MISSOURI STATE VETERANS CEMETERY EXPANSION AND IMPROVEMENT PROJECT

JACKSONVILLE VETERANS CEMETERY (JACKSONVILLE, MISSOURI) MO-17-15

STATE OF MISSOURI
R. GREGORY GARNER
NUMBER A-5443
05-19-2021
ARCHITECT

BID DOCUMENTS

MAY 19, 2021

Archimages
architecture | interiors & planning

OWNER: STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

DEPARTMENT OF PUBLIC SAFETY
MISSOURI VETERANS COMMISSION

PROJECT MANAGEMENT: OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

COUNTY: RANDOLPH COUNTY

STATE OF MISSOURI
PROJECT NUMBER: U2102-01
SITE NUMBER: 6904
ASSET NUMBER: 8136904009

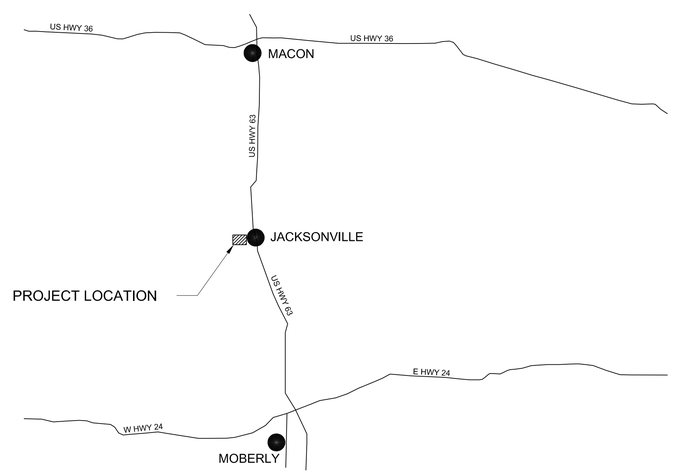
VETERANS CEMETERY
GRANTS PROGRAM: FAI MO-17-15

DESIGNER: ARCHIMAGES, INC.

ARCHIMAGES
PROJECT NUMBER: K20530

INTERMENT SPACES PROVIDED IN THIS PROJECT:

NEW IN-GROUND CASKET BURIAL: NONE
NEW IN-GROUND CREMATION BURIAL: NONE
NEW CREMATION NICHES: 960



VICINITY MAP

N

SHEET INDEX

NO.	DESCRIPTION
GENERAL	
G001	COVER SHEET
CIVIL	
C101	OVERALL PLAN & NOTES
C102	DRIVE WIDENING DEMO PLAN
C201	DRIVE WIDENING SITE PLAN
C202	DAM WALL AND RIP-RAP PLAN
C203	COLUMBARIUM PLAN
C204	SIDEWALK PLAN
C301	DRIVE WIDENING GRADING PLAN
C302	DAM WALL AND RIP-RAP GRADING PLAN
C303	COLUMBARIUM GRADING PLAN
C304	SIDEWALK GRADING PLAN
LANDSCAPE	
LP101	PLANTING PLAN, DETAILS & SCHEDULE
ARCHITECTURAL	
A101	NEW COLUMBARIUM PLAZA PLAN & ELEV'S
A102	ENLARGED PLAN, WALL SECTIONS & DETAILS
A103	EX. ADMINISTRATION & STORAGE FLOOR PLAN
A104	EX. ADMINISTRATION REFLECTED CEILING PLAN
A105	EX. WALL SECTIONS
A201	EX. COMMITTAL SHELTER PLAZA & ELEVATIONS
A202	EX. COMMITTAL SHELTER ELEVATIONS
A203	EX. COLUMBARIUM ELEVATIONS
A204	EX. COMMITTAL SHELTER SIDE ELEVATIONS
A205	EX. COLUMBARIUM WALLS ELEVATIONS
MECHANICAL/PLUMBING/ELECTRICAL	
MPE1.0	MPE SYMBOLS & ABBREVIATIONS
DM1.0	DEMO MECHANICAL PLAN
DE1.0	DEMO LIGHTING PLAN
M1.0	MECHANICAL PLAN
M5.0	MECHANICAL DETAILS & SCHEDULES
E1.0	LIGHTING PLAN
E1.1	SITE LIGHTING PLAN
E5.0	ELECTRICAL DETAIL & SCHEDULES

GENERAL NOTES:

CONTRACTOR WILL BE RESPONSIBLE FOR PLACEMENT AND MAINTENANCE OF TRAFFIC CONTROL DEVICES NECESSARY TO COMPLETE THEIR PORTION OF WORK. THE DEVICES AND METHODS EMPLOYED WILL COMPLY WITH THE CURRENT VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

EXISTING UTILITIES SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL COORDINATE LOCATES (HORIZONTAL AND VERTICAL) PRIOR TO ANY EXCAVATION.

ALL EXCAVATION TO BE IN ACCORDANCE WITH SECTIONS 319.010–319.050, REVISED STATUTES OF THE STATE OF MISSOURI. SUCH COMPLIANCE SHALL NOT, HOWEVER, EXCUSE ANY PERSON MAKING ANY EXCAVATION FROM DOING SO IN A CAREFUL AND PRUDENT MANNER, NOR SHALL IT EXCUSE SUCH PERSON FROM LIABILITY FOR ANY DAMAGE OR INJURY TO UNDERGROUND UTILITIES RESULTING FROM THE EXCAVATION.

A GEOTECHNICAL EVALUATION HAS BEEN PERFORMED BY CROCKETT GEOTECHNICAL TESTING LAB (GTL). REFER TO REPORT NUMBER G21622 DATED MARCH 8, 2021 BY CROCKETT GTL.

REFER TO STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR NARRATIVE REPORT AND BMP DESCRIPTIONS AND DETAILS.

ALL SLOPES ARE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.

IT IS THE INTENT OF THESE PLANS TO COMPLY WITH THE REQUIREMENTS OF THE MoDNR CLEAN WATER COMMISSION.

ALL DISTURBED TURF AREAS SHALL HAVE THE TOP SOIL REMOVED, STOCKPILED, AND RESPREAD AFTER CONSTRUCTION.

ALL DISTURBED TURF AREAS WITHIN THE "LIMITS OF DISTURBANCE" SHALL BE FINE GRADED AND HAVE SOD INSTALLED.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL DEVICES AND REMOVING THEM ONCE THE SITE IS STABILIZED.

ALL STORM SEWER PIPE TO BE SDR 35 PVC UNLESS OTHERWISE NOTED.

ALL STORM SEWER PIPE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. REFER TO DETAIL FOR PIPE BEDDING REQUIREMENTS.

IN ORDER TO TERMINATE A STATE OPERATING PERMIT THE MISSOURI DEPARTMENT OF NATURAL RESOURCES (MDNR) REQUIRES THAT THE PERMITTEE SUBMIT A COMPLETED FORM H (INCLUDED WITH THE APPROVAL PERMIT) TO THE MDNR. A PERMIT IS ELIGIBLE FOR TERMINATION WHEN EITHER PERENNIAL VEGETATION, PAVEMENT, BUILDINGS, OR STRUCTURES USING PERMANENT MATERIALS COVER ALL AREAS THAT HAVE BEEN DISTURBED. VEGETATIVE COVER SHALL BE AT LEAST 70% OF FULLY ESTABLISHED PLANT DENSITY OVER 100% OF THE DISTURBED AREA. A COPY OF FORM H SHOULD BE SUBMITTED TO THE CITY AT WHICH TIME THE CITY WILL REMOVE THE PROJECT FROM ITS INSPECTION SCHEDULE.

LAND DISTURBANCE SITES SHOULD BE INSPECTED ON A REGULAR SCHEDULE AND WITHIN A REASONABLE TIME PERIOD (NOT TO EXCEED 48 HOURS) FOLLOWING HEAVY RAINS. REGULARLY SCHEDULED INSPECTIONS SHALL BE AT A MINIMUM OF ONCE PER WEEK. ANY DEFICIENCIES SHALL BE NOTED WEEKLY AND CORRECTED WITHIN SEVEN CALENDAR DAYS.

TOTAL DISTURBED AREA = 1.2 AC.

MISSOURI DNR LAND DISTURBANCE PERMIT NUMBER TO BE DETERMINED.

TREES AND SHRUBS IN THE PROJECT LIMITS WHICH ARE IN CONFLICT WITH THE PROPOSED INFRASTRUCTURE SHALL BE REMOVED BY THE CONTRACTOR. OWNER MUST APPROVE ANY TREE/SHRUB REMOVAL. TREES AND SHRUBS TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION.

CONSTRUCTION WASTE FROM REMOVING INFRASTRUCTURE (RUBBLE, PAVEMENT, ETC.) SHALL BE DISPOSED OF OFF–SITE BY THE CONTRACTOR.

CONTRACTOR SHALL WORK WITHIN THE LIMITS OF DISTURBANCE TO KEEP DISTURBED AREAS TO A MINIMUM. ANY ADDITIONAL AREAS DISTURBED DURING CONSTRUCTION SHALL BE REESTABLISHED WITH SOD BY THE CONTRACTOR.

CONTRACTOR SHALL REPAIR DAMAGE TO EXISTING INFRASTRUCTURE INCIDENTAL TO CONSTRUCTION.

CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATING MISCELLANEOUS UTILITIES IN CONFLICT WITH THE PROPOSED INFRASTRUCTURE. COORDINATE RELOCATIONS WITH UTILITY PROVIDERS.

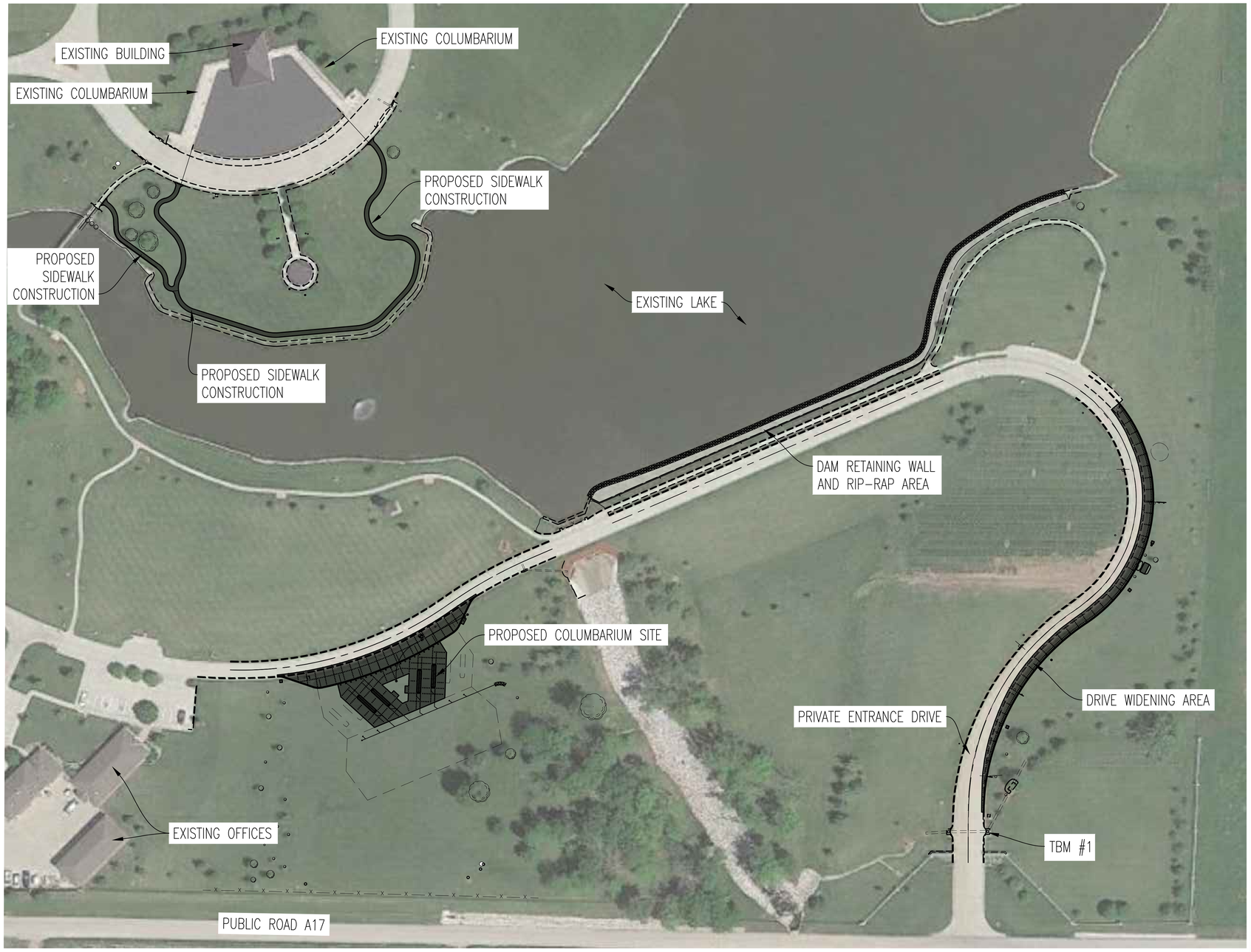
TEMPORARY BENCHMARK (TBM):

TBM #1 - TOP LID OF STORM INLET ON EAST SIDE OF DRIVE, LOCATED APPROXIMATELY 23' INSIDE OF FACILITY MAIN GATE ENTRANCE.
ELEVATION = 809.53

LOCATES:

MISSOURI ONE CALL INC.
1022 B NORTHEAST DRIVE
JEFFERSON CITY, MO 65109
1-800-344-7483

SCALE: 1"=60'
0 30 60 120



STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
ANDREW T. GREENE
NUMBER
PE-2020000043
PROFESSIONAL ENGINEER

PREPARED BY:

CROCKETT
ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. 1
Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#2000151301

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO #	U-2102-01
VCGP #	FAI MO-17-15
ARCHIMAGES #	K20530
SITE #	6904
ASSET #	8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: C-101.dwg
DRAWN BY: ATG
CHECKED BY: ATG
DESIGNED BY: ATG

SHEET TITLE:

OVERALL PLAN AND NOTES

SHEET NUMBER:

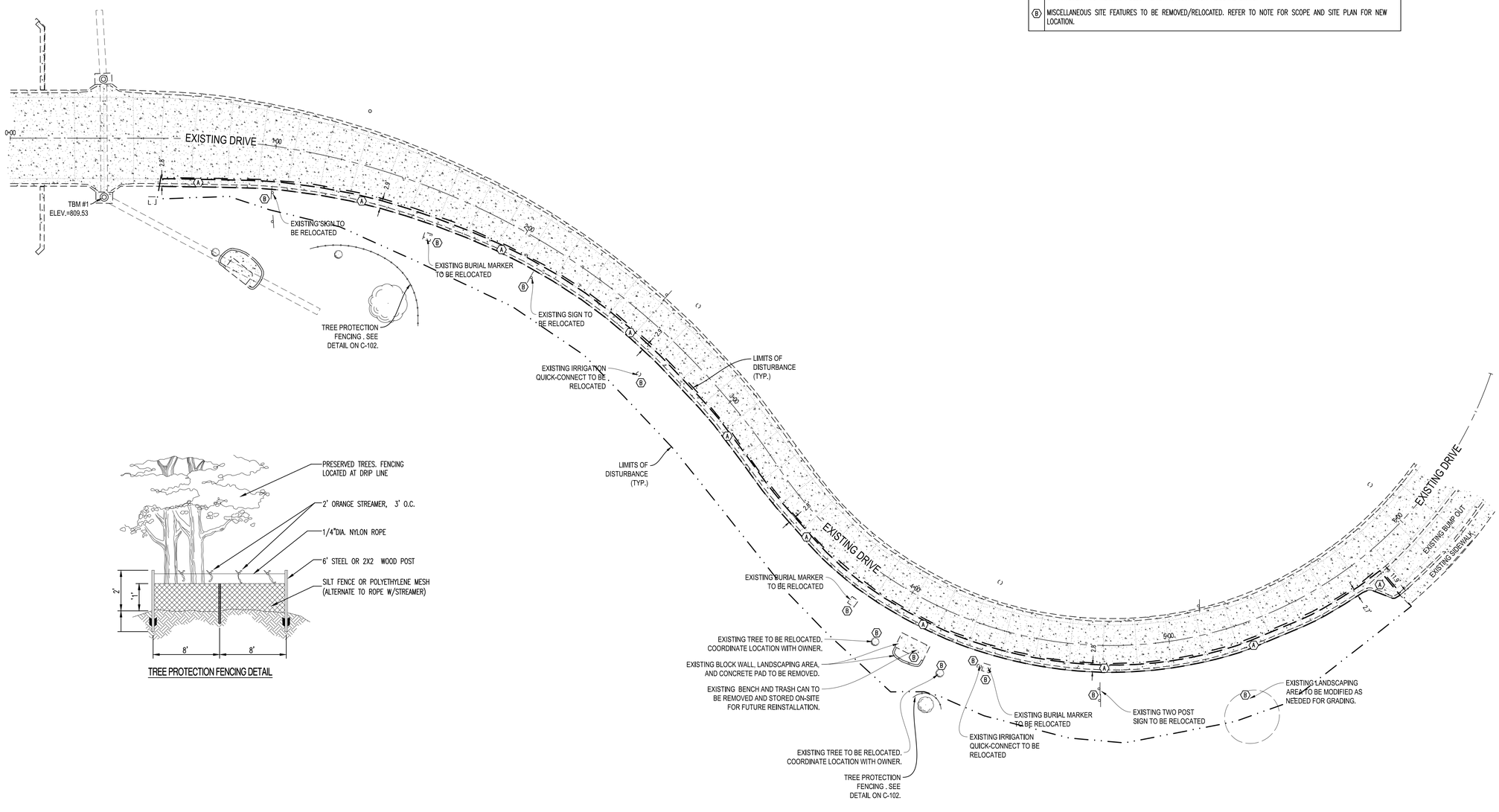
C-101

2 OF 30 SHEETS
MAY 19, 2021

SCALE: 1"=20'

0 10 20 40

KEY NOTES	
A	EXISTING CONCRETE PAVEMENT TO BE REMOVED FOR LANE WIDENING. PROVIDE CLEAN, FULL DEPTH SAW CUT AT LIMITS OF PAVEMENT TO REMAIN. FOLLOW EXISTING JOINT FOR REMOVAL LIMITS.
B	MISCELLANEOUS SITE FEATURES TO BE REMOVED/RELOCATED. REFER TO NOTE FOR SCOPE AND SITE PLAN FOR NEW LOCATION.



TREE PROTECTION FENCING DETAIL

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
ANDREW T. GREENE
NUMBER
PE-2020000043
PROFESSIONAL ENGINEER

PREPARED BY:

CROCKETT
ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. 1
Columbia, Missouri 65203
(573) 447-0292

www.crockettengineering.com

Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#2000151301

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO # U-2102-01
VCGP # FAI MO-17-15
ARCHIMAGES # K20530
SITE # 6904
ASSET # 8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: C-102.dwg
DRAWN BY: ATG
CHECKED BY: ATG
DESIGNED BY: ATG

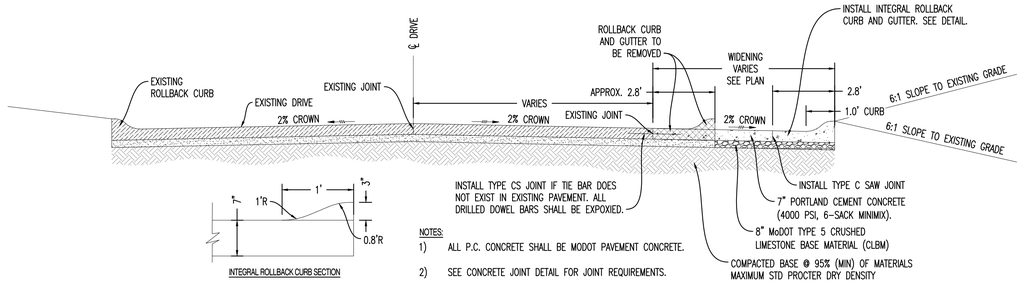
SHEET TITLE:

DRIVE WIDENING DEMO PLAN

SHEET NUMBER:

C-102

3 OF 30 SHEETS
MAY 19, 2021

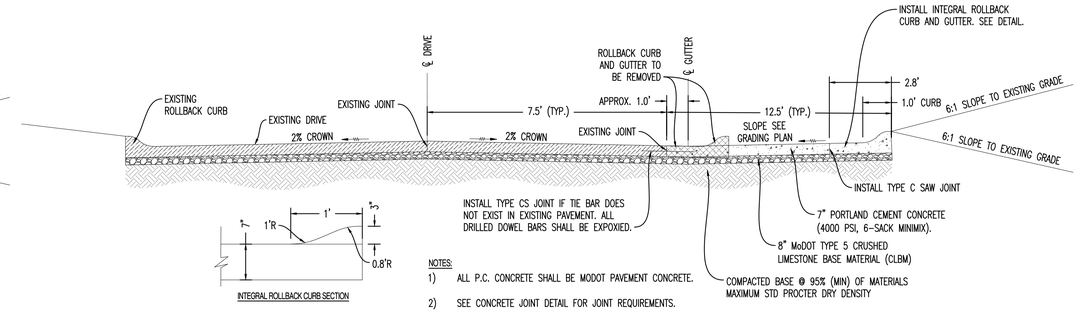


NOTES:

1) ALL P.C. CONCRETE SHALL BE MODOT PAVEMENT CONCRETE.

2) SEE CONCRETE JOINT DETAIL FOR JOINT REQUIREMENTS.

TYPICAL DRIVE WIDENING CROSS SECTION

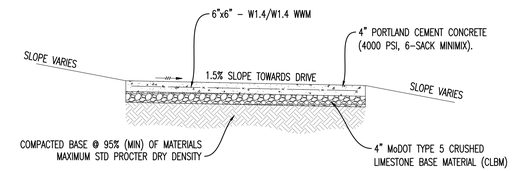


NOTES:

1) ALL P.C. CONCRETE SHALL BE MODOT PAVEMENT CONCRETE.

2) SEE CONCRETE JOINT DETAIL FOR JOINT REQUIREMENTS.

TYPICAL DRIVE WIDENING CROSS SECTION WITH GUTTER SECTION

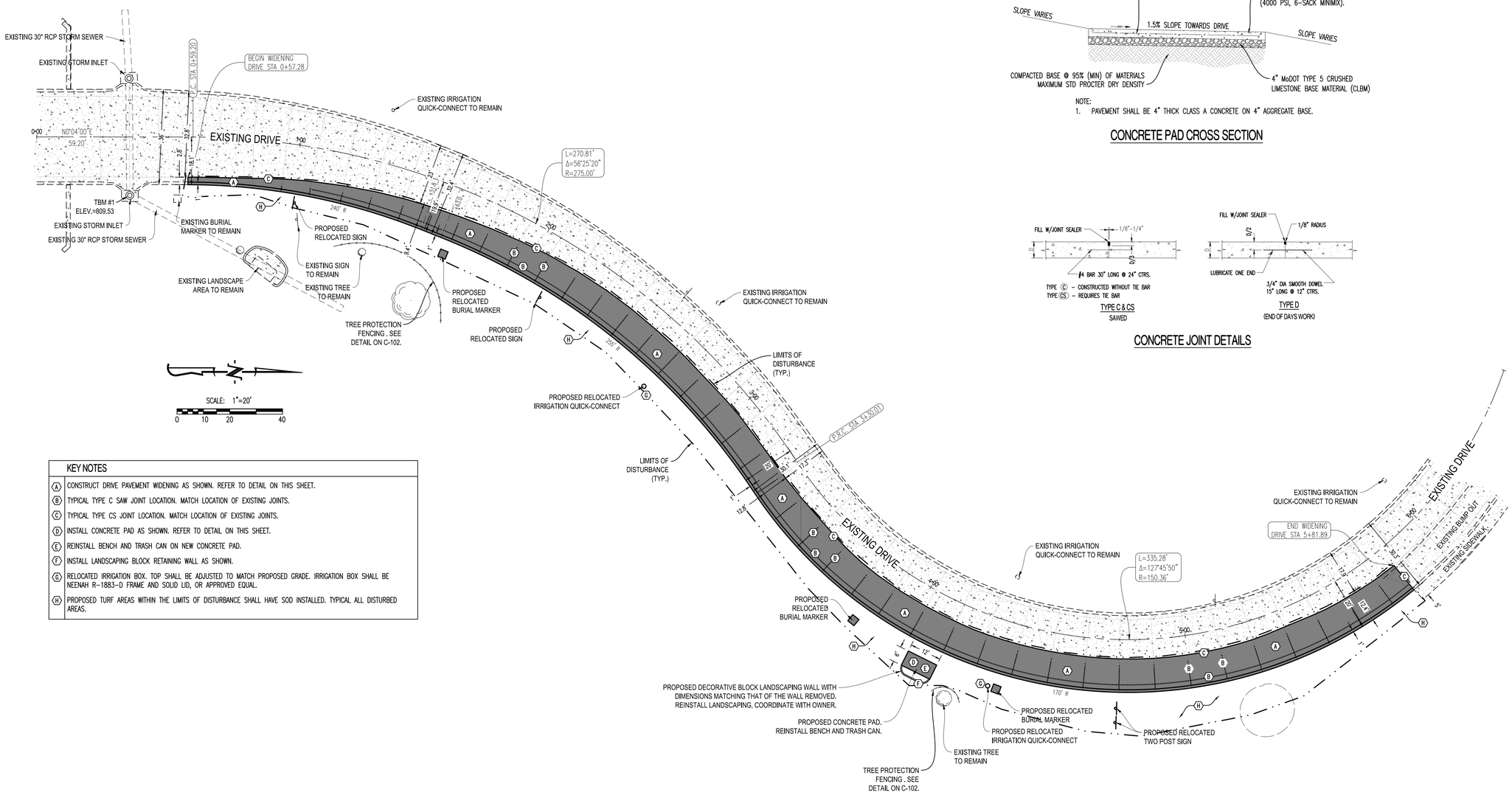


NOTE:

1. PAVEMENT SHALL BE 4" THICK CLASS A CONCRETE ON 4" AGGREGATE BASE.

CONCRETE PAD CROSS SECTION

CONCRETE JOINT DETAILS



KEY NOTES	
A	CONSTRUCT DRIVE PAVEMENT WIDENING AS SHOWN. REFER TO DETAIL ON THIS SHEET.
B	TYPICAL TYPE C SAW JOINT LOCATION. MATCH LOCATION OF EXISTING JOINTS.
C	TYPICAL TYPE CS JOINT LOCATION. MATCH LOCATION OF EXISTING JOINTS.
D	INSTALL CONCRETE PAD AS SHOWN. REFER TO DETAIL ON THIS SHEET.
E	REINSTALL BENCH AND TRASH CAN ON NEW CONCRETE PAD.
F	INSTALL LANDSCAPING BLOCK RETAINING WALL AS SHOWN.
G	RELOCATED IRRIGATION BOX. TOP SHALL BE ADJUSTED TO MATCH PROPOSED GRADE. IRRIGATION BOX SHALL BE NEENAH R-1883-D FRAME AND SOLID LID, OR APPROVED EQUAL.
H	PROPOSED TURF AREAS WITHIN THE LIMITS OF DISTURBANCE SHALL HAVE SOD INSTALLED. TYPICAL ALL DISTURBED AREAS.

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
ANDREW T. GREENE
NUMBER PE-2020000043
PROFESSIONAL ENGINEER

PREPARED BY:

CROCKETT ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. 1
Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#2000151301

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO #	U-2102-01
VCGP #	FAI MO-17-15
ARCHIMAGES #	K20530
SITE #	6904
ASSET #	8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: C-201.dwg
DRAWN BY: ATG
CHECKED BY: ATG
DESIGNED BY: ATG

SHEET TITLE:

DRIVE WIDENING SITE PLAN

SHEET NUMBER:

C-201

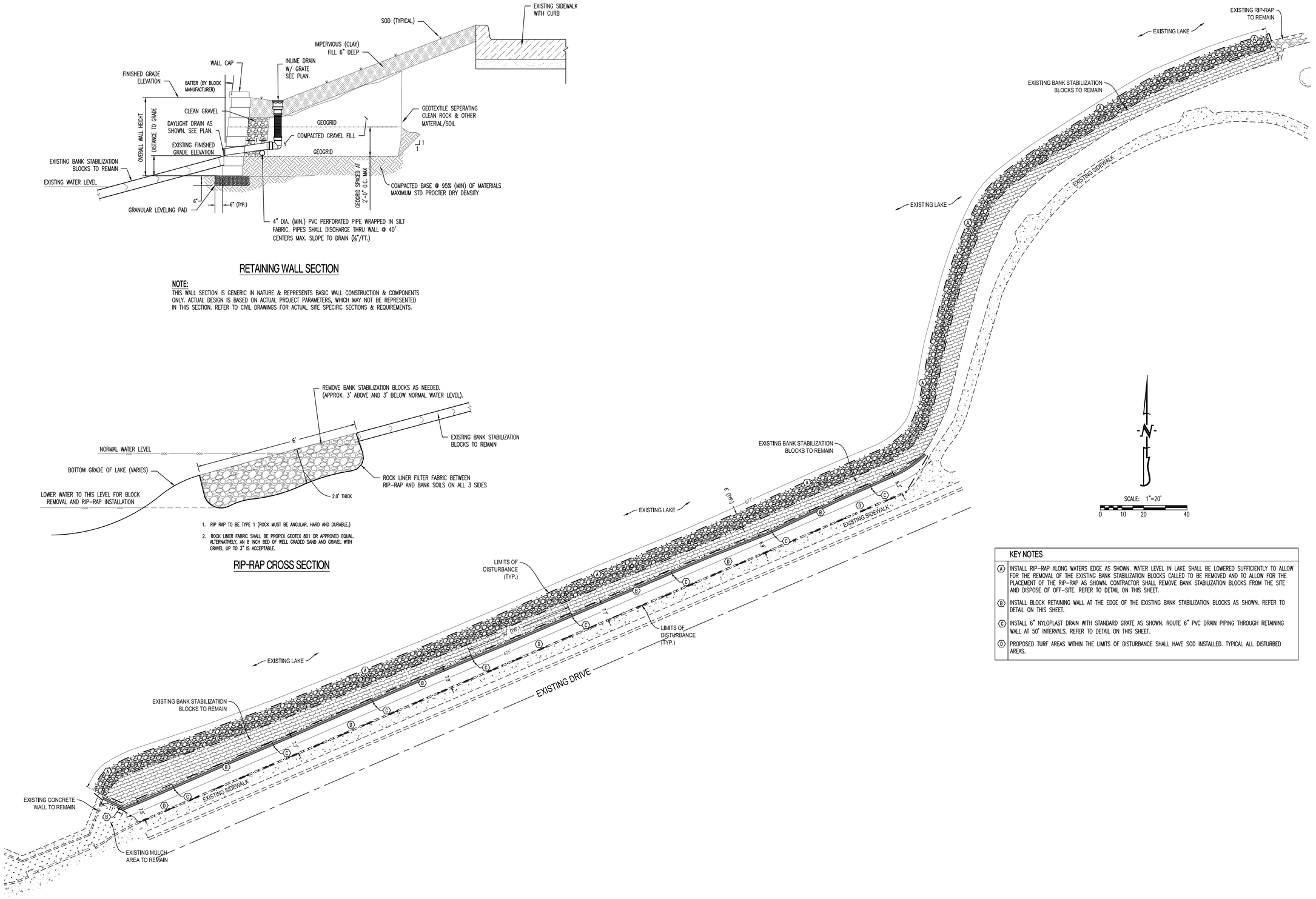
4 OF 30 SHEETS
MAY 19, 2021

RETAINING WALL SECTION

NOTE:
THIS WALL SECTION IS GENERIC IN NATURE & REPRESENTS BASIC WALL CONSTRUCTION & COMPONENTS ONLY. ACTUAL DESIGN IS BASED ON ACTUAL PROJECT PARAMETERS, WHICH MAY NOT BE REPRESENTED IN THIS SECTION. REFER TO CIVIL DRAWINGS FOR ACTUAL SITE SPECIFIC SECTIONS & REQUIREMENTS.

1. RIP RAP TO BE TYPE 1 (ROCK MUST BE ANGULAR, HARD AND DURABLE.)
2. ROCK LINER FABRIC SHALL BE PROPEX GEOTEX 801 OR APPROVED EQUAL. ALTERNATIVELY, AN 8 INCH BED OF WELL GRADED SAND AND GRAVEL WITH GRAVEL UP TO 3" IS ACCEPTABLE.

RIP-RAP CROSS SECTION



KEY NOTES	
A	INSTALL RIP-RAP ALONG WATERS EDGE AS SHOWN. WATER LEVEL IN LAKE SHALL BE LOWERED SUFFICIENTLY TO ALLOW FOR THE REMOVAL OF THE EXISTING BANK STABILIZATION BLOCKS CALLED TO BE REMOVED AND TO ALLOW FOR THE PLACEMENT OF THE RIP-RAP AS SHOWN. CONTRACTOR SHALL REMOVE BANK STABILIZATION BLOCKS FROM THE SITE AND DISPOSE OF OFF-SITE. REFER TO DETAIL ON THIS SHEET.
B	INSTALL BLOCK RETAINING WALL AT THE EDGE OF THE EXISTING BANK STABILIZATION BLOCKS AS SHOWN. REFER TO DETAIL ON THIS SHEET.
C	INSTALL 6" NYLOPLAST DRAIN WITH STANDARD GRATE AS SHOWN. ROUTE 6" PVC DRAIN PIPING THROUGH RETAINING WALL AT 50' INTERVALS. REFER TO DETAIL ON THIS SHEET.
D	PROPOSED TURF AREAS WITHIN THE LIMITS OF DISTURBANCE SHALL HAVE SOD INSTALLED. TYPICAL ALL DISTURBED AREAS.

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
ANDREW T. GREENE
NUMBER
PE-2020000043
PROFESSIONAL ENGINEER

PREPARED BY:
CROCKETT ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. 1
Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#2000151301

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO # U-2102-01
VCGP # FAI MO-17-15
ARCHIMAGES # K20530
SITE # 6904
ASSET # 8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

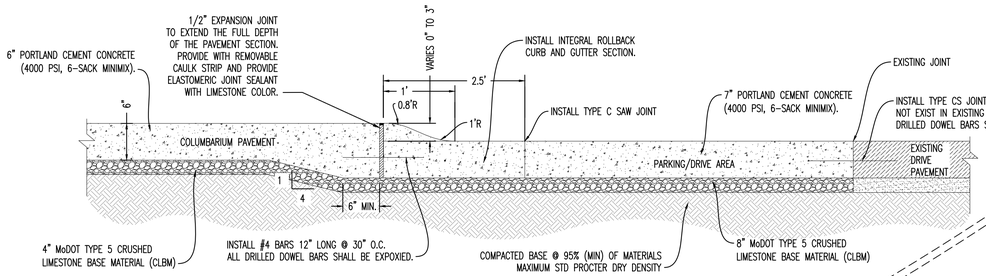
CAD DWG FILE: C-202.dwg
DRAWN BY: ATG
CHECKED BY: ATG
DESIGNED BY: ATG

SHEET TITLE:
DAM WALL AND RIP-RAP PLAN

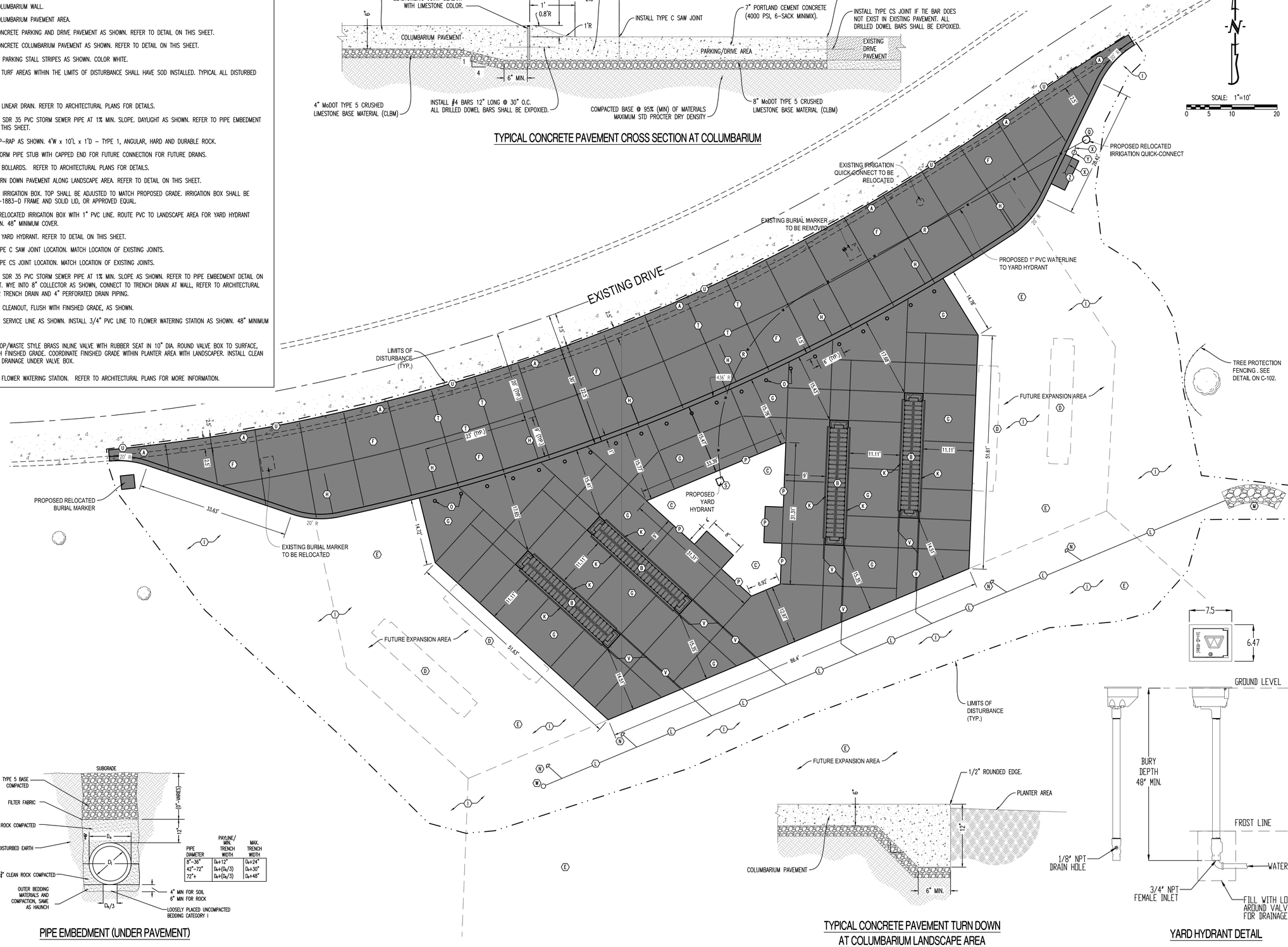
SHEET NUMBER:
C-202

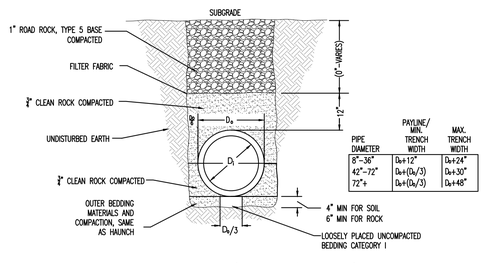
KEY NOTES

- (A) EXISTING CONCRETE PAVEMENT TO BE REMOVED. PROVIDE CLEAN, FULL DEPTH SAW CUT AT LIMITS OF PAVEMENT TO REMAIN. FOLLOW EXISTING JOINT FOR REMOVAL LIMITS.
- (B) PROPOSED COLUMBARIUM WALL. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- (C) PROPOSED LANDSCAPING AREA. REFER TO LANDSCAPING PLAN FOR DETAILS.
- (D) FUTURE COLUMBARIUM WALL.
- (E) FUTURE COLUMBARIUM PAVEMENT AREA.
- (F) INSTALL CONCRETE PARKING AND DRIVE PAVEMENT AS SHOWN. REFER TO DETAIL ON THIS SHEET.
- (G) INSTALL CONCRETE COLUMBARIUM PAVEMENT AS SHOWN. REFER TO DETAIL ON THIS SHEET.
- (H) INSTALL 4" PARKING STALL STRIPES AS SHOWN. COLOR WHITE.
- (I) PROPOSED TURF AREAS WITHIN THE LIMITS OF DISTURBANCE SHALL HAVE SOD INSTALLED. TYPICAL ALL DISTURBED AREAS.
- (J) NOT USED.
- (K) PROPOSED LINEAR DRAIN. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- (L) INSTALL 8" SDR 35 PVC STORM SEWER PIPE AT 1% MIN. SLOPE. DAYLIGHT AS SHOWN. REFER TO PIPE EMBEDMENT DETAIL ON THIS SHEET.
- (M) INSTALL RIP-RAP AS SHOWN. 4'W x 10'L x 1'D – TYPE 1, ANGULAR, HARD AND DURABLE ROCK.
- (N) INSTALL STORM PIPE STUB WITH CAPPED END FOR FUTURE CONNECTION FOR FUTURE DRAINS.
- (O) PROPOSED BOLLARDS. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- (P) INSTALL TURN DOWN PAVEMENT ALONG LANDSCAPE AREA. REFER TO DETAIL ON THIS SHEET.
- (Q) RELOCATED IRRIGATION BOX. TOP SHALL BE ADJUSTED TO MATCH PROPOSED GRADE. IRRIGATION BOX SHALL BE NEENAH R-1883-D FRAME AND SOLID LID, OR APPROVED EQUAL.
- (R) TAP INTO RELOCATED IRRIGATION BOX WITH 1" PVC LINE. ROUTE PVC TO LANDSCAPE AREA FOR YARD HYDRANT CONNECTION. 48" MINIMUM COVER.
- (S) PROPOSED YARD HYDRANT. REFER TO DETAIL ON THIS SHEET.
- (T) TYPICAL TYPE C SAW JOINT LOCATION. MATCH LOCATION OF EXISTING JOINTS.
- (U) TYPICAL TYPE CS JOINT LOCATION. MATCH LOCATION OF EXISTING JOINTS.
- (V) INSTALL 6" SDR 35 PVC STORM SEWER PIPE AT 1% MIN. SLOPE AS SHOWN. REFER TO PIPE EMBEDMENT DETAIL ON THIS SHEET. WYE INTO 8" COLLECTOR AS SHOWN, CONNECT TO TRENCH DRAIN AT WALL, REFER TO ARCHITECTURAL PLANS FOR TRENCH DRAIN AND 4" PERFORATED DRAIN PIPING.
- (W) INSTALL 6" CLEANOUT, FLUSH WITH FINISHED GRADE, AS SHOWN.
- (X) TAP WATER SERVICE LINE AS SHOWN. INSTALL 3/4" PVC LINE TO FLOWER WATERING STATION AS SHOWN. 48" MINIMUM COVER.
- (Y) INSTALL STOP/WASTE STYLE BRASS INLINE VALVE WITH RUBBER SEAT IN 10" DIA. ROUND VALVE BOX TO SURFACE, FLUSH WITH FINISHED GRADE. COORDINATE FINISHED GRADE WITHIN PLANTER AREA WITH LANDSCAPER. INSTALL CLEAN ROCK FOR DRAINAGE UNDER VALVE BOX.
- (Z) PROPOSED FLOWER WATERING STATION. REFER TO ARCHITECTURAL PLANS FOR MORE INFORMATION.



TYPICAL CONCRETE PAVEMENT CROSS SECTION AT COLUMBARIUM

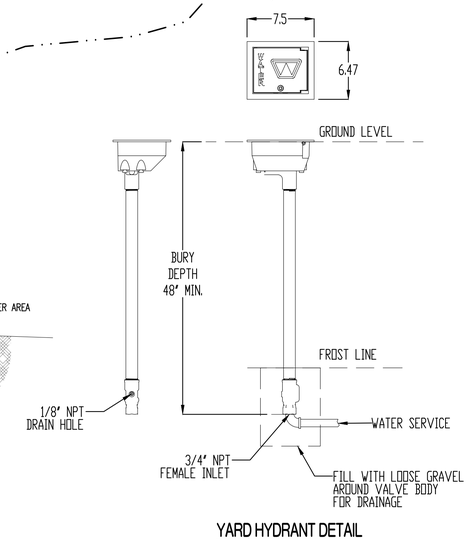




PIPE DIAMETER	PAYLINE/ MIN. TRENCH WIDTH	MAX. TRENCH WIDTH
8"–36"	D_o+12"	D_o+24"
42"–72"	D_o+(D_o/3)	D_o+30"
72"+	D_o+(D_o/3)	D_o+48"

PIPE EMBEDMENT (UNDER PAVEMENT)

TYPICAL CONCRETE PAVEMENT TURN DOWN AT COLUMBARIUM LANDSCAPE AREA



YARD HYDRANT DETAIL

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
ANDREW T. GREENE
NUMBER
PE-2020000043
PROFESSIONAL ENGINEER

PREPARED BY:

CROCKETT ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. 1
Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#2000151301

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO #	U-2102-01
VCGP #	FAI MO-17-15
ARCHIMAGES #	K20530
SITE #	6904
ASSET #	8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

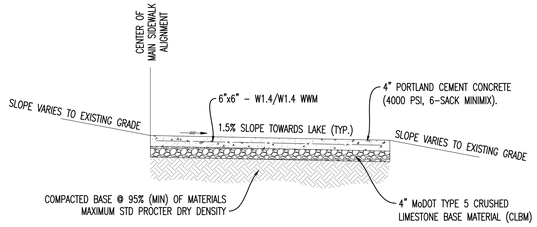
CAD DWG FILE: C-203.dwg
DRAWN BY: ATG
CHECKED BY: ATG
DESIGNED BY: ATG

SHEET TITLE:
COLUMBARIUM PLAN

SHEET NUMBER:
C-203

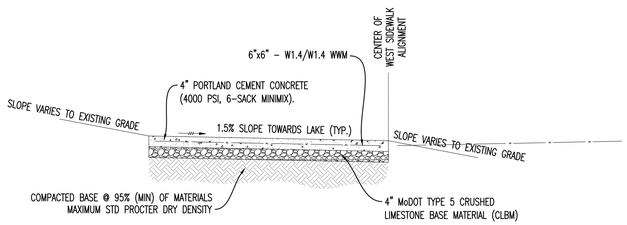
6 OF 30 SHEETS
MAY 19, 2021

KEY NOTES	
(A)	CONSTRUCT CONCRETE SIDEWALK AS SHOWN. REFER TO DETAILS ON THIS SHEET.
(B)	CONSTRUCT THICKENED EDGE SIDEWALK WITH CURB AS SHOWN. REFER TO DETAIL ON THIS SHEET.
(C)	DOWEL PROPOSED SIDEWALK TO EXISTING SIDEWALK WITH 5/8" DIA. SMOOTH DOWEL W/ EXPANSION CAP 12" LONG @ 24" CENTERS W/ 4" EMBEDMENT INTO EXISTING PAVEMENT WITH GREASE.
(D)	PROPOSED TURF AREAS WITHIN THE LIMITS OF DISTURBANCE SHALL HAVE SOD INSTALLED. TYPICAL ALL DISTURBED AREAS.



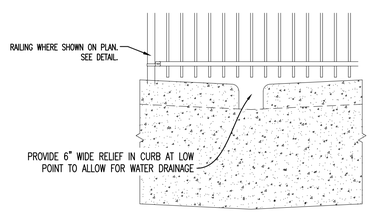
NOTE:
1. SIDEWALK SHALL BE 4" THICK CLASS A CONCRETE ON 4" AGGREGATE BASE.
2. INSTALL 1/2" EXPANSION JOINTS AT INTERSECTIONS, RAMPS, STRUCTURES, & EXISTING PAVEMENTS. MAX. EXPANSION JOINT SPACING = 150'.
3. INSTALL TRANSVERSE SAW JOINTS AT SPACING = SIDEWALK WIDTH.

MAIN SIDEWALK CROSS SECTION

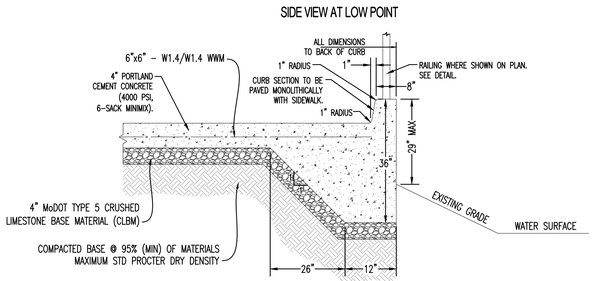


NOTE:
1. SIDEWALK SHALL BE 4" THICK CLASS A CONCRETE ON 4" AGGREGATE BASE.
2. INSTALL 1/2" EXPANSION JOINTS AT INTERSECTIONS, RAMPS, STRUCTURES, & EXISTING PAVEMENTS. MAX. EXPANSION JOINT SPACING = 150'.
3. INSTALL TRANSVERSE SAW JOINTS AT SPACING = SIDEWALK WIDTH.

WEST SIDEWALK CROSS SECTION



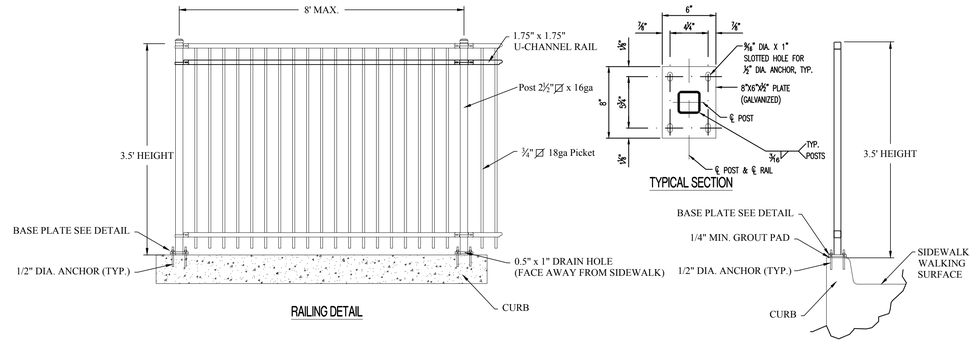
SIDE VIEW AT LOW POINT



CROSS SECTION

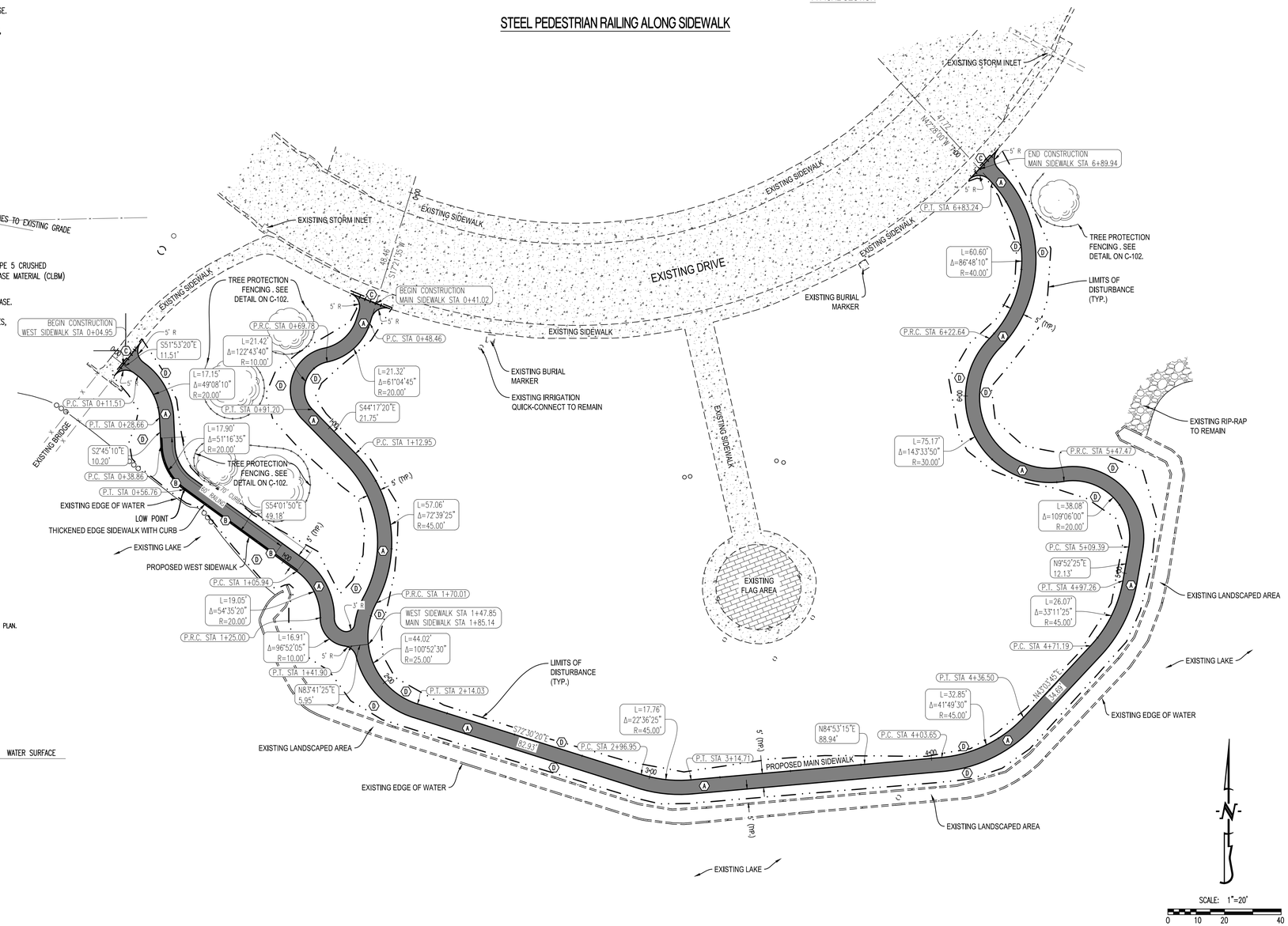
NOTE:
1. SIDEWALK SHALL BE 4" THICK CLASS A CONCRETE ON 4" AGGREGATE BASE.
2. INSTALL 1/2" EXPANSION JOINTS AT INTERSECTIONS, RAMPS, STRUCTURES, & EXISTING PAVEMENTS. MAX. EXPANSION JOINT SPACING = 150'.
3. INSTALL TRANSVERSE SAW JOINTS AT SPACING = SIDEWALK WIDTH.

THICKENED EDGE WEST SIDEWALK WITH CURB



STEEL PEDESTRIAN RAILING ALONG SIDEWALK

RAILING NOTES:
1. ALL RAILS AND POSTS SHALL BE 2½"x2½"x⅛" STRUCTURAL TUBING. TUBING FOR ALL RAILS AND POSTS SHALL CONFORM TO ASTM A500, GRADE B. BALUSTERS SHALL BE ¾"x¾" STEEL BAR. BALUSTERS AND BASE PLATES SHALL CONFORM TO ASTM A709, GRADE 36.
2. RAILS AND BASE PLATES SHALL BE SET PARALLEL TO TOP OF SLAB. ALL POSTS AND BALUSTERS SHALL BE SET VERTICAL. GROUT SHALL BE USED BETWEEN CONCRETE AND BASE PLATE OF POST.
3. ALL RAIL-TO-POST WELDED CONNECTIONS SHALL BE GROUND SMOOTH. NO FIELD WELDING WILL BE PERMITTED. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION OF THE FENCE.
4. USE E70 XX ELECTRODES FOR ALL WELDING.
5. A GROUTED LEVELING PAD SHALL BE USED TO ERECT THE POSTS VERTICAL. THE LEVELING PADS SHALL BE A NON-SHRINK GROUT. THE GROUT SHALL BE MIXED, APPLIED AND CURED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
6. CONCRETE ANCHORS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 AND SEC.1081.
7. NUTS SHALL CONFORM TO ASTM A307. NUTS SHALL BE REGULAR HEXAGON TYPE. WASHERS SHALL BE OF STANDARD COMMERCIAL QUALITY.
8. THE CONCRETE ANCHORS SHALL HAVE A MINIMUM ULTIMATE PULLOUT STRENGTH OF 7900 LBS. BASED ON THE CONCRETE. THE LENGTH OF EMBEDMENT INTO CONCRETE SHALL CONFORM TO MANUFACTURER'S RECOMMENDATIONS.
9. MAIN RAILS SHALL RESIST 50 POUNDS PER LINEAL FOOT LATERALLY AT THE TOP OF THE RAIL OR 200 POUNDS CONCENTRATED LOAD LATERALLY. INTERMEDIATE RAILS SHALL RESIST A CONCENTRATED LOAD OF 50 POUNDS LATERALLY.



STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
ANDREW T. GREENE
NUMBER
PE-2020000043
PROFESSIONAL ENGINEER

PREPARED BY:
CROCKETT ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. 1
Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#2000151301

OFFICE OF ADMINISTRATION DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

DEPARTMENT OF PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO #	U-2102-01
VCGP #	FAI MO-17-15
ARCHIMAGES #	K20530
SITE #	6904
ASSET #	8136904009

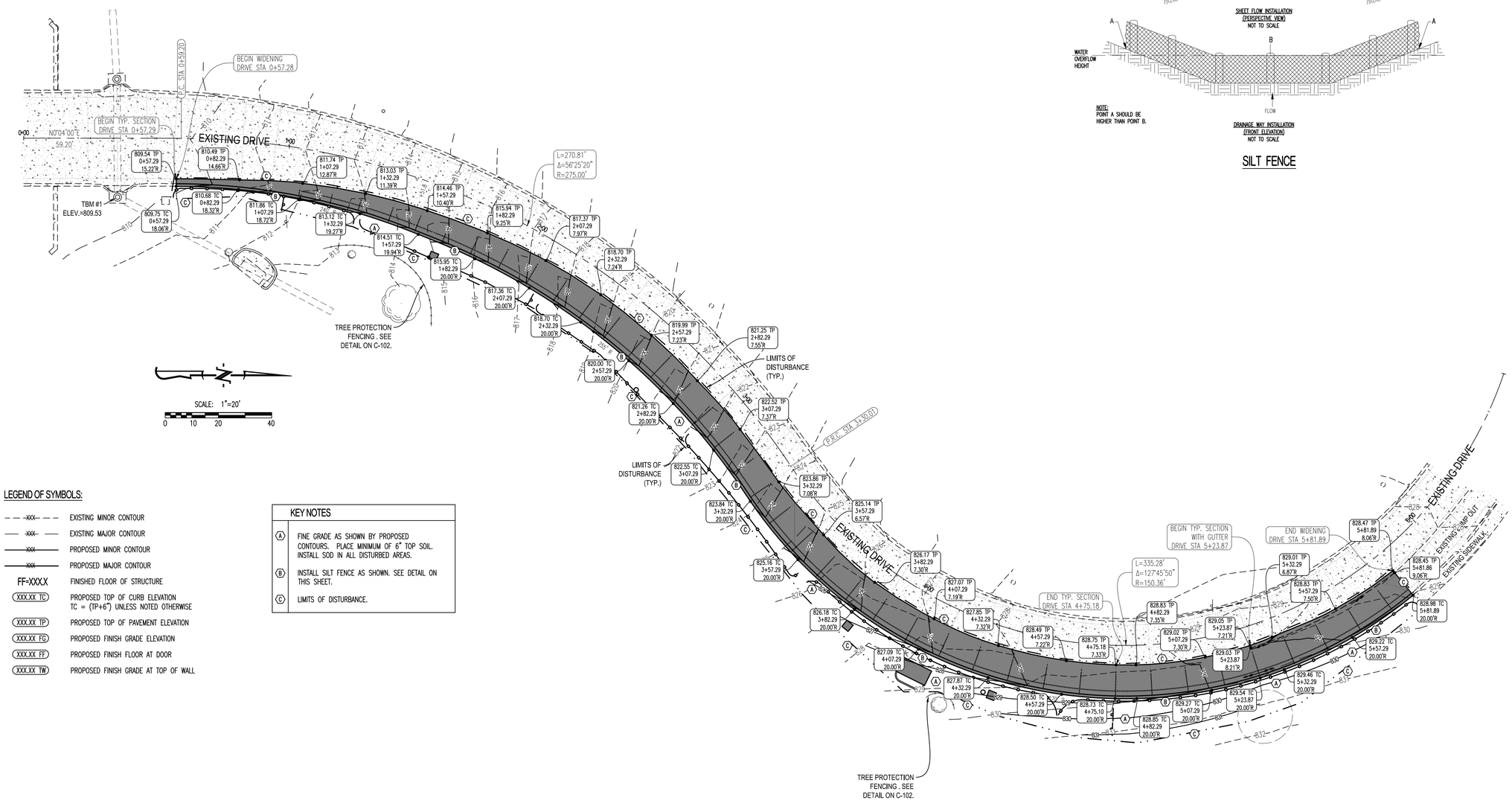
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

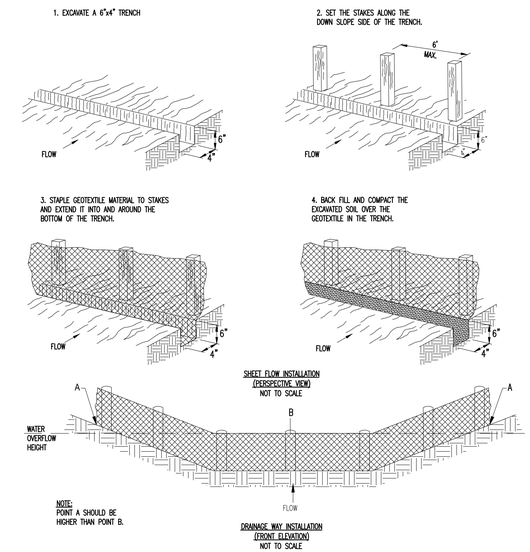
CAD DWG FILE: C-204.dwg
DRAWN BY: ATG
CHECKED BY: ATG
DESIGNED BY: ATG

SHEET TITLE:
SIDEWALK PLAN

SHEET NUMBER:
C-204

7 OF 30 SHEETS
MAY 19, 2021





SILT FENCE

LEGEND OF SYMBOLS:

— — XXX — —	EXISTING MINOR CONTOUR
— XXX —	EXISTING MAJOR CONTOUR
XXX	PROPOSED MINOR CONTOUR
XXX	PROPOSED MAJOR CONTOUR
FF=XXXX	FINISHED FLOOR OF STRUCTURE
XXX.XX TC	PROPOSED TOP OF CURB ELEVATION TC = (TP+6") UNLESS NOTED OTHERWISE
XXX.XX TP	PROPOSED TOP OF PAVEMENT ELEVATION
XXX.XX FG	PROPOSED FINISH GRADE ELEVATION
XXX.XX FF	PROPOSED FINISH FLOOR AT DOOR
XXX.XX TW	PROPOSED FINISH GRADE AT TOP OF WALL

KEY NOTES

A	FINE GRADE AS SHOWN BY PROPOSED CONTOURS. PLACE MINIMUM OF 6" TOP SOIL. INSTALL SOD IN ALL DISTURBED AREAS.
B	INSTALL SILT FENCE AS SHOWN. SEE DETAIL ON THIS SHEET.
C	LIMITS OF DISTURBANCE.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
ANDREW T. GREENE
NUMBER
PE-2020000043
PROFESSIONAL ENGINEER

PREPARED BY:

CROCKETT
ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. 1
Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#2000151301

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO #	U-2102-01
VCGP #	FAI MO-17-15
ARCHIMAGES #	K20530
SITE #	6904
ASSET #	8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

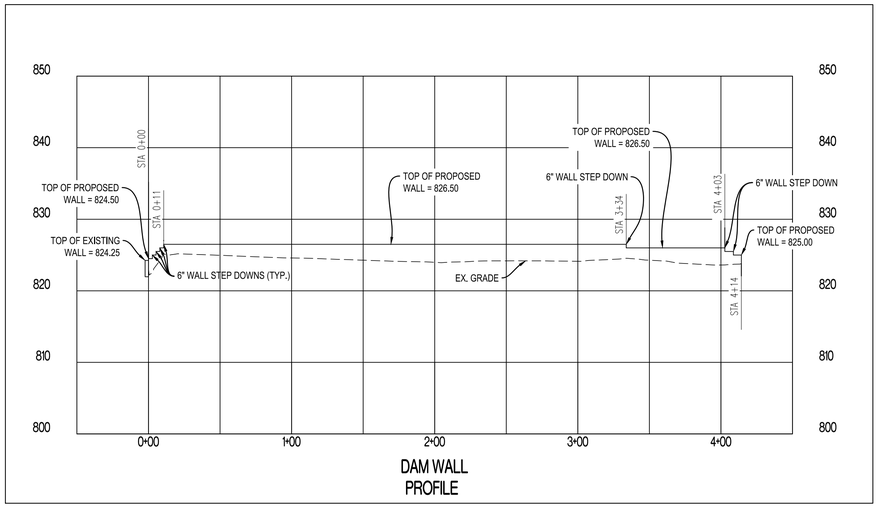
CAD DWG FILE: C-301.dwg
DRAWN BY: ATG
CHECKED BY: ATG
DESIGNED BY: ATG

SHEET TITLE:

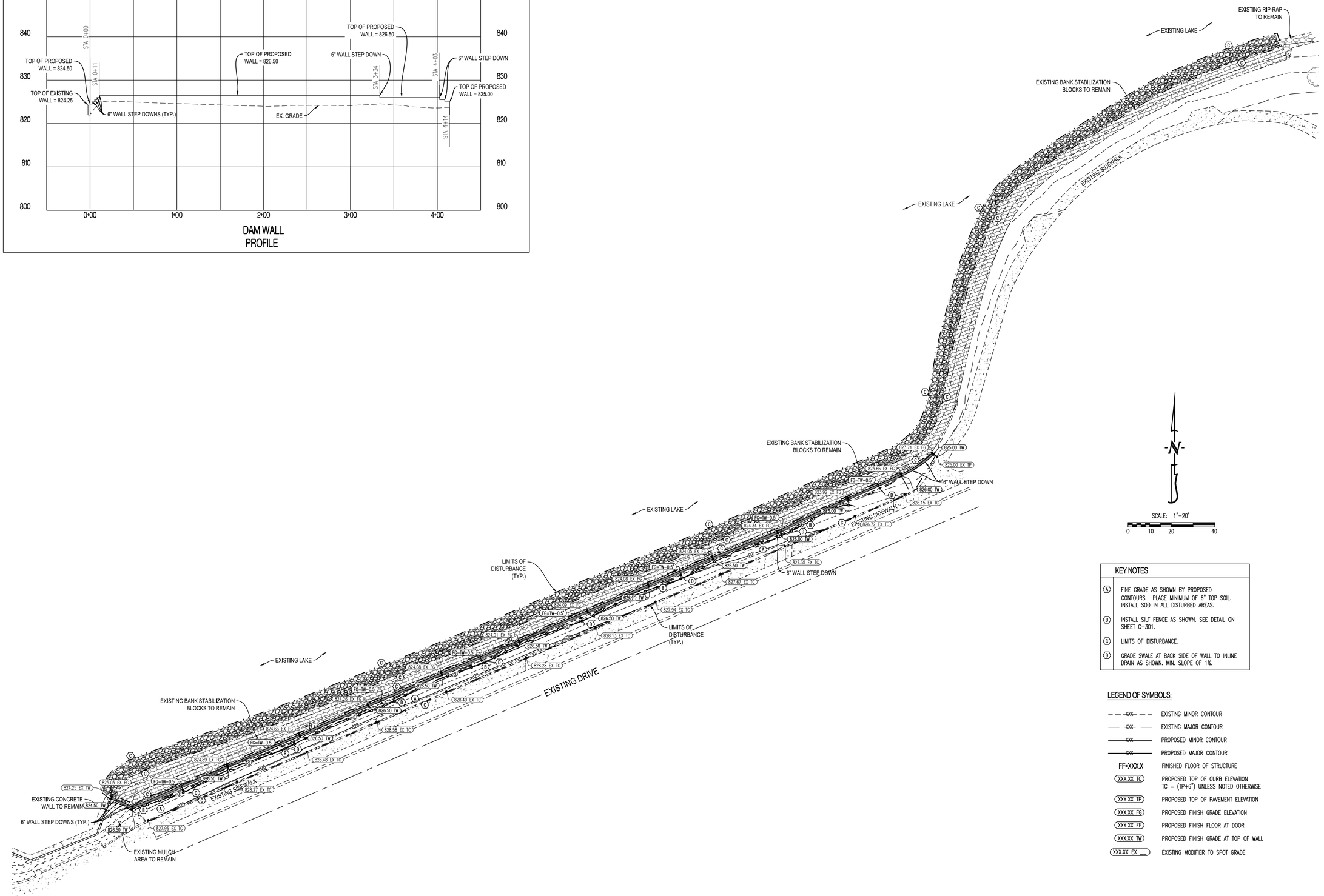
DRIVE WIDENING GRADING & EROSION CONTROL PLAN

SHEET NUMBER:

C-301



DAM WALL PROFILE



KEY NOTES	
A	FINE GRADE AS SHOWN BY PROPOSED CONTOURS. PLACE MINIMUM OF 6" TOP SOIL. INSTALL SOD IN ALL DISTURBED AREAS.
B	INSTALL SILT FENCE AS SHOWN. SEE DETAIL ON SHEET C-301.
C	LIMITS OF DISTURBANCE.
D	GRADE SWALE AT BACK SIDE OF WALL TO INLINE DRAIN AS SHOWN. MIN. SLOPE OF 1%.

LEGEND OF SYMBOLS:

— — XXX — —	EXISTING MINOR CONTOUR
— XXX —	EXISTING MAJOR CONTOUR
XXX	PROPOSED MINOR CONTOUR
XXX	PROPOSED MAJOR CONTOUR
FF=XXX.X	FINISHED FLOOR OF STRUCTURE
XXX.XX TC	PROPOSED TOP OF CURB ELEVATION TC = (TP+6") UNLESS NOTED OTHERWISE
XXX.XX TP	PROPOSED TOP OF PAVEMENT ELEVATION
XXX.XX FG	PROPOSED FINISH GRADE ELEVATION
XXX.XX FF	PROPOSED FINISH FLOOR AT DOOR
XXX.XX TW	PROPOSED FINISH GRADE AT TOP OF WALL
XXX.XX EX __	EXISTING MODIFIER TO SPOT GRADE

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
ANDREW T. GREENE
NUMBER PE-2020000043
PROFESSIONAL ENGINEER

PREPARED BY:

CROCKETT ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. 1
Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#2000151301

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO #	U-2102-01
VCGP #	FAI MO-17-15
ARCHIMAGES #	K20530
SITE #	6904
ASSET #	8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: C-302.dwg
DRAWN BY: ATG
CHECKED BY: ATG
DESIGNED BY: ATG

SHEET TITLE:

DAM WALL AND RIP-RAP GRADING & EROSION CONTROL PLAN

SHEET NUMBER:

C-302

MAY 19, 2021

SCALE: 1"=10'

0 5 10 20

KEY NOTES	
A	FINE GRADE AS SHOWN BY PROPOSED CONTOURS. PLACE MINIMUM OF 6" TOP SOIL. INSTALL SOD IN ALL DISTURBED AREAS.
B	INSTALL SILT FENCE AS SHOWN. SEE DETAIL ON SHEET C-301.
C	LIMITS OF DISTURBANCE.
D	TRANSITION FROM 3" CURB TO 0" CURB.

LEGEND OF SYMBOLS:

– – –XXX– – –	EXISTING MINOR CONTOUR
—— XXX ——	EXISTING MAJOR CONTOUR
——XXX——	PROPOSED MINOR CONTOUR
——XXX——	PROPOSED MAJOR CONTOUR
FF=XXX.X	FINISHED FLOOR OF STRUCTURE
XXX.XX TC	PROPOSED TOP OF CURB ELEVATION TC = (TP+6") UNLESS NOTED OTHERWISE
XXX.XX TP	PROPOSED TOP OF PAVEMENT ELEVATION
XXX.XX FG	PROPOSED FINISH GRADE ELEVATION
XXX.XX FF	PROPOSED FINISH FLOOR AT DOOR
XXX.XX TW	PROPOSED FINISH GRADE AT TOP OF WALL
XXX.XX EX __	EXISTING MODIFIER TO SPOT GRADE

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
ANDREW T. GREENE
NUMBER
PE-2020000043
PROFESSIONAL ENGINEER

PREPARED BY:

CROCKETT
ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. 1
Columbia, Missouri 65203
(573) 447-0292

www.crockettengineering.com

Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#2000151301

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO #	U-2102-01
VCGP #	FAI MO-17-15
ARCHIMAGES #	K20530
SITE #	6904
ASSET #	8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: C-303.dwg
DRAWN BY: ATG
CHECKED BY: ATG
DESIGNED BY: ATG

SHEET TITLE:

COLUMBARIUM GRADING & EROSION CONTROL PLAN

SHEET NUMBER:

C-303

10 OF 30 SHEETS
MAY 19, 2021

KEY NOTES	
A	FINE GRADE AS SHOWN BY PROPOSED CONTOURS. PLACE MINIMUM OF 6" TOP SOIL. INSTALL SOD ON ALL DISTURBED AREAS.
B	INSTALL SILT FENCE AS SHOWN. SEE DETAIL ON SHEET C-301.
C	LIMITS OF DISTURBANCE.

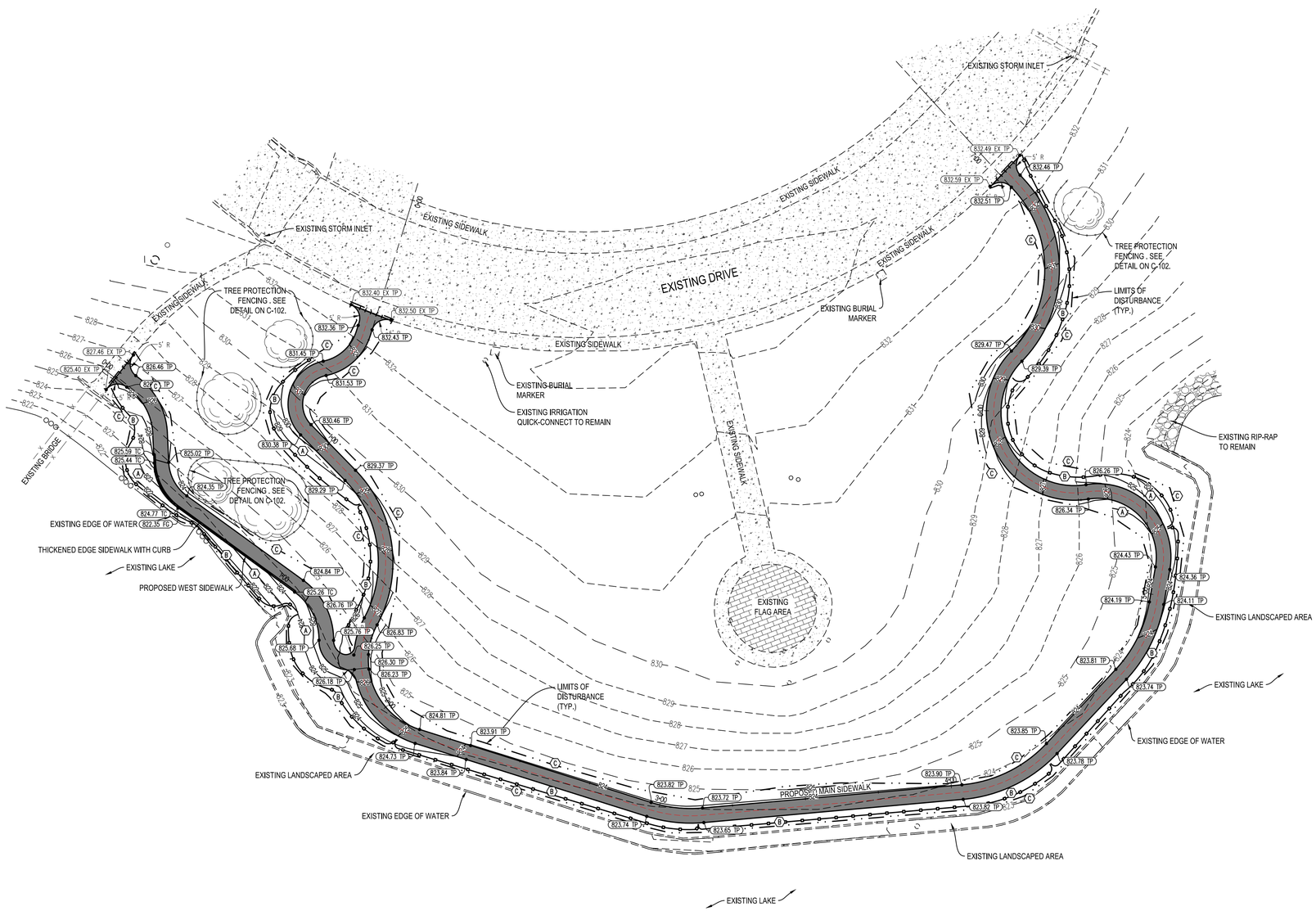
LEGEND OF SYMBOLS:

— — XXX — —	EXISTING MINOR CONTOUR
—— XXX ——	EXISTING MAJOR CONTOUR
——— XXX ———	PROPOSED MINOR CONTOUR
——— XXX ———	PROPOSED MAJOR CONTOUR
FF=XXX.X	FINISHED FLOOR OF STRUCTURE
XXX.XX TC	PROPOSED TOP OF CURB ELEVATION TC = (TP+6") UNLESS NOTED OTHERWISE
XXX.XX TP	PROPOSED TOP OF PAVEMENT ELEVATION
XXX.XX FG	PROPOSED FINISH GRADE ELEVATION
XXX.XX FF	PROPOSED FINISH FLOOR AT DOOR
XXX.XX TW	PROPOSED FINISH GRADE AT TOP OF WALL
XXX.XX EX __	EXISTING MODIFIER TO SPOT GRADE
- - - - - - -	ADA ACCESSIBLE ROUTE

N

SCALE: 1"=20'

0 10 20 40



STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
ANDREW T. GREENE
NUMBER
PE-2020000043
PROFESSIONAL ENGINEER

PREPARED BY:

CROCKETT
ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. 1
Columbia, Missouri 65203
(573) 447-0292

www.crockettengineering.com

Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#2000151301

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO #	U-2102-01
VCGP #	FAI MO-17-15
ARCHIMAGES #	K20530
SITE #	6904
ASSET #	8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: C-304.dwg
DRAWN BY: ATG
CHECKED BY: ATG
DESIGNED BY: ATG

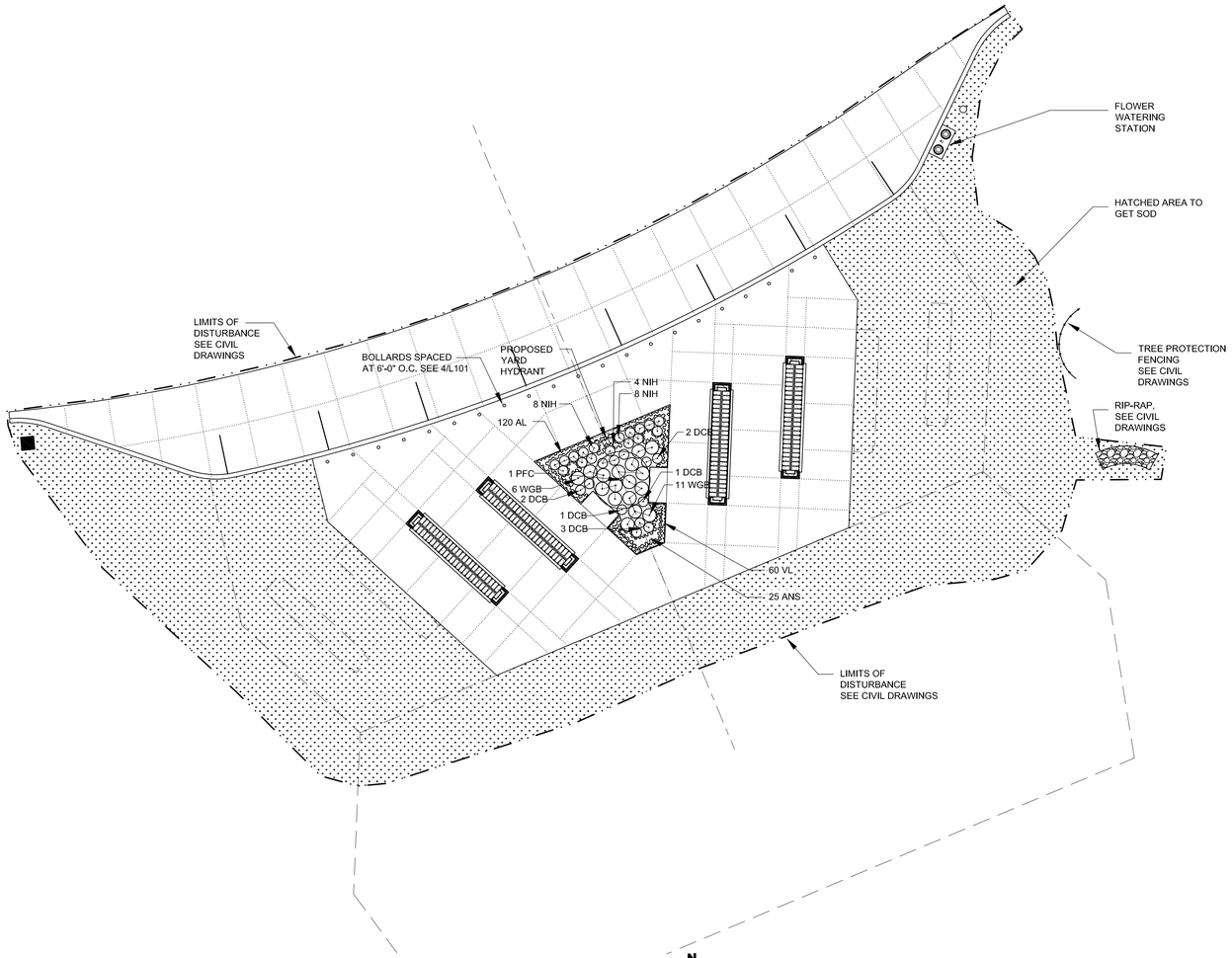
SHEET TITLE:

SIDEWALK GRADING & EROSION CONTROL PLAN

SHEET NUMBER:

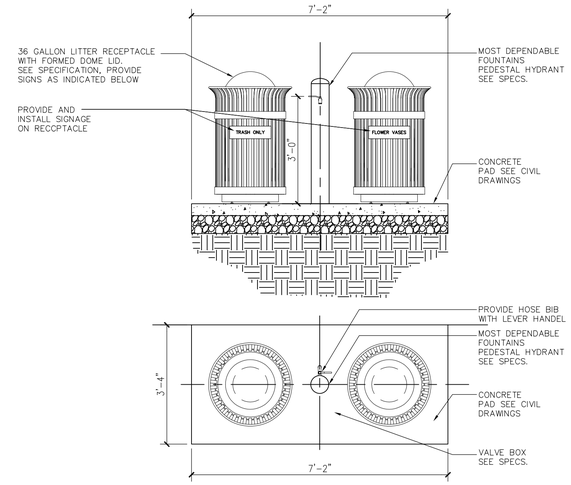
C-304

11 OF 30 SHEETS
MAY 19, 2021



A LANDSCAPE PLAN

NOT TO SCALE



4 FLOWER WATERING STATION

NOT TO SCALE

LANDSCAPE NOTES

1. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITY LINES PRIOR TO EXCAVATING.
2. ALL WATER REQUIRED FOR LANDSCAPE OPERATIONS WILL BE PROVIDED BY OWNER FROM ON-SITE SOURCES AT NO CHARGE TO CONTRACTOR.
3. NO SUBSTITUTIONS SHALL BE ALLOWED WITHOUT ARCHITECT'S APPROVAL.
4. QUANTITIES IN THE PLANT LIST ARE FOR INFORMATION ONLY. CONTRACTOR SHALL VERIFY AND PROVIDE REQUIRED QUANTITIES.
5. PROVIDE NEW SOD AS SPECIFIED IN ALL DISTURBED AREAS THAT ARE NOT OTHERWISE SCHEDULED FOR PLANTING
6. THE PLANTING BEDS RECEIVING MULCH SHALL BE TREATED WITH A PRE-EMERGENT HERBICIDE AFTER PLANTING AND MULCH PLACEMENT. APPLY IN ACCORDANCE WITH STANDARD TRADE PRACTICE.
7. ANY PLANTING BED ADJACENT TO WALKS OR CURBING SHALL HAVE THE GRADE LOWERED TO A SUFFICIENT DEPTH TO ALLOW THE TOP OF THE MULCH TO MATCH THE TOP OF WALK OR CURBING.
8. DO NOT GRADE PLANTING BEDS WITH STEEP, ABRUPT SLOPES DOWN TO EDGING OR CONCRETE EDGES. ALL PLANTING BEDS SHALL HAVE EVEN SMOOTH SLOPES.
9. MULCH SHALL BE GRADE A SHREDDED CYPRESS MULCH INSTALLED IN A 3" LAYER IN ALL SHRUB BEDS.
10. PLANTS SHALL BE TAGGED WITH LABELS IDENTIFYING COMMON AND BOTANICAL NAME UNTIL FINAL ACCEPTANCE IS GIVEN.

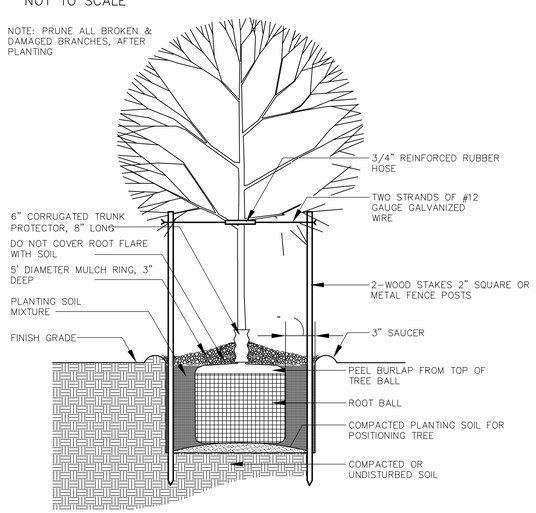
PLANT LIST

KEY	QUANTITY	COMMON NAME	BOTANICAL NAME	SIZE & SPACING	CONDITION
DECIDUOUS TREES					
PFC	1	PRAIRIEFIRE CRABAPPLE	Malus 'Prairiefire'	2" cal.	Balled-in-Burlap
EVERGREEN TREES					
EWP	3*	EASTERN WHITE PINE	Pinus Strubus	6'	Balled-in-Burlap

* Plant 3 EWP notheast of committal service shelter in locations directed by the Owner

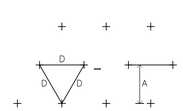
SHRUBS					
DCB	8	DWARF CRANBERRY BUSH	Viburnum opulus 'Nanum'	5 gallon, 2.6'-3.0' O.C.	Container
NIH	12	NORDIC INKBERRY HOLLY	Ilex glabra 'Chamzin'	5 gallon, 2.6'-3.0' O.C.	Container
WGB	10	'WINTER GEM' BOXWOOD	Buxus micro. var. koreana 'Winter Gem'	5 gallon, 2.6'-3.0' O.C.	Container

PERENNIALS					
ANS	75	'APRIL NIGHT' SALVIA	Salvia x sylvesteris 'April Night'	4" pots, 15"-18"	Container
VL	92	VARIEGATED LIRIOPE	Liriope muscari 'Variegata'	1 gallon, 15"-18"	Container



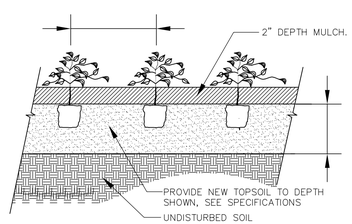
1 DECIDUOUS TREE PLANTING DETAL

NOT TO SCALE



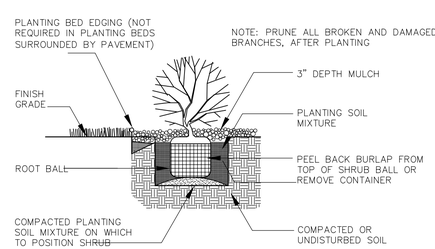
PLANT SPACING

SPACING "D"	ROW "A"
6" O.C.	5.2"
9" O.C.	7.8"
12" O.C.	10.4"
18" O.C.	15.6"
24" O.C.	20.8"
30" O.C.	26.0"
36" O.C.	31.2"



2 PERENNIALS AND GRASSES PLANTING DETAIL

NOT TO SCALE



3 SHRUB PLANTING DETAIL

NOT TO SCALE

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
R. GREGORY GARNER
NUMBER A-5443
05-19-2021
ARCHITECT

Archimages architecture | interiors
143 West Clinton Place St. Louis, Missouri 63122
www.archimages-stl.com | p: (314) 965-7445 | f: (314) 965-7477

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO # U-2102-01
VCGP # FAI MO-17-15
ARCHIMAGES # K20530
SITE # 6904
ASSET # 8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

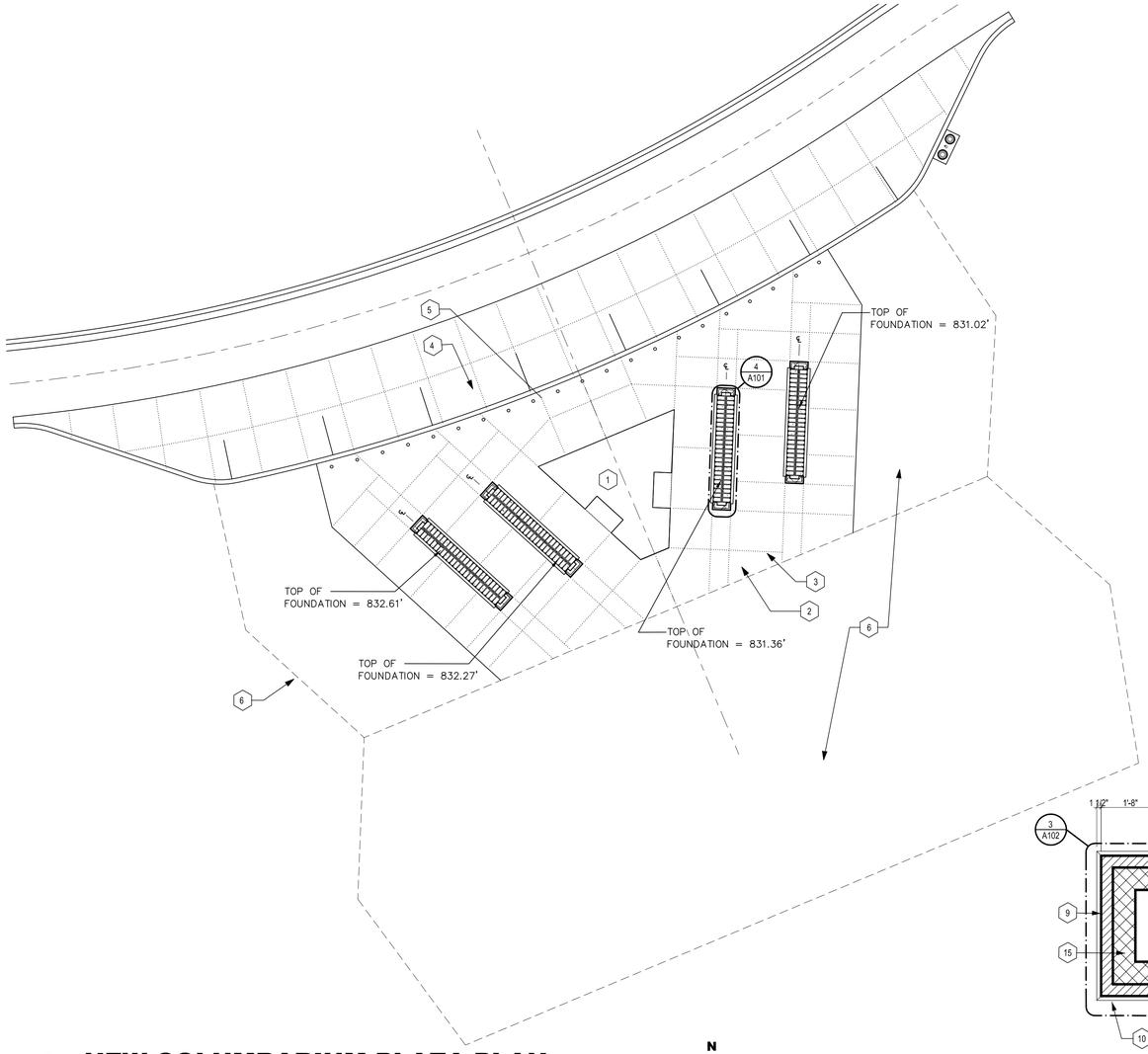
CAD DWG FILE: LP101.dwg
DRAWN BY: SZH
CHECKED BY: KRM
DESIGNED BY: KRM

SHEET TITLE:

PLANTING PLAN, DETAILS & SCHEDULE

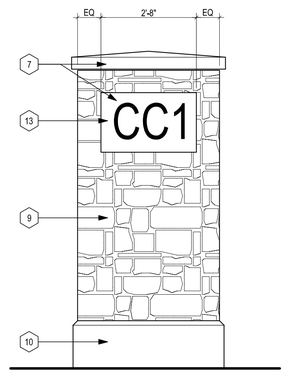
SHEET NUMBER:

LP101



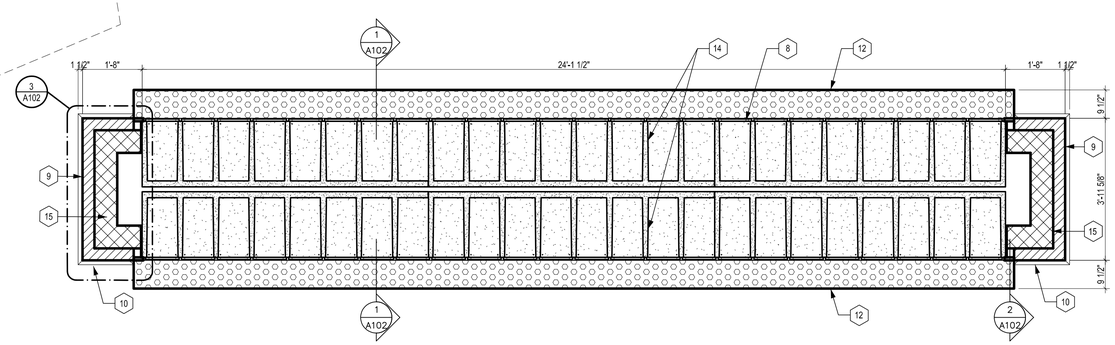
A NEW COLUMBARIUM PLAZA PLAN

0' 8' 16' 24' 1/16"=1'-0"



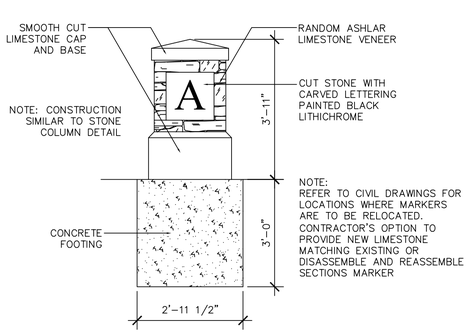
3 COLUMBARIUM END WALL ELEV.

0' 1' 2' 3' 1/2"=1'-0"



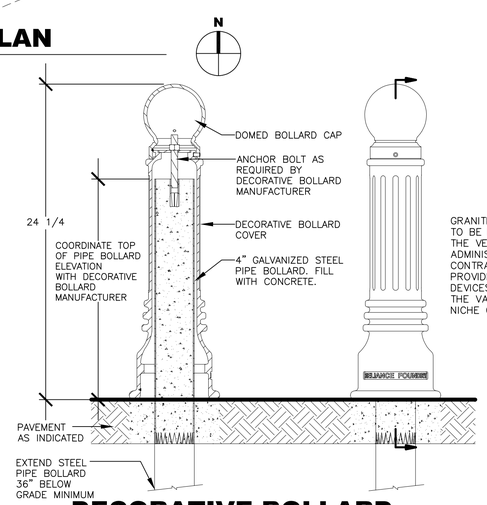
4 COLUMBARIUM PLAN

0' 1' 2' 3' 1/2"=1'-0"



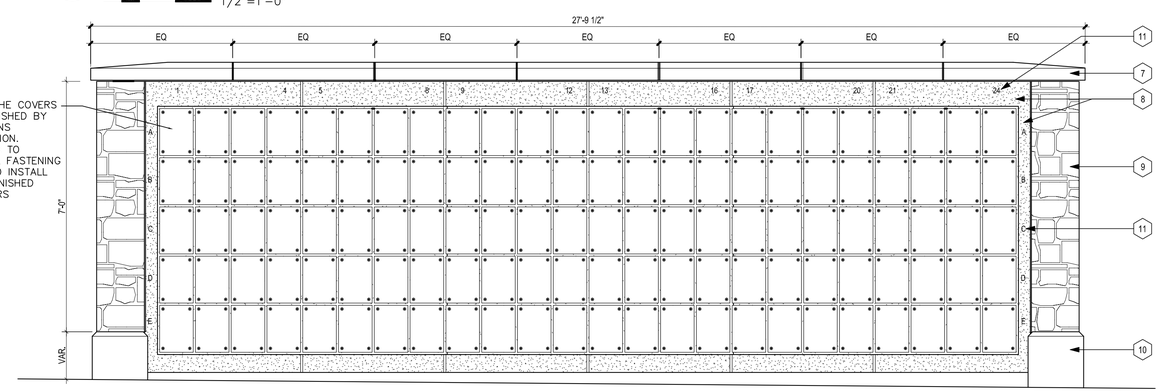
1 EXISTING BURIAL SECTION MARKER

0' 1' 2' 3' 1/2"=1'-0"



2 DECORATIVE BOLLARD COVER DETAIL

NOT TO SCALE



5 COLUMBARIUM WALL ELEVATION

0' 1' 2' 3' 1/2"=1'-0"

FLOOR PLAN KEYED NOTES

MARK	DESCRIPTION
1	PLANTING BED
2	CONCRETE PAVING
3	CONCRETE CONTRACTION JOINT
4	PARALLEL PARKING
5	DECORATIVE ALUMINUM BOLLARD COVERS OVER 4" STEEL BOLLLARDS
6	FUTURE EXPANSION, NOT IN THIS CONTRACT
7	GRANITE CAPSTONE - CHARCOAL BLACK DIAMOND 8 FINISH
8	GRANITE TRIM - IRIDIAN DIAMOND 8 FINISH
9	SPLIT FACE GRANITE VENEER - IRIDIAN, ASHLAR PATTERN
10	WALL BASE GRANITE - CHARCOAL BLACK DIAMOND 8 FINISH
11	2" METAL LETTERS
12	DECORATIVE METAL GRATE
13	12" METAL LETTERS
14	PRECAST CONC. COLUMBARIUM UNITS
15	8" CMU WALL
16	
17	
18	
19	
20	
21	

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
R. GREGORY GARNER
NUMBER A-5443
05-19-2021
ARCHITECT

Archimages architecture | interiors
143 West Clinton Place St. Louis, Missouri 63122
www.archimages-stl.com | p: (314) 965-7445 | f: (314) 965-7477

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO # U-2102-01
VCGP # FAI MO-17-15
ARCHIMAGES # K20530
SITE # 6904
ASSET # 8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: A101.dwg
DRAWN BY: SZH
CHECKED BY: KRM
DESIGNED BY: KRM

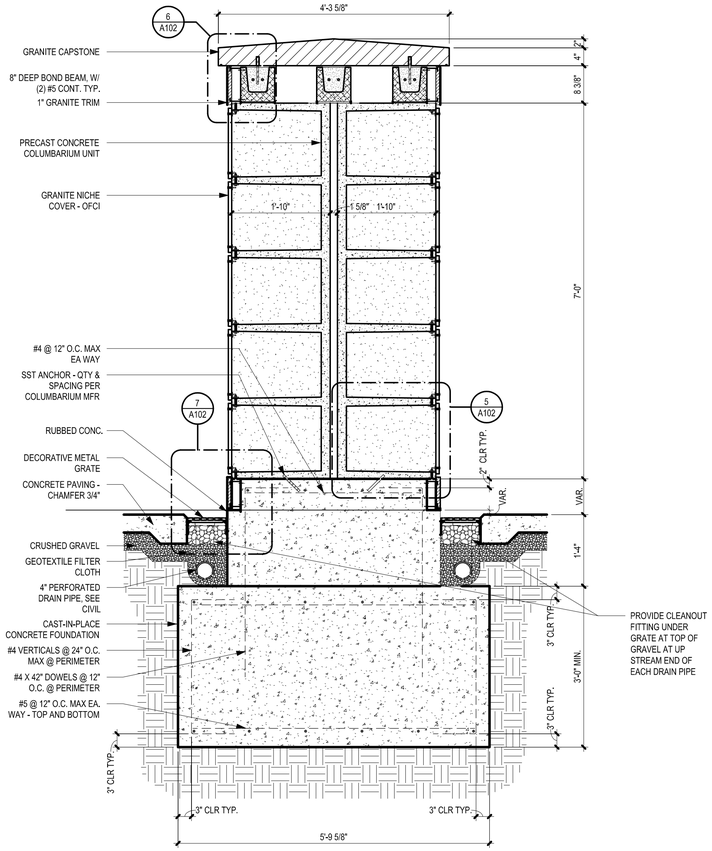
SHEET TITLE:

NEW COLUMBARIUM PLAZA PLAN & ELEVATIONS

SHEET NUMBER:

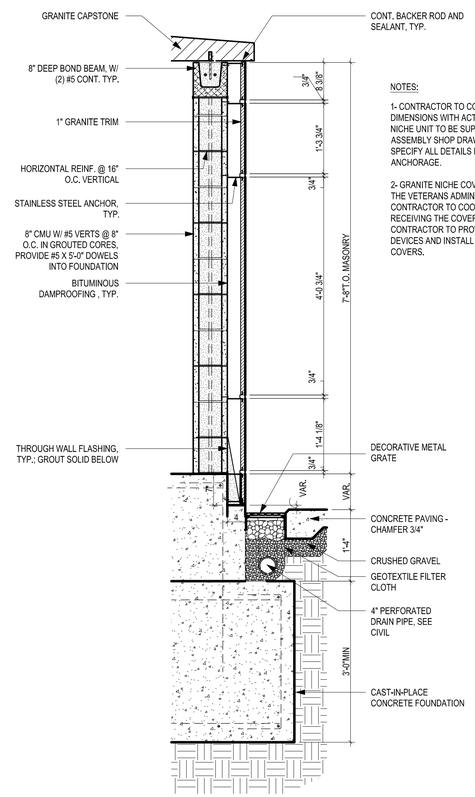
A101

13 OF 30 SHEETS
MAY 19, 2021



1 WALL SECTION @ COLUMBARIUM NICHES

0' 6" 1' 2' 3/4"=1'-0"



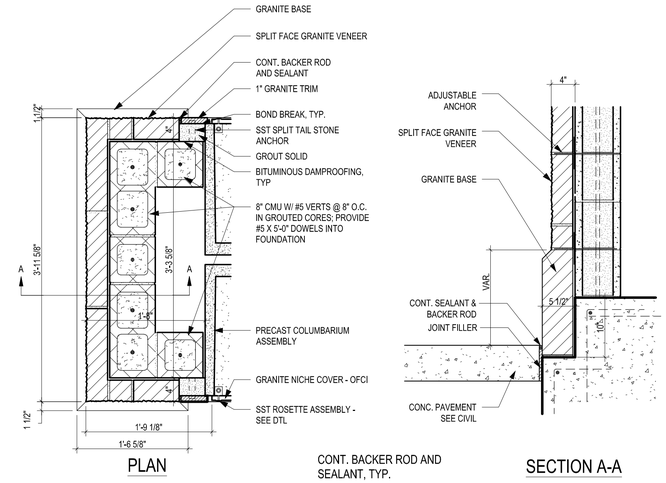
NOTES:

1- CONTRACTOR TO COORDINATE AND ADJUST ALL DIMENSIONS WITH ACTUAL SIZE OF COLUMBARIUM NICHE UNIT TO BE SUPPLIED. COLUMBARIUM NICHE ASSEMBLY SHOP DRAWINGS SHALL SHOW AND SPECIFY ALL DETAILS FOR SST NICHE ANCHORAGE.

2- GRANITE NICHE COVERS TO BE FURNISHED BY THE VETERANS ADMINISTRATION. CONTRACTOR TO COORDINATE ORDERING AND RECEIVING THE COVERS THROUGH OWNER. CONTRACTOR TO PROVIDE ALL FASTENING DEVICES AND INSTALL THE VA FURNISHED NICHE COVERS.

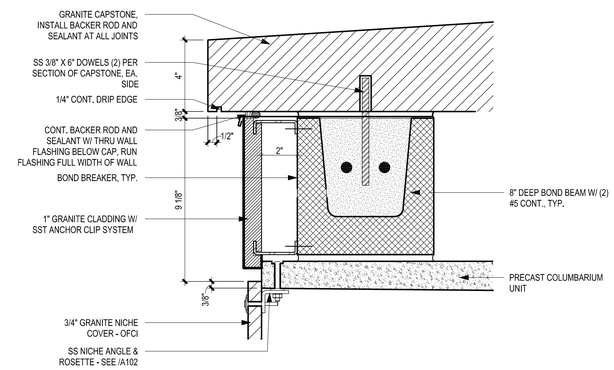
2 WALL SECTION @ GRANITE TRIM

0' 6" 1' 2' 3/4"=1'-0"



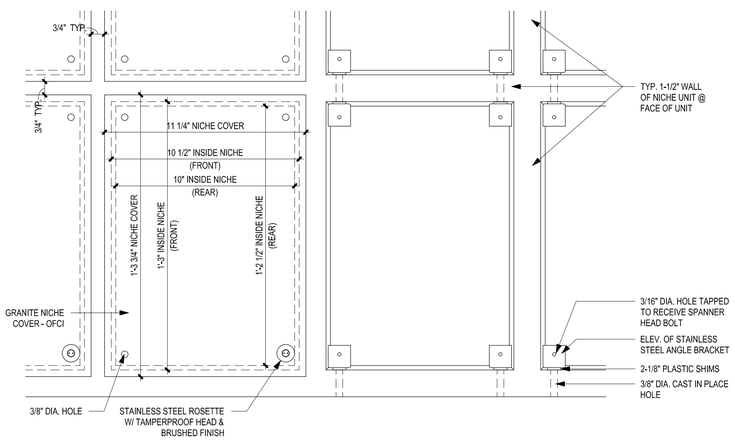
3 COLUMBARIUM END WALL ENLARGED PLAN & SECTION

0' 6" 1' 2' 1"=1'-0"



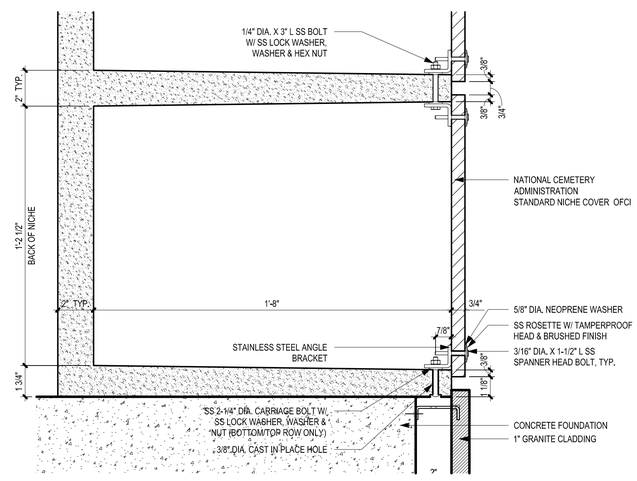
6 TYP. GRANITE CAP DETAIL

0' 2" 4" 8" 3"=1'-0"



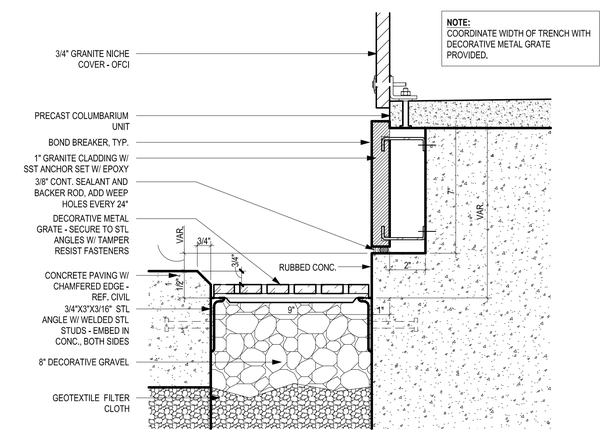
4 TYP. NICHE ELEVATION

0' 2" 4" 8" 3"=1'-0"



5 TYP. SECTION THRU NICHE

0' 2" 4" 8" 3"=1'-0"



7 TYP. NICHE BASE DETAIL

0' 2" 4" 8" 3"=1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
R. GREGORY GARNER
NUMBER A-5443
05-19-2021
ARCHITECT

Archimages architecture | interiors
143 West Clinton Place St. Louis, Missouri 63122
www.archimages-stl.com | p: (314) 965-7445 | f: (314) 965-7477

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
PUBLIC SAFETY, DIVISION OF
MISSOURI VETERANS
COMMISSION

CONSTRUCT NEW
COLUMBARIUM WALL

JACKSONVILLE VETERANS
CEMETERY

JACKSONVILLE, MO

STATE OF MO #	U-2102-01
VCGP #	FAI MO-17-15
ARCHIMAGES #	K20530
SITE #	6904
ASSET #	8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: A102.dwg
DRAWN BY: SZH
CHECKED BY: KRM
DESIGNED BY: KRM

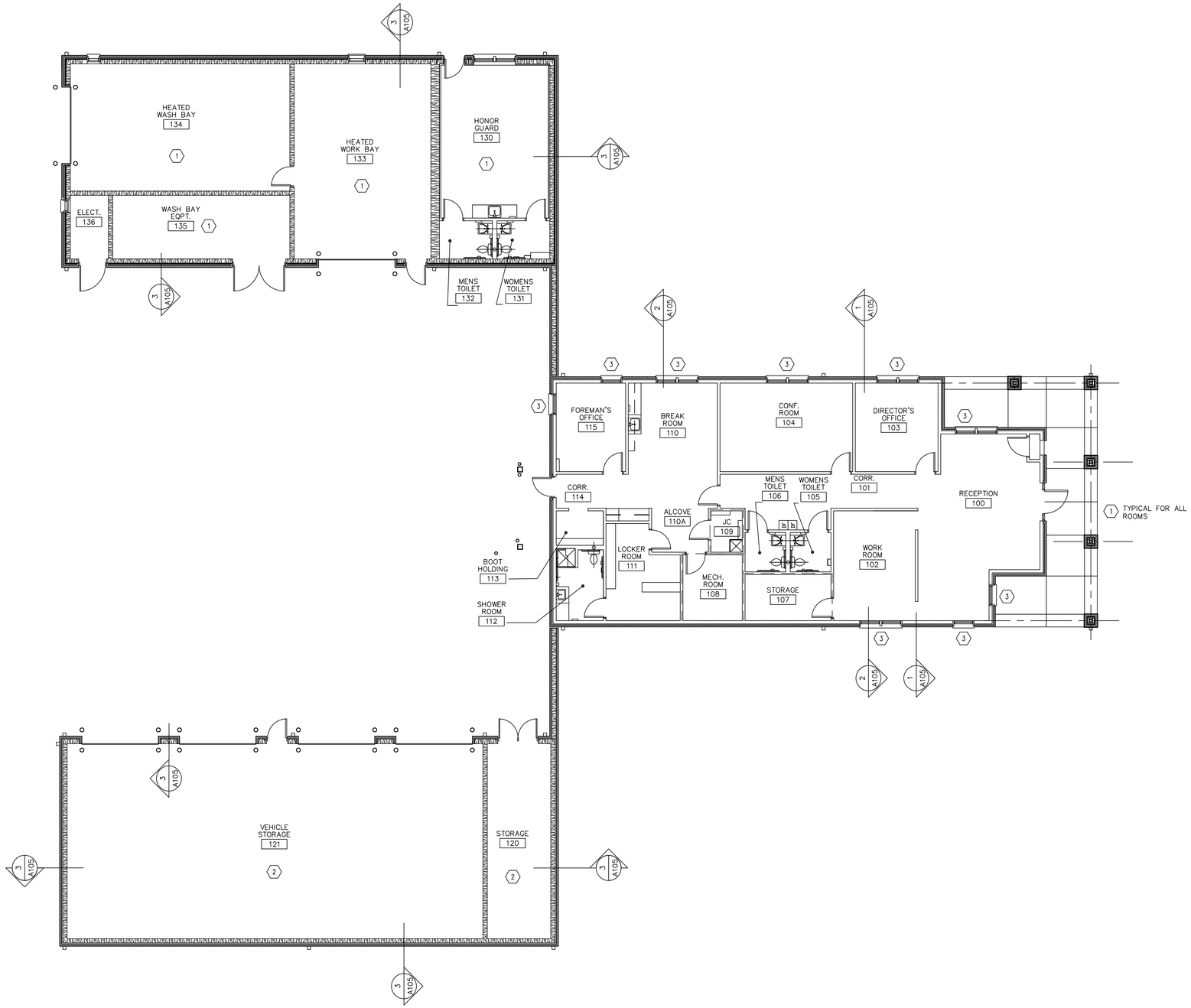
SHEET TITLE:

ENLARGED PLAN
WALL SECTIONS &
DETAILS

SHEET NUMBER:

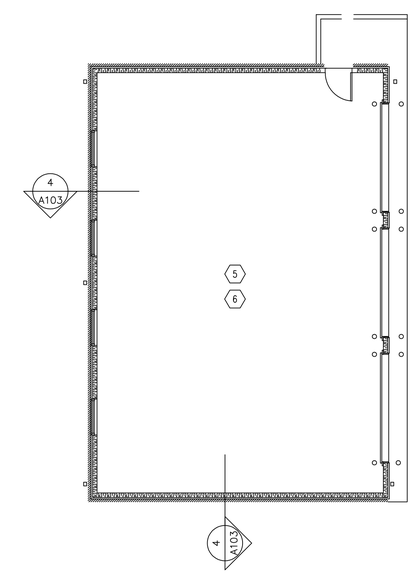
A102

MAY 19, 2021



ADMINISTRATION/MAINTENANCE BUILDINGS NOTES

MARK NUMBER	DESCRIPTION (SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION REGARDING ALTERNATE BID ITEMS AND UNIT PRICES)
1	10–INCHES OF LOOSE FILL BLOWN FIBERGLASS INSULATION OVER EXISTING R–30 BATT ATTIC INSULATION
2	DO NOT ADD INSULATION ABOVE CEILING IN UNHEATED AREAS
3	REPLACE EXISTING DOUBLE HUNG WOOD WINDOW WITH NEW WINDOW AS SPECIFIED . REPAIR INTERIOR DRYWALL AS NEEDED AND PAINT TO MATCH EXISTING. REPLACE EXISTING WOOD SILL WITH SOLID SURFACE AS DETAILED
4	NOT USED
5	PROVIDE NEW 1/2–INCH OSB TO BOTTOM OF TRUSSES AND APPLY 20–INCHES OF BLOWN LOOSE FILL FIBERGLASS INSULATION ABOVE. PROVIDE INSULATION DAMS TO KEEP VENTILATED SOFFIT CLEAR.
6	INSTALL SPRAY FOAM INSULATION IN STUD SPACE AND COVER WITH 1/2–INCH OSB



A EXISTING ADMINISTRATION FLOOR PLAN

0' 4' 8' 12' 1/8"=1'–0"

N — PLAN NORTH — TRUE NORTH

B EXISTING WEST STORAGE FLOOR PLAN

0' 4' 8' 12' 1/8"=1'–0"

N — TRUE NORTH

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
R. GREGORY GARNER
NUMBER A-5443
05-19-2021
ARCHITECT

Archimages architecture | interiors
143 West Clinton Place St. Louis, Missouri 63122
www.archimages-stl.com | p: (314) 965-7445 | f: (314) 965-7477

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
PUBLIC SAFETY, DIVISION OF
MISSOURI VETERANS COMMISSION

CONSTRUCT NEW
COLUMBARIUM WALL

JACKSONVILLE VETERANS
CEMETERY

JACKSONVILLE, MO

STATE OF MO # U-2102-01
VCGP # FAI MO-17-15
ARCHIMAGES # K20530
SITE # 6904
ASSET # 8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: A103.dwg
DRAWN BY: SZH
CHECKED BY: KRM
DESIGNED BY: KRM

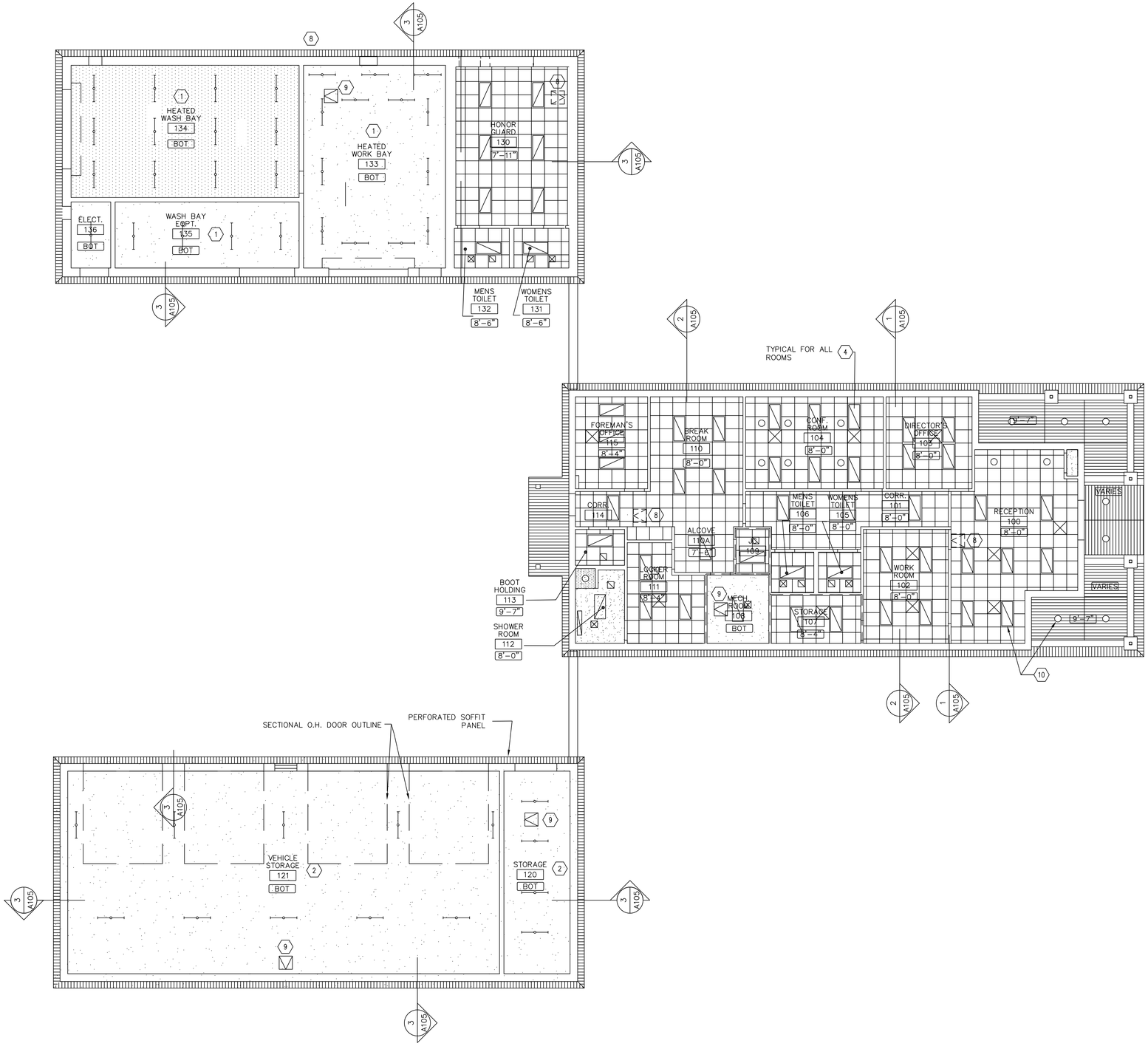
SHEET TITLE:

EXISTING ADMIN.
& STORAGE
FLOOR PLANS

SHEET NUMBER:

A103

15 OF 30 SHEETS
MAY 19, 2021



EXISTING ADMINISTRATION REFLECTED CEILING PLAN

A

0' 4' 8' 12'
1/8"=1'-0"

N PLAN NORTH

N TRUE NORTH

ADMINISTRATION/MAINTENANCE BUILDINGS NOTES

MARK NUMBER	DESCRIPTION (SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION REGARDING ALTERNATE BID ITEMS AND UNIT PRICES)
1	10-INCHES OF LOOSE FILL BLOWN FIBERGLASS INSULATION OVER EXISTING R-30 BATT ATTIC INSULATION(ALTERNATE ONE)
2	DO NOT ADD INSULATION ABOVE CEILING IN UNHEATED AREAS
3	NOT USED
4	REPLACE EXISTING LIGHT FIXTURE WITH LED
5	ADD 1/2-INCH OSB TO BOTTOM OF TRUSSES AND APPLY 20-INCHES OF BLOWN LOOSE FILL FIBERGLASS INSULATION ABOVE. PROVIDE INSULATION DAMS TO KEEP VENTILATED SOFFIT CLEAR
6	INSTALL SPRAY FOAM INSULATION IN STUD SPACE AND COVER WITH 1/2-INCH OSB (ALTERNATE ONE)
7	NOT USED
8	EXISTING ATTIC ACCESS HATCH ABOVE SUSPENDED ACOUSTICAL CEILING
9	EXISTING ATTIC ACCESS HATCH IN DRYWALL CEILING
10	LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS

NOTE:

A. REPLACE ANY CEILING TILE DAMAGED DURING THE COURSE OF THE WORK WITH NEW CEILING TILE TO MATCH THE ORIGINAL. (ALTERNATE ONE)

B. REPLACE EXISTING ATTIC ACCESS HATCHES THAT ARE DAMAGED IN THE COURSE OF THE WORK. PROVIDE ALL ADDITIONAL CEILING ACCESS HATCHES AS NECESSARY TO PERFORM THE WORK (ALTERNATE ONE)

LEGEND

- 2' X 4' RECESSED LIGHT FIXTURE
- FLUORESCENT STRIP FIXTURE
- 1' X 4' LIGHT FIXTURE
- RECESSED LIGHT FIXTURE
- SUSPENDED LIGHT FIXTURE
- SUPPLY GRILLE
- RETURN GRILLE
- ACCESS PANEL (THRU GYP. BD. CLG.)
- ACCESS PANEL (ABOVE CLG. THRU INSULA' BETW. TRUSSES/JOISTS)
- PREFINISHED METAL SOFFIT PANEL
- GYPSUM BOARD CEILING
- GLASS-MAT WALLBOARD CEILING - SEE SPECS.
- FINISH CEILING HEIGHT (ABOVE FINISH FLOOR) NOTE: WHERE CEILING IS TO BE INSTALLED AGAINST B.O. ROOF TRUSSES, THE MARK 'BOT' IS USED)

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
R. GREGORY GARNER
NUMBER A-5443
05-19-2021
ARCHITECT

Archimages architecture | interiors
143 West Clinton Place St. Louis, Missouri 63122
www.archimages-stl.com | p: (314) 965-7445 | f: (314) 965-7477

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO # U-2102-01
VCGP # FAI MO-17-15
ARCHIMAGES # K20530
SITE # 6904
ASSET # 8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: A104.dwg
DRAWN BY: SZH
CHECKED BY: KRM
DESIGNED BY: KRM

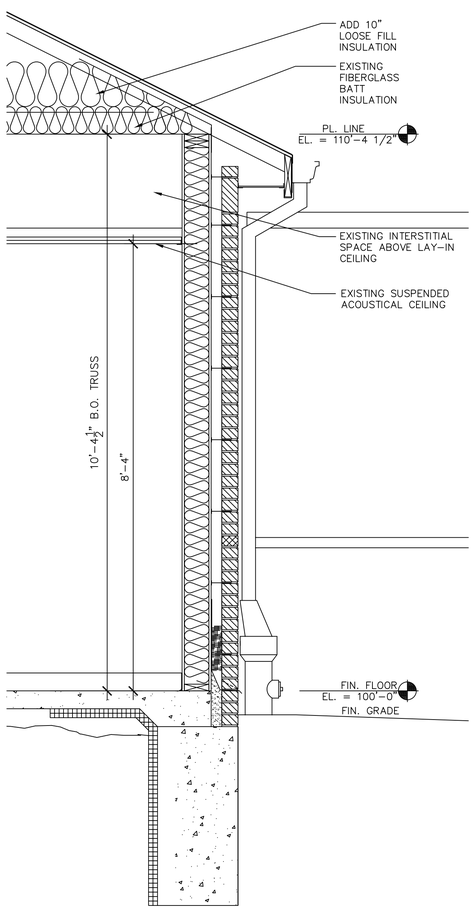
SHEET TITLE:

EXISTING ADMIN. REFLECTED CEILING PLAN

SHEET NUMBER:

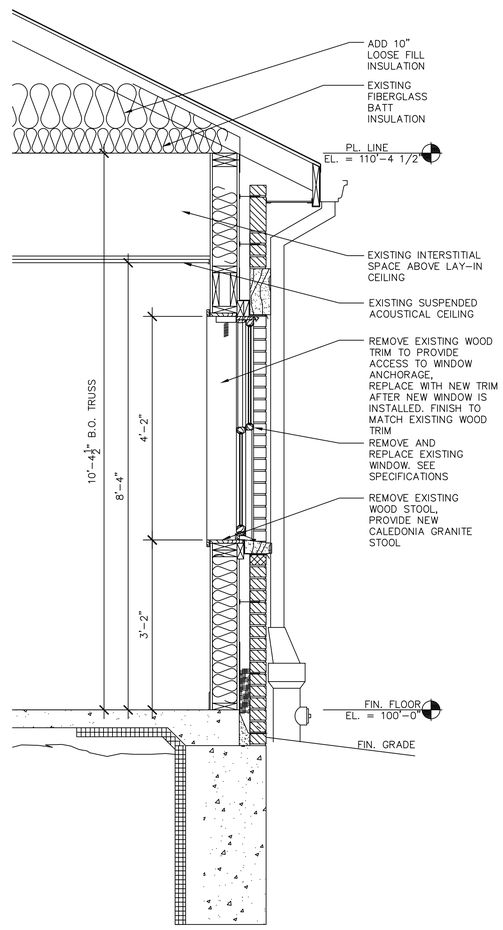
A104

16 OF 30 SHEETS
MAY 19, 2021



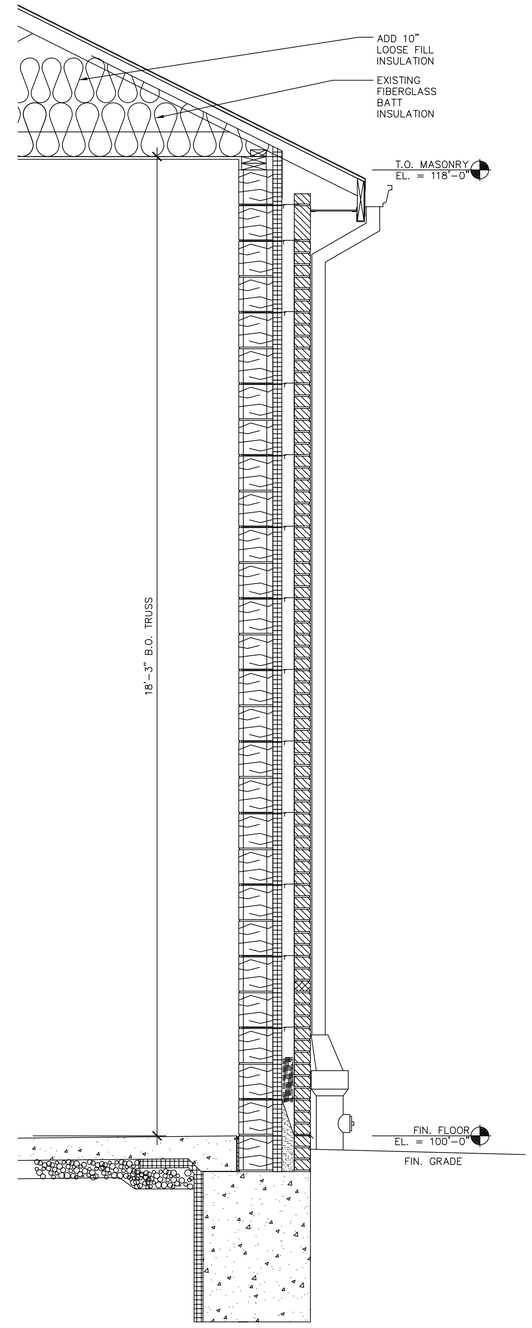
1 TYPICAL WALL SECTION ADMIN. BUILDING

0' 6" 1' 2' 3/4"=1'-0"



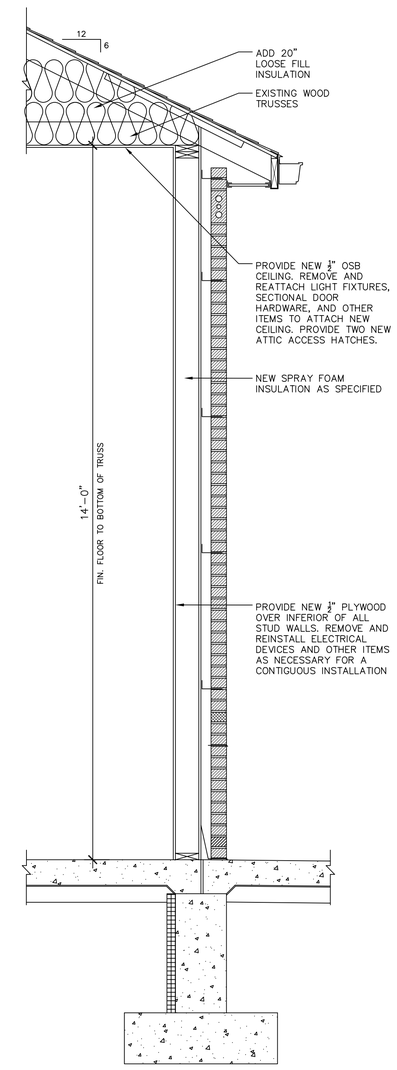
2 SECTION AT WINDOW ADMIN. BUILDING

0' 6" 1' 2' 3/4"=1'-0"



3 TYPICAL WALL SECTION MAINTENANCE BUILDING

0' 6" 1' 2' 3/4"=1'-0"



4 TYPICAL WALL SECTION WEST BUILDING

0' 6" 1' 2' 3/4"=1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

Archimages architecture | interiors
143 West Clinton Place St. Louis, Missouri 63122
www.archimages-stl.com | p: (314) 965-7445 | f: (314) 965-7477

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
PUBLIC SAFETY, DIVISION OF
MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO # U-2102-01
VCGP # FAI MO-17-15
ARCHIMAGES # K20530
SITE # 6904
ASSET # 8136904009

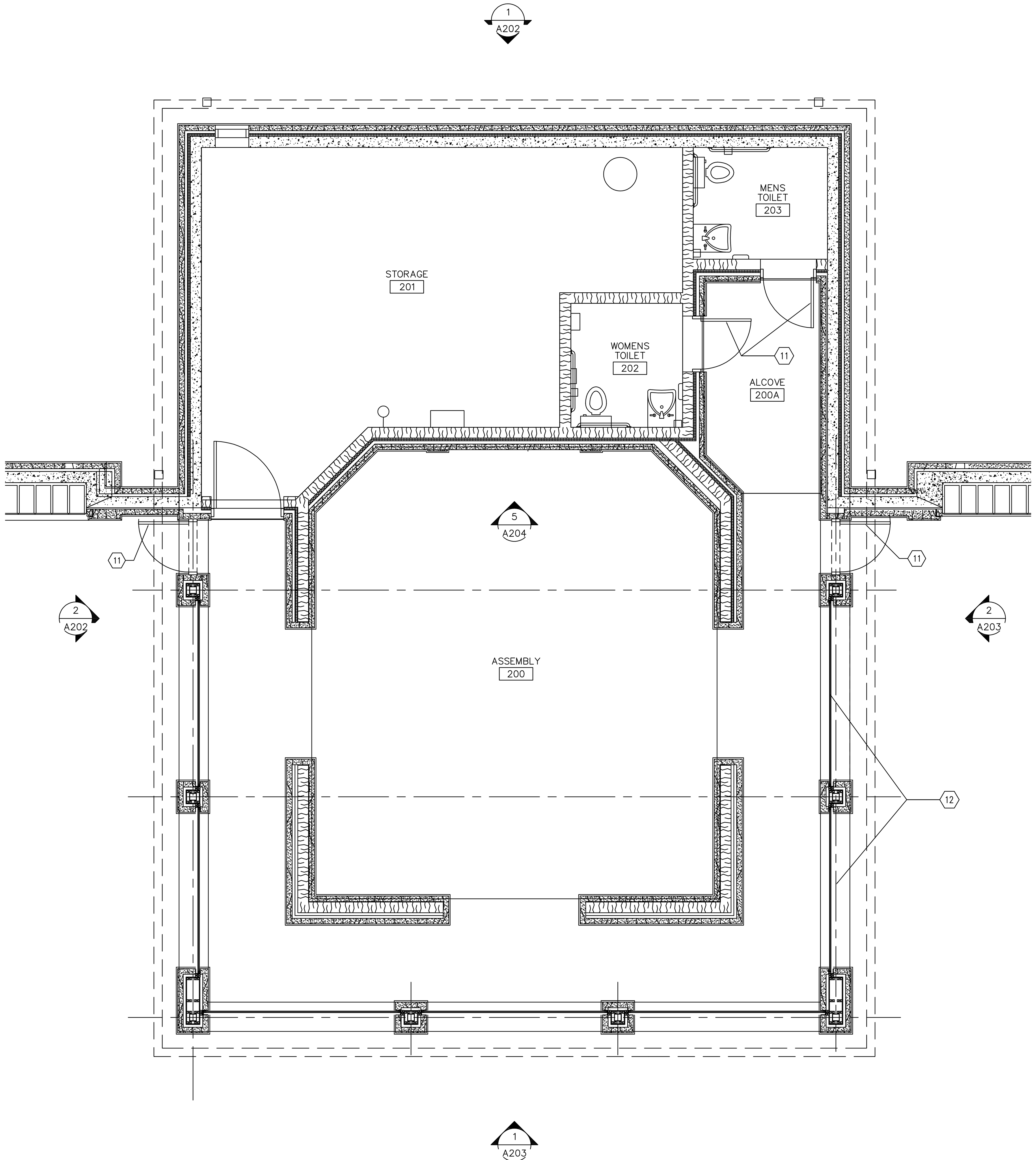
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: A105.dwg
DRAWN BY: SZH
CHECKED BY: KRM
DESIGNED BY: KRM

SHEET TITLE:
EXISTING WALL SECTIONS

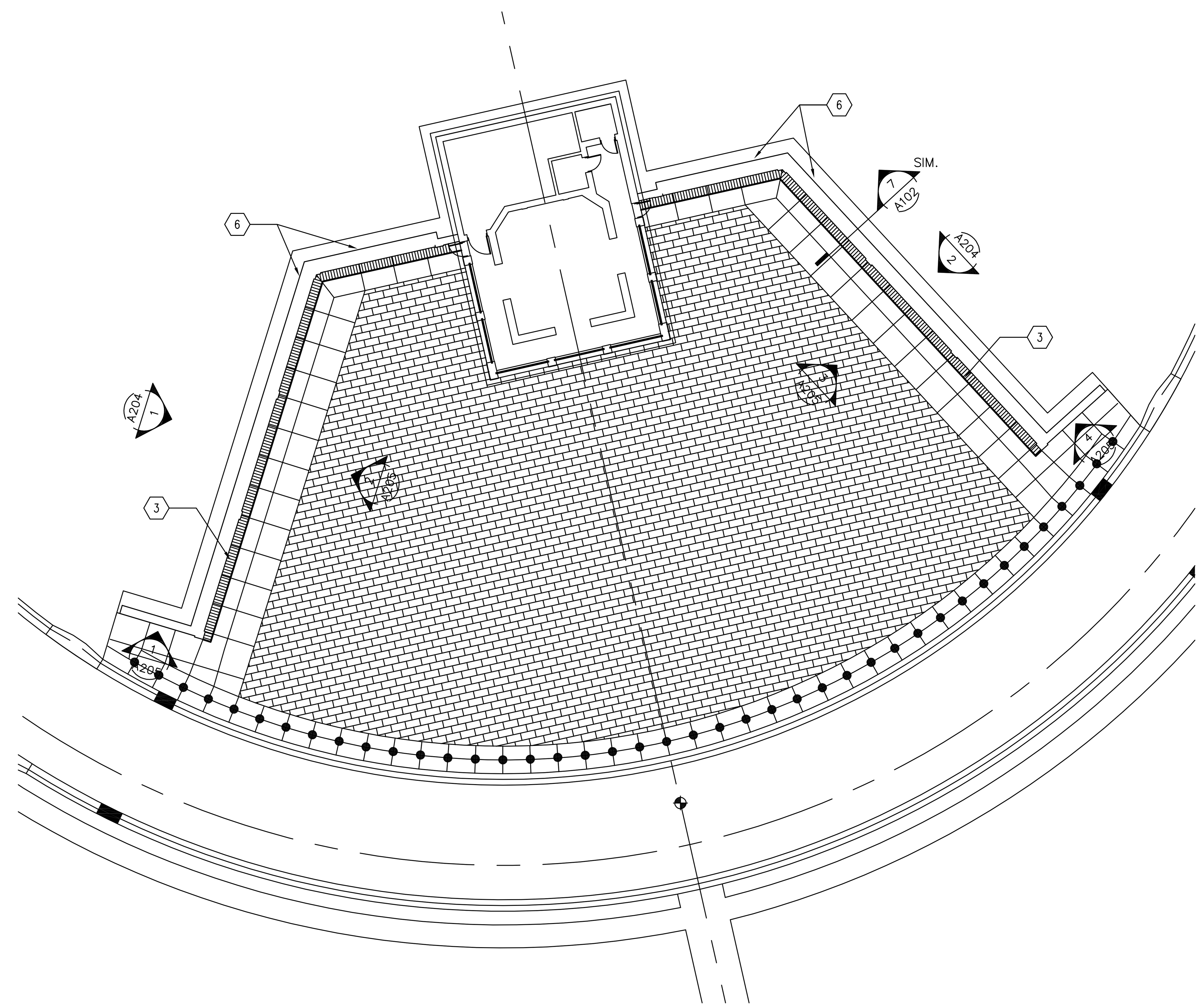
SHEET NUMBER:
A105

17 OF 30 SHEETS
MAY 19, 2021



A **COMMITTAL SHELTER FLOOR PLAN**

0' 2' 4' 6'
1/4"=1'-0"



B **EXISTING COMMITTAL SHELTER PLAZA LAYOUT PLAN**

0' 10' 20' 40'
1"=20.0'

N

EXISTING SHELTER & COLUMBARIUM KEY NOTES

MARK NUMBER	
1	NOT USED ON THIS SHEET
2	NOT USED ON THIS SHEET
3	SAW CUT CONCRETE AND REMOVE TO ALLOW REPLACEMENT OF DAMAGED STONES. INSTALL DECORATIVE GRAVEL AND CAST IRON GRATE IN THE REMAINING TRENCH
4	NOT USED ON THIS SHEET
5	CLEAN AND SEAL ALL LIMESTONE ON COLUMBARIUM WALLS AND SHELTER
6	REMOVE SEALANT FROM ALL STONE WALL CAP JOINTS AND REPLACE WITH NEW SEALANT
7	NOT USED ON THIS SHEET
8	NOT USED ON THIS SHEET
9	NOT USED ON THIS SHEET
10	NOT USED ON THIS SHEET
11	REPAINT HOLLOW METAL DOOR AND FRAME
12	ADD SAFETY STOPS TO 7 EXISTING COILING DOORS

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
R. GREGORY GARNER
NUMBER A-5443
05-19-2021
ARCHITECT

Archimages architecture | interiors
143 West Clinton Place St. Louis, Missouri 63122
www.archimages-stl.com | p: (314) 965-7445 | f: (314) 965-7477

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

DEPARTMENT OF PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO # U-2102-01
VCGP # FAI MO-17-15
ARCHIMAGES # K20530
SITE # 6904
ASSET # 8136904009

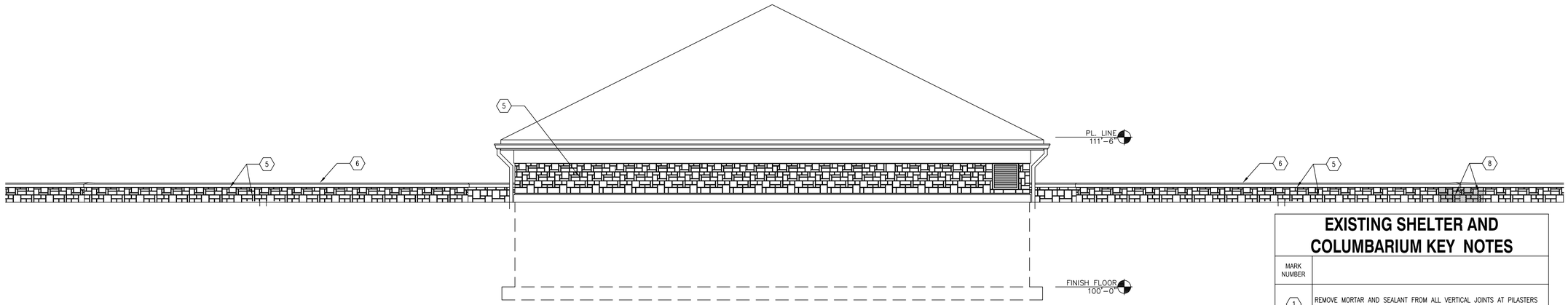
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: A201.dwg
DRAWN BY: SZH
CHECKED BY: KRM
DESIGNED BY: KRM

SHEET TITLE:
EXISTING COMMITTAL SHELTER PLAZA & PLAN

SHEET NUMBER:
A201

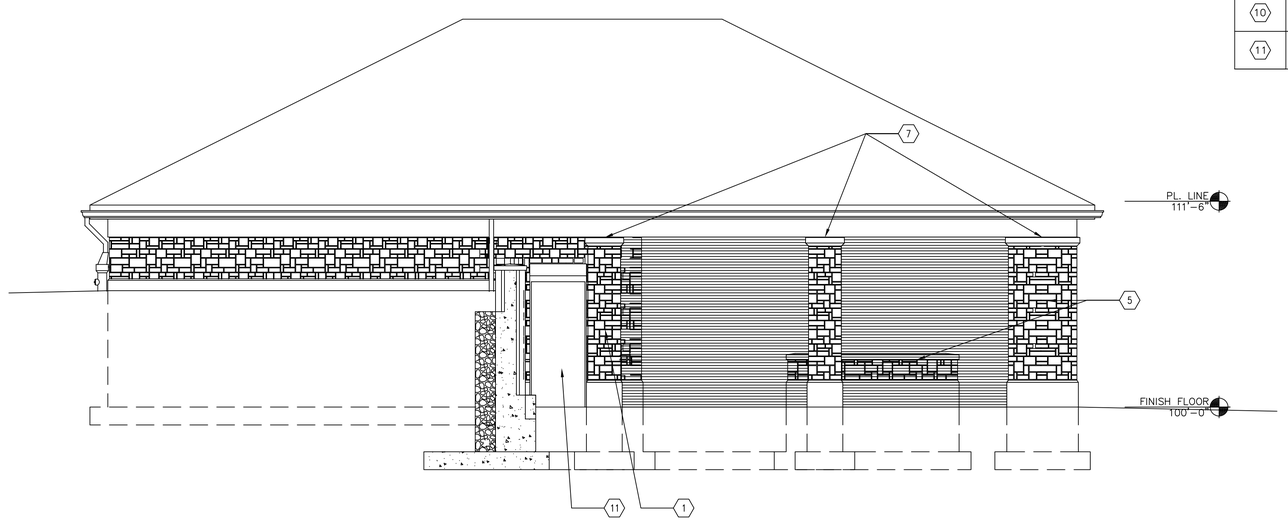
18 OF 30 SHEETS
MAY 19, 2021



1 NORTH ELEVATION

0' 2' 4' 6'
1/4"=1'-0"

EXISTING SHELTER AND COLUMBARIUM KEY NOTES	
MARK NUMBER	
1	REMOVE MORTAR AND SEALANT FROM ALL VERTICAL JOINTS AT PILASTERS AND INSIDE CORNERS OF WALL INTERSECTIONS
2	NOT USED ON THIS SHEET
3	NOT USED ON THIS SHEET
4	NOT USED ON THIS SHEET
5	CLEAN AND SEAL ALL LIMESTONE ON COLUMBARIUM WALLS AND SHELTER
6	'REMOVE SEALANT FROM ALL STONE WALL CAP JOINTS AND REPLACE WITH NEW SEALANT
7	REMOVE AND REPLACE SEALANT AT JOINTS IN PILASTER CAP STONES
8	REMOVE AND REPLACE RANDOM ASHLAR LIMESTONE
9	NOT USED ON THIS SHEET
10	NOT USED ON THIS SHEET
11	REPAINT HOLLOW METAL DOOR AND FRAME



2 WEST ELEVATION

0' 2' 4' 6'
1/4"=1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
R. GREGORY GARNER
NUMBER A-5443
05-19-2021
ARCHITECT

Archimages architecture | interiors
143 West Clinton Place St. Louis, Missouri 63122
www.archimages-stl.com | p: (314) 965-7445 | f: (314) 965-7477

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
PUBLIC SAFETY, DIVISION OF
MISSOURI VETERANS
COMMISSION

CONSTRUCT NEW
COLUMBARIUM WALL

JACKSONVILLE VETERANS
CEMETERY

JACKSONVILLE, MO

STATE OF MO # U-2102-01
VCGP # FAI MO-17-15
ARCHIMAGES # K20530
SITE # 6904
ASSET # 8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: A202.dwg
DRAWN BY: SZH
CHECKED BY: KRM
DESIGNED BY: KRM

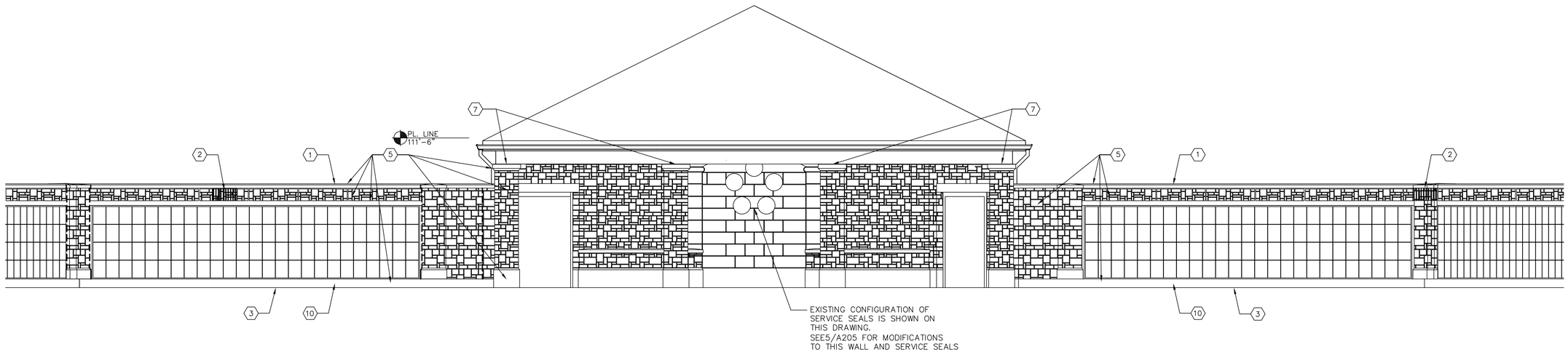
SHEET TITLE:

EXISTING COMMITTAL
SHELTER
ELEVATIONS

SHEET NUMBER:

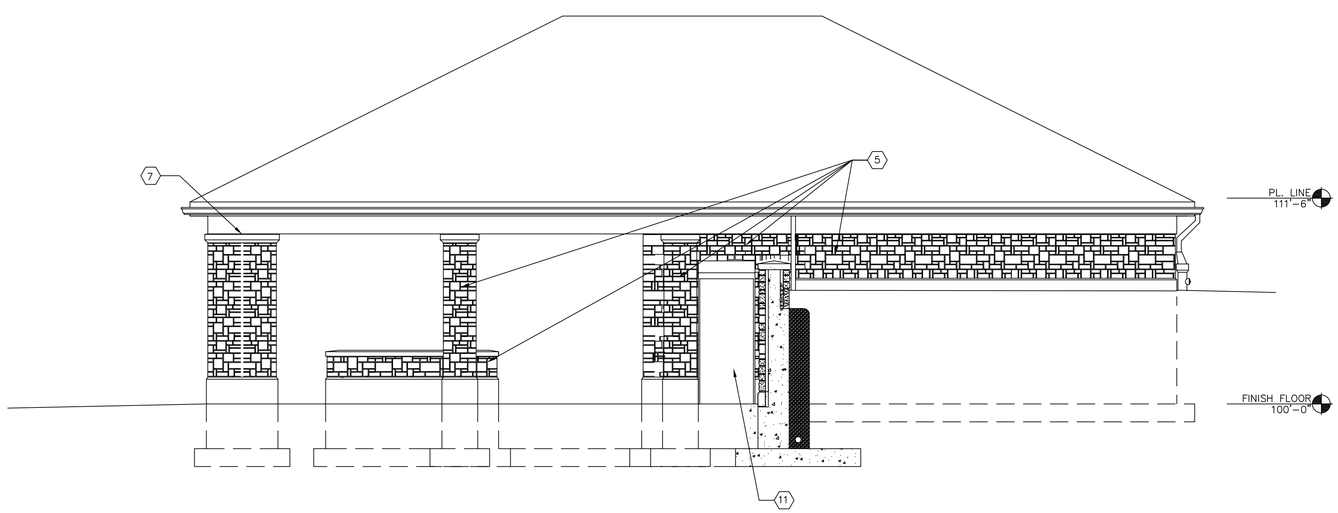
A202

MAY 19, 2021



1 SOUTH ELEVATION

0' 2' 4' 6'
1/4"=1'-0"



2 EAST ELEVATION

0' 2' 4' 6'
1/4"=1'-0"

EXISTING SHELTER AND COLUMBARIUM KEY NOTES

MARK NUMBER	
1	REMOVE MORTAR AND SEALANT FROM ALL VERTICAL JOINTS AT PILASTERS AND INSIDE CORNERS OF WALL INTERSECTIONS
2	PROVIDE TUCK POINTING ON ASHLAR LIMESTONE
3	SAW CUT CONCRETE AND REMOVE TO ALLOW REPLACEMENT OF DAMAGED STONES. INSTALL DECORATIVE GRAVEL AND CAST IRON GRATE IN THE REMAINING TRENCH
4	NOT USED ON THIS SHEET
5	CLEAN AND SEAL ALL LIMESTONE ON COLUMBARIUM WALLS AND SHELTER
6	NOT USED ON THIS SHEET
7	REMOVE AND REPLACE SEALANT AT JOINTS IN PILASTER CAP STONES
8	NOT USED ON THIS SHEET
9	NOT USED ON THIS SHEET
10	REMOVE MORTAR AND SEALANT FROM ALL JOINTS IN BASE STONES ON THE FACE OF THE COLUMBARIUM. REPLACE WITH NEW BACKER ROD AND SEALANT
11	REPAINT THE HOLLOW METAL DOOR AND FRAME

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
R. GREGORY GARNER
NUMBER A-5443
05-19-2021
ARCHITECT

Archimages architecture | interiors
143 West Clinton Place St. Louis, Missouri 63122
www.archimages-stl.com | p: (314) 965-7445 | f: (314) 965-7477

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW
COLUMBARIUM WALL

JACKSONVILLE VETERANS
CEMETERY

JACKSONVILLE, MO

STATE OF MO # U-2102-01
VCGP # FAI MO-17-15
ARCHIMAGES # K20530
SITE # 6904
ASSET # 8136904009

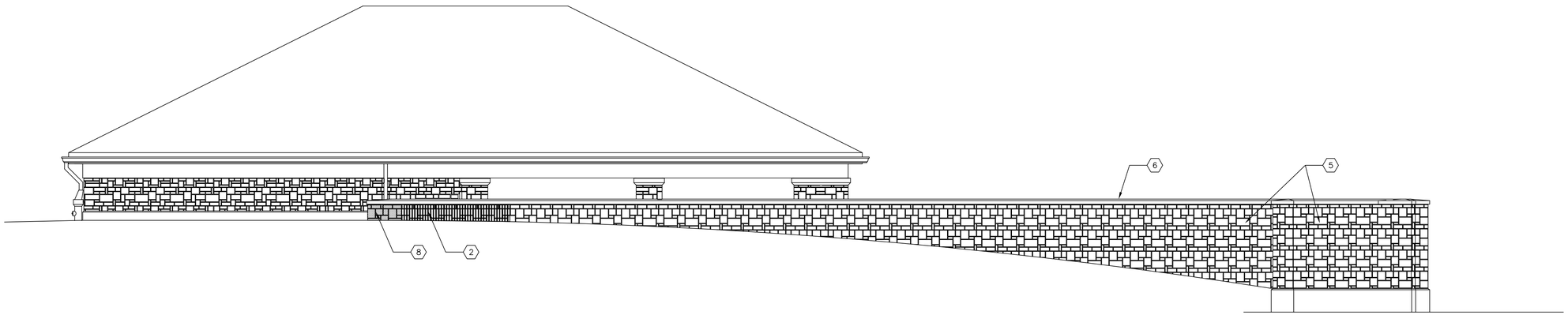
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: A203.dwg
DRAWN BY: SZH
CHECKED BY: KRM
DESIGNED BY: KRM

SHEET TITLE:
EXISTING COMMITTAL
SHELTER
ELEVATIONS

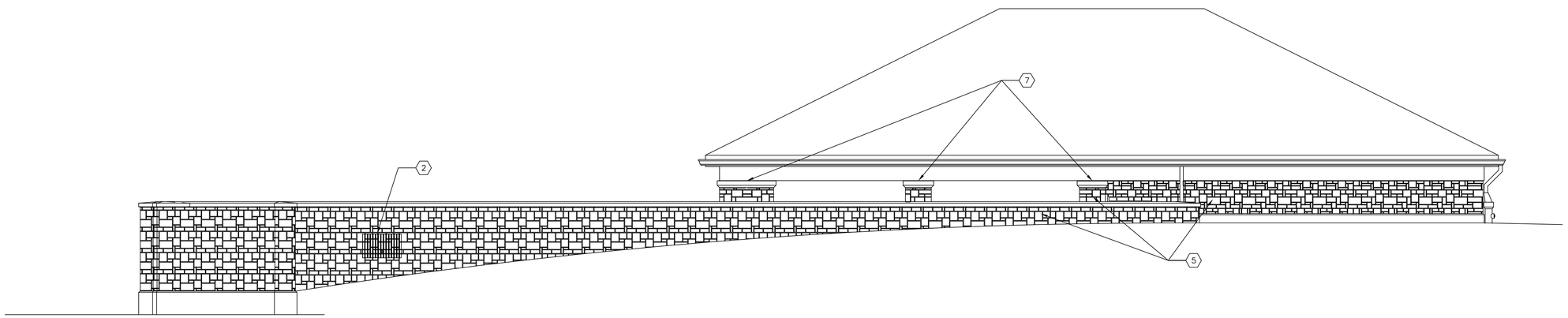
SHEET NUMBER:
A203

20 OF 30 SHEETS
MAY 19, 2021



1 WEST ELEVATION

0' 2' 4' 6'
1/4"=1'-0"



2 EAST ELEVATION

0' 2' 4' 6'
1/4"=1'-0"

KEY NOTES

MARK NUMBER	
1	NOT USED ON THIS SHEET
2	PROVIDE TUCK POINTING ON ASHLAR LIMESTONE
3	NOT USED ON THIS SHEET
4	NOT USED ON THIS SHEET
5	CLEAN AND SEAL ALL LIMESTONE ON COLUMBARIUM WALLS AND SHELTER
6	*REMOVE SEALANT FROM ALL STONE WALL CAP JOINTS AND REPLACE WITH NEW SEALANT
7	REMOVE AND REPLACE SEALANT AT JOINTS IN PILASTER CAP STONES
8	REMOVE AND REPLACE RANDOM ASHLAR LIMESTONE
9	NOT USED ON THIS SHEET
10	NOT USED ON THIS SHEET
11	NOT USED ON THIS SHEET

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
R. GREGORY GARNER
NUMBER A-5443
05-19-2021
ARCHITECT

Archimages
architecture | interiors
143 West Clinton Place St. Louis, Missouri 63122
www.archimages-stl.com | p: (314) 965-7445 | f: (314) 965-7477

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO # U-2102-01
VCGP # FAI MO-17-15
ARCHIMAGES # K20530
SITE # 6904
ASSET # 8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: A204.dwg
DRAWN BY: SZH
CHECKED BY: KRM
DESIGNED BY: KRM

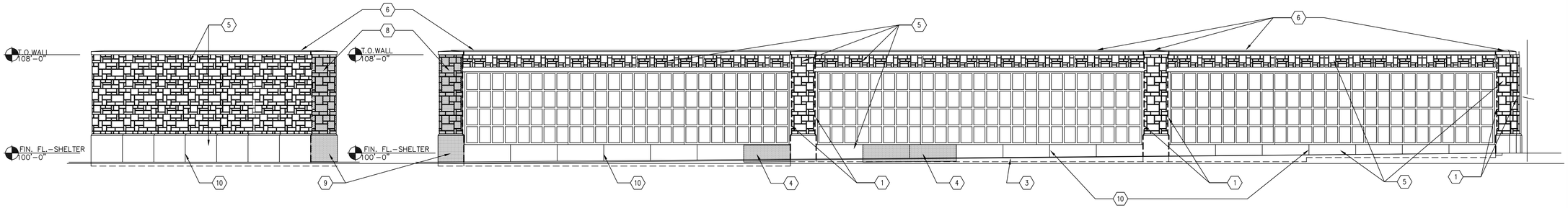
SHEET TITLE:

EXISTING COMMITTAL SHELTER SIDE ELEVATIONS

SHEET NUMBER:

A204

21 OF 30 SHEETS
MAY 19, 2021

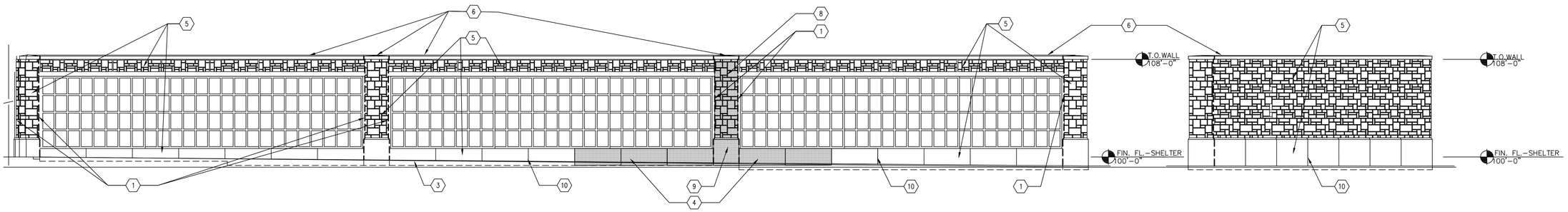


1 SOUTH ELEVATION OF WEST WING OF EXISTING COLUMBARIUM WALL

0' 2' 4' 6' 1/4"=1'-0"

2 EAST ELEVATION OF WEST WING OF EXISTING COLUMBARIUM WALL

0' 2' 4' 6' 1/4"=1'-0"

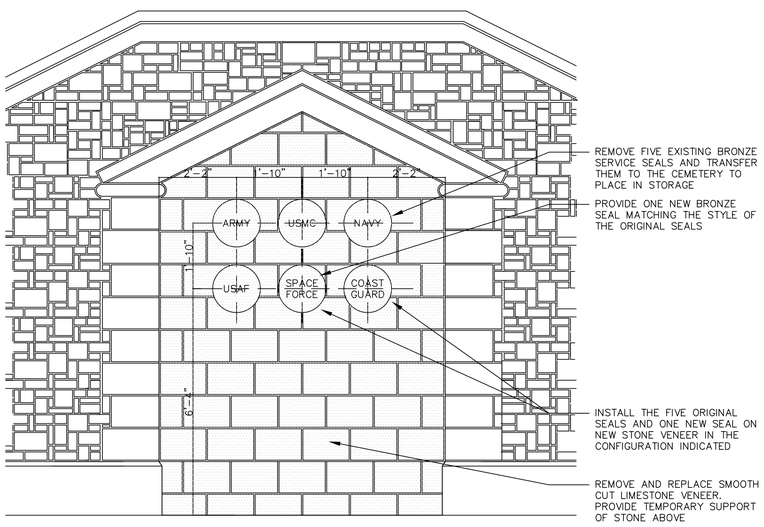


3 WEST ELEVATION OF EAST WING OF EXISTING COLUMBARIUM WALL

0' 2' 4' 6' 1/4"=1'-0"

4 SOUTH ELEVATION OF EAST WING OF EXISTING COLUMBARIUM WALL

0' 2' 4' 6' 1/4"=1'-0"



5 NEW ARRANGEMENT OF SERVICE SEALS

0' 2' 4' 6' 1/4"=1'-0"

EXISTING SHELTER AND COLUMBARIUM KEY NOTES

MARK NUMBER	
1	REMOVE MORTAR AND SEALANT FROM ALL VERTICAL JOINTS AT PILASTERS AND INSIDE CORNERS OF WALL INTERSECTIONS
2	NOT USED ON THIS SHEET
3	SAW CUT CONCRETE AND REMOVE TO ALLOW REPLACEMENT OF DAMAGED STONES. INSTALL DECORATIVE GRAVEL AND CAST IRON GRATE IN THE REMAINING TRENCH
4	REMOVE AND REPLACE SMOOTH CUT LIMESTONE BELOW NICHES AS INDICATED
5	CLEAN AND SEAL ALL LIMESTONE ON COLUMBARIUM WALLS AND SHELTER
6	'REMOVE SEALANT FROM ALL STONE WALL CAP JOINTS AND REPLACE WITH NEW SEALANT
7	NOT USED ON THIS SHEET
8	REMOVE AND REPLACE RANDOM ASHLAR LIMESTONE
9	REMOVE AND REPLACE SMOOTH CUT LIMESTONE & ASHLAR STONE.
10	REMOVE MORTAR AND SEALANT FROM ALL JOINTS IN BASE STONES ON THE FACE OF THE COLUMBARIUM. REPLACE WITH NEW BACKER ROD AND SEALANT
11	NOT USED ON THIS SHEET

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
R. GREGORY GARNER
NUMBER A-5443
05-19-2021
ARCHITECT

Archimages architecture | interiors
143 West Clinton Place St. Louis, Missouri 63122
www.archimages-stl.com | p: (314) 965-7445 | f: (314) 965-7477

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

DEPARTMENT OF PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO # U-2102-01
VCGP # FAI MO-17-15
ARCHIMAGES # K20530
SITE # 6904
ASSET # 8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: A205.dwg
DRAWN BY: SZH
CHECKED BY: KRM
DESIGNED BY: KRM

SHEET TITLE:
EXISTING COLUMBARIUM WALLS ELEVATIONS

SHEET NUMBER:
A205

22 OF 30 SHEETS
MAY 19, 2021

SYMBOLS

PIPING

- DIRECTION OF FLOW
- UNION
- FLANGE CONNECTION
- CAP
- ELBOW UP
- ELBOW DOWN
- TEE UP
- TEE DOWN
- PIPE REDUCER
- PIPE GUIDE
- PIPE ANCHOR
- EXPANSION JOINT
- SHUT-OFF VALVE
- CHECK VALVE
- BALANCING VALVE WITH PRESSURE PORTS
- TRIPLE DUTY VALVE
- STRAINER
- STRAINER WITH BLOWOFF
- RELIEF/SAFETY VALVE
- MANUAL AIR VENT
- SOLENOID VALVE
- THREE-WAY CONTROL VALVE
- TWO-WAY CONTROL VALVE
- PRESSURE REDUCING VALVE
- PRESSURE GAUGE
- THERMOMETER
- BACKFLOW PREVENTER
- REDUCED PRESSURE BACKFLOW PREVENTER
- AIR OUTLET
- OXYGEN OUTLET
- VACUUM OUTLET
- NITROGEN OUTLET
- NITROUS OXIDE OUTLET
- FS-1 FLOOR SINK
- FD-1 FLOOR DRAIN
- RD-1 ROOF DRAIN
- HB-1 HOSE BIBB
- FLOOR/GRADE CLEANOUT
- WALL CLEANOUT
- END OF LINE CLEANOUT

PLUMBING

- WASTE LINE-ABOVE GRADE
- GW GREASE WASTE LINE-ABOVE GRADE
- WASTE LINE-BELOW GRADE
- VENT LINE
- DOMESTIC COLD WATER
- DOMESTIC HOT WATER
- T DOMESTIC TEMPERED HOT WATER
- DOMESTIC HOT WATER RECIRC.
- 140 140 DEGREE DOMESTIC HOT WATER
- VENT THROUGH ROOF NOTE

DUCTWORK

- AHU EQUIPMENT TYPE AND NUMBER
- PUMP
- LINEAR SLOT DIFFUSER
- FLEXIBLE DUCT
- NEGATIVE PRESSURE AIR DUCT UP
- NEGATIVE PRESSURE AIR DUCT DOWN
- POSITIVE PRESSURE AIR DUCT UP
- POSITIVE PRESSURE AIR DUCT DOWN
- RISE DUCT RISE OR DROP IN THE DIRECTION OF AIRFLOW
- SQUARE TO ROUND TRANSITION
- ROUND DUCT UP, DOWN
- ELBOW WITH TURNING VANES
- FLEXIBLE CONNECTION
- MANUAL BALANCE DAMPER
- M MOTORIZED CONTROL DAMPER
- F FIRE DAMPER
- S SMOKE DAMPER
- FS FIRE/SMOKE DAMPER
- SPIN-IN BRANCH DUCT CONNECTOR-WITH DAMPER IF SHOWN
- HIGH EFFICIENCY BRANCH DUCT CONNECTOR-WITH DAMPER IF SHOWN
- SUPPLY AIR DIFFUSER
- DUCT MOUNTED GRILLE/WALL GRILLE
- RETURN GRILLE
- NOISE REDUCING RETURN AIR TRANSFER
- SUPPLY DIFFUSER - THREE-WAY THROW
- 24 DIFFUSER, GRILLE, OR REGISTER TYPE
- 100 CFM
- 6" CONNECTION SIZE

TEMPERATURE CONTROLS

- T AHU-1 TEMPERATURE SENSOR/THERMOSTAT SERVING AHU-1
- H HUMIDITY SENSOR/HUMIDISTAT
- T REMOTE TEMPERATURE SENSOR
- H REMOTE HUMIDITY SENSOR
- CO2 CARBON DIOXIDE SENSOR
- OCC OCCUPANCY SENSOR
- CO CARBON MONOXIDE SENSOR
- SP STATIC PRESSURE SENSOR
- DP DIFFERENTIAL PRESSURE TRANSMITTER
- FM FLOW METER

LIGHTING

- LIGHT TRACK WITH LIGHT TYPES AS INDICATED
- WALL WASHER LIGHTING FIXTURE, ARROW INDICATES DIRECTION
- A FLUORESCENT FIXTURE AND TYPE
- EMERGENCY LIGHT FIXTURE
- NIGHT LIGHT FIXTURE
- A LIGHT FIXTURE AND TYPE
- A LIGHT FIXTURE AND TYPE
- WALL MOUNTED FIXTURE
- WALL SCONCE
- WALL MOUNTED FIXTURE
- POLE MOUNTED LIGHT (NUMBER OF HEADS AS SHOWN)
- TENON MOUNTED POLE LIGHT
- IN-GROUND LIGHT FIXTURE
- BOLLARD LIGHT FIXTURE
- EXIT LIGHT CLG. MNTD. (SGL. FACE)
- EXIT LIGHT CLG. MNTD. (DBL. FACE)
- EXIT LIGHT WALL MNTD. (SGL. FACE)
- EXIT/EMERGENCY LIGHT
- EMERGENCY LIGHT
- CEILING FAN

POWER EQUIPMENT

- ELECTRICAL DISTRIBUTION PANEL, SWITCHBOARD, OR MOTOR CONTROL
- PANEL BOARD
- LOAD CENTER
- M METER
- J-BOX
- MOTOR
- DISCONNECT SWITCH
- COMBINATION DISCONNECT SWITCH AND MOTOR STARTER
- MAGNETIC MOTOR STARTER, NEMA SIZE AS NOTED
- VFD VARIABLE FREQUENCY DRIVE
- BELL
- HOME RUN
- CONCEALED CONDUIT
- CONDUIT BELOW SLAB
- ONE HOT, ONE NEUTRAL, AND ONE GROUND IN CONCEALED CONDUIT (#12 IN 1/2" C. U.N.O.)
- #14'S (WIRE NUMBER INDICATED)
- #16'S (WIRE NUMBER INDICATED)
- EXPOSED CONDUIT
- CONDUIT TURNING DOWN
- CONDUIT TURNING UP

WIRING DEVICES & OUTLETS

- SIMPLEX RECEPTACLE
- DUPLEX RECEPTACLE
- G GROUND FAULT INTERRUPTER
- WP WEATHERPROOF GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE
- USB DUPLEX RECEPTACLE WITH USB OUTLETS
- QUAD RECEPTACLE
- HEAVY DUTY RECEPTACLE-NEMA TYPE AS NOTED
- FLOOR MOUNTED DEVICE
- CEILING MOUNTED DEVICE
- ISOLATED GROUND DUPLEX RECEPTACLE
- ISOLATED GROUND QUAD RECEPTACLE
- CONTROLLED RECEPTACLE
- W WALL MOUNTED PHONE
- 48 48" CENTER OF DEVICE AT 48" A.F.F.
- DATA OUTLET
- TELEPHONE/DATA OUTLET
- CABLE T.V. OUTLET
- CABLE TRAY
- SURFACE RACEWAY
- S SWITCH, SPST U.N.O.
- S^2 SWITCH, DPST
- S^F FUSESTAT
- S^3 3-WAY SWITCH
- S^4 4-WAY SWITCH
- S^D DIMMER SWITCH
- S^J JAMB SWITCH
- S^M MOTOR RATED SWITCH
- S^{WP} SWITCH WITH WEATHERPROOF COVER
- S^K KEYED SWITCH
- TS TIME SWITCH
- PUSH BUTTON
- P PHOTOCELL SWITCH
- # CEILING OCCUPANCY SENSOR
- RC* ROOM CONTROLLER
- EM* EMERGENCY CONTROL UNIT
- P POWER PACK

ABBREVIATIONS

A	AMPS; AIR (COMPRESSED)
A/C	AIR CONDITIONING
AF	AMPERE FUSE
AFC	ABOVE FINISHED CEILING
AFEA	AREA FOR EVACUATION ASSISTANCE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CURRENT
AL	ALUMINUM
APD	AIR PRESSURE DROP
ATS	AUTOMATIC TRANSFER SWITCH
AV	ACID VENT
AW	ACID WASTE
AWG	AMERICAN WIRE GAUGE
BCU	BLOWER COIL UNIT
BFP	BACKFLOW PREVENTER
BHP	BRAKE HORSEPOWER
BFF	BELOW FINISHED FLOOR
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BOS	BOTTOM OF STRUCTURE
BTUH	BRITISH THERMAL UNITS PER HOUR
C	CONDUIT
CT	CURRENT TRANSFORMER
CATV	CABLE TELEVISION SYSTEM
CAV	CONSTANT AIR VOLUME
CCTV	CLOSED CIRCUIT TELEVISION
CD	CONDENSATE DRAIN
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
CO	CLEANOUT, CARBON MONOXIDE
CO2	CARBON DIOXIDE
CT	COOLING TOWER
CTR	COOLING TOWER RETURN
CTS	COOLING TOWER SUPPLY
CU	COPPER, CONDENSING UNIT
CUH	CABINET UNIT HEATER
CW	COLD WATER
CWR	CHILLED WATER RETURN
CWS	CHILLED WATER SUPPLY
D	DRAIN
DDC	DIRECT DIGITAL CONTROL
DFU	DRAINAGE FIXTURE UNITS
DN	DOWN
DPDT	DOUBLE-POLE, DOUBLE-THROW
DPST	DOUBLE-POLE, SINGLE-THROW
DX	DIRECT EXPANSION
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
E/C	ELECTRICAL CONTRACTOR
EDB	ENTERING DRY BULB
EF	EXHAUST FAN
EJ	EXPANSION JOINT
ESFR	EARLY SUPPRESSION FAST RESPONSE
ESP	EXTERNAL STATIC PRESSURE
ETR	EXISTING TO REMAIN
EWB	ENTERING WET BULB
EWC	ELECTRIC WATER COOLER
EXG	EXISTING
FAA	FIRE ALARM ANNUNCIATOR
FACP	FIRE ALARM CONTROL PANEL
FBO	FURNISHED BY OTHERS
FCO	FLOOR CLEANOUT
FCU	FAN COIL UNIT
FD	FIRE DAMPER, FLOOR DRAIN
FF	FINISHED FLOOR
FGCO	FINISHED GRADE CLEANOUT
FL	FLOW LINE
FLA	FULL LOAD AMPS
F/C	FIRE PROTECTION CONTRACTOR
FTU	FAN TERMINAL UNIT
FVNR	FULL VOLTAGE, NON-REVERSING
G	NATURAL GAS, GROUND FAULT INTERRUPTER
G/C	GENERAL CONTRACTOR
GFI	GROUND FAULT INTERRUPTER
GND	GROUND
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GW	GREASE WASTE
HB	HOSE BIBB
HCR	HOT/CHILLED WATER RETURN
HCS	HOT/CHILLED WATER SUPPLY
HD	HEAD, HUB DRAIN
HOA	HAND-OFF-AUTOMATIC
HP	HEAT PUMP
HPC	HIGH PRESSURE CONDENSATE
HPR	HEAT PUMP RETURN
HPS	HEAT PUMP SUPPLY, HIGH PRESSURE STEAM, HIGH PRESSURE SODIUM
HSTAT	HUMIDISTAT
HTG	HEATING
HTR	HEATER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IG	ISOLATED GROUND
IN. WC	INCHES OF WATER COLUMN
INC.	INCANDESCENT
kcmil	1000 CIRCULAR MILS
KV	KILOVOLT
KVA	KILOVOLT-AMPS
KVAR	KILOVOLT-AMPS REACTIVE
KW	KILOWATT
KWH	KILOWATT-HOUR
L	LAVATORY
LAT	LEAVING AIR TEMPERATURE
LDB	LEAVING DRY BULB
LF	LINEAR FEET
LP	LOW PRESSURE
LPC	LOW PRESSURE STEAM CONDENSATE
LPG	LIQUIFIED PETROLEUM GAS (PROPANE)
LPS	LOW PRESSURE STEAM
LRA	LOCKED ROTOR AMPS
LWB	LEAVING WET BULB
LWT	LEAVING WATER TEMPERATURE
MBH	1000 BTU PER HOUR
M/C	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MCC	MOTOR CONTROL CENTER
MCM	1000 CIRCULAR MILS
MD	MOTORIZED DAMPER
MDP	MAIN DISTRIBUTION PANEL
MFR	MANUFACTURER
MH	MANHOLE/METAL HALIDE
MLO	MAIN LUGS ONLY
MPC	MEDIUM PRESSURE CONDENSATE
MPS	MEDIUM PRESSURE STEAM
MS	MOTOR STARTER
MSB	MAIN SWITCHBOARD
MTD	MOUNTED
MAU	MAKE-UP AIR UNIT
N	NITROGEN
N/A	NOT APPLICABLE
NC	NOISE CRITERIA
NFWH	NON-FREEZE WALL HYDRANT
NIC	NOT IN CONTRACT
NO	NITROUS OXIDE
N/O N/C	NORMALLY OPEN, NORMALLY CLOSED
O	OXYGEN
OA	OUTSIDE AIR
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
ORD	OVERFLOW ROOF DRAIN
PA	PIPE ANCHOR
PCWR	PRIMARY CHILLED WATER RETURN
PCWS	PRIMARY CHILLED WATER SUPPLY
PCR	PUMPED CONDENSATE RETURN
PD	PRESSURE DROP (FEET OF WATER)
PH	PHASE
PHWR	PRIMARY HEATING WATER RETURN
PHWS	PRIMARY HEATING WATER SUPPLY
PNL	PANEL
PRV	PRESSURE REDUCING VALVE
PS	PULSE START
PSI	POUNDS PER SQUARE INCH
PSIA	POUNDS PER SQUARE INCH-ABSOLUTE
PSIG	POUNDS PER SQUARE INCH-GAUGE
PT	POTENTIAL TRANSFORMER
QTY	QUANTITY
R	REFRIGERANT
RA	RETURN AIR
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REV	REVISION
RF	RETURN FAN
RH	RELATIVE HUMIDITY
RLA	RUNNING LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
RTU	ROOF TOP UNIT
S	SINK, STEAM
SA	SUPPLY AIR
SAN	SANITARY SEWER
SCWR	SECONDARY CHILLED WATER RETURN
SCWS	SECONDARY CHILLED WATER SUPPLY
SD	SMOKE DAMPER, STORM DRAIN
SF	SUPPLY FAN
SHWR	SECONDARY HEATING WATER RETURN
SHWS	SECONDARY HEATING WATER SUPPLY
SPST	SINGLE-POLE SINGLE-THROW
SP	STATIC PRESSURE
SQFT	SQUARE FOOT/SQUARE FEET
S/S	START/STOP
SS	SERVICE SINK, STAINLESS STEEL
ST	STORM DRAIN, SOUND TRAP, STEAM TRAP
STC	SOUND TRANSMISSION CLASS
STM	STEAM
SW	SOFT WATER
SWBD	SWITCHBOARD
T	TEMPERED WATER
TG	TEMPERATURE GAUGE
TDH	TOTAL DYNAMIC HEAD
TSP	TOTAL STATIC PRESSURE
TSTAT	THERMOSTAT
TL	TWISTLOCK
TU	TERMINAL UNIT
UF	UNDER FLOOR
UG	UNDER GROUND
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORIES, INC.
UNO	UNLESS NOTED OTHERWISE
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VACUUM
VAC	VOLTS ALTERNATING CURRENT
VAV	VARIABLE AIR VOLUME
VCP	VITRIFIED CLAY PIPE
VD	VOLUME DAMPER
VFD	VARIABLE FREQUENCY DRIVE
VTR	VENT THROUGH ROOF
W	WATER SERVICE, WATTS
WB	WET BULB
WCO	WALL CLEANOUT
WC	WATER COLUMN, WATER CLOSET
WH	WALL HYDRANT
WPD	WATER PRESSURE DROP
WP	WEATHERPROOF
WT	WATERTIGHT, WEIGHT
XFMR	TRANSFORMER
XP	EXPLOSION-PROOF

GENERAL

- HEAVY LINEWEIGHT INDICATES NEW WORK
- CONNECT NEW TO EXISTING
- LIGHT AND SCREENED LINEWEIGHT INDICATES EXISTING-TO-REMAIN
- DARK AND DASHED LINEWEIGHT INDICATES DEMOLITION WHEN SHOWN ON DEMOLITION PLAN OR NOTED
- POINT OF DISCONNECT FROM EXISTING
- 2 CONSTRUCTION NOTE
- 2 REVISION NUMBER
- 1 M201 SECTION CUT THROUGH DRAWING
- 1 M201 AREA OF ENLARGEMENT
- 1 M201 PLAN NUMBER
- SHEET WHERE ENLARGED PLAN IS DRAWN

THIS IS A MASTER LEGEND. NOT ALL SYMBOLS, ABBREVIATIONS, ETC. ARE USED ON THE DRAWINGS.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
CASEY JOHN STONE
NUMBER PE-2009035182
PROFESSIONAL ENGINEER
05/19/2021

HOSS & BROWN ENGINEERS
15902 Midland Drive
Shawnee, Kansas 66217
913.362.9090 | mail@h-be.com
H&B PROJECT NUMBER : 2010200

© Hoss & Brown Engineers 2020
MO Certificate of Authority 01022

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
PUBLIC SAFETY, DIVISION OF
MISSOURI VETERANS COMMISSION

CONSTRUCT NEW
COLUMBARIUM WALL

JACKSONVILLE VETERANS
CEMETERY

JACKSONVILLE, MO

STATE OF MO #	U-2102-01
VCGP #	FAI MO-17-15
ARCHIMAGES #	K20530
SITE #	6904
ASSET #	8136904009

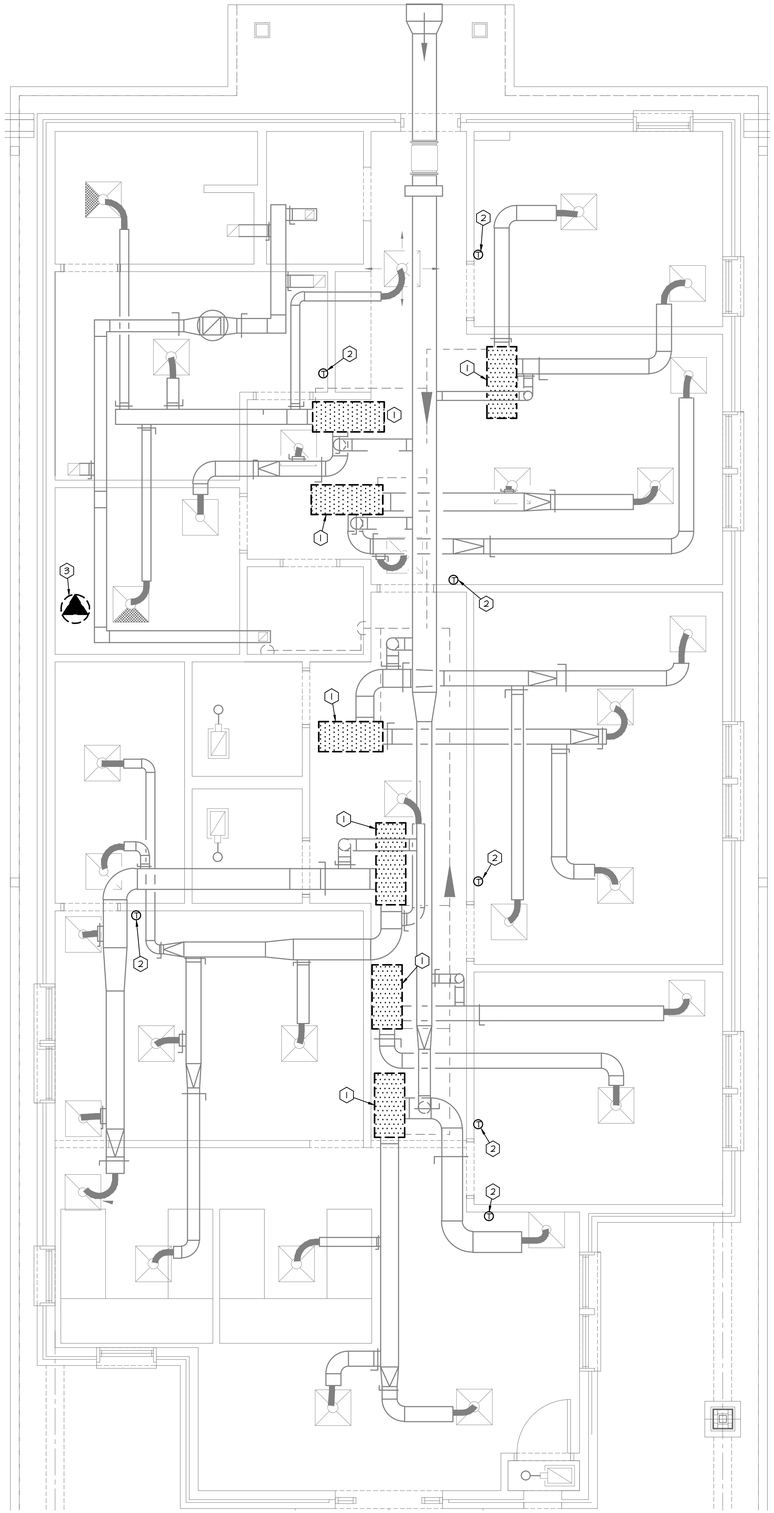
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 05/19/2021

CAD DWG FILE: MPE1.0 - MPE Symbols
DRAWN BY: CSi
CHECKED BY: RPC
DESIGNED BY: RPC

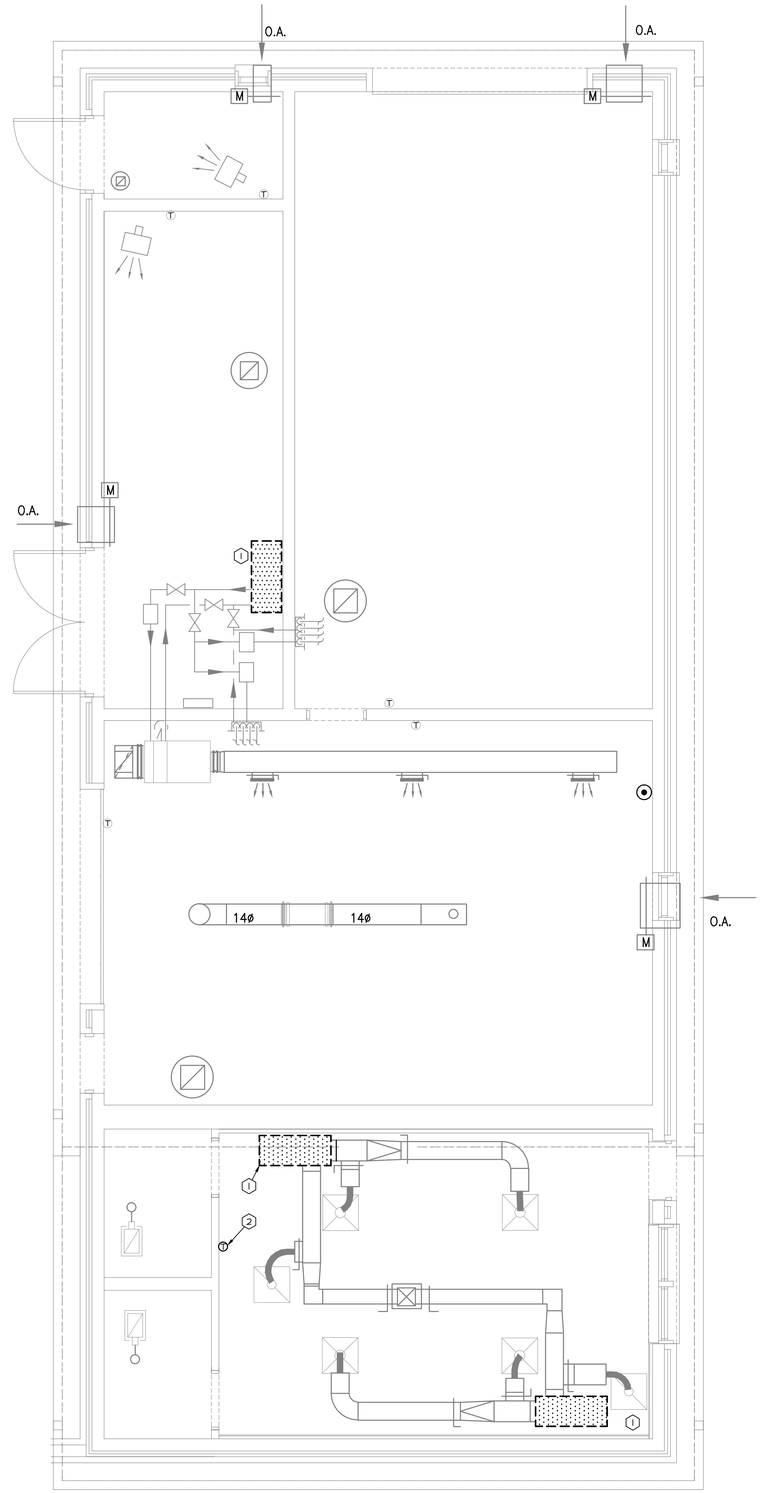
SHEET TITLE:
MPE SYMBOLS & ABBREVIATIONS

SHEET NUMBER:
MPE1.0

23 OF 30 SHEETS
MAY 19, 2021



02 Administration Demo Mechanical Plan
Scale: 1/4" = 1'-0"



01 Administration Demo Mechanical Plan
Scale: 1/4" = 1'-0"

GENERAL DEMOLITION NOTES:

A. ANY INTERRUPTION OF EXISTING SERVICES AND/OR EQUIPMENT SHALL BE PERFORMED AT A TIME APPROVED IN ADVANCE BY THE OWNER'S REPRESENTATIVE SO AS NOT TO INTERFERE WITH THE PRESENT BUILDING OPERATION.

B. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. CONTRACTORS SHALL EXAMINE THE DRAWINGS OF ALL TRADES AND BE FAMILIAR WITH THE OVERALL SCOPE OF DEMOLITION WORK. THE EXACT EXTENT OF DEMOLITION SHALL BE AS REQUIRED BY THE NEW WORK.

C. OWNER SHALL HAVE FIRST RIGHTS TO ALL DEVICES AND EQUIPMENT REMOVED DURING DEMOLITION. COORDINATE WITH THE OWNER PRIOR TO FINAL DISPOSAL.

D. ALL MECHANICAL AND PLUMBING ITEMS TO BE REMOVED SHALL BE REMOVED COMPLETE WITH ALL RELATED ITEMS INCLUDING HANGERS, SUPPORTS, CONTROLS, ETC. CAP ALL OPEN ENDED PIPES AND DUCTWORK.

E. ITEMS SHOWN AS EXISTING TO REMAIN ARE AS TAKEN FROM EXISTING BUILDING DRAWINGS AND FIELD VERIFIED BY ENGINEER. EXACT CONDITIONS SHALL BE FIELD VERIFIED BY CONTRACTOR AND ANY CONFLICTS WHICH AFFECT THE SCOPE OF THE PROJECT SHALL BE REPORTED TO ENGINEER.

0 PLAN NOTES:

1. WATER SOURCE HEAT PUMP - DEMOLISH EXISTING HEAT PUMP. EXISTING DUCT CONNECTIONS AND PIPING CONNECTIONS TO REMAIN FOR USE IN NEW WORK.
2. THERMOSTAT - DEMOLISH EXISTING THERMOSTAT ASSOCIATED WITH HEAT PUMP. EXISTING WIRING TO REMAIN FOR USE IN NEW WORK.
3. PUMP - DEMOLISH GROUND SOURCE HEAT PUMP LOOP PUMP. RETAIN CIRCUITRY AND CONTROLS FOR USE IN NEW WORK.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
CASEY JOHN STONE
NUMBER
PE-2009035182
PROFESSIONAL ENGINEER
05/19/2021

HOSS & BROWN ENGINEERS
15902 Midland Drive
Shawnee, Kansas 66217
913.362.9090 | mail@h-be.com
H&B PROJECT NUMBER : 2010200

© Hoss & Brown Engineers 2020
MO Certificate of Authority 01022

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO #	U-2102-01
VCGP #	FAI MO-17-15
ARCHIMAGES #	K20530
SITE #	6904
ASSET #	8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 05/19/2021

DM1.0 - Demo
CAD DWG FILE: Mechanical Plan.dwg
DRAWN BY: CSi
CHECKED BY: RPC
DESIGNED BY: RPC

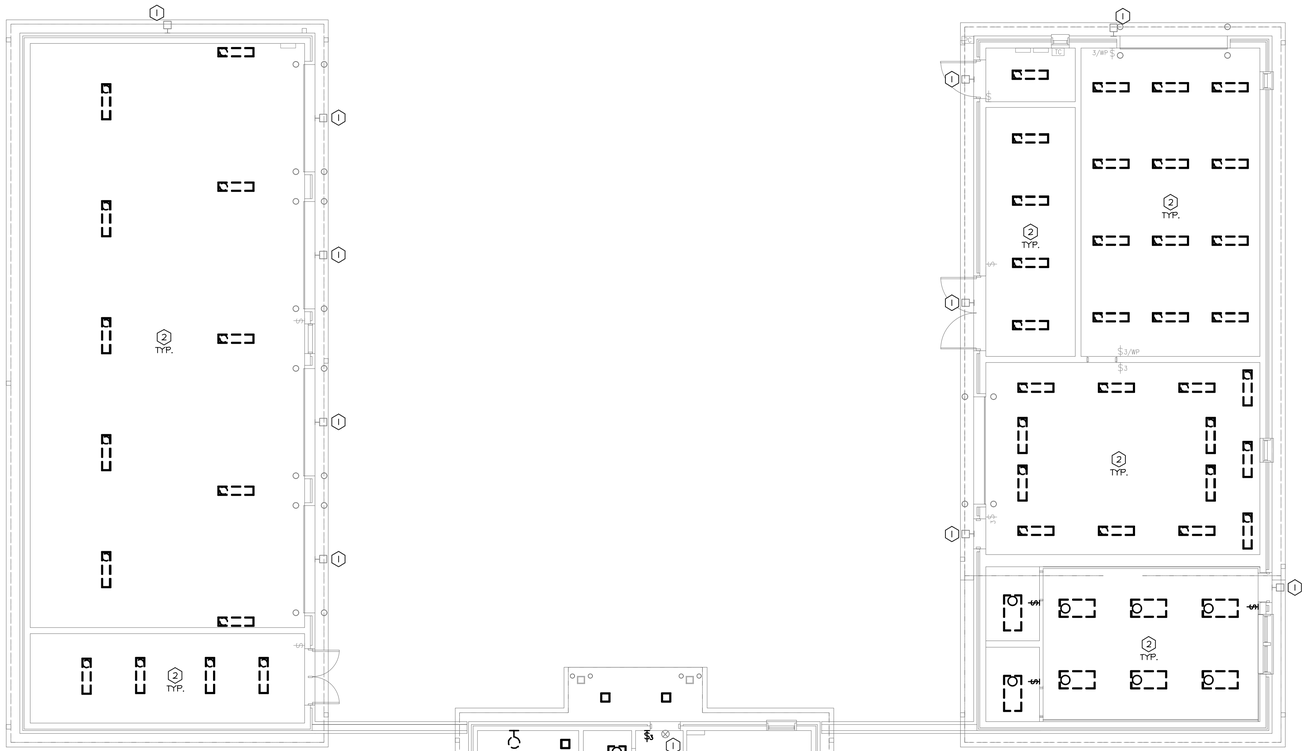
SHEET TITLE:

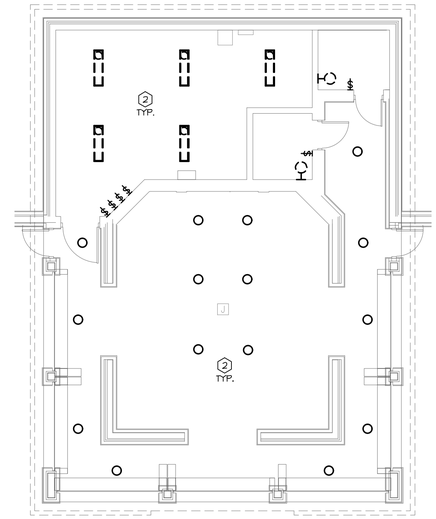
DEMO
MECHANICAL PLAN

SHEET NUMBER:

DM1.0

24 OF 30 SHEETS
MAY 19, 2021

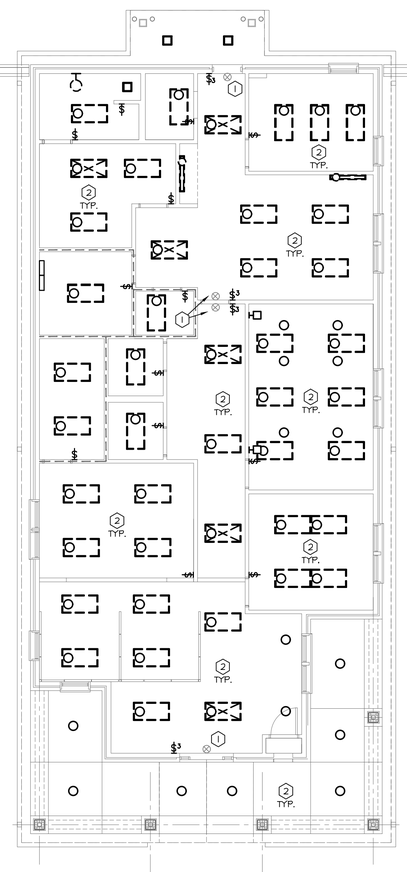




01 Commital Shelter Demo Lighting Plan

Scale: 1/8" = 1'-0"

N



02 Administration Demo Lighting Plan

Scale: 1/8" = 1'-0"

N

GENERAL DEMOLITION NOTES:

A. ANY INTERRUPTION OF EXISTING SERVICES AND/OR EQUIPMENT SHALL BE PERFORMED AT A TIME APPROVED IN ADVANCE BY THE OWNER'S REPRESENTATIVE SO AS NOT TO INTERFERE WITH THE PRESENT BUILDING OPERATION.

B. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. CONTRACTORS SHALL EXAMINE THE DRAWINGS OF ALL TRADES AND BE FAMILIAR WITH THE OVERALL SCOPE OF DEMOLITION WORK. THE EXACT EXTENT OF DEMOLITION SHALL BE AS REQUIRED BY THE NEW WORK.

C. ALL ELECTRICAL ITEMS TO BE REMOVED SHALL BE REMOVED COMPLETE WITH ALL RELATED ITEMS INCLUDING HANGERS, CONDUIT, WIRE, ETC. UNLESS NOTED OTHERWISE ON PLANS. DEMOLISH BRANCH CIRCUITS AND FEEDERS BACK TO THEIR ASSOCIATED CIRCUIT BREAKER UNLESS NOTED OTHERWISE. TURN OFF AND LABEL CIRCUIT BREAKERS AS SPARES FOR NEW WORK.

D. EXTEND CONDUIT AND WIRE AS REQUIRED IN AREAS THAT ELECTRICAL DEMOLITION AFFECTS ELECTRICAL SERVICE TO DEVICES DOWNSTREAM THAT ARE TO REMAIN.

E. ITEMS SHOWN AS EXISTING TO REMAIN ARE AS TAKEN FROM EXISTING BUILDING DRAWINGS AND FIELD VERIFIED BY ENGINEER. EXACT CONDITIONS SHALL BE FIELD VERIFIED BY CONTRACTOR AND ANY CONFLICTS WHICH AFFECT THE SCOPE OF THE PROJECT SHALL BE REPORTED TO ENGINEER.

1 PLAN NOTES:

1. EXISTING TO REMAIN LIGHT FIXTURE - FIXTURE IS EXISTING TO REMAIN. RESTORE FIXTURE TO LIKE-NEW CONDITION AND REINSTALL IN PLACE.
2. DEMOLISH LIGHT FIXTURE - DEMOLISH EXISTING FIXTURE. EXISTING CIRCUITRY TO REMAIN FOR EXTENSION TO NEW FIXTURE.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
CASEY JOHN STONE
NUMBER
PE-2009035182
PROFESSIONAL ENGINEER
05/19/2021

HOSS & BROWN ENGINEERS
15902 Midland Drive
Shawnee, Kansas 66217
913.362.9090 | mail@h-be.com
H&B PROJECT NUMBER : 2010200

© Hoss & Brown Engineers 2020
MO Certificate of Authority 01022

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO #	U-2102-01
VCGP #	FAI MO-17-15
ARCHIMAGES #	K20530
SITE #	6904
ASSET #	8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 05/19/2021

DE1.0 - Demo
CAD DWG FILE: Lighting Plan.dwg
DRAWN BY: CSi
CHECKED BY: RPC
DESIGNED BY: RPC

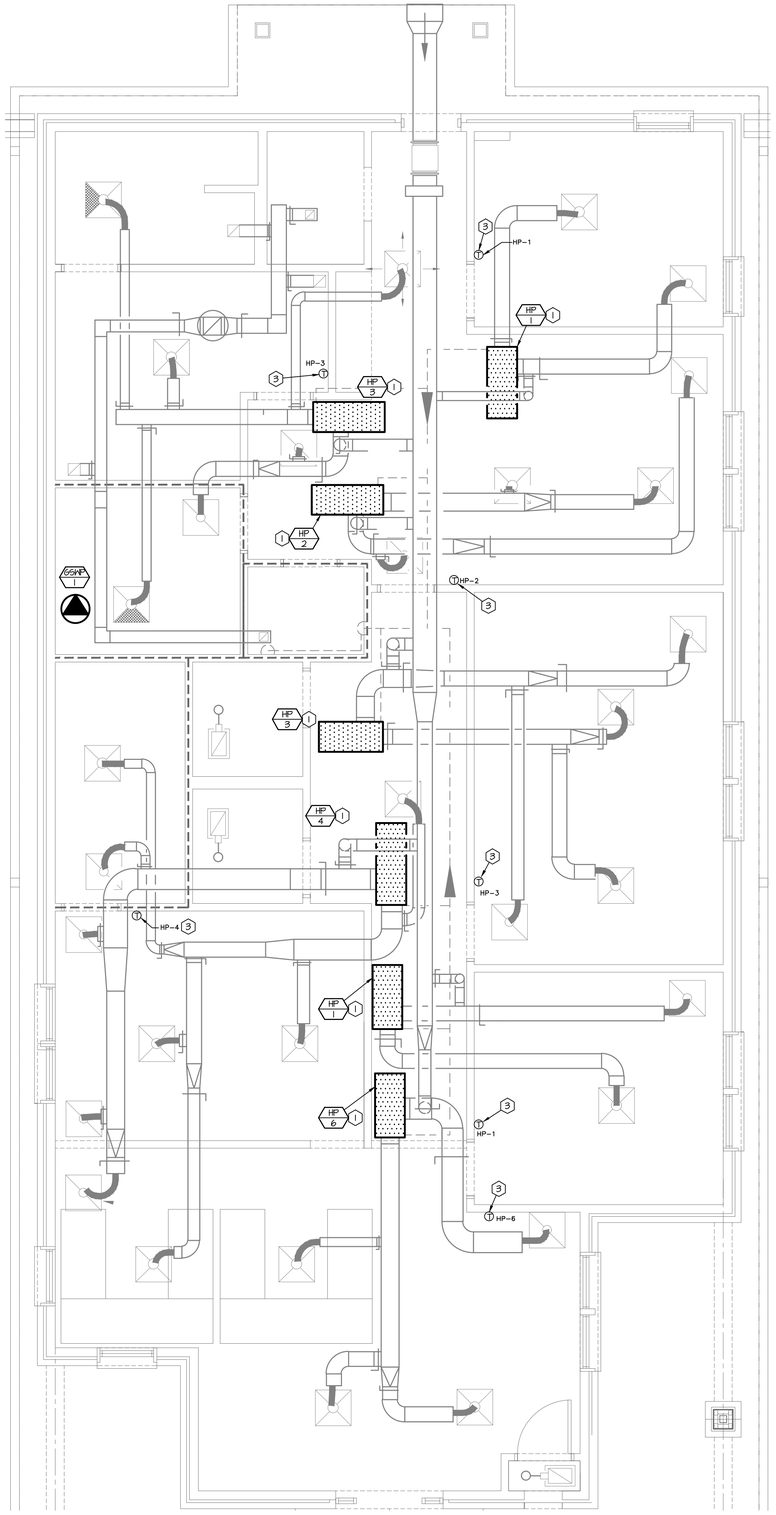
SHEET TITLE:

DEMO LIGHTING PLAN

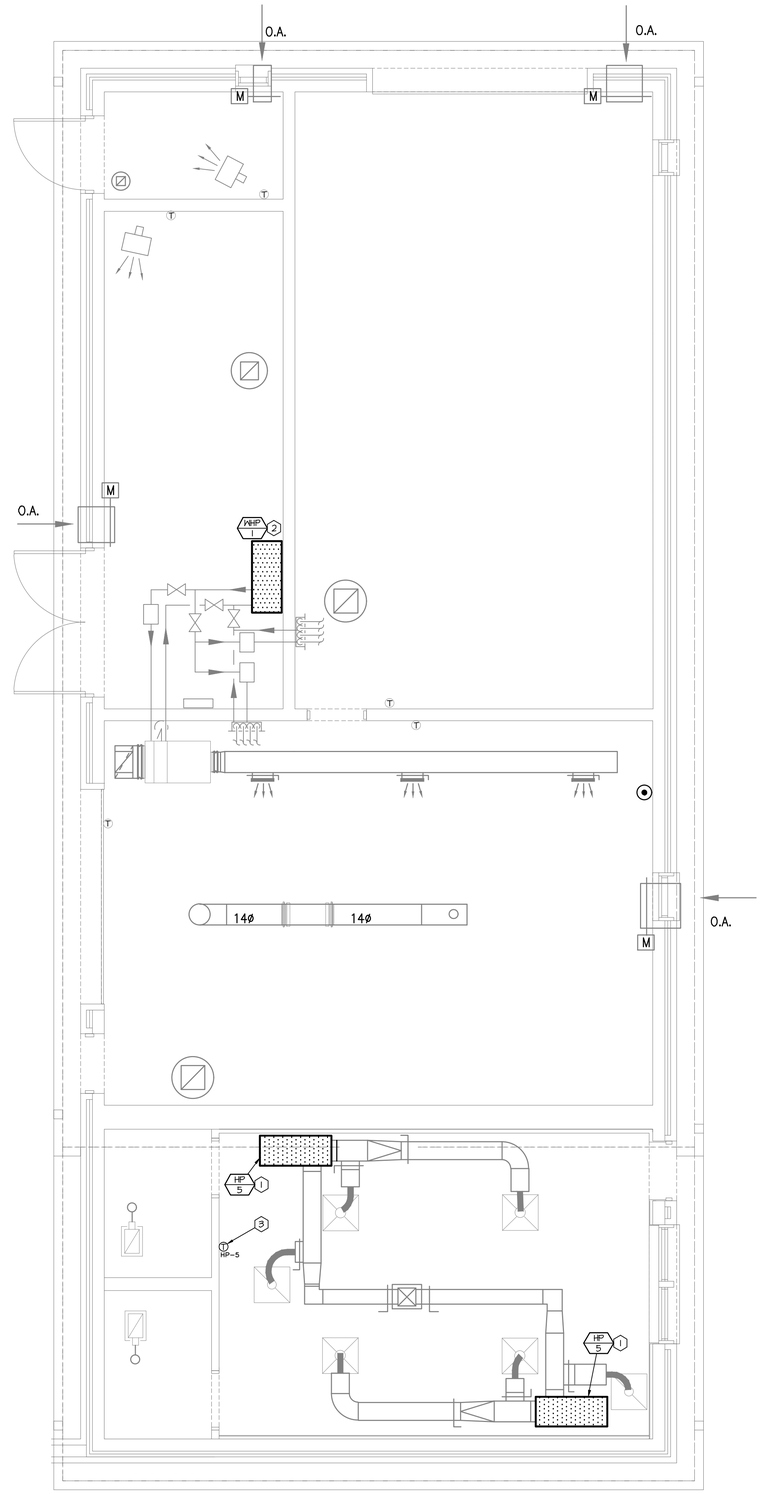
SHEET NUMBER:

DE1.0

25 OF 30 SHEETS
MAY 19, 2021



02 Administration Mechanical Plan
Scale: 1/4" = 1'-0"



01 Administration Mechanical Plan
Scale: 1/4" = 1'-0"

GENERAL NOTES:

A. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. PROVIDE SHEET METAL SYSTEMS COMPLETE AND PER APPLICABLE CODES INCLUDING ALL NECESSARY OFFSETS, FITTINGS AND SPECIAL RADIUS OR MITERED ELBOWS WHICH ARE REQUIRED DUE TO SPACE CONSTRAINTS OR OTHER CONDITIONS.

B. COORDINATE THE INSTALLATION OF THE DUCTWORK AND EQUIPMENT WITH THE WORK OF ALL OTHER TRADES. VERIFY ALL CLEARANCES PRIOR TO THE FABRICATION OF ANY SYSTEM COMPONENTS.

C. DUCTWORK SHALL NOT BE LOCATED OVER ELECTRICAL EQUIPMENT OR PANELS. PROVIDE THE CODE REQUIRED WORKING CLEARANCE AROUND ALL ELECTRICAL EQUIPMENT AND PANELS.

D. PROVIDE ALL MISCELLANEOUS SUPPORTING STEEL, ETC. FOR THE PROPER INSTALLATION OF ALL MECHANICAL SYSTEMS.

E. ALL DUCTWORK DIMENSIONS INDICATE THE INSIDE CLEAR DIMENSION.

F. ALL HYDRONIC HEAT PUMP LOOP PIPING SHALL BE FLUSHED AND REFILLED WITH 20% METHANOL SOLUTION UPON INSTALLATION OF NEW EQUIPMENT.

PLAN NOTES:

1. WATER TO AIR HEAT PUMP - INSTALL WATER SOURCE HEAT PUMP SUSPENDED FROM STRUCTURE. CONNECT TO EXISTING DUCTWORK WITH FLEXIBLE CONNECTION. CONNECT SUPPLY AND RETURN PIPING TO UNIT WITH MANUFACTURER PROVIDED HOSE KIT AND FLOW CONTROL VALVE.
2. WATER TO WATER HEAT PUMP - INSTALL NEW WATER TO WATER HEAT PUMP. CONNECT EXISTING PIPING TO NEW EQUIPMENT.
3. THERMOSTAT - INSTALL NEW THERMOSTAT IN PLACE OF EXISTING THERMOSTAT.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
CASEY JOHN STEINKE
NUMBER
PE-2009035182
PROFESSIONAL ENGINEER
05/19/2021

HOSS & BROWN ENGINEERS
15902 Midland Drive
Shawnee, Kansas 66217
913.362.9090 | mail@h-be.com
H&B PROJECT NUMBER : 2010200

© Hoss & Brown Engineers 2020
MO Certificate of Authority 01022

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
PUBLIC SAFETY, DIVISION OF
MISSOURI VETERANS
COMMISSION

CONSTRUCT NEW
COLUMBARIUM WALL

JACKSONVILLE VETERANS
CEMETERY

JACKSONVILLE, MO

STATE OF MO #	U-2102-01
VCGP #	FAI MO-17-15
ARCHIMAGES #	K20530
SITE #	6904
ASSET #	8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 05/19/2021

CAD DWG FILE: M1.0 - Mechanical Plan.dwg
DRAWN BY: CSi
CHECKED BY: RPC
DESIGNED BY: RPC

SHEET TITLE:

MECHANICAL PLAN

SHEET NUMBER:

M1.0

MAY 19, 2021

WATER SOURCE HEAT PUMP SCHEDULE

MARK	MANUFACTURER	MODEL	COOLING PERFORMANCE											HEATING PERFORMANCE											V/PH	MCA	MOCP	NOTES
			TOT	HEAT REJ	LOAD				SOURCE					TOT	HEAT REJ	LOAD				SOURCE								
			MBH	MBH	EWT	LWT	GPM	PD	EWT	LWT	GPM	PD	EER	MBH	MBH	EWT	LWT	GPM	PD	EWT	LWT	GPM	PD	COP				
WHP-1	FHP	WT061-1USC-F	53.0	66.2	58.0	44.2	12.0	11	85.0	46.3	12.0	11	13.6	56.4	43.4	85.0	44.4	12.0	9	45.0	31.6	12.0	15	4.3	230/1	33.9	60	

GENERAL NOTES (APPLY TO ALL ABOVE):

A. EQUIPMENT SHALL BE PRE-CHARGED WITH R410a.
B. EQUIPMENT SHALL HAVE A 316 SS BRAZED HEAT EXCHANGER
EQUIPMENT SHALL HAVE SCROLL COMPRESSORS
C. PROVIDE WITH STAINLESS STEEL TXV
D. PROVIDE UNIT WITH FACTORY MOUNTED AND WIRED DISCONNECT FOR SINGLE-POINT ELECTRICAL CONNECTION.
E. PROVIDE WITH HINGED ACCESS DOORS.
F. UNIT MANUFACTURER LISTED IS BASIS OF DESIGN. REFER TO SPECIFICATIONS FOR EQUIVALENT EQUIPMENT MANUFACTURERS. CONTRACTOR RESPONSIBLE FOR VERIFYING ALTERTATIVE MANUFACTURERS CAN MEET SCHEDULED PERFORMANCE.

WATER SOURCE HEAT PUMP SCHEDULE

MARK	MANUFACTURER	MODEL	MIN. O/A CFM	SUPPLY FAN		DX COOLING				DX HEATING			WATER	V/PH	MCA	MOCP	NOTES
				CFM	ESP	EAT DB/WB	LAT DB/WB	TOT MBH	SENS MBH	EAT DB	LAT DB	OUT (MBH)	GPM				
HP-1	FHP	EP012-1HZC-FLSPUB	50	300	0.7	80.8/66.7	55.1/54.2	11.3	8.4	65	98	11.2	2.5	230/1	6.7	15	1, 2
HP-2	FHP	EP018-1HZC-FLSTUB	100	450	0.6	81.5/67	54.5/54	17.8	13.2	65	97.4	16.2	4	230/1	12.1	15	1, 2
HP-3	FHP	EP018-1HZC-FLSTUB	150	600	0.5	82.5/67.5	57.7/57.4	18.9	16.1	65	90.4	16.9	5	230/1	12.1	15	1, 2
HP-4	FHP	EP030-1HZC-FLSTUB	200	900	0.6	80.8/66.7	58.1/57.2	26.7	22.4	65	84.2	24.7	7.5	230/1	20.1	30	1, 2
HP-5	FHP	EP030-1HZC-FLSTUB	250	850	0.7	82.5/67.5	58.4/57.6	26.7	22.2	65	90.6	24.8	7.5	230/1	20.1	30	1, 2
HP-6	FHP	EP018-1HZC-FLSTUB	150	650	0.5	80.8/66.7	57.9/57.5	18.8	16.2	65	88.6	17.1	5	230/1	12.1	15	1, 2

NOTES:

1. PROVIDE UNIT WITH FACTORY MOUNTED AND WIRED DISCONNECT FOR SINGLE-POINT ELECTRICAL CONNECTION.
2. PROVIDE PROGRAMMABLE BOSCH BC050 THERMOSTAT OR EQUIVALENT

GENERAL NOTES (APPLY TO ALL ABOVE):

A. PROVIDE MINIMUM EFFICIENCY OF MERV 6 FOR FILTERS DURING CONSTRUCTION AND CHANGE MONTHLY AFTER UNIT START-UP. FINAL FILTER CHANGE AT OWNER OCCUPANCY SHALL BE MERV 7.
B. PROVIDE A 3/4" CONDENSATE DRAIN WITH A 2" TRAP.
C. PROVIDE FILTER FRAME FOR 1" FILTER.
D. COOLING CAPACITY SHALL BE BASED ON 85 F ENTERING WATER TEMPERATURE.
E. HEATING CAPACITY SHALL BE BASED ON 45 F ENTERING WATER TEMPERTURE.
F. GEOTHERMAL LOOP LIQUID IS 20% METHANOL GLYCOL.
G. UNIT MANUFACTURER LISTED IS BASIS OF DESIGN. REFER TO SPECIFICATIONS FOR EQUIVALENT EQUIPMENT MANUFACTURERS. CONTRACTOR RESPONSIBLE FOR VERIFYING ALTERTATIVE MANUFACTURERS CAN MEET SCHEDULED PERFORMANCE.

PUMP SCHEDULE

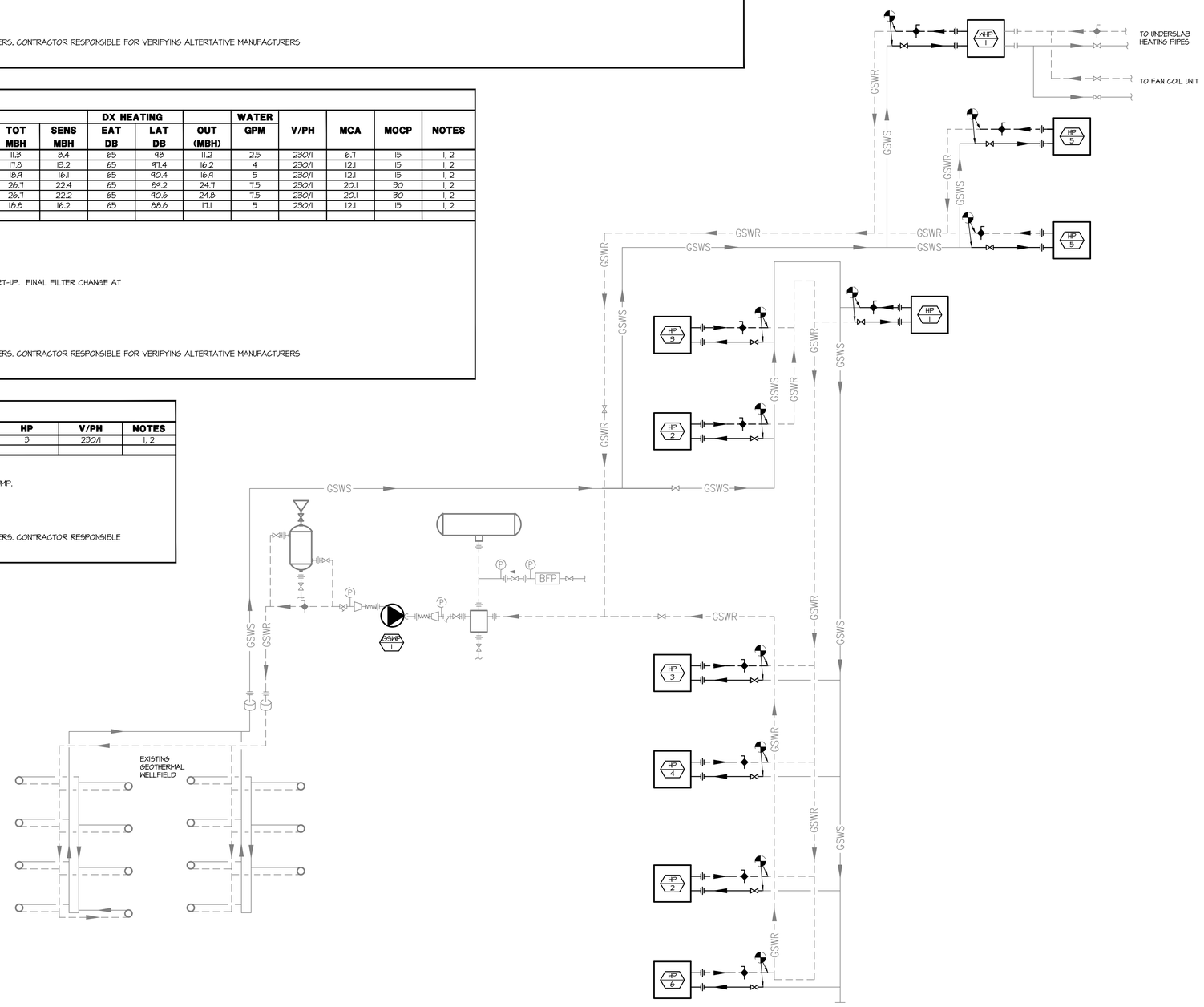
MARK	MANUFACTURER	MODEL	GPM	HEAD	RPM	BHP	HP	V/PH	NOTES
GSWP-1	BELL & GOSSETT	E-90	57	65	3,600	1.43	3	230/1	1, 2

NOTES:

1. FLUID IS 20% METHANOL
2. MOUNT PUMP IN PLACE OF EXISTING PUMP. VERIFY EXISTING CONDITIONS AND MODIFY PIPING AS REQUIRED FOR NEW PUMP.

GENERAL NOTES: (APPLY ALL TO ABOVE)

A. UNLESS NOTED ABOVE, PUMP SHALL OPERATE AT CONSTANT SPEED.
B. ALL PUMPS SHALL BE NON-OVERLOADING.
C. UNIT MANUFACTURER LISTED IS BASIS OF DESIGN. REFER TO SPECIFICATIONS FOR EQUIVALENT EQUIPMENT MANUFACTURERS. CONTRACTOR RESPONSIBLE FOR VERIFYING ALTERTATIVE MANUFACTURERS CAN MEET SCHEDULED PERFORMANCE.



01 Ground Source Water Flow Diagram
Scale: Not to Scale

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
CASEY JOHN STONKE
NUMBER
PE-2009035182
PROFESSIONAL ENGINEER
05/19/2021

HOSS & BROWN ENGINEERS
15902 Midland Drive
Shawnee, Kansas 66217
913.362.9090 | mail@h-be.com
H&B PROJECT NUMBER : 2010200

© Hoss & Brown Engineers 2020

MO Certificate of Authority 01022

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
PUBLIC SAFETY, DIVISION OF
MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO # U-2102-01
VCGP # FAI MO-17-15
ARCHIMAGES # K20530
SITE # 6904
ASSET # 8136904009

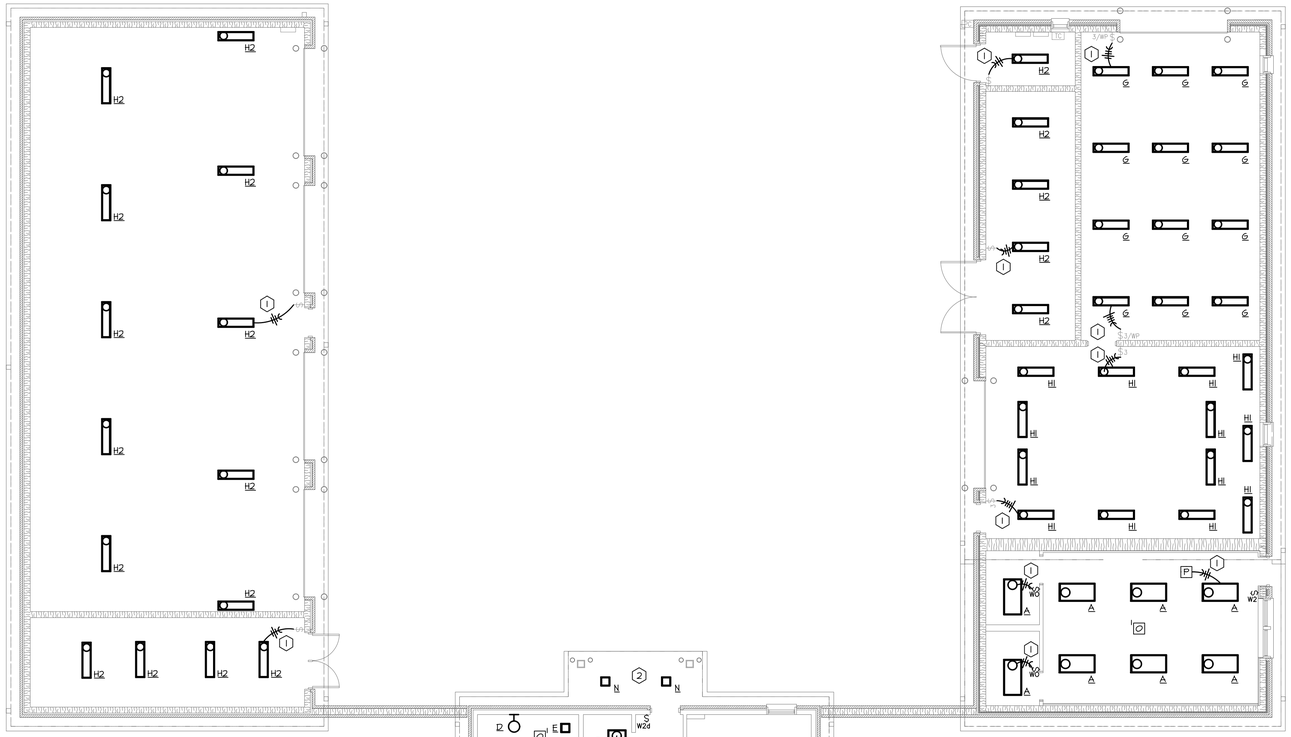
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 05/19/2021

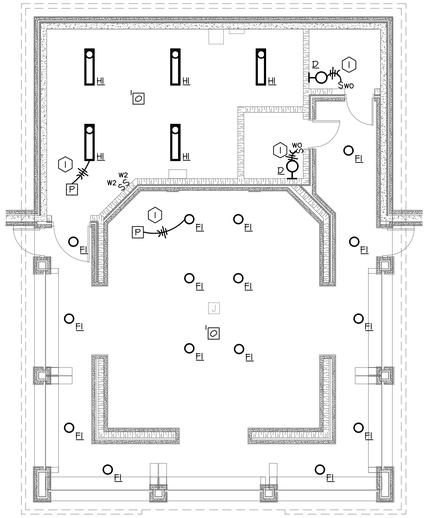
M5.0 - Mechanical
CAD DWG FILE: Details & Schedules.dwg
DRAWN BY: CSi
CHECKED BY: RPC
DESIGNED BY: RPC

SHEET TITLE:
MECHANICAL DETAILS & SCHEDULES

SHEET NUMBER:
M5.0

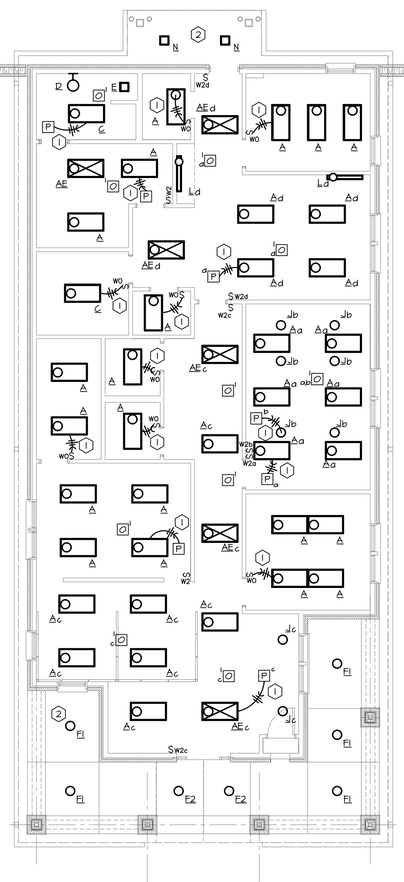
MAY 19, 2021





01 Lighting Plan

Scale: 1/8" = 1'-0"



02 Lighting Plan

Scale: 1/8" = 1'-0"

N

GENERAL NOTES:

A. THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATE THE GENERAL EXTENT OF THE WORK. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL PULL BOXES, JUNCTION BOXES AND INCIDENTAL MATERIALS AND LABOR FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM.

B. ELECTRICAL CONTRACTOR SHALL DE-RATE CONDUCTORS AS REQUIRED BY THE N.E.C. WHEN GROUPED IN COMMON RACEWAYS.

C. COORDINATE THE EXACT LIGHT FIXTURE LOCATIONS WITH THE ARCHITECTURAL DRAWINGS.

D. ALL WIRES RUN BELOW GRADE, IN CONCRETE THAT IS IN DIRECT CONTACT WITH THE EARTH, OR MASONRY THAT IS IN DIRECT CONTACT WITH THE EARTH SHALL BE WET LOCATION LISTED.

E. PROVIDE SEPARATE NEUTRALS FOR DIMMING CIRCUITS.

F. ALL ELECTRICAL BRANCH CIRCUITS SERVING OUTLETS AND LIGHTING IN FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, OR SIMILAR ROOMS SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER.

G. PROVIDE FIRESTOPPING ON CONDUITS PASSING THROUGH FIRE RATED WALLS AND FLOORS. COORDINATE LOCATION AND RATINGS OF WALLS WITH ARCHITECTURAL DRAWINGS.

H. MULTIPLE SWITCHES AT ONE LOCATION SHALL BE GANGED TOGETHER AND HAVE ONE COVER PLATE.

I. ONE WAY 120 VOLT CIRCUIT LENGTH CONDUCTOR SIZING UP TO AND INCLUDING 100 LINEAL FEET SHALL BE #12 AWG, FROM 100 LINEAL FEET TO 150 LINEAL FEET SHALL BE #10 AWG AND FROM 150 LINEAL FEET TO 200 LINEAL FEET SHALL BE #8 AWG.

J. EXTEND CONDUCTORS AS REQUIRED FOR NEW LIGHTING CONTROL DEVICES.

PLAN NOTES:

1. MAKE ELECTRICAL CONNECTION TO EXISTING CIRCUIT SERVING THE SPACE. REFER TO ELECTRICAL SCHEDULES FOR NEWLY INSTALLED LIGHTING CONTROLS
2. REPLACE LIGHT FIXTURES ONE FOR ONE. MAKE ALL NECESSARY ELECTRICAL AND CONTROLS CONNECTIONS.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
CASEY JOHN STONE
NUMBER
PE-2009035182
PROFESSIONAL ENGINEER

05/19/2021

HOSS & BROWN ENGINEERS
15902 Midland Drive
Shawnee, Kansas 66217
913.362.9090 | mail@h-be.com
H&B PROJECT NUMBER : 2010200

© Hoss & Brown Engineers 2020

MO Certificate of Authority 01022

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
PUBLIC SAFETY, DIVISION OF
MISSOURI VETERANS
COMMISSION

CONSTRUCT NEW
COLUMBARIUM WALL

JACKSONVILLE VETERANS
CEMETERY

JACKSONVILLE, MO

STATE OF MO #	U-2102-01
VCGP #	FAI MO-17-15
ARCHIMAGES #	K20530
SITE #	6904
ASSET #	8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 05/19/2021

CAD DWG FILE: E1.0 - Lighting Plan.dwg
DRAWN BY: CSi
CHECKED BY: RPC
DESIGNED BY: RPC

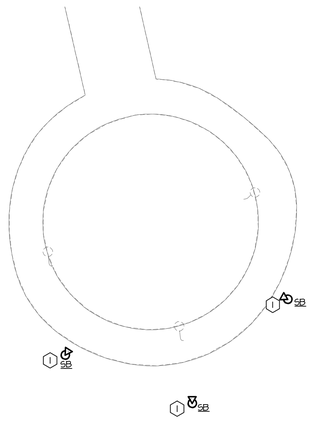
SHEET TITLE:

LIGHTING PLAN

SHEET NUMBER:

E1.0

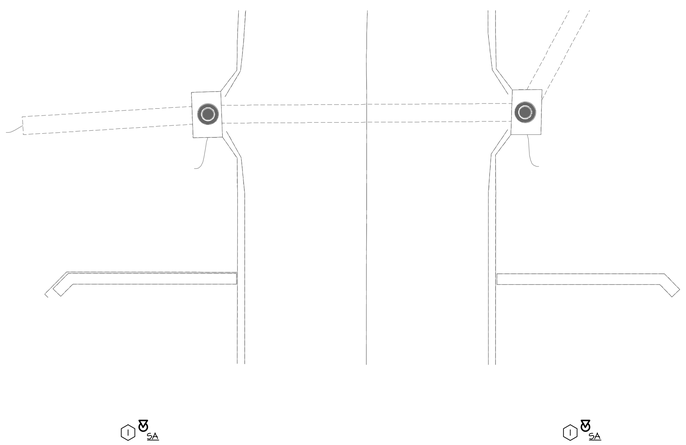
MAY 19, 2021



01 Flag Lighting Plan

Scale: 1" = 10'-0"

N



02 Entrance Lighting Plan

Scale: 1" = 10'-0"

N

GENERAL NOTES:

A. THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATE THE GENERAL EXTENT OF THE WORK. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL PULL BOXES, JUNCTION BOXES AND INCIDENTAL MATERIALS AND LABOR FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM.

B. ELECTRICAL CONTRACTOR SHALL DE-RATE CONDUCTORS AS REQUIRED BY THE N.E.C. WHEN GROUPED IN COMMON RACEWAYS.

C. COORDINATE THE EXACT LIGHT FIXTURE LOCATIONS WITH THE ARCHITECTURAL DRAWINGS.

D. ALL WIRES RUN BELOW GRADE, IN CONCRETE THAT IS IN DIRECT CONTACT WITH THE EARTH, OR MASONRY THAT IS IN DIRECT CONTACT WITH THE EARTH SHALL BE WET LOCATION LISTED.

E. PROVIDE SEPARATE NEUTRALS FOR DIMMING CIRCUITS.

F. ALL ELECTRICAL BRANCH CIRCUITS SERVING OUTLETS AND LIGHTING IN FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, OR SIMILAR ROOMS SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER.

G. PROVIDE FIRESTOPPING ON CONDUITS PASSING THROUGH FIRE RATED WALLS AND FLOORS. COORDINATE LOCATION AND RATINGS OF WALLS WITH ARCHITECTURAL DRAWINGS.

H. MULTIPLE SWITCHES AT ONE LOCATION SHALL BE GANGED TOGETHER AND HAVE ONE COVER PLATE.

I. ONE WAY 120 VOLT CIRCUIT LENGTH CONDUCTOR SIZING UP TO AND INCLUDING 100 LINEAL FEET SHALL BE #12 AWG, FROM 100 LINEAL FEET TO 150 LINEAL FEET SHALL BE #10 AWG AND FROM 150 LINEAL FEET TO 200 LINEAL FEET SHALL BE #8 AWG.

0 PLAN NOTES:

1. REMOVE EXISTING LIGHT AND REPLACE WITH NEW LIGHT. VERIFY EXISTING LIGHT VOLTAGE.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
CASEY JOHN STONE
NUMBER
PE-2009035182
PROFESSIONAL ENGINEER

05/19/2021

H&B ENGINEERS
HOSS & BROWN
15902 Midland Drive
Shawnee, Kansas 66217
913.362.9090 | mail@h-be.com
H&B PROJECT NUMBER : 2010200

© Hoss & Brown Engineers 2020

MO Certificate of Authority 01022

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO #	U-2102-01
VCGP #	FAI MO-17-15
ARCHIMAGES #	K20530
SITE #	6904
ASSET #	8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 05/19/2021

CAD DWG FILE: E1.0 - Lighting Plan.dwg
DRAWN BY: CSi
CHECKED BY: RPC
DESIGNED BY: RPC

SHEET TITLE:

SITE LIGHTING PLAN

SHEET NUMBER:

E1.1

MAY 19, 2021

LIGHT FIXTURE SCHEDULE

MARK	MANUFACTURER	MODEL	LAMP DATA LUMENS	LAMP DATA TYPE	LAMP DATA COLOR(K)	DIMMING	VOLTS	MOUNTING	TOTAL WATTS	DESCRIPTION	NOTES
A	WILLIAMS	LT-24-L52/835-AF-DRV-120	5200	LED	3500	-	120	RECESSED	37	2 X 4 ARCHITECTURAL TROFFER WITH CENTER BASKET LENS	6
AE	WILLIAMS	LT-24-L52/835-AF-EM/10W-DRV-120	5200	LED	3500	-	120	RECESSED	37	2 X 4 ARCHITECTURAL TROFFER WITH CENTER BASKET LENS	5,6
C	WILLIAMS	LT-24-L52/835-AF-LT-24-SMK-N-DRV-120	5200	LED	3500	-	120	SURFACE	37	2 X 4 ARCHITECTURAL TROFFER WITH CENTER BASKET LENS	6,7
D	WILLIAMS	WMA-2-L20/835-AP-DRV-120	2000	LED	3500	-	120	WALL	16	ARCHITECTURAL WALL MOUNT	6
E	WILLIAMS	4DS-TL-L10/835-DIM-UNV-LW-OF-CS-WET/CC	1000	LED	3500	-	120/277	RECESSED	12	4 1/2" SQUARE LENSED SHOWERLIGHT	6
F1	WILLIAMS	6DR-TL-L80/835-DIM-UNV-LW-OF-CS-WET/CC	8000	LED	4000	-	120/277	RECESSED	80	6" ROUND LENSED DOWNLIGHT	6
F2	WILLIAMS	6DR-TL-L80/835-SCA25-DIM-UNV-LW-OF-CS-WET/CC	8000	LED	4000	-	120/277	RECESSED	80	6" ROUND LENSED DOWNLIGHT	6
G	WILLIAMS	9T-4-LT9/835-FR-WET-DRV-120	7900	LED	3500	-	120	SUSPENDED	57	ENCLOSED & GASKETED INDUSTRIAL/GARAGE LIGHTER	4,6
H1	WILLIAMS	80-4-L53/835-DRV-120	5300	LED	3500	-	120	SUSPENDED	34	STANDARD INDUSTRIAL FIXTURE	3,6
H2	WILLIAMS	80-4-L77/835-DRV-120	7700	LED	3500	-	120	SUSPENDED	51	STANDARD INDUSTRIAL FIXTURE	4,6
J	WILLIAMS	6DR-L20/835-DIM-UNV-LW-OF-CS	2000	LED	3500	-	120/277	RECESSED	19	6" ROUND LENSED DOWNLIGHT	6
L	WILLIAMS	15F-1-L6/835-DMA-WRS/120-DRV-120	600	LED	3500	-	120	SURFACE	6	SOLID FRONT UNDER CABINET LIGHT	2,6
N	LITHONIA	CNY-LED-P2-40K-MVOLT-DDB	6600	LED	4000	-	120/277	SURFACE	52	LED CANOPY FIXTURE	6
5A	WILLIAMS	VFI-L35/740-HF-5R-DBZ-VFIF5	3500	LED	4000	-	120/277	GROUND	36	EXTERIOR FLOODLIGHT FIXTURE	6
5B		L51 XFLM-5F LED 28 HO NA UE BRZ	3500	LED	4000	-	120/277	GROUND	36	EXTERIOR SPOTLIGHT FIXUTRE	6

NOTES:

1. PROVIDE NUMBER OF FACES AND DIRECTIONAL ARROWS TO MATCH WHAT IS SHOWN ON DRAWINGS.
2. MOUNT UNDER CABINETS WHERE SHOWN. PROVIDE FACTORY INSTALLED ROCKER SWITCH UNLESS NOTED OTHERWISE.
3. MOUNT FIXTURE 11'-0" ABOVE FINISHED GRADE.
4. MOUNT FIXTURE 13'-0" ABOVE FINISHED GRADE.
5. PROVIDE FIXTURE WITH EMERGENCY DRIVER.
6. COLOR SPECIFIED BY ARCHITECT.
7. FIXTURE SUITABLE FOR GYBOARD CEILING MOUNTING.

GENERAL NOTES:

A. CONTRACTOR SHALL VERIFY CEILING TYPE PRIOR TO ORDERING ALL FIXTURES.
B. PROVIDE ALL REQUIRED ACCESSORIES FOR A COMPLETE INSTALLATION.
C. REFERENCE PLANS FOR FIXTURES REQUIRING EMERGENCY DRIVERS.
D. CONTRACTOR SHALL VERIFY CEILING TYPE PRIOR TO ORDERING ALL FIXTURES.
E. UNIT MANUFACTURER LISTED IS BASIS OF DESIGN. REFER TO SPECIFICATIONS FOR EQUIVALENT EQUIPMENT MANUFACTURERS. CONTRACTOR RESPONSIBLE FOR VERIFYING ALTERTATIVE MANUFACTURERS CAN MEET SCHEDULED PERFORMANCE.

LIGHTING CONTROLS SCHEDULE - LEGRAND WATTSTOPPER

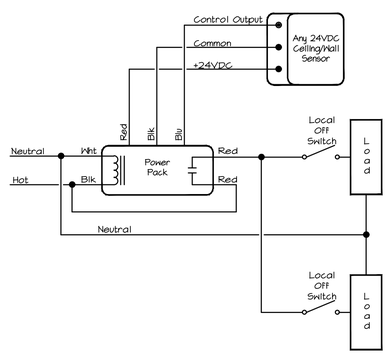
MARK	MANFU	MODEL	DEVICE	MOUNTING	RELAYS	DIMMING	PIR	ULTRA SONIC	TIME DELAY SETTINGS	AMBIENT LIGHT CONTROL	MANUAL ON	AUTO ON	MAXIMUM LOAD	VOLTS	NOTES	CONTROL NOTES
W0	WATTSTOPPER	DSW-301	PERSONAL CONTROL - OCC. SENSOR	WALL	1	-	YES	YES	15 MINUTES	-	YES	NO	20A	120/277	1	1,2
W2	WATTSTOPPER	LVSW-102	PERSONAL CONTROL - 2 BUTTON	WALL	1	-	-	-	-	-	YES	RR/CORR	-	24VDC	1	1
D1	LEGRAND	H4FBL3PW	PERSONAL CONTROL - DIMMING	WALL	1	-	YES	YES	-	-	YES	RR/CORR	-	24VDC	1	
P	LEGRAND	BZ-250	POWER PACK	PLENUM	1	-	-	-	-	-	-	-	-	120/277	1	

NOTES:

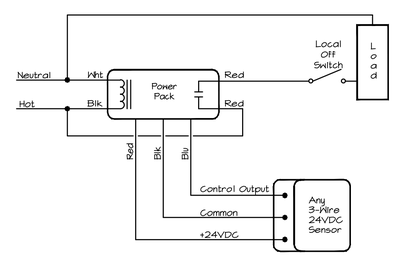
1. ARCHITECHT SHALL SELECT COLOR FROM MANUFACTURER'S COLOR PALATE DURING THE SUBMITTAL PROCESS.
2. PROVIDE SENSOR WITH EXTENDED RANGE LENSE.

GENERAL NOTES (APPLIES TO ALL ABOVE):

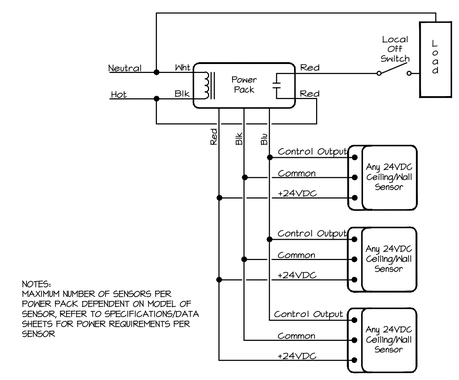
A. PROVIDE POWER PACKS FOR ALL LOW VOLTAGE OCCUPANCY SENSORS.
B. PROVIDE POWER PACK TYPE AND QUANTITY RECOMMENED BY MANUFACTURER FOR DEVICES SCHEDULED.
C. PROVIDE ALL REQUIRED WIRING FOR A COMPLETE INSTALLATION. REFERENCE MANUFACTURER'S WIRING DIAGRAMS FOR ALL REQUIRED WIRING.
D. DUAL TECHNOLOGY SENSORS OCCUPANCY LOGIC SHALL BE SELECTED FOR DETECTION BY EITHER TECHNOLOGY AND SHOULD ONLY REQUIRE ONE FOR INITIAL AND MAINTAINED OCCUPANCY AND RETRIGGER WHEN OPTION IS AVAILABLE.
E. ALL WALL SWITCHES WITH MORE THAN TWO BUTTONS OR BUTTONS FOR DIMMING SHALL BE ENGRAVED WITH THE SCENE FUNCTION. TEXT SHALL BE SELECTED DURING THE SUBMITTAL PROCESS.
F. PROVIDE TWO DIGITAL WIRELESS CONFIGURATION TOOLS, WATTSTOPPER MODEL LMCT-100.
G. UNIT MANUFACTURER LISTED IS BASIS OF DESIGN. REFER TO SPECIFICATIONS FOR EQUIVALENT EQUIPMENT MANUFACTURERS. CONTRACTOR RESPONSIBLE FOR VERIFYING ALTERTATIVE MANUFACTURERS CAN MEET SCHEDULED PERFORMANCE.



01 Ceiling Mounted Occupancy Sensor 24v Dual Level Switched Wiring Diagram
Scale: Not to Scale



02 Ceiling Mounted Occupancy Sensor 24v Wiring Diagram
Scale: Not to Scale



03 Ceiling Mounted Occupancy Sensor 24v Mutiple Sensors Wiring Diagram
Scale: Not to Scale

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
CASEY JOHN STONE
NUMBER
PE-2009035182
PROFESSIONAL ENGINEER
05/19/2021

HOSS & BROWN ENGINEERS
15902 Midland Drive
Shawnee, Kansas 66217
913.362.9090 | mail@h-be.com
H&B PROJECT NUMBER : 2010200

© Hoss & Brown Engineers 2020

MO Certificate of Authority 01022

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
PUBLIC SAFETY, DIVISION OF MISSOURI VETERANS COMMISSION

CONSTRUCT NEW COLUMBARIUM WALL

JACKSONVILLE VETERANS CEMETERY

JACKSONVILLE, MO

STATE OF MO # U-2102-01
VCGP # FAI MO-17-15
ARCHIMAGES # K20530
SITE # 6904
ASSET # 8136904009

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:

ISSUE DATE: 05/19/2021

E5.0 - Electrical
CAD DWG FILE: Details & Schedules.dwg
DRAWN BY: CSi
CHECKED BY: RPC
DESIGNED BY: RPC

SHEET TITLE:
ELECTRICAL DETAILS & SCHEDULES

SHEET NUMBER:
E5.0

MAY 19, 2021