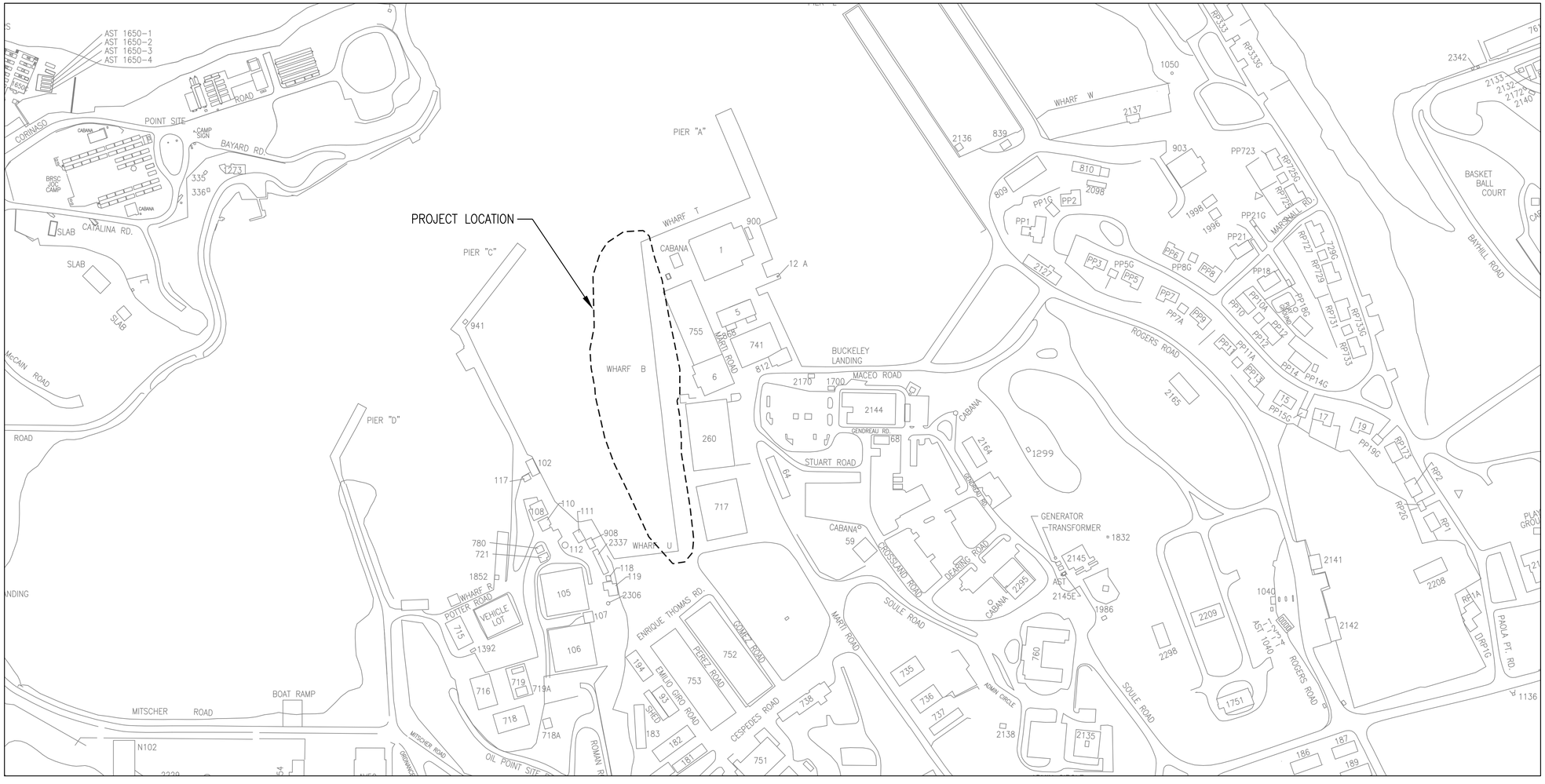
WHARF BRAVO STRUCTURAL REPAIRS

U.S. NAVAL STATION GUANTANAMO BAY
GUANTANAMO BAY, CUBA

SUBMITTAL DATE 04/04/2016



LOCATION MAP
N.T.S.

COMMANDER NAVFAC/BLTL–MICHELE JACKSON, P.E.	IPT TECH. BRANCH HEAD – MICHAEL JOHNSON R.A.	DESIGN WATERFRONT – JOHN McCOY, P.E.	DESIGN CIVIL – RICARDO PALMO
IPT PROJECT MANAGER – ELAINE GALLANT, P.E.		DESIGN STRUCTURAL – VITALY FEYGIN, P.E.	DESIGN ELECTRICAL – CHRISTOPHER DUGUID, P.E.
		CHIEF STRUCTURAL – KURT W. WITTMAN, P.E.	CHIEF CIVIL – JEFFREY FRANK, P.E.
			CHIEF ELECTRICAL – RAMON FLORES, P.E.

SYM	DESCRIPTION	DATE	APPR
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NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY ----

SATISFACTORY TO DATE ----

DES -- DRW -- CHK --

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD J. WARD

CHIEF ENG/ARCH (CORE) --

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

NAVSTA GUANTANAMO BAY

GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

COVER & SIGNATURE SHEET

SCALE: SCALE

EPROJECT NO.: 1295318

CONSTR. CONTR. NO.: N69450–XX–C–XXXX

NAVFAC DRAWING NO.: ----

SHEET 000 OF 57

G001

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIB\project_files\z_CUBA\navsta guantanamo bay\hf605414\wharf bravo structural repairs-1295318\working technical files\Drawing\G001 COVER & SIGNATURE SHEET.dwg LAYOUT NAME: G001 COVER & SIGNATURE SHEET PLOTTED: Tuesday, April 05, 2016 – 9:23am USER: john.d.mccoy

ABBREVIATIONS

AB	ABANDONED	FW	FRESH WATER	REQ'D	REQUIRED
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	GOV'T	GOVERNMENT	S	SOUTH
		ID	INSIDE DIAMETER	SCH	SCHEDULE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	HDG	HOT DIPPED GALVANIZED	SECT	SECTION
		HORIZ	HORIZONTAL	SHT	SHEET
AP	AFT PERPENDICULAR	IN	INCH	SIM	SIMILAR
ASTM	ASTM INTERNATIONAL	INFO	INFORMATION	SPECS	SPECIFICATIONS
AWS	AMERICAN WELDING SOCIETY	LB	POUND	SQ	SQUARE
@	AT	MACH	MACHINE	SR	SEWER
&	AND	MAX	MAXIMUM	SS	STAINLESS STEEL
APPROX	APPROXIMATE	MAT'L	MATERIAL	SSP	STEEL SHEET PILE
BOT, BOTT	BOTTOM	MB	MACHINE BOLT	ST	STREET
℄	CENTER LINE	MCON	MILITARY CONSTRUCTION	STA	STATION
CA	COMPRESSED AIR	MECH	MECHANICAL	STD	STANDARD
CG	CONTINUOUS GROUND	MIL	MILITARY	STL	STEEL
CIP	CAST IN PLACE	MIN	MINIMUM	STM	STEAM
CLR	CLEAR, CLEARANCE	MISC	MISCELLANEOUS	STR	STAGGER
CONC	CONCRETE	MLW	MEAN LOW WATER	SUBSTA	SUBSTATION
CONT	CONTINUED, CONTINUOUS	MLLW	MEAN LOWER LOW WATER	SW	SALT WATER
CP	COMPLETE PENETRATION	MPH	MILES PER HOUR	SYMM	SYMMETRICAL
CU	COPPER	MSL	MEAN SEA LEVEL	T	TON
DB	DOUBLE BITT	N	NORTH	T & B	TOP & BOTTOM (TOP & BOT)
DBL	DOUBLE	NAVFAC	NAVAL FACILITIES ENGINEERING COMMAND	TEL	TELEPHONE
DEMO	DEMOLITION	NIC	NOT IN CONTRACT	THRD	THREADED
DET	DETAIL	No	NUMBER	TYP	TYPICAL
DIA OR Ø	DIAMETER	NTS, NS	NOT TO SCALE, NO SCALE	UFC	UNIFIED FACILITIES CRITERIA
DIM	DIMENSION	OC	ON CENTER	UHMWP	ULTRA HIGH MOLECULAR WEIGHT PLASTIC
DWG	DRAWING	OD	OUTSIDE DIAMETER		
EA	EACH	OPP	OPPOSITE	UNO	UNLESS NOTED OTHERWISE
EF	EACH FACE	OH	OPPOSITE HAND	V	VOLT
EL	ELEVATION	OW	OILY WASTE	VAR	VARIES
ELEC OR ELEC'L	ELECTRICAL	ℙ	PLATE	VERT	VERTICAL
EMBED	EMBEDMENT	P/N	PART NUMBER	W/	WITH
EQUIP	EQUIPMENT	PMPCM	POLYMER MODIFIED PORTLAND CEMENT MORTAR	W/O	WITHOUT
EW	EACH WAY			WP	WORK POINT
EXIST	EXISTING	PI	POST INSTALLED	WW	WASTE WATER
EXP	EXPANSION	PSF	POUNDS PER SQUARE FOOT	Y & D	BUREAU OF YARDS & DOCKS
EJ OR EXP JT	EXPANSION JOINT	PSI	POUNDS PER SQUARE INCH		
FFF	FOAM FILLED FENDER	PVC	POLYVINYL CHLORIDE		
FO	FUEL OIL	PW	POTABLE WATER		
FP	FORWARD PERPENDICULAR	PWC	PUBLIC WORKS COMMAND		
FT	FOOT, FEET	RD	ROAD		
		REF	REFERENCE		
		REINF	REINFORCED, REINFORCING		

Sheet List Table

SHEET NUMBER	SHEET TITLE	NAVFAC DWG N0.
	0 – GENERAL	
G001	COVER & SIGNATURE SHEET	--
G002	DRAWING SHEET INDEX	--
G003	GENERAL ARRANGEMENT AND PHASING PLAN	--
	1 – CIVIL	
C001	GENERAL NOTES AND LEGENDS	--
C002	GEOTECHNICAL DATA	--
C003	GEOTECHNICAL DATA	--
C004	OVERALL EXISTING CONDITIONS PLAN	--
C005	EXISTING CONDITIONS – NORTH 1	--
C006	EXISTING CONDITIONS – NORTH 2	--
C007	EXISTING CONDITIONS – SOUTH 1	--
C008	EXISTING CONDITIONS – SOUTH 2	--
C100	DEMOLITION SITE PLAN – NORTH	--
C101	DEMOLITION SITE PLAN – SOUTH	--
C200	OVERALL SITE PLAN	--
C201	SITE PLAN – NORTH	--
C202	SITE PLAN – SOUTH	--
C203	GRADING PLAN – NORTH	--
C204	GRADING PLAN – SOUTH	--
C205	SEDIMENT CONTROL PLAN – NORTH	--
C206	SEDIMENT CONTROL PLAN – SOUTH	--
C300	UTILITY SITE PLAN – NORTH	--
C301	UTILITY SITE PLAN – SOUTH	--
C400	CONCRETE JOINT PLAN – NORTH	--
C401	CONCRETE JOINT PLAN – SOUTH	--
C501	SITE CONSTRUCTION DETAILS	--
C502	SITE CONSTRUCTION DETAILS	--
C503	UTILITY DETAILS	--
	2 – STRUCTURAL	
S001	STRUCTURAL NOTES 1 OF 2	--
S002	STRUCTURAL NOTES 2 OF 2	--
S011	INSPECTION RESULTS 1 OF 2	--
S012	INSPECTION RESULTS 2 OF 2	--
S013	SITE PHOTOS	--
SD101	DEMOLITION PLAN & DETAILS 1 OF 2	--
SD102	DEMOLITION PLAN & DETAILS 2 OF 2	--
S110	NEW WORK – SITE SKETCH	--
S110A	NEW WORK SITE SKETCH 2	--
S111	STRUCTURAL PLANS 1 OF 5	--
S112	STRUCTURAL PLANS 2 OF 5	--
S113	STRUCTURAL PLANS 3 OF 5	--
S114	STRUCTURAL PLANS 4 OF 5	--
S115	STRUCTURAL PLANS 5 OF 5	--
S201	ELEVATIONS	--
S301	TYPICAL WHARF SECTION 1 OF 2	--
S302	TYPICAL WHARF SECTION 2 OF 2	--
S401	ENLARGED PLANS 1 OF 2	--
S402	ENLARGED PLANS 2 OF 2	--
S501	DETAILS AND PLANS – BULKHEAD	--
S502	DETAILS AND SECTIONS – BULKHEAD	--
S503	DETAILS AND PLANS – TIE-INS AND CORNER	--
S504	DETAILS AND SECTIONS – TIE-INS AND CORNER	--
S505	DETAILS – BULKHEAD WALE, DEADMEN, LDB & MISC.	--
S506	DETAILS – FENDERS AND MISC.	--
	3 – ELECTRICAL	
E001	GENERAL NOTES SYMBOLS AND LEGENDS	15081089
ES101	SITE PLAN	15081090
ES102	SITE PLAN	15081091
E501	ELECTRICAL DETAILS	15081092
E600	ELECTRICAL DIAGRAMS & RISERS	15081093

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PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD J. WARD

CHIEF ENG/ARCH (CORE) --

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

DRAWING SHEET INDEX

SCALE: SCALE

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

NAVFAC DRAWING NO. ----

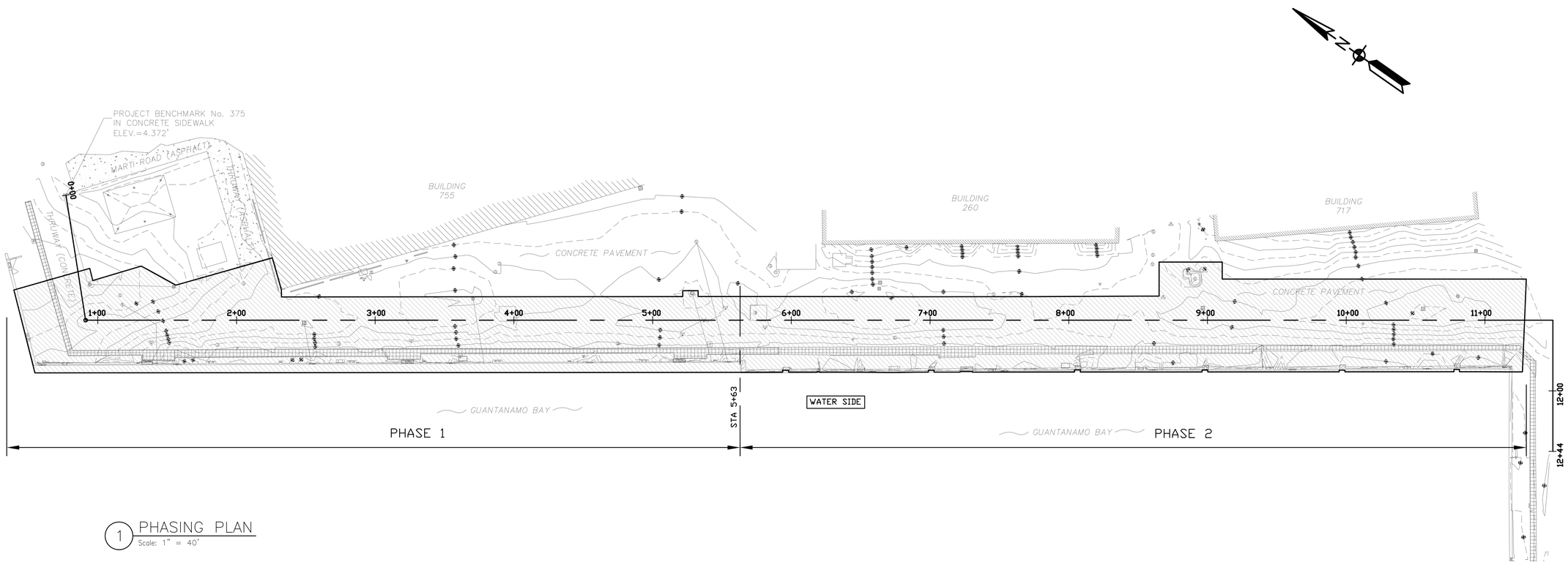
SHEET 000 OF 57

G002

DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\CIB\project_files\z_CUBA\navsta guantanamo bay\hi#60514\wharf bravo structural repairs-1295318\working technical files\Drawings\G002 DRAWING SHEET INDEX.dwg LAYOUT NAME: G002 DRAWING SHEET INDEX PLOTTED: Tuesday, April 05, 2016 – 7:17am USER: john.d.mccoy



1 PHASING PLAN
Scale: 1" = 40'

NOTES:

1. CONSTRUCTION ACTIVITIES ON WHARF BRAVO SHALL NOT IMPACT BERTHING AT WHARF TANGO AND CHARLIE.
2. LOCATION FOR THE CONTRACTOR LAYDOWN ARE WILL BE PROVIDED DURING THE SITE VISIT.
3. COMPLETED PHASE AREAS SHALL BE FULLY FUNCTIONAL BEFORE TURNING OVER TO CONTRACTING OFFICER.

GRAPHIC SCALE
1"=40'
0' 40' 80' 120' 160' 200'

SYM	DESCRIPTION	DATE	APPR
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NAVFAC

SEAL

A/E INFO

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FOR COMMANDER NAVFAC / B.L.T.L.
ACTIVITY
SATISFACTORY TO DATE

DES	RP	DRW	RP	CHK	JF

PM/DM: E. GALLANT
BRANCH MANAGER: J. WARD
CHIEF ENG/ARCH: J. FRANK
FIRE PROTECTION: ---

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
PT SOUTH ATLANTIC
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA
WHARF BRAVO STRUCTURAL REPAIRS
GENERAL ARRANGEMENT AND PHASING PLAN

SCALE: AS SHOWN
EPROJECT NO.: 1295318
CONSTR. CONTR. NO.: N69450-XX-C-XXXX
NAVFAC DRAWING NO.: ---
SHEET 000 OF 57
G003
PWD SHEET NUMBER: --

DRAWFORM REVISION: 7 AUGUST 2009

GENERAL NOTES:

1. HORIZONTAL COORDINATES BASED ON ASSUMED DATUM, US FEET. ELEVATIONS BASED ON MEAN SEA LEVEL = 0.00 US FEET. SURVEY PERFORMED BY NAVFAC ON FEBRUARY, 2013.
2. THE LOCATIONS OF SOME UTILITIES SHOWN ON THE DRAWING ARE BASED ON INFORMATION OBTAINED FROM UTILITY PLANS PROVIDED BY THE GTMO PUBLIC WORKS DEPARTMENT. THE ACCURACY AND COMPLETENESS OF THESE RECORDS IS NOT KNOWN.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM IN THE FIELD, TO THE CONTRACTORS SATISFACTION, THE LOCATIONS AND ELEVATIONS FOR ALL UTILITIES THAT MAY EFFECT THE WORK.
4. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION AND STRUCTURE PLACEMENT WITH ALL UTILITY CONSTRUCTION.
5. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE EROSION AND SOIL CONTROL DURING AND FOLLOWING CONSTRUCTION UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED TO AVOID ADVERSE ENVIRONMENTAL IMPACTS TO OFF-SITE PROPERTY AND DRAINAGE SYSTEMS.
6. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION POLLUTION PREVENTION PLAN.
7. ALL UNDERGROUND UTILITIES TO BE INSTALLED IN ACCORDANCE WITH THE PLANS AND APPROVED SPECIFICATIONS.
8. THE CONTRACTOR(S) SHALL NOTIFY PUBLIC WORKS, AND THE CONTRACTING OFFICER 48 HOURS PRIOR TO INITIATING ANY EXCAVATION ACTIVITIES, OR AS SPECIFIED BY THE UTILITY COMPANIES AND THE PERMITS OBTAINED FOR THE WORK.
9. CONSTRUCTION WARNING SIGNS ARE TO BE MOUNTED AND ERECTED BEFORE CONSTRUCTION CAN COMMENCE. THESE AND ALL TRAFFIC CONTROL DEVICES SHALL FOLLOW THE STANDARDS SET FORTH BY THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
10. THE CONTRACTOR IS RESPONSIBLE FOR CLEARLY IDENTIFYING THE AREA OF CONSTRUCTION AND SAFELY ROUTING ALL VEHICULAR AND PEDESTRIAN TRAFFIC AROUND THE CONSTRUCTION AREA.
11. THE CONTRACTOR(S) SHALL LOCATE, VERIFY AND IDENTIFY ALL EXISTING UNDERGROUND UTILITIES (SHOWN OR NOT SHOWN) ON THE PLANS PRIOR TO ANY EXCAVATION ACTIVITIES.
12. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO EXCAVATION AND TAKE ALL MEASURES NECESSARY TO PROTECT UTILITIES DURING CONSTRUCTION. SHOULD ANY UTILITY LINE OR COMPONENT BECOME DAMAGED OR REQUIRE RELOCATION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CONTRACTING OFFICER.
13. THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES, SURVEY MARKERS, MONUMENTS, ETC. DURING CONSTRUCTION.
14. THERE SHALL BE ADEQUATE NOTICE GIVEN FOR SCHEDULING THE FINAL INSPECTION TO ALLOW FOR TRAVEL TO THE SITE.

DEMOLITION NOTES:

1. CODES: ALL CODES REGULATING DEMOLITION WORK LISTED IN THE SPECIFICATIONS SHALL BE COMPLIED WITH. THE CONTRACTOR SHALL PUT UP AND MAINTAIN SUCH BARRIERS AND WARNING LIGHTS AS MAY BE NECESSARY OR REQUIRED BY CODE TO PROTECT AND PREVENT UNAUTHORIZED PERSONNEL FROM ENTERING THE DEMOLITION WORK AREA. ALL DEMOLITION OPERATIONS SHALL COMPLY WITH THE REQUIREMENTS OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) INSOFAR AS THEY APPLY TO DEMOLITION WORK TO BE PERFORMED UNDER THIS CONTRACT.
2. PROTECTION OF BUILDINGS & EQUIPMENT: TEMPORARY PROTECTIVE DEVICES SHALL BE INSTALLED AS REQUIRED AROUND THE DEMOLITION WORK FOR PROTECTION OF PERSONNEL, EXISTING ADJACENT BUILDINGS, AND EQUIPMENT AGAINST DUST AND FALLING OR FLYING DEBRIS.
3. ALL UTILITY PIPE UNDER EXISTING ROADWAYS THAT IS TO BE REMOVED SHALL BE CAPPED AT THE EDGE OF PAVEMENT AND ABANDONED IN PLACE.

WHARF UTILITY MARKING NOTES:

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO RECORD ALL THE EXISTING UTILITY MARKING PRIOR TO PAVEMENT DEMOLITION. ALL THE UTILITY MARKING SHALL BE RE-PAINT TO ITS ORIGINAL LOCATION AFTER THE NEW CONCRETE PAVEMENT IS COMPLETED.

PAVING AND DRAINAGE NOTES:

1. ALL GRADING, PLACEMENT OF FILL AND COMPACTION SHALL BE IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
2. PIPE LENGTHS MAY REQUIRE SLIGHT FIELD ADJUSTMENTS TO FIT CONDITIONS. ALL PIPE CROSSINGS SHALL BE COMPACTED TO 95% MAX DENSITY AT 6 INCH LIFTS. DENSITIES SHALL BE TAKEN AT EVERY 50 FT. INTERVAL.
3. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION OF THE PAVING AND DRAINAGE FACILITIES WITH ALL OTHER CONSTRUCTION
4. ALL PIPE JOINTS SHALL BE PROPERLY FILLED AND SEALED PER THE PRODUCT MANUFACTURER'S SPECIFICATIONS.
5. THE CONTRACTOR SHALL COORDINATE ALL NOTIFICATIONS AND UTILITY LOCATION EFFORTS WITH PUBLIC WORKS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
6. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE PERMITTED CONSTRUCTION DOCUMENTS. ANY DEVIATION FROM THE APPROVED CONSTRUCTION DOCUMENTS SHALL BE THE SOLE RESPONSIBILITY OF THE ORGANIZATION AND/OR ENTITY RESPONSIBLE FOR THE INSTALLATION TO UPDATE/REPLACE ANY DEFICIENT MATERIAL/EQUIPMENT NECESSARY TO BRING THE FINAL PRODUCT TO THE STANDARD OF THE PERMITTED CONSTRUCTION DOCUMENTS.
7. WHERE TRENCH EXCAVATION EXCEEDS FIVE (5) FEET IN DEPTH, THE CONTRACTOR SHALL SUBMIT A TRENCH SAFETY SYSTEM FOR APPROVAL, THE TRENCH SAFETY SYSTEM SHALL BE COMPLIANT WITH OSHA STANDARD 29 CFR SECTION 1926.650 SUBPART P.
8. THE CONTRACTOR IS COMPLETELY RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES DURING CONSTRUCTION. REFER TO THE CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN.
9. THERE SHALL BE NO UNPROTECTED OPEN TRENCHES AT THE DAY'S END.
10. ALL CONSTRUCTION LINES AND GRADES SHALL BE ESTABLISHED AND MAINTAINED BY THE CONTRACTOR.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION OF DOWNSTREAM TURBIDITY/SILTATION THROUGH THE USE OF HAY BALES, SCREENS, SILTATION BASINS, CHEMICAL FLOCCULATION AND/OR ANY OTHER SUITABLE MEANS REQUIRED.

EROSION AND SEDIMENT CONTROL NOTES:

1. STORMWATER POLLUTION PREVENTION PLAN AND EROSION AND SEDIMENT CONTROL MEASURES WILL BE DEVELOPED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS. THE EROSION CONTROL MEASURES PRESENTED ON THE PLANS ARE INTENDED TO SHOW IN GENERAL TERMS THE MINIMUM ACCEPTABLE LEVEL OF PROTECTION ADJACENT TO THE PROPOSED STRUCTURE.
2. EROSION CONTROL MEASURES AND DETAILS DIFFERING FROM THOSE SHOWN IN THESE PLANS IN CONJUNCTION WITH THE REQUIRED STORMWATER POLLUTION PREVENTION PLAN MAY BE USED, HOWEVER THEY WILL DEMONSTRATE THEIR ADEQUACY AND THAT PERFORMANCE WILL SATISFY LOCAL, STATE, AND FEDERAL REQUIREMENTS.
3. FOLLOWING COMPLETION OF WORK, REMOVE ALL BARRIERS AND RESTORE SITE.
4. THE STORMWATER POLLUTION PREVENTION PLAN MUST BE APPROVED BY THE ENVIRONMENTAL DIVISION PRIOR TO START OF DEMOLITION OR CONSTRUCTION ACTIVITES
5. TURBIDITY BARRIERS SHALL BE USED TO MAINTAIN ACCEPTABLE TURBIDITY LEVELS.
6. NUMBER AND SPACING OF ANCHORS SHALL BE SUFFICIENT TO PREVENT DISPLACEMENT BY CURRENT VELOCITIES, VEGETATION OR DEBRIS.
7. TURBIDITY BARRIERS FOR FLOWING STREAMS AND TIDAL CREEKS MAY BE EITHER FLOATING, OR STAKED TYPES OR ANY COMBINATIONS OF TYPES THAT WILL SUIT SITE CONDITIONS AND MEET EROSION CONTROL AND WATER QUALITY REQUIREMENTS. POSTS IN STAKED TURBIDITY BARRIERS SHALL BE INSTALLED IN VERTICAL POSITION UNLESS OTHERWISE ALLOWED BY THE CONTRACTING OFFICER.

UTILITY NOTES:

1. ALL WATER LINE TO BE PVC PIPE SCHEDULED 80 WITH METAL TRACING WIRE. PIPES SHALL BE MANUFACTURED IN CONFORMANCE WITH THE MOST RECENT AWWA STANDARDS, UFC 3-201-01 AND UFC 3-600-01. FIRE HYDRANT LEADS TO BE 6" DUCTILE IRON AND RESTRAINED.
2. ALL FITTINGS OF THE WATER MAIN MUST BE BLOCKED OR RESTRAINED INCLUDING FIRE HYDRANTS.
3. WATER LINES SHALL BE FLUSHED AND DISINFECTED. DISINFECTION OF THE WATER MAINS SHALL BE IN ACCORDANCE WITH AWWA C-601 STANDARDS.
4. ALL FIRE HYDRANT BARRELS MUST BE COLORED CHROME YELLOW PER REGULATION UFC 3-600-01 SEC 3-7.3.1. BONNET AND CAP TO BE PAINTED IN ACCORDANCE WITH NFPA 291.
5. NO VALVES ARE TO BE CLOSED BY THE CONTRACTOR PRIOR TO NOTIFICATION OF DEPARTMENT OF PUBLIC WORKS.
6. CONTRACTOR SHALL REQUEST INSPECTION BY DPW 3 DAYS PRIOR TO COMMENCING CONSTRUCTION OF ANY WATER MAINS.
7. CONTRACTOR SHALL SUBMIT SHOP DRAWING TO GUANTANAMO BAY DPW FOR FINAL APPROVAL OF WATER METER AND VAULT.
8. ANY WATER PIPING DEEPER THAN 10' AND/OR GREATER THAN 12" DIAMETER ARE TO BE DUCTILE IRON PIPE.
9. ANY SEWER PIPING DEEPER THAN 10' AND/OR UNDER ROADWAYS ARE TO BE DUCTILE IRON PIPE.

ELECTRICAL GENERAL NOTES:

1. EXISTING PRIMARY CIRCUITS SHALL REMAIN ENERGIZED AND IN SERVICE DURING CONSTRUCTION WITH EXCEPTION DURING APPROVED POWER OUTAGES WITH THE CONTRACTING OFFICER.
2. FOR EXISTING PRIMARY CIRCUITS THAT ARE TO BE EXTENDED, THE NEW WORK SHALL BE INSTALLED AND PREPARED FOR RECONNECTION PRIOR TO INTERCEPTION.
3. THE CONTRACTOR IS RESPONSIBLE FOR ALL ELECTRICAL WORK INCLUDING, BUT NOT LIMITED TO, MODIFICATIONS TO THE OVERHEAD ELECTRICAL DISTRIBUTION, MODIFICATIONS TO THE UNDERGROUND ELECTRICAL DISTRIBUTION, MODIFICATIONS TO THE TELECOMMUNICATIONS, CONDUIT, TRENCHING AND BACK FILL, CABLING, AND TESTING.
4. THE CONTRACTOR SHALL TURN OVER ALL POLE-MOUNTED AND PAD-MOUNTED TRANSFORMERS AND SWITCHES REMOVED FROM SERVICE TO THE CONTRACTING OFFICER.

IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT, SCALE REDUCED ACCORDINGLY

SYM	DESCRIPTION	DATE	APPR
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ACTIVITY

SATISFACTORY TO DATE ---

DES RP | DRW RP | CHK JF

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD S. ZAVOYSKI

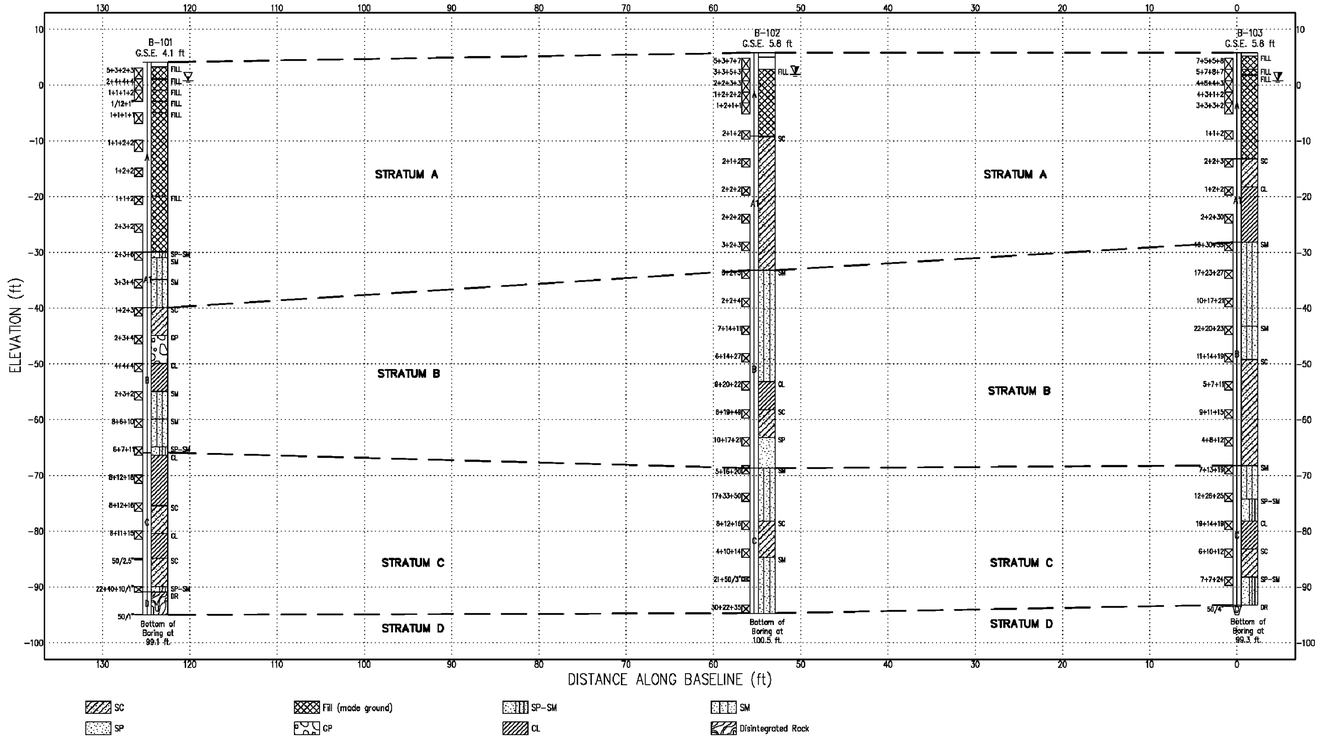
CHIEF ENG/ARCH (CORE) J. FRANK

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA
WHARF BRAVO STRUCTURAL REPAIRS
GENERAL NOTES AND LEGENDS

SCALE: NONE
EPROJECT NO.: 1295318
CONSTR. CONTR. NO. N69450-XX-C-XXXX
NAVFAC DRAWING NO. ----
SHEET 3 OF 57
C001

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CBL\project_files\z_CUBA\navsta guantanamo bay\h\n60514\wharf bravo structural repairs-1295318\working technical files\Drawings\C001 GENERAL NOTES, LEGENDS AND ABBREVIATIONS.dwg LAYOUT NAME: C001 GENERAL NOTES, LEGENDS AND ABBREVIATIONS PLOTTED: Monday, April 04, 2016 - 6:35pm USER: ricardo.palma



Schnabel ENGINEERING	WHARF BRAVO GUANTANAMO BAY, CUBA	DRAWN BY: CAB CHECKED BY: RHW	DATE: 09/03/2015 SCALE: AS SHOWN	SUBSURFACE CROSS SECTION PROJECT NO. 15619016.00 FIGURE A-2

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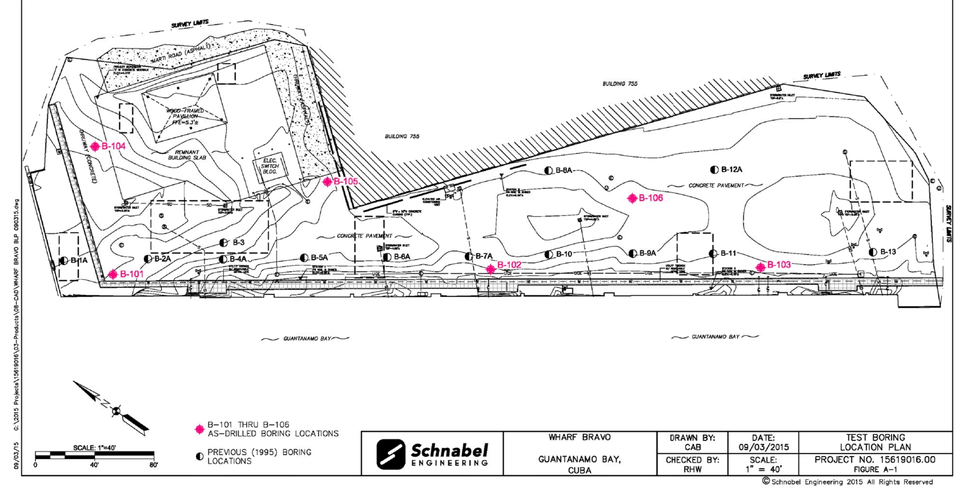
09/03/15 G:\2015 Projects\15619016\03-Products\CAD\WHARF BRAVO XS 090315.dwg

1 SOIL BORING
Scale: NONE



B-101 THRU B-106 AS-DRILLED BORING LOCATIONS

PREVIOUS (1995) BORING LOCATIONS

Schnabel ENGINEERING	WHARF BRAVO GUANTANAMO BAY, CUBA	DRAWN BY: CAB CHECKED BY: RHW	DATE: 09/03/2015 SCALE: 1" = 40'	TEST BORING LOCATION PLAN PROJECT NO. 15619016.00 FIGURE A-1

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ACTIVITY ----

SATISFACTORY TO DATE ----

DES RP DRW RP CHK JF

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD S. ZAVOYSKI

CHIEF ENG/ARCH (CORE) J. FRANK

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

MAYSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

GEOTECHNICAL DATA

SCALE: NONE

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

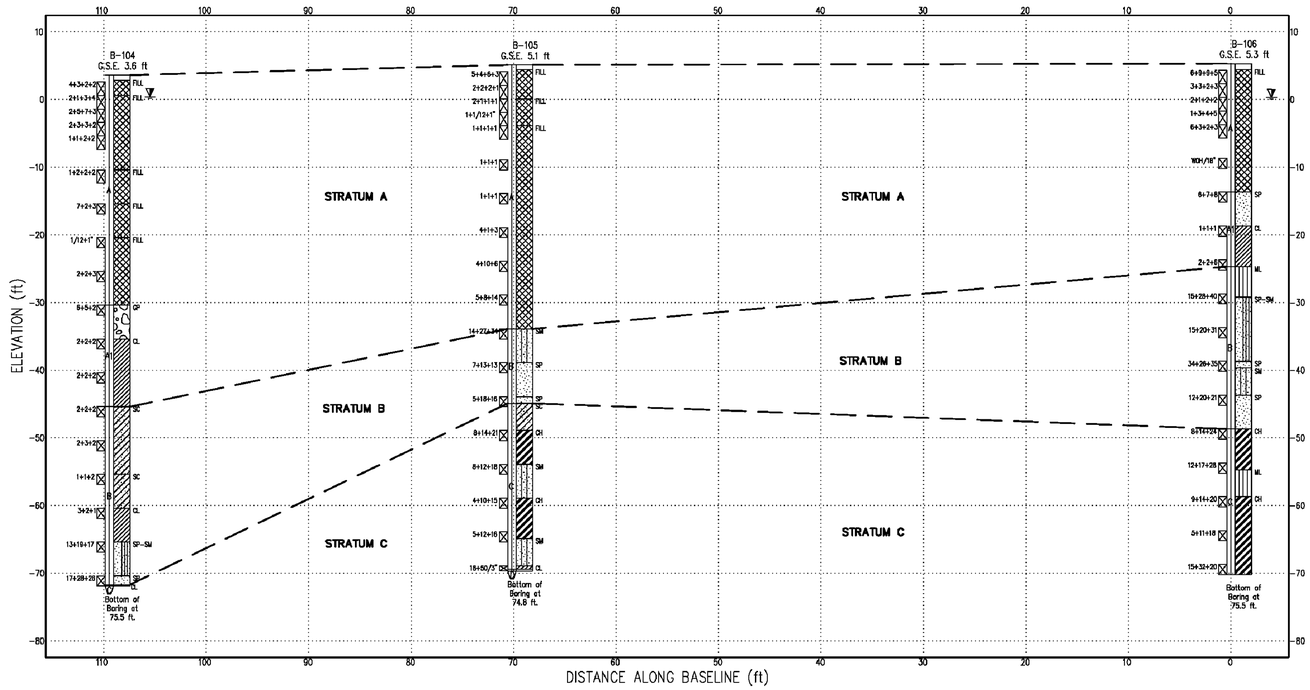
NAVFAC DRAWING NO. ----

SHEET 4 OF 57

C002

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CBL\project_files\z_CUBA\mysta guantanamo bay(hjr)60514\wharf bravo structural repairs-1295318\working technical files\Drawings\C002 OVERALL PROJECT MAP.dwg LAYOUT NAME: C002 OVERALL PROJECT MAP PLOTTED: Monday, April 04, 2016 - 6:36pm USER: ricardo.palma



Schnabel ENGINEERING	WHARF BRAVO GUANTANAMO BAY, CUBA	DRAWN BY: CAB CHECKED BY: RHW	DATE: 09/03/2015 SCALE: AS SHOWN	SUBSURFACE CROSS SECTION PROJECT NO. 15619016.00 FIGURE A-3

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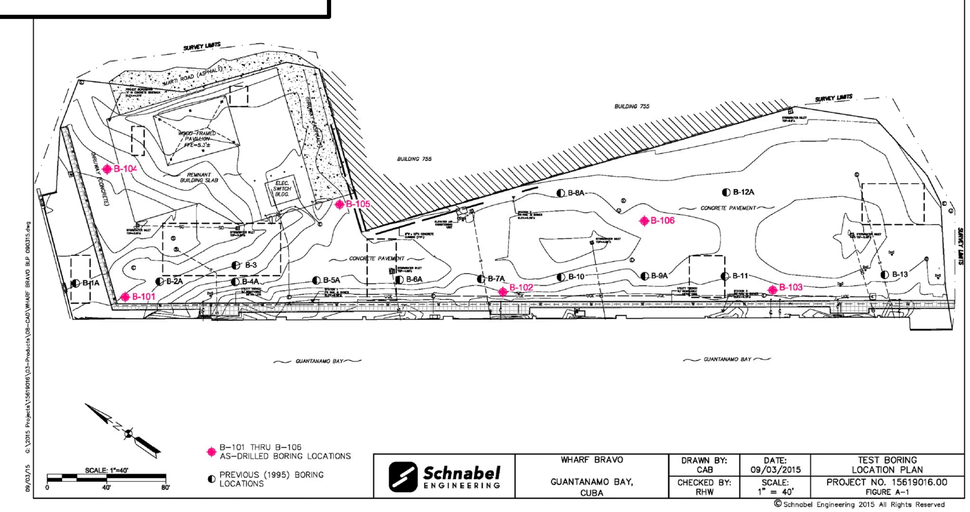
09/03/15 G:\2015 Projects\15619016\03-Products\08-CAD\WHARF BRAVO XS 090315.dwg

2 SOIL BORING
Scale: NONE



Schnabel ENGINEERING	WHARF BRAVO GUANTANAMO BAY, CUBA	DRAWN BY: CAB CHECKED BY: RHW	DATE: 09/03/2015 SCALE: 1" = 40'	TEST BORING LOCATION PLAN PROJECT NO. 15619016.00 FIGURE A-1

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09/03/15 G:\2015 Projects\15619016\03-Products\08-CAD\WHARF BRAVO BLP 090315.dwg

SYM	DESCRIPTION	DATE	APPR

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY ----

SATISFACTORY TO DATE ----

DES RP | DRW RP | CHK JF

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD J. WARD

CHIEF ENG/ARCH (CORE) J. FRANK

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

GEOTECHNICAL DATA

SCALE: NONE

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

NAVFAC DRAWING NO. ----

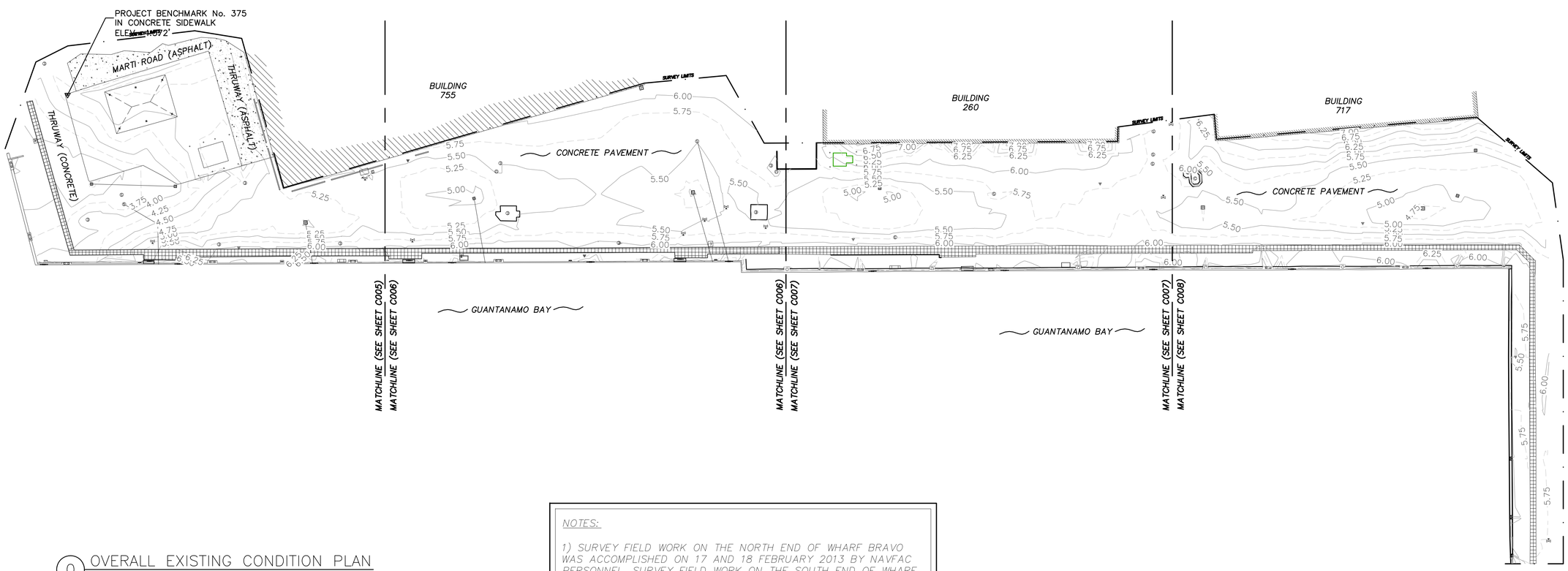
SHEET 5 OF 57

C003

DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\CBL\project_files\z_CUBA\navsta guantanamo bay\hh60514\wharf bravo structural repairs-1295318\working technical files\Drawings\C003 GEOTECHNICAL DATA.dwg LAYOUT NAME: C003 GEOTECHNICAL DATA PLOTTED: Monday, April 04, 2016 - 6:36pm USER: ricardo.palma



0 OVERALL EXISTING CONDITION PLAN

Scale: 1" = 40'-0"

NOTES:

1) SURVEY FIELD WORK ON THE NORTH END OF WHARF BRAVO WAS ACCOMPLISHED ON 17 AND 18 FEBRUARY 2013 BY NAVFAC PERSONNEL. SURVEY FIELD WORK ON THE SOUTH END OF WHARF BRAVO WAS ACCOMPLISHED ON 20 AND 21 MARCH 2016 BY NAVFAC PERSONNEL.

2) PROJECT BENCHMARK DATA SHOWN WAS OBTAINED FROM PROJECT 'GUANTANAMO BAY BENCH MARKS' DATED 14 DECEMBER 1988. DESIGNATED AS POINT NUMBER '375' WITH AN ELEVATION OF 4.372 FEET AS REFERENCED TO THE BENCHMARK DATUM, MEAN SEA LEVEL OF 0.000 FEET.

3) THE PURPOSE OF THIS SURVEY WAS TO COLLECT SURFACE FEATURES FOR THE USE IN A WHARF EXTENSION PROJECT. NO SUBSURFACE DATA WAS COLLECTED AT THE TIME OF THIS SURVEY. THE ELEVATION OF THE PROJECT BENCHMARK WAS NOT VERIFIED.

GRAPHIC SCALE

1"=40' 0' 40' 80' 120' 160' 200'

IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT, SCALE REDUCED ACCORDINGLY

SYM	DESCRIPTION	DATE	APPR
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SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC

ACTIVITY

SATISFACTORY TO DATE ---

DES JWF DRW JWF CHK JWF

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD S. ZAVOYSKI

CHIEF ENG/ARCH (CORE) J. FRANK

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

NAVSTA GUANTANAMO BAY

GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

OVERALL EXISTING CONDITIONS PLAN

SCALE: AS SHOWN

EPROJECT NO.: 1295318

CONTR. CONTR. NO. N69450-XX-C-XXXX

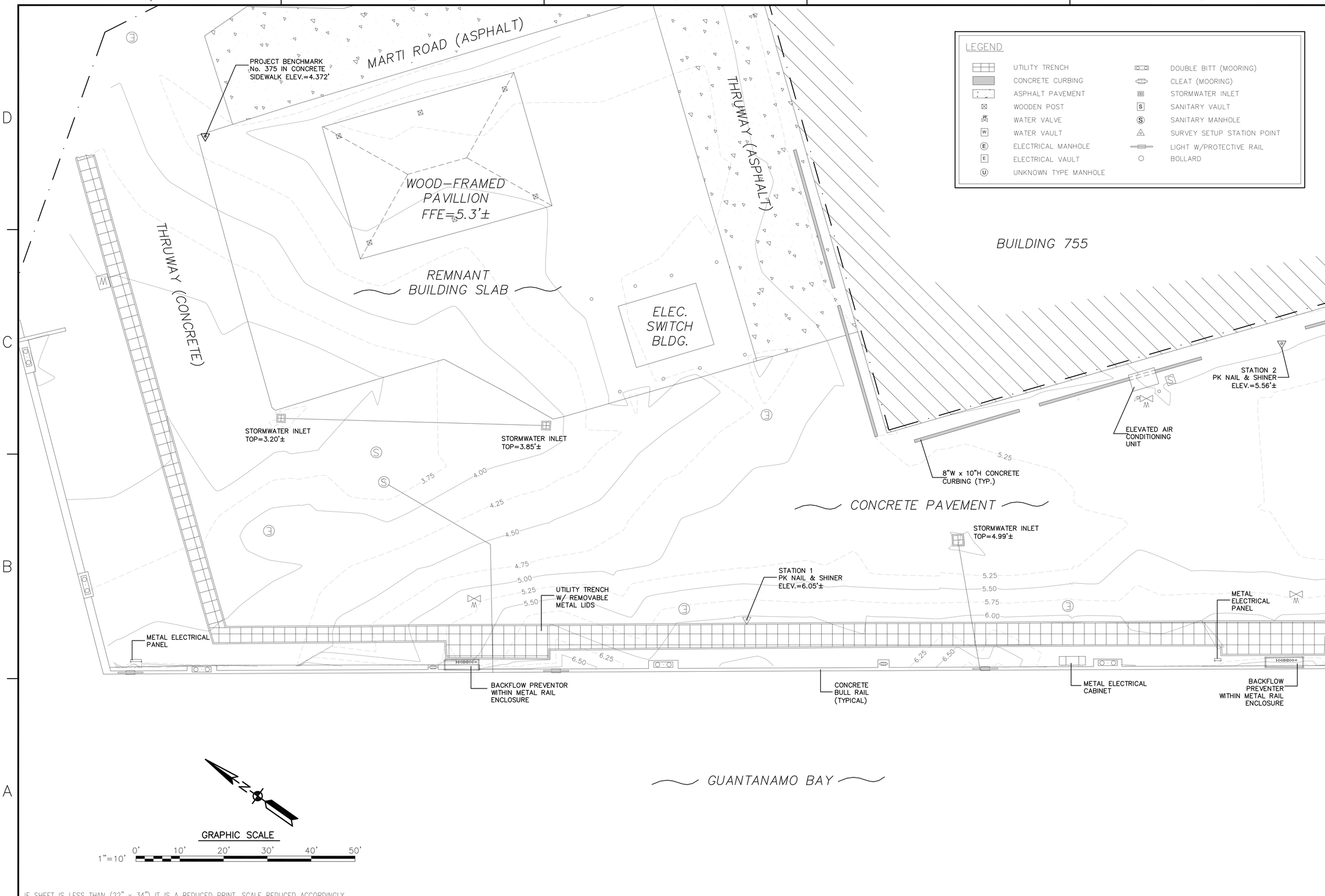
NAVFAC DRAWING NO. ----

SHEET 6 OF 57

C004

DRAWFORM REVISION: 5 APRIL 2012

FILE NAME: P:\CIRL\project_files\z_CUBA\navsta guantanamo bay\h16514\wharf bravo structural repairs-1295318\working technical files\Drawings\C004 OVERALL EXISTING CONDITIONS PLAN.dwg LAYOUT NAME: C004 OVERALL EXISTING CONDITIONS PLAN PLOTTED: Monday, April 04, 2016 - 6:45pm USER: ricardo.palmo



LEGEND

	UTILITY TRENCH		DOUBLE BITT (MOORING)
	CONCRETE CURBING		CLEAT (MOORING)
	ASPHALT PAVEMENT		STORMWATER INLET
	WOODEN POST	S	SANITARY VAULT
W	WATER VALVE	S	SANITARY MANHOLE
W	WATER VAULT		SURVEY SETUP STATION POINT
E	ELECTRICAL MANHOLE		LIGHT W/PROTECTIVE RAIL
E	ELECTRICAL VAULT		BOLLARD
U	UNKNOWN TYPE MANHOLE		

SYM	DESCRIPTION	DATE	APPR
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NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC

ACTIVITY

SATISFACTORY TO DATE ---

DES JWF DRW JWF CHK JWF

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD S. ZAVOYSKI

CHIEF ENG/ARCH (CORE) J. FRANK

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC

NAVFAC FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

EXISTING CONDITIONS – NORTH 1

SCALE: AS SHOWN

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

NAVFAC DRAWING NO. ----

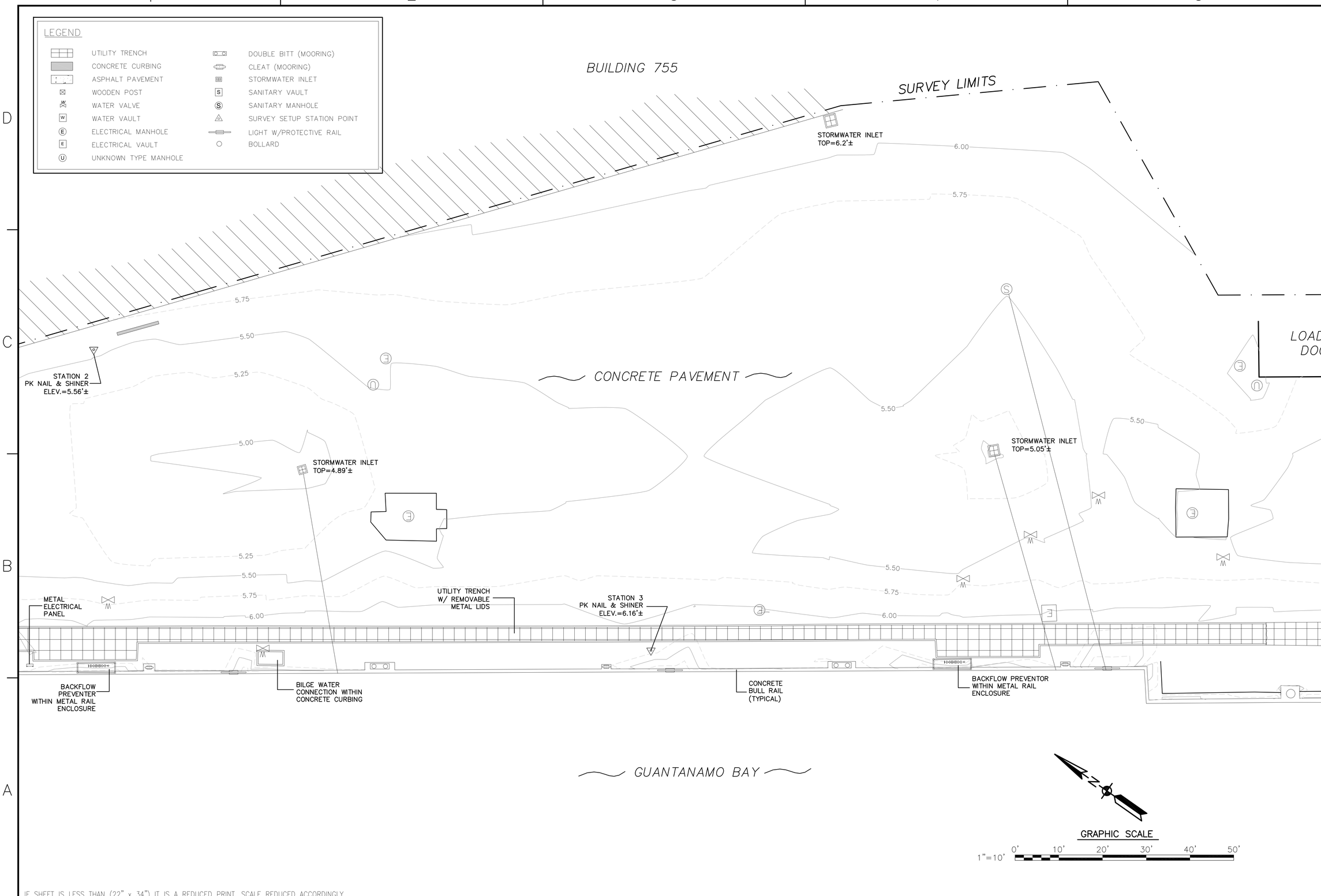
SHEET 7 OF 57

C005

DRAWFORM REVISION: 5 APRIL 2012

IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT, SCALE REDUCED ACCORDINGLY

FILE NAME: P:\OBI\project_files\z_CUBA\navsta guantanamo bay(hjr60514)\wharf bravo structural repairs-1295318\working technical files\Drawings\C005 EXISTING CONDITIONS - NORTH 1.dwg LAYOUT NAME: C005 EXISTING CONDITIONS - NORTH 1 PLOTTED: Monday, April 04, 2016 - 6:45pm USER: ricardo.palmo



IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT, SCALE REDUCED ACCORDINGLY

SYM	DESCRIPTION	DATE	APPR
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NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC

ACTIVITY

SATISFACTORY TO DATE ----

DES JWF | DRW JWF | CHK JWF

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD S. ZAVOYSKI

CHIEF ENG/ARCH (CORE) J. FRANK

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY

NAVAL FACILITIES ENGINEERING COMMAND
NAVAL AIR STATION JACKSONVILLE
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

EXISTING CONDITIONS – NORTH 2

SCALE: AS SHOWN

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450–XX–C–XXXX

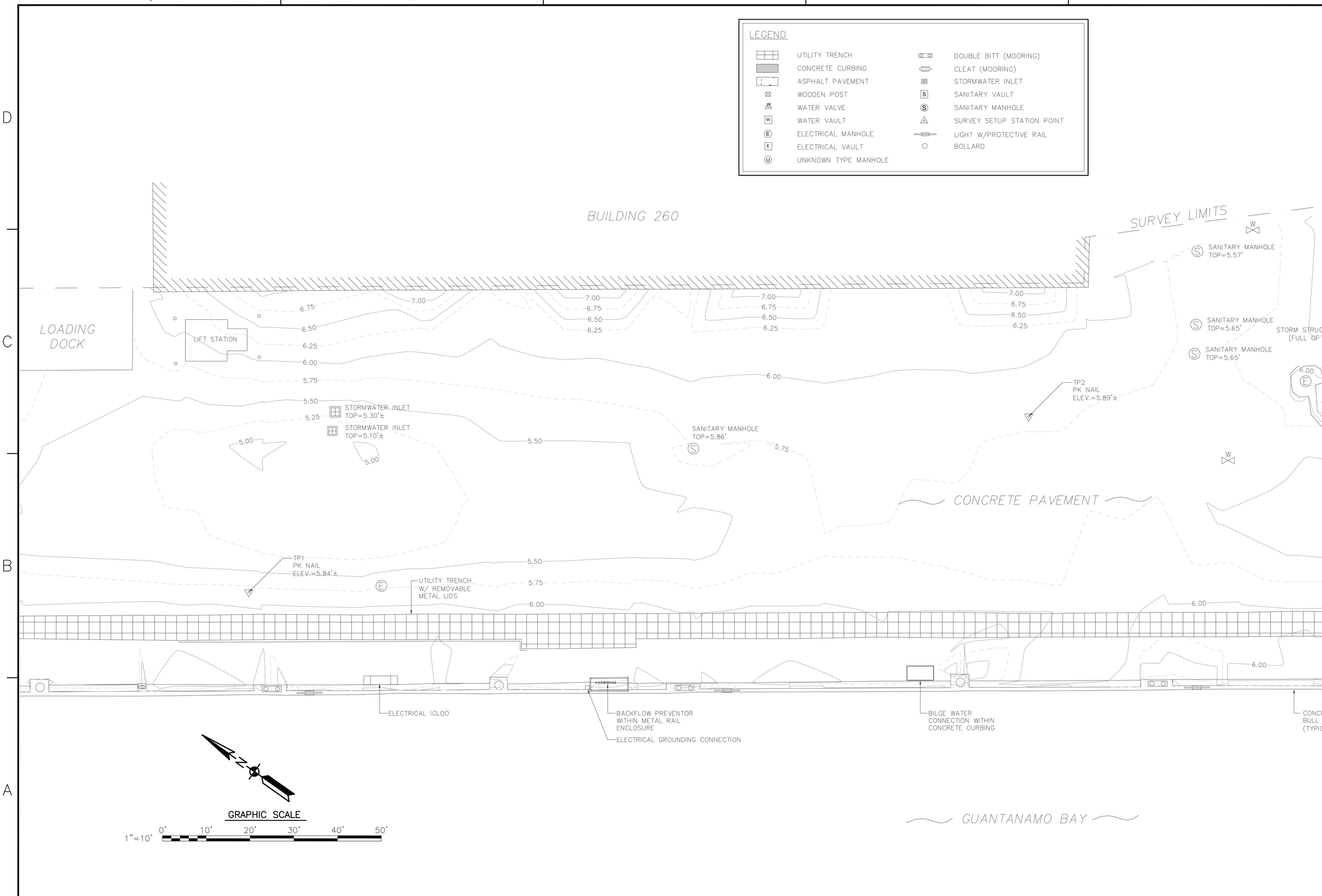
NAVFAC DRAWING NO. ----

SHEET 8 OF 57

C006

DRAWFORM REVISION: 5 APRIL 2012

FILE NAME: P:\QBL\project_files\z_CUBA\navsta guantanamo bay\h\h60514\wharf bravo structural repairs~1295318\working technical files\Drawings\C006 EXISTING CONDITIONS – NORTH 2.dwg LAYOUT NAME: C006 EXISTING CONDITIONS – NORTH 2 PLOTTED: Monday, April 04, 2016 – 6:46pm USER: ricardo.palma



SYM	DESCRIPTION	DATE	APPR
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NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES JW | DRW JW | CHK JF

PM/DM E. GALLANT

BRANCH MANAGER J. WARD

CHIEF ENG/ARCH J. FRANK

FIRE PROTECTION ---

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
PT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY

NAVAL FACILITIES ENGINEERING COMMAND
NAVAL AIR STATION JACKSONVILLE
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

EXISTING CONDITIONS – SOUTH 1

SCALE: AS SHOWN

EPROJECT NO.: 1295318

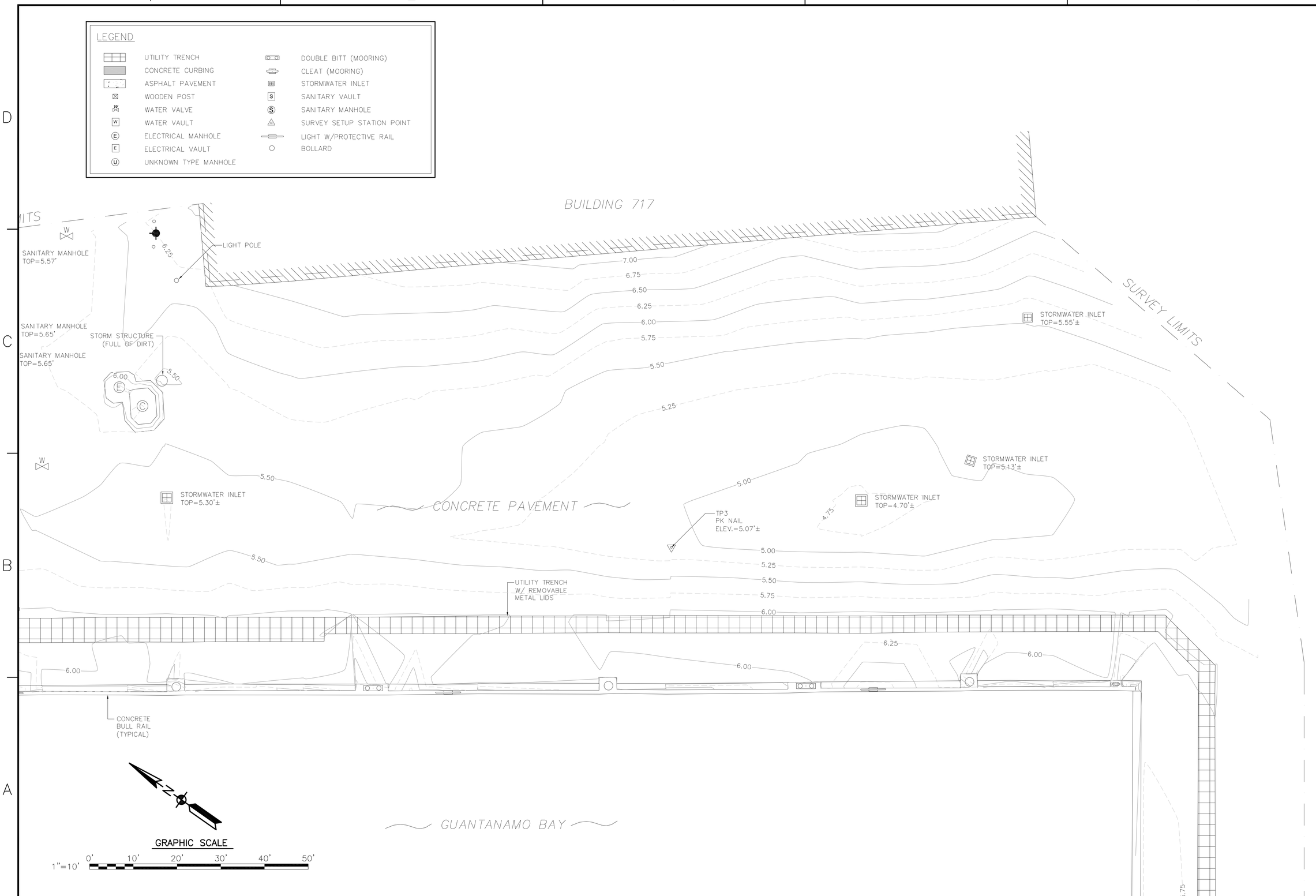
CONSTR. CONTR. NO.: N69450-XX-C-XXXX

NAVFAC DRAWING NO.: ---

SHEET 9 OF 57

C007

DRAWFORM REVISION: 7 AUGUST 2009



SYM	DESCRIPTION	DATE	APPR
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NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES	JW	DRW	JW	CHK	JF

PM/DM: E. GALLANT

BRANCH MANAGER: J. WARD

CHIEF ENG/ARCH: J. FRANK

FIRE PROTECTION: ---

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

EXISTING CONDITIONS – SOUTH 2

SCALE: AS SHOWN

EPROJECT NO.: 1295318

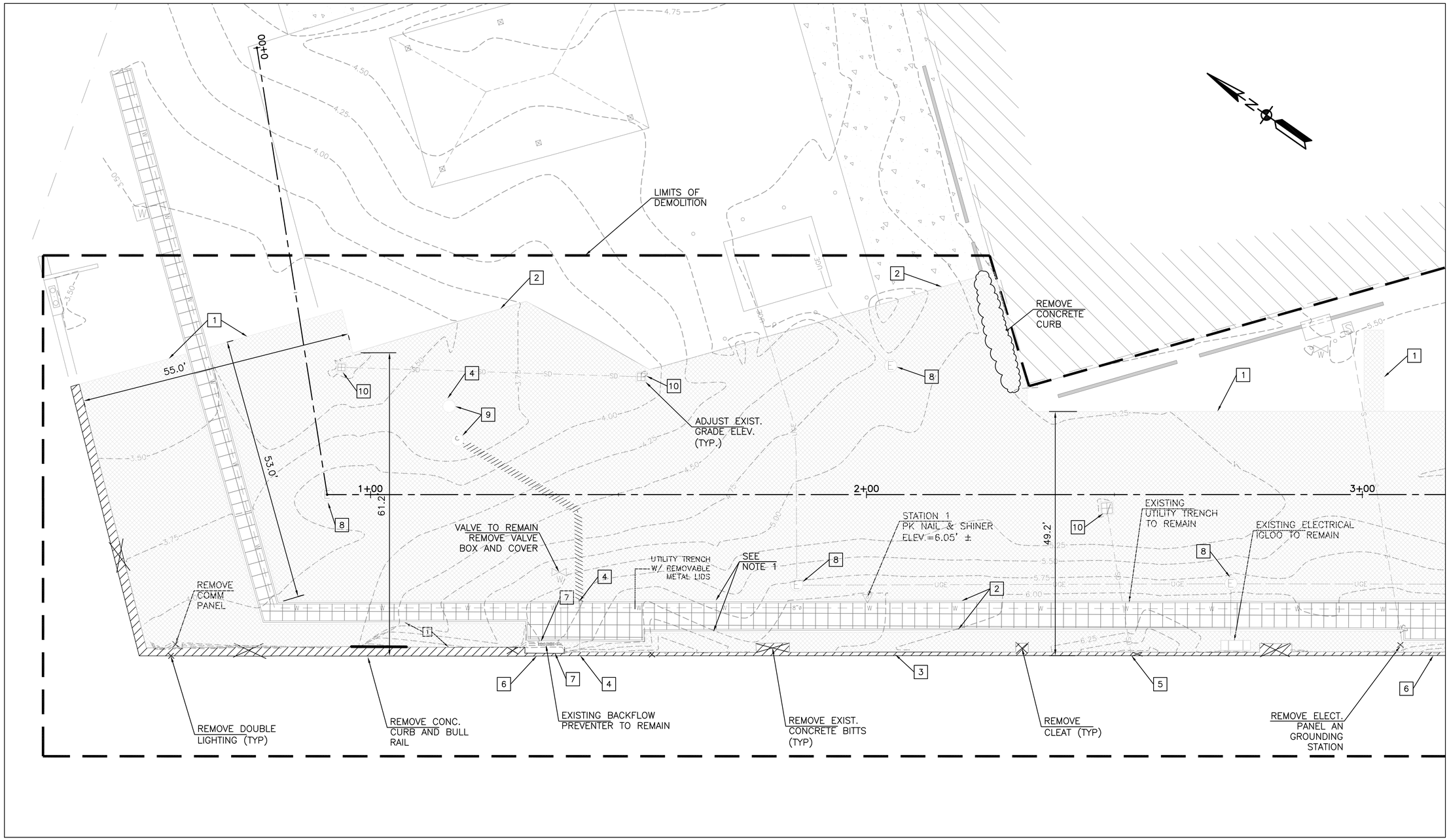
CONSTR. CONTR. NO. N69450-XX-C-XXXX

NAVFAC DRAWING NO. --

SHEET 10 OF 57

C008

DRAWFORM REVISION: 7 AUGUST 2009



1 DEMOLITION PLAN

Scale: 1" = 10'-0"

NOTES:

1. ALL LIMITS OF DEMOLITION ARE APPROXIMATE.
2. CONTRACTOR TO COORDINATE WITH BASE UTILITIES TO ESTABLISH SCHEDULE OF UTILITY DISCONNECTIONS.
3. PROTECT CONCRETE TRENCH WALL ($4\frac{1}{2}$" WIDTH) ON BOTH SIDES.

DEMOLISH EXISTING BULL RAIL & CAP. SEE STRUCTURAL DWGS.

DEMOLISH EXISTING CONCRETE PAVEMENT

DEMOLITION NOTES:

1. REMOVE REINFORCED CONCRETE PAVEMENT (9–12 INCHES THICK) TO EXISTING PAVEMENT JOINT LINES WITHIN THE LIMITS SHOWN.
2. SAWCUT PAVEMENT 3" MINIMUM ALONG THE LINES INDICATED AND REMOVE TO THE LIMITS SHOWN.
3. REMOVE REINFORCED CONCRETE CURB FLUSH WITH TOP OF CONCRETE CAP BEAM.
4. REMOVE EXISTING ABANDONED UTILITY TO THE NEAREST JOINT AND FILL WITH FLOWABLE FILL AND PERMANENTLY CAPPED.
5. REMOVE EXISTING BULKHEAD CONCRETE TO EXPOSE PIPE.
6. UNKNOWN PIPE TYPE. REMOVE EXISTING BULKHEAD CONCRETE TO EXPOSE PIPE.
7. REMOVE METAL RAILING ENCLOSURE
8. PROTECT ELECTRICAL/ SANITARY STRUCTURES TO REMAIN
9. REMOVE SANITARY MANHOLES AND SEPTIC TANK.
10. REMOVE AND REPLACE INLET TOP AND GRADE

GRAPHIC SCALE

1"=10' 0' 10' 20' 30' 40' 50'

IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT, SCALE REDUCED ACCORDINGLY

SYM	DESCRIPTION	DATE	APPR
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NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY ----

SATISFACTORY TO DATE ----

DES RP | DRW RP | CHK JF

PROJECT MANAGER MUENZ

IPT TECH. BRANCH HEAD S. ZAVOYSKI

CHIEF ENG/ARCH (CORE) J. FRANK

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

NAVSTA GUANTANAMO BAY

GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

DEMOLITION SITE PLAN – NORTH

SCALE: AS SHOWN

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450–XX–C–XXXX

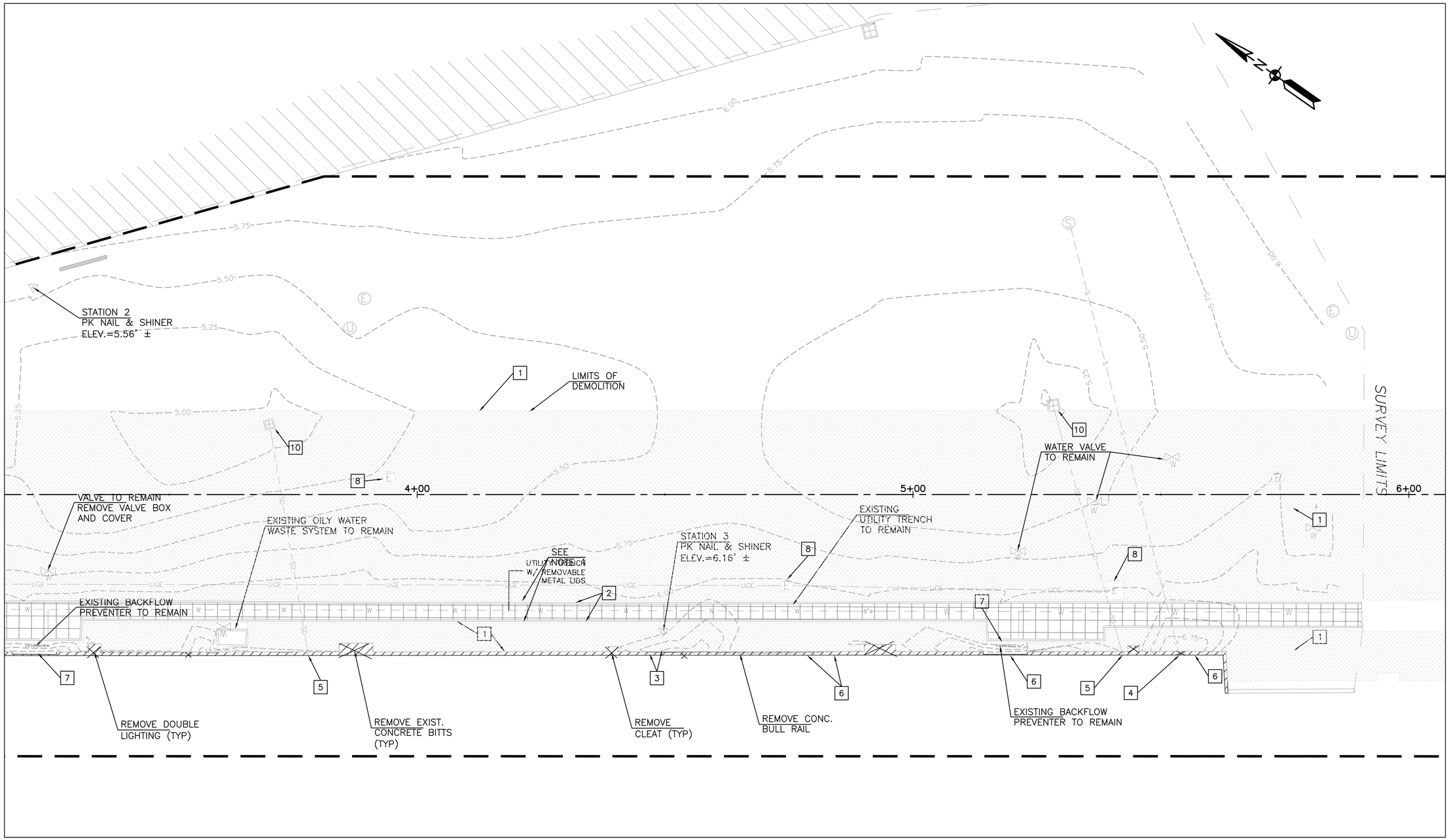
NAVFAC DRAWING NO. ----

SHEET 11 OF 57

C100

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIB\project_files\z_CUBA\navsta guantanamo bay\h\h60514\wharf bravo structural repairs-1295318\working technical files\Drawings\C100 EXISTING CONDITIONS AND DEMOLITION SITE PLAN.dwg LAYOUT NAME: C100 EXISTING CONDITIONS AND DEMOLITION SITE PLAN PLOTTED: Monday, April 04, 2016 - 6:48pm USER: ricardo.palma



2 DEMOLITION PLAN

Scale: 1" = 10'-0"

NOTES:

1. ALL LIMITS OF DEMOLITION ARE APPROXIMATE.
2. CONTRACTOR TO COORDINATE WITH BASE UTILITIES TO ESTABLISH SCHEDULE OF UTILITY DISCONNECTIONS.
3. PROTECT CONCRETE TRENCH WALL ($4\frac{1}{2}$" WIDTH) ON BOTH SIDES.

DEMOLISH EXISTING BULL RAIL & CAP. SEE STRUCTURAL DWGS.

DEMOLISH EXISTING CONCRETE PAVEMENT

DEMOLITION NOTES:

1. REMOVE REINFORCED CONCRETE PAVEMENT (9–12 INCHES THICK) TO EXISTING PAVEMENT JOINT LINES WITHIN THE LIMITS SHOWN.
2. SAWCUT PAVEMENT 3" MINIMUM ALONG THE LINES INDICATED AND REMOVE TO THE LIMITS SHOWN.
3. REMOVE REINFORCED CONCRETE CURB FLUSH WITH TOP OF CONCRETE CAP BEAM.
4. REMOVE EXISTING ABANDONED UTILITY TO THE NEAREST JOINT AND FILL WITH FLOWABLE FILL AND PERMANENTLY CAPPED.
5. REMOVE EXISTING BULKHEAD CONCRETE TO EXPOSE PIPE.
6. UNKNOWN PIPE TYPE. REMOVE EXISTING BULKHEAD CONCRETE TO EXPOSE PIPE.
7. REMOVE METAL RAILING ENCLOSURE
8. PROTECT ELECTRICAL/ SANITARY STRUCTURES TO REMAIN
9. REMOVE SANITARY MANHOLES AND SEPTIC TANK.
10. REMOVE AND REPLACE INLET TOP AND GRADE

GRAPHIC SCALE

1"=10' 0' 10' 20' 30' 40' 50'

IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT, SCALE REDUCED ACCORDINGLY

SYM	DESCRIPTION	DATE	APPR
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NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC

ACTIVITY

SATISFACTORY TO DATE ---

DES RP | DRW RP | CHK JF

PROJECT MANAGER MUENZ

IPT TECH. BRANCH HEAD S. ZAVOYSKI

CHIEF ENG/ARCH (CORE) J. FRANK

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC

NAVAL FACILITIES ENGINEERING COMMAND
NAVAL AIR STATION JACKSONVILLE
NAVSTA GUANTANAMO BAY

GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

DEMOLITION SITE PLAN – SOUTH

SCALE: AS SHOWN

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450–XX–C–XXXX

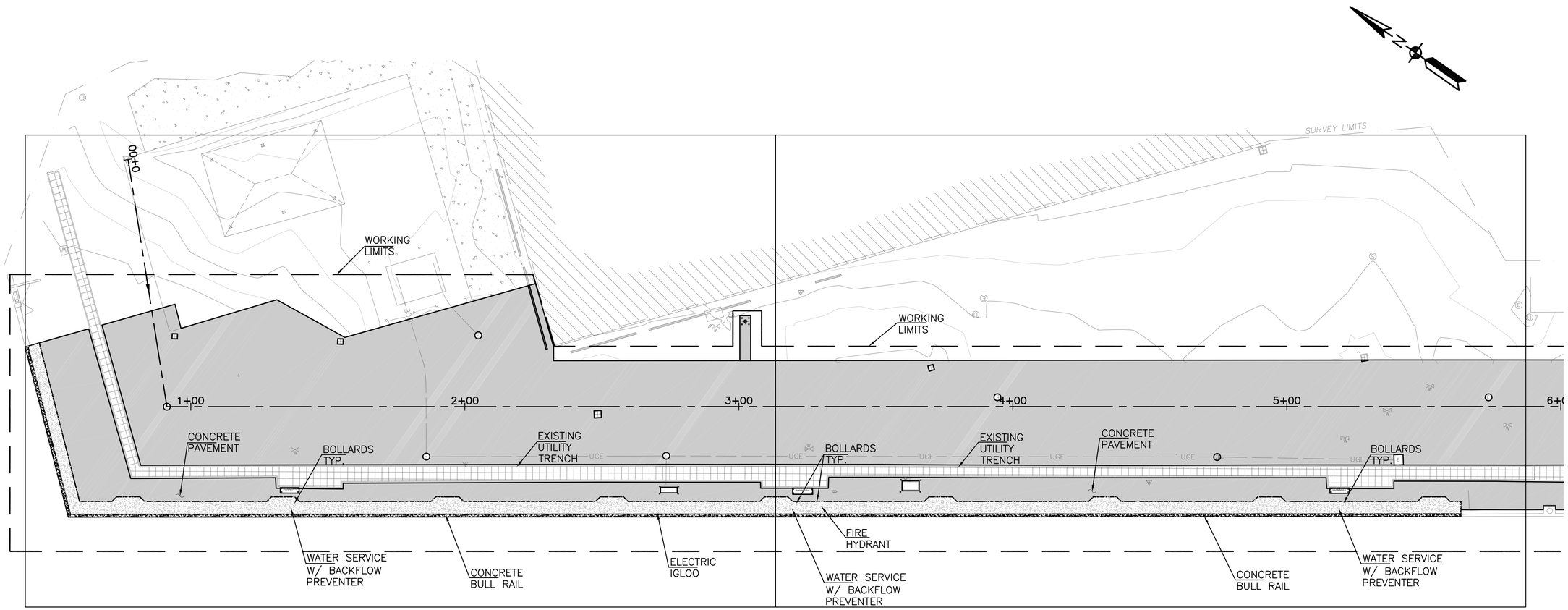
NAVFAC DRAWING NO. ----

SHEET 12 OF 57

C101

DRAWFORM REVISION: 5 APRIL 2012

FILE NAME: P:\CIB\project_files\z_CUBA\navsta guantanamo bay\h\e60514\wharf bravo structural repairs-1295318\working technical files\Drawing\C101 EXISTING CONDITIONS AND DEMOLITION SITE PLAN.dwg LAYOUT NAME: C101 EXISTING CONDITIONS AND DEMOLITION SITE PLAN PLOTTED: Monday, April 04, 2016 - 6:49pm USER: ricardo.palma



MATCHLINE (SEE SHEET C201)
MATCHLINE (SEE SHEET C202)

0 OVERALL SITE PLAN

Scale: 1" = 20'-0"

GRAPHIC SCALE

1"=20' 0' 20' 40' 60' 80' 100'

IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT, SCALE REDUCED ACCORDINGLY

SYM	DESCRIPTION	DATE	APPR
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NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE ---

DES RP | DRW RP | CHK JF

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD S. ZAVOYSKI

CHIEF ENG/ARCH (CORE) J. FRANK

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

OVERALL SITE PLAN

SCALE: AS SHOWN

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

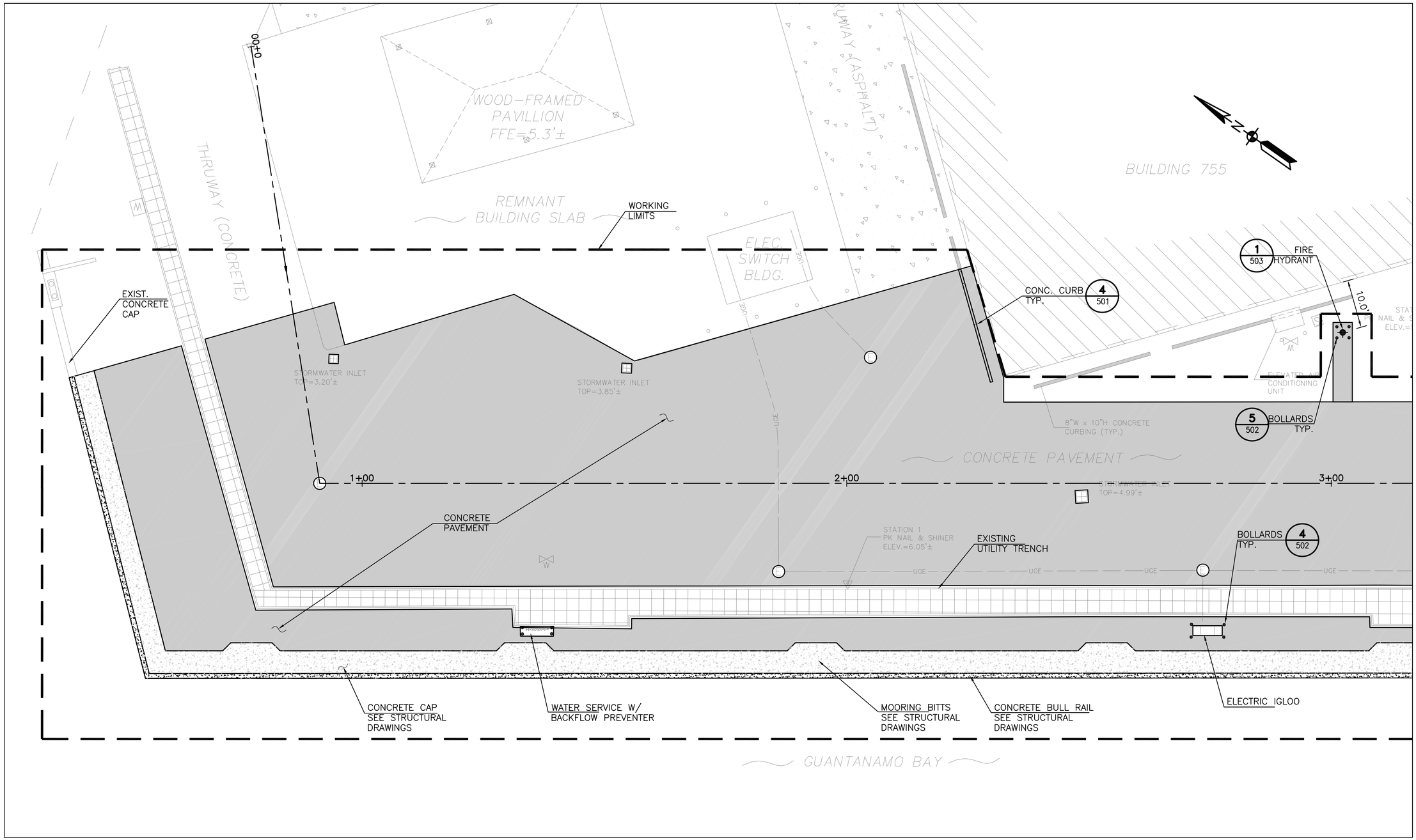
NAVFAC DRAWING NO. ----

SHEET 13 OF 57

C200

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIB\project_files\z_CUBA\navsta guantanamo bay\hi\e60514\wharf bravo structural repairs-1295318\working technical files\Drawings\C200 OVERALL SITE PLAN.dwg LAYOUT NAME: C200 OVERALL SITE PLAN PLOTTED: Monday, April 04, 2016 - 6:51pm USER: ricardo.palma



1 SITE PLAN
Scale: 1" = 10'-0"

NOTES:
1. ALL LIMITS OF WORK ARE APPROXIMATE.
2. REFER TO STRUCTURAL DRAWINGS FOR BULL RAIL DIMENSIONS, BITT AND CLEAT LOCATIONS

NEW BULL RAIL
NEW CONCRETE PAVEMENT
NEW CONCRETE CAP

GRAPHIC SCALE
1"=10' 0' 10' 20' 30' 40' 50'

IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT, SCALE REDUCED ACCORDINGLY

SYM	DESCRIPTION	DATE	APPR
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NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY ----

SATISFACTORY TO DATE ----

DES RP | DRW RP | CHK JF

PROJECT MANAGER MUENZ

IPT TECH. BRANCH HEAD S. ZAVOYSKI

CHIEF ENG/ARCH (CORE) J. FRANK

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC

NAVAL FACILITIES ENGINEERING COMMAND
NAVAL AIR STATION JACKSONVILLE

NAVSTA GUANTANAMO BAY

GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

SITE PLAN – NORTH

SCALE: AS SHOWN

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

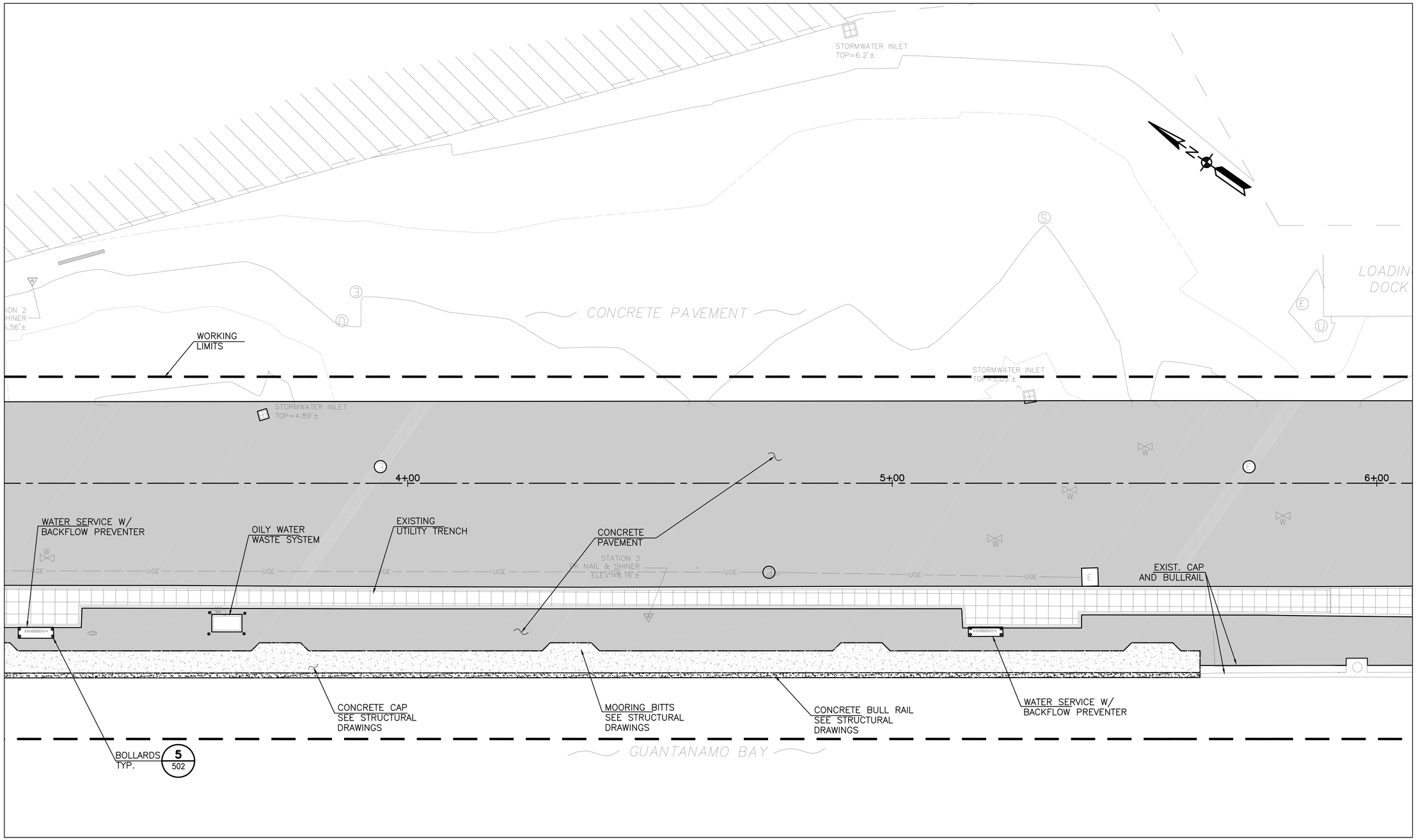
NAVFAC DRAWING NO. ----

SHEET 14 OF 57

C201

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIB\project_files\z_CUBA\navsta guantanamo bay\h\je60514\wharf bravo structural repairs-1295318\working technical files\Drawings\C201 SITE PLAN.dwg LAYOUT NAME: C201 SITE PLAN PLOTTED: Monday, April 04, 2016 - 6:52pm USER: ricardo.palmo



2 SITE PLAN

Scale: 1" = 10'-0"

NOTES:

1. ALL LIMITS OF WORK ARE APPROXIMATE.
2. REFER TO STRUCTURAL DRAWINGS FOR BULL RAIL DIMENSIONS, BITT AND CLEAT LOCATIONS

NEW BULL RAIL

NEW CONCRETE PAVEMENT

NEW CONCRETE CAP

GRAPHIC SCALE

1"=10' 0' 10' 20' 30' 40' 50'

IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT, SCALE REDUCED ACCORDINGLY

SYM	DESCRIPTION	DATE	APPR
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NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC

ACTIVITY

SATISFACTORY TO DATE ---

DES RP | DRW RP | CHK JF

PROJECT MANAGER MUENZ

IPT TECH. BRANCH HEAD S. ZAVOYSKI

CHIEF ENG/ARCH (CORE) J. FRANK

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

NAVSTA GUANTANAMO BAY

GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

SITE PLAN – SOUTH

SCALE: AS SHOWN

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

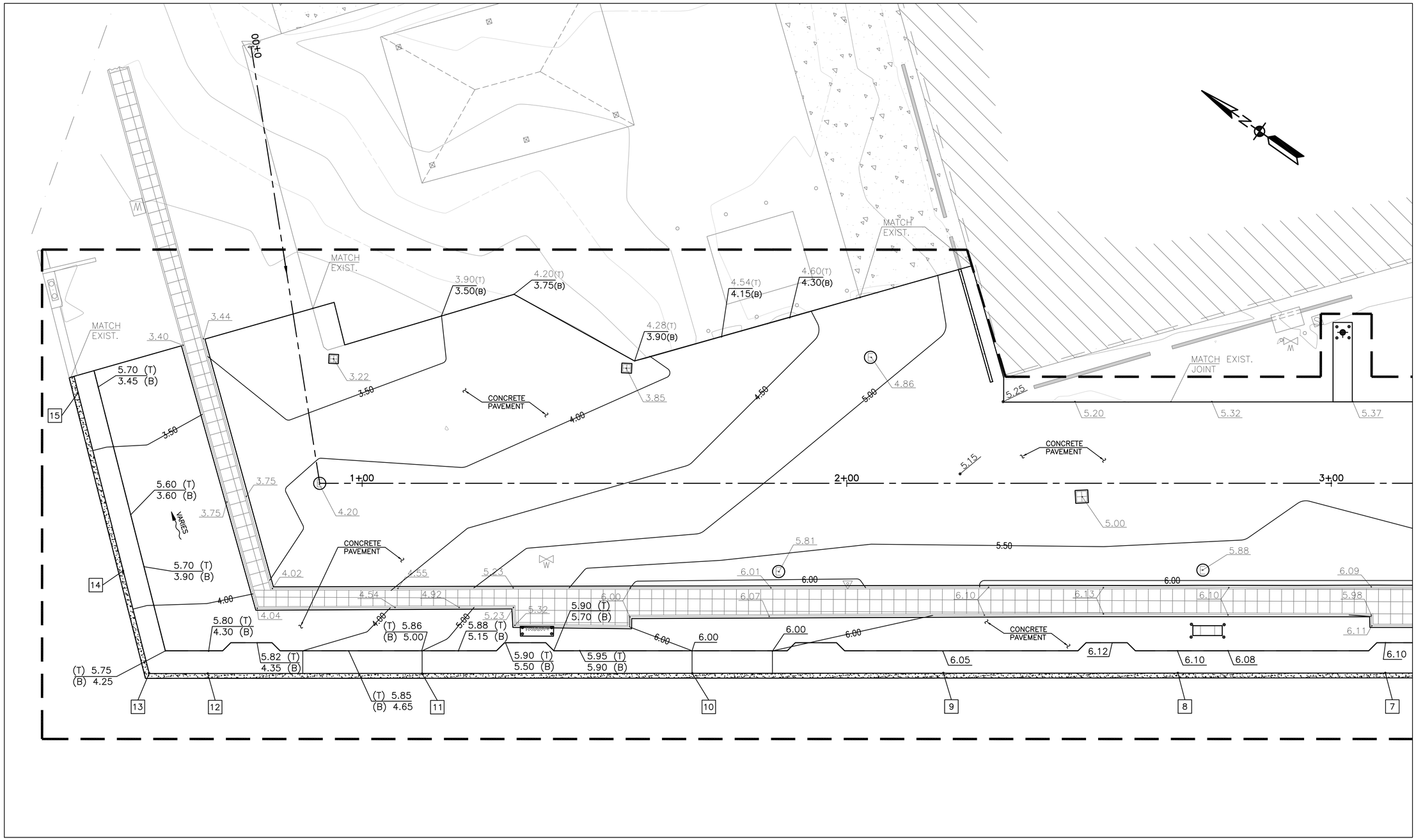
NAVFAC DRAWING NO. ----

SHEET 15 OF 57

C202

DRAWFORM REVISION: 5 APRIL 2012

FILE NAME: P:\CIB\project_files\z_CUBA\navsta guantanamo bay\h16051\4\wharf bravo structural repairs-1295318\working technical Files\Drawings\C202 SITE PLAN.dwg LAYOUT NAME: C202 SITE PLAN PLOTTED: Monday, April 04, 2016 - 6:53pm USER: ricardo.palma



1 GRADING PLAN
Scale: 1" = 10'-0"

LEGEND:

6.84 (T) — TOP OF CONC. CAP
6.01 (B) — TOP OF PAVEMENT

STRUCTURE ELEV. TABLE					
KEY NO.	CONC. CAP ELEV (TOP) (FT)	BULLRAIL ELEV (TOP) (FT)	KEY NOTE	CONC. CAP ELEV (FT)	BULLRAIL ELEV (FT)
7	6.10	6.93	12	5.80	6.63
8	6.10	6.93	13	5.75	6.58
9	6.05	6.88	14	5.70	6.53
10	6.00	6.83	15	5.68	6.51
11	5.86	6.69			

GRAPHIC SCALE
1"=10' 0' 10' 20' 30' 40' 50'

SYM	DESCRIPTION	DATE	APPR

A/E INFO.
APPROVED
FOR COMMANDER NAVFAC / B.L.T.L.
ACTIVITY ----
SATISFACTORY TO DATE ----
DES RP DRW RP CHK JF
PROJECT MANAGER E. GALLANT
IPT TECH. BRANCH HEAD J. WARD
CHIEF ENG/ARCH (CORE) J. FRANK

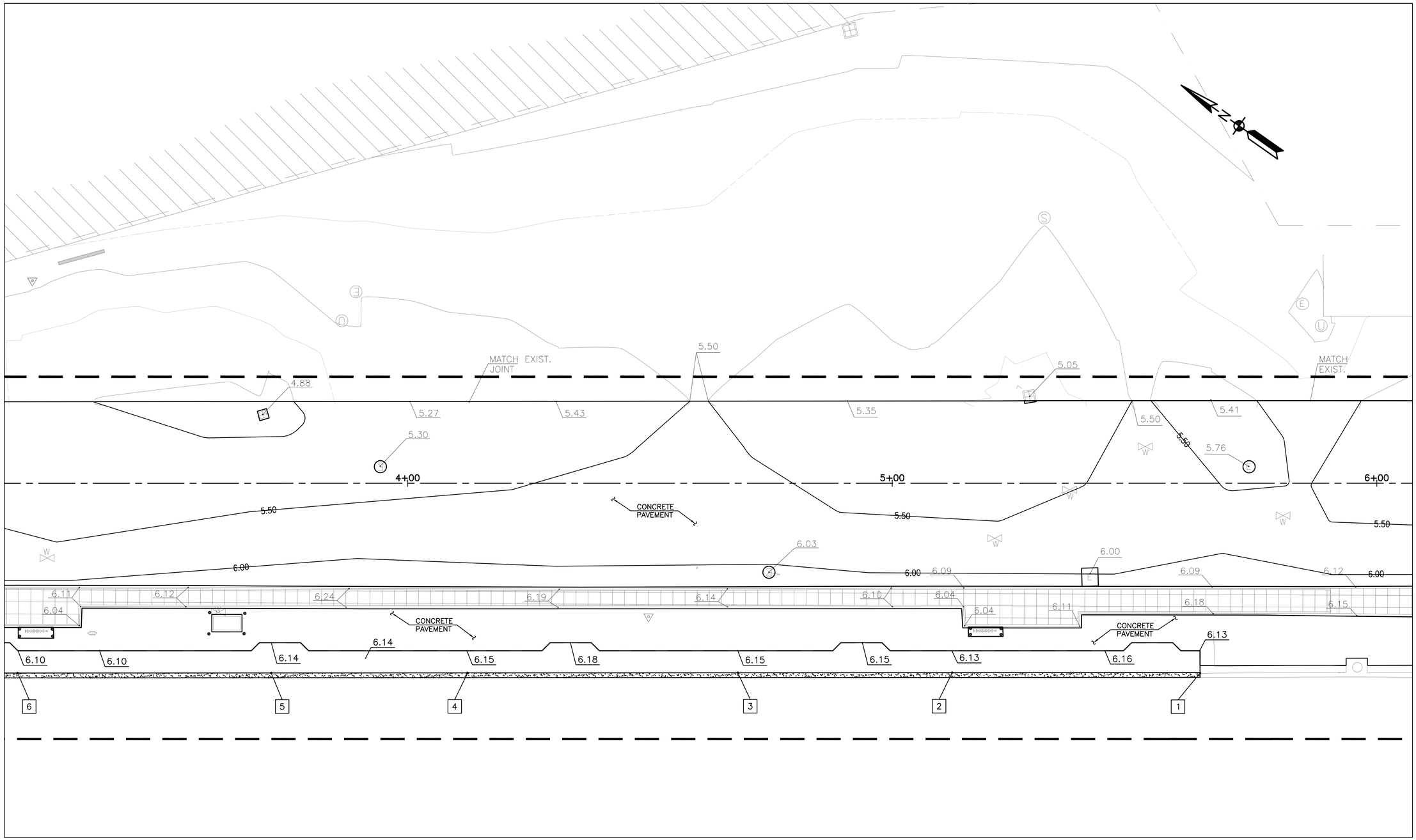
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA
WHARF BRAVO STRUCTURAL REPAIRS
GRADING PLAN – NORTH

SCALE: AS SHOWN
EPROJECT NO.: 1295318
CONSTR. CONTR. NO. N69450-XX-C-XXXX
NAVFAC DRAWING NO. ----
SHEET 16 OF 57
C203

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\OBL\project_files\v_CUBA\navsta guantanamo bay\hr60514\wharf bravo structural repairs-1295318\working technical files\Drawings\C203 GRADING PLAN – NORTH.dwg LAYOUT NAME: C203 GRADING PLAN – NORTH PLOTTED: Monday, April 04, 2016 – 6:38pm USER: ricardo.palma

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE



2 GRADING PLAN
Scale: 1" = 10'-0"

LEGEND:

6.84 (T) — TOP OF CONC. CAP
6.01 (B) — TOP OF PAVEMENT

STRUCTURE ELEV. TABLE					
KEY NO.	CONC. CAP ELEV (TOP) (FT)	BULLRAIL ELEV (TOP) (FT)	KEY NOTE	CONC. CAP ELEV (FT)	BULLRAIL ELEV (FT)
1	6.13	6.96	6	6.10	6.93
2	6.13	6.96			
3	6.15	6.98			
4	6.15	6.98			
5	6.14	6.97			

GRAPHIC SCALE
1"=10' 0' 10' 20' 30' 40' 50'

SYM	DESCRIPTION	DATE	APPR
---	---	---	---

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY ----

SATISFACTORY TO DATE ----

DES RP DRW RP CHK JF

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD J. WARD

CHIEF ENG/ARCH (CORE) J. FRANK

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVFAC FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

GRADING PLAN – SOUTH

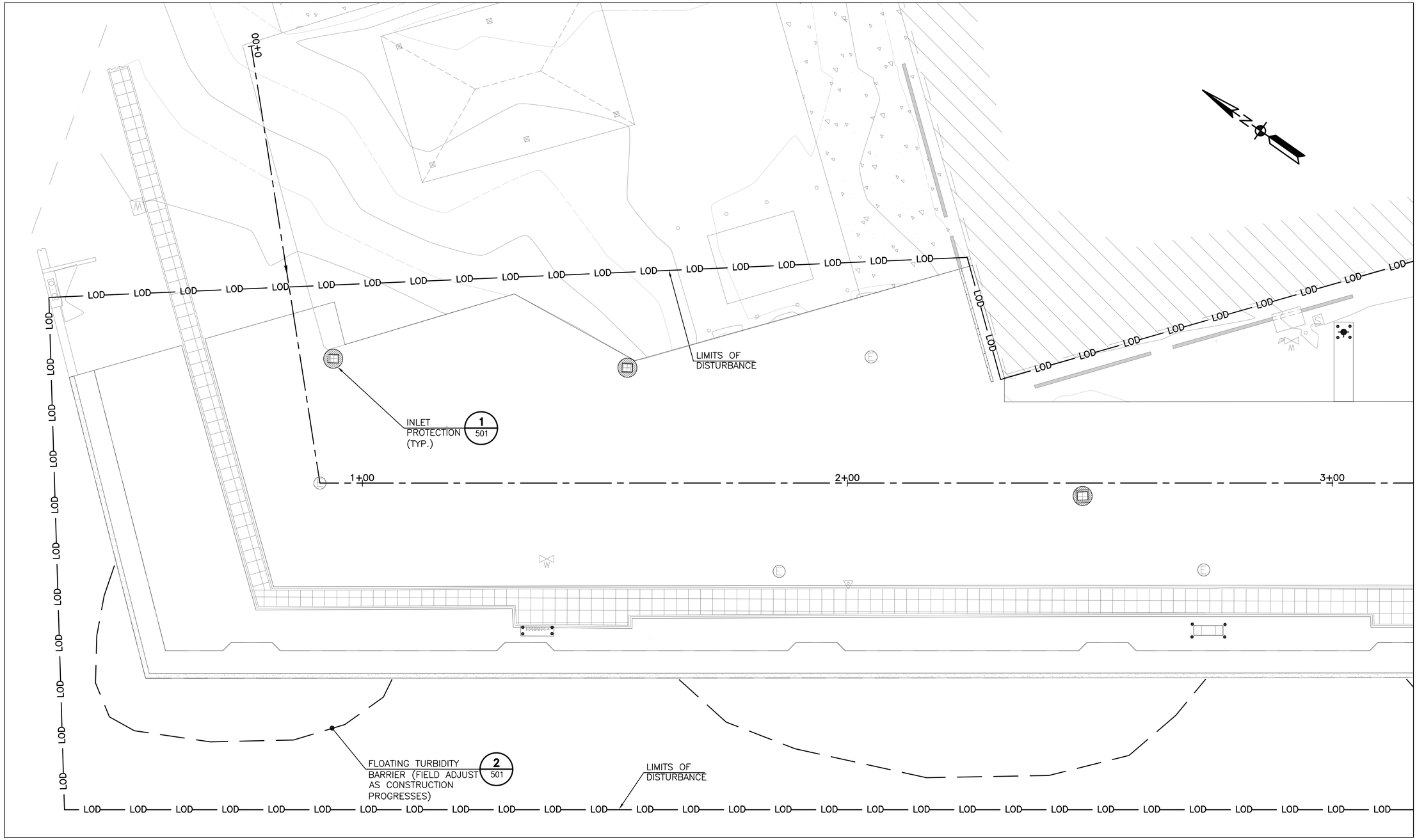
SCALE: AS SHOWN
EPROJECT NO.: 1295318
CONSTR. CONTR. NO. N69450-XX-C-XXXX
NAVFAC DRAWING NO. ----
SHEET 17 OF 57

C204

DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\CIB\project_files\z_CUBA\navsta guantanamo bay\h\n60514\wharf bravo structural repairs~1295318\working technical files\Drawings\C204 GRADING PLAN - SOUTH.dwg LAYOUT NAME: C204 GRADING PLAN – SOUTH PLOTTED: Monday, April 04, 2016 – 6:59pm USER: ricardo.pdimo



1 SEDIMENT CONTROL
Scale: 1" = 10'-0"

NOTES:

1. FOR STORMWATER POLLUTION PREVENTION CONSTRUCTION DETAILS SEE SHEET NUMBER C501

LEGEND:

TURBIDITY BARRIER

LIMITS OF DISTURBANCE — LOD —

INLET PROTECTION

GRAPHIC SCALE

1"=10' 0' 10' 20' 30' 40' 50'

SYM	DESCRIPTION	DATE	APPR

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES RP DRW RP CHK JF

PROJECT MANAGER MUENZ

IPT TECH. BRANCH HEAD S. ZAVOYSKI

CHIEF ENG/ ARCH (CORE) J. FRANK

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
IPT SOUTH ATLANTIC
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL AIR STATION JACKSONVILLE
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

SEDIMENT CONTROL PLAN – NORTH

SCALE: AS SHOWN

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

NAVFAC DRAWING NO. ----

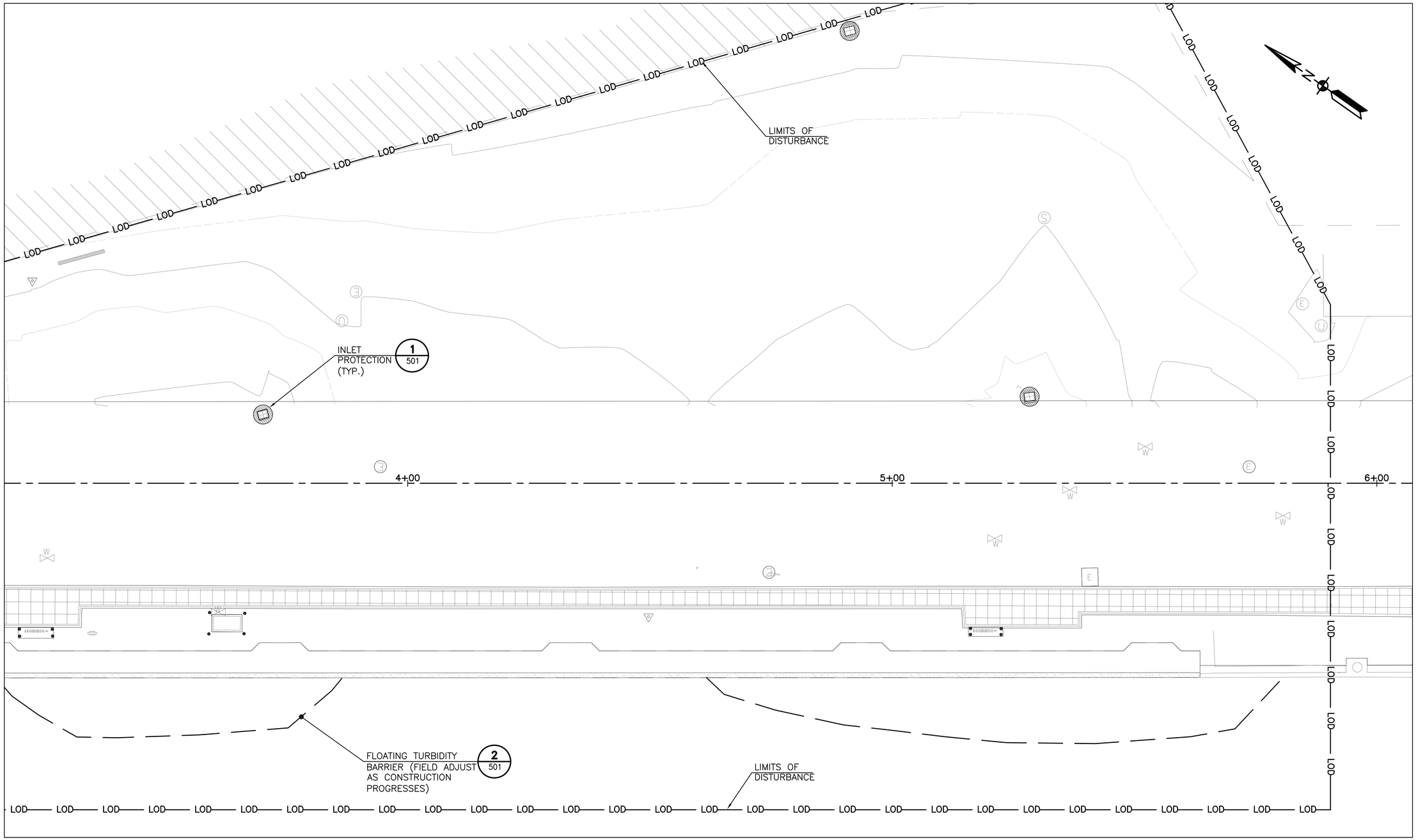
SHEET 18 OF 57

C205

DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\CBL\project_files\z_CUBA\navsta guantanamo bay\hi\h60514\wharf bravo structural repairs-1295318\working technical files\Drawings\C205 SEDIMENT CONTROL PLAN – NORTH.dwg LAYOUT NAME: C205 SEDIMENT CONTROL PLAN – NORTH PLOTTED: Monday, April 04, 2016 – 7:01pm USER: ricardo.palmo



2 SEDIMENT CONTROL

Scale: 1" = 10'-0"

NOTES:

1. FOR STORMWATER POLLUTION PREVENTION CONSTRUCTION DETAILS SEE SHEET NUMBER C501

LEGEND:

TURBIDITY BARRIER

LIMITS OF DISTURBANCE — LOD —

INLET PROTECTION

GRAPHIC SCALE

1"=10' 0' 10' 20' 30' 40' 50'

SYM	DESCRIPTION	DATE	APPR

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES RP | DRW RP | CHK JF

PROJECT MANAGER MUENZ

IPT TECH. BRANCH HEAD S. ZAVOYSKI

CHIEF ENG/ARCH (CORE) J. FRANK

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVFAC FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

SEDIMENT CONTROL PLAN – SOUTH

SCALE: AS SHOWN

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

NAVFAC DRAWING NO. ----

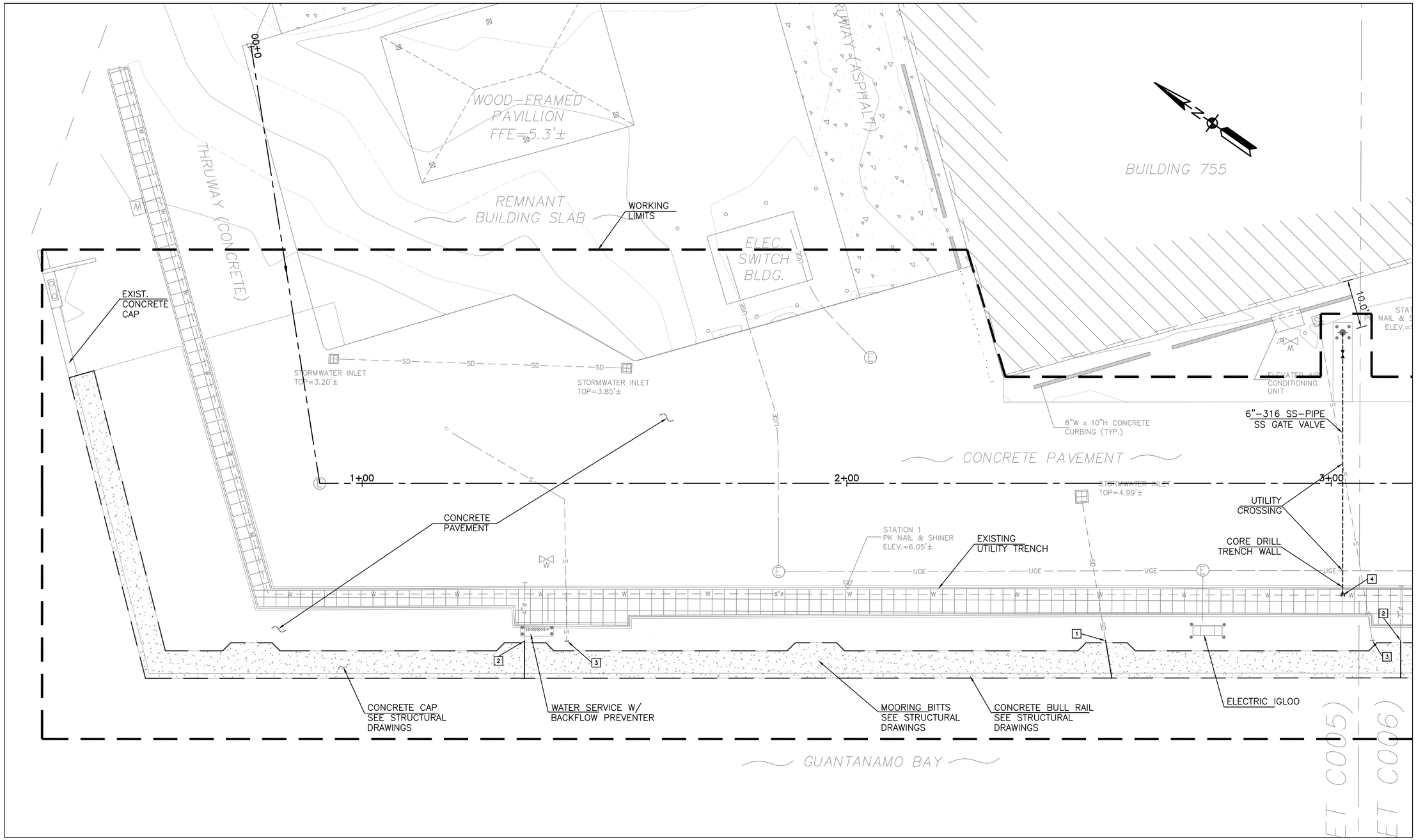
SHEET 19 OF 57

C206

DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\CBI\project_files\Z-CUBA\navsta guantanamo bay(h)h60514\wharf bravo structural repairs-1295318\working technical files\Drawings\C206 SEDIMENT CONTROL PLAN - SOUTH.dwg LAYOUT NAME: C206 SEDIMENT CONTROL PLAN - SOUTH PLOTTED: Monday, April 04, 2016 - 7:02pm USER: ricardo.palmo



1 UTILITY PLAN
Scale: 1" = 10'-0"

UTILITY NOTES:

1. REMOVE THE TEMPORARY PLUG AND EXTEND THE STORMWATER RCP PIPE. SEE DETAIL.
2. BEFORE EXTENDING THE EXISTING PIPE, VERIFY THE PIPE TYPE AND CONDITION. NOTIFY CONTRACTING OFFICER IF DETERIORATED CONDITIONS ARE FOUND.
3. CAP EXISTING PIPE PERMANENTLY AND ABANDONED IN PLACE WITH FLOWABLE FILL MATERIAL.
4. NEW 6"ø SS WATER CONNECTION (TAPPING SLEEVE) FOR NEW FIRE HYDRANT ASSEMBLY. FOR WATER MAIN CONNECTION, SEE DETAIL 2 ON SHEET C503.

NOTES:

1. ALL LIMITS OF WORK ARE APPROXIMATE.
2. CONTRACTOR TO COORDINATE WITH BASE UTILITIES TO ESTABLISH SCHEDULE OF UTILITY DISCONNECTIONS.
3. EXISTING UTILITIES FROM GTMO PUBLIC WORKS DEPARTMENT UTILITY MAPS AND HAVE NOT BEEN VERIFIED FOR ACCURACY OR COMPLETENESS. LOCATIONS TO BE VERIFIED BY THE CONTRACTOR AND SUB-CONTRACTORS TO THEIR SATISFACTION.
4. REFER TO ELECTRICAL DRAWINGS FOR ALL PROPOSED ELECTRICAL UTILITIES.
5. ALL UNDERGROUND METALLIC FITTINGS FOR WATER AND SANITARY PIPING ARE TO BE WRAPPED PER SPECIFICATION SECTION 33 11 00 AND 33 34 00. SEE SPECIFICATIONS FOR ADDITIONAL CRITERIA FOR WATER AND SANITARY SYSTEMS.

GRAPHIC SCALE
1"=10' 0' 10' 20' 30' 40' 50'

IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT, SCALE REDUCED ACCORDINGLY

SYM	DESCRIPTION	DATE	APPR
---	---	---	---

NAVFAC

A/E INFO
APPROVED
FOR COMMANDER NAVFAC / B.L.T.L.
ACTIVITY

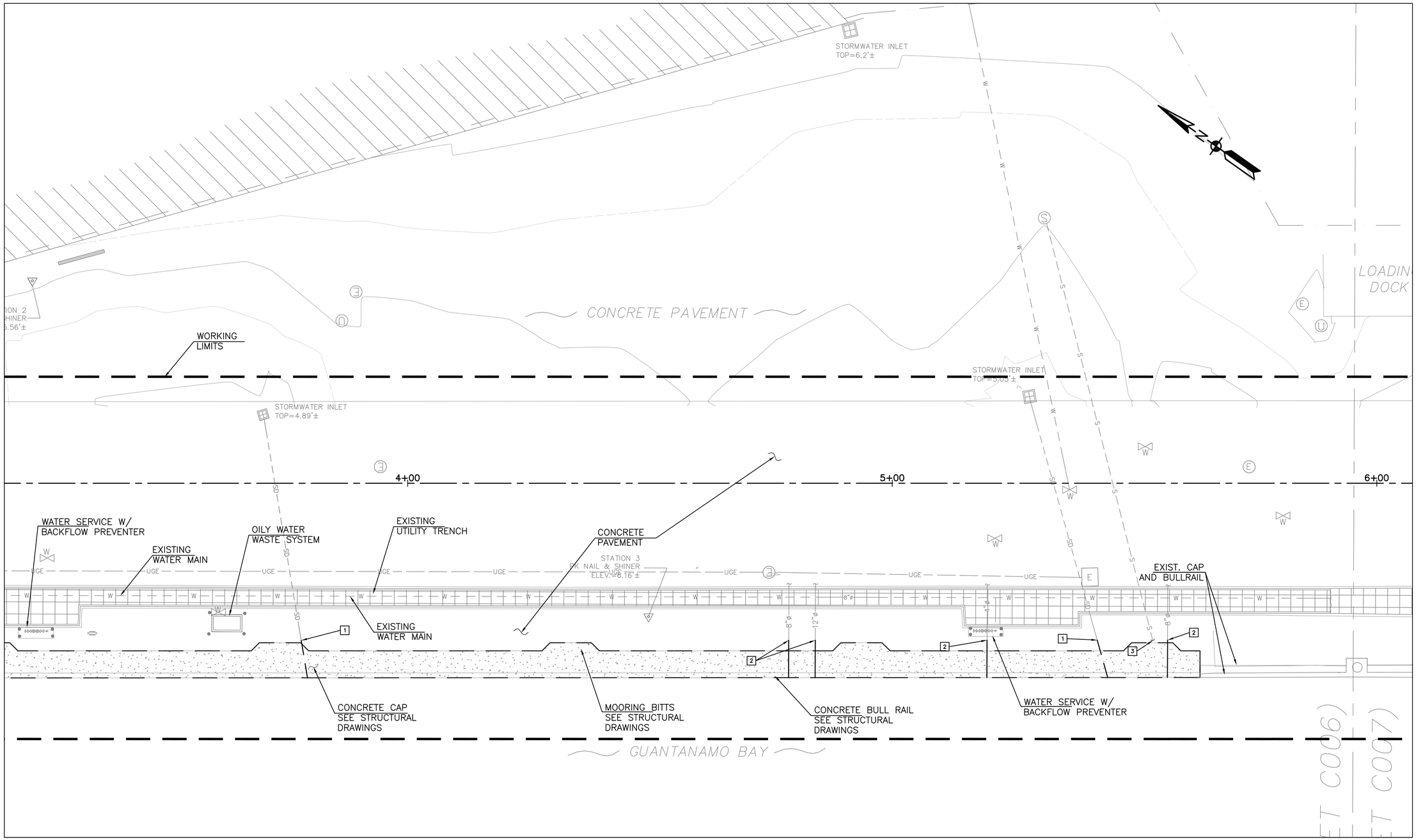
SATISFACTORY TO DATE ---
DES RP DRW RP CHK JF
PROJECT MANAGER E. GALLANT
IPT TECH. BRANCH HEAD S. ZAVOYSKI
CHIEF ENG/ARCH (CORE) J. FRANK

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA
WHARF BRAVO STRUCTURAL REPAIRS
UTILITY SITE PLAN – NORTH

SCALE: AS SHOWN
EPROJECT NO.: 1295318
CONSTR. CONTR. NO. N69450-XX-C-XXXX
NAVFAC DRAWING NO. ----
SHEET 20 OF 57
C300

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\OBA\project_files\z_CUBA\navsta guantanamo bay\hjr60514\wharf bravo structural repairs-1295318\working technical files\Drawings\C300 UTILITY SITE PLAN.dwg LAYOUT NAME: C300 UTILITY SITE PLAN PLOTTED: Monday, April 04, 2016 - 7:06pm USER: ricardo.palmo



2 UTILITY PLAN

Scale: 1" = 10'-0"

UTILITY NOTES:

1. REMOVE THE TEMPORARY PLUG AND EXTEND THE STORMWATER RCP PIPE. SEE DETAIL.
2. BEFORE EXTENDING THE EXISTING PIPE, VERIFY THE PIPE TYPE AND CONDITION. NOTIFY CONTRACTING OFFICER IF DETERIORATED CONDITIONS ARE FOUND.
3. CAP EXISTING PIPE PERMANENTLY AND ABANDONED IN PLACE WITH FLOWABLE FILL MATERIAL.

NOTES:

1. ALL LIMITS OF WORK ARE APPROXIMATE.
2. CONTRACTOR TO COORDINATE WITH BASE UTILITIES TO ESTABLISH SCHEDULE OF UTILITY DISCONNECTIONS.
3. EXISTING UTILITIES FROM GTMO PUBLIC WORKS DEPARTMENT UTILITY MAPS AND HAVE NOT BEEN VERIFIED FOR ACCURACY OR COMPLETENESS. LOCATIONS TO BE VERIFIED BY THE CONTRACTOR AND SUB-CONTRACTORS TO THEIR SATISFACTION.
4. REFER TO ELECTRICAL DRAWINGS FOR ALL PROPOSED ELECTRICAL UTILITIES.
5. ALL UNDERGROUND METALLIC FITTINGS FOR WATER AND SANITARY PIPING ARE TO BE WRAPPED PER SPECIFICATION SECTION 33 11 00 AND 33 34 00. SEE SPECIFICATIONS FOR ADDITIONAL CRITERIA FOR WATER AND SANITARY SYSTEMS.

GRAPHIC SCALE

1"=10' 0' 10' 20' 30' 40' 50'

IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT, SCALE REDUCED ACCORDINGLY

SYM	DESCRIPTION	DATE	APPR
---	---	---	---

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE ----

DES RP DRW RP CHK JF

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD S. ZAVOYSKI

CHIEF ENG/ARCH (CORE) J. FRANK

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

UTILITY SITE PLAN – SOUTH

SCALE: AS SHOWN

EPROJECT NO.: 1295318

CONSTR. CONTR. NO.
N69450-XX-C-XXXX

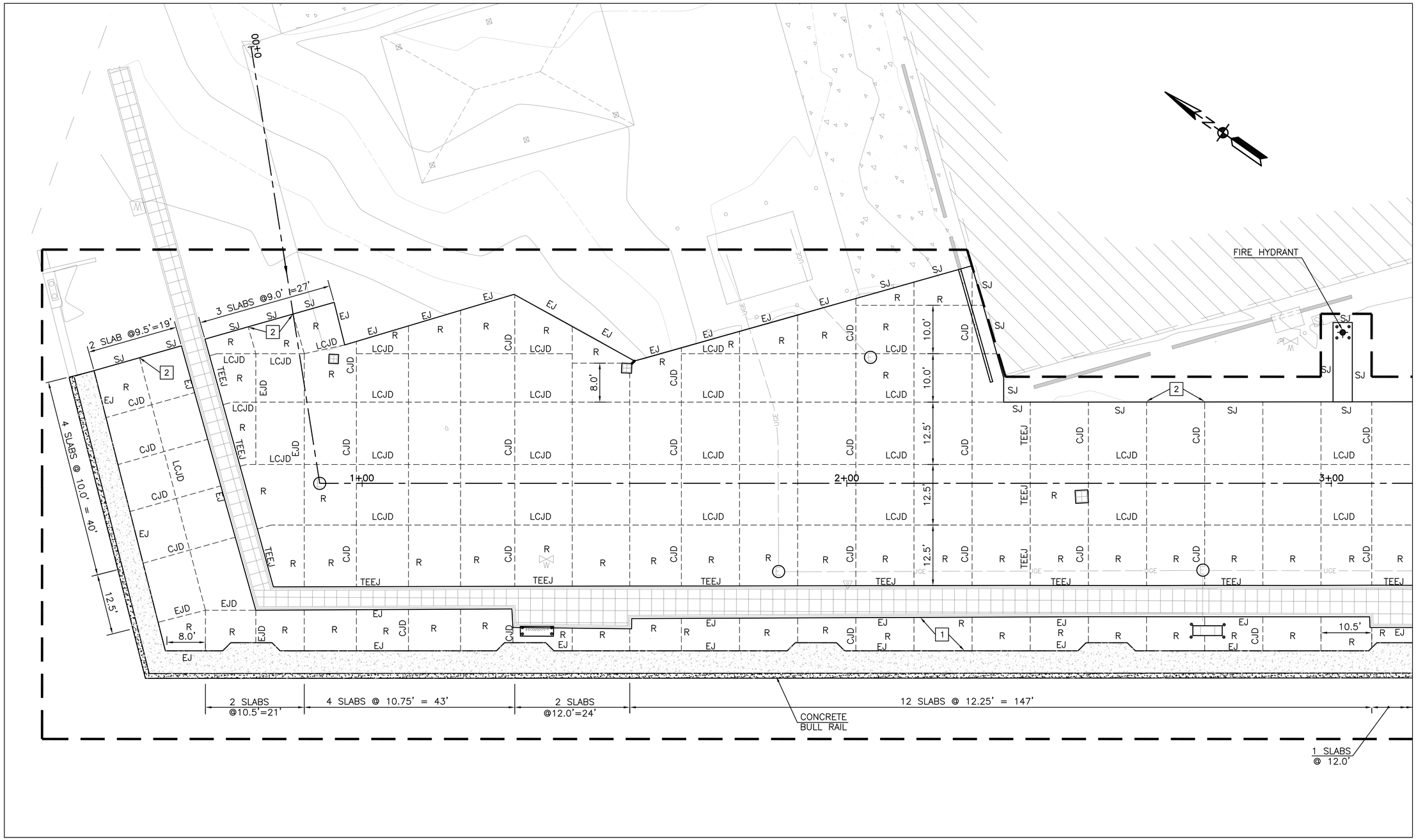
NAVFAC DRAWING NO.

SHEET 21 OF 57

C301

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIB\project_files\z_CUBA\navsta guantanamo bay\hjr60514\wharf bravo structural repairs-1295318\working technical files\Drawings\C301 UTILITY SITE PLAN.dwg LAYOUT NAME: C301 UTILITY SITE PLAN PLOTTED: Monday, April 04, 2016 - 7:06pm USER: rricardo.palmo



1 CONCRETE JOINT PLAN

Scale: 1" = 10'-0"

NOTES:

1. ALL CONCRETE SURFACES AND JOINTS SHALL BE FLUSHED CLEAN WITH WATER AFTER BOTH INITIAL AND FINAL SAWCUTS AND PRIOR TO THE DRYING OF SAWCUT SPAWNED SLURRY.
2. BOTH JOINT FACES SHALL BE SAND-BLASTED AND AIR-BLOWN PRIOR TO FINAL BACKER ROD AND SEALANT INSTALLATION.
3. SEAL RESERVOIR FOR CONTRACTION JOINTS SHALL BE FORMED USING A SECOND SAWCUT. SHOULDERED BLADE SHALL NOT BE USED WITH INITIAL SAWCUT.
4. CONTRACTOR SHALL SEAL ALL NEW JOINTS.

LEGEND:

- TEEJ – THICKENED EDGE EXPANSION JOINT
- CJD – CONTRACTION JOINT DOWELED
- LCJD – LONGITUDINAL CONSTRUCTION JOINT DOWELED
- EJD – EXPANSION JOINT DOWELED
- EJ – EXPANSION JOINT
- SJ – SPECIAL JOINT (THICKENED)
- R – REINFORCED SLAB
- NEW BULL RAIL
- NEW CONCRETE CAP

KEY NOTES:

1. FOR JOINT DETAILS SEE SHEET C501. SEE STRUCTURAL DRAWINGS FOR NEW CONCRETE CAP CROSS SECTION.
2. CONTRACTOR SHALL RE-SEAL EXISTING JOINTS TWO FEET BEYOND THE EXISTING SLAB

GRAPHIC SCALE

1"=10' 0' 10' 20' 30' 40' 50'

SYM	DESCRIPTION	DATE	APPR
---	---	---	---

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE ----

DES RP | DRW RP | CHK JF

PROJECT MANAGER L. MUENZ

IPT TECH. BRANCH HEAD S. ZAVOYSKI

CHIEF ENG/ARCH (CORE) J. FRANK

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

CONCRETE JOINT PLAN – NORTH

SCALE: AS SHOWN

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

NAVFAC DRAWING NO. ----

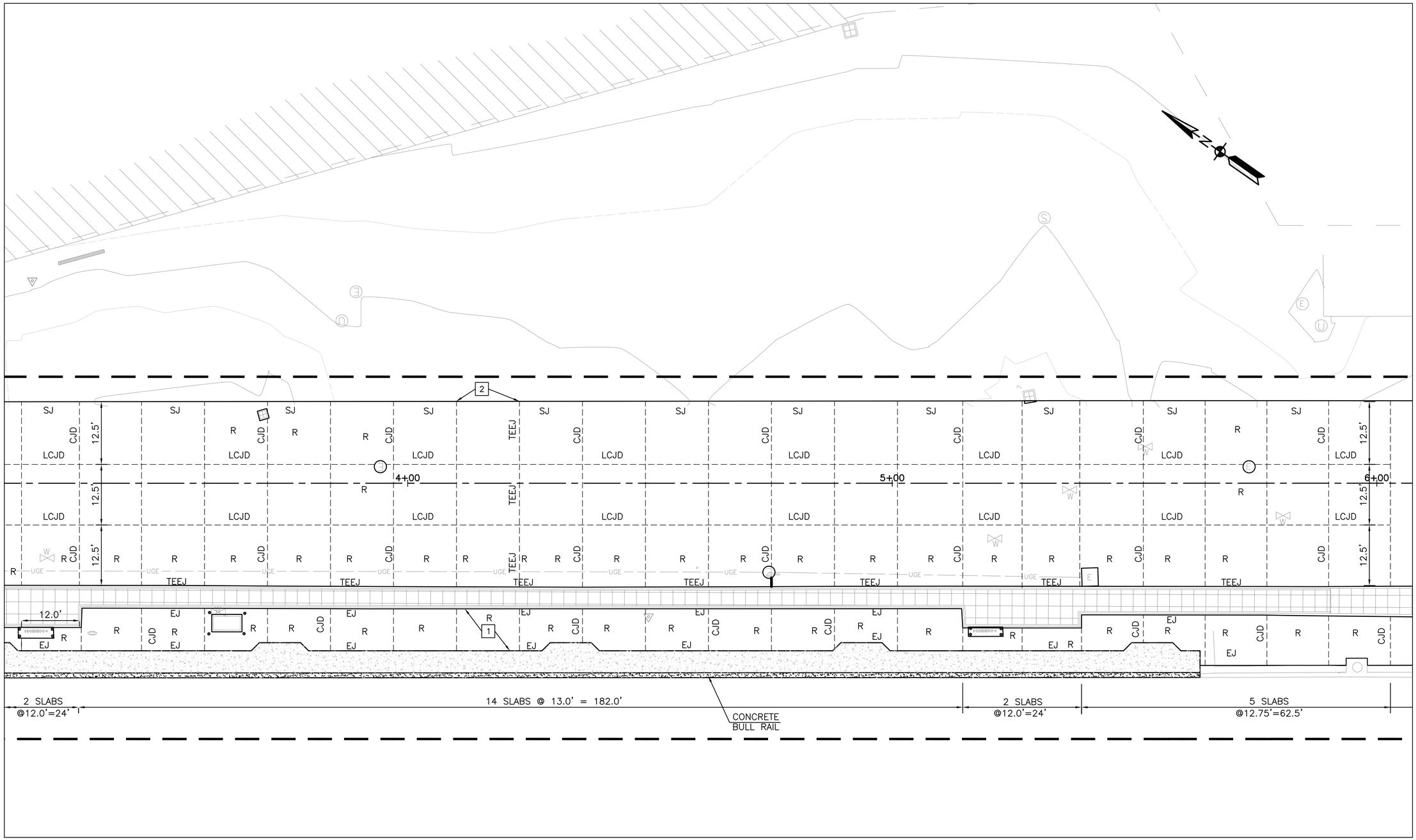
SHEET 22 OF 57

C400

DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\CBL\project_files\z_CUBA\navsta guantanamo bay(h)\h60514\wharf bravo structural repairs-1295318\working technical files\Drawings\C400 CONCRETE JOINT PLAN - NORTH.dwg LAYOUT NAME: C400 CONCRETE JOINT PLAN - NORTH PLOTTED: Monday, April 04, 2016 - 7:07pm USER: ricardo.palma



2 CONCRETE JOINT PLAN

Scale: 1" = 10'-0"

NOTES:

1. ALL CONCRETE SURFACES AND JOINTS SHALL BE FLUSHED CLEAN WITH WATER AFTER BOTH INITIAL AND FINAL SAWCUTS AND PRIOR TO THE DRYING OF SAWCUT SPAWNED SLURRY.
2. BOTH JOINT FACES SHALL BE SAND-BLASTED AND AIR-BLOWN PRIOR TO FINAL BACKER ROD AND SEALANT INSTALLATION.
3. SEAL RESERVOIR FOR CONTRACTION JOINTS SHALL BE FORMED USING A SECOND SAWCUT. SHOULDERED BLADE SHALL NOT BE USED WITH INITIAL SAWCUT.
4. CONTRACTOR SHALL SEAL ALL NEW JOINTS.

LEGEND:

- TEEJ – THICKENED EDGE EXPANSION JOINT
- CJD – CONTRACTION JOINT DOWELED
- LCJD – LONGITUDINAL CONSTRUCTION JOINT DOWELED
- EJD – EXPANSION JOINT DOWELED
- EJ – EXPANSION JOINT
- SJ – SPECIAL JOINT (THICKENED)
- R – REINFORCED SLAB
- NEW BULL RAIL
- NEW CONCRETE CAP

KEY NOTES:

1. FOR JOINT DETAILS SEE SHEET C501. SEE STRUCTURAL DRAWINGS FOR NEW CONCRETE CAP CROSS SECTION.
2. CONTRACTOR SHALL RE-SEAL EXISTING JOINTS TWO FEET BEYOND THE EXISTING SLAB

GRAPHIC SCALE

1"=10' 0' 10' 20' 30' 40' 50'

SYM	DESCRIPTION	DATE	APPR
---	---	---	---

NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE ----

DES RP DRW RP CHK JF

PROJECT MANAGER L. MUENZ

IPT TECH. BRANCH HEAD S. ZAVOYSKI

CHIEF ENG/ARCH (CORE) J. FRANK

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

CONCRETE JOINT PLAN – SOUTH

SCALE: AS SHOWN

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

NAVFAC DRAWING NO. ----

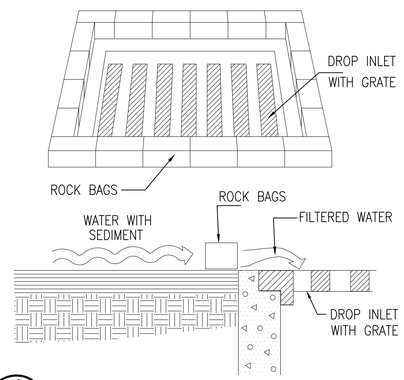
SHEET 23 OF 57

C401

DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\CBL\project_files\z_CUBA\navsta guantanamo bay(h)\h60514\wharf bravo structural repairs-1295318\working technical files\Drawings\C401 CONCRETE JOINT PLAN - SOUTH.dwg LAYOUT NAME: C401 CONCRETE JOINT PLAN - SOUTH PLOTTED: Monday, April 04, 2016 - 7:08pm USER: ricardo.palmo

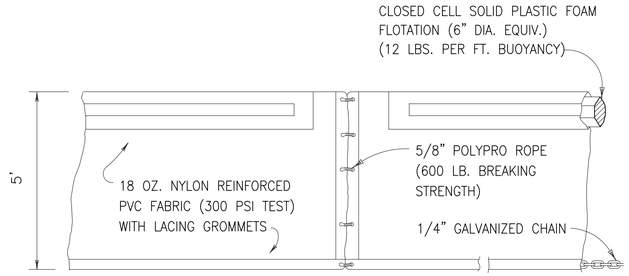


1 C501 ROCK BAG DROP INLET SEDIMENT FILTER

NOT TO SCALE

SPECIFIC APPLICATION

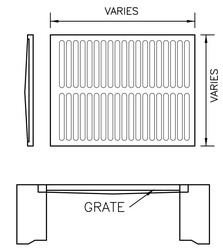
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.



TYPE I

2 C501 FLOATING TURBIDITY BARRIERS

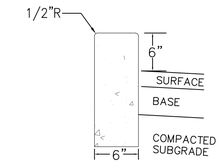
NOT TO SCALE



3 C501 STORM SEWER GRADE

NOT TO SCALE

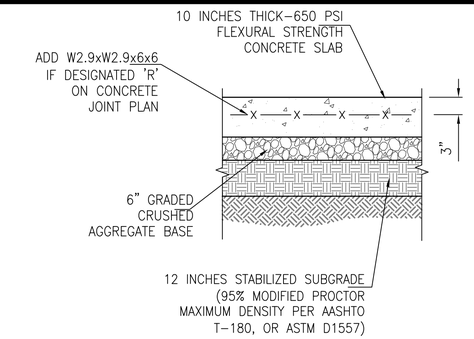
NOTES:
1. ALL GRATES TO BE TRAFFIC BEARING RATED HS-20.



HEADER CURB

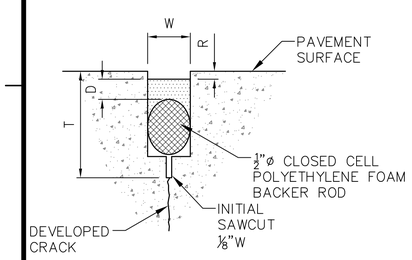
4 C501 CURB SECTION

NOT TO SCALE

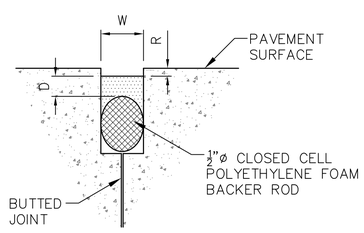


5 C501 TYPICAL CONCRETE DETAIL

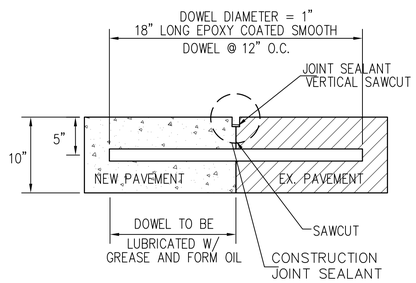
NOT TO SCALE



CONTRACTION JOINT



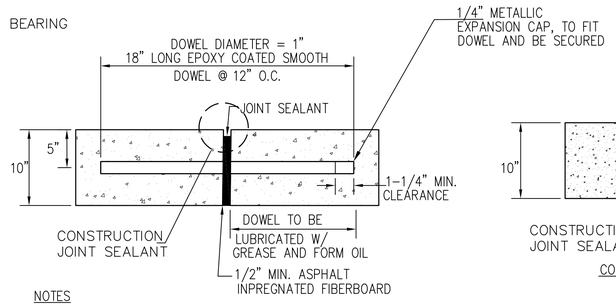
CONSTRUCTION JOINT



NOTES

1. DRILL HOLES 9" DEEP, 12" LATERAL SPACING INTO SURROUNDING PCC PAVEMENT THOROUGHLY.
2. INSERT EPOXY, TO FILL HOLE AND INSERT BARS WITH RETENTION COLLARS.
3. DOWELS SHALL BE AUGNED PERPENDICULAR TO THE SQUARE FACE OF CONCRETE.
4. FOR EPOXY GROUT, THE DIAMETER SHALL BE NOT MORE THAN 1/8-INCH LARGER THAN THE DOWEL DIAMETER.
5. FOR CEMENT-BASED GROUT, THE HOLE DIAMETER SHALL BE AT LEAST 1/4-INCH LARGER AND NOT MORE THAN 3/8-INCH LARGER THAN THE DOWEL.
6. DRILLING, CLEANING, AND GROUTING SHALL BE PERFORMED PER THE EPOXY MANUFACTURER'S RECOMMENDATIONS FOR THIS SPECIFIC APPLICATION.
7. INSTALL END CAPS ON THE FREE END OF DOWELS.
8. JOINT SEALANT TO BE AS NOTED IN PCC JOINT DETAIL.

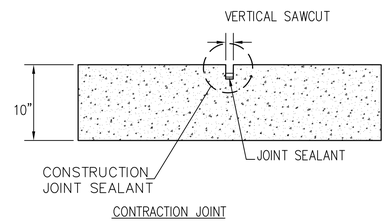
BUTT JOINT



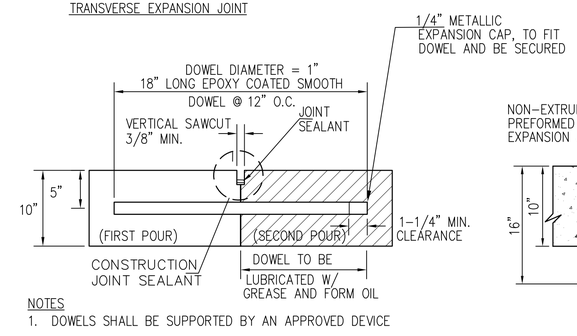
NOTES

1. DOWELS SHALL BE SUPPORTED BY AN APPROVED DEVICE

TRANSVERSE EXPANSION JOINT



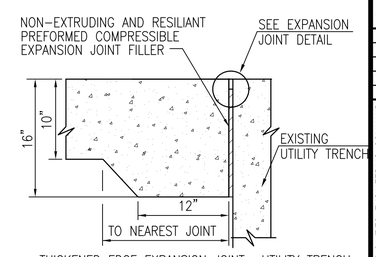
CONTRACTION JOINT



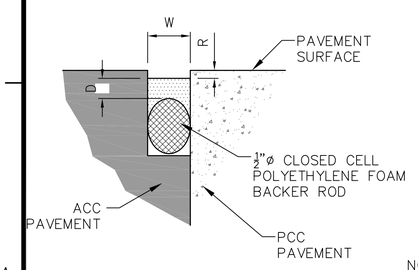
NOTES

1. DOWELS SHALL BE SUPPORTED BY AN APPROVED DEVICE

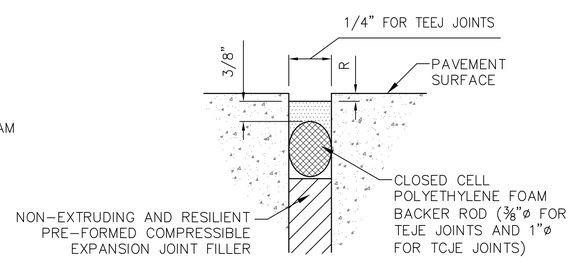
CONSTRUCTION JOINT



THICKENED EDGE EXPANSION JOINT- UTILITY TRENCH



PCC TO ACC JOINT

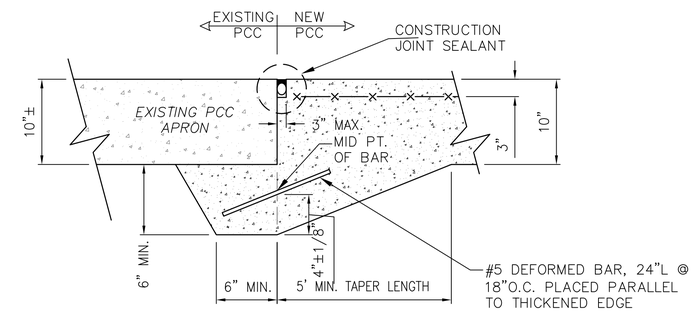


EXPANSION JOINT

SAWCUT/CLEAN BOTH SIDES OF JOINT TO REMOVE FOREIGN MATERIALS &ASSURE ADHESION OF SEALANT TO PCC SUBSTRATE

DEFINITIONS

W ≡ WIDTH OF SEALANT RESERVOIR = 3/8"
D ≡ DEPTH OF SEALANT = 3/8" (OR PER MANUFACTURER'S RECOMMENDATION)
T ≡ DEPTH OF INITIAL SAWCUT = 2.50"
R ≡ DEPTH OF RECESS = 1/4" ± 1/16"



SPECIAL JOINT - EXISTING APRON

6 C501 CONCRETE JOINT DETAILS

NOT TO SCALE

							APPR
							DATE
							DESCRIPTION
							CTM

NAVFAC

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE ---

DES RP DRW RP CHK JF

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD S. ZAVOYSKI

CHIEF ENG/ARCH (CORE) J. FRANK

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC

NAVAL FACILITIES ENGINEERING COMMAND
NAVAL AIR STATION JACKSONVILLE
NAVSTA GUANTANAMO BAY

GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

SITE CONSTRUCTION DETAILS

SCALE: AS SHOWN

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

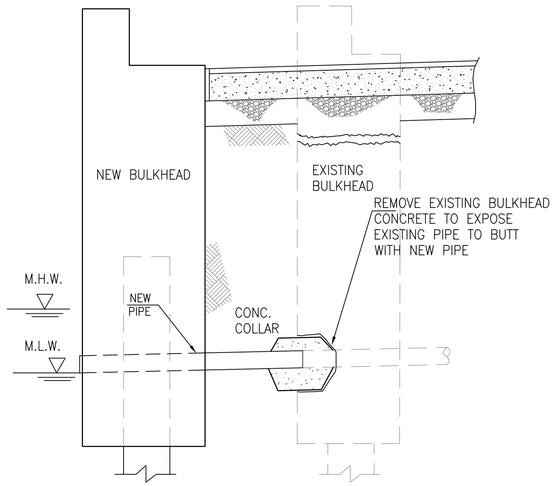
NAVFAC DRAWING NO. ----

SHEET 24 OF 57

C501

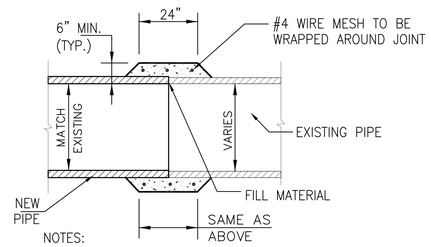
DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIB\project_files\z_CUBA\navsta guantanamo bay\hjr60514\wharf bravo structural repairs-1295318\working technical files\Drawings\C501 SITE CONSTRUCTION DETAILS.dwg LAYOUT NAME: C501 SITE CONSTRUCTION DETAILS PLOTTED: Monday, April 04, 2016 - 7:13pm USER: ricardo.palmo



1 C502 PIPE EXTENSION DETAIL (TYP.)

NOT TO SCALE

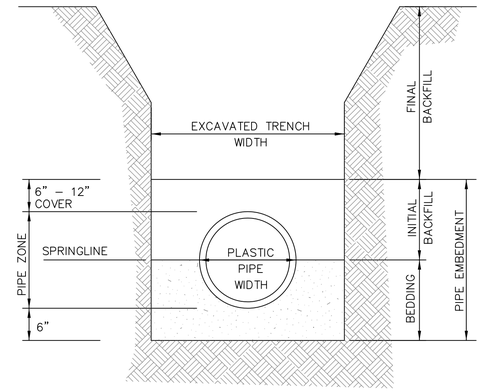


NOTES:

1 – PREVENT ANY EXCESS CONCRETE FLOW THRU GAPS BY FILLING WITH MASTIC FILLING MATERIAL.
2 – REMOVE EXISTING PIPE BEYOND BULKHEAD IF EXISTING PIPE IS DAMAGE.

2 C502 PIPE COLLAR DETAIL

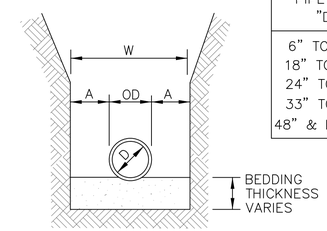
NOT TO SCALE



NOTE: PROVIDE BEDDING IN ACCORDANCE WITH THE SPECIFICATIONS.

3 C502 TRENCH FOR PLASTIC PIPE

NOT TO SCALE



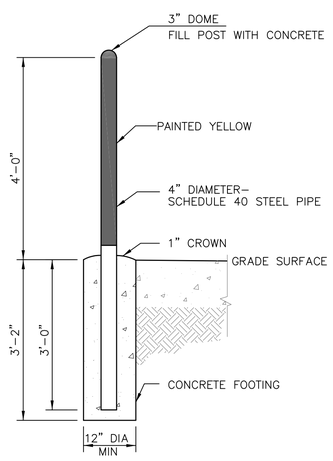
PIPE DIA "D"	MAXIMUM "A"
6" TO 15"	8"
18" TO 21"	10"
24" TO 30"	12"
33" TO 42"	15"
48" & LARGER	18"

MAXIMUM TRENCH WIDTH "W" TAKEN AT TOP OF PIPE

NOTE: PROVIDE BEDDING IN ACCORDANCE WITH THE SPECIFICATIONS.

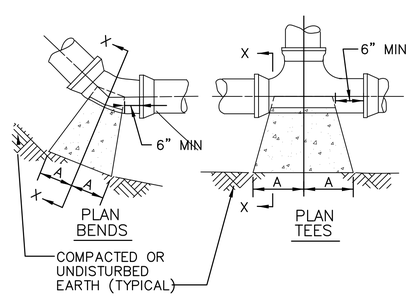
4 C502 TRENCH FOR NON-PLASTIC PIPE

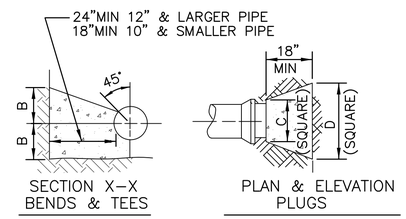
NOT TO SCALE



5 C502 PERMANENT BOLLARD

NOT TO SCALE





SIZE	1/4 BENDS		1/8 BENDS		1/16 BENDS		TEES		PLUGS	
	A	B	A	B	A	B	A	B	C	D
6"	16"	10"	9"	10"	6"	8"	10"	12"	10"	21"
8"	22"	13"	12"	13"	8"	10"	13"	16"	12"	29"
10"	26"	17"	14"	17"	10"	13"	16"	20"	14"	36"
12"	29"	21"	16"	21"	11"	16"	18"	24"	16"	41"
14"	35"	24"	19"	24"	12"	20"	22"	27"	18"	48"
16"	38"	27"	21"	27"	12"	24"	24"	30"	20"	54"

6 C502 THRUST BLOCKS

NOT TO SCALE

SYM	DESCRIPTION	DATE	APPR

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES RP DRW RP CHK JF

PM/DM E. GALLANT

BRANCH MANAGER J. WARD

CHIEF ENG/ARCH J. FRANK

FIRE PROTECTION --

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

NAVSTA GUANTANAMO BAY

GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

SITE CONSTRUCTION DETAILS

SCALE: AS SHOWN

EPROJECT NO.: 1295318

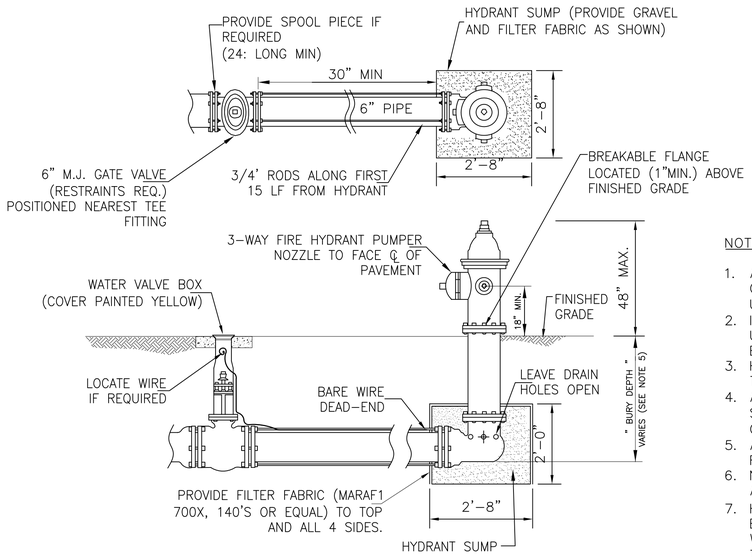
CONSTR. CONTR. NO. N69450–XX–C–XXXX

NAVFAC DRAWING NO. ––

SHEET 25 OF 57

C502

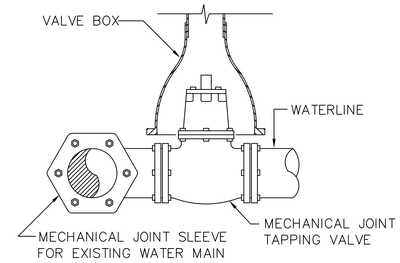
DRAWFORM REVISION: 7 AUGUST 2009



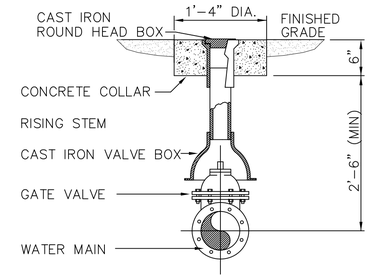
NOTE

1. ALL BOLTS SHALL BE STAINLESS STEEL TYPE 316 COATED WITH ANTI-SIEZE COMPOUND UNLESS OTHERWISE SPECIFIED. ALL BOLTS SHALL BE TIGHTENED USING A TORQUE WRENCH TO MANUFACTURER'S SPECIFICATIONS.
2. IF THRUST BLOCK ARE CALLED FOR, THEY SHALL BE PLACED AGAINST UNDISTURBED OR COMPACTED SOIL. ALL BOLTS AND JOINTS SHALL BE LEFT EXPOSED AND FREE FROM POURED CONCRETE
3. HORIZONTAL PIPE MATERIAL UNDER THE PIER SHALL BE STAINLESS STEEL TYPE 316.
4. ALL FITTINGS SHALL MEET AWWA STANDARD C153/A21 53-00. ALL GASKETS SHALL BE CHLORAMINE RESISTANT AS WELL AS MEET AWWA STANDARD C111/A21 11-00 AND NSF STANDARD 61.
5. ALL JOINTS SHALL BE PUSH ON WITH FIELD-LOC GASKETS OR MEGALUG OR FLANGED.
6. NYLON HYDRANT CAPS SHALL BE COLOR-CODED TO INDICATE AVAILABLE FLOW AND ATTACHED AS SHOWN WITH STAINLESS STEEL CHAIN OR WIRE.
7. HYDRANT BOLTS & NUTS SHALL BE $\frac{5}{8}$"X2$\frac{3}{4}$" STAINLESS STEEL TYPE 316 FOR BOTH ABOVE GROUND AND BURIED LOCATIONS. THREADS SHALL BE COATED WITH ANTI-SEIZE COMPOUND. ALL BOLTS SHALL BE TIGHTENED USING A TORQUE WRENCH TO MANUFACTURER'S SPECIFICATIONS.

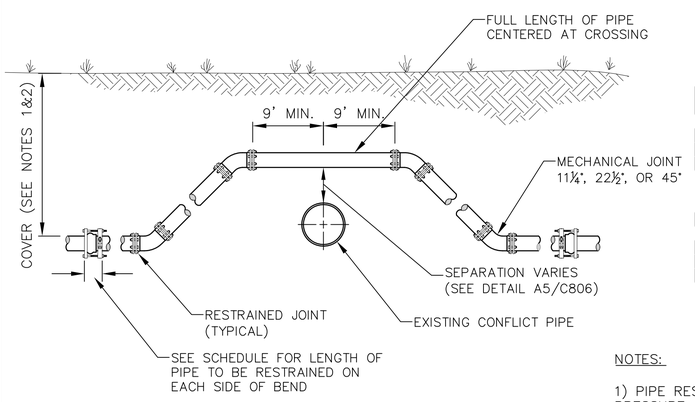
1 C503 FIRE HYDRANT DETAIL
NOT TO SCALE



2 C503 TAPPING SLEEVE DETAIL
NOT TO SCALE



3 C503 VALVE DETAIL
NOT TO SCALE



TYPE 'A' CROSSING
NOT TO SCALE

PVC PIPE RESTRAINT JOINT SCHEDULE

LENGTH TO BE RESTRAINED (FEET)

NOMINAL PIPE SIZE (INCHES)	HORIZONTAL BENDS				VERTICAL OFFSETS		
	90	45	22.5	11.25	Lu	Li	L
4	20	8	4	2	20	3	50
6	28	10	5	2	28	4	70
8	36	14	6	3	36	5	90

REDUCERS

SIZE	LENGTH (FEET)
6x4	35
8x6	35
8x4	65

TEES

RUN SIZE	BRANCH SIZE	LENGTH (FEET)
4	4	FITTING ONLY
6	6	10
6	4<LESS	FITTING ONLY
8	8	30
8	6<LESS	FITTING ONLY

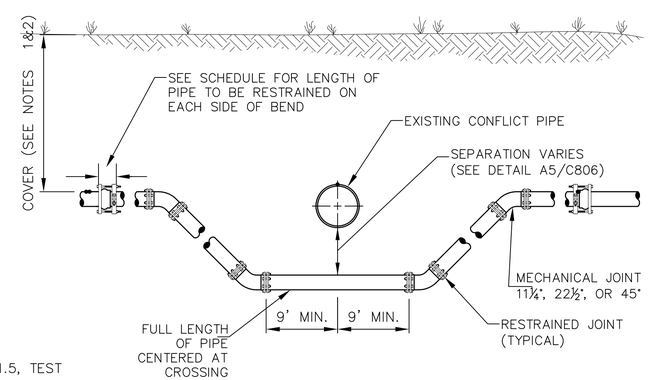
NOTES:

1) PIPE RESTRAINT ASSUMPTIONS: PVC PIPE, SAFETY FACTOR = 1.5, TEST PRESSURE=150PSI, DEPTH OF COVER=30 INCHES.

2) VERTICAL OFFSETS ARE APPROXIMATELY 3 FEET OF COVER ON TOP AND APPROXIMATELY 8 FEET COVER ON BOTTOM. Lu IS THE RESTRAINED LENGTH FOR THE TOP LEVEL. Li IS THE RESTRAINED LENGTH FOR THE BOTTOM LEVEL.

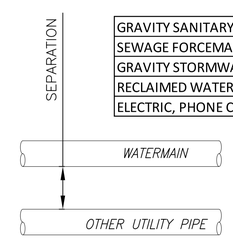
3) TEES: TOTAL LENGTH BETWEEN FIRST JOINTS OR RESTRAINED LENGTH ON EITHER SIDE OF THE TEE (RUN) SHALL BE A TOTAL DISTANCE OF 30 FEET (MIN.)

4) THE INSTALLATION OF BELL HARNESS RESTRAINTS AT PVC JOINTS SHALL BE COMPLETED PER THE MANUFACTURER'S RECOMMENDATIONS.



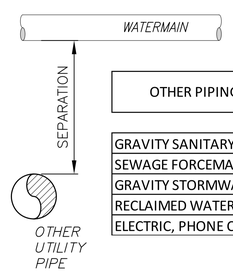
TYPE 'B' CROSSING
NOT TO SCALE

4 C503 PPE CROSSING CONFLICTS DETAIL
NOT TO SCALE



MINIMUM HORIZONTAL SEPARATION REQUIREMENTS

OTHER PIPING TYPE	MINIMUM HORIZONTAL SEPARATION (FEET)
GRAVITY SANITARY SEWER	10
SEWAGE FORCEMAIN	10
GRAVITY STORMWATER	3
RECLAIMED WATER	3
ELECTRIC, PHONE CABLE, GAS	2



MINIMUM VERTICAL SEPARATION REQUIREMENTS

OTHER PIPING TYPE	MINIMUM VERTICAL SEPARATION (INCHES)
GRAVITY SANITARY SEWER	18
SEWAGE FORCEMAIN	18
GRAVITY STORMWATER	12
RECLAIMED WATER	12
ELECTRIC, PHONE CABLE, GAS	6

5 C503 MINIMUM SEPARTION FOR WATERMAINS
NOT TO SCALE

SYM	DESCRIPTION	DATE	APPR

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES RP DRW RP CHK JF

PM/DM E. GALLANT

BRANCH MANAGER J. WARD

CHIEF ENG/ARCH J. FRANK

FIRE PROTECTION --

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC

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NAVAL AIR STATION JACKSONVILLE

NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

UTILITY DETAILS

SCALE: AS SHOWN

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

NAVFAC DRAWING NO. --

SHEET 26 OF 57

C503

DRAWFORM REVISION: 7 AUGUST 2009

STRUCTURAL DESIGN SCOPE

1) PROVIDE A UNIFORM BERTHING FACE TO MATCH EXISTING FACILITY. PROVIDE UPLAND SOIL REPAIRS. PROVIDE REPAIR AND MAINTENANCE OF EXISTING FACILITIES NOT IMPACTED BY THE NEW BERTHING FACE.

DESIGN CRITERIA

1) UFC 3-301-01, STRUCTURAL ENGINEERING, MAY 2014
2) UFC 4-151-10, GENERAL CRITERIA FOR WATERFRONT CONSTRUCTION, SEPTEMBER 2001
3) UFC 4-152-01, DESIGN OF PIERS AND WHARVES, SEPTEMBER 2005
4) ASCE 7-10, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
5) ASCE 61-14, SEISMIC DESIGN OF PIERS AND WHARVES - CHAPTER 2

DESIGN LOADS

1) DEAD LOADS:
   STRUCTURE SELF WEIGHT
2) LIVE LOADS:
   DECK AREA = 300 PSF UNIFORM SURCHARGE
3) WHEEL LOADS:
   DECK AREA = AASHTO HS-20-44, 20TON LIFT TRUCK
   = 24K FORKLIFT (CRITERIA 3)
   TRENCH COVERS = AASHTO HS-20-44, 20TON LIFT TRUCK
4) CRANE LOADS = 50 TON MOBILE CRANE PER UFC 4-152-01
5) BERTHING LOADS

VESSEL NAME	LOA(FT)	BEAM(FT)	DRAFT(FT)	DISPLACEMENT (LT)	BERTHING SPEED(FT/SEC)
BOB HOPE(TAKR300)A	949	106	26	44,229	0.36
LHD-1	844	106	28	40,650	0.37
AOI	615	90	33	39,620	0.37
DDG-51	505	66	30	8,274	0.62
USCG WHEC	378	43	15	3293	0.81
MT OCEAN ENERGY	171	34	9	1,016	0.96
YTB	108	30.5	14	344	1.0

6) WIND LOADS:
   OPERATIONAL MOORING = 35 KNOT 30-SEC GUST
   EXTREME MOORING = 60 KNOT 30-SEC GUST
7) SEISMIC(UFC 4-152-01):
   OCCUPANCY CATEGORY = SUG II
   IMPORTANCE FACTOR = 1.0
   SOIL SEISMIC(PRIOR TO SOIL REPAIRS) = E
   SOIL SEISMIC(AFTER SOIL REPAIRS) = E
   PGA(2475 YR) = 0.50g
   PGA(775 YR) = 0.33g
   PGA(475) = 0.14g

EXISTING CONDITION

1) REFER TO RECORD DRAWINGS, NAVFAC DRAWINGS 4221150 TO 4221181 AND 4249498 TO 4249519. THE GOVERNMENT MAKES NO CLAIM REGARDING THE ACCURACY OF THESE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL INFORMATION REPRESENTED IN THESE DRAWINGS. RECORD DRAWINGS ARE INCORPORATED INTO THIS CONTRACT BY REFERENCE.

GENERAL INFORMATION

1) THESE NOTES ARE NOT INTENDED TO REPLACE THE SPECIFICATIONS. SEE SPECIFICATION FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES.
2) THE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES AND SEQUENCE.
3) DO NOT SCALE DIMENSIONS FROM DRAWINGS. THE CONTRACTOR SHALL REQUEST, IN WRITING, FROM THE GOVERNMENT ANY NECESSARY DIMENSIONS NOT SHOWN ON THE DRAWINGS.
4) REPRODUCTION OF CONTRACT DRAWINGS SHALL NOT BE USED AS SHOP DRAWINGS UNDER ANY CIRCUMSTANCE.
5) CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND CONDITIONS OF EXISTING STRUCTURE AND SITE THAT ARE AFFECTED BY NEW WORK BEFORE PRECEDING. NOTIFY CONTRACTING OFFICER OF ANY DISCREPANCIES THAT IMPACT NEW WORK PRIOR TO MOBILIZATION TO THE SITE.
6) REFERENCE ELEVATION OF 0.00 FEET REFERENCED TO MEAN SEA LEVEL. FOLLOWING IS THE TIDAL INFORMATION AVAILABLE AT TIME OF DESIGN(REF. PWO BENCH MARK DRAWING 5T-1120-1288):
   MEAN HIGH WATER(MHW) +0.50FT
   MSL 0.00FT
   MEAN LOW WATER(MLW) -0.50FT
7) WATER DEPTHS FOUND IN THE INSPECTION SHEETS ARE REFERENCED TO MEAN SEA LEVEL. WATER DEPTHS TAKEN FROM "HYDROGRAPHIC CONDITION SURVEY - JUNE 2012" BY NAVFAC MIDATLANTIC HYDROGRAPHIC SURVEY BRANCH.
8) ALL DIVING OPERATIONS MUST BE PLANNED AND CONDUCTED IN ACCORDANCE WITH CONTRACT REQUIREMENTS AND CONTRACTOR'S SAFETY PRACTICES. NO DIVING SHALL OCCUR UNDER THIS CONTRACT WITHOUT WRITTEN ACCEPTANCE OF THE CONTRACTOR'S DIVE PLAN.
9) REFER TO GENERAL SHEETS FOR PROJECT PHASING REQUIREMENTS.

CONSTRUCTION NOTES

1) ALL CRANE OPERATIONS SHALL BE CONDUCTED IN ACCORDANCE WITH CONTRACT, FEDERAL, AND LOCAL REQUIREMENTS. CONTRACTOR IS RESPONSIBLE TO DETERMINE IF EQUIPMENT CAN OPERATE SAFELY ON THE WHARF.
2) BOTTOM DEBRIS GENERATED BY THE CONTRACTOR SHALL BE REMOVED AT NO ADDITIONAL COST TO THE GOVERNMENT. DIVERS SHALL BE USED TO LOCATE AND RECOVER CONTRACTOR GENERATED BOTTOM DEBRIS. THE USE OF CLAM SHELL BUCKETS OR SIMILAR METHODS IS PROHIBITED.
3) PROVIDE TURBIDITY CURTAIN AROUND ALL ACTIVE CONSTRUCTION AREAS. TURBIDITY CURTAIN SHALL EXTEND FROM WATER SURFACE TO MUDLINE. ANCHOR PER MANUFACTURER'S REQUIREMENTS.
4) COORDINATE LAYDOWN AREA FOR MATERIALS AND EQUIPMENT WITH THE CONTRACTING OFFICER.
5) TAKE PRECAUTIONS TO PROTECT EXISTING WHARF STRUCTURE FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS.

STRUCTURAL DEMOLITION NOTES

1) REMOVE ALL ITEMS AS DETAILED IN THE STRUCTURAL DEMOLITION SHEETS. REFER TO CIVIL SHEETS FOR ANY ADDITIONAL REQUIREMENTS.
2) REMOVE AND STORE EXISTING FOAM FENDERS IN A LOCATION AS INDICATED BY THE CONTRACTING OFFICER. RE-INSTALL AS PART OF THIS CONTRACT.

EXISTING UTILITIES

1) PRIOR TO STARTING CONSTRUCTION, UTILITIES FOR POTABLE WATER, WASTE OIL AND SANITARY SEWER WILL BE CHECKED FOR OBVIOUS LEAKS, PRESSURE TESTED AND FLOW TESTED (WHERE APPLICABLE) TO ESTABLISH BASELINE DATA. ANY LEAK OR ABNORMAL DATA WILL BE REPORTED TO THE CONTRACTING OFFICER. AFTER COMPLETION OF PROJECT, UTILITIES AGAIN SHALL BE TESTED TO ENSURE THAT THEY MEET THE BASELINE ESTABLISHED DATA. ANY VARIANCES WILL BE REPORTED TO THE CONTRACTING OFFICER.

CONCRETE

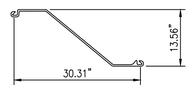
1) ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE AMERICAN CONCRETE INSTITUTE (ACI) BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318), JANUARY 2011. CONCRETE SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:
   A. THE 28-DAY CONCRETE COMPRESSIVE STRENGTH SHALL BE 5,000 PSI.
   B. UNO, CONCRETE COVER OVER STEEL REINFORCEMENT SHALL BE 3 INCHES.
   C. PROVIDE PORE BLOCKER ADMIXTURE. REFER TO SPECIFICATION FOR ADDITIONAL INFORMATION.
   D. REFER TO SPECIFICATIONS FOR ADDITIONAL CONCRETE REQUIREMENTS.
2) EPOXY CHEMICAL EMBED MATERIAL SHALL MEET THE REQUIREMENTS OF ASTM C881 TYPE IV, GR 3.
3) STEEL REINFORCEMENT SHALL MEET THE REQUIREMENTS OF ASTM A615-12 GRADE 60. ALL REINFORCEMENT MUST BE HOT DIPPED GALVANIZED PER ASTM A767 CLASS 1 AFTER ALL BENDING AND MANUFACTURE IS COMPLETE.
4) PROVIDE NON-SHRINK NON-METALLIC GROUT MEETING THE REQUIREMENTS OF ASTM C1107 WITH A WATER-SOLUBLE CHLORIDE CONTENT LESS THAN 0.10% BY MASS TO TOTAL MASS OF THE TOTAL CEMENTITIOUS MATERIALS. PROVIDE A MINIMUM 5,000 PSI 28-DAY COMPRESSIVE STRENGTH GROUT.
5) FOR CIP CONCRETE AGAINST EXISTING CONCRETE:
   A. PREPARE EXISTING CONCRETE SURFACE AS REQUIRED BY EPOXY BONDING COMPOUND MANUFACTURER
   B. PROVIDE EPOXY BONDING MEETING REQUIREMENTS OF ASTM C881 TYPE 2, GRADE 1 WITH CLASS MATCHING REQUIRED PLACEMENT AMBIENT TEMPERATURE RANGE.
6) PROVIDE 4'-0" WIDE CLOSURE POURS IN PILE CAP BETWEEN ADJACENT CONCRETE PLACEMENTS AND WHERE INDICATED ON THE DRAWINGS. LOCATE ALL REINFORCEMENT SPLICES AT CLOSURE POURS. ALLOW ADJACENT CONCRETE PLACEMENTS A MINIMUM OF 7 DAYS OF CURING BEFORE PLACEMENT OF CONCRETE IN CLOSURE POUR. PROVIDE MINIMUM OF ¼" SURFACE AMPLITUDE ON ADJACENT POUR FACES. CLOSURE POURS SHALL NOT OCCUR WITHIN 9'-9" OF ℄ OF LOW DOUBLE BITT FOUNDATIONS AND 5'-6" OF ℄ OF CLEAT FOUNDATIONS.

STEEL

1) THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS AND STRUCTURES SHALL BE IN ACCORDANCE WITH THE SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, ANSI/AISC 360-05, MARCH 9, 2005.
2) THE REQUIRED MATERIAL SPECIFICATION FOR STRUCTURAL STEEL MEMBERS ARE AS FOLLOWS:
   RECTANGULAR AND ROUND HSS---------- ASTM A500, GRADE B
   ROUND STEEL PIPE---------- ASTM A536, GRADE B
   PLATES, CHANNELS AND ANGLES---------- ASTM A36
   STRUCTURAL BOLTS---------- ASTM A490, TYPE 1
   NUTS FOR STRUCTURAL BOLTS---------- ASTM A563
   WASHERS---------- ASTM F436
   ANCHOR RODS W/ NUT AND WASHER----------ASTM F1554, GRADE 36
   THREADED ROD----------ASTM A36
   TIE-BACK ANCHOR ROD---------- ASTM A615, GRADE 75, CONTINUOUS THREAD
   WELDING ELECTRODE---------- AWS D1.1, E70XX
   HOT DIPPED GALVANIZED HARDWARE---------- ASTM A153
   HOT DIPPED GALVANIZED PRODUCTS---------- ASTM A123, GRADE 100
   CLEANING PRIOR TO HDG---------- SSPC SP10, NEAR WHITE
3) ALL WELDED AND MANUFACTURED STEEL PRODUCTS SHALL BE HOT DIPPED GALVANIZED TO THE REQUIREMENTS OF ASTM A123-08 AFTER ALL WELDING AND MANUFACTURING PROCESSES ARE COMPLETED. REMOVE ALL WELDING SLAG AND FLUX FROM STEEL SURFACE PRIOR TO CLEANING. ALL STEEL SHAPES SHALL BE CLEANED TO THE REQUIREMENTS OF SSPC-SP10/NACE NO. 2 FINISH PRIOR TO GALVANIZING.
4) ALL WELDING SHALL BE IN ACCORDANCE WITH THE STRUCTURAL WELDING CODE, AWS D1.1; LATEST ADDITION. UNLESS OTHERWISE INDICATED, TIE-BACK ANCHOR RODS MUST NOT BE WELDED.
5) TIE-BACK ANCHOR RODS, NUTS, WASHERS AND CONNECTIONS MUST BE EPOXY COATED.
6) WELDING OF HOT DIPPED GALVANIZED ITEMS SHALL BE IN ACCORDANCE WITH AWS WZC/D19.0, "WELDING ZINC-COATED STEEL". REMOVE GALVANIZED COATING BY GRINDING OR OTHER ACCEPTABLE METHOD A MINIMUM OF 2 INCHES IN ALL DIRECTIONS FROM THE WELD CENTERLINE. AFTER WELDING, CLEAN & REPAIR WELD EFFECTED ZONE(S) AS REQUIRED BY MIL-P-21035B AND ASTM A780. PROVIDE COATING REPAIR IN ACCORDANCE WITH MIL-P-21035B WITH A MINIMUM DRY FILM THICKNESS OF 10MILS.
7) DO NOT MIX ITEMS OF DIFFERENT GRADE OF HARDWARE ON THE SAME CONNECTION. ALL HARDWARE SHALL BE HOT DIPPED GALVANIZED TO ASTM A153-05.

STEEL SHEET PILE

1) BASIS OF DESIGN FOR STEEL SHEET PILES MUST CONFORM TO ASTM A572 GR 50 AND MEET THE FOLLOWING MINIMUM SECTION PROPERTIES:
   NOMINAL WEB/FLANGE THICKNESS---------- 0.375 INCHES
   ELASTIC SECTION MODULUS (PER LINEAR FOOT OF WALL)--- 25.2 INCHES^3
   MOMENT OF INERTIA (PER LINEAR FOOT OF WALL)-------- 170.6 INCHES^4
   SINGLE SHEET PILE DIMENSIONAL(NOMINAL) BASIS (REFER TO FIGURE BELOW) :



   IF CONTRACTOR PROPOSES STEEL SHEET PILE SECTION THAT DIFFERS FROM THE ABOVE NOMINAL DIMENSIONS BUT MEETS OR EXCEEDS THE DESIGN CROSS SECTIONAL AREA REQUIREMENTS, CONTRACTOR IS RESPONSIBLE FOR ANY IMPACTS TO THIS DESIGN AS WELL AS ANY IMPACTS TO CONSTRUCTION.
2) STEEL SHEET PILES SHALL BE COATED ON THE SEAWARD FACE WITH A COAL-TAR EPOXY - POLYAMIDE COATING SYSTEM. LIMITS OF COATING IS FROM THE DESIGN MUDLINE ELEVATION OF -45' MSL TO 1'-0" (+/-3") INSIDE OF CONCRETE PILE CAP.
3) ANCHORS SHALL BE EPOXY COATED.
4) PROVIDE FILL AS REQUIRED BY THIS CONTRACT BETWEEN THE NEW STEEL SHEET PILE WALL AND THE EXISTING SSP AND PILE CAP.

PILE DRIVING

1) PROVIDE ALL PILES WITH STEEL PILE TIP PROTECTORS(SHOES). SHEET PILE PROTECTORS(SHOES) SHALL BE PROVIDED BY THE SAME MANUFACTURER AS THE SHEET PILE. PROTECTORS(SHOES) SHALL BE WELDED TO PILE TIPS AS RECOMMENDED BY THE MANUFACTURER AND IN ADDITION, ALL WELDING SHALL OCCUR ALONG BOTH FACES OF THE SHEET PILE AT THE SAME LOCATIONS.

BACKFILL REQUIREMENTS

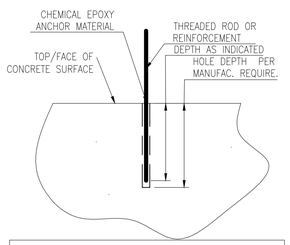
1) PROVIDE CEMENTITIOUS FLOWABLE FILL MEETING ASTM C150 WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 1,000PSI.
2) PROVIDE GRAVEL BACKFILL #57 STONE.

SOIL REPAIRS

1) PROVIDE SOIL REPAIRS WITH A MINIMUM 28-DAY UNCONFINED COMPRESSIVE STRENGTH OF 105PSI.

ABBREVIATIONS

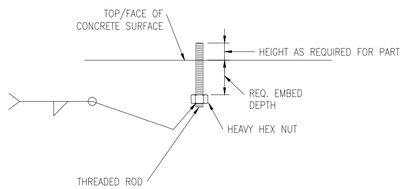
AB	ABANDONED
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AP	AFT PERPENDICULAR
ASTM	ASTM INTERNATIONAL
AWS	AMERICAN WELDING SOCIETY
@	AT
&	AND
APPROX	APPROXIMATE
BOT, BOTT	BOTTOM
℄	CENTER LINE
CA	COMPRESSED AIR
CG	CONTINUOUS GROUND
CIP	CAST IN PLACE
CLR	CLEAR, CLEARANCE
CONC	CONCRETE
CONT	CONTINUED, CONTINUOUS
CP	COMPLETE PENETRATION
CU	COPPER
DB	DOUBLE BITT
DBL	DOUBLE
DEMO	DEMOLITION
DET	DETAIL
DIA OR Ø	DIAMETER
DIM	DIMENSION
DWG	DRAWING
EA	EACH
EF	EACH FACE
EL	ELEVATION
ELEC OR ELEC'L	ELECTRICAL
EMBED	EMBEDMENT
EQUIP	EQUIPMENT
EW	EACH WAY
EXIST	EXISTING
EXP	EXPANSION
EJ OR EXP JT	EXPANSION JOINT
FFF	FOAM FILLED FENDER
FO	FUEL OIL
FP	FORWARD PERPENDICULAR
FT	FOOT, FEET
FW	FRESH WATER
GOV'T	GOVERNMENT
ID	INSIDE DIAMETER
HDG	HOT DIPPED GALVANIZED
HORIZ	HORIZONTAL
IN	INCH
INFO	INFORMATION
LB	POUND
MACH	MACHINE
MAX	MAXIMUM
MAT'L	MATERIAL
MB	MACHINE BOLT
MCON	MILITARY CONSTRUCTION
MECH	MECHANICAL
MIL	MILITARY
MIN	MINIMUM
MISC	MISCELLANEOUS
MLW	MEAN LOW WATER
MLLW	MEAN LOWER LOW WATER
MPH	MILES PER HOUR
MSL	MEAN SEA LEVEL
N	NORTH
NAVFAC	NAVAL FACILITIES ENGINEERING COMMAND
NIC	NOT IN CONTRACT
No	NUMBER
NTS, NS	NOT TO SCALE, NO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OPP	OPPOSITE
OH	OPPOSITE HAND
OW	OILY WASTE
ℙ	PLATE
P/N	PART NUMBER
PMPCM	POLYMER MODIFIED PORTLAND CEMENT MORTAR
PI	POST INSTALLED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
PW	POTABLE WATER
PWC	PUBLIC WORKS COMMAND
RD	ROAD
REF	REFERENCE
REINF	REINFORCED, REINFORCING
REQ'D	REQUIRED
S	SOUTH
SCH	SCHEDULE
SECT	SECTION
SHT	SHEET
SIM	SIMILAR
SPECS	SPECIFICATIONS
SQ	SQUARE
SR	SEWER
SS	STAINLESS STEEL
SSP	STEEL SHEET PILE
ST	STREET
STA	STATION
STD	STANDARD
STL	STEEL
STM	STEAM
STR	STAGGER
SUBSTA	SUBSTATION
SW	SALT WATER
SYMM	SYMMETRICAL
T	TON
T & B	TOP & BOTTOM (TOP & BOT)
TEL	TELEPHONE
THRD	THREADED
TYP	TYPICAL
UFC	UNIFIED FACILITIES CRITERIA
UHMWP	ULTRA HIGH MOLECULAR WEIGHT PLASTIC
UNO	UNLESS NOTED OTHERWISE
V	VOLT
VAR	VARIES
VERT	VERTICAL
W/	WITH
W/O	WITHOUT
WP	WORK POINT
WW	WASTE WATER
Y & D	BUREAU OF YARDS & DOCKS



MINIMUM ALLOWABLE BOND/CONCRETE CAPACITY			
ANCHOR SIZE	TENSION (LBS.)	SHEAR (LBS.)	EMBEDMENT DEPTH (IN)

NOTES:
1. VALUES SHOWN ABOVE FOR TENSION AND SHEAR ARE CONSIDERED SEPARATELY, WITHOUT REDUCTION FACTORS.
2. VALUES SHOWN ABOVE ARE BASED ON MINIMUM CONCRETE fc' = 4,000 PSI.
3. USE STAINLESS STEEL ROD, INCLUDE NUT & WASHER.

1 TYP. P.I. EMBED
Scale: N.S.



2 TYP. HEADED ANCHOR
Scale: N.S.

SYM	DESCRIPTION	DATE	APPR
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NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE ----

DES VF DRW JM CHK --

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD J. WARD

CHIEF ENG/ARCH (CORE) K. WITTMAN

--- --

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVFAC FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

STRUCTURAL NOTES 1 OF 2

SCALE: SCALE
EPROJECT NO.: 1295318
CONSTR. CONTR. NO. N69450-XX-C-XXXX
NAVFAC DRAWING NO. --
SHEET 28 OF 57
S001

DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

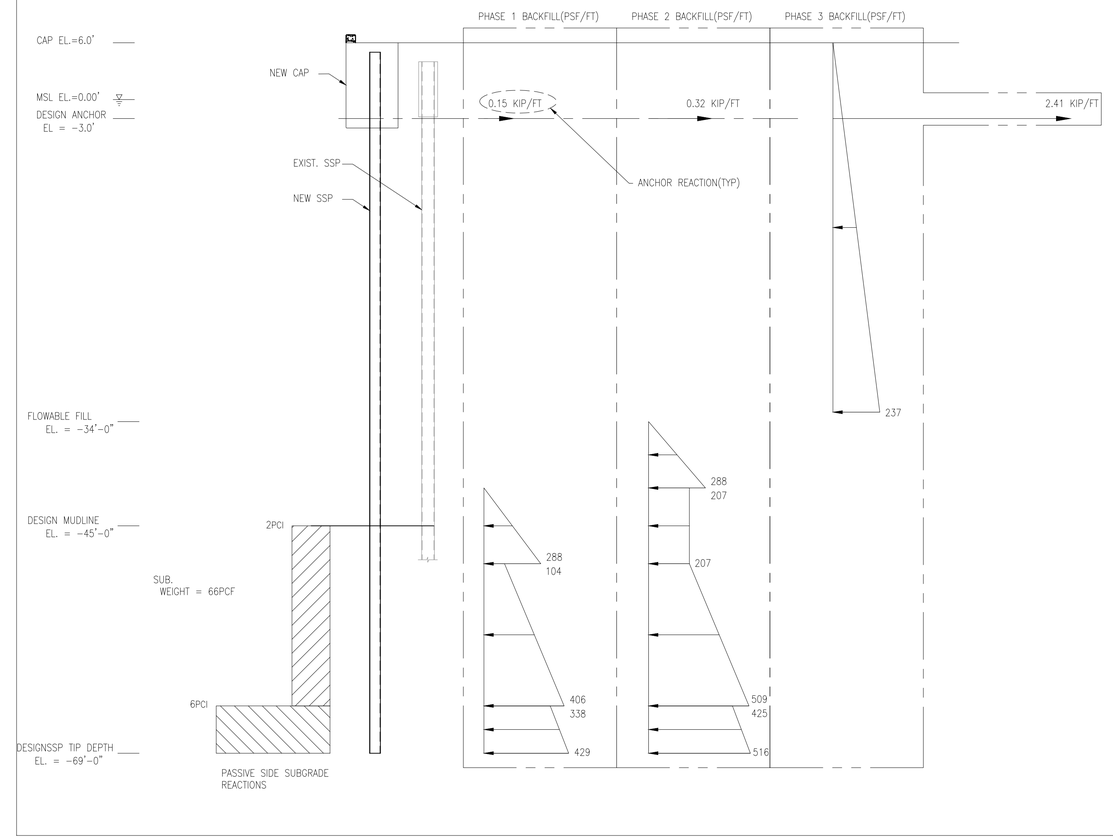
FILE NAME: P:\CBL\project_files\z_CUBA\navsta guantanamo bay\hi#60514\wharf bravo structural repairs~1295318\working technical files\Drawings\S001 STRUCTURAL NOTES 1 OF 2.dwg LAYOUT NAME: S001 STRUCTURAL NOTES 1 OF 2 PLOTTED: Monday, April 04, 2016 - 5:48pm USER: john.d.mccoy

CONCRETE REPAIRS

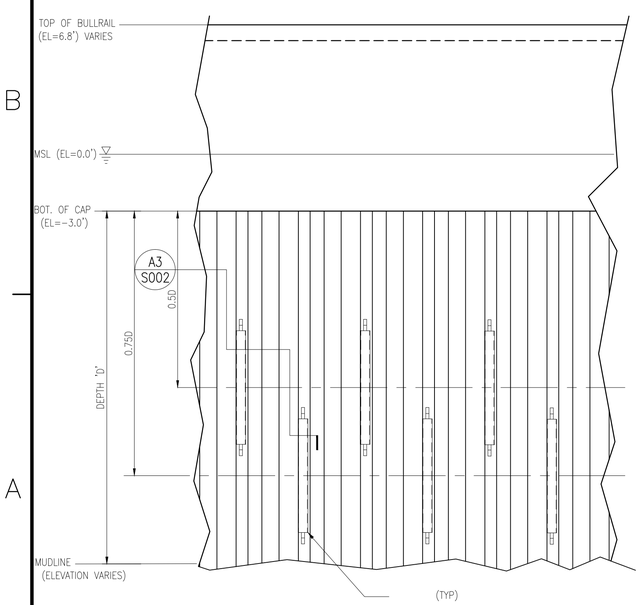
1) PRIOR TO BEGINNING ANY REPAIR WORK, THE CONTRACTOR SHALL PERFORM A SURVEY TO VERIFY ALL REPAIR QUANTITIES AND LOCATIONS INDICATED AS TO BE REPAIRED AND AS LOCATED ON THE DRAWINGS. THE CONTRACTOR SHALL NOTIFY THE GOVERNMENT IN WRITING OF ANY DISCREPANCIES EFFECTING THE PRICE AND/OR SCHEDULE OF THE WORK PRIOR TO BEGINNING CONSTRUCTION.
2) THE OPERATIONS EMPLOYED IN CONCRETE REMOVAL AND PREPARATION OF THE CONCRETE AND REINFORCEMENT FOR REPAIR SHALL NOT WEAKEN THE SURROUNDING EXISTING CONCRETE AND REINFORCEMENT AND THE BOND BETWEEN THEM. LIMIT THE SIZE OF IMPACT HAMMERS TO 15 POUNDS.
3) REMOVAL OF CONCRETE SHALL BE A MINIMUM OF 1" BEHIND REINFORCING STEEL. REPAIR SHALL EXTEND AN ADDITIONAL 6 INCHES AROUND DEFECT INTO ADJACENT SOUND CONCRETE.
4) AREAS REQUIRING REPAIR SHALL BE MODIFIED TO PROVIDE FOR SIMPLE LAYOUTS TO REDUCE EDGE LENGTH AND ELIMINATE ACUTE ANGLES. THE PERIMETERS OF REPAIRS SHALL PROVIDE RIGHT ANGLE CUTS TO THE CONCRETE SURFACE BY SAW CUTTING. SAW CUTS SHALL BE A MINIMUM OF 1" DEEP AND SHALL BE PERPENDICULAR. DO NOT CUT EXISTING REINFORCING STEEL.
5) THE MOISTURE CONDITION OF CONCRETE SUBSTRATE IMMEDIATELY PRIOR TO APPLICATION OF REPAIR MATERIAL SHALL BE SATURATED SURFACE DRY (SSD).
6) ALL EXPOSED REINFORCEMENT STEEL SHALL BE CLEANED OF ALL SCALE, RUST, DIRT, OIL AND ANY OTHER DELETERIOUS MATERIAL. REPLACE REINFORCING STEEL WITH A 20% OR GREATER LOSS OF CROSS SECTIONAL AREA. PROVIDE NEW REINFORCING STEEL THAT IS THE SAME SIZE AND SPACING AS THE EXISTING REINFORCING STEEL. UTILIZE MECHANICAL SPLICES MEETING THE REQUIREMENTS OF ACI 318.
7) MATCH ADJACENT SOUND CONCRETE SURFACE CROSS SECTION AND TEXTURE.
8) BONDING COMPOUND SHALL NOT BE PERMITTED. PROVIDE A ROUGHENED CLEAN SURFACE AND ADEQUATE INTIMATE CONCRETE BETWEEN REPAIR MATERIAL AND SUBSTRATE FOR BONDING IN ACCORDANCE WITH SPECIFICATIONS.

CATHODIC PROTECTION NOTES

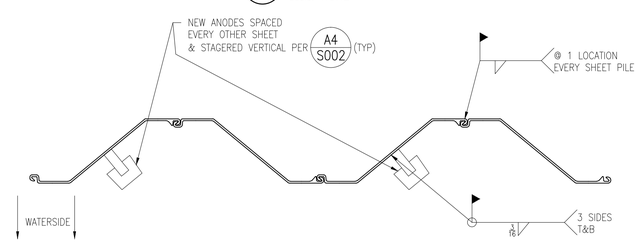
1) PROVIDE SACRIFICIAL ANODES FOR EACH NEW AND EXISTING EXPOSED STEEL SHEET PILE PAIR ALONG THE FACE OF WHARF BRAVO.
2) CATHODIC PROTECTION ANODES MUST MEET THE FOLLOWING REQUIREMENTS:
   A. SPECIFICATION : MIL-A-24779 (SH) 06 OCT 2006, 90 POUNDS
   B. ANODE MATERIAL : ALUMINUM ALLOY
   C. CORE MATERIAL : A36 STEEL
   D. ANODE POTENTIAL : 1.10 VOLTS
   E. NOMINAL AMPERE HOURS/POUND : 1150 AMP-HR/LB
3) PROVIDE SURFACE PREPARATION OF NEW AND EXISTING STEEL SHEET PILE BY REMOVING MARINE GROWTH AND COATING IN THE VICINITY OF THE ANODE ATTACHMENT.
4) CATHODIC PROTECTION ANODES MUST MEET THE FOLLOWING REQUIREMENTS:



B3 PRESSURE DIAMGRAMS
Scale: NONE



A1 ELEVATION – ANODE ATTACHMENT
Scale: NONE



A3 DETAIL – ANODE ATTACHMENT
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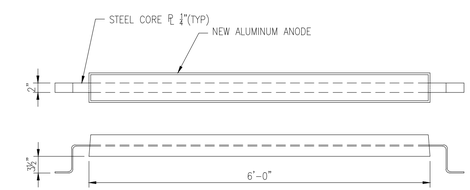

A4 ANODE
Scale: NONE

STM	DESCRIPTION	DATE	APPR
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SATISFACTORY TO DATE

DES VF DRW JM CHK --

PM/DM E. GALLANT

BRANCH MANAGER J. WARD

CHIEF ENG/ARCH

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

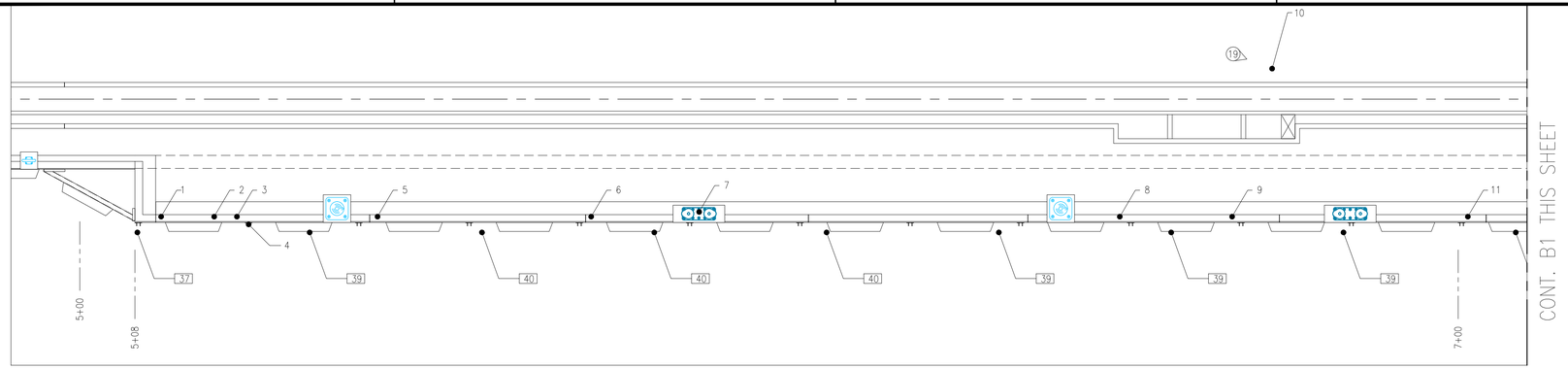
STRUCTURAL NOTES 2 OF 2

SCALE: SCALE
EPROJECT NO.: 1295318
CONSTR. CONTR. NO. N69450-XX-C-XXXX
NAVFAC DRAWING NO. --
SHEET 29 OF 57
S002

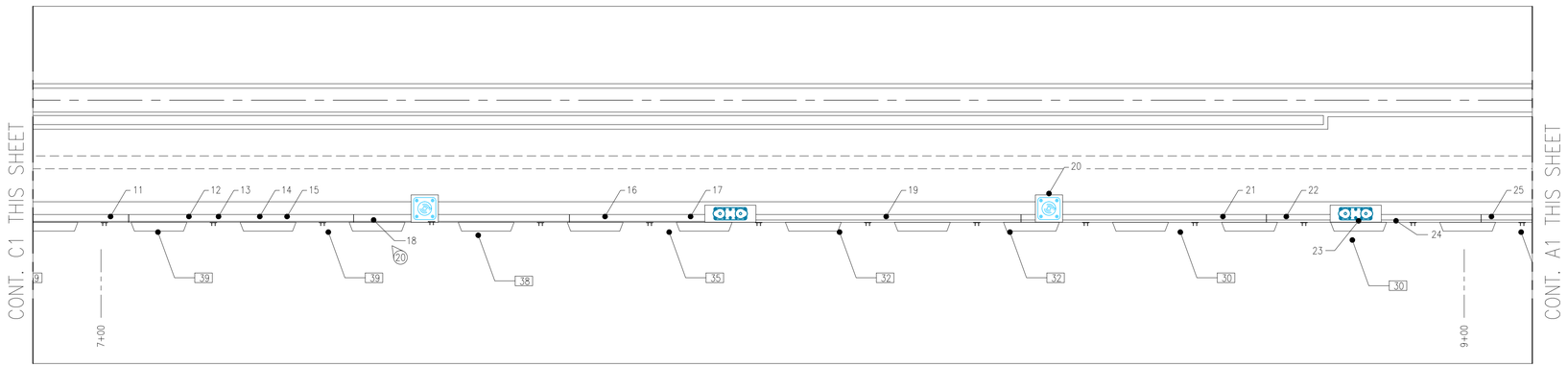
DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

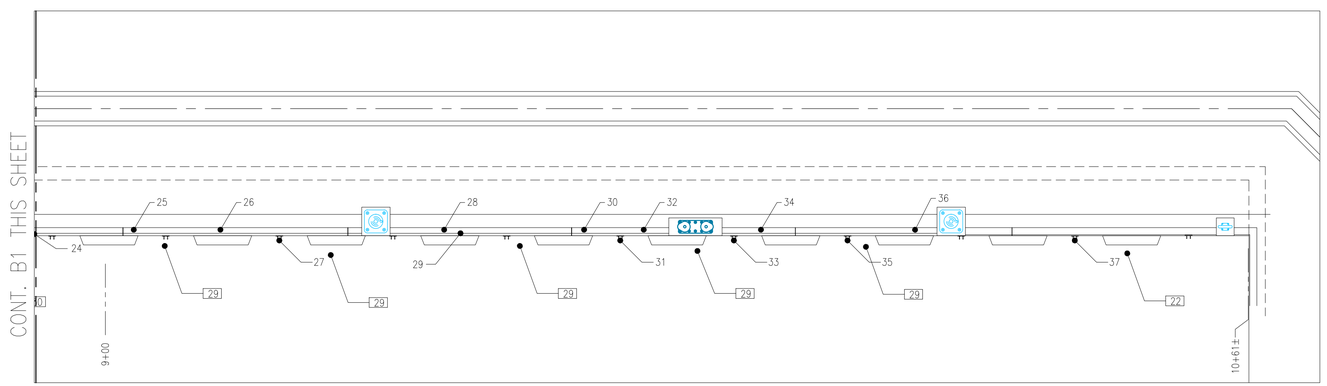
FILE NAME: P:\CUB\project_files\2-CUBA\navsta guantanamo bay(h)#60514\wharf bravo structural repairs~1295318\working technical files\Drawings\S002 STRUCTURAL NOTES 2 OF 2.dwg LAYOUT NAME: S002 STRUCTURAL NOTES 2 OF 2 PLOTTED: Monday, April 04, 2016 - 5:49pm USER: john.d.mccoy



C1 PLAN INSPECTION – 5+00 TO 7+00
Scale: 3/32" = 1'-0"



B1 PLAN INSPECTION – 7+00 TO 9+00
Scale: 3/32" = 1'-0"



A1 PLAN INSPECTION – 9+00 TO 10+61
Scale: 3/32" = 1'-0"

GENERAL SHEET NOTES

INSPECTION NOTES

1. INSPECTION RESULTS PRESENTED ARE FROM OCTOBER 2012 DESIGN LEVEL INSPECTION CONDUCTED BY NAVFAC-SE. CENTER OF DEFECT LOCATION IDENTIFIED BY STATION LOCATION. UNDERWATER DEFECTS LOCATED BY STATION LOCATION AND DEPTH BELOW MSL. CENTER OF DEFECTS ARE WITHIN ±2 FEET OF IDENTIFIED LOCATION. EXTENTS OF DEFECTS ARE +6/-0 INCHES OF IDENTIFIED DIMENSION.
2. PROVIDE REPAIRS AS INDICATED IN THE TABLE. DEFECTS THAT ARE NOT TO BE REPAIRED AS REQUIRED BY DETAILS ON SHEET S503, SHALL BE MARKED AS DO NOT REPAIR(DNR).

SYMBOL LEGEND

FOAM FENDER
EXTRUDED FENDER
DOUBLE BITT
CLEAT
X — DEFECT LOCATION
X — PHOTO
X — WATER DEPTH (FEET REF MSL)

INSPECTION ABBREVIATIONS

ASSESTS

BR	BULLRAIL
CAP	PILE CAP
DECK	CONCRETE/PAVED DECK
EF	EXTRUDED FENDER
MF1	MOORING FITTING TYPE 1 (DOUBLE BITT)
MF2	MOORING FITTING TYPE 2 (CLEAT)
MF3	MOORING FITTING TYPE 3 (BOLLARD)
MFD1	MOORING FOUNDATION TYPE 1
MFD2	MOORING FOUNDATION TYPE 2
MFD3	MOORING FOUNDATION TYPE 3
OTHER	OTHER
PF	PNUEMATIC/FOAM FENDER
PFP	PNEUMATIC./FOAM FENDER PADEYE
SSP	STEEL SHEET PILE
TC	TRENCH COVER
TR	TRENCH
VPC	VALVE PIT COVER

DEFECTS

ABS	ABRASION DAMAGE
BRK	BREAKAGE
CCS	CLOSED CORROSION SPALL
CMS	CLOSED MECHANICAL/OVERLOAD SPALL
COR	CORROSION
DNR	DO NOT REPAIR
FDT	FASTENER DETERIORATION
HCR	HORIZONTAL CRACK
HOL	HOLE
LCR	LONGITUDINAL CRACK ABOVE WATERLINE
MSC	MISSING CONNECTION
MSG	MISSING
OCS	OPEN CORROSION SPALL
OMC	OPEN MECHANICAL SPALL
OSC	OVERSTRESSED CRACKS
VCR	VERTICAL CRACK ABOVE WATERLINE

TABLE NOMENCLATURE

P	POSITION FROM TOP OF PILE TO CENTER OF DEFECT
V	VERTICAL HEIGHT
X	DIMENSION PARALLEL TO WALL FACE
Y	DIMENSION PERPENDICULAR TO WALL FACE
W	WIDTH
D	DEPTH OF DEFECT
N	SIZE AND QUANTITY OF REINFORCEMENT

KEYPLAN

GRAPHIC SCALE

3/32"=1'-0" 0' 10' 20' 30' 40'

SUBMITTAL TITLE
SUBMITTAL DATE

SYM	DESCRIPTION	DATE	APPR
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FOR COMMANDER NAVFAC / B.L.T.L.
ACTIVITY

SATISFACTORY TO DATE ---
DES VF DRW JM CHK --
PROJECT MANAGER E. GALLANT
IPT TECH. BRANCH HEAD J. WARD
CHIEF ENG/ARCH (CORE) K. WITTMAN

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA
WHARF BRAVO STRUCTURAL REPAIRS
INSPECTION RESULTS 1 OF 2

SCALE: SCALE
EPROJECT NO.: 1295318
CONSTR. CONTR. NO. N69450-XX-C-XXXX
NAVFAC DRAWING NO. --
SHEET 30 OF 57
S011

DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\CBL\project_files\z_CUBA\navsta guantanamo bay\hi#60514\wharf bravo structural repairs~1295318\working technical files\Drawings\S011 INSPECTION RESULTS 1 OF 2.dwg LAYOUT NAME: S011 INSPECTION RESULTS 1 OF 2 PLOTTED: Monday, April 04, 2016 – 5:49pm USER: john.d.mccoy

TABLE - INSPECTION RESULTS

DEFECT ID NO.	ASSET TYPE	ASSET LOCATION	DEFECT VERTICAL CENTER(MSL)	DEFECT TYPE	SHEET PILE/CAP P	SHEET PILE/CAP V (in.)	LENGTH L (ft)	DECK X (ft)	DECK Y (ft)	AREA SF or %	CRACK W (in.)	DEPTH (D) in.	EXP. BARS N (#)	REPAIR DETAIL
1	BR	5+11.8		OMC			1.4					2		A1/S506
2	BR	5+19.5		OMC			2.8					2		A1/S506
3	BR	5+22.8		OMC			2.3					3		A1/S506
4	PFP	5+24.5		BRK										C2/S506
5	BR	5+43.2		OMC			1					5		A1/S506
6	BR	5+74.2		OMC			0.9					10		A1/S506
7	MF1	5+90		COR										DNR
8	BR	6+50.9		OMC				1.3					5	A1/S506
9	BR	6+67.2		OMC				1.8					3	A1/S506
10	VPC	6+73		MSG										REPLACE
11	BR	7+01.4		OMC				1.3					3	A1/S506
12	BR	7+12.9		OMC				2.2					4	A1/S506
13	BR	7+17.3		OMC				1.2					5	A1/S506
14	BR	7+23.3		OMC				2.9					3	A1/S506
15	BR	7+27.3		OMC				0.7					4	A1/S506
16	BR	7+74.0		OMC				15.5					12	A1/S506
17	BR	7+86.6		OMC				5.6					12	A1/S506
18	CAP	7+40	-3	OMC			1.4						1#8	B1/S506
19	BR	8+15.2		OMC				0.3					3.6	A1/S506
20	MFD3	8+38.2		OCS				1.7					3	DNR
21	BR	8+64.6		OMC				2.7					3	A1/S506
22	BR	8+73.9		OMC				1					2	A1/S506
25	BR	9+04		OMC				1.7					5	A1/S506
26	BR	9+16.2		OMC				1.2					5	A1/S506
27	PFP	9+24.5		BRK										C2/S506
28	BR	9+47.7		OMC				2					4	A1/S506
29	BR	9+67.4		OMC				3					12	A1/S506
30	PFP	9+72.5		BRK										C2/S506
31	BR	9+75.8		OMC				1.3					3	A1/S506
32	PFP	9+88.5		BRK										C2/S506
33	BR	9+92.3		OMC				5.3					6	A1/S506
34	PFP	10+04.5		BRK										C2/S506
35	BR	10+14.0		OMC				10.1					12	A1/S506
36	PFP	10+36.5		BRK										C2/S506
37	CAP	8+35	-3	OMC			8						1#6	B1/S506

GENERAL SHEET NOTES

INSPECTION NOTES

1. INSPECTION RESULTS PRESENTED ARE FROM OCTOBER 2012 DESIGN LEVEL INSPECTION CONDUCTED BY NAVFAC-SE. CENTER OF DEFECT LOCATION IDENTIFIED BY STATION LOCATION. UNDERWATER DEFECTS LOCATED BY STATION LOCATION AND DEPTH BELOW MSL. CENTER OF DEFECTS ARE WITHIN ±2 FEET OF IDENTIFIED LOCATION. EXTENTS OF DEFECTS ARE +6/-0 INCHES OF IDENTIFIED DIMENSION.
2. PROVIDE REPAIRS AS INDICATED IN THE TABLE. DEFECTS THAT ARE NOT TO BE REPAIRED AS REQUIRED BY DETAILS ON SHEET S503, SHALL BE MARKED AS DO NOT REPAIR(DNR).

SYMBOL LEGEND

FOAM FENDER
EXTRUDED FENDER
DOUBLE BITT
CLEAT
X — DEFECT LOCATION
X — PHOTO
X — WATER DEPTH (FEET REF MSL)

INSPECTION ABBREVIATIONS

ASSETS

BR	BULLRAIL
CAP	PILE CAP
DECK	CONCRETE/PAVED DECK
EF	EXTRUDED FENDER
MF1	MOORING FITTING TYPE 1 (DOUBLE BITT)
MF2	MOORING FITTING TYPE 2 (CLEAT)
MF3	MOORING FITTING TYPE 3 (BOLLARD)
MFD1	MOORING FOUNDATION TYPE 1
MFD2	MOORING FOUNDATION TYPE 2
MFD3	MOORING FOUNDATION TYPE 3
OTHER	OTHER
PF	PNUEMATIC/FOAM FENDER
PFP	PNEUMATIC./FOAM FENDER PADEYE
SSP	STEEL SHEET PILE
TC	TRENCH COVER
TR	TRENCH
VPC	VALVE PIT COVER

DEFECTS

ABS	ABRASION DAMAGE
BRK	BREAKAGE
CCS	CLOSED CORROSION SPALL
CMS	CLOSED MECHANICAL/OVERLOAD SPALL
COR	CORROSION
DNR	DO NOT REPAIR
FDT	FASTENER DETERIORATION
HCR	HORIZONTAL CRACK
HOL	HOLE
LCR	LONGITUDINAL CRACK ABOVE WATERLINE
MSC	MISSING CONNECTION
MSG	MISSING
OCS	OPEN CORROSION SPALL
OMC	OPEN MECHANICAL SPALL
OSC	OVERSTRESSED CRACKS
VCR	VERTICAL CRACK ABOVE WATERLINE

TABLE NOMENCLATURE

P	POSITION FROM TOP OF PILE TO CENTER OF DEFECT
V	VERTICAL HEIGHT
X	DIMENSION PARALLEL TO WALL FACE
Y	DIMENSION PERPENDICULAR TO WALL FACE
W	WIDTH
D	DEPTH OF DEFECT
N	SIZE AND QUANTITY OF REINFORCEMENT

SUBMITTAL TITLE
SUBMITTAL DATE

SYM	DESCRIPTION	DATE	APPR
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SEAL

A/E INFO

APPROVED
FOR COMMANDER NAVFAC / B.L.T.L.
ACTIVITY

SATISFACTORY TO DATE ----
DES VF DRW JM CHK --
PROJECT MANAGER E. GALLANT
IPT TECH. BRANCH HEAD J. WARD
CHIEF ENG/ARCH (CORE) K. WITTMAN

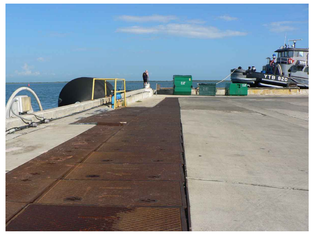
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA
WHARF BRAVO STRUCTURAL REPAIRS
INSPECTION RESULTS 2 OF 2

SCALE: SCALE
EPROJECT NO.: 1295318
CONSTR. CONTR. NO. N69450-XX-C-XXXX
NAVFAC DRAWING NO. --
SHEET 31 OF 57
S012

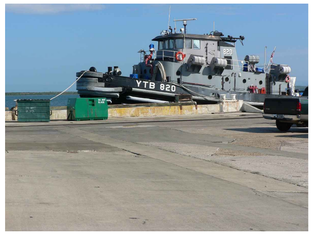
DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CBL\project_files\z_CUBA\navsta guantanamo bay\h\r60514\wharf bravo structural repairs-1295318\working technical files\Drawings\S012 INSPECTION RESULTS 2 OF 2.dwg LAYOUT NAME: S012 INSPECTION RESULTS 2 OF 2 PLOTTED: Monday, April 04, 2016 - 5:49pm USER: john.d.mccoy

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE



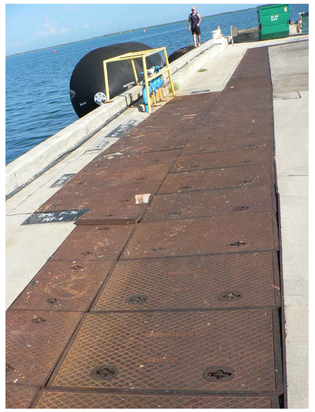
1 – BRAVO LOOKING NORTH



2 – WHARF TANGO

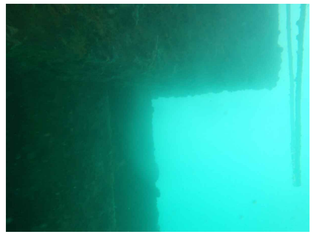
3 – TRENCH COVERS

4 – BRAVO LOOKIING SOUTH



5 – POTABLE WATER

6 – COMMS BOX



7 – UW BRAVO CORNER

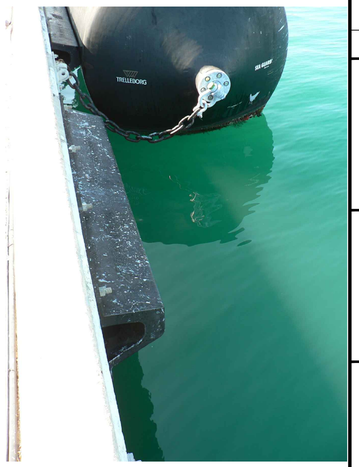
8 – TYP LDB AND FOAM FENDER

9 – TYP CAP EXPANSION JOINT

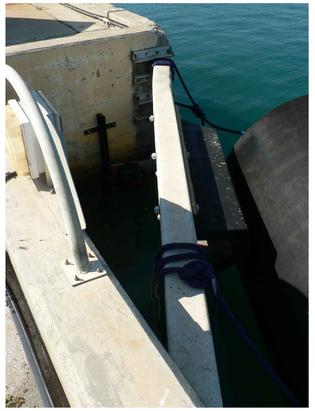
10 – TYP. LOW DECK LIGHTING

11 – TYP. CLEAT

12 – TYP. LOW DOUBLE BITT



13 – TYP. ELASTIC FENDER



14 – FENDERING BAR AT STA. 5+05

15 – SHORE POWER CONNECTION

16 – COMMUNICATIONS

17 – TYP. POTABLE WATER CONNECTION

18 – DAMAGED VALVE PIT COVER

20 – UNDERWATER VOID W/EXOSED REINF.

SYM	DESCRIPTION	DATE	APPR
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SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE ----

DES VF | DRW JM | CHK --

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD J. WARD

CHIEF ENG/ARCH (CORE) K. WITTMAN

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

SITE PHOTOS

SCALE: SCALE

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

NAVFAC DRAWING NO. --

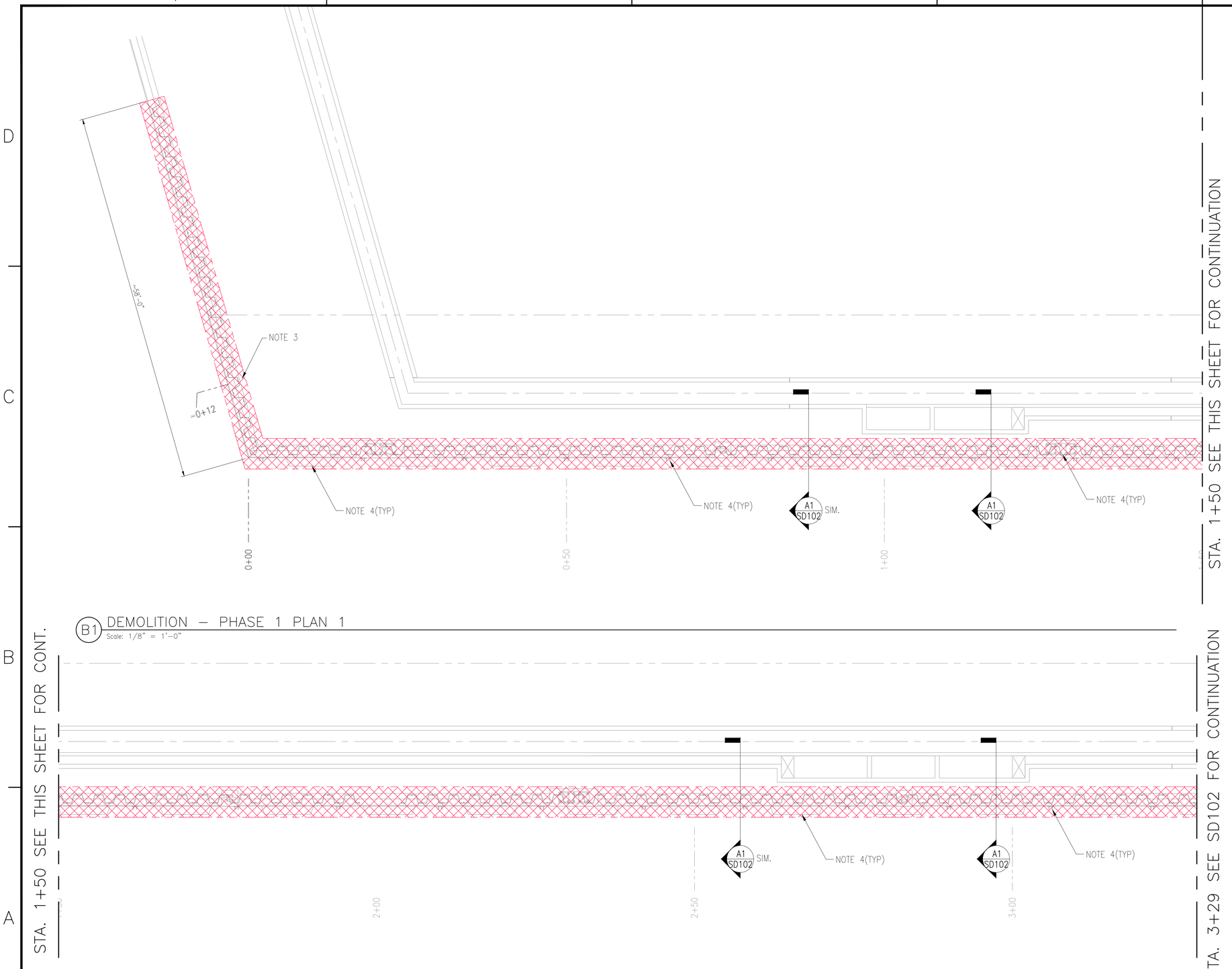
SHEET 32 OF 57

S013

DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\CUBA\project_files\y_CUBA\navsta guantanamo bay\hi60514\wharf bravo structural repairs-1295318\working technical files\Drawings\S013 SITE PHOTOS.dwg LAYOUT NAME: S013 SITE PHOTOS PLOTTED: Monday, April 04, 2016 – 5:50pm USER: john.d.mccoy



GENERAL SHEET NOTES

1. REFER TO SHEET S001 FOR ADDITIONAL INFORMATION.
2. PROVIDE DEMOLITION OF EXISTING CONCRETE BULKHEAD, BULLRAIL, STEEL SHEET PILE, AND OTHER ATTACHED ITEMS AS INDICATED IN THESE DRAWINGS. CUT AND GRIND FLUSH TO SURROUNDING SURFACE ALL ANCHORAGES.
3. PROVIDE CLEAN AND STRAIGHT SAW CUTS AT TIE–IN TO ADJACENT STRUCTURES.
4. REMOVE AND DISPOSE OF THE FOLLOWING EXISTING HARDWARE AS INDICATED:
   - 4.1. PHASE 1 AREA MOORING FITTINGS, EXTRUDED FENDERS : DISPOSE OF AS INDICATED
   - 4.2. PHASE 1 AREA FLOATING FENDER PADEYES : TURNOVER UNDAMAGED PADEYES TO THE GOVERNMENT, DISPOSE OF REMAINDER
   - 4.3. PHASE 2 AREA EXTRUDED FENDERS : DISPOSE OF AS INDICATED
5. EXTEND DEMOLITION AS NEEDED FOR PENETRATIONS AND ANCHORS AS REQUIRED BY CONTRACT.

SYMBOL LEGEND

KEYPLAN

N
PLAN NORTH

GRAPHIC SCALE

1/8"=1'-0" 0' 5' 10' 20' 30'

SUBMITTAL TITLE
SUBMITTAL DATE

SYM	DESCRIPTION	DATE	APPR
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SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES VF DRW JM CHK --

PM/DM E. GALLANT

BRANCH MANAGER J. WARD

CHIEF ENG/ARCH K. WITTMAN

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY

NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

DEMOLITION PLAN & DETAILS 1 OF 2

SCALE: SCALE

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450–XX–C–XXXX

NAVFAC DRAWING NO. ––

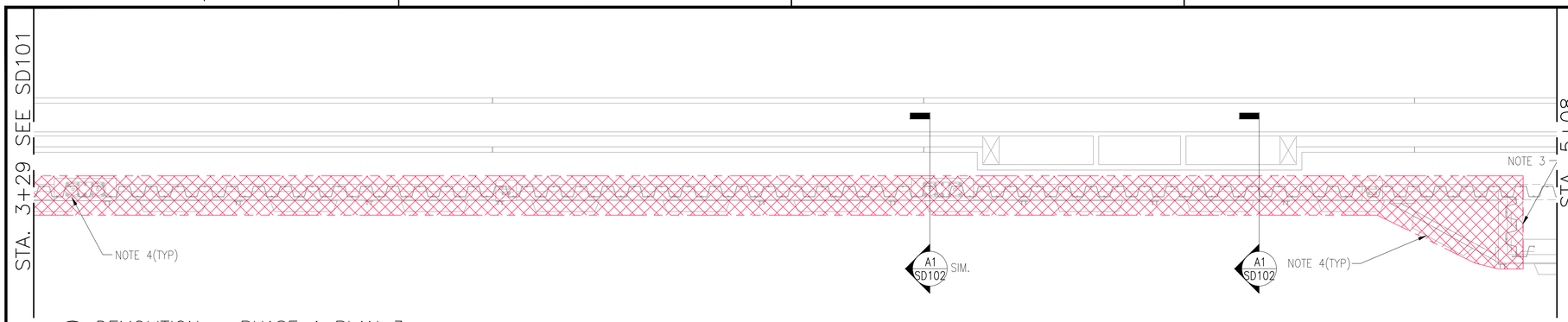
SHEET 33 OF 57

SD101

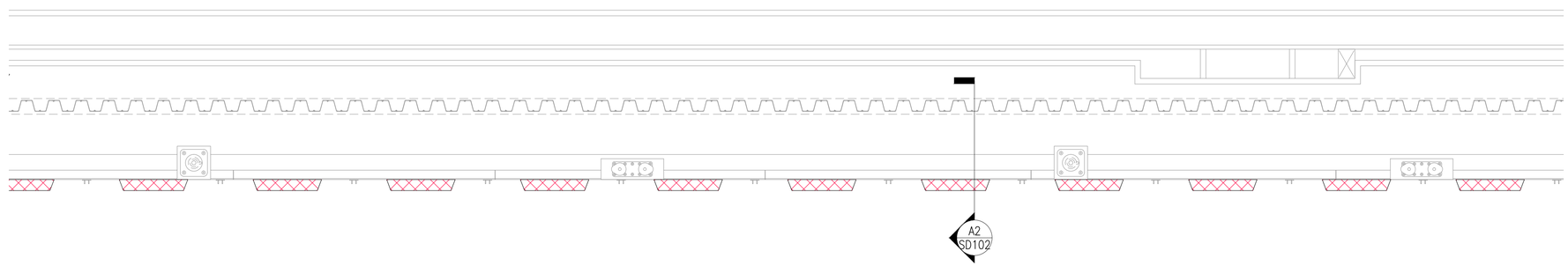
DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

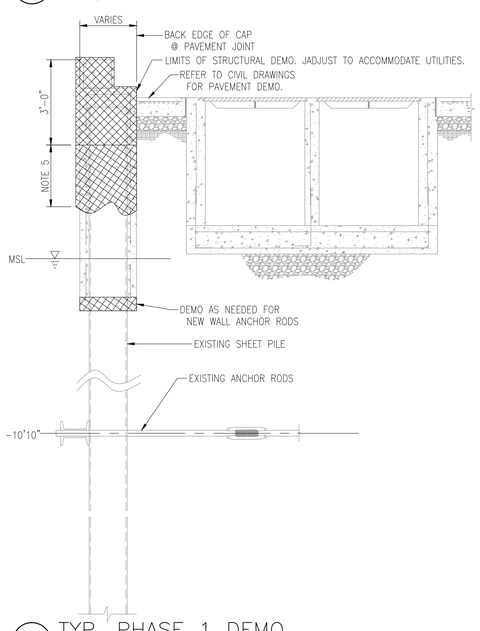
FILE NAME: P:\OBL\project_files\z_GUBA\navsta guantanamo bay\h\h60514\wharf bravo structural repairs-1295318\working technical files\Drawings\SD101 DEMOLITION PLAN & DETAILS 1 OF 2.dwg LAYOUT NAME: SD101 DEMOLITION PLAN & DETAILS 1 OF 2 PLOTTED: Monday, April 04, 2016 – 5:50pm USER: john.d.mccoy



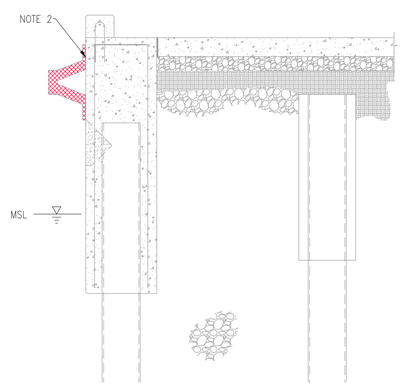
D1 DEMOLITION – PHASE 1 PLAN 3
Scale: 1/8" = 1'–0"



B1 DEMOLITION – PHASE 2 TYPICAL
Scale: 1/8" = 1'–0"



A1 TYP. PHASE 1 DEMO
Scale: 3/8" = 1'–0"



A2 TYP. PHASE 2 DEMO
Scale: 3/8" = 1'–0"

GENERAL SHEET NOTES

1. REFER TO SHEET S001 FOR ADDITIONAL INFORMATION.
2. PROVIDE DEMOLITION OF EXISTING CONCRETE BULKHEAD, BULLRAIL, STEEL SHEET PILE, AND OTHER ATTACHED ITEMS AS INDICATED IN THESE DRAWINGS. CUT AND GRIND FLUSH TO SURROUNDING SURFACE ALL ANCHORAGES.
3. PROVIDE CLEAN AND STRAIGHT SAW CUTS AT TIE–IN TO ADJACENT STRUCTURES.
4. REMOVE AND DISPOSE OF THE FOLLOWING EXISTING HARDWARE AS INDICATED:
   - 4.1. PHASE 1 AREA MOORING FITTINGS, EXTRUDED FENDERS : DISPOSE OF AS INDICATED
   - 4.2. PHASE 1 AREA FLOATING FENDER PADEYES : TURNOVER UNDAMAGED PADEYES TO THE GOVERNMENT, DISPOSE OF REMAINDER
   - 4.3. PHASE 2 AREA EXTRUDED FENDERS : DISPOSE OF AS INDICATED
5. EXTEND DEMOLITION AS NEEDED FOR PENETRATIONS AND ANCHORS AS REQUIRED BY CONTRACT.

SYMBOL LEGEND

KEYPLAN

PLAN NORTH

GRAPHIC SCALE

1/8"=1'–0" 0' 5' 10' 20' 30'

SUBMITTAL TITLE
SUBMITTAL DATE

SYM	DESCRIPTION	DATE	APPR
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SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES VF DRW JM CHK --
PM/DM E. GALLANT
BRANCH MANAGER J. WARD
CHIEF ENG/ARCH K. WITTMAN

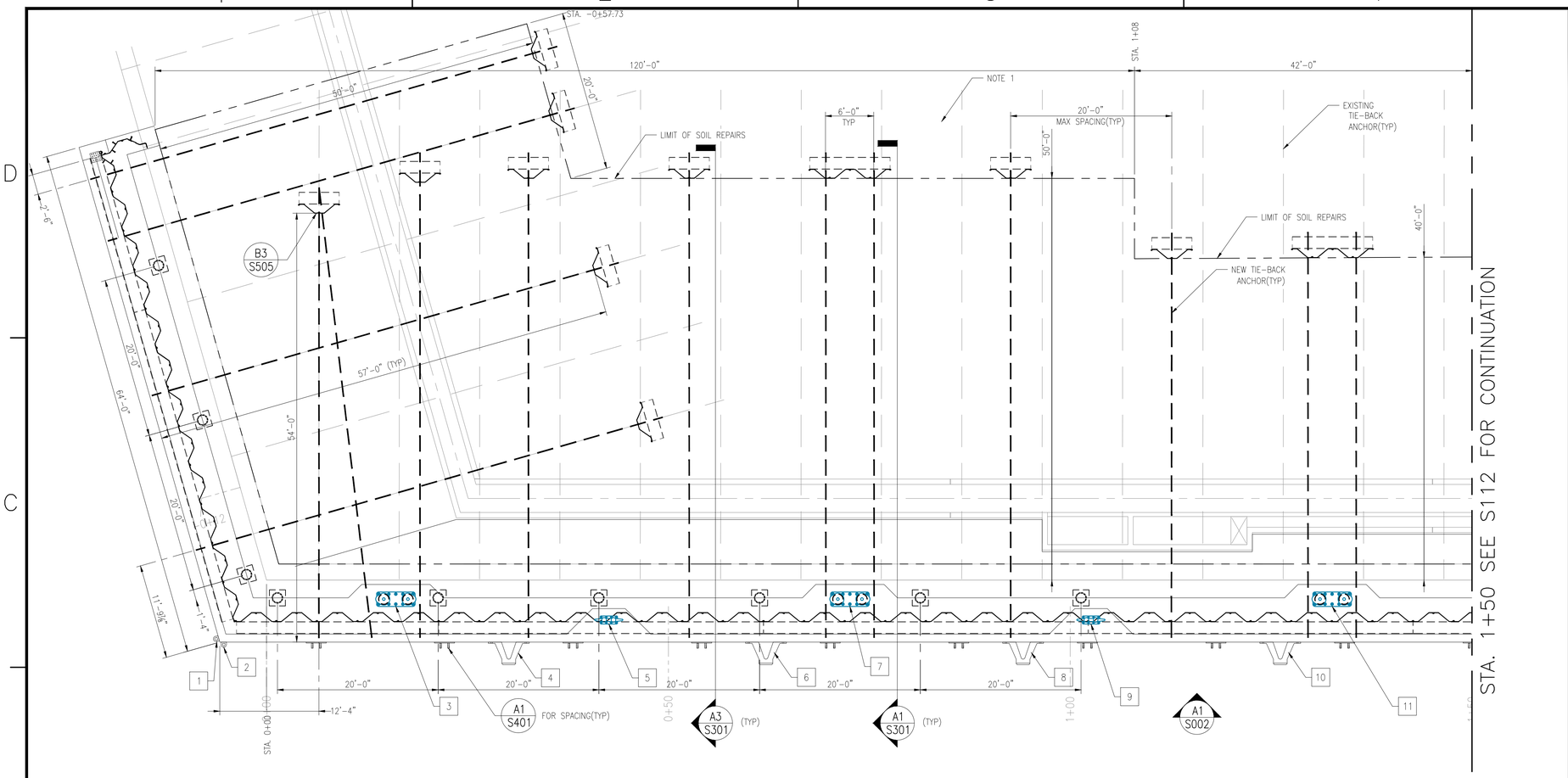
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA
WHARF BRAVO STRUCTURAL REPAIRS
DEMOLITION PLAN & DETAILS 2 OF 2

SCALE: SCALE
EPROJECT NO.: 1295318
CONSTR. CONTR. NO. N69450–XX–C–XXXX
NAVFAC DRAWING NO. --
SHEET 34 OF 57
SD102

DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\CBL\project_files\z_CUBA\navsta guantanamo bay\h\n60514\wharf bravo structural repairs-1295318\working technical files\Drawings\SD102 DEMOLITION PLAN & DETAILS 2 OF 2.dwg LAYOUT NAME: SD102 DEMOLITION PLAN & DETAILS 2 OF 2 PLOTTED: Monday, April 04, 2016 – 5:51pm USER: john.d.mccoy



B1 ENLARGED PLAN 1
Scale: 1/8" = 1'-0"

GENERAL SHEET NOTES

1. REFER TO RECORD DRAWINGS FOR INFORMATION ON EXISTING STRUCTURES.
2. REFER TO SHEETS S001 AND S002 FOR STRUCTURAL NOTES.
3. COORDINATE WORK THIS SHEET WITH CIVIL SHEETS.
4. REFER TO TABLE THIS SHEET FOR COMPONENT LOCATIONS.

COMPONENT WORK POINT LOCATIONS

WP	COMPONENT	STATION
1	CF	00+-5.96
2	CF	00+-5.33
3	LDB	00+16.09
4	AF	00+30.14
5	CL42	00+42.59
6	AF	00+62.14
7	LDB	00+72.59
8	FA	00+94.14
9	CL42	01+2.59
10	AF	01+26.14
11	LDB	01+32.59

SYMBOL LEGEND

- LOW DOUBLE BITT(LDB)
- 42" CLEAT(CL42)
- ARCH FENDER(FA)
- CORNER FENDER(CF)
- PIN PILE(PP) PER C1 S506
- FENDER PADEYE PER C2 S506

KEYPLAN

GRAPHIC SCALE

1/8"=1'-0" 0' 5' 10' 20' 30'

SYM	DESCRIPTION	DATE	APPR
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SEAL

A/E INFO

APPROVED
FOR COMMANDER NAVFAC / B.L.T.L.
ACTIVITY

SATISFACTORY TO DATE ---
DES VF DRW JM CHK --
PROJECT MANAGER E. GALLANT
IPT TECH. BRANCH HEAD J. WARD
CHIEF ENG/ARCH (CORE) K. WITTMAN

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

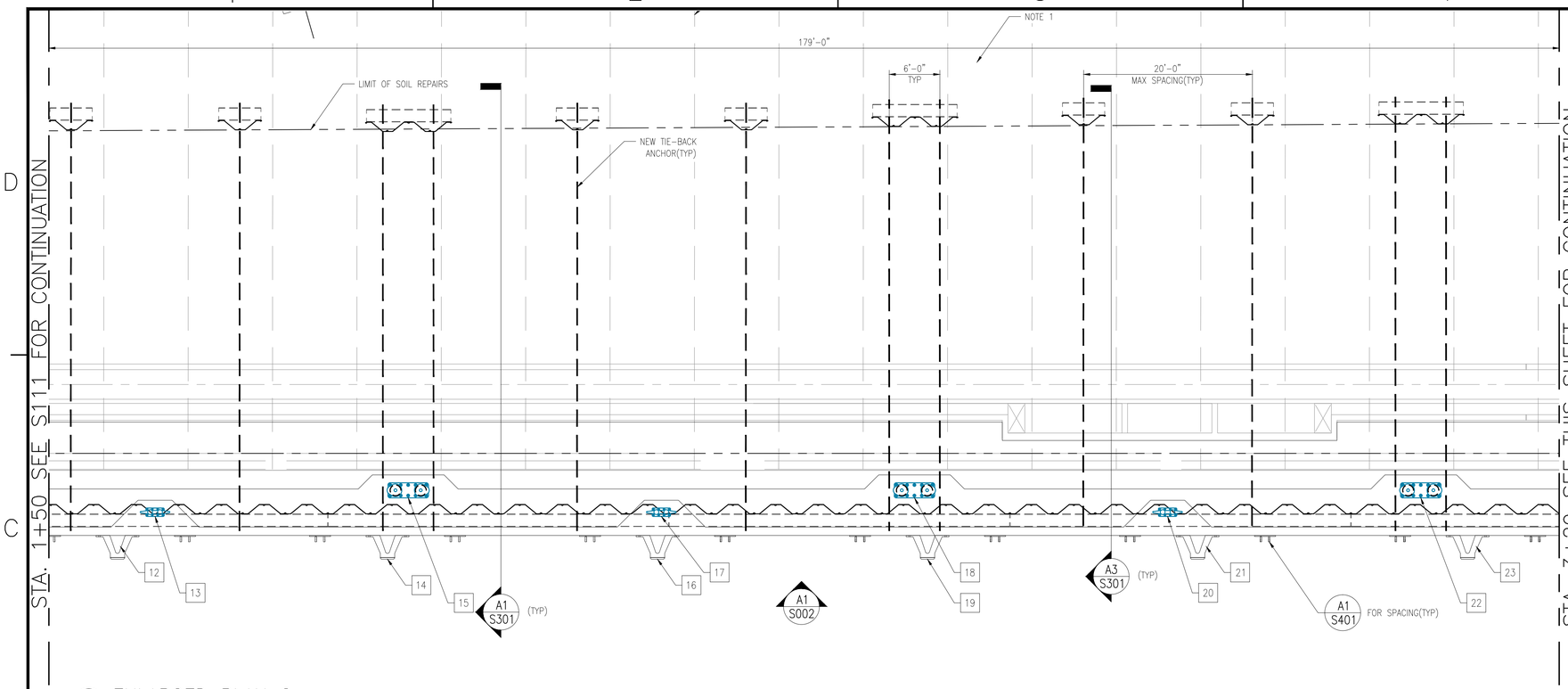
STRUCTURAL PLANS 1 OF 5

SCALE: SCALE
EPROJECT NO.: 1295318
CONSTR. CONTR. NO. N69450-XX-C-XXXX
NAVFAC DRAWING NO. ---
SHEET 35 OF 57
S111

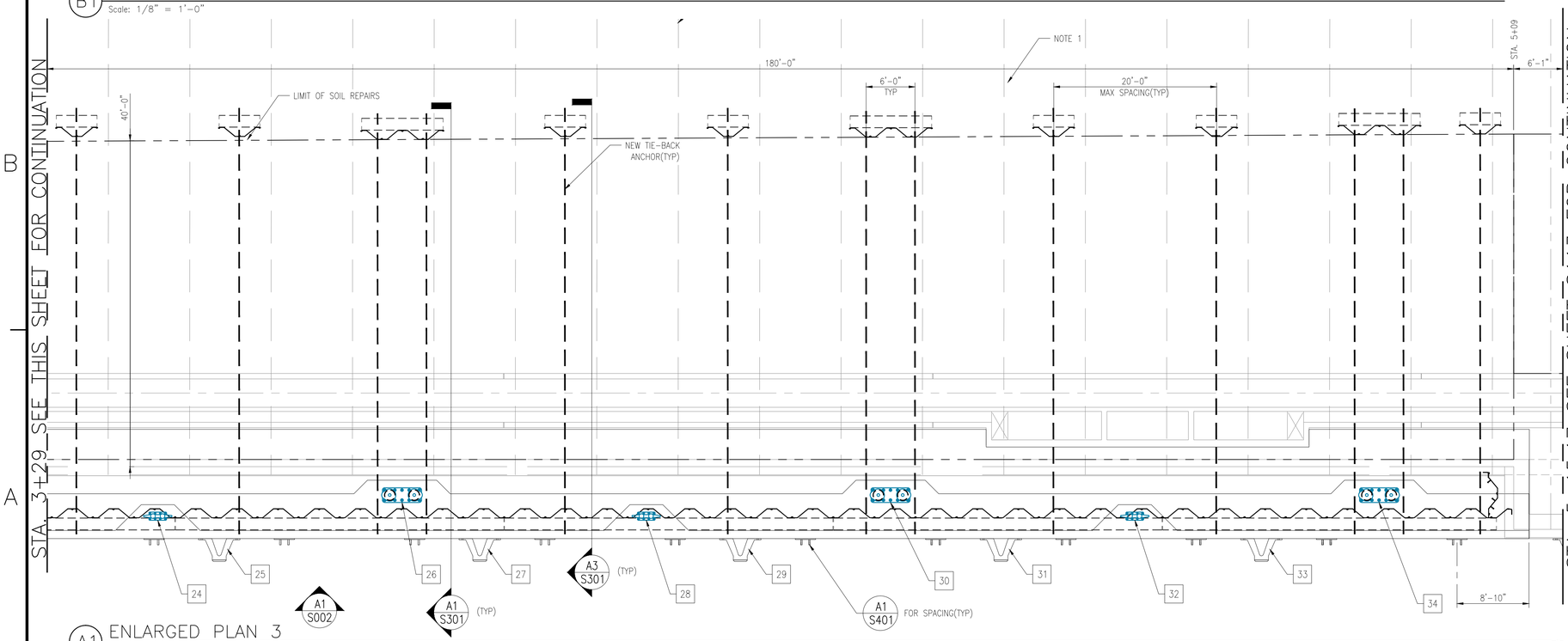
DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CBL\project_files\z_CUBA\navsta guantanamo bay\hr60514\wharf bravo structural repairs-1295318\working technical files\Drawings\S111 STRUCTURAL PLANS 1 OF 5.dwg LAYOUT NAME: S111 STRUCTURAL PLANS 1 OF 5 PLOTTED: Monday, April 04, 2016 - 5:51pm USER: john.d.mccoy

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE



B1 ENLARGED PLAN 2
Scale: 1/8" = 1'-0"



A1 ENLARGED PLAN 3
Scale: 1/8" = 1'-0"

GENERAL SHEET NOTES

1. REFER TO RECORD DRAWINGS FOR INFORMATION ON EXISTING STRUCTURES.
2. REFER TO SHEETS S001 AND S002 FOR STRUCTURAL NOTES.
3. COORDINATE WORK THIS SHEET WITH CIVIL SHEETS.
4. REFER TO TABLE THIS SHEET FOR COMPONENT LOCATIONS.

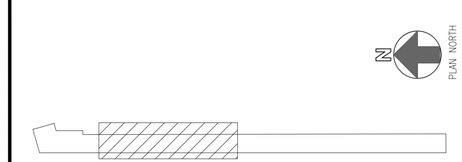
COMPONENT WORK POINT LOCATIONS

WP	COMPONENT	STATION
12	AF	01+58.14
13	CL42	01+62.59
14	AF	01+90.14
15	LDB	01+92.59
16	AF	02+22.14
17	CL42	02+22.59
18	LDB	02+52.59
19	AF	02+54.14
20	CL42	02+82.59
21	AF	02+86.14
22	LDB	03+12.59
23	AF	03+18.14
24	CL42	03+42.59
25	AF	03+50.14
26	LDB	03+72.59
27	AF	03+82.14
28	CL42	04+2.59
29	AF	04+14.14
30	CL42	04+32.59
31	AF	04+46.14
32	CL42	04+62.59
33	AF	04+78.14
34	LDB	04+92.59

SYMBOL LEGEND

- LOW DOUBLE BITT(LDB)
- 42" CLEAT(CL42)
- ARCH FENDER(FA)
- CORNER FENDER(CF)
- PIN PILE(PP) PER C1 S506
- FENDER PADEYE PER C2 S506

KEYPLAN



GRAPHIC SCALE

1/8"=1'-0" 0' 5' 10' 20' 30'

SYM	DESCRIPTION	DATE	APPR
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SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.I.T.L.

ACTIVITY ----

SATISFACTORY TO DATE ----

DES VF DRW JM CHK --

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD J. WARD

CHIEF ENG/ARCH (CORE) K. WITTMAN

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY

NAVAL FACILITIES ENGINEERING COMMAND
NAVAL AIR STATION JACKSONVILLE
NAVFAC SOUTHEAST
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

STRUCTURAL PLANS 2 OF 5

SCALE: SCALE

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

NAVFAC DRAWING NO. --

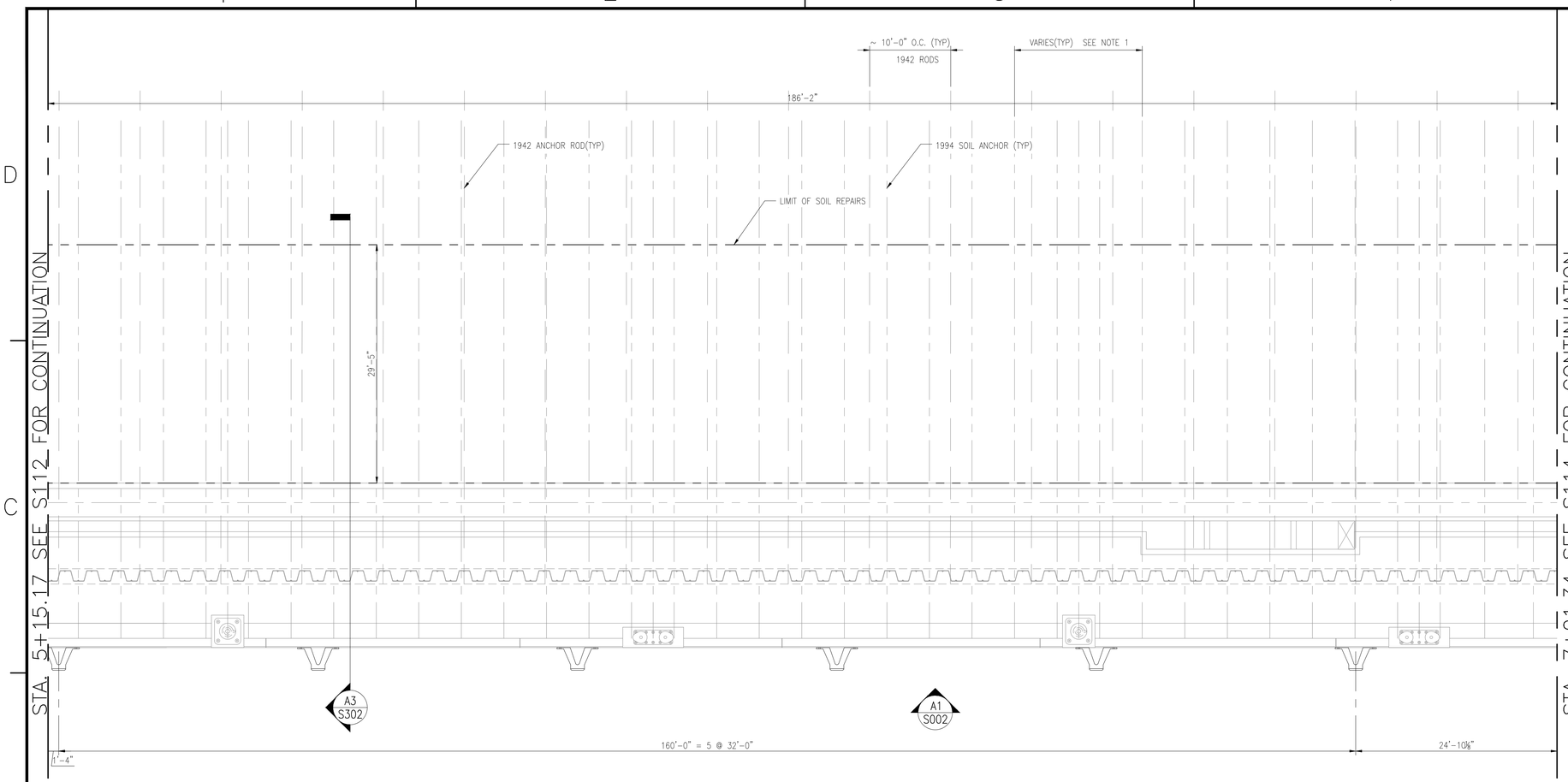
SHEET 36 OF 57

S112

DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\CBR\project_files\z_CUBA\navsta guantanamo bay\hf60514\wharf bravo structural repairs-1295318\working technical files\DrawingsS112 STRUCTURAL PLANS 2 OF 5.dwg LAYOUT NAME: S112 STRUCTURAL PLANS 2 OF 5 PLOTTED: Monday, April 04, 2016 - 5:52pm USER: john.d.mccoy



B1 ENLARGED PLAN 4
Scale: 1/8" = 1'-0"

GENERAL SHEET NOTES

1. REFER TO RECORD DRAWINGS FOR INFORMATION ON EXISTING STRUCTURES.
2. REFER TO SHEETS S001 AND S002 FOR STRUCTURAL NOTES.
3. COORDINATE WORK THIS SHEET WITH CIVIL SHEETS.

SYMBOL LEGEND

- LOW DOUBLE BITT(LDB)
- 42" CLEAT(CL42)
- ARCH FENDER(FA)
- CORNER FENDER(CF)
- PIN PILE(PP) PER C1 S506
- FENDER PADEYE PER C2 S506

KEYPLAN

GRAPHIC SCALE

1/8"=1'-0" 0' 5' 10' 20' 30'

SYM	DESCRIPTION	DATE	APPR
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SEAL

A/E INFO

APPROVED

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ACTIVITY

SATISFACTORY TO DATE ---

DES VF DRW JM CHK --

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD J. WARD

CHIEF ENG/ARCH (CORE) K. WITTMAN

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

STRUCTURAL PLANS 3 OF 5

SCALE: SCALE

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

NAVFAC DRAWING NO. --

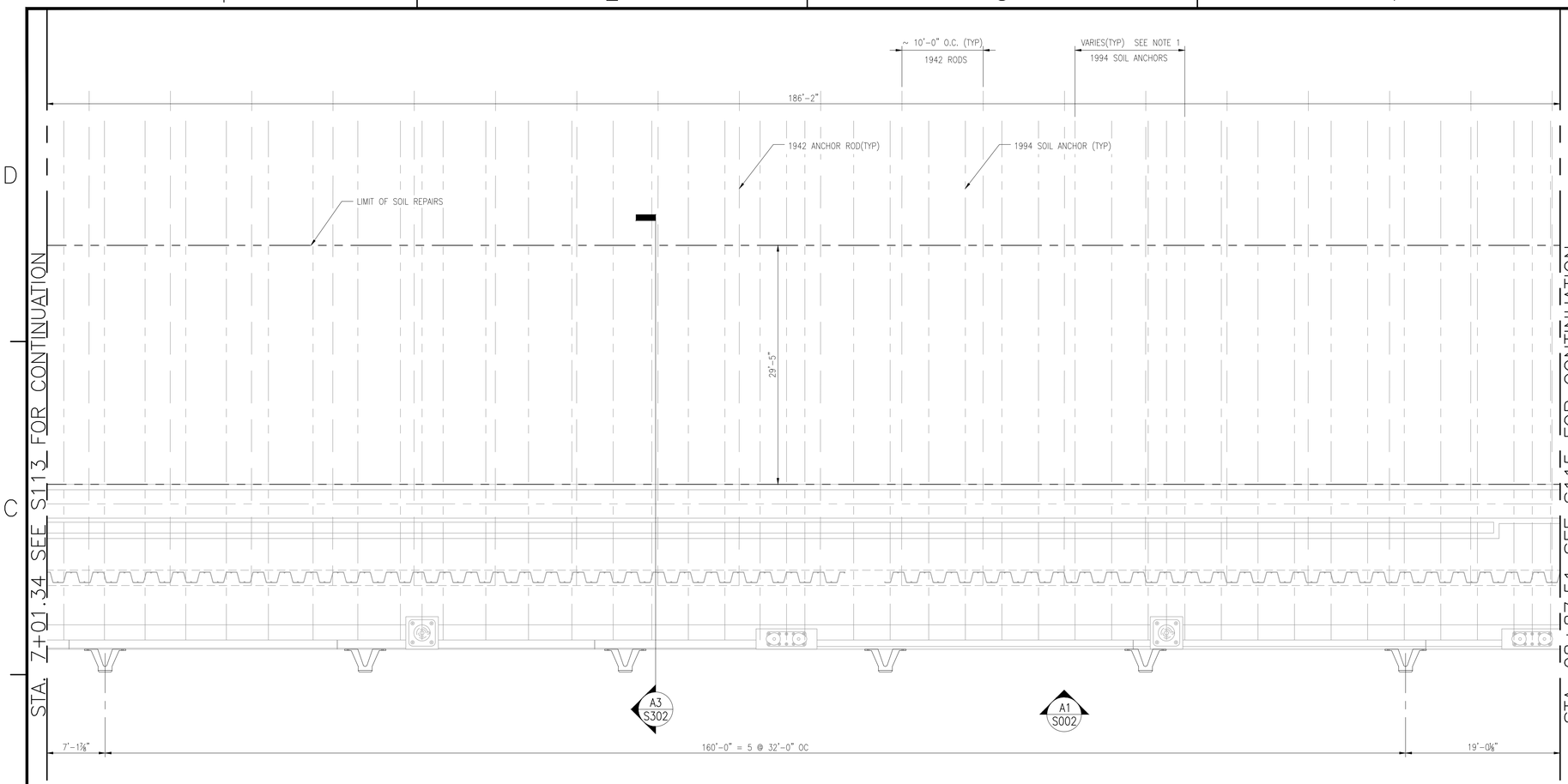
SHEET 37 OF 57

S113

DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\CIBL\project_files\x_CUBA\navsta guantanamo bay\h60514\wharf bravo structural repairs-1295318\working technical files\Drawings\S113 STRUCTURAL PLANS 3 OF 5.dwg LAYOUT NAME: S113 STRUCTURAL PLANS 3 OF 5 PLOTTED: Monday, April 04, 2016 - 5:55pm USER: john.d.mccoy



B1 ENLARGED PLAN 5
Scale: 1/8" = 1'-0"

GENERAL SHEET NOTES

1. REFER TO RECORD DRAWINGS FOR INFORMATION ON EXISTING STRUCTURES.
2. REFER TO SHEETS S001 AND S002 FOR STRUCTURAL NOTES.
3. COORDINATE WORK THIS SHEET WITH CIVIL SHEETS.
4. EXISTING FENDER PADEYES NOT SHOWN FOR CLARITY.

SYMBOL LEGEND

- LOW DOUBLE BITT(LDB)
- 42" CLEAT(CL42)
- ARCH FENDER(FA)
- CORNER FENDER(CF)
- PIN PILE(PP) PER C1 S506
- FENDER PADEYE PER C2 S506

KEYPLAN

GRAPHIC SCALE

1/8"=1'-0" 0' 5' 10' 20' 30'

SYM	DESCRIPTION	DATE	APPR
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SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY ----

SATISFACTORY TO DATE ----

DES VF DRW JM CHK --

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD J. WARD

CHIEF ENG/ARCH (CORE) K. WITTMAN

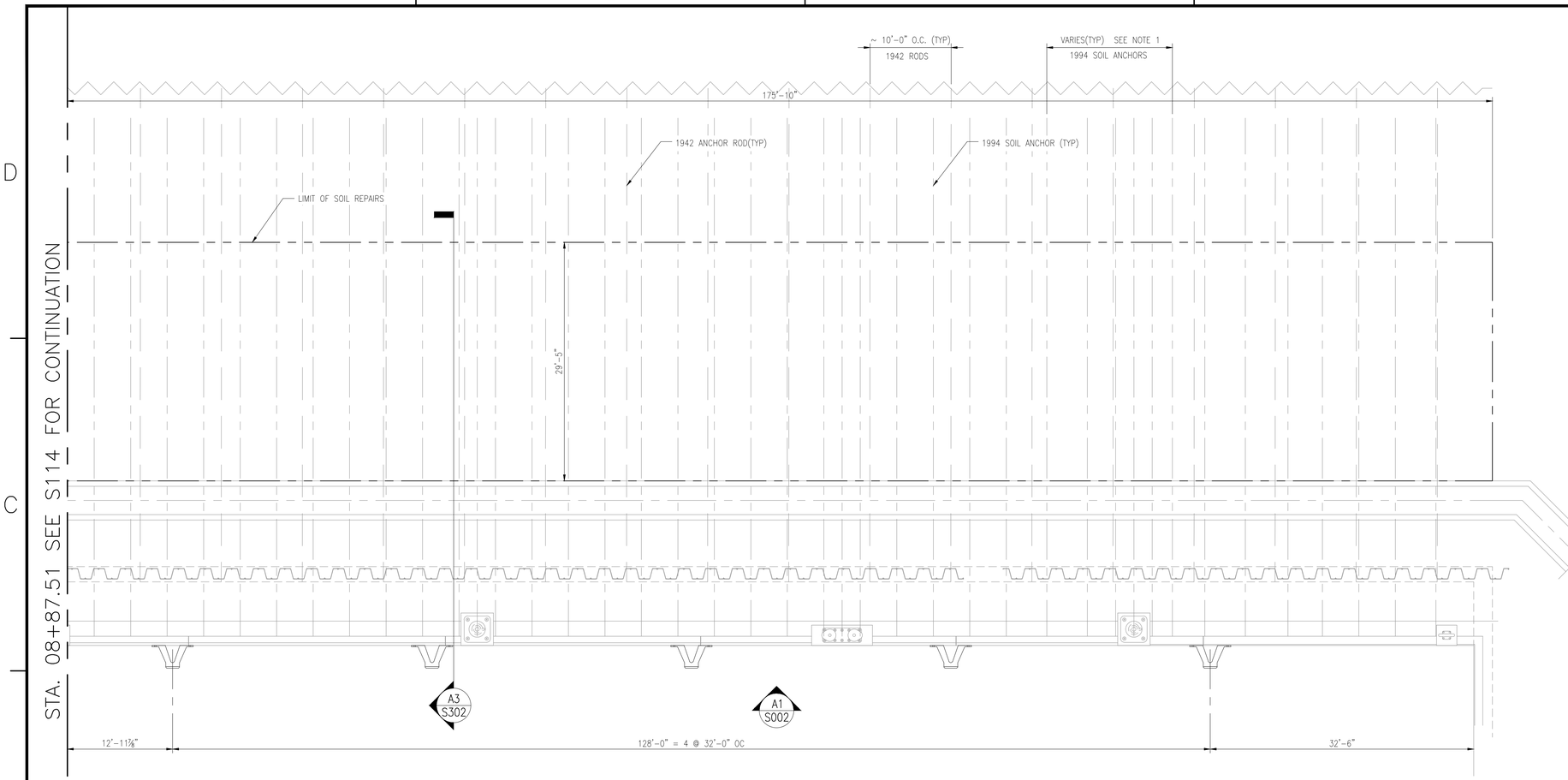
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA
WHARF BRAVO STRUCTURAL REPAIRS
STRUCTURAL PLANS 4 OF 5

SCALE: SCALE
EPROJECT NO.: 1295318
CONSTR. CONTR. NO. N69450-XX-C-XXXX
NAVFAC DRAWING NO. --
SHEET 38 OF 57
S114

DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\CIBL\project_files\x_CUBA\navsta guantanamo bay\h60514\wharf bravo structural repairs-1295318\working technical files\Drawings\S114 STRUCTURAL PLANS 4 OF 5.dwg LAYOUT NAME: S114 STRUCTURAL PLANS 4 OF 5 PLOTTED: Monday, April 04, 2016 - 5:55pm USER: john.d.mccoy



B1 ENLARGED PLAN 6
Scale: 1/8" = 1'-0"

GENERAL SHEET NOTES

1. REFER TO RECORD DRAWINGS FOR INFORMATION ON EXISTING STRUCTURES.
2. REFER TO SHEETS S001 AND S002 FOR STRUCTURAL NOTES.
3. COORDINATE WORK THIS SHEET WITH CIVIL SHEETS.
4. EXISTING FENDER PADEYES NOT SHOWN FOR CLARITY.

SYMBOL LEGEND

- LOW DOUBLE BITT(LDB)
- 42" CLEAT(CL42)
- ARCH FENDER(FA)
- CORNER FENDER(CF)
- PIN PILE(PP) PER C1/S506
- FENDER PADEYE PER C2/S506

KEYPLAN

GRAPHIC SCALE

1/8"=1'-0" 0' 5' 10' 20' 30'

SYM	DESCRIPTION	DATE	APPR
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SEAL

A/E INFO

APPROVED

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ACTIVITY ----

SATISFACTORY TO DATE ----

DES VF DRW JM CHK --

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD J. WARD

CHIEF ENG/ARCH (CORE) K. WITTMAN

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

STRUCTURAL PLANS 5 OF 5

SCALE: SCALE

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

NAVFAC DRAWING NO. --

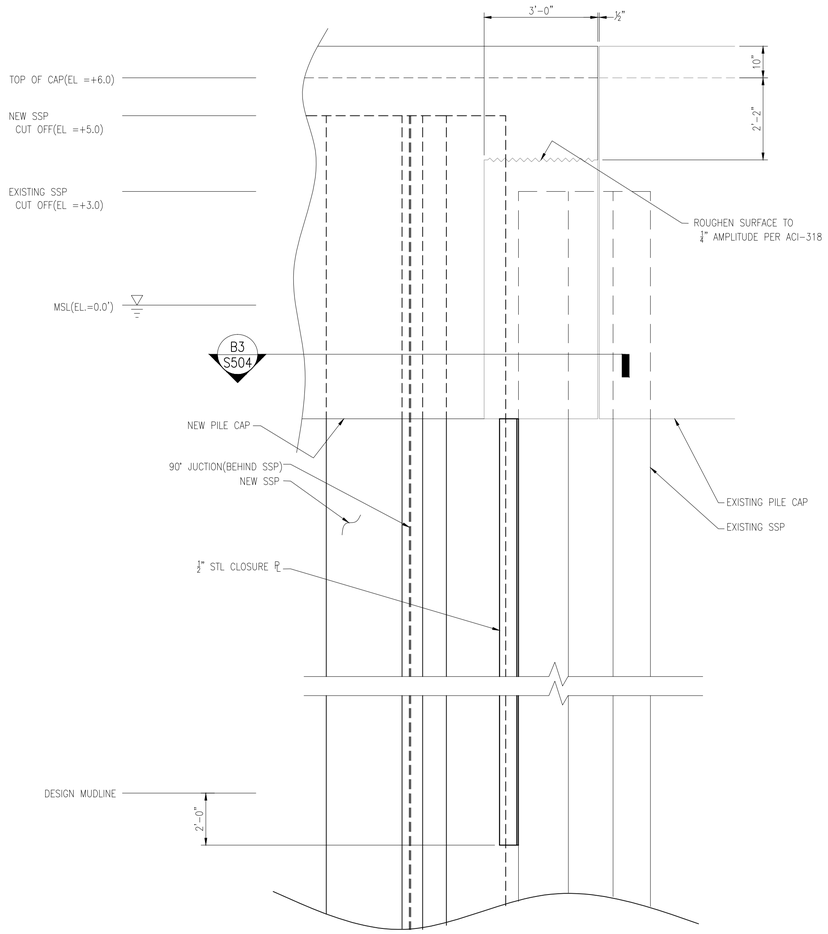
SHEET 39 OF 57

S115

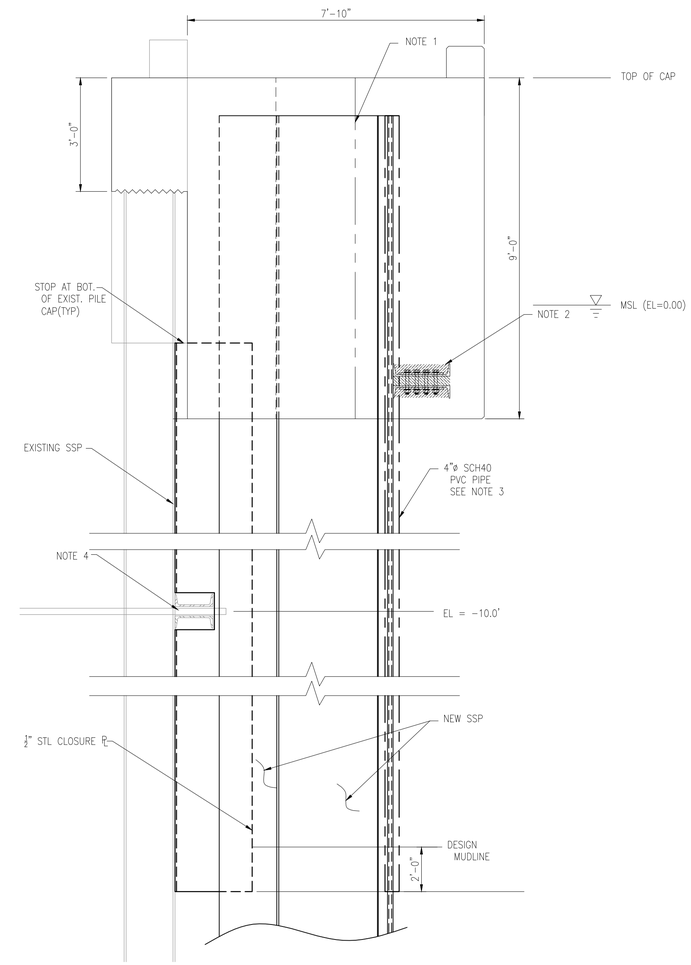
DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\CIBL\project_files\x_CUBA\navsta guantanamo bay\h60514\wharf bravo structural repairs-1295318\working technical files\Drawings\S115 STRUCTURAL PLANS 5 OF 5.dwg LAYOUT NAME: S115 STRUCTURAL PLANS 5 OF 5 PLOTTED: Monday, April 04, 2016 - 5:54pm USER: john.d.mccoy



B1 ELEVATION – SOUTH TIE–IN
Scale: 1/2" = 1'–0"



B3 ELEVATION – UNIFORM TIE IN
Scale: 1/2" = 1'–0"

GENERAL SHEET NOTES

1. PROVIDE CONSTRUCTION JOINT FOR FUTURE EXPANSION.
2. PROVIDE CLOSED CELL FOAM BETWEEN CHANNELS THROUGH BOLTED IN PLACE BY REQUIRED BOLTS. PROVIDE CLOSED CELL FOAM AROUND TOP AND BOTTOM SPLICE PLATES AND SECURE IN PLACE WITH NON–METALLIC STRAPS. PURPOSE IS TO PROVIDE FOR FUTURE WALE CONNECTION.
3. PROVIDE PVC PIPE OVER EXPOSED SSP INTERLOCK AS INDICATED AFTER DRIVING SSP. FILL INSIDE SPACE OF PIPE WITH XXX FULL HEIGHT OF THE PIPE. SECURE IN PLACE TO LIMIT MOVEMENT DURING CONCRETE PLACEMENTS.
4. PROVIDE CUT OUT TO ACCOMMODATE EXISTING SHEET PILE WALL WALER. FILL IN SPACE AROUND PLATE AND EXISTING WALER TO PREVENT LOSS OF FILL AND CONCRETE.

GRAPHIC SCALE

1/2"=1'–0" 1' 0' 1' 2' 3' 4' 5'

SUBMITTAL TITLE
SUBMITTAL DATE

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SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES JM DRW JM CHK --
PM/DM E. GALLANT
BRANCH MANAGER J. WARD
CHIEF ENG/ARCH K. WITTMAN

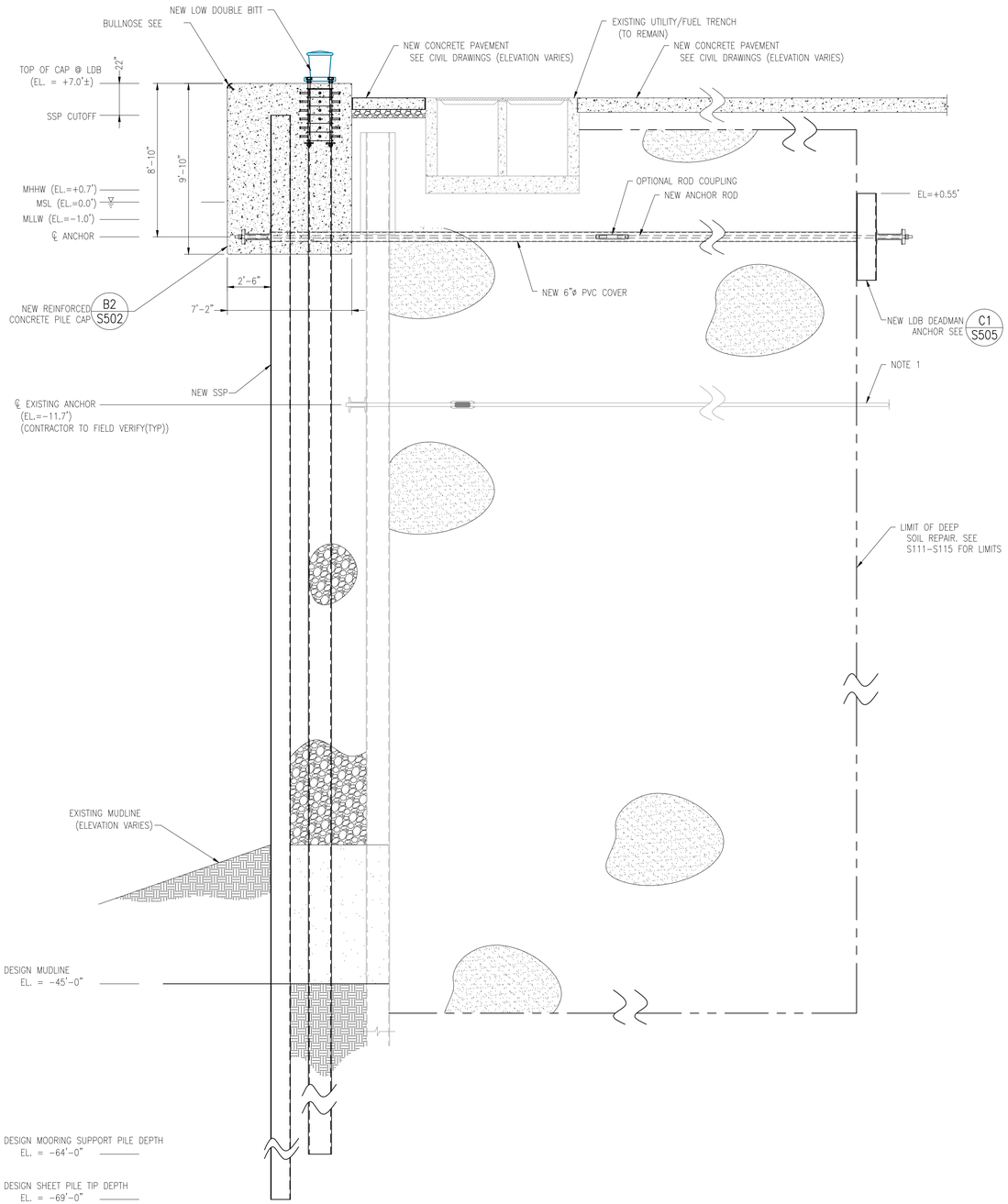
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA
WHARF BRAVO STRUCTURAL REPAIRS
ELEVATIONS

SCALE: SCALE
EPROJECT NO.: 1295318
CONSTR. CONTR. NO. N69450–XX–C–XXXX
NAVFAC DRAWING NO. ––
SHEET 40 OF 57
S201

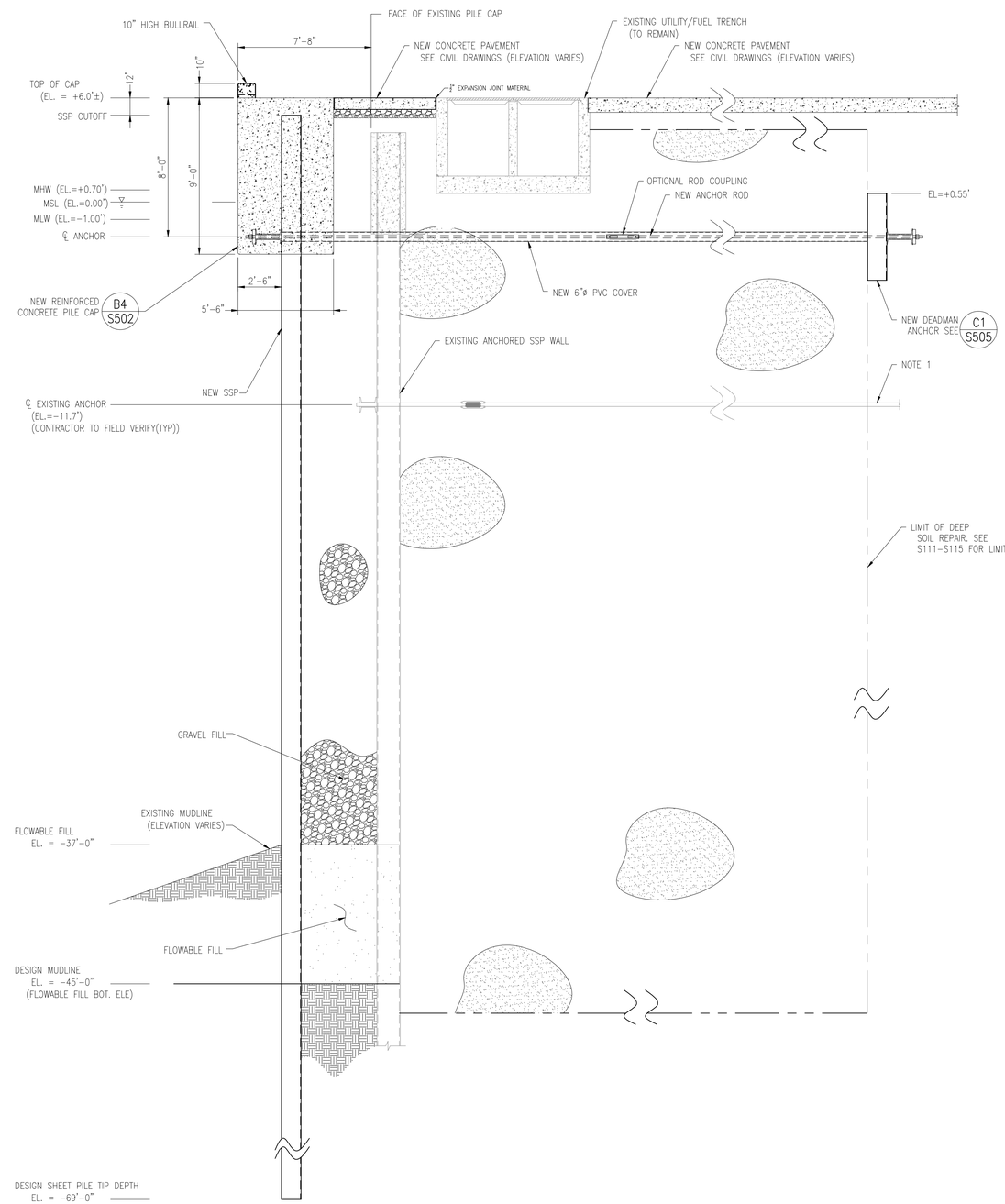
DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CBL\project_files\z_CUBA\navsta guantanamo bay\hf60514\wharf bravo structural repairs-1295318\working technical files\Drawings\S201 ELEVATIONS.dwg LAYOUT NAME: S201 ELEVATIONS PLOTTED: Monday, April 04, 2016 – 5:35pm USER: john.d.mccoy

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE



A1 TYPICAL WHARF SECTION AT LOW DOUBLE BITT
Scale: 1/4" = 1'-0"



A3 TYPICAL WHARF SECTION
Scale: 1/4" = 1'-0"

SHEET NOTES
1. CONTRACTOR MUST VERIFY LOCATION AND DEPTH OF EXISTING SHEET PILE WALL DEADMAN AND ANCHOR RODS.

GRAPHIC SCALE
1/4"=1'-0" 1' 0' 1' 5' 10' 15'

SYM	DESCRIPTION	DATE	APPR
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FOR COMMANDER NAVFAC / B.L.T.L.
ACTIVITY

SATISFACTORY TO DATE ----
DES JM DRW JM CHK KW
PROJECT MANAGER E. GALLANT
IPT TECH. BRANCH HEAD J. WARD
CHIEF ENG/ARCH (CORE) K. WITTMAN

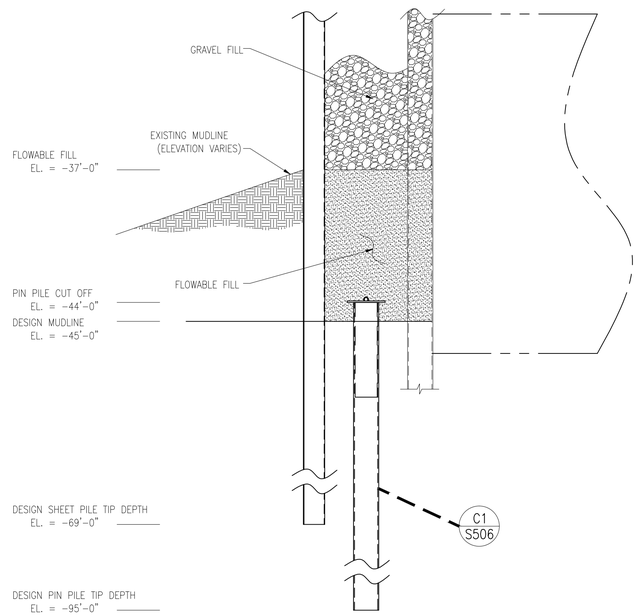
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA
WHARF BRAVO STRUCTURAL REPAIRS
TYPICAL WHARF SECTION 1 OF 2

SCALE: SCALE
EPROJECT NO.: 1295318
CONSTR. CONTR. NO. N69450-XX-C-XXXX
NAVFAC DRAWING NO. --
SHEET 41 OF 57
S301

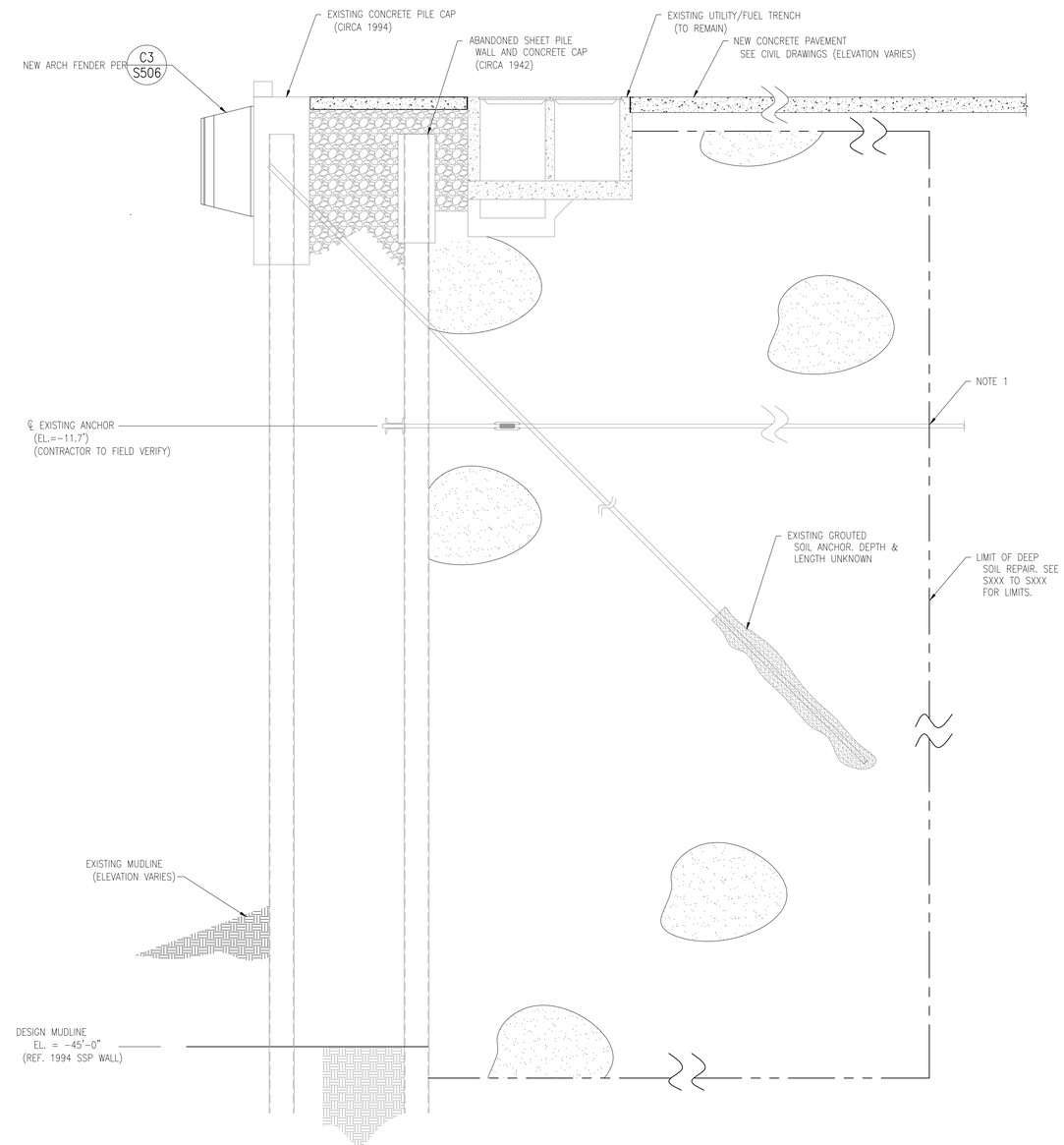
DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\GBL\project_files\v_CUBA\navsta guantanamo bay\h\h680514\wharf bravo structural repairs-1295318\working technical files\Drawings\S301 TYPICAL WHARF SECTION 1 OF 2.dwg LAYOUT NAME: S301 TYPICAL WHARF SECTION 1 OF 2 PLOTTED: Monday, April 04, 2016 - 5:55pm USER: john.d.mccoy



B2 SECTION AT PIN PILE ELEVATION
Scale: 1/4" = 1'-0"



A3 TYPICAL WHARF SECTION AT SOIL REPAIRS (PHASE 2)
Scale: 1/4" = 1'-0"

SHEET NOTES
1. CONTRACTOR MUST VERIFY LOCATION AND DEPTH OF EXISTING SHEET PILE WALL DEADMAN AND ANCHOR RODS.

GRAPHIC SCALE
1/4"=1'-0" 1' 0' 1' 5' 10' 15'

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SEAL

A/E INFO

APPROVED
FOR COMMANDER NAVFAC / B.L.T.L.
ACTIVITY
SATISFACTORY TO DATE
DES VF DRW JM CHK --
PM/DM E. GALLANT
BRANCH MANAGER J. WARD
CHIEF ENG/ARCH K. WITTMAN

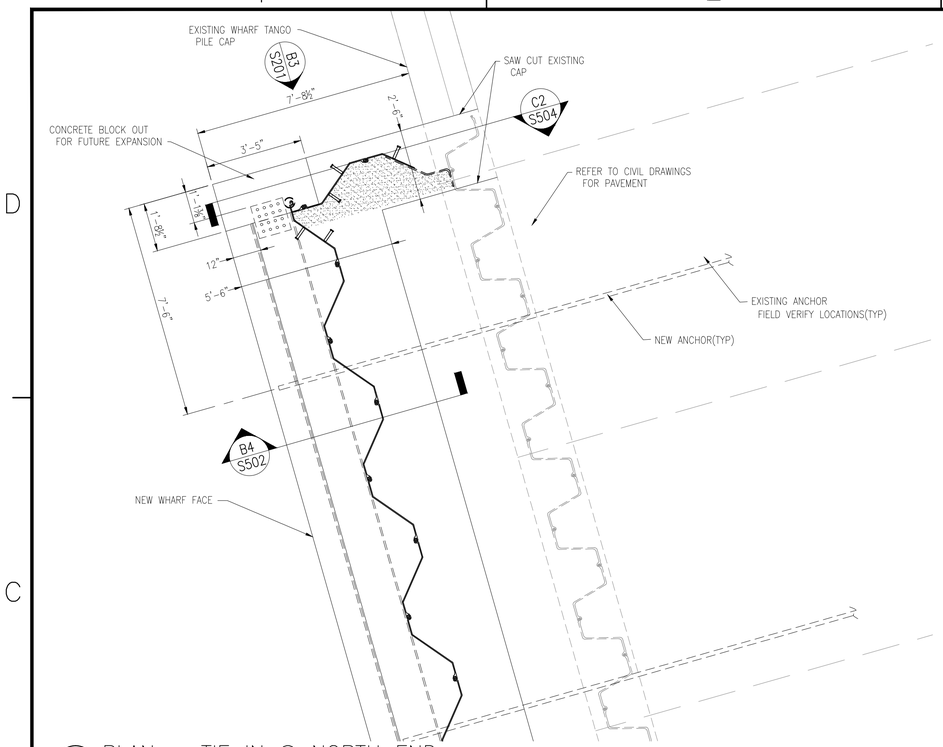
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA
WHARF BRAVO STRUCTURAL REPAIRS
TYPICAL WHARF SECTION 2 OF 2

SCALE: SCALE
EPROJECT NO.: 1295318
CONSTR. CONTR. NO.: N69450-XX-C-XXXX
NAVFAC DRAWING NO. --
SHEET 42 OF 57
S302

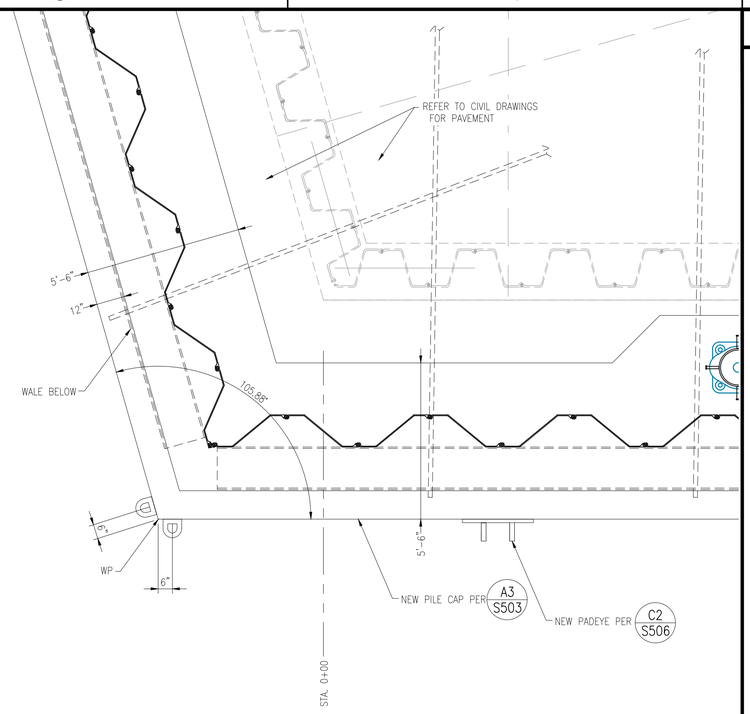
DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

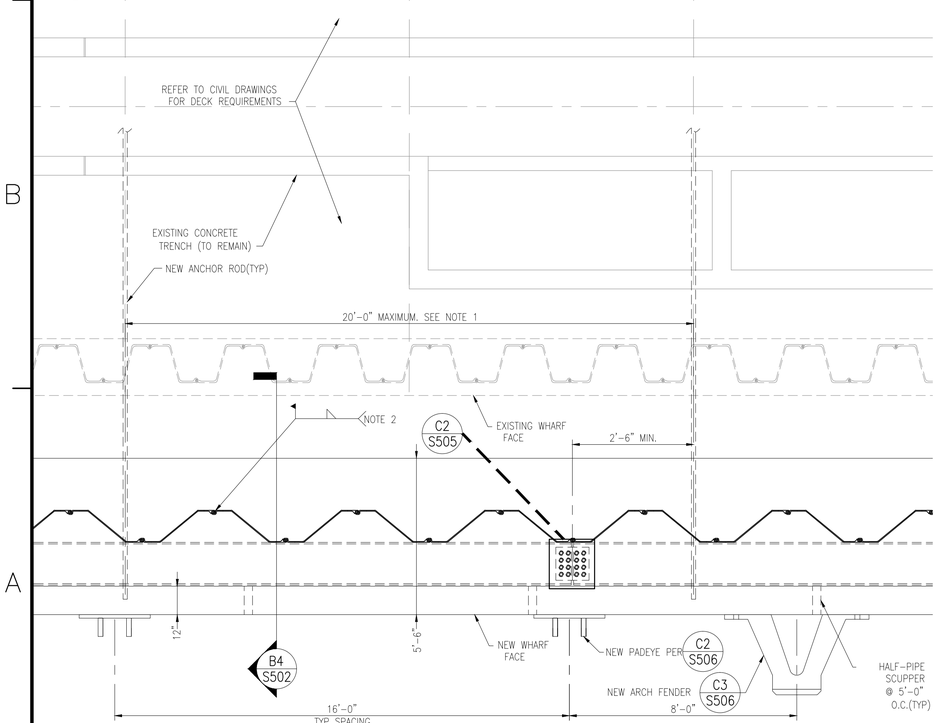
FILE NAME: P:\CUB\project_files\z_CUBA\navsta guantanamo bay\hp60514\wharf bravo structural repairs~1295318\working technical files\Drawings\S302 TYPICAL WHARF SECTION 2 OF 2.dwg LAYOUT NAME: S302 TYPICAL WHARF SECTION 2 OF 2 PLOTTED: Monday, April 04, 2016 - 5:56pm USER: john.d.mccoy



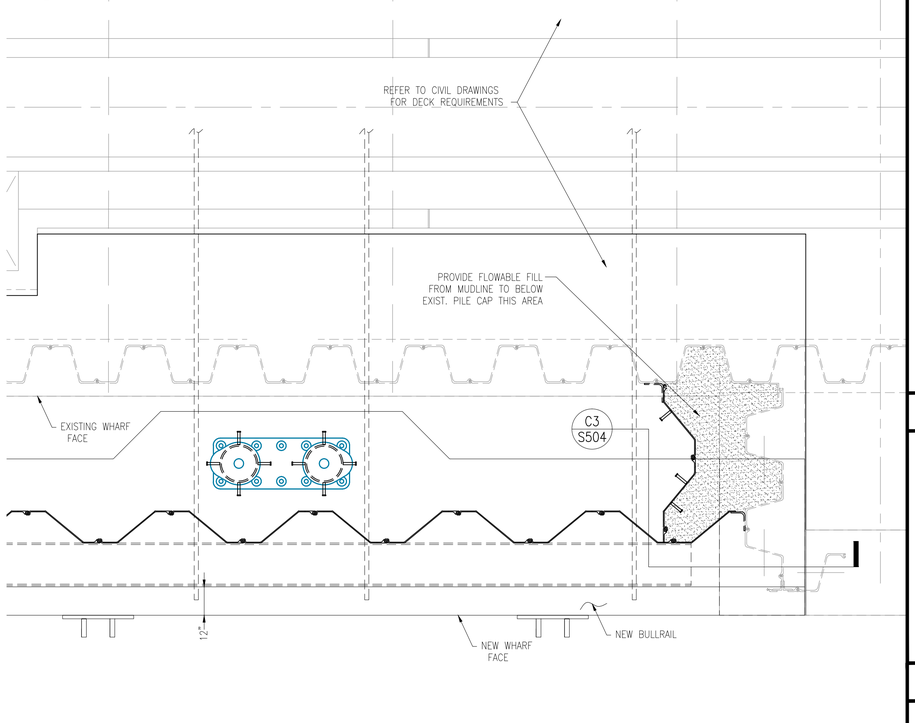
C1 PLAN – TIE IN @ NORTH END
Scale: 3/8" = 1'-0"



C3 PLAN – CORNER
Scale: 3/8" = 1'-0"



A1 PLAN – TYPICAL BULKHEAD
Scale: 3/8" = 1'-0"



A3 PLAN – TIE IN @ SOUTH END
Scale: 3/8" = 1'-0"

GENERAL SHEET NOTES

1. ANCHOR SPACING MUST NOT EXCEED THAT SHOWN ON THIS DRAWING. ADJUST NEW ANCHOR RODS AS NEEDED TO AVOID TRENCHES, UNDERGROUND AND BURIED UTILITIES, STORM PIPING, ETC.. ANCHORS MAY ALSO BE ADJUST TO ACCOMMODATE SOIL REPAIRS. CONTRACTOR IS RESPONSIBLE FOR DETERMINATION OF QUANTITY OF REQUIRED ANCHOR LOCATIONS, DEADMEN AND ASSOCIATED MATERIALS.
2. PROVIDE 2" LONG WELD AT EACH INTERLOCK OF SHEET PILE. LOCATE WELD WITHIN SIX INCHES OF REQUIRED SHEET PILE CUT-OFF ELEVATION.

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NAVFAC

SEAL

A/E INFO

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FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY ----

SATISFACTORY TO DATE ----

DES JM | DRW JM | CHK --

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD J. WARD

CHIEF ENG/ARCH (CORE) K. WITTMAN

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

ENLARGED PLANS 1 OF 2

KEYPLAN

N
PLAN NORTH

GRAPHIC SCALE

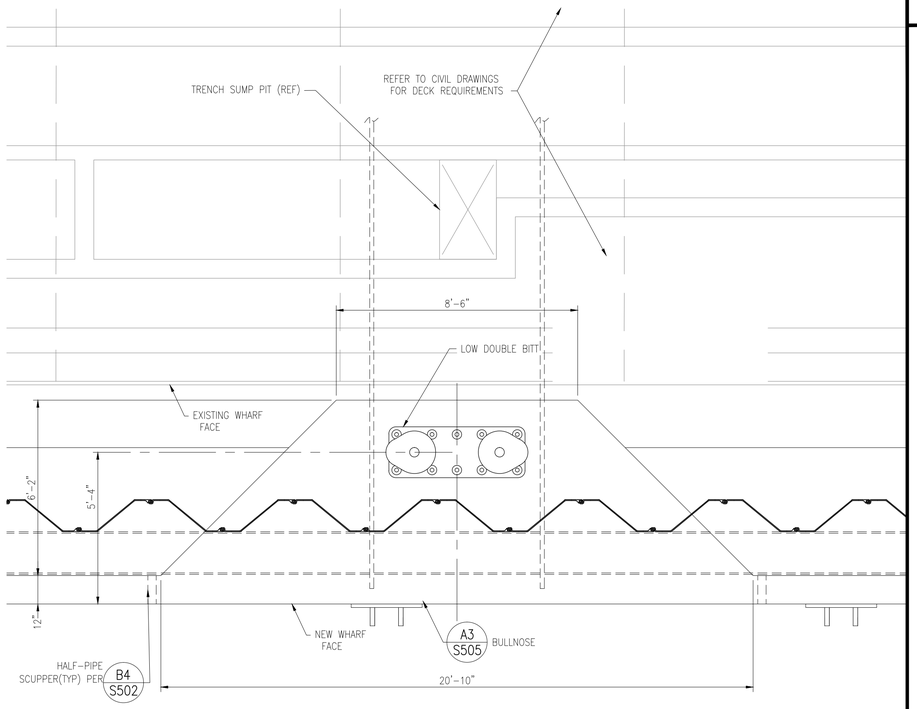
3/8"=1'-0" 1' 0 1' 5' 10'

SCALE: SCALE
EPROJECT NO.: 1295318
CONSTR. CONTR. NO. N69450-XX-C-XXXX
NAVFAC DRAWING NO. --
SHEET 43 OF 57
S401

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CBL\project_files\z_CUBA\navsta guantanamo bay(h)-60514\wharf bravo structural repairs-1295318\working technical files\Drawings\S401 ENLARGED PLANS 1 OF 2.dwg LAYOUT NAME: S401 ENLARGED PLANS 1 OF 2 PLOTTED: Monday, April 04, 2016 – 5:57pm USER: john.d.mccoy

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE



C3 PLAN – BULKHEAD @ LOW DOUBLE BITT

Scale: 3/8" = 1'-0"

GENERAL SHEET NOTES

SYMBOL LEGEND

KEYPLAN

PLAN NORTH

GRAPHIC SCALE

3/8"=1'-0" 1' 0 1' 5' 10'

SUBMITTAL TITLE
SUBMITTAL DATE

SYM	DESCRIPTION	DATE	APPR
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A/E INFO

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ACTIVITY

SATISFACTORY TO DATE

DES -- DRW -- CHK --

PM/DM E. GALLANT

BRANCH MANAGER J. WARD

CHIEF ENG/ARCH K. WITTMAN

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

ENLARGED PLANS 2 OF 2

SCALE: SCALE

EPROJECT NO.: 1295318

CONSTR. CONTR. NO.: N69450-XX-C-XXXX

NAVFAC DRAWING NO. --

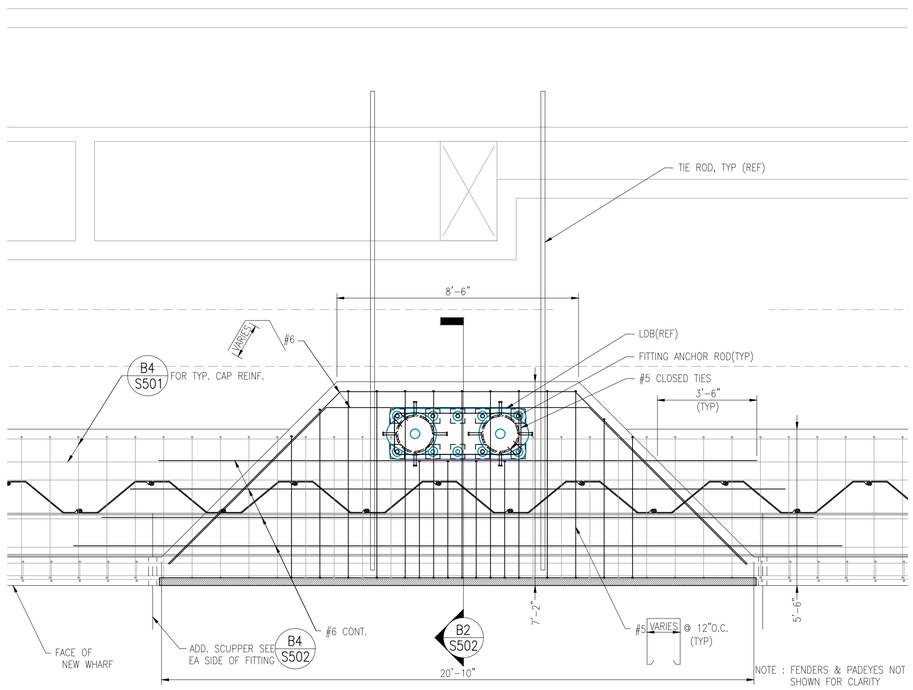
SHEET 44 OF 57

S402

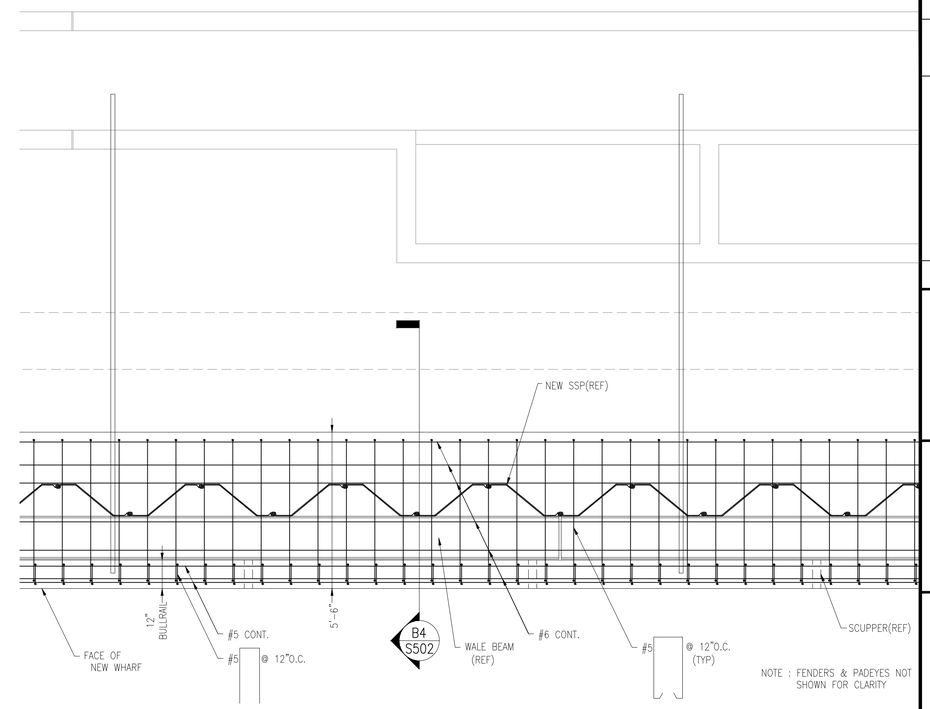
DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CBR\project_files\z_CUBA\navsta guantanamo bay\hi60514\wharf bravo structural repairs-1295318\working technical files\Drawings\S402 ENLARGED PLANS 2 OF 2.dwg LAYOUT NAME: S402 ENLARGED PLANS 2 OF 2 PLOTTED: Monday, April 04, 2016 – 5:57pm USER: john.d.mccoy

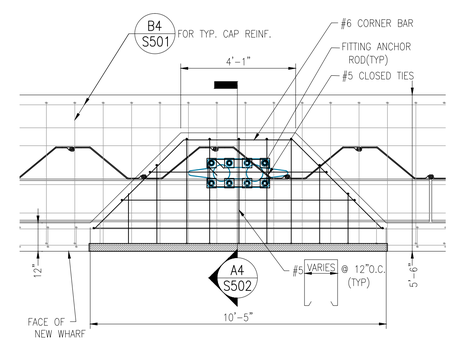
SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE



B2 PLAN – BULKHEAD REINFORCEMENT @ LDB
Scale: 3/8" = 1'-0"



B4 PLAN – TYPICAL BULKHEAD REINFORCEMENT
Scale: 3/8" = 1'-0"



A4 PLAN – BULKHEAD REINFORCEMENT @ CLEAT
Scale: 3/8" = 1'-0"

SYM	DESCRIPTION	DATE	APPR
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NAVFAC

PRELIMINARY
NOT FOR CONSTRUCTION

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE ----

DES VF DRW JM CHK --

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD J. WARD

CHIEF ENG/ARCH (CORE) K. WITTMAN

DEPARTMENT OF THE NAVY
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY

NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

DETAILS AND PLANS – BULKHEAD

SCALE: SCALE

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

NAVFAC DRAWING NO. --

SHEET 45 OF 57

S501

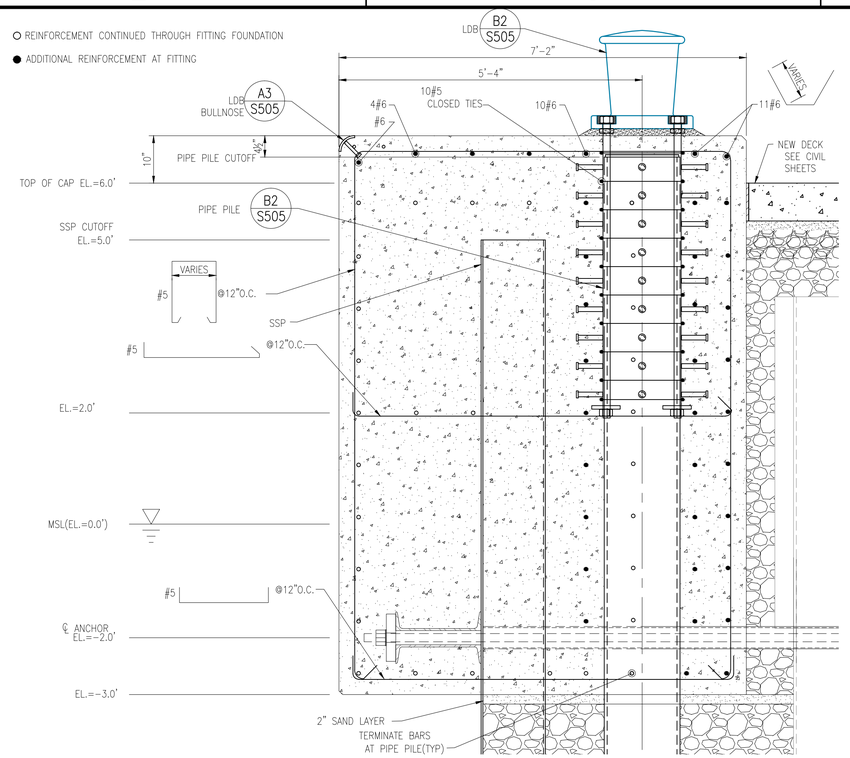
GRAPHIC SCALE

3/8"=1'-0" 1' 0 1' 5' 10'

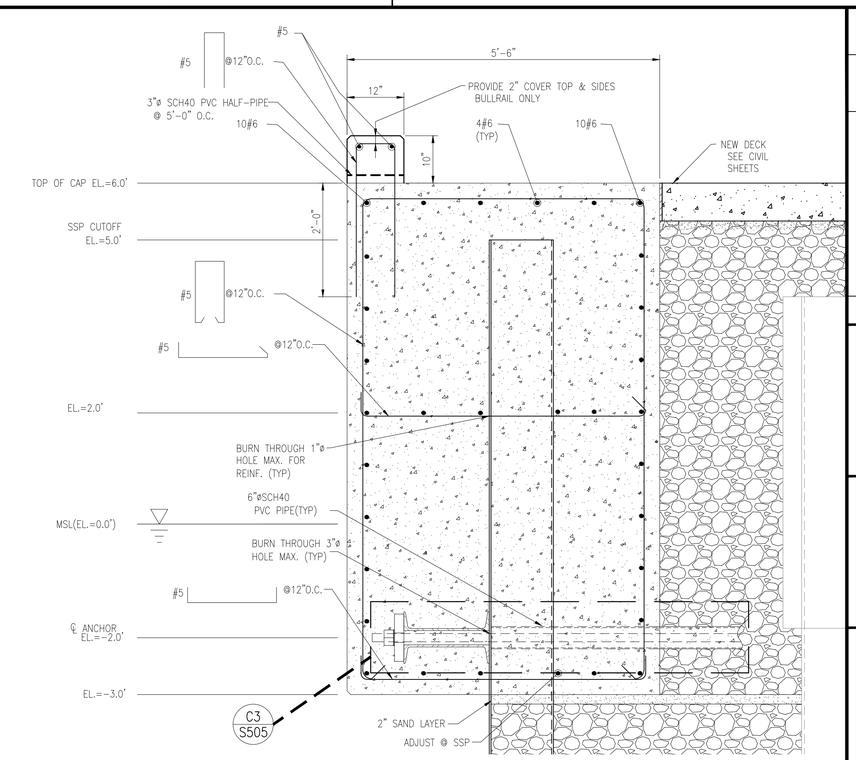
DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

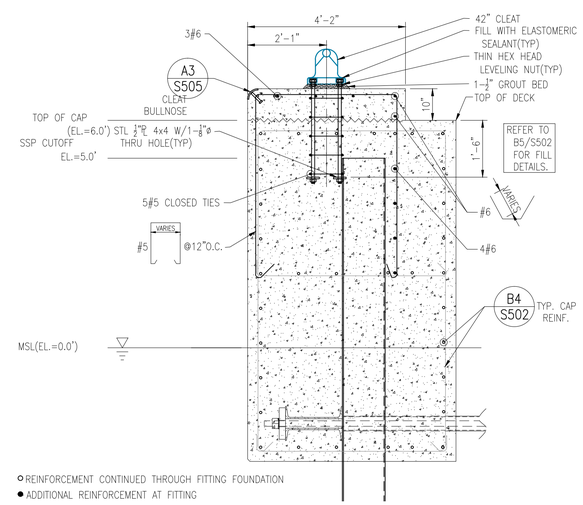
FILE NAME: P:\CUB\project_files\z_CUBA\navsta guantanamo bay\hi60514\whorf bravo structural repairs-1295318\working technical files\Drawings\S501 DETAILS AND PLANS – BULKHEAD.dwg LAYOUT NAME: S501 DETAILS AND PLANS – BULKHEAD PLOTTED: Monday, April 04, 2016 – 5:58pm USER: john.d.mccoy



B2 TYPICAL CAP REINFORCEMENT & DETAILS AT LDB
Scale: 3/4" = 1'-0"



B4 TYPICAL CAP REINFORCEMENT AND DETAILS
Scale: 3/4" = 1'-0"



A4 TYPICAL CAP SECTION REINFORCEMENT & DETAILS AT CLEAT
Scale: 1/2" = 1'-0"

GRAPHIC SCALE

3/4"=1'-0" 1' 6" 0' 1' 2' 3' 4'

SYM	DESCRIPTION	DATE	APPR
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SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE ---

DES JM DRW JM CHK KW

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD J. WARD

CHIEF ENG/ARCH (CORE) K. WITTMAN

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE

NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

DETAILS AND SECTIONS – BULKHEAD

SCALE: SCALE

EPROJECT NO.: 1295318

CONSTR. CONTR. NO.: N69450-XX-C-XXXX

NAVFAC DRAWING NO.: --

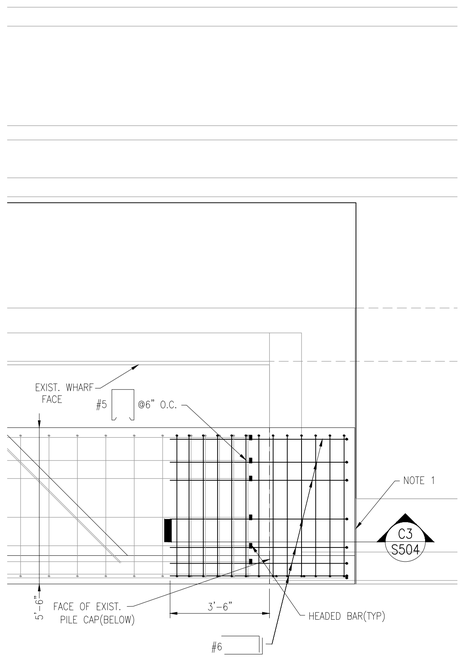
SHEET 46 OF 57

S502

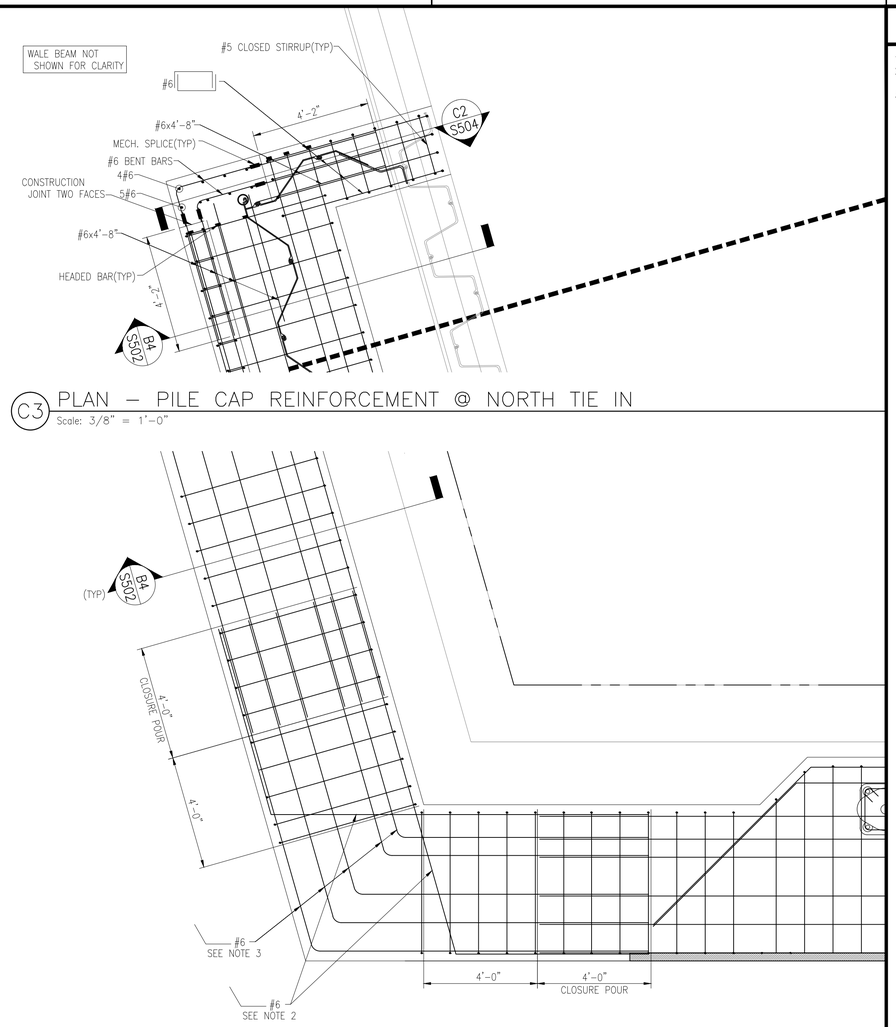
DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\CBL\project_files\2_CUBA\navsta guantanamo bay(h)\n60514\wharf bravo structural repairs~1295318\working technical files\Drawings\S502 DETAILS AND SECTIONS - BULKHEAD.dwg LAYOUT NAME: S502 DETAILS AND SECTIONS - BULKHEAD PLOTTED: Monday, April 04, 2016 - 5:59pm USER: john.d.mccoy



C1 PLAN – PILE CAP REINFORCEMENT @ SOUTH TIE IN
Scale: 3/8" = 1'-0"



C3 PLAN – PILE CAP REINFORCEMENT @ NORTH TIE IN
Scale: 3/8" = 1'-0"

A3 PLAN – PILE CAP REINFORCEMENT @ CORNER
Scale: 3/8" = 1'-0"

GENERAL SHEET NOTES

1. PROVIDE $\frac{1}{4}$" EXPANSION JOINT WITH ADJACENT EXISTING PILE CAP.
2. EXTEND PILE CAP BACK FACE REINFORCEMENT TO FRONT FACE OF ADJACENT AREA AND TERMINATE IN CLOSURE POUR AS FULL REINFORCEMENT SPLICE.
3. PROVIDE ALL HORIZONTAL REINFORCEMENT AS SHOWN. TERMINATE IN CLOSURE POUR AS FULL REINFORCEMENT SPLICE.

KEYPLAN

N
PLAN NORTH

GRAPHIC SCALE

3/8"=1'-0" 1' 0 1' 5' 10'

SUBMITTAL TITLE
SUBMITTAL DATE

SYM	DESCRIPTION	DATE	APPR
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NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES VF DRW JM CHK --
PM/DM E. GALLANT
BRANCH MANAGER J. WARD
CHIEF ENG/ARCH K. WITTMAN

NAVAL FACILITIES ENGINEERING COMMAND
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

DETAILS AND PLANS – TIE-INS AND CORNER

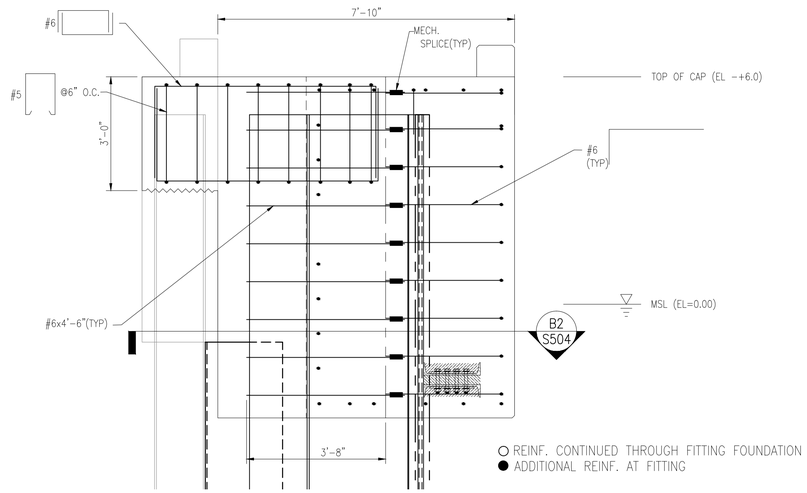
SCALE: SCALE
EPROJECT NO.: 1295318
CONSTR. CONTR. NO. N69450-XX-C-XXXX
NAVFAC DRAWING NO. --
SHEET 47 OF 57

S503

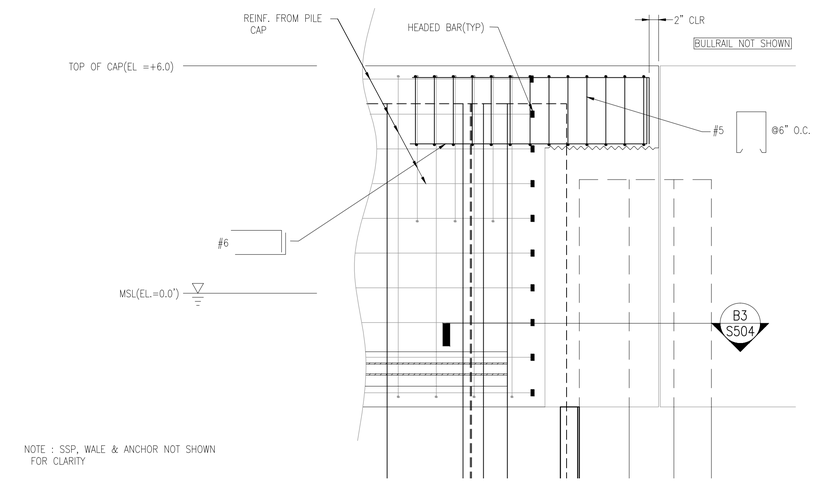
DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CUBA\project_files\y_CUBA\navsta guantanamo bay\hr680514\wharf bravo structural repairs-1295318\working technical files\Drawings\S503 DETAILS AND PLANS - TIE-INS AND CORNER.dwg LAYOUT NAME: S503 DETAILS AND PLANS - TIE-INS AND CORNER PLOTTED: Monday, April 04, 2016 - 5:39pm USER: john.d.mccoy

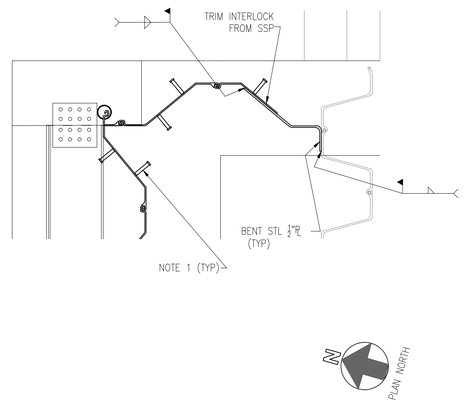
SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE



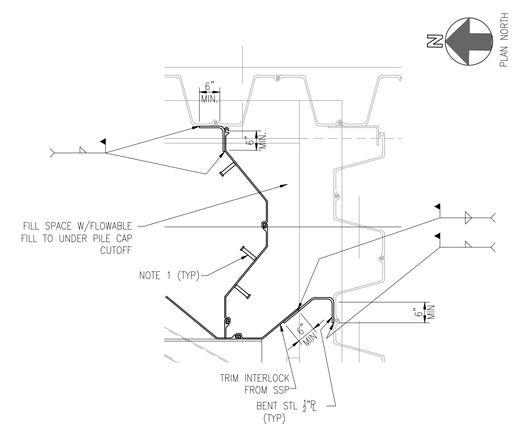
C2 SECTION – REINFORCEMENT @ NORTH TIE IN
Scale: 1/2" = 1'-0"



C3 SECTION – REINFORCEMENT @ SOUTH TIE–IN
Scale: 1/2" = 1'-0"



B2 DETAIL – NORTH TIE IN PLATE
Scale: 1/2" = 1'-0"



B3 DETAIL – SOUTH TIE IN PLATE
Scale: 1/2" = 1'-0"

GENERAL SHEET NOTES

1. PROVIDE 3" STUDS AT 12" O.C. VERTICALLY WITHIN THE CONCRETE PILE CAP.

GRAPHIC SCALE

1/2"=1'-0" 1' 0' 1' 2' 3' 4' 5'

SUBMITTAL TITLE
SUBMITTAL DATE

SYM	DESCRIPTION	DATE	APPR
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SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE

DES VF DRW JM CHK KW
PM/DM E. GALLANT
BRANCH MANAGER J. WARD
CHIEF ENG/ARCH K. WITTMAN

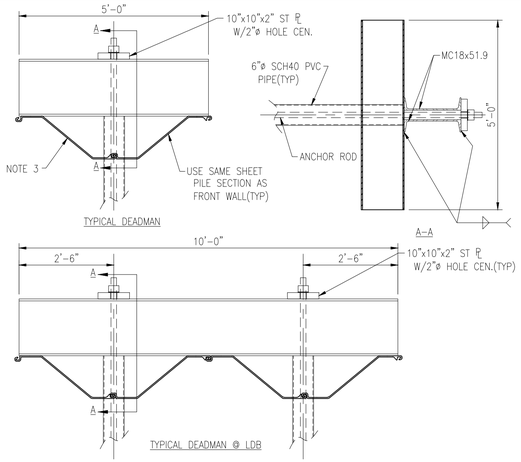
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA
WHARF BRAVO STRUCTURAL REPAIRS
DETAILS AND SECTIONS – TIE–INS AND CORNER

SCALE: SCALE
EPROJECT NO.: 1295318
CONSTR. CONTR. NO.: N69450–XX–C–XXXX
NAVFAC DRAWING NO.: ––
SHEET 48 OF 57
S504

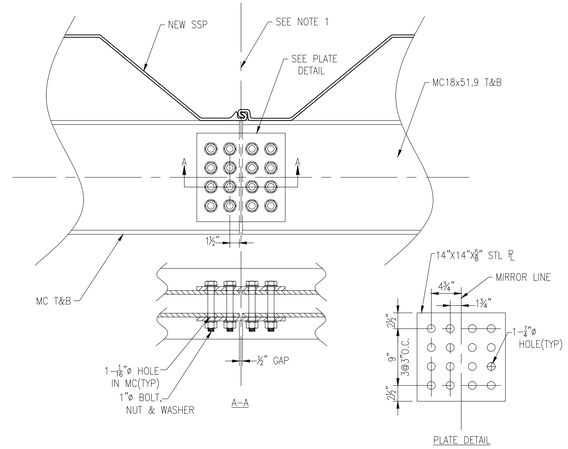
DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CBL\project_files\z_CUBA\navsta guantanamo bay(h)\60514\wharf bravo structural repairs-1295318\working technical files\Drawings\S504 DETAILS AND SECTIONS – TIE-INS AND CORNER.dwg LAYOUT NAME: S504 DETAILS AND SECTIONS – TIE-INS AND CORNER PLOTTED: Monday, April 04, 2016 – 6:00pm USER: john.d.mccoy

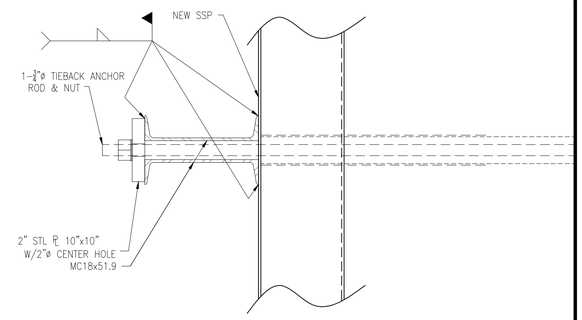
SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE



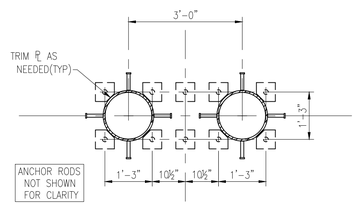
C1 DETAIL – TYP. DEADMAN
Scale: 1/2" = 1'-0"



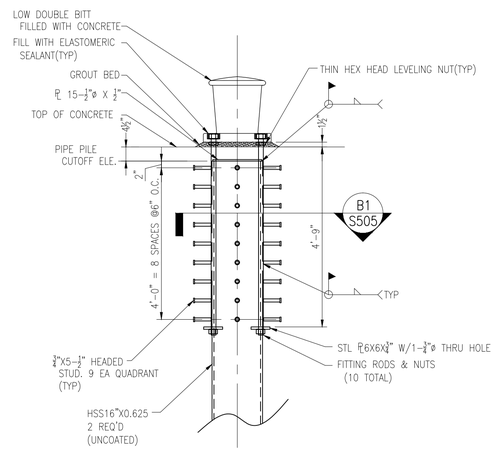
C2 DETAIL –WALE SPLICE
Scale: 1" = 1'-0"



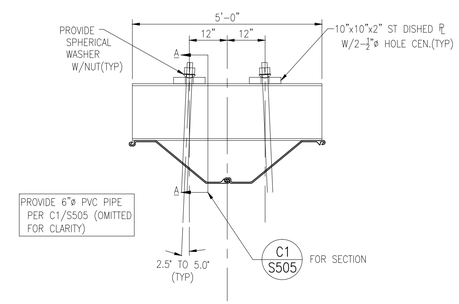
C3 DETAIL – WALE CONNECTION
Scale: 1" = 1'-0"



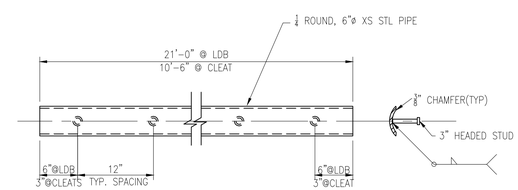
B1 DETAIL – LDB @ RODS
Scale: 1/2" = 1'-0"



B2 DETAIL – LOW DOUBLE BITT
Scale: 1/2" = 1'-0"



B3 DETAIL – ALT. DEADMAN
Scale: 1/2" = 1'-0"



SEE NOTE 2 FOR ADDITIONAL REQUIREMENTS

A3 DETAIL – BULLNOSE
Scale: 1" = 1'-0"

GENERAL SHEET NOTES

1. WALE SPLICES SHALL NOT OCCUR WITHIN 2'-6" OF CENTERLINE OF NEW ANCHOR RODS.
2. PROVIDE BULLNOSE WITH SMOOTH HOT DIPPED GALVANIZED FINISH TO PREVENT SNAGGING OF MOORING LINES. REMOVE ALL GALVANIZE BURRS AND OTHER SURFACE IMPERFECTIONS WITHOUT HARMING THE GALVANIZED SURFACE.
3. SHEET PILE USED FOR ALL DEADMEN MUST BE COATED ON ALL FACES AS REQUIRED BY THIS CONTRACT.

GRAPHIC SCALE

1/2"=1'-0" 1' 0' 1' 2' 3' 4' 5'

1"=1'-0" 1' 6" 0' 1' 2' 3'

SYM	DESCRIPTION	DATE	APPR
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SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY ----

SATISFACTORY TO DATE ----

DES VF DRW JM CHK KW

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD J. WARD

CHIEF ENG/ARCH (CORE) K. WITTMAN

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

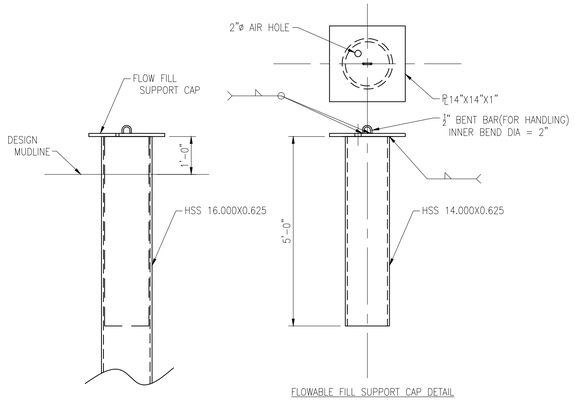
DETAILS – BULKHEAD WALE, DEADMEN, LDB & MISC.

SCALE: SCALE
EPROJECT NO.: 1295318
CONSTR. CONTR. NO.: N69450-XX-C-XXXX
NAVFAC DRAWING NO. --
SHEET 49 OF 57
S505

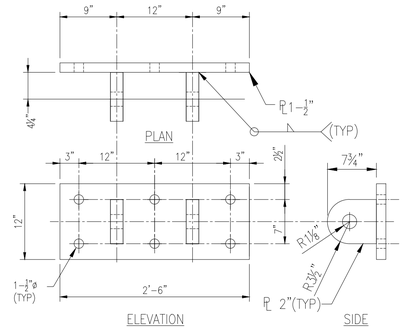
DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CIBL\project_files\z_CUBA\navsta guantanamo bay(hjh60014)\whart bravo structural repairs-1295318\working technical files\Drawings\S505 DETAILS - BULKHEAD WALE, DEADMEN, LDB & MISC.dwg LAYOUT NAME: S505 DETAILS - BULKHEAD WALE DEADMEN LDB & MISC. PLOTTED: Monday, April 04, 2016 - 6:02pm USER: john.d.mccoy

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

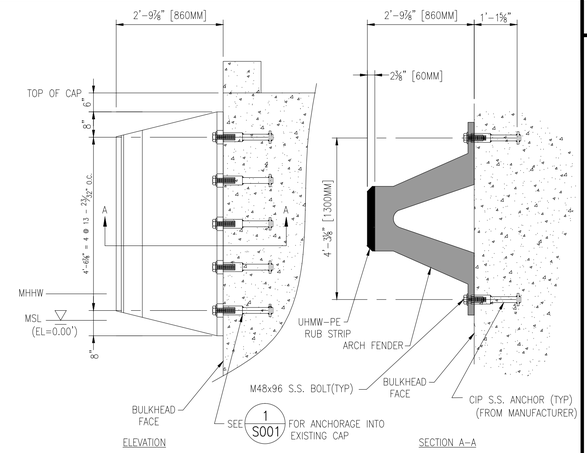


C1 DETAIL – PIN PILE
Scale: 1/2" = 1'-0"

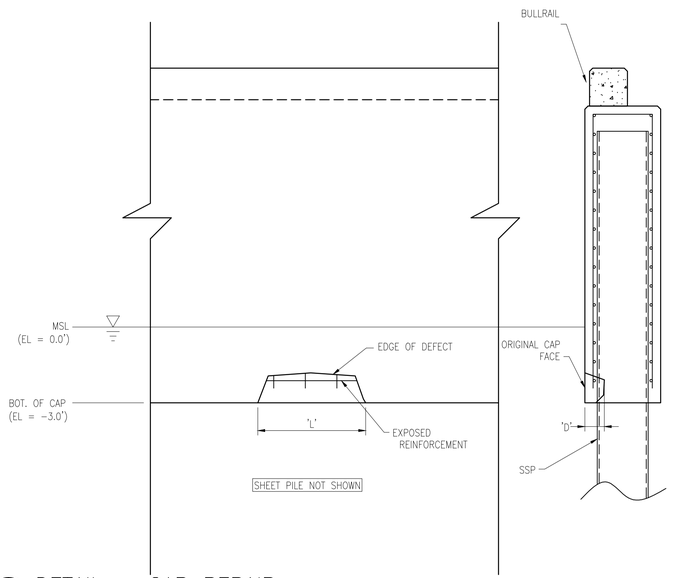


PADEYE NOTE : HOT DIP GALVANIZE AFTER MANUFACTURE

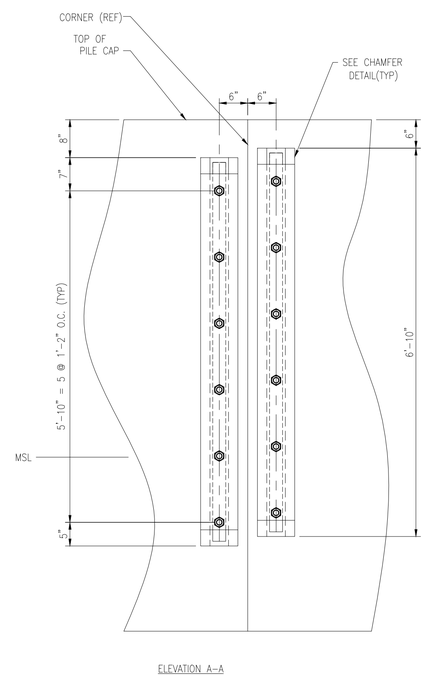
C2 DETAIL – FENDER PADEYE
Scale: 1" = 1'-0"



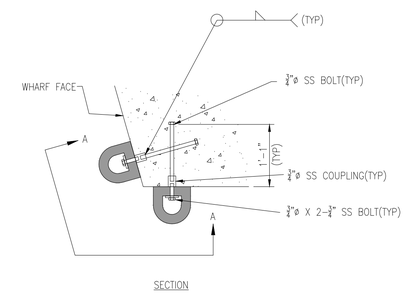
C3 DETAIL – ARCH FENDER
Scale: 1/2" = 1'-0"

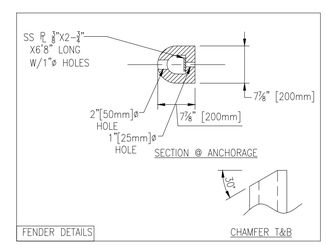


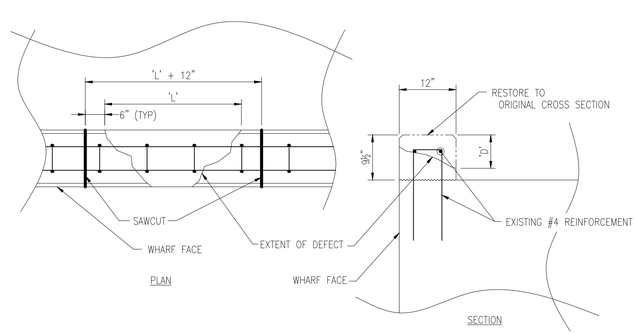
B1 DETAIL – CAP REPAIR
Scale: NONE



A2 DETAIL – CORNER FENDER
Scale: 3/4" = 1'-0"







A1 DETAIL – BULLRAIL REPAIR
Scale: NONE

GENERAL SHEET NOTES

GRAPHIC SCALE

1"=1'-0" 1' 6" 0' 1' 2' 3'
3/4"=1'-0" 1' 6" 0' 1' 2' 3' 4'
1/2"=1'-0" 1' 0' 1' 2' 3' 4' 5'

SUBMITTAL TITLE
SUBMITTAL DATE

SYM	DESCRIPTION	DATE	APPR
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SEAL

A/E INFO

APPROVED
FOR COMMANDER NAVFAC / B.L.T.L.
ACTIVITY
SATISFACTORY TO DATE

DES VF	DRW JM	CHK KW	
PM/DM	E. GALLANT		
BRANCH MANAGER	J. WARD		
CHIEF ENG/ARCH	K. WITTMAN		

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA
WHARF BRAVO STRUCTURAL REPAIRS
DETAILS – FENDERS AND MISC.

SCALE: SCALE
EPROJECT NO.: 1295318
CONSTR. CONTR. NO. N69450-XX-C-XXXX
NAVFAC DRAWING NO. --
SHEET 50 OF 57
S506

DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\CBL\project_files\v_CUBA\vaosta guantanamo bay(h)\n60514\wharf bravo structural repairs-1295318\working technical files\Drawings\S506 DETAILS - FENDERS AND MISC.dwg LAYOUT NAME: S506 DETAILS - FENDERS AND MISC. PLOTTED: Monday, April 04, 2016 - 6:03pm USER: john.d.mccoy

ABBREVIATIONS LEGEND

SCALE: NTS

A
- A – AMBERE
- AB – ANCHOR BOLT
- AC – ALTERNATING CURRENT
- ACT – ABOVE COUNTER TOP
- ADA – AMERICANS W/ DISABILITIES ACT
- ADMIN – ADMINISTRATION
- AF – AMP FRAME, AMP FUSE
- AFF – ABOVE FINISH FLOOR
- AGU – AUTOMATIC GAIN CONTROL
- AHU – AIR HANDLING UNIT
- ALT – ALTERNATE
- ALM – ALARM
- ALUM – ALUMINUM
- ANN – ANNUNCIATOR
- ANSI – AMERICAN NATIONAL STANARDS INSTITUTE
- APPROX – APPROXIMATE
- ASTM – AMERICAN SOCIETY FOR TESTING AND MATERIALS
- AT – AMP TRIP OR AMP TAP
- ATC – AUTOMATIC TEMP. CONTROL
- ATS – AUTOMATIC TRANSFER SWITCH
- AUTO – AUTOMATIC
- AUX – AUXILIARY
- AWG – AMERICAN WIRE GAGE

B
- BLDG – BUILDING
- BLW – BELOW
- BM – BEAM
- BMS – BUILDING MANAGEMENT SYSTEM
- BRG – BEARING

C
- C – CONDUIT
- CAB – CABINET
- CAP – CAPACITY
- CATV – COMMUNITY ANTENNA TELEVISION SYSTEM
- CB – CIRCUIT BREAKER
- CCTV – CLOSED CIRCUIT TELEVISION
- CD – CANDELLA
- CEF – CEILING EXHAUST FAN
- CKT – CIRCUIT
- CL – CENTER LINE
- CL – CLASS
- CLF – CURRENT LIMITING FUSE
- CLG – CEILING
- CLR – CLEAR
- CMU – CONCRETE MASONRY UNIT
- COL – COLUMN
- CONSTR – CONSTRUCTION
- CORR – CORRIDOR
- CS – CONTROL SWITCH
- CT – CURRENT TRANSFORMER
- CTR – CENTER
- CU – COPPER
- CUH – CABINET UNIT HEATER

D
- DC – DIRECT CURRENT
- DEMO – DEMOLITION
- DEPT – DEPARTMENT
- DET – DETECTOR
- DIA – DIAMETER
- DIFF – DIFFUSER
- DIM – DIMENSION
- DIST PNL – DISTRIBUTION PANEL
- DIV – DIVISION
- DN – DOWN
- DPDT – DOUBLE POLE DOUBLE THROW
- DPS – DEPARTMENT OF PUBLIC SAFETY
- DR – DOOR

E
- EA – EACH
- EC – ELECTRICAL CONTRACTOR
- EF – EXHAUST FAN
- EL – ELEVATION
- ELEC – ELECTRIC
- ELEV – ELEVATOR
- ELU – EMERGENCY LIGHTING UNIT
- EM – EMERGENCY
- EMT – ELECTRICAL METALIC TUBING
- ENCL – ENCLOSURE
- EOL – END OF LINE
- EPO – EMERGENCY POWER OFF
- EPRF – EXPLOSION PROOF
- EQ – EQUAL
- EQUIP – EQUIPMENT
- EX – EXISTING
- EXT – EXTERIOR

F
- FCU – FAN COIL UNIT
- FDR – FEEDER
- FDTN – FOUNDATION
- FHP – FULL HEIGHT PARTITION
- FLL – FLOW LINE
- FLR – FLOOR
- FLEX – FLEXIBLE
- FLG – FLANGE
- FLUOR – FLUORESCENT
- FO – FIBER OPTIC
- FP – FIREPROOF
- FRMG – FRAMING
- FS – FUSIBLE SWITCH
- FT – FOOT (or) FEET
- FUT – FUTURE

G
- GA – GUAGE
- GALV – GALVANIZED
- GC – GENERAL CONTRACTOR
- GEN – GENERATOR
- GFI – GROUND FAULT INTERRUPTER
- GRD – GROUND
- GWB – GYPSUM WALL BOARD

H
- HC – HEATING CONTRACTOR
- HDCP – HANDICAP
- HDR – HEADER
- HDW – HARDWARE
- HID – HIGH INTENSITY DISCHARGE
- HORIZ – HORIZONTAL
- HP – HORSEPOWER
- HPS – HIGH PRESSURE SODIUM
- HUH – HORIZONTAL UNIT HEATER
- HVAC – HEATING, VENTILATING, AND AIR CONDITIONING
- HW – HOT WATER
- HZ – FREQUENCY IN CYCLES PER SECOND

I
- IC – INTERCOMMUNICATION
- ID – INSIDE DIAMETER
- IDS – INTRUSTION DETECTION SYSTEM
- IMS – INFORMATION MANAGEMENT SYSTEM
- INSUL – INSULATION
- INT – INTERIOR

J
- JB – JUNCTION BOX

K
- KCMIL – THOUSAND CIRCULAR MILS
- KO – KNOCK OUT
- KV – KILOVOLT
- KVA – KILOVOLT AMPERES
- KVAR – KILOVAR
- KW – KILOWATT
- KWH – KILOWATT HOURS

L
- LAV – LAVATORY
- LAN – LOCAL AREA NETWORK
- LCD – LINEAR CEILING DIFFUSER
- LIN – LINEAR
- LOC – LOCATION
- LTG – LIGHTING
- LVR – LOUVER

M
- MAN – MANUAL
- MATL – MATERIAL
- MAX – MAXIMUM
- MC – MECHANICAL CONTRACTOR METAL CLAD CABLE
- MCC – MOTOR CONTROL CENTER
- MCB – MAIN CIRCUIT BREAKER
- MCM – THOUSAND CIRCULAR MILS
- MDP – MAIN DISTRIBUTION PANEL
- MDS – MAIN DISTRIBUTION SWITCHBOARD
- MECH – MECHANICAL
- MFR – MANUFACTURER
- MIN – MINIMUM
- MISC – MISCELLANEOUS
- MLO – MAIN LUGS ONLY
- MOD – MOTOR OPERATED DAMPER
- MSB – MAIN SWITCH BOARD
- MSG – MAIN SWITCH GEAR
- MTD – MOUNTED

N
- NA – NOT APPLICABLE
- NAC – NOTIFICATION APPLIANCE CIRCUIT EXTENDER
- NDU – NETWORK DISPLAY UNIT
- NE – NORMAL EMERGENCY
- NEC – NATIONAL ELECTRICAL CODE
- NEMA – NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
- NEUT – NEUTRAL
- NF – NON FUSED
- NFS – NON FUSED SWITCH
- NIC – NOT IN CONTRACT
- NO – NUMBER
- NPS – NATIONAL PIPE THREAD
- NPU – NETWORK PROCESSING UNIT
- NTS – NOT TO SCALE

O
- OC – ON CENTER
- OD – OUTSIDE DIAMETER
- OH – OVERHEAD DOOR

P
- PAP – PRE ACTION PANEL
- PB – PULL BOX
- PC – PLUMBING CONTRACTOR
- PL – PILOT LIGHT
- PNL – PANELBOARD
- PP – POWER PANEL
- PR – PAIR
- PRV – POWER ROOF VENTILATOR
- PRESS – PRESSURE
- PVC – POLYVINYL CHLORIDE

R
- R – RELAY
- REC – RECESSED
- RECP – RECEPTACLE
- REQD – REQUIRED
- REV – REVISION
- RGS – RIGID GALVANIZED STEEL
- RTU – ROOF TOP UNIT

S
- SAPF – SPECIAL ACCESS PROGRAM FACILITY
- SCHED – SCHEDULE
- SCC – STATUS COMMAND CENTER
- SCIF – SENSITIVE COMPARTMENTED INFORMATION FACILITY
- SDMPR – SMOKE DAMPER
- SEC – SECONDARY
- SECT – SECTION
- SF – SQUARE FOOT
- SIM – SIMILAR
- SLC – SIGNAL LINE CIRCUIT
- SMK – SMOKE
- SMS – SECURITY MANAGEMENT SYSTEM
- SMR – SURFACE MOUNTED RACEWAY
- SP – STANDPIPE
- SPECS – SPECIFICATIONS
- ST – SHUNT STRIP
- STD – STANDARD
- STR – STARTER
- SUPV – SUPERVISORY
- SUSP – SUSPEND
- SW – SWITCH
- SWBD – SWITCHBOARD
- SWGR – SWITCHGEAR

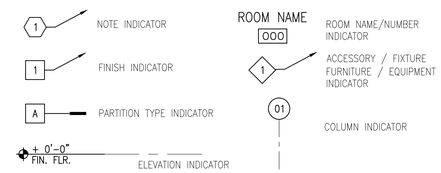
T
- T – TREAD
- TBD – TO BE DETERMINED
- TEL – TELEPHONE
- TEMP – TEMPORARY
- TERM – TERMINAL
- TV – TELEVISION
- TP – TWISTED PAIR
- TSP – TYPICAL SHEILDED PAIR
- TYP – TYPICAL

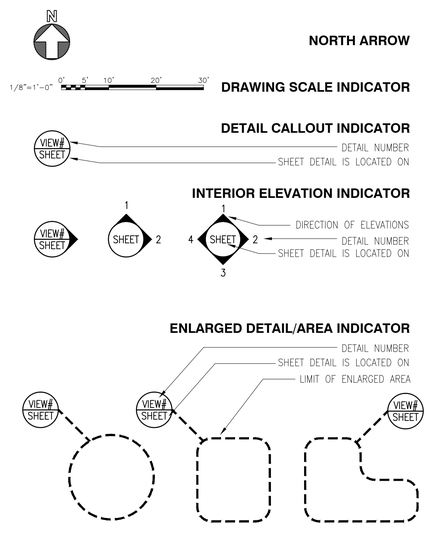
U
- UFC – UNIFORM FACILITIES CRITERIA
- UG – UNDERGROUND
- UHF – ULTRA HIGH FREQUENCY
- UL – UNDERWRITERS LABRATORY
- UNO – UNLESS NOTED OTHERWISE

W
- W – WIRE
- W/ – WITH
- W/O – WITHOUT
- WH – WALL HYDRANT
- WP – WATERPROOF
- XFMR – TRANSFORMER
- XP – EXPLOSION PROOF

SYMBOLS LEGEND

SCALE: 1/8" = 1'-0"





LIGHTING FIXTURE SCHEDULE

FIXTURE SYMBOL	STYLE NO. & TYPE	NUMBER AND TYPE OF LAMPS	VOLTAGE	MOUNTING	NOTES
A	NL-48	LED	120/208	WALL MOUNTED	1, 2, 3, 4, 7
B	NL-48	LED	120/208	WALL MOUNTED	1, 2, 3, 5, 7
C	NL-48	LED	120/208	WALL MOUNTED	1, 2, 3, 6, 7

LIGHTING SCHEDULE NOTES

1. FIXTURES SHALL BE WET-LISTED
2. FIXTURES SHALL HAVE MULTI-TAP BALLAST
3. MOUNT FIXTURES USING EXISTING LIGHT FIXTURE BRACKETS
4. FIXTURE SHALL BE YELLOW
5. FIXTURE SHALL BE BLUE
6. FIXTURE SHALL BE WHITE
7. 2 #10, #10 GROUND IN 1" CONDUIT

ELECTRICAL SYMBOLS LEGEND

SCALE: 1/8" = 1'-0"

TELEPHONE AND DATA

- DOOR BUZZER
- CAMERA
- CLOCK
- MOTION DETECTOR – WALL MTD
- MOTION DETECTOR – CLG MTD
- MICROPHONE JACK – WALL MTD
- MICROPHONE JACK – FLR MTD
- DOOR HOLD
- DOOR CONTACT
- KEYCARD
- VOICE & DATA – CLG MTD
- VOICE & DATA – FLR MTD
- VOICE & DATA – WALL MTD
- INTERCOM CALL STATION
- SPEAKER – CLG MTD
- SPEAKER – WALL MTD
- CATV – WALL MTD
- CATV – CLG MTD
- CATV – FLR MTD
- TELEPHONE DATA BACKBOARD
- CABLE TRAY

POWER

- DUPLEX RECEPTACLE – CLG MTD
- QUAD RECEPTACLE – CLG MTD
- DUPLEX GFCI RECEPTACLE CLG MTD
- QUAD GFCI RECEPTACLE CLG MTD
- WP DUPLEX GFCI WATERPROOF RECEPTACLE – CLG MTD
- WP QUAD GFCI WATERPROOF RECEPTACLE – CLG MTD
- RECEPTACLE – FLR MTD
- QUAD RECEPTACLE – FLR MTD
- DUPLEX GFCI RECEPTACLE FLR MTD
- QUAD GFCI RECEPTACLE FLR MTD
- WP DUPLEX GFCI WATERPROOF RECEPTACLE – FLR MTD
- WP QUAD GFCI WATERPROOF RECEPTACLE – FLR MTD
- RECEPTACLE – WALL MTD
- QUAD RECEPTACLE – WALL MTD
- DUPLEX GFCI RECEPTACLE WALL MTD
- QUAD GFCI RECEPTACLE WALL MTD
- WP DUPLEX GFCI WATERPROOF RECEPTACLE – WALL MTD
- WP QUAD GFCI WATERPROOF RECEPTACLE – WALL MTD
- C RECEPTACLE – CLOCK
- PUSH BUTTON
- J JUNCTION BOX – FLR MTD
- J JUNCTION BOX – WALL MTD
- J JUNCTION BOX – CLG MTD
- MOTOR
- DISCONNECT SWITCH
- MOTOR STARTER
- PANELBOARD 208Y/120V
- PANELBOARD 480Y/277V
- BACKBOARD
- WIREMOLD
- T TRANSFORMER
- CROSS HATCHING REPRESENTS GROUND, NEUTRAL AND HOT RESPECTIVELY, ARROW REPRESENTS HOME RUN
- CONDUIT CONCEALED IN WALL OR ABOVE CEILING
- CONDUIT CONCEALED IN SLAB–IN GROUND OR UNDERFLOOR
- CONDUIT EXPOSED
- CONDUIT UP/DOWN
- CONNECTION TO GROUND ROD

LIGHTING

- LIGHT – WALL MTD
- LIGHT – WALL MTD – EMERGENCY
- OCCUPANCY SENSOR – WALL MTD
- OCCUPANCY SENSOR – CLG MTD
- PHOTOCEL
- DOWNLIGHT – SMALL
- DOWNLIGHT – SMALL – EMERGENCY
- DOWNLIGHT – LARGE
- DOWNLIGHT – LARGE – EMERGENCY
- POLE LIGHT
- POLE LIGHT – EMERGENCY
- EXIT SIGN – WALL MTD – DARKENED SECTION(S) OF SYMBOLS INDICATE FACES. ARROWS INDICATE DIRECTIONAL CHEVRONS
- EXIT SIGN – CLG MTD – DARKENED SECTION(S) OF SYMBOLS INDICATE FACES. ARROWS INDICATE DIRECTIONAL CHEVRONS
- EMERGENCY LIGHT – TWIN HEAD
- EXIT SIGN – CLG MTD – DARKENED SECTION(S) OF SYMBOLS INDICATE FACES. ARROWS INDICATE DIRECTIONAL CHEVRONS
- CEILING MTD FAN
- $ LIGHT SWITCH – SINGLE POLE
- $2 LIGHT SWITCH – 2 WAY
- $3 LIGHT SWITCH – 3 WAY
- $4 LIGHT SWITCH – 4 WAY
- $D LIGHT SWITCH – DIMMER
- $D3 LIGHT SWITCH – 3 WAY DIMMER
- $D4 LIGHT SWITCH – 4 WAY DIMMER
- $K LIGHT SWITCH – KEYED
- $P LIGHT SWITCH – PILOT LIGHT
- $OS LIGHT SWITCH – OCCUPANCY SENSOR
- TRACK LIGHT HEAD
- TRACK LIGHT HEAD – EMERGENCY
- TRACK LIGHT
- TRACK LIGHT – EMERGENCY
- LIGHT – 2X4 FLUORESCENT
- LIGHT – 2X4 FLUORESCENT EMERGENCY
- LIGHT – 2X2 FLUORESCENT
- LIGHT – 2X2 FLUORESCENT EMERGENCY
- LIGHT – 1X4 FLUORESCENT
- LIGHT – 1X4 FLUORESCENT EMERGENCY
- LIGHT – 4' STRIP FLUORESCENT
- LIGHT – 4' STRIP FLUORESCENT EMERGENCY
- LIGHT – 8' STRIP FLUORESCENT
- LIGHT – 8' STRIP FLUORESCENT EMERGENCY
- LIGHT – UNDERCABINET FLUORESCENT
- LIGHT – UNDERCABINET FLUORESCENT EMERGENCY

SECURITY ALARM

- VTC SECURITY ACCESS CAMERA SUBSCRIPT VTC = VIDEO TELE-CONFERENCE
- SECURITY VOLUMETRIC SENSOR
- SECURITY ACCESS BELL
- SECURITY ACCESS BUZZER
- SECURITY ACCESS BUZZER COMBINATION BELL
- SECURITY ACCESS BI DIRECTIONAL SPEAKER
- SECURITY ACCESS CARD READER
- CU SECURITY ACCESS CONTROL UNIT
- IC SECURITY ACCESS INTERCOM STATION
- AP SECURITY ACCESS ANNUNCIATOR PANEL
- SECURITY ACCESS DOOR POSITION
- KP KEY PAD
- MD MOTION DETECTOR
- ES ELECTRIC STRIKE

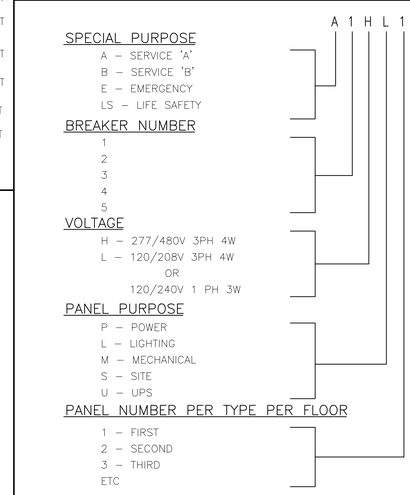
ELECTRICAL GENERAL NOTES

SCALE: NTS

1. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70), UFC 1-200-01 GENERAL BUILDING REQUIREMENTS, AND ALL LOCAL AND STATE CODES.
2. ALL MATERIAL SHALL BE NEW AND SHALL CONFORM TO THE STANDARDS OF THE UNDERWRITER'S LABORATORIES (UL) INC., AND THE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA).
3. IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS THAT A COMPLETE AND WORKABLE ELECTRICAL INSTALLATION BE PROVIDED FOR ALL THE EQUIPMENT DESCRIBED OR SHOWN AS BEING IN THIS CONTRACT.
4. FURNISH ALL LABOR AND TOOLS NECESSARY, AND FURNISH AND INSTALL ALL MATERIALS AND EQUIPMENT IN A FASHION COMPLYING WITH ALL APPLICABLE CODES, UFC'S AND AUTHORITY HAVING JURISDICTION REQUIREMENTS, INCLUDING ITEMS REQUIRED BUT NOT NECESSARILY SHOWN SUCH AS COUPLINGS, BRACKETS, CLAMPS, BOXES, CONNECTORS AND HARDWARE.
5. PROVIDE PULL AND JUNCTION BOXES AS REQUIRED AND SIZED PER NEC.
6. CONDUCTORS SHALL BE COPPER, INSULATION RATED AT NOT LESS THAN 600 VOLTS. MINIMUM SIZE SHALL BE #12 AWG UNLESS OTHERWISE NOTED ON THE DRAWINGS. ALL WIRE #8 AWG AND LARGER SHALL BE STRANDED. ALL CONDUCTORS #10 AND SMALLER SHALL BE SOLID, UNLESS OTHERWISE NOTED.
7. BRANCH CIRCUIT CONDUCTORS SHALL BE TYPE AS INDICATED.
8. PROVIDE A TYPED DIRECTORY IN ALL MODIFIED PANELBOARDS CLEARLY DESCRIBING THE LOCATION OF AND TYPE OF LOAD BEING SERVED FOR ALL CIRCUITS.
9. PROVIDE ENGRAVED PHENOLIC NAMEPLATES FOR ALL ELECTRICAL EQUIPMENT; FOR EXAMPLE, PANELBOARDS, DISCONNECT SWITCHES, ETC.
10. ALL TERMINALS, SPLICING CONNECTORS, LUGS, ETC. SHALL BE IDENTIFIED FOR USE WITH THE MATERIAL (CU/AL) OF THE CONDUCTOR AND SHALL BE PROPERLY INSTALLED.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL ELECTRICAL EQUIPMENT FROM FOREIGN MATERIAL DURING CONSTRUCTION.
12. VERIFY EXACT LOCATIONS OF ALL EQUIPMENT BEFORE ROUGHING IN.
13. ALL NEW CONDUITS RUN IN EXISTING BUILDING SHALL BE CONCEALED WHERE POSSIBLE. EXACT ROUTING OF CONDUITS IF EXPOSED SHALL BE APPROVED BY CONTRACTING OFFICER.
14. THIS SCHEDULE IS A STANDARD SCHEDULE. CERTAIN SYMBOLS & ABBREVIATIONS INDICATED ON THIS SCHEDULE MAY NOT APPEAR ON THE DRAWINGS.
15. BEFORE SUBMITTING THE BID PROPOSAL, VISIT THE JOB SITE AND BECOME FULLY ACQUAINTED WITH THE JOB CONDITIONS. VERIFY SERVICE REQUIREMENTS, INCLUDING ALL NECESSARY PULLBOXES, SIZE AND NUMBER OF CONDUITS AND CONDUCTORS, PANELS, SWITCHBOARDS, DISCONNECT SWITCHES, CABLES, ETC., WHETHER SHOWN ON DRAWINGS OR NOT, BUT REQUIRED FOR PROVIDING A COMPLETE AND OPERABLE ELECTRICAL SYSTEM WITHOUT ADDITIONAL COST TO THE OWNER.
16. ALL EXTERIOR ENCLOSED DISCONNECT SWITCHES AND CIRCUIT BREAKERS SHALL BE NEMA 4X, UNLESS OTHERWISE NOTED.
17. ALL INTERIOR ENCLOSED DISCONNECT SWITCHES AND CIRCUIT BREAKERS SHALL BE NEMA 1, UNLESS OTHERWISE NOTED.
18. ALL MEDIUM VOLTAGE CABLES SHALL BE INSTALLED CONTINUOUS FROM TERMINATION POINT TO TERMINATION POINT WITHOUT SPLICES IN MANHOLES OR JUNCTION POINTS.
19. EC TO PERFORM LOCK-OUT & TAG-OUT PROCEDURES PRIOR TO DEMOLITION OF LIGHTING CIRCUITS AND ELECTRICAL IGLOOS. FIELD VERIFY EXACT LOCATIONS IN FIELD OF CIRCUIT BREAKERS AND DISCONNECTS FOR ALL CIRCUITS SHOWN ON DRAWINGS.
20. EC TO REMOVE AND STORE ALL LIGHT FIXTURE BRACKETS, COMMUNICATION CABINETS, GROUNDING STATION WIRING AND CLAMPS, AND ELECTRICAL IGLOOS DURING DEMOLITION. EC TO INSTALL SAME DEVICES AND EQUIPMENT STORED AFTER CONSTRUCTION IS COMPLETE.

PANELBOARD NUMBERING

SCALE: NTS



SYM	DESCRIPTION	DATE	APPR
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NAVFAC

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE ----

DES CRD DRW CRD CHK RF

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD J. WARD

CHIEF ENG/ARCH (CORE) R. FLORES

---- XX

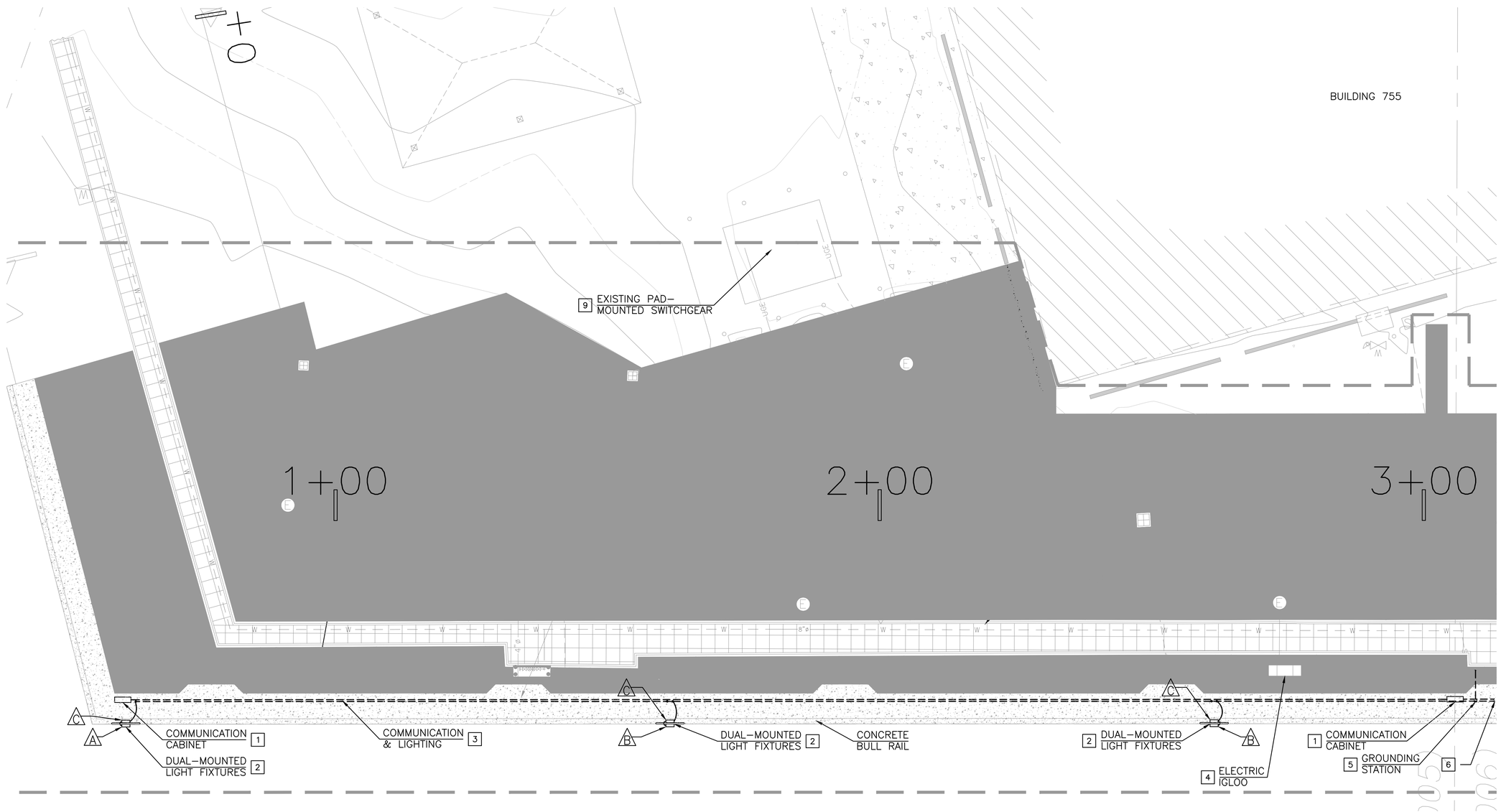
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVSTA GUANTANAMO BAY
NAVAL AIR STATION JACKSONVILLE
GUANTANAMO BAY, CUBA
WHARF BRAVO STRUCTURAL REPAIRS
GENERAL NOTES SYMBOLS AND LEGENDS

SCALE: SCALE
EPROJECT NO.: 1295318
CONSTR. CONTR. NO. N69450-XX-C-XXXX
NAVFAC DRAWING NO. ----
SHEET 053 OF 57
E001

DRAWFORM REVISION: 7 AUGUST 2009

FILE NAME: P:\CBL\project_files\v_CUBA\navsta guantanamo bay\h\h60514\wharf bravo structural repairs-1295318\working technical files\Drawings\E001 GENERAL NOTES SYMBOLS AND LEGENDS.dwg LAYOUT NAME: E001 GENERAL NOTES SYMBOLS AND LEGENDS PLOTTED: Monday, April 04, 2016 – 3:58pm USER: david.c.walter

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE



1 ELECTRICAL PLAN
Scale: 1" = 10'

CONSTRUCTION NOTES:

1. ELECTRICAL CONTRACTOR (EC) TO INSTALL EXISTING COMMUNICATION CABINET IN NEW LOCATION NEAR CURB. EC SHALL CONNECT 2" CONDUIT STUB-UPS TO CABINET USING PVC-COATED FLEXIBLE METAL CONDUIT. EC SHALL INSTALL NEW COMMUNICATION CABLE IN 2" CONDUIT AND CONNECT TO ALL COMMUNICATION CABINETS INSTALLED ALONG THE WHARF CURB. EC SHALL TEST AND VERIFY COMMUNICATION SYSTEM IS FUNCTIONAL AND WORKING CORRECTLY WHEN INSTALLATION IS COMPLETE.
2. EC SHALL INSTALL DUAL-MOUNTED LED LIGHT FIXTURES AT NEW CURB LOCATIONS ALONG THE WHARF USING EXISTING BRACKET HARDWARE. EC SHALL CONNECT TO NEW NEMA 4X JUNCTION BOXES WITH SCREW-TYPE COVERS, USING PVC-COATED FLEXIBLE METAL CONDUIT. EC SHALL CONNECT TO EXISTING LIGHTING CIRCUITS AND TEST NEW LIGHT FIXTURES TO VERIFY NEW INSTALLATION IS WORKING CORRECTLY WHEN INSTALLATION IS COMPLETE.
3. EC SHALL INSTALL (1) 1" PVC SCHEDULE 40 CONDUIT AND (1) 2" PVC SCHEDULE 40 CONDUIT AT MINIMUM 18 INCHES BELOW NEW CONCRETE SLAB FOR LIGHTING CIRCUITS AND COMMUNICATION CABLE. COORDINATE CONDUIT RUNS WITH STRUCTURAL CURB, BULL-RAIL AND MOORING FITTINGS TO AVOID CONFLICTS WITH INSTALLATION. IN THE EVENT OF CONFLICT, INSTALL CONDUITS BELOW STRUCTURAL COMPONENTS. SEE STRUCTURAL DRAWINGS FOR CAP AND CURB DETAILS.
4. EC SHALL CONNECT EXISTING IGLOO TO EXISTING PAD-MOUNTED LOCATION WHEN CONSTRUCTION IS COMPLETE. EC SHALL CONNECT RECEPTACLES AND COMPONENTS WITHIN IGLOO TO EXISTING CIRCUITS AND CABLING AND TEST TO VERIFY ALL COMPONENTS WITHIN IGLOO ARE WORKING PROPERLY WHEN INSTALLATION IS COMPLETE.
5. EC SHALL INSTALL EXISTING GROUNDING STATION AT NEW LOCATION NEXT TO COMMUNICATION CABINET. EC SHALL CONNECT GROUNDING STATION TO EXISTING 1 INCH RIGID METAL CONDUIT IN CONCRETE SLAB. EC SHALL INSTALL NEW #4/0 COPPER FROM GROUNDING STATION TO VAULT AND CONNECT TO EXISTING GROUNDING CONNECTION USING EXOTHERMIC WELD. EC SHALL BOND ALL PIPING WITHIN VAULT USING #4/0 COPPER CONDUCTOR AND APPROVED PIPE CLAMPS. EC SHALL CONNECT GROUNDING CONDUCTOR TO STRUCTURAL STEEL USING EXOTHERMIC WELD. EC SHALL TEST ALL GROUNDING FOR CONTINUITY AND TO ENSURE GROUNDING RESISTANCE MEETS GROUNDING SPECIFICATIONS.
6. SEE SHEET ES102 FOR CONTINUATION
7. EC SHALL EXTEND 1 " CONDUIT AND CABLES TO EXISTING LIGHTING CIRCUITS BY CONNECTING TO EXISTING JUNCTION BOXES AND CONDUIT ALONG WHARF. EXISTING LIGHTING CIRCUITS ARE FED FROM PANEL LB ON EXTERIOR OF BUILDING 260. ALL CONDUIT SURFACE MOUNTED ON WHARF SHALL BE PVC-COATED RIGID METAL CONDUIT.
8. EC SHALL EXTEND 2" CONDUIT AND COMMUNICATION CABLE ALONG WHARF AND CONNECT TO EXISTING CONDUIT IN SLAB USING NEMA 4X JUNCTION BOX. ALL CONDUIT SURFACE MOUNTED ON WHARF SHALL BE PVC-COATED RIGID METAL CONDUIT.
9. EC SHALL PROVIDE LOCK-OUT AND TAG-OUT PROCEDURES FOR ELECTRICAL IGLOOS DURING CONSTRUCTION. EC SHALL TEST CIRCUIT BREAKERS, CABLING AND IGLOOS AFTER CONSTRUCTION IS COMPLETE TO VERIFY ALL COMPONENTS ARE WORKING PROPERLY WHEN INSTALLATION IS COMPLETE.
10. SEE LIGHTING FIXTURE SCHEDULE ON SHEET E001 FOR FIXTURE TYPES A, B, C. PROVIDE LOW WATTAGE FIXTURES FACING THE WATER. PROVIDE HIGHER WATTAGE FIXTURES FACING THE WHARF FOR VEHICLE AND PEDESTRIAN TRAFFIC. SEE SECTION 26 56 00.00 20 FOR DETAILS.

GRAPHIC SCALE
1"=10' 0' 10' 20' 30' 40' 50'

SYM	DESCRIPTION	DATE	APPR
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NAVFAC

SEAL

A/E INFO

APPROVED
FOR COMMANDER NAVFAC / B.L.T.L.
ACTIVITY

SATISFACTORY TO DATE ----
DES CRD DRW CRD CHK RF
PROJECT MANAGER E. GALLANT
IPT TECH. BRANCH HEAD J. WARD
CHIEF ENG/ARCH (CORE) R. FLORES

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY

NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

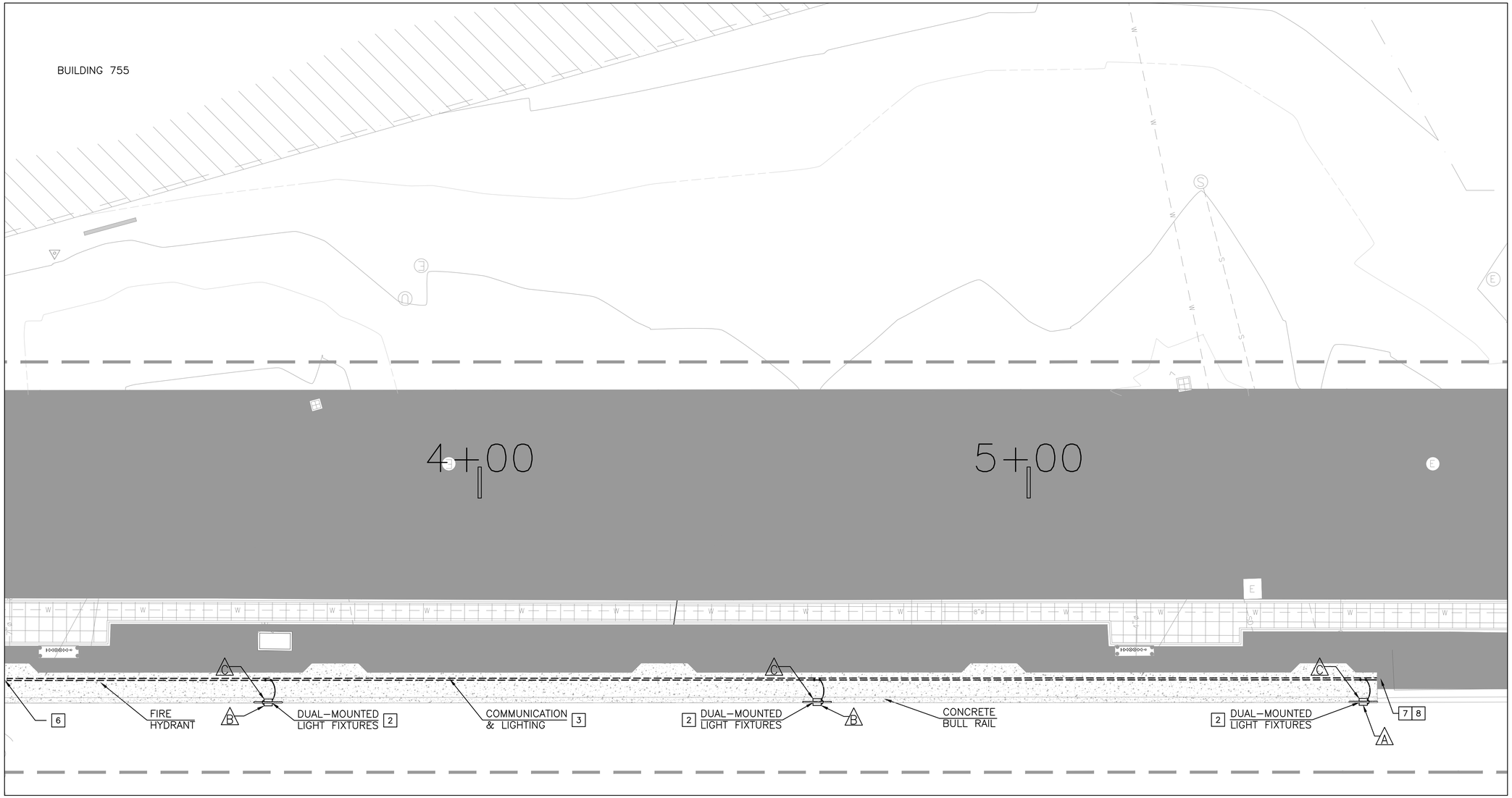
SITE PLAN

SCALE: SCALE
EPROJECT NO.: 1295318
CONSTR. CONTR. NO. N69450-XX-C-XXXX
NAVFAC DRAWING NO. --
SHEET 054 OF 57
ES101

DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\CBL\project_files\J_CUBA\navsta guantanamo bay\hp60514\wharf bravo structural repairs-1295318\working technical files\Drawings\ES101 SITE PLAN.dwg LAYOUT NAME: ES101 SITE PLAN PLOTTED: Monday, April 04, 2016 - 3:58pm USER: david.e.walter



2 ELECTRICAL PLAN

Scale: 1" = 10'

CONSTRUCTION NOTES:

1. ELECTRICAL CONTRACTOR (EC) TO INSTALL EXISTING COMMUNICATION CABINET IN NEW LOCATION NEAR CURB. EC SHALL CONNECT 2" CONDUIT STUB-UPS TO CABINET USING PVC-COATED FLEXIBLE METAL CONDUIT. EC SHALL INSTALL NEW COMMUNICATION CABLE IN 2" CONDUIT AND CONNECT TO ALL COMMUNICATION CABINETS INSTALLED ALONG THE WHARF CURB. EC SHALL TEST AND VERIFY COMMUNICATION SYSTEM IS FUNCTIONAL AND WORKING CORRECTLY WHEN INSTALLATION IS COMPLETE.
2. EC SHALL INSTALL DUAL-MOUNTED LED LIGHT FIXTURES AT NEW CURB LOCATIONS ALONG THE WHARF USING EXISTING BRACKET HARDWARE. EC SHALL CONNECT TO NEW NEMA 4X JUNCTION BOXES WITH SCREW-TYPE COVERS, USING PVC-COATED FLEXIBLE METAL CONDUIT. EC SHALL CONNECT TO EXISTING LIGHTING CIRCUITS AND TEST NEW LIGHT FIXTURES TO VERIFY NEW INSTALLATION IS WORKING CORRECTLY WHEN INSTALLATION IS COMPLETE.
3. EC SHALL INSTALL (1) 1" PVC SCHEDULE 40 CONDUIT AND (1) 2" PVC SCHEDULE 40 CONDUIT AT MINIMUM 18 INCHES BELOW NEW CONCRETE SLAB FOR LIGHTING CIRCUITS AND COMMUNICATION CABLE. COORDINATE CONDUIT RUNS WITH STRUCTURAL CURB, BULL-RAIL AND MOORING FITTINGS TO AVOID CONFLICTS WITH INSTALLATION. IN THE EVENT OF CONFLICT, INSTALL CONDUITS BELOW STRUCTURAL COMPONENTS. SEE STRUCTURAL DRAWINGS FOR CAP AND CURB DETAILS.
4. EC SHALL CONNECT EXISTING IGLOO TO EXISTING PAD-MOUNTED LOCATION WHEN CONSTRUCTION IS COMPLETE. EC SHALL CONNECT RECEPTACLES AND COMPONENTS WITHIN IGLOO TO EXISTING CIRCUITS AND CABLING AND TEST TO VERIFY ALL COMPONENTS WITHIN IGLOO ARE WORKING PROPERLY WHEN INSTALLATION IS COMPLETE.
5. EC SHALL INSTALL EXISTING GROUNDING STATION AT NEW LOCATION NEXT TO COMMUNICATION CABINET. EC SHALL CONNECT GROUNDING STATION TO EXISTING 1 INCH RIGID METAL CONDUIT IN CONCRETE SLAB. EC SHALL INSTALL NEW #4/0 COPPER FROM GROUNDING STATION TO VAULT AND CONNECT TO EXISTING GROUNDING CONNECTION USING EXOTHERMIC WELD. EC SHALL BOND ALL PIPING WITHIN VAULT USING #4/0 COPPER CONDUCTOR AND APPROVED PIPE CLAMPS. EC SHALL CONNECT GROUNDING CONDUCTOR TO STRUCTURAL STEEL USING EXOTHERMIC WELD. EC SHALL TEST ALL GROUNDING FOR CONTINUITY AND TO ENSURE GROUNDING RESISTANCE MEETS GROUNDING SPECIFICATIONS.
6. SEE SHEET ES101 FOR CONTINUATION
7. EC SHALL EXTEND 1 " CONDUIT AND CABLES TO EXISTING LIGHTING CIRCUITS BY CONNECTING TO EXISTING JUNCTION BOXES AND CONDUIT (NOT SHOWN ON THIS SHEET) ALONG WHARF. EXISTING LIGHTING CIRCUITS ARE FED FROM PANEL LB ON EXTERIOR OF BUILDING 260. ALL CONDUIT SURFACE MOUNTED ON WHARF SHALL BE PVC-COATED RIGID METAL CONDUIT.
8. EC SHALL EXTEND 2" CONDUIT AND COMMUNICATION CABLE ALONG WHARF AND CONNECT TO EXISTING CONDUIT IN SLAB (NOT SHOWN ON THIS SHEET) USING NEMA 4X JUNCTION BOX. ALL CONDUIT SURFACE MOUNTED ON WHARF SHALL BE PVC-COATED RIGID METAL CONDUIT.
9. EC SHALL PROVIDE LOCK-OUT AND TAG-OUT PROCEDURES FOR ELECTRICAL IGLOOS DURING CONSTRUCTION. EC SHALL TEST CIRCUIT BREAKERS, CABLING AND IGLOOS TO VERIFY ALL COMPONENTS ARE WORKING PROPERLY WHEN INSTALLATION IS COMPLETE.
10. SEE LIGHTING FIXTURE SCHEDULE ON SHEET E001 FOR FIXTURE TYPES A, B, C. PROVIDE LOW WATTAGE FIXTURES FACING THE WATER. PROVIDE HIGHER WATTAGE FIXTURES FACING THE WHARF FOR VEHICLE AND PEDESTRIAN TRAFFIC. SEE SECTION 26 56 00.00 20 FOR DETAILS.

N

GRAPHIC SCALE

1"=10' 0' 10' 20' 30' 40' 50'

SYM	DESCRIPTION	DATE	APPR
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SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY

SATISFACTORY TO DATE ----

DES CRD DRW CRD CHK RF

PROJECT MANAGER E. GALLANT

IPT TECH. BRANCH HEAD J. WARD

CHIEF ENG/ARCH (CORE) R. FLORES

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
NAVAL AIR STATION JACKSONVILLE
IPT SOUTH ATLANTIC
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

SITE PLAN

SCALE: SCALE

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

NAVFAC DRAWING NO. 15081091

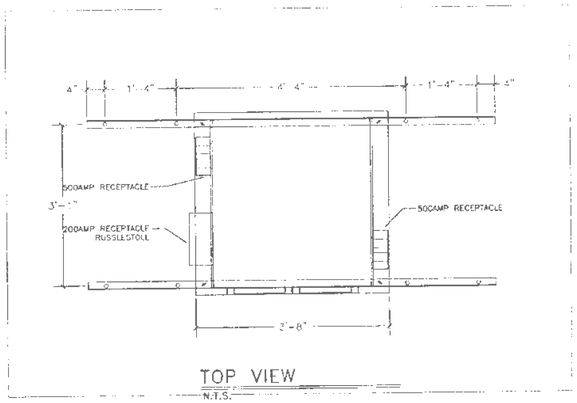
SHEET 055 OF 57

ES102

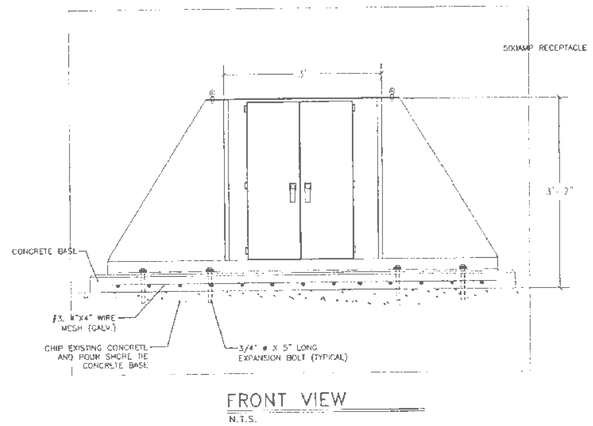
FILE NAME: P:\CBL\project_files\z_CUBA\navsta guantanamo bay\h\r60514\wharf bravo structural repairs-1295318\working technical files\Drawings\ES102 SITE PLAN.dwg LAYOUT NAME: ES102 SITE PLAN PLOTTED: Monday, April 04, 2016 - 3:58pm USER: david.c.walter

DRAWFORM REVISION: 7 AUGUST 2009

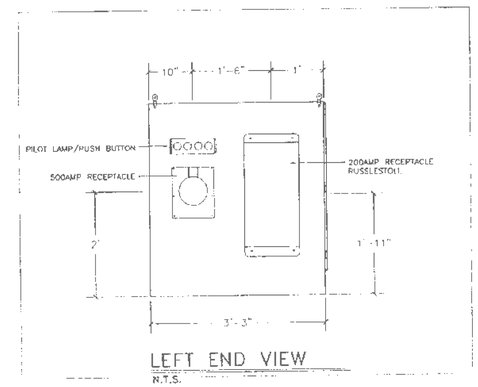
SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE



A ELECTRICAL IGLOO – TOP VIEW
Scale: 1/8" = 1'-0"

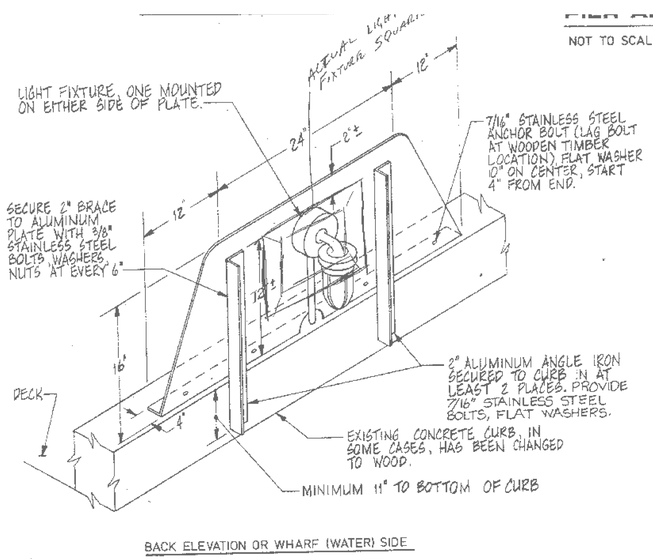


B ELECTRICAL IGLOO – FRONT VIEW
Scale: 1/8" = 1'-0"

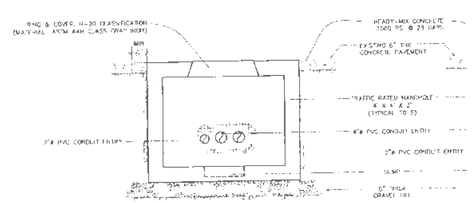


C ELECTRICAL IGLOO – END VIEW
Scale: 1/8" = 1'-0"

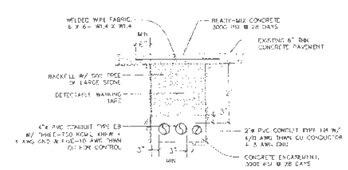
NOT TO SCALE



D LIGHT FIXTURE SUPPORT DETAIL
Scale: 1/8" = 1'-0"



E MANHOLE AND CONDUIT DETAIL
Scale: 1/8" = 1'-0"



F CONDUIT AND DUCTBANK DETAIL
Scale: 1/8" = 1'-0"

GENERAL SHEET NOTES

1. DETAILS SHOWN ARE FROM EXISTING DRAWINGS AND AS BUILDS.
2. ELECTRICAL IGLOO TO BE REMOVED BY ELECTRICAL CONTRACTOR DURING CONSTRUCTION, STORED AND INSTALLED WHEN CONSTRUCTION IS COMPLETE. EC TO COORDINATE INSTALLATION AFTER CONSTRUCTION IS COMPLETE.
3. PRIOR TO DEMOLITION, EC TO PERFORM LOCK–OUT & TAG–OUT PROCEDURES FOR ALL CIRCUITS TO THE ELECTRICAL IGLOO. EC TO PROTECT AND REUSE EXISTING CABLING DURING CONSTRUCTION. CONNECT TO IGLOO AFTER CONSTRUCTION IS COMPLETE. EC TO TEST BREAKER, CABLES AND IGLOO TO VERIFY CIRCUITS AND EQUIPMENT ARE WORKING CORRECTLY.
4. EC TO KEEP LIGHT FIXTURE BRACKETS, COMMUNICATION CABINETS, COMMUNICATION CABLES, GROUNDING STATION WIRING AND CLAMPS, AND ELECTRICAL IGLOO DURING DEMOLITION. EC TO STORE DURING CONSTRUCTION AND REUSE ITEMS DURING INSTALLATION.
5. LIGHT FIXTURE SHOWN IN DETAIL IS NOT THE CURRENT FIXTURE, ONLY SHOWN TO DETAIL FIXTURE SUPPORT. EXISTING SUPPORT TO BE REMOVED, STORED AND REUSED WITH NEW LED STYLE FIXTURE. NEW FIXTURE TO MATCH STYLE, SIZE, VOLTAGE AND COLOR TYPE.
7. ALL EXTERIOR ENCLOSED DISCONNECT SWITCHES AND CIRCUIT BREAKERS SHALL BE NEMA 4X, UNLESS OTHERWISE NOTED.
8. ALL INTERIOR ENCLOSED DISCONNECT SWITCHES AND CIRCUIT BREAKERS SHALL BE NEMA 1, UNLESS OTHERWISE NOTED.

SYM	DESCRIPTION	DATE	APPR
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ACTIVITY ----

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DES CRD DRW CRD CHK RF

PROJECT MANAGER E. GALLANT

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NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST
IPT SOUTH ATLANTIC
NAVAL AIR STATION JACKSONVILLE
NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

ELECTRICAL DETAILS

SCALE: SCALE

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450–XX–C–XXXX

NAVFAC DRAWING NO. 15081092

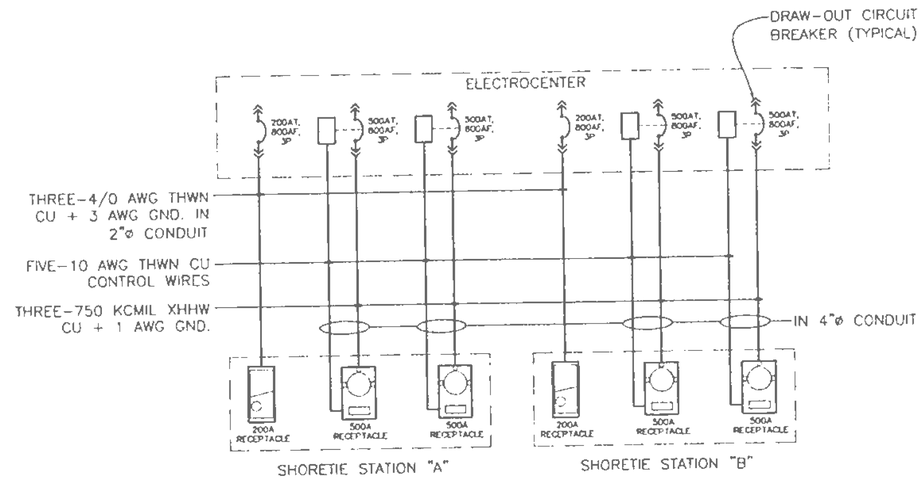
SHEET 056 OF 57

E501

DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\CUBA\project_files\z_CUBA\navsta guantanamo bay\hp60514\wharf bravo structural repairs-1295318\working technical files\Drawings\E501 ELECTRICAL DETAILS.dwg LAYOUT NAME: E501 ELECTRICAL DETAILS PLOTTED: Monday, April 04, 2016 - 3:38pm USER: david.c.walter



A UNDERGROUND FEEDER 1-LINE DIAGRAM

Scale: 1/8" = 1'-0"

PANEL 'LA' SCHEDULE

50A, M.L.O., 208/120 V, 1 PHASE, 3 WIRE, SURFACE MOUNT, SOLID NEUTRAL & GRD BUS, NEMA 3R ENCLOSURE

LOAD SERVED	LOAD (AMPS) A	LOAD (AMPS) B		CKT BKR KAIC	CKT BKR TRIP	WIRE SIZE	CKT NO.	CKT NO.	WIRE SIZE	CKT BKR TRIP	CKT BKR KAIC	LOAD (AMPS) A	LOAD (AMPS) B		LOAD SERVED
OUTBOARD LIGHTS	3			22	20	12	1	2	--	--	--	0			SPACE ONLY
INBOARD LIGHTS		5		22	20	12	3	4	--	--	--		0		SPACE ONLY
	5							6	--	--	--	0			SPACE ONLY
SPARE		0		22	20	--	7	8	--	--	--		0		SPACE ONLY
SPARE	0			--	20	--	9	10	--	--	--	0			SPACE ONLY
		0						12	--	--	--				SPACE ONLY
TOTAL	8	5										0	0		TOTAL

TOTAL CONNECTED AMPS A: 8 B: 5

PROVIDE PANEL WITH 3P, 50A CONTACTOR & SERVICE ENTRANCE RATED. ALL CIRCUIT BREAKERS SHALL BE GFI.

PANEL 'LB' SCHEDULE

50A, M.L.O., 208/120 V, 1 PHASE, 3 WIRE, SURFACE MOUNT, SOLID NEUTRAL & GRD BUS, NEMA 3R ENCLOSURE

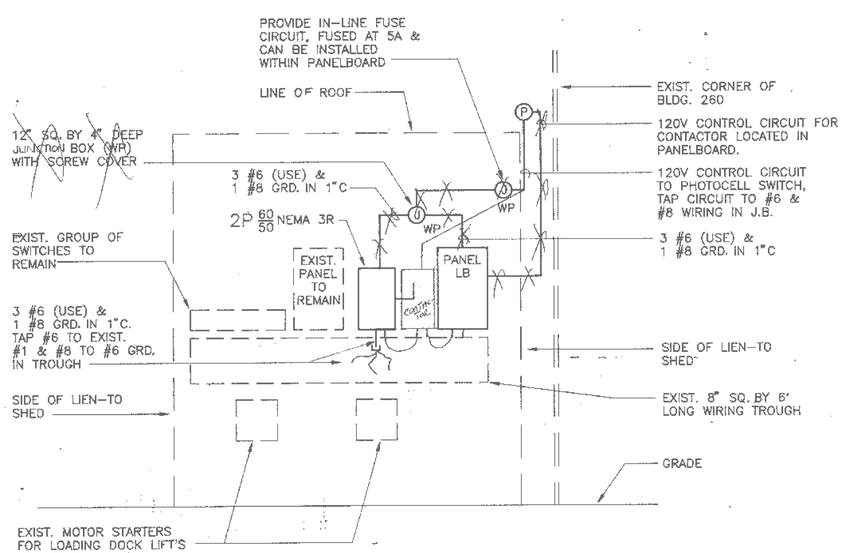
LOAD SERVED	LOAD (AMPS) A	LOAD (AMPS) B		CKT BKR KAIC	CKT BKR TRIP	WIRE SIZE	CKT NO.	CKT NO.	WIRE SIZE	CKT BKR TRIP	CKT BKR KAIC	LOAD (AMPS) A	LOAD (AMPS) B		LOAD SERVED
OUTBOARD LIGHTS - N/E	2			22	20	12	1	2	12	20	22	3.6			INBOARD LIGHTS - N/E
OUTBOARD LIGHTS - S/W		1.5		22	20	12	3						3.6		
SPARE	0			22	20	--	5	6	12	20	22	3			INBOARD LIGHTS - S/W
SPARE		0		22	20	--	7						3		
SPACE ONLY	0			--	--	--	9	10	--	--	--	0			SPACE ONLY
SPACE ONLY		0		--	--	--	10	12	--	--	--		0		SPACE ONLY
TOTAL	2	1.5										6.3	6.3		TOTAL

TOTAL CONNECTED AMPS A: 8.3 B: 8.3

PROVIDE PANEL WITH 3P, 50A CONTACTOR & SERVICE ENTRANCE RATED. ALL CIRCUIT BREAKERS SHALL BE GFI.

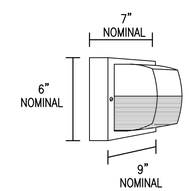
B POWER RISER DIAGRAM

Scale: 1/8" = 1'-0"



C PANEL SCHEDULES

Scale: 1/8" = 1'-0"



LED LUMINAIRE REQUIREMENTS:

1. HOUSING - ONE-PIECE, DIE-CAST ALUMINUM WITH BAKED-ON POLYESTER POWDER COAT FINISH IN BLACK.
2. DIFFUSER - CLEAR PRISMATIC, UV-STABILIZED, INJECTION-MOLDED POLYCARBONATE WITH MINIMUM 1/8" THICKNESS. DIFFUSER SECURED WITH TAMPER-RESISTANT STAINLESS STEEL SCREWS. BLACK HORIZONTAL FRONT EYELID FOR CUTOFF.
3. GASKET - ONE-PIECE, CLOSED-CELL NEOPRENE TO DISCOURAGE MOISTURE, INSECTS AND DEBRIS.
4. BALLAST - CLASS P, HIGH POWER FACTOR (≥.95), PROGRAMMED RAPID START ELECTRONIC TYPE WITH ≤10% TOTAL HARMONIC DISTORTION FOR COMPACT FLUORESCENT LAMPS.
5. LAMPS - LED, WATTAGES BASED ON LIGHT FIXTURE SELECTED. PROVIDE LOW WATTAGE ON WATER SIDE. PROVIDE HIGHER WATTAGE ON SHORE SIDE.
6. CERTIFICATION - UL LISTED AND LABELED FOR WET LOCATIONS.

WALL-MOUNTED LED LIGHT FIXTURE

REVISED:	AUGUST 2004	LIGHTING PLATE:	NL-48

D LED LIGHT FIXTURE

Scale: NOT TO SCALE

GENERAL SHEET NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE NEC AND UFC STANDARDS.
2. UNDERGROUND FEEDER 1-LINE DIAGRAM SHOWN FROM UTILITY AS BUILD DRAWINGS. EXISTING PAD-MOUNTED SWITCHGEAR NORTH OF BUILDING 755 IS LOCATION FOR IGLOO BREAKERS. EC TO VERIFY CIRCUITS, SIZES AND BREAKER LOCATIONS FOR IGLOO.
4. POWER RISER DIAGRAM SHOWS LOCATION OF DISCONNECT AND PANEL LB ON CORNER OF BUILDING 260 AS LOCATION FOR CIRCUIT BREAKERS FOR WHARF LIGHT FIXTURES. EC TO VERIFY AND PERFORM LOCK-OUT & TAG-OUT WHEN WORKING ON CIRCUITS.
3. EC TO PERFORM SITE VISIT AND FIELD VERIFY ALL SITE CONDITIONS INCLUDING ALL SERVICE REQUIREMENTS, PULLBOXES, SIZE AND NUMBER OF CONDUITS AND CONDUCTORS, PANELS, SWITCHBOARDS, DISCONNECT SWITCHES, CABLES, ETC., WHETHER SHOWN ON DRAWINGS OR NOT, BUT REQUIRED FOR PROVIDING A COMPLETE AND OPERABLE ELECTRICAL SYSTEM WITHOUT ADDITIONAL COST TO THE OWNER.
5. EC TO KEEP LIGHT FIXTURE BRACKETS, COMMUNICATION CABINETS, COMMUNICATION CABLES, GROUNDING STATION WIRING AND CLAMPS, AND ELECTRICAL IGLOO DURING DEMOLITION. EC TO STORE DURING CONSTRUCTION AND REUSE ITEMS DURING INSTALLATION.
7. ALL EXTERIOR ENCLOSED DISCONNECT SWITCHES AND CIRCUIT BREAKERS SHALL BE NEMA 4X, UNLESS OTHERWISE NOTED.
8. ALL INTERIOR ENCLOSED DISCONNECT SWITCHES AND CIRCUIT BREAKERS SHALL BE NEMA 1, UNLESS OTHERWISE NOTED.

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DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
IPT SOUTH ATLANTIC
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NAVSTA GUANTANAMO BAY
GUANTANAMO BAY, CUBA

WHARF BRAVO STRUCTURAL REPAIRS

ELECTRICAL DIAGRAMS & RISERS

SCALE: SCALE

EPROJECT NO.: 1295318

CONSTR. CONTR. NO. N69450-XX-C-XXXX

NAVFAC DRAWING NO. ---

SHEET 057 OF 57

E600

DRAWFORM REVISION: 7 AUGUST 2009

SHEET FORMAT IS 22" X 34". IF PRINTED SHEET IS NOT 22" X 34", THEN IT IS NOT TO SCALE

FILE NAME: P:\CBL\project_files\2_CUBA\navsta guantanamo bay\hf60514\whart bravo structural repairs-1295318\working technical files\Drawings\E600 ELECTRICAL DIAGRAMS & RISERS.dwg LAYOUT NAME: E600 ELECTRICAL DIAGRAMS & RISERS PLOTTED: Monday, April 04, 2016 - 3:59pm USER: david.c.walter