Install Nature Park
Missouri School for the Blind
St. Louis, Missouri

OATES ASSOCIATES

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com

Collinsville St. Louis Belleville St. Charles

MISSOURI DESIGN FIRM
LICENSE NO. 001166

STATE OF MISSOURI
JOHN TRAVIS HELMKAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER

03/11/2020

EXPIRES 12/31/2021

ARCTURIS

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS

3636 S. Geyer Road, Suite 305
St. Louis, MO 63127
T: 314.725.5889

Belleville, Illinois Springfield, Illinois St. Louis, Missouri Evansville, Indiana

OWNER: STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

DEPARTMENT OF
ELEMENTARY & SECONDARY EDUCATION

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

DESIGNER: OATES ASSOCIATES

PROJECT NUMBER: E1703-01

ASSET NUMBER: 5012011003, 5012011004

03/11/2020 - ISSUED FOR CONSTRUCTION

SHEET NUMBER:
G-001
1 OF 76 SHEETS
March 11, 2020

INDEX OF DRAWINGS

G-001.....COVER SHEET
G-002.....SHEET INDEX
G-003.....LOCATION MAPS AND KEY PLAN

C-001.....CIVIL GENERAL NOTES
C-002.....MSD CONSTRUCTION NOTES
C-100.....DEMOLITION PLANS - WEST COURTYARD
C-101.....DEMOLITION PLANS - EAST COURTYARD
C-102.....SITE PLAN - WEST COURTYARD
C-103.....SITE PLAN - EAST COURTYARD
C-104.....GRADING PLANS & SWPPP PLANS - WEST COURTYARD
C-105.....GRADING PLANS & SWPPP PLANS - EAST COURTYARD
C-106.....PERIMETER SECURITY SITE PLAN
C-401.....ENLARGED PLANS - PATIO & PEDESTRIAN ENTRANCES
C-402.....ENLARGED PLANS - WEST COURTYARD ALTERNATE #1
C-403.....ENLARGED PLANS - EAST COURTYARD SYN TURF W/ DETAILS
C-501.....CIVIL PLAN DETAILS
C-502.....CIVIL PLAN DETAILS
C-503.....CIVIL PLAN DETAILS
C-504.....CIVIL PLAN DETAILS
C-505.....CIVIL PLAN DETAILS
C-506.....PERIMETER SECURITY DETAILS
C-507.....PERIMETER SECURITY DETAILS
C-601.....DRAINAGE AREAS - LIMITS OF DISTURBANCE
C-602.....DRAINAGE AREAS - EXISTING DRAINAGE AREAS
C-603.....DRAINAGE AREAS - PROPOSED DRAINAGE AREAS
C-604.....DRAINAGE AREAS - TREATMENT AREAS

L-100.....ARCHITECTURAL SITE PLAN
L-101.....DETAIL LAYOUT & DIMENSION PLAN
L-102.....DETAIL LAYOUT & DIMENSION PLAN
L-103.....DETAIL LANDSCAPE PLAN
L-104.....DETAIL LANDSCAPE PLAN
L-105.....LANDSCAPE DETAILS
L-106.....LANDSCAPE DETAILS
L-107.....LANDSCAPE DETAILS
L-108.....LANDSCAPE DETAILS
L-109.....LANDSCAPE DETAILS
L-110.....LANDSCAPE DETAILS
L-111.....LANDSCAPE DETAILS

A-100.....GENERAL ARCHITECTURAL NOTES
A-101.....ENLARGED ARCH PLANS & ELEVS ENTRANCE LOBBY
A-102.....ENLG ARCH PLANS & ELEVS - ENTRY CANOPY - ALT #2
A-103.....ARCHITECTURAL PLAN, DETAILS MED CTR, 2ND FLR
A-104.....ENLARGED ARCH ELEVATIONS CATWALK INFILLS
A-105.....ARCHITECTURAL DETAILS VARIOUS
A-106.....ARCHITECTURAL PLANS, RCP ADMIN, 2ND FLR

S-001.....GENERAL NOTES
S-002.....GENERAL NOTES, TYPICAL DETAILS & ABBREVIATIONS
SD-101.....STRUCTURAL DEMOLITION PLAN
S-100.....OVERALL SITE PLAN
S-101.....FOUNDATION PLANS ALTERNATE #1 & #2
S-102.....SHEET NOT USED
S-103.....ENTRANCE CANOPY FRAMING PLANS ALTERNATE #2
S-201.....SHEET NOT USED
S-501.....FOUNDATION DETAILS ALTERNATE #1 & #2
S-502.....SHEET NOT USED
S-503.....ENTRANCE CANOPY FRAMING DETAILS ALTERNATE #2

P-001.....PLUMBING SYMBOLS & ABBREVIATIONS
P-101.....PLUMBING SITE PLAN
P-301.....PLUMBING DETAILS & SCHEDULES

E-001.....ELECTRICAL SYMBOLS AND ABBREVIATIONS
E-101.....ELECTRICAL ROOMS POWER
E-102.....SITE PLAN POWER
E-103.....ENLARGED SITE PLAN ELECTRICAL
E-104.....SITE PLAN LIGHTING
E-105.....LOBBY PLAN ELECTRICAL
E-106.....SECOND FLOOR PLAN ELECTRICAL
E-107.....SECOND FLR PLAN ELECTRICAL
E-201.....ELECTRICAL DETAILS
E-202.....ELECTRICAL SCHEDULES

T-001.....TECHNOLOGY LEGEND AND ABBREVIATIONS
T-101.....COMMUNICATION ROOMS TECHNOLOGY
T-102.....SITE PLAN TECHNOLOGY
T-103.....LOBBY PLAN TECHNOLOGY
T-104.....SECOND FLR PLAN TECHNOLOGY
T-105.....SECOND FLR PLAN HEALTH CENTER TECHNOLOGY
T-201.....TECHNOLOGY DETAILS

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMCAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER
03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO: 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

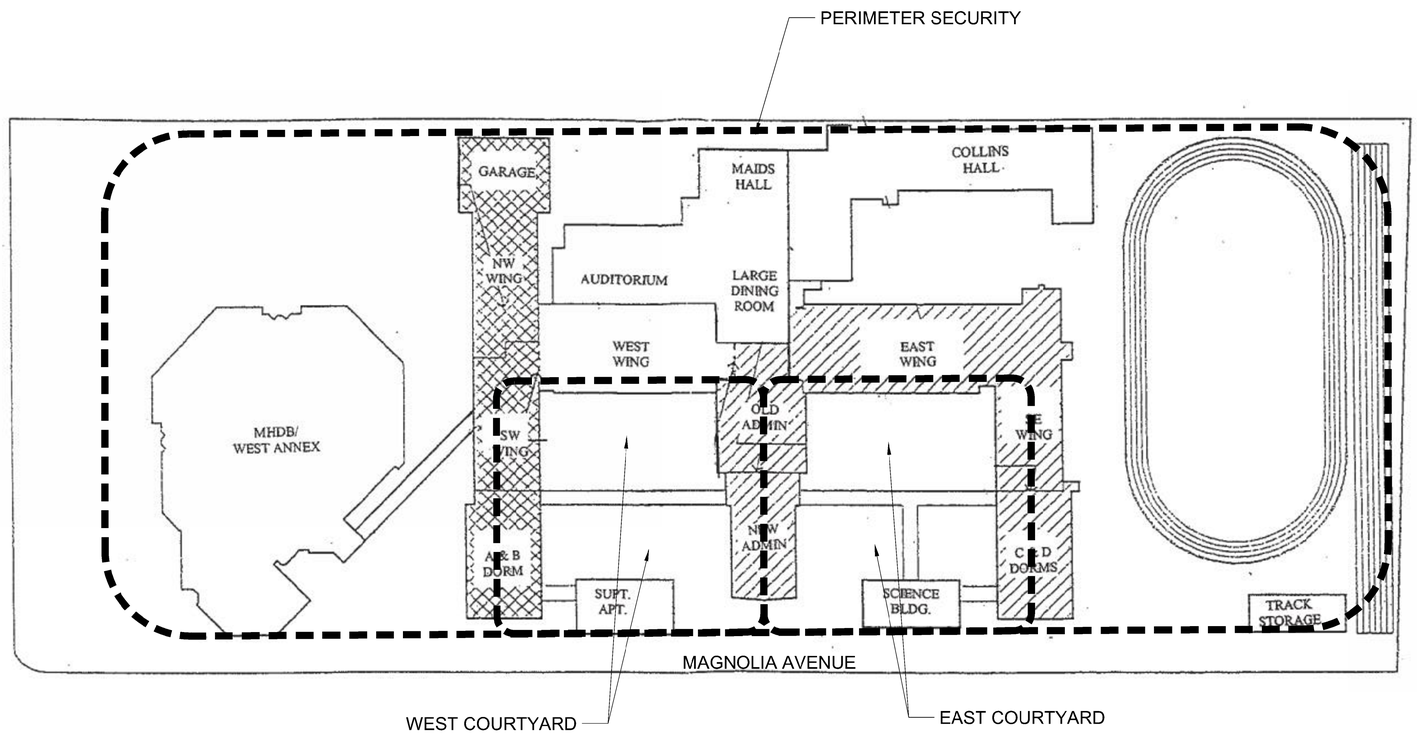
ASSET # 5012011003, 5012011004

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

CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:
SHEET INDEX

SHEET NUMBER:
G-002



G-003 OVERALL CAMPUS SITE PLAN

SCALE: NOT TO SCALE

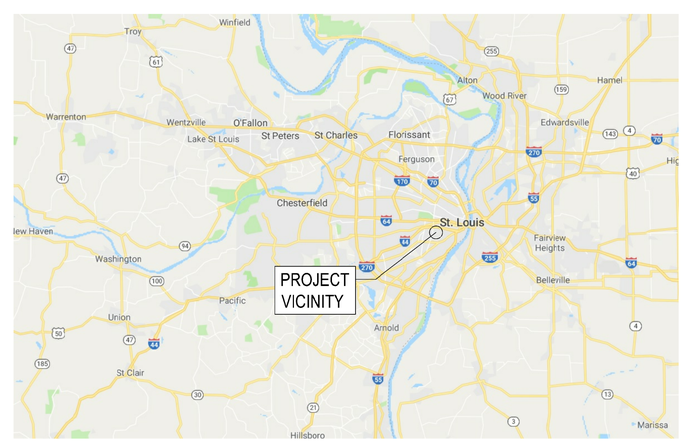
N

LOCATION MAP

N

VICINITY MAP

N



STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMKAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER

03/11/2020

EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO: 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

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

CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:

LOCATION MAPS AND KEY PLAN

SHEET NUMBER:

G-003

ABBREVIATIONS

AD	ALGEBRAIC DIFFERENCE IN GRADE
ADJ	ADJACENT
AGG	AGGREGATE
AI	AREA INLET
ALT	ALTERNATE
ATG	ADJUST TO GRADE
BC	BACK OF CURB
BIT	BITUMINOUS
BLDG	BUILDING
BLRD	BOLLARD
BM	BENCHMARK
BO	BY OTHERS (USED IN CONJUNCTION WITH TBA & TBR)
BVCE	BEGINNING OF VERTICAL CURVE ELEVATION
BVCS	BEGINNING OF VERTICAL CURVE STATION
BW	BOTTOM OF WALL
CATV	CABLE TELEVISION
CB	CATCH BASIN
CI	CURB INLET
CJ	CONTROL JOINT
CL	CENTERLINE
CLF	CHAIN LINK FENCE
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY BLOCK
CO	CLEANOUT
COM	COMMUNICATIONS
CONC	CONCRETE
CONST	CONSTRUCTION
CP	CONTROL POINT
CTR	CENTER
CY	CUBIC YARD
DIA	DIAMETER
DND	DO NOT DISTURB
DS	DOWN SPOUT
DTL	DETAIL
E	EAST
EA	EACH
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC
ENGR	ENGINEER
EOP	EDGE OF PAVEMENT
EQ	EQUAL
ESMT	EASEMENT
ETR	EXISTING TO REMAIN
EVCE	END OF VERTICAL CURVE ELEVATION
EVCS	END OF VERTICAL CURVE STATION
EX	EXISTING
EXP	EXPANSION
FES	FLARED END SECTION
FF	FINISHED FLOOR
FL	FLOW LINE
FO	FIBER OPTIC
FT	FEET
FV	FIELD VERIFY
GI	GRATE INLET
GND	GROUND
HDPE	HIGH DENSITY POLYETHYLENE
HMA	HOT-MIX-ASPHALT
HT	HEIGHT
HVAC	HEATING/ VENTILATION/AIR CONDITIONING
ID	INSIDE DIAMETER
IN	INCHES
INV	INVERT
JB	JUNCTION BOX
K	LENGTH OF VERTICAL CURVE PER PERCENT GRADE DIFFERENCE
LF	LINEAR FEET
MAT	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
N	NORTH
NF	NOW OR FORMERLY
NIC	NOT IN CONTRACT
NO	NUMBER
NTS	NOT TO SCALE
O/C	OIL AND CHIP
OC	ON CENTER
OD	OUTSIDE DIAMETER
PERM	PERMANENT
PL	PROPERTY LINE
PVC	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
QTY	QUANTITY
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
ROW	RIGHT OF WAY
S	SOUTH
SAN	SANITARY
SEW	SEWER
SF	SQUARE FEET
SHT	SHEET
STA	STATION
STD	STANDARD
STM	STORM
SY	SQUARE YARD
TBA	TO BE ABANDONED
TBR	TO BE REMOVED
TBR&R	TO BE REMOVED AND RESET
TBRL	TO BE RELOCATED
TBV	TO BE VACATED
TCE	TEMPORARY CONSTRUCTION EASEMENT
TEL	TELEPHONE
THK	THICK
TUP	TEMPORARY USE PERMIT
TW	TOP OF WALL
TYP	TYPICAL
UIP	USE IN PLACE
UTIL	UTILITIES
VCP	VITRIFIED CLAY PIPE
W	WIDTH OR WEST
W/	WITH
WO/	WITHOUT
WR	WATER RESISTANT
WT	WEIGHT
WTR	WATER
WWF	WELDED WIRE FABRIC
YD	YARD DRAIN
YL	YARD LIGHT

LEGEND

EX	NEW	
		SIGN (TRAFFIC)
		SIGN (ADVERTISEMENT)
		TELEPHONE / POWER POLE
		LIGHT POLE
		ANCHOR POLE
		GUY WIRE
		FIRE HYDRANT
GV	GV	GAS VALVE
WV	WV	WATER VALVE
EM	EM	ELECTRIC METER
GM	GM	GAS METER
		TELEPHONE BOX
		ELECTRIC BOX
		MAILBOX
		CLEANOUT

EX	NEW	
		AREA INLET
		CATCH BASIN
		CURB INLET
		MANHOLE
		TRAFFIC SIGNAL BOX
		TRAFFIC SIGNAL
		HANDHOLE
		SHRUB
		TREE (DECIDUOUS)
		TREE (EVERGREEN)
		STUMP
		CONTROL POINT
		BENCHMARK

LINETYPES

EX		NEW
W	WATER LINE	W
G	GAS LINE	G
T	TELEPHONE LINE	T
OE	OVERHEAD ELECTRIC LINE	OE
E	ELECTRIC LINE	E
FO	FIBER OPTIC LINE	FO
	STORM SEWER	
	SANITARY SEWER	
x	FENCE LINE	x
	TREE LINE	
500	CONTOUR LINE	500
	LIMITS OF CONST	

SYMBOLS LEGEND

1	ELEVATION REFERENCE
4 / 2 / 3	ELEVATION REFERENCE
	DETAIL REFERENCE
	SECTION REFERENCE
1	DRAWING REVISION
	DEMOLITION KEYNOTE
	PLAN KEYNOTE
XXX.XX	PR SPOT ELEVATION
XXX.XX	EX SPOT ELEVATION

GENERAL NOTES

1. ALL SITE WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS IN THE LATEST EDITION OF THE METROPOLITAN ST. LOUIS SEWER DISTRICT'S "STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWERS AND DRAINAGE FACILITIES ", THE METROPOLITAN ST. LOUIS SEWER DISTRICT'S "STANDARD DETAILS", THE CITY OF ST. LOUIS STANDARD SPECIFICATIONS, BID ITEMS AND STANDARD DETAILS FOR STREET AND ALLEY CONSTRUCTION, NOVEMBER 2015, SHALL GOVERN ALL IMPROVEMENTS WITHIN THE CITY ROW, AND THE MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION'S "MISSOURI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION", IN SO FAR AS THEY APPLY, EXCEPT THAT ALL REFERENCES TO MEASUREMENT AND PAYMENT SHALL BE DELETED.
2. A PORTION OF THE EXISTING PARKING LOT WEST OF THE ANNEX BUILDING ON THE FAR WEST SIDE OF THE MISSOURI SCHOOL FOR THE BLIND CAMPUS SHALL BE USED AS A CONTRACTOR STAGING AREA DURING THE DEMOLITION PHASE. THIS AREA SHALL BE KEPT SECURE. NO STAGING WILL BE ALLOWED AT ANY OTHER LOCATION. IF THE EXISTING NATURAL RESOURCES, SIDEWALKS, LANDSCAPING OR OTHER SURFACES ARE DAMAGED BY THE CONTRACTOR, THEY SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE. DURING THE CONSTRUCTION PHASE, A PORTION OF THE PROPOSED PARKING LOT SITE SHALL BE USED AS A CONTRACTOR STAGING AREA.
3. ANY UNSUITABLE MATERIAL ENCOUNTERED DURING CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR AND REPLACED WITH SUITABLE MATERIAL AS APPROVED BY THE ENGINEER. THE COST TO REMOVE AND REPLACE UNSUITABLE MATERIAL THAT WAS NOT VISIBLE DURING THE PREBID WALK-THRU WILL BE CONSIDERED AN UNFORSEEN CONDITION AND WILL BE PAID FOR AS AN AGREED PRICE OR ON A TIME AND MATERIAL BASIS.
4. FULL DEPTH SAW CUTTING ON ALL EDGES FOR REMOVAL ITEMS SHALL BE INCLUDED IN THE COST OF THE PROPOSED IMPROVEMENTS. SAWCUT EDGE AND MATCH NEW PAVEMENT TO EXISTING PAVEMENT WITH A CRISP EDGE.
5. ALL EXISTING FEATURES SUCH AS PAVEMENT, CURB, SIDEWALK, DRIVEWAY PAVEMENT, CULVERTS, HEADWALLS, ROCK BLANKET, FENCING, RETAINING WALLS, ETC. WHICH INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR UNLESS NOTED OTHERWISE ON THE PLANS., EXCEPT FOR THOSE CONSIDERED UNFORSEEN (I.E., NOT VISIBLE DURING THE PRE-BID WALK-THRU), THE COST TO REMOVE EXISTING FEATURES REQUIRED TO CONSTRUCT THE PROJECT SHALL BE INCLUDED IN THE COST BID FOR THE PROJECT.
6. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO ORDERING MATERIALS AND COMMENCING CONSTRUCTION.
7. THE CONTRACTOR SHALL CONFINE ALL OPERATIONS TO THE LIMITS OF CONSTRUCTION SHOWN ON THE PLANS. ANY AREA DISTURBED BEYOND THESE LIMITS SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
8. THE CONTRACTOR SHALL FERTILIZE, SEED AND MULCH OR SOD ALL EARTH SURFACES DISTURBED BY CONSTRUCTION, EXCEPT AS NOTED IN THE PLANS. CONTRACTOR SHALL SEED, FERTILIZE AND MULCH LAWN AREAS WITH 8# PER 1,000 SF OF JAGUAR FESCUE. FERTILIZER SHALL BE APPLIED AT A RATE OF 1:1:1 AT 6 LBS OF NUTRIENTS PER 1,000 SF. STRAW MULCH SHALL BE INSTALLED AT ALL AREAS THAT ARE SEEDED AND FERTILIZED. MULCH SHALL BE APPLIED AT AN APPLICATION RATE OF 2 TONS PER ACRE AND CRIMPED TO THE EARTH FOR STABILIZATION.
9. PROVIDE THE NECESSARY SIGNS AND BARRICADES WHILE WORKING THROUGHOUT THE CONSTRUCTION PERIOD INCLUDING PLACING BARRICADES AT THE PROJECT ENTRANCES TO PREVENT OR DIRECT PUBLIC ENTRY. ALL MATERIAL PILES, EQUIPMENT, OPEN EXCAVATIONS OR THEIR OBSTRUCTIONS OR HAZARDS TO MOTORISTS OR PEDESTRIANS SHALL BE ENCLOSED BY FENCES OR PROTECTED BY BARRICADES. CAUTION TAPE SHALL NOT BE ADEQUATE FOR USE AS A BARRIER. BARRIERS SHALL BE EITHER 4' TALL SNOW FENCE WITH T-POSTS SPACED ON 5' CENTERS OR CHAIN LINK FENCE ON STANDS.
10. THE CONTRACTOR SHALL INSPECT AND ACCEPT THE SITE CONDITIONS PRIOR TO MOBILIZATION. NO ADDITIONAL PAYMENT WILL BE MADE FOR DAMAGING EXISTING CONDITIONS OUTSIDE THE CONSTRUCTION LIMITS THAT SHOULD BE ADDRESSED BEFORE THE TIME CONTRACTOR ASSUMED THE SITE FROM THE OWNER.
11. THE UNITED STATES ACCESS BOARD, PROWAG 2011, SHALL GOVERN ALL ACCESS ROUTE IMPROVEMENTS.

UTILITY CONTACTS

THE FOLLOWING UTILITY COMPANIES MAY HAVE FACILITIES LOCATED WITHIN THE LIMITS OF CONSTRUCTION THAT MAY REQUIRE ADJUSTMENT, RELOCATION OR REMOVAL. ALL ARE MEMBERS OF MISSOURI ONE CALL., UNLESS NOTED OTHERWISE.

METROPOLITAN ST. LOUIS SEWER DISTRICT
2350 MARKET STREET
SAINT LOUIS, MO 63103
(314) 768-6200

CITY OF SAINT LOUIS WATER DIVISION
1640 S. KINGSHIGHWAY
SAINT LOUIS, MO 63110
(314) 633-9000

SPIRE ENERGY
700 MARKET STREET
SAINT LOUIS, MO 63101
(314) 342-0500

CHARTER COMMUNICATION
#815 CHARTER COMMONS
MANCHESTER, MO 63017
(636) 220-2174

AT&T
402 NORTH THIRD STREET
SAINT CHARLES, MO 63301
(636) 448-9607

AMEREN UE
12121 DORSETT ROAD
MARYLAND HEIGHTS, MO 63043
(314) 344-9504

THE ABOVE INFORMATION REPRESENTS THE BEST INFORMATION AVAILABLE TO THE OWNER AND IS ONLY INCLUDED FOR THE CONVENIENCE OF THE BIDDER. IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR HAS TAKEN THE FOREGOING INTO CONSIDERATION IN PREPARING HIS/HER BID, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ANY DELAYS OR INCONVENIENCE CAUSED BY SAME.

UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. THEIR LOCATIONS MUST BE CONSIDERED TO BE APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS NOT PRESENTLY KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. ILLINOIS LAW REQUIRES A MINIMUM 48-HOUR NOTICE TO ALL UTILITY COMPANIES BEFORE DIGGING. FIELD LOCATIONS OF UNDERGROUND FACILITIES MAY BE OBTAINED BY CALLING THE ONE CALL SYSTEM AT 1-800-DIG-RITE AND PROVIDING 48 HOURS ADVANCE NOTICE. NON-ONE CALL MEMBERS MAY BE CONTACTED DIRECT. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT LIMITS ARE LISTED BELOW.

ANY FACILITIES OR APPURTENANCES WHICH ARE THE PROPERTY OF ANY PUBLIC UTILITY LOCATED WITHIN THE LIMITS OF CONSTRUCTION SHOULD BE RELOCATED OR ADJUSTED BY THEIR RESPECTIVE OWNERS. THE CONTRACTOR SHALL NOTIFY AND COOPERATE WITH THE OWNERS OF ANY SUCH FACILITY IN THEIR REMOVAL AND REARRANGEMENT OPERATIONS IN ORDER THAT THESE OPERATIONS AND THE CONSTRUCTION OF THIS PROJECT MAY PROGRESS IN A REASONABLE MANNER. ALL ROADSIDE OBJECTS (UTILITY POLES, FIRE HYDRANTS, SIGNS, ETC.) SHALL BE RELOCATED TO PROVIDE A MINIMUM OF 2 FEET CLEARANCE, MEASURED FROM THE FACE OF CURB TO THE NEAR EDGE OF THE OBJECT. THE COST OF ANY NECESSARY RELOCATIONS MAY BE INCURRED BY THE OWNER IF OTHER ARRANGEMENTS CANNOT BE MADE OR PRIOR AGREEMENTS ARE NOT IN PLACE

MISSOURI ONE CALL SYSTEM, INC
PHONE: 1-800-DIG-RITE

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMCAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER
03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO: 001166
OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

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

CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:
CIVIL GENERAL NOTES

SHEET NUMBER:
C-001

MSD STANDARD CONSTRUCTION NOTES

1. All storm and sanitary sewer structures and appurtenances to be dedicated to MSD, or to be Private Under MSD Inspection, shall conform to the Metropolitan St. Louis Sewer District, Standard Construction Specifications for Sewers and Drainage Facilities, 2009. That will include Standard Details shown therein, and shall include all subsequent changes made thereto.

   Some recent changes concern Plastic Pipe Materials and Pipe Field Testing and performance, and include the following:

PART 2 - MATERIALS OF CONSTRUCTION

1. High Density Polyethylene (HDPE) pipe is not allowed for gravity sewers for storm, combined, or sanitary sewers that are "public" or "private under MSD inspection".

2. Polypropylene (PP) pipe is allowed as follows for gravity sewers that are "public" or "private under MSD inspection:
   For use in sanitary and combined sewers 12 to 60 inches in diameter it shall conform to the requirements of ASTM F2764 "Standard Specification for 6 to 60 in. Polypropylene (PP) Corrugated Double and Triple Wall Pipe and Fittings for Non- Pressure Sanitary Sewer Applications."
   For use in storm sewers 12 to 24 inches in diameter it shall conform to the requirements of ASTM F2881 "Standard Specification for 12 to 60 in. Polypropylene (PP) Dual Wall Pipe and Fittings for Non-Pressure Storm Sewer Applications," or
   For use in storm sewers 12 to 60 inches in diameter it shall conform to the requirements of ASTM F2764 "Standard Specification for 6 to 60 in. Polypropylene (PP) Corrugated Double and Triple Wall Pipe and Fittings for Non- Pressure Sanitary Sewer Applications."

PART 4 - PIPE SEWER CONSTRUCTION

1. Section B, Pipe Field Tests, Paragraph 2, Reach Integrity Testing - delete the first sentence and the following replacement applies:
   All sanitary and combined sewers shall sustain a maximum leakage limit of 100 gallons/inch of pipe diameter/mile of line/day, as required by the Missouri Department of Natural Resources Specifications.

2. Section B, Pipe Field Tests, Paragraph 2, Reach Integrity Testing, Subparagraph c, Infiltration/Exfiltration Testing - delete the sixth sentence, concerning leakage limits, and the following replacement applies:

3. The measurement of leakage shall not exceed 100 gallons/inch of pipe diameter/mile of line/day, as required by the Missouri Department of Natural Resources Specifications.

4. Section B, Pipe Field Tests, Paragraph 4, Manhole Testing, Subparagraph a, Vacuum Testing - after the first sentence, the following addition applies:
   The vacuum test must be performed prior to backfilling around the manhole unless the contractor provides documentation from the precast manhole manufacturer stating that the manhole may be vacuum tested after backfilling has taken place. The contractor must submit this documentation prior to backfilling around any manhole.

5. Section B, Pipe Field Tests, Paragraph 4, Manhole Testing, Subparagraph b, Exfiltration Testing - delete the second sentence, concerning leakage limits, and the following addition applies:

6. For exfiltration testing, the allowable leakage limit is 100 gallons/inch of pipe diameter/mile of line/day when the average head on the test section is three feet (3') or less.

7. If Reinforced Concrete Pipe is used for sanitary or combined sewers larger than 27", all pipe AND joints shall conform to ASTM C 361. In addition, if the diameter is larger than 48", the joint type must include a gasket that is confined in a groove in the spigot of the pipe.

STORMWATER MANAGEMENT FUTURE DISTURBANCE NOTE:

Project Disturbance = 0.84 ACRES
Project Runoff Differential = 0.96 CFS

Any future land disturbance and/or increase in impervious area on this site may require additional stormwater management per MSD regulations in place at that time (including total land disturbance and/or imperviousness added on this plan.)

SITE CONTROL POINTS

CP #1 - AT 1010178.013, 893131.245
ELEV 516.339

CP #2 - AT 1010247.025, 892675.711
ELEV 504.858

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMKAMP
NUMBER
PE-2013004339
PROFESSIONAL ENGINEER

03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO: 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

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

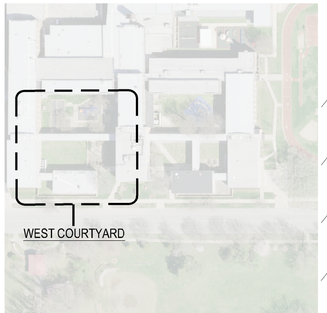
CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:

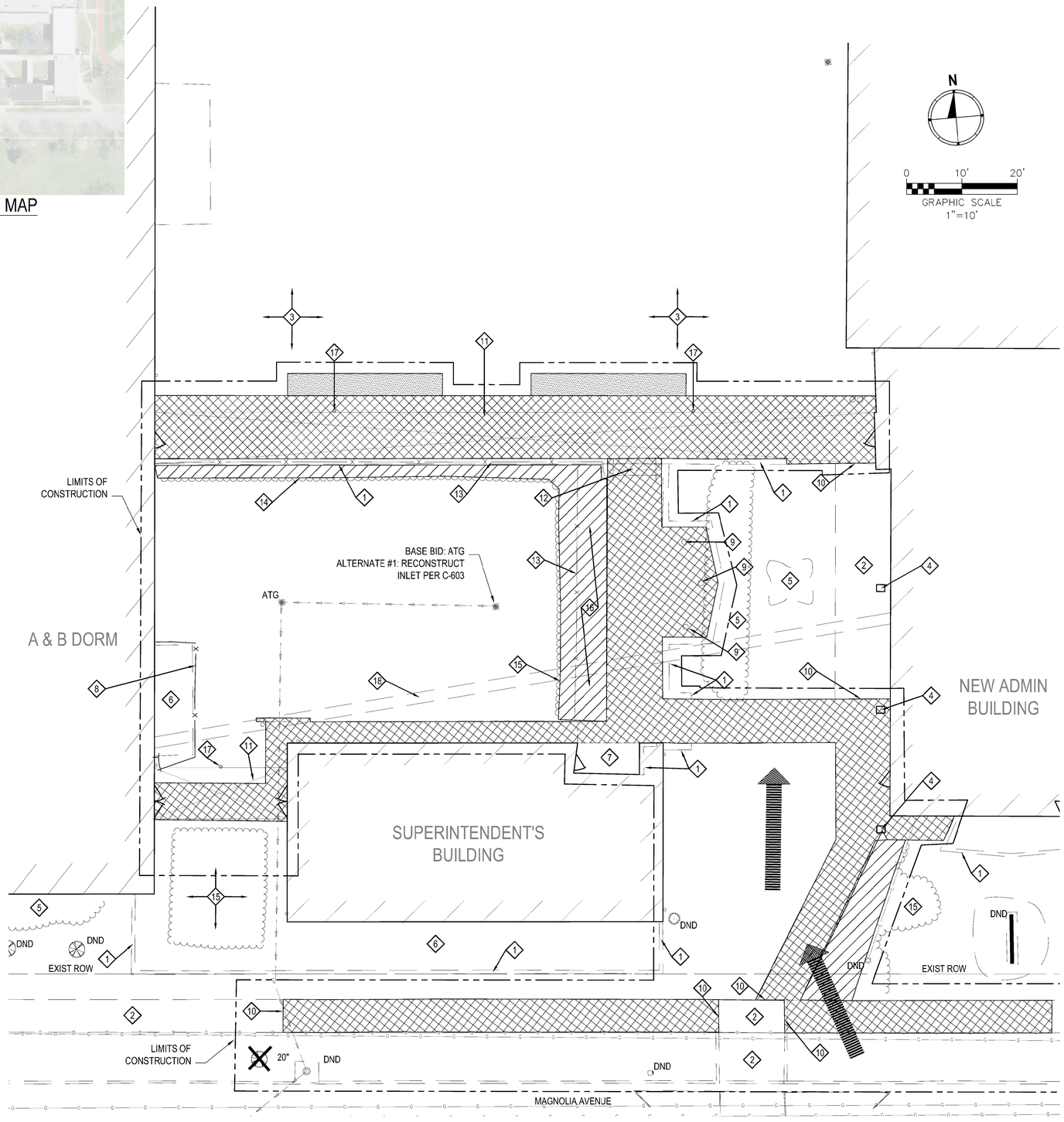
MSD CONSTRUCTION NOTES

SHEET NUMBER:

C-002



KEY MAP



1 C-100 DEMOLITION PLAN - WEST COURTYARD

SCALE: 1" = 10'

KEYED REMOVAL NOTES

1. EXISTING RETAINING WALL, PROTECT AND USE IN PLACE
2. EXISTING CONCRETE SIDEWALK, DO NOT DISTURB
3. EXISTING PLAY SURFACE, DO NOT DISTURB
4. EXISTING COLUMN, DO NOT DISTURB
5. EXISTING LANDSCAPE AREA, DO NOT DISTURB
6. EXISTING CONCRETE PATIO, DO NOT DISTURB
7. EXISTING BRICK PATIO, TO BE REMOVED
8. EXISTING VINYL FENCE, DO NOT DISTURB
   ALTERNATE #1
   EXISTING VINYL FENCE, TO BE REMOVED AND REPLACED
9. EXISTING FLAGPOLE, PROTECT AND USE IN PLACE
10. FULL DEPTH SAWCUT AT EXISTING JOINT
11. EXISTING CATWALK TO BE REMOVED, SEE STRUCTURAL SHEETS FOR ADDITIONAL INFORMATION
12. EXISTING STAIRS, TO BE REMOVED
13. EXISTING FENCE, TO BE REMOVED
14. EXISTING LANDSCAPE AREA, TO BE REMOVED
15. EXISTING LANDSCAPING TO BE SALVAGED AND REUSED IN SAME LOCATION AFTER SITE GRADING HAS BEEN COMPLETED
16. EXISTING BLACKBERRY BUSHES TO BE REMOVED, SALVAGED, AND RELOCATED PER OWNER DISCRETION
17. EXISTING CATWALK ROOF DRAINS TO BE CAPPED AT PROPOSED GRADE
18. EXISTING UTILITY DUCT BANK, CONTRACTOR TO FIELD VERIFY LOCATION OF PRIOR TO STARTING CONSTRUCTION OPERATIONS.

REMOVAL PLAN LEGEND

- EXISTING CONCRETE SIDEWALK TO BE REMOVED
- EXISTING PLAY SURFACE TO BE REMOVED
- EXISTING LANDSCAPE AREA TO BE REMOVED
- CONSTRUCTION ENTRANCE
- LIMITS OF CONSTRUCTION
- EXISTING TREE OR VEGETATION TO BE REMOVED

REMOVAL NOTES

1. UNDERGROUND UTILITY LOCATIONS SHOWN HEREON ARE BASED UPON SURFACE FEATURES AS LOCATED BY SURVEY AND AVAILABLE RECORD DATA, AND ARE APPROXIMATE. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING THE ACTUAL LOCATIONS WITH THE APPROPRIATE UTILITY COMPANY AND/OR MUNICIPAL/BASE DEPARTMENT PRIOR TO CONSTRUCTION AND SUPPLEMENTING WITH GROUND PENETRATING RADAR.
2. CONTRACTOR SHALL LOCATE AND PROTECT ALL UTILITIES THAT ARE NOT DESIGNATED FOR REMOVAL.
3. ADJUST ALL UTILITY VAULTS, FRAMES, LIDS AND GRATES TO NEW GRADE (TYP), EVEN IF NOT SPECIFICALLY NOTED.
4. SAWCUT ALL REMOVALS AT TIE-INS TO EXISTING FEATURES.
5. UNDERGROUND DRAINAGE IS MAPPED BASED ON AVAILABLE DATA. THE CONTRACTOR SHALL CONFIRM ALL UNDERGROUND DRAINAGE PRIOR TO BEGINNING DEMOLITION WORK.
6. DOWNSPOUTS FROM EXISTING CATWALKS TO BE REMOVED AND CAPPED AT PROPOSED GRADE.
7. ALL TREE REMOVAL SHALL OCCUR BETWEEN THE DATES OF NOVEMBER 1ST AND APRIL 14TH.
8. REMOVAL ITEMS NOTED AS "USE IN PLACE" OR "DO NOT DISTURB" THAT REQUIRE DISTURBANCE DUE TO THE CONTRACTOR OPERATIONS SHALL BE REPLACED IN-KIND TO THE OWNER'S SATISFACTION AT NO ADDITIONAL COST TO THE CONTRACT.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMKAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER
03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO: 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

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

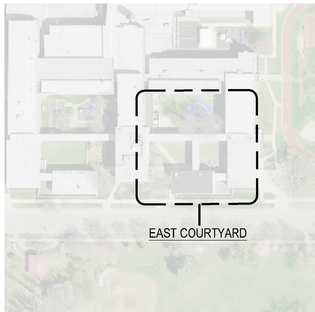
CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:

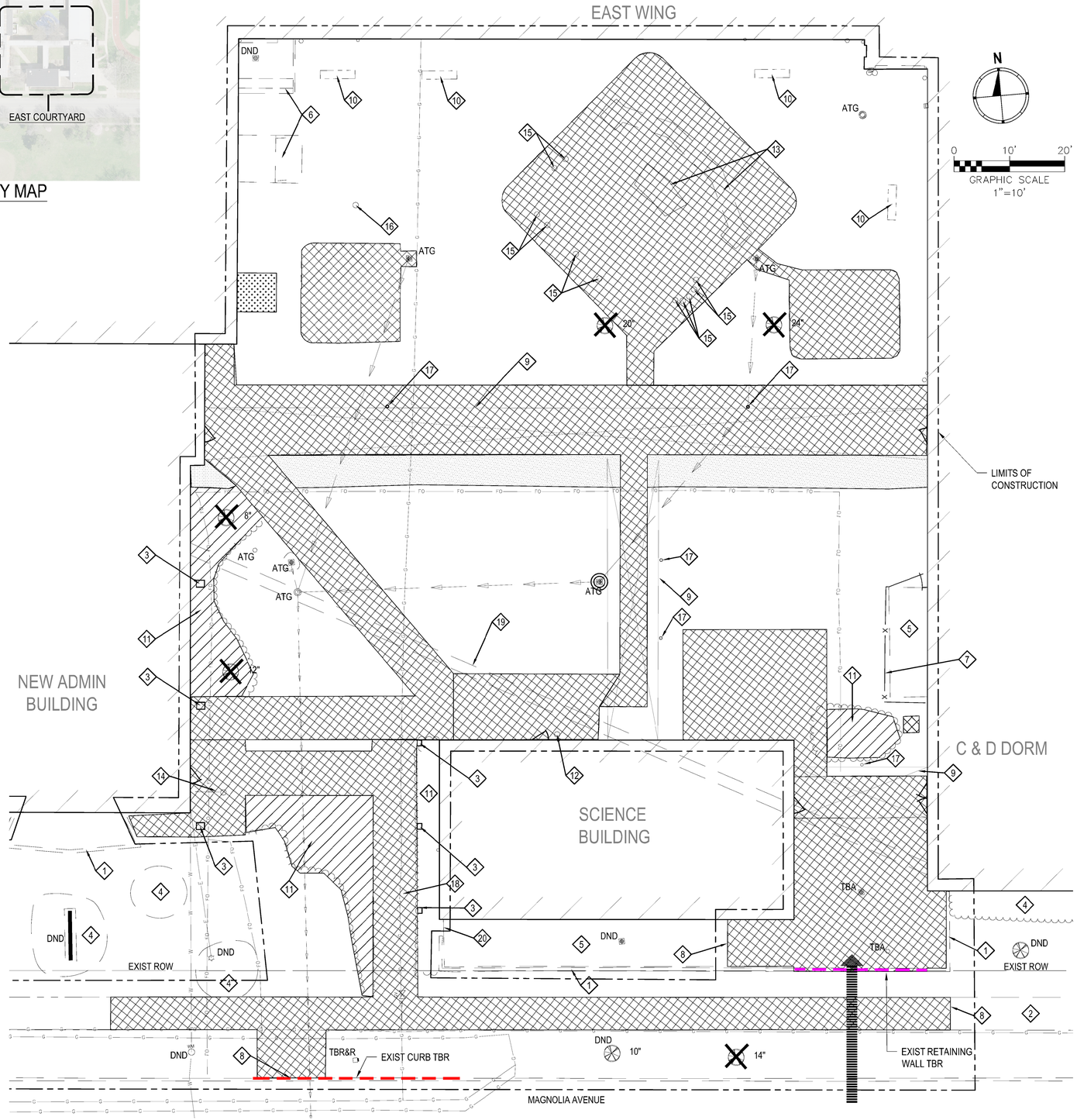
DEMOLITION PLANS - WEST COURTYARD

SHEET NUMBER:

C-100



KEY MAP



1 C-101 DEMOLITION PLAN - EAST COURTYARD

SCALE: 1" = 10'

KEYED REMOVAL NOTES

1. EXISTING RETAINING WALL, PROTECT AND USE IN PLACE
2. EXISTING CONCRETE SIDEWALK, DO NOT DISTURB
3. EXISTING COLUMN, DO NOT DISTURB
4. EXISTING LANDSCAPE AREA, DO NOT DISTURB
5. EXISTING CONCRETE PATIO, DO NOT DISTURB
6. EXISTING CONCRETE STAIRS, DO NOT DISTURB
7. EXISTING VINYL FENCE, TO BE REMOVED
8. FULL DEPTH SAWCUT AT EXISTING JOINT
9. EXISTING CATWALK TO BE REMOVED, SEE STRUCTURAL SHEETS FOR ADDITIONAL INFORMATION
10. EXISTING BENCH, TO BE REMOVED, SALVAGED AND RETURNED TO OWNER
11. EXISTING LANDSCAPE AREA, TO BE REMOVED
12. EXISTING PEDESTAL, TO BE REMOVED
13. EXISTING SEAT WALL AND FIRE PIT, TO BE REMOVED. RETURN ANY AND ALL SALVAGEABLE PARTS TO OWNER.
14. EXISTING CARD READER PEDESTAL, DO NOT DISTURB
15. EXISTING AUDIO PLAY EQUIPMENT, TO BE SALVAGED. SEE LANDSCAPING PLANS FOR ADDITIONAL INFORMATION
16. EXISTING BARBEQUE, TO BE REMOVED, SALVAGED AND RETURNED TO OWNER
17. EXISTING CATWALK ROOF DRAIN TO BE REMOVED AND CAPPED AT PROPOSED GRADE
18. EXISTING 3" GAS SERVICE. CONTRACTOR TO FIELD VERIFY LOCATION OF GAS SERVICE PRIOR TO STARTING CONSTRUCTION OPERATIONS. IF REQUIRED, GAS SERVICE TO BE RELOCATED TO ACCOMMODATE CANOPY COLUMNS.
19. EXISTING UTILITY DUCT BANK, CONTRACTOR TO FIELD VERIFY LOCATION OF PRIOR TO STARTING CONSTRUCTION OPERATIONS.
20. EXISTING GATE TO BE REMOVED

REMOVAL PLAN LEGEND

- EXISTING CONCRETE SIDEWALK TO BE REMOVED
- EXISTING CONCRETE FOUNDATION TO BE REMOVED
- EXISTING ASPHALT PAVEMENT TO BE REMOVED
- EXISTING LANDSCAPE AREA TO BE REMOVED
- EXISTING TREE OR VEGETATION TO BE REMOVED
- EXISTING CURB TO BE REMOVED
- EXISTING RETAINING WALL TO BE REMOVED, SEE STRUCTURAL FOR ADDITIONAL INFORMATION
- CONSTRUCTION ENTRANCE
- LIMITS OF CONSTRUCTION

REMOVAL NOTES

1. UNDERGROUND UTILITY LOCATIONS SHOWN HEREON ARE BASED UPON SURFACE FEATURES AS LOCATED BY SURVEY AND AVAILABLE RECORD DATA, AND ARE APPROXIMATE. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING THE ACTUAL LOCATIONS WITH THE APPROPRIATE UTILITY COMPANY AND/OR MUNICIPAL/BASE DEPARTMENT PRIOR TO CONSTRUCTION AND SUPPLEMENTING WITH GROUND PENETRATING RADAR.
2. CONTRACTOR SHALL LOCATE AND PROTECT ALL UTILITIES THAT ARE NOT DESIGNATED FOR REMOVAL.
3. ADJUST ALL UTILITY VAULTS, FRAMES, LIDS AND GRATES TO NEW GRADE (TYP), EVEN IF NOT SPECIFICALLY NOTED.
4. SAWCUT ALL REMOVALS AT TIE-INS TO EXISTING FEATURES.
5. UNDERGROUND DRAINAGE IS MAPPED BASED ON AVAILABLE DATA. THE CONTRACTOR SHALL CONFIRM ALL UNDERGROUND DRAINAGE PRIOR TO BEGINNING DEMOLITION WORK.
6. DOWNSPOUTS FROM EXISTING CATWALKS TO BE REMOVED AND CAPPED AT PROPOSED GRADE.
7. ALL TREE REMOVAL SHALL OCCUR BETWEEN THE DATES OF NOVEMBER 1ST AND APRIL 14TH.
8. REMOVAL ITEMS NOTED AS "USE IN PLACE" OR "DO NOT DISTURB" THAT REQUIRE DISTURBANCE DUE TO THE CONTRACTOR OPERATIONS SHALL BE REPLACED IN-KIND TO THE OWNER'S SATISFACTION AT NO ADDITIONAL COST TO THE CONTRACT.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMKAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER
03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

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

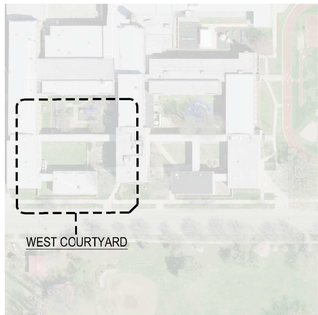
CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:

DEMOLITION PLANS - EAST COURTYARD

SHEET NUMBER:

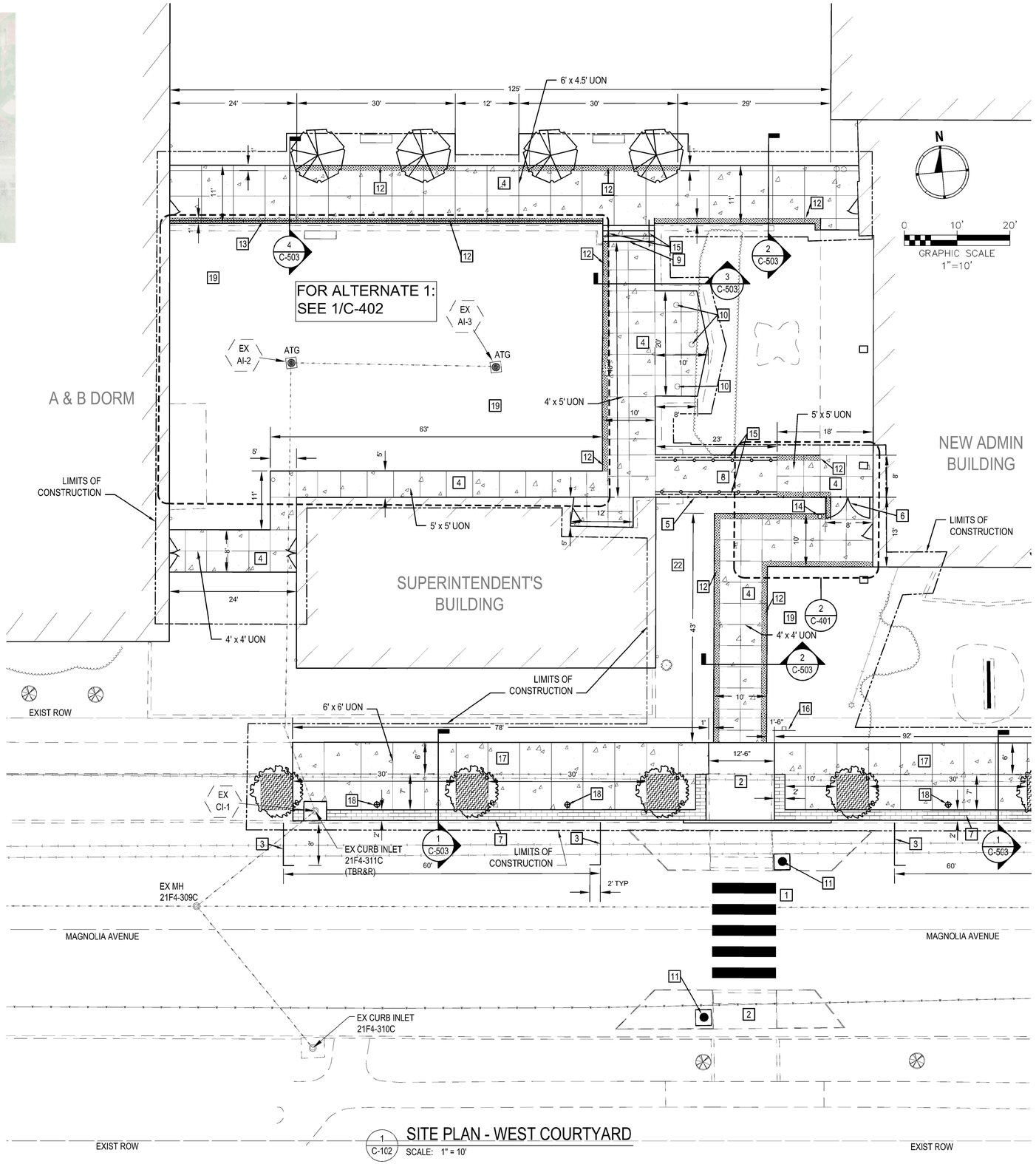
C-101



KEY MAP

BASE BID:
RECONSTRUCTION OF EXISTING SIDEWALK AND STAIRS AS SHOWN ON SHEET C-102.

ALTERNATE #1
CONSTRUCT NEW SIDEWALK AND DRAINAGE IMPROVEMENTS AS SHOWN ON SHEET C-402. GREENHOUSE, CEDAR FENCING, PLANTING BEDS, ALL PLANT MATERIAL AND IRRIGATION AS SHOWN ON THE LANDSCAPE PLANS.



1 C-102 SITE PLAN - WEST COURTYARD
SCALE: 1" = 10'

KEYED SITE PLAN NOTES

1. EX MEDIAN CROSSWALK DND
2. EX CONCRETE CURB RAMP DND
3. NEW 4" WHITE PAINT PAVEMENT MARKINGS
4. NEW CONCRETE SIDEWALK, 5", SEE SIDEWALK TYPICAL SECTION DETAILS, DETAIL 1/C-502.
5. NEW 7' TALL ORNAMENTAL FENCE, SEE 7' TALL ORNAMENTAL FENCE DETAIL, DETAIL 1/C-506.
6. NEW DOUBLE SWING GATE (8' WIDE), SEE DOUBLE SWING GATE DETAIL, DETAIL 2/C-507.
7. NEW 2' WIDE DECORATIVE CONCRETE SIDEWALK, 4" STAMPED RED BRICK SEE DECORATIVE STAMP DETAIL, DETAIL 2/C-5.02.
8. NEW CONCRETE RAMP WITH HANDRAILS, SEE CONCRETE RAMP DETAIL, DETAIL 5&5A/C-501.
9. NEW CONCRETE STAIRS WITH HANDRAILS, SEE CONCRETE STAIRS DETAIL, DETAIL 6/C-501.
10. EXISTING FLAGPOLE, USE IN PLACE SEE ELECTRICAL PLANS FOR PROPOSED LIGHTING
11. NEW SOLAR-POWERED FLASHING BEACON, SEE SOLAR-POWERED FLASHING BEACON DETAIL, DETAIL 6/C-502.
12. NEW 1' WIDE AGGREGATE CONCRETE DETECTION STRIP, SEE SIDEWALK TYPICAL SECTION DETAILS, SHEET C-503 &C-504.
13. NEW 4' TALL ORNAMENTAL FENCE, SEE 4' TALL ORNAMENTAL FENCE DETAIL, DETAIL 5/C-506.
14. NEW KEY CARD PEDESTAL, SEE KEY CARD PEDESTAL DETAIL, DETAIL 4/C-507.
15. HANDRAILS, SEE CONCRETE RAMP OR STAIR DETAIL, DETAIL 5 & 6/C-501.
16. ADA ACCESSIBLE ENTRANCE DIRECTIONAL SIGN, SEE ADA ENTRANCE DIRECTIONAL SIGN DETAIL, DETAIL 4/C-502.
17. NEW CONCRETE SIDEWALK 5", SEE MAGNOLIA AVENUE SIDEWALK TYPICAL SECTION DETAIL, DETAIL 1/C-503.
18. NEW STREETLIGHTS, SEE LANDSCAPE AND ELECTRICAL PLANS
19. NEW TURF LAWN WITH AMENDED SOILS

SITE PLAN NOTES

1. SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION.
2. UTILITIES HAVE BEEN LOCATED FROM AVAILABLE INFORMATION AND THEREFORE LOCATION SHALL BE CONSIDERED APPROXIMATE.
3. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND DEPTHS PRIOR TO ORDERING ANY DRAINAGE ITEMS.
4. DIMENSIONS GIVEN FOR EXISTING CONDITIONS SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO BEGINNING WORK OR ORDERING MATERIALS.
5. FOR PERIMETER SECURITY FENCING AND KEY CARD PEDESTAL LOCATIONS SEE PERIMETER SECURITY SITE PLAN, SHEET C-106.

MSD REMOVE, REPLACE OR REHAB NOTES

1. THE REMOVAL AND REPLACEMENT, OR REHABILITATION OF THE EXISTING STRUCTURE WILL BE DETERMINED BY THE MSD FIELD INSPECTOR. IF THE STRUCTURE IS DETERMINED TO REMAIN IN PLACE, THEN THE TOP SHALL BE ADJUSTED TO GRADE, IF NEEDED.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMKAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER
03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO: 001166
OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

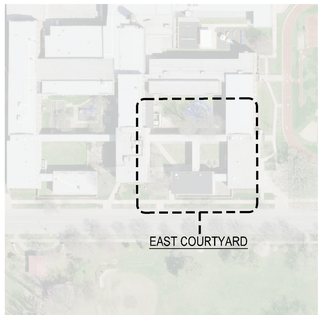
ASSET # 5012011003, 5012011004

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

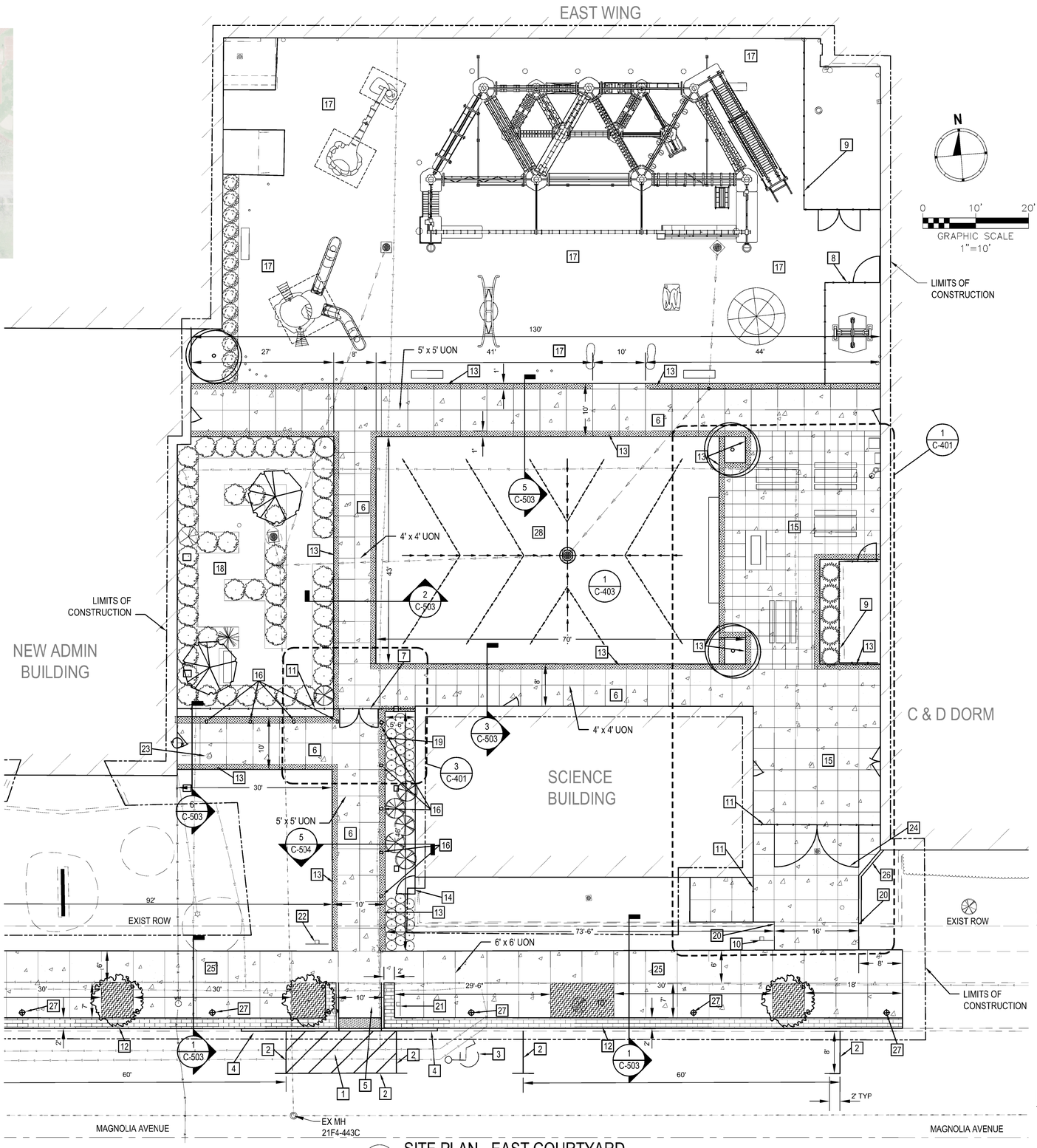
CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:
SITE PLAN - WEST COURTYARD

SHEET NUMBER:
C-102



KEY MAP



1 C-103 SITE PLAN - EAST COURTYARD

SCALE: 1" = 10'

KEYED SITE PLAN NOTES

1. NEW 4" YELLOW PAINTED ISLAND W/ 4" PAINT DIAGONAL MARKINGS AT 36" SPACING TYPICAL
2. NEW 4" YELLOW PAINT PAVEMENT MARKINGS
3. NEW ON-STREET ADA PARKING SPACE, SEE ON-STREET ACCESSIBLE PARKING DETAIL 3/C-502
4. NEW BARRIER CURB, SEE INSTALLATION OR ADJUSTMENT OF GRAN TE CURB DETAIL 2/C-501
5. NEW CONCRETE CURB RAMP, SEE GRADING PLANS AND CURB RAMP DETAIL 1/C-501
6. NEW CONCRETE SIDEWALK, 5", SEE SIDEWALK TYPICAL SECTION DETAILS C-503 & C-504
7. NEW DOUBLE SWING GATE (7' WIDE), SEE DOUBLE SWING GATE DETAIL 2/C-507
8. NEW 4' TALL ORNAMENTAL FENCE, SEE 4' TALL ORNAMENTAL FENCE DETAIL 5/C-506
9. NEW CEDAR FENCE, SEE LANDSCAPE PLANS
10. NEW NO PEDESTRIAN ENTRANCE SIGN, SEE DETAIL 7/C-502
11. NEW 7' TALL ORNAMENTAL FENCE, SEE 7' TALL ORNAMENTAL FENCE DETAIL 1/C-506
12. NEW 2' WIDE DECORATIVE CONCRETE SIDEWALK, 5" STAMPED RED BRICK SEE DECORATIVE STAMP DETAIL 2/C-502
13. NEW 1' WIDE EXPOSED AGGREGATE CONCRETE SIDEWALK, 5" SEE DETAIL 2/C-504
14. NEW 3.5' SWING GATE MOUNTED TO OUTSIDE FACE OF RETAINING WALL, SEE 1/C-507 SIMILAR
15. NEW CONCRETE PATIO, SEE ENLARGED PLAN 1/C-401 FOR MORE INFORMATION
16. ALTERNATE #2
    NEW CANOPY COLUMN, SEE STRUCTURAL PLANS
17. NEW SAFETY SURFACE AND PLAY STRUCTURES, SEE LANDSCAPE PLANS
18. NEW SENSORY MAZE, SEE LANDSCAPE PLANS
19. NEW KEY CARD PEDESTAL, SEE KEY CARD PEDESTAL DETAIL 4/C-507
20. NEW BRICK RETAINING WALL RETURN, SEE DETAIL 25/A-104
21. ADA PARKING SIGN, SEE ADA TELESCOPING SIGN DETAILS 5/C-502
22. ADA ACCESSIBLE ENTRANCE DIRECTIONAL SIGN, SEE ADA ENTRANCE DIRECTIONAL SIGN DETAIL 4/C-502
23. EXISTING KEY CARD ENTRY PEDESTAL DND
24. NEW 12' NON-MOTORIZED DOUBLE VEHICLE SWING GATE, SEE VEHICLE SWING GATE DETAIL 3/C-506
25. NEW CONCRETE SIDEWALK 5", SEE MAGNOLIA AVENUE SIDEWALK TYPICAL SECTION DETAIL 1/C-503
26. NEW CONCRETE CURB, SEE CONCRETE CURB DETAIL 4/C-501
27. NEW STREETLIGHT, SEE ELECTRICAL AND LANDSCAPE PLANS
28. NEW SYNTHETIC TURF, SEE DETAIL 1/C-403

SITE PLAN NOTES

1. SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION.
2. UTILITIES HAVE BEEN LOCATED FROM AVAILABLE INFORMATION AND THEREFORE LOCATION SHALL BE CONSIDERED APPROXIMATE.
3. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND DEPTHS PRIOR TO ORDERING ANY DRAINAGE ITEMS.
4. DIMENSIONS GIVEN FOR EXISTING CONDITIONS SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO BEGINNING WORK OR ORDERING MATERIALS.
5. FOR PERIMETER SECURITY FENCING AND KEY CARD PEDESTAL LOCATIONS SEE PERIMETER SECURITY SITE PLAN, SHEET C-106.

MSD REMOVE, REPLACE OR REHAB NOTES

1. THE REMOVAL AND REPLACEMENT, OR REHABILITATION OF THE EXISTING STRUCTURE WILL BE DETERMINED BY THE MSD FIELD INSPECTOR. IF THE STRUCTURE IS DETERMINED TO REMAIN IN PLACE, THEN THE TOP SHALL BE ADJUSTED TO GRADE, IF NEEDED.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMKAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER
03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

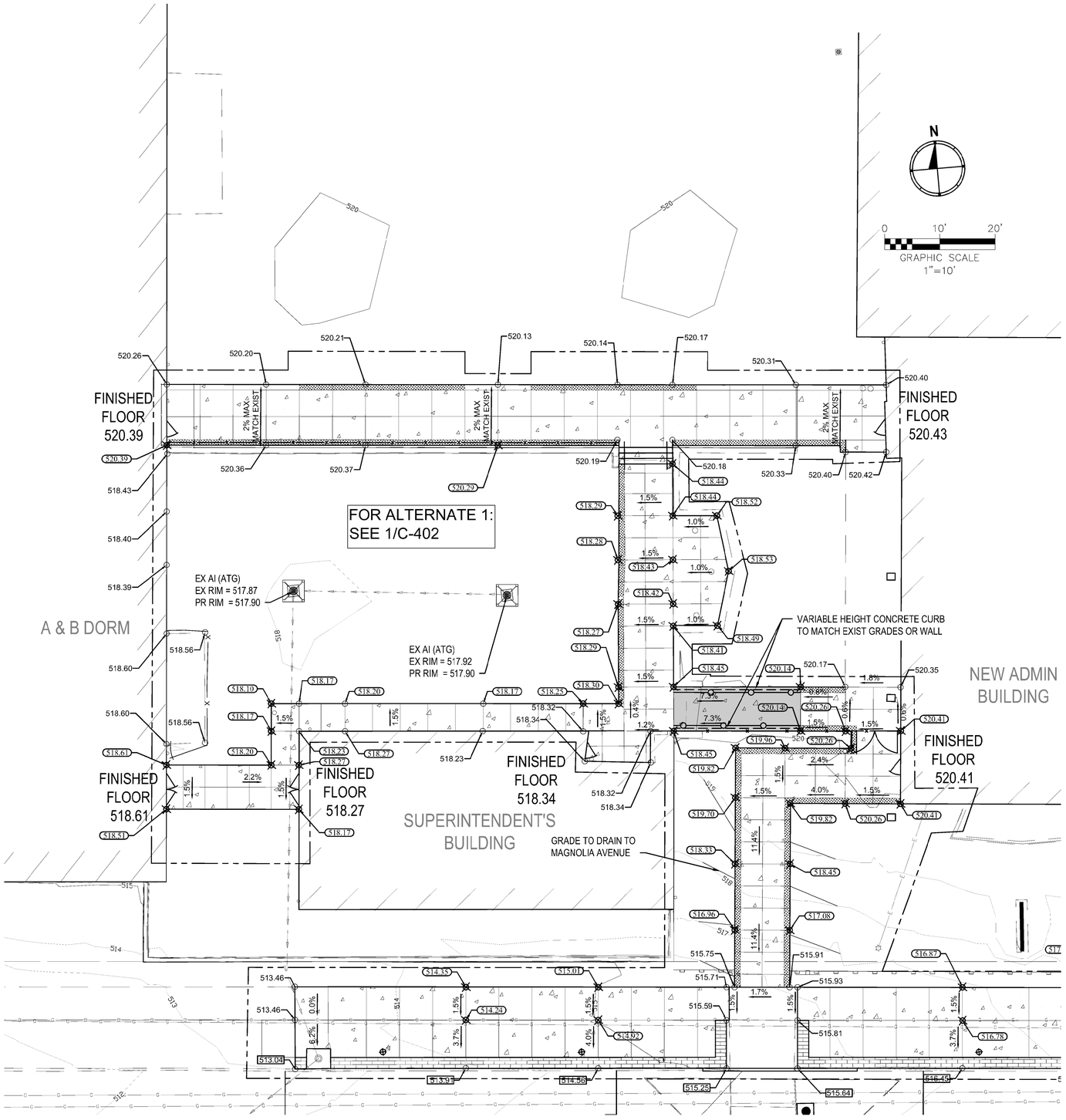
ASSET # 5012011003, 5012011004

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

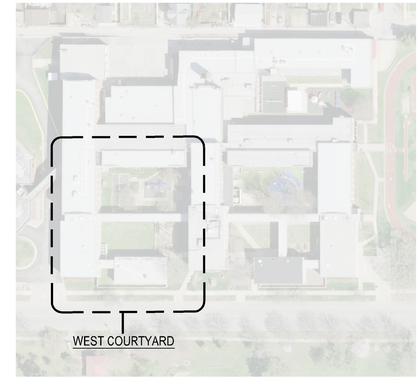
CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:
SITE PLAN - EAST COURTYARD

SHEET NUMBER:
C-103



1 C-104 GRADING PLAN - WEST COURTYARD
SCALE: 1" = 10'



KEY MAP

LEGEND

500 — EXISTING CONTOUR LINE

SYMBOLS LEGEND

- XXX.XX — EXISTING CONDITIONS ELEVATION TO BE MATCHED
- XXX.XX — PROPOSED SIDEWALK OR GROUND ELEVATION
- XXX.XX — EXISTING CONDITIONS ELEVATIONS TO BE MATCHED AT TOP OF CURB LINE
- ADA RAMP MAXIMUM RUNNING GRADE OF 7.5%
- EROSION CONTROL FENCE
- INLET PROTECTION DEVICE

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMKAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER
03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO: 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

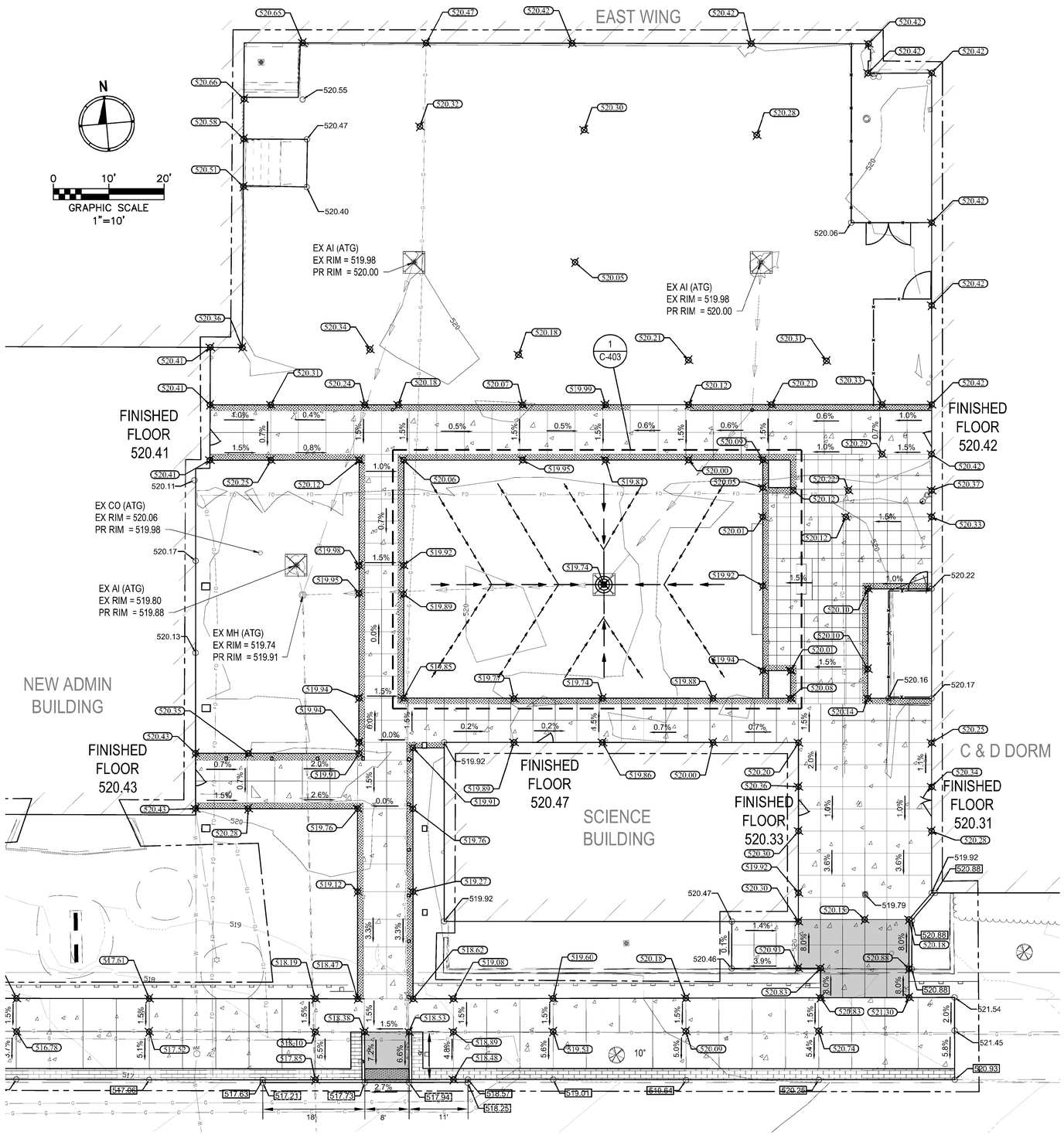
ASSET # 5012011003, 5012011004

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

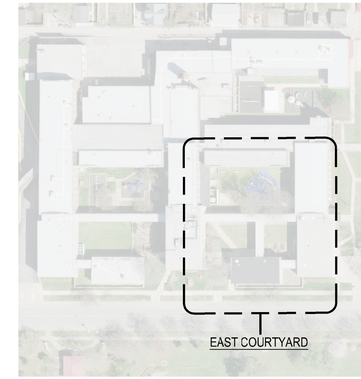
CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:
GRADING PLANS & SWPPP PLANS - WEST COURTYARD

SHEET NUMBER:
C-104



1 C-105 GRADING PLAN - EAST COURTYARD
SCALE: 1" = 10'



KEY MAP

LEGEND

500 — EXISTING CONTOUR LINE

SYMBOLS LEGEND

- xxx.xx — EXISTING CONDITIONS ELEVATION TO BE MATCHED
- xxx.xx — EXISTING CONDITIONS ELEVATION TO BE MATCHED BY NEW EDGE OF PAVEMENT
- xxx.xx — PROPOSED SIDEWALK OR PLAY SURFACE ELEVATION
- xxx.xx — EXISTING CONDITIONS ELEVATIONS TO BE MATCHED AT TOP OF CURB LINE
- ADA RAMP MAXIMUM RUNNING GRADE OF 7.5%
- EROSION CONTROL FENCE
- INLET PROTECTION DEVICE

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMKAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER
03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO: 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

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

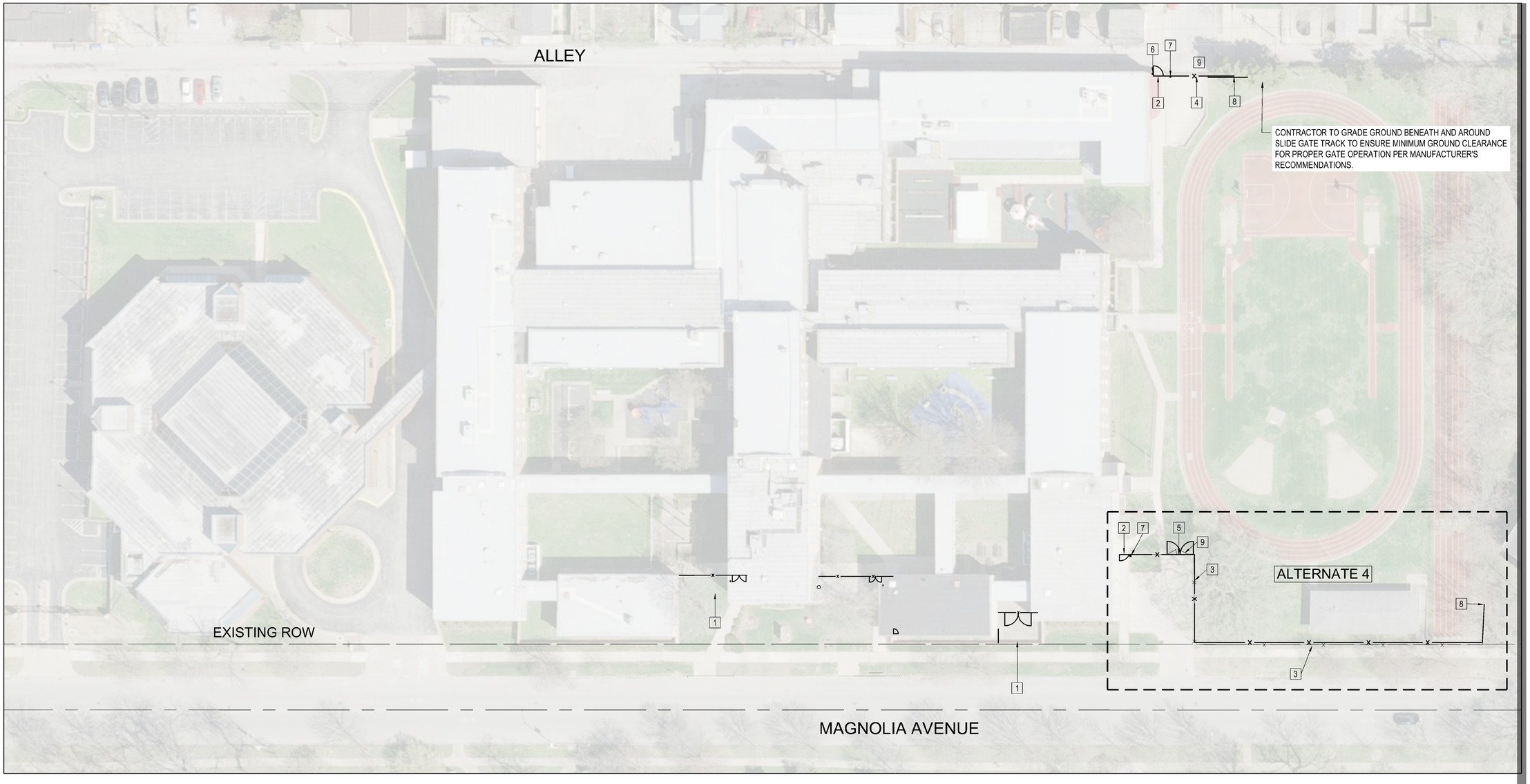
CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:

GRADING PLANS & SWPPP PLANS - EAST COURTYARD

SHEET NUMBER:

C-105



1 / C-106 SITE PLAN - PERIMETER SECURITY

SCALE: 1" = 30'

PERIMETER SECURITY NOTES

1. SEE SHEET C-102 AND C-103 FOR ADDITIONAL FENCING, GATE, AND KEYCARD PEDESTAL LOCATIONS, AND OTHER INFORMATION INSIDE EAST AND WEST COURTYARDS WHICH ARE NOT SHOWN ABOVE.

KEYED NOTES:

—— x —— NEW 7' TALL ORNAMENTAL FENCE, SEE DETAIL 1/C-506

1. TEMPORARY CONSTRUCTION ENTRANCE - SEE SHEET C-100 AND C-101
2. NEW SWING GATE (5'-WIDE), SEE SWING GATE DETAIL, DETAIL 1/C-507
3. EXISTING FENCING AND GATES TO BE REMOVED
4. NEW MOTORIZED 24' CANTILEVER GATE - LEFT SLIDE, SEE CANTILEVER SLIDING GATE DETAIL, DETAIL 2/C-506
5. NEW 8' NON-MOTORIZED DOUBLE VEHICLE SWING GATE, SEE VEHICLE SWING GATE DETAIL 3/C-506
6. NEW CARD READER MOUNTED TO EXTERIOR WALL, SEE ELECTRICAL SHEETS FOR ADDITIONAL INFORMATION
7. NEW KEY CARD PEDESTAL, SEE KEY CARD PEDESTAL DETAIL, DETAIL 4/C-507
8. CONNECT TO EXISTING FENCE
9. EXISTING GATE TO BE REMOVED

N

0 30' 60'

GRAPHIC SCALE 1"=30'

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMKAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER

03/11/2020

EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO.: 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

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

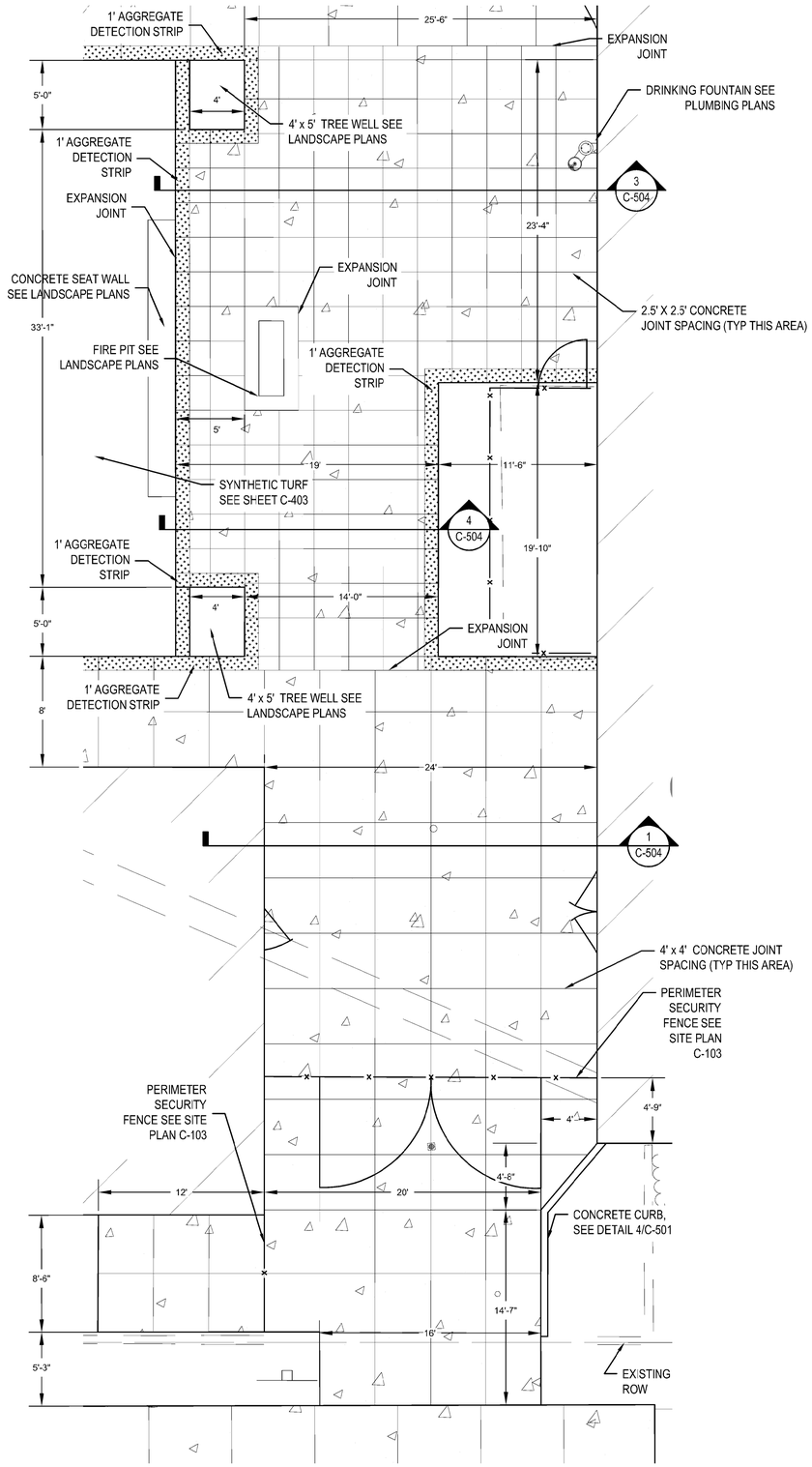
CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:

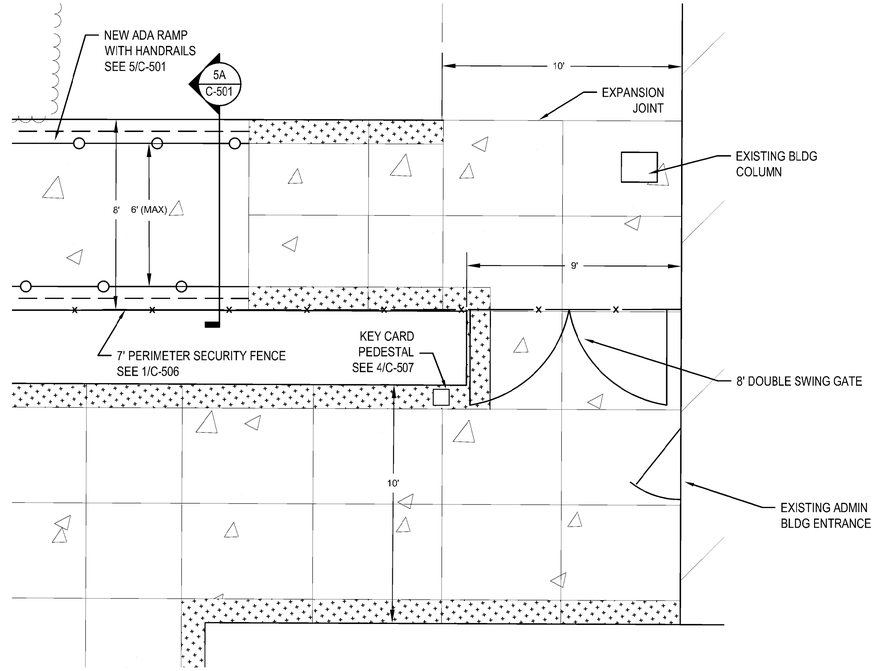
PERIMETER SECURITY SITE PLAN

SHEET NUMBER:

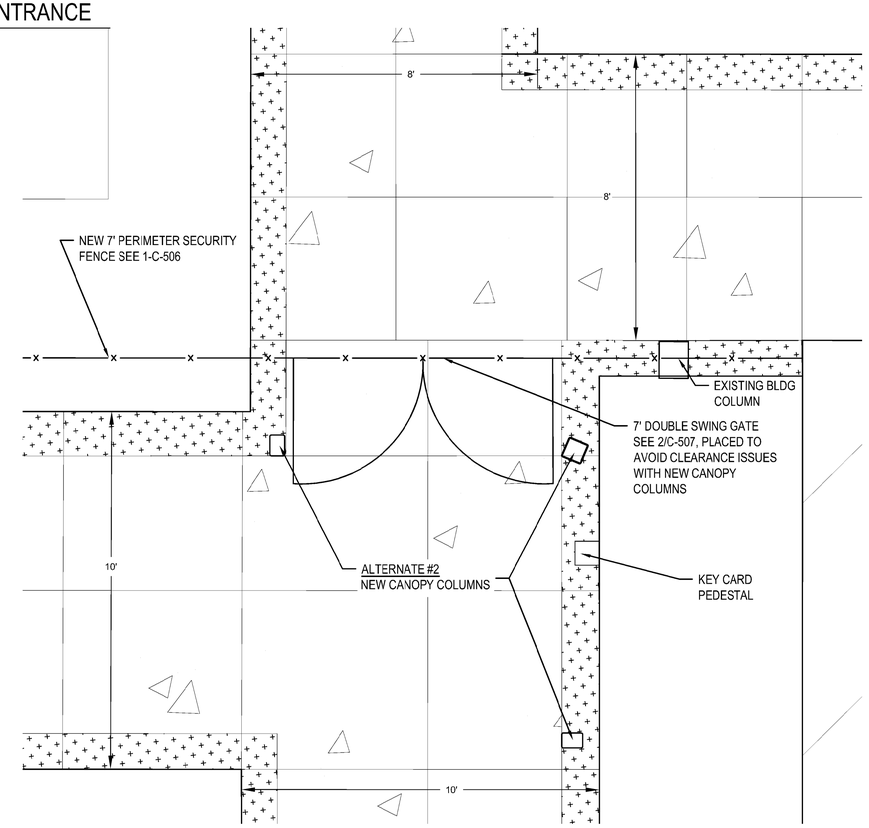
C-106



1 C-401 PATIO & CONTSTRUCTION ENTRANCE
SCALE: 1" = 5'



2 C-401 WEST COURTYARD ENTRANCE
SCALE: NOT TO SCALE



3 C-401 EAST COURTYARD ENTRANCE
SCALE: NOT TO SCALE

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMCAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER
03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO: 001166
OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

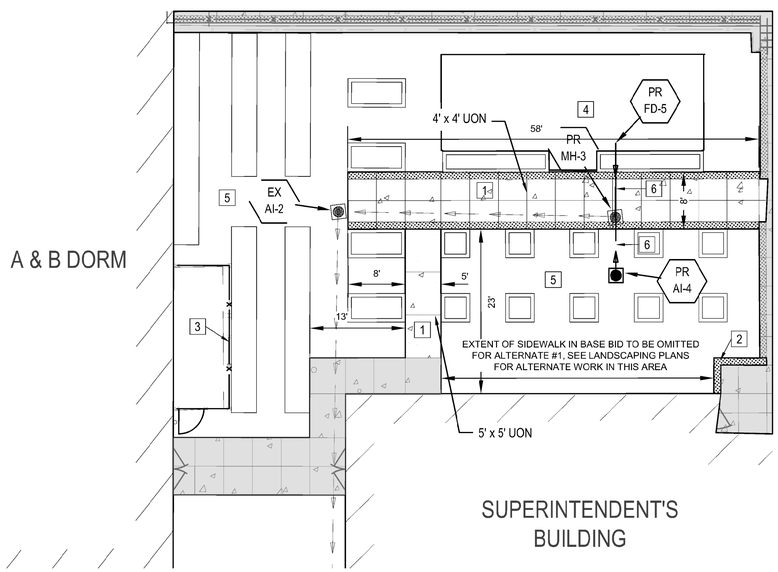
ASSET # 5012011003, 5012011004

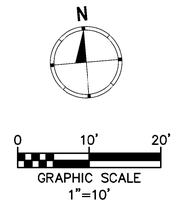
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:
ENLARGED PLANS - PATIO & PEDESTRIAN ENTRANCES

SHEET NUMBER:
C-401





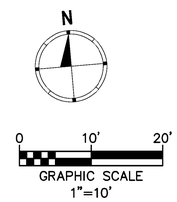
1 C-402 SITE PLAN - ALTERNATE #1
SCALE: 1" = 10'

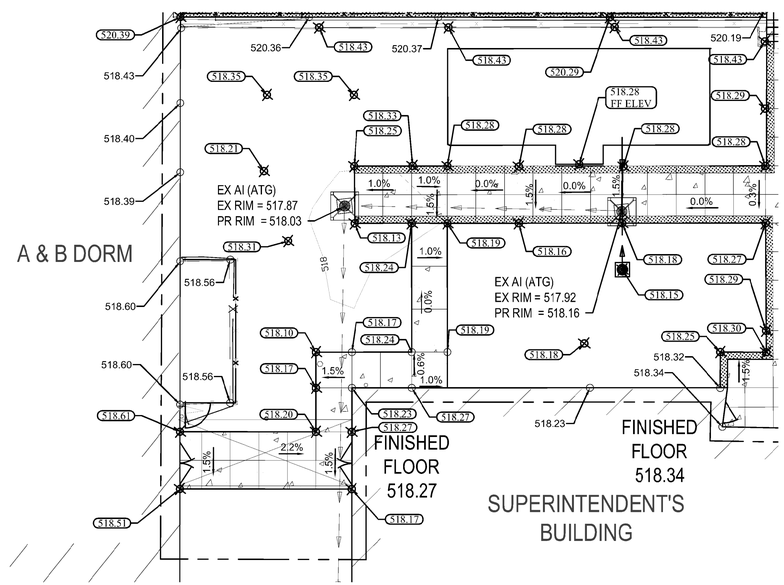
SITE PLAN NOTES

1. SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION.
2. UTILITIES HAVE BEEN LOCATED FROM AVAILABLE INFORMATION AND THEREFORE LOCATION SHALL BE CONSIDERED APPROXIMATE.
3. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND DEPTHS PRIOR TO ORDERING ANY DRAINAGE ITEMS.
4. DIMENSIONS GIVEN FOR EXISTING CONDITIONS SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO BEGINNING WORK OR ORDERING MATERIALS.

KEYED SITE PLAN NOTES

1	NEW CONCRETE SIDEWALK, 5", SEE SIDEWALK TYPICAL SECTION DETAILS, DETAIL 1/C-502.
2	NEW 1' WIDE AGGREGATE CONCRETE DETECTION STRIP, SEE SIDEWALK TYPICAL SECTION DETAILS, SHEET C-503 &C-504.
3	NEW CEDAR FENCE, SEE LANDSCAPE PLANS
4	NEW GREENHOUSE, SEE LANDSCAPE AND STRUCTURAL PLANS
5	NEW TURF LAWN WITH AMENDED SOILS
6	NEW 8" PVC PIPE, SEE PROFILES, SHEET C-604
	DESIGNATES AREA INCLUDED IN BASE BID AND NOT A PART OF ALTERNATE #1





2 C-402 GRADING PLAN - ALTERNATE #1
SCALE: 1" = 10'

LEGEND

500 — EXISTING CONTOUR LINE

SYMBOLS LEGEND

- XXX.XX — EXISTING CONDITIONS ELEVATION TO BE MATCHED
- XXX.XX — PROPOSED SIDEWALK OR GROUND ELEVATION
- XXX.XX — EXISTING CONDITIONS ELEVATIONS TO BE MATCHED AT TOP OF CURB LINE
- EROSION CONTROL FENCE
- INLET PROTECTION DEVICE

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMKAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER
03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO: 001166
OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

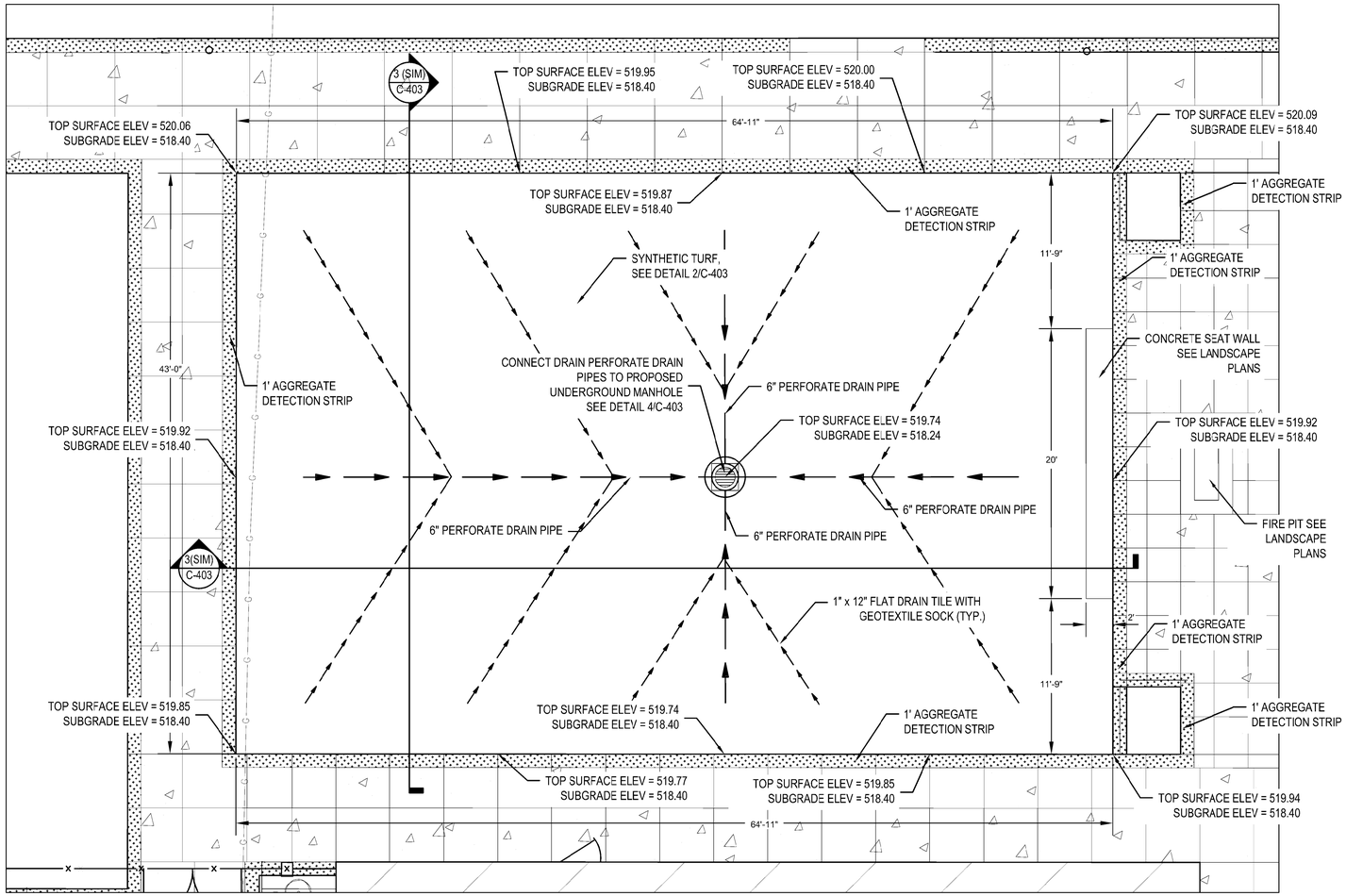
ASSET # 5012011003, 5012011004

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

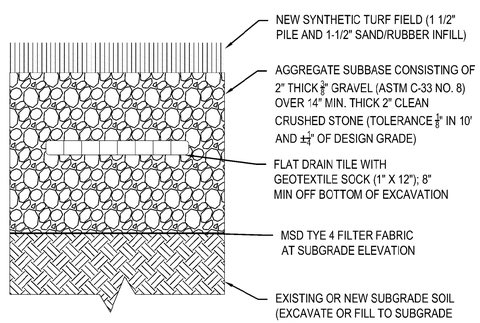
CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:
ENLARGED PLANS - WEST COURTYARD ALTERNATE #1

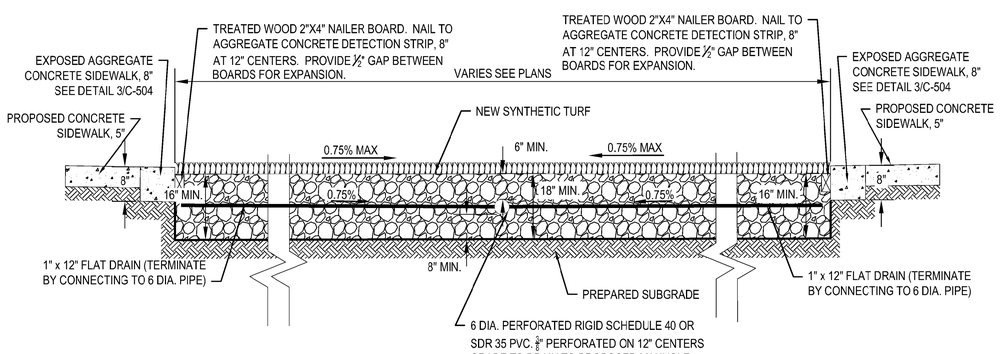
SHEET NUMBER:
C-402



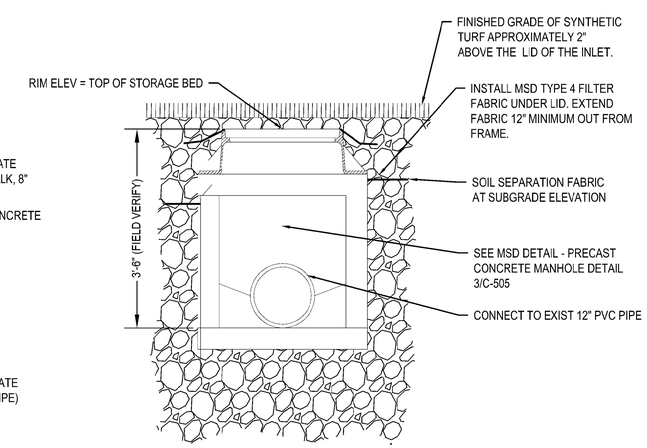
1 C-403 MULTI-PURPOSE TURF LAYOUT
SCALE: 1" = 5'



2 C-403 SYNTHETIC TURF BASE CONSTRUCTION
SCALE: NO SCALE



3 C-403 SYNTHETIC FIELD COLLECTION DRAIN DETAIL
SCALE: NO SCALE



4 C-403 UNDERGROUND MANHOLE DETAIL
SCALE: NO SCALE

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMCAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER
03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO: 001166
OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
ELEMENTARY &
SECONDARY EDUCATION

INSTALL NATURE
PARK

MISSOURI SCHOOL
FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

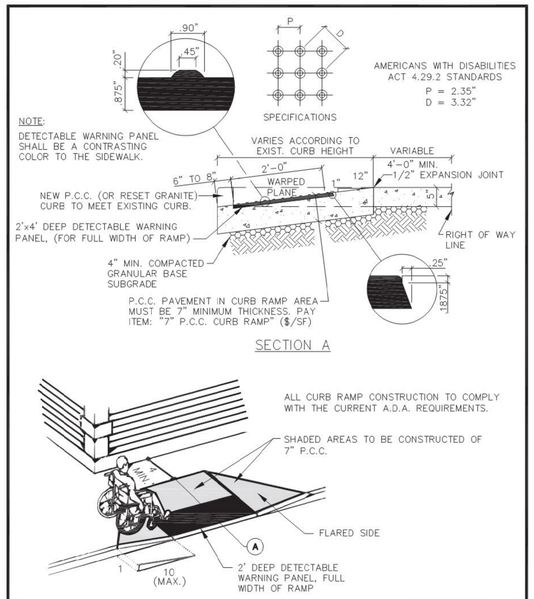
ASSET # 5012011003,
5012011004

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

CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:
ENLARGED PLANS -
EAST COURTYARD
SYN TURF
W/ DETAILS

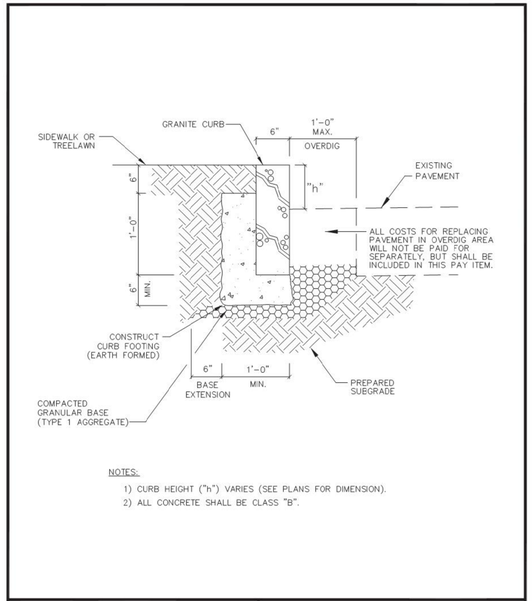
SHEET NUMBER:
C-403



CURB RAMP (ISOMETRIC & SECTION)	CITY OF ST. LOUIS, MISSOURI DEPARTMENT OF THE PRESIDENT BOARD OF PUBLIC SERVICE **Standard Details of Pavement Construction**		
	Dr.: G. Johnson Ch.: T. Steinkoetter	11-03-10	SHEET 35

CURB RAMP (ISOMETRIC & SECTION)

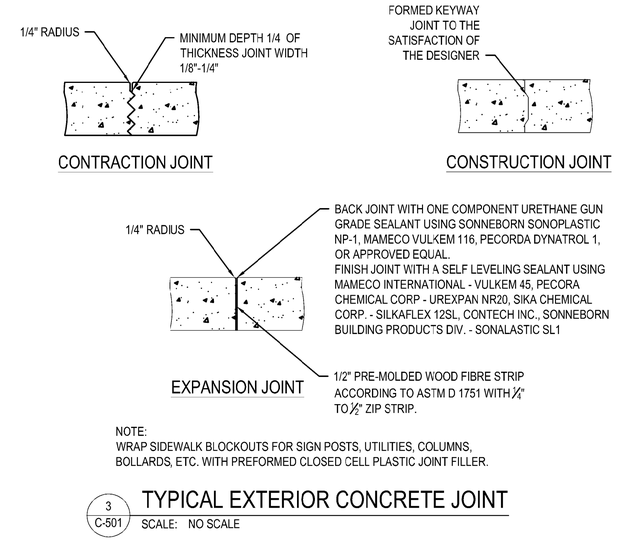
1 / C-501 SCALE: NO SCALE



INSTALLATION OR ADJUSTMENT OF GRANITE CURB	CITY OF ST. LOUIS, MISSOURI DEPARTMENT OF THE PRESIDENT BOARD OF PUBLIC SERVICE **Standard Details of Pavement Construction**		
	Dr.: G. Johnson Ch.: T. Steinkoetter	02-18-09	SHEET 9

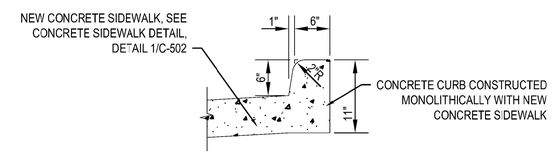
INSTALLATION OR ADJUSTMENT OF GRANITE CURB

2 / C-501 SCALE: NO SCALE



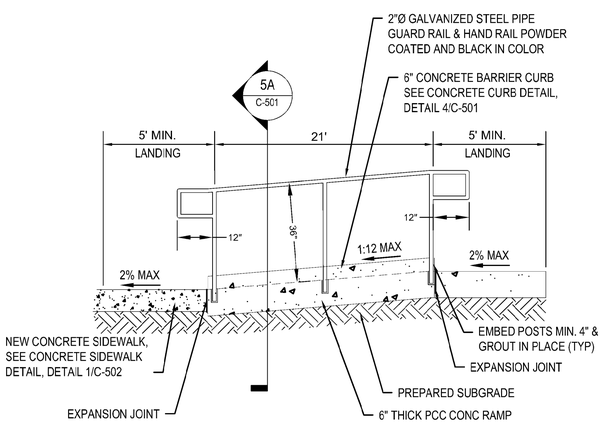
TYPICAL EXTERIOR CONCRETE JOINT

3 / C-501 SCALE: NO SCALE



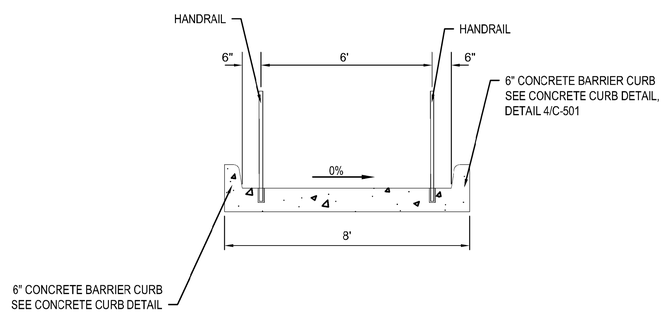
CONCRETE CURB

4 / C-501 SCALE: NO SCALE



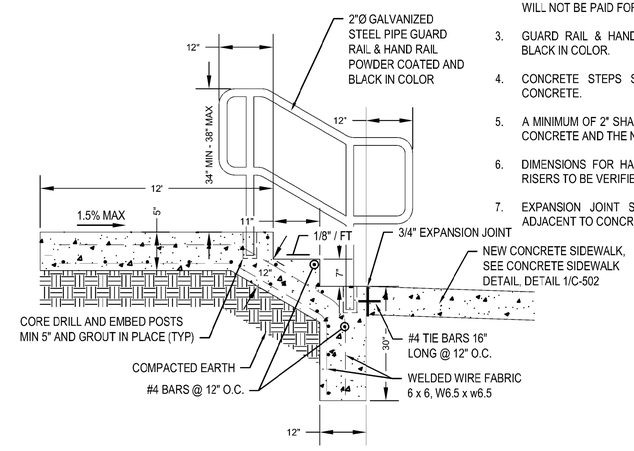
CONCRETE RAMP

5 / C-501 SCALE: NO SCALE



SECTION (TYP)

5A / C-501 SCALE: NO SCALE



CONCRETE STAIRS

6 / C-501 SCALE: NO SCALE

NOTES:

1. DIMENSIONS FROM TREAD TO TREAD AND RISER TO RISER SHALL NOT VARY BY MORE THAN 1/4" PER SET OF STEPS. PLAN DIMENSIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION.
2. REINFORCING BARS SHALL BE EPOXY COATED. REINFORCEMENT WILL NOT BE PAID FOR SEPARATELY.
3. GUARD RAIL & HAND RAIL SHALL BE POWDER COATED AND BLACK IN COLOR.
4. CONCRETE STEPS SHALL BE CONSTRUCTED OF 4,000 PSI CONCRETE.
5. A MINIMUM OF 2" SHALL BE MAINTAINED BETWEEN THE FACE OF CONCRETE AND THE NEAREST EDGE OF ALL REINFORCEMENT.
6. DIMENSIONS FOR HANDRAIL CONSTRUCTION AND TREAD AND RISERS TO BE VERIFIED PRIOR TO CONSTRUCTION.
7. EXPANSION JOINT SHALL BE PLACED WHERE STAIRS ARE ADJACENT TO CONCRETE LANDING AND AT STRUCTURES.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMKAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER
03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO: 001166
OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

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

CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:
CIVIL PLAN DETAILS

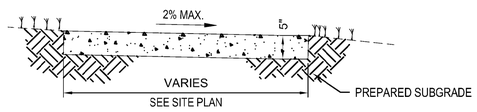
SHEET NUMBER:
C-501

NOTES:

EXPANSION JOINTS ARE TO BE ON ±100' CENTERS AND AT POINTS OF CURVATURE.

EXPANSION JOINT REQUIRED BETWEEN THE SIDEWALK AND EXISTING PAVEMENT OR STRUCTURES.

SEE DETAIL 3 ON SHEET C-501 FOR TYPICAL CONCRETE JOINT.



1 C-502 CONCRETE SIDEWALK
SCALE: NO SCALE

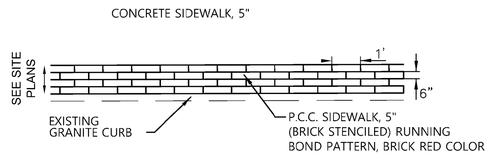
NOTES:

REFER TO THE SITE PLANS FOR LOCATIONS AND DIMENSIONS OF DECORATIVE STAMP.

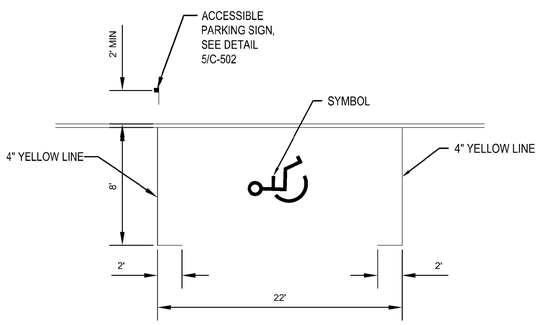
THE CONTRACTOR SHALL PROVIDE A SAMPLE OF THE CONCRETE TEXTURING AND TINTING FOR APPROVAL BY THE STATE.

CONCRETE SHALL BE FULLY COLORED WITH AN IMPRINTED TEXTURE. THE COST OF THE CONCRETE IMPRINTING AND COLOR SHALL BE CONSIDERED AS INCLUDED IN THE COST OF CONCRETE SIDEWALK.

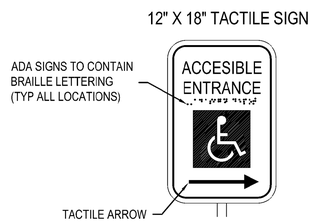
SEE CONCRETE SIDEWALK DETAIL FOR ADDITIONAL INFORMATION.



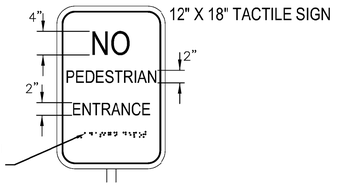
2 C-502 DECORATIVE STAMP
SCALE: NO SCALE



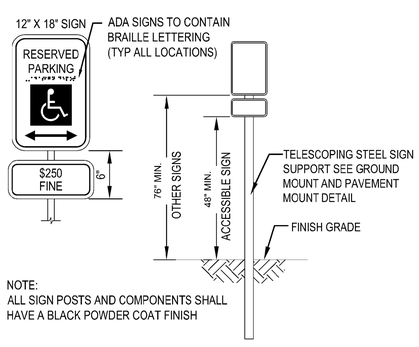
3 C-502 ON-STREET ACCESSIBLE PARKING
SCALE: NO SCALE



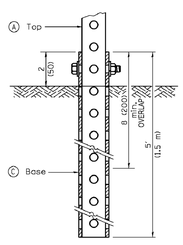
4 C-502 ADA ENTRANCE DIRECTIONAL SIGN
SCALE: NO SCALE



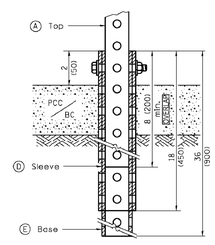
7 C-502 NO PEDESTRIAN ENTRANCE SIGN
SCALE: NO SCALE



NOTE:
ALL SIGN POSTS AND COMPONENTS SHALL HAVE A BLACK POWDER COAT FINISH



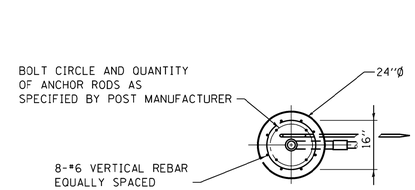
GROUND MOUNT DETAIL



PAVEMENT MOUNT DETAIL

A	2 x 2 x ver. (51 x 51 ver.)
B	1¾ x 1¾ x 12 (44 x 44 x 300)
C	2¼ x 2¼ x 60 (57 x 57 x 1500)
D	2½ x 2½ x 18 (64 x 64 x 450)
E	2¼ x 2¼ x 36 (57 x 57 x 900)

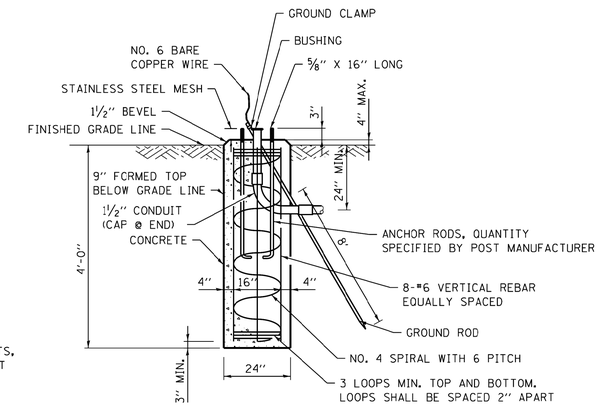
5 C-502 ADA TELESCOPING SIGN
SCALE: NO SCALE



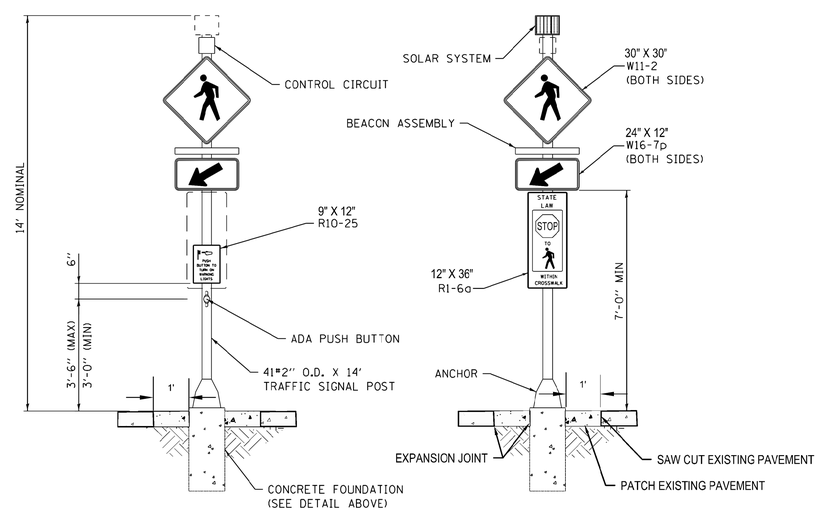
TOP VIEW
(NOT TO SCALE)

NOTES:

1. SEE SPECIAL PROVISION FOR SOLAR-POWERED FLASHING BEACON ASSEMBLY (COMPLETE).
2. CONCRETE FOUNDATIONS, SIGN PANELS, CONTROL CIRCUITS, ADA PUSH BUTTON ETC SHALL BE INCLUDED IN THE COST OF SOLAR-POWERED FLASHING BEACON ASSEMBLY (COMPLETE).
3. POST AND FOUNDATION SHALL BE ACCORDING TO SECTION 902 OF THE MISSOURI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
4. FOUNDATIONS SHALL BE PLACED ADJACENT TO THE EDGE OF SIDEWALK AT THE STATIONS INDICATED ON THE PLANS.



CONCRETE FOUNDATION
(NOT TO SCALE)



FRONT VIEW
(NOT TO SCALE)

BACK VIEW
(NOT TO SCALE)

SOLAR-POWERED FLASHING BEACON ASSEMBLY (COMPLETE)
(NOT TO SCALE)

6 C-502 SOLAR-POWERED FLASHING BEACON ASSEMBLY
SCALE: NO SCALE

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMCAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER
03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166
OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

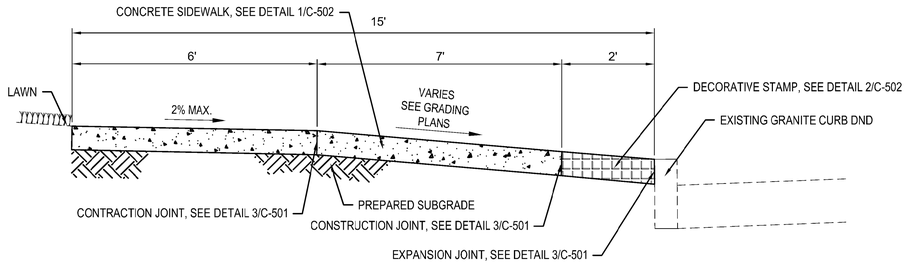
ASSET # 5012011003, 5012011004

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

CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

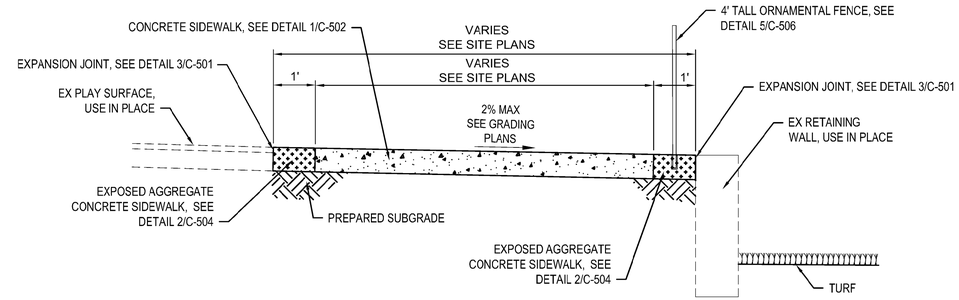
SHEET TITLE:
CIVIL PLAN DETAILS

SHEET NUMBER:
C-502



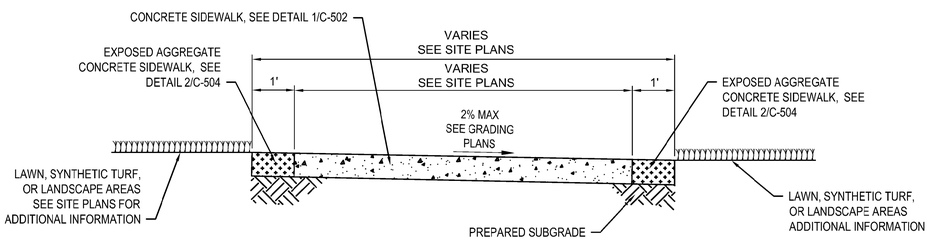
1 C-503 MAGNOLIA AVENUE SIDEWALK TYPICAL SECTION

SCALE: NO SCALE



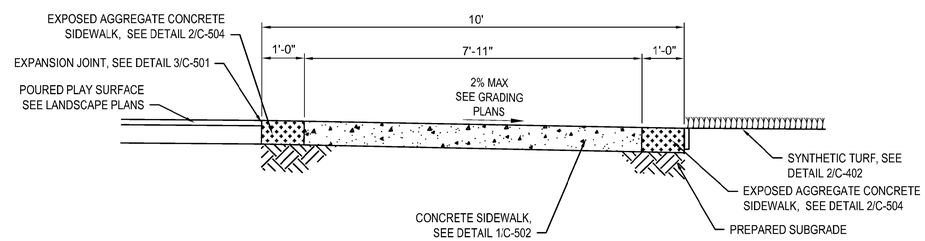
4 C-503 SIDEWALK TYPICAL SECTION - EX WALL ON ONE SIDE

SCALE: NO SCALE



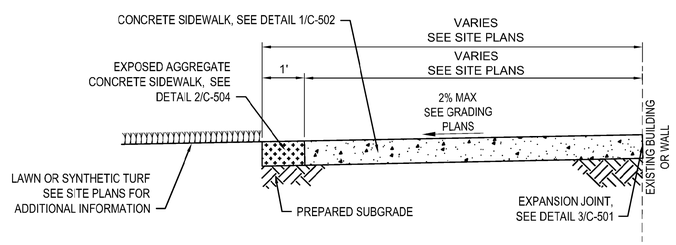
2 C-503 SIDEWALK TYPICAL SECTION - BUFFER ON BOTH SIDES

SCALE: NO SCALE



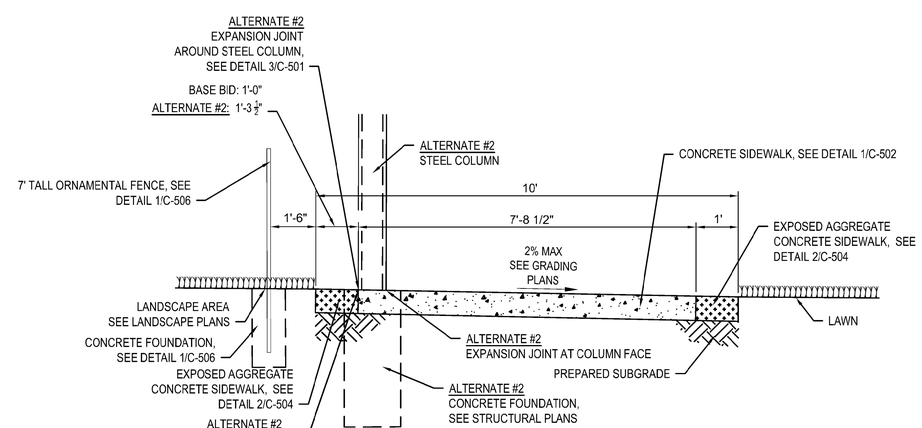
5 C-503 SIDEWALK TYPICAL SECTION - CATWALK

SCALE: NO SCALE



3 C-503 SIDEWALK TYPICAL SECTION - BUILDING OR WALL ON ONE SIDE

SCALE: NO SCALE



6 C-503 SIDEWALK TYPICAL SECTION - ENTRANCE CANOPY W/ FENCE

SCALE: NO SCALE

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMKAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER

03/11/2020

EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

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

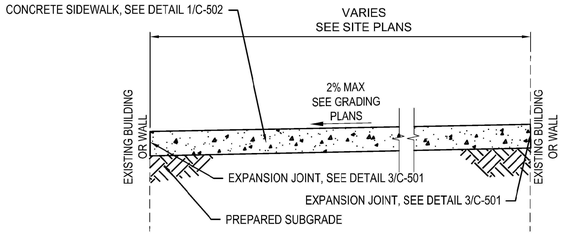
CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:

CIVIL PLAN DETAILS

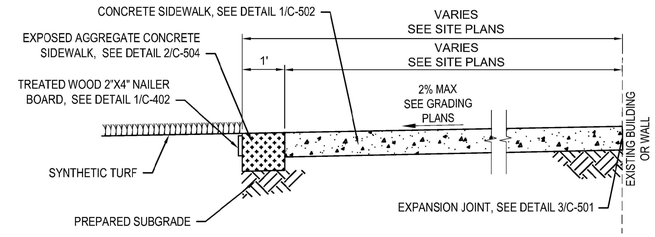
SHEET NUMBER:

C-503



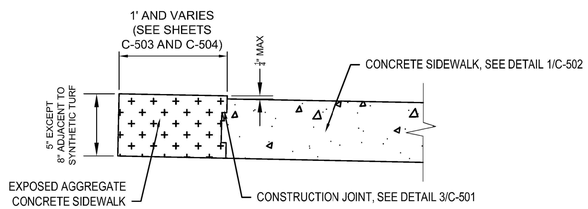
1 C-504 SIDEWALK TYPICAL SECTION - BUILDINGS ON BOTH SIDES

SCALE: NO SCALE



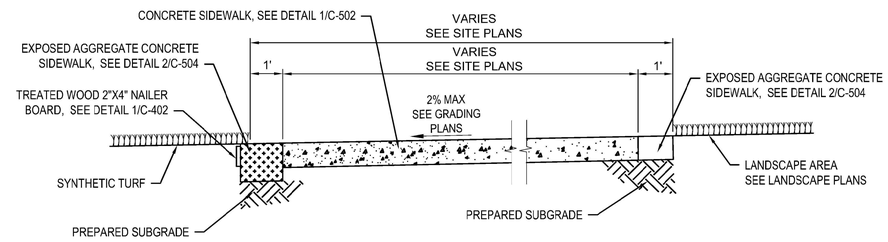
3 C-504 PATIO TYPICAL SECTION - BUFFER ON ONE SIDE

SCALE: NO SCALE



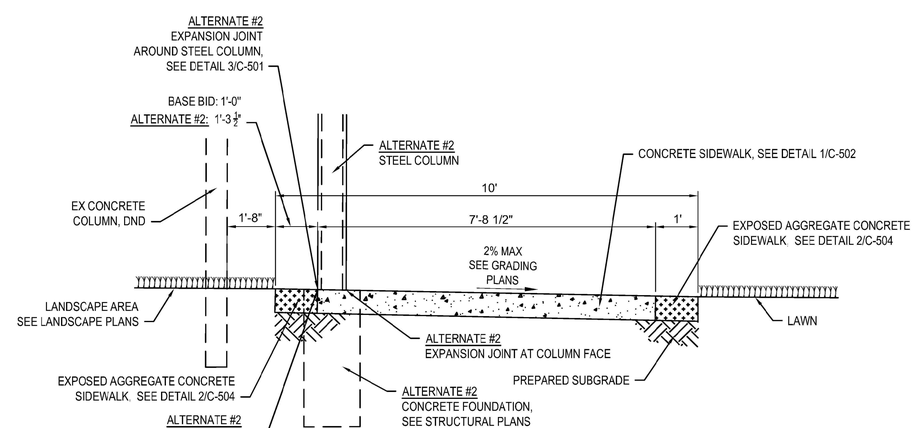
2 C-504 EXPOSED AGGREGATE CONCRETE SIDEWALK DETAIL

SCALE: NO SCALE



4 C-504 PATIO TYPICAL SECTION - BUFFER ON BOTH SIDES

SCALE: NO SCALE



5 C-504 SIDEWALK TYPICAL SECTION - ENTRANCE CANOPY W/O FENCE

SCALE: NO SCALE

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMKAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER

03/11/2020

EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
ELEMENTARY &
SECONDARY EDUCATION

INSTALL NATURE
PARK

MISSOURI SCHOOL
FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003,
5012011004

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

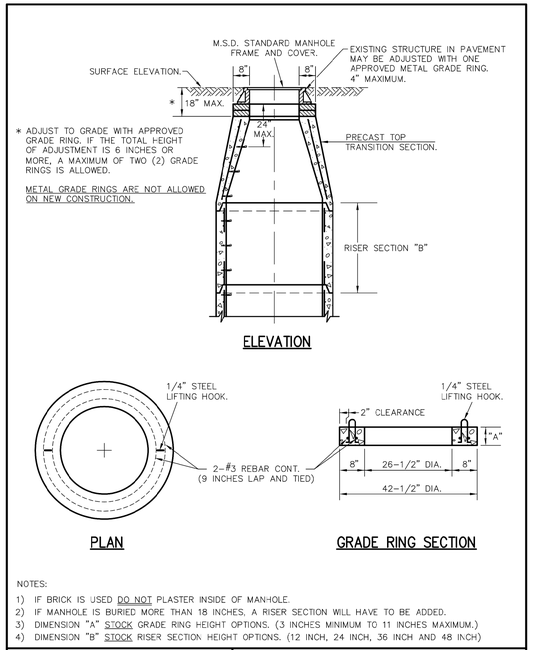
CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:

CIVIL PLAN
DETAILS

SHEET NUMBER:

C-504

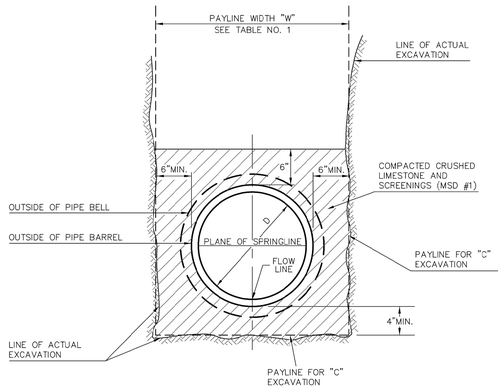


NOTES:

1) IF BRICK IS USED DO NOT PLASTER INSIDE OF MANHOLE.
2) IF MANHOLE IS BURIED MORE THAN 18 INCHES, A RISER SECTION WILL HAVE TO BE ADDED.
3) DIMENSION "A" STOCK GRADE RING HEIGHT OPTIONS. (3 INCHES MINIMUM TO 11 INCHES MAXIMUM.)
4) DIMENSION "B" STOCK RISER SECTION HEIGHT OPTIONS. (12 INCH, 24 INCH, 36 INCH AND 48 INCH)

ADJUST TO GRADE	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. S.A.M. Ch. P.W.S.	2009	SHEET 23 (REV)

1 C-505 MSD STANDARD DETAIL
SCALE: NO SCALE



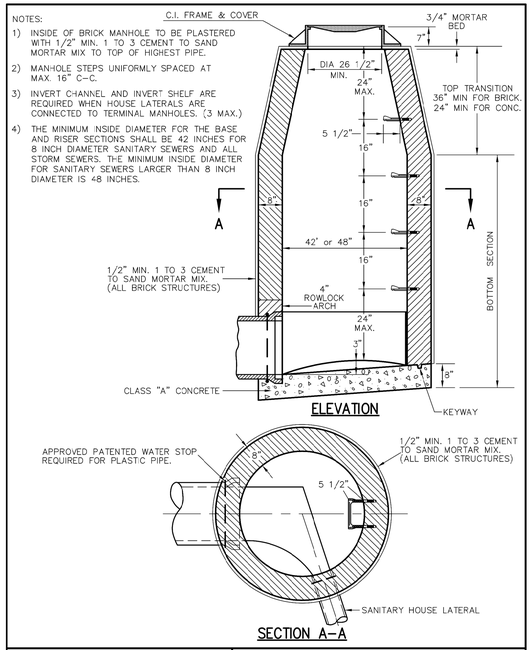
PIPE BEDDING CLASS "C" (FOR ALL 6" to 18" PIPE EXCEPT REINFORCED CONCRETE PIPE)	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. W.S.H. Ch. J.C.K.	2009	SHEET 4

ALTERNATE 1

2 C-505 MSD STANDARD DETAIL
SCALE: NO SCALE

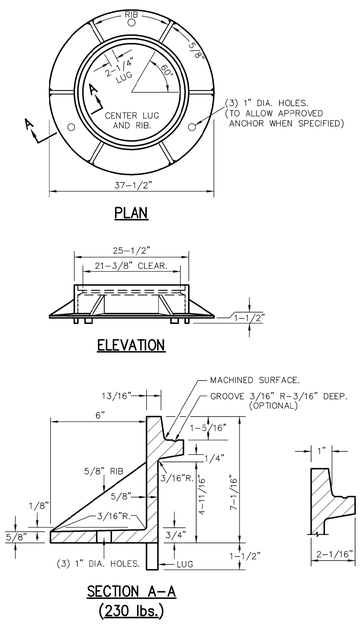
NOTES:

1) INSIDE OF BRICK MANHOLE TO BE PLASTERED WITH 1/2" MIN. 1 TO 3 CEMENT TO SAND MORTAR MIX TO TOP OF HIGHEST PIPE.
2) MANHOLE STEPS UNIFORMLY SPACED AT MAX. 16" C-C.
3) INVERT CHANNEL AND INVERT SHELF ARE REQUIRED WHEN HOUSE LATERALS ARE CONNECTED TO TERMINAL MANHOLES. (3 MAX.)
4) THE MINIMUM INSIDE DIAMETER FOR THE BASE AND RISER SECTIONS SHALL BE 42 INCHES FOR 8 INCH DIAMETER SANITARY SEWERS AND ALL STORM SEWERS. THE MINIMUM INSIDE DIAMETER FOR SANITARY SEWERS LARGER THAN 8 INCH DIAMETER IS 48 INCHES.



TERMINAL MANHOLE	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. WSH/SAM Ch. J.C.K.	2009	SHEET 20 (REV)

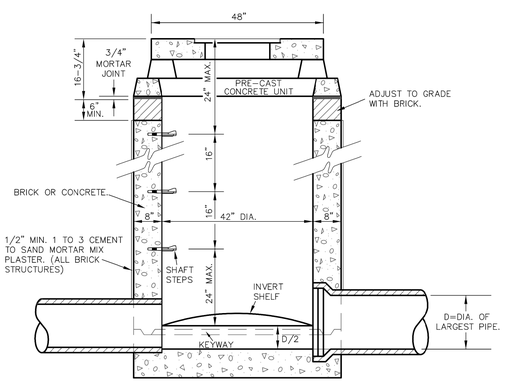
3 C-505 MSD STANDARD DETAIL
SCALE: NO SCALE



CAST IRON MANHOLE FRAME	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. DAB/SAM Ch. J.C.K.	2009	SHEET 52

4 C-505 MSD STANDARD DETAIL
SCALE: NO SCALE

ALTERNATE 1

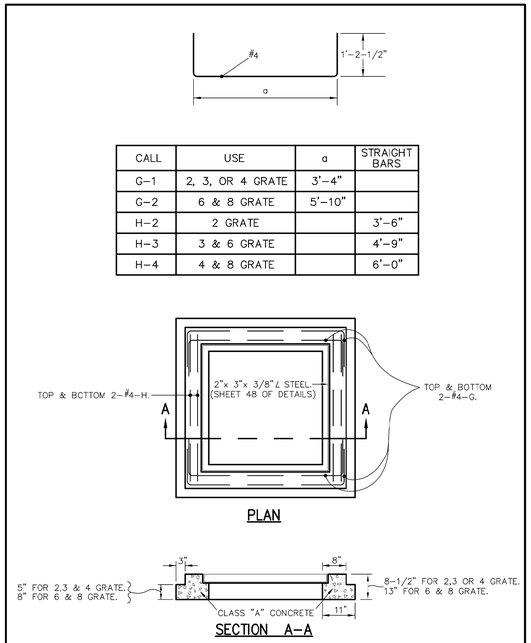


NOTE:
FOR SEWERS 27 INCH THRU 42 INCH SEE DETAIL SHEET 11 FOR BOTTOM SECTION.

AREA INLET MANHOLE (12" THRU 24")	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. RGW/SAM Ch. J.C.K.	2009	SHEET 29

5 C-505 MSD STANDARD DETAIL
SCALE: NO SCALE

ALTERNATE 1



CALL	USE	a	STRAIGHT BARS
G-1	2, 3, OR 4 GRATE	3'-4"	
G-2	6 & 8 GRATE	5'-10"	
H-2	2 GRATE		3'-6"
H-3	3 & 6 GRATE		4'-9"
H-4	4 & 8 GRATE		6'-0"

STEEL REQUIREMENTS FOR GRATE INLET SEAT	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. WSH/SAM Ch. J.C.K.	2009	SHEET 50

C-505 SCALE: NO SCALE

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI JOHN TRAVIS HELMKAMP NUMBER PE-2013004339 PROFESSIONAL ENGINEER
03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166
OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

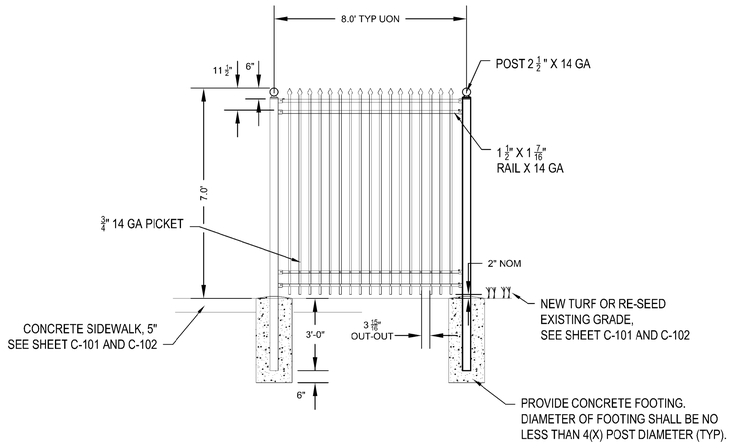
ASSET # 5012011003, 5012011004

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

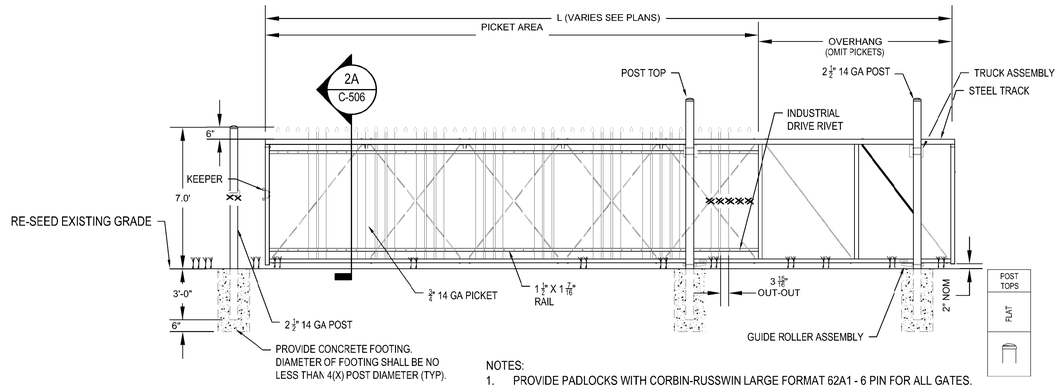
CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:
CIVIL PLAN DETAILS

SHEET NUMBER:
C-505

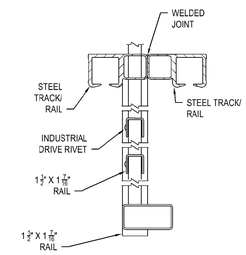


1 C-506 **7' TALL ORNAMENTAL FENCE**
SCALE: NO SCALE

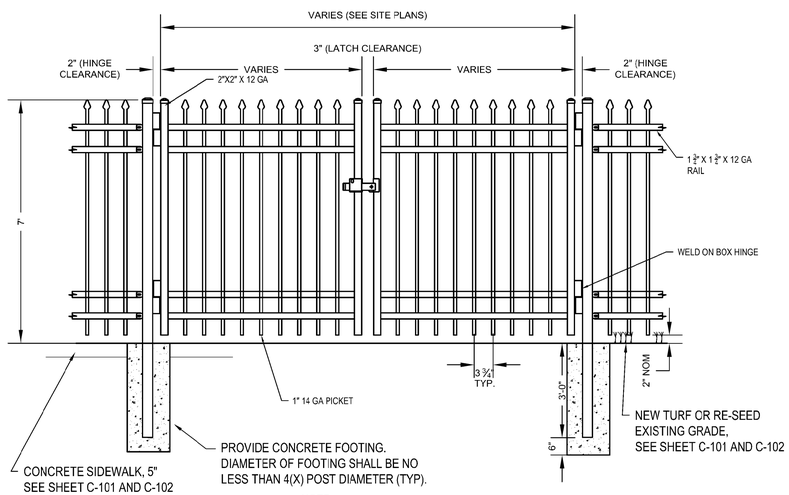


NOTES:
1. PROVIDE PADLOCKS WITH CORBIN-RUSSWIN LARGE FORMAT 62A1 - 6 PIN FOR ALL GATES.
2. SEE DETAIL 4 THIS SHEET FOR GATE ELECTRIC MOTOR SPECS.
3. FOR DOUBLE CANTILEVERED SLIDING GATE, ADD GATE TO GATE CONNECTION.
4. CONTRACTOR TO GRADE GROUND BENEATH AND AROUND SLIDE GATE TRACK TO ENSURE MINIMUM GROUND SLOPE FOR PROPER GATE OPERATION PER MANUFACTURER'S RECOMMENDATIONS.

2 C-506 **CANTILEVERED SLIDING GATE**
SCALE: NO SCALE



2A C-506 **SECTION (TYP)**
SCALE: NO SCALE



NOTE:
1. SEE DETAIL 4 THIS SHEET FOR ELECTRIC MOTOR SPECS.
2. ADD GATE TO GATE CONNECTION PER MANUFACTURER RECOMMENDATIONS

3 C-506 **VEHICLE SWING GATE**
SCALE: NO SCALE

GATE OPERATOR AND CONTROLS:
THE MOTOR SHALL BE 208 VOLT / 3 PHASE.

MOTOR,OPERATOR CONTROLS AND GATE CONTROLLER SHALL BE ENCLOSED IN A WATERPROOF, STAINLESS STEEL CABINET WITH POWDER COATED FINISH. SHALL INCLUDE COLD WEATHER PACKAGE WITH BOX HEATER.

A NEMA 3R DISCONNECT SHALL BE INSTALLED ON THE GATE OPERATOR.

THE GATE CONTROLS SHALL INCLUDE SHORT CIRCUIT AND OVERLOAD PROTECTION. INCLUDE PROVISIONS IN 24V CONTROL CIRCUIT FOR NORMALLY OPEN AND/OR NORMALLY CLOSED CONTACTS, FOR REMOTE CONTROL OF THE OPEN COMMAND FOR GATE. TERMINATIONS SHALL BE ON A TERMINAL STRIP, WIRING TO PIG-TAILS IS NOT ACCEPTABLE. INCLUDE AUDIBLE DEVICE FOR NOTIFICATION WHEN GATE IS STARTING TO MOVE.

INCLUDE OPEN/CLOSE/STOP PUSHBUTTON STATION INSTALLED INSIDE THE CABINET.

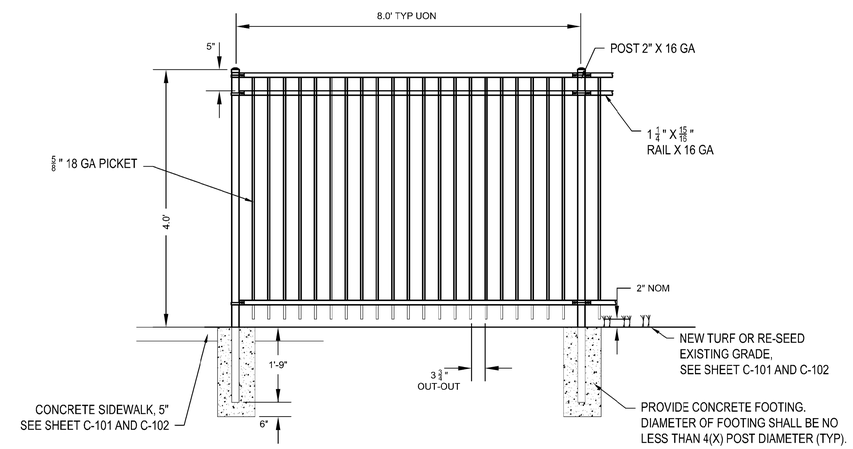
PROVISIONS ON TERMINAL STRIP AND IN CONTROLS FOR SECURITY INTERFACE FOR REMOTE OPEN COMMAND.

INCLUDE PHOTO EYE THRU BEAM (WITH HEATED HEADS) TO PREVENT GATE FROM CLOSING WHEN BEAM IS INTERRUPTED. INCLUDE EDGE SAFETIES ON GATE. WHERE TAIL OF GATE IS NOT WRAPPED BY FENCE AND EXPOSED, INSTALL EDGE SAFETY ON THE BACK SIDE OF GATE ALSO.

INCLUDE PAVEMENT LOOP DETECTORS FOR FREE EXIT AS INDICATED ON THE PLANS. ADD GATE OPERATOR TIMER SO CLOSE DOES NOT START UNTIL VEHICLE CLEARS GATE. LOOP DETECTOR SHALL BE ACCORDING TO DETECTOR LOOP WIRE PLACEMENT DETAIL.

ADD KEYED SWITCH WITH 7 PIN BEST LOCK CYLINDER. SWITCH SHALL BE INSTALLED IN WATER PROOF BOX, ON EXTERIOR OF GATE AT CARD READER STAND.

4 C-506 **GATE ELECTRIC MOTOR**
SCALE: NO SCALE



5 C-506 **4' TALL ORNAMENTAL FENCE**
SCALE: NO SCALE

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMCAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER
03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166
OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

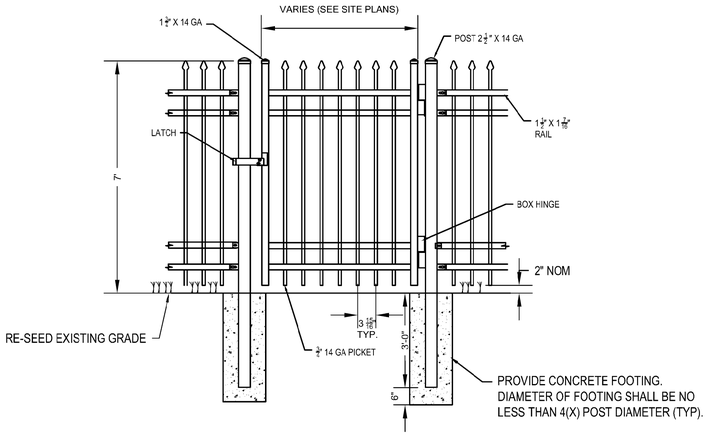
ASSET # 5012011003, 5012011004

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

CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

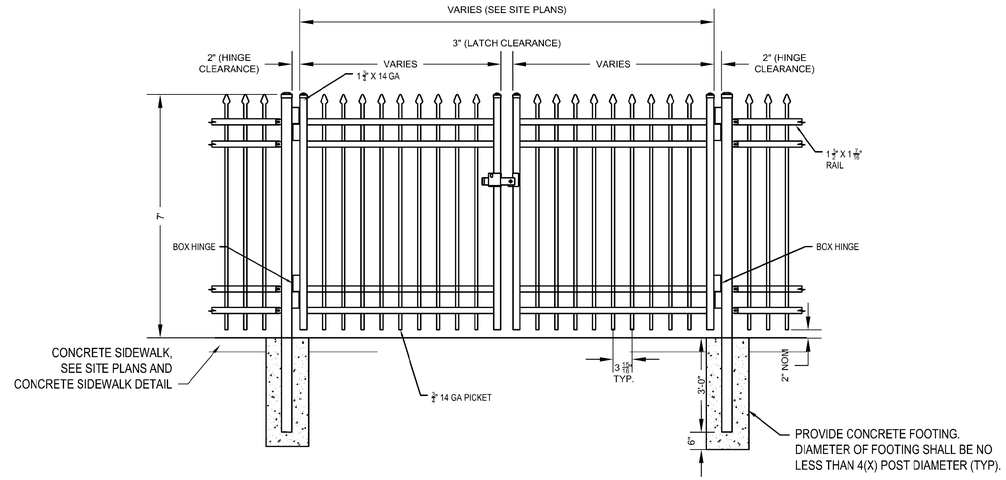
SHEET TITLE:
PERIMETER SECURITY DETAILS

SHEET NUMBER:
C-506



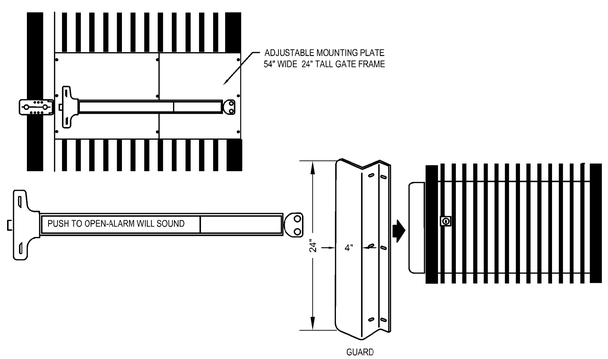
NOTE:
1. PROVIDE EMERGENCY EXIT PUSH BARS ON GATE, SEE EMERGENCY EXIT SWING GATE CRASH BARS, DETAIL 3/C-507.
2. 3.5' SWING GATE SHALL BE PAD LOCKED, PAD LOCK TO BE APPROVED BY OWNER PRIOR TO INSTALLATION

1 / C-507 SWING GATE
SCALE: NO SCALE



NOTE:
1 PROVIDE EMERGENCY EXIT PUSH BARS ON BOTH GATES, SEE EMERGENCY EXIT SWING GATE CRASH BARS, DETAIL 3/C-507.
2 GATE TO GATE CONNECTION PER MANUFACTURER RECOMMENDATIONS

2 / C-507 DOUBLE SWING GATE
SCALE: NO SCALE

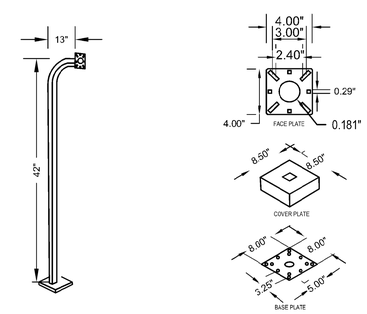


DAC INDUSTRIES, INC OR EQUIVALENT

MOUNT TO SWING GATE, SEE DETAIL 1 AND 2/C-507.

3 / C-507 EMERGENCY EXIT SWING GATE CRASH BARS
SCALE: NO SCALE

42" TALL PEDESTAL THAT ACCOMMODATES ADA COMPLIANT SPECIFICATIONS



SEE ELECTRICAL DETAILS FOR KEY CARD READER

4 / C-507 KEY CARD PEDESTAL
SCALE: NO SCALE

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMCAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER
03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166
OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

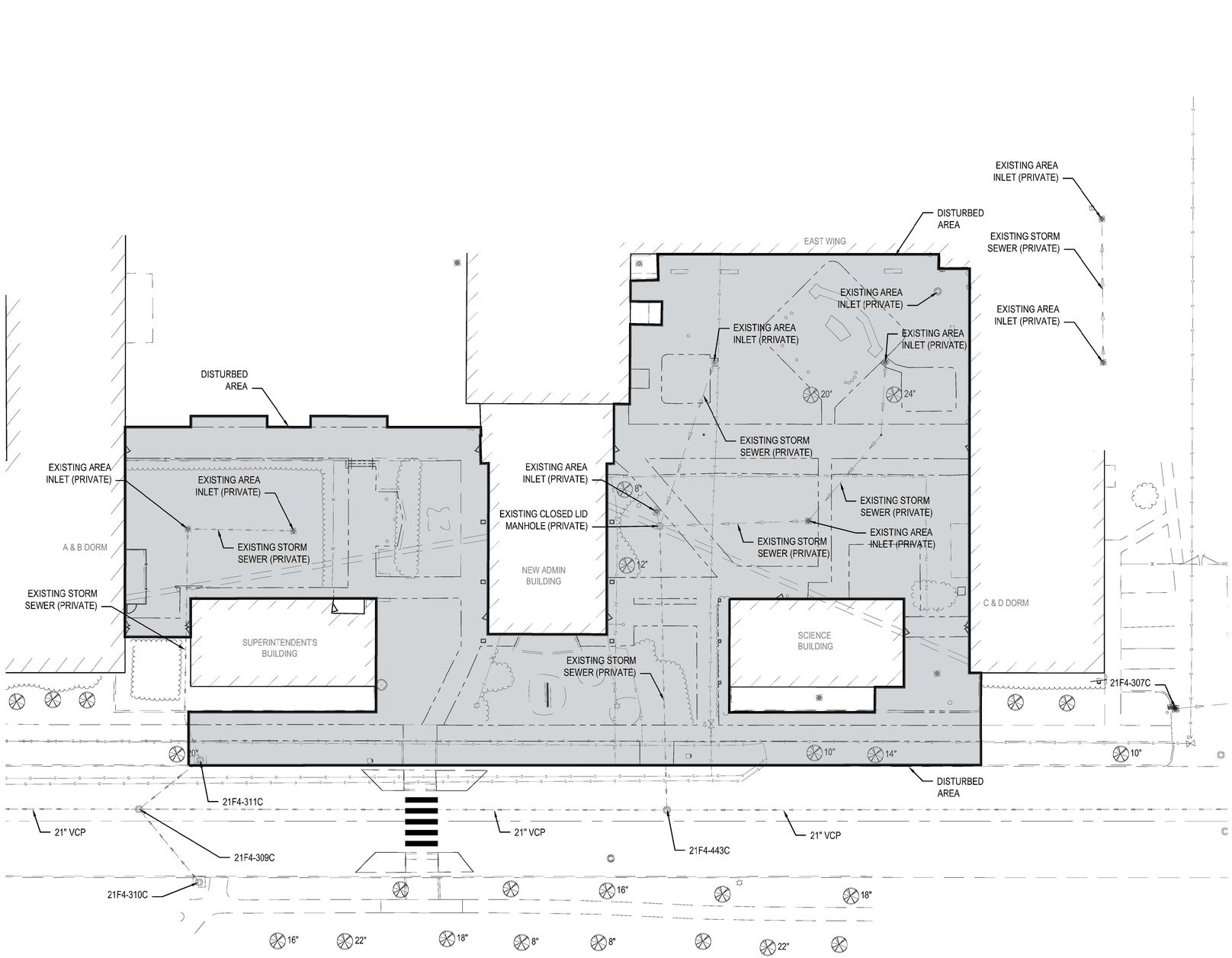
ASSET # 5012011003, 5012011004

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

CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:
PERIMETER SECURITY DETAILS

SHEET NUMBER:
C-507



Summary		
Total Disturbed	0.84	Acres
Runoff Differential (Back to Grass)	0.96	CFS

1 / C-601 TOTAL DISTURBED AREA
SCALE: 1" = 20'

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMKAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER
03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166
OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

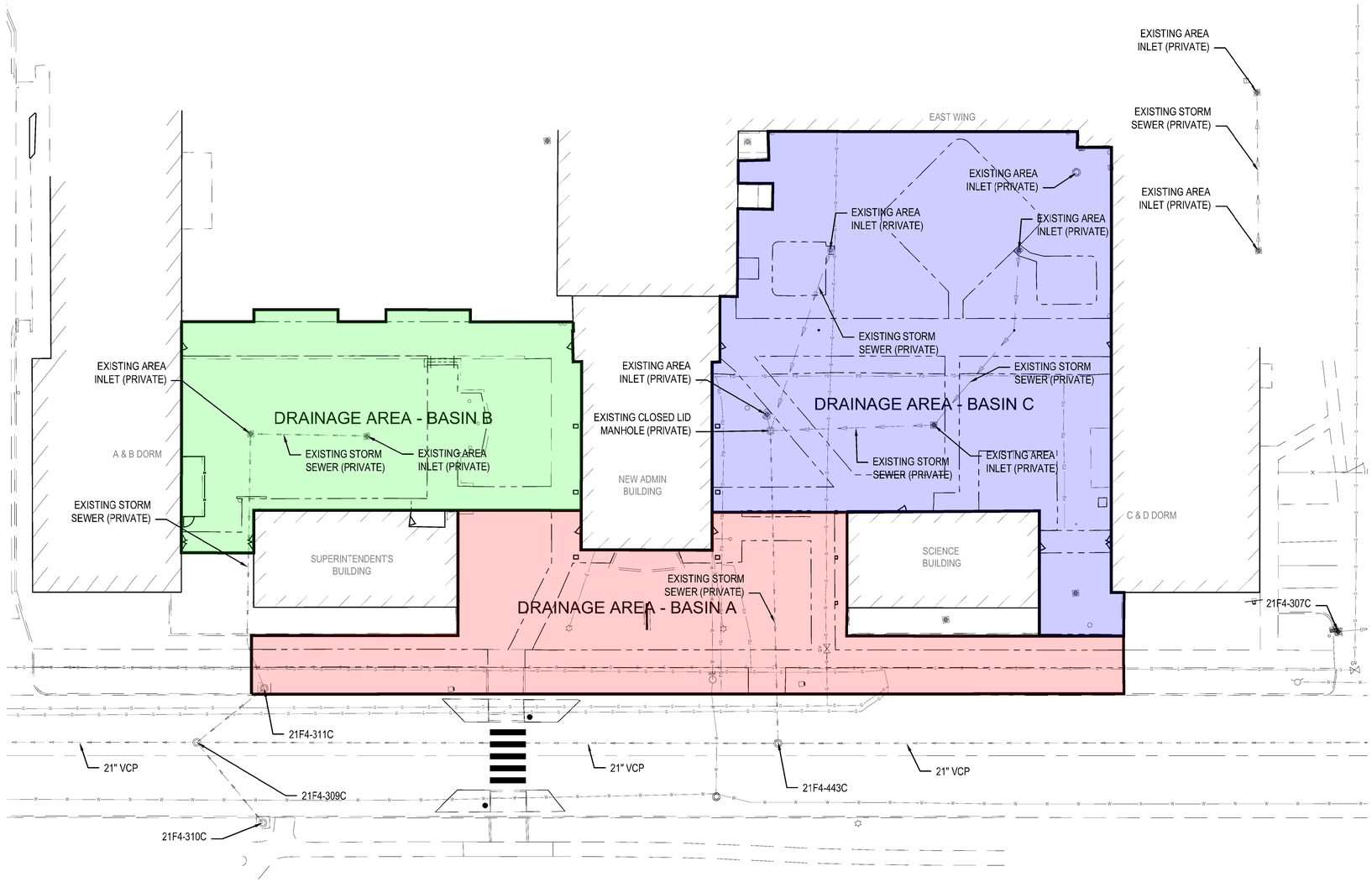
ASSET # 5012011003, 5012011004

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

CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:
DRAINAGE AREAS - LIMITS OF DISTURBANCE

SHEET NUMBER:
C-601



DRAINGE AREA NAME	TOTAL AREA PRE-CONSTR (ACRE)	IMP. AREA PRE-CONSTR. (ACRE)	% IMP. PRE-CONSTR.	PI_{PRE} (20 YR/20 MIN STORM)	Q_{PRE} = PIA (CFS)
Basin A	0.24	0.00	0%	1.78	0.43
Basin B	0.20	0.00	0%	1.78	0.36
Basin C	0.39	0.00	0%	1.78	0.69
				Total	1.48

1 C-602 PRE-CONSTRUCTION DRAINAGE AREAS
SCALE: 1" = 20'

N

0 20' 40'
GRAPHIC SCALE
1"=20'

LEGEND

- BASIN A IMPERVIOUS
- BASIN B IMPERVIOUS
- BASIN C IMPERVIOUS
- DRAINAGE AREAS

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMKAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER
03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO: 001166
OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

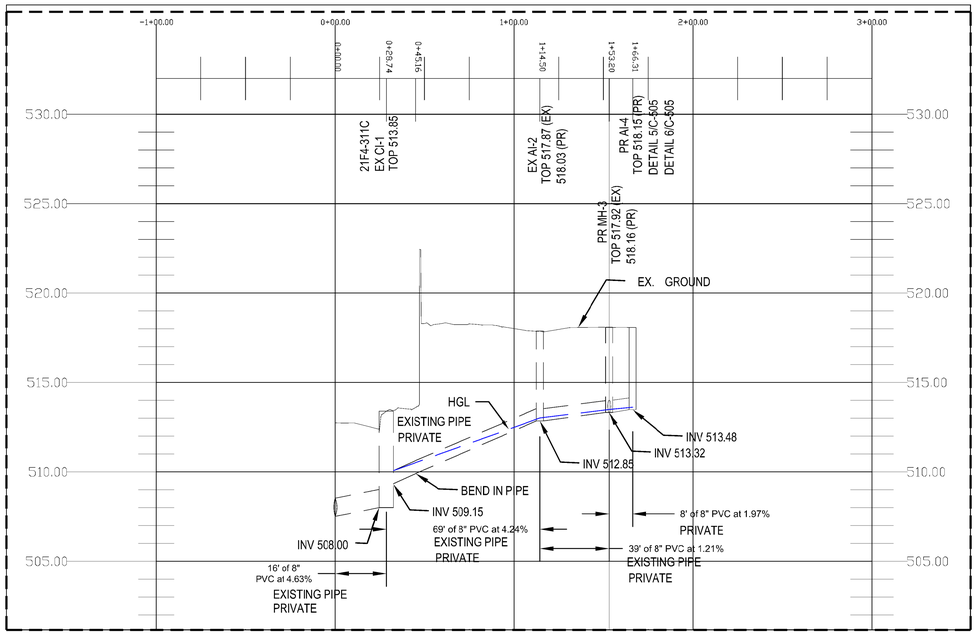
ASSET # 5012011003, 5012011004

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

CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:
DRAINAGE AREAS - EXISTING DRAINAGE AREAS

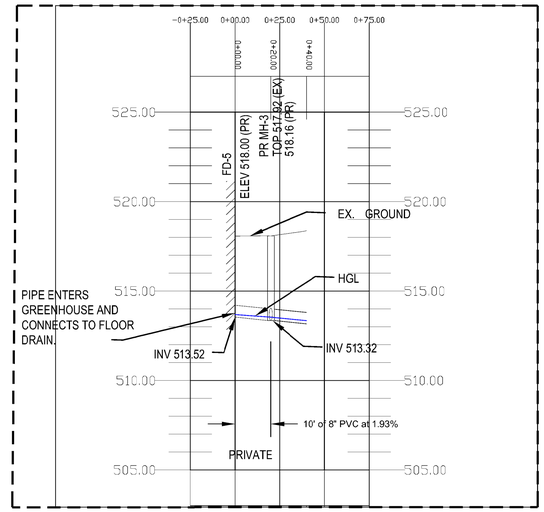
SHEET NUMBER:
C-602



ALTERNATE 1

2 C-603 CI-1 TO AI-4 PROFILE

SCALE: NOT TO SCALE



ALTERNATE 1

3 C-603 FD-5 TO MH-3 PROFILE

SCALE:

ALTERNATE 1

N

0 20' 40'

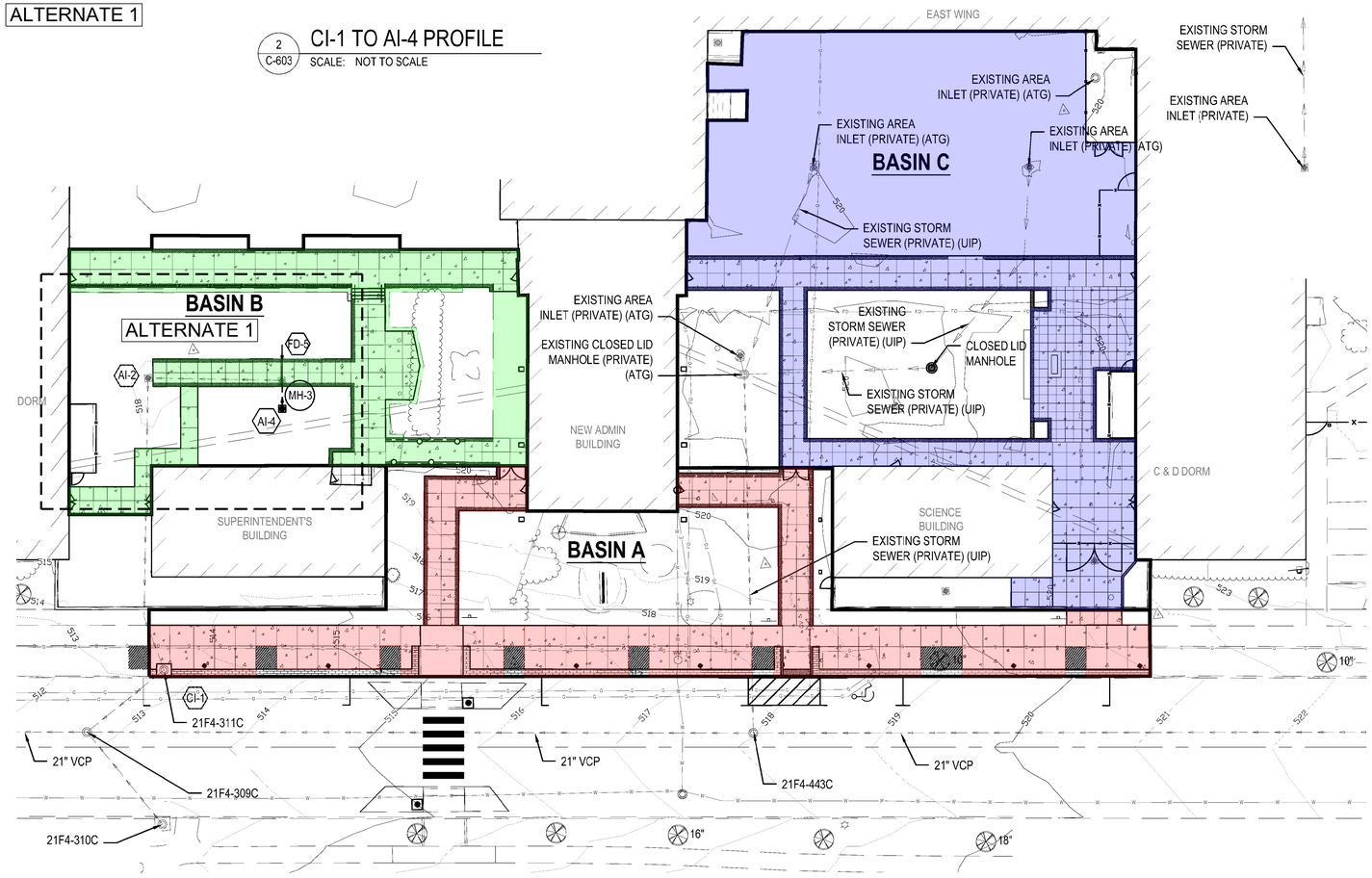
GRAPHIC SCALE
1"=20'

DRAINGE AREA NAME	TOTAL AREA POST-CONSTR (ACRE)	IMP. AREA POST-CONSTR. (ACRE)	% IMP. POST-CONSTR.	PI_{POST} (20 YR/20 MIN STORM)	Q_{POST} = PIA (CFS)
Basin A	0.24	0.12	50%	2.69	0.65
Basin B	0.20	0.11	55%	2.78	0.56
Basin C	0.39	0.28	72%	3.13	1.22
				Total	2.43

Runoff Differential = 2.43 CFS - 1.48 CFS = **0.95 CFS**

LEGEND

- BASIN A IMPERVIOUS
- BASIN B IMPERVIOUS
- BASIN C IMPERVIOUS
- DRAINAGE AREAS



1 C-603 POST-CONSTRUCTION DRAINAGE AREAS

SCALE: 1" = 20'

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMCAMP
NUMBER
PE-2013004339
PROFESSIONAL ENGINEER

03/11/2020

EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
ELEMENTARY &
SECONDARY EDUCATION

INSTALL NATURE
PARK

MISSOURI SCHOOL
FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003,
5012011004

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

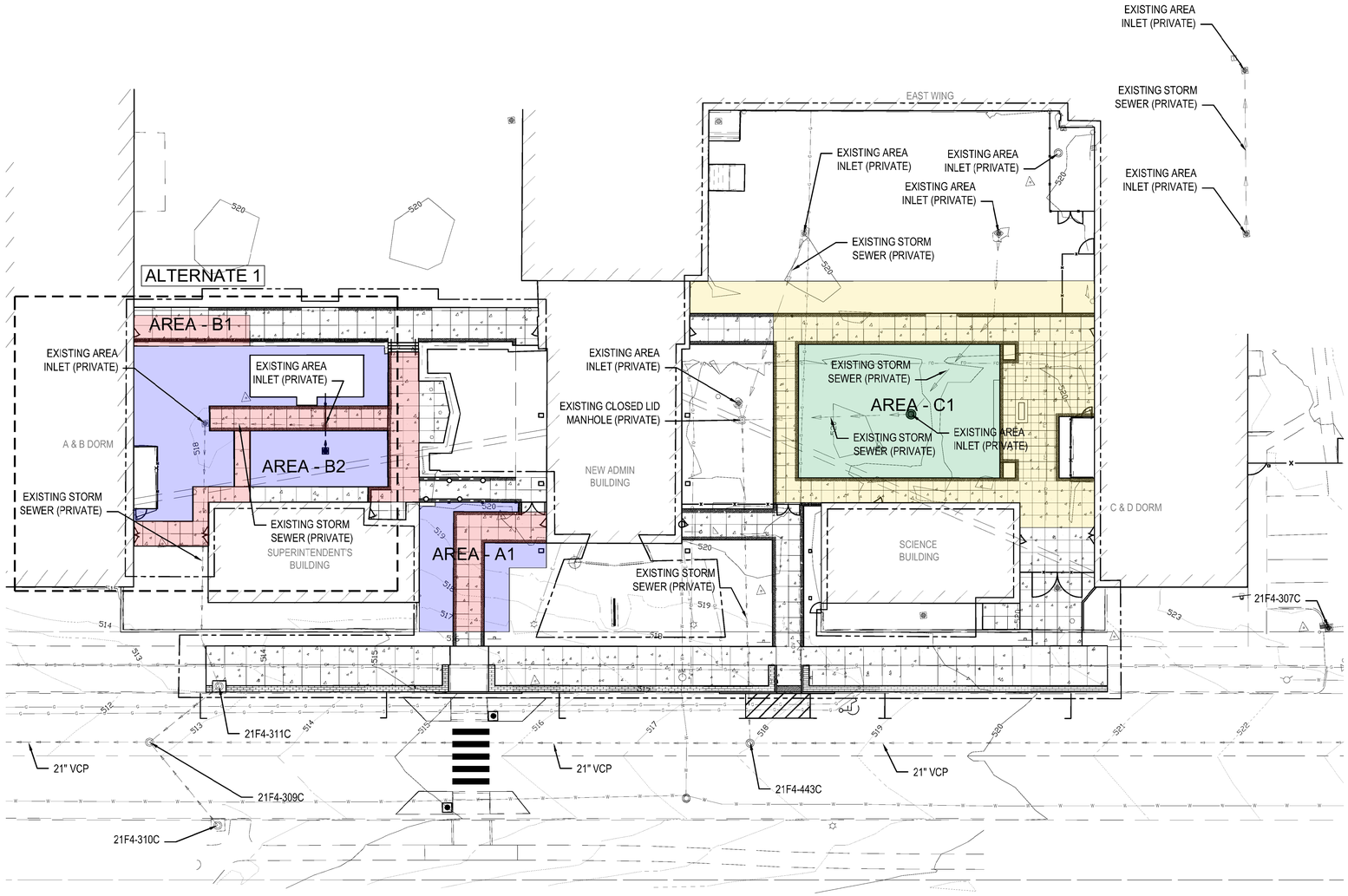
CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:

DRAINAGE
AREAS- PROPOSED
DRAINAGE AREAS

SHEET NUMBER:

C-603



1 C-604 BMP DRAINAGE AREAS
SCALE: 1" = 20'

N

0 20' 40'
GRAPHIC SCALE
1"=20'

LEGEND

- IMPERVIOUS PAVEMENT TO INFILTRATION UNDER TURF
- IMPERVIOUS PAVEMENT TO AMENDED SOILS
- INFILTRATION UNDER SYNTHETIC TURF
- AMENDED SOILS
- DRAINAGE AREAS

INFILTATION UNDER SYNTHETIC TURF CALCULATIONS

POROUS AREA	TOTAL DRAINAGE AREA (SF)	TOTAL POROUS AREA (SF)	TOTAL "EXTERNAL" PAVEMENT AREA (SF)	RUNOFF RATIO:1
Area C1	8,115	2,795	5,320	1.9

LINEAR PAVEMENT AMENDED SOILS DISCONNECTION CALCULATIONS

AMENDED SOIL AREA	TOTAL DRAINAGE AREA (SF)	TOTAL AMENDED SOILS AREA (SF)	TOTAL "EXTERNAL" PAVEMENT AREA (SF)	RUNOFF RATIO:1
Area A1	1,097	1,474	377	0.3
Area A2	2,956	1,581	1,375	0.9
Area B1	1,342	756	586	0.8

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
JOHN TRAVIS HELMKAMP
NUMBER PE-2013004339
PROFESSIONAL ENGINEER
03/11/2020
EXPIRES 12/31/2021

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166
OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

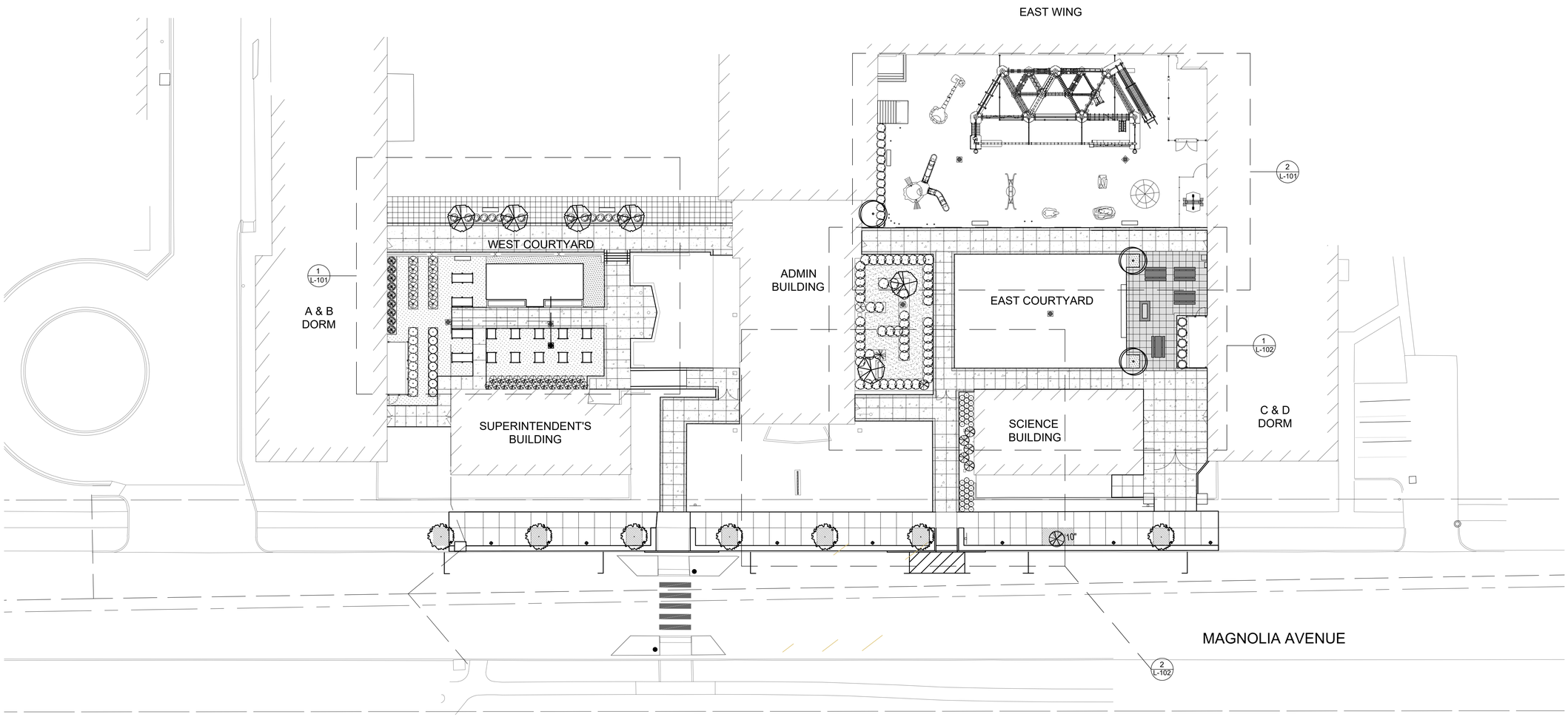
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

SHEET TITLE:
DRAINAGE AREAS - TREATMENT AREAS

SHEET NUMBER:
C-604

NOTES
1. REFER TO CIVIL SHEETS FOR UTILITY INFORMATION.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO ANY CONSTRUCTION.
3. UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. LOCATIONS AND QUANTITIES ARE APPROXIMATE AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE OR VERIFY THEIR EXISTENCE AND EXACT LOCATION AND AVOID ANY DAMAGE.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UNDERGROUND UTILTIES DURING CONSTRUCTION.
5. REPORT ANY DISCREPANCIES FOUND WITH REGARD TO EXISTING CONDITIONS OR PROPOSED DESIGN IMMEDIATELY TO OWNER'S REPRESENTATIVE.
6. DO NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHERE IT IS FOUND THAT KNOWN DISCREPANCIES EXIST. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
7. REFER TO CIVIL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION ON LIGHTING, WIRING SCHEMATICS, AND FIXTURE SCHEDULE.
8. ANY AND ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES-WHETHER SHOWN ON THE DRAWINGS OR OCCURRING IN THE FIELD- ARE TO BE RESTORED WITH SEED OR SOD. AREAS TO BE REPLACED WITH SOD WILL BE SPECIFICALLY NOTED ON CIVIL AND LANDSCAPE PLANS.
9. LANDSCAPE ARCHITECT AND CONSTRUCTION ADMINISTRATOR TO FIELD VERIFY LAYOUT OF IMPROVEMENTS PRIOR TO INSTALLATION.



1 L-100 ARCHITECTURAL SITE PLAN

N

20 0 10 20 40
GRAPHIC SCALE
1" = 20'

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI MICHAEL JOHN RATLIFF NUMBER A-6855 REGISTERED ARCHITECT
03/09/20

ARCTURIS
720 OLIVE STREET, SUITE 200
SAINT LOUIS, MO 63101
314.206.7100

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

FACILITY # 5012011003, 501201104

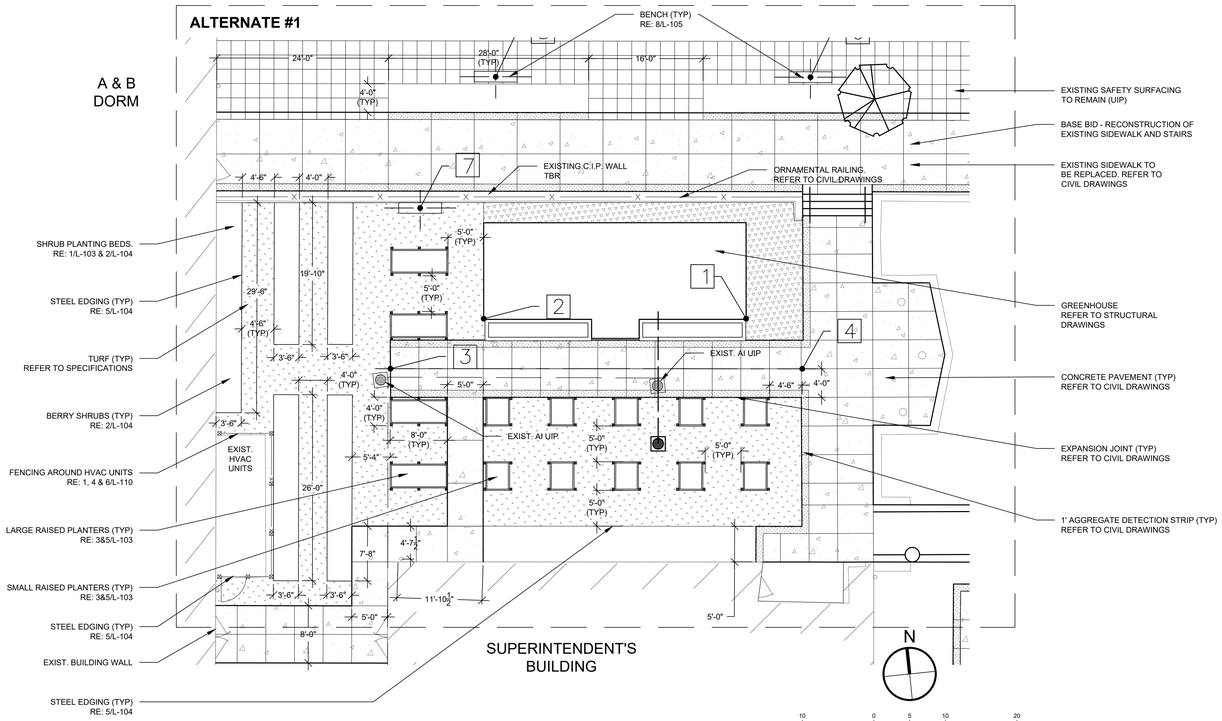
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: L-100
DRAWN BY: SLB
CHECKED BY: MJN
DESIGNED BY: SLB

SHEET TITLE:
ARCHITECTURAL SITE PLAN

SHEET NUMBER:
L-100

27 OF 76 SHEETS
3/11/2020



1 L-101 DETAILED PLAN VIEW - WEST COURTYARD

BASE BID:
RECONSTRUCTION OF EXISTING SIDEWALK AND STAIRS

ALTERNATE #1:
GREENHOUSE, CEDAR FENCING, PLANTING BEDS, ALL PLANT MATERIAL, IRRIGATION, DRAINAGE IMPROVEMENTS

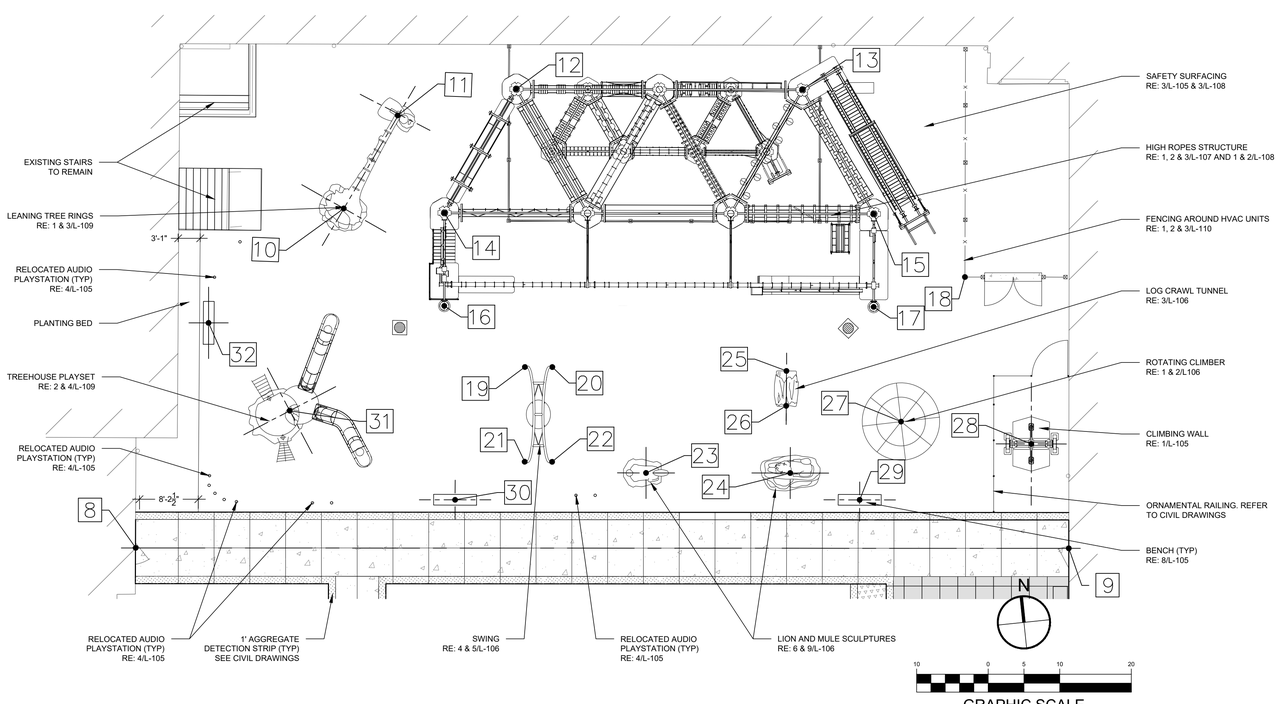
NOTES
1. REFER TO CIVIL SHEETS FOR UTILITY INFORMATION.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO ANY CONSTRUCTION.
3. UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. LOCATIONS AND QUANTITIES ARE APPROXIMATE AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE OR VERIFY THEIR EXISTENCE AND EXACT LOCATION AND AVOID ANY DAMAGE.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UNDERGROUND UTILTIES DURING CONSTRUCTION.
5. REPORT ANY DISCREPANCIES FOUND WITH REGARD TO EXISTING CONDITIONS OR PROPOSED DESIGN IMMEDIATELY TO OWNER'S REPRESENTATIVE.
6. DO NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHERE IT IS FOUND THAT KNOWN DISCREPANCIES EXIST. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
7. REFER TO CIVIL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION ON LIGHTING, WIRING SCHEMATICS, AND FIXTURE SCHEDULE.
8. ANY AND ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES-WHETHER SHOWN ON THE DRAWINGS OR OCCURRING IN THE FIELD- ARE TO BE RESTORED WITH SEED OR SOD. AREAS TO BE REPLACED WITH SOD WILL BE SPECIFICALLY NOTED ON CIVIL AND LANDSCAPE PLANS.
9. LANDSCAPE ARCHITECT AND CONSTRUCTION ADMINISTRATOR TO FIELD VERIFY LAYOUT OF THE IMPROVEMENTS PRIOR TO INSTALLATION.

COORDINATE SCHEDULE

POINT #	POINT TYPE	NORTHING	EASTING	DESCRIPTION
1	ES	1010275.54	893087.15	Edge of Greenhouse Structure
2	ES	1010279.81	893050.73	Edge of Greenhouse Structure
3	CL	1010274.38	893036.96	Center Line of Sidewalk
4	CL	1010267.65	893094.13	Center Line of Sidewalk
5	CP	1010313.19	893056.34	Center Point of Bench
6	CP	1010308.00	893100.02	Center Point of Bench
7	CP	1010296.21	893043.72	Center Point of Bench
8	CL	1010284.86	893194.12	Center Line of Sidewalk
9	CL	1010269.59	893323.61	Center Line of Sidewalk
10	CL	1010328.58	893228.54	Center Line of Play Structure
11	CL	1010340.61	893237.53	Center Line of Play Structure
12	FS	1010342.35	893254.42	Footing of Play Structure
13	FS	1010337.59	893294.13	Footing of Play Structure
14	FS	1010326.32	893242.44	Footing of Play Structure
15	FS	1010319.18	893301.99	Footing of Play Structure
16	FS	1010313.42	893240.89	Footing of Play Structure
17	FS	1010306.27	893300.47	Footing of Play Structure
18	EF	1010308.93	893313.62	Edge of Fence
19	FS	1010303.62	893251.09	Footing of Play Structure
20	FS	1010303.16	893254.89	Footing of Play Structure
21	FS	1010290.48	893249.51	Footing of Play Structure
22	FS	1010290.02	893253.32	Footing of Play Structure
23	CP	1010286.94	893266.17	Center Point of Play Structure
24	CL	1010284.58	893286.18	Center Point of Play Structure
25	CL	1010298.81	893287.32	Center Line of Play Structure
26	CL	1010293.97	893286.72	Center Line of Play Structure
27	CP	1010289.91	893302.40	Center Point of Play Structure
28	CP	1010284.68	893320.11	Center Point of Play Structure
29	CP	1010279.72	893295.38	Center Point of Bench
30	CP	1010286.33	893239.24	Center Point of Bench
31	FS	1010301.38	893217.74	Footing of Play Structure
32	CP	1010314.90	893207.90	Center Point of Bench

LEGEND

AI	AREA INLET
CP	CENTER POINT
CL	CENTERLINE
EF	EDGE OF FENCE
EOP	EDGE OF PAVEMENT
ES	EDGE OF STRUCTURE
ESS	EDGE OF SAFETY SURFACING
FS	FOOTING OF PLAY STRUCTURE (CENTER/MIDPOINT)
1	COORDINATE POINT NUMBER



2 L-101 DETAILED PLAN VIEW - EAST COURTYARD, ACTIVE PLAY AREA

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI MICHAEL JOHN RATLIFF NUMBER A-6855 REGISTERED ARCHITECT
03/09/20

ARCTURIS
720 OLIVE STREET, SUITE 200
SAINT LOUIS, MO 63101
314.206.7100

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

FACILITY # 5012011003, 501201104

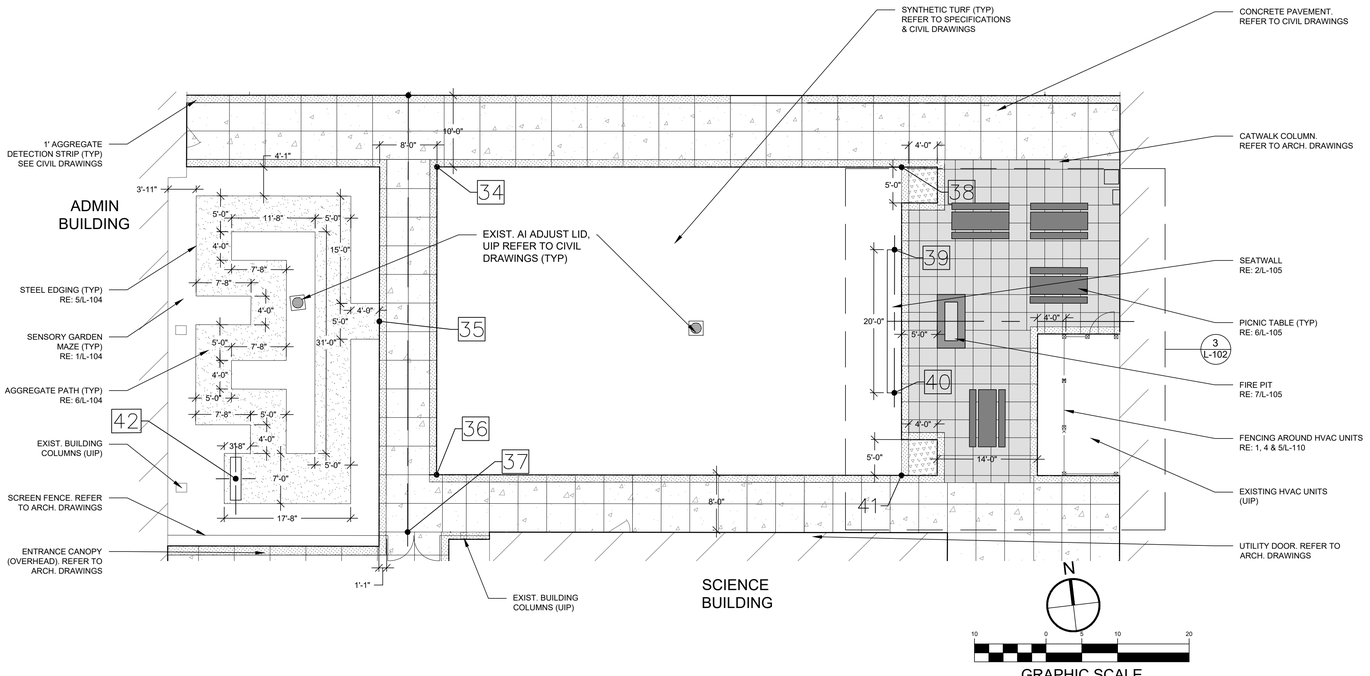
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: L-101
DRAWN BY: SLB
CHECKED BY: MJN
DESIGNED BY: SLB

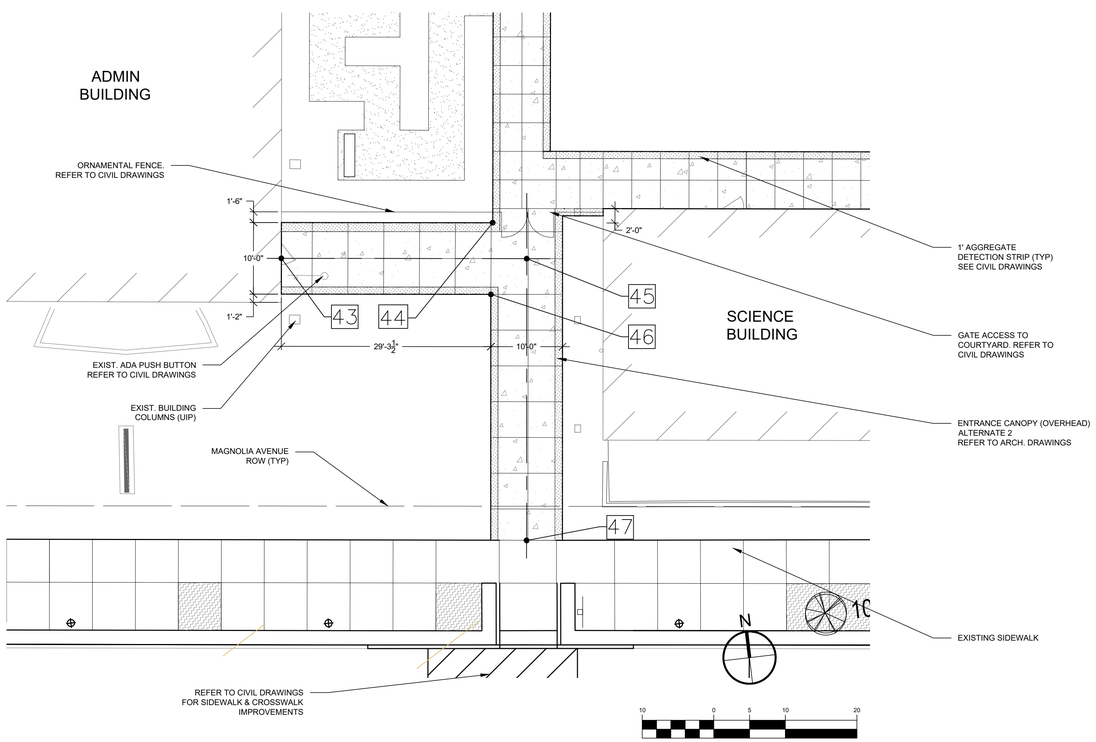
SHEET TITLE:
DETAIL LAYOUT & DIMENSION PLAN

SHEET NUMBER:
L-101

28 OF 76 SHEETS
3/11/2020



1 L-102 DETAILED PLAN VIEW - EAST COURTYARD, PASSIVE PLAY AREA



2 L-102 DETAILED PLAN VIEW - FRONT ENTRANCE

NOTES

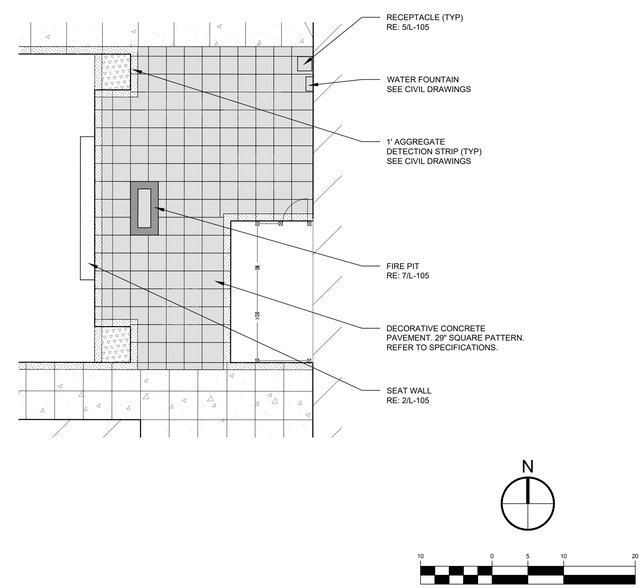
1. REFER TO CIVIL SHEETS FOR UTILITY INFORMATION.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO ANY CONSTRUCTION.
3. UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. LOCATIONS AND QUANTITIES ARE APPROXIMATE AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE OR VERIFY THEIR EXISTENCE AND EXACT LOCATION AND AVOID ANY DAMAGE.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UNDERGROUND UTILTIES DURING CONSTRUCTION.
5. REPORT ANY DISCREPANCIES FOUND WITH REGARD TO EXISTING CONDITIONS OR PROPOSED DESIGN IMMEDIATELY TO OWNER'S REPRESENTATIVE.
6. DO NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHERE IT IS FOUND THAT KNOWN DISCREPANCIES EXIST. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
7. REFER TO CIVIL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION ON LIGHTING, WIRING SCHEMATICS, AND FIXTURE SCHEDULE.
8. ANY AND ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES-WHETHER SHOWN ON THE DRAWINGS OR OCCURRING IN THE FIELD- ARE TO BE RESTORED WITH SEED OR SOD. AREAS TO BE REPLACED WITH SOD WILL BE SPECIFICALLY NOTED ON CIVIL AND LANDSCAPE PLANS.
9. LANDSCAPE ARCHITECT AND CONSTRUCTION ADMINISTRATOR TO FIELD VERIFY LAYOUT OF IMPROVEMENTS PRIOR TO INSTALLATION.

COORDINATE SCHEDULE

POINT #	POINT TYPE	NORTHING	EASTING	DESCRIPTION
33	CL	1010286.21	893225.44	Center Line of Sidewalk
34	EOP	1010275.80	893228.26	Edge of Pavement
35	EOP	1010255.31	893217.74	Edge of Pavement
36	EOP	1010233.09	893223.16	Edge of Pavement
37	EOP	1010225.61	893218.22	Center Line of Sidewalk
38	EOP	1010268.20	893292.73	Edge of Pavement
39	CL	1010256.86	893290.40	Center Line of Seat Wall
40	CL	1010237.00	893288.04	Center Line of Seat Wall
41	EOP	1010225.42	893287.68	Edge of Pavement
42	CP	1010235.81	893195.23	Center Point of Bench
43	CL	1010222.62	893184.10	Center Line of Sidewalk
44	EOP	1010224.13	893214.02	Edge of Pavement
45	CL	1010218.58	893218.15	Center Line of Sidewalk
46	EOP	1010214.20	893212.60	Edge of Pavement
47	CL	1010179.46	893213.53	Center Line of Sidewalk

LEGEND

AI	AREA INLET
CP	CENTER POINT
CL	CENTERLINE
EF	EDGE OF FENCE
EOP	EDGE OF PAVEMENT
ES	EDGE OF STRUCTURE
ESS	EDGE OF SAFETY SURFACING
FS	FOOTING OF PLAY STRUCTURE (CENTER/MIDPOINT)



3 L-102 DETAILED PLAN VIEW - DECORATIVE CONCRETE LAYOUT

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
MICHAEL JOHN RATLIF
NUMBER
A-6855
REGISTERED
03/09/20

ARCTURIS
720 OLIVE STREET, SUITE 200
SAINT LOUIS, MO 63101
314.206.7100

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
ELEMENTARY &
SECONDARY EDUCATION

INSTALL NATURE
PARK

MISSOURI SCHOOL
FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

FACILITY # 5012011003,
501201104

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

CAD DWG FILE: L-102
DRAWN BY: SLB
CHECKED BY: MJN
DESIGNED BY: SLB

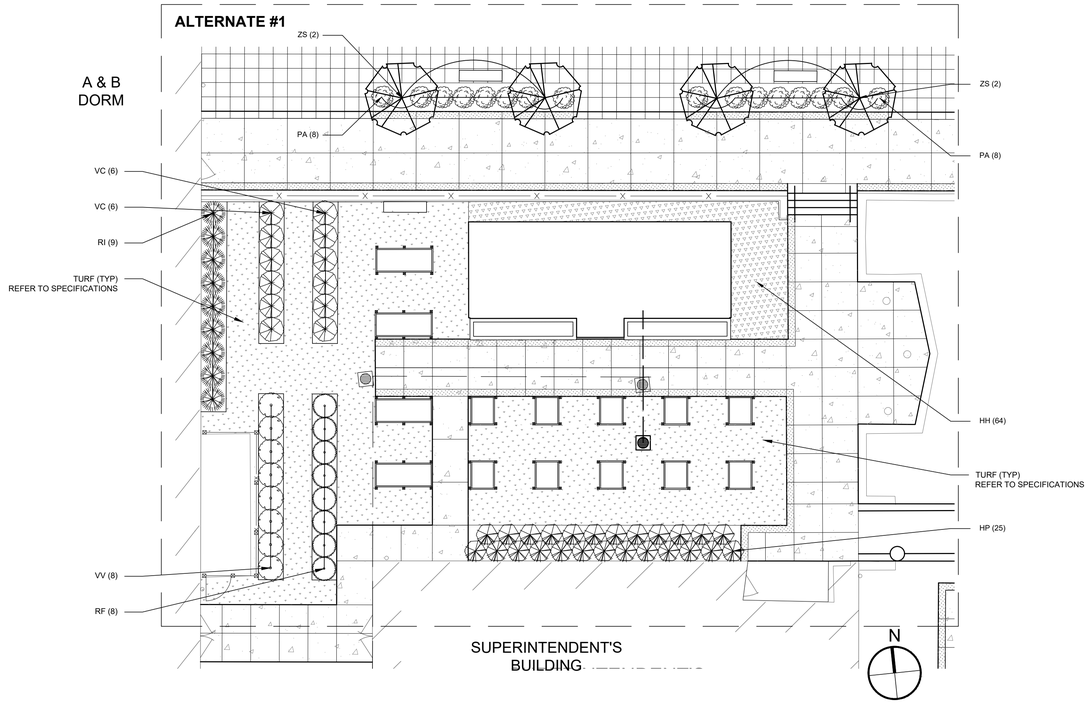
SHEET TITLE:

DETAIL
LAYOUT &
DIMENSION PLAN

SHEET NUMBER:

L-102

29 OF 76 SHEETS
3/11/2020



1 L-103 DETAILED PLAN VIEW - WEST COURTYARD

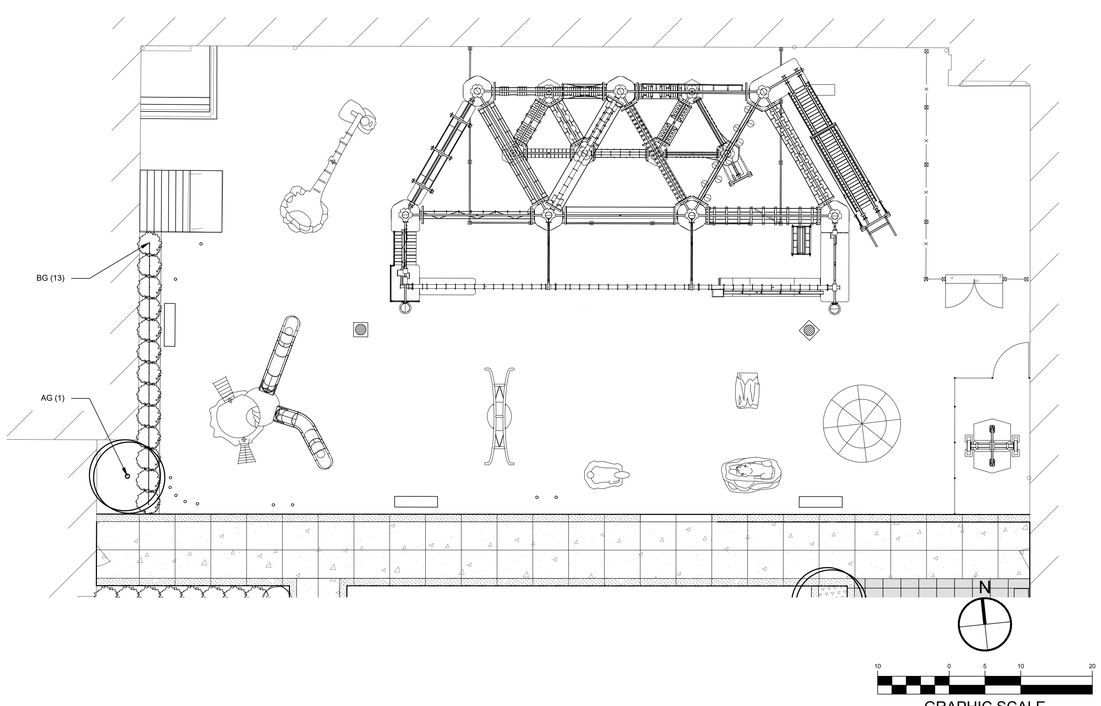
BASE BID:
RECONSTRUCTION OF EXISTING SIDEWALK AND STAIRS

ALTERNATE #1:
GREENHOUSE, CEDAR FENCING, PLANTING BEDS, ALL PLANT MATERIAL, IRRIGATION, DRAINAGE IMPROVEMENTS

NOTES
1. REFER TO CIVIL SHEETS FOR UTILITY INFORMATION.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO ANY CONSTRUCTION.
3. UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. LOCATIONS AND QUANTITIES ARE APPROXIMATE AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE OR VERIFY THEIR EXISTENCE AND EXACT LOCATION AND AVOID ANY DAMAGE.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UNDERGROUND UTILITIES DURING CONSTRUCTION.
5. REPORT ANY DISCREPANCIES FOUND WITH REGARD TO EXISTING CONDITIONS OR PROPOSED DESIGN IMMEDIATELY TO OWNER'S REPRESENTATIVE.
6. DO NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHERE IT IS FOUND THAT KNOWN DISCREPANCIES EXIST. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
7. REFER TO CIVIL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION ON LIGHTING, WIRING SCHEMATICS, AND FIXTURE SCHEDULE.
8. ANY AND ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES-WHETHER SHOWN ON THE DRAWINGS OR OCCURRING IN THE FIELD- ARE TO BE RESTORED WITH SEED OR SOD. AREAS TO BE REPLACED WITH SOD WILL BE SPECIFICALLY NOTED ON CIVIL AND LANDSCAPE PLANS.
9. LANDSCAPE ARCHITECT AND CONSTRUCTION ADMINISTRATOR TO FIELD VERIFY LAYOUT OF IMPROVEMENTS PRIOR TO INSTALLATION.

PLANTING SCHEDULE

SYM	QTY	BOTANICAL NAME	COMMON NAME	SIZE	METHOD
TREES					
AG	1	Amelanchier grandiflora	AUTUMN BRILLIANCE SERVICEBERRY	3" CAL.	B&B
GB	-	Ginkgo biloba 'Princeton Sentry'	PRINCETON SENTRY GINKGO	3" CAL.	B&B
ZS	4	Zelkova serrata	JAPANESE ZELKOVA	3" CAL.	B&B
SHRUBS					
BD	-	Buddleja davidii 'Peakeep'	PEACOCK BUTTERFLY BUSH	3 GAL.	CONT.
BG	13	Buxus 'Green Velvet'	BOXWOOD	5 GAL.	CONT.
CS	-	Cornus sanguinea 'Midwinter Fire'	BLOODTWIG DOGWOOD	3 GAL.	CONT.
HB	-	Hypericum beanii	ST. JOHN'S WORT	3 GAL.	CONT.
HP	25	Hosta 'Patriot'	PATRIOT HOSTA	1 GAL.	CONT.
HR	-	Hemerocallis 'Ribbons and Curls'	RIBBONS AND CURLS DAYLILY	1 GAL.	CONT.
PA	16	Perovskia atriplicifolia 'Little Spire'	RUSSIAN SAGE	3 GAL.	CONT.
RF	8	Rubus fruticosus	BLACKBERRY	3 GAL.	CONT.
RI	9	Rubus idaeus 'Improved Titan'	RASPBERRY	3 GAL.	CONT.
SV	-	Syringa vulgaris 'Little Boy Blue'	LITTLE BOY BLUE LILAC	3 GAL.	CONT.
VC	12	Vaccinium corymbosum	BLUEBERRY	3 GAL.	CONT.
VV	8	Vaccinium vitis-idaea	LINGONBERRY	3 GAL.	CONT.
GROUNDCOVER/GRASSES					
CA	-	Calamagrostis x acutiflora 'Karl Foerster'	FEATHER REED GRASS	3 GAL.	4' OC
HH	64	Hedera helix	ENGLISH IVY	1 PINT	CONT.
JH	-	Juniperus horizontalis 'Plumosa'	CREEPING JUNIPER	1 GAL.	CONT.

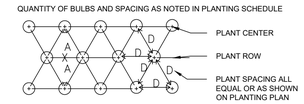


4 L-103 DETAILED PLAN VIEW - EAST COURTYARD, ACTIVE PLAY AREA

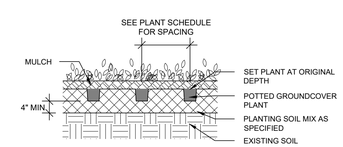
SPACING "D"	ROW "A"	NUMBER OF BULBS PER SQ. FT
12" OC	10.4"	1.15
10" OC	8.7"	1.66
8" OC	6.9"	2.60

NOTES:
BULB QUANTITIES WERE DETERMINED BY MULTIPLYING AREA (SQ. FT) BY NUMBER OF BULBS PER SQ. FT FOR REQUIRED SPACING

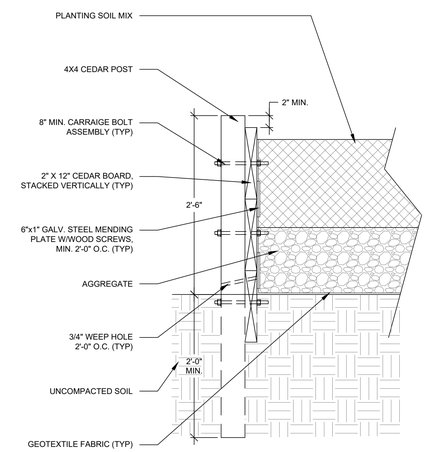
QUANTITY OF BULBS AND SPACING AS NOTED IN PLANTING SCHEDULE



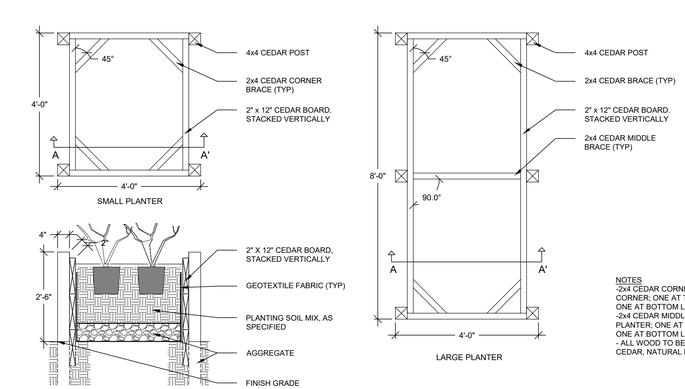
PLANT SPACING (NTS)



2 L-103 GROUNDCOVER PLANTING
1/2" = 1'-0"



3 L-103 RAISED PLANTER DETAIL
1/2" = 1'-0"



NOTES
-2x4 CEDAR CORNER BRACES - 2 PER CORNER; ONE AT TOP LEVEL BOARD, ONE AT BOTTOM LEVEL BOARD
-2x4 CEDAR MIDDLE BRACES - 2 PER PLANTER; ONE AT TOP LEVEL BOARD, ONE AT BOTTOM LEVEL BOARD
- ALL WOOD TO BE WESTERN RED CEDAR, NATURAL FINISH

5 L-103 RAISED PLANTER A-A'
1/2" = 1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
MICHAEL JOHN RATLIFF
NUMBER A-6855
REGISTERED ARCHITECT
03/09/20

ARCTURIS
720 OLIVE STREET, SUITE 200
SAINT LOUIS, MO 63101
314.206.7100

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

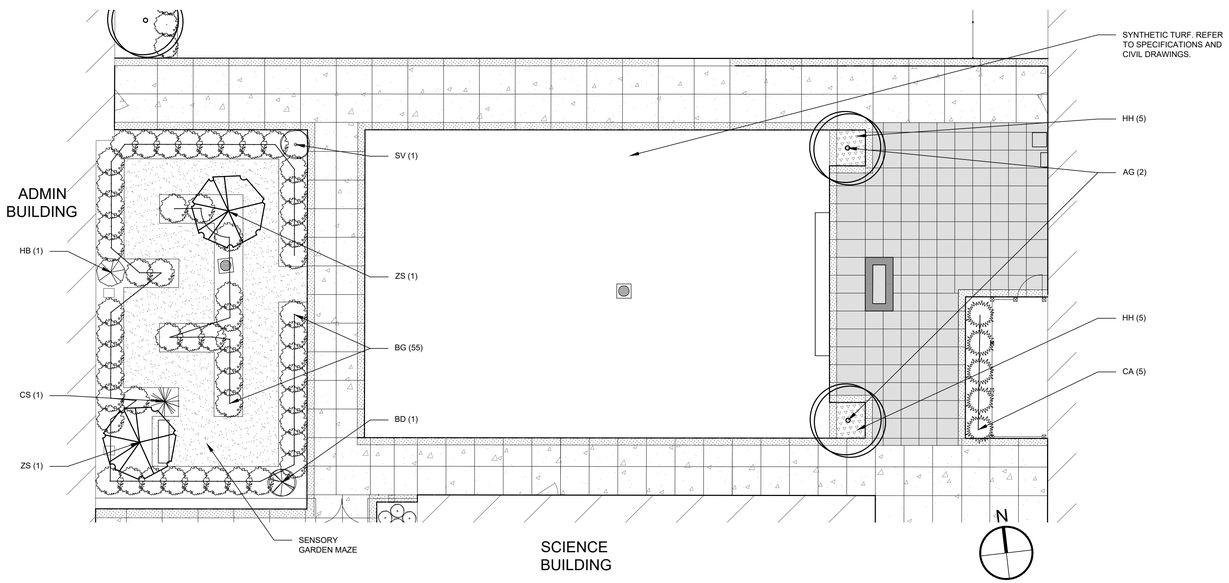
FACILITY # 5012011003, 501201104

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

CAD DWG FILE: L-103
DRAWN BY: SLB
CHECKED BY: MJN
DESIGNED BY: SLB

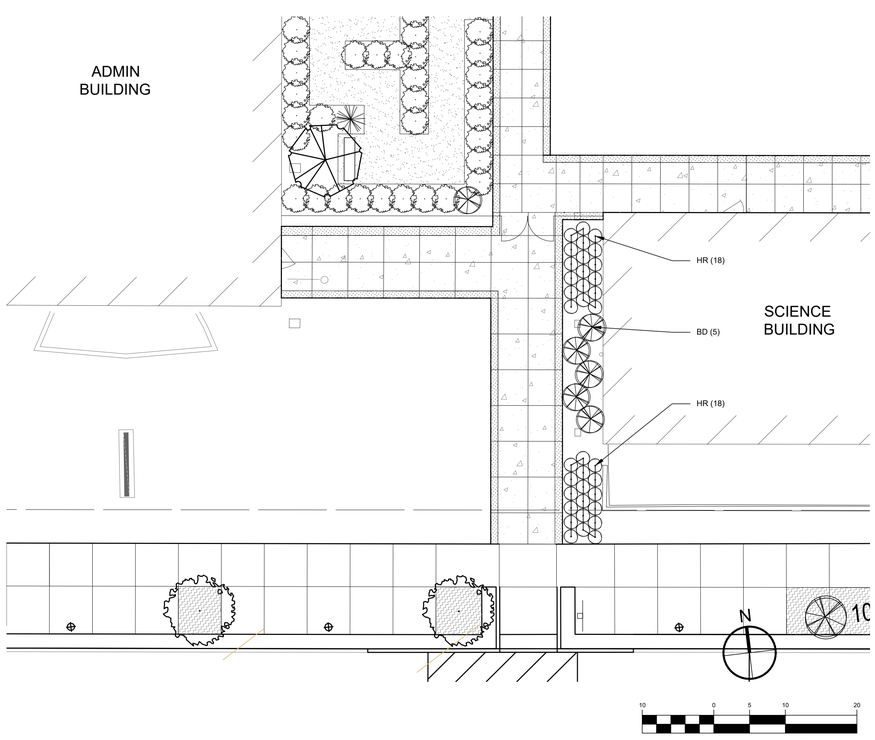
SHEET TITLE:
DETAIL LANDSCAPE PLAN

SHEET NUMBER:
L-103



GRAPHIC SCALE
1" = 10'

1 L-104 DETAILED PLAN VIEW - EAST COURTYARD, PASSIVE PLAY AREA



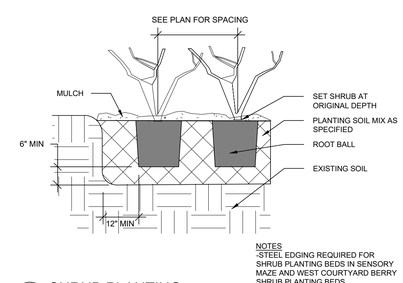
GRAPHIC SCALE
1" = 10'

4 L-104 DETAILED PLAN VIEW - FRONT ENTRANCE

NOTES
1. REFER TO CIVIL SHEETS FOR UTILITY INFORMATION.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO ANY CONSTRUCTION.
3. UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. LOCATIONS AND QUANTITIES ARE APPROXIMATE AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE OR VERIFY THEIR EXISTENCE AND EXACT LOCATION AND AVOID ANY DAMAGE.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UNDERGROUND UTILITIES DURING CONSTRUCTION.
5. REPORT ANY DISCREPANCIES FOUND WITH REGARD TO EXISTING CONDITIONS OR PROPOSED DESIGN IMMEDIATELY TO OWNER'S REPRESENTATIVE.
6. DO NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHERE IT IS FOUND THAT KNOWN DISCREPANCIES EXIST. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
7. REFER TO CIVIL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION ON LIGHTING, WIRING SCHEMATICS, AND FIXTURE SCHEDULE.
8. ANY AND ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES-WHETHER SHOWN ON THE DRAWINGS OR OCCURRING IN THE FIELD- ARE TO BE RESTORED WITH SEED OR SOD. AREAS TO BE REPLACED WITH SOD WILL BE SPECIFICALLY NOTED ON CIVIL AND LANDSCAPE PLANS.
9. LANDSCAPE ARCHITECT AND CONSTRUCTION ADMINISTRATOR TO FIELD VERIFY LAYOUT OF IMPROVEMENTS PRIOR TO INSTALLATION.

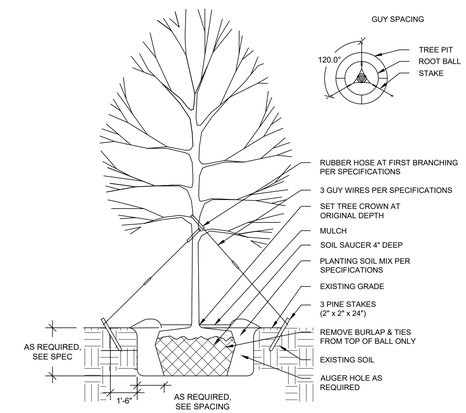
PLANTING SCHEDULE

SYM	QTY	BOTANICAL NAME	COMMON NAME	SIZE	METHOD
TREES					
AG	2	Amelanchier grandiflora	AUTUMN BRILLIANCE SERVICEBERRY	3" CAL.	B&B
GB	-	Ginkgo biloba 'Princeton Sentry'	PRINCETON SENTRY GINKGO	3" CAL.	B&B
ZS	2	Zelkova serrata	JAPANESE ZELKOVA	3" CAL.	B&B
SHRUBS					
BD	6	Buddleja davidii 'Peakeep'	PEACOCK BUTTERFLY BUSH	3 GAL.	CONT.
BG	55	Buxus 'Green Velvet'	BOXWOOD	5 GAL.	CONT.
CS	1	Cornus sanguinea 'Midwinter Fire'	BLOODTWIG DOGWOOD	3 GAL.	CONT.
HB	1	Hypericum beanii	ST. JOHN'S WORT	3 GAL.	CONT.
HP	-	Hosta 'Patriot'	PATRIOT HOSTA	1 GAL.	CONT.
HR	36	Hemerocallis 'Ribbons and Curls'	RIBBONS AND CURLS DAYLILY	1 GAL.	CONT.
PA	-	Perovskia atriplicifolia 'Little Spire'	RUSSIAN SAGE	3 GAL.	CONT.
RF	-	Rubus fruticosus	BLACKBERRY	3 GAL.	CONT.
RI	-	Rubus idaeus 'Improved Titan'	RASPBERRY	3 GAL.	CONT.
SV	1	Syringa vulgaris 'Little Boy Blue'	LITTLE BOY BLUE LILAC	3 GAL.	CONT.
VC	-	Vaccinium corymbosum	BLUEBERRY	3 GAL.	CONT.
VV	-	Vaccinium vitis-idaea	LINGONBERRY	3 GAL.	CONT.
GROUNDCOVER/GRASSES					
CA	5	Calamagrostis x acutiflora 'Karl Foerster'	FEATHER REED GRASS	3 GAL.	4' OC
HH	10	Hedera helix	ENGLISH IVY	1 PINT	CONT.
JH	-	Juniperus horizontalis 'Plumosa'	CREEPING JUNIPER	1 GAL.	CONT.

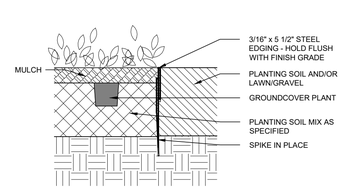


NOTES
-STEEL EDGING REQUIRED FOR SHRUB PLANTING BEDS IN SENSORY MAZE AND WEST COURTYARD BERRY SHRUB PLANTING BEDS.

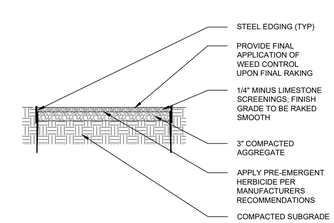
2 L-104 SHRUB PLANTING
1/2" = 1'-0"



3 L-104 DECIDUOUS TREE PLANTING
1/4" = 1'-0"



5 L-104 STEEL EDGING
1/2" = 1'-0"



AGGREGATE PATH
(SENSORY GARDEN MAZE)
6 L-104 1/2" = 1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
MICHAEL JOHN RATLIFF
NUMBER A-6855
REGISTERED ARCHITECT
03/09/20

ARCTURIS
720 OLIVE STREET, SUITE 200
SAINT LOUIS, MO 63101
314.206.7100

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

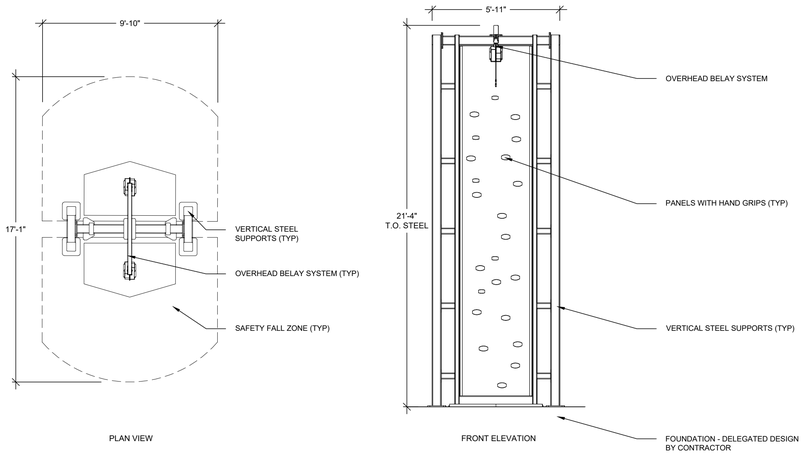
FACILITY # 5012011003, 501201104

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

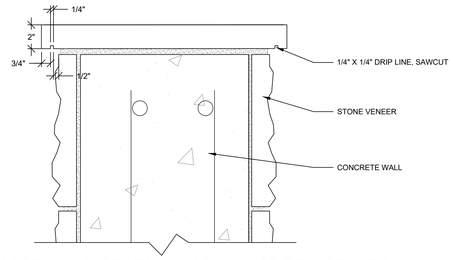
CAD DWG FILE: L-104
DRAWN BY: SLB
CHECKED BY: MJN
DESIGNED BY: SLB

SHEET TITLE:
DETAIL LANDSCAPE PLAN

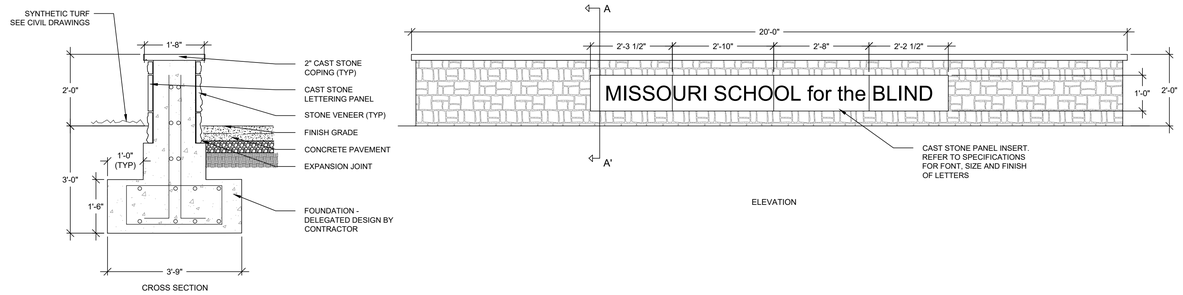
SHEET NUMBER:
L-104



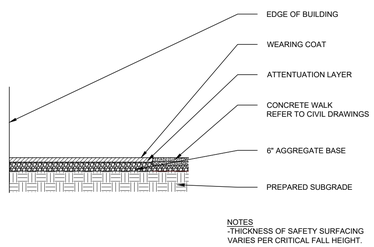
1 L-105 FACE TO FACE CLIMBING WALL
1/4" = 1'-0"



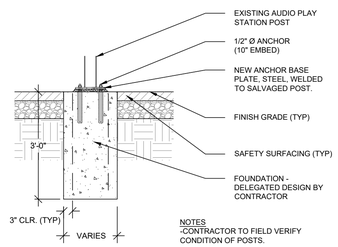
SECTION - CAST STONE COPING (FOR REFERENCE ONLY)
NTS



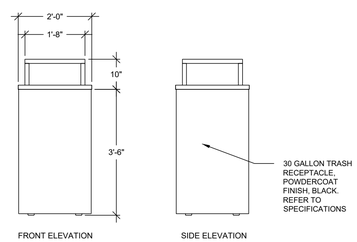
2 L-105 SEAT WALL DETAIL A-A'
1/2" = 1'-0"



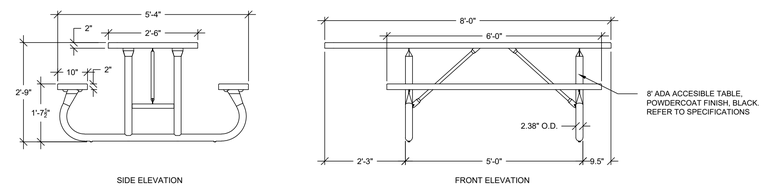
3 L-105 SAFETY SURFACING
1/4" = 1'-0"



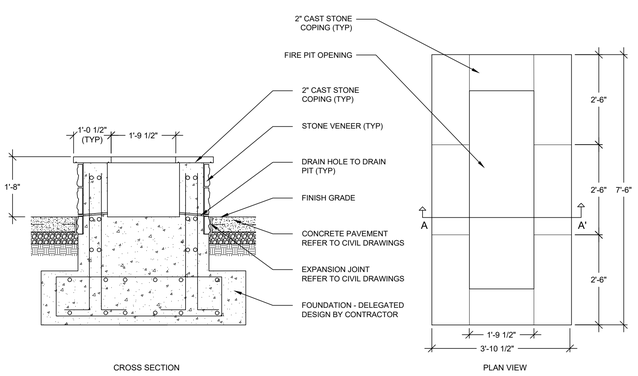
4 L-105 RELOCATED AUDIO PLAY STATION FOUNDATION
1/2" = 1'-0"



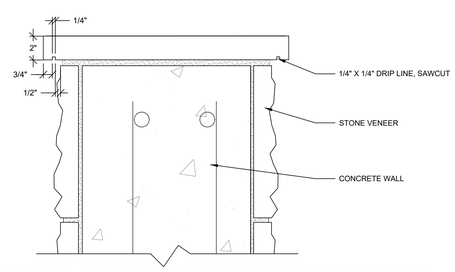
5 L-105 RECEPTACLE DETAIL
1/2" = 1'-0"



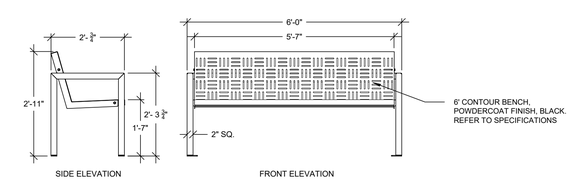
6 L-105 TABLE DETAIL
1/2" = 1'-0"



7 L-105 FIRE PIT DETAIL A-A'
1/2" = 1'-0"



SECTION - CAST STONE COPING (FOR REFERENCE ONLY)
NTS



8 L-105 BENCH DETAIL
1/2" = 1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI MICHAEL JOHN RATLIFF NUMBER A-6855 REGISTERED ARCHITECT

ARCTURIS
720 OLIVE STREET, SUITE 200
SAINT LOUIS, MO 63101
314.206.7100

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

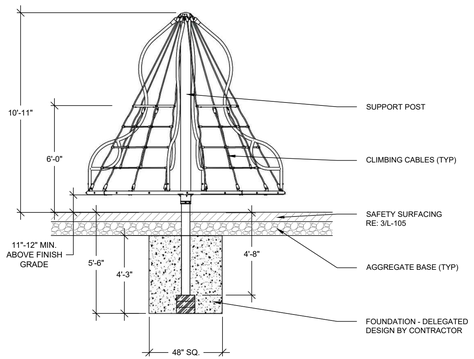
FACILITY # 5012011003, 501201104

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

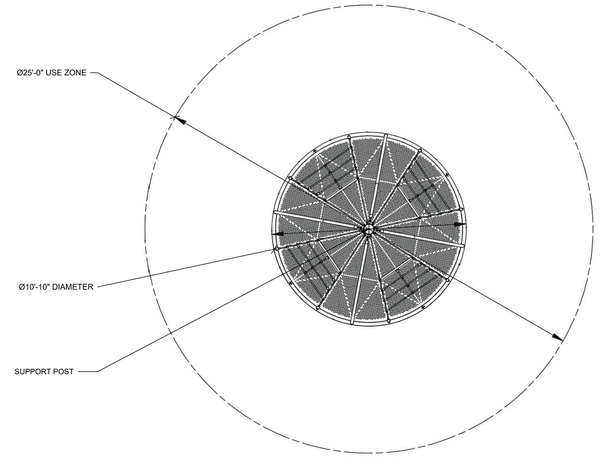
CAD DWG FILE: L-105
DRAWN BY: SLB
CHECKED BY: MJN
DESIGNED BY: SLB

SHEET TITLE:
LANDSCAPE DETAILS

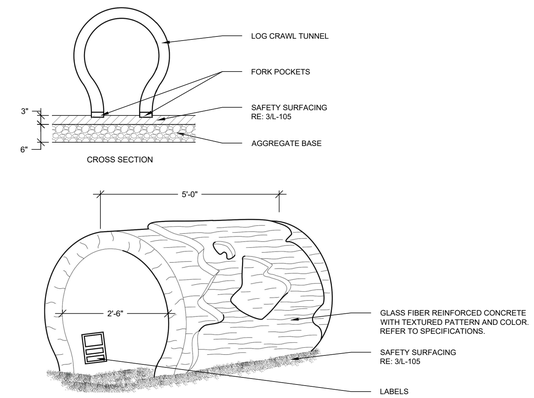
SHEET NUMBER:
L-105



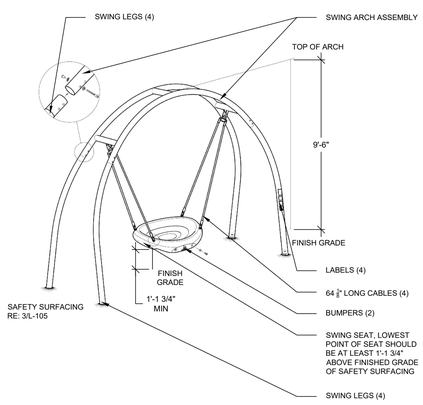
1 L-106 ROTATING CLIMBER ELEVATION VIEW
1/4" = 1'-0"



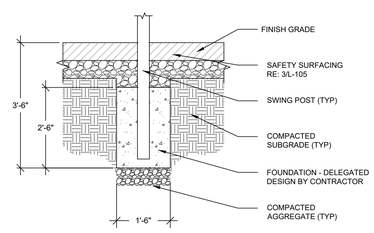
2 L-106 ROTATING CLIMBER PLAN VIEW
1/4" = 1'-0"



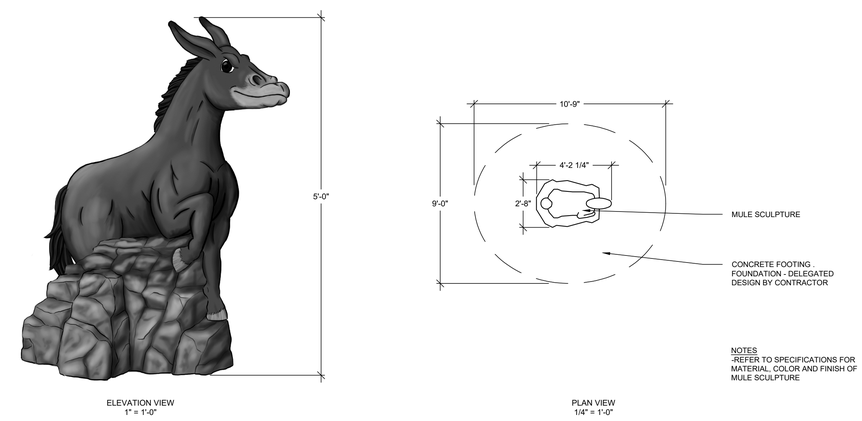
3 L-106 LOG CRAWL TUNNEL DETAIL
1/2" = 1'-0"



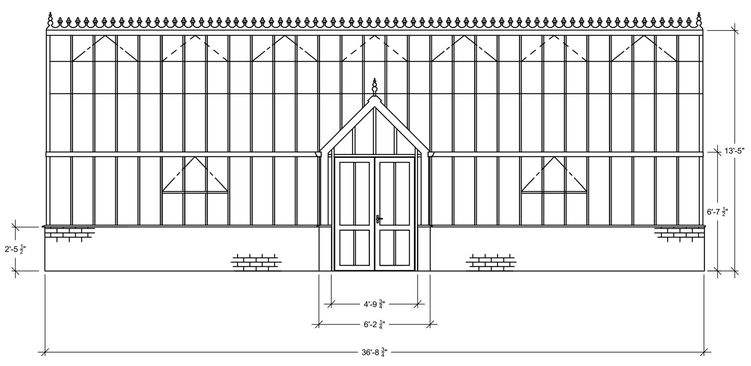
4 L-106 SWING CONNECTION DETAILS
1/4" = 1'-0"



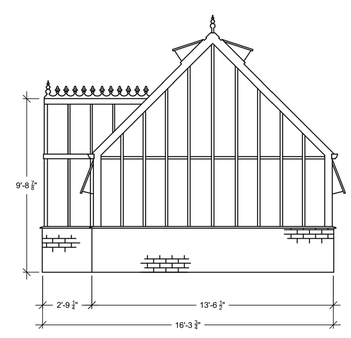
5 L-106 SWING CONNECTION FOOTING
1/2" = 1'-0"



6 L-106 MULE SCULPTURE

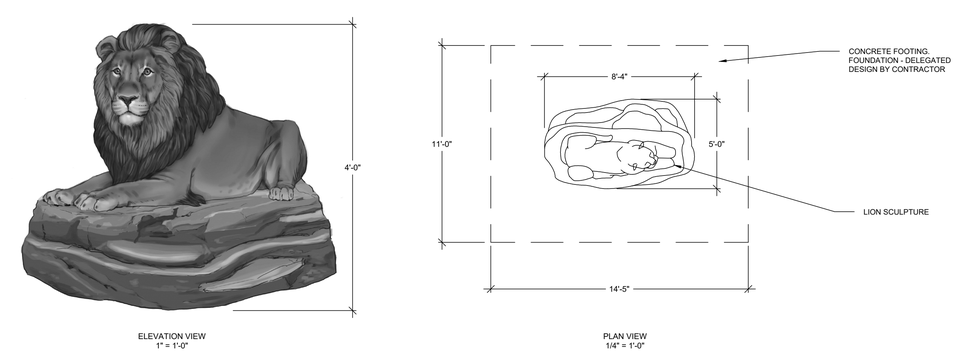


GREENHOUSE SOUTH ELEVATION VIEW
(FOR REFERENCE ONLY - REFER TO STRUCTURAL DRAWINGS)
7 L-106 1/4" = 1'-0"



GREENHOUSE EAST ELEVATION VIEW
(FOR REFERENCE ONLY - REFER TO
STRUCTURAL DRAWINGS)
8 L-106 1/4" = 1'-0"

NOTES
-REFER TO SPECIFICATIONS FOR
MATERIAL, COLOR AND FINISH OF
LION SCULPTURE



9 L-106 LION SCULPTURE

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
MICHAEL JOHN RATLIF
NUMBER
A-6855
REGISTERED ARCHITECT
03/09/20

ARCTURIS
720 OLIVE STREET, SUITE 200
SAINT LOUIS, MO 63101
314.206.7100

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
ELEMENTARY &
SECONDARY EDUCATION

INSTALL NATURE
PARK

MISSOURI SCHOOL
FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

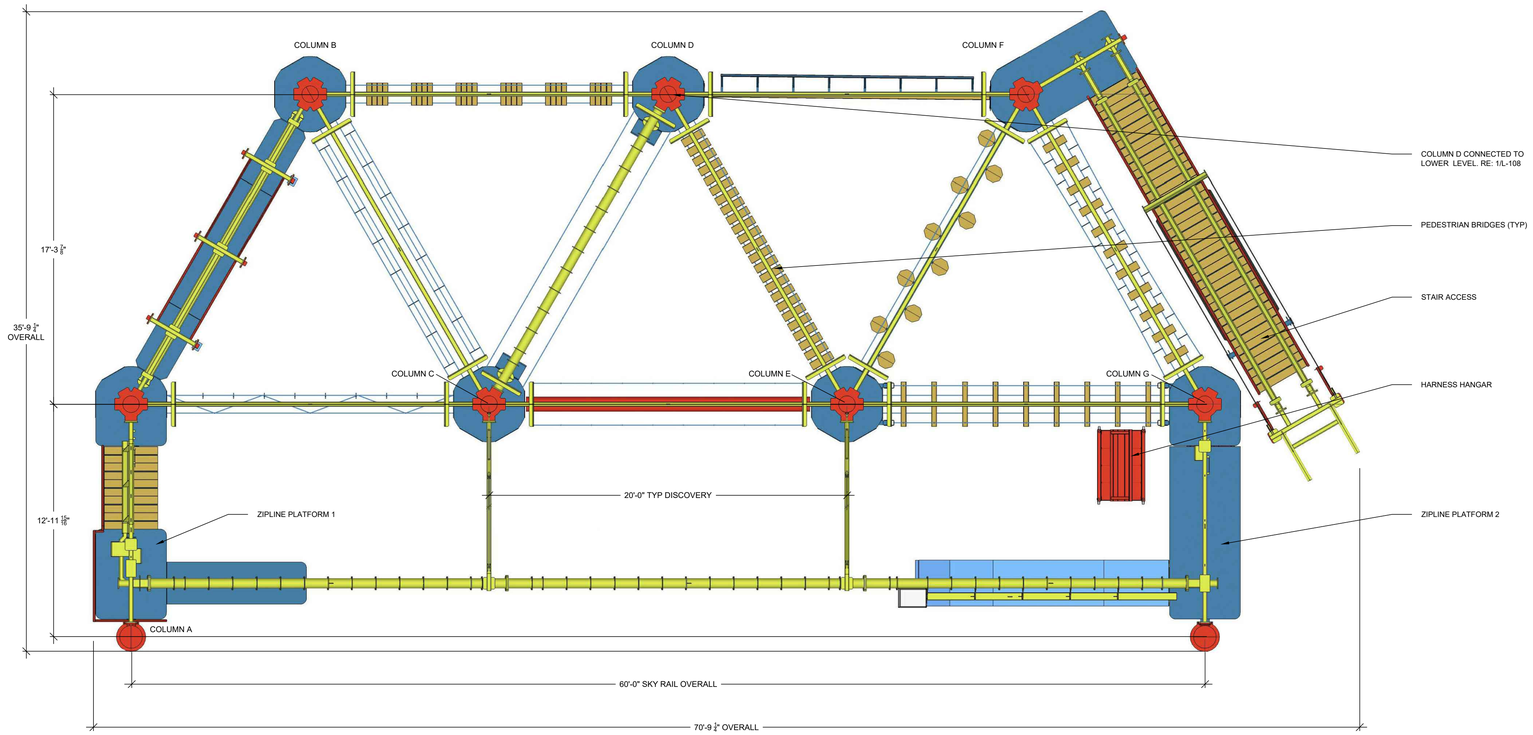
FACILITY # 5012011003,
501201104

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

CAD DWG FILE: L-106
DRAWN BY: SLB
CHECKED BY: MJN
DESIGNED BY: SLB

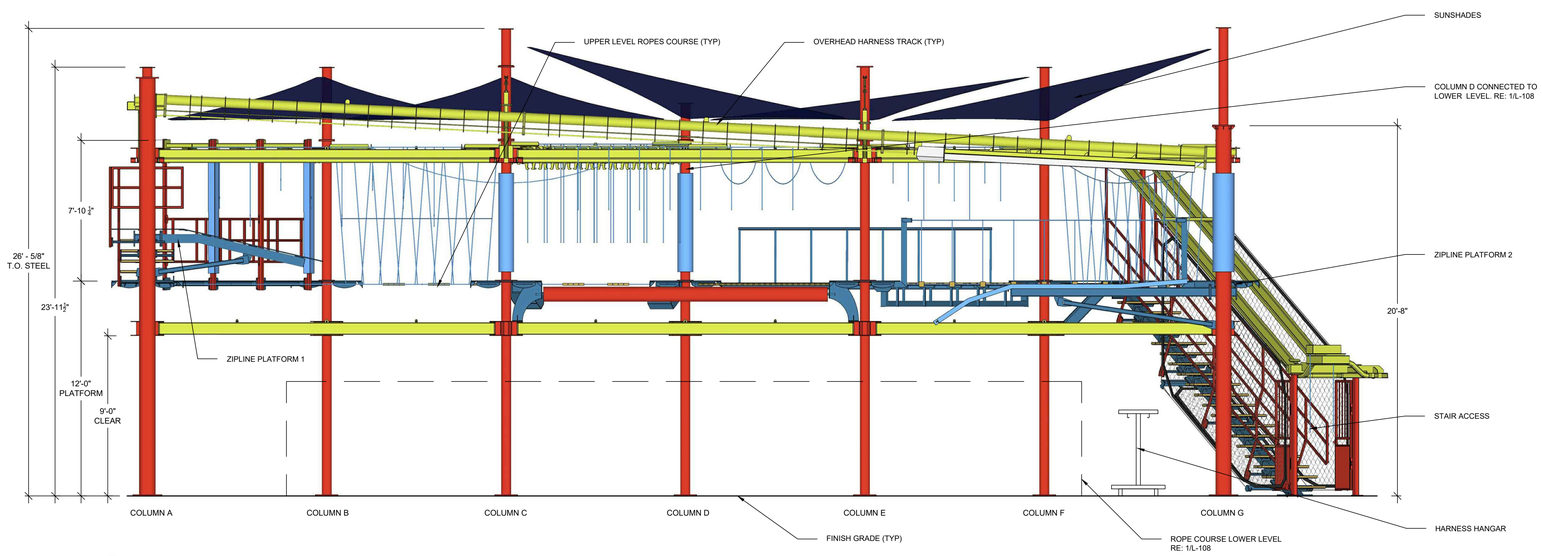
SHEET TITLE:
LANDSCAPE
DETAILS

SHEET NUMBER:
L-106

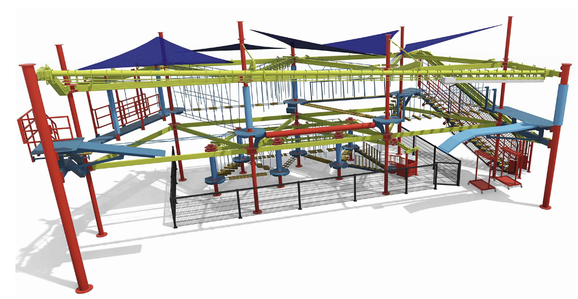


1 L-107 ROPES COURSE TOP LEVEL PLAN VIEW
1/4" = 1'-0"

NOTES
- ALL TUBULAR STEEL TO BE HSS A-500 GRADE B
- STRUCTURAL STEEL PLATES TO BE A-36
- ANCHOR BOLTS TO BE A-36 OR F1554 GRADE C
- PIPE TO BE A35 GRADE B OR A500 GRADE C
- ALL BOLTS TO BE A325 GALVANIZED WITH HEX NUTS
- SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS
- ALL ELEMENTS TO BE 5/8" GALVANIZED 6-STRAND COMBINATION WIRE ROPE CABLE WITH A BREAKING STRENGTH OF 7200 POUNDS AND EXTRUDED PLASTIC PRODUCT
- STRUCTURAL WELDING TO BE DESIGNED AND PERFORMED ACCORDING TO THE LATEST EDITION OF AWS D1.1 STRUCTURAL STEEL
- STRUCTURE IS DESIGNED TO THE LATEST EDITION OF THE IBC, RCSC SPECIFICATION FOR STRUCTURAL JOINTS, AND ASTM F2959-12 STANDARD PRACTICE FOR AERIAL ADVENTURE COURSES
- ALL WIND AND SEISMIC LOADS TO BE CALCULATED ON THE ASCE7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
- PAINT TO MEET OR EXCEED ASTM A-123/ASHTO SPECIFICATIONS FOR MATERIAL PREP AND MIL THICKNESS
- FOUNDATION - DELEGATED DESIGN BY CONTRACTOR



2 L-107 ROPES COURSE TOP LEVEL ELEVATION VIEW (SOUTH ELEVATION)
1/4" = 1'-0"



3 L-107 ROPES COURSE ISOMETRIC VIEW
NOT TO SCALE

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI MICHAEL JOHN RATLIF NUMBER A-6855 REGISTERED ARCHITECT
03/09/20

ARCTURIS
720 OLIVE STREET, SUITE 200
SAINT LOUIS, MO 63101
314.206.7100

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

FACILITY # 5012011003, 501201104

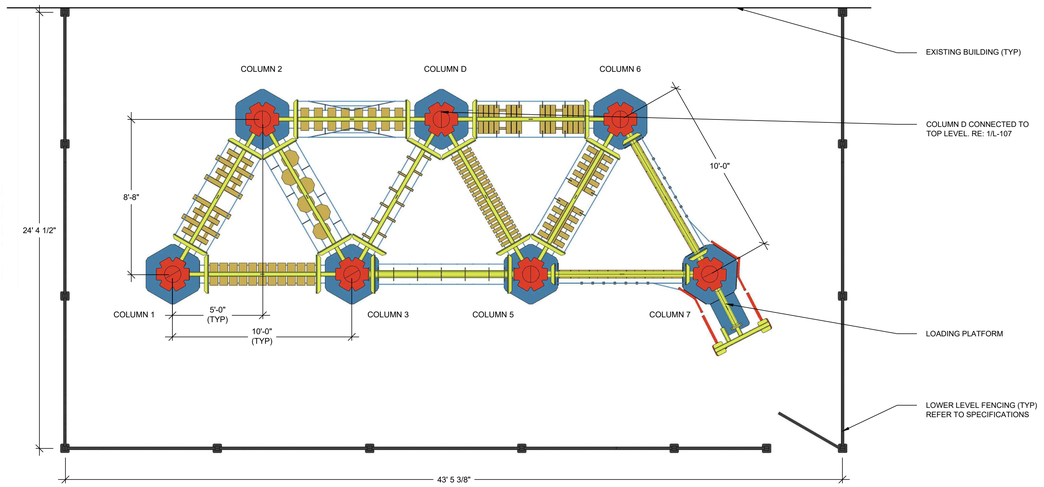
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: L-107
DRAWN BY: SLB
CHECKED BY: MJN
DESIGNED BY: SLB

SHEET TITLE:
LANDSCAPE DETAILS

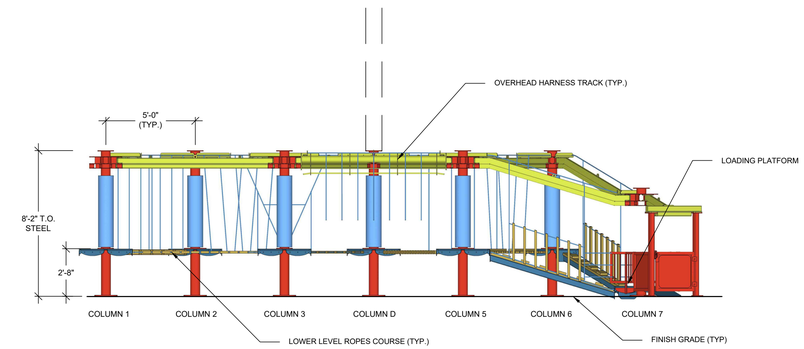
SHEET NUMBER:
L-107

34 OF 76 SHEETS
3/11/2020



NOTES
- ALL TUBULAR STEEL TO BE HSS A-500 GRADE B
- STRUCTURAL STEEL PLATES TO BE A-36
- ANCHOR BOLTS TO BE A-36 OR F1554 GRADE C
- PIPE TO BE A35 GRADE B OR A500 GRADE C
- ALL BOLTS TO BE A325 GALVANIZED WITH HEX NUTS
- SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS
- ALL ELEMENTS TO BE 5/8" GALVANIZED 6-STRAND COMBINATION WIRE ROPE CABLE WITH A BREAKING STRENGTH OF 7200 POUNDS AND EXTRUDED PLASTIC PRODUCT
- STRUCTURAL WELDING TO BE DESIGNED AND PERFORMED ACCORDING TO THE LATEST EDITION OF AWS D1.1 STRUCTURAL STEEL
- STRUCTURE IS DESIGNED TO THE LATEST EDITION OF THE IBC, RCSC SPECIFICATION FOR STRUCTURAL JOINTS, AND ASTM F2959-12 STANDARD PRACTICE FOR AERIAL ADVENTURE COURSES
- ALL WIND AND SEISMIC LOADS TO BE CALCULATED ON THE ASCE7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
- PAINT TO MEET OR EXCEED ASTM A-123/ASHTO SPECIFICATIONS FOR MATERIAL PREP AND MIL THICKNESS
- FOUNDATION - DELEGATED DESIGN BY CONTRACTOR

1 / L-108 ROPES COURSE LOWER LEVEL PLAN VIEW
1/4" = 1'-0"

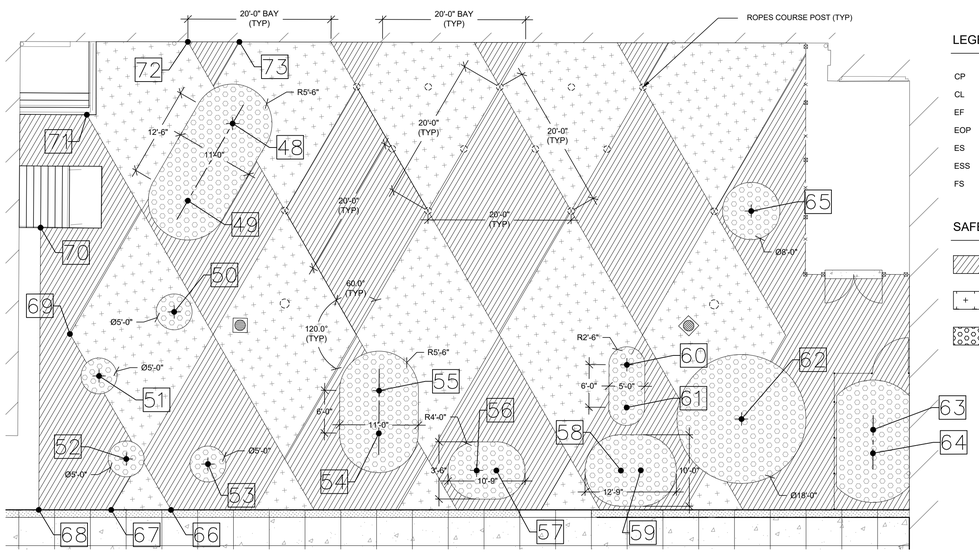


2 / L-108 ROPES COURSE LOWER LEVEL (SOUTH ELEVATION)
1/4" = 1'-0"

COORDINATE SCHEDULE

POINT #	POINT TYPE	NORTHING	EASTING	DESCRIPTION
48	CL	1010339.25	893236.61	Center Line of Safety Surface Zone
49	CL	1010329.28	893229.14	Center Line of Safety Surface Zone
50	CP	1010314.06	893225.42	Center Point of Safety Surface Zone
51	CP	1010306.40	893213.94	Center Point of Safety Surface Zone
52	CP	1010294.43	893216.37	Center Point of Safety Surface Zone
53	CP	1010292.39	893227.62	Center Point of Safety Surface Zone
54	CL	1010293.86	893251.83	Center Line of Safety Surface Zone
55	CL	1010299.78	893252.57	Center Line of Safety Surface Zone
56	CL	1010287.10	893264.80	Center Line of Safety Surface Zone
57	CL	1010286.78	893267.54	Center Line of Safety Surface Zone
58	CL	1010284.73	8932.84.82	Center Line of Safety Surface Zone
59	CL	1010284.44	893287.58	Center Line of Safety Surface Zone
60	CL	1010299.31	893287.38	Center Line of Safety Surface Zone
61	CL	1010293.39	893286.64	Center Line of Safety Surface Zone

POINT #	POINT TYPE	NORTHING	EASTING	DESCRIPTION
62	CP	1010289.91	893302.40	Center Point of Safety Surface Zone
63	CL	1010286.27	893320.48	Center Line of Safety Surface Zone
64	CL	1010283.00	893320.07	Center Line of Safety Surface Zone
65	CP	1010318.62	893307.15	Center Point of Safety Surface Zone
66	ESS	1010286.64	893221.75	Edge of Safety Surfacing
67	ESS	1010287.62	893213.44	Edge of Safety Surfacing
68	ESS	1010288.81	893203.39	Edge of Safety Surfacing
69	ESS	1010312.70	893210.59	Edge of Safety Surfacing
70	ESS	1010327.94	893208.26	Edge of Safety Surfacing
71	ESS	1010342.86	893216.53	Edge of Safety Surfacing
72	ESS	1010351.32	893231.74	Edge of Safety Surfacing
73	ESS	1010350.46	893238.89	Edge of Safety Surfacing



LEGEND

CP	CENTER POINT
CL	CENTERLINE
EF	EDGE OF FENCE
EOP	EDGE OF PAVEMENT
ES	EDGE OF STRUCTURE
ESS	EDGE OF SAFETY SURFACING
FS	FOOTING OF PLAY STRUCTURE (CENTER/MIDPOINT)

SAFETY SURFACING COLORS

BLUE, PANTONE 2185C

GREEN, PANTONE 2247C

YELLOW, PANTONE 380C

3 / L-108 SAFETY SURFACING LAYOUT
1" = 10'-0"

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
MICHAEL JOHN RATCLIFF
NUMBER A-6855
REGISTERED ARCHITECT
03/09/20

ARCTURIS
720 OLIVE STREET, SUITE 200
SAINT LOUIS, MO 63101
314.206.7100

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

FACILITY # 5012011003, 501201104

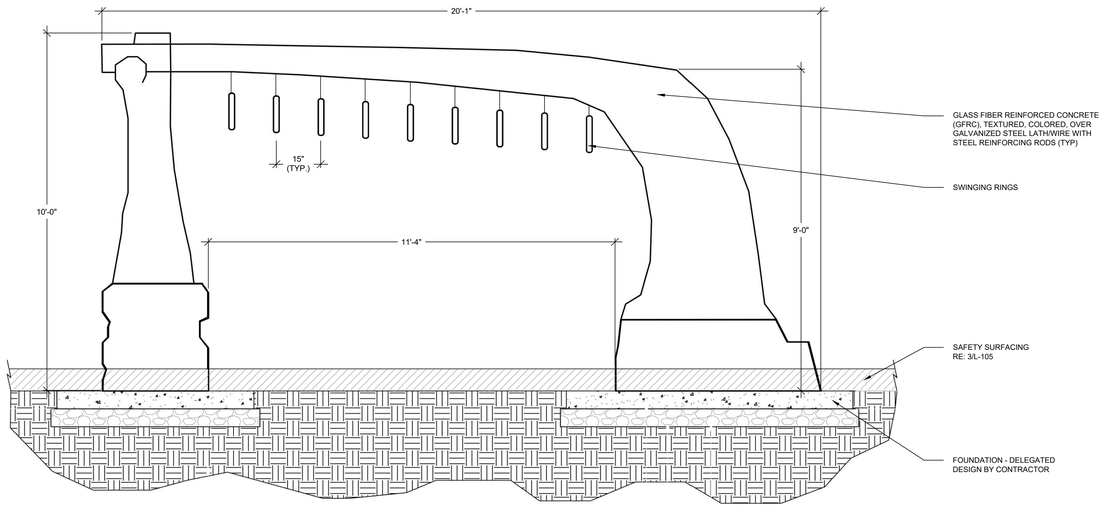
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: L-108
DRAWN BY: SLB
CHECKED BY: MJN
DESIGNED BY: SLB

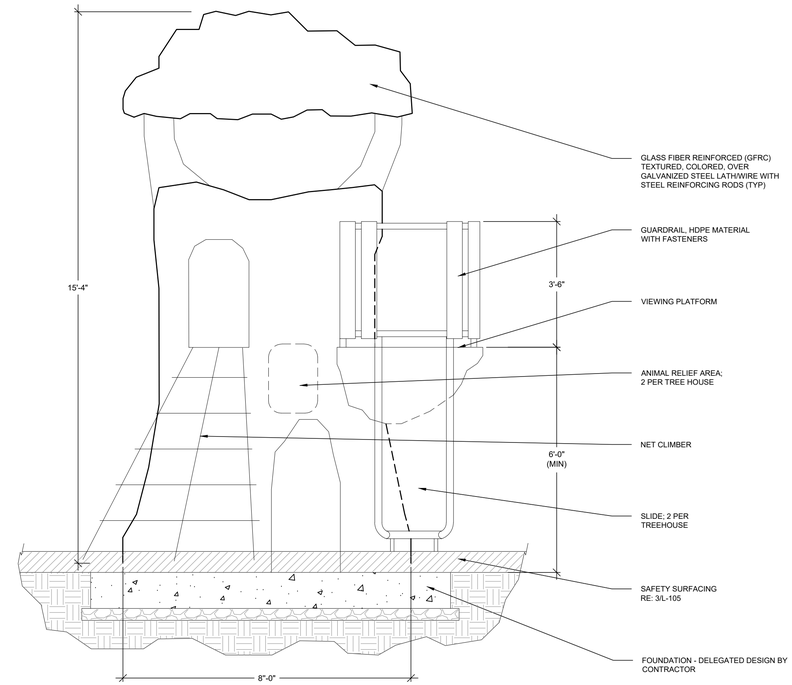
SHEET TITLE:
LANDSCAPE DETAILS

SHEET NUMBER:
L-108

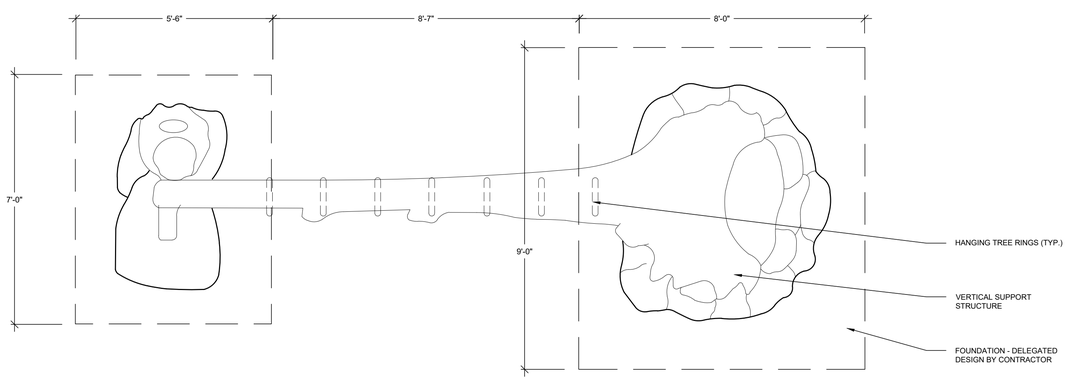
35 OF 76 SHEETS
3/11/2020



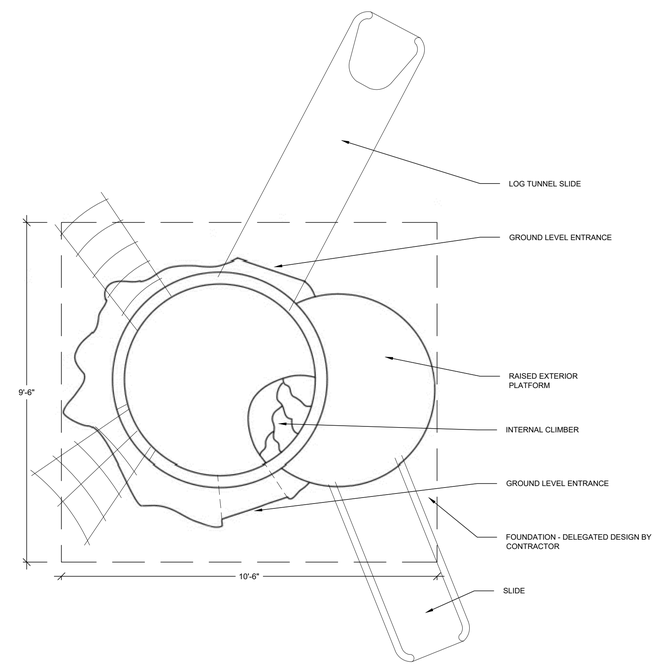
1 L-109 LEANING TREE RINGS ELEVATION VIEW
1/2" = 1'-0"



2 L-109 BACKYARD TREE HOUSE ELEVATION VIEW
1/2" = 1'-0"



3 L-109 LEANING TREE RINGS PLAN VIEW
1/2" = 1'-0"



4 L-109 BACKYARD TREE HOUSE PLAN VIEW
1/2" = 1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
MICHAEL JOHN RATLIF
NUMBER
A-6855
REGISTERED ARCHITECT
03/09/20

ARCTURIS
720 OLIVE STREET, SUITE 200
SAINT LOUIS, MO 63101
314.206.7100

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

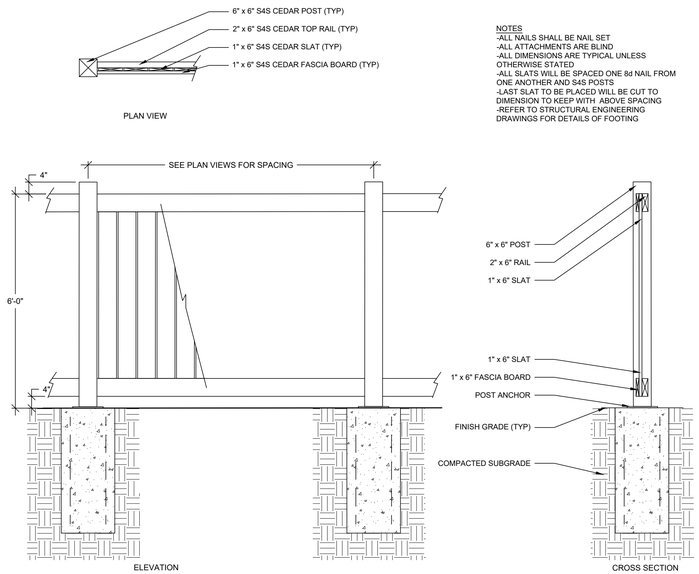
FACILITY # 5012011003, 501201104

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

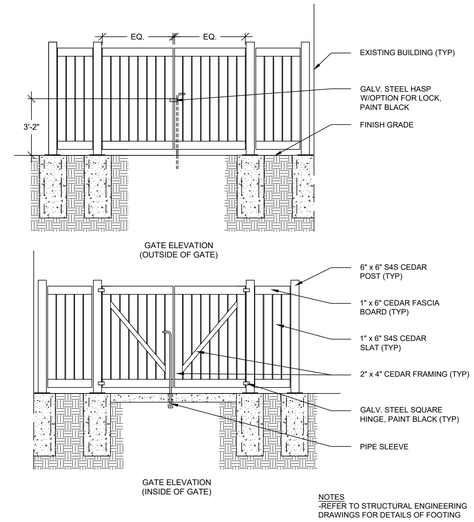
CAD DWG FILE: L-109
DRAWN BY: SLB
CHECKED BY: MJN
DESIGNED BY: SLB

SHEET TITLE:
LANDSCAPE DETAILS

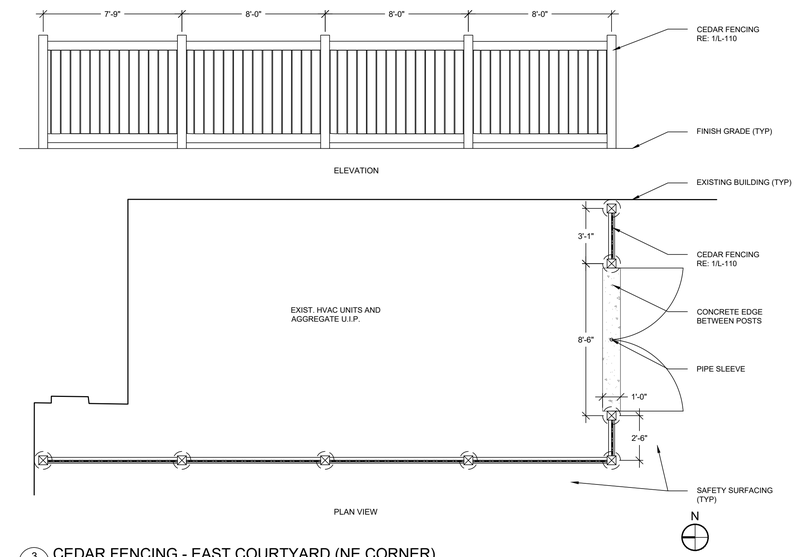
SHEET NUMBER:
L-109



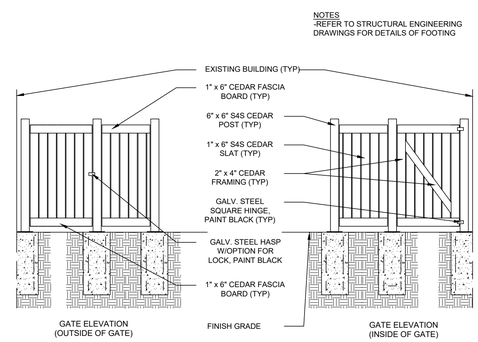
1 L-110 CEDAR FENCING
1/2" = 1'-0"



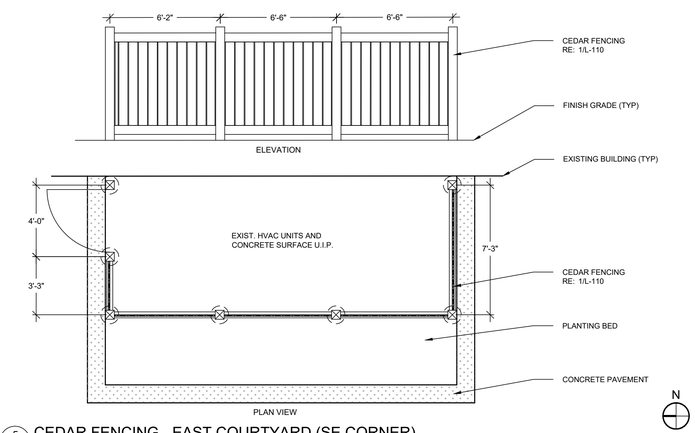
2 L-110 DOUBLE SWING GATE - EAST COURTYARD (NE CORNER)
1/4" = 1'-0"



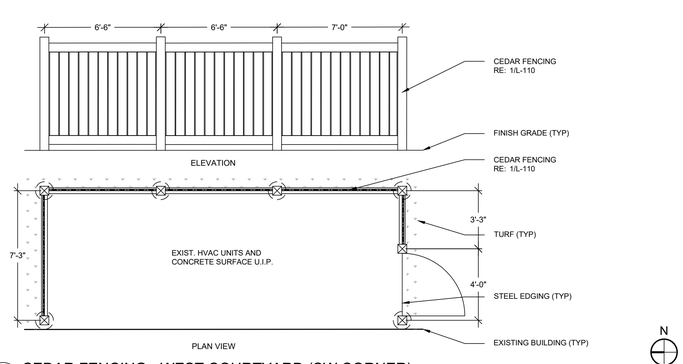
3 L-110 CEDAR FENCING - EAST COURTYARD (NE CORNER)
1/4" = 1'-0"



4 L-110 SINGLE SWING GATE
1/4" = 1'-0"



5 L-110 CEDAR FENCING - EAST COURTYARD (SE CORNER)
1/4" = 1'-0"



6 L-110 CEDAR FENCING - WEST COURTYARD (SW CORNER)
1/4" = 1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
MICHAEL JOHN RATLIF
NUMBER A-6855
REGISTERED ARCHITECT
03/09/20

ARCTURIS
720 OLIVE STREET, SUITE 200
SAINT LOUIS, MO 63101
314.206.7100

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

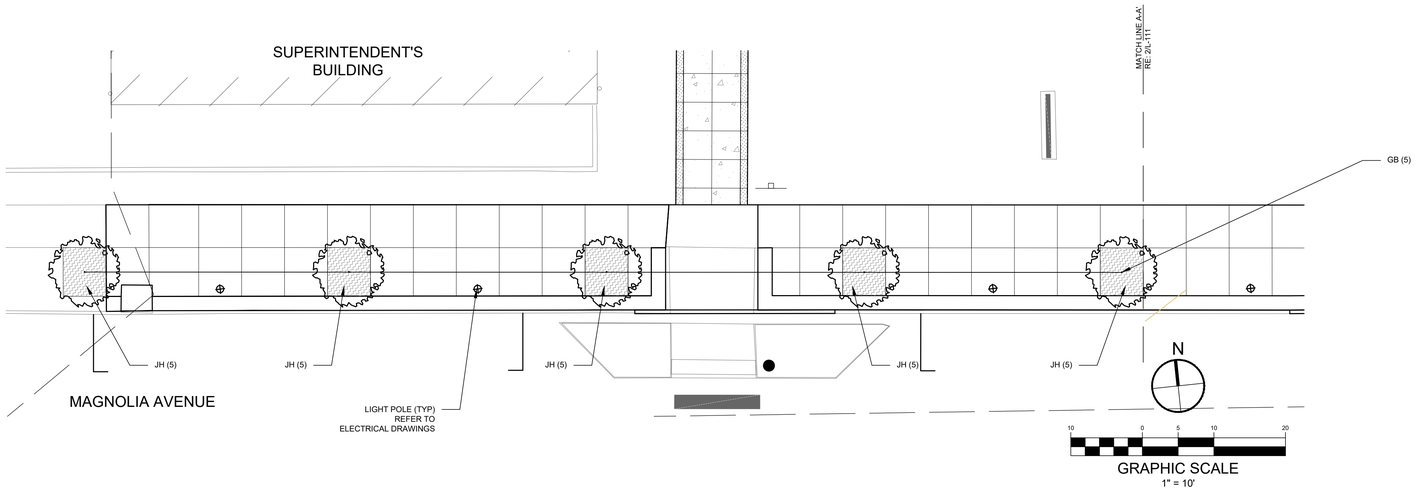
FACILITY # 5012011003, 501201104

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

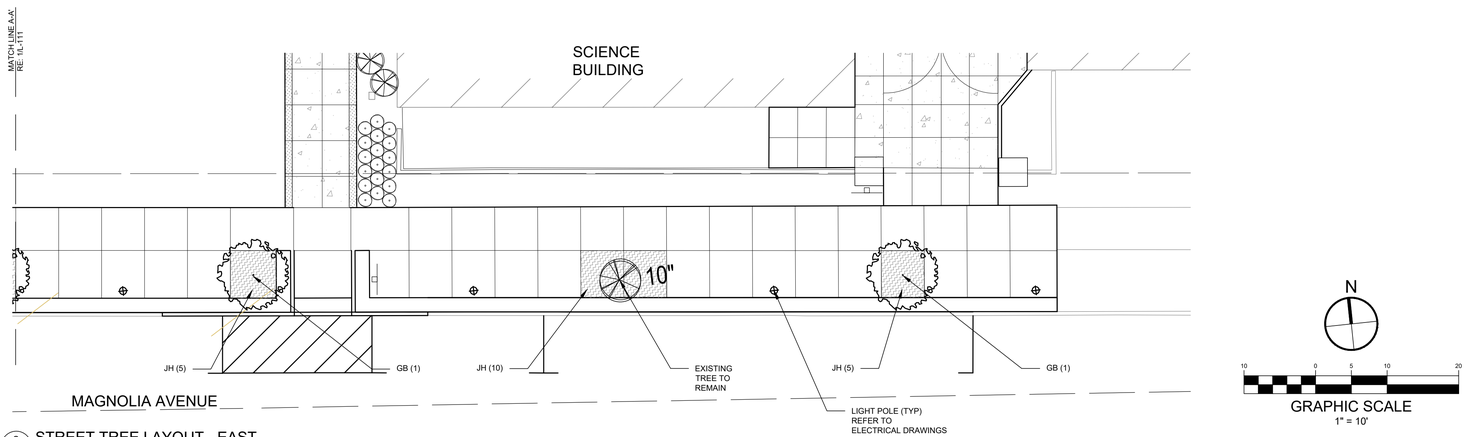
CAD DWG FILE: L-110
DRAWN BY: SLB
CHECKED BY: MJN
DESIGNED BY: SLB

SHEET TITLE:
LANDSCAPE DETAILS

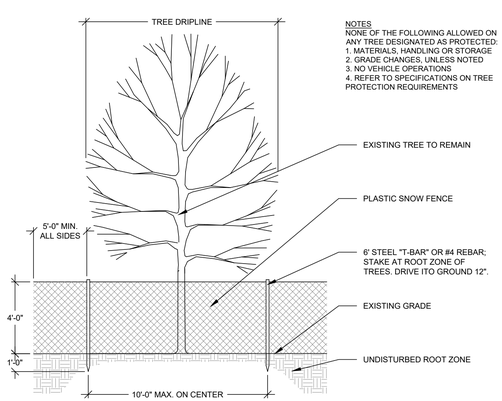
SHEET NUMBER:
L-110



1 L-111 STREET TREE LAYOUT - WEST



2 L-111 STREET TREE LAYOUT - EAST



NOTES
NONE OF THE FOLLOWING ALLOWED ON ANY TREE DESIGNATED AS PROTECTED:
1. MATERIALS, HANDLING OR STORAGE
2. GRADE CHANGES, UNLESS NOTED
3. NO VEHICLE OPERATIONS
4. REFER TO SPECIFICATIONS ON TREE PROTECTION REQUIREMENTS

3 L-111 TREE PROTECTION
1/4" = 1'-0"

NOTES
1. REFER TO CIVIL SHEETS FOR UTILITY INFORMATION.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO ANY CONSTRUCTION.
3. UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. LOCATIONS AND QUANTITIES ARE APPROXIMATE AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE OR VERIFY THEIR EXISTENCE AND EXACT LOCATION AND AVOID ANY DAMAGE.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UNDERGROUND UTILTIES DURING CONSTRUCTION.
5. REPORT ANY DISCREPANCIES FOUND WITH REGARD TO EXISTING CONDITIONS OR PROPOSED DESIGN IMMEDIATELY TO OWNER'S REPRESENTATIVE.
6. DO NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHERE IT IS FOUND THAT KNOWN DISCREPANCIES EXIST. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
7. REFER TO CIVIL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION ON LIGHTING, WIRING SCHEMATICS, AND FIXTURE SCHEDULE.
8. ANY AND ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES-WHETHER SHOWN ON THE DRAWINGS OR OCCURRING IN THE FIELD- ARE TO BE RESTORED WITH SEED OR SOD. AREAS TO BE REPLACED WITH SOD WILL BE SPECIFICALLY NOTED ON CIVIL AND LANDSCAPE PLANS.
9. LANDSCAPE ARCHITECT AND CONSTRUCTION ADMINISTRATOR TO FIELD VERIFY LAYOUT OF IMPROVEMENTS PRIOR TO INSTALLATION.

PLANTING SCHEDULE

SYM	QTY	BOTANICAL NAME	COMMON NAME	SIZE	METHOD
TREES					
AG	-	Amelanchier grandiflora	AUTUMN BRILLIANCE SERVICEBERRY	3" CAL.	B&B
GB	7	Ginkgo biloba 'Princeton Sentry'	PRINCETON SENTRY GINKGO	3" CAL.	B&B
ZS	-	Zelkova serrata	JAPANESE ZELKOVA	3" CAL.	B&B
SHRUBS					
BD	-	Buddleja davidii 'Peakeep'	PEACOCK BUTTERFLY BUSH	3 GAL.	CONT.
BG	-	Buxus 'Green Velvet'	BOXWOOD	5 GAL.	CONT.
CS	-	Cornus sanguinea 'Midwinter Fire'	BLOODTWIG DOGWOOD	3 GAL.	CONT.
HB	-	Hypericum beanii	ST. JOHN'S WORT	3 GAL.	CONT.
HP	-	Hosta 'Patriot'	PATRIOT HOSTA	1 GAL.	CONT.
HR	-	Hemerocallis 'Ribbons and Curls'	RIBBONS AND CURLS DAYLILY	1 GAL.	CONT.
PA	-	Perovskia atriplicifolia 'Little Spire'	RUSSIAN SAGE	3 GAL.	CONT.
RF	-	Rubus fruticosus	BLACKBERRY	3 GAL.	CONT.
RI	-	Rubus idaeus 'Improved Titan'	RASPBERRY	3 GAL.	CONT.
SV	-	Syringa vulgaris 'Little Boy Blue'	LITTLE BOY BLUE LILAC	3 GAL.	CONT.
VC	-	Vaccinium corymbosum	BLUEBERRY	3 GAL.	CONT.
VV	-	Vaccinium vitis-idaea	LINGONBERRY	3 GAL.	CONT.
GROUNDCOVER/GRASSES					
CA	-	Calamagrostis x acutiflora 'Karl Foerster'	FEATHER REED GRASS	3 GAL.	4' OC
HH	-	Hedera helix	ENGLISH IVY	1 PINT	CONT.
JH	45	Juniperus horizontalis 'Plumosa'	CREEPING JUNIPER	1 GAL.	CONT.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
MICHAEL JOHN RATCLIFF
NUMBER
A-6855
REGISTERED ARCHITECT
03/09/20

ARCTURIS
720 OLIVE STREET, SUITE 200
SAINT LOUIS, MO 63101
314.206.7100

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

FACILITY # 5012011003, 501201104

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

CAD DWG FILE: L-110
DRAWN BY: SLB
CHECKED BY: MJN
DESIGNED BY: SLB

SHEET TITLE:
LANDSCAPE DETAILS

SHEET NUMBER:
L-111

GENERAL NOTES: FINISH

1. REFER TO PLANS, RCP, ELEVATIONS, FINISH LEGEND, DOOR SCHEDULE, AND DETAILS FOR FINISH INFORMATION AND LOCATIONS. REFER TO ELEVATIONS FOR ADDITIONAL FINISH INFORMATION OR WHERE MULTIPLE FINISHES ARE INDICATED ON PLAN FOR THE SAME WALL.
2. IDENTIFY AND INFORM CONSTRUCTION TEAM OF ALL CRITICAL PATH ITEMS, CRITICAL DEADLINES, AND DATE OF SUBSTANTIAL COMPLETION.
3. GC TO REVIEW AND SUBMIT TO ARCHITECT SAMPLES OF EACH MATERIAL IN FINISH LEGEND. REFER TO PLANS, RCP, ELEVATIONS, FINISH LEGEND, DOOR SCHEDULE, AND DETAILS FOR FINISH INFORMATION AND LOCATIONS. SAMPLES TO BE THE SPECIFIED COLOR AND FINISH FOR REVIEW. REFERENCE GENERAL NOTES: SUBMITTALS FOR MORE INFO AND PROTOCOL.
4. THE FINISH NAME TAKES PRECEDENT OVER THE FINISH PRODUCT NUMBER WHEN ORDERING MATERIALS. CONTACT ARCHITECT WITH DISCREPANCIES BEFORE ORDERING MATERIALS.
5. PATCH AND REPAIR EXISTING FINISHES AS REQUIRED WHERE DEMOLITION OR NEW CONSTRUCTION OCCURS. NEW FINISHES TO MATCH EXISTING IN MANUFACTURER, COLOR, FINISH, AND TEXTURE. WHERE MATERIALS ARE NOT AVAILABLE FOR EXACT MATCH, SUBMIT PROPOSED REPLACEMENT MATERIALS TO ARCHITECT FOR BEFORE PURCHASE OR INSTALLATION.
6. PATCH AND REPAIR OR REPLACE ANY EXISTING FINISHES IN BUILDING COMMON AREAS OUTSIDE SCOPE OF WORK IF DAMAGE OCCURS RELATED TO THE CONSTRUCTION OF THE SCOPE OF WORK.
7. MAINTAIN AND PROTECT EXISTING FLOORING AND FINISHES NOTED TO REMAIN FOR DURATION OF CONSTRUCTION.
8. ALL INTERIOR FINISHES TO MEET OR EXCEED APPLICABLE CODE REQUIREMENTS, INCLUDING BUT NOT LIMITED TO FLAME SPREAD AND SMOKE DEVELOPMENT.
9. ALL INTERIOR FINISH AND SUNDRIES TO MEET OR EXCEED CLASS II FLAME SPREAD, 26 - 75 AND SMOKE DEVELOPMENT RATING LESS THAN 450 AND ALL OTHER APPLICABLE CODES.
10. ALL IMPACT-RESISTANT PANELS TO BE CLASS 1 COMPONENTS. TESTED IN ACCORDANCE WITH UL-723 (ASTM-E849A) FLAME SPREAD 20 OR LESS. SMOKE DEVELOPED 400 OR LESS.
11. ALL VINYL WALL COVERING FIRE HAZARD CLASSIFICATION (ASTM-E-84) FLAME SPREAD 5, FUEL CONTRIBUTION 0, SMOKE DENSITY FACTOR 5.
12. UNO ALL PAINTED SURFACES TO RECEIVE A MINIMUM OF ONE (1) PRIMER COAT AND THEN TWO (2) FINISH PAINT COATS. TINT PRIMER COAT PER MANUFACTURER'S SPECIFICATIONS.
13. ALL COUNTERTOP EDGE PROFILES TO BE AN EASED EDGE.

UNO ALL PAINTED SURFACES TO RECEIVE THE FOLLOWING FINISHES:
GYP. BD. VERTICAL WALL SURFACES - EGGSHELL (SATIN)
GYP. BD. CEILINGS, SOFFITS, BULKHEADS - FLAT
METAL SURFACES - SEMI-GLOSS
WOOD SURFACES - SEMI-GLOSS
CONCRETE MASONRY UNIT - EGGSHELL

CONTRACTOR'S RESPONSIBILITIES

1. ALL NOTES IN THESE DOCUMENTS INSTRUCT THE GENERAL CONTRACTOR OR, AT THEIR DISCRETION, THEIR SELECTED SUBCONTRACTORS.
2. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE ALL SUBCONTRACTORS RECEIVE THIS SHEET OF GENERAL NOTES IN ADDITION TO TRADE-SPECIFIC INFORMATION.
3. SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, EXISTING CONDITIONS, AND/OR DESIGN INTENT, OBTAIN CLARIFICATION FROM THE ARCHITECT PRIOR TO BID SUBMITTAL AND/OR PROCEEDING WITH ANY WORK, OR RELATED WORK, IN QUESTION.
4. THESE CONTRACT DOCUMENTS ARE INTENDED TO DESCRIBE ONLY THE SCOPE AND APPEARANCE OF THE REAL PROPERTY IMPROVEMENTS, INCLUDING THE PERFORMANCE AND LEVEL OF QUALITY EXPECTED OF ITS COMPONENTS. IT IS INCUMBENT UPON THE CONTRACTOR TO ENSURE THAT ALL WORK COMPLETED AND MATERIALS INSTALLED BE IN FULL COMPLIANCE, AS A MINIMUM STANDARD, WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES HAVING JURISDICTION.
5. THE CONTRACTOR SHALL THOROUGHLY REVIEW THE CONTRACT DOCUMENTS PRIOR TO CONSTRUCTION AND AS AMENDMENTS MAY BE MADE AS CONSTRUCTION PROCEEDS. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES, CONFLICTS, INCONSISTENCIES, ERRORS OR OMISSIONS THAT MAY BE DISCOVERED. IN SUCH CASES, OBTAIN CLARIFICATION OR VERIFICATION OF INTENT FROM THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
6. VERIFY ALL DIMENSIONS SHOWN ON THE DRAWINGS AT THE PROJECT SITE. NOTIFY ARCHITECT OF ANY OMISSIONS, DISCREPANCIES, AND/OR CONFLICTS BEFORE PROCEEDING WITH THE WORK.
7. DO NOT SCALE DRAWINGS, DIMENSIONS GOVERN. LARGE SCALE DETAILS GOVERN OVER SMALL SCALE.
8. DETAILS NOT SHOWN ARE TO BE SIMILAR IN CHARACTER TO THOSE DRAWN. WHERE SPECIFIC DIMENSIONS, DETAILS OR DESIGN INTENT CANNOT BE DETERMINED, OBTAIN CLARIFICATION FROM THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
9. PERFORM ALL WORK IN CONFORMANCE WITH APPLICABLE WRITTEN CODES, ORDINANCES, LAWS, RULES, REGULATIONS AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION. IF THE CONTRACTOR PERFORMS OR PROCEEDS IN A MANNER CONTRARY TO ANY SUCH REQUIREMENTS THE CONTRACTOR ASSUMES FULL RESPONSIBILITY THEREFORE AND SHALL BEAR COSTS RESULTING FROM NONCOMPLIANCE OR VIOLATION, INCLUDING COSTS ASSOCIATED WITH REPAIRING, REPLACING OR OTHERWISE BRINGING THE WORK INTO CONFORMANCE. THE CONTRACTOR IS TO BRING TO THE ARCHITECT'S ATTENTION ANY CONDITIONS REPRESENTED IN THE CONTRACT DOCUMENTS THAT ARE NOT IN CONFORMANCE WITH APPLICABLE REQUIREMENTS.
10. PERFORM ALL WORK IN CONFORMANCE WITH ALL BUILDING OWNER REQUIREMENTS, INCLUDING BUT NOT LIMITED TO WORK HOURS, CONSTRUCTION PROCEDURES, MATERIAL DELIVERY AND STORAGE, ELEVATOR AND RESTROOM ACCESS, PERSONAL CONDUCT, ETC. CONTACT OWNER FOR REQUIREMENTS.
11. PRODUCE AND DISTRIBUTE TO CONSTRUCTION TEAM A CONSTRUCTION SCHEDULE AT FIRST CONSTRUCTION MEETING. SCHEDULE TO IDENTIFY MAJOR MILESTONES AND BE BROKEN DOWN BY TRADE. AT FIRST CONSTRUCTION MEETING, IDENTIFY AND INFORM CONSTRUCTION TEAM OF ALL CRITICAL PATH ITEMS, CRITICAL SEQUENCING AND DEADLINES, AND DATE OF SUBSTANTIAL COMPLETION.
12. PRIOR TO THE START OF CONSTRUCTION, GC, AND ALL SUBCONTRACTORS TO CONFIRM ALL MATERIALS AND FINISHES WITHIN SCOPE OF WORK ARE AVAILABLE IN SUFFICIENT QUANTITY AND WITHIN THE REQUIRED TIMEFRAME ESTABLISHED IN THE CONSTRUCTION SCHEDULE. GC TO INFORM CLIENT AND ARCHITECT OF ANY MATERIALS OR FINISHES THAT ARE NOT IN STOCK, WILL NOT BE AVAILABLE IN TIME TO MEET THE CONSTRUCTION SCHEDULE REQUIREMENTS, OR WHERE THE SUBCONTRACTOR OR SUPPLIER IS UNABLE OR UNWILLING TO COMMIT TO THE CONSTRUCTION SCHEDULE.
13. PROVIDE STRUCTURAL TESTS AND SPECIAL INSPECTIONS AS REQUIRED BY CODE.
14. THE CONTRACTOR SHALL VISIT THE SITE AND BE KNOWLEDGEABLE OF CONDITIONS THEREON, AND SHALL INVESTIGATE, VERIFY AND BE RESPONSIBLE FOR ALL CONDITIONS OF THE PROJECT, AND SHALL NOTIFY THE OWNER OF ANY CONDITIONS REQUIRING MODIFICATION BEFORE PROCEEDING WITH THE WORK.
15. THE CONTRACTOR IS TO MAINTAIN ON SITE A COPY OF THE APPLICABLE EDITION OF THE UL FIRE RESISTANCE DIRECTORY AND OTHER FIRE RESISTIVE STANDARDS REFERENCED IN THE CONTRACT DOCUMENTS FOR USE BY INSPECTORS AT TIMES OF INSPECTION.
16. ALL MATERIAL SUBSTITUTIONS TO BE APPROVED BY ARCHITECT. SUBMIT WRITTEN REQUESTS FOR SUBSTITUTIONS TO THE ARCHITECT NOT LATER THAN 15 DAYS PRIOR TO TIME REQUESTED FOR PREPARATION AND REVIEW OF RELATED SUBMITTALS. SHOW COMPLIANCE WITH REQUIREMENTS FOR SUBSTITUTIONS BY PROVIDING A COMPARISON OF SIGNIFICANT QUALITIES OF PROPOSED SUBSTITUTION WITH THOSE OF WORK SPECIFIED.

GENERAL NOTES: ARCHITECTURAL

1. WHERE WORK OR EQUIPMENT IS INDICATED AS 'NOT IN CONTRACT (NIC)' IN THE DOCUMENTS, SUCH WORK OR EQUIPMENT SHALL BE PROVIDED OUTSIDE THE CONTRACT SCOPE REPRESENTED IN THESE DOCUMENT. THE CONTRACTOR SHALL COORDINATE THEIR WORK WITH NIC ITEMS AND COOPERATE TO AFFECT THE IMPLEMENTATION OF SUCH WORK OR INSTALLATION.
2. DETAILS NOT SHOWN ARE TO BE SIMILAR IN CHARACTER TO THOSE DRAWN. WHERE SPECIFIC DIMENSIONS, DETAILS OR DESIGN INTENT CANNOT BE DETERMINED THE CONTRACTOR IS TO OBTAIN CLARIFICATION FROM THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
3. DO NOT SCALE DRAWINGS. DIMENSIONS GOVERN. LARGE SCALE DETAILS GOVERN OVER SMALL SCALE.
4. WHERE EXISTING WALLS, PARTITIONS, COLUMNS, FLOORS, BULKHEADS, SURFACES, OR FINISHES ARE REMOVED OR PARTIALLY DEMOLISHED, EACH TRADE IS RESPONSIBLE FOR PATCHING OR REFINISHING OF EXISTING CONSTRUCTION REQUIRED BY THAT TRADE'S WORK ON THE PROJECT. THIS WORK MUST BE DONE IN A MANNER WHICH WILL ACCEPT NEW FINISHES.
5. UNO ALL PARTITIONS TO BE PARTITION AS DETAILED ON DETAIL 4/A-101.
6. ALL NEW WALLS SHALL RECEIVE A TEXTURE TO MATCH EXISTING ADJACENT. ALL NEW, MODIFIED, DAMAGED, AND DIRECTLY ADJACENT WALLS SHALL BE PAINTED FULL HEIGHT EXTENDING NEATLY TO A FULL-HEIGHT OUTSIDE OR INSIDE CORNER. NO WALL FACE, EXTENDING TO 90 DEGREE CORNERS, SHALL BE PARTIALLY PAINTED. YOU TOUCH IT, YOU PAINT IT.
7. CONTROL JOINTS: PROVIDE CONTROL JOINTS ACCORDING TO ASTM C 840 AND IN SPECIFIC LOCATIONS APPROVED BY ARCHITECT FOR VISUAL EFFECT. WHEN POSSIBLE ALIGN WITH DOOR FRAME.
8. PARTITIONS ARE DIMENSIONED TO FACE OF PARTITION UNLESS NOTED OTHERWISE.
9. INSTALL MOISTURE RESISTANT GYP BOARD AT ALL WALLS, INCLUDING BUT NOT LIMITED TO LAVATORY LOCATIONS.
10. PROVIDE 6" METAL STUDS AT ALL PARTITIONS WHERE NEW PLUMBING WASTE OR VENT LINES ARE LOCATED.
11. UNO EDGE OF DOOR TO BE LOCATED 5" OFF PERPENDICULAR WALL. PROVIDE BACK-TO-BACK OR NESTED STUDS AT BOTH SIDES OF ALL NEW JAMB LOCATIONS. NESTED STUD GAUGE TO MATCH PARTITION TYPE IN WHICH IT OCCURS OR 20-GAUGE, WHICHEVER GAUGE IS HEAVIER.
12. PROVIDE BLOCKING IN STUD WALLS BEHIND ITEMS (CABINETS, MILLWORK, MARKER BOARDS, ETC.) SUPPORTED BY WALLS, OF SIZES, LENGTHS AND HEIGHTS AS REQUIRED. ATTACH BLOCKING TO STUDS WITH TYPE, SIZE, NUMBER AND SPACING OF ANCHORS AS REQUIRED TO PROPERLY SUPPORT LOADS OF ITEMS SUPPORTED. WHERE WOOD BLOCKING IS USED IT IS TO BE FIRE RETARDANT TREATED. WHERE METAL IS USED PROVIDE MIN 1/8 INCH THICK PLATE, WELDED, SCREWED OR BOLTED TO METAL STUD FRAMING. IF PLATES ARE NOT LOCATED COMPLETELY BEHIND ITEMS SUPPORTED, LET PLATES INTO STUDS OR OTHERWISE CONFIGURE SO THAT THERE ARE NO VISIBLE BULGES IN SURFACE OF FINISHED GYPSUM BOARD DUE TO THICKNESS OF PLATES BETWEEN STUDS AND GYPSUM BOARD.
13. REFER TO DRAWINGS AND SPECIFICATIONS FOR PARTITION TYPES AND SPECIFIED FIRE RATED ASSEMBLY SYSTEMS. CONTRACTOR TO KEEP ON SITE A COPY OF ALL APPLICABLE SYSTEMS TO PROVIDE TO THE INSPECTOR AT TIME OF INSPECTION.
14. ALL MATERIALS USED IN FIRE-RATED ASSEMBLIES SHALL BE APPROVED BY UL OTHER RECOGNIZED STANDARD FOR USE IN SUCH ASSEMBLIES.
15. ALL FIRESTOP SYSTEMS TO MEET UL TESTED SYSTEMS. SYSTEMS MUST BE SUBMITTED TO AND APPROVED BY ARCHITECT PRIOR TO INSTALLATION. GC IS TO KEEP A COPY OF ALL APPROVED SYSTEMS ON SITE FOR DURATION OF PROJECT. ALL INSTALLED SYSTEMS MUST BE LABELED AND DOCUMENTED. DOCUMENTATION IS TO BE SUBMITTED TO OWNER AND ARCHITECT UPON COMPLETION OF THE PROJECT.
16. REPAIR SPRAY-ON FIRE PROOFING AT ALL AREAS WITHIN SCOPE OF WORK TO ACHIEVE REQUIRED FIRE RESISTANCE.
17. PROVIDE THROUGH PENETRATION FIRESTOP SYSTEMS FOR ALL ITEMS PENETRATING FIRE-RATED ASSEMBLIES. PENETRATIONS TO BE DESIGNED, TESTED, AND FIRE-RESISTANCE RATED TO RESIST FOR A PRESCRIBED PERIOD OF TIME THE SPREAD OF FIRE THROUGH PENETRATIONS. PROVIDE UL-LISTED ASSEMBLIES AS REQUIRED.
18. PROVIDE AND INSTALL ADA COMPLIANT BUILDING STANDARD FIRE EXTINGUISHERS AS REQUIRED BY AND IN ACCORDANCE WITH NFPA LIFE SAFETY CODE AND LOCAL BUILDING FIRE SAFETY CODE AND REGULATIONS. CONFIRM QUANTITY AND LOCATION WITH AUTHORITY HAVING JURISDICTION PRIOR TO ORDERING.
19. ALL BUILDING ACCESSIBILITY IS DESIGNED AND SHALL BE IN ACCORDANCE WITH IBC, ANSI 117.1 AND ADAAG, WHICHEVER STANDARD PROVIDES THE GREATEST DEGREE OF ACCESSIBILITY FOR ANY GIVEN BUILDING ELEMENT.
20. FOR ALL DOORS HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERATING DEVICES ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE. LEVER-OPERATED MECHANISMS, PUSH-TYPE MECHANISMS, AND U-SHAPED HANDLES ARE ACCEPTABLE DESIGNS. WHEN SLIDING DOORS ARE FULLY OPEN, OPERATING HARDWARE SHALL BE EXPOSED AND USABLE FROM BOTH SIDES. HARDWARE REQUIRED FOR ACCESSIBLE DOOR PASSAGE SHALL BE MOUNTED NO HIGHER THAN 48" ABOVE FINISH FLOOR.
21. ALL MODIFIED BUILDING ENTRANCES / EXITS SHALL BE ACCESSIBLE.
22. ACCESSIBLE DOORS SHALL HAVE A LANDING ON BOTH SIDES. LANDINGS SHALL BE NO MORE THAN 1/2 INCH BELOW THE TOP OF THE DOOR THRESHOLD.
23. EACH GLAZING UNIT SHALL BEAR THE MANUFACTURER'S LABEL DESIGNATING THE TYPE AND THICKNESS OF GLASS. GLAZING LOCATED WITHIN 24" OF A DOOR AND LESS THAN 60" ABOVE WALKING SURFACE SHALL BE SAFETY GLAZED.
24. ALL SALVAGED, REPAIRED OR REPLACED BUILDING STANDARD BLINDS TO BE REINSTALLED.
25. TO PREVENT GALVANIC ACTION BETWEEN DISSIMILAR METALS, WHERE DISSIMILAR METALS COME INTO CONTACT WITH EACH OTHER, WHERE METALS COME INTO CONTACT WITH WOOD, CONCRETE OR MASONRY, WHERE RUNOFF FROM A METAL SURFACE FLOWS OVER A DISSIMILAR METAL, OR WHERE NON-PASSIVE METAL FASTENERS PENETRATE DISSIMILAR METALS, BREAK THE CONTACT BETWEEN MATERIALS WITH A HEAVY WATERPROOF PAPER OR FELT, A HEAVY COAT OF BITUMINOUS COATING OR AN ELASTOMERIC FILM UNLESS OTHER SEPARATOR IS INDICATED IN THE CONTRACT DOCUMENTS.
26. STEEL EXPOSED TO WATER AND/OR EXTERIOR WEATHER CONDITIONS IS TO BE GALVANIZED UNLESS INDICATED OTHERWISE. WHERE CUTTING, FASTENING, ANCHORAGE OR CONNECTION CONDITIONS RESULT IN BREAKS IN THE GALVANIZING COATING, RESTORE COATING OR APPLY ADDITIONAL COMPATIBLE PROTECTIVE COATING TO MAINTAIN INTEGRITY OF PROTECTION.
27. SHEET METAL FLASHING SHALL BE OF APPROPRIATE THICKNESS AND SIZES, AND DETAILED, CONFIGURED AND INSTALLED SO AS TO ALLOW FOR ACCEPTABLE THERMAL MOVEMENTS WITHOUT VISIBLE DISTORTIONS, LEAKS OR FAILURES OF THE FLASHING SYSTEM'S ABILITY TO PERFORM AS REQUIRED BY THE CONTRACT DOCUMENTS.

EFFORT TO OPERATE DOORS:
1. INTERIOR DOOR = 5 POUNDS MAX
2. EXTERIOR DOOR = 5 POUNDS MAX
3. FIRE DOOR = 15 POUNDS MAX

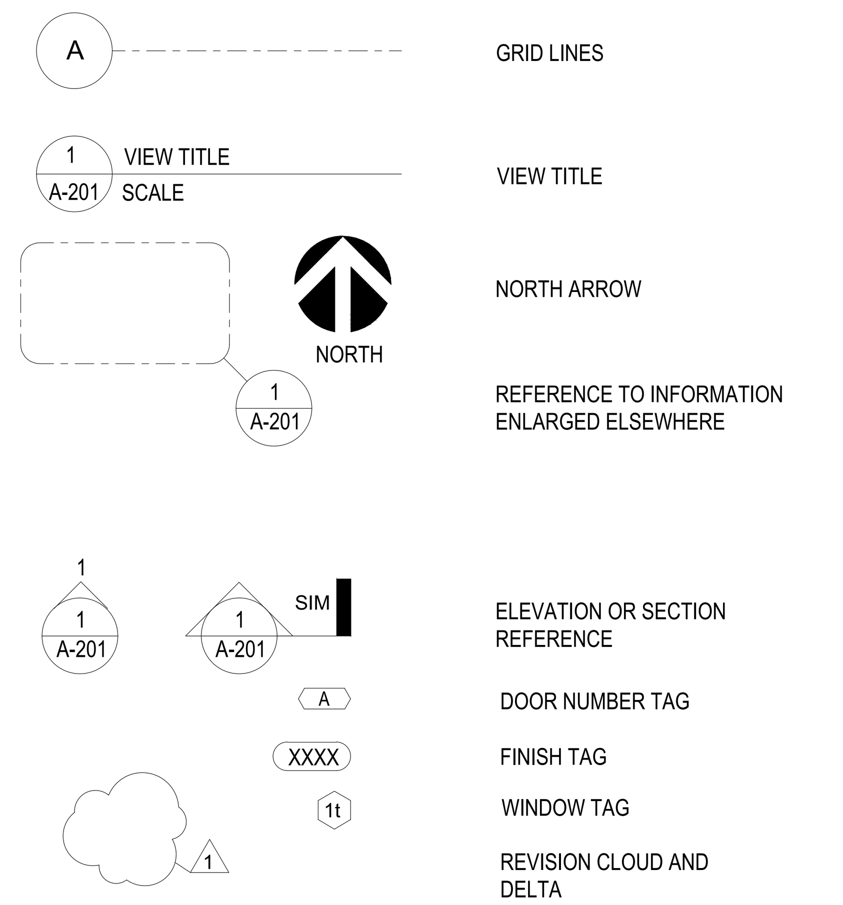
GENERAL NOTES: ACCESSIBILITY

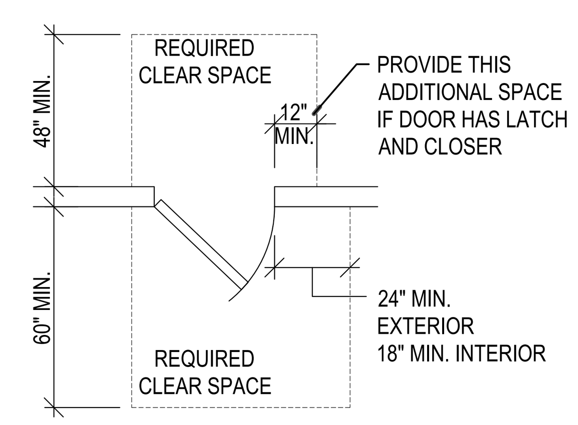
1. ACCESSIBILITY STANDARDS MAY VARY SLIGHTLY FROM THOSE SHOWN HERE ACCORDING TO THE REFERENCED STANDARDS OF THE APPLICABLE CODES, (ANSI A117.1 (I.B.C.)), THE YEAR OF THE CODE ADOPTED AT THE TIME OF PLAN CHECK SUBMITTAL AND THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY, THE LOCAL JURISDICTION REQUIREMENTS, THE CODE ITSELF AS STATED (TITLE 24 OF THE C.B.C., B.O.C.A. OR THE I.B.C.), THE REQUIREMENTS OF AN ADOPTED STATE LAW OR A PRECEDENT PREVIOUSLY SET FOR COMPLIANCE BY THE JUSTICE DEPARTMENT (A.D.A.).
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INFORM THE ARCHITECT AND/OR THE CIVIL ENGINEER OF ANY DISCREPANCIES, SUBTLE OR OTHERWISE, FROM WHAT IS SHOWN HERE AND THE APPLICABLE CODE/LAW/ORDINANCE.
3. THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AID FOR BUILDING AND CONSTRUCTION.
4. GENERAL CONTRACTOR IS TO BE THOROUGHLY FAMILIAR WITH, AND COMPLY WITH, REQUIREMENTS SHOWN ON THE "TYPICAL ACCESSIBILITY STANDARDS" SHEETS, EXCLUDING ONLY ANY DETAILS WHICH ARE CROSSED OUT AS NOT APPLICABLE TO THE INDIVIDUAL PROJECT. DETAILS WITHIN THESE TYPICAL ACCESSIBILITY SHEETS ARE NOT NECESSARILY KEYED IN OR REFERENCED ELSEWHERE IN THE DRAWINGS IN EVERY INSTANCE WHERE THEY APPLY, AS THEY ARE TYPICAL DETAILS.

GENERAL NOTES: DEMOLITION

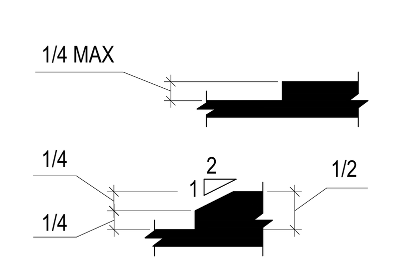
1. PROVIDE TEMPORARY BARRICADES AND OTHER FORMS OF PROTECTION AS REQUIRED TO PROTECT OWNER'S AND CLIENT'S PERSONNEL AND GENERAL PUBLIC FROM INJURY DUE TO SELECTIVE DEMOLITION WORK.
2. ERECT AND MAINTAIN DUST-PROOF PARTITIONS AND CLOSURES AS REQUIRED TO PREVENT SPREAD OF DUST OR FUMES TO OCCUPIED PORTIONS OF THE BUILDING. PROTECT MECHANICAL SYSTEM AS REQUIRED.
3. CONDUCT SELECTIVE DEMOLITION OPERATIONS AND DEBRIS REMOVAL IN A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES.
4. PROVIDE BYPASS CONNECTIONS AS NECESSARY TO MAINTAIN CONTINUITY OF SERVICE TO OCCUPIED AREAS OF THE BUILDING.
5. REVIEW/COORDINATE SCHEDULE OF WORK TO BE DEMOLISHED WITH BUILDING MANAGEMENT TO LIMIT INTERRUPTIONS OF OWNER-OCCUPIED SPACES.
6. MAINTAIN FIRE PROTECTION SERVICES DURING SELECTIVE DEMOLITION.
7. COVER AND PROTECT EQUIPMENT AND FIXTURES INDICATED "TO REMAIN" FROM SOILAGE OR DAMAGE.
8. LOCATE, IDENTIFY, STUB OFF, AND DISCONNECT UTILITY SERVICES THAT ARE NOT INDICATED TO REMAIN.
9. PERFORM SELECTIVE DEMOLITION WORK IN A SYSTEMATIC MANNER.
10. WHERE INDICATED ON DRAWINGS AS "SALVAGE AND STORE," CAREFULLY REMOVE INDICATED ITEMS, CLEAN, STORE, AND REUSE AS REQUIRED. DELIVER UNUSED ITEMS AT COMPLETION OF PROJECT TO CLIENT.
11. REMOVE EXISTING FLOORING (VINYL COMPOSITION TILE, ADJACENT BASE, ETC.) WHERE INDICATED AND AS NEEDED TO COMPLETE THE WORK WITHIN SCOPE OF WORK AREA. CLEAN AND PREPARE CONCRETE SLAB FLOOR AREA TO RECEIVE NEW FLOORING MATERIALS, INCLUDING REMOVAL OR SEALING OF ANY REMAINING EXISTING ADHESIVE AS REQUIRED, PATCHING CRACKS, AND LEVELING OF FLOOR TO MEET REQUIRED TOLERANCES FOR SCHEDULED FINISHES.
12. UNO ALL EXISTING PARTITIONS, FIRE EXTINGUISHERS AND CABINETS, MILLWORK, DOORS, HARDWARE, SIDELITES, CLERESTORIES, ETC. TO REMAIN.
13. WHERE WALLS OR PARTITIONS ARE TO BE REMOVED, REMOVE OR RELOCATE ALL EXISTING ELECTRICAL WIRING, DATA CABLING, TELEPHONE LINES, CABLE LINES, SATELLITE LINES, CONDUIT, WIRE MOLD, RECEPTACLES AND SWITCH BOXES, ETC. LOCATED WITHIN DEMOLISHED PORTIONS.
14. REMOVE ELECTRICAL TERMINATIONS, BOXES, CONDUIT, AND WIRING BACK TO SOURCE PANEL.

GENERAL DRAWING SYMBOLS LEGEND:





SPACE AT DOORS - FRONT APPROACH



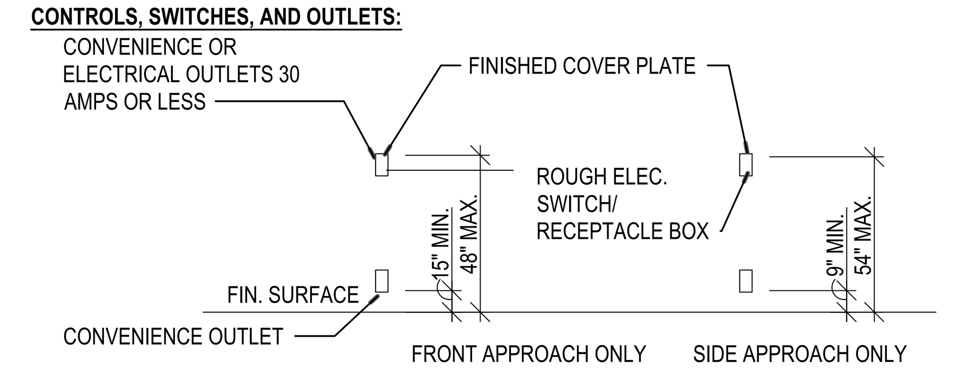
NOTES:
1. CHANGES IN LEVEL GREATER THAN 1/2" SHALL BE RAMPED.

THRESHOLDS / LEVEL CHANGES

DOOR NOTES:
1. ALL EXIT DOORS SHALL BE PIVOTED OR SIDE-HINGED SWINGING TYPE.
2. THE MINIMUM SIZE FOR ANY DOOR SHALL BE 36"x80" AND SHALL HAVE A MINIMUM OF 32" CLEAR.
3. ALL DOORS SHALL HAVE A LEVEL FLOOR OR LANDING ON EACH SIDE OF THE DOOR NOT TO EXCEED A MAXIMUM OF 1/4" PER FOOT OR 2%.
4. A MINIMUM BOTTOM RAIL OF SOLID FLAT SURFACE SHALL BE A MINIMUM 10" (NO GLAZING PERMITTED).
5. DOUBLE DOOR WITH SHALL BE 36" NOMINAL OPENING (ACTIVE LEAF).
6. NO REVOLVING DOOR ALLOWED FOR ACCESSIBLE DOORS.

DOOR HARDWARE NOTES:
1. DOORS SHALL BE OPERABLE FROM SINGLE EFFORT, NO GRASPING OR WRIST MOVEMENT USING LEVERS, PUSH-PULLS, OR PANIC DEVICES, AND SHALL BE OPENABLE WITHOUT USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
2. HARDWARE SHALL BE MOUNTED AT 38" TO 44" AFF.
3. DOOR CLOSERS SHALL PROVIDED A MINIMUM OF 3 SECONDS TO MOVE FROM A 70 DEGREE OPEN POSITION TO A POINT 3" FROM THE LATCH.

CONTROLS, SWITCHES, AND OUTLETS:



1. MANUALLY OPERATED SWITCHES AND CONTROLS OF LIGHTS, POWER, HEAT, VENTILATION, WINDOWS, DRAPERIES, DOORS, AND SIMILAR CONTROLS OF FREQUENT AND ESSENTIAL USE ARE TO BE CENTERED BETWEEN 36" AND 48" AFF.
2. ELECTRICAL AND COMMUNICATIONS CONVENIENCE WALL OUTLETS ARE TO BE CENTERED 15" MIN. AFF. CONVENIENCE OUTLETS USED IN MOVABLE PARTITIONS OR WINDOW WALLS ARE NOT SUBJECT TO THE MINIMUM HEIGHT REQUIREMENTS.
3. EXISTING BUILDING MUST MEET SAME REQUIREMENTS AS NEW CONSTRUCTION UNLESS AN UNREASONABLE HARDSHIP IS GRANTED BY THE ENFORCING AGENCY.

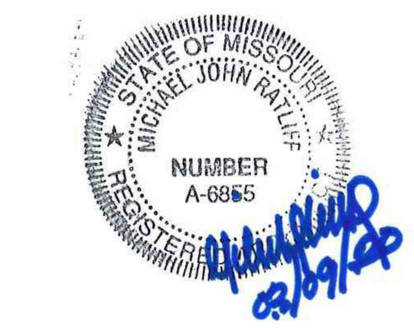
DEFINITION OF TERMS:

1. THE WORD "CLIENT" AS USED IN THESE DOCUMENTS REFERS TO THE ENTITY WHO HAS CONTRACTED THE ARCHITECT TO PERFORM PROFESSIONAL SERVICES ON THIS PROJECT.
2. THE WORD "PROJECT" AS USED IN THESE DOCUMENTS REFERS TO THE SCOPE OF WORK DESCRIBED IN THESE DOCUMENTS.
3. THE WORDS "CONTRACTOR", "GENERAL CONTRACTOR", AND "G.C." AS USED IN THESE DOCUMENTS REFER TO THE GENERAL CONTRACTOR SELECTED BY THE CLIENT TO PERFORM THE WORK DESCRIBED IN THESE DOCUMENTS. ALL NOTES IN THESE DOCUMENTS INSTRUCT THE GENERAL CONTRACTOR.
4. THE WORD "ARCHITECT" AS USED IN THESE DOCUMENTS REFERS ARCTURIS.
5. THE WORDS "CONSTRUCTION TEAM" REFER TO ALL PARTIES INVOLVED IN THE CONSTRUCTION PHASE, INCLUDING BUT NOT LIMITED TO: THE CLIENT AND THEIR CONSULTANTS; AND ALL SUBCONTRACTORS; THE CONSULTING ENGINEERS AND THE ARCHITECT.
6. THE WORD "ALIGN" AS USED IN THESE DOCUMENTS SUPERSEDES ANY DIMENSIONAL INFORMATION INDICATED. IF DISCREPANCIES OCCUR, NOTIFY ARCHITECT IMMEDIATELYTHE GENERAL CONTRACTOR
7. THE WORD "PROVIDE" AS USED IN THESE DOCUMENTS MEANS FURNISH AND INSTALL.
8. THE WORD "CLEAR" AS USED IN THESE DOCUMENTS SHALL MEAN THAT THE CONDITION IS NOT ADJUSTABLE WITHOUT THE APPROVAL OF THE ARCHITECT. CLEAR DIMENSIONS ARE TYPICALLY TO FINISH FACE OF MAJOR SURFACE. COORDINATE REQUIREMENTS FOR BASE BOARD HEATERS OR OTHER PROTRUSIONS WITH ARCHITECT.
9. THE WORD "MAXIMUM" AS USED IN THESE DOCUMENTS SHALL MEAN THE CONDITION IS SLIGHTLY ADJUSTABLE BUT MAY NOT VARY TO A DIMENSION OR QUANTITY GREATER THAN THAT SHOWN WITHOUT APPROVAL OF THE ARCHITECT.
10. THE WORD "MINIMUM" AS USED IN THESE DOCUMENTS SHALL MEAN THE CONDITION IS SLIGHTLY ADJUSTABLE BUT MAY NOT VARY TO A DIMENSION OR QUANTITY LESS THAN THAT SHOWN WITHOUT APPROVAL OF THE ARCHITECT.
11. THE WORD "TYPICAL" AS USED IN THESE DOCUMENTS SHALL MEAN THE CONDITION OR DIMENSION IS THE SAME OR REPRESENTATIVE FOR SIMILAR CONDITIONS THROUGHOUT.
12. THE SYMBOL "+/-" AS USED IN THESE DOCUMENTS SHALL MEAN THE DIMENSION OR QUANTITY IS ADJUSTABLE TO ACCOMMODATE ACTUAL CONDITIONS. IF ACTUAL DIMENSION VARIES BY MORE THAN 1" FROM DIMENSION NOTED AS "+/-", INFORM ARCHITECT BEFORE PROCEEDING.

ABBREVIATIONS

A	
ACT	ACOUSTICAL CEILING TILE
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
APPROX	APPROXIMATE(LY)
APVD	APPROVED
ARCH	ARCHITECT(URAL)
B	
BD	BOARD
BLDG	BUILDING
BLKG	BLOCKING
C	
C/L	CENTERLINE
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
CJ	CONTROL JOINT
CLG	CEILING
CLR	CLEAR
CONC	CONCRETE
CONT	CONTINUE, CONTINUOUS
CORR	CORRIDOR
CT	CERAMIC TILE
D	
DIA	DIAMETER
DIM	DIMENSION(S)
E	
EA	EACH
EJ	EXPANSION JOINT
ELEC	ELECTRIC(AL)
ELEV	ELEVATION
EQ	EQUAL
EQUIP	EQUIPMENT
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
F	
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FIN	FINISH(ED)
FIN FLR	FINISHED FLOOR
FLR	FLOOR
FLUOR	FLUORESCENT
FRT	FIRE-RETARDANT TREATED
G	
GA	GAUGE
GYP BD	GYPSUM BOARD
H	
HC	HOLLOW CORE
HCP	HANDICAP(PED)
HDW	HARDWARE
HM	HOLLOW METAL
HOR	HORIZONTAL
HR	HOUR
HT	HEIGHT
I	
INCL	INCLUDE(D)
INSUL	INSULATION
INT	INTERIOR
J	
JT	JOINT
L	
LAM	LAMINATE
M	
MAX	MAXIMUM
MECH	MECHANICAL
MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
MEPFP	MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION
MIN	MINIMUM
MISC	MISCELLANEOUS
MTL	METAL
N	
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
O	
OC	ON CENTER
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
OH	OPPOSITE HAND
OPG	OPENING
OPP	OPPOSITE
P	
PLAM	PLASTIC LAMINATE
PT	PAINT(ED)
PTN	PARTITION
PWD	PLYWOOD
Q	
QTY	QUANTITY
R	
RB	RESILIENT BASE
REF	REFERENCE
REINF	REINFORCE(D)
REQ	REQUIRED
REV	REVISION
S	
SC	SOLID CORE
SF	SQUARE FOOT (FEET)
SIM	SMILAR
SPEC	SPECIFICATION
SQ	SQUARE
SQ FT	SQUARE FOOT (FEET)
STL	STEEL
SUSP	SUSPEND(ED)
SYM	SYMMETRICAL
T	
TEMP	TEMPERED
TFCI	TENANT(CLIENT) FURNISHED, CONTRACTOR INSTALLED
TFTI	TENANT (CLIENT) FURNISHED, TENANT (CLIENT) INSTALLED
TOS	TOP OF STRUCTURE
TOW	TOP OF WALL
TYP	TYPICAL
U	
UL	UNDERWRITERS LABORATORIES, INC.
UNO	UNLESS NOTED OTHERWISE
V	
VCT	VINYL COMP TILE
VERT	VERTICAL
VIF	VERIFY IN FIELD
W	
W/	WITH
W/O	WITHOUT
WC	WALL COVERING
WD	WOOD

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



ARCTURIS
720 OLIVE STREET, SUITE 200
SAINT LOUIS, MO 63101
314.206.7100

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

FACILITY # 5012011003, 501201104

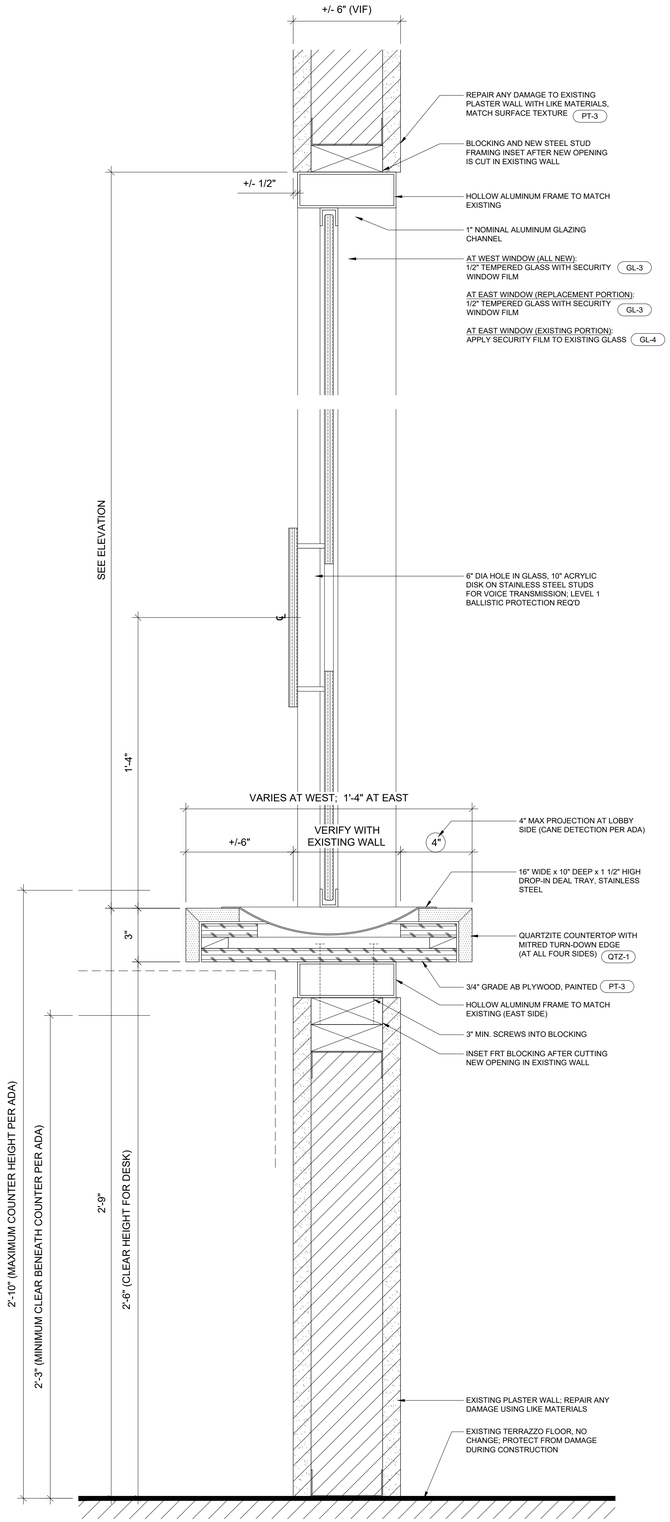
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: A-100
DRAWN BY: MJN
CHECKED BY: MJN
DESIGNED BY: MJN

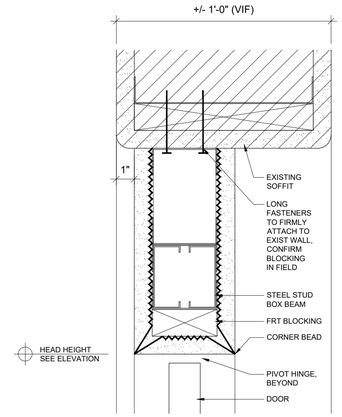
SHEET TITLE:
GENERAL ARCHITECTURAL NOTES

SHEET NUMBER:
A-100

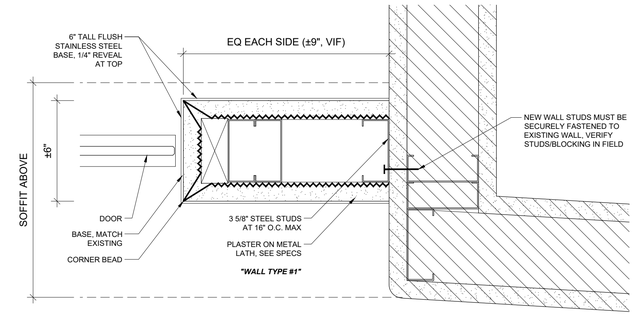
3/11/2020



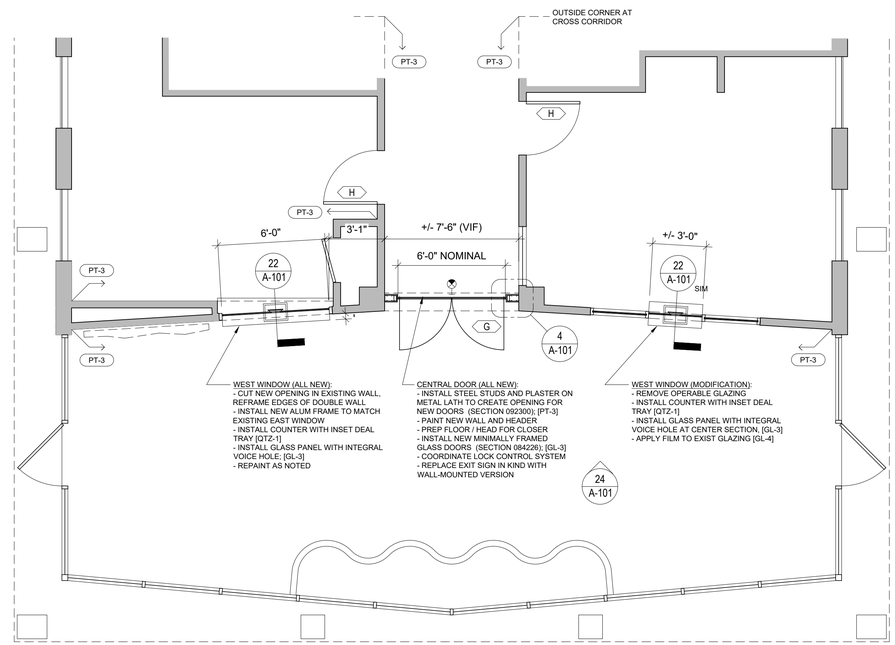
22 A-101 ENTRANCE LOBBY - SECTION DETAIL - CHECK-IN WINDOW
3" = 1'-0"



3 A-101 ENTRANCE LOBBY - SECTION DETAIL - DOOR HEAD
1/4" = 1'-0"

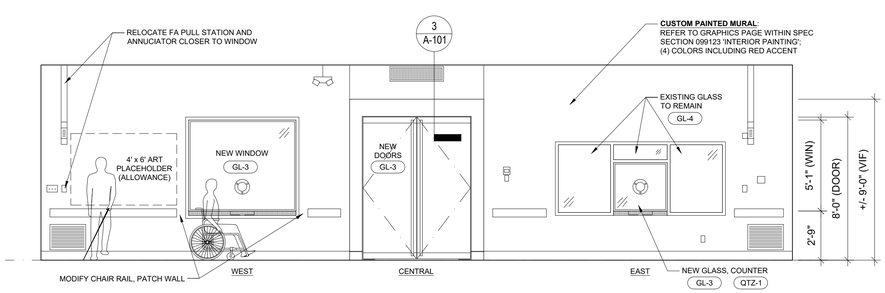


4 A-101 ENTRANCE LOBBY - PLAN DETAIL - DOOR JAMB
1/4" = 1'-0"



NORTH

19 A-101 ENTRANCE LOBBY - ENLARGED PLAN
1/4" = 1'-0"



24 A-101 ENTRANCE LOBBY - ELEVATION - NORTH
1/4" = 1'-0"

INTERIOR DOORS:

(SECTIONS 084226, 087100, 088000)

G — NEW FRONT DOOR (QTY: 1 PAIR): GL-3

DOORS: ALL GLASS, TOP & BOTTOM RAIL
PULLS: FULL-LENGTH BAR
LATCHES: MAGLOCK; COMPATIBLE POWER SUPPLY
HINGES: RECESSED FLOOR CENTER PIVOT CLOSER; TOP PIVOTS
FLOOR STOPS: N/A INTEGRAL WITH HINGE
MOTION SENSOR RELEASE: SEE BRIC DRAWINGS
PUSH TO RELEASE BUTTON: SEE BRIC DRAWINGS
CARD READER SYSTEM: SEE BRIC DRAWINGS

H — EXISTING OFFICE DOOR (QTY: 2 SINGLES):

DOOR: EXISTING TO REMAIN
KNOBS: EXISTING TO REMAIN
LATCH: EXISTING TO REMAIN
STRIKE: ELECTRIC STRIKE: NEW WITH COMPATIBLE POWER SUPPLY
HINGES: EXISTING TO REMAIN
FLOOR STOP: EXISTING TO REMAIN
CARD READER SYSTEM: SEE BRIC DRAWINGS

SEE GENERAL DOOR NOTES ON A-103
SEE ADDITIONAL INTERIOR DOORS ON A-103
SEE EXTERIOR ALUM FRAME WINDOWS ON A-104 & 105

GENERAL OPENING NOTES:
ALL DIMENSIONS SHALL BE VERIFIED IN FIELD; DIMENSIONS SHOWN FOR APPROX REFERENCE ONLY

FINISH LEGEND:

BRICK (SECTION 040120.63):
BR-1 — BRICK, MATCH EXISTING

CONCRETE (REFER TO STRUCT, LANDSCAPE):
CON-1 — STANDARD GREY CONCRETE, BROOM FINISH, SEE STRUCTURAL SPECS FOR ADDITIONAL PERFORMANCE REQS
CON-2 — STANDARD GREY CONCRETE, BROOM FINISH, PATTERNED AT EDGES; REFER TO LANDSCAPE/CIVIL DRAWINGS FOR EXTENTS, SEE STRUCTURAL SPECS FOR ADDITIONAL PERFORMANCE REQS

EFIS (SECTION 072413):
EFS-1 — EFIS, COLOR AS CHOSEN BY ARCHITECT TO MATCH EXISTING BRICK TONE

GLASS (SECTION 088000, 088813):
GL-1 — CLEAR, TEMPERED, INSULATED GLAZING
GL-2 — BACK-PAINTED, TEMPERED, INSULATED SPANDRAL GLAZING
GL-3 — CLEAR, TEMPERED, 1/2" THICK GLAZING WITH SECURITY FILM APPLIED
GL-4 — EXISTING GLAZING, APPLY SECURITY FILM
GL-5 — FIRE-PROTECTION-RATED GLAZING
GL-6 — FIRE-RESISTANCE-RATED GLAZING (ONLY ON GLAZING OVER 100 SQ IN)

PAINT (SECTION 099123 & 099600):
PT-1 — **AT CATWALK**: MEDIUM GREY (TO BE CHOSEN FROM MANUFACTURER'S FULL LINE; EXTERIOR GRADE, SEMI-GLOSS FINISH, SEE ARCHITECTURAL SPECS FOR ADDITIONAL PERFORMANCE REQS
PT-2 — **AT ENTRANCE CANOPY**: MEDIUM GREY (TO BE CHOSEN FROM MANUFACTURER'S FULL LINE; EXTERIOR GRADE, SEMI-GLOSS FINISH, SEE ARCHITECTURAL SPECS FOR ADDL PERFORMANCE REQS
PT-3 — **INTERIOR AT LOBBY**: WHITE, SHEEN TO MATCH EXISTING

SOLID SURFACE (SECTION 123661.19):
QTZ-1 — 2CM QUARTZITE

VINYL COMPOSITE TILE:
VCT-1 — MATCH EXISTING, INSTALL PER MFRS INSTRUCTIONS

WOOD DOORS (SECTION 081416):
WD-1 — PREFIN WOOD DOOR TO MATCH EXISTING

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI MICHAEL JOHN RATLIFF NUMBER A-6865 03/09/20

ARCTURIS
720 OLIVE STREET, SUITE 200
SAINT LOUIS, MO 63101
314.206.7100

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

FACILITY # 5012011003, 501201104

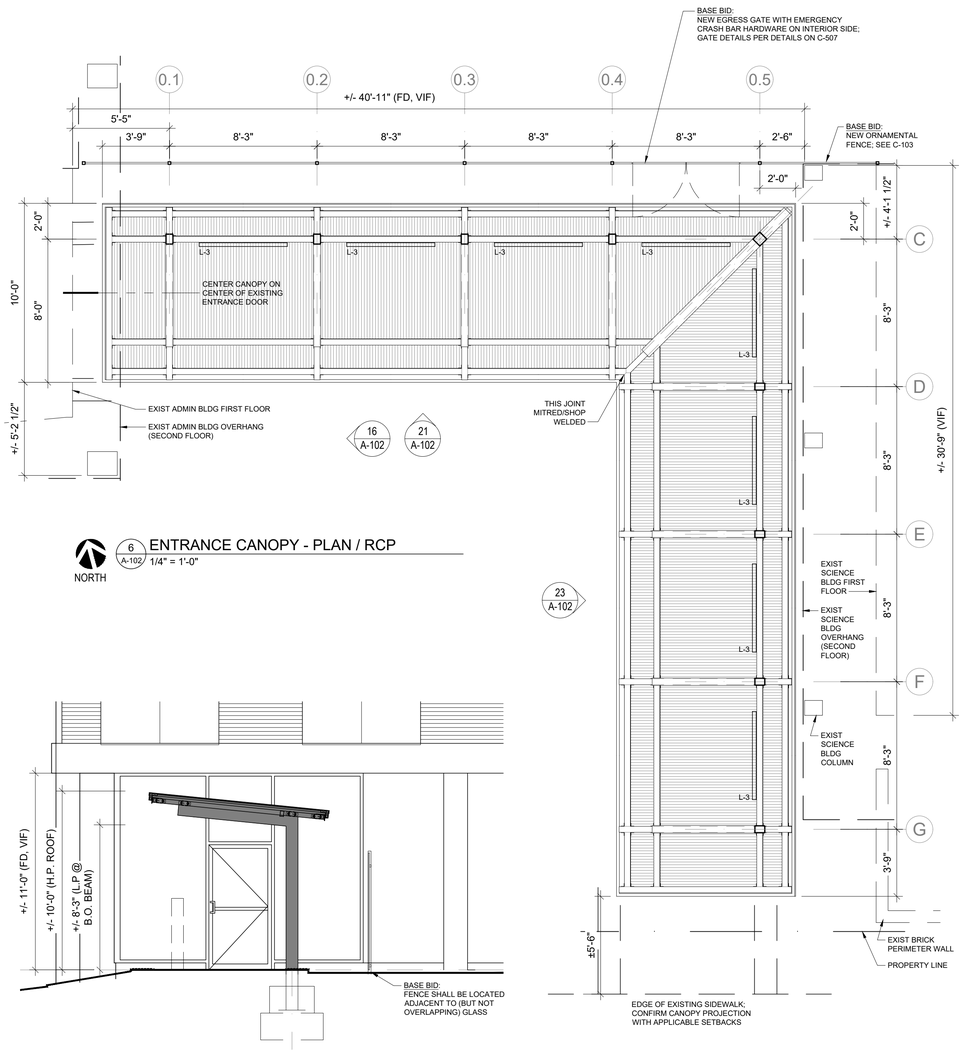
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: A-101
DRAWN BY: MJN
CHECKED BY: MJN
DESIGNED BY: MJN

SHEET TITLE:
ENLARGED ARCH PLANS & ELEVS ENTRANCE LOBBY

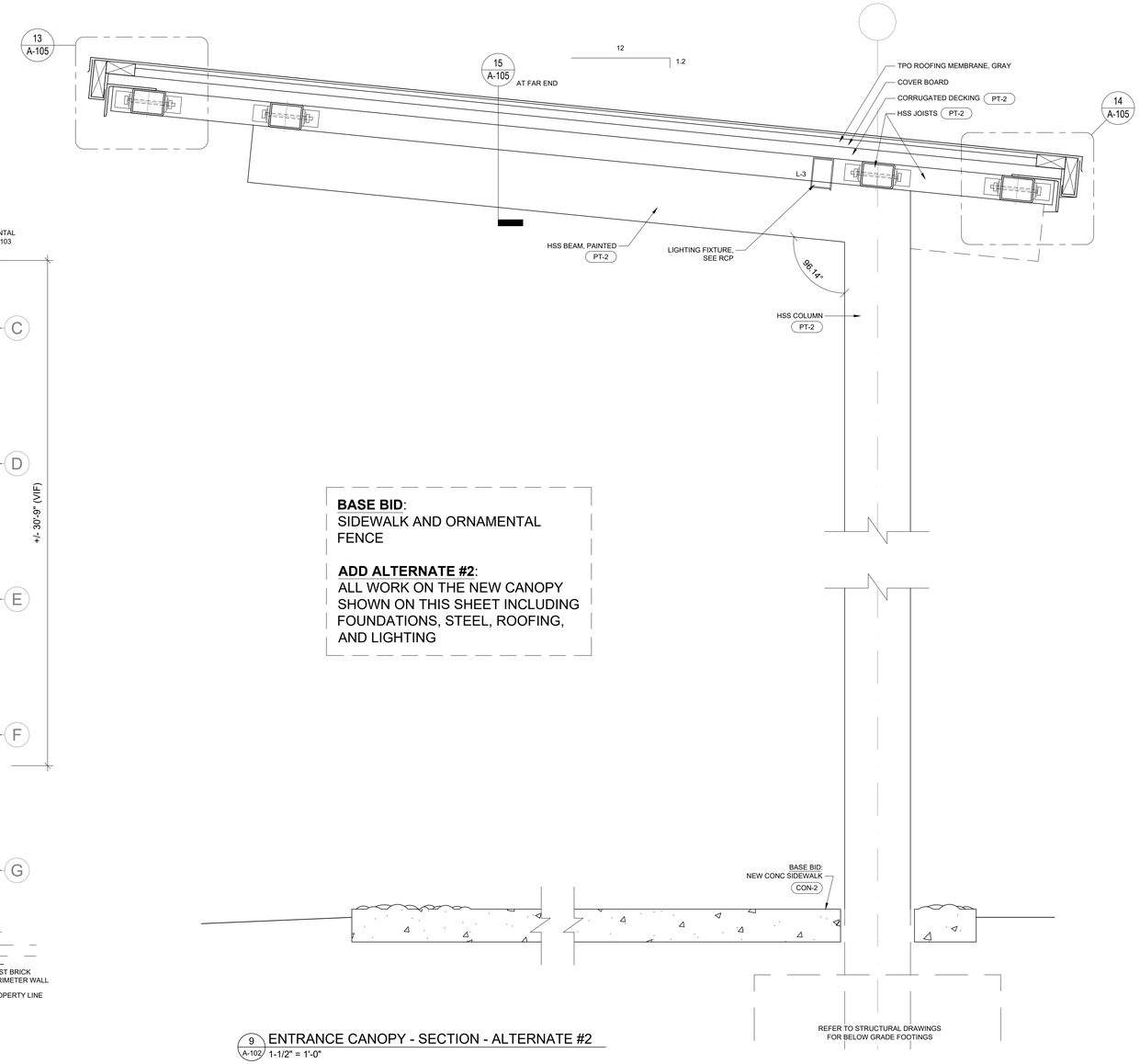
SHEET NUMBER:
A-101

3/11/2020



6 A-102 ENTRANCE CANOPY - PLAN / RCP
1/4" = 1'-0"

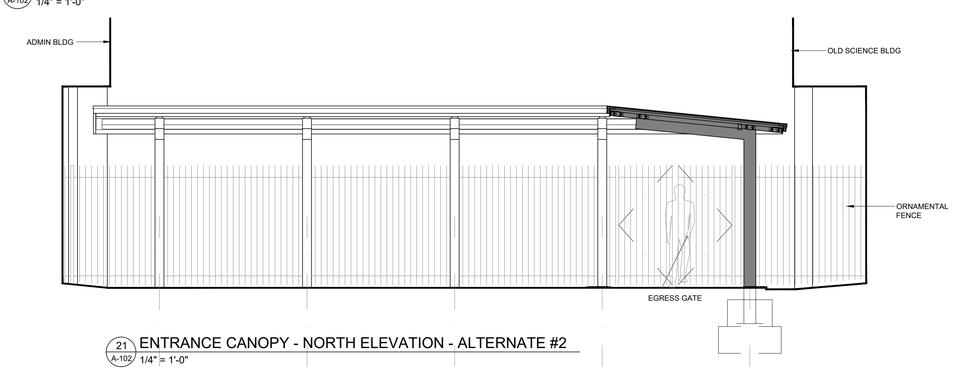
16 A-102 ENTRANCE CANOPY - WEST ELEVATION - ALTERNATE #2
1/4" = 1'-0"



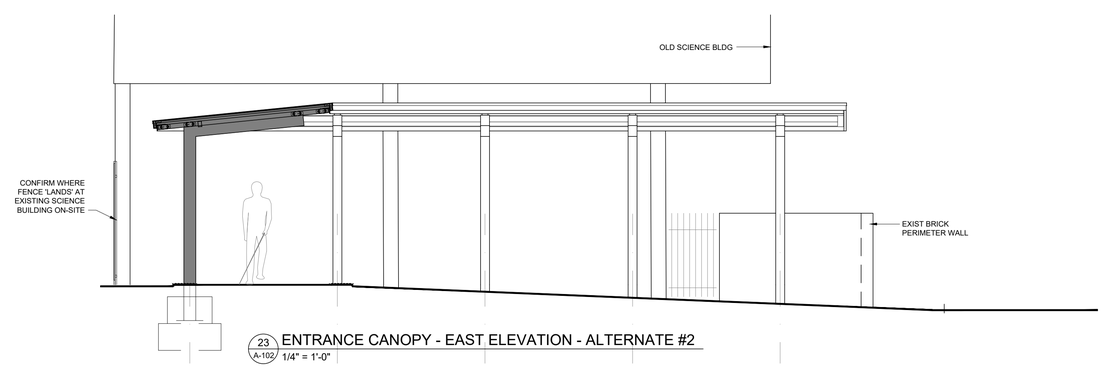
BASE BID:
SIDEWALK AND ORNAMENTAL FENCE

ADD ALTERNATE #2:
ALL WORK ON THE NEW CANOPY SHOWN ON THIS SHEET INCLUDING FOUNDATIONS, STEEL, ROOFING, AND LIGHTING

9 A-102 ENTRANCE CANOPY - SECTION - ALTERNATE #2
1-1/2" = 1'-0"



21 A-102 ENTRANCE CANOPY - NORTH ELEVATION - ALTERNATE #2
1/4" = 1'-0"



23 A-102 ENTRANCE CANOPY - EAST ELEVATION - ALTERNATE #2
1/4" = 1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI MICHAEL JOHN RATLIFF NUMBER A-8865 03/09/20

ARCTURIS
720 OLIVE STREET, SUITE 200
SAINT LOUIS, MO 63101
314.206.7100

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

FACILITY # 5012011003, 501201104

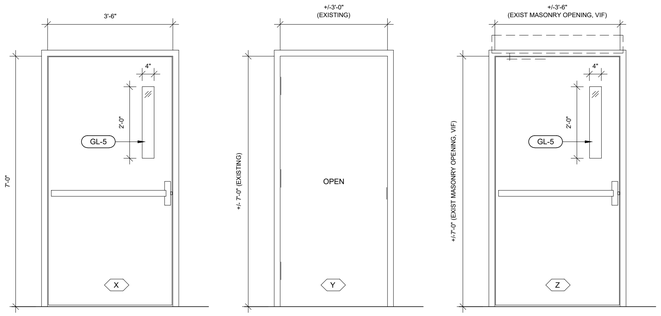
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: A-102
DRAWN BY: MJN
CHECKED BY: MJN
DESIGNED BY: MJN

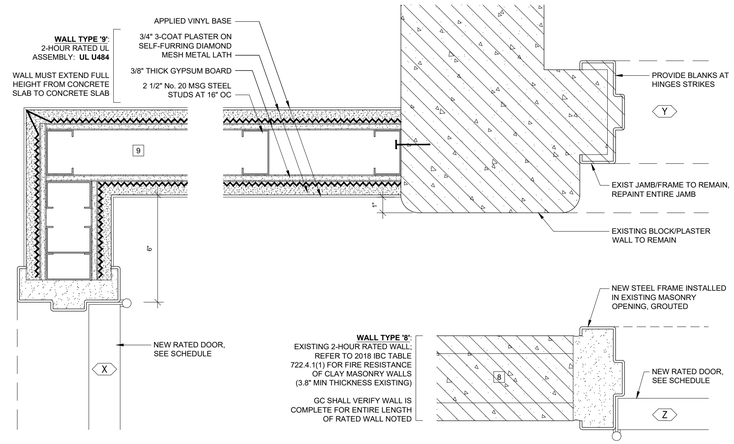
SHEET TITLE:
ENLG ARCH PLANS & ELEVS - ENTRY CANOPY - ALT #2

SHEET NUMBER:
A-102

41 OF 76 SHEETS
3/11/2020



1 A-103 FRAME/DOOR ELEVATIONS
1/2" = 1'-0"



4 A-103 WALL SECTION / PLAN DETAIL
3" = 1'-0"

5 A-103 WALL SECTION / PLAN DETAIL
3" = 1'-0"

INTERIOR DOORS:

X — NEW STAIR DOOR & FRAME (QTY: 1 SINGLE): (90 MINUTE RATED) — WD-1, GL-5
FRAME: HOLLOW METAL, RATED
DOORS: 42"x84", SOLID CORE WOOD, NARROW LITE
PULL: CRASH BAR, STANDARD ADA LEVER
LATCHES: RATED PASSAGE SET
HINGES: RATED BUTT HINGES
CLOSER: SURFACE-MOUNTED
HOLD OPEN: RELOCATE FROM DOOR 'Y'

Y — EXISTING STAIR DOOR (QTY: 1 SINGLE): (90 MINUTE RATED)
REMOVE DOOR, EXTENT OF STAIR EXPANDED
PROVIDE BLANK PLATES AT HINGES/STRIKES

Z — NEW STAIR DOOR & FRAME (QTY: 1 SINGLE): (90 MINUTE RATED) — WD-1, GL-5
FRAME: HOLLOW METAL, RATED
DOORS: 42"x84", SOLID CORE WOOD, NARROW LITE
PULLS: REUSE EXISTING
LATCHES: REUSE EXISTING, ELECTRIC STRIKE
HINGES: RATED BUTT HINGES
CLOSER: INTEGRAL WITH AUTO OPENER
AUTOMATED OPENER: REUSE EXISTING
KEYCARD: REUSE EXISTING

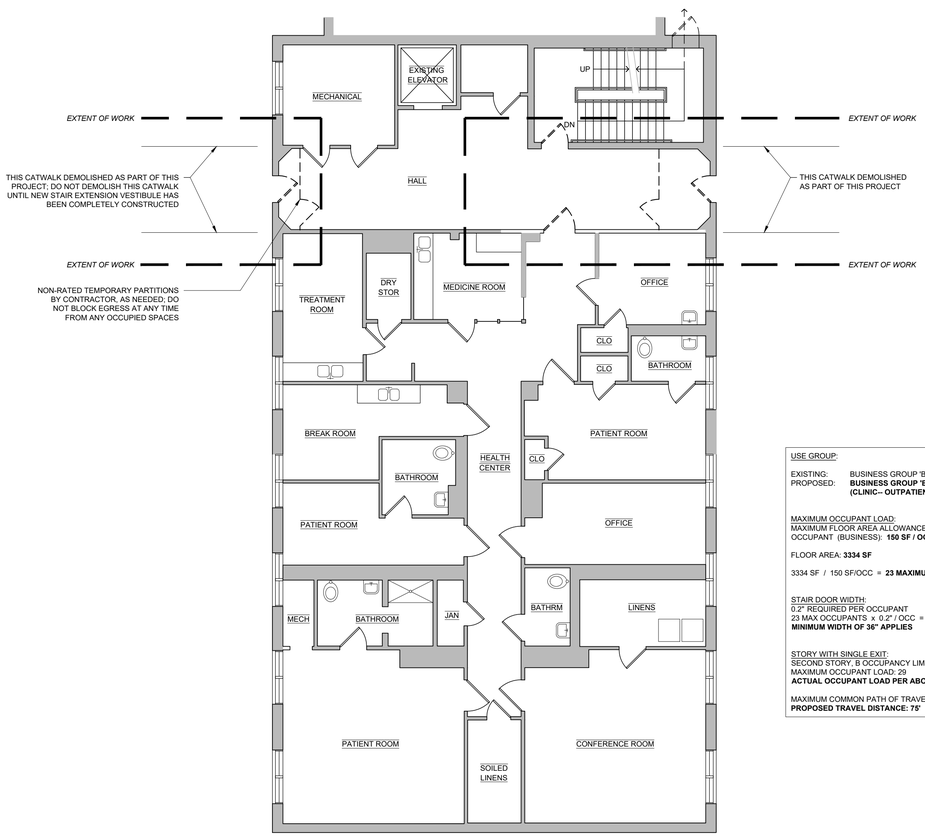
GENERAL OPENING NOTES:
ALL DIMENSIONS SHALL BE VERIFIED IN FIELD;
DIMENSIONS SHOWN FOR APPROXIMATE
PRICING ONLY

MODIFIED WALLS:

8 — EXISTING WALL (MASONRY): (2-HOUR RATED)
REINFORCE ALL PARTS OF WALL INCLUDING FIRESTOPPING AT ANY PENETRATIONS TO ACHIEVE A 2-HOUR RATED PARTITION.

9 — NEW WALL: (2-HOUR RATED)
2-HOUR RATED PLASTER FINISH WALL ON STEEL STUDS; ALL PENETRATIONS, INCLUDING PIPING, CONDUIT, WIRING, SHALL BE FIRESTOPPED AND ANY DUCTS SHALL BE PROPERLY DAMPERED.

GENERAL OPENING NOTES:
ALL DIMENSIONS SHALL BE VERIFIED IN FIELD;
DIMENSIONS SHOWN FOR APPROXIMATE
PRICING ONLY



21 A-103 SECOND FLOOR HEALTH CENTER - EXISTING PLAN
1/8" = 1'-0"

USE GROUP:

		REFERENCE:
EXISTING:	BUSINESS GROUP 'B'	
PROPOSED:	**BUSINESS GROUP 'B' (CLINIC– OUTPATIENT')**	2018 IBC 304 2018 IBC 202
MAXIMUM OCCUPANT LOAD:		2018 IBC 1004.5
MAXIMUM FLOOR AREA ALLOWANCE PER OCCUPANT (BUSINESS):	**150 SF / OCCUPANT**	2018 IBC TABLE 1004.5

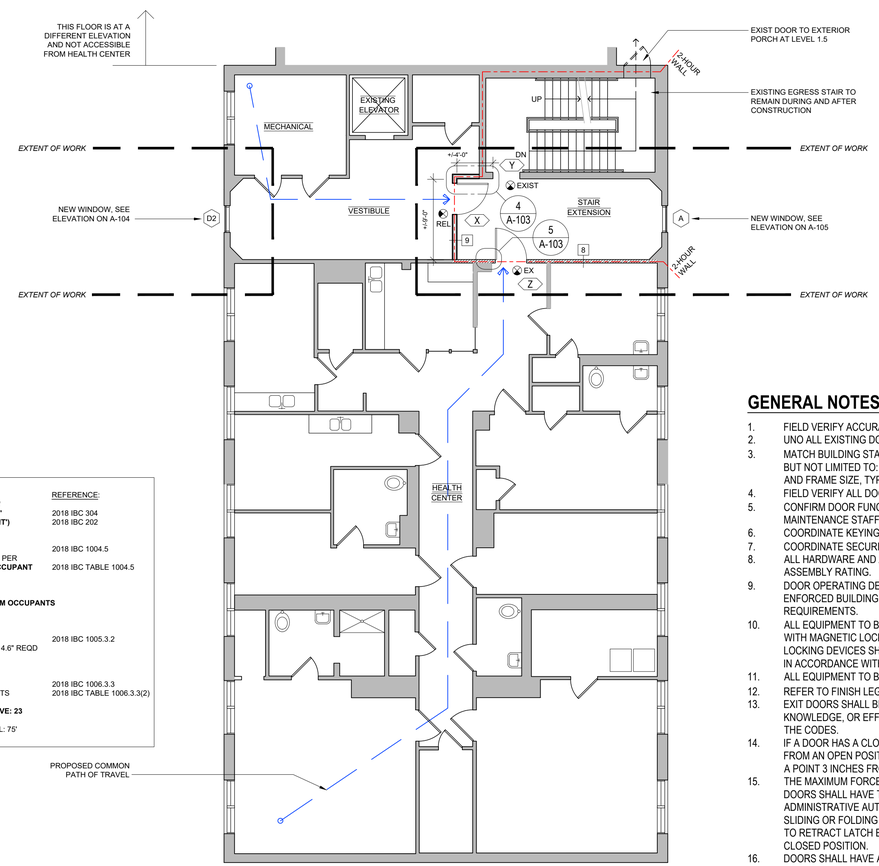
FLOOR AREA: **3334 SF**

3334 SF / 150 SF/OCC = **23 MAXIMUM OCCUPANTS**

STAIR DOOR WIDTH: 2018 IBC 1005.3.2
0.2" REQUIRED PER OCCUPANT
23 MAX OCCUPANTS x 0.2" / OCC = 4.6" REQD
MINIMUM WIDTH OF 36" APPLIES

STORY WITH SINGLE EXIT: 2018 IBC 1006.3.3
SECOND STORY, B OCCUPANCY LIMITS 2018 IBC TABLE 1006.3.3(2)
MAXIMUM OCCUPANT LOAD: 29
ACTUAL OCCUPANT LOAD PER ABOVE: 23

MAXIMUM COMMON PATH OF TRAVEL: 75'
PROPOSED TRAVEL DISTANCE: 75'



23 A-103 SECOND FLOOR HEALTH CENTER - PROPOSED PLAN
1/8" = 1'-0"

GENERAL NOTES: DOOR, FRAME, & HARDWARE

1. FIELD VERIFY ACCURACY OF ALL CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES.
2. UNO ALL EXISTING DOORS, FRAMES, AND HARDWARE TO REMAIN.
3. MATCH BUILDING STANDARDS FOR DOOR ASSEMBLIES WHENEVER POSSIBLE, INCLUDING BUT NOT LIMITED TO: DOOR SIZE, MATERIAL, AND FINISH; HARDWARE STYLE, FUNCTION, AND FINISH; AND FRAME SIZE, TYPE, AND FINISH.
4. FIELD VERIFY ALL DOOR AND FRAME SIZES PRIOR TO FABRICATION AND INSTALLATION.
5. CONFIRM DOOR FUNCTION REQUIREMENTS AT ALL SCHEDULED OPENINGS WITH BUILDING MAINTENANCE STAFF.
6. COORDINATE KEYING WITH BUILDING MAINTENANCE STAFF.
7. COORDINATE SECURITY REQUIREMENTS WITH SECURITY DRAWINGS.
8. ALL HARDWARE AND ASSEMBLIES IN RATED OPENINGS TO COMPLY WITH REQUIRED OPENING ASSEMBLY RATING.
9. DOOR OPERATING DEVICES AND ANY SPECIAL LOCKING ARRANGEMENTS TO COMPLY WITH ALL ENFORCED BUILDING CODES, ICC/ANSI 117.1, AND ALL LOCAL, STATE, AND NATIONAL ACCESSIBILITY REQUIREMENTS.
10. ALL EQUIPMENT TO BE INSTALLED SUCH THAT EMERGENCY MEANS OF EGRESS DOORS EQUIPPED WITH MAGNETIC LOCKS, KEY PAD, PUSH BUTTONS COMBINATION LOCKS OR OTHER SPECIAL LOCKING DEVICES SHALL, IN THE EVENT OF AN EMERGENCY, AUTOMATICALLY RELEASE AND OPEN IN ACCORDANCE WITH ENFORCED BUILDING CODE REQUIREMENTS.
11. ALL EQUIPMENT TO BE INSTALLED SUCH THAT RATED DOORS WILL ALWAYS LATCH.
12. REFER TO FINISH LEGEND FOR ADDITIONAL DOOR, FRAME, AND HARDWARE FINISH INFORMATION.
13. EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, SPECIAL KNOWLEDGE, OR EFFORT. THE OPERATION OF THE SECURITY DEVICES SHALL BE COMPLIANT WITH THE CODES.
14. IF A DOOR HAS A CLOSER, THEN THE SWEEP PERIOD OF THE CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70 DEGREES, THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3 INCHES FROM THE LATCH, MEASURED TO THE LEADING EDGE OF THE DOOR.
15. THE MAXIMUM FORCE FOR PUSHING OR PULLING OPEN A DOOR SHALL BE AS FOLLOWS: (1) FIRE DOORS SHALL HAVE THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY. (2) OTHER DOORS. (A) INTERIOR HINGED DOORS: 5 IBF (22.2N) (B) SLIDING OR FOLDING DOORS: 5 IBF (22.2N) THESE FORCES DO NOT APPLY TO THE FORCE REQUIRED TO RETRACT LATCH BOLTS OR DISENGAGE OTHER DEVICES THAT MAY HOLD THE DOOR IN A CLOSED POSITION.
16. DOORS SHALL HAVE A SMOOTH, UNINTERRUPTED SURFACE ON THE LOWER 10 INCHES.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI MICHAEL JOHN RATLIFF NUMBER A-6815 03/09/20

ARCTURIS
720 OLIVE STREET, SUITE 200
SAINT LOUIS, MO 63101
314.206.7100

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

FACILITY # 5012011003, 501201104

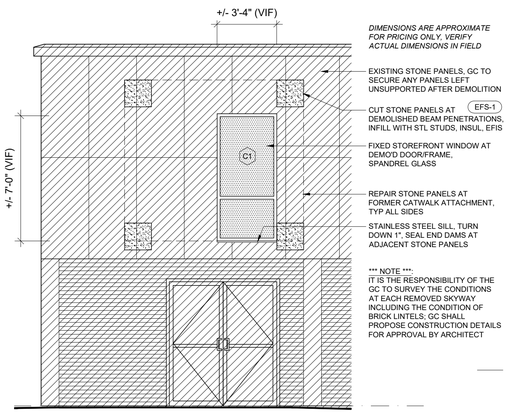
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: A-107
DRAWN BY: MJN
CHECKED BY: MJN
DESIGNED BY: MJN

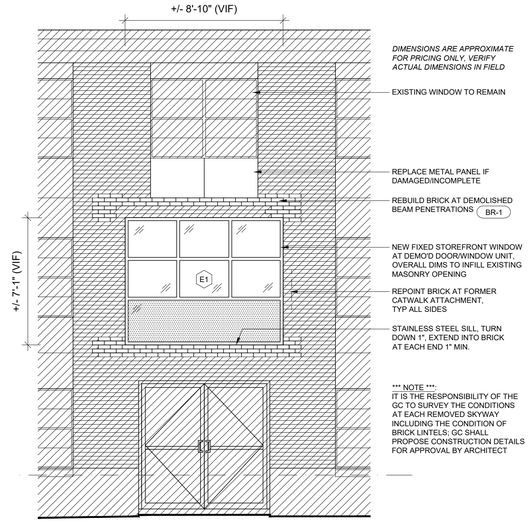
SHEET TITLE:
ARCHITECTURAL PLAN, DETAILS MED CTR, 2ND FLR

SHEET NUMBER:
A-103

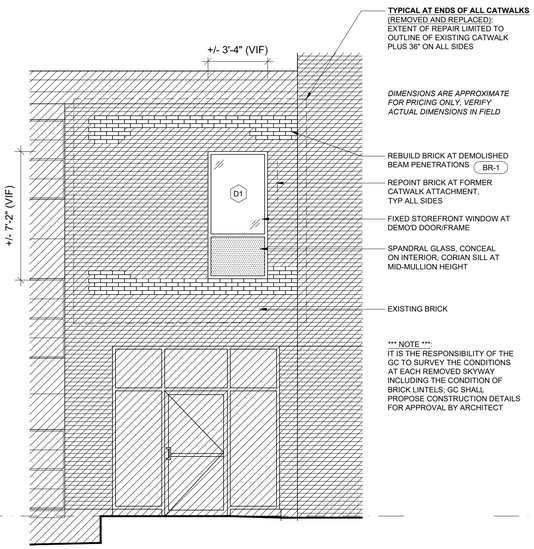
3/11/2020



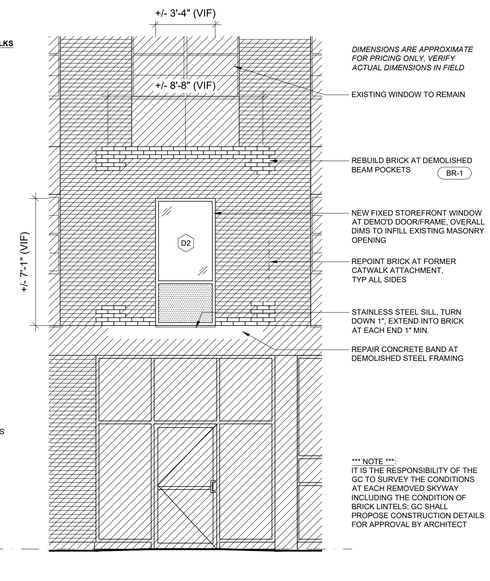
1 A-104 WEST CATWALK (SHORT) - ELEVATION AT EAST END
1/4" = 1'-0"



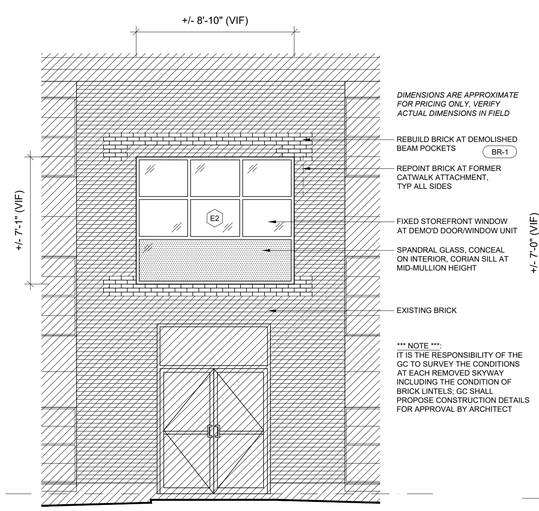
2 A-104 WEST CATWALK (SHORT) - ELEVATION AT WEST END
1/4" = 1'-0"



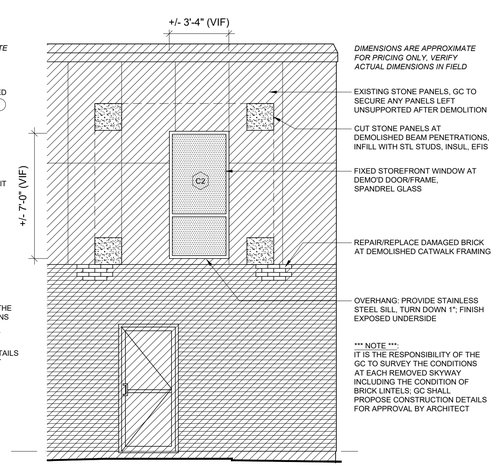
3 A-104 WEST CATWALK (LONG) - ELEVATION AT WEST END
1/4" = 1'-0"



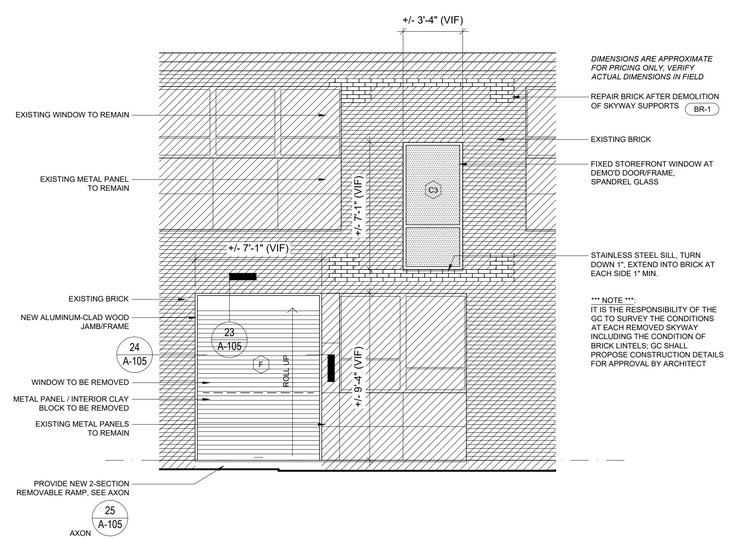
4 A-104 WEST CATWALK (LONG) - ELEVATION AT EAST END
1/4" = 1'-0"



21 A-104 EAST CATWALK (SHORT) - ELEVATION AT WEST END
1/4" = 1'-0"



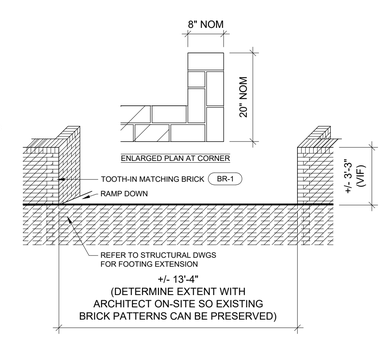
22 A-104 EAST CATWALK (SHORT) - ELEVATION AT EAST END
1/4" = 1'-0"



23 A-104 EAST CATWALK (SPUR) - ELEVATION AT SOUTH END
1/4" = 1'-0"

W#	ALUMINUM WINDOWS: (SECTIONS 084113 & 088000)	
A, B	FIXED, ALUMINUM FRAMED STOREFRONT WINDOW; TEMPERED, SPANDREL GLASS AT LOWER SECTION	GL-1, GL-2
C1, C2, C3	FIXED, ALUMINUM FRAMED STOREFRONT WINDOW; TEMPERED, SPANDREL GLASS ALL SECTIONS	GL-2
D1, D2	FIXED, ALUMINUM FRAMED STOREFRONT WINDOW; TEMPERED, SPANDREL GLASS AT LOWER SECTION	GL-1, GL-2
E1, E2	FIXED, MULTI-DIVISION ALUMINUM FRAMED STOREFRONT WINDOW; TEMPERED, SPANDREL GLASS AT LOWER SECTION(S)	GL-1, GL-2
F	OPERABLE, ROLL-UP OPAQUE DOOR, (SECTION 083323)	

GENERAL OPENING NOTES:
ALL DIMENSIONS SHALL BE VERIFIED IN FIELD; DIMENSIONS SHOWN FOR APPROXIMATE PRICING ONLY



25 A-104 CONSTRUCTION ENTRANCE - SOUTH ELEVATION
1/4" = 1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI MICHAEL JOHN RATLIFF NUMBER A-6865 REGISTERED ARCHITECT
03/09/20

ARCTURIS
720 OLIVE STREET, SUITE 200
SAINT LOUIS, MO 63101
314.206.7100

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

FACILITY # 5012011003, 501201104

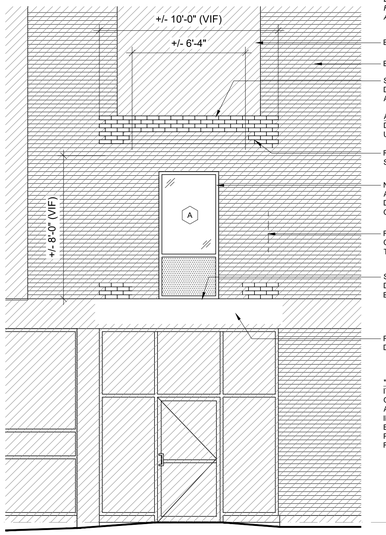
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: A-104
DRAWN BY: MJN
CHECKED BY: MJN
DESIGNED BY: MJN

SHEET TITLE:
ENLARGED ARCH ELEVATIONS CATWALK INFILLS

SHEET NUMBER:
A-104

3/11/2020



DIMENSIONS ARE APPROXIMATE FOR PRICING ONLY. VERIFY ACTUAL DIMENSIONS IN FIELD

EXISTING METAL PANELS

EXISTING BRICK

STAINLESS STEEL SILL, TURN DOWN 1", EXTEND INTO BRICK AT EACH END 1" MIN.

AT INTERIOR (NOT SHOWN): DO NOT DAMAGE GLAZED CLAY UNITS

REBUILD BRICK AFTER SKYWAY DEMO (BR-1)

NEW FIXED STOREFRONT WINDOW AT DEMO'D DOOR/FRAME, OVERALL DIMS TO INFILL EXISTING MASONRY OPENING

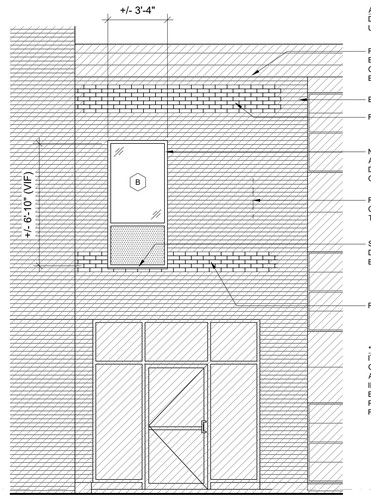
REPOINT BRICK AT FORMER CATWALK ATTACHMENT, TYP ALL SIDES

STAINLESS STEEL SILL, TURN DOWN 1", EXTEND INTO BRICK AT EACH SIDE 1" MIN.

REPAIR CONCRETE BAND AFTER DEMOLITION OF PREVIOUS SKYWAY

*** NOTE ***:
IT IS THE RESPONSIBILITY OF THE GC TO SURVEY THE CONDITIONS AT EACH REMOVED SKYWAY INCLUDING THE CONDITION OF BRICK LINTELS; GC SHALL PROPOSE CONSTRUCTION DETAILS FOR APPROVAL BY ARCHITECT

1 A-105 EAST CATWALK - ELEVATION AT WEST END
1/4" = 1'-0"



DIMENSIONS ARE APPROXIMATE FOR PRICING ONLY. VERIFY ACTUAL DIMENSIONS IN FIELD

AT INTERIOR (NOT SHOWN): DO NOT DAMAGE GLAZED CLAY UNITS

ROOF MEMBRANE WRAPS UP EXISTING BUILDING, TUCK COUNTERFLASHING BEHIND EXISTING ROOF EDGE FLASHING

EXISTING BRICK

REPAIR BRICK AFTER SKYWAY DEMO (BR-1)

NEW FIXED STOREFRONT WINDOW AT DEMO'D DOOR/FRAME, OVERALL DIMS TO INFILL EXISTING MASONRY OPENING

REPOINT BRICK AT FORMER CATWALK ATTACHMENT, TYP ALL SIDES

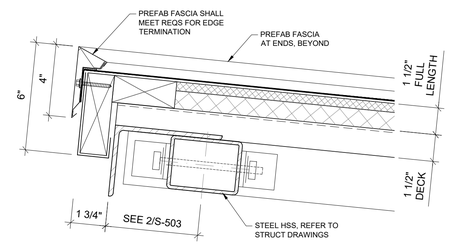
STAINLESS STEEL SILL, TURN DOWN 1", EXTEND INTO BRICK AT EACH SIDE 1" MIN.

REPAIR BRICK AFTER SKYWAY DEMO (BR-1)

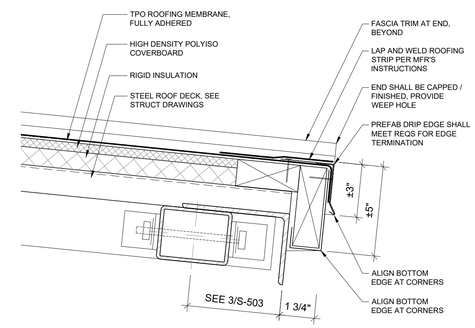
*** NOTE ***:
IT IS THE RESPONSIBILITY OF THE GC TO SURVEY THE CONDITIONS AT EACH REMOVED SKYWAY INCLUDING THE CONDITION OF BRICK LINTELS; GC SHALL PROPOSE CONSTRUCTION DETAILS FOR APPROVAL BY ARCHITECT

2 A-105 EAST CATWALK - ELEVATION AT EAST END
1/4" = 1'-0"

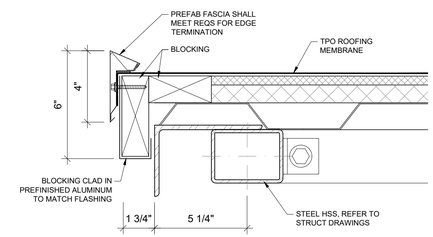
ALTERNATE #2



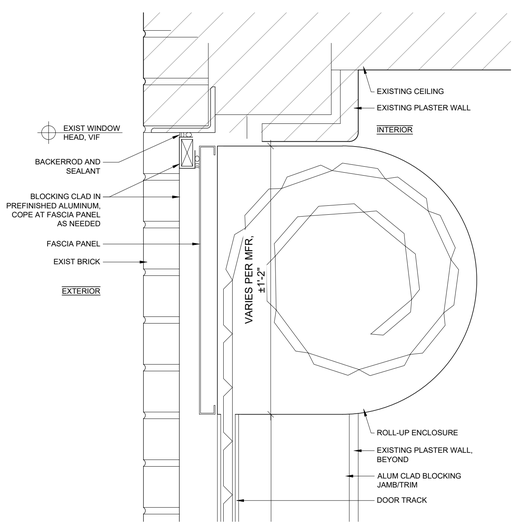
13 A-105 ENTRY CANOPY - SECTION AT ROOF, HIGH END
3" = 1'-0"



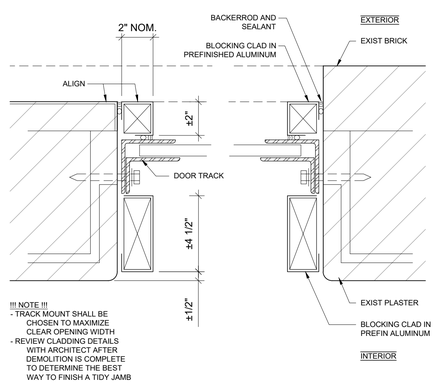
14 A-105 ENTRY CANOPY - SECTION AT ROOF, LOW END
3" = 1'-0"



15 A-105 ENTRY CANOPY - SECTION AT ROOF, END
3" = 1'-0"



23 A-105 NEW ROLL-UP DOOR - SECTION AT HEAD
1 1/2" = 1'-0"



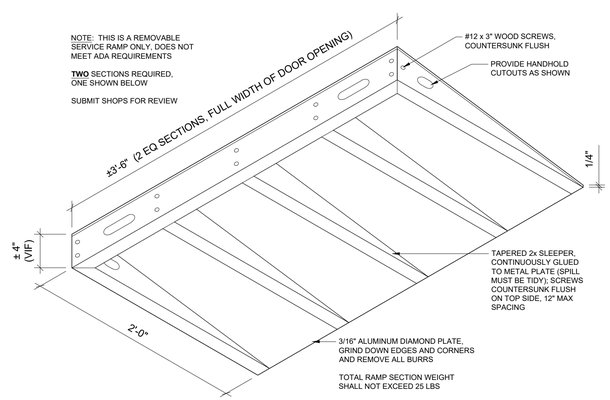
!!! NOTE !!!
- TRACK MOUNT SHALL BE CHOSEN TO MAXIMIZE CLEAR OPENING WIDTH
- REVIEW CLADDING DETAILS WITH ARCHITECT AFTER DEMOLITION IS COMPLETE TO DETERMINE THE BEST WAY TO FINISH A TIDY JAMB

24 A-105 NEW ROLL-UP DOOR - PLAN SECTION AT JAMBS
1 1/2" = 1'-0"

NOTE: THIS IS A REMOVABLE SERVICE RAMP ONLY, DOES NOT MEET ADA REQUIREMENTS

TWO SECTIONS REQUIRED, ONE SHOWN BELOW

SUBMIT SHOPS FOR REVIEW



25 A-105 NEW ROLL-UP DOOR - MOBILE RAMP WORM'S EYE AXON
1 1/2" = 1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI MICHAEL JOHN RATLIFF NUMBER A-6815 03/09/20

ARCTURIS
720 OLIVE STREET, SUITE 200
SAINT LOUIS, MO 63101
314.206.7100

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

FACILITY # 5012011003, 501201104

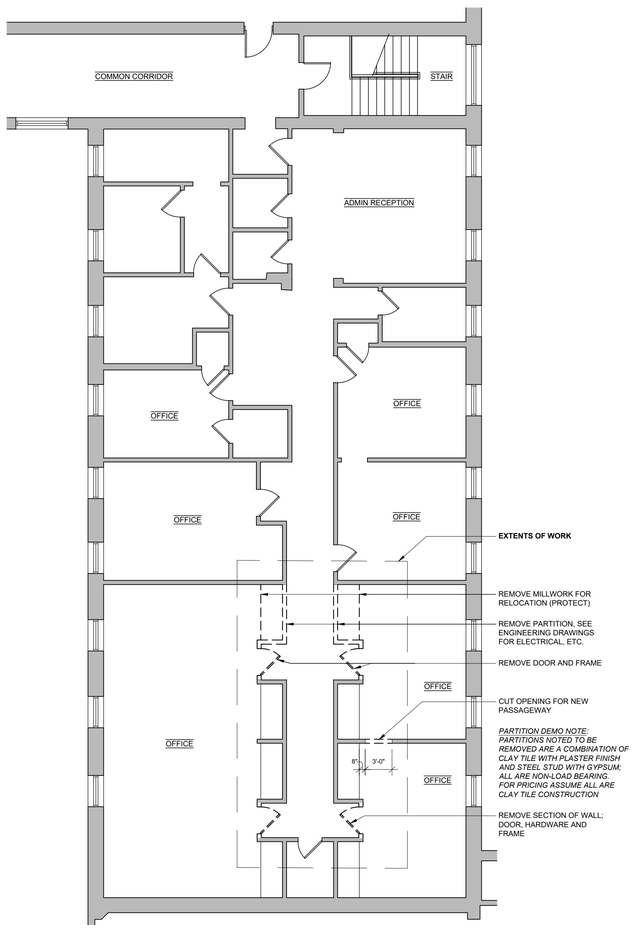
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: A-105
DRAWN BY: MJN
CHECKED BY: MJN
DESIGNED BY: MJN

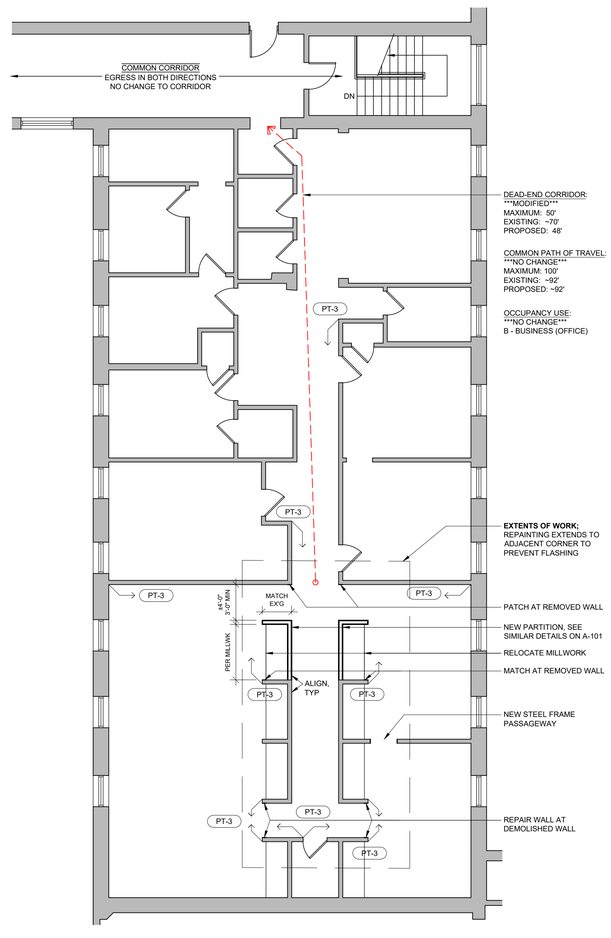
SHEET TITLE:
ARCHITECTURAL DETAILS VARIOUS

SHEET NUMBER:
A-105

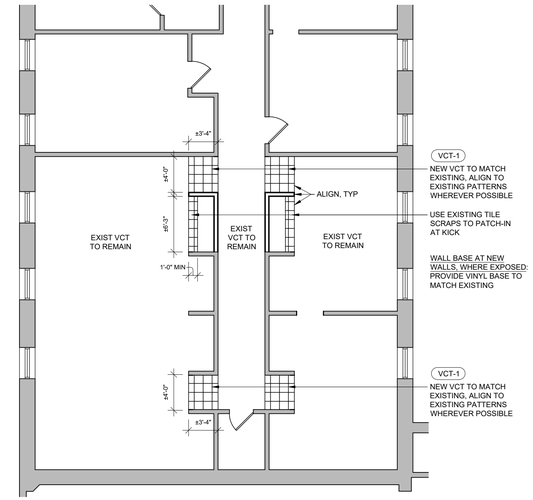
3/11/2020



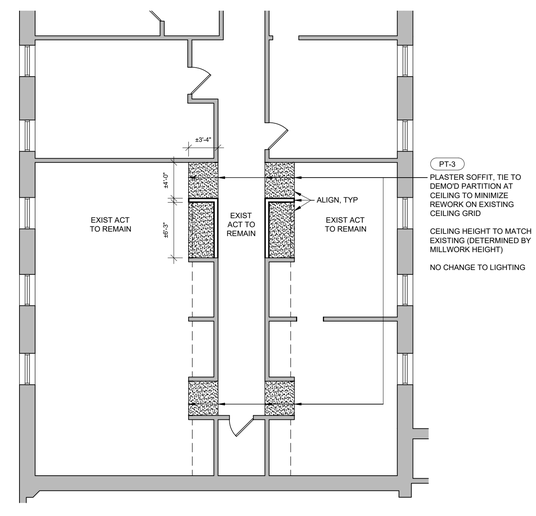
21 A-106 SECOND FLOOR ADMIN - DEMOLITION PLAN
1/8" = 1'-0"



22 A-106 SECOND FLOOR ADMIN - PROPOSED PLAN
1/8" = 1'-0"



13 A-106 SECOND FLOOR ADMIN - FLOOR FINISH PLAN
1/8" = 1'-0"



23 A-106 SECOND FLOOR ADMIN - RCP
1/8" = 1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
MICHAEL JOHN RATLIFF
NUMBER A-6865
03/09/20

ARCTURIS
720 OLIVE STREET, SUITE 200
SAINT LOUIS, MO 63101
314.206.7100

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

FACILITY # 5012011003, 501201104

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

CAD DWG FILE: A-106
DRAWN BY: MJN
CHECKED BY: MJN
DESIGNED BY: MJN

SHEET TITLE:
ARCHITECTURAL PLANS, RCP ADMIN, 2ND FLR

SHEET NUMBER:
A-106

45 OF 76 SHEETS
3/11/2020

GENERAL NOTES

BUILDING CODE

1. PROJECT IS DESIGNED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE - 2018, INCLUDING ALL REFERENCED STANDARDS AS LISTED IN CHAPTER 35.
2. MINIMUM LOADING CONDITIONS ARE PER THE ASCE STANDARD, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ASCE 7-16".
3. WHERE CONFLICT OCCURS BETWEEN REFERENCED CODES AND STANDARDS, SPECIFICATIONS, AND GENERAL NOTES, THE MOST STRINGENT REQUIREMENT SHALL GOVERN.

DESIGN CRITERIA

1. RISK CATEGORY II
2. ALLOWANCE FOR SUPERIMPOSED ROOF DEAD LOAD
   - STEEL BEAMS, METAL DECK 10 PSF
   - SUSPENDED MECH, ELEC, PLMB, ETC. 5 PSF
3. FLOOR LIVE LOAD
   - CATWALK 100 PSF
4. ROOF LIVE LOAD
   - MINIMUM LIVE LOAD 20 PSF
5. ROOF SNOW LOAD
   - GROUND SNOW LOAD, Pg 20 PSF
   - FLAT-ROOF SNOW LOAD, Pf 20 PSF
   - TERRAIN CATEGORY C
   - SNOW EXPOSURE FACTOR, Ce 1.0
   - IMPORTANCE FACTOR, Is 1.0
   - THERMAL FACTOR, Ct 1.2
6. WIND DESIGN DATA
   - BASIC WIND SPEED, V 115 MPH
   - IMPORTANCE FACTOR, I 1.0
   - OCCUPANCY CATEGORY II
   - WIND EXPOSURE CATEGORY C
   - BUILDING CLASSIFICATION OPEN
   - ENTRANCE CANOPY, CHAP. 30, PART 5 - OPEN BUILDING
   - WIND UPLIFT -93 PSF
     88 PSF
   - WIND ON STRUCTURE, ASCE, CHAP. 29.5 49 PSF
7. EARTHQUAKE DESIGN DATA
   - IMPORTANCE FACTOR, I 1.0
   - OCCUPANCY (RISK 2012 IBC) CATEGORY II
   - MAPPED SPECTRAL RESPONSE ACCELERATIONS
     - SHORT PERIOD PARAMETER, S_S 0.430 g
     - 1 SECOND PARAMETER, S_1 0.165 g
   - SITE CLASS D
   - DESIGN SPECTRAL RESPONSE ACCELERATIONS
     - SHORT PERIOD PARAMETER, S_{DS} 0.417 g
     - 1 SECOND PARAMETER, S_{D1} 0.236 g
   - SEISMIC DESIGN CATEGORY C
   - MOMENT-RESISTING FRAME SYSTEM:
     STEEL ORDINARY MOMENT FRAME WITH UNLIMITED HEIGHT
     - RESPONSE MODIFICATION FACTOR, R 1.0
     - SEISMIC RESPONSE COEFFICIENT, C_S 0.417
     - DESIGN BASE SHEAR (CATWALK), V 31.85 KIPS
     - DESIGN BASE SHEAR, (ENTRANCE CANOPY), V 7.6 KIPS
8. GEOTECHNICAL INFORMATION
   - 8.1. GEOTECHNICAL RECOMMENDATIONS ARE FOUND IN THE "GEOTECHNICAL REPORT" BY "SCI ENGINEERING" DATED 08-20-2019. THIS REPORT IS CONSIDERED PART OF THE PROJECT DOCUMENTS. REFER TO THIS REPORT FOR ADDITIONAL INFORMATION AND RECOMMENDATIONS FOR SITE PREPARATION, BEARING MATERIALS, ENGINEERED FILL, BACKFILL, ETC.
   - 8.2. ALLOWABLE BEARING PRESSURE
     - ISOLATED SPREAD FOOTING 2.0 KSF
     - CONTINUOUS STRIP FOOTING 2.0 KSF
   - 8.3. FROST PROTECTION DEPTH FOR BOTTOM OF EXTERIOR FOOTINGS SHALL BE 30 INCHES MINIMUM.

GENERAL PROVISIONS

1. STRUCTURAL DRAWINGS ARE INTENDED TO BE PART OF A COMPLETE PROJECT DOCUMENT SET INCLUDING, BUT NOT LIMITED TO, ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND CIVIL DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE OTHER TRADES AND INCORPORATING INFORMATION FROM OTHER PROJECT DOCUMENTS INTO THEIR SHOP DRAWINGS AND WORK.
2. THE STRUCTURE IS DESIGNED TO PERFORM AS A UNIT UPON COMPLETION OF CONSTRUCTION. IT IS THE RESPONSIBILITY OF T HE CONTRACTOR TO PROVIDE TEMPORARY BRACING, SHORING AND/OR OTHER PROTECTIVE MEASURES AS REQUIRED TO PROTECT AND/OR SUPPORT THE STRUCTURE DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR ALL SEQUENCING, MEANS, AND METHODS OF CONSTRUCTION.
3. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN THE CONTRACT DOCUMENTS AND THE ACTUAL FIELD CONDITIONS.
4. ALL POTENTIAL OMISSIONS, CONFLICTS OR DISCREPANCIES IN THE CONTRACT DOCUMENTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONTINUATION OF WORK.
5. ALL SHOP DRAWINGS AND PRODUCT SUBMITTALS ARE REVIEWED FOR GENERAL CONFORMANCE WITH THE PROJECT DOCUMENTS. REVIEWED SUBMITTALS DO NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY TO CONFORM WITH THE DESIGN DRAWINGS AND SPECIFICATIONS.
6. PLAN DRAWINGS AND DETAILS SHALL NOT BE SCALED. USE DIMENSIONS NOTED, SEE ARCHITECTURAL DRAWINGS OR SUBMIT FOR CLARIFICATION.
7. DO NOT ALTER THE SIZE, DIMENSION, GRADE, OR OTHER MEMBER PROPERTIES WITHOUT WRITTEN APPROVAL FROM THE ENGINEER.
8. NO OPENINGS OR MODIFICATIONS TO ANY STRUCTURAL ELEMENTS SHALL BE PERFORMED WITHOUT WRITTEN APPROVAL FROM THE ENGINEER.
9. SMALL OPENINGS IN WALLS, FLOORS AND ROOFS DIMENSIONED AS 16" OR LESS ARE NOT TYPICALLY SHOWN ON THE STRUCTURAL DRAWINGS. COORDINATE WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, EQUIPMENT, ETC. DRAWINGS FOR SIZE AND LOCATION OF SMALL OPENINGS. SEE TYPICAL DETAILS FOR SUPPLEMENTAL FRAMING OR REINFORCING WHERE REQUIRED.
10. VERIFY DIMENSIONS, WEIGHTS, LOCATIONS, AND DETAILS OF ELEVATORS, STAIRS, EQUIPMENT PITS, DUNNAGE, EQUIPMENT CURBS, SPECIALTY FURNISHINGS, ETC. PRIOR TO FABRICATION OF MATERIALS.
11. DETAILS NOTED AS "TYPICAL" ARE TO APPLY TO ALL CONDITIONS, INCLUDING SIMILAR CONDITIONS, ON THE PROJECT EXCEPT WHERE SPECIFIC DETAILS OR SECTIONS ARE PROVIDED. "TYPICAL" DETAILS APPLY REGARDLESS OF BEING SPECIFICALLY NOTED OR CUT ON THE DRAWINGS. SPECIFIC DETAILS SHALL ALSO APPLY TO THOSE CONDITIONS WHICH ARE THE SAME OR SIMILAR ELSEWHERE ON THE JOB REGARDLESS OF BEING SPECIFICALLY NOTED OR CUT ON DRAWINGS.

DELEGATED DESIGN SUBMITTALS

1. THE DESIGN RESPONSIBILITY FOR THE FOLLOWING SUBMITTALS IS TO BE PERFORMED BY A REGISTERED ENGINEER EMPLOYED BY THE CONTRACTOR.
   - GREENHOUSE STRUCTURE
   - ROPES COURSE FOUNDATION
   - PLAYGROUND EQUIPMENT FOUNDATIONS
2. ENGINEER SHALL BE A REGISTERED PROFESSIONAL OR STRUCTURAL ENGINEER AS APPLICABLE IN THE STATE WHERE THE PROJECT IS LOCATED.
3. SUBMITTAL SHALL BE SIGNED AND SEALED BY THE RESPONSIBLE ENGINEER PRIOR TO REVIEW BY ENGINEER OF RECORD.
4. SUBMITTAL REVIEW WILL INCLUDE GENERAL CONFORMANCE TO DESIGN CRITERIA INCLUDED IN THE PROJECT DOCUMENTS.

EXISTING CONDITIONS

1. CONTRACTOR SHALL BECOME FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING AND PROVIDE THE NECESSARY MEANS AND METHODS TO ACCOMPLISH THE SPECIFIED WORK.
2. FIELD VERIFY ALL CONDITIONS, SIZES, SPACING AND DIMENSIONS OF EXISTING STRUCTURES OR OBSTACLES PRIOR TO TO FABRICATION AND/OR NEW CONSTRUCTION. CONTACT ENGINEER IF EXISTING CONDITIONS, ETC. VARY FROM THOSE SHOWN ON THESE DRAWINGS.
3. CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY REMOVAL AND REPLACEMENT/RELOCATION OF ANY NON-STRUCTURAL ELEMENTS NECESSARY TO COMPLETE THE STRUCTURAL WORK. FOLLOW ALL APPLICABLE CODES AND REQUIREMENTS OF THE AFFECTED TRADES. PROVIDE FOR THIS REQUIREMENT IN THE BID.

STATEMENT OF SPECIAL INSPECTIONS

1. SPECIAL INSPECTIONS SHALL BE IN ACCORDANCE WITH THE IBC SECTION 1704 TOGETHER WITH THE LOCAL AND STATE AMENDMENTS. REFER TO THE TABLES CONTAINED IN THE IBC FOR MATERIAL SPECIFIC INSPECTION TYPES AND FREQUENCIES.
2. SPECIAL INSPECTIONS AND ASSOCIATED TESTING SHALL BE PERFORMED BY AN APPROVED ACCREDITED INDEPENDENT AGENCY. THE CONTRACTOR WILL SECURE AND PAY FOR THE SERVICES OF THE AGENCY TO PERFORM ALL SPECIAL INSPECTIONS AND ASSOCIATED TESTS. INSPECTORS FOR EACH SYSTEM AND MATERIAL SHALL BE INTERNATIONAL CODE COUNCIL (ICC) CERTIFIED OR OTHERWISE APPROVED BY THE BUILDING OFFICIAL.
3. THE SPECIAL INSPECTOR SHALL OBSERVE THE INDICATED WORK FOR COMPLIANCE WITH THE APPROVED CONTRACT DOCUMENTS AND SUBMIT RECORDS OF INSPECTION. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION.
4. SPECIAL INSPECTIONS AND ASSOCIATED TESTING REPORTS SHALL BE SUBMITTED TO THE ENGINEER, CONTRACTOR, BUILDING OFFICIAL AND OWNER WITHIN ONE WEEK OF INSPECTION OR WITHIN ONE WEEK OF TEST COMPLETION. INSPECTIONS FOR WHICH REPORTING SHALL BE REQUIRED ARE NOTED IN THE TABLES CONTAINED IN THE IBC CHAPTER 17.
5. AT THE CONCLUSION OF CONSTRUCTION, A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF PREVIOUSLY NOTED DISCREPANCIES SHALL BE SUBMITTED.
6. STATEMENT OF SPECIAL INSPECTION REQUIREMENTS FOR SEISMIC RESISTANCE SHALL BE IN ACCORDANCE WITH IBC SECTION 1705 TOGETHER WITH LOCAL AND STATE AMENDMENTS.

FOUNDATION

1. THE FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL REPORT. SEE DESIGN CRITERIA.
2. FOUNDATIONS SHALL BEAR ON VIRGIN SOILS OR ENGINEERED FILL CAPABLE OF PROVIDING THE DESIGN ALLOWABLE BEARING PRESSURE.
3. BEARING MATERIALS SHALL BE INSPECTED BY A GEOTECHNICAL ENGINEER PRIOR TO CONCRETE PLACEMENT. THE GEOTECHNICAL ENGINEER SHALL BE THE SOLE JUDGE AS TO THE SUITABILITY OF THE BEARING MATERIALS TO MEET THE SPECIFIED CAPACITY. ADJUST BOTTOM OF FOOTING ELEVATIONS AS REQUIRED
4. PROVIDE DEWATERING SYSTEMS AS REQUIRED TO KEEP EXCAVATIONS FREE OF WATER.
5. DO NOT PLACE CONCRETE IN EXCAVATIONS WITH ICE OR FROZEN GROUND. PROTECT SUBGRADE AS NECESSARY.
6. FOOTINGS PLACED BELOW GRADE MAY BE EARTH FORMED PROVIDED AN ADDITIONAL INCH OF CONCRETE COVER IS PROVIDED ALL AROUND.
7. THE CONTRACTOR SHALL SUBMIT, FOR REVIEW, CHECKED SHOP DRAWINGS FOR ALL REINFORCING MATERIALS.

CONCRETE

1. CONCRETE MATERIALS AND CONSTRUCTION SHALL ADHERE TO THE "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY", ACI 318, YEAR ACCORDING TO PROJECT BUILDING CODE.
2. GENERAL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR STRUCTURAL CONCRETE", ACI 301.
3. CONCRETE 28-DAY COMPRESSIVE STRENGTH AND DENSITY SHALL BE AS FOLLOWS:

	STRENGTH, f'c	DENSITY, pcf
SLABS ON STEEL DECK	4000 PSI	145
FILL SLABS & STAIR PAN FILL	3000 PSI	115
ALL OTHER CONCRETE	4000 PSI	145

4. REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60. REINFORCING TO BE WELDED SHALL CONFORM TO ASTM A706. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064.
5. ALL REINFORCING SHALL BE DETAILED, FABRICATED, SUPPORTED, AND PLACED IN ACCORDANCE WITH THE "ACI DETAILING MANUAL" AND CRSI'S "MANUAL OF STANDARD PRACTICE", LATEST EDITIONS.
6. REINFORCING SHALL BE PLACED WITH CONCRETE COVER AS SHOWN IN DETAILS. WHERE BAR PLACEMENT IS NOT SHOWN, PROVIDE CONCRETE COVER PER ACI, SECTION 7.7 WITH THE FOLLOWING MINIMUM DIMENSIONS WHERE CONCRETE IS:
   - CAST AGAINST EARTH 3 IN
   - EXPOSED TO EARTH & WEATHER 2 IN
   - NOT EXPOSED, SLABS & WALLS & JOISTS 3/4 IN
   - NOT EXPOSED, BEAMS & COLUMNS 1.5 IN
7. SPLICE REINFORCING BARS WITH CLASS "B" SPLICES, UNO, PER THE REQUIREMENTS OF ACI, CHAPTER 12. PROVIDE MINIMUM OF 6" LAP SPLICING FOR WWF IN SOG AND 12" FOR ELEVATED SLABS.
8. PROVIDE FOUNDATION DOWELS OF THE SAME SIZE AND LOCATION AS THAT REQUIRED IN THE COLUMN AND/OR WALL ABOVE. PROVIDE DEVELOPMENT AND SPLICES PER ACI.
9. CONSTRUCTION JOINTS SHALL BE LOCATED ON THE SHOP DRAWINGS AND ARE SUBJECT TO THE APPROVAL OF THE ENGINEER. LOCATE AT POINTS OF MINIMUM SHEAR. REINFORCING SHALL BE CONTINUOUS THROUGH THE JOINT UNLESS IT ALSO FUNCTIONS AS A CONTROL JOINT (50% PASSES). SUBMIT DETAILS OF CONSTRUCTION JOINTS IN THE SHOP DRAWINGS. HORIZONTAL CONSTRUCTION JOINTS ARE NOT ALLOWED IN WALLS OR SLABS.
10. CONTROL JOINTS SHALL BE SPACED AT 15 FOOT MAXIMUM INTERVALS. LAYOUT SHALL CREATE NEARLY SQUARE OR RECTANGULAR (1.5:1 MAX) SECTIONS. SUBMIT CONTROL JOINT LAYOUT FOR APPROVAL.
11. WHERE NEW CONCRETE IS CAST AGAINST HARDENED CONCRETE, JOIN SURFACES WITH DOWELS TO MATCH SIZE AND SPACING OF THAT SHOWN IN NEW CONCRETE. DOWELS SHALL BE MINIMUM #5 SPACED ON A GRID OF 12"OC EACH WAY WITH EMBEDMENT OF 8" SET WITH AN APPROVED INJECTABLE ADHESIVE. MAINTAIN 4" EDGE DISTANCE UNO.
12. PROVIDE 3/4" CHAMFERS AT ALL EDGES THAT ARE EXPOSED TO VIEW IN THE FINISHED STRUCTURE UNLESS SHOWN OTHERWISE IN THE ARCHITECTURAL DRAWINGS.
13. CONCRETE EXPOSED TO FREEZE THAW CYCLES SHALL HAVE 6% AIR ENTRAINMENT. DO NOT AIR ENTRAIN CONCRETE TO BE TROWEL FINISHED.
14. CONCRETE FINISH SHALL CONFORM TO ACI 301 UNO ON ARCHITECTURAL DRAWINGS.
15. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, ETC. FOR INFORMATION ON DOOR AND WINDOW LOCATIONS, LOUVER OPENINGS, SLEEVES, CONDUIT, DRAINS, MISCELLANEOUS EMBEDDED ITEMS, ETC. THAT ARE TO BE INCORPORATED INTO THE WORK. THE VARIOUS TRADES ARE RESPONSIBLE FOR PROVIDING AND PLACING THEIR ITEMS.
16. PROVIDE CONTINUOUS WATERSTOPS IN JOINTS OF PITS, RETAINING WALLS, AND OTHER SIMILAR CONSTRUCTION. WATERSTOP PRODUCTS SHALL BE APPROVED BY THE ENGINEER WHERE NOT SPECIFICALLY CALLED OUT ON DRAWINGS.
17. ALL STEEL ELEMENTS LOCATED BELOW GRADE SHALL BE COATED WITH A MINIMUM OF 1/8" MASTIC AND COVERED WITH 3" MINIMUM CONCRETE FOR PROTECTION.
18. EQUIPMENT PADS, TOPPING SLABS, FILL SLABS, ETC. SHALL BE REINFORCED WITH 6x6 - W2.9xW2.9 WELDED WIRE FABRIC UNO.
19. SET POST-INSTALLED ANCHORS AND DOWELS WITH HILTI HIT HY-200 OR EQUAL. INSTALL PER THE STRICTEST RECOMMENDATIONS OF THE MANUFACTURER. SUBSTITUTION REQUESTS MUST BE PRE-APPROVED BY THE ENGINEER.
20. CONDUITS, PIPES, AND SLEEVES OF ANY MATERIAL NOT HARMFUL TO CONCRETE AND WITHIN THE LIMITATIONS OF SECTION 6.3 OF ACI 318 SHALL BE PERMITTED TO BE EMBEDDED IN CONCRETE, ONLY WITH PRIOR WRITTEN APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL SUBMIT DETAILED DIMENSIONED AND COORDINATED DRAWINGS OF PROPOSED EMBEDDED CONDUIT, PIPES, AND SLEEVES TO THE ENGINEER PRIOR TO CONSTRUCTION.
21. CONDUITS AND PIPES OF ALUMINUM SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE UNLESS EFFECTIVELY COATED OR COVERED TO PREVENT ALUMINUM-CONCRETE REACTION OR ELECTROLYTIC ACTION BETWEEN ALUMINUM AND STEEL.
22. CONDUITS, PIPES, AND SLEEVES PASSING THROUGH A SLAB, WALL, OR BEAM SHALL NOT IMPAIR SIGNIFICANTLY THE STRENGTH OF THE CONSTRUCTION.
23. CONDUITS AND PIPES EMBEDDED WITHIN A SLAB, WALL, OR BEAM (OTHER THAN THOSE MERELY PASSING THROUGH) SHALL SATISFY THE FOLLOWING:
    - 23.1. THEY SHALL NOT BE LARGER IN OUTSIDE DIAMETER THAN ⅓ THE OVERALL THICKNESS OF THE SLAB, WALL, OR BEAM IN WHICH THEY ARE EMBEDDED;
    - 23.2. THEY SHALL NOT BE SPACED CLOSER THAN 3 DIAMETERS OR WIDTHS;
    - 23.3. THEY SHALL NOT SIGNIFICANTLY IMPAIR THE STRENGTH OF THE CONSTRUCTION.
24. CONCRETE COVER FOR PIPES, CONDUIT, AND THEIR FITTINGS SHALL NOT BE LESS THAN 1½ INCH FOR CONCRETE EXPOSED TO EARTH OR WEATHER, NOR LESS THAN ¾ INCH FOR CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND.

REINFORCED MASONRY

1. MASONRY MATERIALS AND CONSTRUCTION SHALL ADHERE TO THE BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES, ACI 530 AND THE SPECIFICATION FOR MASONRY STRUCTURES, ACI 530.1, YEAR ACCORDING TO PROJECT BUILDING CODE.
2. THE MASONRY SYSTEM SHALL HAVE A MINIMUM NET AREA COMPRESSIVE STRENGTH, f'm, EQUAL TO 1500 PSI. GROUT SHALL COMPLY WITH ASTM C476. MORTAR SHALL COMPLY WITH ASTM C270 AND BE TYPE S ABOVE GRADE AND TYPE M BELOW GRADE, UNO.
3. MASONRY UNITS SHALL BE NORMAL WEIGHT CONCRETE, 125 PCF MINIMUM, PER ASTM C90.
4. REINFORCED MASONRY SHALL HAVE SPECIAL INSPECTION PER THE DESIGN CODE REQUIREMENTS. SEE INSPECTION TABLES LOCATED WITHIN THE IBC OR ACI 530.1 AS REQUIRED BY THE PROJECT BUILDING CODE.
5. REINFORCING SHALL COMPLY WITH ASTM A615, GRADE 60. JOINT REINFORCING SHALL COMPLY WITH ASTM A951.
6. CONCRETE CONTRACTOR SHALL FURNISH DOWELS PROJECTING FROM CAST IN PLACE CONCRETE. MASONRY CONTRACTOR SHALL FURNISH ALL OTHER REINFORCING.
7. DOWELS FROM CONCRETE AND/OR MASONRY SHALL ALIGN WITH THE VERTICAL AND/OR HORIZONTAL REINFORCING IN THE MASONRY. DOWELS AND REINFORCING SHALL NOT BE SPACED MORE ONE-FIFTH THE REQUIRED LAP LENGTH, NOR MORE THAN 8" APART.
8. WHERE DOWELS DO NOT LINE UP WITHIN A BLOCK CELL, THEY MAY BE SLOPED NO MORE THAN ONE HORIZONTAL TO SIX VERTICAL.
9. REINFORCING AT SPLICES SHALL BE LAPPED ACCORDING TO ACI 530/530.1, MINIMUM OF 24". REINFORCING SHALL BE WIRED TOGETHER.
10. VERTICAL REINFORCING SHALL BE POSITIONED TO MAINTAIN A CLEARANCE OF 1/2" FROM THE MASONRY SURFACE.
11. REINFORCING SHALL BE FIRMLY POSITIONED WITHIN THE MASONRY CONSTRUCTION AND INSPECTED PRIOR TO THE START OF GROUTING.
12. CONTROL JOINTS SHALL BE LOCATED PER ARCH DWGS. IF CONTROL JOINTS ARE NOT LOCATED, SUBMIT A CONTROL JOINT PLAN FOR REVIEW.
13. JOINT REINFORCING SHALL TERMINATE AT CONTROL JOINTS. HORIZONTAL REINFORCING BARS SHALL BE CONTINUOUS THROUGH CONTROL JOINTS AT ROOF LINES, FLOOR LINES AND AS NOTED IN THE DRAWINGS.
14. ALL ANCHOR BOLTS, HEADED STUDS, REINFORCING, POST-INSTALLED ANCHORS, ETC. SHALL BE PLACED IN SOLID GROUTED CELLS.
15. ALL MASONRY BELOW GRADE SHALL BE GROUTED SOLID. CAVITIES OF MULTIWYTHE WALLS BELOW GRADE SHALL BE GROUTED SOLID.
16. DO NOT EMBED ALUMINUM ITEMS IN MASONRY UNLESS EFFECTIVELY COATED TO RESIST THE REACTION DUE TO DISSIMILAR MATERIALS.
17. JOINT REINFORCING SHALL BE 9 GAGE MINIMUM AND PLACED AT A MINIMUM OF 16" O.C. AND IN THE FIRST TWO BED JOINTS AT THE BASE OF THE WALL. PROVIDE AT 8" O.C. IN PARAPETS AND CANTILEVERED WALLS. JOINT REINFORCING SHALL BE SPLICED 6" MINIMUM.
18. REFER TO DRAWINGS BY OTHER DISCIPLINES FOR DETAILS AND SPECIFIC DIMENSIONS OF WINDOWS, DOORS, LOUVERS, AND OTHER ITEMS WITHIN THE MASONRY. OPENINGS EQUAL TO OR SMALLER THAN 16"x16" ARE NOT TYPICALLY SHOWN ON STRUCTURAL DRAWINGS.
19. OPENINGS SHALL BE CORED OR CUT WITH A MASONRY SAW LEAVING CLEAN EDGES AND NO OVERCUT CORNERS.
20. TEMPORARY SHORING/BRACING OF WALLS IS BY CONTRACTOR. DO NOT REMOVE UNTIL THE THE STRUCTURE'S LATERAL LOAD RESISTING SYSTEM IS COMPLETE.
21. INFORMATION FOR MASONRY CONSTRUCTION IS PROVIDED FOR THE STRUCTURAL REQUIREMENTS ONLY. ADDITIONAL INFORMATION MAY BE FOUND ON DRAWINGS BY OTHER DISCIPLINES.
22. SET POST-INSTALLED ANCHORS AND DOWELS WITH HILTI HIT HY-270 OR EQUAL. INSTALL PER THE STRICTEST RECOMMENDATIONS OF THE MANUFACTURER. SUBSTITUTION REQUESTS MUST BE PRE-APPROVED BY THE ENGINEER.

STRUCTURAL STEEL

1. STEEL MATERIALS AND CONSTRUCTION SHALL ADHERE TO THE AISC STEEL CONSTRUCTION MANUAL, INCLUDING BUT NOT LIMITED TO, AISC 360 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", AISC 341 "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS", RCSC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS", AND AISC 303 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES". EDITION AND YEAR SHALL BE ACCORDING TO PROJECT BUILDING CODE.
2. ALL STRUCTURAL STEEL SHALL BE CLEANED OF ALL RUST, LOOSE MILL SCALE AND OTHER FOREIGN MATERIALS. PRIMING AND PAINTING OF STRUCTURAL STEEL IS REQUIRED FOR STEEL THAT IS PERMANENTLY EXPOSED.
3. GALVANIZE ALL STRUCTURAL STEEL PERMANENTLY EXPOSED TO THE WEATHER. CLEAN AND TOUCH UP GALVANIZING AFTER ERECTION.
4. SEE SPECIFICATION SECTION 051200, "STRUCTURAL STEEL FRAMING", FOR ADDITIONAL REQUIREMENTS NOT NOTED HEREIN.
5. STEEL SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS UNO:
   - WIDE FLANGE SHAPES A992
   - STEEL PIPE A53, Gr B
   - HOLLOW STRUCTURAL SECTIONS A500, Gr C
   - CHANNELS, ANGLES, PLATES A36
6. ASTM A325 OR ASTM A490 HIGH STRENGTH BOLTS SHALL BE USED FOR STEEL TO STEEL CONNECTIONS UNO. ASTM A307 GRADE A STANDARD BOLTS SHALL BE USED FOR CONNECTIONS BETWEEN STEEL AND OTHER MATERIALS.
7. ALL WELDING SHALL BE IN ACCORDANCE WITH THE "STRUCTURAL WELDING CODE" (AWS D1.1) PUBLISHED BY THE AMERICAN WELDING SOCIETY. ELECTRODES FOR WELDING SHALL COMPLY WITH THE REQUIREMENTS OF TABLE 4.4.1 OF (AWS D1.1).
8. ANCHOR BOLTS SHALL BE ASTM F1554, GRADE 36.
9. ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE AISC CODE OF STANDARD PRACTICE (LATEST EDITION), EXCEPT AS MODIFIED IN THESE NOTES AND THE PROJECT SPECIFICATIONS.
10. SPLICING OF STEEL MEMBERS, UNLESS SHOWN ON THE DRAWINGS, IS PROHIBITED WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
11. NO CHANGE IN SIZE OR POSITION OF THE STRUCTURAL ELEMENTS SHALL BE MADE AND HOLES, SLOTS, CUTS, ETC. ARE NOT PERMITTED THROUGH ANY MEMBER UNLESS THEY ARE DETAILED ON THE APPROVED SHOP DRAWINGS.
12. NO FINAL BOLTING OR WELDING SHALL BE MADE UNTIL AS MUCH OF THE STRUCTURE AS WILL BE STIFFENED THEREBY HAS BEEN PROPERLY ALIGNED.
13. ALL EXPOSED STRUCTURAL STEEL IS TO BE PREPARED FOR ARCHITECTURAL FINISHES ACCORDING TO AISC CODE OF STANDARD PRACTICE, SECTION 10, ARCHITECTURALLY EXPOSED STRUCTURAL STEEL.
14. AN "UNSTABLE STEEL FRAME" SHALL BE CONSIDERED TO EXIST UNTIL ALL FLOOR AND ROOF STRUCTURE AND PERMANENT BRACING OR SHEAR WALLS ARE COMPLETED.
15. TEMPORARY BRACING SHALL BE INSTALLED TO PROVIDE STRUCTURAL STABILITY AND RESIST LATERAL LOADS ON THE STRUCTURE DURING ERECTION. BRACING SHALL REMAIN IN PLACE UNTIL ALL WELDING IS COMPLETE, ALL BOLTS ARE COMPLETELY TIGHTENED, FLOORS AND ROOFS ARE COMPLETE, AND ALL PERMANENT BRACING AND SHEAR WALLS ARE INSTALLED.
16. HIGH-STRENGTH BOLTS FOR CONNECTIONS, OTHER THAN THOSE DESIGNATED AS SLIP-CRITICAL, SHALL BE TIGHTENED TO A SNUG-TIGHT CONDITION. HIGH STRENGTH BOLTS FOR CONNECTIONS DESIGNATED AS SLIP-CRITICAL, SHALL BE TIGHTENED AS PER APPLICABLE VALUES IN THE RCSC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS".
17. THE MINIMUM NUMBER OF BOLTS PER CONNECTION SHALL BE TWO (2) - ¾ INCH DIAMETER, A325 BOLTS.
18. MINIMUM FILLET WELD SIZES SHALL COMPLY WITH THE AISC SPECIFICATION REQUIREMENTS, BUT SHALL NOT BE LESS THAN ¼ INCH, UNO.
19. THE CONTRACTOR SHALL SUBMIT DETAILED, ENGINEERED, COORDINATED AND CHECKED SHOP DRAWINGS FOR ALL STRUCTURAL STEEL MEMBERS FOR REVIEW PRIOR TO THE START OF FABRICATION.
20. ALL BEAMS SHALL BE FABRICATED WITH THE NATURAL CAMBER UP.
21. ALL STRUCTURAL STEEL BEAMS FRAMING INTO NEW AND/ OR EXISTING CONCRETE OR MASONRY MEMBERS SHALL BE DETAILED TO SUIT THE HORIZONTAL FIELD TOLERANCES.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF ALL ERECTION PROCEDURES AND SEQUENCES, INCLUDING, BUT NOT LIMITED TO, TEMPERATURE DIFFERENTIALS, ERECTION TOLERANCES, AND WITH RESPECT TO STRUCTURAL STEEL FRAMING INTO REINFORCED CONCRETE WALLS, BEAMS, OR COLUMNS, OR FRAMING INTO EXISTING CONSTRUCTION.
23. ALL ERECTION PROCEDURES, DESIGN, AND CALCULATIONS SHALL BE PERFORMED BY THE CONTRACTOR'S QUALIFIED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MISSOURI. ANY REVIEW OF SUCH CALCULATIONS AND/OR DRAWINGS WILL BE SOLELY LIMITED TO ANY EFFECTS ON THE INTEGRITY OF THE PERMANENT, PRIMARY STRUCTURE.
24. ALL ADDITIONAL STEEL REQUIRED BY THE CONTRACTOR FOR ERECTION PURPOSES AND SITE ACCESS OF STOCKPILED MATERIALS SHALL BE PROVIDED AT NO COST TO THE OWNER. ALL SUCH ADDITIONAL STEEL SHALL BE REMOVED BY THE CONTRACTOR UNLESS APPROVED BY THE ENGINEER IN WRITING.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
HALEY J. COONS
NUMBER PE2014016538
PROFESSIONAL ENGINEER
3-11-20

EXP. DATE: 12/31/2020

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 03/11/2020

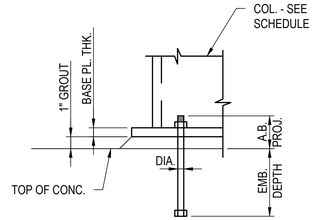
CAD DWG FILE:
DRAWN BY: SLP
CHECKED BY: HJC
DESIGNED BY: SLP

SHEET TITLE:
GENERAL NOTES

SHEET NUMBER:
S-001

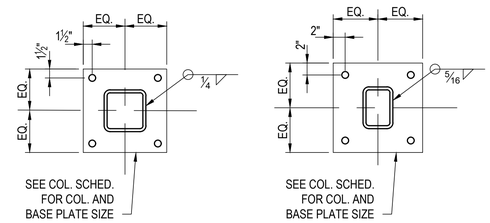
METAL, ROOF, COMPOSITE DECKS

1. THE STEEL ROOF DECK HAS BEEN DESIGNED TO SPAN ACROSS ONE SPAN.
2. AT SUPPORTS PARALLEL TO THE DECK SPAN, RAISE STEEL SUPPORTS OR PROVED SHIMS AT FASTENING POINTS IF THE DECK VALLEY DOES NOT ENGAGE THE SUPPORT.
3. WHERE DECK IS WELDED TO SUPPORTS, PROVIDE WELDING WASHERS FOR DECK WITH DESIGN THICKNESS LESS THAN 0.028".
4. METAL DECK ACCESSORIES, INCLUDING BUT NOT LIMITED TO: GIRDER, FILLERS, Z-CLOSURES, AND COVER PLATES; THAT ARE INTEGRAL WITH THE FLOOR DIAPHRAGM OR ROOF DIAPHRAGM SHALL BE OF THE SAME MATERIAL, FINISH AND MINIMUM THICKNESS AS THE METAL DECK. ACCESSORIES SHALL BE ANCHORED TO SUPPORTING MEMBERS BY ARC SPOT WELDS OR SELF-DRILLING SCREWS AT 12 INCH MAXIMUM SPACING OR AS SHOWN ON THE DESIGN DRAWINGS.
5. ROOF DECK SHALL BE DESIGNED, FABRICATED, AND INSTALLED IN ACCORDANCE WITH "SDI CODE OF STANDARD PRACTICE AND COMMENTARY", SDI COSP-2012.
6. ROOF DECK SHALL BE PAINTED AND GALVANIZED.
7. CATWALK ROOF: 3" CELLUAR METAL ROOF DECK WITH DESIGN THICKNESS: 0.0474"-HAT & 0.0358"-PAN (18/20 GAUGE) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: I=2.012 IN^4/FT, Sp=0.897 IN^3/FT, Sn=0.985 IN^3/FT, Fy=33 KSI.
8. CATWALK ROOF: 3" CELLUAR METAL ROOF DECK SHALL BE WELDED TO SUPPORTS, BOTH PERPENDICULAR AND PARALLEL TO THE DECK, WITH 5⁄8" DIAMETER PUDDLE WELDS AND FASTENED AT SIDELAPS WITH 5⁄8" DIAMETER PUDDLE WELDS.
   8.1. WELD PATTERN: 24/4
   8.2. WELD SPACING AT PERIMETER: 8" O.C.
   8.3. SIDELAP FASTENERS: 4/SPAN
9. ENTRY CANOPY: 1.5" CELLUAR METAL ROOF DECK WITH DESIGN THICKNESS: 0.0358"-HAT & PAN (20/20 GAUGE) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: I=0.357 IN^4/FT, Sp=0.301 IN^3/FT, Sn=0..394 IN^3/FT, Fy=33 KSI.
10. ENTRY CANOPY: 1.5" CELLUAR METAL ROOF DECK SHALL BE WELDED TO SUPPORTS, BOTH PERPENDICULAR AND PARALLEL TO THE DECK, WITH 5⁄8" DIAMETER PUDDLE WELDS AND FASTENED AT SIDELAPS WITH 5⁄8" DIAMETER PUDDLE WELDS AS FOLLOWS.
   10.1. WELD PATTERN: 36/4
   10.2. WELD SPACING AT PERIMETER: 12" O.C.
   10.3. SIDELAP FASTENERS: 4/SPAN, MAXIMUM 18"
11. COMPOSITE FLOOR DECK SHALL BE DESIGNED, FABRICATED, AND INSTALLED IN ACCORDANCE WITH "ANSI/SDI C-2017 STANDARD FOR COMPOSITE STEEL FLOOR DECK" .
12. CATWALK FLOOR: 2" COMPOSITE DECK WITH DESIGN THICKNESS 0.0474" (18 GAUGE) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Ip=0.558 IN^4/FT, In=0.558 IN^4/FT, Sp=0.485 IN^3/FT, Sn=0.500 IN^3/FT, Fy=50 KSI.
13. CATWALK FLOOR: 2" COMPOSITE FLOOR DECK SHALL BE WELDED TO SUPPORTS, BOTH PERPENDICULAR AND PARALLEL TO THE DECK, WITH 5⁄8" DIAMETER PUDDLE WELDS AND FASTENED AT SIDELAPS WITH 5⁄8" DIAMETER PUDDLE WELDS AS FOLLOWS:
   13.0.1. WELD PATTERN: 36/4
   13.0.2. WELD SPACING AT PERIMETER: 12" O.C.
   13.0.3. SIDELAP FASTENERS: 4/SPAN, MAXIMUM 18"
14. COMPOSITE FLOOR DECK SHALL BE GALVANIZED.
15. SHORE COMPOSITE FLOOR DECK WHERE REQUIRED BY MANUFACTURER.
16. THE STEEL ROOF DECK HAS BEEN DESIGNED FOR A 20 PSF CONSTRUCTION LIVE LOAD. THE CONTRACTOR SHALL NOT EXCEED THE ASSUMED CONSTRUCTION DESIGN LIVE LOAD WITHOUT FIRST TAKING ALL NECESSARY SAFETY PRECAUTIONS SUCH AS SHORING, ETC.
17. NO LOADS SHALL BE PERMITTED TO BE HUNG FROM ANY STEEL ROOF DECKING. ALL DUCTWORK, PIPING, LIGHTS, SPRINKLERS ETC., SHALL BE HUNG ON HANGERS DIRECTLY ATTACHED TO THE STRUCTURAL STEEL FRAMING OR FROM SUPPLEMENTARY FRAMING MEMBERS PROVIDED BY THE MEP CONTRACTOR. ALL HANGING LOAD MAGNITUDES AND DETAILS SHALL BE SUBMITTED FOR REVIEW.
18. SEE ARCHITECTURAL DRAWING FOR FIRE RATING REQUIREMENTS.
19. ALL STEEL ROOF DECK SHALL BE FABRICATED FROM STEEL CONFORMING TO THE STANDARDS OF ASTM A653, STRUCTURAL QUALITY, HAVING A MINIMUM YIELD STRENGTH OF 33,000 PSI. ALL STEEL ROOF DECK SHALL BE HOT-DIPPED GALVANIZED THE STANDARDS OF ASTM A525 WITH A COATING CLASS OF G-90, MINIMUM. WHERE APPLICABLE, VERIFY COMPATIBILITY OF GALVANIZING AND SPRAY-ON FIRE PROOFING WITH FIRE PROOFING SUPPLIER. ALL ACOUSTICAL ROOF DECK SHALL BE GALVANIZED AND PRIME PAINTED.
20. ALL STEEL ROOF DECK SHALL BE WIDE RIBBED, UNO, WITH THE DEPTH AND GAGE AS INDICATED ON THE STRUCTURAL DRAWINGS. THE DECK GAGE SHALL NOT BE LESS THAN 20 GAGE.
21. THE CONTRACTOR SHALL PROVED DETAILED AND CHECKED SHOP DRAWINGS INDICATING LOCATION, GAGE, AND SIZE OF EACH PIECE OF DECKING AND RELATED DECKING ACCESSORIES. THE DRAWINGS SHALL CLEARLY SHOW WELDING DETAILS TO STRUCTURAL FRAMING ELEMENTS, SIDE LAP CONNECTION DETAILS, DECK OPENING/EDGE CLOSURES, AND SUPPLEMENTARY DECK AND/OR CLOSURE REINFORCING.
22. PROVIDE CONTINUOUS SHEET STEEL CLOSURES AT ALL DECK OPENINGS AND DECK EDGES, UNO.
23. PROVIDE, AS REQUIRED, ALL RIDGE AND VALLEY PLATES, COLUMN CLOSURES, CANT STRIPS, SUMP PLATES AT PIPING PENETRATIONS, AND RECESSED SUMP PANS AT ROOF DRAINS. PROVIDE SUPPLEMENTAL STRUCTURAL STEEL FRAMING, INCLUDING BEAMS, ANGLES, AND/OR REINFORCING PLATES AT OPENINGS, AS REQUIRED FOR SUPPORT OF THE STEEL ROOF DECK. ALL DECK OPENINGS SHALL BE COORDINATED WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
24. ALL STEEL ROOF DECK ACCESSORIES SHALL BE HOT-DIPPED GALVANIZED TO A COATING CLASS OF G-90, MINIMUM.
25. ALL STEEL ROOF DECK SHALL BE WELDED TO STRUCTURAL STEEL BY QUALIFIED WELDERS USING PRE-QUALIFIED PROCEDURES. THE AWS SPECIFICATIONS ESTABLISH A PROCEDURE FOR PRE-QUALIFICATION OF THE PLUG WELDING OF THE STEEL DECKING TO THE STRUCTURAL STEEL FOR THE PARTICULAR GAGES USED. PRIOR TO THE START OF ERECTION OF THE STEEL COMPOSITE DECK, AND ON A PERIODIC BASIS AS DEEMED NECESSARY BY THE ARCHITECT AND THE OWNER'S TESTING LABORATORY, EACH WELDER SHALL BE QUALIFIED USING THIS PROCEDURE AS WITNESSED BY THE OWNER'S TESTING LABORATORY.
26. THE OWNER'S TESTING AGENCY SHALL INSPECT AND TEST ALL STEEL ROOF DECK INSTALLATION.



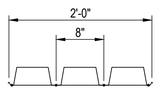
A.B. PROJECTION = BASE PL. THICKNESS + 1" GROUT + 1.5x BOLT DIA.

TYP. ANCHOR BOLT DETAIL



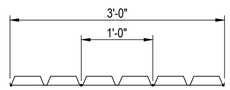
TYPE A TYPE B

TYP. COLUMN BASE PLATES



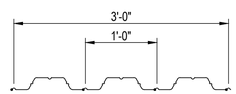
1. 3" x 18/20 GA. TYPE NP CELLUAR METAL ROOF DECK TYP. @ NEW CATWALK ROOF
2. SIDELAP FASTENERS: WELDED, 4 WELDS PER SPAN
3. PERIMETER FASTERNERS: 5⁄8" PUDDLE WELDS @ 8" O.C.

ROOF DECK @ CATWALK



1. 1.5" x 20/20 GA. TYPE BP CELLUAR METAL ROOF DECK TYP. @ ENTRANCE CANOPY ROOF
2. WELD PATTERN: 36/4 PATTERN
3. SIDELAP FASTENTERS: WELDED, 4 WELDS PER SPAN
4. PERIMETER FASTERNERS: 5⁄8" PUDDLE WELDS @ 12" O.C.

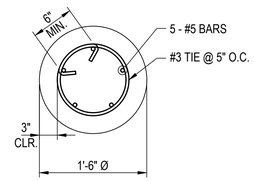
ROOF DECK @ ENTRANCE CANOPY



1. 2" x 18 GA. TYPE VLI METAL ROOF DECK
2. TYP. @ CATWALK FLOOR
3. SIDELAP FASTENERS: WELDED, 4 WELDS PER SPAN
4. PERIMETER FASTERNERS: 5⁄8" PUDDLE WELDS @ 12" O.C.

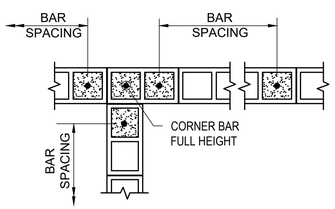
FLOOR DECK @ CATWALK

TYPICAL METAL DECK DETAILS

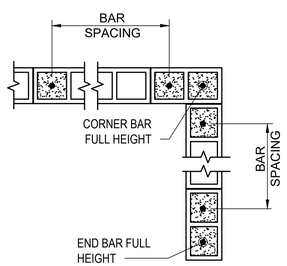


TYPICAL DRILLED PIER DETAIL

NOTE:
CIRCULAR TIES:
1.) ENDS SHALL OVERLAP A MIN. OF 6"
2.) ENDS SHALL TERMINATE WITH STANDARD 135° HOOKS WITH AN EXTENSION LENGTH OF 3"
3.) OVERLAPS AT ENDS OF ADJACENT CIRCULAR TIES SHALL BE STAGGERED AROUND THE PERIMETER ENCLOSING THE LONGITUDINAL BARS



AT WALL INTERSECTION

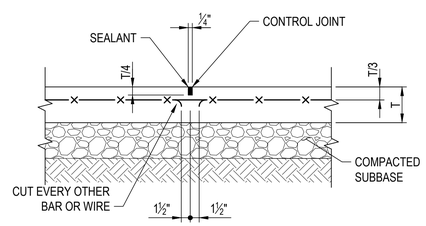


AT CORNER AND END

CMU WALL NOTES:

1. KNEE WALL TO BE 8" WIDE REINFORCED CMU.
2. PROVIDE BOND BEAMS WITH 1-#5 BARS (CONT.) AT THE TOP OF KNEE WALL. LAP SLPICE A MIN. OF 2'-2"
3. PROVIDE CORNER BARS AND BARS AT INTERSECTING WALLS OF MATCHING SIZE AS BOND BEAM REINFORCING AND SPLICE 20" WITH REGULAR BOND BEAM REINFORCING.
4. PROVIDE CONTINUOUS HORIZ. TRUSS REINF. AT 16" VERT. CENTERS. HORIZ. TRUSS REINF. SHALL NOT RUN THROUGH VERTICAL MASONRY CONTROL JOINTS.
5. PROVIDE VERT. REINF. IN GROUTED CELLS AS FOLLOWS:
   A. WALLS: #5 @ 24" o.c.
6. CORNER BARS AND END BARS SHALL BE THE SAME SIZE AS MAIN VERT. REINF. AND SPLICE 26" WITH REGULAR BOND BEAM REINFORCING.

TYPICAL MASONRY WALL DETAIL



TYPICAL CONTROL JOINT DETAIL

SYMBOLS LEGEND

- ELEVATION REFERENCE
- Dtl No. / Sht No. — DETAIL REFERENCE
- SECTION REFERENCE
- COLUMN LINE
- REV. — DRAWING REVISION
- XX — DEMOLITION KEYNOTE
- XX — PLAN KEYNOTE

LINETYPES

- DEMOLITION
- EXISTING
- GRID LINE
- HIDDEN
- WELDED WIRE FABRIC

ABBREVIATIONS

&	AND
	ANGLE
@	AT
	CENTER LINE
	DIAMETER
#	POUND OR NUMBER
	PROPERTY LINE
A	
A.B.	ANCHOR BOLT
ADD	ADDENDUM, ADDITIONAL
A.F.F.	ABOVE FINISH FLOOR
AGG.	AGGREGATE
ALUM.	ALUMINUM
ALT.	ALTERNATE
APPROX.	APPROXIMATE
ARCH.	ARCHITECT, ARCHITECTURAL
ASPH.	ASPHALT
B	
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BOTT.	BOTTOM
BRG	BEARING
C	
CF	CUBIC FEET
CJ	CONTROL JOINT
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONST.	CONSTRUCTION
CONT.	CONTINUOUS, CONTINUED
CTR	CENTER
CTRL	CONTROL
CY	CUBIC YARD
D	
DBL	DOUBLE
DEMO.	DEMOLITION, DEMOLISH
DET.	DETAIL
DIA.	DIAMETER
DIM.	DIMENSION
DL	DEAD LOAD
DN	DOWN
DWG	DRAWING(S)
E	
EA.	EACH
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
E.J.	EXPANSION JOINT
ELEC.	ELECTRIC, ELECTRICAL
ELEV	ELEVATION, ELEVATOR
EQ.	EQUAL
EQUIP.	EQUIPMENT
EXIST.	EXISTING
F	
FDN	FOUNDATION
F.F..	FINISH FLOOR
FIN	FINISH
FT	FOOT, FEET
FTG	FOOTING
F.V.	FIELD VERIFY
G	
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GR.	GRADE
H	
HORIZ.	HORIZONTAL
HT	HEIGHT
I	
I.D.	INSIDE DIAMETER
IN.	INCH
INT.	INTERIOR
J	
JST	JOIST
JT	JOINT
K	
L	
LBS	POUND(S)
L.F.	LINEAR FEET
LL	LIVE LOAD
M	
MAS.	MASONRY
MAT.	MATERIAL
MAX.	MAXIMUM
MECH.	MECHANICAL
MEZZ.	MEZZANINE
MFR	MANUFACTURE, MANUFACTURER, MANUFACTURED
MIN.	MINIMUM
MISC.	MISCELLANEOUS
N	
NTS	NOT TO SCALE
NW	NORMAL WEIGHT
O	
o.c.	ON CENTER
O.A.	OUTSIDE DIAMETER
OH	OVERHEAD
OPNG	OPENING
OPP.	OPPOSITE
P	
PL.	PLATE
PSF	POUNDS / SQUARE FOOT
PSI	POUNDS / SQUARE INCH
Q	
QTY	QUANTITY
R	
REINF.	REINFORCE, REINFORCED, REINFORCING
REQ'D	REQUIRED
REV.	REVISION, REVERSE
S	
SCHED.	SCHEDULE
SECT.	SECTION
SHT	SHEET
S.F.	SQUARE FEET, STOREFRONT
SIM.	SIMILAR
SPEC.	SPECIFICATION
S.S.	STAINLESS STEEL
STD	STANDARD
T	
T.O.	TOP OF
T.O.C.	TOP OF CONCRETE
T.O.F.	TOP OF FOOTING
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TYP.	TYPICAL
U	
U.N.O.	UNLESS NOTED OTHERWISE
V	
V.I.F.	VERIFY IN FIELD
VERT.	VERTICAL
W	
w/	WITH
w/o	WITHOUT
W.W.F.	WELDED WIRE FABRIC
Y	
YD	YARD

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI — HALEY J. COONS — NUMBER PE2014016938 — PROFESSIONAL ENGINEER
3-11-20

EXP. DATE: 12/31/2020

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166
OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

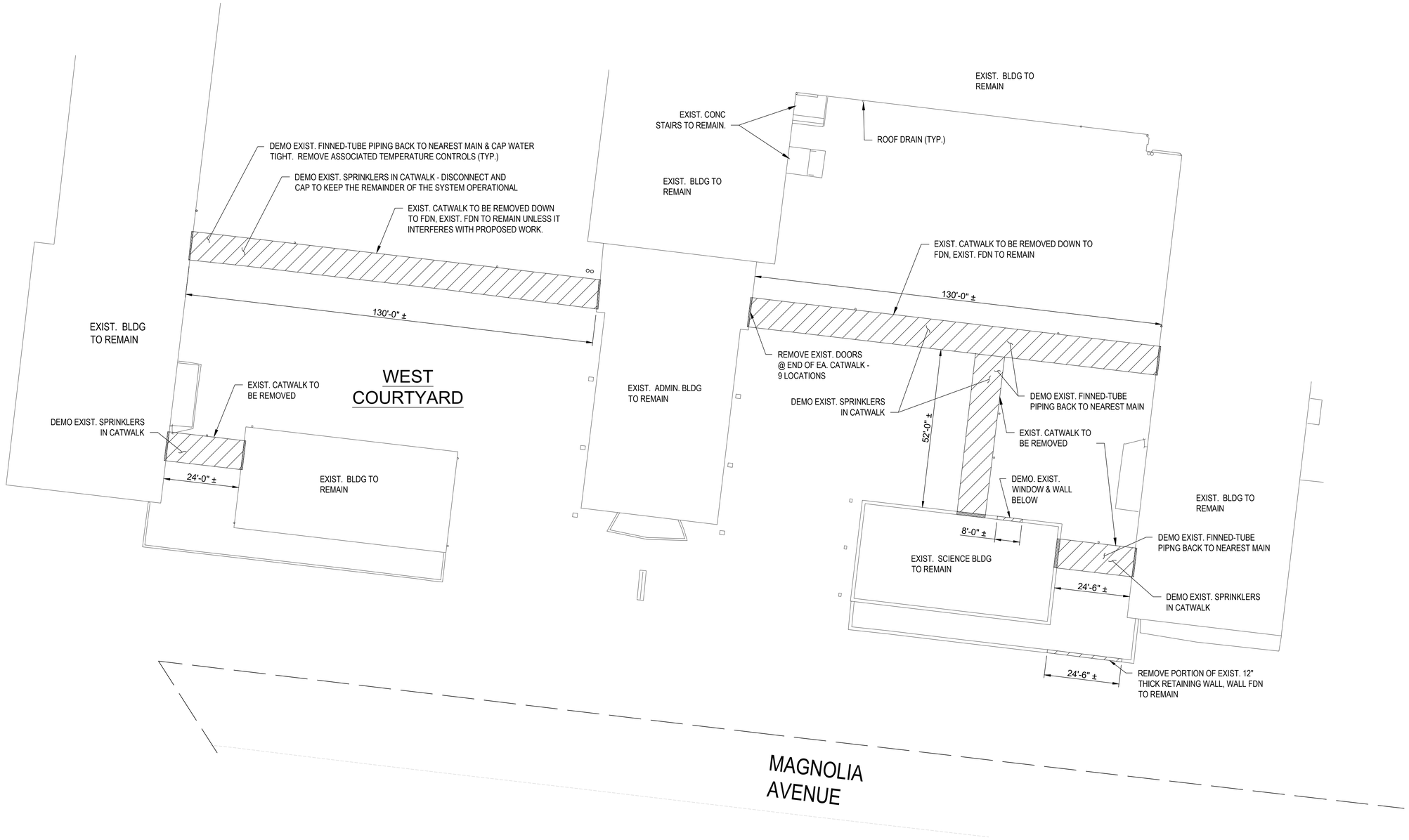
ASSET # 5012011003, 5012011004

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 03/11/2020

CAD DWG FILE:
DRAWN BY: SLP
CHECKED BY: HJC
DESIGNED BY: SLP

SHEET TITLE:
GENERAL NOTES, TYPICAL DETAILS & ABBREVIATIONS

SHEET NUMBER:
S-002



1 SD-101 DEMOLITION PLAN
SCALE: 1/16"=1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
HALEY J. COONS
NUMBER PE2014016938
PROFESSIONAL ENGINEER
3-11-20

EXP. DATE: 12/31/2020

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166
OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

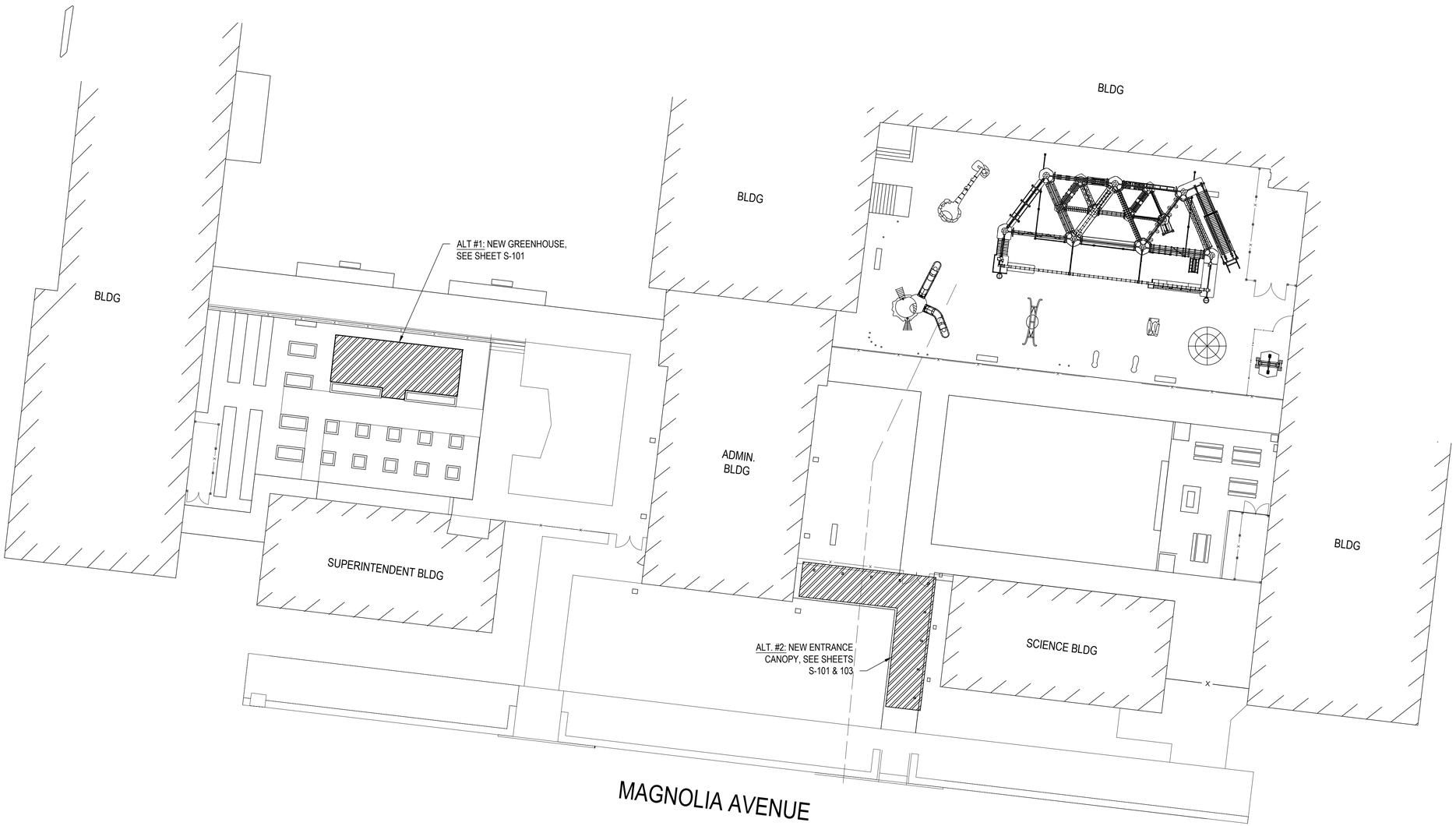
ASSET # 5012011003, 5012011004

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 03/11/2020

CAD DWG FILE:
DRAWN BY: SLP
CHECKED BY: HJC
DESIGNED BY: SLP

SHEET TITLE:
STRUCTURAL DEMOLITION PLAN

SHEET NUMBER:
SD-101



1 S-100 OVERALL STRUCTURAL SITE PLAN

SCALE: 1/16"=1'-0"

N

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
HALEY J. COONS
NUMBER PE2014016938
PROFESSIONAL ENGINEER

3-11-20

EXP. DATE: 12/31/2020

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 03/11/2020

CAD DWG FILE:
DRAWN BY: SLP
CHECKED BY: HJC
DESIGNED BY: SLP

SHEET TITLE:

OVERALL SITE PLAN

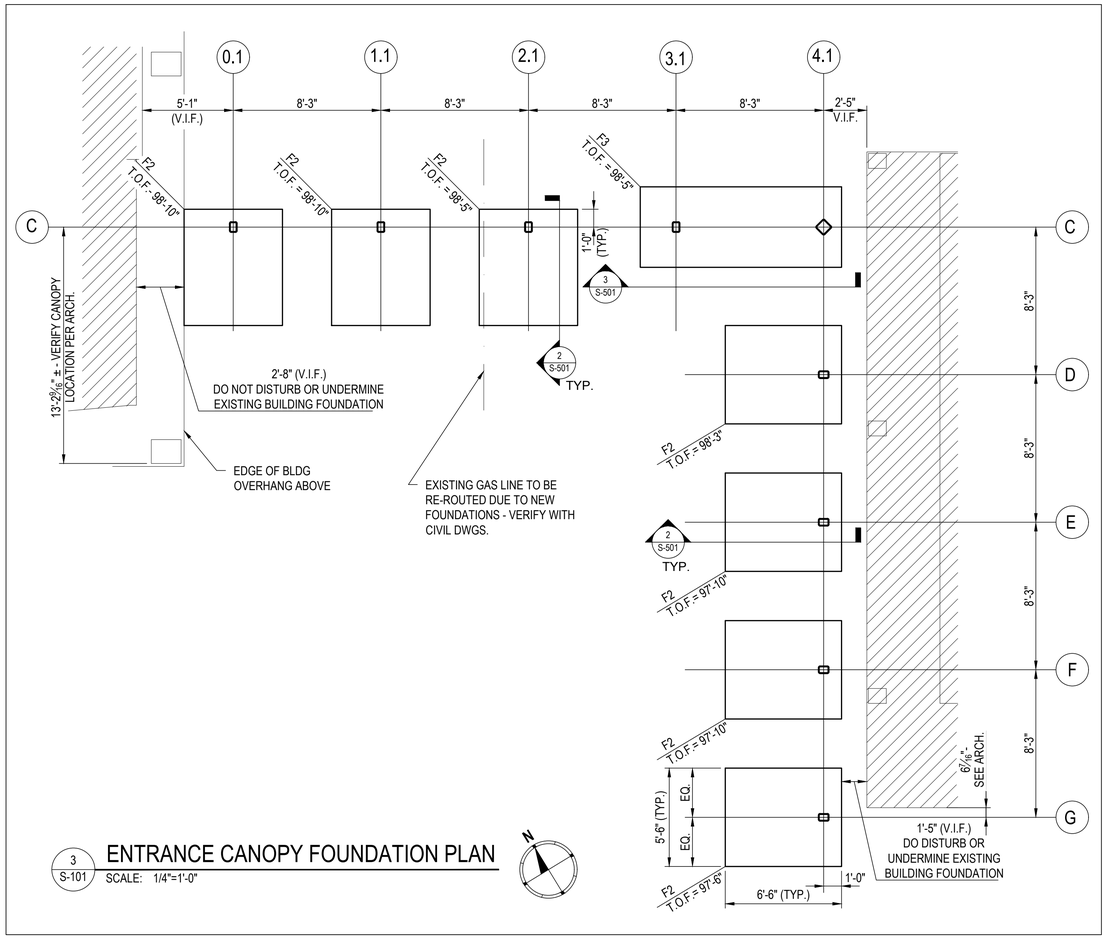
SHEET NUMBER:

S-100

FOOTING SCHEDULE		
MARK	SIZE (LxWxD)	TOP & BOTT. REINF. (EA. WAY)
F1	NOT USED	NOT USED
F2	6'-0" x 6'-0" x 1'-6"	(7) #5
F3	11'-3" x 4'-6" x 1'-6"	#6 @ 12" O.C. SHORT (5) #5 LONG

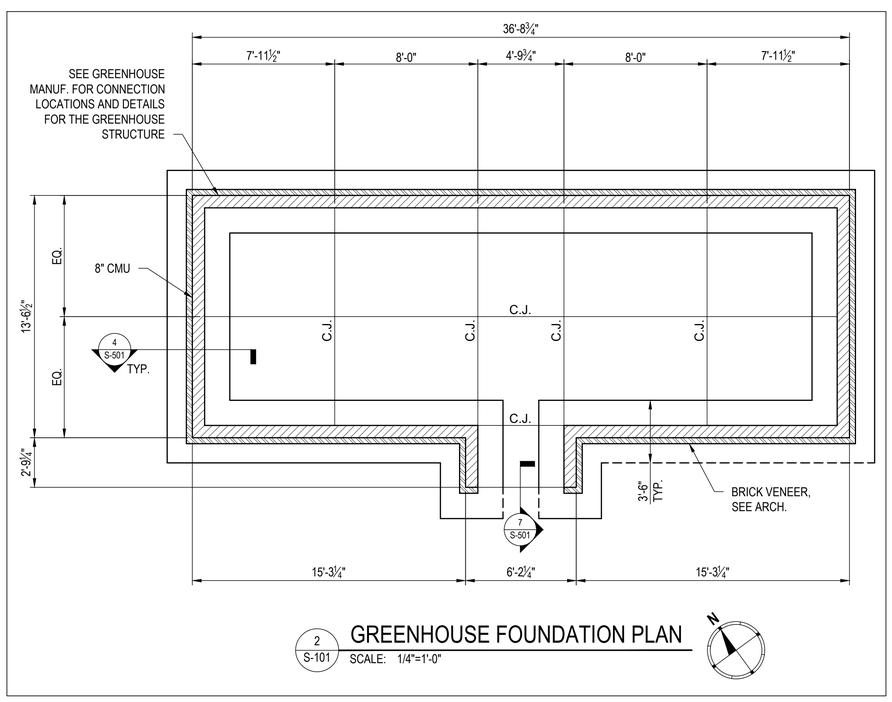
PLAN NOTES

1. SEE SHEETS S-001 & S-002 FOR GENERAL NOTES & TYPICAL DETAILS.
2. SEE SITE PLAN, SHEET S-100, FOR ENTRANCE CANOPY & GREENHOUSE LOCATION
3. TOP OF PILASTER ELEVATION (T.O.F.) = 98'-10" (U.N.O.)



3 S-101 ENTRANCE CANOPY FOUNDATION PLAN
SCALE: 1/4"=1'-0"

ALTERNATE #2: ENTRANCE CANOPY



2 S-101 GREENHOUSE FOUNDATION PLAN
SCALE: 1/4"=1'-0"

ALTERNATE #1: GREEN HOUSE

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
HALEY J. COONS
NUMBER PE2014016938
PROFESSIONAL ENGINEER
3-11-20

EXP. DATE: 12/31/2020

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 03/11/2020

CAD DWG FILE:
DRAWN BY: SLP
CHECKED BY: HJC
DESIGNED BY: SLP

SHEET TITLE:
FOUNDATION PLANS
ALTERNATE #1 & #2

SHEET NUMBER:
S-101

SHEET S-102 NOT USED

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
HALEY J. COONS
NUMBER
PE2014016938
PROFESSIONAL ENGINEER

3-11-20

EXP. DATE: 12/31/2020

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
ELEMENTARY &
SECONDARY EDUCATION

INSTALL NATURE
PARK

MISSOURI SCHOOL
FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003,
5012011004

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 03/11/2020

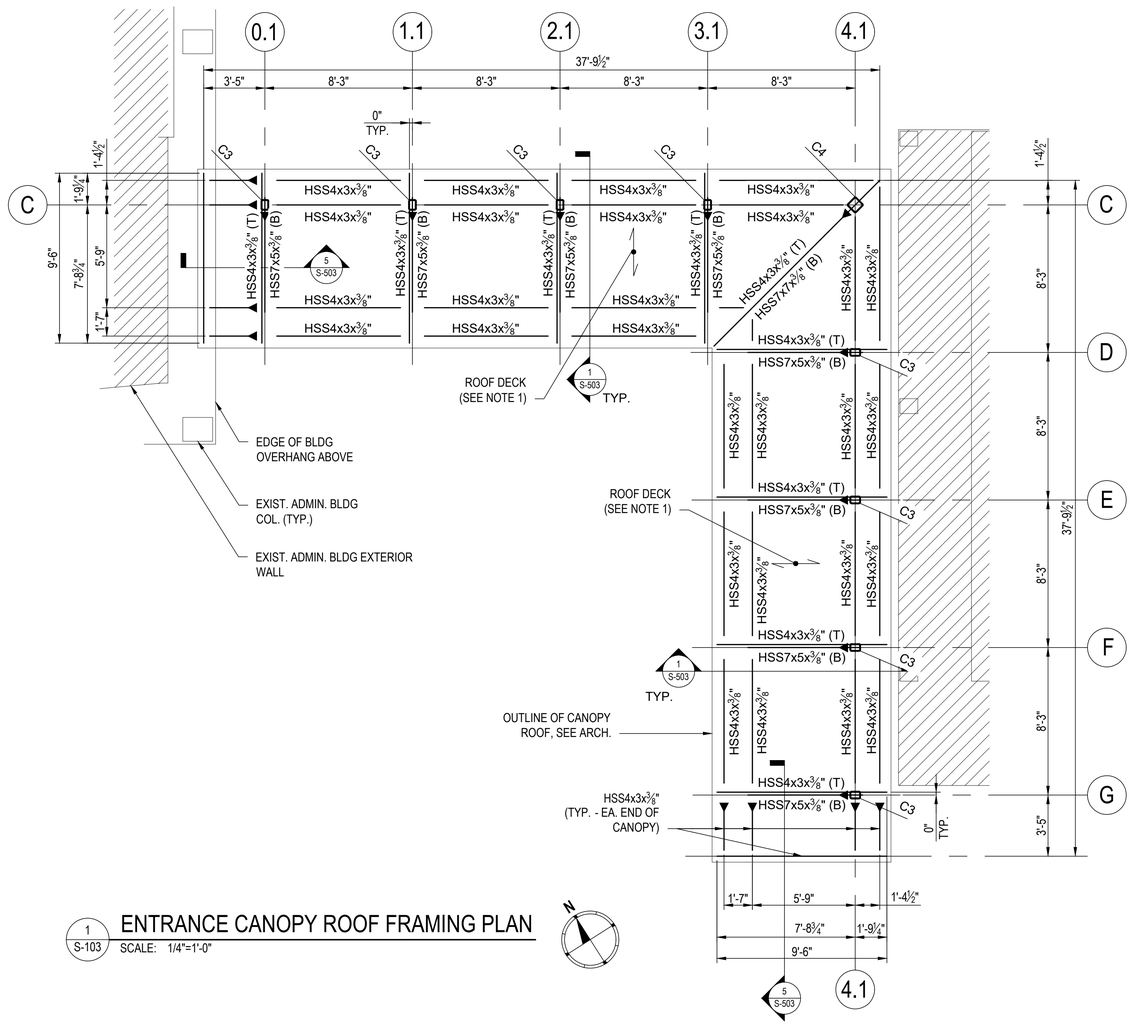
CAD DWG FILE:
DRAWN BY: SLP
CHECKED BY: HJC
DESIGNED BY: SLP

SHEET TITLE:

SHEET NOT USED

SHEET NUMBER:

S-102



1 S-103 ENTRANCE CANOPY ROOF FRAMING PLAN
SCALE: 1/4"=1'-0"

ALTERNATE #2: ENTRANCE CANOPY

COLUMN SCHEDULE			
MARK	SIZE	BASE PLATE (TYPE)	A.B. w/ EMB. DEPTH
C1	HSS 7 x 7 x ⅜"	14x14x¾" (TYPE A)	4 - ¾"Ø x 9" EMB.
C2	HSS 7 x 7 x ½"	14x14x¾" (TYPE A)	4 - ¾"Ø x 9" EMB.
C3	HSS 7 x 5 x ⅜"	15x15x1-1/4" (TYPE B)	4 - ¾"Ø x 12" EMB.
C4	HSS 7 x 7 x ⅜"	15x15x1-1/4" (TYPE B)	4 - ¾"Ø x 12" EMB.

NOTES:

1. SEE SHEET S-002 FOR TYP. COLUMN & BASE PLATE DETAILS INCLUDING BASE PLATE TYPE
2. ALL A.B. TO BE F1554 GRADE 36. (TYP.)

PLAN NOTES:

1. ENTRANCE CANOPY ROOF CONSTRUCTION: 1.5" x 20/20 GA. CELLULAR METAL ROOF DECK TYPE BP. SEE TYPICAL METAL DECK DETAILS ON SHEET S-002 FOR CONNECTION TO STRUCTURE.
2. MOMENT CONNECTION INDICATED BY —◄□►—

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
HALEY J. COONS
NUMBER PE2014016938
PROFESSIONAL ENGINEER
3-11-20

EXP. DATE: 12/31/2020

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 03/11/2020

CAD DWG FILE:
DRAWN BY: SLP
CHECKED BY: HJC
DESIGNED BY: SLP

SHEET TITLE:
ENTRANCE CANOPY FRAMING PLAN ALTERNATE #2

SHEET NUMBER:
S-103

SHEET S-201 NOT USED

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
HALEY J. COONS
NUMBER
PE2014016938
PROFESSIONAL ENGINEER

3-11-20

EXP. DATE: 12/31/2020

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
ELEMENTARY &
SECONDARY EDUCATION

INSTALL NATURE
PARK

MISSOURI SCHOOL
FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003,
5012011004

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 03/11/2020

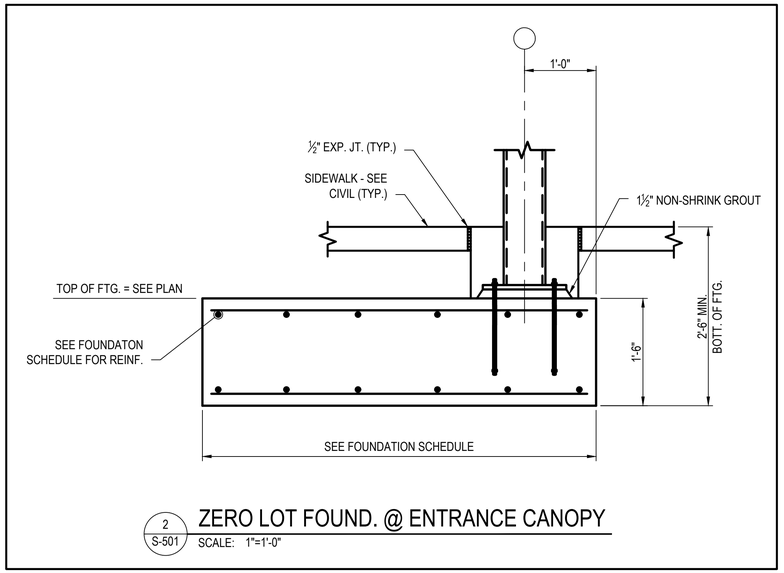
CAD DWG FILE:
DRAWN BY: SLP
CHECKED BY: HJC
DESIGNED BY: SLP

SHEET TITLE:

SHEET NOT USED

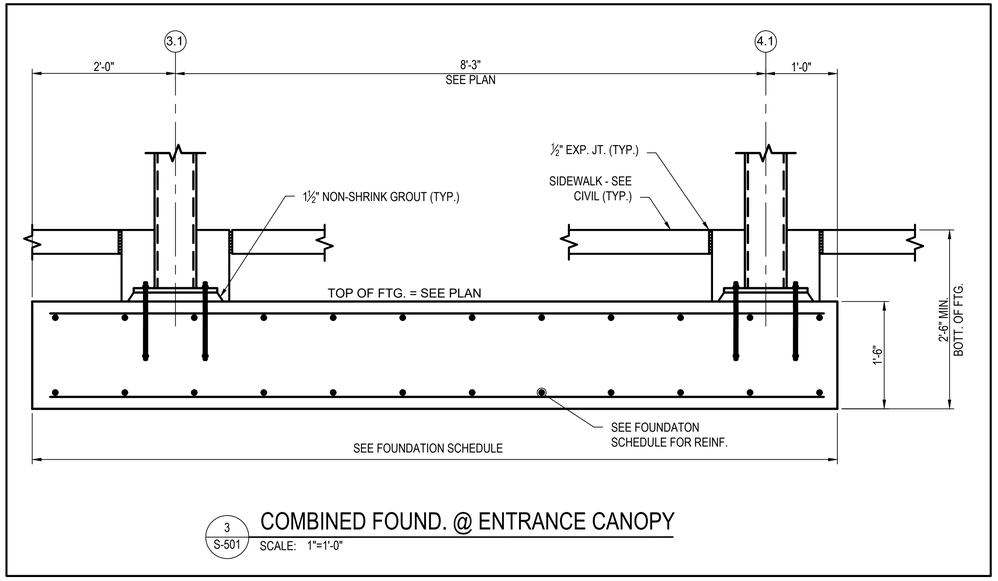
SHEET NUMBER:

S-201



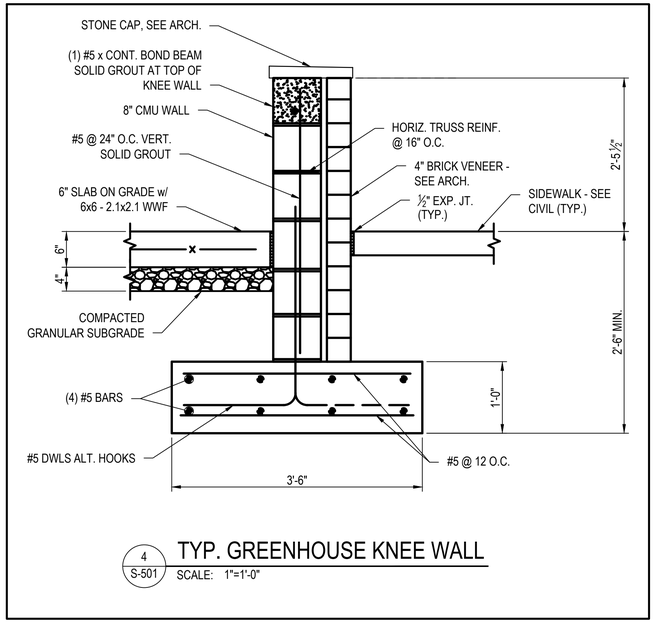
2 S-501 ZERO LOT FOUND. @ ENTRANCE CANOPY
SCALE: 1"=1'-0"

ALTERNATE #2 - ENTRANCE CANOPY



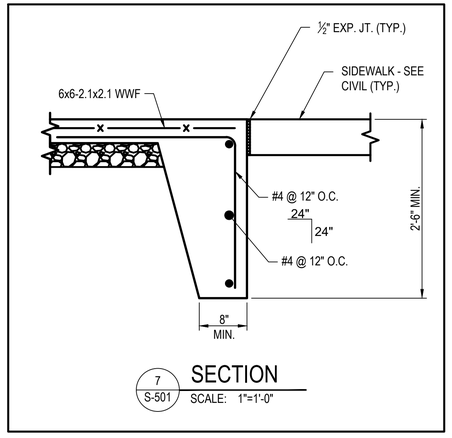
3 S-501 COMBINED FOUND. @ ENTRANCE CANOPY
SCALE: 1"=1'-0"

ALTERNATE #2 - ENTRANCE CANOPY



4 S-501 TYP. GREENHOUSE KNEE WALL
SCALE: 1"=1'-0"

ALTERNATE #1 - GREEN HOUSE FOUNDATION



7 S-501 SECTION
SCALE: 1"=1'-0"

ALTERNATE #1 - GREEN HOUSE FOUNDATION

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
HALEY J. COONS
NUMBER PE-2014016938
PROFESSIONAL ENGINEER
3-11-20

EXP. DATE: 12/31/2020

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 03/11/2020

CAD DWG FILE:
DRAWN BY: SLP
CHECKED BY: HJC
DESIGNED BY: SLP

SHEET TITLE:
FOUNDATION DETAILS ALTERNATE #1 & #2

SHEET NUMBER:
S-501

SHEET S-502 NOT USED

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
HALEY J. COONS
NUMBER
PE2014016938
PROFESSIONAL ENGINEER

3-11-20

EXP. DATE: 12/31/2020

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
ELEMENTARY &
SECONDARY EDUCATION

INSTALL NATURE
PARK

MISSOURI SCHOOL
FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003,
5012011004

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 03/11/2020

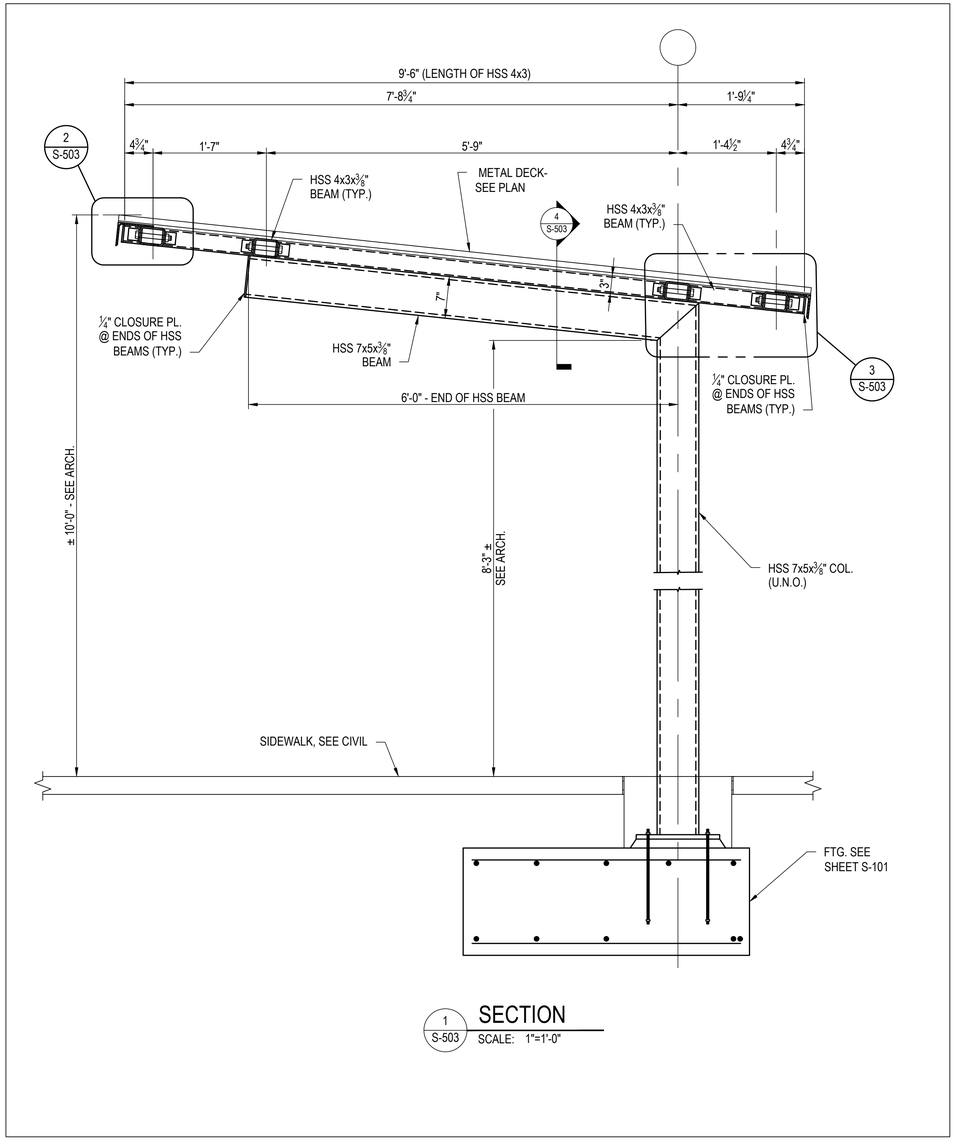
CAD DWG FILE:
DRAWN BY: SLP
CHECKED BY: HJC
DESIGNED BY: SLP

SHEET TITLE:

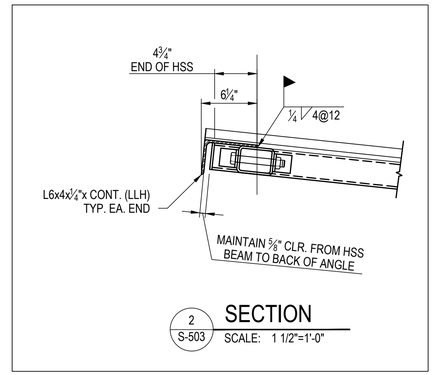
SHEET NOT USED

SHEET NUMBER:

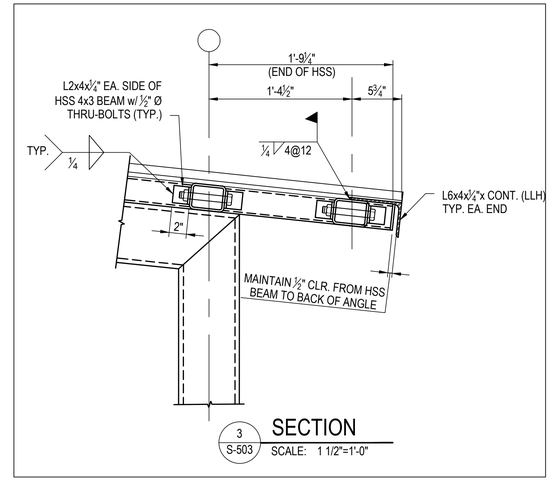
S-502



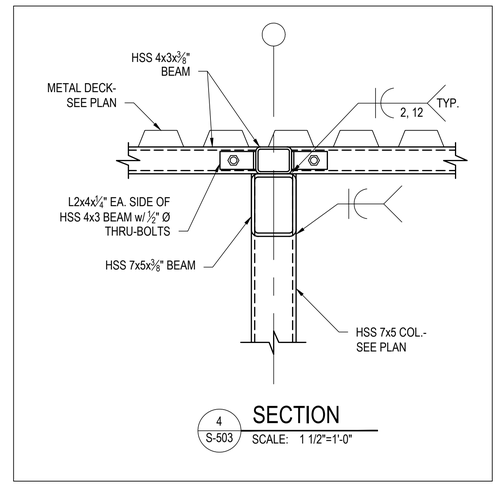
ALTERNATE #2: ENTRANCE CANOPY



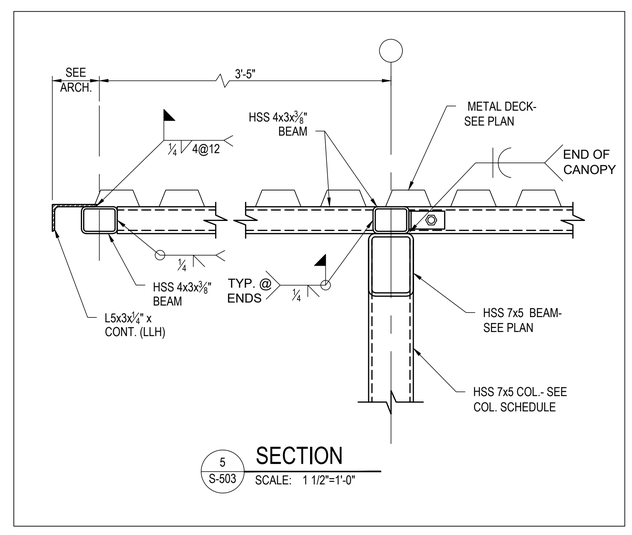
ALTERNATE #2: ENTRANCE CANOPY



ALTERNATE #2: ENTRANCE CANOPY



ALTERNATE #2: ENTRANCE CANOPY



ALTERNATE #2: ENTRANCE CANOPY

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
HALEY J. COONS
NUMBER PE2014016938
PROFESSIONAL ENGINEER
3-11-20

EXP. DATE: 12/31/2020

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001166

OATES ASSOCIATES

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO 63110

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 03/11/2020

CAD DWG FILE:
DRAWN BY: SLP
CHECKED BY: HJC
DESIGNED BY: SLP

SHEET TITLE:
ENTRANCE CANOPY FRAMING DETAILS ALTERNATE #2

SHEET NUMBER:
S-503

The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.

GENERAL NOTES

1 DUE TO THE LIMITED SPACE AVAILABLE FOR THE INSTALLATION OF ALL THE PLUMBING WORK, COORDINATION BETWEEN ALL OTHER TRADES IS OF THE UTMOST IMPORTANCE.

2 THIS CONTRACTOR SHALL VISIT THE PROJECT SITE, AND VERIFY LOCATIONS, ELEVATIONS AND SIZES OF ALL UTILITIES AT SITE PRIOR TO PROCEEDING WITH WORK. EXISTING SYSTEMS AND STRUCTURE SHALL BE INVESTIGATED FOR BEST POSSIBLE ROUTING OF COLD WATER, HOT WATER, SANITARY WASTE AND VENT, STORM AND MEDICAL/LABORATORY GAS PIPING.

3 THESE PLANS ARE DIAGRAMMATIC IN NATURE SINCE THE ONLY AVAILABLE INFORMATION HAS BEEN OBTAINED FROM EXISTING PLANS, SPECIFICATIONS, AND FIELD SURVEYS. THE EXACT LOCATION OF PIPING, FIXTURES, AND EQUIPMENT MAY DEVIATE FROM THE LOCATION INDICATED ON THESE DRAWINGS, EXTREME ACCURACY IS NOT GUARANTEED. THIS CONTRACTOR SHALL BE PREPARED TO MAKE ALTERATIONS TO NEW AND/OR EXISTING SERVICES TO FIT JOB CONDITIONS. THIS CONTRACTOR SHALL FURNISH A COMPLETE AND CODE COMPLYING SYSTEM. THIS CONTRACTOR SHALL REPORT, IN WRITING, ANY DISCREPANCIES WHICH PREVENT THE INSTALLATION OF WORK AS SHOWN.

4 IF THIS CONTRACTOR DOES NOT CLEARLY UNDERSTAND THESE PLANS OR IS NOT COMPLETELY SURE OF THEIR MEANING, THIS CONTRACTOR SHOULD OBTAIN THE ENGINEER'S WRITTEN EXPLANATION AND/OR INTERPRETATION PRIOR TO SUBMITTING BIDS, SINCE THIS CONTRACTOR WILL BE HELD RIGIDLY TO THE INTERPRETATION OF THE ENGINEER.

5 IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO REPAIR THE EXISTING SURFACES TO REMAIN WHERE THEIR WORK HAS BEEN COMPLETED. REPAIR SHALL INCLUDE, BUT NOT LIMITED TO, ANY EXISTING WALL, CEILING OR FLOOR THAT IS SCHEDULED TO REMAIN. REPAIR, PAINTING, AND PATCHING SHALL BE COMPLETED BY AN APPROPRIATE CONTRACTOR QUALIFIED FOR THIS TYPE OF WORK.

6 THE OWNER SHALL MAINTAIN ALL SALVAGE RIGHTS OF FIXTURES, EQUIPMENT AND MATERIALS REMOVED. HOWEVER, ALL FIXTURES, EQUIPMENT AND MATERIALS NOT CLAIMED BY THE OWNER SHALL BE REMOVED FROM THE PREMISES AND PROPERLY DISPOSED OF BY THE DEMOLITION CONTRACTOR.

7 CEILING REMOVAL, STORAGE, AND REPLACEMENT FOR NEW PIPING INSTALLATION SHALL BE BY THE GENERAL CONTRACTOR.

8 IF HAZARDOUS MATERIALS (ASBESTOS) ARE ENCOUNTERED DURING DEMOLITION OPERATIONS, THE CONTRACTOR WILL STOP WORK AT THE PARTICULAR LOCATION AND NOTIFY BUILDING OWNER OF THE HAZARDOUS MATERIAL. THE CONTRACTOR WILL CONTINUE WORK AFTER REMOVAL OF HAZARDOUS MATERIALS IS COMPLETED.

9 TEMPORARY CONNECTIONS SHALL BE PROVIDED BY RESPECTIVE PLUMBING AND FIRE PROTECTION CONTRACTORS WHEN EXTENDED INTERRUPTIONS OF SERVICES AND UTILITIES SUCH AS WATER, WASTE AND FIRE PROTECTION WHICH SERVE OTHER AREAS ARE NECESSARY.

10 COORDINATE WITH MAINTENANCE PERSONNEL AS TO SOURCE OF UTILITIES AND TEMPORARILY DISCONNECT OR SHUT OFF SERVICES OR UTILITIES AT NEAREST MAIN. TEMPORARY AND ACCESSIBLE ISOLATION VALVES SHALL BE INSTALLED CLOSE TO THIS POINT OF WORK.

11 IT IS ESSENTIAL THAT BUILDING OPERATIONS CONTINUE WITH MINIMAL INTERRUPTIONS. IT IS NECESSARY THAT OPERATION OF EXISTING SYSTEMS BE INTERFACED WITH AS LITTLE DISRUPTION AS POSSIBLE EXCEPT IN AREAS VACATED FOR CONSTRUCTION WORK. WORK WHICH WILL INTERFERE WITH OPERATION OF EXISTING FIRE SUPPRESSION AND PLUMBING SYSTEMS OR WHICH REQUIRE DOWNTIME, WILL BE SCHEDULED ONLY AFTER CONSULTATION WITH AND PERMISSION GIVEN BY THE OWNER. ALLOW 10 DAYS PRIOR TO ANTICIPATED INTERRUPTION OF SYSTEMS. WORK MAY BE REQUIRED TO BE PERFORMED OUTSIDE NORMAL WORKING HOURS.

12 ARCHITECTURAL DEMOLITION DRAWINGS AND SPECIFICATIONS SHALL BE READ IN CONJUNCTION WITH THESE DRAWINGS.

13 ALL PIPE HANGERS AND SUPPORTS SHALL BE REMOVED ALONG WITH PIPING BEING REMOVED.

14 THE CONTRACTOR SHALL COORDINATE DEMOLITION WORK WITH PROJECT'S PHASING SCHEDULE PRIOR TO COMMENCEMENT OF ANY WORK.

15 WHEN PLACING NEW PLUMBING FIXTURES, CONTRACTOR SHALL VERIFY LOCATIONS OF PLUMBING VENTS, OFFSET VENTS THAT TERMINATE WITHIN 25 FEET OF HVAC UNITS OUTDOOR AIR INTAKES. CONTRACTOR SHALL FIELD VERIFY PRIOR TO BID WHERE THE INTERFERENCE'S ARE AND PRICE ACCORDINGLY OR MAKE ALLOWANCES IN BID.

16 USE CAUTION WHEN SAW-CUTTING THROUGH EXISTING CONCRETE FLOOR OR WALL CONSTRUCTION FOR THE INSTALLATION OF PLUMBING SYSTEMS TO AVOID CUTTING REBAR AT EDGE OF OPENING. LEAVE SUFFICIENT REBAR EXPOSED TO TIE NEW REINFORCING FOR REPLACEMENT CONCRETE AND/OR OTHER STRUCTURAL ATTACHMENTS FOR NEW CONSTRUCTION.

17 CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REVISIONS, TRANSITIONS, OFFSETS, ETC., TO AVOID DUCTWORK, PIPING, EQUIPMENT, OR STRUCTURE NEW OR EXISTING AND TO MAKE A COMPLETE AND FUNCTIONING SYSTEM.

FIRE STOPPING NOTES

1 MATERIALS: USE ONLY FIRE STOP PRODUCTS THAT HAVE BEEN UL 1479, ASTM E-814, OR UL 2079 TESTED FOR SPECIFIC FIRE RATE CONSTRUCTION CONDITIONS CONFORMING TO CONSTRUCTION ASSEMBLY TYPE, PENETRATING ITEM TYPE, ANNULAR SPACE REQUIREMENTS, AND FIRE RATING INVOLVED FOR EACH SEPARATE INSTANCE.

2 FOR SINGLE PENETRATIONS: A READY-TO-USE LATEX BASED INTUMESCENT SEALANT IS REQUIRED TO MAINTAIN THE FIRE RATING OF THE ASSEMBLY PENETRATED. THE SEALANT MUST HAVE UL LISTING FOR BOTH SLEEVED AND NON-SLEEVED APPLICATIONS.

3 FOR LARGE OPENINGS: CONTAINING MULTIPLE PENETRATIONS (2 OR MORE), A READY-TO-USE FOAM INTUMESCENT BLOCK MATERIAL, MUST BE ABLE TO BE REMOVED AND REINSTALLED WITHOUT COMPROMISING FIRE PROTECTION INTEGRITY. COMPLY WITH MANUFACTURER'S RECOMMENDED PROCEDURES AND PRECAUTIONS. DO NOT USE DAMAGED OR EXPIRED MATERIALS.

4 MANUFACTURERS: JOHNS MANVILLE INTERNATIONAL, 3M BRAND, CSD SEALING SYSTEMS, HILTI, CIBA-GEIGY, HEAVY-DUTY / NEALSON. REFER TO DIVISION 7 FOR FURTHER REQUIREMENTS.

PLUMBING ABBREVIATIONS

ADA	NOT ALL SYMBOLS ARE USED FOR THIS PROJECT AMERICANS WITH DISABILITIES ACT
AP	ACCESS PANEL
BP	BOOSTER PUMP
BT	BATHTUB
BTC	BRANCH TO CONNECTION
BV	BALANCE VALVE
CI	CAST IRON
CO	CLEANOUT
CSS	CLINICAL SERVICE SINK
DCVA	DOUBLE CHECK VALVE ASSEMBLY
DS	DOWNSPOUT
DW	DISHWASHER
DWH	DOMESTIC WATER HEATER
EEW	EMERGENCY EYE WASH
ESEW	EMERGENCY SHOWER & EYE WASH
ESH	EMERGENCY SHOWER
ET	EXPANSION TANK
EWC	ELECTRIC WATER COOLER
FCO	FLOOR CLEAN OUT
GCO	GRADE CLEANOUT
GD	GARBAGE DISPOSAL
HB	HOSE BIBB
HWRP	HOT WATER RETURN PUMP
HWST	HOT WATER STORAGE TANK
IM	ICE MAKER
IW	INDIRECT WASTE
LA	LAVATORY
MB	MOP BASIN
NIC	NOT IN CONTRACT
OB	OUTLET BOX
RD	ROOF DRAIN
RPZ	REDUCED PRESSURE BACKFLOW PREVENTER
S	SANITARY
S/S	STAINLESS STEEL
SH	SHOWER
SK	SINK
SP	SUMP PUMP
SS	SANITARY STACK
SSK	SHOP SINK
SW	SOFT WATER
TMV	THERMOSTATIC MIXING VALVE
UR	URINAL
V	VENT
VB	VACUUM BREAKER
VS	VENT STACK
VTR	VENT THRU ROOF
W	WASTE
WC	WATER CLOSET
WCO	WALL CLEANOUT
WD	WASHER DRAIN
WH	WALL HYDRANT
WHA	WATER HAMMER ARRESTOR
WM	WATER METER
WS	WASTE STACK
WSV	WASTE STACK VENT
YCO	YARD CLEANOUT

PLUMBING SYMBOLS & ABBREVIATIONS

	NOT ALL SYMBOLS ARE USED FOR THIS PROJECT TRAPPED CONNECTION
	STRAINER
	BALANCING VALVE
	CLEANOUT (CO)
	OS & Y GATE VALVE
	TEMPERATURE GAUGE
	THERMOSTATIC MIXING VALVE
	REDUCED PRESSURE BACKFLOW PREVENTER
	HOSE BIBB/WALL HYDRANT
AV	ACID VENT
AW	ACID WASTE
D	DRAIN PIPING
DI	DEIONIZED WATER PIPING
RO	REVERSE OSMOSIS PIPING (RO)
	DOMESTIC COLD WATER PIPING (CW)
	DOMESTIC HOT WATER PIPING (HW)
	DOMESTIC HOT WATER RETURN PIPING (HWR)
NP	NON-POTABLE WATER PIPING
PD	PUMP DISCHARGE PIPING
	SANITARY PIPING
SSD	SUBSOIL DRAINAGE PIPING
ST	STORM PIPING
OST	OVERFLOW STORM PIPING
TW	TEMPERED WATER
	VENT PIPING
	EXISTING FIXTURE TO BE REMOVED
	EXISTING FIXTURE
	NEW FIXTURE
	FLEXIBLE CONNECTION
	FLOOR DRAIN/FLOOR SINK (FD/FS)
	CIRCULATION PUMP

COMMON PFP SYMBOLS & ABBREVIATIONS

	NOT ALL SYMBOLS ARE USED FOR THIS PROJECT DIRECTION OF FLOW
	BRANCH CONNECTION, BOTTOM
	BRANCH CONNECTION, TOP
	ELBOW, TURNED DOWN
	ELBOW, TURNED UP
	SHUTOFF VALVE
	CHECK VALVE
	PRESSURE REDUCING VALVE
	PRESSURE GAUGE
	UNION
	PIPING CAP
	EXISTING PIPING TO BE REMOVED
	MATCH LINE
	CONNECTION TO EXISTING
# P50	DETAIL DESIGNATION
X #	EQUIPMENT DESIGNATION
#	KEYED NOTE
#	REVISION NOTE
22	KITCHEN EQUIPMENT
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITIES HAVING JURISDICTION
AP	ACCESS PANEL
BOP	BOTTOM OF PIPE
DIA	DIAMETER
DN	DOWN
EX OR EXIST	EXISTING
FFE	FINISHED FLOOR ELEVATION
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HP	HORSEPOWER
IE OR INV. ELEV	INVERT ELEVATION
NC	NORMALLY CLOSED
NTS	NOT TO SCALE
PSI	POUNDS PER SQUARE INCH
RPM	REVOLUTIONS PER MINUTE
RI	ROUGH-IN
SOV	SHUTOFF VALVE
TDH	TOTAL DYNAMIC HEAD
VIF	VERIFY IN FIELD

ANCHORAGE AND SWAY BRACING FOR PLUMBING SYSTEM COMPONENTS RELATED TO SEISMIC LOAD RESISTANCE

SEISMIC USE GROUP (IV) — SEISMIC DESIGN CATEGORY (C)

LISTING OF EQUIPMENT & SYSTEM COMPONENTS [Rules & Regulations Referenced In Explanatory Notes Below]	ANCHORAGE TO FLOORS, ROOFS, ETC.		SWAY BRACING		LOCATION OF PROFESSIONALLY-SEALED ANCHORAGE AND SWAY BRACING DETAILS			COMMENTS
					ON CONSTRUCTION DOCUMENTS	SUBSEQUENT SUBMITTAL		
	NOT PROVIDED	PROVIDED	NOT PROVIDED	PROVIDED	DRAWING NO. OR SPEC. SECTION	SHOP DRAWINGS	SEPARATE PERMIT & PLANS	
FIRE PROTECTION, DETECTION & ALARM EQUIPMENT AND SYSTEM COMPONENTS:								
Plumbing Equipment		X		X		X	X	
Plumbing Domestic Hot Water Heaters		X		X		X	X	
Plumbing DWV Piping => 2-1/2" Cast Iron		X		X		X	X	1, 2
Plumbing DWV Piping =< 2" Cast Iron	X		X					
Plumbing DWV Piping => 4" PVC		X		X		X	X	1, 2
Plumbing DWV Piping =< 3"PVC		X	X					
Plumbing DWV Piping => 2-1/2" Ductile Iron								
Plumbing DWV Piping =< 2" Ductile Iron								
Plumbing Domestic Water => 2-1/2" Copper		X		X		X	X	1, 2
Plumbing Domestic Water =< 2" Copper		X	X					

EXPLANATORY NOTES:

1. SWAY BRACING REQUIRED IF PIPING IS SUSPENDED FROM STRUCTURE.
2. ANCHORAGE & BRACING CONTRACTOR SHALL REFER TO SPECIFICATION SECTION 220549.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI · MICHAEL R. HOFF · NUMBER PE2013000576 · PROFESSIONAL ENGINEER

MICHAEL R. HOFF
MO. LICENSE NO. 2013000576 EXP: 12/31/2021

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS

3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

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

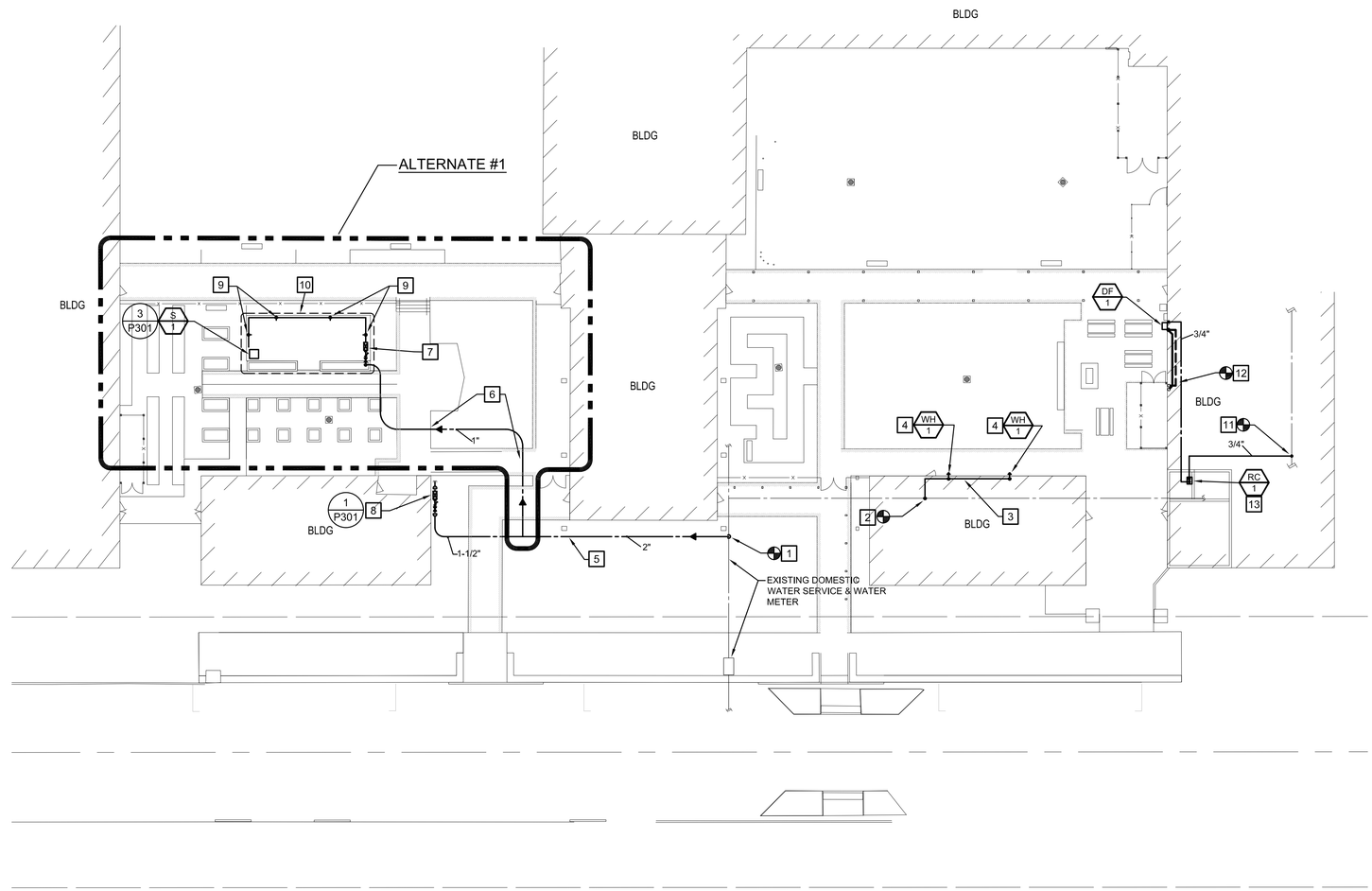
CAD DWG FILE: XXX
DRAWN BY: JEP
CHECKED BY:
DESIGNED BY: JEP

SHEET TITLE:
PLUMBING SYMBOLS & ABBREVIATIONS

SHEET NUMBER:
P-001

2/21/2020

The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.



1 SITE PLAN - PLUMBING

1"= 20'-0"

N

KEYED NOTES

1. CONNECT TO EXISTING DOMESTIC WATER BELOW GRADE.
2. CONNECT TO EXISTING DOMESTIC WATER BELOW FLOOR SLAB
3. TRENCH FLOOR FOR CW PIPING TO WALL HYDRANTS
4. NEW FREEZE PROOF WALL HYDRANTS (WH-1) AT 36" ABOVE GRADE, ON EACH SIDE OF NEW GARAGE DOOR. REFER TO ARCH ELEVATIONS FOR EXACT LOCATIONS.
5. TRENCH NEW DOMESTIC WATER BELOW GRADE.
6. TUNNEL/ AUGER WATER PIPING BELOW CONCRETE WALKS
7. NEW 1" RPZ FOR GREENHOUSE WATER SUPPLY
8. NEW 1-1/2", ABOVE GRADE RPZ, FOR IRRIGATION WATER SUPPLY. CAP 1-1/2" WATER BELOW GRADE FOR CONTINUATION BY IRRIGATION CONTRACTOR.
9. ROUTE 3/4"CW AROUND GREENHOUSE PERIMETER, PROVIDING (4) 3/4"HB-1.
10. GREENHOUSE IS TO BE A VENDOR PROVIDED ITEM. THIS CONTRACTOR SHALL COORDINATE LOCATIONS OF HOSE BIBS (HB-1) AND SINK (S-1) WITH VENDOR OF GREENHOUSE.
11. CONNECT TO EXISTING CW MAIN IN BUILDING. VERIFY EXACT LOCATION.
12. CONNECT TO EXISTING VENT AND WASTE STACK. VERIFY EXACT LOCATION.
13. MOUNT CHILLER ON WALL WITH ANGLE IRON SUPPORTS. TERMINATE DRAIN OVER NEAREST FLOOR DRAIN.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
MICHAEL R. HOFF
NUMBER
PE2013000576
PROFESSIONAL ENGINEER

MICHAEL R. HOFF
MO. LICENSE NO. 2013000576 EXP: 12/31/2021

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS

3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

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

CAD DWG FILE: XXX
DRAWN BY: JEP
CHECKED BY:
DESIGNED BY: JEP

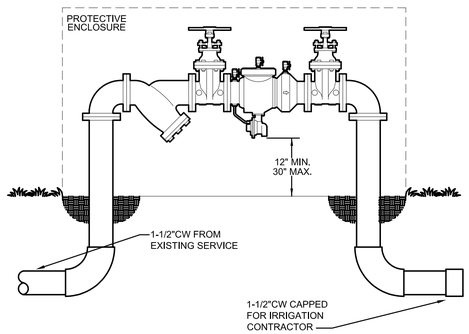
SHEET TITLE:

PLUMBING SITE PLAN

SHEET NUMBER:

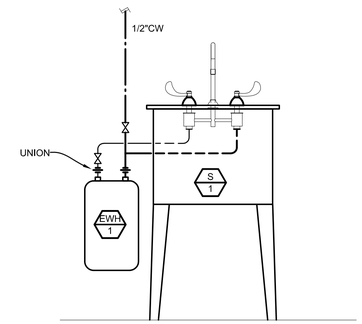
P-101

The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.

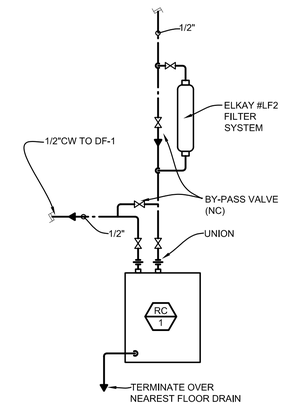


1 P301 IRRIGATION RPZ- ALTERNATE #1
SCALE: NTS

2 P301 NOT USED
SCALE: NTS



3 P301 SINK (S-1) - ALTERNATE #1
SCALE: NTS



4 P301 REMOTE CHILLER (RC-1) - BASE BID
SCALE: NTS

PLUMBING FIXTURE SCHEDULE

MARK	MANUFACTURER & MODEL NUMBER	UTILITIES				REMARKS	NOTES
		WASTE	VENT	CW	HW		
S-1	FIXTURE: ADVANCE TABCO #FS-1-3624	2"	2"	1/2"	1/2"	STAINLESS STEEL, FLOOR MOUNT, SINGLE COMPARTMENT 36"x24"x14"DP. SCULLERY SINK. 14 GAUGE 304 SS WITH BUFFED SATIN FINISHED. CENTER DRAIN. 14 GAUGE SS 1-5/8"Ø TUBULAR LEGS.. 6.25" BACKSPLASH	
	FAUCET: CHICAGO FAUCETS #510-G613L12XKCAB					PRE-RINSE FITTING, CERAMIC 1/4 TURN, 8" BODY, WALL MOUNT , PRE-RINSE SPRAY, LEVER HANDLES, 23" RISER, 44" FLEXIBLE STAINLESS STEEL HOSE WITH INSULATED HANDLE.	
	P-TRAP: DEARBORN BRASS #510-1					17- GAUGE, CHROME PLATED, 1-1/2"P-TRAP	
	STRAINER: ELKAY #LK35					3-1/2" POLISHED CHROME GRID STRAINER, STAINLESS STEEL BODY WITH 1-1/2" x 4" CHROME PLATED BRASS TAILPIECE	
EWH-1	FIXTURE: EEMAX "MINI TANK" #EMT1			1/2"		1.5 GALLON, POINT OF USE ELECTRIC WATER HEATER, 120V, 12A, 1440 WATTS, 50°F TO 140°F, ENAMELED GLASS LINED, T & P RELIEF VALVE, STATUS INDICATOR LIGHT, AND ADJUSTABLE THERMOSTAT.	
HB-1	FIXTURE: CHICAGO FAUCETS #998-633COLDFCF			1/2"		INSIDE SILL FITTING WITH BODY DRAIN PLUG, 3" CROSS HANDLE, 3/4"NPT FEMALE THREAD, ATMOSPHERIC VACUUM BREAKER, NOT INTENDED FOR CONTINUOUS PRESSURE.	
WH-1	FIXTURE: J.R. SMITH			1/2"		"QUARTERHORSE" 1/4 TURN, NON-FREEZE, WALL HYDRANT, WITH INTEGRAL VACUUM BREAKER AND STAINLESS STEEL BOX, WITH LOCKING COVER	
DF-1	FIXTURE: ELKAY #LK4408BF			1/2"		WALL MOUNT, ADA, "EZH2O" BOTTLE FILLING STATION, NON-REFRIGERATED, COORDINATE COLOR WITH ARCHITECT. PROVIDE WITH REMOTE CHILLER RC-1	
RC-1	FIXTURE: ELKAY #ER51Y			(2)1/2"		REMOTE, ELECTRIC REFRIGERATED WATER CHILLER UNIT. 5.0 GPH OF 50°F DRINKING WATER. MOUNT ON WALL WITH ANGLE IRON SUPPORT. ROUTE DRAIN TO NEAREST FLOOR DRAIN. PROVIDE ELKAE #LF2 FILTER SYSTEM KIT AHEAD OF CHILLER UNIT.	

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

MICHAEL R. HOFF
MO. LICENSE NO. 2013000576 EXP: 12/31/2021

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS
3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

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

CAD DWG FILE: XXX
DRAWN BY: JEP
CHECKED BY:
DESIGNED BY: JEP

SHEET TITLE:

PLUMBING DETAILS & SCHEDULES

SHEET NUMBER:

P-301

WIRING PLANS

- CONDUIT RUN CONCEALED IN CEILING OR WALL CONSTRUCTION
- CONDUIT RUN IN FLOOR CONSTRUCTION OR UNDERGROUND
- CONDUIT RUN EXPOSED
- CONDUIT TURNING UP
- CONDUIT TURNING DOWN
- FLEXIBLE CONDUIT
- CONDUIT CAPPED FOR FUTURE.

DRAWING REFERENCES

- 2 / SC-8 — DETAIL NUMBER; PLAN DETAIL REFERENCE TITLE; DRAWING NUMBER
- 3 — KEYED NOTE DESIGNATION
- NORTH ARROW
- XXXX — ROOM NUMBERS
- 1 / E-1 — SECTION NUMBER; SECTION REFERENCE TITLE; DRAWING NUMBER

LIGHTING FIXTURES

- A 1a — LIGHTING FIXTURE (A - DESIGNATES FIXTURE TYPE; 1 - DESIGNATES CIRCUIT NUMBER; a - DESIGNATES CONTROLLING SWITCH)
- B 1a — WALL MOUNTED LIGHTING FIXTURE. HEIGHT AS NOTED.
- A 1a — RECESSED OR SURFACE LIGHTING FIXTURE
- WALL MOUNTED LIGHTING FIXTURE (EMERGENCY, CRITICAL OR LIFE SAFETY IF SHADED AS ABOVE)
- A 1a — STRIP FIXTURE
- BATTERY OPERATED EMERGENCY LIGHTING UNIT
- EXTERIOR LIGHTING FIXTURE - POLE MOUNTED TYPES AND DETAILS AS NOTED
- CLG / WALL — EXIT SIGN DOUBLE-SIDED FIXTURE DIRECTIONAL ARROWS AS INDICATED
- X / X — EXIT SIGN SINGLE-SIDED FIXTURE DIRECTIONAL ARROWS AS INDICATED

SHADING INDICATES FACE(S)

SWITCHES - LIGHTING CONTROL

TYPICAL MOUNTING HEIGHT - 48" AFF

- $ $3 $4 $K — SWITCHES - SINGLE POLE, 3-WAY, 4-WAY, KEYED
- $D — DIMMER SWITCH

ELECTRICAL ABBREVIATIONS:

A.F.F.	ABOVE FINISHED FLOOR.
C	CONDUIT
CKT	CIRCUIT
HP	HORSEPOWER
U.N.O.	UNLESS NOTED OTHERWISE
NEC	NATIONAL ELECTRIC CODE
WP	WEATERPROOF
GFI	GROUND FAULT CIRCUIT INTERRUPTER
PC	PHOTO CELL
HAF	HORIZONTAL AIRFLOW FAN

POWER EQUIPMENT

- J — CEILING-MOUNTED JUNCTION BOX (4"x4"x1-1/2" MIN.)
- PB — PULL BOX
- SWITCHBOARD
- PANELBOARD
- DISCONNECT SWITCH. FUSED OR UNFUSED AS NOTED
- DUPLEX RECEPTACLE OUTLET
- GROUND ROD
- PC — PHOTO CELL
- HC — WALL MOUNTED PUSHBUTTON FOR ADA DOOR OPENER

ELECTRICAL LEGEND AND ABBREVIATIONS (SEE SPECIFICATIONS & SCHEDULES)

NOTES:
1. NOT ALL SYMBOLS AND ABBREVIATIONS ARE USED ON THESE PLANS.
2. ALL MOUNTING HEIGHTS ARE TO CENTERLINE OF DEVICES AND EQUIPMENT U.O.N.
3. IN GENERAL, SYMBOLS SHOWN WITH LIGHT LINES DENOTE EXISTING WORK. SYMBOLS SHOWN WITH HEAVY LINES DENOTE PROPOSED WORK.

The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.

ELECTRICAL INSTALLATION NOTES:

1. THE COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE ADAAG (AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES).
2. CONCEAL ALL CONDUIT IN WALLS, PARTITIONS, ABOVE CEILING, AND BELOW FLOOR SLAB, ETC. UNLESS OTHERWISE INDICATED ON THE PLANS OR IN THE SPECIFICATIONS. CONDUIT IN MECHANICAL ROOMS, AND STORAGE ROOMS WITHOUT CEILINGS MAY BE EXPOSED ON BUILDING STRUCTURE.
3. BOXES LOCATED ON OPPOSITE SIDES OF NON-RATED WALLS SHALL BE OFFSET A MINIMUM OF 6" HORIZONTALLY. BOXES ON OPPOSITE SIDES OF FIRE RATED WALLS SHALL BE OFFSET A MINIMUM OF 24" HORIZONTALLY. "THRU-THE-WALL" BOXES SHALL NOT BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE ARCHITECT / ENGINEER.
4. ELECTRICAL EQUIPMENT SHALL BE MOUNTED TO AVOID THE IMPEDANCE OF OPERATION AND / OR ACCESS TO ELECTRICAL OR MECHANICAL EQUIPMENT. ALL MOUNTING OF ELECTRICAL GEAR ON EQUIPMENT SUPPLIED BY ANOTHER CONTRACTOR SHALL BE APPROVED IN ADVANCE BY THE OTHER CONTRACTOR.
5. ALL FINAL ELECTRICAL CONNECTIONS TO MOTORS SHALL BE MADE WITH FLEXIBLE METAL CONDUIT. USE LIQUIDTIGHT CONDUIT AND FITTINGS WHERE SUBJECT TO MOISTURE. ROUTE GROUND WIRE FROM CIRCUIT GROUNDING TO MOTOR GROUND THROUGH FLEXIBLE CONDUIT. FLEXIBLE CONDUIT SHALL NOT EXCEED 6' IN LENGTH.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OPENINGS REQUIRED IN WALLS. ALL OPENINGS SHALL BE REPAIRED TO MATCH EXISTING CONDITIONS BY A QUALIFIED CONTRACTOR AT THE EXPENSE OF THIS CONTRACTOR. ALL CONDUITS THROUGH WALLS SHALL BE GROUTED OR SEALED INTO OPENINGS.
7. ALL MATERIALS USED TO SEAL PENETRATIONS OF FIRE RATED WALLS AND FLOOR SHALL BE TESTED AND CERTIFIED AS A SYSTEM PER ASTM E814 STANDARDS FOR FIRE TESTS OF THROUGH-PENETRATION FIRESTOPS.
8. UNLESS OTHERWISE STATED, THE MINIMUM CIRCUIT SIZE SHALL BE (2) #12 AND (1) #12 GND IN 3/4" CONDUIT.

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI — CARL V. HAUCK — NUMBER E-16688 — REGISTERED PROFESSIONAL ENGINEER
3/9/20

CARL V. HAUCK
MO. LICENSE NO. 016688 EXP: 12/31/2020

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS
3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

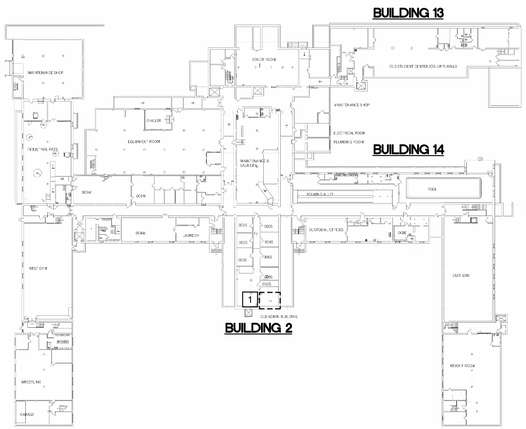
ASSET # 5012011003, 5012011004

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

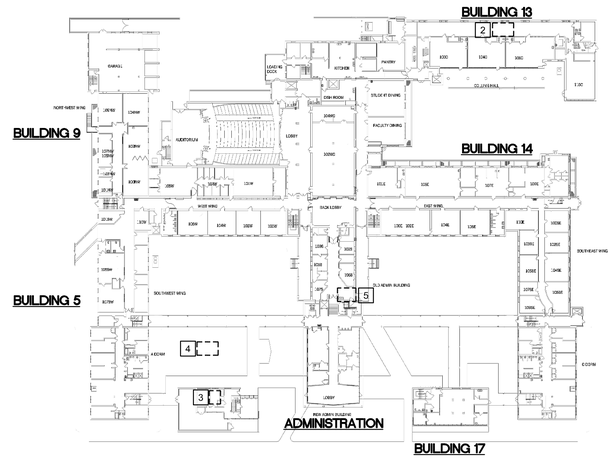
CAD DWG FILE:
DRAWN BY: TSM
CHECKED BY: CVH
DESIGNED BY: TSM

SHEET TITLE:
ELECTRICAL SYMBOLS AND ABBREVIATIONS

SHEET NUMBER:
E-001



1 **MSB BASEMENT ELECTRICAL**
NO SCALE



2 **MSB 1ST FLOOR ELECTRICAL**
NO SCALE

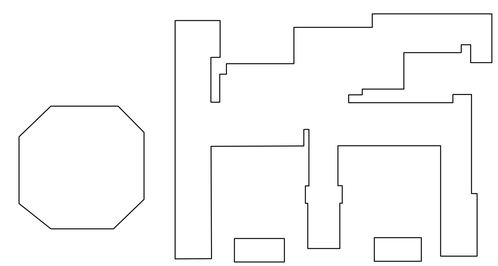
The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.

GENERAL NOTES:

1. DASHED HEAVY LINES DENOTE OUTLINES OF ELECTRICAL ROOMS CONTAINING PANEL BOARDS.
2. PLANS ARE DIAGRAMMATIC IN NATURE. THEY REFLECT THE AVAILABLE INFORMATION OBTAINED FROM FIELD OBSERVATION AND EXISTING DOCUMENTATION. ACTUAL LOCATIONS OF ELEMENTS AND EQUIPMENT MAY DEVIATE FROM THE LOCATIONS AND QUANTITIES SHOWN. CONTRACTOR SHALL FIELD VERIFY PRIOR TO BIDDING. FAILURE TO DO SO SHALL NOT BE CAUSE FOR ADDITIONAL SERVICES OR FEE.
3. ELECTRICAL ROOMS ARE SHOWN FOR REFERENCE PURPOSES ONLY. FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING WORK.
4. VERIFY CONDUIT PATHWAYS WITHIN BUILDING AND ADJUST ELEVATIONS AND ROUTING TO FACILITATE INSTALLATION. COORDINATE WITH ALL OTHER BUILDING TRADES. UTILIZE EXISTING PATHWAYS WHERE APPLICABLE. WHERE PATHWAYS DO NOT EXIST, PROVIDE NEW.
5. FINAL TERMINATION LOCATIONS SHALL BE COORDINATED WITH OTHER TRADES AND APPROVED BY OWNER PRIOR TO ROUGH-IN AND INSTALLATION.
6. SHEET E-102 FOR SITE POWER PLAN.

KEYED NOTES:

1. LOCATION OF EXISTING PANEL BOARD 'SDP-4'.
2. LOCATION OF EXISTING PANEL BOARD 'LPFI'.
3. LOCATION OF EXISTING PANEL BOARD 'LPM-1'.
4. LOCATION OF NEW GREENHOUSE PANEL BOARD, 'PP-1'.
5. LOCATION OF NEW EAST COURTYARD PANEL BOARD, 'PP-2'.



CAMPUS KEY PLAN
NOT TO SCALE

N

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
CARL V. HAUCK
NUMBER E-16688
REGISTERED PROFESSIONAL ENGINEER
3/9/20

CARL V. HAUCK
MO. LICENSE NO. 016688 EXP: 12/31/2020

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS
3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

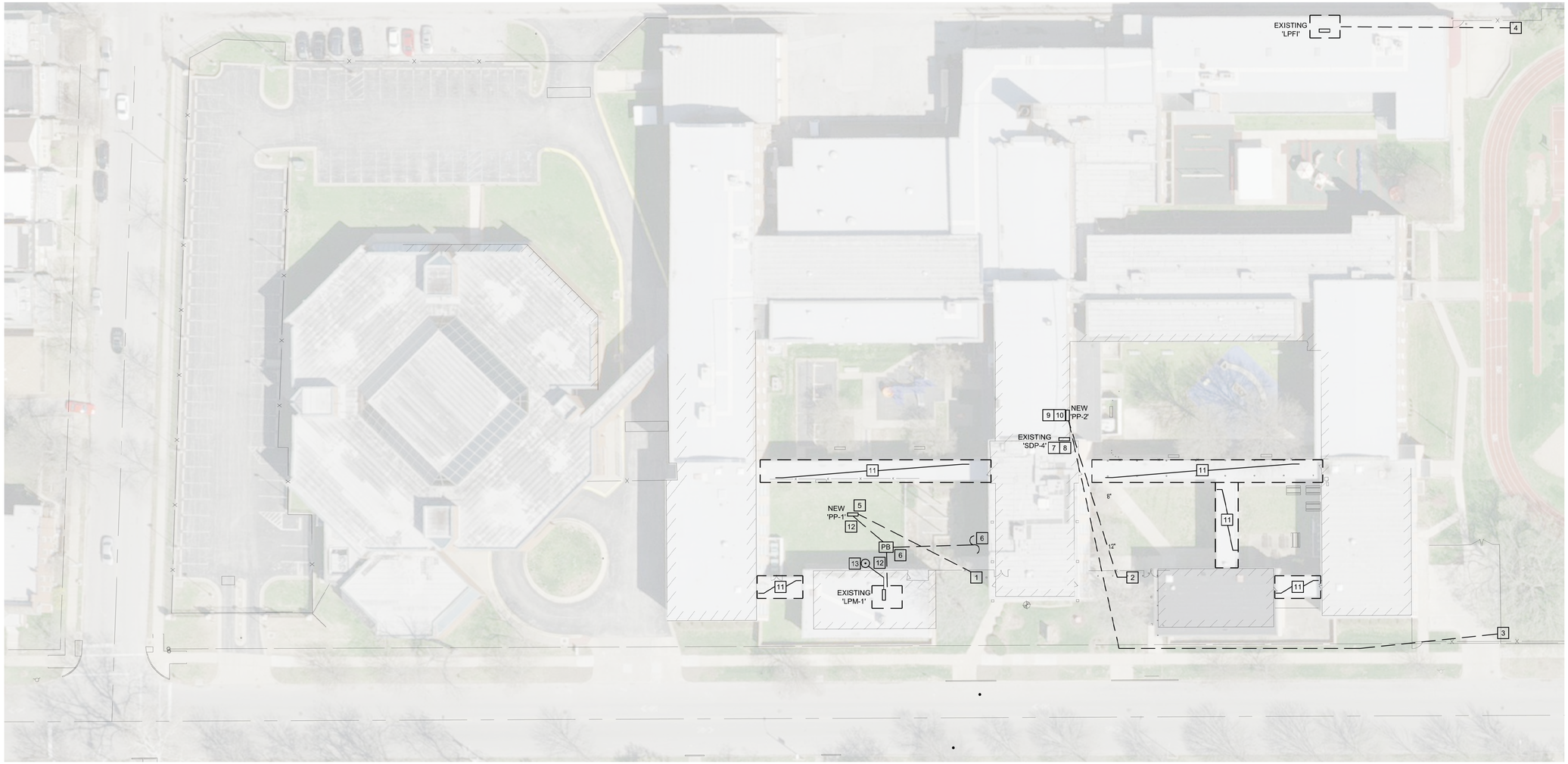
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE:
DRAWN BY: TSM
CHECKED BY: CVH
DESIGNED BY: TSM

SHEET TITLE:
ELECTRICAL ROOMS POWER

SHEET NUMBER:
E-101

The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.



1 SITE PLAN - POWER

1"= 20'-0"

N

GENERAL NOTES:

1. COORDINATE ALL WORK WITH ARCHITECTURAL AND CIVIL PLANS AND SPECIFICATIONS.
2. DASHED HEAVY LINES DENOTE OUTLINES OF ELECTRICAL ROOMS CONTAINING PANEL BOARDS.
3. PLANS ARE DIAGRAMMATIC IN NATURE. THEY REFLECT THE AVAILABLE INFORMATION OBTAINED FROM FIELD OBSERVATION AND EXISTING DOCUMENTATION. ACTUAL LOCATIONS OF ELEMENTS AND EQUIPMENT MAY DEVIATE FROM THE LOCATIONS AND QUANTITIES SHOWN. CONTRACTOR SHALL FIELD VERIFY PRIOR TO BIDDING. FAILURE TO DO SO SHALL NOT BE CAUSE FOR ADDITIONAL SERVICES OR FEE.
4. ELECTRICAL ROOMS ARE SHOWN FOR REFERENCE PURPOSES ONLY. FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING WORK.
5. VERIFY CONDUIT PATHWAYS WITHIN BUILDING AND ADJUST ELEVATIONS AND ROUTING TO FACILITATE INSTALLATION. COORDINATE WITH ALL OTHER BUILDING TRADES. UTILIZE EXISTING PATHWAYS WHERE APPLICABLE. WHERE PATHWAYS DO NOT EXIST, PROVIDE NEW.
6. FINAL TERMINATION LOCATIONS SHALL BE COORDINATED WITH OTHER TRADES AND APPROVED BY OWNER PRIOR TO ROUGH-IN AND INSTALLATION.
7. PATHWAYS SHOWN ARE GENERIC AND SHOWN FOR GENERAL ROUTING PURPOSES . CONTRACTOR SHALL COORDINATE EXACT PATHWAYS WITH EXISTING CONDITIONS.
8. WHERE PATHWAYS CROSS DRIVEWAYS, SIDEWALKS, ETC, PROVIDE TRENCHING/SAW CUT AND PATCHING OR DIRECTIONAL BORING. IN NON-PAVED AREAS, PROVIDE TRENCHING OR DIRECTIONAL BORING. COORDINATE EXACT PATHWAYS WITH EXISTING CONDITIONS.
9. WHERE POSSIBLE, SHARE SIMILAR ROUTING OF COMMUNICATION AND ELECTRICAL PATHWAYS. COORDINATE WITH ELECTRICAL AND CIVIL DRAWINGS.
10. COORDINATE CONDUIT ROUTING WITH CIVIL DRAWINGS AND CONTROL EQUIPMENT CABINET LOCATIONS. REFER TO CIVIL GATE PLANS AND SPECIFICATIONS.

KEYED NOTES:

1. UNDER ALTERNATE #1 PROVIDE (2) #10 AND (1) #10 GROUND IN 3/4" CONDUIT FOR COURTYARD GATE. EXTEND CIRCUIT TO CIRCUIT 12 IN NEW PANEL 'PP-1'. SEE PANEL SCHEDULE PP-1 ON E-202.
2. PROVIDE (2) #10 AND (1) #10 GROUND IN 3/4" CONDUIT FOR COURTYARD GATE. EXTEND CIRCUIT TO CIRCUIT 9 IN NEW PANEL 'PP-2'. SEE PANEL SCHEDULE PP-2 ON E-202.
3. UNDER ALTERNATE #4 PROVIDE (3) #10 AND (1) #10 GROUND IN 3/4" CONDUIT FOR SOUTHEAST PARKING LOT GATE. EXTEND CIRCUIT TO CIRCUIT 13/15/17 IN NEW PANEL 'PP-2' AND PROVIDE 15 AMP 3-POLE BREAKER. SEE PANEL SCHEDULE PP-2 ON E-202.
4. PROVIDE (3) #10 AND (1) #10 GROUND IN 3/4" CONDUIT FOR COLLINS HALL PLAYGROUND GATE. EXTEND CIRCUIT TO EXISTING PANEL 'LPFI' AND PROVIDE 15 AMP 3-POLE BREAKER IN EXISTING SPACE.
5. UNDER ALTERNATE #1 PROVIDE NEMA 3R 200 AMP 4 WIRE 3 PHASE 208/120V PANEL, LOCATED IN THE GREENHOUSE. SEE PANEL BOARD SCHEDULE ON SHEET E-202 FOR MORE INFORMATION.
6. UNDER ALTERNATE #1 LOCATE AND INTERCEPT EXISTING UNDERGROUND FEEDER FROM DISTRIBUTION PANEL BOARD SDP-4 TO ABANDONED SUPERVISOR'S FACILITY. REMOVE EXISTING FEEDER CONDUCTORS. PROVIDE IN GROUND POLYMER CONCRETE BOX (SIZED PER NEC) WITH TIER 8 COVER THAT READS "ELECTRIC". (SEE PULL BOX DETAIL ON E-201). EXTEND (1) 2-1/2" CONDUIT FROM BOX TO NEW PANEL PP-1 IN GREENHOUSE. PROVIDE (3) #4/0 AND (1) #4 GROUND AND TERMINATE TO EXISTING 200A/3P CIRCUIT BREAKER IN SDP-4.
7. REMOVE 30 AMP 3-POLE BREAKER, CIRCUIT #67/69/71, LOCATED IN PANEL 'SDP-4'.
8. PROVIDE 60 AMP 3-POLE CIRCUIT BREAKER IN PANEL "SDP-4", UTILIZE CIRCUIT #67/69/71 FOR 60 AMP 3 PHASE 4 WIRE 208/120V PANEL PP-2.
9. PROVIDE NEMA ONE 60 AMP 4 WIRE 3 PHASE 208/120V PANEL PP-2, LOCATED IN THE BASEMENT ELECTRICAL ROOM. SEE PANEL BOARD SCHEDULE ON SHEET E-202 FOR MORE INFORMATION.
10. PROVIDE (4) #4 AND (1) #8 GROUND IN A 1-3/4" CONDUIT TO THE BASEMENT ELECTRICAL ROOM 60 AMP PANEL, 'PP-2'.
11. UNDER BASE BID, EXISTING CATWALK LIGHTING, RECEPTACLES, SWITCHES, WIRES, AND CONDUIT ARE TO BE REMOVED AND DEMOED BACK TO SOURCE. SALVAGE EXISTING FIRE ALARM AND SPECIAL SYSTEMS EQUIPMENT FOR REUSE. EQUIPMENT NOT REUSED SHALL BE TURNED OVER TO OWNER.
12. UNDER ALTERNATE #1 PROVIDE (4) #3 AND (1) #6 GROUND IN 1-1/4" CONDUIT FROM NEW PANEL PP-1 TO EXISTING PANEL LPM-1. UTILIZE EXISTING CONDUIT FROM PULL BOX TO LPM-1.
13. UNDER ALTERNATE #1 PROVIDE NEW 3/4" X 10 COPPER-CLAD GROUND ROD. EXTEND (11) #6 COPPER CONDUCTOR IN 3/4" CONDUIT TO PANEL LPM-1 AND TERMINATE TO GROUND BUS, BOND TO BUILDING STEEL PER NEC 250.

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
CARL V. HAUCK
NUMBER E-16688
REGISTERED PROFESSIONAL ENGINEER
3/9/20

CARL V. HAUCK
MO. LICENSE NO. 016688 EXP: 12/31/2020

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS

3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

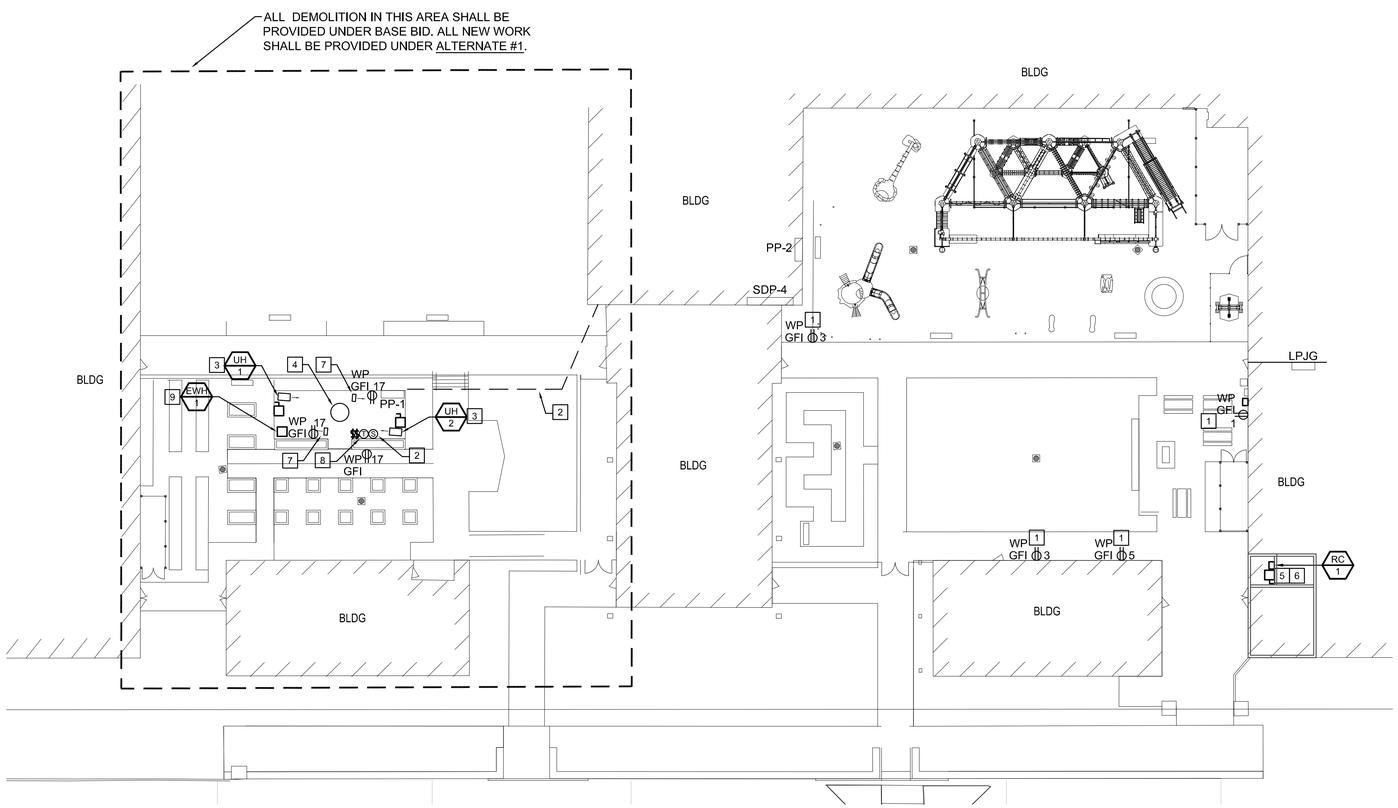
ASSET # 5012011003, 5012011004

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

CAD DWG FILE:
DRAWN BY: TSM
CHECKED BY: CVH
DESIGNED BY: TSM

SHEET TITLE:
SITE PLAN POWER

SHEET NUMBER:
E-102



1 ENLARGED SITE PLAN - ELECTRICAL

1" = 20'

The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.

GENERAL NOTES

1. COORDINATE ROUGH-IN AND FINAL EQUIPMENT LOCATIONS WITH EQUIPMENT INSTALLATIONS.
2. SEE MECHANICAL EQUIPMENT ELECTRICAL DATA SCHEDULE ON SHEET E-202 FOR MORE INFORMATION.
3. ALL ELECTRICAL DEVICES LOCATED IN EXTERIOR SPACES SHALL BE IN NEMA 3R ENCLOSURES.
4. ALL RECEPTACLES LOCATED IN EXTERIOR SPACE AND GREENHOUSE TO INCLUDE LOCKABLE IN-USE EXTRA DUTY RATED COVER PLATES.
5. ALL CONDUIT EXPOSED IN GREENHOUSE SHALL BE ALUMINUM RIGID CONDUIT.

KEYED NOTES

1. PROVIDE (2) #10 AND (1) #10 GROUND IN 3/4" CONDUIT FOR 20A GFI WP OUTLET FROM PANEL 'PP-2'.
2. UNDER ALTERNATE #1 COORDINATE WITH FACILITY CONTROLS CONTRACTOR, C&C GROUP, TO PROVIDE SCHNEIDER ELECTRIC DDC CONTROLLER AND WALL SENSOR FOR MONITORING SPACE TEMPERATURE IN GREENHOUSE. ROUTE COMMUNICATIONS WIRE BELOW GRADE IN 3/4" CONDUIT FROM GREENHOUSE BACK TO MAIN BUILDING AND CONNECT TO EXISTING BAS PORT. PROGRAM NEW GRAPHICS ON EXISTING BAS TO PROVIDE GREENHOUSE SPACE TEMPERATURE READOUT AND PROVIDE ALARMS TO INDICATE LOW SPACE TEMPERATURE (55°F ADJ.).
3. UNDER ALTERNATE #1 PROVIDE 60A, NON-FUSED DISCONNECT SWITCH IN NEMA 4X ENCLOSURE FOR ELECTRIC UNIT HEATER. EXTEND (3) #4 AND (1) #8 GROUND IN 1-1/4" CONDUIT TO PANEL PP-1. UNIT HEATER MOUNTED OVERHEAD AT GREENHOUSE STRUCTURE APPROXIMATELY 8' AFF. PROVIDE UNIT SUPPORT PER DETAIL. COORDINATE EXACT MOUNTING HARDWARE WITH GREENHOUSE CONSTRUCTION. PROVIDE ALL REQUIRED CONTROL WIRING FOR THERMOSTAT (KEYED NOTE 8).
4. UNDER ALTERNATE #1 PROVIDE GFI RECEPTACLE ON GREENHOUSE STRUCTURE OVERHEAD. PROVIDE 60" DIAMETER INDUSTRIAL CEILING FAN RATED FOR OUTDOOR INSTALLATION. 120V, MULTISPEED MOTOR, FACTORY SWITCH W/ SPEED CONTROL, POWER CORD W/ NEMA LS-20 RECEPTACLE WITH EXTRA DUTY WEATHERPROOF COVER, CORROSION RESISTANT FINISH. COORDINATE COLOR WITH ARCHITECT. FAN SHALL BE MANUFACTURED BY CANARM, J&D MANUFACTURING, OR TPI.
5. PROVIDE NEMA TYPE 1 NON-FUSIBLE 30 AMP DISCONNECT FOR REMOTE CHILLER. COORDINATE WITH CHILLER INSTALLER.
6. PROVIDE (2) #10 AND (1) #10 GROUND IN 3/4" CONDUIT FOR REMOTE WATER CHILLER. EXTEND DEDICATED CIRCUIT TO EXISTING PANEL 'LPJG'. PROVIDE NEW 20A/1P CIRCUIT BREAKER.
7. UNDER ALTERNATE #1 PROVIDE GFI RECEPTACLE ON GREENHOUSE STRUCTURE OVERHEAD. PROVIDE 12" DIAMETER HORIZONTAL AIRFLOW FAN RATED FOR OUTDOOR INSTALLATION. INSTALL AT APPROXIMATELY 7'-6" AFF. 120V, MULTISPEED MOTOR, FACTORY SWITCH W/ SPEED CONTROL, POWER CORD W/ 3-PRONG PLUG, CORROSION RESISTANT FINISH, FACTORY MOUNTING BRACKET, FAN SHALL BE MANUFACTURED BY SCHAEFER, J&D MANUFACTURING, OR MEGABREEZE.
8. UNDER ALTERNATE #1 (1) SWITCH FOR CEILING FAN CONTROL, (1) SWITCH FOR HAF FAN CONTROL, (2) THERMOSTAT FOR UNIT HEATERS CONTROL. COORDINATE EXACT LOCATION IN FIELD. ALL ITEMS SHALL BE RATED FOR OUTDOOR INSTALLATION.
9. UNDER ALTERNATE #1 PROVIDE (2) #10 AND (1) #10 GROUND IN 3/4" CONDUIT FOR REMOTE WATER HEATER. EXTEND DEDICATED CIRCUIT TO PANEL 'PP-1'.
10. APPROXIMATE LOCATION OF EXISTING PANEL LPJG.

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
CARL V. HAUCK
NUMBER E-16688
REGISTERED PROFESSIONAL ENGINEER
3/9/20

CARL V. HAUCK
MO. LICENSE NO. 016688 EXP: 12/31/2020

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS
3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

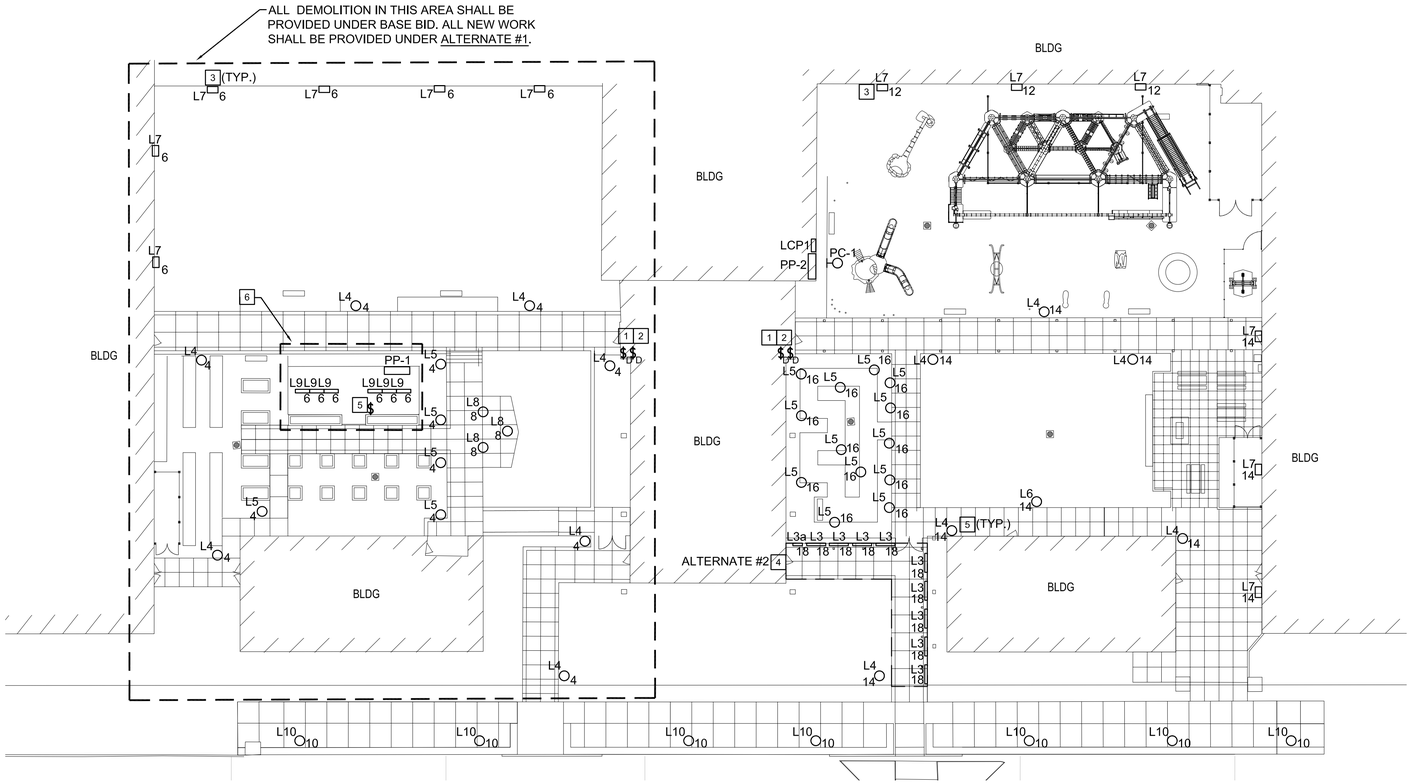
ASSET # 5012011003, 5012011004

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

CAD DWG FILE:
DRAWN BY: TSM
CHECKED BY: CVH
DESIGNED BY: TSM

SHEET TITLE:
ENLARGED SITE PLAN ELECTRICAL

SHEET NUMBER:
E-103



1 ENLARGED SITE PLAN - LIGHTING

1" = 20'

The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.

GENERAL NOTES

1. ALL LIGHTING CIRCUITS ON THIS SHEET SHALL ORIGINATE FROM PANEL PP-2 UNLESS NOTED OTHERWISE.
2. REFER TO ARCHITECTURAL SHEETS A-102 AND A-103 FOR FURTHER INFORMATION.
3. ALL ELECTRICAL DEVICES LOCATED IN EXTERIOR SPACES SHALL BE IN NEMA 3R ENCLOSURES WITH EXTRA DUTY COVERS
4. ALL L-4 POLE MOUNTED FIXTURES SHALL BE MOUNTED AT 14FT ABOVE GRADE.
5. ALL L-6 POLE MOUNTED FIXTURES SHALL BE MOUNTED AT 15FT ABOVE GRADE.
6. ALL L-7 WALL MOUNTED FIXTURES SHALL BE MOUNTED AT 25FT ABOVE GRADE.

KEYED NOTES

1. PROVIDE DIMMING SWITCH INSIDE BUILDING FOR THE COURTYARD SITE LIGHTING. COORDINATE LOCATION WITH OWNER PRIOR TO ROUGH-IN.
2. PROVIDE DIMMING INSIDE BUILDING SWITCH FOR THE COURTYARD PEDESTRIAN LIGHTING. COORDINATE LOCATION WITH OWNER PRIOR TO ROUGH-IN.
3. ROUTE SURFACE MOUNTED CONDUIT ON WALL FOR TYPE L7 FIXTURE (TYPICAL) AND PAINT CONDUIT TO MATCH BRICK.
4. CANOPY LIGHT FIXTURES SHALL BE PROVIDED UNDER ALTERNATIVE #2.
5. PROVIDE LOCAL SWITCHING ONLY FOR GREENHOUSE LIGHTS.
6. LIGHTING CIRCUITS IN GREENHOUSE SHALL ORIGINATE FROM PANEL PP-1 (ALTERNATE #1).

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
CARL V. HAUCK
NUMBER E-16688
REGISTERED PROFESSIONAL ENGINEER
3/9/20

CARL V. HAUCK
MO. LICENSE NO. 016688 EXP: 12/31/2020

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS
3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

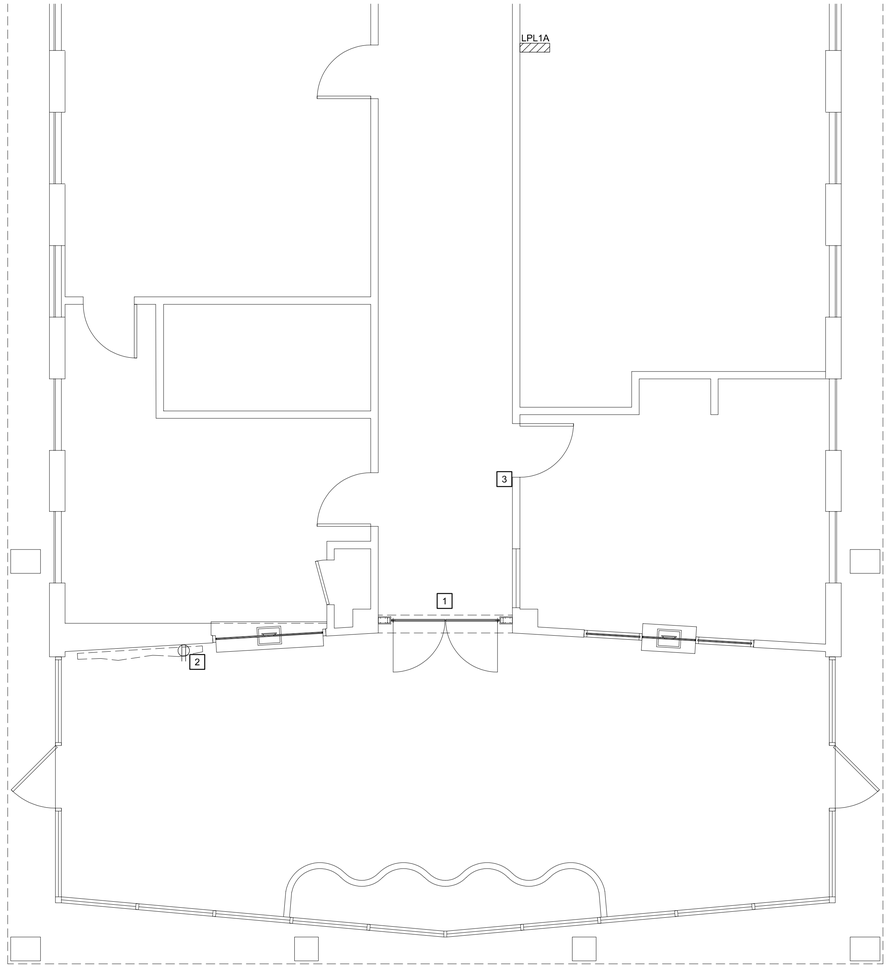
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE:
DRAWN BY: TSM
CHECKED BY: CVH
DESIGNED BY: TSM

SHEET TITLE:
SITE PLAN
LIGHTING

SHEET NUMBER:
E-104

The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.



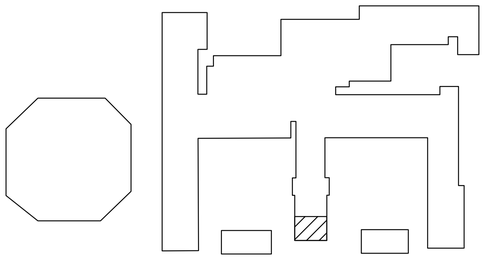
1 LOBBY PLAN - POWER
1/4"= 1'-0"

GENERAL NOTES

1. ALL WORK ON THIS SHEET SHALL BE PROVIDED UNDER BASE BID.
2. COORDINATE ALL WORK WITH ARCHITECTURAL AND CIVIL PLANS AND SPECIFICATIONS.
3. FOR MORE INFORMATION ON DOOR HARDWARE REFER TO ARCH SHEET A-101.
4. ALL WORK ON THIS SHEET SHALL BE PROVIDED UNDER BASE BID.

KEYED NOTES

1. PROVIDE (2) #12 AND (1) #12 GROUND IN 3/4" CONDUIT FOR DOOR MAGLOCK HARDWARE. EXTEND CIRCUIT TO EXISTING PANEL 'LPL1A'.
2. PROVIDE RECEPTACLE FOR ELECTRONIC ART PIECE. PROVIDE (2) #12 AND (1) #12 GROUND IN 3/4" CONDUIT. EXTEND CIRCUIT TO EXISTING PANEL 'LPL1A' AND PROVIDE DEDICATED 20 AMP BREAKER IN EXISTING SPACE. COORDINATE HEIGHT ABOVE FINISHED FLOOR WITH EQUIPMENT INSTALLATION.
3. PROVIDE (2) #12 AND (1) #12 GROUND IN 3/4" CONDUIT FOR DOOR ELECTRIC DOOR STRIKE. EXTEND CIRCUIT TO EXISTING PANEL 'LPL1A'.



CAMPUS KEY PLAN
NOT TO SCALE

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
CARL V. HAUCK
NUMBER E-16688
REGISTERED PROFESSIONAL ENGINEER
3/9/20

CARL V. HAUCK
MO. LICENSE NO. 016688 EXP: 12/31/2020

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS

3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

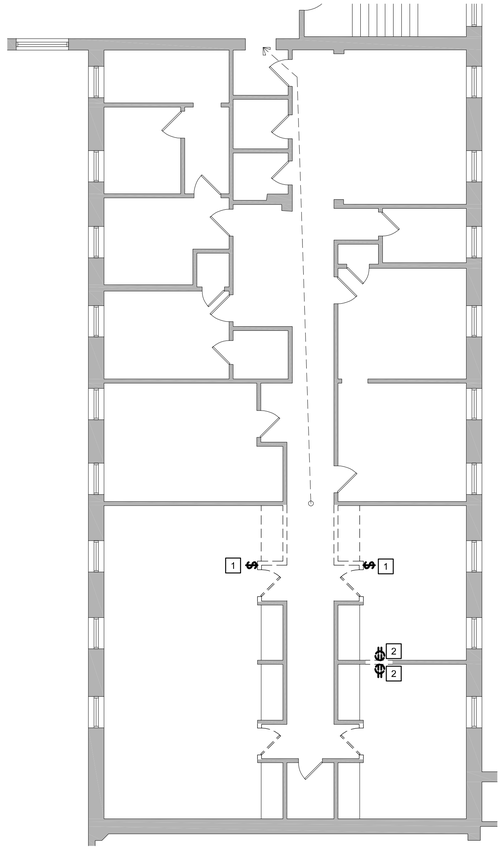
ASSET # 5012011003, 5012011004

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

CAD DWG FILE:
DRAWN BY: TSM
CHECKED BY: CVH
DESIGNED BY: TSM

SHEET TITLE:
LOBBY PLAN ELECTRICAL

SHEET NUMBER:
E-105



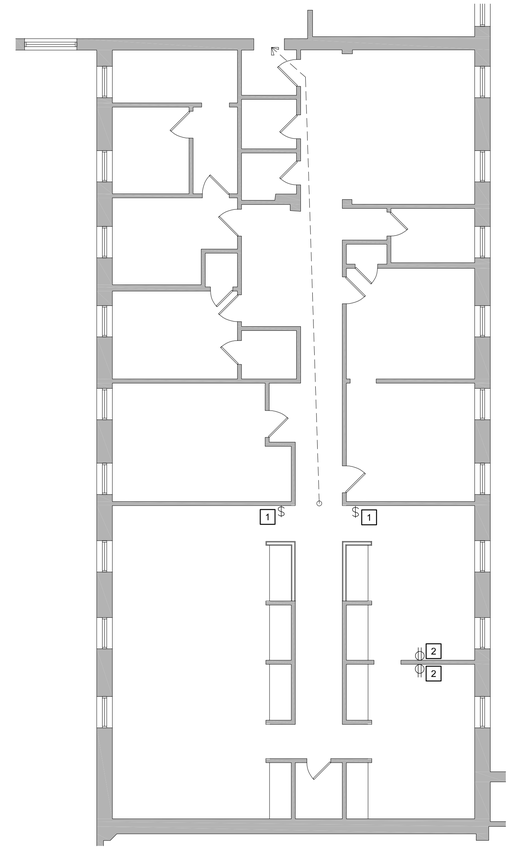
1 SECOND FLOOR PLAN DEMOLITION - POWER
1/8" - 1'-0"

GENERAL NOTES-DEMOLITION

1. ALL WORK SHALL BE PROVIDED UNDER BASE BID.
2. ALL DEVICES SHOWN ARE EXISTING TO BE DEMOLISHED UNLESS NOTED OTHERWISE AS EXISTING TO REMAIN (ETR).
3. PLANS ARE DIAGRAMMATIC IN NATURE. THEY REFLECT THE AVAILABLE INFORMATION OBTAINED FROM FIELD OBSERVATION AND EXISTING DOCUMENTATION. ACTUAL LOCATION OF ELEMENTS AND EQUIPMENT MAY DEVIATE FROM THE LOCATION AND QUANTITIES SHOWN.
4. WHILE MOST DEMOLITION WORK IS CONFINED TO CERTAIN AREAS OF THE BUILDING, WORK FOR ELECTRICAL SYSTEMS MAY BE EXTENDED TO INCLUDE OTHER AREAS OUTSIDE THE SCOPE OF WORK. COORDINATE IN ADVANCE TO PERFORM WORK IN OTHER AREAS TO MINIMIZE INTERRUPTIONS.
5. DEMOLITION REFERS TO THE DISCONNECTION AND REMOVAL OF EQUIPMENT, WIRES, AND COMPONENTS BACK TO SOURCE.
6. CONTRACTOR SHALL PROVIDE ALL CUTTING AND PATCHING AS REQUIRED FOR EXECUTION OF DEMOLITION WORK AND INSTALLATION OF NEW WORK.
7. COORDINATE THE DISCONNECTION AND REMOVAL OF ALL ITEMS WITH ASSOCIATED TRADES. ENSURE SERVICES THAT ARE REQUIRED TO REMAIN ACTIVE ARE ACTIVE DURING AND AFTER DEMOLITION IS COMPLETED. COORDINATE WITH FLOORS ABOVE AND BELOW FOR THE AVOIDANCE OF INADVERTENT SERVICE DEACTIVATION.
8. CONTRACTOR SHALL VISIT SITE PRIOR TO BID SUBMITTAL TO DETERMINE SITE CONDITIONS AFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL COMPENSATION.
9. CONTRACTOR SHALL REPAIR AND/OR REROUTE EXISTING CIRCUITS THAT ARE DISRUPTED BY DEMOLITION.

KEYED NOTES-DEMOLITION

1. DISCONNECT AND REMOVE EXISTING LIGHT SWITCH BACK TO NEAREST JUNCTION BOX. THE CIRCUIT SHALL BE PROTECTED FOR RE-USE. REFER TO NEW WORK PLAN FOR NEW LOCATION.
2. DISCONNECT AND REMOVE EXISTING WALL RECEPTACLE BACK TO NEAREST JUNCTION BOX. THE CIRCUIT SHALL BE PROTECTED FOR RE-USE. REFER TO NEW WORK PLAN FOR NEW LOCATION.



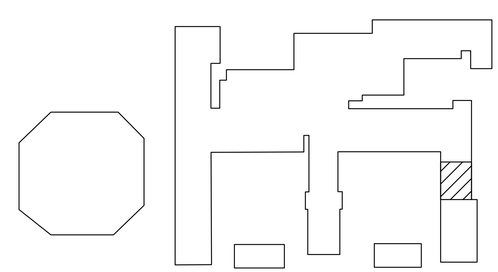
2 SECOND FLOOR PLAN NEW WORK - POWER
1/8" - 1'-0"

GENERAL NOTES-NEW WORK

1. PLANS ARE DIAGRAMMATIC IN NATURE. THEY REFLECT THE AVAILABLE INFORMATION OBTAINED FROM FIELD OBSERVATION AND EXISTING DOCUMENTATION. ACTUAL LOCATION OF ELEMENTS AND EQUIPMENT MAY DEVIATE FROM THE LOCATION AND QUANTITIES SHOWN.
2. ALL WORK ON THIS SHEET SHALL BE PROVIDED UNDER BASE BID.

KEYED NOTES-NEW WORK

1. PROVIDE LIGHT SWITCH UTILIZING EXISTING CIRCUIT FOR LIGHTS IN THIS AREA. EXTEND CIRCUIT AS REQUIRED.
2. PROVIDE RECEPTACLE AND (2) #12 AND (1) #12 GROUND FOR RECEPTACLE. EXTEND CONDUIT AND CONDUCTORS AS REQUIRED.



CAMPUS KEY PLAN
NOT TO SCALE

The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
CARL V. HAUCK
NUMBER E-16688
REGISTERED PROFESSIONAL ENGINEER
3/9/20

CARL V. HAUCK
MO. LICENSE NO. 016688 EXP: 12/31/2020

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS

3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

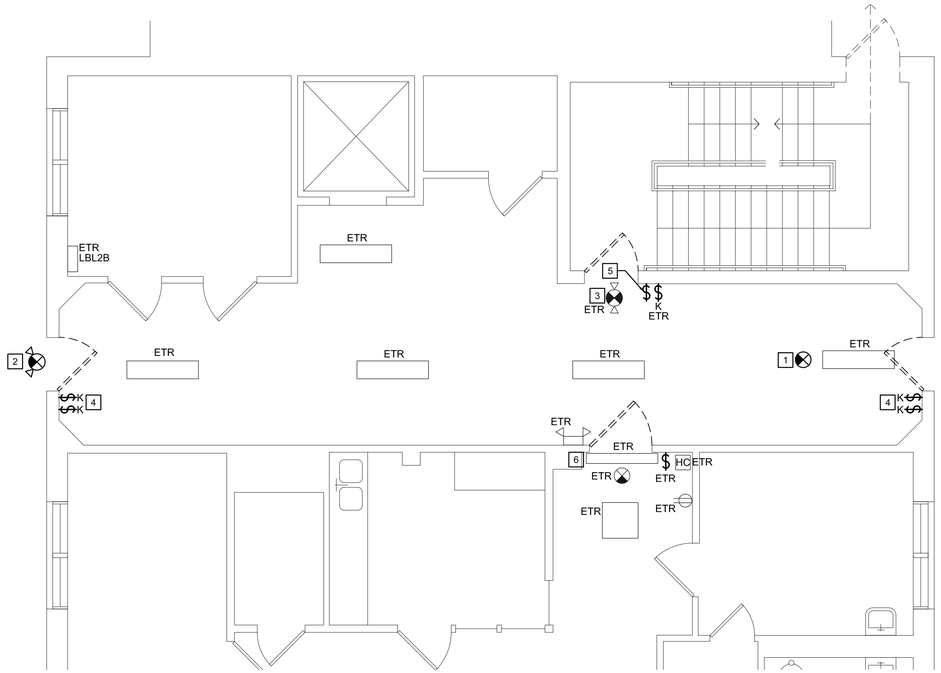
ASSET # 5012011003, 5012011004

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

CAD DWG FILE:
DRAWN BY: TSM
CHECKED BY: CVH
DESIGNED BY: TSM

SHEET TITLE:
SECOND FLOOR PLAN ELECTRICAL

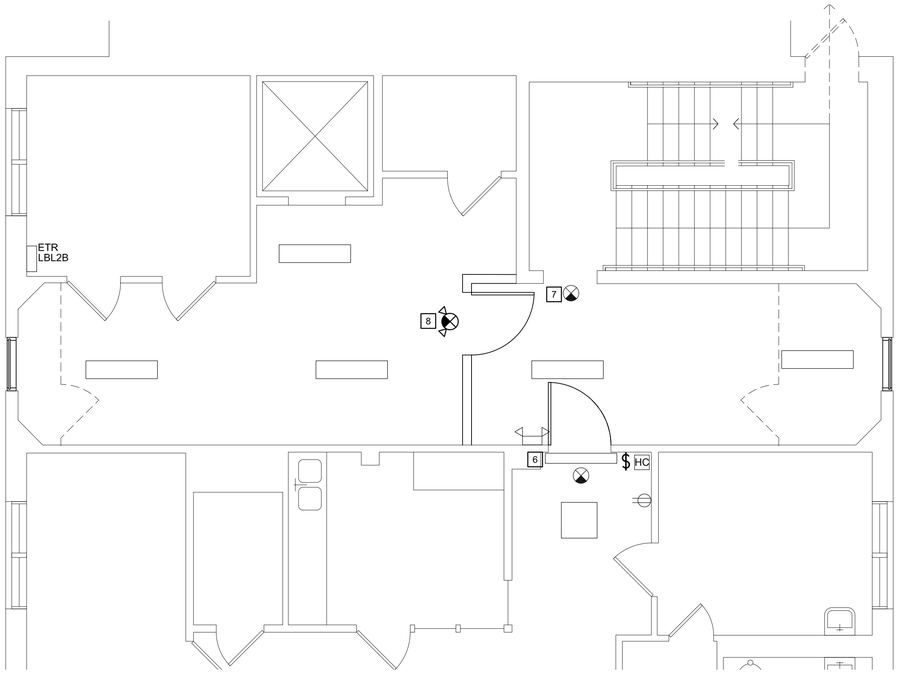
SHEET NUMBER:
E-106



1 SECOND FLOOR PLAN DEMOLITION - ELECTRICAL

1/4" - 1'-0"

N



2 SECOND FLOOR PLAN NEW WORK - ELECTRICAL

1/4" - 1'-0"

N

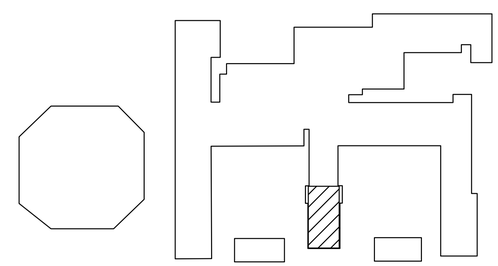
GENERAL NOTES

1. COORDINATE ALL WORK WITH ARCHITECTURAL AND CIVIL PLANS AND SPECIFICATIONS.
2. ALL WORK ON THIS SHEET SHALL BE PROVIDED UNDER BASE BID.

KEYED NOTES

1. REMOVE EXISTING EXIT LIGHT AND SAVE FOR REUSE. CAP CIRCUIT AT JUNCTION BOX AND PROVIDE BLANK COVER PLATE.
2. REMOVE EXISTING EXIT LIGHT AND SAVE FOR REUSE. DEMO CIRCUIT WITH DEMOLITION OF CATWALK.
3. DEMO EXISTING EXIT LIGHT. SAVE CIRCUIT FOR REUSE.
4. DEMO EXISTING KEYED SWITCHES FOR CATWALK LIGHTING. PROVIDE 2-GANG BLANK COVER PLATE.
5. REMOVE EXISTING SINGLE POLE LIGHT SWITCH AND REPLACE WITH KEYED SWITCH.
6. EXISTING ADA DOOR OPENER TO REMAIN AND BE CONNECTED TO NEW REPLACEMENT DOOR.
7. REINSTALL EXISTING EXIT LIGHT AT NEW LOCATION. CONNECT TO EXISTING CIRCUIT.
8. REINSTALL EXISTING EXIT LIGHT AT NEW LOCATION. EXTEND (2) #12 AND (1) #12 GROUND IN 3/4" CONDUIT TO NEAREST UNSWITCHED LIGHTING CIRCUIT.

The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.



CAMPUS KEY PLAN

NOT TO SCALE

N

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
CARL V. HAUCK
NUMBER
E-16688
REGISTERED PROFESSIONAL ENGINEER
3/9/20

CARL V. HAUCK
MO. LICENSE NO. 016688 EXP: 12/31/2020

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS

3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

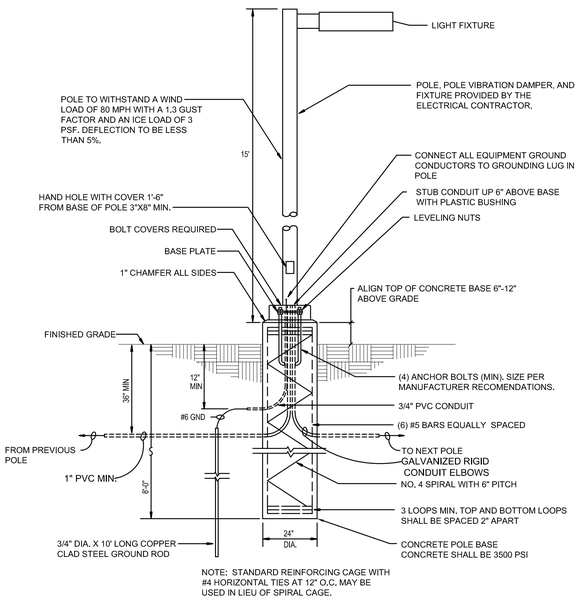
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE:
DRAWN BY: TSM
CHECKED BY: CVH
DESIGNED BY: TSM

SHEET TITLE:
SECOND FLR PLAN ELECTRICAL

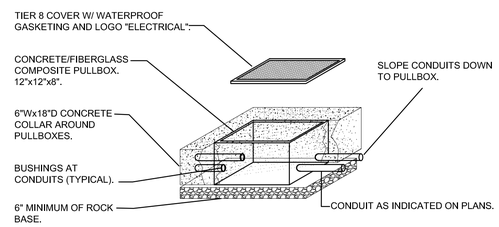
SHEET NUMBER:
E-107

The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.

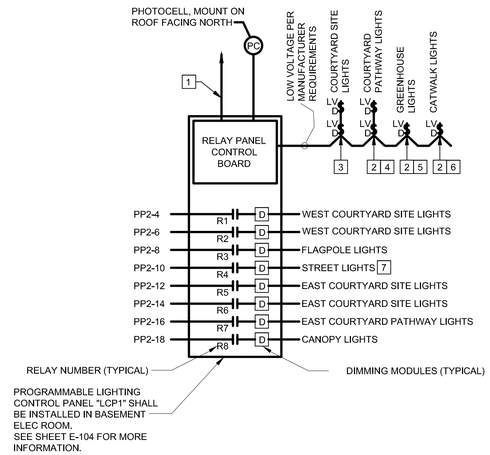


NOTE: STANDARD REINFORCING CAGE WITH #4 HORIZONTAL TIES AT 12" O.C. MAY BE USED IN LIEU OF SPIRAL CAGE.

1 LIGHT POLE DETAIL
NTS



2 PULL BOX DETAIL
NTS



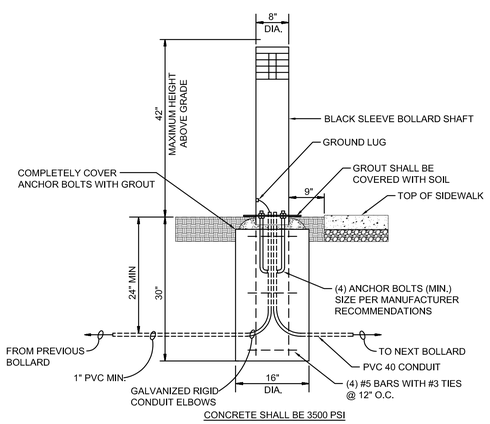
LIGHTING CONTROL SYSTEM GENERAL NOTES

1. PROVIDE WATTSTOPPER LMCP (OR ENGINEER APPROVED EQUAL) RELAY PANEL (WITH BACNET PROTOCOL AND DIMMING MODULES. CONTROL PANEL SHALL HAVE AN INTEGRAL TIME CLOCK FOR TIME SCHEDULING OF INDIVIDUAL RELAYS/DIMMING MODULES.
2. PROVIDE LIGHTING CONTROL SYSTEM RELAY PANEL WITH EACH CIRCUIT CAPABLE OF UNIQUE PROGRAMMING.
3. CONTRACTOR SHALL PROVIDE ALL LIGHTING CONTROL SYSTEM PROGRAMMING, COORDINATE TIME SCHEDULING WITH THE OWNER'S REPRESENTATIVE. EACH RELAY SHALL BE PROGRAMMED FOR PHOTOCELL ON/TIME SCHEDULE OFF WITH MANUAL DIMMING.
4. CONTRACTOR SHALL OBTAIN APPROVAL FROM THE OWNER'S REPRESENTATIVE FOR TIME OF DAY SCHEDULING, CONTROL, ETC. PRIOR TO THE START OF PROGRAMMING.
5. REFER TO FLOOR PLANS FOR LOCATION OF LIGHTING CONTROL PANEL AND LOW VOLTAGE WALL SWITCHES.
6. CONTRACTOR SHALL COORDINATE CABLE TYPES AND INSTALLATION REQUIREMENTS WITH LIGHTING CONTROL SYSTEM MANUFACTURER.

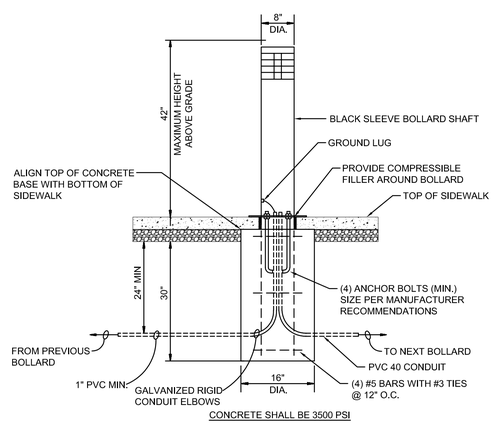
KEYED NOTES

1. PROVIDE CONNECTION TO BUILDING AUTOMATION SYSTEMS (BAS) MS/TP NETWORK. COORDINATE CONNECTION LOCATION WITH BAS MANUFACTURER.
2. UNDER NORMAL OPERATION (PHOTOCELL ON/TIME CLOCK OFF) LIGHTS FIXTURES CONTROLLED BY THE LIGHTING CONTROL PANEL SHALL BE AT FULL LUMEN OUTPUT. OPERATION OF A DIMMER SWITCH SHALL REDUCE THE LUMEN OUTPUT OF THE ZONES BEING CONTROLLED. EACH DIMMER SWITCH SHALL BE PROGRAMMED FOR A MAXIMUM OF 2 HOURS OVERRIDE UPON ACTIVATION. AFTER THE DIMMER SWITCH TIME STARTUP ELAPSES, LIGHT FIXTURES SHALL RETURN TO FULL OUTPUT UNTIL THE TIME CLOCK OFF SETTING TURNS THE LIGHTS OFF.
3. PROGRAM LOW VOLTAGE WALL SWITCHES TO CONTROL RELAYS R1 AND R2.
4. PROGRAM LOW VOLTAGE WALL SWITCHES TO CONTROL RELAY R3.
5. PROGRAM LOW VOLTAGE WALL SWITCHES TO CONTROL RELAYS R4, R5, & R6.
6. PROGRAM LOW VOLTAGE WALL SWITCHES TO CONTROL RELAY R7.
7. COORDINATE PROGRAMMING OF MAGNOLIA STREET LIGHTS WITH THE CITY OF ST. LOUIS.

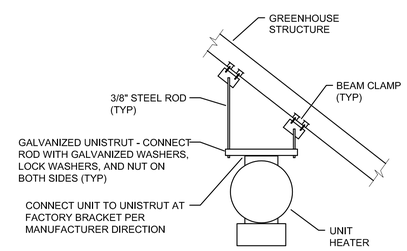
3 LIGHTING CONTROL SYSTEM DIAGRAM
NTS



4 BOLLARD BASE DETAIL (GRASS AREA)
NTS



5 BOLLARD BASE DETAIL (SIDEWALK AREA)
NTS



6 UNIT HEATER MOUNTING DETAIL
NTS

BID AS PART OF ALTERNATE #1

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
CARL V. HAUCK
NUMBER E-16688
REGISTERED PROFESSIONAL ENGINEER
3/9/20

CARL V. HAUCK
MO. LICENSE NO. 016688 EXP: 12/31/2020

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS
3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

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

CAD DWG FILE:
DRAWN BY: TSM
CHECKED BY: CVH
DESIGNED BY: TSM

SHEET TITLE:
ELECTRICAL DETAILS

SHEET NUMBER:
E-201

The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.

LIGHT FIXTURE SCHEDULE

PLAN MARK	DESCRIPTION	MANUFACTURER'S INFORMATION			LAMP	LED LUMEN OUTPUT	COLOR TEMP	APPARENT LOAD	VOLTAGE	MOUNTING/CEILING INFORMATION	COMMENTS
		MANUFACTURER BASIS OF DESIGN	MODEL NUMBER	APPROVE EQUALS							
L1	CEILING MOUNTED DOWNLIGHT	BEGA	66 975 K4	CYLINDERS HESS	LED	348	4000K	6 VA	MVOLT	RECESSED	
L2	CEILING MOUNTED DOWNLIGHT	BEGA	66 055 K4	TECH LIGHTING HESS	LED	301	4000K	4,5 VA	MVOLT	RECESSED	
L3	LED OUTDOOR STRIP	BEGA	24 319 K4	TECH LIGHTING VISION	LED	2038	4000K	36 VA	MVOLT	SURFACE	
L3a	LED OUTDOOR STRIP	BEGA	24 318 K4	TECH LIGHTING VISION	LED	1059	4000K	19 VA	MVOLT	SURFACE	
L4	POLE TOP LUMINARIES WITH SYMMETRICAL LIGHT DISTRIBUTION	BEGA BEGA TUBE	77 142 K4 99622	SELUX HYDREL	LED	1698	4000K	27 VA	MVOLT	POLE MOUNT 14' ABOVE GRADE	SEE POLE DETAIL ON E-201 FOR POLE BASE
L5	LED SYSTEM BOLLARDS UNSHIELDED WITH SAFETY GUARD	BEGA BEGA POLE	99 765 K4 906HR	SELUX LIGMAN	LED	566	4000K	20 VA	MVOLT	POLE	SEE BOLLARD DETAIL ON E-201 FOR BOLLARD BASE
L6	1'x3' POLE MOUNTED SECURITY FIXTURE	COOPER	GLEON-AF-03-LED-E1-T3	D-SERIES AMERICAN ELECTRIC	LED	19,049	4000K	166 VA	MVOLT	POLE MOUNT 16' ABOVE GRADE	SEE POLE DETAIL ON E-201 FOR POLE BASE
L7	WALL PACK	COOPER	GWC-AF-01-LED-E1-T4W-1200	D-SERIES AMERICAN ELECTRIC	LED	8,089	4000K	67 VA	MVOLT	WALL MOUNT 25' ABOVE GRADE	BACK BOX ORDERED SEPARATELY: MA1059XX
L8	FLAG POLE FIXTURE	LUMARK	NFFLD-S-C15-D-UNV-33-S-CB	RISE D-SERIES	LED	5,900	4000K	52 VA	MVOLT	POLE	
L9	LINEAR STRIP	G&G	VPX-4-40K-UVO-120V	SOLAR RAY LUMAX	LED	5,000	4000K	42 VA	MVOLT	PENDANT	
L10	STREET LIGHT	KING LUMINAIRE	K118R	NA	LED	N/A	4000K	100 VA	120V	STRESSCRETE KLC 10' POLE, POLISHED FINISH, FLUSH BASE PLATE	K16 CAPITAL, SOLID SPUN ALUMINUM TOP, #2 FINIAL

LIGHT FIXTURE SCHEDULE GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR ALL MISCELLANEOUS HARDWARE, CLIPS, ANGLES, FRAMES, BOXES ETC. AS REQUIRED TO MOUNT THE FIXTURES IN OR ON THE SURFACES THEY ARE TO BE INSTALLED.
2. REFER TO ARCHITECTURAL DOCUMENTS FOR EXACT MOUNTING LOCATIONS OF LIGHT FIXTURES.
3. WHEN INSTALLING LUMINARIES, THE CONTRACTOR SHALL USE THE LIGHT FIXTURE MANUFACTURER'S MOUNTING HARDWARE AND FOLLOW ALL MANUFACTURER'S INSTALLATION DIRECTIONS.
4. ALL RECESSED DOWNLIGHTS MUST BE INSTALLED SO THAT THE BOTTOM OF THE THROAT IS EVEN WITH THE FINISHED CEILING PLANE. THE OVERLAPPING FLANGE MUST THEN FIT FLUSH TO THE CEILING PLANE/THROAT. NO LIGHT LEAK MUST BE VISIBLE. ALL MISCELLANEOUS HARDWARE ABOVE THE CEILING PLANE TO ACCOMPLISH THE ABOVE SHALL BE INCLUDED IN THE BASE BID.
5. ALL RECESSED DOWNLIGHTS SHALL HAVE SELF-FLANGED REFLECTORS.
6. ALL LIGHT FIXTURES SHALL HAVE A U.L. LABEL.
7. ALL FIXTURES SHALL OPERATE AT 120 VOLTS OR OTHER VOLTAGE AS REQUIRED BY THE CIRCUITS AND/OR PANELS TO WHICH THEY ARE CONNECTED.
8. WHEN FIXTURES ARE INSTALLED IN CONTINUOUS ROWS 2 OR MORE, FIXTURES SHALL BE APPROVED FOR USE AS WIREWAY.
9. REFER TO DIVISION 26 SPECIFICATIONS FOR ADDITIONAL INFORMATION CONCERNING FIXTURES, FINISHES, DRIVERS, ETC.
10. INDOOR LED COLOR TEMPERATURE SHALL BE 3500 KELVIN, OUTDOOR LED COLOR TEMPERATURE SHALL BE 4000 KELVIN (UNLESS OTHERWISE NOTED).

UNIT HEATER SCHEDULE

	MANUFACTURER & MODEL NO.			KW	MBH	CFM	MOTOR HP	VOLTS/PH	MCA	TEMP RISE (°F)	THROW (FT)	WEIGHT (LB)	REMARKS
	TRANE	MARLEY	INDEECO										
UH-1	UHRA-20	QWD	TRIAD	20	68,260	1400	1/3	208/3	55.6	45	35	100	ALL
UH-2	UHRA-20	QWD	TRIAD	20	68,260	1400	1/3	208/3	55.6	45	35	100	ALL

NOTES:
1. CORROSION RESISTANT COMPONENTS. TOTALLY ENCLOSED, WATERTIGHT STAINLESS STEEL CASING.
2. NEMA 4X CONTROL PANEL.
3. 24 V CONTROL TRANSFORMER AND CONTROL CIRCUIT FOR REMOTE THERMOSTAT.
4. REMOTE THERMOSTAT, 24V, 2-STAGE OPERATION.
5. THREE POSITION SWITCH - OFF/HEAT/FAN.
6. SINGLE POINT POWER CONNECTION. INTEGRAL DISCONNECT WITH ENCLOSURE INTERLOCK.
7. AUTO RESET THERMAL CUTOUT.
8. INLET GRILLE AND DISCHARGE GRILLE.
9. UNIT SHALL MEET ALL UL, NEC, AND OSHA REQUIREMENTS.
10. UNIT SHALL BE INSTALLED AND WIRED IN ACCORDANCE WITH MANUFACTURER DIRECTION AND ALL APPLICABLE CODES.
11. PROVIDED BY ELECTRICAL CONTRACTOR.

PANEL: PP-1 OC DEVICE: BREAKER ENCLOSURE: NEMA 3R MAINS: MAIN CIRCUIT BREAKER CONTINUOUS: 200 A
LOCATION: GREENHOUSE TYPE: BOLT ON MOUNTING: SURFACE WIRING: 3-PHASE, 4-WIRE BUS SC RATING:
FED FROM: SDP-4 VOLTAGE: 120/208V FAULT CURRENT

CKT	DESCRIPTION	NOTES	OC	P	A		B		C		P	OC	NOTES	DESCRIPTION	CKT
1				3	6667 VA						1	20 A		SPARE	2
3	UH-1		70 A	3			6667 VA				1	20 A		SPARE	4
5				3					6667 VA	252 VA	1	20 A		GREENHOUSE LIGHTING	6
7				3	6667 VA	120 VA					1	20 A		BAS CONTROLLER	8
9	UH-2		70 A	3			6667 VA				1	20 A		SPARE	10
11				3					6667 VA		1	20 A		SPARE	12
13	COURTYARD GATE		20 A	1	600 VA						1	20 A		SPARE	14
15	WATER HEATER		20 A	1			1440 VA				1	20 A		SPARE	16
17	GREENHOUSE RECEPTACLES		20 A	1					720 VA		1	20 A		SPARE	18
19	SPARE		20 A	1							1	20 A		SPARE	20
21	SPARE		20 A	1							1	20 A		SPARE	22
23	SPARE		20 A	1							1	20 A		SPARE	24
25	SPARE		20 A	1		3600 VA					3	100 A		PANEL LPM-1	26
27	SPARE		20 A	1				3600 VA							28
29	SPARE		20 A	1						3600 VA					30
					17654 VA		18374 VA		17906 VA						
					147 A		153 A		149 A						

TOTAL CONNECTED LOAD: 53934 VA TOTAL CONNECTED AMPS: 150 A
TOTAL DEMAND LOAD: 53877 VA TOTAL DEMAND AMPS: 150 A

NOTES:
1. PANEL PP-1 IS PROVIDED UNDER ALTERNATE #1.

PANEL: PP-2 OC DEVICE: BREAKER ENCLOSURE: NEMA 3R MAINS: MAIN CIRCUIT BREAKER CONTINUOUS: 60 A
LOCATION: EASTCOURTYARD TYPE: BOLT ON MOUNTING: SURFACE WIRING: 3-PHASE, 4-WIRE BUS SC RATING:
FED FROM: SDP-4 VOLTAGE: 120/208V FAULT CURRENT

CKT	DESCRIPTION	NOTES	OC	P	A		B		C		P	OC	NOTES	DESCRIPTION	CKT
1	WEATHERPROOF GFCI RECEPTACLE		20 A	1	180 VA						1	20 A		SPARE	2
3	WEATHERPROOF GFCI RECEPTACLE		20 A	1			360 VA	289 VA			1	20 A		PEDESTRIAN LIGHTING	4
5	WEATHERPROOF GFCI RECEPTACLE		20 A	1					180 VA	469 VA	1	20 A		SITE LIGHITING - WEST COURTYARD	6
7	SPARE		20 A	1		156 VA					1	20 A		FLAGPOLE LIGHTS - WEST COURTYARD	8
9	COURTYARD GATE		20 A	1			600 VA	700 VA			1	20 A		STREET LIGHTING	10
11	SPARE		20 A	1						201 VA	1	20 A		SITE LIGHTING - EAST COURTYARD	12
13	SOUTHEAST PARKING LOT GATE		15 A	3	577 VA	528 VA					1	20 A		SITE LIGHTING - EAST COURTYARD	14
15							577 VA	260 VA			1	20 A		SITE LIGHTING - EAST COURTYARD	16
17									577 VA	343 VA	1	20 A		CANOPY LIGHTING	18
19	SPARE		20 A	1							1	20 A		SPARE	20
21	SPARE		20 A	1							1	20 A		SPARE	22
23	SPARE		20 A	1							1	20 A		SPARE	24
25	SPARE		20 A	1							1	20 A		SPARE	26
27	SPARE		20 A	1							1	20 A		SPARE	28
29	SPARE		20 A	1							1	20 A		SPARE	30
					1441 VA		2786 VA		1770 VA						
					12 A		23 A		15 A						

TOTAL CONNECTED LOAD: 5997 VA TOTAL CONNECTED AMPS: 17 A
TOTAL DEMAND LOAD: 6734 VA TOTAL DEMAND AMPS: 19 A

NOTES:
1. PANEL PP-2 IS PROVIDED UNDER BASE BID.

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI CARL V. HAUCK NUMBER E-16688 REGISTERED PROFESSIONAL ENGINEER
3/9/20

CARL V. HAUCK
MO. LICENSE NO. 016688 EXP: 12/31/2020

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS
3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

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

CAD DWG FILE:
DRAWN BY: TSM
CHECKED BY: CVH
DESIGNED BY: TSM

SHEET TITLE:
ELECTRICAL
SCHEDULES

SHEET NUMBER:
E-202

The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.

TECHNOLOGY COMMUNICATION SYMBOLS AND ABBREVIATIONS

(NOT ALL SYMBOLS MAY BE UTILIZED IN PROJECT)

COMMUNICATION GENERAL NOTES:

A. ALL SYMBOLS SHOWN ARE NOT NECESSARILY USED ON THIS PROJECT.
B. THE DRAWINGS HAVE BEEN PREPARED UTILIZING EXISTING DRAWINGS AND BUILDING OBSERVATIONS AND MAY NOT SHOW ALL CONDITIONS. CONTRACTOR SHALL VISIT THE BUILDING AND SITE PRIOR TO BID SUBMISSION AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS. CONTRACTORS SHALL NOT BE ALLOWED ADDITIONAL FUNDS OR TIME DUE TO FAILURE TO BECOME FAMILIAR WITH ALL EXISTING CONDITIONS.
C. ACCEPTANCE OF CONTRACT MEANS INSTALLER ACCEPTS EXISTING CONDITIONS.
D. COORDINATE INSTALLATION WITH EXISTING CONDITIONS. FIELD VERIFY EXISTING CONDITIONS.
E. CONTRACTOR SHALL SCHEDULE ALL OUTAGES WITH THE OWNER'S REPRESENTATIVE AT LEAST 14 CALENDAR DAYS IN A DEVICE OF A SHUTDOWN.
F. ALL PENETRATIONS THROUGH CONCRETE OR MASONRY WALLS AND FLOOR SLABS SHALL BE CORE DRILLED. AFTER CONDUITS HAVE BEEN INSTALLED, SEAL WALL AROUND CONDUIT TO MAINTAIN FIRE RATING OF FLOOR OR WALL USING UL LISTED METHODS AND MATERIALS. EXTERIOR WALLS SHALL BE SEALED WATER TIGHT.
G. PROVIDE EMT SLEEVES WITH UNINSULATED BUSHINGS ON EACH END FOR ALL CABLES PASSING THROUGH WALLS AND FLOORS. ALL PENETRATIONS THROUGH RATED WALLS AND FLOORS SHALL BE FIRE STOPPED. SEAL AROUND OUTSIDE OF CONDUITS AND SEAL INSIDE OF CONDUIT SLEEVES OR UTILIZE AN APPROVED FIRE RATED ASSEMBLY.
H. CABLING TO BE LOCATED INSIDE BUILDINGS SHALL BE CONCEALED WHERE POSSIBLE AND SHALL BE INSTALLED AS FOLLOWS: CABLES CONCEALED INSIDE HOLLOW WALL CONSTRUCTION SHALL BE INSTALLED IN CONDUITS STUBBED INTO ACCESSIBLE PORTION OF CEILING CAVITY AND SHALL BE SUPPORTED UTILIZING J-HOOK PATHWAYS. CABLES LOCATED IN ROOMS WITH AN EXPOSED CEILING STRUCTURE SHALL BE INSTALLED IN CONDUIT. CABLES INSTALLED ABOVE DRYWALL CEILINGS SHALL BE INSTALLED IN CONDUIT. CABLES INSTALLED IN SOLID MASONRY WALLS SHALL BE INSTALLED IN SURFACE RACEWAY. ROUTE CONDUIT AND CABLES TO SUIT FIELD CONDITIONS. REFER TO PLANS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
I. CONTRACTOR SHALL COORDINATE ALL CONDUIT AND CABLE ROUTING WITH EXISTING CONDITIONS PRIOR TO INSTALLATION.
J. CONTRACTOR SHALL TERMINATE AND TEST ALL COMMUNICATION SYSTEM CABLES PER SPECIFICATIONS AND LATEST TIA/EIA STANDARDS.
K. COMMUNICATION CABLING SHALL NOT EXCEED 90 METERS (295 FEET) PER TIA/EIA STANDARDS.
L. CONTRACTOR SHALL LABEL ALL CABLES AND CONNECTORS (OUTLETS, PATCH PANELS, FACEPLATES, PUNCH DOWN BLOCKS, ETC.) PER SPECIFICATIONS AND OWNER STANDARDS. ALL CABLES SHALL BE PERMANENTLY LABELED WITH A PRE-PRINTED, STICK ON, SELF ADHERING LABELING SYSTEM. REFER TO SPECIFICATIONS.
M. PROVIDE WORK SPECIFIED BUT NOT SHOWN ON DRAWINGS AND PROVIDE WORK SHOWN ON DRAWINGS BUT NOT SPECIFIED AS THOUGH EXPRESSLY REQUIRED BY BOTH.
N. CONTRACTOR SHALL REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR PLACEMENT OF CEILING MOUNTED EQUIPMENT. COORDINATE WITH ALL OTHER TRADES.
O. CONTRACTOR SHALL PROVIDE PULL STRINGS IN ALL EMPTY OR SPARE CONDUIT.

SECURITY GENERAL NOTES:

ACCESS CONTROL SYSTEM

A. PROVIDE ALL REQUIRED PROGRAMMING OF THE ACCESS CONTROL SYSTEM. COORDINATE WITH OWNER FOR SCHEDULE AND OPERATION OF EACH DOOR AND DEVELOPMENT OF ACCESS LEVELS.
B. COORDINATE SHUNT TIMES FOR ALL SECURED DOORS WITH THE OWNER.
C. COORDINATE CONDUIT AND BOX ROUGH-IN LOCATIONS WITH THE DOOR HARDWARE INSTALLER PRIOR TO THE START OF CONSTRUCTION. REFER TO COMMUNICATION DETAIL SHEETS.
D. ACCESS CONTROL SYSTEM DOOR DEVICES INCLUDING BUT NOT LIMITED TO LOCKING MECHANISM, POWER TRANSFER HINGES, CRASH BARS AND DOOR POSITION/CONTACTS SHALL BE FURNISHED BY THE DOOR HARDWARE SUPPLIER. THEY SHALL BE INSTALLED AND WIRED BY THE SECURITY SYSTEM CONTRACTOR UNLESS NOTED OTHERWISE.
E. DOOR LOCK POWER SUPPLIES WITH BATTERY BACKUP SHALL BE FURNISHED, INSTALLED, SIZED AND WIRED BY SECURITY SYSTEM CONTRACTOR. IT IS THE SECURITY SYSTEM CONTRACTORS RESPONSIBILITY TO COORDINATE ELECTRICAL LOAD AND WIRING REQUIREMENTS FOR LOCKING MECHANISM. POWER SUPPLIES SHALL BE LOCATED IN THE COMMUNICATION ROOMS UNLESS NOTED OTHERWISE.
F. ACCESS CONTROL SYSTEM CABLE SIZES, TYPE AND QUANTITIES ARE SHOWN FOR REFERENCE AND BIDDING PURPOSES. THE SECURITY SYSTEM CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CABLING SUITABLE FOR USE WITH THE DEVICES SPECIFIED WITHIN THIS PROJECT.
G. SECURITY SYSTEM CONTRACTOR SHALL COORDINATE EXACT REQUIREMENTS WITH ARCHITECTURAL DOOR HARDWARE, SCHEDULE, DOOR CONTRACTOR AND SUPPLIER PRIOR TO PURCHASE AND INSTALLATION.

VIDEO SURVEILLANCE SYSTEM

A. VIDEO FROM SECURITY CAMERA SHALL BE STORED IN AN EXISTING VIDEO MANAGEMENT SYSTEM NETWORK RECODING SERVER. SECURITY SYSTEM CONTRACTOR SHALL CONTACT OWNER FOR RECORDING FRAME RATES, STORAGE DURATION AND MOTION ACTIVATION SETTING REQUIREMENTS. SECURITY SYSTEM CONTRACTOR SHALL CONFIGURE AND PROGRAM VIDEO MANAGEMENT SYSTEM. SERVER LICENSING SHALL BE INCLUDED IN THE BASE BID.
B. SECURITY SYSTEM CONTRACTOR SHALL SCHEDULE AN ON-SITE MEETING WITH OWNER TO REVIEW FINAL CAMERA PLACEMENT AND FIELD OF VIEWS PRIOR TO INSTALLATION.
C. SECURITY SYSTEM CONTRACTOR SHALL UTILIZE EXISTING OWNER SWITCHES AND COORDINATE IP ADDRESSING FOR CAMERAS FROM OWNER.

FIRE ALARM AND MASS NOTIFICATION SYMBOLS:

75 F — WALL MOUNT FIRE ALARM COMBINATION SPEAKER, STROBE, NOTIFICATION LIGHTS: MOUNT WITH BOTTOM OF STROBE LENS AT THE LOWER OF 80" A.F.F OR 6" BELOW CEILING. NUMERAL WHEN USED INDICATES CANDELA RATING OF MORE THAN 15.

SD F — SMOKE DETECTOR: PHOTO-ELECTRIC TYPE.

DH F — FIRE ALARM ELECTROMAGNETIC DOOR HOLDER.

o — EMERGENCY MASS NOTIFICATION PUSH BUTTONS:
EARTHQUAKE
TERRORIST
INTRUDER
TORNADO

OTHER:

4 / T301 — DETAIL REFERENCE. "4" INDICATES DETAIL # "T301" INDICATES SHEET. REFER TO DETAIL FOR ADDITIONAL REQUIREMENTS.

1 — SHEET KEYED NOTE "1" INDICATES NOTE #.

COMMUNICATION SYMBOLS:

COMMUNICATION OUTLET. REFER TO SPECIFICATIONS AND COMMUNICATION DETAIL SHEETS FOR ADDITIONAL REQUIREMENTS. REFER TO COMMUNICATION OUTLET IDENTIFIERS AND CABLING IDENTIFICATION LISTED BELOW.

- EXISTING OR DEMOLITION COMMUNICATION OUTLET
- NEW COMMUNICATION OUTLET
- WIRELESS ACCESS POINT OUTLET

PUBLIC ADDRESS OR INTERCOM SYMBOLS:

PAGING/INTERCOM SPEAKER: WALL MOUNT. SPEAKER SHALL BE MOUNTED AT APPROXIMATELY 8'-0" A.F.F. UNLESS NOTED OTHERWISE.

PAGING/INTERCOM SPEAKER: CEILING MOUNT.

SECURITY SYMBOLS:

CR S — CARD READER: DEVICE SHALL BE MOUNTED AT APPROXIMATELY 48" A.F.F. TO CENTER OF DEVICE.

PS S — DOOR POSITION SWITCH/CONTACTS.

L S — DOOR LOCKING MECHANISM - ELECTRONIC.

ML S — DOOR LOCKING MECHANISM - MAGNETIC LOCK.

RXM S — REQUEST TO EXIT DEVICE.
RXB = WALL MOUNT PUSH BUTTON
RXM = WALL MOUNT MOTION SENSOR ABOVE DOOR

ICM S — INTERCOM MASTER STATION WITH REMOTE DOOR RELEASE

IC S — AUDIO/VIDEO INTERCOM STATION

SMS S — SECURITY MASTER COMPUTER STATION

GCC S — SECURITY GATE CONTROL CABINET (REFER TO CIVIL DRAWINGS AND SPECIFICATIONS)

PUSH BUTTON FOR REMOTE DOOR RELEASE

VIDEO SURVEILLANCE CAMERA

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
CARL V. HAUCK
NUMBER E-16688
REGISTERED PROFESSIONAL ENGINEER
3/9/20

CARL V. HAUCK
MO. LICENSE NO. 016688 EXP: 12/31/2020

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS

3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

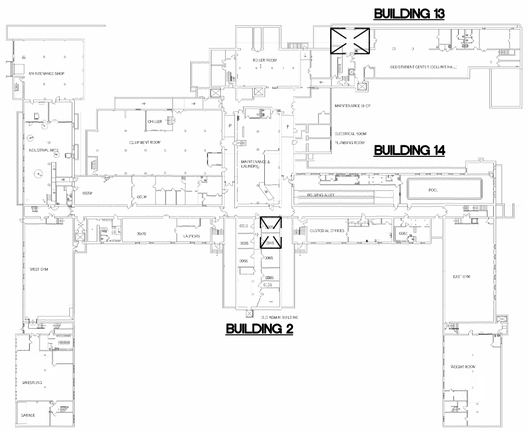
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE:
DRAWN BY: JLC
CHECKED BY: CVH
DESIGNED BY: JLC

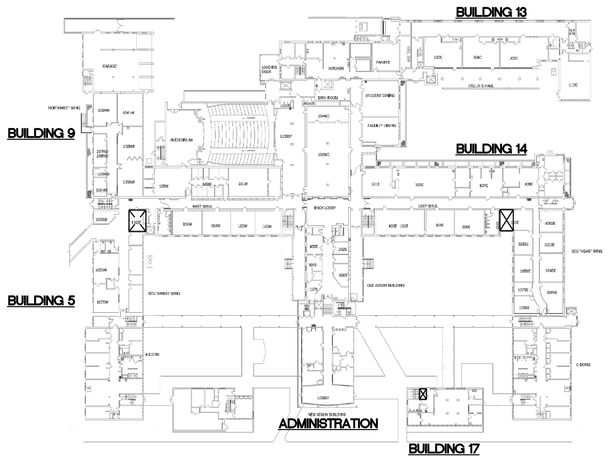
SHEET TITLE:
TECHNOLOGY LEGEND AND ABBREVIATIONS

SHEET NUMBER:
T-001

The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.



1 **MSB BASEMENT COMMUNICATION ROOM LOCATIONS**
NO SCALE



2 **MSB 1ST FLOOR COMMUNICATION ROOM LOCATIONS**
NO SCALE

GENERAL NOTES:

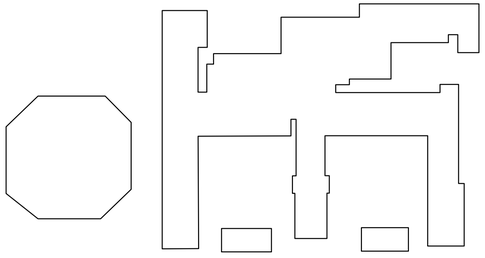
A. DASHED HEAVY LINES DENOTE OUTLINE OF COMMUNICATION ROOM CONTAINING SECURITY EQUIPMENT AND COMPONENTS.

B. PLANS ARE DIAGRAMMATIC IN NATURE. THEY REFLECT THE AVAILABLE INFORMATION OBTAINED FROM FIELD OBSERVATION AND EXISTING DOCUMENTATION. ACTUAL LOCATION OF ELEMENTS AND EQUIPMENT MAY DEVIATE FROM THE LOCATION AND QUANTITIES SHOWN. CONTRACTOR SHALL FIELD VERIFY PRIOR TO BIDDING AND SHALL NOT BE CAUSE FOR ADDITIONAL SERVICES OR FEE.

C. COMMUNICATION ROOMS ARE SHOWN FOR REFERENCE PURPOSES ONLY. FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING WORK.

D. VERIFY CABLE PATHWAY WITHIN BUILDING AND ADJUST ELEVATIONS AND ROUTING TO FACILITATE INSTALLATION. COORDINATE WITH ALL OTHER BUILDING TRADES. UTILIZE EXISTING PATHWAYS WHERE APPLICABLE. WHERE PATHWAYS DO NOT EXIST, PROVIDE NEW.

E. FINAL TERMINATION LOCATIONS SHALL BE COORDINATED WITH AND APPROVED BY OWNER PRIOR TO ROUGH-IN AND INSTALLATION.



CAMPUS KEY PLAN
NOT TO SCALE

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
CARL V. HAUCK
NUMBER E-16688
REGISTERED PROFESSIONAL ENGINEER
3/9/20

CARL V. HAUCK
MO. LICENSE NO. 016688 EXP: 12/31/2020

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS

3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

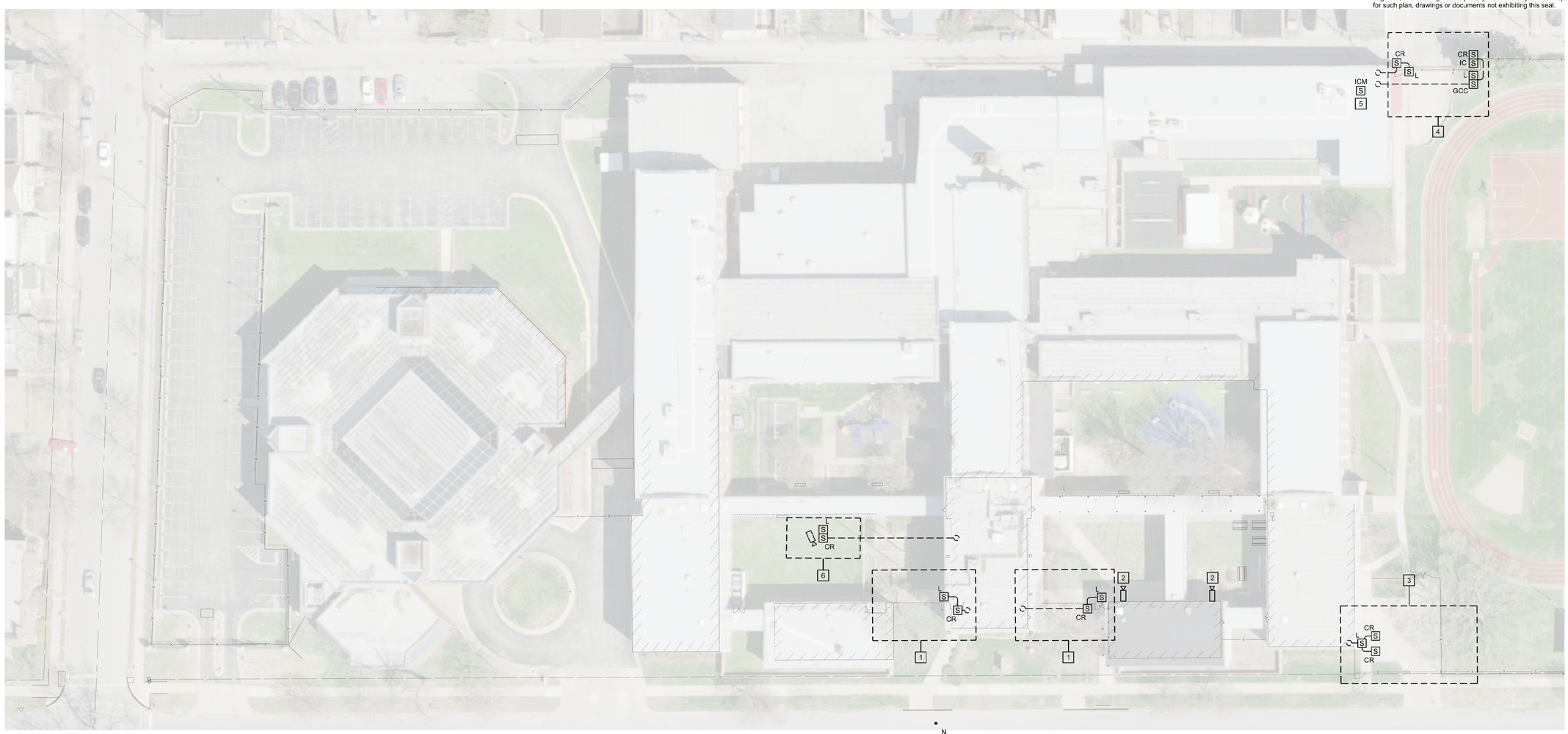
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE:
DRAWN BY: JLC
CHECKED BY: CVH
DESIGNED BY: JLC

SHEET TITLE:
COMMUNICATION ROOMS TECHNOLOGY

SHEET NUMBER:
T-101

The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.



1 SITE PLAN - TECHNOLOGY

1"= 30'-0"

N

GENERAL NOTES:

A. COORDINATE ALL WORK WITH ARCHITECTURAL AND CIVIL PLANS AND SPECIFICATIONS.

B. COORDINATE MOUNTING OF ALL CARD READERS AND INTERCOM SYSTEMS WITH ARCHITECTURAL AND CIVIL DRAWINGS AND SPECIFICATIONS FOR GATES AND PEDESTALS.

C. TYPE AND LOCATION OF GATE LOCKING MECHANISM SHALL BE COORDINATED WITH CIVIL PRIOR TO ROUGH-IN OF PATHWAYS AND INSTALLATION OF CABLING.

D. MOUNTING HEIGHT OF EXTERIOR CAMERAS SHALL BE APPROXIMATELY 12' ABOVE FINISHED GRADE. FINAL MOUNTING HEIGHT SHALL BE COORDINATED WITH EXTERIOR STRUCTURE, INTERIOR CEILING CAVITY AND OTHER TRADES/EXISTING CONDITIONS.

E. CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, COMPONENTS, PATHWAYS, CABLING, AND POWER FOR A COMPLETE AND OPERABLE SYSTEM.

F. FOR ALTERNATES, REFER TO ARCHITECTURAL SPECIFICATIONS FOR ADDITIONAL DESCRIPTIONS, REQUIREMENTS AND INFORMATION.

G. ALL WORK ASSOCIATED WITH THE WEST COURTYARD SHALL BE PART OF ALTERNATE #1.

PATHWAY NOTES AND REQUIREMENTS:

A. PATHWAYS SHOWN ARE GENERIC AND SHOWN FOR GENERAL ROUTING PURPOSES . CONTRACTOR SHALL COORDINATE EXACT PATHWAYS WITH EXISTING CONDITIONS.

B. WHERE PATHWAY CROSSES DRIVES, SIDEWALKS, ETC, PROVIDE TRENCHING/SAW CUT. WHERE PATHWAY CROSSES GRASS, PROVIDE TRENCHING OR DIRECTIONAL BORING. COORDINATE EXACT PATHWAYS WITH EXISTING CONDITIONS.

C. WHERE POSSIBLE, SHARE SIMILAR ROUTING OF COMMUNICATION AND ELECTRICAL PATHWAYS. COORDINATE WITH ELECTRICAL AND CIVIL.

D. COORDINATE CONDUIT ROUTING WITH CIVIL AND CONTROL EQUIPMENT CABINET LOCATIONS. REFER TO CIVIL GATE PLANS AND SPECIFICATIONS.

E. CONDUIT PATHWAYS ARE FOR ROUTING OF ACCESS CONTROL CABLING, VIDEO INTERCOM CABLING AND VIDEO SURVEILLANCE CAMERA CABLING.

F. PROVIDE 2" CONDUIT FROM CONTROL EQUIPMENT CABINET TO DESIGNATED BUILDING FOR ROUTING OF SECURITY CABLING.

G. PROVIDE 1" CONDUIT FROM CONTROL EQUIPMENT CABINET TO GATE LOCKING MECHANISM.

H. PROVIDE 1-1/4" CONDUIT FROM CONTROL EQUIPMENT CABINET TO PEDESTAL LOCATION FOR CARD READER, INTERCOM STATION AND VIDEO SURVEILLANCE CAMERA.

KEYED NOTES:

1. COURTYARD GATE:
PROVIDE CARD READER MOUNTED ON PEDESTAL AT MAN GATE FOR ENTRY. UPON VALID CREDENTIAL, MAN GATE LOCK SHALL RELEASE AND MAN GATE SHALL OPEN.
CABLING FOR THE ACCESS CONTROL SYSTEM SHALL TERMINATE IN BASEMENT IT ROOM OF BUILDING #2.
EXITING AT MAN GATE SHALL BE EMERGENCY EGRESS HARDWARE (REFER TO ARCHITECTURAL AND CIVIL).

2. PROVIDE VIDEO SURVEILLANCE CAMERAS MOUNTED ON EXTERIOR GARAGE, AIMED TO PLAYGROUND AREA. COMMUNICATION CABLING SHALL TERMINATE IN BUILDING 17 IT ROOM.

3. ALTERNATE #4 - SOUTHEAST PARKING LOT GATE:
VEHICLE GATE SHALL BE A MANUAL GATE WITH NO ACCESS CONTROL REQUIRED.
PROVIDE CARD READER AT MAN GATE FOR ENTRY. UPON VALID CREDENTIAL, MAN GATE LOCK SHALL RELEASE AND MAN GATE SHALL OPEN.
PROVIDE CARD READER AT MAN GATE FOR EXIT. UPON VALID CREDENTIAL, MAN GATE LOCK SHALL RELEASE AND MAN GATE SHALL OPEN. EXITING AT MAN GATE SHALL ALSO BE EMERGENCY EGRESS HARDWARE (REFER TO ARCHITECTURAL AND CIVIL).
CABLING FOR ACCESS CONTROL SHALL TERMINATE IN 1ST FLOOR IT ROOM IN BUILDING #14.

4. COLLINS HALL PLAYGROUND GATE:
PROVIDE CARD READER MOUNTED ON PEDESTAL LOCATED AT SECURITY GATE FOR ENTRY AT VEHICLE GATE. UPON VALID CREDENTIAL, GATE LOCK SHALL RELEASE AND GATE SHALL OPEN.
PROVIDE INTERCOM SYSTEM MOUNTED ON PEDESTAL ADJACENT TO CARD READER FOR COMMUNICATION WITH NEW SCHOOL.
PROVIDE MASTER INTERCOM STATION LOCATED IN NEW SCHOOL OFFICE. UPON MASTER INTERCOM REMOTE RELEASE, GATE SHALL RELEASE AND OPEN.
PROVIDE CARD READER AT MAN GATE FOR ENTRY. UPON VALID CREDENTIAL, MAN GATE LOCK SHALL RELEASE AND MAN GATE SHALL OPEN.
CABLING FOR ACCESS CONTROL SHALL TERMINATE IN BASEMENT IT ROOM LOCATED IN BUILDING #13.
EXITING FOR MAN GATE SHALL BE EMERGENCY EGRESS HARDWARE (REFER TO ARCHITECTURAL AND CIVIL).

5. INTERCOM MASTER STATION SHALL RELEASE GATES AS REFERENCED IN KEYED NOTES #4. PRIOR TO ROUGH-IN AND INSTALLATION, COORDINATE EXACT LOCATION WITH OWNER.

6. ALTERNTE #1: PROVIDE CARD READER AND ASSOCIATED LOCKING MECHANISM AT GREEN HOUSE DOOR ENTRANCE. UPON VALID CREDENTIAL, DOOR SHALL RELEASE. EXITING FROM GREEN HOUSE SHALL BE EMERGENCY EGRESS.
PROVIDE VIDEO SURVEILLANCE CAMERA MOUNTED AT BUILDING EXTERIOR FOR VIEWING OF DOOR ENTRANCE.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
CARL V. HAUCK
NUMBER
E-16688
REGISTERED PROFESSIONAL ENGINEER
3/9/20

CARL V. HAUCK
MO. LICENSE NO. 016688 EXP: 12/31/2020

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS

3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

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

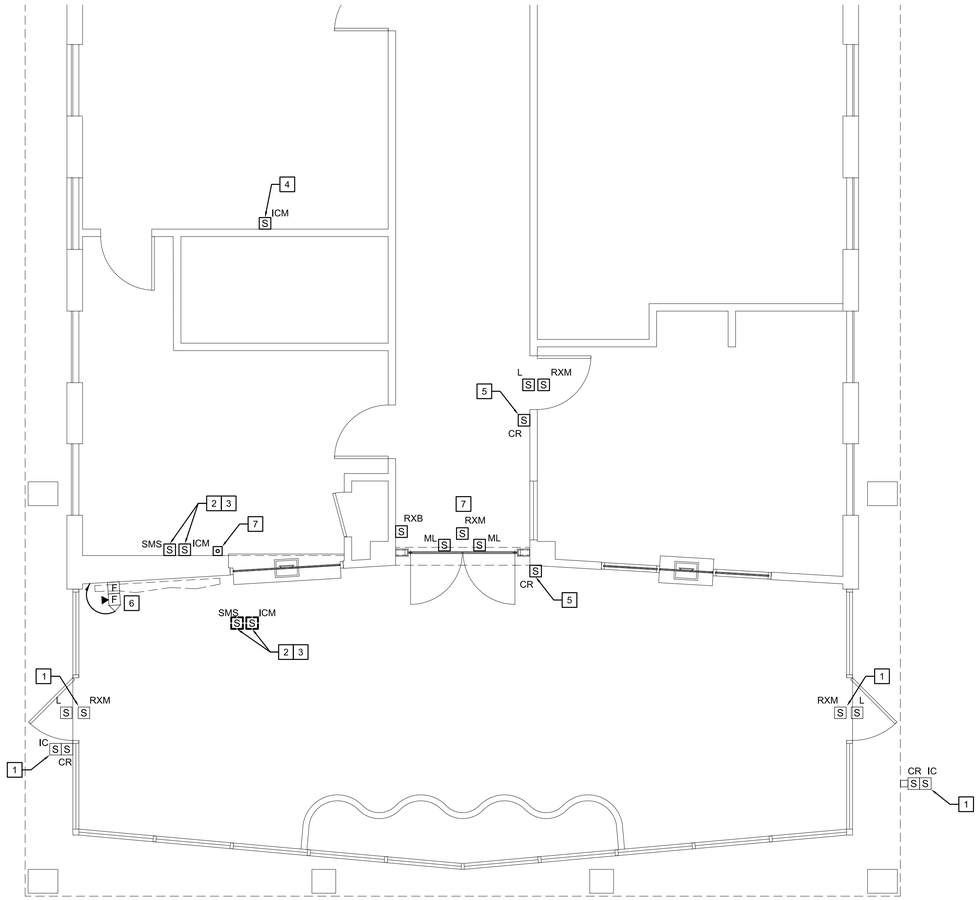
CAD DWG FILE:
DRAWN BY: JLC
CHECKED BY: CVH
DESIGNED BY: JLC

SHEET TITLE:
SITE PLAN TECHNOLOGY

SHEET NUMBER:
T-102

72 OF 76 SHEETS
3/11/2020

The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.



1 LOBBY PLAN - TECHNOLOGY

1/4"= 1'-0"

N

GENERAL NOTES

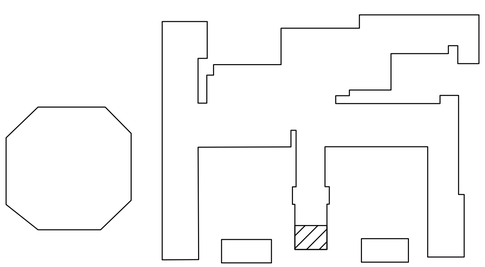
A. COORDINATE ALL WORK WITH ARCHITECTURAL AND CIVIL PLANS AND SPECIFICATIONS.

B. COORDINATE MOUNTING OF ALL CARD READERS AND INTERCOM SYSTEMS WITH ARCHITECTURAL PLANS, ELEVATIONS AND SPECIFICATIONS.

C. ACCESS CONTROL EQUIPMENT AND COMPONENTS SHALL TERMINATE IN COMMUNICATION ROOM LOCATED ON SECOND FLOOR OF BUILDING 2. REFER TO SHEET T-101. VERIFY WITH OWNER PRIOR TO ROUGH-IN AND INSTALLATION.

KEYED NOTES

1. EXISTING VIDEO INTERCOM SYSTEM, CARD READER AND ASSOCIATED DOOR HARDWARE TO REMAIN.
2. EXISTING INTERCOM MASTER STATION SHALL BE DISCONNECTED, REMOVED AND RELOCATED FROM LOBBY AREA INTO DESIGNATED ROOM. CONTRACTOR SHALL UTILIZE ALL EXISTING EQUIPMENT, COMPONENTS AND CABLING.
3. EXISTING VIDEO SURVEILLANCE COMPUTER STATION SHALL BE DISCONNECTED, REMOVED AND RELOCATED FROM LOBBY AREA INTO DESIGNATED ROOM. CONTRACTOR SHALL UTILIZE ALL EXISTING EQUIPMENT, COMPONENTS AND CABLING.
4. PROVIDE INTERCOM MASTER RELEASE STATION AND ASSOCIATED CABLING TO RELEASE EACH SET OF LOBBY DOORS. INTERCOM MASTER STATION SHALL MATCH EXISTING AXIS MASTER STATION (CURRENTLY LOCATED AT RECEPTION DESK). PROVIDE APPROPRIATE PROGRAMMING OF SYSTEM FOR A FULLY OPERABLE SYSTEM. COORDINATE EXACT LOCATION OF INTERCOM MASTER STATION WITH OWNER PRIOR TO ROUGH-IN AND INSTALLATION.
5. PROVIDE CARD READER AND REQUEST TO EXIST DEVICE(S) AT DOOR LOCATIONS. COORDINATE WITH ARCHITECTURAL DOOR HARDWARE FOR CONNECTION TO DOOR LOCKING MECHANISM TYPE. PROGRAM EXISTING ACCESS CONTROL SYSTEM TO ACCOMMODATE NEW CARD READER.
6. RELOCATE EXISTING FIRE ALARM ANNUNCIATOR AND PULL STATION WEST TOWARD WINDOW. EXTEND EXISTING CIRCUIT AS REQUIRED. REFER TO ARCHITECTURAL DETAIL 24/A-101.
7. PROVIDE REMOTE RELEASE PUSH BUTTON. UPON DEPRESSION, LOBBY VESTIBULE DOUBLE DOORS SHALL UNLOCK FOR ENTRY.



CAMPUS KEY PLAN

NOT TO SCALE

N

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
CARL V. HAUCK
NUMBER
E-16688
REGISTERED PROFESSIONAL ENGINEER
3/9/20

CARL V. HAUCK
MO. LICENSE NO. 016688 EXP: 12/31/2020

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS

3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

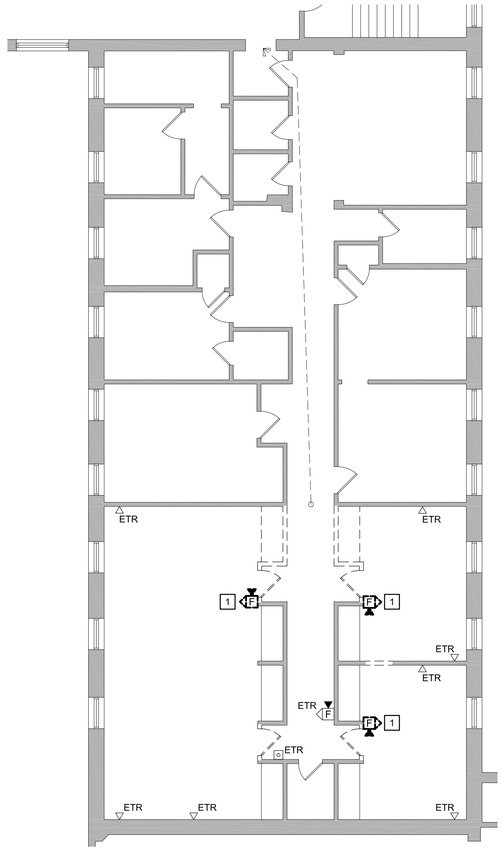
ASSET # 5012011003, 5012011004

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

CAD DWG FILE:
DRAWN BY: JLC
CHECKED BY: CVH
DESIGNED BY: JLC

SHEET TITLE:
LOBBY PLAN TECHNOLOGY

SHEET NUMBER:
T-103



1 SECOND FLOOR PLAN DEMOLITION - TECHNOLOGY
1/8" - 1'-0"

GENERAL NOTES DEMOLITION

A. ALL DEVICES SHOWN ARE EXISTING TO BE DEMOLISHED UNLESS NOTED OTHERWISE AS EXISTING TO REMAIN (ETR).

B. PLANS ARE DIAGRAMMATIC IN NATURE, THEY REFLECT THE AVAILABLE INFORMATION OBTAINED FROM FIELD OBSERVATION AND EXISTING DOCUMENTATION. ACTUAL LOCATION OF ELEMENTS AND EQUIPMENT MAY DEVIATE FROM THE LOCATION AND QUANTITIES SHOWN.

C. IF EXISTING COMPONENTS TO REMAIN ARE DAMAGED, CONTRACTOR SHALL PROVIDE NEW TO MATCH EXISTING AT NO ADDITIONAL COST TO OWNER.

D. EXISTING CABLING TO REMAIN SHALL BE TEMPORARILY SUPPORTED AND PROTECTED. IF CABLE IS DAMAGED DURING THE CONSTRUCTION PROCESS, CONTRACTOR SHALL REPLACE CABLE WITH NEW PER SPECIFICATIONS.

E. WHILE MOST DEMOLITION WORK IS CONFINED TO CERTAIN AREAS OF THE BUILDING, WORK FOR TECHNOLOGY COMMUNICATION SYSTEMS MAY BE EXTENDED TO INCLUDE OTHER AREAS OUTSIDE THE SCOPE OF WORK. PLAN IN ADVANCE TO PERFORM WORK IN OTHER AREAS TO MINIMIZE INTERRUPTIONS.

F. DEMOLITION REFERS TO THE DISCONNECTION AND REMOVAL OF EQUIPMENT, CABLING AND COMPONENTS BACK TO SOURCE.

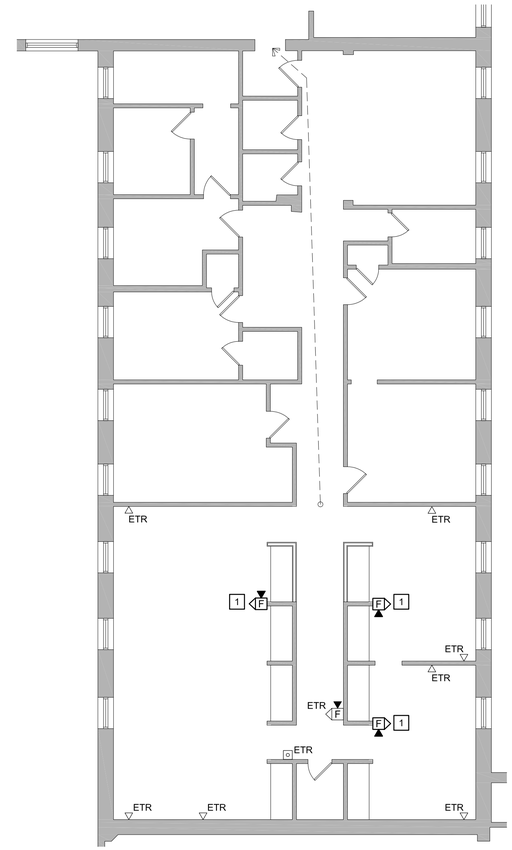
G. CONTRACTOR SHALL PROVIDE ALL CUTTING AND PATCHING AS REQUIRED FOR EXECUTION OF DEMOLITION WORK AND INSTALLATION OF NEW WORK.

H. COORDINATE THE DISCONNECTION AND REMOVAL OF ALL ITEMS WITH ASSOCIATED TRADES. ENSURE SERVICES THAT ARE REQUIRED TO REMAIN ACTIVE ARE ACTIVE DURING AND AFTER DEMOLITION IS COMPLETED. COORDINATE WITH FLOORS ABOVE AND BELOW FOR THE AVOIDANCE OF INADVERTENT SERVICE DEACTIVATION.

I. CONTRACTOR SHALL VISIT SITE PRIOR TO BID SUBMITTAL TO DETERMINE SITE CONDITIONS AFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.

KEYED NOTES DEMOLITION

1 DISCONNECT EXISTING FIRE ALARM SPEAKER/STROBE/LIGHT AND STORE/PROTECT FOR REINSTALLATION. CABLING SHALL BE PROTECTED FOR RE-USE. MAINTAIN EXISTING CIRCUIT. REFER TO NEW WORK PLAN FOR NEW LOCATION.



2 SECOND FLOOR PLAN NEW WORK - TECHNOLOGY
1/8" - 1'-0"

GENERAL NOTES NEW WORK

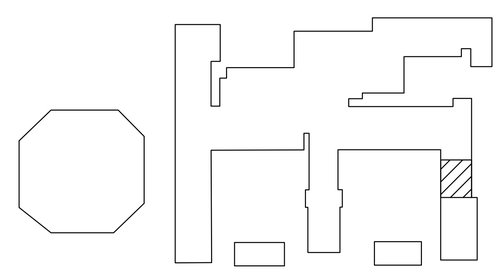
A. ALL EXISTING DEVICES ARE DENOTED AS EXISTING TO REMAIN (ETR).

B. PLANS ARE DIAGRAMMATIC IN NATURE, THEY REFLECT THE AVAILABLE INFORMATION OBTAINED FROM FIELD OBSERVATION AND EXISTING DOCUMENTATION. ACTUAL LOCATION OF ELEMENTS AND EQUIPMENT MAY DEVIATE FROM THE LOCATION AND QUANTITIES SHOWN.

C. EXISTING CABLING TO BE REINSTALLED SHALL BE SUPPORTED TO NEW DEVICE LOCATION.

KEYED NOTES NEW WORK

1 REINSTALL EXISTING FIRE ALARM SPEAKER/STROBE/LIGHT UTILIZING EXISTING FIRE ALARM CABLE AND EXISTING CIRCUIT. EXTEND CIRCUIT AS REQUIRED.



CAMPUS KEY PLAN
NOT TO SCALE

The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
CARL V. HAUCK
NUMBER
E-16688
REGISTERED PROFESSIONAL ENGINEER
3/9/20

CARL V. HAUCK
MO. LICENSE NO. 016688 EXP: 12/31/2020

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS
3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

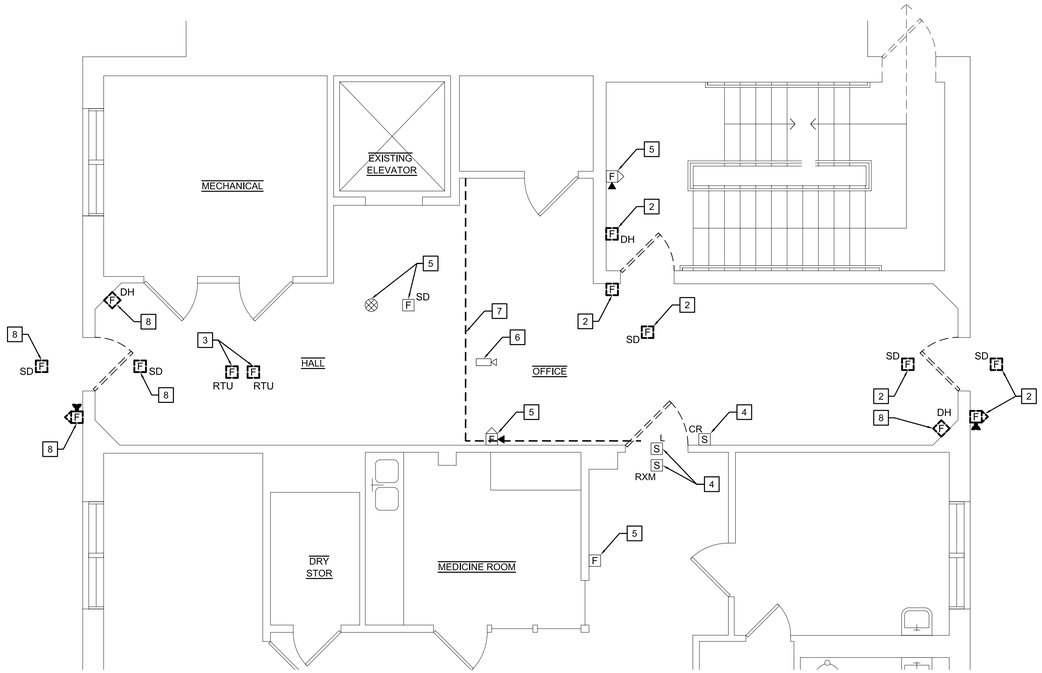
ASSET # 5012011003, 5012011004

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

CAD DWG FILE:
DRAWN BY: JLC
CHECKED BY: CVH
DESIGNED BY: JLC

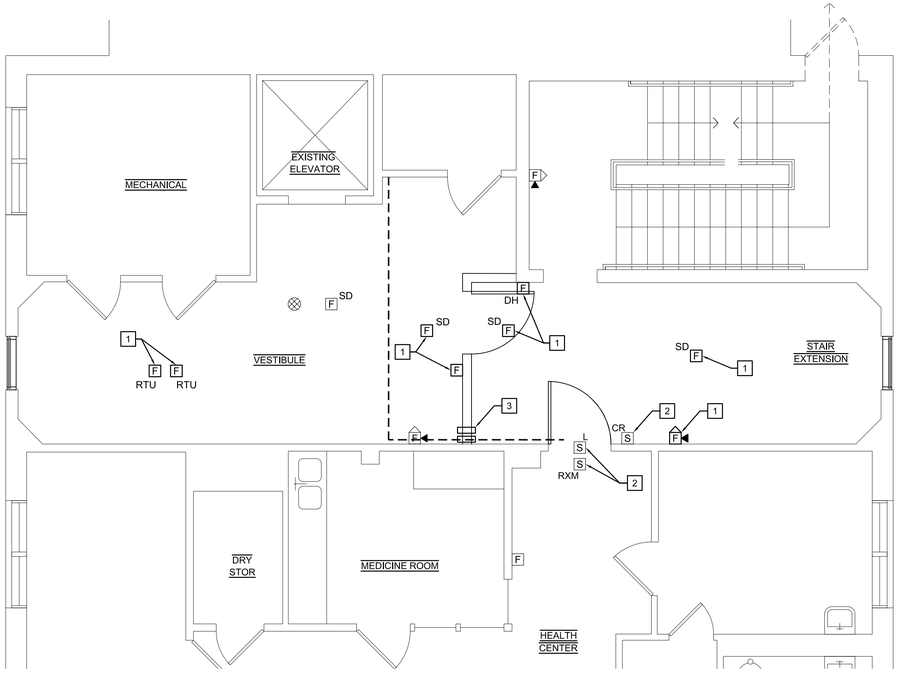
SHEET TITLE:
SECOND FLR PLAN TECHNOLOGY

SHEET NUMBER:
T-104



1 SECOND FLOOR HEALTH CENTER PLAN DEMOLITION - TECHNOLOGY

1/4" - 1'-0"



2 SECOND FLOOR HEALTH CENTER PLAN NEW WORK - TECHNOLOGY

1/4" - 1'-0"

The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.

GENERAL NOTES DEMOLITION

A. ALL DEVICES SHOWN DASHED ARE EXISTING TO BE DEMOLISHED UNLESS NOTED OTHERWISE. ALL DEVICES SHOWN LIGHT ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE.

B. PLANS ARE DIAGRAMMATIC IN NATURE. THEY REFLECT THE AVAILABLE INFORMATION OBTAINED FROM FIELD OBSERVATION AND EXISTING DOCUMENTATION. ACTUAL LOCATION OF ELEMENTS AND EQUIPMENT MAY DEVIATE FROM THE LOCATION AND QUANTITIES SHOWN.

C. IF EXISTING COMPONENTS TO REMAIN ARE DAMAGED, CONTRACTOR SHALL PROVIDE NEW TO MATCH EXISTING AT NO ADDITIONAL COST TO OWNER.

D. EXISTING CABLING TO REMAIN SHALL BE TEMPORARILY SUPPORTED AND PROTECTED. IF CABLE IS DAMAGED DURING THE CONSTRUCTION PROCESS, CONTRACTOR SHALL REPLACE CABLE WITH NEW PER SPECIFICATIONS.

E. WHILE MOST DEMOLITION WORK IS CONFINED TO CERTAIN AREAS OF THE BUILDING, WORK FOR TECHNOLOGY COMMUNICATION SYSTEMS MAY BE EXTENDED TO INCLUDE OTHER AREAS OUTSIDE THE SCOPE OF WORK. PLAN IN ADVANCE TO PERFORM WORK IN OTHER AREAS TO MINIMIZE INTERRUPTIONS.

F. DEMOLITION REFERS TO THE DISCONNECTION AND REMOVAL OF EQUIPMENT, CABLING AND COMPONENTS BACK TO SOURCE.

G. CONTRACTOR SHALL PROVIDE ALL CUTTING AND PATCHING AS REQUIRED FOR EXECUTION OF DEMOLITION WORK AND INSTALLATION OF NEW WORK.

H. COORDINATE THE DISCONNECTION AND REMOVAL OF ALL ITEMS WITH ASSOCIATED TRADES. ENSURE SERVICES THAT ARE REQUIRED TO REMAIN ACTIVE ARE ACTIVE DURING AND AFTER DEMOLITION IS COMPLETED. COORDINATE WITH FLOORS ABOVE AND BELOW FOR THE AVOIDANCE OF INADVERTENT SERVICE DEACTIVATION.

I. CONTRACTOR SHALL VISIT SITE PRIOR TO BID SUBMITTAL TO DETERMINE SITE CONDITIONS AFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.

J. CONTRACTOR SHALL MAINTAIN ALL FIRE ALARM CIRCUIT CONTINUITY IN THE RENOVATED AREA FROM EQUIPMENT AND COMPONENTS BEING DEMOLISHED.

KEYED NOTES DEMOLITION

1. DISCONNECT EXISTING FIRE ALARM SPEAKER/STROBE/LIGHT AND STORE/PROTECT FOR REINSTALLATION. CABLING SHALL BE PROTECTED FOR RE-USE. REFER TO NEW WORK PLAN FOR NEW LOCATION.
2. DISCONNECT AND REMOVE EXISTING FIRE ALARM DEVICE AND RE-INSTALL IN NEW LOCATION. EXISTING CIRCUIT SHALL BE MAINTAINED AND REUSED. REFER TO NEW WORK PLAN. IF NOT REUSED, RETURN TO OWNER.
3. EXISTING DEVICE SHALL BE REMOVED FROM CEILING DUE TO CEILING REMOVAL. DEVICE SHALL BE TEMPORARILY SUPPORT DURING THE CONSTRUCTION PROCESS AND BE ACTIVE AND MAINTAINED. DEVICE SHALL BE REINSTALLED IN NEW CEILING. REFER TO NEW WORK PLAN.
4. CARD READER AND ALL ASSOCIATED ACCESS CONTROL COMPONENTS ARE EXISTING TO REMAIN. DISCONNECT AND REMOVE CABLING FROM EXISTING DOOR FOR RECONNECTION TO NEW DOOR. REFER TO NEW WORK PLAN.
5. DEVICE IS EXISTING TO REMAIN.
6. CAMERA SHALL BE DISCONNECTED, REMOVED AND RETURNED TO OWNER. CABLING SHALL REMAIN AND BE TEMPORARILY SUPPORTED FOR REUSE BY OWNER.
7. EXISTING COMMUNICATION CABLING PATHWAY: CABLES SHALL BE PROTECTED AND MAINTAINED DURING THE CONSTRUCTION PROCESS. IF CABLES ARE DAMAGED, CONTRACTOR SHALL PROVIDE NEW AT NO ADDITIONAL COST TO OWNER AND MEET SPECIFICATIONS.
8. DISCONNECT AND REMOVE EXISTING DEVICE AND TURN OVER TO OWNER. MAINTAIN CIRCUIT CONTINUITY AS REQUIRED.

GENERAL NOTES NEW WORK

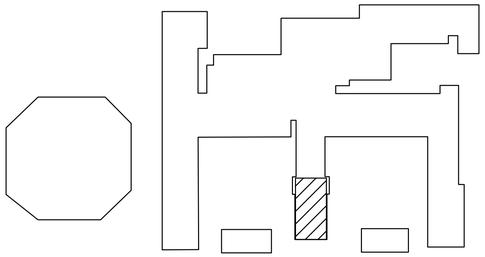
A. ALL EXISTING DEVICES SHOWN LIGHT ARE EXISTING.

B. PLANS ARE DIAGRAMMATIC IN NATURE. THEY REFLECT THE AVAILABLE INFORMATION OBTAINED FROM FIELD OBSERVATION AND EXISTING DOCUMENTATION. ACTUAL LOCATION OF ELEMENTS AND EQUIPMENT MAY DEVIATE FROM THE LOCATION AND QUANTITIES SHOWN.

C. EXISTING CABLING TO BE REINSTALLED SHALL BE SUPPORTED TO NEW DEVICE LOCATION.

KEYED NOTES NEW WORK

1. REINSTALL EXISTING FIRE ALARM DEVICE TO NEW LOCATION UTILIZING AND EXTENDING EXISTING FIRE ALARM CIRCUIT.
2. CARD READER AND ALL ASSOCIATED ACCESS CONTROL COMPONENTS SHALL BE RECONNECTED TO NEW DOOR UTILIZING EXISTING CABLING.
3. PROVIDE (2) STI EZ-PATH SERIES 44+ FIRE RATED ASSEMBLY WITH SPLIT WALL MOUNTING BRACKET (PART NO.EZDP144RS2) OR SIMILAR.



CAMPUS KEY PLAN

NOT TO SCALE

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
CARL V. HAUCK
NUMBER
E-16688
REGISTERED PROFESSIONAL ENGINEER
3/9/20

CARL V. HAUCK
MO. LICENSE NO. 016688 EXP: 12/31/2020

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS

3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

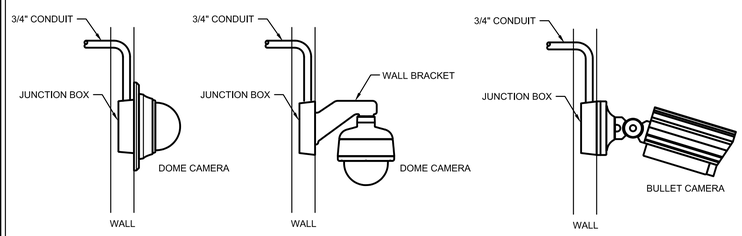
REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE:
DRAWN BY: JLC
CHECKED BY: CVH
DESIGNED BY: JLC

SHEET TITLE:
SECOND FLR PLAN HEALTH CENTER TECHNOLOGY

SHEET NUMBER:
T-105

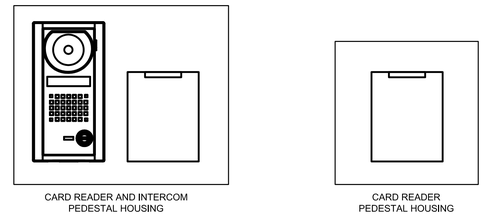
75 OF 76 SHEETS
3/11/2020



NOTES:
1. JUNCTION BOX SHALL BE COMPATIBLE WITH CAMERA. CAMERA CABLING SHALL BE ROUTED THROUGH JUNCTION BOX.
2. CONTRACTOR SHALL APPROPRIATELY SEAL WHERE CAMERA MEETS WALL WHEN USED IN AN EXTERIOR APPLICATION.
3. CONDUIT SHALL EXTEND INTO APPROPRIATE CEILING CAVITY AND EXTEND TO ACCESSIBLE CEILING SPACE.
4. COORDINATE INSTALLATION AND LOCATION OF CAMERA WITH GENERAL CONTRACTOR AND OTHER TRADES. PROVIDE BLOCKING AND CEILING REINFORCEMENT AS REQUIRED.

SCALE: NONE

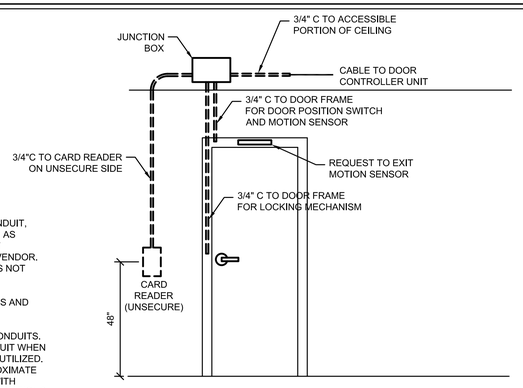
WALL MOUNT CAMERA



NOTES:
1. PEDESTAL HOUSING SHALL BE INJECTION MOLDED, POLCARBONATE (NON-METALLIC), WITH SUN SHIELD. HOUSING SHALL ALSO BE LOCKABLE.
2. SIZE OF PEDESTAL HOUSING SHALL BE COORDINATED WITH PEDESTAL, CARD READER AND INTERCOM SYSTEMS BEING INSTALLED.
3. COORDINATE ALL WORK AND REQUIREMENTS WITH ARCHITECTURAL AND CIVIL PLANS AND SPECIFICATIONS.
4. PROVIDE LABELING OF ALL PEDESTAL INTERCOMS WITH FACILITY BEING CONTACTED. LABEL SHALL BE PERMANENTLY LABELED FOR OUTDOOR APPLICATIONS.

SCALE: NONE

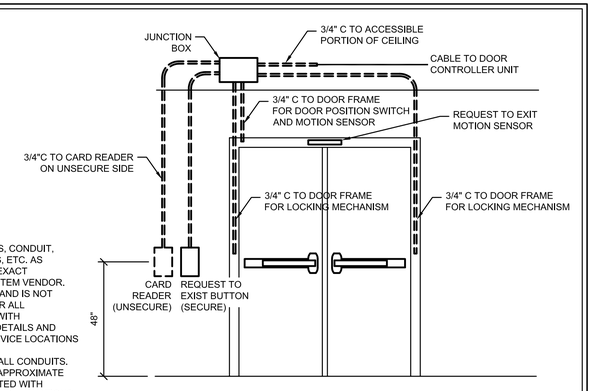
ACCESS CONTROL AND INTERCOM GATE PEDESTALS



NOTES:
1. PROVIDE ROUGH-IN BOXES, CONDUIT, WIRING, POWER SUPPLIES, ETC. AS REQUIRED. COORDINATE EXACT REQUIREMENTS WITH SYSTEM VENDOR.
2. DETAIL IS DIAGRAMMATIC AND IS NOT INTENDED TO BE EXACT OR ALL INCLUSIVE. COORDINATE WITH ARCHITECTURAL PLANS, DETAILS AND DOOR HARDWARE FOR DEVICE LOCATIONS AND TYPES.
3. PROVIDE PULL STRING IN ALL CONDUITS.
4. PROVIDE ADDITIONAL 3/4" CONDUIT WHEN A POWER TRANSFER DEVICE IS UTILIZED.
4. MOUNTING HEIGHTS ARE APPROXIMATE AND SHALL BE COORDINATED WITH ARCHITECTURAL PLANS AND ELEVATIONS.

SCALE: NONE

ACCESS CONTROL SINGLE DOOR



NOTES:
1. PROVIDE ROUGH-IN BOXES, CONDUIT, WIRING, POWER SUPPLIES, ETC. AS REQUIRED. COORDINATE EXACT REQUIREMENTS WITH SYSTEM VENDOR.
2. DETAIL IS DIAGRAMMATIC AND IS NOT INTENDED TO BE EXACT OR ALL INCLUSIVE. COORDINATE WITH ARCHITECTURAL PLANS, DETAILS AND DOOR HARDWARE FOR DEVICE LOCATIONS AND TYPES.
3. PROVIDE PULL STRING IN ALL CONDUITS.
4. MOUNTING HEIGHTS ARE APPROXIMATE AND SHALL BE COORDINATED WITH ARCHITECTURAL PLANS AND ELEVATIONS.

SCALE: NONE

ACCESS CONTROL DOUBLE DOOR

The Professional Engineer's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

STATE OF MISSOURI
CARL V. HAUCK
NUMBER E-16688
REGISTERED PROFESSIONAL ENGINEER
3/9/20

CARL V. HAUCK
MO. LICENSE NO. 016688 EXP: 12/31/2020

BRiC PARTNERSHIP, LLC
CONSULTING ENGINEERS
3636 SOUTH GEYER ROAD
SUITE 305
ST. LOUIS, MO 63127
PHONE: 314.725.5889
MISSOURI CERTIFICATE OF AUTHORITY #2002028690

MSD PROJECT#: 19MSD-00389
BASEMAP: 21F4

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

INSTALL NATURE PARK

MISSOURI SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E1703-01

ASSET # 5012011003, 5012011004

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

CAD DWG FILE:
DRAWN BY: JLC
CHECKED BY: CVH
DESIGNED BY: JLC

SHEET TITLE:
TECHNOLOGY

DETAILS

SHEET NUMBER:
T-201