

# FY16 SPECIAL PROJECT RM12-2137 REPAIR RUNWAYS 14-32 & 6-24 - PHASE 3

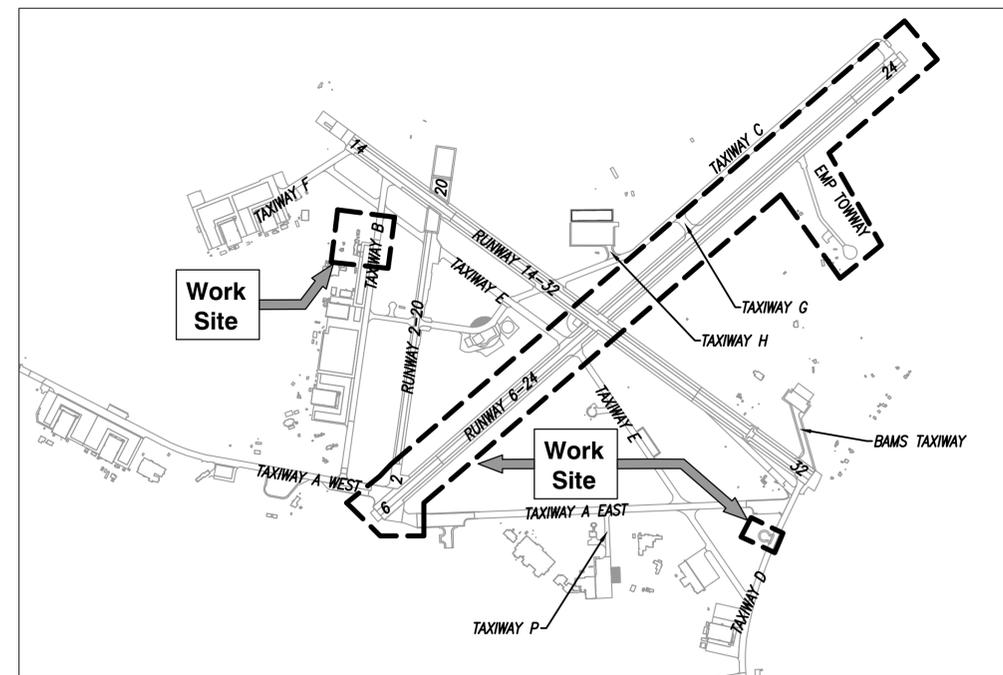
NAVAL AIR STATION PATUXENT RIVER ◦ PATUXENT RIVER, MARYLAND

NAVFAC WASHINGTON  
N62470-12-D-2010 ◦ T.O. 0004

FINAL PLAN SET  
SEPTEMBER 30, 2016



VICINITY MAP  
NTS



LOCATION MAP



NOTE:  
MDE NO 17-SF-0058

SYN	DESCRIPTION	DATE	APPR



**JOHNSON, MIRMIRAN & THOMPSON**  
*Gannett Fleming*  
A Joint Venture  
272 Beach Road, Suite 260  
Virginia Beach, Virginia 23452  
Telephone: (757) 499-1895  
Web: www.jmt.com

APPROVED  
FOR COMMANDER NAVFAC

ACTIVITY  
JAMES FLETCHER PER CHECKLIST  
SATISFACTORY TO DATE 9/27/2016  
DES DFD DRW MSC CHK MJT  
FM/DM RH  
BRANCH MANAGER  
CHIEF ENG/ARCH E. GALLAHER, PE

DEPARTMENT OF THE NAVY  
NAVFAC WASHINGTON  
NAVAL FACILITIES ENGINEERING COMMAND  
WASHINGTON, D.C.  
NAVAL AIR STATION PATUXENT RIVER  
PATUXENT RIVER, MARYLAND  
FY16 SPECIAL PROJECT RM12-2137  
REPAIR RUNWAYS 14-32 & 6-24 - PHASE 3  
TITLE SHEET

SCALE: AS NOTED  
EPROJECT NO.: 1382138  
CONSTR. CONTR. NO. N40080-17-R-0002  
NAVFAC DRAWING NO. 13080059  
SHEET 1 OF 206  
G-001



FILE NAME: G:\VHPA\10863\_003\_FY16\_Repair\_Runways\_Civil\_Phase 3\10-0863-009-0-001.dwg LAYOUT NAME: TITLE SHEET PLOTTED: Sunday, September 25, 2016 1:56pm USER: BCozmetInfo

DRAWING INDEX			
SHEET NO.	NAVFAC DWG. NO.	SHEET TITLE	
<b>GENERAL</b>			
1	G-001	13080059	TITLE SHEET
2	G-002	13080060	DRAWING INDEX
3	G-003	13080061	WORK SCHEMATIC
4	G-004	13080062	CIVIL SITE KEY PLAN - OVERALL
5	G-101	13080063	OVERALL PROJECT PHASING
6	G-102	13080064	PROJECT PHASING - PHASE 3A
7	G-103	13080065	PROJECT PHASING - PHASE 3B
8	G-104	13080066	PROJECT PHASING - PHASE 3C
9	G-105	13080067	PROJECT PHASING - PHASE 3D
10	G-106	13080068	GENERAL NOTES
11	G-107	13080069	MAXIMUM EQUIPMENT HEIGHT PLAN
12	G-108	13080070	MAXIMUM EQUIPMENT HEIGHT PLAN
13	G-109	13080071	HORIZONTAL AND VERTICAL CONTROLS, AND NOTES
14	G-501	13080072	CONSTRUCTION SAFETY DETAILS
<b>GEOTECHNICAL</b>			
15	B-001	13080073	GEOTECHNICAL INVESTIGATION LOCATION PLAN
16	BB101	13080074	BORING AND CORING DETAILS - SHEET 1
17	BB102	13080075	BORING AND CORING DETAILS - SHEET 2
18	BB103	13080076	BORING AND CORING DETAILS - SHEET 3
19	BB104	13080077	BORING AND CORING DETAILS - SHEET 4
<b>CIVIL</b>			
20	C-001	13080078	CIVIL CONSTRUCTION KEYNOTES, LEGEND, AND ABBREVIATIONS
21	C-101	13080079	EXISTING CONDITIONS PLAN - STA 228+01 - 239+21
22	C-102	13080080	EXISTING CONDITIONS PLAN - STA 239+21 - 250+41
23	C-103	13080081	EXISTING CONDITIONS PLAN - STA 250+41 - 261+61
24	C-104	13080082	EXISTING CONDITIONS PLAN - STA 261+61 - 272+81
25	C-105	13080083	EXISTING CONDITIONS PLAN - STA 284+01 - 295+21
26	C-106	13080084	EXISTING CONDITIONS PLAN - STA 295+21 - 306+41
27	C-107	13080085	EXISTING CONDITIONS PLAN - STA 306+41 - 317+61
28	C-108	13080086	EXISTING CONDITIONS PLAN - STA 317+61 - 328+81
29	C-109	13080087	EXISTING CONDITIONS PLAN - STA 328+81 - 340+01
30	C-110	13080088	EXISTING CONDITIONS PLAN - STA 340+01 - 351+21
31	C-111	13080089	EXISTING CONDITIONS PLAN - EMP
32	C-112	13080090	EXISTING CONDITIONS PLAN - COMPASS ROSE
33	C-121	13080091	EROSION AND SEDIMENT CONTROL PLAN
34	C-122	13080092	EROSION AND SEDIMENT CONTROL PLAN
35	C-123	13080093	EROSION AND SEDIMENT CONTROL PLAN
36	C-124	13080094	EROSION AND SEDIMENT CONTROL PLAN
37	C-124A	13080095	EROSION AND SEDIMENT CONTROL PLAN
38	C-125	13080096	EROSION AND SEDIMENT CONTROL PLAN
39	C-126	13080097	EROSION AND SEDIMENT CONTROL PLAN
40	C-127	13080098	EROSION AND SEDIMENT CONTROL PLAN
41	C-128	13080099	EROSION AND SEDIMENT CONTROL PLAN
42	C-129	13080100	EROSION AND SEDIMENT CONTROL PLAN
43	C-130	13080101	EROSION AND SEDIMENT CONTROL PLAN
44	C-131	13080102	EROSION AND SEDIMENT CONTROL PLAN
45	C-132	13080103	EROSION AND SEDIMENT CONTROL PLAN
46	C-133	13080104	EROSION AND SEDIMENT CONTROL PLAN
47	C-134	13080105	EROSION AND SEDIMENT CONTROL PLAN
48	CP101	13080106	DEMOLITION AND CONSTRUCTION PLAN - STA 228+01 - 239+21
49	CP102	13080107	DEMOLITION AND CONSTRUCTION PLAN - STA 239+21 - 250+41
50	CP103	13080108	DEMOLITION AND CONSTRUCTION PLAN - STA 250+41 - 261+61
51	CP104	13080109	DEMOLITION AND CONSTRUCTION PLAN - STA 261+61 - 272+81
52	CP105	13080110	DEMOLITION AND CONSTRUCTION PLAN - STA 284+01 - 295+21
53	CP106	13080111	DEMOLITION AND CONSTRUCTION PLAN - STA 295+21 - 306+41
54	CP107	13080112	DEMOLITION AND CONSTRUCTION PLAN - STA 306+41 - 317+61
55	CP108	13080113	DEMOLITION AND CONSTRUCTION PLAN - STA 317+61 - 328+81
56	CP109	13080114	DEMOLITION AND CONSTRUCTION PLAN - STA 328+81 - 340+01
57	CP110	13080115	DEMOLITION AND CONSTRUCTION PLAN - STA 340+01 - 351+21
58	CP111	13080116	DEMOLITION AND CONSTRUCTION PLAN - EMP
59	CP112	13080117	DEMOLITION AND CONSTRUCTION PLAN - COMPASS ROSE
60	CG101	13080118	GRADING AND DRAINAGE PLAN - STA 228+01 - 239+21
61	CG102	13080119	GRADING AND DRAINAGE PLAN - STA 239+21 - 250+41
62	CG103	13080120	GRADING AND DRAINAGE PLAN - STA 250+41 - 261+61
63	CG104	13080121	GRADING AND DRAINAGE PLAN - STA 261+61 - 272+81
64	CG105	13080122	GRADING AND DRAINAGE PLAN - STA 284+01 - 295+21
65	CG106	13080123	GRADING AND DRAINAGE PLAN - STA 295+21 - 306+41

66	CG107	13080124	GRADING AND DRAINAGE PLAN - STA 306+41 - 317+61
67	CG108	13080125	GRADING AND DRAINAGE PLAN - STA 317+61 - 328+81
68	CG109	13080126	GRADING AND DRAINAGE PLAN - STA 328+81 - 340+01
69	CG110	13080127	GRADING AND DRAINAGE PLAN - STA 340+01 - 351+21
70	CG111	13080128	GRADING AND DRAINAGE PLAN - EMP
71	CG112	13080129	GRADING AND DRAINAGE PLAN - COMPASS ROSE
72	CG201	13080130	RUNWAY 6-24 CENTERLINE PROFILE
73	CG202	13080131	RUNWAY 6-24 CENTERLINE PROFILE
74	CG203	13080132	RUNWAY 6-24 CENTERLINE PROFILE
75	CG204	13080133	RUNWAY 6-24 CENTERLINE PROFILE
76	CG205	13080134	EMP TOWWAY CENTERLINE PROFILE
77	CG301	13080135	RUNWAY 6-24 CROSS SECTIONS - STA 235+50 - 239+00
78	CG302	13080136	RUNWAY 6-24 CROSS SECTIONS - STA 239+50 - 243+00
79	CG303	13080137	RUNWAY 6-24 CROSS SECTIONS - STA 243+50 - 247+00
80	CG304	13080138	RUNWAY 6-24 CROSS SECTIONS - STA 247+50 - 251+00
81	CG305	13080139	RUNWAY 6-24 CROSS SECTIONS - STA 251+50 - 255+00
82	CG306	13080140	RUNWAY 6-24 CROSS SECTIONS - STA 255+50 - 259+00
83	CG307	13080141	RUNWAY 6-24 CROSS SECTIONS - STA 259+50 - 263+00
84	CG308	13080142	RUNWAY 6-24 CROSS SECTIONS - STA 263+50 - 267+00
85	CG309	13080143	RUNWAY 6-24 CROSS SECTIONS - STA 267+50 - 271+00
86	CG310	13080144	RUNWAY 6-24 CROSS SECTIONS - STA 271+50 - 275+00
87	CG311	13080145	RUNWAY 6-24 CROSS SECTIONS - STA 283+50 - 287+00
88	CG312	13080146	RUNWAY 6-24 CROSS SECTIONS - STA 287+50 - 291+00
89	CG313	13080147	RUNWAY 6-24 CROSS SECTIONS - STA 291+50 - 295+00
90	CG314	13080148	RUNWAY 6-24 CROSS SECTIONS - STA 295+50 - 299+00
91	CG315	13080149	RUNWAY 6-24 CROSS SECTIONS - STA 299+50 - 303+00
92	CG316	13080150	RUNWAY 6-24 CROSS SECTIONS - STA 303+50 - 307+00
93	CG317	13080151	RUNWAY 6-24 CROSS SECTIONS - STA 307+50 - 311+00
94	CG318	13080152	RUNWAY 6-24 CROSS SECTIONS - STA 311+50 - 315+00
95	CG319	13080153	RUNWAY 6-24 CROSS SECTIONS - STA 315+50 - 319+00
96	CG320	13080154	RUNWAY 6-24 CROSS SECTIONS - STA 319+50 - 323+00
97	CG321	13080155	RUNWAY 6-24 CROSS SECTIONS - STA 323+50 - 327+00
98	CG322	13080156	RUNWAY 6-24 CROSS SECTIONS - STA 327+50 - 331+00
99	CG323	13080157	RUNWAY 6-24 CROSS SECTIONS - STA 331+50 - 335+00
100	CG324	13080158	RUNWAY 6-24 CROSS SECTIONS - STA 335+50 - 339+00
101	CG325	13080159	RUNWAY 6-24 CROSS SECTIONS - STA 339+50 - 343+00
102	CG326	13080160	RUNWAY 6-24 CROSS SECTIONS - STA 343+50 - 347+00
103	CG327	13080161	RUNWAY 6-24 CROSS SECTIONS - STA 347+50 - 349+50
104	CG328	13080162	EMP TOWWAY CROSS SECTIONS - STA 0+00 - 3+50
105	CG329	13080163	EMP TOWWAY CROSS SECTIONS - STA 4+00 - 8+00
106	CG330	13080164	EMP TOWWAY CROSS SECTIONS - STA 9+50 - 13+00
107	CG331	13080165	EMP TOWWAY CROSS SECTIONS - STA 13+50 - 19+00
108	CG332	13080166	EMP TOWWAY CROSS SECTIONS - STA 19+50 - 19+80
109	CG333	13080167	COMPASS ROSE CROSS SECTIONS
110	C-141	13080168	AIRFIELD MARKING AND STRIPING PLAN - STA 228+01 - 239+21
111	C-142	13080169	AIRFIELD MARKING AND STRIPING PLAN - STA 239+21 - 250+41
112	C-143	13080170	AIRFIELD MARKING AND STRIPING PLAN - STA 250+41 - 261+61
113	C-144	13080171	AIRFIELD MARKING AND STRIPING PLAN - STA 261+61 - 272+81
114	C-145	13080172	AIRFIELD MARKING AND STRIPING PLAN - STA 284+01 - 295+21
115	C-146	13080173	AIRFIELD MARKING AND STRIPING PLAN - STA 295+21 - 306+41
116	C-147	13080174	AIRFIELD MARKING AND STRIPING PLAN - STA 306+41 - 317+61
117	C-148	13080175	AIRFIELD MARKING AND STRIPING PLAN - STA 317+61 - 328+81
118	C-149	13080176	AIRFIELD MARKING AND STRIPING PLAN - STA 328+81 - 340+01
119	C-150	13080177	AIRFIELD MARKING AND STRIPING PLAN - STA 340+01 - 351+21
120	C-151	13080178	AIRFIELD MARKING AND STRIPING PLAN - EMP
121	C-152	13080179	AIRFIELD MARKING AND STRIPING PLAN - COMPASS ROSE
122	C-401	13080180	CONCRETE REPAIR PLAN - STA 229+14 - 234+74
123	C-402	13080181	CONCRETE REPAIR PLAN - STA 234+74 - 240+34
124	C-403	13080182	CONCRETE REPAIR PLAN - STA 240+34 - 245+94
125	C-404	13080183	CONCRETE REPAIR PLAN - STA 334+41 - 340+01
126	C-405	13080184	CONCRETE REPAIR PLAN - STA 340+01 - 345+61
127	C-406	13080185	CONCRETE REPAIR PLAN - STA 345+61 - 351+21
128	C-407	13080186	CONCRETE REPAIR PLAN - TAXIWAY A WEST
129	C-408	13080187	CONCRETE REPAIR PLAN - TAXIWAY A EAST
130	C-409	13080188	CONCRETE JOINT PLAN - EMP SITE
131	C-410	13080189	CONCRETE JOINT PLAN - COMPASS ROSE
132	C-501	13080190	EXISTING PAVEMENT SECTIONS - SHEET 1
133	C-502	13080191	EXISTING PAVEMENT SECTIONS - SHEET 1
134	C-503	13080192	TYPICAL PAVEMENT SECTIONS - SHEET 1
135	C-504	13080193	TYPICAL PAVEMENT SECTIONS - SHEET 2
136	C-505	13080194	TYPICAL PAVEMENT SECTIONS - SHEET 3

137	C-511	13080195	CONSTRUCTION DETAILS
138	C-512	13080196	CONSTRUCTION DETAILS
139	C-513	13080197	CONSTRUCTION DETAILS
140	C-514	13080198	CONSTRUCTION DETAILS
141	C-515	13080199	CONSTRUCTION DETAILS
142	C-517	13080200	DRAINAGE DETAILS
143	C-518	13080201	DRAINAGE DETAILS
144	C-521	13080202	ARRESTING GEAR PAVEMENT PROTECTION SYSTEM DETAILS
145	C-522	13080203	ARRESTING GEAR PAVEMENT PROTECTION SYSTEM DETAILS
146	C-531	13080204	PAVEMENT MARKING DETAILS
147	C-532	13080205	PAVEMENT MARKING DETAILS
148	C-533	13080206	PAVEMENT MARKING DETAILS
149	C-551	13080207	EROSION AND SEDIMENT CONTROL NOTES
150	C-552	13080208	EROSION AND SEDIMENT CONTROL NOTES
151	C-553	13080209	EROSION AND SEDIMENT CONTROL STABILIZATION NOTES
152	C-554	13080210	EROSION AND SEDIMENT CONTROL STABILIZATION NOTES
153	C-555	13080211	EROSION AND SEDIMENT CONTROL DETAILS
154	C-556	13080212	EROSION AND SEDIMENT CONTROL DETAILS
155	C-557	13080213	EROSION AND SEDIMENT CONTROL DETAILS
156	C-558	13080214	EROSION AND SEDIMENT CONTROL DETAILS
157	C-559	13080215	EROSION AND SEDIMENT CONTROL DETAILS
158	C-560	13080216	EROSION AND SEDIMENT CONTROL DETAILS
159	C-561	13080217	EROSION AND SEDIMENT CONTROL DETAILS
160	C-562	13080218	EROSION AND SEDIMENT CONTROL DETAILS
<b>ELECTRICAL</b>			
161	ED100	13080219	OVERALL SITE PLAN - DEMOLITION
162	ED101	13080220	PARTIAL SITE PLAN - DEMOLITION
163	ED102	13080221	PARTIAL SITE PLAN - DEMOLITION
164	ED103	13080222	PARTIAL SITE PLAN - DEMOLITION
165	ED104	13080223	PARTIAL SITE PLAN - DEMOLITION
166	ED105	13080224	PARTIAL SITE PLAN - DEMOLITION
167	ED106	13080225	PARTIAL SITE PLAN - DEMOLITION
168	ED107	13080226	PARTIAL SITE PLAN - DEMOLITION
169	ED108	13080227	PARTIAL SITE PLAN - DEMOLITION
170	ED109	13080228	PARTIAL SITE PLAN - DEMOLITION
171	ED110	13080229	PARTIAL SITE PLAN - DEMOLITION
172	ED111	13080230	PARTIAL SITE PLAN - DEMOLITION
173	ED112	13080231	PARTIAL SITE PLAN - DEMOLITION
174	ED113	13080232	PARTIAL SITE PLAN - DEMOLITION
175	ED114	13080233	PARTIAL SITE PLAN - DEMOLITION
176	ED115	13080234	PARTIAL SITE PLAN - DEMOLITION
177	ED116	13080235	PARTIAL SITE PLAN - DEMOLITION
178	ED117	13080236	PARTIAL SITE PLAN - DEMOLITION
179	ED901	13080237	ELECTRICAL PHOTOS
180	EA001	13080238	ELECTRICAL GENERAL NOTES
181	EA002	13080239	ELECTRICAL CONSTRUCTION LEGEND AND ABBREVIATIONS
182	EA100	13080240	OVERALL SITE PLAN - CONSTRUCTION
183	EA101	13080241	PARTIAL SITE PLAN - CONSTRUCTION
184	EA102	13080242	PARTIAL SITE PLAN - CONSTRUCTION
185	EA103	13080243	PARTIAL SITE PLAN - CONSTRUCTION
186	EA104	13080244	PARTIAL SITE PLAN - CONSTRUCTION
187	EA105	13080245	PARTIAL SITE PLAN - CONSTRUCTION
188	EA106	13080246	PARTIAL SITE PLAN - CONSTRUCTION
189	EA107	13080247	PARTIAL SITE PLAN - CONSTRUCTION
190	EA108	13080248	PARTIAL SITE PLAN - CONSTRUCTION
191	EA109	13080249	PARTIAL SITE PLAN - CONSTRUCTION
192	EA110	13080250	PARTIAL SITE PLAN - CONSTRUCTION
193	EA111	13080251	PARTIAL SITE PLAN - CONSTRUCTION
194	EA112	13080252	PARTIAL SITE PLAN - CONSTRUCTION
195	EA113	13080253	PARTIAL SITE PLAN - CONSTRUCTION
196	EA114	13080254	PARTIAL SITE PLAN - CONSTRUCTION
197	EA115	13080255	PARTIAL SITE PLAN - CONSTRUCTION
198	EA116	13080256	PARTIAL SITE PLAN - CONSTRUCTION
199	EA117	13080257	PARTIAL SITE PLAN - CONSTRUCTION
200	EA501	13080258	ELECTRICAL DETAILS
201	EA502	13091634	ELECTRICAL DETAILS
202	EA503	13091635	ELECTRICAL DETAILS
203	EA504	13091636	ELECTRICAL DETAILS
204	EA601	13091637	AIRFIELD LIGHTING TABLES
205	EA602	13091638	AIRFIELD LIGHTING TABLES
206	EA603	13091639	AIRFIELD LIGHTING TABLES

NOTE:  
MODE NO 17-SF-0058

APPR	DATE	DESCRIPTION	SYN
			
			
<b>JOHNSON, MIRMIRAN &amp; THOMPSON</b> <i>Gannett Fleming</i> <b>A Joint Venture</b> 272 Beach Road, Suite 260 Virginia Beach, Virginia 23452 Telephone: (757) 499-1895 Web: www.jmt.com			
APPROVED			
FOR COMMANDER NAVFAC:			
ACTIVITY:			
JAMES FLETCHER PER CHECKLIST SATISFACTORY TO DATE 9/27/2016 DES DFD DRW MSC CHK MJT PM/DM RH BRANCH MANAGER CHIEF ENG/ARCH E. GALLAHER, PE			
DEPARTMENT OF THE NAVY NAVFAC WASHINGTON WASHINGTON, D.C. NAVAL AIR STATION PATUXENT RIVER PATUXENT RIVER, MARYLAND <b>FY16 SPECIAL PROJECT RM12-2137</b> <b>REPAIR RUNWAYS 14-32 &amp; 6-24 - PHASE 3</b> DRAWING INDEX			
SCALE: AS NOTED			
EPROJCT NO.: 1382138			
CONSTR. CONTR. NO. N40080-17-R-0002			
NAVFAC DRAWING NO. 13080060			
SHEET 2 OF 206			
<b>G-002</b>			
DRAWING REVISION: 10 MARCH 2009			

FILE NAME: G:\V\H\PA\102851\_003\_FY16\_Repair\_Runways\_CADD\Phase 3\GENERAL-CIVIL\_Phase 3\10-0863-009-0-002.dwg LAYOUT NAME

1

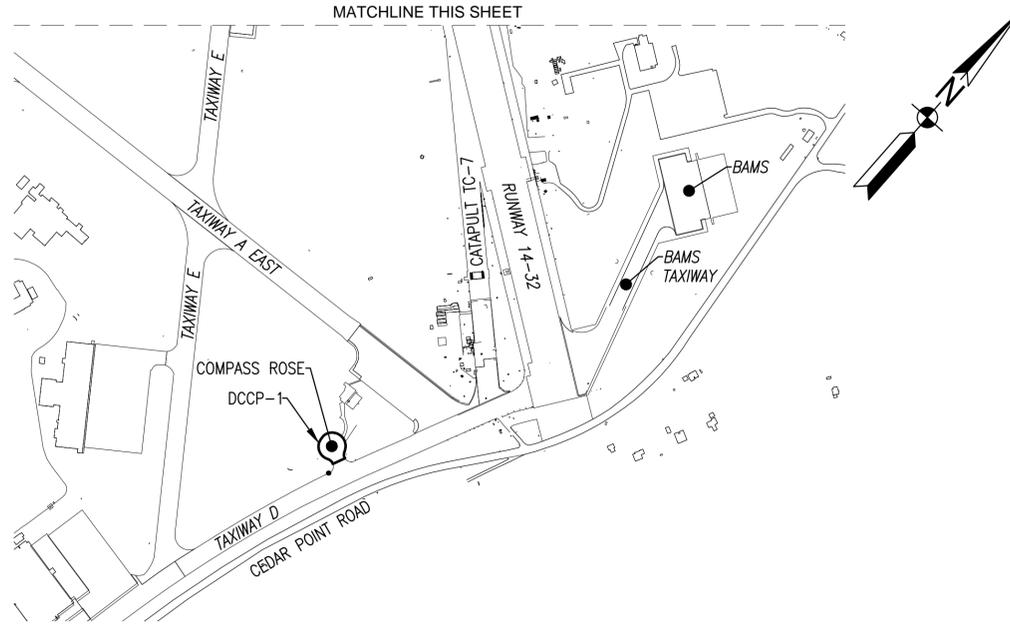
2

3

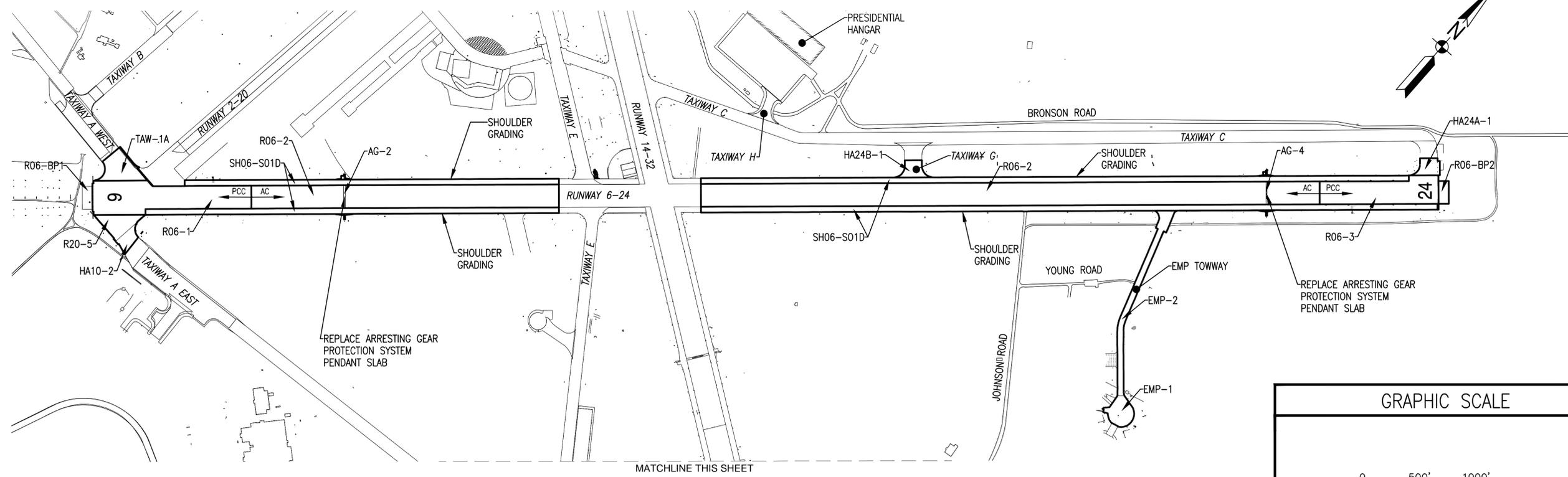
4

5

WORK SCHEMATIC	
LOCATION (BID OPTIONS)	DESCRIPTION OF WORK
R06-2	PROVIDE VARIABLE AC MILL AND OVERLAY. MILL PAVEMENT AND PROVIDE VARIABLE LEVELING AND SURFACE COURSES TO MEET FINISHED GRADES
SH06-S01D	PROVIDE 2" AC RUNWAY SHOULDER PAVEMENT OVERLAY. MILL PAVEMENT AND PROVIDE SURFACE COURSE TO MEET FINISHED GRADES
HA24A-1, HA24B-1, EMP-2	PROVIDE 2" AC PAVEMENT OVERLAY FOR TAXIWAY CONNECTORS. MILL PAVEMENT AND PROVIDE SURFACE COURSE TO MEET FINISHED GRADES
R06-1, R06-3, TAW-1A, HA10-2, R20-5, R06-BP2 (BID OPTION 2)	REPAIR PCC PAVEMENT (SPALLS, CRACKS, FULL SLAB REPLACEMENT, ETC.) AT RUNWAY 6 THRESHOLD, RUNWAY 24 THRESHOLD, TAXIWAY A WEST, TAXIWAY A EAST, AND RUNWAY 2 END
SHOULDER GRADING	GRADE INFIELD AREA. PROVIDE TOPSOIL AND HYROSEED
DRAINAGE IMPROVEMENTS (NOT SHOWN) (BID OPTION 3)	DEMOLISH EXISTING DRAINAGE SYSTEMS AND PROVIDE NEW DRAINAGE INFRASTRUCTURE
PAVEMENT MARKINGS (NOT SHOWN)	PREPARE SURFACE AND PROVIDE PAVEMENT MARKINGS WITHIN LIMITS OF CONSTRUCTION
AG-2, AG-4	DEMOLISH EXISTING AND PROVIDE NEW ARRESTING GEAR PROTECTION SYSTEM PENDANT SLABS ON RUNWAY 6-24
DCCP-1 (BASE BID LINE ITEM #2)	DEMOLISH EXISTING PCC AND PROVIDE NEW PCC PAVEMENT AT THE COMPASS ROSE AT TAXIWAY D FAC #2468 WITH PCC
EMP-1 (BASE BID LINE ITEM #1)	DEMOLISH EXISTING PCC AND PROVIDE NEW PCC PAVEMENT AT THE ELECTROMAGNETIC PULSATOR (EMP)

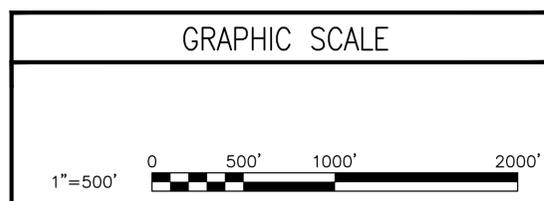


**TAXIWAY D WITH COMPASS ROSE**  
1" = 500'



**WORK SCHEMATIC PLAN - RUNWAY 6-24**  
1" = 500'

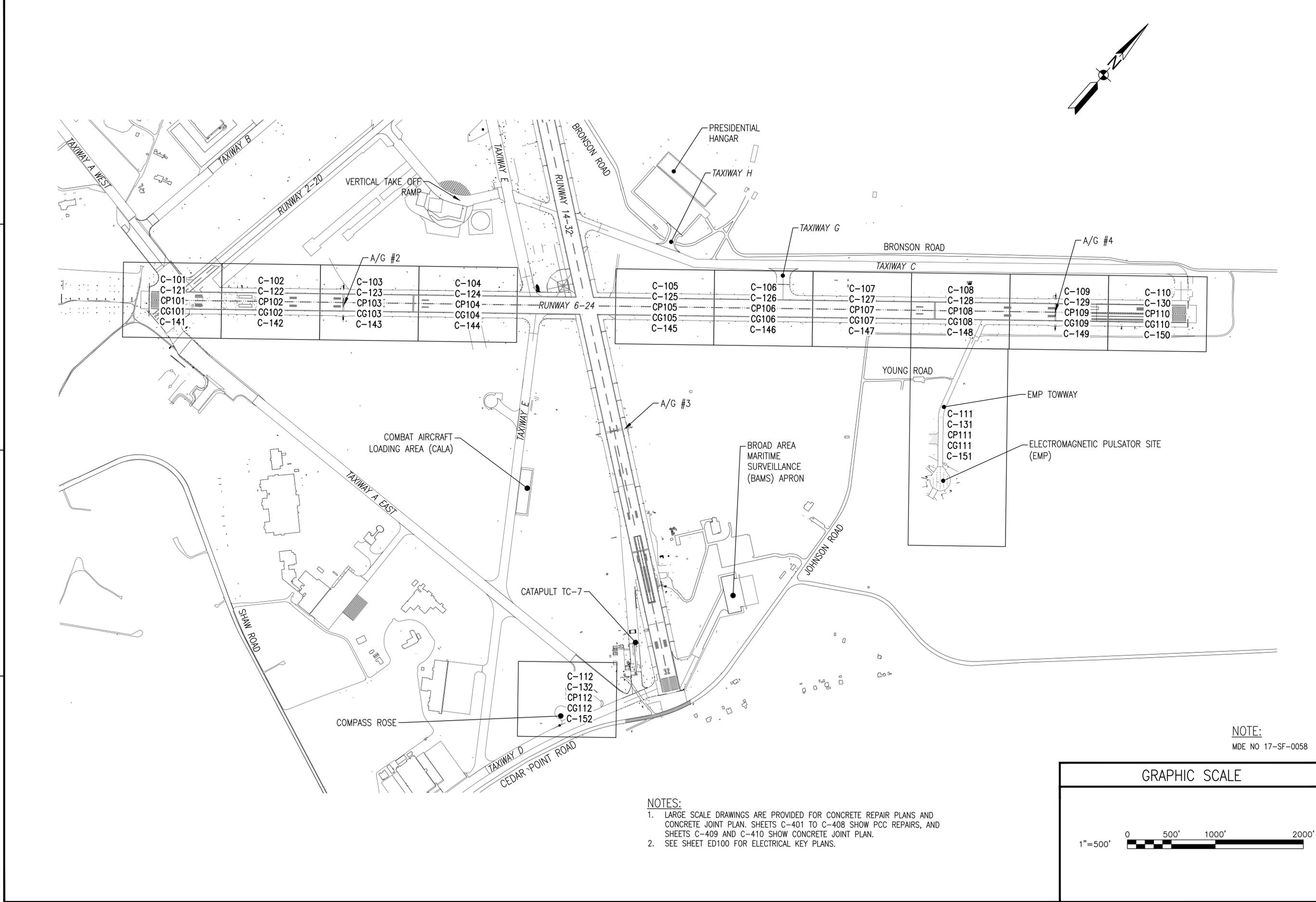
NOTE:  
MDE NO 17-SF-0058



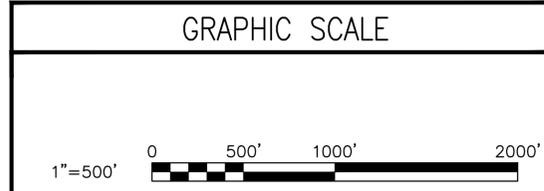
FILE NAME: G:\VHPA\10863\_003\_f16\_repair\_runways\_1\0-0863-009-G-003.dwg LAYOUT NAME: WORK SCHEMATIC PLOTTED: Tuesday, September 27, 2016 - 2:34pm USER: BBoerterino

APPR	DATE
SM	DESCRIPTION
  <b>JOHNSON, MIRMIRAN &amp; THOMPSON</b> <i>Gannett Fleming</i> <b>A Joint Venture</b> 272 Beach Road, Suite 260 Virginia Beach, Virginia 23452 Telephone: (757) 499-1895 Web: www.jmt.com	
APPROVED	A/E: NFO
FOR COMMANDER NAVFAC:	
ACTIVITY	
JAMES FLETCHER PER CHECKLIST	SATISFACTORY TO DATE 9/27/2016
DES: DFD	DRW: MSC
FM/DM: RH	CHK: MJT
BRANCH MANAGER	
CHEF ENG/ARCH: E. GALLAHER, PE	
DEPARTMENT OF THE NAVY	NAVFAC WASHINGTON
NAVAL FACILITIES ENGINEERING COMMAND	WASHINGTON, D.C.
NAVAL AIR STATION PATUXENT RIVER	PATUXENT RIVER, MARYLAND
<b>FY16 SPECIAL PROJECT RM12-2137</b> <b>REPAIR RUNWAYS 14-32 &amp; 6-24 - PHASE 3</b> WORK SCHEMATIC	
SCALE:	AS NOTED
PROJECT NO.:	1382138
CONSTR. CONTR. NO.:	N40080-17-R-0002
NAVFAC DRAWING NO.:	13080061
SHEET	3 OF 206
<b>G-003</b>	
DRAWING REVISION: 10 MARCH 2009	

FILE NAME: G:\VHPA\100851\_003\_FY16\_Repairs\_Brunson\3\GENERAL\CIVIL\_Phase 3\10-0851-009-0-004.dwg LAYOUT NAME: CIVIL SITE KEY PLAN - OVERALL PLOTTED: Sunday, September 25, 2016 - 3:10pm USER: Bcorzentino



- NOTES:**
1. LARGE SCALE DRAWINGS ARE PROVIDED FOR CONCRETE REPAIR PLANS AND CONCRETE JOINT PLAN. SHEETS C-401 TO C-408 SHOW PCC REPAIRS, AND SHEETS C-409 AND C-410 SHOW CONCRETE JOINT PLAN.
  2. SEE SHEET ED100 FOR ELECTRICAL KEY PLANS.



APPR	
DATE	
SYN	
DESCRIPTION	
<p><b>JOHNSON, MIRMIRAN &amp; THOMPSON</b>  <i>Gannett Fleming</i>  <b>A Joint Venture</b>          272 Bendin Road, Suite 260          Virginia Beach, Virginia 23452          Telephone: (757) 499-1895          Web: www.jmt.com</p>	
APPROVED	A/E: JMT
FOR COMMANDER NAVFAC	
ACTIVITY	
<p>JAMES FLETCHER PER CHECKLIST          SATISFACTORY TO DATE 9/27/2016</p>	
DES	DFD   DRW   MSC   CHK   MJT
FM/DM	RH
BRANCH MANAGER	
CHEF ENG/ARCH	E. GALLAHER, PE
DEPARTMENT OF THE NAVY	
NAVFAC WASHINGTON	
NAVAL FACILITIES ENGINEERING COMMAND	
WASHINGTON, D.C.	
NAVAL AIR STATION PATUXENT RIVER	
PATUXENT RIVER, MARYLAND	
<b>FY16 SPECIAL PROJECT RM12-2137</b> <b>REPAIR RUNWAYS 14-32 &amp; 6-24 - PHASE 3</b>	
CIVIL SITE KEY PLAN - OVERALL	
SCALE:	NONE
PROJECT NO.:	1382138
CONSTR. CONTR. NO.:	N40080-17-R-0002
NAVFAC DRAWING NO.:	13080062
SHEET	4 OF 206
<b>G-004</b>	
<small>DRAWING REVISION: 10 MARCH 2009</small>	



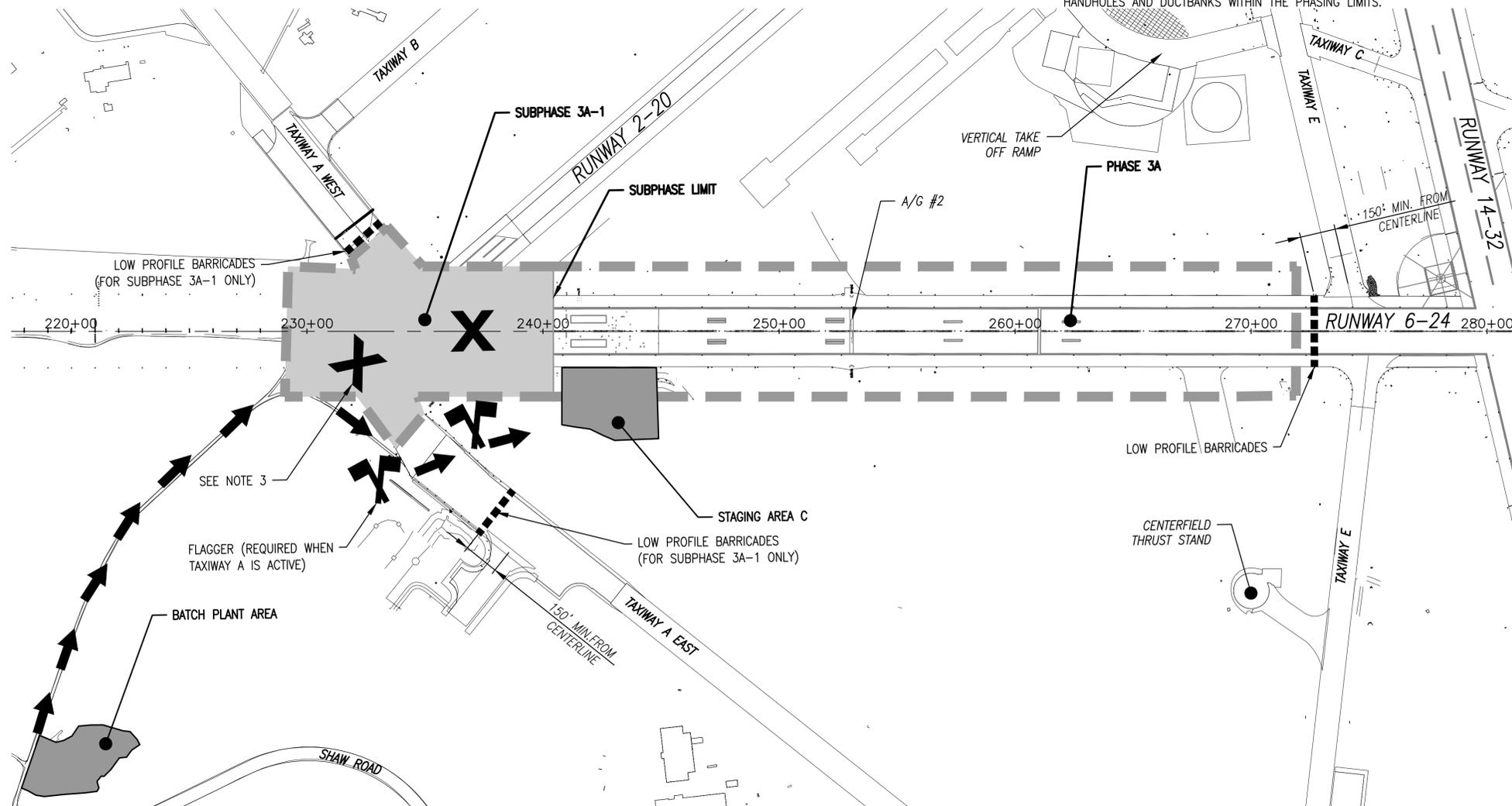
PHASE 3A (RUNWAY 6-24 CLOSED, RUNWAY 2-20 CLOSED PARTIAL DURATION)

PHASE DURATION: 10 WEEKS; SUBPHASE 3A-1 DURATION: 4 WEEKS

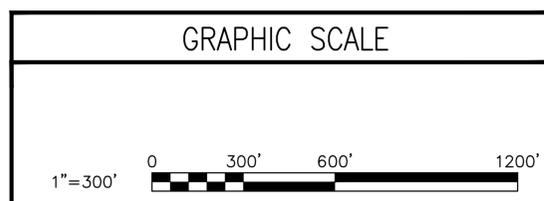
- MOBILIZE TO PROJECT SITE. ESTABLISH STAGING, MATERIAL STORAGE, AND STOCKPILE AREAS SPECIFIC TO SHAW ROAD (KNOWN AS STAGING AREA C AND BATCH PLANT AREA). REINFORCE HAUL ROUTES AND PROTECT UTILITIES, AS NEEDED. ESTABLISH SURVEY CONTROL AND BASELINES. CONTRACTOR TO STAKEOUT AND FLAG WETLAND BOUNDARIES TO BE PROTECTED THROUGHOUT CONSTRUCTION PERIOD.
- INSTALL EROSION CONTROL MEASURES. ESTABLISH TEMPORARY CONSTRUCTION PROVISIONS FOR EXTENDED RUNWAY 6-24 CLOSURE (TEMPORARY CIRCUITING, TEMPORARY STRIPING, SIGN MODIFICATIONS, BARRICADES, ETC).
- STAKEOUT AND FLAG WETLAND BOUNDARIES THAT REQUIRE PROTECTION THROUGHOUT CONSTRUCTION PERIOD.
- ALL WORK WITHIN THE LIMITS OF SUBPHASE 3A-1 SHALL REQUIRE THE CLOSURE OF RUNWAY 2-20 FOR 4 WEEKS.
- DEMOLISH ARRESTING GEAR #2 PROTECTION SYSTEM AND PCC SLABS.
- SUBPHASE 3A-1, PERFORM PCC PAVEMENT REPAIRS TO THE RUNWAY 6 END THRESHOLD (R06-01), TAXIWAY A WEST (TAW-1A) FROM THE NORTH RUNWAY 6 EDGE TO THE HOLD SHORT LINE, AND TAXIWAY A EAST (HA10-2) FROM THE SOUTH RUNWAY EDGE TO THE HOLD SHORT LINE, AND RUNWAY 2 END (R20-5).
- REMOVE RUNWAY 6-24 (R06-2) ASPHALT PAVEMENT IN THE DEEP AC PAVEMENT REPAIR AREA AT APPROX. STA 244+89 TO APPROX. STA 245+65.
- REMOVE RUNWAY 6-24 (R06-2) ASPHALT PAVEMENT TO VARIABLE DEPTH FROM APPROX. STA 245+65 TO STA 252+100 AND STA 253+15 TO STA 271+90, AND AT 200' WIDE. SAWCUT THE EXISTING PAVEMENT WHERE IT TIES INTO EXISTING AC PAVEMENT.
- REMOVE NORTH RUNWAY SHOULDER (SH06-S01D) ASPHALT PAVEMENT TO 2" DEPTH FROM APPROX. STA 239+04 TO APPROX. STA 244+89, AND AT 50' WIDE.
- REMOVE SOUTH RUNWAY SHOULDER (SH06-S01D) ASPHALT PAVEMENT TO 2" DEPTH FROM APPROX. STA 235+59 TO APPROX. STA 244+89, AND AT 50' WIDE.
- REMOVE NORTH RUNWAY SHOULDER (SH06-S01D) ASPHALT PAVEMENT TO VARIABLE DEPTH FROM APPROX. STA 244+89 TO APPROX. STA 271+90, AND AT 50' WIDE.
- REMOVE NORTH RUNWAY SHOULDER (SH06-S01D) ASPHALT PAVEMENT TO VARIABLE DEPTH FROM APPROX. STA 244+89 TO APPROX. STA 271+90, AND AT 50' WIDE.
- DEMOLISH PCC SLABS AT RUNWAY 6 END THRESHOLD (R06-1) FROM APPROX. STA 231+04 TO STA 244+89 AT 12.5' WIDE TO REPAIR RUNWAY CENTERLINE LIGHTS.
- DEMOLISH RUNWAY 6 END (R06-01) THRESHOLD LIGHTING PCC PAVEMENT FROM APPROX. STA 230+94 TO APPROX. STA 231+04 WITH OFFSETS +120 AND -127.
- CONSTRUCT ASPHALT PAVEMENT IN THE DEEP AC PAVEMENT REPAIR AREA ON RUNWAY 6-24 (R06-2) FROM APPROX. STA. 244+89 TO APPROX. STA 245+65.
- CONSTRUCT VARIABLE ASPHALT PAVEMENT OVERLAY ON RUNWAY 6-24 (R06-2) FROM APPROX. STA 245+65 TO STA 252+100 AND STA 253+15 TO STA 271+90.
- CONSTRUCT 2" ASPHALT PAVEMENT OVERLAY ON THE MILLED AREAS FOR NORTH AND SOUTH RUNWAY SHOULDERS (SH06-S01D) FROM APPROX. STA 239+04 TO APPROX. STA 244+89 AND FROM APPROX. STA 235+59 TO APPROX. STA 244+89, RESPECTIVELY.
- CONSTRUCT VARIABLE DEPTH ASPHALT PAVEMENT OVERLAY ON THE MILLED AREAS FOR NORTH AND SOUTH RUNWAY SHOULDERS (SH06-S01D) FROM APPROX. STA 244+89 TO APPROX. STA 271+90.
- CONSTRUCT ARRESTING GEAR PCC SLABS AND ARRESTING GEAR PROTECTION SYSTEM FOR ARRESTING GEAR #2.
- CONSTRUCT PCC SLABS AT RUNWAY 6 END THRESHOLD (R06-01) FROM APPROX. STA 231+04 TO STA 244+89 AT 12.5' WIDE, AS NEEDED TO REPAIR RUNWAY CENTERLINE LIGHTS.
- CONSTRUCT RUNWAY 6 END (R06-01) THRESHOLD LIGHTING PCC PAVEMENT FROM APPROX. STA 230+94 TO APPROX. STA 231+04 WITH OFFSETS +120 AND -127.
- DEMOLISH EXISTING DRAINAGE SYSTEM AND PROVIDE NEW DRAINAGE INFRASTRUCTURE.
- PERFORM INFIELD GRADING, TOPSOILING, AND HYDROSEEDING.
- COORDINATE ALL ELECTRICAL AND CIVIL WORK WITHIN THE PHASING LIMITS.
- PERFORM TEMPORARY AIRFIELD ELECTRICAL WORK.
- ALL ELECTRICAL CONDUIT AND BASE CAN WORK WITHIN AC PAVEMENT AREAS SHALL TAKE PLACE BETWEEN THE MILLING AND PAVING OPERATIONS. THIS IS TO ENSURE THAT THE FINAL SURFACE IS A CONSISTENT AND UNIFORM MATERIAL. CORING OF THE SURFACE COURSE IS ACCEPTABLE TO PLACE TOP SECTIONS AND INSTALL EDGE AND CENTERLINE LIGHTS ONLY.
- REMOVE ALL RUNWAY AND TAXIWAY EDGE LIGHTS. REMOVE RUNWAY THRESHOLD LIGHTS. REMOVE RUNWAY CENTERLINE LIGHTS. REMOVE LIGHT BASE CANS, ISOLATION TRANSFORMERS, CONDUIT, AND WIRING ASSOCIATED WITH THE LIGHTING. DISPOSE OF ALL ELECTRICAL EQUIPMENT PER FEDERAL, STATE, AND LOCAL CODES.
- PERFORM ELECTRICAL CONSTRUCTION WORK WITHIN THE PHASING LIMITS. INSTALL RUNWAY EDGE LIGHTS, RUNWAY CENTERLINE LIGHTS, THRESHOLD LIGHTS, AND TAXIWAY EDGE LIGHTS. INSTALL LIGHT BASE CANS, ISOLATION TRANSFORMERS, CONDUIT AND WIRING ASSOCIATED WITH THE LIGHTING. INSTALL HANDHOLES AND DUCTBANKS WITHIN THE PHASING LIMITS.

LEGEND

- PHASE 3A WORK AREA
- STAGING AREAS, BATCH PLANT AREA
- SUBPHASE 3A-1 WORK AREA
- LIGHTED RUNWAY CLOSURE MARKER AND CLOSED RUNWAY MARKING
- LOW PROFILE BARRICADE
- ACCESS AND HAUL ROUTE
- FLAGMAN WITH RADIO



NOTE:  
MDE NO 17-SF-0058



APPROVED	DATE	APPR
FOR COMMANDER NAVFAC	ACTIVITY	SYN DESCRIPTION
JAMES FLETCHER PER CHECKLIST SATISFACTORY TO DATE 9/27/2016	DES: DFD   DRW: MSC   CHK: MJT	FM/DM: RH
BRANCH MANAGER	CHEF ENG/ARCH: E. GALLAHER, PE	
DEPARTMENT OF THE NAVY NAVFAC WASHINGTON NAVFACILITIES ENGINEERING COMMAND WASHINGTON, D.C. NAVAL AIR STATION PATUXENT RIVER PATUXENT RIVER, MARYLAND FY16 SPECIAL PROJECT RM12-2137 REPAIR RUNWAYS 14-32 & 6-24 - PHASE 3 PROJECT PHASING - PHASE 3A		
SCALE: AS NOTED	PROJECT NO.: 1382138	
CONSTR. CONTR. NO. N40080-17-R-0002	NAVFAC DRAWING NO. 13080064	
SHEET 6 OF 206	G-102	
DRAWING REVISION: 10 MARCH 2009		

FILE NAME: G:\VHPA\10863\_003\_FY16\_Repair\_Runways\_CADD\Phase 3\GENERAL-CIVIL\_Phase 3A\_PLOTTED\_Sunday, September 25, 2016 - 3:43pm USER: Bionerlino

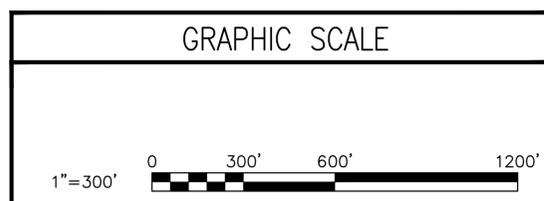
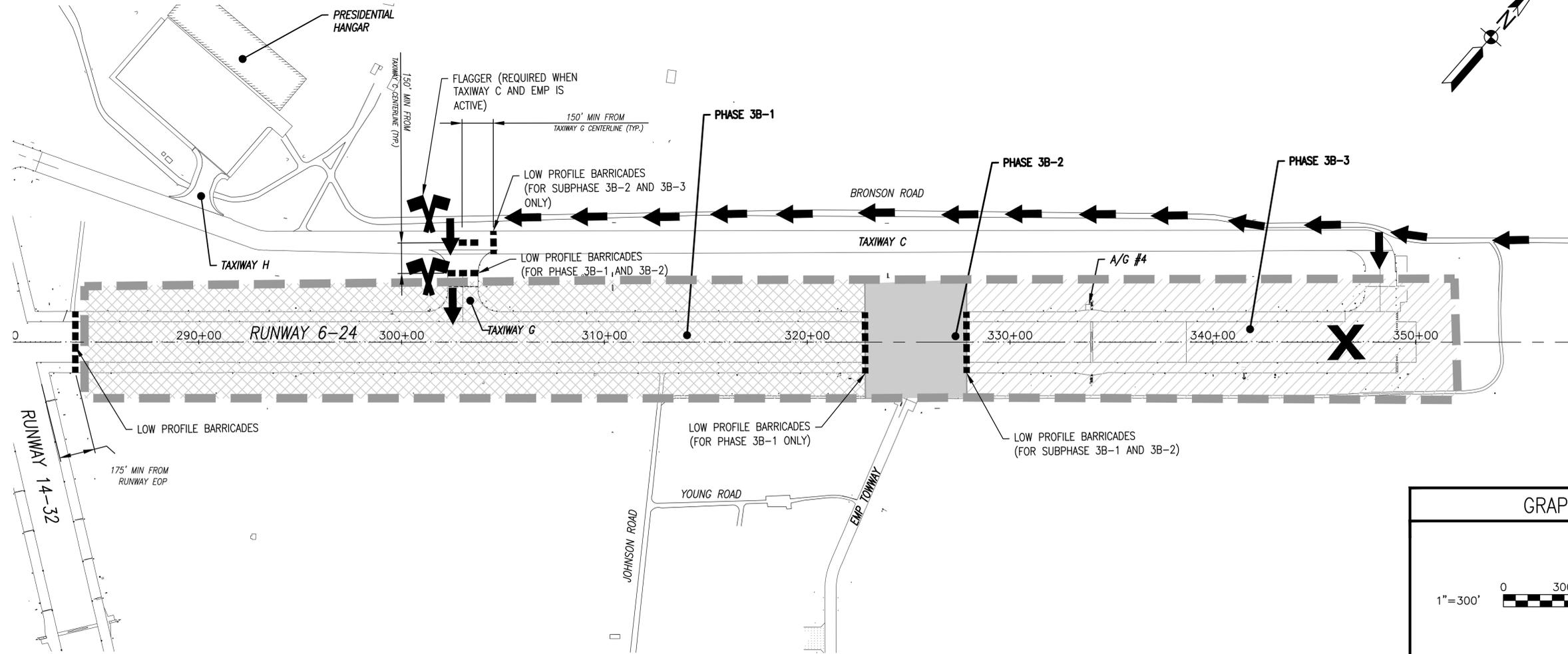
PHASE 3B (RUNWAY 6-24 CLOSED)

PHASE DURATION: 13 WEEKS; SUBPHASE 3B-1 DURATION: 6 WEEKS; SUBPHASE 3B-2 DURATION: 2 WEEKS; SUBPHASE 3B-3 DURATION: 5 WEEKS

- MOBILIZE TO PHASE 3B WORK AREA. USE STAGING, MATERIAL STORAGE, AND STOCKPILE AREAS SPECIFIC TO CEDAR POINT ROAD, AND SHAW ROAD (KNOWN AS STAGING AREA D AND BATCH PLANT AREA RESPECTIVELY). MAINTAIN HAUL ROUTES AND PROTECT UTILITIES, AS NEEDED. ESTABLISH SURVEY CONTROL AND BASELINES.
- INSTALL EROSION CONTROL MEASURES FOR PHASE 3B. MAINTAIN EROSION CONTROL MEASURES OF PHASE 3A FOR EXTENDED RUNWAY 6-24 CLOSURE OR UNTIL AREA OF PHASE 3A IS FULLY STABILIZED.
- INSTALL TEMPORARY CONSTRUCTION MEASURES FOR PHASE 3B AS REQUIRED PER SUBPHASE (RUNWAY 6-24, TAXIWAY G CLOSED, TAXIWAY C CLOSED, AND EMP TOWWAY CLOSED, TEMPORARY STRIPING, SIGN MODIFICATIONS, BARRICADES, ETC).
- DEMOLISH ARRESTING GEAR #4 PROTECTION SYSTEM AND PCC SLABS.
- REMOVE RUNWAY 6-24 (R06-2) ASPHALT PAVEMENT IN THE DEEP AC PAVEMENT REPAIR AREA FROM APPROX. STA. 285+86 TO APPROX. STA. 286+86, AND AT 40' WIDE.
- REMOVE RUNWAY 6-24 (R06-2) ASPHALT PAVEMENT IN THE DEEP AC PAVEMENT REPAIR AREA FROM APPROX. STA. 337+95 TO APPROX. STA. 338+70, AND AT 200' WIDE.
- REMOVE RUNWAY 6-24 (R06-2) ASPHALT PAVEMENT AT VARIABLE DEPTH FROM APPROX. STA 284+00 TO STA. 333+97 AND STA 334+07 TO STA 337+95, AND AT 200' WIDE. SAWCUT THE EXISTING PAVEMENT WHERE IT TIES INTO EXISTING AC PAVEMENT.
- REMOVE NORTH RUNWAY SHOULDER (SH06-S01D) ASPHALT PAVEMENT TO 2" DEPTH FROM APPROX. STA 338+70 TO APPROX. STA 346+53, AND AT 50' WIDE.
- REMOVE SOUTH RUNWAY SHOULDER (SH06-S01D) ASPHALT PAVEMENT TO 2" DEPTH FROM APPROX. STA 338+70 TO APPROX. STA 349+03, AND AT 50' WIDE.
- REMOVE NORTH RUNWAY SHOULDER (SH06-S01D) ASPHALT PAVEMENT TO VARIABLE DEPTH FROM APPROX. STA 284+00 TO APPROX. STA 338+70, AND AT 50' WIDE.
- REMOVE SOUTH RUNWAY SHOULDER (SH06-S01D) ASPHALT PAVEMENT TO VARIABLE DEPTH FROM APPROX. STA 284+00 TO APPROX. STA 338+70, AND AT 50' WIDE.
- REMOVE TAXIWAY G (HA24B-1) ASPHALT PAVEMENT TO 2" DEPTH FROM THE NORTH RUNWAY 6-24 EDGE TO 25' PAST THE HOLD SHORT LINE, AND AT THE TAXIWAY WIDTH. SAWCUT THE EXISTING PAVEMENT WHERE IT TIES INTO AC PAVEMENT.
- REMOVE TAXIWAY C (HA24A-1) ASPHALT PAVEMENT TO 2" DEPTH FROM THE NORTH RUNWAY 6-24 EDGE TO 25' PAST THE HOLD SHORT LINE, AND AT THE TAXIWAY WIDTH. SAWCUT THE EXISTING PAVEMENT WHERE IT TIES INTO AC PAVEMENT.
- REMOVE EMP TOWWAY (EMP-2) ASPHALT PAVEMENT TO 2" DEPTH FROM THE SOUTH RUNWAY 6-24 EDGE TO 25' PAST THE HOLD SHORT LINE, AND AT THE TOWWAY WIDTH. SAWCUT THE EXISTING PAVEMENT WHERE IT TIES INTO AC PAVEMENT.
- DEMOLISH PCC SLABS AT RUNWAY 6 END THRESHOLD (R06-3) FROM APPROX. STA 338+70 TO STA 349+03 AT 12.5' WIDE, AS NEEDED TO REPAIR RUNWAY CENTERLINE LIGHTS.
- DEMOLISH RUNWAY 6 END (R06-3) THRESHOLD LIGHTING PCC PAVEMENT FROM APPROX. STA 349+03 TO APPROX. STA 349+13 WITH OFFSETS -150 TO +151.
- PERFORM PCC REPAIRS TO RUNWAY 24 END THRESHOLD (R06-3) PCC PAVEMENT.
- CONSTRUCT ARRESTING GEAR PCC SLABS AND ARRESTING GEAR PROTECTION SYSTEM FOR ARRESTING GEAR #4.
- CONSTRUCT ASPHALT PAVEMENT IN THE DEEP AC PAVEMENT REPAIR AREA ON RUNWAY 6-24 (R06-2) FROM APPROX. STA. 285+86 TO STA. 286+86, AND AT 40' WIDE.
- CONSTRUCT DEEP AC PAVEMENT REPAIR ON RUNWAY 6-24 (R06-2) FROM APPROX. STA. 337+95 TO APPROX. STA. 338+70, AND AT 200' WIDE.
- CONSTRUCT VARIABLE DEPTH, 200' WIDE ASPHALT PAVEMENT OVERLAY ON RUNWAY (R06-2) FROM APPROX. STA 284+00 TO STA. 333+97, AND STA 334+07 TO STA 337+95.
- CONSTRUCT 2" ASPHALT PAVEMENT OVERLAY ON THE MILLED AREAS FOR THE NORTH AND THE SOUTH RUNWAY SHOULDERS (SH06-S01D) FROM APPROX. STA. 338+70 TO 346+53 AND FROM APPROX. STA. 338+70 TO STA. 349.03, RESPECTIVELY.
- CONSTRUCT VARIABLE DEPTH ASPHALT PAVEMENT OVERLAY ON THE MILLED AREAS FOR THE NORTH AND THE SOUTH RUNWAY SHOULDERS (SH06-S01D) FROM APPROX. STA. 284+00 TO STA. 338+70.
- CONSTRUCT 2" ASPHALT PAVEMENT OVERLAY ON THE MILLED AREAS ON TAXIWAY G (HA24B-1), TAXIWAY C (HA24A-1), AND EMP TOWWAY (EMP-2).
- CONSTRUCT PCC SLABS AT RUNWAY 6 END THRESHOLD (R06-3) FROM APPROX. STA 338+70 TO STA 349+03.00 AT 12.5' WIDE, AS NEEDED TO REPAIR RUNWAY CENTERLINE LIGHTS.
- CONSTRUCT RUNWAY 6 END (R06-3) THRESHOLD LIGHTING PCC PAVEMENT FROM APPROX. STA 349+03 TO APPROX. STA 349+13 WITH OFFSETS -150 TO +151.
- DEMOLISH EXISTING DRAINAGE SYSTEMS AND PROVIDE NEW DRAINAGE INFRASTRUCTURE.
- PERFORM INFIELD GRADING, TOPSOILING, AND HYDROSEEDING.
- COORDINATE ALL ELECTRICAL AND CIVIL WORK WITHIN THE PHASING LIMITS.
- PERFORM TEMPORARY AIRFIELD ELECTRICAL WORK.
- ALL ELECTRICAL CONDUIT AND BASE CAN WORK WITHIN ALL PAVEMENT AREAS SHALL TAKE PLACE BETWEEN THE MILLING AND PAVING OPERATIONS. THIS IS TO ENSURE THAT THE FINAL SURFACE IS A CONSISTENT AND UNIFORM MATERIAL. CORING OF THE SURFACE COURSE IS ACCEPTABLE TO PLACE TOP SECTIONS AND INSTALL EDGE AND CENTERLINE LIGHTS ONLY.
- REMOVE ALL RUNWAY AND TAXIWAY EDGE LIGHTS. REMOVE RUNWAY THRESHOLD LIGHTS. REMOVE RUNWAY CENTERLINE LIGHTS. REMOVE LIGHT BASE CANS, ISOLATION TRANSFORMERS, CONDUIT, AND WIRING ASSOCIATED WITH THE LIGHTING. DISPOSE OF ALL ELECTRICAL EQUIPMENT PER FEDERAL, STATE, AND LOCAL CODES.
- PERFORM ELECTRICAL CONSTRUCTION WORK WITHIN THE PHASING LIMITS. INSTALL RUNWAY EDGE LIGHTS, RUNWAY CENTERLINE LIGHTS, THRESHOLD LIGHTS, AND TAXIWAY EDGE LIGHTS. INSTALL LIGHT BASE CANS, ISOLATION TRANSFORMERS, CONDUIT AND WIRING ASSOCIATED WITH THE LIGHTING. INSTALL HANDHOLES AND DUCTBANKS WITHIN THE PHASING LIMITS.

LEGEND

- PHASE 3B WORK AREA
- SUBPHASE 3B-1 WORK AREA
- SUBPHASE 3B-2 WORK AREA
- SUBPHASE 3B-3 WORK AREA
- LOW PROFILE BARRICADE
- LIGHTED RUNWAY CLOSURE MARKER AND CLOSED RUNWAY MARKING
- ACCESS AND HAUL ROUTE
- FLAGMAN WITH RADIO



APPROVED	DATE	APP'R
FOR COMMANDER NAVFAC	ACTIVITY	
JAMES FLETCHER PER CHECKLIST	SATISFACTORY TO DATE 9/27/2016	
DES: DFD	DRW: MSC	CHK: MJT
FM/DM: RH	BRANCH MANAGER	
CHEF ENG/ARCH: E. GALLAHER, PE		
DEPARTMENT OF THE NAVY	NAV FACILITIES ENGINEERING COMMAND	WASHINGTON, D.C.
EPT BLUE	NAVFAC WASHINGTON	PATUXENT RIVER, MARYLAND
NAVAL AIR STATION PATUXENT RIVER	FY16 SPECIAL PROJECT RM12-2137	REPAIR RUNWAYS 14-32 & 6-24 - PHASE 3
		PROJECT PHASING - PHASE 3B
SCALE: AS NOTED	PROJECT NO.: 1382138	
CONSTR. CONTR. NO. N40080-17-R-0002	NAVAC DRAWING NO. 13080065	
SHEET 7 OF 206	G-103	
DRAWING REVISION: 10 MARCH 2009		

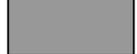
FILE NAME: G:\VHPA\10863\_003\_FY16\_Repairs\_Runways\_CADD\Phase 3\GENERAL-COML\_Phase 3\10-0863-009-0-103.dwg LAYOUT NAME: PROJECT PHASING - PHASE 3B PLOTTED: Sunday, September 25, 2016 - 3:58pm USER: BConzerlino

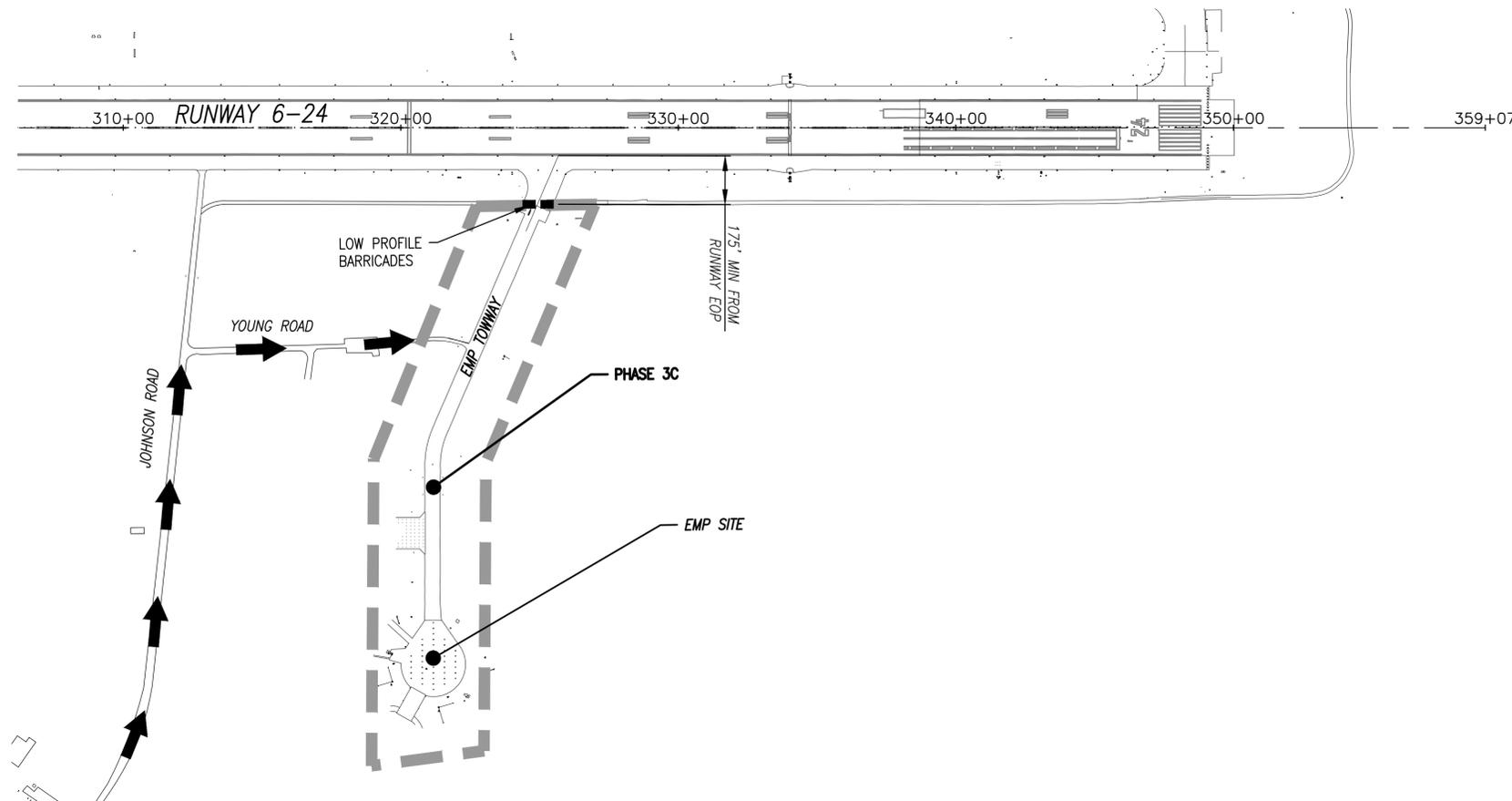
### PHASE 3C (EMP TOWWAY CLOSED)

PHASE DURATION: 5 WEEKS

1. MOBILIZE TO PHASE 3C WORK AREA. USE STAGING, MATERIAL STORAGE, AND STOCKPILE AREAS SPECIFIC TO CEDAR POINT ROAD AND SHAW ROAD (KNOWN AS STAGING AREA D, AND BATCH PLANT AREA RESPECTIVELY). MAINTAIN HAUL ROUTES AND PROTECT UTILITIES, AS NEEDED. ESTABLISH SURVEY CONTROL AND BASELINES.
2. INSTALL EROSION CONTROL MEASURES FOR PHASE 3C. MAINTAIN EROSION CONTROL MEASURES OF PHASE 3A AND 3B UNTIL FINAL STABILIZATION IS ACHIEVED. MAINTAIN TEMPORARY PROVISIONS OF PHASE 3A AND 3B FOR EXTENDED RUNWAY 6-24 CLOSURE.
3. INSTALL TEMPORARY CONSTRUCTION MEASURES FOR PHASE 3C (EMP CLOSED, TEMPORARY STRIPING, SIGN MODIFICATIONS, BARRICADES, ETC).
4. REMOVE EMP TOWWAY (EMP-2) ASPHALT PAVEMENT TO 2" DEPTH FROM 25' SOUTH OF RUNWAY 6-24 HOLD SHORT LINE TO WHERE IT TIES INTO EMP SITE (EMP-1) PCC PAVEMENT, AND AT THE TOWWAY WIDTH. SAWCUT THE EXISTING PAVEMENT WHERE IT TIES INTO AC PAVEMENT.
5. DEMOLISH EMP SITE (EMP-1) PCC SLABS FULL DEPTH.
6. CONSTRUCT 2" ASPHALT PAVEMENT OVERLAY ON THE MILLED AREAS ON EMP TOWWAY (EMP-2).
7. CONSTRUCT 15" THICK PCC SLABS FOR EMP SITE (EMP-1). SEE DETAIL 4 ON SHEET C-506.
8. DEMOLISH EXISTING DRAINAGE SYSTEMS AND PROVIDE NEW DRAINAGE INFRASTRUCTURE.
9. PERFORM INFIELD GRADING, TOPSOILING, AND HYDROSEEDING.
10. COORDINATE ALL ELECTRICAL AND CIVIL WORK WITHIN THE PHASING LIMITS.
11. PERFORM TEMPORARY AIRFIELD ELECTRICAL WORK.
12. ALL ELECTRICAL CONDUIT AND BASE CAN WORK SHALL TAKE PLACE BETWEEN THE MILLING AND PAVING OPERATIONS. THIS IS TO ENSURE THAT THE FINAL SURFACE IS A CONSISTENT AND UNIFORM MATERIAL. CORING OF THE SURFACE COURSE IS ACCEPTABLE TO PLACE TOP SECTIONS AND INSTALL EDGE AND CENTERLINE LIGHTS ONLY.
13. REMOVE ALL TAXIWAY EDGE LIGHTS. REMOVE LIGHT BASE CANS, ISOLATION TRANSFORMERS, CONDUIT, AND WIRING ASSOCIATED WITH THE LIGHTING. DISPOSE OF ALL ELECTRICAL EQUIPMENT PER FEDERAL, STATE, AND LOCAL CODES.
14. PERFORM ELECTRICAL CONSTRUCTION WORK WITHIN THE PHASING LIMITS. INSTALL TAXIWAY EDGE LIGHTS. INSTALL LIGHT BASE CANS, ISOLATION TRANSFORMERS, CONDUIT AND WIRING ASSOCIATED WITH THE LIGHTING. INSTALL HANDHOLES AND DUCTBANKS WITHIN THE PHASING LIMITS.

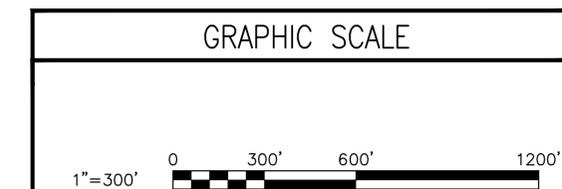
### LEGEND

-  PHASE 3C WORK AREA
-  STAGING AREAS, BATCH PLANT AREA
-  LOW PROFILE BARRICADE
-  ACCESS AND HAUL ROUTE



**BID PROPOSAL NOTE:**  
 1. ALL WORK ASSOCIATED WITH THE EMP TOWWAY AND EMP SITE (STA: 1+86 TO STA: 19+81) IS BASE BID LINE ITEM #1.

**NOTE:**  
 MDE NO 17-SF-0058



SYMBOL	DESCRIPTION	DATE	APPROVED



**JOHNSON, MIRMIRAN & THOMPSON**  
*Gannett Fleming*  
**A Joint Venture**  
 272 Bessie Road, Suite 260  
 Virginia Beach, Virginia 23452  
 Telephone: (757) 499-1895  
 Web: www.jmt.com

APPROVED: \_\_\_\_\_  
 FOR COMMANDER NAVFAC: \_\_\_\_\_  
 ACTIVITY: \_\_\_\_\_  
 JAMES FLETCHER PER CHECKLIST  
 SATISFACTORY TO DATE 9/27/2016  
 DES: DFD | DRW: MSC | CHK: MJT  
 PM/DM: RH  
 BRANCH MANAGER  
 CHIEF ENG/ARCH: E. GALLAHER, PE

DEPARTMENT OF THE NAVY  
 EPT BLUE  
 NAVFAC WASHINGTON  
 WASHINGTON, D.C.  
 NAVAL AIR STATION PATUXENT RIVER  
 PATUXENT RIVER, MARYLAND  
 FY16 SPECIAL PROJECT RM12-2137  
 REPAIR RUNWAYS 14-32 & 6-24 - PHASE 3  
 PROJECT PHASING - PHASE 3C

SCALE: AS NOTED  
 EPROJECT NO.: 1382138  
 CONSTR. CONTR. NO. N40080-17-R-0002  
 NAVFAC DRAWING NO. 13080066  
 SHEET 8 OF 206  
**G-104**

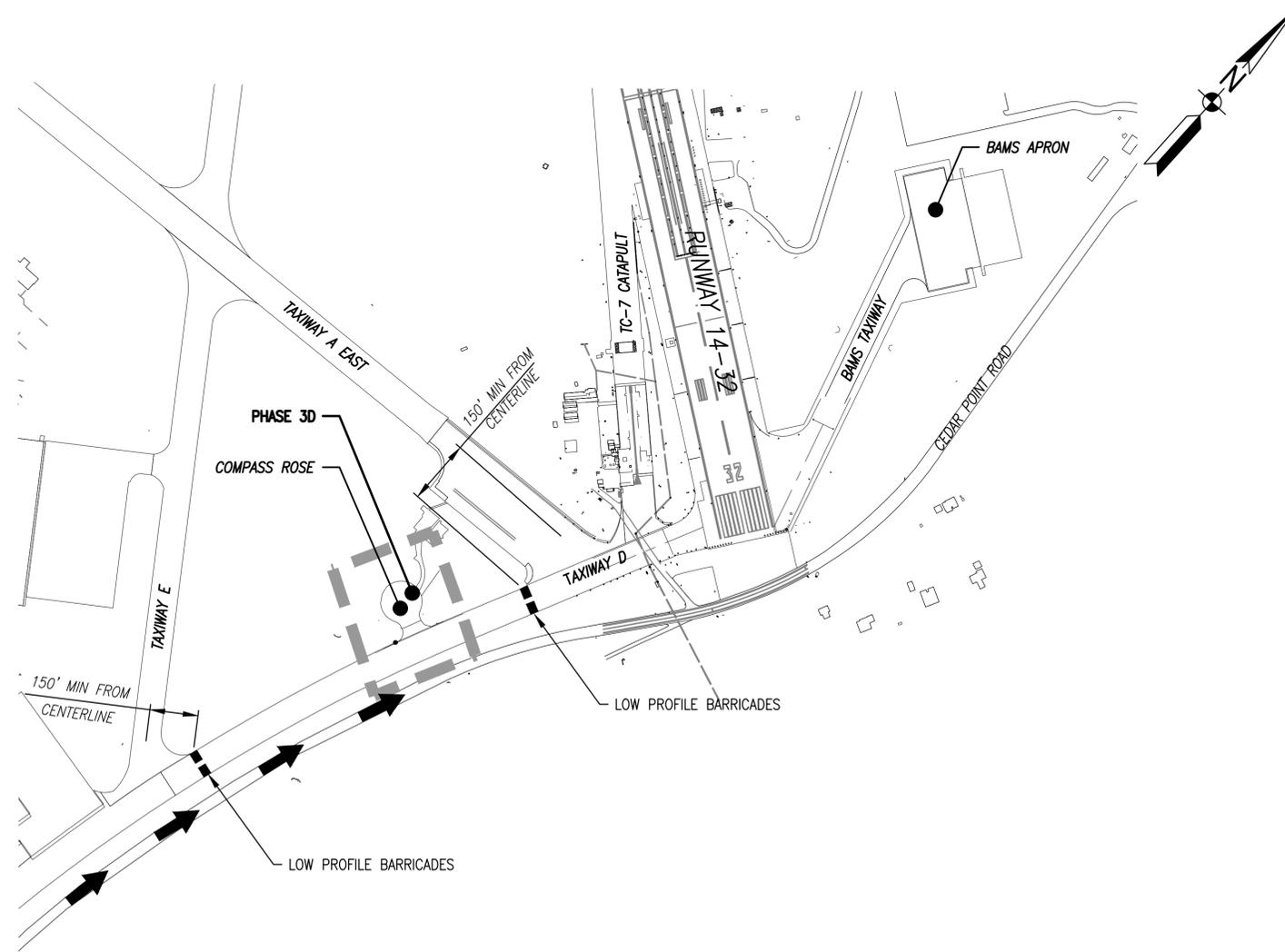
### PHASE 3D (TAXIWAY D CLOSED)

PHASE DURATION: 4 WEEKS

1. MOBILIZE TO PHASE 3D WORK AREA. USE STAGING, MATERIAL STORAGE, AND STOCKPILE AREAS SPECIFIC TO SHAW ROAD (KNOWN AS STAGING AREA D, AND BATCH PLANT AREA). MAINTAIN HAUL ROUTES AND PROTECT UTILITIES, AS NEEDED. ESTABLISH SURVEY CONTROL AND BASELINES.
2. INSTALL EROSION CONTROL MEASURES FOR PHASE 3D. MAINTAIN EROSION CONTROL MEASURES OF PHASE 3A, 3B AND 3C UNTIL FINAL STABILIZATION IS ACHIEVED. MAINTAIN TEMPORARY PROVISIONS OF PHASE 3A, 3B, AND 3C FOR EXTENDED RUNWAY 6-24 CLOSURE.
3. INSTALL TEMPORARY CONSTRUCTION MEASURES FOR PHASE 3D (TAXIWAY D CLOSED, TEMPORARY STRIPING, SIGN MODIFICATIONS, BARRICADES, ETC).
4. DEMOLISH COMPASS ROSE (DCCP-1) PCC PAVEMENT TO FULL DEPTH.
5. CONSTRUCT 15" THICK PCC PAVEMENT FOR COMPASS ROSE (DCCP-1). SEE DETAIL 5 ON SHEET C-504.
6. DEMOLISH EXISTING DRAINAGE SYSTEMS AND PROVIDE NEW DRAINAGE INFRASTRUCTURE.
7. PERFORM INFIELD GRADING, TOPSOILING, AND HYDROSEEDING.

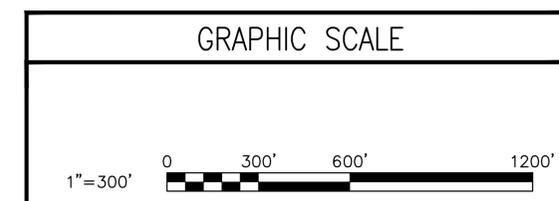
### LEGEND

-  PHASE 3D WORK AREA
-  STAGING AREAS, BATCH PLANT AREA
-  LOW PROFILE BARRICADE
-  ACCESS AND HAUL ROUTE



**BID PROPOSAL NOTE:**  
 1. ALL WORK ASSOCIATED WITH THE COMPASS ROSE IS BASE BID LINE ITEM #2.

**NOTE:**  
 MDE NO 17-SF-0058



SYN	DESCRIPTION	DATE	APPR



**JOHNSON, MIRMIRAN & THOMPSON**  
*Gannett Fleming*  
**A Joint Venture**  
 272 Bengt Road, Suite 260  
 Virginia Beach, Virginia 23452  
 Telephone: (757) 499-1895  
 Web: www.jmt.com

APPROVED: \_\_\_\_\_  
 FOR COMMANDER NAVFAC: \_\_\_\_\_  
 ACTIVITY: \_\_\_\_\_  
 JAMES FLETCHER PER CHECKLIST  
 SATISFACTORY TO DATE 9/27/2016  
 DES: DFD | DRW: MSC | CHK: MJT  
 PM/DM: RH  
 BRANCH MANAGER  
 CHIEF ENG/ARCH: E. GALLAHER, PE

DEPARTMENT OF THE NAVY  
 EPT BLUE  
 NAVFAC WASHINGTON  
 NAVFACILITIES ENGINEERING COMMAND  
 WASHINGTON, D.C.  
 NAVAL AIR STATION PATUXENT RIVER  
 PATUXENT RIVER, MARYLAND  
 FY16 SPECIAL PROJECT RM12-2137  
 REPAIR RUNWAYS 14-32 & 6-24 - PHASE 3  
 PROJECT PHASING - PHASE 3D

SCALE: AS NOTED  
 EPROJECT NO.: 1382138  
 CONSTR. CONTR. NO. N40080-17-R-0002  
 NAVFAC DRAWING NO. 13080067  
 SHEET 9 OF 206  
**G-105**

**GENERAL NOTES:**

- ALL DIMENSIONS ARE IN FEET (FT) AND INCHES (IN).
- SUBMIT A SCHEDULE OF WORK TO THE CONTRACTING OFFICER FIFTEEN (15) DAYS PRIOR TO THE START OF CONSTRUCTION. IDENTIFY THE AREAS OF WORK AND ASSOCIATED DURATIONS REQUIRED FOR COMPLETION. THE SCHEDULE MUST PRESENT TIME BY WEEKLY INCREMENTS.
- CONSTRUCTION PHASING SPECIFIES THE REQUIRED DAYTIME AND NIGHTTIME WORK SHIFTS IN ACCORDANCE WITH THE FORESEEN OPERATIONAL NEEDS OF THE AIRFIELD. NASP RETAINS THE RIGHT TO MODIFY THE DESIGNATED WORK SHIFTS TO ACCOMMODATE THE ACTUAL OPERATIONAL NEEDS OF THE AIRFIELD AT THE TIME OF CONSTRUCTION. COORDINATE PHASING REQUIREMENTS A MINIMUM OF ONE (1) WEEK PRIOR TO BEGINNING WORK IN A NEW PHASE.
- THOROUGHLY CLEAN ALL PAVEMENT SURFACES PRIOR TO LEAVING THE WORK SITE AT THE END OF EACH WORK DAY. THE CONTRACTOR SHALL HAVE A POWER SWEEPER AND VACUUM TRUCK ON SITE DURING CONSTRUCTION. THE CONTRACTOR SHALL HAVE STANDBY EQUIPMENT ON SITE AT ALL TIMES FOR BOTH THE SWEEP AND VACUUM TRUCK. THE SWEEP/VACUUM OPERATION SHALL BE CONTINUOUS.
- MONITOR THE NASP CONTROL TOWER FREQUENCY CONTINUOUSLY WHEN WORKING ON NASP AIRFIELD PROPERTY. FURNISH FOUR (4) RADIOS FOR USE ON AIRFIELD DURING CONSTRUCTION WITH ADDITIONAL BATTERIES. AT THE COMPLETION OF CONSTRUCTION, TURN OVER RADIOS TO AIRFIELD OPERATIONS.
- ACCURACY OF SUBSURFACE UTILITIES SHOWN ON PLANS IS NOT GUARANTEED. UTILITY LINES ARE PROVIDED FOR THE CONTRACTOR'S REFERENCE ONLY. PRIOR TO ALL PAVEMENT DEMOLITION AND EARTHWORK OPERATIONS, CONTACT A UTILITY LOCATING SERVICE TO ACCURATELY IDENTIFY ALL EXISTING SUBSURFACE UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING SUBSURFACE UTILITIES THROUGHOUT CONSTRUCTION.
- IMMEDIATELY NOTIFY AIRPORT OPERATIONS AND THE CONTRACTING OFFICER OF ANY DAMAGE TO REMAINING SUBSURFACE UTILITIES DURING CONSTRUCTION. EXPEDITIOUSLY REPAIR DAMAGED UTILITIES AT THE CONTRACTOR'S EXPENSE. DAMAGE TO UTILITIES AND SUBSEQUENT REPAIR WILL NOT WARRANT A TIME EXTENSION TO THE CONTRACT.
- FURNISH TWO (2) NEW TRAILER-MOUNTED LIGHTED RUNWAY CLOSURE MARKERS FOR USE ON THE PROJECT. LIGHTED RUNWAY CLOSURE MARKERS WILL BECOME THE PROPERTY OF THE GOVERNMENT AT THE COMPLETION OF THE PROJECT. CONTRACTOR SHALL MAINTAIN CLOSURE MARKERS ON A DAILY BASIS.
- CONTRACTOR MUST FURNISH ALL BARRICADES FOR USE ON THE PROJECT. CONTRACTOR MUST PROVIDE BARRICADE PLAN A MINIMUM OF 15 DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITY. BARRICADE PLAN MUST IDENTIFY BARRICADE LOCATION AND NUMBER OF BARRICADES REQUIRED PER PHASE. LOCATION SHOULD BE SHOWN WITH A DIMENSION PERPENDICULAR TO ALL ADJACENT RUNWAY AND TAXIWAY PAVEMENT EDGES.
- CONTRACTOR MUST FURNISH ALL TEMPORARY CONSTRUCTION AND SAFETY ITEMS FOR USE ON THE PROJECT.
- PLACE ALL RUNWAY CLOSURE MARKINGS, TAXIWAY CLOSURE MARKINGS, BARRICADES, AND OTHER TEMPORARY CONSTRUCTION SAFETY DEVICES PRIOR TO THE START OF WORK FOR EACH PHASE. MAINTAIN ALL TEMPORARY CONSTRUCTION SAFETY DEVICES, INCLUDED BUT NOT LIMITED TO LIGHTED RUNWAY CLOSURE MARKERS, LOW PROFILE CONSTRUCTION BARRICADES WITH BEACONS, CONSTRUCTION SIGNS, AND CLOSED RUNWAY MARKINGS, FOR THE ENTIRE DURATION OF CONSTRUCTION OR AS DIRECTED BY THE CONTRACTING OFFICER.
- NO CELL PHONES OR BASE PORTABLE RADIOS MAY BE USED WITHIN 100' OF SUSPECTED ORDNANCE OPERATIONS.
- PROTECT ALL EXISTING FEATURES (INCLUDING, BUT NOT LIMITED TO AIRFIELD LIGHTS, AIRFIELD SIGNS, PAVEMENT, BUILDINGS, FENCES, UTILITIES, ETC.) TO REMAIN WITHIN THE WORK AREA AND THOSE ADJACENT TO THE WORK AREA, STAGING AREA, AND HAUL ROUTE. REPAIR AND/OR REPLACE ALL DAMAGED FEATURES AT THE EXPENSE OF THE CONTRACTOR. REPAIRS SHALL BE PERFORMED CONTINUOUSLY ON A 24-HOUR BASIS.
- NOTAMS ARE REQUIRED FOR ALL WORK WITHIN THE PRIMARY SURFACE OR PART 77 TRANSITIONAL SURFACE OF AN ACTIVE RUNWAY. PROVIDE AIRPORT OPERATIONS OR THE CONTRACTING OFFICER ONE (1) WEEK NOTICE BEFORE THE INITIAL START OF CONSTRUCTION WITHIN THESE AREAS. ONCE CONSTRUCTION IS UNDERWAY, PROVIDE 48-HOUR NOTICE FOR CONSTRUCTION IN AREAS OUTSIDE THE LIMITS OF THE CURRENT NOTAM.
- ALL WORK SHALL COMPLY WITH GUIDELINES IN UFC 3-260-01, PARAGRAPH B14-6.7 SPECIAL SAFETY REQUIREMENTS DURING CONSTRUCTION FOR SETBACK DISTANCES OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL ESTABLISH, IN ADVANCE, A SPECIFIC DEMARCATION OR HOLD LINE LOCATION FOR PERSONNEL AND EQUIPMENT DURING THE TIMES OF WORK INTERRUPTION TO ENSURE THE SAFETY OF THE CONTRACTOR AND AIRCRAFT OPERATIONS.
- ALL EMPLOYEES REQUIRING ACCESS TO THE AIRFIELD MUST RECEIVE BASE ACCESS AND FLIGHTLINE ACCESS THROUGH THE APPROVAL OF NASP ACCESS APPLICATIONS. EMPLOYEES REQUIRED TO CONDUCT HAULING OPERATIONS ON THE AIRFIELD MUST COMPLETE FLIGHT DRIVING TRAINING. THE CONTRACTOR'S PERSONNEL MUST SUCCESSFULLY COMPLETE AIRFIELD DRIVING TRAINING.
- ALL NEW PAVEMENT AND GRADING WORK SHALL MATCH EXISTING ELEVATIONS AT THE LIMIT OF WORK OR LIMIT OF DISTURBANCE.
- HAND EXCAVATE AROUND ALL KNOWN AND POTENTIAL EXISTING UTILITIES AND STRUCTURES.
- SAWCUT EXISTING AC PAVEMENT WHERE IT TIES INTO NEW PAVEMENT.
- REINFORCE ALL ODD-SHAPED SLABS (SEE UFC 3-260-02) OR SLABS WITH UTILITY PENETRATIONS WHETHER INDICATED OR NOT. SEE DETAIL 9 ON SHEET C-511. ODD-SHAPED SLABS INCLUDE NON-SQUARE OR NON RECTANGULAR SLABS AND SLABS WITH A LENGTH TO WIDTH RATIO GREATER THAN 1.25.
- ACCESS AIRFIELD AT SPECIFIED GATES AND ALONG SPECIFIED HAUL ROUTES AS INDICATED ON PLANS OR AS DIRECTED BY THE CONTRACTING OFFICER.
- CONSTRUCTION VEHICLES AND EQUIPMENT MUST YIELD TO ALL AIRFIELD OPERATIONS REGARDLESS OF THE CONSTRUCTION ACTIVITY.
- CROSSING OF AN ACTIVE RUNWAY WITHOUT PRIOR AUTHORIZATION FROM THE TOWER IS STRICTLY PROHIBITED. COORDINATE ALL RUNWAY CROSSINGS WITH AIRFIELD OPERATIONS.
- MATCH CONCRETE JOINTS AT THE INTERFACE BETWEEN NEW AND EXISTING PAVEMENTS, UNLESS NOTED OTHERWISE.
- ALL DEMOLISHED CONCRETE AND ASPHALT PAVEMENT MATERIAL SHALL BE STOCKPILED IN THE DESIGNATED STAGING AREA LOCATIONS FOR USE AS TEMPORARY ROADS AND/OR AS FILL UNLESS DIRECTED OTHERWISE BY THE CONTRACTING OFFICER. AS DIRECTED BY THE CONTRACTING OFFICER, EXCESS MATERIAL THROUGHOUT CONSTRUCTION THAT WILL NOT BE UTILIZED BY NASP IS THE PROPERTY OF THE CONTRACTOR. ALL EXCESS STOCKPILED MATERIAL AT THE END OF CONSTRUCTION IS THE PROPERTY OF THE CONTRACTOR. RECYCLE OF ALL UNUSED DEMOLISHED ASPHALT PAVEMENT MATERIAL OFF NASP IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS. PROVIDE MATERIAL WEIGHT TICKETS TO CONTRACTING OFFICER FOR REVIEW.
- TEMPORARY ASPHALT MILLINGS ROADS REQUIRED FOR CONSTRUCTION SHALL BE DEMOLISHED AND RETURNED TO A PVIOUS TURF CONDITION TO THE SATISFACTION OF THE CONTRACTING OFFICER AND AT NO ADDITIONAL EXPENSE TO THE GOVERNMENT. DISPOSE OF ALL DEMOLISHED MATERIAL OFF NASP IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- ALL DEMOLISHED METAL MATERIAL SHALL BE RECYCLED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS. METAL RECYCLING IS AVAILABLE ON BASE. PROVIDE MATERIAL WEIGHT TICKETS TO CONTRACTING OFFICER FOR REVIEW.
- SUITABLE MATERIAL REMOVED FROM THE SITE THAT MEETS THE MATERIAL SPECIFICATIONS FOR TOPSOIL AND FILL MAY BE REUSED DURING CONSTRUCTION. STOCKPILE MATERIAL IN THE STAGING AREAS DESIGNATED ON THE PLANS OR AS DIRECTED BY THE CONTRACTING OFFICER. PLACE MATERIAL AS SPECIFIED IN THE PLANS AND SPECIFICATIONS. DISPOSE OF EXCESS MATERIAL REMAINING UPON COMPLETION OF CONSTRUCTION OFF BASE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- ALL UNSUITABLE MATERIAL EXCAVATED FROM THE WORK AREA IS THE PROPERTY OF THE CONTRACTOR. DISPOSE OF UNSUITABLE MATERIAL OFF NASP IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- DISPOSE OF ALL STOCKPILED SUITABLE AND UNSUITABLE MATERIAL REMAINING AT THE END OF THE CONTRACT AND NO LONGER OF USE FOR NASP IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.
- PROVIDE SHEETING AND SHORING FOR ALL TRENCHES AND EXCAVATIONS AS NECESSARY IN ACCORDANCE WITH OSHA REGULATIONS
- CONTRACTOR SHALL PROVIDE MEANS TO PROTECT AND MAINTAIN EXCAVATED AREAS. DEWATERING SHALL BE PROVIDED; SEE SPECIFICATION 31 23 00.00 20 FOR REQUIREMENTS TO MAINTAIN EXCAVATED AREAS AT ALL TIMES, AT NO ADDITIONAL COST TO THE GOVERNMENT. SEE EROSION AND SEDIMENT CONTROL PLANS AND DETAILS FOR EROSION CONTROL NOTES AND DEVICES.
- CONTRACTOR IS REQUIRED TO PROTECT EXPOSED SUBGRADE MATERIAL AT ALL TIMES. PROVIDE SECTION IN QUALITY CONTROL PLAN FOR SUBGRADE PROTECTION. SEE SPECIFICATIONS AND PERMITS FOR MINIMUM REQUIREMENTS.
- CONTRACTOR SHALL APPLY TACK COAT ON ALL MILLED SURFACES, ALONG THE VERTICAL PAVEMENT JOINTS, AND BETWEEN ALL AC PAVEMENT LIFTS.

**NOTE:**  
MDE NO 17-SF-0058

**SURVEY NOTES:**

- THE MERIDAN SOURCE OF THIS TOPOGRAPHIC SURVEY IS BASED ON THE NAS PATUXENT HORIZONTAL CONTROL NETWORK SYSTEM, MARYLAND STATE PLANE COORDINATES (NAD 1983 (2011)). REFERENCES CONTROL STATIONS PID D09428 AND D09429. ALL DISTANCES SHOWN HEREON ARE IN US FEET.
- ELEVATIONS SHOWN HEREON ARE BASED ON NASP VERTICAL CONTROL NETWORK (NAVD 1988). REFERENCES CONTROL STATIONS PAX28 AND PAX29. ALL ELEVATIONS SHOWN HEREON ARE IN US FEET.
- TOPOGRAPHIC SURVEY WAS PREPARED TO SHOW THE EXISTING FEATURES AT THE TIME THE SURVEY WAS CONDUCTED. THIS SURVEY DOES NOT CERTIFY AS TO THE ACCURACY OF PROPOSED OR FUTURE ITEMS WHICH ARE SHOWN ON THE DRAWING OR ANY FEATURES OBSERVED DURING CONSTRUCTION THAT WERE CONSTRUCTED AFTER THE SPECIFIED DATES OF SURVEY FOR THIS PROJECT.
- TEMPORARY BENCHMARKS DATA FROM THE TOPOGRAPHIC SURVEY ARE SHOWN ON THE EXISTING CONDITIONS PLANS AND ON SHEET G-109.
- SUBSURFACE UTILITY ENGINEERING (SUE) SURVEY WAS CONDUCTED FOR THIS PROJECT AND INCORPORATED INTO THESE PLANS. SUE SURVEY WAS COMPLETED DURING THE PERIOD OF TIME SPECIFIED ON THIS SHEET AND REPRESENTS THE EXISTING CONDITIONS AT THE TIME OF THE SURVEY. THE ACCURACY OF THE UTILITIES DEPICTED AS A RESULT OF THE SUE SURVEY IS NOT GUARANTEED. THE FULL EXTENT OF EXISTING UTILITIES SHOWN ON THESE PLANS INCLUDE DATA COLLECTED FROM THE SUE SURVEY, AS-BUILT DRAWINGS PROVIDED BY NAVFAC WASHINGTON, AND GIS DATA AVAILABLE THROUGH THE STATE OF MARYLAND.
- TOPOGRAPHIC SURVEY WITHIN 75 FEET OF THE EXISTING EDGE OF RUNWAY AND TAXIWAY PAVEMENT (RELATED TO THIS PROJECT), VAULT 1710, AND VAULT 155 AREA WAS PREPARED IN SEP 2014 TO DEC 2014 (RUNWAY AND TAXIWAY), SEP 2014 TO DEC 2014 (VAULT 1710), SEP 2014 TO DEC 2014 (VAULT 155), AND IN AUGUST 2015 TO SEPTEMBER 2015 (DRAINAGE STRUCTURES) BY:  
  
JOHNSON, MIRMIRAN & THOMPSON  
47 LOVETON CIRCLE  
SPARKS, MD 21152  
410-329-3100
- ALL TOPOGRAPHIC SURVEY WITHIN THE AIRFIELD SECURITY FENCE AND OUTSIDE THE LIMITS OF THE SURVEY PROVIDED BY JMT WAS PREPARED BY:  
  
AXIS GEOSPATIAL LLC  
101 BAY ST  
EASTON, MD 21601  
401-822-1441

SURVEY PROVIDED BY AXIS GEOSPATIAL WAS CONDUCTED VIA AERIAL LIDAR ON SEPTEMBER 27, 2014.

**UTILITY DESIGNATION NOTES:**

- JMT CONDUCTED AN UNDERGROUND UTILITY DESIGNATION SURVEY FOR THIS PROJECT AND INCORPORATED THE FINDINGS INTO THESE PLANS. THE ACCURACY OF THE UTILITIES DEPICTED AS A RESULT OF THE UNDERGROUND UTILITY DESIGNATION SURVEY IS NOT GUARANTEED. THE EXISTING UNDERGROUND UTILITIES SHOWN ON THESE PLANS INCLUDE UTILITY INFORMATION COLLECTED IN THE FIELD IN COMBINATION WITH AVAILABLE AS-BUILT DRAWINGS AND GIS DATA PROVIDED BY NAVFAC WASHINGTON. THE UNDERGROUND UTILITY DESIGNATION SURVEY WAS COMPLETED BETWEEN SEPTEMBER AND MARCH 2015 AND REPRESENTS THE EXISTING CONDITIONS AT THE TIME OF THE SURVEY.
- THE FIELD INVESTIGATION PROCEDURE USED TO MAP THE EXISTING UNDERGROUND UTILITIES SPECIFICALLY INVOLVED, OPENING THE ABOVE GROUND ELECTRIC AND COMMUNICATION STRUCTURES WHERE POSSIBLE TO APPLY AND OBTAIN ELECTRONIC INFORMATION ON SPECIFIC FACILITIES. CONDUCTORS WHICH APPEARED TO BE CUT WITHIN THESE STRUCTURES WERE NOT DESIGNATED AND MAPPED, AND AN ELECTRONIC SWEEP FOR UNKNOWN CONDUCTORS WITHIN THE PROJECT AREA WAS NOT PERFORMED. WHEN A NON-TRACEABLE FACILITY WAS KNOWN TO EXIST WITHIN A SPECIFIC AREA, JMT UTILIZED GROUND PENETRATING RADAR (GPR) IN AN ATTEMPT TO MAP THE FACILITY.
- JMT OBTAINED THE ELECTRONIC INFORMATION USING ASTM ACCEPTED, SURFACE GEOPHYSICAL ELECTROMAGNETIC METHODS CONSISTING OF PIPE AND CABLE LOCATORS. OTHER SURFACE GEOPHYSICAL METHODS WERE NOT UTILIZED.
- THE MANHOLE AND HANDHOLE SKETCHES SHOWN ON THE DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY AND DO NOT GUARANTEE A THOROUGH DEPICTION OF THE UNDERGROUND UTILITIES.
- THE EXISTING SUBSURFACE UTILITIES SHOWN ON THE PLANS DOES NOT NECESSARILY REPRESENT A COMPLETE DEPICTION OF ALL EXISTING UTILITIES, AND JMT DOES NOT GUARANTEE THAT ALL UNDERGROUND UTILITIES HAVE BEEN ACCOUNTED FOR. THE UTILITY LINES SHOWN ARE PROVIDED FOR THE CONTRACTORS REFERENCE ONLY. PRIOR TO ALL PAVEMENT DEMOLITION AND EARTHWORK OPERATIONS, CONTACT MISS UTILITY AND A PRIVATE UTILITY DESIGNATION SERVICE TO PROVIDE A FIELD INVESTIGATION OF THE EXISTING UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING SUBSURFACE UTILITIES THROUGHOUT CONSTRUCTION.
- IMMEDIATELY NOTIFY AIRPORT OPERATIONS AND THE CONTRACTING OFFICER OF ANY DAMAGE TO SUBSURFACE UTILITIES DURING CONSTRUCTION. EXPEDITIOUSLY REPAIR DAMAGED UTILITIES AT THE CONTRACTOR'S EXPENSE. DAMAGE TO UTILITIES AND SUBSEQUENT REPAIR WILL NOT WARRANT A TIME EXTENSION TO THE CONTRACT.

FILE NAME: C:\VFP\A\100851\_003\_FY16\_Repair\_Runways\_CADD\Phase 3\GENERAL-COML\_Phase 3\10-0851-009-0-106.dwg LAYOUT NAME: GENERAL NOTES PLOTTED: Sunday, September 25, 2016 - 4:30pm USER: Bcancerinfo

DATE	APPR
DESCRIPTION	SYN
	
	
<b>JOHNSON, MIRMIRAN &amp; THOMPSON</b> <i>Gannett Fleming</i> <b>A Joint Venture</b> 272 Beach Road, Suite 260 Virginia Beach, Virginia, 23452 Telephone: (757) 499-1895 Web: www.jmt.com	
A/E: JMT	
APPROVED	
FOR COMMANDER NAVFAC	
ACTIVITY	
JAMES FLETCHER PER CHECKLIST SATISFACTORY TO DATE 9/27/2016 DES: DFD DRW: MSC CHK: MJT EM/DM: RH BRANCH MANAGER CHEF: ENG/ARCH: E. GALLAHER, PE	
DEPARTMENT OF THE NAVY	NAVFAC WASHINGTON
NAVAL FACILITIES ENGINEERING COMMAND	WASHINGTON, D.C.
NAVAL AIR STATION PATUXENT RIVER	PATUXENT RIVER, MARYLAND
FY16 SPECIAL PROJECT RM12-2137	REPAIR RUNWAYS 14-32 & 6-24 - PHASE 3
GENERAL NOTES	
SCALE: AS NOTED	
EPROJECT NO.: 1382138	
CONSTR. CONTR. NO. N40080-17-R-0002	
NAVFAC DRAWING NO. 13080068	
SHEET 10 OF 206	
<b>G-106</b>	
DRAWING REVISION: 10 MARCH 2009	