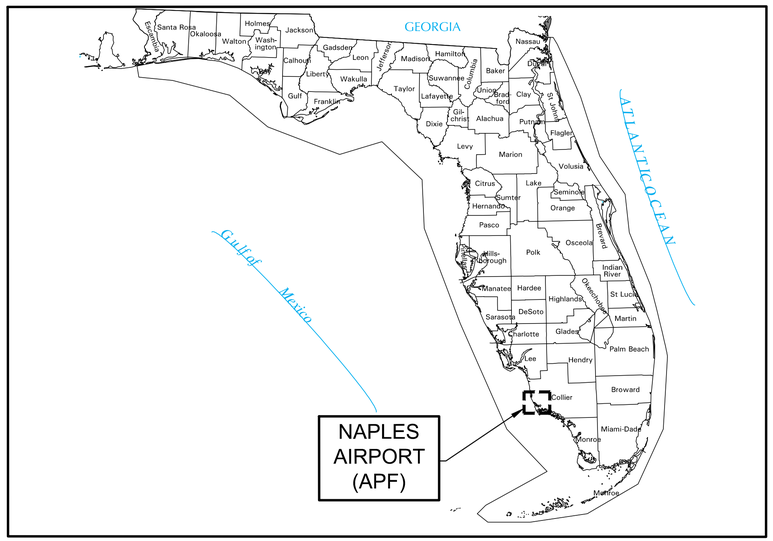
# NAPLES AIRPORT AUTHORITY

## NAPLES AIRPORT (APF)

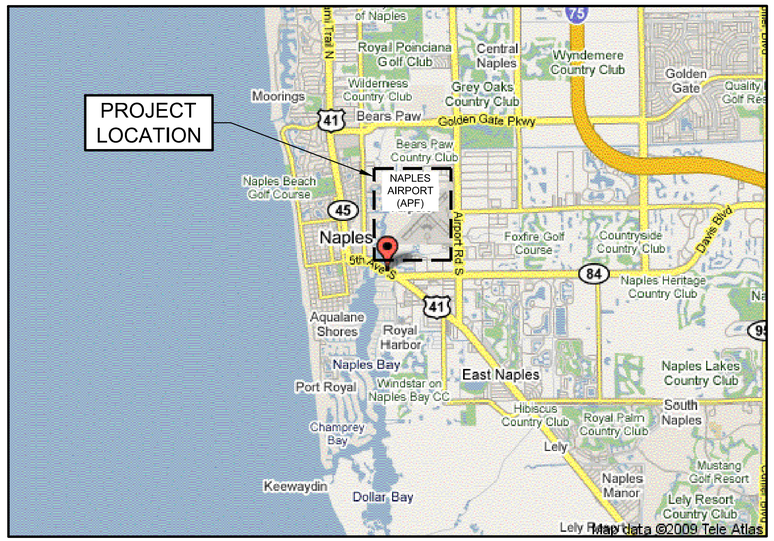
# FUEL FACILITY IMPROVEMENTS PROJECT
# ISSUED FOR PERMIT

## PROJECT ADDRESS:
## 2707 FUEL FARM RD., NAPLES, FL 34104

ISSUE DATE: APRIL 02, 2024
C&C PROJECT NO. 23049




LOCATION MAP
NO SCALE




VICINITY MAP
NO SCALE

PROJECT TEAM:

PRIME CONSULTANT, &
CIVIL & STRUCTURAL:
HANSON PROFESSIONAL SERVICES, INC.
6230 UNIVERSITY PKWY, SUITE 202
SARASOTA, FL 34240
941-342-6321

MECHANICAL, ELECTRICAL &
CONTROLS SUBCONSULTANT
CURRIER & COMPANY, INC.
13323 W. WASHINGTON BLVD., SUITE 206
LOS ANGELES, CA 90066
310-279-5050

PROJECT OWNER:

CITY OF NAPLES AIRPORT AUTHORITY:
BOARD OF COMMISSIONERS
RICK RUPPERT, CHAIR
RITA CUDDIHY, VICE CHAIR
DONNA M. MESSER
MICHAEL LENHARD
KERRY C. DUSTIN

811 Know what's below. Call before you dig.

CALL 811 OR 800-432-4770
WWW.SUNSHINE811.COM

PARCEL ID: 20764680005

LEGAL DESCRIPTION: UNPLATTED LANDS N1/2 SEC 2 TWP 50 RNG 25 AND S1/2 SEC 35 TWP 49 RNG 25, LESS R/W, LESS LEASED PARCELS

DATE
REVISIONS
△

CURRIER ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

PROJECT NAME: FUEL FACILITY IMPROVEMENTS PROJECT
PROJECT LOCATION: NAPLES AIRPORT (APF)
DRAWING NAME: COVER SHEET WITH VICINITY MAP & PROJECT DESIGN TEAM

ISSUED FOR PERMIT

CURRIER & CO, INC.
13323 W.WASHINGTON BLVD,
SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050

SEAL:
JEFFREY BURNS LICENSE No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

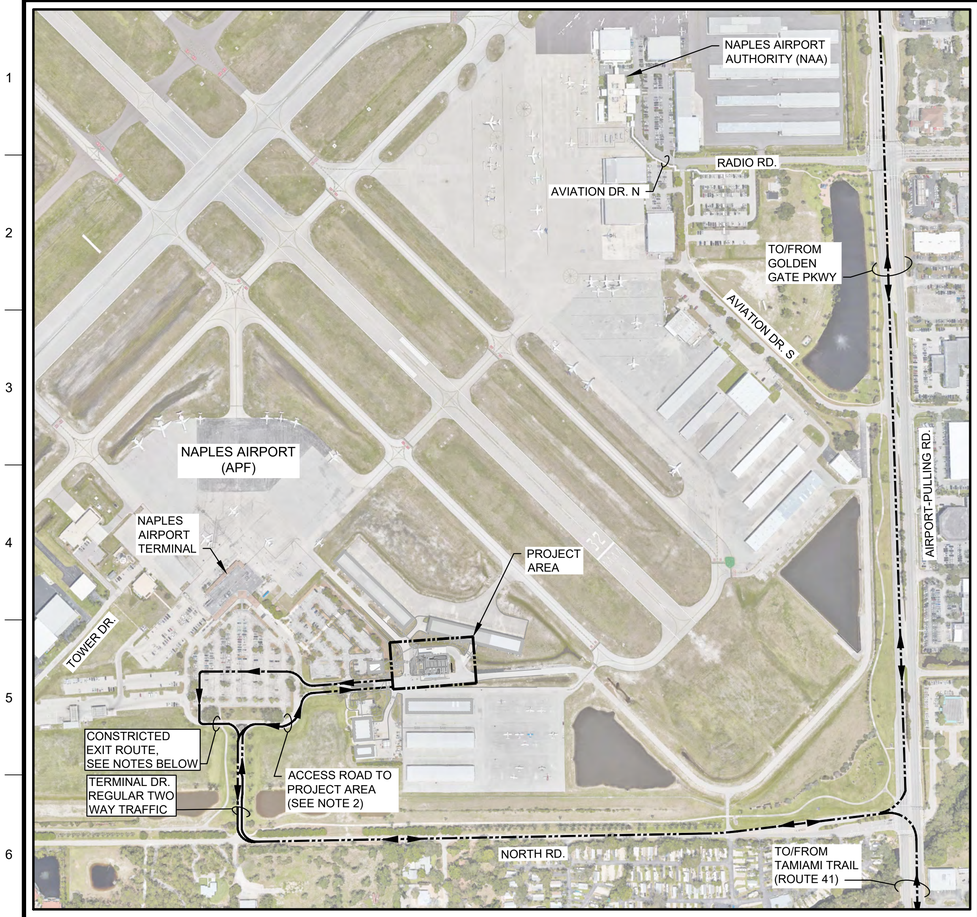
JEFFREY E, BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.G. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049G100 |

SHEET NUMBER:
G1.00

ISSUED FOR PERMIT

Plotted: P:\APF – Naples, FL\23049 APF DBB Transition and Electrical Replacement – Design\DWG\General\23049G100.dwg 4/2/2024 9:32 AM – Joe



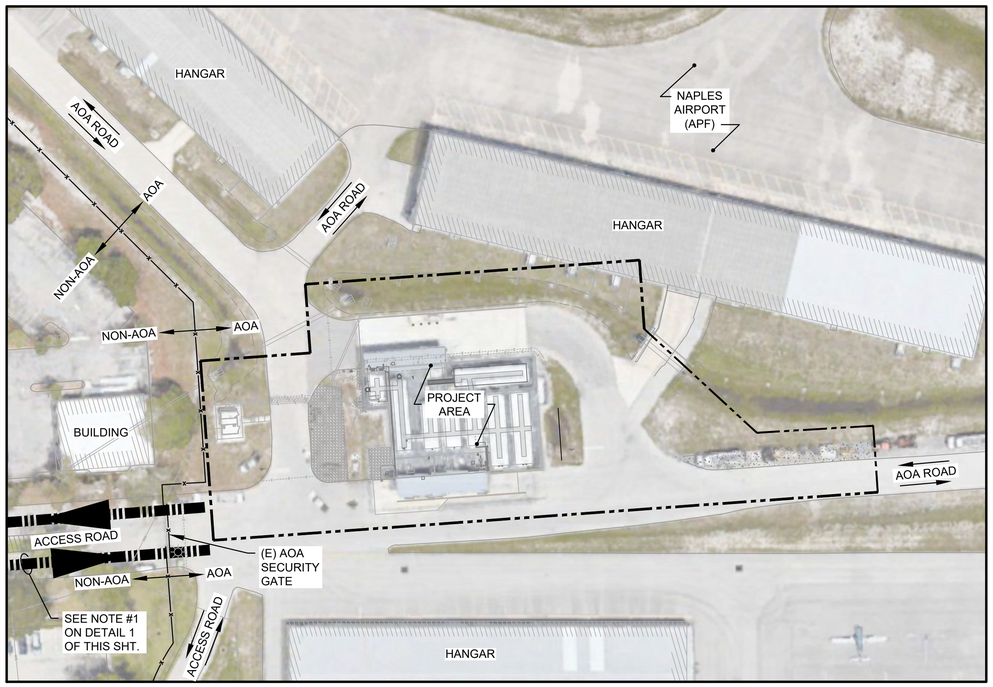

## 1 CONTRACTOR ACCESS ROUTE

SCALE: NOTED

0 400 800 1200
SCALE IN FEET (FULL SIZE)

TRUE NORTH

NOTES:
1. NORMAL CONSTRUCTION TRAFFIC SHALL EGRESS THROUGH THE PARKING LOT AS SHOWN HEREIN. CONTRACTOR SHALL NOT EGRESS ALONG THE FACE OF THE TERMINAL.
2. LARGE CONTRACTOR VEHICLES (LARGER THAN A PICK–UP TRUCK) SHALL INGRESS AND EGRESS ALONG THE SAME ROUTE SHOWN WITH THE ASSISTANCE OF FLAGMEN TO ESCORT IF NEEDED. HEIGHT RESTRICTIONS AT THE TERMINAL MAKE CIRCUMNAVIGATING TERMINAL DRIVE NOT POSSIBLE SO ALL LARGE VEHICLES MUST EGRESS AS SHOWN.
3. COORDINATE WITH THE AIRPORT STAFF TO FINALIZE THE EXACT ROUTE AND THE NEED FOR FLAGMEN, ETC.




## 2 FUEL FACILITY - AERIAL VIEW

SCALE: NOTED

0 50 100 150
SCALE IN FEET (FULL SIZE)

TRUE NORTH

NOTES:
1. CONTRACTOR STAGING AREA ON THE AIRSIDE SHALL BE APPROVED IN ADVANCE BY NAA.
2. CONTRACTOR SHALL PROVIDE AN APPROVED FENCE WITH LOCKING GATE TO SECURE ANY AREA USED FOR STAGING.
3. CONTRACTOR SHALL RETURN ANY AND ALL STAGING AREA TO ITS EXISTING CONDITIONS FOUND AT THE BEGINNING OF THE PROJECT.

## DRAWING INDEX



DATE | REVISIONS | △

CURRIER ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

PROJECT NAME: FUEL FACILITY IMPROVEMENTS PROJECT
PROJECT LOCATION: NAPLES AIRPORT (APF)
DRAWING NAME: STAGING AREA, ACCESS ROUTE AND DRAWING INDEX

ISSUED FOR PERMIT


CURRIER & CO, INC.
13323 W.WASHINGTON BLVD,
SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050


SEAL: JEFFREY BURNS LICENSE No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | J.H. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049G101 |

SHEET NUMBER: G1.01

ISSUED FOR PERMIT

# GENERAL ABBREVIATIONS

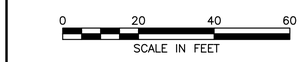
| | |
|---|---|
| **A** | |
| AAV | AUTOMATIC AIR VENT |
| ACM | ASBESTOS–CONTAINING MATERIALS |
| ACWM | ASBESTOS–CONTAINING WASTE MATERIALS |
| AMP(S) | AMPERES |
| AC | ALTERNATING CURRENT |
| ACP | ASPHALTIC CONCRETE |
| ADD | ADDENDUM |
| ADJ | ADJUSTABLE |
| AFF | ABOVE FINISHED FLOOR |
| AFFF | AQUEOUS FILM FORMING FOAM |
| ALT | ALTERNATE |
| ALUM, AL | ALUMINUM |
| ANT | ANTENNA |
| AOA | AIRCRAFT OPERATIONS AREA |
| APF | NAPLES AIRPORT |
| APM | AUTOMATED PEOPLE MOVER |
| APPROX | APPROXIMATELY |
| ARFF | AIRCRAFT RESCUE & FIREFIGHTING |
| ASB | ASBESTOS |
| AST | ABOVEGROUND STORAGE TANK |
| ASTM | AMERICAN SOCIETY OF TESTING & MATERIALS |
| ATS | AUTOMATIC TRANSFER SWITCH |
| AUX | AUXILIARY |
| AVGAS | 100LL GASOLINE |
| AWG | AMERICAN WIRE GAUGE |
| **B** | |
| BAL | BALANCE |
| B'FLY | BUTTERFLY |
| BLDG | BUILDING |
| BLK | BLOCK |
| BOT | BOTTOM |
| BOP | BOTTOM OF PIPE |
| BP | BYPASS |
| BTWN | BETWEEN |
| BVV | BLOCK VALVE VAULT |
| **C** | |
| CAB | CABINET |
| CB | CIRCUIT BREAKER |
| C | CONDUIT |
| CD | CONTAINMENT DRAIN |
| CFPL | CENTRAL FLORIDA PIPELINE |
| CJ | CONSTRUCTION JOINT |
| CKT | CIRCUIT |
| CL OR ℄ | CENTERLINE |
| CM | CONSTRUCTION MANAGER |
| CMU | CONCRETE MASONRY UNIT |
| COL | COLUMN |
| CONC | CONCRETE |
| CONT | CONTINUOUS |
| CP | CATHODIC PROTECTION |
| CSPP | CONSTRUCTION SAFETY & PHASING PLAN |
| CT | CERAMIC TILE/CLAY TREATER |
| 3/C | CONDUCTORS, NUMBER OF |
| CU | COPPER |
| CVV | CONTROL VALVE VAULT |
| **D** | |
| D | DEEP |
| DBB | DOUBLE BLOCK & BLEED |
| DBL | DOUBLE |
| DC | DIRECT CURRENT |
| DEG | DEGREE |
| DET, DTL | DETAIL |
| DIA | DIAMETER |
| DIM | DIMENSION |
| DIP | DUCTILE IRON PIPE |
| DISC | DISCONNECT |
| DIV | DIVISION |
| DLS | DEPARTMENT OF LABOR STANDARDS |
| DN | DOWN |
| DOT | DEPARTMENT OF TRANSPORTATION |
| DP | DESIGN PROFESSIONAL |
| DR | DOOR |
| DWG(S) | DRAWING(S) |
| D/W | DOUBLE WALL |
| **E** | |
| (E) | EXISTING |
| EA. | EACH |
| ECC | ECCENTRIC |
| EFSO | EMERGENCY FUEL SHUT–OFF |
| EJ | EXPANSION JOINT |
| EL | ELEVATION |
| ELEC | ELECTRICAL |
| EMERG | EMERGENCY |
| EMT | ELECTRICAL METALLIC TUBING |
| ENAM | ENAMEL |
| ENT | ENTRANCE |
| EP | EPOXY PAINT |
| EPA | ENVIRONMENTAL PROTECTION AGENCY |
| EQ | EQUAL |
| EQUIP | EQUIPMENT |
| EW | EACH WAY |
| EXP | EXPOSED |
| EXT | EXTERIOR |
| EXTG/E | EXISTING |
| **F** | |
| F3 | FLUORINE–FREE FOAM |
| FAA | FEDERAL AVIATION AUTHORITY |
| FAA AC | FEDERAL AVIATION AUTHORITY ADVISORY CIRCULAR |
| FD | FLAME DETECTOR |
| FDOT | FLORIDA DEPARTMENT OF TRANSPORTATION |

| | |
|---|---|
| **F(CONTINUED)** | |
| FF | FINISH FLOOR |
| FLF | FLAT FACE |
| FIN | FINISH OR FINISHED |
| FL, FLR | FLOOR |
| FM | FIRE MAIN |
| FO | FINISHED OPENING |
| FOB | FLAT ON BOTTOM |
| FOD | FOREIGN OBJECT DEBRIS |
| FPS | FEET PER SECOND |
| FR | FUEL RECOVERY |
| FS | FILTER SEPARATOR |
| FT | FEET |
| FTG | FOOTING |
| FV | FUSIBLE LINK FIRE VALVE |
| **G** | |
| G | GENERAL |
| GA | GAUGE |
| GAL | GALLON |
| GC | GENERAL CONTRACTOR |
| GALV | GALVANIZED |
| GEN | GENERATOR |
| GR | GRADE |
| GRD | GROUND |
| GRS | GALVANIZED RIGID STEEL |
| GPM | GALLONS/MINUTE |
| GPR | GROUND PENETRATING RADAR |
| GWW | GROUNDWATER LEVEL WELL |
| **H** | |
| H | HIGH |
| HDPE | HIGH DENSITY VIRGIN POLYETHYLENE |
| HEPA | HIGH–EFFICIENCY PARTICULATE ABSORBING (FILTER) |
| HMI | HUMAN MACHINE INTERFACE |
| HORIZ | HORIZONTAL |
| HP | HYDRANT PIT |
| HPV | HIGH POINT VENT |
| HPWR | HORSEPOWER |
| HR | HOUR |
| HT | HEIGHT |
| HTE | HEAT TRACING (ELECTRICAL) |
| HYD | FIRE HYDRANT |
| HZ | HERTZ |
| **I** | |
| IBC | INTERNATIONAL BUILDING CODE |
| ID | INSIDE DIAMETER |
| IF | INSULATION FLANGE |
| INFO | INFORMATION |
| INS | INSULATION |
| INST | INSTALL |
| INT | INTERIOR |
| INV | INVERT |
| I/O | INPUT/OUTPUT |
| ISO | ISOLATION |
| IW | INDUSTRIAL WASTE SEWER |
| **J** | |
| JBOX | JUNCTION BOX |
| JF | JET FUEL LINE |
| JT | JOINT |
| **K** | |
| KVA | KILOVOLT AMPERES |
| KW | KILOWATT |
| **L** | |
| L, LG | LONG |
| LAD | LADDER |
| LB(S) | POUNDS |
| LR | LONG RADIUS |
| LPD | LOW POINT DRAIN |
| LT | LIGHT |
| LT WT | LIGHT WEIGHT |
| LV | LOW VOLTAGE |
| **M** | |
| M | METER |
| MAT'L | MATERIAL |
| MAX | MAXIMUM |
| MECH | MECHANICAL |
| MFR | MANUFACTURER |
| MH | MANHOLE |

| | |
|---|---|
| **M(CONTINUED)** | |
| MIL | MILLI–INCH (.001 INCH) |
| MIN | MINIMUM |
| MISC | MISCELLANEOUS |
| MM | MILLIMETER |
| MOGAS | GASOLINE |
| MOT | MAINTENANCE OF TRAFFIC |
| MOV | MOTOR OPERATED VALVE |
| MSP | MILLIPORE SAMPLE POINT |
| MTL | METAL |
| MV | MEDIUM VOLTAGE (600–35KV) |
| MW | GROUNDWATER MONITORING WELL |
| **N** | |
| (N) | NEW |
| NAA | NAPLES AIRPORT AUTHORITY |
| NACE | NATIONAL ASSOCIATION OF CORROSION ENGINEERS |
| NAT | NATURAL |
| N.C. | NORMALLY CLOSED |
| NEC | NATIONAL ELECTRIC CODE |
| NFPA | NATIONAL FIRE PROTECTION ASSOCIATION |
| NG | NATURAL GAS |
| NIC | NOT IN CONTRACT |
| N.O. | NORMALLY OPEN |
| NO | NUMBER |
| NOM | NOMINAL |
| NPDES | NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM |
| NTS | NOT TO SCALE |
| **O** | |
| O.C. | ON CENTER |
| OD | OUTSIDE DIAMETER |
| OF | OUTSIDE FACE |
| OOS | OUT OF SERVICE |
| OPNG | OPENING |
| OPP | OPPOSITE |
| OPS | AIRPORT OPERATIONS |
| OS&Y | OUTSIDE SCREW & YOKE |
| OWS | OIL–WATER SEPARATOR |
| OZ | OUNCE |
| **P** | |
| P | PAINT |
| (P) | PROPOSED |
| PCC | PORTLAND CEMENT CONCRETE |
| PCW | PETROLEUM CONTACT WATER |
| PD | POSITIVE DISPLACEMENT |
| PF | PRE–FILTER |
| PH | PHASE |
| 1/PH | SINGLE PHASE |
| 3/PH | THREE PHASE |
| PIV | POST INDICATOR VALVE |
| PL | PROPERTY LINE, PLATE |
| PLAS | PLASTIC |
| PLAT | PLATFORM |
| PLC | PROGRAMMABLE LOGIC CONTROLLER |
| PLY | PLYWOOD |
| PM | PROGRAM MANAGER |
| PNL | PANEL |
| PR | PAIR |
| PRI | PRIMARY |
| PROP | PROPERTY |
| PS | PIPE SUPPORT |
| PSC | PROJECT SECURITY COORDINATOR |
| PSF | POUNDS PER SQUARE FOOT |
| PSI | POUNDS PER SQUARE INCH |
| PSIG | PSI GAUGE |
| PSP | PROJECT SECURITY PLAN |
| PVC | POLYVINYL CHLORIDE |
| **R** | |
| R | RISER |
| R, RAD | RADIUS |
| RAP | REMEDIAL ACTION PLAN |
| RC | REINFORCED CONCRETE |
| RCP | REINFORCED CONC. PIPE |
| REC | RECESSED |
| RED | REDUCER |
| REF | REFERENCE |
| REINF | REINFORCE |
| REQ | REQUIRED |
| RES | RESILIENT |
| RET | RETAINING |
| REV | REVISION |
| RMC | RIGID METALLIC CONDUIT |
| RNMC | RIGID NONMETALLIC CONDUIT |

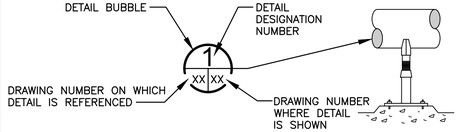
| | |
|---|---|
| **R(CONTINUED)** | |
| RO | ROUGH OPENING |
| ROFA | RUNWAY'S OBJECT FREE AREA |
| RPM | REVOLUTIONS PER MINUTE |
| RTS | RETURN TO SERVICE |
| RTU | REMOTE TERMINAL UNIT |
| **S** | |
| SBP | SECURITY BID PLAN |
| SC | SEALED CONDUIT |
| SCH | SCHEDULE |
| SEC | SECONDARY |
| SECT | SECTION |
| SHT | SHEET |
| SIDA | SECURITY INFORMATION DISPLAY AREA |
| SIM | SIMILAR |
| SJ | SEPARATION JOINT |
| SLD'G | SLIDING |
| SL | SLOPE |
| SOL | SOLID |
| SOW | SCOPE OR WORK |
| SM | SMALL |
| SP | SAMPLE POINT |
| SPCD | SAFETY PLAN COMPLIANCE DOCUMENT |
| SPL | STRIKE PLATE |
| SPEC | SPECIFICATION |
| SPKR | SPEAKER |
| SPR | SERVICE POINT RECEPTACLE |
| SQ | SQUARE |
| SQ FT | SQUARE FOOT |
| SQ IN | SQUARE INCH |
| SR | SPRING RETURN |
| SSTL | STAINLESS STEEL |
| S.S. | STAINLESS STEEL |
| SS | SANITARY SEWER/SUMP SEPARATOR |
| STA | STATIONARY |
| STD | STANDARD |
| STL | STEEL |
| S'PNG | STRIPING |
| STRUCT | STRUCTURAL |
| SW | SWITCH |
| SWPPP | STORM WATER POLLUTION PREVENTION PLAN |
| SYM | SYMMETRICAL |
| **T** | |
| TEL | TELEPHONE |
| TEMP | TEMPERATURE |
| THD | THREADED |
| THK | THICK |
| TI | TENANT IMPROVEMENT |
| TO | TOP OF |
| TOC | TOP OF CURB, CONCRETE |
| TOP | TOP OF PIPE |
| TOS | TOP OF SLAB |
| TOSTL | TOP OF STEEL |
| TOW | TOP OF WALL |
| TSA | TRANSPORTATION SECURITY ADMINISTRATION |
| TYP | TYPICAL |
| **U** | |
| U/G | UNDERGROUND |
| UNO | UNLESS NOTED OTHERWISE |
| UON | UNLESS OTHERWISE NOTED |
| **V** | |
| V | VENT / VOLTS |
| VA | VOLT AMPERES |
| VAR | VARIES |
| VER | VERIFY |
| VERT | VERTICAL |
| **W** | |
| W | WATT / WIRE |
| W/ | WITH |
| W/O | WITHOUT |
| WIND | WINDOW |
| WP | WEATHERPROOF |
| WTR | WATER |
| WWF | WELDED WIRE FABRIC |
| **X** | |
| XFMR | TRANSFORMER |

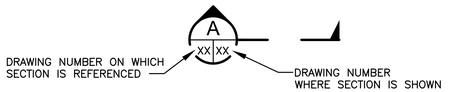
# GENERAL DRAWING REFERENCES




SCALE BAR

NORTH ARROW




USED WHEN SECTION IS SHOWN ON DIFFERENT SHEET (SIMILAR FOR PHOTOGRAPHS TAKEN)

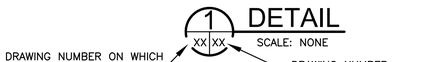

SECTION CUT WHERE SECTION IS SHOWN ON THE SAME SHEET


SECTION SHOWN

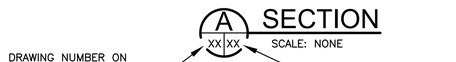
SECTION A

NOTES:

1. STANDARD DETAILS THAT ARE BROADLY APPLICABLE TO THE OVERALL PROJECT FUEL WORK SCOPE

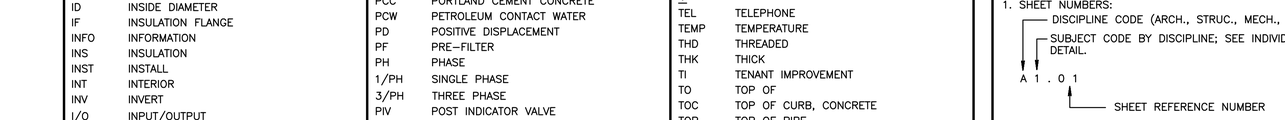







# GENERAL DRAWING CODE LEGEND

1. SHEET NUMBERS:




2. DISCIPLINE CODES:

| | |
|---|---|
| A | ARCHITECTURAL |
| C | CIVIL |
| CP | CATHODIC PROTECTION |
| CU | CIVIL UTILITIES |
| E | ELECTRICAL |
| FE | FUELING ELECTRICAL |
| FM | FUELING MECHANICAL |
| FP | FIRE PROTECTION |
| FT | TANKS |
| G | GENERAL |
| GT | GEOTECH |
| S | STRUCTURAL |
| SV | SURVEY (TOPOGRAPHIC) |

DATE

REVISIONS

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FACILITY IMPROVEMENTS PROJECT

NAPLES AIRPORT (APF)

GENERAL ABBREVIATIONS, LEGENDS & REFERENCES

PROJECT NAME

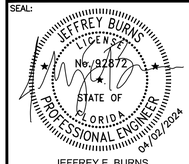
PROJECT LOCATION

DRAWING NAME

ISSUED FOR PERMIT


CURRIER & CO, INC.
13323 W.WASHINGTON BLVD,
SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050


SEAL:




JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | J.H. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049G102 |

SHEET NUMBER:

G1.02

ISSUED FOR PERMIT

# GENERAL SCOPE NOTES

SCOPE

1. CONTRACTOR SHALL PROVIDE, SUPPLY, FURNISH, INSTALL AND COMMISSION A NEW SET OF IMPROVEMENTS TO THE EXISTING NAPLES AIRPORT AUTHORITY (NAA, OWNER) FUEL FACILITY THAT SERVES THE NAPLES AIRPORT (APF) IN NAPLES, FLORIDA. THE CONTRACTOR SHALL PROVIDE ALL WORK IN ACCORDANCE WITH THE AUTHORITIES HAVING JURISDICTION INCLUDING, BUT NOT LIMITED TO, THE STATE OF FLORIDA, COLLIER COUNTY BUILDING DEPARTMENT, THE NAPLES AIRPORT AUTHORITY, CITY OF NAPLES BUILDING DEPARTMENT, THE NAPLES FIRE CHIEF, AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD).
2. THE NAPLES AIRPORT AUTHORITY AND THE NAPLES FIRE MARSHAL (AUTHORITY HAVING JURISDICTION) HAVE REVIEWED THESE PLANS FOR THE PURPOSE OF ESTABLISHING THE SCOPE OF WORK AND COMPLYING WITH PERMITTING REQUIREMENTS.
3. THE OWNER SHALL PAY FOR ALL PERMITS AS A REIMBURSABLE EXPENSE TO THE CONTRACTOR. THE CONTRACTOR SHALL EXPEDITE AND OBTAIN ALL RELATED PERMITS AT NO INCREASE TO THE CONTRACT SUM.
4. SCOPE INCLUDES THE PROCUREMENT, FABRICATION, MODIFICATION, INSTALLATION, COATING, FLUSHING, TESTING AND COMMISSIONING OF ALL NEW ELECTRICAL INFRASTRUCTURE AND FUEL SYSTEM COMPONENTS AND SUBSYSTEM COMPONENTS INCLUDING THE BULK FUEL STORAGE TANK AND APPURTENANCES, NEW PUMPS AND CONTROLS, FILTERS AND APPURTENANCES, REFUELER LOADING RACK AND ASSOCIATED CONTROLS AND SCULLY SYSTEM, TANK GAUGING, METER REGISTERS, BONDING, STORMWATER MANAGEMENT, ELECTRICAL AND CONTROL SYSTEMS.
5. THE PLANS AND SPECIFICATIONS ARE COMPLEMENTARY DOCUMENTS INTENDED TO PROVIDE A COMPREHENSIVE SET OF IMPROVEMENTS AND REQUIREMENTS FOR THE EXECUTION OF THE PROJECT. WHILE THE PLANS ILLUSTRATE THE VISUAL REPRESENTATION OF THE PROJECT DESIGN, THE SPECIFICATIONS DETAIL THE MATERIALS, METHODS, AND QUALITY STANDARDS TO BE FOLLOWED. CONTRACTORS SHALL TO REFER TO BOTH DOCUMENTS IN CONJUNCTION AND ADDRESS ANY DISCREPANCIES BY RFI.
6. ALL CONTRACTOR RECOMMENDED DESIGN CHANGES SHALL FIRST BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER OF RECORD FOR REVIEW AND ACCEPTANCE. NO CHANGE OR DEVIATION FROM WHAT IS SPECIFIED SHALL BE UNDERTAKEN WITHOUT APPROVAL.
7. PROJECT BASE SCOPE OF WORK (THE FOLLOWING IS A GENERAL LIST, SEE PLANS FOR THE COMPLETE SCOPE OF WORK):
   - A. REPLACEMENT OF THE EXISTING ELECTRICAL INFRASTRUCTURE, WHICH INCLUDES: PUMP MOTOR STARTERS, PANEL "MDP", PANEL "A", EFSO PANEL, COMM/FIBER PATCH PANEL, LIGHTING CONTROLLER AND ATS, AND NEW CABLE TRAY TO RE-FEED INFRASTRUCTURE. PHASED DEMOLITION OF THE EXISTING ELECTRICAL INFRASTRUCTURE. RELOCATION OF THE EXISTING GENERATOR AND BASE TANK
   - B. ADD HIGH-LEVEL SHUT-OFF CONTROL VALVE AND IN-TANK MOUNTED FLOAT CONTROL PILOT TO EXISTING UL94 AVGAS TANK #4. CONTRACTOR SHALL COORDINATE THE DRAINING OF TANK 4 WITH THE OWNER/OPERATOR, AND SHALL BE RESPONSIBLE FOR REMOVING THE TANK HEEL, AND RETURNING THE FUEL BACK TO SERVICE ONCE THE WORK IS COMPLETED. VAC OR TANKER TRUCKS USED MUST BE CERTIFIED CLEAN.
   - C. (3) NEW 300-GPM POSITIVE DISPLACEMENT PUMPS (BLACKMER GNX4) WITH 15-HP MOTORS TO SUPPORT THE (2) EXISTING JET-A LOADING/UNLOADING RACKS (NORTH AND SOUTHWEST) AND (1) NEW EAST LOADING/UNLOADING RACKS.
   - D. (3) NEW VERTICAL FILTER SEPARATORS, WITH SUMP MOUNTED WATER PROBE FOR WATER DEFENSE, WHICH SHALL DE-ENERGIZE THE ASSOCIATED PUMP. SUMP DRAINS, DIFFERENTIAL PRESSURE GAUGES, MILLIPORE SAMPLE POINTS, THERMAL/PRESSURE RELIEF VALVE ASSEMBLIES AND AUTOMATIC AIR VENT ASSEMBLIES WILL ALSO BE PROVIDED.
   - E. (3) NEW RELAXATION CHAMBERS, WITH DRAINS, THERMAL/PRESSURE RELIEF VALVE AND AUTOMATIC AIR VENTS ASSEMBLIES.
   - F. NEW 4-INCH STAINLESS STEEL PIPING SYSTEM SHALL BE PROVIDED FOR ALL NEW PIPING AND TO REPLACE ALL OF THE EXISTING COATED CARBON STEEL PIPING WITHIN THE FUEL FARM, ALONG WITH THE NECESSARY PIPE SUPPORTS, ISOLATION VALVES, THERMAL RELIEF VALVE ASSEMBLIES, HIGH-POINTS AND LOW POINTS. NOTE: FLANGES & VALVES WILL BE PROVIDED TO 1) INTEGRATE TANK 4 INTO THE JET-A SYSTEM IN THE FUTURE WHEN THIS TANK IS CONVERTED FROM UL-94 TO JET-A, AND 2) PROVIDE A FUTURE SOUTHEAST JET-A UNLOADING AND LOADING RACKS IN THE AREA THAT IS CURRENTLY UTILIZED FOR UL-94 UNLOADING/LOADING. ADDITIONALLY, IF ADD ALTERNATE #1 (SEE BELOW) IS NOT SELECTED FOR CONSTRUCTION, THEN FLANGED-OFF TIE-IN POINTS AND VALVES WILL BE PROVIDE FOR THE FUTURE TANK'S SUCTION AND FILL PIPING.
   - G. REWORK OF THE EXISTING NORTH AND SOUTHWEST JET-A REFUELER LOADING/UNLOADING PUMP, FILTERS AND RACKS.
   - H. RELOCATED (2) (E) METERS AND (E) MECHANICAL REGISTERS, RELOCATE (1) (E) METER AND PROVIDE A (N) TCS 3000 ELECTRONIC REGISTER FOR THE METER, PROVIDE AND INSTALL (2) (N) TCS METERS WITH (N) TCS 3000 ELECTRONIC REGISTERS. PROVIDE (3) (N) X1 CLOUD CONNECT MODEMS AND INTEGRATE INTO THE AIRPORT'S (E) X1 CLOUD CONNECT SYSTEM.
   - I. (3) (N) EMERGENCY FUEL SHUTOFF (EFSO) STATION, AND RELOCATION OF (2) (E) EFSO STATIONS AND (1) LIGHT POLE.
   - J. REPLACE THE (E) DUAL PRODUCE MOGAS/DIESEL DISPENSER, AND PROVIDE (1) (N) GASBOY DUAL PRODUCT MOGAS/DIESEL DISPENSER WITH INTERNAL PUMPS, METERS, FILTERS, AND (N) UNDER DISPENSER CONTAINMENT UNIT. PROVIDE A (N) FUEL FORCE PEDESTAL CONTROLLER AND INTEGRATE INTO (N) DISPENSER AND AIRPORT'S (E) FUEL FORCE SYSTEM.
   - K. NEW STRUCTURAL TANK FOUNDATIONS AND GENERAL SPILL CONTAINMENT PAD WITH PERIMETER CURB, WHICH SHALL BE SLOPED TO DRAIN INTO THE EXISTING TANK CONTAINMENT AREA.
   - L. (1) NEW REFUELER LOADING RACK AND CONCRETE ISLAND AND LOADING PAD, LOADING CONTROLS AND SCULLY ST-15 OVERFILL PREVENTION SYSTEM, EYEWASH STATION, SLIDE GATE, AND CONCRETE REFUELER LOADING GENERAL SPILL CONTAINMENT AREA. REFUELER LOADING PAD SHALL BE SLOPED TO DRAIN INTO THE TANK CONTAINMENT AREA.
   - M. PROVIDE AND INSTALL A OF (N) CANOPY OVER THE (N) LOADING POSITION (SEE REF DRAWINGS FOR BASIS OF DESIGN)
   - N. RELOCATION OF THE EXISTING OIL-WATER SEPARATOR AND CONTROLS/ALARM, AND DEMOLITION OF THE EXISTING OWS PAD AND EFFLUENT PIPE. CONSTRUCTION OF NEW STRUCTURAL PAD, AND NEW UNDERGROUND EFFLUENT GRAVITY DRAIN. PROVIDE (2) (N) STORMWATER PUMPS AND (N) PIPING TO SERVE RELOCATED OWS. CONTRACTOR SHALL COMPLETE THE RELOCATION OF THE OWS, CONNECT ALL MECHANICAL PLUMBING AND ELECTRICAL CONNECTIONS DURING AN OUTAGE TO BE SCHEDULED IN ADVANCE WITH THE OWNER & OPERATOR. SEE FM1.05A AND FM2.14 FOR REQUIRED TEMPORARY CONDITIONS.
   - O. EXPANSION OF THE EXISTING OPERATIONS BUILDING
   - P. CONSTRUCTION OF NEW RETAINING WALL TO SUIT NEW BUILDING EXPANSION, ELECTRICAL INFRASTRUCTURE AND RELOCATED GENERATOR
   - Q. RE-GRADE AREA ALONG THE EAST SIDE OF THE FUEL FACILITY AND EXPAND NEW ASPHALT DRIVE TO REPLACE THE EXISTING ROADWAY THAT WILL BE DEMOLISHED TO ACCOMMODATE THE NEW LOADING PAD.
   - R. RE-GRADE THE AREA TO THE NORTH AND NORTHEAST OF NEW TANK PAD TO ENSURE POSITIVE DRAINAGE AWAY FROM THE PAD TO THE EXISTING STORM INLET.
   - S. EXTEND THE CONCRETE TRUCK CONTAINMENT PAD ON THE EAST SIDE OF THE SOUTH LOADING/UNLOADING AREA AND INSTALL A NEW SWING GATE.
   - T. EXPAND THE DRAINAGE SWALE ALONG THE EAST SIDE OF THE EAST ROADWAY (THIS IS REQUIRED TO COMPENSATE FOR THE VOLUME OF THE EXISTING DRAINAGE SWALE IN THE LOCATION OF THE NEW TANK THAT WILL BE FILLED IN ONCE THE NEW TANK FOUNDATION AND LOADING PAD ARE CONSTRUCTED).
   - U. WIDENING OF THE WEST-SIDE OF THE WEST SERVICE DRIVE TO ALLOW IMPROVED ACCESS FOR FUEL DELIVERY TRUCKS FROM GATE 1S.
7. ADD ALTERNATE #1 SCOPE (SEE PLANS FOR THE COMPLETE SCOPE OF WORK):
   - A. (1) NEW 40,000-GALLON UL142 SINGLE-WALLED HORIZONTAL AST WITH CATWALK, NORMAL AND EMERGENCY VENTS, (2) MANWAYS, VEEDER ROOT MAG PROBE INTEGRATED INTO THE EXISTING VEEDER ROOT TLS-450+ PANEL, CLOCK GAUGING, GAUGE HATCH, FLOATING SUCTION, INLET DROP TUBE WITH DIFFUSER, EMERGENCY HIGH-LEVEL SHUTOFF VALVE, SUMP PUMP. TIE-IN OF TANK SUPPLY AND SUCTION PIPING INTO THE JET-A PIPING SYSTEM.
8. STRICT COORDINATION OF ALL CONSTRUCTION ACTIVITIES IS TO BE MAINTAINED BY THE CONTRACTOR WITH THE ENGINEER AND THE OWNER/OPERATOR AT ALL TIMES UNTIL THE WORK IS COMPLETED AND ACCEPTED BY THE OWNER.
9. TIME IS OF THE ESSENCE. THE CONTRACTOR SHALL COMPLETE THE WORK ONCE WORK IS STARTED WITHOUT ANY INTERRUPTION OF MORE THAN 4 SEQUENTIAL DAYS UNLESS A PROPOSED INTERRUPTION IS SCHEDULED IN ADVANCE AND APPROVED IN WRITING BY THE OWNER.
10. CONTRACTOR SHALL PROVIDE UPDATED SWPPP AND NPDES SUBMITTALS (AS NECESSARY TO INCORPORATE MEANS & METHODS) AND THEN ISSUE TO THE AIRPORT AUTHORITY, THE FDEP, AND OTHER REGULATORY AUTHORITIES TO COMPLY WITH ALL PERMITTING REQUIREMENTS. PROTECT ALL DRAINS IN THE CONTAINED AREA AND PROTECT ALL EXCAVATIONS IN ADVANCE OF MEASURABLE RAIN EVENTS.
11. CONTRACTOR SHALL PROVIDE A COMPLETE SET OF RED-LINES AND MARK-UPS IN PDF FORMAT TO THE ENGINEER FOR USE IN PRODUCING RECORD PLANS.
12. CONTRACTOR SHALL PROVIDE MANUFACTURER MAINTENANCE AND OPERATION MANUALS FOR ALL NEW EQUIPMENT.
13. CONTRACTOR SHALL ATTEND THE AIRPORT PRECONSTRUCTION MEETING AND SHALL MAKE THEMSELVES FAMILIAR WITH SUBMITTAL REQUIREMENTS THAT MUST BE MADE PRIOR TO AND/OR DURING THIS MEETING AND PRESENT ALL REQUIRED INSURANCE CERTIFICATES, POINTS OF CONTACT AND OTHER MATERIAL INFORMATION TO THE AIRPORT AUTHORITY IN ORDER TO OBTAIN AUTHORIZATION FROM THE TENANT IMPROVEMENT COORDINATOR (JOB SITE PERMIT) TO PROCEED WITH THE WORK.
14. CONTRACTOR SHALL MAKE HIMSELF FAMILIAR WITH AND COMPLY WITH THE INFORMATION AVAILABLE FROM AIRPORT REGARDING SECURITY REGULATIONS, VEHICLE OPERATIONS AND OTHER INFORMATION THAT IS RELEVANT TO THE PROJECT'S EXECUTION.
15. THE CONTRACTOR SHALL CONDUCT A UTILITY LOCATE FOR ALL LOCATIONS OF THE PROJECT WHERE EXCAVATIONS WILL BE PERFORMED.
16. IN ADDITION TO A CONSTRUCTION NPDES PERMIT, CONTRACTOR SHALL PROVIDE AND EXECUTE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE SWPPP SHALL BE APPROVED BY THE OWNER, THE AIRPORT ADMINISTRATION, FDEP AND THEIR DESIGNEES PRIOR TO COMMENCING WORK. THE PLAN SHALL INCLUDE PROTECTION OF OPEN EXCAVATIONS AND THE PROTECTION OF THE INLETS THAT DIRECT STORM WATER AND SPILLS TO ANY COLLECTION SYSTEM, ANY STREAM, NAVIGABLE WATERWAY OR OTHERWISE OFF THE WORK SITE AND/OR OWNER PROPERTY.

# COORDINATION, PHASING, ENVIRONMENTAL & WARRANTY NOTES

SECURITY AND ACCESS NOTES

1. THE NEW FUEL STORAGE FACILITY IS LOCATED INSIDE THE SECURED AREA OF THE AIRPORT, AND THEREFORE THE CONTRACTOR SHALL COORDINATE ALL ACCESS TO THE FACILITY AREA WITH THE OWNER/OPERATOR AND FOLLOW ALL AIRPORT AND UTILITY RELATED RULES AND REGULATIONS AT ALL TIMES.
2. ALL BADGING REQUIREMENTS WILL BE DETERMINED AT THE PRECONSTRUCTION MEETING PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.
3. ANY AND ALL CRANE PERMITS AND NOTAM'S (NOTICE TO AIRMEN) SHALL BE SUBMITTED AND OBTAINED BY THE CONTRACTOR IN ACCORDANCE WITH FAA REQUIREMENTS. ALL CRANE MOBILIZATIONS AND ALL CRANE OPERATIONS SHALL BE COORDINATED BY THE CONTRACTOR WITH THE FAA AIRFIELD OPERATIONS POINT OF CONTACT AT THE BEGINNING OF THE AIRFIELD OPERATIONS SHIFT AND PRIOR TO CRANE MOVEMENT.
4. ENGINEER SHALL SUBMIT THE REQUIRED FAA FORM 7460 AND FAA DETERMINATION SHALL BE RECEIVED IN ADVANCE OF CONTRACTOR MOBILIZING ANY CRANE OR TALL MOBILE EQUIPMENT TO THE PROJECT SITE AND OBTAIN APPROVALS FROM AIRFIELD OPERATIONS.
5. VEHICLE SPEEDS WITHIN THE PROJECT SITE SHALL NOT EXCEED 5 MPH.
6. VEHICLE SPEEDS ON AIRPORT ROADS SHALL NOT EXCEED 15 MPH UNLESS OTHERWISE POSTED.
7. ALL WORK ACTIVITIES SHALL BE CONDUCTED IN STRICT ACCORDANCE WITH FAA ADVISORY CIRCULAR 150/5370-2G 'OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION'.
8. COMPLY WITH ALL AIRPORT REGULATIONS PERTAINING TO WORK ACTIVITIES ON THE AIRPORT PROPERTY AND PROJECT SITE.
9. CONTRACTOR SHALL MAINTAIN ALL OPERATIONS AREAS INCLUDING HAUL ROUTES AND CONSTRUCTION AREAS CLEAR OF ROCKS, MUD, DUST AND DEBRIS AT ALL TIMES. CONTRACTOR SHALL INSPECT AND CLEAN HAUL ROUTES USING AN AIRPORT APPROVED VACUUM SWEEPER MACHINE AND OTHER EQUIPMENT SUITED TO THE TASK AS REQUIRED AT NO INCREASE IN THE CONTRACT SUM DURING EACH MOBILIZATION, HAULING AND DEMOBILIZING EVENT.
10. TRUCKS DELIVERING OR HAULING LOOSE OR GRANULAR MATERIAL SHALL BE COVERED TO PREVENT AIRBORNE DUST OR DEBRIS.
11. WATER SPRAY AND OTHER MEANS OF APPROVED DUST CONTROL SHALL BE USED THROUGHOUT CONSTRUCTION.
12. CONSTRUCTION LIGHTING USED FOR NIGHT WORK MUST BE EQUIPPED WITH SHIELDS TO BLOCK OR REDIRECT LIGHT AWAY FROM ACTIVE AIRCRAFT, TAXIWAYS, APRON AND AIRFIELD OPERATIONAL FACILITY SUCH AS THE AIRPORT CONTROL TOWER.
13. ALL CONTRACTOR EQUIPMENT AND MATERIALS SHALL BE MOVED TO DESIGNATED STAGING AREAS AND ALL SHALL BE KEPT GROUPED TOGETHER IN CLOSE PROXIMITY TO ACTIVE WORK AREAS AND OR DESIGNATED STAGING AREAS.
14. CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO PROTECT EXISTING IMPROVEMENTS, STRUCTURES, LIGHTS AND FENCING. ANY IMPROVEMENTS DAMAGED BY CONTRACTOR ACTIVITIES OR PERSONNEL SHALL BE IMMEDIATELY REPAIRED OR RECONSTRUCTED BY CONTRACTOR TO THE SATISFACTION OF THE OWNER OF THE IMPROVEMENT AND THE AIRPORT ADMINISTRATION.
15. THE CONTRACTOR IS REQUIRED TO HAVE BADGED PERSONNEL COMPLETE A TRAINING PROGRAM CONDUCTED BY THE AIRPORT FOR VEHICLE OPERATIONS ON THE AIRSIDE. ADDITIONAL MOVEMENT AREA DRIVER TRAINING IS REQUIRED IF CONSTRUCTION IS TAKING PLACE WITHIN THE MOVEMENT AREA. ADDITIONALLY, ALL PERSONNEL THAT WILL NOT BE BADGED BUT WILL ACCESS THE AOA UNDER ESCORT MUST REVIEW THE SAFETY AND SECURITY "DOS AND DON'TS" AND SIGN THAT THEY HAVE REVIEWED AND UNDERSTAND THEM. THE DOCUMENT MUST BE SUBMITTED TO THE NAA OPERATIONS DEPARTMENT.

COORDINATION WITH OPERATIONS

1. THE EXISTING APF FUELING FACILITY IS IN OPERATION ON A DAILY BASIS WITHOUT ANY INTERRUPTION. CONTRACTOR SHALL NOT DISABLE ANY SYSTEM OR CAUSE ANY SYSTEM TO FAIL UNLESS HAVING ALREADY FULLY COORDINATED THE OUTAGE COMPLETELY WITH THE PROPER REPRESENTATIVES AND TO THE OWNER'S SATISFACTION IN ADVANCE. SHOULD CONTRACTOR DISABLE ANY UTILITY, SYSTEM OR PORTION OF ANY SYSTEM WITHOUT THE ADVANCED APPROVAL OF THE OWNER AND OPERATOR, THE CONTRACTOR SHALL IMMEDIATELY RESTORE OPERATIONS AT CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE OWNER.
2. TWO REFUELER LOADING RACKS (MINIMUM) SHALL BE MAINTAINED IN OPERATION THROUGHOUT THE DURATION OF THE PROJECT.
3. THE CONTRACTOR SHALL PROVIDE A MASTER CRITICAL PATH SCHEDULE FOR ALL CONSTRUCTION RELATED ITEMS. THIS SCHEDULE SHALL SHOW CRITICAL PATH ACTIVITIES AND THEIR SCHEDULE START TO FINISH, RUN EITHER CONCURRENTLY OR CONCURRENTLY WITH A LAG. SCHEDULE MUST BE APPROVED BY THE OWNER AND THE ENGINEER AT LEAST 3 WEEKS PRIOR TO CONSTRUCTION ACTIVITIES START. MOBILIZATION MAY BE RESTRAINED BY THE OWNER IF A DRAFT OF THE SCHEDULE IS NOT MADE AVAILABLE TO THE OWNER BEFORE THE MOBILIZATION DATE.
4. AT LEAST ONE WEEKLY MEETING BETWEEN THE OPERATOR AND CONTRACTOR IS MANDATORY AND THE RESULTS OF THESE MEETINGS SHALL BE INCORPORATED INTO THE CONTRACTOR'S WEEKLY-PRODUCED, 3-WEEK LOOK AHEAD SCHEDULE.
5. CONTRACTOR SHALL PROVIDE TEMPORARY CONTAINMENT MEASURES AS NEEDED BASED ON PHASING AND CONTRACTOR'S MEANS AND METHODS. TEMPORARY MEASURES INCLUDE, BUT ARE NOT LIMITED TO, CLEAN VAC TRUCKS SUITABLE FOR FUEL RECOVERY AND THE RETURN OF HANDLED FUEL TO STORAGE, CLEAN FUEL RECOVERY BARRELS, TEMPORARY PIPING, INDUSTRY CONFORMING AVIATION FUEL HOSES, STAINLESS TUBING, CONFORMING TEMPORARY VALVES, CONNECTIONS, PLUGS, TEMPORARY DRAINING AND VENTING CONNECTIONS AND ASSOCIATED VALVES.
6. RETURN CLEAR AND BRIGHT (RECOVERED) FUEL TO STORAGE AS DIRECTED BY OPERATOR.
7. IF FUEL THAT IS HANDLED BY CONTRACTOR IS DEGRADED OR OTHERWISE RENDERED OFF-SPEC, THE CONTRACTOR SHALL PAY FOR ALL DISPOSAL COSTS, ALL COSTS OF REPLACING THE RUINED FUEL AND ANY AND ALL CLEANING COSTS THAT MUST BE UNDERTAKEN BY THE OPERATOR TO RETURN THE FUEL SYSTEM BACK TO ITS OPERATING CONDITION.
8. ALL WORK SHALL BE PERFORMED BY THE CONTRACTOR IN A SAFE AND PRE-APPROVED FASHION DURING THE PROJECT.
9. PROVIDE TO THE OWNER, OPERATOR AND AIRPORT AUTHORITY THE NAMES AND CONTACT MANAGING NUMBERS FOR DESIGNATED CONTRACTOR EMPLOYEE(S) RESPONSIBLE FOR CONSTRUCTION, CONTRACTOR ACCESS AND SIGNAGE 24 HOURS PER DAY.

EXISTING CONDITIONS AND ENVIRONMENTAL NOTES

1. GROUNDWATER WHEN DETECTED MUST BE MITIGATED BY THE CONTRACTOR BEFORE MEANINGFUL FOUNDATION WORK MAY COMMENCE. TEMPORARILY MANAGE SPILL CONTAINMENT WHEN INSTALLING GROUNDWATER MITIGATION ELEMENTS.
2. ENVIRONMENTAL SOIL SAMPLES HAVE NOT BEEN TAKEN AND NO KNOWN CONSTITUENTS OF CONCERN WITHIN AND NEAR THE PROJECT AREA HAVE BEEN IDENTIFIED BY OWNER. SHOULD THE CONTRACTOR DISCOVER AN INDICATION THAT ACTIONABLE SOIL CONTAMINATION EXISTS AT ANY TIME DURING THE PROJECT, THE CONTRACTOR SHALL IMMEDIATELY ADVISE THE OWNER AND CEASE ACTIVITIES IN THE SUSPECT AREA UNTIL DIRECTED OTHERWISE BY THE OWNER.
3. SOILS OBTAINED FROM EXCAVATIONS SHALL BE DISPOSED OF BY THE CONTRACTOR IMMEDIATELY OR RE-USED ON SITE IF THE SOIL IS SUITABLE. CONTRACTOR SHALL NOT STOCKPILE UNCONTROLLED SOILS ON THE PROJECT SITE. IF EXCAVATED SOIL IS SUSPECTED OF CONTAMINATION, ADVISE OWNER IMMEDIATELY AND DISCONTINUE THE REMOVAL OF MATERIAL UNTIL DIRECTION IS PROVIDED BY THE OWNER.
4. CONTRACTOR IS RESPONSIBLE FOR CONTRACTING FOR AND SECURING THE SERVICES OF THE LOCAL UTILITY LOCATING SERVICE AS PART OF THE LUMP SUM PROJECT COST PRIOR TO BEGINNING ANY EXCAVATION.
5. COMPLY WITH ALL CODES, REGULATIONS AND REQUIREMENTS OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND OF THE AIRPORT ADMINISTRATION AT ALL TIMES.
6. THE CONTRACTOR SHALL PROVIDE FOR CONTROL OF SURFACE EROSION DURING ALL PHASES OF CONSTRUCTION AND UNTIL THE OWNER ACCEPTS THE WORK AS COMPLETE. THE CONTRACTOR SHALL PROVIDE TEMPORARY SILT FENCE, SILT TRAPS, STRAW BALES, AND/OR OTHER MEANS OF PREVENTING SEDIMENT FROM REACHING AREAS THAT ARE ADJACENT TO OR DOWNSTREAM OF THE PROJECT SITES. CONTRACTOR SHALL GENERATE, SUBMIT AND OBTAIN APPROVAL FOR A CONSTRUCTION NPDES PERMIT IN ACCORDANCE WITH STATE REQUIREMENTS.
7. CONTRACTOR SHALL DISPOSE OF SAND BLASTING WASTE.

WARRANTY

1. CONTRACTOR SHALL PROVIDE TO OWNER A WARRANTY OF ALL INSTALLED EQUIPMENT AND MATERIALS THAT IS EFFECTIVE FOR ONE FULL YEAR AFTER SUBSTANTIAL COMPLETION.
2. SUBSTANTIAL COMPLETION IS DEFINED AS FOLLOWS: THE STAGE IN THE PROGRESS OF THE WORK WHEN THE WORK OR DESIGNATED PORTION THEREOF IS SUFFICIENTLY COMPLETE IN ACCORDANCE WITH CONTRACT DOCUMENTS SO THAT THE OWNER CAN FULLY OCCUPY AND UTILIZE THE WORK FOR ITS INTENDED USE.

# CONTACT INFORMATION

C1. THE CONTRACTOR SHALL DESIGNATE THE EMPLOYEE(S) THAT ARE RESPONSIBLE AND AVAILABLE FOR MAINTAINING CONSTRUCTION OPERATIONS AND SIGNAGE 24-HOURS PER DAY, AND PROVIDE THE OWNER A 24-HOUR CONTACT NAME AND NUMBER.

C2. AIRPORT CONTACT INFO:

A NAA SR. DIRECTOR OF AIRPORT DEVELOPMENT
KERRY D. KEITH
KKEITH@FLYNAPLES.COM
239-253-4137 (CELL)

NOAH DIETRICH
NDIETRICH@FLYNAPLES.COM
239-380-0845 (CELL)

B NAA FUEL SUPPLY & QUALITY CONTROL SUPERVISOR
EMIL GARCES
EGARCES@FLYNAPLES.COM
239-778-6022

A NAA AIRPORT SECURITY AND BADGING
JACK TUER
BADGING@FLYNAPLES.COM
239-253-4945

B CITY OF NAPLES FIRE-RESCUE DEPT. STATION #3
239-213-4907

C INSPECTIONS:
TBD

D FLORIDA DEPARTMENT OF PROTECTION (FDEP), SOUTH DISTRICT
239-344-5600

C3. UTILITIES:
NAPLES CITY UTILITIES
239-213-4745

C4. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IV (SOUTHEAST)
61 FORSYTH ST, SW
ATLANTA, GA, 30303
404-562-9900

# APPLICABLE CODES

APPLICABLE CODES AND STANDARDS:

1. 2023 FLORIDA BUILDING CODE (8TH EDITION, EFFECTIVE 12/31/2023)
2. 2023 FLORIDA FIRE PREVENTION CODE (FFPC) (8TH EDITION, EFFECTIVE 12/31/2023)
3. NFPA 1, UNIFORM FIRE CODE, 2021 EDITION, WITH FLORIDA SPECIFIC AMENDMENTS
4. NFPA 10, STANDARD FOR PORTABLE FIRE EXTINGUISHERS 2018 EDITION
5. NFPA 30, FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE, 2021
6. NFPA 70, THE NATIONAL ELECTRIC CODE (NEC), 2020
7. NFPA 101, LIFE SAFETY CODE, 2021, WITH FLORIDA SPECIFIC AMENDMENTS
8. NFPA 241, STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION, AND DEMOLITION OPERATIONS, 2019 EDITION
9. NFPA 407, STANDARD FOR AIRCRAFT FUEL SERVICING 2017 EDITION
10. NFPA 497, RECOMMENDED PRACTICE FOR THE CLASSIFICATION OF FLAMMABLE LIQUIDS, GASES, OR VAPORS AND OF HAZARDOUS (CLASSIFIED) LOCATIONS FOR ELECTRICAL INSTALLATIONS IN CHEMICAL PROCESS AREAS, 2024 EDITION
11. NFPA 704, STANDARD SYSTEM FOR THE IDENTIFICATION OF THE HAZARDS OF MATERIALS FOR EMERGENCY RESPONSE 2017 EDITION.
12. 2010 ADA STANDARD, SEPTEMBER 15, 2010.
13. ALL TSA SECURITY REQUIREMENTS RELATED TO CONSTRUCTION WITHIN THE SIDA AREA.
14. ALL FAA ADVISORY CIRCULARS PERTAINING TO AIRFIELD CONSTRUCTION.
15. ATA 103 (A4A 103), 2019 EDITION.
16. US EPA, SPILL PREVENTION, CONTROLS AND COUNTERMEASURES (SPCC) RULES, 40 CFR PART 112
17. API 2000, 2014 EDITION
18. API 2350 OVERFILL PREVENTION FOR STORAGE TANKS IN PETROLEUM FACILITIES, FIFTH EDITION 2020
19. UL STANDARD 142, STEEL ABOVEGROUND TANKS FOR FLAMMABLE AND COMBUSTIBLE LIQUIDS, 10TH EDITION, 2019
20. FLORIDA ADMINISTRATIVE CODE CHAPTER 62-762, ABOVEGROUND STORAGE TANK SYSTEMS

DATE | REVISIONS | △

CURRIER ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

PROJECT NAME: FUEL FACILITY IMPROVEMENTS PROJECT
PROJECT LOCATION: NAPLES AIRPORT (APF)
DRAWING NAME: GENERAL SCOPE, CODE, AND CONTACT INFORMATION

ISSUED FOR PERMIT

CURRIER & CO, INC.
13323 W.WASHINGTON BLVD,
SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050

SEAL:

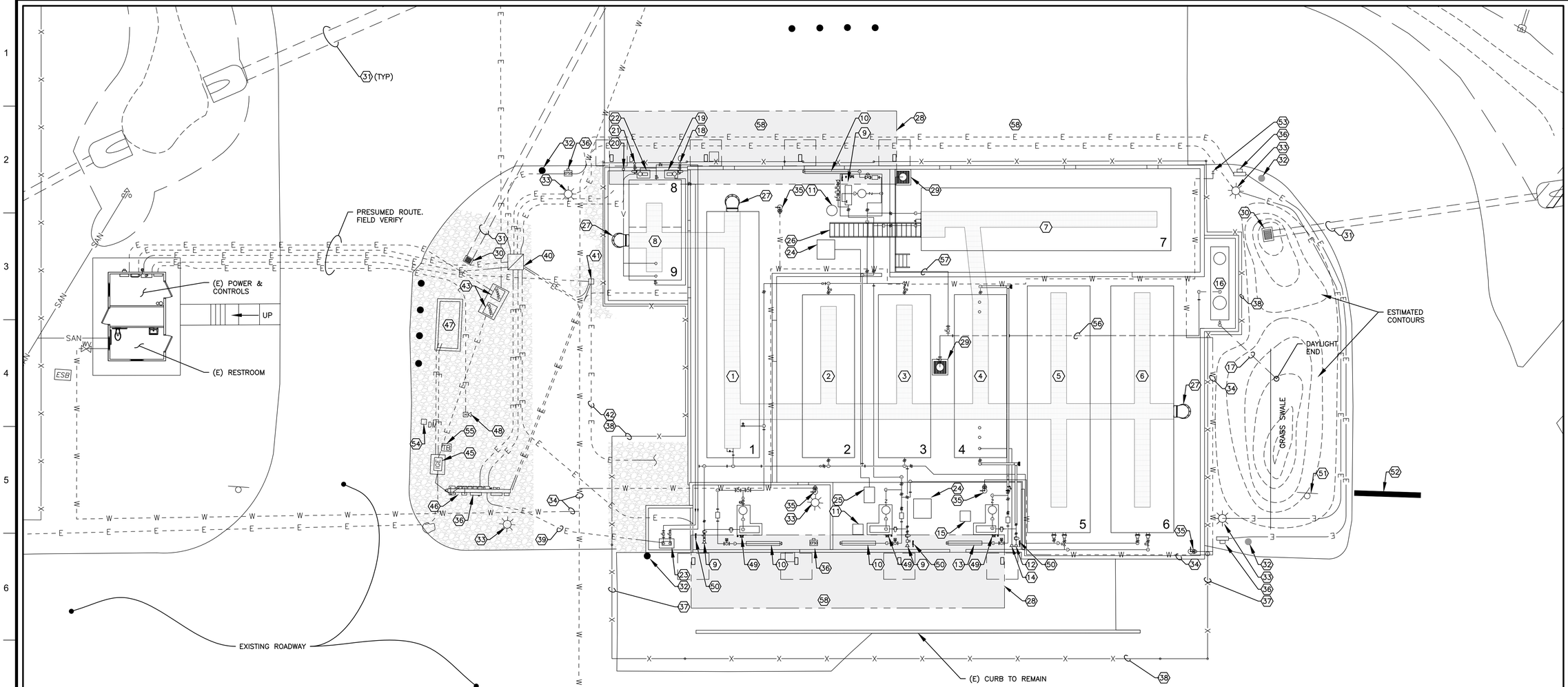
JEFFREY BURNS LICENSE No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | J.H. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049G103 |

SHEET NUMBER: G1.03

ISSUED FOR PERMIT




# 1 EXISTING FACILITY CONDITIONS PLAN

SCALE: NOTED

0 10 20 30
SCALE IN FEET (22x34)

TRUE NORTH

KEYNOTES: (#)

1. 30K GAL. D/W JET-A TANK #1
2. 20K GAL. S/W JET-A TANK #2
3. 20K GAL. S/W JET-A TANK #3
4. 20K GAL. S/W AVGAS TANK #4
5. 40K GAL. D/W JET-A TANK #5
6. 40K GAL. D/W JET-A TANK #6
7. 40K GAL. S/W JET-A TANK #7
8. 12K GAL. S/W MOGAS/DIESEL TANKS #8 & #9 (10K GAL DIESEL TANK #8, 2K GAL MOGAS TANK #9)
9. JET-A OFFLOADING POSITION
10. JET-A LOADING POSITION
11. JET-A SUMP SEPARATOR
12. AVGAS OFFLOADING POSITION
13. AVGAS LOADING POSITION
14. AVGAS VAPOR RECOVERY
15. AVGAS SUMP SEPARATOR
16. 1200-GAL. OWS WITH ESTIMATED 120 GPM CAPACITY
17. 4" OWS EFFLUENT DISCHARGE
18. MOGAS OFFLOADING POSITION
19. MOGAS PUMP
20. MOGAS VAPOR RECOVERY CONNECTION
21. DIESEL OFFLOADING POSITION
22. DIESEL PUMP
23. MOGAS/DIESEL DISPENSER
24. JET-A ANTI-ICING AGENT TANK
25. JET-A ANTI-ICING TRANSFER PUMP
26. TANK CATWALK ACCESS STAIR
27. TANK CATWALK ACCESS LADDER
28. CANOPY
29. CONTAINMENT DRAIN
30. STORM WATER DROP INLET
31. U/G STORM LINE
32. SITE BOLLARD
33. AREA LIGHT
34. U/G WATER SUPPLY
35. EMERGENCY SHOWER/EYE WASH STATION
36. EFSO
37. LOADING/UNLOADING ACCESS/EGRESS SLIDING GATES
38. FACILITY FENCE
39. DISPENSER WIRING
40. 24"x24"x8" J-BOX TO REMAIN (DIMENSIONS APPROXIMATE - FIELD VERIFY)
41. 12"x12"x6" J-BOX TO REMAIN FOR VEEDER ROOT WIRING (DIMENSIONS APPROXIMATE - FIELD VERIFY)
42. VEEDER ROOT WIRING
43. TRANSFORMERS - SEE ELECTRICAL PLANS
44. ELECTRICAL WIRING FROM CONTROL BUILDING
45. ELECTRICAL HAND HOLE
46. PUMP POWER & DISTRIBUTION PANEL - SEE ELECTRICAL PLANS
47. GENERATOR
48. VEEDER ROOT ALARM HORN
49. SCULLY RACK
50. GROUNDING REEL
51. STOP SIGN
52. STOP BAR PAVEMENT MARKING
53. HOSE BIB
54. DUCT MARKER
55. TELEPHONE SPLICE BOX
56. 3" C.S. OWS MANIFOLD PIPE FOR SUMP PUMPS (TO BE REMOVED & REUSED TEMPORARILY)
57. 2" C.S. NORTH SUMP PIPE TO OWS MANIFOLD PIPE
58. CONTAINED AREA TO REMAIN

GENERAL NOTES:

1. PRE-EXISTING SURVEY AND UTILITY DATA WAS OBTAINED BY CURRIER & COMPANY AND USED TO GENERATE THESE PLANS. NO NEW SURVEY WAS AUTHORIZED OR CONDUCTED. ALL U/G ELEMENTS ARE UNVERIFIED.
2. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONAL INFORMATION PRIOR TO EITHER ORDERING OR FABRICATING MATERIALS.
3. CONTRACTOR SHALL FOLLOW THE PROPOSED ROUTING OF ALL NEW PIPING UNLESS ADVANCED ACCEPTANCE FROM THE NAA AND THE ENGINEER IS PROVIDED. NON-COMPLIANT PIPING FOUND ON SITE SHALL BE REPLACED BY CONTRACTOR AT NO INCREASE IN THE CONTRACT SUM.

DATE

REVISIONS

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

PROJECT NAME: FUEL FACILITY IMPROVEMENTS PROJECT

PROJECT LOCATION: NAPLES AIRPORT (APF)

DRAWING NAME: EXISTING FACILITY CONDITIONS PLAN

ISSUED FOR PERMIT

CURRIER & CO, INC.
13323 W.WASHINGTON BLVD,
SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050

SEAL:

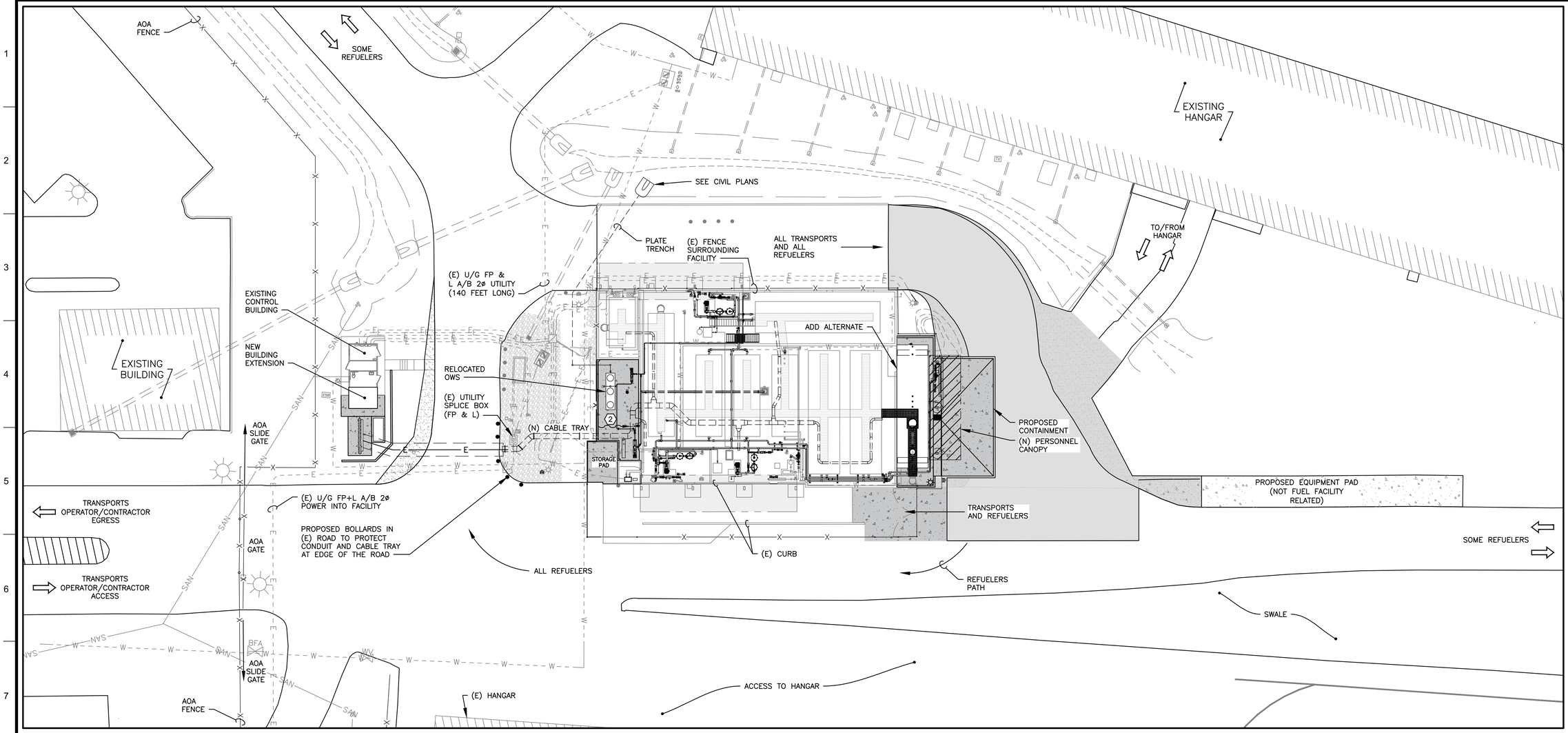
JEFFREY BURNS LICENSE No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.G. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049G200 |

SHEET NUMBER: G2.00

ISSUED FOR PERMIT




# 1 PROPOSED FACILITY CONDITIONS PLAN

SCALE: NOTED

0 20 40 60

SCALE IN FEET (22x34)

TRUE NORTH

KEYNOTES: ⟨#⟩

1. DO NOT BLOCK ANY ROADS & PLATE ANY TRENCHES IN ANY ROADWAY – SUITED TO H2O AND OTHER HEAVY EQUIPMENT/DELIVERIES.
2. (N) CONTAINED AREA DRAINS INTO (E) CONTAINMENT AREA

GENERAL NOTES:

1. SEE TRAFFIC PATTERN CALLED OUT ON THIS PLAN.
2. PHASING IS NOT INDICATED ON THIS SHEET BUT IS REQUIRED.

DATE

REVISIONS

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FACILITY IMPROVEMENTS PROJECT

NAPLES AIRPORT (APF)

PROPOSED FACILITY CONDITIONS PLAN

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

ISSUED FOR PERMIT

CURRIER & CO, INC.
13323 W.WASHINGTON BLVD,
SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050

SEAL:

JEFFREY BURNS LICENSE No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.G. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049G201 |

SHEET NUMBER:

G2.01

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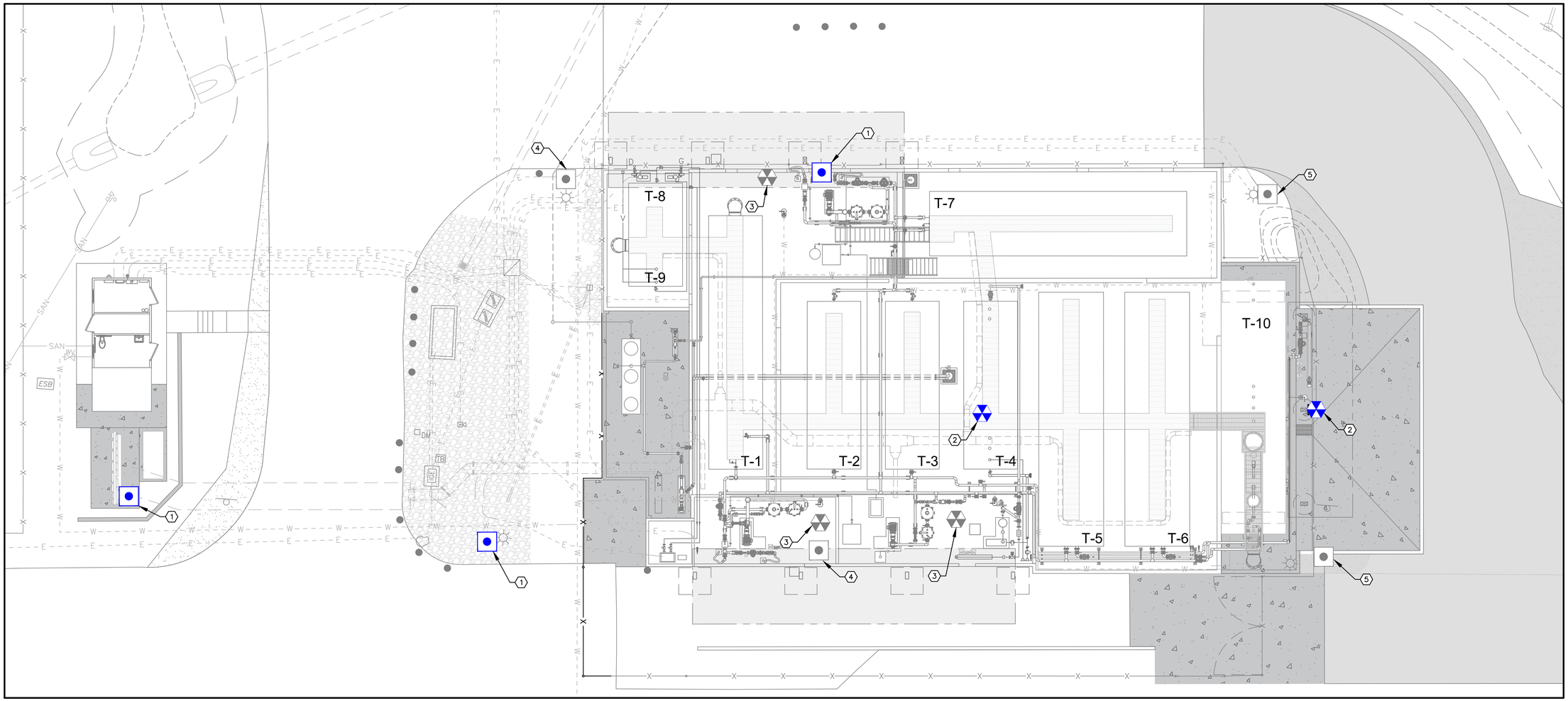


# 1 PROPOSED EFSO & FIRE EXTINGUISHER PLAN

SCALE: NOTED

0 10 20 30
SCALE IN FEET (22x34)

TRUE NORTH

KEYNOTES: (#)
1. (N) EFSO PUSH STATION, SEE ELECTRICAL PLANS
2. (N) 20-LB UL 120 BC FIRE EXTINGUISHER, SEE DETAIL 3/FM4.02
3. (E) 20-LB FIRE EXTINGUISHER
4. (E) EFSO PUSH STATION TO REMAIN
5. (E) RELOCATED EFSO PUSH STATION

| LEGEND | |
|---|---|
| | NEW EFSO STATION |
| | EXISTING EFSO STATION |
| | NEW 20 LB. PURPLE-K FIRE (UL 120 BC) EXTINGUISHER |
| | EXISTING 20 LB. FIRE EXTINGUISHER |

DATE | REVISIONS

CURRIER ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FACILITY IMPROVEMENTS PROJECT
PROJECT NAME

NAPLES AIRPORT (APF)
PROJECT LOCATION

PROPOSED EFSO & FIRE EXTINGUISHER PLAN
DRAWING NAME

ISSUED FOR PERMIT

CURRIER & CO, INC.
13323 W.WASHINGTON BLVD,
SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050

SEAL:
JEFFREY BURNS LICENSED No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.G. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049G202 |

SHEET NUMBER:
G2.02

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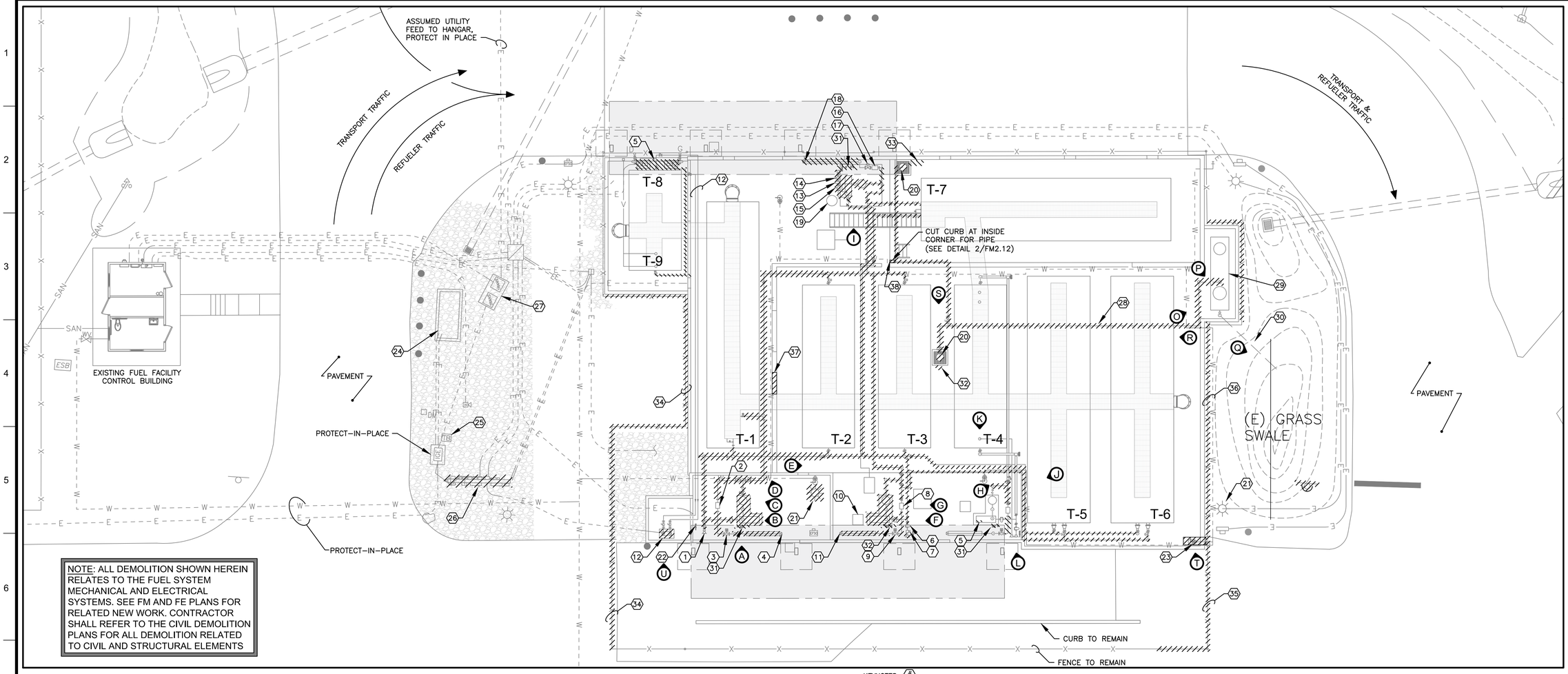



NOTE: ALL DEMOLITION SHOWN HEREIN RELATES TO THE FUEL SYSTEM MECHANICAL AND ELECTRICAL SYSTEMS. SEE FM AND FE PLANS FOR RELATED NEW WORK. CONTRACTOR SHALL REFER TO THE CIVIL DEMOLITION PLANS FOR ALL DEMOLITION RELATED TO CIVIL AND STRUCTURAL ELEMENTS

# FUEL SYSTEM MECHANICAL & ELECTRICAL DEMOLITION PLAN (ALSO SEE CIVIL DEMOLITION PLANS)

1

SCALE: NOTED

0 10 20 30
SCALE IN FEET (22x34)

TRUE NORTH

GENERAL DEMOLITION NOTES:

1. SEE ALSO D400–SERIES DRAWINGS FOR MATERIAL AND EQUIPMENT DEMO PHOTOS FOR MECHANICAL AND ELECTRICAL WORK.
2. THREE WEEKS BEFORE STARTING DEMOLITION, CONTRACTOR SHALL PREPARE A PHASED DEMOLITION/DECONSTRUCTION PLAN FOR APPROVAL AND SUBMIT PROPOSED SALVAGE MATERIAL LIST, DEMOLITION AND OPERATIONAL TRANSITION PLAN, DECONSTRUCTION, AND HAUL–OFF AND DISPOSAL PROCEDURES INCLUDING (E) FUEL SYSTEM PIPING AND EQUIPMENT AND THE (E) CONTROL BUILDING. INCLUDE IN THE PLAN PROCEDURES FOR CAREFUL REMOVAL AND DISPOSITION OF MATERIALS SPECIFIED TO BE SALVAGED, COORDINATION WITH OTHER WORK IN PROGRESS, A DISCONNECTION SCHEDULE OF THE INVOLVED UTILITY SERVICES, AND A DETAILED DESCRIPTION OF METHODS AND EQUIPMENT TO BE USED FOR EACH OPERATION AND OF THE SEQUENCE OF OPERATIONS. IDENTIFY COMPONENTS AND MATERIALS TO BE SALVAGED FOR REUSE OR RECYCLING, SEE NOTES 3 & 8.
3. THE CONTRACTOR SHALL WALK THE PROJECT SITE WITH THE OWNER AND OPERATOR, WHO SHALL IDENTIFY TO THE CONTRACTOR EQUIPMENT THAT SHOULD BE RETURNED TO THE OWNER OR OPERATOR. ALL OTHER EQUIPMENT NOT CLAIMED BY THE OWNER OR OPERATOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR WHO SHALL BE RESPONSIBLE FOR DISPOSING OF SUCH EQUIPMENT ACCORDING TO ALL FEDERAL, STATE AND LOCAL RULES AND REGULATION. PERFORM THIS WALK WITHIN THE 3–WEEK PERIOD ESTABLISHED IN NOTE 2
4. CONTRACTOR SHALL REMOVE RUBBISH AND DEBRIS FROM THE PROJECT SITE; DO NOT ALLOW ACCUMULATIONS INSIDE OR OUTSIDE THE FACILITY, BUILDING, OR ON ANY AIRFIELD PAVEMENTS. CONTRACTOR SHALL REMOVE RUBBISH AND DEBRIS FROM PROPERTY DAILY, UNLESS OTHERWISE DIRECTED, AND SHALL STORE MATERIALS THAT CANNOT BE REMOVED DAILY IN AREAS SPECIFIED BY THE OWNER & AT NO INCREASE IN CONTRACT SUM.
5. CONTRACTOR SHALL NOT DISTURB (E) FACILITY BEYOND EITHER THE EXTENT INDICATED OR NECESSARY TO INSTALL THE SPECIFIED (E) EQUIPMENT OR PROPOSED INSTALLATION OF (N) CONSTRUCTION. PROVIDE TEMPORARY SHORING AND BRACING FOR SUPPORT OF EXISTING SURFACE EQUIPMENT, STRUCTURES, ETC. TO PREVENT SETTLEMENT OR UNDERMINING, AS NECESSARY. CONTRACTOR SHALL PROVIDE PROTECTIVE MEASURES TO CONTROL ACCUMULATION AND MIGRATION OF DUST AND DIRT IN ALL WORK AREAS. REMOVE SNOW, DUST, DIRT, AND DEBRIS FROM WORK AREAS DAILY.
6. CONTRACTOR SHALL PROTECT IN–PLACE ALL (E) EQUIPMENT TO REMAIN AND (E) UTILITIES. IF THE CONTRACTOR DAMAGES ANY (E) EQUIPMENT OR (E) UTILITY IN THE COURSE OF THEIR DEMOLITION WORK, THEN IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO CORRECT/REPAIR THE DAMAGED (E) EQUIPMENT OR (E) UTILITY TO THE OWNER'S SATISFACTION AT NO INCREASE TO THE CONTRACT SUM.
7. BEFORE, DURING AND AFTER THE DEMOLITION AND DECONSTRUCTION WORK, CONTRACTOR SHALL CONTINUOUSLY EVALUATE THE CONDITION OF THE STRUCTURE BEING DEMOLISHED AND DECONSTRUCTED AND TAKE IMMEDIATE ACTION TO PROTECT ALL PERSONNEL WORKING IN AND AROUND THE PROJECT SITE. NO AREA, SECTION, OR COMPONENT OF FLOORS, ROOFS, WALLS, COLUMNS, PILASTERS, OR OTHER STRUCTURAL ELEMENT SHALL BE ALLOWED TO BE LEFT STANDING WITHOUT SUFFICIENT BRACING, SHORING, OR LATERAL SUPPORT TO PREVENT COLLAPSE OR FAILURE WHILE WORKMEN REMOVE DEBRIS OR PERFORM OTHER WORK IN THE IMMEDIATE AREA.
8. BEFORE BEGINNING ANY DEMOLITION OR DECONSTRUCTION WORK, CONTRACTOR SHALL REVIEW THE SITE AND EXAMINE THE DRAWINGS AND SPECIFICATIONS TO DETERMINE THE EXTENT OF THE WORK. RECORD EXISTING CONDITIONS IN THE PRESENCE OF THE OWNER AND OPERATOR SHOWING THE CONDITION OF STRUCTURES AND OTHER FACILITIES ADJACENT TO AREAS OF DEMOLITION. CONTRACTOR SHALL PHOTO–DOCUMENT THE (E) CONDITIONS BEFORE DEMOLITION, AND SHALL SAVE THE PHOTOGRAPHS FOR REFERENCE. INCLUDE IN THE RECORD POSSIBLE CONFLICTING ELECTRICAL CONDUITS, UTILITIES, FUELING LINES, ALARMS SYSTEMS, THE LOCATION AND EXTENT OF EXISTING CRACKS AND OTHER DAMAGE AND DESCRIPTION OF SURFACE CONDITIONS THAT EXIST PRIOR TO BEFORE STARTING WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND DOCUMENT ALL REQUIRED OUTAGES WHICH WILL BE REQUIRED DURING THE COURSE OF WORK, AND TO NOTE THESE OUTAGES ON THE RECORD DOCUMENT, SEE ALSO NOTE 2.
9. CONTRACTOR SHALL NOT INTERRUPT EXISTING UTILITIES SERVING EITHER OCCUPIED OR FUNCTIONING FACILITIES, EXCEPT WHEN AUTHORIZED BY THE OWNER AND OPERATOR IN ADVANCE. CONTRACTOR SHALL NOT BEGIN DEMOLITION WORK UNTIL ALL UTILITY DISCONNECTIONS HAVE BEEN MADE. SHUT OFF AND CAP UTILITIES FOR FUTURE USE, AS INDICATED.

KEYNOTES: (#)

1. (E) OFFLOADING CONNECTION SHALL BE RE–USED FOR SOUTH–WEST OFFLOADING POSITION
2. (E) LIQUID CONTROLS M–25 POSITIVE DISPLACEMENT METER SHALL BE RE–USED AT SOUTH–WEST LOADING RACK
3. (E) 3" BALL VALVE W/ INDELAC CONTROLS SHALL BE RE–USED AT SOUTH–WEST LOADING RACK
4. (E) BAYONET CONNECTION SHALL BE RE–USED AT SOUTH–WEST LOADING RACK
5. (E) UNDERGROUND FEEDER CONDUIT FOR THE AVGAS, MOGAS AND DIESEL PUMPS SHALL HAVE THE CONDUCTORS REMOVED AND BE SEALED & CAPPED AS PART OF THE NEW POWER FEEDS
6. (E) 4" STRAINER SHALL BE DEMOLISHED
7. (E) 4" JET–A ANTI–ICING AGENT INJECTOR SHALL BE RELOCATED TO SOUTH–WEST OFFLOADING POSITION
8. (E) LIQUID CONTROLS M–25 POSITIVE DISPLACEMENT METER SHALL BE RE–USED AT SOUTH–WEST OFFLOADING RACK
9. (E) 3" BALL VALVE W/ INDELAC CONTROLS SHALL BE RE–USED AT EAST LOADING RACK
10. (E) 25–GAL JET–A SUMP SEPARATOR SHALL BE RELOCATED NEXT TO PUMP #4 AND HAVE 1" PIPING TO PUMP INLET FOR FUEL RECOVERY
11. (E) BAYONET CONNECTION SHALL BE RELOCATED TO EAST LOADING RACK
12. (E) MOGAS & DIESEL DISPENSER SHALL BE DEMOLISHED, AND REPLACED – CONTINUE TO USE SUPPLY PLUMBING FROM T–8 & T–9, AND CONNECT TO NEW DISPENSER AS DETAILED.
13. (E) 4" STRAINER SHALL BE RE–USED AT REVISED NORTH OFFLOADING POSITION
14. (E) 4" JET–A ANTI–ICING AGENT INJECTOR SHALL BE RE–USED AT REVISED NORTH OFFLOADING POSITION
15. (E) 4" BALL VALVE SHALL BE RE–USED AT REVISED NORTH OFFLOADING POSITION
16. (E) LIQUID CONTROLS M–25 POSITIVE DISPLACEMENT METER SHALL BE RE–USED AT NORTH LOADING RACK
17. (E) 3" SOLENOID CONTROL VALVE SHALL BE RE–USED AT NORTH LOADING RACK
18. (E) BAYONET CONNECTION SHALL BE RE–USED AT NORTH LOADING RACK
19. (E) SUMP SEPARATOR SHALL BE RELOCATED AT NORTH LOADING POSITION
20. (E) SUBMERSIBLE PUMP TO BE REPLACED AFTER NEW SUMP SYSTEM IS OPERATIONAL
21. (E) LIGHT POLE SHALL BE DEMOLISHED AND THE (E) CONDUIT SHALL HAVE THE CONDUCTORS REMOVED AND BE SEALED & CAPPED (E) GROUNDING REELS SHALL BE PROTECTED–IN–PLACE
22. (E) BUTTERFLY VALVES SHALL BE PROTECTED–IN–PLACE
23. (E) EYEWASH STATION SHALL BE RELOCATED
24. (E) GENERATOR AND BASE TANK, TO BE RELOCATED
25. (E) TRANSFER SWITCH, TO BE DEMOLISHED
26. (E) ELECTRICAL DISTRIBUTION AND CONTROLS RACK, TO BE DEMOLISHED AFTER THE (N) ELECTRICAL INFRASTRUCTURE IS CONSTRUCTED, LOADS TRANSFERED AND ELECTRICAL SYSTEMS COMMISSIONED.
27. (E) PAD MOUNT UTILITY TRANSFORMERS TO REMAIN, SEE STRUCTURAL PLANS.
28. (E) 2" (FIELD VERIFY) FORCE MAIN TO OWS, TO BE TEMPORARILY RELOCATED TO SUIT RELOCATED OWS, SEE FM1.05A, FM1.05B, AND FM2.10. CONTRACTOR TO DEMOLISHED AND DISPOSE OF PIPE AFTER PERMANENT IMPROVEMENTS ARE CONSTRUCTED. SEE D4.02 PHOTOS.
29. (E) OWS, TO BE RELOCATED, SEE CIVIL/STRUCTURAL AND FM PLANS.
30. (E) OWS EFFLUENT PIPE, TO BE DEMOLISHED
31. EACH PUMP CONTROL STATION SHALL BE SELECTIVELY DEMOLISHED AND RESTRUCTURED AROUND THE EXISTING SCULLY PANEL AS (N) CONDUITS WILL BE RUN FROM THE (N) MOTOR STARTERS AND THE CONTROL DESIGN SHALL BE UPDATED TO ALL PUMP FUNCTION THE SAME. (E) CONDUITS THAT PENETRATE THE CONTAINMENT SLAB SHALL HAVE THE CONDUCTORS REMOVED AND BE SEALED AND CAPPED AT THE FIRST JOINT OUT OF THE SLAB.
32. (E) SUBMERSIBLE PUMP COMBINATION BREAKER/STARTER PANEL SHALL BE DEMOLISHED AFTER NEW SUMP SYSTEM IS OPERATIONAL. (E) CONDUIT THAT PENETRATE THE CONTAINMENT SLAB SHALL HAVE THE CONDUCTORS REMOVED AND BE SEALED & CAPPED AT THE FIRST JOINT OUT OF THE SLAB.
33. (E) UNDERGROUND FEEDER CONDUIT FOR THE SUBMERSIBLE PUMP SHALL HAVE THE THE CONDUCTORS REMOVED AND BE SEALED & CAPPED AS PART OF THE NEW POWER FEED.
34. DEMOLISH & REPLACE FENCE FOR PRIST & OWS AREA.
35. GATE & SOME FENCING TO BE DEMOLISHED.
36. FENCE TO BE REMOVED & EXTENDED.
37. SAW CUT 12" WIDE NOTCH FOR NEW 3" AND 4" S.S. SUMP LINES TO BE EXTENDED TO RELOCATED OWS, SEE FM 1.05A AND FM1.05B. LEAVE 1¼" OF CURB ABOVE HIGHEST FLOOR.
38. SAW CUT 6" WIDE NOTCH FOR NEW 2½" S.S. SUMP LINE TO RELOCATED OWS. LEAVE 1¼" OF CURB ABOVE HIGHEST FLOOR. SEE FM1.05B (ONLY).

## LEGEND

| | |
|---|---|
| | DEMOLITION |
| (#) | DEMOLITION PHOTO DETAIL REFERENCE SEE D4.00 THRU D4.02 |

DATE | REVISIONS

CURRIER ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FACILITY IMPROVEMENTS PROJECT

NAPLES AIRPORT (APF)

FUEL SYSTEM MECHANICAL & ELECTRICAL DEMOLITION PLAN

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

ISSUED FOR PERMIT

CURRIER & CO, INC.
13323 W.WASHINGTON BLVD, SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050

SEAL:

JEFFREY BURNS LICENSE No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.G. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049D200 |

SHEET NUMBER: D2.00

ISSUED FOR PERMIT

Plotted: P:\APF – Naples, FL\23049 APF DBB Transition and Electrical Replacement – Design\DWG\Demo\23049D200.dwg 4/2/2024 9:37 AM – Roy


A LOAD/OFFLOAD POSITION #1 - LOOKING NORTH
SCALE: N/A

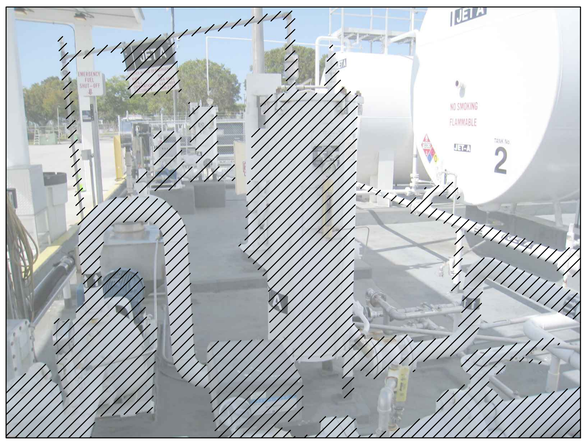

B LOAD/OFFLOAD POSITION #1 - LOOKING WEST
SCALE: N/A


C TANK #1 - LOOKING NORTHWEST
SCALE: N/A


D TANKS #1 & #2 - LOOKING NORTH
SCALE: N/A


E TANK #2 - LOOKING EAST
SCALE: N/A


F LOAD/OFFLOAD POSITION #2 - LOOKING WEST
SCALE: N/A




G FILTER SEPARATOR #2 - LOOKING WEST
SCALE: N/A

H TANKS #6 & #7 MANIFOLD - LOOKING NORTHEAST
SCALE: N/A

I NORTH PUMP AREA AT TANK #7 - LOOKING NORTH
SCALE: N/A

| REVISIONS | DATE |
|---|---|
| | |

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FACILITY IMPROVEMENTS PROJECT

NAPLES AIRPORT (APF)

JET-A SYSTEM
DEMOLITION DETAILS

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

ISSUED FOR PERMIT

CURRIER & CO, INC.
13323 W.WASHINGTON BLVD,
SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050

SEAL:
JEFFREY BURNS LICENSED No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER
04/02/2024

JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.G. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049D400 |

SHEET NUMBER:
D4.00

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J (E) AVGAS
SCALE: N/A

K (E) AVGAS
SCALE: N/A


SEE PLANS FOR ADDITIONS

L (E) AVGAS
SCALE: N/A

DATE

REVISIONS

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

PROJECT NAME: FUEL FACILITY IMPROVEMENTS PROJECT

PROJECT LOCATION: NAPLES AIRPORT (APF)

DRAWING NAME: AVGAS SYSTEM DEMOLIITON DETAILS

ISSUED FOR PERMIT

CURRIER & CO. INC.
13323 W.WASHINGTON BLVD,
SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050

SEAL:

JEFFREY BURNS LICENSE No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.G. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049D401 |

SHEET NUMBER:

D4.01

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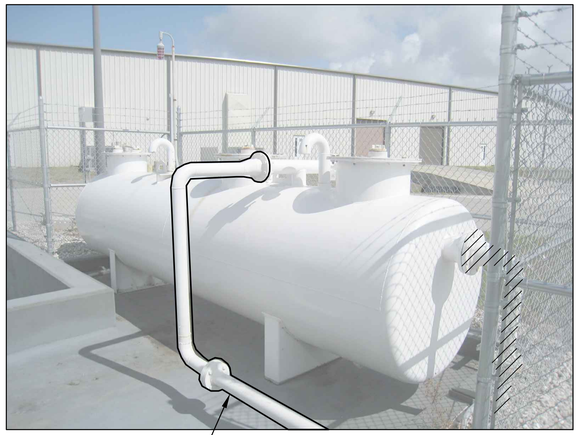
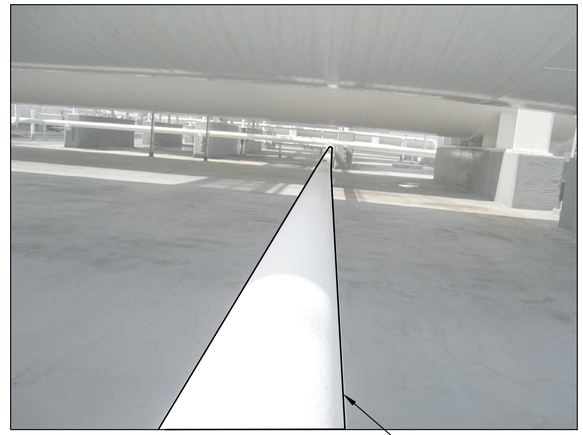


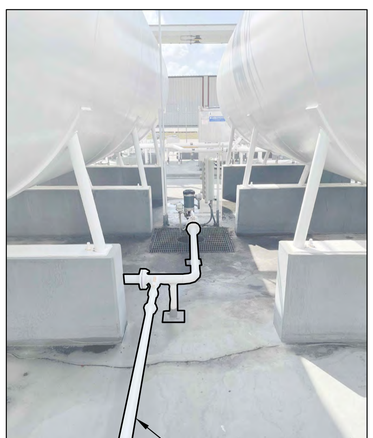

O (E) OWS
SCALE: N/A


P (E) OWS PIPING
SCALE: N/A


Q (E) OWS PIPING
SCALE: N/A




R (E) OWS PIPING
SCALE: N/A




S (E) OWS PIPING
SCALE: N/A


T (E) EYEWASH STATION AT TANK #6
SCALE: N/A


U (E) DISPENSER
SCALE: N/A

| DATE | REVISIONS | △ |
|---|---|---|
| | | |

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FACILITY IMPROVEMENTS PROJECT
NAPLES AIRPORT (APF)
OWS SYSTEM DEMOLIITON DETAILS

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

ISSUED FOR PERMIT

CURRIER & CO. INC.
13323 W.WASHINGTON BLVD,
SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050

SEAL:
JEFFREY BURNS LICENSE No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.G. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049D401 |

SHEET NUMBER:
D4.02

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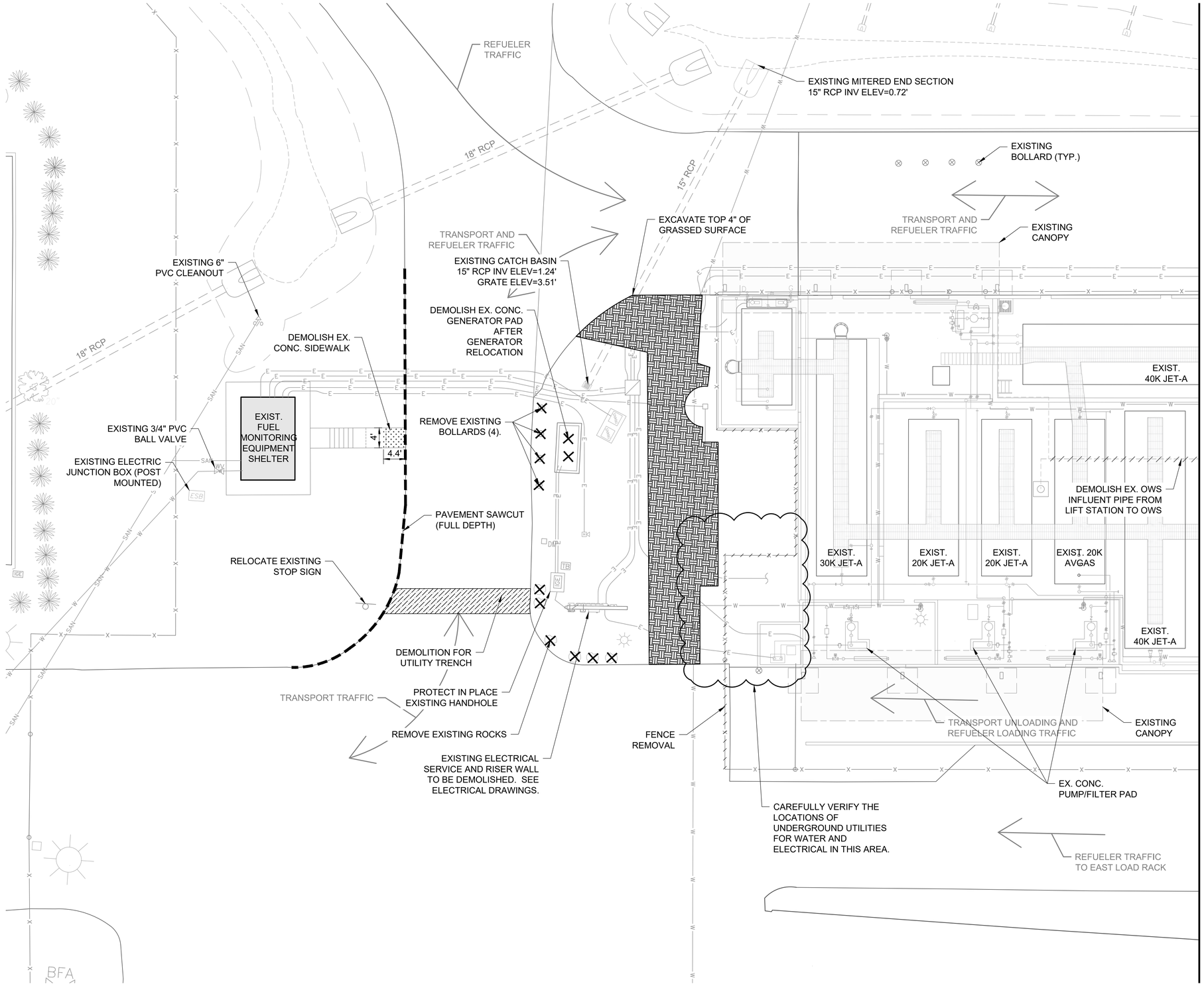


MATCH LINE SHEET C1.02

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LEGEND:

- EXISTING PAVEMENT
- EXISTING BUILDINGS
- EXISTING FENCE
- EXISTING ELECTRIC
- EXISTING LIGHT
- EXISTING WATER LINE
- ITEMS TO BE REMOVED
- PAVEMENT SAW-CUT
- FULL DEPTH PAVEMENT REMOVAL
- BITUMINOUS SURFACE REMOVAL (1.5" NOMINAL SURFACE DEPTH)
- UTILITY TRENCH

NOTE:

1. SEE C1.02 FOR ADDITIONAL DEMOLITION PLANS
2. SEE C3.01 FOR DIMENSIONS AND LIMITS. DEMOLITION LIMITS TO MATCH EXISTING PAVEMENT JOINTS AND MATERIAL CHANGES.

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DATE

REVISIONS

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

PROJECT NAME: FUEL FARM IMPROVEMENTS PROJECT

PROJECT LOCATION: NAPLES AIRPORT (APF)

DRAWING NAME: EXISTING SITE AND DEMOLITION PLAN - SHEET 1 OF 2

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LICENSE
No. 88657
STATE OF FLORIDA
PROFESSIONAL ENGINEER

PROFESSIONAL ENGINEER
STATE OF FLORIDA

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| APPROVED BY: | CAR | FILE NAME: | C1.01 |

SHEET NUMBER:

C1.01

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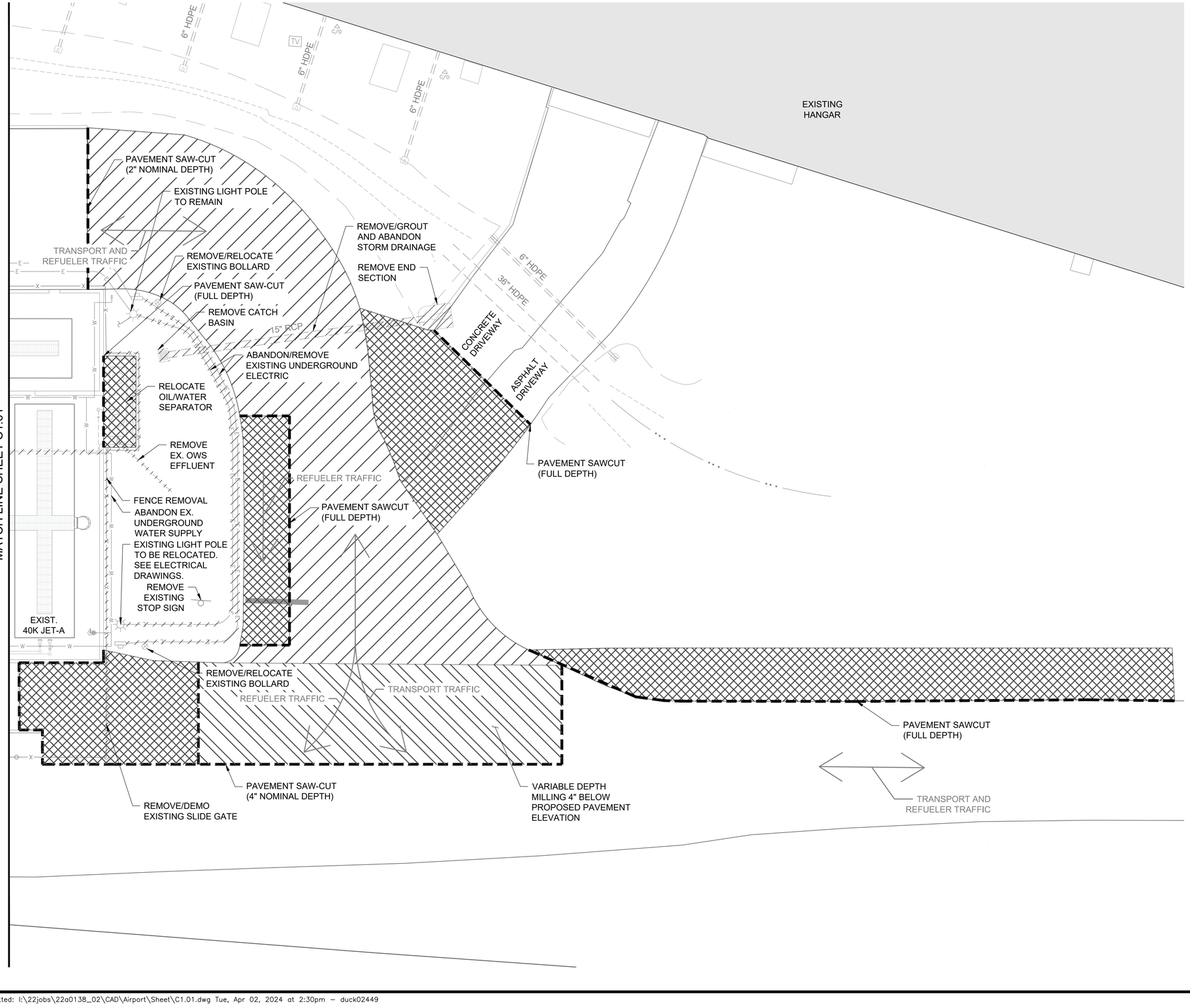


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10 0 10 20

LEGEND:

- EXISTING PAVEMENT
- EXISTING BUILDINGS
- EXISTING FENCE
- EXISTING ELECTRIC
- EXISTING LIGHT
- EXISTING WATER LINE
- ITEMS TO BE REMOVED
- PAVEMENT SAW-CUT
- FULL DEPTH PAVEMENT REMOVAL
- BITUMINOUS SURFACE REMOVAL (1.5" NOMINAL SURFACE DEPTH)
- UTILITY TRENCH

NOTE:

1. SEE C1.01 FOR ADDITIONAL DEMOLITION PLANS
2. SEE C3.02 FOR DIMENSIONS AND LIMITS. DEMOLITION LIMITS TO MATCH EXISTING PAVEMENT JOINTS AND MATERIAL CHANGES.

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ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FARM IMPROVEMENTS PROJECT

NAPLES AIRPORT (APF)

EXISTING SITE AND DEMOLITION PLAN - SHEET 2 OF 2

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

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SHEET NUMBER: C1.02

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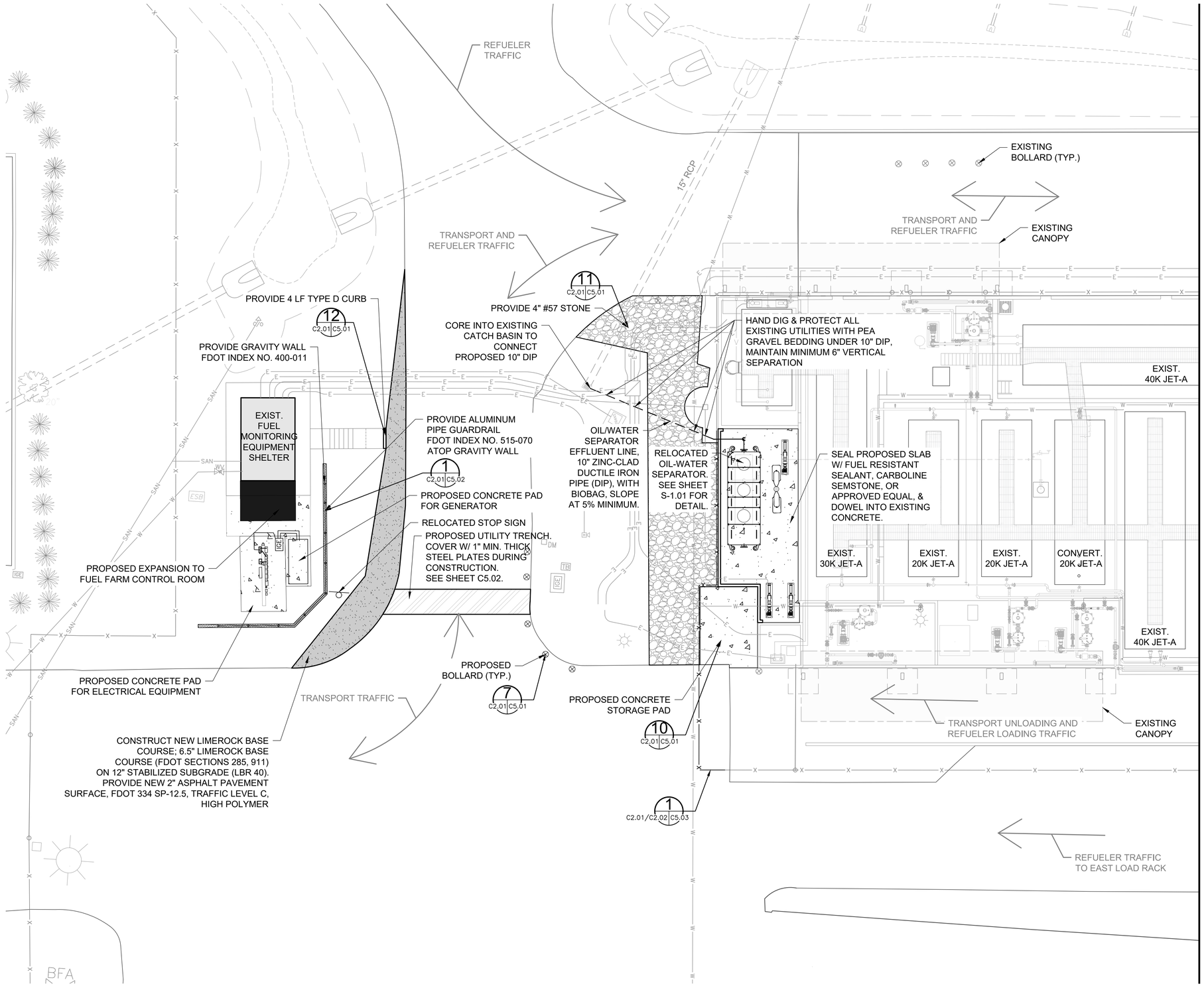


## LEGEND:

- EXISTING PAVEMENT
- EXISTING BUILDINGS
- EXISTING FENCE
- PROPOSED FENCE
- EXISTING ELECTRIC
- EXISTING LIGHT
- EXISTING WATER LINE
- PROPOSED 2" ASPHALT PAVEMENT
- PROPOSED 4" ASPHALT PAVEMENT
- PROPOSED CONCRETE PAD
- NEW 6.5" FDOT LIMEROCK BASE COURSE ON 12" STABILIZED SUBGRADE
- PROPOSED UTILITY TRENCH

SECURITY AND ACCESS NOTES:

1. THE CONTRACTOR IS REQUIRED TO HAVE BADGED PERSONNEL COMPLETE A TRAINING PROGRAM CONDUCTED BY THE AIRPORT FOR VEHICLE OPERATIONS ON THE AIRSIDE. ADDITIONAL MOVEMENT AREA DRIVER TRAINING IS REQUIRED IF CONSTRUCTION IS TAKING PLACE WITHIN THE MOVEMENT AREA. ADDITIONALLY, ALL PERSONNEL THAT WILL NOT BE BADGED BUT WILL ACCESS THE AOA UNDER ESCORT MUST REVIEW THE SAFETY AND SECURITY "DOS AND DON'TS" AND SIGN THAT THEY HAVE REVIEWED AND UNDERSTAND THEM. THE DOCUMENT MUST BE SUBMITTED TO THE NAA OPERATIONS DEPARTMENT.

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Naples AIRPORT

PROJECT NAME: FUEL FARM IMPROVEMENTS PROJECT

PROJECT LOCATION: NAPLES AIRPORT (APF)

DRAWING NAME: PROPOSED SITE PLAN - SHEET 1 OF 2

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SHEET NUMBER: C2.01

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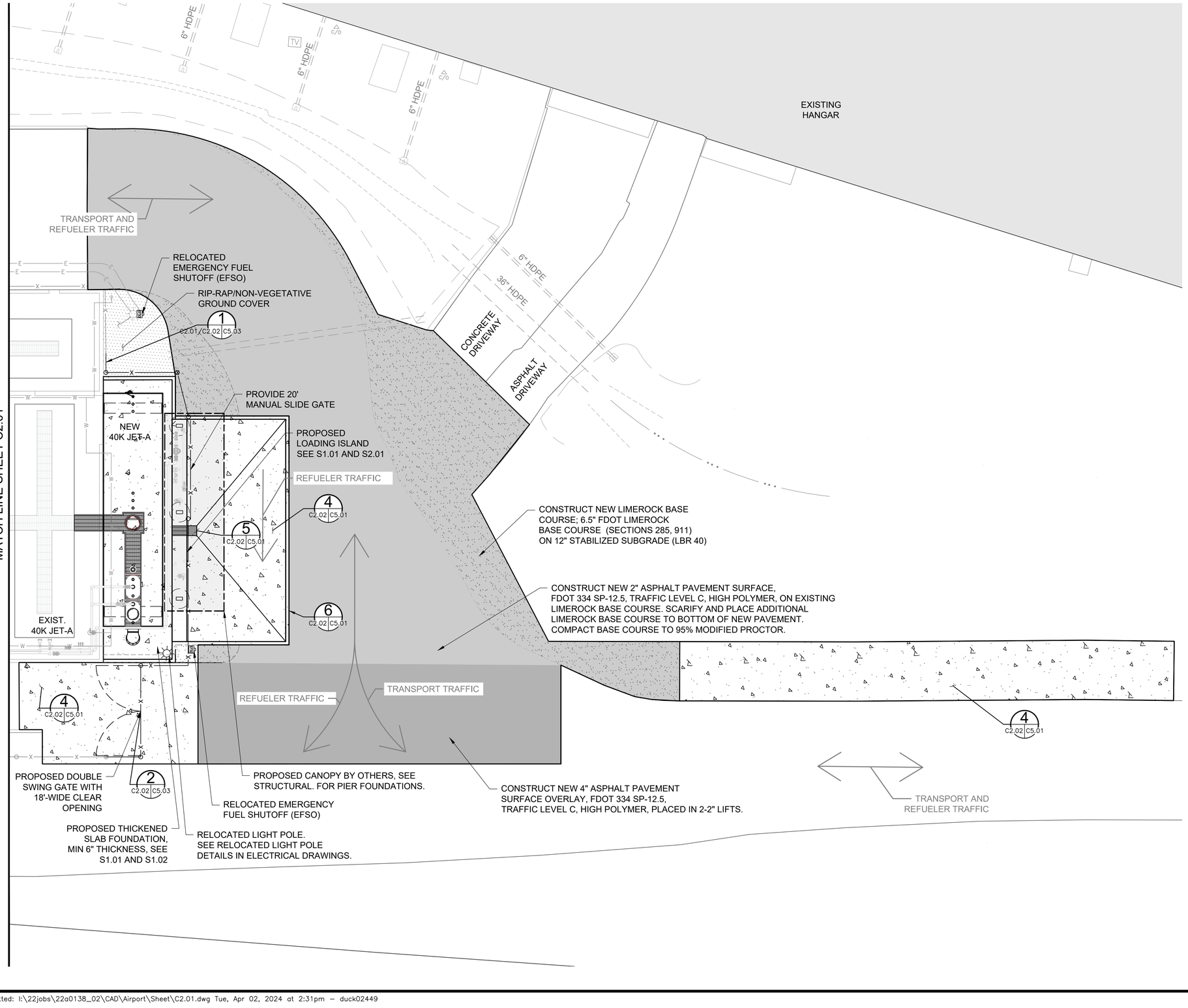


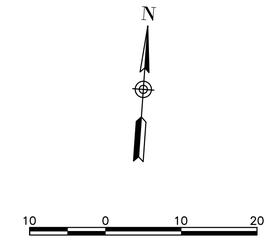


LEGEND:

- EXISTING PAVEMENT
- EXISTING BUILDINGS
- EXISTING FENCE
- PROPOSED FENCE
- EXISTING ELECTRIC
- EXISTING LIGHT
- EXISTING WATER LINE
- PROPOSED 2" ASPHALT PAVEMENT
- PROPOSED 4" ASPHALT PAVEMENT
- PROPOSED CONCRETE PAD
- NEW 6.5" FDOT LIMEROCK BASE COURSE ON 12" STABILIZED SUBGRADE
- PROPOSED UTILITY TRENCH

DATE

REVISIONS

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FARM IMPROVEMENTS PROJECT

PROJECT NAME

NAPLES AIRPORT (APF)

PROJECT LOCATION

PROPOSED SITE PLAN - SHEET 2 OF 2

DRAWING NAME

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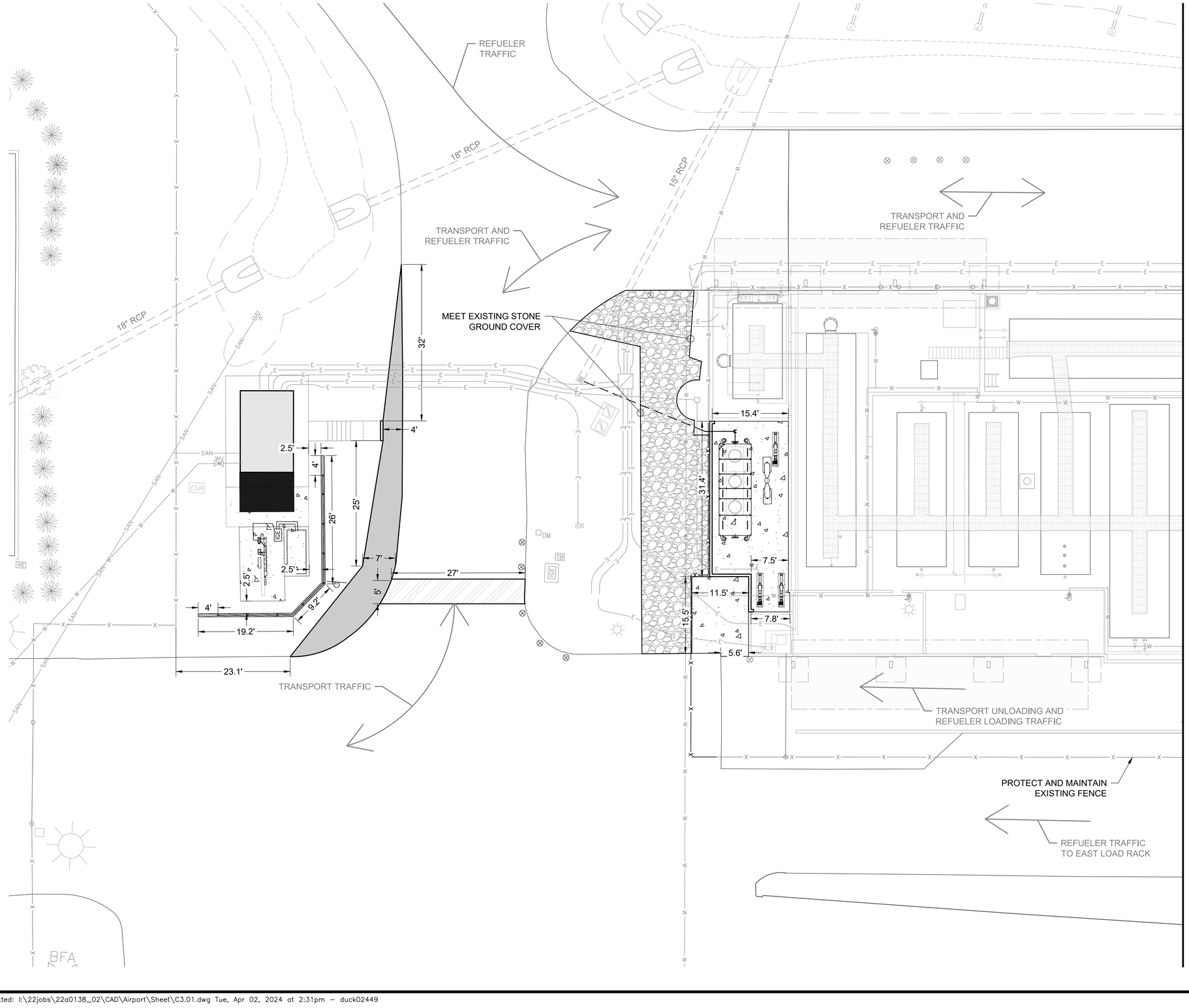


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LEGEND:

- EXISTING PAVEMENT
- EXISTING BUILDINGS
- EXISTING FENCE
- PROPOSED FENCE
- EXISTING ELECTRIC
- EXISTING LIGHT
- EXISTING WATER LINE
- #57 STONE GROUND COVER
- PROPOSED 2" ASPHALT PAVEMENT
- PROPOSED 4" ASPHALT PAVEMENT
- PROPOSED CONCRETE PAD
- PROPOSED GRAVITY WALL
- PROPOSED UTILITY TRENCH

MATCH LINE SHEET C3.02

NOTE:

1. CONTRACTOR TO FIELD VERIFY EXISTING LAYOUT. LIMITS ARE INTENDED TO MATCH EXISTING PAVEMENT JOINTS AND MATERIAL CHANGES.
2. SEE C1.01 FOR DEMOLITION PLANS. PAVING AND GEOMETRY LIMITS TO MATCH DEMOLITION LIMITS.
3. PHASE CONSTRUCTION TO MAINTAIN REFUELER AND TRANSPORT ACCESS/EGRESS.

## SITE ADDRESS NOTE:

1. SITE ADDRESS FOR THE FUEL FARM IS 2705 FUEL FARM ROAD, NAPLES, FL 34104.

## FLOOD ZONE AREA NOTES:

1. THE SITE IS LOCATED IN A SPECIAL FLOOD HAZARD AREA - AE 8.0 NAVD.

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Naples AIRPORT

FUEL FARM IMPROVEMENTS PROJECT

NAPLES AIRPORT (APF)

PAVING AND GEOMETRY PLAN - SHEET 1 OF 2

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

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C3.01

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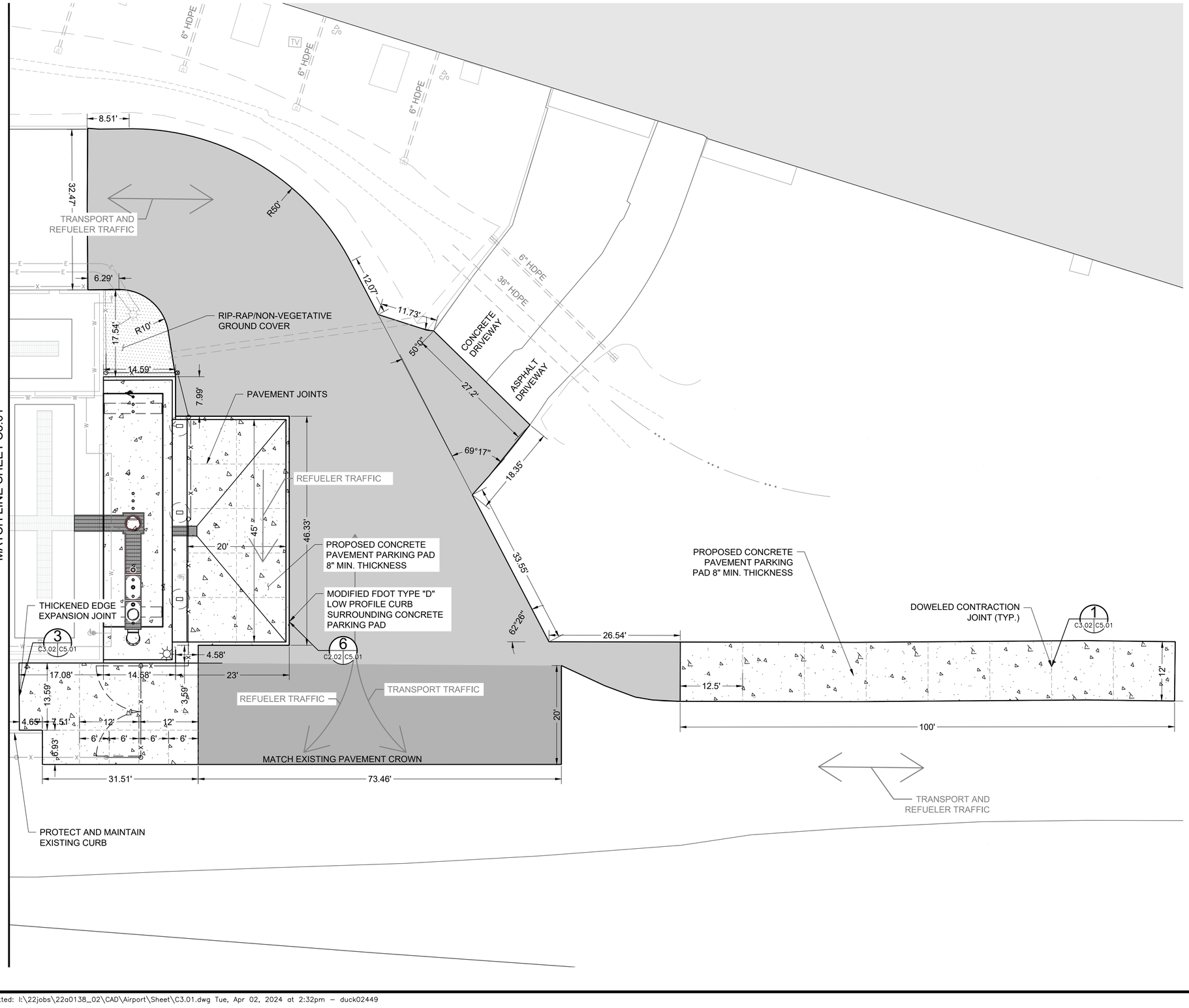


NOTE:

1. CONTRACTOR TO FIELD VERIFY EXISTING LAYOUT. LIMITS ARE INTENDED TO MATCH EXISTING PAVEMENT JOINTS AND MATERIAL CHANGES.
2. SEE C1.02 FOR DEMOLITION PLANS. PAVING AND GEOMETRY LIMITS TO MATCH DEMOLITION LIMITS.
3. PHASE CONSTRUCTION TO MAINTAIN REFUELER AND TRANSPORT ACCESS/EGRESS.

## SITE ADDRESS NOTE:

1. SITE ADDRESS FOR THE FUEL FARM IS 2705 FUEL FARM ROAD, NAPLES, FL 34104.

## FLOOD ZONE AREA NOTES:

1. THE SITE IS LOCATED IN A SPECIAL FLOOD HAZARD AREA - AE 8.0 NAVD.

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Naples AIRPORT

FUEL FARM IMPROVEMENTS PROJECT

NAPLES AIRPORT (APF)

PAVING AND GEOMETRY PLAN - SHEET 2 OF 2

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

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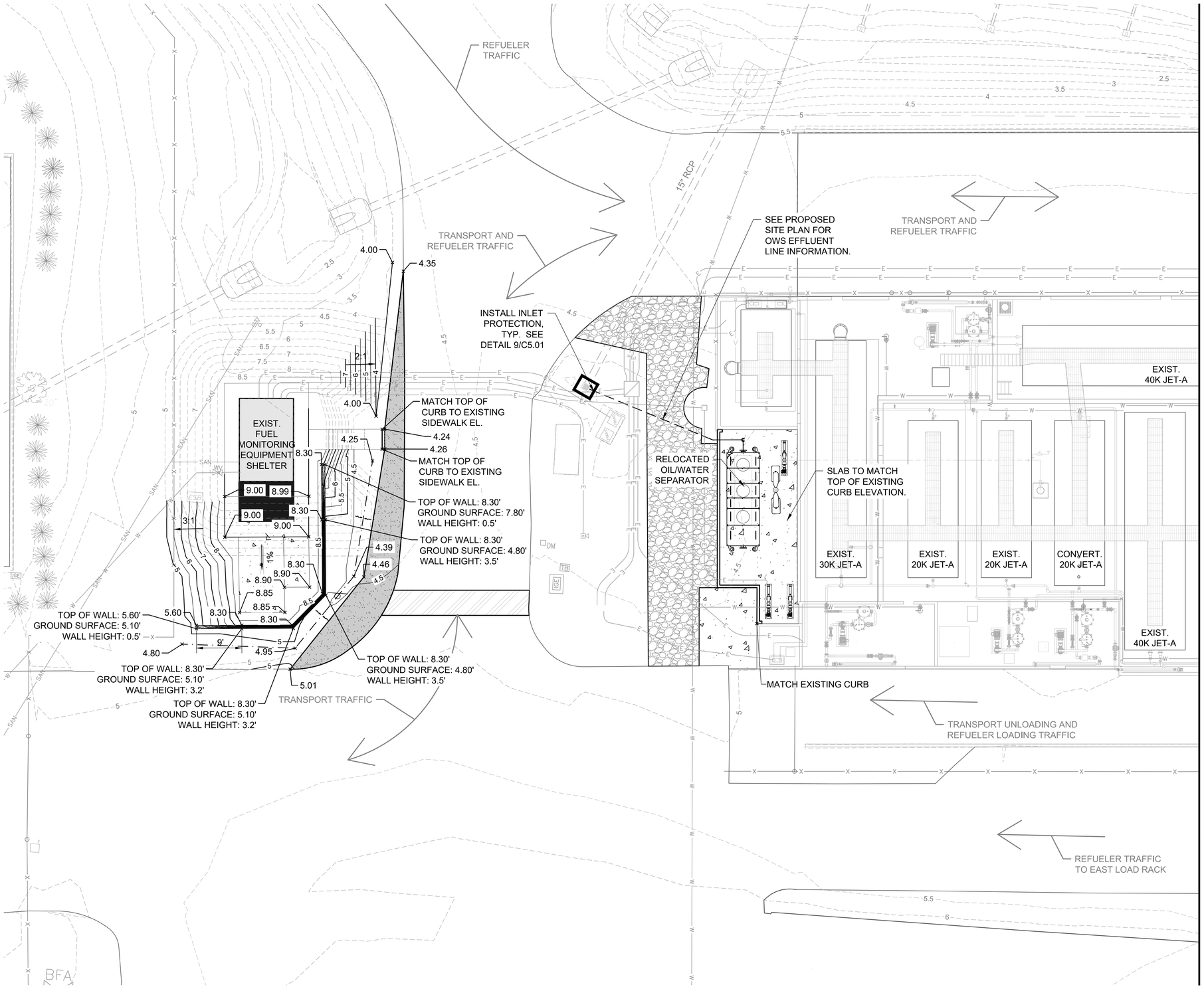


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## LEGEND:

- EXISTING PAVEMENT
- EXISTING BUILDINGS
- EXISTING FENCE
- PROPOSED FENCE
- EXISTING ELECTRIC
- EXISTING LIGHT
- EXISTING WATER LINE
- PROPOSED 2" ASPHALT PAVEMENT
- PROPOSED 4" ASPHALT PAVEMENT
- PROPOSED CONCRETE PAD
- NEW 6.5" FDOT LIMEROCK BASE COURSE ON 12" STABILIZED SUBGRADE
- PROPOSED GRAVITY WALL

NOTE:

1. CONTRACTOR TO FIELD VERIFY ALL EXISTING ELEVATIONS. CONTRACTOR TO MAINTAIN A 1% CROSS SLOPE ACROSS PROPOSED PORTLAND CEMENT CONCRETE PAVEMENT. ASPHALT SURFACES MUST DRAIN WITH FREELY WITHOUT PONDING.
2. DISTURBED GRASSED AREAS SHALL BE RE-ESTABLISHED WITH SOD. STAKE SOD ON ALL SLOPES 3:1 AND STEEPER.
3. SEE C4.02 FOR ADDITIONAL NOTES.

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CURRIER ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

PROJECT NAME: FUEL FARM IMPROVEMENTS PROJECT

PROJECT LOCATION: NAPLES AIRPORT (APF)

DRAWING NAME: PROPOSED GRADING AND DRAINAGE PLAN - SHEET 1

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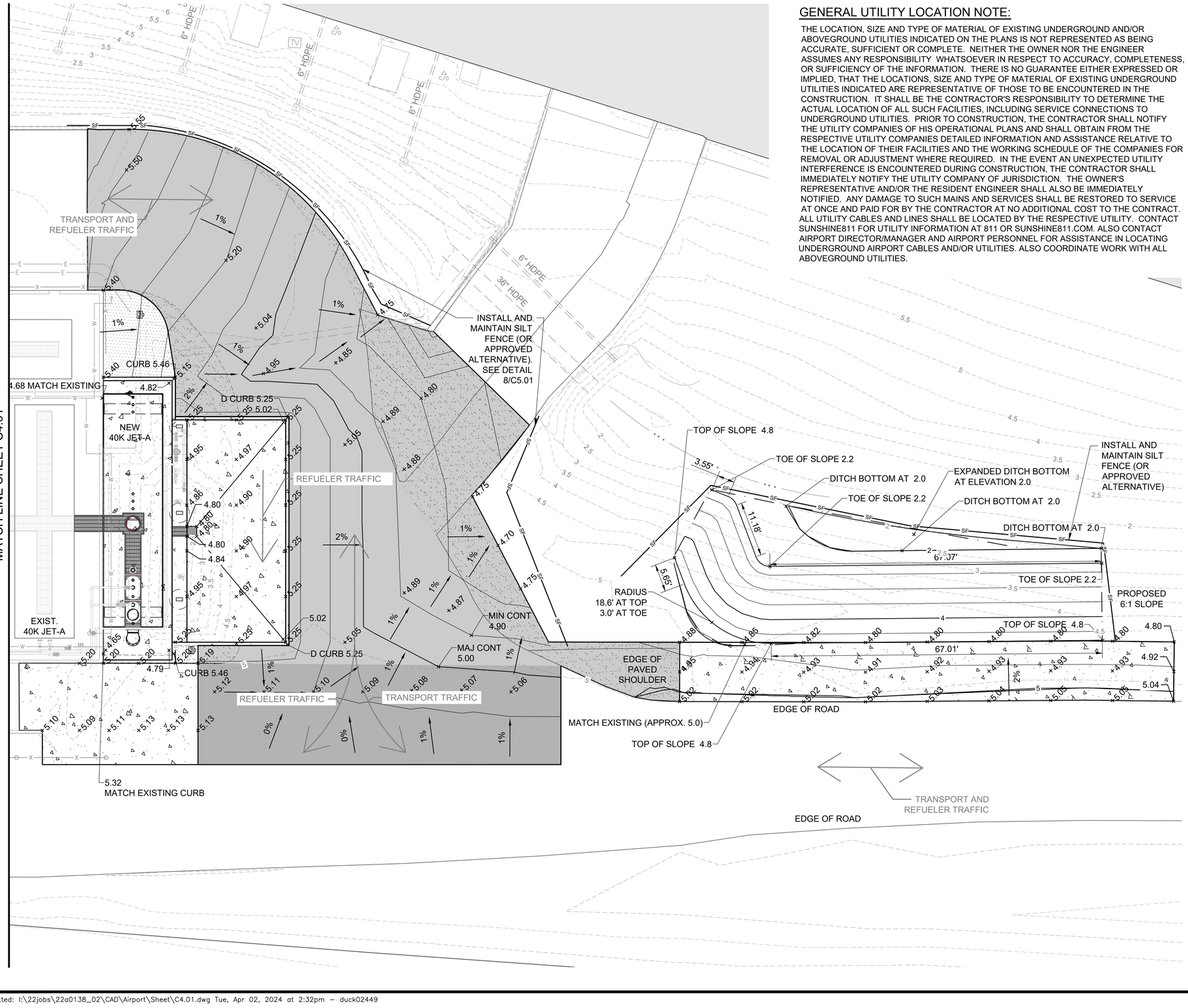
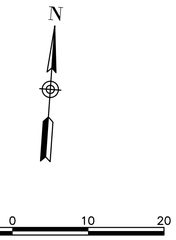
## GENERAL UTILITY LOCATION NOTE:

THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND AND/OR ABOVEGROUND UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY WHATSOEVER IN RESPECT TO ACCURACY, COMPLETENESS, OR SUFFICIENCY OF THE INFORMATION. THERE IS NO GUARANTEE EITHER EXPRESSED OR IMPLIED, THAT THE LOCATIONS, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED IN THE CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION. THE OWNER'S REPRESENTATIVE AND/OR THE RESIDENT ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY DAMAGE TO SUCH MAINS AND SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT. ALL UTILITY CABLES AND LINES SHALL BE LOCATED BY THE RESPECTIVE UTILITY. CONTACT SUNSHINE811 FOR UTILITY INFORMATION AT 811 OR SUNSHINE811.COM. ALSO CONTACT AIRPORT DIRECTOR/MANAGER AND AIRPORT PERSONNEL FOR ASSISTANCE IN LOCATING UNDERGROUND AIRPORT CABLES AND/OR UTILITIES. ALSO COORDINATE WORK WITH ALL ABOVEGROUND UTILITIES.




## LEGEND:

- EXISTING PAVEMENT
- EXISTING BUILDINGS
- EXISTING FENCE
- PROPOSED FENCE
- EXISTING ELECTRIC
- EXISTING LIGHT
- EXISTING WATER LINE
- PROPOSED 2" ASPHALT PAVEMENT
- PROPOSED 4" ASPHALT PAVEMENT
- PROPOSED CONCRETE PAD
- NEW 6.5" FDOT LIMEROCK BASE COURSE ON 12" STABILIZED SUBGRADE

## NOTES:

1. COORDINATE ALL WORK WITH AIRPORT OPERATIONS TO MINIMIZE DOWNTIME TO EXISTING FUEL FACILITY. AIRPORT MANAGEMENT SHALL, AT ALL TIMES, HAVE JURISDICTION OVER INTERRUPTIONS TO FUEL FACILITY OPERATIONS.
2. PROVIDE CONSTRUCTION RUNOFF CONTROL IN ACCORDANCE WITH CHAPTER 5 OF THE FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL.
3. VERIFY EXISTING CONTAINMENT AREA PAD GRADES AND MAKE MINOR ADJUSTMENTS AS REQUIRED TO PROVIDE POSITIVE DRAINAGE TOWARDS EXISTING SUMPS. NOTIFY ENGINEER OF ANY DISCREPANCIES.
4. CONTRACTOR TO FIELD VERIFY ALL EXISTING ELEVATIONS. CONTRACTOR TO MATCH EXISTING GRADES AT LIMITS OF DISTURBANCE. VOLUME OF PROPOSED DRAINAGE DITCH WIDENING TO INCREASE DITCH CAPACITY BY A MINIMUM OF 51 CYD TO COMPENSATE FOR PROPOSED GRADE CHANGES AND INCREASED IMPERVIOUS AREA.
5. DISTURBED GRASSED AREAS SHALL BE RE-ESTABLISHED WITH SOD.

## SITE ADDRESS NOTE:

1. SITE ADDRESS FOR THE FUEL FARM IS 2705 FUEL FARM ROAD, NAPLES, FL 34104.

## FLOOD ZONE AREA NOTES:

1. THE SITE IS LOCATED IN A SPECIAL FLOOD HAZARD AREA - AE 8.0 NAVD.

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CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

PROJECT NAME: FUEL FARM IMPROVEMENTS PROJECT
PROJECT LOCATION: NAPLES AIRPORT (APF)
DRAWING NAME: PROPOSED GRADING AND DRAINAGE PLAN - SHEET 2

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| DRAWN BY: | YY | PROJ. NO: | 22A0138_02 |
| APPROVED BY: | CAR | FILE NAME: | C4.01 |

SHEET NUMBER: C4.02

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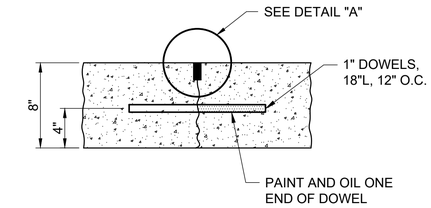
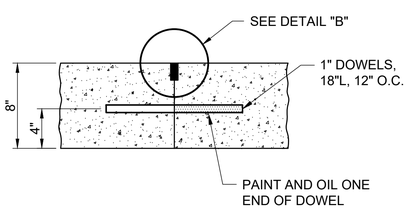
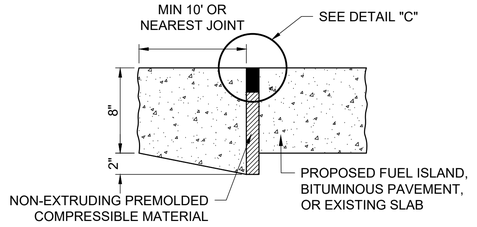


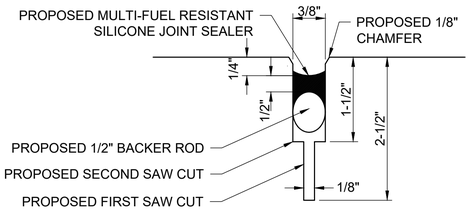

1 DOWELED CONTRACTION JOINT
C3.02 C5.01 SCALE: NONE




2 DOWELED CONSTRUCTION JOINT
C3.02 C5.01 SCALE: NONE




3 THICKENED EDGE EXPANSION JOINT
C3.02 C5.01 SCALE: NONE

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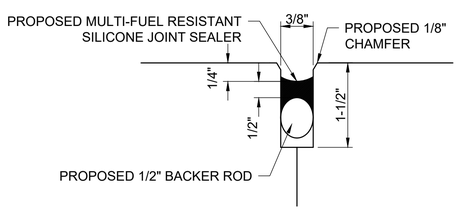


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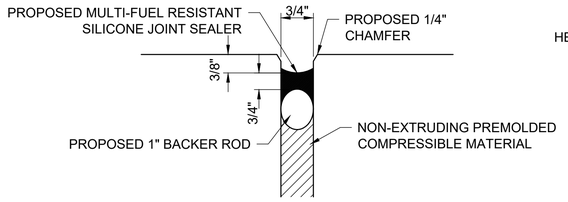
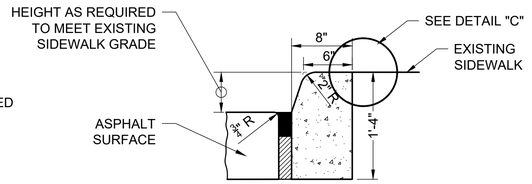
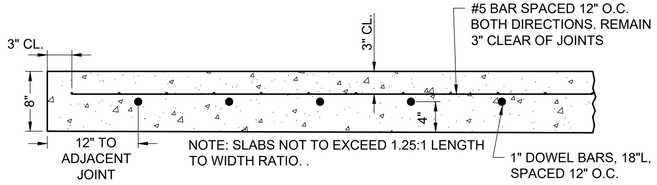


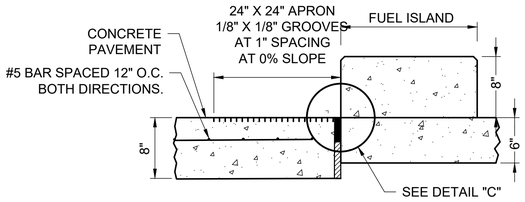

C DETAIL
SCALE: NONE



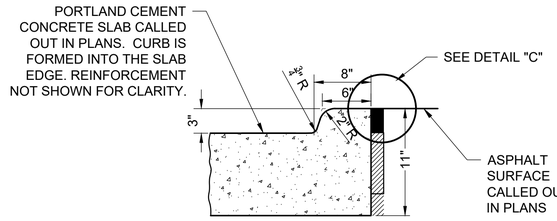

12 MODIFIED FDOT TYPE "D" CURB DETAIL
C2.01 C5.01 SCALE: NONE



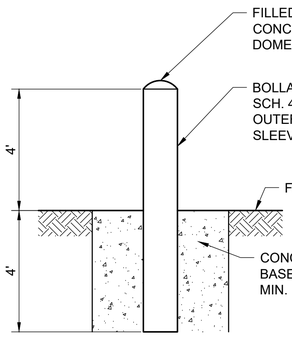

4 CONCRETE PAVEMENT PARKING PAD DETAIL
C2.02 C5.01 SCALE: NONE




5 DRAINAGE APRON DETAIL
C2.02 C5.01 SCALE: NONE

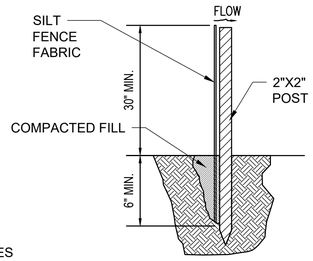



6 MODIFIED FDOT TYPE "D" CURB DETAIL (LOW PROFILE)
C2.02 C5.01 SCALE: NONE

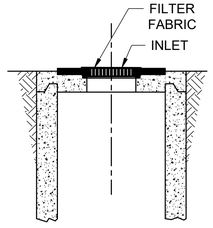



NOTE:
FIELD VERIFY EXISTING UTILITIES IN VICINITY OF BOLLARD PRIOR TO EXCAVATION. COORDINATE ANY CONFLICTS WITH ENGINEER.

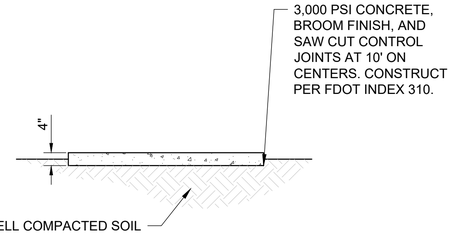
7 BOLLARD DETAIL
C2.01 C5.01 SCALE: NONE



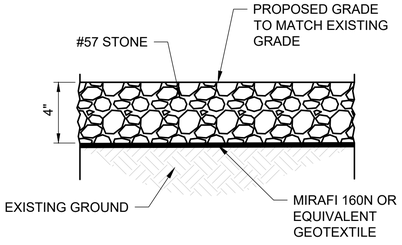

8 SILT FENCE DETAIL
C4.02 C5.01 SCALE: NONE




9 INLET PROTECTION DETAIL
C4.01 C5.01 SCALE: NONE




10 CONCRETE STORAGE PAD DETAIL
C2.01 C5.01 SCALE: NONE




11 #57 STONE SURFACE TYPICAL SECTION
C2.02 C5.01 SCALE: NONE

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REVISIONS

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FARM IMPROVEMENTS PROJECT
NAPLES AIRPORT (APF)
SITE DETAILS SHEET
1 OF 2

PROJECT NAME
PROJECT LOCATION
DRAWING NAME

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Engineering | Planning | Allied Services
Hanson Professional Services Inc.
Offices Nationwide
FL CA Lic. No. 7961

SEAL:
CHRISTOPHER A. REYNOLDS LICENSE No. 88657 STATE OF FLORIDA PROFESSIONAL ENGINEER
PROFESSIONAL ENGINEER
STATE OF FLORIDA

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| DRAWN BY: | YY | PROJ. NO: | 22A0138_02 |
| APPROVED BY: | CAR | FILE NAME: | C5.01 |

SHEET NUMBER:
C5.01

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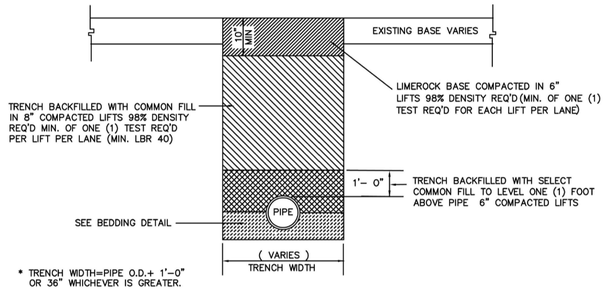


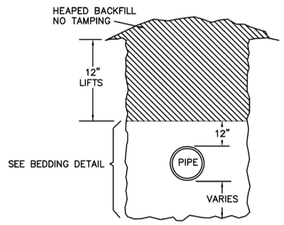

LIMEROCK ROAD

NOTES: 1) ALL PROCTOR AND DENSITY TESTS SHALL BE TAKEN BY A CERTIFIED LABORATORY

2) ALL TESTS SHALL BE COMPLETED AND MEET MINIMUM DENSITY REQUIREMENTS PRIOR TO ADDITIONAL BACK-FILLING

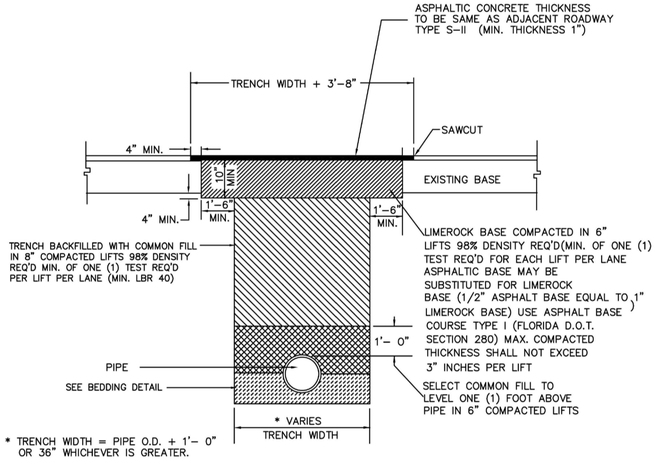
3) ALL BACKFILL MATERIAL REQUIRES APPROVAL BY PROJECT ENGINEER

***** CONTRACTOR SHALL UTILIZE BEST METHODS AND PRACTICES TO CONTROL GROUND WATER DURING ENTIRE EXCAVATION, INSTALLATION, BACKFILL AND COMPACTION. INSTALLATION OF PIPELINE IN WET AND/OR FLOODED TRENCH IS NOT ACCEPTABLE. PROPER BEDDING AND COMPACTION CAN NOT BE ACCOMPLISHED IN WET AND/OR FLOODED TRENCH.




OPEN TERRAIN

BACKFILL DETAIL - LIMEROCK ROAD & OPEN TERRAIN
NOT TO SCALE




NOTES: 1) ALL PROCTOR AND DENSITY TESTS SHALL BE TAKEN BY A CERTIFIED LABORATORY

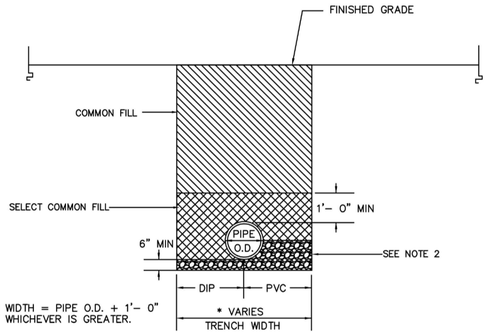
2) ALL TESTS SHALL BE COMPLETED AND MEET MINIMUM DENSITY REQUIREMENTS PRIOR TO ADDITIONAL BACK-FILLING

3) ORDINANCE 82-91 REQUIRES A R.O.W. PERMIT FOR ALL WORK WITHIN PUBLIC ROADS. THE R.O.W. PERMIT REQUIREMENTS SHALL SUPERSEDE THIS DETAIL.

***** CONTRACTOR SHALL UTILIZE BEST METHODS AND PRACTICES TO CONTROL GROUND WATER DURING ENTIRE EXCAVATION, INSTALLATION, BACKFILL AND COMPACTION. INSTALLATION OF PIPELINE IN WET AND/OR FLOODED TRENCH IS NOT ACCEPTABLE. PROPER BEDDING AND COMPACTION CAN NOT BE ACCOMPLISHED IN WET AND/OR FLOODED TRENCH.

***** INSTALLATION OF ANY WATER, WASTEWATER, OR RECLAIM WATER LINE REQUIRED TO PASS UNDER OR TRENCHING CAUSING UNDERMINING OF ANY EXISTING CONCRETE CURB, GUTTER, OR SIDEWALK; TUNNELING UNDER IS NOT ALLOWED. ANY AFFECTED CONCRETE CURB, GUTTER, OR SIDEWALK SHALL BE CLEANLY REMOVED (ALL SECTIONS AFFECTED, 5 FT MINIMUM), FULL BACKFILL AND PROPER COMPACTION PERFORMED, CONCRETE REPLACED REQUIRING A MINIMUM OF 5 FT BETWEEN EXPANSION JOINTS.

BACKFILL DETAIL - PAVED ROADWAYS
NOT TO SCALE




NOTES: 1) COMMON FILL SHALL BE COMPACTED TO MATCH CRITERIA PROVIDED IN BACKFILL DETAILS FOR PAVED AND UNPAVED LOCATIONS RESPECTIVELY.

2) BEDDING MATERIAL SHALL BE FDOT #57 STONE IF BELOW THE SEASONAL LOW GROUNDWATER TABLE, OR FDOT #89 STONE, FDOT #131 OR #132 SCREENING IF ABOVE THE SEASONAL LOW GROUNDWATER TABLE.

3) ORDINANCE 82-91 REQUIRES A R.O.W. PERMIT FOR ALL WORK WITHIN PUBLIC ROADS. THE R.O.W. PERMIT REQUIREMENTS SHALL SUPERSEDE THIS DETAIL.

***** CONTRACTOR SHALL UTILIZE BEST METHODS AND PRACTICES TO CONTROL GROUND WATER DURING ENTIRE EXCAVATION, INSTALLATION, BACKFILL AND COMPACTION. INSTALLATION OF PIPELINE IN WET AND/OR FLOODED TRENCH IS NOT ACCEPTABLE. PROPER BEDDING AND COMPACTION CAN NOT BE ACCOMPLISHED IN WET AND/OR FLOODED TRENCH.

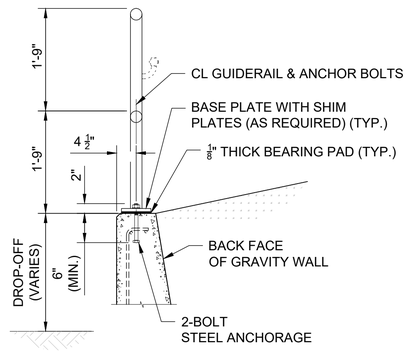
***** INSTALLATION OF ANY WATER, WASTEWATER, OR RECLAIM WATER LINE REQUIRED TO PASS UNDER OR TRENCHING CAUSING UNDERMINING OF ANY EXISTING CONCRETE CURB, GUTTER, OR SIDEWALK; TUNNELING UNDER IS NOT ALLOWED. ANY AFFECTED CONCRETE CURB, GUTTER, OR SIDEWALK SHALL BE CLEANLY REMOVED (ALL SECTIONS AFFECTED, 5 FT MINIMUM), FULL BACKFILL AND PROPER COMPACTION PERFORMED, CONCRETE REPLACED REQUIRING A MINIMUM OF 5 FT BETWEEN EXPANSION JOINTS.

PIPE BEDDING AND BACKFILL DETAIL
NOT TO SCALE

## UTILITY TRENCH BACKFILL DETAILS (CITY OF NAPLES STANDARDS)

## UTILITY NOTES

1. EXISTING REFERS TO FACILITIES EITHER PREVIOUSLY CONSTRUCTED OR TO BE CONSTRUCTED UNDER SEPARATE DEVELOPMENT ORDER.
2. ALL CONDUITS FOR OTHER UTILITIES SHALL BE SEPARATED FROM POTABLE WATER, FORCE MAINS & SANITARY SEWER, BY A MIN. CLEAR VERTICAL DISTANCE OF 18" & HORIZONTAL DISTANCE OF 5'.
3. CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD OF ANY ERRORS OR DISCREPANCIES OF THE PLANS PRIOR TO CONSTRUCTION.
4. EXISTING UTILITY INFORMATION WAS PLOTTED FROM AVAILABLE RECORDS. CONTRACTOR SHALL FIELD VERIFY ELEVATIONS AND LOCATION OF ALL UNDERGROUND AND OVERHEAD UTILITY LINES PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY VARIATIONS FROM THE INFORMATION SHOWN ON THE PLANS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER. THE CONTRACTOR SHALL COORDINATE WITH ALL LOCAL UTILITIES PRIOR TO EXCAVATION TO DETERMINE THE EXACT LOCATION OF ALL UTILITIES. ANY DAMAGE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ANY DESIGN MODIFICATION AND EXPENSE AS A RESULT OF EXISTING UTILITY LINES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
5. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO SAFEGUARD ALL EXISTING STRUCTURES, UTILITIES AND SURVEY MARKERS IN THE AREA.




1 C2.01|C5.02 PIPE GUARDRAIL ON GRAVITY WALL TYPICAL SECTION SCALE: NONE

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DATE
REVISIONS

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FARM IMPROVEMENTS PROJECT
NAPLES AIRPORT (APF)
SITE DETAILS SHEET 2 OF 2

PROJECT NAME
PROJECT LOCATION
DRAWING NAME

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Hanson Professional Services Inc.
Offices Nationwide
FL CA Lic. No. 7961

SEAL:
CHRISTOPHER A. REYNOLDS LICENSE No. 88657 STATE OF FLORIDA PROFESSIONAL ENGINEER
PROFESSIONAL ENGINEER
STATE OF FLORIDA

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| DRAWN BY: | JKD | PROJ. NO. | 22A0138_02 |
| APPROVED BY: | CAR | FILE NAME: | C5.01 |

SHEET NUMBER:
C5.02

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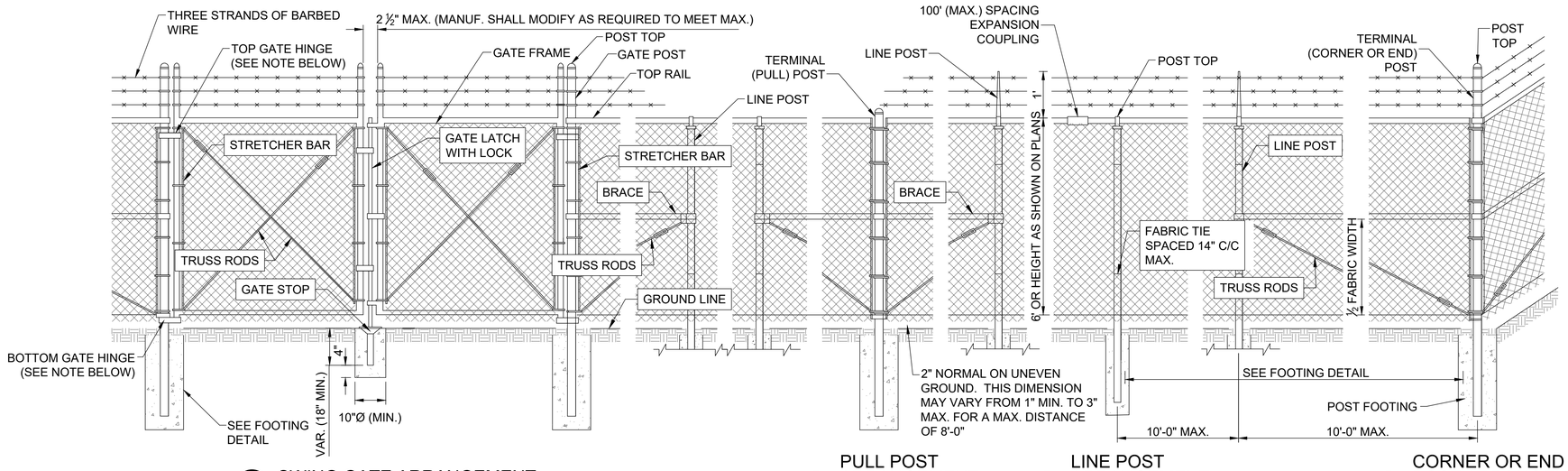


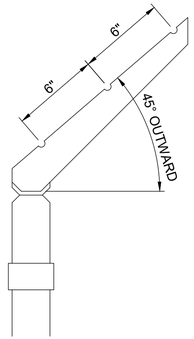

2 SWING GATE ARRANGEMENT
C2.02|C5.03 SCALE: NONE

A PULL POST ARRANGEMENT
SCALE: NONE

B LINE POST ARRANGEMENT
SCALE: NONE

C CORNER OR END POST ARRANGEMENT
SCALE: NONE

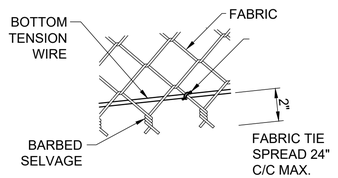
1 FENCE DETAIL
C2.01/C2.02|C5.03 SCALE: NONE



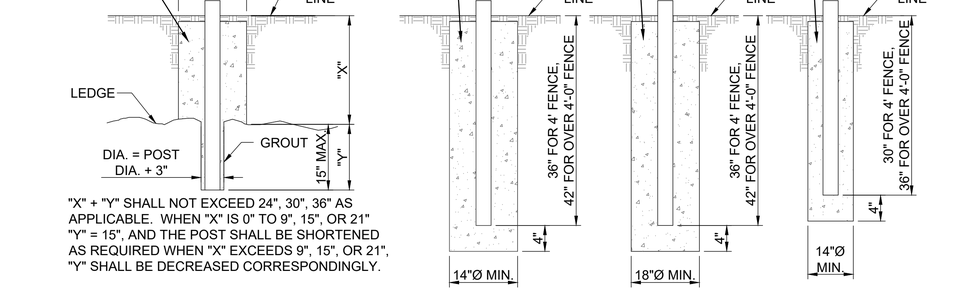

D BARBED WIRE ARM OF LINE POST
SCALE: NONE

| POST & BRACE TABLE | | |
|---|---|---|
| DESCRIPTION | DIA. - INCH (O.D.) | WT. LBS./FT. |
| LINE POST | 2.375 | 3.65 |
| TERMINAL POST | 2.875 | 5.79 |
| END POST | 2.875 | 5.79 |
| CORNER POST | 2.875 | 5.79 |
| PULL POST | 2.875 | 5.79 |
| GATE POST | 4.00 | 9.11 |
| TOP RAIL | 1.66 | 2.27 |

NOTE: TABLE ABOVE IS FOR SCHEDULE 40 PIPE. OTHER MATERIALS ARE ACCEPTABLE, IN ACCORDANCE WITH THE PARAGRAPH AT LEFT, AND SHALL BE OF EQUAL CAPACITY AND STRENGTH TO THAT SHOWN FOR SCHEDULE 40, BUT NOT NECESSARILY OF EQUAL DIMENSION DUE TO THE VARIOUS MATERIAL CHARACTERISTICS.




E METHOD OF TYING FABRIC TO TENSION WIRE
SCALE: NONE




"X" + "Y" SHALL NOT EXCEED 24", 30", 36" AS APPLICABLE. WHEN "X" IS 0" TO 9", 15", OR 21" "Y" = 15", AND THE POST SHALL BE SHORTENED AS REQUIRED WHEN "X" EXCEEDS 9", 15", OR 21", "Y" SHALL BE DECREASED CORRESPONDINGLY.

F FOOTING FOR POST WHEN ROCK IS ENCOUNTERED
SCALE: NONE

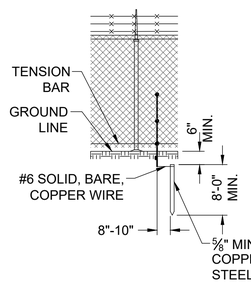
G FOOTING FOR TERMINAL POST
SCALE: NONE

H FOOTING FOR GATE POST
SCALE: NONE

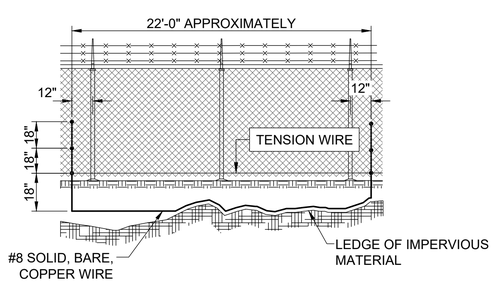
J FOOTING FOR LINE POST
SCALE: NONE

## GENERAL NOTE:

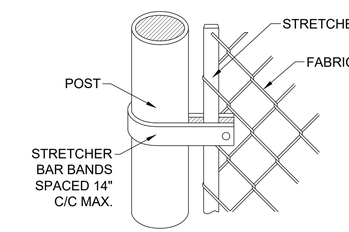
CONTINUOUS FENCE SHALL BE GROUNDED AT INTERVALS NOT EXCEEDING 500 FT IN URBAN AREAS AND 1,000 FT IN RURAL AREAS. THERE SHALL BE A GROUND WITHIN 100 FT OF GATES IN EACH SECTION OF THE FENCE ADJACENT TO THE GATE. FENCE UNDER A POWER LINE SHALL BE GROUNDED BY THREE GROUNDS; ONE DIRECTLY UNDER THE CROSSING AND ONE ON EACH SIDE 25 FT TO 50 FT AWAY. A SINGLE GROUND SHALL BE LOCATED DIRECTLY UNDER EACH TELEPHONE WIRE OR CABLE CROSSING. THE COUNTERPOISE GROUND SHALL BE USED ONLY WHERE IT IS IMPOSSIBLE TO DRIVE A GROUND ROD. THE GROUND WIRE SHALL BE CONNECTED TO THE FABRIC AND TENSION WIRE WITH UL LISTED GROUNDING CONNECTORS OF CAST BRONZE BODY AND BRONZE OR STAINLESS STEEL BOLTS AND WASHERS. GROUNDING CONNECTORS SHALL BE SIZED AND SUITABLE FOR THE RESPECTIVE APPLICATION. CONNECTIONS TO GROUND RODS SHALL BE WITH UL LISTED GROUNDING CONNECTORS SUITABLE FOR EXOTHERMIC WELD TYPE CONNECTORS, CADWELD BY ERICO PRODUCTS, INC., SOLON, OHIO, (PHONE 1-800-248-9353), OR THERMOWELD BY CONTINENTAL INDUSTRIES, INC., TULSA, OKLAHOMA (PHONE 918-663-1440) OR ULTRAWELD BY HARGER, GRAYSLAKE, ILLINOIS (PHONE 1-800-842-7437). EXOTHERMIC WELD CONNECTIONS SHALL BE INSTALLED IN CONFORMANCE WITH THE RESPECTIVE MANUFACTURER'S DIRECTIONS USING MOLDS SUITABLE FOR EACH RESPECTIVE APPLICATION. GROUND RODS SHALL BE 5/8-IN. DIAMETER BY 8 FT LONG (MINIMUM), UL-LISTED, COPPER-CLAD. THE GROUND WIRE USED TO BOND THE FENCE FABRIC AND TENSION WIRE TO THE GROUND ROD SHALL BE #6 AWG BARE SOLID COPPER CONDUCTOR.



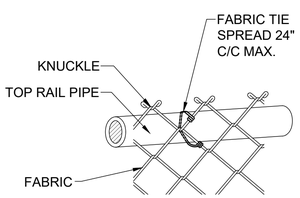

K STANDARD GROUND
SCALE: NONE




L COUNTERPOISE GROUND (ALTERNATE)
SCALE: NONE




M METHOD OF FASTENING STRETCHER BAR TO POST
SCALE: NONE




N METHOD OF TYING FABRIC TO PIPE
SCALE: NONE

3 PROTECTIVE ELECTRICAL GROUND
C5.03 SCALE: NONE

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DATE
REVISIONS

CURRIER ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FARM IMPROVEMENTS PROJECT
NAPLES AIRPORT (APF)
FENCING DETAILS

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

ISSUED FOR PERMIT

HANSON Engineering | Planning | Allied Services
Hanson Professional Services Inc.
Offices Nationwide
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PROFESSIONAL ENGINEER
STATE OF FLORIDA

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| APPROVED BY: | CAR | FILE NAME: | C5.02 |

SHEET NUMBER: C5.03

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## GENERAL NOTES

1. DESIGN:

   ACI 318 – BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.

2. AT ALL TIMES THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONDITIONS OF THE JOBSITE INCLUDING SAFETY OF PERSONS AND PROPERTY. THE ENGINEER'S PRESENCE OR REVIEW OF WORK DOES NOT ENSURE THE ADEQUACY OF THE CONTRACTOR'S MEANS OR METHODS OF CONSTRUCTION.

3. SHORING, BRACING AND PROTECTION OF EXISTING AND ADJACENT STRUCTURES DURING CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL PROTECT AND MAINTAIN THE INTEGRITY OF ADJACENT STRUCTURES.

4. PROPOSED IMPROVEMENTS TO THE CONTAINMENT AREA SHALL BE IN CONFORMANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND REGULATIONS AS REQUIRED BY THE RESPECTIVE PERMITTING AUTHORITY OF JURISDICTION, INCLUDING, BUT NOT LIMITED TO:

   FLORIDA ADMINISTRATIVE RULES, CHAPTER 62–762 ABOVEGROUND STORAGE TANK SYSTEMS.

   NFPA 30 – FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE (MOST CURRENT ISSUE IN FORCE).

   NFPA 407 – STANDARD FOR AIRCRAFT FUEL SERVICING (MOST CURRENT ISSUE IN FORCE.) INCLUDING APPENDICES FOR DESIGN AND CONSTRUCTION, INSTALLATION, INSPECTION AND TESTING OF FUEL DISTRIBUTION SYSTEM, TANKS, PIPING, AND OTHER COMPONENTS RELATED TO INSTALLATION OF FUEL STORAGE AND DISPENSING SYSTEM.

## CONCRETE

1. ALL CONCRETE SHALL BE IN CONFORMANCE WITH ACI 318, 301, 347, LATEST EDITIONS, AND PROPORTIONED FOR STRENGTH AND QUALITY REQUIREMENTS IN ACCORDANCE WITH ACI 318, SECTION 5.3 "PROPORTIONING IN THE BASIS OF FIELD EXPERIENCE".

2. ALL CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 4500 PSI AT 28–DAY STANDARD TEST, AND SHALL HAVE A SLUMP OF 4"± 1 ".

3. CEMENT SHALL CONFORM TO ASTM C 150, TYPE I.

4. AGGREGATES SHALL CONFORM TO ASTM C 33, NORMAL WEIGHT.

5. PLACING OF CONCRETE SHALL CONFORM TO ACI 318 AND 301 LATEST EDITIONS. ALL CONCRETE SHALL BE PLACED IN DRY UNLESS WRITTEN APPROVAL IS OBTAINED.

6. COVER MATERIALS FOR CURING: CURING MATERIALS SHALL CONFORM TO ONE OF THE FOLLOWING SPECIFICATIONS:

   BURLAP CLOTH MADE FROM JUTE OR KENAF – AASHTO M182

   LIQUID MEMBRANE–FORMING COMPOUNDS FOR CURING CONCRETE – ASTM C309, TYPE 7

7. CURING AND PROTECTION: ALL CONCRETE SHALL BE PROPERLY CURED AND PROTECTED BY THE CONTRACTOR. THE WORK SHALL BE PROTECTED FROM THE ELEMENTS, FLOWING WATER, AND FROM DEFACEMENT OF ANY NATURE DURING THE BUILDING OPERATIONS. THE CONCRETE SHALL BE CURED AS SOON AS IT HAS SUFFICIENTLY HARDENED BY COVERING WITH AN APPROVED MATERIAL. WATER–ABSORPTIVE COVERINGS SHALL BE THOROUGHLY SATURATED WHEN PLACED AND KEPT SATURATED FOR A PERIOD OF AT LEAST 3 DAYS. ALL CURING MATS OR BLANKETS SHALL BE SUFFICIENTLY WEIGHTED OR TIED DOWN TO KEEP THE CONCRETE SURFACE COVERED AND TO PREVENT THE SURFACE FROM BEING EXPOSED TO CURRENTS OF AIR. WHERE WOODEN FORMS ARE USED, THEY SHALL BE. KEPT WET AT ALL TIMES UNTIL REMOVED TO PREVENT THE OPENING OF JOINTS AND DRYING OUT OF THE CONCRETE. TRAFFIC SHALL NOT BE ALLOWED ON CONCRETE SURFACES FOR 7 DAYS AFTER THE CONCRETE HAS BEEN PLACED.

8. CONTRACTOR SHALL EMPLOY A CERTIFIED TESTING LABORATORY FOR CONCRETE SAMPLING AND TESTING IN ACCORDANCE WITH ASTM C31 AND ASTM C39. ONE SET OF FIVE 4" X 8" CONCRETE CYLINDERS FOR EACH DAY'S PRODUCTION (TEST 1 @3, 1 @7 AND 2 @28 DAYS). IF THE TWO 28 DAY TESTS FAIL TO MEET REQUIRED STRENGTH, TEST THE 5TH CYLINDER AT 48 DAYS.

9. EXACT LOCATION OF CONCRETE PLACED IMMEDIATELY AFTER TEST SAMPLE SHALL BE INDICATED ON REPORT. SAMPLE CONCRETE SHALL BE SAMPLED AT POINT OF DISCHARGE AND INDICATED AS SUCH ON REPORT.

10. MINIMUM CONCRETE COVER SHALL BE AS SHOWN ON THE DRAWINGS. WHERE THE COVER IS NOT DIMENSIONED, USE THE FOLLOWING:

    CONCRETE CAST AGAINST GROUND: 3"

    SLABS ON GRADE THE MINIMUM COVER SHALL BE 2 INCHES FROM BOTTOM

    ALL OTHER CASES: 2"

## FOUNDATIONS AND SLABS ON GRADE

1. FOUNDATION DESIGN IS BASED ON ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF. CONTRACTOR SHALL MAKE NECESSARY FIELD MEASUREMENTS TO VERIFY THAT EXISTING CONDITIONS ARE COMPATIBLE WITH THE ASSUMPTION. IF DURING THE COURSE OF CONSTRUCTION, ANY SUBSOIL CONDITION ENCOUNTERED IS DIFFERENT FROM THAT ASSUMED BY THE ENGINEER, NOTIFY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. A VAPOR BARRIER CONSISTING OF 10 MIL MINIMUM POLYETHYLENE WITH JOINTS LAPPED 6 INCHES AND SEALED SHALL BE INSTALLED UNDERNEATH THE SLAB.

2. SLAB ON GRADE SHALL BE SUPPORTED ON THE COMPACTED STRUCTURAL FILL. FILL SHOULD BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D–1557).

3. BASIS OF DESIGN FOR JET A FUEL TANK FOUNDATIONS IS A 40,000 GALLON SINGLE WALL STEEL TANK WITH A NOMINAL LENGTH OF 47'–6", DIAMETER OF 144", AND WEIGHT OF 40,000 POUNDS WITH TWO MOUNTING SADDLES. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY AND MAKE ANY REQUIRED CHANGES TO THE FOUNDATION DIMENSIONS OR LOCATIONS TO ACCOMMODATE THE ACTUAL TANK SUPPLIED. ANY REVISIONS TO FOUNDATION DESIGN SHALL BE BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER.

## REINFORCING STEEL

1. ALL REINFORCING STEEL SHALL BE DEFORMED BARS, FREE FROM LOOSE RUST AND SCALE, CONFORMING TO ASTM A–615, GRADE 60. NO WELDING OR TACK WELDING SHALL BE ALLOWED. MINIMUM LAP OF 48 BAR DIAMETER U.N.O. ALL REINFORCEMENT (EXCEPT FOR DRILLED PIER REINFORCEMENT) TO BE EPOXY COATED PER ASTM A775.

2. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A–185, FLAT SHEETS ONLY. MINIMUM LAP SHALL BE 8". ALL WWF REINFORCEMENT TO BE EPOXY COATED PER ASTM A884.

3. ALL ACCESSORIES SHALL HAVE UPTURNED LEGS AND SHALL BE PLASTIC DIPPED AFTER FABRICATION. ACCESSORIES SHALL BE INSTALLED IN ACCORDANCE WITH ACI 315 CURRENT EDITION. SUPPORT BARS SHALL BE #5 OR GREATER NOT SPACED MORE THAN 4' –0" O.C.

## SITE PREPARATION

1. THE ENTIRE STRUCTURE AREAS "FOOTPRINTS", PLUS A MINIMUM MARGIN OF 5 FEET, SHOULD BE STRIPPED AND GRUBBED OF ALL SURFACE VEGETATION, DEBRIS OR OTHER DELETERIOUS MATERIAL, AS ENCOUNTERED. THESE MATERIALS SHOULD BE DISPOSED OF IN AREAS DESIGNATED BY THE OWNER.

2. THE CLEARED SURFACES IN CONSTRUCTION AREAS SHOULD BE PROOFROLLED USING THE APPROPRIATE COMPACTION EQUIPMENT FOR SITE AND SOIL CONDITIONS. ADJUST THE MOISTURE CONTENT OF THE SOIL, AS NECESSARY, TO AID COMPACTION. SUFFICIENT PASSES SHOULD BE MADE TO DEVELOP A MINIMUM DRY DENSITY OF 95 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D–1557) TO A DEPTH OF 12 INCHES BELOW THE COMPACTED SURFACE. REPLACE ALL MATERIAL, IF DETERMINED TO BE DELETERIOUS, IN AREAS THAT "YIELD" DURING THE PROOFROLLING OPERATION AND REPLACE WITH SUITABLE FILL MATERIAL CONFORMING TO THAT STATED IN ITEM 4. CARE SHOULD BE EXERCISED TO AVOID DAMAGING ANY NEIGHBORING STRUCTURES DURING THE COMPACTION OPERATION.

3. AFTER SATISFACTORY PROOFROLLING OF THE CLEARED SURFACE IN ACCORDANCE WITH THE ABOVE, FILLING WITH SUITABLE MATERIAL MAY PROCEED. FILL MATERIAL SHOULD CONFORM TO THAT STATED IN ITEM 4 BELOW. THE FILL SHOULD BE PLACED IN LEVEL LIFTS NOT EXCEEDING 12 INCHES IN UNCOMPACTED THICKNESS. EACH LIFT SHOULD BE COMPACTED BY REPEATED PASSES WITH APPROPRIATE COMPACTION EQUIPMENT TO ACHIEVE AT LEAST 95 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D–1557). THE FILLING AND COMPACTION OPERATIONS SHOULD CONTINUE UNTIL THE DESIRED ELEVATION(S) IS ACHIEVED.

4. FILL MATERIAL SHOULD PREFERABLY CONSIST OF CLEAN TO SLIGHTLY SILTY FINE SANDS (SP OR SP–SM), FREE OF ORGANIC OR OTHER DELETERIOUS MATERIALS, WITH LESS THAN 12 PERCENT PASSING THE U.S. SIEVE NO. 200. THE FILL SOILS SHOULD BE PLACED AND COMPACTED WITHIN +2% TO –4% OF THE OPTIMUM MOISTURE AS DEFINED BY ASTM D–1557.

5. EXCAVATE THE FOOTINGS TO THE PROPOSED BOTTOM OF FOOTING ELEVATIONS AND, THEREAFTER, VERIFY THE IN–PLACE COMPACTION. IF NECESSARY, COMPACT THE BOTTOM OF THE EXCAVATIONS TO ACHIEVE A MINIMUM DRY DENSITY OF 95 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D–1557). THIS DENSITY SHOULD BE DEVELOPED TO A MINIMUM DEPTH OF 12 INCHES BELOW THE BOTTOM OF THE FOOTINGS. OVEREXCAVATE AND RECOMPACT, AS NECESSARY, TO FULFILL THE ABOVE COMPACTION CRITERIA. THE MOISTURE CONTENT OF THE FOUNDATION SOILS MUST BE CONTROLLED DURING THE COMPACTION PROCEDURE TO AID COMPACTION.

## COATING

1. PROVIDE POLYUREA COATING FOR TANK CONTAINMENT AREA. COATING SHALL BE TOTAL CONTAINMENT SOLUTIONS TCS 380–CL OR APPROVED EQUAL AND SHALL BE INSTALLED PER THE FDEP APPROVED EQ PROTOCOL.

2. CONTRACTOR TO MAKE REPAIRS TO EXISTING CONTAINMENT COATING. COORDINATE WITH OWNER. AN ALLOWANCE HAS BEEN INCLUDED FOR REPAIRS TO THE EXISTING COATING.

3. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR PREPARATION AND APPLYING COATING SYSTEM.

4. COATING SHALL BE APPLIED MINIMUM 28 DAYS AFTER CONCRETE HAS BEEN PLACED.

## DESIGN LOADS

1. WIND LOADS: PER FLORIDA BUILDING CODE 2020 AND ASCE 7–16

   –BASIC WIND SPEED: 178 MPH ULTIMATE (133 MPH ASD)

   –IMPORTANCE FACTOR, I: 1.00 (RISK CATEGORY III)

   –WIND EXPOSURE CATEGORY: C

2. TANK FOUNDATION HAS BEEN DESIGNED FOR A TANK FILLED WITH JET FUEL (SPECIFIC GRAVITY = 0.82)

3. FOUNDATION AND ANCHORAGE FOR TANKS HAS BEEN DESIGNED ACCORDING TO ASCE 24 – FLOOD RESISTANT DESIGN AND CONSTRUCTION.

   –DESIGN FLOOD ELEVATION: 9.00 NAVD

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REVISIONS | DATE

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

PROJECT NAME: FUEL FARM IMPROVEMENTS PROJECT
PROJECT LOCATION: NAPLES AIRPORT (APF)
DRAWING NAME: STRUCTURAL GENERAL NOTES

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| DRAWN BY: | HEW | PROJ. NO: | 22A0138_02 |
| APPROVED BY: | JMC | FILE NAME: | S0.01 |

SHEET NUMBER: S0.01

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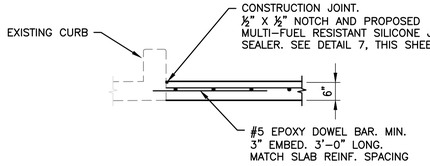
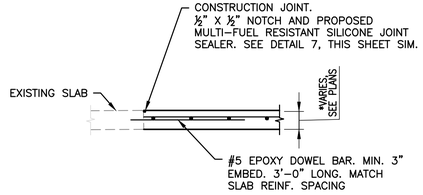



## 1 JET A FUEL TANK PAD - SECTION AT EXISTING CURB
SCALE: 1/2"=1'-0"




## 2 JET A FUEL TANK PAD - TYPICAL SECTION
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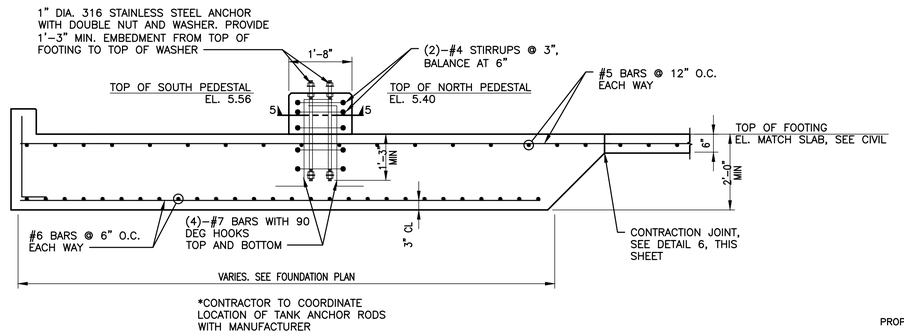


## 3 JET A FUEL TANK FOUNDATION - ANCHOR BOLT SECTION
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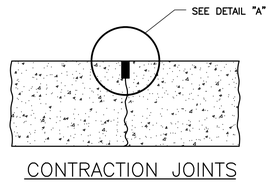
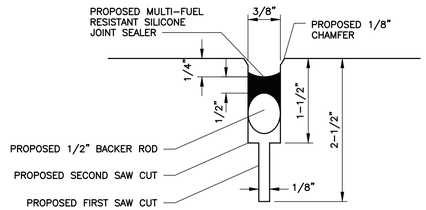



CONTRACTION JOINTS




## 6 DETAIL "A"
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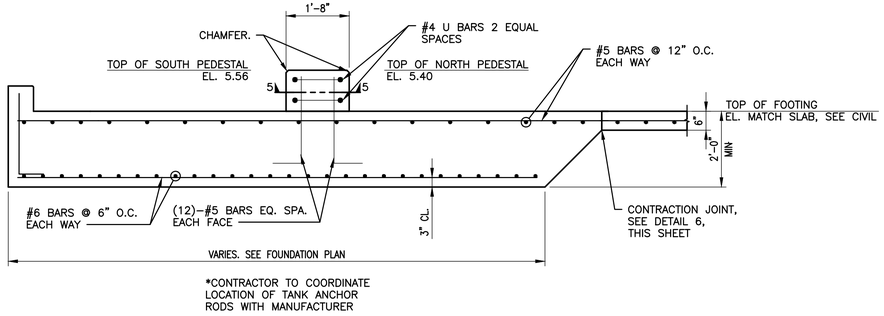
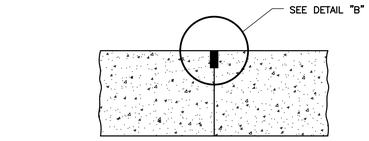
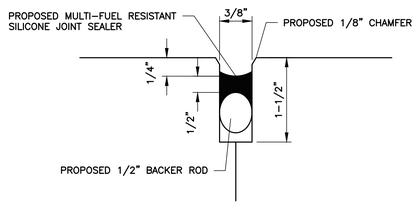



## 4 JET A FUEL TANK FOUNDATION - TYPICAL SECTION
SCALE: 1/2"=1'-0"




CONSTRUCTION JOINTS




## 7 DETAIL "B"
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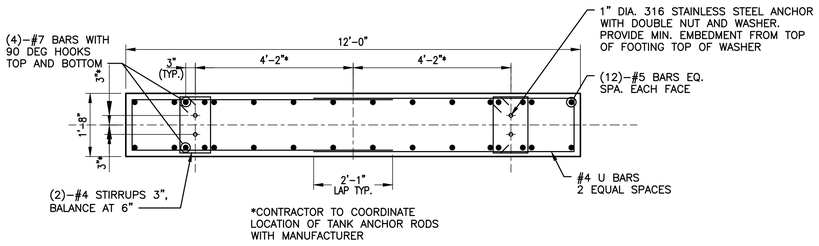
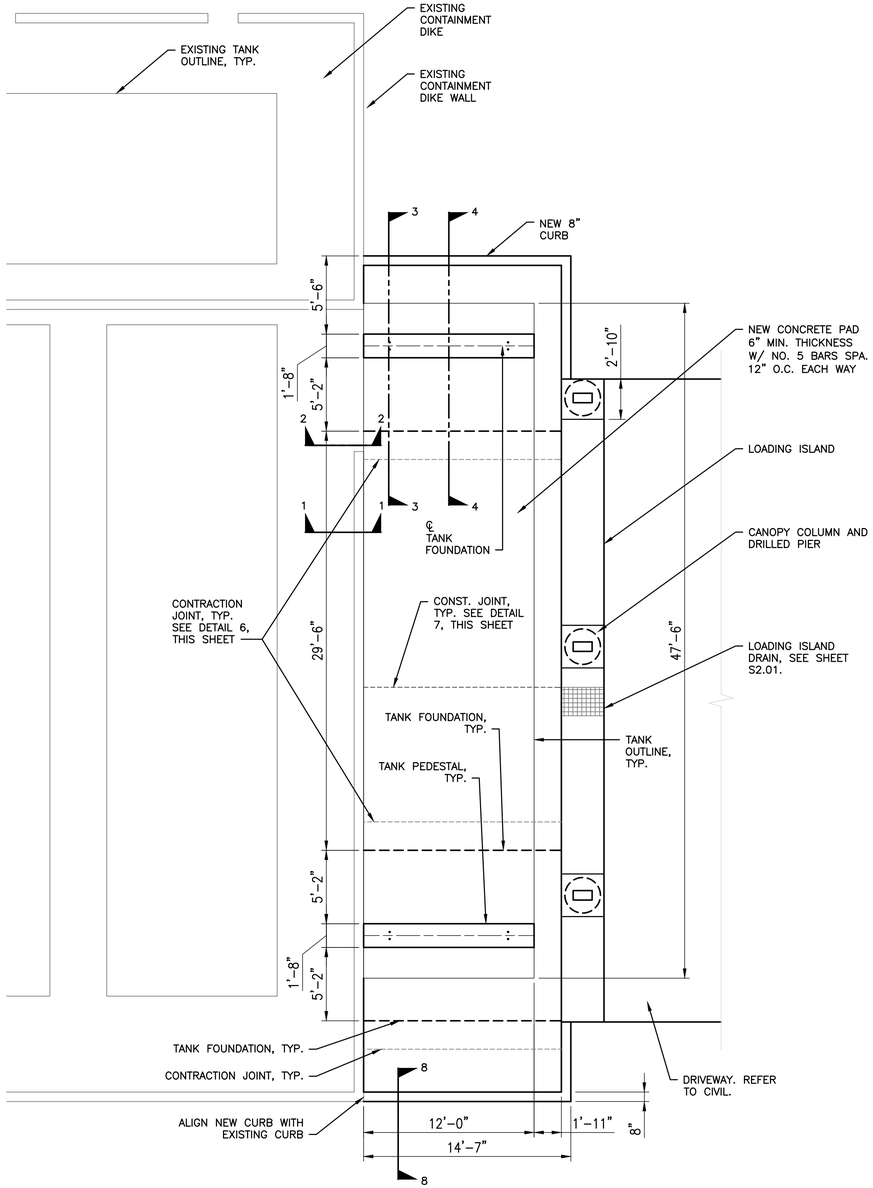



## 5 PEDESTAL SECTION
SCALE: 1/2"=1'-0"

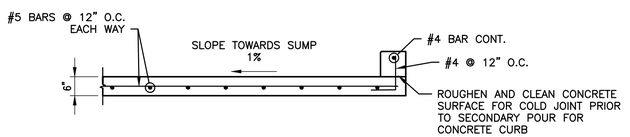
NOTE:

1. CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY PAD DIMENSIONS AND FOUNDATION LOCATIONS FOR EXISTING AND PROPOSED EQUIPMENT PRIOR TO CONSTRUCTION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES.





## 9 JET A FUEL TANK PAD AND FOUNDATION PLAN
SCALE: 3/16"=1'-0"




## 8 JET A FUEL TANK PAD - TYPICAL SECTION
SCALE: 1/2"=1'-0"

DATE
REVISIONS

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FARM IMPROVEMENTS PROJECT
NAPLES AIRPORT (APF)
TANK PAD AND FOUNDATION PLAN AND DETAILS

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

ISSUED FOR PERMIT

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Offices Nationwide
FL CA Lic. No. 7961

SEAL:
JOHN M. CAWLEY
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No. 93137
STATE OF FLORIDA
PROFESSIONAL ENGINEER
PROFESSIONAL ENGINEER
STATE OF FLORIDA

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| DRAWN BY: | HEW | PROJ. NO: | 22A0138_02 |
| APPROVED BY: | JMC | FILE NAME: | S1.01 |

SHEET NUMBER:
S1.01

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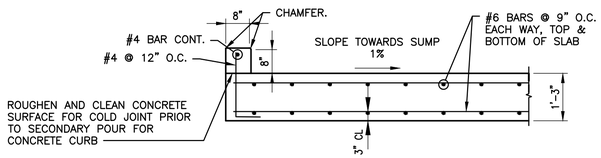
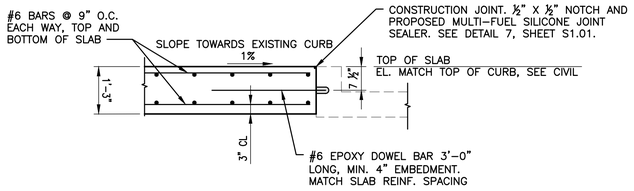


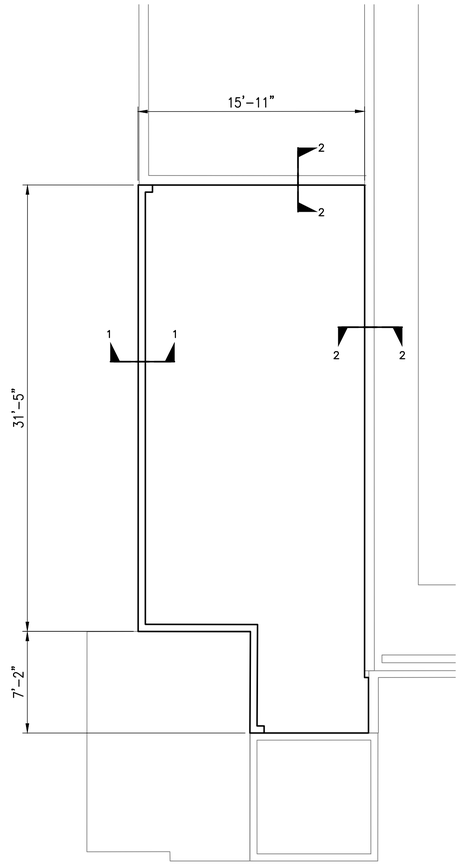

## 1 RELOCATED OIL-WATER SEPARATOR - TYPICAL SECTION

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




## 2 RELOCATED OIL-WATER SEPARATOR - TYPICAL SECTION

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




## 3 RELOCATED OIL-WATER SEPARATOR FOUNDATION PLAN

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

NOTE:

1. CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY PAD DIMENSIONS AND FOUNDATION LOCATIONS FOR EXISTING AND PROPOSED EQUIPMENT PRIOR TO CONSTRUCTION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES.

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REVISIONS

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

PROJECT NAME: FUEL FARM IMPROVEMENTS PROJECT

PROJECT LOCATION: NAPLES AIRPORT (APF)

DRAWING NAME: OIL WATER SEPARATOR PAD FOUNDATION PLAN AND DETAILS

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SHEET NUMBER: S1.02

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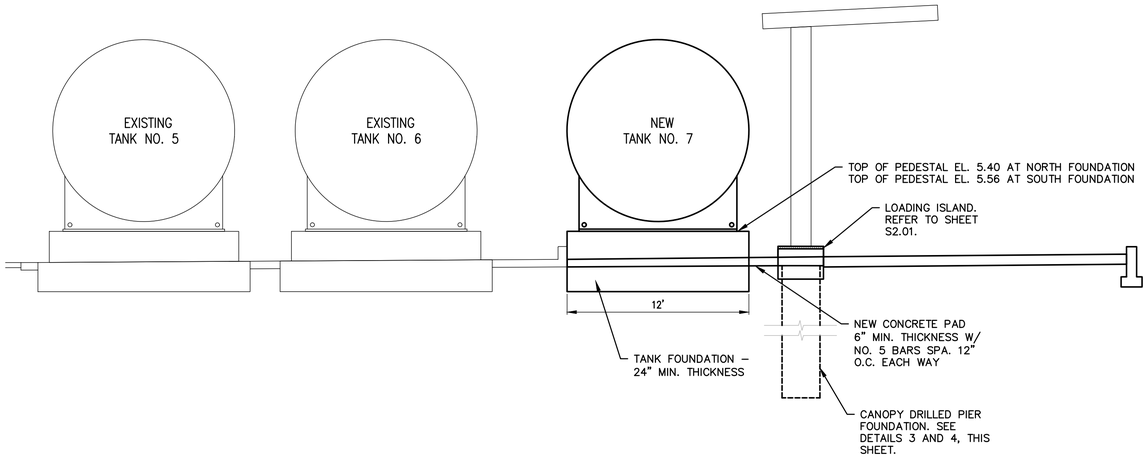
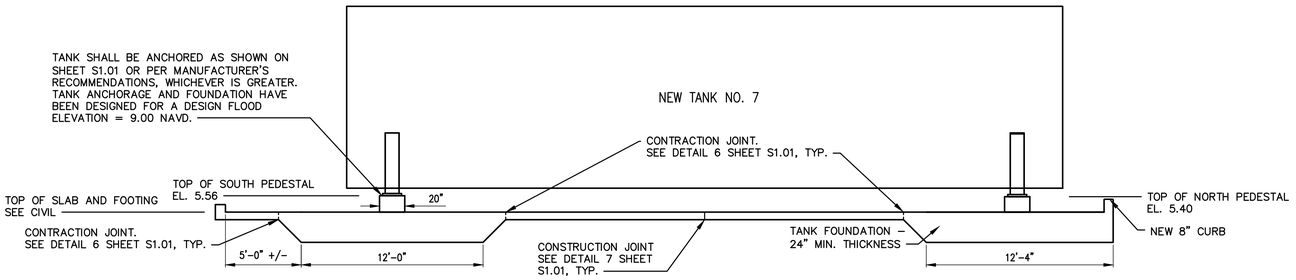


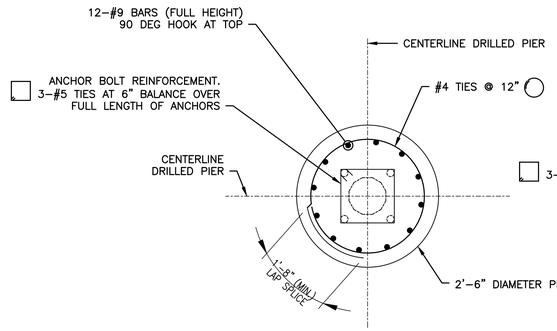

1 WEST-EAST SECTION THROUGH NEW TANK
SCALE: 1" = 5'–0"



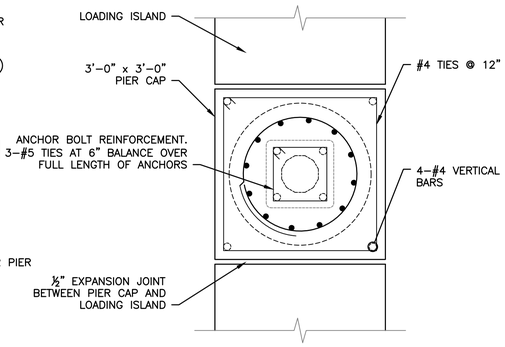

2 SOUTH-NORTH SECTION THROUGH NEW TANK
SCALE: 1" = 5'–0"

NOTES:

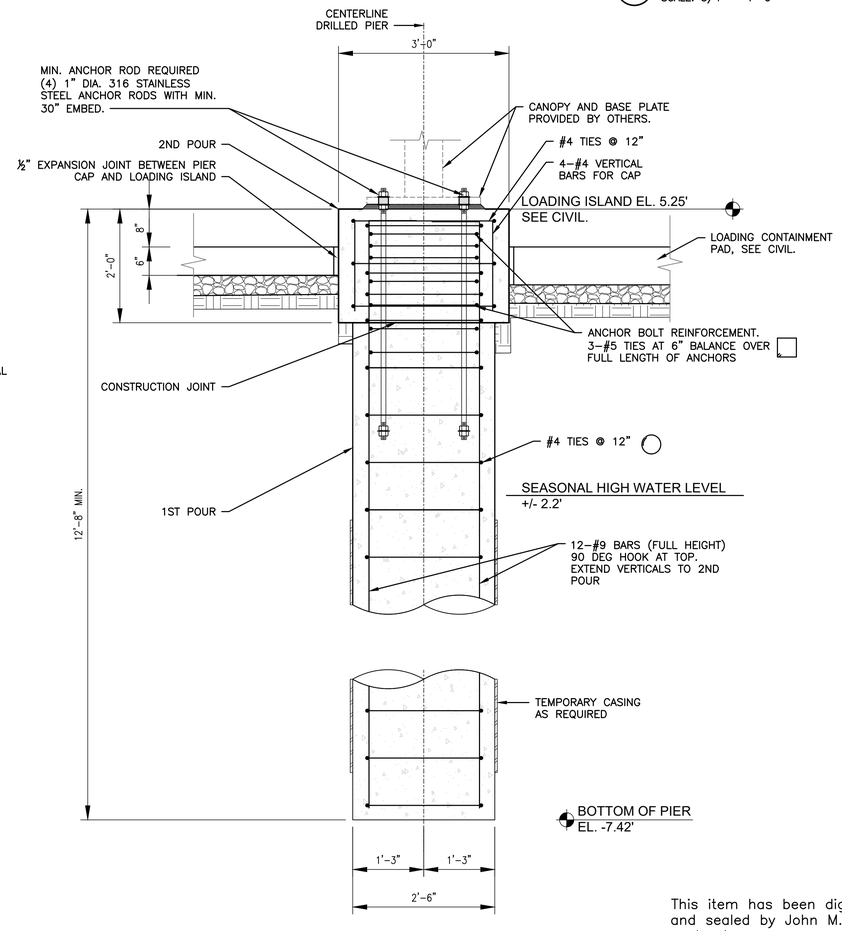
1. EXISTING AND PROPOSED CATWALK NOT SHOWN. CATWALK REQUIRED FOR NEW JET A TANK SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. INTERFACE PROPOSED CATWALK TO EXISTING CATWALK. SEE FT SHTS.
2. SEE "STRUCTURAL NOTES" AND "TANK PAD AND FOUNDATION PLAN AND DETAILS" FOR INFORMATION ON FOUNDATIONS.
3. NEW TANK MANUFACTURER TO COORDINATE SADDLES AND ANCHORAGE DESIGN WITH FLOOD LOADS DUE TO A FLOOD ELEVATION = 9.00 NAVD.




3 DRILLED PIER PLAN
SCALE: 3/4" = 1'–0"




5 DRILLED PIER PLAN
SCALE: 3/4" = 1'–0"




4 DRILLED PIER ELEVATION
SCALE: 3/4" = 1'–0"

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DATE
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ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

PROJECT NAME: FUEL FARM IMPROVEMENTS PROJECT
PROJECT LOCATION: NAPLES AIRPORT (APF)
DRAWING NAME: FUEL FACILITY SECTIONS

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SHEET NUMBER:
S1.03

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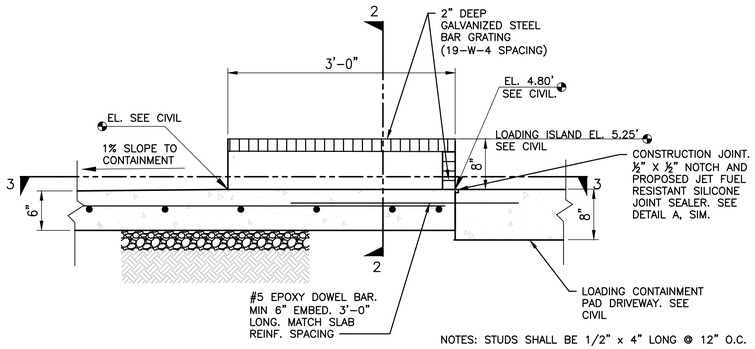
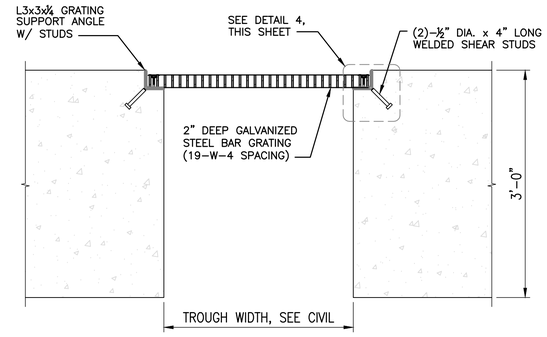
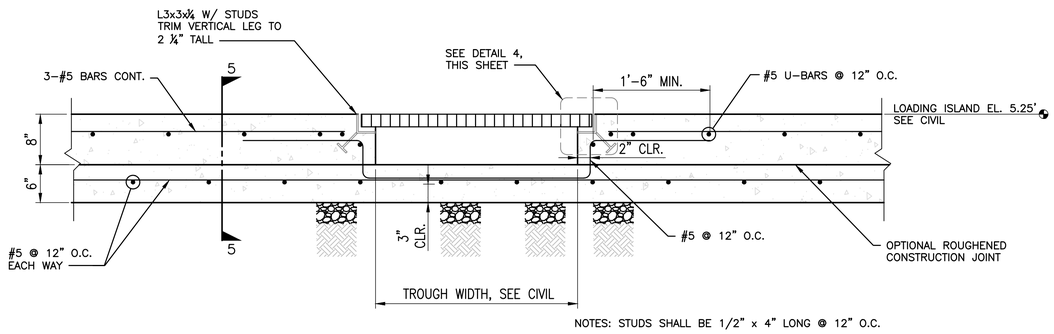


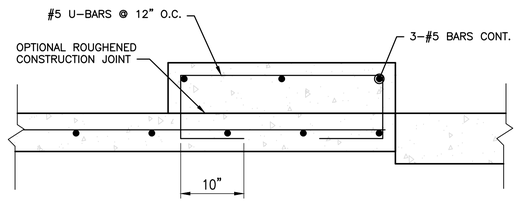

3 ISLAND THROUGH DRAIN PLAN
SCALE: 1" = 1'–0"



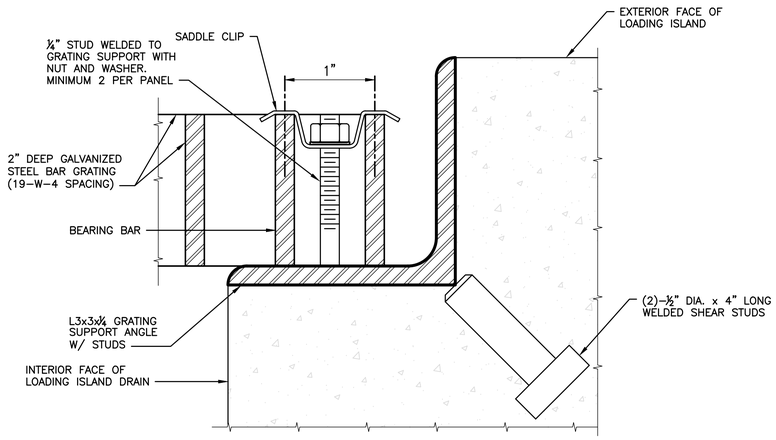

2 ISLAND THROUGH DRAIN DETAIL
SCALE: 1" = 1'–0"

NOTE:

1. ALL STEEL COMPONENTS TO BE HOT–DIP GALVANIZED PER ASTM A123.




5 TYPICAL SECTION THROUGH ISALND
SCALE: 1" = 1'–0"




4 ISLAND THROUGH GRATING SUPPORT
SCALE: 1" = 1'–0"

DATE
REVISIONS

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FARM IMPROVEMENTS PROJECT
NAPLES AIRPORT (APF)
LOADING ISLAND DETAILS

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

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FL CA Lic. No. 7961

SEAL:
JOHN M. CAWLEY LICENSE No. 93137 STATE OF FLORIDA PROFESSIONAL ENGINEER
PROFESSIONAL ENGINEER
STATE OF FLORIDA

| | | | |
|---|---|---|---|
| DESIGNED BY: | HEW | DATE: | 04/02/2024 |
| DRAWN BY: | HEW | PROJ. NO: | 22A0138_02 |
| APPROVED BY: | JMC | FILE NAME: | S2.01 |

SHEET NUMBER:
S2.01

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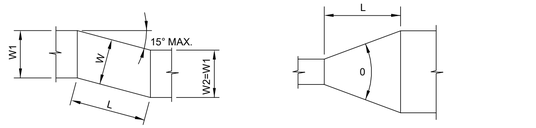
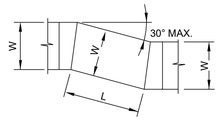
Plotted: I:\22jobs\22a0138_02\CAD\Airport\Sheet\S2.01.dwg Tue, Apr 02, 2024 at 2:34pm – duck02449



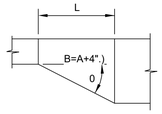

OFFSET TYPE 1
(ANGLED)



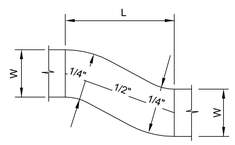

CONCENTRIC TRANSITION
– O MAX. 45° DIVERGING, 60°CONVERGING



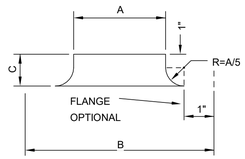

OFFSET TYPE 2
(MITERED)




ECCENTRIC TRANSITION
– 0 MAX. 30° (EXCEPT 45° IS
PERMITTED AT ROUND TO FLAT OVAL)




OFFSET TYPE 3
(RADIUSSED OR OGEE)




STANDARD BELLMOUTH
(ON SHORT PATTERN BELL, C=3",

OFFSETS 2 AND 3 AND TRANSITIONS MAY HAVE EQUAL OR UNEQUAL INLET AND OUTLET AREAS. TRANSITIONS MAY CONVERT DUCT PROFILES TO ANY COMBINATION RECTANGULAR, ROUND OR FLAT OVAL SHAPES.

## 2 DUCTWORK OFFSETS AND TRANSITIONS DETAILS

SCALE:NTS



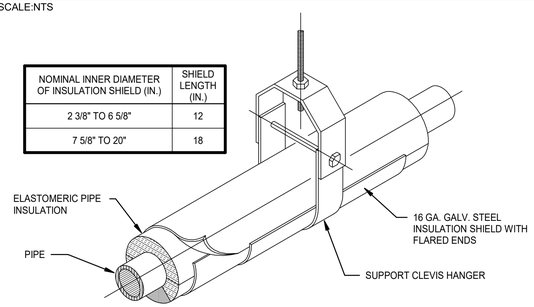

NOTES:

1. PIPING SHOWN FOR ONE CIRCUIT ONY. ADDITIONAL CIRCUITS ARE SIMILAR.
2. REFRIGERANT PIPING AND ACCESSORIES IN THIS DETAIL ARE SHOWN FOR REFERENCE ONLY. SIZE, ROUTING, AND INSTALLATION OF REFRIGERANT PIPING IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED INSTRUCTIONS.
3. ROOF STRUCTURE SHOWN FOR REFERENCE ONLY. COORDINATE CASSETTE UNIT SUPPORT WITH STRUCTURE.

## 3 DUCTLESS SPLIT SYSTEM PIPING DETAIL

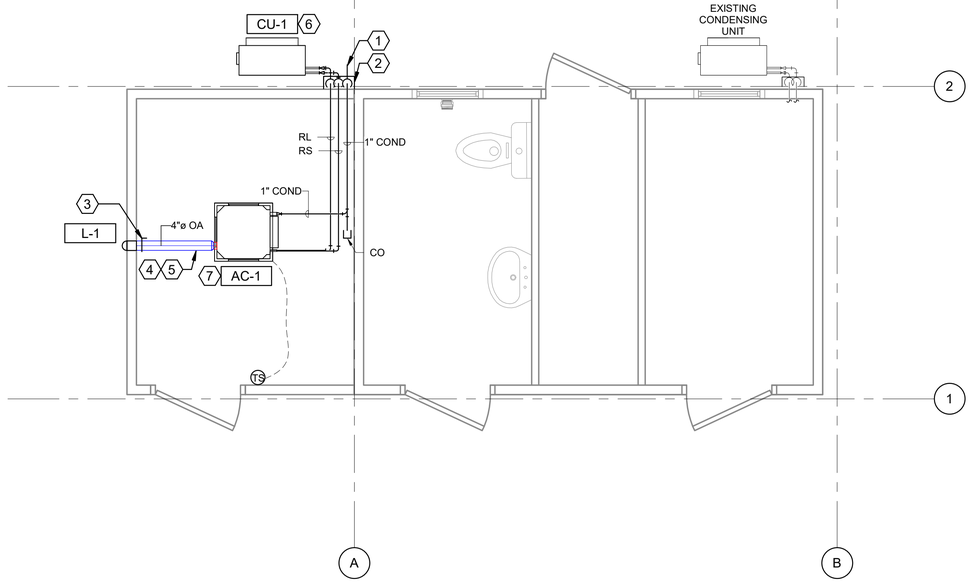
SCALE:NTS

| NOMINAL INNER DIAMETER OF INSULATION SHIELD (IN.) | SHIELD LENGTH (IN.) |
|---|---|
| 2 3/8" TO 6 5/8" | 12 |
| 7 5/8" TO 20" | 18 |




## 4 INSULATED PIPE SUPPORT DETAIL

SCALE:NTS




## 1 FUEL FACILITY EQUIPMENT SHELTER ADDITION HVAC PLAN

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

0 2' 4' 6'

# GENERAL SHEET NOTES

1. REFER TO MECHANICAL GENERAL NOTES ON SHEET M-001.
2. REFER TO SPECIFICATIONS.

# SHEET KEYNOTES

1. CONTRACTOR TO ROUTE 1" CONDENSATE LINE TO DISHCHARGE ON TO CONCRETE.
2. CONTRACTOR TO PROVIDE STAINLESS STEEL REFRIGERANT PIPE COVER FOR NEW CONDENSING UNIT , SIMILAR TO THE EXISTING PIPE COVER FOR THE RESTROOM PORTION OF THE EXISTING BUILDING.
3. CONTRACTOR TO BALANCE OA DAMPER TO 20 CFM.
4. SLOPE OUTSIDE AIR DUCTWORK TO FOLLOW THE ROOFLINE.
5. CONTRACTOR TO PROVIDE 4" BACKDRAFT DAMPER.
6. INSTALL CONDENSING UNIT IN ACCORDANCE TO ALL MANUFACTURER REQUIRED CLEARANCES FOR ALL SIDES OF THE UNIT.
7. COORDINATE AC-1'S EXACT LOCATION AND ELEVATION WITH LIGHTING FIXTURES IN THIS AREA.

## WALL CAP SCHEDULE

| SYMBOL | SERVICE | CFM | DIAMETER (IN.) | FREE AREA VEL. FPM | S.P. IN. W.C. | MANUFACTURER | MODEL | REMARKS |
|---|---|---|---|---|---|---|---|---|
| L-1 | OUTDOOR AIR | 20 | 4" | 500 | 0.04 | SEIHO | SFX-N 4 | ALL |

NOTES:

1. ANODIZED ALUMINUM HOODED VENT CAP. COLOR AS SELECTED BY OWNER FROM MANUFACTURER'S FULL RANGE.
2. REMOVABLE INSECT-SCREEN.

## DUCTLESS SPLIT SYSTEM INDOOR UNIT SCHEDULE

| UNIT NO. | SERVING | FAN DATA | | | | UNIT ELECTRICAL DATA | | | SELECTION BASED ON | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOTAL CFM | OA CFM | SEER/SEER 2 @ ARI | HSPF / HSFP2 @ARI | VOLT | PH | FAN FLA | MANUFACTURER | MODEL | |
| AC-1 | NEW ADDITION | 207-239-270 | 20 | 22.4 / 24.0 | 12.2 / 10.0 | 208/230 | 1 | 0.29 | TRANE | NTXCKS09A112BA | ALL |

NOTES:

1 INDOOR UNIT POWERED FROM OUTDOOR UNIT
2 PROVIDE MANUFACTURER'S WIRED 7 DAY PROGRAMMABLE THERMOSTAT
3 LOW AMBIENT COOLING TO 14 F
4 CASSETTE-STYLE INDOOR UNIT
5 UNIT SHALL HAVE BUILT-IN CONDENSATE PUMP WITH 33" LIFT
6 PROVIDE CONDENSATE FLOAT SWITCH WIRED TO SHUT DOWN THE SYSTEM IN THE EVENT OF A HIGH CONDENSATE LEVEL

## DUCTLESS SPLIT SYSTEM CONDENSING UNIT SCHEDULE:

| UNIT NO. | SERVING | COOLING DATA | | HEATING DATA AT 17F | FAN MOTOR | | | | COMPRESSOR DATA | | | UNIT ELECTRICAL DATA | | | | | SELECTION BASED ON | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CAPACITY MBH | COND. EAT F | CAPACITY MBH | NO. | WATTS | VOLT | PH | QUANTITY | VOLT | PH | VOLT | PH | FAN FLA | MCA | MOCP | MANUFACTURER | MODEL | |
| CU-1 | AC-1 | 9 | 95 | 6.9 | 1 | 55 | 208/230 | 1 | 1 | 208/230 | 1 | 208/230 | 1 | 0.5 | 9 | 15 | TRANE | NTXSKS09A112AA | ALL |

NOTES:

1 HEAT PUMP OUTDOOR UNIT
2 SECURE UNIT TO BUILDING CONCRETE PAD AND PROVIDE HURRICANE TIE-DOWNS. SUBMIT SIGN AND SEALED ENGINEERING DRAWINGS OF TIE-DOWNS FOR APPROVAL.

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REVISIONS | DATE

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FACILITY EXPANSION
FUEL FARM IMPROVEMENTS PROJECT
FUEL FACILITY EQUIPMENT SHELTER ADDITION HVAC PLAN

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

100% DESIGN

HANSON
ENGINEERING | PLANNING | ALLIED SERVICES
Hanson Professional Services Inc.
Offices Nationwide
FL CA Lic. No. 7961

SEAL:

PAUL L. HOLLOWAY LICENSE No. 90175 STATE OF FLORIDA PROFESSIONAL ENGINEER

PROFESSIONAL ENGINEER
STATE OF FLORIDA

| | | | |
|---|---|---|---|
| DESIGN BY: | LMW | DATE: | 04/02/2023 |
| DRAWN BY: | LMW | JOB NO: | 22A0138 |
| APPROVED BY: | PLH | FILE NAME: | |

SHEET NUMBER:

M-2

# MECHANICAL SYMBOLS (PIPING)

| | |
|---|---|
| | UNION JOINT |
| | FLANGE JOINT |
| | "Y" STRAINER |
| | TEE - UP, BRANCH OUT OF TOP |
| | TEE - DOWN, BRANCH OUT OF BOTTOM |
| | ELBOW - UP |
| | ELBOW - DOWN |
| | RISE OR DROP |
| | DIRECTION OF FLOW |
| | SLEEVE THRU WALL |
| | CAP ON END OF PIPE |
| | AIR VENT, MANUAL (MAV) |
| | THERMOMETER, THERMOMETER WELL |
| P | PRESSURE GAUGE WITH GAUGE COCK |
| | PUMP (TRIANGLE POINTS IN DIR. OF FLOW) |
| | FLOW SWITCH |
| P | PRESSURE SWITCH |
| | GATE VALVE |
| | CHECK VALVE |
| | AUTOMATIC CONTROL VALVE, PNEUMATIC STRAIGHT THRU OR THREE - WAY AS INDICATED |
| | COMBINATION BALANCE & SHUTOFF VALVE WITH PRESSURE TAPS |
| | BALL VALVE |
| | PLUG VALVE |
| | GAUGE COCK |
| | REDUCED PRESSURE BACK FLOW PREVENTER |
| | PRESSURE - TEMPERATURE RELIEF VALVE |
| | PRESSURE REGULATING VALVE (STEAM, AIR & WATER, ARROW POINTS TO LOWER PRESSURE.) |
| | VENTURI FLOW MEASURING STATION |
| | FLEXIBLE PIPE CONNECTION |
| | BUTTERFLY VALVE |
| S | SOLENOID VALVE |
| PRV | PRESSURE RELIEF VALVE TAG |
| | |
| | |
| | |
| | |
| | |
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| | |
| | |

# MECHANICAL SYMBOLS (HVAC)

| | |
|---|---|
| OA | OUTDOOR AIR |
| SA | SUPPLY AIR |
| EA | EXHAUST AIR |
| RA | RETURN AIR |
| AFF | ABOVE FINISHED FLOOR |
| TDE | TOP DUCT ELEVATION |
| RBJ | RUN BETWEEN JOIST |
| MD | MOTORIZED DAMPER |
| ACC | AIR COOLED CONDENSER |
| PH | PENTHOUSE (INTAKE OR RELIEF) |
| RLFA | RELIEF AIR |
| M | MOTORIZED DAMPER |
| TX | THERMOSTAT (X = COIL OR BOX NUMBER) |
| N | NIGHT SETBACK STAT |
| H | HUMIDISTAT |
| | VAV BOX TAG |
| | REHEAT OR BOOSTER COIL TAG |
| | CEILING SUPPLY AND RETURN AIR DEVICE |
| A | AIR DEVICE DESIGNATION |
| 24X12 (OR ØX") | DUCT SIZE DESIGNATION. SIDE SHOWN IS FIRST DIMENSION. SIZE SHOWN IS INTERNAL CLEAR OPENING. SHEET METAL SIZE MUST BE INCREASED FOR INTERNAL INSULATION, WHERE SPECIFIED |
| | TURNING VANES (NUMBER OF VANES SHALL BE BASED ON ACTUAL DUCT SIZE & NOT ON SCHEMATIC SYMBOL ON DRAWING) |
| | EXHAUST DUCT |
| | RETURN OR OUTSIDE AIR DUCT |
| | DISCHARGE OR SUPPLY DUCT |
| | FLEXIBLE DUCT CONNECTION |
| | FLEXIBLE DUCT |
| | VOLUME DAMPER (VD) |
| AP / AD | ACCESS PANEL (AP) ACCESS DOOR (AD) |
| F S / AP | FIRE DAMPER (F) SMOKE DAMPER (S) |
| M | MOTORIZED DAMPER (ELEC. OR PNEU.) |
| D | INCLINE DROP IN DIRECTION OF ARROW |
| R | INCLINE RISE IN DIRECTION OF ARROW |
| | TRANSITIONS: GIVE SIZES. FOT = FLAT ON TOP OR FOB = FLAT ON BOTTOM (IF APPLICABLE) |

# MECHANICAL LEGEND (PIPING)

## PIPING DESIGNATIONS

| | |
|---|---|
| HWS | HEATING HOT WATER SUPPLY |
| HWR | HEATING HOT WATER RETURN |
| RL | REFRIGERATION LIQUID |
| RS | REFRIGERATION SUCTION |
| C | CONDENSATE WATER SUPPLY |
| CR | CONDENSATE WATER RETURN |
| CHWS | CHILLED WATER SUPPLY |
| CHWR | CHILLED WATER RETURN |
| CD | CONDENSATE DRAIN |

# MECHANICAL SYMBOLS (GENERAL)

| | |
|---|---|
| X / Z | X = SECTION [LETTER] OR DETAIL [NUMBER]<br>Z = WHERE DETAIL OR SECTION IS SHOWN |
| | HEX NOTES ON DRAWINGS & SCHEDULES |
| | REVISIONS |
| | ROOM NUMBERS |
| | EQUIPMENT TAGS (XX = MARKS BELOW)<br>AHU = AIR HANDLING UNIT<br>AS = AIR SEPARATOR<br>FCU = FAN COIL UNIT<br>CH = CHILLER<br>CT = COOLING TOWER<br>EF = EXHAUST FAN<br>HX = HT. EXCHANGER<br>CU = CONDENSING UNIT<br>EHC = ELECTRIC HEATING COIL<br>UH = UNIT HEATER<br>RTU = ROOFTOP UNIT |
| | POINT OF DISCONNECT<br>POINT OF CONNECT |

# AIR DEVICE LEGEND

AIR DEVICE
24x24 DIFFUSERS

MARK: S3-200
CFM
8" NECK SIZE

NOTE: FOR 24x24 AIR DEVICES PROVIDE 4-WAY PATTERN UNLESS OTHERWISE SPECIFIED.

AIR DEVICE
SLOT DIFFUSERS

MARK: S3-200
CFM
4S-8" NECK SIZE
# OF SLOTS FOR LINEAR DIFFUSERS

HW REHEAT COIL
INDICATES COIL WITH 3-WAY VALVE. COILS WITHOUT ' ' SHALL HAVE 2-WAY VALVE
VAV BOX # 4.1-750
BOX SIZE 9-2.5
CFM
HW GPM

# GENERAL NOTES

1. BEFORE SUBMITTING BID, CONTRACTOR SHALL VISIT THOSE PORTIONS OF THE BUILDING AND SITE AFFECTED BY THIS WORK SO AS TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT MAY AFFECT EXECUTION OF THE WORK. SUBMISSION OF A BID DENOTES THAT SUCH EXAMINATION HAS BEEN MADE AND CLAIMS FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED MAY NOT BE RECOGNIZED. SUBMIT ANY QUESTIONS REQUIRED TO CLARIFY SCOPE PRIOR TO BID. INCLUDE ALL REQUIRED WORK IN BID PRICE.
2. ALL DUCT SIZES INDICATED ON THE DOCUMENTS ARE NET FREE AREA DIMENSIONS.
3. UNFORESEEN SITE CONDITIONS MAY EXIST AND EXISTING UTILITIES MAY NOT BE FIELD LOCATED EXACTLY AS SHOWN ON THE DRAWINGS. COOPERATION WITH OTHER TRADES IN ROUTING AND/OR BURIAL DEPTHS AS DETERMINED DURING CONSTRUCTION AND AS DIRECTED BY THE ARCHITECT/ENGINEER MAY BE NECESSARY. IT IS INTENDED THAT SUCH DEVIATIONS SHALL BE CONSIDERED AS PART OF THIS CONTRACT. SUCH DEVIATIONS MAY NOT BE CONSIDERED AS PART OF THIS CONTRACT WHEN PROPERLY DOCUMENTED IN WRITING.
4. WORK SHALL BE PERFORMED IN COMPLIANCE WITH THE ESTABLISHED WORK SCHEDULE SET FORTH BY OWNER. COORDINATE ALL WORK WITH GENERAL CONTRACTOR.
5. UNLESS OTHERWISE NOTED, ALL CONCRETE PATCHING, WALL PATCHING, CEILING REPAIR, FENCE WORK AND OTHER GENERAL CONSTRUCTION WORK REQUIRED FOR INSTALLING MECHANICAL SYSTEMS SHALL BE PROVIDED BY THE CONTRACTOR RESPONSIBLE FOR SAID WORK. THAT CONTRACTOR SHALL FULLY COORDINATE THAT WORK WITH GENERAL CONTRACTOR USING THE APPROPRIATE CONSTRUCTION TRADES.
6. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BE UL LISTED WHERE APPLICABLE.
7. PENETRATION OF THE ROOF DECK WILL NOT BE ACCEPTABLE FOR SUPPORT OF DUCTWORK, PIPING EQUIPMENT OR ANY OTHER DEVICES. ALL SUPPORTS SHALL SPAN BETWEEN THE STRUCTURAL ELEMENTS TO SUPPORT THE MECHANICAL EQUIPMENT.
8. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND SHOULD NOT BE SCALED. COORDINATE EXACT LOCATION OF ALL CEILING MOUNTED EQUIPMENT SO ALL SERVICEABLE COMPONENTS CAN BE EASILY ACCESSED BY REMOVING CEILING TILES ONLY. REMOVAL OR RELOCATION OF LIGHTING FIXTURES FOR SERVICE ACCESS IS NOT ACCEPTABLE. THE CONTRACTOR SHALL REINSTALL EQUIPMENT THAT HAS INADEQUATE OR UNSAFE ACCESSIBILITY. LOCATE ALL OTHER EQUIPMENT WITH MANUFACTURER RECOMMENDED ACCESS FOR OPERATION AND MAINTENANCE. INSTALL EQUIPMENT WITH PROPER ELECTRICAL CODE CLEARANCES.
9. WHENEVER A REFERENCE IS MADE TO A STANDARD, THE WORK SHALL COMPLY WITH THE LATEST PUBLISHED EDITION OF THE STANDARD AT THE TIME THE PROJECT IS BID UNLESS OTHERWISE SPECIFIED.
10. ALL MATERIAL STORED ON SITE SHALL BE PROPERLY PROTECTED FROM DAMAGE OR DETERIORATION. MATERIAL SHALL NOT BE STORED IN CONTACT WITH THE GROUND. ALL DUCTWORK AND EQUIPMENT, WHETHER INSTALLED OR NOT, SHALL BE SEALED AT ANY OPENING.
11. DUCTWORK SHALL BE SHEET METAL, EXTERNALLY WRAPPED UNLESS OTHERWISE NOTED, MIN. 26 GA. AND CONSTRUCTED IN STRICT ACCORDANCE WITH SMACNA STANDARDS.
12. ALL INSULATION USED FOR DUCTWORK SHALL BE INSTALLED THICKNESS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS. INSULATION MATERIAL SHALL MEET NFPA 90A REQUIREMENTS AND SHALL HAVE COMPOSITE FIRE AND SMOKE HAZARD RATING AS TESTED IN ACCORDANCE WITH UL 723 NOT EXCEEDING FLAME SPREAD INDEX OF 25 AND SMOKE DEVELOPED INDEX OF 50. REFER TO SPECIFICATION SECTION 23 07 13.
13. REFER TO DIVISION 23 SPECIFICATIONS FOR ADDITIONAL INFORMATION AND ALL REQUIREMENTS NOT INDICATED ON THE DRAWINGS. IF THERE ARE ANY APPARENT CONFLICTS BETWEEN THE SPECIFICATIONS AND DRAWINGS, THE MORE STRINGENT REQUIREMENTS SHALL APPLY. NOTIFY THE ARCHITECT/ENGINEER OF ANY CONFLICTS PRIOR TO PURCHASING EQUIPMENT AND PRIOR TO CUTTING OPENINGS.
14. VERIFY EXISTING CONDITIONS IN THE FIELD AND COORDINATE WITH ALL TRADES PRIOR TO INSTALLING OR FABRICATING EQUIPMENT.
15. LOCATE ALL OUTSIDE AIR INTAKES A MINIMUM OF 10'-0" CLEAR FROM ALL PLUMBING VENTS AND EXHAUST AIR DISCHARGE LOCATIONS.
16. ALL WORK, AT A MINIMUM, SHALL BE IN ACCORDANCE WITH OSHA, NFPA STANDARDS AND THE LOCAL GOVERNING AUTHORITIES. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2023 (8TH ED.) FLORIDA BUILDING CODE, FLORIDA ENERGY CONSERVATION CODE, AND FLORIDA MECHANICAL CODE & STANDARDS (WITH SUPPLEMENTS) AS REFERENCED THROUGHOUT THE SPECIFICATIONS. THE DRAWINGS AND SPECIFICATIONS DO NOT ATTEMPT TO INDICATE ALL WORK REQUIRED BY THE CODES AND AUTHORITIES. DO NOT INSTALL WORK THAT DOES NOT MEET THE MINIMUM REQUIREMENTS. IF NECESSARY, REQUEST CLARIFICATION FROM A/E PRIOR TO PROCEEDING.
17. CONTRACTOR SHALL NOT CONCEAL ANY WORK UNTIL INSPECTED BY MECHANICAL INSPECTOR AND/OR THE WORK IS OBSERVED BY THE ARCHITECT/ENGINEER. CONTRACTOR SHALL NOTIFY THE A/E OF A SCHEDULED INSPECTION/REVIEW TIME WITHIN 72 HOURS. GENERAL CONTRACTOR SHALL NOT CONCEAL WORK UNTIL INSPECTED AND OBSERVED, REGARDLESS OF SCHEDULE.
18. PRIME CONTRACTOR IS RESPONSIBLE TO HAVE LICENSED AND QUALIFIED SUBCONTRACTORS PERFORMING ALL WORK.
19. ALL PIPING AND DUCT PENETRATIONS THROUGH FLOOR AND WALLS SHALL BE MADE THROUGH NEATLY CUT OR DRILLED OPENINGS. PROVIDE SLEEVES THROUGH RATED WALLS. SEAL AROUND ALL PENETRATIONS. SEAL NON-RATED WALLS WITH GROUT OR CAULK. BACKING MATERIAL MAY BE USED. SEAL PENETRATIONS IN ALL RATED WALLS WITH UL-LISTED FIRESTOPPING ASSEMBLY MANUFACTURED BY 3M, HILTI, OR STI FIRESTOP.
20. INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
21. REPAIR ALL ACCIDENTAL OR INTENTIONAL DAMAGE TO MATCH NEW AND EXISTING CONSTRUCTION WITH NO NOTICEABLE DIFFERENCE IN CONTINUITY, APPEARANCE, OR FUNCTION.
22. IT IS THE INTENT OF THESE PLANS AND SPECIFICATION TO PROVIDE A WORKING INSTALLATION IN EVERY DETAIL AND ALL ITEMS REQUIRED FOR SUCH AND INSTALLATION SHALL BE PROVIDED WHETHER OR NOT SPECIFICALLY INDICATED OR MENTIONED.

# PROJECT DESIGN CONDITIONS

**TEMPERATURE DESIGN CRITERIA**

| OUTDOOR | | |
|---|---|---|
| **SUMMER:** | 92.0 F DB / 78.0 F WB | 0.4% MEAN COINCIDENTAL DB/WB |
| **SUMMER:** | 87.7 WB | 0.4% WET BULB USED FOR COOLING TOWER SELECTION |
| **WINTER:** | 44.5 F DB | 99.6% DB |
| **DAILY RANGE:** | 13.6 F DB | |

**ASHRAE WEATHER DATA LOCATION:**
**NAPLES AIRPORT, FL**

| INDOOR | | |
|---|---|---|
| **COOLING:** | 75 F DB / 50% RH | +/- 2 DEG F |
| **HEATING:** | 70 F DB | +/- 2 DEG F |

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CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FACILITY EXPANSION
FUEL FARM IMPROVEMENTS PROJECT
MECHANICAL NOTES, LEGENDS, AND ABBREVIATIONS

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

100% DESIGN

HANSON
ENGINEERING | PLANNING | ALLIED SERVICES
Hanson Professional Services Inc.
Offices Nationwide
FL CA Lic. No. 7961

SEAL:
PAUL L. HOLLOWAY LICENSE No. 90175 STATE OF FLORIDA PROFESSIONAL ENGINEER
PROFESSIONAL ENGINEER
STATE OF FLORIDA

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| DESIGNED BY: | LMW | DATE: | 04/02/2023 |
| DRAWN BY: | LMW | PROJ. NO: | 22A0138 |
| APPROVED BY: | PLH | FILE NAME: | |

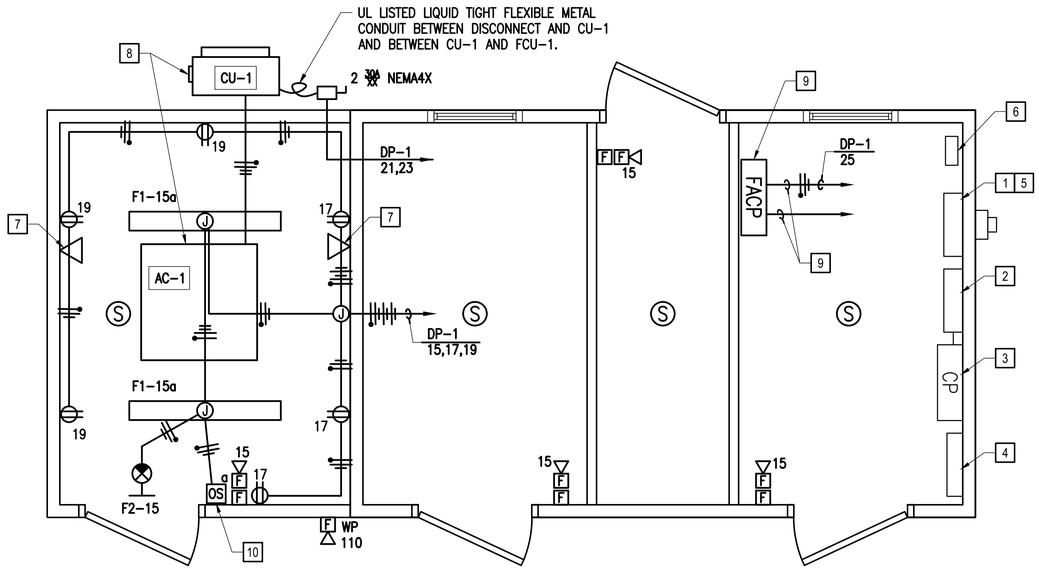
SHEET NUMBER
M-1

## KEYED NOTES:

1. EXISTING SERVICE AND DISTRIBUTION PANELBOARD DP-1. EXISTING PANEL IS A EATON PRL2A, 225A, 120/240V, SINGLE PHASE
2. EXISTING EMERGENCY PANEL
3. EXISTING LIGHTING CONTACTOR AND EXHAUST FAN CONTROL PANEL.
4. EXISTING VEEDER-ROOT TANK MONITORING PANEL
5. PROVIDE 4-20A/1P & 1-15A/2P BRANCH CIRCUIT BREAKERS SUITABLE FOR 2 TIER SERIES RATING OF 65,000 AMPS INTERRUPTING RATING AT 240 VAC WHEN PROTECTED BY A MAIN BREAKER WITH A 65,000 AIC RATING AT 240 VAC. SEE KEYED NOTE 1 FOR PANEL MANUFACTURER AND MODEL NUMBERS. SEE KEYED NOTE 9 FOR RED BREAKER REQUIREMENT FOR FACP.
6. APPROXIMATE LOCATION OF EXISTING NETWORK SWITCH, COORDINATE WITH OWNER ON UPGRADE FOR THIS SWITCH TO ALLOW CONNECTION OF THE NEW NETWORK PORTS IN THE ADDITION.
7. PROVIDE 1" CONDUIT WITH 2-CATEGORY 6 NETWORK CABLES TO LOCATION OF EXISTING NETWORK SWITCH. PROVIDE 2-PORT ETHERNET FACEPLATE WITH TWO WIRED JACKS.
8. NEW SPLIT TYPE AIR CONDITION SYSTEM. INDOOR AC-1 UNIT IS FED FROM OUTDOOR CU-1
9. PROVIDE CONVENTIONAL 5 ZONE FIRE ALARM PANEL EDWARDS FX-5R OR APPROVED EQUIAL. PROVIDE DIALER AND 2 TELEPHONE LINES IN 3/4" C & 1-20A DEDICATED CIRCUIT BREAKER IN PANEL DP-1-CIRCUIT BREAKER TO BE RED IN COLOR. COORDINATE FINAL LOCATION IN THE FIELD TO AVOID CONFLICTS.
10. SENSOR SWITCH MODEL #WSX-PDT-WH OR APPROVED EQUAL.

## ELECTRICAL LEGEND - PLANS

| | |
|---|---|
| ——— | CONDUIT (EXPOSED) |
| - - - - - | CONDUIT OR DUCT (CONCEALED OR BURIED) |
| | DUPLEX CONVENIENCE RECEPTACLE, 120V, 20 AMP SINGLE PHASE, NEMA 5-20R, GROUNDING TYPE. |
| | WALL OR CEILING MT'D. JUNCTION BOX. CONFIGURATION VARIES WITH USE |
| 2 30A XX | SINGLE THROW DISCONNECT SWITCH, 2 = # OF POLES, 30A = AMP RATING, XX = FUSE SIZE IF REQUIRED |
| | CIRCUIT BREAKER PANEL-SEE SCHEDULES |
| | #12 AWG TWHN COPPER UNLESS NOTED OTHERWISE. LONG SLASHES INDICATE NEUTRAL. SHORT SLASHES INDICATE HOT OR SWITCHED LEG. "G" OR SLASHES WITH DOT INDICATE SEPARATE GROUND WIRE. |
| PNL A 1,3,5 | HOMERUN TO PANEL PNL A INDICATES PANEL 1,3,5 INDICATES CIRCUIT NUMBERS |
| F1-Xa | SURFACE MOUNTED LED FIXTURE. LETTER WITH NUMBER INDICATES FIXTURE TYPE. X= CIRCUIT NUMBER a= SWITCH LEG |
| F1-Xa | SURFACE MOUNTED LED FIXTURE WITH EMERGENCY BALLAST BATTERY BACKUP. LETTER WITH NUMBER INDICATES FIXTURE TYPE. X= CIRCUIT NUMBER A= SWITCH LEG |
| | WALL OR CEILING MOUNTED LED FIXTURE. |
| OS a | WALL MOUNTED SWITCH TYPE OCCUPANCY SENSOR A= SWITCH LEG |
| | 2 PORT CAT 6 ETHERNET WALL OUTLET WITH 1" C. AND 2 CAT 6 CABLES TO LOCATION INDICATED |
| F | DOUBLE ACTION TYPE MANUAL FIRE ALARM PULL STATION |
| S | PHOTOELECTRIC TYPE FIRE ALARM SMOKE DETECTOR |
| WP F 15 | FIRE ALARM HORN STROBE, 15 = CANDELLA LEVEL, WP INDICATES WEATHER PROOF |
| FACP | FIRE ALARM CONTROL PANEL |




## NOTES

1. 15 AMP & 20 AMP BRANCH CIRCUITS FOR LIGHTING & RECEPTACLES SHALL USE #12 AWG THWN (MIN.). 3/4" MINIMUM EMT MAY BE USED FOR INTERIOR LIGHTING AND RECEPTACLE BRANCH CIRCUITS.
2. OCCUPANCY SENSOR AND CONVENIENCE RECEPTACLES SHALL BE MOUNTED 48" ABOVE FINISHED FLOOR.
3. CONVENIENCE RECEPTACLES FOR THE ADDITION SHALL BE DUPLEX, 120 VAC SPEC GRADE, 20 AMP, NEMA 5-20R UL LISTED.
4. SURFACE MOUNTED OUTLET BOXES SHALL BE DIE CAST CONSTRUCTION HUBBELL/RACO/BELL, APPLETON, OR CROUSE-HINDS WEATHERPROOF OUTLET BOXES WITH STAINLESS STEEL COVER PLATES.
5. EXIT LIGHTS SHALL BE WIRED ON 24 HOURS PER DAY.

N

## FUEL FACILITY EQUIPMENT SHELTER ADDITION LIGHTING AND RECEPTACLE PLAN

SCALE 1/2"=1'-0"

1 0 2 4 FEET

### LIGHTING FIXTURE SCHEDULE

| FIXT. TYPE | DESCRIPTION | MANUFACTURER & CATALOG NO. | LAMPS/ WATTS | VOLTS | MOUNTING | REMARKS |
|---|---|---|---|---|---|---|
| F1 | 4 FT. WET LOCATION LISTED ENCLOSED AND GASKETED INDUSTRIAL LED LIGHT FIXTURE, IMPACT RESISTANT, UV RESISTANT REINFORCED POLYESTER FIBERGLASS HOUSING, HIGH IMPACT ACRYLIC DIFFUSER. | LITHONIA: FEM-L48-4000LM-LPAFL-WD-MVOLT-40K-80CRI OR APPROVED EQUAL | LED. APPROX. 23.8 INPUT WATTS | 120 | SURFACE TO HARD CEILING | |
| F2 | LED EXIT SIGN WITH TWIN LED LAMP HEAD EMERGENCY LIGHTS WITH BATTERY BACKUP AND SELF DIAGNOSTICS | LITHONIA: CAT. NO. LHQM-LED-R-HO-SD OR APPROVED EQUAL | LED | 120 | MOUNT ON WALL ABOVE EXIT DOORWAY | EXIT LIGHT SHALL BE WIRED TO BE ON 24 HRS/DAY. |

This item has been digitally signed and sealed by Kevin N. Lightfoot, PE on 04/02/2024.

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DATE | REVISIONS

CURRIER ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

PROJECT NAME: FUEL FARM IMPROVEMENTS PROJECT
PROJECT LOCATION: NAPLES AIRPORT (APF)
DRAWING NAME: EQUIPMENT SHELTER ADDTION LIGHTING AND RECEPTACLE PLAN

ISSUED FOR PERMIT


HANSON Engineering | Planning | Allied Services
Hanson Professional Services Inc.
Offices Nationwide
FL CA Lic. No. 7961

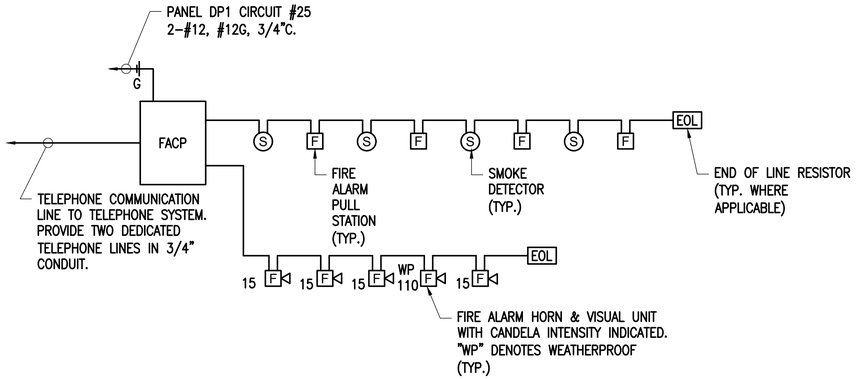

SEAL: KEVIN N. LIGHTFOOT LICENSE No. 71773 STATE OF FLORIDA PROFESSIONAL ENGINEER

PROFESSIONAL ENGINEER
STATE OF FLORIDA

| | | | |
|---|---|---|---|
| DESIGNED BY: | RDN | DATE: | 04/02/2024 |
| DRAWN BY: | CWS | PROJ. NO: | 22A0138_02 |
| APPROVED BY: | KNL | FILE NAME: | E-103-LTG |

SHEET NUMBER: E-1

ISSUED FOR PERMIT




## FIRE ALARM ONE-LINE DIAGRAM

## FIRE ALARM GENERAL NOTES:

1. FIRE DETECTION AND ALARM SYSTEM SHALL BE EDWARDS MODEL FX-5R, OR APPROVED EQUAL.
2. ALL FIRE DETECTION AND ALARM WIRING SHALL BE IN EMT (INTERIOR) AND GRSC (EXTERIOR) AND ALL BOXES PAINTED RED AND MARKED FIRE ALARM. INSTALL IN ACCORDANCE WITH NFPA 72 AND MANUFACTURERS RECOMMENDATIONS.
3. FURNISH AND INSTALL CONDUIT, FITTINGS, RACEWAYS, WIRING, ADJUSTMENTS, RELOCATIONS, AND ACCESSORIES TO ACCOMMODATE THE RESPECTIVE WORK.
4. COORDINATE TELEPHONE SERVICE WORK WITH THE AIRPORT DIRECTOR AND THE AIRPORT'S SERVING TELEPHONE COMPANY. FOR HARD WIRE TELEPHONE SERVICE SYSTEM PROVIDE CONDUITS TO FIRE ALARM CONTROL PANEL. PROVIDE GRSC OUTSIDE AND EMT INSIDE.

## NOTES:

1. ALL WORK, POWER OUTAGES, AND/OR SHUT DOWN OF EXISTING SYSTEMS SHALL BE COORDINATED WITH THE AIRPORT MANAGEMENT. ONCE SHUT DOWN, THE CIRCUITS SHALL BE LABELED AS SUCH TO PREVENT ACCIDENTAL ENERGIZING OF THE RESPECTIVE CIRCUITS. ALL PERSONNEL SHALL FOLLOW U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) 20 CFR PART 1910 OCCUPATIONAL SAFETY & HEALTH STANDARDS FOR ELECTRICAL SAFETY AND LOCKOUT/TAGOUT PROCEDURES INCLUDING, BUT NOT LIMITED TO, 29 CFR SECTIONS 1910.147 THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT).
2. ALL ELECTRICAL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 – NATIONAL ELECTRICAL CODE (NEC) MOST CURRENT ISSUE IN FORCE, THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE U.L. LISTING, INTERTEK TESTING SERVICES VERIFICATIONS/ETL LISTING, (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE WILL NOT BE PERMITTED.
3. ALL CONDUCTORS/WIRING SHALL BE COPPER.
4. COLOR CODE PHASE AND NEUTRAL CONDUCTOR INSULATION FOR NO. 6 AWG OR SMALLER. PROVIDE COLORED INSULATION OR COLORED MARKING TAPE FOR PHASE AND NEUTRAL CONDUCTORS FOR NO. 4 AWG AND LARGER. INSULATED GROUND CONDUCTORS SHALL HAVE GREEN COLORED INSULATION FOR ALL CONDUCTOR AWG AND/OR KCMIL TO COMPLY WITH NEC 250.119. NEUTRAL CONDUCTORS SHALL HAVE WHITE COLOR INSULATION FOR NO. 6 AWG OR SMALLER TO MEET THE REQUIREMENTS OF NEC 200.6. STANDARD COLORS FOR POWER WIRING AND BRANCH CIRCUITS SHALL BE AS FOLLOWS:

120/240 VAC, 1 PHASE, 3 WIRE

| | |
|---|---|
| PHASE A | -BLACK |
| PHASE C | -BLUE |
| NEUTRAL | -WHITE |
| GROUND | -GREEN |

NOTE THE ABOVE COLOR CODING APPLIES TO A 120/240 VAC, 1 PHASE, 3-WIRE SYSTEM THAT ORIGINATES FROM A 240/120 VAC, 3 PHASE, 4 WIRE SYSTEM.

### EXISTING SHELTER SERVICE AND DISTRIBUTION PANEL

| CKT # | DUTY | SIZE | SIZE | DUTY | CKT # |
|---|---|---|---|---|---|
| 1 | INTERIOR LIGHTS | 20A, 1P | 20A, 1P | EQUIPMENT ROOM FAN | 2 |
| 3 | RESTROOM FAN | 20A, 1P | 20A, 1P | EXTERIOR LIGHTS | 4 |
| 5 | RESTROOM RECEPTACLES | 15A, 1P | 20A, 1P | RECEPTACLES STORAGE CHASE | 6 |
| 7 | AC | 15A, 2P | 20A, 2P | HAND DRYER | 8 |
| 9 | | | | | 10 |
| 11 | POWER CONTACTER REST ROOM | 15A, 1P | 20A, 2P | SECURITY CAM. | 12 |
| 13 | POWER CONTACTER EQUIPMENT FAN | 15A, 1P | | | 14 |
| 15 | LIGHTS OFFICE AREA | 20A, 1P | | BLANK | 16 |
| 17 | RECEPTACLES OFFICE AREA | 20A, 1P | | BLANK | 18 |
| 19 | RECEPTACLES OFFICE AREA | 20A, 1P | | BLANK | 20 |
| 21 | NEW AC SYSTEM | 15A, 2P | | BLANK | 22 |
| 23 | | | | BLANK | 24 |
| 25 | FACP (RED BREAKER) | 20A, 1P | | BLANK | 26 |
| 27 | BLANK | | | BLANK | 28 |
| 29 | BLANK | | | BLANK | 30 |
| 31 | BLANK | | | BLANK | 32 |
| 33 | BLANK | | | BLANK | 34 |
| 35 | BLANK | | | BLANK | 36 |
| 37 | BLANK | | | BLANK | 38 |
| 39 | BLANK | | | BLANK | 40 |
| 41 | BLANK | | | BLANK | 42 |

SEE KEYED NOTE 5 ON SHEET E-1


EXISTING 225AMP, 120/240VAC, 1 PHASE, 3 WIRE 42 CIRCUIT PANELBOARD WITH 200AMP, 2 POLE MAIN BREAKER WITH 65,000 AIC AT 240VAC IN A NEMA 1 ENCLOSURE UL-LISTED SUITABLE FOR SERVICE ENTRANCE. BRANCH BREAKERS SHALL BE SUITABLE FOR 2 TIER SERIES RATING OF 65,000 AIC AT 120/240 VAC WHEN PROTECTED BY A MAIN BREAKER WITH 65,000 AIC RATING AT 240 VAC.

**NOTES:**

1. CIRCUIT BREAKERS AND WIRING SHALL BE SIZED FOR THE ACTUAL EQUIPMENT FURNISHED IN CONFORMANCE WITH THE RESPECTIVE MANUFACTURER'S RECOMMENDATION AND N.E.C. CONTRACTOR SHALL ADJUST CIRCUIT BREAKER SIZES & WIRING WHERE APPLICABLE TO CONFORM WITH THE MANUFACTURER'S RECOMMENDATIONS AND N.E.C.

This item has been digitally signed and sealed by Kevin N. Lightfoot, PE on 04/02/2024.

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DATE
REVISIONS

CURRIER ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FARM IMPROVEMENTS PROJECT
NAPLES AIRPORT (APF)
EQUIPMENT SHELTER ADDITION PANEL SCHEDULE AND NOTES

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

ISSUED FOR PERMIT

HANSON Engineering | Planning | Allied Services
Hanson Professional Services Inc.
Offices Nationwide
FL CA Lic. No. 7961

SEAL:
KEVIN N. LIGHTFOOT LICENSE No. 71773 STATE OF FLORIDA PROFESSIONAL ENGINEER
PROFESSIONAL ENGINEER
STATE OF FLORIDA

| | | | |
|---|---|---|---|
| DESIGNED BY: | RDN | DATE: | 04/02/2024 |
| DRAWN BY: | CWS | PROJ. NO: | 22A0138_02 |
| APPROVED BY: | KNL | FILE NAME: | E-102-SCHD |

SHEET NUMBER: E-2

ISSUED FOR PERMIT

Plotted: I:\22jobs\22a0138_02\CAD\Airport\Sheet\E-102-SCHD.dwg Tue, Apr 02, 2024 at 2:34pm – duck02449

# FUEL MECHANICAL LEGEND

## VALVES

- 3-WAY VALVE
- ANGLE VALVE
- ANTI-SIPHON ANGLE VALVE
- XX FT SETTING
- ANTI-SIPHON CHECK
- FLANGED BALL VALVE (MANUAL)
- SOCKET WELDED BALL VALVE
- FL — FUSIBLE LINK SOCKET WELDED BALL VALVE
- 3W — BALL VALVE (THREE WAY)
- M — BALL VALVE (MOTOR OPERATED)
- SR — BALL VALVE (SPRING RETURN CLOSED)
- BUTTERFLY VALVE
- FL — FUSIBLE LINK BUTTERFLY VALVE
- CHECK VALVE
- C — CONTROL VALVE
- C — CONTROL VALVE WITH CHECK FEATURE
- DIAPHRAGM VALVE
- DBB — DOUBLE BLOCK & BLEED PLUG VALVE
- FUSIBLE LINK FIRE VALVE (FV)
- GATE VALVE
- GLOBE VALVE
- NEEDLE VALVE
- P — PISTON PRESSURE CONTROL VALVE
- PLUG VALVE
- R — PRESSURE REGULATOR VALVE
- SELF CONTAINED DIAPHRAM PRESSURE REDUCING (REGULATING) VALVE
- S — SOLENOID ACTUATED CONTROL VALVE
- THERMAL RELIEF VALVE (TRV)

## EQUIPMENT

- AVV — AUTOMATIC AIR VENT ASSEMBLY
- BP — BACKFLOW PREVENTION ASSEMBLY
- S — BASKET TYPE STRAINER
- BF — BLIND FLANGE
- CAMLOCK COUPLING
- CONICAL STRAINER
- FLEXIBLE BALL JOINT
- HPV — HIGH POINT VENT
- HB — HOSE BIB
- IF — INSULATING FLANGE
- LINE PROPORTIONER
- LPD — LOW POINT DRAIN
- ORIFICE PLATE
- REDUCER (CONCENTRIC)
- REDUCER (ECCENTRIC)
- REMOVABLE CAP (THREADED)
- REMOVABLE PLUG (THREADED)
- SPECTACLE BLIND (OPEN)
- SWIVEL JOINT, HOSE, & DRY BREAK COUPLING
- SWIVEL JOINT, HOSE, & TRUCK LOADING NOZZLE
- UNION
- D.E. — UNION – DIELECTRIC
- WM — WATER MONITOR (WM) FILTER
- WH — WALL HYDRANT
- WELD CAP
- Y-TYPE STRAINER

## APPURTENANCES & EQUIPMENT

- AVV / A/E — AIR ELIMINATOR VESSEL W/ AIR ELIMINATOR
- CENTRIFUGAL PUMP
- SLIDING VANE PD PUMP WITH INTERNAL BYPASS
- C/T — CLAY TREATER
- EV — EMERGENCY VENT
- F/S # — FILTER SEPARATOR
- FLANGED FLEXIBLE PUMP CONNECTOR
- FLOATING SUCTION
- HORIZONTAL FILTER SEPARATOR
- P/F — PREFILTER
- P.V.V. (PRESSURE VACUUM PALLET VENT)
- P.V.V. (CARB IF NOTED)
- PI — PRIST INJECTOR
- STATIC GROUNDING REEL
- STRAINER W/ AIR ELIMINATOR
- S/S — SUMP SEPARATOR
- SS — SURGE SUPPRESSOR WITH CHECK VALVE, ISOLATION VALVE AND ⅜" DRAIN

## INSTRUMENTS

- FS — FLOW SWITCH
- PRESSURE GAUGE
- T — THERMOWELL
- ULTRASONIC FLOW METER
- M — POSITIVE DISPLACEMENT METER
- MSP — MSP (MILLIPORE SAMPLE POINT)
- SIGHT FLOW INDICATOR

## MISCELLANEOUS

- COMPONENTS TO BE FURNISHED WITH EQUIPMENT
- DEMOLITION
- PIPE SUPPORT
- POINT OF NEW WORK TIE-IN

- EXISTING SMALL BORE PIPING
- EXISTING LARGE BORE PIPING
- NEW SMALL BORE PIPING
- NEW LARGE BORE PIPING
- ADD ALTERNATE #1 SCOPE

# FLOW DIAGRAM LEGEND

- CLOCK STYLE LEVEL GAUGE
- DP — DIFFERENTIAL PRESSURE GAUGE
- EFSO — EMERGENCY FUEL SHUT-OFF
- HOA — HAND OFF AUTO
- HS — HAND SWITCH
- H — HORN
- IH — IMMERSION HEATER (kW XXX)
- I/O — INPUT / OUTPUT
- NS — KEY SWITCH
- LA — LEVEL ALARM (LOCAL)
- LI — LEVEL INDICATOR
- LSH — LEVEL SWITCH HIGH
- LT — LEVEL TRANSMITTER
- M — MOTOR
- PLC — PROGRAMMABLE LOGIC CONTROLLER
- L — PILOT LIGHT
- PB — PUSH BUTTON
- KS — RUN TIMER
- S — STROBE
- TT — TEMPERATURE TRANSMITTER
- MS — MOISTURE SENSOR

# INSTRUMENTATION LEGEND

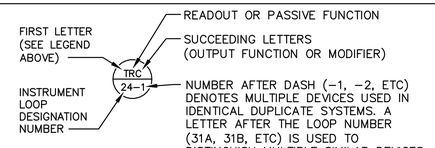
- XXX – — FIELD MOUNTED INSTRUMENT
- XXX – — OPERATOR ACCESSIBLE FIELD INSTRUMENT OR CENTRAL PANEL MOUNTED INSTRUMENT
- XXX – — AUXILIARY LOCATION CENTRAL PANEL MOUNTED INSTRUMENT
- XXX – — PRIMARY LOCATION CENTRAL PANEL MOUNTED INSTRUMENT NORMALLY INACCESSIBLE
- XXX – — LOCAL PANEL MOUNTED INSTRUMENT
- XXX – — PRIMARY LOCATION SHARED DISPLAY OR SHARED CONTROLLER–1
- XXX – — PRIMARY LOCATION SHARED DISPLAY OR SHARED CONTROLLER–2
- XXX – — AUXILIARY LOCATION SHARED DISPLAY OR SHARED CONTROLLER–1
- XXX – — AUXILIARY LOCATION SHARED DISPLAY OR SHARED CONTROLLER–2 NORMALLY INACCESSIBLE
- XXX – — LOCAL, FIELD MOUNTED PROGRAMMABLE LOGIC CONTROLLER
- XXX – — PRIMARY LOCATION PROGRAMMABLE LOGIC CONTROLLER–1
- XXX – — AUXILIARY LOCATION PROGRAMMABLE LOGIC CONTROLLER–1
- XXX – — PRIMARY LOCATION PROGRAMMABLE LOGIC CONTROLLER–2 NORMALLY INACCESSIBLE

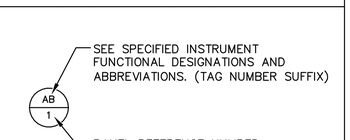
- XXX – — LOCAL FIELD MOUNTED COMPUTER FUNCTION
- XXX – — PRIMARY LOCATION COMPUTER FUNCTION
- XXX – — AUXILIARY LOCATION COMPUTER FUNCTION
- XXX – — PRIMARY LOCATION COMPUTER FUNCTION
- I — UNIDENTIFIED INTERLOCK LOGIC
- PLC — PRIMARY LOCATION PROGRAMMABLE LOGIC CONTROLLER–2
- M — MOTOR– MOTOR STARTER
- INSTRUMENT SUPPLY OR CONNECTION TO PROCESS
- UNDEFINED SIGNAL
- PNEUMATIC SIGNAL
- OR — E — E — ELECTRICAL SIGNAL (ONLY USE ON P&ID, NOT ELECT. PLANS)
- HYDRAULIC SIGNAL
- PNEUMATIC SIGNAL
- INTERNAL SYSTEM LINK (SOFTWARE OR DATA LINK)
- MECHANICAL LINK

## INSTRUMENT IDENTIFICATION SYMBOLS

| | FIRST LETTER | | SUCCEEDING LETTERS | | |
|---|---|---|---|---|---|
| | MEASURED OF INITIATING VARIABLE | MODIFIER | READOUT OR PASSIVE FUNCTION | OUTPUT FUNCTION | MODIFIER |
| A | ANALYSIS | | ALARM | | |
| B | BURNER, COMBUSTION | | USER CHOICE (1) | USER CHOICE (2) | USER CHOICE (3) |
| C | CONDUCTIVITY (ELECTRICAL) | | | CONTROL | |
| D | DENSITY (MASS) OR SPECIFIC GRAVITY | DIFFERENTIAL | | | |
| E | VOLTAGE | | SENSOR (PRIMARY ELEMENT) | | |
| F | FLOW RATE | RATIO (FRACTION) | | | |
| G | GAUGING (DIMENSIONAL) | | GLASS VIEWING DEVICE | | |
| H | HAND (MANUALLY INITIATED) | | | | HIGH |
| I | CURRENT (ELECTRICAL) | | INDICATE | | |
| J | POWER | SCAN | | | |
| K | TIME (TIME SCHEDULE) | TIME RATE OF CHANGE | | CONTROL STATION | |
| L | LEVEL | | LIGHT | | LOW |
| M | MOISTURE OR HUMIDITY | MOMENTARY | | | MIDDLE OR INTERMEDIATE |
| N | KEY | | | | |
| O | | | ORIFICE (RESTRICTION) | | |
| P | PRESSURE OR VACUUM | | | POINT (TEST) CONNECTION | |
| Q | QUANTITY OR EVENT | INTEGRATE OR TOTALIZE | | | |
| R | RADIOACTIVITY | | RECORD OR PRINT | | |
| S | SPEED OR FREQUENCY | SAFETY | | SWITCH | |
| T | TEMPERATURE | | | TRANSMIT | |
| U | MULTIVARIABLE | | MULTIFUNCTION | MULTIFUNCTION | MULTIFUNCTION |
| V | VIBRATION, MECHANICAL ANALYSIS | | | VALVE DAMPER OR LOUVER | |
| W | WEIGHT, FORCE | | WALL | | |
| X | UNCLASSIFIED | X–AXIS | UNCLASSIFIED | UNCLASSIFIED | UNCLASSIFIED |
| Y | EVENT, STATE OR PRESENCE | Y–AXIS | | RELAY, COMPUTER CONVERT | |
| Z | POSITION, DIMENSION | Z–AXIS | | DRIVE, ACTUATE, UNCLASSIFIED FINAL CONTROL ELEMENT | |

# TAG NUMBERS & ADDITIONAL DESIGNATIONS




DATE

REVISIONS

CURRIER ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FACILITY IMPROVEMENTS PROJECT

NAPLES AIRPORT (APF)

FUELING LEGENDS

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

ISSUED FOR PERMIT


CURRIER & CO, INC.
13323 W.WASHINGTON BLVD,
SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050


SEAL:

JEFFREY BURNS LICENSE No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.G. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049FM100 |
| SHEET NUMBER: | | | |

FM1.00

ISSUED FOR PERMIT

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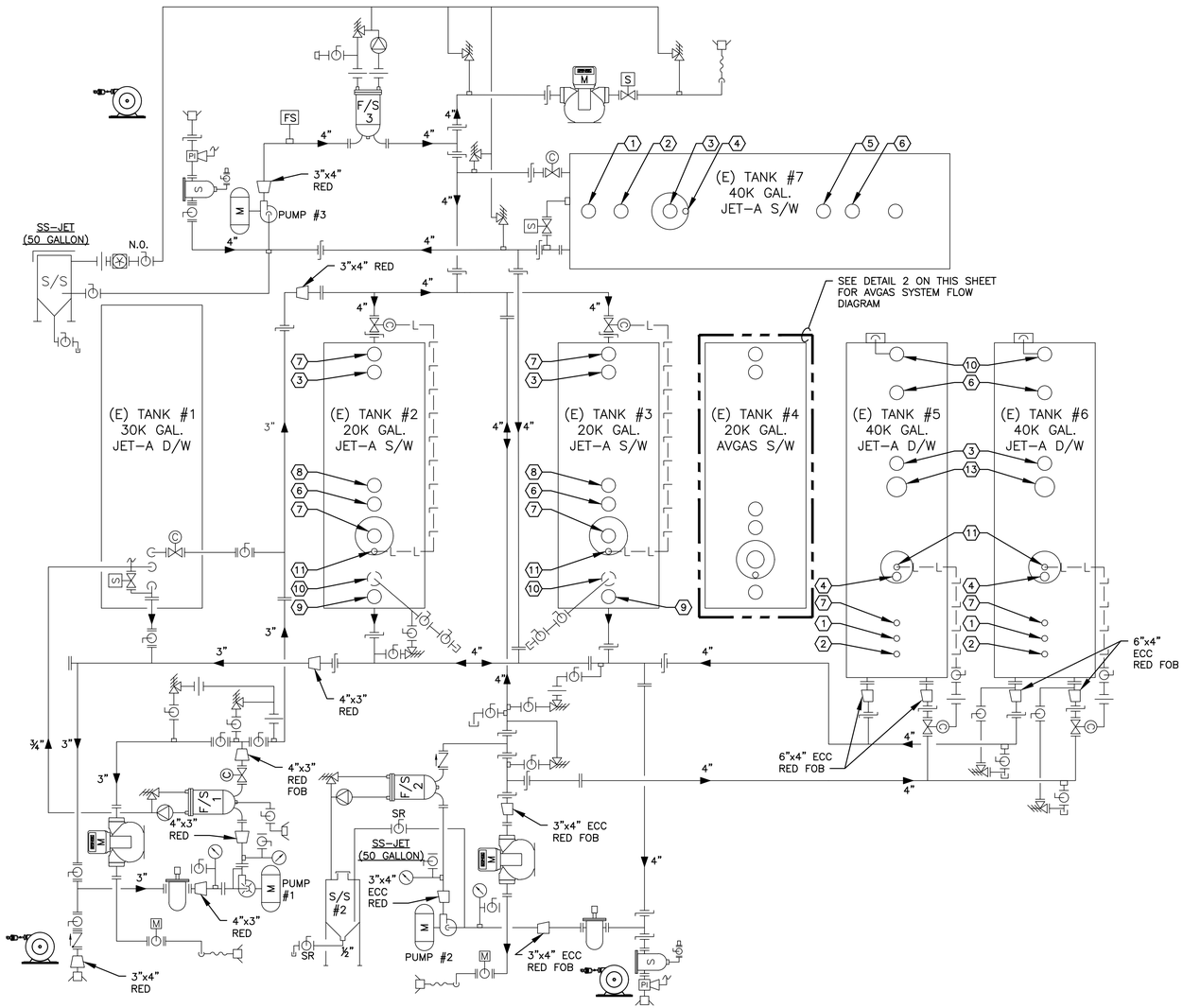
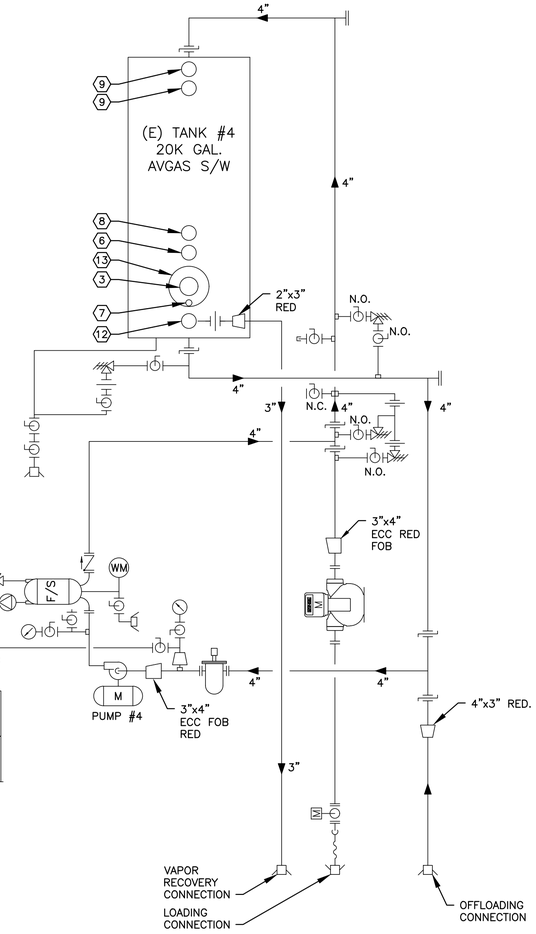



1 EXISTING JET-A SYSTEM FLOW DIAGRAM

SCALE: N/A

NOTES:
1. THE EXISTING MOGAS/DIESEL SPLIT TANK IS NOT SHOWN FOR CLARITY




2 EXISTING AVGAS SYSTEM FLOW DIAGRAM

SCALE: N/A

KEYNOTES (ALL SYSTEM TANKS): (#)

1. CLOCK GAUGE
2. NORMAL VENT
3. EMERGENCY VENT
4. FLOATING SUCTION PULL TESTER
5. GAUGE PORT
6. VEEDER-ROOT LEVEL PROBE
7. GAUGE HATCH
8. INDEPENDENT HIGH LEVEL PROBE ALARM
9. PLUGGED 4" BUNG
10. TANK SUMP CONNECTION
11. OVERFILL PREVENTION LINE TIE-IN
12. PVV AND TANK SUMP BELOW
13. MANWAY

DATE

REVISIONS

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

PROJECT NAME: FUEL FACILITY IMPROVEMENTS PROJECT

PROJECT LOCATION: NAPLES AIRPORT (APF)

DRAWING NAME: EXISTING JET-A & AVGAS SYSTEM FLOW DIAGRAMS

ISSUED FOR PERMIT

CURRIER & CO, INC.
13323 W.WASHINGTON BLVD,
SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050

SEAL:

JEFFREY BURNS LICENSE No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.G. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049FM101 |

SHEET NUMBER:

FM1.01

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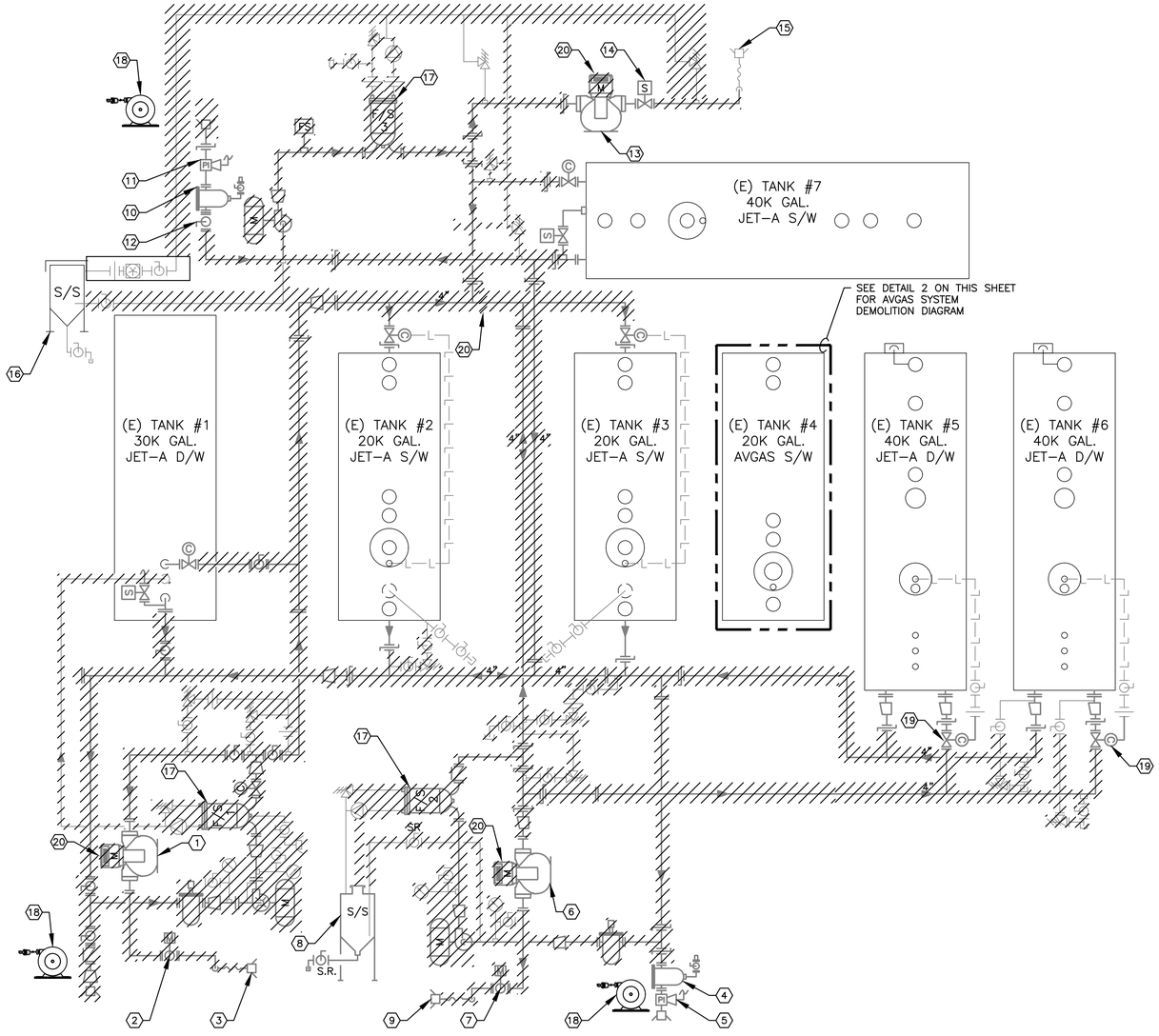
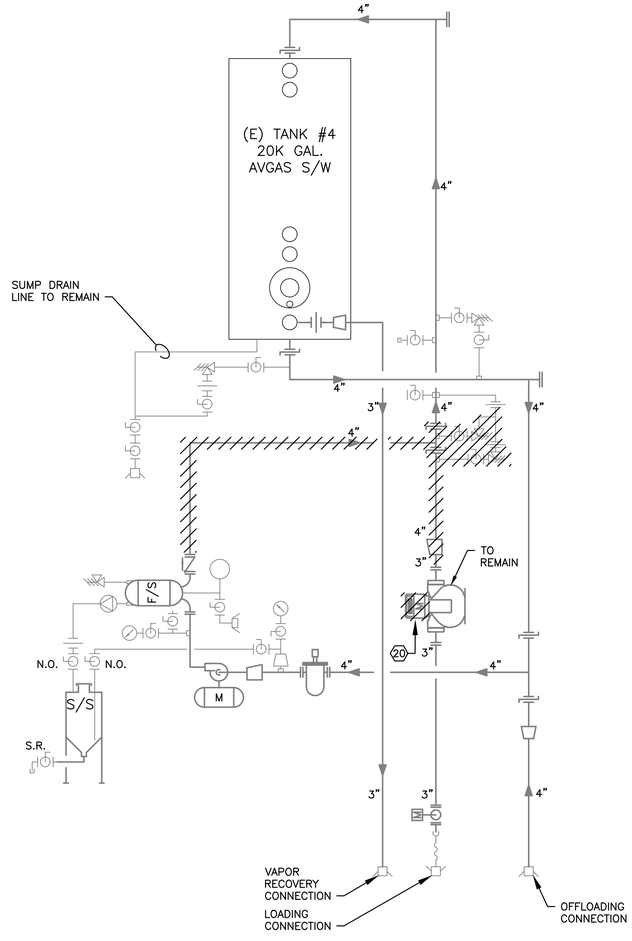



## 1 JET-A SYSTEM DEMOLITION DIAGRAM

SCALE: N/A




## 2 AVGAS SYSTEM DEMOLITION DIAGRAM

SCALE: N/A

KEYNOTES: (#)

1. (E) 3" LIQUID CONTROLS M-25 (300-GPM MAX) POSITIVE DISPLACEMENT METER SHALL BE RE-USED AT SOUTHWEST UNLOADING RACK
2. (E) 3" BALL VALVE W/ INDELAC ELEC. ACTUATOR TO BE DEMOLISHED
3. (E) BAYONET CONNECTION SHALL BE RE-USED AT WEST LOADING RACK
4. (E) 4" STRAINER SHALL BE RELOCATED TO SOUTH WEST OFFLOADING POSITION
5. (E) 4" JET-A ANTI-ICING AGENT INJECTOR SHALL BE RELOCATED TO THE SOUTH-WEST UNLOADING RACK
6. (E) 3" LIQUID CONTROLS M-30 (350-GPM MAX) POSITIVE DISPLACEMENT METER SHALL BE RE-USED AT THE SOUTH-WEST LOADING RACK
7. (E) 3" BALL VALVE W/ INDELAC ELEC. ACTUATOR TO BE DEMOLISHED
8. (E) 25-GAL JET-A SUMP SEPARATOR SHALL BE RELOCATED NEXT TO PUMP #3 AND HAVE 1" PIPING TO PUMP INLET FOR FUEL RECOVERY
9. (E) BAYONET CONNECTION SHALL BE RELOCATED TO EAST LOADING RACK
10. (E) 4" STRAINER SHALL BE RELOCATED TO NORTH OFFLOADING POSITION
11. (E) 4" JET-A ANTI-ICING AGENT INJECTOR SHALL BE RELOCATED TO NORTH UNLOADING POSITION
12. (E) 4" BALL VALVE SHALL BE RE-USED AT NORTH OFFLOADING POSITION
13. (E) 4" LIQUID CONTROLS M-40 (450-GPM MAX) POSITIVE DISPLACEMENT METER SHALL BE RE-USED AT NORTH UNLOADING RACK
14. (E) 4" SOLENOID DIAPHRAGM CONTROL VALVE SHALL BE RE-USED AT NORTH LOADING RACK
15. (E) BAYONET CONNECTION SHALL BE RELOCATED TO NORTH LOADING RACK
16. (E) SUMP SEPARATOR SHALL BE RELOCATED AT NORTH LOADING POSITION
17. (E) FILTER SEPARATOR SHALL BE DEMOLISHED
18. (E) GROUNDING REELS SHALL BE RELOCATED AT NORTH EQUIPMENT AREA
19. (E) 4" HIGH-LEVEL SHUT-OFF CONTROL VALVE, TO BE RELOCATED
20. (E) MECH. REGISTER SHALL BE REMOVED AND RELOCATED TO THE (N) AVGAS UNLOADING METER AND REPLACE WITH A (N) ELEC. REGISTER, SEE FM1.03 & FM1.04

CONTRACTOR SHALL COMPLY WITH ALL COORDINATION NOTES RELATED TO SYSTEM OPERATIONS AT ALL TIMES

LEGEND

DEMOLITION

DATE

REVISIONS

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

PROJECT NAME: FUEL FACILITY IMPROVEMENTS PROJECT

PROJECT LOCATION: NAPLES AIRPORT (APF)

DRAWING NAME: JET-A & AVGAS SYSTEM DEMOLITION FLOW DIAGRAMS

ISSUED FOR PERMIT

CURRIER & CO, INC.
13323 W.WASHINGTON BLVD, SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050

SEAL:

JEFFREY BURNS LICENSED No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

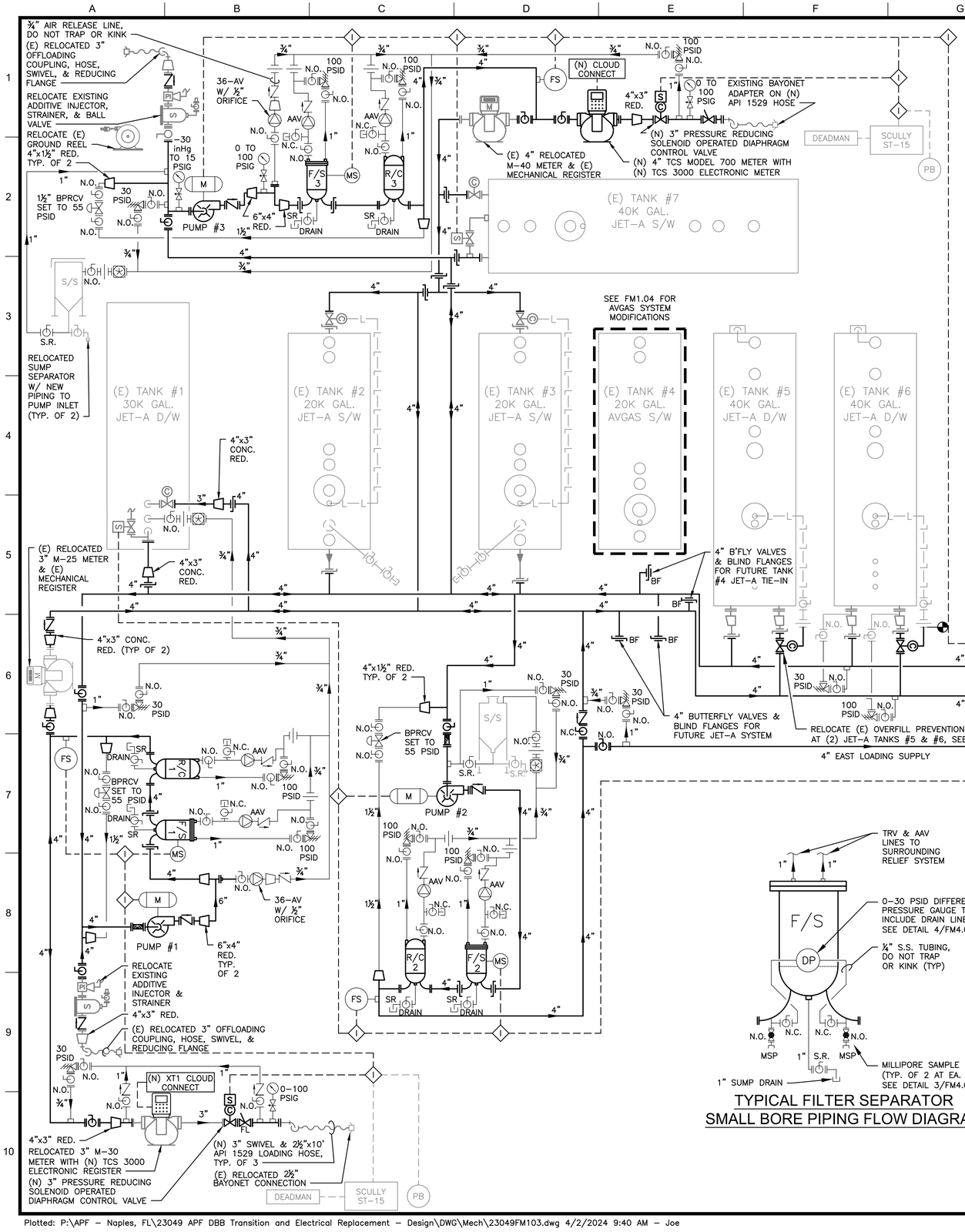
JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.G. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049FM102 |
| SHEET NUMBER: | | | |

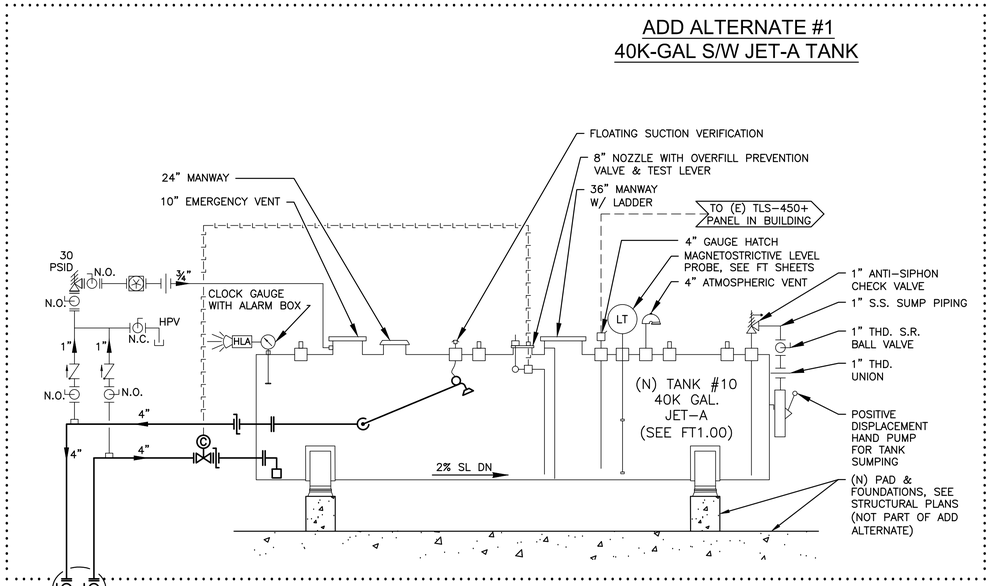
FM1.02

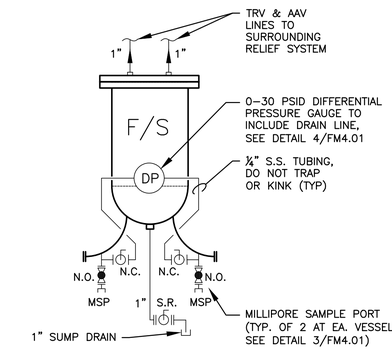
ISSUED FOR PERMIT

Plotted: P:\APF – Naples, FL\23049 APF DBB Transition and Electrical Replacement – Design\DWG\Mech\23049FM102.dwg 4/2/2024 9:33 AM – Roy




## ADD ALTERNATE #1
## 40K-GAL S/W JET-A TANK




## TYPICAL FILTER SEPARATOR SMALL BORE PIPING FLOW DIAGRAM

### FILTER/SEPARATOR & RELAXATION CHAMBER SCHEDULE

| NEW TAG NO. | DESCRIPTION | CAPACITY | CONFIGURATION | MANUFACTURER | MODEL NO. | TRV PRESSURE SETTING |
|---|---|---|---|---|---|---|
| FS-1 | JET-A LOAD/UNLOAD | 474-GPM | VERTICAL | PECO FACET | VCS-433-224 CAT. M, TYPE S | 100 PSID |
| FS-2 | JET-A LOADING | 474-GPM | VERTICAL | PECO FACET | VCS-433-224 CAT. M, TYPE S | 100 PSID |
| FS-3 | JET-A LOAD/UNLOAD | 474-GPM | VERTICAL | PECO FACET | VCS-433-224 CAT. M, TYPE S | 100 PSID |
| RC-1 | JET-A | 150-GAL | VERTICAL | PECO FACET | VRC-C-150 | 100 PSID |
| RC-2 | JET-A | 150-GAL | VERTICAL | PECO FACET | VRC-C-150 | 100 PSID |
| RC-3 | JET-A | 150-GAL | VERTICAL | PECO FACET | VRC-C-150 | 100 PSID |

### FUEL PUMP SCHEDULE

| NEW PUMP ID | OPERATION | PUMP TYPE | FLOW RATE (GPM) | DIFF PRESSURE (PSI) | NPSHr (FT) | POWER (HP) | MAKE/MODEL | GEAR RATIO | PUMP RPM | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| P-1 | JET-A LOAD/UNLOAD | SLIDING VANE PD PUMP | 300 | 55 | 7.28 | 15 | BLACKMER GNX4A W/ BENT METAL BASE PLATE | 5.5 | 317 | INTERAL BYPASS 70 PSI |
| P-2 | JET-A LOADING | SLIDING VANE PD PUMP | 300 | 55 | 7.28 | 15 | BLACKMER/ GNX4A WITH BENT METAL BASE PLATE | 5.5 | 317 | INTERAL BYPASS 70 PSI |
| P-3 | JET-A LOAD/UNLOAD | SLIDING VANE PD PUMP | 300 | 55 | 7.28 | 15 | BLACKMER/ GNX4A WITH BENT METAL BASE PLATE | 5.5 | 317 | INTERAL BYPASS 70 PSI |

DATE
REVISIONS

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FACILITY IMPROVEMENTS PROJECT
PROJECT NAME

NAPLES AIRPORT (APF)
PROJECT LOCATION

PROPOSED JET-A SYSTEM FLOW DIAGRAM
DRAWING NAME

ISSUED FOR PERMIT

CURRIER & CO, INC.
13323 W.WASHINGTON BLVD, SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050

SEAL:
JEFFREY BURNS LICENSE No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

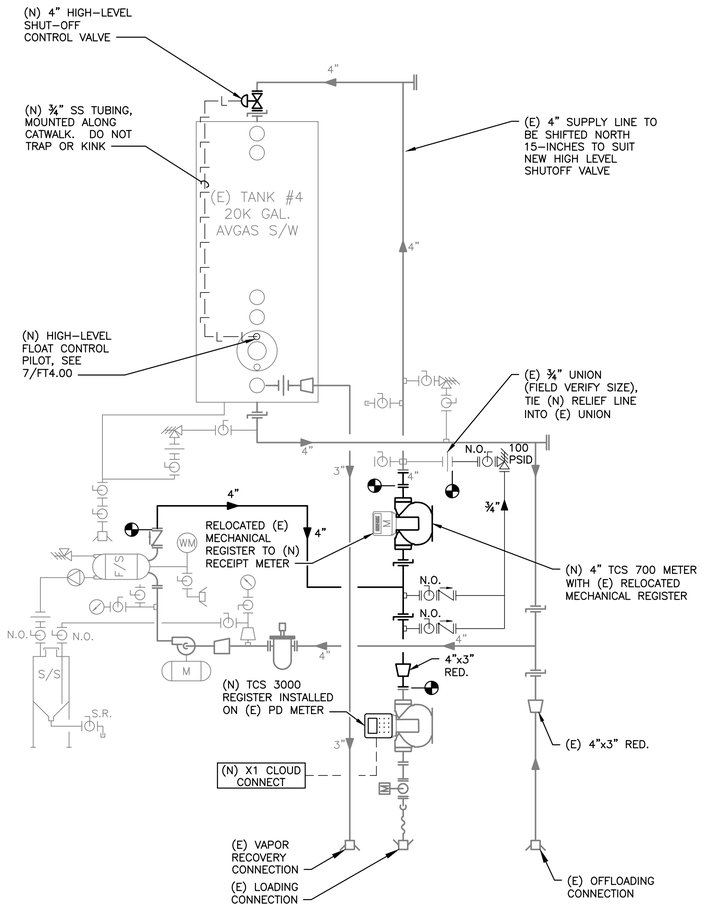
JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.G. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049FM103 |

SHEET NUMBER:
FM1.03

ISSUED FOR PERMIT

Plotted: P:\APF – Naples, FL\23049 APF DBB Transition and Electrical Replacement – Design\DWG\Mech\23049FM103.dwg 4/2/2024 9:40 AM – Joe




DATE

REVISIONS

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

| | |
|---|---|
| PROJECT NAME | FUEL FACILITY IMPROVEMENTS PROJECT |
| PROJECT LOCATION | NAPLES AIRPORT (APF) |
| DRAWING NAME | PROPOSED AVGAS SYSTEM FLOW DIAGRAM |

ISSUED FOR PERMIT


CURRIER & CO, INC.
13323 W.WASHINGTON BLVD,
SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050


SEAL:

JEFFREY BURNS LICENSE No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

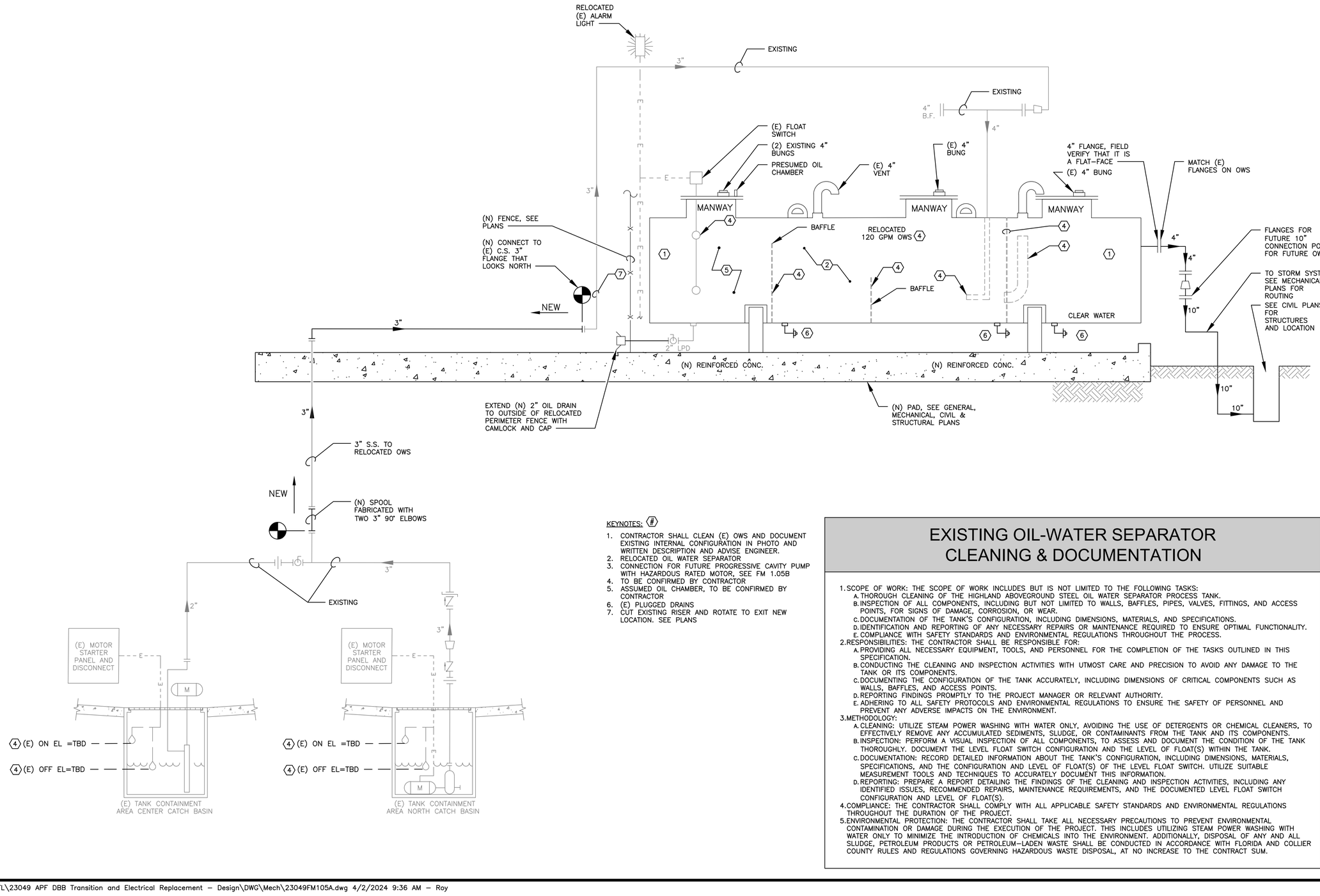
| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.G. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049FM104 |

SHEET NUMBER:

FM1.04

ISSUED FOR PERMIT


Plotted: P:\APF – Naples, FL\23049 APF DBB Transition and Electrical Replacement – Design\DWG\Mech\23049FM104.dwg 4/2/2024 9:40 AM – Jay




KEYNOTES: (#)

1. CONTRACTOR SHALL CLEAN (E) OWS AND DOCUMENT EXISTING INTERNAL CONFIGURATION IN PHOTO AND WRITTEN DESCRIPTION AND ADVISE ENGINEER.
2. RELOCATED OIL WATER SEPARATOR
3. CONNECTION FOR FUTURE PROGRESSIVE CAVITY PUMP WITH HAZARDOUS RATED MOTOR, SEE FM 1.05B
4. TO BE CONFIRMED BY CONTRACTOR
5. ASSUMED OIL CHAMBER, TO BE CONFIRMED BY CONTRACTOR
6. (E) PLUGGED DRAINS
7. CUT EXISTING RISER AND ROTATE TO EXIT NEW LOCATION. SEE PLANS

## EXISTING OIL-WATER SEPARATOR CLEANING & DOCUMENTATION

1. SCOPE OF WORK: THE SCOPE OF WORK INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING TASKS:
   - A. THOROUGH CLEANING OF THE HIGHLAND ABOVEGROUND STEEL OIL WATER SEPARATOR PROCESS TANK.
   - B. INSPECTION OF ALL COMPONENTS, INCLUDING BUT NOT LIMITED TO WALLS, BAFFLES, PIPES, VALVES, FITTINGS, AND ACCESS POINTS, FOR SIGNS OF DAMAGE, CORROSION, OR WEAR.
   - C. DOCUMENTATION OF THE TANK'S CONFIGURATION, INCLUDING DIMENSIONS, MATERIALS, AND SPECIFICATIONS.
   - D. IDENTIFICATION AND REPORTING OF ANY NECESSARY REPAIRS OR MAINTENANCE REQUIRED TO ENSURE OPTIMAL FUNCTIONALITY.
   - E. COMPLIANCE WITH SAFETY STANDARDS AND ENVIRONMENTAL REGULATIONS THROUGHOUT THE PROCESS.
2. RESPONSIBILITIES: THE CONTRACTOR SHALL BE RESPONSIBLE FOR:
   - A. PROVIDING ALL NECESSARY EQUIPMENT, TOOLS, AND PERSONNEL FOR THE COMPLETION OF THE TASKS OUTLINED IN THIS SPECIFICATION.
   - B. CONDUCTING THE CLEANING AND INSPECTION ACTIVITIES WITH UTMOST CARE AND PRECISION TO AVOID ANY DAMAGE TO THE TANK OR ITS COMPONENTS.
   - C. DOCUMENTING THE CONFIGURATION OF THE TANK ACCURATELY, INCLUDING DIMENSIONS OF CRITICAL COMPONENTS SUCH AS WALLS, BAFFLES, AND ACCESS POINTS.
   - D. REPORTING FINDINGS PROMPTLY TO THE PROJECT MANAGER OR RELEVANT AUTHORITY.
   - E. ADHERING TO ALL SAFETY PROTOCOLS AND ENVIRONMENTAL REGULATIONS TO ENSURE THE SAFETY OF PERSONNEL AND PREVENT ANY ADVERSE IMPACTS ON THE ENVIRONMENT.
3. METHODOLOGY:
   - A. CLEANING: UTILIZE STEAM POWER WASHING WITH WATER ONLY, AVOIDING THE USE OF DETERGENTS OR CHEMICAL CLEANERS, TO EFFECTIVELY REMOVE ANY ACCUMULATED SEDIMENTS, SLUDGE, OR CONTAMINANTS FROM THE TANK AND ITS COMPONENTS.
   - B. INSPECTION: PERFORM A VISUAL INSPECTION OF ALL COMPONENTS, TO ASSESS AND DOCUMENT THE CONDITION OF THE TANK THOROUGHLY. DOCUMENT THE LEVEL FLOAT SWITCH CONFIGURATION AND THE LEVEL OF FLOAT(S) WITHIN THE TANK.
   - C. DOCUMENTATION: RECORD DETAILED INFORMATION ABOUT THE TANK'S CONFIGURATION, INCLUDING DIMENSIONS, MATERIALS, SPECIFICATIONS, AND THE CONFIGURATION AND LEVEL OF FLOAT(S) OF THE LEVEL FLOAT SWITCH. UTILIZE SUITABLE MEASUREMENT TOOLS AND TECHNIQUES TO ACCURATELY DOCUMENT THIS INFORMATION.
   - D. REPORTING: PREPARE A REPORT DETAILING THE FINDINGS OF THE CLEANING AND INSPECTION ACTIVITIES, INCLUDING ANY IDENTIFIED ISSUES, RECOMMENDED REPAIRS, MAINTENANCE REQUIREMENTS, AND THE DOCUMENTED LEVEL FLOAT SWITCH CONFIGURATION AND LEVEL OF FLOAT(S).
4. COMPLIANCE: THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY STANDARDS AND ENVIRONMENTAL REGULATIONS THROUGHOUT THE DURATION OF THE PROJECT.
5. ENVIRONMENTAL PROTECTION: THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT ENVIRONMENTAL CONTAMINATION OR DAMAGE DURING THE EXECUTION OF THE PROJECT. THIS INCLUDES UTILIZING STEAM POWER WASHING WITH WATER ONLY TO MINIMIZE THE INTRODUCTION OF CHEMICALS INTO THE ENVIRONMENT. ADDITIONALLY, DISPOSAL OF ANY AND ALL SLUDGE, PETROLEUM PRODUCTS OR PETROLEUM-LADEN WASTE SHALL BE CONDUCTED IN ACCORDANCE WITH FLORIDA AND COLLIER COUNTY RULES AND REGULATIONS GOVERNING HAZARDOUS WASTE DISPOSAL, AT NO INCREASE TO THE CONTRACT SUM.

DATE
REVISIONS

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FACILITY IMPROVEMENTS PROJECT
NAPLES AIRPORT (APF)
INTERIM PROPOSED OIL WATER SEPARATOR SYSTEM DIAGRAM

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

ISSUED FOR PERMIT

CURRIER & CO, INC.
13323 W.WASHINGTON BLVD, SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050

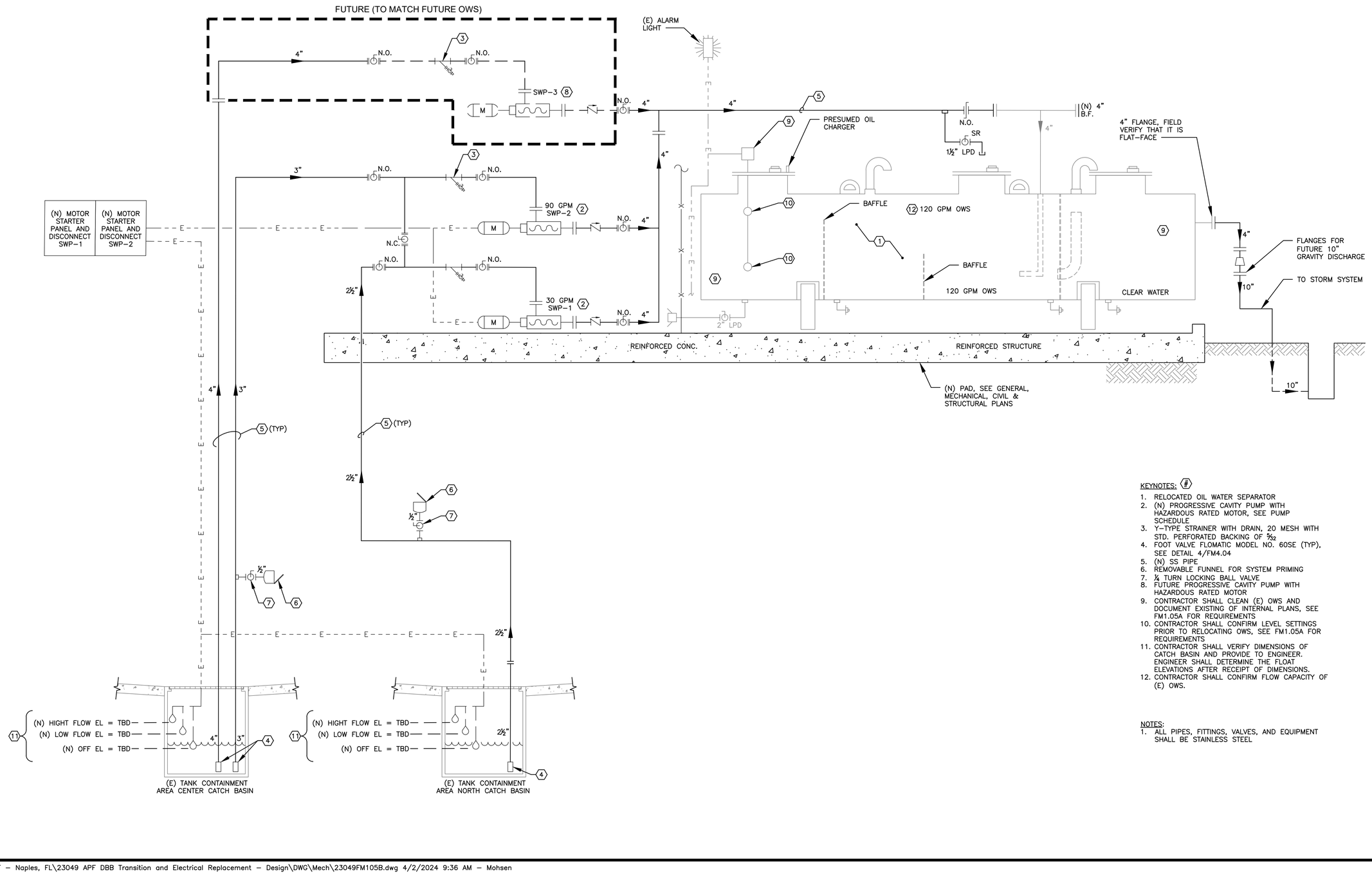
SEAL:
JEFFREY BURNS LICENSE No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.V. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049FM105A |

SHEET NUMBER:
FM1.05A

ISSUED FOR PERMIT




KEYNOTES: (#)

1. RELOCATED OIL WATER SEPARATOR
2. (N) PROGRESSIVE CAVITY PUMP WITH HAZARDOUS RATED MOTOR, SEE PUMP SCHEDULE
3. Y-TYPE STRAINER WITH DRAIN, 20 MESH WITH STD. PERFORATED BACKING OF 5/32
4. FOOT VALVE FLOMATIC MODEL NO. 60SE (TYP), SEE DETAIL 4/FM4.04
5. (N) SS PIPE
6. REMOVABLE FUNNEL FOR SYSTEM PRIMING
7. ¼ TURN LOCKING BALL VALVE
8. FUTURE PROGRESSIVE CAVITY PUMP WITH HAZARDOUS RATED MOTOR
9. CONTRACTOR SHALL CLEAN (E) OWS AND DOCUMENT EXISTING OF INTERNAL PLANS, SEE FM1.05A FOR REQUIREMENTS
10. CONTRACTOR SHALL CONFIRM LEVEL SETTINGS PRIOR TO RELOCATING OWS, SEE FM1.05A FOR REQUIREMENTS
11. CONTRACTOR SHALL VERIFY DIMENSIONS OF CATCH BASIN AND PROVIDE TO ENGINEER. ENGINEER SHALL DETERMINE THE FLOAT ELEVATIONS AFTER RECEIPT OF DIMENSIONS.
12. CONTRACTOR SHALL CONFIRM FLOW CAPACITY OF (E) OWS.

NOTES:

1. ALL PIPES, FITTINGS, VALVES, AND EQUIPMENT SHALL BE STAINLESS STEEL

DATE

REVISIONS

CURRIER ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FACILITY IMPROVEMENTS PROJECT (PROJECT NAME)

NAPLES AIRPORT (APF) (PROJECT LOCATION)

PROPOSED OIL WATER SEPARATOR SYSTEM DIAGRAM (DRAWING NAME)

ISSUED FOR PERMIT

CURRIER & CO. INC.
13323 W.WASHINGTON BLVD,
SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050

SEAL:

JEFFREY BURNS LICENSED No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

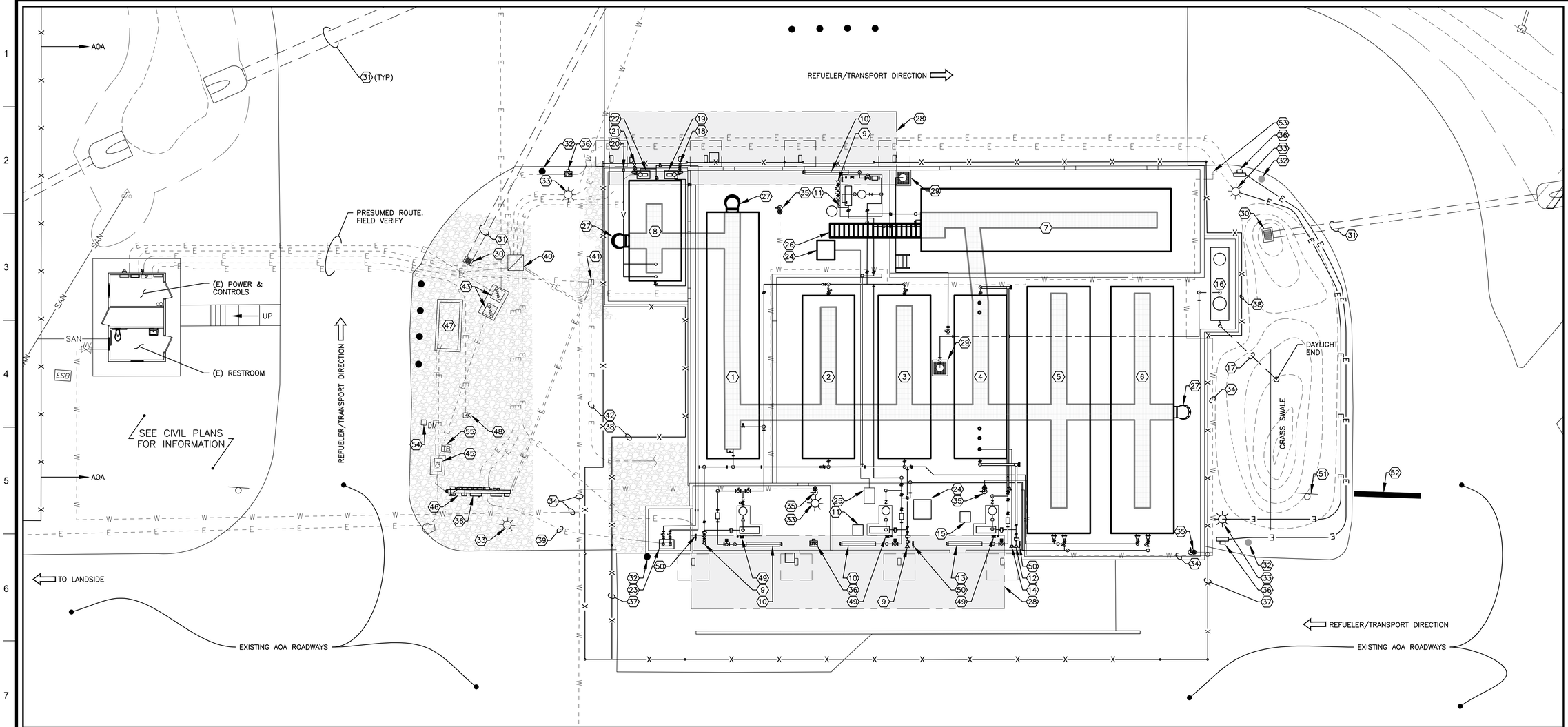
JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | J.H. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049FM105B |

SHEET NUMBER:

FM1.05B

ISSUED FOR PERMIT




# 1 EXISTING OVERALL MECHANICAL CONDITIONS PLAN

SCALE: NOTED

0 10 20 30

SCALE IN FEET (22x34)

TRUE NORTH

KEYNOTES: (#)

1. 30K GAL. D/W JET-A TANK #1
2. 20K GAL. S/W JET-A TANK #2
3. 20K GAL. S/W JET-A TANK #3
4. 20K GAL. S/W AVGAS TANK #4
5. 40K GAL. D/W JET-A TANK #5
6. 40K GAL. D/W JET-A TANK #6
7. 40K GAL. S/W JET-A TANK #7
8. 12K GAL. S/W MOGAS/DIESEL TANKS #8 & #9 (10K GAL DIESEL TANK #8, 2K GAL MOGAS TANK #9)
9. JET-A OFFLOADING CONNECTION
10. JET-A LOADING POSITION
11. JET-A SUMP SEPARATOR
12. AVGAS OFFLOADING POSITION
13. AVGAS LOADING POSITION
14. AVGAS VAPOR RECOVERY
15. AVGAS SUMP SEPARATOR
16. 1.2 K-GAL. OWS
17. 3" OWS EFFLUENT DISCHARGE
18. MOGAS OFFLOADING POSITION
19. MOGAS PUMP
20. MOGAS VAPOR RECOVERY CONNECTION
21. DIESEL OFFLOADING POSITION
22. DIESEL PUMP
23. MOGAS/DIESEL DISPENSER
24. JET-A ANTI-ICING AGENT TANK
25. JET-A ANTI-ICING TRANSFER PUMP
26. TANK CATWALK ACCESS STAIR
27. TANK CATWALK ACCESS LADDER
28. CANOPY (SHADED)
29. CONTAINMENT DRAIN INLET & PUMP
30. STORM WATER DROP INLET
31. U/G STORM LINE
32. SITE BOLLARD
33. AREA LIGHT
34. U/G WATER SUPPLY
35. EMERGENCY SHOWER/EYE WASH STATION
36. EFSO
37. FACILITY ACCESS SLIDING GATE
38. FACILITY FENCE
39. DISPENSER WIRING
40. 24"x24"x8" J-BOX (DIMENSIONS APPROXIMATE - FIELD VERIFY)
41. 12"x12"x6" J-BOX FOR VEEDER ROOT WIRING (DIMENSIONS APPROXIMATE - FIELD VERIFY)
42. VEEDER ROOT WIRING
43. TRANSFORMERS - SEE ELECTRICAL PLANS
44. ELECTRICAL WIRING FROM CONTROL BUILDING
45. ELECTRICAL HAND HOLE
46. PUMP POWER & DISTRIBUTION PANEL - SEE ELECTRICAL PLANS
47. GENERATOR
48. VEEDER ROOT ALARM HORN
49. SCULLY RACK
50. GROUNDING REEL
51. STOP SIGN
52. STOP BAR PAVEMENT MARKING
53. HOSE BIB
54. DUCT MARKER
55. TELEPHONE SPLICE BOX

GENERAL NOTES:

1. PRE-EXISTING SURVEY DATA WAS OBTAINED BY CURRIER & COMPANY FOR GENERAL INFORMATION AND USED TO GENERATE THESE PLANS. NO NEW SURVEY WAS AUTHORIZED OR CONDUCTED.
2. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONAL INFORMATION PRIOR TO EITHER ORDERING OR FABRICATING MATERIALS.

DATE

REVISIONS

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FACILITY IMPROVEMENTS PROJECT

NAPLES AIRPORT (APF)

EXISTING OVERALL MECHANICAL CONDITIONS PLAN

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

ISSUED FOR PERMIT

CURRIER & CO. INC.
13323 W.WASHINGTON BLVD,
SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050

SEAL:

JEFFREY BURNS LICENSED No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.G. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049FM200 |

SHEET NUMBER:

FM2.00

ISSUED FOR PERMIT

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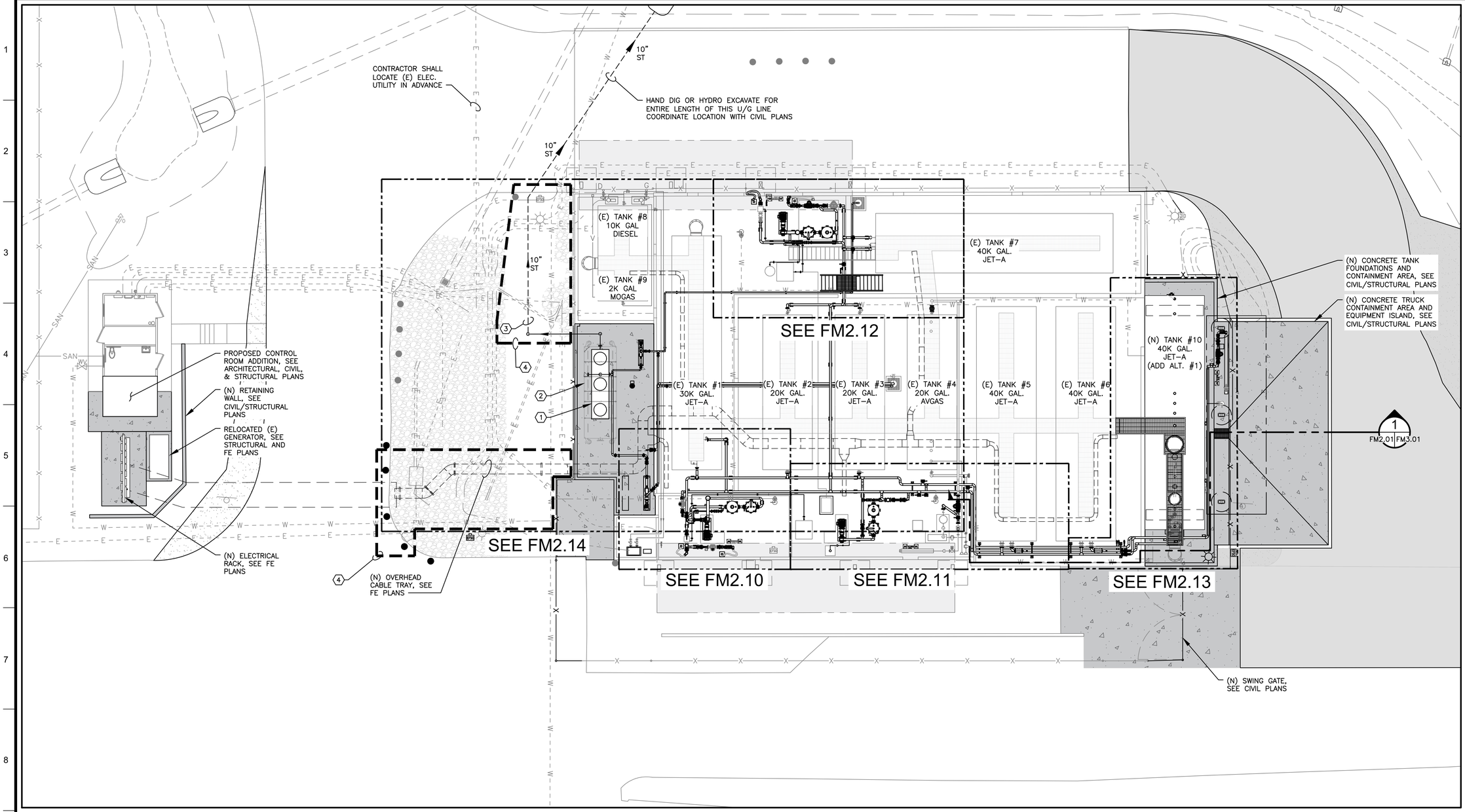



# 1 PROPOSED OVERALL MECHANICAL CONDITIONS PLAN

SCALE: NOTED

SCALE IN FEET (22x34) 0 10 20 30

TRUE NORTH

KEYNOTES: (#)

1. RELOCATE (E) OWS AND PLUMBING TO EXISTING CONTAINMENT DRAINS IN SCHEDULED SHUTDOWN OF NO MORE THAN 7 CALENDAR DAYS. SEE 1.05A. COORDINATE OUTAGE WITH NAA STAFF AND OPERATOR PRE-DRILL (4) ANCHORS
2. FUTURE OWS.
3. PROPOSED STORM WATER OUTFALL FROM RELOCATED OWS.
4. HAND DIG IN THIS AREA – ALL DISCIPLINES
5. PHASING IS REQUIRED. RELOCATION OF EXISTING OWS IS CRITICAL FIRST STEP TO ENABLE LARGE PORTIONS OF WORK.
6. REPLACEMENT OF ALL JET-A PLUMBING IS REQUIRED. STAINLESS STEEL PLUMBING. SHALL BE USED TO REPLACE ALL JET-A CARBON STEEL PIPING. PIPING OF ALL PRODUCTS SHALL NOT BE REPLACED EXCEPT AS NOTED IN THE PLANS.

DATE

REVISIONS

CURRIER ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

PROJECT NAME: FUEL FACILITY IMPROVEMENTS PROJECT

PROJECT LOCATION: NAPLES AIRPORT (APF)

DRAWING NAME: PROPOSED OVERALL MECHANICAL CONDITIONS PLAN

ISSUED FOR PERMIT

CURRIER & CO, INC.
13323 W.WASHINGTON BLVD,
SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050

SEAL:

JEFFREY BURNS LICENSE No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

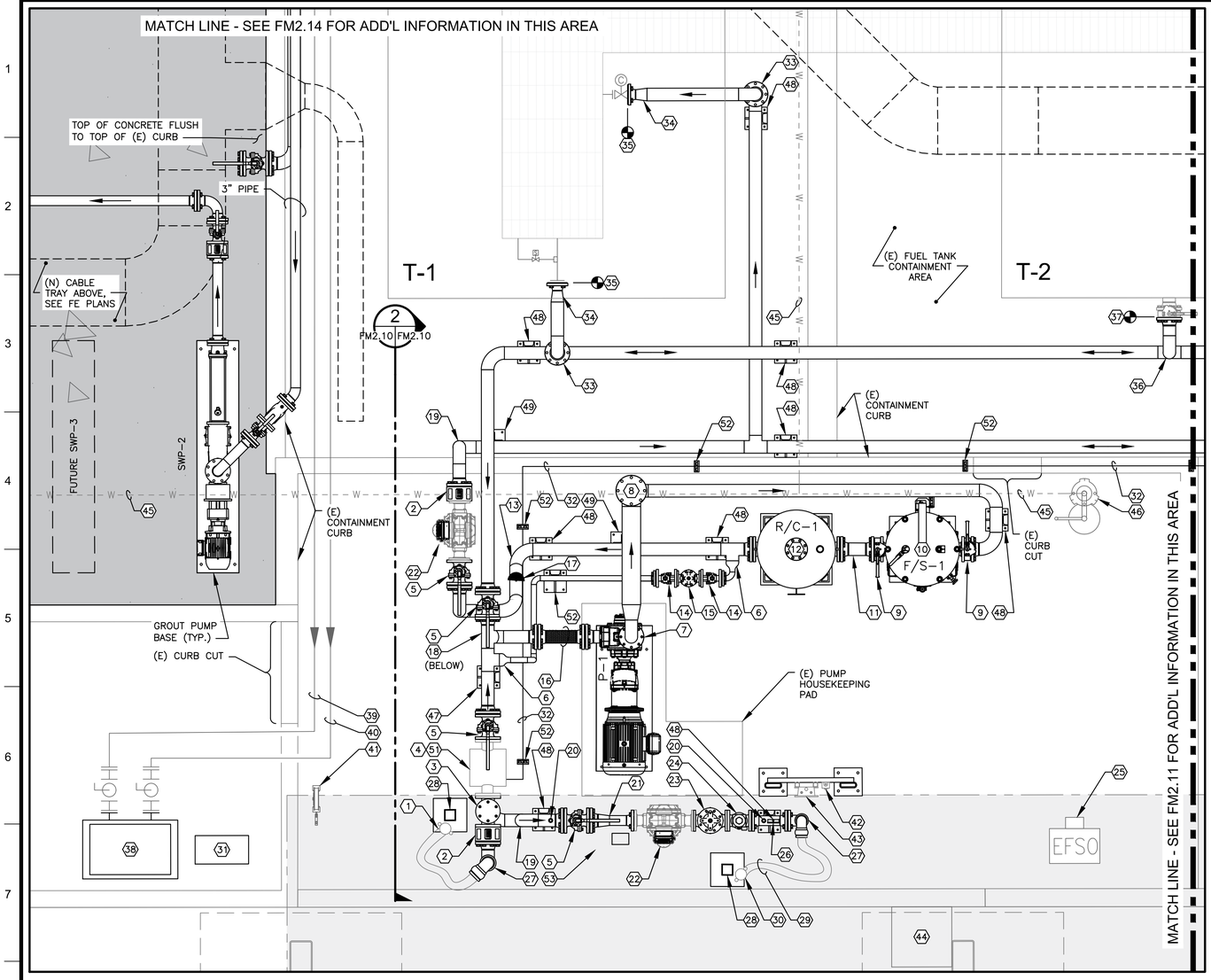
JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.G. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049FM201 |

SHEET NUMBER: FM2.01

ISSUED FOR PERMIT

Plotted: P:\APF – Naples, FL\23049 APF DBB Transition and Electrical Replacement – Design\DWG\Mech\23049FM201.dwg 4/2/2024 9:41 AM – Mohsen

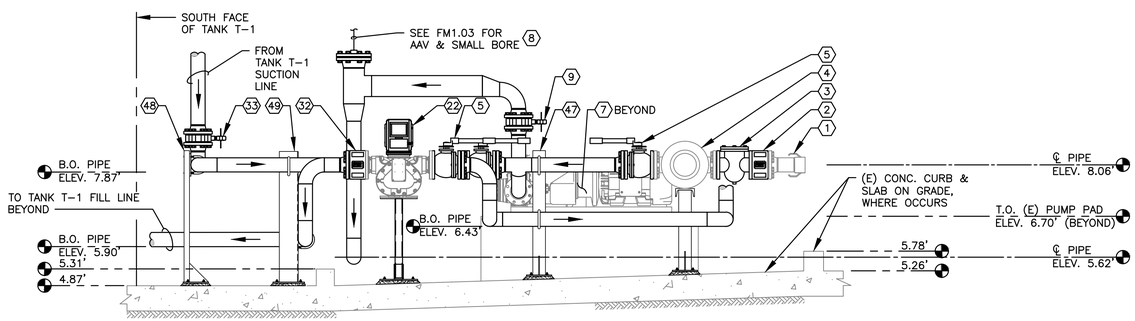



## 1 PROPOSED WEST JET-A PUMP AREA AND MOGAS/DIESEL DISPENSER PLAN

SCALE: NOTED

SCALE IN FEET (22x34)

TRUE NORTH




## 2 SOUTH JET-A LOAD/OFFLOAD PIPING- ELEVATION (LOOKING EAST)

FM2.10 FM2.10 SCALE: NOTED

SCALE IN FEET (22x34)

KEYNOTES: (#)

1. (E) RELOCATED 4" OFFLOADING COUPLING & HOSE
2. (N) 4" CHECK VALVE
3. (N) 4" BASKET STRAINER
4. (E) RELOCATED FUEL ADDITIVE INJECTOR WITH SUPPORT (SEE KEYNOTE 51 FOR SUPPORT)
5. (N) 4" BALL VALVE
6. (N) 4" TEE WITH (N) 4"x1½" CONC. REDUCER FOR BACK PRESSURE RELIEF RETURN
7. (N) PUMP AND MOTOR P-1 WITH CHECK VALVE INSTALLED ON OUTLET, SEE DETAIL 1/FM4.01& PROPOSED PUMP SCHEDULE ON SHT FM1.03. ANCHOR PER MANUFACTURER'S RECOMMENDATION AND GROUT BASE.
8. (N) 6" PIPING WITH AIR ELIMINATOR ASSEMBLY, SEE DETAIL 1/FM4.01
9. (N) 4" BUTTERFLY VALVE
10. (N) FILTER SEPARATOR VESSEL F/S-1, SEE FM1.03 VESSEL SCHEDULE
11. (N) 4"x12"L FLANGED SPOOL
12. (N) RELAXATION CHAMBER R/C-1, SEE FM1.03 VESSEL SCHEDULE
13. (N) 4" ELBOW ROLLED UPWARD
14. (N) 1½" BALL VALVE
15. (N) 1½" BACK PRESSURE RELIEF CONTROL VALVE, SEE FM1.03 FOR RELIEF SETPOINT
16. (N) 4" BRAIDED STEEL PUMP CONNECTOR
17. (N) FLOW SWITCH, SEE DETAIL 5/FM4.01
18. (N) 4" BRANCH TEE FOR PRESSURIZED LOADING SUPPLY, UNDER SUCTION LINE
19. (N) STACKED 90-DEG ELBOWS FOR PIPING ELEVATION CHANGE
20. (N) ¾" COUPLING FOR THERMAL RELIEF CONNECTION
21. (N) 4"x3" CONC. RED. SPOOL WITH A ¾" COUPLING FOR THERMAL RELIEF CONNECTION
22. (E) RELOCATED LC M-25 PD METER WITH NEW TCS 3000 ELECTRONIC REGISTER (SEE KEYNOTE 51 FOR SUPPORT)
23. (N) 3" PRESSURE REDUCING SOLENOID OPERATED CONTROL VALVE
24. (N) 3" FUSIBLE LINK (EXTERNAL SAFETY) VALVE
25. (E) EFSO STATION
26. (N) PRESSURE GAUGE ASSEMBLY, SEE DETAIL 1/FM4.00 AND FM1.03 FOR SETPOINT
27. (N) 4" AND 3" SWIVEL JOINT
28. (N) HOSE HANGER, SEE DETAIL 2/FM4.04
29. (E) RELOCATED 2½"x10'L API-1529 LOADING HOSE
30. (E) RELOCATED 2½" LOADING BAYONET, SEE DETAIL 6/FM4.01
31. (N) FUEL FORCE INVENTORY TRACKING PEDESTAL INTEGRATED INTEGRATED INTO FUEL DISPENSER CONTROLS, SEE FM4.05 AND ELECTRICAL PLANS
32. (N) 1" FUEL ADDITIVE PIPING TO RELOCATED ADDITIVE INJECTOR
33. (N) 4" BUTTERFLY VALVE INSTALLED IN RISER
34. (N) 4"x3" CONC. RED.
35. (N) 3" FLANGED CONNECTION TO (E) 3" TANK NOZZLE
36. (N) 4" TEE ROLLED UPWARD WITH (N) 4" 90-DEG EL
37. (N) 4" FLANGED CONNECTION TO (E) 4" BUTTERFLY VALVE
38. (N) DUAL PRODUCT MOGAS/DIESEL DISPENSER, SEE SHEET FM4.05
39. (E) MOGAS SUPPLY LINE, TO REMAIN
40. (E) DIESEL SUPPLY LINE, TO REMAIN
41. (E) RELOCATED STATIC GROUNDING REEL
42. (E) RELOCATED PUMP P-1 PUSH ON/OFF PUSH BUTTON STATION
43. (E) RELOCATED SCULLY ST-15 OVERFILL PROTECTION UNIT WITH TRUCK PLUG AND DEADMAN CONTROLLER
44. (E) SPILL KIT ENCLOSURE
45. (E) U/G WATER SUPPLY TO (E) EMERGENCY SHOWER / EYEWASH STATION, TO REMAIN
46. (E) EMERGENCY SHOWER / EYEWASH STATION, TO REMAIN
47. (N) PIPE SUPPORT PS-1, SEE DETAIL 1/FM4.02
48. (N) PIPE SUPPORT PS-2, SEE DETAIL 2/FM4.02
49. (N) PIPE SUPPORT PS-3, SEE DETAIL 3/FM4.02
50. (N) PIPE SUPPORT PS-7, SEE DETAIL 7/FM4.02
51. (N) PIPE SUPPORT PS-8, SEE DETAIL 8/FM4.02
52. (N) PIPE SUPPORT PS-10, SEE DETAIL 10/FM4.02
53. (N) X1 CLOUD CONNECT COMMUNICATIONS UNIT, SEE ELECTRICAL PLANS

DATE | REVISIONS

CURRIER ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FACILITY IMPROVEMENTS PROJECT

NAPLES AIRPORT (APF)

PROPOSED WEST PUMP AREA PLAN

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

ISSUED FOR PERMIT

CURRIER & CO, INC.
13323 W.WASHINGTON BLVD,
SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050

SEAL:

JEFFREY BURNS LICENSE No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

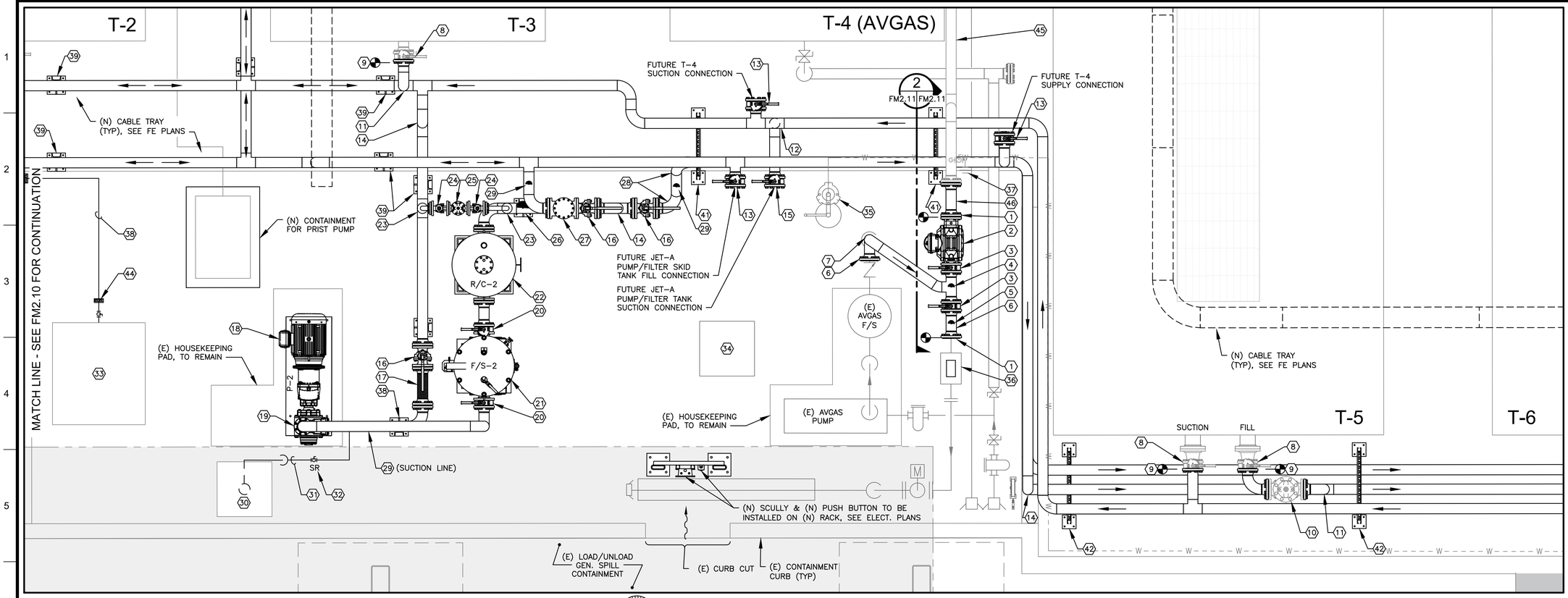
JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.G. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049FM210 |

SHEET NUMBER: FM2.10

ISSUED FOR PERMIT

Plotted: P:\APF – Naples, FL\23049 APF DBB Transition and Electrical Replacement – Design\DWG\Mech\23049FM210.dwg 4/2/2024 9:41 AM – Mohsen




## 1 PROPOSED EAST PUMP AREA PLAN

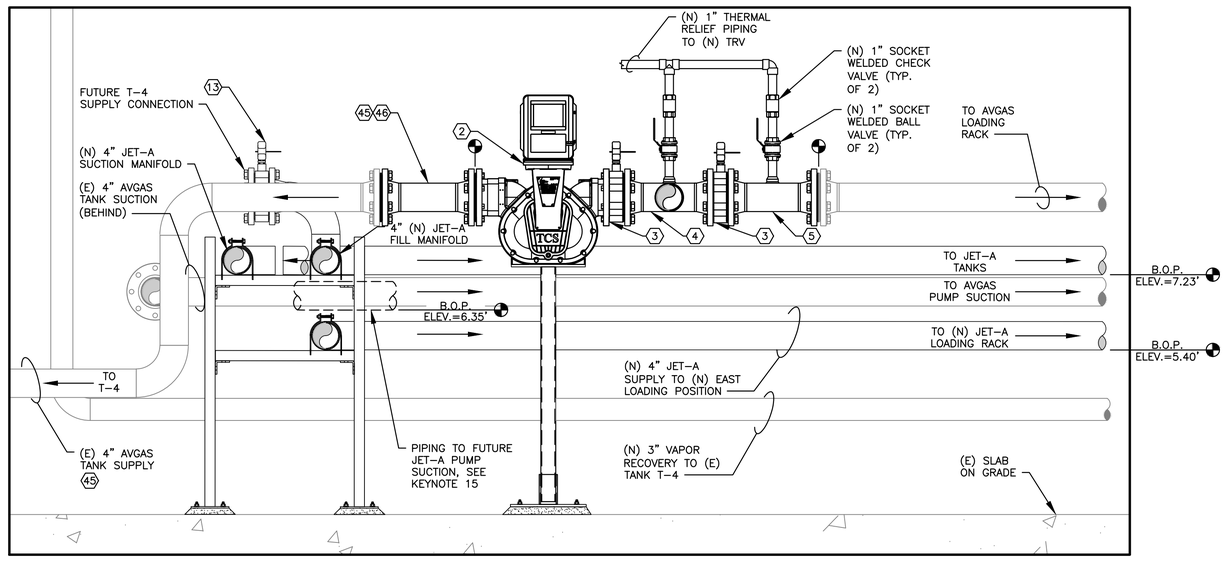
SCALE: NOTED

0 2 4 6
SCALE IN FEET (22x34)

TRUE NORTH

KEYNOTES: (#)

1. (E) 4" FLANGE (AVGAS SYSTEM)
2. (N) TCS 700-35 METER WITH (N) TCS-3000 ELECTRONIC REGISTER, SEE KEYNOTE 36 (AVGAS SYSTEM)
3. (N) 4" BUTTERFLY VALVE (AVGAS SYSTEM)
4. (N) 4" TEE WITH ¾" COUPLING FOR THERMAL RELIEF CONNECTION (AVGAS SYSTEM)
5. (N) 12" L SPOOL WITH ¾" COUPLING FOR THERMAL RELIEF CONNECTION (AVGAS SYSTEM)
6. (N) 4"x12" FLANGED CONNECTION (AVGAS SYSTEM)
7. (N) STACKED 90-DEG ELBOWS FOR PIPING ELEVATION CHANGE (AVGAS SYSTEM)
8. (E) 4" BUTTERFLY VALVE, TO REMAIN
9. (N) 4' FLANGED CONNECTION TO (E) TANK BUTTERFLY VALVE (JET-A SYSTEM)
10. (E) RELOCATED TANK T-5 HIGH-LEVEL SHUTOFF CONTROL VALVE, RE-WORK TUBING AS NECESSARY TO SUIT RELOCATED VALVE. MATCH (E) PIPING SIZE, DO NOT TRAP OR KINK TUBING, BLEED ALL AIR
11. (N) 4" TEE ROLLED UPWARD WITH (N) 4" 90-DEG EL
12. (N) 4" TEE ROLLED DOWNWARD WITH (N) 4" 90-DEG EL
13. (N) 4" BUTTERFLY VALVE WITH (N) 4" BLIND FLANGE
14. (N) STACKED 90-DEG ELBOWS FOR PIPING ELEVATION CHANGE
15. (N) 4" BUTTERFLY VALVE WITH (N) 4" BLIND FLANGE TO FUTURE JET-A PUMP SUCTION
16. (N) 4" BALL VALVE
17. (N) 4" FLANGED X 16"L SS BRAIDED HOSE
18. (N) PUMP AND MOTOR P-2, SEE PROPOSED PUMP SCHEDULE ON SHT FM1.03. ANCHOR PER MANUFACTURER'S RECOMMENDATION AND GROUT BASE.
19. (N) 4" CHECK VALVE INSTALLED ON PUMP DISCHARGE
20. (N) 4" BUTTERFLY VALVE
21. (N) FILTER SEPARATOR VESSEL F/S-2, SEE FM1.03 VESSEL SCHEDULE
22. (N) RELAXATION CHAMBER R/C-2, SEE FM1.03 VESSEL SCHEDULE
23. (N) 4" TEE WITH (N) 4"x1½" CONC. REDUCER FOR BACK PRESSURE RELIEF RETURN
24. (N) 1½" BALL VALVE (HANDLES NOT SOWN)
25. (N) 1½" BACK PRESSURE RELIEF CONTROL VALVE, SEE FM1.03 FOR RELIEF SETPOINT
26. (N) FLOW SWITCH, SEE DETAIL 5/FM4.01
27. (N) 4" CHECK VALVE
28. (N) 90-DEG ELBOWS, ROLLED TO SUIT ELEVATION CHANGE
29. (N) ¾" COUPLING FOR THERMAL RELIEF CONNECTION
30. (E) RELOCATED JET-A SUMP SEPARATOR
31. (N) 1" JET-A RECOVERY LINE ROUTED TO PUMP P-2's SUCTION
32. (N) SPRING RETURN BALL VALVE
33. (E) RELOCATED FUEL ADDITIVE TANK
34. (E) AVGAS SUMP SEPARATOR TO REMAIN
35. (E) EMERGENCY SHOWER/EYEWASH STATION, TO REMAIN
36. (N) TCS 3000 ELEC REGISTER INSTALLED ON (E) PD METER
37. (E) ¾" UNION FOR (N) THERMAL RELIEF PIPING TIE-IN
38. (N) FUEL ADDITIVE PIPING TO ADDITIVE INJECTOR, SEE FM2.10 FOR CONTINUATION
39. (N) PIPE SUPPORT PS-1, SEE DETAIL 1/FM4.02
40. (N) PIPE SUPPORT PS-2, SEE DETAIL 2/FM4.02
41. (N) PIPE SUPPORT PS-3, SEE DETAIL 3/FM4.02
42. (N) PIPE SUPPORT PS-5, SEE DETAIL 5/FM4.02
43. (N) PIPE SUPPORT PS-6, SEE DETAIL 6/FM4.02
44. (N) PIPE SUPPORT PS-10, SEE DETAIL 10/FM4.02
45. CONTRACTOR SHALL SHIFT THE (E) 4" TANK 4 SUPPLY LINE 15-INCHES TO THE NORTH TO CREATE SPACE ON THE INLET NOZZLE TO ACCOMMODATE THE (N) 4" HIGH-LEVEL SHUTOFF VALVE (SEE FM2.12, KEYNOTE 52).
46. (N) 4"ø X 15" SPOOL




## 2 PIPING (LOOKING EAST)

FM2.11|FM3.00 SCALE: 1"=1'

REVISIONS | DATE

CURRIER ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FACILITY IMPROVEMENTS PROJECT

NAPLES AIRPORT (APF)

PROPOSED EAST PUMP AREA PLAN

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

ISSUED FOR PERMIT


CURRIER & CO, INC.
13323 W.WASHINGTON BLVD, SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050


SEAL:

JEFFREY BURNS LICENSED No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

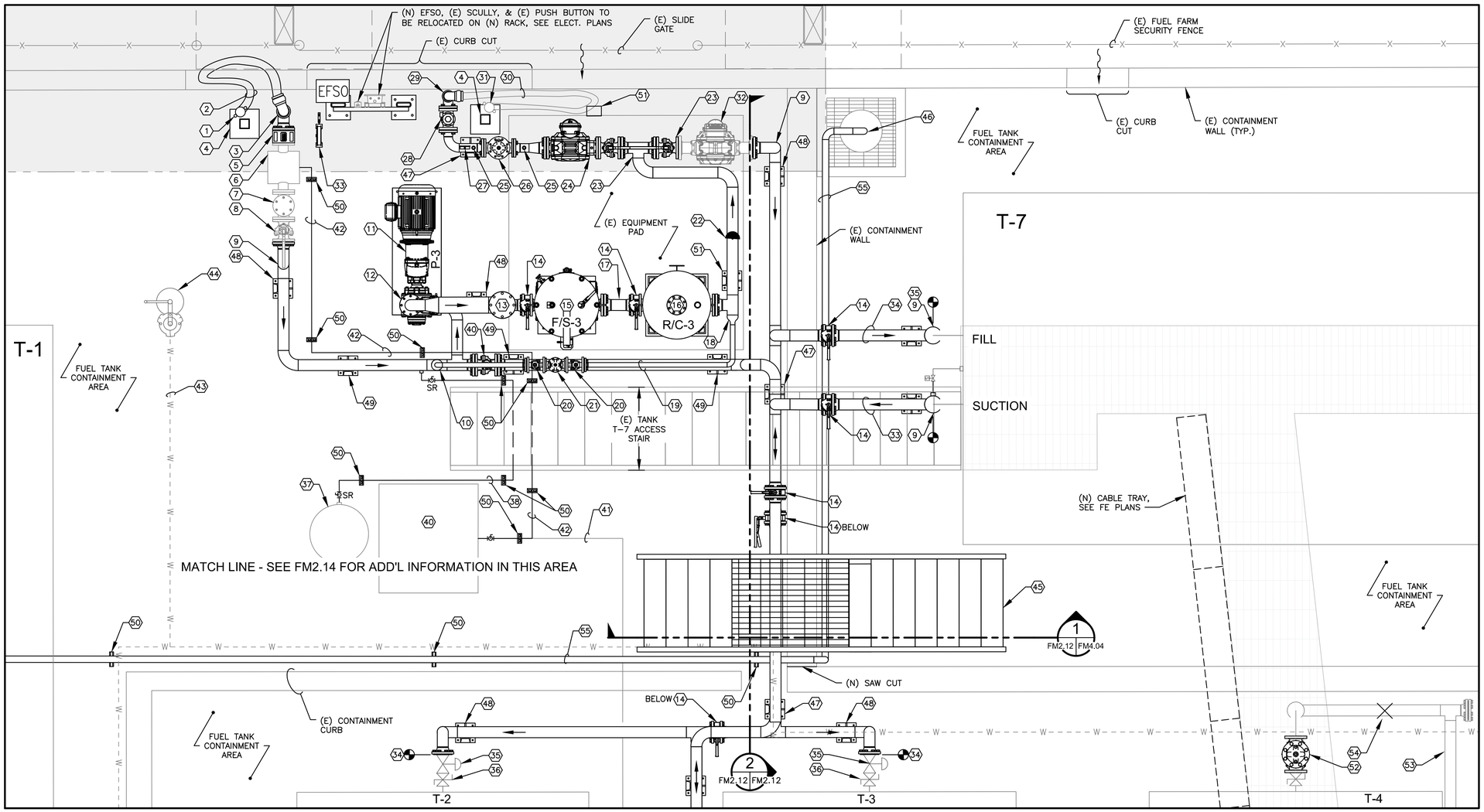
| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.G. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049FM211 |

SHEET NUMBER:

FM2.11

ISSUED FOR PERMIT


Plotted: P:\APF - Naples, FL\23049 APF DBB Transition and Electrical Replacement - Design\DWG\Mech\23049FM211.dwg 4/2/2024 9:38 AM - Jay

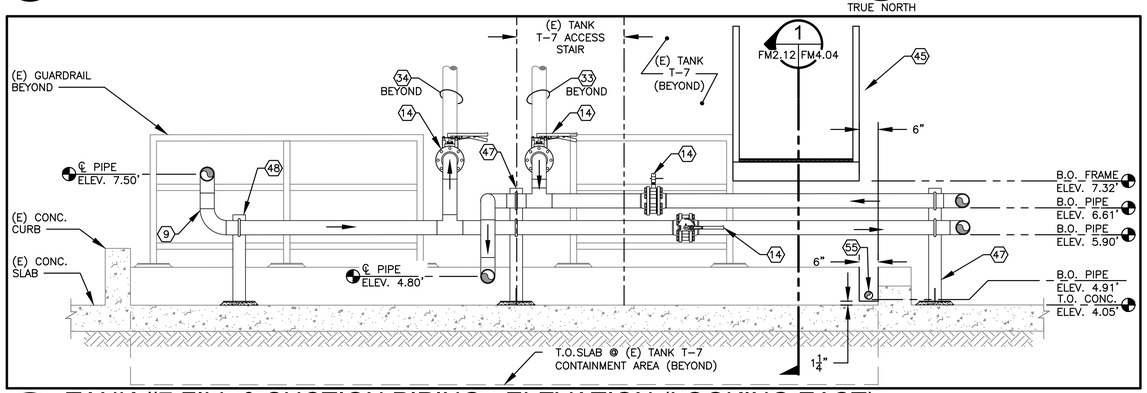



## 1 PROPOSED NORTH PUMP AREA PLAN

SCALE: NOTED

SCALE IN FEET (22x34)

TRUE NORTH




## 2 TANK #7 FILL & SUCTION PIPING - ELEVATION (LOOKING EAST)

SCALE: NOTED

SCALE IN FEET (22x34)

KEYNOTES: (#)

1. (N) 4" API COUPLER, SEE DETAIL 7/FM4.01
2. (N) 4" DIA. X 10' UNLOADING HOSE
3. (N) 4" SWIVEL JOINT
4. (N) HOSE HANGER, SEE DETAIL 2/FM4.04
5. (N) 4" CHECK VALVE
6. (E) RELOCATED 4" PRIST INJECTOR, REWORK SMALL BORE PRIST SUPPLY LINE TO SUIT REVISED LOCATION (FIELD VERIFY SIZE).
7. (E) RELOCATED 4" BASKET STRAINER
8. (E) RELOCATED 4" BALL VALVE
9. (N) STACKED 90-DEG ELBOWS FOR PIPING ELEVATION CHANGE
10. (N) 4" TEE ROLLED UPWARD, WITH (N) 4"X1½" CONC. REDUCER FOR BACK PRESSURE RELIEF RETURN
11. (N) PUMP AND MOTOR P-3 WITH CHECK VALVE ON PUMP DISCHARGE, SEE FM1.03 FOR PROPOSED PUMP SCHEDULE. ANCHOR PER MANUFACTURER'S RECOMMENDATION AND GROUT BASE.
12. (N) 4" CHECK VALVE INSTALLED ON PUMP DISCHARGE
13. (N) 6" PIPING WITH AIR ELIMINATOR ASSEMBLY, SEE DETAIL 1/FM4.01
14. (N) 4" BUTTERFLY VALVE
15. (N) FILTER SEPARATOR VESSEL F/S-3, SEE FM1.03 FOR PROPOSED VESSEL SCHEDULE
16. (N) RELAXATION CHAMBER R/C-3, SEE FM1.03 FOR PROPOSED VESSEL SCHEDULE
17. (N) 4"x12"L FLANGED SPOOL
18. (N) 4"x1½" CONC. REDUCER
19. (N) 1½" BACK PRESSURE RELIEF LINE
20. (N) 1½" BALL VALVE
21. (N) 1½" BACK PRESSURE RELIEF CONTROL VALVE, SEE FM1.03 FOR RELIEF SETPOINT
22. (N) FLOW SWITCH, SEE DETAIL 5/FM4.01
23. (N) 4" BALL VALVE
24. (N) TCS 700-35 METER WITH (N) TCS-3000 ELECTRONIC REGISTER & SUPPORT, SEE DETAIL 8/FM4.02
25. (N) ¾" COUPLING FOR THERMAL RELIEF CONNECTION, SEE DETAIL 5/FM4.00
26. (N) 3" PRESSURE REDUCING SOLENOID OPERATED CONTROL VALVE
27. (N) PRESSURE GAUGE ASSEMBLY, SEE DETAIL1/FM4.00 AND FM1.03 FOR SETPOINT
28. (N) 3" FUSIBLE LINK (EXTERNAL SAFETY) VALVE
29. (N) 3" SWIVEL JOINT
30. (N) 2½"x10'L API-1529 LOADING HOSE
31. (E) RELOCATED 2½" LOADING BAYONET, SEE DETAIL 6/FM4.01
32. (E) RELOCATED METER WITH (E) MECHANICAL REGISTER
33. (N) 4" RISER TO (E) TANK #7 TANK SUCTION NOZZLE
34. (N) 4" RISER TO (E) TANK FILL NOZZLE
35. (E) 4" OVERFILL PREVENTION VALVE, TO REMAIN
36. (E) 4" BUTTERFLY VALVE, TO REMAIN
37. (E) RELOCATED JET-A SUMP SEPARATOR
38. (N) 1" RETURN-TO-SERVICE LINE, SEE FM1.03
39. (N) 1" COUPLING INSTALLED ON 4" SUCTION LINE FOR RETURN-TO-SERVICE CONNECTION
40. (E) PRIST TANK, TO REMAIN
41. (E) PRIST TRANSFER PIPING, TO REMAIN
42. (N) 1" PRIST PIPING TO RELOCATED PRIST INJECTOR
43. (E) U/G WATER SUPPLY TO EMERGENCY EYEWASH STATION/SHOWER, TO REMAIN
44. (E) EMERGENCY EYEWASH STATION/SHOWER, TO REMAIN
45. (N) CROSS-OVER STAIRS, SEE DETAIL 1/FM4.04
46. (N) FOOT VALVE, SEE DETAIL 4/FM4.04
47. (N) PIPE SUPPORT PS-1, SEE DETAIL 1/FM4.02
48. (N) PIPE SUPPORT PS-2, SEE DETAIL 2/FM4.02
49. (N) PIPE SUPPORT PS-4, SEE DETAIL 4/FM4.02
50. (N) PIPE SUPPORT PS-10, SEE DETAIL 10/FM4.02
51. (N) X1 CLOUD CONNECT COMMUNICATIONS UNIT, SEE ELECTRICAL PLANS
52. (N) 4" HIGH-LEVEL SHUTOFF CONTROL VALVE ON TANK 4 SUPPLY NOZZLE
53. CONTRACTOR SHALL SHIFT THE (E) 4" AVGAS SUPPLY LINE 15-INCHES NORTH TO SUIT NEW HIGH LEVEL SHUTOFF VALVE
54. RELOCATE (E) PIPE SUPPORT TO SUIT RELOCATED AVGAS SUPPLY PIPE (NOTE: THE OTHER U-BOLT SUPPORTS SHALL REMAIN, CONTRACTOR TO LOOSEN THEM TO SHIFT THE PIPE AND THEN RE-TIGHTEN.
55. 2½" DRAIN PIPING TO OWS PUMPS, SEE FM2.14 AND FM1.05B FOR CONTINUATION

DATE | REVISIONS

CURRIER ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FACILITY IMPROVEMENTS PROJECT

NAPLES AIRPORT (APF)

PROPOSED NORTH PUMP AREA PLAN

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

ISSUED FOR PERMIT


CURRIER & CO, INC.
13323 W.WASHINGTON BLVD,
SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050


SEAL:

JEFFREY BURNS LICENSE No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

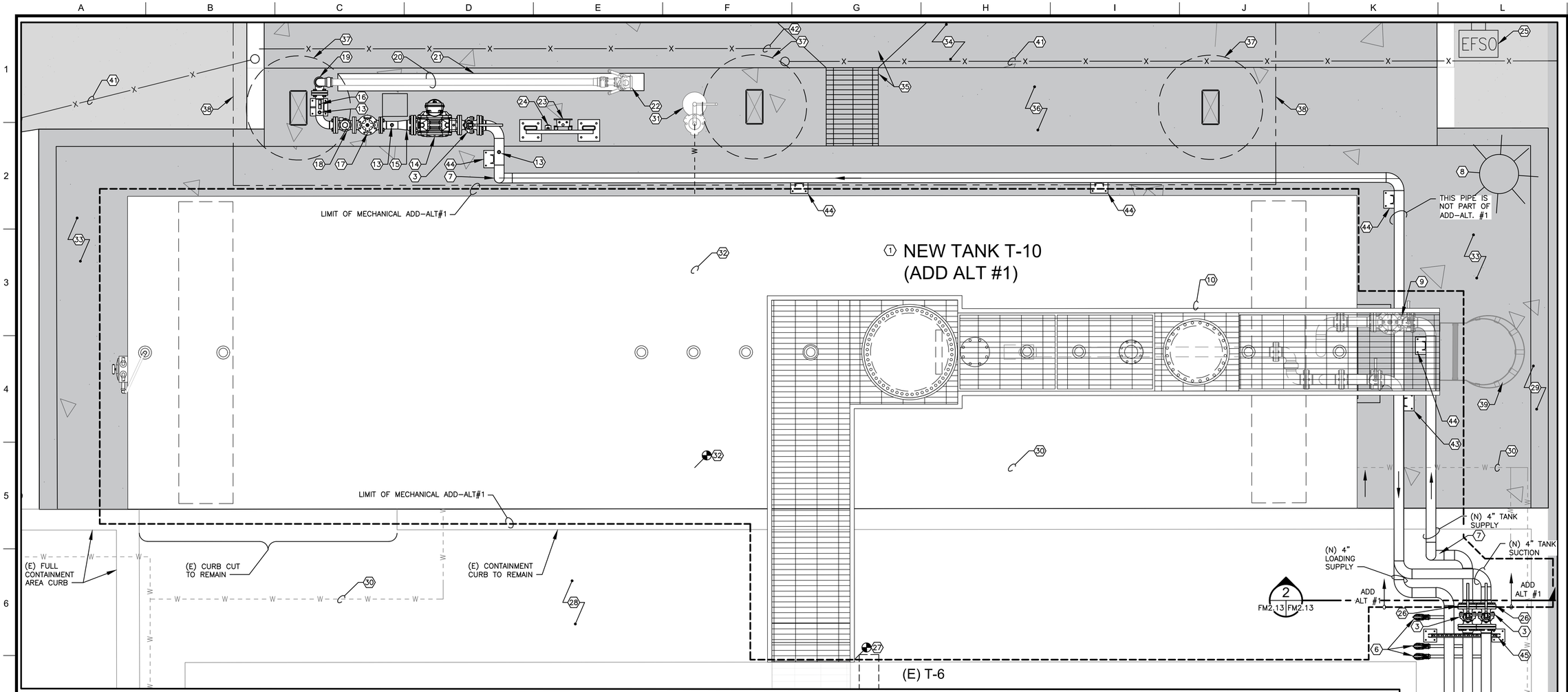
| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.G. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049FM212 |

SHEET NUMBER:

FM2.12

ISSUED FOR PERMIT


Plotted: P:\APF – Naples, FL\23049 APF DBB Transition and Electrical Replacement – Design\DWG\Mech\23049FM212.dwg 4/2/2024 9:34 AM – Roy

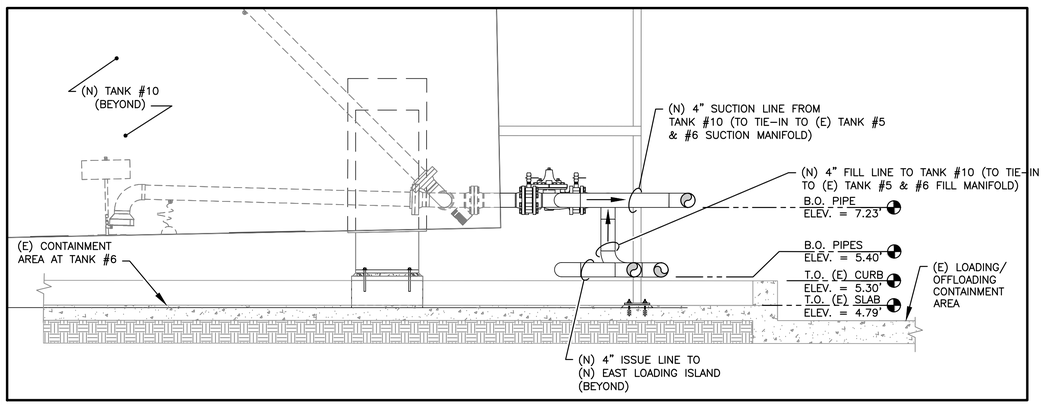



## 1 PROPOSED TANK #10 AREA PLAN

SCALE: NOTED

SCALE IN FEET (22x34) 0 2 4 6

TRUE NORTH




## 2 EAST LOADING AND TANK #10 FILL AND SUCTION PIPING

SCALE: 1"=2'

KEYNOTES: (#)

1. (N) 40,000-GAL UL-142 SINGLE-WALLED JET-A TANK T-10 WITH CATWALK AND TANK APPURTENANCES, SEE SHEET FT1.00
2. (N) 4" FLANGED CONNECTION TO (E) BUTTERFLY VALVE
3. (N) 4" BALL VALVE
4. (E) RELOCATED TANK T-6 HIGH-LEVEL SHUTOFF CONTROL VALVE, RE-WORK TUBING AS NECESSARY TO SUIT RELOCATED VALVE. MATCH (E) TUBING SIZE, DO NOT TRAP OR KINK TUBING, BLEED ALL AIR
5. (N) 4" TEE ROLLED UPWARD WITH (N) 4" 90-DEG EL
6. (N) 2" LPD ASSEMBLY, SEE DETAIL 2/FM4.00
7. (N) STACKED 90-DEG ELBOWS FOR PIPING ELEVATION CHANGE
8. NOT USED
9. (N) 4" HIGH-LEVEL SHUTOFF CONTROL VALVE
10. (N) FLOAT CONTROL SS TUBING, SIZED PER MANUFACTURER'S RECOMMENDATIONS. ROUTE ALONG CATWALK TO FLOAT CONTROL PILOT, DO NOT KINK OR TRAP
11. NOT USED
12. NOT USED
13. (N) ¾" COUPLING FOR THERMAL RELIEF CONNECTION
14. (N) TCS 700-35 METER WITH (N) TCS-3000 ELECTRONIC REGISTER & SUPPORT, SEE KEYNOTE 46
15. (N) 4"x3" CONC. RED. SPOOL (21"L)
16. (N) PRESSURE GAUGE ASSEMBLY, SEE DETAIL 5/FM4.00 AND FM1.03 FOR GRADATION
17. (N) 3" PRESSURE REDUCING SOLENOID OPERATED CONTROL VALVE
18. (N) 3" FUSIBLE LINK (EXTERNAL SAFETY) VALVE
19. (N) 3" FLANGED X NPT SWIVEL, REDUCE TO 2½" WITH REDUCING BUSHING, SEE DETAIL 1/FM4.03
20. (N) 2½"x10'L API 1529 LOADING HOSE
21. (N) HOSE TROUGH, SEE DETAIL 1/FM4.03
22. (E) RELOCATED 2½" LOADING BAYONET, SEE DETAIL 6/FM4.01
23. (N) SCULLY ST-15 OVERFILL PREVENTION UNIT WITH TRUCK PLAN AND DEADMAN CONTROLLER
24. (N) PUMP P-2 ON/OFF PUSH BUTTON STATION
25. (N) EFSO STATION, SEE FE PLANS
26. IF ADD ALTERNATE #1 IS NOT PURSUED BY THE OWNER, CONTRACTOR SHALL INSTALL A (N) 4" BLIND AT THIS LOCATION (TYP OF 2)
27. IF ADD ALTERNATE #1 IS NOT PURSUED BY THE OWNER, CONTRACTOR SHALL INSTALL A (N) CATWALK EXTENSION & STAIR TO (E) TANK #6 CATWALK
28. (E) FULL TANK CONTAINMENT AREA
29. (E) LOADING/OFFLOADING CONTAINMENT AREA
30. (E) U/G WATER LINE TO BE PROTECTED IN PLACE
31. (E) RELOCATED EYEWASH STATION
32. TIE-IN (N) U/G WATER LINE FOR RELOCATED EMERGENCY SHOWER & EYE WASH STATION, SEE STRUCTURAL PLANS
33. (N) CONCRETE TANK #10 CONTAINMENT AREA WHICH DRAIN INTO (E) FULL CONTAINMENT AREA, SEE STRUCTURAL PLANS
34. (N) CONCRETE LOADING CONTAINMENT AREA WHICH DRAINS ONTO TANK #10 FULL CONTAINMENT AREA, SEE STRUCTURAL PLANS
35. (N) CONCRETE DRAINAGE TROUGH THROUGH LOADING EQUIPMENT AREA, SEE STRUCTURAL PLANS
36. (N) LOADING EQUIPMENT ISLAND, SEE STRUCTURAL PLANS
37. (N) LOADING CANOPY FOUNDATION, SEE STRUCTURAL PLANS
38. (N) LOADING CANOPY EXTENTS, BY OTHERS
39. IF ADD ALTERNATE #1 IS NOT PURSUED BY THE OWNER, CONTRACTOR SHALL RELOCATE (E) TANK ACCESS STAIR WITH (N) EXTENSION, SEE DETAIL 2/FM4.03
40. (N) LIGHTPOLE, SEE ELECTRICAL PLANS
41. (N) SECURITY FENCE, SEE CIVIL & STRUCTURAL PLANS
42. (N) SLIDING GATE, SEE CIVIL & STRUCTURAL PLANS
43. (N) PIPE SUPPORT PS-1, SEE DETAIL 1/FM4.02
44. (N) PIPE SUPPORT PS-2, SEE DETAIL 2/FM4.02
45. (N) PIPE SUPPORT PS-6, SEE DETAIL 6/FM4.02
46. (N) PIPE SUPPORT PS-8, SEE DETAIL 8/FM4.02

DATE

REVISIONS

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

FUEL FACILITY IMPROVEMENTS PROJECT

NAPLES AIRPORT (APF)

PROPOSED TANK #10 AREA PLAN

PROJECT NAME | PROJECT LOCATION | DRAWING NAME

ISSUED FOR PERMIT

CURRIER & CO, INC.
13323 W.WASHINGTON BLVD,
SUITE 206
LOS ANGELES, CA 90066
(310) 279-5050

SEAL:

JEFFREY BURNS LICENSED No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.C. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049FM213 |
| SHEET NUMBER: | | | |

FM2.13

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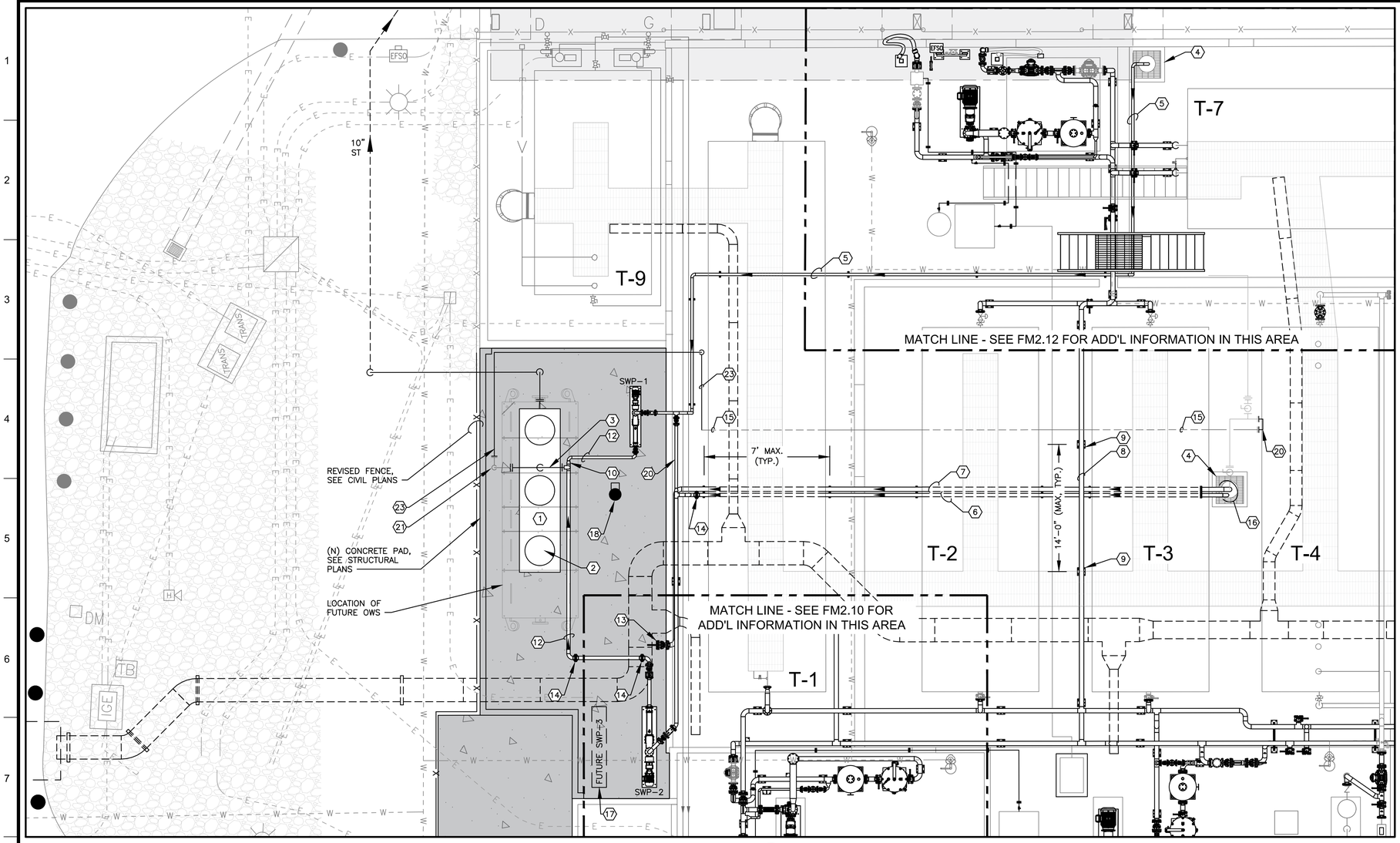
Plotted: P:\APF – Naples, FL\23049 APF DBB Transition and Electrical Replacement – Design\DWG\Mech\23049FM213.dwg 4/2/2024 9:35 AM – Mohsen




## 1 OIL / WATER SEPARATOR RELOCATION PLAN

SCALE: NOTED

SCALE IN FEET (22x34) 0 5 10 15

TRUE NORTH

KEYNOTES: (#)

1. (E) RELOCATED OIL–WATER SEPARATOR
2. (E) HIGH OIL–LEVEL PROBE, SEE FE PLANS
3. (E) 4" RELOCATED RISER SPOOL
4. (E) CATCH BASIN
5. (N) 2½" SS STORMWATER SUCTION LINE TO (N) POSITIVE CAVITY PUMP. SWP–1
6. (N) 3" SS STORMWATER SUCTION LINE TO (N) POSITIVE CAVITY PUMP. SWP–2
7. (N) 4" SS STORMWATER SUCTION LINE TO FUTURE POSITIVE CAVITY PUMP. SWP–3
8. (N) 4" SS SUCTION (TOP) AND 4"TANK FILL (BOTTOM) LINES
9. (N) PIPE SUPPORT PS–1, SEE DETAIL 1/FM4.02
10. (N) 4"x2½" SS REDUCER
11. (N) 4" SS TEE FOR FUTURE SWP–3 PUMP CONNECTION
12. (N) 3" SS FORCE MAIN TO RELOCATED OWS
13. (N) 4" SS BALL VALVE WITH BLIND FLANGE FOR FUTURE SWP–3 PUMP SUCTION CONNECTION
14. (N) 3" SS FLANGE SET
15. (E) RELOCATED 3" CS PIPE. CONTRACTOR SHALL RELOCATE THE EXISTING 3" PIPE AND SUPPORTS THAT CURRENTLY SUPPLIES THE OWS IN ITS EXISTING LOCATION TO SUIT THE RELOCATED OWS. THIS TEMPORARY CONDITION SHALL REMAIN UNTIL THE NEW SWP PUMPS AND SUCTION LINES ARE INSTALLED AND COMMISSIONED. CONTRACTOR TO PROVIDE ANY AND ALL FITTINGS, PIPE AND PIPE SUPPORTS NECESSARY TO SUIT THE TEMPORARY INSTALLATION AS NO INCREASE TO THE CONTRACT SUM. ALTERNATE PIPE ROUTING PROPOSED BY THE CONTRACTOR SHALL BE SUBMITTED THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. SEE FM1.05A AND FM1.05B.
16. (N) 3" SS AND 4" SS DROP TUBES WITH FOOT VALVES, SEE DETAIL 4/FM4.04.
17. (N) 3" SS SUCTION DROP TUBE TO BE INSTALLED AT THE TIME OF THE INSTALLATION OF (N) SWP–2 PUMP, EXISTING SUMP PUMP TO BE REMOVED
18. FUTURE PUMP SPW–3
19. (E) RELOCATED OWS ALARM STROBE LIGHT.
20. (N) SS PIPE BRIDGE, SEE FM1.05B
21. (N) SPOOL FABRICATED OUT OF (2) 90° ELBOWS TO TEMPORARILY TIE IN (E) 3" RELOCATED PIPE INTO (E) STORMWATER PUMP MANIFOLD
22. (E) SPOOL TO BE TEMPORARILY RELOCATED AND MODIFIED TO SUIT TEMPORARY CONDITIONS.
23. (N) TEMPORARY 3" PIPE AND FITTINGS TO SUIT TEMPORARY INSTALLATION.

DATE

REVISIONS

CURRIER
ENGINEERING MANAGEMENT CONSULTING

Naples AIRPORT

PROJECT NAME: FUEL FACILITY IMPROVEMENTS PROJECT

PROJECT LOCATION: NAPLES AIRPORT (APF)

DRAWING NAME: OIL / WATER SEPARATOR RELOCATION PLAN

ISSUED FOR PERMIT

CURRIER & CO, INC.
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SEAL:

JEFFREY BURNS LICENSE No. 92872 STATE OF FLORIDA PROFESSIONAL ENGINEER 04/02/2024

JEFFREY E. BURNS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
# 92872 - EXPIRES 2/28/2025

| | | | |
|---|---|---|---|
| DESIGNED BY: | J.E.B. | DATE: | 04/02/2024 |
| DRAWN BY: | M.C. | PROJ. NO: | 23049 |
| APPROVED BY: | J.E.B. | FILE NAME: | 23049FM214 |

SHEET NUMBER: FM2.14

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