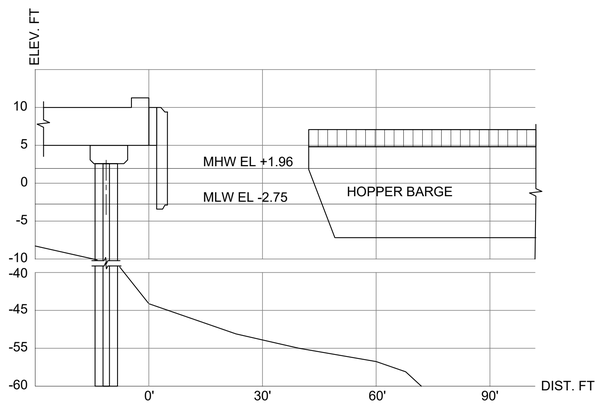
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. G-100.00

Last Saved By: AcostaML
Last Date Saved: 10/20/2026 3:19 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\eljacobs-americas-01\d0129586\GM-G-100.00.dwg
Date & Time Plotted: 10/20/2026 3:22 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb



NOTES:

1. ALL WORK SHALL BE COORDINATED W/ THE PLANT OPERATORS. OTHER PROJECTS AND CONTRACTORS MAY BE PERFORMING OTHER WORK IN OR ADJACENT TO THE PROJECT AREA, CONCURRENT W/ THIS PROJECT. CONTRACTOR SHALL COORDINATE ALL OTHER ONGOING WORK.
2. CONTRACTOR SHALL INSTALL TEMPORARY PROTECTION MEASURES TO AVOID DISPERSION OF DEMOLISHED AND REMOVED MATERIALS INTO THE WATERWAY.



NOTES:
AREAS OF 10FT MUDLINE DEPTH AND SHALLOWER SHALL BE MARKED AND DESIGNATED AS "NO BARGE ACCESS AREAS".

NOTE

PHASING BOUNDARIES FOR CAISSON AND UNDERDECK REHABILITATION WORK VARIES. FOR DETAILS OF INDIVIDUAL PHASES, REFER TO THE FOLLOWING SHEETS:

UNDERDECK REPAIR PLAN -	UR-S-001, US-S-101 TO UR-S-109
FENDERING REPLACEMENT PLAN -	SEE CURRENT SHEET
CAISSONS JACKETING PLAN -	CR-S-101 TO CR-S-105
ICEBREAKER RECONSTRUCTION PLAN -	SEE CURRENT SHEET

OVERALL CONSTRUCTION STAGING PLAN

SCALE: 1"=100'-0"

0 100 200 FT.
1"=100'

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: I. TUTUNCU, PE
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

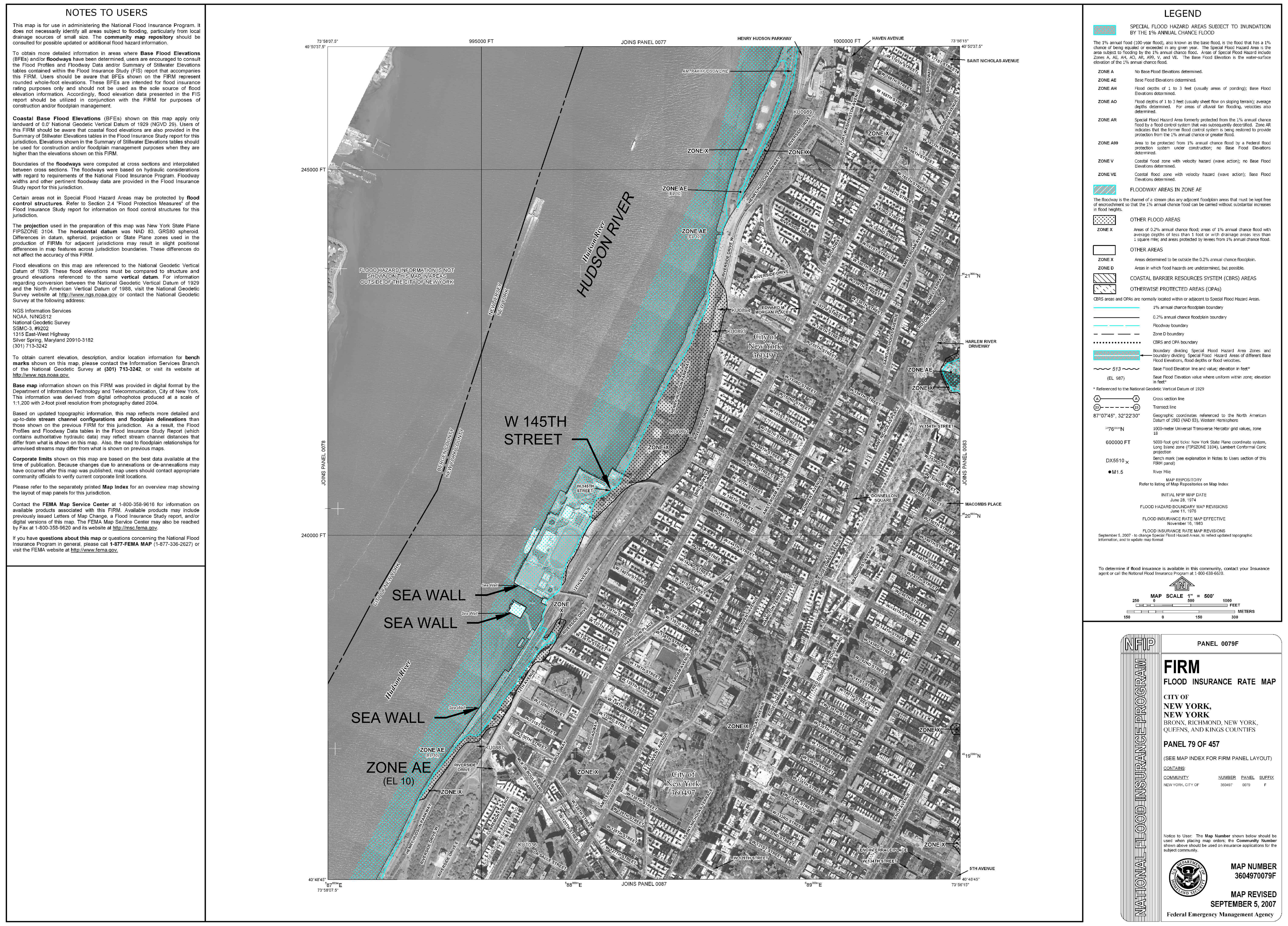
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

CONSTRUCTION STAGING PLAN
FOR REFERENCE ONLY

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. G-101.00

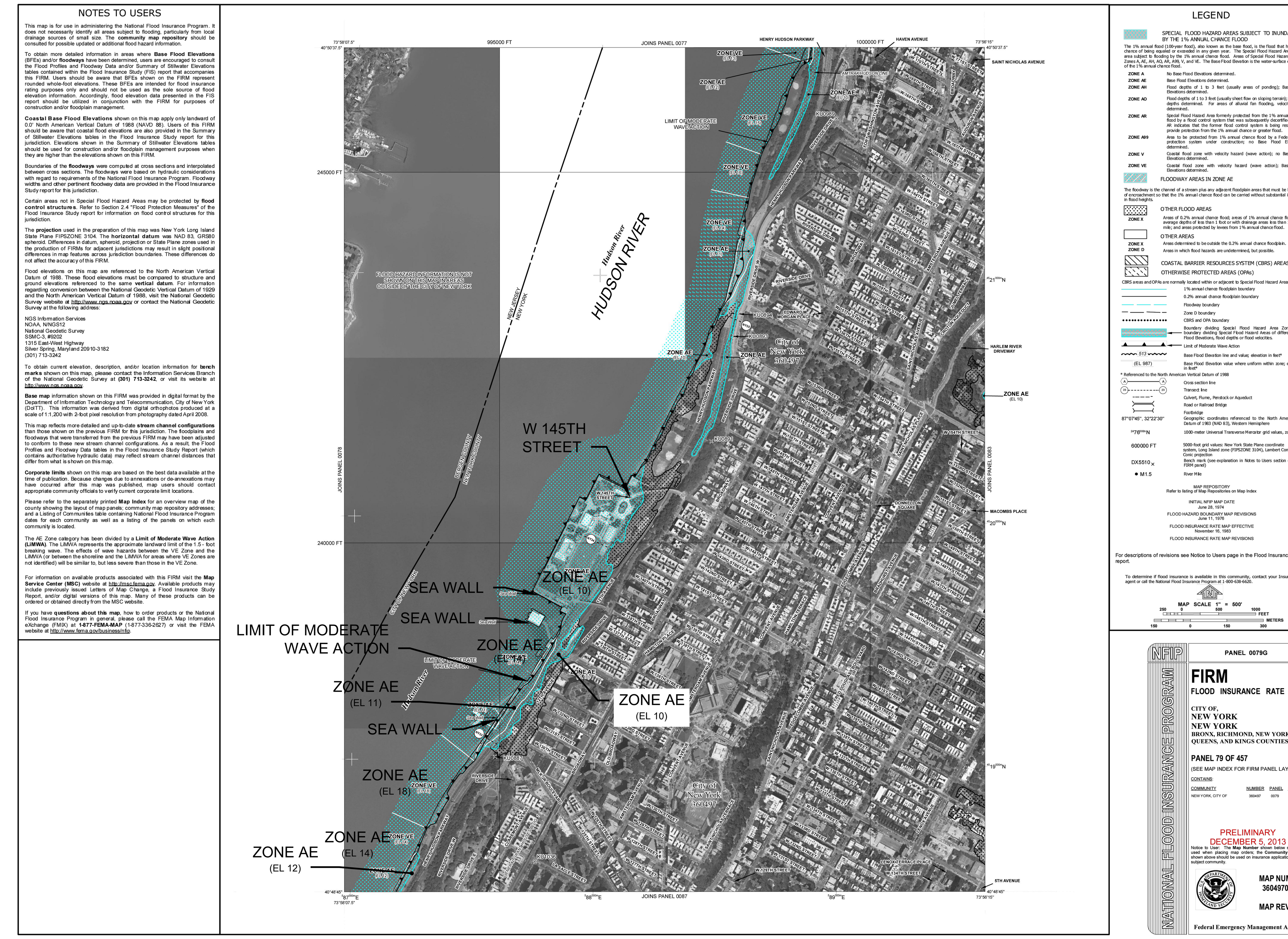
Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129586\GM-G-101.00.dwg
Last Date Saved: 10/20/2026 3:19 PM
Plot Scale: 1:1
Date & Time Plotted: 10/20/2026 3:22 PM
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



FEMA 2007 FIRM MAP

NOT TO SCALE



FEMA 2013 PFIRM MAP

NOT TO SCALE

1"=100' 0 100 200 FT.

NYC Environmental Protection BEDC/IHD

90% DESIGN SUBMITTAL

SUBMITTAL DATE: 2/7/2025

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: I. TUTUNCU, PE

CHECKED BY: A. WALLER, PE

DESIGN LEAD: I. TUTUNCU, PE

SECTION MANAGER: F. PULIDO, PE

DRAWN BY: D. KNIGHT

Jacobs

STATE OF NEW YORK · ILKER TUTUNCU · LICENSED PROFESSIONAL ENGINEER

NYC Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA

PORTFOLIO MANAGER: MATTHEW OSIT, PE

DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION

BUREAU OF ENGINEERING DESIGN & CONSTRUCTION

96-05 HORACE HARDING EXPRESSWAY 5th FLOOR

CORONA, NEW YORK 11368

www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

FEMA FIRM

DATE: OCTOBER 2026

SHEET NO:

DRAWING NO. G-102.00

Last Saved By: AcostaML Last Date Saved: 10/20/2026 3:19 PM Date & Time Plotted: 10/20/2026 3:22 PM

Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches) Plot Scale: 1:1 Plot Style Table: BEDC_Acad(N).ctb

Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129586\GM-G-102.00.dwg

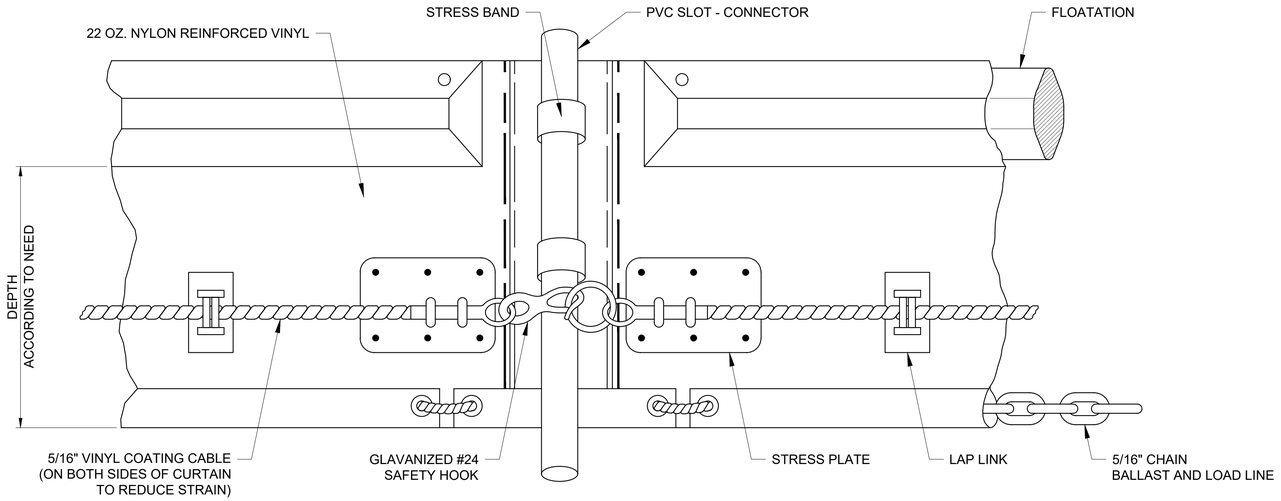
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

GENERAL NOTES :

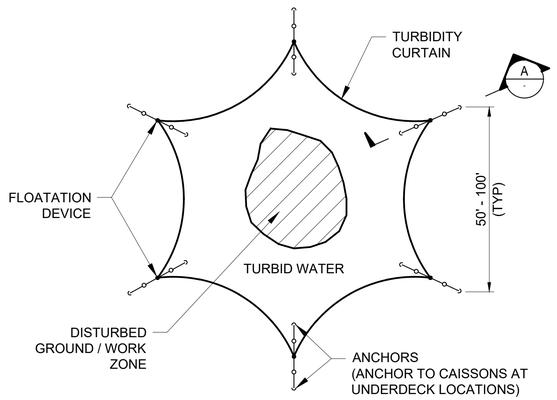
1. ALL FEDERAL, STATE, AND LOCAL SAFETY REGULATIONS ARE TO BE STRICTLY FOLLOWED.
2. THE CONTRACTOR SHALL ABIDE BY ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL PROTECTION STANDARDS, LAWS AND REGULATIONS, AND PROJECT-SPECIFIC PERMIT CONDITIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE CONSTRUCTION SITE AND THE AREAS OF WORK WHILE PERFORMING THE WORK. CONSTRUCTION DEBRIS SHALLBE REMOVED FROM THE CONSTRUCTION SITE ON A DAILY BASIS. NO BURNING OF DEBRIS SHALL BE PERMITTED.
4. DURING ALL PHASES OF THE WORK ALL PRECAUTIONS SHALL BE TAKEN AS NECESSARY OR AS REQUIRED TO PERMANENTLY PREVENT CONTAMINATED WATER, VEHICLE FLUIDS, CONSTRUCTION DEBRIS, AND ANY OTHER CONTAMINANT FROM ENTERING THE WATERWAY.
5. CONTRACTOR SHALL INSTALL A FLOATING BOOM TYPE TURBIDITY CURTAIN THAT ENCLOSES THE WORK AREA.

FLOATING BOOM TURBIDITY CURTAIN

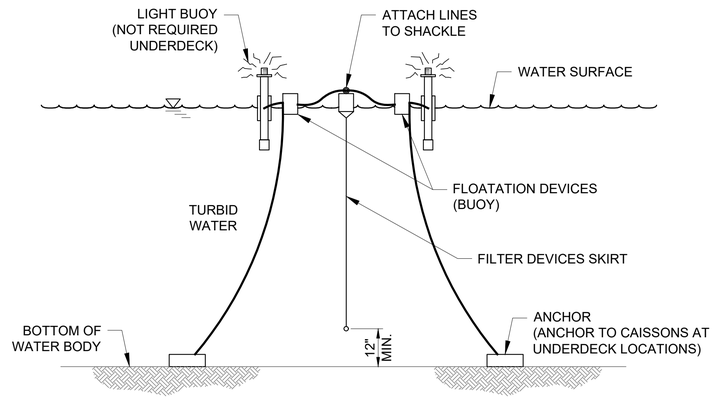
1. TURBIDITY CURTAIN SHALL BE FLOATING BOOM DOT TYPE 3, DESIGNED FOR SUSTAINED CURRENT SPEEDS UP TO 3 KNOTS.
2. TURBIDITY CURTAIN SHALL BE DEPLOYED AROUND THE WORK AREA DURING EACH CONSTRUCTION PHASE THAT IS EXPECTED TO PRODUCE DEBRIS AND/OR SEDIMENT.
3. TURBIDITY CURTAIN SHALL BE ANCHORED IN PLACE OR ATTACHED TO A FIXED STRUCTURE TO KEEP IN IN PLACE.
4. TURBIDITY CURTAIN SHALL HAVE NAVIGATION HAZARD LIGHTS COMPLIANT WITH US COAST GUARD REGULATIONS.
5. TURBIDITY CURTAIN SHALL BE CAPABLE OF COLLECTING ANY FLOATING DEBRIS GENERATED DURING CONSTRUCTION ACTIVITIES. DEBRIS SHALL BE COLLECTED AND DISPOSED OF ON A DAILY BASIS.
6. TURBIDITY CURTAIN WILL BE AVAILABLE ON-SITE FOR USE AS WARRANTED BASED ON MONITORING OF TURBIDITY TO MAINTAIN COMPLIANCE WITH PERMIT CONDITIONS.
7. THE CONTRACTOR SHALL PERFORM ROUTINE VISUAL INSPECTIONS, WITH A PHYSICAL CHECK ON THE TURBIDITY CURTAIN WITHIN 24 HOURS OF ANY MAJOR STORM OR ICE EVENT. CONTRACTOR SHALL DOCUMENT THE ROUTINE VISUAL AND POST-MAJOR STORM EVENT INSPECTIONS.
8. TURBIDITY CURTAIN DETAILS PROVIDED ON THIS SHEET IS FOR REFERENCE ONLY. THE CONTRACTOR SHALL SUBMIT HIS PROPOSED TURBIDITY CURTAIN DETAILS FOR APPROVAL.



TYPICAL ELEVATION VIEW
SCALE: NTS



TYPICAL DEPLOYMENT PLAN
SCALE: NTS



A / - SECTION
SCALE: NTS

FLOATING BOOM TYPE TURBIDITY CURTAIN
SCALE: 3"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: ILKER TUTUNCU, PE
DRAWN BY: ENRIQUE FLORES
CHECKED BY: ALAN WALLER, PE
DESIGN LEAD: ILKER TUTUNCU, PE
SECTION MANAGER: FELIPE PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

TURBIDITY CONTROL MEASURES

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. G-103.00

Last Saved By: AcostaML
Last Date Saved: 10/20/2026 3:19 PM
Date & Time Plotted: 10/20/2026 3:22 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129586\GM-G-103.00.dwg

NYC Finance

NYC Digital Tax Map

Effective Date : 05-03-2016 15:19:28
End Date : Current

Manhattan Block: 2101



Feet
0 55 110 220 330 440

Legend

- Streets
- Miscellaneous Text
- Possession Hooks
- Boundary Lines
- Lot Face Possession Hooks
- Regular
- Underwater
- Tax Lot Polygon
- Condo Number
- Tax Block Polygon

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: I. TUTUNCU, PE
DRAWN BY: D. KNIGHT
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

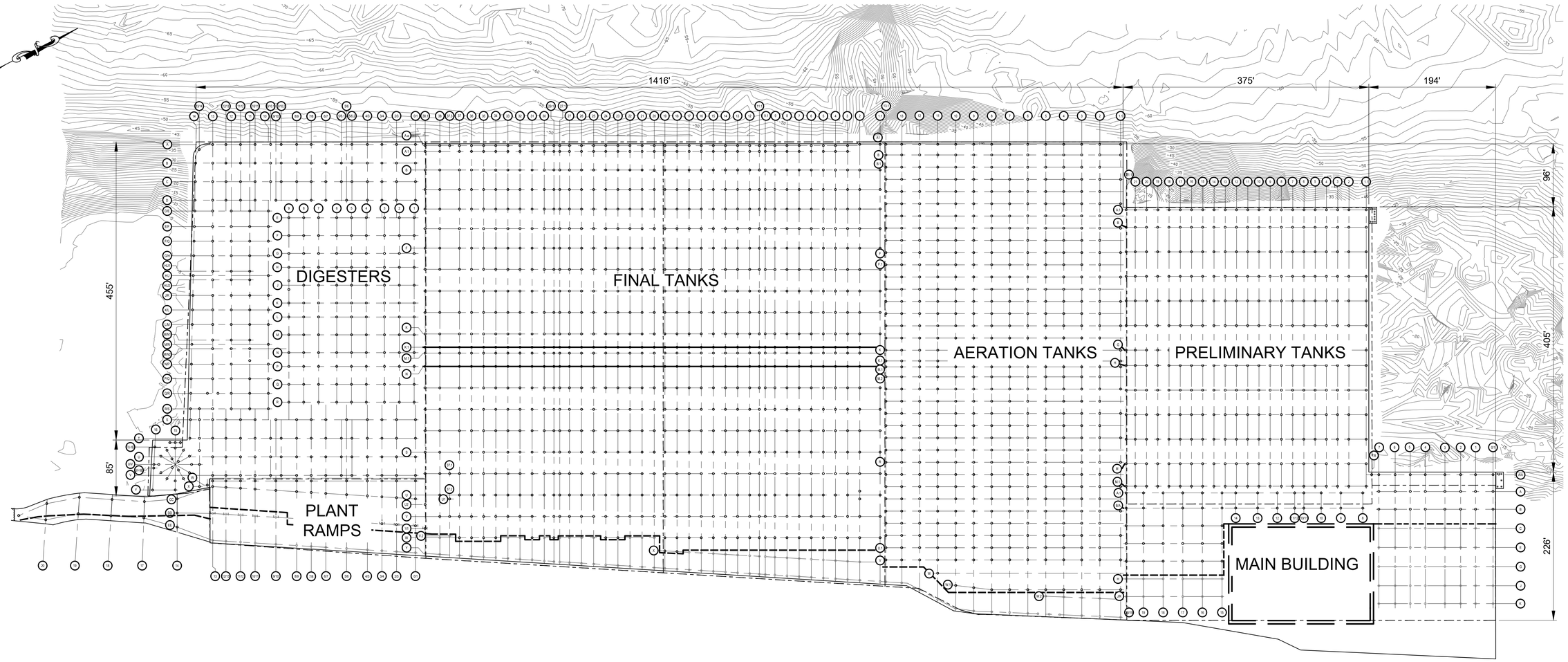
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

NYC TAX MAP

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. G-104.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129586\GM-G-104.00.dwg
Last Date Saved: 10/20/2026 3:19 PM
Date & Time Plotted: 10/20/2026 3:22 PM
Plot Style Table: BEDC_Acad(N).ctb
Plot Scale: 1:1



CAISSONS GENERAL ARRANGEMENT PLAN

SCALE: 1"=80'-0"

0 80 160 FT.
1"=80'

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: T. DONOVAN, PE
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

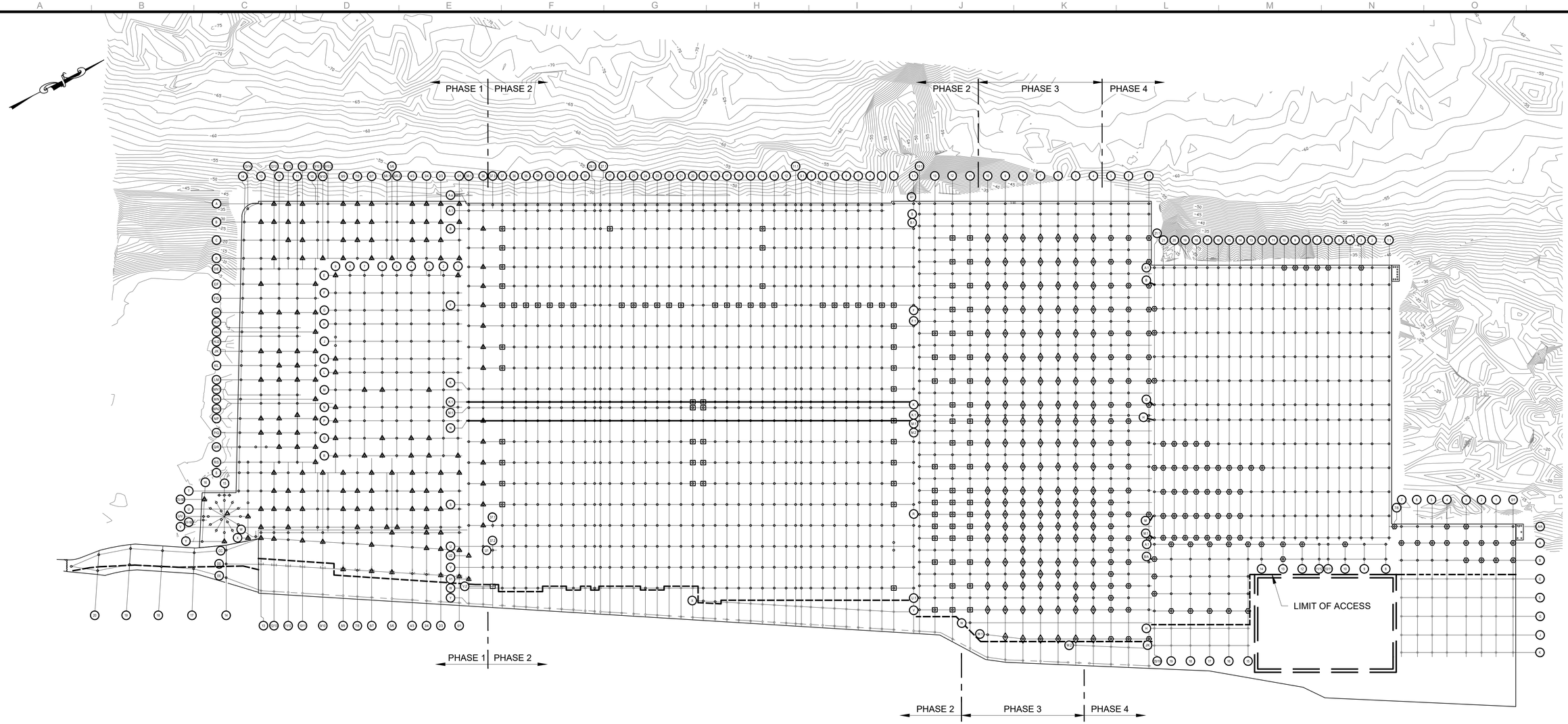
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

CAISSONS GENERAL ARRANGEMENT PLAN

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. CR-S-001.00

Last Saved By: AcostaML Last Date Saved: 9/18/2026 11:06 AM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0\1295899\CR-S-001.00.dwg
Date & Time Plotted: 10/20/2026 3:32 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



CAISSON PLAN

SCALE: 1"=80'-0"

LEGEND:

- PHASE 1 CAISSON ENCASEMENTS
- PHASE 2 CAISSON ENCASEMENTS
- PHASE 3 CAISSON ENCASEMENTS
- PHASE 4 CAISSON ENCASEMENTS
- (A) CAISSON ROW DESIGNATION
- (14) CAISSON BENT DESIGNATION

STRUCTURE ABBREVIATIONS

AT	AERATION TANKS
DT	DIGESTERS
FTN	FINAL TANKS - NORTH
FTS	FINAL TANKS - SOUTH
MB	MAIN BUILDING
PR	PLANT RAMPS
PT	PRELIMINARY TANKS

NOTES:

1. FOR CLARITY, NOT ALL BENT AND ROW DESIGNATIONS ARE SHOWN. REFER TO PARTIAL PLANS FOR EACH PHASE FOR COMPLETE BENT AND ROW DESIGNATIONS.

PHASING SCHEDULE

PHASE	ENCASEMENTS	STRUCTURES
PHASE 1	140 CAISSONS	DT, PR
PHASE 2	129 CAISSONS	DT, AT, FTN, FTS
PHASE 3	144 CAISSONS	AT
PHASE 4	134 CAISSONS	AT, MB, PT

1"=80' 0 80 160 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: T. DONOVAN, PE
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

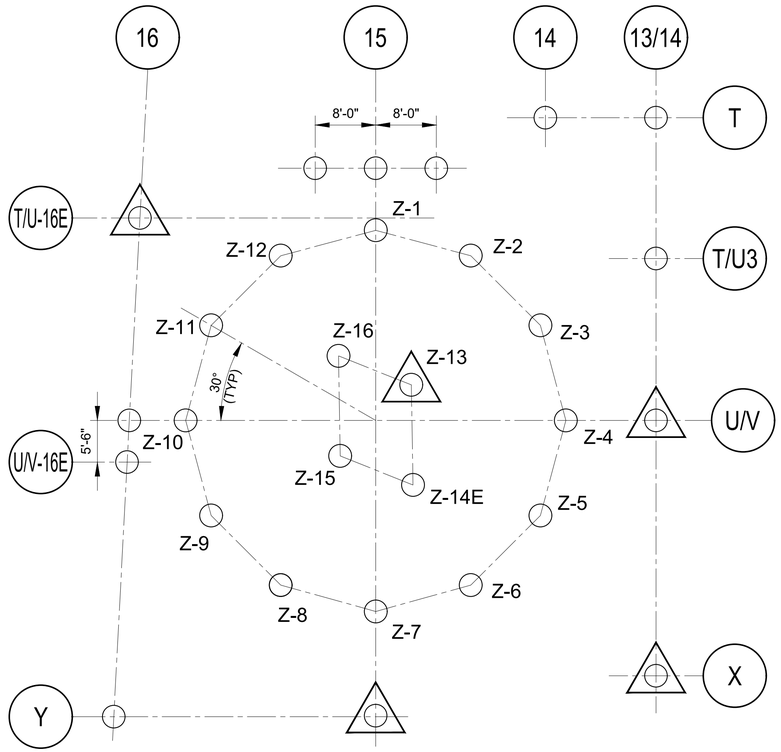
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

CAISSON REHABILITATION PLAN

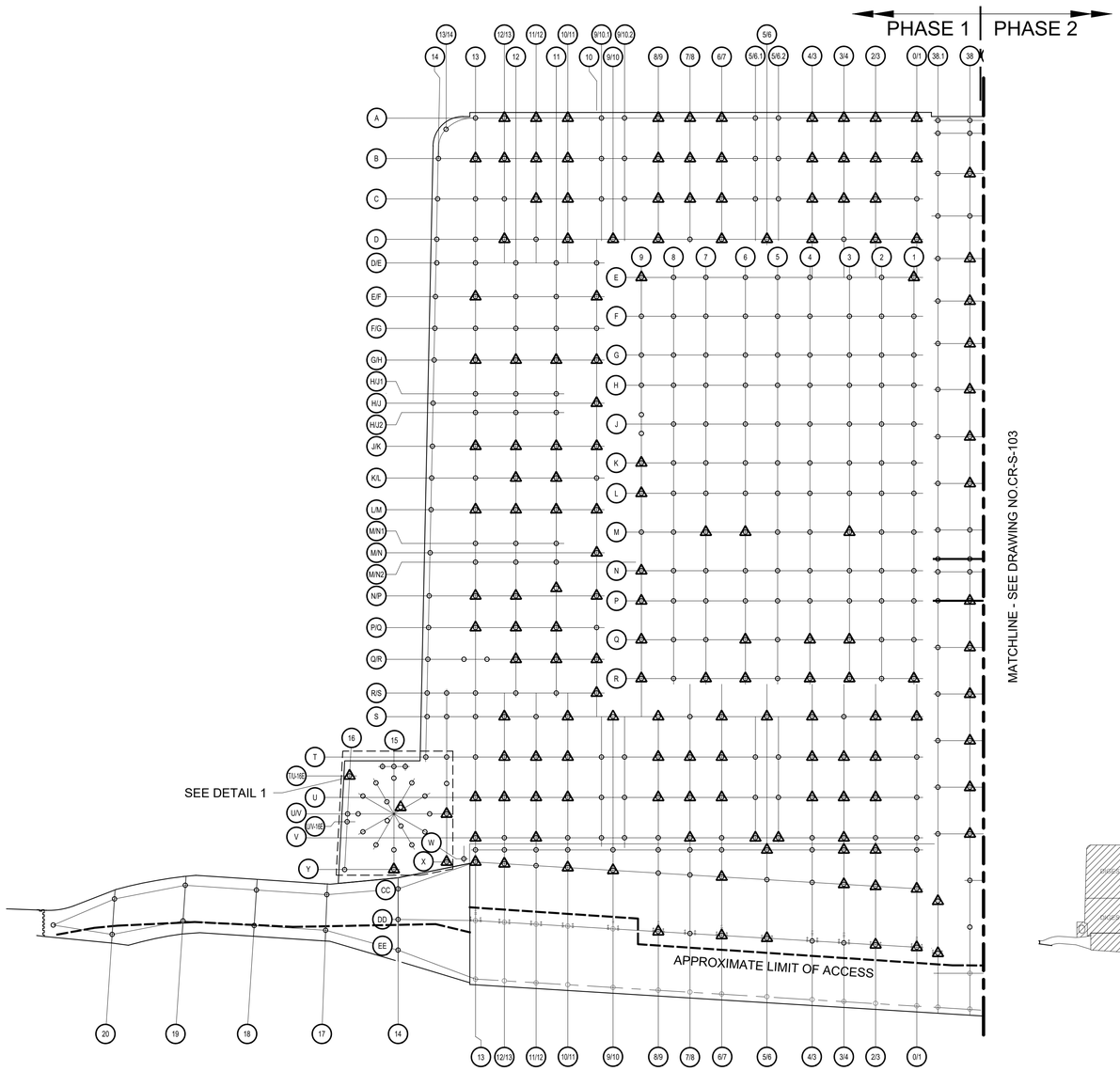
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. CR-S-101.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\CR-S-101.00.dwg
Last Date Saved: 10/20/2026 3:31 PM
Date & Time Plotted: 10/20/2026 3:32 PM
Plot Scale: 1:1 Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



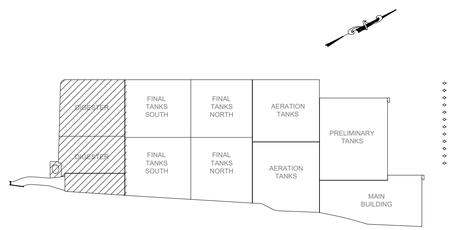
DETAIL 1
BENT Z CAISSONS
SCALE: 1"=10'-0"



CAISSON REHABILITATION PLAN
PHASE 1
SCALE: 1"=50'-0"

LEGEND:

- PHASE 1 CAISSON ENCASEMENTS
- PHASE 2 CAISSON ENCASEMENTS
- PHASE 3 CAISSON ENCASEMENTS
- PHASE 4 CAISSON ENCASEMENTS
- CAISSON ROW DESIGNATION
- CAISSON BENT DESIGNATION



KEY PLAN

1"=10' 0 10 20 FT.
1"=50' 0 50 100 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: T. DONOVAN, PE
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

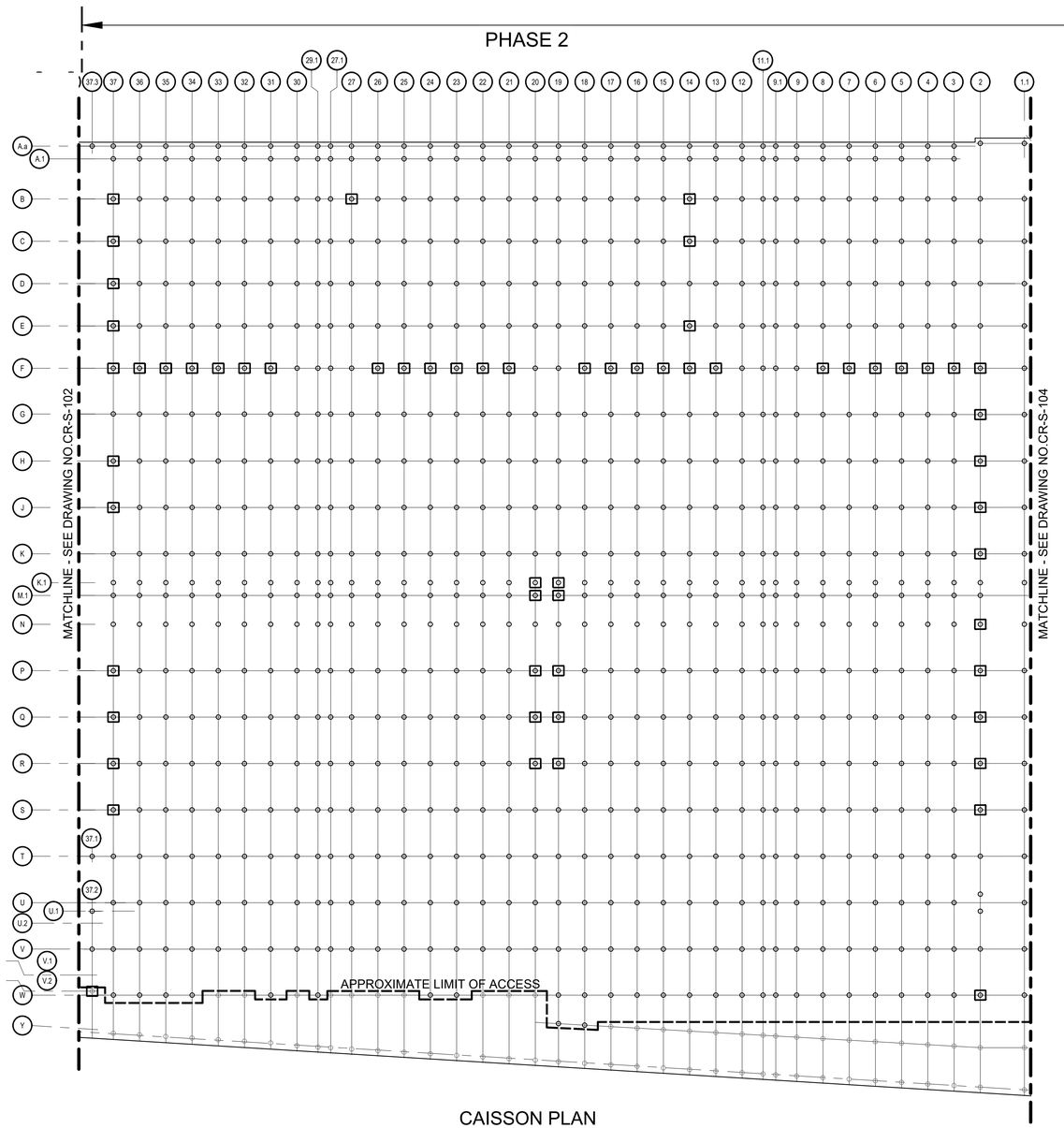
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

CAISSON REHABILITATION PLAN
PHASE 1 - DIGESTER AND PLANT RAMPS

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. CR-S-102.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

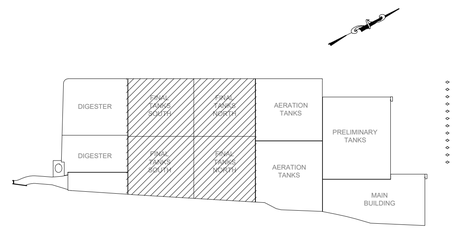
Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\CR-S-102.00 .dwg
Last Date Saved: 10/20/2026 3:31 PM
Date & Time Plotted: 10/20/2026 3:32 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb



CAISSON PLAN
PHASE 2
SCALE: 1"=50'-0"

LEGEND:

- PHASE 1 CAISSON ENCASEMENTS
- PHASE 2 CAISSON ENCASEMENTS
- PHASE 3 CAISSON ENCASEMENTS
- PHASE 4 CAISSON ENCASEMENTS
- CAISSON ROW DESIGNATION
- CAISSON BENT DESIGNATION



KEY PLAN

0 50 100 FT.
1"=50'

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: T. DONOVAN, PE
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

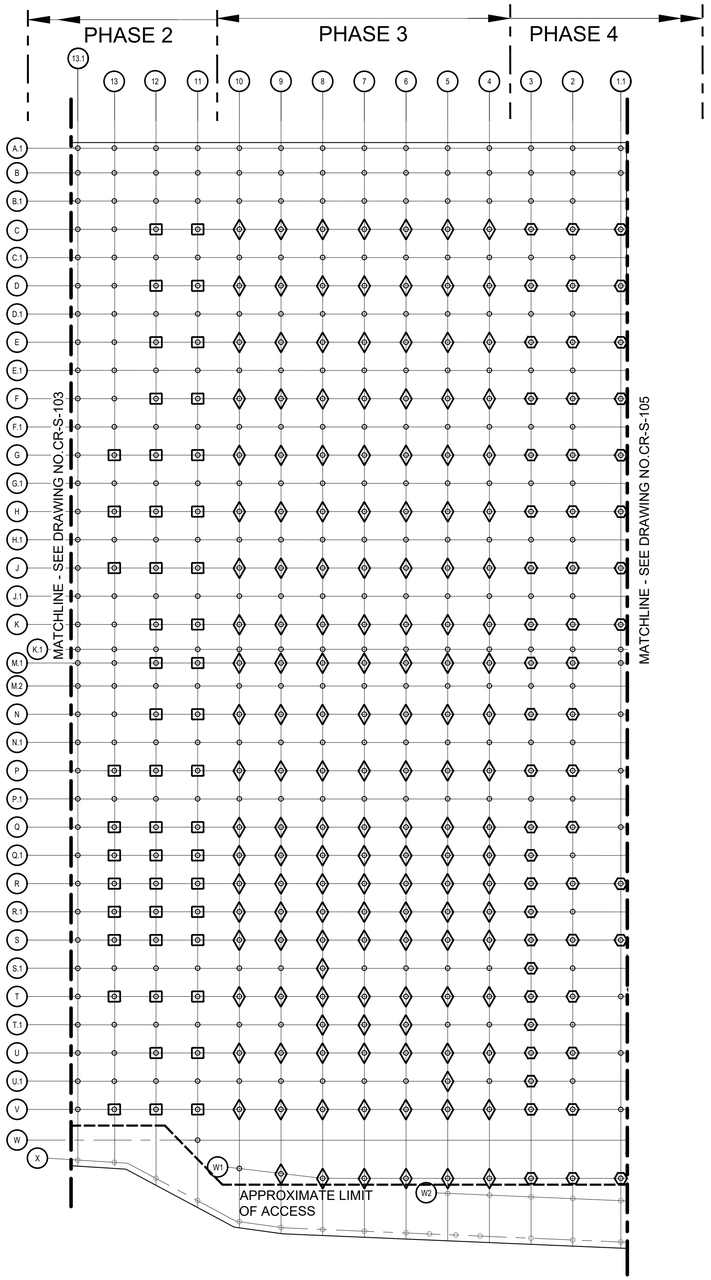
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

CAISSON REHABILITATION PLAN
PHASE 2 - FINAL TANKS

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. CR-S-103.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\CR-S-103.00.dwg
Last Date Saved: 10/20/2026 3:31 PM
Date & Time Plotted: 10/20/2026 3:32 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

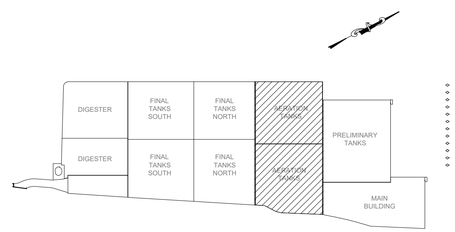
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



CAISSON PLAN
PHASE 3
SCALE: 1"=50'-0"

LEGEND:

- PHASE 1 CAISSON ENCASEMENTS
- PHASE 2 CAISSON ENCASEMENTS
- PHASE 3 CAISSON ENCASEMENTS
- PHASE 4 CAISSON ENCASEMENTS
- CAISSON ROW DESIGNATION
- CAISSON BENT DESIGNATION



KEY PLAN

1"=50' 0 50 100 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: T. DONOVAN, PE
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

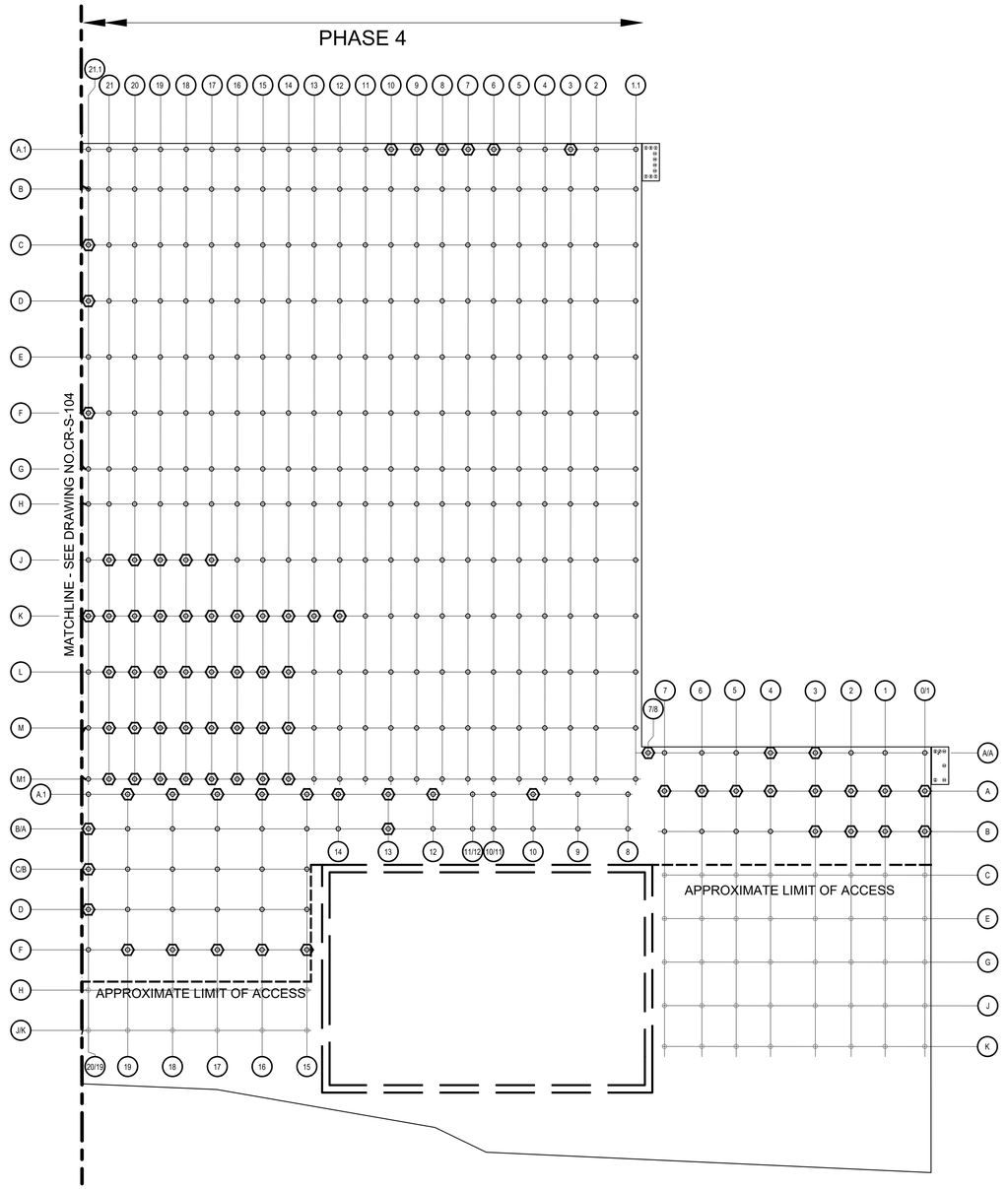
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

CAISSON REHABILITATION PLAN
PHASE 3 - AERATION TANKS

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. CR-S-104.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\CR-S-104.00.dwg
Last Date Saved: 10/20/2026 3:31 PM
Date & Time Plotted: 10/20/2026 3:32 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

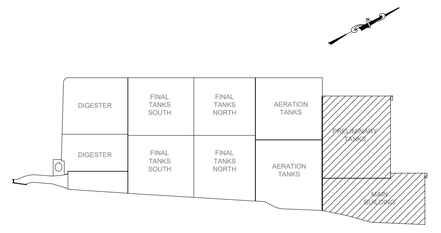
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



CAISSON PLAN
PHASE 4
SCALE: 1"=50'-0"

LEGEND:

- PHASE 1 CAISSON ENCASEMENTS
- PHASE 2 CAISSON ENCASEMENTS
- PHASE 3 CAISSON ENCASEMENTS
- PHASE 4 CAISSON ENCASEMENTS
- CAISSON ROW DESIGNATION
- CAISSON BENT DESIGNATION



KEY PLAN

0 50 100 FT.
1"=50'

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: T. DONOVAN, PE
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

CAISSON REHABILITATION PLAN
PHASE 4 - PRELIMINARY TANKS AND MAIN BUILDING

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. CR-S-105.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\CR-S-105.00.dwg
Last Date Saved: 10/20/2026 3:31 PM
Date & Time Plotted: 10/20/2026 3:32 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

STRUCTURE	BENT	ROW	CAISSON SIZE	ENCASEMENT LENGTH	PHASE	NOTES
DT	1	E	Pipe 42" x 0.75"	20	1	
DT	1	R	Pipe 42" x 0.75"	15	1	
DT	3	M	Pipe 36" x 0.5"	13	1	
DT	3	Q	Pipe 42" x 0.75"	25	1	
DT	3	R	Pipe 42" x 0.75"	24	1	
DT	4	Q	Pipe 42" x 0.75"	25	1	
DT	4	R	Pipe 42" x 0.75"	24	1	
DT	6	M	Pipe 36" x 0.5"	13	1	
DT	6	Q	Pipe 42" x 0.75"	25	1	
DT	6	R	Pipe 42" x 0.75"	24	1	
DT	7	M	Pipe 36" x 0.5"	13	1	
DT	7	R	Pipe 42" x 0.75"	24	1	
DT	9	E	Pipe 42" x 0.75"	33	1	
DT	9	K	Pipe 42" x 0.75"	27	1	
DT	9	L	Pipe 42" x 0.75"	15	1	
DT	9	N	Pipe 42" x 0.75"	28	1	
DT	9	P	Pipe 42" x 0.75"	26	1	
DT	9	Q	Pipe 42" x 0.75"	25	1	
DT	9	R	Pipe 42" x 0.75"	15	1	
DT	10	E/F	Pipe 42" x 0.75"	13	1	
DT	10	G/H	Pipe 42" x 0.75"	12	1	
DT	10	H/J	Pipe 42" x 0.75"	12	1	
DT	10	J/K	Pipe 42" x 0.75"	11	1	
DT	10	L/M	Pipe 42" x 0.75"	14	1	
DT	10	M/N	Pipe 42" x 0.75"	13	1	
DT	10	N/P	Pipe 42" x 0.75"	13	1	
DT	10	Q/R	Pipe 42" x 0.75"	15	1	
DT	10	R/S	Pipe 36" x 0.5"	15	1	
DT	11	G/H	Pipe 42" x 0.75"	12	1	
DT	11	J/K	Pipe 42" x 0.75"	11	1	
DT	11	K/L	Pipe 42" x 0.75"	11	1	
DT	11	L/M	Pipe 42" x 0.75"	14	1	
DT	11	N/P	Pipe 42" x 0.75"	13	1	
DT	11	P/Q	Pipe 42" x 0.75"	13	1	POSSIBLE OBSTRUCTION - STEEL PLATE PROTRUDING 1"
DT	11	Q/R	Pipe 42" x 0.75"	15	1	
DT	12	G/H	Pipe 42" x 0.75"	12	1	
DT	12	J/K	Pipe 42" x 0.75"	11	1	
DT	12	K/L	Pipe 42" x 0.75"	11	1	
DT	12	L/M	Pipe 42" x 0.75"	14	1	
DT	12	N/P	Pipe 42" x 0.75"	13	1	
DT	12	P/Q	Pipe 42" x 0.75"	13	1	
DT	12	Q/R	Pipe 42" x 0.75"	15	1	
DT	13	B	Pipe 42" x 0.75"	42	1	
DT	13	E/F	Pipe 42" x 0.75"	13	1	
DT	13	G/H	Pipe 42" x 0.75"	12	1	
DT	13	J/K	Pipe 42" x 0.75"	11	1	
DT	13	L/M	Pipe 42" x 0.75"	14	1	
DT	13	N/P	Pipe 42" x 0.75"	13	1	
DT	13	P/Q	Pipe 42" x 0.75"	13	1	
DT	13	U	Pipe 42" x 0.75"	12	1	
DT	13	V	Pipe 42" x 0.75"	12	1	
DT	13	Z	Pipe 30" x 0.5"	11	1	
DT	15	Y	Pipe 42" x 0.75"	9	1	

STRUCTURE	BENT	ROW	CAISSON SIZE	ENCASEMENT LENGTH	PHASE	NOTES
DT	2/3	A	Pipe 42" x 0.75"	49	1	
DT	2/3	B	Pipe 42" x 0.75"	42	1	
DT	2/3	C	Pipe 42" x 0.75"	30	1	
DT	2/3	D	Pipe 42" x 0.75"	21	1	
DT	2/3	S	Pipe 42" x 0.75"	15	1	
DT	2/3	T	Pipe 42" x 0.75"	13	1	
DT	2/3	U	Pipe 42" x 0.75"	12	1	
DT	3/4	A	Pipe 42" x 0.75"	49	1	
DT	3/4	B	Pipe 42" x 0.75"	42	1	
DT	3/4	C	Pipe 42" x 0.75"	30	1	
DT	3/4	T	Pipe 42" x 0.75"	13	1	
DT	3/4	U	Pipe 42" x 0.75"	12	1	
DT	3/4	V	Pipe 42" x 0.75"	12	1	
DT	4/3	A	Pipe 42" x 0.75"	49	1	
DT	4/3	B	Pipe 42" x 0.75"	42	1	
DT	4/3	C	Pipe 42" x 0.75"	30	1	
DT	4/3	D	Pipe 42" x 0.75"	21	1	
DT	4/3	S	Pipe 42" x 0.75"	15	1	
DT	4/3	T	Pipe 42" x 0.75"	13	1	
DT	4/3	U	Pipe 42" x 0.75"	12	1	
DT	5/6	D	Pipe 42" x 0.75"	21	1	
DT	5/6	S	Pipe 42" x 0.75"	15	1	
DT	6/7	A	Pipe 42" x 0.75"	49	1	
DT	6/7	B	Pipe 42" x 0.75"	42	1	
DT	6/7	C	Pipe 42" x 0.75"	30	1	
DT	6/7	D	Pipe 42" x 0.75"	21	1	
DT	6/7	S	Pipe 42" x 0.75"	15	1	
DT	6/7	T	Pipe 42" x 0.75"	13	1	STEEL TABS PROTRUDING 1"
DT	6/7	U	Pipe 42" x 0.75"	12	1	STEEL ANGLE PROTRUDING 4"
DT	7/8	A	Pipe 42" x 0.75"	49	1	
DT	7/8	B	Pipe 42" x 0.75"	42	1	
DT	7/8	C	Pipe 42" x 0.75"	30	1	
DT	7/8	T	Pipe 42" x 0.75"	13	1	
DT	7/8	U	Pipe 42" x 0.75"	12	1	STEEL ANGLE PROTRUDING 4"
DT	7/8	V	Pipe 42" x 0.75"	12	1	
DT	8/9	A	Pipe 42" x 0.75"	49	1	
DT	8/9	B	Pipe 42" x 0.75"	42	1	
DT	8/9	C	Pipe 42" x 0.75"	30	1	
DT	8/9	D	Pipe 42" x 0.75"	21	1	
DT	8/9	S	Pipe 42" x 0.75"	15	1	
DT	8/9	T	Pipe 42" x 0.75"	13	1	
DT	8/9	U	Pipe 42" x 0.75"	12	1	INSTALL CAISSON HOLE REPAIR PRIOR TO ENCASEMENT
DT	9/10	D	Pipe 42" x 0.75"	21	1	
DT	9/10	S	Pipe 42" x 0.75"	15	1	
DT	10/11	A	Pipe 42" x 0.75"	49	1	
DT	10/11	B	Pipe 42" x 0.75"	42	1	
DT	10/11	C	Pipe 42" x 0.75"	30	1	
DT	10/11	D	Pipe 42" x 0.75"	21	1	
DT	10/11	S	Pipe 42" x 0.75"	15	1	
DT	10/11	T	Pipe 42" x 0.75"	13	1	
DT	10/11	U	Pipe 42" x 0.75"	12	1	
DT	11/12	A	Pipe 42" x 0.75"	49	1	

LEGEND:

- △ PHASE 1 CAISSON ENCASEMENTS
- □ PHASE 2 CAISSON ENCASEMENTS
- ◊ PHASE 3 CAISSON ENCASEMENTS
- ⬡ PHASE 4 CAISSON ENCASEMENTS

STRUCTURE ABBREVIATIONS

AT	AERATION TANKS
DT	DIGESTERS
FTN	FINAL TANKS - NORTH
FTS	FINAL TANKS - SOUTH
MB	MAIN BUILDING
PR	PLANT RAMPS
PT	PRELIMINARY TANKS

NOTES:

1. ENCASEMENT LENGTHS ARE MEASURED FROM THE UNDERSIDE OF THE PILE CAP TO 3' BELOW THE MUDLINE AND ARE BASED ON INSPECTIONS PERFORMED IN 2016 AND IN 2019. SEE DWG. CR-S-300 FOR TYPICAL CAISSON ENCASEMENT DETAILS.
2. CONTRACTOR SHALL INSPECT ALL CAISSONS AS FIRST ORDER OF WORK AND SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES FROM THE CONDITIONS NOTED IN THE SCHEDULE.
3. POSSIBLE OBSTRUCTIONS THAT WERE FOUND IN THE 2019 INSPECTION HAVE BEEN NOTED FOR CONTRACTOR'S CONVENIENCE. CONTRACTOR SHALL REMOVE ALL OBSTRUCTIONS AS NEEDED TO PERFORM THE WORK PRIOR TO JACKET INSTALLATION.
4. PROTRUSIONS LARGER THAN 1/4" SHALL BE REMOVED FROM THE CAISSON SURFACE. CAISSON STEEL SHALL BE GROUND SMOOTH AND THE BARE AREA SHALL BE COATED ACCORDING TO SPECIFICATION SECTION 09 91 00 PAINTING.
5. HOLES IN THE STEEL SHELL AND UNDERLYING CONCRETE SHALL BE REPAIRED PRIOR TO JACKET INSTALLATION. SEE DWG. CR-S-300 FOR CAISSON HOLE REPAIR DETAIL AND CAISSON HOLE REPAIR SCHEDULE.
6. REFER TO SPECIFICATION 03 60 10 FOR ALL EPOXY GROUTED ENCASEMENT INSTALLATION EQUIPMENT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: T. DONOVAN, PE
DRAWN BY: D. KNIGHT
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

CAISSON REHABILITATION SCHEDULE
PHASE 1 - SHEET 1 OF 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. CR-S-200.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Last Date Saved: 10/20/2026 3:31 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\CR-S-200.00.dwg
Date & Time Plotted: 10/20/2026 3:32 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

STRUCTURE	BENT	ROW	CAISSON SIZE	ENCASEMENT LENGTH	PHASE	NOTES
DT	11/12	B	Pipe 42" x 0.75"	42	1	
DT	11/12	C	Pipe 42" x 0.75"	30	1	
DT	11/12	T	Pipe 42" x 0.75"	13	1	
DT	11/12	U	Pipe 42" x 0.75"	12	1	
DT	11/12	V	Pipe 42" x 0.75"	12	1	
DT	12/13	A	Pipe 42" x 0.75"	49	1	
DT	12/13	B	Pipe 42" x 0.75"	42	1	
DT	12/13	D	Pipe 42" x 0.75"	21	1	
DT	12/13	S	Pipe 42" x 0.75"	15	1	
DT	12/13	T	Pipe 42" x 0.75"	13	1	INSTALL CAISSON HOLE REPAIR PRIOR TO ENCASEMENT
DT	12/13	U	Pipe 42" x 0.75"	12	1	
DT	0/1	A	Pipe 42" x 0.75"	49	1	
DT	0/1	B	Pipe 42" x 0.75"	42	1	
DT	0/1	D	Pipe 42" x 0.75"	21	1	
DT	0/1	S	Pipe 42" x 0.75"	15	1	
DT	13/14	U/V	Pipe 42" x 0.75"	10	1	
DT	13/14	X	Pipe 42" x 0.75"	10	1	
DT	16E	T/U	Pipe 36" x 0.5"	12	1	
DT	5/6.1	V	Pipe 36" x 0.5"	12	1	
DT	5/6.2	V	Pipe 36" x 0.5"	12	1	
FTS	38	B	Pipe 42" x 0.75"	33	1	
FTS	38	D	Pipe 42" x 0.75"	19	1	
FTS	38	E	Pipe 42" x 0.75"	21	1	
FTS	38	F	Pipe 42" x 0.75"	22	1	
FTS	38	G	Pipe 42" x 0.75"	20	1	
FTS	38	H	Pipe 42" x 0.75"	20	1	
FTS	38	J	Pipe 42" x 0.75"	19	1	
FTS	38	N	Pipe 42" x 0.75"	22	1	
FTS	38	P	Pipe 42" x 0.75"	20	1	
FTS	38	Q	Pipe 42" x 0.75"	20	1	
FTS	38	R	Pipe 42" x 0.75"	19	1	
FTS	38	S	Pipe 42" x 0.75"	18	1	
FTS	38	T	Pipe 42" x 0.75"	16	1	
FTS	37.1	U.2	Pipe 42" x 0.75"	15	1	
FTS	38.1	V.1	Pipe 42" x 0.75"	5	1	

LEGEND:

- △ PHASE 1 CAISSON ENCASEMENTS
- □ PHASE 2 CAISSON ENCASEMENTS
- ◊ PHASE 3 CAISSON ENCASEMENTS
- ○ PHASE 4 CAISSON ENCASEMENTS

STRUCTURE ABBREVIATIONS

AT	AERATION TANKS
DT	DIGESTERS
FTN	FINAL TANKS - NORTH
FTS	FINAL TANKS - SOUTH
MB	MAIN BUILDING
PR	PLANT RAMPS
PT	PRELIMINARY TANKS

NOTES:

1. ENCASEMENT LENGTHS ARE MEASURED FROM THE UNDERSIDE OF THE PILE CAP TO 3' BELOW THE MUDLINE AND ARE BASED ON INSPECTIONS PERFORMED IN 2016 AND IN 2019. SEE DWG. CR-S-300 FOR TYPICAL CAISSON ENCASEMENT DETAILS.
2. CONTRACTOR SHALL INSPECT ALL CAISSONS AS FIRST ORDER OF WORK AND SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES FROM THE CONDITIONS NOTED IN THE SCHEDULE.
3. POSSIBLE OBSTRUCTIONS THAT WERE FOUND IN THE 2019 INSPECTION HAVE BEEN NOTED FOR CONTRACTOR'S CONVENIENCE. CONTRACTOR SHALL REMOVE ALL OBSTRUCTIONS AS NEEDED TO PERFORM THE WORK PRIOR TO JACKET INSTALLATION.
4. PROTRUSIONS LARGER THAN 1/4" SHALL BE REMOVED FROM THE CAISSON SURFACE. CAISSON STEEL SHALL BE GROUND SMOOTH AND THE BARE AREA SHALL BE COATED ACCORDING TO SPECIFICATION SECTION 09 91 00 PAINTING.
5. HOLES IN THE STEEL SHELL AND UNDERLYING CONCRETE SHALL BE REPAIRED PRIOR TO JACKET INSTALLATION. SEE DWG. CR-S-300 FOR CAISSON HOLE REPAIR DETAIL AND CAISSON HOLE REPAIR SCHEDULE.
6. REFER TO SPECIFICATION 03 60 10 FOR ALL EPOXY GROUTED ENCASEMENT INSTALLATION EQUIPMENT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: T. DONOVAN, PE
DRAWN BY: D. KNIGHT
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

CAISSON REHABILITATION SCHEDULE
PHASE 1 - SHEET 2 OF 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. CR-S-201.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\CR-S-200.00.dwg
Last Date Saved: 10/20/2026 3:31 PM
Date & Time Plotted: 10/20/2026 3:32 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

STRUCTURE	BENT	ROW	CAISSON SIZE	ENCASEMENT LENGTH	PHASE	NOTES
AT	11	C	Pipe 42" x 0.75"	33	2	
AT	11	D	Pipe 42" x 0.75"	29	2	
AT	11	E	Pipe 42" x 0.75"	33	2	
AT	11	F	Pipe 42" x 0.75"	33	2	
AT	11	G	Pipe 42" x 0.75"	32	2	
AT	11	H	Pipe 42" x 0.75"	33	2	
AT	11	J	Pipe 42" x 0.75"	31	2	
AT	11	K	Pipe 42" x 0.75"	27	2	
AT	11	M.1	Pipe 42" x 0.75"	27	2	
AT	11	N	Pipe 42" x 0.75"	28	2	
AT	11	P	Pipe 42" x 0.75"	26	2	POSSIBLE OBSTRUCTION - H-PILE TOUCHING WEST FACE
AT	11	Q	Pipe 42" x 0.75"	25	2	
AT	11	Q.1	Pipe 36" x 0.5"	23	2	
AT	11	R	Pipe 42" x 0.75"	24	2	
AT	11	R.1	Pipe 36" x 0.5"	25	2	
AT	11	S	Pipe 42" x 0.75"	22	2	
AT	11	T	Pipe 42" x 0.75"	19	2	
AT	11	U	Pipe 42" x 0.75"	15	2	
AT	11	V	Pipe 42" x 0.75"	10	2	
AT	12	C	Pipe 42" x 0.75"	33	2	
AT	12	D	Pipe 42" x 0.75"	29	2	
AT	12	E	Pipe 42" x 0.75"	33	2	
AT	12	F	Pipe 42" x 0.75"	33	2	
AT	12	G	Pipe 42" x 0.75"	32	2	
AT	12	H	Pipe 42" x 0.75"	33	2	
AT	12	J	Pipe 42" x 0.75"	31	2	
AT	12	K	Pipe 42" x 0.75"	28	2	
AT	12	M.1	Pipe 42" x 0.75"	27	2	
AT	12	N	Pipe 42" x 0.75"	28	2	
AT	12	P	Pipe 42" x 0.75"	26	2	
AT	12	Q	Pipe 42" x 0.75"	25	2	
AT	12	Q.1	Pipe 36" x 0.5"	23	2	
AT	12	R	Pipe 42" x 0.75"	24	2	
AT	12	R.1	Pipe 36" x 0.5"	25	2	
AT	12	S	Pipe 42" x 0.75"	22	2	
AT	12	T	Pipe 42" x 0.75"	19	2	
AT	12	U	Pipe 42" x 0.75"	15	2	
AT	12	V	Pipe 42" x 0.75"	10	2	
AT	13	G	Pipe 42" x 0.75"	32	2	
AT	13	H	Pipe 42" x 0.75"	33	2	
AT	13	J	Pipe 42" x 0.75"	31	2	
AT	13	P	Pipe 42" x 0.75"	26	2	
AT	13	Q	Pipe 42" x 0.75"	25	2	
AT	13	Q.1	Pipe 36" x 0.5"	23	2	
AT	13	R	Pipe 42" x 0.75"	24	2	
AT	13	R.1	Pipe 36" x 0.5"	25	2	
AT	13	S	Pipe 42" x 0.75"	22	2	
AT	13	T	Pipe 42" x 0.75"	19	2	
AT	13	V	Pipe 42" x 0.75"	12	2	POSSIBLE OBSTRUCTION - PIPE AROUND BOTTOM OF CAISSON
FTN	2	F	Pipe 42" x 0.75"	33	2	
FTN	2	G	Pipe 42" x 0.75"	32	2	

STRUCTURE	BENT	ROW	CAISSON SIZE	ENCASEMENT LENGTH	PHASE	NOTES
FTN	2	H	Pipe 42" x 0.75"	33	2	
FTN	2	J	Pipe 42" x 0.75"	31	2	
FTN	2	K	Pipe 42" x 0.75"	27	2	
FTN	2	N	Pipe 42" x 0.75"	28	2	
FTN	2	P	Pipe 42" x 0.75"	26	2	
FTN	2	Q	Pipe 42" x 0.75"	25	2	
FTN	2	R	Pipe 42" x 0.75"	24	2	
FTN	2	S	Pipe 42" x 0.75"	22	2	
FTN	2	W	Pipe 42" x 0.75"	11	2	
FTN	3	F	Pipe 42" x 0.75"	33	2	
FTN	4	F	Pipe 42" x 0.75"	33	2	
FTN	5	F	Pipe 42" x 0.75"	22	2	
FTN	6	F	Pipe 42" x 0.75"	33	2	
FTN	7	F	Pipe 42" x 0.75"	22	2	
FTN	8	F	Pipe 42" x 0.75"	22	2	
FTN	13	F	Pipe 42" x 0.75"	22	2	
FTN	14	B	Pipe 42" x 0.75"	33	2	
FTN	14	C	Pipe 42" x 0.75"	25	2	
FTN	14	E	Pipe 42" x 0.75"	21	2	
FTN	14	F	Pipe 42" x 0.75"	22	2	
FTN	15	F	Pipe 42" x 0.75"	22	2	
FTN	16	F	Pipe 36" x 0.5"	12	2	
FTN	17	F	Pipe 36" x 0.5"	12	2	
FTN	18	F	Pipe 36" x 0.5"	12	2	
FTN	19	K.1	Pipe 36" x 0.5"	20	2	
FTN	19	M.1	Pipe 36" x 0.5"	14	2	
FTN	19	P	Pipe 42" x 0.75"	20	2	
FTN	19	Q	Pipe 42" x 0.75"	20	2	
FTN	19	R	Pipe 42" x 0.75"	19	2	
FTS	20	K.1	Pipe 36" x 0.5"	20	2	
FTS	20	M.1	Pipe 36" x 0.5"	14	2	
FTS	20	P	Pipe 42" x 0.75"	20	2	
FTS	20	Q	Pipe 42" x 0.75"	20	2	
FTS	20	R	Pipe 42" x 0.75"	19	2	
FTS	21	F	Pipe 42" x 0.75"	22	2	
FTS	22	F	Pipe 42" x 0.75"	22	2	
FTS	23	F	Pipe 42" x 0.75"	22	2	
FTS	24	F	Pipe 42" x 0.75"	22	2	
FTS	25	F	Pipe 42" x 0.75"	22	2	
FTS	26	F	Pipe 42" x 0.75"	22	2	
FTS	27	B	Pipe 42" x 0.75"	33	2	
FTS	31	F	Pipe 42" x 0.75"	22	2	
FTS	32	F	Pipe 42" x 0.75"	22	2	
FTS	33	F	Pipe 42" x 0.75"	22	2	
FTS	34	F	Pipe 42" x 0.75"	22	2	
FTS	35	F	Pipe 42" x 0.75"	22	2	
FTS	36	F	Pipe 42" x 0.75"	22	2	
FTS	37	B	Pipe 42" x 0.75"	33	2	
FTS	37	C	Pipe 42" x 0.75"	25	2	
FTS	37	D	Pipe 42" x 0.75"	19	2	
FTS	37	E	Pipe 42" x 0.75"	21	2	
FTS	37	F	Pipe 42" x 0.75"	22	2	
FTS	37	H	Pipe 42" x 0.75"	20	2	

LEGEND:

- △ PHASE 1 CAISSON ENCASEMENTS
- □ PHASE 2 CAISSON ENCASEMENTS
- ◊ PHASE 3 CAISSON ENCASEMENTS
- ○ PHASE 4 CAISSON ENCASEMENTS

STRUCTURE ABBREVIATIONS

AT	AERATION TANKS
DT	DIGESTERS
FTN	FINAL TANKS - NORTH
FTS	FINAL TANKS - SOUTH
MB	MAIN BUILDING
PR	PLANT RAMPS
PT	PRELIMINARY TANKS

NOTES:

1. ENCASEMENT LENGTHS ARE MEASURED FROM THE UNDERSIDE OF THE PILE CAP TO 3' BELOW THE MUDLINE AND ARE BASED ON INSPECTIONS PERFORMED IN 2016 AND IN 2019. SEE DWG. CR-S-300 FOR TYPICAL CAISSON ENCASEMENT DETAILS.
2. CONTRACTOR SHALL INSPECT ALL CAISSONS AS FIRST ORDER OF WORK AND SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES FROM THE CONDITIONS NOTED IN THE SCHEDULE.
3. POSSIBLE OBSTRUCTIONS THAT WERE FOUND IN THE 2019 INSPECTION HAVE BEEN NOTED FOR CONTRACTOR'S CONVENIENCE. CONTRACTOR SHALL REMOVE ALL OBSTRUCTIONS AS NEEDED TO PERFORM THE WORK PRIOR TO JACKET INSTALLATION.
4. PROTRUSIONS LARGER THAN 1/4" SHALL BE REMOVED FROM THE CAISSON SURFACE. CAISSON STEEL SHALL BE GROUND SMOOTH AND THE BARE AREA SHALL BE COATED ACCORDING TO SPECIFICATION SECTION 09 91 00 PAINTING.
5. HOLES IN THE STEEL SHELL AND UNDERLYING CONCRETE SHALL BE REPAIRED PRIOR TO JACKET INSTALLATION. SEE DWG. CR-S-300 FOR CAISSON HOLE REPAIR DETAIL AND CAISSON HOLE REPAIR SCHEDULE.
6. REFER TO SPECIFICATION 03 60 10 FOR ALL EPOXY GROUTED ENCASEMENT INSTALLATION EQUIPMENT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: T. DONOVAN, PE
DRAWN BY: D. KNIGHT
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

CAISSON REHABILITATION SCHEDULE
PHASE 2 - SHEET 1 OF 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. CR-S-202.00

Last Saved By: AcostaML Last Date Saved: 10/20/2026 3:31 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches) Plot Style Table: BEDC_Acad(N).ctb
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\CR-S-200.00.dwg
Date & Time Plotted: 10/20/2026 3:32 PM
Plot Scale: 1:1

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

STRUCTURE	BENT	ROW	CAISSON SIZE	ENCASEMENT LENGTH	PHASE	NOTES
FTS	37	J	Pipe 42" x 0.75"	19	2	
FTS	37	P	Pipe 42" x 0.75"	20	2	
FTS	37	Q	Pipe 42" x 0.75"	20	2	
FTS	37	R	Pipe 42" x 0.75"	19	2	
FTS	37	S	Pipe 42" x 0.75"	18	2	
FTS	37.1	V.2	Pipe 42" x 0.75"	4	2	
PR	13	CC	Pipe 36" x 0.5"	10	2	
PR	2/3	BB	Pipe 36" x 0.5"	14	2	
PR	2/3	CC	Pipe 42" x 0.75"	10	2	
PR	2/3	DD	Pipe 42" x 0.75"	7	2	
PR	3/4	BB	Pipe 36" x 0.5"	14	2	
PR	3/4	CC	Pipe 42" x 0.75"	10	2	
PR	4/3	BB	Pipe 36" x 0.5"	14	2	
PR	4/3	CC	Pipe 42" x 0.75"	10	2	
PR	4/3	DD	Pipe 42" x 0.75"	7	2	
PR	5/6	BB	Pipe 36" x 0.5"	14	2	
PR	5/6	DD	Pipe 30" x 0.5"	7	2	
PR	6/7	CC	Pipe 42" x 0.75"	10	2	
PR	6/7	DD	Pipe 42" x 0.75"	7	2	
PR	8/9	DD	Pipe 42" x 0.75"	7	2	
PR	9/10	CC	Pipe 42" x 0.75"	10	2	
PR	10/11	CC	Pipe 42" x 0.75"	10	2	
PR	12/13	CC	Pipe 36" x 0.5"	10	2	
PR	0/1	CC	Pipe 42" x 0.75"	10	2	
PR	0/1	DD	Pipe 42" x 0.75"	7	2	

LEGEND:

- △ PHASE 1 CAISSON ENCASEMENTS
- □ PHASE 2 CAISSON ENCASEMENTS
- ◊ PHASE 3 CAISSON ENCASEMENTS
- ○ PHASE 4 CAISSON ENCASEMENTS

STRUCTURE ABBREVIATIONS

AT	AERATION TANKS
DT	DIGESTERS
FTN	FINAL TANKS - NORTH
FTS	FINAL TANKS - SOUTH
MB	MAIN BUILDING
PR	PLANT RAMPS
PT	PRELIMINARY TANKS

NOTES:

1. ENCASEMENT LENGTHS ARE MEASURED FROM THE UNDERSIDE OF THE PILE CAP TO 3' BELOW THE MUDLINE AND ARE BASED ON INSPECTIONS PERFORMED IN 2016 AND IN 2019. SEE DWG. CR-S-300 FOR TYPICAL CAISSON ENCASEMENT DETAILS.
2. CONTRACTOR SHALL INSPECT ALL CAISSONS AS FIRST ORDER OF WORK AND SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES FROM THE CONDITIONS NOTED IN THE SCHEDULE.
3. POSSIBLE OBSTRUCTIONS THAT WERE FOUND IN THE 2019 INSPECTION HAVE BEEN NOTED FOR CONTRACTOR'S CONVENIENCE. CONTRACTOR SHALL REMOVE ALL OBSTRUCTIONS AS NEEDED TO PERFORM THE WORK PRIOR TO JACKET INSTALLATION.
4. PROTRUSIONS LARGER THAN 1/4" SHALL BE REMOVED FROM THE CAISSON SURFACE. CAISSON STEEL SHALL BE GROUND SMOOTH AND THE BARE AREA SHALL BE COATED ACCORDING TO SPECIFICATION SECTION 09 91 00 PAINTING.
5. HOLES IN THE STEEL SHELL AND UNDERLYING CONCRETE SHALL BE REPAIRED PRIOR TO JACKET INSTALLATION. SEE DWG. CR-S-300 FOR CAISSON HOLE REPAIR DETAIL AND CAISSON HOLE REPAIR SCHEDULE.
6. REFER TO SPECIFICATION 03 60 10 FOR ALL EPOXY GROUTED ENCASEMENT INSTALLATION EQUIPMENT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: T. DONOVAN, PE
DRAWN BY: D. KNIGHT
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

CAISSON REHABILITATION SCHEDULE
PHASE 2 - SHEET 2 OF 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. CR-S-203.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML Last Date Saved: 10/20/2026 3:31 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches) Date & Time Plotted: 10/20/2026 3:32 PM
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\CR-S-200.00.dwg Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

STRUCTURE	BENT	ROW	CAISSON SIZE	ENCASEMENT LENGTH	PHASE	NOTES
AT	4	C	Pipe 42" x 0.75"	33	3	
AT	4	D	Pipe 42" x 0.75"	29	3	
AT	4	E	Pipe 42" x 0.75"	33	3	
AT	4	F	Pipe 42" x 0.75"	33	3	
AT	4	G	Pipe 42" x 0.75"	32	3	
AT	4	H	Pipe 42" x 0.75"	33	3	
AT	4	J	Pipe 42" x 0.75"	31	3	
AT	4	K	Pipe 42" x 0.75"	27	3	
AT	4	M.1	Pipe 42" x 0.75"	27	3	
AT	4	N	Pipe 42" x 0.75"	28	3	
AT	4	P	Pipe 42" x 0.75"	26	3	
AT	4	Q	Pipe 42" x 0.75"	25	3	
AT	4	Q.1	Pipe 36" x 0.5"	23	3	
AT	4	R	Pipe 42" x 0.75"	24	3	
AT	4	R.1	Pipe 36" x 0.5"	25	3	
AT	4	S	Pipe 42" x 0.75"	22	3	
AT	4	T	Pipe 42" x 0.75"	19	3	
AT	4	U	Pipe 42" x 0.75"	15	3	
AT	4	V	Pipe 42" x 0.75"	10	3	
AT	4	W.1	Pipe 42" x 0.75"	7	3	
AT	5	C	Pipe 42" x 0.75"	33	3	
AT	5	D	Pipe 42" x 0.75"	29	3	
AT	5	E	Pipe 42" x 0.75"	33	3	
AT	5	F	Pipe 42" x 0.75"	22	3	
AT	5	G	Pipe 42" x 0.75"	32	3	
AT	5	H	Pipe 42" x 0.75"	33	3	
AT	5	J	Pipe 42" x 0.75"	31	3	
AT	5	K	Pipe 42" x 0.75"	27	3	
AT	5	M.1	Pipe 42" x 0.75"	27	3	
AT	5	N	Pipe 42" x 0.75"	28	3	
AT	5	P	Pipe 42" x 0.75"	26	3	
AT	5	Q	Pipe 42" x 0.75"	25	3	
AT	5	Q.1	Pipe 42" x 0.75"	23	3	
AT	5	R	Pipe 42" x 0.75"	24	3	
AT	5	R.1	Pipe 36" x 0.5"	25	3	
AT	5	S	Pipe 42" x 0.75"	22	3	
AT	5	T	Pipe 42" x 0.75"	19	3	
AT	5	U	Pipe 42" x 0.75"	15	3	
AT	5	U.1	Pipe 36" x 0.5"	13	3	
AT	5	V	Pipe 42" x 0.75"	10	3	
AT	5	W.1	Pipe 42" x 0.75"	7	3	POSSIBLE OBSTRUCTION - BULKHEAD CAST AROUND CAISSON , WEST HALF EXPOSED
AT	6	C	Pipe 42" x 0.75"	33	3	
AT	6	D	Pipe 42" x 0.75"	29	3	
AT	6	E	Pipe 42" x 0.75"	33	3	
AT	6	F	Pipe 42" x 0.75"	33	3	
AT	6	G	Pipe 42" x 0.75"	32	3	
AT	6	H	Pipe 42" x 0.75"	33	3	
AT	6	J	Pipe 42" x 0.75"	31	3	
AT	6	K	Pipe 42" x 0.75"	27	3	
AT	6	M.1	Pipe 42" x 0.75"	27	3	
AT	6	N	Pipe 42" x 0.75"	28	3	
AT	6	P	Pipe 42" x 0.75"	26	3	

STRUCTURE	BENT	ROW	CAISSON SIZE	ENCASEMENT LENGTH	PHASE	NOTES
AT	6	Q	Pipe 42" x 0.75"	25	3	
AT	6	Q.1	Pipe 36" x 0.5"	23	3	
AT	6	R	Pipe 42" x 0.75"	24	3	
AT	6	R.1	Pipe 36" x 0.5"	25	3	
AT	6	S	Pipe 42" x 0.75"	22	3	
AT	6	T	Pipe 42" x 0.75"	19	3	
AT	6	T.1	Pipe 36" x 0.5"	17	3	
AT	6	U	Pipe 42" x 0.75"	15	3	
AT	6	V	Pipe 42" x 0.75"	10	3	
AT	6	W.1	Pipe 42" x 0.75"	7	3	INSTALL CAISSON HOLE REPAIR PRIOR TO ENCASEMENT
AT	7	C	Pipe 42" x 0.75"	33	3	
AT	7	D	Pipe 42" x 0.75"	29	3	
AT	7	E	Pipe 42" x 0.75"	33	3	
AT	7	F	Pipe 42" x 0.75"	22	3	
AT	7	G	Pipe 42" x 0.75"	32	3	
AT	7	H	Pipe 42" x 0.75"	33	3	
AT	7	J	Pipe 42" x 0.75"	31	3	
AT	7	K	Pipe 42" x 0.75"	27	3	
AT	7	M.1	Pipe 42" x 0.75"	27	3	
AT	7	N	Pipe 42" x 0.75"	28	3	
AT	7	P	Pipe 42" x 0.75"	26	3	
AT	7	Q	Pipe 42" x 0.75"	25	3	
AT	7	Q.1	Pipe 36" x 0.5"	23	3	
AT	7	R	Pipe 42" x 0.75"	24	3	
AT	7	R.1	Pipe 36" x 0.5"	25	3	
AT	7	S	Pipe 42" x 0.75"	22	3	
AT	7	T	Pipe 42" x 0.75"	19	3	
AT	7	T.1	Pipe 36" x 0.5"	17	3	
AT	7	U	Pipe 42" x 0.75"	15	3	
AT	7	V	Pipe 42" x 0.75"	10	3	
AT	7	W.1	Pipe 42" x 0.75"	7	3	
AT	8	C	Pipe 42" x 0.75"	33	3	
AT	8	D	Pipe 42" x 0.75"	29	3	
AT	8	E	Pipe 42" x 0.75"	33	3	
AT	8	F	Pipe 42" x 0.75"	22	3	
AT	8	G	Pipe 42" x 0.75"	32	3	
AT	8	H	Pipe 42" x 0.75"	33	3	
AT	8	J	Pipe 42" x 0.75"	31	3	
AT	8	K	Pipe 42" x 0.75"	27	3	
AT	8	M.1	Pipe 42" x 0.75"	27	3	
AT	8	N	Pipe 42" x 0.75"	28	3	
AT	8	P	Pipe 42" x 0.75"	26	3	
AT	8	Q	Pipe 42" x 0.75"	25	3	
AT	8	Q.1	Pipe 36" x 0.5"	23	3	
AT	8	R	Pipe 42" x 0.75"	24	3	
AT	8	R.1	Pipe 36" x 0.5"	25	3	
AT	8	S	Pipe 42" x 0.75"	22	3	
AT	8	S.1	Pipe 36" x 0.5"	15	3	
AT	8	T	Pipe 42" x 0.75"	19	3	
AT	8	T.1	Pipe 36" x 0.5"	17	3	
AT	8	U	Pipe 42" x 0.75"	15	3	
AT	8	V	Pipe 42" x 0.75"	10	3	

LEGEND:

△ PHASE 1 CAISSON ENCASEMENTS

□ PHASE 2 CAISSON ENCASEMENTS

◊ PHASE 3 CAISSON ENCASEMENTS

⬡ PHASE 4 CAISSON ENCASEMENTS

STRUCTURE ABBREVIATIONS

AT	AERATION TANKS
DT	DIGESTERS
FTN	FINAL TANKS - NORTH
FTS	FINAL TANKS - SOUTH
MB	MAIN BUILDING
PR	PLANT RAMPS
PT	PRELIMINARY TANKS

NOTES:

1. ENCASEMENT LENGTHS ARE MEASURED FROM THE UNDERSIDE OF THE PILE CAP TO 3' BELOW THE MUDLINE AND ARE BASED ON INSPECTIONS PERFORMED IN 2016 AND IN 2019. SEE DWG. CR-S-300 FOR TYPICAL CAISSON ENCASEMENT DETAILS.
2. CONTRACTOR SHALL INSPECT ALL CAISSONS AS FIRST ORDER OF WORK AND SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES FROM THE CONDITIONS NOTED IN THE SCHEDULE.
3. POSSIBLE OBSTRUCTIONS THAT WERE FOUND IN THE 2019 INSPECTION HAVE BEEN NOTED FOR CONTRACTOR'S CONVENIENCE. CONTRACTOR SHALL REMOVE ALL OBSTRUCTIONS AS NEEDED TO PERFORM THE WORK PRIOR TO JACKET INSTALLATION.
4. PROTRUSIONS LARGER THAN 1/4" SHALL BE REMOVED FROM THE CAISSON SURFACE. CAISSON STEEL SHALL BE GROUND SMOOTH AND THE BARE AREA SHALL BE COATED ACCORDING TO SPECIFICATION SECTION 09 91 00 PAINTING.
5. HOLES IN THE STEEL SHELL AND UNDERLYING CONCRETE SHALL BE REPAIRED PRIOR TO JACKET INSTALLATION. SEE DWG. CR-S-300 FOR CAISSON HOLE REPAIR DETAIL AND CAISSON HOLE REPAIR SCHEDULE.
6. REFER TO SPECIFICATION 03 60 10 FOR ALL EPOXY GROUTED ENCASEMENT INSTALLATION EQUIPMENT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: T. DONOVAN, PE
DRAWN BY: D. KNIGHT
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

CAISSON REHABILITATION SCHEDULE
PHASE 3 - SHEET 1 OF 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. CR-S-204.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Last Date Saved: 10/20/2026 3:31 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\CR-S-200.00.dwg
Date & Time Plotted: 10/20/2026 3:32 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

STRUCTURE	BENT	ROW	CAISSON SIZE	ENCASEMENT LENGTH	PHASE	NOTES
AT	8	W.1	Pipe 42" x 0.75"	7	3	
AT	9	C	Pipe 42" x 0.75"	33	3	
AT	9	D	Pipe 42" x 0.75"	29	3	
AT	9	E	Pipe 42" x 0.75"	33	3	
AT	9	F	Pipe 42" x 0.75"	33	3	
AT	9	G	Pipe 42" x 0.75"	32	3	
AT	9	H	Pipe 42" x 0.75"	33	3	
AT	9	J	Pipe 42" x 0.75"	31	3	
AT	9	K	Pipe 42" x 0.75"	27	3	
AT	9	M.1	Pipe 42" x 0.75"	27	3	
AT	9	N	Pipe 42" x 0.75"	28	3	
AT	9	P	Pipe 42" x 0.75"	26	3	
AT	9	Q	Pipe 42" x 0.75"	25	3	
AT	9	Q.1	Pipe 36" x 0.5"	23	3	
AT	9	R	Pipe 42" x 0.75"	15	3	
AT	9	R.1	Pipe 36" x 0.5"	25	3	
AT	9	S	Pipe 42" x 0.75"	22	3	
AT	9	T	Pipe 42" x 0.75"	19	3	
AT	9	U	Pipe 42" x 0.75"	15	3	
AT	9	V	Pipe 42" x 0.75"	10	3	
AT	9	W.1	Pipe 42" x 0.75"	7	3	
AT	10	C	Pipe 42" x 0.75"	33	3	
AT	10	D	Pipe 42" x 0.75"	29	3	
AT	10	E	Pipe 42" x 0.75"	33	3	
AT	10	F	Pipe 42" x 0.75"	33	3	
AT	10	G	Pipe 42" x 0.75"	32	3	
AT	10	H	Pipe 42" x 0.75"	33	3	
AT	10	J	Pipe 42" x 0.75"	31	3	
AT	10	K	Pipe 42" x 0.75"	27	3	
AT	10	M.1	Pipe 42" x 0.75"	27	3	
AT	10	N	Pipe 42" x 0.75"	28	3	POSSIBLE OBSTRUCTION - H-PILE WITHIN 2" OF SOUTHEAST FACE
AT	10	P	Pipe 42" x 0.75"	26	3	
AT	10	Q	Pipe 42" x 0.75"	25	3	POSSIBLE OBSTRUCTION - H-PILE TOUCHING SOUTH FACE
AT	10	Q.1	Pipe 36" x 0.5"	23	3	
AT	10	R	Pipe 42" x 0.75"	24	3	
AT	10	R.1	Pipe 36" x 0.5"	25	3	
AT	10	S	Pipe 42" x 0.75"	22	3	
AT	10	T	Pipe 42" x 0.75"	19	3	
AT	10	U	Pipe 42" x 0.75"	15	3	
AT	10	V	Pipe 42" x 0.75"	10	3	

LEGEND:

- △ PHASE 1 CAISSON ENCASEMENTS
- □ PHASE 2 CAISSON ENCASEMENTS
- ◊ PHASE 3 CAISSON ENCASEMENTS
- ○ PHASE 4 CAISSON ENCASEMENTS

STRUCTURE ABBREVIATIONS

AT	AERATION TANKS
DT	DIGESTERS
FTN	FINAL TANKS - NORTH
FTS	FINAL TANKS - SOUTH
MB	MAIN BUILDING
PR	PLANT RAMPS
PT	PRELIMINARY TANKS

NOTES:

1. ENCASEMENT LENGTHS ARE MEASURED FROM THE UNDERSIDE OF THE PILE CAP TO 3' BELOW THE MUDLINE AND ARE BASED ON INSPECTIONS PERFORMED IN 2016 AND IN 2019. SEE DWG. CR-S-300 FOR TYPICAL CAISSON ENCASEMENT DETAILS.
2. CONTRACTOR SHALL INSPECT ALL CAISSONS AS FIRST ORDER OF WORK AND SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES FROM THE CONDITIONS NOTED IN THE SCHEDULE.
3. POSSIBLE OBSTRUCTIONS THAT WERE FOUND IN THE 2019 INSPECTION HAVE BEEN NOTED FOR CONTRACTOR'S CONVENIENCE. CONTRACTOR SHALL REMOVE ALL OBSTRUCTIONS AS NEEDED TO PERFORM THE WORK PRIOR TO JACKET INSTALLATION.
4. PROTRUSIONS LARGER THAN 1/4" SHALL BE REMOVED FROM THE CAISSON SURFACE. CAISSON STEEL SHALL BE GROUND SMOOTH AND THE BARE AREA SHALL BE COATED ACCORDING TO SPECIFICATION SECTION 09 91 00 PAINTING.
5. HOLES IN THE STEEL SHELL AND UNDERLYING CONCRETE SHALL BE REPAIRED PRIOR TO JACKET INSTALLATION. SEE DWG. CR-S-300 FOR CAISSON HOLE REPAIR DETAIL AND CAISSON HOLE REPAIR SCHEDULE.
6. REFER TO SPECIFICATION 03 60 10 FOR ALL EPOXY GROUTED ENCASEMENT INSTALLATION EQUIPMENT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: T. DONOVAN, PE
DRAWN BY: D. KNIGHT
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

CAISSON REHABILITATION SCHEDULE
PHASE 3 - SHEET 2 OF 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. CR-S-205.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML Last Date Saved: 10/20/2026 3:31 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches) Date & Time Plotted: 10/20/2026 3:33 PM
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\CR-S-200.00.dwg Plot Style Table: BEDC_Acad(N).ctb
Plot Scale: 1:1

STRUCTURE	BENT	ROW	CAISSON SIZE	ENCASEMENT LENGTH	PHASE	NOTES
AT	1.1	C	Pipe 42" x 0.75"	33	4	
AT	1.1	D	Pipe 42" x 0.75"	29	4	
AT	1.1	E	Pipe 42" x 0.75"	33	4	
AT	1.1	F	Pipe 42" x 0.75"	33	4	
AT	1.1	G	Pipe 42" x 0.75"	32	4	
AT	1.1	H	Pipe 42" x 0.75"	33	4	
AT	1.1	J	Pipe 42" x 0.75"	31	4	
AT	1.1	K	Pipe 42" x 0.75"	27	4	
AT	1.1	R	Pipe 42" x 0.75"	24	4	
AT	1.1	S	Pipe 42" x 0.75"	22	4	
AT	1.1	W.1	Pipe 42" x 0.75"	7	4	
AT	2	C	Pipe 42" x 0.75"	33	4	
AT	2	D	Pipe 42" x 0.75"	29	4	
AT	2	E	Pipe 42" x 0.75"	33	4	
AT	2	F	Pipe 42" x 0.75"	33	4	
AT	2	G	Pipe 42" x 0.75"	32	4	
AT	2	H	Pipe 42" x 0.75"	33	4	
AT	2	J	Pipe 42" x 0.75"	31	4	
AT	2	K	Pipe 42" x 0.75"	27	4	
AT	2	M.1	Pipe 42" x 0.75"	27	4	
AT	2	N	Pipe 42" x 0.75"	28	4	
AT	2	P	Pipe 42" x 0.75"	26	4	
AT	2	Q	Pipe 42" x 0.75"	25	4	
AT	2	R	Pipe 42" x 0.75"	24	4	
AT	2	S	Pipe 42" x 0.75"	22	4	
AT	2	T	Pipe 42" x 0.75"	19	4	
AT	2	U	Pipe 42" x 0.75"	15	4	
AT	2	V	Pipe 42" x 0.75"	10	4	
AT	2	W.1	Pipe 42" x 0.75"	7	4	POSSIBLE OBSTRUCTION - PIPE AROUND BOTTOM OF CAISSON
AT	3	C	Pipe 42" x 0.75"	33	4	
AT	3	D	Pipe 42" x 0.75"	29	4	
AT	3	E	Pipe 42" x 0.75"	33	4	
AT	3	F	Pipe 42" x 0.75"	33	4	
AT	3	G	Pipe 42" x 0.75"	32	4	
AT	3	H	Pipe 42" x 0.75"	33	4	
AT	3	J	Pipe 42" x 0.75"	31	4	
AT	3	K	Pipe 42" x 0.75"	27	4	
AT	3	M.1	Pipe 42" x 0.75"	27	4	
AT	3	N	Pipe 42" x 0.75"	28	4	
AT	3	P	Pipe 42" x 0.75"	26	4	
AT	3	Q	Pipe 42" x 0.75"	25	4	
AT	3	Q.1	Pipe 36" x 0.5"	23	4	
AT	3	R	Pipe 42" x 0.75"	24	4	
AT	3	R.1	Pipe 36" x 0.5"	25	4	
AT	3	S	Pipe 42" x 0.75"	22	4	
AT	3	S.1	Pipe 36" x 0.5"	15	4	
AT	3	T	Pipe 42" x 0.75"	19	4	
AT	3	T.1	Pipe 36" x 0.5"	17	4	
AT	3	U	Pipe 42" x 0.75"	15	4	
AT	3	U.1	Pipe 36" x 0.5"	13	4	
AT	3	V	Pipe 42" x 0.75"	10	4	
AT	3	W.1	Pipe 42" x 0.75"	7	4	

STRUCTURE	BENT	ROW	CAISSON SIZE	ENCASEMENT LENGTH	PHASE	NOTES
MB	1	A	Pipe 36" x 0.5"	10	4	
MB	1	B	Pipe 36" x 0.5"	8	4	
MB	2	A	Pipe 36" x 0.5"	10	4	
MB	2	B	Pipe 36" x 0.5"	8	4	
MB	3	A	Pipe 36" x 0.5"	10	4	
MB	3	AA	Pipe 36" x 0.5"	15	4	
MB	3	B	Pipe 36" x 0.5"	8	4	
MB	4	A	Pipe 36" x 0.5"	10	4	
MB	4	AA	Pipe 36" x 0.5"	15	4	
MB	5	A	Pipe 36" x 0.5"	10	4	
MB	6	A	Pipe 36" x 0.5"	10	4	
MB	7	A	Pipe 36" x 0.5"	10	4	
MB	10	A.1	Pipe 36" x 0.5"	14	4	
MB	12	A.1	Pipe 36" x 0.5"	14	4	
MB	13	A.1	Pipe 36" x 0.5"	14	4	
MB	13	B/A	Pipe 36" x 0.5"	14	4	
MB	14	A.1	Pipe 36" x 0.5"	14	4	
MB	15	A.1	Pipe 36" x 0.5"	14	4	
MB	15	F	Pipe 42" x 0.75"	22	4	
MB	16	A.1	Pipe 36" x 0.5"	14	4	
MB	16	F	Pipe 36" x 0.5"	12	4	
MB	17	A.1	Pipe 36" x 0.5"	14	4	
MB	17	F	Pipe 36" x 0.5"	12	4	
MB	18	A.1	Pipe 36" x 0.5"	14	4	
MB	18	F	Pipe 36" x 0.5"	12	4	
MB	19	A.1	Pipe 36" x 0.5"	14	4	
MB	19	F	Pipe 36" x 0.5"	12	4	
MB	7/8	AA	Pipe 24" x 0.5"	15	4	
MB	0/1	A	Pipe 42" x 0.75"	49	4	
MB	0/1	B	Pipe 42" x 0.75"	42	4	
MB	20/19	B/A	Pipe 36" x 0.5"	14	4	
MB	20/19	C/B	Pipe 36" x 0.5"	13	4	
MB	20/19	D	Pipe 36" x 0.5"	12	4	
PT	3	A.1	Pipe 36" x 0.5"	39	4	
PT	6	A.1	Pipe 36" x 0.5"	39	4	
PT	7	A.1	Pipe 36" x 0.5"	39	4	
PT	8	A.1	Pipe 36" x 0.5"	39	4	
PT	9	A.1	Pipe 36" x 0.5"	39	4	
PT	10	A.1	Pipe 36" x 0.5"	14	4	
PT	12	K	Pipe 42" x 0.75"	28	4	
PT	13	K	Pipe 42" x 0.75"	28	4	
PT	14	K	Pipe 42" x 0.75"	28	4	
PT	14	L	Pipe 42" x 0.75"	29	4	
PT	14	M	Pipe 42" x 0.75"	28	4	
PT	14	M.1	Pipe 36" x 0.5"	14	4	
PT	15	K	Pipe 42" x 0.75"	28	4	
PT	15	L	Pipe 42" x 0.75"	29	4	
PT	15	M	Pipe 42" x 0.75"	28	4	
PT	15	M.1	Pipe 36" x 0.5"	14	4	
PT	16	K	Pipe 42" x 0.75"	28	4	
PT	16	L	Pipe 42" x 0.75"	29	4	
PT	16	M	Pipe 42" x 0.75"	28	4	
PT	16	M.1	Pipe 36" x 0.5"	14	4	

LEGEND:

△ PHASE 1 CAISSON ENCASEMENTS

□ PHASE 2 CAISSON ENCASEMENTS

◊ PHASE 3 CAISSON ENCASEMENTS

⬡ PHASE 4 CAISSON ENCASEMENTS

STRUCTURE ABBREVIATIONS

AT	AERATION TANKS
DT	DIGESTERS
FTN	FINAL TANKS - NORTH
FTS	FINAL TANKS - SOUTH
MB	MAIN BUILDING
PR	PLANT RAMPS
PT	PRELIMINARY TANKS

NOTES:

1. ENCASEMENT LENGTHS ARE MEASURED FROM THE UNDERSIDE OF THE PILE CAP TO 3' BELOW THE MUDLINE AND ARE BASED ON INSPECTIONS PERFORMED IN 2016 AND IN 2019. SEE DWG. CR-S-300 FOR TYPICAL CAISSON ENCASEMENT DETAILS.
2. CONTRACTOR SHALL INSPECT ALL CAISSONS AS FIRST ORDER OF WORK AND SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES FROM THE CONDITIONS NOTED IN THE SCHEDULE.
3. POSSIBLE OBSTRUCTIONS THAT WERE FOUND IN THE 2019 INSPECTION HAVE BEEN NOTED FOR CONTRACTOR'S CONVENIENCE. CONTRACTOR SHALL REMOVE ALL OBSTRUCTIONS AS NEEDED TO PERFORM THE WORK PRIOR TO JACKET INSTALLATION.
4. PROTRUSIONS LARGER THAN 1/4" SHALL BE REMOVED FROM THE CAISSON SURFACE. CAISSON STEEL SHALL BE GROUND SMOOTH AND THE BARE AREA SHALL BE COATED ACCORDING TO SPECIFICATION SECTION 09 91 00 PAINTING.
5. HOLES IN THE STEEL SHELL AND UNDERLYING CONCRETE SHALL BE REPAIRED PRIOR TO JACKET INSTALLATION. SEE DWG. CR-S-300 FOR CAISSON HOLE REPAIR DETAIL AND CAISSON HOLE REPAIR SCHEDULE.
6. REFER TO SPECIFICATION 03 60 10 FOR ALL EPOXY GROUTED ENCASEMENT INSTALLATION EQUIPMENT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: T. DONOVAN, PE
DRAWN BY: D. KNIGHT
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

CAISSON REHABILITATION SCHEDULE
PHASE 4 - SHEET 1 OF 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. CR-S-206.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\CR-S-200.00.dwg
Last Date Saved: 10/20/2026 3:31 PM
Date & Time Plotted: 10/20/2026 3:33 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

STRUCTURE	BENT	ROW	CAISSON SIZE	ENCASEMENT LENGTH	PHASE	NOTES
PT	17	J	Pipe 42" x 0.75"	28	4	
PT	17	K	Pipe 42" x 0.75"	28	4	
PT	17	L	Pipe 42" x 0.75"	29	4	
PT	17	M	Pipe 42" x 0.75"	28	4	
PT	17	M.1	Pipe 36" x 0.5"	14	4	
PT	18	J	Pipe 42" x 0.75"	28	4	
PT	18	K	Pipe 42" x 0.75"	28	4	
PT	18	L	Pipe 42" x 0.75"	29	4	
PT	18	M	Pipe 42" x 0.75"	28	4	
PT	18	M.1	Pipe 36" x 0.5"	14	4	
PT	19	J	Pipe 42" x 0.75"	28	4	
PT	19	K	Pipe 42" x 0.75"	28	4	
PT	19	L	Pipe 42" x 0.75"	29	4	
PT	19	M	Pipe 42" x 0.75"	28	4	
PT	19	M.1	Pipe 36" x 0.5"	14	4	
PT	20	J	Pipe 42" x 0.75"	28	4	
PT	20	K	Pipe 42" x 0.75"	28	4	
PT	20	L	Pipe 42" x 0.75"	29	4	
PT	20	M	Pipe 42" x 0.75"	28	4	
PT	20	M.1	Pipe 36" x 0.5"	14	4	
PT	21	J	Pipe 42" x 0.75"	28	4	
PT	21	K	Pipe 42" x 0.75"	28	4	
PT	21	L	Pipe 42" x 0.75"	29	4	
PT	21	M	Pipe 42" x 0.75"	28	4	
PT	21	M.1	Pipe 36" x 0.5"	14	4	
PT	21.1	C	Pipe 36" x 0.5"	44	4	
PT	21.1	D	Pipe 36" x 0.5"	41	4	
PT	21.1	F	Pipe 36" x 0.5"	35	4	
PT	21.1	K	Pipe 36" x 0.5"	28	4	

LEGEND:

- △ PHASE 1 CAISSON ENCASEMENTS
- □ PHASE 2 CAISSON ENCASEMENTS
- ◊ PHASE 3 CAISSON ENCASEMENTS
- ⬡ PHASE 4 CAISSON ENCASEMENTS

STRUCTURE ABBREVIATIONS

AT	AERATION TANKS
DT	DIGESTERS
FTN	FINAL TANKS - NORTH
FTS	FINAL TANKS - SOUTH
MB	MAIN BUILDING
PR	PLANT RAMPS
PT	PRELIMINARY TANKS

NOTES:

1. ENCASEMENT LENGTHS ARE MEASURED FROM THE UNDERSIDE OF THE PILE CAP TO 3' BELOW THE MUDLINE AND ARE BASED ON INSPECTIONS PERFORMED IN 2016 AND IN 2019. SEE DWG. CR-S-300 FOR TYPICAL CAISSON ENCASEMENT DETAILS.
2. CONTRACTOR SHALL INSPECT ALL CAISSONS AS FIRST ORDER OF WORK AND SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES FROM THE CONDITIONS NOTED IN THE SCHEDULE.
3. POSSIBLE OBSTRUCTIONS THAT WERE FOUND IN THE 2019 INSPECTION HAVE BEEN NOTED FOR CONTRACTOR'S CONVENIENCE. CONTRACTOR SHALL REMOVE ALL OBSTRUCTIONS AS NEEDED TO PERFORM THE WORK PRIOR TO JACKET INSTALLATION.
4. PROTRUSIONS LARGER THAN 1/4" SHALL BE REMOVED FROM THE CAISSON SURFACE. CAISSON STEEL SHALL BE GROUND SMOOTH AND THE BARE AREA SHALL BE COATED ACCORDING TO SPECIFICATION SECTION 09 91 00 PAINTING.
5. HOLES IN THE STEEL SHELL AND UNDERLYING CONCRETE SHALL BE REPAIRED PRIOR TO JACKET INSTALLATION. SEE DWG. CR-S-300 FOR CAISSON HOLE REPAIR DETAIL AND CAISSON HOLE REPAIR SCHEDULE.
6. REFER TO SPECIFICATION 03 60 10 FOR ALL EPOXY GROUTED ENCASEMENT INSTALLATION EQUIPMENT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: T. DONOVAN, PE
DRAWN BY: D. KNIGHT
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

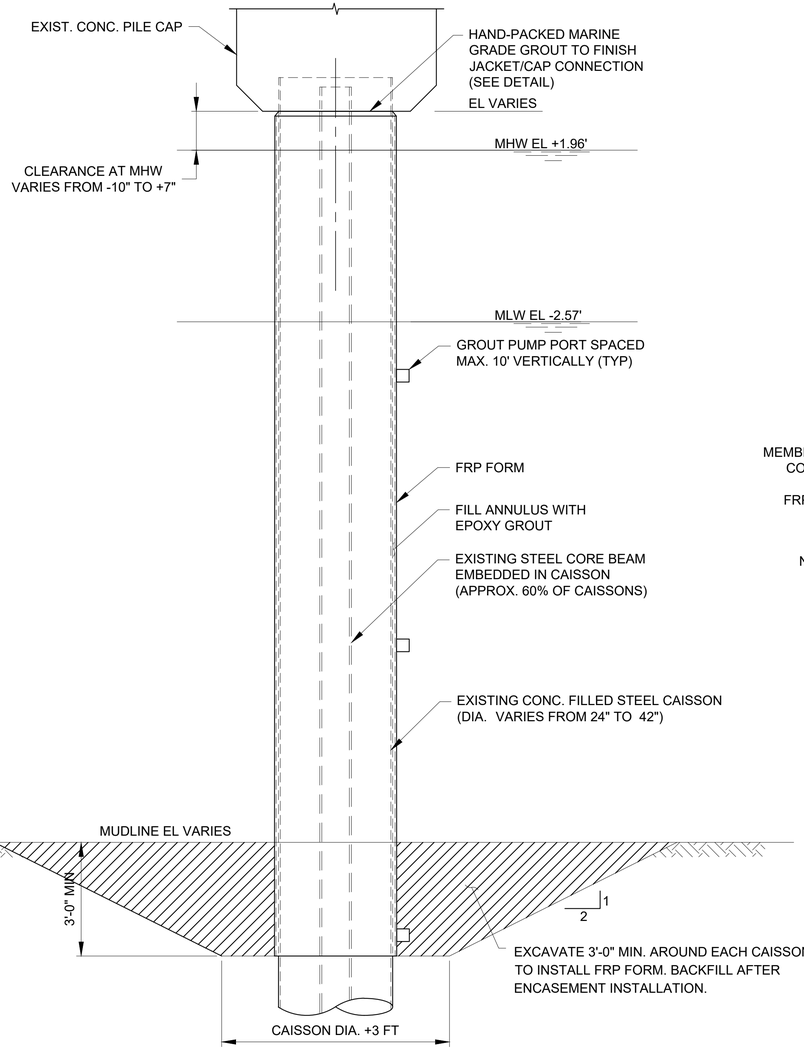
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

CAISSON REHABILITATION SCHEDULE
PHASE 4 - SHEET 2 OF 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. CR-S-207.00

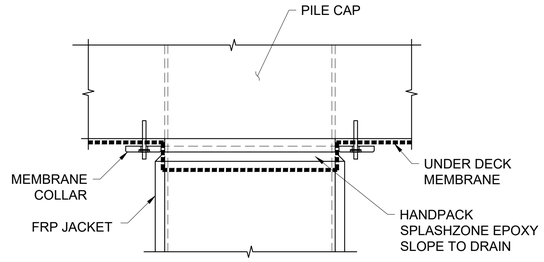
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML Last Date Saved: 10/20/2026 3:31 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches) Date & Time Plotted: 10/20/2026 3:33 PM
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\CR-S-200.00.dwg Plot Style Table: BEDC_Acad(N).ctb Plot Scale: 1:1



FULL-HEIGHT FRP JACKET DETAIL

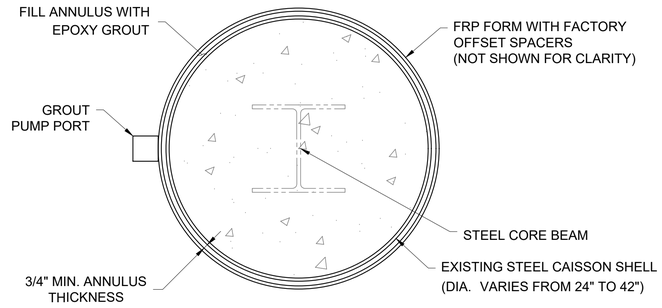
SCALE: 1/2"=1'-0"



NOTE: UNDERDECK MEMBRANE SHALL BE INSTALLED PRIOR TO INSTALLING CAISSON ENCASEMENT.

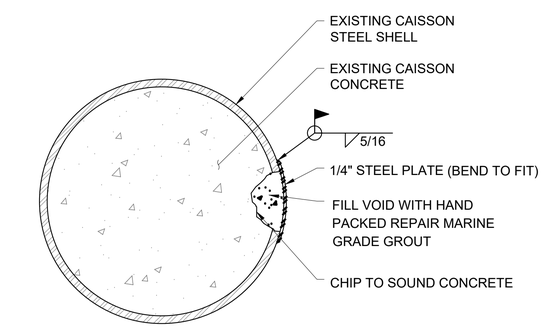
ENCASEMENT TOP DETAIL WITH UNDERDECK MEMBRANE

SCALE: 3/4"=1'-0"

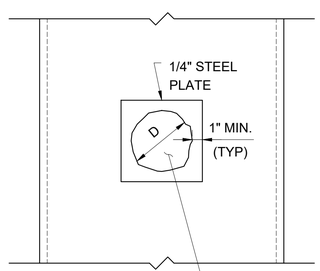


TYPICAL ENCASEMENT SECTION

SCALE: 1"=1'-0"



PLAN



ELEVATION

CAISSON HOLE REPAIR DETAIL

NOT TO SCALE

NOTES:

1. INSTALL TEMPORARY TURBIDITY CURTAIN AROUND THE WORK AREA.
2. USING A 10 KSI MIN. HIGH-PRESSURE WASHER, CLEAN CAISSON SURFACE OF MARINE GROWTH, PROTECTIVE COATING, AND RUST.
3. PERFORM CAISSON HOLE REPAIRS PRIOR TO INSTALLATION OF FRP JACKET.
4. INSTALL UNDERDECK MEMBRANE PRIOR TO INSTALLING CAISSON ENCASEMENTS.
5. EXCAVATE INTO MUDLINE AT CAISSON BOTTOM 3'-0" MIN. TO ENABLE EMBEDMENT OF FRP JACKET INTO MUDLINE. RESTORE MUDLINE SURROUNDING THE NEW JACKET TO EXISTING ELEVATION AFTER COMPLETION OF JACKET INSTALLATION.
6. FRP FORMS SHALL BE CENTERED ON CAISSON WITH PLASTIC SPACERS.
7. PUMP EPOXY GROUT FROM BOTTOM UP INTO ANNULUS BETWEEN FRP JACKET AND CAISSON USING PRE-INSTALLED PUMP PORTS.
8. HAND PACK MARINE GRADE EPOXY GROUT AT CAISSON/PILE CAP CONNECTION. SLOPE TO DRAIN.

CAISSON HOLE REPAIR SCHEDULE

STRUCTURE	BENT	ROW	CAISSON SIZE	HOLE DIMENSION	PHASE
DT	8/9	U	Pipe42"X0.75"	4"X2"	1
DT	12/13	T	Pipe42"X0.75"	4"X2"X3"	1
AT	6	W.1	Pipe42"X0.75"	4" DIA.	3

1"=1'-0": 0, 1, 2 FT.
3/4"=1'-0": 0, 1, 2, 3 FT.
1/2"=1'-0": 0, 1, 2, 3, 4 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: T. DONOVAN, PE
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

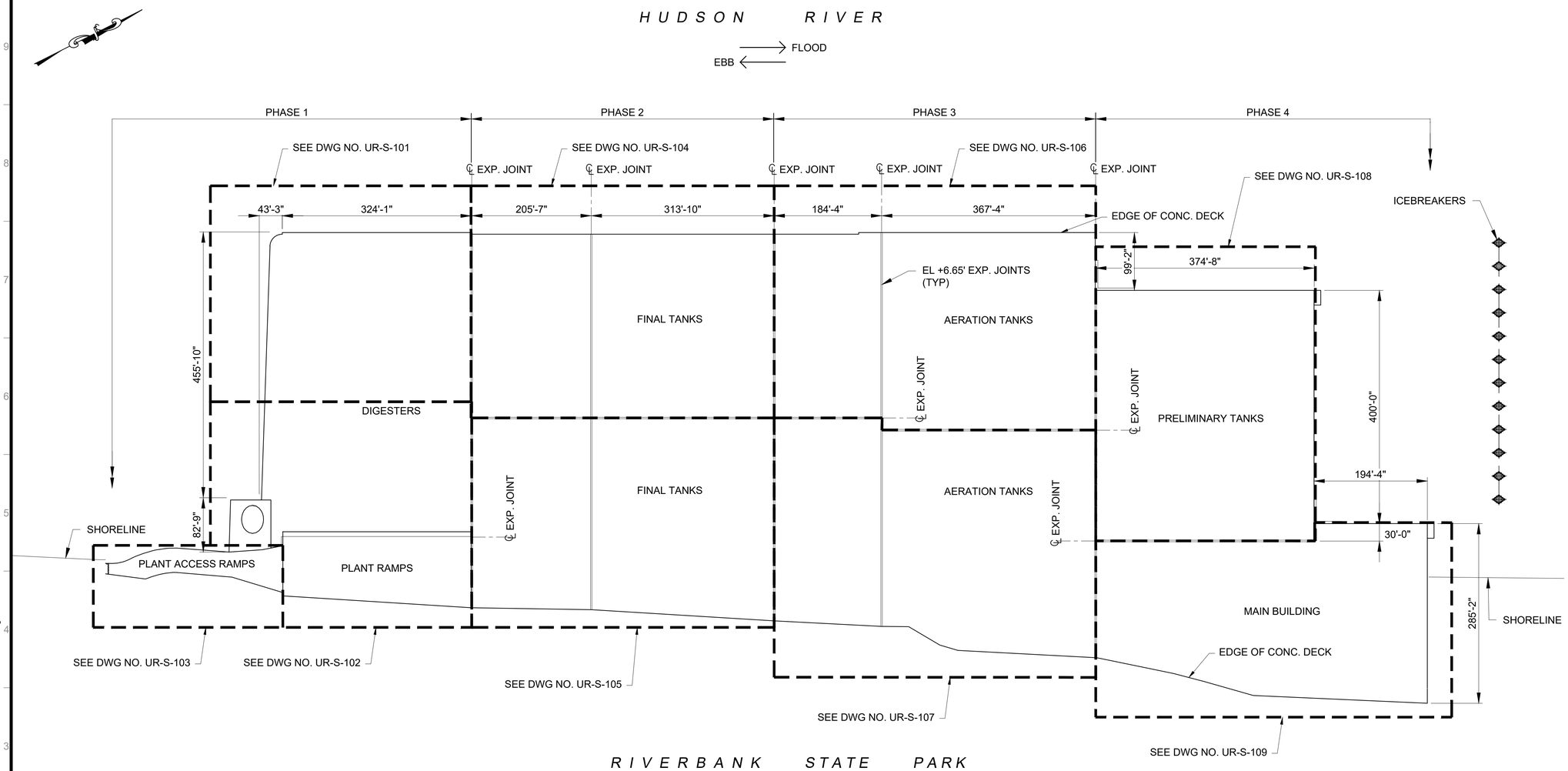
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

CAISSON JACKETING DETAILS

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. CR-S-300.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\CR-S-300.00.dwg
Last Date Saved: 10/20/2026 3:31 PM
Date & Time Plotted: 10/20/2026 3:33 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



UNDERDECK REHABILITATION NOTES:

1. ALL WORK SHALL BE COORDINATED WITH THE PLANT OPERATORS. OTHER PROJECTS AND CONTRACTORS MAY BE PERFORMING ADDITIONAL WORK IN OR ADJACENT TO THE PROJECT AREA, CONCURRENT WITH THIS PROJECT. CONTRACTOR SHALL COORDINATE WITH ALL ADDITIONAL ONGOING WORK.
2. CONTRACTOR SHALL INSTALL TEMPORARY PROTECTION MEASURES TO AVOID DISPERSION OF DEMOLISHED AND REMOVED MATERIALS INTO THE WATERWAY.
3. THIS PORTION OF THE WORK INCLUDES CONCRETE REPAIRS, EXPANSION JOINT REPAIRS, MEMBRANE REMOVAL, SURFACE CLEANING, INSTALLATION OF NEW MEMBRANE TO THE UNDERDECK SURFACES.
4. CONTRACTOR SHALL PERFORM CONCRETE REPAIRS IN ACCORDANCE WITH TYPICAL DETAILS GIVEN ON DWG. UR-S-300, UR-S-301, AND SPECIFICATION 03 01 30.71 - REHABILITATION OF CAST-IN-PLACE CONCRETE.
5. ALL EXISTING MEMBRANE MATERIAL SHALL BE REMOVED FROM THE UNDERDECK SURFACE TO SOUND MATERIAL PER THE DEMOLITION DETAILS ON DWG. UR-DS-100.00. SEE DEMOLITION DRAWINGS FOR DETAILS. FOLLOWING THE MEMBRANE REMOVAL, CONTRACTOR SHALL PERFORM AN INSPECTION OF THE UNDERLYING CONCRETE TO DOCUMENT ADDITIONAL DEFECTS. SEE SPECIFICATION 03 01 30.71 - REHABILITATION OF CAST-IN-PLACE CONCRETE FOR INSPECTION REQUIREMENTS. REPAIR OF THE ADDITIONAL DEFECTS SHALL BE PERFORMED PER TYPICAL DETAILS GIVEN ON DWG. UR-S-300 AND UR-S-301.
6. FOLLOWING MEMBRANE REMOVAL AND REPAIR OF IDENTIFIED CONCRETE SOFFIT DEFECTS, NEW MEMBRANE SHALL BE INSTALLED PER THE MEMBRANE INSTALLATION DETAILS.
7. UPON COMPLETION OF THE WORK, CONTRACTOR SHALL REMOVAL ALL TEMPORARY PROTECTION MEASURES AND OTHER TEMPORARY INSTALLATIONS.

UNDERDECK REPAIRS GENERAL PHASING AND ARRANGEMENT PLAN (EL +6.65')

SCALE: 1"=100'-0"

0 100 200 FT.
1"=100'

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA, EF
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

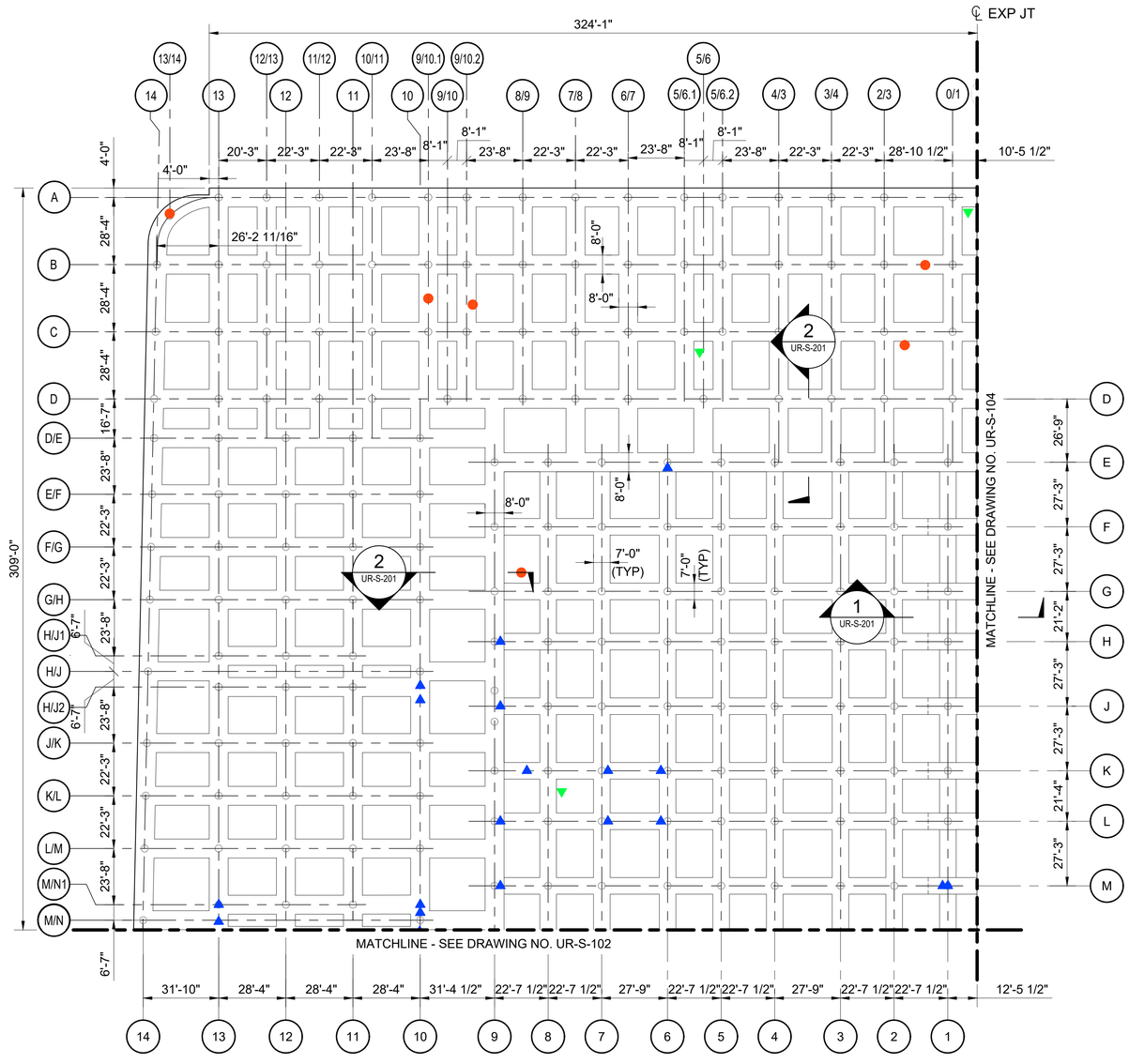
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

UNDERDECK REPAIRS GENERAL PHASING AND ARRANGEMENT PLAN (EL +6.65')

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-001.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129598\UR-S-001.00.dwg
Last Date Saved: 9/18/2026 11:36 AM
Date & Time Plotted: 10/20/2026 3:42 PM
Plot Style Table: BEDC_Acad(N).ctb
Plot Scale: 1:1



UNDERDECK REPAIR PLAN - PHASE 1 WEST

SCALE: 1"=30'-0"

PILE LEGEND

- STEEL CAISSON
- STEEL H-PILE
- STEEL H-PILE BATTER
- 1 — UNDERDECK BENT
- A — UNDERDECK ROW

FRAMING LEGEND

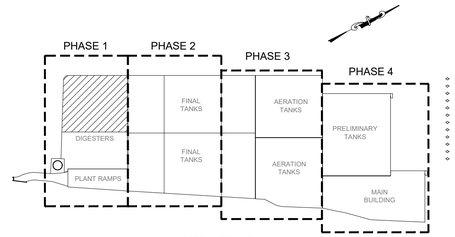
- CONCRETE PILE CAP
- EXPANSION JOINT

NOTES:

1. REFER TO DWGS UR-S-303 TO UR-S-316 FOR CONCRETE REPAIR SCHEDULES.
2. MEMBRANE DEFECTS NOT SHOWN ON REPAIR PLANS. SEE REPAIR SCHEDULES ON DWGS UR-S-510 TO UR-S-553 FOR LOCATIONS AND DIMENSIONS.

REPAIRS LEGEND

- TYPE 4 STEEL PENETRATION REPAIRS
- TYPE 7 CORE HOLE REPAIRS
- TYPE 8 PVC DRAIN PIPE REPAIRS



KEY PLAN

1"=30' 0 30 60 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

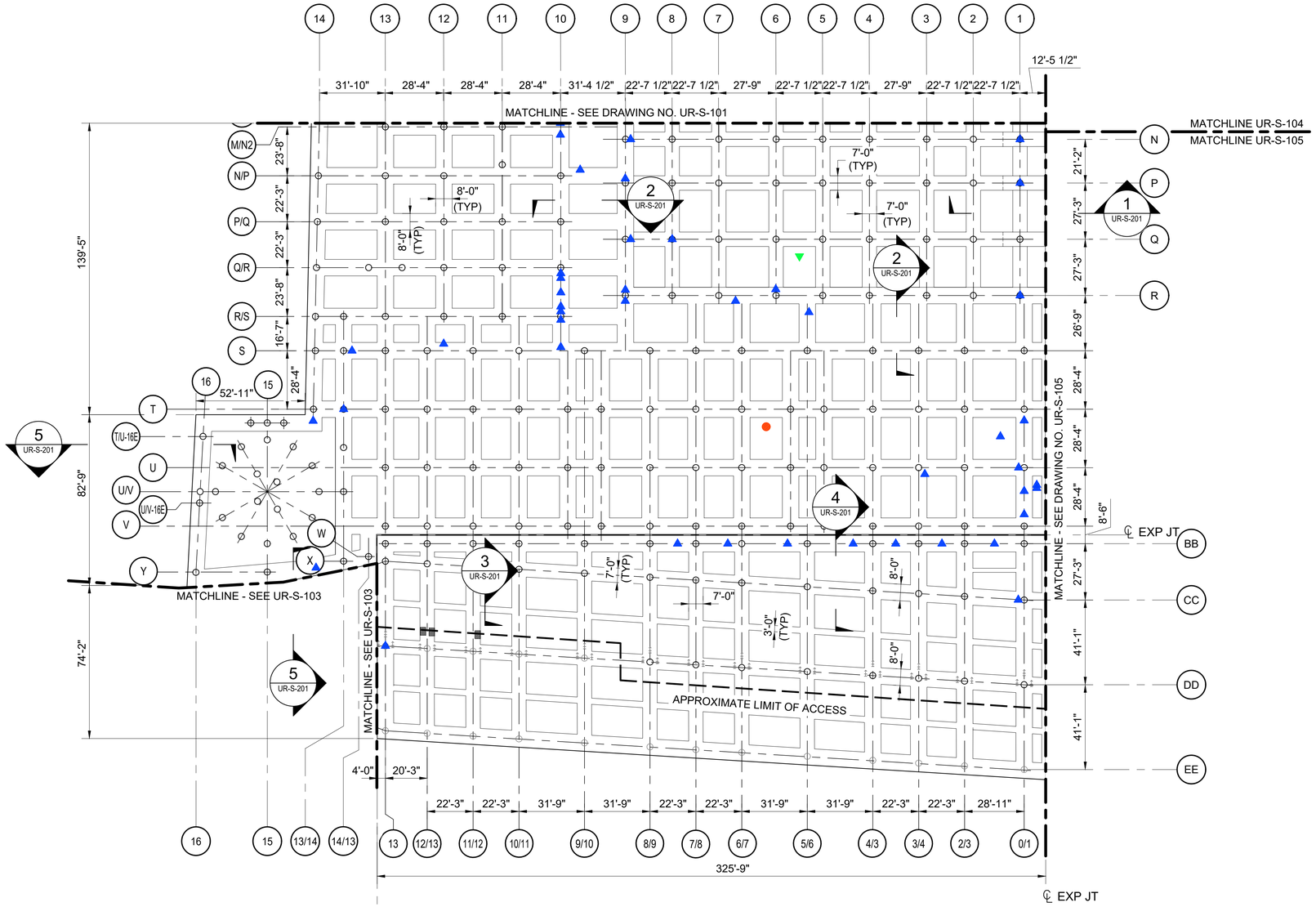
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

UNDERDECK REPAIR PLAN - PHASE 1 WEST

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-101.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-101.00.dwg
Last Date Saved: 10/20/2026 3:36 PM
Date & Time Plotted: 10/20/2026 3:42 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



UNDERDECK REPAIR PLAN - PHASE 1 EAST

SCALE: 1"=30'-0"

PILE LEGEND

- STEEL CAISSON
- STEEL H-PILE
- STEEL H-PILE BATTER
- 1 — UNDERDECK BENT
- A — UNDERDECK ROW

FRAMING LEGEND

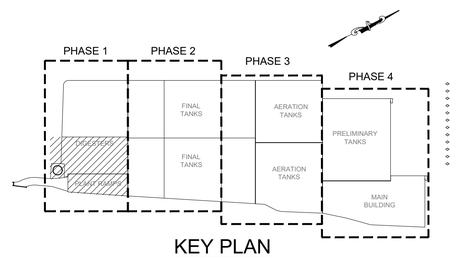
- CONCRETE PILE CAP
- EXPANSION JOINT

NOTES:

1. REFER TO DWGS UR-S-303 TO UR-S-316 FOR CONCRETE REPAIR SCHEDULES.
2. MEMBRANE DEFECTS NOT SHOWN ON REPAIR PLANS. SEE REPAIR SCHEDULES ON DWGS UR-S-510 TO UR-S-553 FOR LOCATIONS AND DIMENSIONS.

REPAIRS LEGEND

- TYPE 2 CONC REPAIRS
- TYPE 4 STEEL PENETRATION REPAIRS
- TYPE 7 CORE HOLE REPAIRS
- TYPE 8 PVC DRAIN PIPE REPAIRS



KEY PLAN

0 30 60 FT.
1"=30'

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

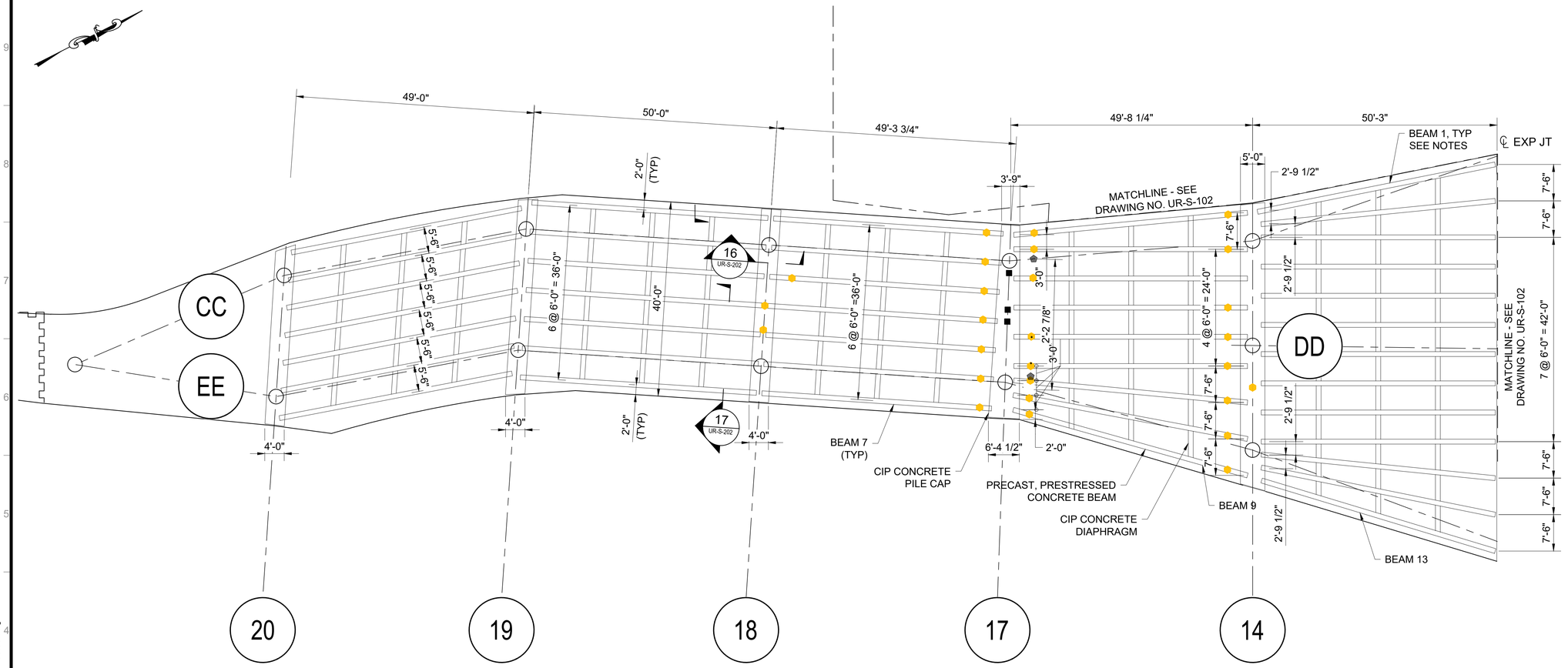
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

UNDERDECK REPAIR PLAN - PHASE 1 EAST

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-102.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-102.00.dwg
Date & Time Plotted: 10/20/2026 3:42 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb
Last Date Saved: 10/20/2026 3:36 PM



PILE LEGEND

- STEEL CAISSON
- STEEL H-PILE
- STEEL H-PILE BATTER
- 1 — UNDERDECK BENT
- A — UNDERDECK ROW

FRAMING LEGEND

- CONCRETE PILE CAP
- EXPANSION JOINT

NOTES:

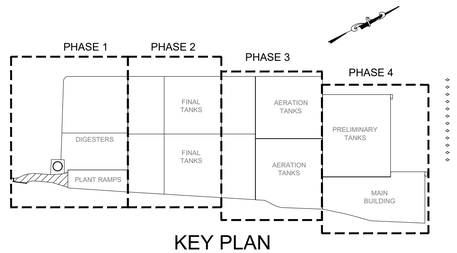
1. REFER TO DWGS UR-S-303 TO UR-S-316 FOR CONCRETE REPAIR SCHEDULES.
2. MEMBRANE DEFECTS NOT SHOWN ON REPAIR PLANS. SEE REPAIR SCHEDULES ON DWGS UR-S-510 TO UR-S-553 FOR LOCATIONS AND DIMENSIONS.

REPAIRS LEGEND

- TYPE 1 CONC REPAIRS
- TYPE 5 CONC REPAIRS
- TYPE 6 CONC REPAIRS

UNDERDECK REPAIR PLAN
PHASE 1 - PLANT ACCESS RAMPS

SCALE: 1/2"=1'-0"



KEY PLAN

1"=10' 0 10 20 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

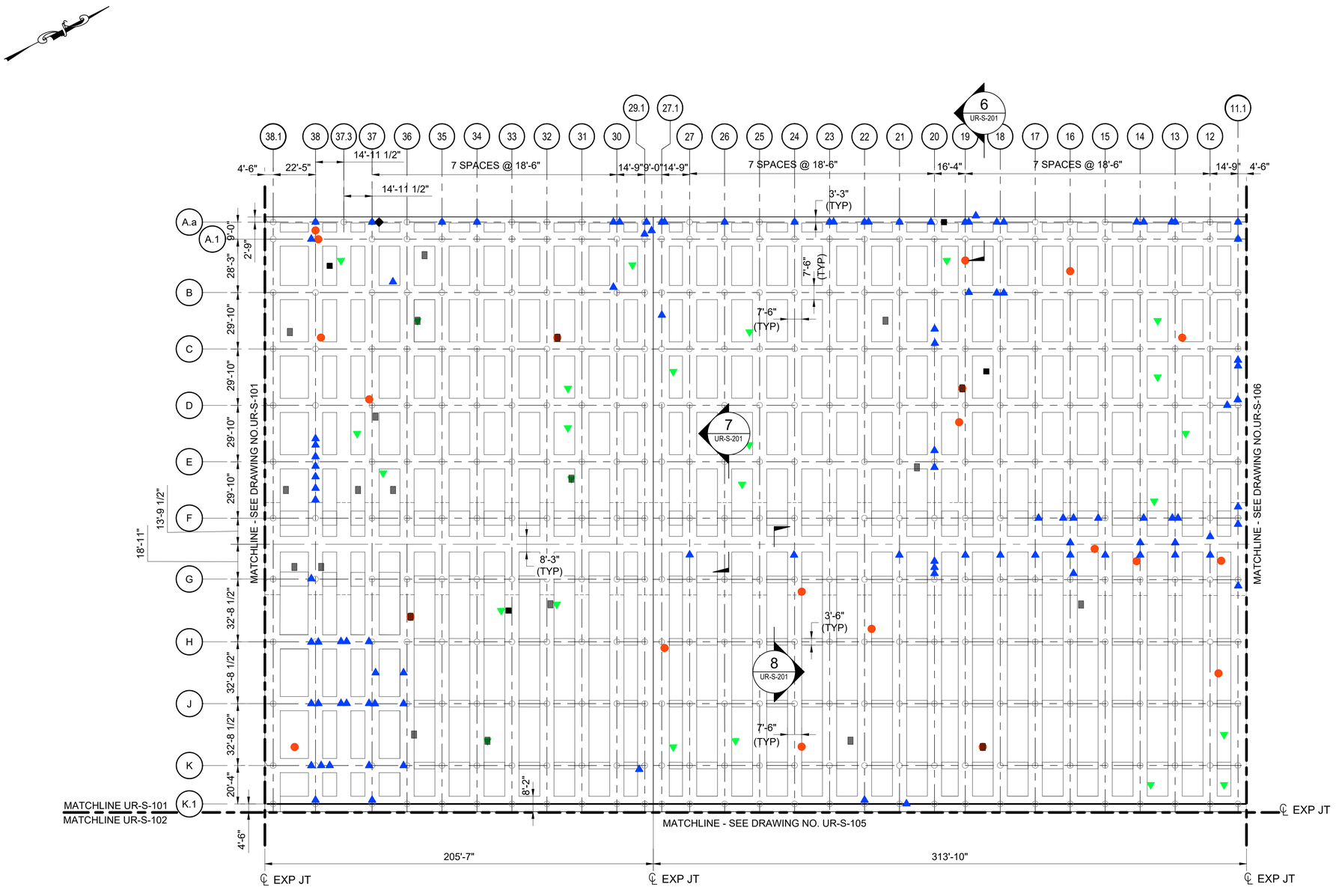
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

UNDERDECK REPAIR PLAN
PHASE 1 - PLANT ACCESS RAMPS

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-103.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-103.00.dwg
Last Date Saved: 10/20/2026 3:36 PM
Date & Time Plotted: 10/20/2026 3:42 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



UNDERDECK REPAIR PLAN - PHASE 2 WEST

SCALE: 1"=30'-0"

PILE LEGEND

- STEEL CAISSON
- STEEL H-PILE
- STEEL H-PILE BATTER
- 1 — UNDERDECK BENT
- A — UNDERDECK ROW

FRAMING LEGEND

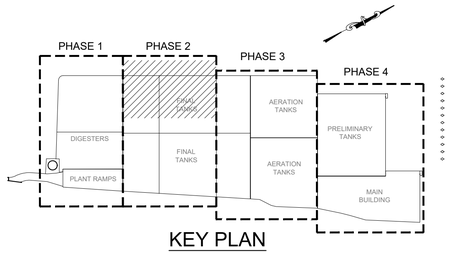
- CONCRETE PILE CAP
- EXPANSION JOINT

NOTES:

1. REFER TO DWGS. UR-S-303 T0 UR-S-316 FOR SCHEDULE OF REPAIRS.
2. MEMBRANE DEFECTS NOT SHOWN ON REPAIR PLANS. SEE REPAIR SCHEDULES ON DWGS UR-S-510 TO UR-S-553 FOR LOCATIONS AND DIMENSIONS.
3. WHERE A CONCRETE REPAIR OVERLAPS WITH EITHER A TYPE 4 STEEL PENETRATION, TYPE 7 CORE HOLE REPAIR OR TYPE 8 PVC DRAIN PIPE REPAIR, CONTRACTOR SHALL REPAIR OVERLAPPING DEFECTS TOGETHER USING THE SPALL REPAIR METHOD (TYPE 1 OR TYPE 2). HANDPACKING SHALL NOT BE PERMITTED FOR THESE REPAIRS.

REPAIRS LEGEND

- TYPE 1 CONC REPAIRS
- TYPE 2 CONC REPAIRS
- TYPE 3 CONC REPAIRS
- TYPE 4 STEEL PENETRATION REPAIRS
- TYPE 7 CORE HOLE REPAIRS
- TYPE 8 PVC DRAIN PIPE REPAIRS



KEY PLAN

1"=30' 0 30 60 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

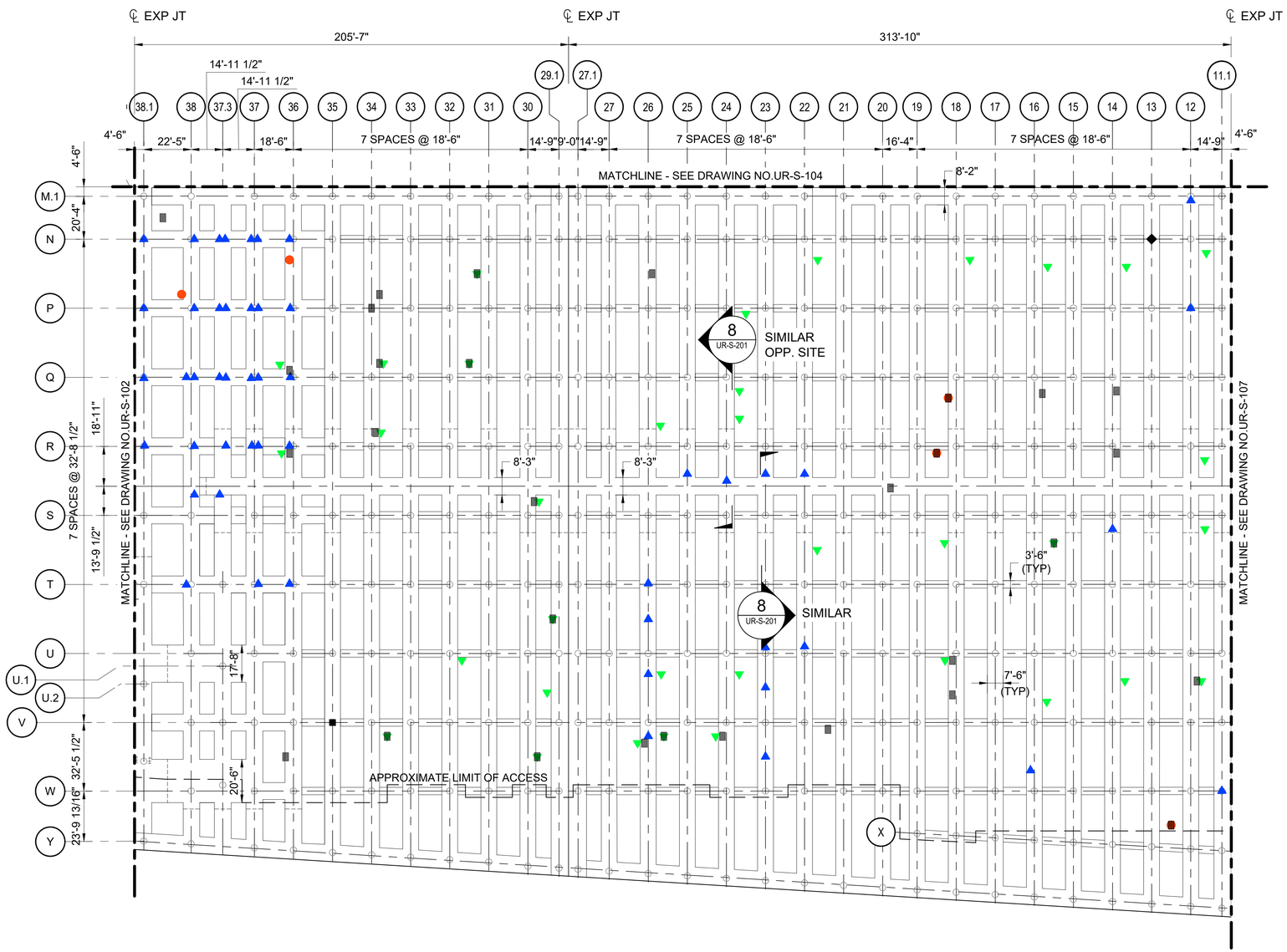
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

UNDERDECK REPAIR PLAN - PHASE 2 WEST

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-104.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d01295898\UR-S-104.00.dwg
Last Date Saved: 10/20/2026 3:36 PM
Date & Time Plotted: 10/20/2026 3:42 PM
Plot Scale: 1:1 Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



UNDERDECK REPAIR PLAN - PHASE 2 EAST

SCALE: 1"=30'-0"

PILE LEGEND

- STEEL CAISSON
- STEEL H-PILE
- STEEL H-PILE BATTER
- 1 — UNDERDECK BENT
- A — UNDERDECK ROW

FRAMING LEGEND

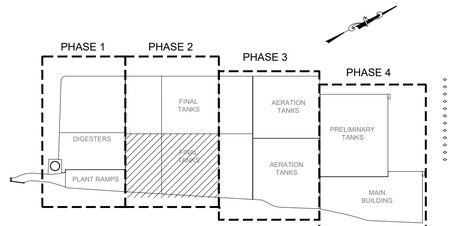
- CONCRETE PILE CAP
- EXPANSION JOINT

NOTES:

1. REFER TO DWGS. UR-S-303 TO UR-S-316 FOR SCHEDULE OF REPAIRS.
2. MEMBRANE DEFECTS NOT SHOWN ON REPAIR PLANS. SEE REPAIR SCHEDULES ON DWGS. UR-S-510 TO UR-S-553 FOR LOCATIONS AND DIMENSIONS.
3. WHERE A CONCRETE REPAIR OVERLAPS WITH EITHER A TYPE 4 STEEL PENETRATION, TYPE 7 CORE HOLE REPAIR OR TYPE 8 PVC DRAIN PIPE REPAIR, CONTRACTOR SHALL REPAIR OVERLAPPING DEFECTS TOGETHER USING THE SPALL REPAIR METHOD (TYPE 1 OR TYPE 2). HANDPACKING SHALL NOT BE PERMITTED FOR THESE REPAIRS.

REPAIRS LEGEND

- TYPE 1 CONC REPAIRS
- TYPE 2 CONC REPAIRS
- TYPE 3 CONC REPAIRS
- TYPE 4 STEEL PENETRATION REPAIRS
- TYPE 7 CORE HOLE REPAIRS
- TYPE 8 PVC DRAIN PIPE REPAIRS



KEY PLAN

0 30 60 FT.
1"=30'

Environmental Protection BEDC/IHD

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

STATE OF NEW YORK — ILHAN TUTUNCU — LICENSED PROFESSIONAL ENGINEER

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

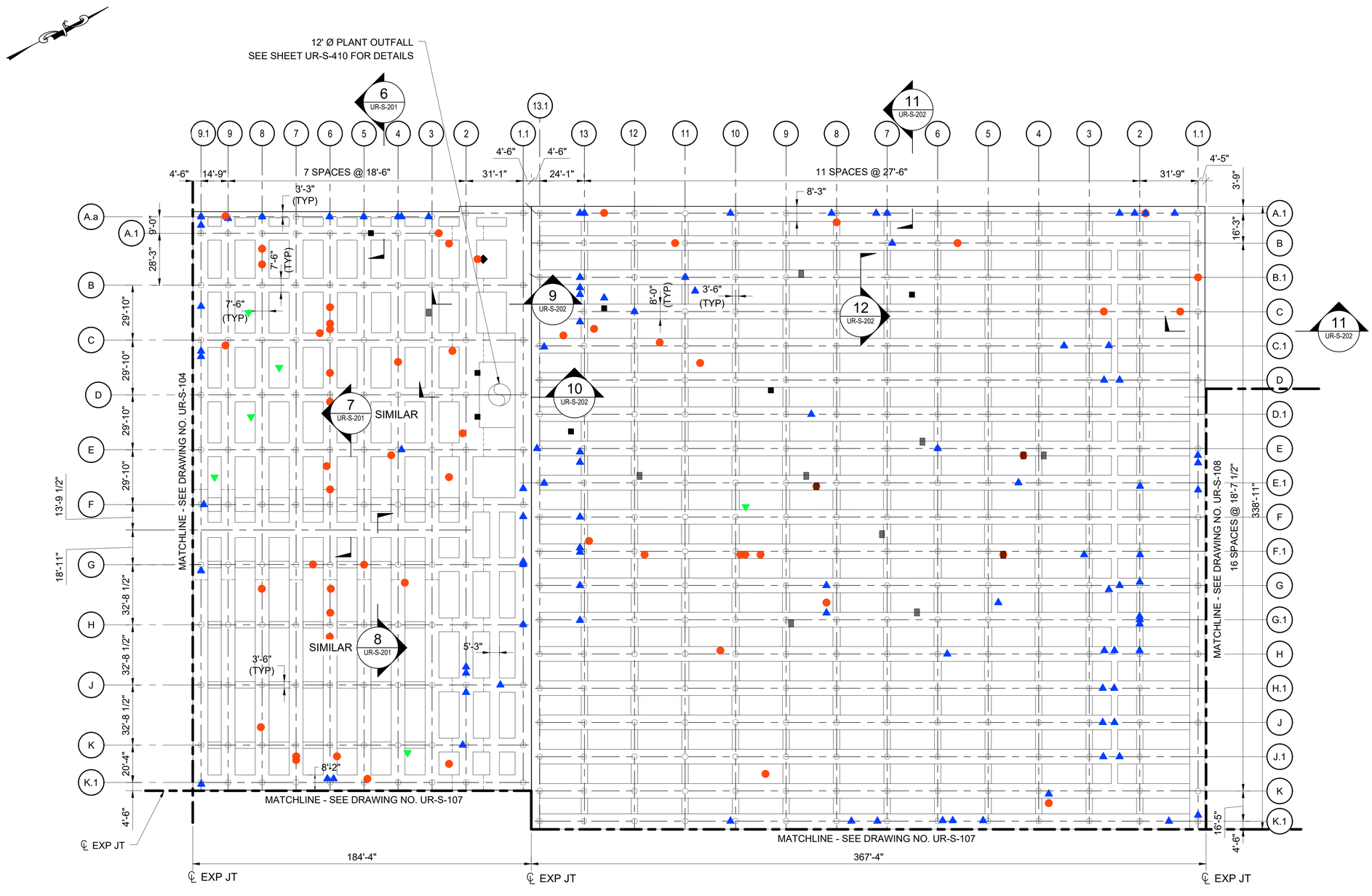
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

UNDERDECK REPAIR PLAN - PHASE 2 EAST

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-105.00

Last Saved By: AcostaML Last Date Saved: 10/20/2026 3:36 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches) Plot Style Table: BEDC_Acad(N).ctb
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-105.00.dwg
Date & Time Plotted: 10/20/2026 3:42 PM Plot Scale: 1:1

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



UNDERDECK REPAIR PLAN - PHASE 3 WEST

SCALE: 1"=30'-0"

PILE LEGEND

- STEEL CAISSON
- STEEL H-PILE
- STEEL H-PILE BATTER
- (1) UNDERDECK BENT
- (A) UNDERDECK ROW

FRAMING LEGEND

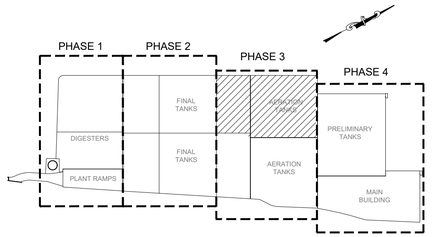
- CONCRETE PILE CAP
- EXPANSION JOINT

NOTES:

1. REFER TO DWGS. UR-S-303 TO UR-S-316 FOR SCHEDULE OF REPAIRS.
2. MEMBRANE DEFECTS NOT SHOWN ON REPAIR PLANS. SEE REPAIR SCHEDULES ON DWGS. UR-S-510 TO UR-S-553 FOR LOCATIONS AND DIMENSIONS.
3. WHERE A CONCRETE REPAIR OVERLAPS WITH EITHER A TYPE 4 STEEL PENETRATION, TYPE 7 CORE HOLE REPAIR OR TYPE 8 PVC PIPE DRAIN REPAIR, CONTRACTOR SHALL REPAIR OVERLAPPING DEFECTS TOGETHER USING THE SPALL REPAIR METHOD (TYPE 1 OR TYPE 2). HANDPACKING SHALL NOT BE PERMITTED FOR THESE REPAIRS.

REPAIRS LEGEND

- TYPE 1 CONC REPAIRS
- TYPE 2 CONC REPAIRS
- TYPE 3 CONC REPAIRS
- TYPE 4 STEEL PENETRATION REPAIRS
- TYPE 7 CORE HOLE REPAIRS
- TYPE 8 PVC DRAIN PIPE REPAIRS



KEY PLAN

1"=30' 0 30 60 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

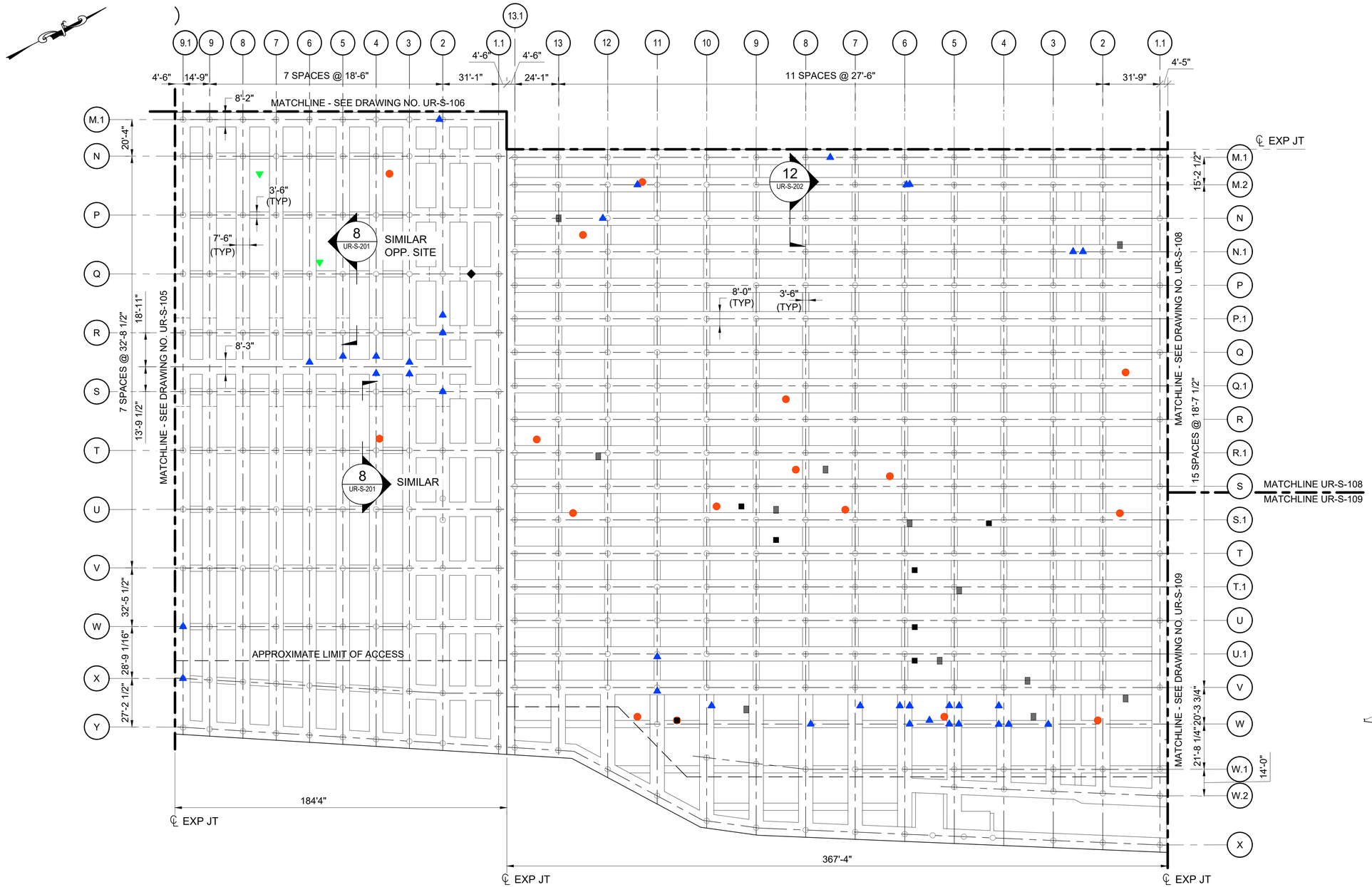
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

UNDERDECK REPAIR PLAN - PHASE 3 WEST

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-106.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-106.00.dwg
Last Date Saved: 10/20/2026 3:36 PM
Date & Time Plotted: 10/20/2026 3:42 PM
Plot Scale: 1:1 Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



UNDERDECK REPAIR PLAN - PHASE 3 EAST

SCALE: 1"=30'-0"

PILE LEGEND

- STEEL CAISSON
- STEEL H-PILE
- STEEL H-PILE BATTER
- (1) UNDERDECK BENT
- (A) UNDERDECK ROW

FRAMING LEGEND

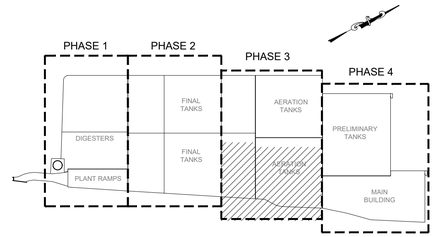
- CONCRETE PILE CAP
- EXPANSION JOINT

NOTES:

1. REFER TO DWGS. UR-S-303 TO UR-S-316 FOR CONCRETE REPAIR SCHEDULES.
2. MEMBRANE DEFECTS NOT SHOWN ON REPAIR PLANS. SEE REPAIR SCHEDULES ON DWGS. UR-S-510 TO UR-S-553 FOR LOCATIONS AND DIMENSIONS.
3. WHERE A CONCRETE REPAIR OVERLAPS WITH EITHER A TYPE 4 STEEL PENETRATION, TYPE 7 CORE HOLE REPAIR OR TYPE 8 PVC DRAIN PIPE REPAIR, CONTRACTOR SHALL REPAIR OVERLAPPING DEFECTS TOGETHER USING THE SPALL REPAIR METHOD (TYPE 1 OR TYPE 2). HANDPACKING SHALL NOT BE PERMITTED FOR THESE REPAIRS.

REPAIRS LEGEND

- TYPE 1 CONC REPAIRS
- TYPE 2 CONC REPAIRS
- TYPE 3 CONC REPAIRS
- TYPE 4 STEEL PENETRATION REPAIRS
- TYPE 7 CORE HOLE REPAIRS
- TYPE 8 PVC DRAIN PIPE REPAIRS



KEY PLAN

1"=30' 0 30 60 FT.

NYC Environmental Protection BEDC/RD

BID SET

DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M.DWYER
DRAWN BY: MA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

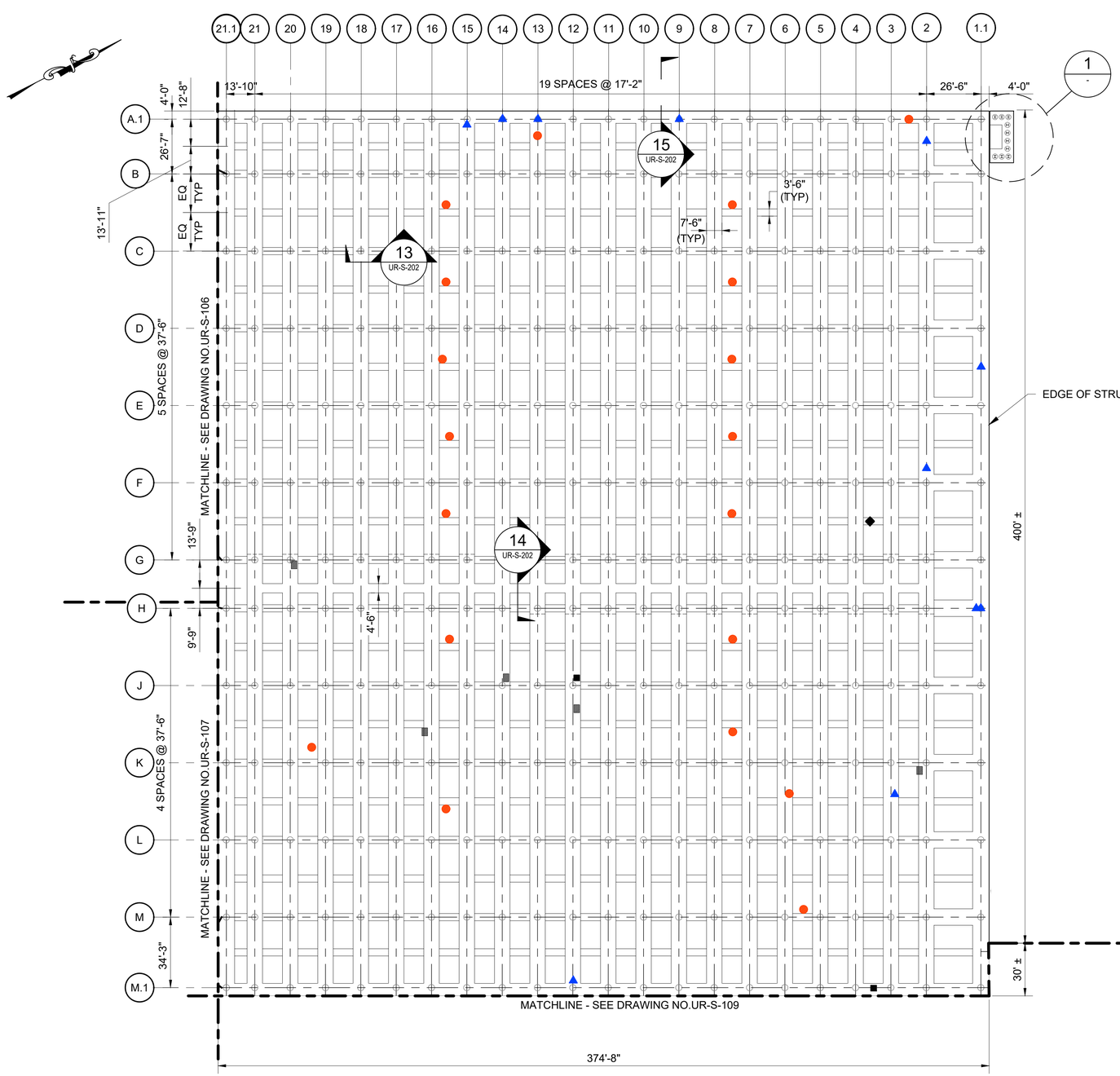
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

UNDERDECK REPAIR PLAN - PHASE 3 EAST

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-107.00

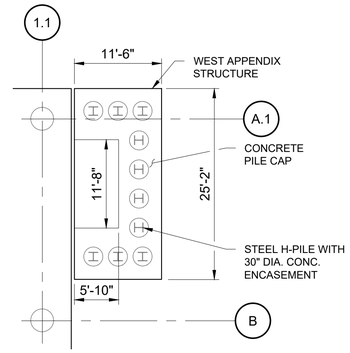
Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-107.00.dwg
Last Date Saved: 10/20/2026 3:36 PM
Date & Time Plotted: 10/20/2026 3:43 PM
Plot Scale: 1:1 Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



UNDERDECK REPAIR PLAN- PHASE 4 WEST

SCALE: 1"=30'-0"



1 - DETAIL

SCALE: 1"=10'

PILE LEGEND

- STEEL CAISSON
- STEEL H-PILE
- STEEL H-PILE BATTER
- 1 — UNDERDECK BENT
- A — UNDERDECK ROW

FRAMING LEGEND

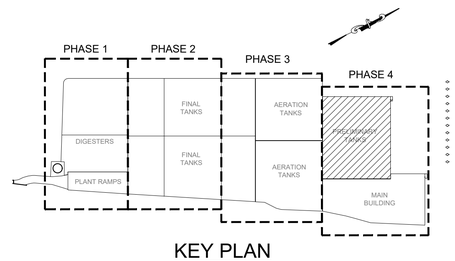
- CONCRETE PILE CAP
- EXPANSION JOINT

NOTES:

1. REFER TO DWGS. UR-S-303 To UR-S-316 FOR CONCRETE REPAIR SCHEDULES.
2. MEMBRANE DEFECTS NOT SHOWN ON REPAIR PLANS. SEE REPAIR SCHEDULES ON DWGS. UR-S-510 TO UR-S-553 FOR LOCATIONS AND DIMENSIONS.

REPAIRS LEGEND

- TYPE 1 CONC REPAIRS
- TYPE 2 CONC REPAIRS
- TYPE 3 CONC REPAIRS
- TYPE 4 STEEL PENETRATION REPAIRS
- TYPE 7 CORE HOLE REPAIRS



KEY PLAN

1"=30' 0 30 60 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I.TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

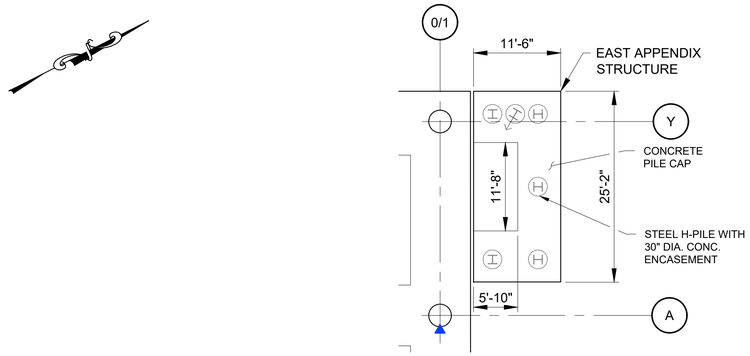
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

UNDERDECK REPAIR PLAN - PHASE 4 WEST

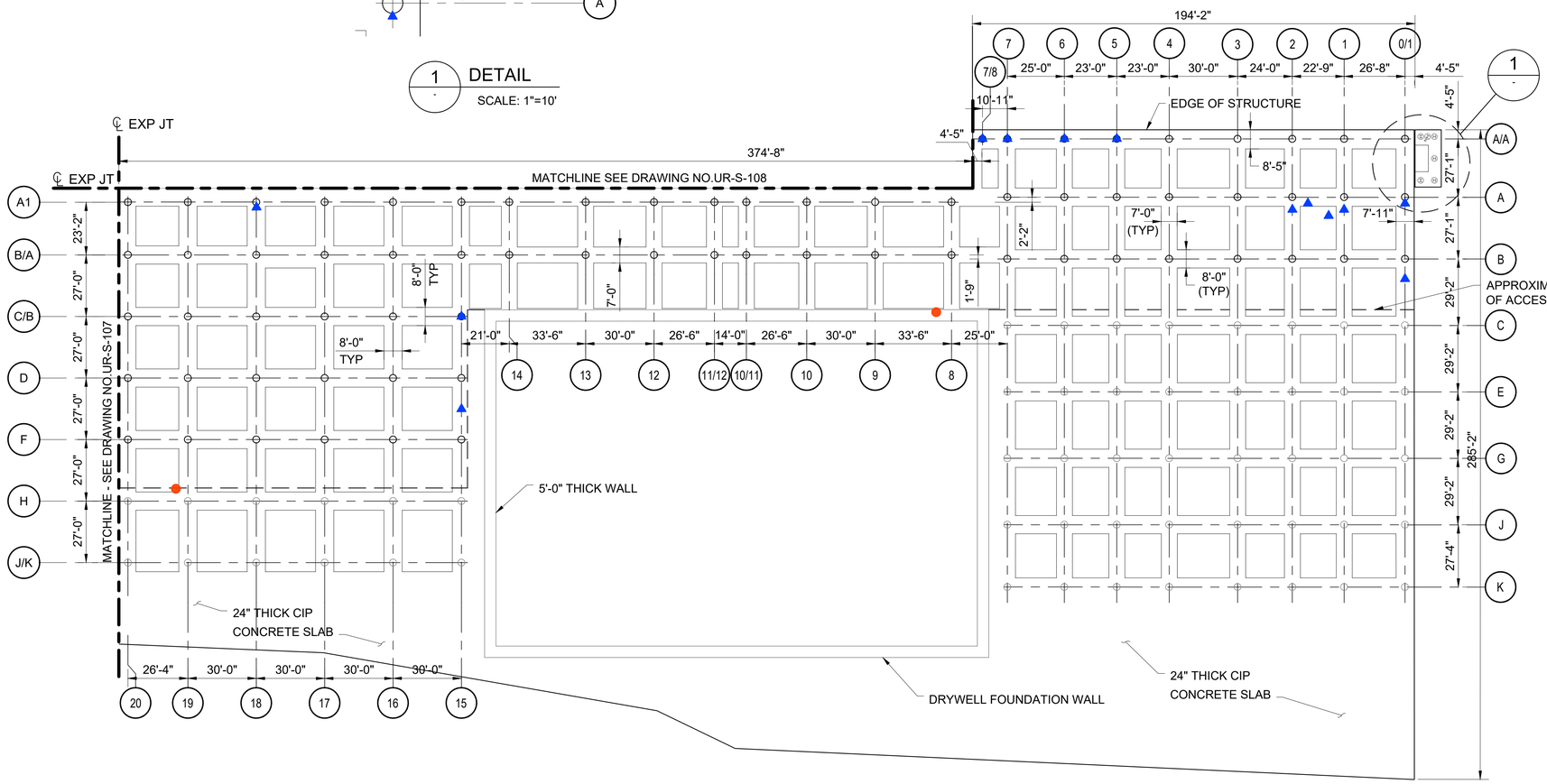
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-108.00

Last Saved By: AcostaML
Last Date Saved: 10/20/2026 3:36 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129598\UR-S-108.00.dwg
Date & Time Plotted: 10/20/2026 3:43 PM
Plot Style Table: BEDC_Acad(N).ctb
Plot Scale: 1:1

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



1 DETAIL
SCALE: 1"=10'



UNDERDECK REPAIR PLAN - PHASE 4 EAST

SCALE: 1"=30'-0"

PILE LEGEND

- STEEL CAISSON
- STEEL H-PILE
- STEEL H-PILE BATTER
- 1 — UNDERDECK BENT
- A — UNDERDECK ROW

FRAMING LEGEND

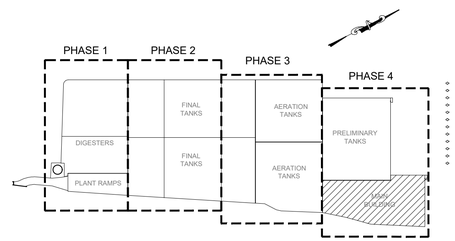
- CONCRETE PILE CAP
- EXPANSION JOINT

NOTES:

1. REFER TO DWGS. UR-S-303 TO UR-S-316 FOR CONCRETE REPAIR SCHEDULES.
2. MEMBRANE DEFECTS NOT SHOWN ON REPAIR PLANS. SEE REPAIR SCHEDULES ON DWGS. UR-S-510 TO UR-S-553 FOR LOCATIONS AND DIMENSIONS.

REPAIRS LEGEND

- TYPE 4 STEEL PENETRATION REPAIRS
- TYPE 7 CORE HOLE REPAIRS



KEY PLAN

1"=30' 0 30 60 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

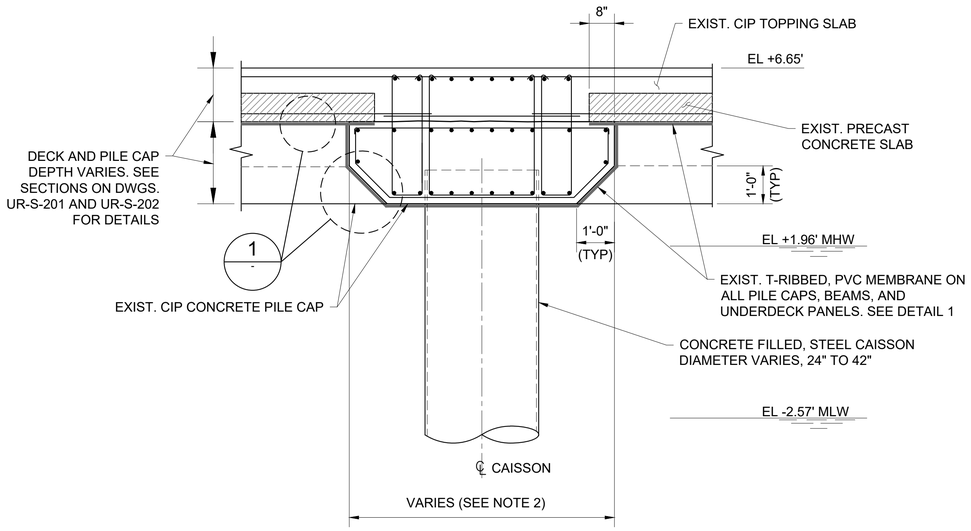
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

UNDERDECK REPAIR PLAN - PHASE 4 EAST

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-109.00

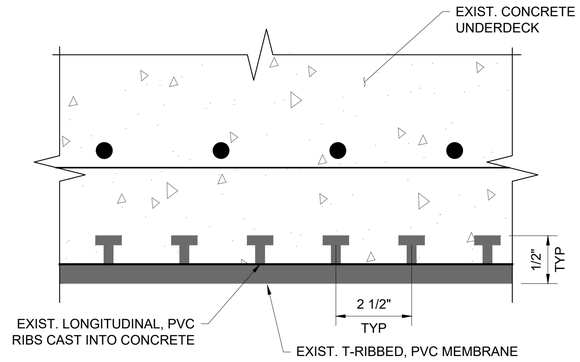
Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-109.00.dwg
Last Date Saved: 10/20/2026 3:36 PM
Plot Scale: 1:1
Date & Time Plotted: 10/20/2026 3:43 PM
Plot Style Table: BEDC_Acad(N).ctb

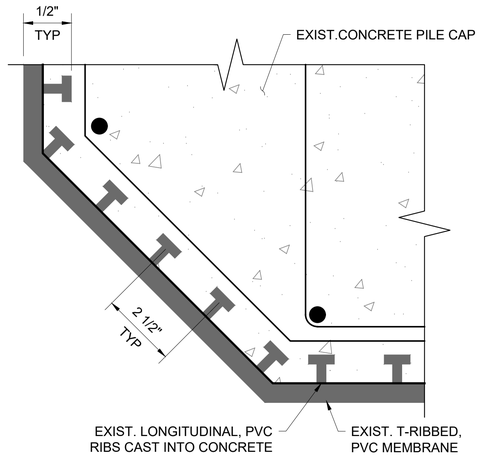
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



TYPICAL SECTION OF PILE CAP

SCALE: 1"=1'-0"



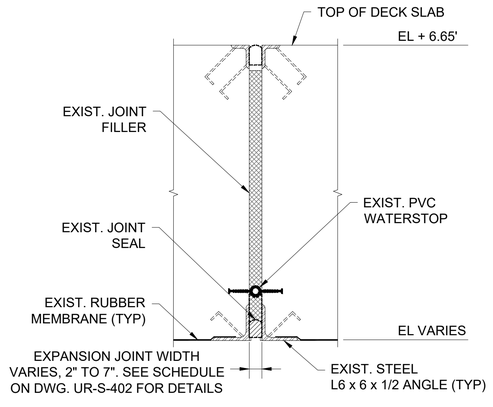


1 MEMBRANE DETAIL

N.T.S.

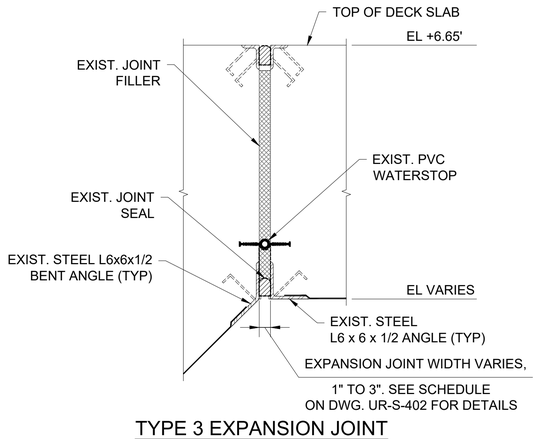
NOTES:

1. REINFORCING BAR LAYOUT SHOWN IS SCHEMATIC ONLY. EXISTING REINFORCING BAR LAYOUT VARIES.
2. DUE TO AS-BUILT CAISSON ALIGNMENT, BEAM DIMENSIONS MAY VARY AND MAY NOT BE CENTERED ON CAISSON. SEE SECTIONS ON DWGS. UR-S-201 AND UR-S-202 FOR TYPICAL PILE CAP DIMENSIONS.
3. SEE EXPANSION JOINT REPAIR PLAN ON DWG. NO. UR-S-400 FOR JOINT TYPE LOCATIONS AND DWG. UR-S-401 FOR JOINT WIDTHS.



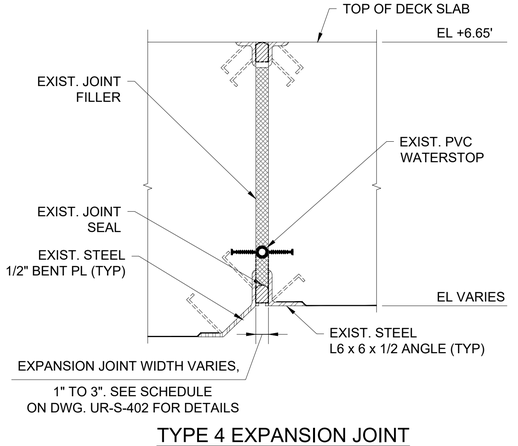
TYPE 1 EXPANSION JOINT

SCALE: 1"=1'-0"



TYPE 3 EXPANSION JOINT

SCALE: 1"=1'-0"



TYPE 4 EXPANSION JOINT

SCALE: 1"=1'-0"

0 1 2 FT.
1"=1'-0"
0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA, EF
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

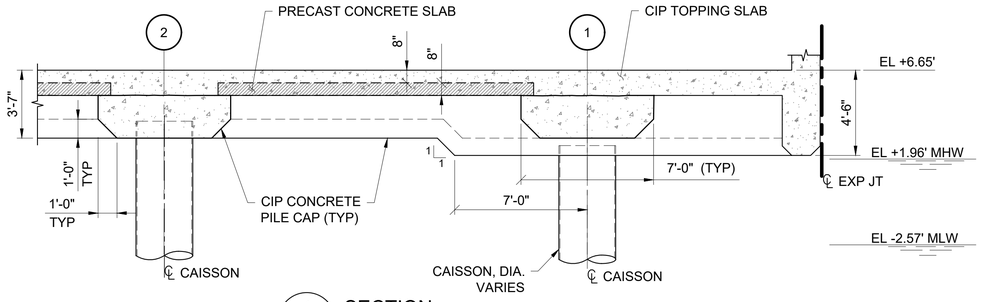
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

UNDERDECK TYPICAL EXISTING SECTIONS - 1

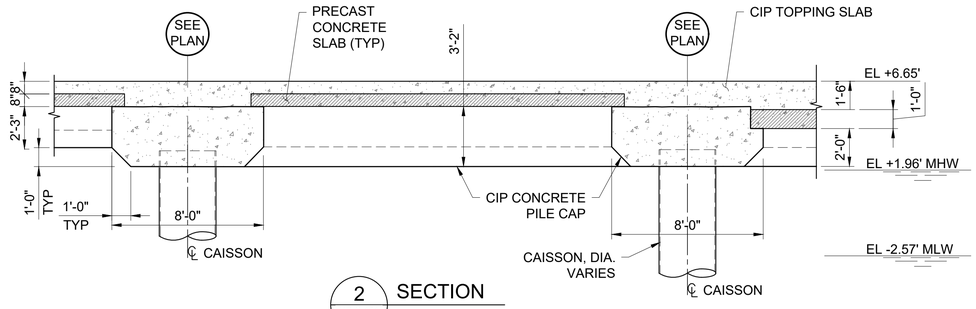
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-200.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

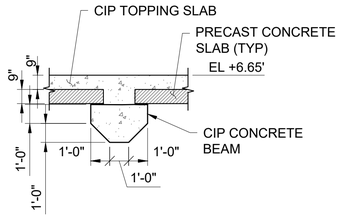
Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-200.00.dwg
Last Date Saved: 10/20/2026 3:36 PM
Date & Time Plotted: 10/20/2026 3:43 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb



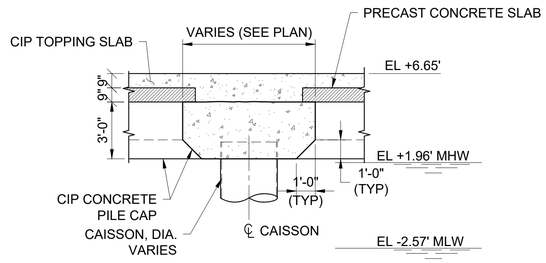
1 SECTION
UR-S-101 UR-S-102
SCALE: 1/4"=1'-0"



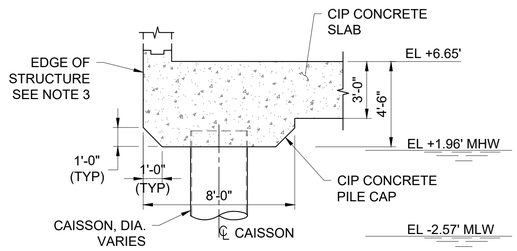
2 SECTION
UR-S-101 UR-S-102
SCALE: 1/4"=1'-0"



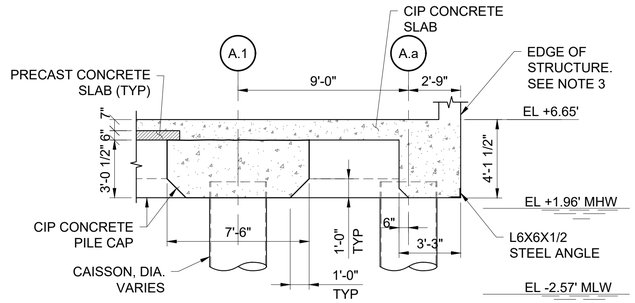
3 SECTION
UR-S-102
SCALE: 1/4"=1'-0"



4 SECTION
UR-S-102
SCALE: 1/4"=1'-0"



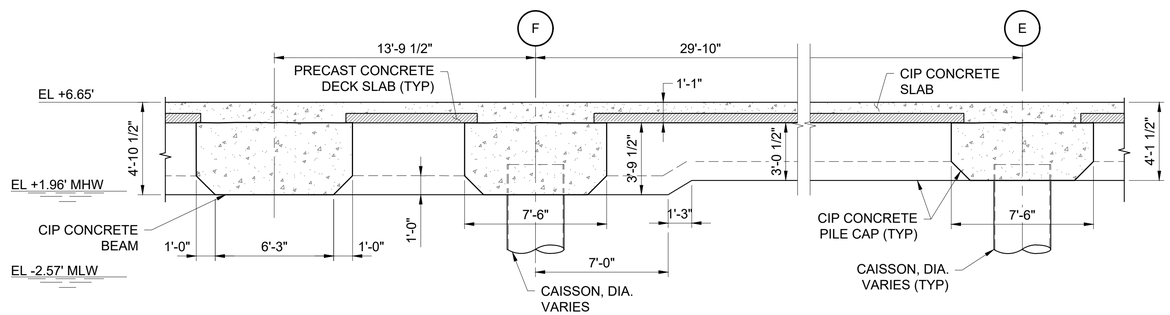
5 SECTION
UR-S-102
SCALE: 1/4"=1'-0"



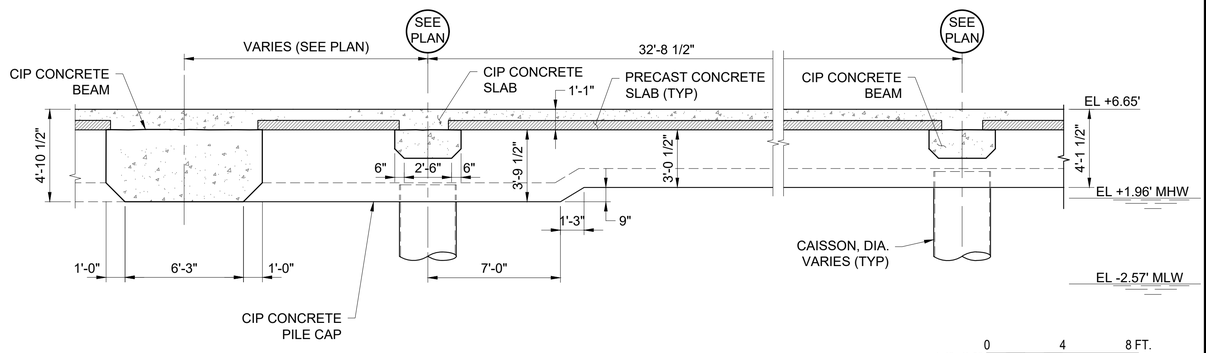
6 SECTION
UR-S-104 UR-S-106
SCALE: 1/4"=1'-0"

NOTES:

1. REBAR, DRAIN PIPES AND OTHER EMBEDDED ITEMS IN PILECAPS NOT SHOWN FOR CLARITY.
2. RIBBED PVC MEMBRANE IS EMBEDDED ON ALL SURFACES. MEMBRANE NOT SHOWN FOR CLARITY. SEE DWG. UR-S-200 FOR TYPICAL DETAILS.
3. EXISTING FENDER SYSTEM NOT SHOWN. SEE FR SERIES SHEETS FOR DETAILS.



7 SECTION
UR-S-104 UR-S-106
SCALE: 1/4"=1'-0"



8 SECTION
UR-S-104 UR-S-105 UR-S-106
SCALE: 1/4"=1'-0"

0 4 8 FT.
1/4"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA, EF
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

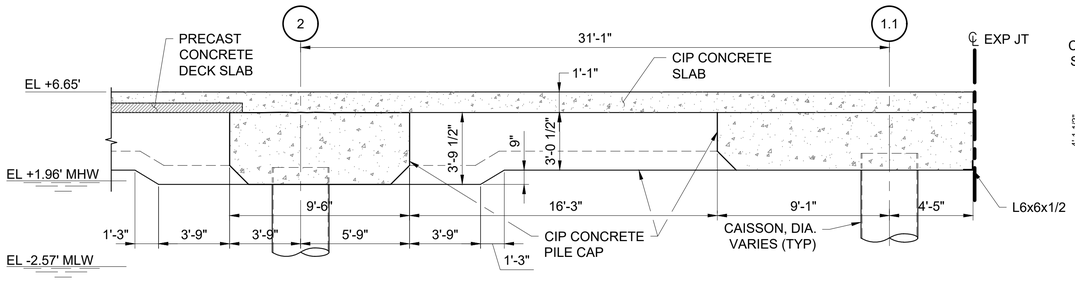
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

UNDERDECK TYPICAL EXISTING SECTIONS - 2

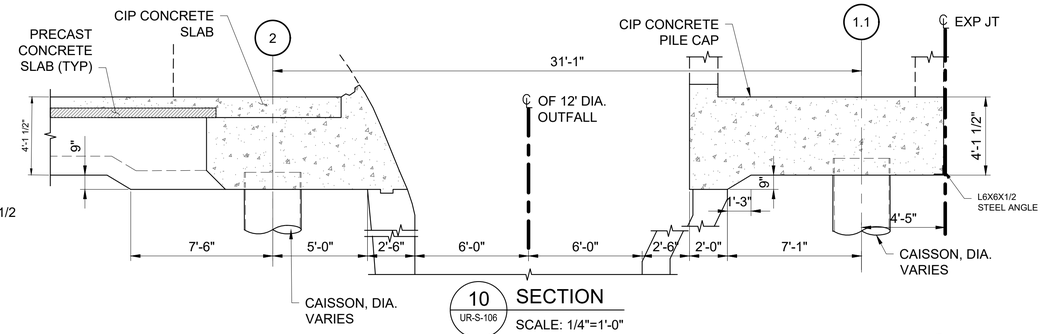
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-201.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

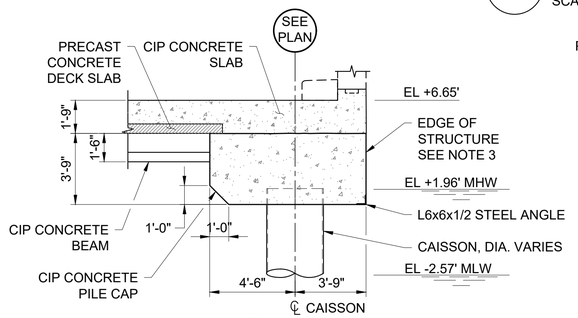
Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-201.00.dwg
Last Date Saved: 10/20/2026 3:36 PM
Date & Time Plotted: 10/20/2026 3:43 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb



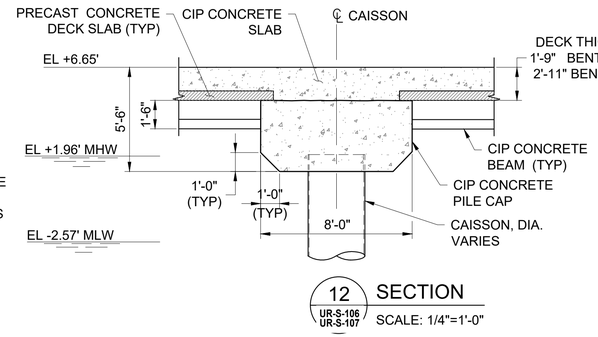
9 SECTION
UR-S-106
SCALE: 1/4"=1'-0"



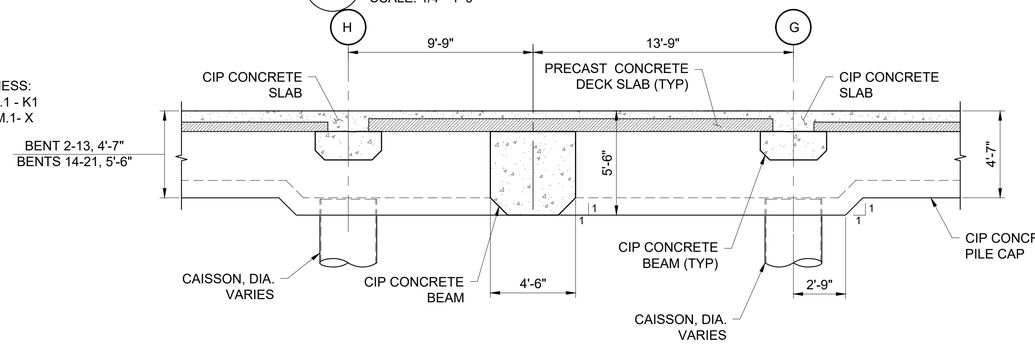
10 SECTION
UR-S-106
SCALE: 1/4"=1'-0"



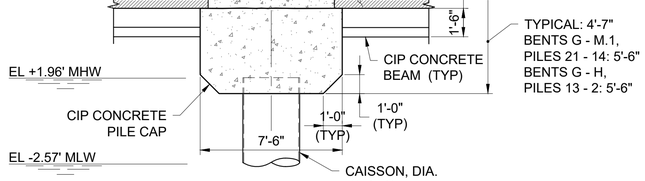
11 SECTION
UR-S-106
SCALE: 1/4"=1'-0"



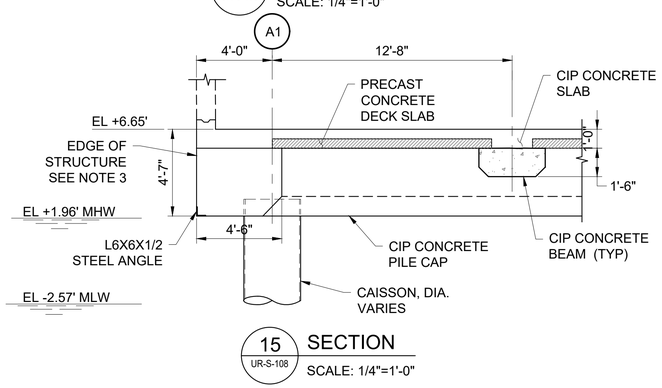
12 SECTION
UR-S-106
UR-S-107
SCALE: 1/4"=1'-0"



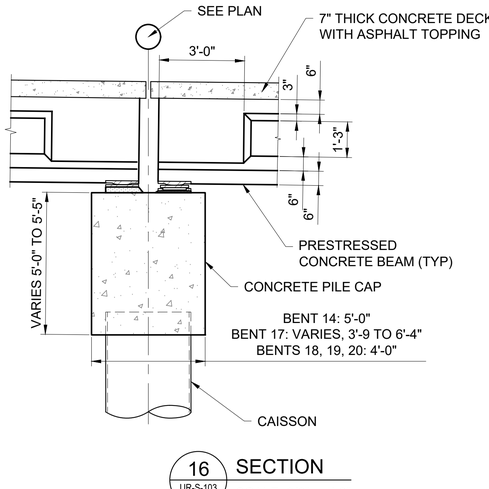
14 SECTION
UR-S-108
SCALE: 1/4"=1'-0"



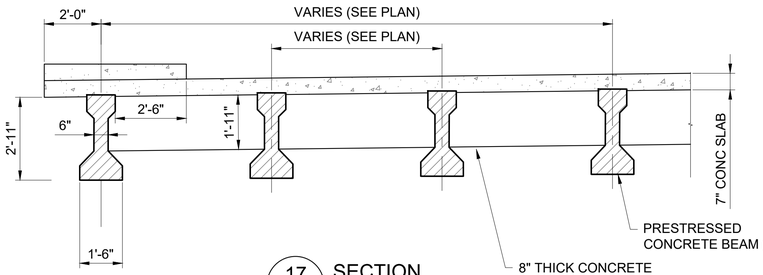
13 SECTION
UR-S-108
SCALE: 1/4"=1'-0"



15 SECTION
UR-S-108
SCALE: 1/4"=1'-0"



16 SECTION
UR-S-103
SCALE: 3/8" = 1'-0"



17 SECTION
UR-S-103
SCALE: 3/8" = 1'-0"

NOTES:

1. REBAR, DRAIN PIPES AND OTHER EMBEDDED ITEMS IN PILECAPS NOT SHOWN FOR CLARITY.
2. RIBBED PVC MEMBRANE IS EMBEDDED ON ALL SURFACES. MEMBRANE NOT SHOWN FOR CLARITY. SEE DWG. UR-S-200 FOR TYPICAL DETAILS.
3. EXISTING FENDER SYSTEM NOT SHOWN. SEE FR SERIES SHEETS FOR DETAILS.

3/8"=1'-0" 0 1 2 3 5 FT.
1/4"=1'-0" 0 4 8 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA, EF
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

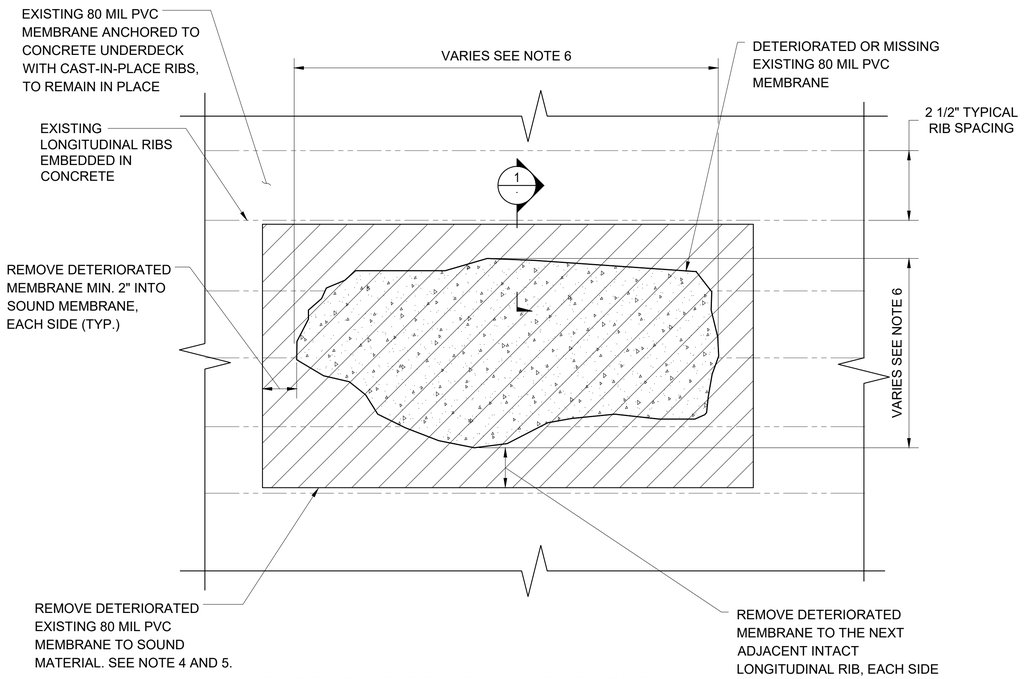
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

UNDERDECK TYPICAL EXISTING SECTIONS - 3

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-202.00

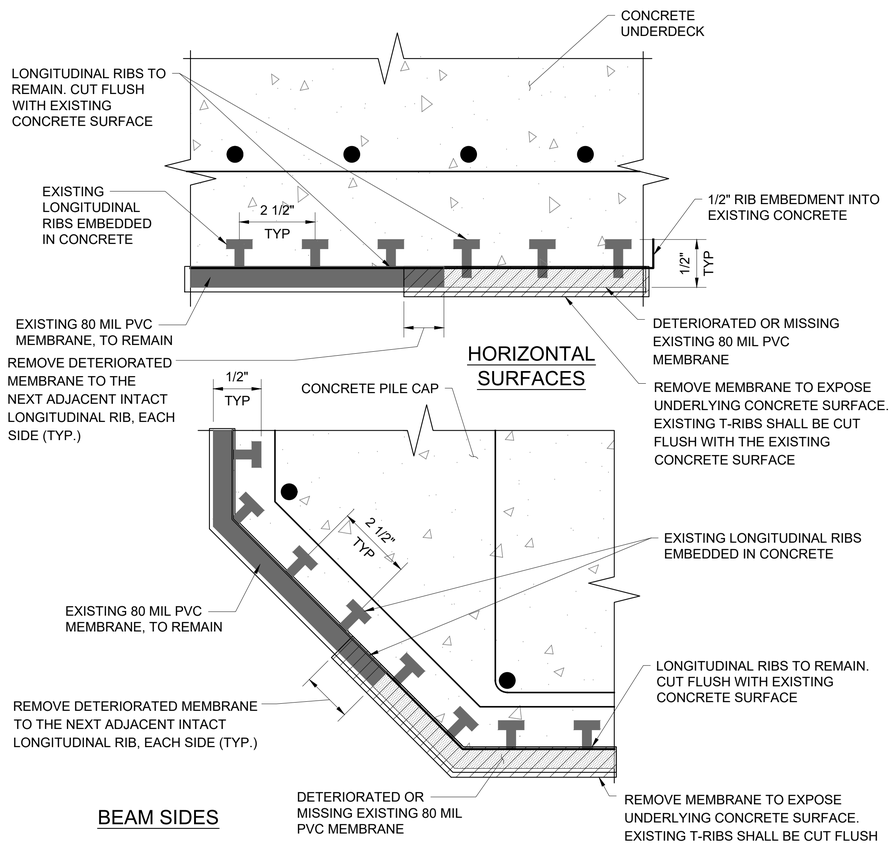
Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-202.00.dwg
Last Date Saved: 10/20/2026 3:36 PM
Date & Time Plotted: 10/20/2026 3:43 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



EXISTING MEMBRANE REPAIR DEMOLITION

N.T.S.



HORIZONTAL SURFACES

BEAM SIDES

1 MEMBRANE REMOVAL SECTION

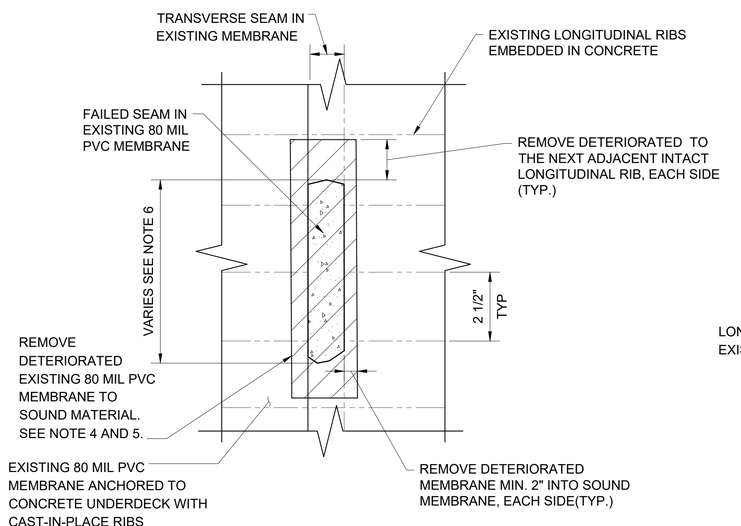
N.T.S.

LEGEND:

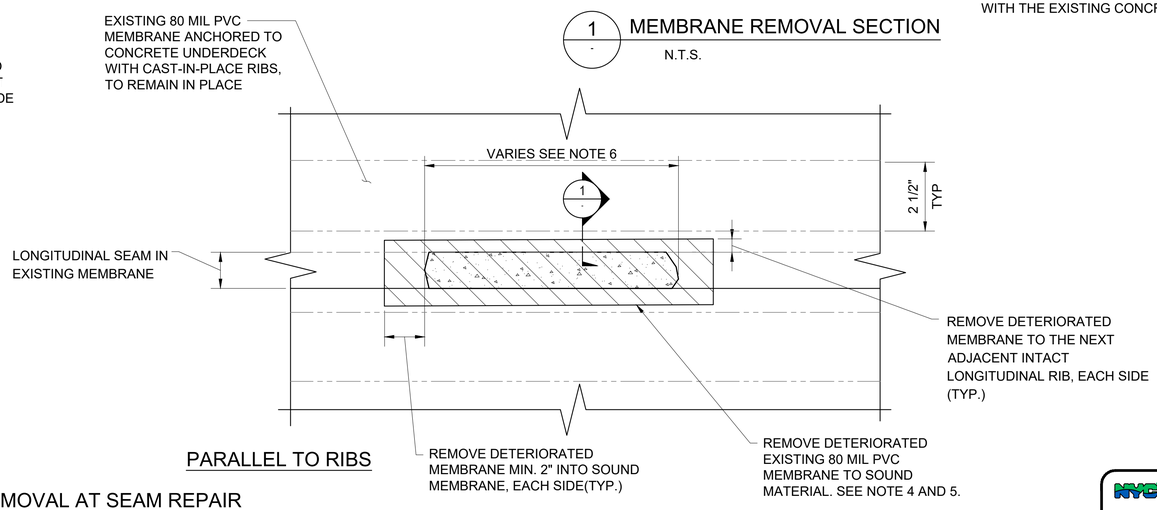
ITEM TO BE DEMOLISHED

NOTES:

1. EXISTING UNDERDECK MEMBRANE IS ATTACHED TO ALL EXPOSED UNDERDECK SURFACES UNLESS NOTED OTHERWISE. CONTRACTOR SHALL REMOVE DETERIORATED MEMBRANE ONLY PER THE DETAILS ON THIS SHEET. ALL OTHER EXISTING INTACT MEMBRANE SHALL REMAIN.
2. FOLLOWING REMOVAL OF DETERIORATED MEMBRANE CONTRACTOR SHALL INSTALL MEMBRANE REPAIRS. SEE DWGS. UR-S-500 TO UR-S-502 FOR MEMBRANE REPAIR DETAILS AND DWGS. UR-S-510 TO UR-S-553 FOR MEMBRANE REPAIR SCHEDULES.
3. MEMBRANE REMOVAL SHALL BE PERFORMED AT ALL TYPE 1, TYPE 2, TYPE 3, AND TYPE 4 MEMBRANE REPAIR LOCATIONS.
4. SOUND MEMBRANE IS DEFINED AS INTACT MEMBRANE WITH NO CUTS OR HOLES THAT IS SECURELY ANCHORED INTO THE EXISTING CONCRETE SUBSTRATE.
5. DETERIORATED MEMBRANE AREA MAY INCLUDE MISSING, TORN OR DELAMINATING MEMBRANE, AS WELL AS FAILED EPOXY PATCHES. ALL MATERIAL SHALL BE REMOVED TO SOUND SUBSTRATE IN THE REPAIR AREA.
6. DETERIORATED MEMBRANE DIMENSIONS VARY FROM 1" TO OVER 100 FT LONG AND 1" TO 8 FT WIDE. SEE MEMBRANE REPAIR SCHEDULE ON DWGS. UR-S-510 TO US-S-553 FOR DIMENSIONS AND LOCATIONS OF DETERIORATED MEMBRANE.
7. DEFECT DIMENSIONS PROVIDED ARE BASED ON 2019 DESIGN LEVEL INSPECTION FINDINGS. CONTRACTOR SHALL VERIFY DIMENSIONS OF DETERIORATED MEMBRANE IN FIELD AND SHALL BE RESPONSIBLE FOR REMOVAL AND REPAIR OF ALL DETERIORATED MEMBRANE.
8. DETERIORATED MEMBRANE LOCATIONS MAY OVERLAP WITH AREAS THAT REQUIRE CONCRETE REPAIRS. IN AREAS WHERE CONCRETE REPAIRS ARE ALSO REQUIRED, MEMBRANE REMOVAL MAY EXTEND AS NEEDED TO FACILITATE CONCRETE REPAIRS.
9. REQUIRED CONCRETE REPAIRS SHALL BE PERFORMED AFTER MEMBRANE REMOVAL AND BEFORE INSTALLATION OF MEMBRANE REPAIRS. SEE DWGS. UR-S-300 TO UR-S-316 FOR CONCRETE REPAIR DETAILS AND SCHEDULES.
10. REINFORCING LAYOUT SHOWN IS SCHEMATIC ONLY. EXISTING REINFORCING LAYOUT VARIES.
11. DUE TO AS-BUILT CAISSON ALIGNMENT, PILE CAP DIMENSIONS MAY VARY AND MAY NOT BE CENTERED ON CAISSON. SEE UNDERDEK PLANS ON DWGS. UR-S-101 TO UR-S-109 FOR PILE CAP SPACING AND SECTIONS ON DWGS. UR-S-201 AND UR-S-202 FOR TYPICAL PILE CAP DIMENSIONS.
12. SEE EXPANSION JOINT REPAIR PLAN ON DWG. NO. UR-S-400 FOR JOINT TYPE LOCATIONS AND DWG. UR-S-401 FOR EXISTING JOINT WIDTHS.



PERPENDICULAR TO RIBS



PARALLEL TO RIBS

EXISTING MEMBRANE REMOVAL AT SEAM REPAIR

N.T.S.

0 1 2 FT.
1"=1'-0"
0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA, EF
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

UNDERDECK DEMO DETAILS
SHEET 1 OF 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-DS-100.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-DS-100.00.dwg
Date & Time Plotted: 10/20/2026 3:43 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb
Last Date Saved: 10/20/2026 3:36 PM

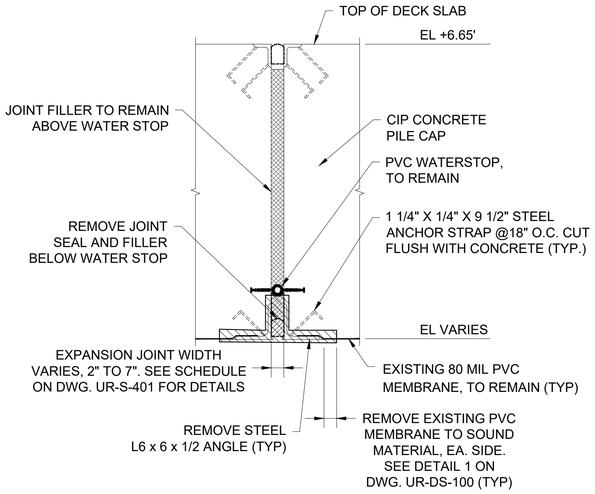
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

LEGEND:

ITEM TO BE DEMOLISHED

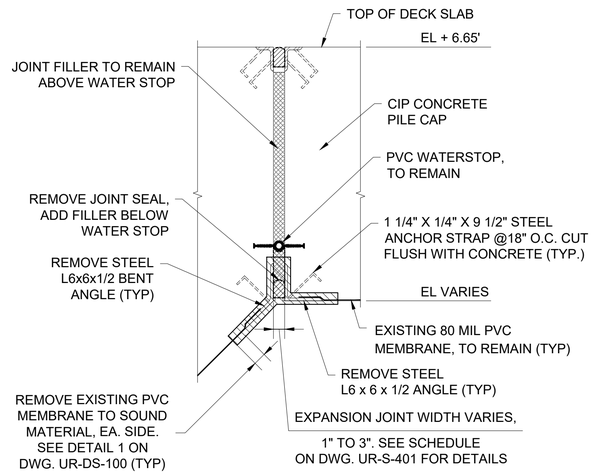
NOTES:

1. SEE DWG. UR-DS-100 FOR DEMOLITION NOTES.
2. SEE DWG. UR-S-400 FOR EXPANSION JOINT LOCATIONS AND DWG. UR-S-401 FOR EXPANSION JOINT DETAILS.



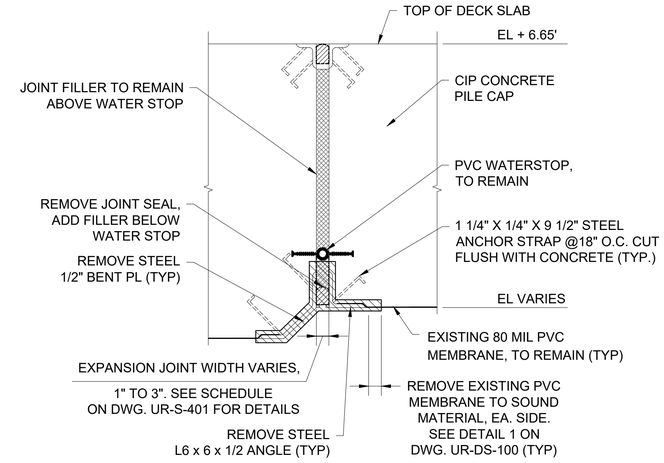
TYPE 1 EXPANSION JOINT DEMOLITION

SCALE: 1"=1'-0"



TYPE 3 EXPANSION JOINT DEMOLITION

SCALE: 1"=1'-0"



TYPE 4 EXPANSION JOINT DEMOLITION

SCALE: 1"=1'-0"

0 1 2 FT.
1"=1'-0"
0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA, EF
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

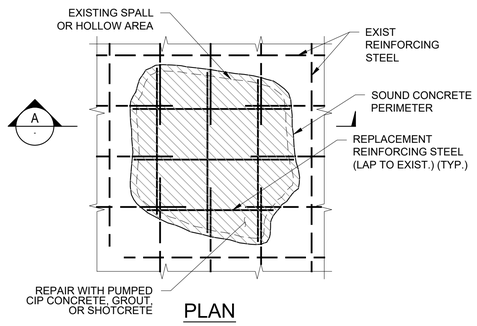
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

UNDERDECK DEMO DETAILS
SHEET 2 OF 2

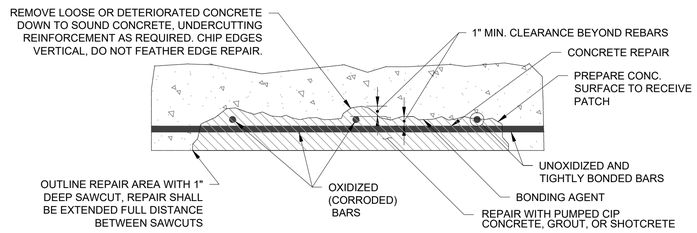
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-DS-101.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Last Date Saved: 10/20/2026 3:36 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Plot Style Table: BEDC_Acad(N).ctb
Plot Scale: 1:1
Date & Time Plotted: 10/20/2026 3:43 PM
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129598\UR-DS-101.00.dwg



PLAN

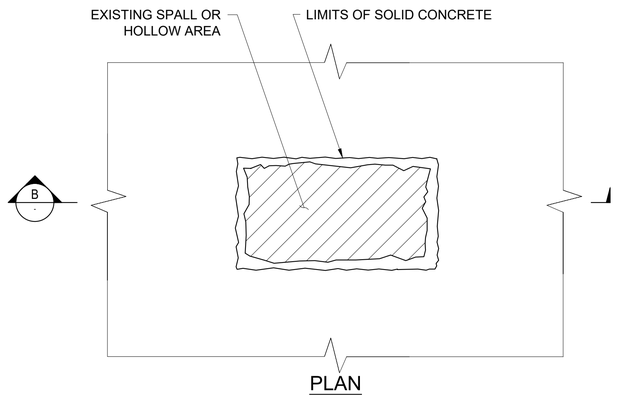


A - SECTION

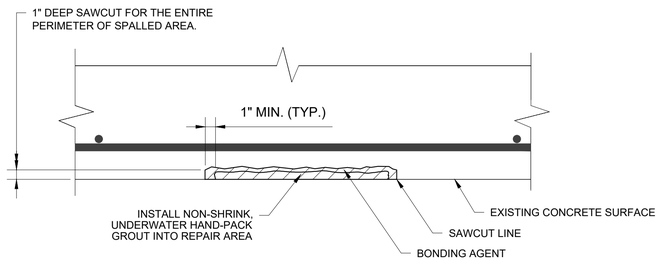
N.T.S.

TYPE 1 SPALL REPAIR

N.T.S.



PLAN

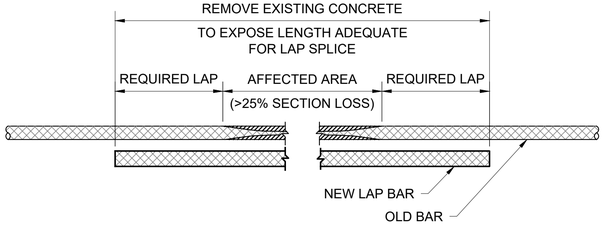


B - SECTION

N.T.S.

TYPE 2 SPALL REPAIR

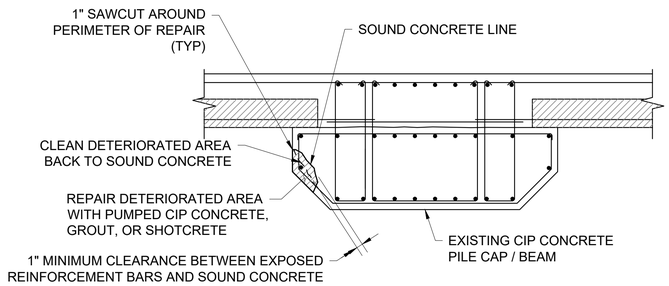
N.T.S.



RECOMMENDED CLEARANCE

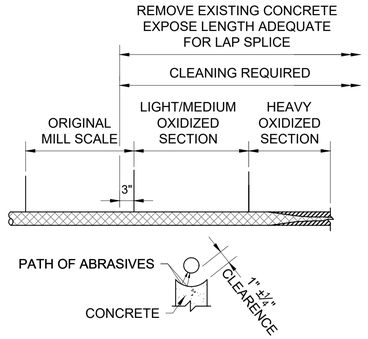
REPAIR OF REINFORCING STEEL WITH SECTION LOSS

N.T.S.



TYPE 3 SPALL REPAIR

N.T.S.



CLEANING UNDERSIDE OF BAR

CLEANING OF REINFORCING STEEL

N.T.S.

NOTES:

1. REPAIRS SHOWN ARE TYPICAL REPAIRS BASED ON INSPECTIONS PERFORMED IN 2016 AND 2019. ADDITIONAL CONCRETE DEFECTS MAY BE UNCOVERED AS A RESULT OF MEMBRANE REMOVAL REQUIRED BY THE CONTRACT DOCUMENTS. CONTRACTOR SHALL REPAIR ALL ADDITIONAL DEFECTS FOUND USING THE DETAILS SHOWN. ADDITIONAL REPAIRS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION. BASED ON THIS REVIEW, ADDITIONAL REPAIR DETAILS MAY BE DEVELOPED AS REQUIRED IF THE TYPICAL REPAIR DETAILS SHOWN HERE ARE DETERMINED TO BE NOT ADEQUATE.
2. SPALL REPAIR DETAILS ARE APPLICABLE TO VERTICAL, HORIZONTAL, AND OVERHEAD ORIENTATIONS.
3. ALL ELEMENT AND REINFORCEMENT LAYOUTS SHOWN ARE GENERIC. EXISTING LAYOUTS WILL VARY. SEE REPAIR SCHEDULES GIVEN ON DWGS. UR-S-302 TO UR-S-316 AND REPAIR PLANS GIVEN ON DWGS. UR-S-101 TO UR-S-109 FOR DETAILS.
4. IDENTIFY UNSOUND AND DETERIORATED CONCRETE BY SOUNDING TECHNIQUES AND REVIEW PROPOSED EXTENT OF REPAIR WITH ENGINEER.
5. TAPERED SHOULDERS ARE NOT PERMITTED AROUND THE PERIMETER OF THE REPAIR AREA. CONTRACTOR SHALL SQUARE EDGES OF PATCH AREAS BY SAWING, CHIPPING, OR OTHER MEANS.
6. WHERE REINFORCEMENT IS FOUND TO HAVE GREATER THAN 25% SECTION LOSS, CONTRACTOR SHALL CONSULT ENGINEER. REINFORCEMENT TO BE REPLACED MAY BE SPLICED IN BY LAPPING PER REINFORCING STEEL DETAILS OR VIA MECHANICAL SPLICES.
7. A MINIMUM OF 3 INCHES OF CONCRETE COVER MUST BE UTILIZED OVER ALL REINFORCING BARS AND SPLICES, IF NECESSARY THE REPAIR MAY PROTRUDE FROM THE SIDE OF THE EXISTING CONCRETE IN LOCATIONS WHERE IT WILL NOT INTERFERE WITH NORMAL FUNCTION OF THE STRUCTURE. ALL PROTRUDING REPAIRS MUST HAVE CHAMFERED EDGES.
8. CHAMFER EXTERIOR CORNERS WHEN REPAIRING A SPALL LOCATED ON A CORNER. THE EXISTING CHAMFER SHALL BE MAINTAINED.
9. CHECK pH LEVEL OF CHIPPED SURFACE WITH HYDRION pH PENCIL. ENSURE A pH LEVEL OF 9 OR HIGHER PLACING CONCRETE. IF pH LEVEL IS LOWER THAN 9, THE CONCRETE SHALL BE CHIPPED BACK FURTHER.
10. REPAIRED CONCRETE SURFACES, EITHER BY PUMPING CONCRETE, HANDPACKING, OR SHOTCRETING, SHALL BE LEFT SMOOTH WITHOUT SHARP EDGES OR PROTRUSIONS TO ALLOW MEMBRANE INSTALLATION.
11. WHERE A CONCRETE REPAIR OVERLAPS WITH EITHER A TYPE 4 STEEL BAR PENETRATION, TYPE 7 CORE HOLE REPAIR OR TYPE 8 PVC DRAIN PIPE REPAIR, CONTRACTOR SHALL REPAIR OVERLAPPING DEFECTS TOGETHER USING THE SPALL REPAIR METHOD (TYPE 1 OR TYPE 2). HANDPACKING SHALL NOT BE PERMITTED FOR THESE REPAIRS.

BID SET

DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

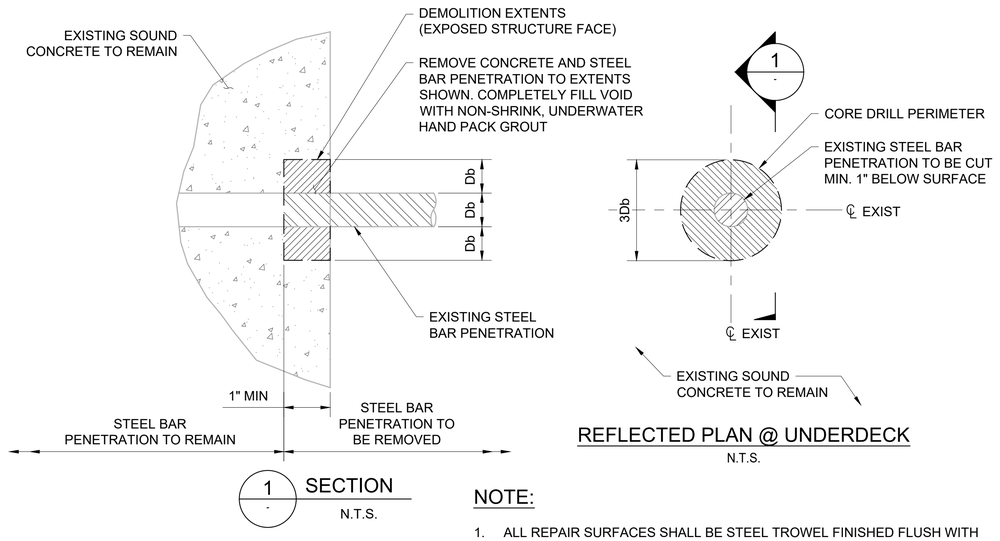
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

UNDERDECK CONCRETE REPAIR DETAILS - 1

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-300.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-300.00.dwg
Date & Time Plotted: 10/20/2026 3:43 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb
Last Date Saved: 10/20/2026 3:38 PM

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



1 - SECTION

N.T.S.

REFLECTED PLAN @ UNDERDECK

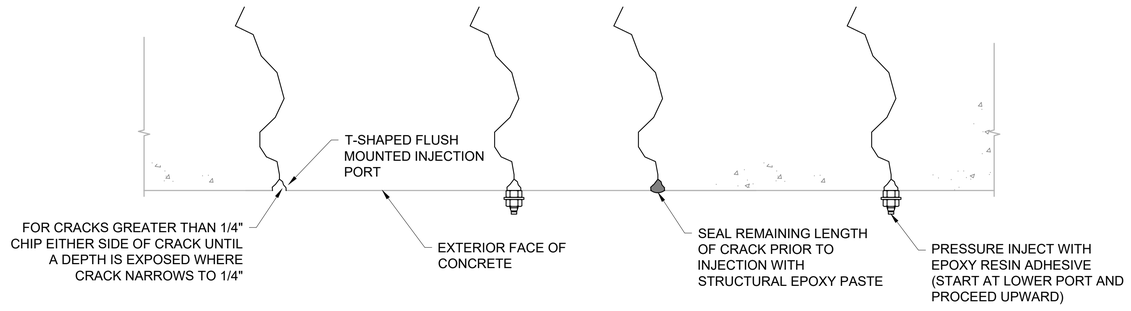
N.T.S.

NOTE:

1. ALL REPAIR SURFACES SHALL BE STEEL TROWEL FINISHED FLUSH WITH EXISTING SURFACE.

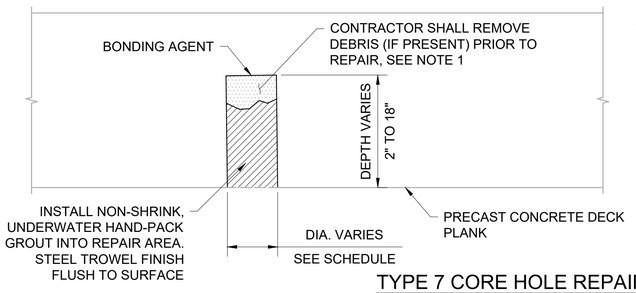
TYPE 4 STEEL BAR PENETRATION REPAIR

N.T.S.



TYPE 5 CRACK REPAIR

N.T.S.

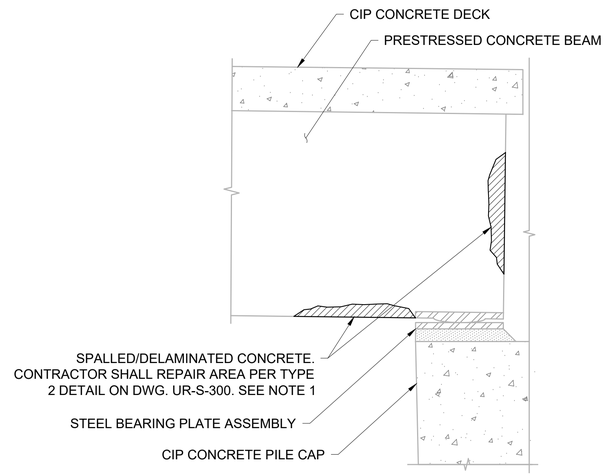


TYPE 7 CORE HOLE REPAIR

N.T.S.

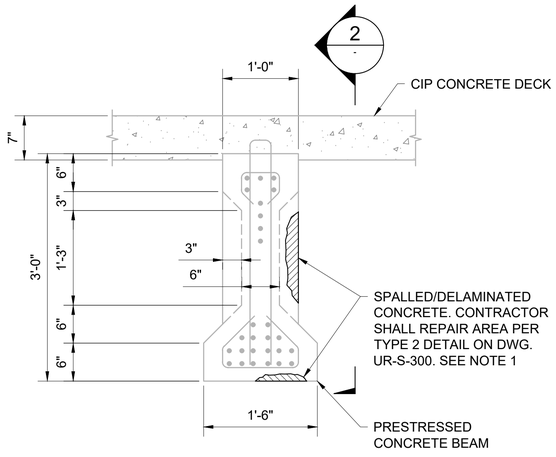
NOTES:

1. INSTANCES OF DEBRIS FROM PREVIOUS CONCRETE REPAIRS WERE NOTED DURING INSPECTION. WHERE PRESENT, CONTRACTOR SHALL REMOVE DEBRIS TO SOUND CONCRETE PRIOR TO CONDUCTING REPAIR.
2. EXISTING STRUCTURE VARIES DEPENDING ON LOCATION OF CORE HOLE. REFER TO SCHEDULE AND UNDERDECK TYPICAL SECTIONS FOR RELEVANT DETAILS AT EACH CORE HOLE.
3 ALL REPAIR SURFACES SHALL BE STEEL TROWEL FINISHED FLUSH WITH EXISTING SURFACE.



2 - ELEVATION

SCALE: 1"=1'-0"

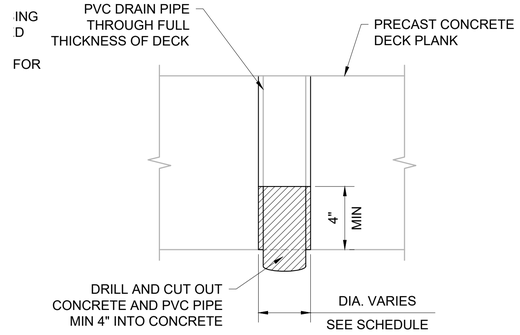


NOTES:

1. CONTRACTOR SHALL TAKE CARE TO NOT DAMAGE ANY PRESTRESSING STRANDS DURING REPAIR AREA PREPARATION. PARTIALLY EXPOSED PRESTRESSING STRANDS SHALL NOT BE FULLY EXPOSED. IF FULLY EXPOSED STRANDS ARE ENCOUNTERED, CONTACT THE ENGINEER FOR DIRECTION.

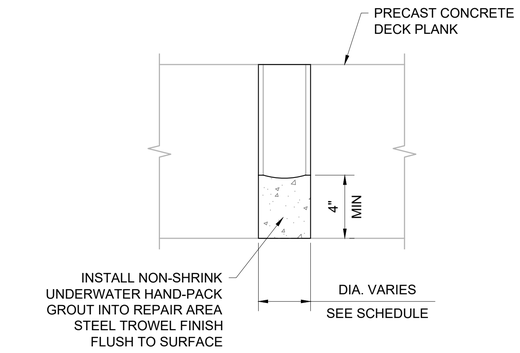
TYPE 6 SPALL REPAIR

SCALE: 1' = 1'-0"



TYPE 8 PVC DRAIN PIPE DEMO

N.T.S.



TYPE 8 PVC DRAIN PIPE REPAIR

N.T.S.

NOTES:

1. CONTRACTOR SHALL PROBE HOLE PRIOR TO INSTALLATION OF TYPE 8 REPAIR. IF SOUND MATERIAL IS REACHED AND CORE HOLE IS NOT FULLY THROUGH THE DECK,CONTRACTOR SHALL REPAIR USING A TYPE 7 CORE HOLE REPAIR.

NOTE: REFER TO REPAIR NOTES GIVEN ON DWG. UR-S-300.00

0 1 2 FT.
1"=1'-0"
0 1 2 3 4 FT.
1/2"=1'-0"

BID SET

DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: G. LICATA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

UNDERDECK CONCRETE REPAIR DETAILS -2

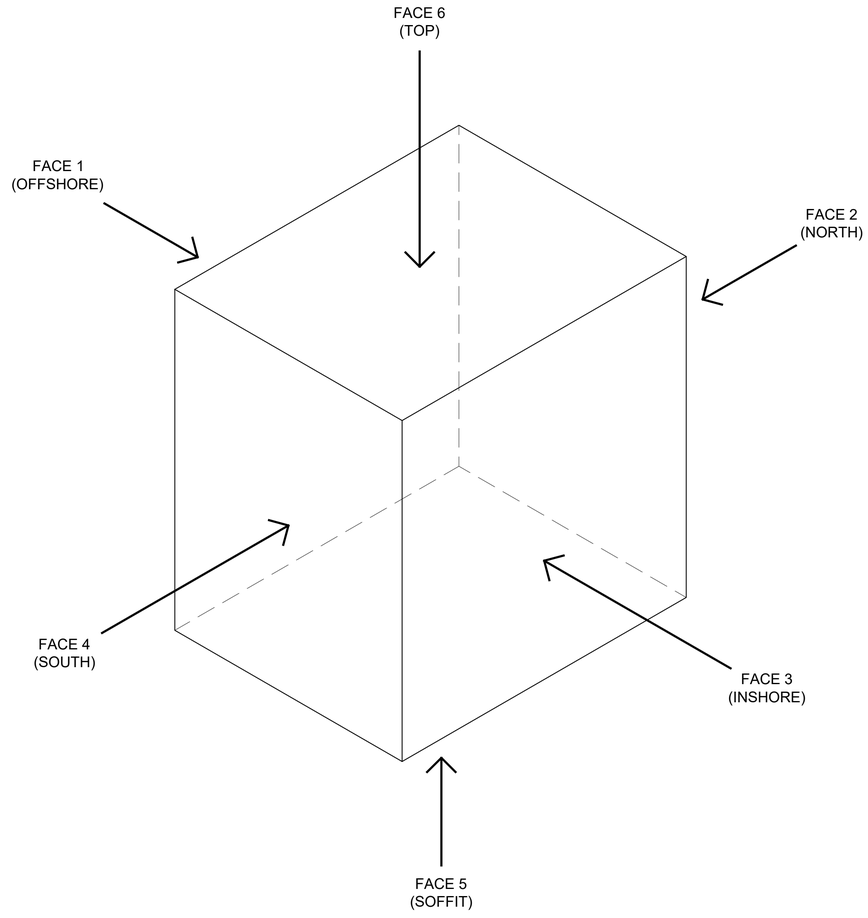
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-301.00

Last Saved By: AcostaML Last Date Saved: 10/20/2026 3:38 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches) Plot Style Table: BEDC_Acad(N).ctb
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-301.00.dwg
Date & Time Plotted: 10/20/2026 3:43 PM
Plot Scale: 1:1

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

CONCRETE REPAIR SCHEDULE - PHASE 1

LOCATION					REPAIR TYPE	DEFECT NOTES			NOTES
STRUCTURE	BENT	PILE	FACE	ELEMENT		AREA	DEPTH	BARS EXPOSED	
PLANT RAMPS	10/11.9	CC.8	5	DECK	TYPE 2	1.5	4	-	
PLANT RAMPS	11/12.9	CC.8	5	DECK	TYPE 2	1.5	3	-	
PLANT RAMPS	12/13.1	CC.8	5	DECK	TYPE 2	0.5	-	-	
PLANT ACCESS RAMPS	14	DD.4	3/5	CAP	TYPE 6	23.5	-	-	
PLANT ACCESS RAMPS	14.1	-	5	BEAM 9	TYPE 6	1.5	1	-	AT BEARING PLATE
PLANT ACCESS RAMPS	14.1	-	2/3	BEAM 9	TYPE 6	1	1.5	1	
PLANT ACCESS RAMPS	14.1	-	5	BEAM 8	TYPE 6	1.5	1	-	AT BEARING PLATE
PLANT ACCESS RAMPS	14.1	-	5	BEAM 7	TYPE 6	1.5	1	-	AT BEARING PLATE
PLANT ACCESS RAMPS	14.1	-	5	BEAM 6	TYPE 6	1.5	1	-	AT BEARING PLATE
PLANT ACCESS RAMPS	14.1	-	2	BEAM 5	TYPE 6	1	1.5	1	
PLANT ACCESS RAMPS	14.1	-	2	BEAM 4	TYPE 6	0.5	0.75	1	
PLANT ACCESS RAMPS	14.1	-	5	BEAM 2	TYPE 6	1.5	1	-	AT BEARING PLATE
PLANT ACCESS RAMPS	14.1	-	5	BEAM 1	TYPE 6	1.5	1	-	AT BEARING PLATE
PLANT ACCESS RAMPS	14.1	-	1/2/3	BEAM 6	TYPE 6	2.5	1.5	1	
PLANT ACCESS RAMPS	14.9	-	5	BEAM 9	TYPE 6	1.5	1	-	AT BEARING PLATE
PLANT ACCESS RAMPS	14.9	-	5	BEAM 8	TYPE 6	1.5	1	-	AT BEARING PLATE
PLANT ACCESS RAMPS	14.9	-	5	BEAM 7	TYPE 6	1.5	1	-	AT BEARING PLATE
PLANT ACCESS RAMPS	14.9	-	5	BEAM 6	TYPE 6	1.5	1	-	AT BEARING PLATE
PLANT ACCESS RAMPS	14.9	-	3/4	BEAM 6	TYPE 6	0.5	1	4	
PLANT ACCESS RAMPS	14.9	-	4	BEAM 5	TYPE 6	1	1	8	
PLANT ACCESS RAMPS	14.9	-	5	BEAM 3	TYPE 6	1.5	-	-	AT BEARING PLATE
PLANT ACCESS RAMPS	14.9	-	4	BEAM 3	TYPE 6	1	1	2	
PLANT ACCESS RAMPS	14.9	-	5	BEAM 2	TYPE 6	1.5	-	-	AT BEARING PLATE
PLANT ACCESS RAMPS	14.9	-	5	BEAM 1	TYPE 6	1.5	-	-	AT BEARING PLATE
PLANT ACCESS RAMPS	14.9	CC - CC.9	5	DECK	TYPE 5		-	-	23 FT LONG HAIRLINE CRACK
PLANT ACCESS RAMPS	17	CC.1	5	DECK	TYPE 1	0.5	1.5	-	SPALL ON NORTH SIDE OF EXPANSION JOINT
PLANT ACCESS RAMPS	17	CC.4 - CC.5	5	DECK	TYPE 1	3.5	4	2	SPALL ON SOUTH SIDE OF EXPANSION JOINT
PLANT ACCESS RAMPS	17.1	-	5	BEAM 1	TYPE 6	1.5	-	-	AT BEARING PLATE
PLANT ACCESS RAMPS	17.1	-	2/3	BEAM 2	TYPE 6	2	-	-	
PLANT ACCESS RAMPS	17.1	-	2/3	BEAM 3	TYPE 6	0.5	1.5	-	
PLANT ACCESS RAMPS	17.1	-	1/2	BEAM 4	TYPE 6	1	-	-	
PLANT ACCESS RAMPS	17.1	-	1/2	BEAM 5	TYPE 6	2	2.5	3	
PLANT ACCESS RAMPS	17.1	-	2	BEAM 6	TYPE 6	0.5	0.75	1	
PLANT ACCESS RAMPS	17.1	-	1/2	BEAM 7	TYPE 6	2	2	2	
PLANT ACCESS RAMPS	17.9	-	4	BEAM 3	TYPE 6	1	1	1	
PLANT ACCESS RAMPS	18	CC.5 - CC.7	5	DECK	TYPE 6	1	3	1	



BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: G. LICATA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

PHASE 1 CONCRETE REPAIR SCHEDULE

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-302.00

Last Saved By: AcostaML
Last Date Saved: 10/20/2026 3:38 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Plot Style Table: BEDC_Acad(N).ctb
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129598\UR-S-302.00.dwg
Date & Time Plotted: 10/20/2026 3:43 PM
Plot Scale: 1:1

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

STEEL BAR PENETRATION REPAIR SCHEDULE - PHASE 1

LOCATION				DIAMETER (IN.)	NOTES
STRUCTURE	BENT	PILE	ELEMENT		
DIGESTERS	0.9	U.1 - U.6	DECK	2	5 LOCATIONS TOTAL
DIGESTERS	1	M	CAP	1.5	
DIGESTERS	1	N	CAP	1	2 LOCATIONS TOTAL
DIGESTERS	1	P	DECK	1	2 LOCATIONS TOTAL
DIGESTERS	1	R	CAP	1	2 LOCATIONS TOTAL
DIGESTERS	1.1	M	CAP	1	
DIGESTERS	0/1	T.1	CAP	1	
DIGESTERS	0/1	U.4 - U.8	CAP	2	3 LOCATIONS TOTAL
DIGESTERS	0/1.1	U	CAP	1	2 LOCATIONS TOTAL
DIGESTERS	0/1.1 - 0.5	U.1 - U.3	CAP	2	5 LOCATIONS TOTAL
DIGESTERS	0/1.4	T.4	DECK	2	
DIGESTERS	2/3.9	U.1	DECK	1	
DIGESTERS	5.3	R.3	CAP	1	
DIGESTERS	6	E.1	CAP	2	
DIGESTERS	6	Q.9	CAP	1	2 LOCATIONS TOTAL
DIGESTERS	6.1	K	CAP	1	
DIGESTERS	6.1	L	CAP	1	
DIGESTERS	6.7	R.1	CAP	2	
DIGESTERS	6.9	K	CAP	1	
DIGESTERS	6.9	L	CAP	1	
DIGESTERS	8	Q	CAP	1	
DIGESTERS	8.4	K	CAP	1	
DIGESTERS	8.9	H	CAP	1	
DIGESTERS	8.9	J	CAP	1	
DIGESTERS	8.9	L	CAP	1	
DIGESTERS	8.9	M	CAP	1	
DIGESTERS	8.9	N	CAP	1	
DIGESTERS	8.9	Q	CAP	1	
DIGESTERS	9	N.9	CAP	1	
DIGESTERS	9	Q.9	CAP	1	5 LOCATIONS TOTAL
DIGESTERS	9	R.1	CAP	1	
DIGESTERS	9.7	M/N2.8	DECK	1.5	
DIGESTERS	10	H/J.2	CAP	1.5	
DIGESTERS	10	H/J.4	CAP	1.5	
DIGESTERS	10	L/M.8	CAP	1	
DIGESTERS	10	L/M.9	CAP	1	
DIGESTERS	10	M/N.1	CAP	1	
DIGESTERS	10	M/N.3	CAP	1	10 LOCATIONS TOTAL
DIGESTERS	10	Q/R.1	CAP	1	
DIGESTERS	10	Q/R.2	CAP	1	
DIGESTERS	10	Q/R.5	CAP	1	
DIGESTERS	10	Q/R.8	CAP	1	
DIGESTERS	10	Q/R.9	CAP	1	
DIGESTERS	10	R/S.1 - R/S.9	CAP	1	3 LOCATIONS TOTAL
DIGESTERS	12	R/S.8	CAP	1	
DIGESTERS	13	M/N.1	CAP	1	
DIGESTERS	13	M/N1.1	CAP	2	
DIGESTERS	13/14.1	T	CAP	2	
DIGESTERS	13.8	S	CAP	1	

STEEL BAR PENETRATION REPAIR SCHEDULE - PHASE 1

LOCATION				DIAMETER (IN.)	NOTES
STRUCTURE	BENT	PILE	ELEMENT		
DIGESTERS	14	T.2	CAP	2	
DIGESTERS	14	X.5	CAP	1	
PLANT RAMPS	0/1.1	CC	CAP	1.5	
PLANT RAMPS	0/1.5	BB	CAP	1.5	5 LOCATIONS TOTAL
PLANT RAMPS	2/3.5	BB	CAP	1.5	4 LOCATIONS TOTAL
PLANT RAMPS	3/4.5	BB	CAP	1.5	3 LOCATIONS TOTAL
PLANT RAMPS	4/3.3	BB	CAP	1.5	3 LOCATIONS TOTAL
PLANT RAMPS	5/6.3	BB	CAP	1.5	3 LOCATIONS TOTAL
PLANT RAMPS	6/7.3	BB	CAP	1.5	3 LOCATIONS TOTAL
PLANT RAMPS	7/8.4	BB	CAP	2	
PLANT RAMPS	13	DD	CAP	1	

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: G. LICATA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

PHASE 1 TYPE 4 STEEL BAR PENETRATION REPAIR SCHEDULE

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-303.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-303.00.dwg
Last Date Saved: 10/20/2026 3:38 PM
Date & Time Plotted: 10/20/2026 3:43 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

CORE HOLE REPAIR SCHEDULE - PHASE 1

LOCATION				DIAMETER (IN)	NOTES
STRUCTURE	BENT	PILE	ELEMENT		
DIGESTERS	0/1.4	B	CAP	3	WITH ANCHOR HOLES
DIGESTERS	0/1.7	C.2	DECK	2	
DIGESTERS	5/6.1.5	T.3	DECK	3	
DIGESTERS	8.5	F.7	DECK	2	
DIGESTERS	8/9.9	B.6	DECK	3	
DIGESTERS	9/10.1	B.5	CAP	3	
DIGESTERS	13/14	A.25	CAP	3	FAILED EPOXY REPAIR

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: G. LICATA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

PHASE 1 TYPE 7 CORE HOLE REPAIR SCHEDULE

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-304.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML Last Date Saved: 10/20/2026 3:38 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches) Date & Time Plotted: 10/20/2026 3:43 PM
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-304.00.dwg Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

PVC PIPE REPAIR SCHEDULE - PHASE 1			
STRUCTURE	BENT	PILE	DIAMETER (in.)
DIGESTER TANKS	0/1	A.2	2
DIGESTER TANKS	5.5	Q.3	2
DIGESTER TANKS	5/6.2.6	C.3	2
DIGESTER TANKS	7.9	K.4	2

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: G. LICATA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

PHASE 1 TYPE 8 PVC PIPE REPAIR SCHEDULE

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-305.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

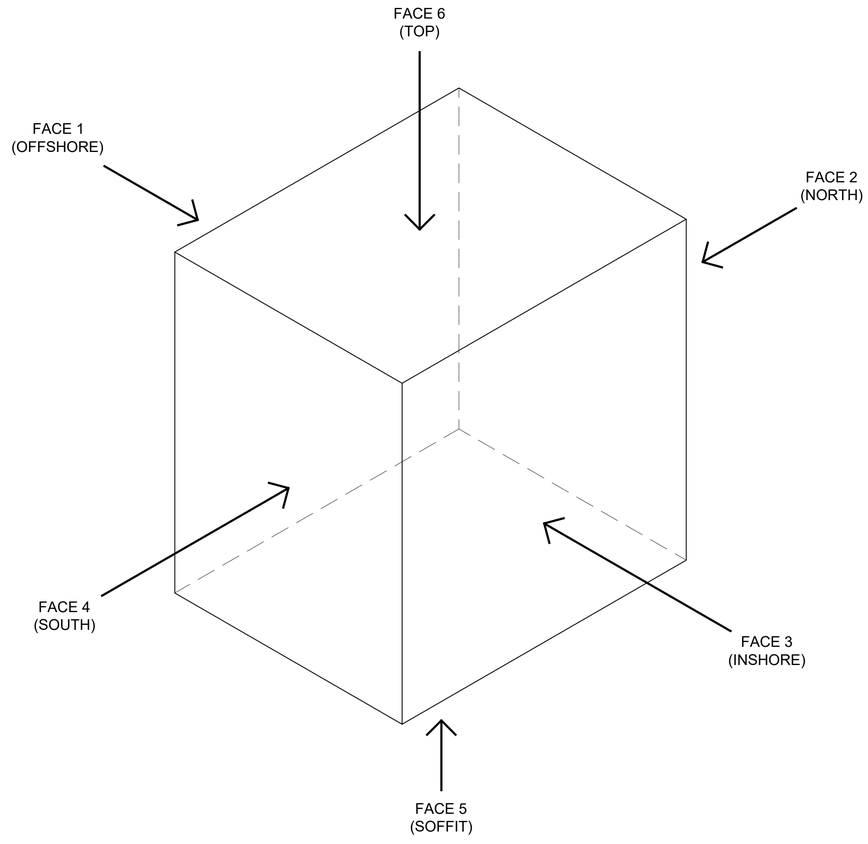
Last Saved By: AcostaML Last Date Saved: 10/20/2026 3:38 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches) Plot Style Table: BEDC_Acad(N).ctb
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-305.00.dwg
Date & Time Plotted: 10/20/2026 3:43 PM
Plot Scale: 1:1

CONCRETE REPAIR SCHEDULE - PHASE 2

LOCATION					REPAIR TYPE	DEFECT NOTES			NOTES
STRUCTURE	BENT	PILE	FACE	ELEMENT		AREA	DEPTH	BARS EXPOSED	
FINAL TANKS	11.1.8	U.4	5	DECK	TYPE 2	1	3	-	
FINAL TANKS	12.5	W.6	5	DECK	TYPE 2	0.5	2	-	
FINAL TANKS	13	N	4/5	CAP	TYPE 3	0.5	-	1	
FINAL TANKS	13.9	Q.2	5	DECK	TYPE 2	0.5	1	-	
FINAL TANKS	13.9	R.1	5	DECK	TYPE 2	0.5	2	-	
FINAL TANKS	15.5	S.4	5	DECK	TYPE 2	0.5	2	-	
FINAL TANKS	15.8	G.4	5	DECK	TYPE 2	0.5	6	-	
FINAL TANKS	15.8	Q.2	5	DECK	TYPE 2	0.5	2	-	
FINAL TANKS	18.1	U.1	5	DECK	TYPE 2	1	3	-	
FINAL TANKS	18.1	U.6	5	DECK	TYPE 2	0.5	3	-	
FINAL TANKS	18.2	Q.3	5	DECK	TYPE 2	0.5	1	-	
FINAL TANKS	18.4	C.4	5	DECK	TYPE 1	0.5	4	1	
FINAL TANKS	18.5	J.7	5	DECK	TYPE 2	1	4	-	
FINAL TANKS	18.5	R.1	5	DECK	TYPE 2	0.5	2	-	
FINAL TANKS	19.1	C.7	5	DECK	TYPE 2	0.5	4	-	
FINAL TANKS	19.7	A.a	5	CAP	TYPE 1	2	4	2	
FINAL TANKS	19.8	R.6	5	DECK	TYPE 2	0.5	2	-	
FINAL TANKS	20.5	E.1	5	DECK	TYPE 2	0.5	3	-	
FINAL TANKS	21.4	B.5	5	DECK	TYPE 2	1	4	-	
FINAL TANKS	21.4	V.1	5	DECK	TYPE 2	0.5	-	-	
FINAL TANKS	22.2	J.6	5	DECK	TYPE 2	0.5	1	-	
FINAL TANKS	24.1	V.2	5	DECK	TYPE 2	0.5	-	-	
FINAL TANKS	25.6	V.2	5	DECK	TYPE 2	0.5	2	-	
FINAL TANKS	25.9	N.5	5	DECK	TYPE 2	0.5	-	-	
FINAL TANKS	26.1	V.3	5	DECK	TYPE 2	1	3	-	
FINAL TANKS	29.1.2	T.5	5	DECK	TYPE 2	1	2	-	
FINAL TANKS	29.1.7	V.5	5	DECK	TYPE 2	0.5	3	-	
FINAL TANKS	29.1.8	R.8	5	DECK	TYPE 2	1	2	-	
FINAL TANKS	31.3	E.3	5	DECK	TYPE 2	1.5	3	-	
FINAL TANKS	31.3	N.5	5	DECK	TYPE 2	0.5	3	-	
FINAL TANKS	31.5	P.8	5	DECK	TYPE 2	0.5	2	-	
FINAL TANKS	31.7	B.8	5	DECK	TYPE 2	0.5	3	-	
FINAL TANKS	31.9	G.4	5	DECK	TYPE 2	1	4	-	X2
FINAL TANKS	33.1	G.5	5	DECK	TYPE 1	0.5	3	1	
FINAL TANKS	33.6	V.2	5	DECK	TYPE 2	0.5	2	-	
FINAL TANKS	33.7	J.6	5	DECK	TYPE 2	0.5	3	-	
FINAL TANKS	33.8	N.8	5	DECK	TYPE 2	4	2	-	
FINAL TANKS	33.8	P.8	5	DECK	TYPE 2	0.5	2	-	
FINAL TANKS	33.9	Q.8	5	DECK	TYPE 2	4	2	-	
FINAL TANKS	34	P	5	CAP	TYPE 2	2	3	-	
FINAL TANKS	35	V	5	CAP	TYPE 1	13.5	12	-	
FINAL TANKS	35.5	A.1.3	5	DECK	TYPE 2	0.5	4	-	
FINAL TANKS	35.7	B.5	5	DECK	TYPE 2	1	3	-	
FINAL TANKS	35.8	J.5	5	DECK	TYPE 2	0.5	2	-	
FINAL TANKS	35.9	G.6	5	DECK	TYPE 2	1.5	3	-	
FINAL TANKS	36.1	P.9	5	DECK	TYPE 2	0.5	2	-	
FINAL TANKS	36.1	R.1	5	DECK	TYPE 2	0.5	2	-	
FINAL TANKS	36.2	V.5	5	DECK	TYPE 2	0.5	2	-	

CONCRETE REPAIR SCHEDULE - PHASE 2

LOCATION					REPAIR TYPE	DEFECT NOTES			NOTES
STRUCTURE	BENT	PILE	FACE	ELEMENT		AREA	DEPTH	BARS EXPOSED	
FINAL TANKS	36.4	E.5	5	DECK	TYPE 2	0.5	1	-	
FINAL TANKS	36.8	A.a	5	CAP	TYPE 3	2	3	1	FAILED EPOXY REPAIR
FINAL TANKS	36.9	D.2	5	DECK	TYPE 2	1	1	-	
FINAL TANKS	37.3.5	A.1.5	5	DECK	TYPE 1	2.5	5	1	
FINAL TANKS	37.3.8	F.8	5	DECK	TYPE 2	1.5	3	-	
FINAL TANKS	37.5	E.5	5	DECK	TYPE 2	0.5	1	-	
FINAL TANKS	38.5	F.8	5	DECK	TYPE 2	1	2	-	
FINAL TANKS	38.6	B.7	5	DECK	TYPE 2	1.5	2	-	
FINAL TANKS	38.6	M.1.5	5	DECK	TYPE 2	0.5	3	-	
FINAL TANKS	38.7	E.4	5	DECK	TYPE 2	1	2	-	



BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: G. LICATA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

PHASE 2 CONCRETE REPAIR SCHEDULE

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-306.00

Last Saved By: AcostaML
Last Date Saved: 10/20/2026 3:38 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-011\d0129598\UR-S-306.00.dwg
Date & Time Plotted: 10/20/2026 3:43 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

STEEL BAR PENETRATION REPAIR SCHEDULE - PHASE 2

LOCATION				DIAMETER (IN.)	NOTES
STRUCTURE	BENT	PILE	ELEMENT		
FINAL TANKS	11.1	A.1	CAP	1	
FINAL TANKS	11.1	A.a	CAP	1	3 LOCATIONS TOTAL
FINAL TANKS	11.1	C.2 - C.3	CAP	1	3 LOCATIONS TOTAL
FINAL TANKS	11.1	C.9	CAP	1	
FINAL TANKS	11.1	E.8	CAP	1	
FINAL TANKS	11.1	F.1	CAP	1	
FINAL TANKS	11.1	G.1	CAP	1	
FINAL TANKS	11.1	W	CAP	1	6 LOCATIONS TOTAL
FINAL TANKS	11.1.4	D	CAP	1	
FINAL TANKS	12	F.3	CAP	1	
FINAL TANKS	12	F.6	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	12	M.1.1	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	12	P	CAP	1	
FINAL TANKS	12.9	F	CAP	1	
FINAL TANKS	13	A.a	CAP	2	
FINAL TANKS	13	F.4	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	13	F.6	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	13.1	A.a	CAP	1	
FINAL TANKS	13.1	F	CAP	1	
FINAL TANKS	13.9	A.a	CAP	1	
FINAL TANKS	13.9	F	CAP	1	
FINAL TANKS	14	F.4	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	14	F.6	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	14	S.2	CAP	1	
FINAL TANKS	14.1	A.a	CAP	1	
FINAL TANKS	15	F.6	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	15.2	F	CAP	1	
FINAL TANKS	15.9	F	CAP	1	
FINAL TANKS	15.9	F.9	CAP	1	
FINAL TANKS	16	F.4	CAP	1	
FINAL TANKS	16	F.6	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	16.1	F	CAP	1	
FINAL TANKS	16.1	V.7	DECK	1	
FINAL TANKS	16.9	F	CAP	1	
FINAL TANKS	17	F.6	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	17.9	A.a	CAP	1	
FINAL TANKS	17.9	B	CAP	1	
FINAL TANKS	18	F.6	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	18.1	A.a	CAP	1	
FINAL TANKS	18.1	B	CAP	1.5	
FINAL TANKS	18.7	A-0.2	CAP	1	
FINAL TANKS	18.9	A.a	CAP	1	
FINAL TANKS	18.9	B	CAP	1	
FINAL TANKS	19	A.a	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	19	F.6	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	20	B.4 - B.9	CAP	1	5 LOCATIONS TOTAL
FINAL TANKS	20	B.9	CAP	1	
FINAL TANKS	20	D.8	CAP	1	
FINAL TANKS	20	E.1	CAP	1	
FINAL TANKS	20	F.7	CAP	1	
FINAL TANKS	20	F.8	CAP	1	
FINAL TANKS	20	F.9	CAP	1	
FINAL TANKS	20.1	A.a	CAP	1	
FINAL TANKS	20.8	K.1	CAP	1	

STEEL BAR PENETRATION REPAIR SCHEDULE - PHASE 2

LOCATION				DIAMETER (IN.)	NOTES
STRUCTURE	BENT	PILE	ELEMENT		
FINAL TANKS	21	F.6	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	21	A.a	CAP	1	
FINAL TANKS	21.9	A.a	CAP	1	
FINAL TANKS	22	A.a	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	22	K.9	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	22	R.4	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	22	T.9	CAP	1	
FINAL TANKS	22.9	A.a	CAP	1	
FINAL TANKS	23	A.a	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	23	R.4	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	23	T.9	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	23	U - V	CAP	1	7 LOCATIONS TOTAL
FINAL TANKS	23	V - W	CAP	1	4 LOCATIONS TOTAL
FINAL TANKS	24	A.a	CAP	3	
FINAL TANKS	24	F.6	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	24	R.5	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	25	R.4	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	26	A.a	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	26	T	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	26	T - U	CAP	1	10 LOCATIONS TOTAL
FINAL TANKS	26	U.3	CAP	1	7 LOCATIONS TOTAL
FINAL TANKS	26	V.2	CAP	1	
FINAL TANKS	27	F.6	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	27.1	A.a	CAP	1	
FINAL TANKS	27.1	B.4	CAP	1	
FINAL TANKS	27.1.6	A.a.5	CAP	1	
FINAL TANKS	27.1.9	A.a	CAP	1	
FINAL TANKS	27.9	A.a	CAP	1	
FINAL TANKS	29.1	A.a.7	CAP	1	
FINAL TANKS	29.1.2	K.1	CAP	1.5	
FINAL TANKS	29.1.9	A.a	CAP	3	
FINAL TANKS	30.1	A.1.9	DECK	1.5	
FINAL TANKS	30.1	A.a	CAP	1	
FINAL TANKS	34	A.a	CAP	1	
FINAL TANKS	35	A.a	CAP	1	
FINAL TANKS	36.1	H.5	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	36.1	J	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	36.1	K	CAP	2	2 LOCATIONS TOTAL
FINAL TANKS	36.1	N	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	36.1	P	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	36.1	Q	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	36.1	R	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	36.1	T	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	36.4	A.1.8	DECK	-	
FINAL TANKS	36.9	H.5	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	36.9	J	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	36.9	N	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	36.9	P	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	36.9	Q	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	36.9	R	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	36.9	T	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37	A.a	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37	K.9	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.1	H	CAP	1	2 LOCATIONS TOTAL

STEEL BAR PENETRATION REPAIR SCHEDULE - PHASE 2

LOCATION				DIAMETER (IN.)	NOTES
STRUCTURE	BENT	PILE	ELEMENT		
FINAL TANKS	37.1	J	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.1	K	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.1	N	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.1	P	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.1	Q	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.1	R	CAP	1	
FINAL TANKS	37.3.1	H	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.3.1	J	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.3 - 38	K	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.3.1	N	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.3.1	P	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.3.1	Q	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.3.1	R.7	DECK	1	3 LOCATIONS TOTAL
FINAL TANKS	37.3.9	H	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.3.9	J	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.3.9	N	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.3.9	P	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.3.9	Q	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.3.9	R	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.3.9	R.7	DECK	1	3 LOCATIONS TOTAL
FINAL TANKS	37.9	H	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.9	J	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.9	K	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.9	N	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.9	P	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.9	Q	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	37.9	R	CAP	1	
FINAL TANKS	38	A.a	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	38	D.6	CAP	1	
FINAL TANKS	38	D.7	CAP	1	
FINAL TANKS	38	D.9	CAP	1	
FINAL TANKS	38	E.1	CAP	1	
FINAL TANKS	38	E.3	CAP	1	
FINAL TANKS	38	E.5	CAP	1	
FINAL TANKS	38	E.7	CAP	1	
FINAL TANKS	38	K.9	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	38.1	A.1	CAP	1	
FINAL TANKS	38.1	G	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	38.1	H	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	38.1	J	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	38.1	K	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	38.1	N	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	38.1	P	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	38.1	Q	CAP	1	
FINAL TANKS	38.1	Q	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	38.1	R	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	38.1	T	CAP	1	2 LOCATIONS TOTAL

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: G. LICATA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

PHASE 2 TYPE 4 STEEL BAR PENETRATION REPAIR SCHEDULE

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-307.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-307.00.dwg
Last Date Saved: 10/20/2026 3:38 PM
Date & Time Plotted: 10/20/2026 3:44 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

CORE HOLE REPAIR SCHEDULE - PHASE 2

LOCATION				DIAMETER (IN)	NOTES
STRUCTURE	BENT	PILE	ELEMENT		
FINAL TANKS	11.1.6	F.7	DECK	3	
FINAL TANKS	11.1.7	H.6	DECK	3	
FINAL TANKS	12.5	W.6	DECK	2	
FINAL TANKS	12.8	B.8	DECK	3	
FINAL TANKS	14.1	F.7	DECK	6	HOLE GOES THROUGH DECK
FINAL TANKS	15.3	F.5	CAP	2	
FINAL TANKS	16	A.1.6	CAP	1	
FINAL TANKS	18.2	Q.3	DECK	2	
FINAL TANKS	18.5	J.7	DECK	2	
FINAL TANKS	18.5	R.1	DECK	2	
FINAL TANKS	19	A.1.4	CAP	2	X2
FINAL TANKS	19.1	C.7	DECK	2	
FINAL TANKS	19.2	D.3	DECK	3	
FINAL TANKS	21.8	G.8	DECK	3	
FINAL TANKS	23.8	G.2	DECK	3	
FINAL TANKS	23.8	J.7	DECK	3	
FINAL TANKS	27.9	H.1	DECK	2	
FINAL TANKS	31.7	B.8	DECK	3	
FINAL TANKS	35.9	G.6	DECK	2	
FINAL TANKS	36.1	N.3	DECK	3	
FINAL TANKS	37.1	C.9	DECK	3	X2
FINAL TANKS	37.9	B.8	CAP	3	
FINAL TANKS	37.3.9	A.1	CAP	3	FAILED EPOXY REPAIR
FINAL TANKS	38	A.a.5	CAP	4	
FINAL TANKS	38.5	J.7	DECK	2	
FINAL TANKS	38.2	N.8	DECK	3	

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: G. LICATA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

PHASE 2 TYPE 7 CORE HOLE REPAIR SCHEDULE

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-308.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-308.00.dwg
Last Date Saved: 10/20/2026 3:38 PM
Date & Time Plotted: 10/20/2026 3:44 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PVC PIPE REPAIR SCHEDULE - PHASE 2

STRUCTURE	BENT	PILE	DIAMETER (in.)
FINAL TANKS	11.1.5	J.5	3
FINAL TANKS	11.1.5	K.5	3
FINAL TANKS	11.1.5	N.2	2
FINAL TANKS	11.1.8	R.2	2
FINAL TANKS	11.1.8	U.4	2
FINAL TANKS	11.1.9	S.2	2
FINAL TANKS	12.7	D.5	3
FINAL TANKS	13.5	B.5	3
FINAL TANKS	13.5	C.5	5
FINAL TANKS	13.6	E.7	3
FINAL TANKS	13.7	K.5	3
FINAL TANKS	13.8	N.4	3
FINAL TANKS	13.8	U.4	2
FINAL TANKS	15.5	S.4	2
FINAL TANKS	15.8	N.4	3
FINAL TANKS	15.9	U.7	2
FINAL TANKS	17.9	N.3	3
FINAL TANKS	18.1	U.1	2
FINAL TANKS	18.3	S.4	2
FINAL TANKS	19.6	A.1.4	3
FINAL TANKS	21.8	N.3	2
FINAL TANKS	21.8	S.5	2
FINAL TANKS	23.5	P	2
FINAL TANKS	23.9	Q.2	2
FINAL TANKS	23.9	Q.6	2
FINAL TANKS	23.9	U.3	2
FINAL TANKS	24.1	V.2	3
FINAL TANKS	25.2	B.7	2
FINAL TANKS	25.2	D.7	2
FINAL TANKS	25.5	E.4	2
FINAL TANKS	25.6	V.2	3
FINAL TANKS	25.8	J.6	1.5
FINAL TANKS	25.8	Q.7	3
FINAL TANKS	25.9	U.3	2
FINAL TANKS	25.9	U.3	2
FINAL TANKS	26.1	V.3	3
FINAL TANKS	27.8	C.4	2.5
FINAL TANKS	27.8	J.7	2
FINAL TANKS	29.1	A.1.4	2.5
FINAL TANKS	29.1.1	U.6	3
FINAL TANKS	29.1.2	T.5	3
FINAL TANKS	29.1.7	V.5	3
FINAL TANKS	29.1.8	R.8	2
FINAL TANKS	31.3	E.3	2.5
FINAL TANKS	31.3	N.5	2
FINAL TANKS	31.4	C.7	2.5
FINAL TANKS	31.4	D.4	2.5
FINAL TANKS	31.5	P.8	2

PVC PIPE REPAIR SCHEDULE - PHASE 2

STRUCTURE	BENT	PILE	DIAMETER (in.)
FINAL TANKS	31.8	U.1	3
FINAL TANKS	31.9	G.4	1.5
FINAL TANKS	33.1	G.5	2
FINAL TANKS	33.6	V.2	3
FINAL TANKS	33.7	J.6	1.5
FINAL TANKS	33.8	P.8	2
FINAL TANKS	33.9	Q.8	2
FINAL TANKS	35.7	B.5	2
FINAL TANKS	36.1	P.9	2
FINAL TANKS	36.1	R.1	3
FINAL TANKS	36.8	E.2	1.5
FINAL TANKS	37.5	D.5	2
FINAL TANKS	37.3.1	A.1.4	3

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: G. LICATA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

PHASE 2 TYPE 8 PVC PIPE REPAIR SCHEDULE

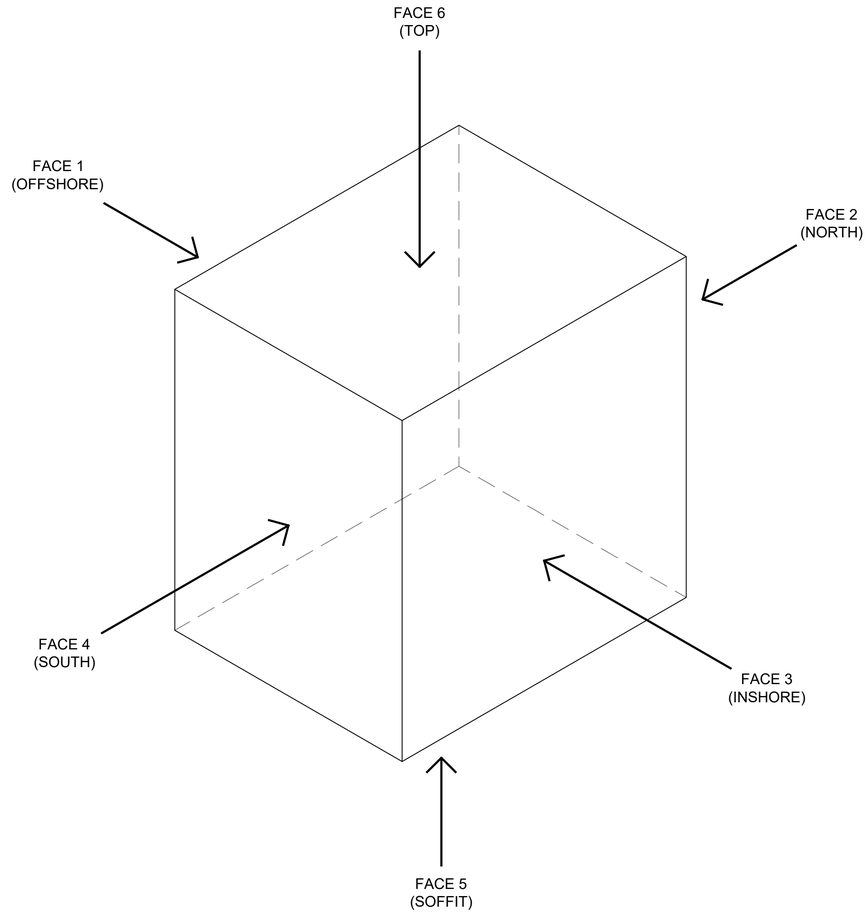
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-309.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-309.00.dwg
Last Date Saved: 10/20/2026 3:38 PM
Date & Time Plotted: 10/20/2026 3:44 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

CONCRETE REPAIR SCHEDULE - PHASE 3

LOCATION					REPAIR TYPE	DEFECT NOTES			NOTES
STRUCTURE	BENT	PILE	FACE	ELEMENT		AREA	DEPTH	BARS EXPOSED	
FINAL TANKS	1.1.5	Q	5	CAP	TYPE 3	0.5	-	1	
FINAL TANKS	1.1.7	A.1.5	5	CAP	TYPE 3	0.5	4	-	INTERMEDIATE CAP
FINAL TANKS	1.1.8	C.6	5	DECK	TYPE 1	1	3	1	
FINAL TANKS	1.1.8	D.4	5	DECK	TYPE 1	4.5	5	5	
FINAL TANKS	3.1	B.5	5	DECK	TYPE 2	1	2	-	
FINAL TANKS	4.8	A.1	5	CAP	TYPE 1	7	2	1	
AERATION TANKS	1.1.6	V.3	5	DECK	TYPE 2	0.5	2	-	
AERATION TANKS	1.1.7	N.8	5	DECK	TYPE 2	0.5	2	-	
AERATION TANKS	3.4	V.8	5	DECK	TYPE 2	0.5	2	-	
AERATION TANKS	3.5	U.1.8	5	DECK	TYPE 2	0.5	1.5	-	
AERATION TANKS	3.9	E.2	5	DECK	TYPE 2	2.5	2	-	
AERATION TANKS	4.3	E.2	5	DECK	TYPE 2	0.5	2		
AERATION TANKS	4.3	S.1.1	5	DECK	TYPE 1	1	3	4	
AERATION TANKS	4.7	F.1.1	5	DECK	TYPE 2	1.5	2		
AERATION TANKS	4.9	T.1.1	5	DECK	TYPE 2	0.5	1	-	
AERATION TANKS	5.3	U.1.2	5	DECK	TYPE 2	0.5	1	-	
AERATION TANKS	5.8	T.5	5	DECK	TYPE 1	1	2	2	
AERATION TANKS	5.8	U.1.2	5	DECK	TYPE 1	0.5	1	2	
AERATION TANKS	5.8	U.2	5	DECK	TYPE 1	0.5	2	2	
AERATION TANKS	5.9	S.1.1	5	DECK	TYPE 2	1.5	3	-	
AERATION TANKS	6.3	D.1.8	5	DECK	TYPE 2	0.5	3	-	
AERATION TANKS	6.4	G.8	5	DECK	TYPE 2	0.5	3	-	
AERATION TANKS	6.5	B.1.5	5	DECK	TYPE 1	2.5	5	4	HEAVY EFFLORESCENCE
AERATION TANKS	7.1	F.5	5	DECK	TYPE 2	1.5	2	-	
AERATION TANKS	7.6	R.1.5	5	DECK	TYPE 2	1	2	-	
AERATION TANKS	8.4	E.1.1	5	DECK	TYPE 2	0.5	1	-	
AERATION TANKS	8.6	E.8	5	DECK	TYPE 2	1.5	2	-	
AERATION TANKS	8.6	S.1.6	5	DECK	TYPE 1	1.5	2	3	
AERATION TANKS	8.6	S.7	5	DECK	TYPE 2	0.5	2	-	
AERATION TANKS	8.7	B.9	5	DECK	TYPE 2	0.5	4	-	
AERATION TANKS	8.9	G.1.1	5	DECK	TYPE 2	0.5	2	-	
AERATION TANKS	9.2	V.6	5	DECK	TYPE 2	1.5	2	-	
AERATION TANKS	9.3	D.3	5	DECK	TYPE 1	1.5	4	3	
AERATION TANKS	9.3	S.6	5	DECK	TYPE 1	1.5	2	3	
AERATION TANKS	10.6	V.9	5	DECK	TYPE 1	1	1	3	
AERATION TANKS	11.9	E.8	5	DECK	TYPE 2	1.5	3	-	
AERATION TANKS	12.2	R.1.1	5	DECK	TYPE 2	1.5	1	-	
AERATION TANKS	12.6	B.1.9	5	DECK	TYPE 1	0.5	3	1	



BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: G. LICATA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

PHASE 3 CONCRETE REPAIR SCHEDULE

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-310.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Last Date Saved: 10/20/2026 3:38 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\jacobs-americas-01\d0129589\UR-S-310.00.dwg
Date & Time Plotted: 10/20/2026 3:44 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

STEEL BAR PENETRATION REPAIR SCHEDULE - PHASE 3

LOCATION				DIAMETER (IN.)	NOTES
STRUCTURE	BENT	PILE	ELEMENT		
FINAL TANKS	1.1	E.7	CAP	1	
FINAL TANKS	1.1	F.2	CAP	1	
FINAL TANKS	1.1	F.95	CAP	1	
FINAL TANKS	1.1	G - H	CAP	1	9 LOCATIONS TOTAL
FINAL TANKS	1.1.4	J	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	2	H.7	CAP	1	
FINAL TANKS	2	H.8	CAP	1	
FINAL TANKS	2	J.1	CAP	1	
FINAL TANKS	2	Q.7	CAP	1	
FINAL TANKS	2	R - S	CAP	1	7 LOCATIONS TOTAL
FINAL TANKS	2.1	K	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	2.1	M.1	CAP	1	
FINAL TANKS	3	R.5	CAP	1	
FINAL TANKS	3	R.7	CAP	1	
FINAL TANKS	3.1	A.a	CAP	1	
FINAL TANKS	3.9	A.a	CAP	2	
FINAL TANKS	3.9	E	CAP	1	
FINAL TANKS	4	R.4	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	4	R.7	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	4	A.a	CAP	1	
FINAL TANKS	5	R.4	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	5	A.a	CAP	1	
FINAL TANKS	5.9	K.9	CAP	1	
FINAL TANKS	6	R.5	CAP	1	
FINAL TANKS	6	A.a	CAP	1	
FINAL TANKS	6.1	K.9	CAP	1	
FINAL TANKS	8	A.a	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	9	A.a.1	CAP	1	
FINAL TANKS	9.1	A.a	CAP	1	3 LOCATIONS TOTAL
FINAL TANKS	9.1	A.a.5	CAP	1	2 LOCATIONS TOTAL
FINAL TANKS	9.1	B.4	CAP	1	
FINAL TANKS	9.1	C.2 - C.3	CAP	1	3 LOCATIONS TOTAL
FINAL TANKS	9.1	G.1	CAP	1	
FINAL TANKS	9.1	K.1.1	CAP	4	2 LOCATIONS TOTAL
FINAL TANKS	9.1	W - X	CAP	1	3 LOCATIONS TOTAL
FINAL TANKS	9.9	F	CAP	1.5	
AERATION TANKS	1.1	E.1.2	CAP	1	
AERATION TANKS	1.1	E.2 - E.4	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	1.1	K.8	CAP	1	
AERATION TANKS	1.1.4 - 1.1.9	A.1	CAP	1	5 LOCATIONS TOTAL
AERATION TANKS	1.1.5	K.1	CAP	1	
AERATION TANKS	2	E.1.1	CAP	1	
AERATION TANKS	2	F.1.1	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	2	F.1.9	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	2	G.1	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	2	G.1.1	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	2	G.1.9	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	2	G.9	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	2.1	A.1	CAP	2	

STEEL BAR PENETRATION REPAIR SCHEDULE - PHASE 3

LOCATION				DIAMETER (IN.)	NOTES
STRUCTURE	BENT	PILE	ELEMENT		
AERATION TANKS	2.1 - 2.4	A.1	CAP	1	3 LOCATIONS TOTAL
AERATION TANKS	2.4	D	CAP	1	
AERATION TANKS	2.4	G	CAP	1	
AERATION TANKS	2.4	J.1	CAP	1	
AERATION TANKS	2.4	N.1	CAP	1	
AERATION TANKS	2.5	H	CAP	1	
AERATION TANKS	2.5	H.1	CAP	1	
AERATION TANKS	2.5	J	CAP	1	
AERATION TANKS	2.6	C.1	CAP	1	
AERATION TANKS	2.6	G	CAP	1	
AERATION TANKS	2.6	N.1	CAP	1	
AERATION TANKS	2.7	D	CAP	1	
AERATION TANKS	2.7	H	CAP	1	
AERATION TANKS	2.7	H.1	CAP	1	
AERATION TANKS	2.7	J	CAP	1	
AERATION TANKS	2.7	J.1	CAP	1	
AERATION TANKS	3.1	F.1	CAP	1	
AERATION TANKS	3.1	W	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	3.5	C.1	CAP	1	
AERATION TANKS	3.8	K.1	CAP	1	
AERATION TANKS	3.9	W	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	4.1	V.5	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	4.1	W	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	4.4	E.1	CAP	1	
AERATION TANKS	4.8	G.5	DECK	2	
AERATION TANKS	4.9	V.5	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	4.9	W	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	5.1	K.1	CAP	1	
AERATION TANKS	5.1	V.5	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	5.1	W	CAP	1	
AERATION TANKS	5.5	V.9	DECK	1	
AERATION TANKS	5.7	K.1	CAP	1	
AERATION TANKS	5.8	H	CAP	1	
AERATION TANKS	5.9	K.1	CAP	1	
AERATION TANKS	5.9	M.2	CAP	1	
AERATION TANKS	5.9	V.5	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	5.9	W	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	6	E	CAP	1	
AERATION TANKS	6	M.2	CAP	1	
AERATION TANKS	6.1	V.5	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	6.9	B	CAP	1	
AERATION TANKS	6.9	V.5	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	7	A.1	CAP	2	
AERATION TANKS	7.1	A.1	CAP	2	
AERATION TANKS	7.2	K.1	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	7.5	M.1	CAP	1	
AERATION TANKS	7.7	K.1	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	7.9	W	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	8.1	A.1	CAP	2	

STEEL BAR PENETRATION REPAIR SCHEDULE - PHASE 3

LOCATION				DIAMETER (IN.)	NOTES
STRUCTURE	BENT	PILE	ELEMENT		
AERATION TANKS	8.2	G	CAP	1	6 LOCATIONS TOTAL
AERATION TANKS	8.2	G.8	DECK	2	
AERATION TANKS	8.5	D.1	CAP	1	
AERATION TANKS	9.9	V.5	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	10.1	A.1	CAP	2	
AERATION TANKS	10.1	A.1	CAP	1	
AERATION TANKS	10.1	K.1	CAP	1	
AERATION TANKS	10.8	B.1.4	DECK	1	
AERATION TANKS	11 - 12	B.1 - C	DECK	2	4 LOCATIONS TOTAL
AERATION TANKS	11	U.1.1	CAP	1	4 LOCATIONS TOTAL
AERATION TANKS	11	V.1	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	11.4	M.2	CAP	-	
AERATION TANKS	12.1	N	CAP	1	4 LOCATIONS TOTAL
AERATION TANKS	12.6	B.1.6	DECK	3	
AERATION TANKS	13	A.1	CAP	2	
AERATION TANKS	13 - 13.1	A.1	CAP	1	5 LOCATIONS TOTAL
AERATION TANKS	13.1	B.1	CAP	1	
AERATION TANKS	13.1	B.1.3	CAP	1	
AERATION TANKS	13.1	B.1.5	CAP	1	
AERATION TANKS	13.1	C.3	CAP	1	
AERATION TANKS	13.1	E.1 - F	CAP	1	5 LOCATIONS TOTAL
AERATION TANKS	13.1	E.4	CAP	1	
AERATION TANKS	13.1	F - F.9	CAP	1	5 LOCATIONS TOTAL
AERATION TANKS	13.1	F.1 - G	CAP	1	5 LOCATIONS TOTAL
AERATION TANKS	13.1	G - G.1	CAP	-	5 LOCATIONS TOTAL
AERATION TANKS	13.1.1	E	CAP	1	2 LOCATIONS TOTAL
AERATION TANKS	13.9	C.1	CAP	1	
AERATION TANKS	13.9	E.1	CAP	1	2 LOCATIONS TOTAL

Environmental Protection BEDC/IHD

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: G. LICATA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

PHASE 3 TYPE 4 STEEL BAR PENETRATION REPAIR SCHEDULE

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-311.00

Last Saved By: AcostaML
Last Date Saved: 10/20/2026 3:38 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-311.00.dwg
Date & Time Plotted: 10/20/2026 3:44 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

CORE HOLE REPAIR SCHEDULE - PHASE 3

LOCATION				DIAMETER (IN)	NOTES
STRUCTURE	BENT	PILE	ELEMENT		
FINAL TANKS	1.1.8	A.1.5	CAP	3	
FINAL TANKS	2.1	D.7	DECK	2	
FINAL TANKS	2.3	C.2	DECK	2	
FINAL TANKS	2.4	A.1.2	DECK	3	
FINAL TANKS	2.5	E.5	CAP	3	
FINAL TANKS	2.5	K.5	DECK	3	
FINAL TANKS	2.8	A.1	CAP	3	
FINAL TANKS	3.6	N.3	DECK	3	
FINAL TANKS	3.8	G.3	DECK	4	
FINAL TANKS	3.9	S.8	DECK	2	
FINAL TANKS	4	C.4	CAP	3	
FINAL TANKS	4.2	E.1	CAP	2	
FINAL TANKS	4.9	K.9	CAP	1	X2
FINAL TANKS	5	G	CAP	1	
FINAL TANKS	5.8	K.3	DECK	2	
FINAL TANKS	6	B.4	CAP	1	
FINAL TANKS	6	B.7	CAP	1	
FINAL TANKS	6	B.8	CAP	1	
FINAL TANKS	6	C.6	CAP	3	
FINAL TANKS	6	D.1	CAP	1	
FINAL TANKS	6	E.7	CAP	3	
FINAL TANKS	6	G.4	CAP	1	
FINAL TANKS	6	G.8	CAP	1	
FINAL TANKS	6	H.2	CAP	1	
FINAL TANKS	6.1	E.3	CAP	2	
FINAL TANKS	6.3	B.9	CAP	6	
FINAL TANKS	6.5	G	CAP	3	
FINAL TANKS	7	K.3	CAP	2	
FINAL TANKS	7	K.4	CAP	1	X2
FINAL TANKS	8	A.1.3	CAP	8	
FINAL TANKS	8	A.1.6	CAP	3	
FINAL TANKS	8	G.4	CAP	2	
FINAL TANKS	8	J.7	CAP	1	X2
FINAL TANKS	9.1	A.a	CAP	2	
FINAL TANKS	9.1	C.1	CAP	2	
AERATION TANKS	1.1	B.1	CAP	4	
AERATION TANKS	1.1.3	C	CAP	4	
AERATION TANKS	1.1.6	Q.6	DECK	4	
AERATION TANKS	1.1.7	S.8	DECK	2	
AERATION TANKS	1.1.9	A.1	CAP	2	
AERATION TANKS	2.1	V.9	DECK	2	
AERATION TANKS	2.7	C	CAP	2	
AERATION TANKS	3.8	K.4	DECK	2	
AERATION TANKS	4.3	E.2	DECK	3	
AERATION TANKS	4.7	F.1.1	DECK	3	
AERATION TANKS	5.2	V.8	DECK	2	
AERATION TANKS	5.6	B	CAP	2	
AERATION TANKS	6.3	R.1.7	DECK	1	
AERATION TANKS	7.2	S.7	DECK	1	

CORE HOLE REPAIR SCHEDULE - PHASE 3

LOCATION				DIAMETER (IN)	NOTES
STRUCTURE	BENT	PILE	ELEMENT		
AERATION TANKS	8	A.1.3	CAP	1	
AERATION TANKS	8.2	G.5	DECK	3	
AERATION TANKS	8.2	R.1.5	DECK	2	
AERATION TANKS	8.4	E.1.1	DECK	3	
AERATION TANKS	8.4	Q.1.4	DECK	3	
AERATION TANKS	9.4	J.1.5	DECK	2	
AERATION TANKS	9.5	F.1.1	DECK	3	
AERATION TANKS	9.8	F.1.1	DECK	3	
AERATION TANKS	9.8	S.6	DECK	1	
AERATION TANKS	9.9	F.1.1	DECK	3	
AERATION TANKS	10.3	G.1.9	DECK	2	
AERATION TANKS	10.6	V.9	DECK	3	
AERATION TANKS	10.7	C.1.5	DECK	3	
AERATION TANKS	11.2	B	CAP	1	
AERATION TANKS	11.3	M.1.9	DECK	2	
AERATION TANKS	11.4	V.8	DECK	3	
AERATION TANKS	11.5	C.9	DECK	3	
AERATION TANKS	11.8	F.1.1	DECK	3	
AERATION TANKS	12.5	N.5	DECK	2	
AERATION TANKS	12.6	A.1	CAP	4	X2
AERATION TANKS	12.7	S.8	DECK	1	
AERATION TANKS	12.8	C.5	DECK	3	
AERATION TANKS	12.9	F.7	DECK	3	
AERATION TANKS	13.4	C.7	DECK	4	
AERATION TANKS	13.5	R.6	DECK	2	

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: G. LICATA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

PHASE 3 TYPE 7 CORE HOLE REPAIR SCHEDULE

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-312.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-312.00.dwg
Last Date Saved: 10/20/2026 3:38 PM
Date & Time Plotted: 10/20/2026 3:44 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

PVC PIPE REPAIR SCHEDULE - PHASE 3			
STRUCTURE	BENT	PILE	DIAMETER (in.)
FINAL TANKS	3.8	K.2	3
FINAL TANKS	5.8	P.8	3
FINAL TANKS	7.5	C.5	3
FINAL TANKS	7.5	N.3	3
FINAL TANKS	8.1	D.4	3
FINAL TANKS	8.4	B.5	3
FINAL TANKS	9.5	E.5	3
AERATION TANKS	9.8	E.1.7	3

Environmental Protection BEDC/IHD

BID SET

DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: G. LICATA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

STATE OF NEW YORK ILHAN TUTUNCU LICENSED PROFESSIONAL ENGINEER

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

PHASE 3 TYPE 8 PVC PIPE REPAIR SCHEDULE

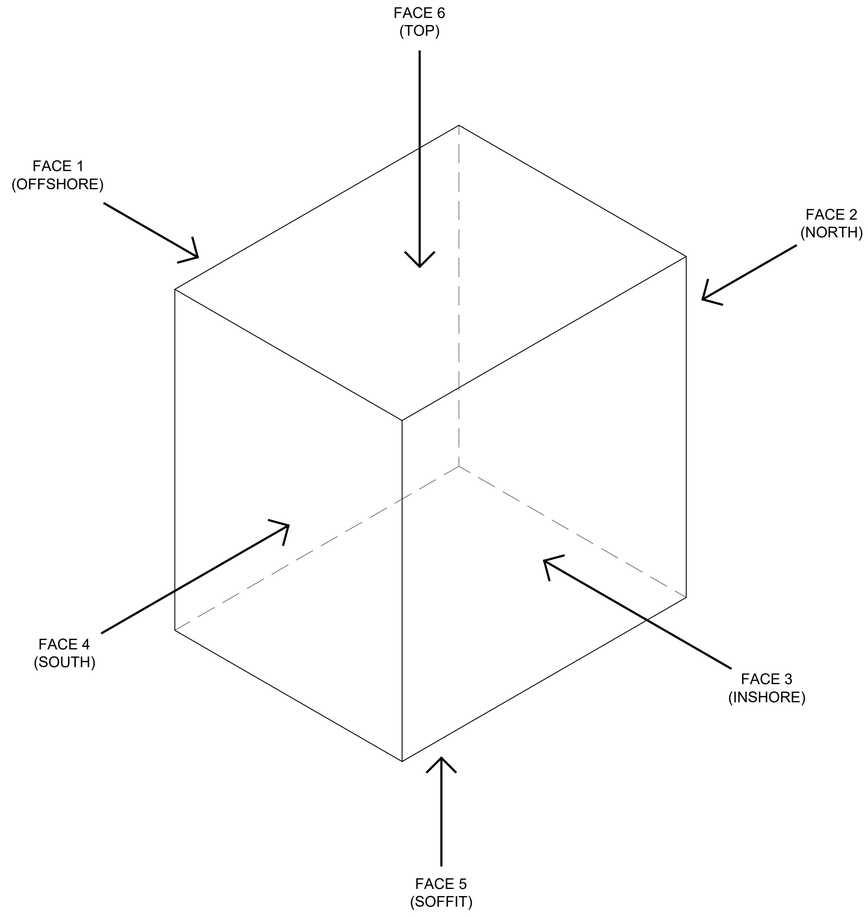
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-313.00

Last Saved By: AcostaML Last Date Saved: 10/20/2026 3:38 PM Date & Time Plotted: 10/20/2026 3:44 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches) Plot Scale: 1:1 Plot Style Table: BEDC_Acad(N).ctb
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0729589\UR-S-313.00.dwg

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

CONCRETE REPAIR SCHEDULE -PHASE 4

LOCATION					REPAIR TYPE	DEFECT NOTES			NOTES
STRUCTURE	BENT	PILE	FACE	ELEMENT		AREA	DEPTH	BARS EXPOSED	
PRELIMINARY TANKS	2.2	K.1	5	DECK	TYPE 2	1	1	-	
PRELIMINARY TANKS	3.5	M.1	5	DECK	TYPE 1	2	3	2	
PRELIMINARY TANKS	3.6	F.5	1	CAP	TYPE 3	1	1	-	
PRELIMINARY TANKS	11.9	H.9	5	DECK	TYPE 1	2	3	1	
PRELIMINARY TANKS	11.9	J.3	5	DECK	TYPE 2	0.5	1	-	
PRELIMINARY TANKS	13.9	H.9	5	DECK	TYPE 2	2	3	-	
PRELIMINARY TANKS	16.2	J.6	5	DECK	TYPE 2	1	2	-	
PRELIMINARY TANKS	19.9	G.1	5	DECK	TYPE 2	0.5	1	-	



BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: G. LICATA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

PHASE 4 CONCRETE REPAIR SCHEDULE

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-314.00

Last Saved By: AcostaML
Last Date Saved: 10/20/2026 3:38 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-314.00.dwg
Date & Time Plotted: 10/20/2026 3:44 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

STEEL BAR PENETRATION REPAIR SCHEDULE - PHASE 4

LOCATION				DIAMETER (IN.)	NOTES
STRUCTURE	BENT	PILE	ELEMENT		
PRELIMINARY TANKS	1.1	D.5	CAP	1	
PRELIMINARY TANKS	1.1	H	CAP	1	2 LOCATIONS TOTAL
PRELIMINARY TANKS	1.1.1	H	CAP	1	
PRELIMINARY TANKS	2	A.1.4	CAP	1	
PRELIMINARY TANKS	2	E.8	CAP	1	
PRELIMINARY TANKS	2.9	K.4	DECK	1	
PRELIMINARY TANKS	9	A.1	CAP	2	2 LOCATIONS TOTAL
PRELIMINARY TANKS	12	M.9	CAP	1	
PRELIMINARY TANKS	13	A.1	CAP	2	2 LOCATIONS TOTAL
PRELIMINARY TANKS	14	A.1	CAP	2	2 LOCATIONS TOTAL
PRELIMINARY TANKS	15	A.1.1	CAP	1	
MAIN BUILDING	0/1	A.1 - B.3	CAP	2	9 LOCATIONS TOTAL
MAIN BUILDING	1	A.2	CAP	1	
MAIN BUILDING	1.3 - 1.7	A.1 - A.3	DECK	1.5	6 LOCATIONS TOTAL
MAIN BUILDING	2	A.2	CAP	1	
MAIN BUILDING	5	A.a	CAP	1	
MAIN BUILDING	6	A.a	CAP	1	2 LOCATIONS TOTAL
MAIN BUILDING	7	A.a	CAP	1	2 LOCATIONS TOTAL
MAIN BUILDING	7/8	A.a	CAP	1	2 LOCATIONS TOTAL
MAIN BUILDING	15	C/B	CAP	1	
MAIN BUILDING	15	D.5	CAP	2	
MAIN BUILDING	18	A.1.1	CAP	1	

Last Saved By: AcostaML Last Date Saved: 10/20/2026 3:38 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches) Plot Style Table: BEDC_Acad(N).ctb
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-315.00.dwg
Date & Time Plotted: 10/20/2026 3:44 PM
Plot Scale: 1:1

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: G. LICATA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

PHASE 4 TYPE 4 STEEL BAR PENETRATION REPAIR SCHEDULE

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-315.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

CORE HOLE REPAIR SCHEDULE - PHASE 4

LOCATION				DIAMETER (IN)	NOTES
STRUCTURE	BENT	PILE	ELEMENT		
PRELIMINARY TANKS	2.5	A.1	CAP	3	
PRELIMINARY TANKS	5.5	L.9	DECK	3	
PRELIMINARY TANKS	5.9	K.4	DECK	3	
PRELIMINARY TANKS	7.5	B.4	DECK	3	
PRELIMINARY TANKS	7.5	C.4	DECK	3	
PRELIMINARY TANKS	7.5	D.4	DECK	3	
PRELIMINARY TANKS	7.5	E.4	DECK	3	
PRELIMINARY TANKS	7.5	F.4	DECK	3	
PRELIMINARY TANKS	7.5	H.4	DECK	3	
PRELIMINARY TANKS	7.5	J.6	DECK	3	
PRELIMINARY TANKS	13	A.1.3	CAP	4	
PRELIMINARY TANKS	15.5	E.4	DECK	3	
PRELIMINARY TANKS	15.5	H.4	DECK	3	
PRELIMINARY TANKS	15.6	B.4	DECK	3	
PRELIMINARY TANKS	15.6	C.4	DECK	3	
PRELIMINARY TANKS	15.6	F.4	DECK	3	
PRELIMINARY TANKS	15.6	K.6	DECK	3	X2
PRELIMINARY TANKS	15.7	D.4	DECK	3	
PRELIMINARY TANKS	19.4	J.8	DECK	2	
MAIN BUILDING	8.2	B.8	DECK	3	
MAIN BUILDING	19.2	F.8	DECK	2	

Last Saved By: AcostaML Last Date Saved: 10/20/2026 3:38 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches) Date & Time Plotted: 10/20/2026 3:44 PM
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-316.00.dwg Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: G. LICATA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

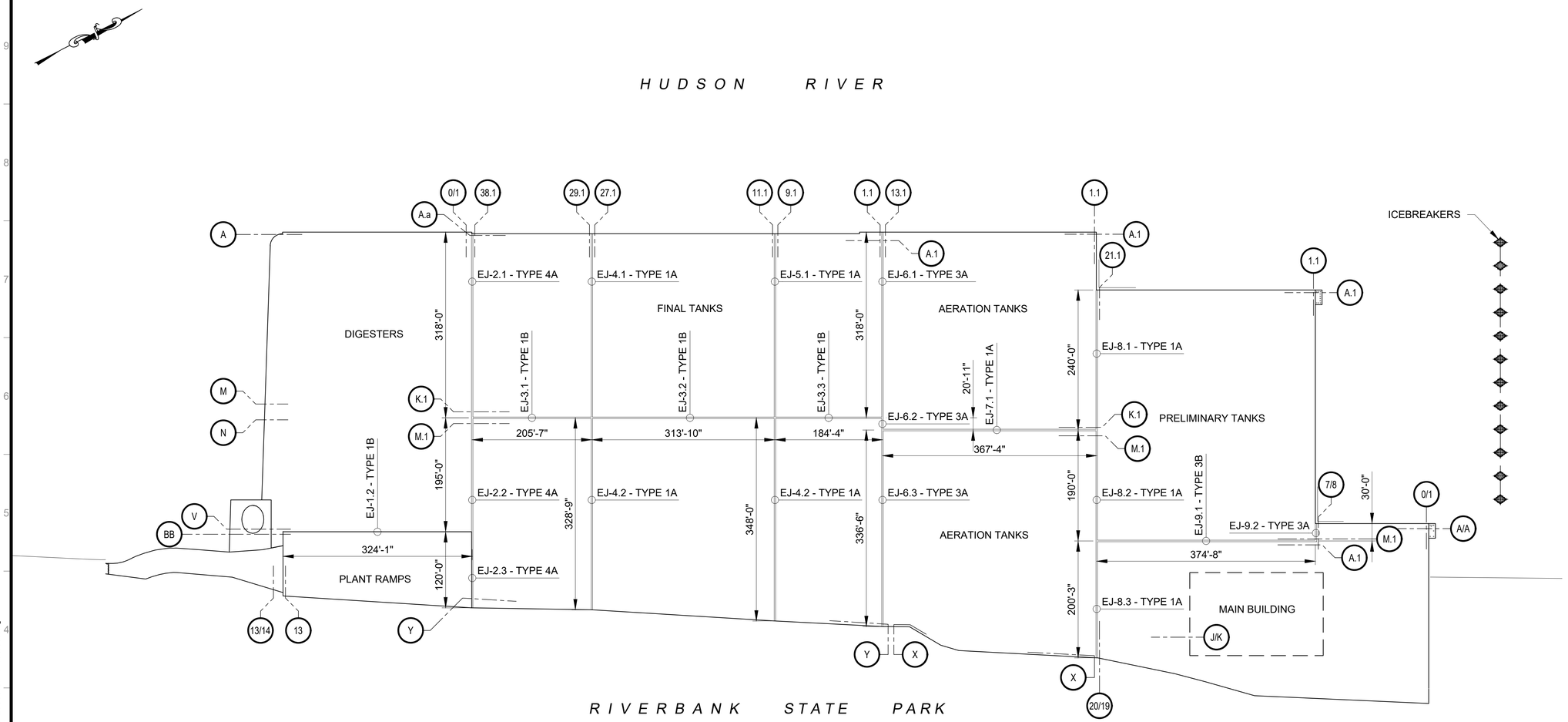
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

PHASE 4 TYPE 7 CORE HOLE REPAIR SCHEDULE

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-316.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



EXPANSION JOINT PLAN

SCALE: 1"=100'-0"

PILE LEGEND

1 — UNDERDECK BENT

A — UNDERDECK ROW

LEGEND

EXPANSION JOINT

NOTES:

1. SEE DWGS. UR-S-401 AND UR-S-402 FOR REPAIR DETAILS AND REPAIR SCHEDULE.

0 100 200 FT.
1"=100'

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

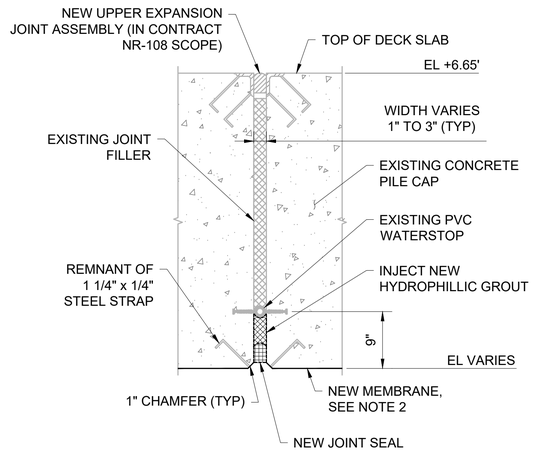
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

EXPANSION JOINT REPAIR PLAN

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-400.00

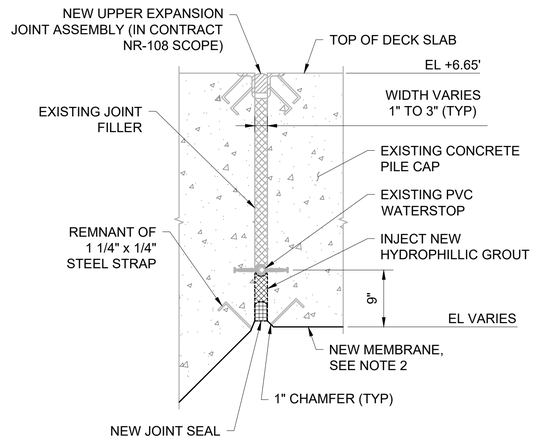
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00" x 34.00" Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-400.00.dwg
Last Save Date: 10/20/2026 3:38 PM
Plot Scale: 1:1
Date & Time Plotted: 10/20/2026 3:44 PM
Plot Style Table: BEDC_Acad(N).ctb



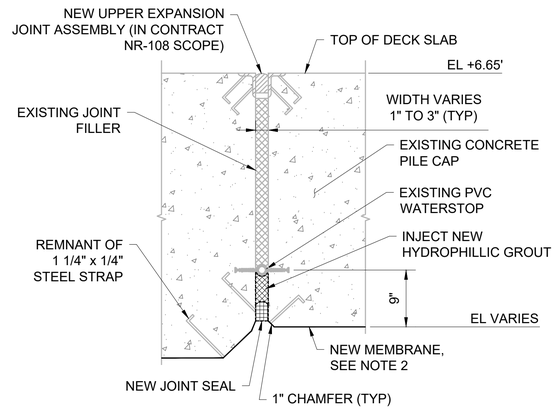
TYPE 1A EXPANSION JOINT REPAIR

SCALE: 1" = 1'-0"



TYPE 3A EXPANSION JOINT REPAIR

SCALE: 1" = 1'-0"

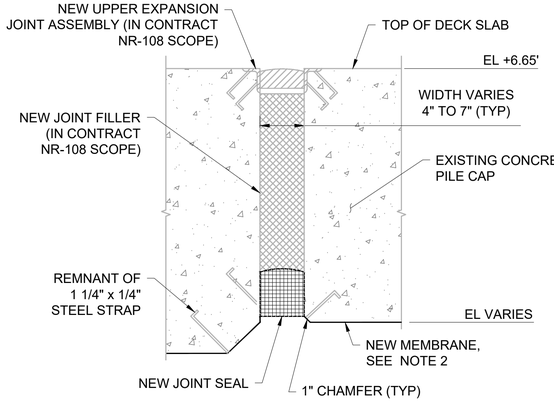


TYPE 4A EXPANSION JOINT REPAIR

SCALE: 1" = 1'-0"

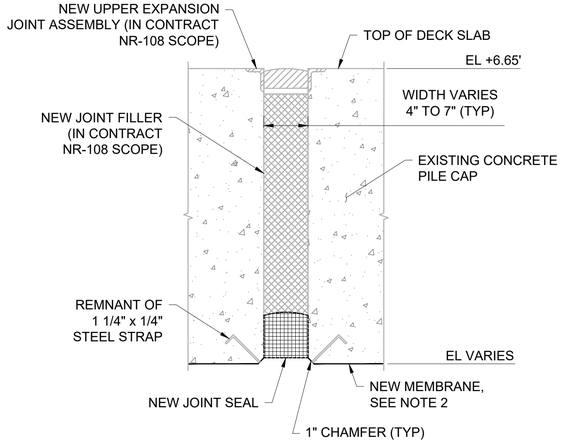
NOTES:

1. REMOVAL OF EXISTING EDGE ANGLES AND JOINT FILLER REQUIRED PRIOR TO INSTALLATION. SEE DWG. UR-D-100 FOR DETAILS.
2. NEW MEMBRANE SHALL BE INSTALLED BEFORE NEW JOINT SEAL AND FILLER. SEE DWG. UR-S-500 FOR MEMBRANE TERMINATION AT EXPANSION JOINT AND TYPICAL MEMBRANE INSTALLATION DETAILS.



TYPE 3B EXPANSION JOINT REPAIR

SCALE: 1" = 1'-0"



TYPE 1B EXPANSION JOINT REPAIR

SCALE: 1" = 1'-0"

1"=1'-0" 0 1 2 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

EXPANSION JOINT REPAIR DETAILS - 1

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-401.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-401.00.dwg
Last Date Saved: 10/20/2026 3:38 PM
Date & Time Plotted: 10/20/2026 3:44 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

EXPANSION JOINT REPAIR SCHEDULE - PHASE 1

JOINT ID	LOCATION	BENT		ROW		LENGTH (FT)	MAX WIDTH (IN.)	MIN WIDTH (IN.)	REPAIR TYPE
		START	END	START	END				
EJ-1.2	PLANT RAMPS/PLANT ACCESS RAMP	13 (PLANT RAMPS) 14/13 (PLANT ACCESS RAMP)	0/1 (PLANT RAMPS) 38.1 (FINAL tANKS)	V (DIGESTERS) BB (PLANT RAMPS)	V (DIGESTERS) BB (PLANT RAMPS)	324.1	5	3	1B
EJ-2.1	DIGESTERS/FINAL TANKS	0.1 (PLANT RAMPS) 38.1 (FINAL TANKS)	0/1 (PLANT RAMPS) 38.1 (FINAL tANKS)	A (DIGESTERS) A.a (FINAL TANKS)	M/N (DIGESTERS) K.1/M.1(FINAL TANKS)	318.0	3	1	4A
EJ-2.2	DIGESTERS/FINAL TANKS	0.1 (PLANT RAMPS) 38.1 (FINAL TANKS)	0/1 (PLANT RAMPS) 38.1 (FINAL tANKS)	M/N (DIGESTERS) K.1/M.1(FINAL TANKS)	V/BB (DIGESTERS/PLANT RAMPS) T/U (FINAL TANKS)	195.0	3	1.5	4A
EJ-2.3	PLANT RAMPS/FINAL TANKS	0.1 (PLANT RAMPS) 38.1 (FINAL TANKS)	0/1 (PLANT RAMPS) 38.1 (FINAL tANKS)	V/BB (DIGESTERS/PLANT RAMPS) T/U (FINAL TANKS)	V/BB (DIGESTERS/PLANT RAMPS) T/U (FINAL TANKS)	120.0	3	1	4A

EXPANSION JOINT REPAIR SCHEDULE - PHASE 2

JOINT ID	LOCATION	BENT		ROW		LENGTH (FT)	MAX WIDTH (IN.)	MIN WIDTH (IN.)	REPAIR TYPE
		START	END	START	END				
EJ-3.1	FINAL TANKS	38.1	29.1/27.1	K.1/M.1	K.1/M.1	205.6	7	6	1B
EJ-3.2	FINAL TANKS	29.1/27.1	11.1/9.1	K.1/M.1	K.1/M.1	313.8	6	4	1B
EJ-4.1	FINAL TANKS	29.1/27.1	29.1/27.1	A.a	K.1/M.1	318.0	2	1	1A
EJ-4.2	FINAL TANKS	29.1/27.1	29.1/27.1	K.1/M.1	Y	328.8	2.5	1	1A
EJ-5.1	FINAL TANKS	11.1/9.1	11.1/9.1	A.a	K.1/M.1	318.0	2	1	1A
EJ-5.2	FINAL TANKS	11.1/9.1	11.1/9.1	K.1/M.1	Y	348.0	3	1.5	1A

EXPANSION JOINT REPAIR SCHEDULE - PHASE 3

JOINT ID	LOCATION	BENT		ROW		LENGTH (FT)	MAX WIDTH (IN.)	MIN WIDTH (IN.)	REPAIR TYPE
		START	END	START	END				
EJ-3.3	FINAL TANKS	11.1/9.1	1.1 (FINAL TANKS) 13.1 (AERATION TANKS)	K.1/M.1	K.1/M.1	184.3	5.5	4	1B
EJ-6.1	FINAL TANKS/AERATION TANKS	1.1 (FINAL TANKS) 13.1 (AERATION TANKS)	1.1 (FINAL TANKS) 13.1 (AERATION TANKS)	A.a (FINAL TANKS) A.1 (AERATION TANKS)	K.1/M.1 (FINAL TANKS) K (AERATION TANKS)	318.0	2	1.5	3A
EJ-6.2	FINAL TANKS/AERATION TANKS	1.1 (FINAL TANKS) 13.1 (AERATION TANKS)	1.1 (FINAL TANKS) 13.1 (AERATION TANKS)	K.1/M.1 (FINAL TANKS) K (AERATION TANKS)	N (FINAL TANKS) K.1/M.1 (AERATION TANKS)	20.92	2	1.5	3A
EJ-6.3	FINAL TANKS/AERATION TANKS	1.1 (FINAL TANKS) 13.1 (AERATION TANKS)	1.1 (FINAL TANKS) 13.1 (AERATION TANKS)	N (FINAL TANKS) K.1/M.1 (AERATION TANKS)	Y (FINAL TANKS) X (AERATION TANKS)	336.5	2.5	1.5	3A
EJ-7.1	AERATION TANKS	1.1 (FINAL TANKS) 13.1 (AERATION TANKS)	1.1 (AERATION TANKS) 21.1 (PRELIMINARY TANKS)	K.1/M.1	K.1/M.1	367.3	3	1	1A
EJ-8.1	AERATION TANKS/PRELIMINARY TANKS	1.1 (AERATION TANKS) 21.1 (PRELIMINARY TANKS)	1.1 (AERATION TANKS) 21.1 (PRELIMINARY TANKS)	D (AERATION TANKS) A.1 (PRELIMINARY TANKS)	K.1/M.1 (AERATION TANKS) H (PRELIMINARY TANKS)	240.0	2	1.5	1A
EJ-8.2	AERATION TANKS/PRELIMINARY TANKS	1.1 (AERATION TANKS) 21.1 (PRELIMINARY TANKS)	1.1 (AERATION TANKS) 21.1 (PRELIMINARY TANKS)	K.1/M.1 (AERATION TANKS) H (PRELIMINARY TANKS)	S (AERATION TANKS) M.1 (PRELIMINARY TANKS) A.1 (MAIN BUILDING)	190.0	2.5	1.5	1A
EJ-8.3	MAIN BUILDING/AERATION TANKS	1.1 (AERATION TANKS) 20 (MAIN BUILDING)	1.1 (AERATION TANKS) 20 (PRELIMINARY TANKS)	S (AERATION TANKS) M.1 (PRELIMINARY TANKS) A.1 (MAIN BUILDING)	X (AERATION TANKS) J/K (MAIN BUILDING)	200.3	2	1	3A

EXPANSION JOINT REPAIR SCHEDULE - PHASE 4

JOINT ID	mLOCATION	BENT		ROW		LENGTH (FT)	MAX WIDTH (IN.)	MIN WIDTH (IN.)	REPAIR TYPE
		START	END	START	END				
EJ-9.1	MAIN BUILDING/PRELIMINARY TANKS	1.1 (AERATION TANKS) 21.1 (PRELIMINARY TANKS) 20 (MAIN BUILDING)	1.1 (PRELIMINARY TANKS) 7/8 (MAIN BUILDING)	M.1 (PRELIMINARY TANKS) A.1 (MAIN BUILDING)	M.1 (PRELIMINARY TANKS) A.1 (MAIN BUILDING)	374.7	4	3	3B
EJ-9.2	MAIN BUILDING/PRELIMINARY TANKS	1.1 (PRELIMINARY TANKS) 7/8 (MAIN BUILDING)	1.1 (PRELIMINARY TANKS) 7/8 (MAIN BUILDING)	M (PRELIMINARY TANKS) A.A (MAIN BUILDING)	M.1 (PRELIMINARY TANKS) A.1 (MAIN BUILDING)	30.0	2	1	3A

NOTES:

1. SEE DWGS. UR-S-400 AND UR-S-401 FOR EXPANSION JOINT LOCATIONS AND REPAIR DETAILS.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

STATE OF NEW YORK — ILHAN TUTUNCU — LICENSED PROFESSIONAL ENGINEER

NYC Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

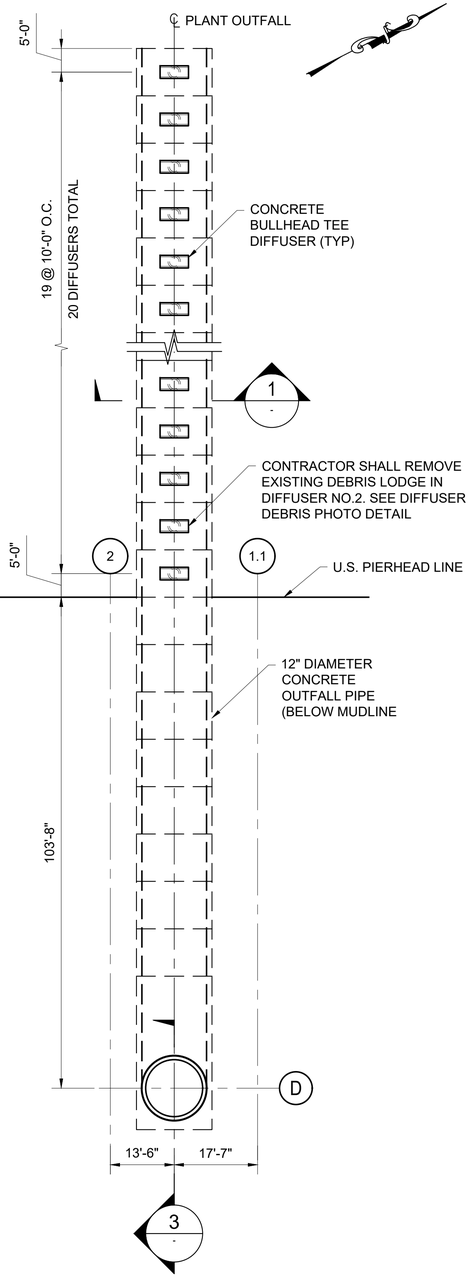
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

EXPANSION JOINT REPAIR SCHEDULE

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-402.00

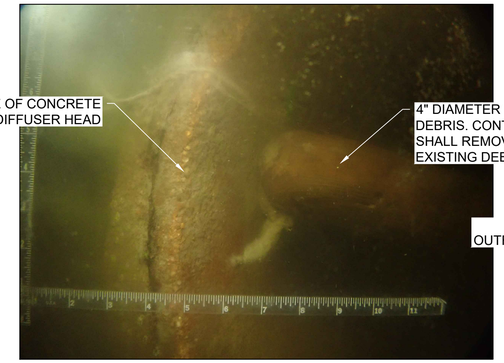
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-402.00.dwg
Last Date Saved: 10/20/2026 3:38 PM
Date & Time Plotted: 10/20/2026 3:44 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb



PLANT OUTFALL PLAN

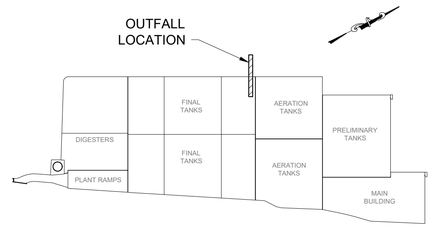
SCALE: 1/16"=1'-0"



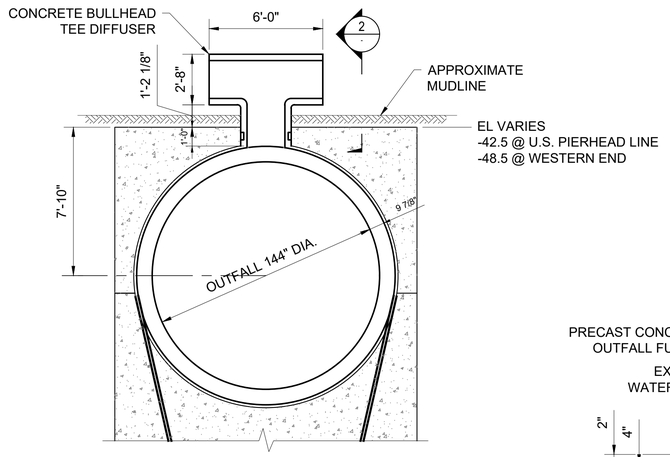
DIFFUSER DEBRIS PHOTO DETAIL



OUTFALL LEAK PHOTO DETAIL

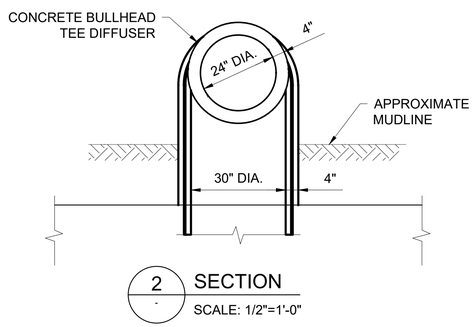


KEY PLAN



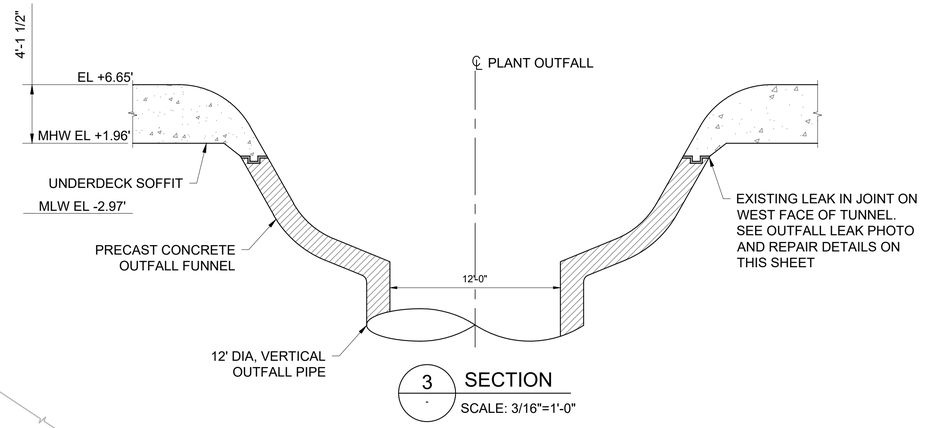
1 SECTION

SCALE: 1/4"=1'-0"



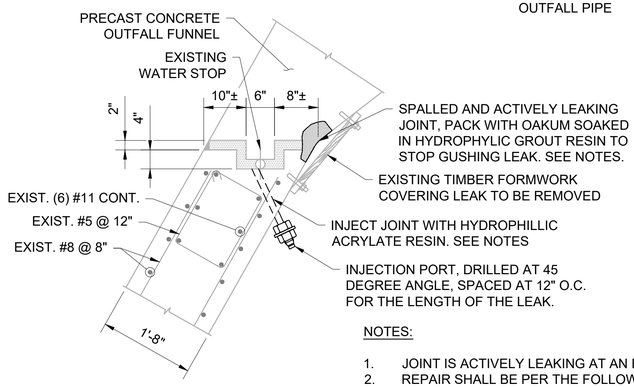
2 SECTION

SCALE: 1/2"=1'-0"



3 SECTION

SCALE: 3/16"=1'-0"



OUTFALL LEAK REPAIR DETAIL

SCALE: 3/4" = 1'-0"

NOTES:

1. JOINT IS ACTIVELY LEAKING AT AN ESTIMATED RATE OF 5 GAL./MIN.
2. REPAIR SHALL BE PER THE FOLLOWING PROCEDURE:
   - A. REMOVE EXISTING TIMBER FORMWORK INSTALLED OVER LEAK
   - B. PACK DETERIORATED AND LEAKING JOINT WITH HYDROPHYLLIC GROUT-SOAKED OAKUM UNTIL LEAKING SUBSIDES. INSTALL TEMPORARY FORMS AS REQUIRED TO KEEP OAKUM IN PLACE
   - C. DRILL INJECTION PORTS AT A 45 DEGREE ANGLE TO THE JOINT, SPACED AT 12" O.C.
   - D. INJECT JOINT WITH HYDROPHYLLIC ACRYLATE RESIN STARTING AT ONE END OF THE CRACK AND PROGRESSING TO THE OTHER END.

1/16"=1'-0" 0 10 20 30 FT.
1/4"=1'-0" 0 4 8 FT.
1/2"=1'-0" 0 1 2 3 4 FT.
3/4"=1'-0" 0 1 2 3 FT.

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NYC Environmental Protection BEDC/HD

BID SET

DATE ISSUED: OCTOBER 2026

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

STATE OF NEW YORK ILHAN TUTUNCU LICENSED PROFESSIONAL ENGINEER

NYC Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

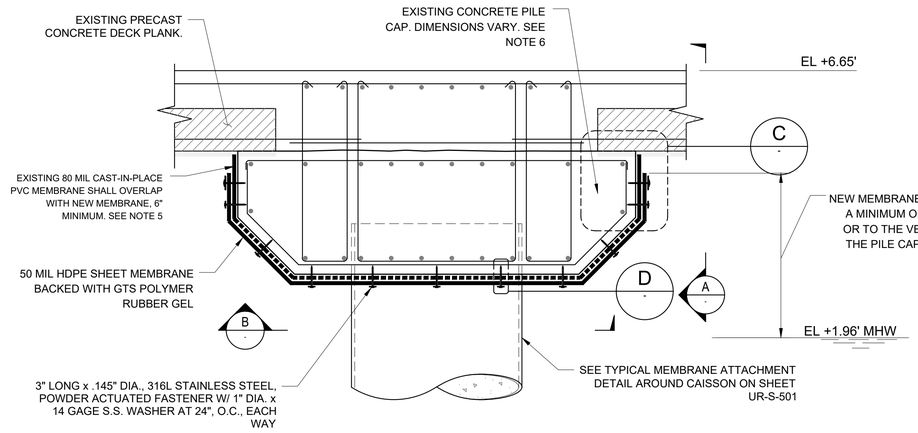
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

OUTFALL DETAILS

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-410.00

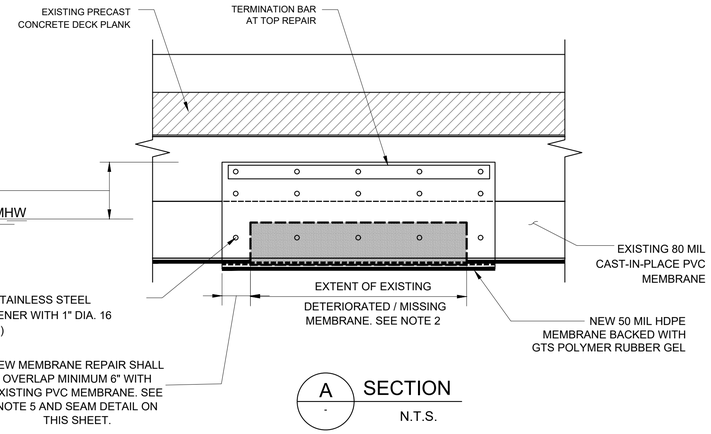
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-410.00.dwg
Last Date Saved: 10/20/2026 3:38 PM
Date & Time Plotted: 10/20/2026 3:44 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb



TYPE 1 - MAJOR MEMBRANE REPAIR

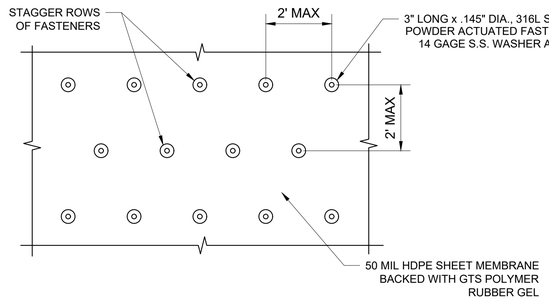
SCALE: 3/4"=1'-0"



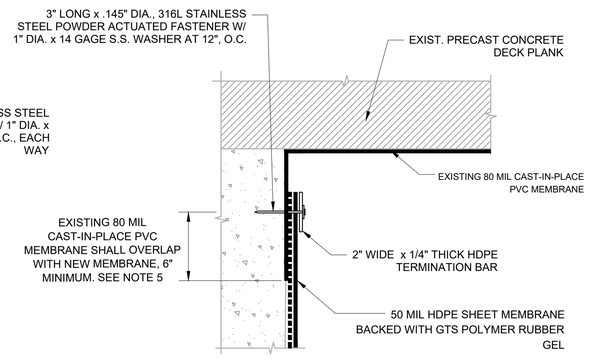
A SECTION
N.T.S.

MEMBRANE REPAIR NOTES:

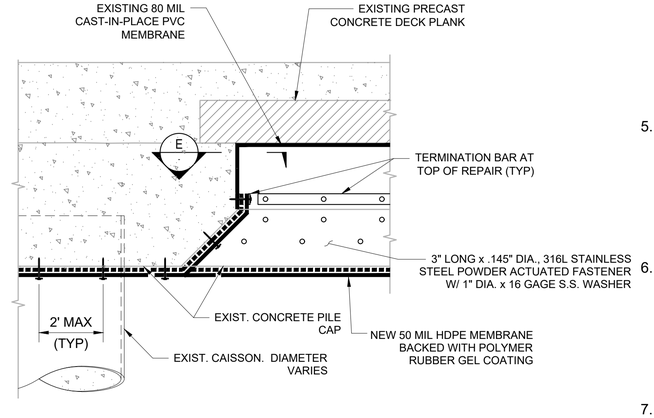
1. MEMBRANE REPAIRS SHALL BE INSTALLED TO RESTORE THE EXISTING MEMBRANE TO SOUND CONDITION IN ALL LOCATIONS. SEE MEMBRANE REPAIR SCHEDULE ON DWGS. UR-S-510 TO UR-S-553 FOR REPAIR LOCATIONS AND DIMENSIONS.
2. MEMBRANE SHALL BE REMOVED AT REPAIR AREAS IN ACCORDANCE WITH THE DEMOLITION DETAILS SHOWN ON DWGS. UR-DS-100 AND UR-DS-101. ALL OTHER EXISTING INTACT MEMBRANE SHALL REMAIN IN PLACE.
3. PRIOR TO INSTALLATION OF THE NEW MEMBRANE, CONCRETE DETERIORATION IN THE AREA SHALL BE REPAIRED. SEE CONCRETE REPAIR DETAILS ON DWGS. UR-S-300 AND UR-S-301. SEE CONCRETE REPAIR SCHEDULES ON DWGS. UR-S-302 TO UR-S-316 FOR REPAIR LOCATIONS AND DETAILS. ANY ADDITIONAL CONCRETE DETERIORATION OBSERVED DURING MEMBRANE REMOVAL SHALL BE APPROVED BY THE ENGINEER PRIOR TO REPAIR.
4. EXISTING CONCRETE SURFACE MAY HAVE SIGNIFICANT DETERIORATION AND/OR ROUGHNESS. CONTRACTOR SHALL REMOVE ALL LOOSE AND DETERIORATED CONCRETE SUBSTRATE AND SMOOTH CONCRETE TO A MAXIMUM 1/16" SURFACE ROUGHNESS PROFILE USING CEMENTITIOUS GROUT FOR TYPE 2 LOCAL REPAIRS AND SHOTCRETE FOR TYPE 1 MAJOR REPAIR AREAS AS REQUIRED. SEE REPAIR SCHEDULE FOR AREAS WITH OBSERVED CONCRETE EROSION.
5. EXISTING PVC MEMBRANE SHALL REMAIN IN PLACE WHERE INTACT AND NEW POLYGEL BACKED MEMBRANE SHALL OVERLAP WITH EXISTING MEMBRANE MINIMUM 6". EXISTING MEMBRANE SHALL BE CLEANED OF ALL MARINE GROWTH, DIRT AND GREASE AND LIGHTLY ROUGHENED WITH 80 GRIT SANDPAPER PRIOR TO NEW MEMBRANE INSTALLATION.
6. DUE TO AS-BUILT CAISSON ALIGNMENT, PILE CAP DIMENSIONS VARY AND MAY NOT BE CENTERED ON CAISSON. SEE UNDERDECK PLANS ON DWGS. UR-S-101 TO UR-S-109 FOR PILE CAP SPACING AND DWGS. UR-S-200 TO UR-S-202 FOR TYPICAL SECTIONS. CONTRACTOR SHALL VERIFY ALL PILE CAP DIMENSIONS IN FIELD.
7. SOME REPAIR AREAS HAVE MULTIPLE DEFECTS IN THE SAME AREA. THE CONTRACTOR SHALL HAVE THE OPTION OF REPAIRING EACH DEFECT USING INDIVIDUAL REPAIRS OR USING A SINGULAR LARGER REPAIR PATCH ENCOMPASSING MULTILE DEFECTS.
8. MEMBRANE INSTALLATION AROUND CAISSONS SCHEDULED FOR JACKET INSTALLATION SHALL BE COMPLETED PRIOR TO JACKET INSTALLATION. SEE CR-S SERIES DWGS. FOR DETAILS.
9. CONTRACTOR SHALL USE REBAR LOCATING DEVICE TO AVOID EXISTING REBARS DURING MEMBRANE INSTALLATION.



B TYPICAL MEMBRANE FASTENER LAYOUT
N.T.S.

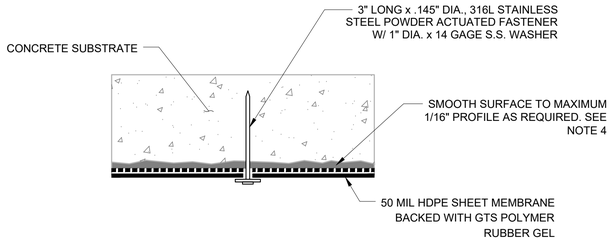


C TERMINATION BAR DETAIL
N.T.S.

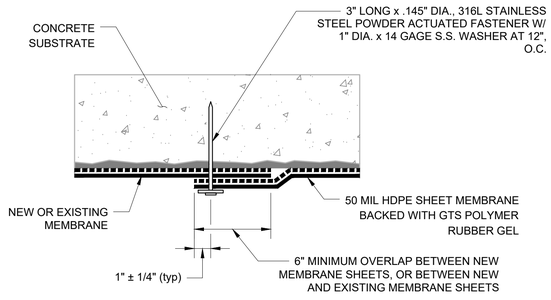


TYPE 1 - MEMBRANE CORNER DETAIL

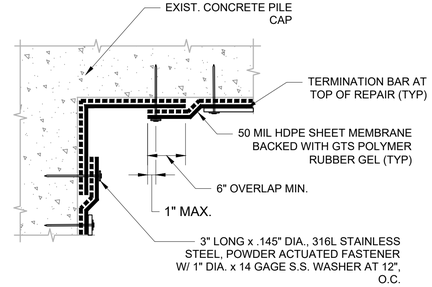
SCALE: 3/4"=1'-0"



D POWDER ACTUATED FASTENER DETAIL
N.T.S.



SHEET MEMBRANE SEAM DETAIL
N.T.S.



E SECTION
N.T.S.

0 1 2 3 FT.
3/4"=1'-0"

Environmental Protection BEDC/HD

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: MA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

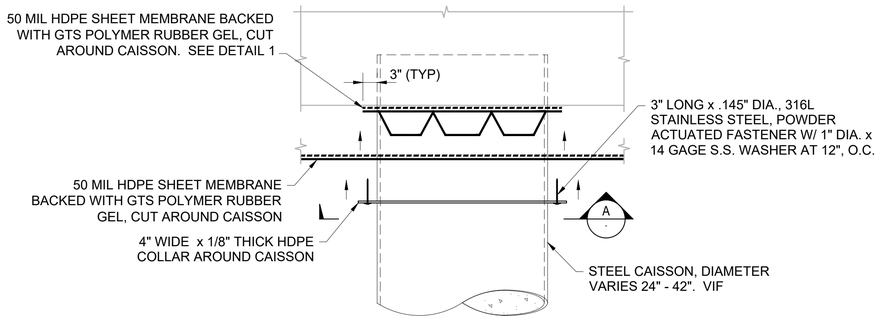
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE INSTALLATION DETAILS
SHEET 1 OF 3

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-500.00

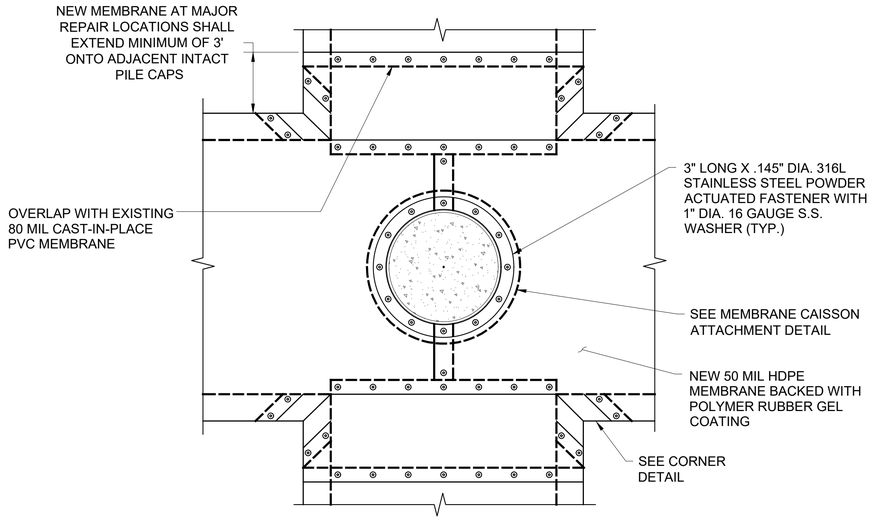
Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-500.00.dwg
Last Date Saved: 10/20/2026 3:40 PM
Date & Time Plotted: 10/20/2026 3:44 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



TYPE 1 - MAJOR MEMBRANE REPAIR AT CAISSON

SCALE: 3/4"=1'-0"

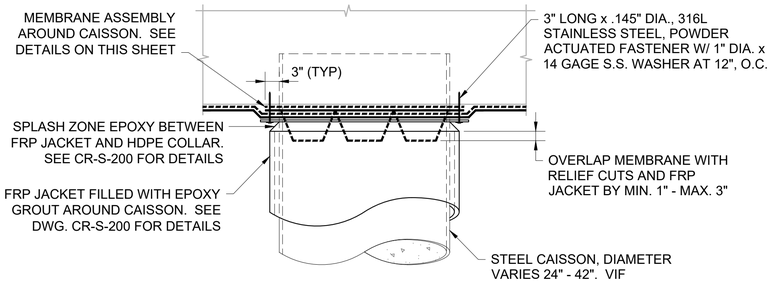


A MAJOR MEMBRANE REPAIR AT CAISSON

SCALE: 1/2"=1'-0"

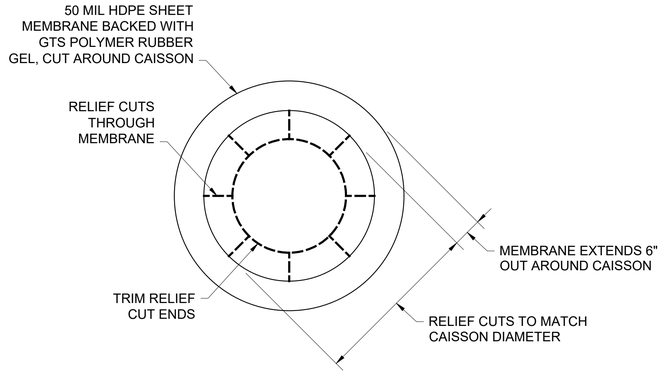
NOTES:

1. SEE MEMBRANE REPAIR ON DWG. UR-S-500.



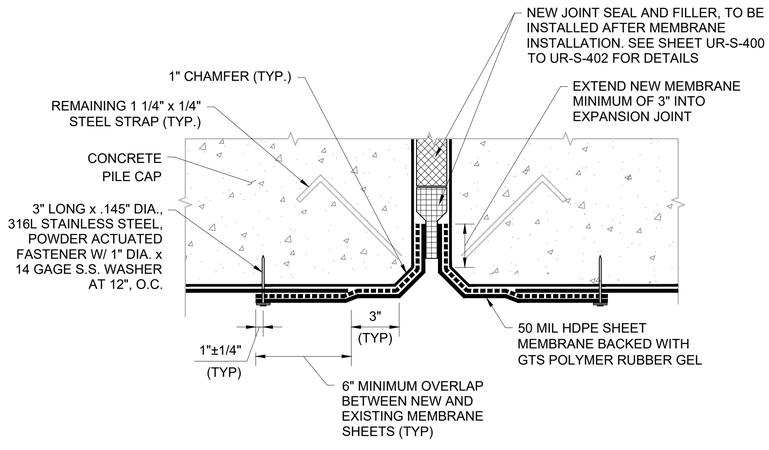
TYPICAL MEMBRANE ATTACHMENT DETAIL AROUND CAISSON WITH EPOXY JACKET

SCALE: 3/4"=1'-0"



1 DETAIL

3/4"=1'-0"



TYPICAL EXPANSION JOINT TERMINATION DETAIL

N.T.S.

1/2"=1'-0" 0 1 2 3 4 FT.

3/4"=1'-0" 0 1 2 3 FT.

BID SET

DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

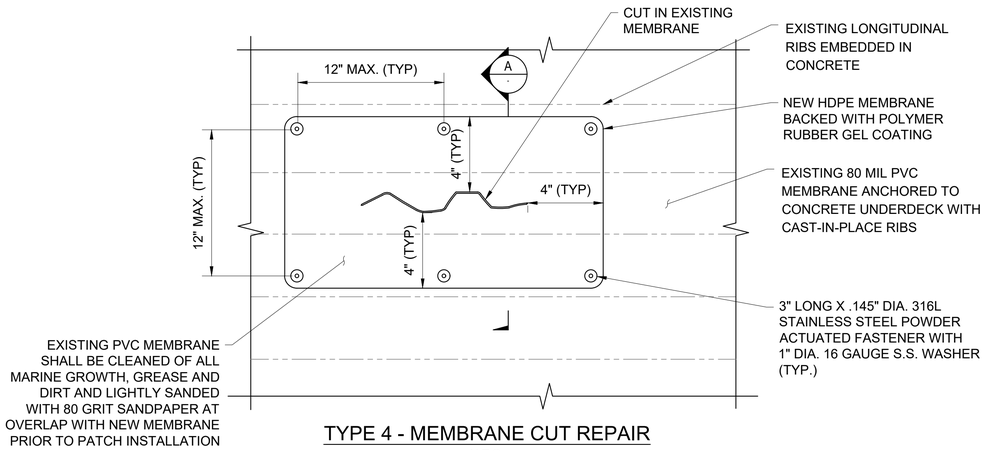
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE INSTALLATION DETAILS
SHEET 2 OF 3

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-501.00

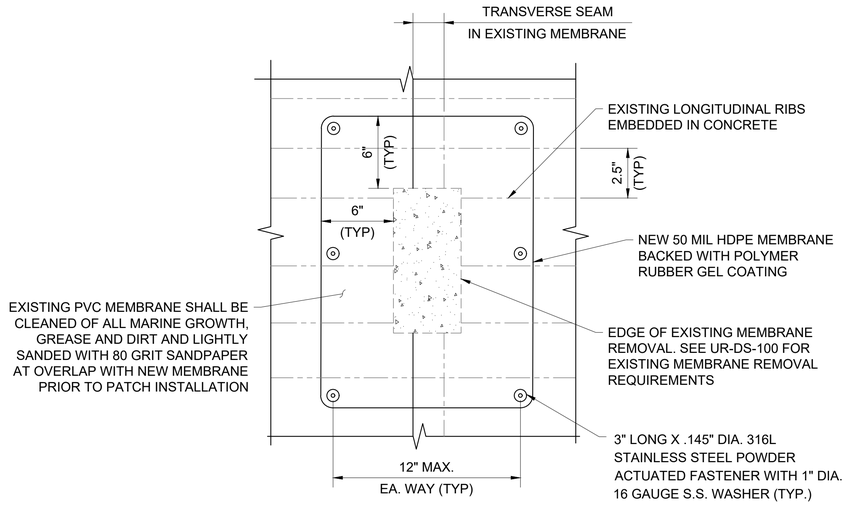
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d01295989\UR-S-501.00.dwg
Last Date Saved: 10/20/2026 3:40 PM
Date & Time Plotted: 10/20/2026 3:44 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb



TYPE 4 - MEMBRANE CUT REPAIR

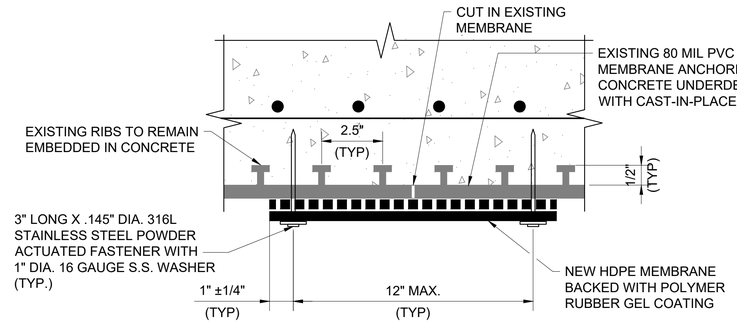
N.T.S.



TYPE 3 - MEMBRANE SEAM REPAIR

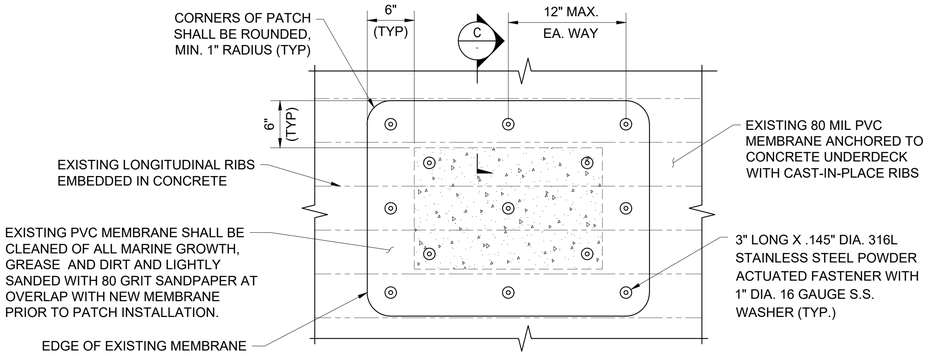
N.T.S.

MEMBRANE FENDER REPAIR SCHEDULE					
STRUCTURE	FENDER WORK PHASE	LOCATION	ELEMENT	REPAIR TYPE	ESTIMATED DETERIORATED AREA (sf)
TYPE A FENDERS	1 A	SEE DWG. FR-S-100	EDGE BEAM	TYPE 2	-
TYPE B FENDERS	1 A	SEE DWG. FR-S-100	EDGE BEAM	TYPE 2	384
TYPE A FENDERS	2 A	SEE DWG. FR-S-100	EDGE BEAM	TYPE 2	-
TYPE B FENDERS	2 A	SEE DWG. FR-S-100	EDGE BEAM	TYPE 2	400
TYPE A FENDERS	3 A	SEE DWG. FR-S-100	EDGE BEAM	TYPE 2	490
TYPE B FENDERS	3 A	SEE DWG. FR-S-100	EDGE BEAM	TYPE 2	560
TYPE A FENDERS	4 A	SEE DWG. FR-S-100	EDGE BEAM	TYPE 2	498
TYPE B FENDERS	4 A	SEE DWG. FR-S-100	EDGE BEAM	TYPE 2	1328



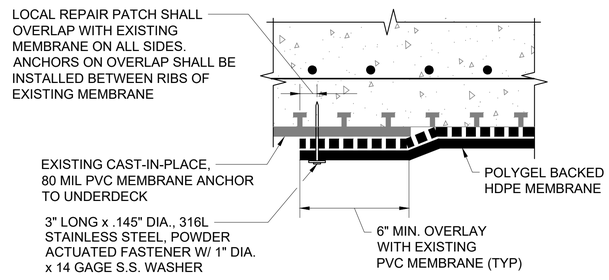
A - SECTION

N.T.S.



TYPE 2 - LOCAL MEMBRANE REPAIR

N.T.S.



B - SECTION

N.T.S.

NOTES:

1. SEE MEMBRANE REPAIR NOTES ON DWG. UR-S-500.
2. FOLLOWING REMOVAL OF THE EXISTING FENDER SYSTEM, CONTRACTOR SHALL REPAIR EXISTING MEMBRANE ON EDGE BEAM WHERE MEMBRANE IS DETERIORATED OR MISSING DUE TO EXISTING FENDER BOLT PENETRATIONS. SEE MEMBRANE FENDER REPAIR SCHEDULE ON THIS DWG.
3. REPAIRS SHALL BE PERFORMED IN ACCORDANCE WITH TYPE 2 - LOCAL MEMBRANE REPAIR DETAIL ON THIS DWG.
4. REPAIR QUANTITIES PROVIDED IN MEMBRANE FENDER REPAIR SCHEDULE ON THIS DWG. ARE ESTIMATES BASED ON EXISTING FENDER LAYOUT. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF ALL EXISTING DETERIORATED MEMBRANE AS A RESULT OF FENDER REMOVAL.
5. CONTRACTOR MAY OPT TO REPAIR MEMBRANE DETERIORATION AROUND EXISTING FENDERS USING INDIVIDUAL PATCHES OR CONTINUOUS REPAIR PATCHES. DETERIORATED AREA PROVIDED ASSUMES A CONTINUOUS PATCH AT ALL TYPE A FENDER CONNECTIONS AND LOCALIZED PATCHES AT EACH TYPE B FENDER CONNECTION POINT.
6. MEMBRANE REPAIRS SHALL ONLY BE INSTALLED AT LOCATIONS WITH EXISTING MEMBRANE IN PLACE AND AFTER NEW FENDER MOUNTING FRAME IS INSTALLED ON CONCRETE BEAM.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE INSTALLATION DETAILS
SHEET 3 OF 3

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-502.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

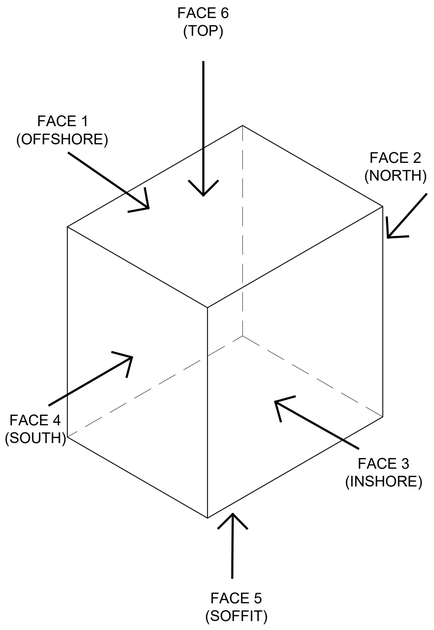
Last Saved By: AcostaML Last Date Saved: 10/20/2026 3:40 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches) Plot Style Table: BEDC_Acad(N).ctb
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-502.00.dwg
Date & Time Plotted: 10/20/2026 3:44 PM Plot Scale: 1:1

PHASE 1 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
DIGESTER TANKS	0	-	A.1	A.5	5	E-W CAP	TYPE 2	12	12	X3 DEFECTS AT THIS REPAIR LOCATION. FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	0	-	A.9	-	5	E-W CAP	TYPE 2	12	12	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	0.5	-	A.2	-	5	DECK	TYPE 4	4	-	
DIGESTER TANKS	0/1	4/3.1	A	-	5	N-S CAP	TYPE 1	1200	72	FAILING EPOXY REPAIR IN AREA. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	0/1	-	A.9	-	5	E-W CAP	TYPE 2	36	12	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	0/1	-	A.2	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	0/1.5	-	A	-	3	N-S CAP	TYPE 2	3	3	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	2/3	2/3.1	A	-	5	N-S CAP	TYPE 2	60	24	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	2/3	-	A.3	-	4/5	E-W CAP	TYPE 2	10	12	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	2/3	-	A	A.2	5	E-W CAP	TYPE 1	60	48	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	2/3	-	A.3	-	4/5	E-W CAP	TYPE 4	1	-	X8 REPAIRS AT THIS LOCATION
DIGESTER TANKS	2/3	-	A.5	-	5	E-W CAP	TYPE 2	36	36	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	2/3	-	A.7	A.4	5	E-W CAP	TYPE 1	60	60	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	2/3	-	A.6	-	2	E-W CAP	TYPE 2	6	6	
DIGESTER TANKS	2/3.8	-	A.1	-	5	DECK	TYPE 2	2	2	
DIGESTER TANKS	3/4	-	A.5	-	4	E-W CAP	TYPE 2	2	2	
DIGESTER TANKS	3/4	-	A	A.2	5	E-W CAP	TYPE 1	60	48	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	3/4.8	4/3.1	A	-	5	N-S CAP	TYPE 1	60	72	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	4/3	-	A.4	B.1	5	E-W CAP	TYPE 1	48	48	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	4/3	-	A.4	-	2/5	E-W CAP	TYPE 3	12	-	
DIGESTER TANKS	4/3.5	0.8	A	-	5	N-S CAP	TYPE 4	2	-	X5 REPAIRS AT THIS LOCATION
DIGESTER TANKS	4/3.8	5/6.2.1	A	-	5	N-S CAP	TYPE 1	84	60	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	5/6.2	-	A.9	B.1	5	E-W CAP	TYPE 2	36	60	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	5/6.2	-	A.5	-	2/5	E-W CAP	TYPE 2	1	1	
DIGESTER TANKS	5/6.2.3	6/7.5	A	-	5	N-S CAP	TYPE 1	420	36	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	5/6.2.5	-	A.1	-	5	E-W CAP	TYPE 2	8	8	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	5/6.1	-	A.9	-	5	E-W CAP	TYPE 2	7	3	
DIGESTER TANKS	6/7	-	A	A.1	5	E-W CAP	TYPE 1	48	60	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	6/7.3	6/7.6	A.1	A.4	5	DECK	TYPE 2	2	2	X16 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	6/7.9	-	A	-	5	N-S CAP	TYPE 2	24	48	
DIGESTER TANKS	7/8	8/9	A	-	5	N-S CAP	TYPE 1	216	192	
DIGESTER TANKS	7/8.2	8/9	A	-	5	N-S CAP	TYPE 2	24	12	
DIGESTER TANKS	7/8.6	-	A	-	3/5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	8/9	-	A.1	-	5	E-W CAP	TYPE 4	3	-	
DIGESTER TANKS	8/9	-	A.9	-	5	E-W CAP	TYPE 2	6	30	
DIGESTER TANKS	9/10.1	-	A.4	-	5	E-W CAP	TYPE 2	60	20	
DIGESTER TANKS	9/10.1	-	A.7	-	5	E-W CAP	TYPE 2	14	120	
DIGESTER TANKS	10/11	-	A.1	-	5	N-S CAP	TYPE 1	72	96	
DIGESTER TANKS	11	12	A.5	-	4/5/2	E-W CAP	TYPE 2	80	12	
DIGESTER TANKS	11	12	A.6	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	11	12	A.9	-	5	E-W CAP	TYPE 4	2	-	X4 REPAIRS AT THIS LOCATION
DIGESTER TANKS	12/13	-	A.3	-	4	E-W CAP	TYPE 2	1	1	
DIGESTER TANKS	12/13.7	-	A.3	-	5	DECK	TYPE 2	24	24	
DIGESTER TANKS	13	-	A	B	5	E-W CAP	TYPE 1	96	60	1 IN. CONC. EROSION IN AREA
DIGESTER TANKS	13.1	0/1	A	-	5	N-S CAP	TYPE 1	3696	72	
DIGESTER TANKS	13.3	-	A	-	5	N-S CAP	TYPE 4	60	-	
DIGESTER TANKS	13.5	13/14	A	-	5	N-S CAP	TYPE 1	120	48	1 IN. CONC. EROSION IN AREA
DIGESTER TANKS	13/14	-	A	-	5	N-S CAP	TYPE 1	36	120	1 IN. CONC. EROSION IN AREA
DIGESTER TANKS	13/14	-	A.3	-	2	N-S CAP	TYPE 2	24	12	FAILING EPOXY REPAIR IN AREA. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	14	-	A	-	5	E-W CAP	TYPE 1	120	96	
DIGESTER TANKS	0	-	B	-	5	N-S CAP	TYPE 2	12	12	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	0	-	B.1	-	5	E-W CAP	TYPE 3	18	-	
DIGESTER TANKS	0	-	B.4	B.8	5	E-W CAP	TYPE 2	4	4	X5 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	0.1	0.8	B	-	5	N-S CAP	TYPE 2	48	24	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	0.4	-	B	-	5	N-S CAP	TYPE 2	8	8	
DIGESTER TANKS	0.8	-	B	-	5	N-S CAP	TYPE 2	12	12	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	0.8	-	B.1	B.4	5	DECK	TYPE 2	3	3	X6 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	0/1.1	-	B	-	5	N-S CAP	TYPE 2	36	18	
DIGESTER TANKS	0/1.1	-	B	-	5	N-S CAP	TYPE 2	12	12	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	0/1.4	0.6	B	-	5	N-S CAP	TYPE 2	48	36	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	0/1.4	-	B	-	1	N-S CAP	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	2/3	-	B.4	-	4	E-W CAP	TYPE 2	1	1	
DIGESTER TANKS	2/3.9	-	B.1	-	5	DECK	TYPE 4	8	-	
DIGESTER TANKS	3/4	-	B.8	C	5	E-W CAP	TYPE 2	48	28	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	3/4	-	B.5	-	4	E-W CAP	TYPE 2	1	1	
DIGESTER TANKS	3/4	-	B	-	5	E-W CAP	TYPE 3	36	-	
DIGESTER TANKS	3/4	-	B.1	-	2	E-W CAP	TYPE 2	1	1	
DIGESTER TANKS	3/4.2	-	B.7	-	5	DECK	TYPE 2	1	1	
DIGESTER TANKS	3/4.5	-	B	-	3/5	N-S CAP	TYPE 2	1	1	
DIGESTER TANKS	4/3	-	B.4	C.1	5	E-W CAP	TYPE 1	72	60	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	4/3.1	-	B	-	3/5	N-S CAP	TYPE 4	2	-	
DIGESTER TANKS	4/3.4	-	B	-	1	N-S CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION

PHASE 1 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
DIGESTER TANKS	5/6.2	-	B.4	-	5	E-W CAP	TYPE 1	48	48	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	5/6.2	-	B.4	B.6	5	E-W CAP	TYPE 2	24	60	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	5/6.2	-	B.2	B.3	5	E-W CAP	TYPE 2	30	30	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	5/6.2	-	B.1	B.2	5	E-W CAP	TYPE 2	18	40	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	5/6.2.8	-	B	-	5	N-S CAP	TYPE 3	8	-	
DIGESTER TANKS	5/6.1	-	B.9	-	5	E-W CAP	TYPE 2	12	12	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	5/6.1.2	-	B	-	5	N-S CAP	TYPE 3	8	-	
DIGESTER TANKS	5/6.1.2	-	B.7	-	5	DECK	TYPE 2	1	1	
DIGESTER TANKS	5/6.1.9	-	B.2	-	5	DECK	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	6/7	-	B.7	-	4/5	E-W CAP	TYPE 2	3	6	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	6/7.4	-	B	-	5	N-S CAP	TYPE 2	24	48	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	6/7.5	-	B	-	5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	6/7.9	-	B.2	-	5	DECK	TYPE 2	30	30	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	7/8	-	B	B.1	5	E-W CAP	TYPE 2	36	48	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	7/8	-	B.5	-	4/5	E-W CAP	TYPE 2	4	8	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	7/8	-	B.5	-	5	DECK	TYPE 4	12	-	
DIGESTER TANKS	7/8	-	B.9	C.1	5	E-W CAP	TYPE 1	60	60	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	8/9	-	B.2	-	5	E-W CAP	TYPE 2	6	6	X6 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	8/9	-	B.9	-	5	E-W CAP	TYPE 2	6	6	
DIGESTER TANKS	8/9	-	B.9	-	5	E-W CAP	TYPE 2	6	30	
DIGESTER TANKS	8/9	-	B.9	-	5	E-W CAP	TYPE 2	4	6	
DIGESTER TANKS	8/9	-	B.9	-	5	E-W CAP	TYPE 2	3	4	
DIGESTER TANKS	8/9.7	-	B	-	5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	8/9.9	-	B.6	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	9/10.2	-	B	-	5	N-S CAP	TYPE 2	18	48	
DIGESTER TANKS	9/10.2.3	-	B	-	5	N-S CAP	TYPE 2	14	24	
DIGESTER TANKS	9/10.8	-	B	-	5	N-S CAP	TYPE 2	36	36	
DIGESTER TANKS	9/10.9	-	B	-	5	N-S CAP	TYPE 1	48	48	
DIGESTER TANKS	9/10.1	-	B.5	-	4	N-S CAP	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	9/10.1	-	B	-	5	E-W CAP	TYPE 1	72	72	
DIGESTER TANKS	9/10.1	-	B	-	5	E-W CAP	TYPE 1	60	70	
DIGESTER TANKS	9/10.1.4	-	B	-	5	E-W CAP	TYPE 2	6	3	
DIGESTER TANKS	9/10.1.6	-	B	-	5	N-S CAP	TYPE 4	4	-	
DIGESTER TANKS	10/11	-	B	-	5	N-S CAP	TYPE 1	120	100	
DIGESTER TANKS	10/11	-	B.3	-	5	N-S CAP	TYPE 2	1	1	
DIGESTER TANKS	10/11.5	-	B	-	5	N-S CAP	TYPE 2	12	36	
DIGESTER TANKS	11	12.3	B.8	-	5	DECK	TYPE 2	48	48	
DIGESTER TANKS	11	12.6	B.3	-	5	DECK	TYPE 2	24	36	
DIGESTER TANKS	11	12	B	-	5	E-W CAP	TYPE 1	60	60	
DIGESTER TANKS	11	12	B.2	-	5	E-W CAP	TYPE 2	60	12	
DIGESTER TANKS	12/13	-	B	-	5	E-W CAP	TYPE 2	42	12	
DIGESTER TANKS	12/13	-	B.3	-	5	E-W CAP	TYPE 2	50	6	
DIGESTER TANKS	12/13.8	-	B	-	5	N-S CAP	TYPE 4	10	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	12/13.9	-	B.5	-	5	DECK	TYPE 2	36	150	
DIGESTER TANKS	13	14	B.1	-	5	DECK	TYPE 4	3	-	X10 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13	-	B	-	5	N-S CAP	TYPE 1	70	50	
DIGESTER TANKS	13	-	B.3	-	5	E-W CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13	-	B.9	-	5	E-W CAP	TYPE 4	18	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13.8	-	B	-	5	N-S CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	14	-	B	-	5	E-W CAP	TYPE 1	72	120	1 IN. CONC. EROSION IN AREA
DIGESTER TANKS	14	-	B.6	-	5	E-W CAP	TYPE 4	6	-	
DIGESTER TANKS	0	-	C.1	-	5	E-W CAP	TYPE 3	18	-	
DIGESTER TANKS	0.1	0.9	C.1	C.9	5	DECK	TYPE 2	2	2	X7 DEFECTS AT THIS REPAIR LOCATION
PLANT RAMPS	0.5	-	C.8	-	5	DECK	TYPE 2	2	6	
DIGESTER TANKS	0.8	-	C.1	0.9	5	DECK	TYPE 2	3	3	X5 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	0.9	-	C	-	5	E-W CAP	TYPE 2	12	12	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	0/1	-	C.9	-	5	E-W CAP	TYPE 2	30	24	
DIGESTER TANKS	0/1	-	C.5	-	5	E-W CAP	TYPE 2	72	8	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	0/1	-	C.4	-	4/5	E-W CAP	TYPE 4	8	-	
DIGESTER TANKS	0/1	0/1.3	C	-	5	N-S CAP	TYPE 2	12	12	X5 DEFECTS AT THIS REPAIR LOCATION. FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	0/1.7	0/1.3	C.2	-	5	DECK	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	0/1.8	2/3	C	-	5	N-S CAP	TYPE 1	48	60	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	2/3	-	C.3	-	4/5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	2/3	-	C.5	-	4/5	E-W CAP	TYPE 2	1	1	X4 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	2/3	-	C.7	C.4	5	E-W CAP	TYPE 1	60	72	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	2/3	-	C.1	C.6	2	E-W CAP	TYPE 4	5	-	X4 REPAIRS AT THIS LOCATION
DIGESTER TANKS	2/3.1	-	C	-	3	N-S CAP	TYPE 2	1	1	

NOTES:

1. SEE FIGURE BELOW FOR "FACE" LOCATIONS.



1/2"=1'-0" 0 1 2 3 4 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 1 REPAIR SCHEDULE
SHEET 1 OF 8

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-510.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-510.00_517.00.dwg
Last Date Saved: 10/20/2026 3:40 PM
Date & Time Plotted: 10/20/2026 3:45 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

PHASE 1 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
DIGESTER TANKS	2/3.4	-	C	-	3/5	N-S CAP	TYPE 4	4	-	
DIGESTER TANKS	2/3.5	-	C.6	-	5	DECK	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	3/4	-	C.3	-	2/5	E-W CAP	TYPE 2	4	6	
DIGESTER TANKS	3/4	-	C.2	-	2	E-W CAP	TYPE 2	2	2	
DIGESTER TANKS	3/4.1	3/4.2	C	-	5	N-S CAP	TYPE 2	36	12	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	4/3	-	C.2	-	5	E-W CAP	TYPE 3	60	-	
DIGESTER TANKS	4/3.4	0.5	C	-	3	E-W CAP	TYPE 2	36	2	
DIGESTER TANKS	4/3.7	-	C	-	5	N-S CAP	TYPE 3	30	-	
DIGESTER TANKS	5/6.2	-	C.1	-	5	E-W CAP	TYPE 3	18	1	
DIGESTER TANKS	5/6.2.6	-	C.3	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	5/6.1	-	C.1	-	5	E-W CAP	TYPE 2	48	8	
DIGESTER TANKS	5/6.1	-	C.2	-	5	E-W CAP	TYPE 4	4	-	
DIGESTER TANKS	5/6.1.3	-	C	-	3/5	N-S CAP	TYPE 2	1	1	
DIGESTER TANKS	5/6.1.4	-	C	-	5	N-S CAP	TYPE 1	48	48	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	5/6.1.5	-	C	-	5	N-S CAP	TYPE 2	4	4	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	6/7	-	C	C.5	5	E-W CAP	TYPE 1	72	84	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	6/7.1	-	C	-	5	N-S CAP	TYPE 2	24	1	
DIGESTER TANKS	6/7.1	-	C	-	1/5	N-S CAP	TYPE 2	1	1	
DIGESTER TANKS	6/7.5	-	C.2	-	5	DECK	TYPE 4	4	-	
DIGESTER TANKS	6/7.9	-	C	-	5	N-S CAP	TYPE 2	36	48	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	7/8	-	C.4	-	2/5	E-W CAP	TYPE 2	4	6	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	7/8.1	-	C	-	5	N-S CAP	TYPE 3	30	-	
DIGESTER TANKS	7/8.3	-	C.6	-	5	DECK	TYPE 4	1	-	
DIGESTER TANKS	7/8.4	-	C	-	3/5	N-S CAP	TYPE 2	5	1	
DIGESTER TANKS	7/8.8	-	C	-	5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	8/9	-	C.1	-	5	E-W CAP	TYPE 1	72	120	
DIGESTER TANKS	8/9	-	C.7	-	5	E-W CAP	TYPE 4	4	-	
DIGESTER TANKS	8/9	-	C.7	-	2	E-W CAP	TYPE 4	4	-	
DIGESTER TANKS	8/9.1	-	C.8	-	5	DECK	TYPE 2	12	12	
DIGESTER TANKS	8/9.6	-	C	-	3	N-S CAP	TYPE 2	1	1	
DIGESTER TANKS	8/9.6	-	C	-	5	N-S CAP	TYPE 4	6	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	8/9.9	-	C	-	5	N-S CAP	TYPE 4	6	-	
DIGESTER TANKS	9/10.2	-	C.4	-	5	E-W CAP	TYPE 1	70	60	
DIGESTER TANKS	9/10.2	-	C.1	-	5	N-S CAP	TYPE 2	6	3	
DIGESTER TANKS	9/10.2	-	C.2	-	5	E-W CAP	TYPE 1	48	84	
DIGESTER TANKS	9/10.2	-	C.9	-	5	E-W CAP	TYPE 2	12	18	
DIGESTER TANKS	9/10.2.2	-	C	-	5	N-S CAP	TYPE 2	2	2	
DIGESTER TANKS	9/10.2.5	-	C	-	5	N-S CAP	TYPE 1	50	50	
DIGESTER TANKS	9/10.9	-	C.9	-	5	N-S CAP	TYPE 2	12	48	
DIGESTER TANKS	9/10.1	-	C.5	-	5	E-W CAP	TYPE 1	60	40	
DIGESTER TANKS	9/10.1	-	C.2	-	5	E-W CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	9/10.1	-	C.7	-	5	N-S CAP	TYPE 2	6	1	
DIGESTER TANKS	9/10.1	-	C.6	-	5	E-W CAP	TYPE 2	12	12	
DIGESTER TANKS	9/10.1	-	C.4	-	5	E-W CAP	TYPE 2	10	10	
DIGESTER TANKS	9/10.1	-	C.8	-	5	E-W CAP	TYPE 1	70	40	
DIGESTER TANKS	9/10.1	-	C.2	-	5	E-W CAP	TYPE 4	8	-	
DIGESTER TANKS	10/11	-	C	-	5	N-S CAP	TYPE 1	80	50	
DIGESTER TANKS	10/11	-	C.4	-	5	N-S CAP	TYPE 2	24	30	
DIGESTER TANKS	10/11.1	10/11.4	C	-	5	N-S CAP	TYPE 4	1	-	
DIGESTER TANKS	10/11.6	-	C	-	5	N-S CAP	TYPE 4	6	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	11	12.9	C	-	5	N-S CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	11	12.9	C	-	5	N-S CAP	TYPE 3	24	-	
DIGESTER TANKS	11	12.1	C	-	5	N-S CAP	TYPE 2	30	30	
DIGESTER TANKS	11	12	C	-	5	E-W CAP	TYPE 2	36	36	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	11	12	C.4	-	5	E-W CAP	TYPE 4	6	-	
DIGESTER TANKS	11	12	C.1	-	5	E-W CAP	TYPE 2	6	6	
DIGESTER TANKS	11/12	-	C.4	-	2	E-W CAP	TYPE 4	6	-	
DIGESTER TANKS	12/13	-	C	-	5	E-W CAP	TYPE 2	36	36	
DIGESTER TANKS	12/13	-	C	-	5	E-W CAP	TYPE 2	36	36	
DIGESTER TANKS	12/13	-	C.5	-	5	E-W CAP	TYPE 4	1	-	X6 REPAIRS AT THIS LOCATION
DIGESTER TANKS	12/13	-	C.7	-	5	E-W CAP	TYPE 3	6	-	
DIGESTER TANKS	13	-	C	-	5	E-W CAP	TYPE 2	24	60	
DIGESTER TANKS	13	-	C.1	-	5	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	13	-	C.5	-	5	E-W CAP	TYPE 4	2	-	X6 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13	-	C.9	-	4/5	E-W CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13.2	-	C.1	-	5	DECK	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13.2	-	C.8	-	5	DECK	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13.5	-	C	-	3/5	N-S CAP	TYPE 2	10	10	
DIGESTER TANKS	13.7	-	C	-	5	N-S CAP	TYPE 4	2	-	X6 REPAIRS AT THIS LOCATION
DIGESTER TANKS	14	-	C	-	5	E-W CAP	TYPE 2	36	24	
DIGESTER TANKS	14	-	C	-	5	E-W CAP	TYPE 2	48	1	
DIGESTER TANKS	14	-	C	-	5	E-W CAP	TYPE 4	18	-	
DIGESTER TANKS	14	-	C.6	-	5	E-W CAP	TYPE 2	96	12	
DIGESTER TANKS	0	-	D.2	-	4	E-W CAP	TYPE 2	2	2	

PHASE 1 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
DIGESTER TANKS	0	-	D.3	-	4	E-W CAP	TYPE 4	4	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	0.2	-	D	-	5	N-S CAP	TYPE 2	24	12	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	0.4	-	D	-	5	N-S CAP	TYPE 2	12	12	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	0.8	-	D.8	D.9	5	DECK	TYPE 2	3	3	X6 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	0.9	-	D.5	-	5	DECK	TYPE 2	2	2	
DIGESTER TANKS	0/1	-	D.1	-	5	E-W CAP	TYPE 2	12	12	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	0/1	-	D.4	-	2	E-W CAP	TYPE 4	6	-	
DIGESTER TANKS	0/1	-	D.6	-	2	E-W CAP	TYPE 2	1	1	
DIGESTER TANKS	0/1.5	-	D.4	-	5	DECK	TYPE 2	5	1	
DIGESTER TANKS	0/1.5	-	D	-	1/5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	0/1.6	-	D	-	3/5	N-S CAP	TYPE 4	8	-	
DIGESTER TANKS	2/3	-	D.1	-	5	E-W CAP	TYPE 3	36	-	
DIGESTER TANKS	2/3	-	D.9	-	5	E-W CAP	TYPE 2	18	24	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	2/3.1	-	D.6	-	5	DECK	TYPE 2	1	1	
DIGESTER TANKS	2/3.4	-	D.8	-	5	DECK	TYPE 4	12	-	
DIGESTER TANKS	2/3.5	-	D.5	-	5	DECK	TYPE 2	1	1	
DIGESTER TANKS	3/4	-	D.9	-	5	E-W CAP	TYPE 2	12	12	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	3/4	-	D	-	5	E-W CAP	TYPE 3	60	-	
DIGESTER TANKS	3/4.1	3/4.4	D.1	D.8	5	DECK	TYPE 2	1	1	X8 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	3/4.4	4/3.2	D	-	5	N-S CAP	TYPE 2	12	60	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	4/3	-	D.6	-	4/5	E-W CAP	TYPE 4	4	-	
DIGESTER TANKS	4/3.5	-	D	-	5	N-S CAP	TYPE 4	6	-	
DIGESTER TANKS	4/3.6	-	D.5	-	5	DECK	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	5/6.2	5/6.1.1	D	-	5	N-S CAP	TYPE 1	264	84	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	5/6.1	-	D	-	4/5	E-W CAP	TYPE 2	8	12	
DIGESTER TANKS	5/6.1	-	D.1	D.4	5	E-W CAP	TYPE 3	240	-	
DIGESTER TANKS	5/6.1.3	-	D.2	-	5	DECK	TYPE 4	2	-	
DIGESTER TANKS	5/6.1.4	-	D	-	5	N-S CAP	TYPE 3	30	-	
DIGESTER TANKS	5/6.1.4	-	D	-	1/5	N-S CAP	TYPE 2	2	2	
DIGESTER TANKS	5/6.1.5	-	D	-	3/5	N-S CAP	TYPE 3	3	-	
DIGESTER TANKS	6/7	-	D.1	-	5	E-W CAP	TYPE 2	6	1	
DIGESTER TANKS	6/7.8	-	D	-	5	N-S CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	6/7.9	-	D	-	5	N-S CAP	TYPE 2	1	1	
DIGESTER TANKS	7/8	-	D.4	-	5	E-W CAP	TYPE 4	4	-	
DIGESTER TANKS	7/8	-	D.9	-	5	E-W CAP	TYPE 3	48	1	
DIGESTER TANKS	7/8.1	-	D	-	3/5	N-S CAP	TYPE 4	2	-	
DIGESTER TANKS	7/8.9	-	D	-	5	N-S CAP	TYPE 2	30	12	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	8/9	-	D	-	5	N-S CAP	TYPE 2	24	8	
DIGESTER TANKS	8/9.3	-	D	-	5	N-S CAP	TYPE 2	6	2	
DIGESTER TANKS	8/9.5	-	D.2	-	5	E-W CAP	TYPE 2	30	6	
DIGESTER TANKS	8/9.8	-	D	-	5	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	8/9.8	-	D	-	5	N-S CAP	TYPE 2	6	2	
DIGESTER TANKS	9.5	-	D.6	-	5	N-S CAP	TYPE 4	2	-	
DIGESTER TANKS	9/10	-	D	-	5	E-W CAP	TYPE 2	18	24	
DIGESTER TANKS	10	-	D.5	-	5	N-S CAP	TYPE 4	8	-	
DIGESTER TANKS	10	-	D.8	-	5	N-S CAP	TYPE 2	6	6	
DIGESTER TANKS	10/11	-	D	-	5	N-S CAP	TYPE 2	40	24	
DIGESTER TANKS	10/11	-	D.1	-	5	N-S CAP	TYPE 2	6	6	
DIGESTER TANKS	10/11	-	D.1	-	5	N-S CAP	TYPE 3	8	-	
DIGESTER TANKS	10/11	-	D.8	-	5	N-S CAP	TYPE 4	1	-	
DIGESTER TANKS	10/11.4	-	D	-	3/5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	11	12	D.4	-	5	E-W CAP	TYPE 4	3	-	
DIGESTER TANKS	11	12.2	D	-	1	N-S CAP	TYPE 4	36	-	
DIGESTER TANKS	11	12	D.4	-	5	E-W CAP	TYPE 4	4	-	
DIGESTER TANKS	12/13	-	D	-	5	E-W CAP	TYPE 3	18	-	
DIGESTER TANKS	13	-	D.3	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13	-	D.9	-	5	E-W CAP	TYPE 4	24	-	
DIGESTER TANKS	13.2	-	D	-	5	N-S CAP	TYPE 4	2	-	
DIGESTER TANKS	14	-	D	-	5	E-W CAP	TYPE 2	36	36	
DIGESTER TANKS	10	-	D/E.1	-	5	N-S CAP	TYPE 2	6	6	
DIGESTER TANKS	10	-	D/E.3	-	5	E-W CAP	TYPE 4	2	-	X7 REPAIRS AT THIS LOCATION
DIGESTER TANKS	10	-	D/E.8	-	5	E-W CAP	TYPE 3	84	-	
DIGESTER TANKS	10.9	-	D/E	-	5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	11	-	D/E.5	-	4/5	E-W CAP	TYPE 4	4	-	
DIGESTER TANKS	11	12	D/E	-	5	N-S CAP	TYPE 2	4	4	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	11	-	D/E.5	-	4/5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	11.2	-	D/E	-	1/5	N-S CAP	TYPE 2	5	5	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	11.4	-	D/E	-	5	N-S CAP	TYPE 4	1	-	

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 1 REPAIR SCHEDULE
SHEET 2 OF 8

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-511.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-510.00_517.00.dwg
Last Date Saved: 10/20/2026 3:40 PM
Date & Time Plotted: 10/20/2026 3:45 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 1 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
DIGESTER TANKS	12.9	-	D/E	-	5	DECK	TYPE 2	12	12	
DIGESTER TANKS	13	-	D/E.5	-	2/5	E-W CAP	TYPE 2	24	6	
DIGESTER TANKS	13.3	-	D/E	-	5	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13.7	-	D/E.3	-	5	DECK	TYPE 2	2	2	
DIGESTER TANKS	14	-	D/E	-	5	E-W CAP	TYPE 2	18	12	
DIGESTER TANKS	1	-	E	-	5	E-W CAP	TYPE 2	12	4	X3 DEFECTS AT THIS REPAIR LOCATION. FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	1.2	-	E	-	5	E-W CAP	TYPE 4	1	-	X5 REPAIRS AT THIS LOCATION
DIGESTER TANKS	1.3	-	E	-	5	N-S CAP	TYPE 4	3	-	X4 REPAIRS AT THIS LOCATION
DIGESTER TANKS	4	-	E	-	5	N-S CAP	TYPE 3	4	-	
DIGESTER TANKS	4	-	E.2	-	5	E-W CAP	TYPE 2	2	3	
DIGESTER TANKS	4.2	-	E	-	5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	4.9	-	E	-	5	N-S CAP	TYPE 4	5	-	
DIGESTER TANKS	5.5	-	E	-	5	N-S CAP	TYPE 3	48	-	
DIGESTER TANKS	5.9	-	E	-	5	N-S CAP	TYPE 3	36	-	
DIGESTER TANKS	6	-	E.1	-	5	E-W CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	6	-	E.1	-	3/5	E-W CAP	TYPE 2	12	4	
DIGESTER TANKS	6.1	-	E	-	5	N-S CAP	TYPE 3	84	-	
DIGESTER TANKS	6.1	-	E	-	3/5	N-S CAP	TYPE 2	6	6	
DIGESTER TANKS	6.6	-	E	-	5	N-S CAP	TYPE 4	2	-	
DIGESTER TANKS	6.8	-	E	-	5	N-S CAP	TYPE 4	4	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	6.9	-	E	-	5	N-S CAP	TYPE 2	72	18	
DIGESTER TANKS	7.5	-	E	-	5	N-S CAP	TYPE 4	3	-	X6 REPAIRS AT THIS LOCATION
DIGESTER TANKS	7.8	-	E	-	5	N-S CAP	TYPE 4	8	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	8	-	E.3	-	5	E-W CAP	TYPE 2	12	6	
DIGESTER TANKS	8.1	-	E	-	5	N-S CAP	TYPE 3	18	-	
DIGESTER TANKS	8.5	-	E	-	5	N-S CAP	TYPE 4	3	-	X4 REPAIRS AT THIS LOCATION
DIGESTER TANKS	8.5	-	E	-	5	N-S CAP	TYPE 2	12	12	
DIGESTER TANKS	8.9	-	E.3	-	5	N-S CAP	TYPE 3	24	-	
DIGESTER TANKS	9	-	E	-	5	E-W CAP	TYPE 3	48	-	
DIGESTER TANKS	9	-	E.1	-	5	E-W CAP	TYPE 2	8	8	
DIGESTER TANKS	9	-	E.9	-	5	E-W CAP	TYPE 3	36	-	
DIGESTER TANKS	9.7	-	E.5	-	5	N-S CAP	TYPE 4	6	-	
DIGESTER TANKS	10	-	E/F	-	5	N-S CAP	TYPE 3	72	-	
DIGESTER TANKS	10	-	E/F	-	5	E-W CAP	TYPE 3	48	-	
DIGESTER TANKS	10	-	E/F.1	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	10	-	E/F.6	-	4/5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	10.6	-	E/F	-	5	N-S CAP	TYPE 4	8	-	
DIGESTER TANKS	10.6	-	E/F	-	5	N-S CAP	TYPE 4	2	-	X4 REPAIRS AT THIS LOCATION
DIGESTER TANKS	10.6	-	E/F.8	-	5	DECK	TYPE 2	3	1	
DIGESTER TANKS	11	-	E/F	-	5	N-S CAP	TYPE 3	24	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	11	-	E/F.1	-	5	E-W CAP	TYPE 4	11	-	
DIGESTER TANKS	11	-	E/F.4	-	5	E-W CAP	TYPE 2	6	6	
DIGESTER TANKS	11	-	E/F.5	-	5	E-W CAP	TYPE 2	18	6	
DIGESTER TANKS	11	-	E/F.8	-	5	E-W CAP	TYPE 2	6	6	
DIGESTER TANKS	11	-	E/F.9	-	5	E-W CAP	TYPE 2	40	10	
DIGESTER TANKS	11.2	11.7	E/F.5	-	5	N-S CAP	TYPE 1	200	40	
DIGESTER TANKS	11.5	-	E/F	-	1/5/3	N-S CAP	TYPE 2	14	24	X3 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	12	-	E/F.8	-	5	E-W CAP	TYPE 4	4	-	
DIGESTER TANKS	12.4	-	E/F	-	3/5	N-S CAP	TYPE 2	10	10	
DIGESTER TANKS	12.6	-	E/F	-	5	N-S CAP	TYPE 4	1	-	
DIGESTER TANKS	13	-	E/F	-	5	E-W CAP	TYPE 3	12	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	13	-	E/F.5	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	13.9	-	E/F.9	-	5	DECK	TYPE 2	2	2	
DIGESTER TANKS	14	-	E/F	-	5	E-W CAP	TYPE 2	60	30	
DIGESTER TANKS	14	-	E/F.7	-	5	E-W CAP	TYPE 2	48	12	
DIGESTER TANKS	1	-	F.5	-	5	E-W CAP	TYPE 4	1	-	X5 REPAIRS AT THIS LOCATION
DIGESTER TANKS	1.2	-	F	-	5	N-S CAP	TYPE 4	1	-	
DIGESTER TANKS	2	-	F.5	-	5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	3	-	F.4	-	5	E-W CAP	TYPE 2	12	36	
DIGESTER TANKS	4	-	F.2	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	4	-	F.5	-	5	E-W CAP	TYPE 4	3	-	X4 REPAIRS AT THIS LOCATION
DIGESTER TANKS	4.5	-	F	-	5	N-S CAP	TYPE 2	10	-	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	5	-	F.5	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	5	-	F.5	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	6	-	F.5	-	5	E-W CAP	TYPE 4	2	-	X6 REPAIRS AT THIS LOCATION
DIGESTER TANKS	6.3	-	F	-	5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	6.8	-	F	-	5	N-S CAP	TYPE 4	2	-	X4 REPAIRS AT THIS LOCATION
DIGESTER TANKS	7	-	F.1	-	5	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	7	-	F.8	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	7.5	-	F	-	3/5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	8	-	F	-	5	E-W CAP	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	8.2	-	F	-	5	N-S CAP	TYPE 4	6	-	
DIGESTER TANKS	8.5	-	F.7	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE

PHASE 1 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
DIGESTER TANKS	9	-	F.2	-	5	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	9	-	F	-	4/5	N-S CAP	TYPE 4	5	-	
DIGESTER TANKS	9.3	-	F.3	-	5	N-S CAP	TYPE 3	12	-	
DIGESTER TANKS	9.5	-	F.4	-	5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	9.8	-	F.7	-	5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	9.8	-	F.3	-	5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	10	11	F/G	GH	5	DECK	TYPE 4	3	-	X22 REPAIRS AT THIS LOCATION
DIGESTER TANKS	11.1	-	F/G.9	-	1/5/4	N-S CAP	TYPE 2	2	2	
DIGESTER TANKS	11.2	-	F/G	-	1/5	N-S CAP	TYPE 2	6	48	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	11.4	-	F/G	-	1/5/3	N-S CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	11.9	-	F/G	-	5	N-S CAP	TYPE 3	30	-	
DIGESTER TANKS	12	-	F/G.1	-	5	E-W CAP	TYPE 2	10	20	
DIGESTER TANKS	12	-	F/G.7	-	5	E-W CAP	TYPE 3	36	-	
DIGESTER TANKS	12	-	F/G.1	-	5	E-W CAP	TYPE 2	6	18	
DIGESTER TANKS	12	-	F/G.7	-	5	E-W CAP	TYPE 3	36	-	
DIGESTER TANKS	12.5	-	F/G	-	1/5	N-S CAP	TYPE 4	10	-	
DIGESTER TANKS	12.6	-	F/G	-	5	N-S CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13	-	F/G	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13.3	-	F/G	-	1/5	N-S CAP	TYPE 4	2	-	
DIGESTER TANKS	14	-	F/G	-	5	E-W CAP	TYPE 1	72	72	
DIGESTER TANKS	14	-	F/G.6	-	5	E-W CAP	TYPE 2	72	10	
DIGESTER TANKS	1	-	G	-	5	E-W CAP	TYPE 3	36	-	
DIGESTER TANKS	1	-	G.3	-	5	E-W CAP	TYPE 4	6	-	
DIGESTER TANKS	1	-	G.3	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	1.1	-	G	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	1.2	-	G	-	5	N-S CAP	TYPE 4	5	-	
DIGESTER TANKS	2	-	G.9	-	5	E-W CAP	TYPE 4	3	-	
DIGESTER TANKS	2.6	-	G	-	5	N-S CAP	TYPE 4	5	-	
DIGESTER TANKS	3	-	G.1	-	5	E-W CAP	TYPE 3	48	-	
DIGESTER TANKS	3	-	G.3	-	5	E-W CAP	TYPE 4	4	-	
DIGESTER TANKS	3.1	-	G	-	5	N-S CAP	TYPE 4	8	-	
DIGESTER TANKS	3.1	-	G	-	5	N-S CAP	TYPE 3	48	-	
DIGESTER TANKS	3.1	-	G	-	5	N-S CAP	TYPE 2	3	3	
DIGESTER TANKS	3.3	-	G	-	5	N-S CAP	TYPE 2	2	2	X9 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	4	-	G.1	-	5	E-W CAP	TYPE 4	6	-	
DIGESTER TANKS	4.9	-	G.1	-	5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	5	-	G.1	-	5	E-W CAP	TYPE 3	36	-	
DIGESTER TANKS	6.2	-	G	-	5	N-S CAP	TYPE 4	2	-	
DIGESTER TANKS	6.9	-	G.1	-	5	N-S CAP	TYPE 2	12	12	
DIGESTER TANKS	7	-	G.9	-	4/5	E-W CAP	TYPE 2	12	6	
DIGESTER TANKS	7	-	G.1	-	5	E-W CAP	TYPE 3	36	-	
DIGESTER TANKS	7.5	-	G	-	5	N-S CAP	TYPE 4	1	-	X7 REPAIRS AT THIS LOCATION
DIGESTER TANKS	8	-	G	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	9.5	-	G.7	-	5	N-S CAP	TYPE 2	6	6	
DIGESTER TANKS	10	-	G/H	-	5	E-W CAP	TYPE 3	36	-	
DIGESTER TANKS	11	-	G/H.1	-	5	E-W CAP	TYPE 3	36	-	
DIGESTER TANKS	11.1	-	G/H.1	-	5	N-S CAP	TYPE 4	30	-	
DIGESTER TANKS	12	-	G/H.7	-	2	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	12.3	-	G/H.2	-	5	DECK	TYPE 4	1	-	X5 REPAIRS AT THIS LOCATION
DIGESTER TANKS	12.4	-	G/H.7	-	5	DECK	TYPE 2	1	1	X6 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	13	-	G/H.1	-	5	E-W CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13	-	G/H.5	-	5	E-W CAP	TYPE 2	1	2	
DIGESTER TANKS	14	-	G/H	-	5	E-W CAP	TYPE 1	48	48	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	14	-	G/H.4	-	5	E-W CAP	TYPE 2	72	14	
DIGESTER TANKS	14	-	G/H	-	2/5	E-W CAP	TYPE 2	3	1	
DIGESTER TANKS	14	-	G/H.3	-	5	E-W CAP	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
DIGESTER TANKS	1	-	H.8	-	5	E-W CAP	TYPE 4	5	-	
DIGESTER TANKS	1	-	H.9	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	1.2	-	H.8	-	5	DECK	TYPE 4	2	-	
DIGESTER TANKS	2	-	H.4	-	5	E-W CAP	TYPE 4	3	-	
DIGESTER TANKS	2.8	-	H.2	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	2.9	-	H	-	5	N-S CAP	TYPE 3	24	-	
DIGESTER TANKS	3	-	H	-	5	E-W CAP	TYPE 3	48	-	
DIGESTER TANKS	3	-	H.2	-	5	E-W CAP	TYPE 3	48	-	
DIGESTER TANKS	3.1	-	H	-	5	N-S CAP	TYPE 3	24	-	
DIGESTER TANKS	3.1	-	H	-	5	N-S CAP	TYPE 2	2	3	X5 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	3.5	-	H	-	5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	4	-	H.7	-	5	E-W CAP	TYPE 4	2	-	

0 1 2 3 4 FT.
1/2"=1'-0"

NYC Environmental Protection BEDC/RD

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

STATE OF NEW YORK ILHAN TUTUNCU LICENSED PROFESSIONAL ENGINEER

NYC Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 1 REPAIR SCHEDULE
SHEET 3 OF 8

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-512.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-510.00_517.00.dwg
Last Date Saved: 10/20/2026 3:40 PM
Date & Time Plotted: 10/20/2026 3:45 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 1 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
DIGESTER TANKS	5	-	H.8	-	5	E-W CAP	TYPE 4	1	-	X5 REPAIRS AT THIS LOCATION
DIGESTER TANKS	8.9	-	H	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	9	-	H/J1.1	-	5	E-W CAP	TYPE 2	1	2	
DIGESTER TANKS	9	-	H/J1.7	-	5	E-W CAP	TYPE 3	8	-	
DIGESTER TANKS	9	-	H/J1.9	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	10.4	-	H/J1	-	1/5	N-S CAP	TYPE 2	5	5	
DIGESTER TANKS	10.6	-	H/J1	-	1/5	N-S CAP	TYPE 2	6	6	
DIGESTER TANKS	10.8	-	H/J1	-	5	N-S CAP	TYPE 4	8	-	
DIGESTER TANKS	13	-	H/J1.7	-	5	E-W CAP	TYPE 2	3	1	
DIGESTER TANKS	13.1	-	H/J1	-	5	DECK	TYPE 2	36	12	
DIGESTER TANKS	10	-	H/J.2	-	5	E-W CAP	TYPE 2	1.5	1.5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	10	-	H/J.4	-	5	E-W CAP	TYPE 2	12	-	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	10	-	H/J.5	-	5	E-W CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	11.1	-	H/J.1	-	3/5	N-S CAP	TYPE 4	4	-	
DIGESTER TANKS	11.4	-	H/J	-	1/5/3	N-S CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	11.4	-	H/J.1	-	5	N-S CAP	TYPE 2	6	4	
DIGESTER TANKS	12	-	H/J.1	-	5	E-W CAP	TYPE 3	12	-	
DIGESTER TANKS	12	-	H/J.2	-	5	E-W CAP	TYPE 3	12	-	
DIGESTER TANKS	12	-	H/J.7	-	2/5/4	E-W CAP	TYPE 4	2	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	14	-	H/J	-	5	E-W CAP	TYPE 2	24	14	
DIGESTER TANKS	8	-	H/J2.9	-	5	E-W CAP	TYPE 2	12	36	
DIGESTER TANKS	9	-	H/J2.3	-	5	E-W CAP	TYPE 4	3	-	
DIGESTER TANKS	9	-	H/J2.5	-	5	E-W CAP	TYPE 2	1	2	
DIGESTER TANKS	9	-	H/J2.7	-	5	E-W CAP	TYPE 3	7	-	
DIGESTER TANKS	9	-	H/J2.8	-	4/5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	11	-	H/J2.5	-	5	E-W CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	13	-	H/J2	-	5	E-W CAP	TYPE 2	2	2	
DIGESTER TANKS	13	-	H/J2	-	5	E-W CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13	-	H/J2.5	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	13.8	-	H/J2.8	-	5	DECK	TYPE 2	24	30	
DIGESTER TANKS	1	-	J	-	5	E-W CAP	TYPE 3	48	-	
DIGESTER TANKS	1	-	J.2	-	5	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	1	-	J.5	-	5	E-W CAP	TYPE 4	4	-	X4 REPAIRS AT THIS LOCATION
DIGESTER TANKS	1.1	-	J	-	5	N-S CAP	TYPE 3	24	-	
DIGESTER TANKS	1.7	-	J	-	5	N-S CAP	TYPE 4	5	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	2	-	J	-	4/5	N-S CAP	TYPE 4	4	-	
DIGESTER TANKS	2	-	J.5	-	5	E-W CAP	TYPE 4	12	-	
DIGESTER TANKS	2	-	J.9	-	5	E-W CAP	TYPE 3	24	-	
DIGESTER TANKS	2.1	-	J	-	5	N-S CAP	TYPE 3	12	-	
DIGESTER TANKS	2.5	-	J.5	-	5	DECK	TYPE 4	4	-	
DIGESTER TANKS	3	-	J.5	-	5	E-W CAP	TYPE 4	2	-	X10 REPAIRS AT THIS LOCATION
DIGESTER TANKS	3.1	-	J.1	-	5	N-S CAP	TYPE 3	24	-	
DIGESTER TANKS	3.3	-	J	-	5	N-S CAP	TYPE 4	6	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	3.5	-	J	-	5	N-S CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	4	-	J	-	5	E-W CAP	TYPE 3	12	-	
DIGESTER TANKS	4.1	-	J	-	5	N-S CAP	TYPE 4	6	-	
DIGESTER TANKS	6	-	J	-	5	E-W CAP	TYPE 3	48	-	
DIGESTER TANKS	6	-	J.5	-	5	E-W CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	6	-	J.2	-	2/5	E-W CAP	TYPE 4	6	-	
DIGESTER TANKS	6.9	-	J.1	-	3/5	N-S CAP	TYPE 2	12	12	
DIGESTER TANKS	7	-	J	-	5	E-W CAP	TYPE 3	6	-	
DIGESTER TANKS	7	-	J.5	-	5	E-W CAP	TYPE 4	1	-	X10 REPAIRS AT THIS LOCATION
DIGESTER TANKS	7	-	J.9	-	5	E-W CAP	TYPE 3	18	-	
DIGESTER TANKS	7.3	-	J	-	5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	8.9	-	J	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	9	-	J	-	4/5	E-W CAP	TYPE 2	1	1	
DIGESTER TANKS	9.2	-	J.5	-	5	N-S CAP	TYPE 4	6	-	
DIGESTER TANKS	9.8	-	J/K	-	5	N-S CAP	TYPE 4	2	-	X4 REPAIRS AT THIS LOCATION
DIGESTER TANKS	10	-	J/K	-	5	E-W CAP	TYPE 3	60	-	
DIGESTER TANKS	11	-	J/K	-	5	E-W CAP	TYPE 4	3	-	
DIGESTER TANKS	11.4	-	J/K	-	1/5/3	N-S CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	11.8	-	J/K	-	1/5/3	N-S CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	12.4	-	J/K	-	1/5	N-S CAP	TYPE 4	4	-	
DIGESTER TANKS	14	-	J/K	-	5	E-W CAP	TYPE 2	48	14	
DIGESTER TANKS	14	-	J/K.9	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	1	-	K	-	5	E-W CAP	TYPE 3	12	-	
DIGESTER TANKS	1.4	-	K	-	5	N-S CAP	TYPE 2	4	2	X3 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	1.6	-	K	-	5	N-S CAP	TYPE 2	1	1	
DIGESTER TANKS	2	-	K.7	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	2	-	K.7	-	5	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	2.1	-	K.3	-	5	DECK	TYPE 2	1	1	X6 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	2.1	-	K.3	-	5	DECK	TYPE 4	3	-	
DIGESTER TANKS	2.5	-	K	-	5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	3.5	-	K	-	5	N-S CAP	TYPE 4	5	-	

PHASE 1 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
DIGESTER TANKS	3.5	-	K	-	5	N-S CAP	TYPE 4	1	-	
DIGESTER TANKS	4	-	K	-	5	E-W CAP	TYPE 3	36	-	
DIGESTER TANKS	6.1	-	K	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	6.9	-	K	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	7.9	-	K.4	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	8	-	K.7	-	5	E-W CAP	TYPE 3	12	-	
DIGESTER TANKS	8.4	-	K	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	9	-	K.4	-	5	N-S CAP	TYPE 2	3	2	
DIGESTER TANKS	9	-	K	-	5	E-W CAP	TYPE 3	18	-	
DIGESTER TANKS	9	-	K.9	-	5	E-W CAP	TYPE 2	2	1	
DIGESTER TANKS	9.6	-	K.1	-	5	N-S CAP	TYPE 4	7	-	
DIGESTER TANKS	9.4	-	K/L	-	5	N-S CAP	TYPE 2	6	8	X3 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	11	-	K/L.6	-	5	E-W CAP	TYPE 4	3	-	
DIGESTER TANKS	11.1	-	K/L	-	5	N-S CAP	TYPE 4	8	-	
DIGESTER TANKS	11.4	-	K/L	-	1/5/3	N-S CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	13	-	K/L	-	5	E-W CAP	TYPE 2	3	6	
DIGESTER TANKS	13	-	K/L.1	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	13.5	-	K/L	-	5	N-S CAP	TYPE 2	2	2	
DIGESTER TANKS	14	-	K/L	-	5	E-W CAP	TYPE 2	10	10	
DIGESTER TANKS	1	-	L	-	3/5	E-W CAP	TYPE 4	5	-	
DIGESTER TANKS	1	-	L	-	5	E-W CAP	TYPE 2	4	4	
DIGESTER TANKS	1	-	L.4	-	5	E-W CAP	TYPE 2	1	5	
DIGESTER TANKS	2	-	L.7	-	5	E-W CAP	TYPE 4	2	-	X7 REPAIRS AT THIS LOCATION
DIGESTER TANKS	2	-	L.9	-	5	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	3	-	L.9	-	5	E-W CAP	TYPE 4	3	-	
DIGESTER TANKS	3.5	-	L	-	5	N-S CAP	TYPE 4	2	-	
DIGESTER TANKS	3.5	-	L	-	5	N-S CAP	TYPE 2	10	2	
DIGESTER TANKS	3.6	-	L.3	-	5	DECK	TYPE 4	2	-	
DIGESTER TANKS	6	-	L.5	-	5	E-W CAP	TYPE 4	1	-	X9 REPAIRS AT THIS LOCATION
DIGESTER TANKS	6.1	-	L	-	5	E-W CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	6.9	-	L	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	7	-	L.5	-	5	E-W CAP	TYPE 3	18	-	
DIGESTER TANKS	7.6	-	L	-	5	N-S CAP	TYPE 2	5	5	
DIGESTER TANKS	8.5	-	L	-	1/5	N-S CAP	TYPE 4	60	-	
DIGESTER TANKS	8.9	-	L	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	9	-	L	-	5	E-W CAP	TYPE 3	72	-	
DIGESTER TANKS	9.2	-	L.3	-	4	N-S CAP	TYPE 3	80	-	
DIGESTER TANKS	10	-	L/M.8	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	10	-	L/M.9	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	10.2	10.8	L/M	-	5	DECK	TYPE 2	6	6	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	10.3	-	L/M.6	-	5	N-S CAP	TYPE 2	2	2	
DIGESTER TANKS	12	-	L/M	-	2/5/4	E-W CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	12	-	L/M.9	-	5	E-W CAP	TYPE 2	48	12	
DIGESTER TANKS	12	-	L/M.9	-	5	E-W CAP	TYPE 4	12	-	
DIGESTER TANKS	12.5	-	L/M	-	3/5	N-S CAP	TYPE 4	1	-	X5 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13	-	L/M.9	-	5	E-W CAP	TYPE 4	12	-	
DIGESTER TANKS	14	-	L/M	-	5	E-W CAP	TYPE 2	36	12	
DIGESTER TANKS	1	-	M	-	3/5	E-W CAP	TYPE 2	6	-	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	1.1	-	M	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	1.9	-	M.1	-	5	DECK	TYPE 4	2	-	
DIGESTER TANKS	2	-	M	-	5	E-W CAP	TYPE 4	18	-	
DIGESTER TANKS	2	-	M.2	-	5	E-W CAP	TYPE 4	18	-	
DIGESTER TANKS	2.1	-	M	-	3/5	N-S CAP	TYPE 3	8	-	
DIGESTER TANKS	3	-	M.6	-	5	E-W CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	4	-	M.9	-	2	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	5	-	M.5	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	6	-	M.3	-	5	E-W CAP	TYPE 3	30	-	
DIGESTER TANKS	6.9	-	M.9	-	1/5	N-S CAP	TYPE 2	12	12	
DIGESTER TANKS	7	-	M.3	-	5	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	7.5	-	M	-	5	N-S CAP	TYPE 4	1	-	X7 REPAIRS AT THIS LOCATION
DIGESTER TANKS	7.9	-	M	-	5	N-S CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	8.9	-	M	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	8.9	-	M	-	5	N-S CAP	TYPE 2	1	1	
DIGESTER TANKS	9	9/10	M	-	5	DECK	TYPE 4	2	-	X8 REPAIRS AT THIS LOCATION
DIGESTER TANKS	9	-	M.3	-	5	E-W CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	9.9	-	M.8	-	5	DECK	TYPE 4	1	-	
DIGESTER TANKS	13	-	M/N1.1	-	5	E-W CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	13	-	M/N1.8	-	2	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	10	-	M/N.5	-	4	N-S CAP	TYPE 2	2	2	

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 1 REPAIR SCHEDULE
SHEET 4 OF 8

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-513.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-510.00_517.00.dwg
Last Date Saved: 10/20/2026 3:40 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb
Date & Time Plotted: 10/20/2026 3:45 PM

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 1 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
DIGESTER TANKS	10	-	M/N.1	-	5	E-W CAP	TYPE 2	1	-	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	10	-	M/N.3	-	5	E-W CAP	TYPE 2	4	-	X10 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	10	-	M/N.4	-	4/5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	11.4	-	M/N.2	-	1/5/3	N-S CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	11.4	-	M/N.1	-	1/5/3	N-S CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	13	-	M/N.1	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	14	-	M/N	-	5	E-W CAP	TYPE 2	24	60	
DIGESTER TANKS	14	-	M/N.4	-	5	E-W CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	11	-	M/N2.9	-	4/5	E-W CAP	TYPE 2	24	30	
DIGESTER TANKS	11	-	M/N2.1	-	5	E-W CAP	TYPE 2	12	12	
DIGESTER TANKS	12	-	M/N2.3	-	3/5	N-S CAP	TYPE 4	4	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	1	-	N	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	1	-	N.5	-	5	DECK	TYPE 4	5	-	
DIGESTER TANKS	2	-	N.9	-	4	E-W CAP	TYPE 2	4	4	
DIGESTER TANKS	2	-	N.9	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	3	-	N.9	-	5	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	3.1	-	N	-	5	N-S CAP	TYPE 4	36	-	
DIGESTER TANKS	4	-	N.6	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	4.3	-	N	-	5	N-S CAP	TYPE 2	24	24	
DIGESTER TANKS	6	-	N.1	-	5	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	6	-	N.6	-	5	E-W CAP	TYPE 3	48	-	
DIGESTER TANKS	6.9	-	N.1	-	3/5	N-S CAP	TYPE 2	12	12	
DIGESTER TANKS	7.5	-	N	-	5	N-S CAP	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
DIGESTER TANKS	8.9	-	N	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	9	-	N.9	-	5	E-W CAP	TYPE 2	12	-	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	9.7	-	N.7	-	5	DECK	TYPE 2	1.5	1.5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	9/10	-	N/P.1	-	2	E-W CAP	TYPE 4	4	-	
DIGESTER TANKS	10	-	N/P.5	-	4/5	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	10.4	-	N/P	-	5	N-S CAP	TYPE 4	6	-	
DIGESTER TANKS	11	-	N/P	-	1/4/5	N-S CAP	TYPE 2	24	24	
DIGESTER TANKS	11.5	-	N/P	-	5	N-S CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	12	-	N/P.1	-	5	N-S CAP	TYPE 2	4	12	
DIGESTER TANKS	12.7	-	N/P	-	3/5	N-S CAP	TYPE 2	1	1	
DIGESTER TANKS	13	-	N/P	-	5	E-W CAP	TYPE 2	1	3	
DIGESTER TANKS	13	-	N/P.2	-	4	E-W CAP	TYPE 4	8	-	
DIGESTER TANKS	14	-	N/P	-	5	E-W CAP	TYPE 2	12	12	
DIGESTER TANKS	14	-	N/P.7	-	5	E-W CAP	TYPE 2	6	4	
DIGESTER TANKS	14	-	N/P.4	-	5	E-W CAP	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
DIGESTER TANKS	14	-	N/P.7	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	1	-	P	-	5	DECK	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	1	-	P.1	-	5	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	1.8	-	P	-	5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	2.5	-	P	-	1	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	3.2	-	P	-	5	N-S CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	3.3	-	P.9	-	5	DECK	TYPE 4	3	-	X5 REPAIRS AT THIS LOCATION
DIGESTER TANKS	3.4	-	P.5	-	5	DECK	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	3.6	-	P.3	-	5	DECK	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	3.8	-	P.8	-	5	DECK	TYPE 2	5	2	
DIGESTER TANKS	4	-	P.1	-	5	E-W CAP	TYPE 4	12	-	
DIGESTER TANKS	4	-	P.5	-	5	E-W CAP	TYPE 4	1	-	X15 REPAIRS AT THIS LOCATION
DIGESTER TANKS	5	-	P	-	5	N-S CAP	TYPE 2	3	3	
DIGESTER TANKS	5	-	P.5	-	5	E-W CAP	TYPE 4	1	-	X6 REPAIRS AT THIS LOCATION
DIGESTER TANKS	5.1	-	P.8	-	5	DECK	TYPE 4	2	-	
DIGESTER TANKS	5.4	-	P	-	5	N-S CAP	TYPE 3	36	-	
DIGESTER TANKS	5.5	-	P	-	5	N-S CAP	TYPE 2	24	24	
DIGESTER TANKS	6	-	P.5	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	7.4	-	P.9	-	5	DECK	TYPE 4	2	-	
DIGESTER TANKS	8	-	P.5	-	5	E-W CAP	TYPE 4	3	-	
DIGESTER TANKS	8	-	P.8	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	9	-	P.5	-	4	E-W CAP	TYPE 4	3	-	X5 REPAIRS AT THIS LOCATION
DIGESTER TANKS	9	-	P	-	4	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	9	-	P.3	-	5	E-W CAP	TYPE 2	4	18	
DIGESTER TANKS	9	-	P.9	-	5	E-W CAP	TYPE 3	4	-	
DIGESTER TANKS	9.4	-	P	-	3	E-W CAP	TYPE 2	10	10	
DIGESTER TANKS	9.5	9.7	P.6	-	1/5/3	N-S CAP	TYPE 4	4	-	
DIGESTER TANKS	9.7	-	P.6	-	1	N-S CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	10	-	P/Q.1	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	10	-	P/Q.8	-	2/5	E-W CAP	TYPE 4	3	-	
DIGESTER TANKS	10	-	P/Q.9	-	2/5	E-W CAP	TYPE 4	3	-	
DIGESTER TANKS	10.5	-	P/Q	-	5	N-S CAP	TYPE 2	2	2	
DIGESTER TANKS	11.1	-	P/Q.1	-	3/4/5	N-S CAP	TYPE 2	24	24	
DIGESTER TANKS	11.1	-	P/Q	-	5	N-S CAP	TYPE 4	8	-	

PHASE 1 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
DIGESTER TANKS	11.5	-	P/Q	-	1/5/3	N-S CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	11.5	-	P/Q	-	1/5/3	N-S CAP	TYPE 2	36	20	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	11.8	-	P/Q	-	5	N-S CAP	TYPE 2	10	8	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	12	-	P/Q.5	-	5	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	12.1	-	P/Q	-	5	N-S CAP	TYPE 4	10	-	
DIGESTER TANKS	12.7	-	P/Q	-	5	N-S CAP	TYPE 4	6	-	
DIGESTER TANKS	13	-	P/Q	-	5	E-W CAP	TYPE 2	3	8	
DIGESTER TANKS	13	-	P/Q.5	-	5	E-W CAP	TYPE 4	3	-	
DIGESTER TANKS	13	-	P/Q.7	-	4/5	E-W CAP	TYPE 2	2	1	
DIGESTER TANKS	13	-	P/Q.9	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	14	-	P/Q	-	5	E-W CAP	TYPE 1	60	50	
DIGESTER TANKS	14	-	P/Q.3	-	5	E-W CAP	TYPE 2	60	10	
DIGESTER TANKS	14	-	P/Q.7	-	5	E-W CAP	TYPE 4	3	-	
DIGESTER TANKS	1	-	Q.1	-	5	DECK	TYPE 4	1	-	
DIGESTER TANKS	1	-	Q	-	1	N-S CAP	TYPE 4	10	-	
DIGESTER TANKS	1.3	-	Q	-	1/5/4	N-S CAP	TYPE 3	24	-	
DIGESTER TANKS	3.4	-	Q	-	5	N-S CAP	TYPE 4	1	-	
DIGESTER TANKS	4	-	Q.2	-	5	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	4	-	Q.9	-	2	E-W CAP	TYPE 4	5	-	
DIGESTER TANKS	5	-	Q.3	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	5	-	Q	-	5	E-W CAP	TYPE 3	24	-	
DIGESTER TANKS	5.5	-	Q.3	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	6	-	Q.9	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	7	-	Q.1	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	8	-	Q.2	-	5	E-W CAP	TYPE 4	6	-	
DIGESTER TANKS	8	-	Q	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	8.9	-	Q	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	9	-	Q.7	-	5	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	9	-	Q.9	-	5	E-W CAP	TYPE 2	2	-	X5 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	10	-	Q/R.1	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	10	-	Q/R.2	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	10	-	Q/R.5	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	10	-	Q/R.8	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	10	-	Q/R.9	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	10.5	-	Q/R	-	5	N-S CAP	TYPE 2	2	2	
DIGESTER TANKS	11.7	-	Q/R	-	5	N-S CAP	TYPE 2	24	6	
DIGESTER TANKS	12	-	Q/R	-	5	E-W CAP	TYPE 4	3	-	
DIGESTER TANKS	12.4	-	Q/R	-	3/5	E-W CAP	TYPE 4	14	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13	-	Q/R.6	-	4/5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13.4	-	Q/R	-	1/5	N-S CAP	TYPE 4	2	-	
DIGESTER TANKS	14	-	Q/R	-	5	E-W CAP	TYPE 1	60	50	
DIGESTER TANKS	14	-	Q/R.2	-	5	E-W CAP	TYPE 2	50	10	
DIGESTER TANKS	14	-	Q/R.1	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	14	-	Q/R.9	-	5	E-W CAP	TYPE 4	4	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	1	-	R	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	4.8	-	R	-	5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	3	-	R	-	5	E-W CAP	TYPE 3	12	-	
DIGESTER TANKS	3.2	-	R	-	1	N-S CAP	TYPE 4	5	-	
DIGESTER TANKS	3.7	-	R	-	5	N-S CAP	TYPE 2	12	3	
DIGESTER TANKS	3.8	-	R	-	1	N-S CAP	TYPE 4	2	-	
DIGESTER TANKS	4	-	R	-	5	E-W CAP	TYPE 3	36	-	
DIGESTER TANKS	5	-	R	-	5	E-W CAP	TYPE 3	42	-	
DIGESTER TANKS	5.3	-	R.3	-	5	N-S CAP	TYPE 2	48	-	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	5.3	-	R	-	1	N-S CAP	TYPE 4	2	-	
DIGESTER TANKS	5.9	-	R	-	5	N-S CAP	TYPE 4	6	-	
DIGESTER TANKS	6.7	-	R.1	-	5	E-W CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	7.6	-	R	-	5	E-W CAP	TYPE 3	72	-	
DIGESTER TANKS	8.7	-	R	-	5	N-S CAP	TYPE 4	2	-	X6 REPAIRS AT THIS LOCATION
DIGESTER TANKS	9	-	R.1	-	5	E-W CAP	TYPE 2	24	-	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	10	-	R/S.1	RS.9	5	E-W CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	10	-	R/S.1	-	5	E-W CAP	TYPE 4	10	-	
DIGESTER TANKS	10	-	R/S.5	-	5	E-W CAP	TYPE 4	4	-	
DIGESTER TANKS	10.4	-	R/S.4	-	4	N-S CAP	TYPE 4	10	-	
DIGESTER TANKS	11.4	-	R/S	-	5	N-S CAP	TYPE 2	6	36	
DIGESTER TANKS	11.5	-	R/S	-	5	N-S CAP	TYPE 2	6	6	
DIGESTER TANKS	12	-	R/S.8	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	12	13	R/S.9	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 1 REPAIR SCHEDULE
SHEET 5 OF 8

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-514.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\acostaml\bentley\projectwise\jacobs-americas-01\d0729589\UR-S-510.00_517.00.dwg
Last Date Saved: 10/20/2026 3:40 PM
Date & Time Plotted: 10/20/2026 3:45 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 1 SCHEDULE										
LOCATION								DETERIORATED AREA		
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT	REPAIR TYPE	LENGTH (IN.)	WIDTH (IN.)	FULL NOTES
	START	END	START	END						
DIGESTER TANKS	12.8	-	R/S	-	3	E-W CAP	TYPE 4	4	-	
DIGESTER TANKS	12/13	-	R/S.5	-	4/5	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	13	-	R/S	-	5	E-W CAP	TYPE 4	4	-	
DIGESTER TANKS	13	-	R/S.2	-	4/5	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	13	-	R/S.8	-	5	E-W CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13.5	-	R/S.2	-	5	E-W CAP	TYPE 2	10	10	
DIGESTER TANKS	14	-	R/S	-	5	E-W CAP	TYPE 2	18	18	
DIGESTER TANKS	14	-	R/S.3	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	14	-	R/S.9	-	5	E-W CAP	TYPE 4	2	-	X4 REPAIRS AT THIS LOCATION
DIGESTER TANKS	9/10	-	S	-	5	E-W CAP	TYPE 3	60	-	
DIGESTER TANKS	9/10.6	-	S	-	5	E-W CAP	TYPE 2	18	10	
DIGESTER TANKS	9/10.1	-	S.5	-	5	E-W CAP	TYPE 4	2	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	10/11	-	S.2	-	5	N-S CAP	TYPE 2	24	6	
DIGESTER TANKS	11	12	S.5	-	5	N-S CAP	TYPE 2	60	30	
DIGESTER TANKS	11	12.4	S	-	5	N-S CAP	TYPE 3	26	-	
DIGESTER TANKS	11	12.5	S	-	5	N-S CAP	TYPE 2	1	1	
DIGESTER TANKS	12	13	S.1	-	5	E-W CAP	TYPE 3	48	-	
DIGESTER TANKS	12	13	S.5	-	2/5/4	E-W CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	12	13	S.8	-	5	E-W CAP	TYPE 2	8	6	
DIGESTER TANKS	12/13	-	S.8	-	2/5	N-S CAP	TYPE 2	10	10	
DIGESTER TANKS	12/13	-	S.4	-	2/5/4	E-W CAP	TYPE 4	2	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	12/13	-	S	-	5	E-W CAP	TYPE 3	36	-	
DIGESTER TANKS	12/13	-	S	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	12/13.7	-	S.7	-	3/5	N-S CAP	TYPE 2	1	1	
DIGESTER TANKS	13	-	S.1	-	5	E-W CAP	TYPE 3	36	-	
DIGESTER TANKS	13	-	S.5	-	5	E-W CAP	TYPE 2	2	6	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	13	-	S.3	-	4/5	E-W CAP	TYPE 2	2	2	
DIGESTER TANKS	13	-	S.6	-	4/5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	13.5	-	S.5	-	5	E-W CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	13.8	-	S	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	13/14.2	-	S.2	-	5	N-S CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	14	-	S	-	5	E-W CAP	TYPE 2	60	24	
DIGESTER TANKS	14	-	S.7	-	5	E-W CAP	TYPE 2	12	12	
DIGESTER TANKS	0	-	T.1	-	5	E-W CAP	TYPE 3	8	-	
DIGESTER TANKS	0	-	T.5	-	5	E-W CAP	TYPE 2	1	1	
DIGESTER TANKS	0	-	T.7	-	4/5	E-W CAP	TYPE 2	1	1	
DIGESTER TANKS	0.2	-	T.1	-	5	DECK	TYPE 4	1	-	
DIGESTER TANKS	0/1	-	T.2	-	4/5	E-W CAP	TYPE 2	4	2	
DIGESTER TANKS	0/1	-	T.1	-	5	E-W CAP	TYPE 3	6	-	
DIGESTER TANKS	0/1	-	T.1	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	0/1.1	0.4	T	-	3	N-S CAP	TYPE 2	60	3	
DIGESTER TANKS	0/1.1	-	T	-	3	N-S CAP	TYPE 4	8	-	
DIGESTER TANKS	0/1.1	-	T.1	-	5	DECK	TYPE 2	1	1	
DIGESTER TANKS	0/1.2	-	T.2	-	5	DECK	TYPE 2	1	1	
DIGESTER TANKS	1	-	T.3	-	5	E-W CAP	TYPE 2	1	18	
DIGESTER TANKS	1	-	T.3	-	5	E-W CAP	TYPE 2	6	4	
DIGESTER TANKS	1	-	T	-	5	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	1	-	T.1	-	5	E-W CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	1.4	-	T.1	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	1.5	1.8	T	-	5	N-S CAP	TYPE 1	60	60	0.5 IN. CONC. EROSION IN AREA
DIGESTER TANKS	1.9	-	T	-	5	N-S CAP	TYPE 2	36	36	
DIGESTER TANKS	2/3	-	T.2	-	4/5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	2/3	-	T.7	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	2/3.5	0.7	T.7	-	5	DECK	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	2	-	T	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	2.1	-	T	-	5	N-S CAP	TYPE 4	4	-	X8 REPAIRS AT THIS LOCATION
DIGESTER TANKS	2.2	-	T	-	5	N-S CAP	TYPE 2	2	2	X3 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	2.9	-	T	-	5	N-S CAP	TYPE 2	30	18	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	2.9	-	T	-	5	N-S CAP	TYPE 2	24	36	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	2.9	-	T	-	5	N-S CAP	TYPE 4	2	-	
DIGESTER TANKS	3/4	-	T.1	-	5	E-W CAP	TYPE 3	6	-	
DIGESTER TANKS	3/4	-	T.9	-	5	E-W CAP	TYPE 3	6	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	3/4.5	-	T.2	0.5	5	DECK	TYPE 2	1	1	X4 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	3/4.5	-	T.5	-	5	DECK	TYPE 2	3	4	
DIGESTER TANKS	4/3	-	T.3	-	5	E-W CAP	TYPE 2	1	1	
DIGESTER TANKS	4/3	-	T.8	-	5	E-W CAP	TYPE 2	3	3	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	4/3	-	T.6	-	5	E-W CAP	TYPE 2	1	1	
DIGESTER TANKS	4/3	-	T.2	-	2/5	E-W CAP	TYPE 4	3	-	
DIGESTER TANKS	4/3	-	T.1	-	2	E-W CAP	TYPE 4	6	-	
DIGESTER TANKS	5/6.2	-	T.8	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	5/6.2	-	T.8	-	5	E-W CAP	TYPE 3	4	-	
DIGESTER TANKS	5/6.2	-	T.3	-	2/5	E-W CAP	TYPE 2	2	2	
DIGESTER TANKS	5/6.2.3	-	T.1	-	5	DECK	TYPE 2	1	1	

PHASE 1 SCHEDULE										
LOCATION								DETERIORATED AREA		
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT	REPAIR TYPE	LENGTH (IN.)	WIDTH (IN.)	FULL NOTES
	START	END	START	END						
DIGESTER TANKS	5/6.2.3	-	T.3	-	5	DECK	TYPE 2	1	1	
DIGESTER TANKS	5/6.2.7	-	T	-	3/5	N-S CAP	TYPE 4	6	-	
DIGESTER TANKS	5/6.1	-	T.1	0.5	5	E-W CAP	TYPE 2	2	2	X6 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	5/6.1.5	-	T.3	0.8	5	DECK	TYPE 2	36	144	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	5/6.1.5	-	T.2	-	5	DECK	TYPE 2	2	2	
DIGESTER TANKS	6/7	-	T.1	-	5	E-W CAP	TYPE 3	10	-	
DIGESTER TANKS	6/7.2	-	T.6	-	5	DECK	TYPE 2	1	1	
DIGESTER TANKS	7/8	-	T.9	-	5	E-W CAP	TYPE 4	6	-	
DIGESTER TANKS	7/8	-	T.8	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	7/8.3	-	T.3	-	5	DECK	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	7/8.7	-	T	-	3	N-S CAP	TYPE 4	2	-	
DIGESTER TANKS	8/9	-	T.4	-	4/5	E-W CAP	TYPE 4	3	-	
DIGESTER TANKS	8/9	-	T.2	-	5	E-W CAP	TYPE 2	1	1	
DIGESTER TANKS	8/9.2	-	T.1	0.4	5	DECK	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	9/10.2	-	T.8	-	2/5	E-W CAP	TYPE 4	4	-	
DIGESTER TANKS	9/10.2.3	-	T.8	-	5	DECK	TYPE 4	3	-	
DIGESTER TANKS	9/10.1	-	T.2	-	5	E-W CAP	TYPE 2	48	36	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	9/10.1.2	-	T	-	5	N-S CAP	TYPE 1	120	60	
DIGESTER TANKS	9/10.1.2	-	T.3	-	5	DECK	TYPE 2	1	1	
DIGESTER TANKS	9/10.1.3	-	T	-	5	N-S CAP	TYPE 1	150	50	
DIGESTER TANKS	9/10.1.7	-	T	-	5	N-S CAP	TYPE 1	60	60	
DIGESTER TANKS	9/10.1.8	-	T	-	5	N-S CAP	TYPE 1	72	72	
DIGESTER TANKS	10	-	T.9	-	5	E-W CAP	TYPE 4	6	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	10	-	T.8	-	5	E-W CAP	TYPE 2	3	2	
DIGESTER TANKS	10	-	T.3	-	5	E-W CAP	TYPE 3	6	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	10	-	T.1	-	5	E-W CAP	TYPE 3	4	-	
DIGESTER TANKS	10/11.2	-	T	-	5	N-S CAP	TYPE 2	36	48	
DIGESTER TANKS	11	12.1	T	-	5	N-S CAP	TYPE 1	144	120	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	11	-	T	T.2	5	E-W CAP	TYPE 2	24	48	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	11	-	T.1	T.6	2/5	E-W CAP	TYPE 2	3	60	
DIGESTER TANKS	11.2	0.8	T.4	0.6	5	DECK	TYPE 2	1	1	X12 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	12	13	T	-	5	E-W CAP	TYPE 1	60	60	
DIGESTER TANKS	12	13	T.3	-	2/5	E-W CAP	TYPE 2	36	28	
DIGESTER TANKS	12	-	T.2	-	5	E-W CAP	TYPE 2	36	36	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	12	-	T.5	0.9	5	E-W CAP	TYPE 4	1	-	X12 REPAIRS AT THIS LOCATION
DIGESTER TANKS	12	-	T.9	-	5	E-W CAP	TYPE 3	4	-	
DIGESTER TANKS	12.3	-	T.5	-	5	DECK	TYPE 2	2	2	
DIGESTER TANKS	12.3	0.5	T.6	0.7	5	DECK	TYPE 2	2	2	X4 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	12/13	-	T	-	5	E-W CAP	TYPE 1	60	40	
DIGESTER TANKS	12/13.7	-	T	-	5	N-S CAP	TYPE 2	1	1	
DIGESTER TANKS	13	-	T	-	5	E-W CAP	TYPE 3	80	-	
DIGESTER TANKS	13	-	T.2	-	5	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	13	-	T.3	-	5	E-W CAP	TYPE 4	6	-	
DIGESTER TANKS	13	-	T	-	5	E-W CAP	TYPE 3	60	-	
DIGESTER TANKS	13	-	T.7	-	5	E-W CAP	TYPE 2	1	1	
DIGESTER TANKS	13	-	T.5	-	2	E-W CAP	TYPE 2	1	1	
DIGESTER TANKS	13	-	T.9	-	5	E-W CAP	TYPE 3	4	1	
DIGESTER TANKS	13.5	-	T	-	5	N-S CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	13.5	-	T	-	5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13.9	-	T	-	5	N-S CAP	TYPE 3	48	-	
DIGESTER TANKS	13/14.1	-	T	-	5	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	13/14.8	-	T	-	1/5/3	N-S CAP	TYPE 2	18	18	
DIGESTER TANKS	14	-	T	-	5	E-W CAP	TYPE 2	24	24	
DIGESTER TANKS	14	-	T.2	-	2	E-W CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	14	-	T.7	-	5	E-W CAP	TYPE 3	36	-	
DIGESTER TANKS	14	-	T.9	-	5	E-W CAP	TYPE 4	6	-	
DIGESTER TANKS	14	-	T.2	-	5	E-W CAP	TYPE 3	60	-	
DIGESTER TANKS	14	-	T.9	-	5	E-W CAP	TYPE 2	6	6	
DIGESTER TANKS	14	-	T.8	-	5	E-W CAP	TYPE 3	6	-	
DIGESTER TANKS	14	-	T.2	-	5	E-W CAP	TYPE 2	12	24	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	14	-	T	-	5	E-W CAP	TYPE 3	36	-	
DIGESTER TANKS	14.1	-	T	-	5	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	14.5	-	T	-	5	N-S CAP	TYPE 2	30	24	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	14.5	-	T.5	-	5	DECK	TYPE 2	2	2	
DIGESTER TANKS	14.9	-	T	-	5	N-S CAP	TYPE 2	24	24	
DIGESTER TANKS	14.9	-	T	-	5	N-S CAP	TYPE 2	36	36	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	14.9	-	T	-	5	N-S CAP	TYPE 2	36	36	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	0.2	-	U.7	-	5	DECK	TYPE 2	2	2	

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 1 REPAIR SCHEDULE
SHEET 6 OF 8

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-515.00

Last Saved By: AcostaML
Last Date Saved: 10/20/2026 3:40 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129698\UR-S-510.00_517.00.dwg
Date & Time Plotted: 10/20/2026 3:45 PM
Plot Style Table: BEDC_Acad(N).ctb
Plot Scale: 1:1

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 1 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
DIGESTER TANKS	0.9	-	U.1	0.6	5	DECK	TYPE 2	2	2	X5 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	0/1	-	U.4	0.8	5	E-W CAP	TYPE 2	2	2	X3 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	0/1.1	-	U	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	0/1.1	0.5	U.1	0.3	5	E-W CAP	TYPE 2	2	2	X5 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	0/1.5	-	U.6	-	4	E-W CAP	TYPE 2	3	3	
DIGESTER TANKS	0/1.8	-	U.7	-	5	DECK	TYPE 2	1	1	
DIGESTER TANKS	1	-	U.1	-	5	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	1	-	U	-	5	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	1	-	U	-	2	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	1.1	-	U.5	-	5	DECK	TYPE 3	30	-	
DIGESTER TANKS	1.2	-	U	-	5	DECK	TYPE 3	24	-	
DIGESTER TANKS	1.3	-	U.1	-	5	DECK	TYPE 4	2	-	
DIGESTER TANKS	1.3	-	U.5	-	5	DECK	TYPE 3	12	-	
DIGESTER TANKS	2/3	-	U.9	-	5	E-W CAP	TYPE 2	1	8	
DIGESTER TANKS	2/3	-	U.1	-	2	E-W CAP	TYPE 2	2	2	
DIGESTER TANKS	2/3.2	-	U	-	5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	2/3.4	0.8	U.2	0.6	5	DECK	TYPE 2	2	2	X13 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	2/3.9	-	U	-	5	N-S CAP	TYPE 2	1	1	
DIGESTER TANKS	2.8	-	U	-	5	DECK	TYPE 3	50	-	
DIGESTER TANKS	2.9	-	U.1	-	5	DECK	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	3/4	-	U	-	5	N-S CAP	TYPE 3	18	-	
DIGESTER TANKS	3/4	-	U.7	-	4/5	E-W CAP	TYPE 2	2	2	
DIGESTER TANKS	3/4	-	U.6	-	5	E-W CAP	TYPE 2	1	1	
DIGESTER TANKS	3/4	-	U.9	-	5	E-W CAP	TYPE 3	12	-	
DIGESTER TANKS	3/4.1	-	U	-	1/5	N-S CAP	TYPE 3	10	-	
DIGESTER TANKS	3/4.1	-	U	-	5	N-S CAP	TYPE 2	3	2	
DIGESTER TANKS	3/4.4	0.8	U.2	0.4	5	DECK	TYPE 2	3	3	X5 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	3/4.5	-	U	-	5	N-S CAP	TYPE 2	12	24	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	3	-	U.1	-	5	DECK	TYPE 3	12	-	
DIGESTER TANKS	3.1	-	U.1	U.3	5	DECK	TYPE 3	48	-	
DIGESTER TANKS	3.1	-	U.1	-	5	DECK	TYPE 2	2	2	
DIGESTER TANKS	4/3	-	U.5	-	4/5	E-W CAP	TYPE 4	3	-	
DIGESTER TANKS	4/3	-	U.5	-	2	E-W CAP	TYPE 4	3	-	
DIGESTER TANKS	4/3.4	-	U	-	3	N-S CAP	TYPE 2	1	1	
DIGESTER TANKS	5/6.2	-	U.1	-	4	E-W CAP	TYPE 4	6	-	
DIGESTER TANKS	5/6.2	-	U.4	-	2	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	5/6.2	-	U.1	-	4	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	5/6.1	-	U.2	-	4	E-W CAP	TYPE 2	2	2	
DIGESTER TANKS	5/6.1	-	U.4	-	2	E-W CAP	TYPE 2	1	1	
DIGESTER TANKS	5/6.1.5	-	U	-	3/5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	5/6.1.6	-	U	-	1	N-S CAP	TYPE 4	4	-	
DIGESTER TANKS	5/6.1.9	-	U	-	5	N-S CAP	TYPE 4	2	-	
DIGESTER TANKS	6/7	-	U.4	-	4	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	6/7	-	U.1	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	6/7	-	U.8	-	2/5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	6/7.2	-	U	-	5	N-S CAP	TYPE 2	30	24	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	6/7.6	-	U	-	3/5	N-S CAP	TYPE 4	4	-	
DIGESTER TANKS	7/8	-	U	-	5	N-S CAP	TYPE 4	4	-	
DIGESTER TANKS	7/8	-	U.5	0.6	5	E-W CAP	TYPE 1	60	60	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	7/8	-	U.4	-	2	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	7/8	-	U.3	-	2	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	7/8.4	-	U	-	1	N-S CAP	TYPE 4	1	-	X6 REPAIRS AT THIS LOCATION
DIGESTER TANKS	7/8.6	-	U.6	-	5	DECK	TYPE 4	2	-	
DIGESTER TANKS	8/9	-	U.5	-	4	E-W CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	8/9	-	U.1	-	5	E-W CAP	TYPE 3	10	1	
DIGESTER TANKS	8/9	-	U.3	0.6	5	E-W CAP	TYPE 4	4	-	X9 REPAIRS AT THIS LOCATION
DIGESTER TANKS	8/9	-	U.2	-	5	E-W CAP	TYPE 4	10	-	
DIGESTER TANKS	8/9	-	U.7	-	5	E-W CAP	TYPE 2	2	2	
DIGESTER TANKS	8/9.1	-	U	-	5	N-S CAP	TYPE 2	2	2	
DIGESTER TANKS	8/9.1	-	U	-	5	N-S CAP	TYPE 3	10	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	8/9.5	-	U	-	5	N-S CAP	TYPE 2	4	1	X7 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	8/9.9	-	U.3	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	9/10.2	-	U.5	-	4	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	9/10.2	-	U.6	0.8	5	E-W CAP	TYPE 1	48	48	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	9/10.2	-	U.9	-	5	E-W CAP	TYPE 2	36	24	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	9/10.2	-	U.4	-	2/5	E-W CAP	TYPE 2	1	1	
DIGESTER TANKS	9/10.2.1	0.3	U	-	5	N-S CAP	TYPE 1	48	48	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	9/10.2.2	-	U.3	-	5	DECK	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	9/10.2.4	-	U.8	-	5	DECK	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	9/10.2.5	-	U	-	3/5	N-S CAP	TYPE 4	5	-	

PHASE 1 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
DIGESTER TANKS	9/10.1	-	U.5	-	5	E-W CAP	TYPE 2	8	24	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	9/10.1	-	U.6	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	9/10.1.1	0.3	U	-	5	N-S CAP	TYPE 1	48	48	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	9/10.1.3	-	U.9	-	5	DECK	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	9/10.1.8	-	U.7	-	5	DECK	TYPE 2	2	4	
DIGESTER TANKS	9/10.1.9	-	U	-	5	N-S CAP	TYPE 2	4	6	
DIGESTER TANKS	10/11	-	U.9	-	5	E-W CAP	TYPE 2	36	6	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	10/11	-	U.9	-	5	E-W CAP	TYPE 2	36	24	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	10/11.1	-	U	-	5	N-S CAP	TYPE 2	30	60	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	10/11.4	0.6	U	-	5	N-S CAP	TYPE 4	2	-	X11 REPAIRS AT THIS LOCATION
DIGESTER TANKS	10/11.5	-	U	-	3/5	N-S CAP	TYPE 2	2	2	X3 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	10/11.7	-	U.7	-	5	DECK	TYPE 2	1	1	
DIGESTER TANKS	10/11.8	-	U.8	-	5	DECK	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	10/11.9	-	U	-	5	N-S CAP	TYPE 3	18	-	
DIGESTER TANKS	11/12	-	U.9	-	5	E-W CAP	TYPE 2	36	18	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	11/12	-	U.9	-	5	E-W CAP	TYPE 3	10	-	
DIGESTER TANKS	11/12	-	U.1	-	5	E-W CAP	TYPE 3	18	-	
DIGESTER TANKS	11/12.2	-	U	-	5	N-S CAP	TYPE 4	2	-	
DIGESTER TANKS	11/12.7	-	U	-	5	N-S CAP	TYPE 2	48	36	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	11/12.7	-	U.3	0.9	5	DECK	TYPE 2	24	180	
DIGESTER TANKS	12	13.1	U	-	5	N-S CAP	TYPE 1	48	72	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	12	13.9	U	-	5	N-S CAP	TYPE 2	48	36	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	12/13	-	U	U.9	5	E-W CAP	TYPE 1	60	300	FAILING EPOXY REPAIR IN AREA
DIGESTER TANKS	12/13	-	U.5	-	2	E-W CAP	TYPE 2	2	2	
DIGESTER TANKS	13	-	U.5	-	5	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13	-	U.3	-	2/5	E-W CAP	TYPE 2	1	1	
DIGESTER TANKS	13	-	U.2	-	5	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	13	-	U.8	-	5	E-W CAP	TYPE 4	1	-	
DIGESTER TANKS	13.1	-	U	-	5	N-S CAP	TYPE 3	60	-	
DIGESTER TANKS	13.5	-	U	-	5	N-S CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13.6	-	U	-	5	E-W CAP	TYPE 4	3	-	
DIGESTER TANKS	14	-	U.5	U.9	5	E-W CAP	TYPE 3	36	-	
DIGESTER TANKS	14	-	U.7	-	5	E-W CAP	TYPE 4	6	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	14	-	U	-	5	E-W CAP	TYPE 3	120	-	
DIGESTER TANKS	14.2	-	U.5	-	5	DECK	TYPE 3	3	-	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	15	-	U.4	-	5	DECK	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
DIGESTER TANKS	15	-	U.2	-	5	DECK	TYPE 3	10	-	
DIGESTER TANKS	15.1	-	U.9	-	5	DECK	TYPE 3	8	-	
DIGESTER TANKS	15.7	-	U.3	-	5	DECK	TYPE 3	24	-	
DIGESTER TANKS	15.7	-	U.3	-	5	DECK	TYPE 3	2	-	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	1	-	V.8	V.9	2	E-W CAP	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
DIGESTER TANKS	1	-	V.8	-	5	E-W CAP	TYPE 2	2	2	
DIGESTER TANKS	1	-	V.6	-	5	E-W CAP	TYPE 4	2	-	
DIGESTER TANKS	1	-	V.3	-	5	E-W CAP	TYPE 2	1	1	
DIGESTER TANKS	1	-	V.2	-	5	E-W CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	2/3.4	-	V	-	1/5	N-S CAP	TYPE 4	2	-	
DIGESTER TANKS	2.8	-	V	-	5	DECK	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	3/4.3	-	V	-	1/5	N-S CAP	TYPE 2	2	2	
DIGESTER TANKS	3	-	V.8	-	5	DECK	TYPE 4	1	-	
DIGESTER TANKS	3.1	-	V.9	-	5	DECK	TYPE 2	1	1	
DIGESTER TANKS	4/3.1	-	V	-	1	N-S CAP	TYPE 2	60	4	
DIGESTER TANKS	6/7.2	-	V	-	1	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	7/8.6	-	V	-	1/5	N-S CAP	TYPE 4	2	-	
DIGESTER TANKS	8/9.5	-	V	-	1/5	N-S CAP	TYPE 2	2	2	
DIGESTER TANKS	8/9.9	-	V	-	1	N-S CAP	TYPE 2	2	6	
DIGESTER TANKS	12	13.3	V	-	5	N-S CAP	TYPE 4	3	-	X4 REPAIRS AT THIS LOCATION
DIGESTER TANKS	12	13.1	V	-	5	N-S CAP	TYPE 3	18	-	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	13	-	V	-	5	N-S CAP	TYPE 2	18	3	
DIGESTER TANKS	13.2	13.5	V	-	5	N-S CAP	TYPE 4	6	-	X3 REPAIRS AT THIS LOCATION
DIGESTER TANKS	13.3	-	V	-	5	N-S CAP	TYPE 4	4	-	
DIGESTER TANKS	14	-	V.8	-	5	E-W CAP	TYPE 3	18	-	
DIGESTER TANKS	15	-	V.1	-	5	DECK	TYPE 3	12	-	
DIGESTER TANKS	14	-	X	W	5	N-S CAP	TYPE 2	1	1	MULTIPLE DEFECTS IN REPAIR AREA
DIGESTER TANKS	14	-	X.5	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
DIGESTER TANKS	14	-	X.5	-	5	N-S CAP	TYPE 3	18	-	
DIGESTER TANKS	14	-	X.9	-	5	N-S CAP	TYPE 3	18	1	
DIGESTER TANKS	1	1.3	Y	-	5	N-S CAP	TYPE 3	60	-	
DIGESTER TANKS	1	-	Y	-	5	E-W CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

STATE OF NEW YORK · ILHAN TUTUNCU · LICENSED PROFESSIONAL ENGINEER

NYC Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 1 REPAIR SCHEDULE
SHEET 7 OF 8

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-516.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-510.00_517.00.dwg
Last Date Saved: 10/20/2026 3:40 PM
Date & Time Plotted: 10/20/2026 3:45 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 1 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
DIGESTER TANKS	1.2	-	Y	-	5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	1.3	-	Y	-	5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	1.5	-	Y	-	5	N-S CAP	TYPE 3	24	-	
DIGESTER TANKS	1.5	1.7	Y	-	5	N-S CAP	TYPE 3	60	-	
DIGESTER TANKS	1.8	2	Y	-	5	N-S CAP	TYPE 3	36	-	
DIGESTER TANKS	2	-	Y	-	5	N-S CAP	TYPE 2	2	1	X2 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	2.1	2.3	Y	-	5	N-S CAP	TYPE 2	3	1	X5 DEFECTS AT THIS REPAIR LOCATION
DIGESTER TANKS	2.4	2.6	Y	-	5	N-S CAP	TYPE 3	36	-	
DIGESTER TANKS	2.4	-	Y	-	5	N-S CAP	TYPE 4	2	-	X6 REPAIRS AT THIS LOCATION
DIGESTER TANKS	2.6	-	Y	-	5	N-S CAP	TYPE 3	60	-	
DIGESTER TANKS	2.8	-	Y	-	5	N-S CAP	TYPE 4	3	-	
DIGESTER TANKS	2.9	-	Y	-	5	N-S CAP	TYPE 4	3	-	
PLANT RAMPS	0/1.5	-	BB	-	5	N-S CAP	TYPE 2	1.5	1.5	X5 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PLANT RAMPS	2/3.5	-	BB	-	5	N-S CAP	TYPE 2	1.5	1.5	X4 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PLANT RAMPS	3/4	-	BB.7	-	3/5	E-W CAP	TYPE 4	3	-	
PLANT RAMPS	3/4.5	-	BB	-	5	N-S CAP	TYPE 2	1.5	1.5	X3 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PLANT RAMPS	4/3	-	BB.9	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
PLANT RAMPS	4/3.3	-	BB	-	5	N-S CAP	TYPE 2	1.5	1.5	X3 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PLANT RAMPS	5/6.3	-	BB	-	5	N-S CAP	TYPE 2	1.5	1.5	X3 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PLANT RAMPS	6/7.3	-	BB	-	5	N-S CAP	TYPE 2	1.5	1.5	X3 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PLANT RAMPS	7/8.4	-	BB	-	5	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PLANT RAMPS	0/1	-	CC.4	-	5	E-W CAP	TYPE 3	36	-	
PLANT RAMPS	0/1	-	CC	-	5	E-W CAP	TYPE 2	36	36	
PLANT RAMPS	0/1.1	-	CC	-	5	N-S CAP	TYPE 2	1.5	1.5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PLANT RAMPS	0/1.2	-	CC.5	-	1/5	N-S CAP	TYPE 4	2	-	
PLANT RAMPS	2/3	-	CC.4	-	2/5	E-W CAP	TYPE 2	1	1	
PLANT RAMPS	2/3.9	-	CC.8	-	5	N-S CAP	TYPE 4	3	-	
PLANT RAMPS	3/4	3/4.4	CC.5	-	5	N-S CAP	TYPE 4	1	-	X5 REPAIRS AT THIS LOCATION
PLANT RAMPS	3/4.5	-	CC	-	1/5	N-S CAP	TYPE 4	1	-	
PLANT RAMPS	4/3	-	CC.5	-	4/5	E-W CAP	TYPE 4	2	-	
PLANT RAMPS	4/3	-	CC.5	-	4/5	E-W CAP	TYPE 4	1	-	
PLANT RAMPS	4/3	-	CC.4	-	2/5	E-W CAP	TYPE 4	5	-	
PLANT RAMPS	5/6	-	CC.8	-	2	E-W CAP	TYPE 4	3	-	
PLANT RAMPS	5/6.4	-	CC.5	-	5	N-S CAP	TYPE 4	1	-	
PLANT RAMPS	6/7	-	CC.6	-	2/5	E-W CAP	TYPE 4	5	-	
PLANT RAMPS	6/7.5	6/7	CC.5	-	5	N-S CAP	TYPE 2	1	1	X5 DEFECTS AT THIS REPAIR LOCATION
PLANT RAMPS	6/7.8	-	CC.5	-	5	N-S CAP	TYPE 4	2	-	
PLANT RAMPS	7/8	-	CC.5	-	2/5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
PLANT RAMPS	7/8.8	-	CC	-	1	N-S CAP	TYPE 4	2	-	
PLANT RAMPS	9/10.2	-	CC.5	-	3/5	N-S CAP	TYPE 2	2	2	X3 DEFECTS AT THIS REPAIR LOCATION
PLANT RAMPS	9/10.2	-	CC.5	-	3/5	N-S CAP	TYPE 4	2	-	
PLANT RAMPS	9/10	-	CC.5	-	1	N-S CAP	TYPE 4	2	-	
PLANT RAMPS	9/10.1	-	CC.5	-	3/5	N-S CAP	TYPE 2	3	3	
PLANT RAMPS	10/11	-	CC.2	-	5	E-W CAP	TYPE 4	3	-	
PLANT RAMPS	10/11	-	CC.4	-	5	E-W CAP	TYPE 3	36	-	
PLANT RAMPS	10/11	-	CC.5	-	5	E-W CAP	TYPE 4	2	-	
PLANT RAMPS	10/11	-	CC.8	-	2	E-W CAP	TYPE 4	3	-	
PLANT RAMPS	10/11	-	CC.5	-	2/5	E-W CAP	TYPE 2	2	2	
PLANT RAMPS	10/11.5	-	CC	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
PLANT RAMPS	10/11.9	-	CC.8	-	5	DECK	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PLANT RAMPS	11/12	-	CC.4	-	5	E-W CAP	TYPE 3	96	-	
PLANT RAMPS	11/12	-	CC.6	-	5	E-W CAP	TYPE 3	3	-	
PLANT RAMPS	11/12	-	CC.7	-	5	E-W CAP	TYPE 2	3	8	
PLANT RAMPS	11/12	-	CC.7	-	5	E-W CAP	TYPE 3	3	-	
PLANT RAMPS	11/12	-	CC.7	-	4/5	E-W CAP	TYPE 4	3	-	
PLANT RAMPS	11/12.9	-	CC.8	-	5	DECK	TYPE 2	1	1	
PLANT RAMPS	11/12.9	-	CC.8	-	5	DECK	TYPE 2	12	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PLANT RAMPS	12/13.1	-	CC.8	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PLANT RAMPS	12/13.1	-	CC.8	-	5	DECK	TYPE 4	1	-	
PLANT RAMPS	13	-	CC.8	-	4/5	E-W CAP	TYPE 2	8	3	X3 DEFECTS AT THIS REPAIR LOCATION
PLANT RAMPS	6/7.9	-	DD	-	5	N-S CAP	TYPE 3	5	-	
PLANT RAMPS	8/9.6	-	DD	-	1	N-S CAP	TYPE 2	3	1	
PLANT RAMPS	8/9.6	-	DD	-	1	N-S CAP	TYPE 2	1	1	
PLANT RAMPS	8/9.7	-	DD	-	1	N-S CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
PLANT RAMPS	13	-	DD	-	4	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 1 REPAIR SCHEDULE
SHEET 8 OF 8

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-517.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-510.00_517.00.dwg
Last Date Saved: 10/20/2026 3:40 PM
Date & Time Plotted: 10/20/2026 3:45 PM
Plot Style Table: BEDC_Acad(N).ctb
Plot Scale: 1:1

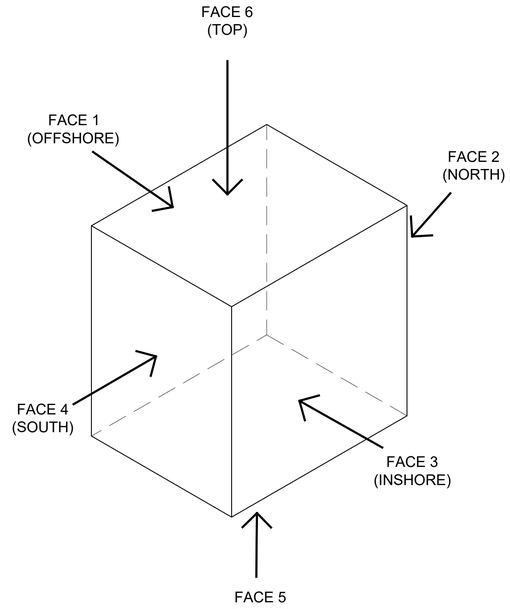
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 2 SCHEDULE										
LOCATION								DETERIORATED AREA		
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT	REPAIR TYPE	LENGTH (IN.)	WIDTH (IN.)	FULL NOTES
	START	END	START	END						
FINAL TANKS	11.1	-	A.a	-	5	E-W CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	11.1	-	A.a	-	5	E-W CAP	TYPE 2	10	4	
FINAL TANKS	11.1	-	A.a.6	-	5	E-W CAP	TYPE 2	3	12	
FINAL TANKS	12	-	A.a.4	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	12	-	A.a.5	-	4/5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	13	-	A.a	-	5	E-W CAP	TYPE 2	7	-	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	13.1	-	A.a	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	13.9	-	A.a	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	14	-	A.a.9	-	5	E-W CAP	TYPE 2	18	18	
FINAL TANKS	14.1	-	A.a	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	15	-	A.a.1	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	15	-	A.a.9	-	5	E-W CAP	TYPE 2	36	36	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	15	-	A.a.-.1	-	5	N-S CAP	TYPE 2	60	24	
FINAL TANKS	15.1	-	A.a	-	5	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	15.8	-	A.a.5	-	5	DECK	TYPE 4	10	-	
FINAL TANKS	15.9	-	A.a	-	3	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	16	-	A.a.5	-	2	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	16	-	A.a	-	5	E-W CAP	TYPE 4	4	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	16	-	A.a	-	1	N-S CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	16.5	-	A.a	-	5	N-S CAP	TYPE 2	48	24	
FINAL TANKS	17	-	A.a	A.1.2	5	E-W CAP	TYPE 1	84	168	FAILING EPOXY REPAIR IN AREA. 1 IN. CONC. EROSION IN AREA
FINAL TANKS	17.9	-	A.a	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	18	-	A.a.5	-	5	E-W CAP	TYPE 2	24	24	
FINAL TANKS	18.1	-	A.a	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	18.1	-	A.a	-	5	N-S CAP	TYPE 2	24	12	
FINAL TANKS	18.7	-	A.a	-	5	N-S CAP	TYPE 2	36	12	
FINAL TANKS	18.9	-	A.a	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	19	-	A.a	-	2	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	19	-	A.a.8	-	5	E-W CAP	TYPE 2	1	3	
FINAL TANKS	19	-	A.a	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	19	-	A.a	-	5	E-W CAP	TYPE 2	2	-	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	19.7	-	A.a	-	5	N-S CAP	TYPE 1	120	36	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	19.7	21	A.a	-	5	N-S CAP	TYPE 1	288	72	1 IN. CONC. EROSION IN AREA
FINAL TANKS	20	-	A.a	A.4	5	E-W CAP	TYPE 1	72	192	1 IN. CONC. EROSION IN AREA
FINAL TANKS	20.1	-	A.a	-	5	N-S CAP	TYPE 2	60	36	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	20.1	-	A.a	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	20.5	-	A.a	-	5	N-S CAP	TYPE 2	36	24	
FINAL TANKS	21	-	A.a	A	5	E-W CAP	TYPE 1	72	60	
FINAL TANKS	21	-	A.a.1	-	5	E-W CAP	TYPE 2	8	18	
FINAL TANKS	21.1	-	A.a	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	21.9	-	A.a	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	22	-	A.a	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	22.9	-	A.a	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	23	-	A.a	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	24	-	A.a	-	5	E-W CAP	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	24	-	A.a.1	-	5	E-W CAP	TYPE 2	12	18	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	24	-	A.a.1	-	4/5	E-W CAP	TYPE 2	8	24	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	24	-	A.a.5	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	26	-	A.a	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	26	-	A.a.6	-	5	E-W CAP	TYPE 2	8	1	
FINAL TANKS	26	-	A.a	-	5	E-W CAP	TYPE 2	12	12	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	26.3	-	A.a.5	-	5	DECK	TYPE 4	6	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	26.3	-	A.a.5	-	5	DECK	TYPE 2	10	12	
FINAL TANKS	26.6	-	A.a	-	3	N-S CAP	TYPE 2	3	2	
FINAL TANKS	26.7	-	A.a	-	3	N-S CAP	TYPE 2	8	3	
FINAL TANKS	27.1	-	A.a	-	5	N-S CAP	TYPE 2	1	-	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	27.4	-	A.a.6	-	5	DECK	TYPE 4	3	-	
FINAL TANKS	27.9	-	A.a	-	5	N-S CAP	TYPE 2	1	-	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	27.9	-	A.a	-	5	N-S CAP	TYPE 2	12	36	
FINAL TANKS	27.1.6	29.1	A.a	-	5	E-W CAP	TYPE 2	36	48	
FINAL TANKS	27.1.6	-	A.a.5	-	5	E-W CAP	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	27.1.6	-	A.a.7	-	5	E-W CAP	TYPE 2	4	12	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	27.1.9	-	A.a	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	29.1	-	A.a.6	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	29.1	-	A.a.7	-	5	E-W CAP	TYPE 2	5	24	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	29.1.1	-	A.a.1	-	5	E-W CAP	TYPE 2	12	18	
FINAL TANKS	29.1.8	-	A.a	-	3/5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	29.1.9	-	A.a	-	5	N-S CAP	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	30	-	A.a.4	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	30.1	-	A.a	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	31	-	A.A	-	5	E-W CAP	TYPE 2	30	60	FAILING EPOXY REPAIR IN AREA

PHASE 2 SCHEDULE										
LOCATION								DETERIORATED AREA		
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT	REPAIR TYPE	LENGTH (IN.)	WIDTH (IN.)	FULL NOTES
	START	END	START	END						
FINAL TANKS	31.4	-	A.A.1	-	5	E-W BEAM	TYPE 4	1	-	
FINAL TANKS	32	-	A.A.5	-	5	E-W CAP	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	32	-	A.a.2	-	5	E-W CAP	TYPE 2	24	6	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	32	-	A.A	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	32	-	A.a.-.1	-	5	N-S CAP	TYPE 1	72	36	FAILING EPOXY REPAIR IN AREA. 1 IN. CONC. EROSION IN AREA
FINAL TANKS	32	-	A.A	-	5	E-W CAP	TYPE 2	3	6	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	32.3	-	A.A.5	-	5	DECK	TYPE 2	72	48	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	32.8	-	A.A	-	5	N-S CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	33	-	A.A	-	5	E-W CAP	TYPE 2	8	18	
FINAL TANKS	33.5	-	A.A.4	-	5	DECK	TYPE 4	3	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	33.8	-	A.A	-	5	N-S CAP	TYPE 2	36	24	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	34	-	A.a.3	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	34	-	A.A	-	5	E-W CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	34.1	-	A.A	-	5	N-S CAP	TYPE 2	2	2	
FINAL TANKS	35	-	A.A.1	-	5	E-W CAP	TYPE 2	30	20	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	35	-	A.A	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	36	-	A.A.1	-	5	E-W CAP	TYPE 2	30	18	
FINAL TANKS	36	-	A.a	-	5	E-W CAP	TYPE 2	18	18	
FINAL TANKS	36	-	A.A	-	3	N-S CAP	TYPE 4	1	-	
FINAL TANKS	36.8	-	A.A	-	5	N-S CAP	TYPE 2	50	36	FAILING EPOXY REPAIR IN AREA. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37	-	A.A	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	37	-	A.a	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37	-	A.a.8	-	5	E-W CAP	TYPE 4	10	-	
FINAL TANKS	37	-	A.a.-1	-	5	E-W CAP	TYPE 1	72	72	2 IN. CONC. EROSION IN AREA
FINAL TANKS	37.3	-	A.a.1	-	5	N-S CAP	TYPE 2	12	12	
FINAL TANKS	37.4	-	A.a.5	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	37.9	-	A.a	-	3/5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	37.3	-	A.a.5	-	2	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	37.3	-	A.a.1	-	5	E-W CAP	TYPE 2	18	30	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	38	-	A.a	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38	-	A.a	-	5	E-W CAP	TYPE 2	6	15	
FINAL TANKS	38	-	A.a.5	-	2	E-W CAP	TYPE 2	4	4	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38.1	-	A.a	-	5	N-S CAP	TYPE 2	10	10	
FINAL TANKS	11.1	-	A.1	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	11.1.9	-	A.1	-	5	N-S CAP	TYPE 4	4	-	
FINAL TANKS	12	-	A.1.4	-	5	E-W CAP	TYPE 4	48	-	
FINAL TANKS	13	-	A.1	-	3/5	N-S CAP	TYPE 2	5	2	
FINAL TANKS	13	-	A.1	-	3/5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	14	-	A.1.5	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	14	-	A.1	-	5	E-W CAP	TYPE 3	6	-	
FINAL TANKS	14	-	A.1.9	-	5	E-W CAP	TYPE 2	8	8	
FINAL TANKS	16	-	A.1	-	5	E-W CAP	TYPE 3	72	-	
FINAL TANKS	16	-	A.1.2	-	4	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	16	-	A.1.6	-	4	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	16.2	-	A.1	-	5	N-S CAP	TYPE 3	6	-	
FINAL TANKS	16.7	-	A.1.3	-	5	DECK	TYPE 2	5	5	
FINAL TANKS	18	-	A.1	-	5	E-W CAP	TYPE 3	4	-	
FINAL TANKS	18.7	-	A.1	-	1	N-S CAP	TYPE 4	4	-	
FINAL TANKS	18.7	-	A.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	19	-	A.1.4	-	2	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	19	-	A.1.9	-	5	E-W CAP	TYPE 2	12	1	
FINAL TANKS	19	-	A.1.3	-	5	E-W CAP	TYPE 2	3	1	
FINAL TANKS	19	-	A.1	-	5	E-W CAP	TYPE 3	24	-	
FINAL TANKS	19.5	-	A.1	-	5	N-S CAP	TYPE 2	24	3	
FINAL TANKS	19.6	-	A.1.4	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	20	-	A.1.8	B.3	5	E-W CAP	TYPE 1	144	60	1 IN. CONC. EROSION IN AREA
FINAL TANKS	20.1	-	A.1.5	-	5	DECK	TYPE 2	3	3	
FINAL TANKS	21	-	A.1	A.1.3	5	E-W CAP	TYPE 1	72	72	
FINAL TANKS	21	21.2	A.1	-	5	N-S CAP	TYPE 1	72	36	
FINAL TANKS	21.6	-	A.1.9	-	5	DECK	TYPE 2	2	2	
FINAL TANKS	22	-	A.1	A.1.6	5	E-W CAP	TYPE 1	72	240	1 IN. CONC. EROSION IN AREA
FINAL TANKS	23	-	A.1	-	5	E-W CAP	TYPE 3	72	-	
FINAL TANKS	23	-	A.1.1	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	23.3	-	A.1	-	5	N-S CAP	TYPE 1	48	48	
FINAL TANKS	24	-	A.1.1	-	5	E-W CAP	TYPE 2	4	4	
FINAL TANKS	25	-	A.1.5	-	2/5	E-W CAP	TYPE 2	3	3	

NOTES:

1. SEE FIGURE BELOW FOR "FACE" LOCATIONS.



1/2"=1'-0" 0 1 2 3 4 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 2 REPAIR SCHEDULE
SHEET 1 OF 14

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-518.00

Last Saved By: AcostaML Last Date Saved: 10/20/2026 3:41 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches) Plot Style Table: BEDC_Acad(N).ctb
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-518.00_S31.00.dwg
Date & Time Plotted: 10/20/2026 3:45 PM Plot Scale: 1:1

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 2 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	25	-	A.1.5	-	5	E-W CAP	TYPE 3	18	-	
FINAL TANKS	25	-	A.1.1	-	5	E-W CAP	TYPE 2	6	2	
FINAL TANKS	25.5	-	A.1.7	-	5	DECK	TYPE 2	1	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	26	-	A.1.5	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	26	-	A.1.5	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	26.2	-	A.1	-	1	N-S CAP	TYPE 4	4	-	
FINAL TANKS	27	-	A.1.4	-	2/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	27	-	A.1	-	5	N-S CAP	TYPE 4	60	-	
FINAL TANKS	27.3	-	A.1	-	1/5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	27.1	-	A.1.6	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	29.1	-	A.1.6	-	5	E-W CAP	TYPE 4	1	-	X6 REPAIRS AT THIS LOCATION
FINAL TANKS	29.1	-	A.1.9	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	29.1.1	-	A.1.4	-	5	DECK	TYPE 2	4	4	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	30	-	A.1.3	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	30.1	-	A.1.9	-	5	DECK	TYPE 2	1.5	1.5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	30.1	-	A.1	-	5	N-S CAP	TYPE 2	12	24	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	30.5	-	A.1	-	5	N-S CAP	TYPE 2	8	8	
FINAL TANKS	30.8	-	A.1	-	1	N-S CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	31	-	A.1.4	-	2	E-W CAP	TYPE 2	12	6	
FINAL TANKS	31	-	A.1	-	5	E-W CAP	TYPE 2	24	60	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	31.1	-	A.1.3	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	31.3	-	A.1	-	1	N-S CAP	TYPE 2	24	12	
FINAL TANKS	31.8	-	A.1.9	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	32	-	A.1.7	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	32	-	A.1.1	-	5	E-W CAP	TYPE 4	1	-	X7 REPAIRS AT THIS LOCATION
FINAL TANKS	32	-	A.1	-	5	N-S CAP	TYPE 2	18	18	
FINAL TANKS	33	-	A.1.4	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	33.9	-	A.1	-	5	N-S CAP	TYPE 1	48	48	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	33.9	-	A.1	-	3/5	N-S CAP	TYPE 2	4	1	
FINAL TANKS	34	-	A.1	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	35	-	A.1.3	-	5	E-W CAP	TYPE 2	12	12	
FINAL TANKS	35	-	A.1.3	-	5	E-W CAP	TYPE 2	8	8	
FINAL TANKS	35.5	-	A.1.3	-	5	DECK	TYPE 2	8	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	35.7	-	A.1	-	5	N-S CAP	TYPE 2	10	48	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	36	-	A.1.5	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	36	-	A.1.5	-	4/5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	36.2	-	A.1	-	5	N-S CAP	TYPE 2	48	36	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	36.4	-	A.1.8	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	36.9	-	A.1.1	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	36.9	-	A.1	-	5	N-S CAP	TYPE 2	24	24	
FINAL TANKS	37.3	-	A.1.3	-	5	E-W CAP	TYPE 2	12	8	
FINAL TANKS	37.3.1	-	A.1.4	-	5	DECK	TYPE 2	18	18	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3.5	-	A.1.5	-	5	DECK	TYPE 2	24	24	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3.9	-	A.1	-	5	N-S CAP	TYPE 2	16	50	FAILING EPOXY REPAIR IN AREA. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38	-	A.1.4	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	38.1	-	A.1	-	5	N-S CAP	TYPE 2	15	15	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38.1	-	A.1	-	5	N-S CAP	TYPE 2	8	8	
FINAL TANKS	38.6	-	A.1	-	3	N-S CAP	TYPE 4	1	-	
FINAL TANKS	38.1	-	A.1.7	-	2	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	11.1	-	B.3	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	11.1.2	-	B	-	1	N-S CAP	TYPE 2	1	6	
FINAL TANKS	11.1.8	-	B.8	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	12	-	B	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	12.8	-	B.8	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	13.2	-	B	-	5	N-S CAP	TYPE 2	12	12	
FINAL TANKS	13.5	-	B.5	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	15	-	B.4	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	15.7	-	B	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	15.8	-	B.8	-	5	DECK	TYPE 2	12	3	
FINAL TANKS	17	-	B.1	-	5	E-W CAP	TYPE 4	36	-	
FINAL TANKS	17.9	-	B	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	18	-	B.6	-	2	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	18	-	B.4	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	18	-	B.3	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	18	-	B.9	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	18.1	-	B	-	5	N-S CAP	TYPE 2	1.5	1.5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	18.6	-	B.5	-	5	N-S CAP	TYPE 2	60	36	
FINAL TANKS	18.9	-	B	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	20	-	B.4	B.9	5	E-W CAP	TYPE 2	1	1	X5 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	20	-	B.9	-	5	E-W CAP	TYPE 2	18	-	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	20.2	-	B	-	3	N-S CAP	TYPE 4	1	-	
FINAL TANKS	20.2	-	B.3	-	5	DECK	TYPE 4	4	-	
FINAL TANKS	20.7	-	B	-	3	N-S CAP	TYPE 2	1	1	

PHASE 2 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	20.8	-	B.1	-	5	N-S CAP	TYPE 3	30	-	
FINAL TANKS	21	-	B.4	-	4	E-W CAP	TYPE 4	3	-	
FINAL TANKS	21	-	B	-	5	N-S CAP	TYPE 3	72	-	
FINAL TANKS	21.4	-	B.5	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	21.8	-	B	-	1	N-S CAP	TYPE 4	3	-	
FINAL TANKS	23	-	B.6	-	4/5	E-W CAP	TYPE 2	12	2	
FINAL TANKS	23	-	B.4	-	4	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	23.4	-	B	-	4/5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	24	-	B.2	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	24	-	B.7	-	5	E-W CAP	TYPE 2	6	2	
FINAL TANKS	24	-	B.8	-	5	E-W CAP	TYPE 2	6	2	
FINAL TANKS	24	-	B.9	-	5	E-W CAP	TYPE 2	2	4	
FINAL TANKS	25	-	B.4	-	2/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	25	-	B.6	-	4/5	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	25	-	B.9	-	5	E-W CAP	TYPE 3	15	-	
FINAL TANKS	25.1	-	B	-	3/5	N-S CAP	TYPE 2	2	2	
FINAL TANKS	25.2	-	B.7	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	25.9	-	B	-	5	N-S CAP	TYPE 3	60	-	
FINAL TANKS	26	-	B.9	-	5	E-W CAP	TYPE 3	12	-	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	26	-	B.4	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	26.1	-	B	-	5	N-S CAP	TYPE 3	15	-	
FINAL TANKS	26.7	-	B	-	1/5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	27	-	B	-	5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	27.1	-	B.7	-	2/5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	27.1	-	B.5	-	5	E-W CAP	TYPE 2	2	1	
FINAL TANKS	27.1	-	B.4	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	29.1	-	B.7	-	5	E-W CAP	TYPE 2	5	18	
FINAL TANKS	29.1	-	B.3	B.6	5	E-W CAP	TYPE 2	4	4	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	29.1	-	B.6	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	29.1	-	B.9	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	29.1.2	-	B	-	5	N-S CAP	TYPE 2	18	12	
FINAL TANKS	31	-	B.6	-	2/5	E-W CAP	TYPE 2	4	4	
FINAL TANKS	31	-	B.2	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	31.7	-	B.8	-	5	DECK	TYPE 2	4	4	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	31.8	-	B.1	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	32	-	B.6	-	5	E-W CAP	TYPE 4	12	-	
FINAL TANKS	32	-	B	-	5	N-S CAP	TYPE 3	36	2	
FINAL TANKS	32	-	B	-	5	N-S CAP	TYPE 2	24	48	
FINAL TANKS	32.3	-	B.8	-	5	DECK	TYPE 4	1	-	X5 REPAIRS AT THIS LOCATION
FINAL TANKS	32.3	-	B	-	3/5	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	32.4	-	B	-	1/5	N-S CAP	TYPE 2	24	24	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	33.1	-	B	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	33.2	35.2	B.7	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	33.9	-	B.2	-	5	DECK	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	34	-	B.2	-	5	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	34.2	-	B.8	-	5	DECK	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	34.3	-	B	-	5	N-S CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	35	-	B.1	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	35.5	-	B	-	5	N-S CAP	TYPE 2	36	48	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	35.5	-	B	-	1	N-S CAP	TYPE 4	1	-	X6 REPAIRS AT THIS LOCATION
FINAL TANKS	35.5	-	B	-	4	N-S CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	35.7	-	B.5	-	5	DECK	TYPE 2	12	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	35.9	-	B	-	5	N-S CAP	TYPE 2	8	8	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	36.1	-	B	-	5	N-S CAP	TYPE 2	12	30	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	36.8	-	B	-	5	N-S CAP	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	36.9	-	B.2	-	5	DECK	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	37.9	-	B.8	-	5	N-S CAP	TYPE 2	12	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3	-	B.3	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	37.3	-	B.5	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	38	-	B.8	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	38	-	B	-	5	N-S CAP	TYPE 1	144	144	FAILING EPOXY REPAIR IN AREA. 1.5 IN. CONC. EROSION IN AREA
FINAL TANKS	38	-	B.9	-	4/5	E-W CAP	TYPE 2	12	24	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	38.2	-	B	-	3	N-S CAP	TYPE 2	8	10	
FINAL TANKS	38.3	-	B	-	3	N-S CAP	TYPE 4	2	-	
FINAL TANKS	38.6	-	B.7	-	5	DECK	TYPE 2	14	14	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	11.1	-	C.2	C.3	5	E-W CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	11.1	-	C.9	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	11.1.9	-	C	-	5	N-S CAP	TYPE 3	8	-	

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 2 REPAIR SCHEDULE
SHEET 2 OF 14

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-519.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00" x 34.00" Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-518.00_S31.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Plot Scale: 1:1
Date & Time Plotted: 10/20/2026 3:45 PM
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 2 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	12	-	C.7	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	12.1	-	C	-	1	N-S CAP	TYPE 3	6	-	
FINAL TANKS	12.9	-	C	-	5	N-S CAP	TYPE 3	6	-	
FINAL TANKS	13	-	C.6	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	13	-	C.5	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	13	-	C.9	-	5	E-W CAP	TYPE 4	5	-	
FINAL TANKS	13.2	-	C.2	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	13.5	-	C.5	-	5	DECK	TYPE 2	5	5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	14	-	C.9	-	5	E-W CAP	TYPE 3	6	-	
FINAL TANKS	14	-	C.9	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	14.5	-	C	-	5	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	15	-	C.5	-	2	E-W CAP	TYPE 4	4	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	15	-	C.9	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	15	-	C	-	5	E-W CAP	TYPE 3	3	-	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	16	-	C.5	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	16	-	C	-	5	E-W CAP	TYPE 3	8	-	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	16	-	C.3	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	16	-	C.5	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	16.4	-	C	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	16.8	-	C.8	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	16.9	-	C	-	5	N-S CAP	TYPE 3	12	-	
FINAL TANKS	17	-	C.1	-	5	E-W CAP	TYPE 3	48	-	
FINAL TANKS	17	-	C.1	-	5	E-W CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	17.5	-	C	-	5	N-S CAP	TYPE 4	10	-	
FINAL TANKS	18.4	-	C.4	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	18.6	-	C	-	5	N-S CAP	TYPE 4	6	-	
FINAL TANKS	19	-	C.1	-	5	E-W CAP	TYPE 3	7	-	
FINAL TANKS	19	-	C	-	5	E-W CAP	TYPE 2	4	1	
FINAL TANKS	19.1	-	C.7	-	5	DECK	TYPE 2	8	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	19.1	-	C.5	-	5	DECK	TYPE 2	3	3	
FINAL TANKS	20	-	C.4	-	2	E-W CAP	TYPE 4	4	-	
FINAL TANKS	20	-	C.1	-	5	E-W CAP	TYPE 3	60	1	
FINAL TANKS	20	-	C.5	-	5	E-W CAP	TYPE 2	8	1	
FINAL TANKS	20.9	-	C	-	5	N-S CAP	TYPE 2	4	12	
FINAL TANKS	21.1	-	C	-	5	N-S CAP	TYPE 4	12	-	
FINAL TANKS	22	-	C.5	-	5	E-W CAP	TYPE 2	6	4	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	23	-	C.3	-	2/5	E-W CAP	TYPE 4	14	-	
FINAL TANKS	23	-	C	-	5	E-W CAP	TYPE 4	12	-	
FINAL TANKS	23.1	-	C.8	-	5	DECK	TYPE 2	3	2	
FINAL TANKS	23.5	-	C	-	5	E-W CAP	TYPE 2	36	12	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	24	-	C.4	-	5	E-W CAP	TYPE 2	72	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	25	-	C.4	-	2/5	E-W CAP	TYPE 2	12	24	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	25.1	-	C.4	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	25.1	-	C.8	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	26.8	-	C	-	1/5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	27	-	C.7	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	27	-	C	-	5	N-S CAP	TYPE 2	5	24	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	27	-	C.4	C.5	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	27	-	C.4	-	5	E-W CAP	TYPE 2	72	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	27.2	27.8	C.8	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	27.8	-	C.4	-	5	DECK	TYPE 2	2.5	2.5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	27.1	-	C.4	-	5	E-W CAP	TYPE 2	72	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	27.1	-	C.8	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	27.1	-	C	-	5	E-W CAP	TYPE 3	6	-	
FINAL TANKS	29.1	-	C	-	5	N-S CAP	TYPE 4	4	-	
FINAL TANKS	29.1	-	C.5	-	5	E-W CAP	TYPE 2	72	12	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	29.1	-	C.7	-	5	E-W CAP	TYPE 4	5	-	
FINAL TANKS	29.1.9	-	C	-	5	N-S CAP	TYPE 3	24	-	
FINAL TANKS	30	-	C.7	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	30	-	C	-	5	E-W CAP	TYPE 4	12	-	
FINAL TANKS	30.8	-	C	-	3	N-S CAP	TYPE 4	4	-	
FINAL TANKS	31.3	-	C	-	1	N-S CAP	TYPE 4	1	-	
FINAL TANKS	31.4	-	C.7	-	5	DECK	TYPE 2	2.5	2.5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	32	-	C.5	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	32	-	C.1	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	32	-	C	-	5	E-W CAP	TYPE 3	48	-	
FINAL TANKS	32.4	-	C	-	3/5	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	32.9	-	C	-	5	E-W CAP	TYPE 2	48	36	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	33	-	C.5	-	2/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	33	-	C	-	5	N-S CAP	TYPE 2	3	3	
FINAL TANKS	33	-	C	-	5	N-S CAP	TYPE 1	48	48	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	33.2	33.8	C.3	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	33.8	-	C.8	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	34	-	C.6	-	5	E-W CAP	TYPE 4	6	-	

PHASE 2 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	34.2	-	C	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	34.9	-	C.8	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	35	-	C	-	5	E-W CAP	TYPE 3	8	-	
FINAL TANKS	35	-	C.1	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	35	-	C.4	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	35	-	C.6	-	4/5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	35	-	C.8	-	5	DECK	TYPE 4	6	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	35.5	-	C	-	5	N-S CAP	TYPE 2	6	48	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	36	-	C.3	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	36.1	-	C.9	-	5	N-S CAP	TYPE 4	6	-	
FINAL TANKS	36.3	-	C.8	-	5	DECK	TYPE 2	4	4	
FINAL TANKS	37	-	C.9	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	37	-	C.3	-	2	E-W CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	37	-	C.5	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	37	-	C.6	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	37.1	37.9	C.9	-	5	DECK	TYPE 2	3	3	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.2	-	C	-	5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	37.9	-	C	-	5	N-S CAP	TYPE 4	8	-	
FINAL TANKS	37.3.8	-	C	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	37.3.8	-	C	-	5	N-S CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	38	-	C.4	-	5	E-W CAP	TYPE 2	72	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	38	-	C.4	-	2/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	38	-	C	-	5	E-W CAP	TYPE 1	72	84	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	38.1	-	C.1	C.5	5	E-W CAP	TYPE 3	168	-	
FINAL TANKS	11.1	-	D.2	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	11.1	-	D.3	-	4	E-W CAP	TYPE 2	2	2	
FINAL TANKS	11.1.2	-	D.5	-	5	DECK	TYPE 4	48	-	
FINAL TANKS	11.1.2	-	D.6	-	5	DECK	TYPE 4	12	-	
FINAL TANKS	11.1.2	-	D.8	-	5	DECK	TYPE 4	12	-	
FINAL TANKS	11.1.3	-	D.8	-	5	DECK	TYPE 2	4	4	
FINAL TANKS	11.1.4	-	D	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	11.1.5	-	D.9	-	5	DECK	TYPE 4	3	-	
FINAL TANKS	12	-	D.4	-	2	E-W CAP	TYPE 2	3	3	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	12.7	-	D.5	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	13	-	D.1	-	5	E-W CAP	TYPE 4	5	-	
FINAL TANKS	14	-	D.6	-	4	E-W CAP	TYPE 4	10	-	
FINAL TANKS	14.2	-	D	-	1	N-S CAP	TYPE 2	4	4	
FINAL TANKS	15.2	-	D	-	5	N-S CAP	TYPE 2	3	3	
FINAL TANKS	15.2	-	D	-	5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	16	-	D.4	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	16	-	D.1	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	16	-	D.8	-	5	E-W CAP	TYPE 3	30	-	
FINAL TANKS	17	-	D.9	-	5	E-W CAP	TYPE 2	8	1	
FINAL TANKS	18	-	D.2	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	18.1	-	D	-	5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	19	-	D.5	-	4	E-W CAP	TYPE 2	3	3	
FINAL TANKS	19	-	D.3	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	19.2	-	D.3	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	19.3	-	D	-	3	N-S CAP	TYPE 2	1	1	
FINAL TANKS	20	-	D.8	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	21	-	D	-	5	E-W CAP	TYPE 4	36	-	
FINAL TANKS	22	-	D.3	-	5	E-W CAP	TYPE 3	18	-	
FINAL TANKS	23	-	D.5	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	23.1	23.6	D	-	5	N-S CAP	TYPE 3	72	-	
FINAL TANKS	23.5	-	D	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	24	25	D	-	5	N-S CAP	TYPE 3	120	-	
FINAL TANKS	25.2	-	D.2	-	5	DECK	TYPE 2	1	2	
FINAL TANKS	25.2	-	D.7	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	25.3	-	D	-	5	N-S CAP	TYPE 3	36	-	
FINAL TANKS	25.5	-	D.8	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	26	-	D.4	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	27.1	-	D.1	-	5	DECK	TYPE 4	4	-	
FINAL TANKS	27.1	-	D.3	-	2/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	27.1	-	D.8	-	2/5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	27.1	-	D.9	-	5	E-W CAP	TYPE 4	12	-	
FINAL TANKS	27.1	-	D	-	5	E-W CAP	TYPE 4	24	-	
FINAL TANKS	29.1	-	D	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	29.1	-	D.5	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	29.1	-	D.9	-	5	E-W CAP	TYPE 2	6	1	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	29.1	-	D.7	-	4	E-W CAP	TYPE 4	3	-	
FINAL TANKS	29.1.4	-	D	-	1/5	N-S CAP	TYPE 2	1	3	
FINAL TANKS	30	31	D	E.7	5	DECK	TYPE 4	3	-	X16 REPAIRS AT THIS LOCATION
FINAL TANKS	30	-	D.8	-	4	E-W CAP	TYPE 2	2	2	
FINAL TANKS	30	-	D.3	-	4/5	E-W CAP	TYPE 2	3	1	

1/2"=1'-0" 0 1 2 3 4 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 2 REPAIR SCHEDULE
SHEET 3 OF 14

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-520.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-518.00_S31.00.dwg
Date & Time Plotted: 10/20/2026 3:45 PM
Plot Style Table: BEDC_Acad(N).ctb
Plot Scale: 1:1
Last Date Saved: 10/20/2026 3:41 PM

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 2 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	30.8	-	D	-	3/5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	31	32	D.7	D.9	5	DECK	TYPE 4	6	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	31	-	D.9	-	5	E-W CAP	TYPE 4	5	-	
FINAL TANKS	31.4	-	D.4	-	5	DECK	TYPE 2	2.5	2.5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	31.9	-	D	-	5	N-S CAP	TYPE 3	10	-	
FINAL TANKS	32	-	D.4	-	2/5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	32	-	D.8	-	4	E-W CAP	TYPE 2	1	3	X6 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	32.5	-	D	-	5	N-S CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	32.9	-	D.8	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	33.3	-	D.2	-	5	DECK	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	33.4	-	D	-	1/5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	35	-	D.1	-	5	E-W CAP	TYPE 2	1	10	
FINAL TANKS	35	-	D.5	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	35.1	-	D	-	5	E-W CAP	TYPE 4	8	-	
FINAL TANKS	35.2	35.5	D.5	-	5	DECK	TYPE 2	6	12	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	36	-	D.3	-	2	E-W CAP	TYPE 2	1	1	
FINAL TANKS	36	-	D.8	-	2/5	E-W CAP	TYPE 4	10	-	
FINAL TANKS	36	-	D.1	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	36.2	-	D	-	3/5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	36.8	-	D	-	3/5	N-S CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	36.9	-	D.2	-	5	DECK	TYPE 2	4	4	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37	-	D.4	-	2/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	37	-	D.2	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	37	-	D.6	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	37	-	D.9	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	37.5	-	D.5	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3	-	D.9	-	2	E-W CAP	TYPE 2	1	1	
FINAL TANKS	37.3	-	D.7	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	37.3.2	-	D	-	3	N-S CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	38	-	D	-	5	E-W CAP	TYPE 2	6	72	
FINAL TANKS	38	-	D.6	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38	-	D.7	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38	-	D.9	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38.5	-	D.2	-	5	DECK	TYPE 3	15	-	
FINAL TANKS	38.7	-	D	-	1/5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	38.8	-	D	-	3/5	N-S CAP	TYPE 2	4	4	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	38.9	-	D	-	1/5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	11.1	-	E.1	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	11.1	-	E.5	-	5	E-W CAP	TYPE 3	1	-	
FINAL TANKS	11.1	-	E.9	-	4/5	E-W CAP	TYPE 3	18	-	
FINAL TANKS	11.1	-	E.8	-	4/5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	12	-	E.4	-	2	E-W CAP	TYPE 2	2	2	
FINAL TANKS	12	-	E.4	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	12	-	E.6	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	12.3	-	E	-	1/5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	13	-	E.5	-	2/5	E-W CAP	TYPE 4	4	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	13.6	-	E.7	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	13.9	-	E	-	1	N-S CAP	TYPE 4	2	-	
FINAL TANKS	14	-	E.3	-	2/5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	14	-	E.7	-	2/5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	14	-	E.8	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	15.5	-	E.8	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	15.6	-	E.8	-	5	DECK	TYPE 2	2	2	
FINAL TANKS	17	-	E.8	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	17	-	E.9	-	5	E-W CAP	TYPE 2	12	2	
FINAL TANKS	18	-	E.4	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	18	-	E.3	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	18.1	-	E	-	5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	19	-	E.5	-	2	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	19	-	E.9	-	5	E-W CAP	TYPE 2	48	2	
FINAL TANKS	19	-	E.8	-	4	E-W CAP	TYPE 4	3	-	
FINAL TANKS	19	-	E.1	-	5	E-W CAP	TYPE 2	6	4	
FINAL TANKS	19	-	E	-	5	E-W CAP	TYPE 4	24	-	
FINAL TANKS	19.8	-	E	-	5	N-S CAP	TYPE 2	36	1	
FINAL TANKS	19.9	-	E.1	-	5	E-W CAP	TYPE 2	24	36	
FINAL TANKS	20	-	E.1	-	5	E-W CAP	TYPE 2	12	4	
FINAL TANKS	20	-	E.1	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	20	-	E.9	-	5	E-W CAP	TYPE 4	12	-	
FINAL TANKS	20.3	-	E	-	5	N-S CAP	TYPE 2	12	4	
FINAL TANKS	20.5	-	E.1	-	5	DECK	TYPE 2	5	5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	21.8	-	E	-	1	N-S CAP	TYPE 4	14	-	
FINAL TANKS	22	-	E.7	E.9	5	E-W CAP	TYPE 2	1	36	
FINAL TANKS	22.1	-	E	-	5	N-S CAP	TYPE 2	8	1	
FINAL TANKS	23	-	E.6	-	5	E-W CAP	TYPE 2	2	3	

PHASE 2 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	23	-	E.5	-	4/5	E-W CAP	TYPE 2	24	12	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	23	-	E.3	-	4/5	E-W CAP	TYPE 2	2	1	
FINAL TANKS	23.1	-	E	-	5	N-S CAP	TYPE 3	24	-	
FINAL TANKS	25	-	E.4	E.5	2	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	25	-	E.5	-	5	E-W CAP	TYPE 2	72	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	25	-	E.8	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	25.5	-	E.4	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	26	-	E.2	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	26.7	-	E.7	-	5	DECK	TYPE 2	2	2	
FINAL TANKS	27	-	E.5	-	4	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	27	-	E.9	-	5	E-W CAP	TYPE 2	6	3	
FINAL TANKS	27	-	E.8	-	4	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	27.7	-	E	-	5	N-S CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	27.1	-	E.2	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	27.1	-	E.7	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	29.1	-	E.4	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	29.1	-	E.5	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	29.1	-	E.5	-	5	E-W CAP	TYPE 2	72	10	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	30	-	E.5	E.7	4/5	E-W CAP	TYPE 2	2	2	X8 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	30	-	E.1	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	31	-	E.5	E.7	2/5	E-W CAP	TYPE 2	2	2	X8 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	31	-	E.4	-	5	E-W CAP	TYPE 2	6	36	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	31.1	-	E	-	1/5	N-S CAP	TYPE 4	5	-	
FINAL TANKS	31.3	-	E.3	-	5	DECK	TYPE 2	14	14	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	31.6	-	E	-	3	N-S CAP	TYPE 4	1	-	
FINAL TANKS	32	-	E.9	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	32	-	E.4	-	5	E-W CAP	TYPE 2	2	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	32	-	E.8	-	4/5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	32	-	E	-	5	E-W CAP	TYPE 4	7	-	
FINAL TANKS	32	-	E	-	5	E-W CAP	TYPE 4	24	-	
FINAL TANKS	32.4	-	E	-	5	N-S CAP	TYPE 2	24	60	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	33	-	E	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	33	-	E.4	-	5	E-W CAP	TYPE 4	1	-	X5 REPAIRS AT THIS LOCATION
FINAL TANKS	33	-	E.8	-	4	E-W CAP	TYPE 2	1	1	
FINAL TANKS	33.9	-	E	-	5	N-S CAP	TYPE 3	24	-	
FINAL TANKS	34	-	E.4	-	2	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	34	-	E.8	-	4/5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	34	-	E.5	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	34	-	E.1	-	5	E-W CAP	TYPE 2	3	3	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	34	-	E	-	5	E-W CAP	TYPE 4	3	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	34	-	E	-	5	E-W CAP	TYPE 3	8	-	
FINAL TANKS	34.2	-	E.2	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	34.8	-	E	-	1/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	35	-	E.1	-	2/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	35	-	E.5	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	35.8	-	E	-	1	N-S CAP	TYPE 4	6	-	
FINAL TANKS	35.8	-	E.2	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	36	-	E.5	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	36.1	36.9	E	F	5	DECK	TYPE 2	1	1	X7 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	36.4	-	E.5	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	36.8	-	E.2	-	5	DECK	TYPE 2	1.5	1.5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	36.8	-	E	-	3/5	N-S CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	37	-	E.5	-	2/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	37	-	E.5	-	5	E-W CAP	TYPE 2	72	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	37	-	E.9	-	5	E-W CAP	TYPE 3	48	-	
FINAL TANKS	37.5	-	E.5	-	5	DECK	TYPE 2	4	4	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3	-	E.5	-	2/5	E-W CAP	TYPE 2	96	12	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	37.3	-	E.9	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	37.3	-	E.5	-	5	E-W CAP	TYPE 2	72	12	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	37.3.8	-	E.3	-	5	DECK	TYPE 2	6	6	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	38	-	E	-	5	E-W CAP	TYPE 3	1	2	
FINAL TANKS	38	-	E.1	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38	-	E.3	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38	-	E.5	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38	-	E.7	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38	-	E.5	-	5	E-W CAP	TYPE 2	72	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	38	-	E.6	-	4/5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	38	-	E.8	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	38	-	E.9	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	38	-	E.3	-	2/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	38	-	E	-	5	E-W CAP	TYPE 1	48	48	1 IN. CONC. EROSION IN AREA
FINAL TANKS	38.7	-	E.4	-	5	DECK	TYPE 2	4	4	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	11.1	-	F.1	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	11.1.6	-	F.7	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 2 REPAIR SCHEDULE
SHEET 4 OF 14

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-521.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00" x 34.00" Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-518.00_531.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Date & Time Plotted: 10/20/2026 3:45 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 2 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	12	-	F.3	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	12	-	F.4	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	12	-	F.6	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	12	-	F.5	-	5	E-W CAP	TYPE 3	18	-	
FINAL TANKS	12.1	-	F.6	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	12.1	-	F	-	1/5	N-S CAP	TYPE 2	2	2	
FINAL TANKS	12.9	-	F.9	-	5	DECK	TYPE 2	2	2	
FINAL TANKS	12.9	-	F	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	12.9	-	F	-	5	N-S CAP	TYPE 2	3	2	
FINAL TANKS	12.9	-	F	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	13	-	F.5	F.9	5	E-W CAP	TYPE 3	3	-	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	13	-	F.6	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	13	-	F.4	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	13	-	F.2	-	5	E-W CAP	TYPE 3	10	-	
FINAL TANKS	13	-	F	-	5	E-W CAP	TYPE 3	96	-	
FINAL TANKS	13.1	-	F	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	13.2	-	F.5	-	5	N-S BEAM	TYPE 4	3	-	
FINAL TANKS	13.9	-	F	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	13.9	-	F.5	-	5	N-S BEAM	TYPE 3	24	-	
FINAL TANKS	14	-	F.2	-	2	N-S CAP	TYPE 4	2	-	
FINAL TANKS	14	-	F	-	5	E-W CAP	TYPE 3	72	-	
FINAL TANKS	14	-	F.4	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	14	-	F.5	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	14	-	F.6	-	5	E-W CAP	TYPE 2	6	-	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	14	-	F.9	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	14.1	-	F.7	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	15	-	F.6	-	5	E-W CAP	TYPE 2	2	-	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	15	-	F.5	-	5	N-S CAP	TYPE 3	60	-	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	15.2	-	F	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	15.2	-	F.5	-	3	N-S CAP	TYPE 4	3	-	
FINAL TANKS	15.3	-	F.5	-	3	E-W CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	15.9	-	F.9	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	15.9	-	F.5	-	5	E-W CAP	TYPE 2	12	2	
FINAL TANKS	15.9	-	F	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	16	-	F.2	-	5	E-W CAP	TYPE 4	12	-	
FINAL TANKS	16	-	F.4	-	5	E-W CAP	TYPE 2	12	-	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	16	-	F.5	-	5	N-S CAP	TYPE 1	48	72	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	16	-	F.6	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	16	-	F.7	-	4	E-W CAP	TYPE 4	10	-	
FINAL TANKS	16.1	-	F	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	16.9	-	F	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	17	-	F.7	-	2	E-W CAP	TYPE 4	10	-	
FINAL TANKS	17	-	F.9	-	2	E-W CAP	TYPE 4	16	-	
FINAL TANKS	17	-	F.5	F.7	5	E-W CAP	TYPE 4	72	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	17	-	F.6	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	17	-	F	-	5	E-W CAP	TYPE 4	8	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	18	-	F	-	5	E-W CAP	TYPE 3	18	-	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	18	-	F.2	-	5	E-W CAP	TYPE 2	36	1	
FINAL TANKS	18	-	F.6	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	18.5	-	F	-	3	N-S CAP	TYPE 2	1	1	
FINAL TANKS	19	-	F.6	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	19	-	F.5	-	5	N-S CAP	TYPE 4	36	-	
FINAL TANKS	19	-	F.4	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	19	-	F.1	-	5	E-W CAP	TYPE 2	6	1	
FINAL TANKS	20	-	F.5	-	5	E-W CAP	TYPE 4	24	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	20	-	F.5	-	5	E-W CAP	TYPE 2	8	2	
FINAL TANKS	20	-	F.7	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	20	-	F.8	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	20	-	F.9	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	20	-	F.8	-	5	E-W CAP	TYPE 2	24	1	
FINAL TANKS	20	-	F.8	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	20	-	F.9	-	5	E-W CAP	TYPE 4	12	-	
FINAL TANKS	20.7	-	F	-	1	N-S CAP	TYPE 4	2	-	
FINAL TANKS	20.8	-	F.4	-	5	N-S CAP	TYPE 2	36	6	
FINAL TANKS	20.8	-	F.6	-	5	N-S CAP	TYPE 2	24	3	
FINAL TANKS	21	-	F.6	-	5	E-W CAP	TYPE 2	18	-	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	21	-	F.4	-	5	E-W CAP	TYPE 4	24	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	21	-	F.1	-	5	E-W CAP	TYPE 2	24	1	
FINAL TANKS	21	-	F	-	5	E-W CAP	TYPE 2	8	2	

PHASE 2 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	22	-	F.3	-	5	E-W CAP	TYPE 2	12	4	
FINAL TANKS	22	-	F.7	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	23	-	F.1	F.5	5	E-W CAP	TYPE 2	2	3	
FINAL TANKS	23	-	F.2	-	4	E-W CAP	TYPE 3	72	-	
FINAL TANKS	23.1	23.3	F.1	F.3	1/5	E-W CAP	TYPE 4	18	-	
FINAL TANKS	23.5	-	F	-	1	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	24	-	F	-	5	E-W CAP	TYPE 2	5	15	
FINAL TANKS	24	-	F.6	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	24.1	-	F.4	-	5	N-S CAP	TYPE 3	60	-	
FINAL TANKS	25	-	F.4	-	5	E-W CAP	TYPE 3	24	-	
FINAL TANKS	25	-	F.6	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	25.5	-	F	-	1	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	26	-	F.7	-	2	E-W CAP	TYPE 2	1	1	
FINAL TANKS	26	-	F.6	-	2	E-W CAP	TYPE 2	3	3	
FINAL TANKS	26	-	F.5	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	26.8	-	F	-	1	N-S CAP	TYPE 2	1	1	
FINAL TANKS	27	-	F.5	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	27	-	F.6	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	27	-	F.9	-	5	E-W CAP	TYPE 2	18	2	
FINAL TANKS	27.5	-	F.5	-	1	N-S CAP	TYPE 4	2	-	
FINAL TANKS	27.5	-	F.5	-	3/5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	27.6	-	F	-	5	N-S CAP	TYPE 2	14	1	
FINAL TANKS	27.1	-	F.5	-	5	E-W CAP	TYPE 2	30	3	
FINAL TANKS	27.1	-	F.5	-	5	E-W CAP	TYPE 2	18	72	
FINAL TANKS	27.1	-	F.6	-	5	E-W CAP	TYPE 4	36	-	
FINAL TANKS	29.1	-	F.8	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	29.1	-	F.1	F.2	5	E-W CAP	TYPE 2	2	36	
FINAL TANKS	29.1.2	-	F.1	-	5	DECK	TYPE 2	4	4	
FINAL TANKS	29.1.9	-	F.5	-	5	N-S CAP	TYPE 3	24	-	
FINAL TANKS	29.1.9	-	F.5	-	3	N-S CAP	TYPE 4	4	-	
FINAL TANKS	31	-	F.2	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	31.3	-	F.6	-	5	DECK	TYPE 4	3	-	
FINAL TANKS	32	-	F.8	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	32	-	F.7	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	32.5	-	F	-	1/5	N-S CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	32.9	-	F	-	3/4	N-S CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	33	-	F.4	-	5	E-W CAP	TYPE 4	2	-	X5 REPAIRS AT THIS LOCATION
FINAL TANKS	33	-	F.7	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	33.1	-	F	-	5	N-S CAP	TYPE 2	2	2	
FINAL TANKS	33.1	-	F.6	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	33.8	-	F	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	34	-	F.8	-	4/5	E-W CAP	TYPE 4	6	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	34	-	F.3	-	4	E-W CAP	TYPE 2	6	3	
FINAL TANKS	34	-	F.1	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	34	-	F.1	-	5	E-W CAP	TYPE 3	26	-	
FINAL TANKS	34	-	F	-	5	N-S CAP	TYPE 2	2	8	
FINAL TANKS	34	-	F	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	34.3	-	F	-	5	N-S CAP	TYPE 2	4	4	
FINAL TANKS	34.4	-	F	-	1/5	N-S CAP	TYPE 4	8	-	
FINAL TANKS	34.9	-	F.6	-	5	DECK	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	35	-	F	-	5	E-W CAP	TYPE 2	4	36	
FINAL TANKS	35	-	F.3	-	5	E-W CAP	TYPE 4	90	-	
FINAL TANKS	35	-	F.5	-	5	E-W CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	35	-	F.7	-	5	E-W CAP	TYPE 2	4	4	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	35	-	F.9	-	5	E-W CAP	TYPE 2	3	3	
FINAL TANKS	35.1	-	F.6	-	5	DECK	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	35.8	-	F.5	-	4	E-W CAP	TYPE 2	1	1	
FINAL TANKS	36	-	F.7	-	2	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	36	-	F.7	-	2	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	36	-	F.3	-	5	E-W CAP	TYPE 4	42	-	
FINAL TANKS	36	-	F	-	5	E-W CAP	TYPE 2	3	7	X4 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	37	-	F.8	-	5	E-W CAP	TYPE 4	72	-	
FINAL TANKS	37	-	F.9	-	5	E-W CAP	TYPE 2	1	6	
FINAL TANKS	37	-	F.1	-	5	E-W CAP	TYPE 3	60	-	
FINAL TANKS	37.3.5	-	F.5	-	5	N-S BEAM	TYPE 3	6	-	
FINAL TANKS	37.3.8	-	F.8	-	5	DECK	TYPE 2	14	14	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38	-	F.1	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	38	-	F.4	-	5	E-W CAP	TYPE 3	30	-	
FINAL TANKS	38	-	F.5	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	38	-	F.7	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	38	-	F.9	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	38	-	F.7	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	38	-	F.9	-	4/5	E-W CAP	TYPE 4	1	-	

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 2 REPAIR SCHEDULE
SHEET 5 OF 14

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-522.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-516.00_531.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Date & Time Plotted: 10/20/2026 3:45 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

PHASE 2 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	38.5	-	F	-	1	N-S CAP	TYPE 4	5	-	
FINAL TANKS	38.5	-	F.8	-	5	DECK	TYPE 2	14	14	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38.8	-	F.5	-	3	N-S BEAM	TYPE 2	2	2	
FINAL TANKS	11.1	-	G.1	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	11.1	-	G	-	5	E-W CAP	TYPE 3	18	-	
FINAL TANKS	12	-	G.3	-	2/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	12	-	G.5	-	2/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	12	-	G.6	-	2/5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	12	-	G	-	5	E-W CAP	TYPE 3	18	-	
FINAL TANKS	12	-	G	-	5	E-W CAP	TYPE 3	8	-	
FINAL TANKS	12	-	G.8	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	12.2	-	G.5	-	5	DECK	TYPE 4	4	-	
FINAL TANKS	13	-	G.5	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	13	-	G.2	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	13.1	-	G.1	-	5	E-W CAP	TYPE 3	6	-	
FINAL TANKS	14	-	G.8	-	2	N-S CAP	TYPE 4	2	-	
FINAL TANKS	15	-	G	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	15	-	G.8	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	15	-	G	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	15.8	-	G.4	-	5	DECK	TYPE 2	4	4	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	15.8	-	G.5	-	5	DECK	TYPE 4	10	-	
FINAL TANKS	15.9	-	G.5	-	5	DECK	TYPE 2	6	6	
FINAL TANKS	16	-	G.5	-	5	E-W CAP	TYPE 2	72	12	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	16.8	-	G.8	-	5	DECK	TYPE 2	4	4	
FINAL TANKS	17	-	G	-	2	E-W CAP	TYPE 4	6	-	
FINAL TANKS	17	-	G.5	-	4/5	E-W CAP	TYPE 2	72	24	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	17	-	G	-	5	E-W CAP	TYPE 3	48	-	
FINAL TANKS	17.9	-	G.6	-	5	DECK	TYPE 2	3	3	
FINAL TANKS	18	-	G.4	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	18	-	G.8	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	19	-	G.5	-	2	E-W CAP	TYPE 2	2	2	
FINAL TANKS	19	-	G.5	-	4/5	E-W CAP	TYPE 2	24	72	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	19	-	G.2	-	5	E-W CAP	TYPE 2	2	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	20	-	G.4	-	2	E-W CAP	TYPE 2	2	2	
FINAL TANKS	20	-	G.8	H	5	E-W CAP	TYPE 4	72	-	
FINAL TANKS	21	-	G	-	2	E-W CAP	TYPE 4	4	-	
FINAL TANKS	21	-	G.3	-	2	E-W CAP	TYPE 2	8	1	
FINAL TANKS	21.8	-	G.8	-	5	DECK	TYPE 2	5	5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	22	-	G.4	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	22	-	G	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	22	-	G.2	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	22	-	G.2	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	22	-	G.4	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	22	-	G.8	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	23	-	G.9	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	23	-	G.3	-	5	E-W CAP	TYPE 4	18	-	
FINAL TANKS	23	-	G.6	-	4	E-W CAP	TYPE 3	24	-	
FINAL TANKS	23.8	-	G.2	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	24	-	G	-	5	E-W CAP	TYPE 3	15	-	
FINAL TANKS	24	-	G.5	-	5	E-W CAP	TYPE 2	72	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	24	-	G.9	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	25	-	G.4	-	5	E-W CAP	TYPE 2	72	8	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	25.1	-	G.3	-	5	DECK	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	26	-	G.4	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	27	-	G.3	-	4	E-W CAP	TYPE 4	3	-	
FINAL TANKS	27	-	G.8	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	27.8	-	G.8	-	5	DECK	TYPE 2	5	12	
FINAL TANKS	27.1	-	G	-	5	E-W CAP	TYPE 3	24	-	
FINAL TANKS	27.1	-	G.2	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	29.1	-	G.5	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	29.1	-	G.5	-	5	E-W CAP	TYPE 2	72	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	29.1	-	G.4	-	4/5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	30	-	G	-	3	E-W CAP	TYPE 4	2	-	
FINAL TANKS	30	-	G.4	-	5	E-W CAP	TYPE 4	2	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	30	-	G.2	-	5	E-W CAP	TYPE 4	18	-	
FINAL TANKS	30.6	-	G.5	-	5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	31	-	G.5	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	31	-	G.7	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	31.9	-	G.4	-	5	DECK	TYPE 2	12	12	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	32	-	G.7	-	4/5	E-W CAP	TYPE 2	3	2	
FINAL TANKS	32	-	G	-	5	E-W CAP	TYPE 3	7	-	
FINAL TANKS	32.5	-	G	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	32.7	-	G.6	-	5	DECK	TYPE 2	1	1	

PHASE 2 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	33	-	G	-	5	E-W CAP	TYPE 2	24	24	
FINAL TANKS	33	-	G.5	-	4/5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	33	-	G.8	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	33.1	-	G.5	-	5	DECK	TYPE 2	8	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	33.5	33.8	G.3	-	5	DECK	TYPE 2	1	1	X8 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	34	-	G.3	-	2	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	34	-	G.9	-	2/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	34	-	G.3	-	5	E-W CAP	TYPE 2	6	2	
FINAL TANKS	34	-	G	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	35	-	G.1	-	5	E-W CAP	TYPE 4	48	-	
FINAL TANKS	35	-	G.5	-	4/5	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	35	-	G.3	-	4/5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	35	-	G.6	-	4/5	E-W CAP	TYPE 2	3	1	
FINAL TANKS	35.9	-	G.6	-	5	DECK	TYPE 2	24	36	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	35.9	-	G.5	-	5	DECK	TYPE 2	4	1	
FINAL TANKS	36	-	G.9	-	4/5	E-W CAP	TYPE 4	5	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	36	-	G.5	-	4/5	E-W CAP	TYPE 2	4	50	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	36	-	G.1	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	36.2	-	G	-	1	N-S CAP	TYPE 4	3	-	
FINAL TANKS	37	-	G.5	-	2/5	E-W CAP	TYPE 4	1	-	X6 REPAIRS AT THIS LOCATION
FINAL TANKS	37	-	G.1	-	2	E-W CAP	TYPE 2	1	1	
FINAL TANKS	37	-	G.2	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	37.3	-	G.9	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	37.3	-	G.4	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	37.3.8	-	G	-	3/5	N-S CAP	TYPE 4	6	-	
FINAL TANKS	38	-	G.1	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	38	-	G.2	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	38.1	-	G	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38.1	-	G.3	-	5	DECK	TYPE 4	6	-	
FINAL TANKS	38.6	-	G.3	-	5	DECK	TYPE 2	3	3	
FINAL TANKS	38.7	-	G.9	-	5	DECK	TYPE 2	2	2	
FINAL TANKS	38.1	-	G.2	-	2/5	E-W CAP	TYPE 2	3	1	
FINAL TANKS	11.1	-	H.9	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	11.1.7	-	H.6	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	12	-	H	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	12	-	H.9	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	12	-	H.2	-	4	E-W CAP	TYPE 4	4	-	
FINAL TANKS	12	-	H.2	-	4	E-W CAP	TYPE 4	3	-	
FINAL TANKS	12	-	H.2	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	13	-	H.8	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	13	-	H.2	-	2	E-W CAP	TYPE 2	2	2	
FINAL TANKS	13	-	H.1	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	13	-	H.5	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	13	-	H	-	5	E-W CAP	TYPE 4	12	-	
FINAL TANKS	13.5	-	H.5	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	14	-	H.7	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	14	-	H.9	-	4	E-W CAP	TYPE 4	3	-	
FINAL TANKS	16	-	H.1	-	4	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	16	-	H.7	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	16.8	-	H.8	-	5	DECK	TYPE 2	3	3	
FINAL TANKS	16.9	-	H.2	-	5	DECK	TYPE 2	4	4	
FINAL TANKS	17	-	H.3	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	18	-	H	-	5	E-W CAP	TYPE 2	12	24	
FINAL TANKS	19	-	H	-	5	E-W CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	20	-	H.8	-	2	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	20	-	H.5	-	2	E-W CAP	TYPE 2	1	1	
FINAL TANKS	20	-	H.1	-	5	E-W CAP	TYPE 4	12	-	
FINAL TANKS	22	-	H.8	-	2	E-W CAP	TYPE 4	3	-	
FINAL TANKS	22	-	H.2	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	22	-	H.7	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	23	-	H.3	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	23	-	H.3	-	4/5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	23.2	-	H.3	-	5	DECK	TYPE 2	3	3	
FINAL TANKS	23.5	-	H	-	5	N-S CAP	TYPE 2	2	2	
FINAL TANKS	24	-	H.7	-	2/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	24	-	H.8	-	2/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	24.2	-	H.3	-	5	DECK	TYPE 2	2	2	
FINAL TANKS	24.2	-	H.3	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	25	-	H.9	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	25	-	H.2	-	4/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	26	-	H.4	-	2	E-W CAP	TYPE 4	3	-	
FINAL TANKS	26	-	H.8	-	2	E-W CAP	TYPE 2	3	2	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	26.2	-	H.3	-	5	DECK	TYPE 4	2	-	

0 1 2 3 4 FT.
1/2"=1'-0"

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

BID SET
DATE ISSUED: OCTOBER 2026

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 2 REPAIR SCHEDULE
SHEET 6 OF 14

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-523.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-518.00_537.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Date & Time Plotted: 10/20/2026 3:45 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

PHASE 2 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	26.8	-	H.8	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	27	-	H.1	-	2/5	E-W CAP	TYPE 2	2	6	
FINAL TANKS	27	-	H.4	-	2/5	E-W CAP	TYPE 2	2	6	
FINAL TANKS	27.9	-	H.1	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	27.1	-	H.3	-	2/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	29.1	-	H.2	-	5	E-W CAP	TYPE 4	18	-	
FINAL TANKS	29.1.8	-	H.9	-	5	DECK	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	30	-	H.5	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	31	-	H.3	-	2	E-W CAP	TYPE 4	3	-	
FINAL TANKS	31	-	H.7	-	4	E-W CAP	TYPE 4	3	-	
FINAL TANKS	32	-	H.9	-	5	E-W CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	33	-	H.4	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	34	-	H.4	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	34	-	H.6	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	34.9	-	H.2	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	35	-	H	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	35	-	H.8	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	35.2	-	H.3	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	35.4	-	H.5	-	4/5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	35.8	-	H.3	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	36	-	H.4	-	2	E-W CAP	TYPE 4	5	-	
FINAL TANKS	36.1	-	H.5	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	36.9	-	H.5	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37	-	H.5	-	4/5	E-W CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	37	-	H.7	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	37.1	-	H	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.9	-	H	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3.1	-	H	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3.9	-	H	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38	-	H.6	-	4/5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	38.1	-	H	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38.5	-	H	-	5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	38.1	-	H.8	-	2/5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	11.1.1	-	J.2	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	11.1.5	-	J.5	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	12	-	J.3	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	12	-	J.6	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	12.2	-	J.6	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	13	-	J.6	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	14	-	J.9	-	2	E-W CAP	TYPE 4	5	-	
FINAL TANKS	15	-	J	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	17	-	J.4	-	4	E-W CAP	TYPE 4	10	-	
FINAL TANKS	18.1	-	J.8	-	5	DECK	TYPE 4	3	-	
FINAL TANKS	18.4	-	J	-	1	N-S CAP	TYPE 4	3	-	
FINAL TANKS	18.5	-	J.7	-	5	DECK	TYPE 2	10	10	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	19	-	J.7	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	21	-	J.7	-	2	E-W CAP	TYPE 2	2	2	
FINAL TANKS	21	-	J.3	-	4	E-W CAP	TYPE 4	3	-	
FINAL TANKS	21	-	J	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	21.3	-	J.3	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	22	-	J.3	-	4	E-W CAP	TYPE 4	3	-	
FINAL TANKS	22.2	-	J.6	-	5	DECK	TYPE 2	8	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	23	-	J.8	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	23	-	J.6	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	23.4	-	J.4	-	4	E-W CAP	TYPE 2	6	2	
FINAL TANKS	23.8	-	J.7	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	24	-	J.9	-	5	E-W CAP	TYPE 2	3	3	
FINAL TANKS	25	-	J.5	-	2/5	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	25	-	J	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	25.8	-	J.6	-	5	DECK	TYPE 2	1.5	1.5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	26.8	-	J.7	-	5	DECK	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	26.8	-	J.7	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	27.5	-	J.4	-	5	DECK	TYPE 4	10	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	27.8	-	J.7	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	27.1	-	J.5	-	5	E-W CAP	TYPE 2	1	5	
FINAL TANKS	29.1	-	J.3	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	30	-	J.7	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	31.9	-	J	-	5	N-S CAP	TYPE 2	6	2	
FINAL TANKS	32	-	J.5	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	32	-	J.8	-	2	E-W CAP	TYPE 4	2	-	

PHASE 2 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	32	-	J.9	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	32	-	J.7	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	32	-	J.6	-	5	E-W CAP	TYPE 2	5	1	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	32	-	J.3	-	5	E-W CAP	TYPE 4	5	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	33	-	J.7	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	33	-	J.5	-	4/5	E-W CAP	TYPE 2	3	3	
FINAL TANKS	33.4	-	J	-	1/5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	33.7	-	J.6	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	34	-	J	-	2/5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	34	-	J.5	-	5	E-W CAP	TYPE 2	3	4	
FINAL TANKS	34	-	J.5	-	4/5	E-W CAP	TYPE 2	12	24	
FINAL TANKS	34.9	-	J	-	1/5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	35	-	J.4	-	5	E-W CAP	TYPE 2	3	3	
FINAL TANKS	35	-	J.9	-	4/5	E-W CAP	TYPE 4	4	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	35.6	-	J	-	1/5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	35.8	-	J.5	-	5	DECK	TYPE 2	4	4	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	36	-	J.8	-	2	E-W CAP	TYPE 4	3	-	
FINAL TANKS	36	-	J	J.6	5	E-W CAP	TYPE 4	7	-	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	36.1	-	J	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	36.9	-	J	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37	-	J.9	-	2/5	E-W CAP	TYPE 4	10	-	
FINAL TANKS	37	-	J	J.6	5	E-W CAP	TYPE 1	72	180	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	37.1	-	J	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.9	-	J	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3	-	J.5	-	4/5	E-W CAP	TYPE 4	4	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	37.3	-	J.5	-	5	E-W CAP	TYPE 2	8	4	
FINAL TANKS	37.3.1	-	J	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3.9	-	J	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38	-	J.4	-	2/5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	38	-	J.1	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	38	-	J.2	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	38	-	J.5	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	38.1	-	J	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38.1	-	J	-	5	N-S CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	38.1	-	J	-	5	N-S CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	38.1	-	J	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38.1	-	J	-	5	N-S CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	38.1	-	J	-	5	N-S CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	38.5	-	J.7	-	5	DECK	TYPE 2	4	4	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	11.1.5	-	K.5	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	12	-	K.8	-	5	E-W CAP	TYPE 2	2	1	
FINAL TANKS	12	-	K.8	-	5	E-W CAP	TYPE 2	2	3	
FINAL TANKS	12	-	K	-	4	N-S CAP	TYPE 4	6	-	
FINAL TANKS	13	-	K	-	2	N-S CAP	TYPE 4	1	-	
FINAL TANKS	13.7	-	K.5	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	16	-	K.4	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	17	-	K.7	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	19	-	K.2	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	21	-	K.4	-	4	E-W CAP	TYPE 4	3	-	
FINAL TANKS	21	-	K.6	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	22	-	K.9	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	23	-	K.5	-	4	E-W CAP	TYPE 4	6	-	
FINAL TANKS	23.5	-	K	-	3	N-S CAP	TYPE 2	8	2	
FINAL TANKS	24	-	K.9	-	2	E-W CAP	TYPE 2	4	1	
FINAL TANKS	24	-	K.6	-	2	E-W CAP	TYPE 4	8	-	
FINAL TANKS	26	-	K.8	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	26	-	K.3	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	27	-	K.5	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	27	-	K.9	-	5	E-W CAP	TYPE 2	2	6	
FINAL TANKS	29.1	-	K	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	30	-	K.7	-	5	E-W CAP	TYPE 2	3	10	
FINAL TANKS	31	-	K	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	32	-	K.5	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	32	-	K	K.1	5	E-W CAP	TYPE 4	4	-	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	33.2	-	K.4	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	33.3	-	K	-	1	N-S CAP	TYPE 2	1	1	
FINAL TANKS	34	-	K.2	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	34	-	K.2	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	34.3	-	K	-	3/5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	34.5	-	K.8	-	5	DECK	TYPE 4	6	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	34.9	-	K.2	-	5	DECK	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	34.9	-	K.8	-	5	DECK	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	35	-	K.4	-	4/5	E-W CAP	TYPE 2	2	2	

0 1 2 3 4 FT.
1/2"=1'-0"

Environmental Protection BEDC/HD

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

STATE OF NEW YORK ILKER TUTUNCU LICENSED PROFESSIONAL ENGINEER

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 2 REPAIR SCHEDULE
SHEET 7 OF 14

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-524.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-518.00_S31.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Date & Time Plotted: 10/20/2026 3:45 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 2 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	36.1	-	K	-	5	N-S CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37	-	K.6	-	2/5	E-W CAP	TYPE 4	10	-	
FINAL TANKS	37	-	K.3	-	4/5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	37	-	K.9	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.1	-	K	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.9	-	K	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3.1	37.3.9	K	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38	-	K.9	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38.1	-	K	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	11.1	-	K.1.1	-	5	E-W CAP	TYPE 2	24	18	
FINAL TANKS	12.3	-	K.1	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	13	-	K.1	-	5	E-W CAP	TYPE 2	36	24	
FINAL TANKS	13.3	-	K.1	-	1/5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	14.5	-	K.1	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	20.8	-	K.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	29.1.2	-	K.1	-	5	N-S CAP	TYPE 2	1.5	1.5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	30.1	-	K.1	-	5	N-S CAP	TYPE 4	12	-	
FINAL TANKS	31.5	-	K.1	-	5	N-S CAP	TYPE 1	60	60	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	32.5	-	K.1	-	1/5	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	35.3	-	K.1	-	5	DECK	TYPE 2	2	2	
FINAL TANKS	35.5	-	K.1	-	1/5	N-S CAP	TYPE 2	8	60	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	36	-	K.1	-	2/5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	36.5	-	K.1	-	5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	37.3	-	K.1	.8	2/5	E-W CAP	TYPE 4	1	-	X8 REPAIRS AT THIS LOCATION
FINAL TANKS	38.9	-	K.1	-	5	N-S CAP	TYPE 2	12	12	
FINAL TANKS	12	-	M.1.1	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	13	-	M.1.8	-	5	E-W CAP	TYPE 3	8	-	
FINAL TANKS	13	-	M.1.3	-	5	E-W CAP	TYPE 3	48	-	
FINAL TANKS	13.1	-	M.1	-	5	N-S CAP	TYPE 4	4	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	13.5	-	M.1	-	5	N-S CAP	TYPE 4	4	-	
FINAL TANKS	13.8	-	M.1.8	-	5	DECK	TYPE 2	1	2	
FINAL TANKS	14	-	M.1.8	N.1	5	E-W CAP	TYPE 3	24	-	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	14	-	M.1.3	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	14.2	14.7	M.1	-	5	N-S CAP	TYPE 2	8	1	X8 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	14.3	-	M.1.2	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	15	-	M.1.9	-	5	E-W CAP	TYPE 2	2	2	X4 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	15	-	M.1.3	-	5	E-W CAP	TYPE 2	1	6	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	15	-	M.1.1	-	5	E-W CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	15.3	-	M.1	-	5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	15.5	-	M.1	-	5	N-S CAP	TYPE 4	7	-	X8 REPAIRS AT THIS LOCATION
FINAL TANKS	16	-	M.1.1	-	5	E-W CAP	TYPE 3	12	-	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	16	-	M.1	-	5	N-S CAP	TYPE 3	24	-	
FINAL TANKS	16.2	17	M.1	-	5	N-S CAP	TYPE 4	6	-	X5 REPAIRS AT THIS LOCATION
FINAL TANKS	16.8	-	M.1.8	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	17	-	M.1.7	-	4/5	E-W CAP	TYPE 2	2	1	
FINAL TANKS	17.3	-	M.1	-	5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	17.8	-	M.1.7	-	5	DECK	TYPE 2	2	1	
FINAL TANKS	18	-	M.1.2	-	5	E-W CAP	TYPE 3	6	-	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	18.2	-	M.1.8	-	5	DECK	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	18.6	-	M.1	-	5	N-S CAP	TYPE 4	5	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	19.7	-	M.1	-	5	N-S CAP	TYPE 3	24	-	
FINAL TANKS	19.8	-	M.1.8	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	19.9	-	M.1	-	5	N-S CAP	TYPE 3	10	-	
FINAL TANKS	20	21	M.1	-	5	N-S CAP	TYPE 4	6	-	X6 REPAIRS AT THIS LOCATION
FINAL TANKS	20	-	M.1.6	-	5	E-W CAP	TYPE 3	18	-	
FINAL TANKS	20	-	M.1.2	-	5	E-W CAP	TYPE 2	2	1	
FINAL TANKS	20	-	M.1.1	-	5	E-W CAP	TYPE 3	24	-	
FINAL TANKS	20	-	M.1.2	-	5	E-W CAP	TYPE 2	2	1	
FINAL TANKS	20.1	-	M.1.8	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	20.4	-	M.1	-	3	N-S CAP	TYPE 2	1	1	
FINAL TANKS	20.8	-	M.1.8	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	21	-	M.1.1	-	5	E-W CAP	TYPE 3	24	-	
FINAL TANKS	23	-	M.1.6	-	4/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	23	-	M.1.5	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	23	-	M.1.6	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	23.1	-	M.1	-	5	N-S CAP	TYPE 3	24	-	
FINAL TANKS	23.5	-	M.1	-	5	N-S CAP	TYPE 2	6	72	
FINAL TANKS	23.9	-	M.1.9	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	24	-	M.1.9	-	4/5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION

PHASE 2 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	24	-	M.1.7	-	4/5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	24	-	M.1.4	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	24	-	M.1.1	-	2	E-W CAP	TYPE 2	3	2	
FINAL TANKS	25	-	M.1.8	-	4/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	25	-	M.1.2	-	2/5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	25	-	M.1.2	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	25.4	-	M.1	-	3	N-S CAP	TYPE 2	1	1	
FINAL TANKS	26	-	M.1.4	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	26	-	M.1.3	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	26.1	-	M.1	-	3	N-S CAP	TYPE 2	1	1	
FINAL TANKS	26.2	-	M.1	-	3	N-S CAP	TYPE 4	8	-	
FINAL TANKS	26.3	-	M.1	-	3	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	26.9	-	M.1	-	3/5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	27	-	M.1.5	-	4/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	27.5	-	M.1	-	3	N-S CAP	TYPE 4	2	-	
FINAL TANKS	29.1.2	-	M.1	-	3/5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	29.1.2	-	M.1	-	3/5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	30	30.2	M.1	-	5	N-S CAP	TYPE 4	36	-	
FINAL TANKS	30	-	M.1.1	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	30	-	M.1.9	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	31	-	M.1	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	31	-	M.1.8	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	31.4	32	M.1	-	5	N-S CAP	TYPE 4	3	-	X12 REPAIRS AT THIS LOCATION
FINAL TANKS	32	33	M.1	-	5	N-S CAP	TYPE 2	4	1	X8 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	32	-	M.1.1	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	32	-	M.1.8	-	5	E-W CAP	TYPE 4	4	-	X5 REPAIRS AT THIS LOCATION
FINAL TANKS	32	-	M.1.8	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	33.8	-	M.1	M.1.4	5	DECK	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	34	-	M.1.9	-	4/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	34.5	-	M.1	-	3/5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	34.5	-	M.1	-	5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	35	-	M.1.7	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	35	-	M.1	-	5	E-W CAP	TYPE 2	18	6	
FINAL TANKS	37	-	M.1.2	-	5	E-W CAP	TYPE 3	24	-	
FINAL TANKS	37	-	M.1.9	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	37.1	-	M.1.1	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	38.6	-	M.1.5	-	5	DECK	TYPE 2	8	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38.1	-	M.1.7	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	11.1	-	N.8	-	5	E-W CAP	TYPE 4	5	-	
FINAL TANKS	11.1	-	N.1	-	4/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	11.1.2	-	N.5	-	5	DECK	TYPE 4	5	-	
FINAL TANKS	11.1.5	-	N.2	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	12	-	N	P	4	E-W CAP	TYPE 4	6	-	X13 REPAIRS AT THIS LOCATION
FINAL TANKS	13	-	N	-	4/5	E-W CAP	TYPE 2	3	10	
FINAL TANKS	13	-	N.8	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	13	-	N.7	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	13	-	N.1	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	13	-	N	-	4/5	E-W CAP	TYPE 2	4	6	
FINAL TANKS	13.8	-	N.4	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	14	-	N.1	-	4/5	E-W CAP	TYPE 2	6	6	
FINAL TANKS	14	-	N.2	-	4/5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	14	-	N.3	-	4/5	E-W CAP	TYPE 2	6	8	
FINAL TANKS	14	-	N.5	-	4/5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	14	-	N.7	-	4	E-W CAP	TYPE 2	4	4	
FINAL TANKS	14	-	N.7	-	5	E-W CAP	TYPE 3	48	-	
FINAL TANKS	14	-	N.4	N.8	5	E-W CAP	TYPE 2	4	4	X4 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	14	-	N.1	-	5	E-W CAP	TYPE 3	48	-	
FINAL TANKS	14	-	N	-	2	E-W CAP	TYPE 2	1	6	
FINAL TANKS	14	-	N.2	-	2/5	E-W CAP	TYPE 2	4	4	
FINAL TANKS	14.1	-	N.7	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	14.8	-	N.7	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	14.9	-	N.4	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	15	-	N.3	-	5	E-W CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	15	-	N	-	2/5	E-W CAP	TYPE 2	1	6	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	15.5	-	N	-	5	N-S CAP	TYPE 2	8	6	
FINAL TANKS	15.5	-	N	-	4/5	N-S CAP	TYPE 2	2	1	
FINAL TANKS	15.8	-	N.4	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	16	-	N.8	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	16	-	N	-	5	E-W CAP	TYPE 3	6	-	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	16.2	-	N.5	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	16.7	-	N	-	5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	16.8	-	N.8	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	17	-	N.5	-	5	E-W CAP	TYPE 2	1	24	

0 1 2 3 4 FT.
1/2"=1'-0"

NYC Environmental Protection BEDC/IHD

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

STATE OF NEW YORK — ILHAN TUTUNCU — LICENSED PROFESSIONAL ENGINEER

NYC Environmental Protection

ACCOUNTABLE MANAGER
FRANK GIARDINA

PORTFOLIO MANAGER
MATTHEW OSIT, PE

DEPUTY DIRECTOR, IN HOUSE DESIGN
KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 2 REPAIR SCHEDULE
SHEET 8 OF 14

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-525.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-518.00_531.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Plot Scale: 1:1
Date & Time Plotted: 10/20/2026 3:45 PM
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 2 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	17	-	N	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	17.6	-	N	-	1/5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	17.9	-	N.3	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	18	-	N.3	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	18	-	N.2	-	5	E-W CAP	TYPE 3	18	-	
FINAL TANKS	18	-	N	-	5	E-W CAP	TYPE 3	18	-	
FINAL TANKS	18.1	-	N.1	-	5	DECK	TYPE 4	4	-	
FINAL TANKS	18.5	-	N	-	5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	18.7	-	N.5	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	19	-	N.8	-	4/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	19	-	N.9	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	19	-	N.8	-	4/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	19	-	N.6	-	5	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	19.3	-	N	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	20	-	N.6	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	20.8	-	N.2	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	21.8	-	N.3	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	22	-	N.7	-	5	E-W CAP	TYPE 2	3	8	
FINAL TANKS	22	-	N.7	-	5	E-W CAP	TYPE 3	8	-	
FINAL TANKS	22	-	N.6	-	5	E-W CAP	TYPE 3	24	-	
FINAL TANKS	22	-	N.9	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	22.9	-	N.9	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	23	-	N	-	5	E-W CAP	TYPE 2	2	3	
FINAL TANKS	23	-	N.1	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	23	-	N.2	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	23	-	N.6	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	23	-	N.6	-	2/5	E-W CAP	TYPE 2	1	2	
FINAL TANKS	23.9	-	N.5	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	24	-	N.5	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	24	-	N.1	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	24	-	N.5	-	5	E-W CAP	TYPE 2	72	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	24	-	N.5	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	24	-	N.5	-	2/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	25	-	N.5	-	5	E-W CAP	TYPE 2	72	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	25.9	-	N.5	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	26	-	N	-	4	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	26	-	N	-	4/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	26	-	N.5	-	5	E-W CAP	TYPE 2	72	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	26	-	N.7	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	26.1	-	N	-	1/5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	27	-	N.8	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	27	-	N.1	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	27	-	N.5	-	5	E-W CAP	TYPE 2	72	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	27.1	-	N.5	-	5	E-W CAP	TYPE 2	72	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	29.1	-	N.6	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	30	-	N	-	5	E-W CAP	TYPE 3	24	-	
FINAL TANKS	30	-	N.5	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	30	-	N.5	N.7	2/5	E-W CAP	TYPE 4	6	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	30	-	N.7	-	4/5	E-W CAP	TYPE 4	24	-	
FINAL TANKS	30	-	N.8	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	31	-	N.4	0.7	2	E-W CAP	TYPE 2	6	4	X6 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	31	-	N.5	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	31	-	N.8	-	4/5	E-W CAP	TYPE 4	7	-	
FINAL TANKS	31	-	N.8	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	31.3	-	N.5	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	32	-	N.5	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	32	-	N.9	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	33	-	N	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	33	-	N.1	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	33	-	N.7	P	5	E-W CAP	TYPE 3	84	-	
FINAL TANKS	33.8	-	N.8	-	5	DECK	TYPE 2	24	24	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	34	-	N	-	2	E-W CAP	TYPE 4	4	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	34	-	N.1	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	34	-	N.4	-	2/5	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	34	-	N.7	-	4	E-W CAP	TYPE 4	3	-	
FINAL TANKS	34	-	N.8	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	34	-	N.9	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	34	-	N.9	-	2/5	E-W CAP	TYPE 2	8	1	
FINAL TANKS	35	-	N	-	4/5	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	35	-	N	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	35	-	N	-	2/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	35	-	N.1	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	35	-	N.8	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	36	-	N.2	-	2/5	E-W CAP	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION

PHASE 2 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	36	-	N	-	2/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	36.1	-	N.3	-	5	DECK	TYPE 2	8	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	36.1	-	N	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	36.1	-	N	-	5	N-S CAP	TYPE 4	18	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	36.9	-	N	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37	-	N.7	-	4	E-W CAP	TYPE 4	4	-	
FINAL TANKS	37	-	N.1	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	37	-	N.4	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	37	-	N.5	-	5	E-W CAP	TYPE 4	8	-	
FINAL TANKS	37.1	-	N	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.9	-	N	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3	-	N	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	37.3	-	N.5	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	37.3.1	-	N	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3.9	-	N	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38	-	N	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	38	-	N.1	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	38	-	N.5	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	38	-	N.9	-	5	E-W CAP	TYPE 4	2	-	X6 REPAIRS AT THIS LOCATION
FINAL TANKS	38	-	N.9	-	2/5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	38.1	-	N	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38.2	-	N.8	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38.1	-	N	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	38.1	-	N.5	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	11.1	-	P.1	-	4	E-W CAP	TYPE 4	6	-	
FINAL TANKS	11.1	-	P.7	-	5	E-W CAP	TYPE 2	1	2	
FINAL TANKS	11.1	-	P.1	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	11.1.8	-	P.2	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	12	-	P	-	2	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	12	-	P	-	2	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	13	-	P	-	4/5	E-W CAP	TYPE 2	3	8	
FINAL TANKS	13	-	P.4	-	4	E-W CAP	TYPE 2	1	1	
FINAL TANKS	14	-	P.6	-	4	E-W CAP	TYPE 4	4	-	
FINAL TANKS	14	-	P.4	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	14	-	P	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	14	-	P.1	P.5	2/5	E-W CAP	TYPE 2	3	3	X4 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	14.1	-	P.2	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	15	-	P	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	15	-	P.7	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	15.1	-	P.2	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	15.4	-	P.4	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	15.5	-	P	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	15.9	-	P.1	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	16	-	P	-	5	E-W CAP	TYPE 3	24	-	
FINAL TANKS	16.8	-	P.7	-	5	DECK	TYPE 2	2	4	
FINAL TANKS	17	-	P.3	-	4/5	E-W CAP	TYPE 3	10	-	
FINAL TANKS	17	-	P.8	-	4/5	E-W CAP	TYPE 2	3	1	
FINAL TANKS	17	-	P.8	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	17	-	P.3	-	5	E-W CAP	TYPE 3	48	-	
FINAL TANKS	17.8	-	P	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	17.9	-	P.4	-	5	DECK	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	18	-	P.1	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	18	-	P.3	-	4/5	E-W CAP	TYPE 2	6	1	
FINAL TANKS	18	-	P.5	-	5	E-W CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	18	-	P	-	5	E-W CAP	TYPE 3	24	-	
FINAL TANKS	18.9	-	P.2	-	5	DECK	TYPE 2	1	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	19	-	P.7	-	5	E-W CAP	TYPE 3	18	-	
FINAL TANKS	19	-	P.4	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	19	-	P.1	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	19	-	P.8	-	2/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	19.4	-	P	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	20	-	P.2	-	2	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	20.1	-	P.2	-	5	DECK	TYPE 2	2	2	
FINAL TANKS	20.2	-	P.8	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	20.6	-	P.5	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	20.8	-	P.5	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	20.8	-	P.8	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	21	-	P.5	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	21	-	P.1	-	5	E-W CAP	TYPE 3	15	-	
FINAL TANKS	21	-	P.1	-	2	E-W CAP	TYPE 2	2	2	
FINAL TANKS	21	-	P.2	P.5	2/5	E-W CAP	TYPE 2	4	1	X5 DEFECTS AT THIS REPAIR LOCATION

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 2 REPAIR SCHEDULE
SHEET 9 OF 14

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-526.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-516.00_537.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb
Date & Time Plotted: 10/20/2026 3:45 PM

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 2 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	21.1	-	P	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	22	-	P.1	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	23	-	P.1	-	4/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	23	-	P.8	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	23.5	-	P	-	5	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	23.8	-	P.2	-	5	DECK	TYPE 2	6	6	
FINAL TANKS	24	-	P.8	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	24	-	P.5	-	4/5	E-W CAP	TYPE 2	2	8	
FINAL TANKS	24	-	P.2	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	25	-	P.5	-	4/5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	25	-	P.3	-	5	E-W CAP	TYPE 3	18	-	
FINAL TANKS	25	-	P.1	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	26	-	P.9	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	26	-	P.8	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	26	-	P.9	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	27	-	P.7	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	27	-	P.7	-	2/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	27.9	-	P.3	-	5	DECK	TYPE 2	2	4	
FINAL TANKS	29.1.2	-	P.8	-	5	DECK	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	29.1.2	-	P.8	-	5	DECK	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	30	-	P.5	0.6	5	E-W CAP	TYPE 2	18	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	30	-	P.7	-	4	E-W CAP	TYPE 4	3	-	
FINAL TANKS	31	-	P.3	-	2	E-W CAP	TYPE 4	3	-	
FINAL TANKS	31	-	P.5	-	2	E-W CAP	TYPE 4	3	-	
FINAL TANKS	31	-	P.8	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	31.5	-	P.8	-	5	DECK	TYPE 2	8	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	32	-	P.1	-	5	E-W CAP	TYPE 4	3	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	32	-	P.2	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	32	-	P.3	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	32	-	P.7	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	32.3	-	P.7	-	5	DECK	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	33	-	P	-	5	E-W CAP	TYPE 4	5	-	
FINAL TANKS	33	-	P.2	-	4/5	E-W CAP	TYPE 4	5	-	
FINAL TANKS	33	-	P.3	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	33	-	P.5	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	33	-	P.9	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	33.8	-	P.8	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	34	-	P	-	5	E-W CAP	TYPE 2	18	18	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	34	-	P.1	-	4	E-W CAP	TYPE 4	6	-	
FINAL TANKS	34	-	P.5	-	4	E-W CAP	TYPE 4	3	-	
FINAL TANKS	34	-	P.8	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	36	-	P.3	-	4/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	36	-	P	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	36	-	P.9	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	36.1	-	P	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	36.1	-	P.9	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	36.9	-	P	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.1	-	P	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.9	-	P	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3	-	P	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	37.3	-	P.1	-	5	E-W CAP	TYPE 4	18	-	
FINAL TANKS	37.3.1	-	P	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3.9	-	P	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38	-	P.4	-	4/5	E-W CAP	TYPE 4	5	-	
FINAL TANKS	38	-	P	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	38	-	P.9	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	38	-	P.8	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	38.1	-	P	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38.1	-	P.9	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	11.1.2	-	Q.2	-	5	DECK	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	11.1.2	-	Q.8	-	5	DECK	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	11.1.9	-	Q.8	-	5	DECK	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	12	-	Q.9	-	4/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	12	-	Q.5	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	13	-	Q.7	-	4/5	E-W CAP	TYPE 3	24	-	
FINAL TANKS	13	-	Q.8	-	4	E-W CAP	TYPE 2	6	3	
FINAL TANKS	13	-	Q.7	-	5	E-W CAP	TYPE 4	8	-	
FINAL TANKS	13	-	Q.8	-	2/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	13	-	Q.8	-	2/5	E-W CAP	TYPE 4	8	-	
FINAL TANKS	13.1	-	Q.3	-	5	DECK	TYPE 4	1	-	

PHASE 2 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	13.9	-	Q.2	-	5	DECK	TYPE 2	4	4	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	14	-	Q.6	-	5	E-W CAP	TYPE 3	4	-	
FINAL TANKS	14	-	Q.5	-	5	E-W CAP	TYPE 2	3	3	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	14	-	Q.1	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	14	-	Q	-	5	E-W CAP	TYPE 3	24	-	
FINAL TANKS	14	-	Q.6	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	14.1	-	Q.7	-	5	DECK	TYPE 2	3	4	
FINAL TANKS	14.2	-	Q.2	-	5	DECK	TYPE 2	3	6	
FINAL TANKS	14.3	-	Q.4	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	15	-	Q.9	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	15	-	Q.5	-	5	E-W CAP	TYPE 4	2	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	15	-	Q.2	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	15	-	Q	-	2	E-W CAP	TYPE 4	3	-	
FINAL TANKS	15	-	Q.6	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	15.5	-	Q	-	5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	15.8	-	Q.2	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	16	-	Q.5	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	16	-	Q.7	-	5	E-W CAP	TYPE 3	8	-	
FINAL TANKS	16	-	Q	-	5	E-W CAP	TYPE 3	24	-	
FINAL TANKS	16.2	-	Q.7	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	16.7	-	Q.1	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	16.8	-	Q.3	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	16.8	-	Q.7	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	17	-	Q.8	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	17	-	Q.8	-	5	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	17	-	Q	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	17	-	Q.6	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	17.9	-	Q.3	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	18	-	Q.4	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	18	-	Q.3	-	5	E-W CAP	TYPE 3	3	-	
FINAL TANKS	18	-	Q	-	5	E-W CAP	TYPE 3	24	-	
FINAL TANKS	18.2	-	Q.3	-	5	DECK	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	19	-	Q.8	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	19	-	Q.7	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	19.4	-	Q	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	19.8	-	Q.4	-	5	DECK	TYPE 4	10	-	
FINAL TANKS	20	-	Q.3	-	5	E-W CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	20.7	-	Q.2	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	21	-	Q.2	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	21	-	Q	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	21	-	Q.5	-	2/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	22	-	Q	-	5	E-W CAP	TYPE 3	18	-	
FINAL TANKS	22	-	Q.1	-	2/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	23.9	-	Q.6	-	4/5	E-W CAP	TYPE 2	4	6	
FINAL TANKS	23.9	-	Q.6	-	4/5	E-W CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	23.9	-	Q.2	-	5	DECK	TYPE 2	6	6	
FINAL TANKS	23.9	-	Q.2	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	23.9	-	Q.1	-	5	DECK	TYPE 2	1	36	
FINAL TANKS	23.9	-	Q	-	5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	24	-	Q.6	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	24	-	Q.1	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	24	-	Q.1	-	4/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	24	-	Q.1	-	4/5	E-W CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	24	-	Q.2	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	24	-	Q	-	5	E-W CAP	TYPE 3	8	-	
FINAL TANKS	24	-	Q.2	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	25	-	Q.4	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	25	-	Q.5	-	5	E-W CAP	TYPE 2	72	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	25	-	Q.7	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	25	-	Q.2	-	2/5	E-W CAP	TYPE 2	3	1	
FINAL TANKS	25.8	-	Q.7	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	25.9	-	Q.8	-	5	DECK	TYPE 2	2	3	
FINAL TANKS	26	-	Q.3	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	26	-	Q	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	26	-	Q	-	5	E-W CAP	TYPE 2	8	15	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	26	-	Q.5	-	5	E-W CAP	TYPE 2	72	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	27	-	Q.2	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	27	-	Q.3	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	27.1	-	Q.1	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	27.1	-	Q.5	-	5	E-W CAP	TYPE 2	72	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	27.1	-	Q.8	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	29.1	-	Q.3	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	29.1	-	Q.4	-	4/5	E-W CAP	TYPE 3	30	1	
FINAL TANKS	29.1	-	Q.7	-	4	E-W CAP	TYPE 2	1	1	

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 2 REPAIR SCHEDULE
SHEET 10 OF 14

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-527.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\acostaml\jacobs-americas-01\d0729589\UR-S-516.00_531.00.dwg
Date & Time Plotted: 10/20/2026 3:45 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb
Last Date Saved: 10/20/2026 3:41 PM

PHASE 2 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	29.1	-	Q.7	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	30	-	Q.5	-	5	E-W CAP	TYPE 4	1	-	X12 REPAIRS AT THIS LOCATION
FINAL TANKS	30.8	-	Q.7	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	31	-	Q	-	5	E-W CAP	TYPE 3	30	-	
FINAL TANKS	31	-	Q.1	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	31	-	Q.5	-	5	E-W CAP	TYPE 4	2	-	X7 REPAIRS AT THIS LOCATION
FINAL TANKS	31	-	Q.7	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	32	-	Q	-	4/5	E-W CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	32	-	Q.6	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	33	-	Q	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	33	-	Q	-	5	E-W CAP	TYPE 4	18	-	
FINAL TANKS	33	-	Q.2	-	5	E-W CAP	TYPE 4	8	-	
FINAL TANKS	33	-	Q.3	Q.5	4/5	E-W CAP	TYPE 4	3	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	33	-	Q.5	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	33	-	Q.5	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	33	-	Q.5	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	33	-	Q.9	-	2	E-W CAP	TYPE 4	3	-	
FINAL TANKS	33.9	-	Q.8	-	5	DECK	TYPE 2	24	24	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	34	-	Q.9	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	34	-	Q.9	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	35	-	Q.3	-	4	E-W CAP	TYPE 2	2	1	
FINAL TANKS	35	-	Q.4	-	4	E-W CAP	TYPE 2	2	1	
FINAL TANKS	35	-	Q.5	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	35	-	Q.5	-	2	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	35.5	-	Q	-	3/5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	36	-	Q.5	-	4	E-W CAP	TYPE 2	5	1	
FINAL TANKS	36	-	Q	-	5	E-W CAP	TYPE 4	24	-	
FINAL TANKS	36	-	Q.5	-	5	E-W CAP	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	36	-	Q.5	-	2/5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	36.1	-	Q	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	36.9	-	Q	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37	-	Q.4	Q.6	4	E-W CAP	TYPE 4	6	-	X5 REPAIRS AT THIS LOCATION
FINAL TANKS	37.1	-	Q	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.9	-	Q	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3	-	Q	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	37.3	-	Q.8	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	37.3.1	-	Q	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3.3	-	Q.3	-	5	DECK	TYPE 4	3	-	
FINAL TANKS	37.3.9	-	Q	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38	-	Q.1	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	38.1	-	Q	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38.1	-	Q	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38.9	-	Q.9	-	5	DECK	TYPE 4	3	-	
FINAL TANKS	38.1	-	Q	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38.1	-	Q.4	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	38.1	-	Q.6	-	2/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	38.1	-	Q.3	-	2/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	38.1	-	Q.6	-	2/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	11.1.8	-	R.2	-	5	DECK	TYPE 2	5	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	12	-	R.8	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	13	-	R.5	-	5	N-S CAP	TYPE 3	8	-	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	13	-	R	-	2/5	E-W CAP	TYPE 4	24	-	
FINAL TANKS	13	-	R.2	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	13.1	-	R.6	-	5	DECK	TYPE 4	8	-	
FINAL TANKS	13.2	-	R.5	-	5	N-S CAP	TYPE 4	10	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	13.9	-	R.1	-	5	DECK	TYPE 2	4	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	14	-	R.5	-	5	E-W CAP	TYPE 3	18	-	
FINAL TANKS	14	-	R	-	5	E-W CAP	TYPE 2	2	4	
FINAL TANKS	14	-	R.4	-	2/5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	14.6	-	R.5	-	5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	15	-	R.4	R.6	5	E-W CAP	TYPE 2	8	2	X10 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	15	-	R.3	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	15	-	R.2	-	5	E-W CAP	TYPE 2	3	2	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	15.2	15.9	R.5	-	5	N-S CAP	TYPE 4	4	-	X6 REPAIRS AT THIS LOCATION
FINAL TANKS	15.4	-	R.9	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	15.5	-	R	-	5	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	16.7	-	R.5	-	5	N-S CAP	TYPE 3	60	-	
FINAL TANKS	16.8	-	R.6	-	5	E-W CAP	TYPE 2	4	4	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	17	-	R.6	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	17	-	R.6	-	5	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION

PHASE 2 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	17	-	R.4	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	17.8	-	R.5	-	5	N-S CAP	TYPE 3	48	-	
FINAL TANKS	18	-	R.6	-	5	E-W CAP	TYPE 3	2	-	
FINAL TANKS	18	-	R.4	-	5	E-W CAP	TYPE 3	4	-	
FINAL TANKS	18	-	R	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	18.5	-	R.1	-	5	DECK	TYPE 2	6	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	19	-	R	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	19.2	-	R.5	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	19.8	-	R.6	-	5	DECK	TYPE 2	4	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	20	-	R.3	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	20.5	-	R.2	-	2/5	E-W CAP	TYPE 3	5	-	
FINAL TANKS	20.9	-	R	-	3/5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	21	-	R.1	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	21	-	R	-	5	E-W CAP	TYPE 4	5	-	
FINAL TANKS	21.8	-	R.9	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	22	-	R.1	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	22	-	R.4	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	22.8	-	R.5	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	23	-	R.4	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	23	-	R.4	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	23	-	R.6	-	5	E-W CAP	TYPE 3	6	-	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	23	-	R.8	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	23	-	R.5	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	23	-	R.3	-	2/5	E-W CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	23.3	-	R.8	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	23.7	-	R.8	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	24	-	R.1	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	24	-	R.1	-	4	E-W CAP	TYPE 4	6	-	
FINAL TANKS	24	-	R	-	4	E-W CAP	TYPE 4	12	-	
FINAL TANKS	24	-	R.1	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	24	-	R.1	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	24	-	R.5	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	24	-	R.9	-	2/5	E-W CAP	TYPE 2	2	3	
FINAL TANKS	24	-	R.8	-	5	DECK	TYPE 4	15	-	
FINAL TANKS	24	-	R.1	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	24.5	-	R.5	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	24.6	-	R.5	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	25	-	R.7	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	25	-	R.1	-	4/5	E-W CAP	TYPE 4	4	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	25	-	R.4	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	25	-	R.9	-	2	E-W CAP	TYPE 4	8	-	
FINAL TANKS	25.1	-	R.9	-	5	DECK	TYPE 2	2	10	
FINAL TANKS	26	-	R.2	-	4/5	E-W CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	26.5	-	R.6	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	27.9	-	R.4	-	5	DECK	TYPE 2	2	2	
FINAL TANKS	29.1	-	R.2	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	29.1.6	-	R.5	-	1/5	N-S BEAM	TYPE 4	2	-	
FINAL TANKS	29.1.6	-	R.5	-	1/5	N-S BEAM	TYPE 4	2	-	
FINAL TANKS	29.1.8	-	R.8	-	5	DECK	TYPE 2	12	18	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	30	-	R.7	-	5	E-W CAP	TYPE 3	8	-	
FINAL TANKS	30.1	-	R.5	-	3	N-S BEAM	TYPE 4	3	-	
FINAL TANKS	31	-	R.3	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	32	-	R.2	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	32	-	R.4	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	32	-	R.4	-	5	E-W CAP	TYPE 3	3	-	
FINAL TANKS	32	-	R.6	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	32	-	R.7	-	5	E-W CAP	TYPE 2	4	1	
FINAL TANKS	32.5	-	R.4	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	33	-	R.2	R.4	2/5	E-W CAP	TYPE 2	6	1	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	33.2	-	R.2	-	5	DECK	TYPE 4	3	-	
FINAL TANKS	33.9	-	R.7	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	34	-	R.3	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	34	-	R.4	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	34	-	R.8	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	35	-	R.1	-	4	E-W CAP	TYPE 4	4	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	35	-	R.3	-	5	E-W CAP	TYPE 4	6	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	35	-	R.8	-	5	E-W CAP	TYPE 2	2	1	
FINAL TANKS	36	-	R.2	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	36	-	R.3	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	36	-	R.1	-	2	E-W CAP	TYPE 4	4	-	
FINAL TANKS	36.1	-	R.1	-	5	DECK	TYPE 2	8	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	36.1	-	R	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 2 REPAIR SCHEDULE
SHEET 11 OF 14

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-528.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-516.00_531.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Date & Time Plotted: 10/20/2026 3:45 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 2 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	36.7	-	R	-	5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	36.9	-	R	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37	37.6	R.5	-	5	N-S CAP	TYPE 3	72	-	
FINAL TANKS	37	-	R.2	-	4/5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	37	-	R.4	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	37	-	R.6	-	5	E-W CAP	TYPE 3	24	-	
FINAL TANKS	37.1	-	R	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3	-	R.5	-	5	N-S CAP	TYPE 3	24	-	
FINAL TANKS	37.3	-	R.5	-	5	N-S CAP	TYPE 3	72	-	
FINAL TANKS	37.9	-	R	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3	-	R.7	-	5	E-W CAP	TYPE 4	2	-	X10 REPAIRS AT THIS LOCATION
FINAL TANKS	37.3.1	-	R.7	-	5	DECK	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3.2	-	R.2	-	5	DECK	TYPE 4	6	-	
FINAL TANKS	37.3.5	-	R.5	-	5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	37.3.9	-	R.7	-	5	DECK	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37.3.9	-	R	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38	-	R.7	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	38	-	R.9	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	38.1	-	R	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38.5	-	R	-	5	N-S CAP	TYPE 2	2	2	
FINAL TANKS	38.5	-	R	-	1/5	N-S CAP	TYPE 2	3	1	
FINAL TANKS	38.1	-	R.4	-	2/5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	38.1	-	R.3	-	2	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	11.1	-	S.5	-	5	E-W CAP	TYPE 2	6	6	
FINAL TANKS	11.1.9	-	S.2	-	5	DECK	TYPE 2	12	7	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	12	-	S.4	-	5	E-W CAP	TYPE 4	9	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	12	-	S.4	-	5	E-W CAP	TYPE 2	3	4	X4 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	13	-	S.3	-	4	E-W CAP	TYPE 4	3	-	
FINAL TANKS	13	-	S.8	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	13	-	S.3	-	5	E-W CAP	TYPE 4	3	-	X6 REPAIRS AT THIS LOCATION
FINAL TANKS	13	-	S	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	13.7	-	S.3	-	5	DECK	TYPE 4	4	-	
FINAL TANKS	13.9	-	S	-	1/5	N-S CAP	TYPE 4	4	-	
FINAL TANKS	14	-	S.4	-	4	E-W CAP	TYPE 2	2	2	
FINAL TANKS	14	-	S.5	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	14	-	S.2	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	14	-	S	-	5	E-W CAP	TYPE 3	18	-	
FINAL TANKS	14.8	-	S	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	15	-	S	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	15.5	-	S	-	5	N-S CAP	TYPE 2	2	2	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	15.5	-	S.4	-	5	DECK	TYPE 2	6	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	15.8	-	S.7	-	5	DECK	TYPE 4	3	-	
FINAL TANKS	16	-	S	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	16	-	S.4	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	16.8	-	S.3	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	17	-	S.1	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	17	-	S.2	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	17	-	S.8	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	18	-	S.3	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	18	-	S.2	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	18	-	S.1	-	5	E-W CAP	TYPE 2	1	5	
FINAL TANKS	18	-	S.4	-	2	E-W CAP	TYPE 4	3	-	
FINAL TANKS	18	-	S.7	S.9	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	18.3	-	S.4	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	19	-	S.1	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	19.6	-	S.7	-	5	DECK	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	20	-	S.9	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	20.6	-	S	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	21	-	S.5	-	4/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	21.8	-	S.5	-	5	DECK	TYPE 2	8	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	22	-	S.4	-	4/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	22	-	S.4	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	22	-	S.5	-	2	E-W CAP	TYPE 2	2	1	
FINAL TANKS	23	-	S.7	-	4/5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	23	-	S.5	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	23	-	S.4	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	23	-	S.3	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	23	-	S.2	-	4/5	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	23	-	S.1	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	23	-	S.8	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	23	-	S.9	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION

PHASE 2 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	23.4	-	S	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	24	-	S.7	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	24	-	S.7	-	2/5	E-W CAP	TYPE 4	8	-	
FINAL TANKS	24	-	S.3	-	2/5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	24	-	S.2	-	2/5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	24	-	S	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	25	-	S.4	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	25	-	S.3	-	5	E-W CAP	TYPE 2	1	2	
FINAL TANKS	25.2	-	S.8	-	5	DECK	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	26	-	S.9	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	27	-	S.5	-	5	E-W CAP	TYPE 2	36	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	27	-	S.7	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	27.6	-	S.7	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	27.1	-	S.5	-	5	E-W CAP	TYPE 2	72	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	27.1	-	S.9	-	2/5	E-W CAP	TYPE 4	8	-	
FINAL TANKS	27.1	-	S.9	-	2/5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	27.1	-	S.7	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	27.1	-	S.6	-	2/5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	29.1	-	S.1	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	29.1	-	S.2	-	4	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	29.1	-	S.2	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	29.1	-	S.2	-	5	E-W CAP	TYPE 3	10	-	
FINAL TANKS	29.1	-	S.3	-	4	E-W CAP	TYPE 4	6	-	
FINAL TANKS	29.1	-	S.5	-	5	E-W CAP	TYPE 4	1	-	X11 REPAIRS AT THIS LOCATION
FINAL TANKS	29.1	-	S.6	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	29.1	-	S.6	-	5	E-W CAP	TYPE 3	6	-	
FINAL TANKS	29.1	-	S.7	-	4/5	E-W CAP	TYPE 4	4	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	30	-	S	-	5	E-W CAP	TYPE 3	6	-	
FINAL TANKS	30	-	S.1	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	30	-	S.1	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	30	-	S.3	-	4/5	E-W CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	30	-	S.5	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	30	-	S.7	-	5	E-W CAP	TYPE 2	24	24	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	30	-	S.8	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	30	-	S.9	-	4/5	E-W CAP	TYPE 4	5	-	
FINAL TANKS	30.5	-	S	-	5	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	31	-	S	-	5	E-W CAP	TYPE 4	8	-	
FINAL TANKS	31	-	S.3	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	31	-	S.4	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	31	-	S.4	-	2/5	E-W CAP	TYPE 2	4	12	
FINAL TANKS	31	-	S.5	-	4/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	31	-	S.8	-	2	E-W CAP	TYPE 2	4	4	
FINAL TANKS	31	-	S.9	-	4/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	32	-	S.1	-	4	E-W CAP	TYPE 4	5	-	
FINAL TANKS	32	-	S.2	-	4	E-W CAP	TYPE 2	2	2	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	32	-	S.3	-	5	E-W CAP	TYPE 3	48	-	
FINAL TANKS	32	-	S.5	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	32.4	-	S	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	33	-	S	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	33	-	S.1	-	4	E-W CAP	TYPE 4	4	-	
FINAL TANKS	33	-	S.2	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	33	-	S.4	-	2/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	34	-	S.1	-	4	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	34.2	-	S	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	35	-	S.5	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	35	-	S.2	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	35	-	S.5	-	5	E-W CAP	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	35	-	S.5	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	35	-	S.6	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	35	-	S.9	-	5	E-W CAP	TYPE 3	4	-	
FINAL TANKS	36	36.9	S	-	5	N-S CAP	TYPE 1	120	60	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	36	-	S.1	-	5	E-W CAP	TYPE 3	11	-	
FINAL TANKS	37	-	S.2	-	4	E-W CAP	TYPE 4	3	-	
FINAL TANKS	37	-	S.3	-	4	E-W CAP	TYPE 4	3	-	
FINAL TANKS	37	-	S.5	-	4	E-W CAP	TYPE 4	3	-	
FINAL TANKS	37	-	S.5	-	2	E-W CAP	TYPE 4	4	-	
FINAL TANKS	37.1	-	S	-	3	N-S CAP	TYPE 4	3	-	
FINAL TANKS	37.8	-	S.4	-	5	DECK	TYPE 4	4	-	
FINAL TANKS	37.3.5	-	S	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	38	-	S.1	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	38	-	S.5	-	5	E-W CAP	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	38	-	S.4	-	2	E-W CAP	TYPE 4	3	-	
FINAL TANKS	38.1	-	S.5	-	4/5	N-S CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	38.7	-	S	-	5	N-S CAP	TYPE 4	8	-	

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-518.00_531.00.dwg

Last Date Saved: 10/20/2026 3:41 PM
Date & Time Plotted: 10/20/2026 3:45 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 2 REPAIR SCHEDULE
SHEET 12 OF 14

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-529.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 2 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	38.7	-	S	-	3/5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	38.9	-	S	-	3/5	N-S CAP	TYPE 2	2	2	
FINAL TANKS	38.1	-	S.1	S.7	5	E-W CAP	TYPE 4	4	-	X10 REPAIRS AT THIS LOCATION
FINAL TANKS	38.1	-	S.9	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	38.1	-	S.1	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	12	-	T.8	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	13.1	-	T.6	-	5	DECK	TYPE 4	4	-	
FINAL TANKS	14	-	T	-	2/5	E-W CAP	TYPE 3	18	-	
FINAL TANKS	14.1	-	T.4	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	14.2	-	T.3	-	5	DECK	TYPE 2	1	3	
FINAL TANKS	14.2	-	T.7	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	14.6	-	T	-	5	N-S CAP	TYPE 2	7	2	
FINAL TANKS	15	-	T.1	-	5	E-W CAP	TYPE 4	10	-	
FINAL TANKS	15.2	-	T.4	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	15.5	-	T	-	5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	15.9	-	T.1	-	5	DECK	TYPE 2	1	3	
FINAL TANKS	16	-	T	-	5	E-W CAP	TYPE 3	8	-	
FINAL TANKS	16.8	-	T.3	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	17	-	T.5	-	2/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	18	-	T.4	-	2/5	E-W CAP	TYPE 4	8	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	18.2	-	T	-	5	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	18.2	-	T.3	-	5	DECK	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	18.5	-	T	-	5	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	19	-	T.4	-	4	E-W CAP	TYPE 4	4	-	
FINAL TANKS	19	-	T.7	-	4/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	19.1	-	T.3	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	19.4	-	T	-	5	N-S CAP	TYPE 4	2	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	19.8	-	T.3	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	20	-	T.5	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	20	-	T.6	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	20	-	T.7	-	2/5	E-W CAP	TYPE 4	6	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	20.1	-	T	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	20.6	-	T.7	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	21	-	T.2	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	21	-	T.6	-	2/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	22	-	T.9	-	4/5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	22	-	T.7	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	22	-	T.8	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	22	-	T.9	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	22	-	T.2	-	2/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	22	-	T.9	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	22	-	T.2	-	2	E-W CAP	TYPE 4	3	-	
FINAL TANKS	22.9	-	T.8	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	22.9	-	T	-	2/5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	23	-	T.7	-	4	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	23	-	T.7	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	23	-	T.8	-	5	E-W CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	23	-	T.9	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	23	-	T.9	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	23	-	T.4	-	2	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	23	-	T.3	-	2/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	24	-	T.9	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	24	-	T.6	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	24	-	T.8	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	24.3	-	T.3	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	24.5	-	T	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	25	-	T.6	-	2	E-W CAP	TYPE 2	1	1	
FINAL TANKS	25	-	T.5	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	25	-	T.4	-	2/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	25.1	-	T.2	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	25.3	-	T	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	25.9	-	T.8	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	25.9	-	T.2	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	26	-	T.8	-	4	E-W CAP	TYPE 4	3	-	
FINAL TANKS	26	-	T.7	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	26	-	T.6	-	4	E-W CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	26	-	T.2	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	26	-	T	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	26	-	T	U	5	E-W CAP	TYPE 2	1	1	X10 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	26.3	-	T	-	3/5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	27	-	T.9	-	2	E-W CAP	TYPE 4	5	-	
FINAL TANKS	27.1	-	T.5	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	27.1	-	T.5	-	2/5	E-W CAP	TYPE 2	1	1	

PHASE 2 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	27.1	-	T.2	-	2/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	29.1	-	T	-	5	E-W CAP	TYPE 3	24	-	
FINAL TANKS	29.1	-	T.1	-	4/5	E-W CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	29.1	-	T.5	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	29.1	-	T.8	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	29.1.2	-	T.5	-	5	DECK	TYPE 2	10	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	30	-	T.1	-	2	E-W CAP	TYPE 2	2	2	X4 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	30	-	T.6	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	31	-	T.5	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	32	-	T.2	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	32	-	T.5	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	32	-	T.6	-	2	E-W CAP	TYPE 4	5	-	
FINAL TANKS	32	-	T.7	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	32	-	T.9	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	32	-	T.7	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	32	-	T.9	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	33	-	T	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	33	-	T.5	T.7	4	E-W CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	33	-	T.6	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	34	-	T.4	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	34	-	T.5	-	4	E-W CAP	TYPE 4	4	-	
FINAL TANKS	34	-	T.5	U	2	E-W CAP	TYPE 4	3	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	35	-	T.1	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	35	-	T.3	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	35	-	T.6	-	2	E-W CAP	TYPE 2	3	1	
FINAL TANKS	35	-	T.9	-	2/5	E-W CAP	TYPE 2	4	4	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	35.3	-	T	-	5	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	35.3	-	T	-	1/5	N-S CAP	TYPE 4	4	-	
FINAL TANKS	36	-	T.5	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	36	-	T.9	-	5	E-W CAP	TYPE 4	5	-	
FINAL TANKS	36	-	T.5	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	36.1	-	T	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	36.1	-	T	-	1	N-S CAP	TYPE 4	2	-	
FINAL TANKS	36.7	-	T	-	1	N-S CAP	TYPE 4	2	-	
FINAL TANKS	36.8	-	T.8	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	36.9	-	T	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	37	-	T.6	-	4	E-W CAP	TYPE 2	1	1	
FINAL TANKS	37	-	T.9	-	4	E-W CAP	TYPE 2	1	1	
FINAL TANKS	37.2	-	T	-	5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	37.3	-	T	-	5	N-S CAP	TYPE 3	30	1	
FINAL TANKS	37.3	-	T	-	5	N-S CAP	TYPE 3	48	-	
FINAL TANKS	37.3	-	T.7	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	37.3.5	-	T	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	37.3.5	-	T	-	1	N-S CAP	TYPE 4	2	-	
FINAL TANKS	38	-	T.1	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	38.1	-	T	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38.1	-	T	-	5	E-W CAP	TYPE 2	1	-	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	38.1	-	T.9	-	5	E-W CAP	TYPE 4	36	-	
FINAL TANKS	38.1	-	T.8	-	2	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	11.1.8	-	U.4	-	5	DECK	TYPE 2	8	10	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	12	-	U	-	5	E-W CAP	TYPE 2	36	24	
FINAL TANKS	12	-	U.7	-	4	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	12	-	U.4	-	5	E-W CAP	TYPE 4	4	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	13	-	U	-	4/5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	13.8	-	U.4	-	5	DECK	TYPE 2	6	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	14	-	U	-	4/5	E-W CAP	TYPE 2	3	3	
FINAL TANKS	14	-	U	-	4/5	E-W CAP	TYPE 3	6	-	
FINAL TANKS	14.2	-	U	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	15	-	U.4	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	15.9	-	U.7	-	5	DECK	TYPE 2	6	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	16	-	U.4	-	2/5	E-W CAP	TYPE 2	3	3	
FINAL TANKS	16	-	U.4	-	5	E-W CAP	TYPE 4	2	-	X12 REPAIRS AT THIS LOCATION
FINAL TANKS	17	-	U.4	-	5	E-W CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	17	-	U.3	-	4/5	E-W CAP	TYPE 4	7	-	
FINAL TANKS	17	-	U.9	-	4/5	E-W CAP	TYPE 4	5	-	
FINAL TANKS	17.8	-	U.5	-	5	DECK	TYPE 2	1	4	
FINAL TANKS	18	-	U.4	-	2	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	18	-	U.5	-	2/5	E-W CAP	TYPE 2	6	2	
FINAL TANKS	18.1	-	U.6	-	5	DECK	TYPE 2	8	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	19	-	U.5	-	2/5	E-W CAP	TYPE 2	3	1	
FINAL TANKS	19	-	U.5	-	2/5	E-W CAP	TYPE 2	4	2	
FINAL TANKS	19	-	U.8	-	5	E-W CAP	TYPE 4	6	-	

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 2 REPAIR SCHEDULE
SHEET 13 OF 14

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-530.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-516.00_531.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb
Date & Time Plotted: 10/20/2026 3:45 PM

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 2 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	21	-	U.4	-	2/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	22	-	U	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	22	-	U.4	-	2/5	E-W CAP	TYPE 4	10	-	
FINAL TANKS	22	-	U.4	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	22	-	U.8	-	2/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	22	-	U.9	-	2	E-W CAP	TYPE 4	12	-	
FINAL TANKS	23	-	U.6	-	5	E-W CAP	TYPE 2	3	2	
FINAL TANKS	23	-	U	V	5	E-W CAP	TYPE 2	1	1	X7 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	23	-	U.8	-	2	E-W CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	23	-	U.7	-	5	E-W CAP	TYPE 1	72	36	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	23.9	-	U.3	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	25	-	U.8	-	2/5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	25.9	-	U.3	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	25.9	-	U.3	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	26	-	U.3	-	5	E-W CAP	TYPE 2	1	1	X7 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	26	-	U.8	-	2/5	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	26	-	U.4	-	2	E-W CAP	TYPE 4	3	-	
FINAL TANKS	26.5	-	U	-	3/5	N-S CAP	TYPE 4	12	-	
FINAL TANKS	27	-	U	-	2/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	27	-	U	-	2/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	27	-	U.8	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	27	-	U.3	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	27	-	U.9	-	5	E-W CAP	TYPE 2	6	5	
FINAL TANKS	27.1	-	U.5	-	2/5	E-W CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	27.1	-	U.9	-	2	E-W CAP	TYPE 2	2	2	
FINAL TANKS	29.1.1	-	U.6	-	5	DECK	TYPE 2	7	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	30	-	U.9	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	30	-	U.4	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	30	-	U.6	-	5	E-W CAP	TYPE 2	4	2	
FINAL TANKS	30.7	-	U	-	5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	30.8	-	U	-	1	N-S CAP	TYPE 4	1	-	
FINAL TANKS	31.8	-	U.5	-	5	DECK	TYPE 2	1	1	X6 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	32	-	U	-	2/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	32.2	-	U	-	5	N-S CAP	TYPE 4	6	-	
FINAL TANKS	32.5	-	U	-	3/5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	33	-	U	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	33	-	U.8	-	4/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	33	-	U.5	-	5	E-W CAP	TYPE 2	2	1	
FINAL TANKS	34	-	U.5	-	4/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	35	-	U	-	5	N-S CAP	TYPE 4	2	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	35	-	U.3	-	4/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	36	-	U.8	-	2	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	36.3	-	U.3	-	2	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	36.7	-	U	-	5	N-S CAP	TYPE 4	6	-	
FINAL TANKS	37.9	-	U	-	5	N-S CAP	TYPE 4	4	-	
FINAL TANKS	37.3	-	U	-	5	E-W CAP	TYPE 4	18	-	
FINAL TANKS	37.3	-	U.3	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	37.3.1	-	U.3	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	37.3.5	-	U	-	5	N-S CAP	TYPE 4	8	-	
FINAL TANKS	38.5	-	U	-	5	N-S CAP	TYPE 4	6	-	
FINAL TANKS	38.5	-	U	-	3	N-S CAP	TYPE 4	1	-	
FINAL TANKS	38.5	-	U	-	3/5	N-S CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	38.1.3	-	U.9	-	5	E-W CAP	TYPE 4	7	-	
FINAL TANKS	18	-	U.1	-	2/5	E-W CAP	TYPE 2	3	4	
FINAL TANKS	18.1	-	U.1	-	5	DECK	TYPE 2	9	9	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	21	-	U.1	-	4/5	E-W CAP	TYPE 2	11	2	
FINAL TANKS	27	-	U.1	-	2/5	E-W CAP	TYPE 2	18	1	
FINAL TANKS	27	-	U.1	-	2/5	E-W CAP	TYPE 2	1	3	
FINAL TANKS	27	-	U.1	-	2/5	E-W CAP	TYPE 2	8	5	
FINAL TANKS	30.9	-	U.1	-	5	DECK	TYPE 2	1	2	
FINAL TANKS	31.8	-	U.1	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	35	-	U.1	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	15	-	U.2	-	2	E-W CAP	TYPE 2	3	4	
FINAL TANKS	18	-	U.2	-	2/5	E-W CAP	TYPE 4	7	-	
FINAL TANKS	37.3	-	U.2	-	5	E-W CAP	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	37.3	-	U.2	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	16.1	-	V.7	-	5	DECK	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	18.6	-	V	-	1	N-S CAP	TYPE 2	2	1	
FINAL TANKS	21	-	V.2	-	4/5	E-W CAP	TYPE 2	8	2	
FINAL TANKS	21.4	-	V.1	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	22	-	V.3	-	2/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	22	-	V.2	V.5	4/5	E-W CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION

PHASE 2 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	23	-	V	W	5	E-W CAP	TYPE 2	1	1	X4 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	23	-	V	W	5	E-W CAP	TYPE 4	4	-	X12 REPAIRS AT THIS LOCATION
FINAL TANKS	23	-	V.2	-	4/5	E-W CAP	TYPE 2	2	2	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	24	-	V.3	-	2/5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	24	-	V.3	-	2/5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	24	-	V.3	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	24	-	V.1	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	24.1	-	V.2	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	25	-	V	-	2/5	E-W CAP	TYPE 4	4	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	25	-	V.1	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	25	-	V	-	4/5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	25.6	-	V.2	-	5	DECK	TYPE 2	8	5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	26	-	V.9	-	2/5	E-W CAP	TYPE 2	3	6	
FINAL TANKS	26	-	V.2	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	26.1	-	V.3	-	5	DECK	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	27	-	V.2	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	27	-	V.6	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	27	-	V	-	2	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	27.1	-	V.4	-	2	E-W CAP	TYPE 2	1	1	
FINAL TANKS	27.1	-	V	-	5	E-W CAP	TYPE 2	1	2	
FINAL TANKS	29.1.7	-	V.5	-	5	DECK	TYPE 2	6	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	30	-	V.2	-	2	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	30	-	V.5	-	4/5	E-W CAP	TYPE 2	1	4	
FINAL TANKS	31	-	V.4	-	2/5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	31	-	V.2	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	31	-	V.4	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	32	-	V.8	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	32	-	V.4	-	2/5	E-W CAP	TYPE 2	1	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	32	-	V.8	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	33	-	V.6	-	5	DECK	TYPE 4	10	-	
FINAL TANKS	33	-	V.6	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	33	-	V	-	4/5	E-W CAP	TYPE 2	4	4	
FINAL TANKS	33.6	-	V.2	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	34	-	V.6	-	2/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	34	-	V.1	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	34	-	V.1	-	4	E-W CAP	TYPE 4	3	-	
FINAL TANKS	35	-	V.2	-	2/5	E-W CAP	TYPE 2	2	3	
FINAL TANKS	35	-	V.3	-	2/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	35	-	V	-	5	E-W CAP	TYPE 2	36	48	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	35.4	-	V	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	36	-	V.5	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	36.1	-	V	-	3/5	N-S CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	36.1	-	V	-	3/5	N-S CAP	TYPE 2	2	3	
FINAL TANKS	36.2	-	V.5	-	5	DECK	TYPE 2	4	4	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	36.6	-	V	-	1	N-S CAP	TYPE 4	2	-	
FINAL TANKS	36.8	36.9	V	-	3	N-S CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	37.1	-	V	-	3/5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	37.1	-	V	-	5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	37.5	-	V	-	1/5	N-S CAP	TYPE 2	2	1	
FINAL TANKS	37.3.1	-	V	-	5	N-S CAP	TYPE 3	60	-	
FINAL TANKS	37.3.1	-	V	-	5	N-S CAP	TYPE 2	3	2	
FINAL TANKS	38	-	V.7	-	5	E-W CAP	TYPE 3	72	-	
FINAL TANKS	38.1	-	V	-	1/5	N-S CAP	TYPE 4	12	-	
FINAL TANKS	11.1	-	W	-	5	E-W CAP	TYPE 2	1	1	X6 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	12.5	-	W.6	-	5	DECK	TYPE 2	6	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	13	-	W.4	-	4	E-W CAP	TYPE 2	1	1	
FINAL TANKS	13	-	W	-	4/5	E-W CAP	TYPE 2	1	2	
FINAL TANKS	13	-	W.3	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	14.1	-	W.2	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	15	-	W.1	-	2/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	15.5	-	W	-	3/5	N-S CAP	TYPE 2	6	4	
FINAL TANKS	15.8	-	W.1	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	18.6	-	W.8	-	5	DECK	TYPE 4	3	-	
FINAL TANKS	19	-	W.1	-	5	E-W CAP	TYPE 3	6	-	
FINAL TANKS	38.9	-	W	-	1	N-S CAP	TYPE 2	1	1	

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 2 REPAIR SCHEDULE
SHEET 14 OF 14

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-531.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00" x 34.00" Inches)
Drawing File Name & Drive Location: C:\Users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-518.00_531.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Plot Scale: 1:1
Date & Time Plotted: 10/20/2026 3:46 PM
Plot Style Table: BEDC_Acad(N).ctb

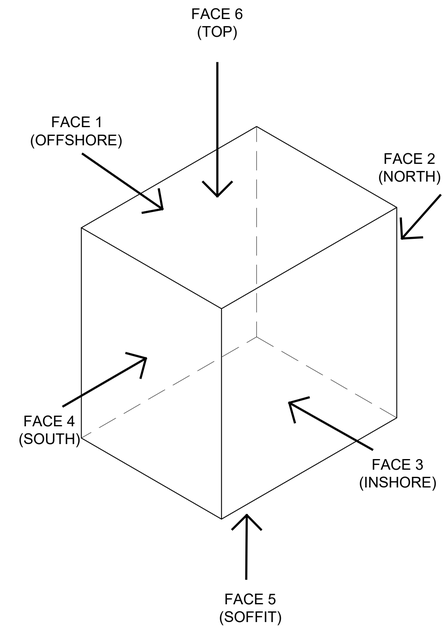
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 3 SCHEDULE										
LOCATION								DETERIORATED AREA		
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT	REPAIR TYPE	LENGTH (IN.)	WIDTH (IN.)	FULL NOTES
	START	END	START	END						
FINAL TANKS	1.1	-	A.a.-1	-	5	E-W CAP	TYPE 2	12	24	
FINAL TANKS	1.1	-	A.a.-1	-	5	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	1.1	-	A.a.-1	-	5	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	1.1	-	A.a.2	-	5	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	1.1	-	A.a.2	-	5	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	1.1	-	A.a.9	-	5	E-W CAP	TYPE 2	8	2	
FINAL TANKS	2	-	A.a	-	5	BOTH CAP	TYPE 1	48	48	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	2	-	A.a.2	B.1	5	E-W CAP	TYPE 1	36	360	2 IN. CONC. EROSION IN AREA
FINAL TANKS	3	-	A.a.-1	-	5	N-S CAP	TYPE 1	144	24	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	3.1	-	A.a	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	3.9	-	A.a	-	5	E-W CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	4.9	-	A.a	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	5.1	-	A.a	-	5	N-S CAP	TYPE 2	2	-	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	5.5	-	A.A.9	-	5	N-S BEAM	TYPE 4	4	-	
FINAL TANKS	5.8	7.2	A.a	-	5	N-S CAP	TYPE 1	360	48	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	5.9	-	A.a	-	5	N-S CAP	TYPE 2	48	30	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	6	-	A.a.1	-	5	E-W CAP	TYPE 2	4	3	
FINAL TANKS	6.1	-	A.a	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	6.1	-	A.a.-1	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	7	-	A.a	-	4	E-W CAP	TYPE 4	4	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	7.5	-	A.a	-	5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	7.9	9.6	A.a	-	5	N-S CAP	TYPE 1	288	42	FAILING EPOXY REPAIR IN AREA. 2 IN. CONC. EROSION IN AREA
FINAL TANKS	8	-	A.a	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	8	-	A.a.5	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	9	-	A.a.1	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	9	-	A.a.2	-	5	E-W CAP	TYPE 2	4	14	
FINAL TANKS	9	-	A.a.9	-	5	E-W CAP	TYPE 2	3	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	9	-	A.a.3	-	5	E-W CAP	TYPE 4	1.5	-	
FINAL TANKS	9.7	-	A.a	-	3	N-S CAP	TYPE 2	8	8	
FINAL TANKS	9.1	-	A.a	-	5	E-W CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	9.1	-	A.a.5	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	9.1	-	A.a	-	5	E-W CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	9.1	-	A.a.8	-	5	E-W CAP	TYPE 2	2	8	
FINAL TANKS	9.1	-	A.a.8	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	9.1	-	A.a.8	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	1.1	-	A.1.2	-	5	E-W CAP	TYPE 2	1	7	
FINAL TANKS	1.1	-	A.1.5	-	5	E-W CAP	TYPE 2	5	5	
FINAL TANKS	1.1.7	-	A.1.5	-	5	N-S BEAM	TYPE 2	10	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	1.1.8	-	A.1.5	-	5	N-S CAP	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	2.2	-	A.1	-	5	N-S CAP	TYPE 1	60	48	1 IN. CONC. EROSION IN AREA
FINAL TANKS	2.4	-	A.1.2	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	2.8	-	A.1	-	3	N-S CAP	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	2.9	-	A.1.9	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	3.9	-	A.1.4	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	4	-	A.1.5	-	2	E-W CAP	TYPE 2	3	1	
FINAL TANKS	4	-	A.1.3	-	4	E-W CAP	TYPE 4	5	-	
FINAL TANKS	4	-	A.1.9	-	5	N-S CAP	TYPE 1	72	36	
FINAL TANKS	4.1	-	A.1.4	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	4.8	-	A.1	-	5	N-S CAP	TYPE 2	3	-	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	4.9	-	A.1	-	5	N-S CAP	TYPE 4	5	-	
FINAL TANKS	4.9	-	A.1	-	5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	5	-	A.1.5	-	2	E-W CAP	TYPE 4	4	-	
FINAL TANKS	5	-	A.1.1	-	5	N-S CAP	TYPE 4	12	-	
FINAL TANKS	5	-	A.1.1	-	5	N-S CAP	TYPE 1	48	48	
FINAL TANKS	5.1	-	A.1	-	5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	6	-	A.1.3	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	6	-	A.1.4	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	6	-	A.1.3	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	6	-	A.1.3	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	6	-	A.1.4	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	6.1	-	A.1.1	-	5	N-S CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	6.8	-	A.1.1	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	7	-	A.1.3	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	7	-	A.1.2	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	7	-	A.1	-	5	E-W CAP	TYPE 2	12	2	
FINAL TANKS	7.1	-	A.1	-	5	N-S CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	7.5	-	A.1	-	5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	8	-	A.1.9	-	5	N-S CAP	TYPE 2	2	2	
FINAL TANKS	8	-	A.1.6	-	2	E-W CAP	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	8	-	A.1.3	-	2	E-W CAP	TYPE 2	8	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	8	-	A.1.3	-	2	E-W CAP	TYPE 4	3	-	
FINAL TANKS	8	-	A.1	-	5	E-W CAP	TYPE 2	15	48	FAILING EPOXY REPAIR IN AREA

PHASE 3 SCHEDULE										
LOCATION								DETERIORATED AREA		
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT	REPAIR TYPE	LENGTH (IN.)	WIDTH (IN.)	FULL NOTES
	START	END	START	END						
FINAL TANKS	8	-	A.1.2	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	8	-	A.1.3	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	8	-	A.1.6	-	5	E-W CAP	TYPE 2	2	3	
FINAL TANKS	8	-	A.1.6	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	8	-	A.1.7	-	5	E-W CAP	TYPE 2	4	2	
FINAL TANKS	8	-	A.1.9	-	5	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	8.1	-	A.1.1	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	8.1	-	A.1.9	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	8.3	-	A.1.9	-	1/5	N-S CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	8.9	-	A.1.1	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	8.9	-	A.1.9	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	8.9	-	A.1	-	5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	9	-	A.1.1	-	5	E-W CAP	TYPE 4	7	-	
FINAL TANKS	9	-	A.1.1	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	9	-	A.1.7	-	5	E-W CAP	TYPE 3	12	1	
FINAL TANKS	9	-	A.1.8	-	5	E-W CAP	TYPE 2	4	6	
FINAL TANKS	9.5	-	A.1	-	5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	9.1	-	A.1.4	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	1.1	-	B.1	-	4	E-W CAP	TYPE 4	4	-	
FINAL TANKS	1.1.5	-	B.5	-	5	DECK	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	1.1.5	-	B	-	5	N-S CAP	TYPE 1	60	48	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	1.1.5	-	B	-	5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	1.1.7	-	B	-	3	N-S CAP	TYPE 4	3	-	
FINAL TANKS	1.1.8	-	B	-	3	N-S CAP	TYPE 4	12	-	
FINAL TANKS	2	-	B.4	-	2	E-W CAP	TYPE 4	6	-	
FINAL TANKS	2	-	B.8	-	5	E-W CAP	TYPE 2	4	4	
FINAL TANKS	2	-	B.4	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	2	-	B.9	-	5	E-W CAP	TYPE 2	12	14	
FINAL TANKS	2.3	-	B	-	5	N-S CAP	TYPE 1	60	60	1 IN. CONC. EROSION IN AREA
FINAL TANKS	3.1	-	B.5	-	5	DECK	TYPE 2	10	10	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	4.9	-	B.9	-	5	N-S CAP	TYPE 4	10	-	
FINAL TANKS	4.9	-	B.8	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	6	-	B.4	-	4	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	6	-	B.7	-	4	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	6	-	B.8	-	4	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	6	-	B	-	5	N-S CAP	TYPE 4	48	-	
FINAL TANKS	6	-	B	-	5	E-W CAP	TYPE 4	12	-	
FINAL TANKS	6.1	-	B.1	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	6.1	-	B	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	6.1	-	B.1	-	5	N-S CAP	TYPE 4	12	-	
FINAL TANKS	6.2	-	B.2	-	5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	6.2	-	B.2	-	3	N-S CAP	TYPE 4	3	-	
FINAL TANKS	6.3	-	B.9	-	5	N-S CAP	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	6.5	-	B	-	5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	6.5	-	B.1	-	5	N-S CAP	TYPE 4	4	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	6.9	-	B.9	-	5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	7	-	B.7	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	7	-	B.1	-	5	E-W CAP	TYPE 2	24	12	
FINAL TANKS	7.1	-	B.9	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	7.1	-	B	-	5	N-S CAP	TYPE 4	48	-	
FINAL TANKS	7.7	-	B	-	1	N-S CAP	TYPE 4	1	-	
FINAL TANKS	8.4	-	B.5	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	8.5	-	B	-	3	N-S CAP	TYPE 4	1	-	
FINAL TANKS	8.9	-	B.9	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	8.9	-	B	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	9	-	B.1	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	9	-	B.1	-	5	E-W CAP	TYPE 2	1	6	
FINAL TANKS	9	-	B.7	-	5	E-W CAP	TYPE 2	1	5	
FINAL TANKS	9.8	-	B	-	5	N-S CAP	TYPE 2	6	9	
FINAL TANKS	9.1	-	B.6	-	2	E-W CAP	TYPE 4	5	-	
FINAL TANKS	9.1	-	B.4	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	9.1	-	B.9	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	1.1	-	C.1	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	1.1	-	C.1	-	5	E-W CAP	TYPE 4	8	-	
FINAL TANKS	1.1	-	C.1	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	1.1	-	C.1	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	1.1	-	C.9	-	5	E-W CAP	TYPE 4	5	-	
FINAL TANKS	1.1	-	C.9	-	5	E-W CAP	TYPE 4	10	-	
FINAL TANKS	1.1.6	-	C	-	5	N-S CAP	TYPE 4	3	-	

NOTES:

1. SEE FIGURE BELOW FOR "FACE" LOCATIONS.



0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 3 REPAIR SCHEDULE
SHEET 1 OF 15

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-532.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-532.00_546.00.dwg
Date & Time Plotted: 10/20/2026 3:46 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb
Last Date Saved: 10/20/2026 3:41 PM

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 3 SCHEDULE										
LOCATION								DETERIORATED AREA		
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT	REPAIR TYPE	LENGTH (IN.)	WIDTH (IN.)	FULL NOTES
	START	END	START	END						
FINAL TANKS	1.1.8	-	C.5	D	5	E-W CAP	TYPE 2	12	120	
FINAL TANKS	1.1.8	-	C.6	-	5	E-W CAP	TYPE 2	8	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	2	-	C	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	2	-	C.1	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	2	-	C.5	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	2	-	C.7	-	5	E-W CAP	TYPE 2	1	7	
FINAL TANKS	2	-	C.8	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	2.3	-	C.2	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	2.9	-	C.9	-	5	E-W CAP	TYPE 2	5	1	
FINAL TANKS	3	-	C.1	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	3	-	C.4	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	4	-	C.4	-	4	E-W CAP	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	4	-	C.2	-	1	N-S CAP	TYPE 2	14	14	
FINAL TANKS	4	-	C.5	-	4	E-W CAP	TYPE 4	7	-	
FINAL TANKS	4.3	-	C	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	4.8	-	C	-	5	N-S CAP	TYPE 4	8	-	
FINAL TANKS	4.8	-	C.2	-	5	DECK	TYPE 2	1	2	
FINAL TANKS	5	-	C.5	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	5	-	C.1	-	5	E-W CAP	TYPE 4	36	-	
FINAL TANKS	5.4	-	C	-	5	N-S CAP	TYPE 4	5	-	
FINAL TANKS	5.9	-	C	-	5	N-S CAP	TYPE 4	4	-	
FINAL TANKS	5.9	-	C	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	6	-	C.6	-	4	E-W CAP	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	6	-	C.2	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	6.1	-	C.7	-	5	E-W CAP	TYPE 4	8	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	6.1	-	C.7	-	5	E-W CAP	TYPE 2	24	1	
FINAL TANKS	6.1	-	C.1	-	5	E-W CAP	TYPE 2	12	6	
FINAL TANKS	6.1	-	C.2	-	5	E-W CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	6.5	-	C.9	-	5	N-S CAP	TYPE 2	12	12	
FINAL TANKS	6.5	-	C.9	-	5	N-S CAP	TYPE 4	12	-	
FINAL TANKS	6.9	-	C.4	-	2	E-W CAP	TYPE 4	5	-	
FINAL TANKS	7	-	C.5	-	5	E-W CAP	TYPE 2	2	2	X3 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	7.1	-	C.9	-	5	N-S CAP	TYPE 2	4	4	
FINAL TANKS	7.1	-	C.1	-	5	N-S CAP	TYPE 4	6	-	
FINAL TANKS	7.5	-	C.5	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	8	-	C.1	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	8	-	C	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	8	-	C.3	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	8	-	C.5	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	8	-	C.5	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	8	-	C.9	-	5	E-W CAP	TYPE 2	3	1	
FINAL TANKS	8.7	-	C	-	3	N-S CAP	TYPE 4	1	-	
FINAL TANKS	9	-	C.5	-	2	E-W CAP	TYPE 2	6	4	
FINAL TANKS	9	-	C.3	-	2	E-W CAP	TYPE 2	1	1	
FINAL TANKS	9	-	C	-	5	E-W CAP	TYPE 2	5	3	
FINAL TANKS	9	-	C.6	-	5	E-W CAP	TYPE 4	9	-	
FINAL TANKS	9	-	C.9	-	5	E-W CAP	TYPE 4	10	-	
FINAL TANKS	9	-	C.5	-	4	E-W CAP	TYPE 4	5	-	
FINAL TANKS	9	-	C.5	-	4	E-W CAP	TYPE 4	8	-	
FINAL TANKS	9	-	C.1	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	9.2	-	C	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	9.1	-	C.1	-	5	E-W CAP	TYPE 2	6	-	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	9.1	-	C.2	C.3	5	E-W CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	1.1	-	D.5	-	5	E-W CAP	TYPE 4	10	-	
FINAL TANKS	1.1	-	D.9	-	5	E-W CAP	TYPE 4	8	-	
FINAL TANKS	1.1	-	D.9	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	1.1.8	-	D.8	-	5	E-W CAP	TYPE 4	8	-	
FINAL TANKS	1.1.8	-	D	D.5	5	E-W CAP	TYPE 2	24	144	
FINAL TANKS	1.1.8	-	D.4	-	5	E-W CAP	TYPE 2	18	30	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	2	-	D.5	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	2.1	-	D.7	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	2.5	-	D	-	3	N-S CAP	TYPE 4	6	-	
FINAL TANKS	3	-	D.3	-	5	E-W CAP	TYPE 4	8	-	
FINAL TANKS	3.2	-	D	-	1	N-S CAP	TYPE 4	10	-	
FINAL TANKS	4	-	D.7	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	4.9	-	D	-	5	N-S CAP	TYPE 4	36	-	
FINAL TANKS	5.5	-	D	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	5.9	-	D.8	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	6	-	D.4	-	2	E-W CAP	TYPE 4	4	-	
FINAL TANKS	6	-	D.6	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	6	-	D.1	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	6	-	D.5	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	6.1	-	D.1	-	5	N-S CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION

PHASE 3 SCHEDULE										
LOCATION								DETERIORATED AREA		
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT	REPAIR TYPE	LENGTH (IN.)	WIDTH (IN.)	FULL NOTES
	START	END	START	END						
FINAL TANKS	6.1	-	D.4	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	6.1	-	D.4	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	6.2	-	D	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	6.5	-	D	-	5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	6.9	-	D	-	5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	7.8	-	D.9	-	5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	8	-	D.9	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	8.1	-	D.4	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	8.5	-	D	-	3	N-S CAP	TYPE 4	3	-	
FINAL TANKS	9	-	D.7	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	9.2	-	D	-	3/5	N-S CAP	TYPE 4	5	-	
FINAL TANKS	9.9	-	D	-	3	N-S CAP	TYPE 2	3	9	
FINAL TANKS	9.9	-	D	-	3/5	N-S CAP	TYPE 2	3	6	
FINAL TANKS	1.1	-	E.1	-	5	E-W CAP	TYPE 2	1.5	1.5	
FINAL TANKS	1.1	-	E.4	-	5	E-W CAP	TYPE 2	24	36	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	1.1	-	E.7	-	5	E-W CAP	TYPE 2	4	4	
FINAL TANKS	1.1	-	E.7	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	2.4	-	E	-	5	N-S CAP	TYPE 4	5	-	
FINAL TANKS	2.5	-	E.5	-	5	N-S CAP	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	2.9	-	E.8	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	3	-	E.4	-	3	N-S CAP	TYPE 4	6	-	
FINAL TANKS	3	-	E.5	-	5	E-W CAP	TYPE 2	1	1	X5 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	3.1	-	E	-	3	N-S CAP	TYPE 4	4	-	
FINAL TANKS	3.1	-	E.1	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	3.1	-	E.9	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	3.1	-	E.9	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	3.9	-	E	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	4.1	-	E	-	1	N-S CAP	TYPE 4	5	-	
FINAL TANKS	4.2	-	E.1	-	5	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	4.5	-	E	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	4.9	-	E	-	5	N-S CAP	TYPE 4	6	-	
FINAL TANKS	4.9	-	E.9	-	5	E-W CAP	TYPE 4	12	-	
FINAL TANKS	4.9	5	E.2	-	5	E-W CAP	TYPE 4	2	-	X6 REPAIRS AT THIS LOCATION
FINAL TANKS	5	-	E.7	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	5.9	-	E	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	5.9	-	E.1	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	5.9	-	E.9	-	5	E-W CAP	TYPE 2	8	11	
FINAL TANKS	6	-	E.5	-	5	E-W CAP	TYPE 4	4	-	X5 REPAIRS AT THIS LOCATION
FINAL TANKS	6	-	E.4	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	6	-	E.8	-	5	E-W CAP	TYPE 2	12	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	6	-	E.7	-	4	E-W CAP	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	6	-	E.9	-	5	E-W CAP	TYPE 2	8	4	
FINAL TANKS	6.1	-	E.8	-	5	E-W CAP	TYPE 4	12	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	6.1	-	E.3	-	5	E-W CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	6.1	-	E.1	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	6.1	-	E.2	-	5	E-W CAP	TYPE 4	4	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	6.1	-	E.9	-	5	E-W CAP	TYPE 4	7	-	
FINAL TANKS	6.1	-	E.5	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	6.1	-	E.1	-	5	E-W CAP	TYPE 2	2	1	X4 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	6.5	-	E	-	5	N-S CAP	TYPE 4	4	-	X5 REPAIRS AT THIS LOCATION
FINAL TANKS	6.9	-	E.2	-	5	E-W CAP	TYPE 4	4	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	6.9	-	E.1	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	8	-	E.1	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	8	-	E.1	-	5	E-W CAP	TYPE 2	1	3	
FINAL TANKS	8	-	E.3	-	5	E-W CAP	TYPE 4	5	-	
FINAL TANKS	8.2	-	E	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	9	-	E	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	9	-	E.4	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	9	-	E.4	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	9	-	E.9	-	4	E-W CAP	TYPE 4	4	-	
FINAL TANKS	9.5	-	E.5	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	9.1	-	E.8	-	2	E-W CAP	TYPE 4	7	-	
FINAL TANKS	1.1	-	F.2	-	5	E-W CAP	TYPE 2	10	-	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	1.1	-	F.8	-	5	E-W CAP	TYPE 2	4	4	
FINAL TANKS	1.1	-	F.9	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	2.6	-	F	-	3	N-S CAP	TYPE 2	2	2	
FINAL TANKS	2.8	-	F	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	3	-	F.3	-	5	E-W CAP	TYPE 3	18	-	
FINAL TANKS	3	-	F.5	-	5	E-W CAP	TYPE 4	2	-	

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 3 REPAIR SCHEDULE
SHEET 2 OF 15

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-533.00

Last Saved By: AcostaML Last Date Saved: 10/20/2026 3:41 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches) Date & Time Plotted: 10/20/2026 3:46 PM
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-532.00_546.00.dwg Plot Scale: 1:1 Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 3 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	4.9	-	F.5	-	5	N-S CAP	TYPE 2	3	30	
FINAL TANKS	5.9	-	F.5	-	5	N-S CAP	TYPE 4	48	-	
FINAL TANKS	6.5	-	F.5	-	5	N-S BEAM	TYPE 4	2	-	X7 REPAIRS AT THIS LOCATION
FINAL TANKS	6.9	-	F	-	5	E-W CAP	TYPE 4	24	-	
FINAL TANKS	7	-	F.8	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	7	-	F.6	-	5	E-W CAP	TYPE 4	24	-	
FINAL TANKS	7	-	F.4	-	5	E-W CAP	TYPE 4	12	-	
FINAL TANKS	8	-	F.4	-	5	E-W CAP	TYPE 2	30	42	
FINAL TANKS	8	-	F.5	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	8	-	F.7	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	8.2	-	F.1	-	3	N-S CAP	TYPE 4	4	-	
FINAL TANKS	9.4	-	F	-	3	N-S CAP	TYPE 4	4	-	
FINAL TANKS	9.9	-	F	-	5	N-S CAP	TYPE 2	1.5	1.5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	9.1	-	F.9	-	5	E-W CAP	TYPE 2	2	4	
FINAL TANKS	1.1	-	G	H	5	E-W CAP	TYPE 2	72	3	MULTIPLE DEFECTS IN REPAIR AREA. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	1.1.1	-	G	-	5	N-S CAP	TYPE 4	10	-	
FINAL TANKS	2	-	G.2	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	3.3	-	G	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	3.8	-	G.3	-	5	DECK	TYPE 2	4	4	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	3.9	-	G	-	5	E-W CAP	TYPE 4	18	-	
FINAL TANKS	4	4.1	G.1	G.2	5	E-W CAP	TYPE 4	2	-	X4 REPAIRS AT THIS LOCATION
FINAL TANKS	4.1	-	G	-	5	E-W CAP	TYPE 4	50	-	
FINAL TANKS	4.3	-	G	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	4.7	-	G	-	1	N-S CAP	TYPE 4	2	-	
FINAL TANKS	5	-	G	-	2	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	5	-	G.5	-	5	E-W CAP	TYPE 4	4	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	5.9	-	G	-	5	E-W CAP	TYPE 2	5	1	
FINAL TANKS	6	-	G.8	-	4	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	6	-	G	-	5	E-W CAP	TYPE 2	5	1	
FINAL TANKS	6	-	G.4	-	3	E-W CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	6	-	G.4	-	2	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	6.5	-	G	-	5	N-S CAP	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	6.8	-	G.4	-	5	N-S CAP	TYPE 4	10	-	
FINAL TANKS	8	-	G.4	-	2	E-W CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	8	-	G	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	8	-	G.5	-	4	E-W CAP	TYPE 2	0.25	0.25	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	9	-	G.7	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	9	-	G.5	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	9.1	-	G.5	-	2	E-W CAP	TYPE 2	1	1	
FINAL TANKS	9.1	-	G.1	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	9.1	-	G	-	5	E-W CAP	TYPE 3	18	-	
FINAL TANKS	9.1	11.1	G.5	-	5	E-W CAP	TYPE 2	72	12	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	2	-	H.7	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	2	-	H.8	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	4.1	-	H.2	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	6	-	H.2	-	2	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	6.5	-	H.2	-	5	N-S CAP	TYPE 2	2	2	
FINAL TANKS	7	-	H.4	-	2	E-W CAP	TYPE 2	1	1	
FINAL TANKS	9	-	H.9	-	2	E-W CAP	TYPE 4	8	-	
FINAL TANKS	9	-	H.5	-	3	E-W CAP	TYPE 4	1	-	
FINAL TANKS	9.1	-	H.9	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	1.1	-	J.6	-	5	E-W CAP	TYPE 4	8	-	
FINAL TANKS	1.1.1	-	J	-	1	N-S CAP	TYPE 2	1.5	1.5	
FINAL TANKS	1.1.2	-	J.5	-	5	DECK	TYPE 4	5	-	
FINAL TANKS	1.1.2	-	J.5	-	5	DECK	TYPE 4	5	-	
FINAL TANKS	1.1.2	-	J.4	-	5	DECK	TYPE 4	3	-	
FINAL TANKS	1.1.3	-	J	-	1	N-S CAP	TYPE 2	3	3	
FINAL TANKS	1.1.4	-	J	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	1.1.5	-	J.8	-	5	E-W BEAM	TYPE 4	15	-	
FINAL TANKS	1.1.5	-	J.5	-	5	E-W BEAM	TYPE 4	18	-	
FINAL TANKS	2	-	J.1	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	5.1	-	J.3	J.5	4	E-W CAP	TYPE 4	6	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	5.9	-	J.5	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	6.1	-	J.3	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	7	-	J.3	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	7	-	J	-	5	E-W CAP	TYPE 2	36	24	
FINAL TANKS	8	-	J.8	-	2	E-W CAP	TYPE 4	14	-	
FINAL TANKS	8	-	J.7	-	2	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	8	-	J.5	-	2	E-W CAP	TYPE 4	3	-	
FINAL TANKS	8	-	J.8	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	8	-	J.8	-	5	E-W CAP	TYPE 2	3	3	
FINAL TANKS	9	-	J.4	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	9	-	J.4	-	2	E-W CAP	TYPE 4	3	-	

PHASE 3 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
FINAL TANKS	9	-	J.1	-	2	E-W CAP	TYPE 4	4	-	
FINAL TANKS	9	-	J.1	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	9	-	J	-	5	E-W CAP	TYPE 4	12	-	
FINAL TANKS	9.1	-	J.9	-	2	E-W CAP	TYPE 2	2	1	
FINAL TANKS	9.1	-	J	-	2	E-W CAP	TYPE 2	2	1	
FINAL TANKS	9.1	-	J.9	-	5	E-W CAP	TYPE 3	10	-	
FINAL TANKS	1.1	-	K	-	-	E-W CAP	TYPE 2	4	4	
FINAL TANKS	1.1	-	K.1	-	-	E-W CAP	TYPE 2	4	4	
FINAL TANKS	2.1	-	K	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	2.5	-	K.5	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	3.8	-	K.2	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	4	-	K.6	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	4.9	5.1	K.9	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	5.1	-	K.4	-	5	E-W CAP	TYPE 4	16	-	
FINAL TANKS	5.1	-	K.5	-	5	E-W CAP	TYPE 4	12	-	
FINAL TANKS	5.8	-	K.3	-	5	DECK	TYPE 2	2.5	2.5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	5.9	-	K.9	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	6	-	K.7	-	4	E-W CAP	TYPE 4	6	-	
FINAL TANKS	6	-	K.2	-	4	E-W CAP	TYPE 4	12	-	
FINAL TANKS	6	-	K.2	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	6	-	K.5	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	6.1	-	K.9	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	7	-	K.3	-	2	E-W CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	7	-	K.4	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	9	-	K.5	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	9	-	K.7	-	3	E-W CAP	TYPE 4	2	-	
FINAL TANKS	9.1	-	K.1.1	-	5	E-W CAP	TYPE 2	8	4	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	1.1	-	M.1.1	-	5	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	1.1.3	-	M.1.2	-	5	DECK	TYPE 2	24	96	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	2.1	-	M.1	-	5	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	3	-	M.1.1	-	4/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	3	-	M.1.9	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	3	-	M.1.1	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	3.4	-	M.1.9	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	3.8	-	M.1	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	4	-	M.1.7	-	2/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	4.2	-	M.1.2	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	4.7	-	M.1	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	4.8	-	M.1.2	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	5	-	M.1.9	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	5	-	M.1.7	-	2/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	5	-	M.1.2	-	2/5	E-W CAP	TYPE 3	2	-	
FINAL TANKS	5.5	-	M.1	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	6	-	M.1.1	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	6.1	-	M.1.9	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	6.2	-	M.1.1	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	6.9	-	M.1.2	-	5	DECK	TYPE 4	3	-	
FINAL TANKS	7	-	M.1.4	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	7	-	M.1.1	-	5	DECK	TYPE 2	3	1	
FINAL TANKS	8.1	-	M.1.3	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	8	-	M.1.4	-	5	E-W CAP	TYPE 4	5	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	1.1	-	N.3	-	5	E-W CAP	TYPE 4	10	-	
FINAL TANKS	1.1	-	N.1	-	5	E-W CAP	TYPE 3	10	-	
FINAL TANKS	1.1.3	-	N.9	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	1.1.5	-	N.6	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	1.1.6	-	N	-	5	N-S CAP	TYPE 2	1	1	X4 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	2.8	-	N.8	-	5	DECK	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	3	-	N.2	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	3	-	N.4	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	3	-	N.4	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	3	-	N.2	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	3	-	N.4	-	4/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	3	-	N.6	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	3.1	-	N.5	-	5	DECK	TYPE 4	3	-	
FINAL TANKS	3.1	-	N.5	-	5	DECK	TYPE 2	2	2	
FINAL TANKS	3.6	-	N.3	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	3.9	-	N.2	-	5	DECK	TYPE 2	2	2	
FINAL TANKS	4	-	N	-	2/5	E-W CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	4	-	N.5	-	2	E-W CAP	TYPE 4	2	-	
FINAL TANKS	4	-	N.8	-	2/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	5.5	-	N	-	1/5	N-S CAP	TYPE 4	4	-	
FINAL TANKS	6.1	-	N.3	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 3 REPAIR SCHEDULE
SHEET 3 OF 15

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-534.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-532.00_546.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Date & Time Plotted: 10/20/2026 3:46 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 3 SCHEDULE										
LOCATION								DETERIORATED AREA		
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT	REPAIR TYPE	LENGTH (IN.)	WIDTH (IN.)	FULL NOTES
	START	END	START	END						
FINAL TANKS	6.1	-	N.8	-	5	DECK	TYPE 2	2	2	
FINAL TANKS	6.1	-	N.8	-	5	DECK	TYPE 2	4	3	
FINAL TANKS	6.9	-	N.1	-	5	DECK	TYPE 2	2	2	
FINAL TANKS	7	-	N.1	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	7	-	N.2	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	7.5	-	N.3	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	8	-	N.7	-	4/5	E-W CAP	TYPE 4	4	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	8	-	N.9	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	8	-	N.1	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	8.2	-	N.2	-	5	DECK	TYPE 2	3	1	
FINAL TANKS	9	-	N.7	-	5	E-W CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	9	-	N.8	-	2/5	E-W CAP	TYPE 4	9	-	
FINAL TANKS	9	-	N.9	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	9	-	N.1	-	2	E-W CAP	TYPE 2	1	1	
FINAL TANKS	9	-	N.8	-	2/5	E-W CAP	TYPE 4	18	-	
FINAL TANKS	9	-	N.8	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	9.5	-	N.3	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	9.9	-	N.4	-	5	DECK	TYPE 2	3	1	
FINAL TANKS	9.1	-	N.5	-	2/5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	9.1	-	N.9	-	2/5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	1.1.5	-	P	-	5	E-W CAP	TYPE 3	3	-	
FINAL TANKS	1.1.7	-	P.6	-	5	DECK	TYPE 2	2	2	
FINAL TANKS	1.1.9	-	P	-	3	N-S CAP	TYPE 4	2	-	
FINAL TANKS	2	-	P.3	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	2.5	-	P	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	2.8	-	P	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	3	-	P.2	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	3.8	-	P.8	-	5	DECK	TYPE 2	2	2	
FINAL TANKS	5	-	P.3	-	5	E-W CAP	TYPE 2	1	2	
FINAL TANKS	5.8	-	P.8	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	6	-	P.3	-	2/5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	6.1	-	P.8	-	5	DECK	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	7	-	P.8	-	4	E-W CAP	TYPE 4	15	-	
FINAL TANKS	8	-	P.7	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	1.1.5	-	Q	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	1.1.5	-	Q.9	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	1.1.5	-	Q.9	-	5	E-W CAP	TYPE 3	18	-	
FINAL TANKS	2	-	Q.3	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	2	-	Q.7	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	2	-	Q.5	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	2.7	-	Q	-	5	N-S CAP	TYPE 2	2	1	
FINAL TANKS	3	-	Q	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	3	-	Q.4	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	3	-	Q.5	-	5	E-W CAP	TYPE 2	24	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	3	-	Q.5	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	3.3	-	Q	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	4	-	Q.5	-	5	E-W CAP	TYPE 2	72	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	4	-	Q.8	-	4/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	4.8	-	Q.3	-	5	DECK	TYPE 4	3	-	
FINAL TANKS	4.9	-	Q.7	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	5	-	Q.9	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	5	-	Q.8	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	5	-	Q.5	-	5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	5	-	Q.5	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	6	-	Q	-	4	E-W CAP	TYPE 4	1	-	
FINAL TANKS	6.2	-	Q.8	-	5	DECK	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	6.8	-	Q.2	-	5	DECK	TYPE 2	2	2	
FINAL TANKS	7	-	Q.6	-	2/5	E-W CAP	TYPE 2	8	1	
FINAL TANKS	7	-	Q.2	-	2	E-W CAP	TYPE 4	3	-	
FINAL TANKS	7.1	-	Q.2	-	5	DECK	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	7.8	-	Q.3	-	5	DECK	TYPE 2	6	3	
FINAL TANKS	9	-	Q	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	9.1	-	Q	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	1.1	-	R.1	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	1.1.3	-	R	-	5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	1.1.4	-	R.5	-	5	DECK	TYPE 4	3	-	
FINAL TANKS	1.1.5	-	R.1	-	5	E-W CAP	TYPE 3	18	-	
FINAL TANKS	1.1.5	-	R.4	-	5	E-W CAP	TYPE 2	1	4	
FINAL TANKS	1.1.5	-	R.9	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	1.1.5	-	R	S	4	E-W CAP	TYPE 2	2	2	X7 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	2	-	R	S	2	E-W CAP	TYPE 2	2	2	X4 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	2	-	R	S	5	E-W CAP	TYPE 2	72	3	MULTIPLE DEFECTS IN REPAIR AREA. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	2.2	-	R	-	5	N-S CAP	TYPE 3	6	-	
FINAL TANKS	2.4	-	R.7	-	3/5	N-S CAP	TYPE 4	1	-	

PHASE 3 SCHEDULE										
LOCATION								DETERIORATED AREA		
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT	REPAIR TYPE	LENGTH (IN.)	WIDTH (IN.)	FULL NOTES
	START	END	START	END						
FINAL TANKS	2.5	-	R.3	-	3	E-W CAP	TYPE 4	3	-	
FINAL TANKS	3	-	R	-	5	E-W CAP	TYPE 3	10	-	
FINAL TANKS	3	-	R.5	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	3	-	R.7	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	3.1	-	R.9	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	3.8	-	R.5	-	1/5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	4	-	R.7	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	4	-	R.4	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	4	-	R.4	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	4.5	-	R.8	-	5	DECK	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	5	-	R.4	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	5.3	-	R.7	-	5	DECK	TYPE 2	6	6	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	5.8	-	R	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	6	-	R.5	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	6.7	-	R.4	-	5	DECK	TYPE 2	4	3	X2 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	6.9	-	R.9	-	1	N-S CAP	TYPE 4	6	-	
FINAL TANKS	7	-	R	-	2	E-W CAP	TYPE 4	5	-	
FINAL TANKS	9	-	R	-	4/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	9.5	-	R.9	-	5	DECK	TYPE 2	3	3	
FINAL TANKS	1.1	-	S.8	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	1.1	-	S.5	-	4/5	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	1.1	-	S.3	-	4/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	1.1.2	-	S	-	5	N-S CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	1.1.3	-	S	-	1	N-S CAP	TYPE 4	5	-	
FINAL TANKS	1.1.5	-	S.4	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	1.1.5	-	S.5	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	1.1.5	-	S.3	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	1.1.9	-	S	-	5	N-S CAP	TYPE 3	4	-	
FINAL TANKS	2	-	S.1	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	2	-	S.6	-	4/5	E-W CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	2	-	S.8	-	4/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	2	-	S.5	-	4/5	E-W CAP	TYPE 4	8	-	
FINAL TANKS	2.5	-	S	-	1	N-S CAP	TYPE 4	3	-	
FINAL TANKS	2.9	-	S	-	5	N-S CAP	TYPE 4	3	-	
FINAL TANKS	3	-	S.6	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	3	-	S.7	-	4/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	3.8	-	S.3	-	5	DECK	TYPE 4	1	-	X6 REPAIRS AT THIS LOCATION
FINAL TANKS	3.8	-	S.3	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	3.9	-	S	-	5	N-S CAP	TYPE 2	16	12	
FINAL TANKS	3.9	-	S.8	-	5	DECK	TYPE 2	8	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	3.9	-	S.8	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	4	-	S.5	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	4	-	S.7	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	5	-	S.8	-	2	E-W CAP	TYPE 4	1	-	
FINAL TANKS	5	-	S.5	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	5	-	S.4	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	5	-	S.4	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	5	-	S.3	-	4/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	5	-	S.2	-	4	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	6	-	S.7	-	2/5	E-W CAP	TYPE 4	2	-	X6 REPAIRS AT THIS LOCATION
FINAL TANKS	6	-	S.5	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	6	-	S.5	-	2/5	E-W CAP	TYPE 2	11	1	
FINAL TANKS	6	-	S.3	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	6	-	S	-	4	N-S CAP	TYPE 4	6	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	6	-	S.3	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	6	-	S.3	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	6.9	-	S	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	7	-	S.4	-	2	N-S CAP	TYPE 2	1	2	
FINAL TANKS	8	-	S	-	4/5	E-W CAP	TYPE 2	2	1	
FINAL TANKS	8	-	S.2	-	4/5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	1.1	-	T.6	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	1.1	-	T.2	-	4	E-W CAP	TYPE 4	4	-	
FINAL TANKS	1.1.5	-	T.4	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	1.1.5	-	T.7	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	1.1.5	-	T.5	-	4/5	E-W CAP	TYPE 2	1	2	
FINAL TANKS	2.1	-	T.8	-	5	DECK	TYPE 4	3	-	
FINAL TANKS	2.5	-	T.4	T.6	3	E-W CAP	TYPE 2	1	2	X6 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	2.6	-	T	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	2.8	-	T	-	3	N-S CAP	TYPE 4	1	-	
FINAL TANKS	3	-	T	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	3	-	T.4	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	3.2	-	T.2	-	5	DECK	TYPE 4	1	-	

0 1 2 3 4 FT.
1/2"=1'-0"

NYC Environmental Protection BEDC/HD

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

STATE OF NEW YORK — ILKER TUTUNCU — LICENSED PROFESSIONAL ENGINEER

NYC Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 3 REPAIR SCHEDULE
SHEET 4 OF 15

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-535.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\dd1295589\UR-S-532.00_546.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Date & Time Plotted: 10/20/2026 3:46 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 3 SCHEDULE										
LOCATION								DETERIORATED AREA		
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT	REPAIR TYPE	LENGTH (IN.)	WIDTH (IN.)	FULL NOTES
	START	END	START	END						
FINAL TANKS	4	-	T.9	-	2/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	4.1	-	T.7	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	4.7	-	T.3	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	4.8	-	T.3	-	5	DECK	TYPE 2	2	2	
FINAL TANKS	4.8	-	T.3	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	5	-	T.2	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	5	-	T.6	-	2/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	5	-	T.9	-	5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	6	-	T.9	-	2/5	E-W CAP	TYPE 4	1	-	
FINAL TANKS	6	-	T.9	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	6.2	-	T.1	-	5	DECK	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	6.2	-	T.7	-	5	DECK	TYPE 2	3	3	
FINAL TANKS	6.2	-	T.8	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	7	-	T.3	-	2/5	N-S CAP	TYPE 2	4	1	
FINAL TANKS	7	-	T.5	-	2/5	E-W CAP	TYPE 2	3	3	
FINAL TANKS	8	-	T.5	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	8	-	T.9	-	5	E-W CAP	TYPE 3	24	-	
FINAL TANKS	9.1	-	T.4	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	9.1	-	T.3	-	5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	1.1.4	-	U	-	5	N-S CAP	TYPE 3	24	-	
FINAL TANKS	1.1.5	-	U	-	5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	1.1.5	-	U.4	-	5	E-W BEAM	TYPE 2	4	2	
FINAL TANKS	1.1.5	-	U.3	-	5	E-W BEAM	TYPE 4	4	-	
FINAL TANKS	1.1.5	-	U.2	-	5	E-W CAP	TYPE 2	3	12	FAILING EPOXY REPAIR IN AREA
FINAL TANKS	2	-	U.4	-	2/5	E-W CAP	TYPE 4	12	-	
FINAL TANKS	2	-	U.1	-	5	E-W CAP	TYPE 2	5	2	
FINAL TANKS	2.6	-	U	-	5	N-S CAP	TYPE 4	1	-	
FINAL TANKS	2.9	-	U	-	1	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	3	-	U.9	-	5	E-W CAP	TYPE 4	1	-	X5 REPAIRS AT THIS LOCATION
FINAL TANKS	3	-	U.1	-	4/5	E-W CAP	TYPE 2	1	1	
FINAL TANKS	3.1	-	U.2	-	5	DECK	TYPE 2	2	2	
FINAL TANKS	3.7	-	U	-	5	N-S CAP	TYPE 2	1	1	
FINAL TANKS	3.8	-	U.2	-	5	DECK	TYPE 2	1	1	
FINAL TANKS	4	-	U	-	2/5	E-W CAP	TYPE 2	12	12	MULTIPLE DEFECTS IN REPAIR AREA
FINAL TANKS	4	-	U	-	5	E-W CAP	TYPE 3	12	-	
FINAL TANKS	4	-	U.7	-	2/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	4	-	U.3	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	4	-	U.5	-	4/5	E-W CAP	TYPE 4	3	-	
FINAL TANKS	5	-	U.4	-	4/5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	5.6	-	U.7	-	5	DECK	TYPE 2	2	2	
FINAL TANKS	6	-	U.7	-	4	E-W CAP	TYPE 4	2	-	
FINAL TANKS	6.1	-	U.2	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
FINAL TANKS	6.9	-	U	-	5	N-S CAP	TYPE 2	10	1	
FINAL TANKS	6.9	-	U	-	3/5	N-S CAP	TYPE 4	12	-	
FINAL TANKS	7	-	U.5	-	5	E-W CAP	TYPE 2	2	2	
FINAL TANKS	7.1	-	U.2	-	5	DECK	TYPE 4	1	-	
FINAL TANKS	7.1	-	U.2	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	8	-	U.7	-	5	E-W CAP	TYPE 2	1	7	
FINAL TANKS	9	-	U.1	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	9	-	U.1	-	5	E-W CAP	TYPE 4	6	-	X3 REPAIRS AT THIS LOCATION
FINAL TANKS	9	-	U.7	-	5	E-W CAP	TYPE 4	5	-	
FINAL TANKS	9	-	U.5	-	4/5	E-W CAP	TYPE 4	12	-	
FINAL TANKS	9	-	U.3	-	4	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
FINAL TANKS	9	-	U.7	-	4/5	E-W CAP	TYPE 4	4	-	
FINAL TANKS	9.9	-	U.5	-	5	E-W CAP	TYPE 4	5	-	
FINAL TANKS	9.1	-	U.1	-	5	E-W CAP	TYPE 4	10	-	
FINAL TANKS	1.1.6	-	W.2	-	5	DECK	TYPE 4	2	-	
FINAL TANKS	1.1.6	-	W	-	3/5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	1.1.7	-	W	-	3/5	N-S CAP	TYPE 2	4	4	
FINAL TANKS	2	-	W.5	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	2	-	W	-	5	N-S CAP	TYPE 3	48	-	
FINAL TANKS	2.9	-	W	-	3/5	N-S CAP	TYPE 4	24	-	
FINAL TANKS	3	-	W.3	W.6	5	E-W CAP	TYPE 2	1	1	X20 DEFECTS AT THIS REPAIR LOCATION
FINAL TANKS	3	-	W.2	-	2	E-W CAP	TYPE 4	18	-	
FINAL TANKS	4	-	W.1	-	5	E-W CAP	TYPE 4	6	-	
FINAL TANKS	5	-	W.1	-	5	E-W CAP	TYPE 4	2	-	
FINAL TANKS	6	-	W.3	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	7	-	W.2	-	5	E-W CAP	TYPE 3	36	-	
FINAL TANKS	7	-	W.3	-	4	E-W CAP	TYPE 2	1	4	
FINAL TANKS	8	-	W.5	-	5	E-W CAP	TYPE 2	36	36	
FINAL TANKS	8.8	-	W	-	3/5	N-S CAP	TYPE 4	2	-	
FINAL TANKS	9	-	W.2	-	5	E-W CAP	TYPE 2	6	1	
FINAL TANKS	9	-	W	-	2	E-W CAP	TYPE 2	18	12	
FINAL TANKS	9.1	-	W	X	5	E-W CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE

PHASE 3 SCHEDULE										
LOCATION								DETERIORATED AREA		
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT	REPAIR TYPE	LENGTH (IN.)	WIDTH (IN.)	FULL NOTES
	START	END	START	END						
FINAL TANKS	9.1	-	W.6	-	5	E-W CAP	TYPE 3	36	-	
AERATION TANKS	1.1	-	A.1	D.2	5	E-W CAP	TYPE 1	72	1243	FAILING EPOXY REPAIR IN AREA. 1.5 IN. CONC. EROSION IN AREA
AERATION TANKS	1.1.2	-	A.1	-	5	N-S CAP	TYPE 2	12	12	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	1.1.4	1.1.9	A.1	-	5	N-S CAP	TYPE 2	1	1	X5 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	1.1.8	-	A.1	-	5	N-S CAP	TYPE 2	12	18	
AERATION TANKS	1.1.9	-	A.1	-	5	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.1	-	A.1	-	5	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.1	2.4	A.1	-	5	N-S CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.3	-	A.1	-	5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	2.7	-	A.1	-	5	N-S CAP	TYPE 2	7	7	
AERATION TANKS	2.8	3.3	A.1	-	5	N-S CAP	TYPE 1	103	72	1 IN. CONC. EROSION IN AREA
AERATION TANKS	3.8	-	A.1	-	5	N-S CAP	TYPE 2	3	3	
AERATION TANKS	3.9	-	A.1	-	5	N-S CAP	TYPE 2	8	8	
AERATION TANKS	3.9	-	A.1	-	5	N-S CAP	TYPE 2	3	5	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	4	5.1	A.1	-	5	N-S CAP	TYPE 1	330	72	1 IN. CONC. EROSION IN AREA
AERATION TANKS	5.2	-	A.1	-	5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	5.9	-	A.1	-	5	N-S CAP	TYPE 2	18	8	
AERATION TANKS	6.1	-	A.1	-	5	N-S CAP	TYPE 2	8	8	
AERATION TANKS	6.3	-	A.1	-	5	N-S CAP	TYPE 4	12	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	6.8	-	A.1.7	-	5	DECK	TYPE 4	2	-	
AERATION TANKS	7	-	A.1	-	5	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	7.1	-	A.1	-	5	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	7.2	-	A.1	-	5	N-S CAP	TYPE 2	8	12	
AERATION TANKS	7.8	8	A.1	-	5	N-S CAP	TYPE 2	42	10	
AERATION TANKS	7.9	-	A.1.1	-	5	DECK	TYPE 2	12	12	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	8.1	-	A.1	-	5	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	8	-	A.1.3	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	8.9	-	A.1	-	5	N-S CAP	TYPE 2	8	8	
AERATION TANKS	9.2	-	A.1	-	5	N-S CAP	TYPE 2	60	36	
AERATION TANKS	9.3	-	A.1	-	5	N-S CAP	TYPE 4	24	-	
AERATION TANKS	9.6	-	A.1	-	5	N-S CAP	TYPE 4	6	-	
AERATION TANKS	9.6	-	A.1	-	5	N-S CAP	TYPE 2	3	1	
AERATION TANKS	9.8	-	A.1	-	5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	9.9	-	A.1	-	5	N-S CAP	TYPE 1	60	48	
AERATION TANKS	10	-	A.1	-	5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	10.1	-	A.1	-	5	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	10.1	-	A.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	10.1	-	A.1	-	5	N-S CAP	TYPE 4	8	-	
AERATION TANKS	10.2	-	A.1	-	5	N-S CAP	TYPE 4	8	-	
AERATION TANKS	10.4	12.1	A.1	-	5	N-S CAP	TYPE 1	561	72	1 IN. CONC. EROSION IN AREA
AERATION TANKS	11	-	A.1.1	-	5	E-W CAP	TYPE 4	3	-	
AERATION TANKS	11.9	-	A.1.2	-	5	DECK	TYPE 4	3	-	
AERATION TANKS	12.1	-	A.1.1	A.1.7	5	DECK	TYPE 4	8	-	X4 REPAIRS AT THIS LOCATION
AERATION TANKS	12.6	-	A.1	-	5	N-S CAP	TYPE 2	4	4	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	12.8	-	A.1.2	-	5	DECK	TYPE 4	6	-	
AERATION TANKS	13	-	A.1	-	5	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	13	-	A.1	-	5	N-S CAP	TYPE 2	12	12	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	13	13.1	A.1	-	5	N-S CAP	TYPE 2	1	1	X5 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	13.1	-	A.1.-1	-	5	E-W CAP	TYPE 1	72	36	
AERATION TANKS	13.1	-	A.1.4	-	2/5	E-W CAP	TYPE 4	3	-	X5 REPAIRS AT THIS LOCATION
AERATION TANKS	1.1	3.3	B	-	5	N-S CAP	TYPE 1	726	72	1 IN. CONC. EROSION IN AREA
AERATION TANKS	2.5	-	B	C	5	E-W CAP	TYPE 4	72	-	
AERATION TANKS	3	-	B.1	-	4/5	E-W BEAM	TYPE 4	10	-	
AERATION TANKS	4.1	-	B.3	-	5	DECK	TYPE 2	10	10	
AERATION TANKS	4.2	5.8	B	-	5	N-S CAP	TYPE 1	206	72	1 IN. CONC. EROSION IN AREA
AERATION TANKS	5.5	-	B.7	-	5	DECK	TYPE 2	4	4	
AERATION TANKS	5.6	-	B	-	3	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	6	-	B	-	5	N-S CAP	TYPE 2	15	8	
AERATION TANKS	6	-	B.3	-	4	E-W CAP	TYPE 2	3	3	
AERATION TANKS	6.5	-	B	-	5	N-S CAP	TYPE 2	15	15	
AERATION TANKS	6.9	-	B	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	8.7	-	B.9	-	5	DECK	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	9.1	-	B	-	5	N-S CAP	TYPE 2	12	2	
AERATION TANKS	10	-	B	-	5	N-S CAP	TYPE 2	2	4	
AERATION TANKS	10.3	-	B	-	1	N-S CAP	TYPE 4	3	-	
AERATION TANKS	10.4	-	B	-	1	N-S CAP	TYPE 4	3	-	
AERATION TANKS	10.4	-	B	-	5	N-S CAP	TYPE 4	5	-	
AERATION TANKS	10.9	-	B	-	5	N-S CAP	TYPE 4	4	-	
AERATION TANKS	11	12	B.1	C	5	DECK	TYPE 2	4	4	X4 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	11.1	-	B	-	5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	11.2	-	B	-	5	N-S CAP	TYPE 2	3	3	

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 3 REPAIR SCHEDULE
SHEET 5 OF 15

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-536.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-532.00_546.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb
Date & Time Plotted: 10/20/2026 3:46 PM

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 3 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
AERATION TANKS	11.2	-	B	-	5	N-S CAP	TYPE 4	5	-	
AERATION TANKS	11.2	-	B	-	3/5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	11.3	-	B	-	5	N-S CAP	TYPE 4	10	-	
AERATION TANKS	11.5	12.5	B	-	5	N-S CAP	TYPE 1	330	72	1 IN. CONC. EROSION IN AREA
AERATION TANKS	11.8	12	B	-	5	N-S CAP	TYPE 1	72	72	
AERATION TANKS	12	-	B	-	1	N-S CAP	TYPE 4	5	-	
AERATION TANKS	12.6	-	B.9	-	5	DECK	TYPE 2	5	5	
AERATION TANKS	13.2	-	B	-	3	N-S CAP	TYPE 4	4	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	1.1	-	B.1	-	4	E-W CAP	TYPE 2	4	4	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	1.1	1.1.2	B.1	-	5	N-S CAP	TYPE 1	33	72	1 IN. CONC. EROSION IN AREA
AERATION TANKS	1.1.5	1.1.8	B.1	-	5	N-S CAP	TYPE 1	112	72	1 IN. CONC. EROSION IN AREA
AERATION TANKS	1.1.9	-	B.1	-	5	N-S CAP	TYPE 2	24	24	
AERATION TANKS	2.1	-	B.1	-	5	N-S CAP	TYPE 2	10	3	
AERATION TANKS	2.5	-	B.1.9	-	5	E-W BEAM	TYPE 2	24	24	
AERATION TANKS	2.9	-	B.1	-	5	N-S CAP	TYPE 2	24	24	
AERATION TANKS	3.5	5	B.1	-	5	N-S CAP	TYPE 1	396	72	1 IN. CONC. EROSION IN AREA
AERATION TANKS	3.8	-	B.1	-	3	N-S CAP	TYPE 4	2	-	
AERATION TANKS	4	-	B.1	-	3	N-S CAP	TYPE 4	4	-	
AERATION TANKS	5	-	B.1.5	-	2	E-W CAP	TYPE 2	6	3	
AERATION TANKS	5.7	6	B.1	-	5	N-S CAP	TYPE 1	100	36	
AERATION TANKS	6.5	-	B.1.5	-	5	DECK	TYPE 2	24	24	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	6.6	-	B.1	-	3/5	N-S CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	7.5	8	B.1	-	5	N-S CAP	TYPE 1	165	72	
AERATION TANKS	7.6	-	B.1.4	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	8.2	-	B.1	-	5	N-S CAP	TYPE 2	48	36	
AERATION TANKS	9.1	-	B.1	-	5	N-S CAP	TYPE 2	36	36	
AERATION TANKS	9.8	-	B.1	-	3/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	10.4	-	B.1	-	3/5	N-S CAP	TYPE 4	8	-	
AERATION TANKS	10.8	-	B.1	-	3	N-S CAP	TYPE 4	2	-	
AERATION TANKS	10.8	-	B.1.4	-	5	DECK	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	11	-	B.1.4	-	4/5	E-W CAP	TYPE 4	6	-	
AERATION TANKS	12	-	B.1.5	-	5	E-W CAP	TYPE 4	2	-	
AERATION TANKS	12	-	B.1.9	-	5	E-W CAP	TYPE 4	3	-	
AERATION TANKS	12.6	-	B.1.9	-	5	DECK	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	12.6	-	B.1.6	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	12.9	-	B.1	-	5	N-S CAP	TYPE 2	36	36	
AERATION TANKS	13	-	B.1	-	5	N-S CAP	TYPE 2	2	12	
AERATION TANKS	13	-	B.1.5	-	5	E-W CAP	TYPE 4	1	-	
AERATION TANKS	13.5	-	B.1.5	-	5	E-W BEAM	TYPE 4	5	-	
AERATION TANKS	13.1	-	B.1	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	13.1	-	B.1.3	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	13.1	-	B.1.5	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	1.1	2	C	-	5	N-S CAP	TYPE 1	300	72	1 IN. CONC. EROSION IN AREA
AERATION TANKS	1.1.1	-	C	-	1	N-S CAP	TYPE 2	12	24	FAILING EPOXY REPAIR IN AREA
AERATION TANKS	1.1.3	-	C	-	1	N-S CAP	TYPE 2	4.5	4.5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.4	-	C	-	5	N-S CAP	TYPE 2	2	12	
AERATION TANKS	2.5	-	C	-	5	N-S CAP	TYPE 2	18	6	
AERATION TANKS	2.6	-	C.2	-	2/5	E-W BEAM	TYPE 2	2	2	
AERATION TANKS	2.7	-	C	-	1	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.7	-	C	-	5	N-S CAP	TYPE 2	120	12	
AERATION TANKS	2.7	-	C	-	5	N-S CAP	TYPE 2	8	18	
AERATION TANKS	3	-	C.4	-	4	E-W CAP	TYPE 4	1	-	
AERATION TANKS	3.1	-	C	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	3.1	-	C	-	5	N-S CAP	TYPE 3	12	36	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	3.5	-	C	-	5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	3.7	-	C	-	5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	3.8	-	C	-	3	N-S CAP	TYPE 4	8	-	
AERATION TANKS	4	-	C.7	-	4	E-W CAP	TYPE 2	4	2	
AERATION TANKS	4.1	-	C	-	5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	6	-	C	-	1/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	6	-	C	-	5	N-S CAP	TYPE 4	96	-	
AERATION TANKS	6.5	-	C	-	5	N-S CAP	TYPE 2	12	72	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	6.9	-	C	-	1	N-S CAP	TYPE 4	10	-	
AERATION TANKS	6.9	-	C	-	5	N-S CAP	TYPE 3	8	-	
AERATION TANKS	7.9	-	C	-	5	N-S CAP	TYPE 3	6	-	
AERATION TANKS	8	-	C.5	-	5	E-W CAP	TYPE 2	36	12	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	8.2	-	C	-	5	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	8.9	-	C	-	1/5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	9.9	-	C	-	5	N-S CAP	TYPE 4	96	-	
AERATION TANKS	10	-	C	-	1/5	N-S CAP	TYPE 2	24	6	
AERATION TANKS	10	-	C	-	5	N-S CAP	TYPE 3	8	-	
AERATION TANKS	10	-	C.4	-	5	E-W CAP	TYPE 3	18	-	
AERATION TANKS	10.4	-	C	-	1/5	N-S CAP	TYPE 4	6	-	

PHASE 3 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
AERATION TANKS	10.5	-	C	-	1	N-S CAP	TYPE 4	1	-	
AERATION TANKS	10.9	-	C	-	1/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	10.9	-	C.4	-	1	N-S CAP	TYPE 4	4	-	
AERATION TANKS	11.5	-	C.9	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	11.5	-	C.5	-	1/5	N-S BEAM	TYPE 4	5	-	
AERATION TANKS	11.9	-	C	-	1	N-S CAP	TYPE 4	2	-	
AERATION TANKS	12	-	C.5	-	5	E-W CAP	TYPE 4	12	-	
AERATION TANKS	12.4	-	C	-	1/5	N-S CAP	TYPE 2	3	3	
AERATION TANKS	12.8	-	C	-	5	N-S CAP	TYPE 2	3	3	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	12.8	-	C.5	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	13.1	-	C	-	5	N-S CAP	TYPE 1	72	72	
AERATION TANKS	13.4	-	C.7	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	13.6	-	C.5	-	5	DECK	TYPE 2	72	72	
AERATION TANKS	13.1	-	C.3	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	1.1	1.1.1	C.1	-	5	N-S CAP	TYPE 1	36	72	1 IN. CONC. EROSION IN AREA
AERATION TANKS	1.1.4	-	C.1	-	5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	2.5	-	C.1	-	1/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	2.6	-	C.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.9	-	C.1	-	3	N-S CAP	TYPE 4	12	-	
AERATION TANKS	3.5	-	C.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	4	-	C.1	-	5	N-S CAP	TYPE 3	12	-	
AERATION TANKS	4	-	C.1	-	5	N-S CAP	TYPE 3	18	-	
AERATION TANKS	4	-	C.1	-	3	N-S CAP	TYPE 2	1	1	
AERATION TANKS	5.5	-	C.1	-	5	N-S CAP	TYPE 3	12	-	
AERATION TANKS	6	-	C.1	-	5	N-S CAP	TYPE 3	12	-	
AERATION TANKS	6.1	-	C.1	-	5	N-S CAP	TYPE 3	18	-	
AERATION TANKS	7	-	C.1	-	5	N-S CAP	TYPE 3	12	-	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	7.4	-	C.1	-	5	N-S CAP	TYPE 2	18	5	
AERATION TANKS	7.7	-	C.1	-	5	N-S CAP	TYPE 2	18	6	
AERATION TANKS	8	-	C.1	-	5	N-S CAP	TYPE 3	12	-	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	8.5	-	C.1	-	1/5	N-S CAP	TYPE 4	6	-	
AERATION TANKS	8.8	-	C.1	-	1/5	N-S CAP	TYPE 4	4	-	
AERATION TANKS	9.5	-	C.1	-	1/5	N-S CAP	TYPE 4	4	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	9.5	10	C.1	-	5	N-S CAP	TYPE 1	48	144	FAILING EPOXY REPAIR IN AREA. 1 IN. CONC. EROSION IN AREA
AERATION TANKS	10.7	-	C.1.5	-	5	DECK	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	10.8	-	C.1	-	1	N-S CAP	TYPE 4	36	-	
AERATION TANKS	11.6	-	C.1	-	5	N-S CAP	TYPE 3	24	1	
AERATION TANKS	13	-	C.1	-	5	N-S CAP	TYPE 4	8	-	
AERATION TANKS	13.1	-	C.1	-	3	N-S CAP	TYPE 2	3	3	
AERATION TANKS	13.5	-	C.1	-	5	N-S CAP	TYPE 2	4	8	
AERATION TANKS	13.9	-	C.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	1.1	1.1.2	D	-	5	N-S CAP	TYPE 1	60	72	1 IN. CONC. EROSION IN AREA
AERATION TANKS	2.4	-	D	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.7	-	D	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	3.2	-	D	-	1	N-S CAP	TYPE 2	4	6	
AERATION TANKS	3.3	-	D	-	5	N-S CAP	TYPE 2	12	12	
AERATION TANKS	3.4	-	D	-	1/5	N-S CAP	TYPE 4	12	-	
AERATION TANKS	3.5	-	D	-	5	N-S CAP	TYPE 2	12	12	
AERATION TANKS	4.7	-	D	-	5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	6	-	D	-	5	N-S CAP	TYPE 3	72	-	
AERATION TANKS	6.2	-	D	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	6.6	-	D	-	5	N-S CAP	TYPE 2	12	72	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	7	-	D	-	5	N-S CAP	TYPE 3	72	-	
AERATION TANKS	8	-	D	-	5	N-S CAP	TYPE 3	72	-	
AERATION TANKS	8.1	-	D	-	5	N-S CAP	TYPE 3	12	-	
AERATION TANKS	9	-	D	-	5	N-S CAP	TYPE 3	72	-	
AERATION TANKS	9.3	-	D.3	-	5	DECK	TYPE 2	14	14	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	9.5	-	D	-	5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	12.2	-	D	-	5	N-S CAP	TYPE 4	18	-	
AERATION TANKS	1.1.1	-	D.1.9	-	5	E-W CAP	TYPE 2	18	3	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	2.8	-	D.1	-	5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	3	-	D.1	-	5	N-S CAP	TYPE 3	6	-	
AERATION TANKS	3.4	-	D.1	-	5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	3.9	-	D.1	-	5	N-S CAP	TYPE 2	24	4	
AERATION TANKS	4.5	-	D.1	-	1	N-S CAP	TYPE 4	2	-	
AERATION TANKS	4.5	-	D.1	-	1	N-S CAP	TYPE 4	2	-	
AERATION TANKS	5.4	-	D.1	-	5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	5.8	-	D.1	-	1	N-S CAP	TYPE 4	4	-	
AERATION TANKS	6	-	D.1	-	5	N-S CAP	TYPE 3	96	-	
AERATION TANKS	6.3	-	D.1.8	-	5	DECK	TYPE 2	24	24	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	7	-	D.1	-	5	N-S CAP	TYPE 3	72	-	
AERATION TANKS	8	-	D.1	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	8.2	-	D.1	-	1/5	N-S CAP	TYPE 4	2	-	

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 3 REPAIR SCHEDULE
SHEET 6 OF 15

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-537.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\autodesk\vault client (2026)\working folder\bedc_acad(n).ctb
Last Date Saved: 10/20/2026 3:41 PM
Plot Style Table: BEDC_Acad(N).ctb
Plot Scale: 1:1
Date & Time Plotted: 10/20/2026 3:46 PM

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 3 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
AERATION TANKS	8.4	-	D.1	-	3	N-S CAP	TYPE 4	2	-	
AERATION TANKS	8.5	-	D.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	8.6	-	D.1	-	1/5	N-S CAP	TYPE 4	6	-	
AERATION TANKS	8.9	-	D.1	-	5	N-S CAP	TYPE 2	6	2	
AERATION TANKS	10	-	D.1	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	10.1	-	D.1	-	1	N-S CAP	TYPE 4	2	-	
AERATION TANKS	12.7	13	D.1	-	5	N-S CAP	TYPE 1	96	72	
AERATION TANKS	13.3	-	D.1.5	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	1.1	-	E.2	E.4	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	1.1	-	E.5	-	5	E-W CAP	TYPE 2	6	4	
AERATION TANKS	1.1.1	-	E	-	5	N-S CAP	TYPE 2	4	4	
AERATION TANKS	2.1	2.5	E	-	5	N-S CAP	TYPE 3	60	-	
AERATION TANKS	2.8	-	E	-	3	N-S CAP	TYPE 4	2	-	
AERATION TANKS	3	-	E	-	5	N-S CAP	TYPE 3	72	-	
AERATION TANKS	3.4	-	E	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	3.5	-	E	-	5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	3.9	-	E.2	-	5	DECK	TYPE 2	18	18	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	4.3	-	E.2	-	5	DECK	TYPE 2	10	10	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	4.6	-	E	-	1/5	N-S CAP	TYPE 4	6	-	
AERATION TANKS	5.2	-	E.4	-	5	DECK	TYPE 2	10	2	
AERATION TANKS	5.5	-	E	-	5	N-S CAP	TYPE 4	8	-	
AERATION TANKS	6	6.2	E	-	5	N-S CAP	TYPE 3	96	-	
AERATION TANKS	6.5	-	E	-	1/5	N-S CAP	TYPE 3	4	-	
AERATION TANKS	6.5	-	E	-	3	N-S CAP	TYPE 4	1	-	
AERATION TANKS	6.9	-	E	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	7	-	E	-	5	N-S CAP	TYPE 3	48	-	
AERATION TANKS	8.6	-	E.8	-	5	DECK	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	10	-	E	-	5	N-S CAP	TYPE 3	48	-	
AERATION TANKS	10.8	-	E	-	5	N-S CAP	TYPE 4	10	-	
AERATION TANKS	11.7	-	E	-	5	N-S CAP	TYPE 4	4	-	
AERATION TANKS	11.9	-	E.8	-	5	DECK	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	13.5	-	E	-	5	N-S CAP	TYPE 4	5	-	
AERATION TANKS	13.1	-	E.4	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	13.1.1	-	E	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	1.1	-	E.1.2	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	1.1	-	E.1.8	-	5	E-W CAP	TYPE 2	24	1	
AERATION TANKS	2	-	E.1.5	-	4	E-W CAP	TYPE 2	1	1	
AERATION TANKS	2	-	E.1.1	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.5	-	E.1	-	5	N-S CAP	TYPE 4	10	-	
AERATION TANKS	3	-	E.1	-	5	N-S CAP	TYPE 4	10	-	
AERATION TANKS	4	-	E.1	-	5	N-S CAP	TYPE 3	72	-	
AERATION TANKS	4.4	-	E.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	5	5.2	E.1	-	5	N-S CAP	TYPE 3	72	-	
AERATION TANKS	5	-	E.1.2	-	5	E-W CAP	TYPE 2	30	30	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	6	-	E.1	-	5	N-S CAP	TYPE 2	36	3	
AERATION TANKS	7.5	-	E.1	-	1	N-S CAP	TYPE 4	2	-	
AERATION TANKS	8.4	-	E.1.1	-	5	DECK	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	9.8	-	E.1.7	-	5	DECK	TYPE 2	10	4	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	11	11.1	E.1	-	5	N-S CAP	TYPE 4	24	-	
AERATION TANKS	11.5	11.9	E.1	-	5	N-S CAP	TYPE 3	96	-	
AERATION TANKS	12	-	E.1	-	5	N-S CAP	TYPE 3	72	1	
AERATION TANKS	12.6	13.1	E.1	-	5	N-S CAP	TYPE 1	120	72	
AERATION TANKS	13.6	-	E.1	-	1	N-S CAP	TYPE 4	2	-	
AERATION TANKS	13.6	13.8	E.1	-	5	N-S CAP	TYPE 2	48	24	
AERATION TANKS	13.9	-	E.1	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	13.1	-	E.1	F	5	E-W CAP	TYPE 2	1	1	X5 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	1.1	-	F.5	-	5	E-W CAP	TYPE 4	12	-	
AERATION TANKS	1.1.1	-	F	-	5	N-S CAP	TYPE 2	36	1	
AERATION TANKS	1.1.5	-	F.2	-	5	DECK	TYPE 2	4	4	
AERATION TANKS	2.4	-	F	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	2.6	-	F	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	3	-	F	-	5	N-S CAP	TYPE 3	72	-	
AERATION TANKS	3.5	-	F	-	5	N-S CAP	TYPE 2	6	72	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	4.7	-	F	-	5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	5.4	-	F	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	5.9	-	F	-	5	N-S CAP	TYPE 3	6	-	
AERATION TANKS	6.4	-	F	-	3	N-S CAP	TYPE 4	6	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	6.5	-	F	-	1/5	N-S CAP	TYPE 4	6	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	6.5	-	F	-	5	N-S CAP	TYPE 2	6	72	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	7	-	F	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	7.1	-	F.5	-	5	DECK	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	8	-	F	-	5	N-S CAP	TYPE 3	12	-	

PHASE 3 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
AERATION TANKS	8.7	-	F.2	-	5	DECK	TYPE 2	5	2	
AERATION TANKS	9	-	F	-	5	N-S CAP	TYPE 3	12	-	
AERATION TANKS	10	-	F	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	11	-	F	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	12	-	F	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	12.9	-	F.7	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	13	-	F	-	5	N-S CAP	TYPE 3	2.5	-	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	13.5	-	F	-	1	N-S CAP	TYPE 4	2	-	X4 REPAIRS AT THIS LOCATION
AERATION TANKS	13.1	-	F	F.9	5	E-W CAP	TYPE 2	1	1	X5 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	1.1.5	-	F.1	-	3/5	N-S CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	1.1.6	-	F.1	-	3/5	N-S CAP	TYPE 4	8	-	
AERATION TANKS	1.1.7	-	F.1	-	5	N-S CAP	TYPE 3	24	1	
AERATION TANKS	2	-	F.1.1	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2	-	F.1.9	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	3.1	-	F.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	3.4	-	F.1	-	3	N-S CAP	TYPE 4	3	-	
AERATION TANKS	3.4	-	F.1	-	3	N-S CAP	TYPE 4	6	-	
AERATION TANKS	4	-	F.1	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	4.7	-	F.1.1	-	5	DECK	TYPE 2	18	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	6.7	-	F.1	-	5	N-S CAP	TYPE 2	2	1	
AERATION TANKS	7.7	-	F.1	-	5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	7.9	-	F.1	-	5	N-S CAP	TYPE 4	12	-	
AERATION TANKS	8.3	-	F.1	-	3	N-S CAP	TYPE 4	3	-	
AERATION TANKS	8.7	-	F.1	-	1	N-S CAP	TYPE 4	6	-	
AERATION TANKS	9	-	F.1	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	9.5	-	F.1.1	-	5	DECK	TYPE 2	10	10	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	9.8	-	F.1.1	-	5	DECK	TYPE 2	10	10	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	9.9	-	F.1.1	-	5	DECK	TYPE 2	10	10	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	10	-	F.1	-	5	N-S CAP	TYPE 3	48	-	
AERATION TANKS	11.8	-	F.1.1	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	12	-	F.1	-	5	N-S CAP	TYPE 3	12	-	
AERATION TANKS	13.1	-	F.1	G	5	N-S CAP	TYPE 2	1	1	X5 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	1.1	-	G.6	-	5	E-W CAP	TYPE 3	36	-	
AERATION TANKS	1.1	-	G.5	-	4/5	E-W CAP	TYPE 2	4	2	
AERATION TANKS	1.1.4	-	G	-	1	N-S CAP	TYPE 4	2	-	
AERATION TANKS	1.1.7	-	G	-	1/5	N-S CAP	TYPE 2	2	1	
AERATION TANKS	2	-	G	G.1	4	E-W CAP	TYPE 2	2	2	X5 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	2	-	G.9	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.4	-	G	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.5	-	G.1	H	2	E-W BEAM	TYPE 2	1	1	X6 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	2.6	-	G	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	3.3	-	G	-	5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	3.4	-	G	-	1	N-S CAP	TYPE 4	5	-	
AERATION TANKS	4	-	G	-	5	N-S CAP	TYPE 3	8	-	
AERATION TANKS	4.8	-	G.5	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	4.9	-	G.2	G.6	5	DECK	TYPE 2	1	6	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	5.5	-	G.9	-	5	DECK	TYPE 2	3	3	
AERATION TANKS	6.4	-	G.8	-	5	DECK	TYPE 2	4	4	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	7.2	-	G	-	5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	8.2	-	G	-	5	N-S CAP	TYPE 2	12	12	MULTIPLE DEFECTS IN REPAIR AREA. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	8.2	-	G.5	-	5	DECK	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	8.2	-	G.8	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	8.9	-	G	-	5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	9.2	-	G	-	5	N-S CAP	TYPE 2	12	12	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	10	-	G.9	-	5	E-W CAP	TYPE 4	1	-	
AERATION TANKS	10	-	G.2	-	5	E-W CAP	TYPE 4	1	-	
AERATION TANKS	10.8	-	G	-	3	N-S CAP	TYPE 4	1	-	
AERATION TANKS	11	-	G	-	5	N-S CAP	TYPE 3	12	-	
AERATION TANKS	11.7	-	G	-	3/5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	12.5	-	G	-	5	N-S CAP	TYPE 2	6	72	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	13.8	-	G	-	1	N-S CAP	TYPE 2	4	4	
AERATION TANKS	13.9	-	G	-	5	N-S CAP	TYPE 4	8	-	
AERATION TANKS	13.1	-	G	G.1	5	E-W CAP	TYPE 2	72	3	MULTIPLE DEFECTS IN REPAIR AREA. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	1.1	-	G.1	-	3/5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	1.1	-	G.1.9	-	5	E-W CAP	TYPE 3	24	2	
AERATION TANKS	1.1.1	-	G.1	-	5	N-S CAP	TYPE 3	12	-	
AERATION TANKS	1.1.5	-	G.1	-	5	N-S CAP	TYPE 3	12	-	
AERATION TANKS	2	-	G.1	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2	-	G.1.1	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

STATE OF NEW YORK · ILHAN TUTUNCU · LICENSED PROFESSIONAL ENGINEER

NYC Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 3 REPAIR SCHEDULE
SHEET 7 OF 15

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-538.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-532.00_546.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb
Date & Time Plotted: 10/20/2026 3:46 PM

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 3 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT START	BENT END	PILE ROW START	PILE ROW END	FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
AERATION TANKS	2	-	G.1.9	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.5	-	G.1	-	5	N-S CAP	TYPE 3	48	-	
AERATION TANKS	3.2	-	G.1.2	-	5	DECK	TYPE 4	2	-	
AERATION TANKS	3.3	-	G.1	-	1/5	N-S CAP	TYPE 4	4	-	
AERATION TANKS	3.7	-	G.1	-	2/5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	4	-	G.1	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	4	-	G.1.5	-	5	E-W CAP	TYPE 4	4	-	
AERATION TANKS	4	-	G.1.5	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	4.1	-	G.1	-	3/5	N-S CAP	TYPE 4	8	-	
AERATION TANKS	4.5	-	G.1	-	3/5	N-S CAP	TYPE 4	6	-	
AERATION TANKS	4.7	-	G.1	-	2/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	5	-	G.1.5	-	5	E-W CAP	TYPE 2	8	6	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	5	-	G.1.5	-	2/5	E-W CAP	TYPE 4	10	-	
AERATION TANKS	5.9	-	G.1.1	-	5	DECK	TYPE 4	2	-	
AERATION TANKS	6	-	G.1	-	5	N-S CAP	TYPE 3	84	-	
AERATION TANKS	6	-	G.1.4	-	5	E-W CAP	TYPE 2	18	18	
AERATION TANKS	6	-	G.1	-	3	N-S CAP	TYPE 2	8	36	
AERATION TANKS	6	-	G.1.4	-	5	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	6.1	6.5	G.1	-	5	N-S CAP	TYPE 3	120	-	
AERATION TANKS	6.2	-	G.1.1	-	5	DECK	TYPE 2	2	2	
AERATION TANKS	6.2	-	G.1.8	-	5	DECK	TYPE 4	2	-	
AERATION TANKS	6.5	-	G.1	-	5	N-S CAP	TYPE 3	72	-	
AERATION TANKS	6.7	-	G.1	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	7	-	G.1.5	-	5	E-W CAP	TYPE 2	36	2	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	7	-	G.1.8	-	5	E-W CAP	TYPE 4	1	-	
AERATION TANKS	7.2	-	G.1	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	7.2	-	G.1.2	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	7.2	-	G.1.6	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	7.2	-	G.1.8	-	5	DECK	TYPE 4	2	-	
AERATION TANKS	7.2	-	G.1.9	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	7.4	-	G.1	-	3/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	7.5	-	G.1.6	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	7.6	-	G.1.9	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	7.7	-	G.1.1	-	5	DECK	TYPE 2	6	6	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	7.7	-	G.1.9	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	8.2	-	G.1.3	-	5	DECK	TYPE 4	3	-	
AERATION TANKS	8.9	-	G.1.1	-	5	DECK	TYPE 2	8	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	9	-	G.1	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	9.2	-	G.1.9	-	5	DECK	TYPE 2	12	4	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	9.2	-	G.1.3	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	9.7	-	G.1.4	-	5	DECK	TYPE 2	6	2	
AERATION TANKS	9.8	-	G.1.7	-	5	DECK	TYPE 2	2	2	
AERATION TANKS	9.9	-	G.1.7	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	10.3	-	G.1	-	1/5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	10.3	-	G.1.9	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	10.5	-	G.1	-	1/5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	11	-	G.1	-	5	N-S CAP	TYPE 3	8	-	
AERATION TANKS	12.8	-	G.1.5	-	5	DECK	TYPE 2	6	6	
AERATION TANKS	1.1	-	H.8	-	4	E-W CAP	TYPE 4	1	-	
AERATION TANKS	1.1.4	-	H	-	5	E-W CAP	TYPE 4	3	-	
AERATION TANKS	1.1.5	-	H	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	1.1.8	-	H	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	2.5	-	H	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.5	-	H.1	H.9	4	E-W BEAM	TYPE 2	2	2	X5 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	2.5	-	H.1	H.9	2	E-W BEAM	TYPE 2	2	2	X5 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	2.5	-	H.1	H.9	4	E-W BEAM	TYPE 2	2	2	X6 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	2.7	-	H	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	3	-	H.3	G.7	2	E-W CAP	TYPE 2	2	2	X3 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	4.5	-	H	-	1/5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	4.8	-	H	-	1/5	N-S CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	4.8	-	H	-	5	E-W CAP	TYPE 3	8	-	
AERATION TANKS	5.3	-	H	-	5	E-W CAP	TYPE 4	2	-	
AERATION TANKS	5.5	-	H	-	5	E-W CAP	TYPE 4	2	-	
AERATION TANKS	5.5	-	H.5	-	5	DECK	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	5.8	-	H	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	6.4	-	H.1	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	7.1	-	H	-	5	E-W CAP	TYPE 4	3	-	
AERATION TANKS	7.2	-	H.8	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	7.3	-	H	-	5	E-W CAP	TYPE 4	1	-	
AERATION TANKS	7.5	-	H	-	5	E-W CAP	TYPE 4	1	-	
AERATION TANKS	7.5	-	H.1	-	5	DECK	TYPE 2	12	3	
AERATION TANKS	7.7	-	H	-	5	E-W CAP	TYPE 4	2	-	
AERATION TANKS	7.8	-	H	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION

PHASE 3 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT START	BENT END	PILE ROW START	PILE ROW END	FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
AERATION TANKS	7.9	-	H	-	5	E-W CAP	TYPE 4	1	-	
AERATION TANKS	8.1	-	H	-	5	E-W CAP	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
AERATION TANKS	8.4	-	H	-	5	E-W CAP	TYPE 4	2	-	
AERATION TANKS	8.5	-	H	-	5	E-W CAP	TYPE 3	2	-	
AERATION TANKS	8.6	-	H.6	-	5	DECK	TYPE 2	5	5	
AERATION TANKS	8.7	-	H	-	5	E-W CAP	TYPE 4	1	-	
AERATION TANKS	8.8	-	H	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	9.6	-	H	-	5	E-W CAP	TYPE 3	8	-	
AERATION TANKS	9.8	-	H.8	-	5	DECK	TYPE 4	2	-	
AERATION TANKS	9.8	-	H.9	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	10	-	H	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	10.4	-	H.1	J	5	DECK	TYPE 2	48	180	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	10.5	-	H	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	10.5	-	H	-	5	E-W CAP	TYPE 4	2	-	
AERATION TANKS	11.5	-	H	-	5	E-W CAP	TYPE 3	8	-	
AERATION TANKS	12	-	H	-	5	E-W CAP	TYPE 3	36	-	
AERATION TANKS	12.5	-	H	-	5	E-W CAP	TYPE 2	12	72	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	12.9	-	H	-	5	E-W CAP	TYPE 3	15	-	
AERATION TANKS	13	-	H.9	-	4	E-W CAP	TYPE 2	2	2	
AERATION TANKS	13.2	-	H	-	5	DECK	TYPE 4	3	-	
AERATION TANKS	13.7	-	H	-	3	N-S CAP	TYPE 2	2	2	X3 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	13.8	-	H	-	5	E-W CAP	TYPE 2	24	24	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	13.1	-	H	-	5	E-W CAP	TYPE 2	24	18	
AERATION TANKS	13.1	-	H.5	-	5	E-W CAP	TYPE 4	2	-	
AERATION TANKS	1.1.1	-	H.1	-	5	N-S CAP	TYPE 3	72	-	
AERATION TANKS	2	-	H.1	-	5	N-S CAP	TYPE 3	18	-	
AERATION TANKS	2.3	-	H.1.9	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	2.5	-	H.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.7	-	H.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	3	-	H.1	-	5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	3.2	-	H.1.9	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	3.3	-	H.1	-	5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	3.4	-	H.1.9	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	3.5	-	H.1.9	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	3.8	-	H.1.9	-	5	DECK	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	3.9	-	H.1	-	5	N-S CAP	TYPE 3	3	-	
AERATION TANKS	5	-	H.1	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	5.9	-	H.1	-	5	N-S CAP	TYPE 3	12	-	
AERATION TANKS	5.9	-	H.1	-	5	N-S CAP	TYPE 3	6	-	
AERATION TANKS	6.3	-	H.1.8	-	5	DECK	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	6.5	-	H.1.8	-	5	DECK	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	7	-	H.1.5	-	5	E-W CAP	TYPE 4	3	-	
AERATION TANKS	7.1	-	H.1.1	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	7.9	-	H.1.1	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	8.1	-	H.1.9	-	5	DECK	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	8.4	-	H.1.9	-	5	DECK	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	10.2	-	H.1.4	-	5	DECK	TYPE 2	40	60	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	10.7	-	H.1.2	H.1.9	5	DECK	TYPE 2	8	120	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	13.1	13.9	H.1	-	3	N-S CAP	TYPE 2	2	2	X10 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	13	-	H.1.8	-	5	E-W CAP	TYPE 4	4	-	
AERATION TANKS	13	-	H.1.7	-	5	E-W CAP	TYPE 4	3	-	
AERATION TANKS	13.1	-	H.1	-	3/5	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	13.2	-	H.1	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	13.9	13.3	H.1	-	1	N-S CAP	TYPE 2	2	2	X7 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	1.1.3	-	J.9	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	2.5	-	J	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.7	-	J	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	3	-	J	-	5	N-S CAP	TYPE 3	60	-	
AERATION TANKS	3.2	-	J	-	5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	3.3	-	J	-	5	N-S CAP	TYPE 2	3	1	
AERATION TANKS	3.3	-	J.3	-	5	DECK	TYPE 4	3	-	
AERATION TANKS	3.6	-	J	-	5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	3.8	-	J	-	5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	3.8	-	J.5	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	4	-	J	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	4.1	-	J	-	5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	4.1	4.5	J.7	-	5	DECK	TYPE 2	120	60	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	4.3	-	J	-	5	N-S CAP	TYPE 2	6	6	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	4.5	-	J	-	3/5	N-S CAP	TYPE 4	14	-	
AERATION TANKS	4.9	-	J.4	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	5.1	-	J.2	-	5	DECK	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	5.5	-	J	J.1	5	DECK	TYPE 2	72	180	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	5.9	-	J	-	5	N-S CAP	TYPE 2	12	12	

Date & Time Plotted: 10/20/2026 3:46 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb
Last Date Saved: 10/20/2026 3:41 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-532.00_546.00.dwg
Last Saved By: AcostaML

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 3 REPAIR SCHEDULE
SHEET 8 OF 15

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-539.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 3 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
AERATION TANKS	5.9	-	J	J.1	5	DECK	TYPE 2	72	180	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	6	-	J.5	-	5	E-W CAP	TYPE 4	5	-	
AERATION TANKS	7	-	J.5	-	5	E-W CAP	TYPE 4	2	-	
AERATION TANKS	7.8	-	J	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	7.8	-	J.1	J.3	5	DECK	TYPE 2	72	72	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	8.7	-	J	-	5	N-S CAP	TYPE 3	12	-	
AERATION TANKS	8.8	-	J	-	5	N-S CAP	TYPE 2	6	72	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	8.8	-	J.5	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	9	-	J	-	3/5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	9	-	J.8	-	5	E-W CAP	TYPE 4	2	-	
AERATION TANKS	9.1	-	J	-	5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	9.6	-	J	-	5	N-S CAP	TYPE 2	6	1	
AERATION TANKS	10.2	-	J	-	5	N-S CAP	TYPE 4	8	-	
AERATION TANKS	10.7	-	J	-	5	N-S CAP	TYPE 4	4	-	
AERATION TANKS	11.1	-	J.5	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	11.3	-	J	-	5	N-S CAP	TYPE 2	6	12	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	11.4	-	J	-	5	N-S CAP	TYPE 2	6	12	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	11.8	-	J.8	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	12.2	-	J.5	-	5	DECK	TYPE 2	36	72	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	12.7	-	J	-	5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	13.1	13.8	J.1	-	1	DECK	TYPE 2	2	2	X3 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	13.9	13.5	J	-	1	N-S CAP	TYPE 2	2	2	X3 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	1.1	-	J.1	-	4	E-W CAP	TYPE 4	1	-	
AERATION TANKS	1.1	-	J.1.8	-	4/5	E-W CAP	TYPE 4	2	-	
AERATION TANKS	1.1.9	-	J.1	-	5	N-S CAP	TYPE 3	8	-	
AERATION TANKS	2	-	J.1	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	2	-	J.1.3	-	5	E-W CAP	TYPE 4	4	-	
AERATION TANKS	2.4	-	J.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.5	-	J.1.5	-	4/5	E-W BEAM	TYPE 4	1	-	
AERATION TANKS	2.7	-	J.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	3.7	-	J.1	-	5	N-S CAP	TYPE 3	60	-	
AERATION TANKS	4	-	J.1	-	5	N-S CAP	TYPE 3	48	-	
AERATION TANKS	4	-	J.1.7	-	4/5	E-W CAP	TYPE 4	2	-	
AERATION TANKS	4.9	-	J.1.8	-	5	DECK	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	6	-	J.1.1	-	5	E-W CAP	TYPE 2	24	4	
AERATION TANKS	6.1	-	J.1.9	-	5	DECK	TYPE 4	3	-	
AERATION TANKS	6.1	-	J.1.3	-	5	DECK	TYPE 2	15	2	
AERATION TANKS	6.8	-	J.1.7	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	6.8	-	J.1.3	-	5	DECK	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	7.2	-	J.1.5	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	8	-	J.1	-	5	N-S CAP	TYPE 3	72	-	
AERATION TANKS	8.5	-	J.1	-	5	N-S CAP	TYPE 3	72	-	
AERATION TANKS	9.1	-	J.1.2	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	9.1	-	J.1.3	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	9.4	-	J.1.5	-	5	DECK	TYPE 2	5	5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	9.6	-	J.1.9	-	5	DECK	TYPE 2	1	2	
AERATION TANKS	10.1	-	J.1.3	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	10.3	-	J.1	-	1/5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	10.5	-	J.1.8	-	5	DECK	TYPE 2	3	2	
AERATION TANKS	10.6	-	J.1.3	-	5	DECK	TYPE 2	72	72	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	10.8	-	J.1	-	5	N-S CAP	TYPE 3	60	-	
AERATION TANKS	10.9	-	J.1.5	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	11.1	-	J.1.7	-	5	DECK	TYPE 2	2	2	
AERATION TANKS	11.5	-	J.1	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	11.5	-	J.1.2	-	5	DECK	TYPE 2	2	2	
AERATION TANKS	11.9	-	J.1	-	3/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	12	-	J.1	-	5	N-S CAP	TYPE 3	96	-	
AERATION TANKS	12.7	-	J.1	-	3	N-S CAP	TYPE 2	1	1	
AERATION TANKS	12.8	-	J.1	-	3	N-S CAP	TYPE 4	4	-	
AERATION TANKS	12.9	-	J.1.8	-	5	DECK	TYPE 4	2	-	
AERATION TANKS	13.1	13.9	J.1	-	1	N-S CAP	TYPE 2	2	2	X8 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	13.1	13.9	J.1	-	3	N-S CAP	TYPE 2	2	2	X8 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	13.1	-	J.1.5	-	5	DECK	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	13.3	-	J.1	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	1.1	-	K.8	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	1.1.3	-	K.9	-	5	DECK	TYPE 4	3	-	
AERATION TANKS	1.1.5	-	K	-	1/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	2	-	K.9	-	4	E-W CAP	TYPE 4	2	-	
AERATION TANKS	2.1	-	K	-	5	N-S CAP	TYPE 2	4	3	
AERATION TANKS	2.5	-	K	-	5	N-S CAP	TYPE 4	36	-	
AERATION TANKS	2.5	-	K.3	-	2/5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	2.9	-	K	-	5	N-S CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	3.8	-	K	-	3/5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	3.8	-	K.4	-	5	DECK	TYPE 2	4	4	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE

PHASE 3 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
AERATION TANKS	4.8	-	K	-	3	N-S CAP	TYPE 2	10	12	
AERATION TANKS	5.8	-	K	-	3/5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	6.2	6.9	K	K.1	5	DECK	TYPE 4	1	-	X11 REPAIRS AT THIS LOCATION
AERATION TANKS	7.1	-	K	-	5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	7.3	-	K	-	5	N-S CAP	TYPE 2	6	1	
AERATION TANKS	8.1	-	K	-	5	N-S CAP	TYPE 4	24	-	
AERATION TANKS	9.3	-	K	-	5	N-S CAP	TYPE 4	48	-	
AERATION TANKS	9.5	-	K	-	5	N-S CAP	TYPE 4	4	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	10	-	K	-	5	N-S CAP	TYPE 4	6	-	
AERATION TANKS	10.1	10.9	K.1	K.9	5	DECK	TYPE 2	1	1	X17 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	10.9	-	K	-	5	N-S CAP	TYPE 2	4	4	
AERATION TANKS	11.8	-	K.4	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	12	-	K	-	5	N-S CAP	TYPE 4	4	-	
AERATION TANKS	12.1	-	K	-	5	N-S CAP	TYPE 4	4	-	
AERATION TANKS	12.7	-	K	-	3	N-S CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	12.9	-	K	-	5	N-S CAP	TYPE 2	4	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	13	-	K.1	-	4/5	E-W BEAM	TYPE 4	2	-	
AERATION TANKS	13.2	-	K	-	3	N-S CAP	TYPE 2	1	1	
AERATION TANKS	13.3	13.4	K	-	1	N-S CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	1.1.5	-	K.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.8	-	K.1	-	1	N-S CAP	TYPE 4	3	-	
AERATION TANKS	3.8	-	K.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	4.1	-	K.1	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	4.8	-	K.1	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	5.1	-	K.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	5.7	-	K.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	5.9	-	K.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	7.2	-	K.1	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	7.7	-	K.1	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	7.9	-	K.1	-	5	N-S CAP	TYPE 2	6	36	
AERATION TANKS	8.1	-	K.1	-	5	N-S CAP	TYPE 2	3	3	
AERATION TANKS	8.5	-	K.1	-	5	N-S CAP	TYPE 4	6	-	
AERATION TANKS	8.6	-	K.1	-	5	N-S CAP	TYPE 4	6	-	
AERATION TANKS	10.1	-	K.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	10.8	-	K.1	-	1	N-S CAP	TYPE 4	2	-	
AERATION TANKS	11.5	-	K.1	-	5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	11.6	-	K.1	-	1/5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	11.7	-	K.1	-	1/5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	12.1	-	K.1	-	5	N-S CAP	TYPE 4	12	-	
AERATION TANKS	12.3	-	K.1	-	5	N-S CAP	TYPE 4	12	-	
AERATION TANKS	13.1	-	K.1	-	5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	13.6	-	K.1	-	5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	13.7	-	K.1	-	5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	13.9	-	K.1	-	1	N-S CAP	TYPE 4	3	-	
AERATION TANKS	1.1.2	-	M.1	-	5	N-S CAP	TYPE 4	4	-	
AERATION TANKS	2	-	M.1.1	-	4	E-W BEAM	TYPE 4	6	-	
AERATION TANKS	3	4	M.1	M.2	5	DECK	TYPE 4	4	-	X5 REPAIRS AT THIS LOCATION
AERATION TANKS	3	-	M.1	M.2	2	E-W BEAM	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	3.1	-	M.1	-	5	N-S CAP	TYPE 2	4	4	
AERATION TANKS	4	-	M.1	-	5	N-S CAP	TYPE 4	6	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	4.2	4.9	M.1.1	M.1.9	5	DECK	TYPE 2	1	1	X12 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	4.5	-	M.1	-	5	N-S CAP	TYPE 2	6	3	
AERATION TANKS	5.7	-	M.1	-	5	N-S CAP	TYPE 2	6	2	
AERATION TANKS	5.8	-	M.1	-	5	N-S CAP	TYPE 2	6	2	
AERATION TANKS	5.8	-	M.1	-	5	N-S CAP	TYPE 2	6	2	
AERATION TANKS	5.8	-	M.1.7	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	7.3	7.7	M.1.8	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	7.5	-	M.1	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	8.1	-	M.1	-	3/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	8	-	M.1.8	-	5	E-W CAP	TYPE 2	48	8	
AERATION TANKS	8.8	-	M.1	-	5	N-S CAP	TYPE 2	6	2	
AERATION TANKS	9	-	M.1.9	-	5	E-W CAP	TYPE 2	48	8	
AERATION TANKS	9.1	-	M.1	-	5	N-S CAP	TYPE 2	4	4	
AERATION TANKS	10.9	-	M.1	-	5	N-S CAP	TYPE 2	4	4	
AERATION TANKS	11.1	-	M.1	-	5	N-S CAP	TYPE 4	36	-	
AERATION TANKS	11.3	-	M.1.9	-	5	DECK	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	12	-	M.1	-	5	N-S CAP	TYPE 4	96	-	
AERATION TANKS	12.4	-	M.1	-	3	N-S CAP	TYPE 4	4	-	
AERATION TANKS	13.1	-	M.1	-	5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	13	-	M.1.9	-	5	E-W CAP	TYPE 4	4	-	
AERATION TANKS	13	-	M.1.5	-	5	E-W CAP	TYPE 4	1	-	
AERATION TANKS	1.1	-	M.2.2	-	4/5	E-W CAP	TYPE 4	5	-	
AERATION TANKS	1.1.4	-	M.2	-	1/5	N-S CAP	TYPE 4	4	-	

0 1 2 3 4 FT.
1/2"=1'-0"

NYC Environmental Protection BEDC/IHD

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 3 REPAIR SCHEDULE
SHEET 9 OF 15

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-540.00

Last Saved By: AcostaML
Last Date Saved: 10/20/2026 3:41 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-532.00_546.00.dwg
Date & Time Plotted: 10/20/2026 3:46 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 3 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
AERATION TANKS	1.1.8	-	M.2	-	5	N-S CAP	TYPE 4	12	-	
AERATION TANKS	2	-	M.2	-	5	N-S CAP	TYPE 4	24	-	
AERATION TANKS	2	2.5	M.2	N	5	DECK	TYPE 4	3	-	X5 REPAIRS AT THIS LOCATION
AERATION TANKS	2	-	M.2.6	-	4	E-W CAP	TYPE 2	2	2	X3 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	2.5	-	M.2	-	5	N-S CAP	TYPE 4	18	-	
AERATION TANKS	3	-	M.2.2	M.2.9	2	E-W CAP	TYPE 4	3	-	X6 REPAIRS AT THIS LOCATION
AERATION TANKS	3.6	-	M.2	-	3/5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	3.9	-	M.2	-	1	N-S CAP	TYPE 4	2	-	
AERATION TANKS	4	-	M.2	-	5	N-S CAP	TYPE 4	6	-	
AERATION TANKS	4	5	M.2	N	5	DECK	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
AERATION TANKS	5.8	-	M.2	-	3/5	N-S CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	5.9	-	M.2	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	6	-	M.2	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	6	7	M.2	N	5	DECK	TYPE 4	4	-	X7 REPAIRS AT THIS LOCATION
AERATION TANKS	7	-	M.2	-	5	N-S CAP	TYPE 3	60	-	
AERATION TANKS	7.9	-	M.2	-	3/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	8.2	-	M.2	-	3	N-S CAP	TYPE 4	2	-	
AERATION TANKS	9	10	M.2	N	5	DECK	TYPE 2	2	2	X6 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	9.3	-	M.2	-	5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	9.6	9.7	M.2	-	3	N-S CAP	TYPE 4	3	-	
AERATION TANKS	10	-	M.2	-	5	N-S CAP	TYPE 3	48	-	
AERATION TANKS	10.8	-	M.2	-	1/5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	10.8	-	M.2	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	11.4	-	M.2	-	1	N-S CAP	TYPE 2	6	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	11.7	-	M.2	-	3	N-S CAP	TYPE 4	2	-	
AERATION TANKS	12.3	12.5	M.2	N	5	DECK	TYPE 2	4	4	X20 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	12.6	-	M.2	-	3	N-S CAP	TYPE 4	3	-	
AERATION TANKS	13	-	M.2	-	5	N-S CAP	TYPE 4	24	-	
AERATION TANKS	13.2	-	M.2	-	5	N-S CAP	TYPE 2	18	18	FAILING EPOXY REPAIR IN AREA
AERATION TANKS	13.4	-	M.2	-	1	N-S CAP	TYPE 4	3	-	
AERATION TANKS	1.1.5	-	N	-	5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	1.1.5	-	N.9	-	5	DECK	TYPE 4	3	-	
AERATION TANKS	1.1.7	-	N.8	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.1	-	N.1	-	5	DECK	TYPE 4	5	-	
AERATION TANKS	2.2	-	N.2	-	5	DECK	TYPE 4	10	-	
AERATION TANKS	2.2	-	N.1	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	2.5	-	N	-	5	N-S CAP	TYPE 4	6	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	2.5	-	N.5	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	2.5	-	N.5	-	4	E-W CAP	TYPE 4	2	-	
AERATION TANKS	2.5	-	N.9	-	5	E-W CAP	TYPE 3	24	-	
AERATION TANKS	2.7	-	N	-	1	N-S CAP	TYPE 4	1	-	
AERATION TANKS	3.1	-	N.1	-	5	DECK	TYPE 4	2	-	
AERATION TANKS	3.2	-	N	-	5	N-S CAP	TYPE 4	6	-	
AERATION TANKS	3.5	-	N	-	1	N-S CAP	TYPE 4	5	-	
AERATION TANKS	3.5	-	N	-	5	N-S CAP	TYPE 4	2	-	X11 REPAIRS AT THIS LOCATION
AERATION TANKS	3.8	-	N	-	5	N-S CAP	TYPE 2	1	2	
AERATION TANKS	4	-	N.2	-	5	E-W BEAM	TYPE 4	1	-	
AERATION TANKS	4	-	N.6	-	5	E-W BEAM	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	4.1	-	N	-	5	N-S CAP	TYPE 4	2	-	X5 REPAIRS AT THIS LOCATION
AERATION TANKS	4.2	-	N.1	-	5	DECK	TYPE 4	4	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	4.2	-	N.4	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	4.3	-	N	-	1	N-S CAP	TYPE 4	4	-	
AERATION TANKS	4.6	-	N	-	5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	4.7	-	N	-	5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	5	-	N	-	5	N-S CAP	TYPE 4	36	-	
AERATION TANKS	5	-	N.5	-	5	E-W CAP	TYPE 4	1	-	
AERATION TANKS	5.1	-	N	N.1	5	DECK	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	5.2	-	N	-	5	N-S CAP	TYPE 3	5	-	
AERATION TANKS	5.6	-	N	-	1	N-S CAP	TYPE 4	1	-	
AERATION TANKS	5.7	-	N	-	1	N-S CAP	TYPE 4	1	-	
AERATION TANKS	5.7	-	N	-	5	N-S CAP	TYPE 4	18	-	
AERATION TANKS	7	-	N	-	5	N-S CAP	TYPE 4	36	-	
AERATION TANKS	8	-	N	-	5	N-S CAP	TYPE 4	12	-	
AERATION TANKS	8.9	-	N	-	5	N-S CAP	TYPE 4	12	-	
AERATION TANKS	8.9	-	N	-	3/5	N-S CAP	TYPE 2	1	3	
AERATION TANKS	9.6	-	N.4	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	9.7	-	N	-	5	N-S CAP	TYPE 4	5	-	
AERATION TANKS	9.7	-	N.2	-	5	DECK	TYPE 2	2	2	
AERATION TANKS	9.8	-	N.1	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	9.9	-	N	-	3/5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	10	-	N	-	5	N-S CAP	TYPE 4	48	-	
AERATION TANKS	10	-	N.5	-	5	E-W CAP	TYPE 2	36	36	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	10.1	-	N	-	1	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	10.3	-	N	-	3/5	N-S CAP	TYPE 4	2	-	

PHASE 3 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
AERATION TANKS	10.3	-	N.2	-	5	DECK	TYPE 2	6	3	
AERATION TANKS	10.6	-	N	-	3	N-S CAP	TYPE 4	2	-	
AERATION TANKS	11	-	N	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	11	-	N.5	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	11.2	-	N.4	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	11.7	-	N	-	5	N-S CAP	TYPE 4	12	-	
AERATION TANKS	11.7	-	N.8	-	5	DECK	TYPE 2	2	2	
AERATION TANKS	12.1	-	N	-	5	N-S CAP	TYPE 2	1	1	X4 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	12.5	-	N.5	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	12.8	-	N.6	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	13.1	-	N.8	-	5	DECK	TYPE 4	3	-	
AERATION TANKS	13.2	-	N	-	1/5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	13.3	13.7	N	-	5	N-S CAP	TYPE 2	36	18	
AERATION TANKS	13.3	-	N	-	3	N-S CAP	TYPE 2	2	2	
AERATION TANKS	13.4	-	N.7	-	5	DECK	TYPE 4	4	-	
AERATION TANKS	13.5	-	N	-	1/5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	13.8	-	N	-	3	N-S CAP	TYPE 4	1	-	
AERATION TANKS	13.8	-	N.2	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	13.9	-	N.4	-	5	DECK	TYPE 4	6	-	
AERATION TANKS	2.4	-	N.1	-	5	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.4	-	N.1.5	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	2.5	-	N.1.1	N.1.9	4	E-W CAP	TYPE 2	2	2	X5 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	2.5	-	N.1.1	N.1.9	2	E-W CAP	TYPE 2	2	2	X5 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	2.6	-	N.1	-	5	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.9	-	N.1	-	3	N-S CAP	TYPE 4	8	-	
AERATION TANKS	2.9	-	N.1	-	3	N-S CAP	TYPE 4	1	-	
AERATION TANKS	3.2	-	N.1	-	3	N-S CAP	TYPE 4	1	-	
AERATION TANKS	3.5	-	N.1	-	1	N-S CAP	TYPE 4	1	-	
AERATION TANKS	3.5	-	N.1	-	3	N-S CAP	TYPE 4	1	-	
AERATION TANKS	4.5	-	N.1.5	-	5	DECK	TYPE 4	1	-	X5 REPAIRS AT THIS LOCATION
AERATION TANKS	4.9	-	N.1.9	-	5	DECK	TYPE 2	1	2	
AERATION TANKS	5.2	-	N.1.2	-	5	DECK	TYPE 4	2	-	
AERATION TANKS	5.6	5.9	N.1.1	-	5	DECK	TYPE 2	96	2	
AERATION TANKS	5.8	-	N.1	-	5	N-S CAP	TYPE 3	4	-	
AERATION TANKS	6.1	-	N.1.1	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	6.3	-	N.1.1	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	6.5	-	N.1	-	5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	6.6	-	N.1.2	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	6.8	-	N.1.3	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	6.8	-	N.1.8	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	6.9	-	N.1.5	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	7.6	-	N.1	-	5	N-S CAP	TYPE 3	4	-	
AERATION TANKS	8.2	-	N.1.4	-	5	DECK	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	8.4	-	N.1.5	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	9	-	N.1.3	N.1.8	5	E-W CAP	TYPE 4	1	-	X9 REPAIRS AT THIS LOCATION
AERATION TANKS	9.3	-	N.1	-	3	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	9.6	-	N.1	-	3	N-S CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	9.8	-	N.1	-	3	N-S CAP	TYPE 4	2	-	
AERATION TANKS	10.1	-	N.1	-	5	N-S CAP	TYPE 2	36	36	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	10.8	-	N.1	-	1/5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	11.2	-	N.1.1	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	11.4	-	N.1.6	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	12	-	N.1	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	12.4	-	N.1	-	1/5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	12.4	-	N.1	-	5	N-S CAP	TYPE 3	6	-	
AERATION TANKS	13.1	-	N.1.3	-	5	DECK	TYPE 4	3	-	
AERATION TANKS	13.1	-	N.1.6	-	5	DECK	TYPE 4	3	-	
AERATION TANKS	13	-	N.1.5	-	4/5	E-W CAP	TYPE 2	12	12	
AERATION TANKS	13	-	N.1.3	-	5	E-W CAP	TYPE 4	1	-	
AERATION TANKS	13.2	-	N.1.3	-	5	DECK	TYPE 4	3	-	
AERATION TANKS	13.4	-	N.1	-	5	N-S CAP	TYPE 2	12	8	
AERATION TANKS	13.4	-	N.1	-	5	N-S CAP	TYPE 2	12	1	
AERATION TANKS	13.6	-	N.1	-	1	N-S CAP	TYPE 2	2	2	
AERATION TANKS	13.1	-	N.1	-	1	E-W CAP	TYPE 4	1	-	
AERATION TANKS	9.6	-	P	-	1	N-S CAP	TYPE 4	1	-	
AERATION TANKS	13.9	-	P	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	1.1.9	-	P.1	-	3/5	N-S CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	2	-	P.1.9	-	5	E-W CAP	TYPE 2	1	7	
AERATION TANKS	3.3	-	P.1.6	-	5	DECK	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	3.7	-	P.1.7	-	5	DECK	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	4	-	P.1.5	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	4.4	-	P.1.2	-	5	DECK	TYPE 4	2	-	
AERATION TANKS	7.4	-	P.1.3	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 3 REPAIR SCHEDULE
SHEET 10 OF 15

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-541.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-532.00_546.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Date & Time Plotted: 10/20/2026 3:46 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 3 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
AERATION TANKS	8.4	-	P.1.4	-	5	DECK	TYPE 4	1	-	X7 REPAIRS AT THIS LOCATION
AERATION TANKS	9.3	-	P.1.6	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	1.1	-	Q.2	-	5	E-W CAP	TYPE 2	2	6	X3 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	1.1.4	-	Q	-	3/5	N-S CAP	TYPE 4	6	-	
AERATION TANKS	1.1.6	-	Q.6	-	5	DECK	TYPE 2	4	4	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	1.1.9	-	Q	-	5	N-S CAP	TYPE 3	12	-	
AERATION TANKS	2	-	Q.1	-	5	E-W BEAM	TYPE 2	2	2	
AERATION TANKS	2.3	-	Q.6	-	5	DECK	TYPE 4	6	-	
AERATION TANKS	2.4	-	Q	-	5	N-S CAP	TYPE 3	48	-	
AERATION TANKS	2.5	-	Q.9	-	5	E-W BEAM	TYPE 3	48	-	
AERATION TANKS	2.8	2.9	Q	-	5	N-S CAP	TYPE 3	60	-	
AERATION TANKS	3	-	Q	-	3/5	N-S CAP	TYPE 2	18	2	
AERATION TANKS	3	-	Q.3	-	2	E-W BEAM	TYPE 2	2	2	
AERATION TANKS	3	-	Q.6	-	2	E-W BEAM	TYPE 2	2	2	
AERATION TANKS	3	-	Q.8	-	2	E-W BEAM	TYPE 2	2	2	
AERATION TANKS	3	-	Q.9	-	2	E-W BEAM	TYPE 2	2	2	
AERATION TANKS	3.5	-	Q	-	3/5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	4	-	Q	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	4.9	-	Q	-	5	N-S CAP	TYPE 3	72	-	
AERATION TANKS	4.9	-	Q	-	5	N-S CAP	TYPE 3	48	-	
AERATION TANKS	5.2	-	Q	-	5	N-S CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	5.2	-	Q	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	5.2	-	Q.8	-	5	DECK	TYPE 2	4	4	
AERATION TANKS	5.4	5.6	Q	-	5	N-S CAP	TYPE 4	4	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	5.7	-	Q	-	3	N-S CAP	TYPE 4	2	-	
AERATION TANKS	5.9	-	Q	-	5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	6	-	Q	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	6	-	Q.2	-	5	E-W CAP	TYPE 4	6	-	
AERATION TANKS	6.6	-	Q	-	5	N-S CAP	TYPE 3	12	-	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	6.7	-	Q	-	5	E-W CAP	TYPE 3	36	-	
AERATION TANKS	7	-	Q	-	5	E-W CAP	TYPE 3	60	-	
AERATION TANKS	7	-	Q	-	5	N-S CAP	TYPE 3	48	-	
AERATION TANKS	7.7	-	Q	-	5	N-S CAP	TYPE 4	2	-	X7 REPAIRS AT THIS LOCATION
AERATION TANKS	7.8	-	Q	-	5	N-S CAP	TYPE 4	1	-	X5 REPAIRS AT THIS LOCATION
AERATION TANKS	8	-	Q	-	5	E-W CAP	TYPE 3	12	-	
AERATION TANKS	8	-	Q.2	-	5	E-W CAP	TYPE 4	1	-	
AERATION TANKS	8	-	Q.8	-	5	E-W CAP	TYPE 2	1	1	
AERATION TANKS	8.3	-	Q	-	5	E-W CAP	TYPE 4	1	-	
AERATION TANKS	8.6	-	Q	-	5	N-S CAP	TYPE 4	12	-	
AERATION TANKS	8.8	-	Q	-	5	N-S CAP	TYPE 4	6	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	9	-	Q	-	3/5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	9	-	Q	-	5	N-S CAP	TYPE 3	8	-	
AERATION TANKS	9	-	Q.1	-	5	E-W BEAM	TYPE 3	36	-	
AERATION TANKS	9.3	-	Q	-	5	N-S CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	9.5	9.8	Q.2	Q.7	5	DECK	TYPE 2	2	2	X4 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	9.5	9.6	Q	-	5	N-S CAP	TYPE 2	4	4	X10 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	9.6	-	Q	-	5	N-S CAP	TYPE 4	3	-	X9 REPAIRS AT THIS LOCATION
AERATION TANKS	10	-	Q	-	5	N-S CAP	TYPE 3	60	-	
AERATION TANKS	10.1	-	Q	-	5	N-S CAP	TYPE 2	10	60	
AERATION TANKS	10.2	-	Q.8	-	5	DECK	TYPE 2	6	2	
AERATION TANKS	10.3	-	Q.5	-	5	DECK	TYPE 3	12	-	
AERATION TANKS	10.8	-	Q	-	3	N-S CAP	TYPE 2	2	2	
AERATION TANKS	11	-	Q	-	5	N-S CAP	TYPE 3	12	-	
AERATION TANKS	11	-	Q	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	11.3	11.4	Q.1	Q.8	5	DECK	TYPE 2	3	3	X14 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	11.7	-	Q	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	11.8	-	Q.2	-	5	DECK	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	12.6	-	Q	-	5	N-S CAP	TYPE 3	48	-	
AERATION TANKS	12.8	-	Q	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	13.1	-	Q	-	5	N-S CAP	TYPE 3	6	-	
AERATION TANKS	13	-	Q.1	-	5	DECK	TYPE 3	60	1	
AERATION TANKS	13.7	-	Q.9	-	5	DECK	TYPE 2	60	4	
AERATION TANKS	13.1	-	Q.2	-	5	E-W CAP	TYPE 2	2	3	
AERATION TANKS	13.1	-	Q.5	-	5	E-W CAP	TYPE 2	6	6	
AERATION TANKS	1.1	-	Q.1	Q.9	4/5	E-W CAP	TYPE 4	2	-	X6 REPAIRS AT THIS LOCATION
AERATION TANKS	1.1	-	Q.1.8	-	5	E-W CAP	TYPE 3	18	-	
AERATION TANKS	2	-	Q.1	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	2.1	-	Q.1	-	3/5	N-S CAP	TYPE 4	4	-	
AERATION TANKS	2.4	-	Q.1	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	2.5	-	Q.1.1	-	5	E-W BEAM	TYPE 3	36	-	
AERATION TANKS	3.2	-	Q.1.8	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	3.5	-	Q.1	-	1/5	N-S CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	3.7	-	Q.1	-	5	N-S CAP	TYPE 3	48	-	
AERATION TANKS	4.5	-	Q.1	-	1	N-S CAP	TYPE 4	2	-	

PHASE 3 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
AERATION TANKS	4.6	-	Q.1.3	-	5	DECK	TYPE 2	2	2	
AERATION TANKS	4.8	4.9	Q.1	-	1/5	N-S CAP	TYPE 2	2	2	X4 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	4.8	-	Q.1.5	-	5	DECK	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	5.7	-	Q.1	-	1/5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	6.2	7.9	Q.1.1	0.6	5	DECK	TYPE 2	2	2	X4 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	7	-	Q.1	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	7.3	-	Q.1	-	1/5	N-S CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	7.4	7.9	Q.1.1	Q.1.7	5	DECK	TYPE 2	2	2	X7 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	8	-	Q.1	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	8.1	-	Q.1.2	-	5	DECK	TYPE 4	8	-	
AERATION TANKS	8.4	-	Q.1.4	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	9.6	-	Q.1.1	-	5	DECK	TYPE 4	4	-	
AERATION TANKS	10.3	-	Q.1.1	-	5	DECK	TYPE 2	3	3	
AERATION TANKS	10.7	-	Q.1	-	1	N-S CAP	TYPE 2	1	1	
AERATION TANKS	10.8	-	Q.1	-	5	N-S CAP	TYPE 2	3	2	
AERATION TANKS	10.8	-	Q.1.8	-	5	DECK	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	11.1	11.9	Q.1.1	Q.1.8	5	DECK	TYPE 2	1	1	X5 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	13.1	0.9	Q.1	-	3	N-S CAP	TYPE 2	2	2	X9 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	13.1	-	Q.1.9	-	5	DECK	TYPE 2	4	4	X3 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	13.6	0.7	Q.1.1	-	5	DECK	TYPE 2	36	6	
AERATION TANKS	2.1	2.4	R	-	3	N-S CAP	TYPE 2	72	3	
AERATION TANKS	2.5	-	R	-	5	N-S BEAM	TYPE 3	72	-	
AERATION TANKS	3	-	R.9	-	5	E-W CAP	TYPE 2	24	3	
AERATION TANKS	3.5	-	R.1	0.9	5	DECK	TYPE 2	1	1	X9 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	4	-	R	-	5	N-S CAP	TYPE 3	60	-	
AERATION TANKS	4	-	R.9	-	5	E-W CAP	TYPE 3	6	-	
AERATION TANKS	4.2	-	R	-	5	N-S CAP	TYPE 2	3	3	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	4.5	-	R.1	-	5	DECK	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	4.8	-	R.2	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	5.1	-	R	-	5	N-S CAP	TYPE 3	18	-	
AERATION TANKS	5.2	-	R	-	5	N-S CAP	TYPE 2	2	2	X3 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	6	-	R	-	5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	7	-	R	-	5	N-S CAP	TYPE 3	3	3	
AERATION TANKS	7.7	-	R.7	-	5	DECK	TYPE 3	8	-	
AERATION TANKS	8.7	-	R	-	5	N-S CAP	TYPE 3	18	-	
AERATION TANKS	8.9	-	R	-	5	N-S CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	9.3	-	R	-	5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	9.5	-	R	-	5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	10	-	R.4	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	10	-	R	-	3	N-S CAP	TYPE 2	2	2	
AERATION TANKS	10.8	-	R.3	-	5	DECK	TYPE 2	6	6	
AERATION TANKS	11	-	R	-	5	N-S CAP	TYPE 3	8	-	
AERATION TANKS	11.1	-	R	-	5	N-S CAP	TYPE 2	4	4	
AERATION TANKS	11.2	-	R	-	5	N-S CAP	TYPE 2	4	4	
AERATION TANKS	11.4	-	R.4	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	11.8	-	R	-	5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	11.9	-	R.6	-	5	DECK	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	12	-	R.4	-	5	E-W CAP	TYPE 2	1	1	X4 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	12.1	12.4	R	-	3	N-S CAP	TYPE 1	84	36	
AERATION TANKS	12.2	-	R.3	-	5	DECK	TYPE 2	3	3	
AERATION TANKS	12.2	-	R.6	-	5	DECK	TYPE 2	3	3	
AERATION TANKS	12.4	-	R	-	1	N-S CAP	TYPE 4	1	-	
AERATION TANKS	12.5	-	R	-	5	N-S CAP	TYPE 2	4	4	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	12.9	-	R	-	5	N-S CAP	TYPE 3	4	-	
AERATION TANKS	13.1	-	R	-	5	N-S CAP	TYPE 3	24	1	
AERATION TANKS	13.1	-	R.1	0.9	5	DECK	TYPE 3	48	-	
AERATION TANKS	13	-	R.1	-	5	E-W BEAM	TYPE 2	1	1	
AERATION TANKS	13	-	R.3	-	5	E-W CAP	TYPE 2	1	1	
AERATION TANKS	13	-	R.9	-	5	E-W CAP	TYPE 2	1	1	
AERATION TANKS	13.2	13.9	R	-	1	N-S CAP	TYPE 2	2	2	X5 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	13.2	-	R.1	0.9	5	DECK	TYPE 3	48	-	
AERATION TANKS	13.5	-	R.6	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	13.6	0.8	R.1	0.9	5	DECK	TYPE 2	4	4	X4 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	1.1	-	R.1	-	5	N-S CAP	TYPE 3	3	-	
AERATION TANKS	1.1.2	-	R.1.1	-	5	DECK	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	1.1.2	-	R.1.8	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	1.1.6	-	R.1.1	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	2.5	2.9	R.1	-	5	N-S CAP	TYPE 3	120	-	
AERATION TANKS	2.5	-	R.1.3	-	4	E-W BEAM	TYPE 2	1	3	
AERATION TANKS	2.5	-	R.1.2	-	4/5	E-W BEAM	TYPE 2	1	4	
AERATION TANKS	2.5	-	R.1.7	-	4	E-W BEAM	TYPE 4	1	-	
AERATION TANKS	2.9	-	R.1.3	-	5	DECK	TYPE 2	4	18	
AERATION TANKS	2.9	-	R.1	-	5	N-S CAP	TYPE 3	6	-	
AERATION TANKS	3.3	-	R.1.2	-	5	DECK	TYPE 2	3	1	

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 3 REPAIR SCHEDULE
SHEET 11 OF 15

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-542.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-532.00_546.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Date & Time Plotted: 10/20/2026 3:46 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 3 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
AERATION TANKS	3.5	3.6	R.1	-	5	N-S CAP	TYPE 3	18	-	
AERATION TANKS	3.8	-	R.1.2	-	5	DECK	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	4	-	R.1	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	4	-	R.1.5	-	5	E-W CAP	TYPE 4	2	-	
AERATION TANKS	5	-	R.1	-	5	N-S CAP	TYPE 3	18	-	
AERATION TANKS	5.5	-	R.1	-	3	N-S CAP	TYPE 4	8	-	
AERATION TANKS	6	-	R.1	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	6.3	-	R.1.7	-	5	DECK	TYPE 2	8	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	7	-	R.1	-	5	N-S CAP	TYPE 3	12	-	
AERATION TANKS	7.2	-	R.1	-	1/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	7.6	-	R.1.5	-	5	DECK	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	8.2	-	R.1.5	-	5	DECK	TYPE 2	5	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	8.5	-	R.1	-	5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	8.5	-	R.1.1	-	5	DECK	TYPE 2	4	4	
AERATION TANKS	8.5	-	R.1.3	-	5	DECK	TYPE 2	4	4	
AERATION TANKS	9.2	-	R.1.8	-	5	DECK	TYPE 4	18	-	
AERATION TANKS	9.6	-	R.1.5	-	5	DECK	TYPE 2	4	1	
AERATION TANKS	10.6	-	R.1	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	10.8	-	R.1.6	-	5	DECK	TYPE 2	2	1	
AERATION TANKS	11	-	R.1.1	-	5	E-W CAP	TYPE 2	30	6	
AERATION TANKS	11	-	R.1.1	-	5	E-W CAP	TYPE 3	4	-	
AERATION TANKS	11.3	-	R.1	-	1	N-S CAP	TYPE 2	3	3	
AERATION TANKS	11.6	-	R.1	-	1/5	N-S CAP	TYPE 4	6	-	
AERATION TANKS	11.7	-	R.1	-	3/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	12.2	-	R.1	-	1/5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	12.2	12.7	R.1.5	0.9	5	DECK	TYPE 2	1	1	X5 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	12.2	-	R.1.1	-	5	DECK	TYPE 2	10	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	13	-	R.1	-	5	N-S CAP	TYPE 3	12	1	
AERATION TANKS	13.1	-	R.1	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	13	-	R.1.1	-	5	E-W CAP	TYPE 4	4	-	
AERATION TANKS	13.5	-	R.1.9	-	5	DECK	TYPE 2	36	4	
AERATION TANKS	13.6	-	R.1.7	-	5	DECK	TYPE 2	1	3	
AERATION TANKS	1.1	-	S	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	1.1.7	-	S.8	-	5	DECK	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2	-	S	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	2.3	-	S.7	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	2.5	-	S	-	5	N-S CAP	TYPE 3	96	-	
AERATION TANKS	2.5	-	S.9	-	5	E-W BEAM	TYPE 3	30	-	
AERATION TANKS	3	-	S	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	3.5	-	S	-	5	DECK	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	3.5	-	S.7	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	4	-	S	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	4	-	S.3	-	4/5	E-W CAP	TYPE 4	6	-	
AERATION TANKS	4	-	S.7	-	5	E-W CAP	TYPE 2	1	1	
AERATION TANKS	4	-	S.5	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	4.5	-	S	-	5	N-S CAP	TYPE 2	3	2	
AERATION TANKS	4.5	-	S	-	3/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	5	-	S	-	5	N-S CAP	TYPE 3	48	-	
AERATION TANKS	5	-	S.5	-	4/5	E-W CAP	TYPE 2	1	1	
AERATION TANKS	5.2	-	S	-	3/5	N-S CAP	TYPE 4	1	-	X5 REPAIRS AT THIS LOCATION
AERATION TANKS	5.3	-	S	-	5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	5.4	-	S	-	3	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	5.5	-	S	-	3	N-S CAP	TYPE 4	3	-	
AERATION TANKS	5.7	-	S	-	5	N-S CAP	TYPE 2	1	2	
AERATION TANKS	6	-	S	-	5	N-S CAP	TYPE 3	30	-	
AERATION TANKS	6	-	S.1	-	5	E-W BEAM	TYPE 2	30	4	
AERATION TANKS	6.6	-	S	-	5	N-S CAP	TYPE 3	4	6	
AERATION TANKS	6.7	-	S	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	7.1	-	S.1	-	5	DECK	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	7.2	-	S.7	-	5	DECK	TYPE 2	8	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	7.4	-	S	-	5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	8	-	S	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	8.5	8.7	S	-	5	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	8.6	-	S.7	-	5	DECK	TYPE 2	4	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	8.8	-	S	-	5	N-S CAP	TYPE 3	18	-	
AERATION TANKS	9	-	S	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	9.3	-	S.6	-	5	DECK	TYPE 2	12	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	9.5	-	S	-	5	N-S CAP	TYPE 2	1	1	X4 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	9.8	-	S.6	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	10	-	S	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	10.3	-	S.2	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	10.5	-	S.8	-	5	DECK	TYPE 4	3	-	
AERATION TANKS	11.2	-	S	-	5	N-S CAP	TYPE 2	3	3	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	11.7	-	S	-	5	N-S CAP	TYPE 3	24	-	

PHASE 3 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
AERATION TANKS	12.1	12.3	S	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	12.3	-	S.1	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	12.5	-	S	-	5	N-S CAP	TYPE 2	3	3	X4 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	12.7	-	S.8	-	5	DECK	TYPE 2	8	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	13.4	-	S.1	-	5	DECK	TYPE 4	3	-	
AERATION TANKS	13.6	0.8	S	-	3	N-S CAP	TYPE 2	36	2	
AERATION TANKS	13.8	-	S.3	-	5	DECK	TYPE 4	6	-	
AERATION TANKS	1.1	-	S.1.2	-	5	E-W CAP	TYPE 3	48	-	
AERATION TANKS	1.1	-	S.1.5	-	5	E-W CAP	TYPE 3	6	-	
AERATION TANKS	1.1	-	S.1.9	-	5	E-W CAP	TYPE 3	6	-	
AERATION TANKS	1.1.1	-	S.1	-	5	N-S CAP	TYPE 3	36	-	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	1.1.5	-	S.1	-	3	N-S CAP	TYPE 4	2	-	
AERATION TANKS	2.1	-	S.1	-	5	N-S CAP	TYPE 3	30	-	
AERATION TANKS	2.6	-	S.1	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	2.9	-	S.1	-	5	N-S CAP	TYPE 3	60	-	
AERATION TANKS	3	-	S.1	-	5	N-S CAP	TYPE 3	60	-	
AERATION TANKS	3	-	S.1.5	-	2	E-W CAP	TYPE 4	2	-	
AERATION TANKS	4.3	-	S.1.1	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	5.9	-	S.1.1	-	5	DECK	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	6.5	-	S.1.7	-	5	DECK	TYPE 4	12	-	
AERATION TANKS	6.7	-	S.1.1	-	5	DECK	TYPE 2	2	1	
AERATION TANKS	7.5	-	S.1.5	0.9	5	DECK	TYPE 2	1	1	X5 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	8.1	-	S.1.2	-	5	DECK	TYPE 2	10	2	
AERATION TANKS	8.5	-	S.1.5	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	8.6	-	S.1.6	-	5	DECK	TYPE 2	24	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	9.2	-	S.1.5	-	5	DECK	TYPE 4	3	-	
AERATION TANKS	9.8	-	S.1.9	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	11	-	S.1	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	11.8	-	S.1.7	-	5	DECK	TYPE 4	2	-	
AERATION TANKS	13.1	0.4	S.1	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	13	-	S.1.3	-	5	E-W CAP	TYPE 4	1	-	
AERATION TANKS	13.5	-	S.1.4	-	5	DECK	TYPE 4	4	-	
AERATION TANKS	13.1	-	S.1.7	-	5	E-W CAP	TYPE 3	4	-	
AERATION TANKS	1.1	-	T.9	-	5	E-W CAP	TYPE 3	48	-	
AERATION TANKS	1.1.1	-	T	-	5	N-S CAP	TYPE 3	48	-	
AERATION TANKS	1.1.5	-	T	-	1	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	2	-	T.1	-	2	E-W BEAM	TYPE 4	2	-	
AERATION TANKS	2.5	-	T	-	5	N-S BEAM	TYPE 3	48	-	
AERATION TANKS	2.5	-	T	-	5	E-W BEAM	TYPE 3	12	-	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	2.5	-	T.1	-	5	E-W BEAM	TYPE 3	36	-	
AERATION TANKS	2.5	-	T.6	-	2	E-W BEAM	TYPE 3	2	-	
AERATION TANKS	3	-	T	-	3/5	N-S CAP	TYPE 3	2	-	
AERATION TANKS	3	-	T.6	-	5	E-W CAP	TYPE 4	1	-	
AERATION TANKS	3.2	-	T.2	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	3.3	-	T	-	3	N-S CAP	TYPE 4	6	-	
AERATION TANKS	3.4	-	T	-	1/5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	3.6	-	T.9	-	5	DECK	TYPE 4	4	-	
AERATION TANKS	4.3	-	T	-	1/5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	4.5	-	T	-	1/5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	5	-	T	-	5	N-S CAP	TYPE 3	30	-	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	5.1	-	T	-	5	N-S CAP	TYPE 4	4	-	
AERATION TANKS	5.8	-	T.5	-	5	DECK	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	5.9	-	T	-	5	N-S CAP	TYPE 2	3	1	X3 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	6.1	-	T	-	5	N-S CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	6.4	-	T	-	5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	6.5	-	T	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	6.6	-	T	-	5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	7.3	-	T	-	3/5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	7.5	-	T	-	3/5	N-S CAP	TYPE 4	4	-	
AERATION TANKS	8	-	T	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	8.1	-	T.5	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	9.9	-	T	-	3/5	N-S CAP	TYPE 4	4	-	
AERATION TANKS	10	-	T	-	5	N-S CAP	TYPE 3	30	-	
AERATION TANKS	10	-	T	-	5	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	10.8	-	T	-	5	N-S CAP	TYPE 3	60	-	
AERATION TANKS	10.9	-	T	-	3/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	11	-	T	-	5	N-S CAP	TYPE 3	24	-	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	11	-	T	-	3	N-S CAP	TYPE 4	4	-	
AERATION TANKS	11	-	T	-	3/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	11.7	-	T	-	5	N-S CAP	TYPE 4	12	-	
AERATION TANKS	12	-	T	-	5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	12.6	-	T	-	5	N-S CAP	TYPE 2	2	2	X5 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	13.1	13.8	T	-	1	N-S CAP	TYPE 2	2	2	X8 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	13	-	T	-	5	N-S CAP	TYPE 3	30	-	

0 1 2 3 4 FT.
1/2"=1'-0"

Environmental Protection BEDC/IHD

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 3 REPAIR SCHEDULE
SHEET 12 OF 15

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-543.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0729589\UR-S-532.00_546.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Date & Time Plotted: 10/20/2026 3:46 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 3 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
AERATION TANKS	13	-	T	-	3/5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	13	-	T	-	3/5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	13.7	-	T.3	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	13.1	-	T.5	-	5	E-W CAP	TYPE 3	6	-	
AERATION TANKS	1.1	-	T.1	-	5	E-W CAP	TYPE 3	24	-	
AERATION TANKS	1.1	-	T.1	-	4/5	E-W CAP	TYPE 4	4	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	1.1.1	-	T.1	-	5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	1.1.3	-	T.1	-	1	N-S CAP	TYPE 4	3	-	
AERATION TANKS	1.1.4	0.7	T.1	-	5	N-S CAP	TYPE 3	96	-	
AERATION TANKS	1.1.5	-	T.1.1	-	5	DECK	TYPE 4	1	-	X5 REPAIRS AT THIS LOCATION
AERATION TANKS	1.1.5	-	T.1	-	3/5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	2	-	T.1	-	1	N-S CAP	TYPE 4	3	-	
AERATION TANKS	2.1	-	T.1.2	-	5	DECK	TYPE 4	18	-	
AERATION TANKS	2.3	-	T.1.5	-	5	DECK	TYPE 4	2	-	
AERATION TANKS	2.4	-	T.1	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	2.5	-	T.1.1	-	2	E-W BEAM	TYPE 2	30	8	
AERATION TANKS	2.6	-	T.1	-	3/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	3.1	-	T.1	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	3.1	-	T.1	-	3/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	3.3	-	T.1	-	1/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	3.6	-	T.1	-	3/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	4	-	T.1	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	4.1	-	T.1	-	1	N-S CAP	TYPE 4	4	-	
AERATION TANKS	4.1	-	T.1.8	-	5	DECK	TYPE 4	3	-	
AERATION TANKS	4.3	-	T.1	-	3/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	4.7	-	T.1	-	5	N-S CAP	TYPE 2	3	3	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	4.9	-	T.1.1	-	5	DECK	TYPE 2	6	4	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	5	-	T.1	-	5	N-S CAP	TYPE 3	48	-	
AERATION TANKS	5	-	T.1.1	-	4/5	E-W CAP	TYPE 2	2	1	
AERATION TANKS	5.1	5.4	T.1	-	3/5	N-S CAP	TYPE 4	2	-	X5 REPAIRS AT THIS LOCATION
AERATION TANKS	5.6	5.9	T.1.5	0.9	5	DECK	TYPE 4	2	-	X4 REPAIRS AT THIS LOCATION
AERATION TANKS	5.8	-	T.1	-	1/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	6.1	-	T.1	-	1	N-S CAP	TYPE 2	1	1	
AERATION TANKS	6.1	-	T.1	-	5	N-S CAP	TYPE 3	12	-	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	6.9	-	T.1	-	3/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	7	-	T.1	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	7.6	-	T.1	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	7.9	-	T.1	-	5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	8.1	-	T.1	-	3/5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	8.2	-	T.1.5	-	5	DECK	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	8.4	-	T.1	-	1	N-S CAP	TYPE 4	2	-	
AERATION TANKS	8.6	-	T.1	-	1	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	8.9	-	T.1	-	3/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	9	-	T.1	-	1/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	9.8	-	T.1	-	3/5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	9.8	-	T.1.2	-	5	DECK	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	10	-	T.1	-	1/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	10	-	T.1	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	10.1	-	T.1	-	3	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	10.4	-	T.1	-	1/5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	10.6	-	T.1	-	1/5	N-S CAP	TYPE 2	1	1	X4 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	11	-	T.1	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	11	-	T.1	-	1	N-S CAP	TYPE 4	3	-	
AERATION TANKS	11.8	-	T.1	-	1/5	N-S CAP	TYPE 2	4	4	
AERATION TANKS	12	-	T.1	-	5	N-S CAP	TYPE 3	48	-	
AERATION TANKS	12.2	-	T.1.2	-	5	DECK	TYPE 2	3	3	
AERATION TANKS	12.4	-	T.1	-	1	N-S CAP	TYPE 4	6	-	
AERATION TANKS	12.8	-	T.1	-	1	N-S CAP	TYPE 2	6	6	
AERATION TANKS	12.9	-	T.1.1	-	5	DECK	TYPE 4	2	-	
AERATION TANKS	13.1	-	T.1	-	5	N-S CAP	TYPE 3	6	-	
AERATION TANKS	13.1	13.3	T.1	-	5	N-S CAP	TYPE 3	60	-	
AERATION TANKS	13	-	T.1	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	13	-	T.1	-	1/5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	13	-	T.1.5	-	4	E-W CAP	TYPE 4	2	-	
AERATION TANKS	13.5	-	T.1	-	3/5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	13.6	-	T.1	-	3	N-S CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	13.8	-	T.1	-	1/5	N-S CAP	TYPE 2	3	3	
AERATION TANKS	13.1	-	T.1.6	-	2	E-W CAP	TYPE 4	6	-	
AERATION TANKS	13.1	-	T.1.1	-	5	E-W CAP	TYPE 3	12	-	
AERATION TANKS	1.1	-	U	-	5	E-W CAP	TYPE 3	72	-	
AERATION TANKS	1.1	-	U.1	-	5	E-W CAP	TYPE 3	36	-	
AERATION TANKS	1.1	-	U.1	-	4/5	E-W CAP	TYPE 4	8	-	
AERATION TANKS	1.1.5	-	U	-	1	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	2	-	U	-	1	N-S CAP	TYPE 4	4	-	

PHASE 3 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
AERATION TANKS	2.5	2.9	U	-	5	N-S CAP	TYPE 3	60	-	
AERATION TANKS	2.5	-	U.1	-	5	E-W BEAM	TYPE 3	18	-	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	2.9	-	U	-	3/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	3	-	U	-	5	N-S CAP	TYPE 3	24	1	
AERATION TANKS	3	-	U.5	-	4/5	E-W CAP	TYPE 2	3	2	
AERATION TANKS	3.1	-	U	-	5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	3.5	-	U	-	3/5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	4	-	U.7	-	2	E-W CAP	TYPE 4	2	-	
AERATION TANKS	4.4	-	U	-	3	N-S CAP	TYPE 4	1	-	
AERATION TANKS	4.8	-	U	-	5	N-S CAP	TYPE 3	30	-	
AERATION TANKS	4.8	-	U	-	3/5	N-S CAP	TYPE 2	3	3	
AERATION TANKS	5.5	-	U	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	5.8	-	U.2	-	5	DECK	TYPE 2	12	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	5.8	-	U.2	-	5	DECK	TYPE 2	3	1	
AERATION TANKS	5.9	-	U	-	5	N-S CAP	TYPE 2	4	3	
AERATION TANKS	5.9	-	U	-	5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	6	-	U.5	-	4/5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	6.4	-	U	-	5	N-S CAP	TYPE 4	8	-	
AERATION TANKS	6.6	-	U	-	5	N-S CAP	TYPE 2	12	6	X3 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	7	-	U	-	5	N-S CAP	TYPE 3	18	-	
AERATION TANKS	7	-	U.1	-	5	E-W BEAM	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	7	-	U.4	-	5	E-W CAP	TYPE 4	1	-	
AERATION TANKS	7	-	U.8	-	2/5	E-W CAP	TYPE 4	4	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	7.2	-	U	-	5	N-S CAP	TYPE 3	8	-	
AERATION TANKS	7.2	-	U	-	1	N-S CAP	TYPE 4	2	-	
AERATION TANKS	7.2	-	U	-	3	N-S CAP	TYPE 2	1	1	
AERATION TANKS	7.3	-	U	-	1/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	7.5	-	U.8	-	5	DECK	TYPE 4	2	-	
AERATION TANKS	7.9	-	U	-	5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	8	-	U	-	5	N-S CAP	TYPE 3	36	-	
AERATION TANKS	8	-	U.5	-	5	E-W CAP	TYPE 2	1	1	
AERATION TANKS	8.4	-	U	-	3/5	N-S CAP	TYPE 4	4	-	
AERATION TANKS	8.8	-	U	-	5	N-S CAP	TYPE 3	12	-	
AERATION TANKS	9	-	U	-	5	N-S CAP	TYPE 3	48	-	
AERATION TANKS	9	-	U.4	-	5	E-W CAP	TYPE 4	1	-	
AERATION TANKS	9	-	U.7	-	5	E-W CAP	TYPE 2	1	1	
AERATION TANKS	9	-	U.4	-	2/5	E-W CAP	TYPE 4	1	-	
AERATION TANKS	9.1	-	U	-	1/5	N-S CAP	TYPE 4	4	-	
AERATION TANKS	9.5	-	U	-	5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	9.6	-	U	-	1/5	N-S CAP	TYPE 4	4	-	
AERATION TANKS	10.3	-	U	-	1	N-S CAP	TYPE 4	3	-	
AERATION TANKS	10.3	-	U.1	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	10.7	-	U	-	1/5	N-S CAP	TYPE 2	2	2	
AERATION TANKS	11	-	U	-	2/5	E-W CAP	TYPE 3	8	-	
AERATION TANKS	11.9	-	U	-	3	N-S CAP	TYPE 4	2	-	
AERATION TANKS	12	-	U	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	12.5	-	U	-	5	N-S CAP	TYPE 4	1	-	X5 REPAIRS AT THIS LOCATION
AERATION TANKS	12.7	-	U	-	1/5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	12.8	-	U	-	5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	12.8	-	U.2	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	13	-	U	-	5	N-S CAP	TYPE 3	12	-	
AERATION TANKS	13.1	-	U	-	3/4	N-S CAP	TYPE 2	34	4	
AERATION TANKS	13	-	U	-	3	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	13.2	-	U	-	1/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	13.2	-	U	-	5	N-S CAP	TYPE 2	2	6	
AERATION TANKS	13.6	-	U.5	-	5	E-W BEAM	TYPE 3	1	-	
AERATION TANKS	13.1	-	U.1	-	5	E-W CAP	TYPE 3	6	-	
AERATION TANKS	13.1	-	U.5	-	5	E-W CAP	TYPE 3	6	-	
AERATION TANKS	1.1	-	U.1.8	-	5	E-W CAP	TYPE 4	3	-	
AERATION TANKS	1.1.4	-	U.1	-	1/5	N-S CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	1.1.6	-	U.1	-	3	N-S CAP	TYPE 4	2	-	
AERATION TANKS	1.1.9	-	U.1	-	1/5	N-S CAP	TYPE 4	12	-	
AERATION TANKS	2	-	U.1	-	3	N-S CAP	TYPE 3	8	-	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	2.5	-	U.1.2	-	5	E-W BEAM	TYPE 2	30	8	
AERATION TANKS	2.9	-	U.1	-	5	N-S CAP	TYPE 3	12	-	
AERATION TANKS	2.9	-	U.1	-	1/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	3	-	U.1	-	3	N-S CAP	TYPE 3	12	-	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	3	-	U.1.3	-	2/5	E-W CAP	TYPE 4	3	-	
AERATION TANKS	3.1	-	U.1	-	5	N-S CAP	TYPE 3	12	-	
AERATION TANKS	3.4	-	U.1.9	-	5	DECK	TYPE 4	2	-	
AERATION TANKS	3.5	-	U.1.8	-	5	DECK	TYPE 2	10	10	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	3.8	3.9	U.1	-	1/5	N-S CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	4.1	-	U.1	-	1	N-S CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 3 REPAIR SCHEDULE
SHEET 13 OF 15

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-544.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00" x 34.00" Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-532.00_546.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Plot Scale: 1:1
Date & Time Plotted: 10/20/2026 3:46 PM
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 3 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
AERATION TANKS	4.3	-	U.1	-	3/5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	4.5	-	U.1	-	1	N-S CAP	TYPE 2	3	2	
AERATION TANKS	4.8	-	U.1	-	3	N-S CAP	TYPE 2	3	1	
AERATION TANKS	5	-	U.1	-	3	N-S CAP	TYPE 4	2	-	
AERATION TANKS	5	-	U.1.8	-	5	E-W CAP	TYPE 2	2	2	
AERATION TANKS	5.1	-	U.1	-	1/5	N-S CAP	TYPE 3	4	-	
AERATION TANKS	5.3	-	U.1.2	-	5	DECK	TYPE 2	10	10	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	5.8	-	U.1	-	1/5	N-S CAP	TYPE 4	6	-	
AERATION TANKS	5.8	-	U.1.2	-	5	DECK	TYPE 2	12	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	6.7	-	U.1	-	1	N-S CAP	TYPE 4	4	-	
AERATION TANKS	6.9	-	U.1	-	1/5	N-S CAP	TYPE 4	8	-	
AERATION TANKS	7	-	U.1.1	-	5	E-W CAP	TYPE 2	1	1	
AERATION TANKS	7.4	-	U.1	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	7.6	-	U.1	-	1	N-S CAP	TYPE 4	2	-	
AERATION TANKS	7.7	-	U.1	-	3	N-S CAP	TYPE 2	1	1	
AERATION TANKS	8	-	U.1.8	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	8.9	-	U.1.5	-	5	DECK	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	8.9	-	U.1	-	3	N-S CAP	TYPE 2	1	1	
AERATION TANKS	9	-	U.1.9	-	5	E-W CAP	TYPE 4	2	-	
AERATION TANKS	9.1	-	U.1.1	0.6	5	DECK	TYPE 4	2	-	X4 REPAIRS AT THIS LOCATION
AERATION TANKS	9.2	9.9	U.1	-	1/5	N-S CAP	TYPE 4	3	-	X7 REPAIRS AT THIS LOCATION
AERATION TANKS	9.5	-	U.1	-	3/5	N-S CAP	TYPE 2	3	1	
AERATION TANKS	10	-	U.1	-	5	N-S CAP	TYPE 3	60	-	
AERATION TANKS	10.4	-	U.1.8	-	5	DECK	TYPE 2	7	3	
AERATION TANKS	10.5	-	U.1	-	1/5	N-S CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	10.9	-	U.1	-	5	N-S CAP	TYPE 4	8	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	11	-	U.1.1	-	5	E-W CAP	TYPE 2	1	1	X4 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	11.1	-	U.1	-	1	N-S CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	11.6	-	U.1	-	1/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	12.4	-	U.1	-	3	N-S CAP	TYPE 4	2	-	
AERATION TANKS	12.5	0.7	U.1	-	1/5	N-S CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	12.6	-	U.1	-	3	N-S CAP	TYPE 2	1	1	
AERATION TANKS	12.9	-	U.1	-	1/5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	13.1	-	U.1	-	5	N-S CAP	TYPE 3	24	-	
AERATION TANKS	13	-	U.1.4	-	5	E-W BEAM	TYPE 2	4	1	
AERATION TANKS	13.2	-	U.1.5	-	5	DECK	TYPE 4	2	-	
AERATION TANKS	13.4	-	U.1.5	-	5	DECK	TYPE 2	1	1	
AERATION TANKS	13.5	-	U.1.5	-	2/5	E-W BEAM	TYPE 2	30	8	
AERATION TANKS	13.7	-	U.1	-	1	N-S CAP	TYPE 4	3	-	
AERATION TANKS	13.8	-	U.1	-	1	N-S CAP	TYPE 2	2	2	
AERATION TANKS	1.1	-	V	-	5	N-S CAP	TYPE 3	48	-	
AERATION TANKS	1.1.1	-	V.5	-	5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	1.1.2	-	V.5	-	3/5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	1.1.3	-	V	-	1	N-S CAP	TYPE 4	3	-	
AERATION TANKS	1.1.6	-	V	-	5	N-S CAP	TYPE 2	36	24	
AERATION TANKS	1.1.6	-	V.7	-	5	DECK	TYPE 2	2	2	
AERATION TANKS	1.1.6	-	V.8	-	5	DECK	TYPE 4	7	-	
AERATION TANKS	1.1.6	-	V.3	-	5	DECK	TYPE 2	8	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	1.1.8	-	V.5	-	3/5	N-S BEAM	TYPE 4	3	-	
AERATION TANKS	1.1.9	-	V.5	-	3/5	N-S BEAM	TYPE 4	1	-	
AERATION TANKS	2	-	V.9	-	2	E-W CAP	TYPE 4	2	-	
AERATION TANKS	2	-	V.8	-	2	E-W CAP	TYPE 4	2	-	
AERATION TANKS	2	-	V.6	-	2	E-W CAP	TYPE 4	1	-	
AERATION TANKS	2	-	V.7	V.8	4	E-W CAP	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
AERATION TANKS	2	-	V.2	-	4/5	E-W CAP	TYPE 2	1	2	
AERATION TANKS	2	-	V.2	-	4/5	E-W CAP	TYPE 4	3	-	
AERATION TANKS	2	-	V.2	-	4/5	E-W CAP	TYPE 4	1	-	
AERATION TANKS	2	-	V.4	-	4/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	2.1	-	V.9	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	2.1	-	V.5	-	1	N-S CAP	TYPE 4	3	-	
AERATION TANKS	2.2	-	V.5	-	1/5	N-S BEAM	TYPE 4	2	-	
AERATION TANKS	2.3	-	V.5	-	3/5	N-S BEAM	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	2.5	-	V.9	-	2	E-W BEAM	TYPE 2	1	3	
AERATION TANKS	2.5	-	V.9	-	2	E-W BEAM	TYPE 4	15	-	
AERATION TANKS	2.5	-	V.8	-	2	E-W BEAM	TYPE 4	12	-	
AERATION TANKS	2.5	-	V.7	-	2	E-W BEAM	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	2.5	-	V.6	-	2/5	E-W BEAM	TYPE 4	3	-	
AERATION TANKS	2.5	-	V.8	-	4/5	E-W CAP	TYPE 4	4	-	
AERATION TANKS	2.5	-	V.3	-	2/5	E-W BEAM	TYPE 4	1	-	
AERATION TANKS	2.5	-	V.4	-	2	E-W BEAM	TYPE 4	4	-	
AERATION TANKS	2.9	-	V.5	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	3	-	V	-	1/5	N-S CAP	TYPE 3	8	-	MULTIPLE DEFECTS IN REPAIR AREA
AERATION TANKS	3	-	V.8	-	2	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION

PHASE 3 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
AERATION TANKS	3	-	V.9	-	4	E-W CAP	TYPE 4	3	-	
AERATION TANKS	3	-	V.3	-	2	E-W CAP	TYPE 2	1	2	
AERATION TANKS	3	-	V.3	-	2/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	3.4	-	V	-	1	N-S CAP	TYPE 4	3	-	
AERATION TANKS	3.4	-	V.8	-	5	DECK	TYPE 2	3	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	3.4	-	V	-	3	N-S CAP	TYPE 4	1	-	
AERATION TANKS	3.9	-	V	-	1	N-S CAP	TYPE 4	4	-	
AERATION TANKS	4	-	V.8	-	4	E-W CAP	TYPE 4	2	-	
AERATION TANKS	4	-	V.9	-	4/5	E-W CAP	TYPE 2	1	3	
AERATION TANKS	4	-	V.8	-	4	E-W CAP	TYPE 4	1	-	
AERATION TANKS	4	-	V.2	-	4	E-W CAP	TYPE 4	1	-	
AERATION TANKS	4.1	-	V.5	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	4.1	-	V	-	3/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	4.4	-	V	-	1/5	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	4.4	-	V	-	3	N-S CAP	TYPE 4	8	-	
AERATION TANKS	4.8	-	V	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	4.9	-	V.5	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	5.1	-	V.5	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	5.2	-	V.8	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	5.2	-	V.5	-	3/5	N-S CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	5.5	-	V	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	5.5	-	V.9	-	5	DECK	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	5.7	-	V	-	5	N-S CAP	TYPE 4	4	-	
AERATION TANKS	5.9	-	V.5	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	5.9	-	V.5	-	1/5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	6	-	V	-	4/5	E-W CAP	TYPE 4	3	-	
AERATION TANKS	6	-	V.8	-	2/5	E-W CAP	TYPE 4	12	-	
AERATION TANKS	6	-	V.2	-	4	E-W CAP	TYPE 4	1	-	
AERATION TANKS	6.1	-	V.5	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	6.5	-	V	-	5	N-S CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	6.5	-	V	-	5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	6.9	-	V	-	5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	6.9	-	V.5	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	7.3	-	V	-	5	N-S CAP	TYPE 4	4	-	
AERATION TANKS	7.5	-	V	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	7.6	-	V.4	-	5	DECK	TYPE 2	8	4	
AERATION TANKS	7.9	-	V	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	8.2	-	V.9	-	5	DECK	TYPE 4	1	-	
AERATION TANKS	8.7	-	V	-	5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	8.9	-	V	-	5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	9	-	V.6	-	4	E-W CAP	TYPE 4	2	-	
AERATION TANKS	9	-	V.7	-	4	E-W CAP	TYPE 4	1	-	
AERATION TANKS	9.2	-	V.6	-	5	DECK	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	9.3	-	V.5	-	3/5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	9.5	-	V	-	3/5	N-S CAP	TYPE 4	3	-	
AERATION TANKS	9.5	-	V.5	-	5	N-S CAP	TYPE 4	4	-	
AERATION TANKS	9.5	-	V.5	-	5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	9.6	-	V	-	5	N-S CAP	TYPE 2	1	1	X4 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	9.9	-	V	-	1	N-S CAP	TYPE 4	6	-	
AERATION TANKS	9.9	-	V	-	5	N-S CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
AERATION TANKS	9.9	-	V.5	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	9.9	-	V.5	-	5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	10	-	V	-	2/5	N-S CAP	TYPE 2	12	8	
AERATION TANKS	10.6	-	V.9	-	5	DECK	TYPE 2	12	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	10.8	-	V	-	1	N-S CAP	TYPE 4	2	-	
AERATION TANKS	11	-	V	-	5	E-W CAP	TYPE 3	48	-	
AERATION TANKS	11	-	V.1	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	11.3	11.4	V	-	5	N-S CAP	TYPE 4	2	-	X5 REPAIRS AT THIS LOCATION
AERATION TANKS	11.4	-	V.8	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	11.6	-	V	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	11.6	-	V	-	3	N-S CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	11.8	-	V.2	-	5	DECK	TYPE 4	3	-	
AERATION TANKS	12.5	-	V	-	5	N-S CAP	TYPE 4	18	-	
AERATION TANKS	12.7	-	V	-	1/5	N-S CAP	TYPE 2	1	1	
AERATION TANKS	12.8	-	V	-	5	N-S CAP	TYPE 4	3	-	

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 3 REPAIR SCHEDULE
SHEET 14 OF 15

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-545.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-532.00_546.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Date & Time Plotted: 10/20/2026 3:46 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 3 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
AERATION TANKS	13	-	V	-	1	N-S CAP	TYPE 4	3	-	
AERATION TANKS	1.1.5	-	W	-	1/5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	2.2	-	W	-	1/5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	2.3	-	W	-	1/5	N-S CAP	TYPE 4	1	-	
AERATION TANKS	3.1	-	W	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	3.1	-	W	-	1/5	N-S CAP	TYPE 4	2	-	
AERATION TANKS	3.9	-	W	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	4.1	-	W	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	4.9	-	W	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	5.1	-	W	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	5.9	-	W	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	7.9	-	W	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
AERATION TANKS	8.2	-	W	-	1/5	N-S CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	9.5	-	W	-	5	N-S BEAM	TYPE 3	3	-	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	9.5	-	W	-	5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
AERATION TANKS	9.8	-	W	-	5	N-S BEAM	TYPE 3	1	-	X2 DEFECTS AT THIS REPAIR LOCATION
AERATION TANKS	11.5	-	W	-	5	N-S CAP	TYPE 3	12	-	
AERATION TANKS	11.6	-	W	-	1/5	N-S CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 3 REPAIR SCHEDULE
SHEET 15 OF 15

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-546.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

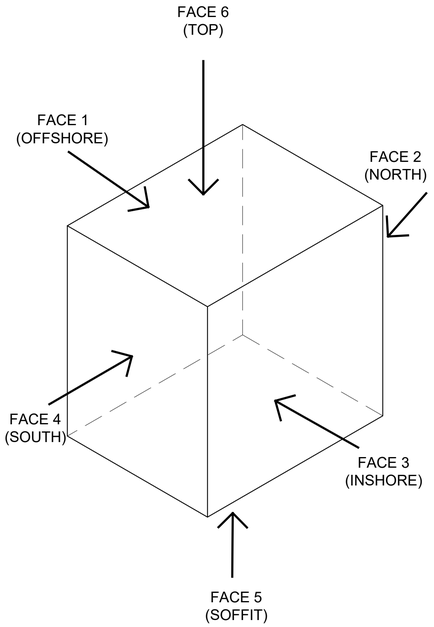
Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-S32.00_546.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Date & Time Plotted: 10/20/2026 3:46 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

PHASE 4 SCHEDULE										
LOCATION								DETERIORATED AREA		
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT	REPAIR TYPE	LENGTH (IN.)	WIDTH (IN.)	FULL NOTES
	START	END	START	END						
PRELIMINARY TANKS / WEST APPENDIX	-	-	-	-	5	ALL CAPS	TYPE 1	SEE PLAN	SEE PLAN	1.5 IN. CONC. EROSION IN AREA
PRELIMINARY TANKS	1.1	-	A.1	-	5	E-W CAP	TYPE 1	60	72	FAILING EPOXY REPAIR IN AREA. 1.5 IN. CONC. EROSION IN AREA
PRELIMINARY TANKS	1.1	-	A.1	B.3	5	E-W CAP	TYPE 1	72	1200	2 IN. CONC. EROSION IN AREA
PRELIMINARY TANKS	1.1.2	-	A.1	-	5	N-S CAP	TYPE 2	30	10	
PRELIMINARY TANKS	1.1.2	-	A.1	-	3/5	N-S CAP	TYPE 4	2	-	
PRELIMINARY TANKS	1.1.8	3.1	A.1	-	5	N-S CAP	TYPE 1	60	300	FAILING EPOXY REPAIR IN AREA. 0.5 IN. CONC. EROSION IN AREA
PRELIMINARY TANKS	2	-	A.1.4	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	2	-	A.1.4	-	2/5	E-W CAP	TYPE 4	4	-	
PRELIMINARY TANKS	2.5	-	A.1	-	3	N-S CAP	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	2.5	-	A.1.5	-	5	N-S BEAM	TYPE 2	2	1	
PRELIMINARY TANKS	3	-	A.1	A.1.5	5	E-W CAP	TYPE 1	120	60	FAILING EPOXY REPAIR IN AREA. 0.5 IN. CONC. EROSION IN AREA
PRELIMINARY TANKS	3	-	A.1.9	B	5	E-W CAP	TYPE 1	48	48	FAILING EPOXY REPAIR IN AREA
PRELIMINARY TANKS	3	-	A.1.9	-	2/5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	3.5	-	A.1	-	5	N-S CAP	TYPE 2	14	3	
PRELIMINARY TANKS	3.7	6.5	A.1	-	5	N-S CAP	TYPE 1	60	1200	1 IN. CONC. EROSION IN AREA
PRELIMINARY TANKS	4	-	A.1	A.1.2	5	E-W CAP	TYPE 1	36	72	FAILING EPOXY REPAIR IN AREA
PRELIMINARY TANKS	4	-	A.1.9	B	5	E-W CAP	TYPE 4	6	-	
PRELIMINARY TANKS	5	-	A.1.3	-	5	E-W CAP	TYPE 2	2	6	
PRELIMINARY TANKS	5	-	A.1.3	-	5	E-W CAP	TYPE 2	2	2	
PRELIMINARY TANKS	6	-	A.1	A.1.4	5	E-W CAP	TYPE 1	72	84	FAILING EPOXY REPAIR IN AREA. 0.5 IN. CONC. EROSION IN AREA
PRELIMINARY TANKS	6	-	A.1.8	B.2	5	E-W CAP	TYPE 1	60	84	FAILING EPOXY REPAIR IN AREA. 0.5 IN. CONC. EROSION IN AREA
PRELIMINARY TANKS	6.8	7.5	A.1	-	5	N-S CAP	TYPE 1	144	84	FAILING EPOXY REPAIR IN AREA. 0.5 IN. CONC. EROSION IN AREA
PRELIMINARY TANKS	7	-	A.1.2	-	4/5	E-W CAP	TYPE 4	12	-	
PRELIMINARY TANKS	7	-	A.1.8	-	5	E-W CAP	TYPE 4	48	-	
PRELIMINARY TANKS	8	-	A.1	A.1.3	5	E-W CAP	TYPE 1	120	120	2 IN. CONC. EROSION IN AREA
PRELIMINARY TANKS	9	-	A.1	-	5	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	9	-	A.1	-	5	N-S CAP	TYPE 1	72	48	0.5 IN. CONC. EROSION IN AREA
PRELIMINARY TANKS	9	-	A.1	-	5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	10	-	A.1	-	5	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	10	11	A.1	-	5	N-S CAP	TYPE 1	144	48	
PRELIMINARY TANKS	10	-	A.1	B.3	5	E-W CAP	TYPE 1	72	360	0.5 IN. CONC. EROSION IN AREA
PRELIMINARY TANKS	11	-	A.1	A.1.8	5	E-W CAP	TYPE 1	84	240	0.25 IN. CONC. EROSION IN AREA
PRELIMINARY TANKS	11	-	A.1	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	12	13	A.1	-	5	N-S CAP	TYPE 1	432	60	0.5 IN. CONC. EROSION IN AREA
PRELIMINARY TANKS	12	-	A.1	B	5	E-W CAP	TYPE 1	216	72	
PRELIMINARY TANKS	13	-	A.1	A.1.8	5	E-W CAP	TYPE 1	60	216	0.25 IN. CONC. EROSION IN AREA
PRELIMINARY TANKS	13	-	A.1	-	5	N-S CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	13	-	A.1.3	-	2	E-W CAP	TYPE 2	4	4	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	14	-	A.1	-	5	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	14	-	A.1.1	-	5	E-W CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	14	-	A.1.9	-	5	E-W CAP	TYPE 2	6	3	
PRELIMINARY TANKS	15	-	A.1.1	-	4/5	E-W CAP	TYPE 2	24	18	FAILING EPOXY REPAIR IN AREA
PRELIMINARY TANKS	15	-	A.1.1	-	5	E-W CAP	TYPE 2	8	10	
PRELIMINARY TANKS	15	-	A.1.1	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	16	-	A.1.2	-	4/5	E-W CAP	TYPE 2	24	24	FAILING EPOXY REPAIR IN AREA
PRELIMINARY TANKS	16	-	A.1.3	-	2	E-W CAP	TYPE 2	1	2	X2 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	16	-	A.1.9	-	5	E-W CAP	TYPE 4	10	-	
PRELIMINARY TANKS	15.5	16.5	A.1	-	5	N-S CAP	TYPE 1	240	72	FAILING EPOXY REPAIR IN AREA. 0.5 IN. CONC. EROSION IN AREA
PRELIMINARY TANKS	17	-	A.1	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	17	-	A.1.1	-	5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	17	-	A.1.9	-	5	E-W CAP	TYPE 4	6	-	
PRELIMINARY TANKS	17.5	-	A.1	-	5	N-S CAP	TYPE 2	1	2	
PRELIMINARY TANKS	17.8	-	A.1.3	-	5	DECK	TYPE 2	2	4	
PRELIMINARY TANKS	18	18.7	A.1	-	5	N-S CAP	TYPE 1	144	48	1 IN. CONC. EROSION IN AREA
PRELIMINARY TANKS	18	-	A.1.3	-	5	E-W CAP	TYPE 4	6	-	
PRELIMINARY TANKS	18	-	A.1	-	5	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	18	-	A.1	-	5	N-S CAP	TYPE 3	3	-	
PRELIMINARY TANKS	18	-	A.1.7	-	5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	18.7	-	A.1.3	-	5	DECK	TYPE 2	3	1	
PRELIMINARY TANKS	19	-	A.1.1	-	5	E-W CAP	TYPE 2	18	18	X2 DEFECTS AT THIS REPAIR LOCATION. FAILING EPOXY REPAIR IN AREA
PRELIMINARY TANKS	19	-	A.1	-	5	N-S CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	19	-	A.1.2	-	2/5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	19	-	A.1.9	-	5	E-W CAP	TYPE 4	10	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	20	-	A.1	-	5	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	20	-	A.1.3	-	5	E-W CAP	TYPE 4	5	-	

PHASE 4 SCHEDULE										
LOCATION								DETERIORATED AREA		
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT	REPAIR TYPE	LENGTH (IN.)	WIDTH (IN.)	FULL NOTES
	START	END	START	END						
PRELIMINARY TANKS	20.8	-	A.1	-	5	N-S CAP	TYPE 2	8	1	
PRELIMINARY TANKS	21	-	A.1	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	21	-	A.1.1	-	5	E-W CAP	TYPE 2	2	4	
PRELIMINARY TANKS	21	-	A.1.2	-	5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	21	-	A.1	-	5	E-W CAP	TYPE 2	6	8	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	21	-	A.1.6	-	5	E-W CAP	TYPE 2	1	8	X2 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	21	-	A.1.7	-	5	E-W CAP	TYPE 2	1	8	X2 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	21.1	-	A.1	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	21.1	-	A.1.2	-	5	E-W CAP	TYPE 2	60	24	
PRELIMINARY TANKS	21.1	-	A.1	-	5	E-W CAP	TYPE 2	18	5	
PRELIMINARY TANKS	21.1	-	A.1	-	2/5	E-W CAP	TYPE 4	1	-	X12 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	21.1	-	A.1.6	B	5	E-W CAP	TYPE 2	1	10	X3 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	1.1.4	-	B.5	-	3/5	N-S CAP	TYPE 2	2	5	
PRELIMINARY TANKS	1.1.4	-	B.9	-	5	DECK	TYPE 2	18	9	
PRELIMINARY TANKS	1.1.8	-	B.7	-	5	DECK	TYPE 2	12	12	
PRELIMINARY TANKS	1.1.9	-	B	-	5	N-S CAP	TYPE 4	4	-	
PRELIMINARY TANKS	1.1.9	-	B	-	3	N-S CAP	TYPE 2	4	3	X2 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	2	-	B.2	B.8	5	E-W CAP	TYPE 3	36	-	
PRELIMINARY TANKS	2	-	B.5	B.6	5	E-W CAP	TYPE 2	24	5	
PRELIMINARY TANKS	2	-	B.4	-	2/5	E-W CAP	TYPE 2	5	2	
PRELIMINARY TANKS	2	-	B.4	-	5	E-W CAP	TYPE 4	4	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	2.6	-	B.5	-	5	N-S BEAM	TYPE 4	3	-	
PRELIMINARY TANKS	3	-	B.7	-	5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	3	-	B.7	-	2/5	E-W CAP	TYPE 2	1	2	
PRELIMINARY TANKS	3	-	B.6	-	5	E-W CAP	TYPE 2	2	1	
PRELIMINARY TANKS	4	-	B.2	-	5	E-W CAP	TYPE 2	1	6	X4 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	4.8	-	B	-	5	N-S BEAM	TYPE 4	4	-	
PRELIMINARY TANKS	5	-	B.4	-	5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	6	-	B.4	-	5	E-W CAP	TYPE 2	1	2	X3 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	6	-	B.8	-	4/5	E-W CAP	TYPE 2	1	2	
PRELIMINARY TANKS	6	-	B.8	-	5	E-W CAP	TYPE 2	2	6	X7 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	6	-	B.9	-	5	E-W CAP	TYPE 2	5	1	X3 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	7	-	B.7	-	4/5	E-W CAP	TYPE 4	5	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	7.5	-	B.4	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	7.8	-	B.6	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	8	-	B.4	-	5	E-W CAP	TYPE 3	24	-	
PRELIMINARY TANKS	8.2	-	B.9	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	8.9	-	B.5	-	5	N-S BEAM	TYPE 4	6	-	
PRELIMINARY TANKS	9	-	B.5	-	5	E-W CAP	TYPE 4	4	-	
PRELIMINARY TANKS	9	-	B.7	-	5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	10	-	B.4	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	12.3	-	B.6	-	5	E-W CAP	TYPE 4	24	-	
PRELIMINARY TANKS	13	-	B.5	-	5	E-W CAP	TYPE 3	36	-	
PRELIMINARY TANKS	13	-	B.4	-	5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	13	-	B.7	-	2/5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	13	-	B.7	-	2/5	E-W CAP	TYPE 2	2	1	
PRELIMINARY TANKS	14	-	B.1	-	4/5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	14	-	B.4	-	2/5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	14.1	-	B.1	B.5	5	DECK	TYPE 4	2	-	X6 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	14.2	-	B.3	-	5	DECK	TYPE 2	1	1	
PRELIMINARY TANKS	15	-	B.7	-	2/5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	16	-	B.4	-	5	E-W CAP	TYPE 2	6	2	X3 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	16	-	B.3	-	2/5	E-W CAP	TYPE 4	4	-	
PRELIMINARY TANKS	16	-	B.8	-	2/5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	15.6	-	B.4	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	17	-	B.4	-	5	E-W CAP	TYPE 2	1	10	
PRELIMINARY TANKS	17.5	-	B.2	-	5	DECK	TYPE 2	18	6	
PRELIMINARY TANKS	17.5	-	B.7	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	18	-	B.7	-	5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	18.3	-	B.3	-	5	DECK	TYPE 4	2	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	19	-	B.4	-	5	E-W CAP	TYPE 3	9	-	
PRELIMINARY TANKS	19.1	-	B.1	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	19.8	-	B.4	-	5	DECK	TYPE 2	1	6	
PRELIMINARY TANKS	20	-	B.2	-	4/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	20	-	B.4	-	5	E-W CAP	TYPE 3	48	-	
PRELIMINARY TANKS	20	-	B.7	-	2/5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	21	-	B.4	-	5	E-W CAP	TYPE 3	48	-	
PRELIMINARY TANKS	21	-	B.7	-	2/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	21	-	B.8	-	5	E-W CAP	TYPE 4	2	-	

NOTES:

1. SEE FIGURE BELOW FOR "FACE" LOCATIONS.



0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 4 REPAIR SCHEDULE
SHEET 1 OF 7

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-547.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0729589\UR-S-547.00_553.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Date & Time Plotted: 10/20/2026 3:47 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 4 SCHEDULE										
LOCATION								DETERIORATED AREA		
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT	REPAIR TYPE	LENGTH (IN.)	WIDTH (IN.)	FULL NOTES
	START	END	START	END						
PRELIMINARY TANKS	21.1	-	B	B.5	5	E-W CAP	TYPE 2	84	20	
PRELIMINARY TANKS	1.1	1.1.8	C	-	1/5	N-S CAP	TYPE 4	5	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	1.1	-	C.4	-	5	E-W CAP	TYPE 4	2	-	X4 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	1.1	-	C.5	-	5	E-W CAP	TYPE 2	18	24	
PRELIMINARY TANKS	1.1	-	C.6	-	5	E-W CAP	TYPE 2	6	10	
PRELIMINARY TANKS	1.1	-	C.7	-	5	E-W CAP	TYPE 4	18	-	
PRELIMINARY TANKS	1.1	-	C.9	-	5	E-W CAP	TYPE 2	6	18	
PRELIMINARY TANKS	1.1.1	-	C	-	1/5	N-S CAP	TYPE 4	2	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	1.1.8	-	C	C.5	5	DECK	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	2	-	C.2	-	5	E-W CAP	TYPE 3	6	2	
PRELIMINARY TANKS	2	-	C.6	-	2/5	E-W CAP	TYPE 2	2	1	
PRELIMINARY TANKS	2	-	C.6	-	2/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	2.5	-	C	-	5	N-S BEAM	TYPE 2	8	1	
PRELIMINARY TANKS	2.9	-	C	-	5	N-S BEAM	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	2.9	-	C	-	5	N-S BEAM	TYPE 4	2	-	
PRELIMINARY TANKS	3	-	C	-	5	E-W CAP	TYPE 2	1	3	
PRELIMINARY TANKS	3	-	C.5	-	5	E-W CAP	TYPE 2	2	5	
PRELIMINARY TANKS	3.2	-	C.5	-	1/5	N-S BEAM	TYPE 2	2	1	
PRELIMINARY TANKS	3.5	-	C	-	3/5	N-S BEAM	TYPE 2	4	2	
PRELIMINARY TANKS	4	-	C.2	-	5	E-W CAP	TYPE 4	6	-	
PRELIMINARY TANKS	4	-	C.2	-	2/5	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	4	-	C.6	-	4/5	E-W CAP	TYPE 2	2	2	
PRELIMINARY TANKS	4	-	C.6	-	5	E-W CAP	TYPE 4	2	-	X5 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	5	-	C.2	-	5	E-W CAP	TYPE 4	6	-	
PRELIMINARY TANKS	5	-	C.3	-	5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	5	-	C.5	-	5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	5	-	C.6	-	5	E-W CAP	TYPE 4	2	-	X9 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	5.3	5.5	C.5	-	5	N-S BEAM	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	6	6.8	C.5	-	5	N-S BEAM	TYPE 2	6	1	X3 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	6	-	C	-	5	E-W CAP	TYPE 4	4	-	X4 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	6	-	C.2	-	5	E-W CAP	TYPE 4	4	-	
PRELIMINARY TANKS	6	-	C.6	-	5	E-W CAP	TYPE 4	3	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	6	-	C.8	-	5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	6.4	6.7	C.5	-	5	N-S BEAM	TYPE 4	7	-	X4 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	6.5	-	C	-	5	N-S BEAM	TYPE 2	4	1	
PRELIMINARY TANKS	6.9	-	C.5	-	5	DECK	TYPE 2	2	2	
PRELIMINARY TANKS	7	-	C.3	-	5	E-W CAP	TYPE 3	18	-	
PRELIMINARY TANKS	7	-	C.6	-	5	E-W CAP	TYPE 4	4	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	7.5	-	C.4	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	8	-	C.6	-	5	E-W CAP	TYPE 4	2	-	X8 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	8.9	-	C.8	-	5	DECK	TYPE 2	1	4	
PRELIMINARY TANKS	9	-	C.3	-	2	E-W CAP	TYPE 2	3	3	
PRELIMINARY TANKS	9	-	C.6	-	5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	10	-	C.1	-	5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	10	-	C.5	-	5	E-W CAP	TYPE 3	9	-	
PRELIMINARY TANKS	11	-	C.7	-	5	E-W CAP	TYPE 3	24	-	
PRELIMINARY TANKS	11.1	-	C.4	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	11.3	11.9	C.7	C.8	5	DECK	TYPE 4	2	-	X4 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	11.8	-	C.6	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	12	-	C.5	-	4/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	12	-	C.1	-	5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	12.2	-	C.5	-	3	N-S BEAM	TYPE 2	5	3	
PRELIMINARY TANKS	12.3	-	C	-	5	N-S BEAM	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	12.5	-	C	-	5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	12.9	-	C.8	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	14	-	C	-	5	E-W CAP	TYPE 3	24	-	
PRELIMINARY TANKS	14	-	C.3	-	5	E-W CAP	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	14	-	C.3	-	2/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	14	-	C.5	-	5	E-W CAP	TYPE 4	36	-	
PRELIMINARY TANKS	14	-	C.6	-	5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	14	-	C.8	-	2/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	14.1	-	C.9	-	5	DECK	TYPE 2	1	1	
PRELIMINARY TANKS	14.5	-	C	-	5	N-S BEAM	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	14.8	-	C.8	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	14.9	-	C.5	-	3	N-S BEAM	TYPE 2	6	3	
PRELIMINARY TANKS	15	-	C.2	-	2/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	15	-	C.6	-	5	E-W CAP	TYPE 4	1	-	X9 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	16	-	C.1	-	2	E-W CAP	TYPE 2	2	4	
PRELIMINARY TANKS	16	-	C.8	-	2	E-W CAP	TYPE 2	1	2	
PRELIMINARY TANKS	16	-	C.8	-	5	E-W CAP	TYPE 4	1	-	X9 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	15.4	15.6	C.5	-	5	N-S BEAM	TYPE 4	2	-	X5 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	16.5	-	C.5	-	5	N-S BEAM	TYPE 2	4	4	
PRELIMINARY TANKS	16.5	-	C.5	-	5	N-S BEAM	TYPE 4	2	-	
PRELIMINARY TANKS	15.6	-	C.4	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE

PHASE 4 SCHEDULE										
LOCATION								DETERIORATED AREA		
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT	REPAIR TYPE	LENGTH (IN.)	WIDTH (IN.)	FULL NOTES
	START	END	START	END						
PRELIMINARY TANKS	17.2	-	C.3	-	5	DECK	TYPE 4	6	-	
PRELIMINARY TANKS	18	19	C	C.5	5	DECK	TYPE 4	4	-	X9 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	18	-	C.1	-	2	E-W CAP	TYPE 2	2	4	
PRELIMINARY TANKS	18	-	C.2	-	2	E-W CAP	TYPE 2	3	5	
PRELIMINARY TANKS	18.3	-	C.5	-	5	N-S BEAM	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	19	-	C.2	-	4/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	19	-	C.2	-	2	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	19	20	C.6	D	5	DECK	TYPE 4	3	-	X9 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	19	-	C.8	-	2	E-W CAP	TYPE 4	4	-	
PRELIMINARY TANKS	21	-	C.2	-	2/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	21	-	C	-	5	E-W CAP	TYPE 3	12	-	
PRELIMINARY TANKS	21	-	C.3	-	2/5	E-W CAP	TYPE 2	2	2	
PRELIMINARY TANKS	21	-	C.6	-	5	E-W CAP	TYPE 4	3	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	21	-	C.7	-	2	E-W CAP	TYPE 2	2	10	
PRELIMINARY TANKS	1.1	-	D.4	-	5	E-W CAP	TYPE 2	1	5	
PRELIMINARY TANKS	1.1	-	D.2	-	5	E-W CAP	TYPE 4	4	-	
PRELIMINARY TANKS	1.1	-	D.5	D.7	5	E-W CAP	TYPE 2	24	60	
PRELIMINARY TANKS	1.1	-	D.5	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	1.1.2	-	D	-	1/5	N-S CAP	TYPE 4	4	-	X4 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	1.1.5	-	D	-	1/5	N-S CAP	TYPE 2	3	1	
PRELIMINARY TANKS	2	-	D.4	-	5	E-W CAP	TYPE 4	6	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	2	-	D.8	-	5	E-W CAP	TYPE 4	6	-	
PRELIMINARY TANKS	2	-	D.8	-	2	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	2.2	2.8	D.8	-	5	DECK	TYPE 2	12	12	X4 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	2.8	-	D.8	-	5	DECK	TYPE 2	2	2	
PRELIMINARY TANKS	3.1	-	D.3	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	3.3	-	D	-	1/5	N-S BEAM	TYPE 2	7	1	
PRELIMINARY TANKS	7	-	D.3	-	5	E-W CAP	TYPE 4	4	-	
PRELIMINARY TANKS	7	-	D.9	-	5	E-W CAP	TYPE 2	1	12	
PRELIMINARY TANKS	7	-	D.8	-	5	E-W CAP	TYPE 4	7	-	
PRELIMINARY TANKS	7.1	7.8	D.7	D.8	5	DECK	TYPE 4	2	-	X5 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	7.2	-	D	-	1/5	N-S BEAM	TYPE 4	6	-	
PRELIMINARY TANKS	7.5	-	D.4	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	7.8	-	D.1	-	5	DECK	TYPE 2	1	1	
PRELIMINARY TANKS	8	-	D.3	D.6	5	E-W CAP	TYPE 1	48	84	
PRELIMINARY TANKS	8	-	D.1	-	5	E-W CAP	TYPE 3	24	-	
PRELIMINARY TANKS	8	-	D.7	-	5	E-W CAP	TYPE 3	60	-	
PRELIMINARY TANKS	8	-	D.8	-	2/5	E-W CAP	TYPE 4	4	-	
PRELIMINARY TANKS	8.8	-	D.8	-	5	DECK	TYPE 2	10	6	
PRELIMINARY TANKS	9	-	D.4	-	5	E-W CAP	TYPE 2	1	8	
PRELIMINARY TANKS	9.1	-	D.6	-	5	DECK	TYPE 2	7	2	
PRELIMINARY TANKS	9.8	-	D.8	-	5	DECK	TYPE 2	2	3	
PRELIMINARY TANKS	10	-	D.3	-	5	E-W CAP	TYPE 3	96	-	
PRELIMINARY TANKS	10.8	-	D.7	-	5	DECK	TYPE 2	4	6	
PRELIMINARY TANKS	11	-	D.2	-	5	E-W CAP	TYPE 4	18	-	
PRELIMINARY TANKS	12	-	D.4	-	2	E-W CAP	TYPE 4	24	-	
PRELIMINARY TANKS	12	-	D.9	-	5	E-W CAP	TYPE 3	36	-	
PRELIMINARY TANKS	12	-	D.7	-	5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	12.2	-	D.1	-	5	DECK	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	14	-	D.2	-	2/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	14	-	D.8	-	5	E-W CAP	TYPE 3	24	-	
PRELIMINARY TANKS	14	-	D.7	-	5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	14.4	-	D.5	-	5	N-S BEAM	TYPE 4	2	-	X9 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	16	-	D.4	-	5	E-W CAP	TYPE 3	12	-	
PRELIMINARY TANKS	16	-	D.1	-	2/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	16	17	D.6	D.9	5	DECK	TYPE 4	2	-	X10 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	15.1	-	D.6	-	5	DECK	TYPE 2	3	1	
PRELIMINARY TANKS	15.7	-	D.4	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	15.9	-	D.2	-	5	DECK	TYPE 4	3	-	
PRELIMINARY TANKS	17	-	D.2	-	4/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	18	-	D.3	-	4/5	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	18.1	-	D	-	1	N-S BEAM	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	18.2	-	D.4	-	5	DECK	TYPE 4	6	-	
PRELIMINARY TANKS	18.4	-	D.4	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	19	-	D.1	-	5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	19	-	D	-	5	E-W CAP	TYPE 4	6	-	
PRELIMINARY TANKS	19	-	D.6	-	2/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	19.9	-	D	-	5	N-S BEAM	TYPE 2	1	1	
PRELIMINARY TANKS	20	-	D	-	4/5	E-W CAP	TYPE 4	4	-	

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 4 REPAIR SCHEDULE
SHEET 2 OF 7

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-548.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-547.00_553.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Date & Time Plotted: 10/20/2026 3:47 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

PHASE 4 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
PRELIMINARY TANKS	20	-	D.4	-	4/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	20	-	D.6	-	5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	20.2	-	D.4	-	5	DECK	TYPE 2	1	1	
PRELIMINARY TANKS	20.2	-	D	-	3	N-S BEAM	TYPE 4	2	-	
PRELIMINARY TANKS	20.4	-	D.6	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	21	-	D.3	-	5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	21	-	D.5	-	5	E-W CAP	TYPE 3	8	-	
PRELIMINARY TANKS	21.1	-	D.1	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	21.1	-	D	-	5	E-W CAP	TYPE 2	8	3	
PRELIMINARY TANKS	1.1	-	E	E.5	5	E-W CAP	TYPE 1	48	72	FAILING EPOXY REPAIR IN AREA. 0.25 IN. CONC. EROSION IN AREA
PRELIMINARY TANKS	1.1	-	E.4	-	5	E-W CAP	TYPE 4	12	-	
PRELIMINARY TANKS	1.1	-	E.5	-	5	E-W CAP	TYPE 3	6	-	
PRELIMINARY TANKS	1.1.3	-	E	-	1/5	N-S CAP	TYPE 4	2	-	X4 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	1.1.5	-	E	-	3/5	E-W CAP	TYPE 4	6	-	
PRELIMINARY TANKS	1.1.6	-	E	-	1/5	N-S CAP	TYPE 2	1	3	
PRELIMINARY TANKS	1.1.8	-	E.9	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	2	-	E.4	-	5	E-W CAP	TYPE 2	1	5	
PRELIMINARY TANKS	2	-	E.8	-	5	E-W CAP	TYPE 3	5	-	
PRELIMINARY TANKS	2	-	E.8	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	2	-	E.6	-	5	E-W CAP	TYPE 4	2	-	X5 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	2.2	-	E.1	-	5	DECK	TYPE 4	4	-	
PRELIMINARY TANKS	2.8	-	E.7	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	3	-	E	-	5	E-W CAP	TYPE 3	24	-	
PRELIMINARY TANKS	3	-	E.8	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	3	-	E.5	-	5	E-W CAP	TYPE 3	12	-	
PRELIMINARY TANKS	3	-	E.9	-	5	E-W CAP	TYPE 3	10	-	
PRELIMINARY TANKS	4	-	E.4	-	5	E-W CAP	TYPE 3	8	-	
PRELIMINARY TANKS	4.5	-	E.3	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	5	-	E.9	-	5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	6	-	E.6	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	6.8	-	E.2	-	5	DECK	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	7	-	E.2	-	4/5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	7	-	E.3	-	2/5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	7	-	E.6	-	5	E-W CAP	TYPE 4	2	-	X7 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	7.5	-	E.4	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	8	-	E.3	-	2	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	8	-	E.6	-	4/5	E-W CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	8	-	E.7	-	5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	8	-	E.7	-	2/5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	8.9	-	E.5	-	5	N-S BEAM	TYPE 4	2	-	
PRELIMINARY TANKS	9	-	E.2	-	4	E-W CAP	TYPE 2	2	2	
PRELIMINARY TANKS	9	-	E.1	-	2	E-W CAP	TYPE 2	2	2	
PRELIMINARY TANKS	9	-	E.6	-	5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	9	-	E.6	-	2/5	E-W CAP	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	10	-	E.3	-	2/5	E-W CAP	TYPE 3	24	-	
PRELIMINARY TANKS	10.1	-	E.6	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	10.2	-	E.8	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	10.7	-	E.2	-	5	DECK	TYPE 2	2	2	
PRELIMINARY TANKS	11.2	-	E.5	-	5	N-S BEAM	TYPE 2	1	1	
PRELIMINARY TANKS	12	-	E.7	-	2/5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	13	-	E.6	-	5	E-W CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	14	-	E.3	-	5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	14	-	E.8	-	5	E-W CAP	TYPE 2	1	12	
PRELIMINARY TANKS	14.2	14.6	E.2	E.4	5	DECK	TYPE 4	4	-	X4 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	16.3	-	E.5	-	1	N-S BEAM	TYPE 2	5	4	
PRELIMINARY TANKS	15.5	-	E.4	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	16.5	-	E.7	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	17	-	E.4	-	5	E-W CAP	TYPE 2	6	2	
PRELIMINARY TANKS	17	-	E.4	-	5	E-W CAP	TYPE 4	6	-	
PRELIMINARY TANKS	17	-	E.6	-	5	E-W CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	17.4	-	E.6	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	18	-	E.2	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	18	-	E.7	-	4/5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	18	-	E.8	-	2/5	E-W CAP	TYPE 2	2	2	
PRELIMINARY TANKS	18.8	-	E.4	-	2	E-W CAP	TYPE 2	2	4	
PRELIMINARY TANKS	19	-	E.4	-	2	E-W CAP	TYPE 2	2	4	
PRELIMINARY TANKS	20.7	-	E.6	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	20.8	-	E.7	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	20.8	-	E.9	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	21	-	E	-	5	E-W CAP	TYPE 3	12	-	
PRELIMINARY TANKS	21	-	E.4	-	5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	21.1	-	E.5	-	5	N-S BEAM	TYPE 2	1	3	
PRELIMINARY TANKS	1.1	-	F.3	-	5	E-W CAP	TYPE 4	6	-	

PHASE 4 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
PRELIMINARY TANKS	1.1	-	F.3	-	5	E-W CAP	TYPE 2	1	18	
PRELIMINARY TANKS	1.1	-	F.9	-	4/5	E-W CAP	TYPE 4	4	-	
PRELIMINARY TANKS	1.1	-	F.8	-	5	E-W CAP	TYPE 2	1	4	
PRELIMINARY TANKS	1.1	-	F.9	-	5	E-W CAP	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	1.1.1	-	F	-	3/5	N-S CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	1.1.2	-	F	-	3/5	N-S CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	1.1.2	1.1.5	F.9	-	5	DECK	TYPE 2	4	2	X5 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	2.3	-	F.5	-	5	N-S BEAM	TYPE 4	3	-	
PRELIMINARY TANKS	3	-	F.2	-	5	E-W CAP	TYPE 2	1	12	
PRELIMINARY TANKS	3	-	F.1	-	4/5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	3.6	-	F.5	-	1	N-S BEAM	TYPE 2	4	18	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	6.2	-	F.5	-	1	N-S BEAM	TYPE 4	3	-	
PRELIMINARY TANKS	7	-	F.7	-	5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	7.5	-	F.4	-	5	DECK	TYPE 2	6	6	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	8	-	F.2	-	2/5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	8	-	F.8	-	2/5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	9	-	F.4	-	5	E-W CAP	TYPE 3	36	-	
PRELIMINARY TANKS	9	-	F.1	-	2/5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	9.4	-	F.8	-	5	DECK	TYPE 4	6	-	
PRELIMINARY TANKS	9.7	-	F	-	1/5	N-S BEAM	TYPE 4	1	-	
PRELIMINARY TANKS	12.2	-	F.1	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	12.9	-	F.4	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	13	-	F.9	-	2/5	E-W CAP	TYPE 2	2	2	
PRELIMINARY TANKS	15	-	F.2	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	15	-	F.3	-	5	E-W CAP	TYPE 2	4	4	
PRELIMINARY TANKS	15	-	F.3	-	5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	15	-	F.9	-	5	E-W CAP	TYPE 2	4	1	
PRELIMINARY TANKS	16	-	F.7	-	4/5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	16.1	-	F.6	-	5	DECK	TYPE 4	3	-	
PRELIMINARY TANKS	16.5	-	F.5	-	3/5	N-S BEAM	TYPE 2	1	1	
PRELIMINARY TANKS	15.6	-	F.4	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	15.8	-	F.6	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	16.9	-	F.1	-	5	DECK	TYPE 2	1	1	
PRELIMINARY TANKS	17	-	F.3	-	4/5	E-W CAP	TYPE 2	3	3	
PRELIMINARY TANKS	17	-	F.1	-	5	E-W CAP	TYPE 2	3	12	
PRELIMINARY TANKS	17.2	-	F.3	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	17.9	-	F	-	5	N-S BEAM	TYPE 4	3	-	
PRELIMINARY TANKS	17.9	-	F.5	-	3/5	N-S BEAM	TYPE 2	1	1	
PRELIMINARY TANKS	18.4	-	F.5	-	5	N-S BEAM	TYPE 2	1	1	
PRELIMINARY TANKS	18.9	-	F.1	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	19.2	-	F.4	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	20	-	F.3	-	5	E-W CAP	TYPE 3	2	-	
PRELIMINARY TANKS	20	-	F.6	-	5	E-W CAP	TYPE 2	1	12	
PRELIMINARY TANKS	20	-	F.6	-	2/5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	20.2	-	F.8	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	20.8	-	F.6	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	21.1	-	F.9	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	21.1	-	F.6	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	21.9	-	F.9	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	1.1	-	G.1	-	5	E-W CAP	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	1.1	-	G	-	5	E-W CAP	TYPE 2	36	6	
PRELIMINARY TANKS	1.1	-	G.9	-	5	E-W CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	1.1	-	G.9	-	5	E-W CAP	TYPE 2	2	2	
PRELIMINARY TANKS	1.1	-	G	-	5	E-W CAP	TYPE 2	1.5	1.5	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	1.1.1	1.1.3	G	-	3/5	N-S CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	1.1.8	-	G.6	-	5	N-S CAP	TYPE 3	3	-	
PRELIMINARY TANKS	2	-	G.1	-	5	E-W CAP	TYPE 3	3	-	
PRELIMINARY TANKS	2	-	G.7	-	5	E-W CAP	TYPE 2	2	2	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	3	-	G.1	-	5	E-W CAP	TYPE 2	1	12	
PRELIMINARY TANKS	3	-	G	-	2/5	E-W CAP	TYPE 2	4	24	
PRELIMINARY TANKS	3	-	G.7	-	5	E-W CAP	TYPE 4	2	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	4	-	G.2	-	2/5	E-W CAP	TYPE 2	3	4	
PRELIMINARY TANKS	4	-	G.8	-	5	E-W CAP	TYPE 4	6	-	X7 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	5	-	G	-	5	E-W CAP	TYPE 3	12	-	
PRELIMINARY TANKS	6	-	G.7	-	5	E-W CAP	TYPE 3	12	-	
PRELIMINARY TANKS	8	-	G.2	-	5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	8	-	G.1	-	5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	8	-	G.7	-	5	E-W CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	8	-	G.7	-	2/5	E-W CAP	TYPE 2	1	3	X3 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	8.3	-	G.6	-	1/5	N-S BEAM	TYPE 2	2	2	
PRELIMINARY TANKS	9	-	G.2	-	5	E-W CAP	TYPE 3	3	1	
PRELIMINARY TANKS	9	-	G	-	5	E-W CAP	TYPE 3	24	1	
PRELIMINARY TANKS	9.4	-	G.6	-	3	N-S BEAM	TYPE 2	4	3	

0 1 2 3 4 FT.
1/2"=1'-0"

NYC Environmental Protection BEDC/ND

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

STATE OF NEW YORK · ILHAN TUTUNCU · LICENSED PROFESSIONAL ENGINEER

NYC Environmental Protection

ACCOUNTABLE MANAGER
FRANK GIARDINA
PORTFOLIO MANAGER
MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN
KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 4 REPAIR SCHEDULE
SHEET 3 OF 7

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-549.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00" x 34.00" Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-547.00_553.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Plot Scale: 1:1
Date & Time Plotted: 10/20/2026 3:47 PM
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 4 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
PRELIMINARY TANKS	10	-	G.6	-	5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	10	-	G.7	-	5	E-W CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	11	-	G.2	-	5	E-W CAP	TYPE 2	10	3	
PRELIMINARY TANKS	11	-	G.7	-	5	E-W CAP	TYPE 3	8	1	
PRELIMINARY TANKS	12	-	G.6	-	5	E-W CAP	TYPE 3	4	-	
PRELIMINARY TANKS	12	-	G.3	-	5	E-W CAP	TYPE 2	14	4	
PRELIMINARY TANKS	12	-	G.7	-	5	E-W CAP	TYPE 2	4	2	
PRELIMINARY TANKS	14.4	-	G	-	5	N-S BEAM	TYPE 2	1	1	
PRELIMINARY TANKS	14.7	-	G.3	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	15	-	G.7	-	5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	15.2	-	G	-	1	N-S BEAM	TYPE 2	4	1	
PRELIMINARY TANKS	16.2	-	G.6	-	5	N-S BEAM	TYPE 3	18	-	
PRELIMINARY TANKS	15.9	-	G.7	-	5	DECK	TYPE 2	1	4	
PRELIMINARY TANKS	17	-	G.4	-	5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	17	-	G.2	-	2	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	17	-	G.7	-	5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	17.1	-	G.6	-	5	N-S BEAM	TYPE 3	30	-	
PRELIMINARY TANKS	17.5	-	G	-	3	N-S BEAM	TYPE 4	2	-	
PRELIMINARY TANKS	18	-	G.3	-	2	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	19.9	-	G.1	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	20	-	G.9	-	4	E-W CAP	TYPE 2	4	1	
PRELIMINARY TANKS	21	-	G.9	-	2/5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	21.1	-	G.6	-	3	N-S BEAM	TYPE 2	1	2	
PRELIMINARY TANKS	21.1	-	G.3	-	5	DECK	TYPE 4	3	-	
PRELIMINARY TANKS	1.1	-	H	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	1.1	-	H.2	H.7	5	E-W CAP	TYPE 2	1	12	X5 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	1.1	-	H.9	-	5	E-W CAP	TYPE 2	36	36	
PRELIMINARY TANKS	1.1.1	-	H	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	2	-	H.7	-	5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	3	-	H	-	5	E-W CAP	TYPE 3	4	-	X3 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	3	-	H.8	-	5	E-W CAP	TYPE 3	12	-	
PRELIMINARY TANKS	4	-	H.8	H.9	5	E-W CAP	TYPE 3	36	-	
PRELIMINARY TANKS	4.2	-	H	-	5	N-S BEAM	TYPE 4	8	-	
PRELIMINARY TANKS	5	-	H	-	5	E-W CAP	TYPE 3	18	-	
PRELIMINARY TANKS	5	-	H.4	H.5	5	E-W CAP	TYPE 3	36	-	
PRELIMINARY TANKS	6	-	H.2	-	5	E-W CAP	TYPE 4	6	-	
PRELIMINARY TANKS	6	-	H.4	-	5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	6	-	H.4	-	2/5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	6	-	H.6	-	2/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	6	-	H.7	-	2/5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	7	-	H	-	5	E-W CAP	TYPE 3	18	-	
PRELIMINARY TANKS	7.5	-	H.4	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	8	-	H.9	-	5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	8	-	H.2	H.4	2/5	E-W CAP	TYPE 2	5	5	X4 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	9	-	H.7	-	5	E-W CAP	TYPE 3	12	-	
PRELIMINARY TANKS	9	-	H.1	-	2/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	9	-	H.1	-	2/5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	9.5	-	H.9	-	5	DECK	TYPE 2	9	9	
PRELIMINARY TANKS	10	-	H.9	-	4	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	10	-	H.5	-	4/5	E-W CAP	TYPE 4	18	-	
PRELIMINARY TANKS	10	-	H.9	-	5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	11	-	H.7	-	4	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	11	-	H.5	-	5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	11.9	-	H.9	-	5	DECK	TYPE 2	20	12	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	12	-	H.4	-	5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	12.2	-	H.9	-	5	DECK	TYPE 4	3	-	
PRELIMINARY TANKS	13	-	H	-	5	E-W CAP	TYPE 4	5	-	
PRELIMINARY TANKS	13	-	H.7	-	5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	13	-	H.2	-	2/5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	13	-	H.3	-	4/5	E-W CAP	TYPE 4	4	-	
PRELIMINARY TANKS	13	-	H.3	-	4/5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	13.7	-	H	-	1/5	N-S BEAM	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	13.9	-	H.9	-	5	DECK	TYPE 2	16	16	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	14	-	H.3	-	5	E-W CAP	TYPE 3	24	-	
PRELIMINARY TANKS	14	-	H.1	H.3	5	E-W CAP	TYPE 3	48	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	15	-	H	H.6	5	E-W CAP	TYPE 3	84	-	
PRELIMINARY TANKS	15	-	H	H.2	5	E-W CAP	TYPE 3	48	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	15	-	H.4	-	5	E-W CAP	TYPE 3	18	-	
PRELIMINARY TANKS	15	-	H.3	-	4/5	E-W CAP	TYPE 2	4	1	
PRELIMINARY TANKS	15	-	H.4	-	4/5	E-W CAP	TYPE 2	4	1	X2 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	16	-	H	-	5	E-W CAP	TYPE 3	8	-	
PRELIMINARY TANKS	16	-	H	-	5	E-W CAP	TYPE 3	12	-	
PRELIMINARY TANKS	15.1	-	H.8	-	5	DECK	TYPE 4	2	-	

PHASE 4 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
PRELIMINARY TANKS	15.3	-	H	-	5	N-S BEAM	TYPE 4	2	-	
PRELIMINARY TANKS	15.5	-	H.4	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	17	-	H	-	5	E-W CAP	TYPE 3	24	-	
PRELIMINARY TANKS	17	-	H.1	-	5	E-W CAP	TYPE 2	1	24	
PRELIMINARY TANKS	17	-	H.8	-	5	E-W CAP	TYPE 2	1	12	
PRELIMINARY TANKS	17	-	H	-	5	E-W CAP	TYPE 3	30	-	
PRELIMINARY TANKS	18	-	H.2	-	5	E-W CAP	TYPE 3	12	-	
PRELIMINARY TANKS	18	-	H.2	H.4	5	E-W CAP	TYPE 3	18	-	
PRELIMINARY TANKS	18.3	-	H.5	-	5	N-S BEAM	TYPE 4	1	-	X6 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	18.4	-	H	-	1/5	N-S BEAM	TYPE 4	1	-	
PRELIMINARY TANKS	19	-	H.2	H.5	5	E-W CAP	TYPE 3	36	-	
PRELIMINARY TANKS	19.2	-	H.9	-	5	DECK	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	19.8	-	H.8	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	20	-	H.7	-	2/5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	21	-	H.1	-	5	E-W CAP	TYPE 2	2	2	
PRELIMINARY TANKS	21	-	H.1	H.5	5	E-W CAP	TYPE 3	36	-	
PRELIMINARY TANKS	21	-	H.1	-	5	E-W CAP	TYPE 2	2	2	
PRELIMINARY TANKS	21	-	H.6	-	2/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	21	-	H.7	-	4	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	21.1	-	H.1	-	5	E-W CAP	TYPE 2	3	12	
PRELIMINARY TANKS	1.1	-	J.4	-	5	E-W CAP	TYPE 2	2	2	
PRELIMINARY TANKS	1.1	-	J.9	-	5	E-W CAP	TYPE 2	1	36	
PRELIMINARY TANKS	1.1.7	-	J	-	1/5	N-S CAP	TYPE 4	6	-	
PRELIMINARY TANKS	1.1.9	-	J	-	5	N-S CAP	TYPE 3	6	-	
PRELIMINARY TANKS	2	-	J.4	J.6	5	E-W CAP	TYPE 3	36	-	
PRELIMINARY TANKS	2	-	J.1	-	5	E-W CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	2.1	-	J.9	-	5	DECK	TYPE 2	2	1	
PRELIMINARY TANKS	3.5	-	J.3	-	5	DECK	TYPE 2	1	3	
PRELIMINARY TANKS	3.9	-	J.4	-	5	DECK	TYPE 2	1	2	
PRELIMINARY TANKS	4	-	J.8	-	5	E-W CAP	TYPE 3	36	-	
PRELIMINARY TANKS	4	-	J.6	-	5	E-W CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	5	-	J	-	5	E-W CAP	TYPE 3	18	-	
PRELIMINARY TANKS	5.2	-	J.4	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	6	-	J.6	-	5	E-W CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	6	-	J.4	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	6	-	J.2	-	5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	7.5	-	J.6	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	8	-	J.5	-	5	E-W CAP	TYPE 3	3	-	
PRELIMINARY TANKS	8	-	J.6	-	5	E-W CAP	TYPE 4	1	-	X7 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	10	-	J.9	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	10	-	J.6	-	5	E-W CAP	TYPE 4	1	-	X7 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	10	-	J.2	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	10.2	-	J.5	-	5	N-S BEAM	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	10.5	-	J.5	-	5	N-S BEAM	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	11	-	J.6	-	5	E-W CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	11.8	-	J.1	-	5	DECK	TYPE 2	1	1	
PRELIMINARY TANKS	11.9	-	J.3	-	5	DECK	TYPE 2	9	5	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	12	-	J.6	-	5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	12	-	J.4	-	4/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	12.6	-	J.5	-	5	N-S BEAM	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	13	-	J.6	-	4/5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	13	-	J.7	-	4/5	E-W CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	13	-	J.8	-	5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	13	-	J.6	-	5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	14	-	J.8	-	4/5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	14	-	J	-	5	E-W CAP	TYPE 2	2	8	
PRELIMINARY TANKS	14.2	-	J.8	-	5	DECK	TYPE 4	6	-	
PRELIMINARY TANKS	14.2	14.8	J.3	-	5	DECK	TYPE 2	1	12	X4 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	14.2	-	J.4	-	5	DECK	TYPE 4	3	-	
PRELIMINARY TANKS	15	-	J.2	-	4	E-W CAP	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	16.2	-	J.6	-	5	DECK	TYPE 2	18	24	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	16.7	-	J.8	-	5	DECK	TYPE 2	12	24	
PRELIMINARY TANKS	17.1	17.2	J.4	-	5	DECK	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	17.2	-	J.1	-	5	DECK	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	18	-	J	-	5	E-W CAP	TYPE 2	1	3	
PRELIMINARY TANKS	18.1	-	J.8	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	18.3	-	J	-	5	N-S BEAM	TYPE 4	2	-	X4 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	18.7	-	J.8	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	19	-	J.3	-	5	E-W CAP	TYPE 2	2	5	
PRELIMINARY TANKS	19.4	-	J.8	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	20.1	-	J.4	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	20.1	-	J.6	-	5	DECK	TYPE 2	2	2	
PRELIMINARY TANKS	21	-	J	-	5	E-W CAP	TYPE 3	2	2	

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 4 REPAIR SCHEDULE
SHEET 4 OF 7

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-550.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-547.00_553.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb
Date & Time Plotted: 10/20/2026 3:47 PM

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 4 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
PRELIMINARY TANKS	21	-	J.7	-	4	E-W CAP	TYPE 4	6	-	
PRELIMINARY TANKS	21.3	-	J	-	5	N-S BEAM	TYPE 4	3	-	
PRELIMINARY TANKS	1.1	-	K	-	5	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	1.1	-	K	-	5	N-S CAP	TYPE 3	24	-	
PRELIMINARY TANKS	1.1	-	K.5	-	5	E-W CAP	TYPE 3	36	-	
PRELIMINARY TANKS	1.1	-	K.6	K.7	5	E-W CAP	TYPE 3	6	-	
PRELIMINARY TANKS	1.1	-	K.6	-	5	E-W CAP	TYPE 4	2	-	X5 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	1.1.2	-	K	-	5	N-S CAP	TYPE 4	2	-	X8 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	1.1.2	-	K	-	3/5	N-S CAP	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	2	-	K	-	5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	2	-	K.9	-	5	E-W CAP	TYPE 2	1	12	X2 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	2	-	K.6	-	5	E-W CAP	TYPE 2	1	12	
PRELIMINARY TANKS	2	-	K.5	-	5	E-W CAP	TYPE 3	12	-	
PRELIMINARY TANKS	2.2	-	K.1	-	5	DECK	TYPE 2	9	9	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	2.5	-	K.6	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	2.6	-	K.4	-	5	DECK	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	2.9	-	K.4	-	5	DECK	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	3	-	K.8	-	5	E-W CAP	TYPE 2	8	1	
PRELIMINARY TANKS	4	-	K.2	-	2/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	4.2	-	K.1	-	5	DECK	TYPE 4	3	-	
PRELIMINARY TANKS	4.2	-	K.1	-	5	DECK	TYPE 2	3	1	
PRELIMINARY TANKS	5.5	-	K.7	-	5	DECK	TYPE 2	1	1	
PRELIMINARY TANKS	5.9	-	K.4	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	6	-	K.4	-	5	E-W CAP	TYPE 3	8	-	
PRELIMINARY TANKS	6.2	-	K.4	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	6.8	-	K.6	-	5	DECK	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	7	-	K.5	-	5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	7.1	-	K.9	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	7.9	-	K.5	-	1	N-S BEAM	TYPE 4	3	-	
PRELIMINARY TANKS	7.9	-	K.6	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	7.9	-	K.9	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	8	-	K.4	-	5	E-W CAP	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	8	-	K.5	-	5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	9	-	K.3	-	5	E-W CAP	TYPE 3	24	-	
PRELIMINARY TANKS	10	-	K.7	-	4/5	E-W CAP	TYPE 4	8	-	
PRELIMINARY TANKS	10	-	K.7	-	4/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	10	-	K.5	-	5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	10.2	-	K.5	-	5	N-S BEAM	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	11	-	K.8	-	4/5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	13	-	K.7	-	2/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	13	-	K.1	-	2/5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	13.1	-	K.4	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	14	-	K.8	-	4/5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	14	-	K.2	K.5	5	E-W CAP	TYPE 2	1	48	
PRELIMINARY TANKS	14	-	K.1	-	4/5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	14.2	-	K.8	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	15	-	K.3	-	2/5	E-W CAP	TYPE 2	2	2	
PRELIMINARY TANKS	16.1	-	K.1	-	5	DECK	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	15.1	-	K.5	-	5	N-S BEAM	TYPE 4	4	-	
PRELIMINARY TANKS	15.1	-	K.6	-	5	DECK	TYPE 4	3	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	15.1	-	K.6	-	5	DECK	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	15.1	-	K.9	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	15.2	-	K.2	-	5	DECK	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	16.6	-	K	-	1/5	N-S BEAM	TYPE 4	5	-	
PRELIMINARY TANKS	15.6	-	K.6	-	5	DECK	TYPE 2	3	3	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	17	-	K.6	-	2	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	18	-	K.4	-	2/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	18.1	-	K.4	-	5	DECK	TYPE 4	2	-	X4 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	18.5	-	K.5	-	5	N-S BEAM	TYPE 4	2	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	18.5	-	K	-	5	N-S BEAM	TYPE 4	2	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	18.8	-	K.6	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	19.1	-	K.6	-	5	DECK	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	19.2	-	K.4	-	5	DECK	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	20	-	K.1	-	5	E-W CAP	TYPE 2	2	2	
PRELIMINARY TANKS	21	-	K.2	-	2/5	E-W CAP	TYPE 4	4	-	
PRELIMINARY TANKS	21	-	K.4	-	4/5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	1.1	-	L	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	1.1	-	L	-	5	E-W CAP	TYPE 3	36	1	
PRELIMINARY TANKS	1.1	-	L.1	L.4	5	E-W CAP	TYPE 2	36	60	
PRELIMINARY TANKS	1.1	-	L.5	-	5	E-W CAP	TYPE 3	36	3	
PRELIMINARY TANKS	1.1	-	L.6	-	5	E-W CAP	TYPE 4	4	-	

PHASE 4 SCHEDULE

LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
PRELIMINARY TANKS	1.1	-	L.1	-	5	E-W CAP	TYPE 3	6	-	
PRELIMINARY TANKS	1.1	-	L.2	-	5	E-W CAP	TYPE 3	6	-	
PRELIMINARY TANKS	1.1	-	L.3	-	5	E-W CAP	TYPE 3	6	-	
PRELIMINARY TANKS	1.1.6	-	L	-	1	N-S CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	1.1.8	-	L	-	1/5	N-S CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	1.1.8	-	L.7	-	5	DECK	TYPE 4	5	-	
PRELIMINARY TANKS	2	-	L.1	L.9	5	E-W CAP	TYPE 3	240	-	
PRELIMINARY TANKS	2	-	L.9	-	5	E-W CAP	TYPE 2	3	8	X2 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	2.3	-	L	-	5	N-S BEAM	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	2.5	-	L.5	-	5	N-S BEAM	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	3	-	L	-	5	E-W CAP	TYPE 2	5	5	
PRELIMINARY TANKS	3	-	L.6	-	5	E-W CAP	TYPE 4	1	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	3	-	L.8	-	5	E-W CAP	TYPE 3	24	-	
PRELIMINARY TANKS	3.1	-	L.1	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	3.9	-	L.1	-	5	DECK	TYPE 2	1	2	
PRELIMINARY TANKS	5	-	L.7	-	2/5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	5.5	-	L.9	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	6	-	L	-	5	E-W CAP	TYPE 2	12	12	
PRELIMINARY TANKS	6	-	L.6	M	5	E-W CAP	TYPE 4	4	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	6.3	-	L.5	-	5	N-S BEAM	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	7	-	L.6	-	5	E-W CAP	TYPE 4	2	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	8	-	L.6	-	5	E-W CAP	TYPE 4	2	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	8.1	-	L.1	-	5	DECK	TYPE 2	3	8	
PRELIMINARY TANKS	9	-	L.6	-	5	E-W CAP	TYPE 4	2	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	10	-	L.6	-	2/5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	11.2	-	L	-	3	N-S BEAM	TYPE 4	4	-	
PRELIMINARY TANKS	12	-	L.8	-	4/5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	13.1	-	L.6	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	13.9	-	L.6	-	5	DECK	TYPE 4	1	-	
PRELIMINARY TANKS	14	-	L.8	-	4/5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	14	-	L.7	-	5	E-W CAP	TYPE 3	36	-	
PRELIMINARY TANKS	14	-	L.5	-	5	E-W CAP	TYPE 2	1	24	
PRELIMINARY TANKS	14	-	L.1	L.3	5	E-W CAP	TYPE 2	1	60	
PRELIMINARY TANKS	16	-	L	-	2	E-W CAP	TYPE 2	3	1	
PRELIMINARY TANKS	16.2	-	L.1	-	5	DECK	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	15.9	-	L.7	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	19	-	L.1	-	4/5	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	19	-	L.2	-	5	E-W CAP	TYPE 4	4	-	
PRELIMINARY TANKS	19.1	19.7	L.6	L.8	5	DECK	TYPE 4	2	-	X6 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	19.3	-	L.5	-	5	N-S BEAM	TYPE 3	1	-	
PRELIMINARY TANKS	21	-	L.8	-	4	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	21.1	-	L.4	-	2	E-W CAP	TYPE 4	1	-	
PRELIMINARY TANKS	21.1	-	L.1	-	2	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	1.1	-	M	-	5	E-W CAP	TYPE 2	1.5	1.5	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	1.1	-	M.7	M.9	5	E-W CAP	TYPE 4	4	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	1.1	-	M.5	-	5	E-W CAP	TYPE 3	12	-	
PRELIMINARY TANKS	1.1	-	M	-	5	E-W CAP	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	1.1.5	-	M	-	3/5	N-S CAP	TYPE 4	4	-	
PRELIMINARY TANKS	1.1.6	-	M.7	-	5	DECK	TYPE 2	12	8	
PRELIMINARY TANKS	1.1.9	-	M	-	1/5	N-S CAP	TYPE 4	1	-	
PRELIMINARY TANKS	2	-	M.2	-	5	E-W CAP	TYPE 3	24	-	
PRELIMINARY TANKS	3	-	M	-	5	E-W CAP	TYPE 3	36	-	
PRELIMINARY TANKS	3	-	M.5	-	5	E-W CAP	TYPE 3	12	-	
PRELIMINARY TANKS	3.1	-	M.1	-	5	DECK	TYPE 2	12	12	
PRELIMINARY TANKS	3.2	-	M.1	-	5	DECK	TYPE 2	1	1	
PRELIMINARY TANKS	3.3	-	M.2	-	5	DECK	TYPE 4	3	-	
PRELIMINARY TANKS	3.5	-	M.1	-	5	DECK	TYPE 2	18	18	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	4	-	M.4	-	4/5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	4	-	M.5	-	5	E-W CAP	TYPE 3	18	-	
PRELIMINARY TANKS	4	-	M.6	-	4/5	E-W CAP	TYPE 2	4	4	
PRELIMINARY TANKS	4	-	M.7	-	5	E-W CAP	TYPE 3	8	-	
PRELIMINARY TANKS	4	-	M.9	-	5	E-W CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	5	-	M.3	-	5	E-W CAP	TYPE 2	2	2	
PRELIMINARY TANKS	5.1	5.8	M.2	M.4	5	DECK	TYPE 4	2	-	X6 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	5.5	-	M.3	-	5	DECK	TYPE 4	2	-	
PRELIMINARY TANKS	6	-	M	-	5	E-W CAP	TYPE 3	36	-	
PRELIMINARY TANKS	6	-	M.8	-	4/5	E-W CAP	TYPE 4	6	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	6	-	M.9	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	6.3	-	M	-	5	N-S BEAM	TYPE 4	8	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	6.3	-	M.6	-	5	DECK	TYPE 2	1	1	
PRELIMINARY TANKS	6.3	-	M	-	5	N-S BEAM	TYPE 3	24	-	
PRELIMINARY TANKS	6.8	-	M.8	-	5	DECK	TYPE 2	1	1	

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 4 REPAIR SCHEDULE
SHEET 5 OF 7

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-551.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00" x 34.00" Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-547.00_553.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Plot Style Table: BEDC_Acad(N).ctb
Plot Scale: 1:1
Date & Time Plotted: 10/20/2026 3:47 PM

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 4 SCHEDULE										
LOCATION								DETERIORATED AREA		
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT	REPAIR TYPE	LENGTH (IN.)	WIDTH (IN.)	FULL NOTES
	START	END	START	END						
PRELIMINARY TANKS	7	-	M.7	-	5	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	7.5	7.8	M.7	-	5	DECK	TYPE 2	24	2	
PRELIMINARY TANKS	8	-	M.2	-	4/5	E-W CAP	TYPE 2	3	1	
PRELIMINARY TANKS	8	-	M.2	-	5	E-W CAP	TYPE 4	4	-	
PRELIMINARY TANKS	8	-	M.7	-	2/5	E-W CAP	TYPE 2	3	1	
PRELIMINARY TANKS	9	-	M	-	5	E-W CAP	TYPE 2	1	8	
PRELIMINARY TANKS	9	-	M.3	-	5	E-W CAP	TYPE 2	1	3	
PRELIMINARY TANKS	9	-	M.4	-	5	E-W CAP	TYPE 2	1	3	
PRELIMINARY TANKS	9	-	M.2	-	2/5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	9	-	M.8	-	2/5	E-W CAP	TYPE 4	4	-	
PRELIMINARY TANKS	10	-	M.3	-	5	E-W CAP	TYPE 3	48	-	
PRELIMINARY TANKS	10	-	M.7	-	5	E-W CAP	TYPE 4	4	-	
PRELIMINARY TANKS	10	-	M.5	-	2/5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	10.3	-	M	-	5	N-S BEAM	TYPE 4	2	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	10.3	-	M.5	-	5	N-S BEAM	TYPE 4	3	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	11	-	M	-	2/5	E-W CAP	TYPE 4	3	-	
PRELIMINARY TANKS	11	-	M.7	0.8	4/5	E-W CAP	TYPE 4	3	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	12	-	M.9	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
PRELIMINARY TANKS	12	-	M.7	-	5	E-W CAP	TYPE 4	2	-	X3 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	13	-	M	-	4/5	E-W CAP	TYPE 4	6	-	
PRELIMINARY TANKS	13	-	M.8	-	5	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	14	-	M.4	0.6	4/5	E-W CAP	TYPE 2	1	1	X4 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	14	-	M.4	-	5	E-W CAP	TYPE 3	12	-	
PRELIMINARY TANKS	15	-	M.4	-	2/5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	15	-	M	-	5	E-W CAP	TYPE 3	5	-	
PRELIMINARY TANKS	16	-	M.9	-	5	E-W CAP	TYPE 2	1	3	
PRELIMINARY TANKS	16	-	M.7	-	4/5	E-W CAP	TYPE 2	18	1	
PRELIMINARY TANKS	16	-	M	-	5	E-W CAP	TYPE 3	3	1	
PRELIMINARY TANKS	16.2	-	M.5	-	5	N-S BEAM	TYPE 3	1	2	
PRELIMINARY TANKS	15.3	-	M.8	-	5	DECK	TYPE 4	3	-	
PRELIMINARY TANKS	17	-	M	-	4/5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	18	-	M	-	2	E-W CAP	TYPE 4	2	-	
PRELIMINARY TANKS	18	-	M.7	-	2	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	18.3	-	M.5	-	5	N-S BEAM	TYPE 4	2	-	MULTIPLE DEFECTS IN REPAIR AREA
PRELIMINARY TANKS	18.3	-	M	-	5	N-S BEAM	TYPE 4	2	-	X7 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	19	-	M.7	-	2/5	E-W CAP	TYPE 4	4	-	
PRELIMINARY TANKS	19.3	-	M	-	3/5	N-S BEAM	TYPE 4	2	-	
PRELIMINARY TANKS	19.5	-	M	-	5	N-S BEAM	TYPE 2	1	1	
PRELIMINARY TANKS	21	-	M	-	2	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	21	-	M.9	-	2	E-W CAP	TYPE 4	8	-	
PRELIMINARY TANKS	21	-	M.7	-	4/5	E-W CAP	TYPE 2	1	1	
PRELIMINARY TANKS	21.1	-	M.4	-	5	E-W CAP	TYPE 3	12	-	
PRELIMINARY TANKS	1.1	-	M.1	-	5	N-S CAP	TYPE 3	24	1	
PRELIMINARY TANKS	1.1	-	M.1	-	5	E-W CAP	TYPE 2	2	3	
PRELIMINARY TANKS	1.1.9	-	M.1	-	5	N-S CAP	TYPE 3	12	1	
PRELIMINARY TANKS	1.1.9	-	M.1	-	3/5	N-S CAP	TYPE 2	30	3	
PRELIMINARY TANKS	2	-	M.1	-	5	E-W CAP	TYPE 3	6	-	
PRELIMINARY TANKS	2.2	2.6	M.1	-	5	N-S CAP	TYPE 3	30	-	
PRELIMINARY TANKS	3	-	M.1	M.2	5	E-W CAP	TYPE 3	36	-	
PRELIMINARY TANKS	3.1	-	M.1	-	5	N-S CAP	TYPE 2	1	3	
PRELIMINARY TANKS	3.9	-	M.1	-	5	N-S CAP	TYPE 3	8	-	
PRELIMINARY TANKS	6	-	M.1	M.4	5	E-W CAP	TYPE 2	2	2	X5 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	6.2	-	M.1	-	5	N-S CAP	TYPE 4	1	-	X5 REPAIRS AT THIS LOCATION
PRELIMINARY TANKS	9	-	M.1	-	5	E-W CAP	TYPE 2	1	3	
PRELIMINARY TANKS	14	-	M.1	-	5	E-W CAP	TYPE 2	3	3	
PRELIMINARY TANKS	15.8	-	M.1	-	1/5	N-S CAP	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION
PRELIMINARY TANKS	17.4	-	M.1	-	1/5	N-S CAP	TYPE 2	2	1	
PRELIMINARY TANKS	19	-	M.1	-	3	N-S CAP	TYPE 4	5	-	
PRELIMINARY TANKS	20	-	M.1	-	5	E-W CAP	TYPE 3	18	1	
PRELIMINARY TANKS	21	-	M.1	-	4	E-W CAP	TYPE 4	2	-	X2 REPAIRS AT THIS LOCATION
MAIN BUILDING / EAST APPENDIX	-	-	-	-	5	ALL CAPS	TYPE 1	SEE PLAN	SEE PLAN	1 IN. CONC. EROSION IN AREA
MAIN BUILDING	0/1	-	A/A	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	1	-	A/A	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	1.6	-	A/A	-	5	N-S CAP	TYPE 4	6	-	X3 REPAIRS AT THIS LOCATION
MAIN BUILDING	2	-	A/A	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	3	-	A/A	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	4	-	A/A	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	3.2	-	A/A	-	5	N-S CAP	TYPE 3	60	-	
MAIN BUILDING	5	-	A/A	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE

PHASE 4 SCHEDULE										
LOCATION								DETERIORATED AREA		
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT	REPAIR TYPE	LENGTH (IN.)	WIDTH (IN.)	FULL NOTES
	START	END	START	END						
MAIN BUILDING	5.1	-	A/A	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	6	-	A/A	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	7	-	A/A	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	7	-	A/A	-	5	N-S CAP	TYPE 4	3	-	
MAIN BUILDING	7/8	-	A/A	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	7/8	-	A/A	-	5	N-S CAP	TYPE 2	4	18	
MAIN BUILDING	7/8.1	-	A/A	-	5	E-W CAP	TYPE 2	8	6	
MAIN BUILDING	0/1	-	A	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	0/1	-	A	-	5	E-W CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	0/1	-	A	B.3	5	E-W CAP	TYPE 2	72	3	MULTIPLE DEFECTS IN REPAIR AREA. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	0/1	-	A.5	-	5	E-W CAP	TYPE 2	3	1	
MAIN BUILDING	0/1	-	A	-	5	E-W CAP	TYPE 3	24	-	
MAIN BUILDING	0/1.7	-	A	-	5	N-S CAP	TYPE 4	3	-	
MAIN BUILDING	0/1.8	-	A	-	5	N-S CAP	TYPE 4	3	-	
MAIN BUILDING	1	-	A.2	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	1.3	1.7	A.1	A.3	5	DECK	TYPE 2	1.5	1.5	X6 DEFECTS AT THIS REPAIR LOCATION. CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	1.9	-	A	-	5	N-S CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	2	-	A.4	-	5	E-W CAP	TYPE 4	3	-	X5 REPAIRS AT THIS LOCATION
MAIN BUILDING	2	-	A.2	-	5	E-W CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	4.6	-	A	-	1/5	N-S CAP	TYPE 2	2	2	
MAIN BUILDING	5	-	A	-	5	E-W CAP	TYPE 2	2	3	
MAIN BUILDING	5	-	A.5	-	5	E-W CAP	TYPE 4	3	-	
MAIN BUILDING	5.1	-	A	-	3/5	N-S CAP	TYPE 4	6	-	
MAIN BUILDING	5.2	-	A	-	3/5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
MAIN BUILDING	6	-	A.6	-	2/5	E-W CAP	TYPE 4	4	-	
MAIN BUILDING	6	-	A.4	-	4/5	E-W CAP	TYPE 2	1	1	
MAIN BUILDING	6.3	-	A.3	-	5	DECK	TYPE 4	4	-	
MAIN BUILDING	7	-	A.6	-	5	E-W CAP	TYPE 4	4	-	
MAIN BUILDING	13.2	-	A1.2	-	5	DECK	TYPE 4	2	-	
MAIN BUILDING	15.4	15.9	A1.2	A1.6	5	DECK	TYPE 2	1	1	X5 DEFECTS AT THIS REPAIR LOCATION
MAIN BUILDING	15.4	-	A1	-	3	N-S CAP	TYPE 4	2	-	
MAIN BUILDING	16	-	A1.4	-	4	E-W CAP	TYPE 2	1	1	
MAIN BUILDING	16.6	-	A1	-	3	N-S CAP	TYPE 4	2	-	
MAIN BUILDING	17	-	A1.9	-	5	E-W CAP	TYPE 3	4	-	
MAIN BUILDING	17.5	-	A1	-	3/5	N-S CAP	TYPE 2	2	2	
MAIN BUILDING	17.8	-	A1.8	-	5	DECK	TYPE 2	2	2	
MAIN BUILDING	18	-	A1.1	-	5	E-W CAP	TYPE 2	8	-	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	18	-	A1.2	A.1.5	5	E-W CAP	TYPE 4	1	-	X4 REPAIRS AT THIS LOCATION
MAIN BUILDING	18.2	-	A1.3	-	5	DECK	TYPE 2	2	2	
MAIN BUILDING	18.5	-	A1	-	5	N-S CAP	TYPE 4	1	-	
MAIN BUILDING	18.9	-	A1.3	-	5	DECK	TYPE 2	2	2	
MAIN BUILDING	19	-	A1.6	A.1.8	4	E-W CAP	TYPE 2	1	1	X4 DEFECTS AT THIS REPAIR LOCATION
MAIN BUILDING	19	-	A1.3	-	5	E-W CAP	TYPE 2	1	1	
MAIN BUILDING	19.9	-	A1	-	3/5	N-S CAP	TYPE 2	8	18	
MAIN BUILDING	20	-	A1.1	-	2/5	E-W CAP	TYPE 2	2	2	
MAIN BUILDING	2.6	-	B	-	3/5	N-S CAP	TYPE 2	1	1	
MAIN BUILDING	2.9	-	B	-	5	N-S CAP	TYPE 3	18	-	
MAIN BUILDING	3.3	3.7	B	-	3/5	N-S CAP	TYPE 4	3	-	X4 REPAIRS AT THIS LOCATION
MAIN BUILDING	5	-	B.2	-	4	E-W CAP	TYPE 2	1	1	
MAIN BUILDING	5.5	-	B	-	3	N-S CAP	TYPE 2	1	1	
MAIN BUILDING	6	-	B.1	-	5	E-W CAP	TYPE 2	1	2	
MAIN BUILDING	6.7	-	B	-	5	N-S CAP	TYPE 4	4	-	
MAIN BUILDING	7.6	-	B	-	5	N-S CAP	TYPE 4	4	-	
MAIN BUILDING	8.8	-	B/A.5	-	5	DECK	TYPE 2	24	3	
MAIN BUILDING	8.2	-	B/A.8	-	5	DECK	TYPE 2	3	3	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	9.5	-	B/A.1	-	5	DECK	TYPE 2	1	1	
MAIN BUILDING	10	-	B/A.5	-	5	E-W CAP	TYPE 2	4	1	X2 DEFECTS AT THIS REPAIR LOCATION
MAIN BUILDING	10	-	B/A.4	-	4	E-W CAP	TYPE 4	2	-	
MAIN BUILDING	10.3	10.6	B/A.5	B/A.9	5	DECK	TYPE 2	2	2	X10 DEFECTS AT THIS REPAIR LOCATION
MAIN BUILDING	11/12	-	B/A.5	-	2/5	E-W CAP	TYPE 4	3	-	
MAIN BUILDING	11/12	-	B/A.6	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
MAIN BUILDING	11/12	-	B/A.8	-	4/5	E-W CAP	TYPE 4	3	-	X5 REPAIRS AT THIS LOCATION
MAIN BUILDING	12	-	B/A.5	-	2/5	E-W CAP	TYPE 2	1	1	
MAIN BUILDING	12	-	B/A	-	5	E-W CAP	TYPE 3	48	-	
MAIN BUILDING	13.3	-	B/A	-	1/5	N-S CAP	TYPE 4	3	-	
MAIN BUILDING	13.4	-	B/A.2	-	5	DECK	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
MAIN BUILDING	13.5	-	B/A.8	-	5	DECK	TYPE 4	6	-	
MAIN BUILDING	14	-	B/A.8	-	5	E-W CAP	TYPE 2	1	1	
MAIN BUILDING	14	-	B/A.7	-	4/5	E-W CAP	TYPE 4	4	-	

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

STATE OF NEW YORK ILHAN TUTUNCU LICENSED PROFESSIONAL ENGINEER

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 4 REPAIR SCHEDULE
SHEET 6 OF 7

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-552.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-547.00_553.00.dwg
Last Date Saved: 10/20/2026 3:41 PM
Date & Time Plotted: 10/20/2026 3:47 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

PHASE 4 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
MAIN BUILDING	14.5	-	B/A	-	1/5	N-S CAP	TYPE 2	1	1	
MAIN BUILDING	14.5	-	B/A	-	3/5	N-S CAP	TYPE 2	1	1	
MAIN BUILDING	14.8	-	B/A.7	-	5	DECK	TYPE 2	1	1	
MAIN BUILDING	15	-	B/A.7	-	5	E-W CAP	TYPE 4	3	-	
MAIN BUILDING	15	-	B/A.1	-	4	E-W CAP	TYPE 2	36	3	
MAIN BUILDING	15.3	-	B/A.2	-	5	DECK	TYPE 2	2	2	
MAIN BUILDING	16.4	-	B/A	-	1	N-S CAP	TYPE 4	4	-	
MAIN BUILDING	16.8	-	B/A.8	-	5	DECK	TYPE 2	2	2	
MAIN BUILDING	17.2	-	B/A.8	-	5	DECK	TYPE 2	1	1	
MAIN BUILDING	17.4	-	B/A	-	5	N-S CAP	TYPE 2	2	2	
MAIN BUILDING	17.4	-	B/A.6	-	5	DECK	TYPE 4	1	-	
MAIN BUILDING	17.5	17.8	B/A.6	B/A.8	5	DECK	TYPE 2	1	1	X4 DEFECTS AT THIS REPAIR LOCATION
MAIN BUILDING	18	-	B/A.5	-	5	E-W CAP	TYPE 4	3	-	
MAIN BUILDING	18.5	-	B/A.4	-	5	DECK	TYPE 2	18	18	
MAIN BUILDING	18.7	-	B/A.6	-	5	DECK	TYPE 2	1	1	
MAIN BUILDING	19.1	-	B/A	-	1/5	N-S CAP	TYPE 2	4	3	
MAIN BUILDING	19.9	-	B/A	-	5	N-S CAP	TYPE 4	4	-	
MAIN BUILDING	19.9	-	B/A	-	5	N-S CAP	TYPE 3	8	-	
MAIN BUILDING	14.2	-	C/B.6	-	5	DECK	TYPE 2	2	2	X2 DEFECTS AT THIS REPAIR LOCATION
MAIN BUILDING	14.8	-	C/B	-	1/5	N-S CAP	TYPE 2	4	5	
MAIN BUILDING	15	-	C/B	-	5	N-S CAP	TYPE 2	1	1	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	15	-	C/B	-	5	N-S CAP	TYPE 3	18	-	
MAIN BUILDING	15	-	C/B.2	-	5	E-W CAP	TYPE 4	3	-	
MAIN BUILDING	15	-	C/B.5	C/B.9	5	E-W CAP	TYPE 3	72	-	
MAIN BUILDING	15.2	15.5	C/B.4	C/B.9	5	DECK	TYPE 2	1	1	X5 DEFECTS AT THIS REPAIR LOCATION
MAIN BUILDING	15.9	-	C/B	-	1	N-S CAP	TYPE 4	3	-	
MAIN BUILDING	16	-	C/B	-	5	N-S CAP	TYPE 3	18	-	
MAIN BUILDING	16	-	C/B.5	-	4/5	E-W CAP	TYPE 2	6	12	
MAIN BUILDING	16	-	C/B.6	-	5	E-W CAP	TYPE 2	1	1	
MAIN BUILDING	16	-	C/B.9	-	5	E-W CAP	TYPE 2	3	2	
MAIN BUILDING	16.1	-	C/B	-	5	N-S CAP	TYPE 3	5	-	MULTIPLE DEFECTS IN REPAIR AREA
MAIN BUILDING	16.2	-	C/B	-	5	N-S CAP	TYPE 3	12	-	
MAIN BUILDING	16.8	-	C/B	-	3/5	N-S CAP	TYPE 4	3	-	
MAIN BUILDING	17	-	C/B	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
MAIN BUILDING	17	-	C/B.3	-	4	E-W CAP	TYPE 4	2	-	
MAIN BUILDING	17	-	C/B.2	-	5	E-W CAP	TYPE 2	1	1	
MAIN BUILDING	17	-	C/B.6	-	5	E-W CAP	TYPE 2	1	1	
MAIN BUILDING	17.2	-	C/B.1	-	5	DECK	TYPE 2	1	1	
MAIN BUILDING	18	-	C/B.5	-	5	E-W CAP	TYPE 2	1	1	X10 DEFECTS AT THIS REPAIR LOCATION
MAIN BUILDING	18.2	-	C/B	-	5	N-S CAP	TYPE 2	12	5	
MAIN BUILDING	18.3	-	C/B	-	5	N-S CAP	TYPE 3	60	-	
MAIN BUILDING	18.4	-	C/B	-	1	N-S CAP	TYPE 4	12	-	
MAIN BUILDING	18.7	-	C/B	-	5	N-S CAP	TYPE 4	1	-	
MAIN BUILDING	18.8	-	C/B.9	-	5	DECK	TYPE 2	1	1	
MAIN BUILDING	19	-	C/B.1	-	5	E-W CAP	TYPE 3	18	-	
MAIN BUILDING	19	-	C/B.5	-	5	E-W CAP	TYPE 2	1	1	
MAIN BUILDING	19.8	-	C/B	-	5	N-S CAP	TYPE 2	1	1	X2 DEFECTS AT THIS REPAIR LOCATION
MAIN BUILDING	14.1	14.9	D.4	-	5	DECK	TYPE 3	18	-	MULTIPLE DEFECTS IN REPAIR AREA
MAIN BUILDING	14.9	-	D.6	-	5	DECK	TYPE 2	1	1	X3 DEFECTS AT THIS REPAIR LOCATION
MAIN BUILDING	15	-	D.1	-	5	E-W CAP	TYPE 2	3	3	
MAIN BUILDING	15	-	D.2	-	5	E-W CAP	TYPE 4	3	-	
MAIN BUILDING	15	-	D.5	-	5	E-W CAP	TYPE 2	3	3	
MAIN BUILDING	15	-	D.7	-	5	E-W CAP	TYPE 3	48	-	
MAIN BUILDING	15	-	D.5	-	5	E-W CAP	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	15.1	-	D	-	5	N-S CAP	TYPE 3	12	-	MULTIPLE DEFECTS IN REPAIR AREA
MAIN BUILDING	15.1	-	E	-	5	N-S CAP	TYPE 3	4	-	
MAIN BUILDING	15.3	-	D	-	3/5	N-S CAP	TYPE 2	1	1	
MAIN BUILDING	15.5	-	E	-	5	N-S CAP	TYPE 3	4	-	
MAIN BUILDING	15.7	-	E	-	1/5	N-S CAP	TYPE 4	4	-	
MAIN BUILDING	16	-	D	-	5	N-S CAP	TYPE 3	36	-	
MAIN BUILDING	16	-	D.1	-	5	E-W CAP	TYPE 3	12	-	MULTIPLE DEFECTS IN REPAIR AREA
MAIN BUILDING	16	-	E	-	5	N-S CAP	TYPE 3	8	-	
MAIN BUILDING	16.5	-	E	-	5	N-S CAP	TYPE 2	4	1	
MAIN BUILDING	16.8	-	D.2	-	5	DECK	TYPE 2	1	1	
MAIN BUILDING	17	-	D.1	-	5	E-W CAP	TYPE 3	60	-	
MAIN BUILDING	17	-	D.9	-	5	E-W CAP	TYPE 3	18	-	
MAIN BUILDING	17.1	-	D	-	5	N-S CAP	TYPE 4	4	-	X2 REPAIRS AT THIS LOCATION
MAIN BUILDING	17.4	-	E	-	5	N-S CAP	TYPE 2	1	1	
MAIN BUILDING	17.5	-	D	-	1	N-S CAP	TYPE 2	4	6	
MAIN BUILDING	17.5	17.9	D.1	D.8	5	DECK	TYPE 2	1	1	MULTIPLE DEFECTS IN REPAIR AREA
MAIN BUILDING	17.7	-	E	-	5	N-S CAP	TYPE 3	60	-	
MAIN BUILDING	17.9	-	D	-	1	N-S CAP	TYPE 4	2	-	
MAIN BUILDING	18	-	D	-	5	N-S CAP	TYPE 3	60	-	

PHASE 4 SCHEDULE										
LOCATION							REPAIR TYPE	DETERIORATED AREA		FULL NOTES
STRUCTURE	BENT		PILE ROW		FACE	ELEMENT		LENGTH (IN.)	WIDTH (IN.)	
	START	END	START	END						
MAIN BUILDING	18.1	-	E	-	5	N-S CAP	TYPE 2	3	3	
MAIN BUILDING	18.2	-	D.2	-	5	DECK	TYPE 2	1	1	
MAIN BUILDING	18.7	-	D.2	-	5	DECK	TYPE 2	3	2	
MAIN BUILDING	18.8	-	D.8	-	5	DECK	TYPE 2	1	1	
MAIN BUILDING	18.9	-	D	-	5	N-S CAP	TYPE 3	12	-	
MAIN BUILDING	18.9	-	D	-	5	N-S CAP	TYPE 2	2	2	
MAIN BUILDING	19	-	E	-	5	N-S CAP	TYPE 3	60	-	
MAIN BUILDING	19.2	-	D.5	-	5	DECK	TYPE 2	1	1	
MAIN BUILDING	19.3	-	D	-	5	N-S CAP	TYPE 2	1	1	
MAIN BUILDING	19.5	19.9	D	-	5	N-S CAP	TYPE 1	60	48	MULTIPLE DEFECTS IN REPAIR AREA
MAIN BUILDING	19.6	-	E	-	1/5	N-S CAP	TYPE 4	4	-	
MAIN BUILDING	19.9	-	E	-	5	N-S CAP	TYPE 4	6	-	
MAIN BUILDING	20	-	D.8	-	5	E-W CAP	TYPE 4	12	-	
MAIN BUILDING	15	-	F	H	2	E-W CAP	TYPE 2	1	1	X8 DEFECTS AT THIS REPAIR LOCATION
MAIN BUILDING	15	-	F.6	-	5	E-W CAP	TYPE 3	12	-	
MAIN BUILDING	15	-	F.1	-	5	E-W CAP	TYPE 4	2	-	
MAIN BUILDING	15	-	F.4	-	4/5	E-W CAP	TYPE 4	2	-	
MAIN BUILDING	16.3	-	F.2	-	5	DECK	TYPE 4	1	-	
MAIN BUILDING	17	-	F.6	-	4/5	E-W CAP	TYPE 4	4	-	
MAIN BUILDING	18	-	F.2	-	2	E-W CAP	TYPE 4	1	-	
MAIN BUILDING	18	-	F.9	-	2	E-W CAP	TYPE 4	1	-	
MAIN BUILDING	19.2	-	F.2	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	19.2	-	F.8	-	5	DECK	TYPE 2	2	2	CONC. REPAIR IN AREA. SEE CONC. REPAIR SCHEDULE
MAIN BUILDING	20	-	F.8	-	5	E-W CAP	TYPE 3	12	-	
MAIN BUILDING	20	-	F.9	-	5	E-W CAP	TYPE 3	6	-	
MAIN BUILDING	15	-	H	H.9	2	E-W CAP	TYPE 2	1	1	X4 DEFECTS AT THIS REPAIR LOCATION
MAIN BUILDING	15.1	-	H	-	5	N-S CAP	TYPE 3	24	-	
MAIN BUILDING	15.5	15.8	H.5	-	5	DECK	TYPE 3	96	-	
MAIN BUILDING	15.8	-	H	-	5	N-S CAP	TYPE 3	12	-	
MAIN BUILDING	16	-	H	-	5	N-S CAP	TYPE 3	36	-	
MAIN BUILDING	16	-	H.5	-	5	E-W CAP	TYPE 2	72	12	MULTIPLE DEFECTS IN REPAIR AREA
MAIN BUILDING	16.8	-	H	-	1/5	N-S CAP	TYPE 4	1	-	
MAIN BUILDING	17	-	H	-	5	N-S CAP	TYPE 3	24	-	
MAIN BUILDING	17	-	H.6	-	5	E-W CAP	TYPE 3	12	-	MULTIPLE DEFECTS IN REPAIR AREA
MAIN BUILDING	17.5	-	H	-	1/5	N-S CAP	TYPE 4	1	-	
MAIN BUILDING	18	-	H	-	5	N-S CAP	TYPE 3	6	-	
MAIN BUILDING	18	-	H.1	-	5	E-W CAP	TYPE 3	24	-	
MAIN BUILDING	18	-	H.9	-	5	E-W CAP	TYPE 3	36	-	
MAIN BUILDING	18	-	H.1	-	5	E-W CAP	TYPE 3	24	-	
MAIN BUILDING	18	-	H.9	-	5	E-W CAP	TYPE 3	36	-	
MAIN BUILDING	18.2	-	H.2	-	5	DECK	TYPE 4	1	-	
MAIN BUILDING	18.2	-	H.9	-	5	DECK	TYPE 4	1	-	X3 REPAIRS AT THIS LOCATION
MAIN BUILDING	18.5	-	H	-	5	N-S CAP	TYPE 3	8	-	
MAIN BUILDING	18.7	-	H	-	5	N-S CAP	TYPE 2	1	1	
MAIN BUILDING	19	-	H.5	-	5	E-W CAP	TYPE 4	1	-	X2 REPAIRS AT THIS LOCATION
MAIN BUILDING	19	-	H.1	-	5	E-W CAP	TYPE 3	12	-	
MAIN BUILDING	19.2	-	H	-	5	N-S CAP	TYPE 3	8	-	
MAIN BUILDING	19.3	-	H.9	-	5	DECK	TYPE 4	1	-	
MAIN BUILDING	19.6	-	H	-	5	N-S CAP	TYPE 4	1	-	
MAIN BUILDING	19.8	-	H	-	5	N-S CAP	TYPE 3	8	-	

Date & Time Plotted: 10/20/2026 3:47 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb
Last Date Saved: 10/20/2026 3:41 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\UR-S-547.00_553.00.dwg
Last Saved By: AcostaML

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: M. DWYER
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

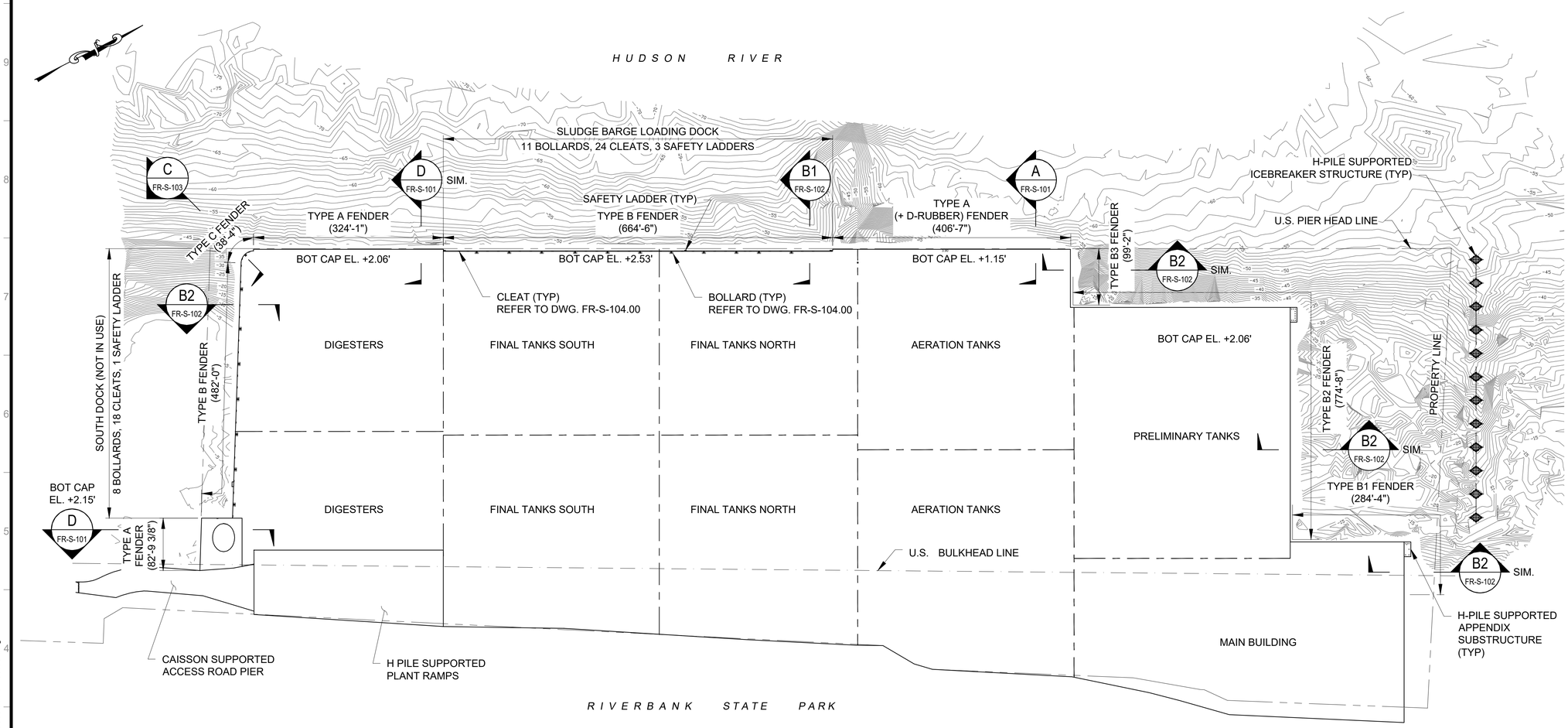
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

MEMBRANE PHASE 4 REPAIR SCHEDULE
SHEET 7 OF 7

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. UR-S-553.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



LEGEND:

PROPERTY LINE

U.S. PIER HEAD LINE

NOTES:

1. REFER TO DWGS. G-004.00 AND G-005.00 FOR MARINE GENERAL NOTES, LEGENDS AND ABBREVIATIONS.
2. REFER TO DWGS. FR-S-101.00 TO FR-S-104.00 FOR DETAILS OF EXISTING FENDERING TYPES AND MOORING.
3. THE FENDER TYPES AND THEIR EXTENTS ARE AS SHOWN IN THE FINAL AS-BUILT DRAWINGS OF PLANT CONTRACT 5 - SUBSTRUCTURES, PW 164 NORTH RIVER WATER POLLUTION CONTROL PROJECT. ALL FENDER LENGTHS SHOWN ARE MEASURED AT FACE OF CONCRETE DECK AND SHALL BE VERIFIED IN THE FIELD.
4. THE MOORING TYPES, SAFETY LADDERS AND THEIR LOCATIONS ARE AS SHOWN IN THE FINAL AS-BUILT DRAWINGS OF PLANT CONTRACT 5 - SUBSTRUCTURES, PW 164 NORTH RIVER WATER POLLUTION CONTROL PROJECT.
5. CONTRACTOR SHALL VERIFY ALL ELEVATIONS, DIMENSIONS AND LENGTHS SHOWN ON THESE DRAWINGS IN THE FIELD AND BRING ANY DISCREPANCIES TO THE ENGINEER'S ATTENTION FOR A RESOLUTION.

EXISTING FENDERING AND MOORING - GENERAL ARRANGEMENT PLAN (EL +6.65')

SCALE: 1"=100'-0"

0 100 200 FT.
1"=100'

EXISTING FENDERING

FENDER SYSTEM	FENDER TYPE	APPROXIMATE LENGTH
FIXED CONCRETE EDGE PROTECTION SYSTEM	TYPE A	406'-10 3/8"
	TYPE A (+D-RUBBER) FENDER	406'-7"
RETRACTABLE ENERGY ABSORBING FENDER SYSTEM	TYPE B	1146'-6"
	TYPE B1	284'-4"
	TYPE B2	774'-8"
	TYPE B3	99'-2"
	TYPE C	38'-4"
		TOTAL = 3156'-5 3/8"

EXISTING MOORING AND SAFETY LADDERS

DOCK LOCATION	MOORING TYPE	CAPACITY	QUANTITY
SLUDGE BARGE LOADING DOCK	CAST STEEL BOLLARD (SEE NOTE 2)	33.2 LT (SEE NOTE 1)	11
	CAST IRON CLEAT (SEE NOTE 2)	UNKNOWN	24
	SAFETY LADDER	-	3
SOUTH DOCK (NOT IN USE)	CAST STEEL BOLLARD	33.2 LT (SEE NOTE 1)	8
	CAST IRON CLEAT	UNKNOWN	18
	SAFETY LADDER	-	1

1. ESTIMATED CAPACITY BASED ON ANCHORAGE
2. REFER TO FR-S-104 FOR TYPICAL EXISTING BOLLARD AND CLEAT DETAILS

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

EXISTING FENDERING AND MOORING - ARRANGEMENT PLAN

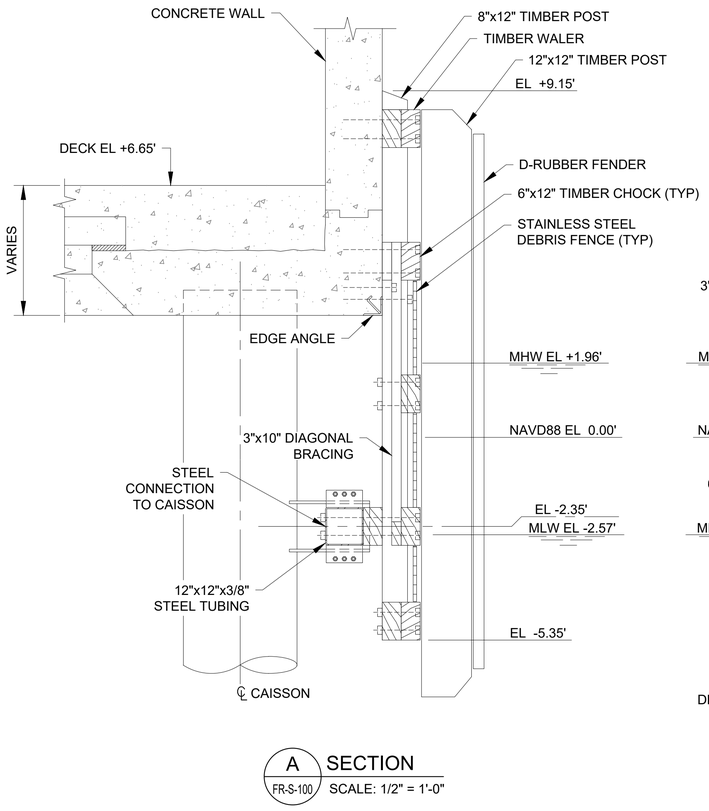
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-100.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-100.00.dwg
Last Date Saved: 9/18/2026 12:35 PM
Date & Time Plotted: 10/20/2026 4:01 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

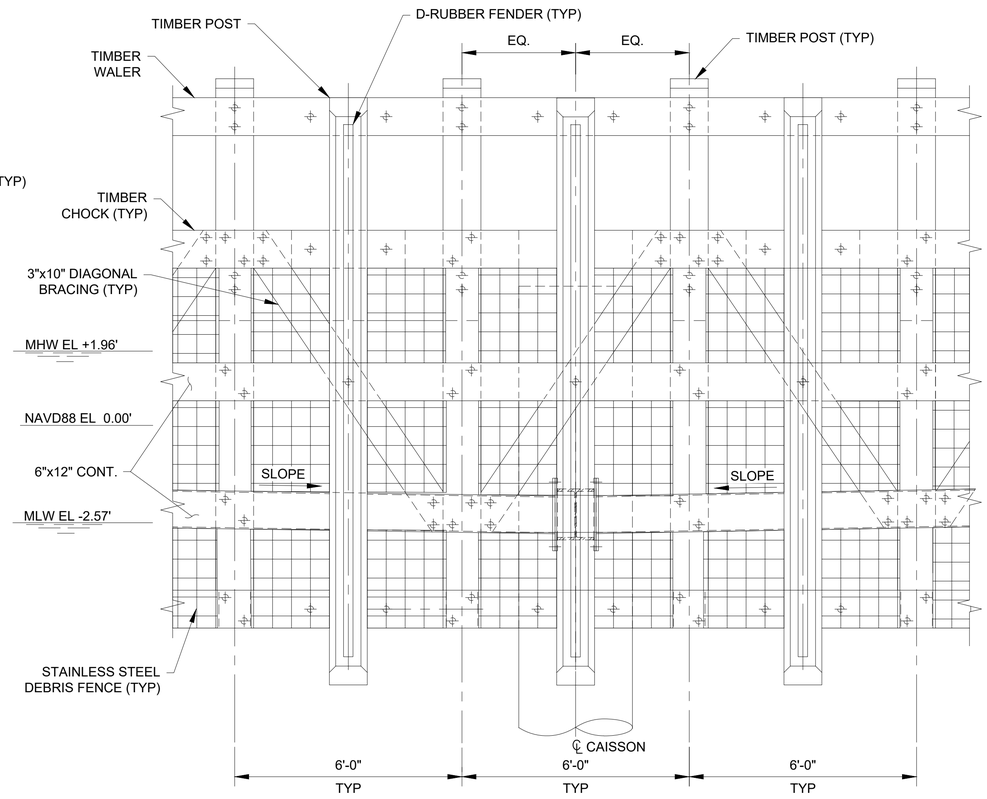
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

NOTES:

1. REFER TO DWGS. G-004.00 AND G-005.00 FOR MARINE GENERAL NOTES, LEGENDS AND ABBREVIATIONS.
2. REFER TO DWG. FR-S-100.00 FOR THE ARRANGEMENT PLAN OF EXISTING FENDERING AND MOORING.
3. REFER TO DWG. FR-S-100.00 FOR THE NOTES ON EXISTING FENDERING AND MOORING.

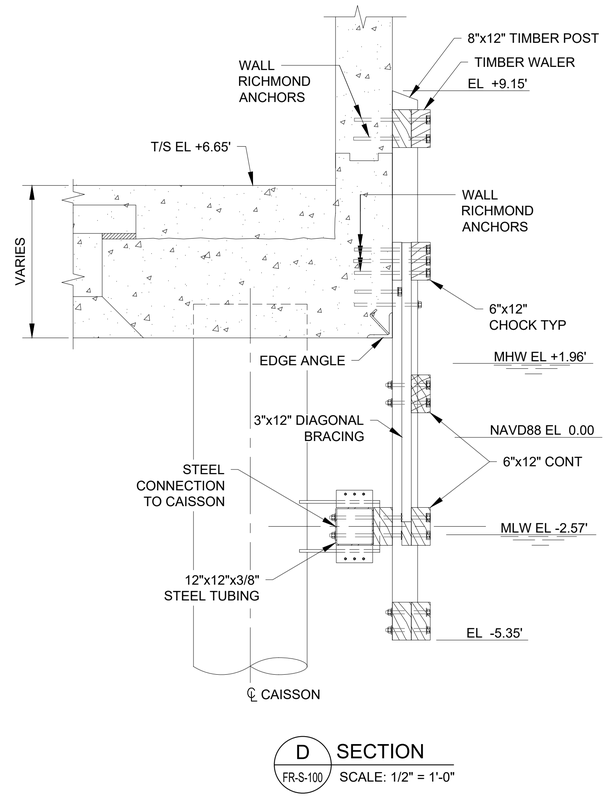


A SECTION
FR-S-100 SCALE: 1/2" = 1'-0"



TYPICAL ELEVATION (VIEW FROM WATERSIDE)
EXISTING TYPE A FENDER

SCALE: 1/2"=1'-0"



D SECTION
FR-S-100 SCALE: 1/2" = 1'-0"

1/2"=1'-0" 0 1 2 3 4 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

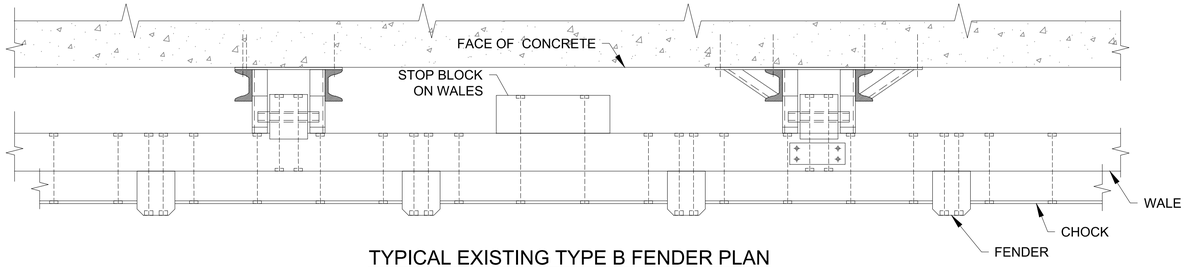
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

EXISTING FENDERING AND MOORING - PLAN, ELEVATION AND SECTIONS - SHEET 1

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-101.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-101.00.dwg
Date & Time Plotted: 10/20/2026 4:02 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb
Last Date Saved: 10/20/2026 3:57 PM

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

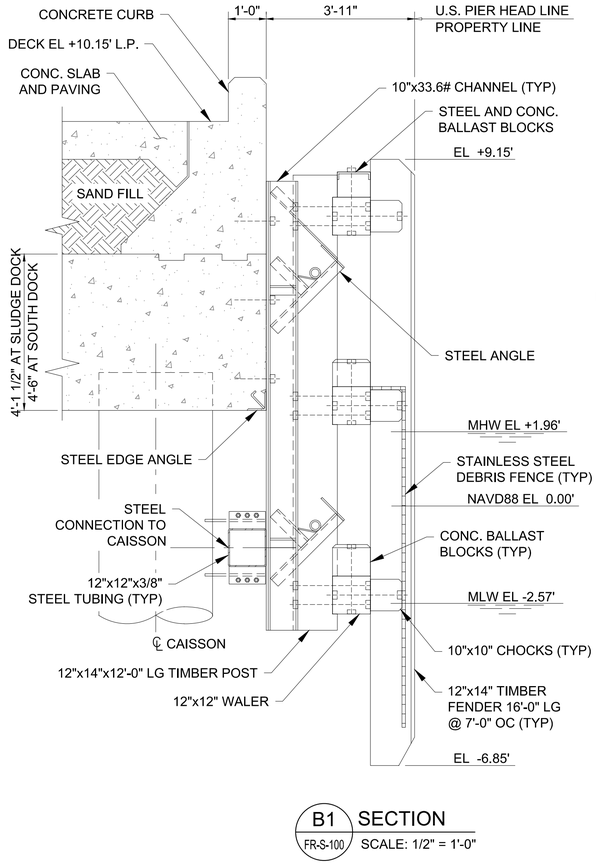


TYPICAL EXISTING TYPE B FENDER PLAN

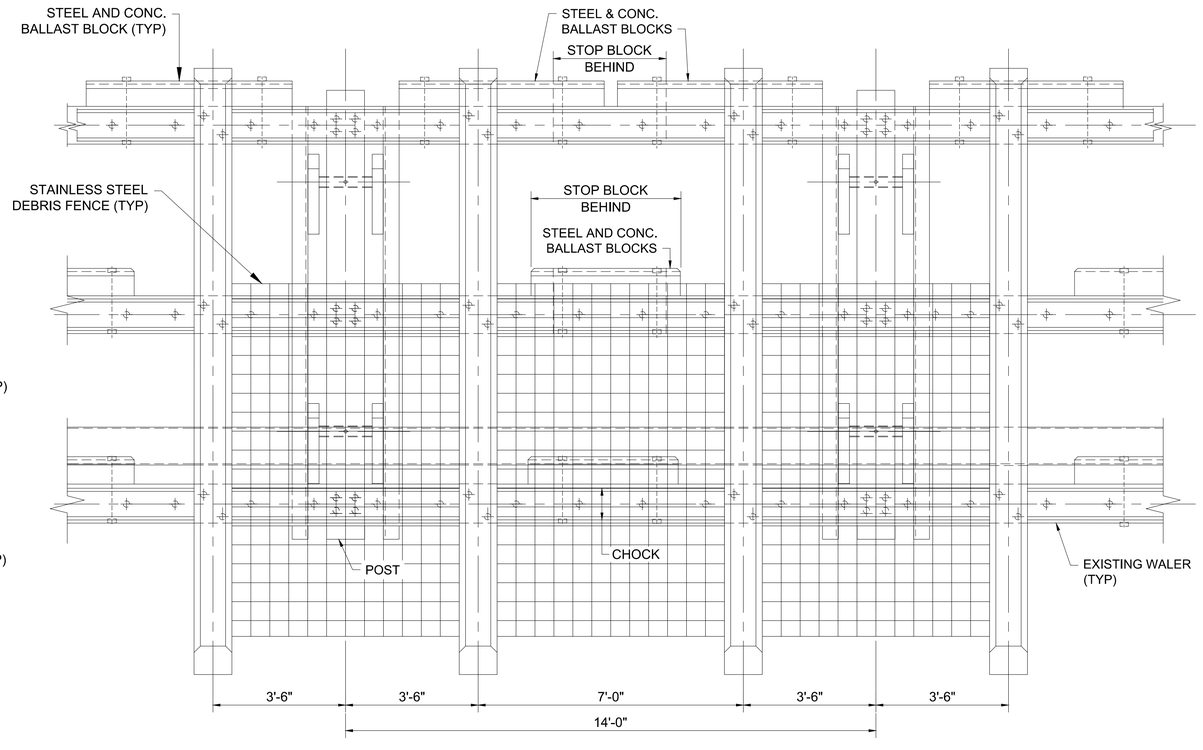
SCALE: 1/2"=1'-0"

NOTES:

1. REFER TO DWGS. G-004.00 AND G-005.00 FOR MARINE GENERAL NOTES, LEGENDS AND ABBREVIATIONS.
2. REFER TO DWG. FR-S-100.00 FOR THE ARRANGEMENT PLAN OF EXISTING FENDERING AND MOORING.
3. REFER TO DWG. FR-S-100.00 FOR THE NOTES ON EXISTING FENDERING AND MOORING.

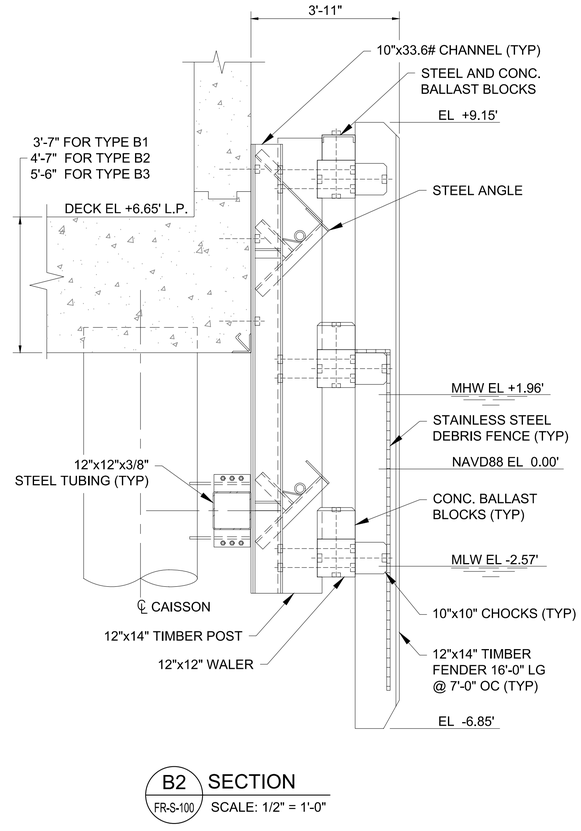


B1 / FR-S-100 SECTION
SCALE: 1/2" = 1'-0"



TYPICAL ELEVATION (VIEW FROM WATERSIDE) EXISTING TYPE B FENDER

SCALE: 1/2"=1'-0"



B2 / FR-S-100 SECTION
SCALE: 1/2" = 1'-0"

1/2"=1'-0" 0 1 2 3 4 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

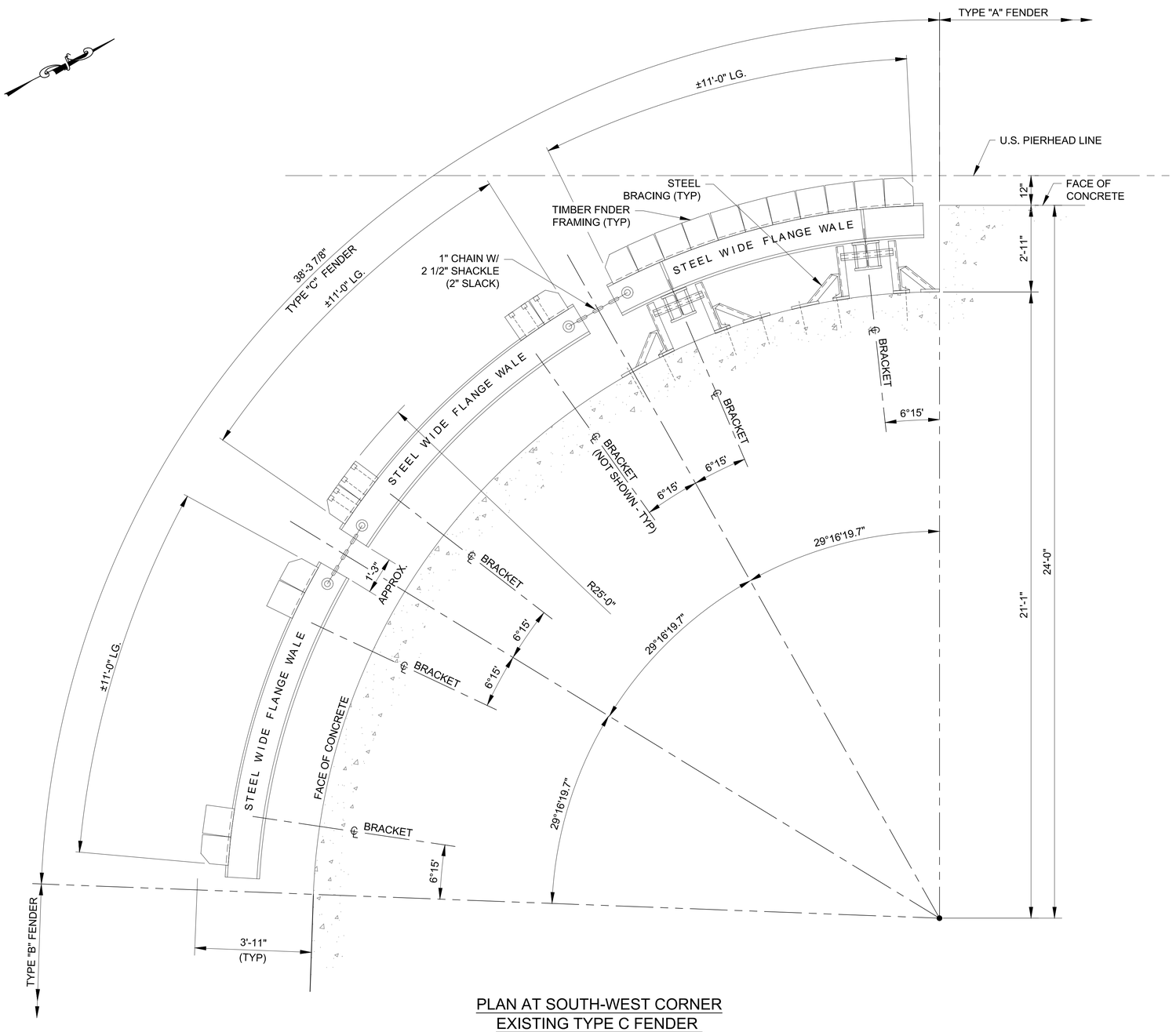
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

EXISTING FENDERING AND MOORING - PLAN, ELEVATION AND SECTIONS - SHEET 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-102.00

Last Saved By: J.perez
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostam\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-102.00.dwg
Last Date Saved: 10/20/2026 3:57 PM
Date & Time Plotted: 10/20/2026 4:02 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

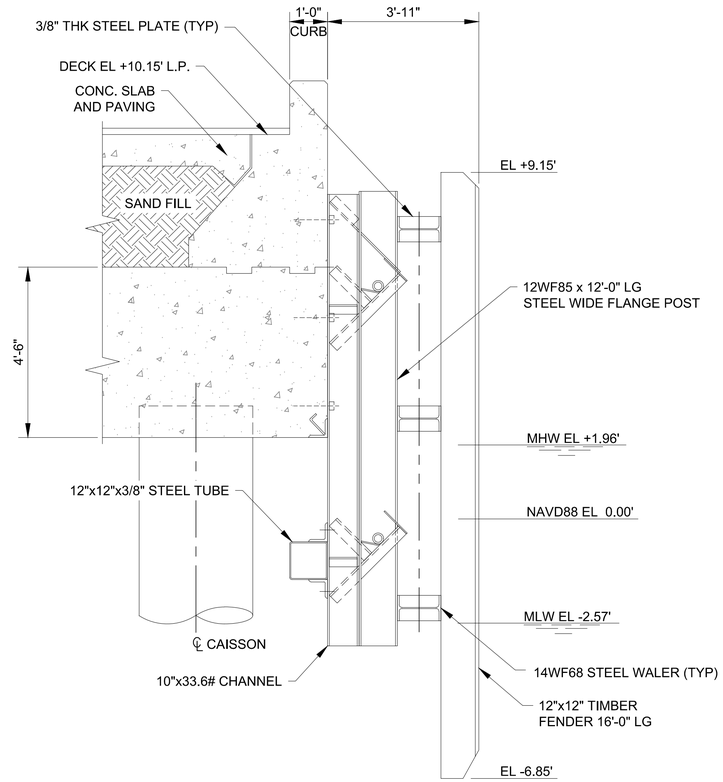
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



PLAN AT SOUTH-WEST CORNER
EXISTING TYPE C FENDER
SCALE: 1/2"=1'-0"

NOTES:

1. REFER TO DWGS. G-004.00 AND G-005.00 FOR MARINE GENERAL NOTES, LEGENDS AND ABBREVIATIONS.
2. REFER TO DWG. FR-S-100.00 FOR THE ARRANGEMENT PLAN OF EXISTING FENDERING AND MOORING.
3. REFER TO DWG. FR-S-100.00 FOR THE NOTES ON EXISTING FENDERING AND MOORING.



C SECTION
FR-S-100 SCALE: 1/2" = 1'-0"

1/2"=1'-0" 0 1 2 3 4 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

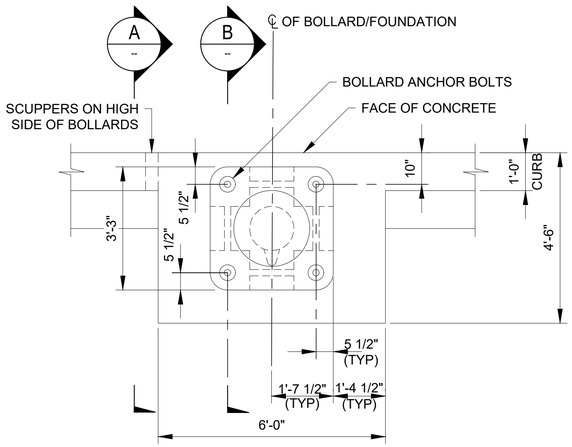
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

EXISTING FENDERING AND MOORING - PLAN, ELEVATION AND SECTIONS - SHEET 3

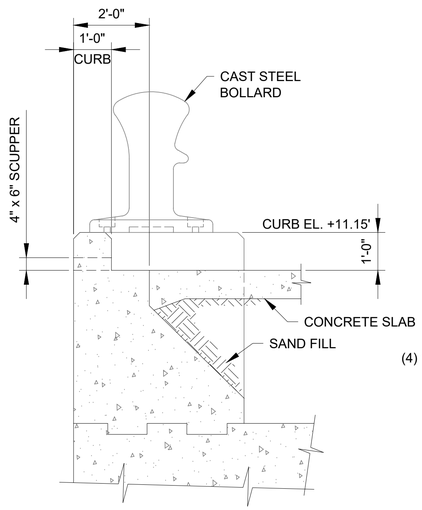
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-103.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-103.00.dwg
Last Date Saved: 10/20/2026 3:57 PM
Date & Time Plotted: 10/20/2026 4:02 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

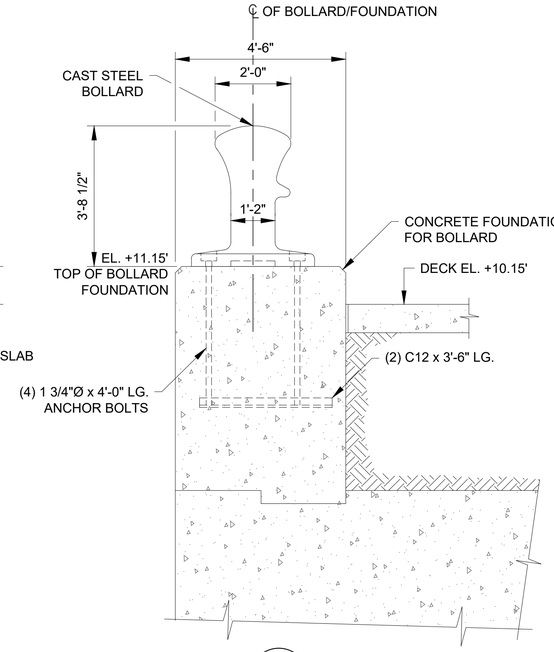
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



BOLLARD PLAN



A -- SECTION



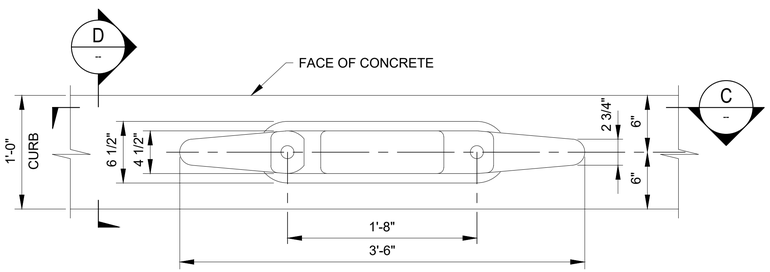
B -- SECTION

DETAIL OF EXISTING BOLLARD

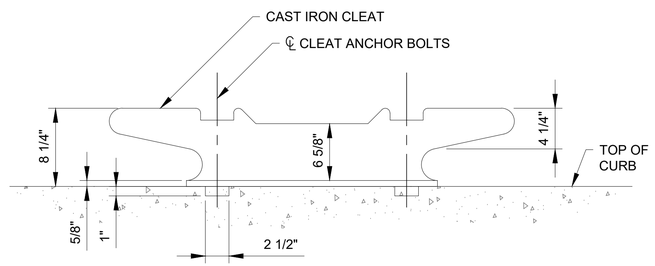
SCALE: 1/2"=1'-0"

NOTES:

1. REFER TO DWGS. G-004.00 AND G-005.00 FOR MARINE GENERAL NOTES, LEGENDS AND ABBREVIATIONS.
2. REFER TO DWG. FR-S-100.00 FOR THE ARRANGEMENT PLAN OF EXISTING FENDERING AND MOORING.
3. REFER TO DWG. FR-S-100.00 FOR THE NOTES ON EXISTING FENDERING AND MOORING.
4. CAPACITY OF THE CAST STEEL BOLLARD CSB-4 IS CALCULATED AS 74 KIPS.
5. CAPACITY OF THE CAST IRON CLEAT CSC-2 IS UNKNOWN.



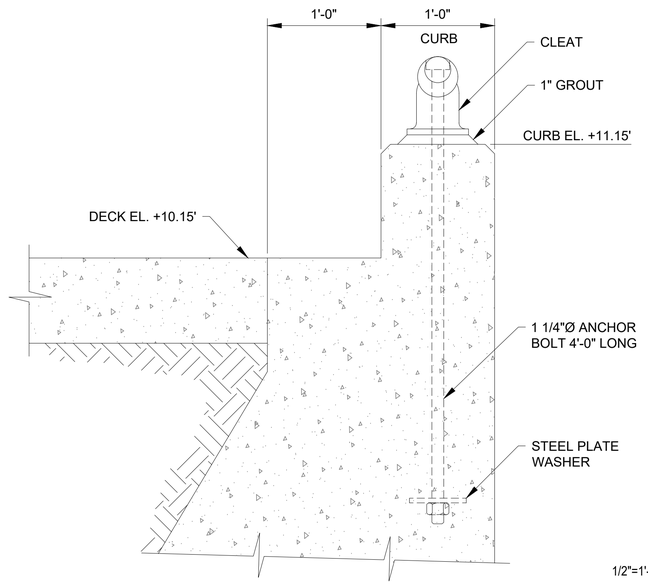
CLEAT PLAN



C -- SECTION

DETAIL OF EXISTING CLEAT

SCALE: 1 1/2"=1'-0"



D -- SECTION

0 1 2 3 4 FT.
1/2"=1'-0"

0 1 1-1/2 FT.
1-1/2"=1'-0"

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

BID SET

DATE ISSUED: OCTOBER 2026

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

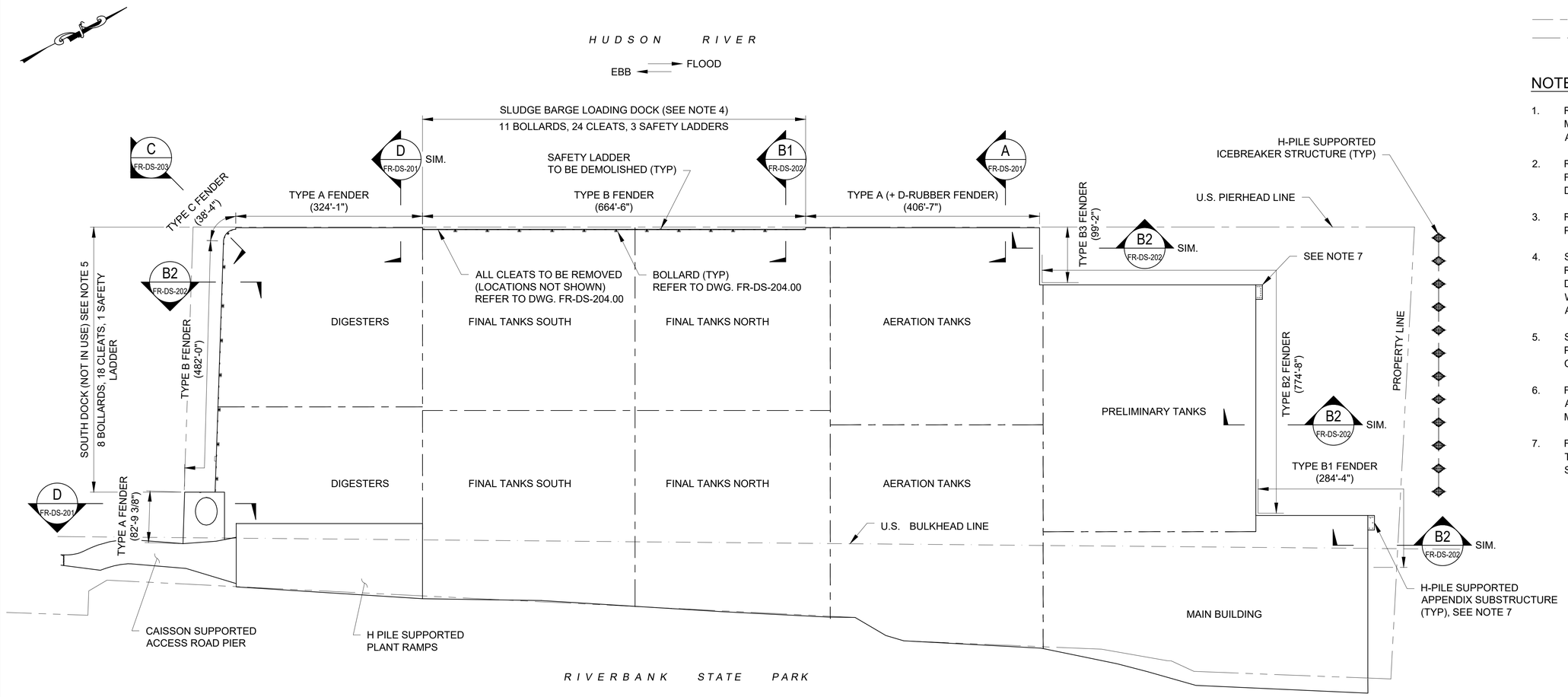
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

EXISTING FENDERING AND MOORING - PLAN, ELEVATION AND SECTIONS - SHEET 4

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-104.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-104.00.dwg
Last Date Saved: 10/20/2026 3:57 PM
Date & Time Plotted: 10/20/2026 4:02 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb



EXISTING FENDERING AND MOORING - DEMOLITION PLAN

SCALE: 1"=100'-0"

LEGEND:

PROPERTY LINE

U.S. PIER HEAD LINE

NOTES:

1. REFER TO DWGS. G-004.00 AND G-005.00 FOR MARINE GENERAL NOTES, LEGENDS AND ABBREVIATIONS.
2. REFER TO DWGS. FR-DS-201.00 TO FR-DS-204.00 FOR DETAILS OF FENDERING AND MOORING DEMOLITION.
3. REFER TO DWG. G-101 FOR OVERALL PROJECT PHASING PLAN.
4. SLUDGE DOCK BOLLARDS (11 EA.) SHALL BE REPAINTED AND REUSED. ALL CLEATS AT SLUDGE DOCK (24 EA.) WILL BE REMOVED AND REPLACED WITH CLEATS. REFER TO DWGS. FR-DS-205.00 AND FR-S-501.00 FOR DETAILS.
5. SOUTH DOCK BOLLARDS AND CLEATS SHALL BE PRESERVED AS-IS. REMOVE ONLY TWO DAMAGED CLEATS AND REPAIR CONCRETE CURB.
6. FOR MEMBRANE REPAIRS TO BE PERFORMED AFTER EXISTING FENDER DEMOLITION, SEE MEMBRANE REPAIR DETAILS ON DWG. UR-S-502.00.
7. FRP EDGE PROTECTION SYSTEM SHALL COVER THREE OPEN SIDES OF THE TWO APPENDIX STRUCTURES.

1"=100' 0 100 200 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

EXISTING FENDERING AND MOORING - DEMOLITION PLAN

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-DS-200.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

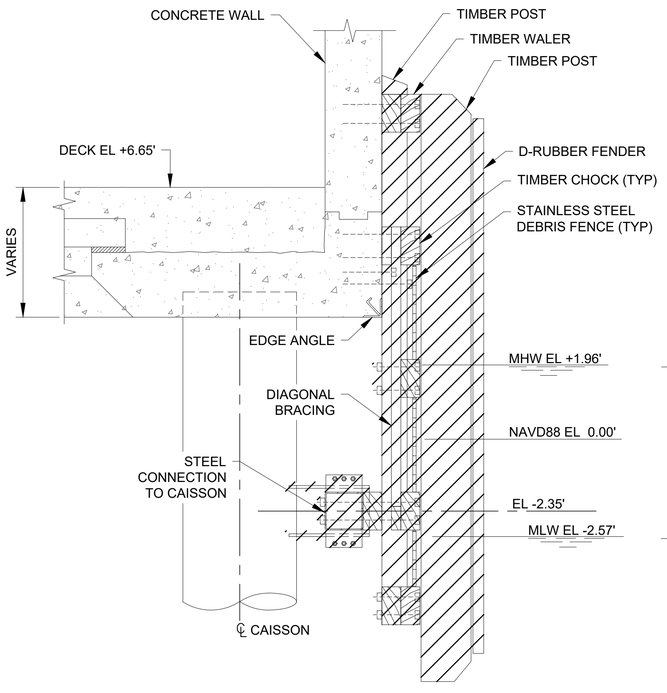
Last Saved By: AcostaML Last Date Saved: 10/20/2026 3:58 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches) Plot Style Table: BEDC_Acad(N).ctb
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-DS-200.00.dwg
Date & Time Plotted: 10/20/2026 4:02 PM
Plot Scale: 1:1

LEGEND:

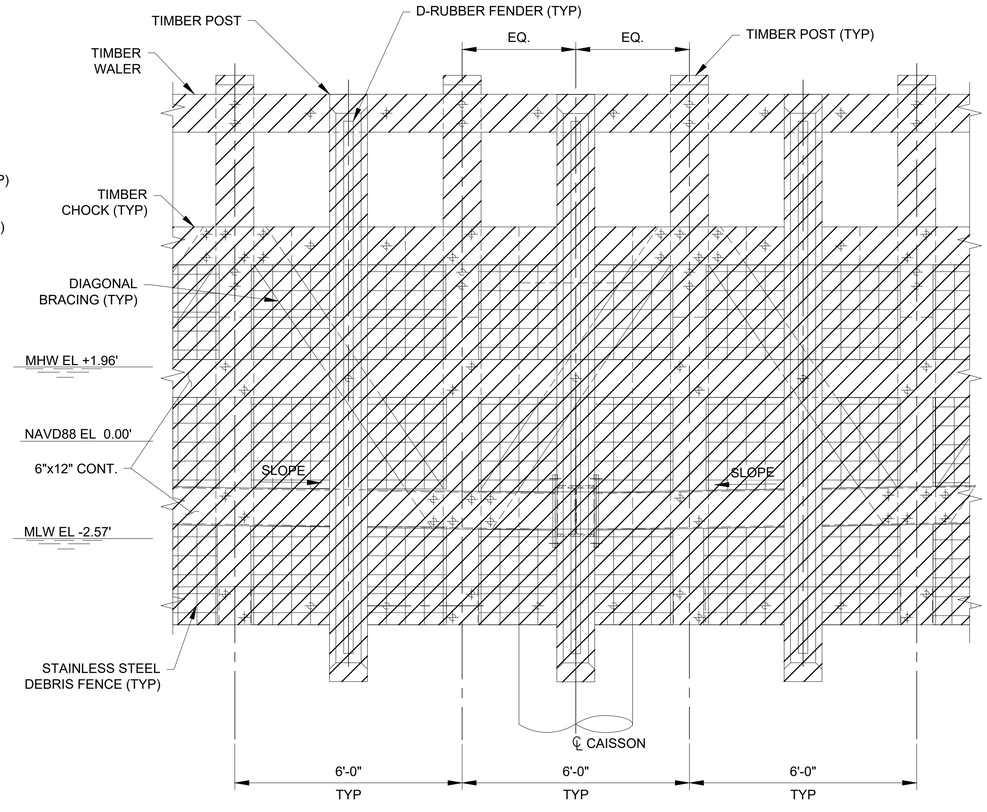
TO BE DEMOLISHED

NOTES:

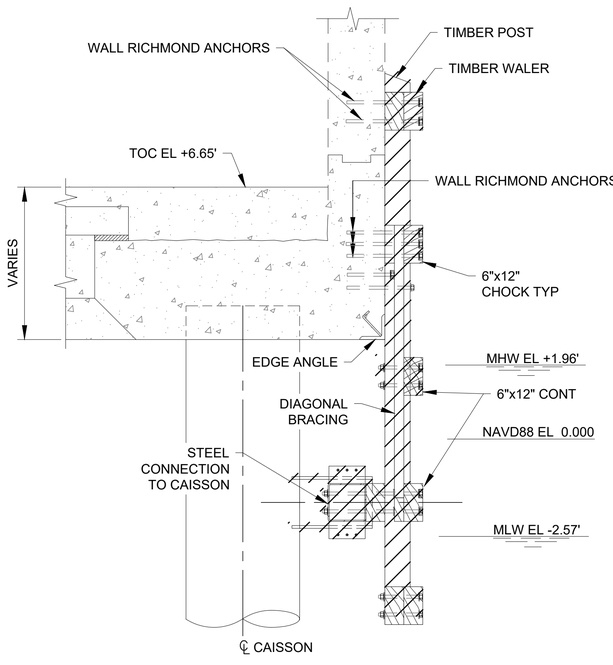
1. REFER TO DWGS. G-004.00 AND G-005.00 FOR MARINE GENERAL NOTES, LEGENDS AND ABBREVIATIONS.
2. REFER TO DWG. FR-DS-200.00 FOR THE DEMOLITION PLAN OF FENDERING AND MOORING.
3. REFER TO DWG. FR-DS-200.00 FOR THE DEMOLITION NOTES ON EXISTING FENDERING AND MOORING.
4. BOLTS SHALL BE CUT 2" BELOW CONCRETE SURFACE AND CONCRETE SHALL BE PATCHED. SEE DETAIL ON DWG. FR-S-600.
5. CAISSONS SHALL BE GROUND SMOOTH WHERE STEEL FENDER CONNECTIONS ARE REMOVED. COVER EXPOSED STEEL WITH COAL TAR EPOXY. REFER TO SPECIFICATION 09 91 00 FOR PAINT SYSTEM.
6. EXISTING PROTECTIVE MEMBRANE NOT SHOWN FOR CLARITY. FOR MEMBRANE REPAIRS TO BE PERFORMED AFTER EXISTING FENDER DEMOLITION, SEE MEMBRANE REPAIR DETAILS ON DWG. UR-S-502.00.



A DEMOLITION - SECTION
FR-DS-200 SCALE: 1/2" = 1'-0"



DEMOLITION - TYPICAL ELEVATION (VIEW FROM WATERSIDE)
EXISTING TYPE A FENDER
SCALE: 1/2"=1'-0"



D DEMOLITION - SECTION
FR-DS-200 SCALE: 1/2" = 1'-0"

1/2"=1'-0" 0 1 2 3 4 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

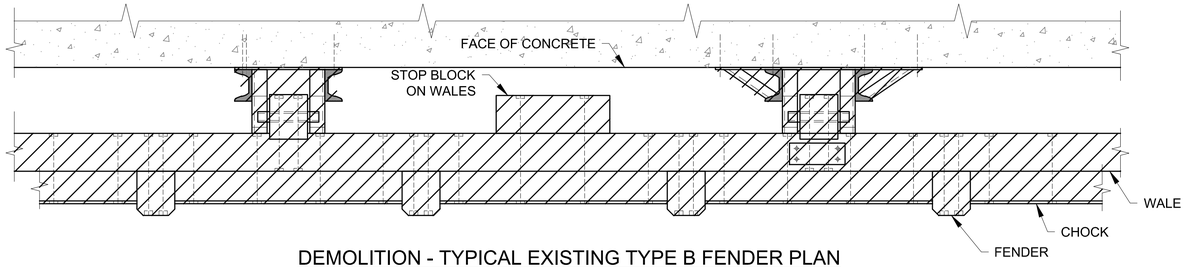
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

EXISTING FENDERING AND MOORING - DEMOLITION - PLAN, ELEVATION AND SECTIONS - SHEET 1

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-DS-201.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-DS-201.00.dwg
Last Date Saved: 10/20/2026 3:58 PM
Date & Time Plotted: 10/20/2026 4:02 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



DEMOLITION - TYPICAL EXISTING TYPE B FENDER PLAN

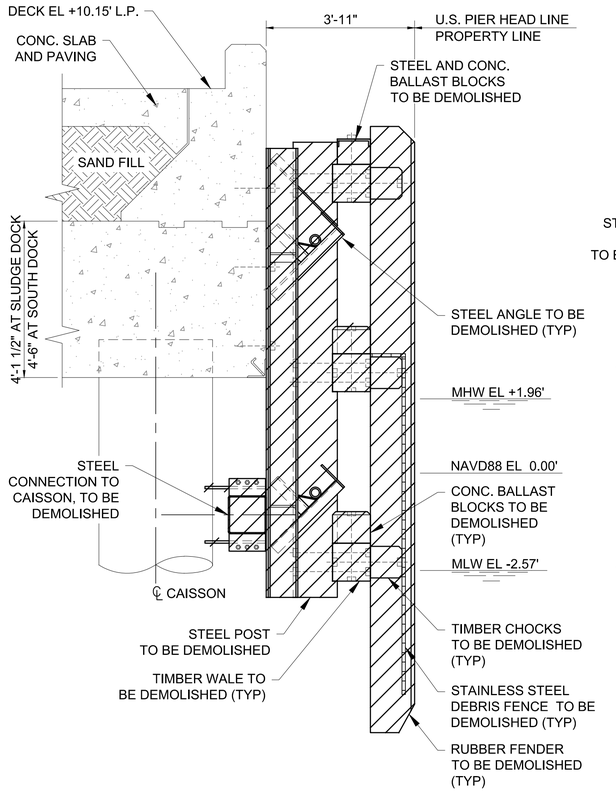
SCALE: 1/2"=1'-0"

LEGEND:

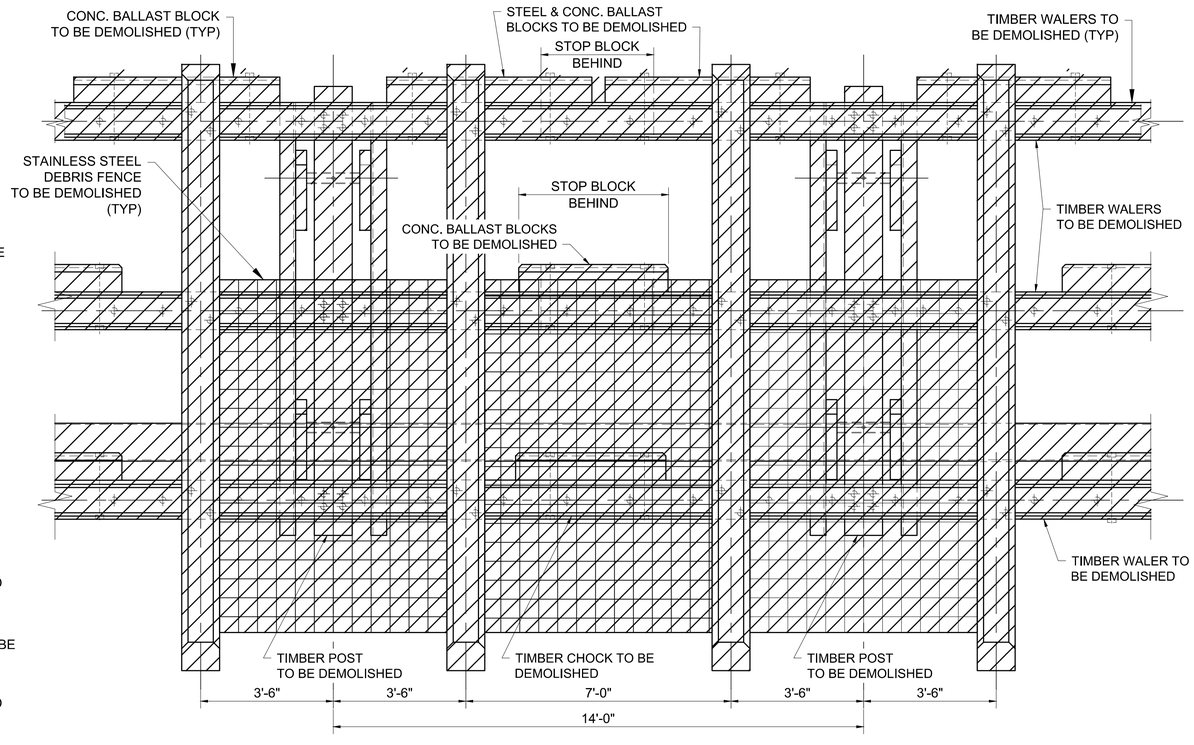
TO BE DEMOLISHED

NOTES:

1. REFER TO DWGS. G-004.00 AND G-005.00 FOR MARINE GENERAL NOTES, LEGENDS AND ABBREVIATIONS.
2. REFER TO DWG. FR-DS-200.00 FOR THE DEMOLITION PLAN OF FENDERING AND MOORING.
3. REFER TO DWG. FR-DS-200.00 FOR THE DEMOLITION NOTES ON EXISTING FENDERING AND MOORING.
4. BOLTS SHALL BE CUT 2" BELOW CONCRETE SURFACE AND CONCRETE SHALL BE PATCHED. SEE DETAIL ON DWG. FR-S-600.
5. CAISSONS SHALL BE GROUND SMOOTH WHERE STEEL FENDER CONNECTIONS ARE REMOVED. COVER EXPOSED STEEL WITH COAL TAR EPOXY. REFER TO SPECIFICATION 09 91 00 FOR PAINT SYSTEM.
6. EXISTING PROTECTIVE MEMBRANE NOT SHOWN FOR CLARITY. FOR MEMBRANE REPAIRS TO BE PERFORMED AFTER EXISTING FENDER DEMOLITION, SEE MEMBRANE REPAIR DETAILS ON DWG. UR-S-502.00.

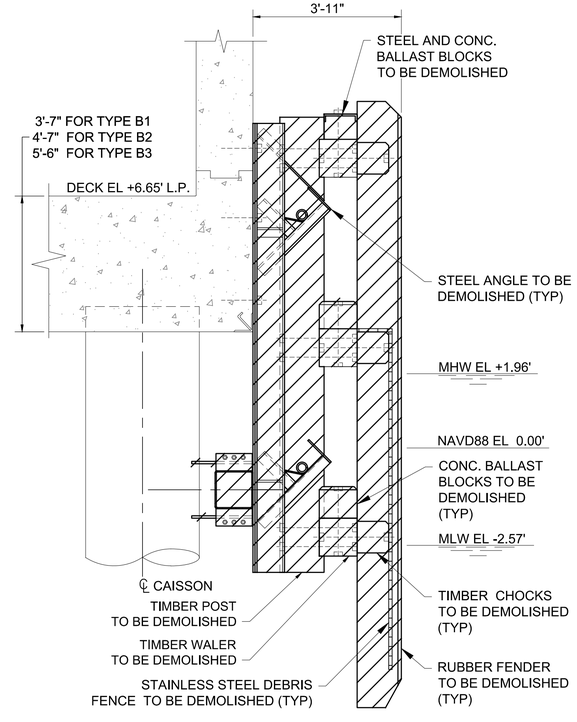


B1 DEMOLITION - SECTION
FR-DS-200 SCALE: 1/2" = 1'-0"



DEMOLITION - TYPICAL ELEVATION (VIEW FROM WATERSIDE)
EXISTING TYPE B FENDER

SCALE: 1/2"=1'-0"



B2 DEMOLITION - SECTION
FR-DS-200 SCALE: 1/2" = 1'-0"

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PER
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

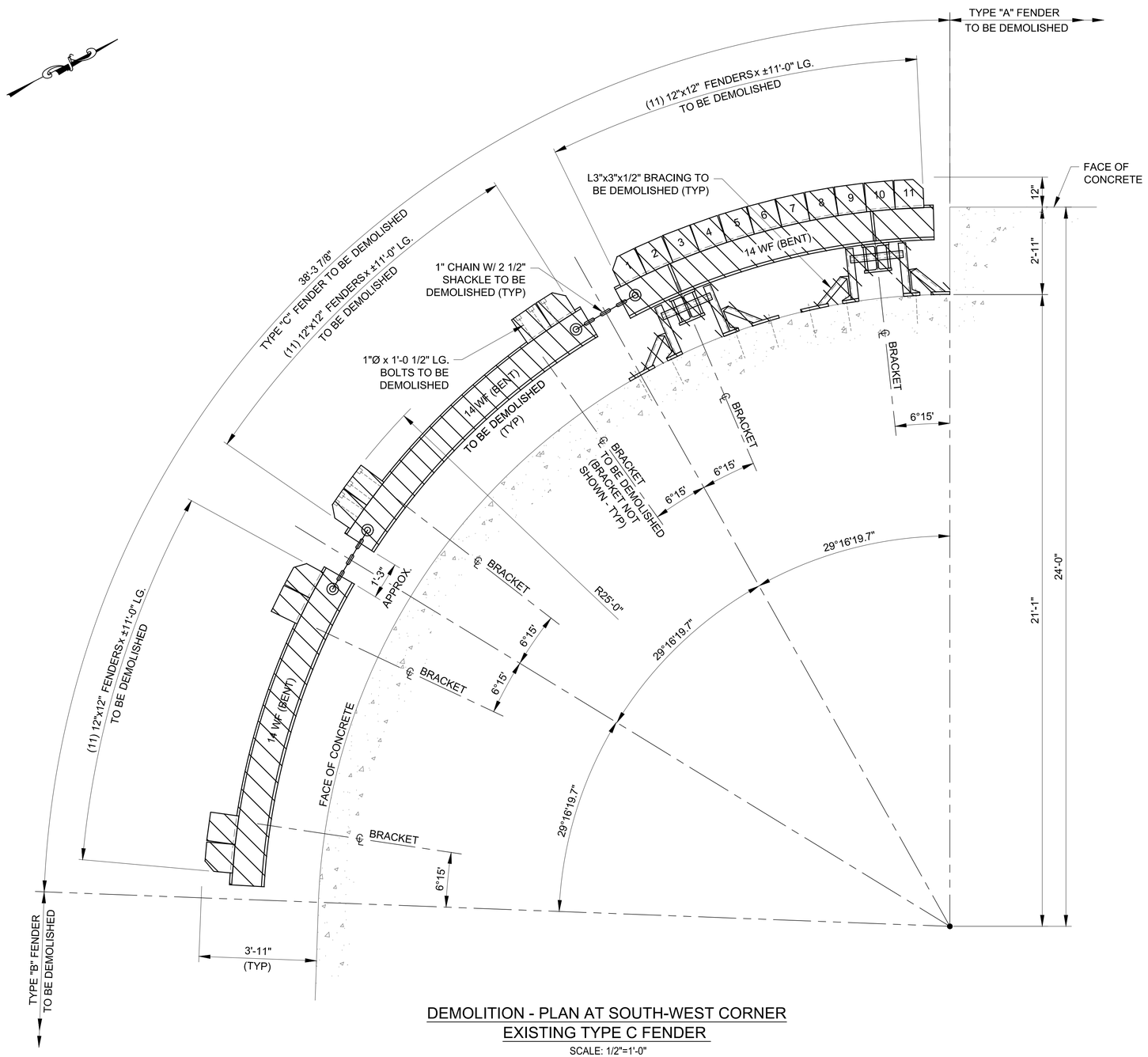
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

EXISTING FENDERING AND MOORING - DEMOLITION - PLAN, ELEVATION AND SECTIONS - SHEET 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-DS-202.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-DS-202.00.dwg
Last Date Saved: 10/20/2026 3:58 PM
Date & Time Plotted: 10/20/2026 4:02 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb



DEMOLITION - PLAN AT SOUTH-WEST CORNER
EXISTING TYPE C FENDER

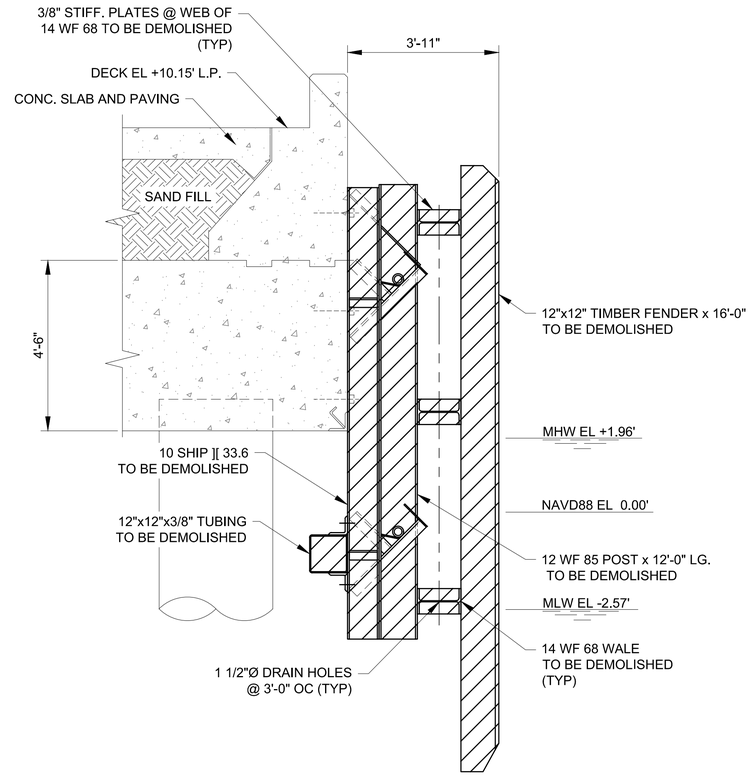
SCALE: 1/2"=1'-0"

LEGEND:

TO BE DEMOLISHED

NOTES:

1. REFER TO DWGS. G-004.00 AND G-005.00 FOR MARINE GENERAL NOTES, LEGENDS AND ABBREVIATIONS.
2. REFER TO DWG. FR-DS-200.00 FOR THE DEMOLITION PLAN OF FENDERING AND MOORING.
3. REFER TO DWG. FR-DS-200.00 FOR THE DEMOLITION NOTES ON EXISTING FENDERING AND MOORING.
4. BOLTS SHALL BE CUT 2" BELOW CONCRETE SURFACE AND CONCRETE SHALL BE PATCHED. SEE DETAIL ON DWG. FR-S-600.
5. EXISTING PROTECTIVE MEMBRANE NOT SHOWN FOR CLARITY. FOR MEMBRANE REPAIRS TO BE PERFORMED AFTER EXISTING FENDER DEMOLITION, SEE MEMBRANE REPAIR DETAILS ON DWG. UR-S-502.00.



C FR-DS-200 DEMOLITION - SECTION

SCALE: 1/2" = 1'-0"

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

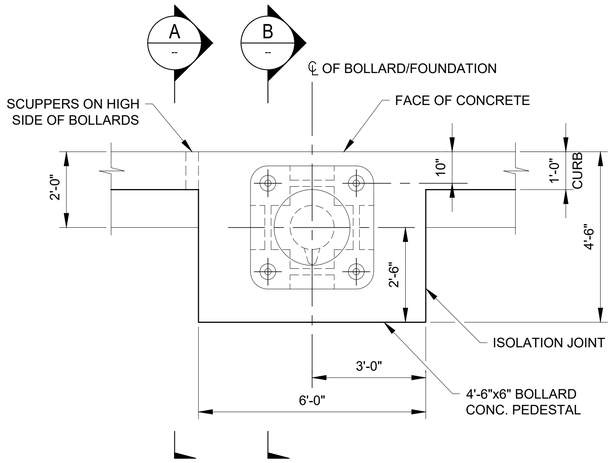
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

EXISTING FENDERING AND MOORING - DEMOLITION - PLAN, ELEVATION AND SECTIONS - SHEET 3

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-DS-203.00

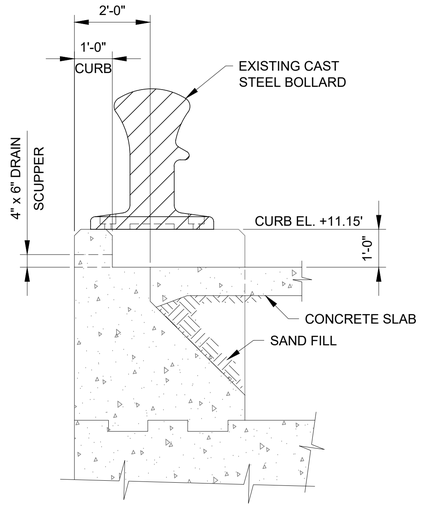
Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-DS-203.00.dwg
Last Date Saved: 10/20/2026 3:58 PM
Date & Time Plotted: 10/20/2026 4:02 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



BOLLARD PLAN

SCALE: 1/2"=1'-0"

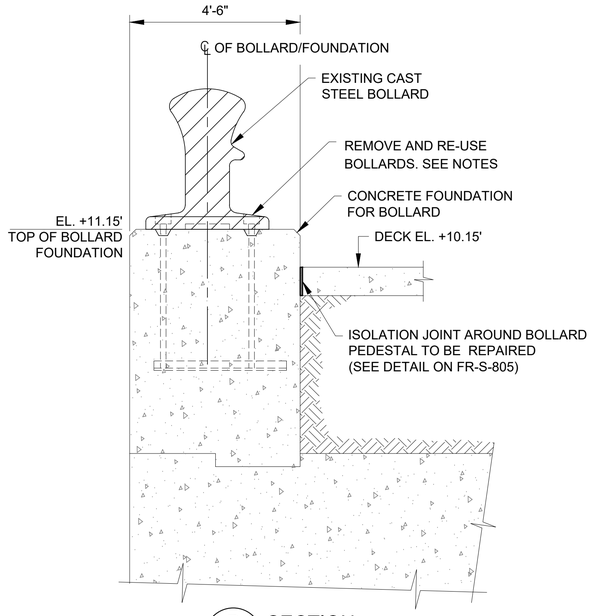


A - SECTION

SCALE: 1/2" = 1'-0"

TYPICAL DEMOLITION DETAIL OF EXISTING BOLLARD

SCALE: 1/2"=1'-0"



B - SECTION

SCALE: 1/2" = 1'-0"

NOTES:

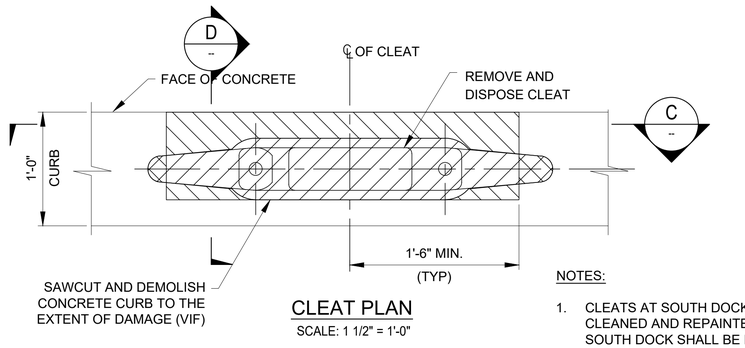
1. EXISTING BOLLARDS AT THE SLUDGE DOCK SHALL BE REMOVED, REPAINTED AND REINSTALLED.
2. CUT EXISTING BOLLARD ANCHOR BOLTS 2" BELOW CONCRETE PEDESTAL AND PATCH CUT HOLES.
3. BOLLARDS AT THE SOUTH DOCK SHALL BE CLEANED AND REPAINTED IN PLACE.

LEGEND:

TO BE DEMOLISHED, EXCEPT BOLLARDS TO BE REMOVED FOR REPAINTING THEN REINSTALLED.

NOTES:

1. REFER TO DWGS. G-004.00 AND G-005.00 FOR MARINE GENERAL NOTES, LEGENDS AND ABBREVIATIONS.
2. REFER TO DWG. FR-DS-200.00 FOR THE DEMOLITION PLAN OF FENDERING AND MOORING.
3. REFER TO DWG. FR-DS-200.00 FOR THE DEMOLITION NOTES ON EXISTING FENDERING AND MOORING.
4. ANCHOR BOLTS SHALL BE CUT 2" BELOW CONCRETE SURFACE AND CONCRETE SHALL BE PATCHED. SEE DETAIL ON DWG. FR-S-600.
5. SEE DWG. FR-S-805 FOR REPAIRS TO DECK SLAB.

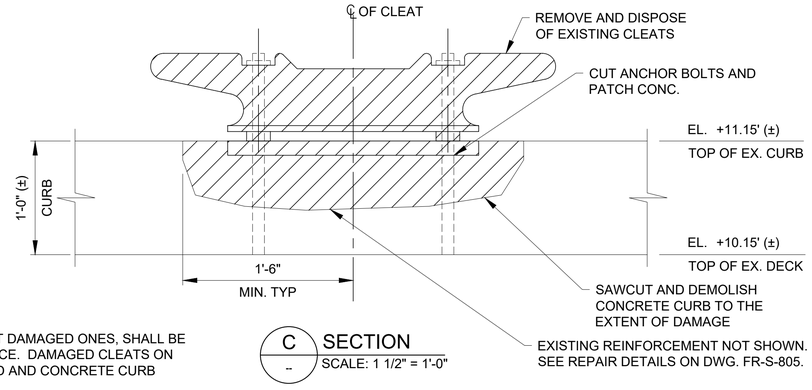


CLEAT PLAN

SCALE: 1 1/2" = 1'-0"

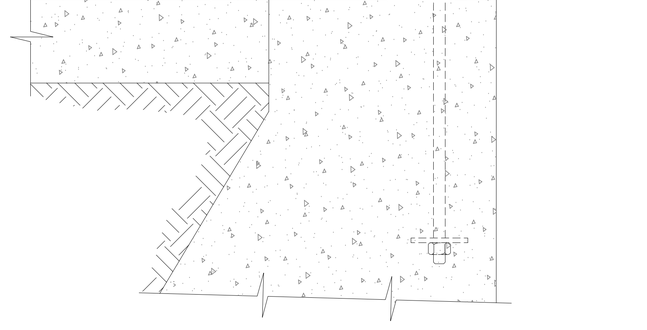
NOTES:

1. CLEATS AT SOUTH DOCK, EXCEPT DAMAGED ONES, SHALL BE CLEANED AND REPAINTED IN PLACE. DAMAGED CLEATS ON SOUTH DOCK SHALL BE REMOVED AND CONCRETE CURB SHALL BE REPAIRED.
2. CONTRACTOR SHALL ENSURE THAT ALL EXISTING REINFORCEMENT IS PROTECTED DURING REMOVAL OF DAMAGED CONCRETE AND INSTALLATION OF NEW CONCRETE.



C - SECTION

SCALE: 1 1/2" = 1'-0"



D - SECTION

SCALE: 1 1/2" = 1'-0"

DEMOLITION DETAIL OF EXISTING CLEAT AT SOUTH DOCK

SCALE: 1 1/2"=1'-0"

0 1 2 3 4 FT.
1/2"=1'-0"

0 1 1-1/2 FT.
1-1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

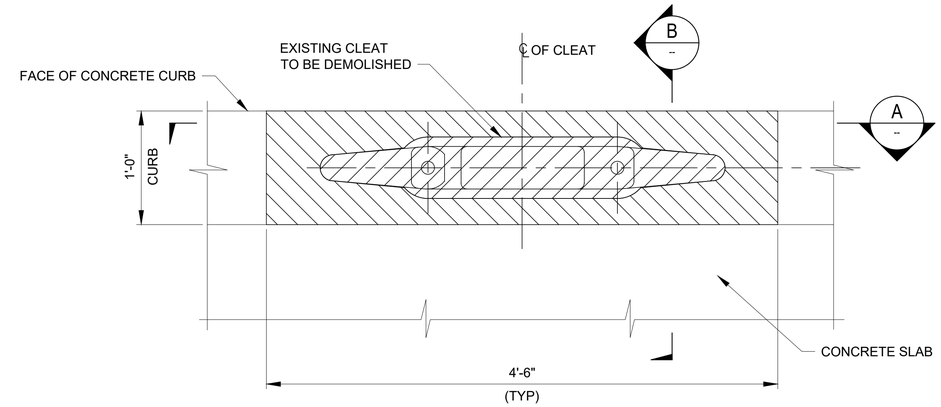
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

EXISTING FENDERING AND MOORING - DEMOLITION - PLAN, ELEVATION AND SECTIONS - SHEET 4

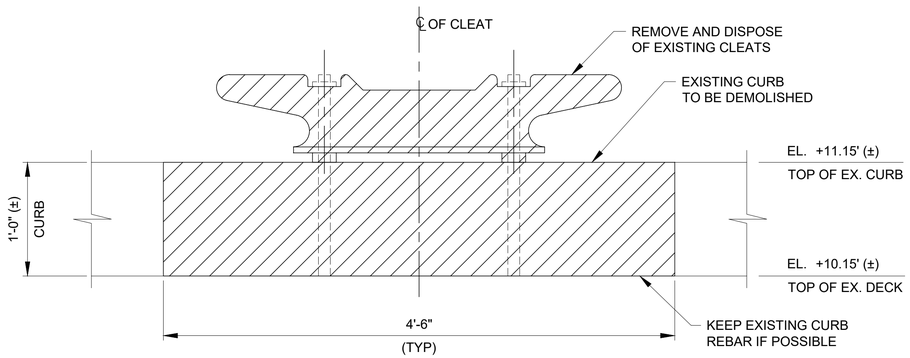
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-DS-204.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

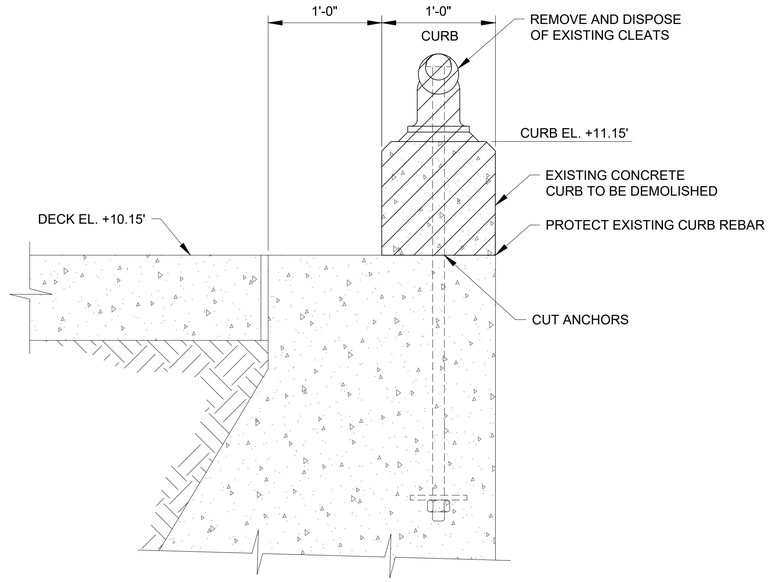
Last Saved By: AcostaML
Last Date Saved: 10/20/2026 3:58 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-DS-204.00.dwg
Date & Time Plotted: 10/20/2026 4:02 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb



CLEAT PLAN
SCALE: 1 1/2" = 1'-0"



A SECTION
SCALE: 1 1/2" = 1'-0"



B SECTION
SCALE: 1 1/2" = 1'-0"

DEMOLITION DETAIL OF EXISTING CLEAT AT SLUDGE DOCK
SCALE: 1 1/2"=1'-0"

LEGEND:

TO BE DEMOLISHED, EXCEPT BOLLARDS TO BE REMOVED FOR REPAINTING THEN REINSTALLED.

NOTES:

1. ALL CLEATS ON SLUDGE DOCK SHALL BE REMOVED AND REPLACED, SEE DWG FR-S-501.00 FOR NEW CLEAT DETAILS.
2. REFER TO DWG FR-S-801.00 FOR LOCATIONS OF CLEATS ON SLUDGE DOCK.
3. CONTRACTOR SHALL ENSURE THAT ALL EXISTING REINFORCEMENT IS PROTECTED DURING REMOVAL OF EXISTING CONCRETE AND INSTALLATION OF NEW CONCRETE.

1-1/2"=1'-0" 0 1 1-1/2 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

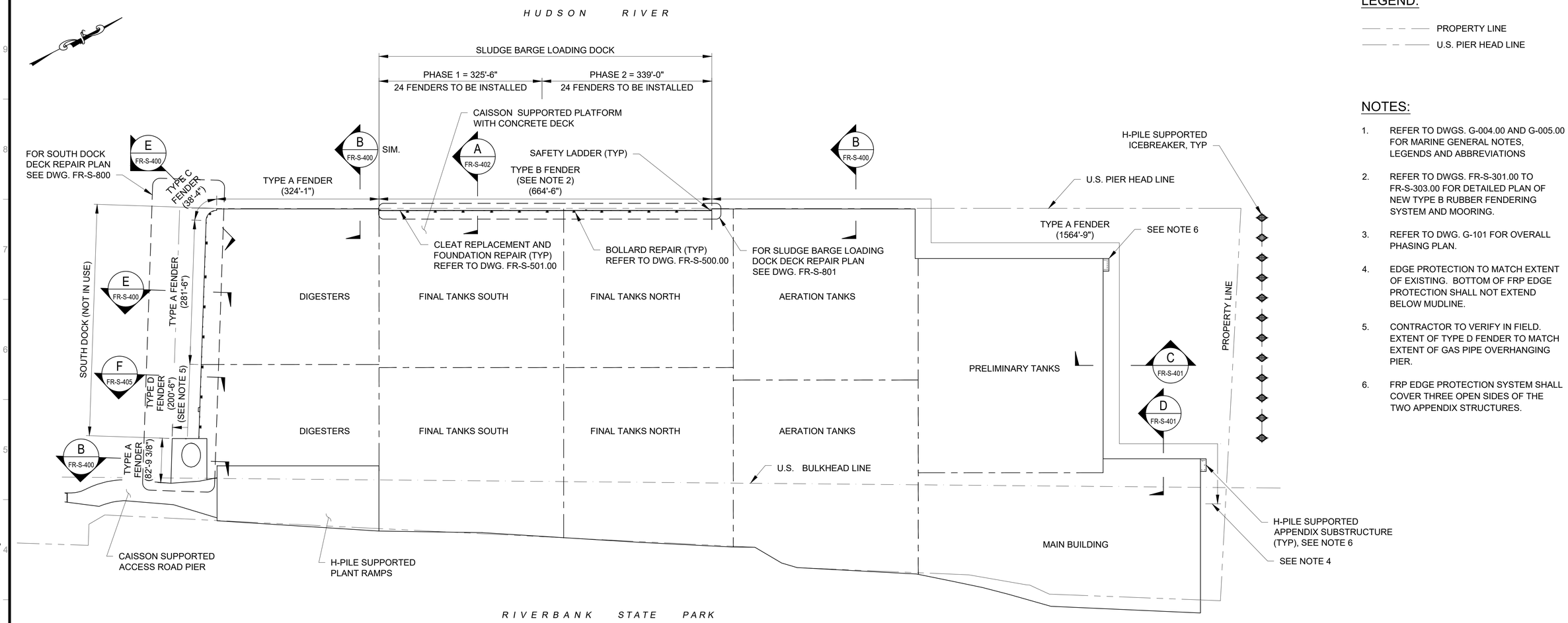
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

EXISTING FENDERING AND MOORING - DEMOLITION - PLAN, ELEVATION AND SECTIONS - SHEET 5

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-DS-205.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-DS-205.00.dwg
Last Date Saved: 10/20/2026 3:58 PM
Date & Time Plotted: 10/20/2026 4:02 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



FENDERING AND MOORING - ARRANGEMENT PLAN

SCALE: 1"=100'-0"

LEGEND:

PROPERTY LINE

U.S. PIER HEAD LINE

NOTES:

1. REFER TO DWGS. G-004.00 AND G-005.00 FOR MARINE GENERAL NOTES, LEGENDS AND ABBREVIATIONS
2. REFER TO DWGS. FR-S-301.00 TO FR-S-303.00 FOR DETAILED PLAN OF NEW TYPE B RUBBER FENDERING SYSTEM AND MOORING.
3. REFER TO DWG. G-101 FOR OVERALL PHASING PLAN.
4. EDGE PROTECTION TO MATCH EXTENT OF EXISTING. BOTTOM OF FRP EDGE PROTECTION SHALL NOT EXTEND BELOW MUDLINE.
5. CONTRACTOR TO VERIFY IN FIELD. EXTENT OF TYPE D FENDER TO MATCH EXTENT OF GAS PIPE OVERHANGING PIER.
6. FRP EDGE PROTECTION SYSTEM SHALL COVER THREE OPEN SIDES OF THE TWO APPENDIX STRUCTURES.

0 100 200 FT.
1"=100'

NYC Environmental Protection BEDC/IHD

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

FENDERING AND MOORING - ARRANGEMENT PLAN

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-300.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-300.00.dwg
Last Date Saved: 10/20/2026 4:00 PM
Date & Time Plotted: 10/20/2026 4:02 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

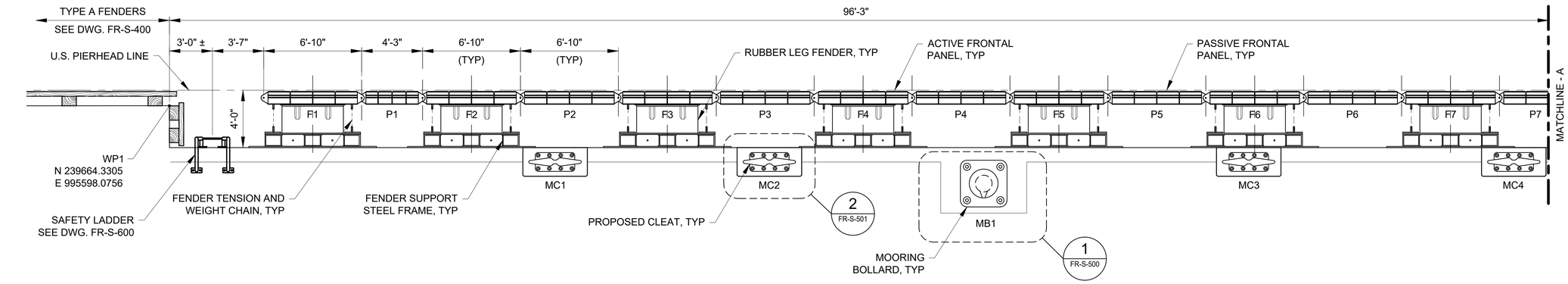
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

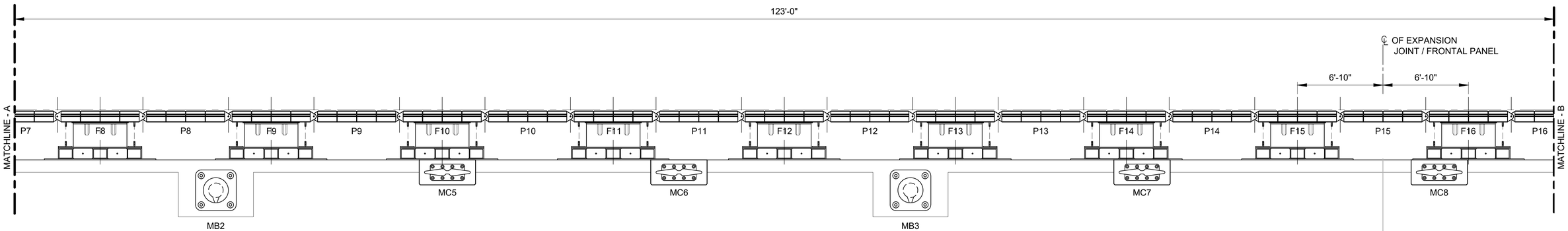
LEGEND:

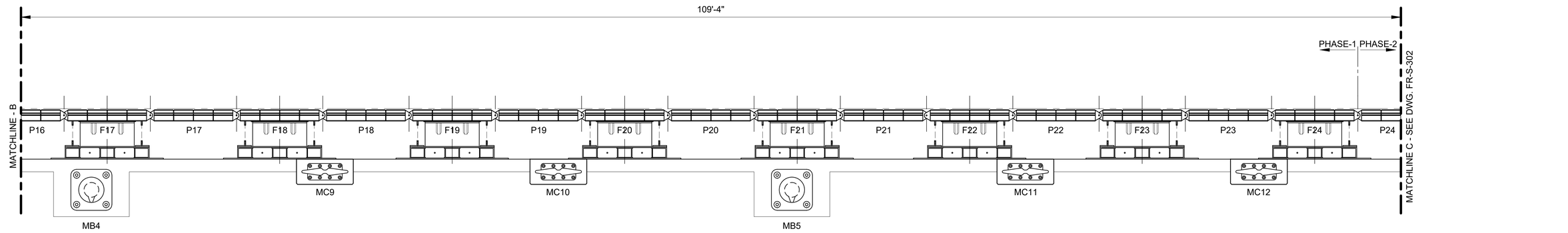
F1	FENDER PANEL NO. 1
P1	PASSIVE PANEL NO. 1
MB1	MARINE BOLLARD NO.1
MC1	MARINE CLEAT NO. 1

PANEL SIZE:

PANEL TYPE 1 : 6'-10" WIDE
PANEL TYPE 2 : 4'-3" WIDE







0 4 8 FT.
1/4"=1'-0"

FENDERING AND MOORING - SLUDGE BARGE LOADING DOCK -ARRANGEMENT PLAN

SCALE: 1/4"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

FENDERING AND MOORING -
TYPE B FENDER LAYOUT - SHEET 1

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-301.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

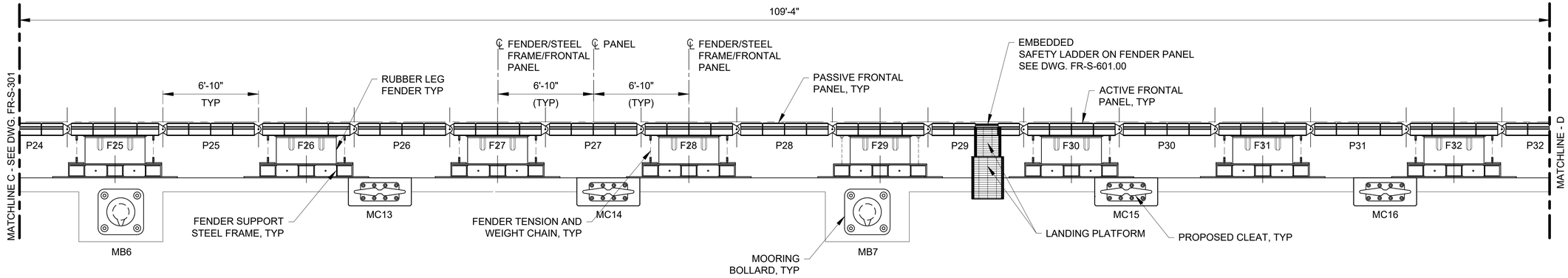
Last Saved By: AcostaML Last Date Saved: 10/20/2026 4:00 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches) Plot Style Table: BEDC_Acad(N).ctb
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-301.00.dwg
Date & Time Plotted: 10/20/2026 4:02 PM
Plot Scale: 1:1

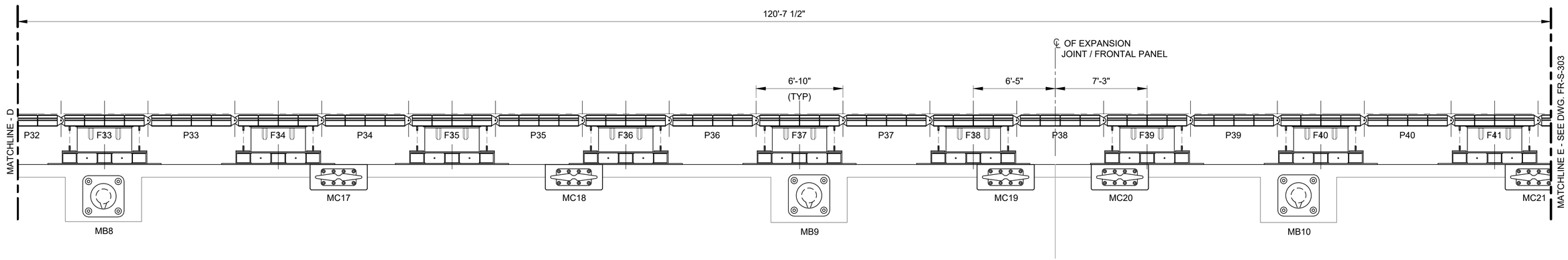
LEGEND:

F1	FENDER PANEL NO. 1
P1	PASSIVE PANEL NO. 1
MB1	MARINE BOLLARD NO.1
MC1	MARINE CLEAT NO. 1

PASSIVE PANEL SIZE:

PANEL TYPE 1: 6'-10" WIDE
PANEL TYPE 2: 4'-3" WIDE





FENDERING AND MOORING - SLUDGE BARGE LOADING DOCK -ARRANGEMENT PLAN

SCALE: 1/4"=1'-0"

0 4 8 FT.
1/4"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

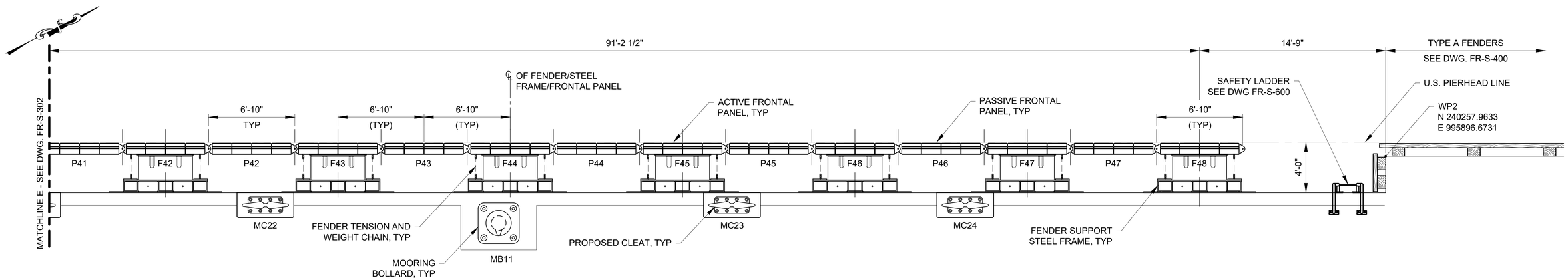
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

FENDERING AND MOORING - TYPE B FENDER LAYOUT - SHEET 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-302.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-302.00.dwg
Last Date Saved: 10/20/2026 4:00 PM
Date & Time Plotted: 10/20/2026 4:02 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



FENDERING AND MOORING - SLUDGE BARGE LOADING DOCK -ARRANGEMENT PLAN

SCALE: 1/4"=1'-0"

FENDER SCHEDULE		
FENDER NO.	DISTANCE FROM FENDER CL TO WP1	DISTANCE FROM FENDER CL TO WP2
F1	10' - 0"	654'-6"
F2	21'-1"	643'-5"
F3	34'-9	629'-9"
F4	48'-5"	616'-1"
F5	62'-1"	602'-5"
F6	75'-9"	588'-9"
F7	89'-5"	575'-1"
F8	103'-1"	561'-5"
F9	116'-9"	547'-9"
F10	130'-5"	534'-1"
F11	144'-1"	520'-5"
F12	157'-9"	506'-9"
F13	171'-5"	493'-1"
F14	185'-1"	479'-5"
F15	198'-9"	465'-9"
F16	218'-5"	452'-1"
F17	226'-1"	438'-5"
F18	238'-9"	424'-9"
F19	253'-5"	411'-1"
F20	267'-1"	397'-5"
F21	280'-9"	383'-9"
F22	294'-5"	370'-1"
F23	308'-1"	356'-5"
F24	321'-9"	342'-9"

FENDER SCHEDULE		
FENDER NO.	DISTANCE FROM FENDER CL TO WP1	DISTANCE FROM FENDER CL TO WP2
F25	335'-5"	329'-1"
F26	349'-1"	315'-5"
F27	362'-9"	301'-9"
F28	376'-5"	288'-1"
F29	390'-1"	274'-5"
F30	403'-9"	260'-9"
F31	417'-5"	242'-1"
F32	431'-1"	233'-5"
F33	444'-9"	219'-9"
F34	458'-5"	206'-1"
F35	472'-9"	192'-5"
F36	485'-9"	174'-9"
F37	499'-5"	165'-1"
F38	513'-1"	151'-5"
F39	526'-9"	137'-9"
F40	540'-5"	124'-1"
F41	554'-1"	110'-5"
F42	567'-9"	96'-9"
F43	581'-5"	83'-1"
F44	593'-1"	69'-5"
F45	608'-9"	55'-9"
F46	622'-5"	42'-1"
F47	630'-1"	28'-5"
F48	649'-9"	14'-9"

PASSIVE PANEL SCHEDULE	
PANEL NO.	PANEL
P1	TYPE 2
P2	TYPE 1
P3	TYPE 1
P4	TYPE 1
P5	TYPE 1
P6	TYPE 1
P7	TYPE 1
P8	TYPE 1
P9	TYPE 1
P10	TYPE 1
P11	TYPE 1
P12	TYPE 1
P13	TYPE 1
P14	TYPE 1
P15	TYPE 1
P16	TYPE 1
P17	TYPE 1
P18	TYPE 1
P19	TYPE 1
P20	TYPE 1
P21	TYPE 1
P22	TYPE 1
P23	TYPE 1
P24	TYPE 1

PASSIVE PANEL SCHEDULE	
PANEL NO.	PANEL
P25	TYPE 1
P26	TYPE 1
P27	TYPE 1
P28	TYPE 1
P29	TYPE 1
P30	TYPE 1
P31	TYPE 1
P32	TYPE 1
P33	TYPE 1
P34	TYPE 1
P35	TYPE 1
P36	TYPE 1
P37	TYPE 1
P38	TYPE 1
P39	TYPE 1
P40	TYPE 1
P41	TYPE 1
P42	TYPE 1
P43	TYPE 1
P44	TYPE 1
P45	TYPE 1
P46	TYPE 1
P47	TYPE 1

LEGEND:

F1	FENDER PANEL NO. 1
P1	PASSIVE PANEL NO. 1
MB1	MARINE BOLLARD NO.1
MC1	MARINE CLEAT NO. 1

PASSIVE PANEL SIZE:

PANEL TYPE 1: 6'-10" WIDE
PANEL TYPE 2 : 4'-3" WIDE

0 4 8 FT.
1/4"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

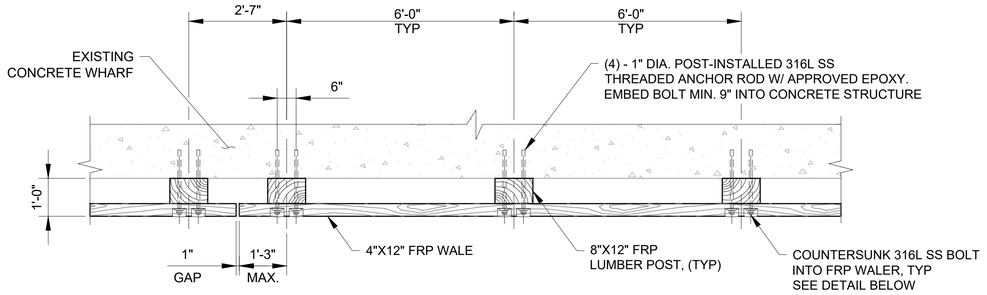
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

FENDERING AND MOORING - TYPE B FENDER LAYOUT - SHEET 3

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-303.00

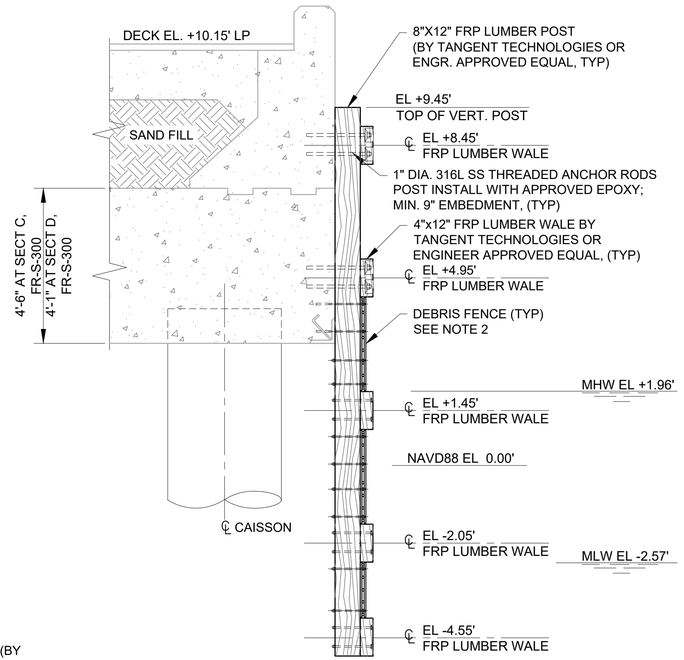
Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d01295989\FR-S-303.00.dwg
Last Date Saved: 10/20/2026 4:00 PM
Date & Time Plotted: 10/20/2026 4:02 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



DETAIL - TYPICAL FRP EDGE PROTECTION PLAN

SCALE: 1/2"=1'-0"

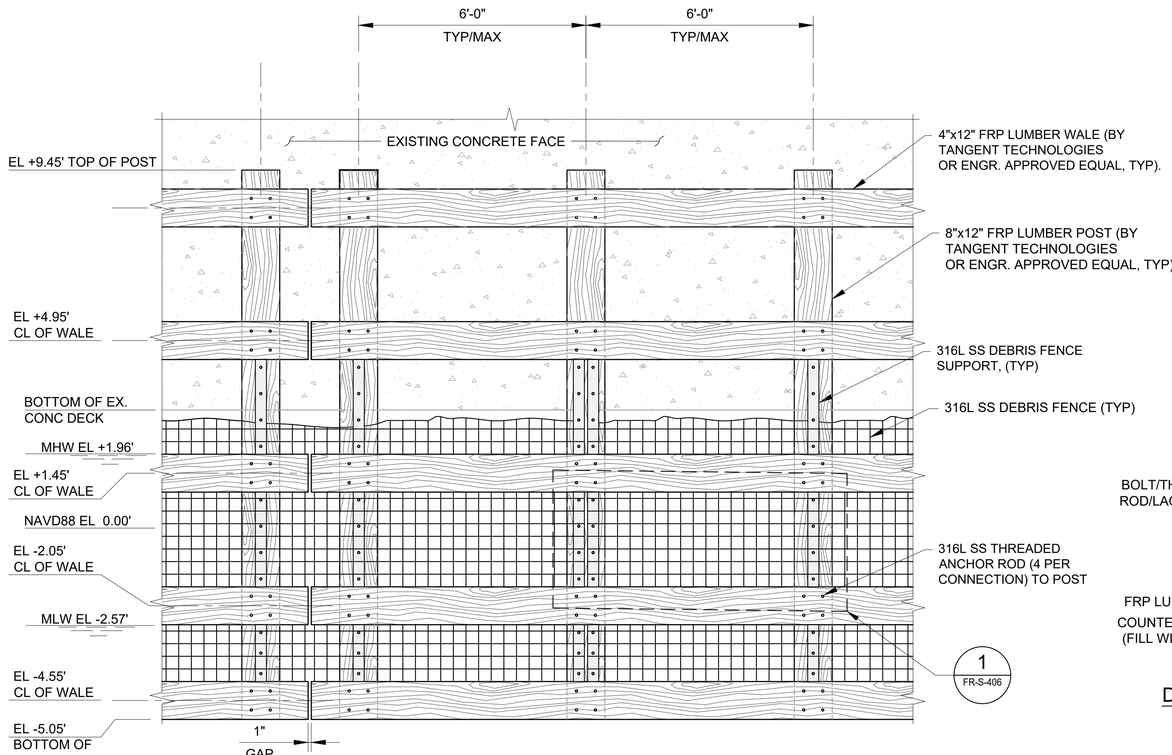


E FR-S-300 SECTION - TYPICAL FRP EDGE PROTECTION

SCALE: 1/2" = 1'-0"

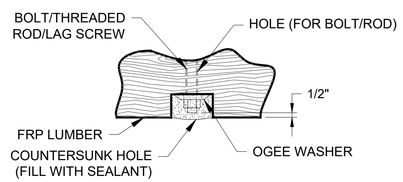
NOTES:

1. ALL BOLTS TO BE USED FOR FRP LUMBER EDGE PROTECTION SYSTEM INSTALLATION INCLUDING ANCHOR BOLTS SHALL BE 316L STAINLESS STEEL (UNS 31603) CONDITION: A COLD-FINISHED WITH MATCHING NUTS AND WASHERS.
2. THE DEBRIS FENCE AND FENCE SUPPORT INCLUDING FASTENERS SHALL BE 316L STAINLESS STEEL (UNS 31603) CONDITION: A COLD-FINISHED. SEE DETAILS ON DWG. FR-S-406.



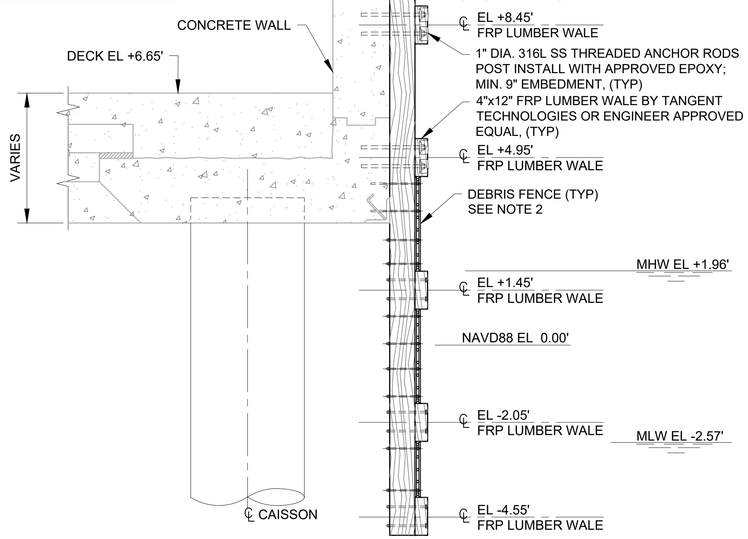
DETAIL - TYPICAL FRP EDGE PROTECTION ELEVATION

SCALE: 1/2"=1'-0"



DETAIL - COUNTERSUNK HOLE

SCALE: 1 1/2"=1'-0"



B FR-S-300 SECTION - TYPICAL FRP EDGE PROTECTION

SCALE: 1/2" = 1'-0"

1/2"=1'-0" 0 1 2 3 4 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

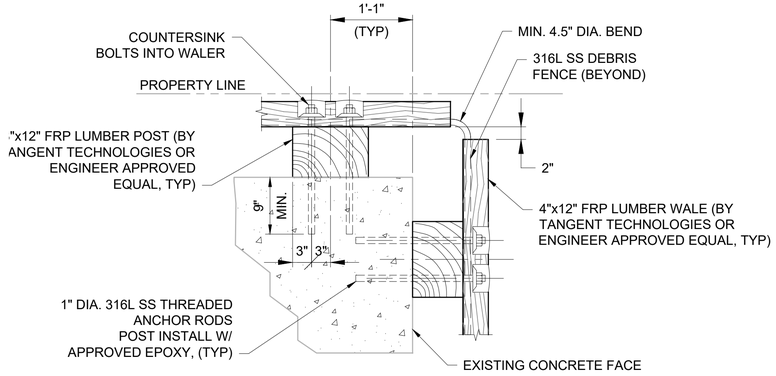
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS
FENDERING AND MOORING -
FENDER SYSTEM DETAILS -
TYPE A FENDER - SHEET 1

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-400.00

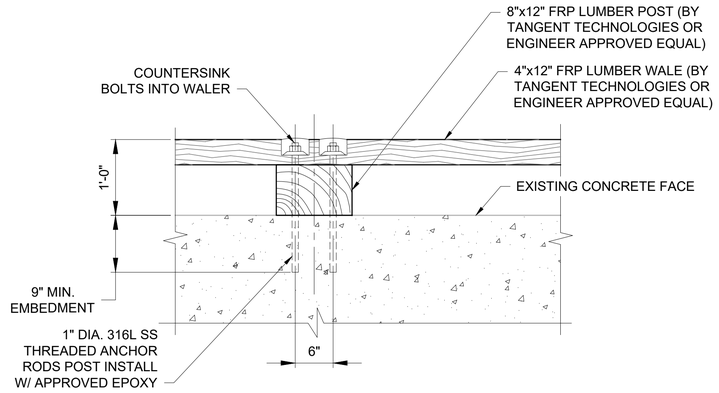
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-400.00.dwg
Last Date Saved: 10/20/2026 4:00 PM
Date & Time Plotted: 10/20/2026 4:02 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb



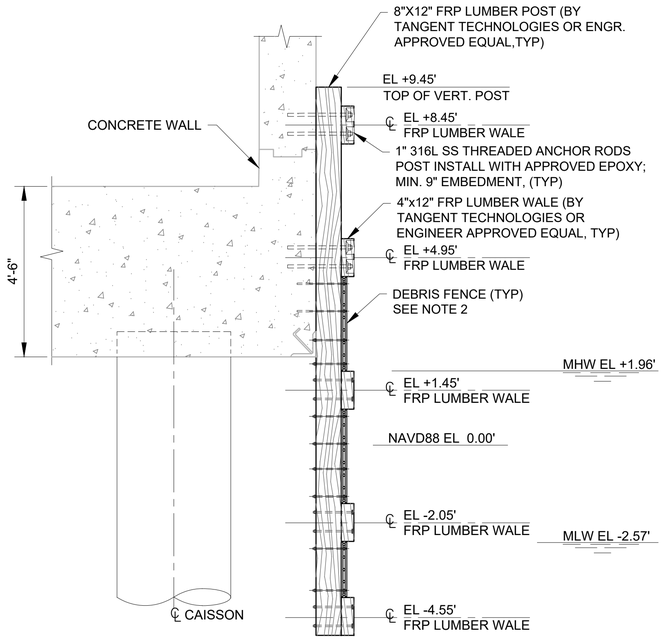
DETAIL - TYPICAL FRP EDGE PROTECTION CONER DETAIL 1

SCALE: 1"=1'-0"



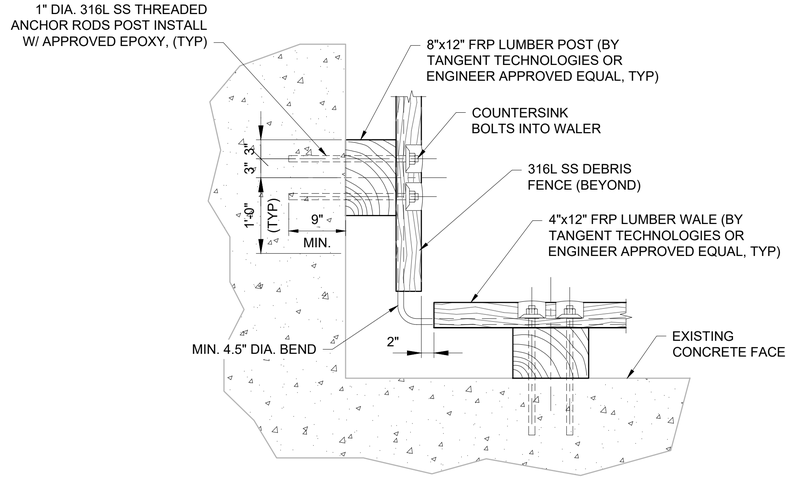
DETAIL - TYPICAL FRP EDGE PROTECTION CONNECTION

SCALE: 1"=1'-0"



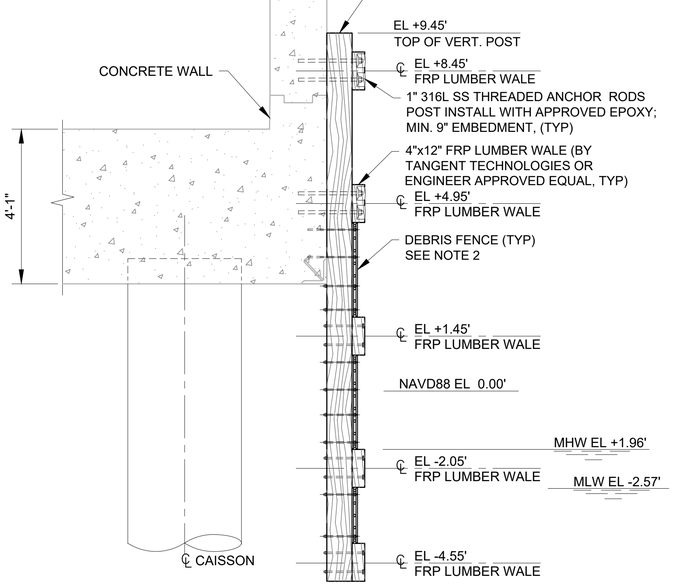
C SECTION - TYPICAL FRP EDGE PROTECTION

FR-S-300 SCALE: 1/2" = 1'-0"



DETAIL - TYPICAL FRP EDGE PROTECTION CONER DETAIL 2

SCALE: 1"=1'-0"



D SECTION - TYPICAL FRP EDGE PROTECTION

FR-S-300 SCALE: 1/2" = 1'-0"

NOTES:

1. ALL BOLTS TO BE USED FOR FRP LUMBER EDGE PROTECTION SYSTEM INSTALLATION INCLUDING ANCHOR BOLTS SHALL BE 316L STAINLESS STEEL (UNS 31603) CONDITION: A COLD-FINISHED WITH MATCHING NUTS AND WASHERS.

2. THE DEBRIS FENCE AND FENCE SUPPORT INCLUDING FASTENERS SHALL BE 316L STAINLESS STEEL (UNS 31603) CONDITION: A COLD-FINISHED. SEE DETAILS ON DWG. FR-S-406.

0 1 2 FT.
1"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

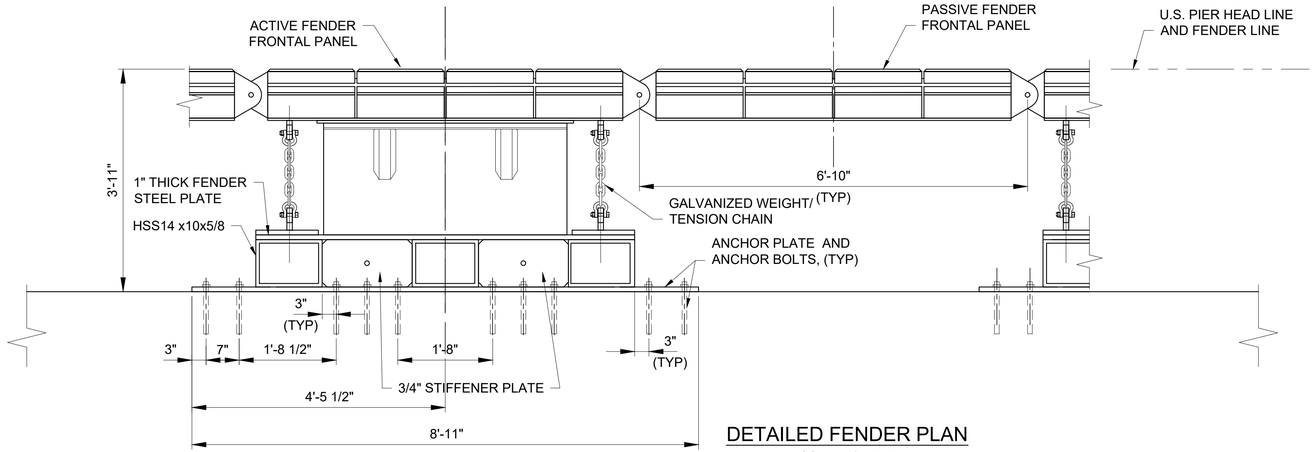
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS
FENDERING AND MOORING -
FENDER SYSTEM DETAILS -
TYPE A FENDER - SHEET 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-401.00

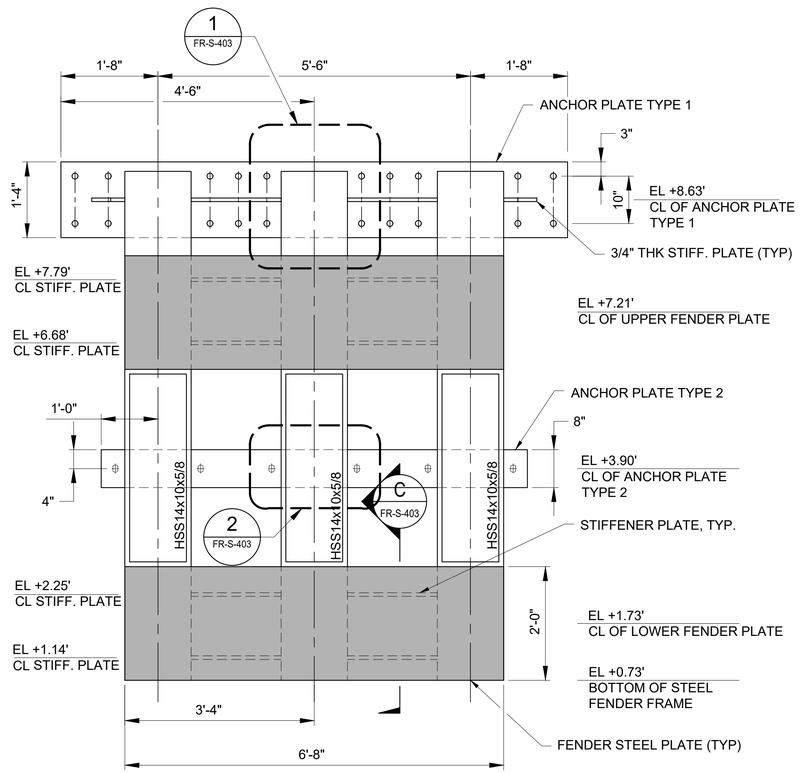
Last Saved By: AcostaML
Last Date Saved: 10/20/2026 4:00 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Plot Style Table: BEDC_Acad(N).ctb
Plot Scale: 1:1
Date & Time Plotted: 10/20/2026 4:03 PM
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-401.00.dwg

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



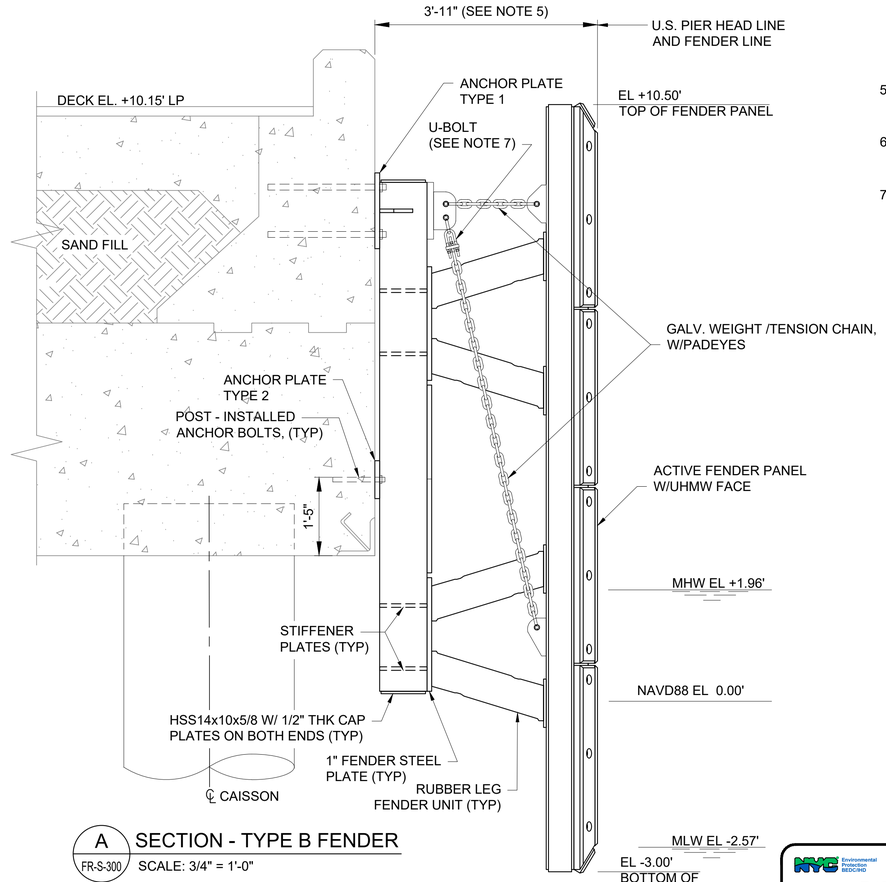
DETAILED FENDER PLAN

SCALE: 3/4"=1'-0"



ELEVATION - STEEL FENDER FRAME

SCALE: 3/4"=1'-0"



A
FR-S-300
SECTION - TYPE B FENDER

SCALE: 3/4" = 1'-0"

FENDER SYSTEM GENERAL NOTES:

1. THE CONTRACTOR TO FIELD VERIFY ALL EXISTING DIMENSION AT EACH FENDER LOCATION.
2. WEIGHT CHAIN, TENSION CHAIN, AND PADEYES ASSEMBLIES SHALL BE PROVIDED AS DESIGNED BY THE FENDER MANUFACTURER FOR PROPER FUNCTIONING OF THE SYSTEM. THE FENDER MANUFACTURER SHALL SUPPLY ALL CHAINS, HARDWARE AND ASSOCIATED ACCESSORIES.
3. THE RUBBER LEG FENDER SYSTEM SHALL BE AS SUPPLIED BY SHIBATA FENDER TEAM, MODEL FE 600 WITH G2.9 RUBBER GRADE OR ENGINEER APPROVED EQUIVALENT. THE FENDER SYSTEM SHALL BE CAPABLE OF ABSORBING A MINIMUM BERTHING ENERGY OF 84-KIP FEET AND A MAXIMUM FENDER REACTION OF 103 KIPS PER FENDER LEG AND PERFORMANCE TOLERANCES SHALL BE WITHIN +/- 10% OF THE VALUES PUBLISHED IN THE FENDER SUPPLIER'S CATALOG. REFER TO THE PROJECT TECHNICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
4. PRIOR TO ATTACHING THE FENDER STEEL FRAME, THE CONTRACTOR SHALL PERFORM A SURVEY OF THE EXISTING CONCRETE FACE TO DETERMINE THE CONDITION OF THE FASCIA. IF DETERMINED BY THE ENGINEER TO BE IN POOR CONDITION, THE CONTRACTOR SHALL REPAIR THE FASCIA AS SHOWN IN THE CONTRACT DRAWINGS.
5. DISTANCE FROM CONCRETE EDGE TO FENDER LINE OF 3'-11" SHALL BE MAINTAINED.
6. FABRICATED STEEL COMPONENTS SHALL BE COATED PER SECTION 09 91 00 PAINTING.
7. U-BOLT SHALL BE DOUBLE NUTTED FOR SECURE LOCKING.

0 1 2 3 FT.
3/4"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

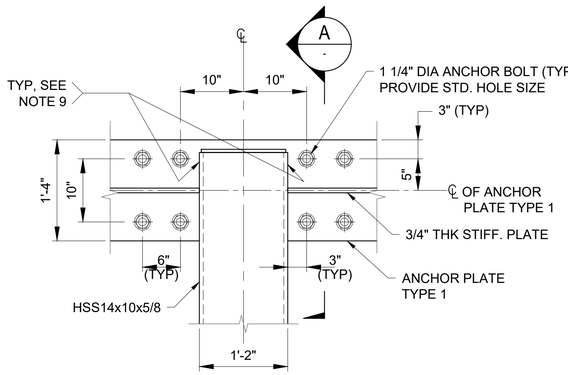
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS
FENDERING AND MOORING -
FENDER SYSTEM DETAILS -
TYPE B FENDER - SHEET 1

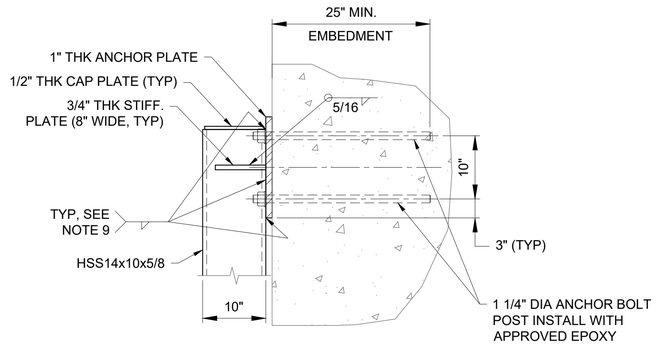
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-402.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

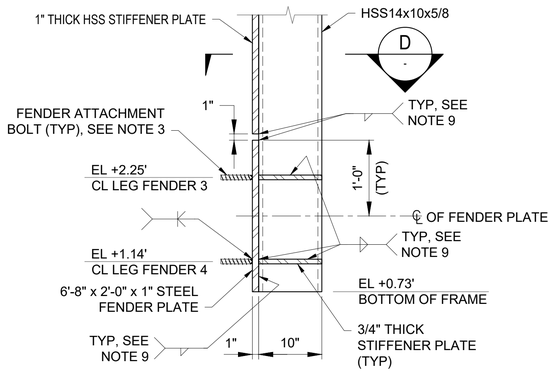
Last Saved By: AcostaML
Last Date Saved: 10/20/2026 4:00 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-402.00.dwg
Date & Time Plotted: 10/20/2026 4:03 PM
Plot Style Table: BEDC_Acad(N).ctb
Plot Scale: 1:1



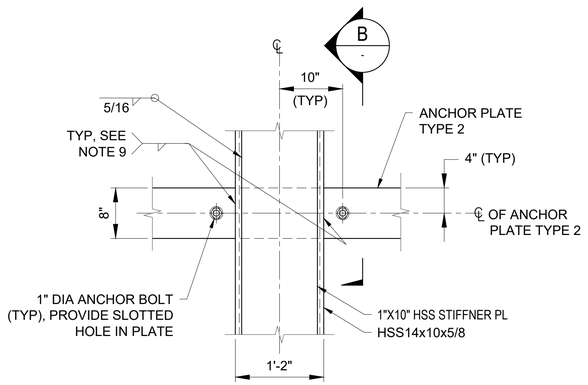
1 DETAIL
FR-S-402 SCALE: 1" = 1'-0"



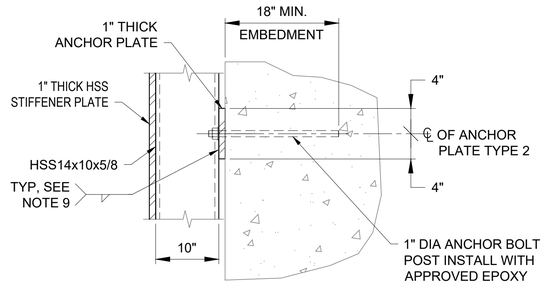
A SECTION
- SCALE: 1" = 1'-0"



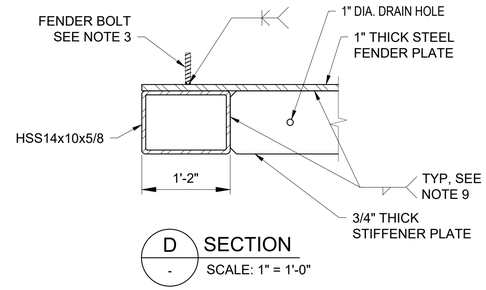
C SECTION - FENDER CONNECTION
FR-S-402 SCALE: 1" = 1'-0"



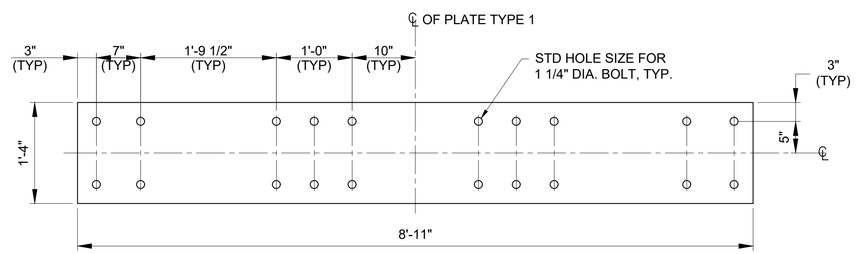
2 DETAIL
FR-S-402 SCALE: 1" = 1'-0"



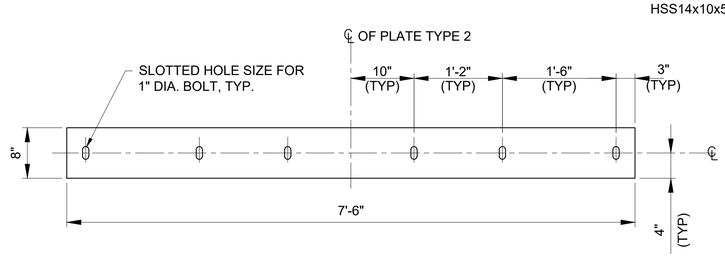
B SECTION
- SCALE: 1" = 1'-0"



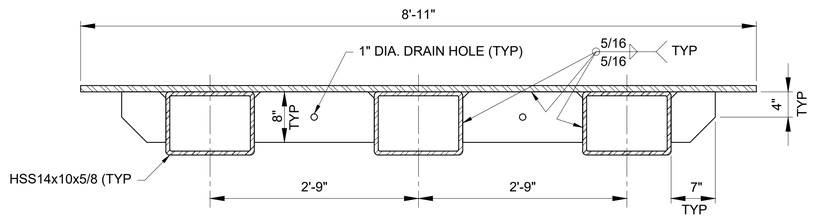
D SECTION
- SCALE: 1" = 1'-0"



ANCHOR PLATE TYPE 1
SCALE: 1"=1'-0"



ANCHOR PLATE TYPE 2
SCALE: 1"=1'-0"



STIFFENER PLATE @ EL +8.63'
SCALE: 1"=1'-0"

NOTE:
ANCHOR BOLTS NOT SHOWN FOR CLARITY.

NOTES:

1. ALL ANCHOR BOLTS SHALL BE ALL THREADED ASTM F1554 GRADE 150 HOT DIP GALVANIZED. CHASE THREADS AFTER GALVANIZING.
2. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF THE RUBBER LEG FENDER BOLT WITH THE FENDER SUPPLIER/MANUFACTURER.
3. LEG FENDER BOLT SIZE, NUMBER, SPACING AND RELEVANT DETAILS SHALL BE PROVIDED BY THE FENDER MANUFACTURER. FENDER BOLT WELDED CONNECTION TO THE STEEL FRAME SHALL BE SHOP MADE WITH COMPLETE PENETRATION WELDING. FENDER BOLT WELDING SHALL BE COMPLETED WITH A FILLET WELD AFTER COMPLETE JOINT PENETRATION HAS BEEN ACHIEVED.
4. ALL STEEL TUBES SHALL BE ASTM A500 GRADE C WITH A MINIMUM YIELD STRENGTH OF 50KSI. STEEL TUBES SHALL BE HOT DIP GALVANIZED. STEEL PLATES SHALL BE ASTM A709 GRADE 50.
5. WASHERS AND NUTS SHALL BE HOT DIP GALVANIZED AND HAVE A SHOP APPLIED POLYAMIDE EPOXY PRIMER AT 4 MILS DRY FILM THICKNESS. POST INSTALLATION, FIELD APPLY COATING PER SPECIFICATION 09 91 00 TO NUTS, WASHERS AND ANCHOR BOLT THREAD EXPOSED END.
6. SEAL WELD ALL WELDED ASSEMBLIES.
7. FENDER MOUNTING FRAME SHALL BE PAINTED PER CONTRACT SPECIFICATION SECTION 09 91 00 PAINTING.
8. HSS ENDS SHALL BE CAPPED WITH 1/2" THICK PLATE.
9. MINIMUM FILLET WELD SIZE SHALL BE 5/16" UNO.

1"=1'-0" 0 1 2 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

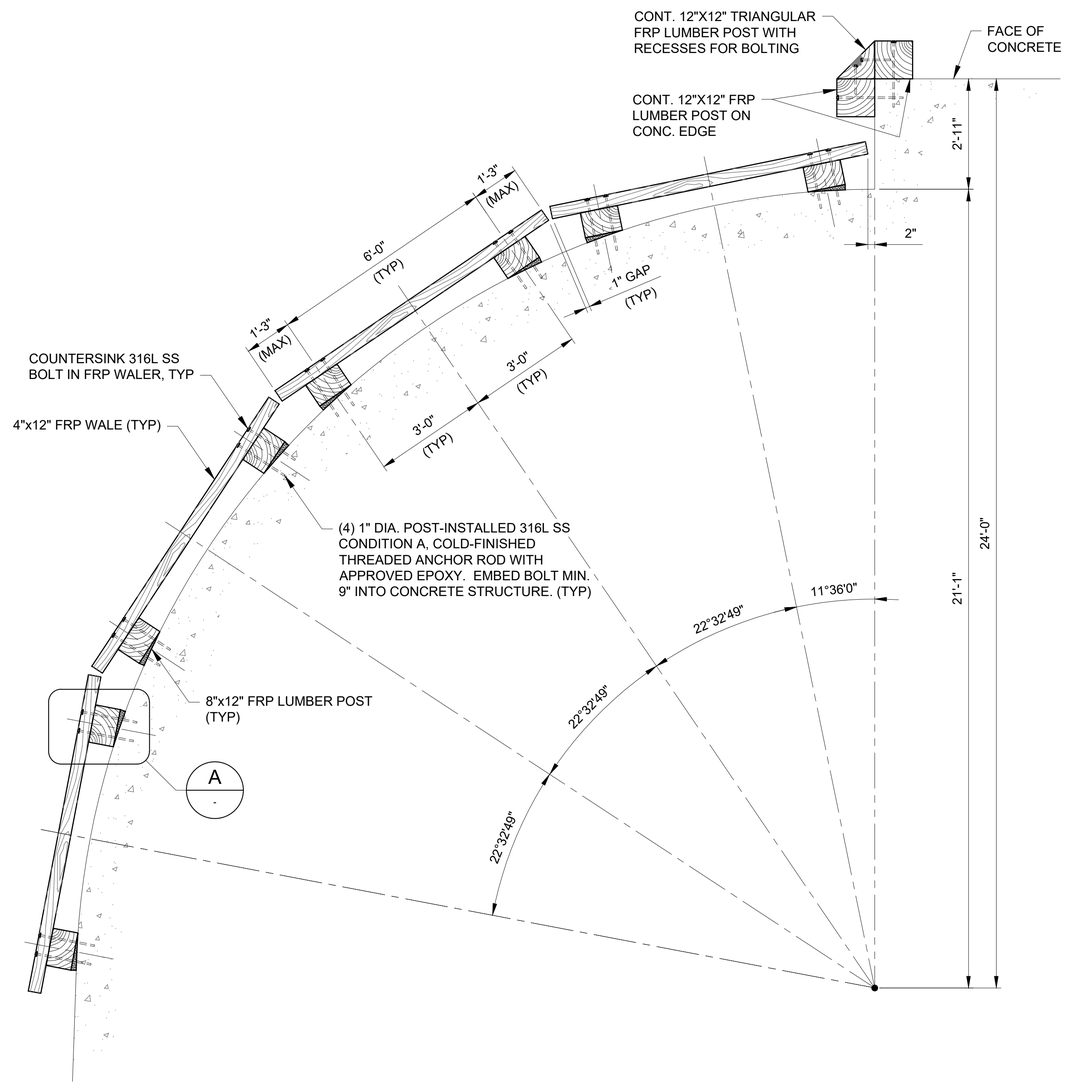
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS
FENDERING AND MOORING -
FENDER SYSTEM DETAILS -
TYPE B FENDER - SHEET 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-403.00

Last Saved By: AcostaML
Paper Size Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-403.00.dwg
Last Date Saved: 10/20/2026 4:00 PM
Plot Scale: 1:1
Date & Time Plotted: 10/20/2026 4:03 PM
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

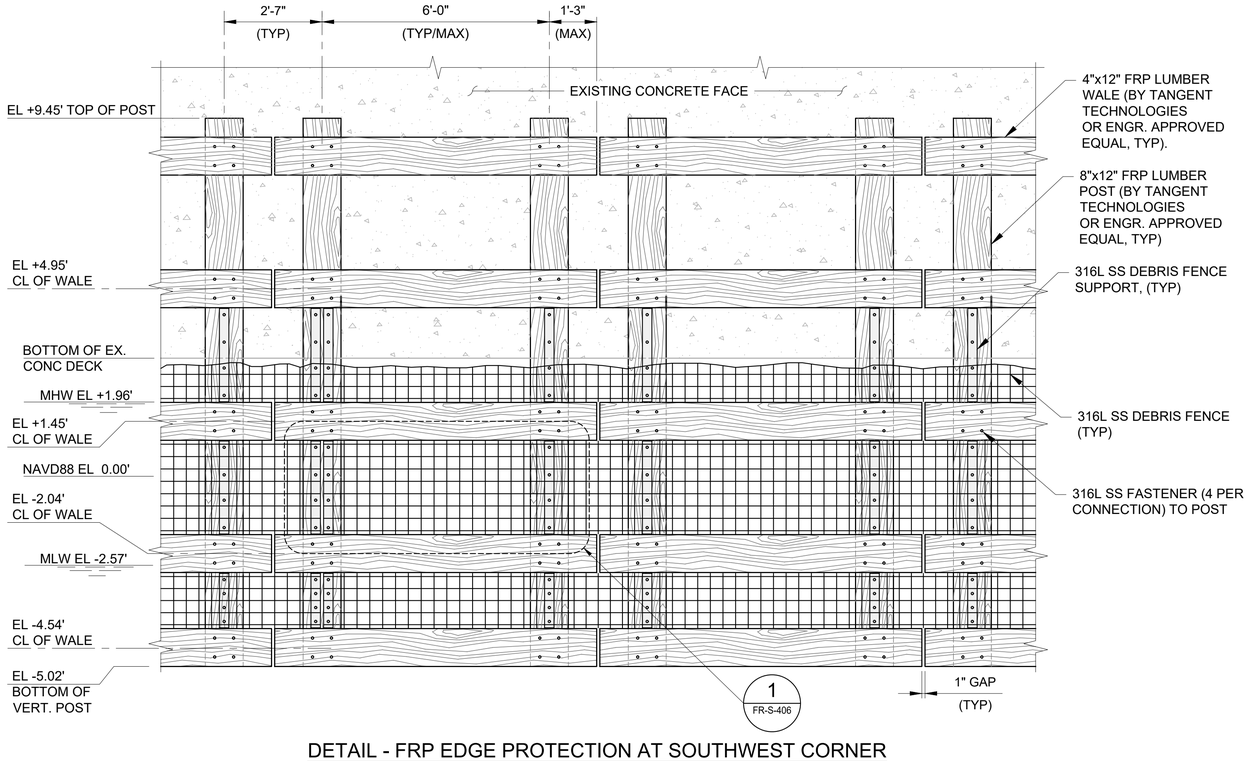


PLAN - FRP EDGE PROTECTION AT SOUTHWEST CORNER

SCALE: 1/2"=1'-0"

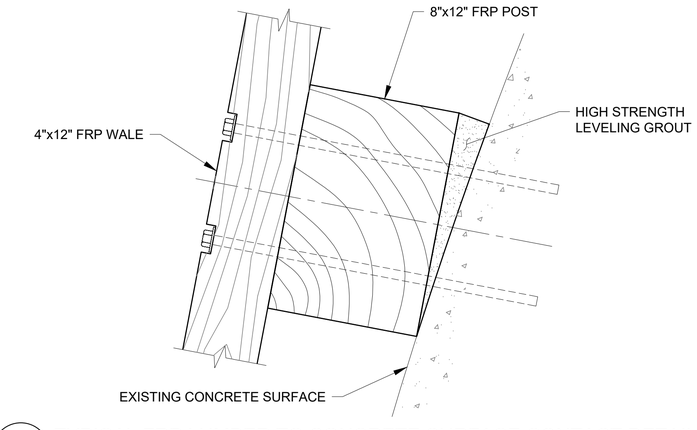
NOTES:

1. APPLY HIGH STRENGTH LEVELING GROUT TO CONCRETE SURFACE FOR SOLID CONTACT BETWEEN LUMBER AND CONCRETE SURFACE.
2. ALL BOLTS TO BE USED FOR FRP LUMBER EDGE PROTECTION SYSTEM INSTALLATION INCLUDING ANCHOR BOLTS SHALL BE 316L STAINLESS STEEL (UNS 31603) CONDITION: A COLD-FINISHED WITH MATCHING NUTS AND WASHERS.
3. THE DEBRIS FENCE AND FENCE SUPPORT INCLUDING FASTENERS SHALL BE 316L STAINLESS STEEL (UNS 31603) CONDITION: A COLD-FINISHED. SEE DETAILS ON DWG. FR-S-406.



DETAIL - FRP EDGE PROTECTION AT SOUTHWEST CORNER ELEVATION

SCALE: 1/2"=1'-0"



A - TYPICAL FRP LUMBER TO CONCRETE SURFACE CONTACT DETAIL

SCALE: 3" = 1'-0"

1/2"=1'-0": 0 1 2 3 4 FT.

3"=1'-0": 0 3 6 9 IN.

BID SET

DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

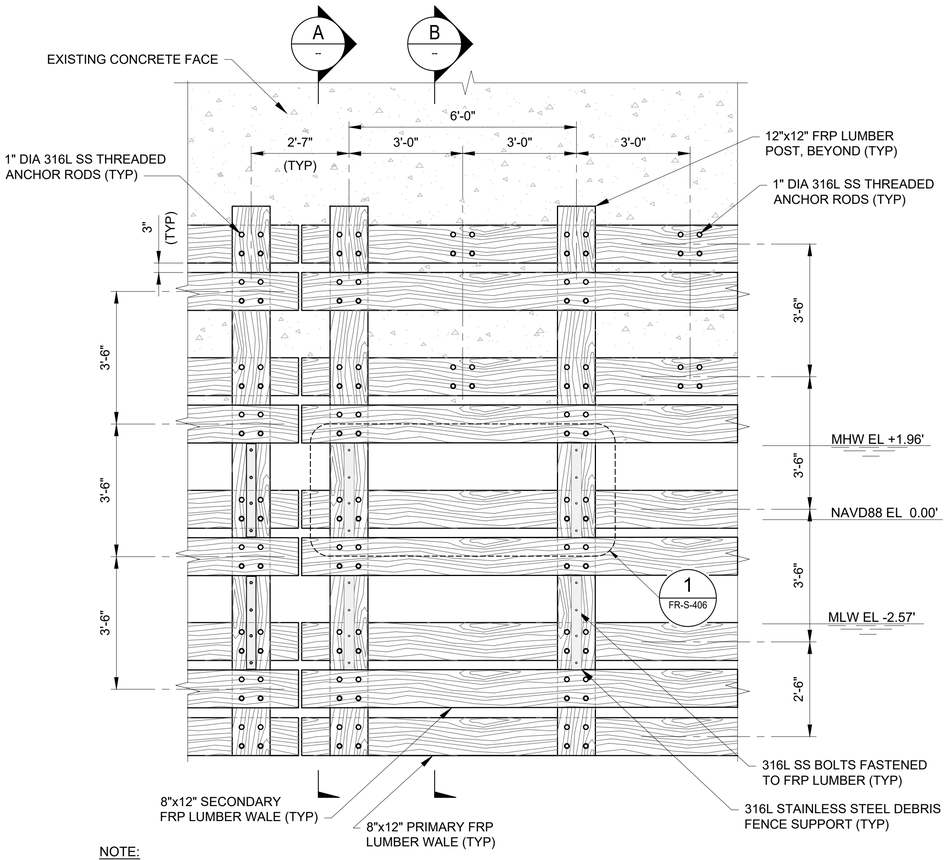
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS
FENDERING AND MOORING -
FENDER SYSTEM DETAILS -
TYPE C FENDER

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-404.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: j.perez
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostam\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-404.00.dwg
Last Date Saved: 10/20/2026 4:00 PM
Date & Time Plotted: 10/20/2026 4:03 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

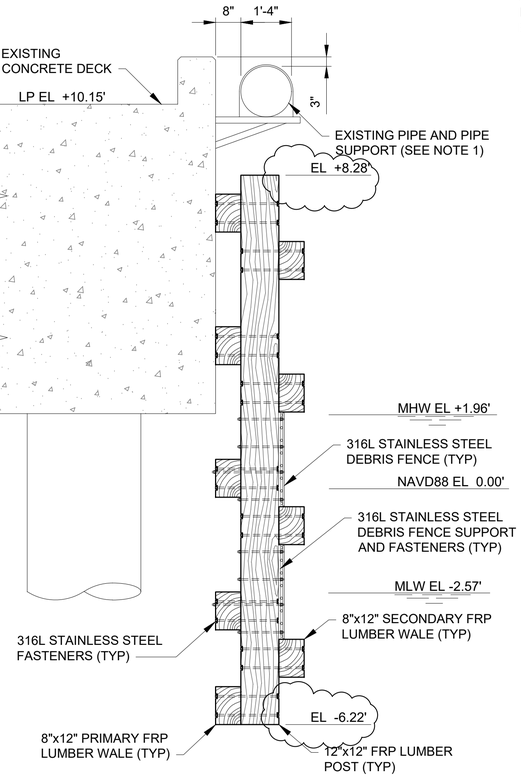


NOTE:

1. STAINLESS STEEL DEBRIS FENCE AND EXISTING PIPE/PIPE SUPPORT NOT SHOWN FOR CLARITY. SEE DETAILS ON DWG. FR-S-406.

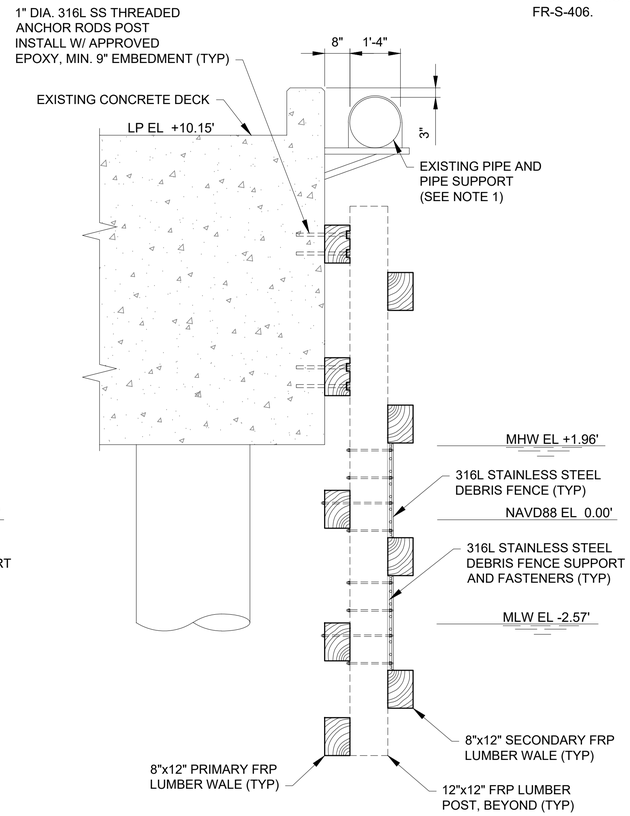
DETAIL - FRP EDGE PROTECTION ELEVATION

SCALE: 1/2"=1'-0"



A -- SECTION - FRP EDGE PROTECTION

SCALE: 1/2" = 1'-0"



B -- SECTION - FRP EDGE PROTECTION

SCALE: 1/2" = 1'-0"

NOTES:

1. VERIFY EXISTING PIPE AND PIPE SUPPORT DIMENSIONS IN FIELD.
2. ALL BOLTS TO BE USED FOR FRP LUMBER EDGE PROTECTION SYSTEM INSTALLATION INCLUDING ANCHOR BOLTS SHALL BE 316L STAINLESS STEEL (UNS 31603) CONDITION: A COLD-FINISHED WITH MATCHING NUTS AND WASHERS.
3. THE DEBRIS FENCE AND FENCE SUPPORT INCLUDING FASTENERS SHALL BE 316L STAINLESS STEEL (UNS 31603) CONDITION: A COLD-FINISHED. SEE DETAILS ON DWG. FR-S-406.

0 1 2 3 4 FT.
1/2"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

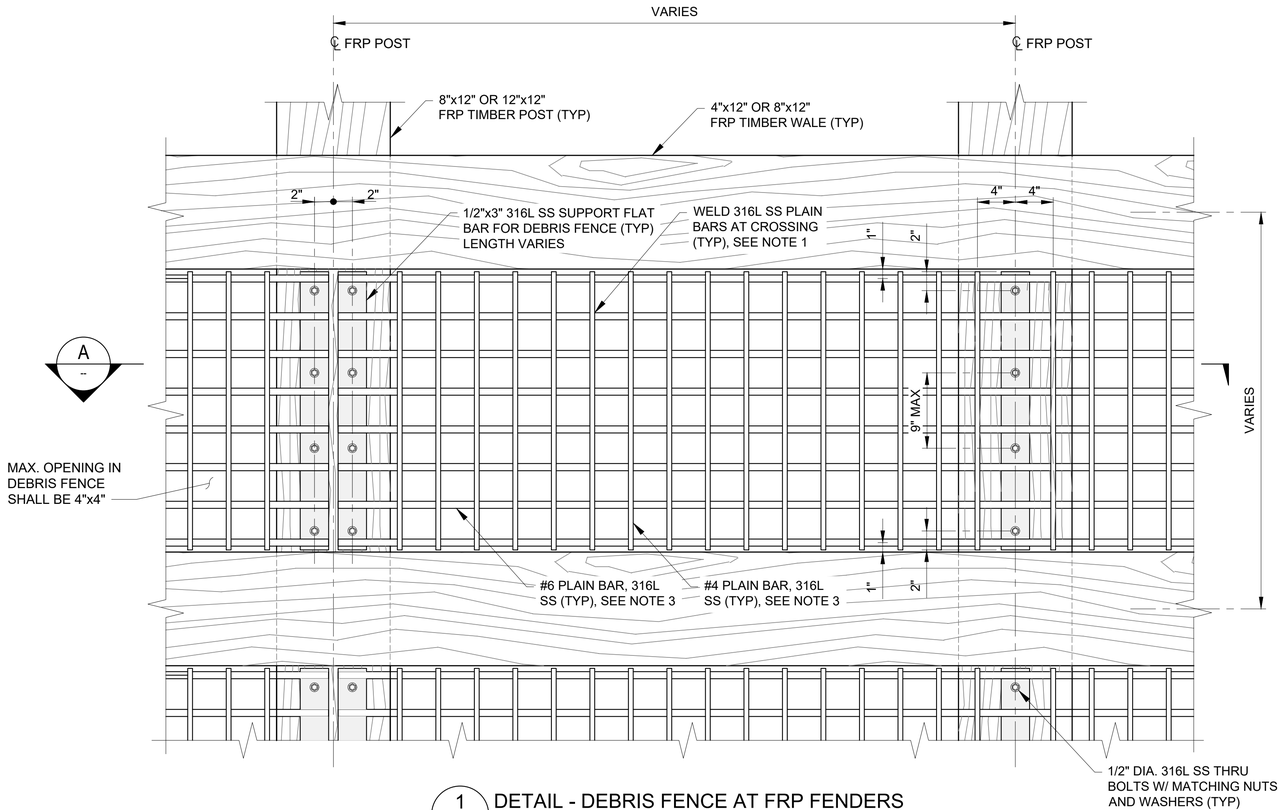
"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS
FENDERING AND MOORING -
FENDER SYSTEM DETAILS -
TYPE D FENDER

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-405.00

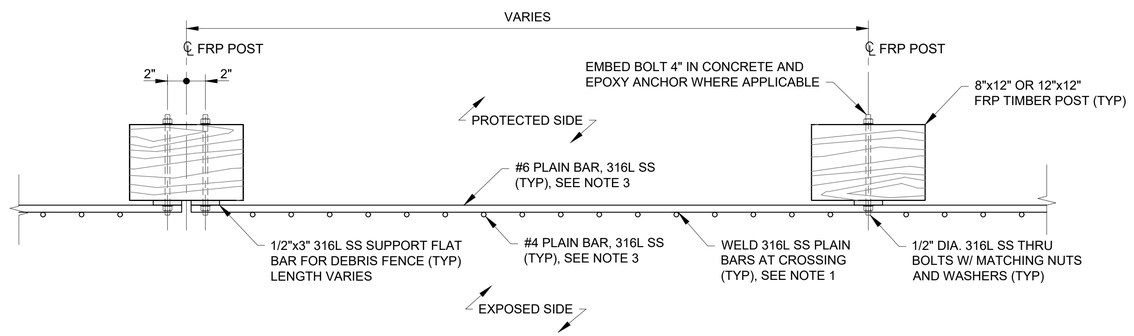
Last Saved By: AcostaML
Last Date Saved: 10/20/2026 4:00 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-405.00.dwg
Date & Time Plotted: 10/20/2026 4:03 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb



1 / FR-S-400 — DETAIL - DEBRIS FENCE AT FRP FENDERS

SCALE: 1 1/2" = 1'-0"

FR-S-404
FR-S-405



A / -- — SECTION - DEBRIS FENCE AT FENDER TYPES A, C & D

SCALE: 1 1/2" = 1'-0"

NOTES:

1. WELDS SHALL BE PER MANUFACTURER RECOMMENDATIONS IN ACCORDANCE WITH AWS D1.4 AND D1.6.
2. SPACING OF 316L SS BOLTS SHALL NOT EXCEED 9".
3. 316L SS DEBRIS FENCE MAXIMUM OPENING IN MESH SHALL NOT EXCEED 4".
4. FOR FRP FENDER DIMENSIONS AT FENDER TYPE A, SEE DWG FR-S-400.
5. FOR FRP FENDER DIMENSIONS AT FENDER TYPE C, SEE DWG FR-S-404.
6. FOR FRP FENDER DIMENSIONS AT FENDER TYPE D, SEE DWG FR-S-405.

0 1 1-1/2 FT.
1-1/2"=1'-0"

NYC Environmental Protection BEDC/HD

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

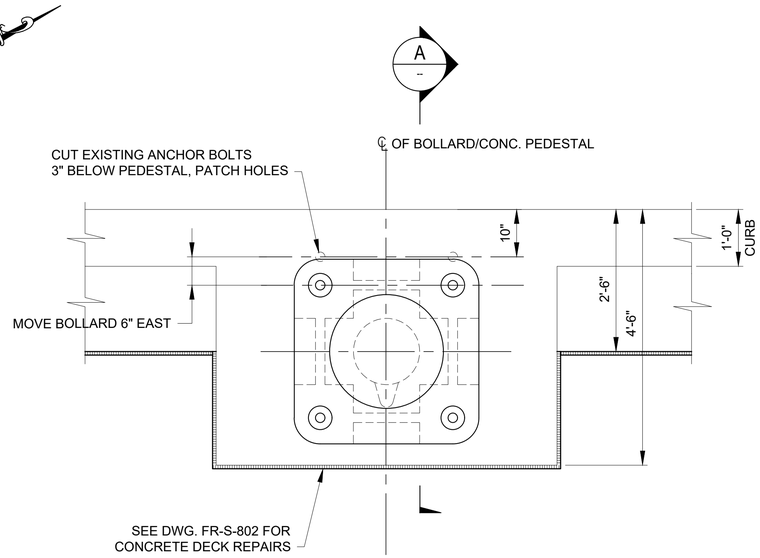
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS
FENDERING AND MOORING -
FENDER SYSTEM DETAILS -
DEBRIS FENCE DETAILS

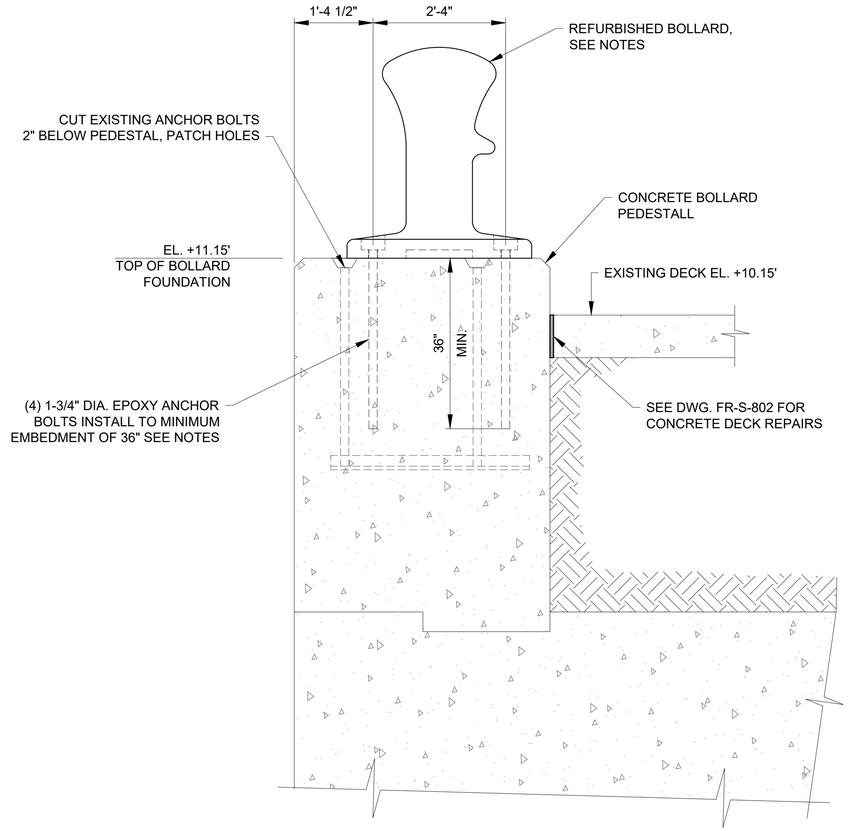
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-406.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

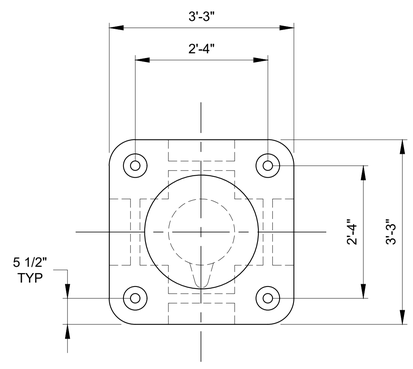
Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-406.00.dwg
Last Date Saved: 10/20/2026 4:00 PM
Date & Time Plotted: 10/20/2026 4:03 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb



1 DETAIL
FR-S-301 SCALE: 3/4" = 1'-0"



A SECTION
- SCALE: 3/4" = 1'-0"



TYPICAL BOLLARD PLAN DIMENSIONS
SCALE: 3/4"=1'-0"

NOTES:

1. CLEAN AND REMOVE ALL RUST, GREASE AND AND ANY FOREIGN MATERIAL FROM BOLLARD SURFACE AND BLAST ALL OUTSIDE SURFACE TO SSPC -SP6 OR BETTER.
2. PAINT SYSTEM FOR BOLLARD TO BE PER SPECIFICATION 09 91 00.
3. THE REPAINTED MOORING BOLLARDS SHALL BE SECURED TO THE CONCRETE PEDESTAL WITH ALL THREADED GALVANIZED ANCHOR BOLTS ASTM F1554 GR 55 (FY=55 KSI). EPOXY FOR INSTALLATION SHALL BE HILTI HIT-RE 500 V3 OR ENGR. APPROVED EQUAL.
4. MOORING BOLLARDS SHALL BE BEDDED IN A NON-SHRINK, NON-METALLIC GROUT WITH A MINIMUM COMPRESSIVE STRENGTH OF 8,000 PSI.
5. AVOID BOLLARD ANCHORAGE CONFLICT W/ FENDER FRAME ANCHORAGE. REFER TO DWGS. FR-S-402 AND FR-S-403 FOR FENDER FRAME ANCHORAGE DETAILS.

0 1 2 3 FT.
3/4"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

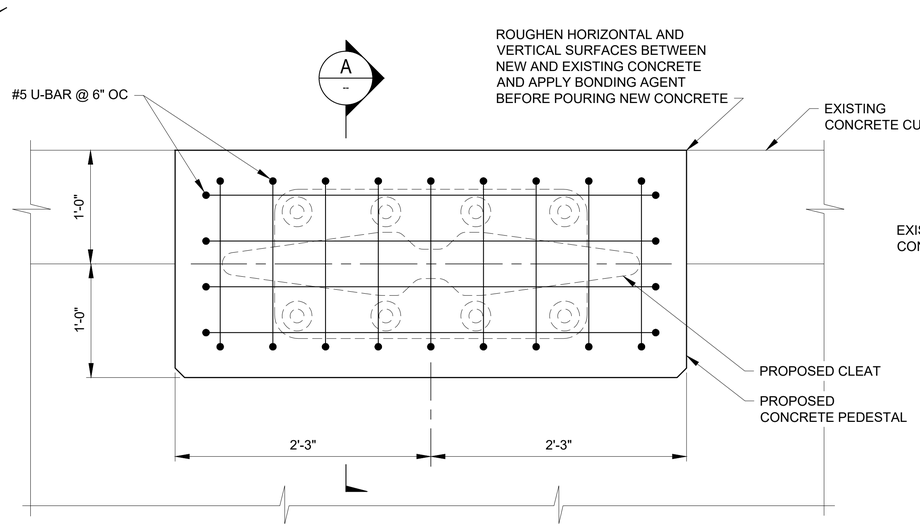
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

FENDERING AND MOORING - BOLLARD DETAILS

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-500.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

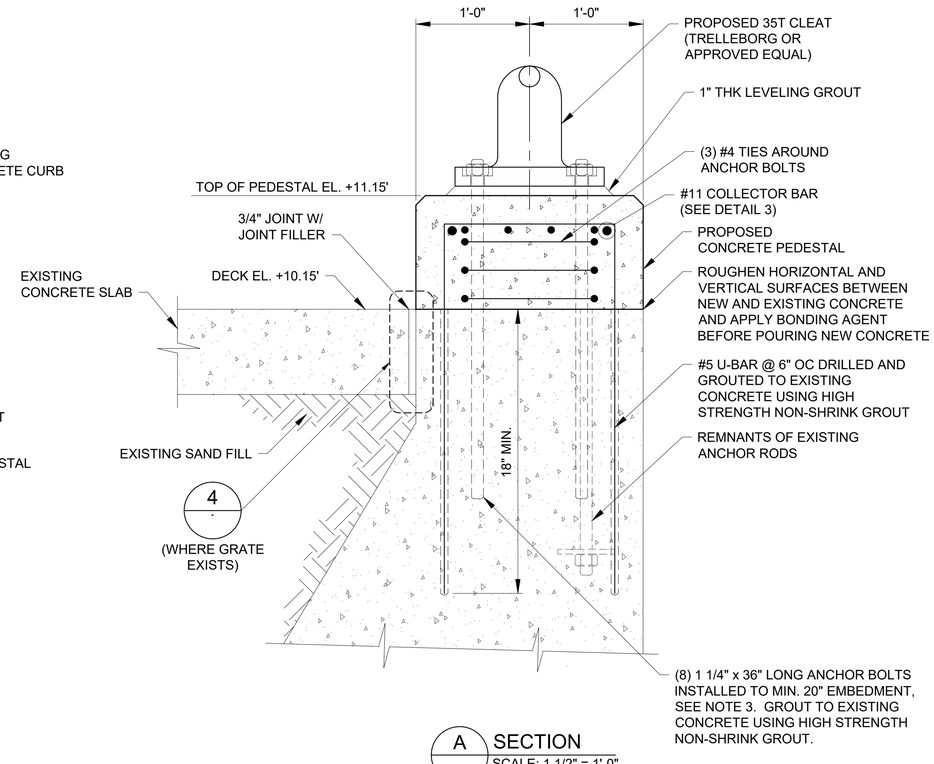
Last Saved By: J.perez
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acosta\mlappdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-500.00.dwg
Last Date Saved: 10/20/2026 4:00 PM
Date & Time Plotted: 10/20/2026 4:03 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb



NOTE:

#11 COLLECTOR BARS NOT SHOWN FOR CLARITY.

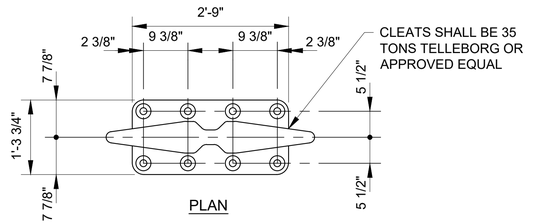
2 -- DETAIL
SCALE: 1 1/2" = 1'-0"



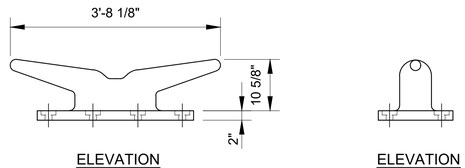
A -- SECTION
SCALE: 1 1/2" = 1'-0"

NOTES:

1. PAINT SYSTEM FOR CLEAT TO BE PER SPECIFICATION 09 91 00.
2. CLEATS SHALL BE BEDDED IN A NON-SHRINK, NON-METALLIC GROUT WITH A MINIMUM COMPRESSIVE STRENGTH OF 8,000 PSI.
3. ALL THREADED ANCHOR BOLTS SHALL BE ASTM F1544 GR. 55 HOT-TIP GALVANIZED.
4. AVOID CLEAT ANCHORAGE CONFLICT W/ FENDER FRAME ANCHORAGE. REFER TO DWGS. FR-S-402 AND FR-S-403 FOR FENDER FRAME ANCHORAGE.

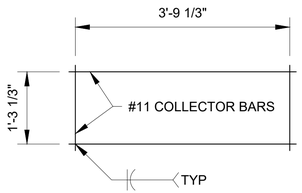


PLAN

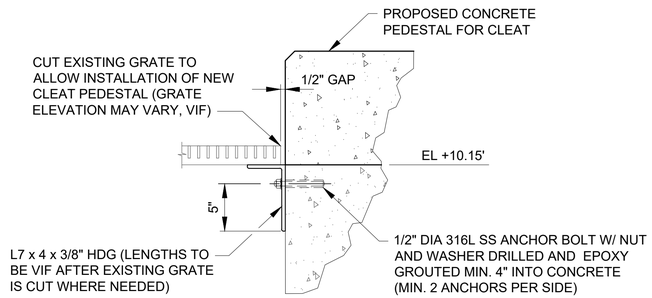


ELEVATION

ELEVATION



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



NOTE:

EXISTING GRATE SHOWN SCHEMATICALLY (VIF).

4 -- GRATE SUPPORT DETAIL
SCALE: 1 1/2" = 1'-0"

TYPICAL CLEAT DETAIL
SCALE: 3/4" = 1'-0"

3/4"=1'-0" 0 1 2 3 FT.
1-1/2"=1'-0" 0 1 1-1/2 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

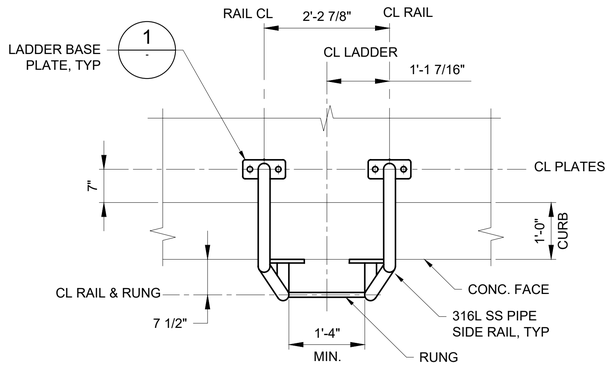
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

FENDERING AND MOORING - CLEAT DETAILS

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-501.00

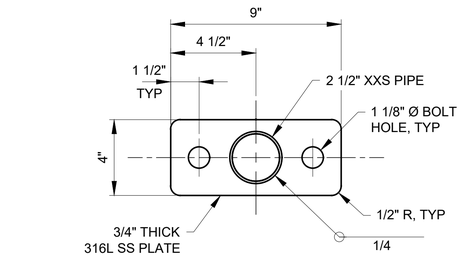
Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-501.00.dwg
Last Date Saved: 10/20/2026 4:00 PM
Date & Time Plotted: 10/20/2026 4:03 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



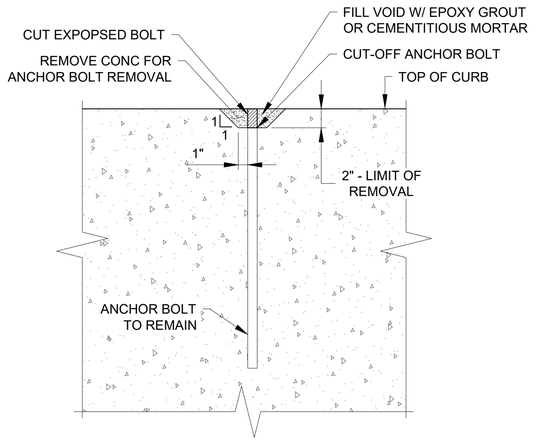
PLAN - SAFETY LADDER

SCALE: 3/4"=1'-0"



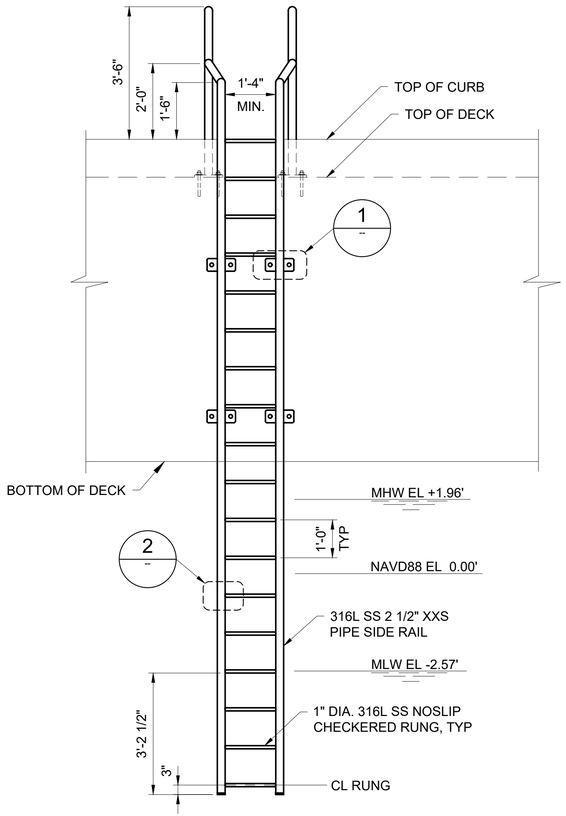
1 -- DETAIL - SAFETY LADDER HAND RAIL BASE PLATE

SCALE: 3" = 1'-0"



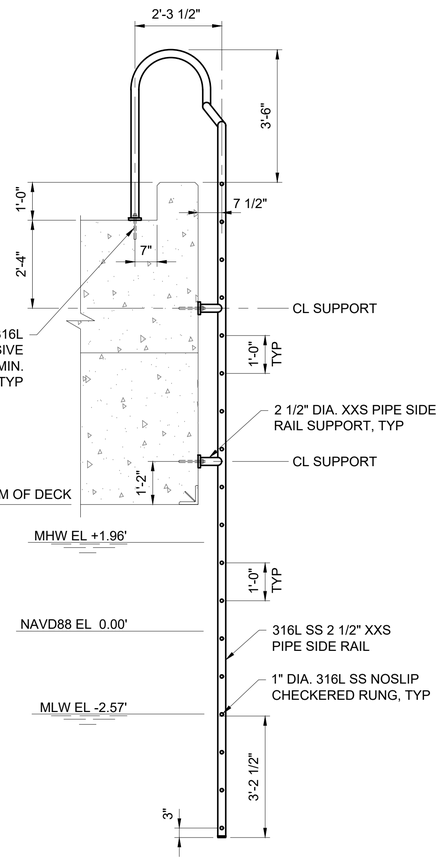
TYPICAL ANCHOR BOLT CUT-OFF DETAIL

SCALE: NTS



LADDER ELEVATION

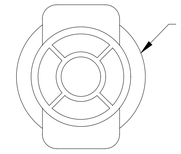
SCALE: 1/2"=1'-0"



LADDER SECTION

SCALE: 1/2"=1'-0"

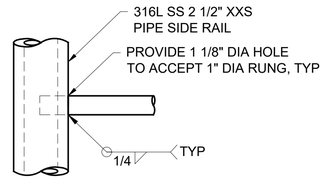
NOTE:
ALL STEEL ELEMENTS AND MOUNTING HARDWARE SHALL BE 316L STAINLESS STEEL. VISIBLE LADDER SURFACES SHALL BE PAINTED OSHA SAFETY YELLOW.



LIFE RING

SCALE: NTS

NOTE:
FOUR LIFE RINGS SHALL BE INSTALLED ON THE FACILITY WALL WHERE SAFETY LADDERS ARE LOCATED. FOLLOW LIFE RING MANUFACTURER'S WALL MOUNTING DETAILS.



2 -- DETAIL - RUNG TO SIDE RAIL CONNECTION

SCALE: 3" = 1'-0"

1/2"=1'-0" 0 1 2 3 4 FT.

3/4"=1'-0" 0 1 2 3 FT.

3"=1'-0" 0 3 6 9 IN.

NYC Environmental Protection BEDC/HD

BID SET

DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

STATE OF NEW YORK ILHAN TUTUNCU LICENSED PROFESSIONAL ENGINEER

NYC Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

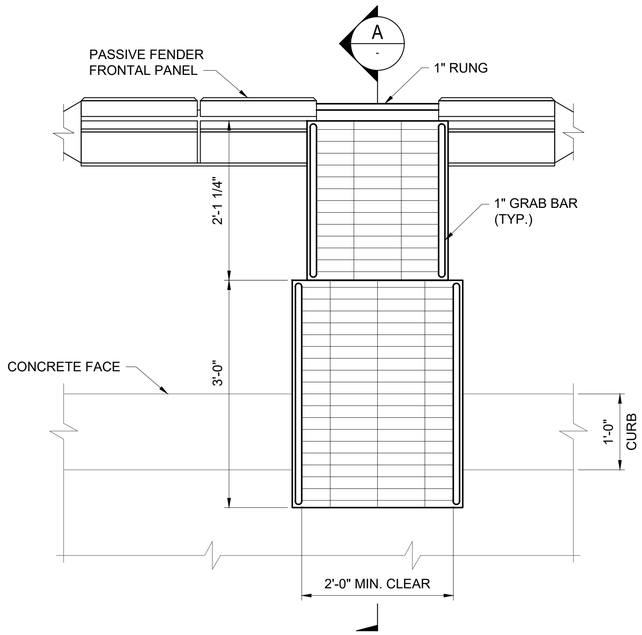
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS
FENDERING AND MOORING - MISCELLANEOUS DETAILS - SHEET 1

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-600.00

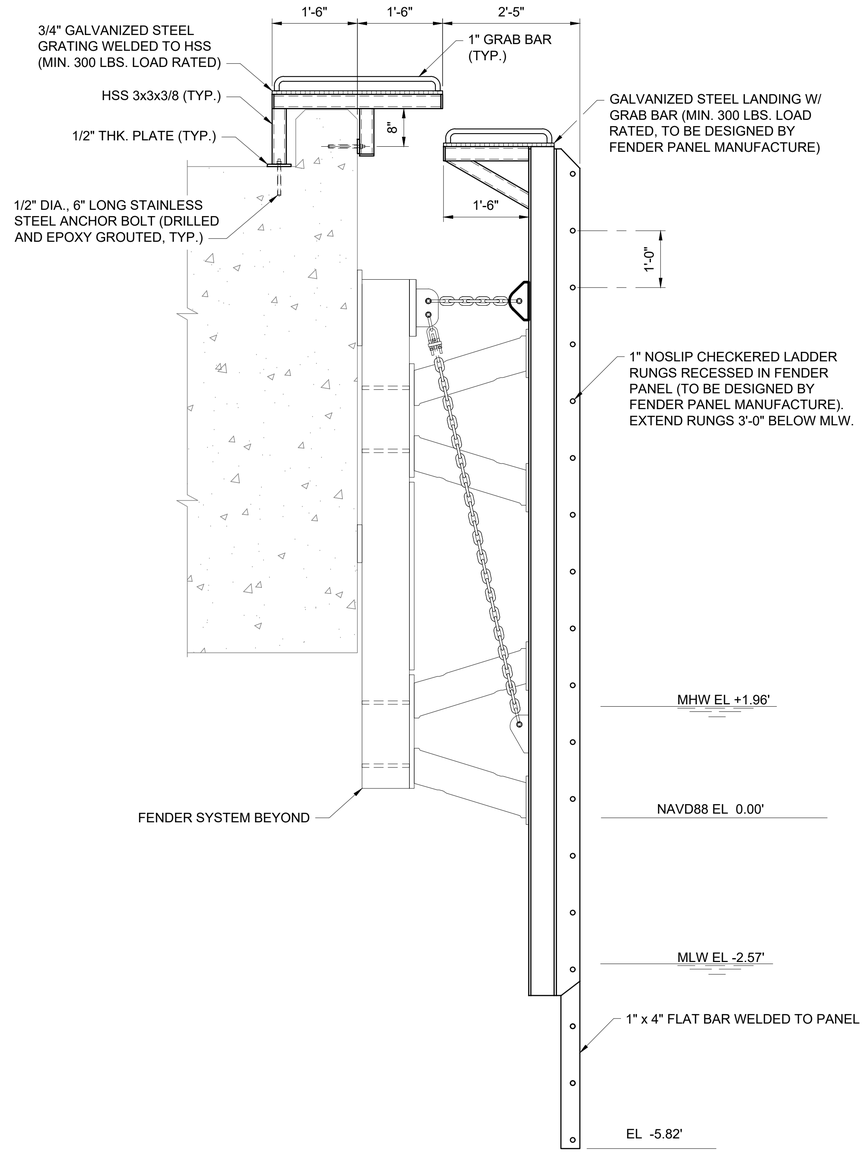
Last Saved By: J.perez
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostami\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-600.00.dwg
Last Date Saved: 10/20/2026 4:00 PM
Date & Time Plotted: 10/20/2026 4:03 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



PLAN - EMBEDDED SAFETY LADDER

SCALE: 1"=1'-0"



A - SECTION - EMBEDDED SAFETY LADDER

SCALE: 3/4" = 1'-0"

1/2"=1'-0" 0 1 2 3 4 FT.

1"=1'-0" 0 1 2 FT.

BID SET

DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE

DRAWN BY: J. PEREZ

CHECKED BY: A. WALLER, PE

DESIGN LEAD: I. TUTUNCU, PE

SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA

PORTFOLIO MANAGER: MATTHEW OSIT, PE

DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION

BUREAU OF ENGINEERING DESIGN & CONSTRUCTION

96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

FENDERING AND MOORING - MISCELLANEOUS DETAILS - SHEET 2

DATE: OCTOBER 2026

SHEET NO:

DRAWING NO. FR-S-601.00

Last Saved By: J.perez
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostam\appdata\local\bentley\projectwise\jacobs-americas-01\d0129599\FR-S-601.00.dwg
Last Date Saved: 10/20/2026 4:00 PM
Date & Time Plotted: 10/20/2026 4:03 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

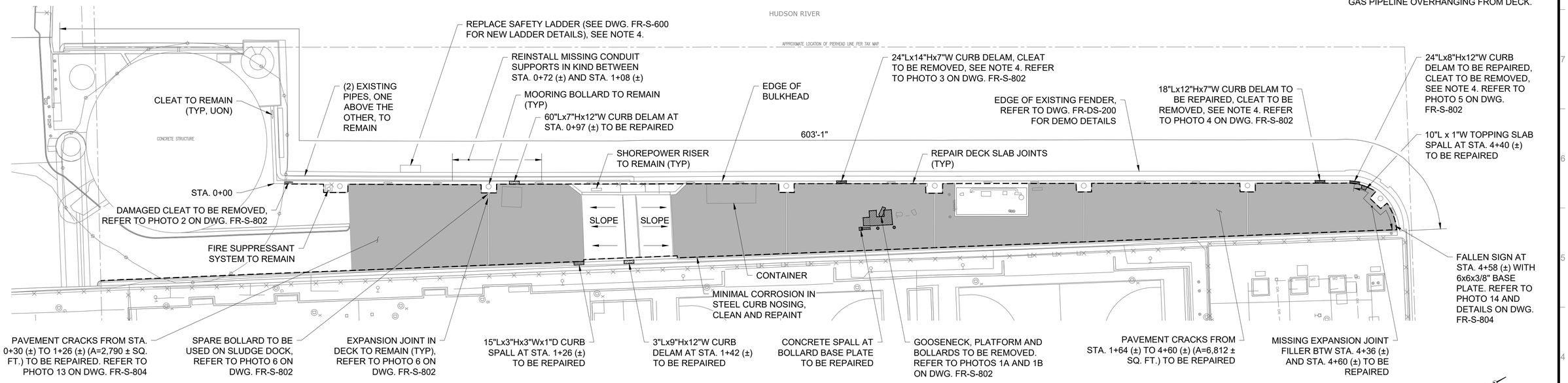
MISCELLANEOUS REPAIR SCHEDULE					
DOCK	START STATION	END STATION	ELEMENT	REFER TO DETAIL DRAWING	NOTES
SOUTH	0+30	1+26	PAVEMENT CRACKS	FR-S-804	34'W PAVEMENT; MULTIPLE CRACKS IN DECK; APPROX. 250LF CRACKING
SOUTH	0+72	1+08	CONDUIT SUPPORTS		FIVE MISSING SUPPORTS;REPLACE IN-KIND
SOUTH	1+64	4+60	PAVEMENT CRACKS	FR-S-804	34'W PAVEMENT; INTERMITTENT CRACKING UP TO 1/16"W
SOUTH	1+64	1+64	STEEL CURB NOSING		CLEAN AND REPAINT
SOUTH	4+36	4+60	MISSING EXPANSION JOINT SEALER		REPLACE IN-KIND
SOUTH	4+58	4+58	FALLEN SIGN	FR-S-804	SEE DETAIL

LEGEND:

- CLEAN AND REPAIR DECK JOINTS
- TO BE REMOVED
- DELAMINATION
- SPALLING
- PAVEMENT CRACKS

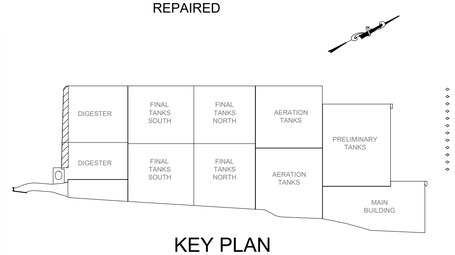
NOTES:

1. CONTRACTOR SHALL VERIFY ALL DEFECTS IN THE FIELD AND BRING ANY DISCREPANCIES TO THE ENGINEER'S ATTENTION.
2. REFER TO DWG. FR-S-802 FOR TYPICAL REPAIR DETAILS.
3. REMOVE 4 EXISTING DAMAGED CLEATS FROM SOUTH DOCK AND REPAIR CONCRETE. OTHER EXISTING MARINE BOLLARDS AND CLEATS SHALL REMAIN, CLEANED AND PAINTED IN PLACE. REMOVED CLEATS SHALL NOT RE-INSTALLED ON REPAIRED CONCRETE.
4. ADJUST OFFSET OF SAFETY LADDER FROM CONCRETE FASCIA TO ALLOW FOR EXISTING GAS PIPELINE OVERHANGING FROM DECK.



CONCRETE REPAIR SCHEDULE									
DOCK	STATION	ELEMENT	OFFSET FROM DOCK EDGE (FT)	LENGTH (IN)	HEIGHT (IN)	WIDTH (IN)	DEPTH (IN)	BARS EXPOSED	NOTES
SOUTH	0+97	CURB	0	60	7	12			PROTECT EXISTING CONDUIT SUPPORTS IN REPAIR AREA AND RETURN TO ORIGINAL CONDITION AFTER REPAIR
SOUTH	1+26	CURB	35 (±)	15	3	3	1		
SOUTH	1+42	CURB	35 (±)	3	9	12			
SOUTH	2+29	CURB	0	24	14	7			
SOUTH	2+39	TOPPING SLAB	25 (±)	20		20	2		REMOVE EXISTING TRAFFIC BOLLARD PRIOR TO CONCRETE REPAIR
SOUTH	4+22	CURB	0	18	12	7			REMOVE EXISTING CLEAT PRIOR TO CONCRETE REPAIR
SOUTH	4+36	CURB	0	24	8	12			REMOVE EXISTING CLEAT PRIOR TO CONCRETE REPAIR
SOUTH	4+40	TOPPING SLAB	1 (±)	10		1			
SOUTH	4+56	CURB	0	24	6				REMOVE EXISTING CLEAT PRIOR TO CONCRETE REPAIR
SLUDGE	0+43	CURB	0	24	8	4			REMOVE EXISTING CLEAT PRIOR TO CONCRETE REPAIR
SLUDGE	0+94	CURB	0	30	8	8			REMOVE EXISTING CLEAT PRIOR TO CONCRETE REPAIR
SLUDGE	2+58	CURB	0	16	12	4			
SLUDGE	3+39	CURB	0	15	20	1	1		
SLUDGE	4+12	CURB	0	30	12	8			REMOVE EXISTING CLEAT PRIOR TO CONCRETE REPAIR
SLUDGE	4+30	CURB	0	36	12	8		3	REMOVE EXISTING CLEAT PRIOR TO CONCRETE REPAIR
SLUDGE	4+86	CURB	0	52	15	9	4	2	REMOVE EXISTING CLEAT PRIOR TO CONCRETE REPAIR
SLUDGE	6+18	STAIR WALL	4.2 (±)		9	9	3.5		

REMOVAL OF DAMAGED CLEATS SCHEDULE					
DOCK	STATION	CONCRETE REPAIR REQUIRED, REFER TO CONCRETE REPAIR SCHEDULES	DOCK	STATION	CONCRETE REPAIR REQUIRED, REFER TO CONCRETE REPAIR SCHEDULES
SOUTH	0+06	YES	SLUDGE	4+30	REPLACE
SOUTH	2+29	YES	SLUDGE	4+68	REPLACE
SOUTH	4+22	YES	SLUDGE	4+86	REPLACE
SOUTH	4+36	YES	SLUDGE	5+19	REPLACE
SLUDGE	0+27	REPLACE	SLUDGE	5+29	REPLACE
SLUDGE	0+43	REPLACE	SLUDGE	5+62	REPLACE
SLUDGE	0+76	REPLACE	SLUDGE	5+81	REPLACE
SLUDGE	0+94	REPLACE	SLUDGE	6+19	REPLACE
SLUDGE	1+32	REPLACE	SLUDGE	6+36	REPLACE
SLUDGE	1+50	REPLACE			
SLUDGE	1+88	REPLACE			
SLUDGE	2+10	REPLACE			
SLUDGE	2+44	REPLACE			
SLUDGE	2+64	REPLACE			
SLUDGE	3+02	REPLACE			
SLUDGE	3+20	REPLACE			
SLUDGE	3+58	REPLACE			
SLUDGE	3+74	REPLACE			
SLUDGE	4+12	REPLACE			



KEY PLAN

1"=20' 0 20 40 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

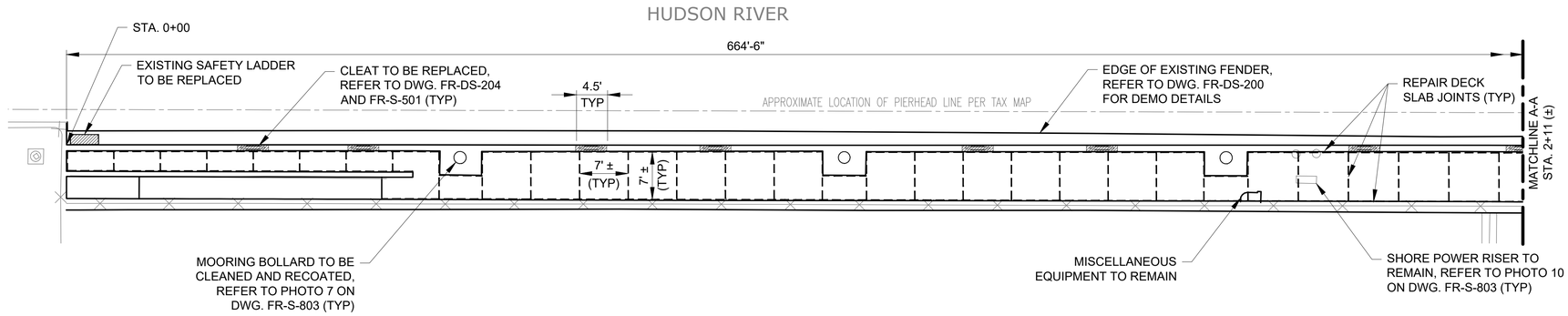
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

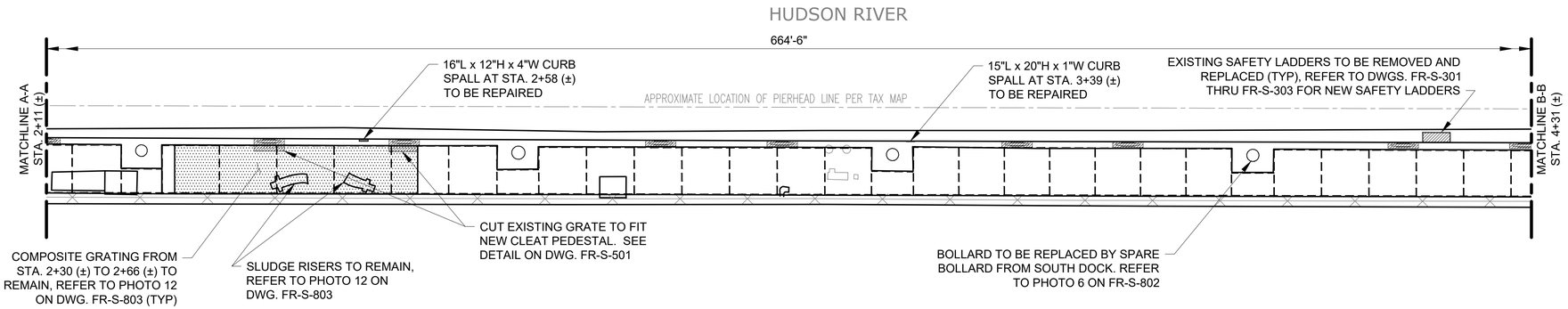
SOUTH DOCK DECK REPAIRS PLAN

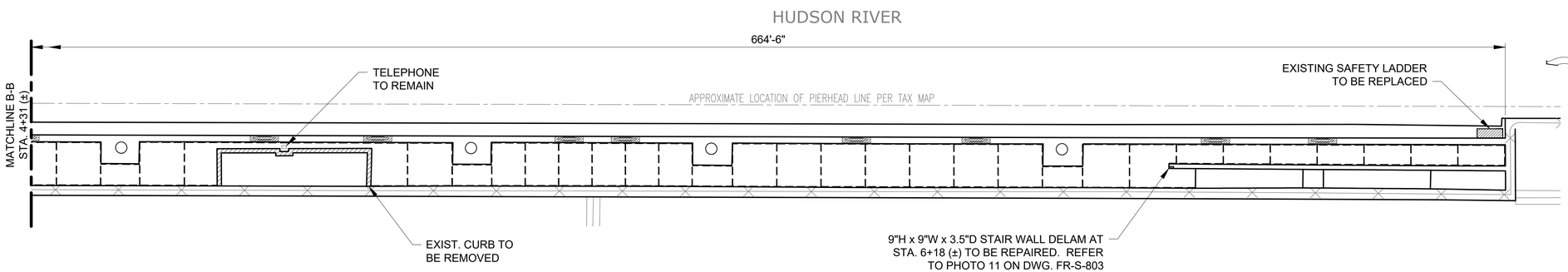
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-800.00

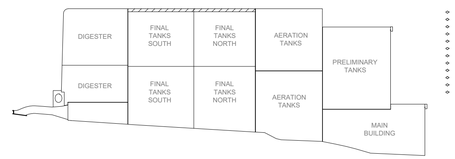
Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-800.00.dwg
Date & Time Plotted: 10/20/2026 4:03 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb
Last Date Saved: 10/20/2026 4:00 PM

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.









KEY PLAN

LEGEND:

- CLEAN AND REPAIR DECK JOINTS
- TO BE DEMO
- DELAMINATION
- SPALLING
- COMPOSITE GRATING

NOTES:

1. CONTRACTOR SHALL VERIFY ALL DEFECTS IN THE FIELD AND BRING ANY DISCREPANCIES TO THE ENGINEER'S ATTENTION.
2. REFER TO DWG. FR-S-802 THRU FR-S-805 FOR TYPICAL REPAIR DETAILS AND PHOTOS.
3. ALL MOORING CLEATS SHALL BE REMOVED FROM SLUDGE DOCK. REFER TO DWG. FR-DS-204 FOR DEMO AND CONCRETE REPAIR DETAILS.
4. BOLLARD AT STA. 3+93 SHALL BE REPLACED WITH SPARE BOLLARD THAT IS CURRENTLY NOT IN USE ON THE SOUTH DOCK.
5. ALL BOLLARDS SHALL BE REMOVED, SENT TO SHOP FOR CLEANING AND REPAINTING, AND REINSTALLED ON EXISTING CONCRETE BASES USING NEW DRILLED AND EPOXY GROUTED ANCHOR RODS. REFER TO DWG. FR-S-500 FOR DETAILS.

0 10 20 FT.
1"=10'

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

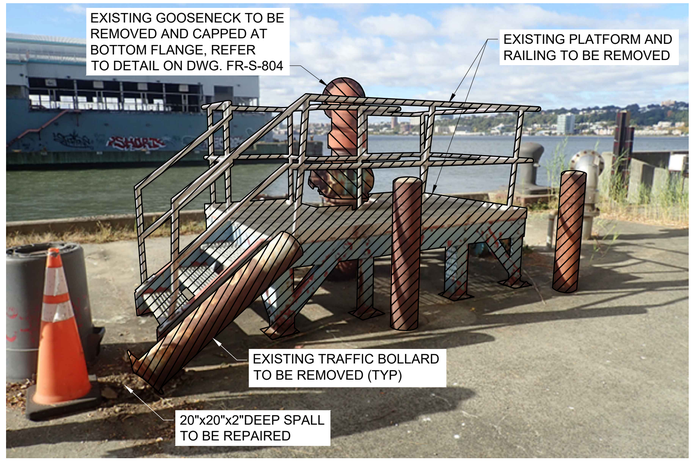
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

SLUDGE DOCK DECK REPAIRS
PLAN

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-801.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-801.00.dwg
Last Date Saved: 10/20/2026 4:00 PM
Date & Time Plotted: 10/20/2026 4:03 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

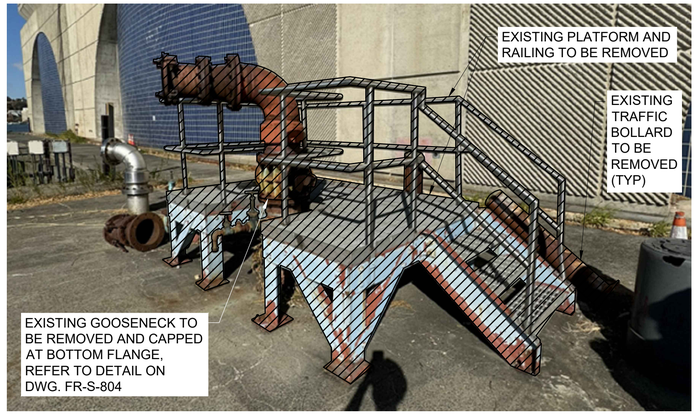
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



GOOSENECK, PLATFORM AND BOLLARD REMOVAL

1A / FR-S-800 PHOTO AT STA. 2+39 (±)

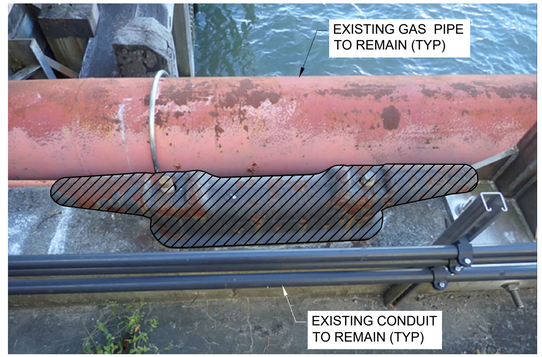
SCALE: NTS



GOOSENECK, PLATFORM AND BOLLARD REMOVAL

1B / FR-S-800 PHOTO AT STA. 2+39 (±)

SCALE: NTS



CLEAT WITH MISSING ANCHOR NUTS TO BE REMOVED

2 / FR-S-800 PHOTO AT STA. 0+06 (±)

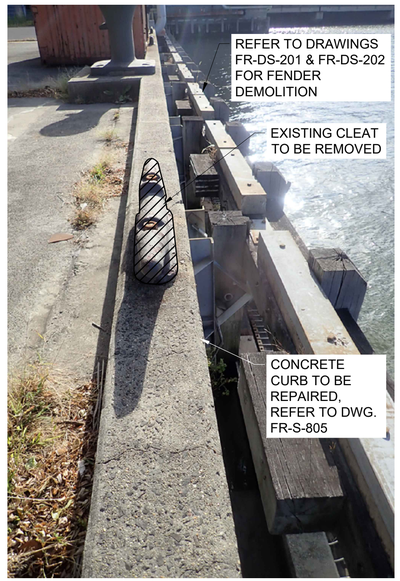
SCALE: NTS

LEGEND:

TO BE REMOVED

NOTES:

1. ONLY CLEATS MARKED FOR REMOVAL ARE TO BE REMOVED. OTHER BOLLARDS AND CLEATS SHALL BE CLEANED AND RE-PAINTED ON SITE.
2. REFER TO DRAWINGS FR-DS-201 THROUGH FR-DS-203 FOR FENDER DEMOLITION DETAILS.
3. CONTRACTOR SHALL PROTECT ALL OTHER ITEMS THAT ARE NOT MARKED FOR DEMOLITION.
4. REFER TO DWG. FR-S-600 FOR TYPICAL ANCHOR BOLT CUTOFF DETAIL.



CLEAT WITH DAMAGED CONCRETE BASE TO BE REMOVED

3 / FR-S-800 PHOTO AT STA. 2+29 (±)

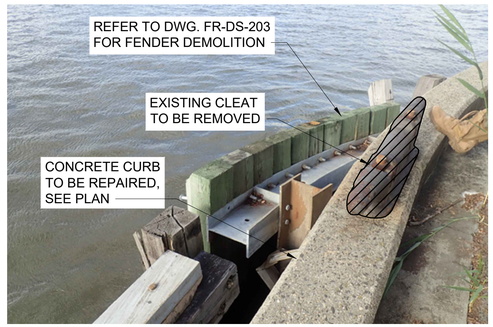
SCALE: NTS



CLEAT WITH DAMAGED CONCRETE BASE TO BE REMOVED

4 / FR-S-800 PHOTO AT STA. 4+22 (±)

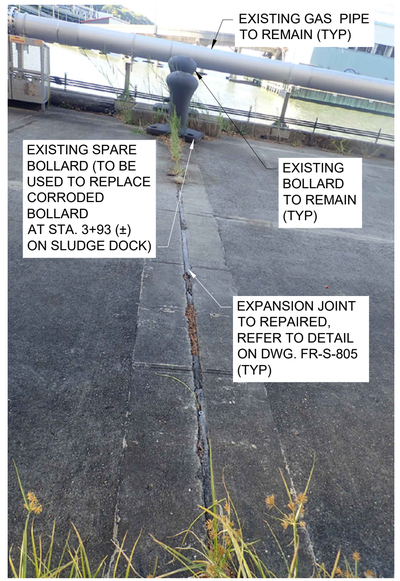
SCALE: NTS



CLEAT WITH DAMAGED CONCRETE BASE TO BE REMOVED

5 / FR-S-800 PHOTO AT STA. 4+36 (±)

SCALE: NTS



TYPICAL EXPANSION JOINT

6 / FR-S-800 PHOTO AT STA. 2+29 (±)

SCALE: NTS

NYC Environmental Protection BEDC/RD

BID SET

DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE

DRAWN BY: J. PEREZ

CHECKED BY: A. WALLER, PE

DESIGN LEAD: I. TUTUNCU, PE

SECTION MANAGER: F. PULIDO, PE

Jacobs

STATE OF NEW YORK ILHAN TUTUNCU LICENSED PROFESSIONAL ENGINEER

NYC Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA

PORTFOLIO MANAGER: MATTHEW OSIT, PE

DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION

BUREAU OF ENGINEERING DESIGN & CONSTRUCTION

96-05 HORACE HARDING EXPRESSWAY 5th FLOOR

CORONA, NEW YORK 11368

www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

SOUTH DOCK DECK REPAIRS

DEMOLITION DETAILS / PHOTOS

DATE: OCTOBER 2026

SHEET NO:

DRAWING NO. FR-S-802.00

Last Saved By: J.perez
Paper Size Plotted/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostam\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-802.00.dwg
Last Date Saved: 10/20/2026 4:00 PM
Date & Time Plotted: 10/20/2026 4:04 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



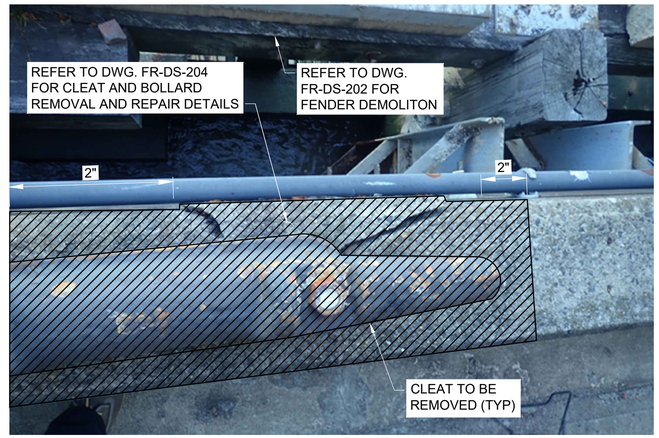
TYPICAL MOORING BOLLARD

7 PHOTO
-- SCALE: NTS



TYPICAL CLEAT

8 PHOTO
-- SCALE: NTS



TYPICAL CLEAT WITH DAMAGED CONCRETE BASE

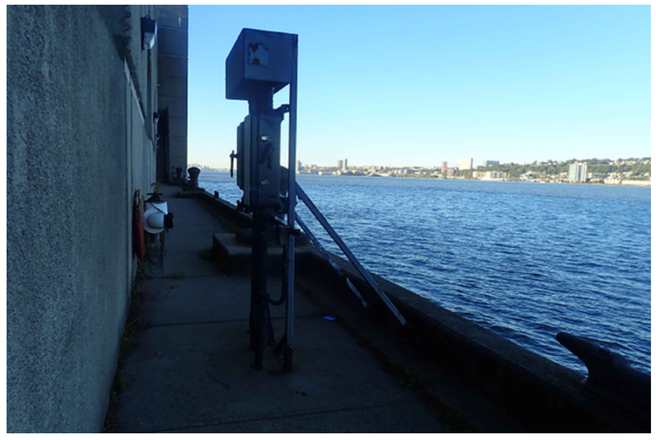
9 PHOTO
-- SCALE: NTS

LEGEND:

TO BE REMOVED

NOTES:

1. CONTRACTOR SHALL ENSURE THAT ALL EXISTING REINFORCEMENT IS PROTECTED DURING REMOVAL OF DAMAGED CONCRETE AND INSTALLATION OF NEW CONCRETE.
2. ALL CLEATS SHALL BE REMOVED FROM SLUDGE DOCK AND REPLACED WITH NEW CLEATS. REFER TO DWGS FR-DS-204 AND FR-S-501.
3. ALL BOLLARDS SHALL BE REMOVED, REPAINTED AND REINSTALLED AT SLUDGE DOCK.



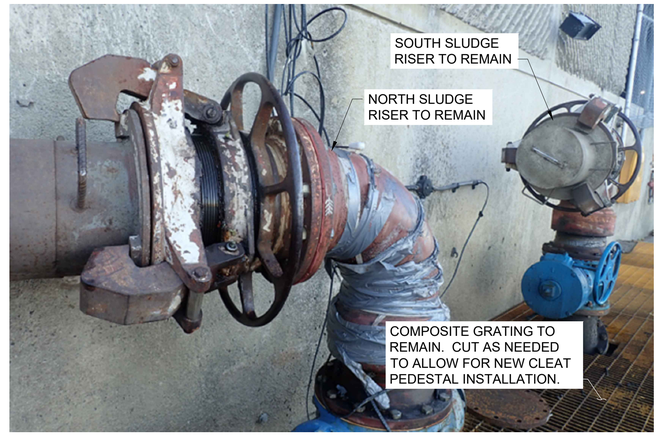
SHORE POWER RISER

10 PHOTO AT STA. 1+80 (±)
-- SCALE: NTS



STAIR WALL DELAMINATION

11 PHOTO AT STA. 6+18 (±)
-- SCALE: NTS



SLUDGE RISERS AND COMPOSITE GRATING

12 PHOTO AT STA. 2+30 (±) TO STA. 2+66 (±)
-- SCALE: NTS

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

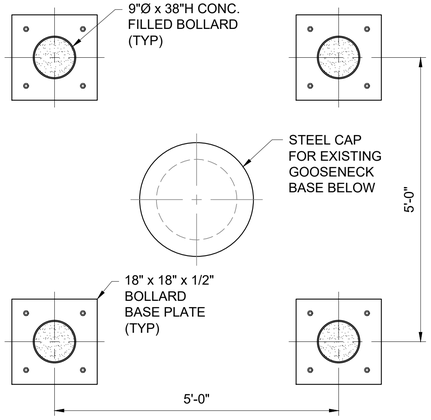
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

SLUDGE DOCK DECK REPAIRS
PHOTOS

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-803.00

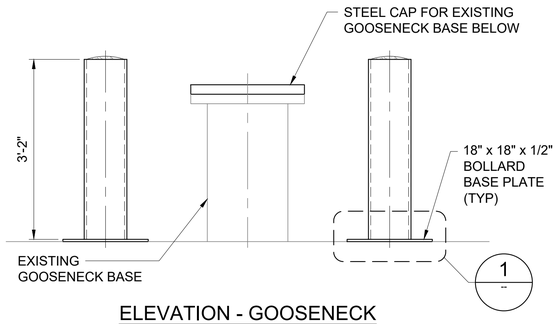
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML Last Date Saved: 10/20/2026 4:00 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-803.00.dwg
Date & Time Plotted: 10/20/2026 4:04 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb



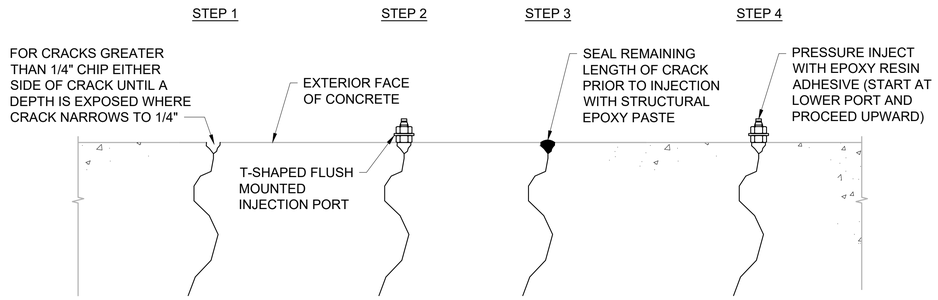
PLAN - EXISTING GOOSENECK W/ CAP AND BOLLARDS

SCALE: 3/4"=1'-0"



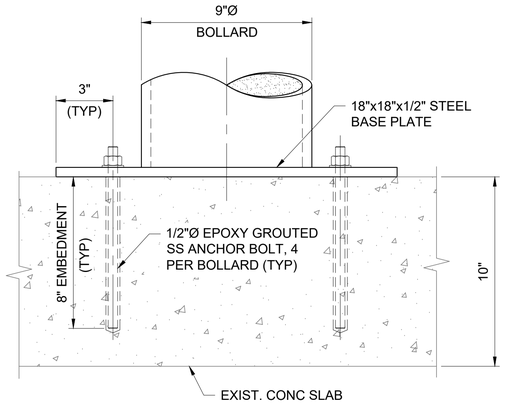
ELEVATION - GOOSENECK TRAFFIC BOLLARDS

SCALE: 3/4"=1'-0"



DETAIL - PAVEMENT CRACK REPAIRS

SCALE: NTS

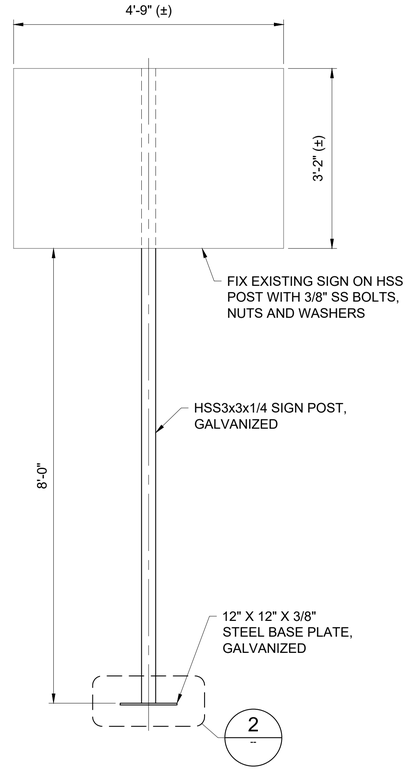


1 -- TRAFFIC BOLLARD ANCHORAGE DETAIL

SCALE: 3" = 1'-0"

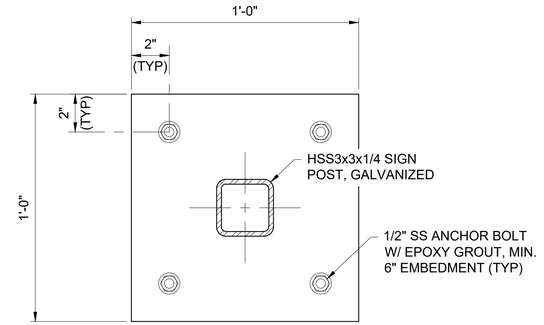
NOTES:

1. SEE PHOTOS 1A AND 1B ON DWG. FR-S-802 FOR EXISTING CONDITIONS AND DEMOLITION EXTENTS.
2. EXISTING GOOSENECK BASE BELOW BOTTOM FLANGE SHALL REMAIN UNCHANGED.
3. ALL BOLTS, WASHERS, AND NUTS SHALL BE 316L STAINLESS STEEL UNO.



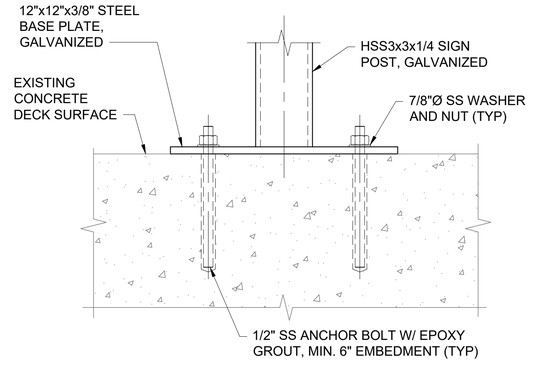
DETAIL - POST FOR DAMAGED SIGN AT STA. 4+58 (±)

SCALE: 3/4"=1'-0"



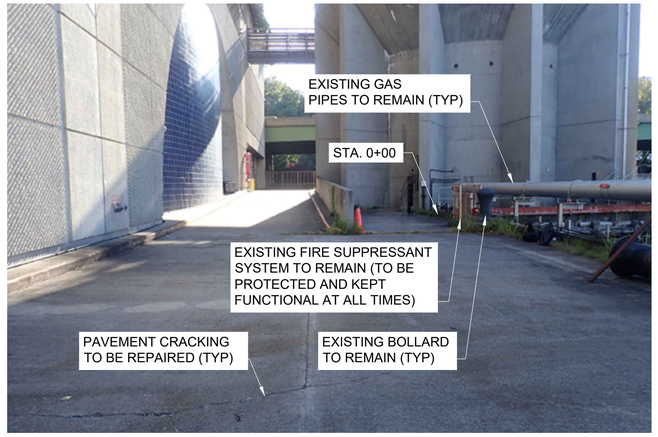
PLAN - POST BASE PLATE

SCALE: 3"=1'-0"



2 -- POST ANCHORAGE DETAIL

SCALE: 3" = 1'-0"



TYPICAL PAVEMENT CRACKING

13 FR-S-800 PHOTO AT STA. 2+29 (±)

SCALE: NTS



EXISTING DAMAGED SIGN

14 FR-S-800 PHOTO AT STA. 4+58 (±)

SCALE: NTS

3/4"=1'-0" 0 1 2 3 FT.

3"=1'-0" 0 3 6 9 IN.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

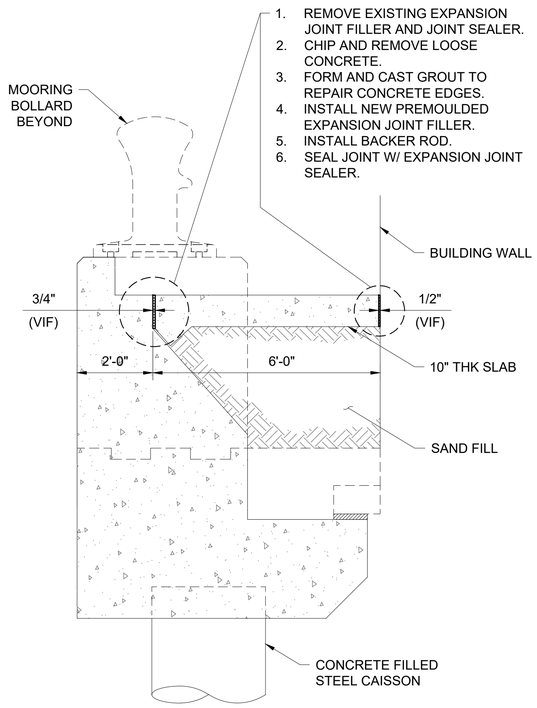
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

SOUTH DOCK DECK REPAIRS
DETAILS

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-804.00

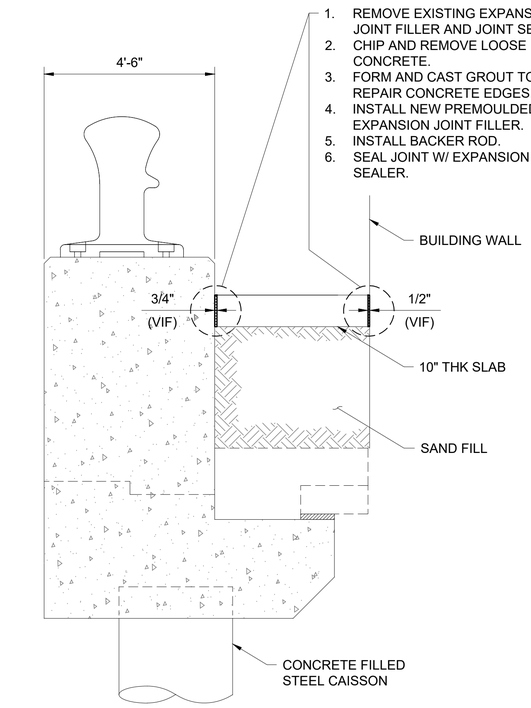
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: J.perez
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostamil\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-804.00.dwg
Date & Time Plotted: 10/20/2026 4:04 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb
Last Date Saved: 10/20/2026 4:00 PM



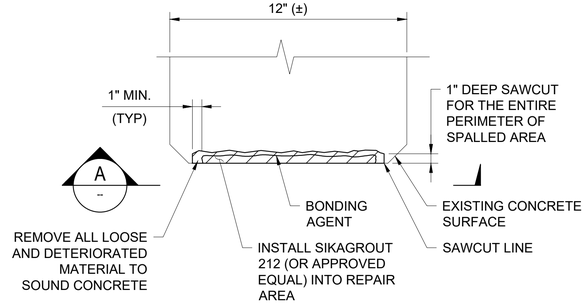
SECTION BETWEEN MOORING BOLLARDS

SCALE: 1/2"=1'-0"



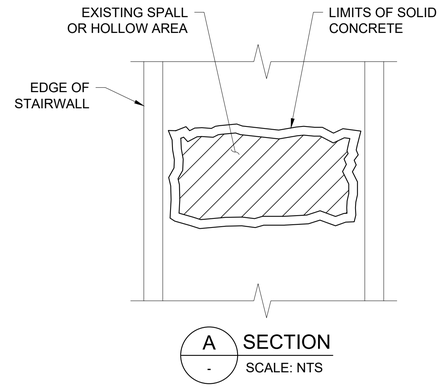
SECTION AT MOORING BOLLARDS

SCALE: 1/2"=1'-0"



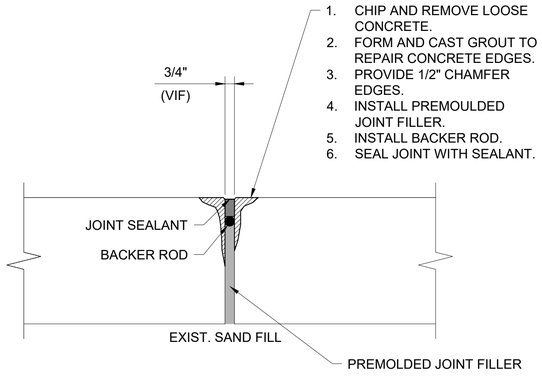
PLAN - STAIRWALL SPALL REPAIR

SCALE: NTS



A - SECTION

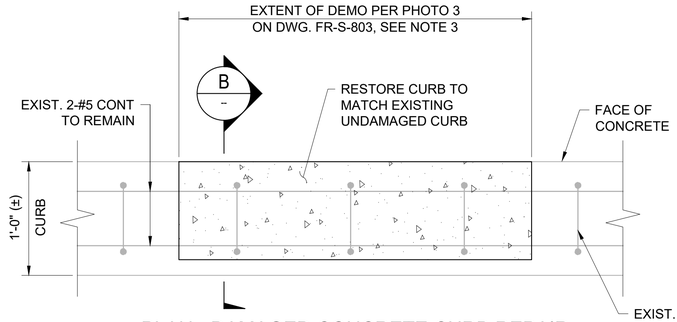
SCALE: NTS



SECTION BETWEEN SLABS

SCALE: NOT TO SCALE

(SECTION BETWEEN SLABS AND WALL / PEDESTAL SIMILAR)

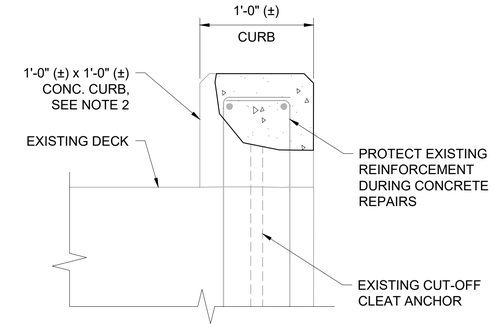


PLAN - DAMAGED CONCRETE CURB REPAIR

SCALE: NTS

NOTES:

1. CONTRACTOR SHALL ENSURE THAT ALL EXISTING REINFORCEMENT IS PROTECTED DURING REMOVAL OF DAMAGED CONCRETE AND INSTALLATION OF NEW CONCRETE.
2. CONCRETE REPAIR SHALL RESTORE THE CURB TO ITS ORIGINAL DESIGN CONDITION.
3. REFER TO CONCRETE REPAIR SCHEDULE ON FR-S-800 FOR DIMENSIONS OF REPAIRS AND OTHER RELEVANT INFORMATION.



B - SECTION

SCALE: NTS

1/2"=1'-0" 0 1 2 3 4 FT.

BID SET

DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

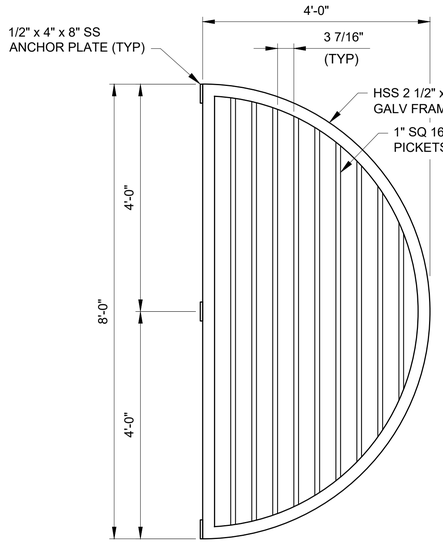
SOUTH DOCK AND SLUDGE DOCK DECK REPAIRS
DETAILS

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-805.00

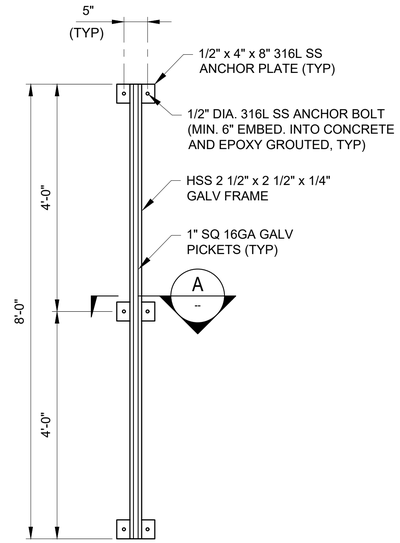
Last Saved By: J.perez
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostamlapp\data\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-805.00.dwg
Last Date Saved: 10/20/2026 4:00 PM
Date & Time Plotted: 10/20/2026 4:04 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



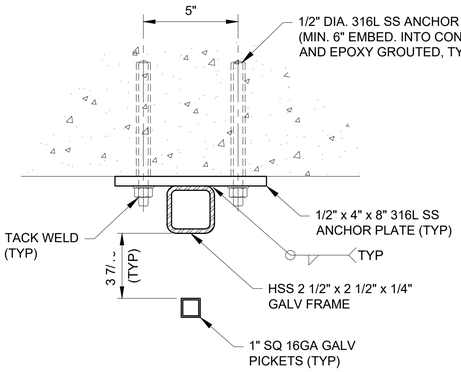


ELEVATION VIEW



FRONT VIEW - MOUNTING HOLE LAYOUT

1 DETAIL -SECURITY FENCE
SCALE: 3/4" = 1'-0"



A SECTION
SCALE: 3" = 1'-0"

NOTES:

1. THE CONTRACTOR SHALL BE REQUIRED TO USE STAINLESS STEEL TYPE 316L HARDWARE AND MOUNTING PARTS, SUCH AS NUTS AND BOLTS, UNLESS OTHER WISE APPROVED IN WRITING BY THE ENGINEER. REFER TO SPECIFICATION SECTION 05 05 23.02.
2. STEEL SHALL BE HOT DIP GALVANIZED AND PAINTED BLACK. REFER TO SPECIFICATION SECTION 09 91 00.
3. TAG WELD ANCHOR BOLT NUT AGAINST VANDALISM.

3/4"=1'-0" 0 1 2 3 FT.
3"=1'-0" 0 3 6 9 IN.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: J. KOUBA / V. PRILUTSKY, PE
DRAWN BY: J. PEREZ
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS
SOUTH DOCK DECK REPAIRS
SECURITY FENCE DETAILS

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-S-806.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\FR-S-806.00.dwg
Last Date Saved: 10/20/2026 4:00 PM
Date & Time Plotted: 10/20/2026 4:04 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

ABBREVIATIONS

A	-	AMPS
AFF	-	ABOVE FINISHED FLOOR
AIC	-	AMPS INTERRUPTING CAPACITY
ATS	-	AUTOMATIC TRANSFER SWITCH
AWG	-	AMERICAN WIRE GAUGE
BKR	-	BREAKER
C	-	CONDUIT
CB	-	CIRCUIT BREAKER
CKT	-	CIRCUIT
CONT	-	CONTINUATION
CP	-	CONTROL PANEL
CPT	-	CONTROL PANEL TRANSFORMER
CT	-	CURRENT TRANSFORMER
CTRL	-	CONTROL
DEP	-	DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIV	-	DIVISION
DS	-	DISCONNECT SWITCH
DWG	-	DRAWING
EL	-	ELEVATION
GFCT	-	GROUND FAULT CURRENT TRANSFORMER
G, GND	-	GROUND
HTC	-	DUAL CIRCUIT HEAT TRACE CONTROLLER
HZ	-	HERTZ
JB	-	JUNCTION BOX
KA	-	KILO AMPERE INTERRUPTING CAPACITY
KCMIL	-	ONE THOUSAND CIRCULAR MILS
KV	-	KILO-VOLTS
KVA	-	KILO-VOLTS-AMPERE
KW	-	KILOWATTS
LP	-	LIGHTING PANEL
MCC	-	MOTOR CONTROL CENTER
MCP	-	MOTOR CIRCUIT PROTECTOR
MPC	-	MINI-POWER CENTER
NEC	-	NATIONAL ELECTRICAL CODE
NFPA	-	NATIONAL FIRE PROTECTION ASSOCIATION
NEMA	-	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NC	-	NORMALLY CLOSED
NO	-	NORMALLY OPEN, NUMBER
NTS	-	NOT TO SCALE
NYCEC	-	NEW YORK CITY ELECTRICAL CODE
P	-	POWER CONNECTION BOX
PB	-	PULL BOX
PH	-	PHASE
PP	-	POWER PANEL
PT	-	POTENTIAL TRANSFORMER
PVC	-	POLYVINYL CHLORIDE
RGS	-	RIGID GALVANIZED STEEL
SPD	-	SURGE PROTECTION DEVICE
SS	-	STAINLESS STEEL
SWGR	-	SWITCHGEAR
T	-	AMBIENT AIR TEMPERATURE SENSOR
TB	-	TERMINAL BLOCK
TSP	-	TWISTED SHIELDED PAIR
TYP	-	TYPICAL
UON	-	UNLESS OTHERWISE NOTED
USS	-	UNIT SUBSTATION
V	-	VOLTS
VAC	-	VOLTS ALTERNATING CURRENT
VFD	-	VARIABLE FREQUENCY DRIVE
W	-	WATTS / WIRES
WP	-	WEATHERPROOF
XFMR	-	TRANSFORMER
XP	-	EXPLOSION PROOF

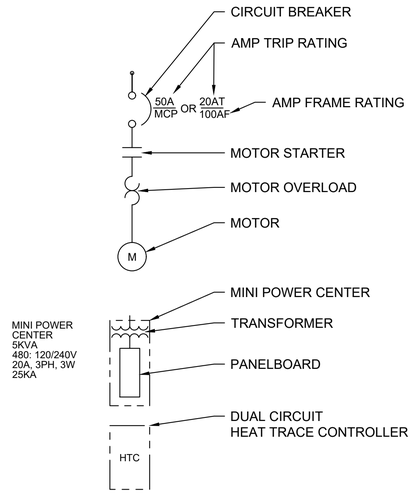
GENERAL NOTES

1. LIGHTING CONDUITS INCLUDING CIRCUIT ROUTING, JUNCTION BOXES, ETC, ARE SHOWN DIAGRAMMATICALLY. EXACT RUNS AND PLACEMENT OF EQUIPMENT SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD, EXCEPT WHERE SPECIFICALLY DIMENSIONED ON THE PLANS.
2. WALL & FLOOR OPENINGS SPECIFICALLY SHOWN SHALL BE COORDINATED BETWEEN TRADES.
3. ALL PENETRATIONS FOR CONDUIT ENTRIES TO ELECTRICAL ENCLOSURES LOCATED IN DAMP OR WET AREAS SHALL BE MADE FROM THE BOTTOM OR SIDE OF ENCLOSURE.
4. ALL CONDUITS SHALL BE RUN EXPOSED.
5. ALL JUNCTION BOXES SHALL BE SIZED BY THE CONTRACTOR PER NYCEC AND SHALL BE DETERMINED IN THE FIELD.
6. WHERE SHOWN ON CONTRACT DRAWINGS THE WORD "PROVIDED" SHALL MEAN "FURNISHED AND INSTALLED".REFER TO THE STRUCTURAL DRAWINGS FOR EXPANSION JOINT LOCATIONS. THE CONTRACTOR SHALL VERIFY STRUCTURAL JOINTS IN THE FIELD PRIOR TO INSTALLATION OF CONDUIT.

DEMOLITION NOTES

1. THE CONTRACTOR SHALL COORDINATE ALL DEMOLITION WORK WITH THE CITY AND THE ENGINEER. NO EQUIPMENT SHALL BE REMOVED UNTIL APPROVED BY THE ENGINEER.
2. THE CONTRACTOR SHALL DE-ENERGIZE AND SAFE-OFF ALL EQUIPMENT SHOWN TO BE REMOVED UNDER THIS CONTRACT AS REQUIRED. ALL OPENINGS IN WALLS, FLOORS, ENCLOSURES, ETC LEFT DUE TO DEMOLITION OF ELECTRICAL EQUIPMENT SHALL BE PATCHED, SEALED AND PAINTED TO MATCH EXISTING MATERIALS AND SURFACES.
3. THE CONTRACTOR SHALL NOT CONSIDER ANY OF THE DEMOLISHED COMPONENTS TO BE SALVAGEABLE BY THE CONTRACTOR UNTIL AFTER THE CITY HAS OFFICIALLY DETERMINED THEY DO NOT INTEND TO RETAIN THE COMPONENT.

SINGLE LINE DIAGRAM SYMBOLS



LIGHTING LAYOUT SYMBOLS

A
15
WALL MOUNTED LIGHTING FIXTURE
A - INDICATES FIXTURE TYPE
15 - INDICATES CIRCUIT NUMBER

POWER LAYOUT SYMBOLS

EXPOSED CONDUIT
CONDUIT TURNING DOWN
CONDUIT TURNING UP

HEAT TRACE LAYOUT SYMBOLS

SPLICE KIT
P POWER CONNECTION BOX
E END SEAL
T AMBIENT AIR TEMPERATURE SENSOR
HEAT TRACE CABLE

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
##			

DESIGNED BY: D. PINEDO, P.E.
DRAWN BY: M. GODBY
CHECKED BY: D. FREDERICKS, P.E.
DESIGN LEAD: D. FREDERICKS, P.E.
SECTION MANAGER: H. ELZOGHBY, P.E.

JACOBS SAVIN ENGINEERS, P.C.

STATE OF NEW YORK DAVID G. FREDERICKS 086076 LICENSED PROFESSIONAL ENGINEER

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSSIT

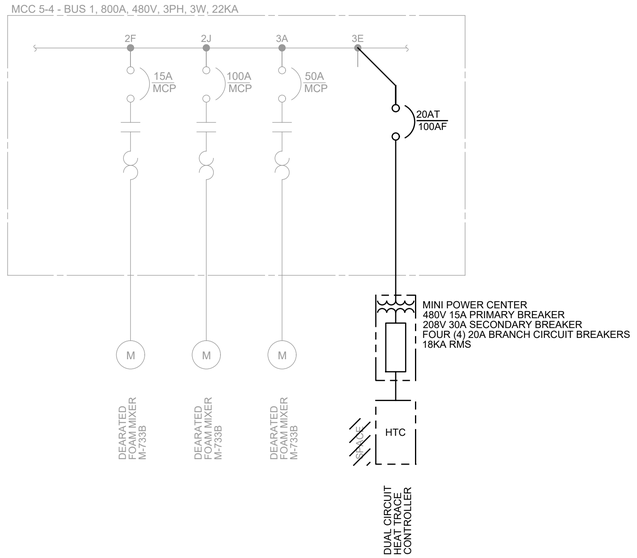
"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WWRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

ELECTRICAL
GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. SD-E-001.00



ELECTRICAL ROOM 13: MCC 5-4 PARTIAL SINGLE LINE DIAGRAM

SCALE: NONE

NOTES:

1. FOR NOTES, SYMBOLS AND ABBREVIATIONS, SEE DWG SD-E-001.
2. EXISTING MCC 5-4 IS MANUFACTURED BY FEDERAL PACIFIC. THE RETROFIT CIRCUIT BREAKER SHALL BE COMPATIBLE WITH THE EXISTING EQUIPMENT AND MATCH EXISTING SHORT CIRCUIT RATING.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
##			

DESIGNED BY: D. PINEDO, P.E.
DRAWN BY: M. GODBY
CHECKED BY: D. FREDERICKS, P.E.
DESIGN LEAD: D. FREDERICKS, P.E.
SECTION MANAGER: H. ELZOGHBY, P.E.

JACOBS SAVIN ENGINEERS, P.C.

STATE OF NEW YORK — DAVID G. FREDERICKS — 086076 — LICENSED PROFESSIONAL ENGINEER

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSSIT

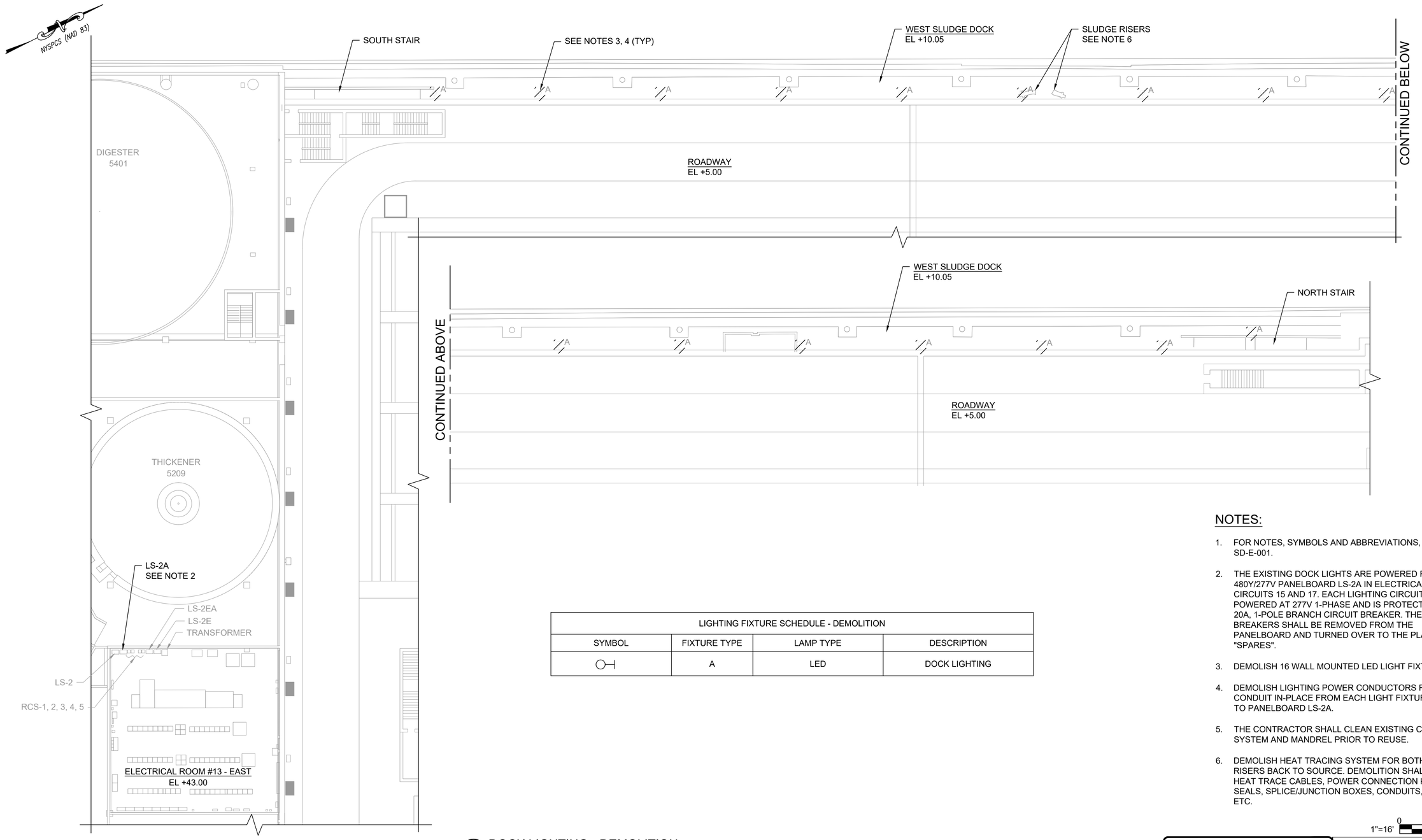
"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WWRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

ELECTRICAL
MCC 5-4 PARTIAL SINGLE LINE DIAGRAM MODIFICATIONS

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. SD-E-002.00



LIGHTING FIXTURE SCHEDULE - DEMOLITION			
SYMBOL	FIXTURE TYPE	LAMP TYPE	DESCRIPTION
○⊣	A	LED	DOCK LIGHTING

NOTES:

1. FOR NOTES, SYMBOLS AND ABBREVIATIONS, SEE DWG SD-E-001.
2. THE EXISTING DOCK LIGHTS ARE POWERED FROM 480Y/277V PANELBOARD LS-2A IN ELECTRICAL #13, CIRCUITS 15 AND 17. EACH LIGHTING CIRCUIT IS POWERED AT 277V 1-PHASE AND IS PROTECTED BY A 20A, 1-POLE BRANCH CIRCUIT BREAKER. THE CIRCUIT BREAKERS SHALL BE REMOVED FROM THE PANELBOARD AND TURNED OVER TO THE PLANT AS "SPARES".
3. DEMOLISH 16 WALL MOUNTED LED LIGHT FIXTURES.
4. DEMOLISH LIGHTING POWER CONDUCTORS FROM CONDUIT IN-PLACE FROM EACH LIGHT FIXTURE BACK TO PANELBOARD LS-2A.
5. THE CONTRACTOR SHALL CLEAN EXISTING CONDUIT SYSTEM AND MANDREL PRIOR TO REUSE.
6. DEMOLISH HEAT TRACING SYSTEM FOR BOTH SLUDGE RISERS BACK TO SOURCE. DEMOLITION SHALL INCLUDE HEAT TRACE CABLES, POWER CONNECTION KITS, END SEALS, SPLICE/JUNCTION BOXES, CONDUITS, WIRES ETC.

1 DOCK LIGHTING - DEMOLITION
SCALE: 1/16" = 1'-0"

0 16 32 FT.
1"=16'

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

BID SET
DATE ISSUED: OCTOBER 2026

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
##			

DESIGNED BY: D. PINEDO, P.E.
DRAWN BY: M. GODBY
CHECKED BY: D. FREDERICKS, P.E.
DESIGN LEAD: D. FREDERICKS, P.E.
SECTION MANAGER: H. ELZOGHBY, P.E.

JACOBS SAVIN ENGINEERS, P.C.

STATE OF NEW YORK DAVID G. FREDERICKS LICENSED PROFESSIONAL ENGINEER 086076

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSSIT

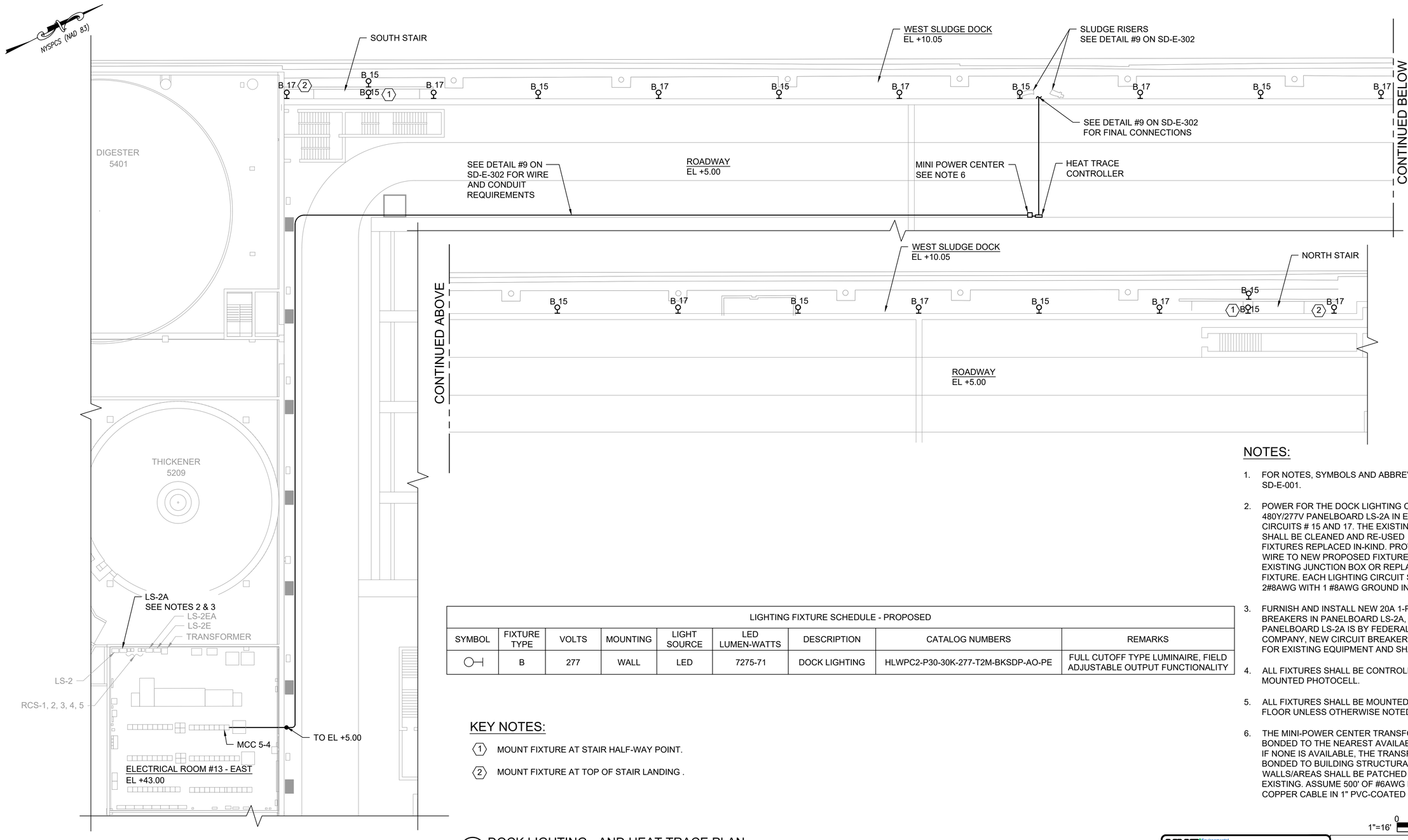
"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WWRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

EXISTING SLUDGE DOCK LIGHTING AND HEAT TRACE DEMOLITION PLAN

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. SD-E-101.00



NOTES:

1. FOR NOTES, SYMBOLS AND ABBREVIATIONS, SEE DWG SD-E-001.
2. POWER FOR THE DOCK LIGHTING CIRCUITS SHALL BE FROM 480Y/277V PANELBOARD LS-2A IN ELECTRICAL ROOM #13, CIRCUITS # 15 AND 17. THE EXISTING CONDUIT SYSTEM SHALL BE CLEANED AND RE-USED FOR CONNECTIONS TO FIXTURES REPLACED IN-KIND. PROVIDE NEW CONDUIT AND WIRE TO NEW PROPOSED FIXTURES FROM NEAREST EXISTING JUNCTION BOX OR REPLACED IN-KIND LIGHT FIXTURE. EACH LIGHTING CIRCUIT SHALL CONSIST OF 2#8AWG WITH 1 #8AWG GROUND IN 3/4" CONDUIT.
3. FURNISH AND INSTALL NEW 20A 1-POLE BRANCH CIRCUIT BREAKERS IN PANELBOARD LS-2A, CIRCUITS 15 AND 17. PANELBOARD LS-2A IS BY FEDERAL PACIFIC ELECTRIC COMPANY, NEW CIRCUIT BREAKERS SHALL BE SUITABLE FOR EXISTING EQUIPMENT AND SHALL BE RATED 30KA.
4. ALL FIXTURES SHALL BE CONTROLLED BY INTEGRALLY MOUNTED PHOTOCELL.
5. ALL FIXTURES SHALL BE MOUNTED AT 10' ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED.
6. THE MINI-POWER CENTER TRANSFORMER SHALL BE BONDED TO THE NEAREST AVAILABLE GROUNDING SYSTEM. IF NONE IS AVAILABLE, THE TRANSFORMER SHALL BE BONDED TO BUILDING STRUCTURAL STEEL. ALL DISTURBED WALLS/AREAS SHALL BE PATCHED AND PAINTED TO MATCH EXISTING. ASSUME 500' OF #6AWG BARE STRANDED COPPER CABLE IN 1" PVC-COATED RGS CONDUIT.

LIGHTING FIXTURE SCHEDULE - PROPOSED								
SYMBOL	FIXTURE TYPE	VOLTS	MOUNTING	LIGHT SOURCE	LED LUMEN-WATTS	DESCRIPTION	CATALOG NUMBERS	REMARKS
⊖⊣	B	277	WALL	LED	7275-71	DOCK LIGHTING	HLWPC2-P30-30K-277-T2M-BKSDP-AO-PE	FULL CUTOFF TYPE LUMINAIRE, FIELD ADJUSTABLE OUTPUT FUNCTIONALITY

KEY NOTES:

(1) MOUNT FIXTURE AT STAIR HALF-WAY POINT.

(2) MOUNT FIXTURE AT TOP OF STAIR LANDING .

(1) DOCK LIGHTING - AND HEAT TRACE PLAN

SCALE: 1/16" = 1'-0"

1"=16' 0 16 32 FT.

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

BID SET
DATE ISSUED: OCTOBER 2026

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1			
2			
3			
4			
5			
6			
7			
##			

DESIGNED BY: D. PINEDO, P.E.
DRAWN BY: M.GODBY
CHECKED BY: D. FREDERICKS, P.E.
DESIGN LEAD: D. FREDERICKS, P.E.
SECTION MANAGER: H. ELZOGHBY, P.E.

JACOBS SAVIN ENGINEERS, P.C.

STATE OF NEW YORK DAVID G. FREDERICKS LICENSED PROFESSIONAL ENGINEER 086076

Environmental Protection

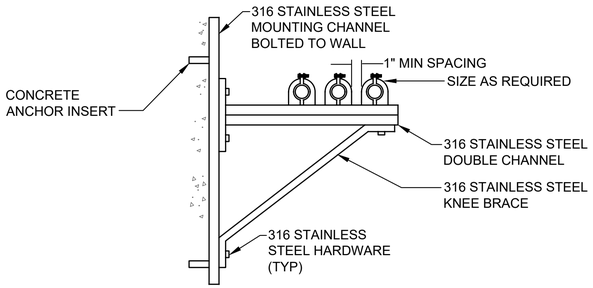
ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSSIT

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WWRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS
SLUDGE DOCK LIGHTING AND HEAT TRACE PLAN

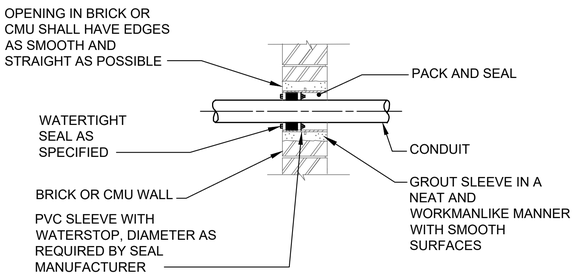
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. SD-E-201.00



1 SD-E-201

TYPICAL WALL-MOUNTED CONDUIT RACK

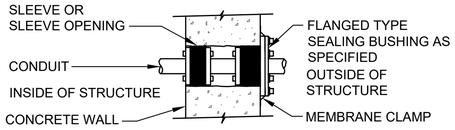
SCALE: NOT TO SCALE



2 SD-E-201

WATERTIGHT CONDUIT PENETRATION THROUGH BLOCK WALL

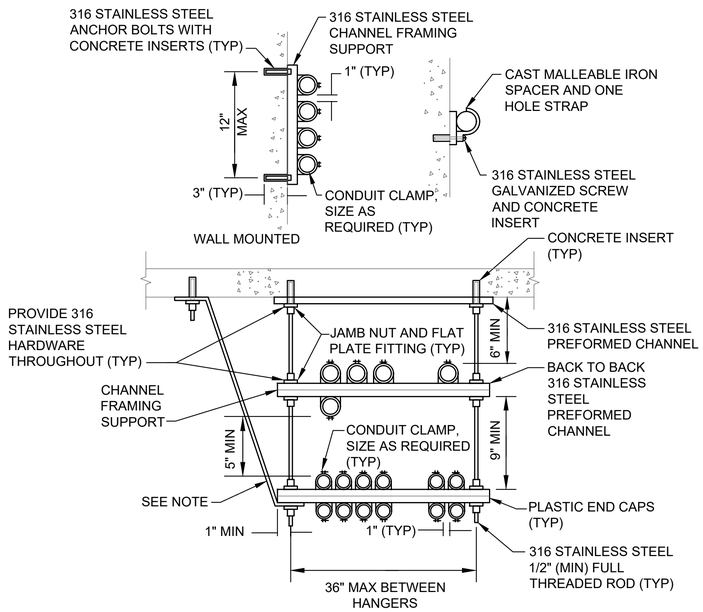
SCALE: NOT TO SCALE



3 SD-E-201

ABOVE GRADE CONCRETE PENETRATION THROUGH EXISTING WALL

SCALE: NOT TO SCALE



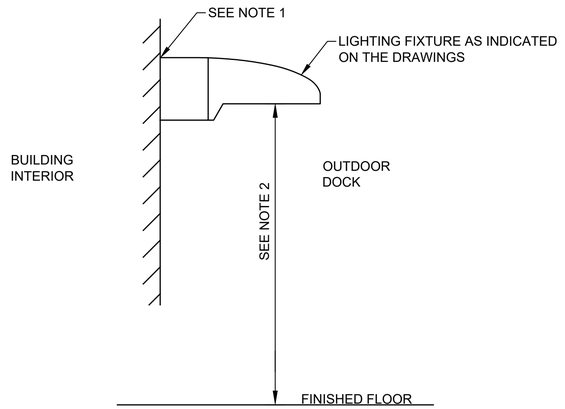
4 SD-E-201

TYPICAL TRAPEZE, WALL AND CEILING CONDUIT MOUNTING

SCALE: NOT TO SCALE

NOTE:

1. PROVIDE SEISMIC RESTRAINTS PER NYC CODE AND APPLICABLE SECTIONS OF DIVISION 26 SPECIFICATIONS. ALL DESIGNED RESTRAINT SYSTEMS SHALL BE SIGNED AND SEALED BY A LICENSED ENGINEER IN THE STATE OF NEW YORK.



5 SD-E-201

TYPICAL WALL-MOUNTED FIXTURE DETAIL

SCALE: NOT TO SCALE

NOTES:

1. MOUNT ON EXTERIOR WALL OF BUILDING.
2. MOUNTING HEIGHT SHALL BE AS INDICATED ON THE DRAWINGS.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: D. PINEDO, P.E.
DRAWN BY: M. GODBY
CHECKED BY: D. FREDERICKS, P.E.
DESIGN LEAD: D. FREDERICKS, P.E.
SECTION MANAGER: H. ELZOGHBY, P.E.

JACOBS SAVIN ENGINEERS, P.C.

STATE OF NEW YORK DAVID G. FREDERICKS LICENSED PROFESSIONAL ENGINEER 086076

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSSIT

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

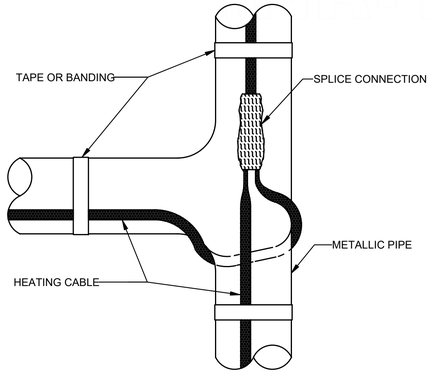
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WWRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

ELECTRICAL
DETAILS
SHEET 1 OF 2

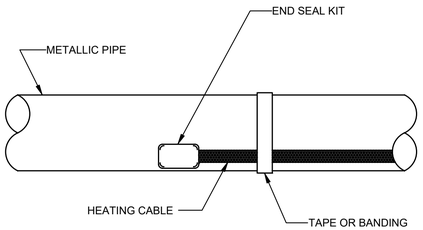
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. SD-E-301.00

ARCHIVE COPY DO NOT BID OR USE



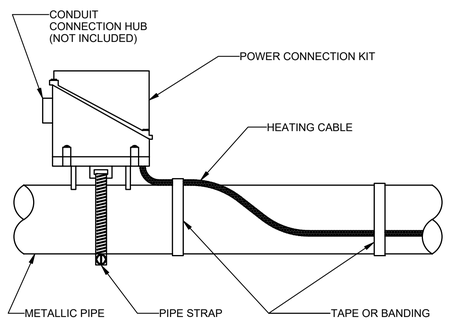
6 - TYPICAL TEE SPLICE CONNECTION DETAIL

SCALE: NOT TO SCALE



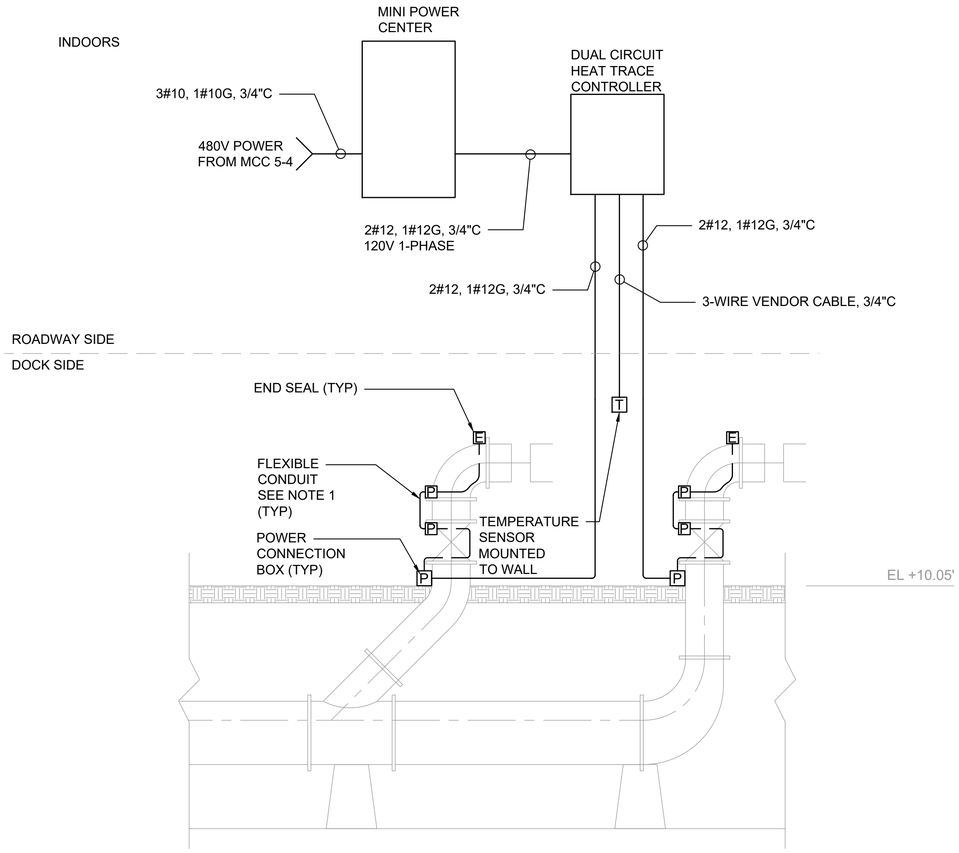
7 - TYPICAL END SEAL INSTALLATION DETAIL

SCALE: NOT TO SCALE



8 - TYPICAL POWER CONNECTION BOX DETAIL

SCALE: NOT TO SCALE



9 - SD-E-210 HEAT TRACE CONNECTION SCHEMATIC

SCALE: NOT TO SCALE

NOTE:
1. PROVIDE SUFFICIENT LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT SLACK TO ALLOW FOR A FULL 180 DEGREE ROTATION OF PIPE ELBOW.

NOTES:

1. FOR NOTES, SYMBOLS AND ABBREVIATIONS, SEE DWG SD-E-001.
2. THE HEAT TRACE SYSTEM IS SHOWN DIAGRAMMATICALLY. THE INSTALLATION AND QUANTITY OF HEAT TRACE CABLE, POWER CONNECTION BOXES, END SEALS, SPLICE KITS, RIGID/FLEXIBLE CONDUITS, AND TEMPERATURE SENSOR SHALL ALL BE COORDINATED WITH THE HEAT TRACE VENDOR AND WITH SPECIFICATION 40 41 13 - HEAT TRACING FOR PLUMBING PIPES AND THE MECHANICAL SPECIFICATIONS.

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: D. PINEDO, P.E.
DRAWN BY: M. GODBY
CHECKED BY: D. FREDERICKS, P.E.
DESIGN LEAD: D. FREDERICKS, P.E.
SECTION MANAGER: H. ELZOGHBY, P.E.

JACOBS / SAVIN ENGINEERS, P.C.

STATE OF NEW YORK DAVID G. FREDERICKS 086076 LICENSED PROFESSIONAL ENGINEER

NYC Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSSIT

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WWRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

ELECTRICAL
DETAILS
SHEET 2 OF 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. SD-E-302.00

NYC Environmental Protection BEDC/HD

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

GENERAL NOTES

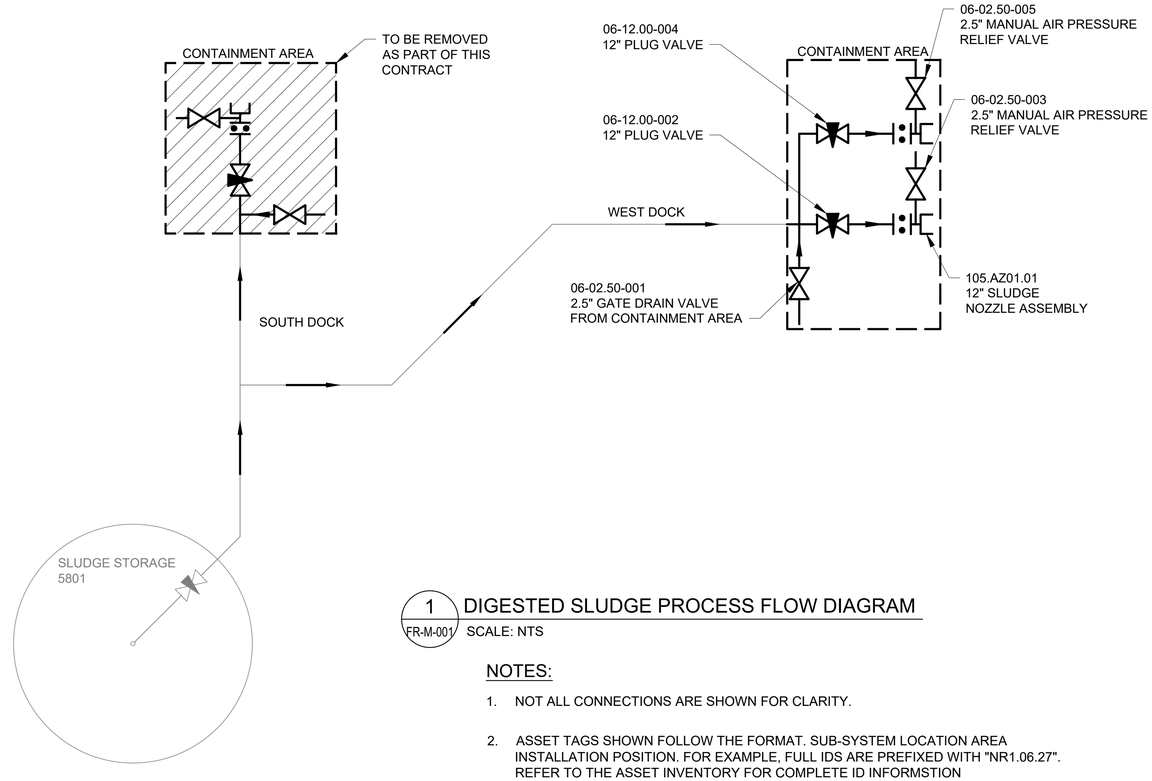
1. ELEVATIONS SHOWN ON THE CONTRACT DRAWINGS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
2. DIMENSIONS AND LOCATIONS OF EXISTING PIPING, EQUIPMENT, APPURTENANCES, AND STRUCTURES HAVE BEEN OBTAINED FROM EXISTING RECORD AND/OR CONTRACT DRAWINGS. ADDITIONAL INFORMATION HAS BEEN OBTAINED TROUGH FIELD SURVEYS CONDUCTED BY OTHERS.
3. CERTAIN EXISTING PIPES, EQUIPMENT AND STRUCTURES NOT DIRECTLY RELATED TO THE WORK UNDER THIS CONTRACT HAVE BEEN OMITTED FOR CLARITY. IT IS NOT WARRANTED THAT THE LOCATIONS AND DIMENSIONS OF THE EXISTING PIPING, EQUIPMENT, AND STRUCTURES ARE EXACT AND THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL DIMENSIONS AND LOCATIONS OF EXISTING PIPING, EQUIPMENT, AND STRUCTURES AS REQUIRED FOR THE NEW CONSTRUCTION.
4. ALL EXISTING SIGNS IN THE CONTRACT AREA ARE TO REMAIN INTACT. SIGNS DAMAGED SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ANY SIGNS THAT REQUIRE RESETTING SHALL BE PLACED IN A FINAL POSITION DETERMINED BY THE OWNER. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR SIGNS DAMAGED BY HIS OPERATIONS.
5. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER A MINIMUM OF SEVENTY-TWO (72) HOURS PRIOR TO THE START OF CONSTRUCTION. IN ADDITION, IF WORK SHOULD BE STOPPED AND RESTARTED FOR ANY REASON, THE CONTRACTOR SHALL GIVE THE ENGINEER A MINIMUM OF SEVENTY-TWO (72) HOURS NOTICE.
6. THE DEMOLITION, MODIFICATION, OR ALTERATION OF EXISTING PIPING, SLUDGE NOZZLE ASSEMBLIES, EQUIPMENT, AND STRUCTURES SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS AND CODES. REFER TO THE SPECIFICATIONS FOR ADDITIONAL DETAILS.
7. CONTRACTOR SHALL REMOVE ALL EXISTING EMBEDDED ITEMS ASSOCIATED WITH DEMOLISHED EQUIPMENT.
8. CONTRACTOR'S WORK SHALL NOT INTERFERE WITH DAILY SLUDGE VESSEL LOADING OPERATION VIA EITHER THE NORTH DOCK OR WEST DOCK, PERMANENT OR TEMPORARY SLUDGE NOZZLE ASSEMBLY, PERMANENT OR TEMPORARY SLUDGE LINES, AND SHALL NOT INTERFERE WITH OTHER FACILITY OPERATIONS DURING CONSTRUCTION AND CONSTRUCTION PHASING CONSTRAINTS.
9. ALL DIMENSIONS, FIELD CONDITIONS, AND QUANTITIES SHALL BE VERIFIED BY THE CONTRACTOR BEFORE STARTING NEW WORK.
10. WHERE ITEMS ARE NOTED TO BE REMOVED OR DEMOLISHED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND OFFSITE DISPOSAL OF ANY REMOVED OR DEMOLISHED MATERIAL AND EQUIPMENT.
11. ALL EXISTING EQUIPMENT AND MATERIALS SCHEDULED TO REMAIN IN THE VICINITY OF DEMOLITION AREAS SHALL BE PROTECTED BY THE CONTRACTOR TO PREVENT DAMAGE. ANY EXISTING EQUIPMENT OR MATERIALS THAT ARE DAMAGED BY THE CONTRACTOR DURING THE PERFORMANCE OF THE WORK SHALL BE REPLACES AT NO COST TO THE CITY.
12. THE CONTRACTOR SHALL OBTAIN AND HAVE ON THE JOB SITE, AT ALL TIMES, ALL PERMITS AS REQUIRED BY PERMITTING AGENCY. THE CONTRACTOR SHALL BEAR ALL COTS OF OBTAINING THESE PERMITS.
13. ALL EQUIPMENT, MATERIALS, CONSTRUCTION METHODS, AND WORKMANSHIP SHALL CONFORM TO THE CONSTRUCTION SPECIFICATIONS AND DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SUBMITTAL OF SHOP DRAWINGS FOR APPROVAL BY THE ENGINEER PRIOR TO FURNISHING AND INSTALLATION OF EQUIPMENT AND MATERIALS ASSOCIATED WITH THE REFERENCED STANDARDS AND SPECIFICATIONS.
14. NO ATTEMPT HAS BEEN MADE TO SHOW ALL PIPE SUPPORTS, ANCHORS,EXPANSION DEVICES ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGNING AND FURNISHING ALL NECESSARY SUPPORTS IN ACCORDANCE WITH THE SPECIFICATIONS, SUBJECT TO REVIEW BY THE ENGINEER. ALL DESIGNS SHALL BE PREPARED BY A LICENSED PROFESSIONAL ENGINEER.
15. ALL PLATES, ANGLES, ANCHOR BOLTS, NUTS AND WASHERS SHALL BE TYPE 316L STAINLESS STEEL UNLESS OTHERWISE NOTED. ALL WELDING OF STAINLESS STEEL SHALL BE PERFORMED IN AN APPROVED SHOP. FIELD WELDING SHALL NOT BE PERMITTED UNLESS OTHERWISE APPROVED BY THE ENGINEER.
16. ALL PIPE MATERIALS, JOINT TYPES, COATINGS, AND LININGS SHALL BE AS INDICATED IN THE PIPE SCHEDULES IN DETAILED SPECIFICATION SECTION 40 06 01 - SCHEDULE FOR EXPOSED PIPING.

SYMBOLS

- PLUG VALVE
- BALL VALVE
- GATE VALVE
- SWIVEL JOIN AND QUICK CONNECT/DISCONNECT COUPLING WITH CAP

ABBREVIATIONS

DIP	DUCTILE IRON PIPE
DSL	DIGESTED SLUDGE LINE



1 FR-M-001 DIGESTED SLUDGE PROCESS FLOW DIAGRAM
SCALE: NTS

NOTES:

1. NOT ALL CONNECTIONS ARE SHOWN FOR CLARITY.
2. ASSET TAGS SHOWN FOLLOW THE FORMAT. SUB-SYSTEM LOCATION AREA INSTALLATION POSITION. FOR EXAMPLE, FULL IDS ARE PREFIXED WITH "NR1.06.27". REFER TO THE ASSET INVENTORY FOR COMPLETE ID INFORMSTION
3. A SUGGESTED SEQUENCE OF CONSTRUCTION IS PROVIDED ON DWG FR-M-100 AND FR-M-101.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: E. KOPEC, PE
DRAWN BY: J. PEREZ
CHECKED BY: S. FISKEN, PE
DESIGN LEAD: F. PULIDO, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

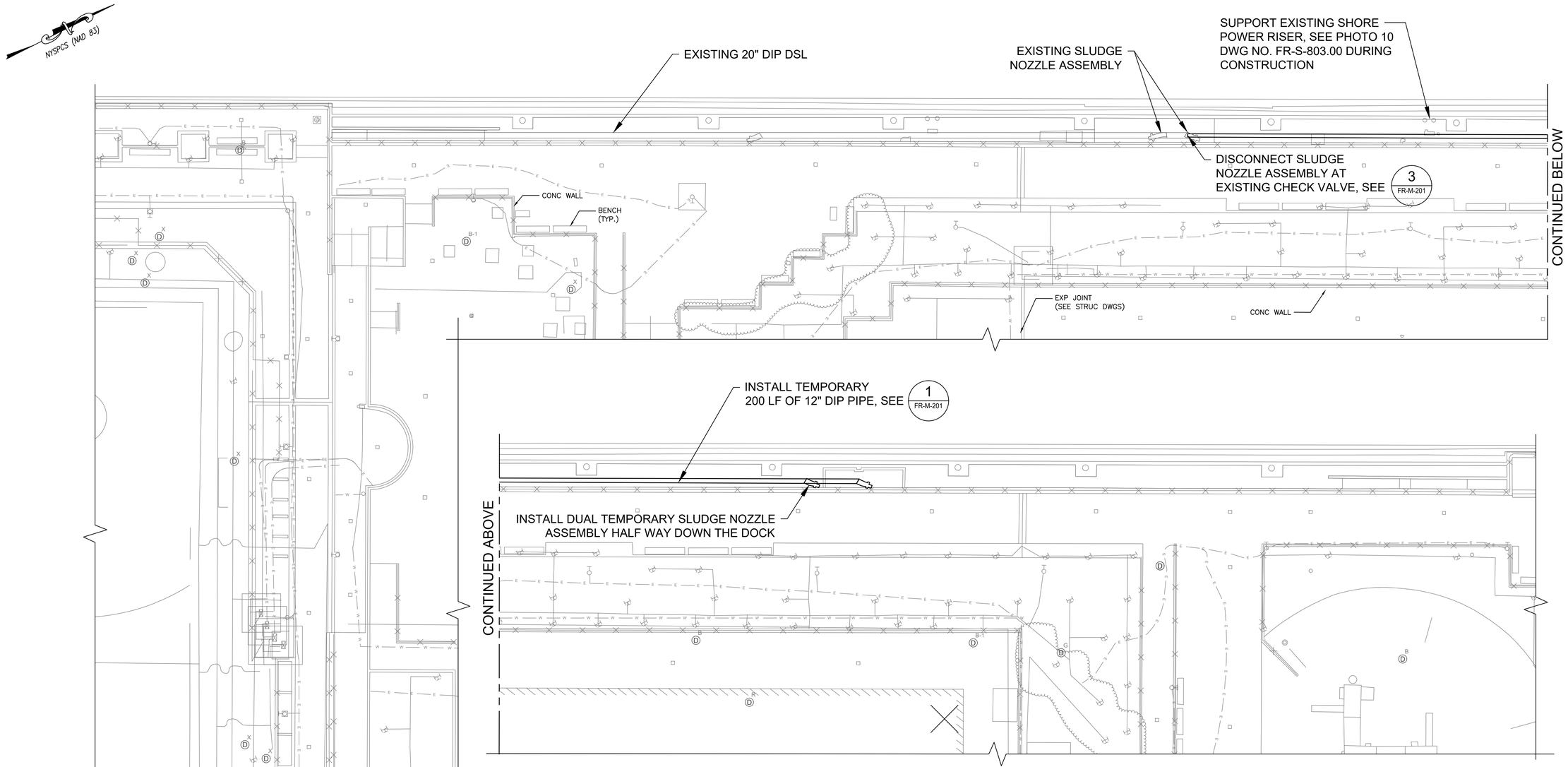
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

GENERAL NOTES, SYMBOLS AND ABBREVIATIONS

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-M-001.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129590\FR-M-001.00.dwg
Last Date Saved: 9/18/2026 12:49 PM
Plot Scale: 1:1
Date & Time Plotted: 10/20/2026 4:12 PM
Plot Style Table: BEDC_Acad(N).ctb



CONSTRUCTION KEY NOTES:

1. DISCONNECT THE EXISTING SLUDGE NOZZLE AT THE 20"x20"x12" REDUCING WYE AND AT THE 20"x12" REDUCING ELBOW PER DETAIL 3 FR-M-201.
2. CAP THE 20"x20"x12" REDUCING WYE WITH A 12" BLIND FLANGE.
3. FURNISH AND INSTALL TEMPORARY 12" DIP DSL, PER DETAIL 1 FR-M-201, COMPLETE WITH PIPE SUPPORTS PER DETAIL 4 FR-M-201 AND HEAT TRACING INSULATION.
4. FURNISH AND INSTALL TEMPORARY SLUDGE NOZZLE ASSEMBLY PER DETAIL 1 FR-M-201.

TEMPORARY SLUDGE TRANSFER PROCESS - PHASE 1

SCALE: 1"=1/16"

1/16"=1'-0" 0 10 20 30 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: E. KOPEC, PE
DRAWN BY: J. PEREZ
CHECKED BY: S. FISKEN, PE
DESIGN LEAD: F. PULIDO, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

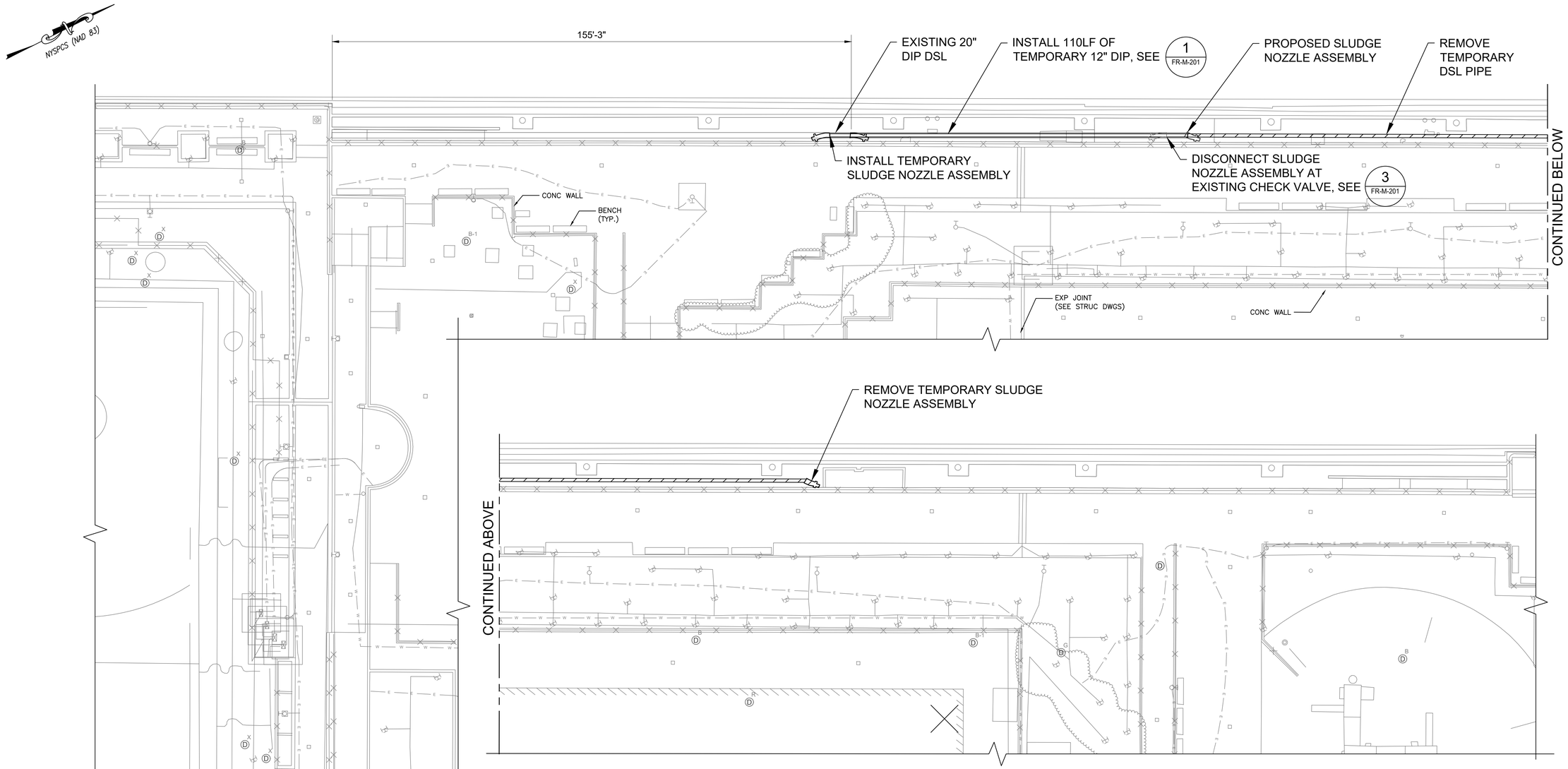
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

TEMPORARY SLUDGE TRANSFER PROCESS PHASE 1

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-M-100.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129590\FR-M-100.00.dwg
Last Date Saved: 10/20/2026 4:11 PM
Date & Time Plotted: 10/20/2026 4:12 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



CONSTRUCTION KEY NOTES:

1. DISCONNECT THE EXISTING SLUDGE NOZZLE AT THE 20"x20"x12" REDUCING WYE AND AT THE 20"x12" REDUCING ELBOW PER DETAIL 3 FR-M-201.
2. CAP THE 20"x20"x12" REDUCING WYE WITH A 12" BLIND FLANGE.
3. FURNISH AND INSTALL TEMPORARY 12" DIP DSL, PER DETAIL 1 FR-M-201, COMPLETE WITH PIPE SUPPORTS PER DETAIL 4 FR-M-201 AND HEAT TRACING INSULATION.
4. FURNISH AND INSTALL TEMPORARY SLUDGE NOZZLE ASSEMBLY PER DETAIL 1 FR-M-201.

TEMPORARY SLUDGE TRANSFER PROCESS - PHASE 2

SCALE: 1"=1/16"

1/16"=1'-0" 0 10 20 30 FT.

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NYC Environmental Protection BEDCHQ

BID SET

DATE ISSUED: OCTOBER 2026

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: E. KOPEC, PE
DRAWN BY: J. PEREZ
CHECKED BY: S. FISKEN, PE
DESIGN LEAD: F. PULIDO, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

STATE OF NEW YORK — MARK PELLER PULIDO — LICENSED PROFESSIONAL ENGINEER

NYC Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

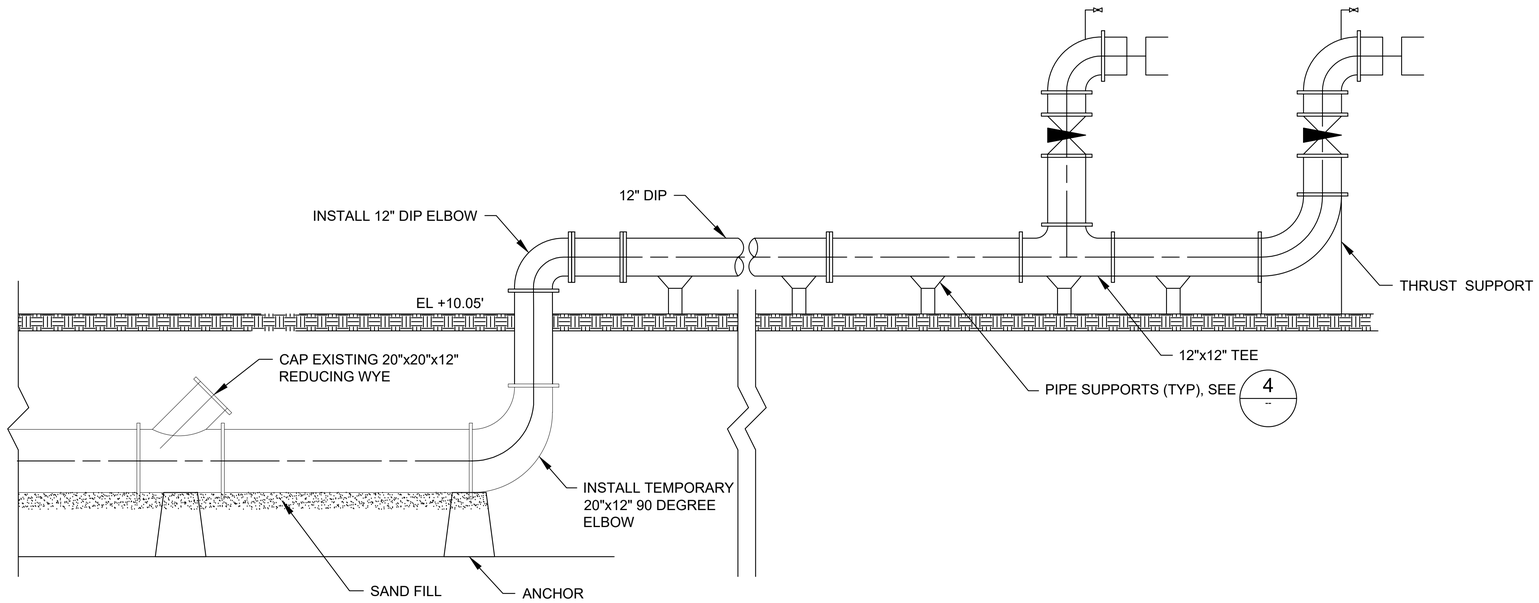
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

TEMPORARY SLUDGE TRANSFER PROCESS PHASE 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-M-101.00

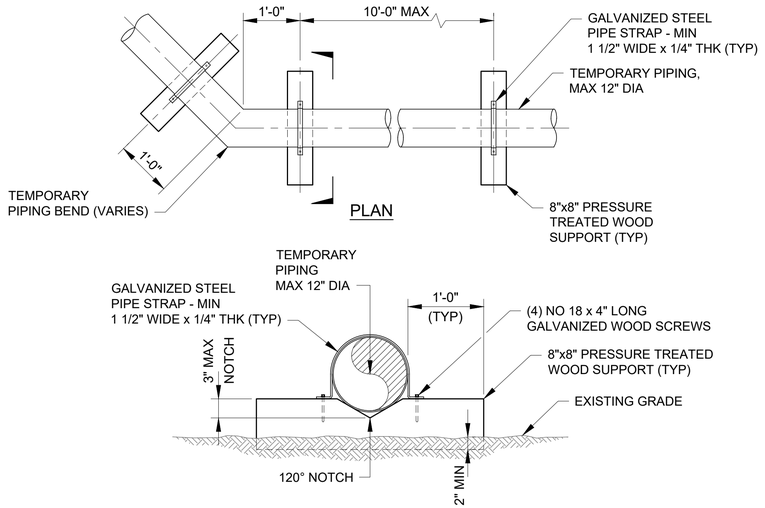
Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129590\FR-M-101.00.dwg
Last Date Saved: 10/20/2026 4:11 PM
Date & Time Plotted: 10/20/2026 4:12 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



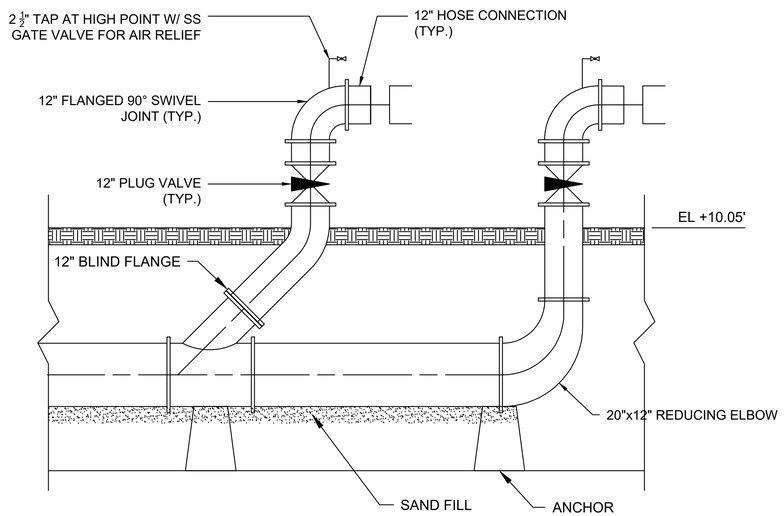
1 FR-M-100 FR-M-101 — TEMPORARY SLUDGE LINE AND SLUDGE NOZZLE ASSEMBLY CONNECTION

SCALE: NTS



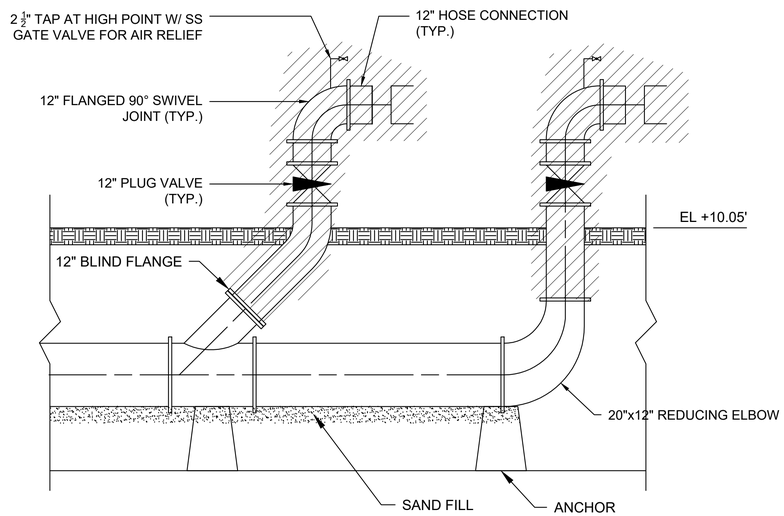
4 -- DETAIL - TYPICAL TEMPORARY PIPE SUPPORT AT GRADE

SCALE: NTS



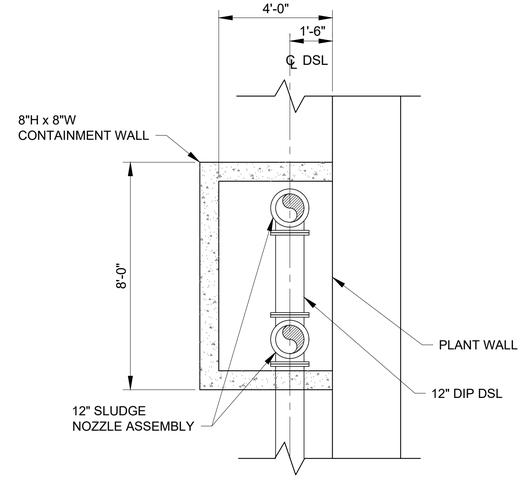
2 -- EXISTING SLUDGE NOZZLE ASSEMBLY

SCALE: NTS



3 FR-M-100 FR-M-101 — EXISTING SLUDGE NOZZLE ASSEMBLY DEMOLITION

SCALE: NTS



5 -- DETAIL - SLUDGE NOZZLE ASSEMBLY CONTAINMENT AREA

SCALE: NTS

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: E. KOPEC, PE
DRAWN BY: J. PEREZ
CHECKED BY: S. FISKEN, PE
DESIGN LEAD: F. PULIDO, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

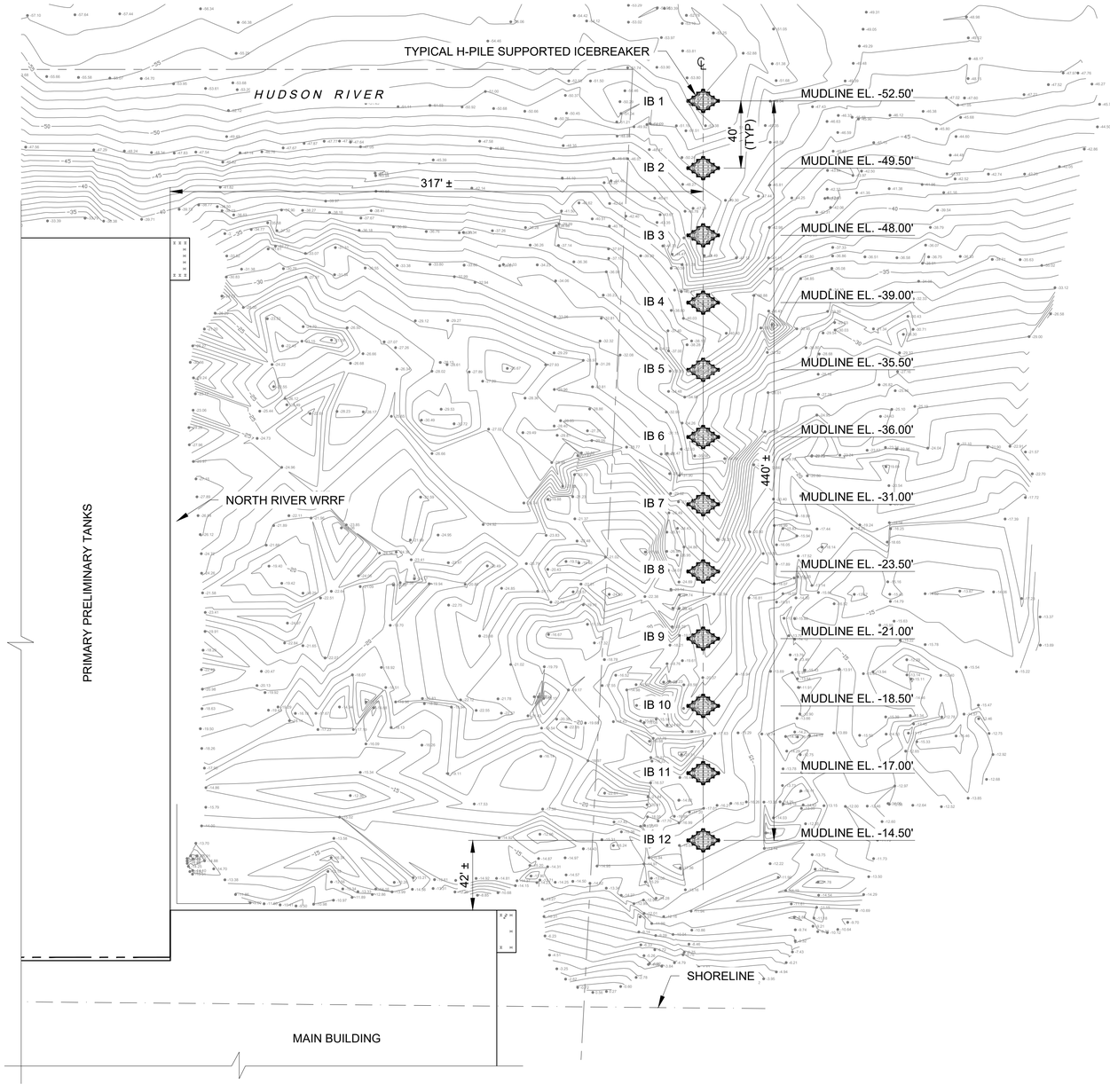
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

TEMPORARY SLUDGE TRANSFER PROCESS DETAILS

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. FR-M-201.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129590\FR-M-201.00.dwg
Last Date Saved: 10/20/2026 4:11 PM
Date & Time Plotted: 10/20/2026 4:12 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

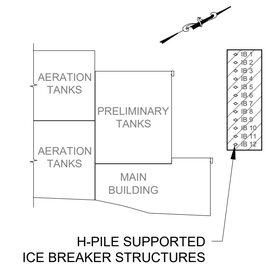


LEGEND:

IB-1	ICEBREAKER #1
IB-2	ICEBREAKER #2
IB-3	ICEBREAKER #3
IB-4	ICEBREAKER #4
IB-5	ICEBREAKER #5
IB-6	ICEBREAKER #6
IB-7	ICEBREAKER #7
IB-8	ICEBREAKER #8
IB-9	ICEBREAKER #9
IB-10	ICEBREAKER #10
IB-11	ICEBREAKER #11
IB-12	ICEBREAKER #12

NOTES:

1. ARRANGEMENT PLAN IS BASED ON RECORD DWG. AB-29 BY PERINI NORTH RIVER ASSOCIATES IN 1978.
2. MUDLINE ELEVATION REFERS TO APPROXIMATE LOCATION WHERE PILE #1 MEETS MUDLINE.
3. FOR EXISTING PLAN AND SECTIONS, SEE DWGS. IB-S-201 THROUGH IB-S-203.
4. FOR DEMOLITION ELEVATION, SEE DWG. IB-S-301.
5. FOR RECONSTRUCTION PLAN, SECTIONS AND DETAILS, SEE DWGS. IB-S-401 THROUGH IB-S-502.



H-PILE SUPPORTED
ICE BREAKER STRUCTURES

KEY PLAN

1"=40' 0 40 80 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: V. PRILUTSKY
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

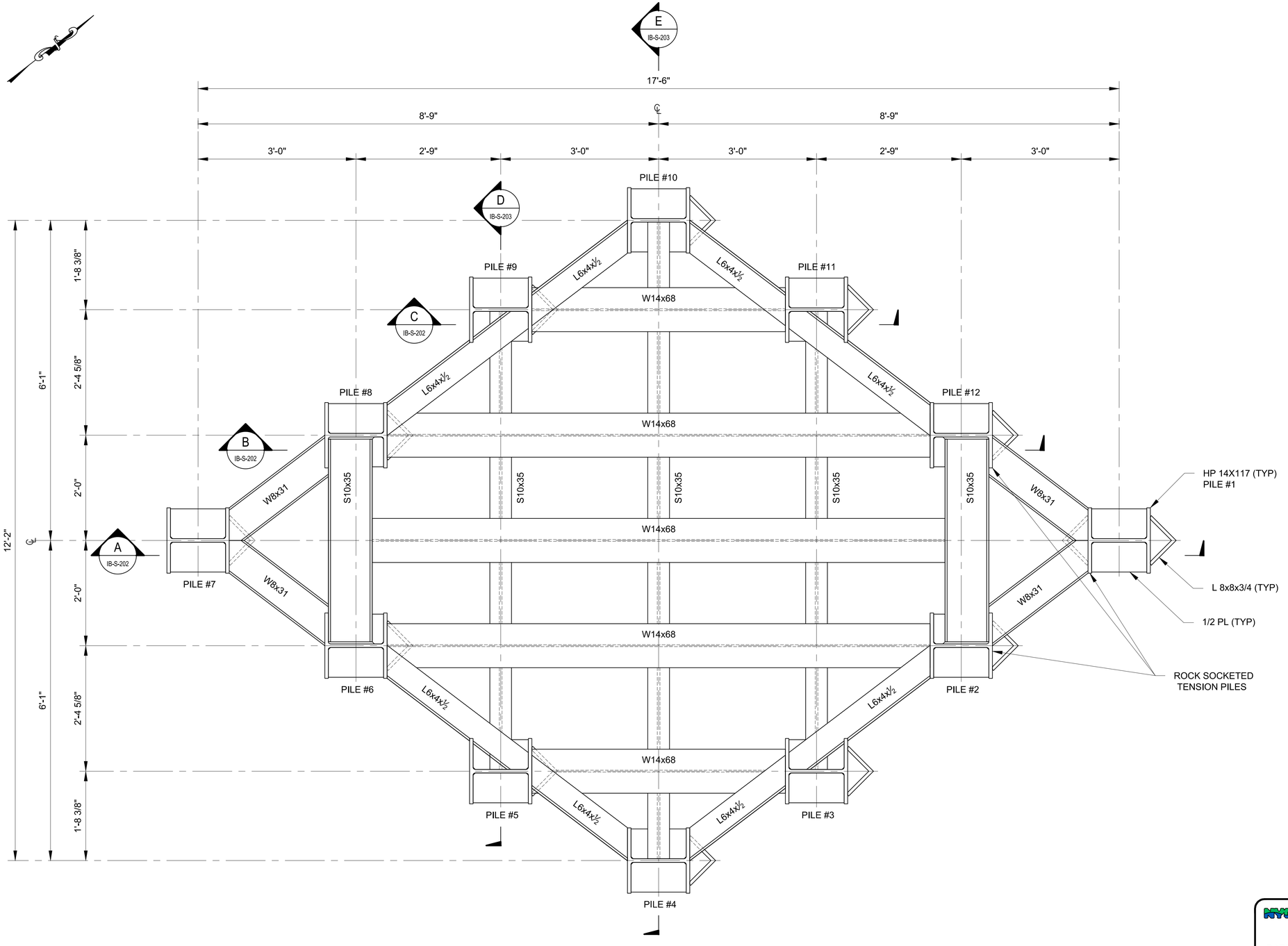
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

ICEBREAKER GENERAL ARRANGEMENT

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. IB-S-101.00

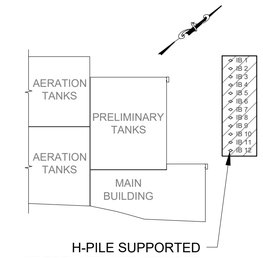
Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d01295589\IB-S-101.00.dwg
Last Date Saved: 9/18/2026 1:57 PM
Plot Style Table: BEDC_Acad(N).ctb
Plot Scale: 1:1
Date & Time Plotted: 10/20/2026 4:23 PM

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



NOTES:

1. EXISTING TYPICAL ICEBREAKER GENERAL ARRANGEMENT AND PLAN IS BASED ON RECORD DRAWING AB-29 BY PERINI NORTH RIVER ASSOCIATES IN 1978.
2. ALL PILES ARE HP14x117.
3. ALL PILES, EXCEPT PILES #1, #2 AND #12 ARE COMPRESSION PILES AND WERE DRIVEN TO BEDROCK WITH WELDED DRIVING SHOES.
4. PILES #1, #2 AND #12 ARE TENSION PILES DRILLED WITH A 26" DIAMETER ROCK SOCKET, PER RECORD DRAWINGS.



H-PILE SUPPORTED
ICE BREAKER STRUCTURES

KEY PLAN

0 1 2 FT.
1"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: V. PRILUTSKY
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

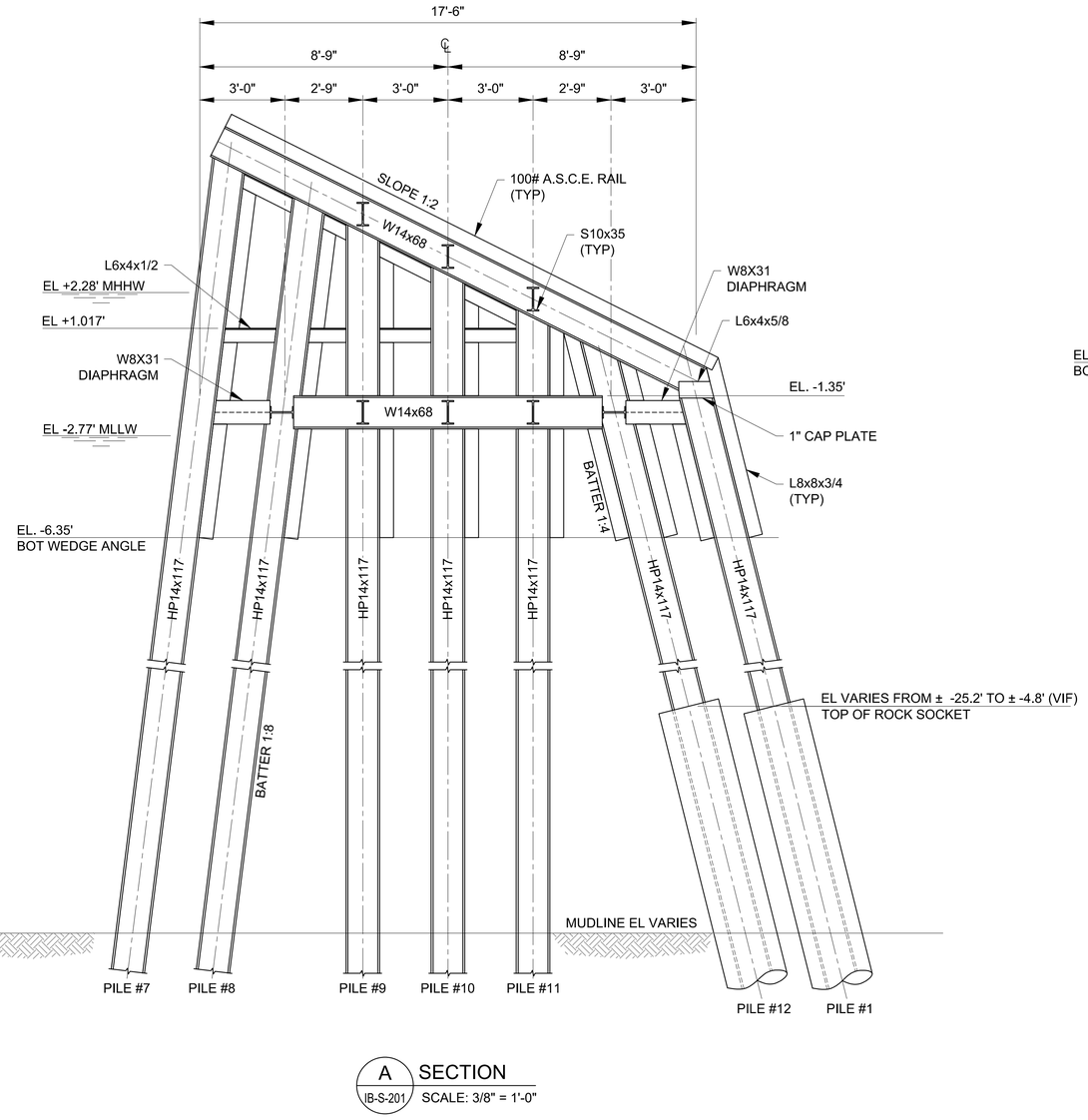
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

ICEBREAKER EXISTING PLAN AT EL. -1.35'

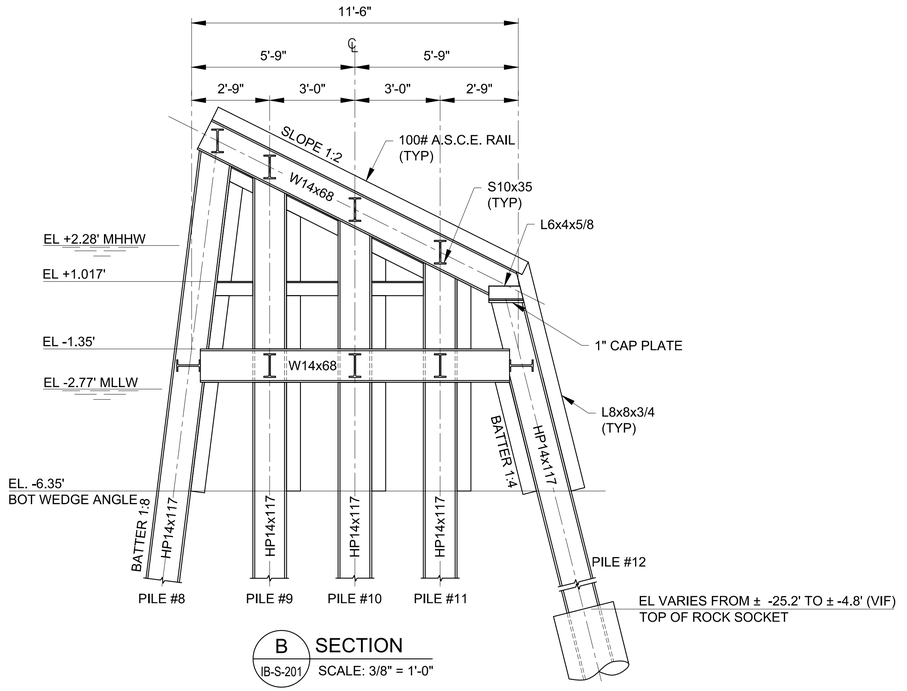
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. IB-S-201.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

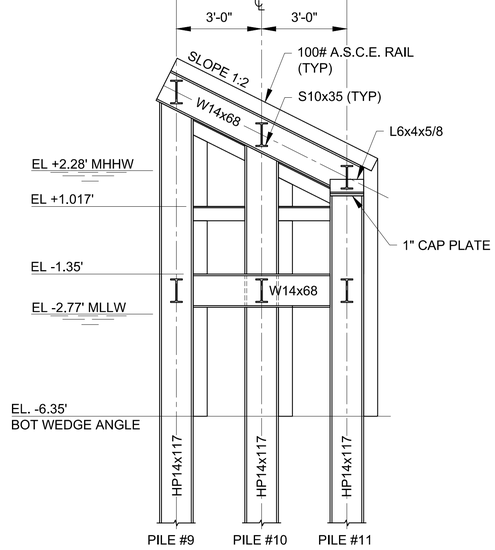
Last Saved By: J.perez
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostam\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\IB-S-201.00.dwg
Last Date Saved: 10/20/2026 4:21 PM
Date & Time Plotted: 10/20/2026 4:23 PM
Plot Style Table: BEDC_Acad(N).ctb
Plot Scale: 1:1



A SECTION
IB-S-201 SCALE: 3/8" = 1'-0"



B SECTION
IB-S-201 SCALE: 3/8" = 1'-0"



C SECTION
IB-S-201 SCALE: 3/8" = 1'-0"

NOTES:

1. EXISTING ICEBREAKER DETAILS WERE ADOPTED FROM RECORD DRAWING AB-28 BY PERINI NORTH RIVER ASSOCIATES.

3/8"=1'-0" 0 1 2 3 5 FT.

NYC Environmental Protection BEDC/RD

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: V. PRILUTSKY
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

STATE OF NEW YORK ILHAN TUTUNCU LICENSED PROFESSIONAL ENGINEER

NYC Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

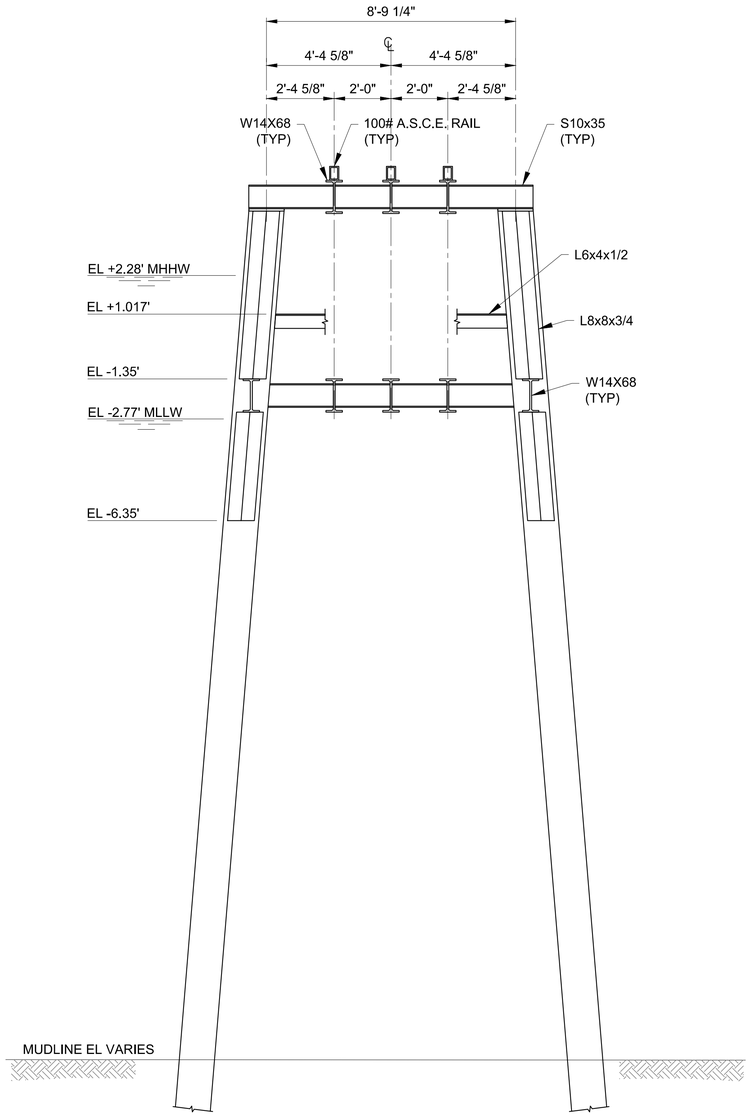
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

ICEBREAKER EXISTING SECTIONS - SHEET 1

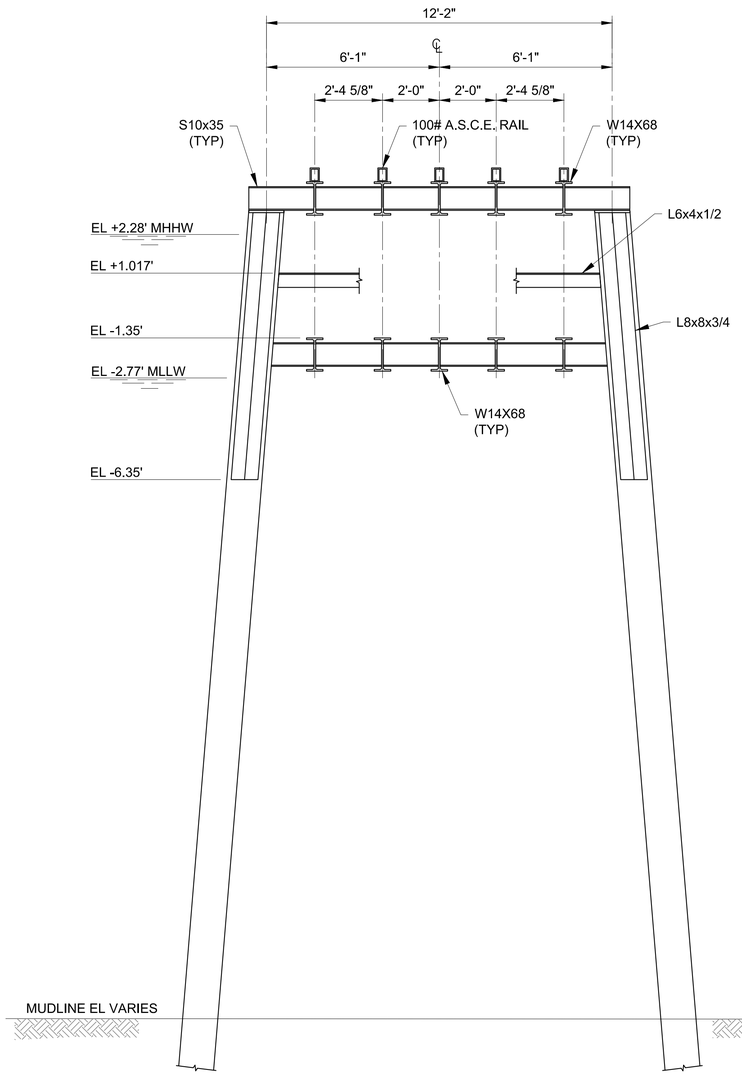
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. IB-S-202.00

Last Saved By: AcostaML
Paper Size Plotted/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\IB-S-202.00.dwg
Last Date Saved: 10/20/2026 4:21 PM
Date & Time Plotted: 10/20/2026 4:23 PM
Plot Scale: 1:1 Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



D SECTION
IB-S-201 SCALE: 3/8" = 1'-0"



E SECTION
IB-S-201 SCALE: 3/8" = 1'-0"

NOTES:

1. ICEBREAKER DETAILS ARE ADOPTED FROM RECORD DRAWING AB-28 BY PERINI NORTH RIVER ASSOCIATES.

3/8"=1'-0" 0 1 2 3 5 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: V. PRILUTSKY
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

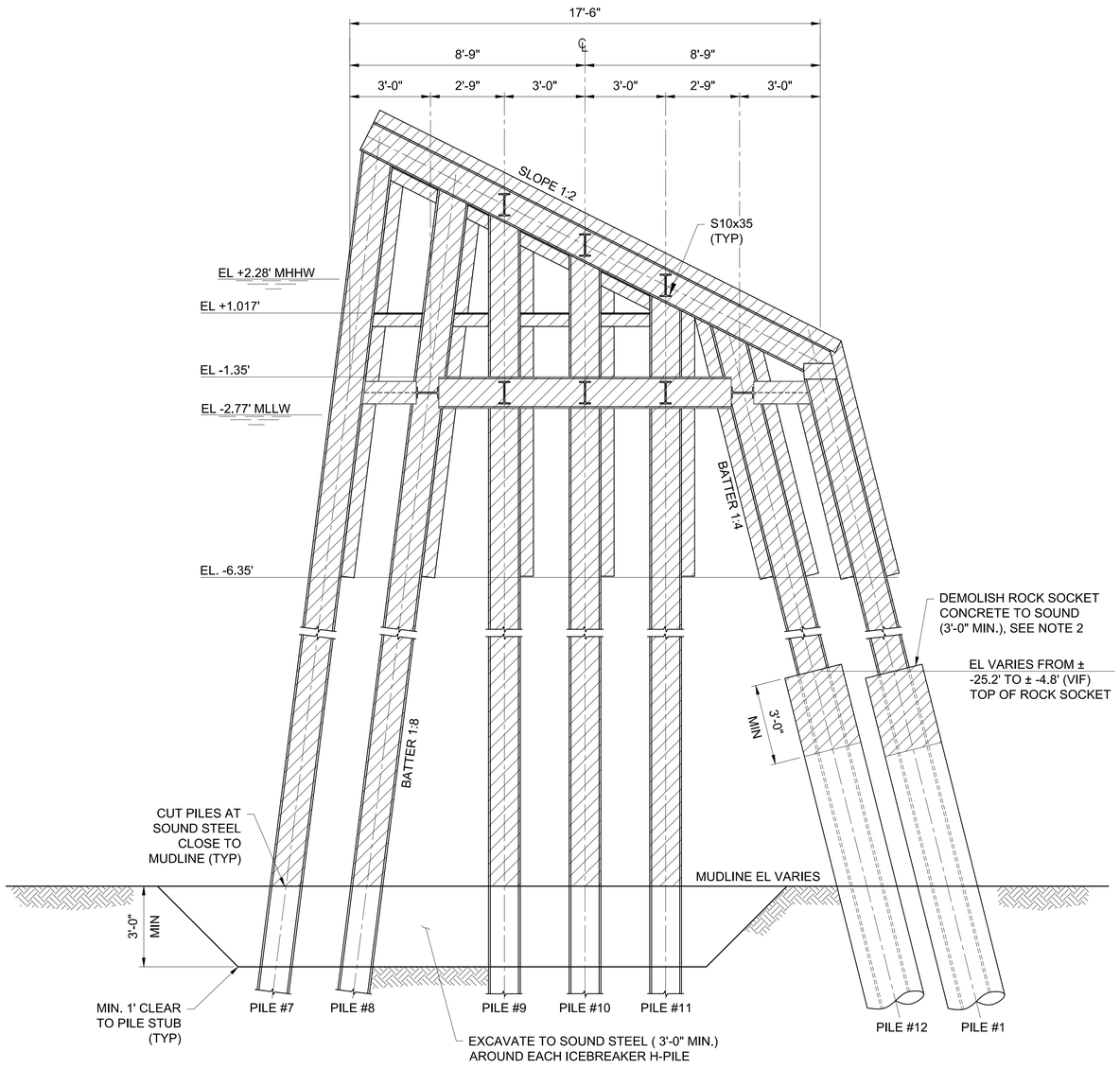
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

ICEBREAKER EXISTING SECTIONS - SHEET 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. IB-S-203.00

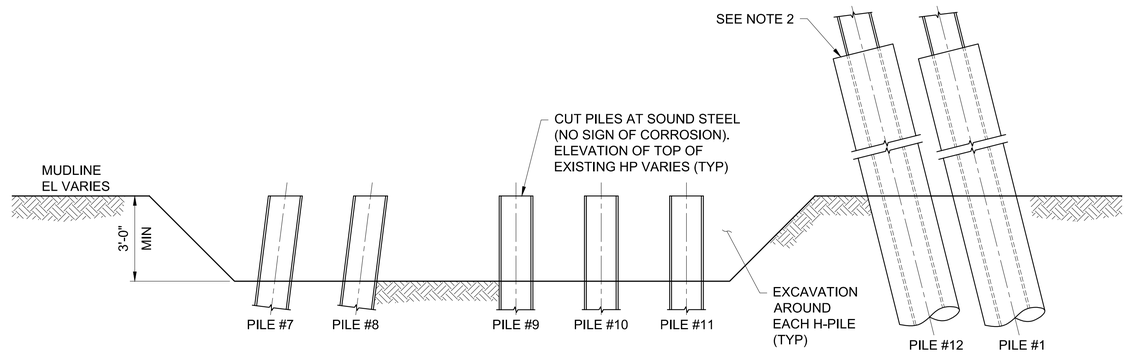
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\IB-S-203.00.dwg
Last Date Saved: 10/20/2026 4:21 PM
Date & Time Plotted: 10/20/2026 4:24 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb



TYPICAL DEMOLITION SECTION

SCALE: 3/8"=1'-0"



ICEBREAKER FOUNDATION AFTER DEMOLITION COMPLETED

SCALE: 3/8"=1'-0"

LEGEND:

DEMOLISHED STRUCTURAL MEMBER

NOTES:

1. ICEBREAKER DETAILS ARE ADOPTED FROM RECORD DRAWING AB-28 BY PERINI NORTH RIVER ASSOCIATES.
2. TOP OF EXISTING ROCK SOCKET CONCRETE ELEVATION WILL VARY AFTER DEMOLITION ADDITIONAL CONCRETE SHALL BE REMOVED IF EXPOSED H-PILE HAS SIGNS OF CORROSION. LENGTH OF EXPOSED H-PILE ABOVE CONCRETE SHALL BE 3 FEET MINIMUM FOR SPLICING / ATTACHMENT OF THE NEW H-PILE.

3/8"=1'-0" 0 1 2 3 5 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: V. PRILUTSKY
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

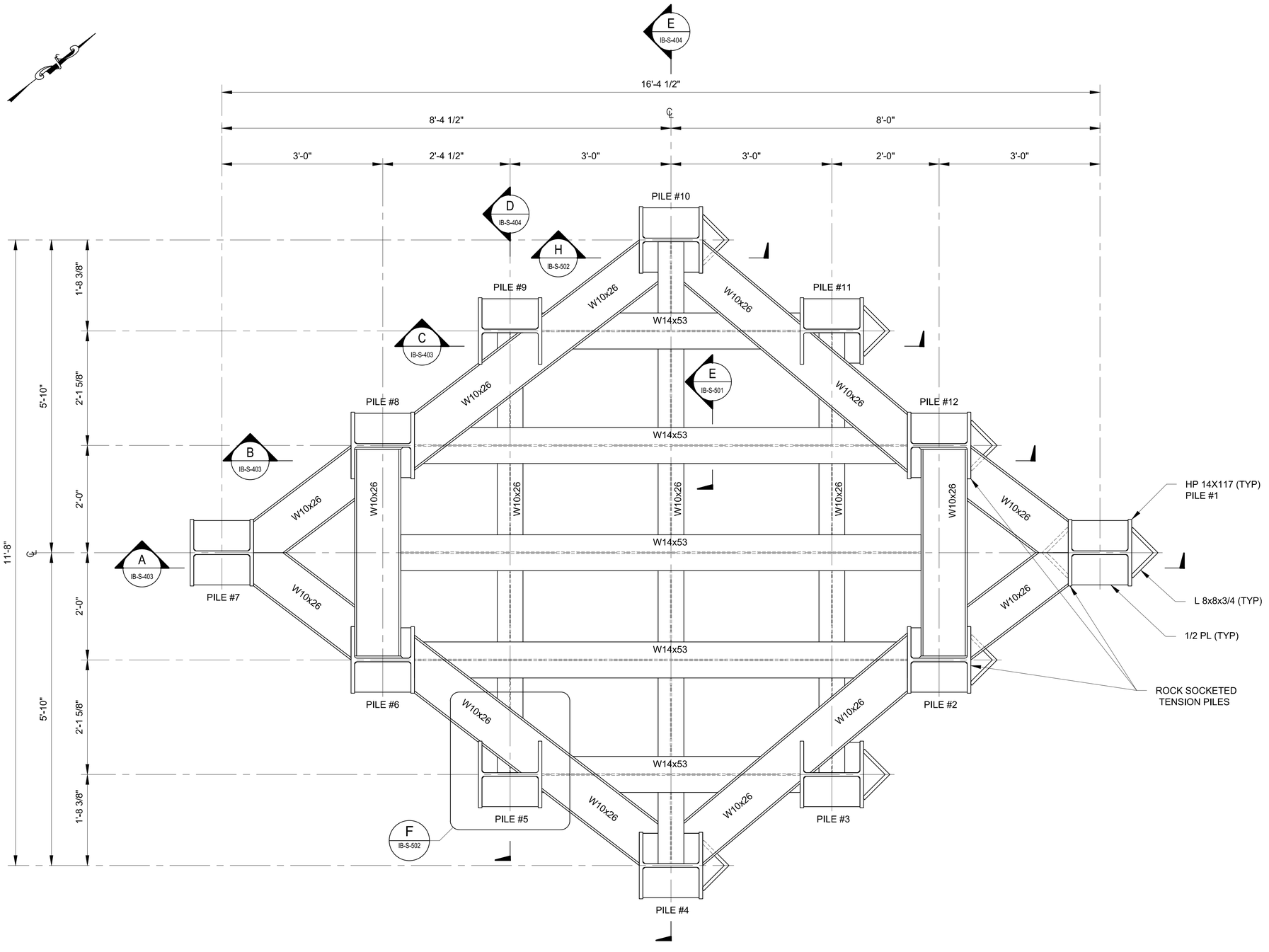
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

ICEBREAKER DEMOLITION

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. IB-DS-301.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\IB-DS-301.00.dwg
Last Date Saved: 10/20/2026 4:22 PM
Date & Time Plotted: 10/20/2026 4:24 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb



NOTES:

1. PROVIDE DRAIN HOLES IN W AND C SHAPES WITH WEB IN HORIZONTAL POSITION, TYP.

0 1 2 FT.
1"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: V. PRILUTSKY
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

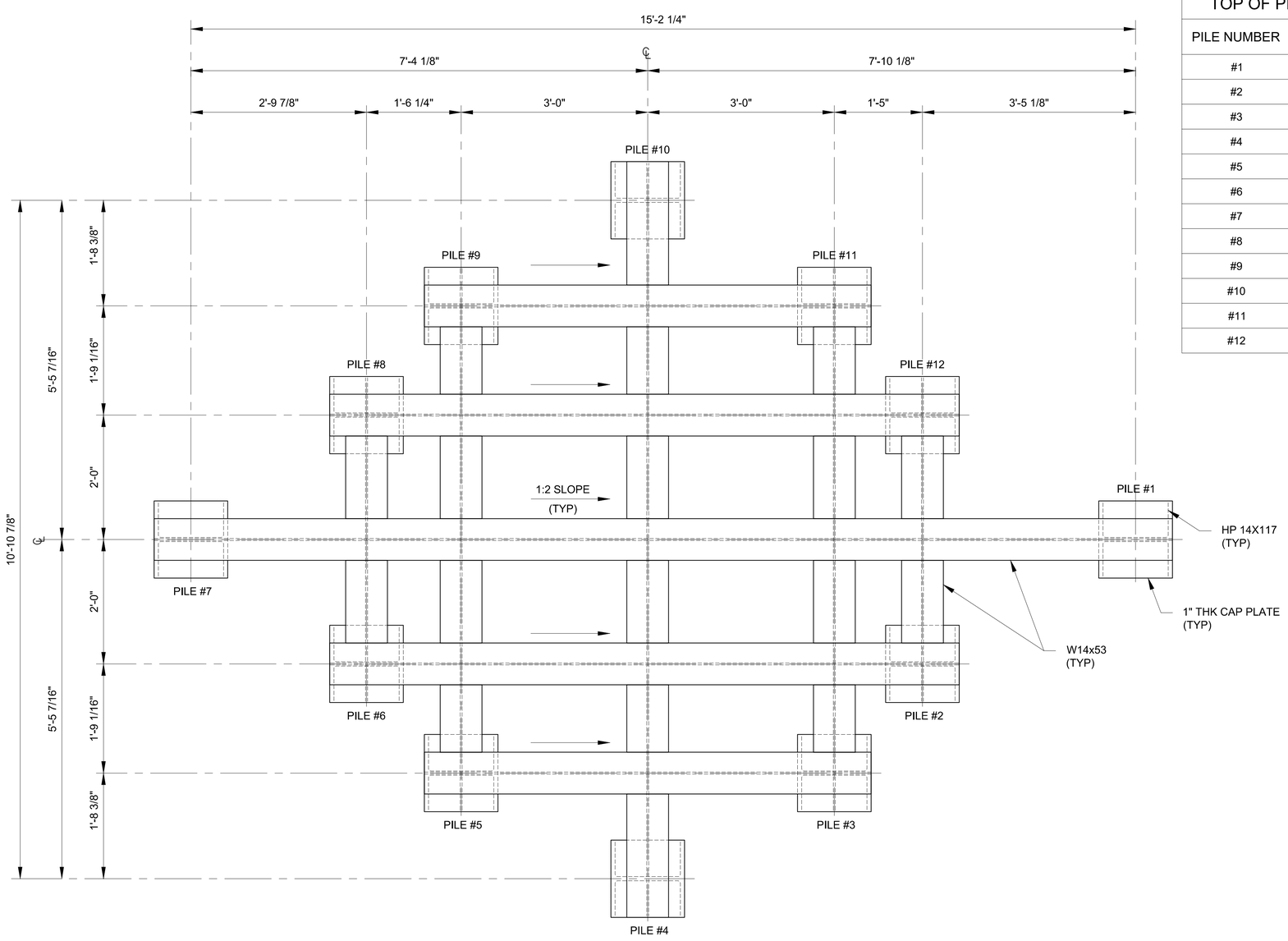
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

ICEBREAKER PLAN AT EL. +2.00'

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. IB-S-401.00

Last Saved By: J.perez
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostam\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\IB-S-401.00.dwg
Last Date Saved: 10/20/2026 4:22 PM
Date & Time Plotted: 10/20/2026 4:24 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



TOP OF PILE ELEVATION	
PILE NUMBER	TOP ELEVATION (FT., NAVD88)
#1	+2'-7 1/2"
#2	+4'-4 1/6"
#3	+5'-0 2/3"
#4	+6'-6 3/4"
#5	+8'-1"
#6	+8'-10"
#7	+10'-3"
#8	+8'-10"
#9	+8'-1"
#10	+6'-6 3/4"
#11	+5'-0 2/3"
#12	+4'-4 1/6"

NOTES:

1. ALL DIMENSIONS ARE TAKEN PARALLEL TO VERTICAL DATUM, NOT ALONG AXIS OF MEMBERS.
2. RAILS NOT SHOWN FOR CLARITY.

X / IB-S-403 — TOP RAIL SUPPORT FRAMING PLAN
SCALE: 1" = 1'-0"

0 1 2 FT.
1"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: V. PRILUTSKY
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

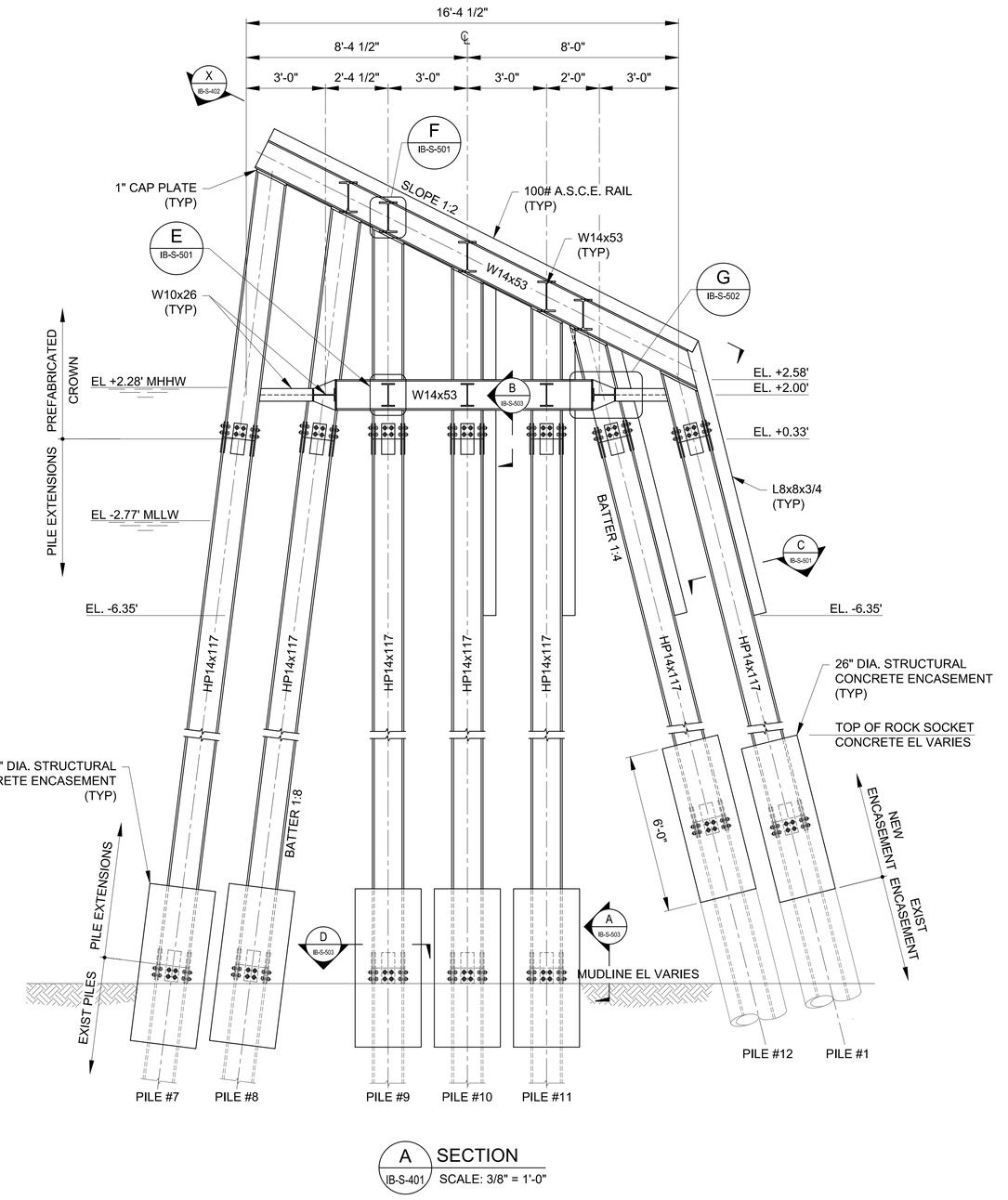
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

ICEBREAKER TOP RAIL SUPPORT FRAMING PLAN

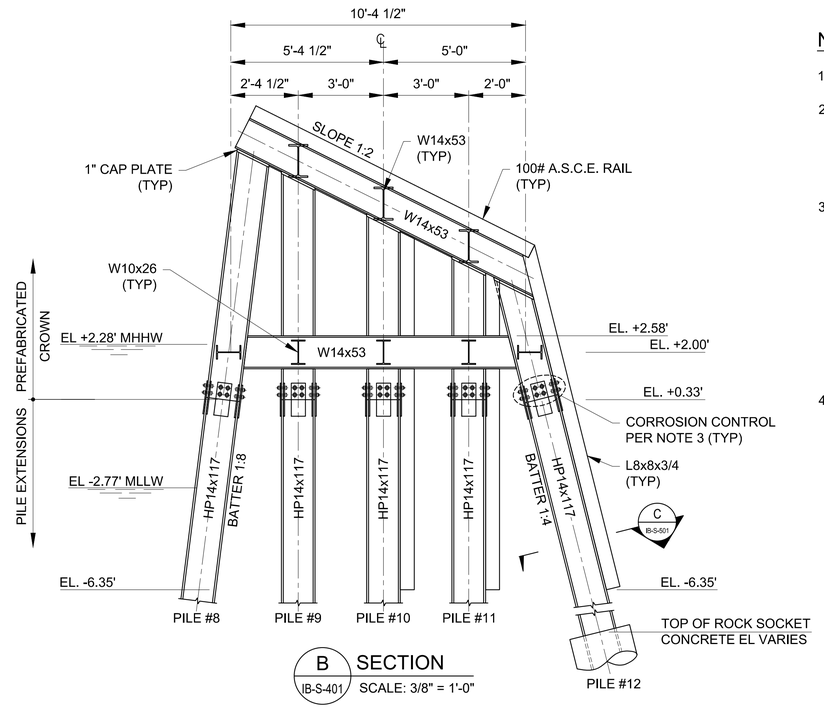
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. IB-S-402.00

Last Saved By: AcostaML
Last Date Saved: 10/20/2026 4:22 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d01295898\IB-S-402.00.dwg
Date & Time Plotted: 10/20/2026 4:24 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

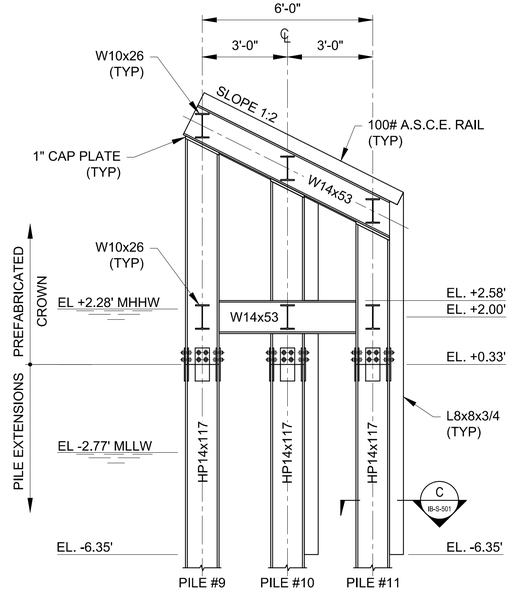
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



A SECTION
IB-S-401 SCALE: 3/8" = 1'-0"



B SECTION
IB-S-401 SCALE: 3/8" = 1'-0"



C SECTION
IB-S-401 SCALE: 3/8" = 1'-0"

NOTES:

1. ALL PILES ARE HP14X117.
2. CONTRACTOR SHALL PROVIDE AND INSTALL TEMPORARY BRACING ON ALL PILE EXTENSIONS UNTIL THEY ARE CONNECTED TO THE PREFABRICATED CROWN ASSEMBLY.
3. BOLTS AT THE UPPER CONNECTION OF THE STRUCTURE SHALL HAVE ZINC ANODE BOLT CAPS FROM FARWEST CORROSION OR EQUAL. AFTER ANODE BOLT CAP INSTALLATION, EXPOSED BOLTS SHALL RECEIVE A COAT OF SPLASH ZONE EPOXY OR EQUAL. ANODE BOLTS CAPS SHALL NOT BE COATED. BOLTED CONNECTIONS AT THE LOWER CONNECTION ENCASED IN CONCRETE DO NOT REQUIRE ADDITIONAL CORROSION PROTECTION.
4. ALL NEW STEEL SHALL BE COATED PER SECTION 09 91 00 PAINTING.

3/8"=1'-0" 0 1 2 3 5 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: V. PRILUTSKY
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

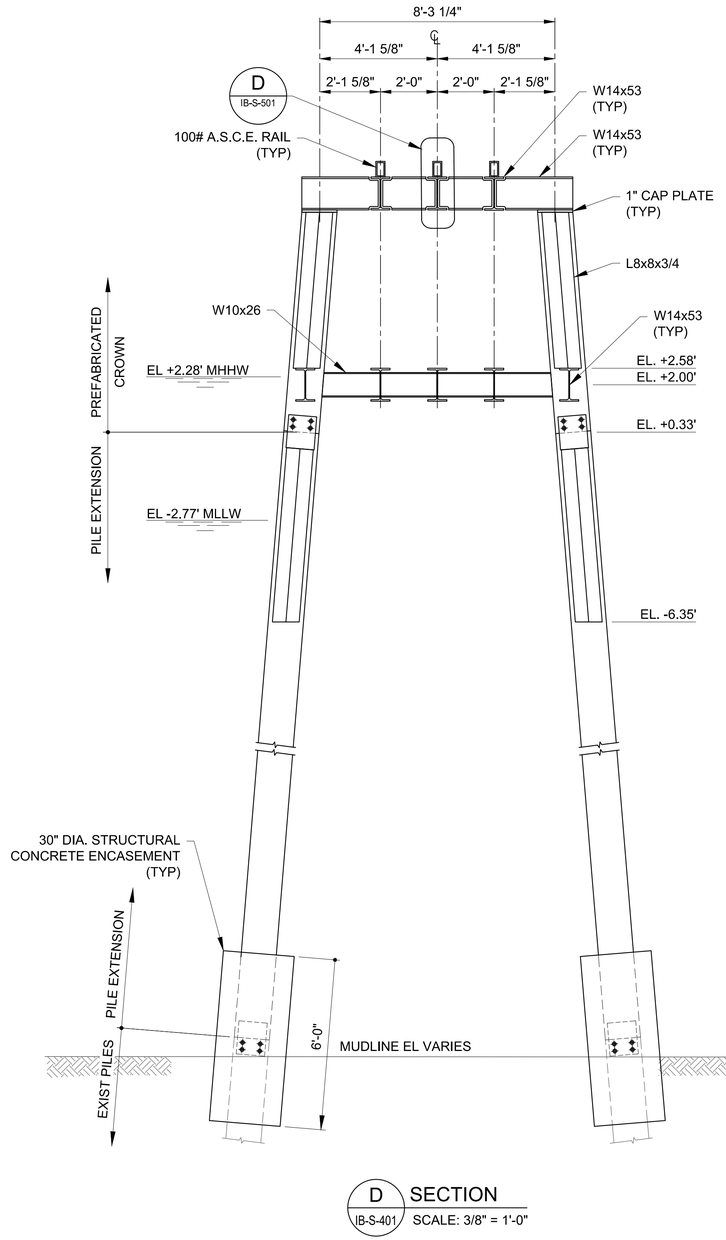
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

ICEBREAKER SECTIONS - SHEET 1

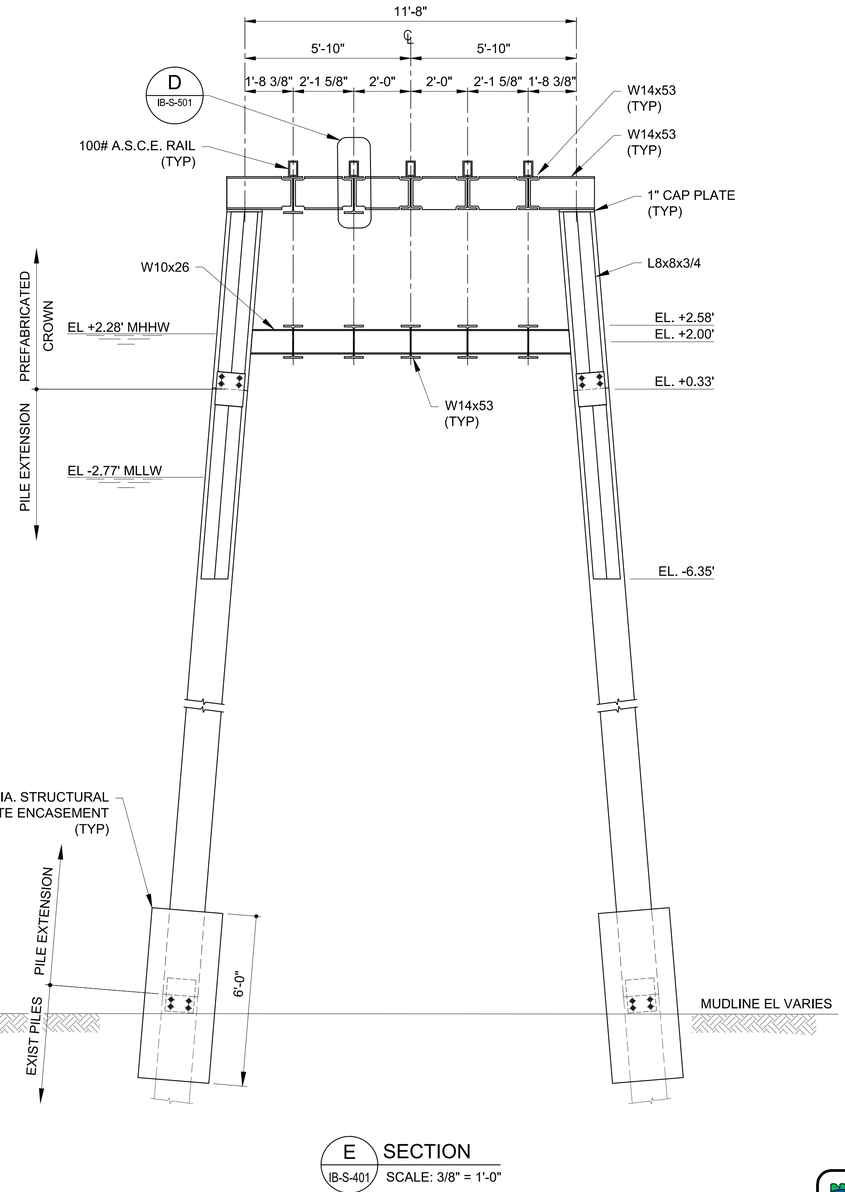
DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. IB-S-403.00

Last Saved By: J.perez
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostam\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\IB-S-403.00.dwg
Last Date Saved: 10/20/2026 4:22 PM
Date & Time Plotted: 10/20/2026 4:24 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



D SECTION
IB-S-401 SCALE: 3/8" = 1'-0"



E SECTION
IB-S-401 SCALE: 3/8" = 1'-0"

3/8"=1'-0" 0 1 2 3 5 FT.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: V. PRILUTSKY
DRAWN BY: M. ACOSTA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

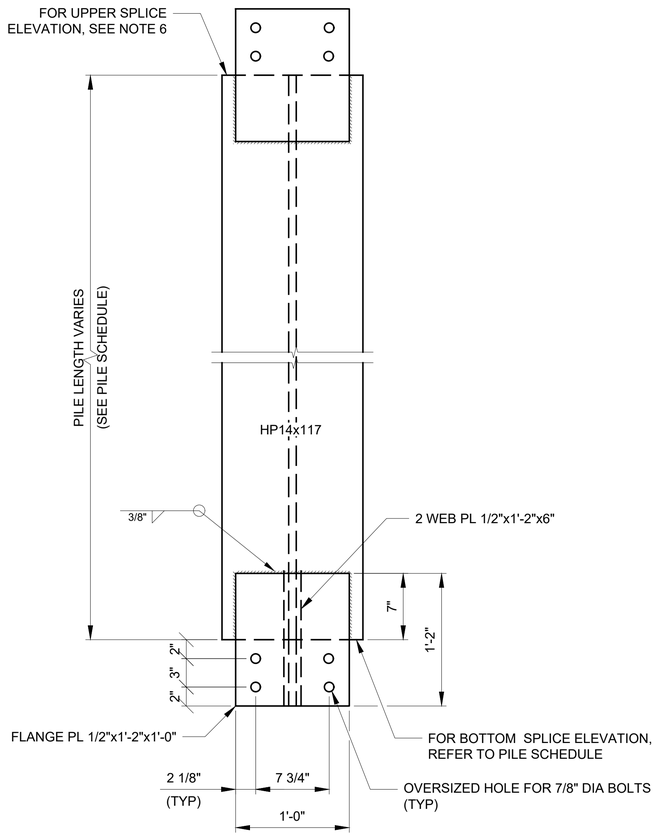
ICEBREAKER SECTIONS - SHEET 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. IB-S-404.00

Last Saved By: JLperez
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acosta\mlappdata\local\bentley\projectwise\jacobs-americas-01\d0129589\IB-S-404.00.dwg
Last Date Saved: 10/20/2026 4:22 PM
Date & Time Plotted: 10/20/2026 4:24 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

PILE ID	PILE MAXIMUM AXIAL LOAD	PILE MAXIMUM MOMENT AT BOTTOM CONNECTION	PILE MAXIMUM MOMENT AT TOP CONNECTION	BOTTOM CONNECTION ELEVATION	PILE BATTER	NOTES
	kip	k-ft	k-ft	ft		
1-1	144.8 (T)	61.9	53.0	See Note 4	1:4	
1-2	144.8 (T)	61.9	53.0	See Note 4	1:4	
1-3	150.9 (C)	29.3	64.6	-53.00	1:12	
1-4	150.9 (C)	29.3	64.6	-53.00	1:12	
1-5	150.9 (C)	29.3	64.6	-53.00	1:12	
1-6	62.9 (C)	29.3	73.0	-53.00	1:8	
1-7	62.9 (C)	29.3	73.0	-53.00	1:8	
1-8	62.9 (C)	29.3	73.0	-53.00	1:8	
1-9	150.9 (C)	29.3	64.6	-53.00	1:12	
1-10	150.9 (C)	29.3	64.6	-53.00	1:12	
1-11	150.9 (C)	29.3	64.6	-53.00	1:12	
1-12	144.8 (T)	61.9	53.0	See Note 4	1:4	
2-1	144.8 (T)	61.9	53.0	See Note 4	1:4	
2-2	144.8 (T)	61.9	53.0	See Note 4	1:4	
2-3	150.9 (C)	29.3	64.6	-49.00	1:12	
2-4	150.9 (C)	29.3	64.6	-49.00	1:12	
2-5	150.9 (C)	29.3	64.6	-49.00	1:12	
2-6	62.9 (C)	29.3	73.0	-50.00	1:8	
2-7	62.9 (C)	29.3	73.0	-50.00	1:8	
2-8	62.9 (C)	29.3	73.0	-50.00	1:8	
2-9	150.9 (C)	29.3	64.6	-50.00	1:12	
2-10	150.9 (C)	29.3	64.6	-50.00	1:12	
2-11	150.9 (C)	29.3	64.6	-50.00	1:12	
2-12	144.8 (T)	61.9	53.0	See Note 4	1:4	
3-1	144.8 (T)	61.9	53.0	See Note 4	1:4	
3-2	144.8 (T)	61.9	53.0	See Note 4	1:4	
3-3	150.9 (C)	29.3	64.6	-48.00	1:12	
3-4	150.9 (C)	29.3	64.6	-48.00	1:12	
3-5	150.9 (C)	29.3	64.6	-48.00	1:12	
3-6	62.9 (C)	29.3	73.0	-47.00	1:8	
3-7	62.9 (C)	29.3	73.0	-47.00	1:8	
3-8	62.9 (C)	29.3	73.0	-47.00	1:8	
3-9	150.9 (C)	29.3	64.6	-49.00	1:12	
3-10	150.9 (C)	29.3	64.6	-49.00	1:12	
3-11	150.9 (C)	29.3	64.6	-49.00	1:12	
3-12	144.8 (T)	61.9	53.0	See Note 4	1:4	
4-1	132.4 (T)	54.2	60.9	See Note 4	1:4	
4-2	132.4 (T)	54.2	60.9	See Note 4	1:4	
4-3	136.4 (C)	26.7	63.5	-40.00	1:12	
4-4	136.4 (C)	26.7	63.5	-40.00	1:12	
4-5	136.4 (C)	26.7	63.5	-40.00	1:12	
4-6	58.7 (C)	27.6	70.7	-40.00	1:8	
4-7	58.7 (C)	27.6	70.7	-40.00	1:8	
4-8	58.7 (C)	27.6	70.7	-40.00	1:8	
4-9	136.4 (C)	26.7	63.5	-41.00	1:12	
4-10	136.4 (C)	26.7	63.5	-41.00	1:12	
4-11	136.4 (C)	26.7	63.5	-41.00	1:12	
4-12	132.4 (T)	54.2	60.9	See Note 4	1:4	

FOR CONTINUATION SEE DWG NO. IB-S-406



A - TYPICAL PILE FABRICATION DETAIL

SCALE: N.T.S.

NOTES:
1. WEDGE ANGLE WELDED TO PILE NOT SHOWN FOR CLARITY. PILES #1, #2, #3, #4, #10, #11, #12 OF EACH ICEBREAKER WILL INCLUDE WEDGE ANGLES.

GENERAL NOTES:

1. ALL PILES ARE HP14X117
2. PILE ID. 1ST NUMBER = ICEBREAKER NUMBER, 2ND NUMBER=PILE NUMBER IN THE STRUCTURE.
3. TOP AND BOTTOM CONNECTION ELEVATION IS APPROXIMATE ELEVATION OF THE CENTER OF CONNECTION.
4. ELEVATION IN BOTTOM CONNECTION OF TENSION PILES (PILES 1, 2, 12 OF EACH ICEBREAKER) WILL VARY BASED ON ELEVATION OF SOUND STEEL WITHIN ROCK SOCKET CONCRETE.
5. AXIAL LOAD. (T) - TENSION, (C)- COMPRESSION.
6. TOP CONNECTION ELEVATION +0.33 FOR ALL PILES.
7. PILE AXIAL LOADS AND MOMENTS ARE ULTIMATE LOADS.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: V. PRILUTSKY
DRAWN BY: G. LICATA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

ICEBREAKER PILE SCHEDULE
SHEET 1

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. IB-S-405.00

Last Saved By: AcostaML
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\IB-S-405.00.dwg
Last Date Saved: 10/20/2026 4:22 PM
Date & Time Plotted: 10/20/2026 4:24 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

FOR CONTINUATION SEE DWG NO. IB-S-405

PILE ID	PILE MAXIMUM AXIAL LOAD	PILE MAXIMUM MOMENT AT BOTTOM CONNECTION	PILE MAXIMUM MOMENT AT TOP CONNECTION	BOTTOM CONNECTION ELEVATION	PILE BATTER	NOTES
	kip	k-ft	k-ft	ft		
5-1	132.4 (T)	54.2	60.9	See Note 4	1:4	
5-2	132.4 (T)	54.2	60.9	See Note 4	1:4	
5-3	136.4 (C)	26.7	63.5	-36.00	1:12	
5-4	136.4 (C)	26.7	63.5	-36.00	1:12	
5-5	136.4 (C)	26.7	63.5	-36.00	1:12	
5-6	58.7 (C)	27.6	70.7	-38.00	1:8	
5-7	58.7 (C)	27.6	70.7	-38.00	1:8	
5-8	58.7 (C)	27.6	70.7	-38.00	1:8	
5-9	136.4 (C)	26.7	63.5	-39.00	1:12	
5-10	136.4 (C)	26.7	63.5	-39.00	1:12	
5-11	136.4 (C)	26.7	63.5	-39.00	1:12	
5-12	132.4 (T)	54.2	60.9	See Note 4	1:4	
6-1	132.4 (T)	54.2	60.9	See Note 4	1:4	
6-2	132.4 (T)	54.2	60.9	See Note 4	1:4	
6-3	136.4 (C)	26.7	63.5	-35.00	1:12	
6-4	136.4 (C)	26.7	63.5	-35.00	1:12	
6-5	136.4 (C)	26.7	63.5	-35.00	1:12	
6-6	58.7 (C)	27.6	70.7	-34.00	1:8	
6-7	58.7 (C)	27.6	70.7	-34.00	1:8	
6-8	58.7 (C)	27.6	70.7	-34.00	1:8	
6-9	136.4 (C)	26.7	63.5	-36.00	1:12	
6-10	136.4 (C)	26.7	63.5	-36.00	1:12	
6-11	136.4 (C)	26.7	63.5	-36.00	1:12	
6-12	132.4 (T)	54.2	60.9	See Note 4	1:4	
7-1	116.8 (T)	46.5	65.7	See Note 4	1:4	
7-2	116.8 (T)	46.5	65.7	See Note 4	1:4	
7-3	118.8 (C)	22.5	61.4	-29.00	1:12	
7-4	118.8 (C)	22.5	61.4	-29.00	1:12	
7-5	118.8 (C)	22.5	61.4	-29.00	1:12	
7-6	53.5 (C)	23.8	68.0	-28.00	1:8	
7-7	53.5 (C)	23.8	68.0	-28.00	1:8	
7-8	53.5 (C)	23.8	68.0	-28.00	1:8	
7-9	118.8 (C)	22.5	61.4	-30.00	1:12	
7-10	118.8 (C)	22.5	61.4	-30.00	1:12	
7-11	118.8 (C)	22.5	61.4	-30.00	1:12	
7-12	116.8 (T)	46.5	65.7	See Note 4	1:4	
8-1	96.7 (T)	39.9	66.0	See Note 4	1:4	
8-2	96.7 (T)	39.9	66.0	See Note 4	1:4	
8-3	97.1 (C)	15.7	57.4	-23.00	1:12	
8-4	97.1 (C)	15.7	57.4	-23.00	1:12	
8-5	97.1 (C)	15.7	57.4	-23.00	1:12	
8-6	46.7 (C)	16.5	63.6	-25.00	1:8	
8-7	46.7 (C)	16.5	63.6	-25.00	1:8	
8-8	46.7 (C)	16.5	63.6	-25.00	1:8	
8-9	97.1 (C)	15.7	57.4	-25.00	1:12	
8-10	97.1 (C)	15.7	57.4	-25.00	1:12	
8-11	97.1 (C)	15.7	57.4	-25.00	1:12	
8-12	96.7 (T)	39.9	66.0	See Note 4	1:4	

PILE ID	PILE MAXIMUM AXIAL LOAD	PILE MAXIMUM MOMENT AT BOTTOM CONNECTION	PILE MAXIMUM MOMENT AT TOP CONNECTION	BOTTOM CONNECTION ELEVATION	PILE BATTER	NOTES
	kip	k-ft	k-ft	ft		
9-1	96.7 (T)	39.9	66.0	See Note 4	1:4	
9-2	96.7 (T)	39.9	66.0	See Note 4	1:4	
9-3	97.1 (C)	15.7	57.4	-21.00	1:12	
9-4	97.1 (C)	15.7	57.4	-21.00	1:12	
9-5	97.1 (C)	15.7	57.4	-21.00	1:12	
9-6	46.7 (C)	16.5	63.6	-20.00	1:8	
9-7	46.7 (C)	16.5	63.6	-20.00	1:8	
9-8	46.7 (C)	16.5	63.6	-20.00	1:8	
9-9	97.1 (C)	15.7	57.4	-21.00	1:12	
9-10	97.1 (C)	15.7	57.4	-21.00	1:12	
9-11	97.1 (C)	15.7	57.4	-21.00	1:12	
9-12	96.7 (T)	39.9	66.0	See Note 4	1:4	
10-1	96.7 (T)	39.9	66.0	See Note 4	1:4	
10-2	96.7 (T)	39.9	66.0	See Note 4	1:4	
10-3	97.1 (C)	15.7	57.4	-18.00	1:12	
10-4	97.1 (C)	15.7	57.4	-18.00	1:12	
10-5	97.1 (C)	15.7	57.4	-18.00	1:12	
10-6	46.7 (C)	16.5	63.6	-19.00	1:8	
10-7	46.7 (C)	16.5	63.6	-19.00	1:8	
10-8	46.7 (C)	16.5	63.6	-19.00	1:8	
10-9	97.1 (C)	15.7	57.4	-19.00	1:12	
10-10	97.1 (C)	15.7	57.4	-19.00	1:12	
10-11	97.1 (C)	15.7	57.4	-19.00	1:12	
10-12	96.7 (T)	39.9	66.0	See Note 4	1:4	
11-1	96.7 (T)	39.9	66.0	See Note 4	1:4	
11-2	96.7 (T)	39.9	66.0	See Note 4	1:4	
11-3	97.1 (C)	15.7	57.4	-17.0	1:12	
11-4	97.1 (C)	15.7	57.4	-17.0	1:12	
11-5	97.1 (C)	15.7	57.4	-17.0	1:12	
11-6	46.7 (C)	16.5	63.6	-17.0	1:8	
11-7	46.7 (C)	16.5	63.6	-17.0	1:8	
11-8	46.7 (C)	16.5	63.6	-17.0	1:8	
11-9	97.1 (C)	15.7	57.4	-17.0	1:12	
11-10	97.1 (C)	15.7	57.4	-17.0	1:12	
11-11	97.1 (C)	15.7	57.4	-17.0	1:12	
11-12	96.7 (T)	39.9	66.0	See Note 4	1:4	
12-1	96.7 (T)	39.9	66.0	See Note 4	1:4	
12-2	96.7 (T)	39.9	66.0	See Note 4	1:4	
12-3	97.1 (C)	15.7	57.4	-15.00	1:12	
12-4	97.1 (C)	15.7	57.4	-15.00	1:12	
12-5	97.1 (C)	15.7	57.4	-15.00	1:12	
12-6	46.7 (C)	16.5	63.6	-15.00	1:8	
12-7	46.7 (C)	16.5	63.6	-15.00	1:8	
12-8	46.7 (C)	16.5	63.6	-15.00	1:8	
12-9	97.1 (C)	15.7	57.4	-16.00	1:12	
12-10	97.1 (C)	15.7	57.4	-16.00	1:12	
12-11	97.1 (C)	15.7	57.4	-16.00	1:12	
12-12	96.7 (T)	39.9	66.0	See Note 4	1:4	

GENERAL NOTES:

1. ALL PILES ARE HP14X117
2. PILE ID. 1ST NUMBER = ICEBREAKER NUMBER, 2ND NUMBER=PILE NUMBER IN THE STRUCTURE.
3. TOP AND BOTTOM CONNECTION ELEVATION IS APPROXIMATE ELEVATION OF THE CENTER OF CONNECTION.
4. ELEVATION IN BOTTOM CONNECTION OF TENSION PILES (PILES 1, 2, 12 OF EACH ICEBREAKER) WILL VARY BASED ON ELEVATION OF SOUND STEEL WITHIN ROCK SOCKET CONCRETE.
5. AXIAL LOAD. (T) - TENSION, (C)- COMPRESSION.
6. TOP CONNECTION ELEVATION +0.33 FOR ALL PILES.
7. PILE AXIAL LOADS AND MOMENTS ARE ULTIMATE LOADS.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: V. PRILUTSKY
DRAWN BY: G. LICATA
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

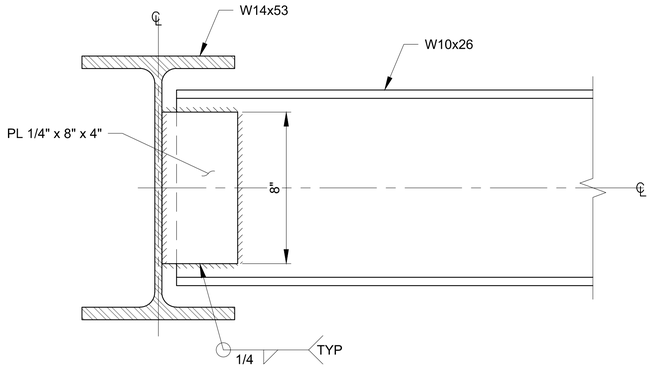
NR-107 - NORTH RIVER WRRF
UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

ICEBREAKER PILE SCHEDULE
SHEET 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. IB-S-406.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

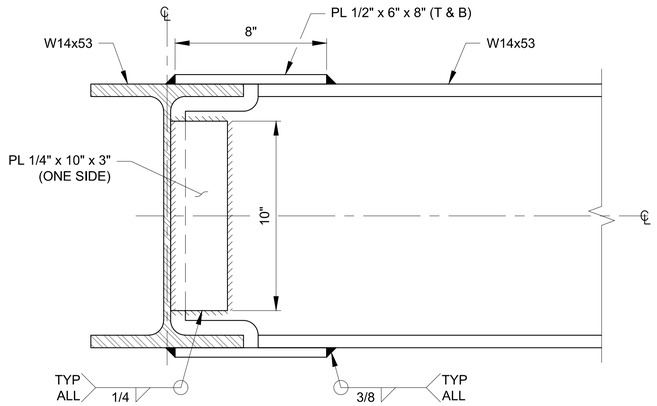
Last Saved By: AcostaML
Last Date Saved: 10/20/2026 4:22 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\IB-S-406.00.dwg
Date & Time Plotted: 10/20/2026 4:24 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb



E
IB-S-401, IB-S-403

TYPICAL STEEL FRAME
CONNECTION - W10 TO W14

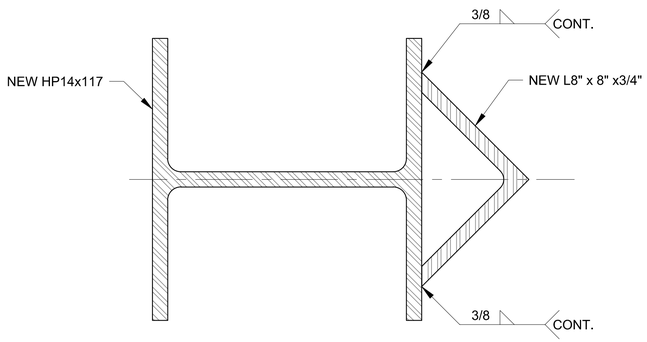
SCALE: 3"=1'-0"



F
IB-S-402, IB-S-403

TYPICAL STEEL FRAME
CONNECTION - W14 TO W14

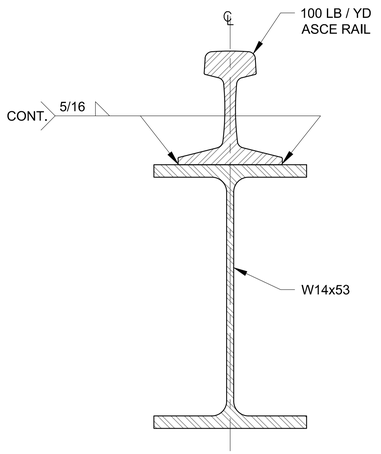
SCALE: 3"=1'-0"



C
IB-S-402

TYPICAL STEEL FRAME
CONNECTION - WEDGE ANGLE TO PILE

SCALE: 3"=1'-0"



D
IB-S-404

TYPICAL STEEL FRAME
CONNECTION - RAIL TO W14

SCALE: 3"=1'-0"

0 3 6 9 IN.
3"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: V. PRILUTSKY
DRAWN BY: E. FLORES
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

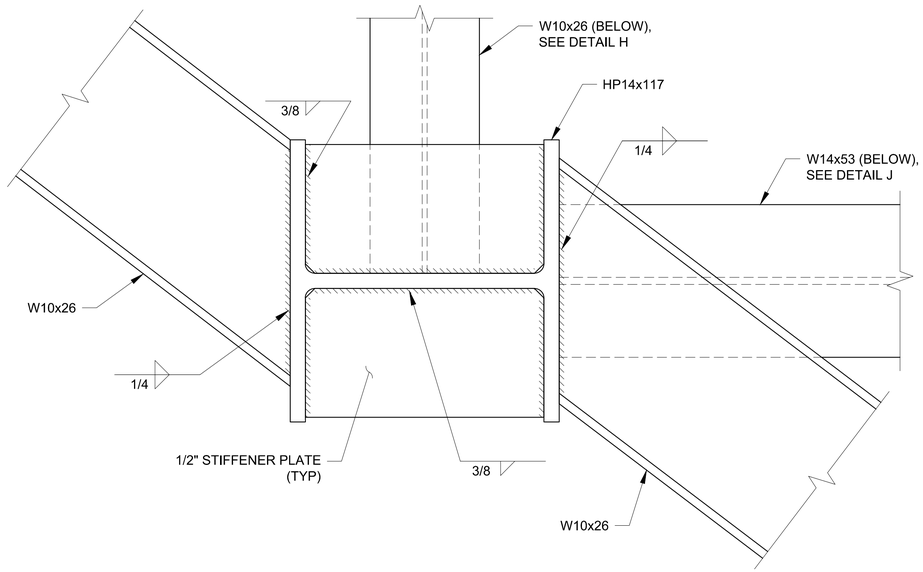
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

ICEBREAKER CONNECTION DETAILS - SHEET 1

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. IB-S-501.00

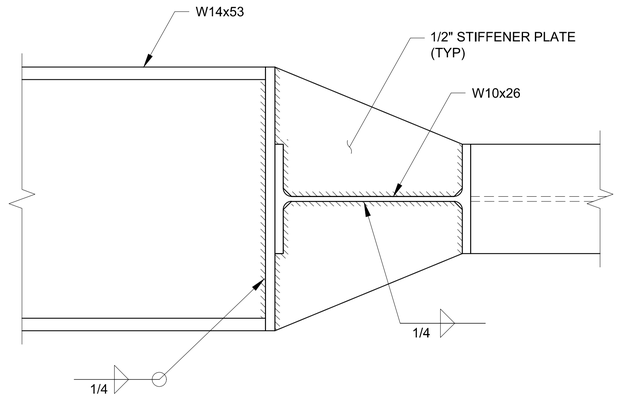
Last Saved By: AcostaML
Last Date Saved: 10/20/2026 4:22 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\IB-S-501.00.dwg
Date & Time Plotted: 10/20/2026 4:24 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



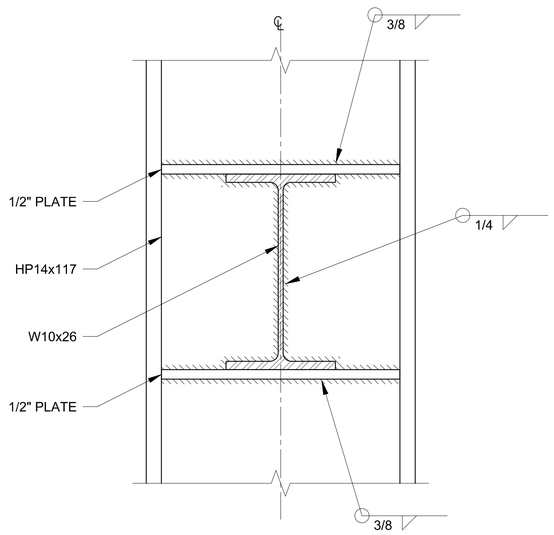
F IB-S-401 TYPICAL PILE TO WIDE FLANGE DIAPHRAGM CONNECTION DETAIL

SCALE: 3"=1'-0"



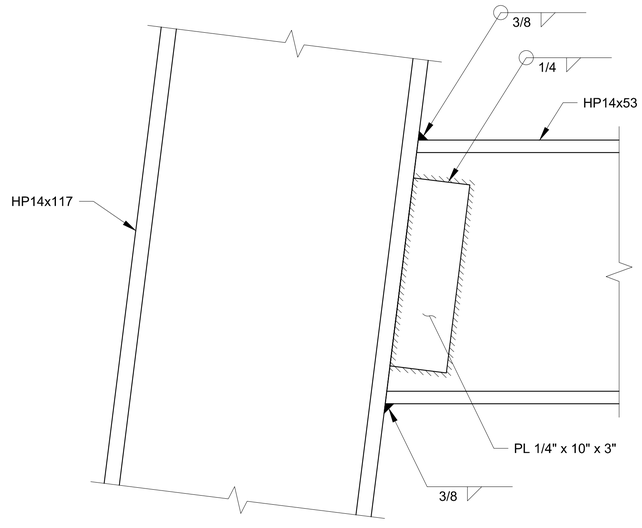
G IB-S-403 BRACING MEMBER CONNECTION DETAIL

SCALE: 3"=1'-0"



H IB-S-401 TYPICAL PILE TO W10 CONNECTION DETAIL

SCALE: 3"=1'-0"



J - TYPICAL PILE TO W14 CONNECTION DETAIL

SCALE: 3"=1'-0"

NOTES:

1. ALL WELDS NOT SHOWN SHALL BE 1/4" FILLET WELDS.

3"=1'-0" 0 3 6 9 IN.

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: V. PRILUTSKY
DRAWN BY: E. FLORES
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

Environmental Protection

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

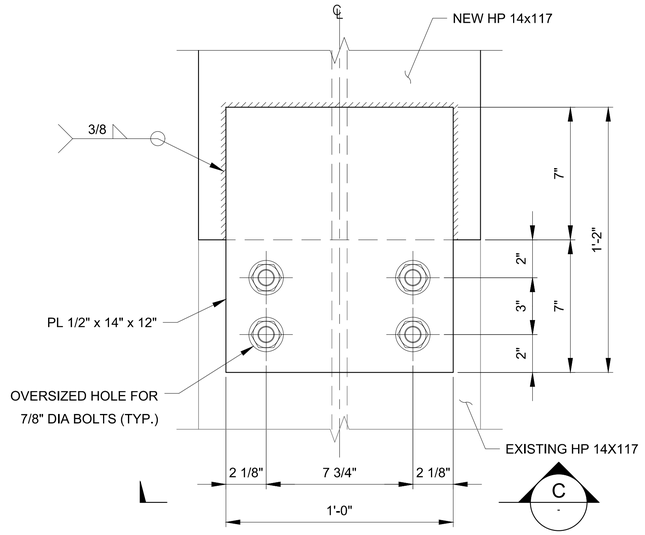
NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

ICEBREAKER CONNECTION DETAILS - SHEET 2

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. IB-S-502.00

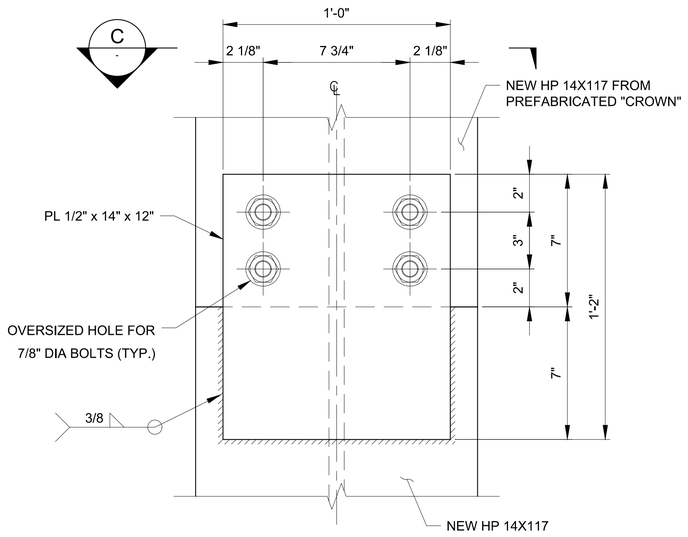
Last Saved By: AcostaML Last Date Saved: 10/20/2026 4:23 PM Date & Time Plotted: 10/20/2026 4:24 PM
Paper Size Printed/Plotted: ANSI full bleed D (22.00 x 34.00 Inches) Plot Scale: 1:1 Plot Style Table: BEDC_Acad(N).ctb
Drawing File Name & Drive Location: C:\users\acostaml\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\IB-S-502.00.dwg

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



A IB-S-403 PILE BOTTOM FLANGE SPLICE DETAIL (SEE NOTE 1)

SCALE: 3"=1'-0"

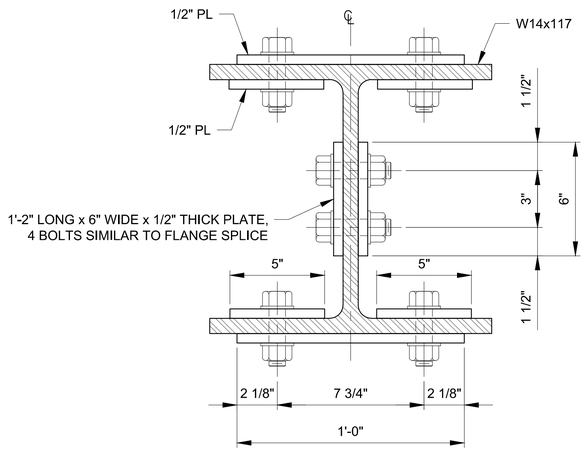


B IB-S-403 PILE TOP FLANGE SPLICE DETAIL (SEE NOTE 1)

SCALE: 3"=1'-0"

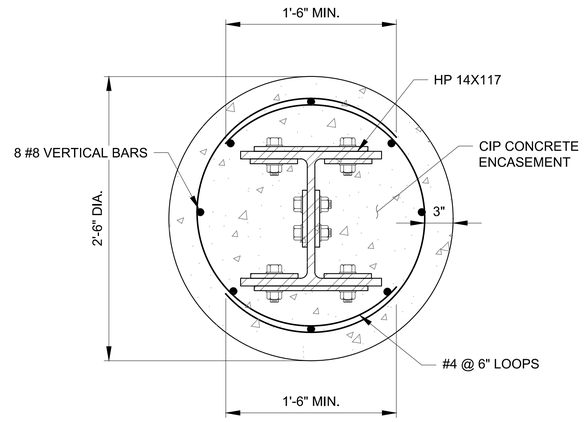
NOTES:

1. FOR SPECIFIC SPLICE LOCATION ON EACH ICEBREAKER STRUCTURE LEG, SEE TABLE ON DRAWINGS S-405 AND S-406.
2. ALL WELDS NOT SHOWN SHALL BE 1/4" FILLET WELDS.



C - TYPICAL PILE FIELD SPLICE DETAIL

SCALE: 3"=1'-0"



D IB-S-403 PILE BOTTOM SPLICE ENCASEMENT DETAIL

SCALE: 1 1/2"=1'-0"

0 3 6 9 IN.
3"=1'-0"

BID SET
DATE ISSUED: OCTOBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY: V. PRILUTSKY
DRAWN BY: E.FLORES
CHECKED BY: A. WALLER, PE
DESIGN LEAD: I. TUTUNCU, PE
SECTION MANAGER: F. PULIDO, PE

Jacobs

ACCOUNTABLE MANAGER: FRANK GIARDINA
PORTFOLIO MANAGER: MATTHEW OSIT, PE
DEPUTY DIRECTOR, IN HOUSE DESIGN: KEN MORIARTY, PE

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NR-107 - NORTH RIVER WRRF UNDERDECK STRUCTURAL AND MARINE IMPROVEMENTS

ICEBREAKER CONNECTIONS DETAIL - SHEET 3

DATE: OCTOBER 2026
SHEET NO:
DRAWING NO. IB-S-503.00

Last Saved By: J.perez
Paper Size Printed/Plotted: ANSI full bleed D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\users\acostam\appdata\local\bentley\projectwise\jacobs-americas-01\d0129589\IB-S-503.00.dwg
Last Date Saved: 10/20/2026 4:23 PM
Date & Time Plotted: 10/20/2026 4:24 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad(N).ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.