

**SURVEY NOTES:**

1. TOPOGRAPHIC SURVEY PREPARED BY C. ALLAN BAMFORTH, JR., ENGINEER – SURVEYOR LTD., DATED JANUARY 2015
2. THE EXISTENCE SIZE AND/OR LOCATION OF UTILITIES ARE NOT GUARANTEED BY THIS SURVEY. UTILITIES SHOWN ARE BASED ON ABOVE GROUND STRUCTURES, AVAILABLE UTILITY PLANS, GIS DATA PROVIDED BY NAVY GEOREADINESS REPOSITORY AND MISS UTILITY DESIGNER TICKET NUMBER A502002937. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
3. ELEVATIONS ARE IN FEET AND REFER TO NORTH AMERICAN VERTICAL DATUM (NAVD) 1988 AND ARE BASED ON NORFOLK NAVAL BASE CONTROL STATION, NSN 27.
4. TEMPORARY BENCHMARK (TBM) IS A CHISELED SQUARE "□" ON TOP OF CURB. AS INDICATED ON SHEET CE103, ELVE. =11.67
5. COORDINATES SHOWN REFER TO VIRGINIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (NAD 1983/93). COORDINATES ARE BASED ON NAVAL STATION CONTROL STATIONS NSN 25 & NSN 27 AND WERE ESTABLISHED UTILIZING GPS.

**BASELINE POINT:**

#1	N: 3511528.0660	NAIL SPIKE
	E: 12131881.2630	
#2	N: 3511690.0730	NAIL SPIKE
	E: 12132308.7570	

**GENERAL NOTES:**

1. PRIOR TO EXCAVATION THE CONTRACTOR SHALL LOCATE ANY AND ALL UNDERGROUND UTILITIES THAT MAY EXIST OR CROSS THROUGH THE AREA OF CONSTRUCTION WHETHER OR NOT THEY ARE SHOWN IN THESE PLANS.
2. THE CONTRACTOR SHALL USE EXTREME CAUTION DURING DEMOLITION / EXCAVATION. LOCATION OF THE KNOWN EXISTING UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL PHYSICALLY VERIFY THE LOCATION AND ELEVATION OF ALL INDICATED EXISTING UTILITIES TO THE GREATEST EXTENT POSSIBLE PRIOR TO STARTING THE DEMOLITION / EXCAVATION PROCESS.
3. EXECUTE ALL WORK WITH CARE AS TO PROTECT FROM DAMAGE ADJACENT EXISTING FEATURES TO REMAIN. ANY SUCH DAMAGE SHALL BE REPAIRED OR REPLACED TO MATCH THE ORIGINAL CONDITION AS APPROVED BY THE CONTRACTING OFFICER AT NO ADDITIONAL COST TO THE GOVERNMENT.
4. THE CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES. VERIFY ALL FIELD CONDITIONS, QUANTITIES AND DIMENSIONS PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE PROMPTLY BROUGHT TO ATTENTION OF THE CONTRACTING OFFICER.
5. ALL GRADE TRANSITIONS BETWEEN NEW AND EXISTING GRADE SHALL BE SMOOTH AND GRADUAL WITH NO SHARP OR ABRUPT CHANGES.

**UTILITY NOTES:**

1. EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND BASED ON FIELD SURVEYS, AVAILABLE RECORDS, VERBAL INFORMATION AND/OR PHYSICAL FEATURES. PRIOR TO EXCAVATION (AT LEAST 72 HOURS OR THE MORE RESTRICTIVE MINIMUM NOTIFICATION PERIOD), THE CONTRACTOR SHALL CONTACT THE ROIC/OIIC, PUBLIC WORKS DIVISION, FEAD AND STATION LOCATING SERVICE SUCH AS "DIGSAFE, MISS UTILITY, ETC." TO ALLOW MARKING OF EXISTING BURIED UTILITIES.
2. ALL EXISTING UNDERGROUND UTILITIES IN THE WORK AREA MUST BE POSITIVELY IDENTIFIED BY A THIRD PARTY, INDEPENDENT, PRIVATE UTILITY LOCATING COMPANY, IN ADDITION TO ANY STATION LOCATING SERVICE SUCH AS "DIGSAFE, MISS UTILITY, ETC.", AND COORDINATED WITH THE ROIC/OIIC, PUBLIC WORKS DIVISION, AND FEAD. ANY MARKINGS MADE DURING THE UTILITY INVESTIGATION MUST BE MAINTAINED THROUGHOUT THE CONTRACT.
3. WHENEVER CONTRACT WORK INVOLVES CHIPPING, SAW CUTTING, OR CORE DRILLING THROUGH CONCRETE, BITUMINOUS ASPHALT OR OTHER IMPERVIOUS SURFACES, THE THIRD PARTY, INDEPENDENT, PRIVATE LOCATING COMPANY SHALL LOCATE UTILITY DEPTH BY USE OF GROUND PENETRATING RADAR (GPR), X-RAY, BORE SCOPE, OR ULTRASOUND PRIOR TO THE START OF DEMOLITION AND CONSTRUCTION. OUTAGES TO ISOLATE UTILITY SYSTEMS MUST BE USED IN CIRCUMSTANCES WHERE UTILITIES ARE UNABLE TO BE POSITIVELY IDENTIFIED. THE USE OF HISTORICAL DRAWINGS DOES NOT ALLEVIATE THE CONTRACTOR FROM MEETING THIS REQUIREMENT.
4. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND ANY DAMAGE TO THE UTILITIES SHALL BE IMMEDIATELY REPAIRED AT THE CONTRACTORS EXPENSE. THE CONTRACTOR SHALL BE REQUIRED AND AGREES TO COMPLY WITH ALL THE PROVISIONS OF THE GOVERNMENT, STATE AND UTILITY FOR UNDERGROUND DAMAGE PREVENTION AND HEREBY AGREES TO HOLD THE GOVERNMENT HARMLESS AGAINST ANY LOSS, DAMAGES AND CLAIMS OF ANY NATURE WHATSOEVER ARISING OUT OF FAILURE TO COMPLY WITH SAID PROVISIONS.

**LIST OF ABBREVIATIONS:**

BLDG	BUILDING	DIP	DUCTILE IRON PIPE	PS	PUMP STATION
BW	BOTTOM OF WALL	ELV	ELEVATION	PVC	POLYVINYL CHLORIDE PIPE
CBH	CONCRETE BENCH	EOI	END OF INFORMATION	R	RADIUS
CC	CONCRETE CURB (NO GUTTER PAN)	EOP	EDGE OF PAVEMENT	RCP	REINFORCED CONCRETE PIPE
CLF	CHAIN LINK FENCE	EX	EXISTING	SAN	SANITARY SEWER
CMP	CORRUGATED METAL PIPE	FFE	FINISHED FLOOR ELEVATION	SD	STORM DRAIN PIPE
CONC	CONCRETE	GT	GRATE	STL	STEEL
CPT	CONCRETE PICNIC TABLE	INV	INVERT	BLDGTW	TOP OF WALL
CW	CURB WIPEDOWN	LF	LINEAR FEET	TYP	TYPICAL
CWLK	CONCRETE WALK	MEG	MATCH EXISTING GRADE	W	WATER LINE
DCL	DITCH CENTER LINE	N/A	NOT ACCESSIBLE	W/	WITH

**LEGEND:**

	EXISTING (E.)	NEW	EXISTING (E.)	NEW
TOP OF CURB OR CONCRETE (TC) ELEVATION ELEVATION OF GUTTER, PAVEMENT OR GROUND				
SPOT ELEVATION				
BITUMINOUS PAVEMENT				
BOLLARD				
BUILDING (BLDG.)				
BUSH				
CONCRETE (CONC.)				
CONTOUR				
CURB				
CURB AND GUTTER				
DRY SWALE STORMWATER BMP				
SWALE / DITCH				
FENCE				
SIGN				
TOP OF BANK (T.O.B.)				
TREE				
GAS MAIN				
SANITARY (SAN.) SEWER				
UNDERGROUND (UG.) STEAM (STM.)				
STORM (S.) SEWER				
UNDERGROUND (UG.) COMMUNICATION (COMM.)				
UNDERGROUND (UG.) ELECTRIC (ELEC.)				
WATER (W.) MAIN				
CATCH BASIN (C.B.)				
CLEAN OUT (C.O.)				
FIRE HYDRANT (F.H.)				
GUY WIRE				
LIGHT POLE				
MANHOLE (MH.)				
WATER VALVE (W.V.)				
CABLE TELEVISION				
CONDUIT				
INACCESSIBLE				
INVERT				
STRUCTURE				
STEAM				
TYPICAL				
WITH				



APPROVED	
FOR COMMANDER NAVFAC	
ACTIVITY	
SATISFACTORY TO	DATE
DES. LLP	DRN. LLP
CHK. BIL	
FW/DM	M. PERRY/L. SANDERS
BRANCH MANAGER	
CHIEF ENG/ARCH	
FIRE PROTECTION	

DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC	NAVAL STATION - NORFOLK, VIRGINIA
NAVAL STATION NORFOLK	NORFOLK, VIRGINIA

FY 2016 P-518	MH-60 AVET TRAINING FACILITY
GENERAL NOTES, LEGEND AND ABBREVIATIONS	

SCALE	AS SHOWN
PROJECT NO.	1291639
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO.	12701606
SHEET	10 OF 109
<b>C-001</b>	

FILE NAME: P:\VA\NavalStationNorfolk\MILCON\2016\_1291639\_P-518\_DBB\_MH-60\_AVET\_Training\_Facility\B\_Design\Drawings\Model Files\05\_Civil\C-001.dwg LAYOUT NAME: C-001 PLOTTED: Wednesday, September 30, 2015 - 9:55am USER: luaphu





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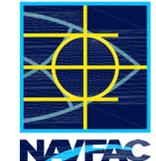
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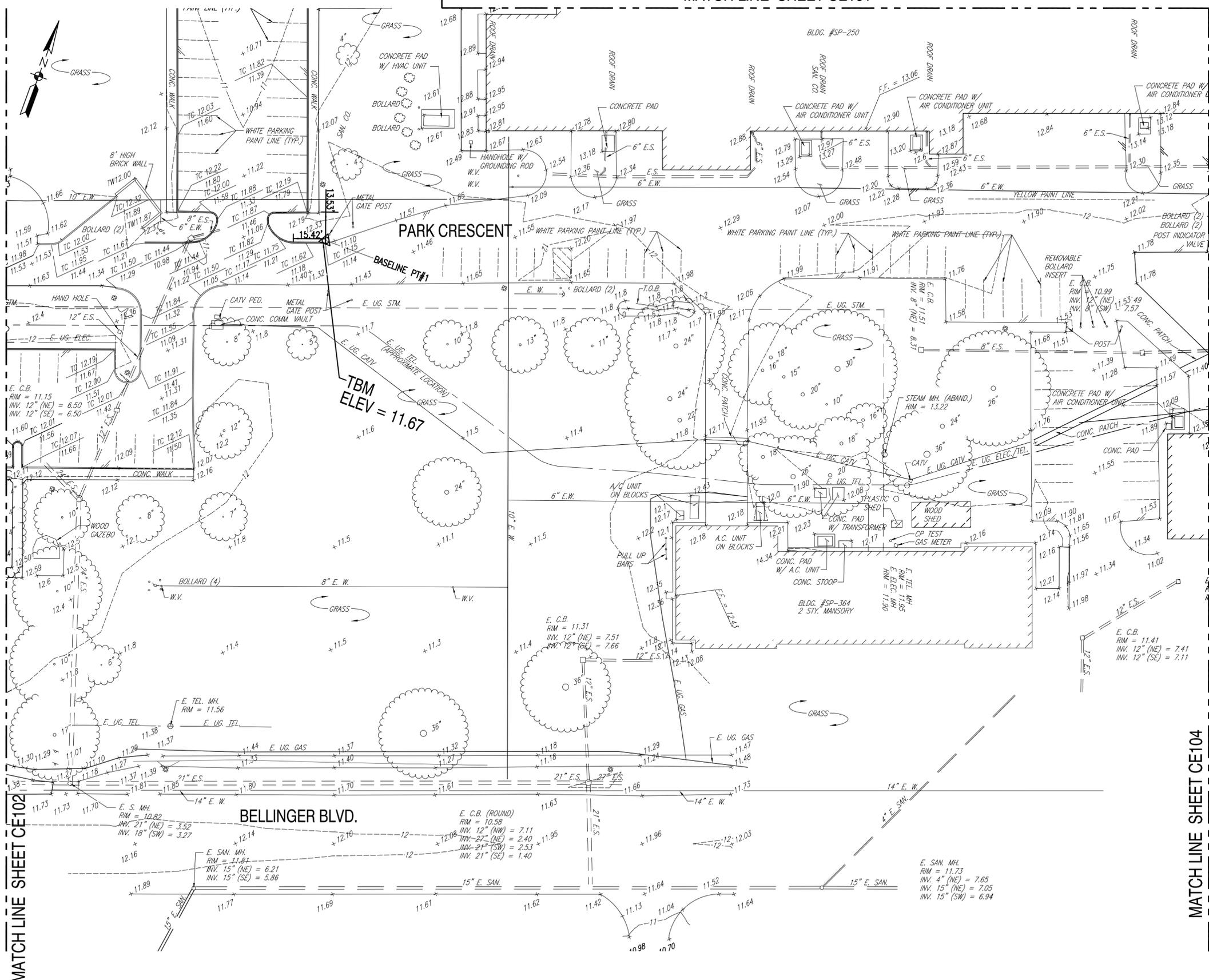
MATCH LINE SHEET CE101

SHEET NOTES

1. SEE SHEET C-001 FOR GENERAL & SURVEY NOTES & LEGEND.



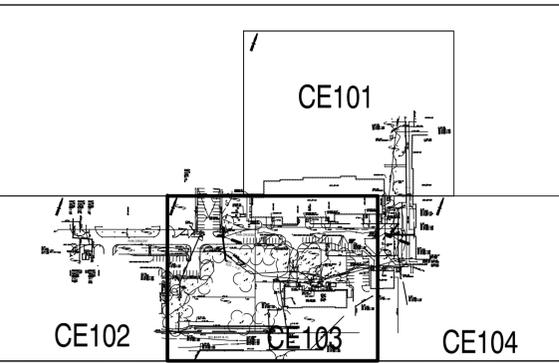
SYMBOL	DESCRIPTION	DATE	APPROVED



MATCH LINE SHEET CE104

MATCH LINE SHEET CE102

KEY PLAN



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND - MIDLANTIC  
HAMPTON ROADS FT. NORFOLK, VIRGINIA

NAVAL FACILITIES ENGINEERING COMMAND - MIDLANTIC  
NAVAL STATION - NORFOLK, VIRGINIA

NAVAL STATION NORFOLK  
FY 2016 P-518  
MH-60 AVET TRAINING FACILITY  
EXISTING SITE CONDITIONS

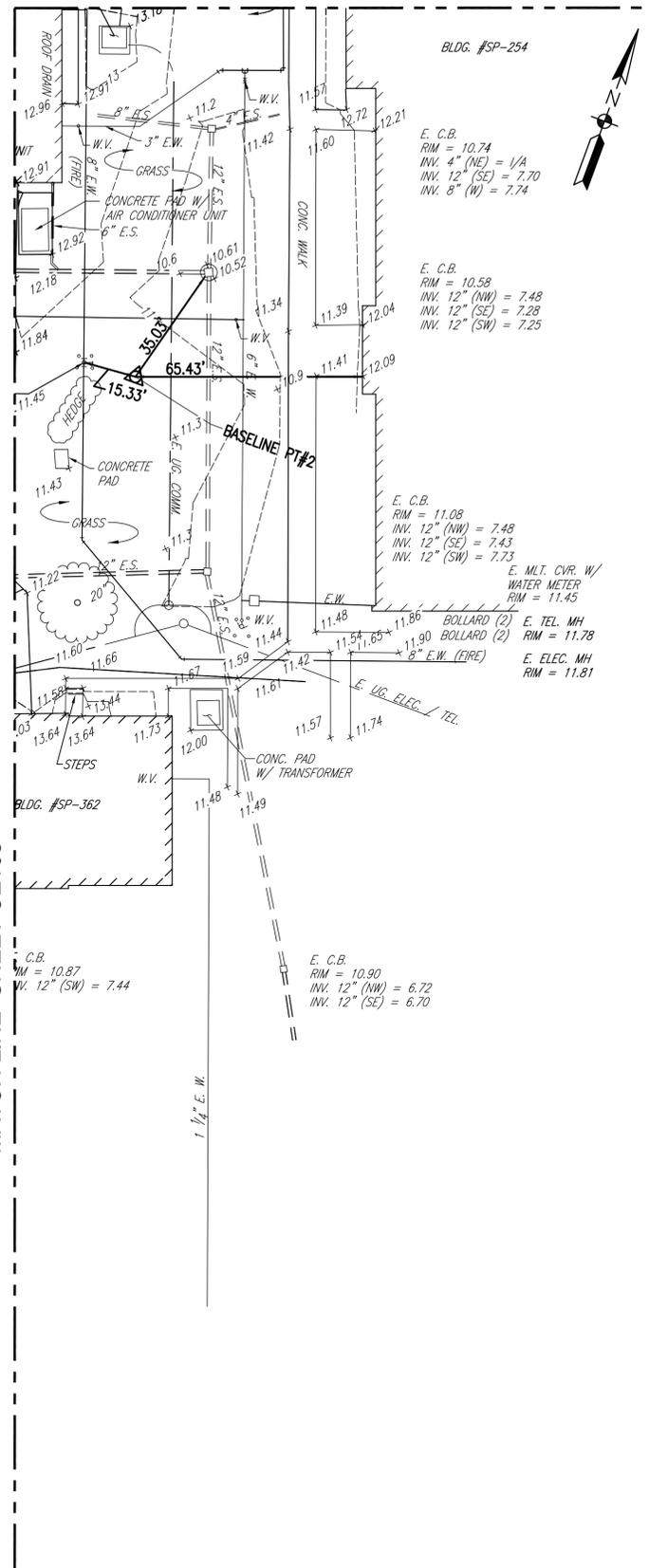
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CONSTR. CONTR. NO.:  
NAVFAC DRAWING NO.: 12701609  
SHEET 13 OF 109  
**CE103**  
DRAWING REVISION: 10 MARCH 2009

FILE NAME: P:\VIA\NavalStationNorfolk\MILCON\2016\_P-518\_DBB\_MH-60 AVET Training Facility\B\_Design\Drawings Model Files\05\_Civil\CE101-CE104.dwg LAYOUT NAME: CE103 PLOTTED: Wednesday, September 30, 2015 - 10:18am USER: luuphu

FILE NAME: P:\VA\NavalStationNorfolk\MILCON\2016\_1291639\_P-518\_DBB\_MH-60 AVET Training Facility\B\_Design\Drawings Model Files\05\_Civil\CE101-CE104.dwg LAYOUT NAME: CE104 PLOTTED: Wednesday, September 30, 2015 - 10:18am USER: luu,phu

1 2 3 4 5

MATCH LINE SHEET CE101



**EXISTING SITE CONDITION**  
SCALE: 1" = 25'



**SHEET NOTES**

- SEE SHEET C-001 FOR GENERAL & SURVEY NOTES & LEGEND.

SYMBOL	DESCRIPTION	DATE	APPROVED



APPROVED: \_\_\_\_\_  
FOR COMMANDER NAVFAC

ACTIVITY: \_\_\_\_\_  
SATISFACTORY TO: \_\_\_\_\_ DATE: \_\_\_\_\_

DES: **LLP** | DRW: **LLP** | CHK: **BUL**  
PM/DM: **M. PERRY/L. SANDERS**  
BRANCH MANAGER: \_\_\_\_\_  
CHIEF ENG/ARCH: \_\_\_\_\_  
FIRE PROTECTION: \_\_\_\_\_

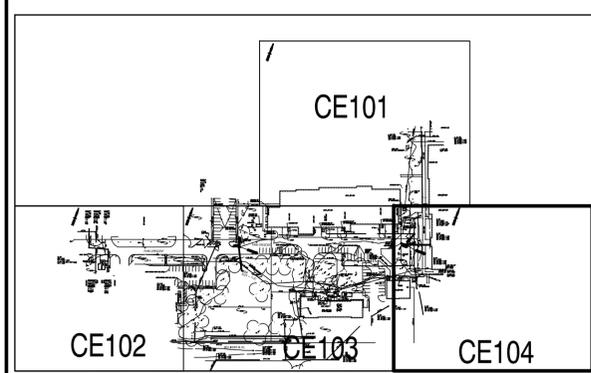
DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND - MIDA TLANTIC  
NAVAL STATION - NORFOLK, VIRGINIA  
NAVAL STATION NORFOLK NORFOLK, VIRGINIA

**FY 2016 P-518**  
**MH-60 AVET TRAINING FACILITY**  
EXISTING SITE CONDITIONS

SCALE: **AS SHOWN**  
EPROJECT NO.: **1291639**  
CONSTR. CONTR. NO.: \_\_\_\_\_  
NAVFAC DRAWING NO.: **12701610**  
SHEET **14** OF **109**  
**CE104**

DRAWFORM REVISION: 10 MARCH 2009

**KEY PLAN**



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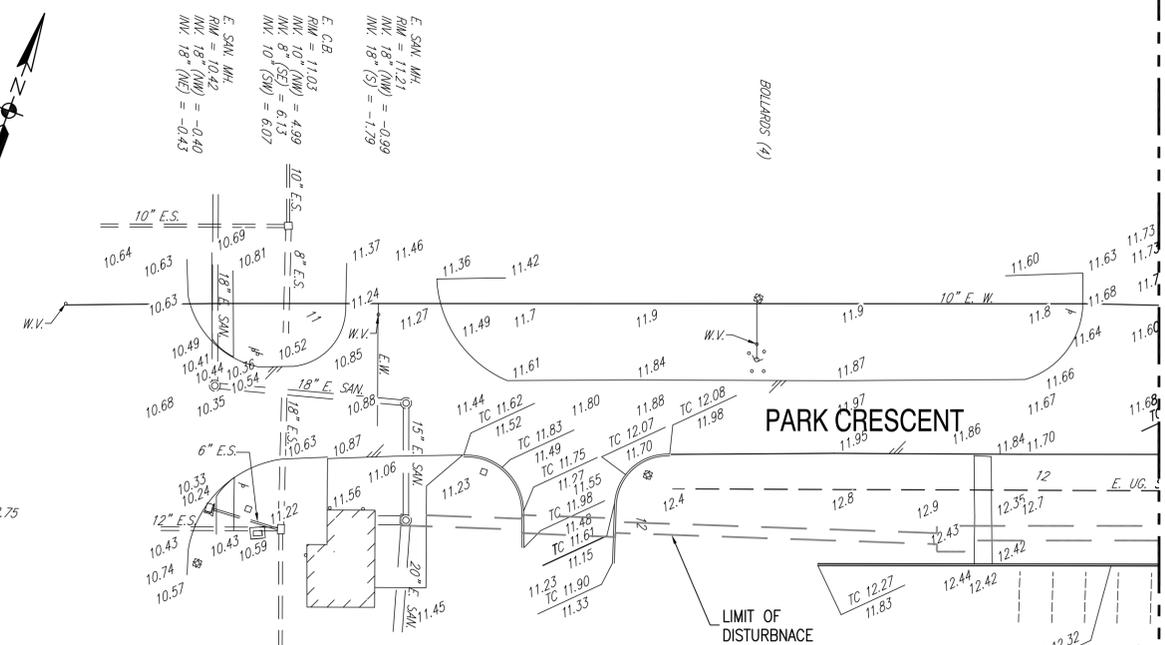
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### EROSION & SEDIMENT CONTROL LEGEND

CONSTRUCTION ENTRANCE	(CE)
INLET PROTECTION	(IP)
SILT FENCE	(SF)
TEMPORARY TOPSOIL STOCKPILE	(TS)
TREE PROTECTION	(TP)

**REGISTERED LAND DISTURBER:**  
 THE CONTRACTOR SELECTED TO COMPLETE THE REGULATED LAND DISTURBING ACTIVITY AS SHOWN ON THESE DRAWINGS IS RESPONSIBLE FOR IMPLEMENTING THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS. PRIOR TO THE COMMENCEMENT OF THIS ACTIVITY, IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL LAW, THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL HOLDING A CERTIFICATE OF COMPETENCE WITH THE COMMONWEALTH OF VIRGINIA AS THE PERSON RESPONSIBLE FOR CARRYING OUT THE APPROVED PLAN, AND PROVIDE THE NAME OF THAT INDIVIDUAL TO THE PLAN APPROVING AUTHORITY.

## EROSION AND SEDIMENT CONTROL PLAN PHASE I (PRE-DEVELOPMENT)

SCALE: 1" = 25'



### SHEET NOTES

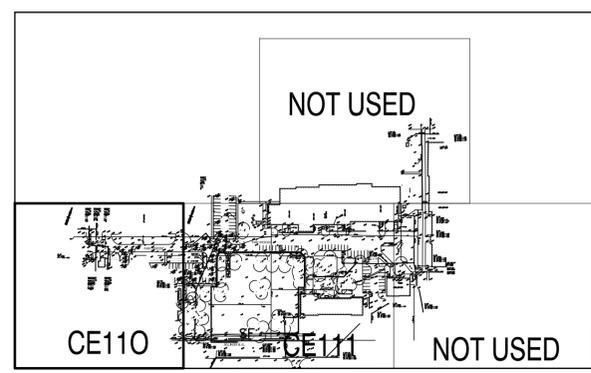
1. SEE SHEET C-001 FOR GENERAL SURVEY NOTES & LEGEND.

### EROSION & SEDIMENT CONTROL GENERAL NOTES

1. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS 4VAC25-840 EROSION AND SEDIMENT CONTROL REGULATIONS.
2. THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
3. ALL APPROPRIATE EROSION CONTROL MEASURES SUCH AS, BUT NOT LIMITED TO, TREE PROTECTION, SILT FENCE, CONSTRUCTION ENTRANCE, SEDIMENT TRAPPING FACILITIES, AND INLET PROTECTION SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION AND MUST BE REVIEWED AND APPROVED BY THE INSPECTOR BEFORE ANY CLEARING OPERATIONS BEGIN.
4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND LAND DISTURBANCE PERMIT MUST BE MAINTAINED AT THE SITE FOR THE DURATION OF ALL CONSTRUCTION AND LAND-DISTURBING ACTIVITIES.
5. THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN ALL APPROVED MEASURES AS SHOWN ON THE DRAWINGS. ANY ADDITIONAL MEASURES DEEMED REQUIRED BY THE PLAN APPROVING AUTHORITY SHALL BECOME PART OF THE EROSION AND SEDIMENT CONTROL PLAN FOR THE PROPERTY. ALL FIELD CHANGES MUST BE APPROVED BY THE PLAN APPROVING AUTHORITY.
6. DURING DEWATERING OPERATIONS, WATER SHALL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
7. THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN ALL MEASURES TO PREVENT SOIL FROM ERODING ONTO ADJACENT PROPERTY, STREETS, DRAINAGE SYSTEMS, AND WATERWAYS. ALL DEVICES SHALL BE CLEANED OF MUD, DEBRIS, AND OTHER ERODED MATERIAL DURING THE SITE CLEARING AND DEVELOPMENT. PERFORM INSPECTION OF DEVICES DURING OR IMMEDIATELY FOLLOWING INITIAL INSTALLATION AT LEAST ONCE IN EVERY TWO (2) WEEKS PERIOD AND WITHIN 48 HOURS FOLLOWING ANY RUNOFF PRODUCING STORM EVENT. ALL INSPECTION AND MAINTENANCE ACTIVITIES SHALL BE DOCUMENTED AND AVAILABLE FOR REVIEW AT THE PLAN REVIEWING AUTHORITIES REQUEST.
8. TEMPORARY AND PERMANENT SEEDING OPERATIONS SHALL BE INITIATED WITHIN SEVEN (7) DAYS AFTER REACHING FINAL GRADE OR UPON SUSPENSION OF GRADING OPERATIONS FOR ANTICIPATED DURATION OF GREATER THAN FOURTEEN (14) DAYS OR UPON COMPLETION OF GRADING OPERATIONS FOR A SPECIFIC AREA.
9. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE KEPT IN PLACE FOR THE DURATION OF THE CLEARING AND CONSTRUCTION OPERATIONS AND AT A MAXIMUM FOR THE SPECIFIED TIME FOR EACH MEASURE AS IDENTIFIED IN THE VESC HANDBOOK, OR WHEN FULL STABILIZATION HAS OCCURRED FOR THE ENTIRE SITE. A FINAL INSPECTION BY THE PLAN APPROVING AUTHORITY SHALL DETERMINE WHEN THIS FACT IS ACCOMPLISHED AND ALL TEMPORARY MEASURES AND DEVICES CAN BE REMOVED.
10. THE CONTRACTOR SHALL MONITOR AND TAKE PRECAUTIONS TO CONTROL DUST AND OTHER AIR POLLUTANTS, INCLUDING BUT NOT LIMITED TO USING WATER OR CHEMICALS, LIMITING THE NUMBER OF VEHICLES ALLOWED ONSITE, MINIMIZING THE OPERATING SPEED OF ALL VEHICLES, ETC. ALSO, THE CONTRACTOR WILL BE RESPONSIBLE FOR THE DAILY SWEEPING SHOULD SEDIMENT ACCUMULATE ON PAVED SURFACES.

MATCH LINE SHEET CE111

### KEY PLAN



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APPROVED	DATE																		
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FIRE PROTECTION	SEAL																		
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND - MIDDLE ATLANTIC HAMPTON ROADS FT. NAVAL STATION NORFOLK NORFOLK, VIRGINIA	NAVAL FACILITIES ENGINEERING COMMAND NAVAL STATION NORFOLK NORFOLK, VIRGINIA																		
FY 2016 P-518 MH-60 AVET TRAINING FACILITY EROSION & SEDIMENT CONTROL PLAN PHASE I (PRE-DEVELOPMENT)	AS SHOWN EPROJECT NO.: 1291639 CONSTR. CONTR. NO. NAVFAC DRAWING NO. 12701611 SHEET 15 OF 109 <b>CE110</b>																		
DRAWING REVISION: 10 MARCH 2009																			

FILE NAME: P:\VA\NavalStationNorfolk\MILCON\2016\_1291639\_P-518\_DBE6\_MH-60\_AVET\_Training\_Facility\B\_Design\Drawings\Model\_Files\05\_Civil\CE110-CE111.dwg PLOTTED: Wednesday, September 30, 2015 - 10:21am USER: luaphu

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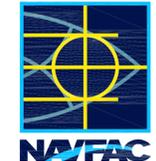
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MATCH LINE SHEET NOT USED

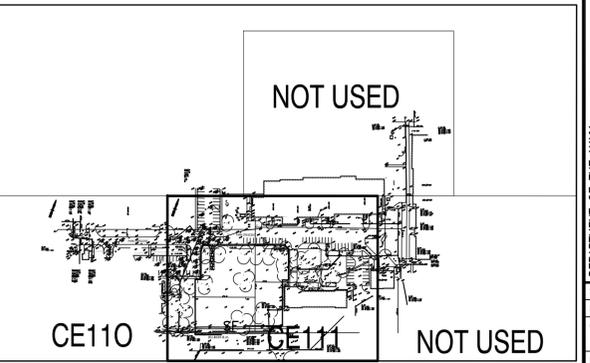
SHEET NOTES

- 1. SEE SHEET C-001 FOR GENERAL & SURVEY NOTES & LEGEND.
- 2. SEE SHEET C-110 FOR EROSION & SEDIMENT CONTROL GENERAL NOTES AND LEGEND.

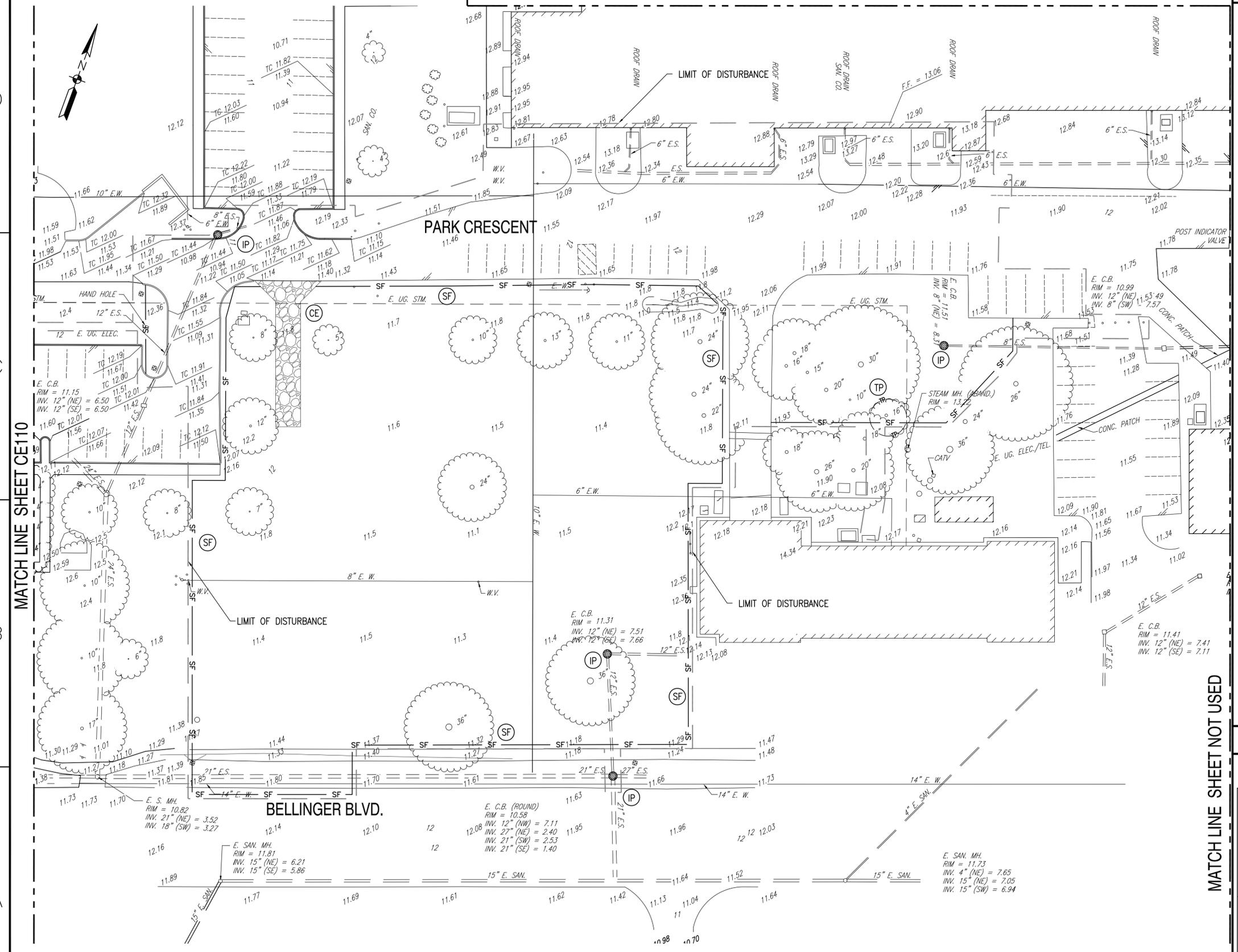


**REGISTERED LAND DISTURBER:**  
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KEY PLAN



**EROSION AND SEDIMENT CONTROL PLAN PHASE I (PRE-DEVELOPMENT)**  
 SCALE: 1" = 25'



FILE NAME: P:\VA\NavalStationNorfolk\WILCON\2016\_1291639\_518\_DBE6\_MH-60\_AET\_Training\_Facility\B\_Design\Drawings\Model\_Files\05\_Civil\CE110-CE111.dwg LAYOUT NAME: CE111 PLOTTED: Wednesday, September 30, 2015 - 10:21am USER: ltu.phu

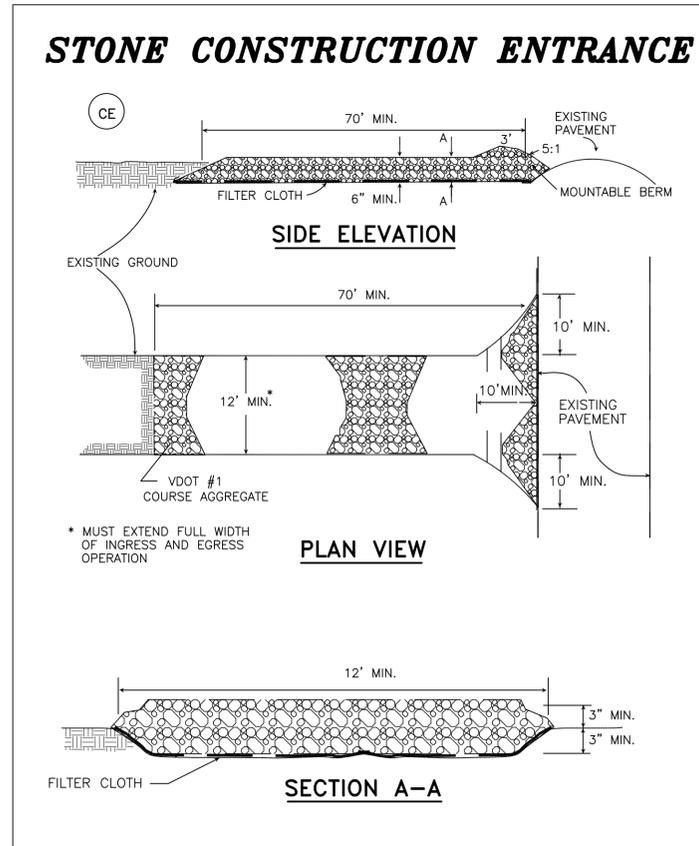
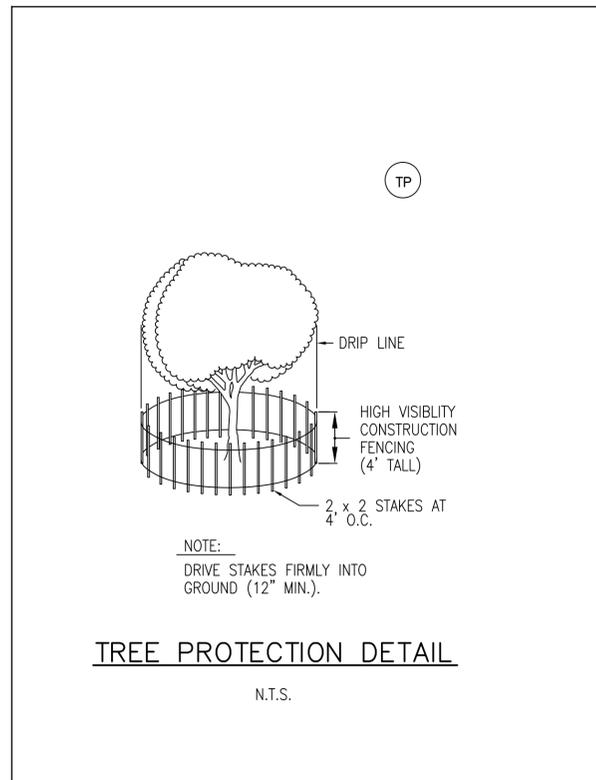
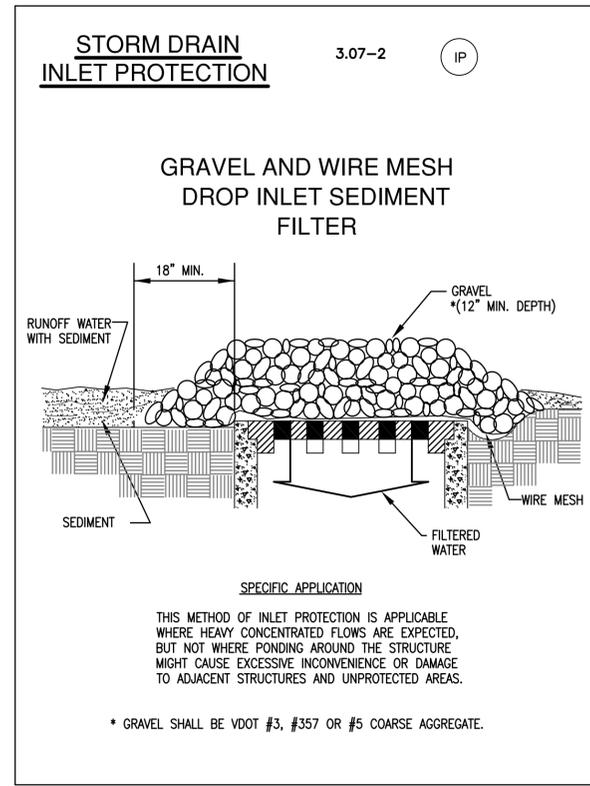
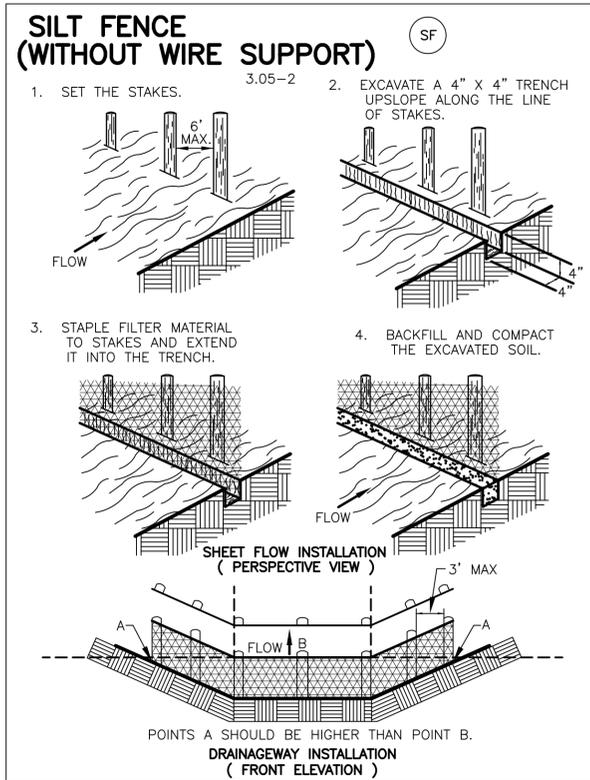
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FOR COMMANDER NAVFAC	ACTIVITY
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CHK: BUL	
PM/DM: M. PERRY/L. SANDERS	
BRANCH MANAGER	
CHEF ENG/ARCH	
FIRE PROTECTION	
NAVAL FACILITIES ENGINEERING COMMAND - MIDA TLANTIC	NORFOLK, VIRGINIA
NAVAL STATION NORFOLK	
FY 2016 P-518	
MH-60 AVET TRAINING FACILITY	
EROSION & SEDIMENT CONTROL PLAN	
PHASE I (PRE - DEVELOPMENT)	
SCALE: AS SHOWN	
PROJECT NO.: 1291639	
CONSTR. CONTR. NO.	
NAVAC DRAWING NO. 12701612	
SHEET 16 OF 109	
CE111	
DRAWING REVISION: 10 MARCH 2009	











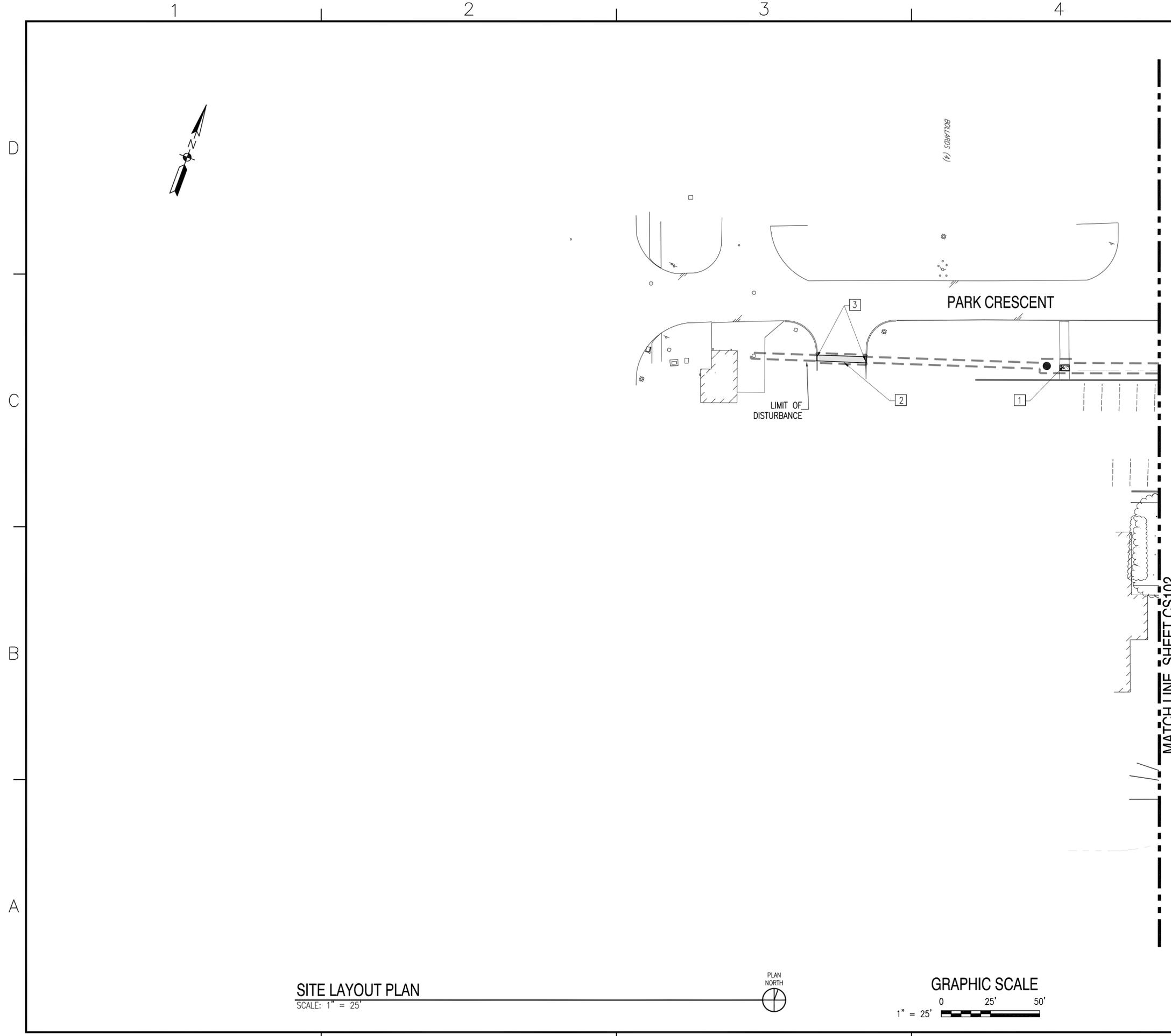
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PM/DM M. PERRY/L. SANDERS		
BRANCH MANAGER		
CHIEF ENG/ARCH		
FIRE PROTECTION		
DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND - MIDA TLANTIC	
NAVAL FACILITIES ENGINEERING COMMAND - MIDA TLANTIC	NAVAL STATION - NORFOLK, VIRGINIA	
NAVAL STATION NORFOLK	NORFOLK, VIRGINIA	
FY 2016 P-518	MH-60 AVET TRAINING FACILITY	
	EROSION & SEDIMENT CONTROL DETAILS	
SCALE:	AS SHOWN	
EPROJECT NO.:	1291639	
CONSTR. CONTR. NO.		
NAVFAC DRAWING NO.	12701617	
SHEET	21	OF 109
<b>CE503</b>		
DRAWFORM REVISION: 10 MARCH 2009		

FILE NAME: P:\VA\NavalStationNorfolk\WILCON\2016\_1291639\_P-518\_DBE\_MH-60 AVET Training Facility\B\_Design\Drawings\Model Files\05\_Civil\CE503-CE503.dwg LAYOUT NAME: CE503 PLOTTED: Wednesday, September 30, 2015 - 11:57am USER: lru.phu

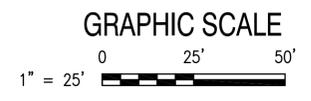




FILE NAME: P:\NAVStationNorfolk\MILCON\2016\_1291639\_P-518\_DBB\_MH-60 AVET Training Facility\_B\_Design\Drawings Model Files\05\_Civil\CS101-102.dwg LAYOUT NAME: CS101 PLOTTED: Wednesday, September 30, 2015 - 12:15pm USER: luu.phu



**SITE LAYOUT PLAN**  
SCALE: 1" = 25'



**GENERAL SHEET NOTES**

1. SEE SHEET C-001 FOR GENERAL & SURVEY NOTES AND LEGEND.

**SITE LAYOUT KEYNOTES (THIS SHEET)**

- 1 CONCRETE SIDEWALK, SEE DETAIL C1 ON SHEET C-505
- 2 UTILITY BITUMINOUS PAVEMENT PATCH, SEE DETAIL D4 ON SHEET C-504
- 3 CONCRETE CURB

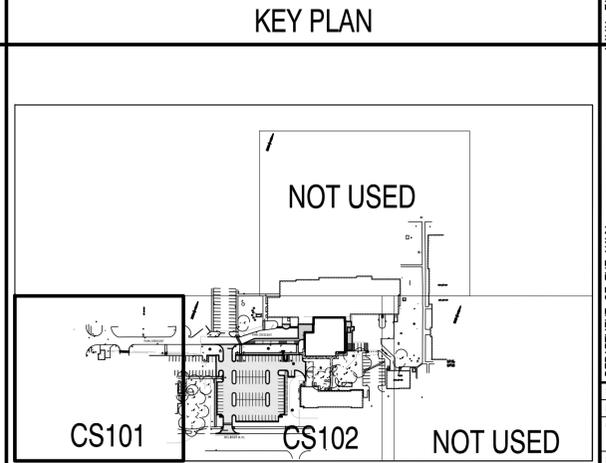


SYMBOL	DESCRIPTION	DATE	APPROVED

APPROVED	A/E INFO
FOR COMMANDER NAVFAC	
ACTIVITY	
SATISFACTORY TO	DATE
DES: LLP	DRW: LLP
CHK: BJL	
PM/DM: M. PERRY/L. SANDERS	
BRANCH MANAGER	
CHIEF ENG/ARCH	
FIRE PROTECTION	

DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND - MIDA TLANTIC  
HAMPTON ROADS FT.  
NAVAL STATION NORFOLK  
NORFOLK, VIRGINIA

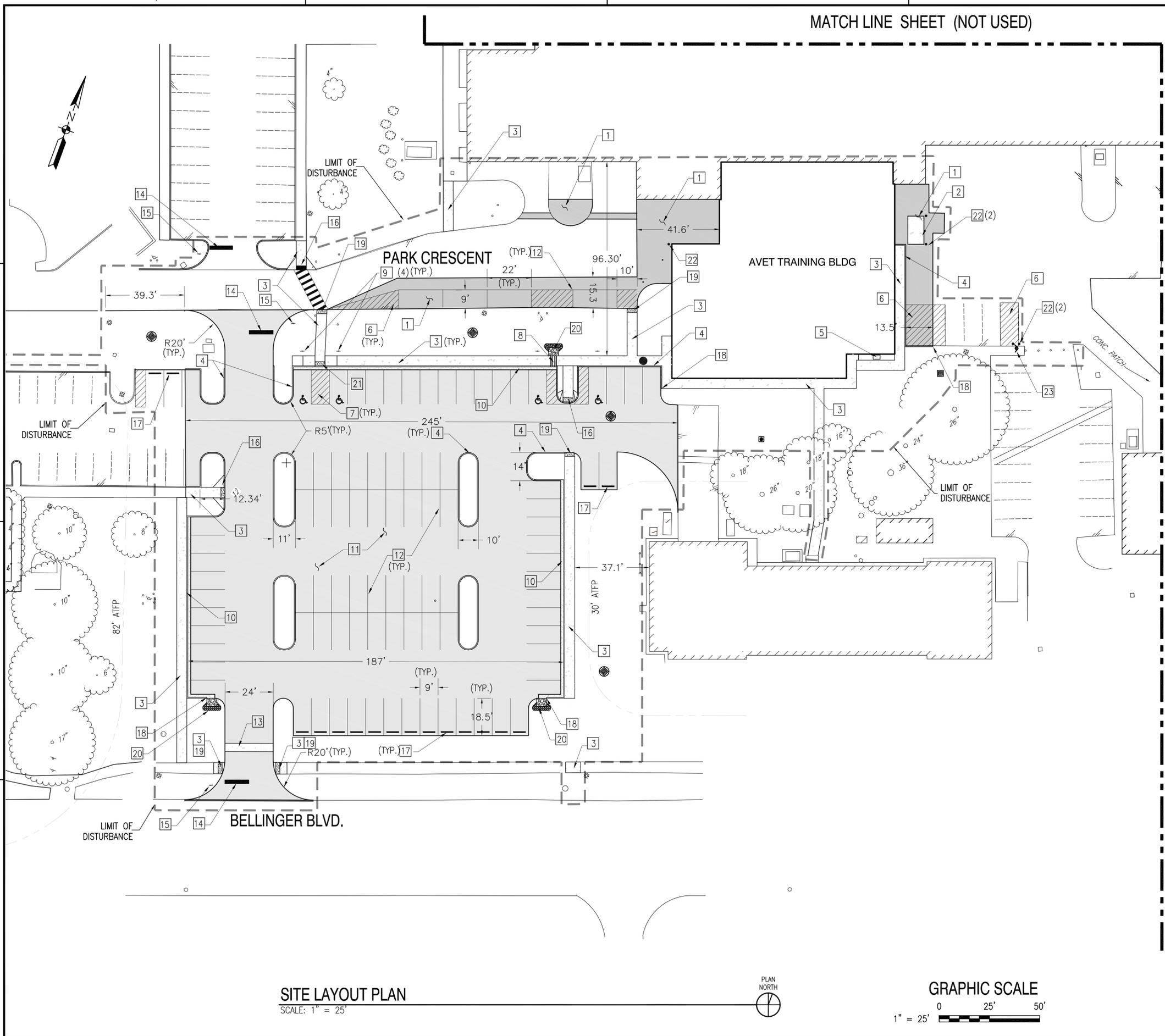
FY 2016 P-518  
MH-60 AVET TRAINING FACILITY  
SITE LAYOUT PLAN



SCALE:	AS SHOWN
PROJECT NO.:	1291639
CONSTR. CONTR. NO.:	
NAVFAC DRAWING NO.:	12701620
SHEET	24 OF 109
<b>CS101</b>	

DRAWFORM REVISION: 10 MARCH 2009

FILE NAME: P:\VIA\NavalStationNorfolk\MILCON\2016\_1291639\_P-518\_DBB\_MH-60 AVET Training Facility\B\_Design\Drawings Model Files\05\_Civil\CS101-102.dwg LAYOUT NAME: CS102 PLOTTED: Wednesday, September 30, 2015 - 5:15pm USER: luu.phu



MATCH LINE SHEET (NOT USED)

GENERAL SHEET NOTES

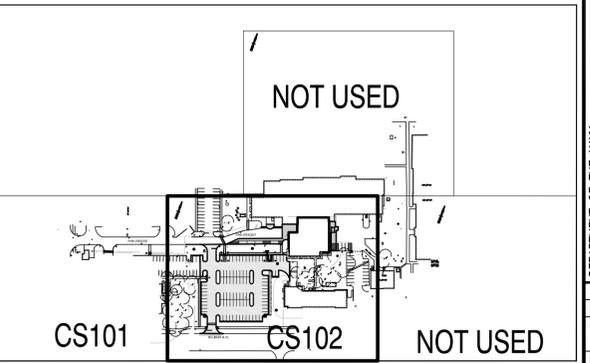
1. SEE SHEET C-001 FOR GENERAL & SURVEY NOTES AND LEGEND.

SITE LAYOUT KEYNOTES (THIS SHEET)

- 1 HEAVY DUTY BITUMINOUS PAVEMENT, SEE DETAIL B4 ON SHEET C-504
- 2 CONCRETE UTILITY PAD (8'X14'), SEE DETAIL A5 ON SHEET C-504
- 3 5' CONCRETE SIDEWALK, SEE DETAIL C1 ON SHEET C-505
- 4 CONCRETE CURB, SEE DETAIL A1 ON SHEET C-504
- 5 CONCRETE UTILITY PAD (2'X3.5'), SEE DETAIL A5 ON SHEET C-504
- 6 PAINTED ISLAND -YELLOW, SEE DETAIL C2 ON SHEET C-506
- 7 PAINTED ISLAND -BLUE (ACCESS AISLE), SEE DETAIL C2 ON SHEET C-506
- 8 SIDEWALK GRATE, SEE DETAIL A1 ON SHEET C-505
- 9 HANDICAP PARKING SIGN, SEE DETAIL A1 ON SHEET C-506
- 10 CONCRETE CURB AND GUTTER, SEE DETAIL A1 ON SHEET C-504
- 11 LIGHT DUTY BITUMINOUS PAVEMENT, SEE DETAIL D3 ON SHEET C-504
- 12 4" PAINT PARKING STRIPE, SEE DETAIL C2 ON SHEET C-506
- 13 CONCRETE PAVED DITCH, SEE DETAIL A3 ON SHEET C-504
- 14 24" STOP BAR, SEE DETAIL C2 ON SHEET C-506
- 15 "STOP" SIGN, SEE DETAIL A2 ON SHEET C-506
- 16 ADA WALK RAMP TYPE "B", SEE DETAIL D5 ON SHEET C-505
- 17 WHEEL STOP, SEE DETAIL A3 ON SHEET C-506
- 18 CURB WIPEDOWN, SEE DETAIL D1 ON SHEET C-504
- 19 TRUNCATED DOMES
- 20 RIPRAP, SEE DETAIL D3 ON SHEET C-503
- 21 ADA WALK RAMP TYPE "A", SEE DETAIL D1 ON SHEET C-505
- 22 BOLLARD, SEE DETAIL C5 ON SHEET C-506
- 23 FIRE HYDRANT

MATCH LINE SHEET CS102

KEY PLAN



SITE LAYOUT PLAN  
SCALE: 1" = 25'



APPR	
DATE	
DESCRIPTION	
SYM	
SEAL	
A/E INFO	
APPROVED	
FOR COMMANDER NAVFAC	
ACTIVITY	
SATISFACTORY TO DATE	
DES	LLP
DRAW	LLP
CHK	BUL
PM/DM	M. PERRY/L. SANDERS
BRANCH MANAGER	
CHIEF ENG/ARCH	
FIRE PROTECTION	
NAVAL FACILITIES ENGINEERING COMMAND - MIDA TLANTIC NAVAL STATION - NORFOLK, VIRGINIA NORFOLK, VIRGINIA	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND - MIDA TLANTIC NAVAL STATION NORFOLK NORFOLK, VIRGINIA FY 2016 P-518 MH-60 AVET TRAINING FACILITY SITE LAYOUT PLAN	
SCALE: AS SHOWN	
EPROJECT NO.: 1291639	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 12701621	
SHEET 25 OF 109	
<b>CS102</b>	
DRAWING REVISION: 10 MARCH 2009	

### SHEET NOTES

1. SEE SHEET C-001 FOR CIVIL LEGEND AND GENERAL NOTES.

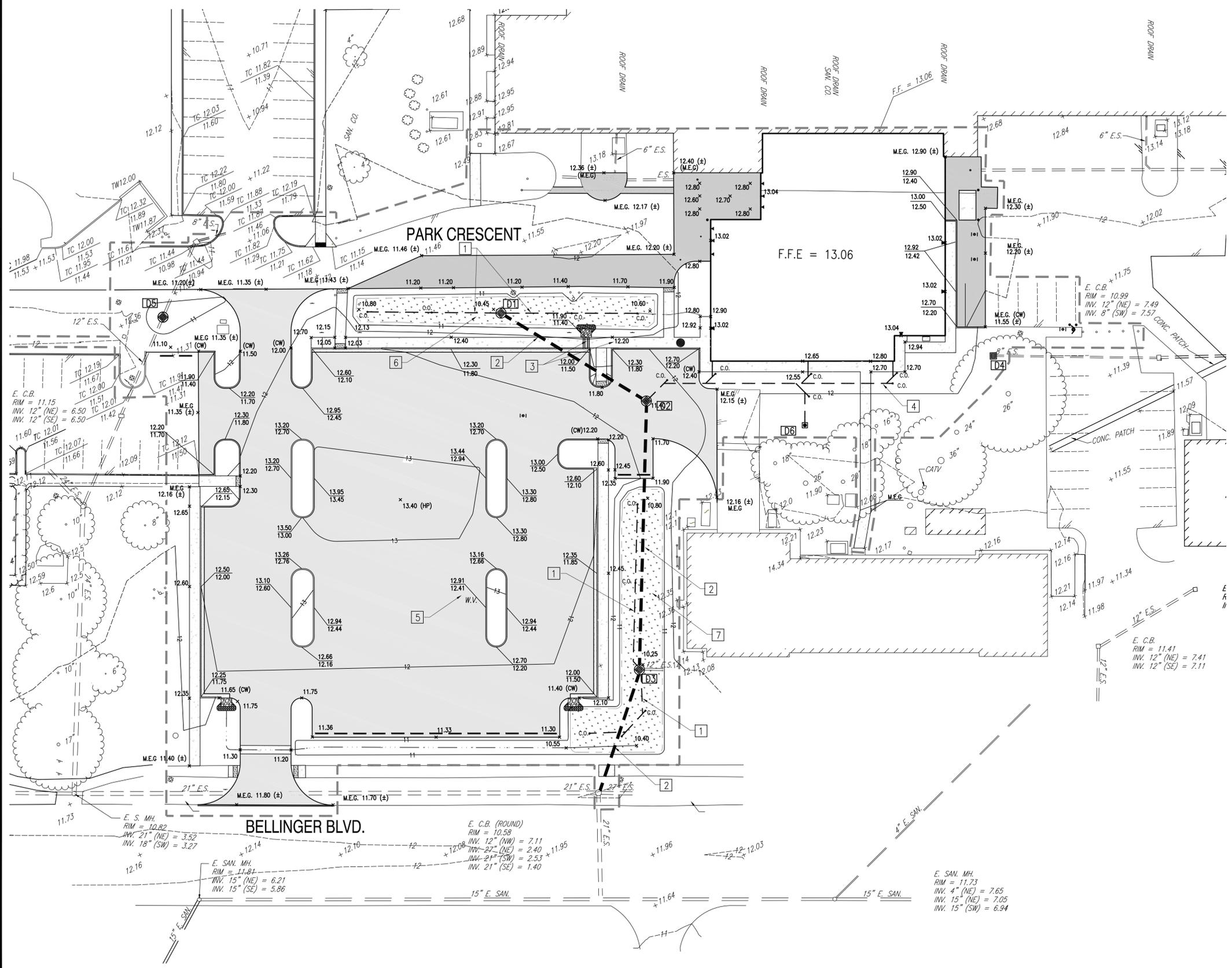
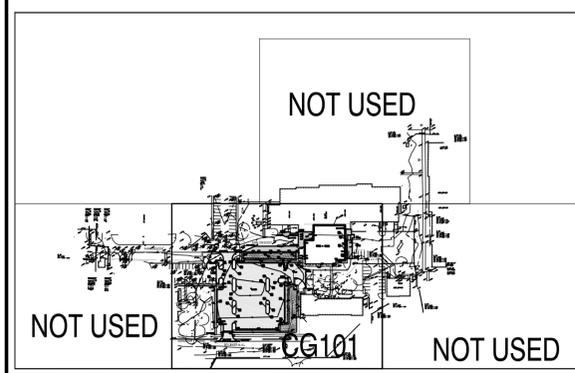
### LAYOUT KEYNOTES

- 1 6" HDPE PERFORATED UNDERDRAIN PIPE
- 2 15" RCP
- 3 SIDEWALK GRATE
- 4 6" PVC UNDERGROUND ROOF DRAIN @ 1.0% SLOPE
- 5 ADJUST EX. WATER VALVE COVER TO MATCH NEW FINISHED GRADE
- 6 DRY SWALE "A"
- 7 DRY SWALE "B"

### NEW STORM DRAINAGE STRUCTURE DATA

- [D1]** GRATE DROP INLET  
RIM = 10.80'  
INV. OUT = 5.50' (15" RCP)  
INV. IN = 7.70' (6" PERFORATED SCHEDULE 40 PVC UNDERDRAIN PIPE)  
[D1] TO [D2]
- [D2]** GRATE DROP INLET  
RIM = 11.40'  
INV. IN = 5.10' (15" RCP)  
INV. OUT = 5.00' (15" RCP)  
[D2] TO [D3]  
80 LF 15" RCP @0.5%
- [D3]** GRATE DROP INLET  
RIM = 10.75'  
INV. IN = 7.50' (6" PERFORATED SCHEDULE 40 PVC UNDERDRAIN PIPE)  
INV. IN = 4.37' (15" RCP)  
INV. IN = 7.58' ± (EX. 12" STORM PIPE)  
INV. OUT = 4.27' (15" RCP)  
[D3] TO E.C.B.  
127 LF 15" RCP @0.5%
- [D4]** GRATE DROP INLET  
RIM = 11.40'  
INV. OUT = 7.50' (±)  
(8" EXISTING STORM PIPE)
- [D5]** GRATE DROP INLET  
RIM = 10.50'  
INV. IN = 7.04' (±) (12" EXISTING STORM PIPE)  
INV. OUT = 6.944' (±) (12" EXISTING STORM PIPE)
- [D6]** 18" YARD DRAIN BASIN  
RIM = 11.50'  
INV. OUT = 9.70' (6" PCV)

### KEY PLAN



### GRADING PLAN

SCALE: 1" = 25'

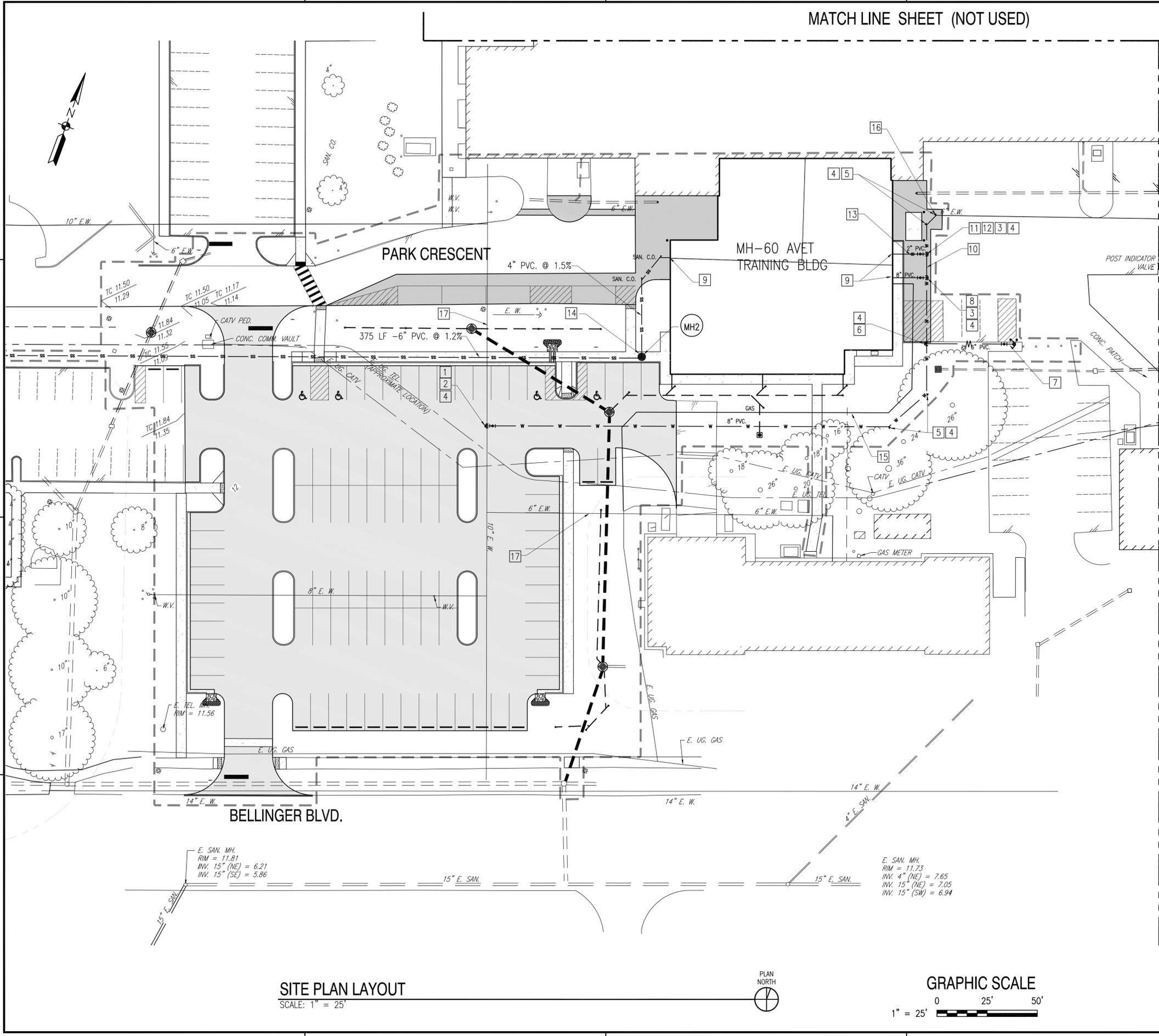


APPR	
DATE	
DESCRIPTION	
SYMBOL	
APPROVED	
FOR COMMANDER NAVFAC	
ACTIVITY	
SATISFACTORY TO DATE	
DES: LLP	DRN: LLP
CHK: BIL	
BRANCH MANAGER	
M. PERRY/L. SANDERS	
CHIEF ENG/ARCH	
FIRE PROTECTION	
NAVFACILITIES ENGINEERING COMMAND	
NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC	
NAVAL STATION - NORFOLK, VIRGINIA	
NORFOLK, VIRGINIA	
DEPARTMENT OF THE NAVY	
NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC	
NAVAL STATION NORFOLK	
FY 2016 P-518	
MH-60 AVET TRAINING FACILITY	
GRADING PLAN	
SCALE: AS SHOWN	
PROJECT NO: 1291639	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO: 12701622	
SHEET 26 OF 109	
<b>CG101</b>	
DRAWING REVISION: 10 MARCH 2009	

FILE NAME: P:\VA\NavalStationNorfolk\MILCON\2016\_1291639\_P-518\_DBB\_MH-60\_AVET\_Training\_Facility\B\_Design\Drawings\Model Files\CG101.dwg PLOTTED: Thursday, October 15, 2015 - 2:20pm USER: lauipho



FILE NAME: P:\VIA\NavalStationNorfolk\MILCON\2016\_1291639\_P-518\_DBB\_MH-60 AVET Training Facility\B\_Design\Drawings Model Files\05\_Civil\CU101-CU102.dwg LAYOUT NAME: CU102 PLOTTED: Wednesday, September 30, 2015 - 5:24pm USER: luu.phu



MATCH LINE SHEET (NOT USED)

GENERAL SHEET NOTES

- SEE SHEET C-001 FOR GENERAL & SURVEY NOTES AND LEGEND.
- SEE ELECTRICAL DRAWING SHEETS FOR ELECTRICAL AND TELECOMMUNICATION LAYOUT.

UTILITY LAYOUT KEYNOTES (THIS SHEET)

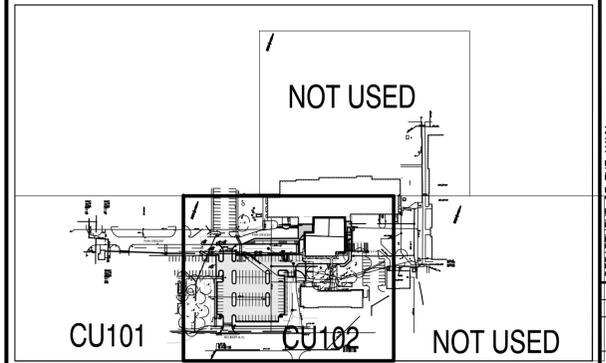
- 10"x8" TEE
- CONNECT NEW 8" PVC WATER LINE TO EX. 10" WATER LINE
- WATER VALVE
- THRUST BLOCK
- 45° BEND
- 8"x6" TEE
- FIRE HYDRANT ASSEMBLY
- 8"x8" TEE
- SEE MECHANICAL DRAWING SHEETS FOR CONTINUATION
- 8"x6" REDUCER
- 6"x6" TEE
- 6"x2" REDUCER
- AMI WATER METER
- CONNECT 4" SANITARY PVC FROM BLDG TO NEW SANITARY (MH2) AT 1.5% SLOPE
- GAS LINE BY VA NATURAL GAS
- CONNECT NEW 6" PVC WATER LINE TO EXISTING 6" WATER LINE
- RELOCATE EX. WATERLINE IF NEEDED TO PROVIDE MIN. 3' COVER FOR EX. WATERLINE IN DRY SWALE AREA.

MATCH LINE SHEET CU101

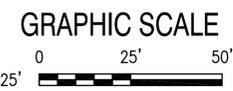
NEW SANITARY STRUCTURE DATA (THIS SHEET)

(MH2) PRECAST CONCRETE SANITARY MANHOLE  
 RIM = 12.60'  
 INV. IN = 8.40' (4" PVC FROM BLDG)  
 NV. OUT = 8.30' (6" PVC)

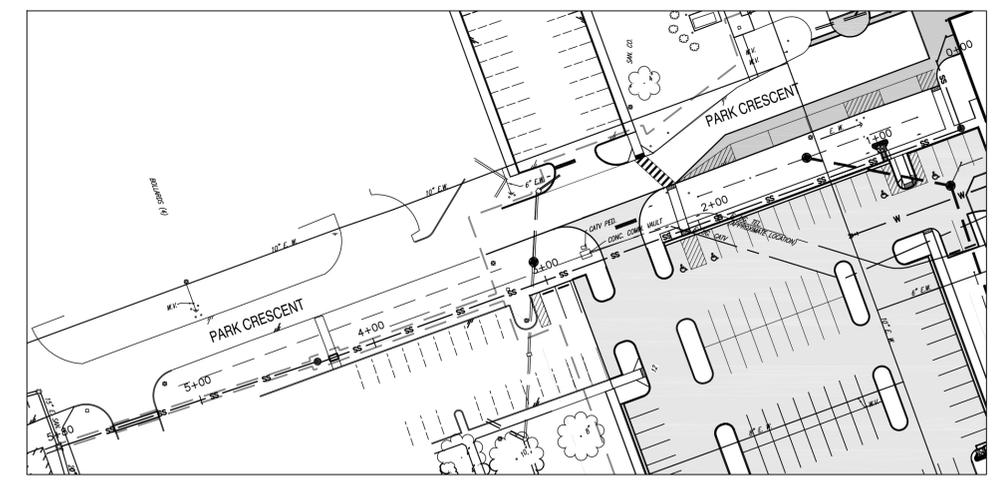
KEY PLAN



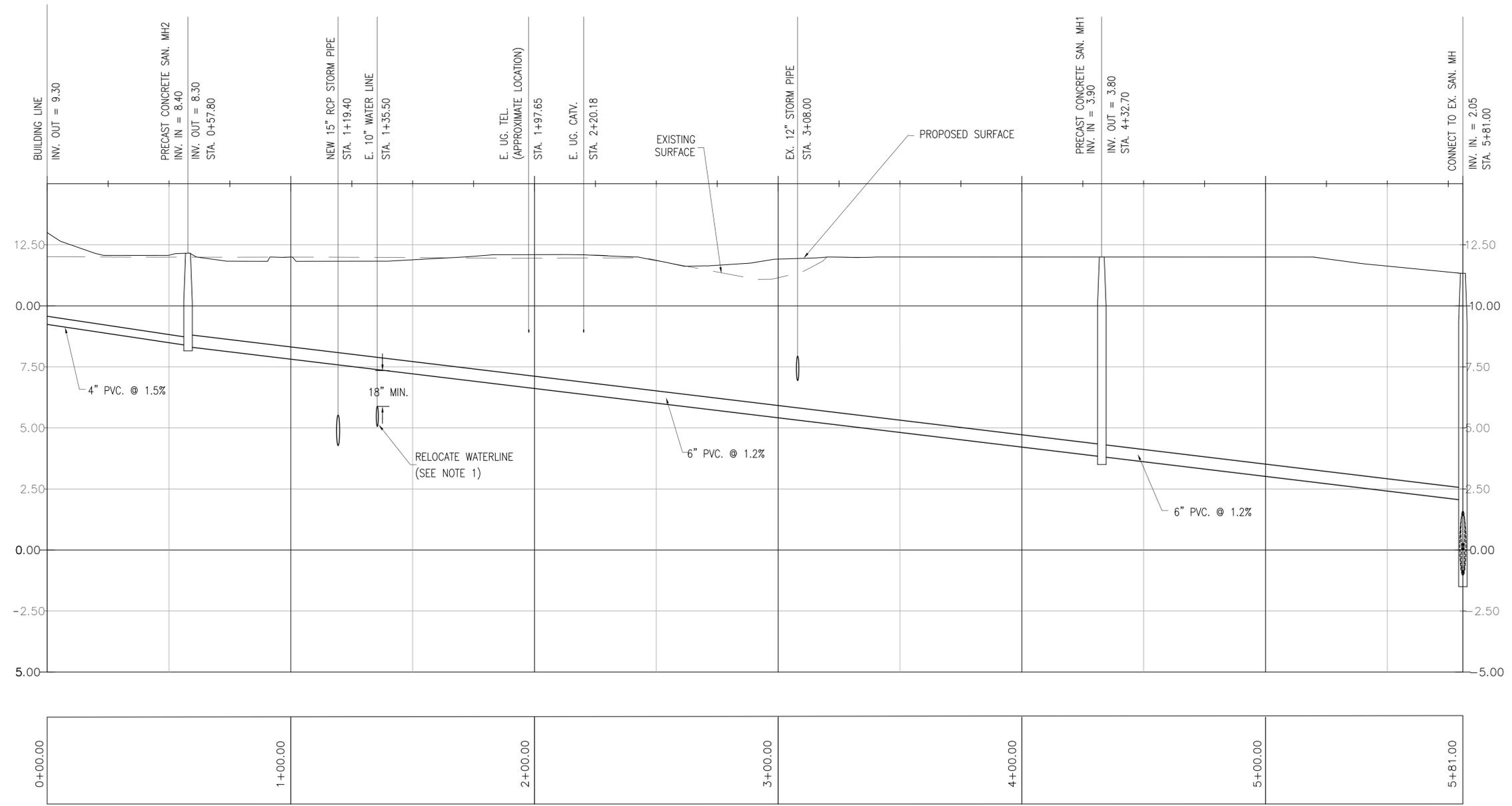
SITE PLAN LAYOUT  
 SCALE: 1" = 25'



APPR									
DATE									
DESCRIPTION									
SYMBOL									
APPROVED: _____ FOR COMMANDER NAVFAC: _____ ACTIVITY: _____ SATISFACTORY TO: _____ DATE: _____ DES: LLP    DRW: LLP    CHK: BUL PM/DM: M. PERRY/L. SANDERS BRANCH MANAGER: _____ CHIEF ENG/ARCH: _____ FIRE PROTECTION: _____									
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND - MIDLANTLANTIC NAVAL STATION - NORFOLK, VIRGINIA NAVAL STATION NORFOLK - NORFOLK, VIRGINIA FY 2016 P-518 MH-60 AVET TRAINING FACILITY UTILITY LAYOUT PLAN									
SCALE: AS SHOWN PROJECT NO.: 1291639 CONSTR. CONTR. NO.: _____ NAVFAC DRAWING NO.: 12701624 SHEET 28 OF 109 <b>CU102</b> DRAWING REVISION: 10 MARCH 2009									



**PLAN VIEW**  
SCALE: 1" = 50'



**SANITARY SEWER PROFILE**  
SCALE: HORIZ 1" = 25'; VERT. 1" = 2.5'

**SHEET NOTES**

- DEPTH OF EXISTING WATER LINE IS UNKNOWN. RELOCATE WATERLINE TO PROVIDE MINIMUM CLEARANCE PER DETAIL A4 SHEET C-501



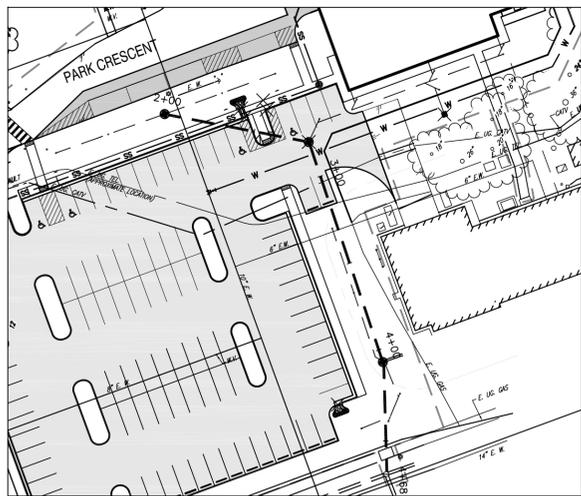
SYMBOL	DESCRIPTION	DATE	APPROVED

APPROVED	A/E INFO	
FOR COMMANDER NAVFAC		
ACTIVITY		
SATISFACTORY TO	DATE	
DES LRP	DRW LLP	CHK BJL
PM/DM M. PERRY/L. SANDERS		
BRANCH MANAGER		
CHIEF ENG/ARCH		
FIRE PROTECTION		

DEPARTMENT OF THE NAVY  
 NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC  
 HAMPTON ROADS FT.  
 NAVAL STATION NORFOLK NORFOLK, VIRGINIA  
 NAVAL STATION NORFOLK NORFOLK, VIRGINIA  
 FY 2016 P-518  
 MH-60 AVET TRAINING FACILITY  
 UTILITY PROFILE

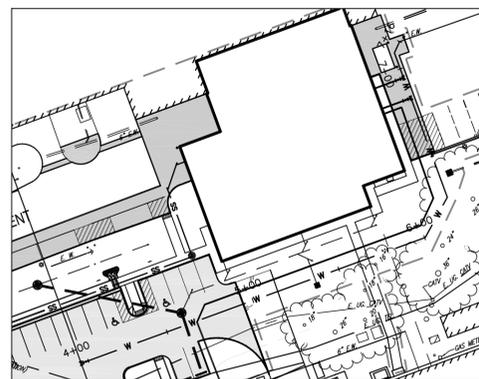
SCALE: AS SHOWN  
 EPROJECT NO.: 1291639  
 CONSTR. CONTR. NO.  
 NAVFAC DRAWING NO. 12701625  
 SHEET 29 OF 109  
**CU201**  
 DRAWFORM REVISION: 10 MARCH 2009

FILE NAME: P:\NAVStationNorfolk\MILCON\2016\_1291639\_P-518\_DBB\_MH-60 AVET Training Facility\_B\_Design\Drawings Model Files\05\_Civil\CU201-CU202.dwg LAYOUT NAME: CU201 PLOTTED: Wednesday, September 30, 2015 - 5:27pm USER: luuphu



**PLAN VIEW**

SCALE: 1" = 50'

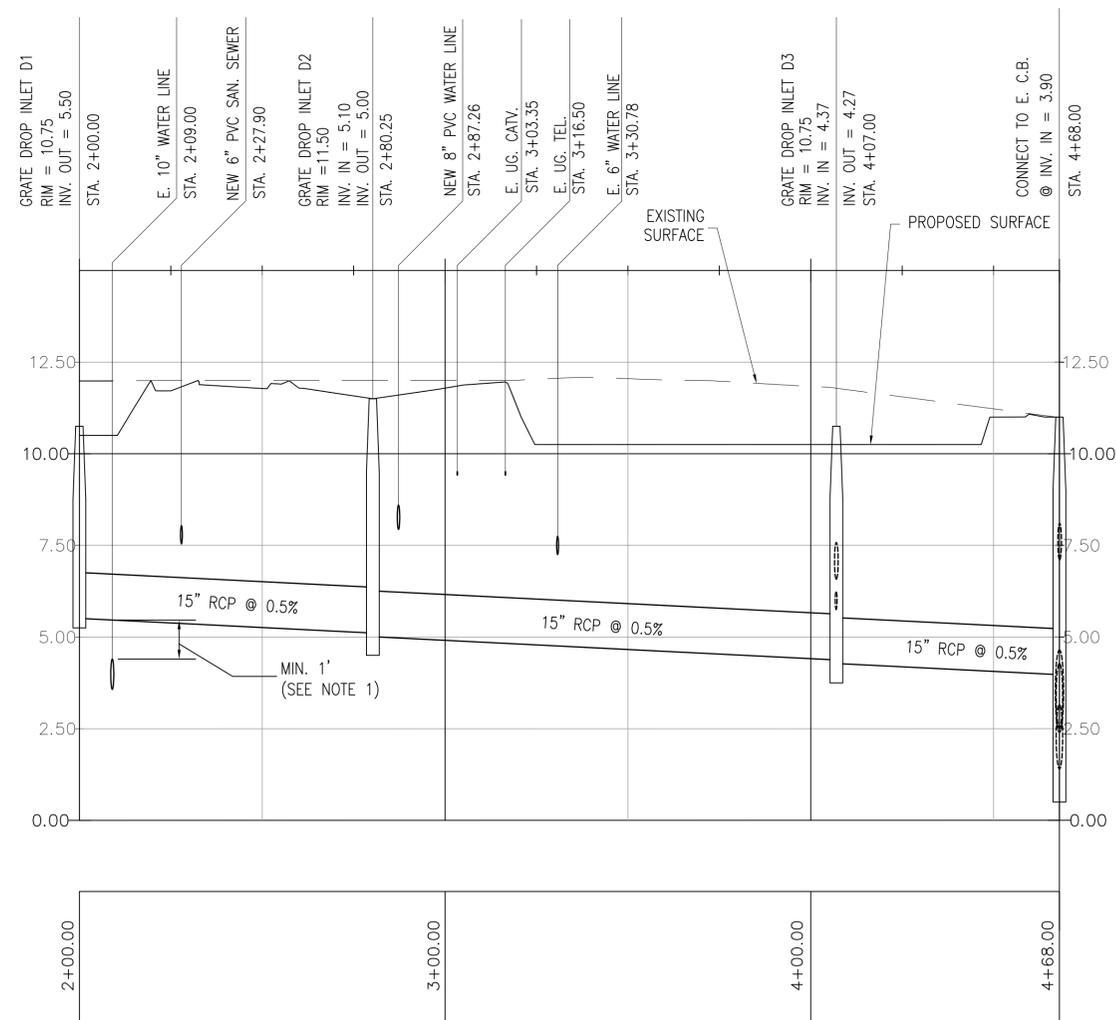


**PLAN VIEW**

SCALE: 1" = 50'

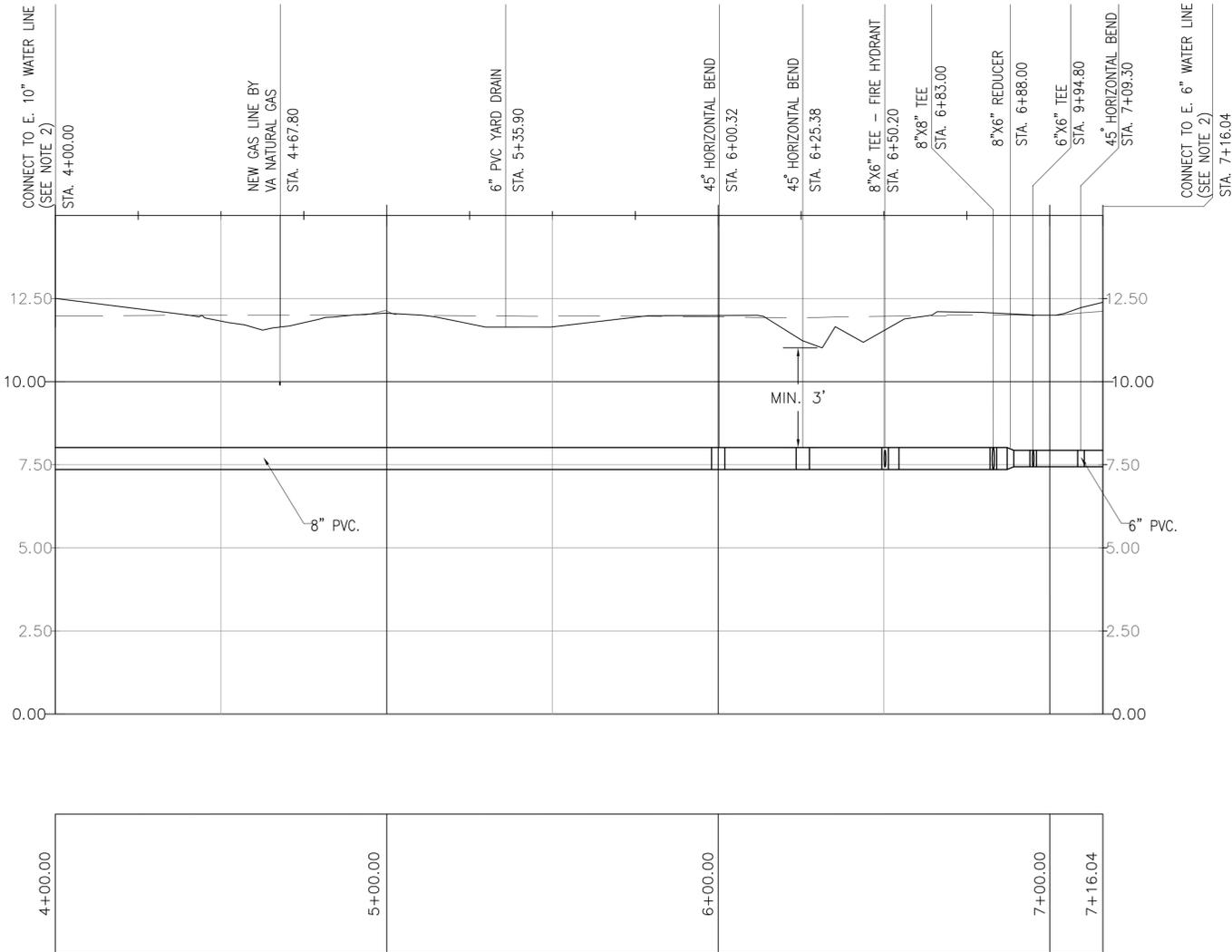
**SHEET NOTES**

1. DEPTH OF EXISTING WATER LINE IS UNKNOWN. RELOCATE WATERLINE TO PROVIDE MINIMUM CLEARANCE PER DETAIL A4 SHEET C-501



**STORM PROFILE**

SCALE: HORIZ 1" = 25'; VERT. 1" = 2.5'



**WATER PROFILE**

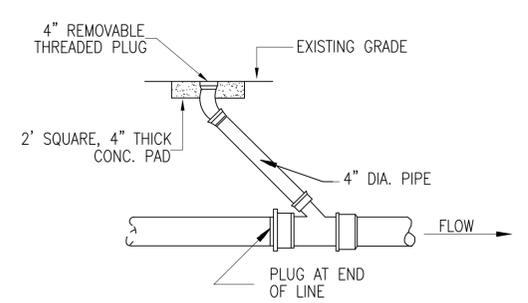
SCALE: HORIZ 1" = 25'; VERT. 1" = 2.5'



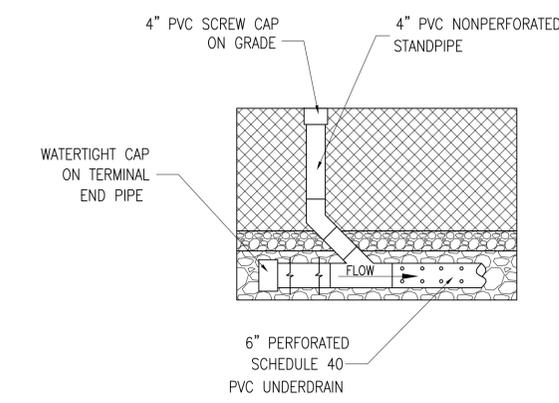
APPROVED	A/E R/O
FOR COMMANDER NAVFAC	ACTIVITY
SATISFACTORY TO DATE	
DES LLP	DRW LLP
CHK BJL	
PM/DM M. PERRY/L. SANDERS	
BRANCH MANAGER	
CHEF ENG/ARCH	
FIRE PROTECTION	
DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC	NAVAL STATION - NORFOLK, VIRGINIA
NAVAL STATION NORFOLK	NORFOLK, VIRGINIA
<b>FY 2016 P-518</b> <b>MH-60 AVET TRAINING FACILITY</b> UTILITY PROFILE	
SCALE: AS SHOWN	
EPROJECT NO.: 1291639	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 12701626	
SHEET 30 OF 109	
<b>CU202</b>	
DRAWFORM REVISION: 10 MARCH 2009	

FILE NAME: P:\NA\NavalStationNorfolk\MILCON\2016\_1291639\_P-518\_DBB\_MH-60 AVET Training Facility\B\_Design\Drawings Model Files\05\_Civil\CU201-CU202.dwg LAYOUT NAME: CU202 PLOTTED: Wednesday, September 30, 2015 - 12:26pm USER: luu.phu

FILE NAME: P:\NAVAStationNorfolk\MILCON\2016\_1291639\_P-518\_DBB\_MH-60 AVET Training Facility\B\_Design\Drawings Model Files\05\_Civil\C501-C506.dwg LAYOUT NAME: C-501 PLOTTED: Wednesday, September 30, 2015 12:27pm USER: luu.phu

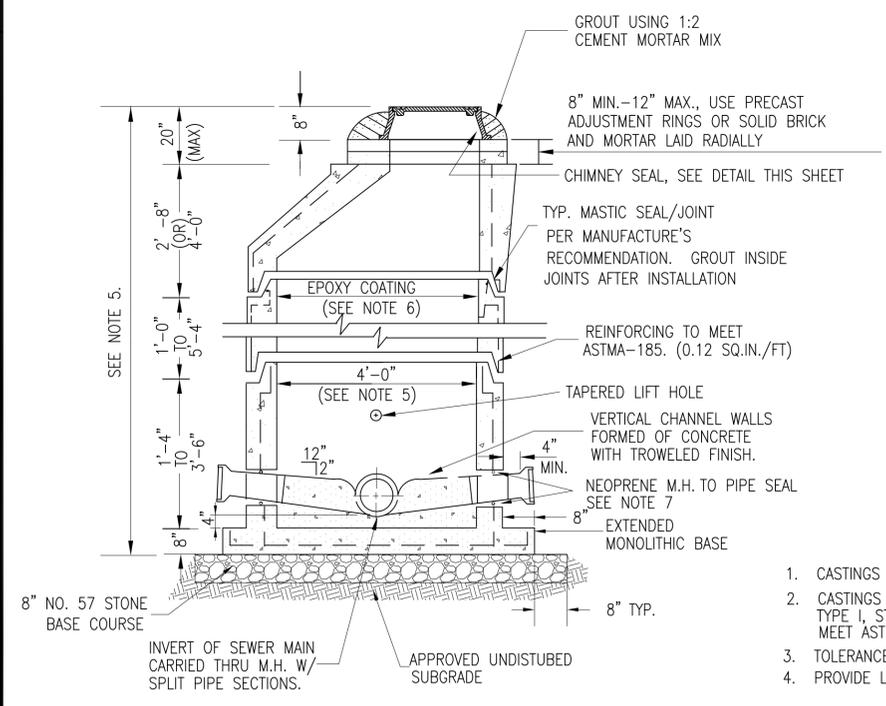
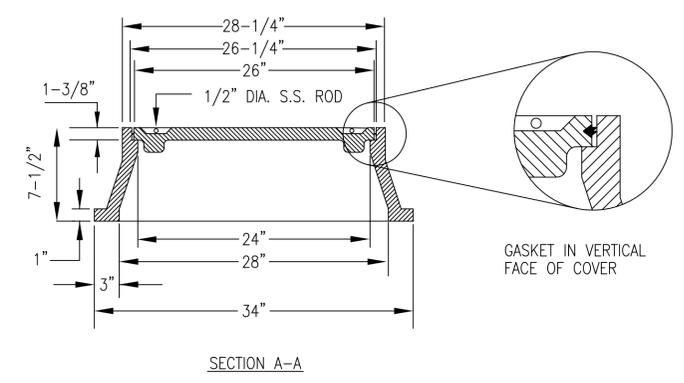
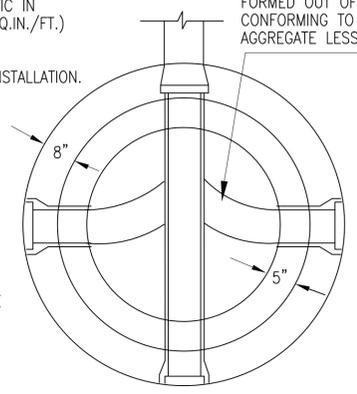


**D3** CLEANOUT DETAIL  
NOT TO SCALE

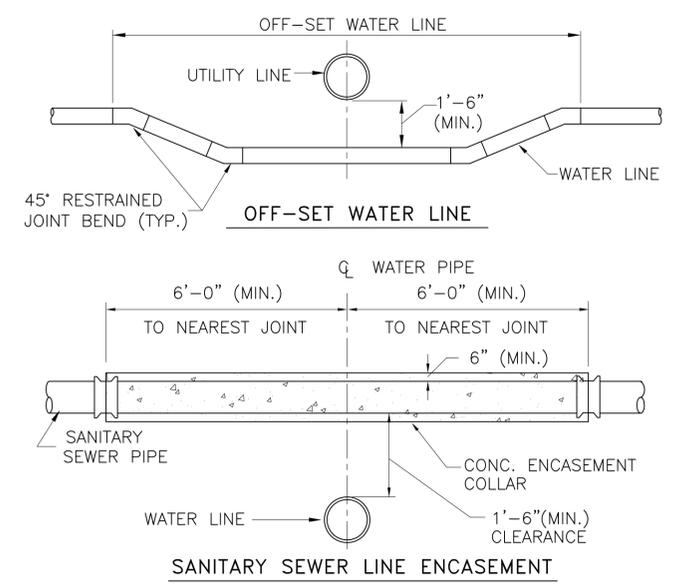
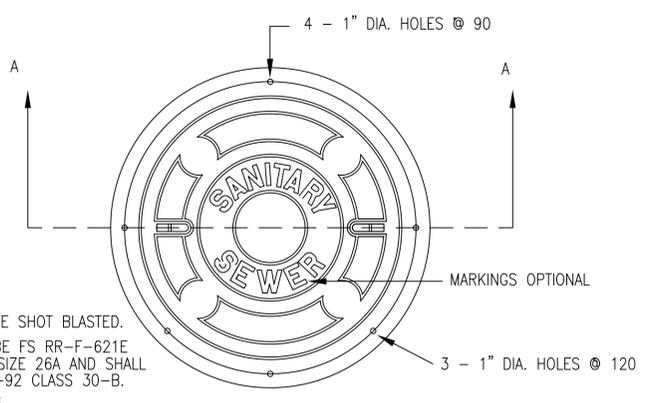


**C4** DRY SWALE UNDERDRAIN CLEANOUT  
NOT TO SCALE

1. PRECAST MANHOLE SECTIONS IN COMPLIANCE W/ASTM-C-478 USING CLASS A-3 CONCRETE (3000 P.S.I.) AND REINFORCING FABRIC IN COMPLIANCE W/ASTM A-185 (0.12 SQ.IN./FT.) PROVIDE MAX. OF 2 LIFT HOLES PER SECTION - PLUG WATER TIGHT W/RUBBER PLUG & GROUT AFTER INSTALLATION.
2. O-RING JOINT SHALL MEET ALL REQUIREMENTS OF ASTM C-361.
3. JACKUP RINGS WILL NOT BE ACCEPTABLE.
4. BASES SHALL BE EXTENDED MONOLITHIC TYPE.
5. DEPTH FOR 48" M.H. WITH 5" WALL SHALL BE 12'. OVER 12' USE 60" M.H. WITH 6" WAL.
6. ALL MANHOLES SHALL RECEIVE INSIDE APPLICATION OF EPOXY COATING.
7. TYP. NEOPRENE SEAL



1. CASTINGS SHALL BE SHOT BLASTED.
2. CASTINGS SHALL BE FS RR-F-621E TYPE I, STYLE A, SIZE 26A AND SHALL MEET ASTM A-48-92 CLASS 30-B.
3. TOLERANCE ± .125.
4. PROVIDE LIFTING PROVISIONS AS SHOWN

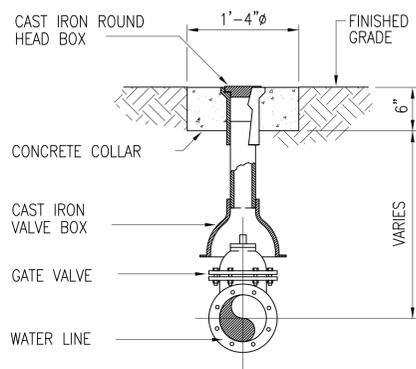


**A4** UTILITY LINE CROSSING  
NOT TO SCALE

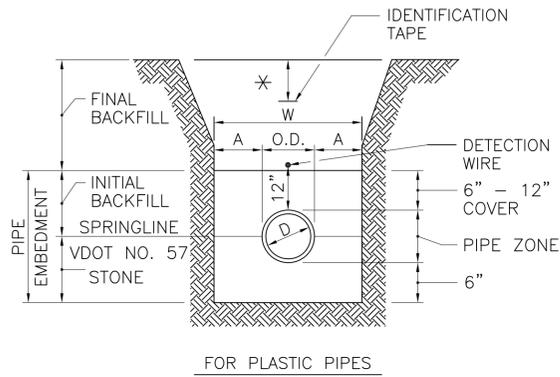
**A1** SANITARY MANHOLE - PRECAST CONCRETE  
NOT TO SCALE

APPROVED	A/E INFO
FOR COMMANDER NAVFAC	
ACTIVITY	
SATISFACTORY TO DATE	
DES LLP	DRW LLP
CHK BJL	
PM/DM M. PERRY/L. SANDERS	
BRANCH MANAGER	
CHIEF ENG/ARCH	
FIRE PROTECTION	
DEPARTMENT OF THE NAVY	
NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC	
HAMPDEN ROADS BFT	
NAVAL STATION NORFOLK	
NORFOLK, VIRGINIA	
FY 2016 P-518	
MH-60 AVET TRAINING FACILITY	
CIVIL DETAILS	
SCALE: AS SHOWN	
PROJECT NO.: 1291639	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 12701627	
SHEET 31 OF 109	
C-501	
DRAWING REVISION: 10 MARCH 2009	

FILE NAME: P:\VIA\NavalStationNorfolk\MILCON\2016\_1291639\_P-518\_DBB\_MH-60 AVET Training Facility\B\_Design\Drawings Model Files\05\_Civil\C501-C506.dwg LAYOUT NAME: C-502 PLOTTED: Tuesday, October 20, 2015 - 9:21am USER: luu.phu

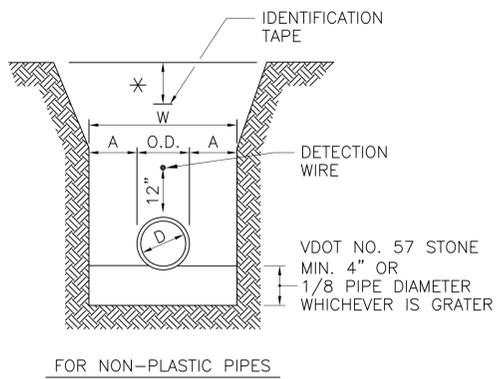


**A2 VALVE WITH VALVE BOX**  
NOT TO SCALE

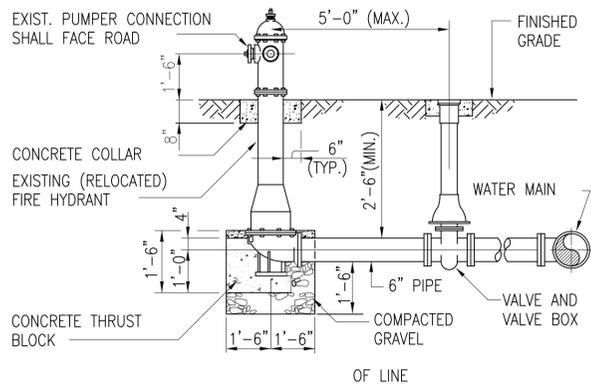


PIPE DIA. "D"	MAXIMUM "A"
SMALLER THAN 6"	8"
6" TO 15"	8"
16" TO 21"	10"

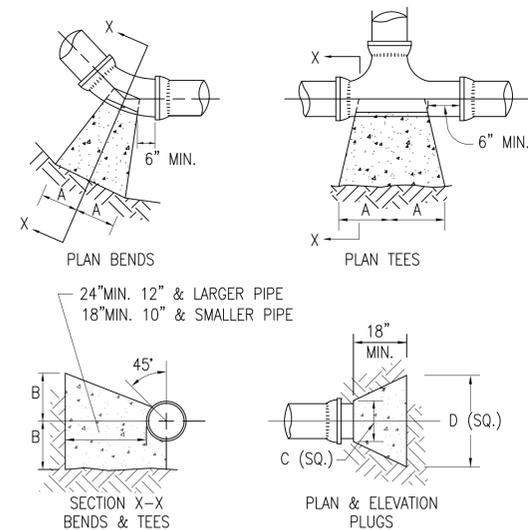
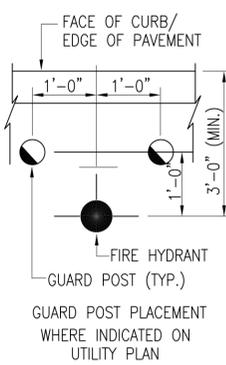
\* 12" BELOW FINISHED GRADE IN UNPAVED AREAS.  
6" BELOW TOP OF SUBGRADE IN PAVED AREAS.



**A3 PIPE TRENCH WIDTH DETAIL**  
NOT TO SCALE

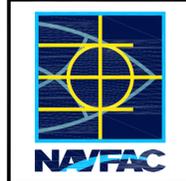


**A1 FIRE HYDRANT ASSEMBLY**  
NOT TO SCALE



SIZE	1/4 BENDS		1/8 BENDS		1/16 BENDS		TEES		PLUGS	
	A	B	A	B	A	B	A	B	C	D
4" & 6"	16"	10"	9"	10"	6"	8"	10"	12"	10"	21"
8"	22"	13"	12"	13"	8"	10"	13"	16"	12"	29"

**A4 TYPICAL CONCRETE THRUST BLOCKS**  
NOT TO SCALE



SYMBOL	DESCRIPTION	DATE	APPROVED

DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND - MIDLANTIC  
NAVAL STATION - NORFOLK, VIRGINIA  
NAVAL STATION NORFOLK  
NORFOLK, VIRGINIA

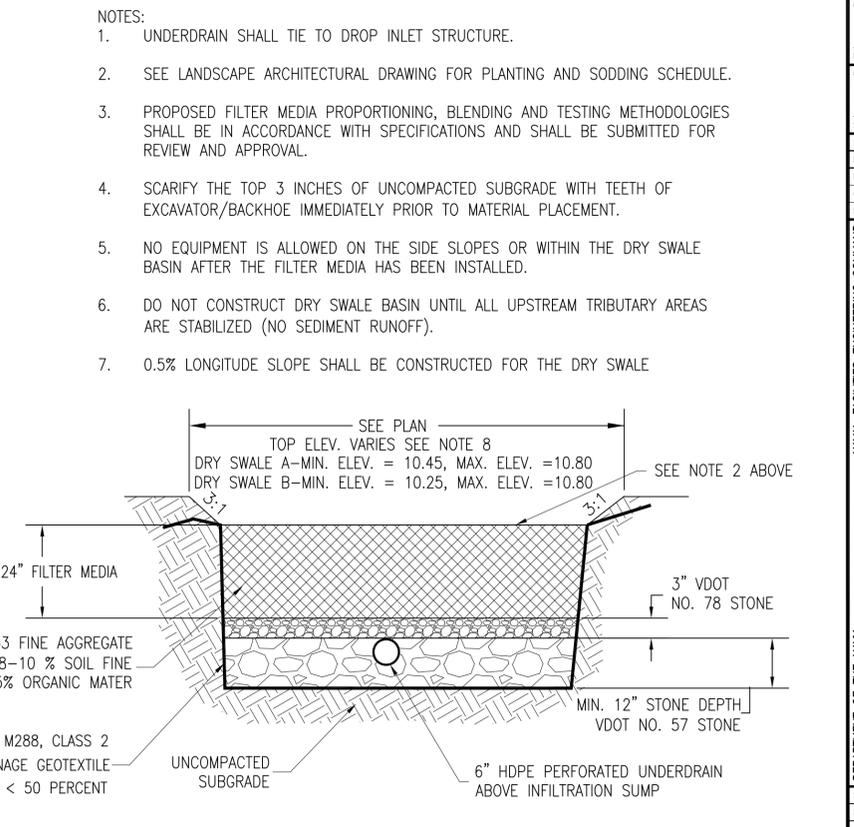
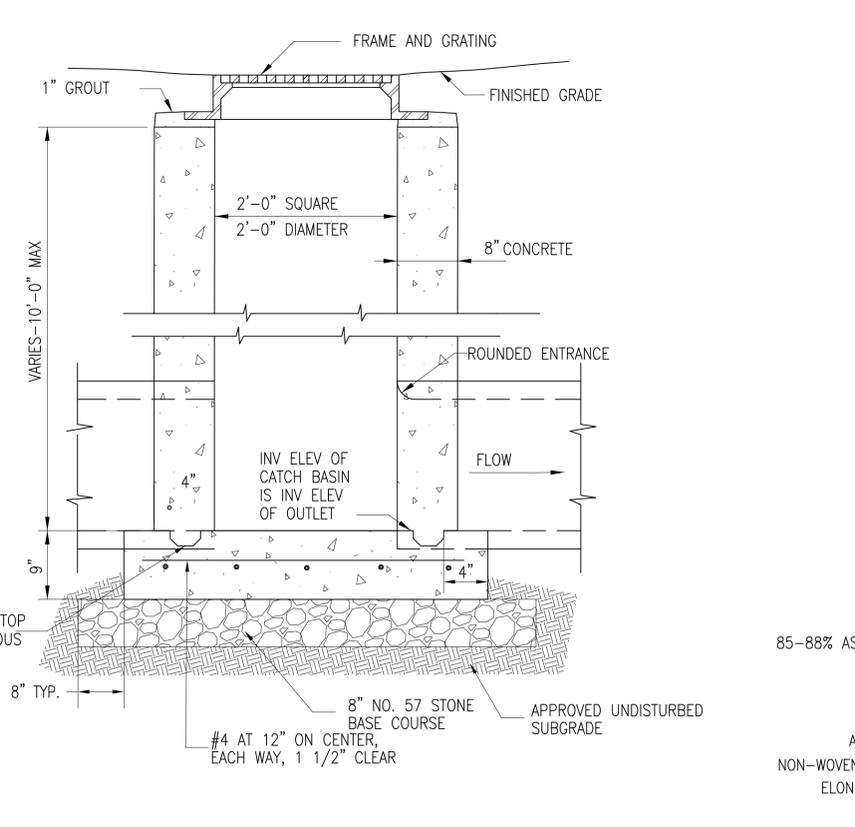
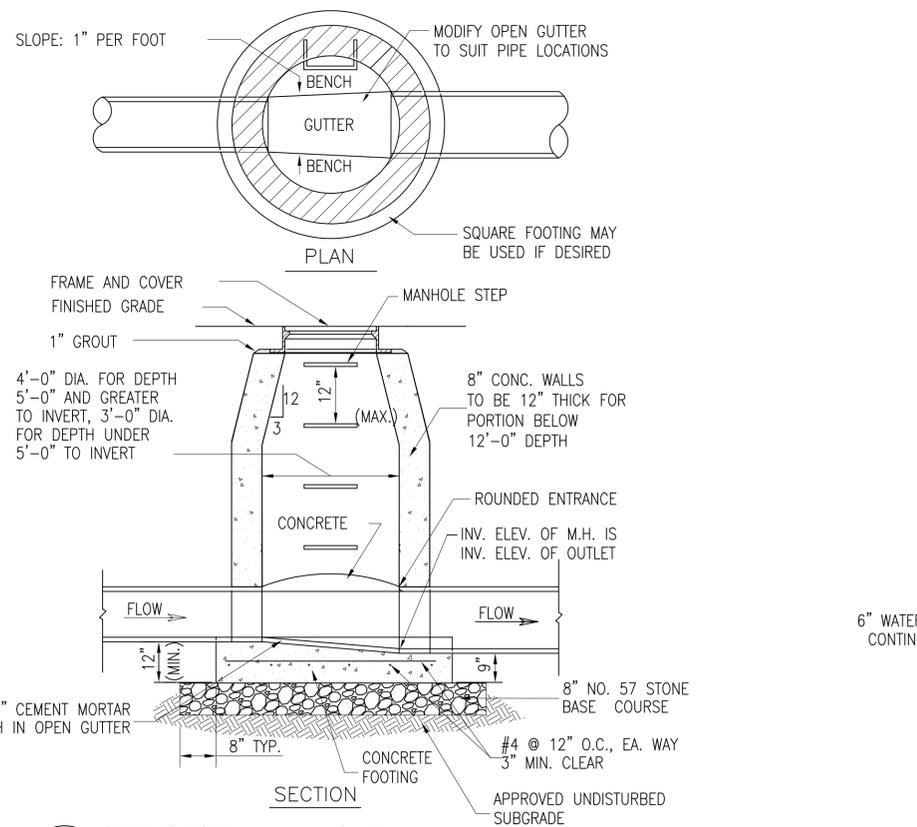
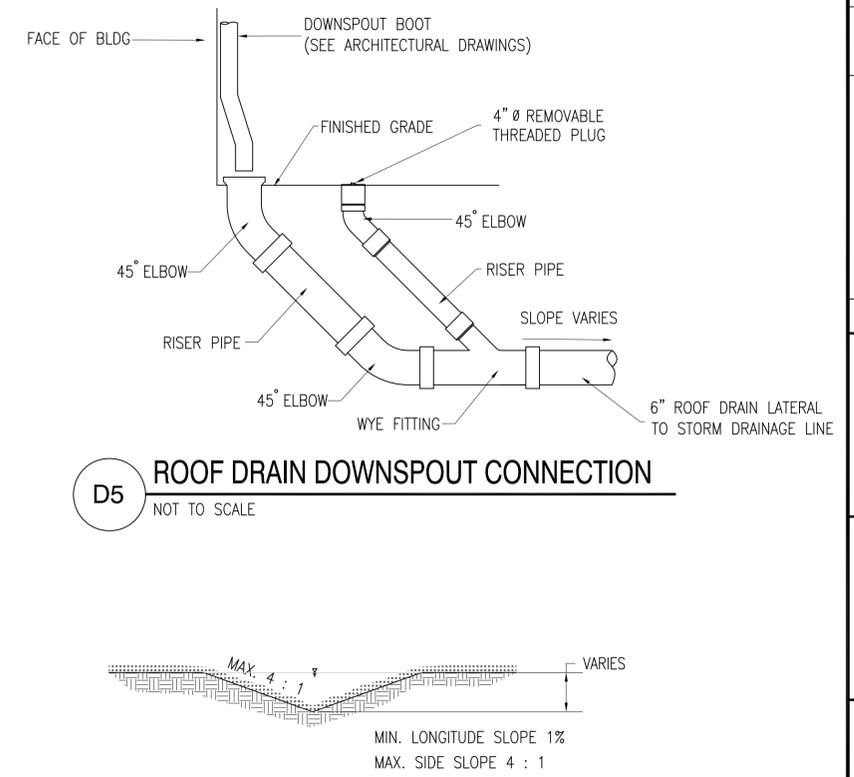
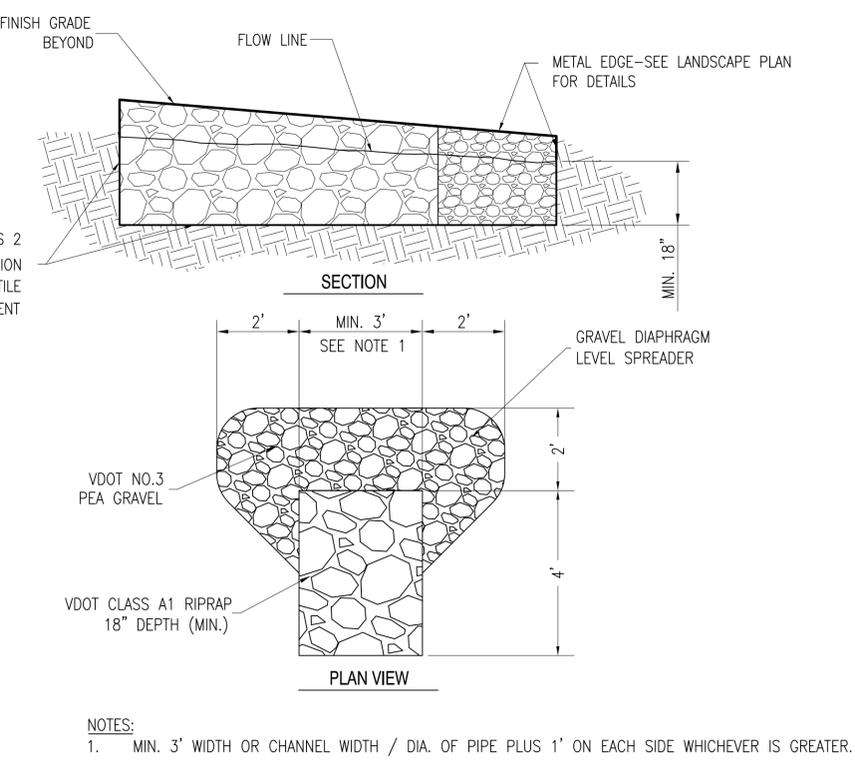
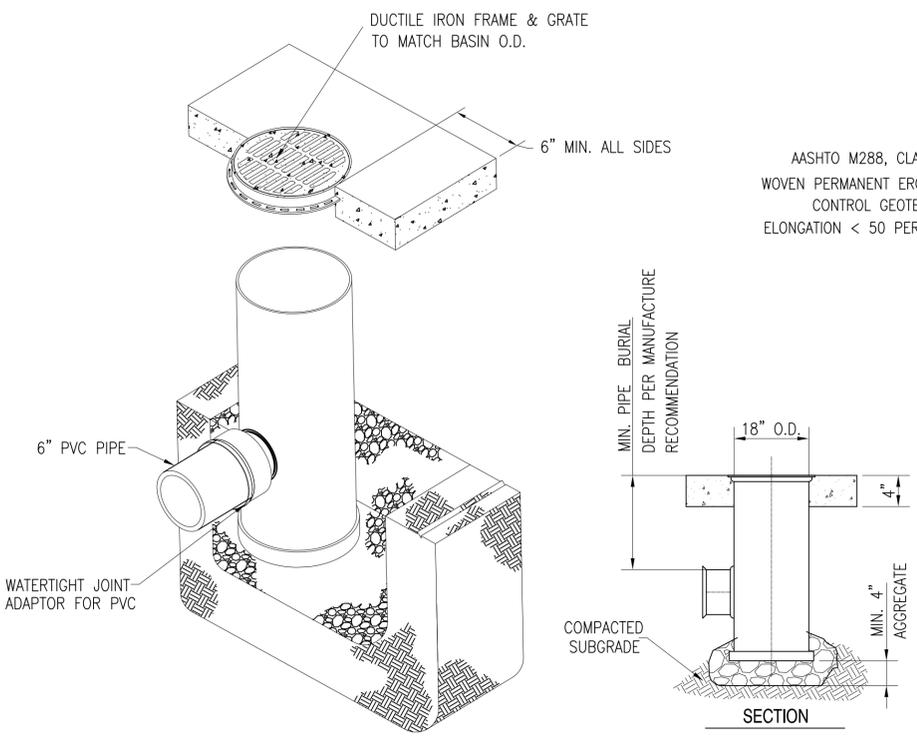
FY 2016 P-518  
MH-60 AVET TRAINING FACILITY  
CIVIL DETAILS

SCALE: AS SHOWN  
EPROJECT NO.: 1291639  
CONSTR. CONTR. NO.  

NAVFAC DRAWING NO. 12701628  
SHEET 32 OF 109  
C-502

DRAWING REVISION: 10 MARCH 2009

FILE NAME: P:\VIA\NavalStationNorfolk\MILCON\2016\_1291639\_P-518\_DBB\_MH-60\_AVET\_Training\_Facility\_B\_Design\Drawings Model Files\05\_Civil\0501-C506.dwg LAYOUT NAME: C-503 PLOTTED: Wednesday, October 28, 2015 1:37pm USER: luuphu



APPROVED	A/E	R/O
FOR COMMANDER NAUFAC		
ACTIVITY		
SATISFACTORY TO	DATE	
DES	LLP	DRW
PM/DM	M. PERRY/L. SANDERS	CHK
BRANCH MANAGER		BUL
CHIEF ENG/ARCH		
FIRE PROTECTION		
DEPARTMENT OF THE NAVY		
NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC		
HAMPDEN ROADS Bldg.		
NAVAL STATION NORFOLK		
NORFOLK, VIRGINIA		
FY 2016 P-518		
MH-60 AVET TRAINING FACILITY		
CIVIL DETAILS		
SCALE:	AS SHOWN	
PROJECT NO.:	1291639	
CONSTR. CONTR. NO.:		
NAVAC DRAWING NO.:	12701629	
SHEET	33	OF 109
<b>C-503</b>		
DRAWING REVISION: 10 MARCH 2009		

1

2

3

4

5

D

C

B

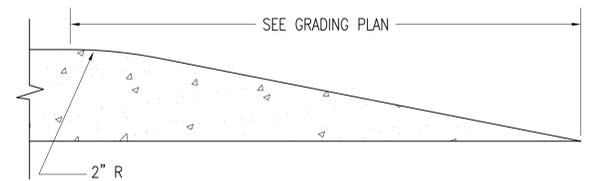
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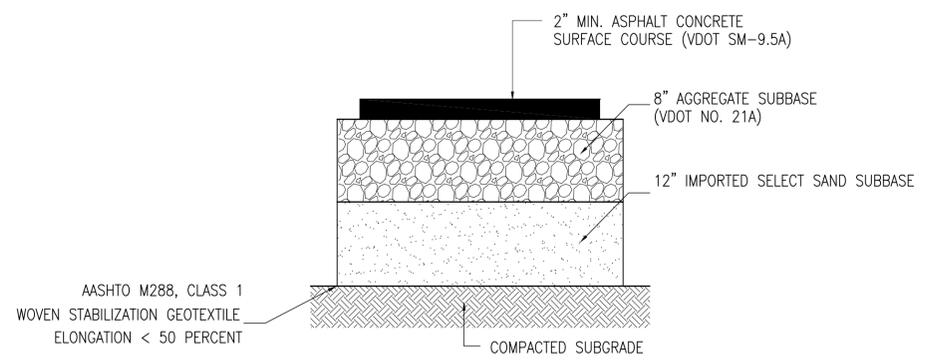
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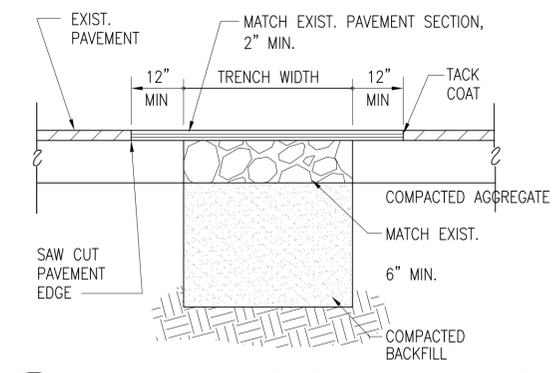
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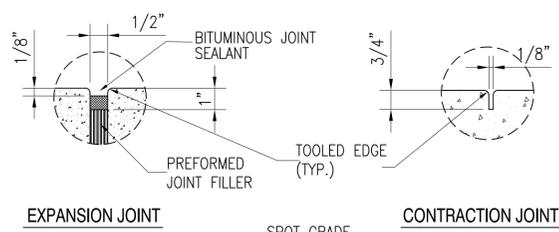
**D1** CURB WIPEDOWN  
NOT TO SCALE



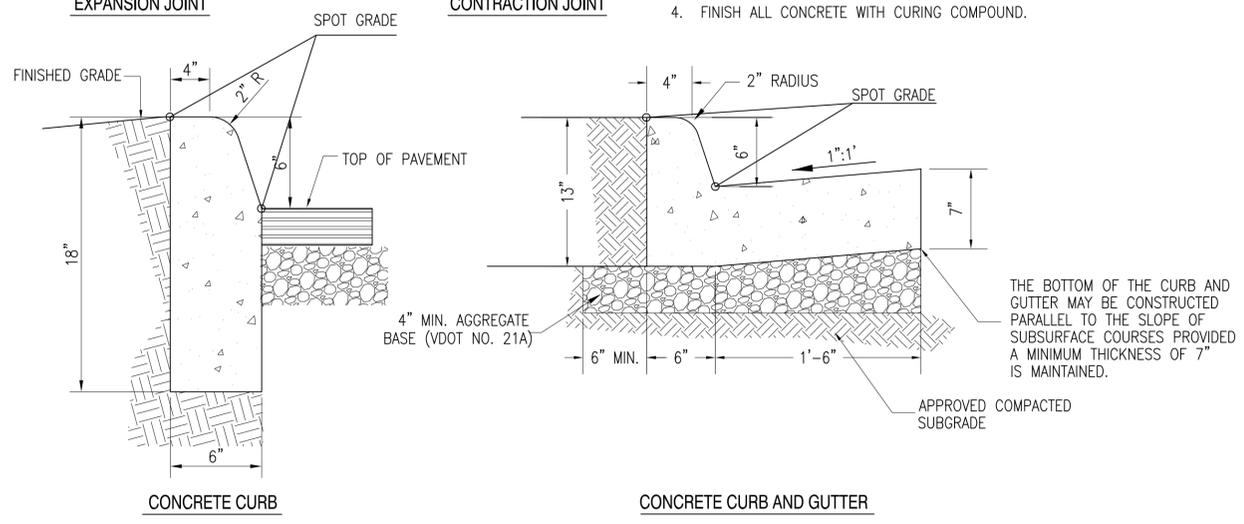
**D3** LIGHT DUTY BITUMINOUS PAVEMENT SECTION  
NOT TO SCALE



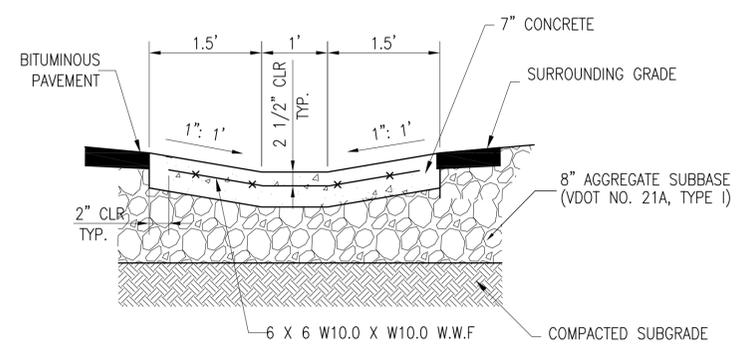
**D4** UTILITY BITUMINOUS PAVEMENT PATCH  
NOT TO SCALE



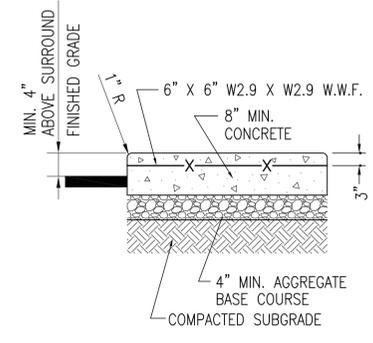
- NOTES:**
1. CONCRETE SHALL BE 3000 PSI.
  2. CONTRACT JOINT SHALL BE SPACED AT 10' INTERVAL. (A 15' SPACING WILL BE ALLOWED WHEN MACHINE IS USED.)
  3. 1/2" EXPANSION JOINTS SHALL BE SPACED AT 50' MAX. INTERVAL OR AT RIGID OBJECTS.
  4. FINISH ALL CONCRETE WITH CURING COMPOUND.



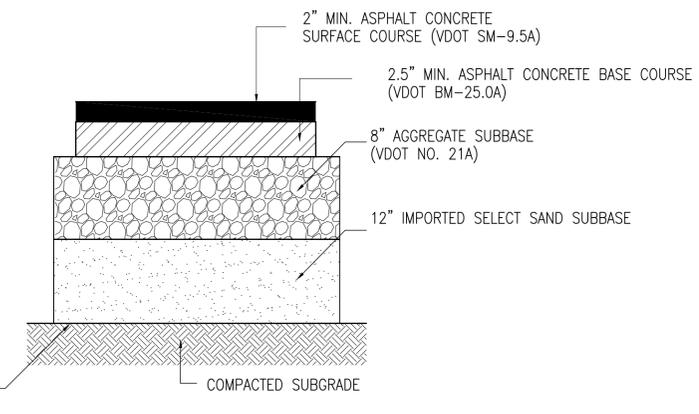
**A1** CONCRETE CURB & CONCRETE CURB AND GUTTER DETAILS  
NOT TO SCALE



**A3** PAVED CONCRETE DITCH DETAIL  
NOT TO SCALE



**A5** CONCRETE UTILITY PAD  
NOT TO SCALE



**B4** HEAVY DUTY BITUMINOUS PAVEMENT SECTION  
NOT TO SCALE

SYMBOL	DESCRIPTION	DATE	APPROVED



APPROVED

FOR COMMANDER NAVFAC

ACTIVITY

SATISFACTORY TO DATE

DES: LLP    DRW: LLP    CHK: BJL  
 PM/DM: M. PERRY/L. SANDERS

BRANCH MANAGER

CHEF ENG/ARCH

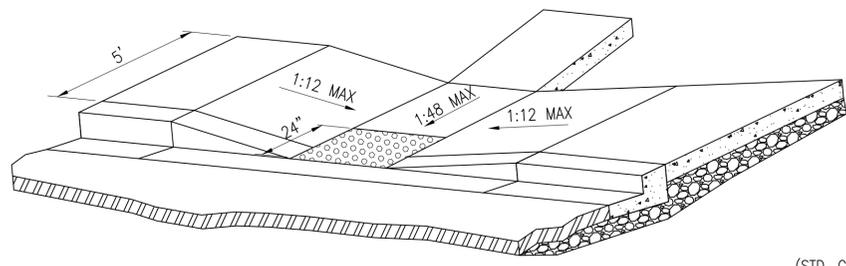
FIRE PROTECTION

DEPARTMENT OF THE NAVY  
 NAVAL FACILITIES ENGINEERING COMMAND - MIDLANTIC  
 NAVAL STATION - NORFOLK, VIRGINIA  
 NAVAL STATION NORFOLK    NORFOLK, VIRGINIA

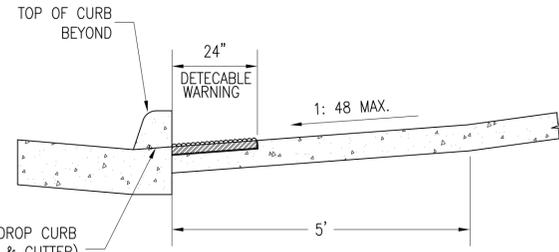
SCALE: AS SHOWN  
 EPROJECT NO.: 1291639  
 CONSTR. CONTR. NO.  
 NAVFAC DRAWING NO. 12701630  
 SHEET 34 OF 109  
**C-504**

DRAWFORM REVISION: 10 MARCH 2009

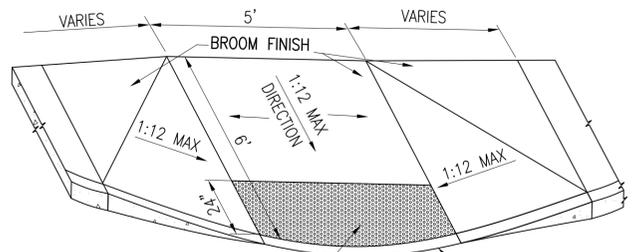
FILE NAME: P:\VIA\NavalStationNorfolk\MILCON\2016\_1291639\_P-518\_DBB\_MH-60 AVET Training Facility\_B-Design\Drawings Model Files\05\_Civil\C501-C506.dwg LAYOUT NAME: C-504 PLOTTED: Wednesday, October 28, 2015 - 1:37pm USER: luuphu



PERSPECTIVE VIEW



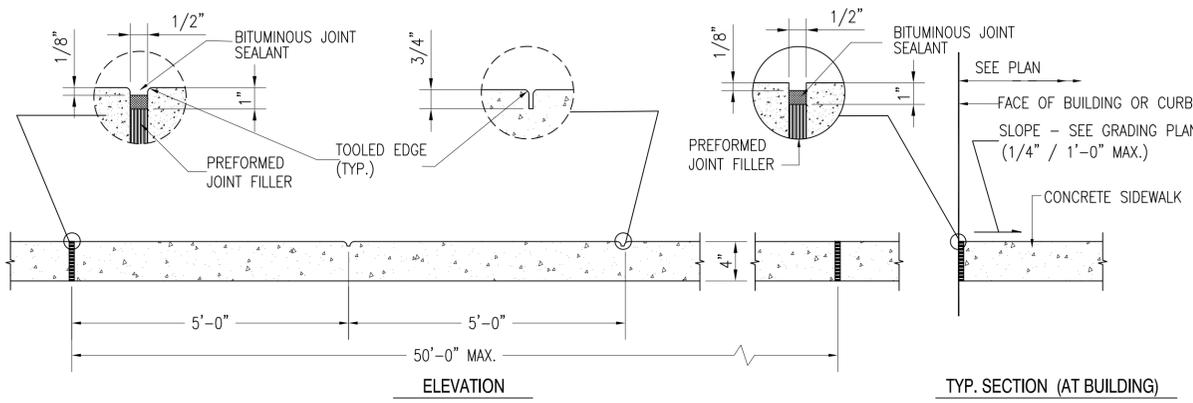
SECTION



TRUNCATED DOMES NO LIP

D5 WALKRAMP TYPE "B"  
NOT TO SCALE

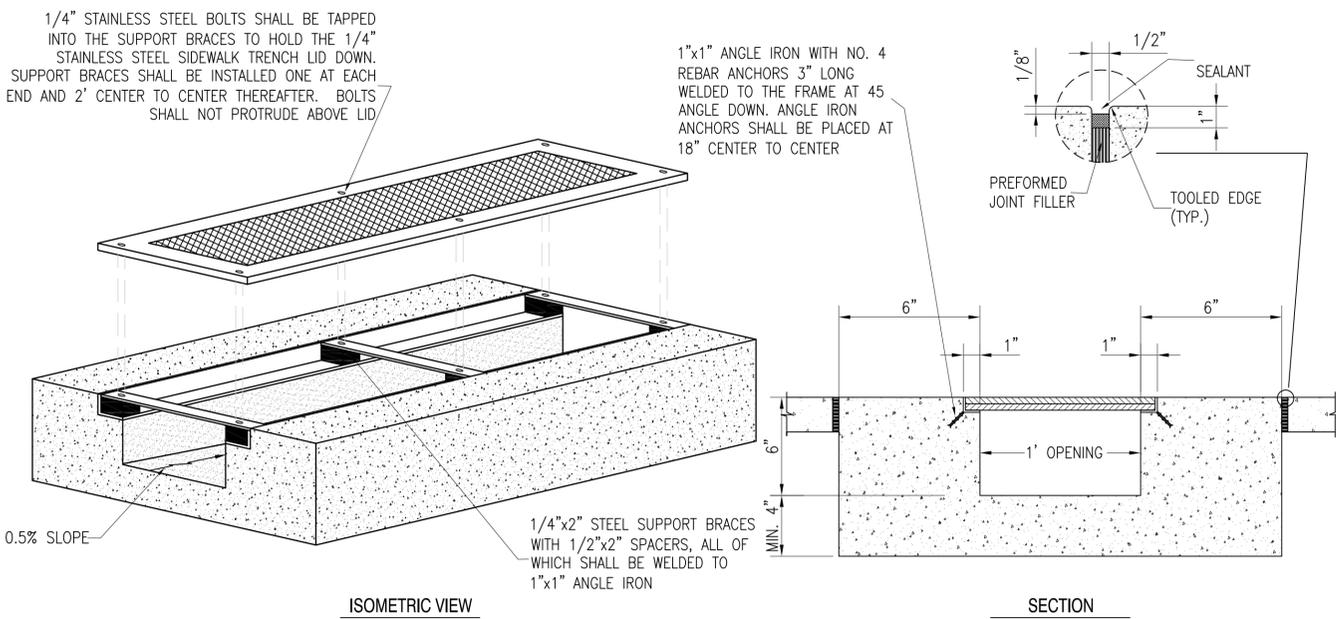
D1 WALKRAMP TYPE "A" DETAILS  
NOT TO SCALE



ELEVATION

TYP. SECTION (AT BUILDING)

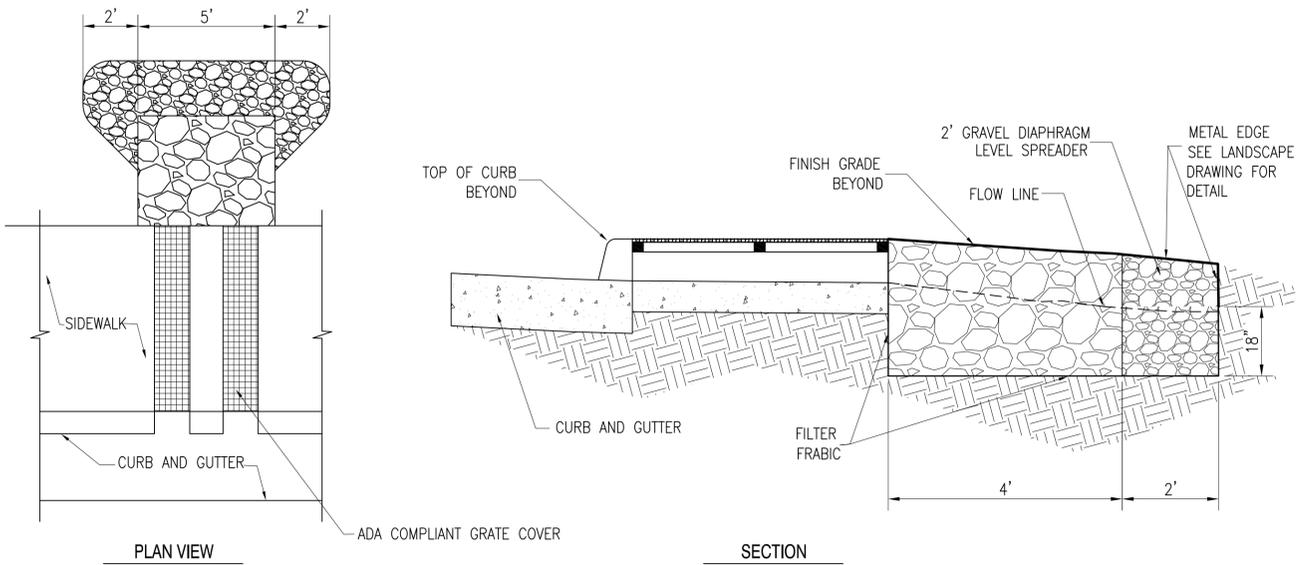
C1 CONCRETE SIDEWALK DETAILS  
NOT TO SCALE



ISOMETRIC VIEW

SECTION

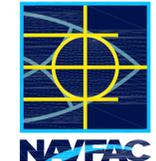
A1 SIDEWALK GRATE  
NOT TO SCALE



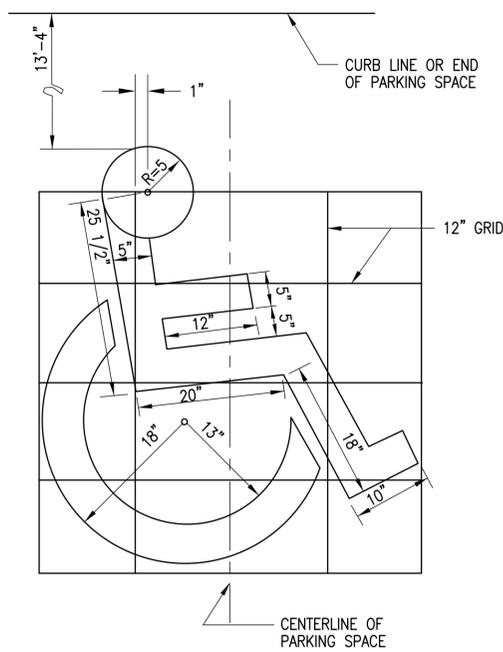
PLAN VIEW

SECTION

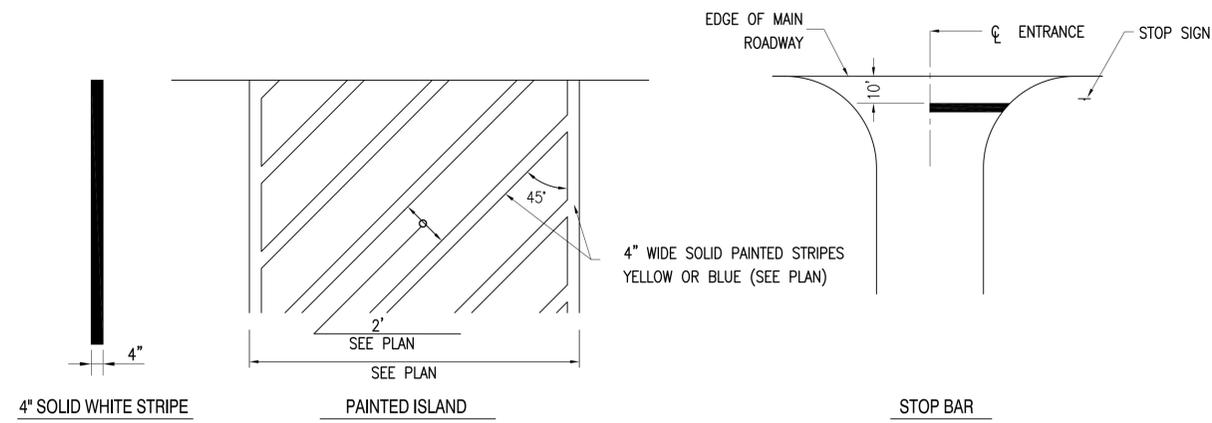
APPROVED	DATE	APP'R
FOR COMMANDER NAVFAC		
ACTIVITY		
SATISFACTORY TO	DATE	
DES LJP	DRW LLP	CHK BJL
PM/DM M. PERRY/L. SANDERS		
BRANCH MANAGER		
CHIEF ENG/ARCH		
FIRE PROTECTION		
DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND - MIDDLE ATLANTIC	NORFOLK, VIRGINIA
NAVAL FACILITIES ENGINEERING COMMAND - MIDDLE ATLANTIC	NAVAL STATION - NORFOLK, VIRGINIA	
NAVAL STATION NORFOLK	FY 2016 P-518	CIVIL DETAILS
	MH-60 AVET TRAINING FACILITY	
SCALE:	AS SHOWN	
PROJECT NO.:	1291639	
CONSTR. CONTR. NO.		
NAVFAC DRAWING NO.	12701631	
SHEET	35	OF 109
<b>C-505</b>		
DRAWING REVISION: 10 MARCH 2009		



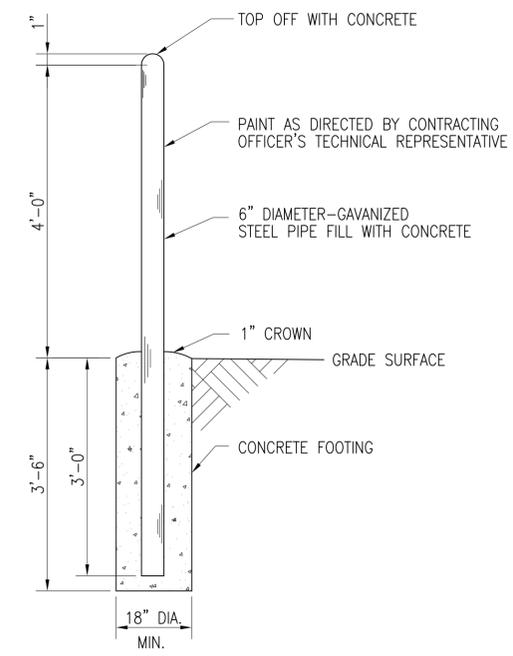
FILE NAME: P:\VIA\NavalStationNorfolk\MILCON\2016\_P-518\_DBB\_MH-60 AVET Training Facility\B\_Design\Drawings Model Files\05\_Civil\C501-C506.dwg LAYOUT NAME: C-505 PLOTTED: Thursday, October 01, 2015 - 1:16pm USER: luu.phu



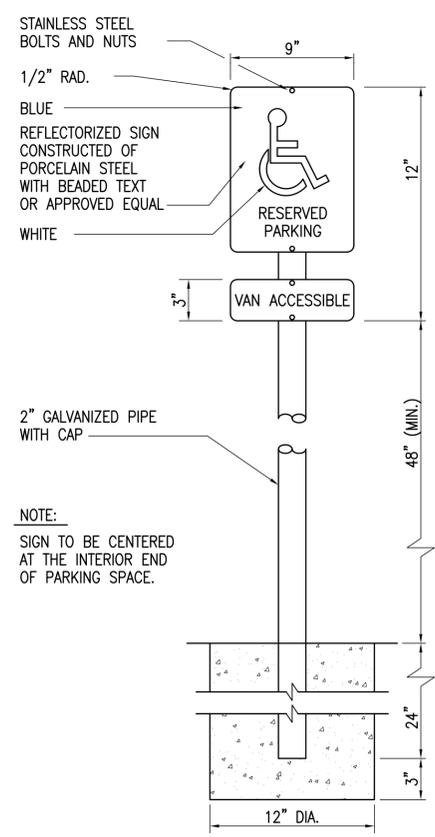
**C1 HANDICAP PARKING SYMBOL**  
NOT TO SCALE



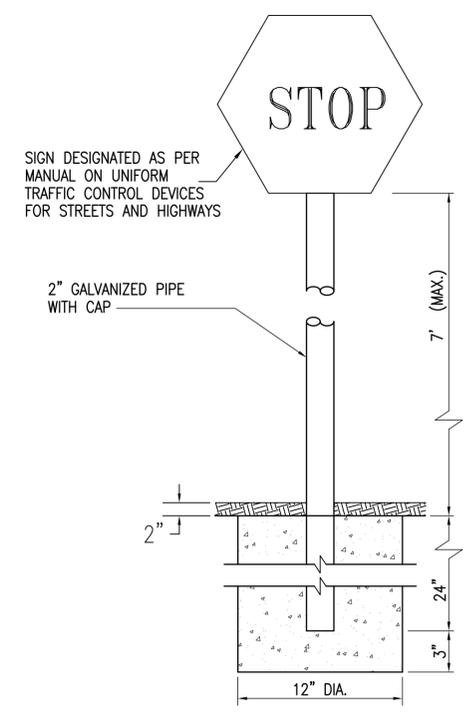
**C2 PAVEMENT MARKING**  
NOT TO SCALE



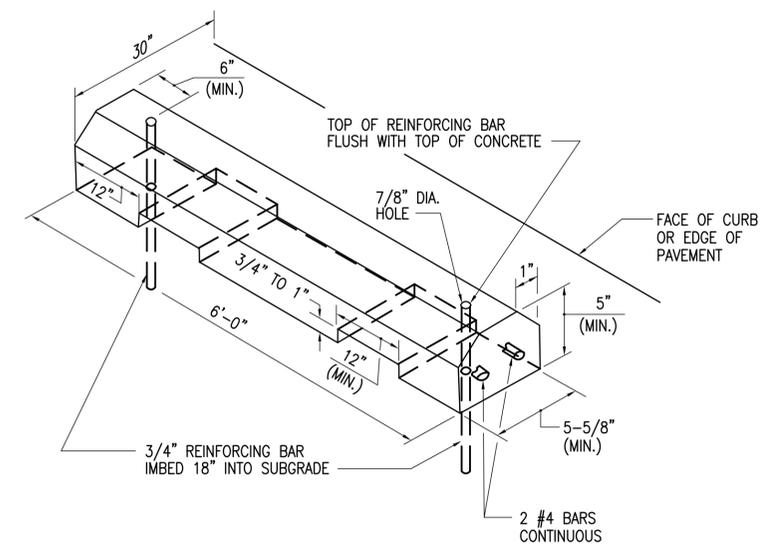
**C5 BOLLARD DETAIL**  
NOT TO SCALE



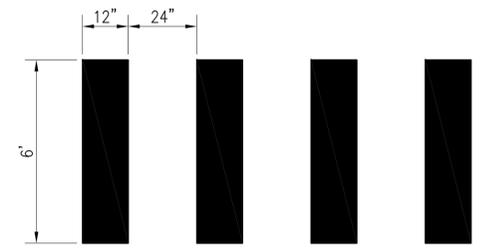
**A1 HANDICAP PARKING SIGN**  
NOT TO SCALE



**A2 STOP SIGN**  
NOT TO SCALE



**A3 PRECAST CONCRETE WHEEL STOP**  
NOT TO SCALE



**A5 CROSSWALK**  
NOT TO SCALE

APPROVED	A/E / INFO
FOR COMMANDER NAUFAC	
ACTIVITY	
SATISFACTORY TO DATE	
DES: LLP	DRW: LLP
CHK: BJL	
PM/DM: M. PERRY/L. SANDERS	
BRANCH MANAGER	
CHIEF ENG/ARCH	
FIRE PROTECTION	
DEPARTMENT OF THE NAVY	
NAVAL FACILITIES ENGINEERING COMMAND - MIDA TLANTIC	
NAVAL STATION - NORFOLK, VIRGINIA	
NAVAL STATION NORFOLK	
NORFOLK, VIRGINIA	
FY 2016 P-518	
MH-60 AVET TRAINING FACILITY	
CIVIL DETAILS	
SCALE:	AS SHOWN
PROJECT NO.:	1291639
CONSTR. CONTR. NO.:	
NAVAC DRAWING NO.:	12701632
SHEET:	36 OF 109
<b>C-506</b>	
DRAWING REVISION: 10 MARCH 2009	

FILE NAME: P:\NAVA\NavalStationNorfolk\MILCON\2016\_1291639\_P-518\_DBB\_MH-60 AVET Training Facility\B\_Design\Drawings Model Files\05\_Civil\C501-C506.dwg LAYOUT NAME: C-506 PLOTTED: Wednesday, September 30, 2015 5:38pm USER: luu.phu