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C

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A

DATE

DESCRIPTION

SW



DES. DRW. CHK.

APPROVED

FOR COMMANDER NAVFAC

ACTIVITY

DAVID OKADA

SATISFACTORY TO DATE 06/12/2015

DES. JBE DRW. JBE REV. MDL

PM/DM JBE

FIRE PROTECTION JL

BRANCH MANAGER CHM

CHIEF ENG/ARCH

NAVAL FACILITIES ENGINEERING COMMAND

PEARL HARBOR, HAWAII

HALAWA, HAWAII

NAVFAC HAWAII

CAMP SMITH

R1-1439 CONSTRUCT EXTERIOR STAIRWAY

BAUER ROADWAY

PROFILES

SCALE: AS NOTED

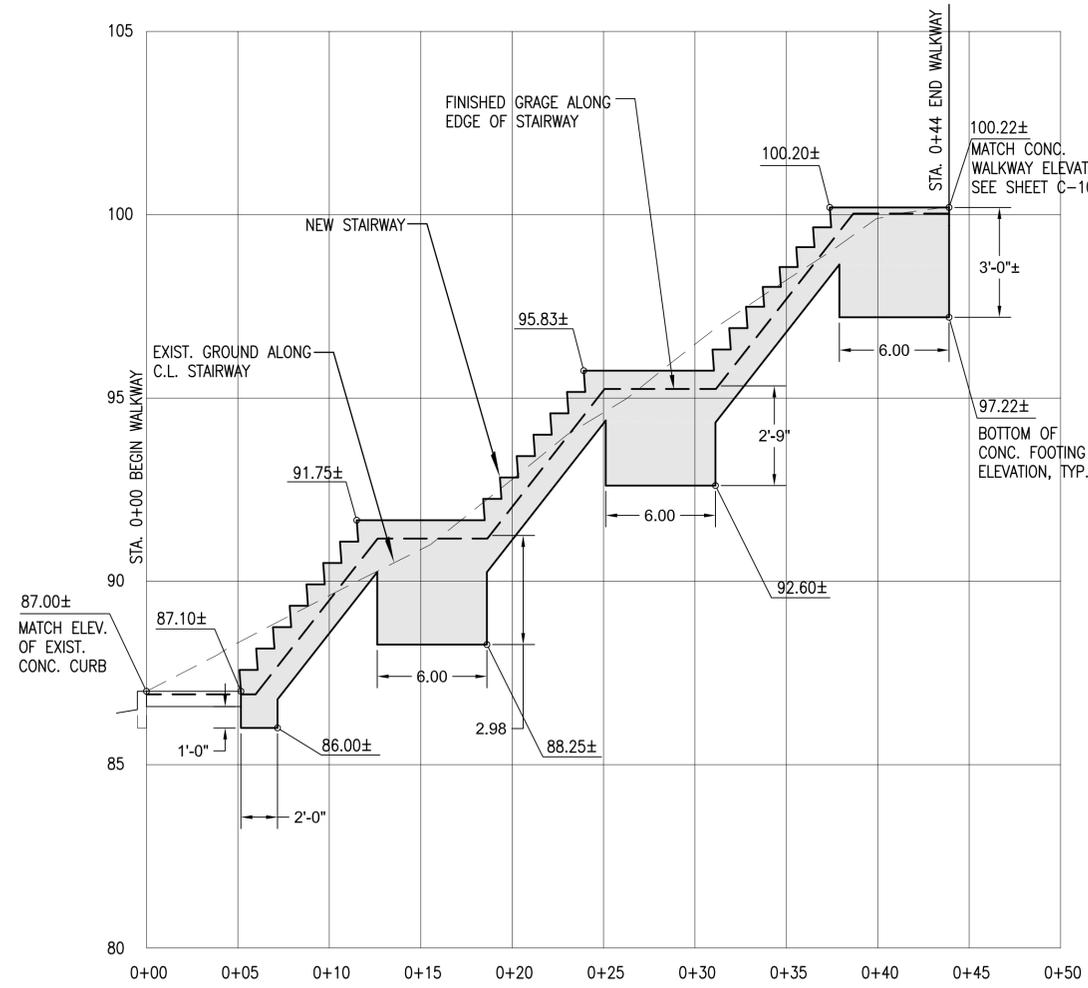
PROJECT NO.: 1379470

CONSTR. CONTR. NO. IFB

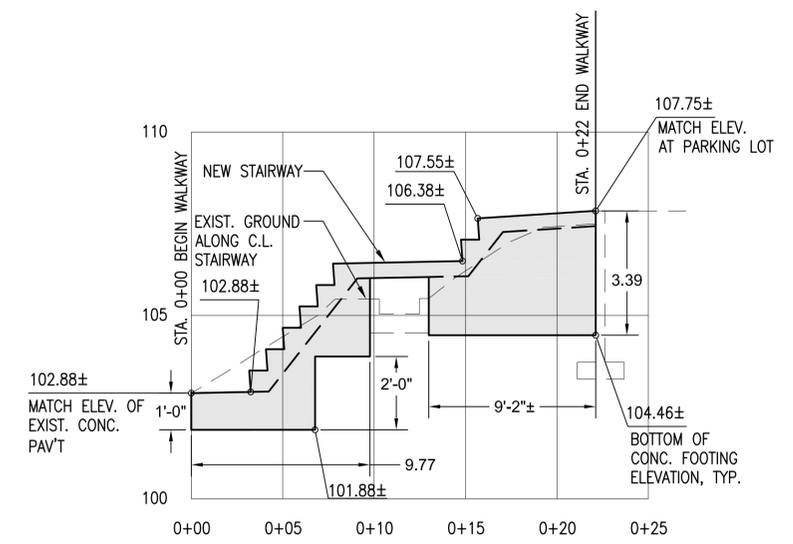
NAVFAC DRAWING NO. 19052493

SHEET 4 OF 12

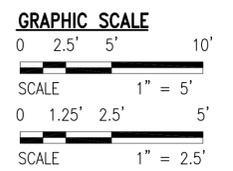
C-201



PROFILE - LOWER STAIRWAY A1
 SCALE: H: 1"=5'-0"; V: 1"=2.5'-0" C-101



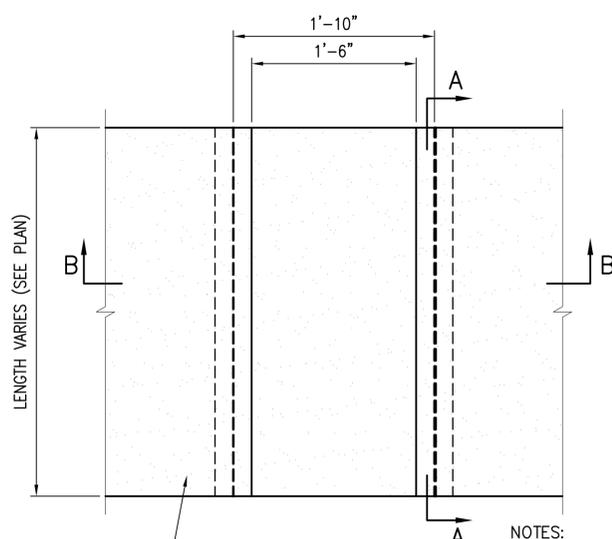
PROFILE - UPPER STAIRWAY A2
 SCALE: H: 1"=5'-0"; V: 1"=2.5'-0" C-101



THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK AMONG THE VARIOUS TRADES AS NECESSARY TO AVOID CONFLICTS AND TO INSURE THE INSTALLATION OF ALL WORK WITHIN THE AVAILABLE SPACE.

IF SHEET IS LESS THAN 22" X 34" REDUCE PRINT - USE GRAPHIC SCALES

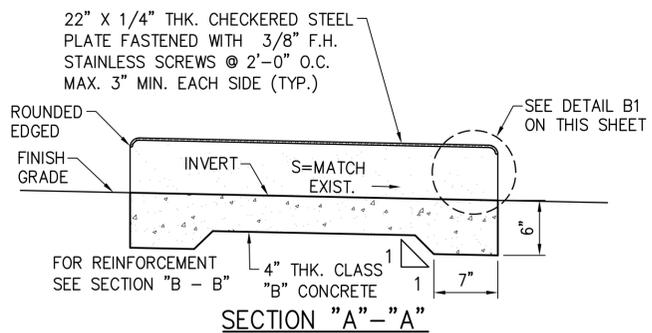
WR#: 14-060804



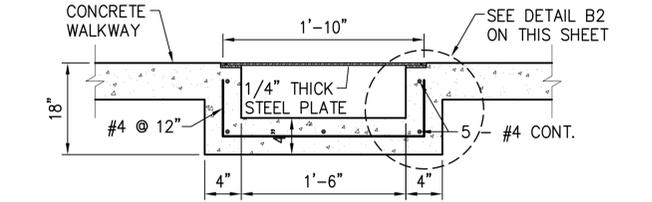
**PLAN
SIDEWALK CULVERT DETAIL**

SCALE: NTS C-101

- NOTES:
 1. ALL STEEL TO BE GALVANIZED.
 2. ALL DIMENSIONS TO BE FIELD VERIFIED PRIOR TO FABRICATION.



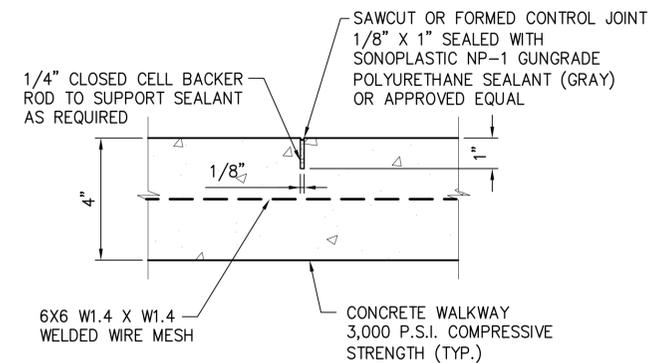
SECTION "A"-"A"



SECTION "B"-"B"

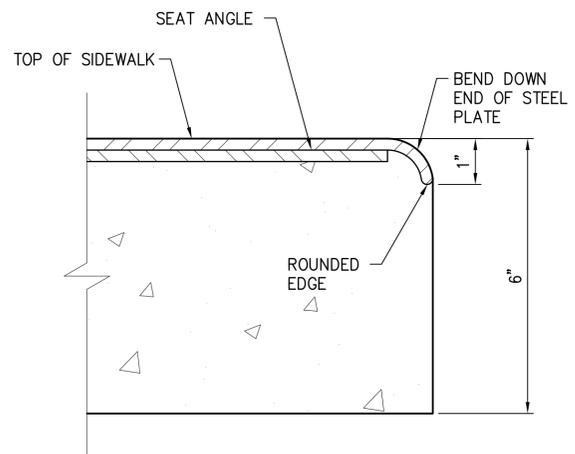
COVER DETAIL

SCALE: NTS C-102



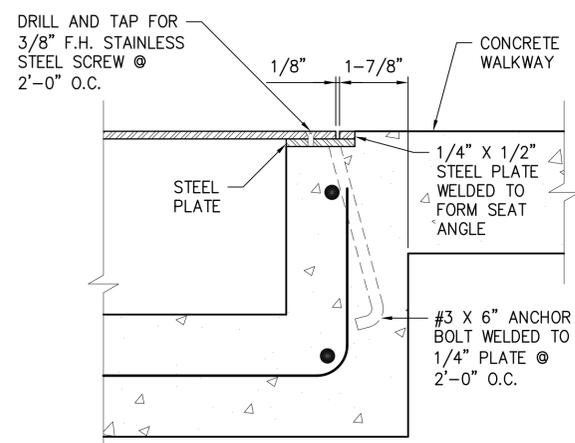
CONTROL JOINT DETAIL

SCALE: NTS C-101



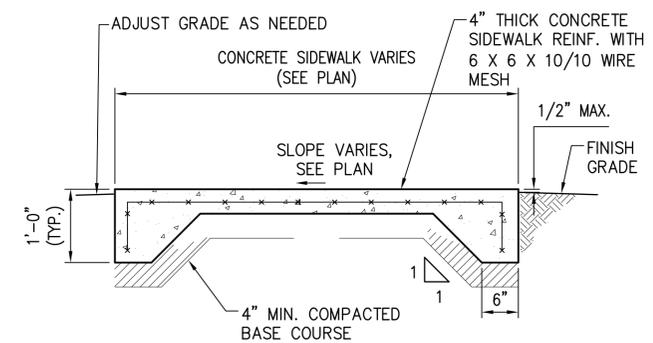
SIDEWALK CULVERT

SCALE: NTS C-102



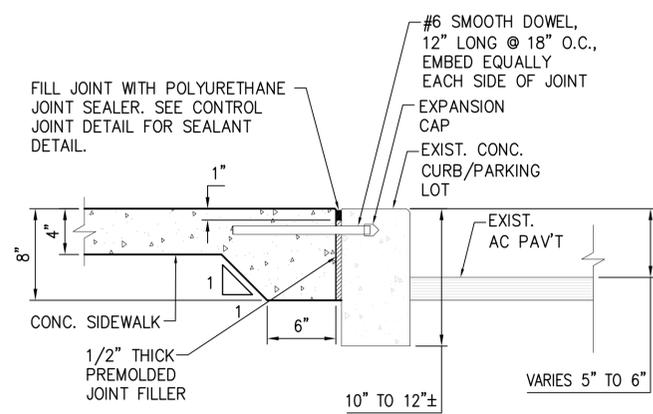
SIDEWALK CULVERT

SCALE: NTS C-102



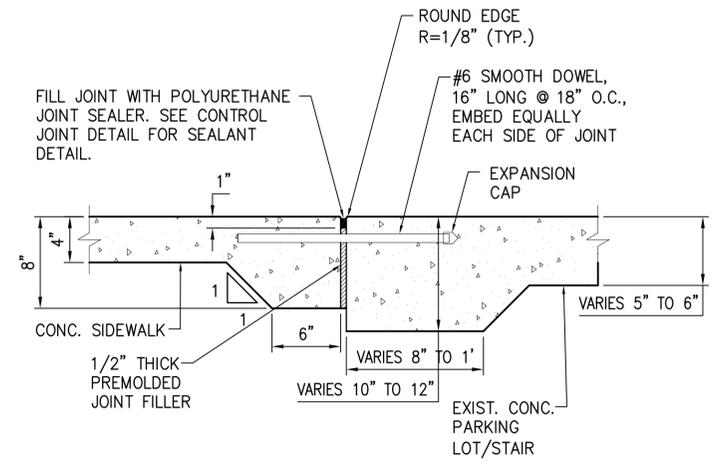
CONCRETE SIDEWALK DETAIL

SCALE: NTS C-101



EXPANSION JOINT DETAIL

SCALE: NTS C-101



EXPANSION JOINT DETAIL

SCALE: NTS C-101

| | |
|---|-------------------------------------|
| DATE | |
| DESCRIPTION | |
| SYN | |
| | |
| DES | CHK |
| APPROVED | |
| PER COMMANDER NAVFAC ACTIVITY DAVID OKADA | |
| SATISFACTORY TO | DATE 06/12/2015 |
| DES JBE | DRW JBE |
| REV | LNK |
| PM/DM | JBE |
| FIRE PROTECTION | JL |
| BRANCH MANAGER | CHM |
| CHIEF, ENG/ARCH | |
| NAVFAC HAWAII | PEARL HARBOR, HAWAII |
| NAVFAC HAWAII | HALAWA, HAWAII |
| DEPARTMENT OF THE NAVY | CAMP SMITH |
| | R1-1439 CONSTRUCT EXTERIOR STAIRWAY |
| | BAUER ROADWAY |
| | DETAILS |
| SCALE: | AS NOTED |
| PROJECT NO.: | 1379470 |
| CONSTR. CONTR. NO. | IFB |
| NAVFAC DRAWING NO. | 19052494 |
| SHEET | 5 OF 12 |
| C-501 | |

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C

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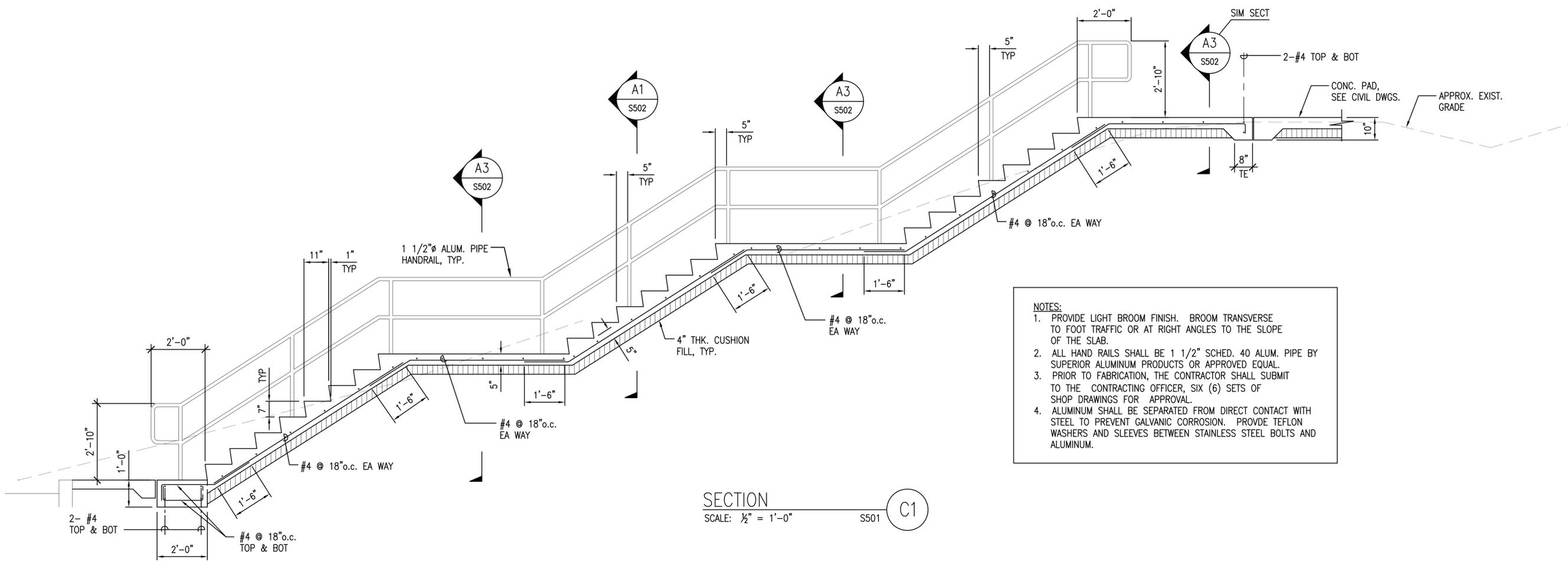
A

D

C

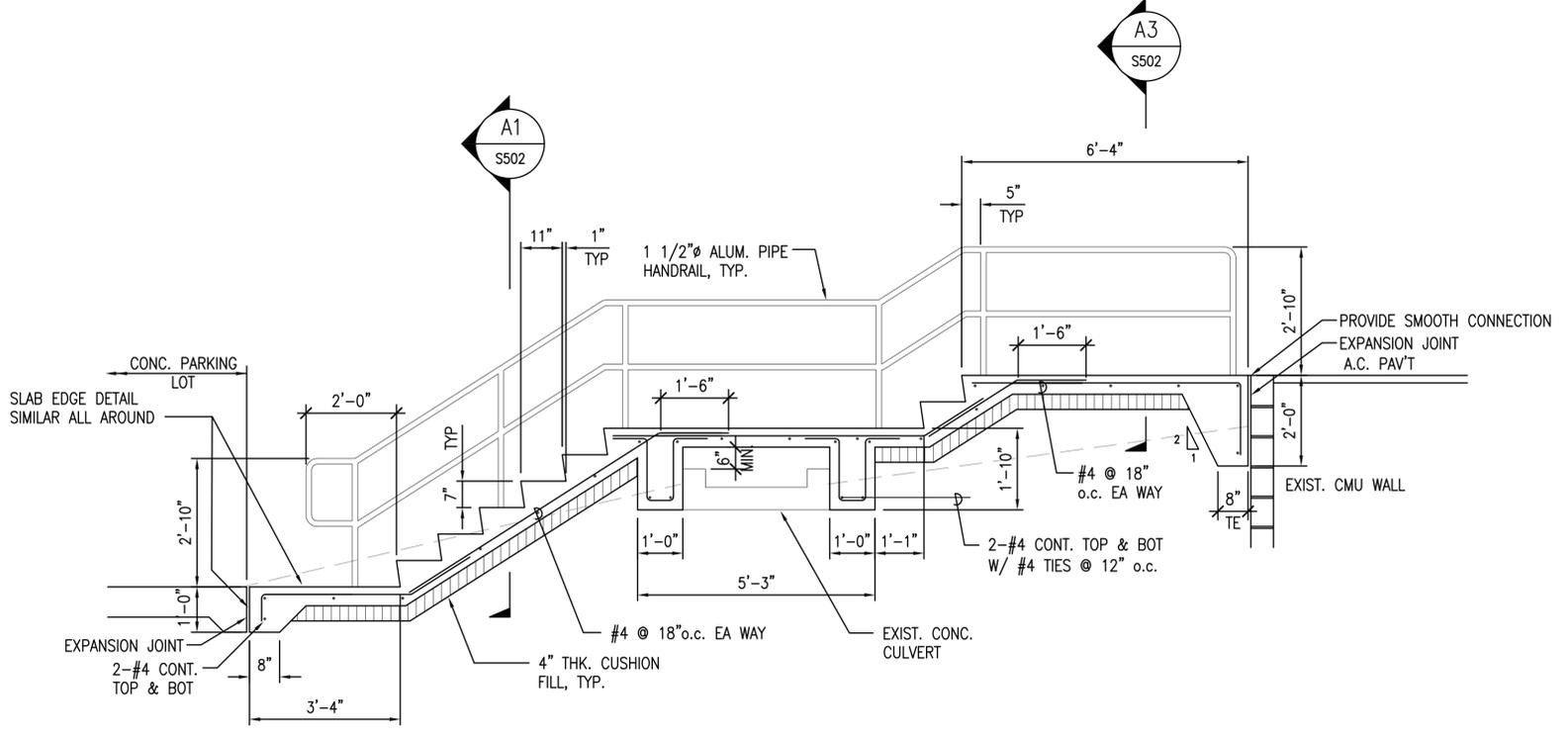
B

A

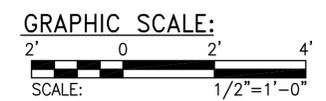


- NOTES:**
1. PROVIDE LIGHT BROOM FINISH. BROOM TRANSVERSE TO FOOT TRAFFIC OR AT RIGHT ANGLES TO THE SLOPE OF THE SLAB.
 2. ALL HAND RAILS SHALL BE 1 1/2" SCHED. 40 ALUM. PIPE BY SUPERIOR ALUMINUM PRODUCTS OR APPROVED EQUAL.
 3. PRIOR TO FABRICATION, THE CONTRACTOR SHALL SUBMIT TO THE CONTRACTING OFFICER, SIX (6) SETS OF SHOP DRAWINGS FOR APPROVAL.
 4. ALUMINUM SHALL BE SEPARATED FROM DIRECT CONTACT WITH STEEL TO PREVENT GALVANIC CORROSION. PROVIDE TEFLON WASHERS AND SLEEVES BETWEEN STAINLESS STEEL BOLTS AND ALUMINUM.

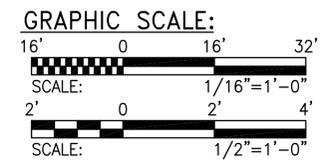
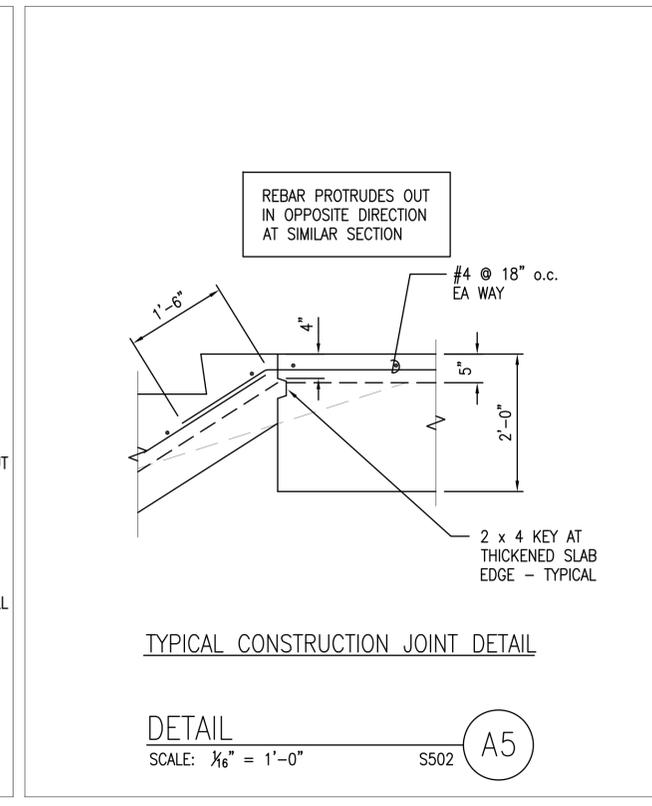
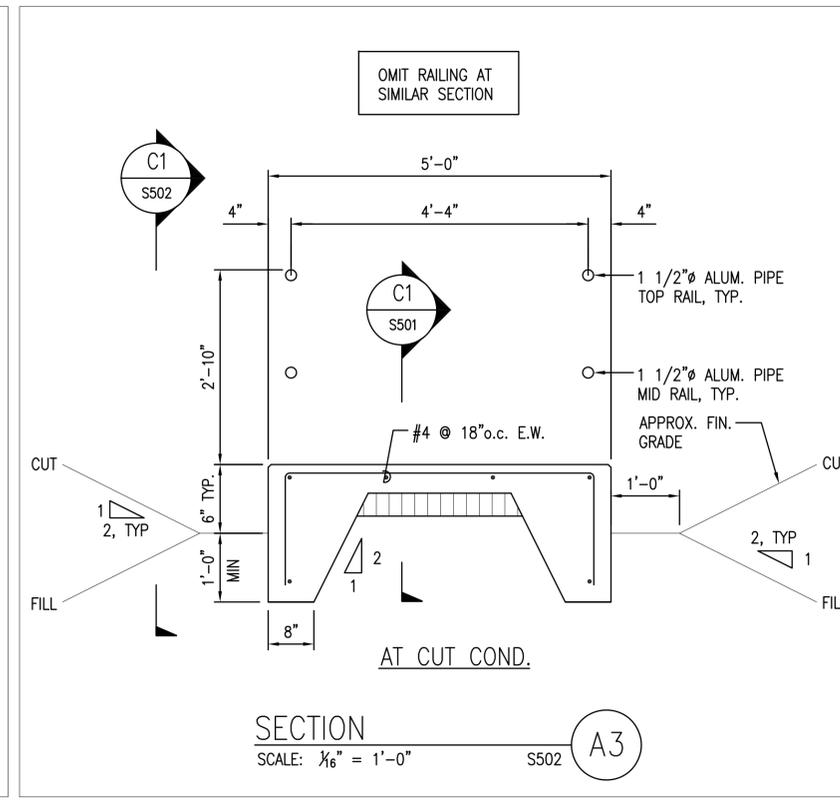
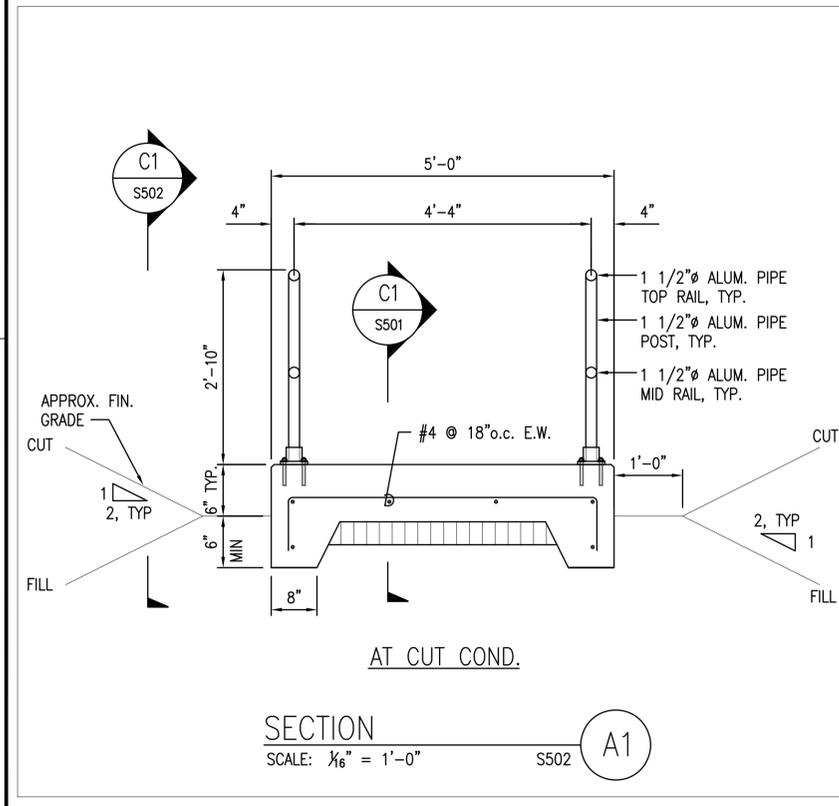
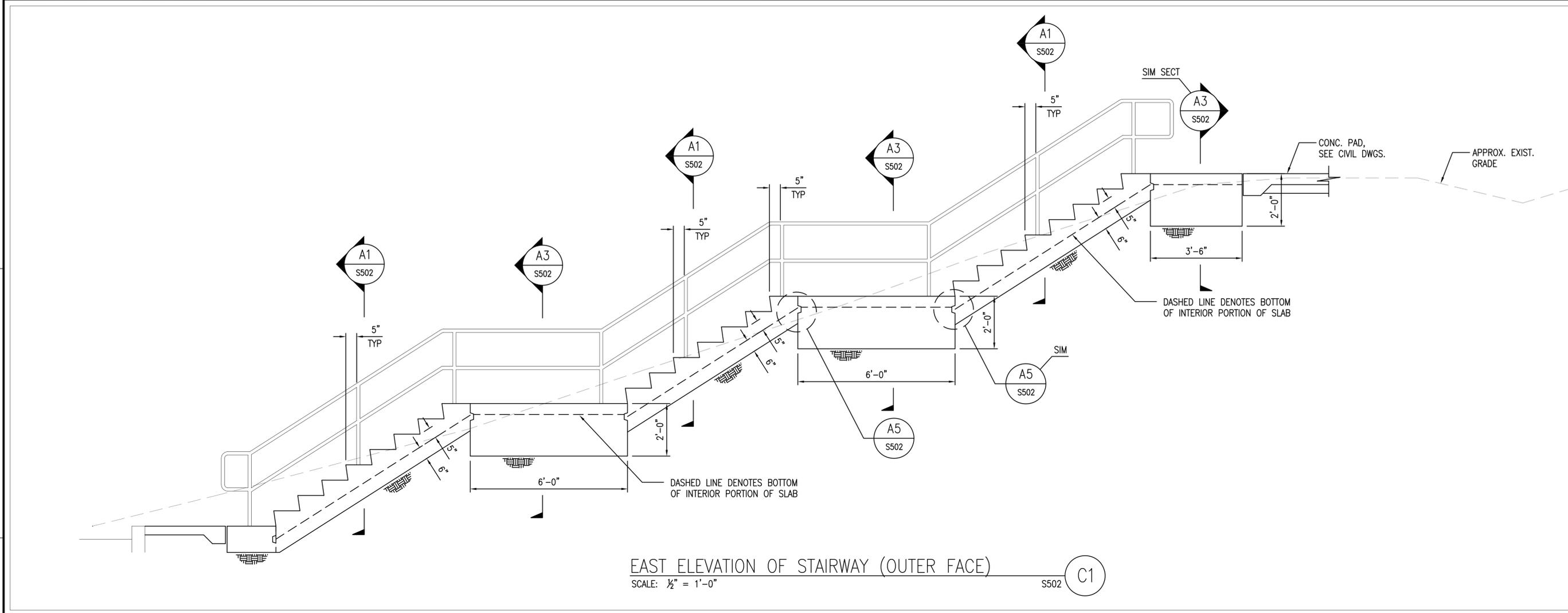
SECTION
SCALE: 1/2" = 1'-0"
S501 C1



SECTION
SCALE: 1/2" = 1'-0"
S501 A2



| | | |
|--|----------------------|------------|
| DES | DRW | CHK |
| APPROVED | | |
| FIR COMMANDER NAVFAC | | |
| ACTIVITY | | |
| DAVID OKADA | | |
| SATISFACTORY TO | DATE | 06/12/2015 |
| DES | MKS | DRW |
| PM/DM | JBE | REV |
| FIRE PROTECTION | JL | |
| BRANCH MANAGER | CHM | |
| CHIEF ENG/ARCH | | |
| NAVAL FACILITIES ENGINEERING COMMAND | PEARL HARBOR, HAWAII | |
| NAVFAC HAWAII | HALAWA, HAWAII | |
| DEPARTMENT OF THE NAVY | CAMP SMITH | |
| R1-1439 CONSTRUCT EXTERIOR STAIRWAY | | |
| BAUER ROADWAY | | |
| STAIRWAY LONGITUDINAL SECTIONS | | |
| SCALE: AS NOTED | PROJECT NO.: | 1379470 |
| CONSTR. CONTR. NO. | IFB | |
| NAVFAC DRAWING NO. | 19052496 | |
| SHEET | 7 | OF 12 |
| S-501 | | |

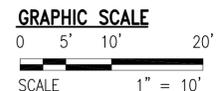
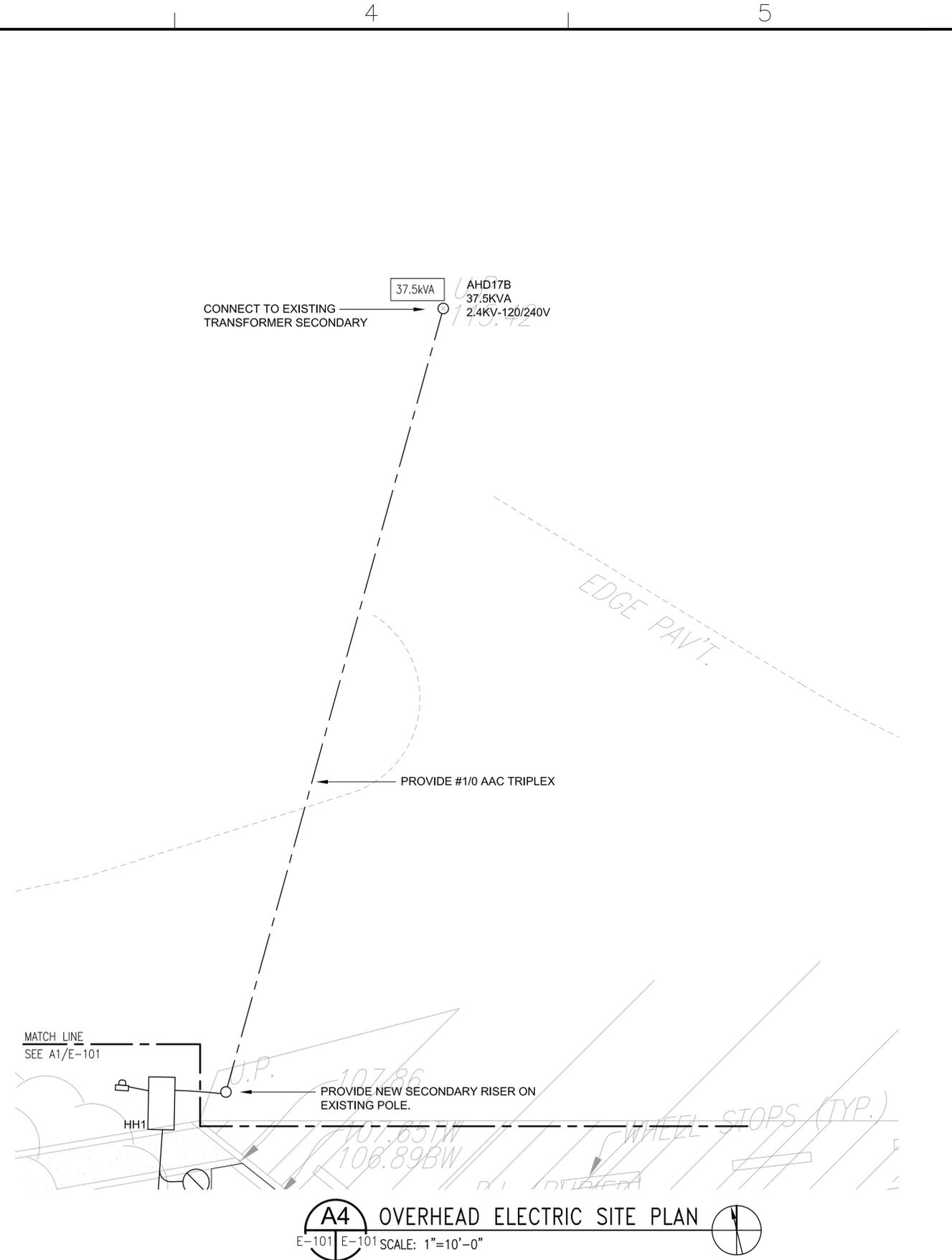
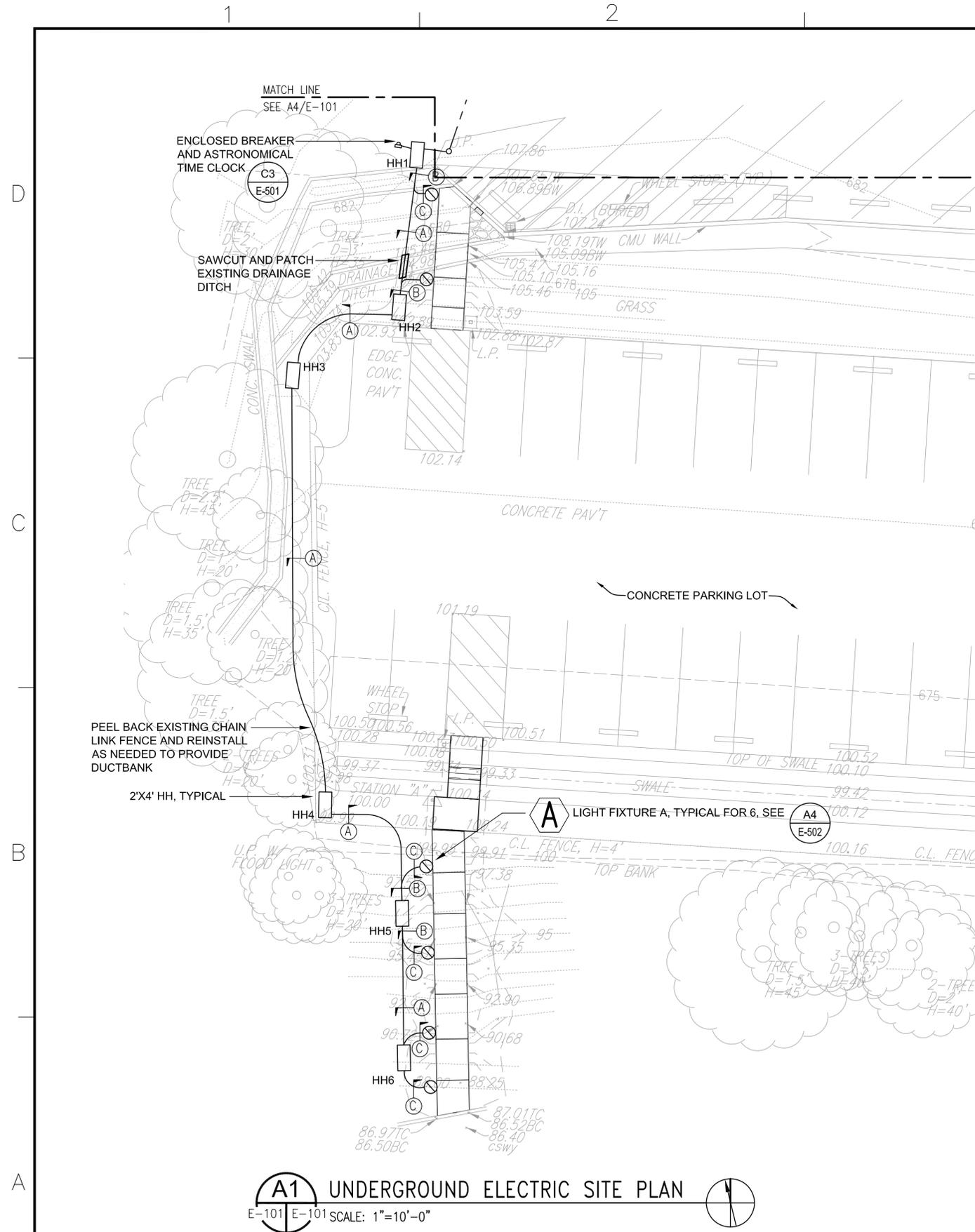


| | | |
|--------------------------------------|----------------------|---|
| DES | DRW | CHK |
| APPROVED | | |
| FIR COMMANDER NAVFAC | | |
| ACTIVITY | | |
| DAVID OKADA | | |
| SATISFACTORY TO | DATE | 06/12/2015 |
| DES | MKS | DRW |
| PM/DM | JBE | REV |
| FIRE PROTECTION | JL | |
| BRANCH MANAGER | CHM | |
| CHIEF, ENG/ARCH | | |
| NAVAL FACILITIES ENGINEERING COMMAND | PEARL HARBOR, HAWAII | HALAWA, HAWAII |
| NAVFAC HAWAII | CAMP SMITH | R1-1439 CONSTRUCT EXTERIOR STAIRWAY BAUER ROADWAY |
| DEPARTMENT OF THE NAVY | | STAIR ELEVATION, SECTIONS, & STRUCTURAL DETAIL |
| SCALE: AS NOTED | PROJECT NO.: | 1379470 |
| CONSTR. CONTR. NO. | IFB | |
| NAVFAC DRAWING NO. | 19052497 | |
| SHEET | 8 | OF 12 |
| S-502 | | |

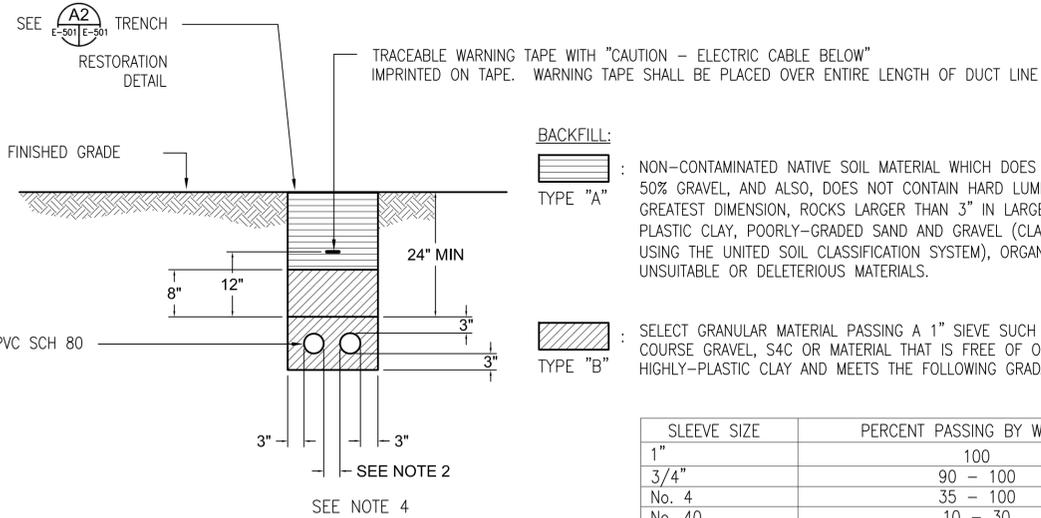
THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK AMONG THE VARIOUS TRADES AS NECESSARY TO AVOID CONFLICTS AND TO INSURE THE INSTALLATION OF ALL WORK WITHIN THE AVAILABLE SPACE.

IF SHEET IS LESS THAN 22" X 34" REDUCE PRINT - USE GRAPHIC SCALES

WR#: 14-060804



| | | |
|------------------------|-------------------------------------|----------------|
| DES | DRW | CHK |
| APPROVED | | |
| FIR COMMANDER NAVFAC | | |
| ACTIVITY | | |
| DAVID OKADA | | |
| SATISFACTORY TO | DATE | 06/12/2015 |
| DES | GJT | DRW |
| PM/DM | JBE | REV |
| FIRE PROTECTION | JL | MO |
| BRANCH MANAGER | MJU | |
| CHIEF ENG/ARCH | | |
| DEPARTMENT OF THE NAVY | NAVFAC HAWAII | NAVFAC HAWAII |
| | PEARL HARBOR, HAWAII | HALAWA, HAWAII |
| CAMP SMITH | R1-1439 CONSTRUCT EXTERIOR STAIRWAY | |
| | BAUER ROADWAY | |
| | | SITE PLAN |
| SCALE: | AS NOTED | |
| PROJECT NO.: | 1379470 | |
| CONSTR. CONTR. NO. | IFB | |
| NAVFAC DRAWING NO. | 19052499 | |
| SHEET | 10 | OF 12 |
| E-101 | | |

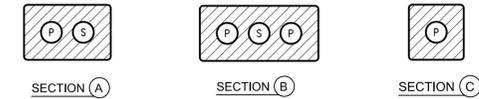


BACKFILL:

TYPE "A" : NON-CONTAMINATED NATIVE SOIL MATERIAL WHICH DOES NOT CONTAIN MORE THAN 50% GRAVEL, AND ALSO, DOES NOT CONTAIN HARD LUMPS OF EARTH 3" IN GREATEST DIMENSION, ROCKS LARGER THAN 3" IN LARGEST DIMENSION, HIGHLY PLASTIC CLAY, POORLY-GRADED SAND AND GRAVEL (CLASSIFIED AS SP AND GP USING THE UNITED SOIL CLASSIFICATION SYSTEM), ORGANICS, DEBRIS, OR OTHER UNSUITABLE OR DELETERIOUS MATERIALS.

TYPE "B" : SELECT GRANULAR MATERIAL PASSING A 1" SIEVE SUCH AS 3/4" AGGREGATE BASE COURSE GRAVEL, S4C OR MATERIAL THAT IS FREE OF ORGANICS, DEBRIS OR HIGHLY-PLASTIC CLAY AND MEETS THE FOLLOWING GRADATION:

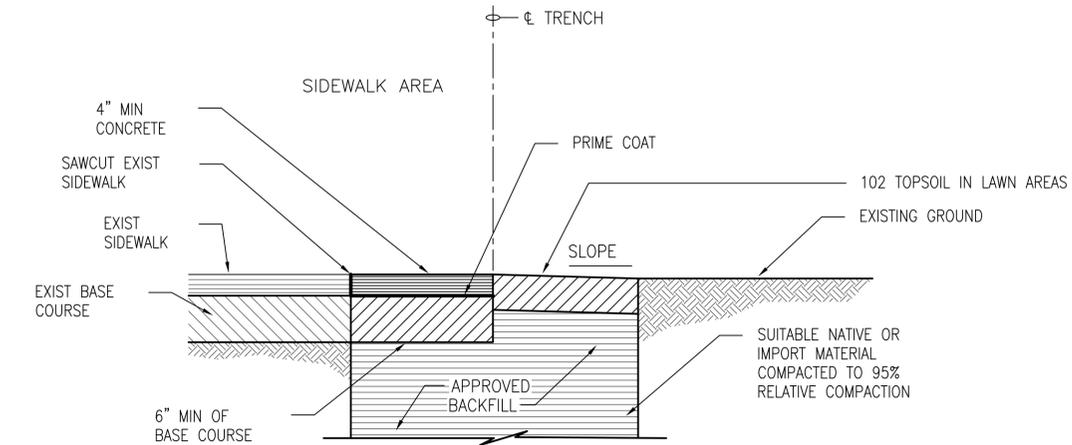
| SLEEVE SIZE | PERCENT PASSING BY WEIGHT |
|-------------|---------------------------|
| 1" | 100 |
| 3/4" | 90 - 100 |
| No. 4 | 35 - 100 |
| No. 40 | 10 - 30 |
| No. 200 | 3 - 15 |



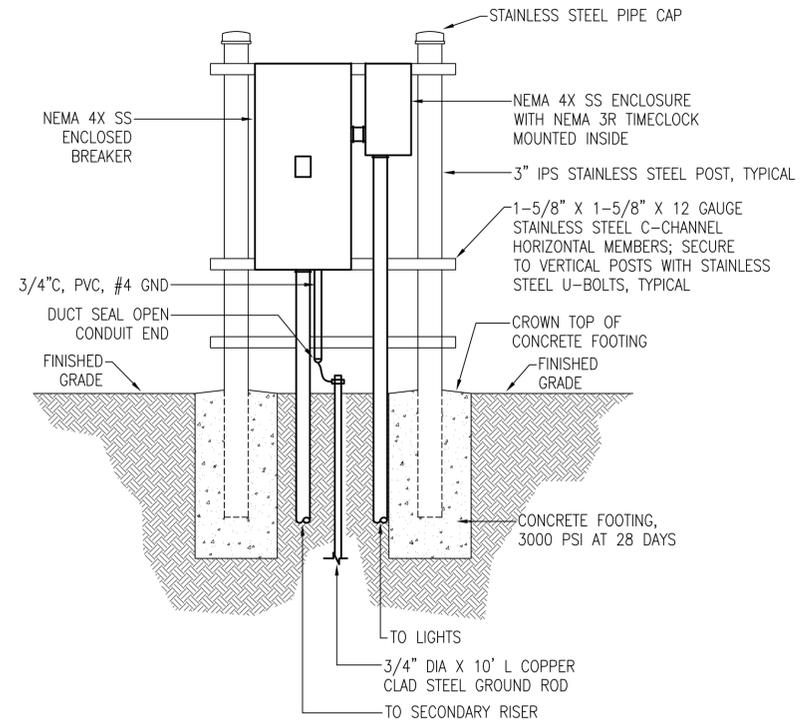
NOTES:

1. P = 2" ELECTRICAL DUCTS, S = 2" SPARE DUCT
2. PROVIDE 2" SEPARATION BETWEEN DUCTS OF SAME SYSTEM AND 3" BETWEEN DUCTS OF DIFFERENT SYSTEMS.
3. WHERE TRENCH ENCOUNTERS EXISTING CONCRETE OR ASPHALT CONCRETE, SURFACE SHALL BE SAW CUT, BACKFILL, COMPACT AND PATCH SURFACE TO MATCH ADJACENT AREA. SEE TRENCH RESTORATION DETAIL. WHERE TRENCH ENCOUNTERS EXISTING GRASS, PROVIDE LANDSCAPING CONSISTING OF LAWN AS REQUIRED TO REPAIR DAMAGE TO EXISTING GRASS AREA.
4. IF NORMAL MATERIAL IN THE BOTTOM OF THE TRENCH IS NOT TYPE "B", AN ADDITIONAL 3" SHALL BE EXCAVATED AND THE TYPE "B" BACKFILL SHALL BE PROVIDED

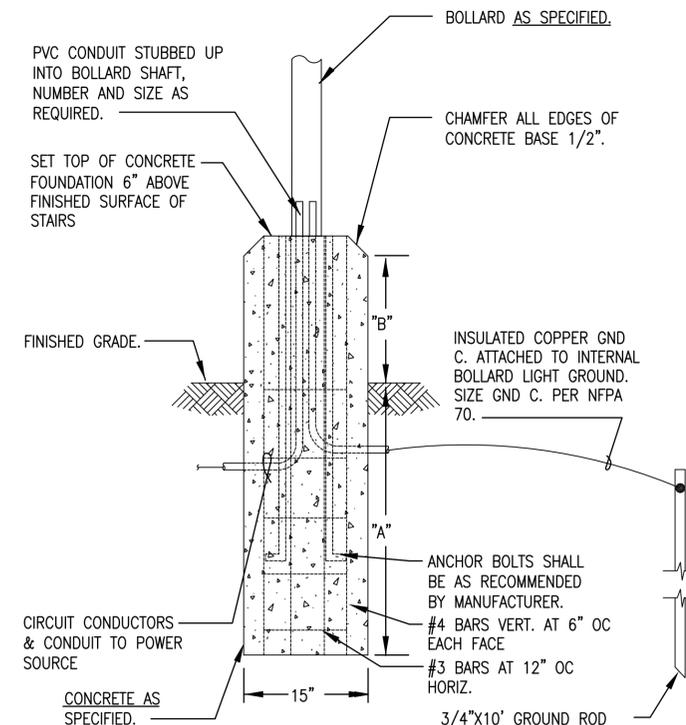
B1 TYPICAL DUCT SECTION (DIRECT BURIED)
E-501 E-501 NOT TO SCALE



A1 TRENCH RESTORATION DETAIL
E-501 E-501 NOT TO SCALE



C3 TIME CLOCK STANCHION DETAIL
E-501 E-501 NOT TO SCALE

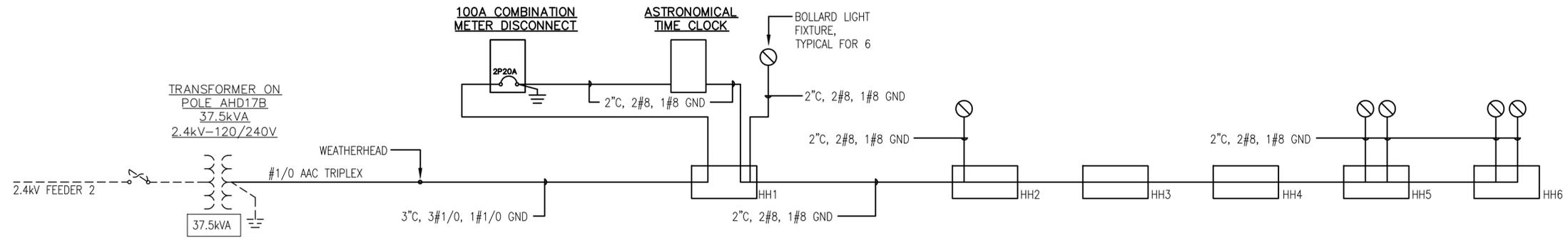


A3 BOLLARD FOUNDATION DETAIL
E-501 E-501 NOT TO SCALE

| A | B |
|-----|--------|
| 24" | VARIES |

LEGEND
GND C. - GROUNDING CONDUCTOR

| | |
|--|--|
| DATE | |
| DESCRIPTION | |
| DATE | |
| DESCRIPTION | |
| | |
| DES | CHK |
| APPROVED | |
| PER COMMANDER NAVFAC ACTIVITY DAVID OKADA SATISFACTORY TO DATE 06/12/2015 DES GJT DRW GJT REV MO PM/DM JBE FIRE PROTECTION JLL BRANCH MANAGER MJU CHIEF ENG/ARCH | |
| NAVAL FACILITIES ENGINEERING COMMAND PEARL HARBOR, HAWAII HALAWA, HAWAII | DEPARTMENT OF THE NAVY NAVFAC HAWAII CAMP SMITH R1-1439 CONSTRUCT EXTERIOR STAIRWAY BAUER ROADWAY DETAILS |
| SCALE: | AS NOTED |
| PROJECT NO.: | 1379470 |
| CONSTR. CONTR. NO. | IFB |
| NAVFAC DRAWING NO. | 19052500 |
| SHEET | 11 OF 12 |
| E-501 | |



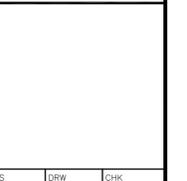
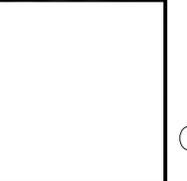
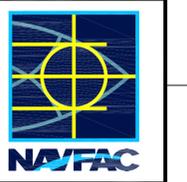
TIME CLOCK SHALL HAVE ELECTRONIC 7 DAY PROGRAMMING WITH NON-VOLATILE MEMORY AND BATTERY BACK UP, WITH NEMA 3R ENCLOSURE, MOUNTED IN NEMA 4X SS ENCLOSURE.

ONE LINE DIAGRAM

SCALE: NONE

| LIGHTING FIXTURE SCHEDULE | | | |
|---------------------------|-------|----------------------------------|--|
| TYPE | VOLTS | LAMP | DESCRIPTION |
| A | MVOLT | 1,588 LUMEN, 4,000K, >70 CRI LED | LED BOLLARD WITH ASYMMETRIC DISTRIBUTION, 1,588 LUMENS, >70 CRI, 4,000K LED BOLLARD WITH NATURAL ALUMINUM TGIC POWDERCOAT FINISHED ALUMINUM EXTRUSION, 42" H, 8" DIA., OPTICS SHALL PROVIDE ZERO UPLIGHT AND BE DARK SKY FRIENDLY, FIXTURE SHALL BE U.L. LISTED. LITHONIA DSXB LED 12C 700 40K ASY MVOLT SF DNAXD OR APPROVED EQUAL |

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
| | | |
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| | | |
| | | |



| | | |
|----------------------|------|------------|
| DES | DRW | CHK |
| APPROVED | | |
| FIR COMMANDER NAVFAC | | |
| ACTIVITY | | |
| DAVID OKADA | | |
| SATISFACTORY TO | DATE | 06/12/2015 |
| DES | GJT | DRW |
| REV | GJT | REV |
| MO | JBE | MO |
| PM/DM | JL | JBE |
| FIRE PROTECTION | JL | JL |
| BRANCH MANAGER | MJU | MJU |
| CHIEF ENG/ARCH | | |

DEPARTMENT OF THE NAVY
NAVFAC HAWAII
PEARL HARBOR, HAWAII
HALAWA, HAWAII
CAMP SMITH
R1-1439 CONSTRUCT EXTERIOR STAIRWAY
BAUER ROADWAY
ONE LINE DIAGRAM, FIXTURE SCHEDULE

| | |
|--------------------|----------|
| SCALE: | AS NOTED |
| PROJECT NO.: | 1379470 |
| CONSTR. CONTR. NO. | IFB |
| NAVFAC DRAWING NO. | 19052501 |
| SHEET | 12 OF 12 |
| E-502 | |