

APPENDICIES

APPENDIX A
PHASE V DEVELOPMENT CONSTRUCTION PLANS

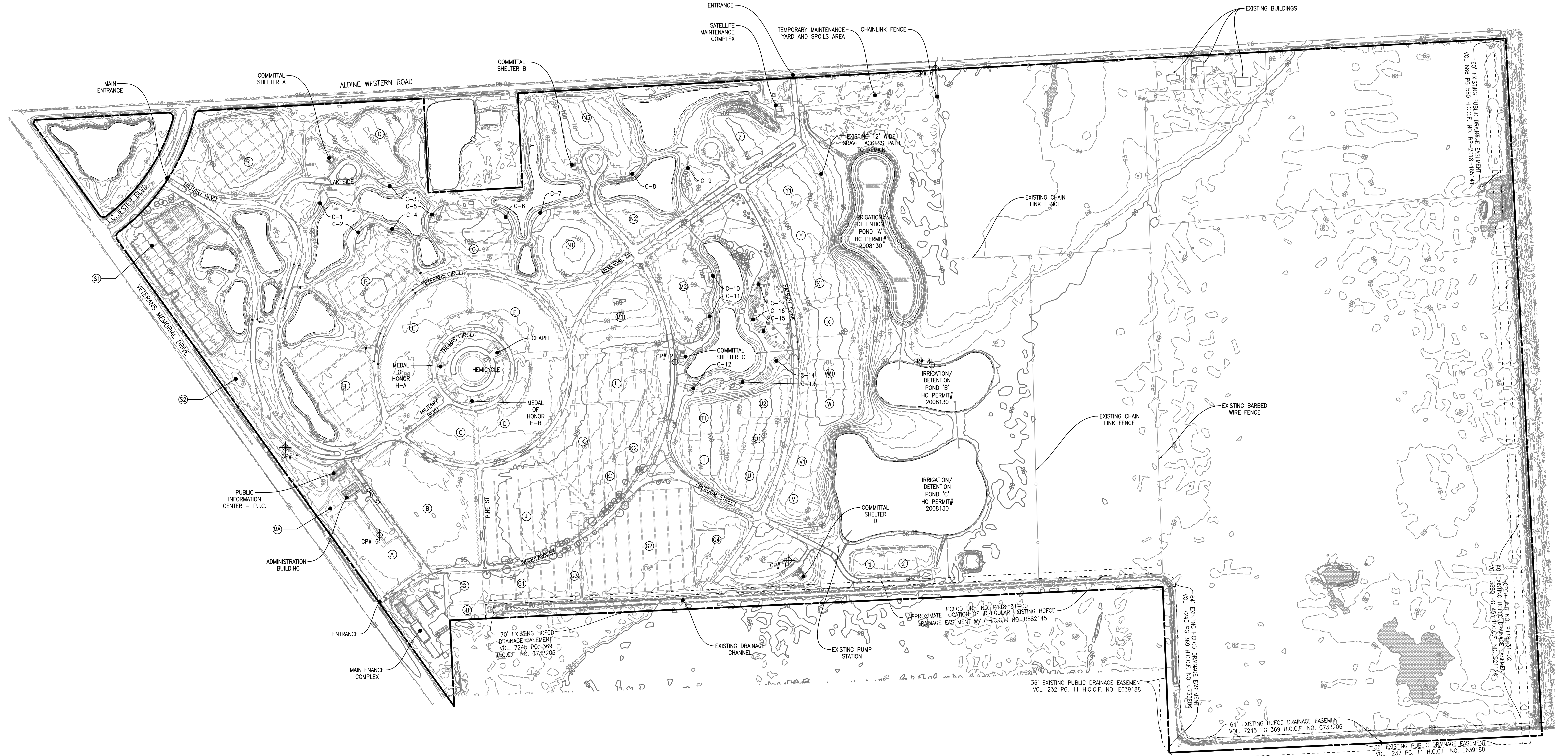
NOTE:

1. OUTLINES OF EXISTING BURIAL SECTIONS ARE APPROXIMATE LOCATIONS GATHERED FROM HOUSTON NATIONAL CEMETERY RECORD DRAWINGS.
2. BASIS OF BEARING: GPS NAD83/NAVDS88 TEXAS STATE PLANE 4204 COORDINATES, GRID
3. HORIZONTAL AND VERTICAL CONTROL DATUM:
NAD83/NAVDS88, TEXAS STATE PLANE 4204 COORDINATES, GRID
VERTICAL DATA FROM PHASE IV PROJECT, NO. 851CM2043 REQUIRES A CORRECTION OF -9.52 FEET (SUBTRACT FROM OLD DATA)


GILPIN ENGINEERING GPS CONTROL POINTS	NORTHING	EASTING	ELEVATION
CP # 1 - 3/4" IR W/CAP AT SHELTER D	13902135.72	3094156.46	93.21
CP # 2 -XMARK-CURB-INLET AT SHELTER-C	13903117.39	3093592.39	94.06
CP # 3 - 3/4" IR W/CAP BY THE POND	13903102.55	3094865.86	89.63
CP # 4 - 3/4" IR W/CAP ON ALDINE WEST ROAD	13904573.33	3094883.97	94.18
CP # 5 - 1/2" IR W/CAP ON MILITARY DRIVE	13902694.67	3091662.65	97.74
CP # 6 -XMARK-CURB-INLET ON PARKING LOT	13902260.85	3092129.13	96.13

GRAPHIC LEGEND:

- EXISTING PROPERTY LINE
- EXISTING BURIAL SECTION
- GPS CONTROL POINTS
- COLUMBARIUM WALL
- EXISTING POND
- EXISTING WETLAND



200 100 0 200 400 600
GRAPHICAL SCALE: 1" = 200'

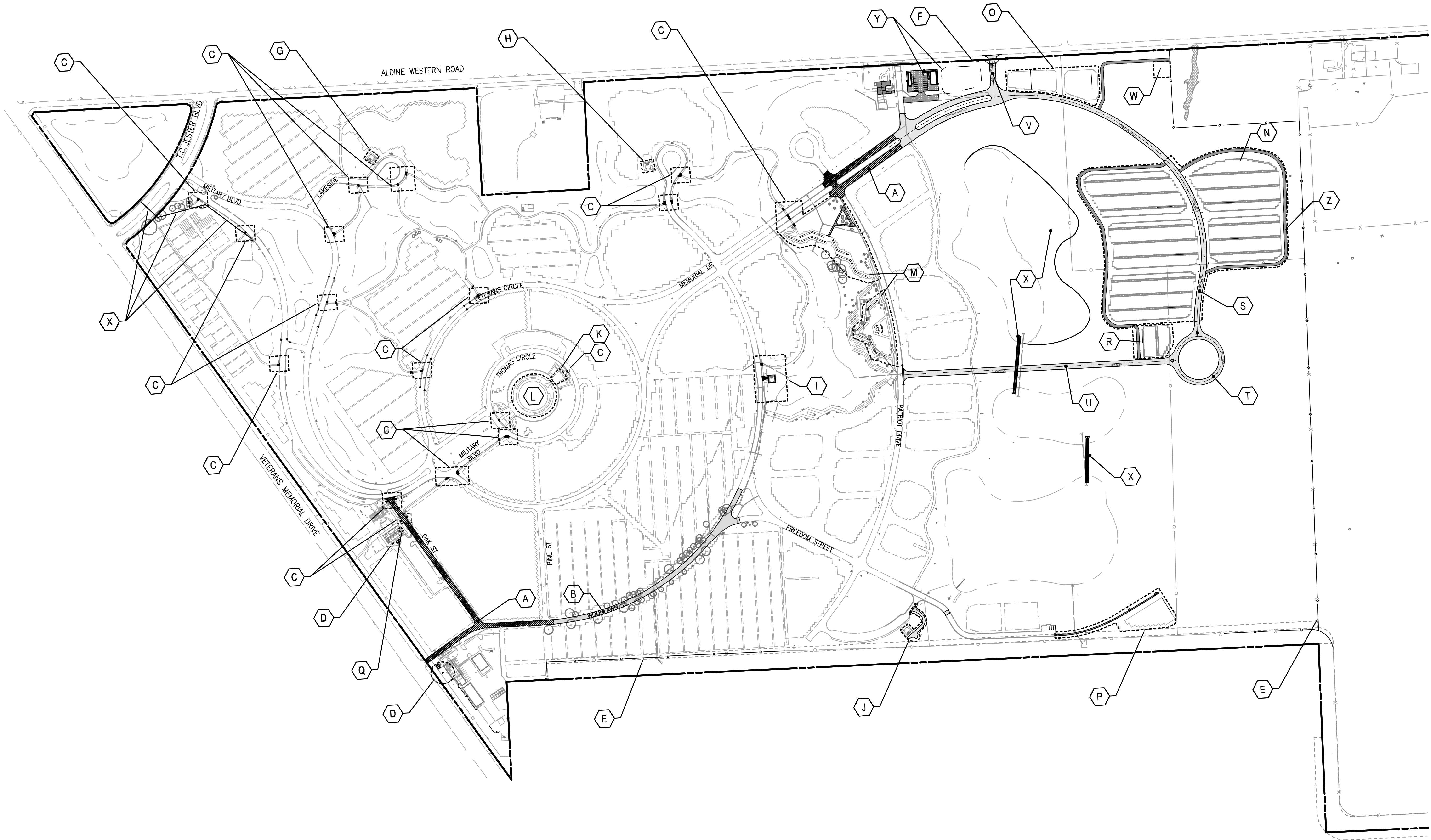
		CONSULTANT			ARCHITECT/ENGINEER OF RECORD		STAMP	<div>Office of Construction and Facilities Management</div> <div>VAU.S. Department of Veterans Affairs</div>	Drawing Title	Phase	Project Title	Project Number
		The LA Group (518) 587-8100	Aqua Engineering, Inc. (970) 372-6104	OCMI (202) 607-7575	 <div>148 S. Queen Street, Suite 201 Martinsburg, WV 25401 Phone: 304-725-8456 www.gordon.us.com</div>	PROGRAMMING AND PLANNING CIVIL ENGINEERING LANDSCAPE ARCHITECTURE SURVEY AND MAPPING SECURITY CONSULTING	OVERALL EXISTING CONDITIONS PLAN		CONSTRUCTION DOCUMENTS 1	HOUSTON NATIONAL CEMETERY PHASE 5 DEVELOPMENT	851PC2048	
		rvi (512) 480-0032	AES Group (303) 841-3922	Gilpin Engineering (512) 220-8100			Approved: Project Director					Building Number
		Komatsu Inc. (817) 587-8100	ECS Midwest LLC. 847-279-0366	GIS, Inc. (205) 941-0442							Location HARRIS COUNTY, TEXAS	Drawing Number
Revisions:	Date:								Issue Date August 30, 2019	Checked BJS	Drawn ACS	VL100 Dwg. 03 of 205

GRAPHIC LEGEND:

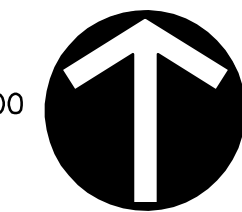
- EXISTING PROPERTY LINE
- PHASE 5 DEVELOPMENT CONSTRUCTION AREAS

KEY NOTE LEGEND:

- | KEY NO. | DESCRIPTION |
|---------|---|
| A | PAVEMENT MILL AND OVERLAY |
| B | FULL DEPTH PAVEMENT RECONSTRUCTION INCLUDING REPLACEMENT OF CURB AND GUTTER |
| C | ADA DETECTABLE WARNING AND RAMP INSTALLATION AT PEDESTRIAN POINTS OF ENTRY INTO VEHICULAR TRAFFIC |
| D | NEW GENERATORS <ul style="list-style-type: none">GENERATOR PADGENERATOR AND DIESEL TANK |
| E | CHAIN LINK FENCE |
| F | ORNAMENTAL FENCE AND ENTRY GATE |
| G | COMMITTAL SHELTER A <ul style="list-style-type: none">GUTTER AND DRAINAGE REPAIRCONCRETE REPLACEMENT |
| H | COMMITTAL SHELTER B <ul style="list-style-type: none">GUTTER AND DRAINAGE REPAIRCONCRETE REPLACEMENT |
| I | COMMITTAL SHELTER C <ul style="list-style-type: none">ADA DETECTABLE WARNING AND RAMP INSTALLATION AT PEDESTRIAN POINTS OF ENTRY INTO VEHICULAR TRAFFICREGRADE EXISTING ACCESSIBILITY PATH TO MEET ADA REQUIREMENTSREPAIR/REPLACE SLAB AND/OR EXPANSION JOINTS TO ACHIEVE POSITIVE DRAINAGE |
| J | COMMITTAL SHELTER D <ul style="list-style-type: none">GUTTER AND DRAINAGE REPAIRREAR ACCESS DRIVEFANCEILING REPAIRS |
| K | CHAPEL RENOVATION <ul style="list-style-type: none">INTERIOR RENOVATIONSBATHROOM RENOVATIONS |
| L | HEMICIRCLE REPAIR <ul style="list-style-type: none">REPAIR EXTERIOR PRECAST CONCRETEARCHITECTURAL PANELSREPAIR AND CLEAN SURFACE CONCRETE |
| M | COLUMBARIUM/MEMORIAL WALLS/OSSUARY |
| N | PRE-PLACED DOUBLE DEPTH CRYPT SECTIONS |
| O | IN-GROUND CREMAINS SECTION |
| P | GREEN BURIAL SECTION <ul style="list-style-type: none">INSTALL SIDE WALK EXTENSION |
| Q | GIS/GPS SYSTEM EQUIPMENT <ul style="list-style-type: none">RACK TO BE MOUNTED ADJACENT TO EXISTING RACK IN NETWORK/JANITORIAL CLOSETANTENNA CABLE SHALL BE RUN THROUGH EXISTING CONDUIT RUN AND WALL HOLESANTENNA TO BE MOUNTED ON ROOF |
| R | OVERSIZED PRE-PLACED DOUBLE-DEPTH CRYPT SECTION |
| S | MEMORIAL DRIVE EXTENSION |
| T | NEW TRAFFIC CIRCLE |
| U | NEW ROAD "A" |
| V | NEW ENTRANCE ROAD |
| W | IRRIGATION WELL <ul style="list-style-type: none">INSTALL IRRIGATION WELL |
| X | STORMWATER CONTROL <ul style="list-style-type: none">EXPANDED PONDNEW EQUALIZATION PIPES BETWEEN PONDSTORM SEWER REPAIR/REPLACEMENT |
| Y | CONTRACTOR YARD/STAGING AREA <ul style="list-style-type: none">GRAVEL/FENCED CONTRACTOR AREARE TRAILERCONTRACTOR TRAILERFENCED STAGING AREA |
| Z | GRAVEL DRIVES <ul style="list-style-type: none">INSTALL NEW GRAVEL DRIVES |



200 100 0 200 400 600
GRAPHICAL SCALE: 1" = 200'



Revisions:	Date:

CONSULTANT		
The LA Group (518) 587-8100	Aqua Engineering, Inc. (970) 372-6104	OCMI (202) 607-7575
IVI (512) 480-0032	AES Group (303) 841-3922	Gilpin Engineering (512) 220-8100
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ARCHITECT/ENGINEER OF RECORD		STAMP
 148 S. Queen Street, Suite 201 Martinsburg, WV 25401 Phone: 304-725-8456 www.gordon.us.com	PROGRAMMING AND PLANNING CIVIL ENGINEERING LANDSCAPE ARCHITECTURE SURVEY AND MAPPING SECURITY CONSULTING	

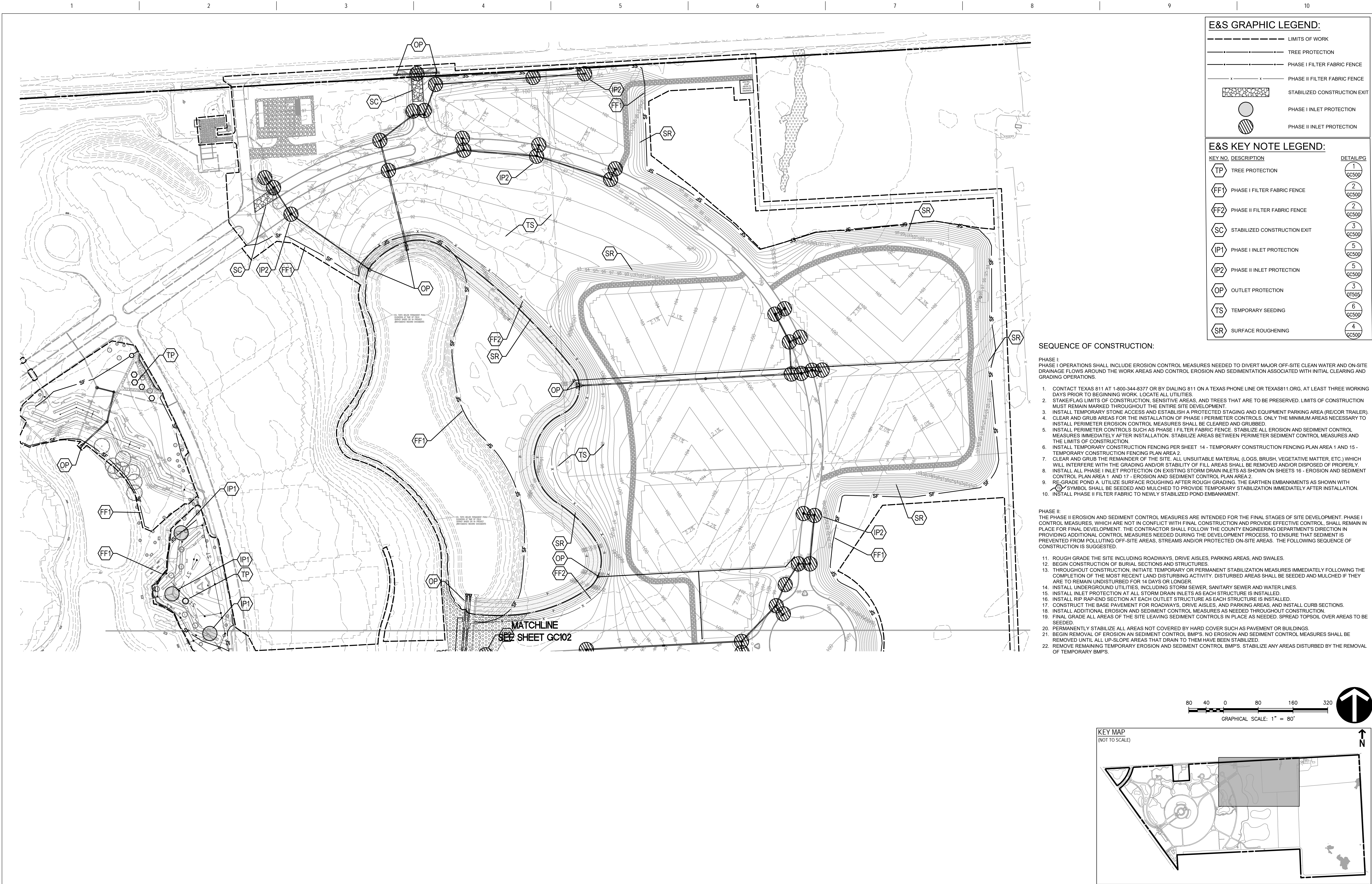
Office of Construction and Facilities Management
 U.S. Department of Veterans Affairs

Drawing Title OVERALL SITE DEVELOPMENT PLAN
Approved: Project Director

Phase CONSTRUCTION DOCUMENTS 1

Project Title HOUSTON NATIONAL CEMETERY PHASE 5 DEVELOPMENT
Location HARRIS COUNTY, TEXAS
Issue Date August 30, 2019
Checked BJS
Drawn ACS

Project Number 851PC2048
Building Number
Drawing Number G1100
Dwg. 04 of 205



E&S GRAPHIC LEGEND:

- LIMITS OF WORK
- TREE PROTECTION
- PHASE I FILTER FABRIC FENCE
- PHASE II FILTER FABRIC FENCE
- STABILIZED CONSTRUCTION EXIT
- PHASE I INLET PROTECTION
- PHASE II INLET PROTECTION

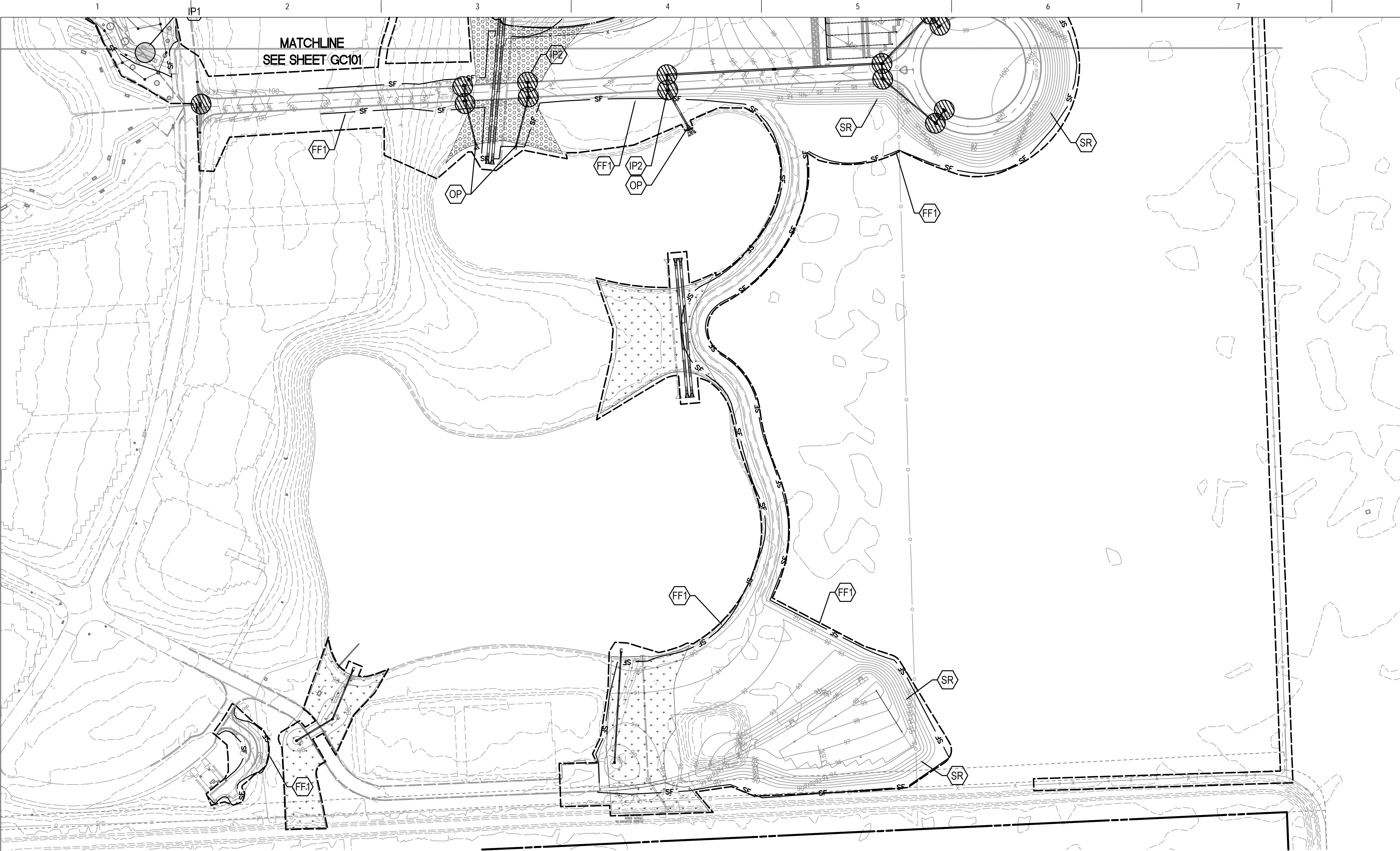
E&S KEY NOTE LEGEND:

KEY NO.	DESCRIPTION	DETAIL/PG
TP	TREE PROTECTION	1 GC500
FF1	PHASE I FILTER FABRIC FENCE	2 GC500
FF2	PHASE II FILTER FABRIC FENCE	2 GC500
SC	STABILIZED CONSTRUCTION EXIT	3 GC500
IP1	PHASE I INLET PROTECTION	5 GC500
IP2	PHASE II INLET PROTECTION	5 GC500
OP	OUTLET PROTECTION	3 DT505
TS	TEMPORARY SEEDING	6 GC500
SR	SURFACE ROUGHENING	4 GC500

SEQUENCE OF CONSTRUCTION:

- PHASE I: PHASE I OPERATIONS SHALL INCLUDE EROSION CONTROL MEASURES NEEDED TO DIVERT MAJOR OFF-SITE CLEAN WATER AND ON-SITE DRAINAGE FLOWS AROUND THE WORK AREAS AND CONTROL EROSION AND SEDIMENTATION ASSOCIATED WITH INITIAL CLEARING AND GRADING OPERATIONS.
- CONTACT TEXAS 811 AT 1-800-344-8377 OR BY DIALING 811 ON A TEXAS PHONE LINE OR TEXAS811.ORG, AT LEAST THREE WORKING DAYS PRIOR TO BEGINNING WORK. LOCATE ALL UTILITIES.
 - STAKE/FLAG LIMITS OF CONSTRUCTION, SENSITIVE AREAS, AND TREES THAT ARE TO BE PRESERVED. LIMITS OF CONSTRUCTION MUST REMAIN MARKED THROUGHOUT THE ENTIRE SITE DEVELOPMENT.
 - INSTALL TEMPORARY STONE ACCESS AND ESTABLISH A PROTECTED STAGING AND EQUIPMENT PARKING AREA (RE/COR TRAILER).
 - CLEAR AND GRUB AREAS FOR THE INSTALLATION OF PHASE I PERIMETER CONTROLS. ONLY THE MINIMUM AREAS NECESSARY TO INSTALL PERIMETER EROSION CONTROL MEASURES SHALL BE CLEARED AND GRUBBED.
 - INSTALL PERIMETER CONTROLS SUCH AS PHASE I FILTER FABRIC FENCE. STABILIZE ALL EROSION AND SEDIMENT CONTROL MEASURES IMMEDIATELY AFTER INSTALLATION. STABILIZE AREAS BETWEEN PERIMETER SEDIMENT CONTROL MEASURES AND THE LIMITS OF CONSTRUCTION.
 - INSTALL TEMPORARY CONSTRUCTION FENCING PER SHEET 14 - TEMPORARY CONSTRUCTION FENCING PLAN AREA 1 AND 15 - TEMPORARY CONSTRUCTION FENCING PLAN AREA 2.
 - CLEAR AND GRUB THE REMAINDER OF THE SITE. ALL UNSUITABLE MATERIAL (LOGS, BRUSH, VEGETATIVE MATTER, ETC.) WHICH WILL INTERFERE WITH THE GRADING AND/OR STABILITY OF FILL AREAS SHALL BE REMOVED AND/OR DISPOSED OF PROPERLY.
 - INSTALL ALL PHASE I INLET PROTECTION ON EXISTING STORM DRAIN INLETS AS SHOWN ON SHEETS 16 - EROSION AND SEDIMENT CONTROL PLAN AREA 1 AND 17 - EROSION AND SEDIMENT CONTROL PLAN AREA 2.
 - RE-GRADE POND A. UTILIZE SURFACE ROUGHENING AFTER ROUGH GRADING. THE EARTHEN EMBANKMENTS AS SHOWN WITH ○ SYMBOL SHALL BE SEEDDED AND MULCHED TO PROVIDE TEMPORARY STABILIZATION IMMEDIATELY AFTER INSTALLATION.
 - INSTALL PHASE II FILTER FABRIC TO NEWLY STABILIZED POND EMBANKMENT.
- PHASE II: THE PHASE II EROSION AND SEDIMENT CONTROL MEASURES ARE INTENDED FOR THE FINAL STAGES OF SITE DEVELOPMENT. PHASE I CONTROL MEASURES, WHICH ARE NOT IN CONFLICT WITH FINAL CONSTRUCTION AND PROVIDE EFFECTIVE CONTROL, SHALL REMAIN IN PLACE FOR FINAL DEVELOPMENT. THE CONTRACTOR SHALL FOLLOW THE COUNTY ENGINEERING DEPARTMENT'S DIRECTION IN PROVIDING ADDITIONAL CONTROL MEASURES NEEDED DURING THE DEVELOPMENT PROCESS, TO ENSURE THAT SEDIMENT IS PREVENTED FROM POLLUTING OFF-SITE AREAS, STREAMS AND/OR PROTECTED ON-SITE AREAS. THE FOLLOWING SEQUENCE OF CONSTRUCTION IS SUGGESTED.
- ROUGH GRADE THE SITE INCLUDING ROADWAYS, DRIVE AISLES, PARKING AREAS, AND SWALES.
 - BEGIN CONSTRUCTION OF BURIAL SECTIONS AND STRUCTURES.
 - THROUGHOUT CONSTRUCTION, INITIATE TEMPORARY OR PERMANENT STABILIZATION MEASURES IMMEDIATELY FOLLOWING THE COMPLETION OF THE MOST RECENT LAND DISTURBING ACTIVITY. DISTURBED AREAS SHALL BE SEEDDED AND MULCHED IF THEY ARE TO REMAIN UNDISTURBED FOR 14 DAYS OR LONGER.
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Revisions:		Date:		CONSULTANT			ARCHITECT/ENGINEER OF RECORD		STAMP		Drawing Title		Phase		Project Title		Project Number	
				The LA Group (518) 587-8100			Aqua Engineering, Inc. (970) 372-6104		OCMI (202) 607-7575		EROSION AND SEDIMENT CONTROL PLAN AREA 1		CONSTRUCTION DOCUMENTS 1		HOUSTON NATIONAL CEMETERY PHASE 5 DEVELOPMENT		851PC2048	
				IVI (512) 480-0032			AES Group (303) 841-3922			Gilpin Engineering (512) 220-8100		Approved: Project Director				Building Number		
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																GC101		
																Dwg. 16 of 205		



E&S GRAPHIC LEGEND:

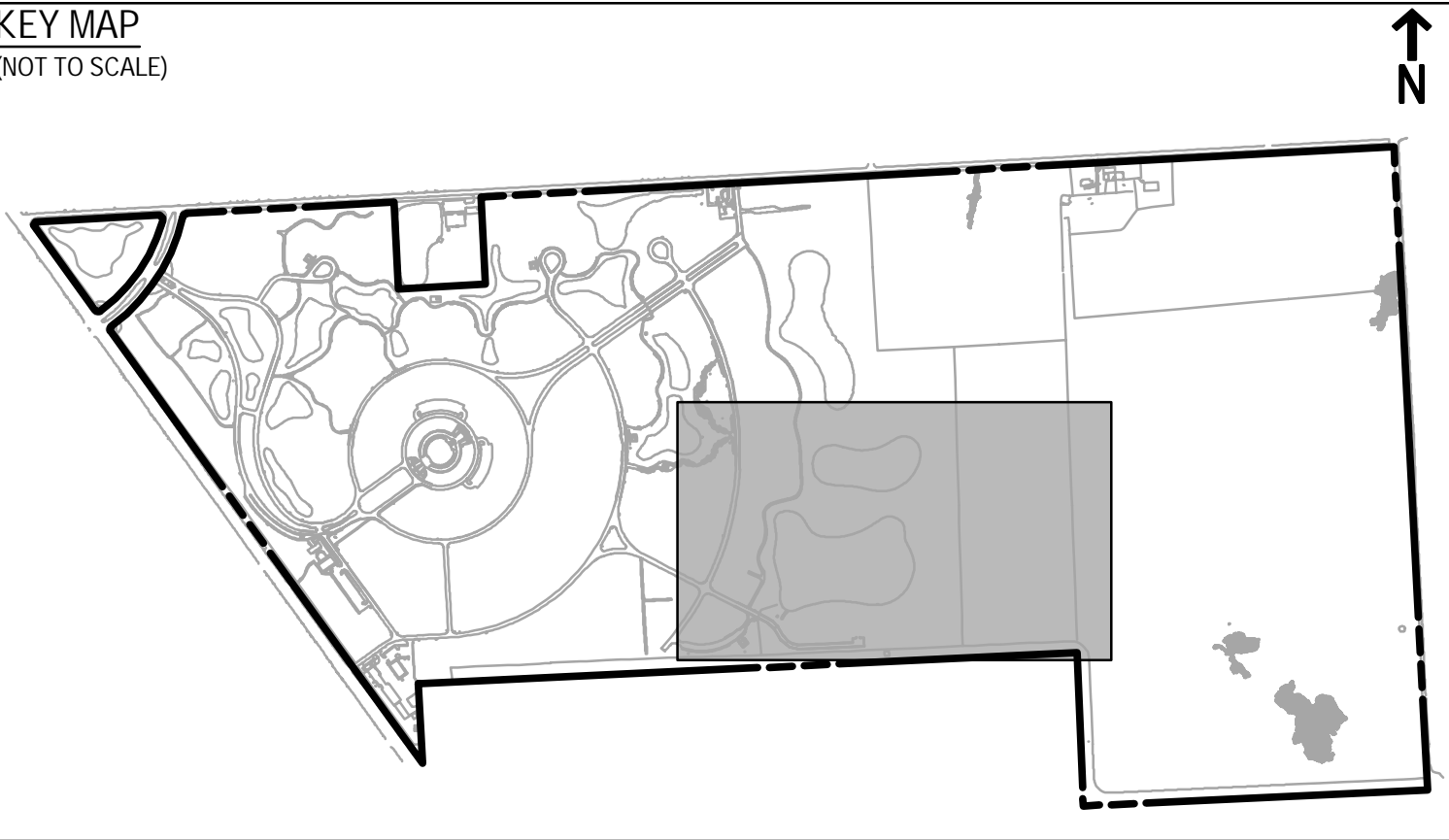
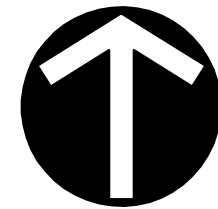
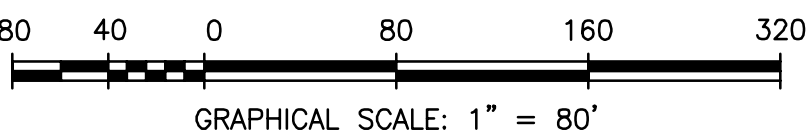
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ARCHITECT/ENGINEER OF RECORD



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PROGRAMMING AND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEY AND MAPPING
SECURITY CONSULTING

STAMP

Office of
Construction
and Facilities
Management

 U.S. Department
of Veterans Affairs

Drawing Title

EROSION AND SEDIMENT CONTROL
PLAN AREA 2

Approved: Project Director

Phase

CONSTRUCTION
DOCUMENTS 1

Project Title

HOUSTON NATIONAL CEMETERY
PHASE 5 DEVELOPMENT

Location

HARRIS COUNTY, TEXAS

Issue Date

August 30, 2019

Checked

BJS

Drawn

ACS

Project Number

851PC2048

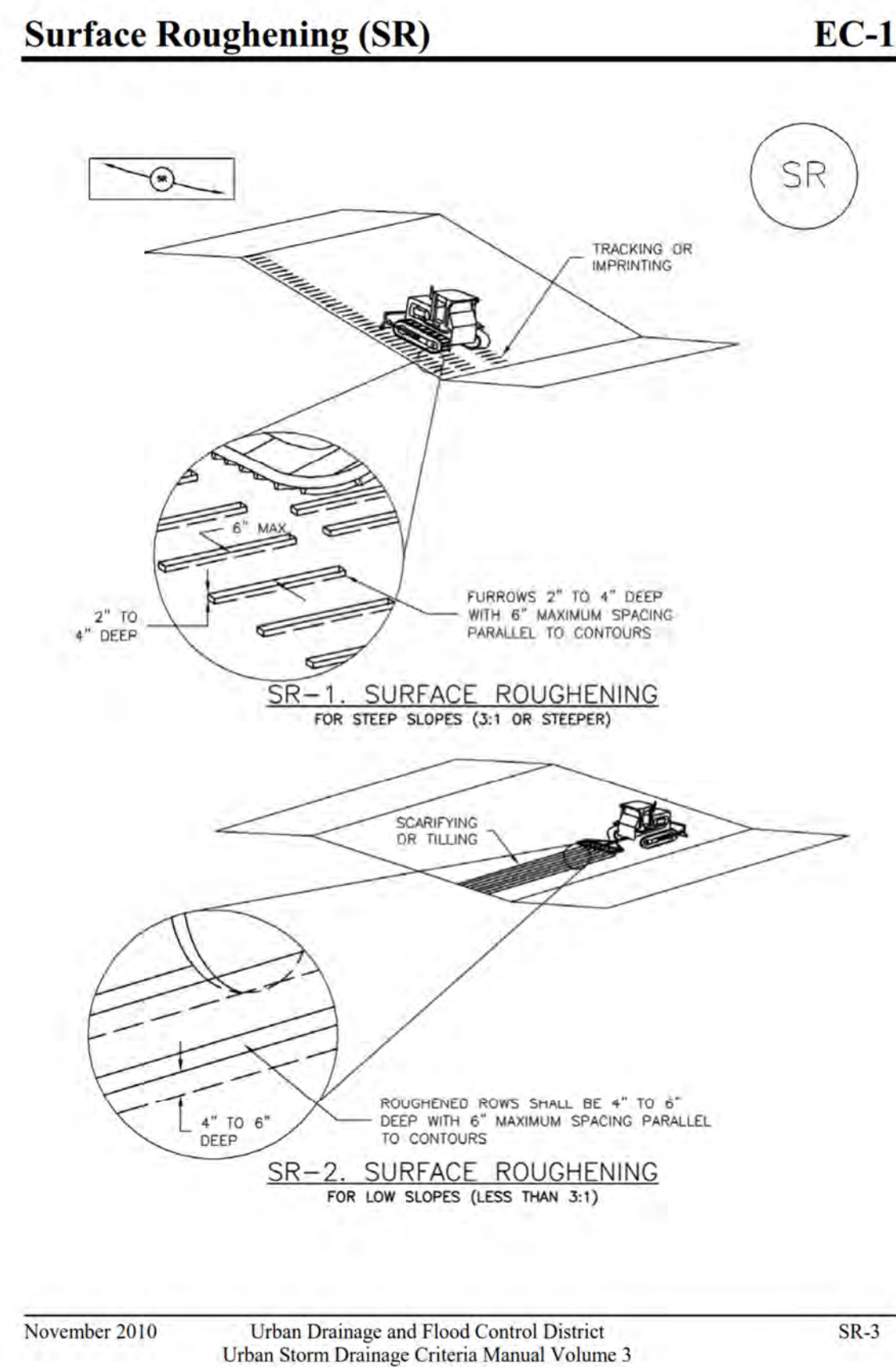
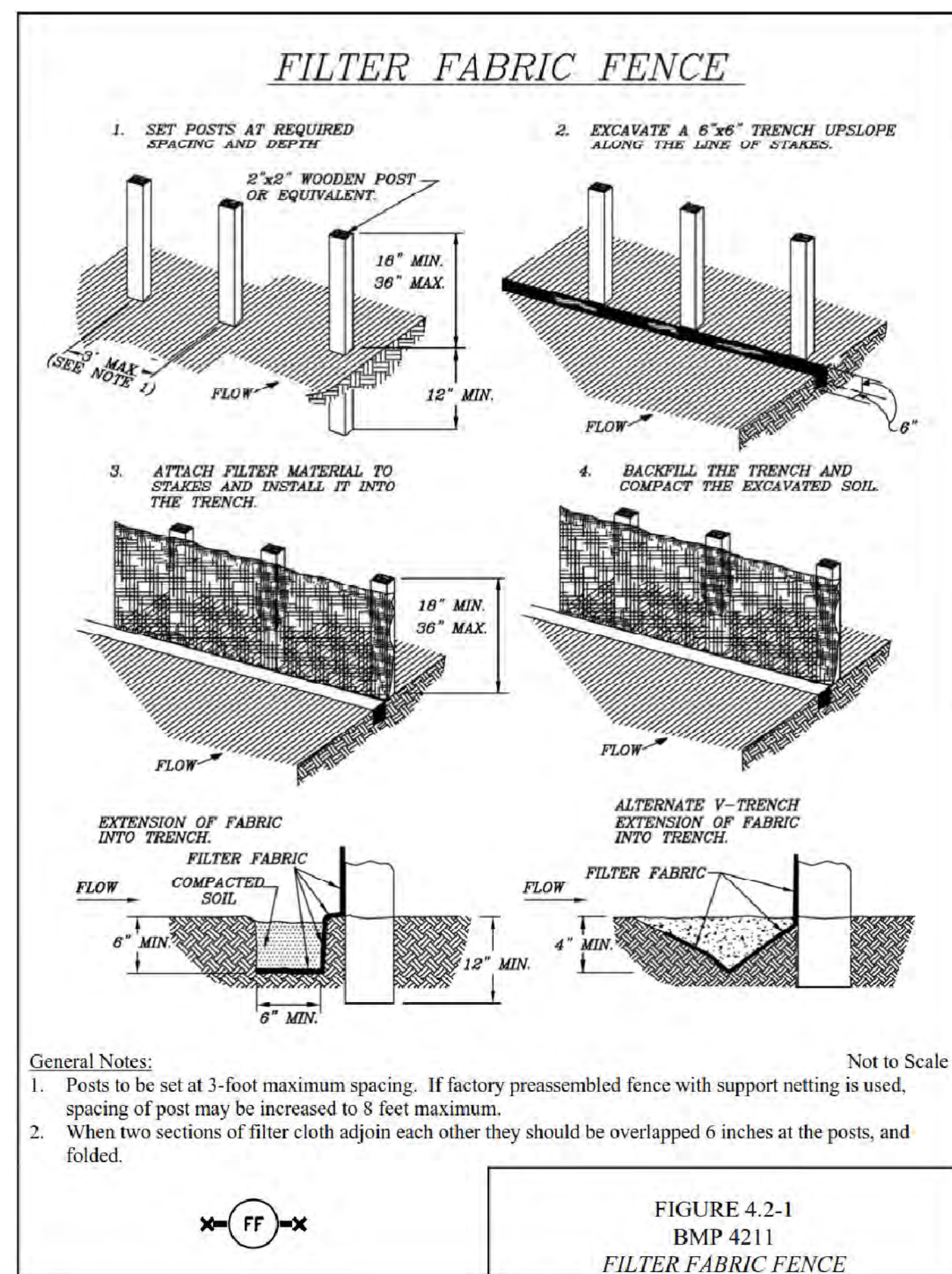
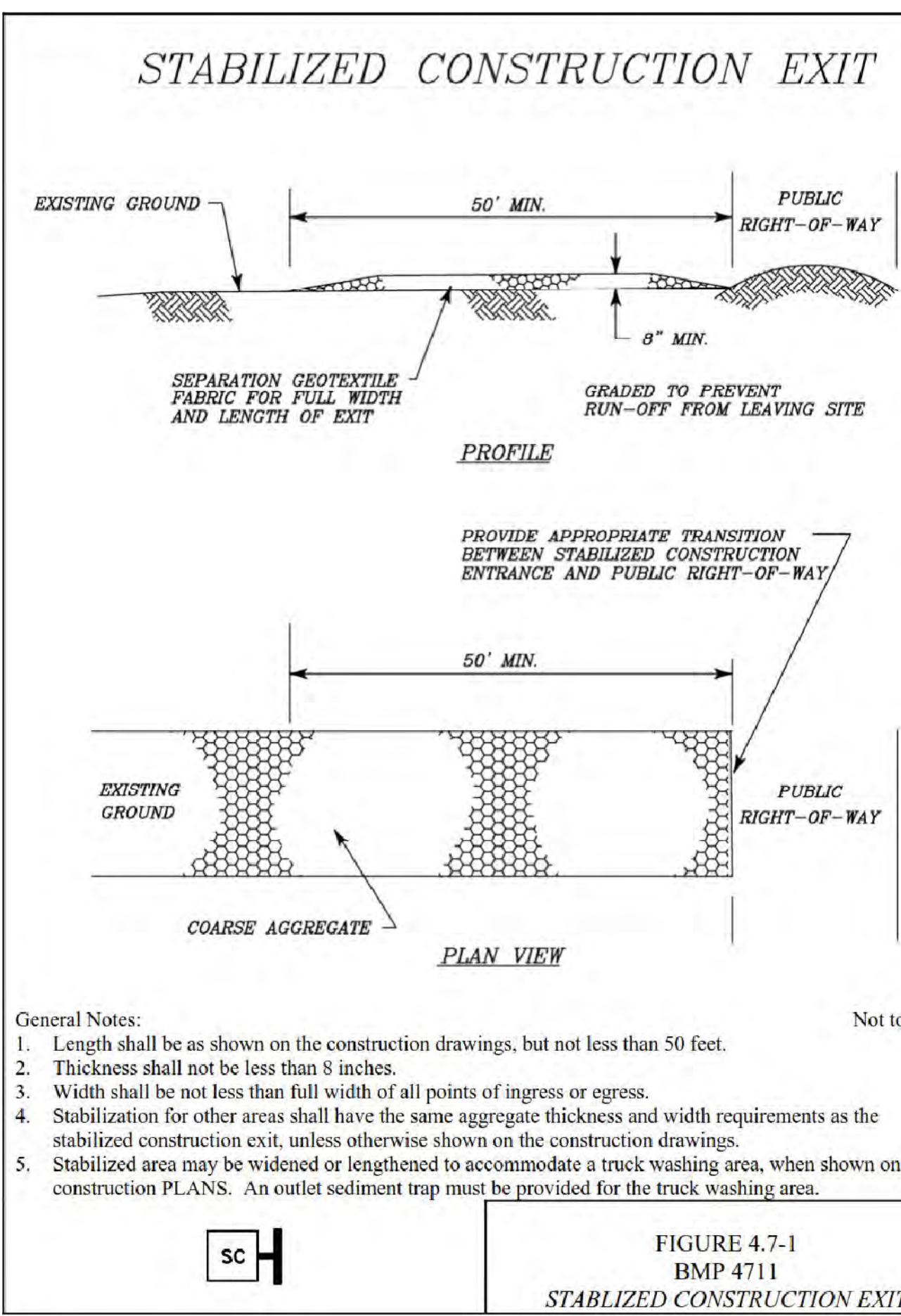
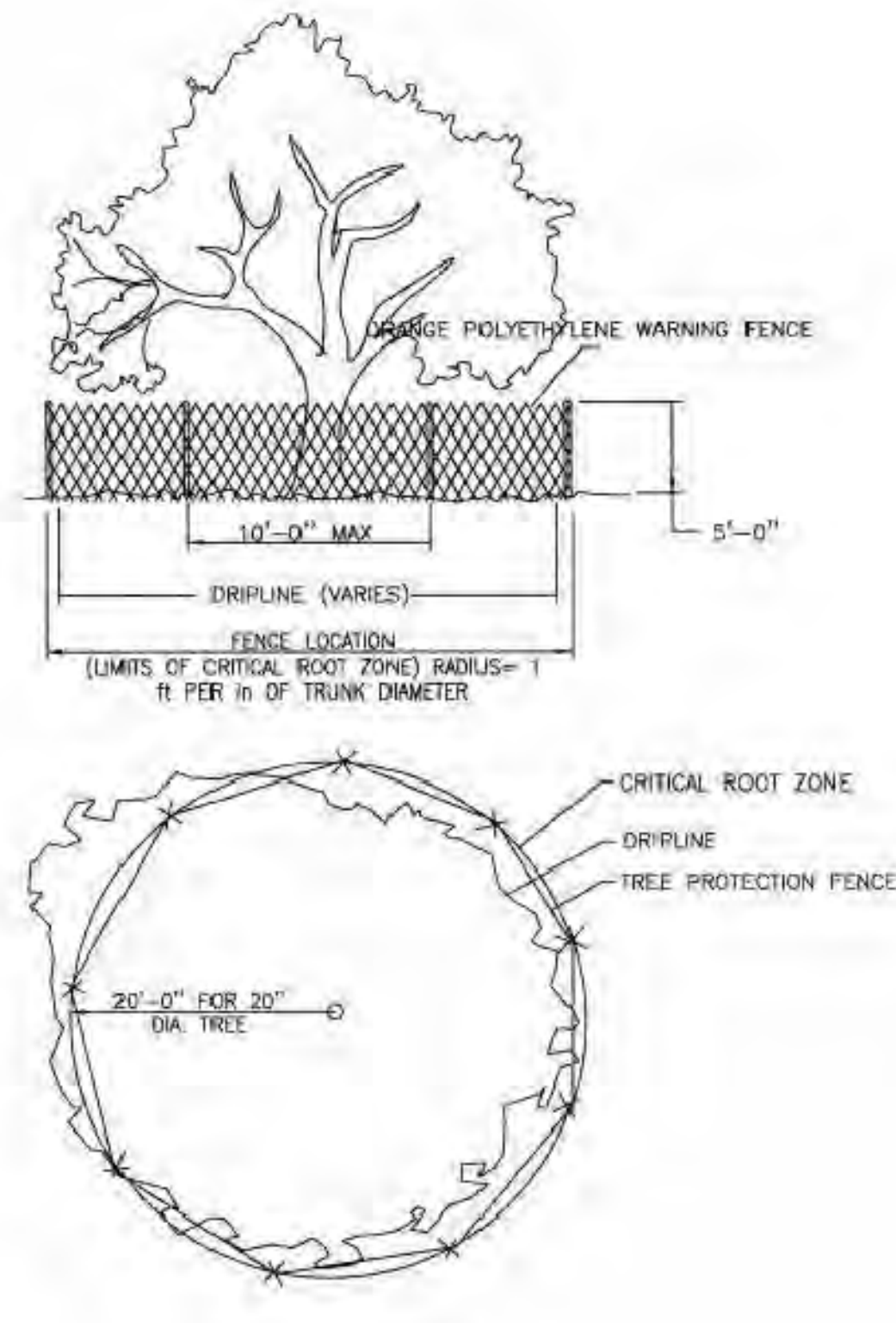
Building Number

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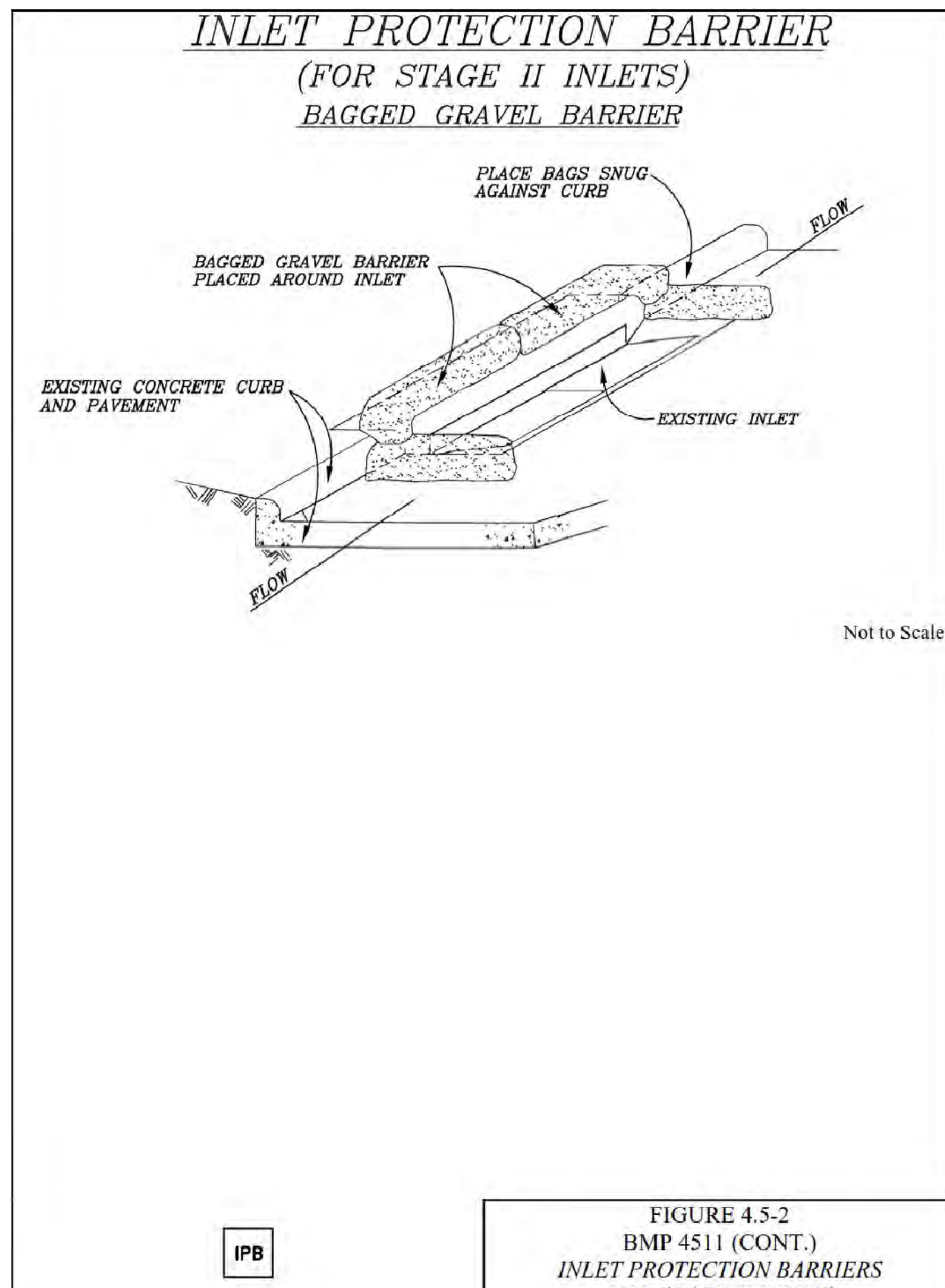
GC102

Dwg. 17 of 205

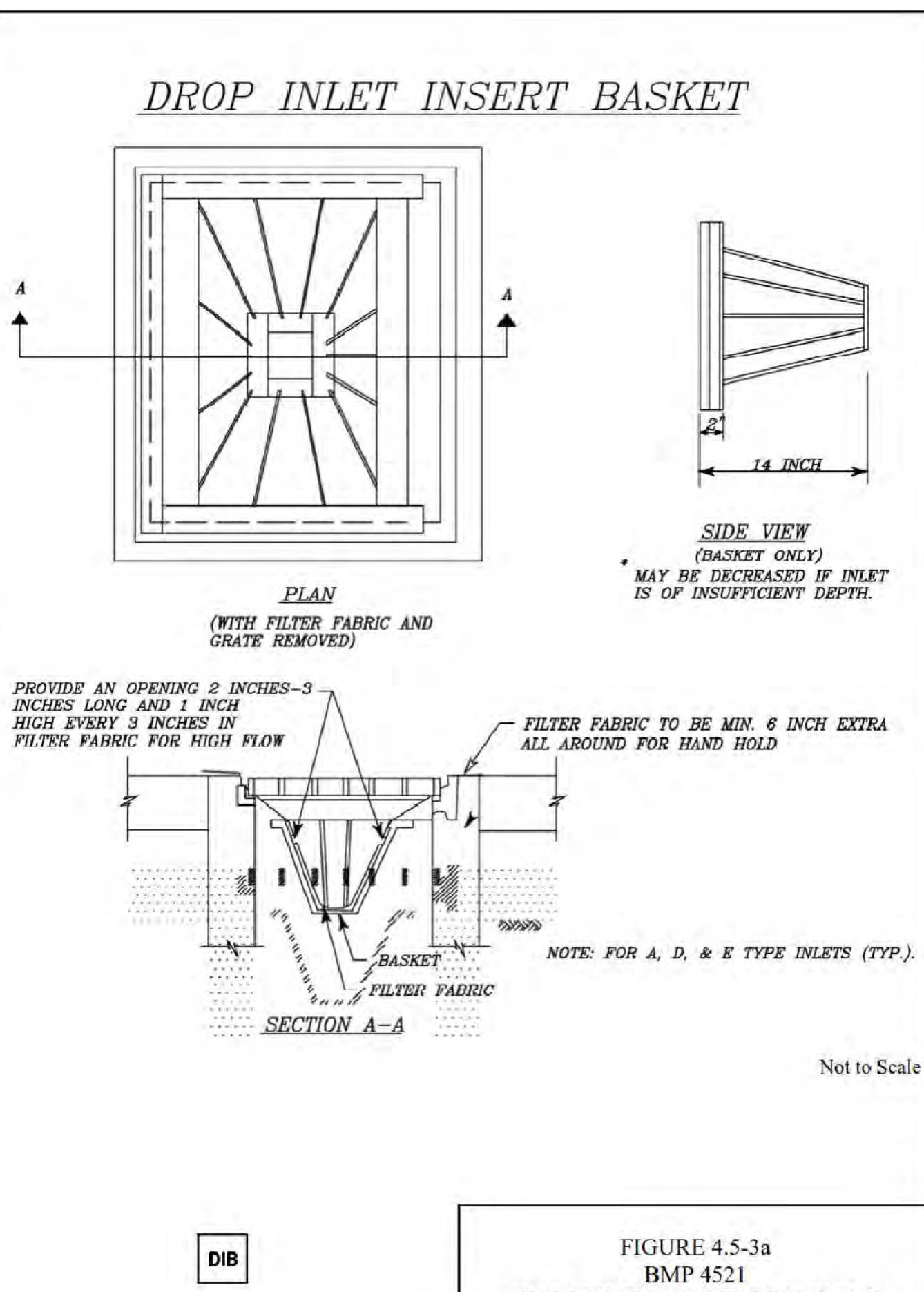
1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF ANY CHANGES. THE REVIEWING AGENCY MAY REQUIRE A PRELIMINARY SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
2. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE REVIEWING AGENCY SHALL BE NOTIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY ALL MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE E&S PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.
3. ALL EARTH DISTURBANCE ACTIVITIES SHALL BE LIMITED TO THOSE AREAS IDENTIFIED AS BEING IN AN AREA PREVIOUSLY UNMARKED, TEXAS 811. SHALL BE NOTIFIED AT 1-800-344-8377 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM HARRIS COUNTY PRIOR TO IMPLEMENTATION.
5. PRIOR TO COMMENCING CLEARING AND GRADING, CONTRACTOR TO INSTALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES.
6. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
7. CLEARING, GRUBBING AND STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPs SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE BEING MONITORED AS DESCRIBED IN THE E&S PLAN.
8. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF WORK BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED BEFORE CLEARING AND GRUBBING ACTIVITIES BEGINS.
9. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAP(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINAL GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE MUST BE PROTECTED BY A PROTECTIVE COVER AS SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
10. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY HARRIS COUNTY.
11. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF AT AN APPROVED LOCATION BY THE CONTRACTOR AS SHOWN ON THE PLAN DRAWINGS.
12. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY HARRIS COUNTY FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
13. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN



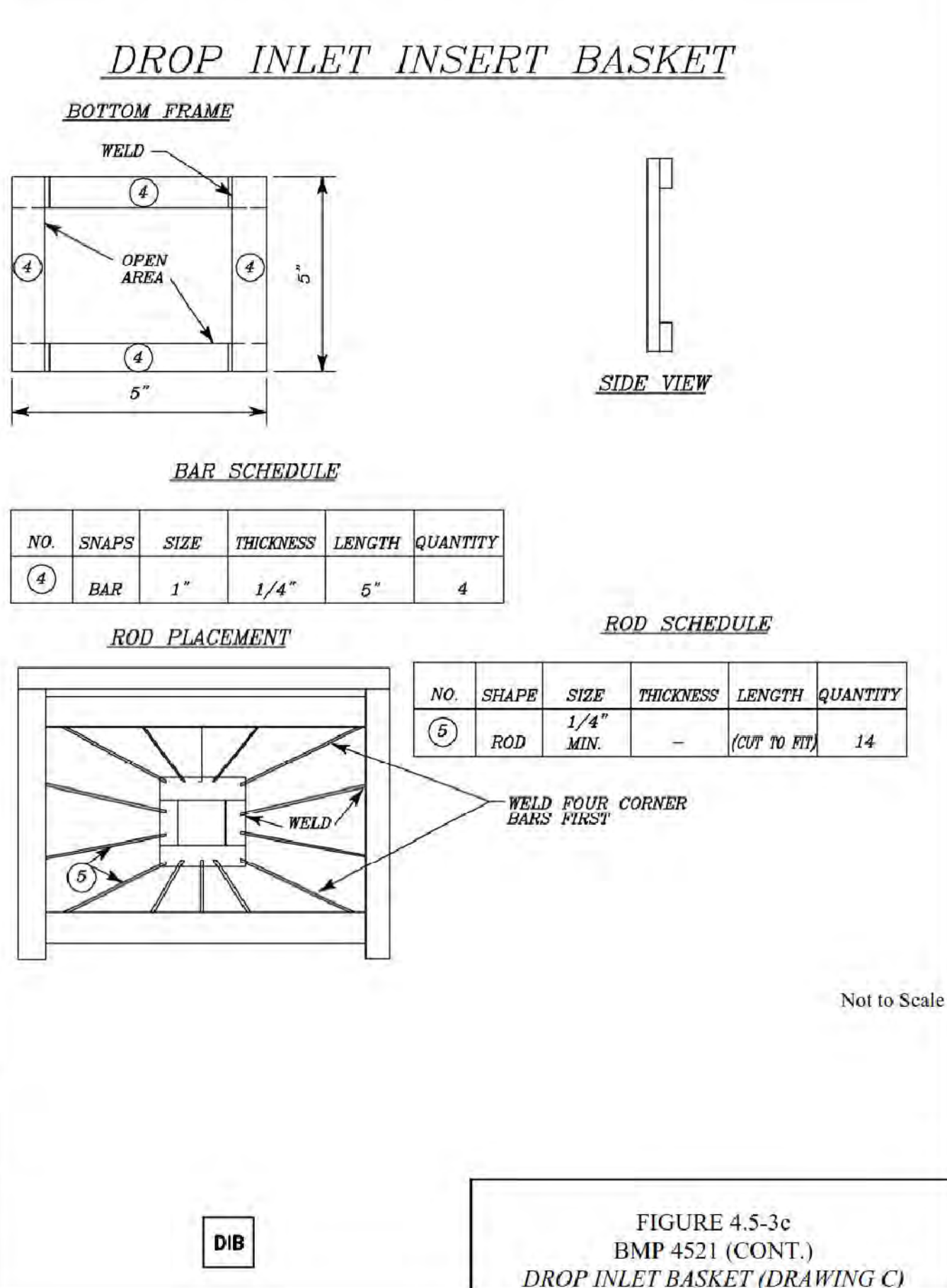
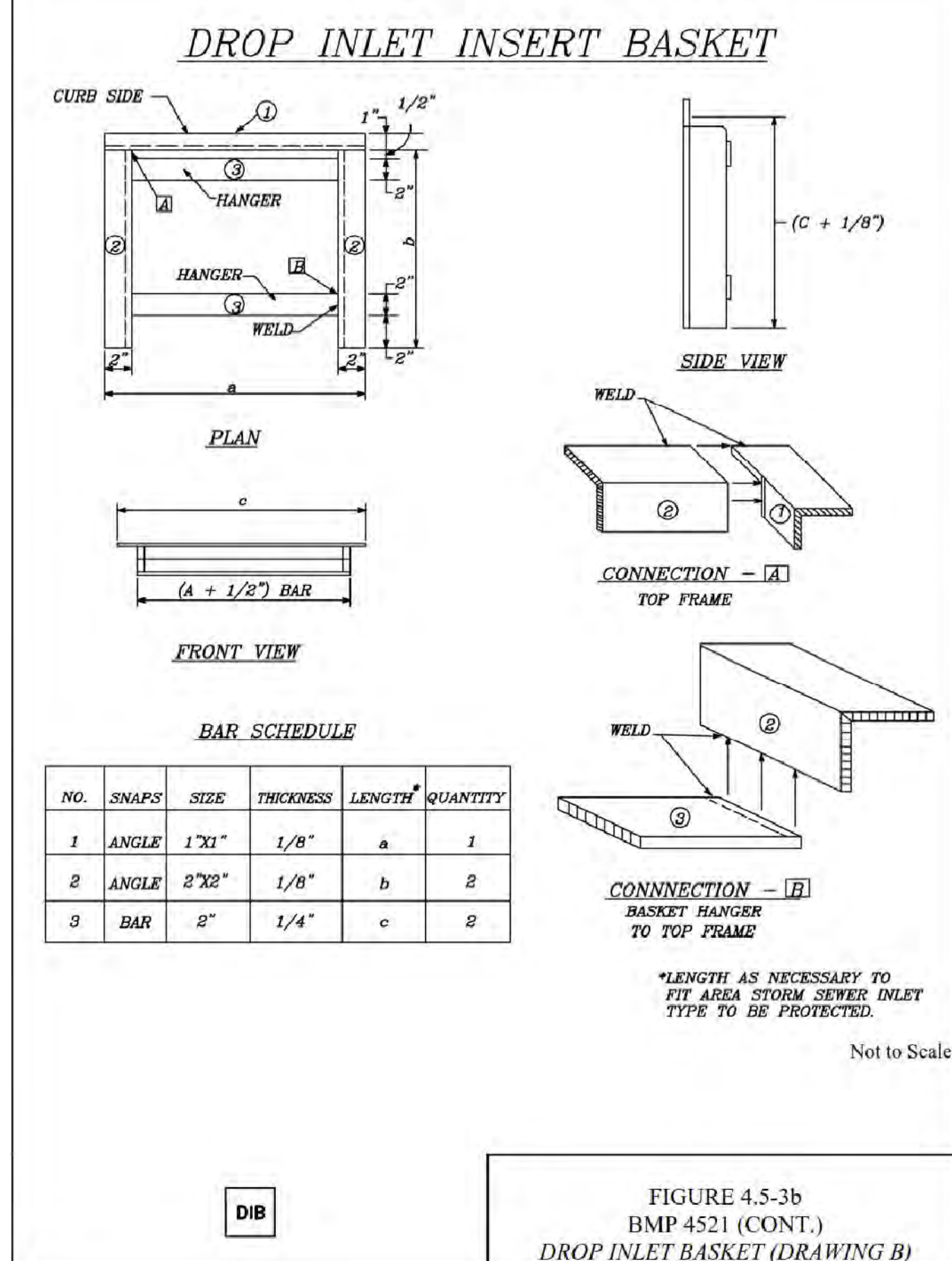
1. SEE PLAN VIEW FOR LOCATION(S) OF SURFACE ROUGHENING
2. SURFACE ROUGHENING SHALL BE PROVIDED IMMEDIATELY AFTER COMPLETION OF FINISHED GRADING (FOR AREAS NOT RECEIVING TOPSOIL) OR PRIOR TO TOPSOIL COMPLETION OR ANY FORECASTED RAIN EVENT
3. AREAS WHERE BUILDING FOUNDATIONS, PAVEMENT, OR SOD WILL BE PLACED WITHOUT DELAY IN THE CONSTRUCTION SEQUENCE, SURFACE ROUGHENING IS NOT REQUIRED.
4. DISTURBED SURFACES SHALL BE ROUGHENED USING RIPPER OR TILLING EQUIPMENT ON THE CONTOUR OR TRACKING UP AND DOWN A SLOPE USING EQUIPMENT TREADS.
5. A FARMING DISK SHALL NOT BE USED FOR SURFACE ROUGHENING.



DROP INLET INSERT BASKET



DROP INLET INSERT BASKET



TEMPORARY EROSION CONTROL SEEDING INSTALLATION NOTES:

1. SEEDING OF VEGETATION FILTER STRIP IS TO BE CONTAINED WITHIN A PROJECT CONSTRUCTION SITE. TEMPORARY SEEDING LOCATIONS ARE AS INDICATED ON PLANS. TEMPORARY SEEDING IS INTENDED TO GERMINATE AND ESTABLISH WITHIN 10-14 DAYS. THE SPECIES USED IN THIS SEEDING ARE NOT PERMANENT OR SHOULD BE INTEGRATED WITH A PERMANENT SEEDING OR PLANTING.
2. SEEDS; CONFORM TO REQUIREMENTS OF USDA RULES AND REGULATIONS AS SET FORTH OF FEDERAL SEED ACT AND TEXAS SEED LAW. USE SEED WHICH HAS BEEN TREATED WITH AN APPROVED FUNGICIDE. CONTAINER LABELS TO SHOW PURITY, GERMINATION, NAME AND TYPE OF SEED, AND SOURCE OR ORIGIN. REFER TO TABLE FOR PLANTING DATE, TYPE, AND RATE.

TYPE	RATES OF APPLICATION IN POUNDS PER ACRE	PLANTING DATE
UNHULLED BERMUDA/ GRASS OATS/ WINTER RYE	20	JAN. 1 TO APR. 1
HULLED BERMUDA GRASS/LOVE GRASS	12	APR. 1 TO OCT. 1
MIX BERMUDA AND ANNUAL RYE IN FOLLOWING PROPORTIONS	12:200	OCT. 1 TO JAN. 1
ANNUAL MILLET GRASS	35-40	APR. 1 TO NOV. 1

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 CONSTRUCTION DOCUMENTS 1 SUBMIS



LEGEND

PROPOSED PERMANENT TURF REINFORCEMENT MATTING SEE SPECIFICATIONS

PROPOSED GRASS OR REINFORCEMENT GRASS SPILLWAY ARMORING SEE LANDSCAPE PLAN

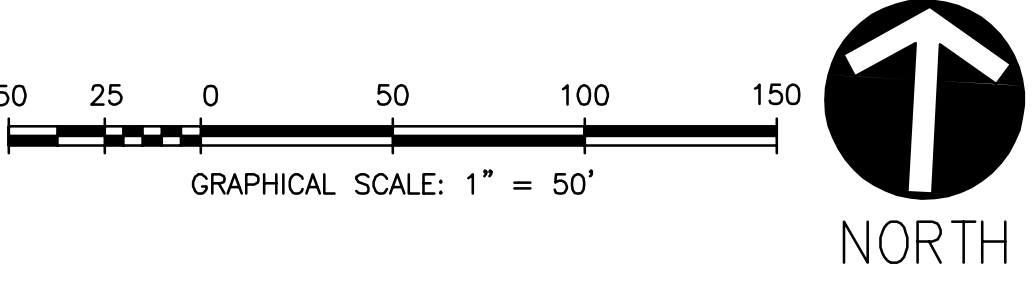
EXTENTS OF POND PLANTING SEE LANDSCAPE PLAN

STAGE-STORAGE

POND B					
Stage	h (ft)	Elevation	Contour Area (ac.)	Detention Volume (ac-Ft)	Total Volume (ac-Ft)
0	0	82	1.65	0	0.00
1	1.00	83	1.77	0	1.71
2	1.00	84	1.86	0	3.53
3	1.00	85	2.19	0	5.55
4	1.00	86	2.51	0	7.90
4.79	0.79	86.79	2.77	0	9.98
6	1.21	88	2.87	3.41	13.40
7	1.00	89	2.98	6.34	16.33
8	1.00	90	3.44	9.55	19.53
9.5	1.50	91.5	3.99	15.12	25.11

STAGE-STORAGE

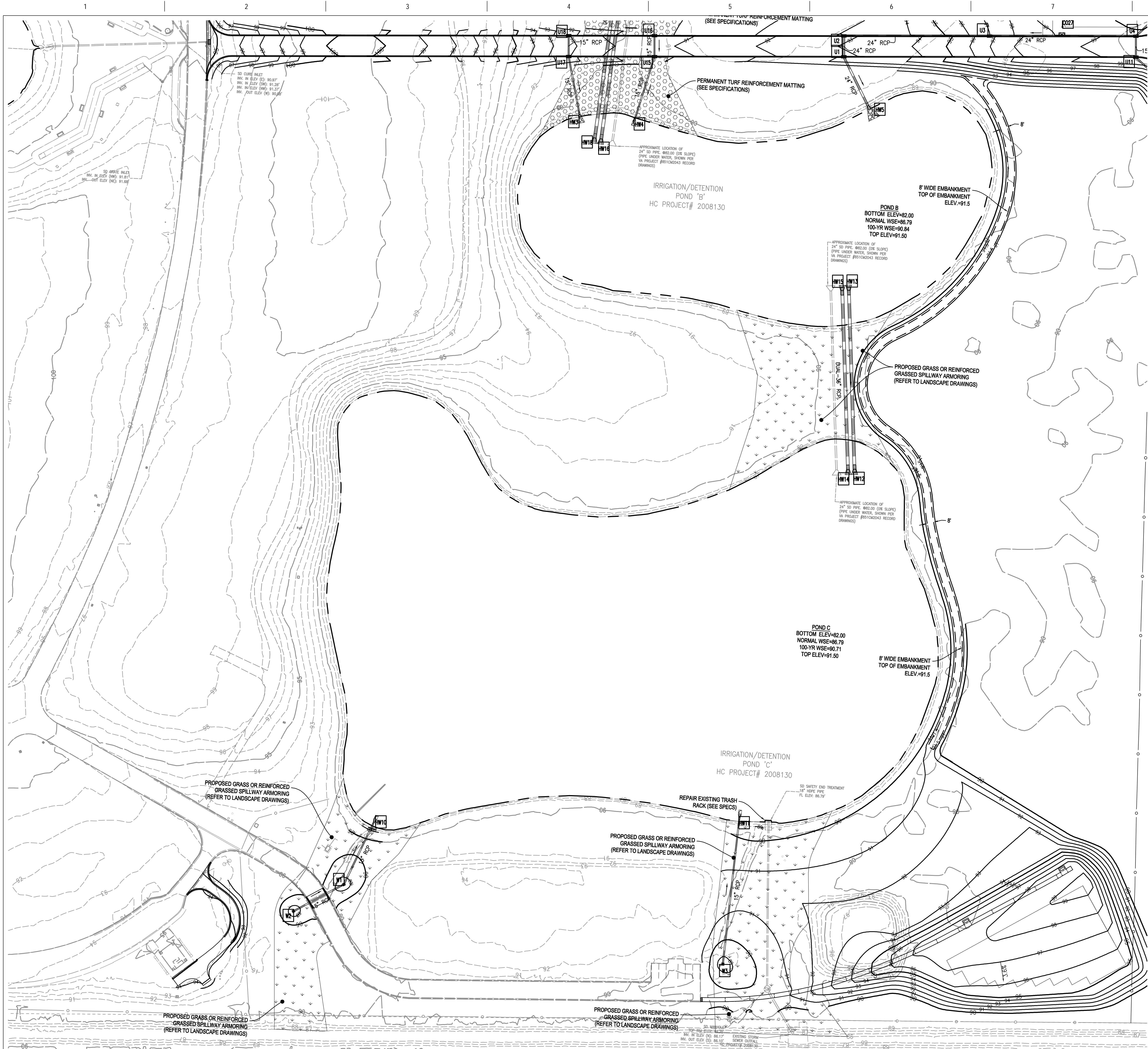
POND C					
POND A					
Stage	h (ft)	Elevation	Contour Area (ac.)	Detention Volume (ac-Ft)	Total Volume (ac-Ft)
0	0	82	4.97	0	0.00
1	1.00	83	5.17	0	5.07
2	1.00	84	5.38	0	10.35
3	1.00	85	5.98	0	16.03
4	1.00	86	6.53	0	22.28
4.79	0.79	86.79	6.97	0	27.62
6	1.21	88	7.32	8.65	36.26
7	1.00	89	7.56	16.08	43.70
8	1.00	90	7.82	23.77	51.39
9.5	1.50	91.5	8.18	35.78	63.39



KEY MAP
(NOT TO SCALE)
SCALED BY 1/1000



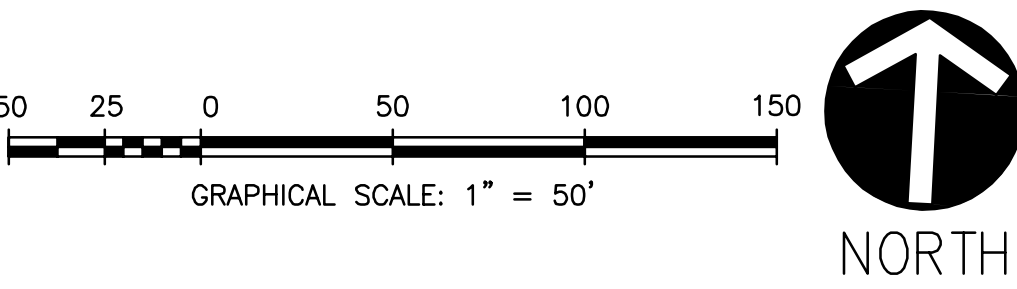
CONSULTANT			ARCHITECT/ENGINEER OF RECORD		Office of Construction and Facilities Management		Drawing Title		Phase		Project Title		Project Number	
The LA Group (518) 587-8100			Aqua Engineering, Inc. (970) 372-6104		OCMI (202) 607-7575		POND A GRADING PLAN		CONSTRUCTION DOCUMENTS 1		HOUSTON NATIONAL CEMETERY PHASE 5 DEVELOPMENT		851PC2048	
rvi (512) 480-0032			AES Group (303) 841-3922		Gilpin Engineering (512) 220-8100		Approved: Project Director				Location HARRIS COUNTY, TEXAS		Building Number	
Komatsu Inc. (817) 587-8100			ECS Midwest LLC. 847-279-0366		GIS, Inc. (205) 941-0442						Issue Date August 30, 2019		Drawing Number CG120	
Revisions:			Date:		148 S. Queen Street, Suite 201 Martinsburg, WV 25401 Phone: 304-725-8456 www.gordon.us.com		U.S. Department of Veterans Affairs				Checked SCP		Drawn PAS	
													Bwg: 53 of 208	




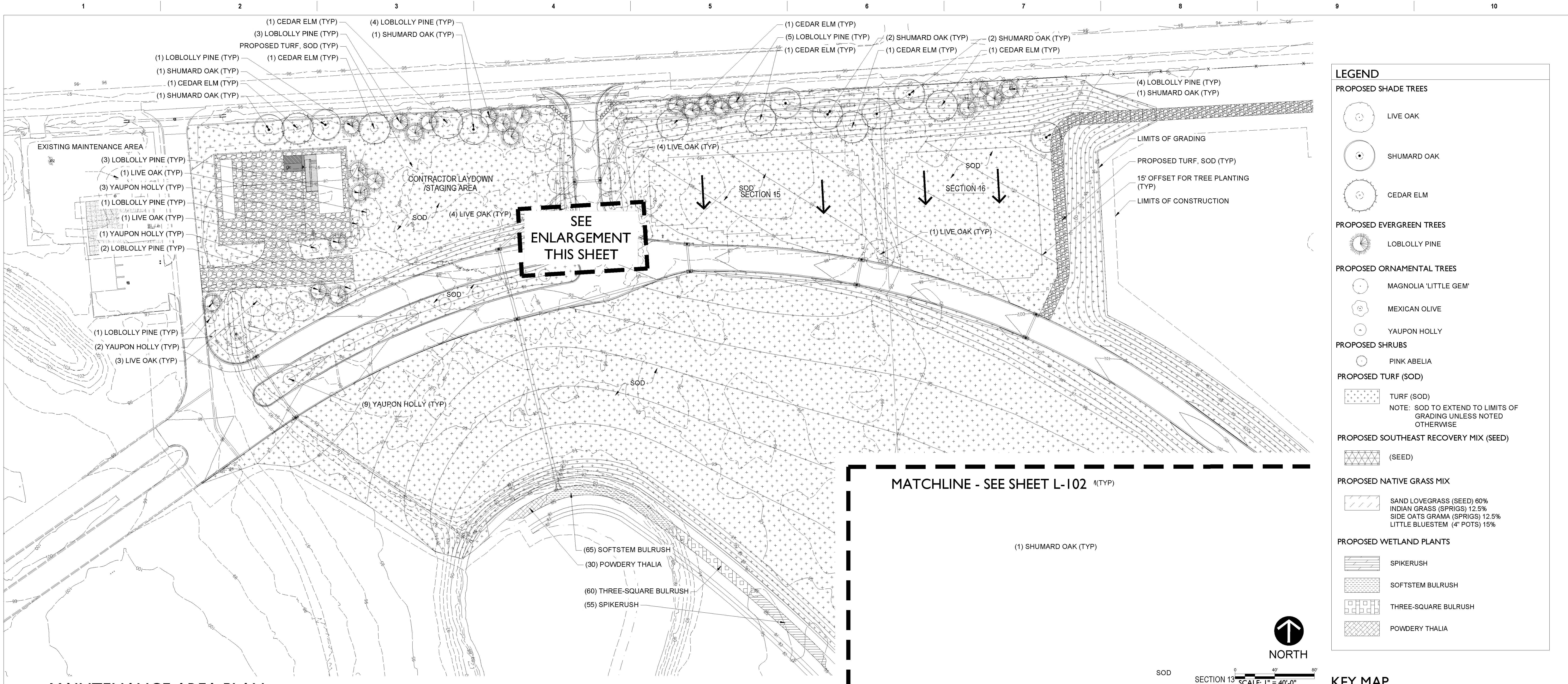
LEGEND	
	PROPOSED PERMANENT TURF REINFORCEMENT MATTING SEE SPECIFICATIONS
	PROPOSED GRASS OR REINFORCEMENT GRASS SPILLWAY ARMORING SEE LANDSCAPE PLAN
	EXTENTS OF POND PLANTING SEE LANDSCAPE PLAN

STAGE-STORAGE					
POND B					
Stage	h (ft)	Elevation	Contour Area (ac.)	Detention Volume (Ac-Ft)	Total Volume (ac-ft)
0	0	82	1.65	0	0.00
1	1.00	83	1.77	0	1.77
2	1.00	84	1.86	0	3.53
3	1.00	85	2.19	0	5.55
4	1.00	86	2.51	0	7.90
4.79	0.79	86.79	2.77	0	9.98
6	1.21	88	2.87	3.41	13.40
7	1.00	89	2.98	6.34	16.33
8	1.00	90	3.44	9.55	19.53
9.5	1.50	91.5	3.99	15.12	25.11

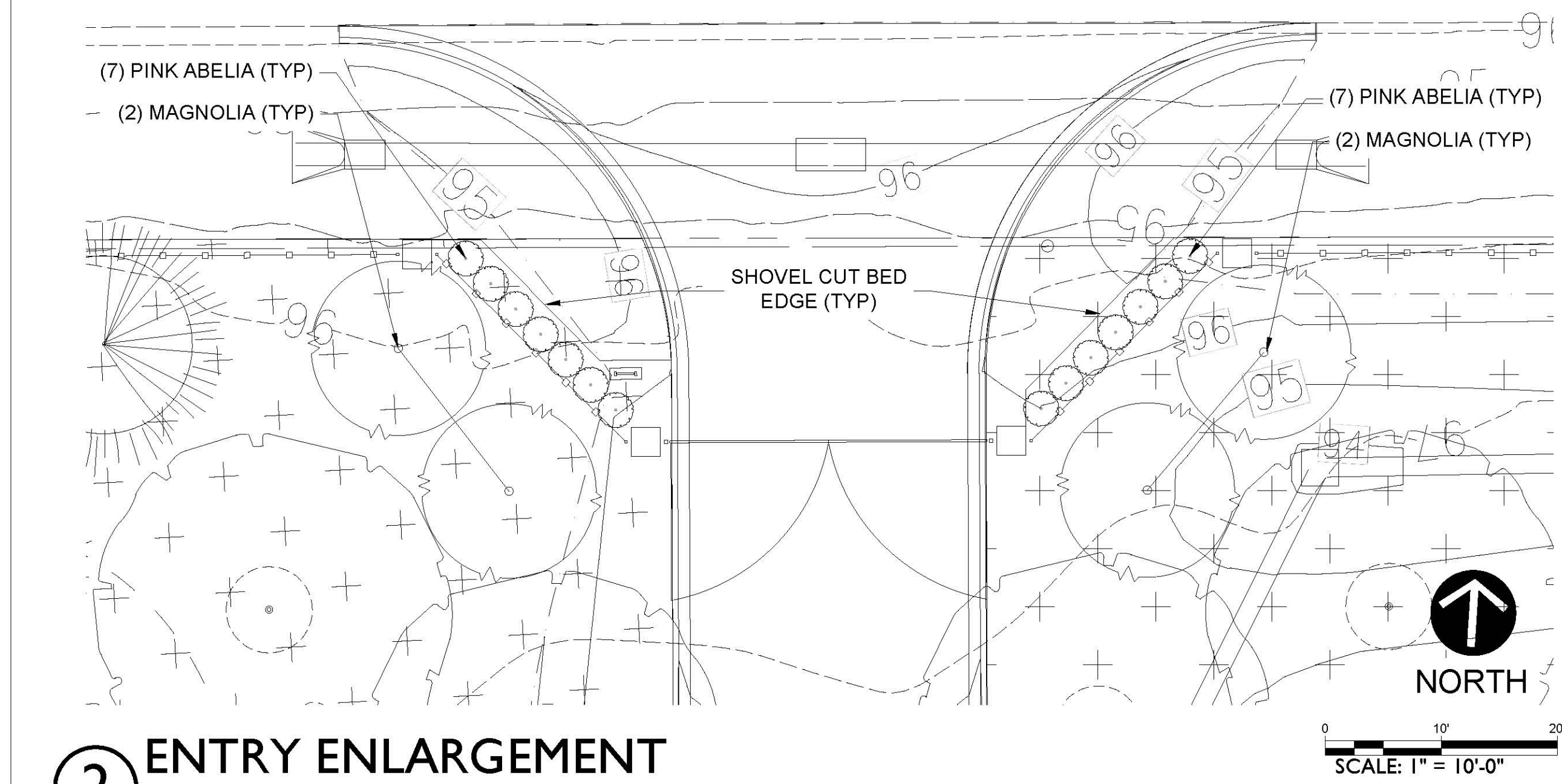
POND C					
Stage	h (ft)	Elevation	Contour Area (ac.)	Detention Volume (Ac-Ft)	Total Volume (ac-ft)
0	0	82	4.95	0	0.00
1	1.00	83	5.15	0	5.05
2	1.00	84	5.35	0	10.30
3	1.00	85	5.86	0	15.91
4	1.00	86	6.39	0	22.03
4.79	0.79	86.79	6.81	0	27.25
6	1.21	88	6.95	8.32	35.57
7	1.00	89	7.10	15.35	42.60
8	1.00	90	7.65	22.73	49.97
9.5	1.50	91.5	7.95	34.43	61.67



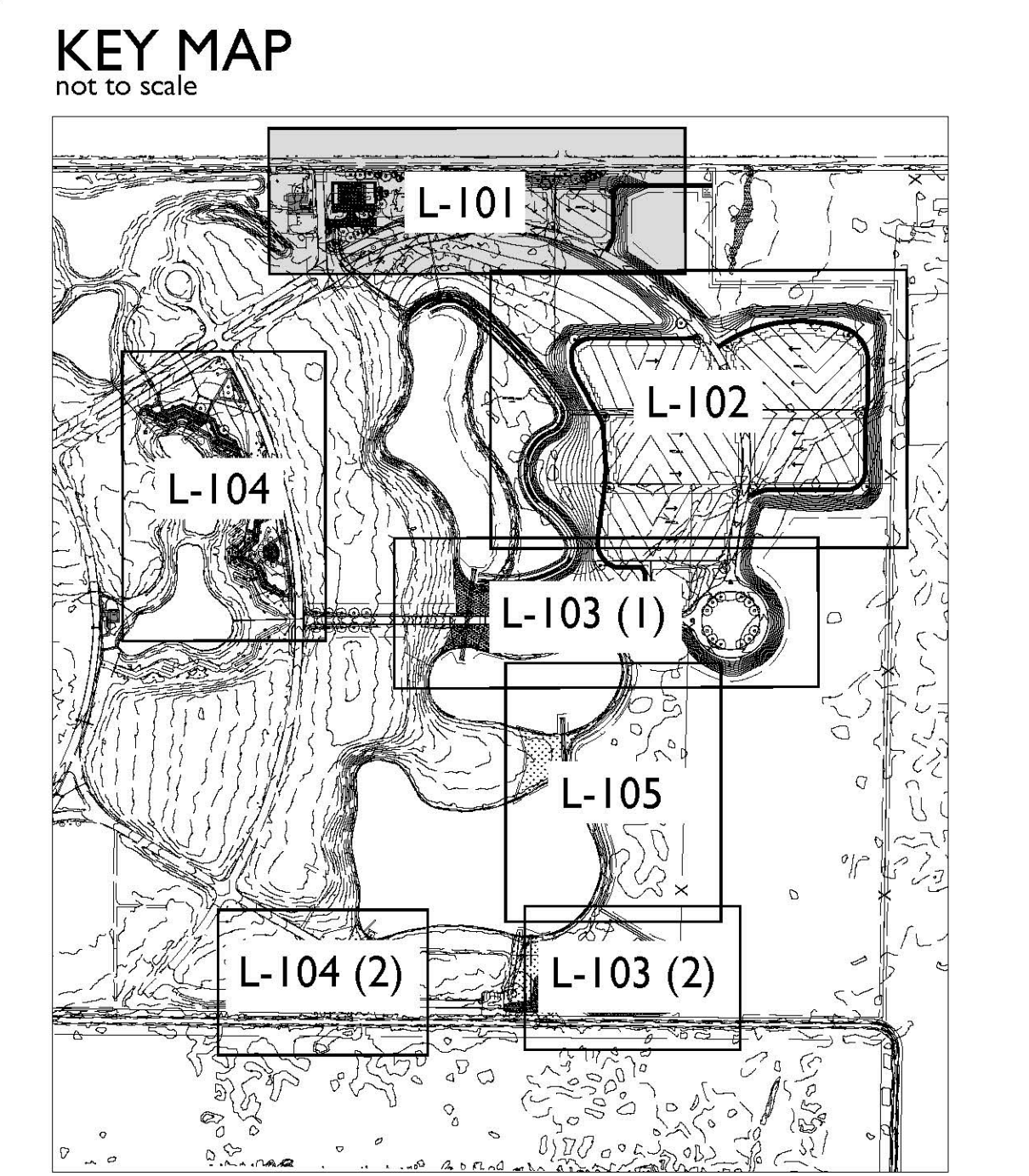
		CONSULTANT			ARCHITECT/ENGINEER OF RECORD		STAMP	<div>Office of Construction and Facilities Management</div> <div><div>VA</div>U.S. Department of Veterans Affairs</div>	Drawing Title		Phase	Project Title		Project Number	
		The LA Group (518) 587-8100	Aqua Engineering, Inc. (970) 372-8104	OCMI (202) 607-7575	<div>Gordon</div> <div>148 S. Queen Street, Suite 201 Martinsburg, WV 25401 Phone: 304-725-8456 www.gordon.us.com</div>	PROGRAMMING AND PLANNING CIVIL ENGINEERING LANDSCAPE ARCHITECTURE SURVEY AND MAPPING SECURITY CONSULTING			POND B & C GRADING PLAN		CONSTRUCTION DOCUMENTS 1	HOUSTON NATIONAL CEMETERY PHASE 5 DEVELOPMENT		851PC2048	
		rvi (512) 480-0032	AES Group (303) 841-3922	Gilpin Engineering (512) 220-8100					Approved: Project Director				Location HARRIS COUNTY, TEXAS		Building Number
		Komatsu Inc. (817) 587-8100	ECS Midwest LLC. 847-279-0366	GIS, Inc. (205) 941-0442					Issue Date August 30, 2019		Checked SCP	Drawn PAS	Drawing Number CG121 Dwg. 54 of 205		
Revisions:		Date:													




1 MAINTENANCE AREA PLAN



2 ENTRY ENLARGEMENT



		CONSULTANT			ARCHITECT/ENGINEER OF RECORD		STAMP	<div>Office of Construction and Facilities Management</div> <div>VAU.S. Department of Veterans Affairs</div>	Drawing Title	Phase	Project Title	Project Number	
		The LA Group (518) 587-8100	Aqua Engineering, Inc. (970) 372-6104	OCMI (202) 607-7575	 <div>PROGRAMMING AND PLANNING CIVIL ENGINEERING LANDSCAPE ARCHITECTURE SURVEY AND MAPPING SECURITY CONSULTING</div>		LANDSCAPE PLAN		CONSTRUCTION DOCUMENTS 1	HOUSTON NATIONAL CEMETERY PHASE 5 DEVELOPMENT	851PC2048		
		RVi (512) 480-0032	AES Group (303) 841-3922	Gilpin Engineering (512) 220-8100								Building Number	
		Komatsu Inc. (817) 587-8100	ECS Midwest LLC. 847-279-0366	GIS, Inc. (205) 941-0442								Drawing Number	
Revisions:	Date:												
					148 S. Queen Street, Suite 201 Martinsburg, WV 25401 Phone: 304-725-8456 www.gordon.us.com				Approved: Project Director		Location HARRIS COUNTY, TEXAS	L-101 Dwg. 132 of 205	
											Issue Date August 30, 2019	Checked MS	Drawn AC, LI