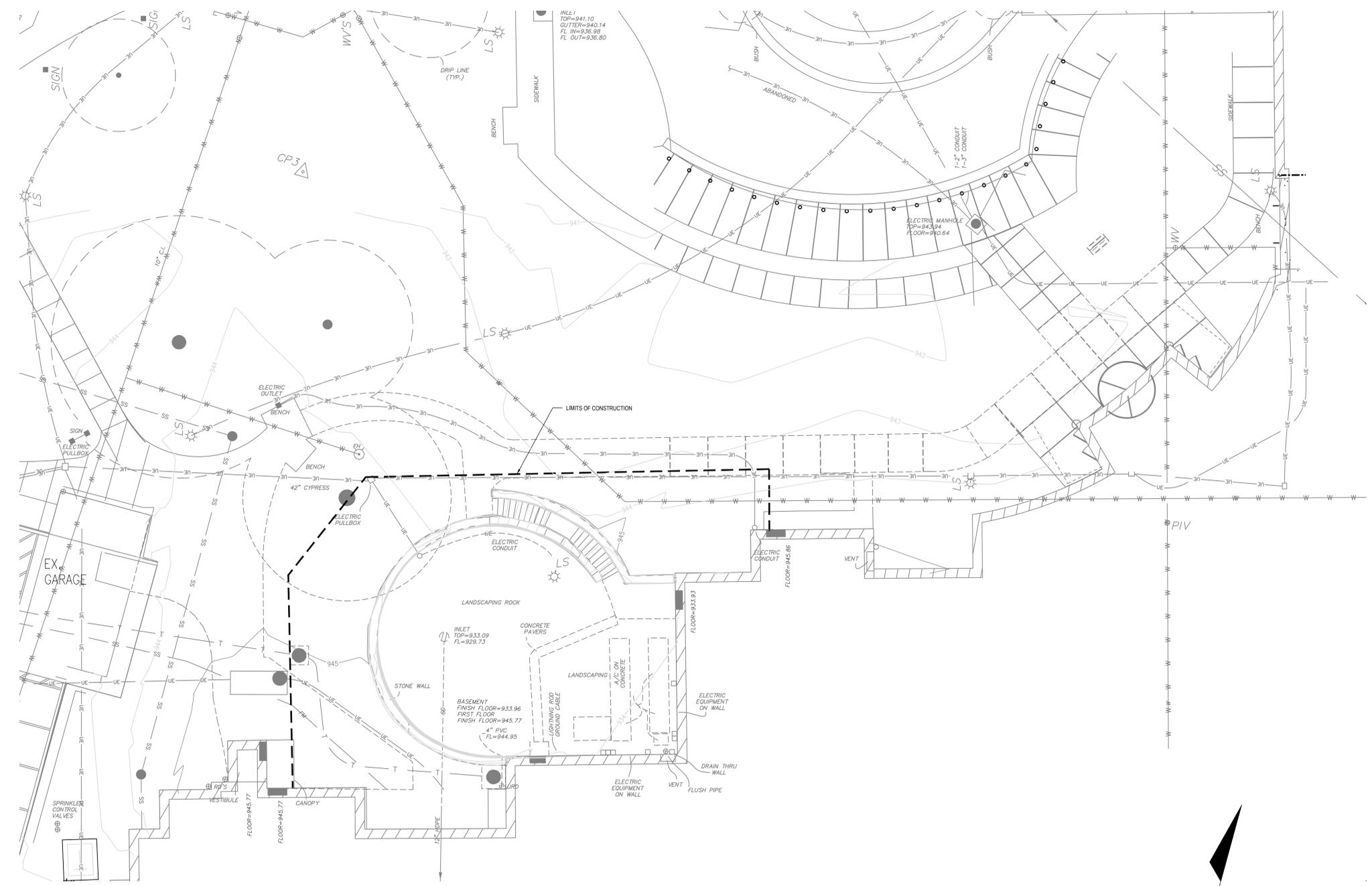


LEGEND		
	EXISTING	PROPOSED
EX. A.C. PAVEMENT		
EX. CONCRETE		
NATIONAL HISTORIC PRESERVATION		
LIMITS OF CONSTRUCTION		
WATERLINE		
SANITARY SEWER LINE		
STORM DRAIN LINE		
FENCE LINE		
UNDERGROUND ELECTRICAL LINE		
UNDERGROUND GAS LINE		
UNDERGROUND COMMUNICATIONS LINE		
BACK OF CURB		
EDGE OF PAVEMENT		
SIDEWALK		
UTILITY TUNNEL		
STORM DRAIN MANHOLE		
SANITARY SEWER MANHOLE		
FIRE HYDRANT		
WATER VALVE		
STEAM MANHOLE		
STREETLIGHT		
TREE		
SURVEY CONTROL POINT		

CIVIL SHEET ABBREVIATIONS			
ABBRV	ABBREVIATION	F/F	FACE TO FACE
AC	AGGREGATE BASE COURSE	FE EL	FINISH FLOOR ELEVATION
AC	ASPHALTIC CONCRETE	FG	FINISH GRADE
ACP	ASPHALTIC CONCRETE PAVING	FL	FLOW LINE
ADA	AMERICANS WITH DISABILITIES ACT	FM	FORCED MAIN SEWER
AGGR	AGGREGATE	FOC	FACE OF CURB
ASPH	ASPHALT	FT	FEET OR FOOT
ASST	ASSEMBLY	FTG	FOOTING
AVE	AVENUE	HC	HANDICAP
BC	BACK OF CURB	HCP	HANDICAPPED
BDRY	BOUNDARY	HDPE	HIGH DENSITY POLYETHYLENE
BTUM	BITUMINOUS	HNDRL	HANDRAIL
BLDG	BUILDING	HRZ	HORIZONTAL
BVD	BOULEVARD	ID	INSIDE DIAMETER OR INSIDE DIMENSION
BM	BENCHMARK	INFO	INFORMATION
BRG	BEARING	INVT	INVERT
CB	CATCH BASIN	INW EL	INVERT ELEVATION
CFS	CUBIC FEET PER SECOND	LAT	LATITUDE
CL	CENTER LINE	LF	LINEAR FEET (FOOT)
CLASS	CLASSIFICATION	LOC	LOCATION
CMP	CORRUGATED METAL PIPE	LP	LOW POINT
CMU	CONCRETE MASONRY UNIT	LS	LUMP SUM
CO	SEWER CLEAN OUT	MATL	MATERIAL
CONC	CONCRETE	MH	MANHOLE
CONSTR	CONSTRUCTION	MN	MINIMUM
COORD	COORDINATE	MISC	MISCELLANEOUS
CORR	CORROSION	MON	MONUMENT
CU FT	CUBIC FEET	MTC	MEETING
CU YD	CUBIC YARD	MULT	MULTIPLE
DA	DRAINAGE AREA	N	NORTH
DAT	DATUM	NA	NOT APPLICABLE
DEG	DEGREE	NO	NUMBER
DEMO	DEMOLITION	NIS	NOT TO SCALE
DEPT	DEPARTMENT	OC	ON CENTER
DESCR	DESCRIPTION	PC	POINT OF CURVE
DET	DETAIL	PCT	PERCENT
DI	DROP INLET	PI	POINT OF INTERSECTION
DIA	DIAMETER	PL	PROPERTY LINE
DIF	DIFFERENCE	PRKG	PARKING
DIM	DIMENSION	PROP	PROPOSED
DIP	DUCTILE IRON PIPE	PROP	PROPOSED
DIR	DIRECTION	PSI	POUNDS PER SQUARE INCH
DIST	DISTANCE	PVC	POLYVINYL CHLORIDE (PLASTIC)
DWG	DRAWING	QTY	QUANTITY
E	EAST	R	RADIUS
EA	EDGE OF CURB	R/CB	REINFORCED CONCRETE BOX
EG	EXISTING GRADE	RCP	REINFORCED CONCRETE PIPE
EL	ELEVATION	RD	ROAD OR ROOF DRAIN
ENGR	ENGINEER	REQD	REQUIRED
ENTR	ENTRANCE	REQD	REQUIRED
EP	EDGE OF PAVEMENT (PAVING)	ROW	RIGHT OF WAY
EPA	ENVIRONMENTAL PROTECTION AGENCY	RT	RIGHT
EQUIP	EQUIPMENT	RW	ROADWAY
ERD	EXISTING ROOF DRAIN		
ES	EDGE OF SHOULDER		
ESMT	EASEMENT		
EST	ESTIMATE		
EX	EXISTING		
EXST	EXISTING		
SD	STORM DRAIN MANHOLE	SS	SANITARY SEWER
SDM	SECTION	SSM	SANITARY SEWER MANHOLE
SF	SQUARE FOOT (FEET)	ST	STREET
SFLDR	SHOULDER	STL	STREETLIGHT
SMH	STEAM MANHOLE	STA	STATION
SP EL	SPOT ELEVATION	STD	STANDARD
SPEC	SPECIFICATION	STM	STREAM
SQ YD	SQUARE YARD	SURF	SURFACE
SS	SANITARY SEWER	SURV	SURVEY
SSM	SANITARY SEWER MANHOLE	SW	SIDEWALK
ST	STREET	SWR	SWITCH
STL	STREETLIGHT	SYM	SYMBOL
STA	STATION	TAN	TANGENT
STD	STANDARD	TC	TOP OF CURB
STM	STREAM	TD	TRENCH DRAIN
STN	STATION	TE	TOP ELEVATION
SURF	SURFACE	TEMP	TEMPERATURE
SURV	SURVEY	THRU	THROUGH
SW	SIDEWALK	TMH	TOP OF MANHOLE
SWR	SWITCH	TOC	TOP OF CURB
SYM	SYMBOL	TOW	TOP OF WALL
TAN	TANGENT	TUF	TOP OF FOOTING
TC	TOP OF CURB	TOP	TOP
TD	TRENCH DRAIN	TOPO	TOPOGRAPHY
TE	TOP ELEVATION	TOS	TOP OF SLAB
TEMP	TEMPERATURE	TYP	TYPICAL
THRU	THROUGH	UCGD	UNDERGROUND UNPAVED ROAD
TMH	TOP OF MANHOLE	UNP	UNPAVED ROAD
TOC	TOP OF CURB	UNP RD	UNPAVED ROAD UNLESS OTHERWISE NOTED
TOW	TOP OF WALL	UTIL	UTILITY
TUF	TOP OF FOOTING	VAR	VARIABLES
TOP	TOP	VC	VERTICAL CURVE
TOPO	TOPOGRAPHY	VERT	VERTICAL
TOS	TOP OF SLAB	VC	VERTICAL CURVE
TYP	TYPICAL	VOL	VOLUME
UCGD	UNDERGROUND UNPAVED ROAD	W	WEST
UNP	UNPAVED ROAD	W/O	WITHOUT
UNP RD	UNPAVED ROAD UNLESS OTHERWISE NOTED		
UTIL	UTILITY		
VAR	VARIABLES		
VC	VERTICAL CURVE		
VERT	VERTICAL		
VC	VERTICAL CURVE		
VOL	VOLUME		
W	WEST		
W/O	WITHOUT		



F1 CIVIL SURVEY PLAN - NORTH
1"=10'

CONTROL POINTS				
NO.	DESCRIPTION	NORTHING	EASTING	ELEVATION
CP1	IRON	1055141.51	2780898.27	929.22
CP2	IRON	1054843.90	2780665.87	938.21
CP3	IRON	1054816.09	2780942.26	943.09
CP4	IRON	1054549.81	2780644.54	932.32
CP8	IRON	1055204.38	2781269.90	932.67
CP9	IRON	1055204.38	2781269.90	932.67
CP867	DRILL HOLE	1054576.73	2781049.72	937.05

SURVEY DISCLAIMER
 SURVEY INFORMATION OF SITE DETERMINED FROM VA SUPPLIED AS-BUILT DRAWINGS AND PHOTOGRAPHIC, VISUAL, AND LIDAR SURVEY CONDUCTED BY TRIPLE C. CONSTRUCTION HAS OCCURRED ON THIS SITE SINCE THE SURVEY WAS COMPLETED. CONDITION OF THE SITE MAY VARY FROM THE SURVEYED CONDITION. UTILITY LOCATIONS ARE IN APPROXIMATE LOCATION. CONTRACTOR TO VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION TO PROVIDE NON-INTERRUPTION OF SERVICE. TO ENSURE PROPER CLEARANCE/SEPARATION, AND TO AVOID DAMAGE THERETO. UTILITIES DAMAGED THROUGH NEGLIGENCE OF THE CONTRACTOR TO OBTAIN LOCATION OF SAME SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

Revisions:	Date:

CONSULTANT

BOB D. CAMPBELL & CO.
 Structural Engineers Since 1957

MES GROUP

ARCHITECT/ENGINEER OF RECORD
 A/E:
 TRIPLE C THE A&E GROUP
 2625 LINDELL BLVD, 2ND FLOOR, 2064
 ST. LOUIS, MO 63108
 MAT PERKINS
 520-481-8548

TRIPLE C - THE A&E GROUP
 A MULTI-DISCIPLINE COMPANY

STAMP

Office of Construction and Facilities Management

 U.S. Department of Veterans Affairs

Drawing Title
 CIVIL - SURVEY PLAN NORTH

Approved: _____

Phase
 ISSUED FOR BIDDING

Project Title
 KCVA - Inpatient Medicine Bed Addition

Project Number
 589-017

Building Number
 B1

Drawing Number
 VF101

Location
 4801 Linwood Blvd, Kansas City, MO 64128

Issue Date
 JULY 21, 2022

Checked
 PERKINS

Drawn
 STRUBLE

LEGEND		
	EXISTING	PROPOSED
EX. CONCRETE		
LIMITS OF CONSTRUCTION		
SIDEWALK		
CURB		
WATERLINE		
UNDERGROUND COMMUNICATIONS LINE		
SANITARY SEWER LINE		
STORM DRAIN LINE		
UNDERGROUND ELECTRICAL LINE		
UNDERGROUND GAS LINE		
SANITARY SEWER MANHOLE		
STORM DRAIN MANHOLE		
SEWER CLEAN-OUT		
STORM DRAIN INLET		
WATER VALVE		
FIRE HYDRANT		
STREETLIGHT		
TREE		
EX. TO BE REMOVED		
EX. SIDEWALK TO BE REMOVED		
EX. LANDSCAPE TO BE REMOVED		
CONSTRUCTION FENCING		

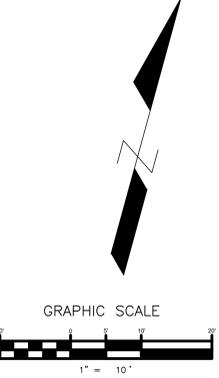
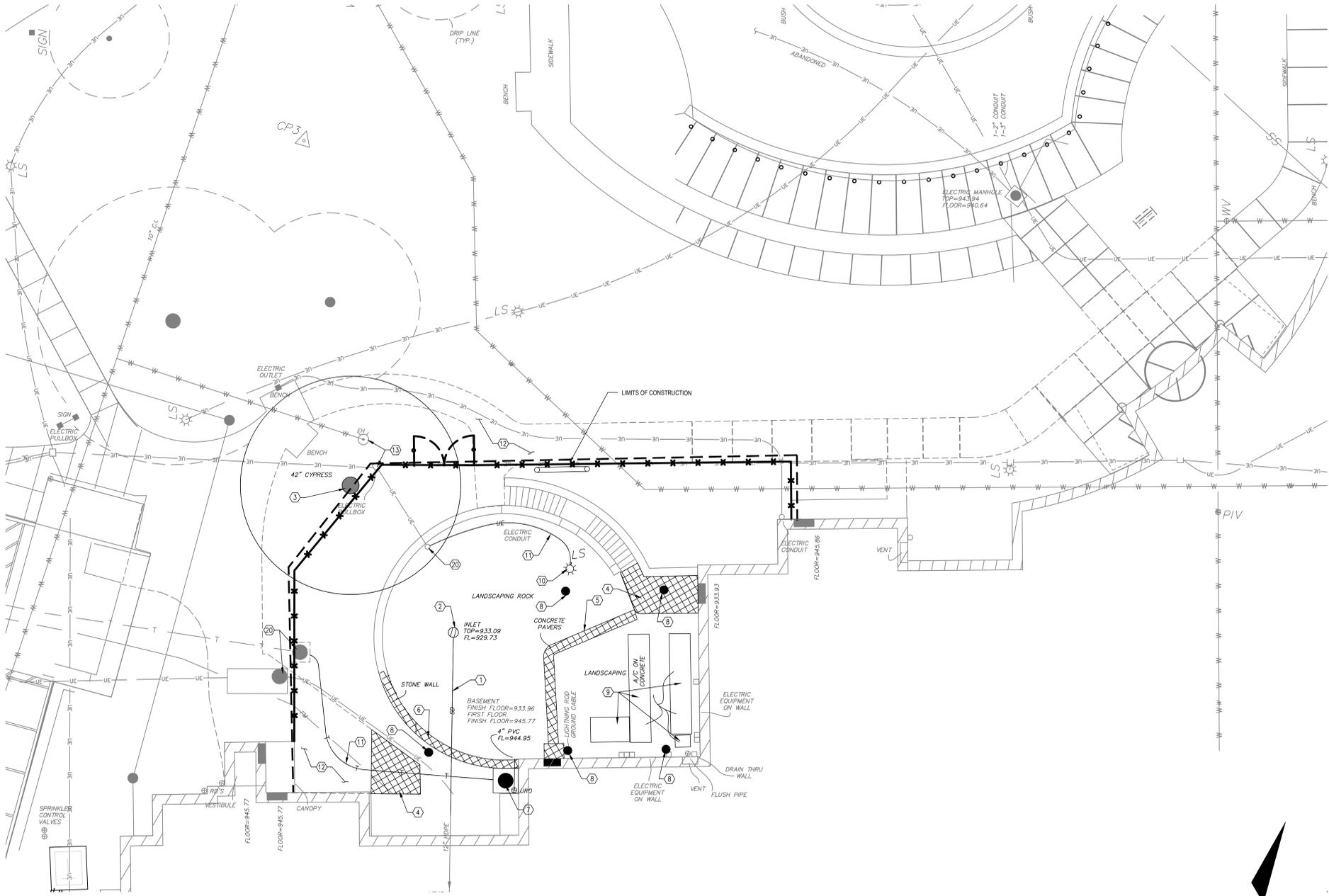
CONSTRUCTION NOTES LEGEND	
(1)	EXISTING STORM DRAIN PIPE TO BE REMOVED
(2)	EXISTING STORM DRAIN CATCH BASIN TO BE REMOVED
(3)	EXISTING TREE TO BE REMOVED
(4)	EXISTING CONCRETE SIDEWALK / DRIVEWAY TO BE REMOVED
(5)	EXISTING PAVERS TO BE REMOVED
(6)	EXISTING PORTION OF RETAINING WALL TO BE REMOVED
(7)	EXISTING ABANDONED COMMUNICATION MANHOLE TO BE REMOVED
(8)	LOCATION OF PROPOSED COLUMN - AREA TO DIG, SAW-CUT AND REMOVE SECTION OF CONCRETE IF PRESENT
(9)	EXISTING A/C UNIT TO BE RELOCATED - CONCRETE PAD TO BE REMOVED
(10)	EXISTING STREET LIGHT POLE TO BE REMOVED
(11)	EXISTING PVC CONDUIT TO BE REMOVED AND ABANDONED IN PLACE UNDER REMAINING SIDEWALK
(12)	EXISTING CONCRETE SIDEWALK, PROTECT IN PLACE. CONTRACTOR TO REPAIR ANY DAMAGE CAUSED DURING CONSTRUCTION
(13)	EXISTING UTILITY STRUCTURE TO REMAIN, PROTECT IN PLACE

GENERAL NOTES	
1.	ALL WORK DETAILED ON THESE PLANS AND PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE GEOTECHNICAL REPORT. WHERE APPLICABLE, CITY OF KANSAS CITY CODE OF ORDINANCES SHALL APPLY.
2.	THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA REGULATIONS WITH RESPECT TO STORM WATER DISCHARGE.
3.	PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL OBSTRUCTIONS INCLUDING ALL UNDERGROUND UTILITIES. THE CONTRACTOR'S SURVEYOR SHALL DOCUMENT THE HORIZONTAL LOCATION AND ELEVATION OF UTILITIES THAT ARE EXPOSED. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER'S REPRESENTATIVE (COR) OR ENGINEER SO THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
4.	ALL ELECTRICAL, TELEPHONE, CABLE TV, GAS AND OTHER UTILITY LINES, CABLES, AND APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION SHALL BE COORDINATED WITH THE COR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY ADJUSTMENTS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCES CAUSED BY UTILITY COMPANY WORK CREWS. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE HIS ACTIVITIES TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK.
5.	THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA. ANY DAMAGE TO EXISTING FACILITIES CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE AND APPROVED BY THE CONSTRUCTION OBSERVER.
6.	CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
7.	OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS OR DESIGNATED TRAFFIC LANES. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE PUBLIC RIGHT-OF-WAY.
8.	THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (I.E. BARRICADE, TOPSOIL, DISTURBANCE, EXCAVATION PERMITS, EPA STORM WATER PERMITS, ETC.).
9.	ALL PROPERTY CORNERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ALL PROPERTY CORNERS MUST BE RESET BY A REGISTERED LAND SURVEYOR.
10.	THE CONTRACTOR SHALL PREPARE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN AND OBTAIN APPROVAL OF SUCH PLAN FROM THE CONTRACT OFFICER'S REPRESENTATIVE (COR), PRIOR TO BEGINNING ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.
11.	ALL BARRICADES AND CONSTRUCTION SIGNING SHALL CONFORM TO APPLICABLE SECTIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), US DEPARTMENT OF TRANSPORTATION, LATEST EDITION.
12.	THE CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION BARRICADES AND SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADES AT THE END AND BEGINNING OF EACH DAY.
13.	THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO CONFORM WITH EPA REQUIREMENTS, INCLUDING COMPLIANCE WITH NPDES PHASE 2 REQUIREMENTS. THIS INCLUDES PREPARATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), FILING THE NOTICE OF INTENT AND MAINTENANCE OF SWPPP BEST MANAGEMENT PLANS (BMPs).
14.	SEE SHEET VF101 FOR CIVIL ABBREVIATIONS.

NOTE:
UTILITY BURY DEPTHS NOT VERIFIED. CONTRACTOR TO POT-HOLE VERIFY ALL UTILITIES WITHIN CONSTRUCTION AREA PRIOR TO CONSTRUCTION. SEE SHEET CU101 "UTILITY SEPARATION NOTES" FOR STANDARD UTILITY DEPTH AND SEPARATION REQUIREMENTS.

SURVEY DISCLAIMER		
SURVEY INFORMATION OF SITE DETERMINED FROM VA SUPPLIED AS-BUILT DRAWINGS AND PHOTOGRAPHIC, VISUAL, AND LIDAR SURVEY CONDUCTED BY TRIPLE C. CONSTRUCTION HAS OCCURRED ON THIS SITE SINCE THE SURVEY WAS COMPLETED. CONDITION OF THE SITE MAY VARY FROM THE SURVEYED CONDITION. UTILITY LOCATIONS ARE IN APPROXIMATE LOCATION. CONTRACTOR TO VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION TO PROVIDE NON-INTERRUPTION OF SERVICE. TO ENSURE PROPER CLEARANCE/SEPARATION, AND TO AVOID DAMAGE THERETO. UTILITIES DAMAGED THROUGH NEGLIGENCE OF THE CONTRACTOR TO OBTAIN LOCATION OF SAME SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE.		

DEMOLITION QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
EXISTING 12" STORM DRAIN PIPE	36	LF
EXISTING STORM DRAIN CATCH BASIN	1	EA
EXISTING LIGHT POLE	1	EA
EXISTING SIDEWALK	180	SF
EXISTING PAVERS	87	SF
EXISTING 12" RETAINING WALL	23	LF
EXISTING PVC ELECTRICAL/TELEPHONE CONDUIT	50	LF
EXISTING COMMUNICATIONS MANHOLE	1	EA
EXISTING TREE	1	EA



F1 CIVIL DEMOLITION PLAN - NORTH
1"=10'

Revisions:	Date:

CONSULTANT

BOB D. CAMPBELL & CO.
 Structural Engineers Since 1957

MES GROUP

ARCHITECT/ENGINEER OF RECORD
 A/E:
TRIPLE C THE A&E GROUP
 2625 LINDELL BLVD, 2ND FLOOR, 2064
 ST. LOUIS, MO 63108
MAT PERKINS
 520-481-8548

TRIPLE C - THE A&E GROUP

 A MULTI-DISCIPLINE COMPANY

STAMP

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

Drawing Title CIVIL - DEMOLITION PLAN NORTH	Phase ISSUED FOR BIDDING
Approved:	

Project Title KCVA - Inpatient Medicine Bed Addition	Project Number 589-017
Building Number B1	Drawing Number CD101

Location 4801 Linwood Blvd, Kansas City, MO 64128	Issue Date JULY 21, 2022	Checked PERKINS	Drawn STRUBLE
---	------------------------------------	---------------------------	-------------------------

LEGEND		
	EXISTING	PROPOSED
EX. CONCRETE		
LIMITS OF CONSTRUCTION		
SIDEWALK		
FENCE		
CONTRACTOR STAGING AREA		
SANITARY SEWER MANHOLE		
STORM DRAIN MANHOLE		
SEWER/STORM PVC CLEAN-OUT		
STORM DRAIN INLET		
WATER VALVE		
SAW-CUT LINE		
STREETLIGHT		
FIRE HYDRANT		
TREE		

CONSTRUCTION NOTES LEGEND	
(1)	CONSTRUCT 5' CONCRETE SIDEWALK
(2)	CONSTRUCT MET YARD FENCING AND ENTRANCE GATE - 3' LOCKING
(3)	CONSTRUCT CONSTRUCTION FENCING - SEE DETAIL FS, SHEET C5501A
(4)	CONSTRUCT CONSTRUCTION YARD ENTRANCE GATE - (2) 6' CENTER LOCKING
(5)	CONSTRUCT COLUMN - SEE STRUCTURAL PLANS
(6)	CONSTRUCT CONSTRUCTION AND SAFETY SIGN - SEE DETAIL FS, SHEET C5501
(7)	CONSTRUCT SOB LANDSCAPING
(8)	CONSTRUCT WOOD CHIP MULCH LANDSCAPING

CONTRACTOR NOTE

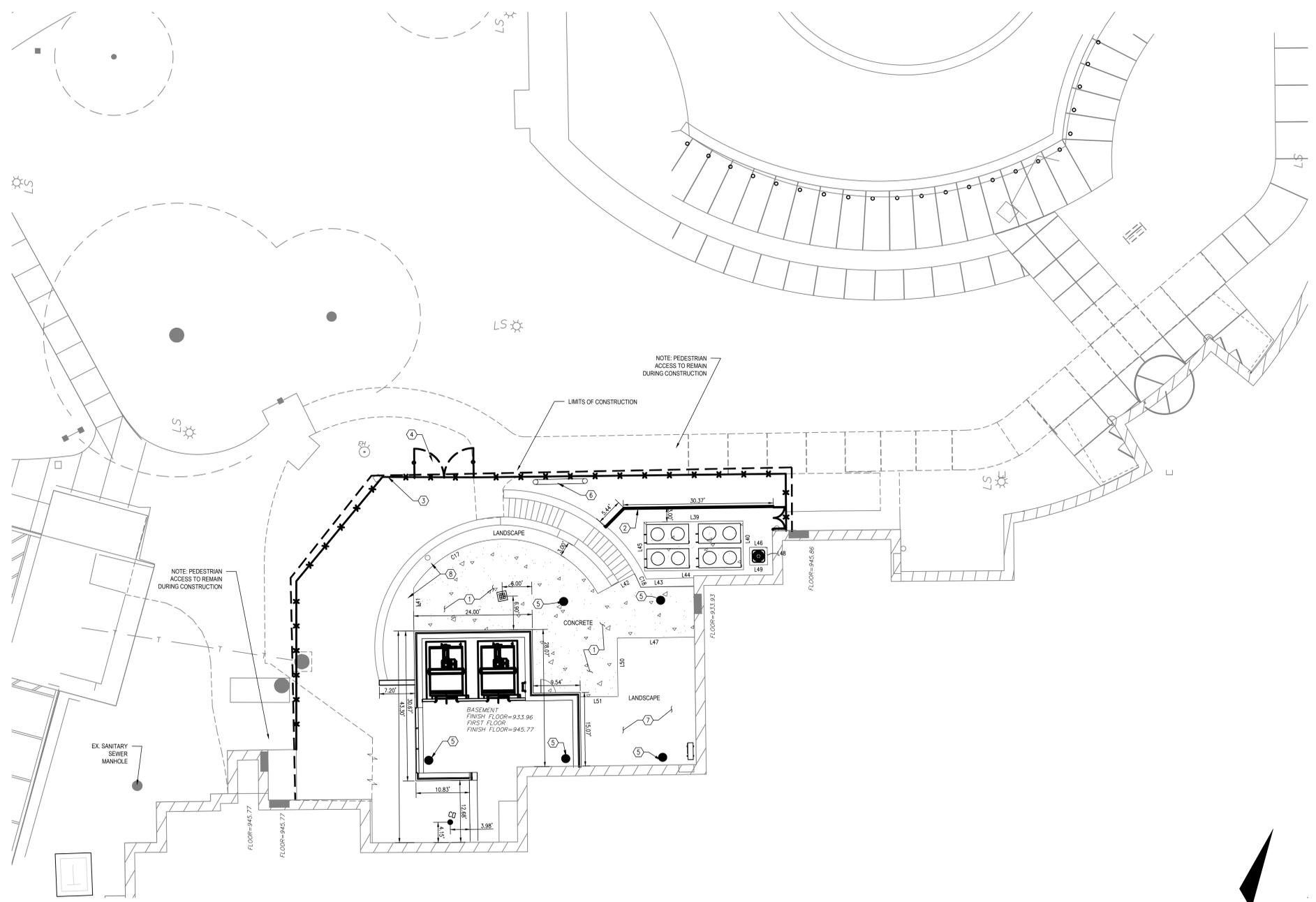
"LIMITS OF CONSTRUCTION" IDENTIFIES AN IMAGINARY LINE AROUND ALL AREAS IN WHICH CONSTRUCTION WILL OCCUR. SOME ADDITIONAL AREAS MAY BE IMPACTED BY UTILITY INFRASTRUCTURE TIE-INS. COORDINATE WITH COR.

"LIMITS OF CONTRACTOR FENCED AREA" IDENTIFIES THE CONTRACTOR'S FENCE (TO COMPLY WITH VA STANDARDS) AROUND THE BUILDING CONSTRUCTION AREA. COORDINATE WITH COR.

"OPTIONAL TEMPORARY CONTRACTOR MATERIAL LAYDOWN AREA" IDENTIFIES AREAS FOR CONTRACTOR TO TEMPORARILY STAGE MATERIALS.

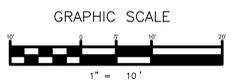
SURVEY DISCLAIMER

SURVEY INFORMATION OF SITE DETERMINED FROM VA SUPPLIED AS-BUILT DRAWINGS AND PHOTOGRAPHIC, VISUAL, AND LIDAR SURVEY CONDUCTED BY TRIPLE C. CONSTRUCTION HAS OCCURRED ON THIS SITE SINCE THE SURVEY WAS COMPLETED. CONDITION OF THE SITE MAY VARY FROM THE SURVEYED CONDITION. UTILITY LOCATIONS ARE IN APPROXIMATE LOCATION. CONTRACTOR TO VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION TO PROVIDE NON-INTERRUPTION OF SERVICE. TO ENSURE PROPER CLEARANCE/SEPARATION, AND TO AVOID DAMAGE THERETO. UTILITIES DAMAGED THROUGH NEGLIGENCE OF THE CONTRACTOR TO OBTAIN LOCATION OF SAME SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE.



Line #	Length	Direction
L39	20.06	N74° 05' 13.93"E
L40	10.00	N15° 54' 46.07"W
L41	8.68	S15° 54' 46.07"E
L42	8.52	S46° 29' 59.92"W
L43	10.77	N73° 31' 01.88"E
L44	20.06	N74° 05' 13.93"E
L45	10.00	N15° 54' 46.07"W
L46	3.60	N74° 05' 13.93"E
L47	15.67	S74° 05' 13.93"W
L48	3.60	S15° 54' 46.07"E
L49	3.60	N74° 05' 13.93"E
L50	11.92	S15° 54' 46.07"E
L51	7.65	S74° 05' 13.93"W

Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C17	44.94	21.77	118.28	S76° 22' 03"W	37.37
C18	11.88	28.93	23.52	S49° 02' 08"E	11.79



F1 CIVIL SITE PLAN - NORTH
1"=10'

Revisions:	Date:

CONSULTANT

BOB D. CAMPBELL & CO.
Structural Engineers Since 1957

MES GROUP

ARCHITECT/ENGINEER OF RECORD

A/E:
TRIPLE C THE A&E GROUP
2625 LINDELL BLVD, 2ND FLOOR, 2064
ST. LOUIS, MO 63108
MAT PERKINS
520-481-8548

TRIPLE C - THE A&E GROUP
A MULTI-DISCIPLINE COMPANY

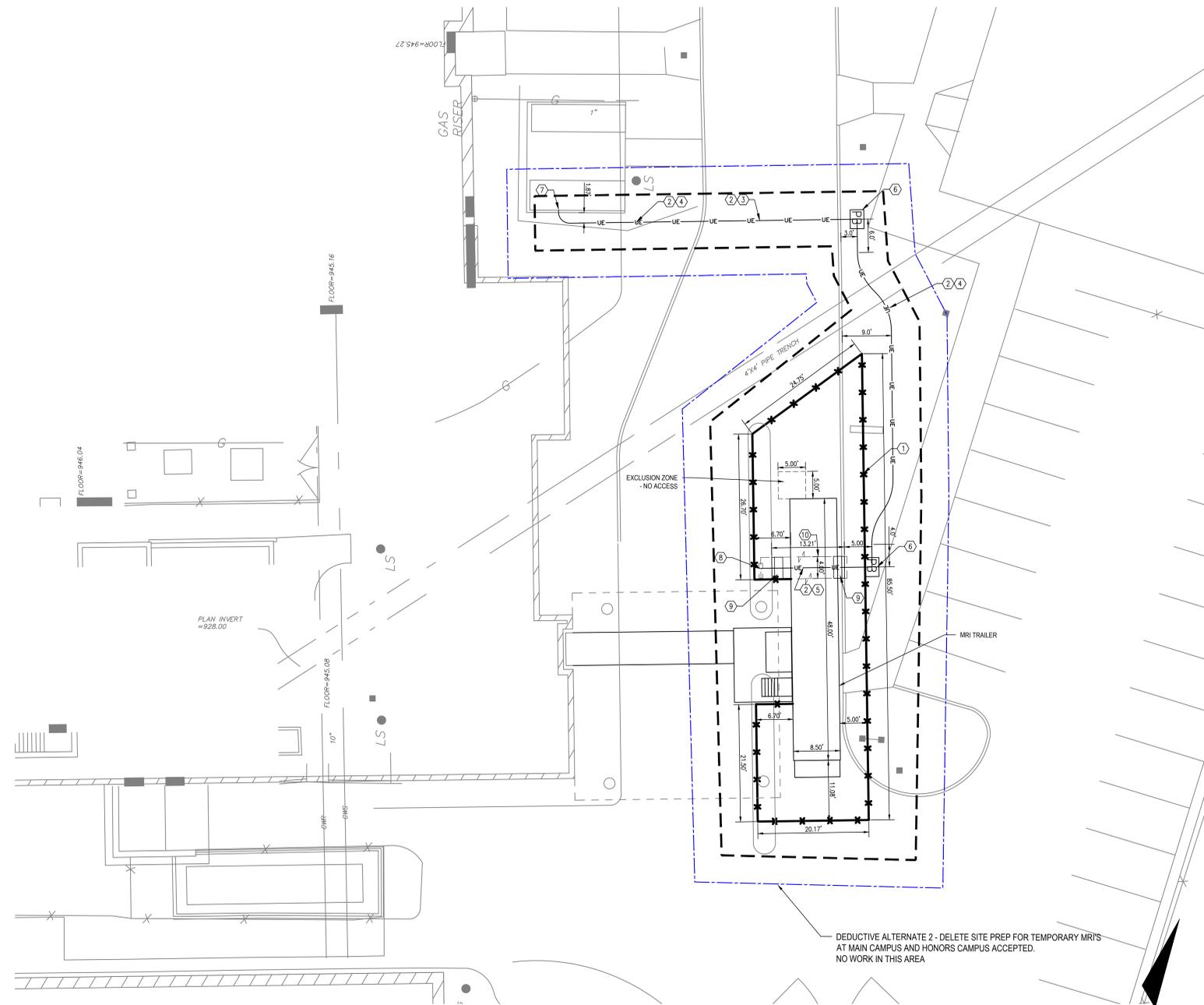


Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title CIVIL - SITE PLAN NORTH	Phase ISSUED FOR BIDDING
Approved:	

Project Title KCVA - Inpatient Medicine Bed Addition	Project Number 589-017
Location 4801 Linwood Blvd, Kansas City, MO 64128	Building Number B1
Issue Date JULY 21, 2022	Checked PERKINS
Drawn STRUBLE	Drawing Number CS101



LEGEND		
	EXISTING	PROPOSED
LIMITS OF CONSTRUCTION		---
SIDEWALK		---
FENCE	---	---
SAW-CUT LINE		---
STREETLIGHT	LS	---

DEDUCTIVE ALTERNATES:
 (DEDUCTIVE ALTERNATES ARE CASCADING AND MUST BE EXERCISED IN THE ORDER PRESENTED)

DEDUCTIVE ALTERNATE 1 - DELETE ELEVATOR CARS AND HOIST MACHINES

DEDUCTIVE ALTERNATE 2 - DELETE SITE PREP FOR TEMPORARY MRI'S AT MAIN CAMPUS AND HONORS CAMPUS

DEDUCTIVE ALTERNATE 3 - DELETE STAIR IN MRI AREA

DEDUCTIVE ALTERNATE 4 - DELETE RENOVATION OF CORRIDOR C3-20 FLOOR AND WALL FINISHES

DEDUCTIVE ALTERNATE 5 - DELETE RENOVATION OF WAITING ROOM M3-203A, NOURISHMENT M3-209, SOILED LINEN STORAGE M3-205B, VISITOR TOILET M3025A, AND NETWORK CLOSET F-155

DEDUCTIVE ALTERNATE 6 - DELETE RENOVATION OF 3 PATIENT ROOMS (M3-223, M3-224 & M3-225) ALONG WITH RESTROOMS STORAGE AND CORRIDOR ADJACENT

CONSTRUCTION NOTES LEGEND	
(1)	CONSTRUCT TEMPORARY FENCING - SEE DETAIL F6, SHEET CS501A
(2)	CONSTRUCT 2" PVC ELECTRICAL CONDUIT
(3)	CONSTRUCT BORE UNDER EXISTING ROADWAY
(4)	CONSTRUCT UTILITY TRENCH IN UNPAVED AREA - SEE DETAIL B1, SHEET CS501A
(5)	CONSTRUCT UTILITY TRENCH IN PAVED AREA - SEE DETAIL D1 & D3, SHEET CS501A
(6)	CONSTRUCT 12\"/>
(7)	CONNECT TO EXISTING TRANSFORMER - SEE ELECTRICAL PLANS
(8)	REMOVE AND CONSTRUCT 4\"/>
(9)	REMOVE AND CONSTRUCT 4\"/>
(10)	SAW-CUT EXISTING CONCRETE PAVEMENT

CONTRACTOR NOTE

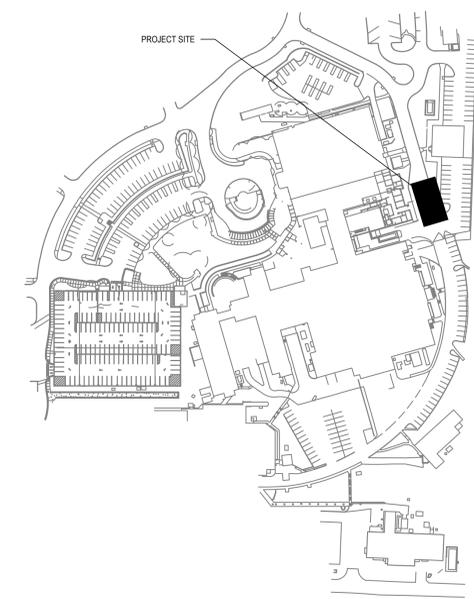
"LIMITS OF CONSTRUCTION" IDENTIFIES AN IMAGINARY LINE AROUND ALL AREAS IN WHICH CONSTRUCTION WILL OCCUR. SOME ADDITIONAL AREAS MAY BE IMPACTED BY UTILITY INFRASTRUCTURE TIE-INS. COORDINATE WITH COR.

"LIMITS OF CONTRACTOR FENCED AREA" IDENTIFIES THE CONTRACTOR'S FENCE (TO COMPLY WITH VA STANDARDS) AROUND THE BUILDING CONSTRUCTION AREA. COORDINATE WITH COR.

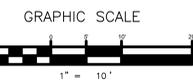
"OPTIONAL TEMPORARY CONTRACTOR MATERIAL LAYDOWN AREA" IDENTIFIES AREAS FOR CONTRACTOR TO TEMPORARILY STAGE MATERIALS.

SURVEY DISCLAIMER

SURVEY INFORMATION OF SITE DETERMINED FROM VA SUPPLIED AS-BUILT DRAWINGS AND PHOTOGRAPHIC AND VISUAL INSPECTION CONDUCTED BY TRIPLE C. CONSTRUCTION HAS OCCURRED ON THIS SITE SINCE THE SURVEY WAS COMPLETED. CONDITION OF THE SITE MAY VARY FROM THE SURVEYED CONDITION. UTILITY LOCATIONS ARE IN APPROXIMATE LOCATION. CONTRACTOR TO VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION TO PROVIDE NON-INTERRUPTION OF SERVICE, TO ENSURE PROPER CLEARANCE/SEPARATION, AND TO AVOID DAMAGE THERE TO. UTILITIES DAMAGED THROUGH NEGLIGENCE OF THE CONTRACTOR TO OBTAIN LOCATION OF SAME SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE.



DEDUCTIVE ALTERNATE 2 - DELETE SITE PREP FOR TEMPORARY MRI'S AT MAIN CAMPUS AND HONORS CAMPUS ACCEPTED. NO WORK IN THIS AREA



F1 CIVIL SITE PLAN - TEMPORARY MRI LOCATIONS - MAIN CAMPUS
1"=10'

KEY MAP

Revisions:	Date:

CONSULTANT

BOB D. CAMPBELL & CO.
Structural Engineers Since 1957

MES GROUP

ARCHITECT/ENGINEER OF RECORD

A/E:
TRIPLE C THE A&E GROUP
2625 LINDELL BLVD, 2ND FLOOR, 2064
ST. LOUIS, MO 63108
MAT PERKINS
520-481-8548

TRIPLE C - THE A&E GROUP
A MULTI-DISCIPLINE COMPANY



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

Drawing Title
CIVIL - SITE PLAN
TEMPORARY MRI LOCATIONS
-MAIN CAMPUS

Approved:

Phase
ISSUED FOR BIDDING

Project Title
KCVA - Inpatient Medicine Bed Addition

Location
4801 Linwood Blvd, Kansas City, MO 64128

Issue Date
JULY 21, 2022

Checked
PERKINS

Drawn
STRUBLE

Project Number
589-017

Building Number
B1

Drawing Number
CS101A

LEGEND		
	EXISTING	PROPOSED
CONCRETE PAD		
LIMITS OF CONSTRUCTION		
SIDEWALK		
CONCRETE CURB		
UNDERGROUND ELECTRICAL CONDUIT	UE	UE
LONG LEG TURN DOWN CURB TO BE DEMOLISHED		
ASPHALT TO BE DEMOLISHED		
CONCRETE TO BE DEMOLISHED		
SAW-CUT LINE		
STREETLIGHT		
ELECTRICAL PULLBOX		PB

CONSTRUCTION NOTES LEGEND	
(1)	EX. CONCRETE CURB TO BE REMOVED
(2)	EXISTING ASPHALT TO BE REMOVED
(3)	EXISTING CONCRETE SIDEWALK/PATIO TO BE REMOVED
(4)	EXISTING STREETLIGHT TO BE RELOCATED
(5)	EXISTING STREETLIGHT CONDUIT TO BE RELOCATED
(6)	CONSTRUCT NEW STREETLIGHT POLE BASE, RE-INSTALL EXISTING STREETLIGHT
(7)	SEE DETAIL F1, SHEET CS501A
(8)	CONSTRUCT 12"x24" ELECTRICAL PULLBOX - SEE DETAIL A6, SHEET CS501A
(9)	CONSTRUCT 1 1/4" PVC STREETLIGHT CONDUIT
(10)	CONSTRUCT LONG LEG TURN DOWN SLAB - SEE DETAIL D3, SHEET CS501A
(11)	CONSTRUCT CONCRETE MRI TRAILER PAD
(12)	CONSTRUCT CONCRETE FENCING - SEE DETAIL F6, SHEET CS501A
(13)	SAW-CUT EXISTING ASPHALT
(14)	CONSTRUCT 2" PVC ELECTRICAL CONDUIT
(15)	CONSTRUCT BORE UNDER EXISTING SIDEWALK
(16)	CONSTRUCT UTILITY TRENCH IN UNPAVED AREA - SEE DETAIL B1, SHEET CS501A
(17)	CONNECT TO EXISTING TRANSFORMER - SEE ELECTRICAL PLANS
(18)	CONNECT TO NEW RECEPTACLE - SEE ELECTRICAL PLANS
(19)	CONSTRUCT CONCRETE CURB - SEE DETAIL B8, SHEET CS501A
(20)	CONNECT TO EXISTING CONCRETE, MATCH EXISTING GRADE
	- SEE DETAIL E6, SHEET CS501

CONTRACTOR NOTE

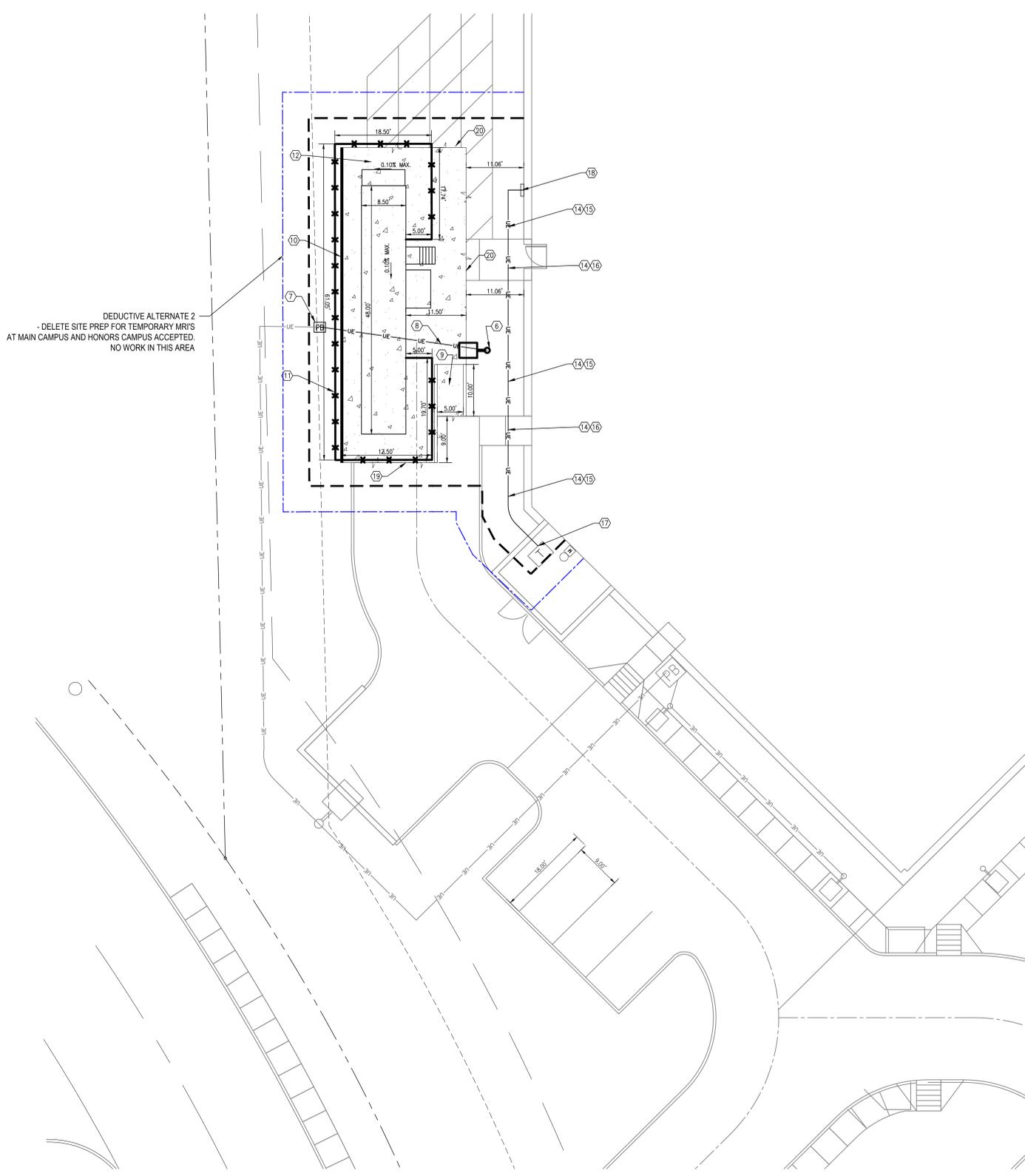
"LIMITS OF CONSTRUCTION" IDENTIFIES AN IMAGINARY LINE AROUND ALL AREAS IN WHICH CONSTRUCTION WILL OCCUR. SOME ADDITIONAL AREAS MAY BE IMPACTED BY UTILITY INFRASTRUCTURE ITEMS. COORDINATE WITH COR.

"LIMITS OF CONTRACTOR FENCED AREA" IDENTIFIES THE CONTRACTOR'S FENCE (TO COMPLY WITH VA STANDARDS) AROUND THE BUILDING CONSTRUCTION AREA. COORDINATE WITH COR.

"OPTIONAL TEMPORARY CONTRACTOR MATERIAL LAYDOWN AREA" IDENTIFIES AREAS FOR CONTRACTOR TO TEMPORARILY STAGE MATERIALS.

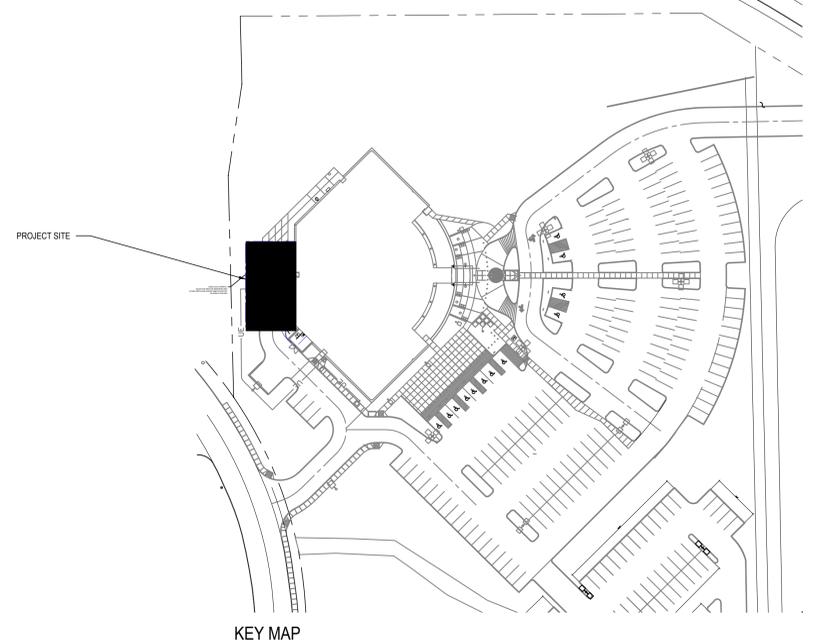
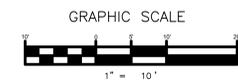
SURVEY DISCLAIMER

SURVEY INFORMATION OF SITE DETERMINED FROM VA SUPPLIED AS-BUILT DRAWINGS AND PHOTOGRAPHIC AND VISUAL INSPECTION. CONSTRUCTION MAY HAVE OCCURRED ON THIS SITE SINCE THE SURVEY WAS COMPLETED. CONDITION OF THE SITE MAY VARY FROM THE SURVEYED CONDITION. UTILITY LOCATIONS ARE IN APPROXIMATE LOCATION. CONTRACTOR TO VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION TO PROVIDE NON-INTERRUPTION OF SERVICE, TO ENSURE PROPER CLEARANCE/SEPARATION, AND TO AVOID DAMAGE THERETO. UTILITIES DAMAGED THROUGH NEGLIGENCE OF THE CONTRACTOR TO OBTAIN LOCATION OF SAME SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE.



F1 CIVIL DEMOLITION PLAN
1"=10'

DEDUCTIVE ALTERNATES:	
(DEDUCTIVE ALTERNATES ARE CASCADING AND MUST BE EXERCISED IN THE ORDER PRESENTED)	
DEDUCTIVE ALTERNATE 1 -	DELETE ELEVATOR CARS AND HOIST MACHINES
DEDUCTIVE ALTERNATE 2 -	DELETE SITE PREP FOR TEMPORARY MRI'S AT MAIN CAMPUS AND HONORS CAMPUS
DEDUCTIVE ALTERNATE 3 -	DELETE STAIR IN MRI AREA
DEDUCTIVE ALTERNATE 4 -	DELETE RENOVATION OF CORRIDOR C3-20 FLOOR AND WALL FINISHES
DEDUCTIVE ALTERNATE 5 -	DELETE RENOVATION OF WAITING ROOM M3-203A, NOURISHMENT M3-209, SOILED LINEN STORAGE M3-205B, VISITOR TOILET M30205A, AND NETWORK CLOSET F-155
DEDUCTIVE ALTERNATE 6 -	DELETE RENOVATION OF 3PATIENT ROOMS (M3-223, M3-224 & M3-225) ALONG WITH RESTROOMS STORAGE AND CORRIDOR ADJACENT



F1 CIVIL SITE PLAN - TEMPORARY MRI LOCATIONS - HONORS CAMPUS
1"=10'

Revisions:	Date:

CONSULTANT

BOB D. CAMPBELL & CO.
Structural Engineers Since 1957

MES GROUP

ARCHITECT/ENGINEER OF RECORD

A/E:
TRIPLE C THE A&E GROUP
2625 LINDELL BLVD, 2ND FLOOR, 2063
ST. LOUIS, MO 63108
MAT PERKINS
520-481-8548

TRIPLE C - THE A&E GROUP
A MULTI-DISCIPLINE COMPANY

STAMP

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title
CIVIL - SITE PLAN
TEMPORARY MRI LOCATIONS
- HONORS CAMPUS

Phase
ISSUED FOR BIDDING

Project Title
KCVA - Inpatient Medicine Bed Addition

Location
4801 Linwood Blvd, Kansas City, MO 64128

Issue Date
JULY 21, 2022

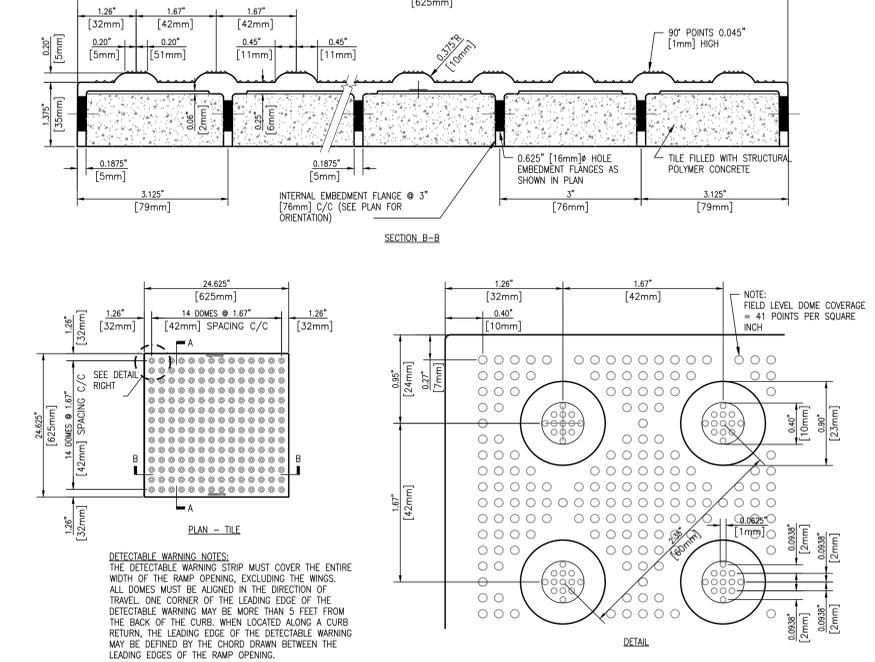
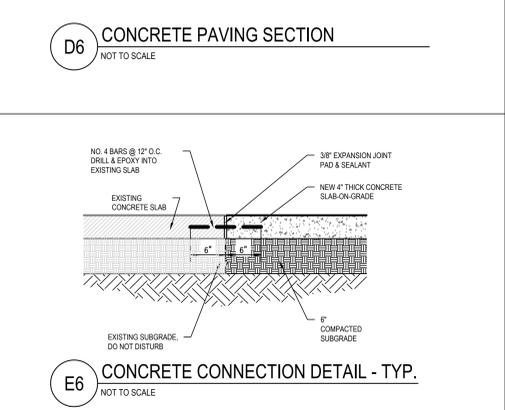
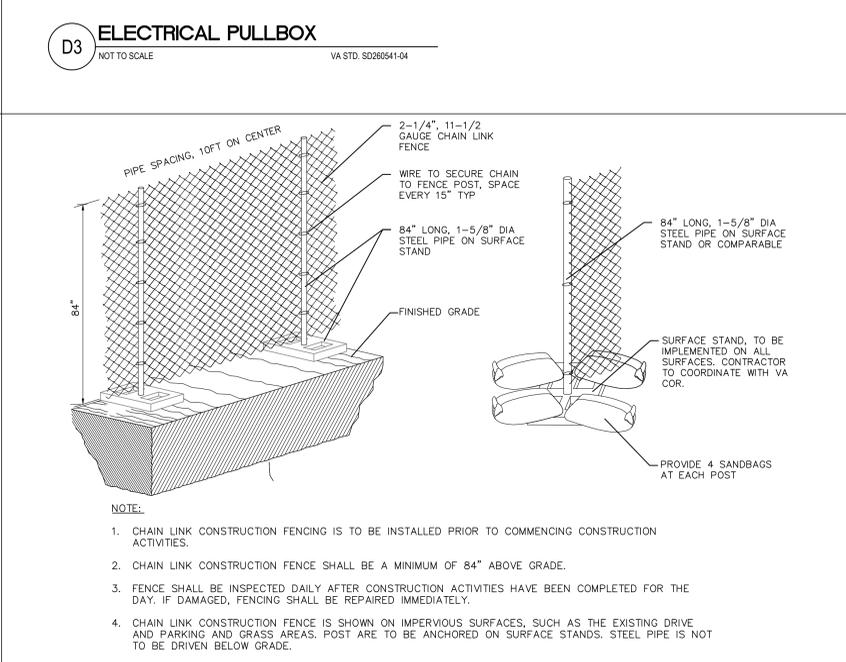
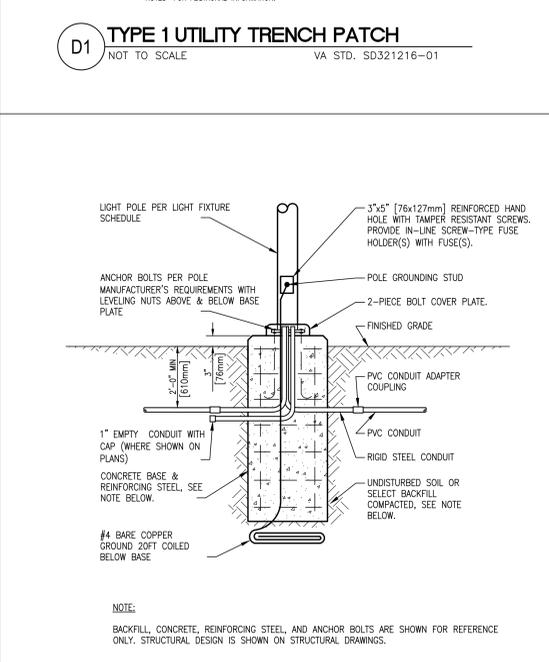
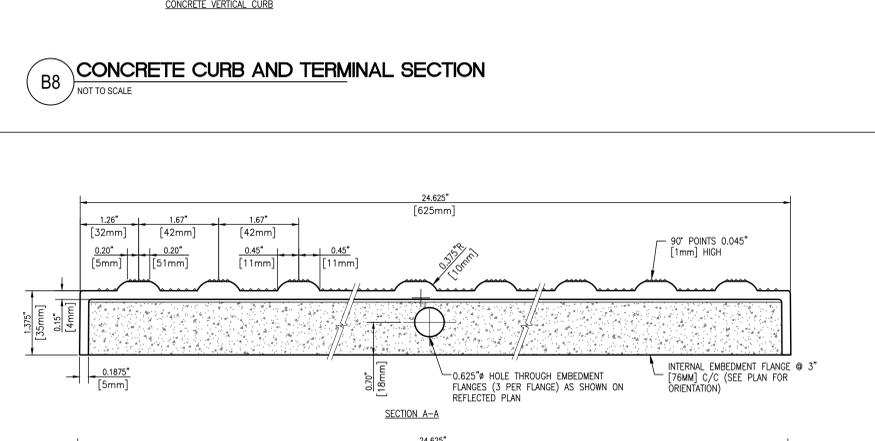
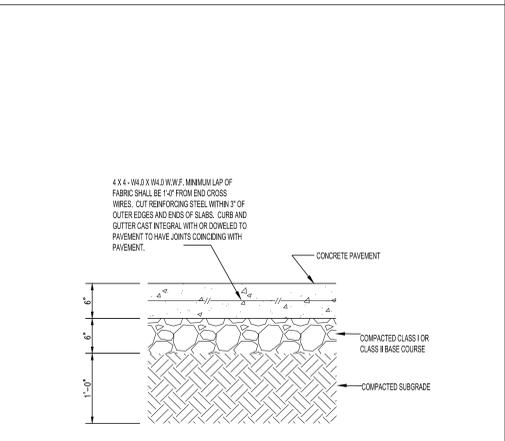
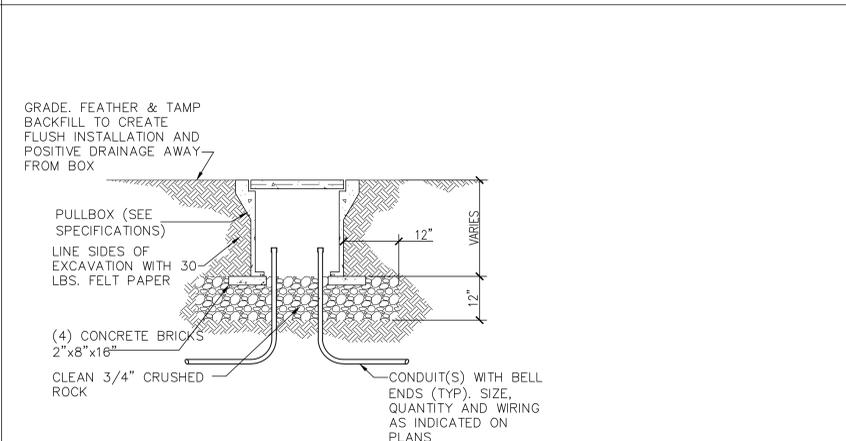
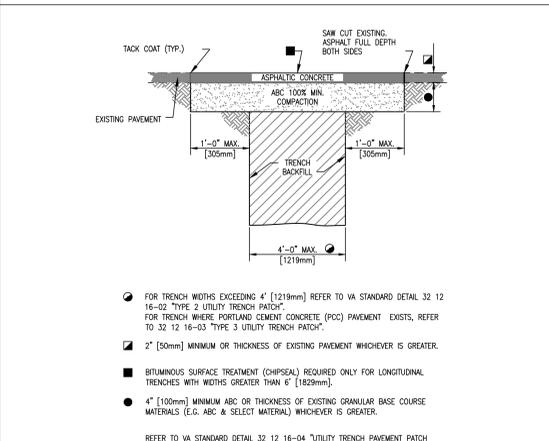
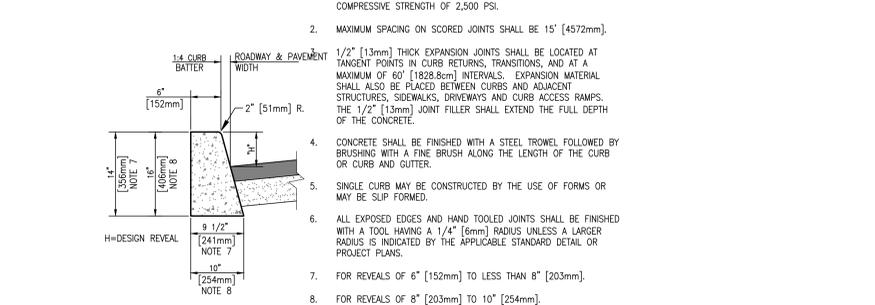
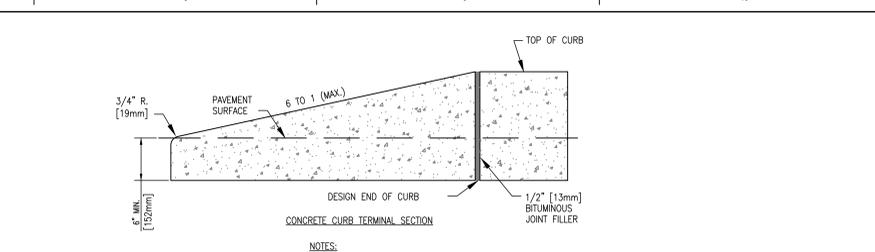
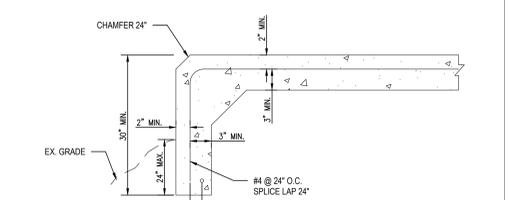
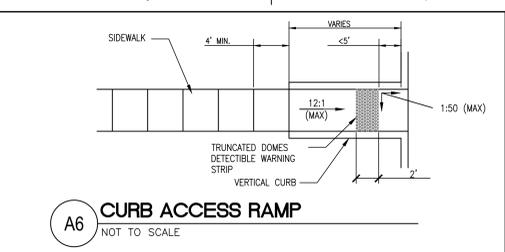
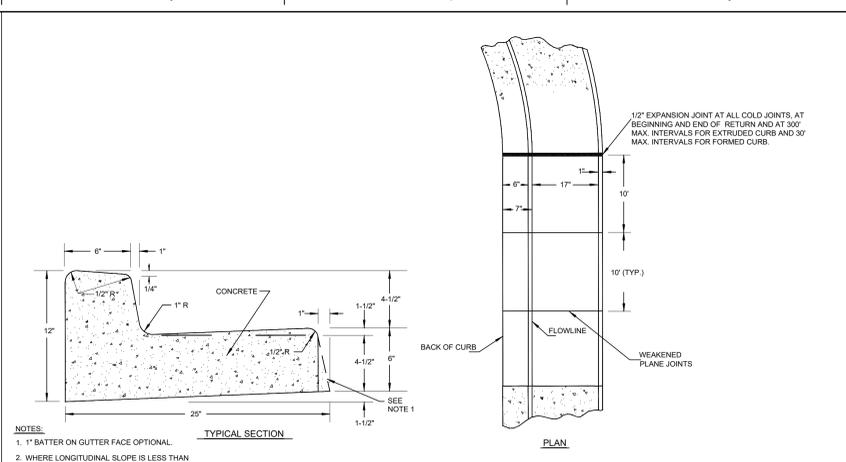
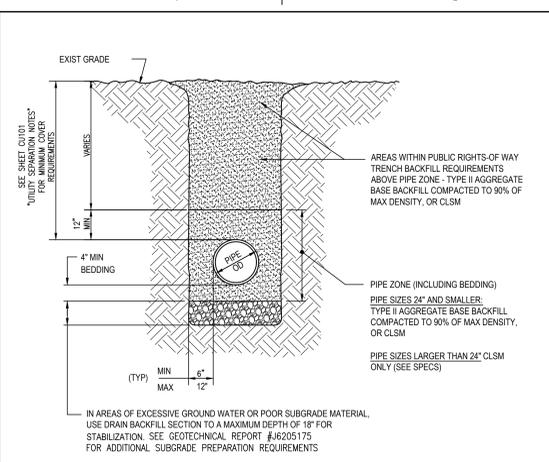
Checked
PERKINS

Drawn
STRUBLE

Project Number
589-017

Building Number
B1

Drawing Number
CS101B



Revisions:	Date:

CONSULTANT 	ARCHITECT/ENGINEER OF RECORD 	Office of Construction and Facilities Management 	Drawing Title CIVIL - DETAIL SHEET	Phase ISSUED FOR BIDDING	Project Title KCVA - Inpatient Medicine Bed Addition	Project Number 589-017
BOB D. CAMPBELL & CO. Structural Engineers Since 1957	MES GROUP	VA U.S. Department of Veterans Affairs	Approved:	Location 4801 Linwood Blvd, Kansas City, MO 64128	Building Number B1	Drawing Number CS501A
Issue Date JULY 21, 2022	Checked PERKINS	Drawn STRUBLE	Expires: 12/31/23	Issue Date JULY 21, 2022	Checked PERKINS	Drawn STRUBLE

NOTE:
 THE CONTRACTOR SHALL PROVIDE A QUALIFIED SWPPP DEVELOPER (QSD) WHO WILL BE RESPONSIBLE FOR DEVELOPING A STORMWATER POLLUTION PREVENTION PLAN FOR THIS PROJECT. THE QSD WILL ACT AS A DATA SUBMITTER FOR THE VA, WITH THE FILING OF THE NOTICE OF INTENT TO THE WISCONSIN STATE WATER RESOURCES CONTROL BOARD FOR COVERAGE UNDER THE CONSTRUCTION GENERAL PERMIT. THE CONTRACTOR SHALL BE RESPONSIBLE TO PAY ALL FEES ASSOCIATED WITH THIS PERMIT, WHICH INCLUDE, BUT ARE NOT LIMITED TO, THE NOTICE OF INTENT FILING AND ANNUAL FEES FOR MAINTAINING COVERAGE UNDER THIS PERMIT. THE CONTRACTOR WILL BE RESPONSIBLE FOR REVIEWING AND IMPLEMENTING THE PROVISIONS SPECIFIED IN THE SWPPP AND THE EROSION CONTROL PLANS. THE CONTRACTOR SHALL ALSO PROVIDE A QUALIFIED SWPPP PRACTITIONER (QSP) WHO WILL BE RESPONSIBLE FOR IMPLEMENTING THE SWPPP AND WILL ASSIST THE VA IN THE FILING OF A NOTICE OF TERMINATION TO THE STATE WATER RESOURCES CONTROL BOARD AT THE END OF THE PROJECT.

SURVEY DISCLAIMER
 SURVEY INFORMATION OF SITE DETERMINED FROM VA SUPPLIED AS-BUILT DRAWINGS AND PHOTOGRAPHIC, VISUAL, AND LIDAR SURVEY CONDUCTED BY TRIPLE C. CONSTRUCTION HAS OCCURRED ON THIS SITE SINCE THE SURVEY WAS COMPLETED. CONDITION OF THE SITE MAY VARY FROM THE SURVEYED CONDITION. UTILITY LOCATIONS ARE IN APPROXIMATE LOCATION. CONTRACTOR TO VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION TO PROVIDE NON-INTERRUPTION OF SERVICE, TO ENSURE PROPER CLEARANCE/SEPARATION, AND TO AVOID DAMAGE THERETO. UTILITIES DAMAGED THROUGH NEGLIGENCE OF THE CONTRACTOR TO OBTAIN LOCATION OF SAME SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

	EXISTING	PROPOSED
	CONCRETE	
LIMITS OF CONSTRUCTION		
BACK OF CURB		
SIDEWALK		
FLOW LINE		
CONSTRUCTION FENCING		
SANITARY SEWER MANHOLE		
STORM DRAIN MANHOLE		
SEWER CLEAN-OUT		
STORM DRAIN INLET		
STREET LIGHT		
SLOPE AND FLOW DIRECTION		
SAW-CUT LINE		
GRAVEL BAG		

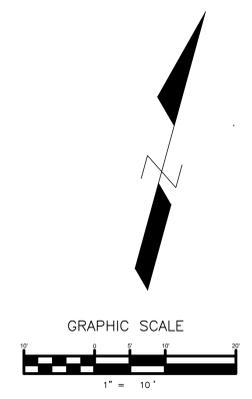
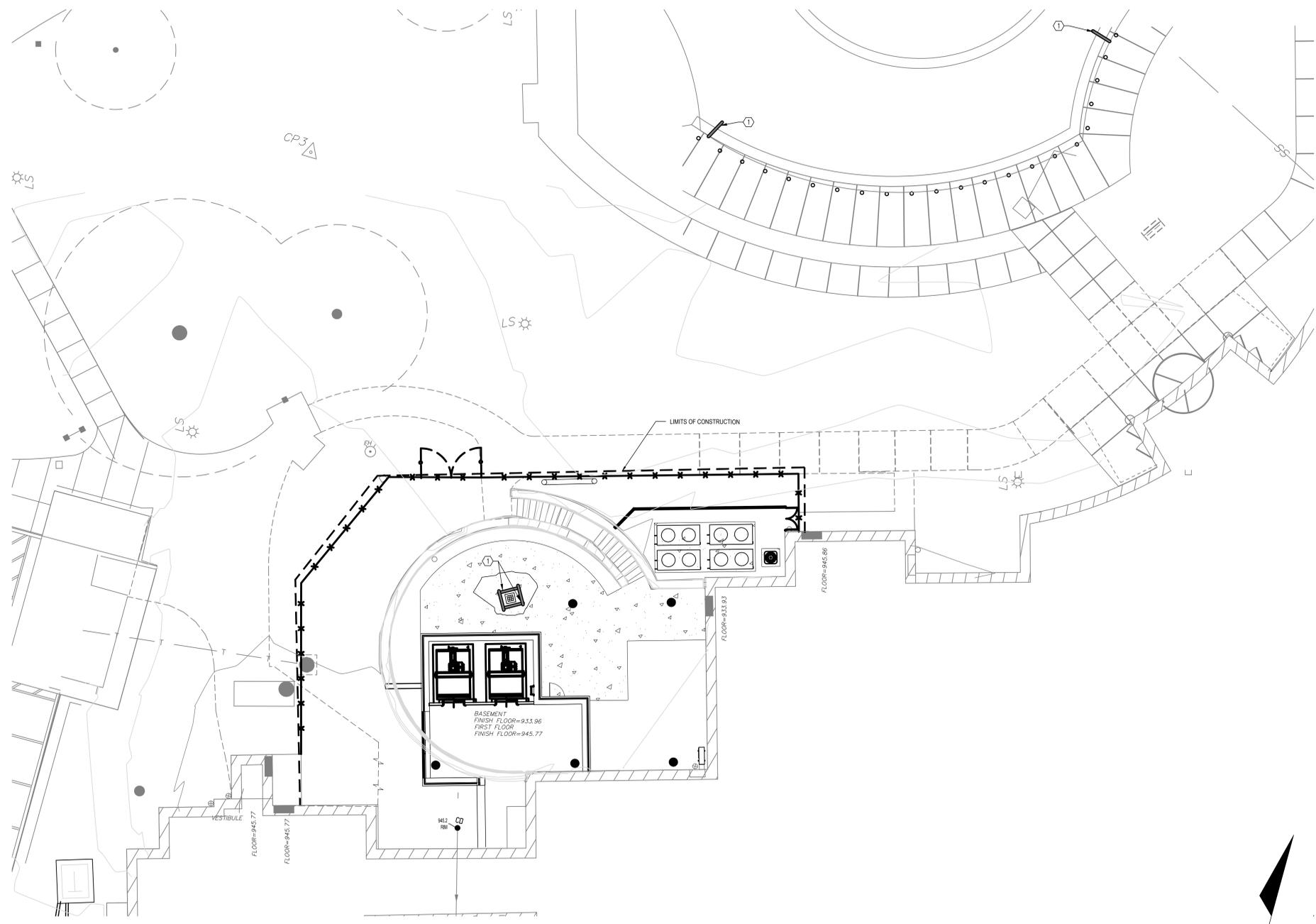
CONSTRUCTION NOTES LEGEND

(1) CONSTRUCT GRAVEL BAG INLET PROTECTION

- GRADING NOTES**
- EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON SHEET 05501.
 - THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
 - ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "GEO-TECHNICAL INVESTIGATION", AS PROVIDED BY THE ARCHITECT OR OWNER. ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREIN, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT'S (FIRST PRIORITY) SPECIFICATIONS, AND/OR THE KANSAS CITY CODE OF ORDINANCES (SECOND PRIORITY).
 - EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.
 - IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.
 - THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY. THIS SHOULD BE ACHIEVED BY CONSTRUCTING TEMPORARY BARRIERS OR SILT FENCE AT THE PROPERTY LINES AND NETTING THE SOIL TO PROTECT IT FROM WIND EROSION.
 - A DISPOSAL SITE FOR ANY & ALL EXCAVATION MATERIAL, AND UNSUITABLE MATERIAL AND/OR A BORROW SITE CONTAINING ACCEPTABLE FILL MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL OR BORROW SITE AND HAUL TO OR FROM SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASURE OR PAYMENT SHALL BE MADE.
 - PAVING AND ROADWAY GRADES SHALL BE +/- 0.1" FROM PLAN ELEVATIONS. PAD ELEVATIONS SHALL BE +/- 0.05" FROM BUILDING PLAN ELEVATION.
 - VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION. (SEE SITE PLAN SHEET 05101).

SWPPP QUANTITIES

DESCRIPTION	QUANTITY	UNITS
GRAVEL BAG	6	EA



F1 CIVIL STORMWATER PROTECTION PLAN - NORTH
 1"=10'

Revisions:

No.	Description	Date

CONSULTANT

BOB D. CAMPBELL & CO.
 Structural Engineers Since 1957

MES GROUP

ARCHITECT/ENGINEER OF RECORD

A/E:
 TRIPLE C THE A&E GROUP
 2625 LINDELL BLVD, 2ND FLOOR, 2064
 ST. LOUIS, MO 63108
 MAT PERKINS
 520-481-8548

TRIPLE C - THE A&E GROUP
 A MULTI-DISCIPLINE COMPANY

STAMP

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title
 CIVIL - STORMWATER PROTECTION PLAN NORTH

Approved:

Phase
 ISSUED FOR BIDDING

Project Title
 KCVA - Inpatient Medicine Bed Addition

Location
 4801 Linwood Blvd, Kansas City, MO 64128

Issue Date
 JULY 21, 2022

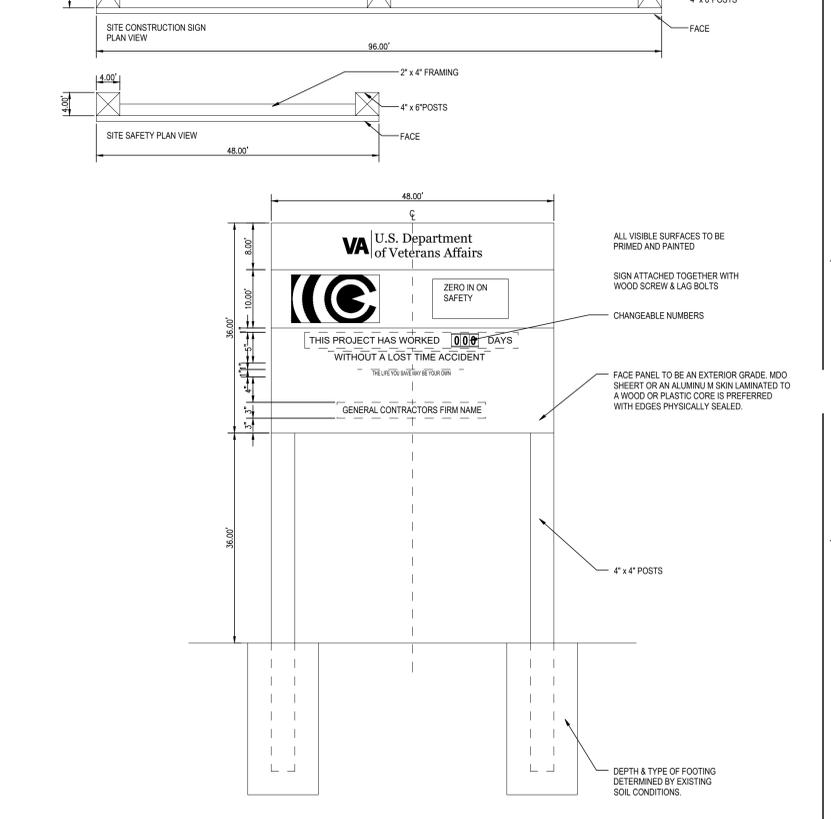
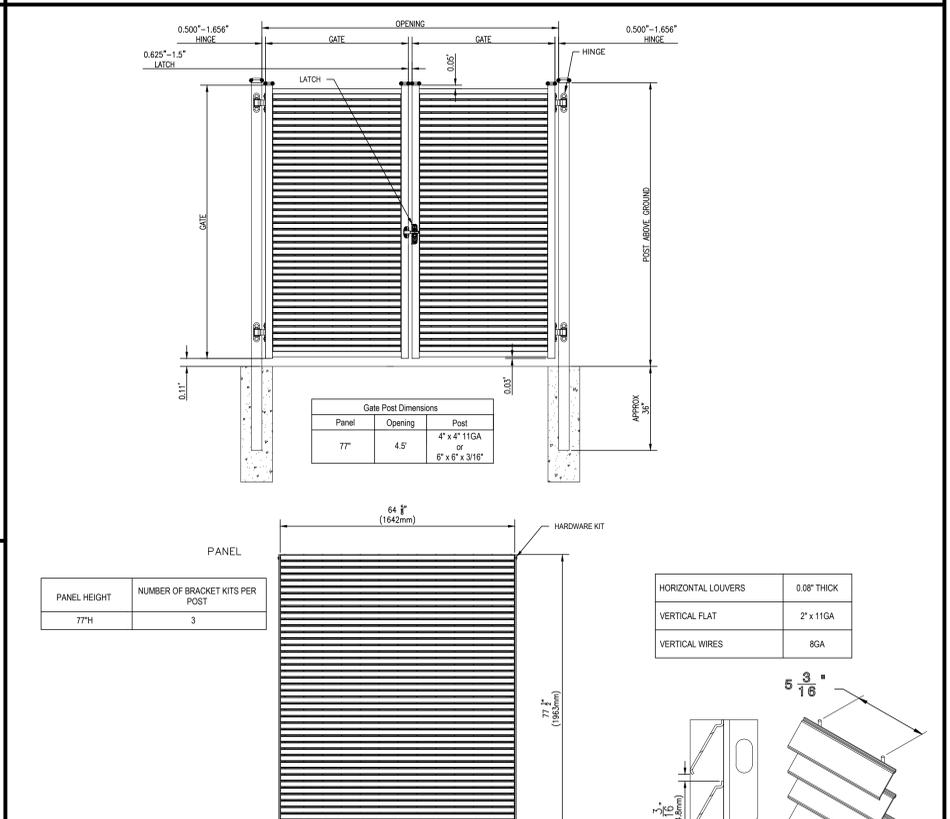
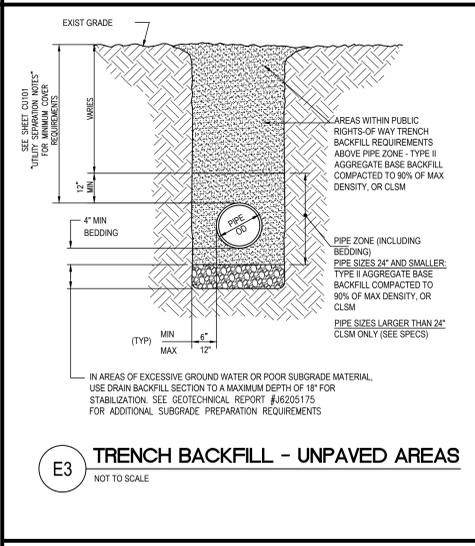
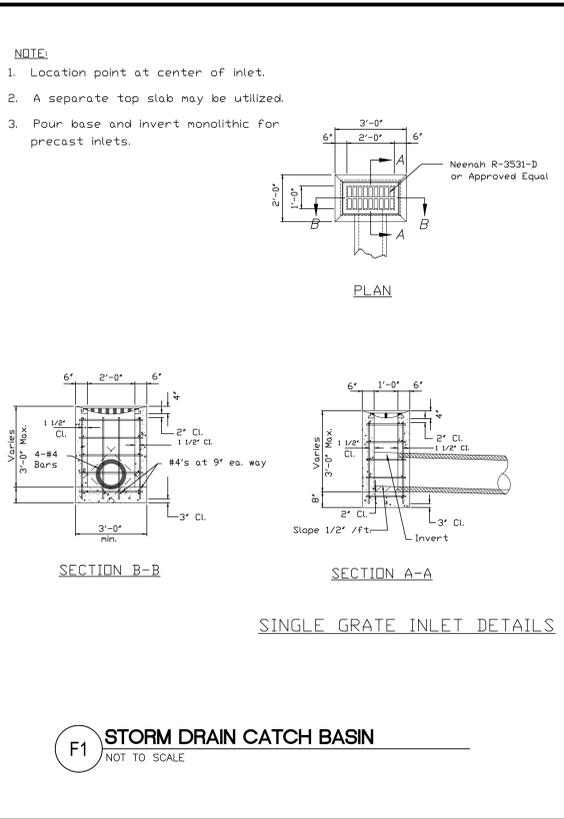
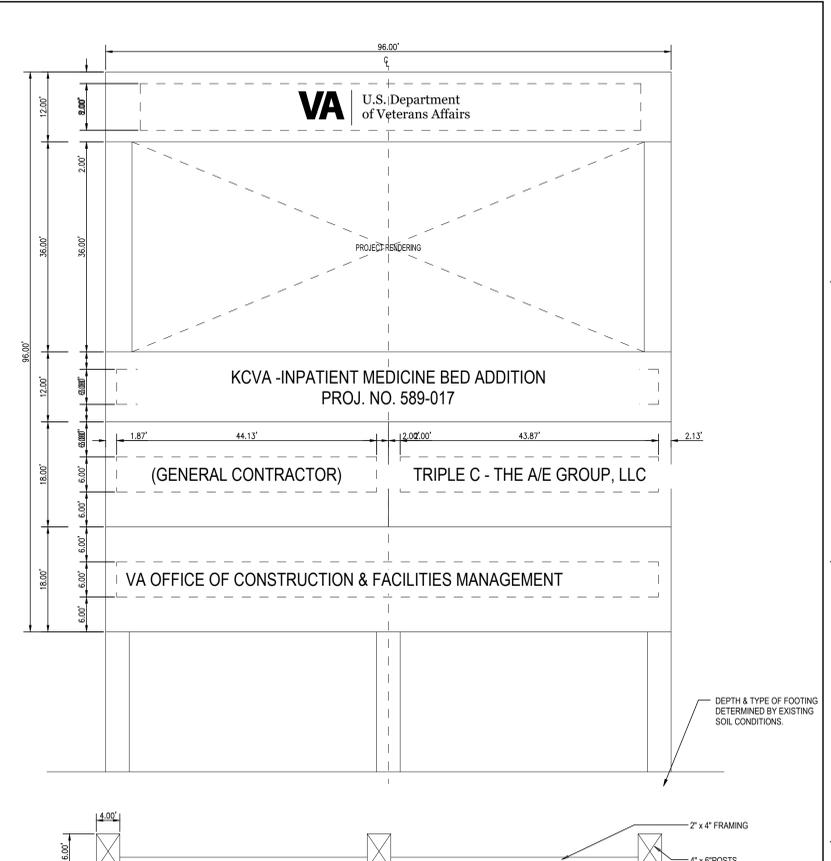
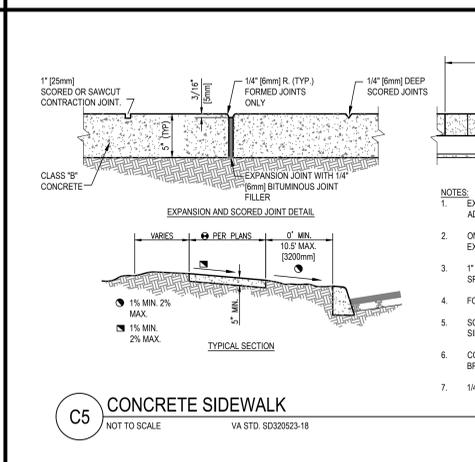
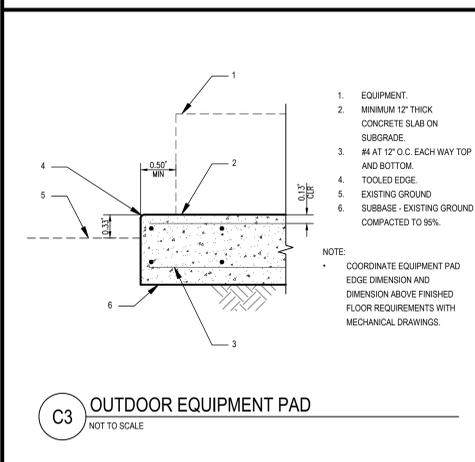
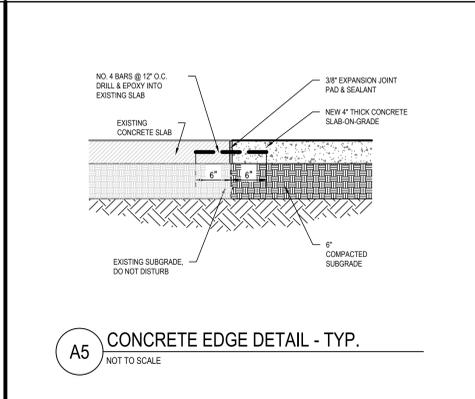
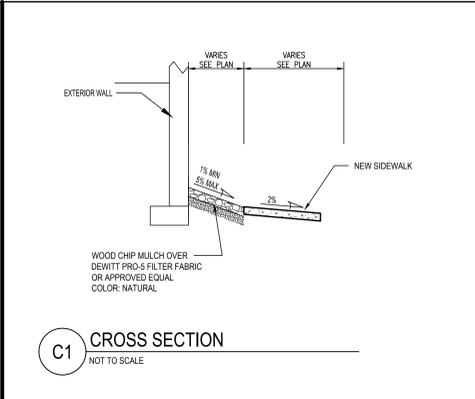
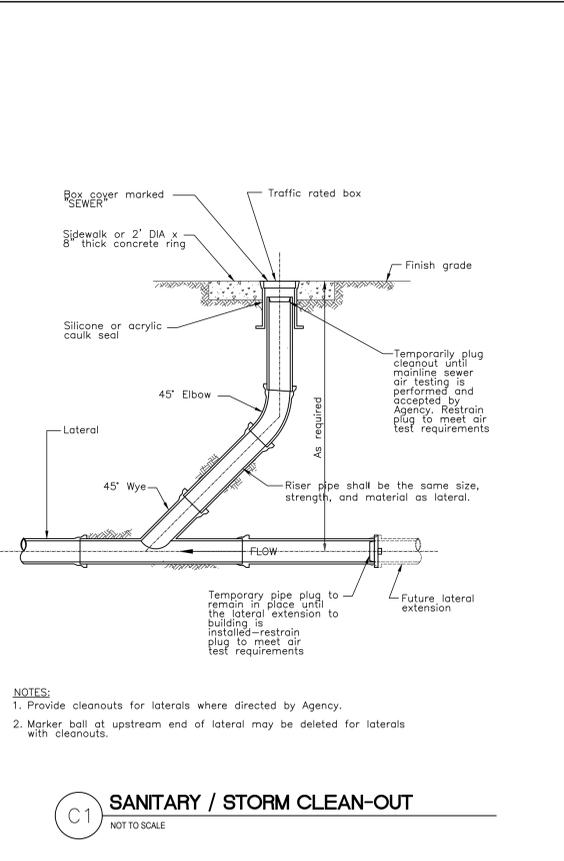
Checked
 PERKINS

Drawn
 STRUBLE

Project Number
 589-017

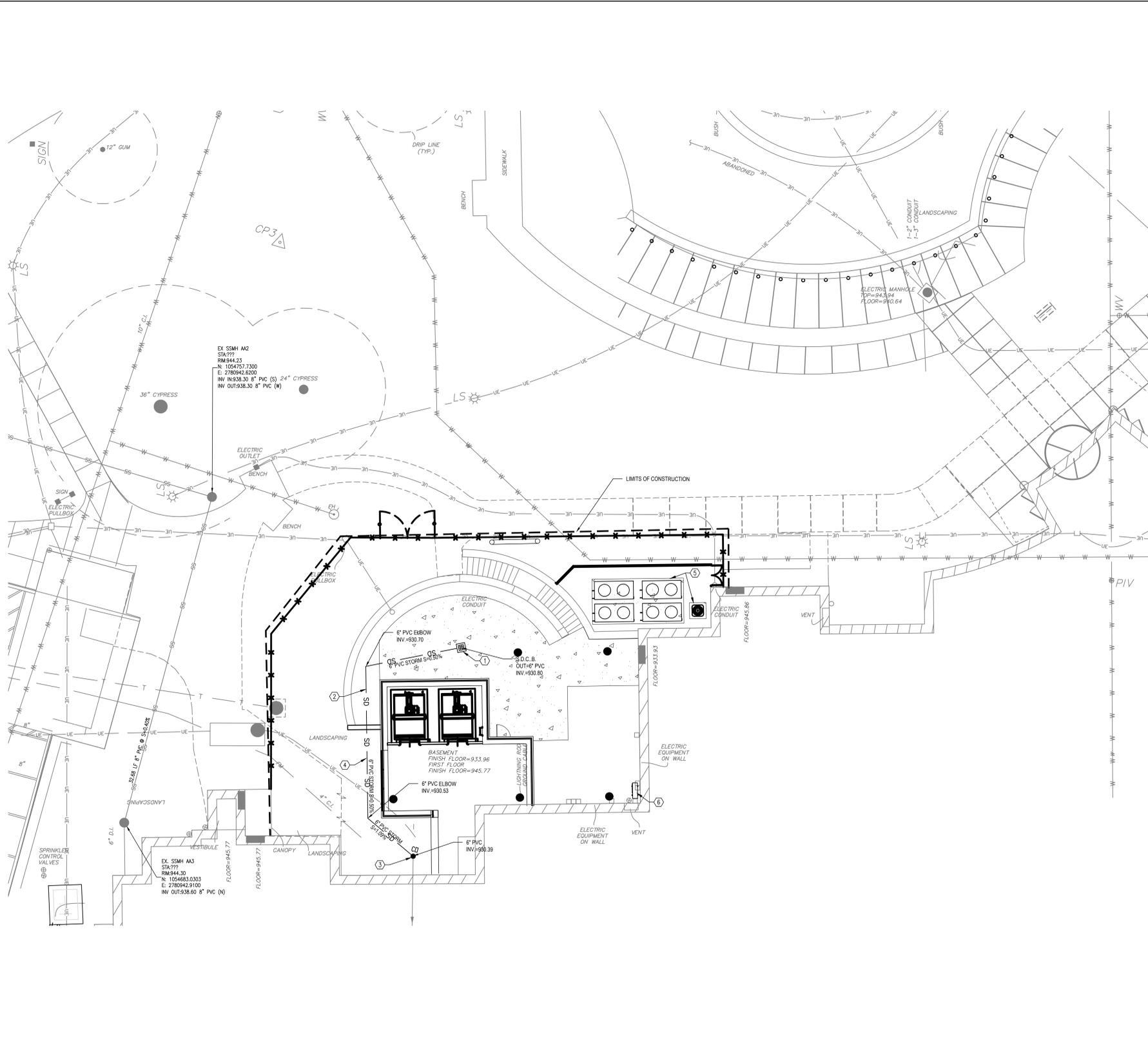
Building Number
 B1

Drawing Number
 CG102



<p>Revisions:</p> <p>Date:</p>	<p>CONSULTANT</p> <p>BOB D. CAMPBELL & CO. Structural Engineers Since 1957</p> <p>MES GROUP</p>	<p>ARCHITECT/ENGINEER OF RECORD</p> <p>A/E: TRIPLE C THE A & E GROUP 2625 LINDELL BLVD, 2ND FLOOR, 2064 ST. LOUIS, MO 63108 MAT PERKINS 520-481-8548</p> <p>TRIPLE C - THE A&E GROUP A MULTI-DISCIPLINE COMPANY</p>	<p>STAMP</p> <p>Office of Construction and Facilities Management VA U.S. Department of Veterans Affairs</p>	<p>Drawing Title CIVIL - GRADING DETAILS</p> <p>Approved:</p>	<p>Phase ISSUED FOR BIDDING</p>	<p>Project Title KCVA -Inpatient Medicine Bed Addition</p> <p>Location 4801 Linwood Blvd, Kansas City, MO 64128</p> <p>Issue Date JULY 21, 2022</p> <p>Checked PERKINS</p> <p>Drawn STRUBLE</p>	<p>Project Number 589-017</p> <p>Building Number B1</p> <p>Drawing Number CG501</p>
--------------------------------	---	---	---	---	-------------------------------------	---	---

VA FORM 08-6231



UTILITY SEPARATION NOTES

APPLICABLE NOTES FROM THE CURRENT IN-PLACE REQUIREMENTS FOR DEPARTMENT OF VETERANS AFFAIRS FACILITIES: 'SITE DEVELOPMENT DESIGN MANUAL - FEBRUARY 2013'

5.2 GENERAL UTILITY DESIGN REQUIREMENTS
 5.2.1 CLEARANCES AND CROSSINGS
 THE A/E SHALL DESIGN THE SITE WITH THE FEWEST CROSSINGS OF UTILITIES POSSIBLE. THE A/E SHALL CONSIDER THE FOLLOWING ORDER OF PRIORITY FOR UNDERGROUND FACILITIES:
 • SANITARY SEWER
 • STORM SEWER
 • WATER MAIN
 • OTHER UTILITIES

5.2.6 MINIMUM DEPTH OF COVER
 INDICATE BY NOTES ON DRAWINGS OR DETAIL SECTION, THE MINIMUM DEPTH OF COVER REQUIRED OVER EACH SPECIFIC UTILITY SYSTEM. ALL BURIED UTILITIES SHALL HAVE UNDERGROUND DETECTABLE WARNING TAPE INSTALLED IN THE TRENCH.
 MINIMUM COVER FOR STORM SEWER LINES SHALL BE AT LEAST 2'-0" (600 MM) FROM FINISH GRADES.
 • TOP OF POTABLE WATER, CHILLED WATER, FUEL AND APPURTENANCES SHALL BE AT LEAST 1'-0" (300 MM) BELOW FROST PENETRATION.
 • THE MINIMUM DEPTH OF SANITARY SEWER LINES AT THE TERMINUS POINT SHALL BE 4'-0" (1200MM), WHERE PRACTICAL. TOP OF SEWERS SHALL BE AT LEAST 1'-0" (300 MM) BELOW FROST PENETRATION, WHERE SUCH DEPTH BELOW IS NOT PRACTICAL. PROVIDE FROST PROTECTION AND/OR SUPPORTING FOUNDATIONS TO A DEPTH BELOW THE FROST LINE AND SECURELY FASTEN SEWER TO FOUNDATION.

5.2.7 UTILITIES DISTRIBUTION TYPE
 THE UTILITY DISTRIBUTION TYPE SHALL BE DETERMINED ON A PROJECT BY PROJECT BASIS. THE A/E MUST CONSIDER THE EXISTING SITE CONDITIONS AND BUDGET WHEN DECIDING WHAT TYPE TO USE.

5.2.7.1 TRENCHES. GENERALLY, DO NOT INSTALL MORE THAN ONE UTILITY SYSTEM IN THE SAME TRENCH. HOWEVER, DUE TO SITE CONSTRAINTS AND VALUE ENGINEERING CONCEPTS, MULTIPLE UTILITIES IN THE SAME TRENCH WILL BE EVALUATED BY THE GOVERNMENT ON A PER CASE BASIS. PRIOR TO APPROVING ANY MULTIPLE LINE TRENCH, THE A/E SHALL DOCUMENT THAT THE USE OF THE MULTIPLE LINE TRENCH WILL NOT NEGATIVELY IMPACT THE UTILITY SYSTEM. ADEQUATE CLEARANCES ARE PROVIDED FOR THE OPERATION AND MAINTENANCE OF THE SYSTEMS, AND THAT THE JOINT TRENCH WILL NOT POSE ANY CONTRACTIBILITY CONSTRAINTS. THERE MUST BE A MINIMUM OF 12" (300 MM) BETWEEN THE OUTSIDE DIAMETERS OF ALL PIPES TO OBTAIN THE REQUIRED COMPACTION.

5.2.8 HORIZONTAL CLEARANCE
 THE HORIZONTAL CLEARANCE SHALL BE MEASURED BETWEEN THE OUTSIDE DIMENSION OF THE PIPE, DUCT BANK, OR STRUCTURE.

5.2.8.1 WATER AND SANITARY SEWER:
 MAINTAIN A HORIZONTAL CLEARANCE BETWEEN POTABLE WATER MAINS AND GRAVITY FLOW SANITARY SEWERS/SANITARY SEWER FORCE MAINS OF AT LEAST 10 FEET (3M). THE HORIZONTAL CLEARANCE BETWEEN POTABLE WATER MAINS AND SANITARY SEWER MAINS MAY BE REDUCED TO 6'-0" (1800 MM) WHEN LOCAL CONDITIONS PREVENT A HORIZONTAL CLEARANCE OF 10'-0" (3 M). THE WATER MAIN INVERT IS A MINIMUM OF 18" (450 MM) ABOVE THE CROWN OF THE SEWER AND THE WATER MAIN IS IN A TRENCH, SEPARATED BY UNDISTURBED SOIL. WHEN THE SPECIFIED HORIZONTAL CLEARANCE CANNOT BE MET, THE WATER MAIN SHALL BE CONSTRUCTED WITH MECHANICAL JOINT DUCTILE IRON PIPE PER SPECIFICATION 33 100 - WATER UTILITIES, AND THE SANITARY SEWER SHALL BE CONSTRUCTED WITH MECHANICAL JOINT PRESSURE RATED DUCTILE IRON PIPE PER SPECIFICATION 33 30 00 - SANITARY SEWAGE UTILITIES. HORIZONTAL CLEARANCES SHALL COMPLY WITH THE REQUIREMENTS OF THE STATE HEALTH DEPARTMENT, DEPARTMENT OF ENVIRONMENTAL QUALITY, OR AGENCY GOVERNING THE FACILITY OF POTABLE WATER MAINS AND SYSTEMS.

5.2.8.2 WATER AND CHILLED WATER:
 MAINTAIN A HORIZONTAL CLEARANCE OF AT LEAST 6'-0" (1800MM) BETWEEN POTABLE WATER MAINS AND RECLAIMED/REUSE AND CHILLED WATER MAINS.

5.2.8.3 WATER AND STORM SEWER:
 MAINTAIN A HORIZONTAL CLEARANCE OF AT LEAST 5'-0" (1500MM) BETWEEN POTABLE WATER MAINS AND STORM SEWERS.

5.2.8.4 DUCT BANKS AND PIPED UTILITIES:
 MAINTAIN A HORIZONTAL CLEARANCE OF AT LEAST 3'-0" (900 MM) BETWEEN DUCT BANKS AND PIPED UTILITIES.

5.2.9 VERTICAL CLEARANCE
 THE VERTICAL CLEARANCE SHALL BE MEASURED BETWEEN THE OUTSIDE DIMENSION OF THE PIPE, DUCT BANK, OR STRUCTURE. FOR INSULATED PIPING, THE CLEARANCE SHALL BE MEASURED TO THE OUTSIDE OF THE INSULATION. AT UTILITY CROSSINGS WHERE ADEQUATE COMPACTION OF THE BEDDING MATERIAL CANNOT BE OBTAINED, USE FLOWABLE FILL IN THE ZONES WHERE COMPACTION IS IMPOSSIBLE OR IMPRACTICAL.

- MAINTAIN A MINIMUM VERTICAL CLEARANCE OF AT LEAST 1'-0" (300 MM) BETWEEN ALL UTILITIES AT CROSSINGS UNLESS OTHERWISE SPECIFIED BELOW.
- AT CROSSINGS OF POTABLE WATER MAINS AND SANITARY SEWERS, STORM SEWERS, FORCE MAINS, RECLAIMED/REUSE MAINS, OR CHILLED WATER MAINS, WHERE THE POTABLE WATER MAIN CROSSES ABOVE THE OTHER UTILITY, THE MINIMUM VERTICAL SEPARATION SHALL BE 18" (450 MM), OR AS REQUIRED BY THE STATE HEALTH DEPARTMENT, DEPARTMENT OF ENVIRONMENTAL QUALITY, OR AGENCY GOVERNING THE FACILITY OF POTABLE WATER, WHICHEVER IS GREATER.
 - WHERE 18" (450 MM) CANNOT BE MAINTAINED OR WHERE POTABLE WATER LINES CROSS UNDER GRAVITY SEWERS, RECLAIMED/REUSE MAINS, OR CHILLED WATER MAINS, ADDITIONAL PROTECTION SHALL BE PROVIDED AS REQUIRED BY THE AGENCY GOVERNING THE FACILITY OF POTABLE WATER. ADDITIONAL PROTECTION SHALL CONSIST OF CONSTRUCTING BOTH PIPING SYSTEMS WITH DUCTILE IRON PIPE WITH RESTRAINED MECHANICAL JOINTS OR USE OF CONCRETE ENCASEMENT. THE ADDITIONAL PROTECTION SHALL EXTEND A MINIMUM DISTANCE OF 10'-0" (3 M) OUTSIDE THE LIMITS OF THE CROSSING.
 - SANITARY SEWER FORCE MAINS SHALL ONLY CROSS UNDER POTABLE WATER MAINS WITH A MINIMUM VERTICAL CLEARANCE OF 18" (450 MM), WHEN THE VERTICAL CLEARANCE BETWEEN THE POTABLE WATER MAIN AND THE FORCE MAIN IS LESS THAN 18" (450 MM), BOTH THE WATER MAIN AND THE FORCE MAIN SHALL BE CONSTRUCTED WITH RESTRAINED MECHANICAL JOINT DUCTILE IRON PIPE AS INDICATED ABOVE FOR ADDITIONAL PROTECTION.
 - THE PREFERRED VERTICAL CLEARANCE BETWEEN DUCT BANKS AND PIPED UTILITIES SHALL BE 2'-0" (300 MM) AND THE MINIMUM VERTICAL CLEARANCE SHALL BE 18" (450 MM).
 - THE MINIMUM VERTICAL CLEARANCE TO ALL STEAM, PUMPED CONDENSATE, AND HOT WATER, AND OTHER UTILITIES SHALL BE AT LEAST 18" (450 MM), WHEN THIS VERTICAL CLEARANCE CANNOT BE MAINTAINED, THE INSULATION THICKNESS ON THE STEAM, CONDENSATE, OR HOT WATER MAIN SHALL BE INCREASED BY 50%.

DESCRIPTION	QUANTITY	UNITS
36" X 24" STORM DRAIN CATCH BASIN	1	EA
6" PVC STORM DRAIN PIPE	60	LF
12" PVC STORM DRAIN CLEAN-OUT	1	EA

NOTE:
 THE CONTRACTOR SHALL PROVIDE A "QUALIFIED SWPPP DEVELOPER" (QSD) WHO WILL BE RESPONSIBLE FOR DEVELOPING A STORMWATER POLLUTION PREVENTION PLAN FOR THIS PROJECT. THE QSD WILL ACT AS A DATA SUBMITTER FOR THE VA, WITH THE FILING OF THE NOTICE OF INTENT TO THE WISCONSIN STATE WATER RESOURCES CONTROL BOARD FOR COVERAGE UNDER THE CONSTRUCTION GENERAL PERMIT. THE CONTRACTOR SHALL BE RESPONSIBLE TO PAY ALL FEES ASSOCIATED WITH THIS PERMIT, WHICH INCLUDE, BUT ARE NOT LIMITED TO, THE NOTICE OF INTENT FILING AND ANNUAL FEES FOR MAINTAINING COVERAGE UNDER THIS PERMIT. THE CONTRACTOR WILL BE RESPONSIBLE FOR REVIEWING AND IMPLEMENTING THE PROVISIONS SPECIFIED IN THE SWPPP AND THE EROSION CONTROL PLANS. THE CONTRACTOR SHALL ALSO PROVIDE A "QUALIFIED SWPPP PRACTITIONER" (QSP) WHO WILL BE RESPONSIBLE FOR IMPLEMENTING THE SWPPP, AND WILL ASSIST THE VA IN THE FILING OF A NOTICE OF TERMINATION TO THE STATE WATER RESOURCES CONTROL BOARD AT THE END OF THE PROJECT.

SURVEY DISCLAIMER
 SURVEY INFORMATION OF SITE DETERMINED FROM VA SUPPLIED AS-BUILT DRAWINGS AND PHOTOGRAPHIC, VISUAL, AND LEAS SURVEY CONDUCTED BY TRIPLE C. CONSTRUCTION HAS OCCURRED ON THIS SITE SINCE THE SURVEY WAS COMPLETED. CONDITION OF THE SITE MAY VARY FROM THE SURVEYED CONDITION. UTILITY LOCATIONS ARE IN APPROXIMATE LOCATION. CONTRACTOR TO VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION TO PROVIDE NON-INTERRUPTION OF SERVICE, TO ENSURE PROPER CLEARANCE/SEPARATION, AND TO AVOID DAMAGE THERETO. UTILITIES DAMAGED THROUGH NEGLIGENCE OF THE CONTRACTOR TO OBTAIN LOCATION OF SAME SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

CONTRACTOR NOTE
 GENERAL CONTRACTOR TO RETAIN SERVICE FROM INDEPENDENT CONTRACTOR TO VERIFY AND MARK ON CONSTRUCTION DRAWINGS AND ON SITE THE LOCATION OF ALL UNDERGROUND UTILITIES ASSOCIATED WITH THIS PROJECT.

	EXISTING	PROPOSED
CONCRETE SIDEWALK		
LIMITS OF CONSTRUCTION SIDEWALK		
FENCE		
WATERLINE - FIRE		
SANITARY SEWER LINE		
STORM DRAIN LINE		
UNDERGROUND ELECTRICAL LINE		
UNDERGROUND GAS LINE		
SANITARY SEWER MANHOLE		
STORM DRAIN MANHOLE		
SEWER/STORM PVC CLEAN-OUT		
STORM DRAIN INLET		
WATER VALVE		
UTILITY LINE CAP		
FIRE HYDRANT		
FIRE DEPARTMENT CONNECTION		
STREETLIGHT		
TREE		

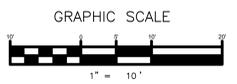
(1)	CONSTRUCT 36" X 24" STORM DRAIN CATCH BASIN - SEE DETAIL F1, SHEET CG501
(2)	CONSTRUCT 6" PVC STORM DRAIN PIPE - SEE DETAIL E3, SHEET CG501
(3)	CONSTRUCT 12" PVC STORM DRAIN CLEAN-OUT, CONNECT TO EXISTING 12" VCP PIPE - SEE DETAIL C1, SHEET CG501
(4)	BORE UNDER EXISTING WALL
(5)	CONSTRUCT MECHANICAL CONCRETE PAD, RE-INSTALL TRANSFORMER A.C. UNIT - SEE ELEC. PLUMBING PLANS FOR ADDITIONAL INFORMATION - SEE DETAIL C3, SHEET CG501
(6)	MECHANICAL UNIT - SEE MECHANICAL PLANS

1.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE INSTALLATION OF ALL WORK RELATED TO MECHANICAL UTILITIES AS SHOWN ON THIS PLAN INCLUDING: TRENCHING, BACKFILL, SUPPORTS, CLEANOUT PADS, SERVICE STOPS AND BOXES, SERVICE LINES, TESTING, CLEANING, AND STERILIZING. ANY WORK NOT ACCEPTED BY THE ARCHITECT OR ENGINEER DUE TO IMPROPER WORKMANSHIP OR LACK OF PROPER COORDINATION SHALL BE REMOVED AND CORRECTLY INSTALLED AT THE CONTRACTOR'S EXPENSE, AS DIRECTED.
2.	MINIMUM DEPTHS OF COVER SHALL BE: 36" FOR WATERLINES AND 48" FOR SEWER, EXCEPT AT BUILDING CONNECTION.
3.	ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL EXCEPT AS OTHERWISE STATED OR PROVIDED OF HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE IAPMO UNIFORM PLUMBING CODE & NFPA 24, LATEST EDITION.
4.	UTILITY LINES SHALL BE INSTALLED PRIOR TO PAVEMENT, CURB AND GUTTER, AND/OR SIDEWALK, AS APPLICABLE.
5.	ROUGH GRADING OF SITE (+/- 0.5') SHALL BE COMPLETED PRIOR TO INSTALLATION OF UTILITY LINES.
6.	CONTRACTOR WILL BE RESPONSIBLE FOR CONNECTIONS TO NEW AND EXISTING BUILDING DRAIN LINES AND ALL NECESSARY FITTINGS.
7.	ALL VALVES SHALL BE ANCHORED PER CITY OF MENLO PARK STANDARD DWG. WA-5.
8.	FIRE LINES SHALL USE PIPE MATERIALS UNDERWRITERS LABORATORIES LISTED AND APPROVED FOR FIRE SERVICE.
9.	UTILITY LOCATIONS DETERMINED FROM VA MASTER UTILITY PLAN. CONTRACTOR SHALL VERIFY INVERTS AND LOCATIONS OF EXISTING UTILITY LINES PRIOR TO BEGINNING OF WORK. ALL CONFLICTS SHALL BE BROUGHT TO ATTENTION OF THE C.O.R. AND RESOLVED PRIOR TO BEGINNING OF WORK.
10.	CONTRACTOR SHALL NOTIFY THE AUTHORITY HAVING JURISDICTION PRIOR TO INSTALLATION OF FIRE SERVICE LINES, AND PRIOR TO TESTING OF ALL WATERLINES. CONTRACTOR SHALL COMPLETE, SIGN, AND SUBMIT THE CONTRACTORS MATERIAL & TEST CERTIFICATE FOR UNDERGROUND PIPING IN ACCORDANCE WITH NFPA 24.

ELECTRICAL/COMMUNICATIONS NOTES:

- ALL ELECTRICAL CONDUIT SHOWN IS FOR REFERENCE ONLY. PLEASE SEE ELECTRICAL PLAN EP106 FOR DETAILED INFORMATION.
- COMMUNICATIONS CONDUIT SHOWN IS FOR REFERENCE ONLY. PLEASE SEE TECHNOLOGY SITE PLAN TS101 FOR DETAILED INFORMATION.

F1 CIVIL UTILITY PLAN - NORTH
 1"=10'



Revisions:	Date:

CONSULTANT
BOB D. CAMPBELL & CO.
 Structural Engineers Since 1957

MES GROUP

ARCHITECT/ENGINEER OF RECORD
 A/E:
 TRIPLE C THE A&E GROUP
 2625 LINDELL BLVD, 2ND FLOOR, 206
 ST. LOUIS, MO 63108
 MAT PERKINS
 520-481-8548

TRIPLE C - THE A&E GROUP
 A MULTI-DISCIPLINE COMPANY



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

Drawing Title CIVIL - UTILITY PLAN NORTH	Phase ISSUED FOR BIDDING
Approved:	

Project Title KCVA - Inpatient Medicine Bed Addition	Project Number 589-017
Location 4801 Linwood Blvd, Kansas City, MO 64128	Building Number B1
Issue Date JULY 21, 2022	Checked PERKINS
	Drawn STRUBLE

Drawing Number CU101
