

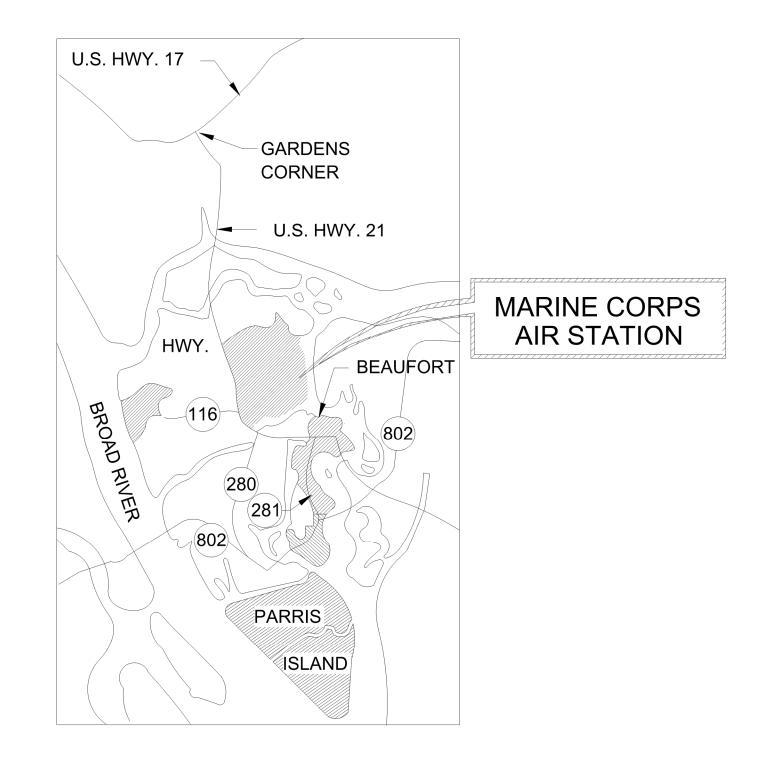


# MCAS BEAUFORT AIRFIELD STORMWATER REPAIR BE2004M

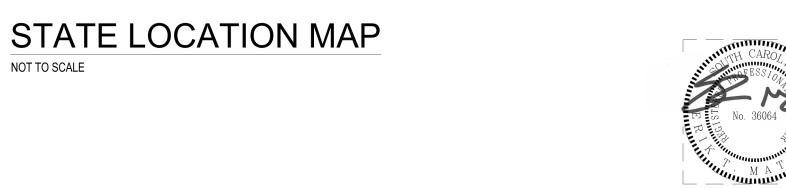
MARINE CORPS AIR STATION, BEAUFORT, SOUTH CAROLINA APRIL 27, 2020

FINAL DESIGN SUBMISSION

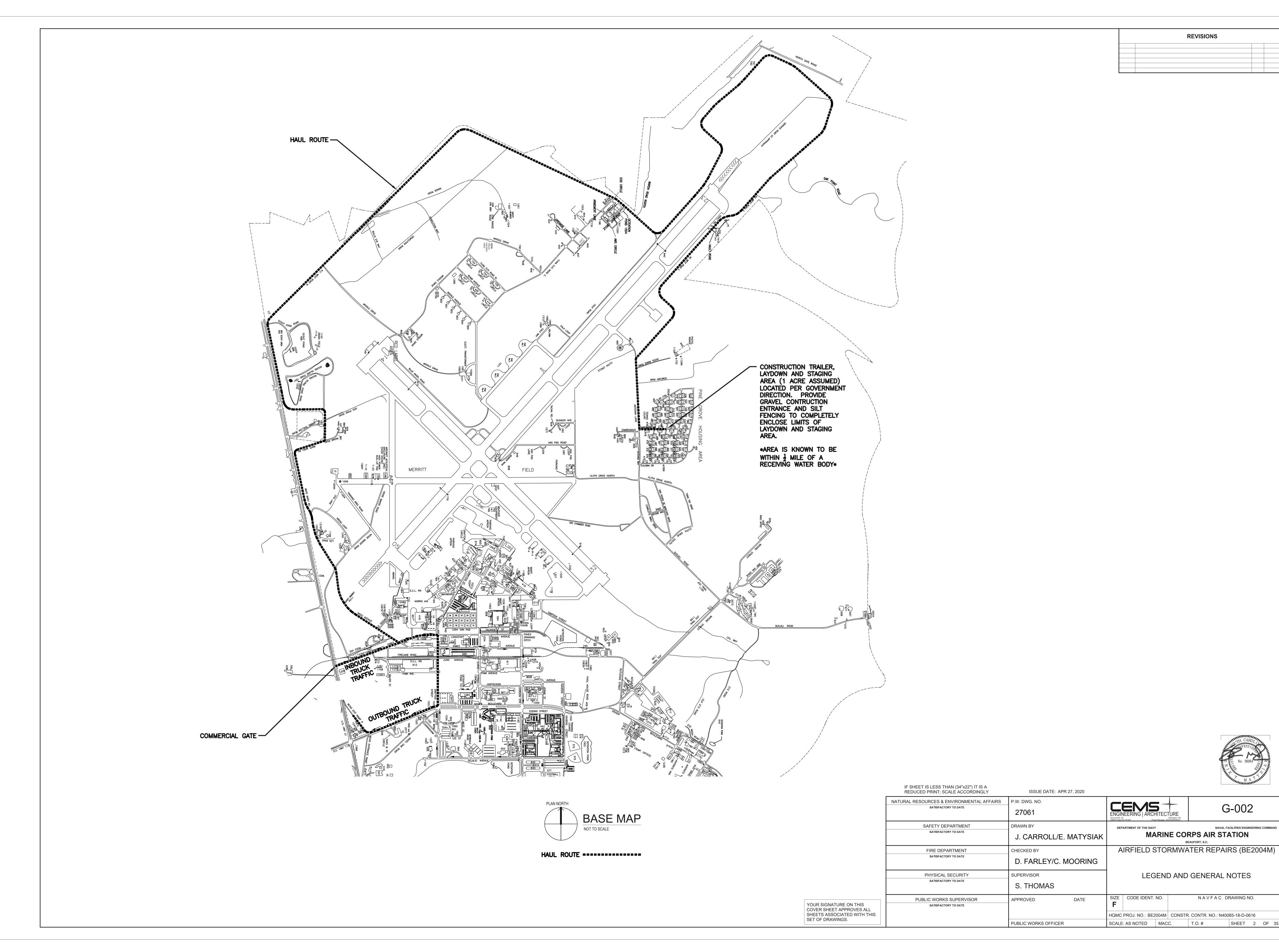
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**REVISIONS** 

G-002

NAVFAC DRAWING NO.

NAVAL FACILITIES ENGINEERING COMMAND

SHEET 2 OF 35

# EXISTING CONDITIONS LEGEND EXISTING TO REMAIN EXISTING WITHIN SCOPE BUILDING OUTLINE EDGE OF PAVEMENT STORM WATER LINE (GIS) SANITARY SEWER LINE (GIS) WATER LINE (GIS) TU DATUR ULE DATUR ULE DATUR ULE DATUR SP### EXISTING WITHIN SCOPE BUILDING OUTLINE EDGE OF PAVEMENT STORM WATER LINE (GIS) WATER LINE (GIS) FENCELINE CENTERLINE PIPE LABEL

# INSTALLATION ACCESS

CONTRACTOR AND SUB-CONTRACTOR PERSONNEL ARE REQUIRED TO FOLLOW THE PROCEDURES FOR BASE ACCESS AND DBIDS PROCESS TO ACCESS THE BASE. CONTRACTOR AND SUB-CONTRACTOR PERSONNEL MUST OBTAIN A FLIGHTLINE DRIVER'S LICENSE TO OPERATE A MOTOR VEHICLE, WHICH REQUIRES ADDITIONAL TIME AND AN EDUCATION COURSE.

MANHOLE

# SITE INVESTIGATION NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AN AS-BUILT SURVEY OF ALL THE STORM DRAINAGE (EXISTING, REPAIRED, AND REPLACED) WITHIN THIS PROJECT SCOPE. SURVEY SHALL CAPTURE ALL STORM PIPES AND STRUCTURES. SURVEY SHALL PROPERLY VERIFY THE LOCATION, ELEVATION / DEPTH, RIM, INVERT(S) AND PIPE SIZE(S) AT EACH STORM STRUCTURE.

- 2. THE CONTRACTOR SHALL HIRE A UTILITY LOCATE COMPANY TO LOCATE AND MARK ALL SUBSURFACE UTILITIES OR OTHER NOTEWORTHY ITEMS FOR AWARENESS AND TO ENSURE PROTECTION IN THE VICINITY OF EARTHWORK, DEMOLITION, REPAIR AND CONSTRUCTION.
- 3. ALL EXISTING UTILITIES ARE SHOWN IN AN APPROXIMATE LOCATIONS PER GIS DATA AND INSTALLATION RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY LOCATIONS, SIZES, AND DEPTHS OF ALL EXISTING ABOVE & BELOW GROUND UTILITIES AT LEAST 48 HOURS PRIOR TO THE START OF EARTHWORK, DEMOLITION, REPAIR AND CONSTRUCTION. THE CONTRACTING OFFICER SHALL BE NOTIFIED IN ADVANCE OF ANY DISCREPANCIES AFFECTING EXCAVATION, DEMOLITION, REPAIR OR CONSTRUCTION.
- 4. THE CONTRACTOR SHALL CALL PUPS, 811 OR (888) 721-7877, BEFORE ANY EXCAVATION AND COORDINATE WITH MARINE CORPS AIR STATION (MCAS) ON LOCATING REQUIREMENTS. SOUTH CAROLINA STATE LAW REQUIRES ANY ACTIVITY THAT RESULTS IN THE MOVEMENT OR REMOVAL OF EARTH, ROCK OR OTHER MATERIALS IN OR ON THE GROUND REQUIRES THE EXCAVATOR TO CONTACT THE UTILITY COMPANY OR ONE CALL CENTER WITH ADEQUATE INFORMATION REGARDING THE DIG. EACH EXCAVATOR IS REQUIRED TO WAIT 72-HOURS OR 3 BUSINESS DAYS BEFORE STARTING THE DIGGING WORK.
- 5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH UTILITY PROVIDERS (AS NECESSARY) WITHIN THE PROJECT AREA. SOME UTILITY CONTACT INFORMATION IS AS FOLLOWS

COMCAST: 4400 BELLE OAKS DR. CHARLESTON, SC 29405. 843-266-3010 DOMINION ENERGY: PO BOX 1168, BEAUFORT, SC 29901. 843-525-7731 CENTURYLINK: PO DRAWER 1659, BEAUFORT, SC 29902. 843-525-7979 HARGRAY COMMUNICATIONS GROUP, INC: PO BOX 346 BLUFFTON, SC 29910. 843-815-1676 BJWSA: 6 SNAKE RD OKATIE, SC 29909. 843-987-9229.

6. KNOWN UNDERGROUND UTILITY LOCATIONS ARE SHOWN ON THE PLAN, HOWEVER, NOT SHOWN BUT POSSIBLY ENCOUNTERED IN THE AREA OF THE SITE ARE OTHER BURIED UTILITIES INCLUDING, BUT NOT LIMITED TO; TELEPHONE, FIBER OPTICS, CABLE TELEVISION, POTABLE WATER, SANITARY SEWER, GAS PIPELINE / TRANSMISSION LINE, STORM SEWER. ALL UTILITIES ENCOUNTERED SHALL BE PROTECTED DURING EXCAVATION, DEMOLITION, REPAIR AND CONSTRUCTION UNLESS OTHERWISE STATED TO BE REMOVED.

# **ENVIRONMENTAL NOTES**

- 1. IF ANY SUSPECTED ARTIFACTS ARE DISCOVERED DURING GROUND DISTURBING ACTIVITIES, ALL WORK SHOULD STOP AND NREAO (AND PROJECT MANAGER / CONTRACTING OFFICER) SHOULD BE NOTIFIED IMMEDIATELY.
- 2. ALLIGATORS HAVE BEEN KNOWN TO INHABIT VARIOUS STORM WATER OUTFALLS. WORKERS SHOULD BE AWARE OF THEIR POTENTIAL PRESENCE. IF ENCOUNTERED, CONTACT NREAO PERSONNEL IMMEDIATELY FOR ALLIGATOR REMOVAL/RELOCATION.
- 3. ALL METAL PIPING IS ASSUMED TO BE CONTAMINATED WITH NON-FRIABLE ASBESTOS INTERIOR COATING. ALL AREAS OF THE AIRFIELD WILL HAVE POTENTIAL TO BE CONTAMINATED. LINES, EXCAVATED MATERIAL, AND WASHWATER SHOULD BE VERIFIED FOR THE PRESENCE OF HAZARDOUS MATERIALS AND DISPOSED OF IN ACCORDANCE WITH MCAS STANDARDS, APPLICABLE EPA AND SCDHEC REGULATIONS.
- 4. IN SITU MATERIAL IS NOT ANTICIPATED TO BE CONTAMINATED. IF ANY MATERIAL CONTAMINATES THE SOIL, FURTHER ACTION WILL BE NECESSARY TO CLEAN THE SOIL. THIS WILL INCLUDE BUT IS NOT LIMITED TO SOIL REMOVAL/CONTAINERIZATION, SOIL REPLACEMENT AND LABORATORY TESTING WITH A DHEC CERTIFIED LAB TO VERIFY THE AREA CLEAN.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE TO ACQUIRE ALL NECESSARY PERMITS PER STATE, FEDERAL REGULATIONS, AND OSHA STANDARDS INCLUDING HAZARDOUS MATERIAL PERMITTING. A COPY OF THE LEAD AND ASBESTOS REPORT MUST BE SUBMITTED TO SCDHEC AT LEAST (10) WORKING DAYS PRIOR TO DEMOLITION WHEN APPLYING FOR A DEMOLITION PERMIT. ALL PERMITS/ RECEIPTS/ INSPECTION DOCUMENTS SHALL BE COORDINATED WITH MCAS PROGRAM MANAGER, CHRIS DOSHER AT CHRISTOPHER.DOSHER@USMC.MIL. PROPER LABELING, TRANSPORTING, AND DISPOSAL OF HAZARDOUS CONTAINING MATERIALS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- 6. ALL DEMOLITION DEBRIS SHALL BE HAULED OFFSITE AND DISPOSED OF OFFSITE AT A FACILITY LICENSED AND PERMITTED TO ACCEPT LIKE MATERIALS, WITH A STATE APPROVED EROSION CONTROL PLAN IN PLACE. ALL MATERIALS SHALL BE TRANSPORTED OFF GOVERNMENT PROPERTY FOR FURTHER PROCESSING BY THE CONTRACTOR OR OTHER PARTIES IN ACCORDANCE WITH DOD REGULATIONS.
- 7. HAZARDOUS COMPONENT ABATEMENT FOR MATERIALS SUCH AS ASBESTOS, PETROLEUM DERIVATIVES, LEAD PAINT, PCB LIQUIDS, AND OTHER HAZARDOUS MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH A HAZARDOUS WASTE MANAGEMENT PLAN (HWMP) IN PLACE. THE CONTRACTOR SHALL ACQUIRE A COMPETENT/ CURRENT SCDHEC ASBESTOS SUPERVISOR DURING ANY POSSIBLE DISTURBANCE OF ACM TO ASSURE COMPLIANCE FOR BOTH STATE AND FEDERAL REGULATIONS. IF ASBESTOS IS PRESENT OR PRESUMED, THIS PROJECT IS SUBJECT TO SOUTH CAROLINA REGULATION 61-86.1. STANDARDS OF PERFORMANCE FOR ASBESTOS.
- 8. THE CONTRACTOR SHALL ABATE, REMOVE, AND MANAGE THE HAZARDOUS MATERIALS IN ACCORDANCE WITH FEDERAL AND LOCAL ENVIRONMENTAL PROTECTION LAWS AND REGULATIONS. THE CONTRACTOR SHALL DETERMINE IF PERSONAL PROTECTIVE EQUIPMENT IS RECOMMENDED OR REQUIRED BASED ON EVALUATIONS OF THE COMPLETED REPORTS. IF PROJECT IS CLASSIFIED BY SCDHEC ASBESTOS STANDARDS AS NESHAP SIZE PROJECT A SCDHEC LICENSED PROJECT.
- 9. CONTRACTOR WILL BE REQUIRED BY MCAS TO PROVIDE ASBESTOS PLAN FOR REVIEW AND ACCEPTANCE FROM NREAO WITH SAFETY BEFORE APPLYING FOR PERMIT. ESTABLISH DESIGNATED LIMITS FOR THE ASBESTOS REGULATED WORK AREA WITH THE USE OF RED BARRIER TAPE, CRITICAL BARRIERS AND SIGNS, AND MAINTAIN ALL OTHER REQUIREMENTS FOR ASBESTOS CONTROL AREA EXCEPT LOCAL EXHAUST.

# CIVIL LEGEND

**EXISTING** 

			BUILDING OUTLINE
			— EDGE OF PAVEMENT
SD DATUR ————————————————————————————————————	——————————————————————————————————————		STORM WATER LINE (GIS)
		SD SD	— STORM WATER LINE
SS DATUR SS DATUR			SANITARY SEWER LINE (GIS)
W DATUR — W DATUR —			WATER LINE (GIS)
TU DATUR — TU DATUR —			TELECOMMUNICATIONS (GIS)
UE DATUR — UE DATUR — —			ELECTRICAL (GIS)
			UNDERGROUND FUEL (GIS)
			FENCELINE
			GRAVEL CONSTRUCTION ENTRA
			— SILT FENCE
			INLET PROTECTION
			■■ LIMITS OF DISTURBANCE
	SP###		PIPE LABEL
			MANHOLE

<u>NEW</u>

# **ENVIRONMENTAL NOTES (CONTINUED)**

EXISTING WITHIN SCOPE

- 10. ALL WASH WATER FROM METAL PIPING MUST BE SCREENED AND FILTERED TO REMOVE FIBERS WHICH ARE ASSUMED TO CONTAIN ASBESTOS. RINSE WATER WILL REQUIRE FILTRATION TO 5 MICRONS. CONTRACTOR WILL BE REQUIRED TO PROVIDE AN ASBESTOS PLAN TO FILTER, STORE, AND DISPOSE OF ALL WATER COMING FROM THE AIRFIELD PIPES. FIBERS/PARTICLES MUST BE CAPTURED, CONTAINED, CATEGORIZED/LABELED, AND DISPOSED OF IN ACCORDANCE WITH STATE, FEDERAL, AND DOD REGULATIONS.
- 11. WASH WATER SHALL BE TRANSPORTED OFF GOVERNMENT PROPERTY FOR DISPOSAL IN ACCORDANCE WITH STATE, FEDERAL, AND DEPARTMENT OF DEFENSE REQUIREMENTS, WITH MANIFESTS SIGNED BY THE GOVERNMENT.
- 12. SCREENED OR FILTERED WASH SHALL BE TESTED ON-INSTALLATION. FIELD SAMPLING SHALL MONITOR THE FOLLOWING:
  TEST REQUIREMENTS:

BENZENE - 5 UG/L (MICROGRAMS/LITER)
TOLUENE - 1000 UG/L
ETHYLBENZENE - 700 UG/L
XYLENE - 10,000 UG/L
NAPHTHALENE - 0.17 UG/L
PFBS - 40 UG/L
PFAS - 0.070 UG/L
PFOS - 0.070 UG/L

- 13. WASH WATER SHALL BE TESTED FOR PFOS / PFAS TO AND CATEGORIZED IF LEVELS EXCEED 70 PARTS PER TRILLION (PPT). ALL WASH WATER SHALL BE TRANSPORTED OFF GOVERNMENT PROPERTY FOR DISPOSAL IN ACCORDANCE WITH STATE, FEDERAL, AND DEPARTMENT OF DEFENSE REQUIREMENTS, WITH MANIFESTS SIGNED BY THE GOVERNMENT.
- 14. IF PETROLEUM DERIVATIVES ARE ENCOUNTERED IN WASH WATER EXCEEDING ABOVE LEVELS, THESE SHALL BE CATEGORIZED ACCORDINGLY. ALL WASH WATER SHALL BE TRANSPORTED OFF GOVERNMENT PROPERTY FOR DISPOSAL IN ACCORDANCE WITH STATE, FEDERAL, AND DEPARTMENT OF DEFENSE REQUIREMENTS, WITH MANIFESTS SIGNED BY THE GOVERNMENT.

# **GENERAL NOTES**

- 1. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS AND BE PREPARED TO ADEQUATELY CARE FOR AND SAFEGUARD HIMSELF AND THE OWNER FROM DAMAGE. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE WORKMANLIKE REPAIR OF ANY DAMAGE DONE TO ANY NEW AND EXISTING SITE ITEMS IN THE EXECUTION OF HIS WORK UNDER THIS SECTION. ADVANCED PERMISSION FROM THE INSTALLATION FOR PHOTOGRAPHY TO DOCUMENT EXISTING CONDITIONS PRIOR TO START OF ANY WORK IS REQUIRED.
- 2. CONTRACTOR SHALL PROVIDE BYPASS PUMPING FOR SEGMENTS OF STORM DRAIN REPAIR AND REPLACEMENT. EXCAVATION FOR NEW PIPE PLACEMENT SHALL BE DEWATERED IF NEEDED. DURING STORM DRAIN CLEANING, REPAIR, AND REPLACEMENT, NO FLUID DISCHARGE SHALL OCCUR. ALL FLUID SHALL BE CAPTURED, RETAINED, AND TESTED PER ENVIRONMENTAL NOTES. NO WETLAND OR DOWNSTREAM FLUID DISCHARGE IS ACCEPTABLE.
- 3. THE LIMITS OF SITE DISTURBANCE FOR NEW STORM DRAINAGE PLACEMENT TOTALS APPROXIMATELY 2.90 ACRES. ALL CONTRACTORS SHALL MEET ALL REQUIREMENTS OF THE APPROVED SCDHEC LAND DISTURBANCE PERMIT AND BECOME FAMILIAR WITH AND COMPLY WITH ALL EROSION AND SEDIMENT CONTROL AND STORMWATER PREVENTION REQUIREMENTS CONTAINED THROUGHOUT THE SWPPP, DRAWINGS, SPECIFICATIONS AND PERMITS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING FOR THE DURATION OF THE PROJECT: PROVIDE A SCDHEC CERTIFIED EROSION INSPECTOR, PROVIDE WEEKLY INSPECTION REPORTS, COMPLETE THE NOTICE OF TERMINATION (NOT) ONCE THE SITE IS STABILIZED AS REQUIRED BY THE APPROVED PERMITS.
- 4. UPON COMPLETION OF STORM DRAIN PIPE REPAIR AND REPLACEMENT, CONTRACTOR SHALL PERFORM POST CCTV INSPECTION TO VERIFY THE REPAIR OR REPLACEMENT OF STORM SEWERS HAS BEEN COMPLETED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS. REFER TO SPECIFICATION SECTION 33 01 30.16 "TV INSPECTION OF SEWER PIPELINES".

# **DEMOLITION NOTES**

- UNLESS NOTED OTHERWISE, DEMOLITION WORK ENTAILS COMPLETE REMOVAL OF THE ITEMS OR STRUCTURES IN THEIR ENTIRETY. REPAIR, REMOVAL AND REPLACEMENT OF PAVEMENT AND STORM DRAINS SHOWN IS THE MINIMUM AMOUNT REQUIRED TO COMPLETE THE PROJECT.
- 2. SAW CUT AND REMOVE ALL EXISTING PAVEMENT AS NOTED ON PLANS. PROVIDE NEAT AND CLEAN JOINTS AT PAVEMENT TO REMAIN.
- 3. ALL DEPRESSIONS RESULTING FROM DEMOLITION ACTIVITIES SHALL BE FILLED & COMPACTED WITH SUITABLE SOILS TO EXISTING GRADE AND SLOPED FOR POSITIVE DRAINAGE. OFFSITE BORROW NECESSARY FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE PROVIDED BY THE CONTRACTOR FROM SOURCES DEVELOPED BY THE CONTRACTOR.
- 4. AFTER GRADING ACTIVITY HAS BEEN COMPLETED, THE CONTRACTOR SHALL PLACE NECESSARY TOPSOIL AND SOD AS SPECIFIED ON THE SHEETS IN ALL DISTURBED LOCATIONS NOT TO BE PAVED.

# SCDHEC NOTES

- 1. STORMWATER, SEDIMENT AND EROSION CONTROL MEASURES SHALL BE IN PLACE FOR THE DURATION OF SITE WORK IN ACCORDANCE WITH THE SWPPP AND DRAWINGS. MEASURES SHALL BE ESTABLISHED PRIOR TO SITE DISTURBANCE AND MAINTAINED THRU STABILIZATION CLOSEOUT. SITE DISTURBANCE TOTALS 3.5 ACRES AS SHOWN ON THE DRAWINGS AND AS DOCUMENTED IN THE SWPPP.
- 2. I HAVE PLACED MY SIGNATURE AND SEAL ON THE DESIGN DOCUMENTS SUBMITTED SIGNIFYING THAT I ACCEPT RESPONSIBILITY FOR THE DESIGN OF THE SYSTEM. FURTHER, I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE DESIGN IS CONSISTENT WITH THE REQUIREMENTS OF TITLE 48, CHAPTER 14 OF THE CODE OF LAWS OF SC, 1976 AS AMENDED, PURSUANT TO REGULATION 72-300 ET SEQ. (IF APPLICABLE), AND IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF SCR100000.

# ABBREVIATIONS:

STORM DRAIN = SD

MANHOLE = MH

GRATE INLET = GI

HEADWALL = HW

REINFORCED CONCRETE PIPE = RCP

POLYVINYL CHLORIDE PIPE = PVC

DUCTILE IRON PIPE = DIP
RESTRAINED JOINT = RJ
HIGH DENSITY POLYETHYLENE = HDPE
BITUMINOUS-COATED CORRUGATED METAL PIPE = BCCM
INVERT ELEVATION = IE
FRAME (RIM ELEVATION) = FR

# SAFETY NOTES

- THE CONTRACTOR SHALL ACQUAINT SUPERVISORS AND EMPLOYEES OF THE ACTIVITIES AND OPERATIONS THAT ARE INHERENT TO THIS ACTIVE BASE, INCLUDING PROCEDURES
  RELATED TO AIRCRAFT OPERATIONS, AND SHALL CONDUCT ITS CONSTRUCTION ACTIVITIES TO CONFORM TO ALL ROUTINE REQUIREMENTS AND EMERGENCY AIR TRAFFIC
  REQUIREMENTS AND GUIDELINES ON SAFETY.
- THE CONTRACTOR IS FULLY RESPONSIBLE FOR AIRCRAFT AND AIRCRAFT OPERATIONAL SAFETY ASSOCIATED WITH CONSTRUCTION ACTIVITIES RELATIVE TO THE CONSTRUCTION PROJECT AT ALL TIMES. THE CONTRACTOR SHALL MEET THE SAFETY REQUIREMENTS ESTABLISHED PER EM 385-1-1 SECTION 32 AIRFIELD AND AIRCRAFT OPERATIONS.
- 3. THE CONTRACTOR SHALL PROVIDE A CLOSURE PLAN FOR PAVEMENT WORK ON TAXIWAY B. FOR REPAIR WORK WITHIN AREAS OF EXISTING PAVEMENT, THE CONTRACTOR SHALL SCHEDULE AND COORDINATE WITH THE GOVERNMENT IN ADVANCE OF TRENCHLESS EQUIPMENT STAGING. ENSURE THAT ALL PROPER SAFETY MEASURES ARE FOLLOWED DURING WORK, INCLUDING PROPER PLACEMENT AND LOCATION OF LOW-PROFILE BARRICADES. NO RUNWAY, TAXIWAY, APRON OR ROADWAY SHALL BE CLOSED WITHOUT WRITTEN APPROVAL OF THE GOVERNMENT. A MINIMUM OF 48 HOURS WRITTEN NOTICE OF REQUESTED CLOSING SHALL BE PROVIDED IN ORDER TO ALLOW SUFFICIENT TIME TO COORDINATE THE NECESSARY ADVISORIES.
- 4. ALL CONTRACTOR VEHICLES THAT ARE AUTHORIZED TO OPERATE ON THE AIRFIELD OR HAUL ROUTES SHALL DISPLAY IN FULL VIEW ABOVE THE VEHICLE A FLASHING AMBER (YELLOW) DOME-TYPE LIGHT, MOUNTED ON TOP OF THE VEHICLE AND OF SUCH INTENSITY TO CONFORM TO LOCAL CODES FOR MAINTENANCE AND EMERGENCY VEHICLES.
- 5. OPEN FLAMES, WELDING OR TORCH-CUTTING OPERATIONS ARE PROHIBITED UNLESS ADEQUATE FIRE AND SAFETY PRECAUTIONS HAVE BEEN TAKEN AND THE PROCEDURE IS APPROVED BY THE GOVERNMENT.
- 6. STOCKPILING OF CONSTRUCTION MATERIALS SHALL NOT BE PERMITTED ON-SITE. OPEN TRENCHES, EXCAVATION AND WORKING MATERIALS LOCATED IN THE AIRFIELD OPERATIONS AREA SHALL BE PROMINENTLY MARKED WITH FLAGS OR OTHER APPROVED METHODS AND LIGHTED BY APPROVED LIGHT UNITS DURING HOURS OF RESTRICTED VISIBILITY AND DARKNESS.
- 7. DEBRIS, WASTE AND LOOSE MATERIAL CAPABLE OF CAUSING DAMAGE TO AIRCRAFT LANDING GEARS, PROPELLERS OR BEING INGESTED INTO AIRCRAFT ENGINES SHALL NOT BE ALLOWED TO BE ON ACTIVE AIRCRAFT MOVEMENT AREA PAVEMENT OR ALONG HAUL ROUTES. THE CONTRACTOR SHALL REMOVE IT IMMEDIATELY AND CONTINUOUSLY DURING CONSTRUCTION BY MECHANICAL VACUUM SWEEPER OR OTHER APPROVED METHODS. BROOMS CANNOT CONTAIN METAL BRISTLES.
- 8. THE PROJECT SUPERINTENDENT/SUPERVISOR WILL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS. PRIOR TO THE COMMENCEMENT OF WORK, THE PROJECT SUPERINTENDENT/SUPERVISOR SHALL PROVIDE A PROPOSED ACCIDENT AND FIRE PROTECTION PLAN FOR ALL WORK CONTEMPLATED UNDER THE CONTRACT, CONDUCT AT LEAST ONE SAFETY MEETING EACH MONTH FOR EACH SHIFT, AND REQUIRE THE ATTENDANCE OF ALL SUPERVISORS AT SUCH MEETINGS. COPIES OF THE MINUTES OF SAFETY MEETINGS SHALL BE KEPT ON FILE IN THE CONTRACTOR'S FIELD OFFICE AND BE MADE AVAILABLE UPON DEMAND BY THE GOVERNMENT.
- 9. THE EMERGENCY NUMBER TO CALL FOR ANY INCIDENT ON THE PROJECT OR AIRFIELD SHALL BE 911, AND THE SITE IS MARINE CORPS AIR STATION (MCAS) BEAUFORT, UNLESS OTHERWISE NOTIFIED BY THE GOVERNMENT.
- 10. CONSTRUCTION DURING THE PROJECT MAY BE HALTED AT ANY TIME BY THE GOVERNMENT OR AIRFIELD OPERATIONS PERSONNEL IF IT IS DETERMINED TO BE IN THE BEST INTEREST OF THE BASE OR AIRCRAFT OPERATIONAL SAFETY, AND THE CONTRACTOR MAY BE DIRECTED TO REMOVE EQUIPMENT AND/OR EVACUATE THE SITE. NECESSARY EXTENSIONS IN CONTRACT TIME MAY BE GRANTED OR A STOP WORK ORDER WILL BE ISSUED DUE TO THESE DELAYS, HOWEVER, THERE WILL BE NO ADJUSTMENTS IN CONTRACT PRICE DUE TO THESE DELAYS.

# **SECURITY NOTES**

YOUR SIGNATURE ON THIS

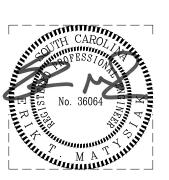
SET OF DRAWINGS.

COVER SHEET APPROVES ALL

SHEETS ASSOCIATED WITH THIS

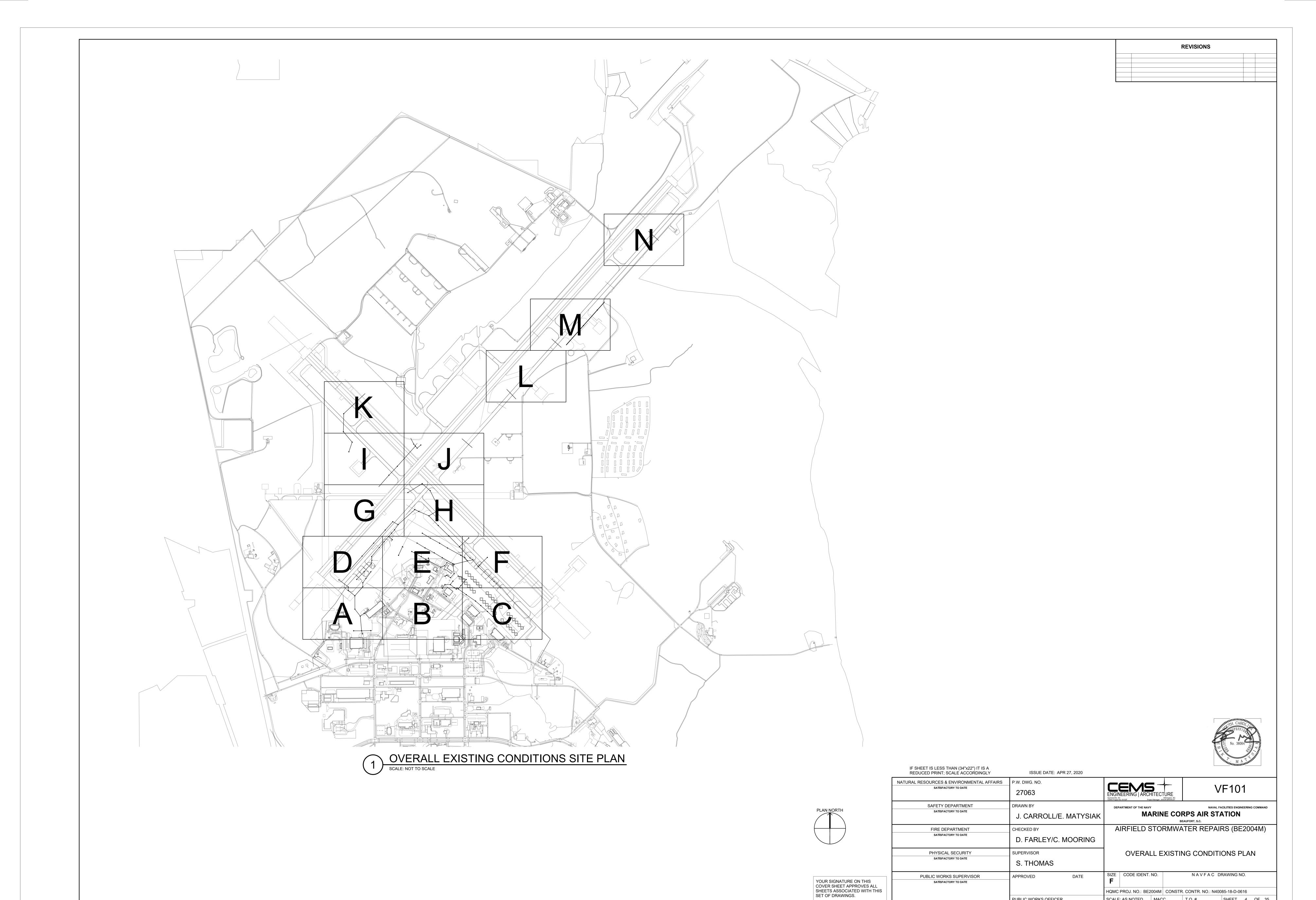
- 1. IT IS INTENDED THAT THE CONTRACTOR SHALL COMPLY WITH ALL SECURITY REQUIREMENTS SPECIFIED HEREIN. THE PROJECT SUPERINTENDENT/SUPERVISOR SHALL BE REQUIRED TO FAMILIARIZE THEMSELVES WITH REQUIREMENTS OF OPERATING WITHIN AND AROUND THE BASE AND AIRFIELD, INCLUDING APPLICABLE RULES AND REGULATIONS. THE SUPERINTENDENT/SUPERVISOR SHALL BE RESPONSIBLE FOR BRIEFING ALL CONTRACTOR PERSONNEL ON THESE REQUIREMENTS AND, FROM TIME TO TIME, OTHER SECURITY PROVISIONS ADOPTED BY THE GOVERNMENT. ALL NEW CONTRACTOR EMPLOYEES SHALL BE BRIEFED ON THESE REQUIREMENTS PRIOR TO WORKING IN THE CONSTRUCTION AREA.
- 2. THE CONTRACTOR'S ACCESS TO THE SITE SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE GOVERNMENT. NO OTHER ACCESS POINTS SHALL BE ALLOWED UNLESS APPROVED AND DIRECTED BY THE GOVERNMENT. CONTRACTOR EMPLOYEE VEHICLES SHALL PARK OUTSIDE OF THE RESTRICTED AIRFIELD AREA OR AT THE DESIGNATED STAGING AND LAYDOWN AREA. ALL CONTRACTOR TRAFFIC AUTHORIZED TO ENTER THE SITE SHALL BE EXPERIENCED IN THE ROUTE OR GUIDED BY CONTRACTOR PERSONNEL. THE CONTRACTOR SHALL BE RESPONSIBLE COMMUNICATION WITH AIRFIELD OPERATION.
- 3. ALL CONTRACTOR'S MATERIAL ORDERS FOR DELIVERY TO THE SITE MUST BE ESCORTED BY THE CONTRACTOR. THE CONTRACTOR ACCESS GATE DESIGNATED FOR USE MAY BE UTILIZED BY OTHER CONTRACTORS OR BASE PERSONNEL DURING THIS PROJECT. THE CONTRACTOR IS REQUIRED TO COORDINATE ACCESS WITH ALL PARTIES. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR ISSUES RELATED TO SITE ACCESS.
- 4. IDENTIFICATION OF PERSONNEL: AT THE GOVERNMENTS' DISCRETION, ALL EMPLOYEES OF THE CONTRACTOR OR SUBCONTRACTORS REQUIRING ACCESS TO THE CONSTRUCTION SITE ARE REQUIRED TO BE SUPPLIED WITH IDENTIFICATION BADGES TO BE WORN AT ALL TIMES WHILE WITHIN THE WORK AREAS. BADGES SHALL BE SUPPLIED BY THE CONTRACTOR AND SHALL STATE "MCAS BEAUFORT CONTRACTOR AIRFIELD STORMWATER REPAIR" BADGES CAN BE PLASTIC WALLET SIZE OR METAL PIN WITH A MINIMUM 2 1/2" DIAMETER AND MUST BE WORN ON OUTER GARMENTS SO AS TO BE CLEARLY VISIBLE. BADGING IS TO BE UNIFORM IN APPEARANCE AND SUFFICIENTLY DISTINCTIVE IN DESIGN OR COLOR TO CLEARLY IDENTIFY AN EMPLOYEE AS BEING ASSIGNED/ASSOCIATED WITH THIS CONTRACT. THE BADGE NUMBER SHALL BE PROMINENT FOR EASY IDENTIFICATION. BADGES ARE TO BE IDENTIFIED NUMERICALLY AND ISSUED INDIVIDUALLY TO WHOM IT IS ASSIGNED. BLOCKS OF NUMBERS CAN BE ASSIGNED TO SUBCONTRACTORS. SUPPLY, ISSUANCE AND CONTROL OF IDENTIFICATION BADGES SHALL BE THAT OF THE CONTRACTOR THROUGH THE SUPERINTENDENT.
- 5. IDENTIFICATION OF VEHICLES: THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A LIST OF CONTRACTOR AND SUB-CONTRACTOR VEHICLES AUTHORIZED TO OPERATE ON THE SITE. THE CONTRACTOR SHALL ISSUE TO THE CONSTRUCTION MANAGER, A CURRENT LIST OF COMPANIES AUTHORIZED TO ENTER AND CONDUCT WORK ON THE AIRFIELD. CONTRACTOR EMPLOYEE PERSONAL VEHICLES ARE NOT ALLOWED ON THE AIRFIELD AT ANY TIME.

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**REVISIONS** 

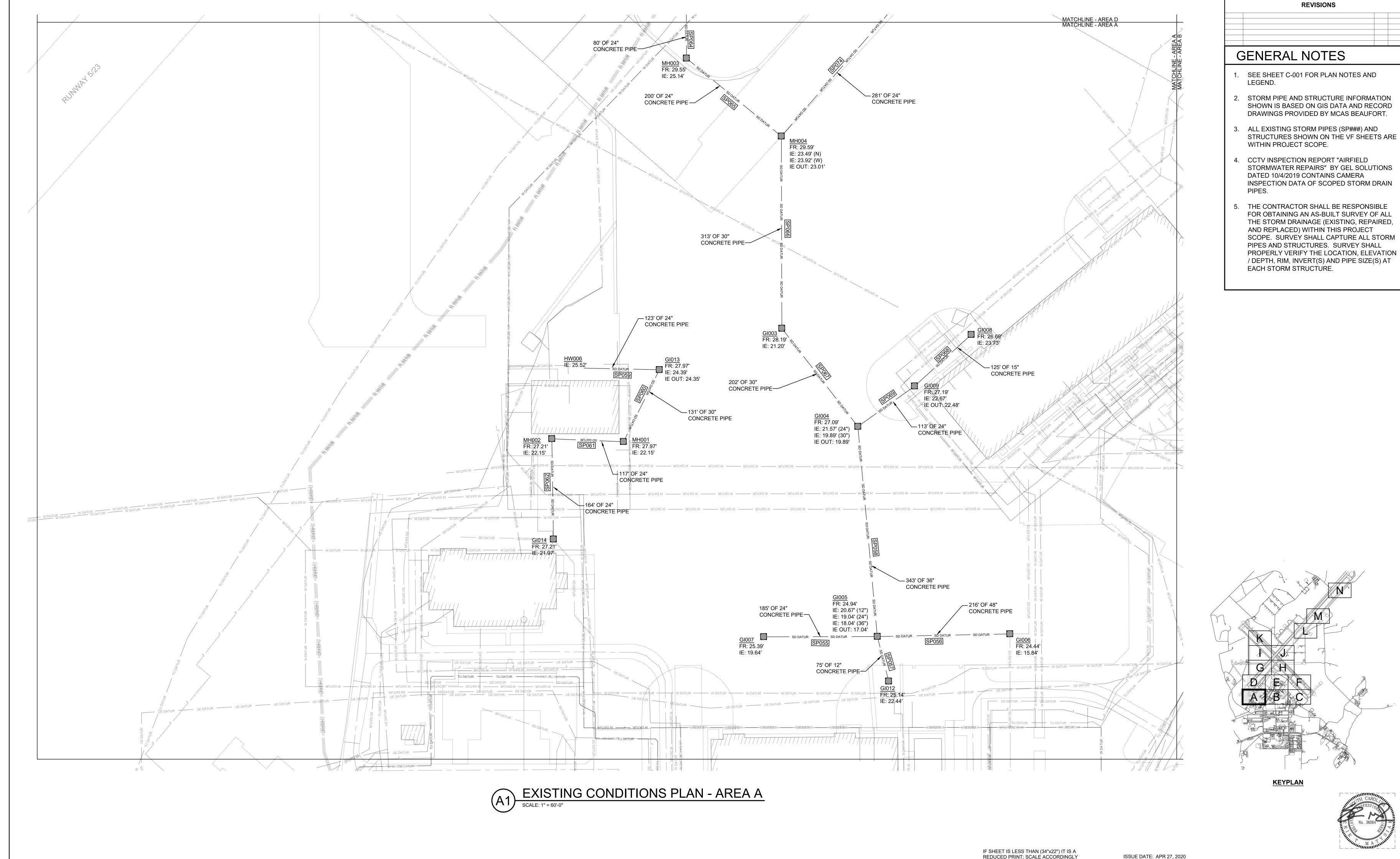
NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS  SATISFACTORY TO DATE	P.W. DWG. NO. 27062	CENS ENGINEERING   ARCHITECTURI	- F	C-001
SAFETY DEPARTMENT SATISFACTORY TO DATE	J. CARROLL/E. MATYSIAK	Summerville, SC Wilmingto CEMS Project No:18152F Project Manager, JASON BRAV  DEPARTMENT OF THE NAVY	n, NC WLEY	AL FACILITIES ENGINEERING COMMA
FIRE DEPARTMENT SATISFACTORY TO DATE	D. FARLEY/C. MOORING	AIRFIELD STORM	IWATER REP	AIRS (BE2004M
PHYSICAL SECURITY SATISFACTORY TO DATE	SUPERVISOR S. THOMAS	LEGEND A	AND GENERAI	L NOTES
PUBLIC WORKS SUPERVISOR SATISFACTORY TO DATE	APPROVED DATE	SIZE CODE IDENT. NO.		DRAWING NO.
	PUBLIC WORKS OFFICER	HQMC PROJ. NO.: BE2004M CO SCALE: AS NOTED MACC.	T.O. #	SHEET 3 OF

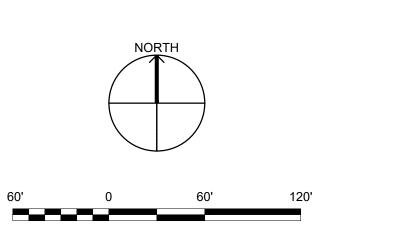


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SCALE: AS NOTED MACC. T.O. #

SHEET 4 OF 35





SCALE: 1" = 60'

GRAPHIC SCALE

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SAFETY DEPARTMENT SATISFACTORY TO DATE	J. CARROLL/E.	MATYSIAK	DEP	ARTMENT OF TH
FIRE DEPARTMENT SATISFACTORY TO DATE	D. FARLEY/C. N	OORING	А	IRFIEL
PHYSICAL SECURITY  SATISFACTORY TO DATE	SUPERVISOR S. THOMAS			EXIS
PUBLIC WORKS SUPERVISOR SATISFACTORY TO DATE	APPROVED	DATE	SIZE <b>F</b>	CODE IDI
			HQMC	PROJ. NO.:

PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY

MARINE CORPS AIR STATION

BEAUFORT, S.C.

AIRFIELD STORMWATER REPAIRS (BE2004M)

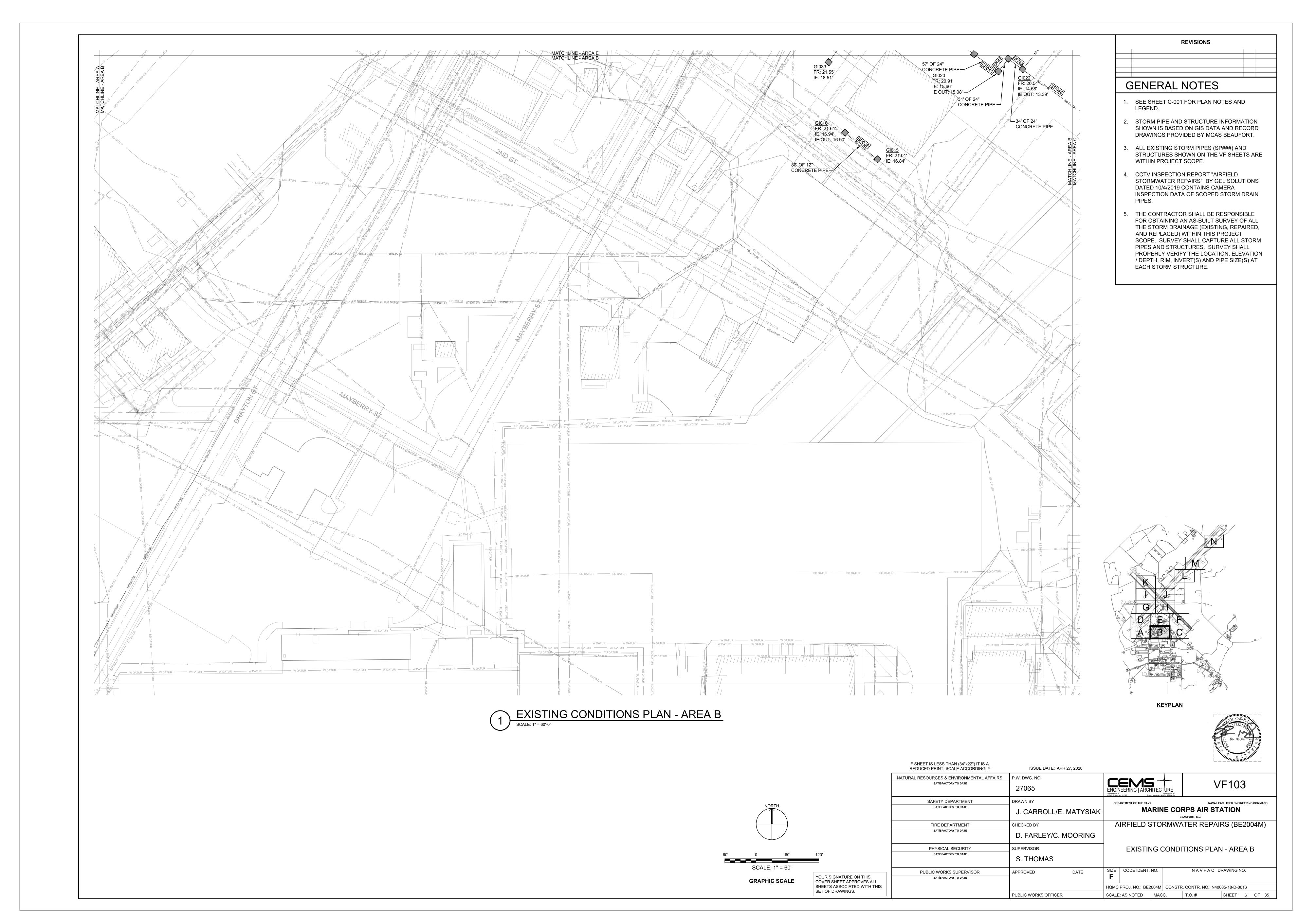
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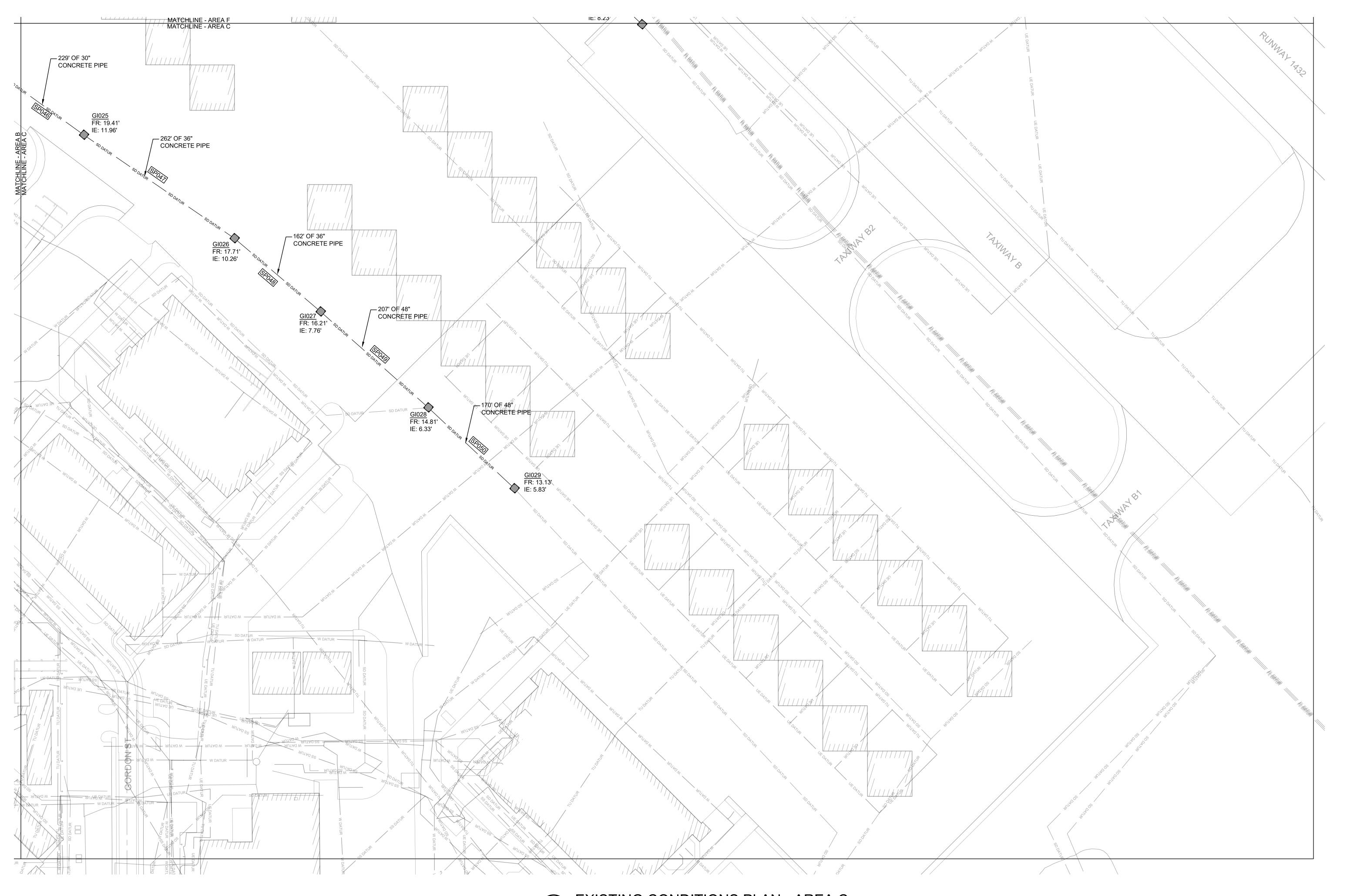
EXISTING CONDITIONS PLAN - AREA A

SIZE <b>F</b>	CODE IDENT. NO.	NAVFAC	DRAWING NO.

 HQMC PROJ. NO.: BE2004M
 CONSTR. CONTR. NO.: N40085-18-D-0616

 SCALE: AS NOTED
 MACC.
 T.O. #
 SHEET 5 OF 35



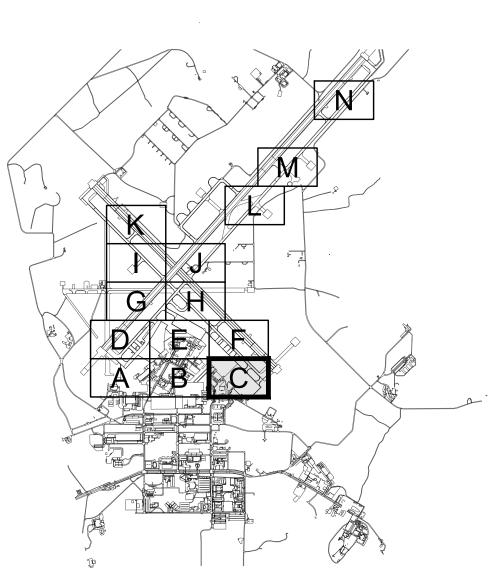


# GENERAL NOTES

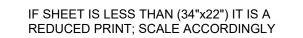
- 1. SEE SHEET C-001 FOR PLAN NOTES AND LEGEND.
- 2. STORM PIPE AND STRUCTURE INFORMATION SHOWN IS BASED ON GIS DATA AND RECORD DRAWINGS PROVIDED BY MCAS BEAUFORT.

**REVISIONS** 

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**KEYPLAN** 



SATISFACTORY TO DATE

SAFETY DEPARTMENT

SATISFACTORY TO DATE

FIRE DEPARTMENT SATISFACTORY TO DATE

PHYSICAL SECURITY

SATISFACTORY TO DATE

PUBLIC WORKS SUPERVISOR

SATISFACTORY TO DATE

NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS P.W. DWG. NO.

ISSUE DATE: APR 27, 2020

J. CARROLL/E. MATYSIAK

D. FARLEY/C. MOORING

27066

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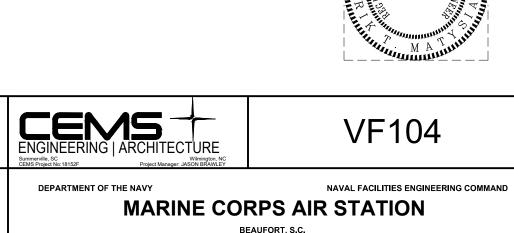
CHECKED BY

SUPERVISOR

APPROVED

S. THOMAS

PUBLIC WORKS OFFICER

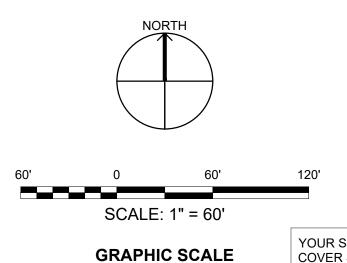


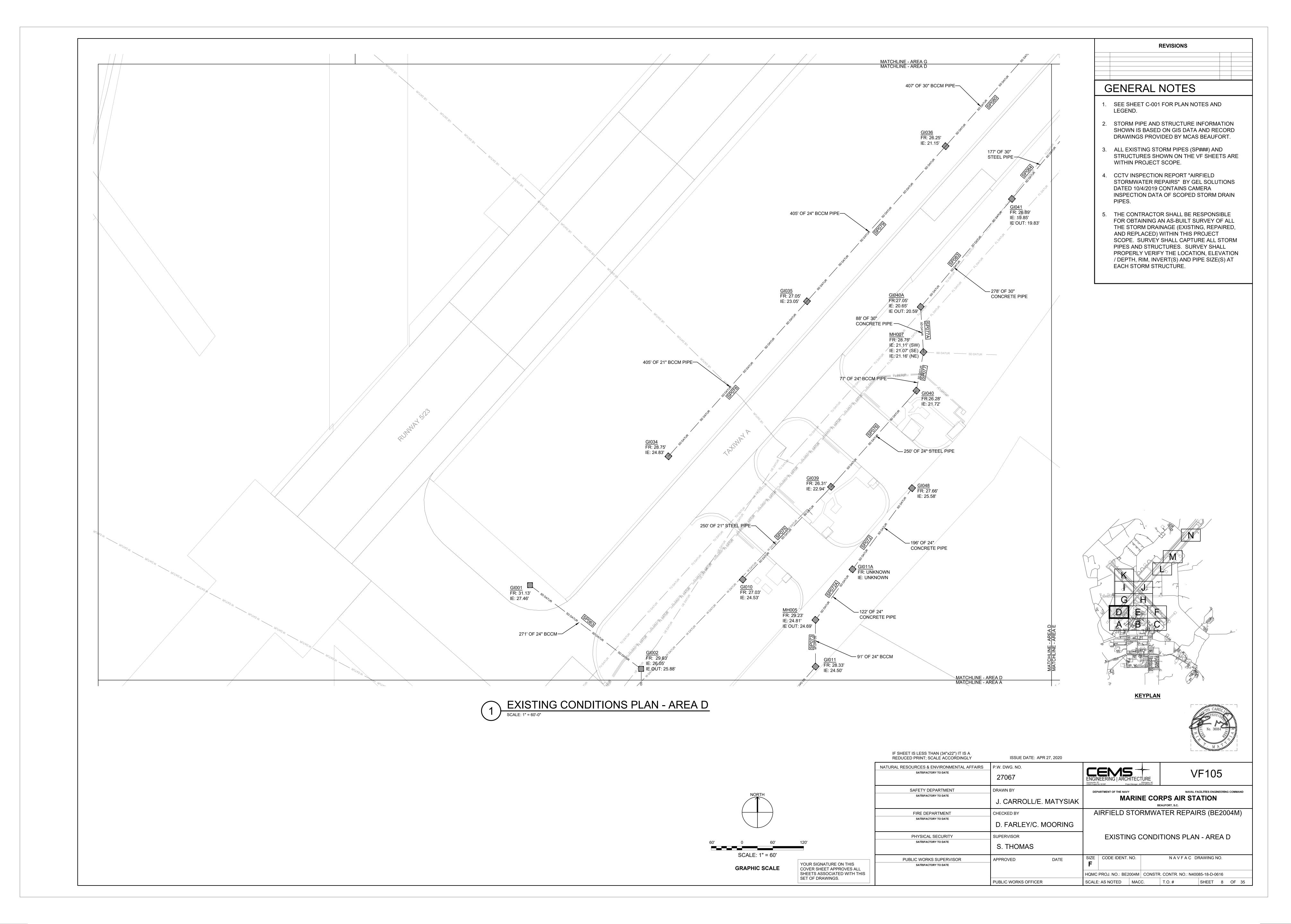
AIRFIELD STORMWATER REPAIRS (BE2004M)

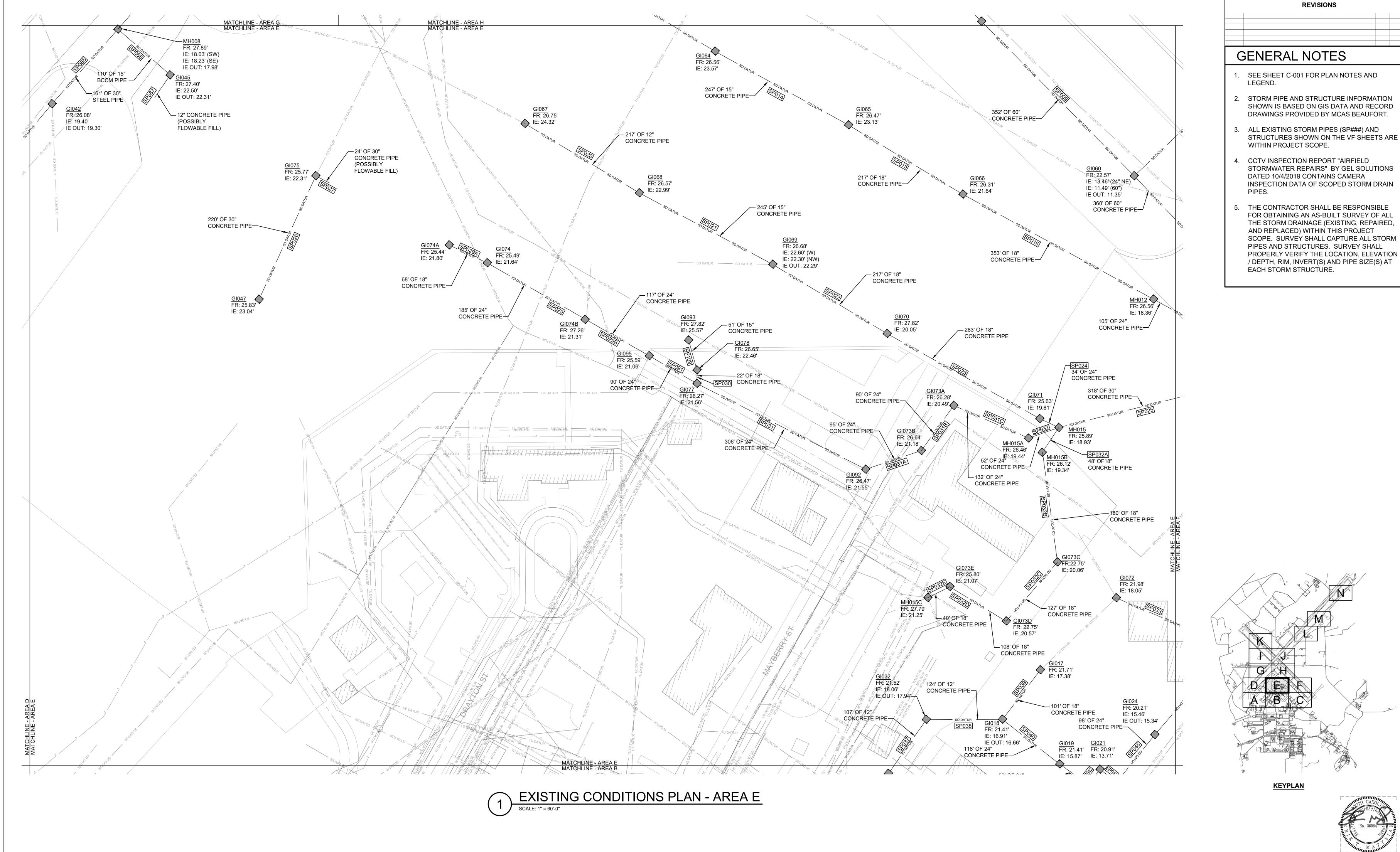
EXISTING CONDITIONS PLAN - AREA C

SIZE CODE IDENT. NO. NAVFAC DRAWING NO. DATE HQMC PROJ. NO.: BE2004M | CONSTR. CONTR. NO.: N40085-18-D-0616 SCALE: AS NOTED MACC. T.O. # SHEET 7 OF 35









NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS P.W. DWG. NO. SATISFACTORY TO DATE 27068 DRAWN BY SAFETY DEPARTMENT SATISFACTORY TO DATE CHECKED BY FIRE DEPARTMENT SATISFACTORY TO DATE PHYSICAL SECURITY SUPERVISOR SATISFACTORY TO DATE S. THOMAS SCALE: 1" = 60' PUBLIC WORKS SUPERVISOR APPROVED YOUR SIGNATURE ON THIS COVER SHEET APPROVES ALL SATISFACTORY TO DATE **GRAPHIC SCALE** 

SHEETS ASSOCIATED WITH THIS

SET OF DRAWINGS.

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URAL RESOURCES & ENVIRONMENTAL AFFAIRS
SATISFACTORY TO DATE

P.W. DWG. NO.
27068

P.W. DWG. NO.
27068

DRAWN BY
J. CARROLL/E. MATYSIAK

FIRE DEPARTMENT
SATISFACTORY TO DATE

DEPARTMENT
SATISFACTORY TO DATE

D. FARLEY/C. MOORING

PHYSICAL SECURITY
SATISFACTORY TO DATE

D. FARLEY/C. MOORING

PHYSICAL SECURITY
SATISFACTORY TO DATE

SUPERVISOR
SATISFACTORY TO DATE

SUPERVISOR
STHOMAS

PUBLIC WORKS SUPERVISOR

APPROVED
DATE

SIZE CODE IDENT. NO.
NAVFAC DRAWING NO.

PUBLIC WORKS OFFICER

SIZE CODE IDENT. NO. NAVFAC DRAWING NO.

HQMC PROJ. NO.: BE2004M CONSTR. CONTR. NO.: N40085-18-D-0616

SCALE: AS NOTED MACC. T.O. # SHEET 9 OF 35

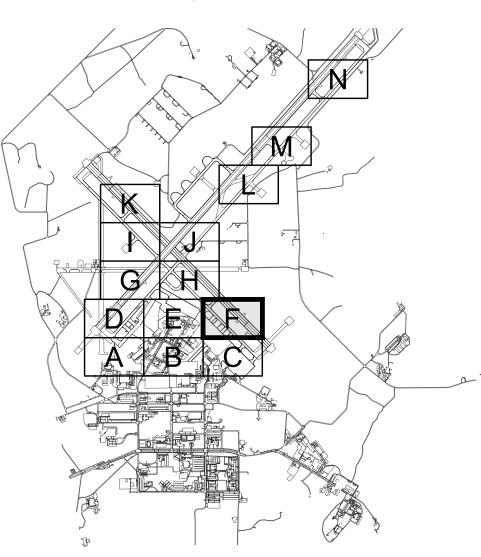


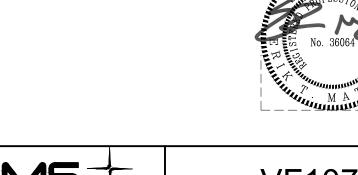
# **GENERAL NOTES**

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**REVISIONS** 

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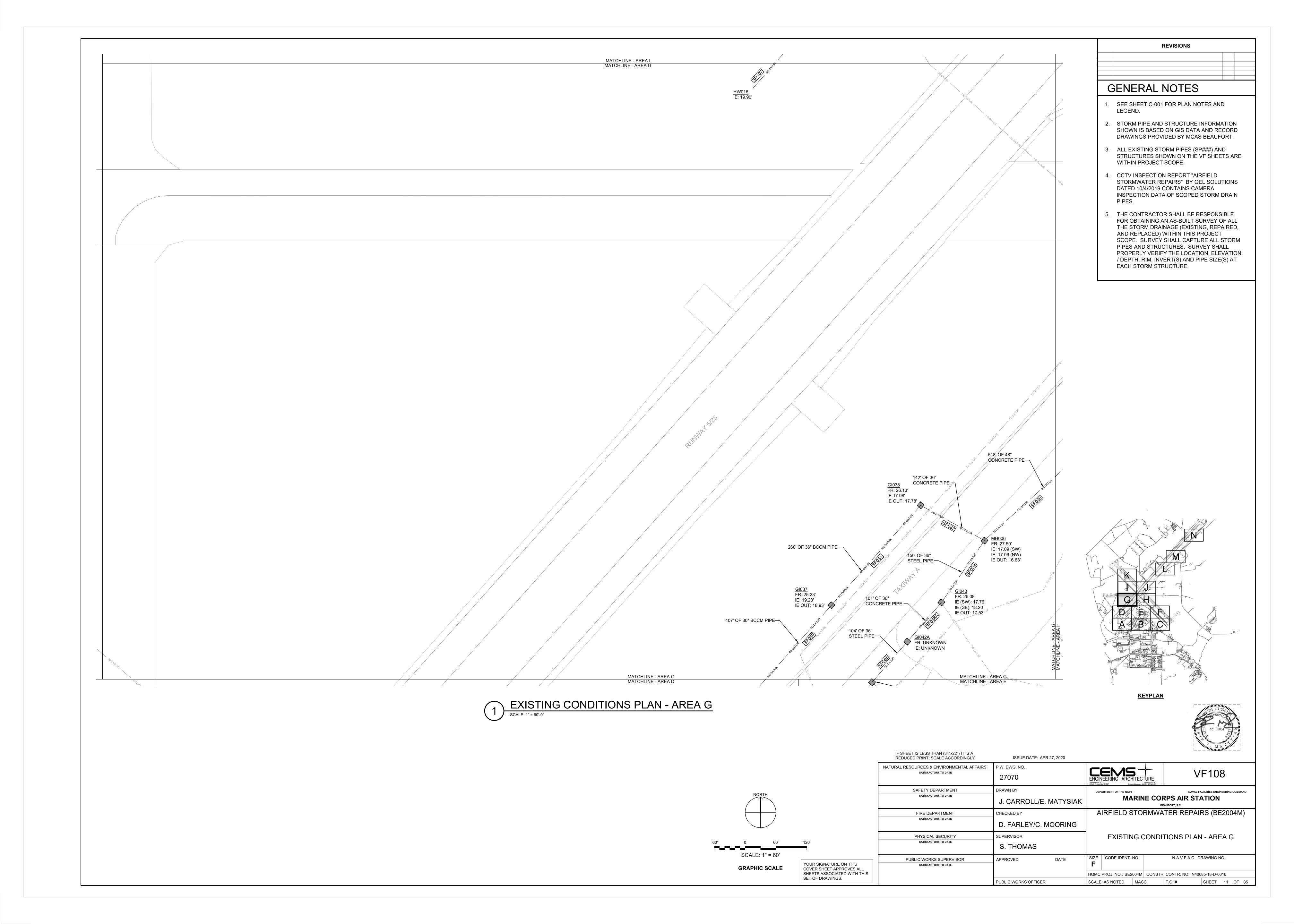
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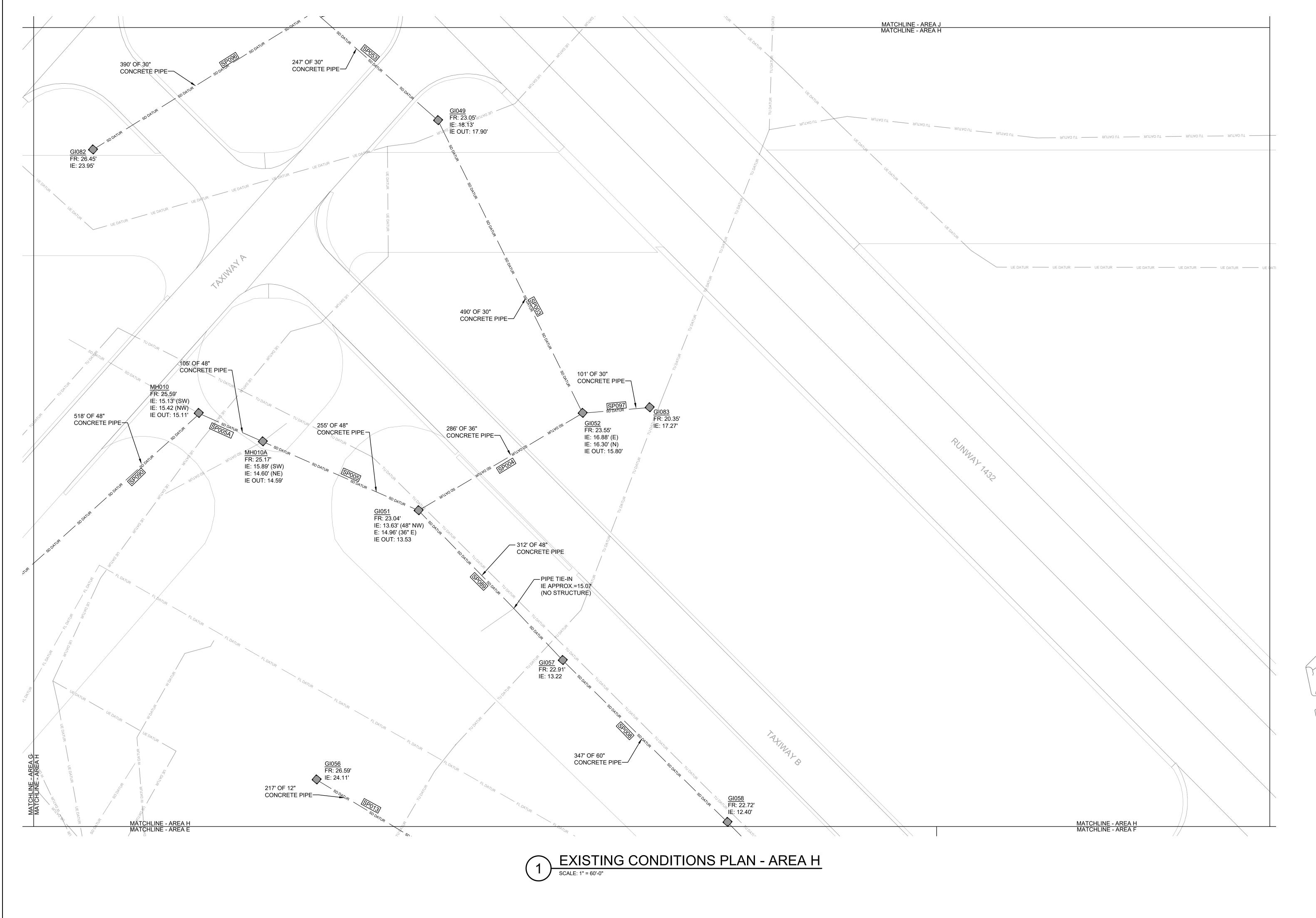
Y	OUR SIGNATURE ON THIS
C	OVER SHEET APPROVES ALL
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SE	T OF DRAWINGS.

IF SHEET IS LESS THAN (34"x22") IT IS A REDUCED PRINT; SCALE ACCORDINGLY	ISSUE DATE: APR 27, 2020	
NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS  SATISFACTORY TO DATE	P.W. DWG. NO. 27069	ENGINEER Summerville, SC CEMS Project No:18152F
SAFETY DEPARTMENT SATISFACTORY TO DATE	J. CARROLL/E. MATYSIAK	DEPARTM
FIRE DEPARTMENT SATISFACTORY TO DATE	D. FARLEY/C. MOORING	AIR
PHYSICAL SECURITY SATISFACTORY TO DATE	SUPERVISOR S. THOMAS	ı
PUBLIC WORKS SUPERVISOR SATISFACTORY TO DATE	APPROVED DATE	SIZE CO
	PUBLIC WORKS OFFICER	HQMC PRO

ENGINEERING   ARCHITECTURE Surmerville, SC CEMS Project Manager: JASON BRÄWLEY	VF107
	NAVAL FACILITIES ENGINEERING COMMAN RPS AIR STATION EAUFORT, S.C.
	TER REPAIRS (BE2004M)
EVISTING CONDI	TIONS DIANI ADEA E

EXISTING CONDITIONS PLAN - AREA F									
SIZE <b>F</b>	SIZE CODE IDENT. NO.			NAVFAC DRAWING NO.					
HQMC PROJ. NO.: BE2004M			CONSTR. CONTR. NO.: N40085-18-D-0616						
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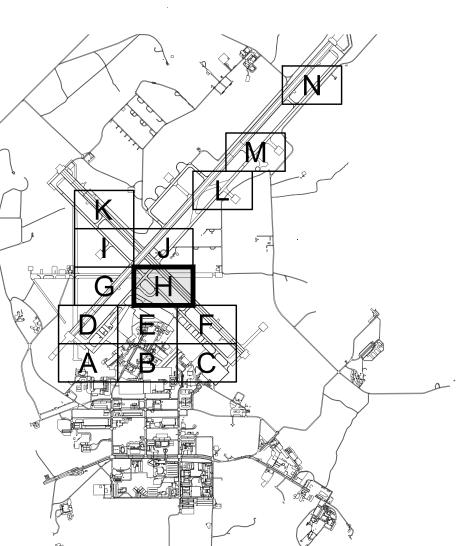
1. SEE SHEET C-001 FOR PLAN NOTES AND LEGEND.

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**KEYPLAN** 



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SAFETY DEPARTMENT

SATISFACTORY TO DATE

FIRE DEPARTMENT

SATISFACTORY TO DATE

PUBLIC WORKS SUPERVISOR

SATISFACTORY TO DATE

ISSUE DATE: APR 27, 2020 NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS P.W. DWG. NO. 27071

J. CARROLL/E. MATYSIAK

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PUBLIC WORKS OFFICER



SIZE | CODE IDENT. NO.

VF109

NAVFAC DRAWING NO.

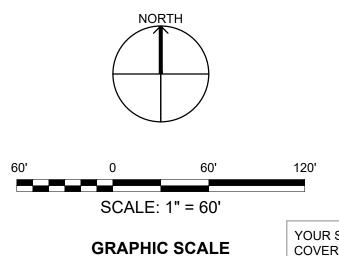
NAVAL FACILITIES ENGINEERING COMMAND

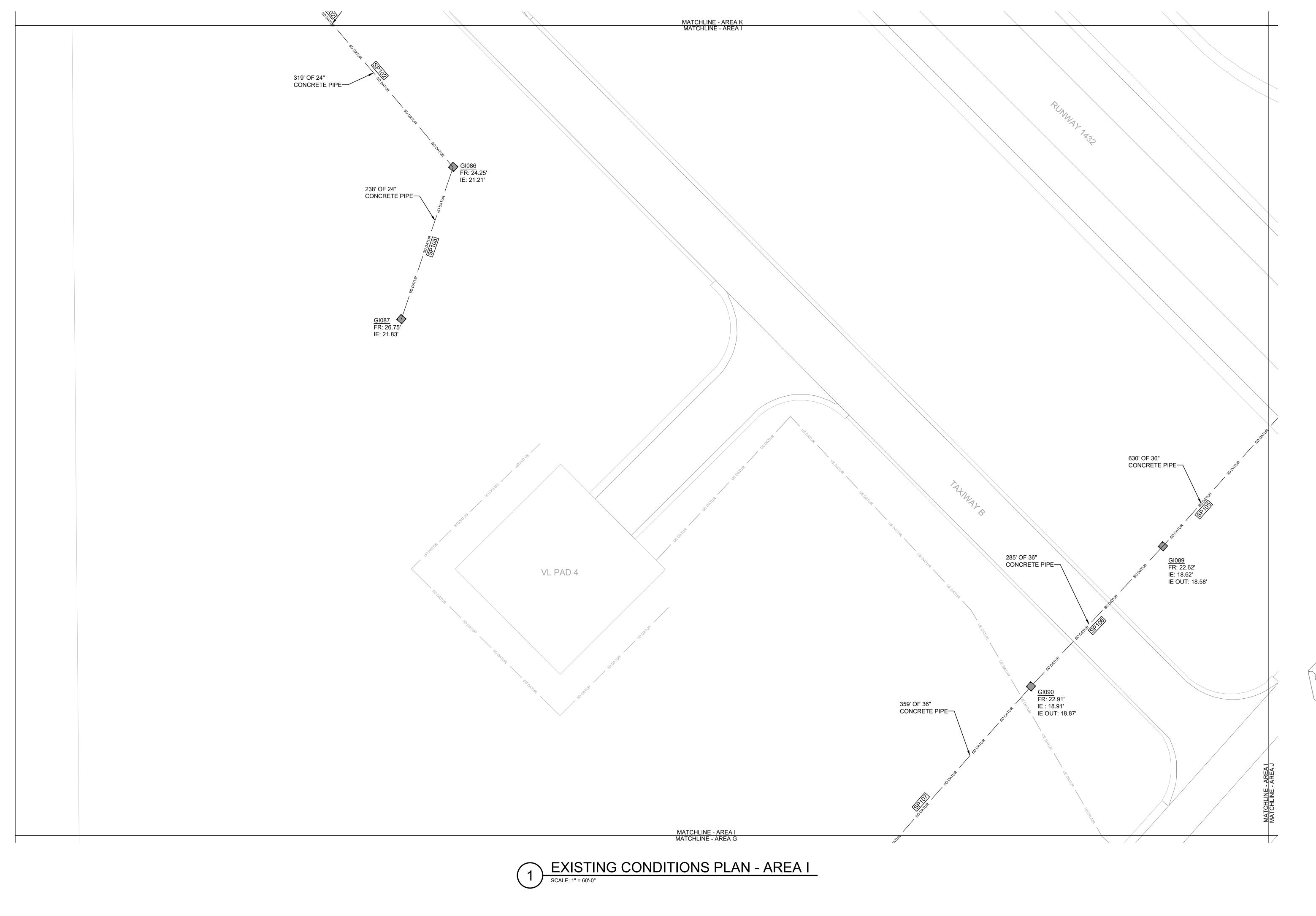
MARINE CORPS AIR STATION AIRFIELD STORMWATER REPAIRS (BE2004M)

D. FARLEY/C. MOORING EXISTING CONDITIONS PLAN - AREA H PHYSICAL SECURITY SUPERVISOR SATISFACTORY TO DATE S. THOMAS

DATE

HQMC PROJ. NO.: BE2004M | CONSTR. CONTR. NO.: N40085-18-D-0616 SCALE: AS NOTED MACC. T.O. # SHEET 12 OF 35



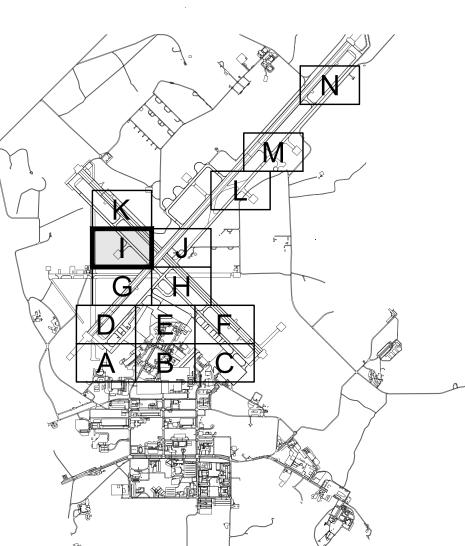


# **GENERAL NOTES**

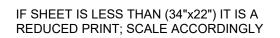
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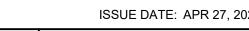
**REVISIONS** 

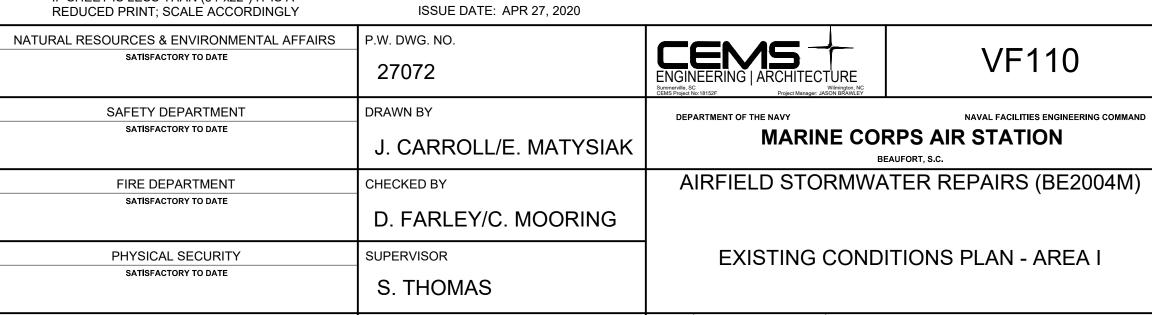
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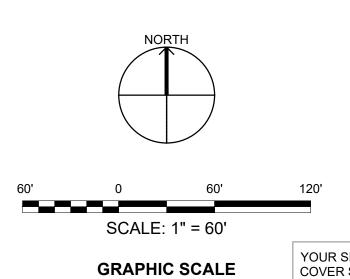
**KEYPLAN** 

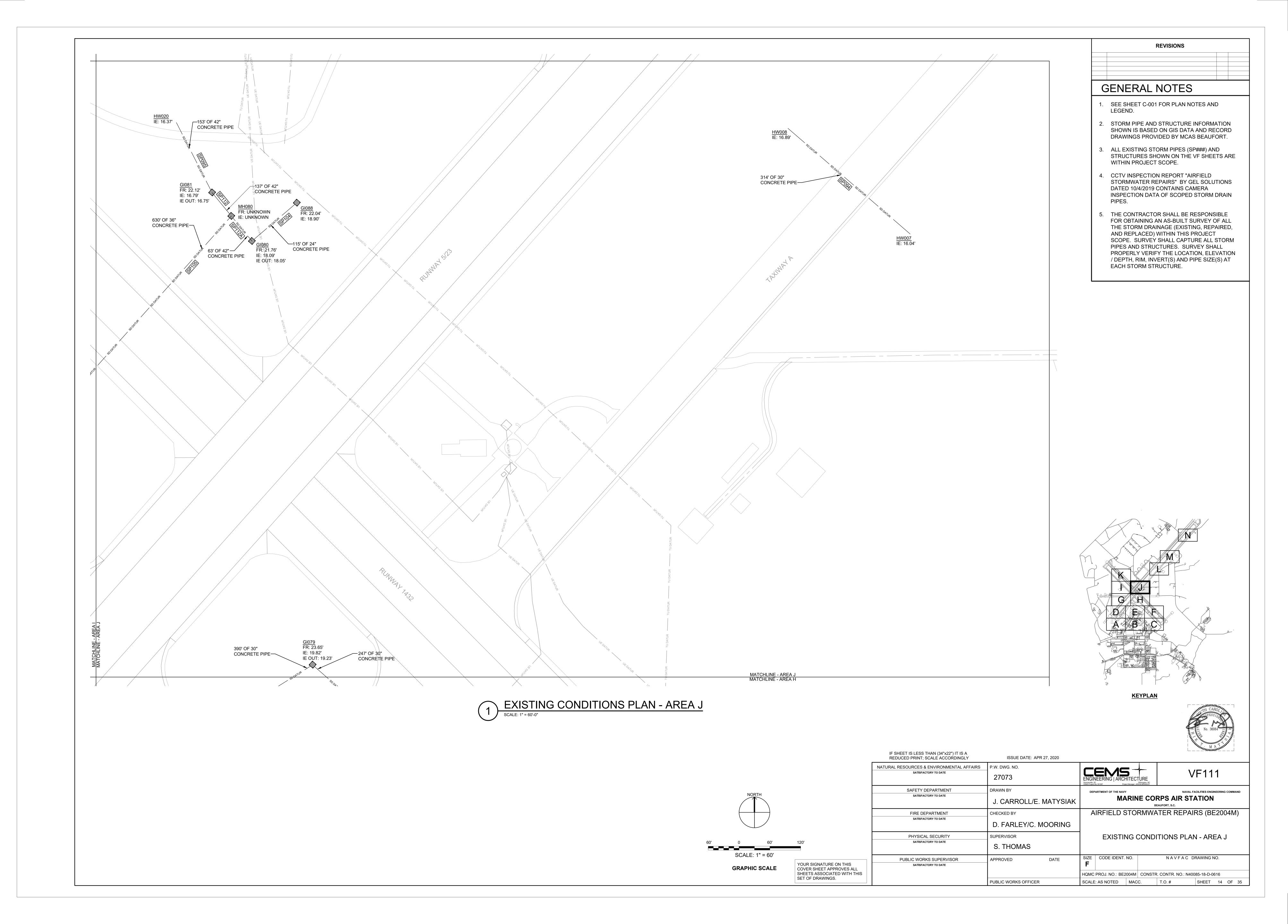


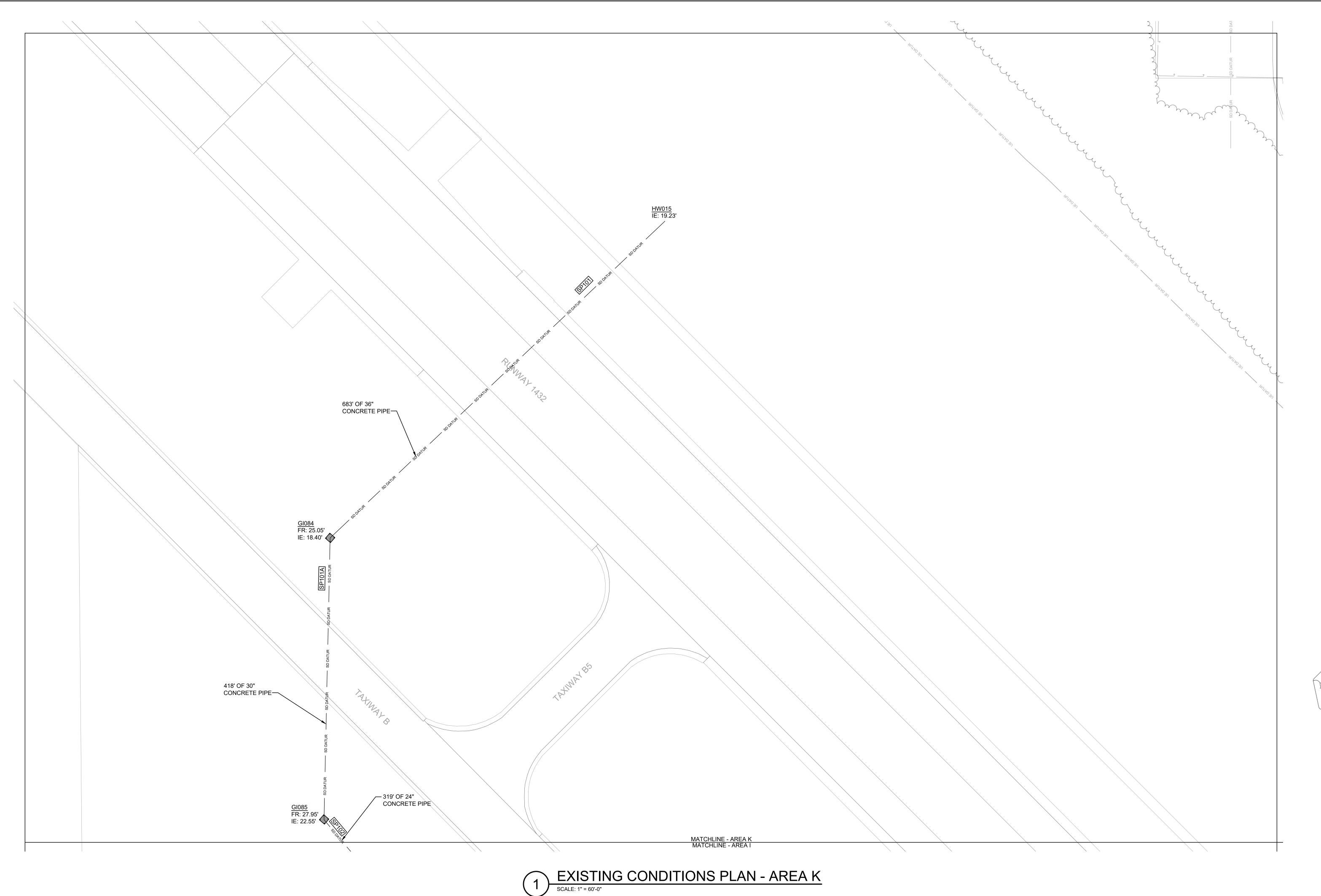




FIRE DEPARTMENT SATISFACTORY TO DATE	D. FARLEY/C. MOORING  SUPERVISOR		AIRFIELD STORMWATER REPAIRS (BE						Л)
PHYSICAL SECURITY SATISFACTORY TO DATE				EXISTIN	IG COND	ITIONS PLAN	N - AREA	\ l	
SATISFACTORY TO DATE	S. THOMAS								
PUBLIC WORKS SUPERVISOR SATISFACTORY TO DATE	APPROVED DATE	S	F F	CODE IDENT. N	Ю.	NAVFAC DI	RAWING NO.		
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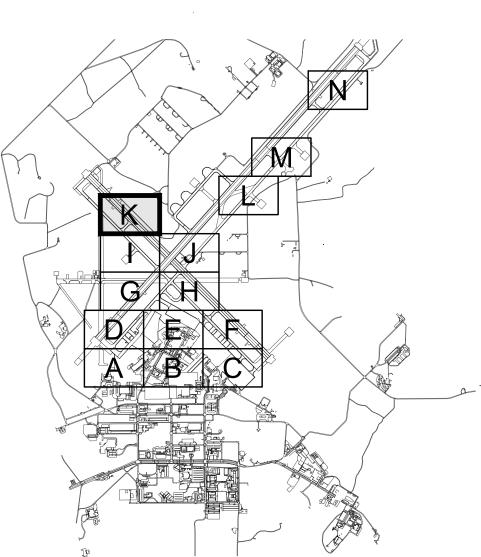




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**KEYPLAN** 



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SAFETY DEPARTMENT

SATISFACTORY TO DATE

FIRE DEPARTMENT

SATISFACTORY TO DATE

PHYSICAL SECURITY

SATISFACTORY TO DATE

PUBLIC WORKS SUPERVISOR

SATISFACTORY TO DATE

NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS P.W. DWG. NO.

ISSUE DATE: APR 27, 2020

DATE

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DRAWN BY

CHECKED BY

SUPERVISOR

APPROVED

S. THOMAS

PUBLIC WORKS OFFICER

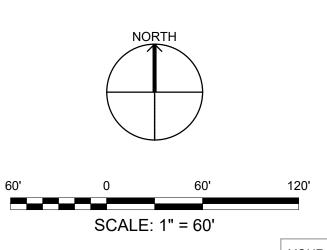


DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS AIR STATION J. CARROLL/E. MATYSIAK AIRFIELD STORMWATER REPAIRS (BE2004M) D. FARLEY/C. MOORING

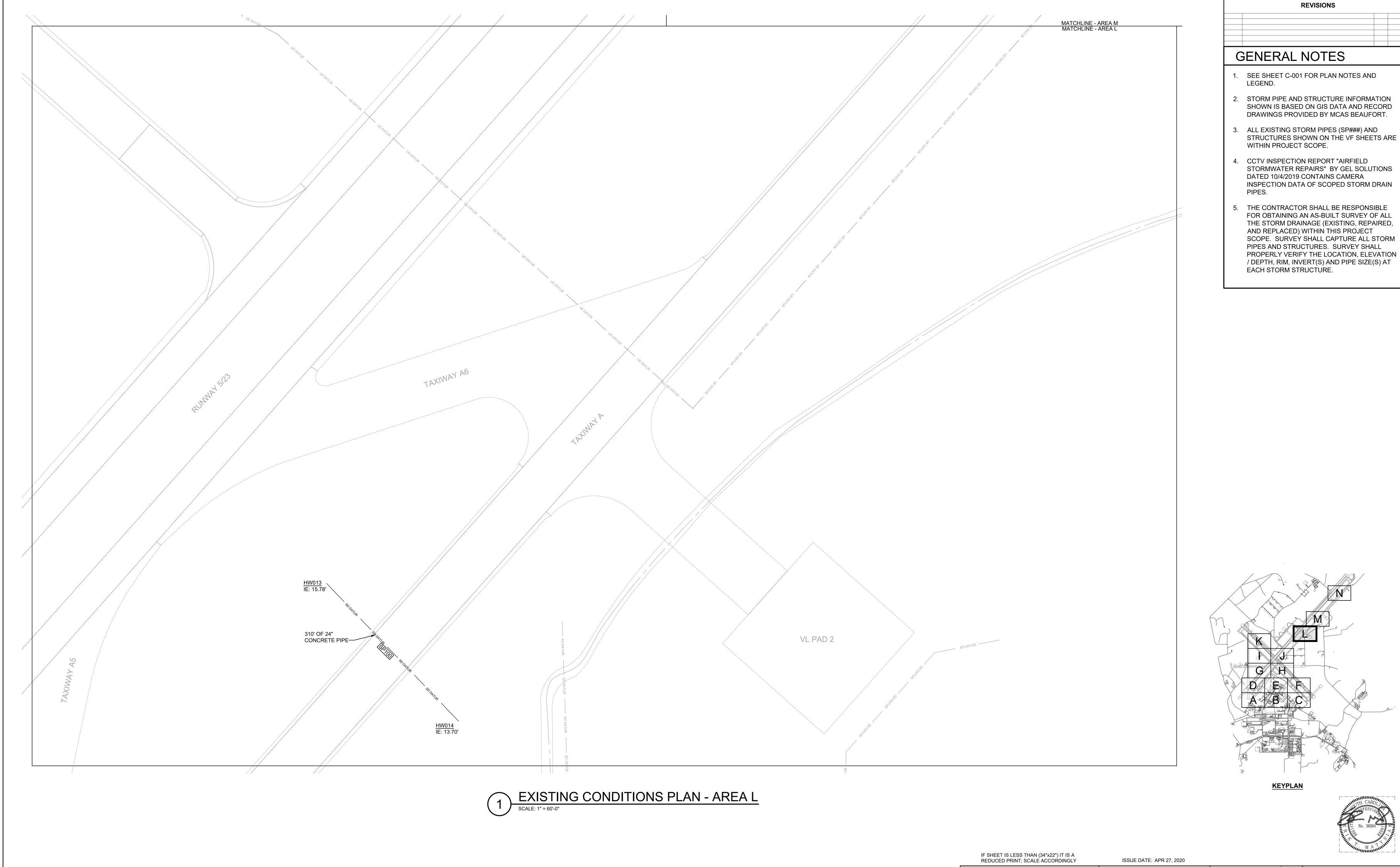
EXISTING CONDITIONS PLAN- AREA K

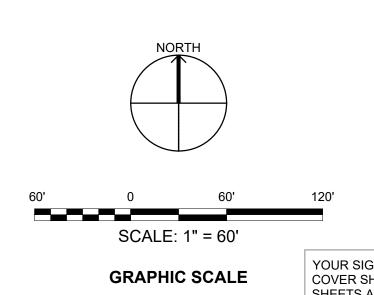
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HQMC PROJ. NO.: BE2004M | CONSTR. CONTR. NO.: N40085-18-D-0616 SCALE: AS NOTED MACC. T.O. # SHEET 15 OF 35



**GRAPHIC SCALE** 





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	NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS  SATISFACTORY TO DATE	P.W. DWG. NO. 27075		ENGIN Summerville, SC	ENG ARCI	
	SAFETY DEPARTMENT SATISFACTORY TO DATE	J. CARROLL/E. I	MATYSIAK	DEP	ARTMENT OF THE NAV	
	FIRE DEPARTMENT SATISFACTORY TO DATE	CHECKED BY  D. FARLEY/C. M	OORING	A	IRFIELD S	<u>Τ</u>
	PHYSICAL SECURITY SATISFACTORY TO DATE	S. THOMAS			EXISTI	N
	PUBLIC WORKS SUPERVISOR SATISFACTORY TO DATE	APPROVED	DATE	SIZE <b>F</b>	CODE IDENT.	N
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DEPARTMENT OF THE NAVY

MARINE CORPS AIR STATION

BEAUFORT, S.C.

AIRFIELD STORMWATER REPAIRS (BE2004M)

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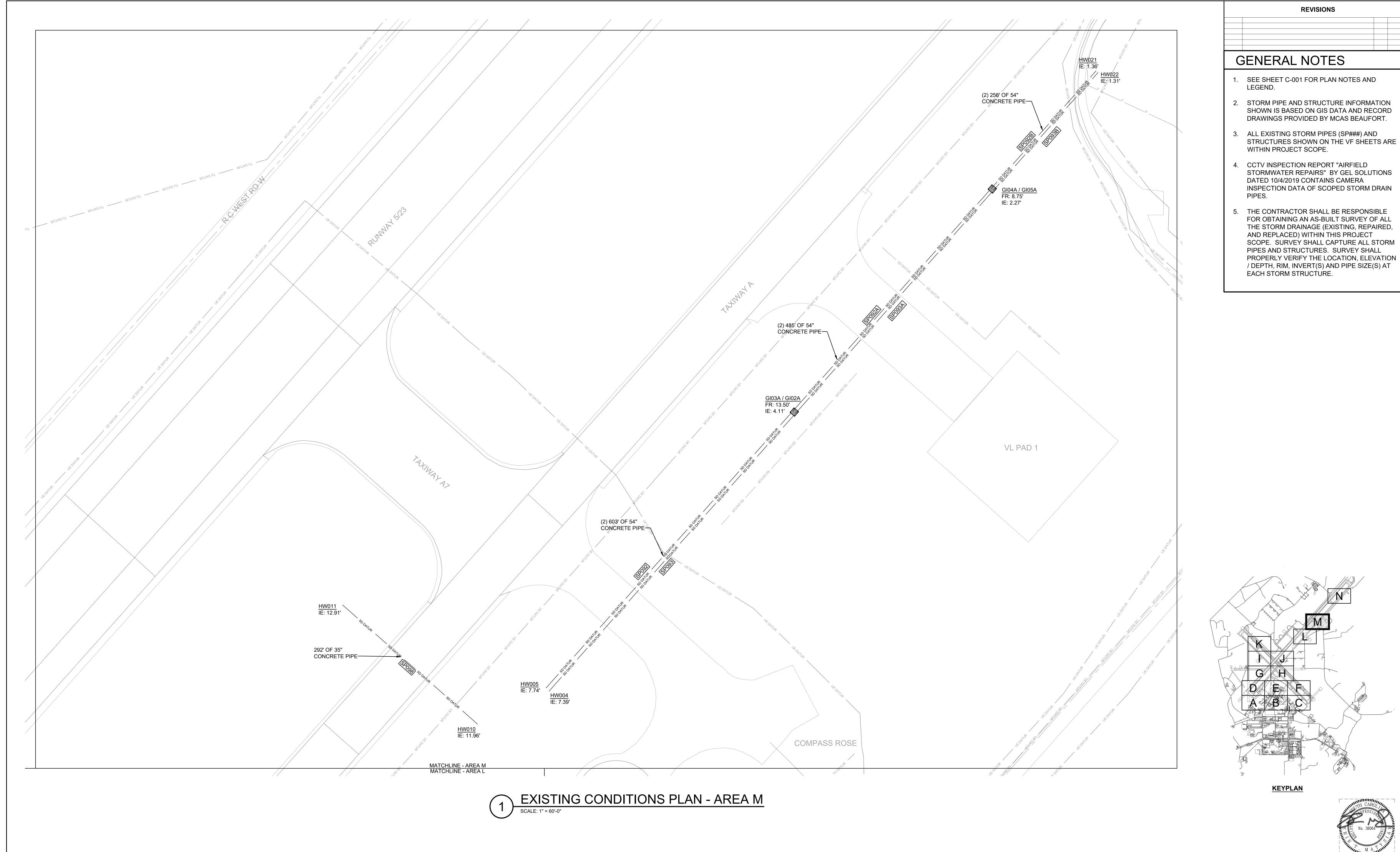
EXISTING CONDITIONS PLAN- AREA L

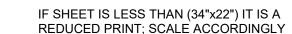
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NAVFAC DRAWING NO.

HQMC PROJ. NO.: BE2004M CONSTR. CONTR. NO.: N40085-18-D-0616

SCALE: AS NOTED MACC. T.O. # SHEET 16 OF 35





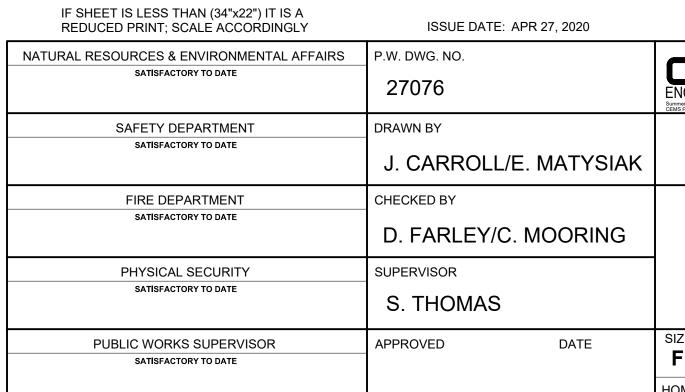
SCALE: 1" = 60'

**GRAPHIC SCALE** 

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SET OF DRAWINGS.

SHEETS ASSOCIATED WITH THIS



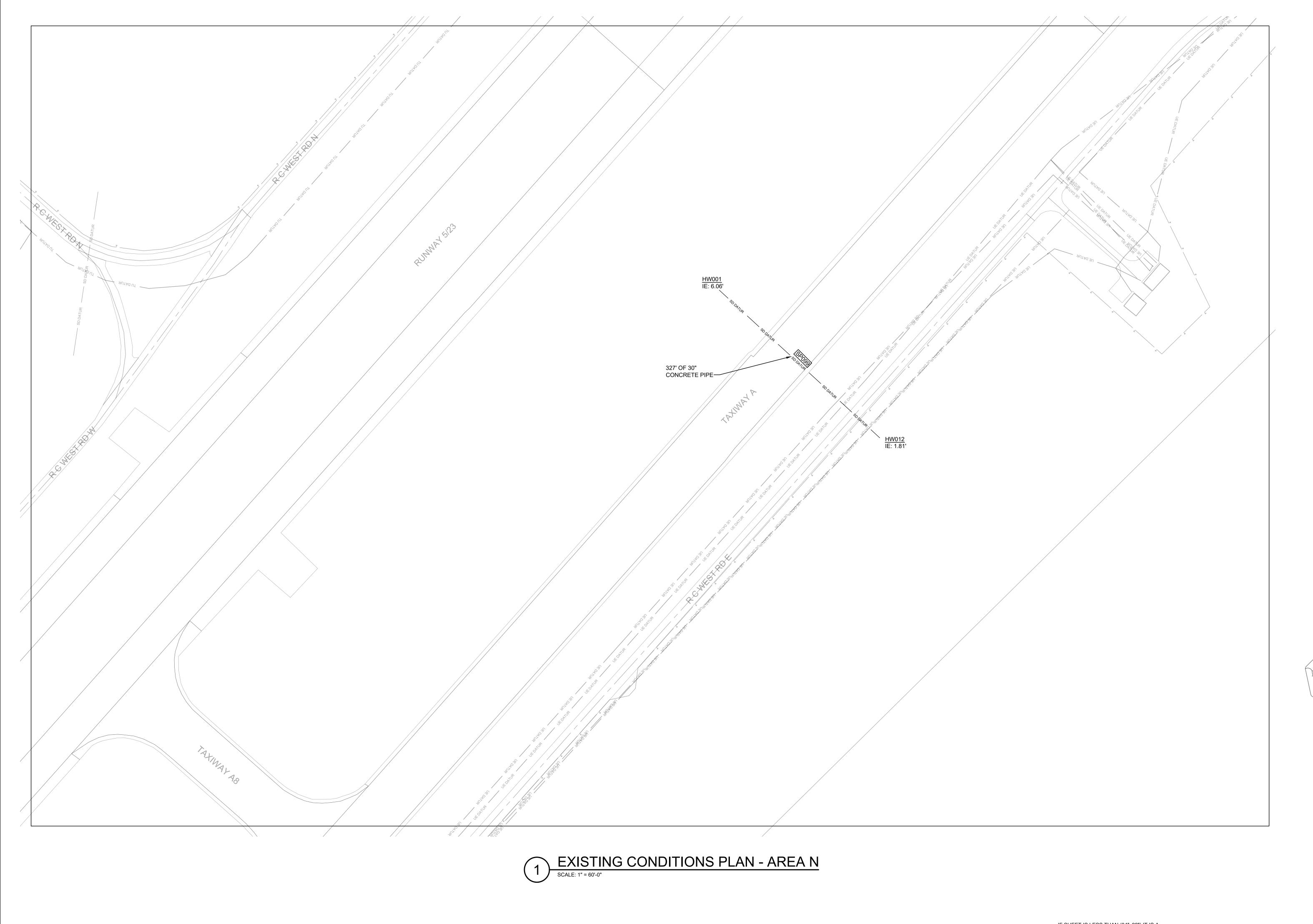
PUBLIC WORKS OFFICER

	ENGINEERING   ARCHITECTURE Summerville, SC CEMS Project Mo:18152F Project Manager: JASON BRAWLEY	VF114				
	DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND				
IAK	MARINE CO	RPS AIR STATION				
1/\(\)\	ВЕ	AUFORT, S.C.				
	AIRFIELD STORMWATER REPAIRS (BE2004M)					

EXISTING CONDITIONS PLAN- AREA M

**REVISIONS** 

Ē	SIZE <b>F</b>	CODE IDENT.	NO.		NAVFA	C DF	rawing n	Ο.			
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	SCALE	: AS NOTED	MAC	C.	T.O. #		SHEET	17	OF	35	
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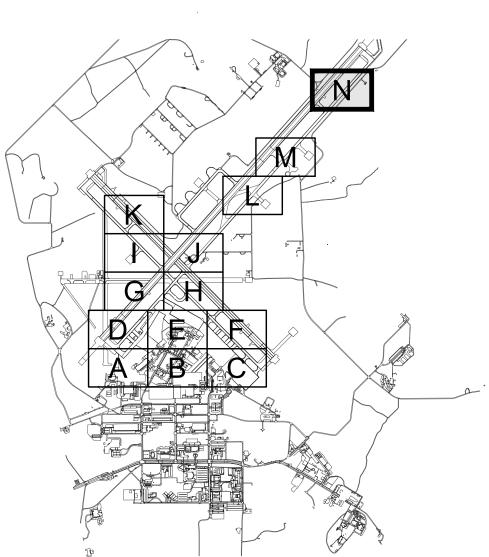


# **GENERAL NOTES**

- SEE SHEET C-001 FOR PLAN NOTES AND LEGEND.
- STORM PIPE AND STRUCTURE INFORMATION SHOWN IS BASED ON GIS DATA AND RECORD DRAWINGS PROVIDED BY MCAS BEAUFORT.

**REVISIONS** 

- 3. ALL EXISTING STORM PIPES (SP###) AND STRUCTURES SHOWN ON THE VF SHEETS ARE WITHIN PROJECT SCOPE.
- 4. CCTV INSPECTION REPORT "AIRFIELD STORMWATER REPAIRS" BY GEL SOLUTIONS DATED 10/4/2019 CONTAINS CAMERA INSPECTION DATA OF SCOPED STORM DRAIN PIPES.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AN AS-BUILT SURVEY OF ALL THE STORM DRAINAGE (EXISTING, REPAIRED, AND REPLACED) WITHIN THIS PROJECT SCOPE. SURVEY SHALL CAPTURE ALL STORM PIPES AND STRUCTURES. SURVEY SHALL PROPERLY VERIFY THE LOCATION, ELEVATION / DEPTH, RIM, INVERT(S) AND PIPE SIZE(S) AT EACH STORM STRUCTURE.







SCALE: 1" = 60'

GRAPHIC SCALE

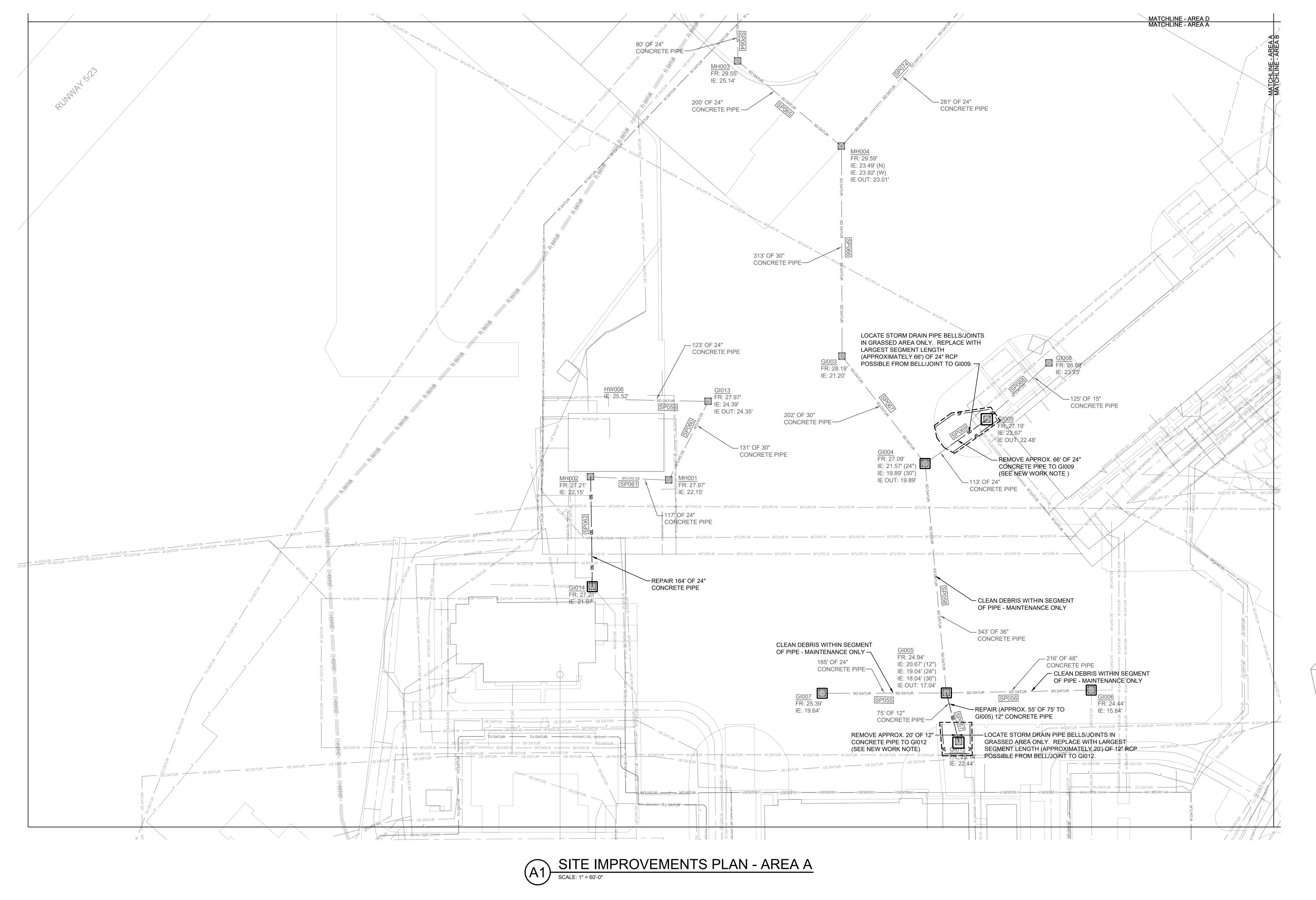
IF SHEET IS LESS THAN (34"x22") IT IS A		
REDUCED PRINT; SCALE ACCORDINGLY	ISSUE DATE: APR 27, 2020	
NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS	P.W. DWG. NO.	
SATISFACTORY TO DATE	27077	ENGIN Summerville, SC CEMS Project No
SAFETY DEPARTMENT	DRAWN BY	DEPA
SATISFACTORY TO DATE	J. CARROLL/E. MATYSIAK	
FIRE DEPARTMENT	CHECKED BY	Α
SATISFACTORY TO DATE	D. FARLEY/C. MOORING	
PHYSICAL SECURITY	SUPERVISOR	
SATISFACTORY TO DATE	S. THOMAS	
PUBLIC WORKS SUPERVISOR SATISFACTORY TO DATE	APPROVED DATE	SIZE <b>F</b>
		HQMC
	PUBLIC WORKS OFFICER	SCALE:

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	ENGINEERING   ARCHITECTURE Surmerville, SC CEMS Project No.:19152F Project Manager: JASON BRAWLEY	VF115
	DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMA
YSIAK		RPS AIR STATION EAUFORT, S.C.
	AIRFIELD STORMWA	TER REPAIRS (BE2004M
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	EXISTING COND	TIONS PLAN- AREA N

	EXISTING	CONDITIONS PLAN- AREA N
SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.

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	HQMC	PROJ. NO.: BE2	004M	CONSTR	. CONTR. NO.: N400	85-18-D-06	16		
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LEGEND.

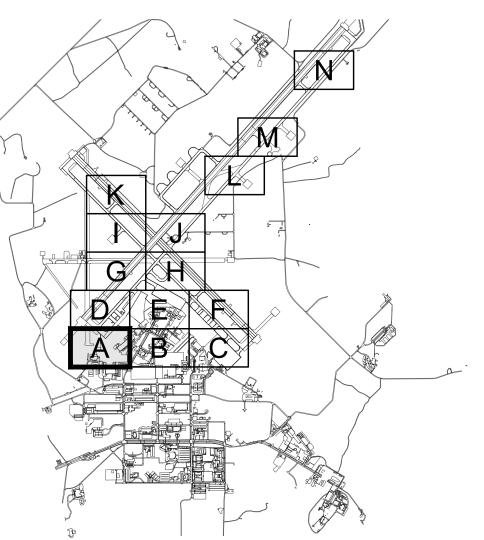
1. SEE SHEET C-001 FOR PLAN NOTES AND

**NEW WORK NOTES** 

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**REVISIONS** 

- 3. STORM PIPE REPLACEMENT IN UNPAVED AREA SHALL BE OPEN CUT TRENCH OPERATION PROVIDED IN ACCORDANCE WITH SPECIFICATION 33 40 00. PROVIDE INLET PROTECTION, SILT FENCE AND CONSTRUCTION FENCING AS DETAILED. BACKFILL AND COMPACT TRENCHES WITH SUITABLE SOIL AND STABILIZE PER HYDROSEED SCHEDULE (SEE C-501).
- 4. STORM PIPE REPAIR IN PAVED AREA SHALL BE COORDINATED IN ADVANCE OF TRENCHLESS EQUIPMENT STAGING CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH GOVERNMENT. ENSURE THAT ALL PROPER SAFETY MEASURES ARE FOLLOWED DURING WORK, INCLUDING PROPER PLACEMENT AND LOCATION OF FENCING AND LOW-PROFILE BARRICADES.
- 5. STORM PIPE REPAIR METHOD: TRENCHLESS CURED-IN-PLACE (CIPP) OPERATION IN ACCORDANCE WITH SPECIFICATION SECTION 33 01 30.72.
- 6. PERFORM STORM DRAIN CLEANING PRIOR TO REPAIR IN ACCORDANCE WITH DRAWING C-001 NOTES. PROVIDE TEMPORARY BYPASS PUMPING (IF NECESSARY) DURING REPAIR.
- 7. UPON COMPLETION OF EXISTING STORM DRAIN PIPE REPAIR AND/OR NEW PLACEMENT, CONTRACTOR SHALL PERFORM POST-TV INSPECTION) PER REQUIREMENTS OF SPECIFICATION SECTION 33 01 30.16.
- 8. SILT FENCING SHALL BE MAINTAINED IN PLACE AND IN GOOD CONDITION UNTIL GROUND COVER IS ESTABLISHED. SEDIMENT CAUSED BY CHANGED SOIL AND SURFACE CONDITIONS SHALL BE CONTAINED WITHIN THE DISTURBANCE LIMITS SHOWN CONTRACTOR SHALL ENSURE NO VEHICLE TRACKING ONTO SURROUNDING PAVEMENT. WASH WHEELS AND SWEEP AS NECESSARY TO PREVENT SEDIMENT FROM LEAVING DISTURBED AREAS.



KEYPLAN



SHEET 20 OF 35

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SAFETY DEPARTMENT

SATISFACTORY TO DATE

FIRE DEPARTMENT SATISFACTORY TO DATE

REDUCED PRINT; SCALE ACCORDINGLY ISSUE DATE: APR 27, 2020

NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS P.W. DWG. NO.

J. CARROLL/E. MATYSIAK

D. FARLEY/C. MOORING

27079

DRAWN BY

CHECKED BY



CI102

DEPARTMENT OF THE NAVY

NAVAL FACILITIES ENGINEERING COMMAND

MARINE CORPS AIR STATION

AIRFIELD STORMWATER REPAIRS (BE2004M)

SITE IMPROVEMENTS PLAN - AREA A

SIZE CODE IDENT. NO. NAVFAC DRAWING NO.

SCALE: AS NOTED MACC. T.O. #

HQMC PROJ. NO.: BE2004M | CONSTR. CONTR. NO.: N40085-18-D-0616

SCALE: 1" = 60'

GRAPHIC SCALE

NORTH

120'

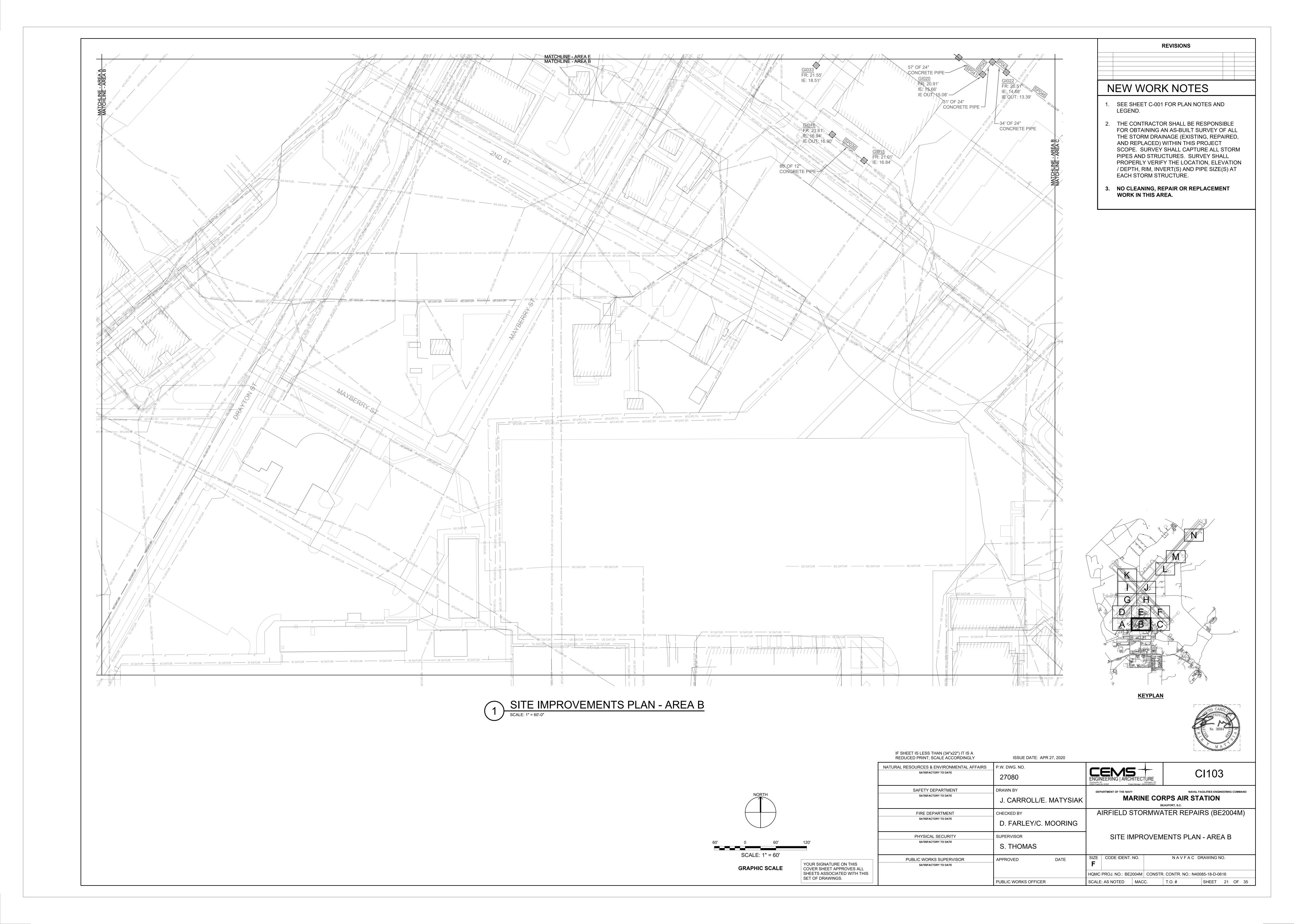
YOUR SIGNATURE ON TO COVER SHEET APPROXIMATION OF THE PROPERTY OF

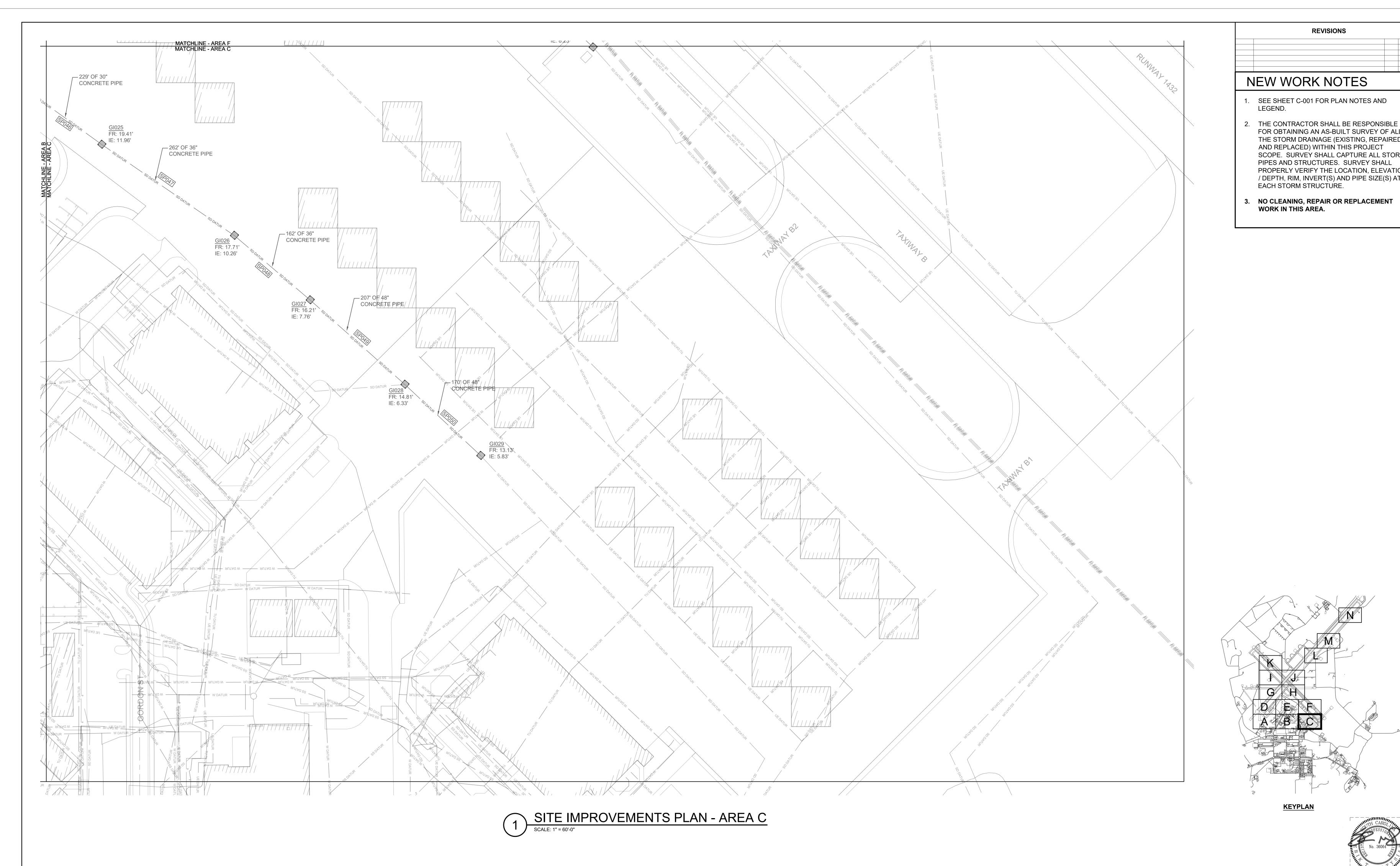
YOUR SIGNATURE ON THIS COVER SHEET APPROVES ALL SHEETS ASSOCIATED WITH THIS SET OF DRAWINGS. PHYSICAL SECURITY
SATISFACTORY TO DATE

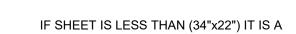
SUPERVISOR
S. THOMAS

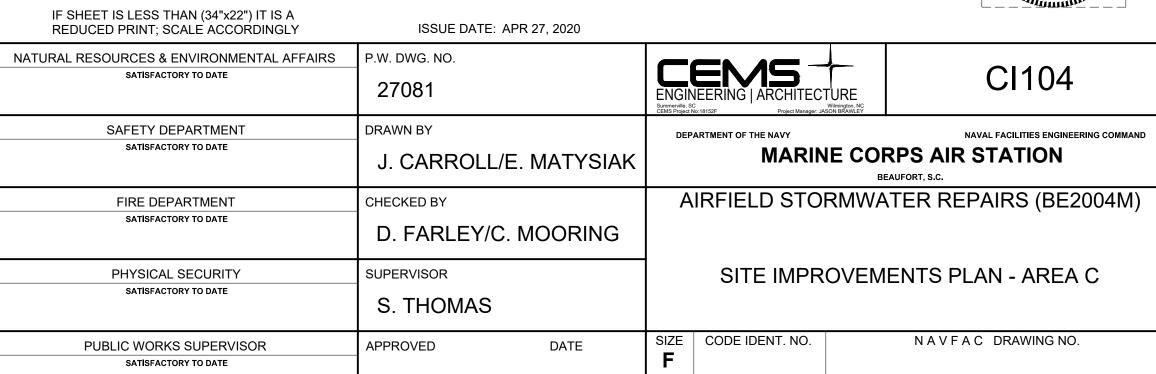
PUBLIC WORKS SUPERVISOR
SATISFACTORY TO DATE

PUBLIC WORKS OFFICER









PUBLIC WORKS OFFICER

**REVISIONS** 

FOR OBTAINING AN AS-BUILT SURVEY OF ALL THE STORM DRAINAGE (EXISTING, REPAIRED,

SCOPE. SURVEY SHALL CAPTURE ALL STORM

PROPERLY VERIFY THE LOCATION, ELEVATION / DEPTH, RIM, INVERT(S) AND PIPE SIZE(S) AT

AND REPLACED) WITHIN THIS PROJECT

EACH STORM STRUCTURE.

**KEYPLAN** 

HQMC PROJ. NO.: BE2004M | CONSTR. CONTR. NO.: N40085-18-D-0616

SHEET 22 OF 35

SCALE: AS NOTED MACC. T.O. #

WORK IN THIS AREA.

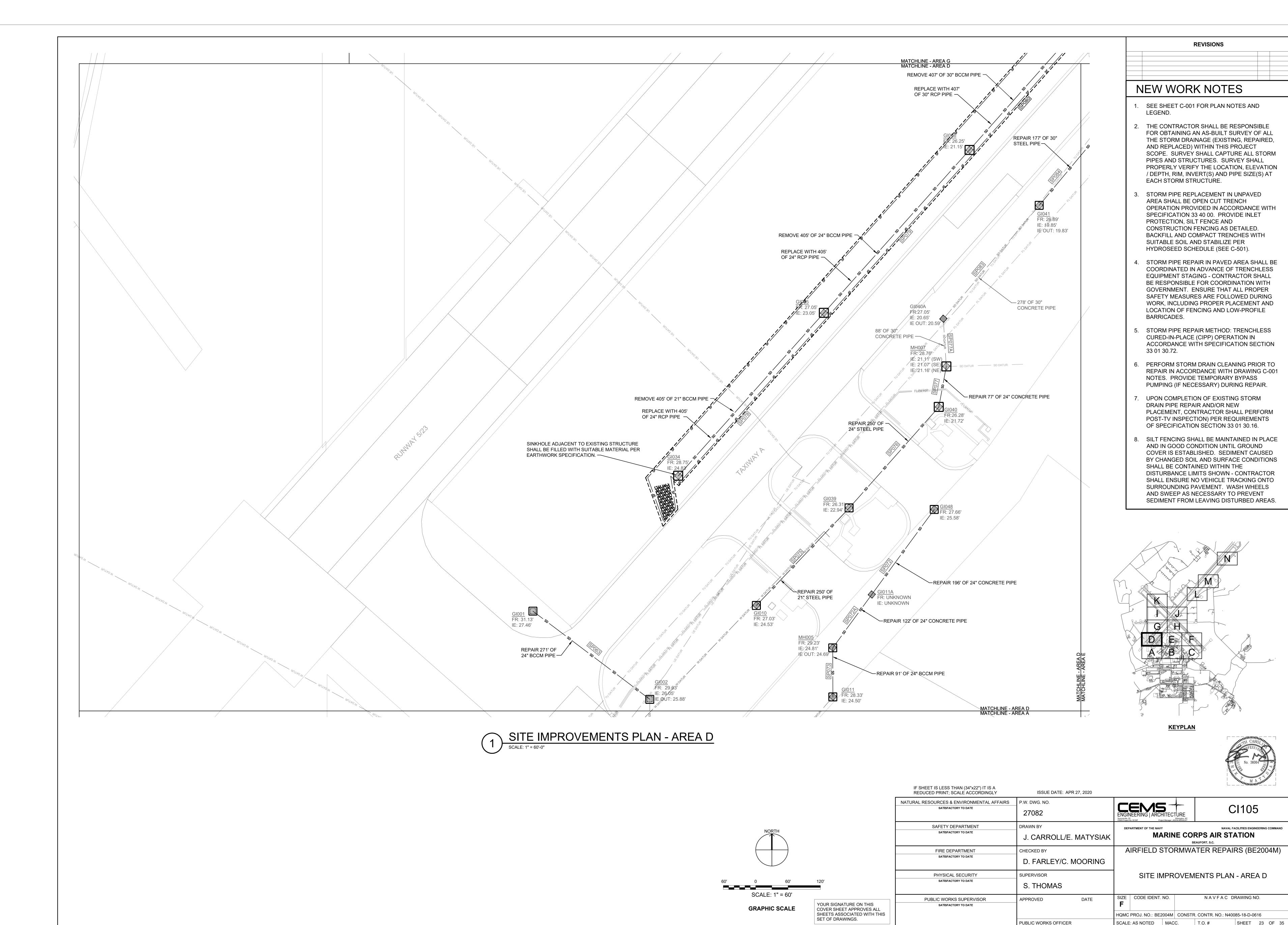
PIPES AND STRUCTURES. SURVEY SHALL

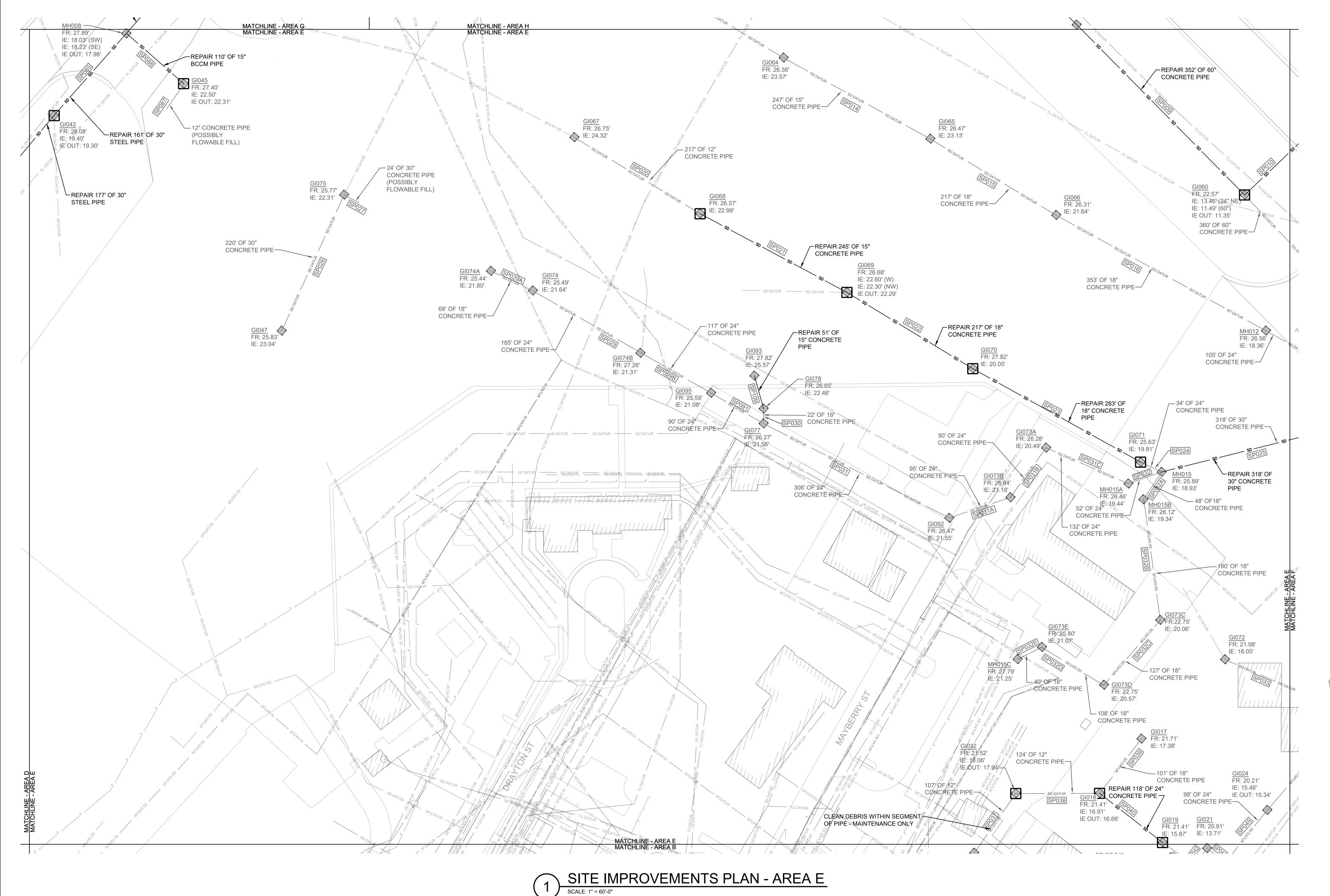
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SET OF D	RAWING	S	

SCALE: 1" = 60'

**GRAPHIC SCALE** 

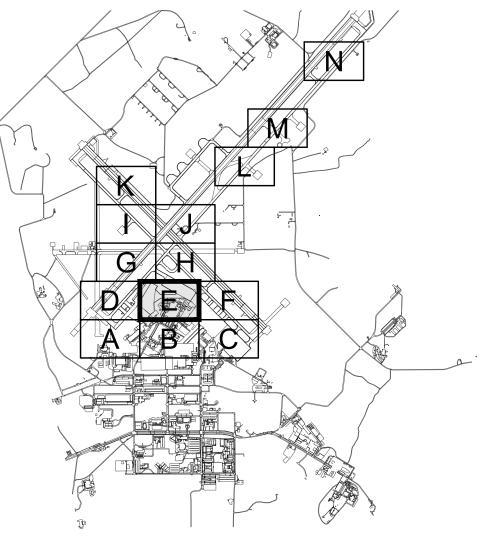




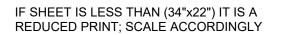
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**KEYPLAN** 



SATISFACTORY TO DATE

SAFETY DEPARTMENT

SATISFACTORY TO DATE

FIRE DEPARTMENT

SATISFACTORY TO DATE

PHYSICAL SECURITY

SATISFACTORY TO DATE

PUBLIC WORKS SUPERVISOR

SATISFACTORY TO DATE

ISSUE DATE: APR 27, 2020 NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS P.W. DWG. NO.

D. FARLEY/C. MOORING

DATE

27083

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CHECKED BY

SUPERVISOR

APPROVED

S. THOMAS

PUBLIC WORKS OFFICER



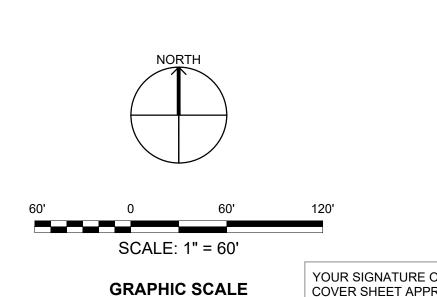
NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS AIR STATION

SITE IMPROVEMENTS PLAN - AREA E

AIRFIELD STORMWATER REPAIRS (BE2004M)

SIZE CODE IDENT. NO. NAVFAC DRAWING NO.

HQMC PROJ. NO.: BE2004M | CONSTR. CONTR. NO.: N40085-18-D-0616 SCALE: AS NOTED MACC. T.O. # SHEET 24 OF 35





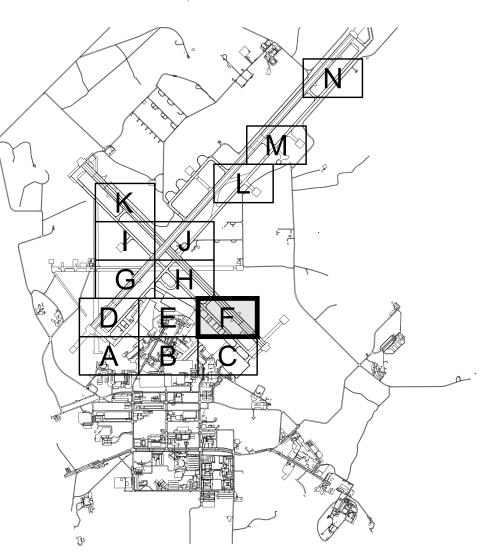
1. SEE SHEET C-001 FOR PLAN NOTES AND

LEGEND.

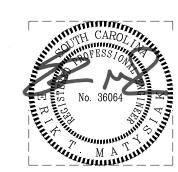
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**REVISIONS** 

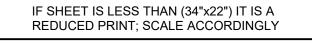
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**KEYPLAN** 



SITE IMPROVEMENTS PLAN - AREA F
SCALE: 1" = 60'-0"



SATISFACTORY TO DATE

SAFETY DEPARTMENT

FIRE DEPARTMENT SATISFACTORY TO DATE

PHYSICAL SECURITY

SATISFACTORY TO DATE

PUBLIC WORKS SUPERVISOR

SATISFACTORY TO DATE

SATISFACTORY TO DATE

ISSUE DATE: APR 27, 2020 NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS P.W. DWG. NO. 27084

J. CARROLL/E. MATYSIAK

D. FARLEY/C. MOORING

DATE

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CHECKED BY

SUPERVISOR

APPROVED

S. THOMAS

PUBLIC WORKS OFFICER



NAVAL FACILITIES ENGINEERING COMMAND

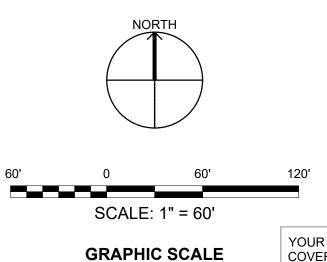
SHEET 25 OF 35

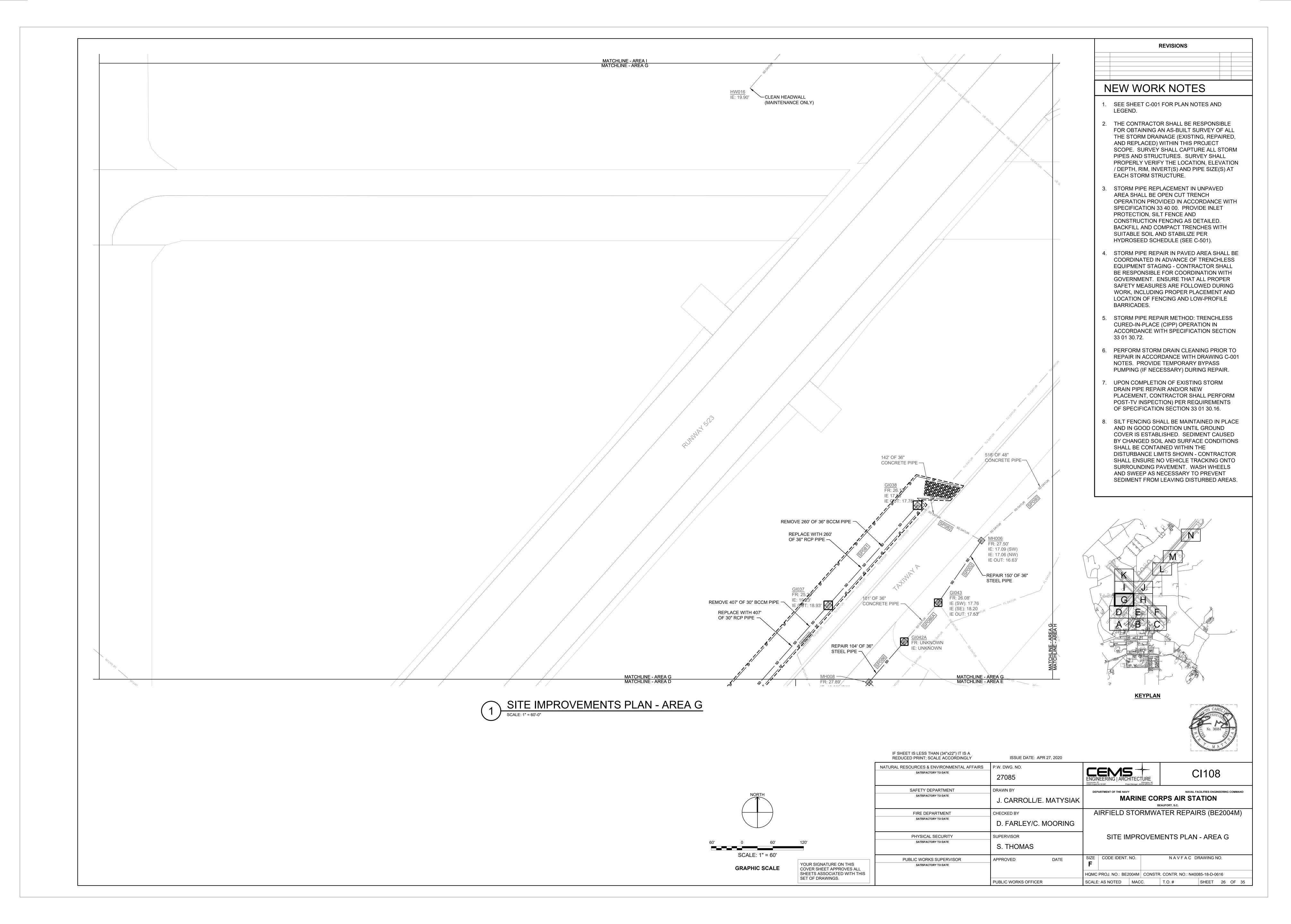
DEPARTMENT OF THE NAVY MARINE CORPS AIR STATION AIRFIELD STORMWATER REPAIRS (BE2004M)

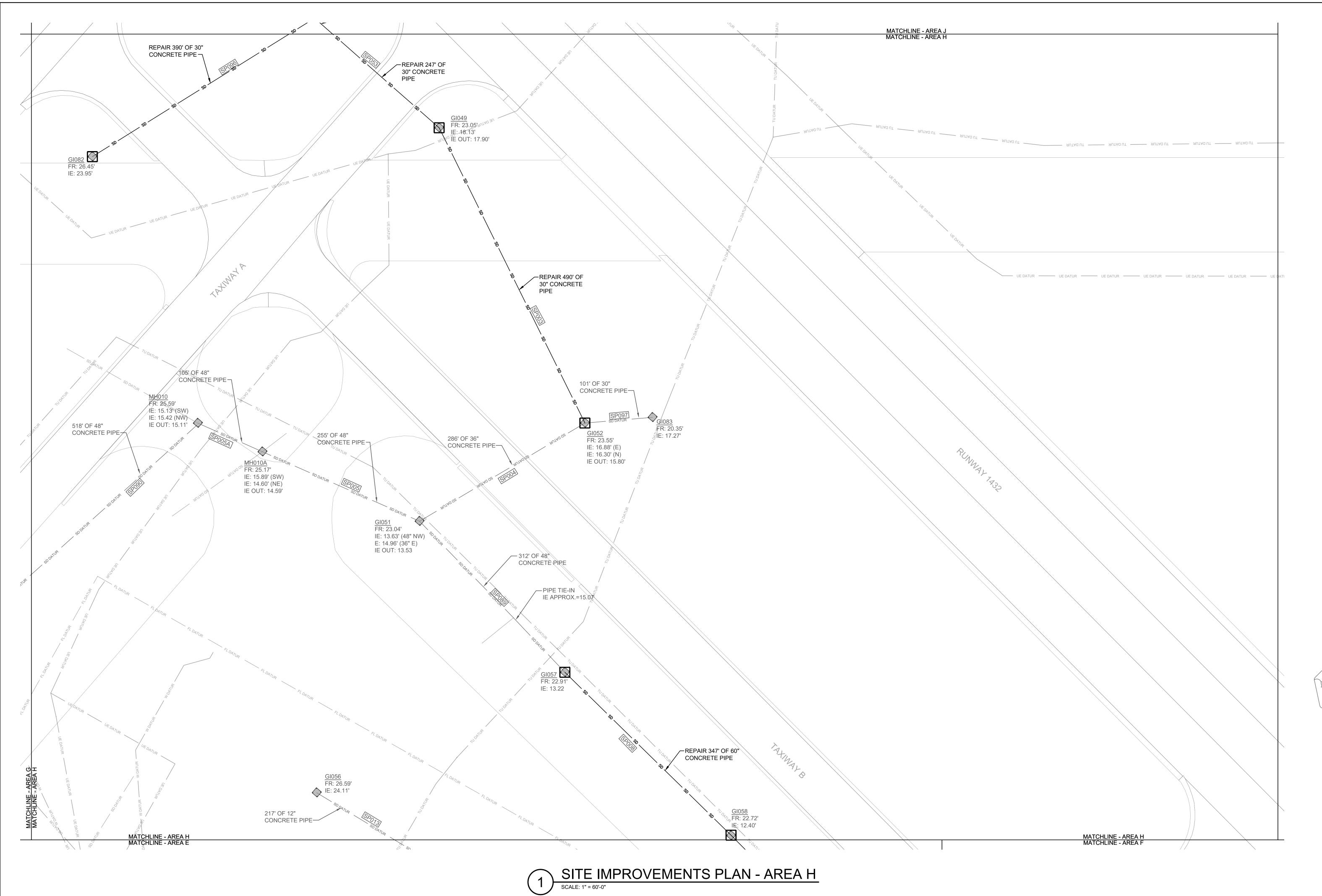
SITE IMPROVEMENTS PLAN - AREA F

SIZE CODE IDENT. NO. NAVFAC DRAWING NO. HQMC PROJ. NO.: BE2004M | CONSTR. CONTR. NO.: N40085-18-D-0616

SCALE: AS NOTED MACC. T.O. #



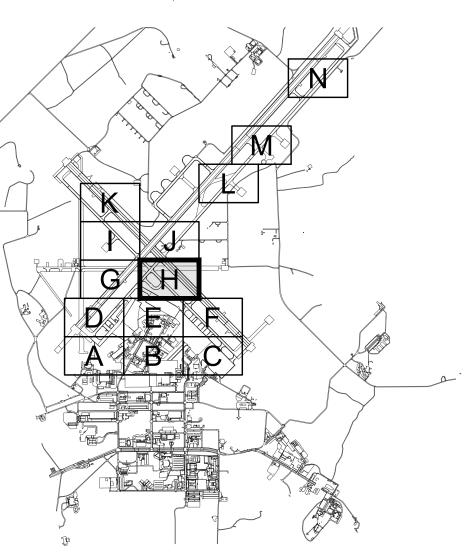




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**KEYPLAN** 



SHEET 27 OF 35

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SAFETY DEPARTMENT

FIRE DEPARTMENT SATISFACTORY TO DATE

PHYSICAL SECURITY

SATISFACTORY TO DATE

PUBLIC WORKS SUPERVISOR

SATISFACTORY TO DATE

SATISFACTORY TO DATE

NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS P.W. DWG. NO.

ISSUE DATE: APR 27, 2020

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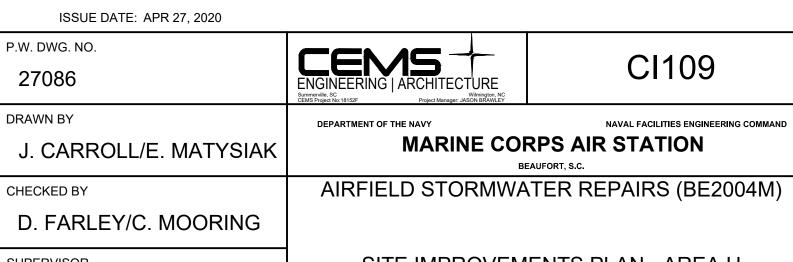
CHECKED BY

SUPERVISOR

APPROVED

S. THOMAS

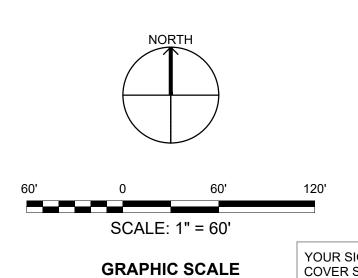
PUBLIC WORKS OFFICER

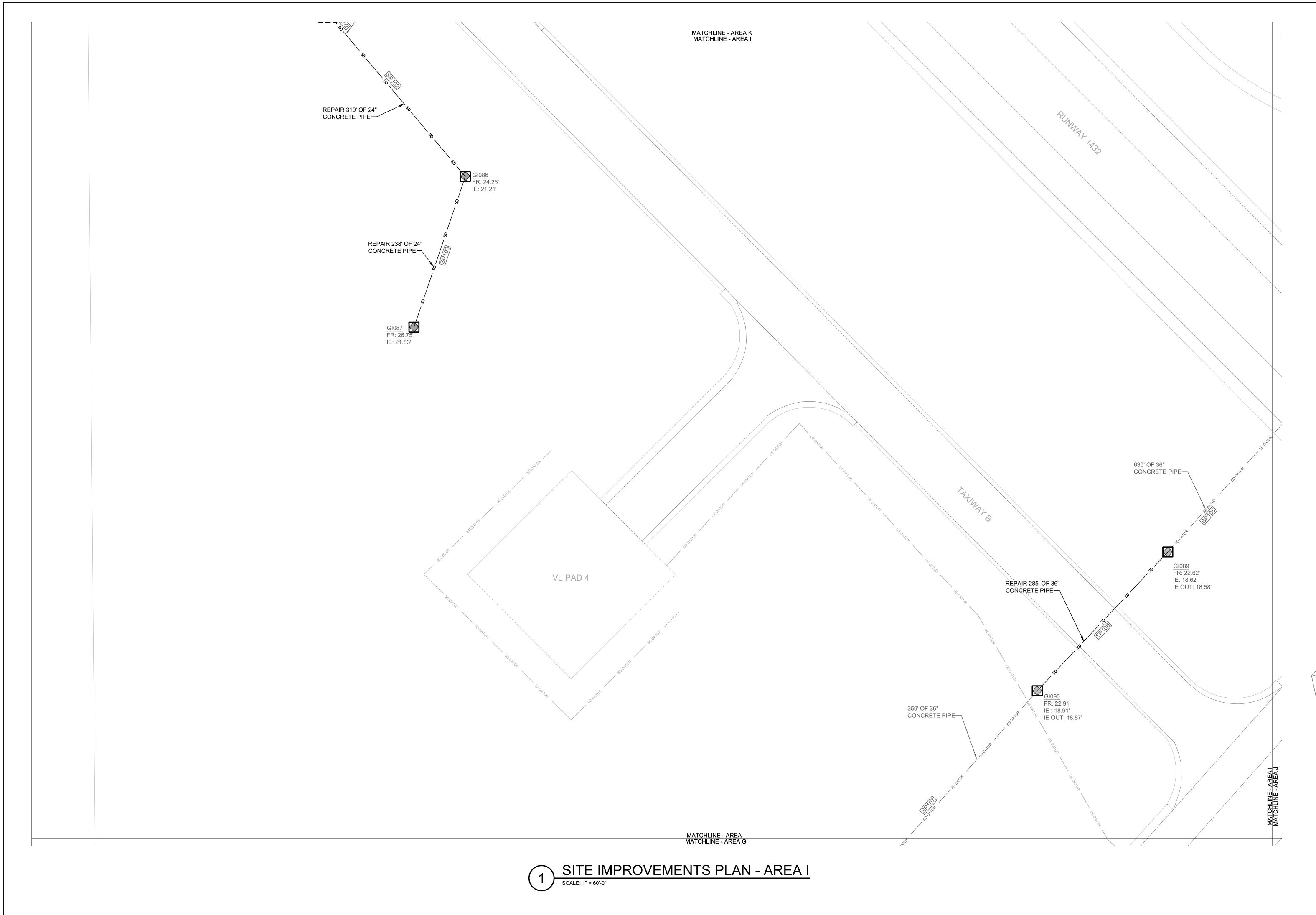


SCALE: AS NOTED MACC. T.O. #

SITE IMPROVEMENTS PLAN - AREA H

SIZE CODE IDENT. NO. NAVFAC DRAWING NO. DATE HQMC PROJ. NO.: BE2004M | CONSTR. CONTR. NO.: N40085-18-D-0616

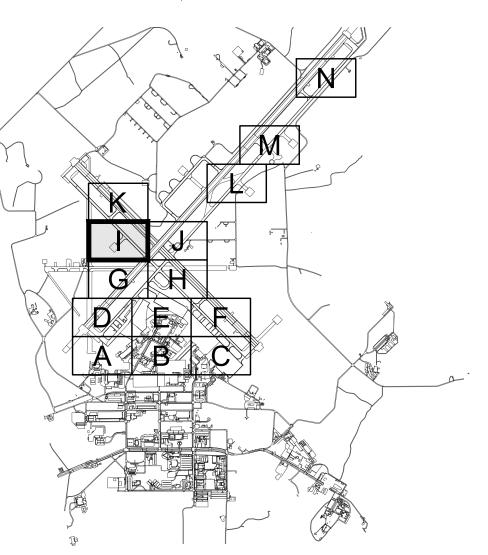




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**REVISIONS** 

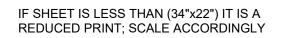
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**KEYPLAN** 



SHEET 28 OF 35



SATISFACTORY TO DATE

FIRE DEPARTMENT SATISFACTORY TO DATE

PHYSICAL SECURITY

REDUCED PRINT; SCALE ACCORDINGLY	ISSUE DATE: APR 27, 2020	
NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS  SATISFACTORY TO DATE	P.W. DWG. NO. 27087	ENGINEERING   ARCHITECTURE Summerville, SC CEMS Project No.18152F Project Manager: JASON BRAWLEY
SAFETY DEPARTMENT	DRAWN BY	DEPARTMENT OF THE NAVY

CHECKED BY

SUPERVISOR

PUBLIC WORKS OFFICER

CI110 NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS AIR STATION

J. CARROLL/E. MATYSIAK AIRFIELD STORMWATER REPAIRS (BE2004M)

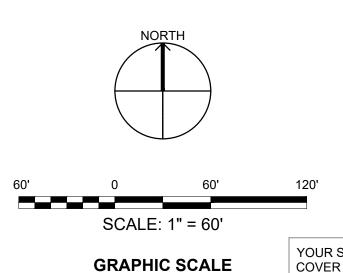
DEPARTMENT OF THE NAVY

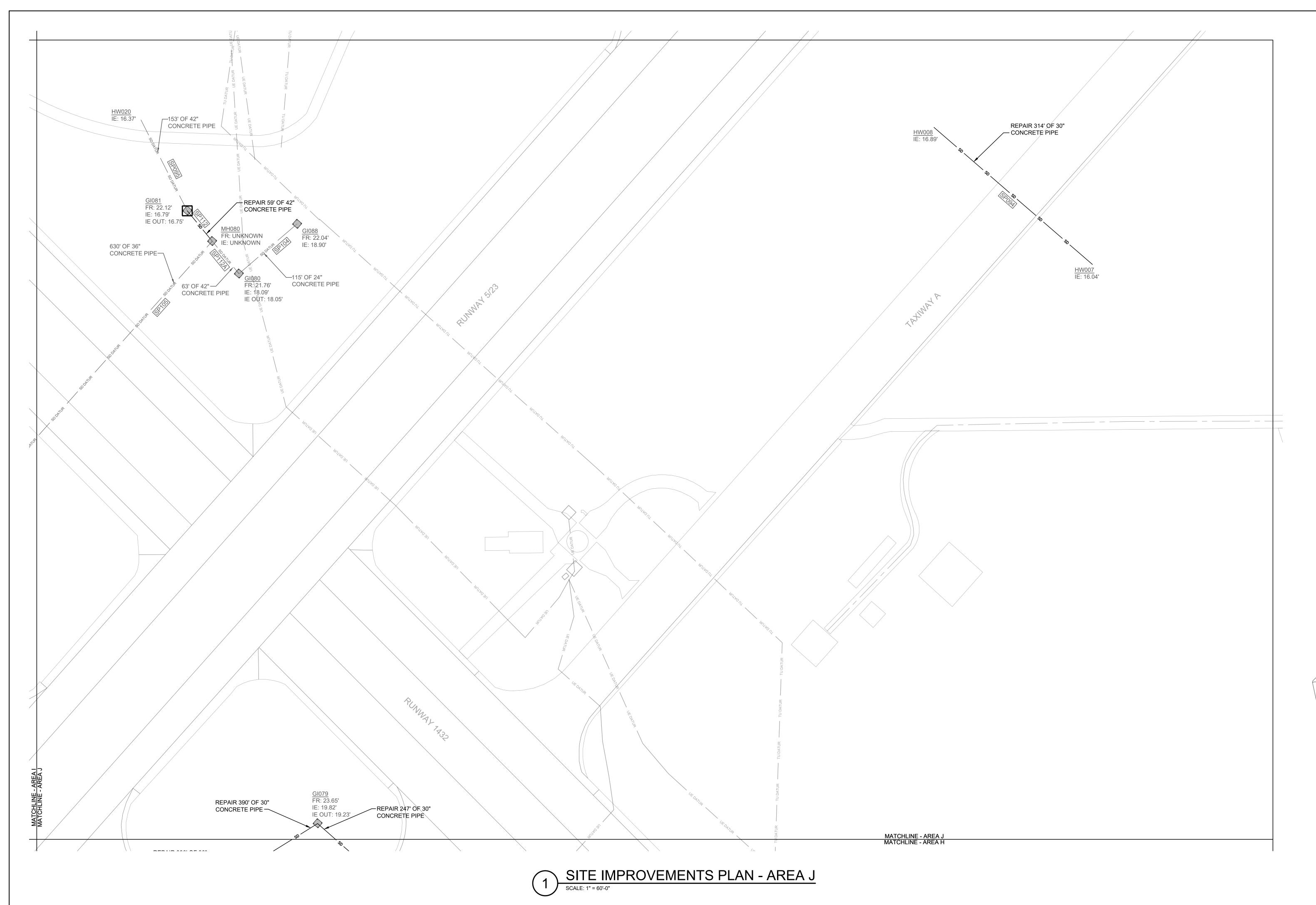
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SITE IMPROVEMENTS PLAN - AREA I

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PUBLIC WORKS SUPERVISOR SATISFACTORY TO DATE	APPROVED	DATE	SIZE <b>F</b>	CODE IDENT. NO.	NAVFAC DRAWING NO.
			HQMC	PROJ. NO.: BE2004M	CONSTR. CONTR. NO.: N40085-18-D-0616

D. FARLEY/C. MOORING

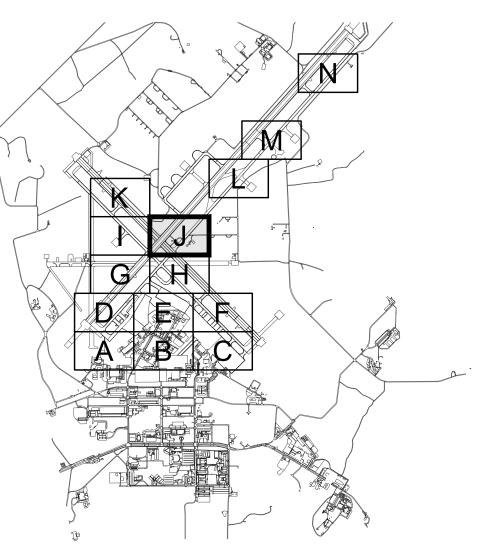




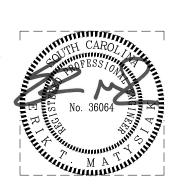
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**REVISIONS** 

- 3. STORM PIPE REPLACEMENT IN UNPAVED AREA SHALL BE OPEN CUT TRENCH OPERATION PROVIDED IN ACCORDANCE WITH SPECIFICATION 33 40 00. PROVIDE INLET PROTECTION, SILT FENCE AND CONSTRUCTION FENCING AS DETAILED. BACKFILL AND COMPACT TRENCHES WITH SUITABLE SOIL AND STABILIZE PER HYDROSEED SCHEDULE (SEE C-501).
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**KEYPLAN** 

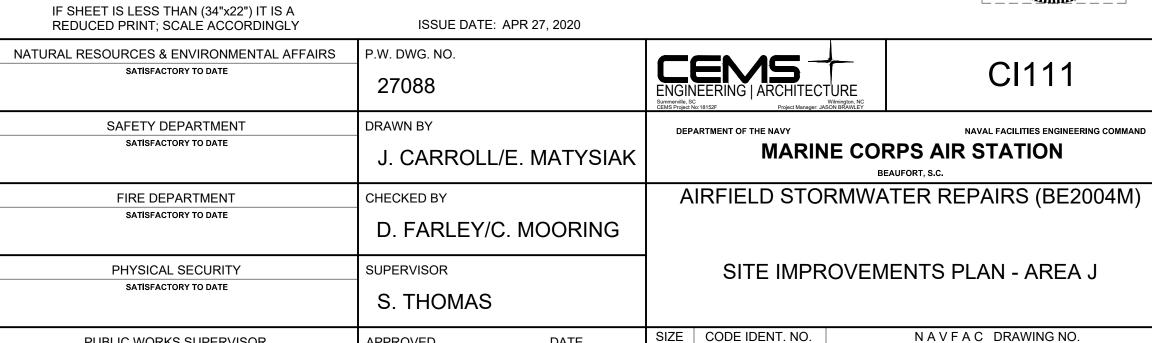


SHEET 29 OF 35

SCALE: 1" = 60'

**GRAPHIC SCALE** 

SET OF DRAWINGS.



CI111

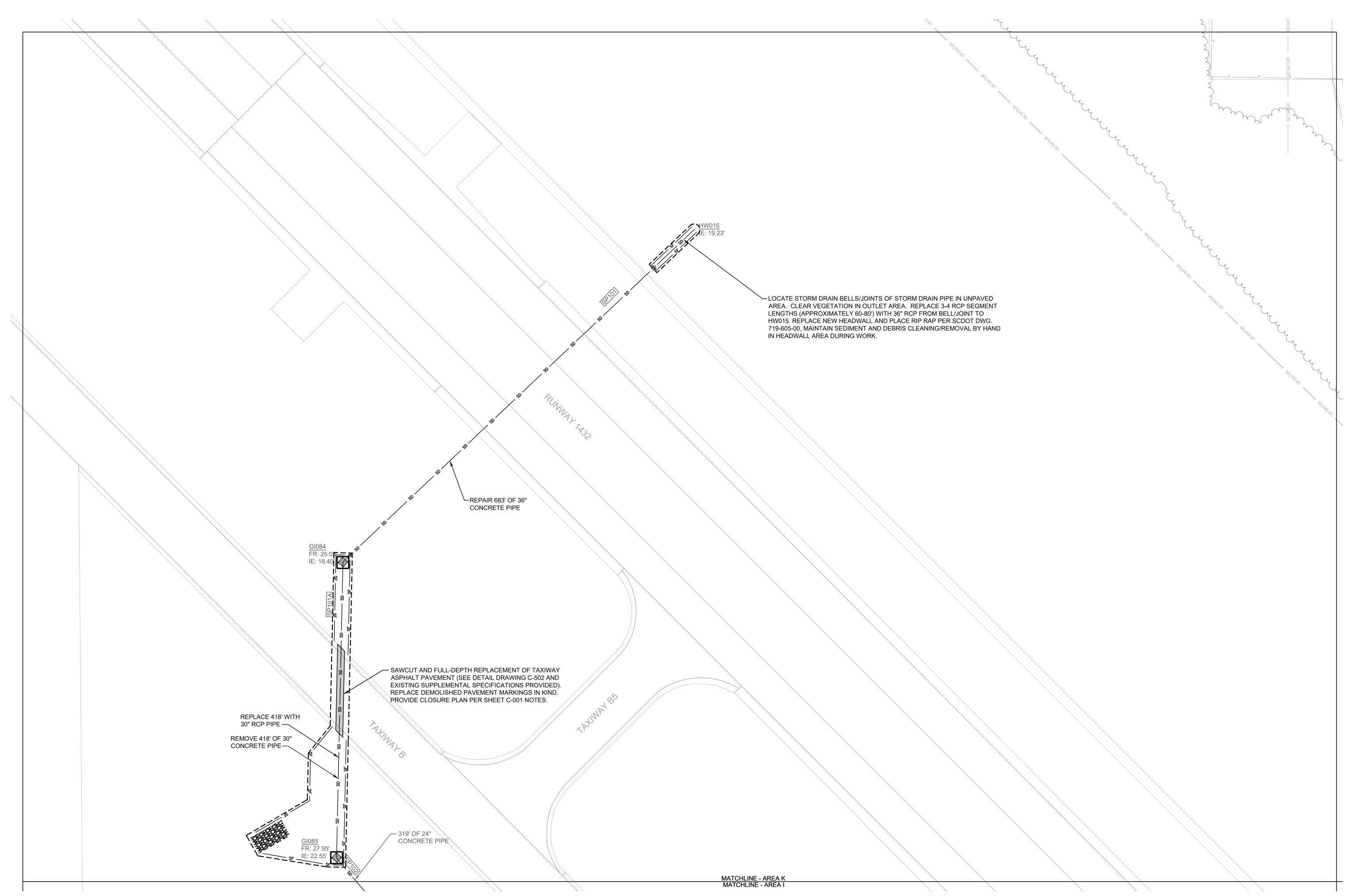
NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS AIR STATION

SIZE | CODE IDENT. NO. NAVFAC DRAWING NO.

SCALE: AS NOTED MACC. T.O. #

SITE IMPROVEMENTS PLAN - AREA J PUBLIC WORKS SUPERVISOR APPROVED DATE YOUR SIGNATURE ON THIS COVER SHEET APPROVES ALL SATISFACTORY TO DATE SHEETS ASSOCIATED WITH THIS HQMC PROJ. NO.: BE2004M | CONSTR. CONTR. NO.: N40085-18-D-0616

PUBLIC WORKS OFFICER



1. SEE SHEET C-001 FOR PLAN NOTES AND

EACH STORM STRUCTURE.

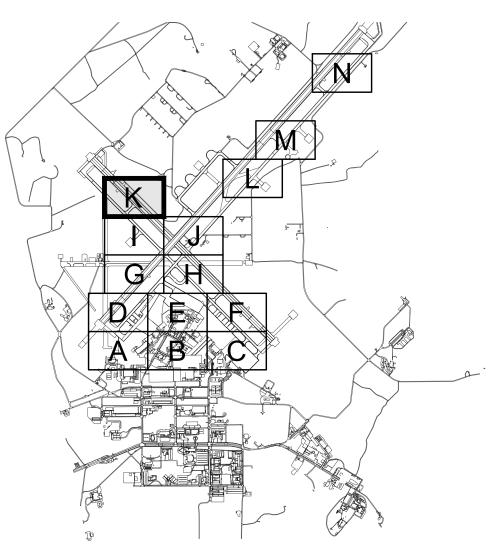
LEGEND.

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**KEYPLAN** 



SHEET 30 OF 35

SITE IMPROVEMENTS PLAN - AREA K
SCALE: 1" = 60'-0"

IF SHEET IS LESS THAN (34"x22") IT IS A REDUCED PRINT; SCALE ACCORDINGLY

SATISFACTORY TO DATE

SAFETY DEPARTMENT

FIRE DEPARTMENT SATISFACTORY TO DATE

PHYSICAL SECURITY

SATISFACTORY TO DATE

PUBLIC WORKS SUPERVISOR

SATISFACTORY TO DATE

SATISFACTORY TO DATE

NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS P.W. DWG. NO.

ISSUE DATE: APR 27, 2020

27089

DRAWN BY

CHECKED BY

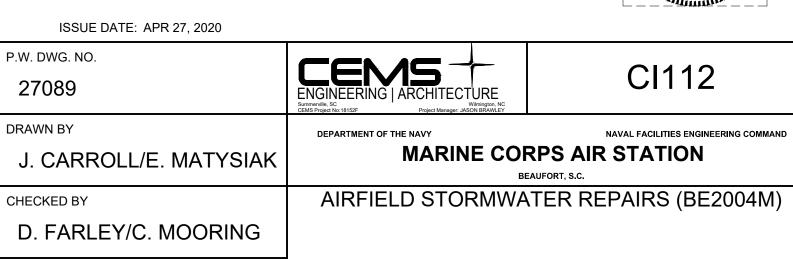
SUPERVISOR

APPROVED

S. THOMAS

PUBLIC WORKS OFFICER

DATE

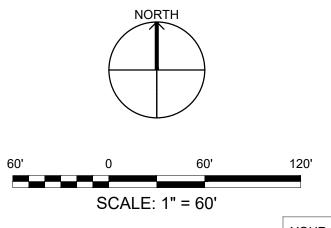


SITE IMPROVEMENTS PLAN- AREA K

SIZE | CODE IDENT. NO. NAVFAC DRAWING NO.

SCALE: AS NOTED MACC. T.O. #

HQMC PROJ. NO.: BE2004M | CONSTR. CONTR. NO.: N40085-18-D-0616



**GRAPHIC SCALE** 

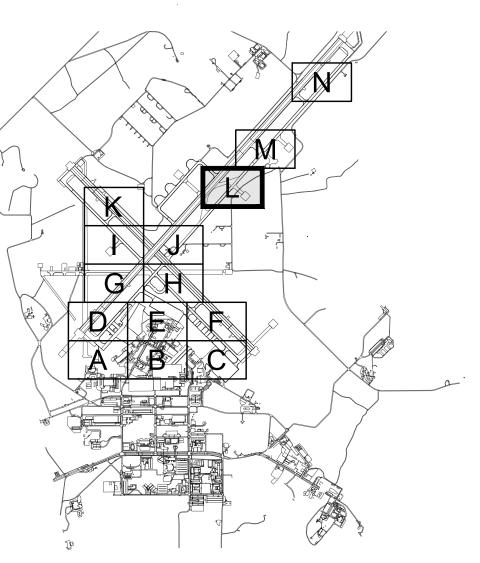


LEGEND.

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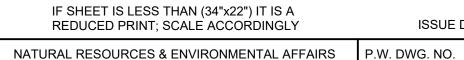
**KEYPLAN** 



SHEET 31 OF 35

SITE IMPROVEMENTS PLAN - AREA L

SCALE: 1" = 60'-0"



SATISFACTORY TO DATE

SAFETY DEPARTMENT

SATISFACTORY TO DATE

FIRE DEPARTMENT SATISFACTORY TO DATE

PHYSICAL SECURITY

SATISFACTORY TO DATE

PUBLIC WORKS SUPERVISOR

SATISFACTORY TO DATE

ISSUE DATE: APR 27, 2020

J. CARROLL/E. MATYSIAK

D. FARLEY/C. MOORING

DATE

27090

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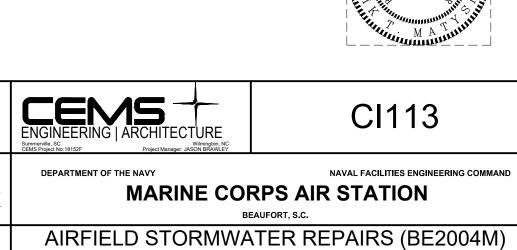
CHECKED BY

SUPERVISOR

APPROVED

S. THOMAS

PUBLIC WORKS OFFICER

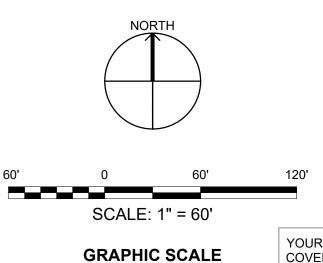


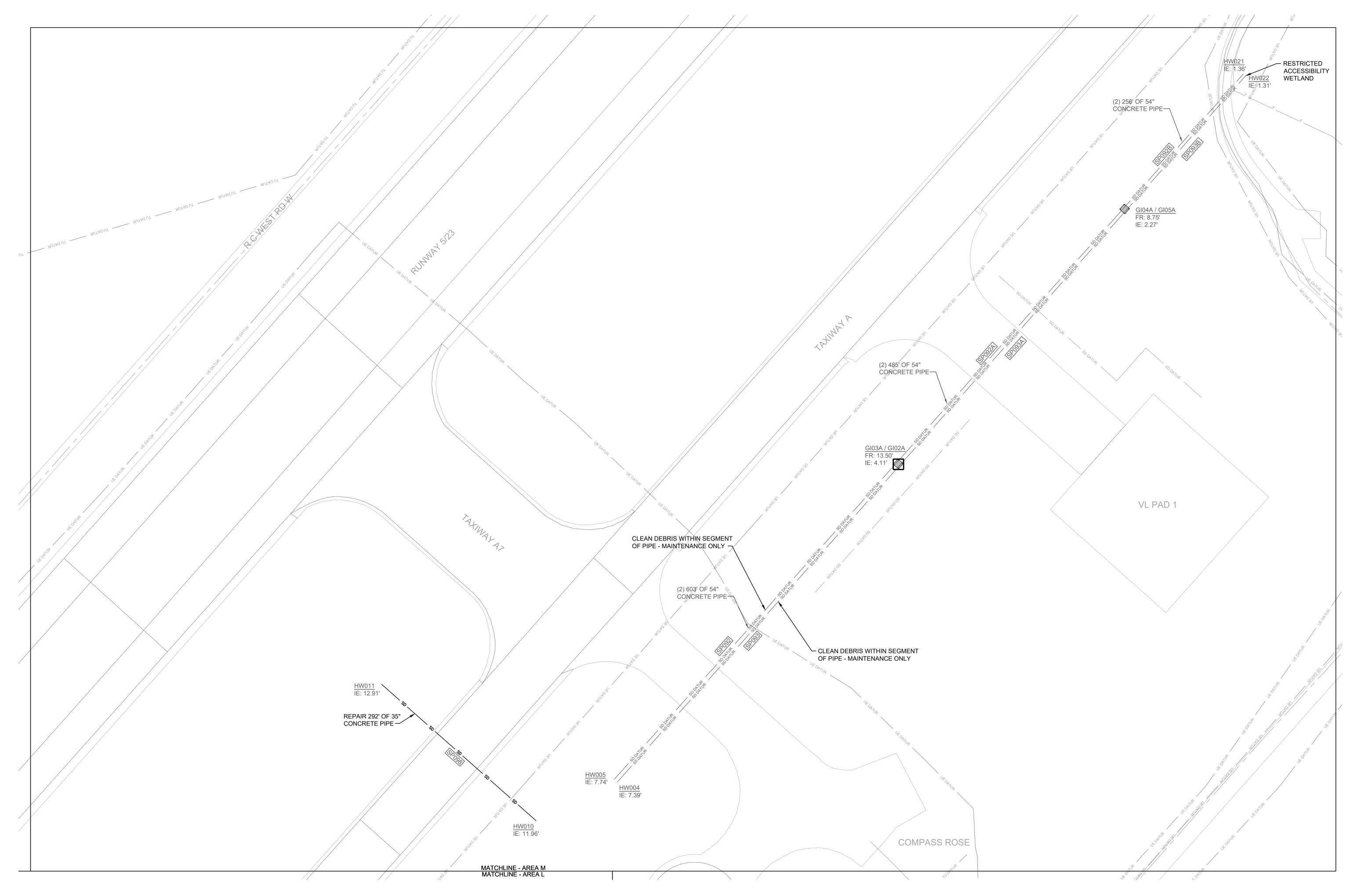
SITE IMPROVEMENTS PLAN- AREA L

SIZE CODE IDENT. NO. NAVFAC DRAWING NO.

HQMC PROJ. NO.: BE2004M CONSTR. CONTR. NO.: N40085-18-D-0616

SCALE: AS NOTED MACC. T.O. #

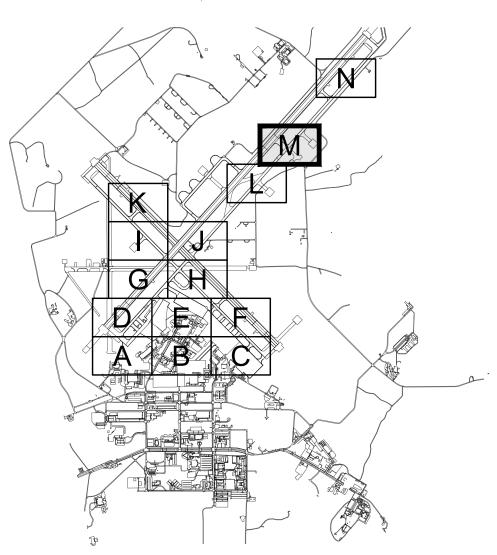




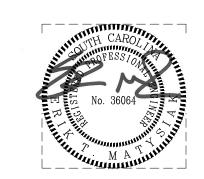
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**KEYPLAN** 



SITE IMPROVEMENTS PLAN - AREA M
SCALE: 1" = 60'-0"

IF SHEET IS LESS THAN (34"x22") IT IS A REDUCED PRINT; SCALE ACCORDINGLY

ISSUE DATE: APR 27, 2020 NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS P.W. DWG. NO. 27091 DRAWN BY SAFETY DEPARTMENT SATISFACTORY TO DATE J CARROLL/F MATYSIAK

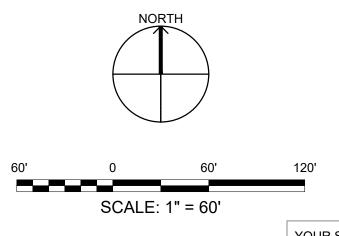
PUBLIC WORKS OFFICER

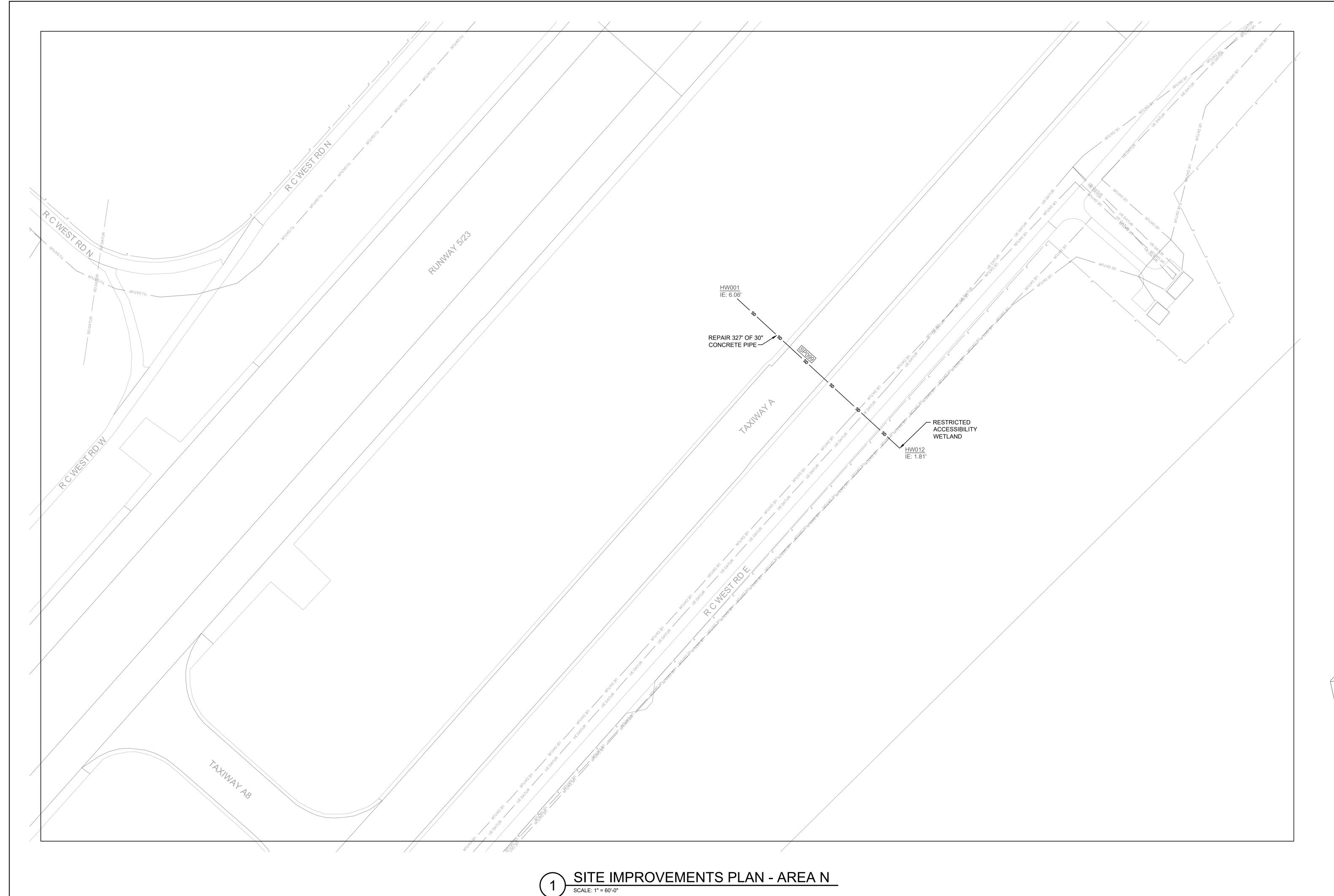
	3. GARROLLIE. MATTOIAR
FIRE DEPARTMENT SATISFACTORY TO DATE	D. FARLEY/C. MOORING
PHYSICAL SECURITY SATISFACTORY TO DATE	SUPERVISOR S. THOMAS
PUBLIC WORKS SUPERVISOR  SATISFACTORY TO DATE	APPROVED DATE

ENGINEERING | ARCHITECTURE DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS AIR STATION AIRFIELD STORMWATER REPAIRS (BE2004M)

SITE IMPROVEMENTS PLAN- AREA M

SIZE CODE IDENT. NO. NAVFAC DRAWING NO. HQMC PROJ. NO.: BE2004M | CONSTR. CONTR. NO.: N40085-18-D-0616 SCALE: AS NOTED MACC. T.O. # SHEET 32 OF 35

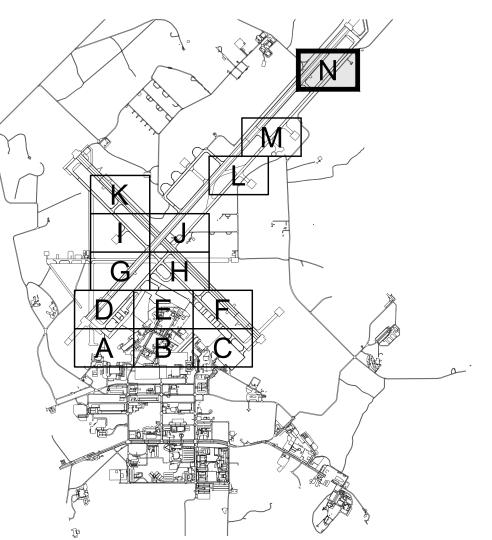




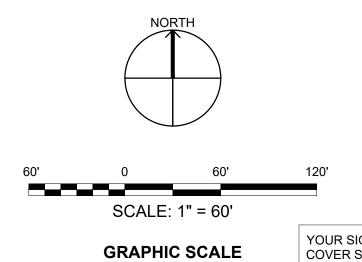
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120'
YOUR SIGNATURE ON THIS COVER SHEET APPROVES ALL SHEETS ASSOCIATED WITH THIS SET OF DRAWINGS.

IF SHEET IS LESS THAN (34"x22") IT IS A REDUCED PRINT; SCALE ACCORDINGLY	ISSUE DATE: APR 27, 2020		M A A			
NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS  SATISFACTORY TO DATE	P.W. DWG. NO. 27092	ENGINEERING   ARCHITECTURE Summerville, SC. CEMS Project No.18152F Project Manager: JASON BRAWLEY	CI115			
SAFETY DEPARTMENT SATISFACTORY TO DATE	J. CARROLL/E. MATYSIAK	DEPARTMENT OF THE NAVY  MARINE CORPS AIR STATION  BEAUFORT, S.C.				
FIRE DEPARTMENT SATISFACTORY TO DATE	D. FARLEY/C. MOORING	AIRFIELD STORMWATER REPAIRS (BE2004M				
PHYSICAL SECURITY SATISFACTORY TO DATE	SUPERVISOR S. THOMAS	SITE IMPROVEN	IENTS PLAN- AREA N			
PUBLIC WORKS SUPERVISOR SATISFACTORY TO DATE	APPROVED DATE	SIZE CODE IDENT. NO.	NAVFAC DRAWING NO.			
		HQMC PROJ. NO.: BE2004M   CONSTR. CONTR. NO.: N40085-18-D-0616				
	PUBLIC WORKS OFFICER	SCALE: AS NOTED MACC.	T.O. # SHEET 33 OF 35			

# STANDARD NOTES:

- IF NECESSARY, SLOPES, WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO
- 2. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE FOURTEEN
  - WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE

(14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW

- WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE
- ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY, OR INCORRECTLY, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
- PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING. THE WATER SHOULD BE FILTERED TO REMOVE ANY SEDIMENTS BEFORE BEING PUMPED BACK INTO THE WATERS OF THE STATE
- 5. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED
- 6. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY
- REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN IN ACCORDANCE WITH S.C. REG. 72-300 ET SEQ.
- TEMPORARY DIVISION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE
- TRAPS OR STABLE OUTLETS. 9. ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE
- MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS 10. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
- 11. A COPY OF THE SWPPP, INSPECTIONS RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
- 12. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
- 13. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.
- 14. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE;
- 15. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPS (SEDIMENT BASIN, FILTER BAG, ETC.).
- 16. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED: WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL;
- WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING
- COMPOUNDS AND OTHER CONSTRUCTION MATERIALS; FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND
- MAINTENANCE; AND
- SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING 17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
- 18. IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPS MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.
- 19. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE

# SEDIMENT AND EROSION CONTROL NOTES

- 1. GENERAL A. ALL AREAS WHICH ARE DISTURBED BY THE CONTRACTOR SHALL BE STABILIZED
- B. PROVIDE A DOUBLE ROW OF SILT FENCE IN ALL AREAS WHERE A 50' BUFFER CAN'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND THE WETLANDS. A 10' BUFFER SHALL BE LEFT WITH THE WETLANDS AND SILT FENCE.

# 2. COASTAL SEEDING SPECIFICATIONS

PERMANENT SEEDING:

GRASSING MEANS ARE SPECIFIED FOR EACH SITE ON THE SITE SHEETS. CONTRACTOR SHALL ENSURE EFFECTIVE WATERING AND PERIODIC

INSPECTION TO ENSURE APPROPRIATE GROWTH OF GRASS.

TEMPORARY SEEDING (EXCEPT FOR FLIGHTLINE LOCATIONS) "COOL SEASON": PLANTED BETWEEN 1 SEPTEMBER AND 3 MARCH

RYEGRASS W/ BERMUDA

90-135 LBS./AC

WELL DRAINED, CLAYEY/LOAMY SITES SPECIES

RYEGRASS W/ BERMUDA

90-135 LBS./AC.

"WARM SEASON": PLANTED BETWEEN 4 MARCH AND 31 AUGUST SANDY, DROUGHTY SITES

<u>SPECIES</u> BERMUDA (PURE) WELL DRAINED, CLAYEY/LOAMY SITES

90-135 LBS./AC

<u>SPECIES</u>

GENERATED BY THE PROJECT.

SANDY, DROUGHTY SITES

**BERMUDA (PURE)** 90-135 LBS./AC

# 3. EROSION CONTROL PLAN

- A. INSTALL PERMANENT VEGETATIVE COVER AND THE LONG-TERM EROSION PROTECTION MEASURES OR STRUCTURES AS SOON AS PRACTICAL IN THE DEVELOPMENT PROCESS
- PROVIDE FOR HANDLING THE INCREASED RUNOFF CAUSED BY CHANGED SOIL AND SURFACE CONDITIONS. USE EFFECTIVE MEANS TO CONSERVE EXISTING ON-SITE SOIL INCLUDING THE USE OF DIVERSION DITCHES. GRASSED WATERWAYS AND STORM SEWERS.
- C. PLACE SILT FENCE BARRIERS AT LOCATIONS SHOWN ON PLAN. SILT BARRIERS SHALL BE MAINTAINED IN PLACE AND IN GOOD CONDITION UNTIL GROUND COVER IS ESTABLISHED.
- D. ALL DISTURBED AREAS NOT PAVED SHALL BE GRASSED. USE TEMPORARY PLANT COVER. MULCHING. AND/OR STRUCTURES TO CONTROL RUNOFF AND PROTECT AREAS SUBJECT TO EROSION DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE DUMPSTER OF SUFFICIENT SIZE AND NUMBER TO CONTAIN THE SOLID WASTE
- F. CONTRACTOR SHALL FREQUENTLY REMOVE GARBAGE TO MAINTAIN A CLEAN CONSTRUCTION SITE AND MINIMIZE THE EXPOSURE OF WASTE TO STORM WATER.

PLAN SYMBOL 1.25 LB./LINEAR FT STEEL POSTS FILTER FABRIC - HEAVY DUTY PLASTIC BACKFILL TRENCH WITH TIE FOR STEEL POSTS COMPACTED EARTH-(RESTRICT TO TOP 8-INCHES OF FABRIC) - BURY FABRIC USE EITHER FLAT-BOTTOM OR V-BOTTOM TRENCH SEE DETAILS



# SILT FENCE - GENERAL NOTES

- 1. DO NOT PLACE SILT FENCE ACROSS CHANNELS OR IN OTHER AREAS SUBJECT TO CONCENTRATED FLOWS. SILT FENCE SHOULD NOT BE USED AS A VELOCITY CONTROL BMP. CONCENTRATED FLOWS ARE ANY FLOWS GREATER THAN 0.5 CFS.
- 2. MAXIMUM SHEET OR OVERLAND FLOW PATH LENGTH TO THE SILT FENCE SHALL BE 100-FEET.
- 3. MAXIMUM SLOPE STEEPNESS (NORMAL [PERPENDICULAR] TO THE FENCE LINE) SHALL BE 2:1.
- THE FOLLOWING OPTIONS: WRAP EACH FABRIC TOGETHER AT A SUPPORT POST WITH BOTH ENDS FASTENED TO THE POST, WITH A 1-FOOT MINIMUM

4. SILT FENCE JOINTS, WHEN NECESSARY, SHALL BE COMPLETED BY ONE OF

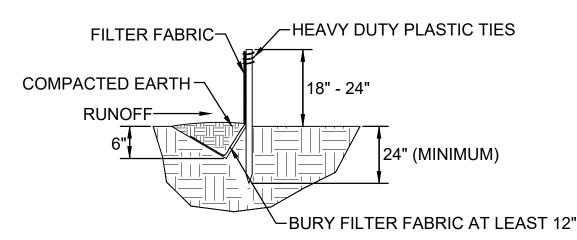
- OVERLAP SILT FENCE BY INSTALLING 3-FEET PASSED THE SUPPORT POST TO WHICH THE NEW SILT FENCE ROLL IS ATTACHED. ATTACH OLD ROLL TO NEW ROLL WITH HEAVY-DUTY PLASTIC TIES; OR
- OVERLAP ENTIRE WIDTH OF EACH SILT FENCE ROLL FROM ONE SUPPORT POST TO THE NEXT SUPPORT POST
- 5. ATTACH FILTER FABRIC TO THE STEEL POSTS USING HEAVY-DUTY PLASTIC TIES THAT ARE EVENLY SPACED WITHIN THE TOP 8-INCHES OF THE FABRIC.
- 6. INSTALL THE SILT FENCE PERPENDICULAR TO THE DIRECTION OF THE STORMWATER FLOW AND PLACE THE SILT FENCE THE PROPER DISTANCE FROM THE TOE OF STEEP SLOPES TO PROVIDE SEDIMENT STORAGE AND ACCESS FOR MAINTENANCE AND CLEANOUT
- 7. INSTALL SILT FENCE CHECKS (TIE-BACKS) EVERY 50-100 FEET, DEPENDENT ON SLOPE, ALONG SILT FENCE THAT IS INSTALLED WITH SLOPE AND WHERE CONCENTRATED FLOWS ARE EXPECTED OR ARE DOCUMENTED ALONG THE PROPOSED/INSTALLED SILT FENCE.

# SILT FENCE - POST REQUIREMENTS

- 1. SILT FENCE POSTS MUST BE 48-INCH LONG STEEL POSTS THAT MEET, AT A MINIMUM, THE FOLLOWING PHYSICAL CHARACTERISTICS. - COMPOSED OF A HIGH STRENGTH STEEL WITH A MINIMUM YIELD STRENGTH OF 50,000 PSI.
- INCLUDE A STANDARD "T" SECTION WITH A NOMINAL FACE WIDTH OF 1.38-INCHES AND A NOMINAL "T" LENGTH OF 1.48-INCHES.
- WEIGH 1.25 POUNDS PER FOOT (± 8%) 2. POSTS SHALL BE EQUIPPED WITH PROJECTIONS TO AID IN FASTENING
- OF FILTER FABRIC. 3. STEEL POSTS MAY NEED TO HAVE A METAL SOIL STABILIZATION PLATE WELDED NEAR THE BOTTOM WHEN INSTALLED ALONG STEEP SLOPES OR INSTALLED IN LOOSE SOILS. THE PLATE SHOULD HAVE A MINIMUM CROSS SECTION OF 17-SQUARE INCHES AND BE COMPOSED OF 15 GAUGE STEEL, AT A MINIMUM. THE METAL SOIL STABILIZATION PLATE
- SHOULD BE COMPLETELY BURIED. 4. INSTALL POSTS TO A MINIMUM OF 24-INCHES. A MINIMUM HEIGHT OF 1-TO 2- INCHES ABOVE THE FABRIC SHALL BE MAINTAINED, AND A MAXIMUM HEIGHT OF 3 FEET SHALL BE MAINTAINED ABOVE THE
- 5. POST SPACING SHALL BE AT A MAXIMUM OF 6-FEET ON CENTER.

# HEAVY DUTY PLASTIC TIES COMPACTED EARTH 18-IN. TO 24-IN **RUNOFF**— 24" (MINIMUM) **FILTER**

FLAT BOTTOM TRENCH DETAIL



V-SHAPED TRENCH DETAIL

# SILT FENCE - INSPECTION & MAINTENANCE

- 1. THE KEY TO FUNCTIONAL SILT FENCE IS WEEKLY INSPECTIONS. ROUTINE MAINTENANCE, AND
- REGULAR SEDIMENT REMOVAL 2. REGULAR INSPECTIONS OF SILT FENCE SHALL BE CONDUCTED ONCE EVERY CALENDAR WEEK AND, AS RECOMMENDED, WITHIN 24-HOURS AFTER EACH RAINFALL EVEN THAT PRODUCES 1/2-INCH OR MORE OF
- ATTENTION TO SEDIMENT ACCUMULATIONS ALONG THE SILT FENCE IS EXTREMELY IMPORTANT. ACCUMULATED SEDIMENT SHOULD BE
- CONTINUALLY MONITORED AND REMOVED WHEN NECESSARY 4. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES 1/3 THE HEIGHT OF THE SILT FENCE
- 5. REMOVED SEDIMENT SHALL BE PLACED IN STOCKPILE STORAGE AREAS OR SPREAD THINLY ACROSS DISTURBED AREA. STABILIZE THE REMOVED SEDIMENT AFTER IT IS RELOCATED.
- 6. CHECK FOR AREAS WHERE STORMWATER RUNOFF HAS ERODED A CHANNEL BENEATH THE SILT FENCE, OR WHERE THE FENCE HAS SAGGED OR COLLAPSED DUE TO RUNOFF OVERTOPPING THE SILT FENCE. INSTALL CHECKS/TIE-BACKS AND/OR REINSTALL SILT FENCE AS NECESSARY.
- 7. CHECK FOR TEARS WITHIN THE SILT FENCE, AREAS WHERE SILT FENCE HAS BEGUN TO DECOMPOSE. AND FOR ANY OTHER CIRCUMSTANCE THAT MAY RENDER THE SILT FENCE INEFFECTIVE. REMOVED DAMAGED SILT FENCE AND REINSTALL NEW SILT FENCE IMMEDIATELY.
- 8. SILT FENCE SHOULD BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED AND ONCE IT IS REMOVED. THE RESULTING DISTURBED AREA SHALL BE PERMANENTLY STABILIZED.

# SILT FENCE - FABRIC REQUIREMENTS

- 1. SILT FENCE MUST BE COMPOSED OF WOVEN GEOTEXTILE FILTER FABRIC THAT CONSISTS OF THE FOLLOWING REQUIREMENTS:
- COMPOSED OF FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS OF AT LEAST 85% BY WEIGHT OF POLYOLEFINS POLYESTERS, OR POLYAMIDES THAT ARE FORMED INTO A NETWORK SUCH THAT THE FILAMENTS OR YARNS RETAIN DIMENSIONAL STABILITY RELATIVE TO EACH OTHER;
- FREE OF ANY TREATMENT OR COATING WHICH MIGHT ADVERSELY ALTER ITS PHYSICAL PROPERTIES AFTER INSTALLATION;
- FREE OF ANY DEFECTS OR FLAWS THAT SIGNIFICANTLY AFFECT ITS PHYSICAL AND/OR FILTERING PROPERTIES; AND, - HAVE A MINIMUM WIDTH OF 36-INCHES.
- 2. USE ONLY FABRIC APPEARING ON SC DOT'S QUALIFIED PRODUCTS LISTING (QPL), APPROVAL SHEET #34, MEETING THE REQUIREMENTS OF THE MOST CURRENT EDITION OF THE SC DOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
- 3. 12-INCHES OF THE FABRIC SHOULD BE PLACED WITHIN EXCAVATED TRENCH AND TOED IN WHEN THE TRENCH IS BACKFILLED.
- 4. FILTER FABRIC SHALL BE PURCHASED IN CONTINUOUS ROLLS AND CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS.
- 5. FILTER FABRIC SHALL BE INSTALLED AT A MINIMUM OF 24-INCHES
- ABOVE THE GROUND.

## SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION: LIST OF QUALIFIED PROVIDERS OF SILT FENCING / LOW FLOW DROP INLET PROTECTION GEOTEXTILE FABRICS

P O BOX 60988

877-744-9747

(704)676-9788

P. O. BOX 599

(912) 534-5757

FAX: (704)676-9791

HIGHWAY 82 WEST

FAX: (912) 534-5533

WILLACOOCHEE. GA 31650

FAX: 843-744-9750

ATTN: BILLY DENSON

CHARLOTTE, NC 28273

PROTECH ENVIRONMENTAL SUPPLY

BELTON INDUSTRIES, INC. PO BOX 127 (2) STYLE 941 BELTON, SC 29627 (3) STYLE 945 (864) 338-5711 ATTN: MR. DAVID GALLOWAY

THRACE-LINQ 2550 WEST FIFTH NORTH ST. SUMMERVILLE, SC 29483-9699 (803) 875-8280 (800) 445-4675

CONSTRUCTION FABRICS & SUPPLY ATTN: MITCH PERKINS 1603 JAMES P. ROGERS DRIVE VALDOSTA, GEORGIA 31601 (229) 244-0004 ATTN: ANGIE ANDERSON OR

JEFF COPPAGE

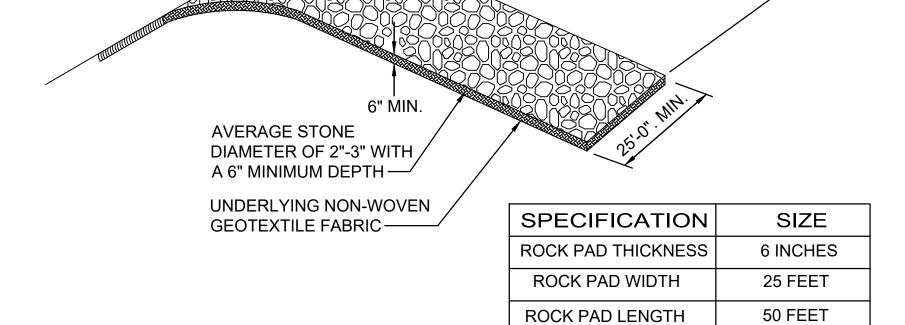
HANES GEOCOMPONENTS 10800 S. COMMERCE BLVD. #9 SUITE L, CHARLOTTE, NC 28273 (704)588-7626 FAX: (704)588-7972 ATTN: KEITH GREGORY WWW.HANESGEO.COM

COASTAL SITE SUPPLY, INC. PROPEX, INC. P O BOX 22788 6025 LEE HIGHWAY. SUITE 425 NORTH CHARLESTON, SC 29419 CHATTANOOGA. TN 37422 (800)621-1273 FAX: (423)899-7619 WWW.GEOTEXTILE.COM

1500 CONTINENTAL BLVD., SUITE C/F ACF ENVIRONMENTAL

2831 CARDWELL ROAD RICHMOND, VA 23234 (800)448-3636 FAX: (804)743-7779 WWW.ACFENVIRONMENTAL.COM WILLACOOCHEE INDUSTRIAL FABRICS

> DDD EROSION CONTROL, INC. P O BOX 694 1383 INDUSTRIAL DRIVE ASHBURN, GA 31714 (229) 567-0751 FAX: (229) 567-0752 EMAIL: DDDEROSION@WINDSTREAM.NET WWW.3DEROSION.COM ATTN: DON DAVIS



# CONSTRUCTION ENTRANCE - GENERAL NOTES

- 1. STABILIZED CONSTRUCTION ENTRANCES SHOULD BE USED AT ALL POINTS WHERE TRAFFIC WILL EGRESS/INGRESS A CONSTRUCTION SITE ONTO A PUBLIC ROAD OR ANY IMPERVIOUS SURFACES, SUCH AS
- PARKING LOTS. 2. INSTALL A NON-WOVEN GEOTEXTILE FABRIC PRIOR TO
- PLACING ANY STONE. 3. INSTALL A CULVERT PIPE ACROSS THE ENTRANCE WHEN NEEDED TO PROVIDE POSITIVE DRAINAGE
- 4. THE ENTRANCE SHALL CONSIST OF 2-INCH TO 3-INCH D50 STONE PLACED AT A MINIMUM DEPTH OF 6-INCHES. 5. MINIMUM DIMENSIONS OF THE ENTRANCE SHALL BE
- 25-FEET WIDE BY 50-FEET LONG. AND MAY BE MODIFIED AS NECESSARY TO ACCOMMODATE SITE CONSTRAINTS. THE EDGES OF THE ENTRANCE SHALL BE TAPERED OUT TOWARDS THE ROAD TO PREVENT TRACKING AT THE
- EDGE OF THE ENTRANCE. 7. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN OR
- OTHER SEDIMENT TRAPPING STRUCTURE. 8. LIMESTONE MAY NOT BE USED FOR THE STONE PAD.

# CONSTRUCTION ENTRANCE - INSPECTION & MAINTENANCE

ROCK PAD STONE SIZE | D50 = 2-3 INCHES

1. THE KEY TO FUNCTIONAL CONSTRUCTION ENTRANCES IS WEEKLY

EDGES SHALL BE TAPERED

**OUT TOWARDS ROAD TO** 

PREVENT TRACKING OF

MUD ON THE EDGES

INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR SEDIMENT REMOVAL 2. REGULAR INSPECTIONS OF CONSTRUCTION ENTRANCES SHALL BE CONDUCTED ONCE EVERY CALENDAR WEEK AND, AS RECOMMENDED

**REVISIONS** 

- WITHIN 24-HOURS AFTER EACH RAINFALL EVEN THAT PRODUCES 1/2-INCH OR MORE OF PRECIPITATION. 3. DURING REGULAR INSPECTIONS, CHECK FOR MUD AND SEDIMENT BUILDUP
- AND PAD INTEGRITY. INSPECTION FREQUENCIES MAY NEED TO BE MORE FREQUENT DURING LONG PERIODS OF WET WEATHER.
- 4. RESHAPE THE STONE PAD AS NECESSARY FOR DRAINAGE AND RUNOFF 5. WASH OR REPLACE STONES AS NEEDED AND AS DIRECTED BY SITE INSPECTOR. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE THE AMOUNT OF
- MUD BEING CARRIED OFF-SITE BY VEHICLES. FREQUENT WASHING WILL EXTEND THE USEFUL LIFE OF STONE PAD. 6. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO ADJACENT IMPERVIOUS SURFACES BY BRUSHING OR SWEEPING. FLUSHING
- SHOULD ONLY BE USED WHEN THE WATER CAN BE DISCHARGED TO A SEDIMENT TRAP OR BASIN. 7. DURING MAINTENANCE ACTIVITIES, ANY BROKEN PAVEMENT SHOULD BE

SURFACE TO SERVE POST-CONSTRUCTION.

REPAIRED IMMEDIATELY. 8. CONSTRUCTION ENTRANCES SHOULD BE REMOVED AFTER THE SITE HAS REACHED FINAL STABILIZATION. PERMANENT VEGETATION SHOULD REPLACE AREAS FROM WHICH CONSTRUCTION ENTRANCES HAVE BEEN REMOVED, UNLESS AREA WILL BE CONVERTED TO AN IMPERVIOUS

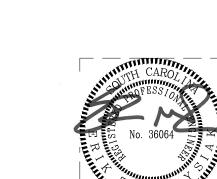


# CONSTRUCTION SEQUENCE

YOUR SIGNATURE ON THIS **COVER SHEET APPROVES ALL** SHEETS ASSOCIATED WITH THIS

SET OF DRAWINGS.

- 1. PLACE SCDHEC LAND DISTURBANCE PERMIT. APPROVED PLANS AND THE ON-SITE SWPPP (OS-SWPPP) AT A LOCATION ON THE SITE. 2. BEFORE LAND DISTURBING ACTIVITIES. THE LOCAL EQC MUST BE NOTIFIED. A DIG PERMIT SUBMITTED TO MCAS. AND A SWPPP
- PRECONSTRUCTION MEETING PERFORMED 3. INSTALL SILT FENCE AND GRAVEL CONSTRUCTION ENTRANCE. DISTURBANCE SHOULD BE MINIMAL AS NECESSARY TO INSTALL SILT FENCE. INLET PROTECTION AND GRAVEL CONSTRUCTION ENTRANCE.
- 4. BEGIN DEMOLITION AND GRADING OPERATIONS 5. REMOVE AND/OR DEMOLISH EXISTING SITE FEATURES AS INDICATED ON THE DEMOLITION PLAN AND LIMIT SEDIMENT FROM THE
- 6. COMPLETE FILLING AND GRADING OPERATIONS.
- INITIATE TEMPORARY AND PERMANENT VEGETATIVE STABILIZATION MEASURES AS INDICATED ON THE PLANS.
- 8. REMOVE ACCUMULATED SEDIMENT AND MAINTAIN SEDIMENT DEVICES UNTIL SITE HAS BEEN STABILIZED. REMOVE SEDIMENT DEVICES ONCE SITE HAS BEEN STABILIZED AND GIVEN APPROVAL BY GOVERNMENT
- 10. SUBMIT NOTICE OF TERMINATION TO SCDHEC AND MEET ALL OF THE LAND DISTURBANCE PERMIT REQUIREMENTS



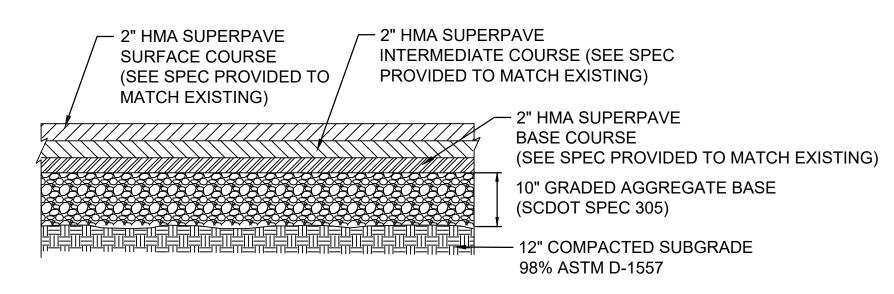
SHEET 34 OF 35

IF SHEET IS LESS THAN (34"x22") IT IS A

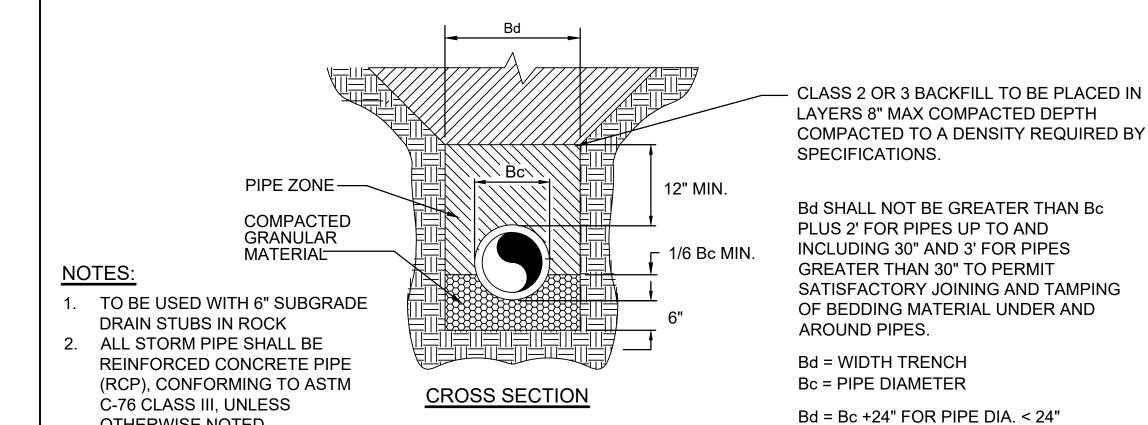
REDUCED PRINT; SCALE ACCORDINGLY	ISSUE DATE: APR 27	, 2020				
NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS  SATISFACTORY TO DATE	P.W. DWG. NO. 27093		ENGIN Summerville, S CEMS Project	ENS ARCHITEC  C  C  Project Manager. J  Project Manager. J	Wilmington, NC	C-501
SAFETY DEPARTMENT SATISFACTORY TO DATE	J. BARNES		MARINE CORPS AIR STATION  BEAUFORT, S.C.			
FIRE DEPARTMENT SATISFACTORY TO DATE	D. FARLEY		AIRFIELD STORMWATER REPAIRS (BE200			
PHYSICAL SECURITY SATISFACTORY TO DATE	SUPERVISOR S. THOMAS		EROSION CONTROL DETAILS			ONTROL DETAILS
PUBLIC WORKS SUPERVISOR SATISFACTORY TO DATE	APPROVED	DATE	SIZE <b>F</b> HQMC	CODE IDENT. NO. PROJ. NO.: BE2004M	CONSTR	N A V F A C DRAWING NO.  R. CONTR. NO.: N40085-18-D-0616

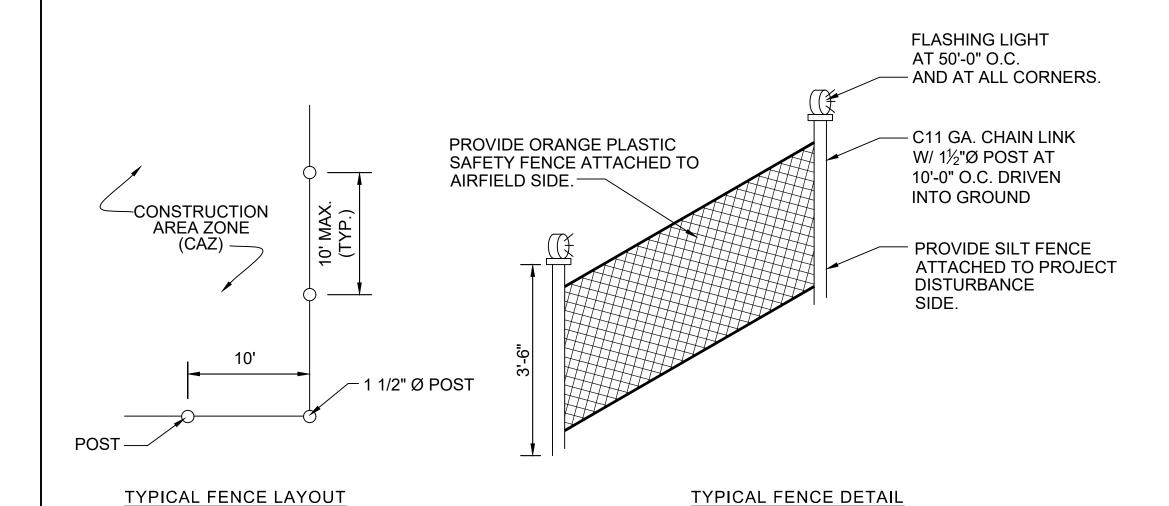
SCALE: AS NOTED MACC. T.O. #

PUBLIC WORKS OFFICER



# TAXIWAY PAVEMENT SECTION





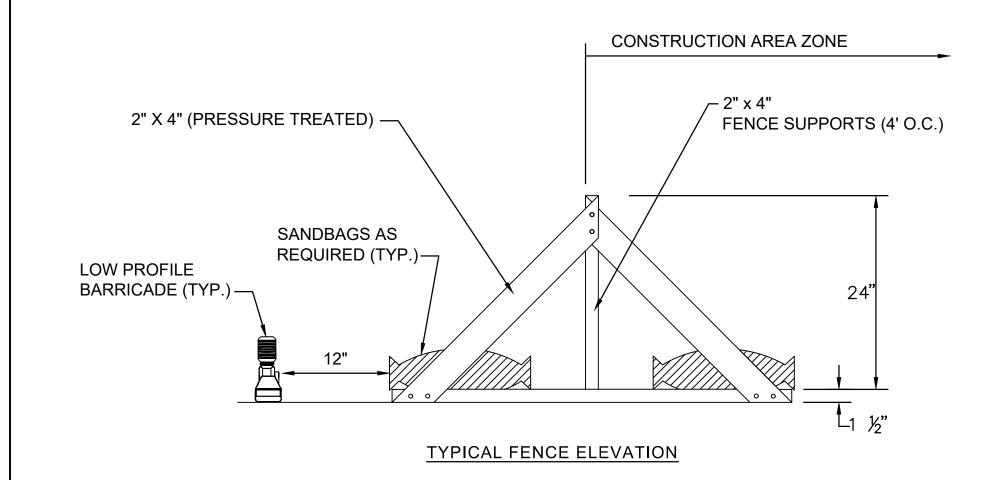
Bd = Bc +36" FOR PIPE DIA > 24"

# GENERAL NOTES:

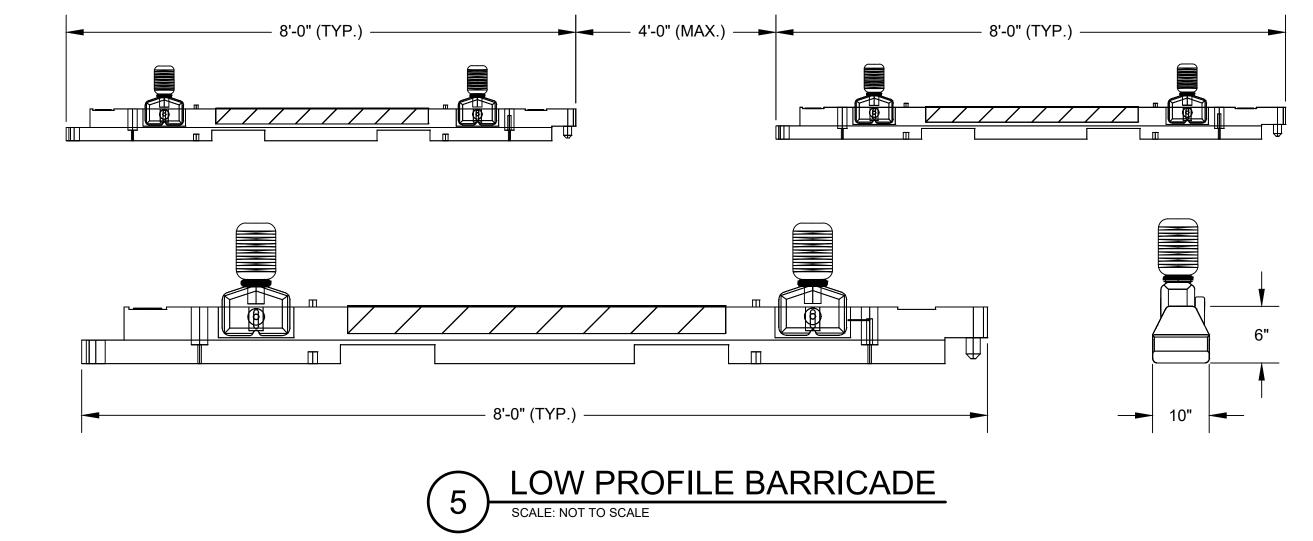
OTHERWISE NOTED.

- 1. IN UNPAVED AREAS, POSTS SHALL BE SPACED AT 10' MAXIMUM INTERVALS ALONG THE FENCE.
- 2. THE CONTRACTOR SHALL MAINTAIN CONSTRUCTION AREA ZONE FENCING FROM EXCAVATION THRU STABILIZATION. ALL MATERIALS USED IN THE FENCE SHALL BECOME THE CONTRACTOR'S PROPERTY AND SHALL BE DISPOSED OF OFF THE GOVERNMENT PREMISES.
- 3. FLASHING AMBER-YELLOW LIGHTS SHALL HAVE AT LEAST 5 CANDELAS EFFECTIVE INTENSITY AND FLASH AT A RATE OF 55 TO 75 FLASHES PER

# UNPAVED AREA - CONSTRUCTION / FOD FENCE

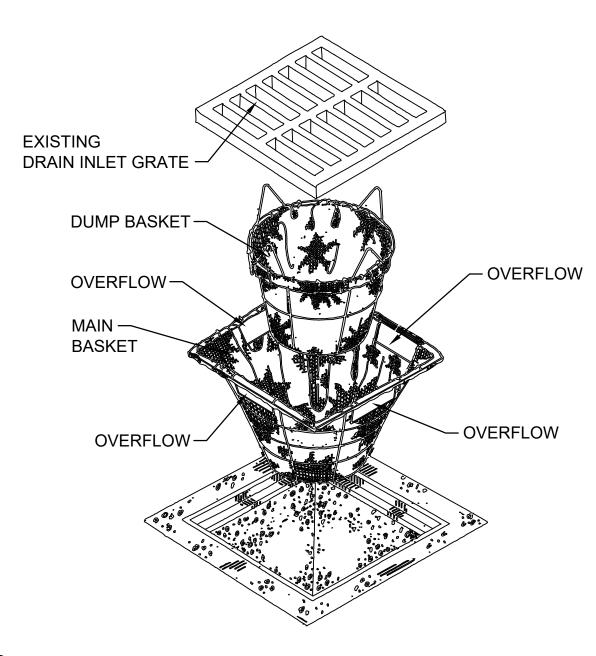


PAVED AREA - EQUIPMENT STAGING FOD FENCE



# BARRICADE NOTES

- BARRICADE SHALL BE MODEL AR 10" X 96" 0 V.2 HDPE LOW PROFILE AIRPORT BARRIER, AS SHOWN, OR APPROVED EQUAL.
- THE ENTIRE AREA OF ORANGE AND WHITE STRIPES SHALL BE REFLECTIVE WITH SMOOTH SURFACE TYPE REFLECTIVE SHEETING.
- 3. FLASHING RED CAUTION LIGHTS SHALL BE BATTERY OR SOLAR OPERATED AND SHALL MAINTAIN SUCH INTENSITY SO AS TO BE READILY IDENTIFIED FROM DISTANCES OF AT LEAST 200 FEET DURING DARKNESS.
- 4. IF FLAGS ARE USED ON BARRICADE, FLAGS SHALL ALTERNATE ORANGE AND WHITE FROM ONE BARRICADE TO THE NEXT. INSTALL FLAG AND STAFF TO ENSURE THAT THE FLAG WILL REMAIN EXTENDED AT ALL TIMES.
- BARRICADES SHALL BE IN COMPLIANCE WITH AC 150/5370-2E.
- INSTALLED BARRICADES SHALL BE FILLED WITH WATER AFTER PLACEMENT. DURING SUB-FREEZING TEMPERATURES, BARRICADES SHALL BE FILLED WITH POTASSIUM ACETATE OR CALCIUM CHLORIDE
- BARRICADES SHALL BE INSTALLED AT THE LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE GOVERNMENT AND AS REQUIRED BY THE CONTRACTOR TO PROTECT THE WORK AREA. THE PHASE DURING WHICH EACH BARRICADE IS TO REMAIN IN PLACE IS INDICATED BY THE PHASING DRAWINGS. BARRICADES SHALL BE INSTALLED AT THE BEGINNING OF EACH PHASE AND SHALL REMAIN IN PLACE THROUGHOUT THE PHASE. IF THE CONTRACTOR MUST TEMPORARILY REMOVE ANY OF THE BARRICADES (TO ALLOW CONSTRUCTION TRAFFIC TO TRAVEL INTO OR OUT OF THE CONSTRUCTION AREA, OR TO COMPLETE CONSTRUCTION AT THE PHASE BOUNDARY), THE CONTRACTOR SHALL PROVIDE A FLAGMAN TO PREVENT AIRCRAFT OR VEHICLE TRAFFIC FROM INADVERTENTLY TRAVELING INTO THE CONSTRUCTION AREA UNTIL THE BARRICADE IS REPLACED AT ITS ORIGINAL POSITION.
- LOW PROFILE BARRICADES SHALL CONFORM TO FAA ADVISORY CIRCULARS 150/5340-1 AND 150/5370-2, LATEST EDITIONS. BARRICADE SEGMENTS MAY BE LOCKED CONTINUALLY OR OPTIONALLY SPACED WITH A 4' MAX. GAP, UNLESS OTHERWISE SPECIFIED BY THE GOVERNMENT. INTERNAL WATER BALLAST SHALL PROVIDE ADEQUATE STABILIZATION TO PREVENT MOVEMENT FROM JET OR PROP BLAST.
- ALL BARRICADES SHALL DELINEATE THE AREA TO BE PROTECTED AND THE BARRICADE LINE SHALL EXTEND TO THE EDGES OF PAVEMENT OR AS DIRECTED BY THE GOVERNMENT.
- 7. IN ADDITION TO THE REQUIREMENTS FOR TAXIWAY CROSSINGS. BARRICADES SHALL BE SPACED AT 50' FOR DELINEATION OF ALL CONSTRUCTION WORK AND OPEN EXCAVATIONS WITHIN THE 200' PERMANENT TAXIWAY CLEAR ZONE AND THE 1,000' RUNWAY CLEAR ZONE.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MAINTENANCE OF BARRICADES INCLUDING LIGHTS DURING CONSTRUCTION. ALL LIGHTS SHALL BE KEPT IN OPERABLE CONDITION. BARRICADES OR COMPONENTS SHALL BE REPLACED WHEN EXHIBITING SIGNS OF DAMAGE OR DETERIORATION.



**REVISIONS** 

# NOTES:

- INLET PROTECTION SHALL BE INSTALLED PRIOR TO COMMENCING ANY DEMOLITION AND CONSTRUCTION WORKS, OR AT THE TIME ANY NEW DRAIN STRUCTURE IS SET.
- INSTALLATION: REMOVE GRATE, DROP MAIN SEDIMENT BASKET IN OPENING PLACE DUMP BASKET WITHIN MAIN BASKET. REPLACE GRATE.
- 3. INSPECT WEEKLY AND AFTER EACH RAIN. IF THERE IS AN ACCUMULATION OF SEDIMENT: SLIDE THE GRATE OFF THE INLET, LIFT THE DUMP BASKET OUT OF THE MAIN BASKET, EMPTY CONTENTS IN A SUITABLE LOCATION (TO BE REMOVED FROM SITE), REPLACE DUMP BASKET, REPLACE GRATE.
- 4. AFTER APPROXIMATELY 10 DUMPS, OR AS NEEDED, EMPTY THE MAIN BASKET OF ALL ACCUMULATED SEDIMENT.
- 5. VERIFY WATER LEVEL TO ENSURE DRAIN INLET FUNCTIONS PROPERLY, AND IS NOT BLOCKED DURING STORM EVENTS. REMOVE / DO NOT INSTALL AND NOTIFY COR / ENGINEER OF RECORD IF AREA PONDS, FLOODS, OR COULD POSE A SAFETY HAZARD TO VEHICLE TRAFFIC.





# **GENERAL NOTES:**

- WARNING SIGNS SHALL BE INSTALLED AT ANY SITE PROJECT SITE INGRESS/EGRESS POINTS, AND ALONG THE CONSTRUCTION AREA IDENTIFIED BY THE CONTRACTING OFFICER, COE MANAGER, AIRFIELD MANAGEMENT, OR MCAS BEAUFORT REPRESENTATIVE.
- WARNING SIGNS SHALL BE INSTALLED AT CENTER OF THE POST. TOP OF SIGNS SHALL BE LOCATED AT THE TIP OF THE PLASTIC FLAGGING. WARNING SIGNS SHALL BE ATTACHED TO THE POST IN PREDRILLED HOLES WITH A NUT AND BOLT.
- SIGN PANELS SHALL BE MANUFACTURED FROM STEEL OR ALUMINUM PLATE AND SHALL BE A MINIMUM THICKNESS OF 0.08 INCHES OR 14 GAUGE. PROVIDE LETTERS IN RED WITH WHITE





SCALE: AS NOTED MACC.

T.O. #

SHEET 35 OF 35

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	NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS  SATISFACTORY TO DATE	P.W. DWG. NO. 27094		ENGIN Summerville, S CEMS Project I		TURE Wilmington, NC SON BRAWLEY	C-502	
	SAFETY DEPARTMENT SATISFACTORY TO DATE	J. BARNES		DEPARTMENT OF THE NAVY  MARINE CORPS AIR STATION  BEAUFORT, S.C.				
	FIRE DEPARTMENT SATISFACTORY TO DATE	CHECKED BY  D. FARLEY		AIRFIELD STORMWATER REPAIRS (BE2004N				
	PHYSICAL SECURITY SATISFACTORY TO DATE	SUPERVISOR S. THOMAS		EROSION CONTROL AND SITE DETAILS				
	PUBLIC WORKS SUPERVISOR SATISFACTORY TO DATE	APPROVED D	ATE	SIZE <b>F</b>	CODE IDENT. NO.		NAVFAC DRAWING NO.	
;				HQMC	PROJ. NO.: BE2004M	CONSTR	. CONTR. NO.: N40085-18-D-0616	

PUBLIC WORKS OFFICER

