

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



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



ARCTURIS



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

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

OWNER:

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

DEPARTMENT OF
ELEMENTARY & SECONDARY EDUCATION

DESIGNER:

OATES ASSOCIATES

PROJECT
MANAGEMENT:

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

PROJECT NUMBER:

E1703-01

ASSET NUMBER:

5012011003, 5012011004

10/18/2019 - ISSUED FOR CONSTRUCTION

SHEET NUMBER:

G-001

1 OF 74 SHEETS
OCTOBER 18, 2019



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 & SWPPP PLANS - WEST COURTYARD
 C-105.....GRADING & SWPPP PLANS - EAST COURTYARD
 C-106.....PERIMETER SECURITY SITE PLAN
 C-401.....ENLARGED PLANS - PATIO & PEDESTRIAN ENTRANCES
 C-402.....ENLARGED PLANS - SYNTHETIC TURF DETAILS
 C-403.....ENLARGED PLANS EAST COURTYARD - SYNTHETIC TURF
 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.....TOTAL DISTURBED AREA
 C-602.....PRE-CONSTRUCTION DRAINAGE AREA
 C-603.....POST-CONSTRUCTION DRAINAGE AREA
 C-604.....BMP DRAINAGE AREA

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.....ENLARGED ARCH PLANS & ELEVS ENTRY CANOPY
 A-103.....ENLARGED ARCH PLANS & ELEVS EAST CATWALK
 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
 S-102.....CATWALK FRAMING PLANS
 S-103.....ENTRANCE CANOPY FRAMING PLAN
 S-201.....CATWALK ELEVATIONS
 S-501.....FOUNDATION DETAILS
 S-502.....CATWALK FRAMING DETAILS
 S-503.....ENTRANCE CANOPY FRAMING DETAILS

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-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-201.....TECHNOLOGY DETAILS



10/18/2019

EXPIRES 12/31/2019

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. 001198



MSD PROJECT#: 19MSD-0038
 BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
 DIVISION OF FACILITIES
 MANAGEMENT,
 DESIGN AND CONSTRUCTIO

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



10/18/2019
EXPIRES 12/31/2019

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. 001198



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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: _____

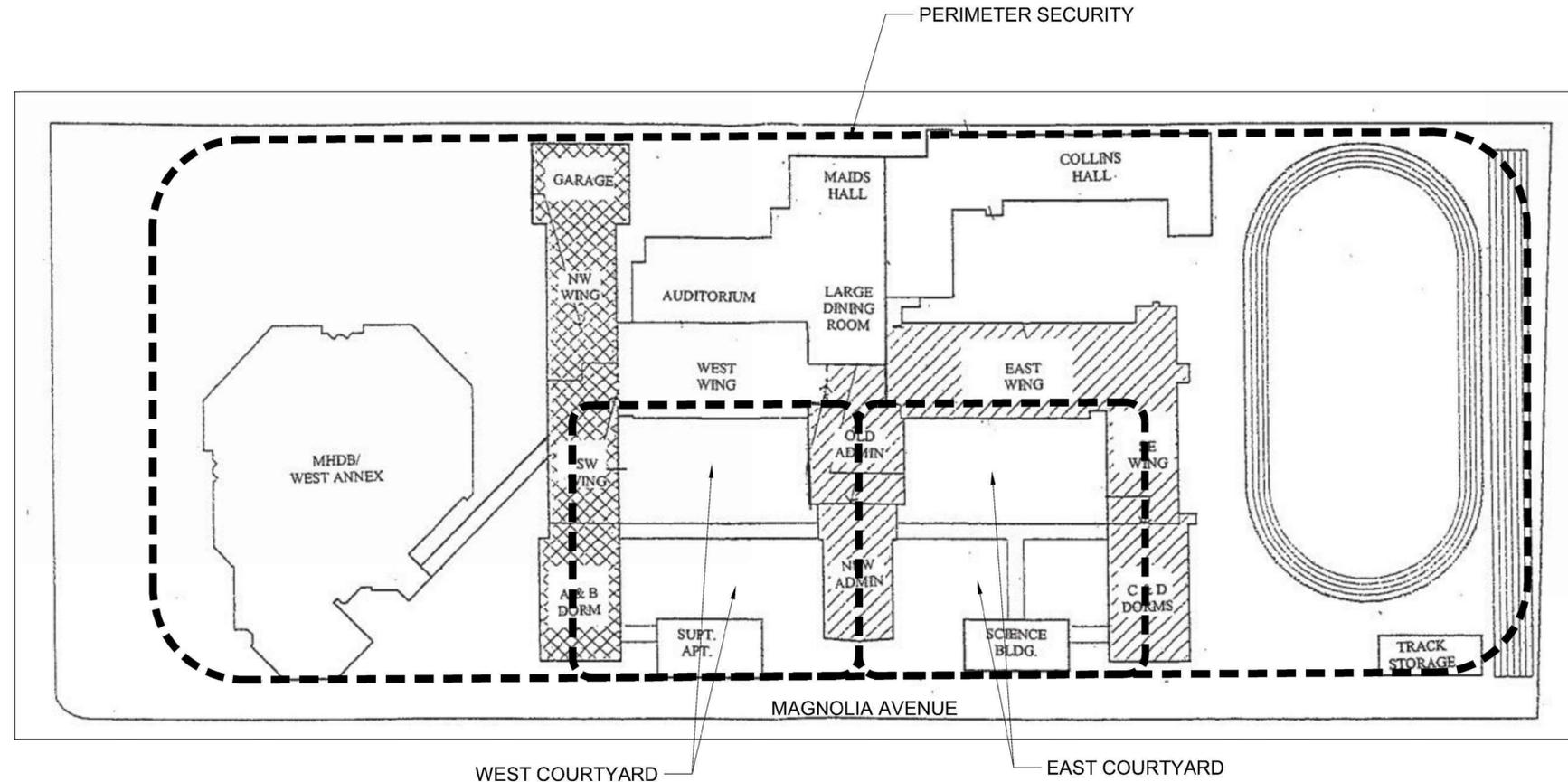
CAD DWG FILE: _____
DRAWN BY: _____
CHECKED BY: _____
DESIGNED BY: _____

SHEET TITLE:
LOCATION MAPS
AND KEY PLAN

SHEET NUMBER:

G-003

3 OF 74 SHEETS
10/18/2019



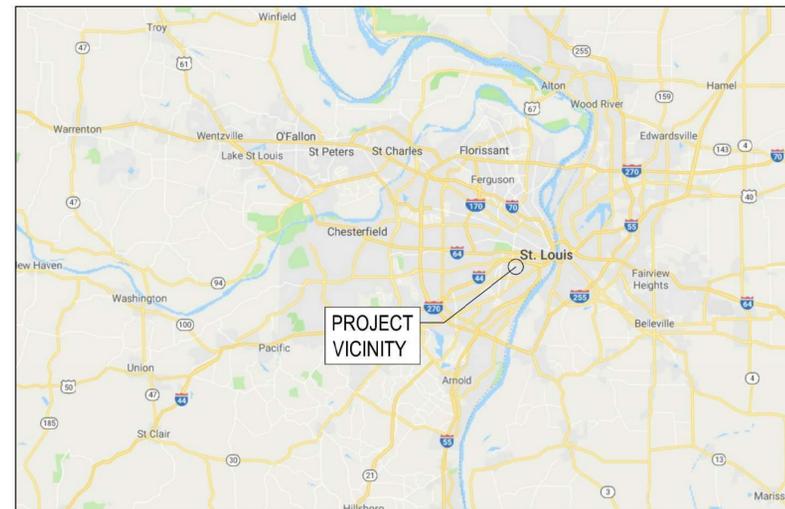
1
G-003 SCALE: NOT TO SCALE

OVERALL CAMPUS SITE PLAN

LOCATION MAP



VICINITY MAP





10/18/2019
EXPIRES 12/31/2019

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. 001198



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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

4 OF 74 SHEETS
10/18/2019

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
TBRV	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

GENERAL NOTES

- ALL SITE WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS IN THE LATEST EDITION OF THE METROPOLITAN ST. LOUIS SEWER DISTRICTS "STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWERS AND DRAINAGE FACILITIES", THE METROPOLITAN ST. LOUIS SEWER DISTRICTS "STANDARD DETAILS", CITY OF ST. LOUIS BOARD OF PUBLIC SERVICE "STANDARD SPECIFICATIONS, BID ITEMS AND STANDARD DETAILS FOR STREET AND ALLEY CONSTRUCTION", 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.
- 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.
- 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.
- 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.
- 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.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO ORDERING MATERIALS AND COMMENCING CONSTRUCTION.
- 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.
- 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.
- 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.
- 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.

LEGEND

EX	NEW	
		SIGN (TRAFFIC)
		SIGN (ADVERTISEMENT)
		TELEPHONE / POWER POLE
		LIGHT POLE
		ANCHOR POLE
		GUY WIRE
		FIRE HYDRANT
		GAS VALVE
		WATER VALVE
		ELECTRIC METER
		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	
		WATER LINE
		GAS LINE
		TELEPHONE LINE
		OVERHEAD ELECTRIC LINE
		ELECTRIC LINE
		FIBER OPTIC LINE
		STORM SEWER
		SANITARY SEWER
		FENCE LINE
		TREE LINE
		CONTOUR LINE
		LIMITS OF CONST

SYMBOLS LEGEND

	ELEVATION REFERENCE
	ELEVATION REFERENCE
	DETAIL REFERENCE
	SECTION REFERENCE
	DRAWING REVISION
	DEMOLITION KEYNOTE
	PLAN KEYNOTE
	PR SPOT ELEVATION
	EX SPOT ELEVATION

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
230 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



MSD STANDARD CONSTRUCTION NOTES

- 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

- 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".
- 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

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



10/18/2019

EXPIRES 12/31/2019

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. 001198



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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: _____

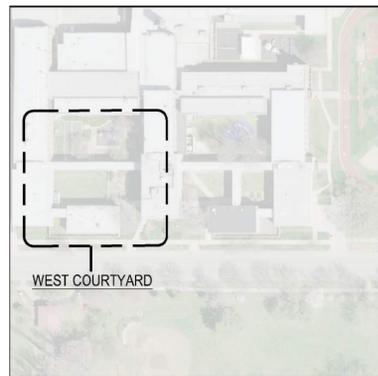
CAD DWG FILE: _____
DRAWN BY: _____
CHECKED BY: _____
DESIGNED BY: _____

SHEET TITLE:

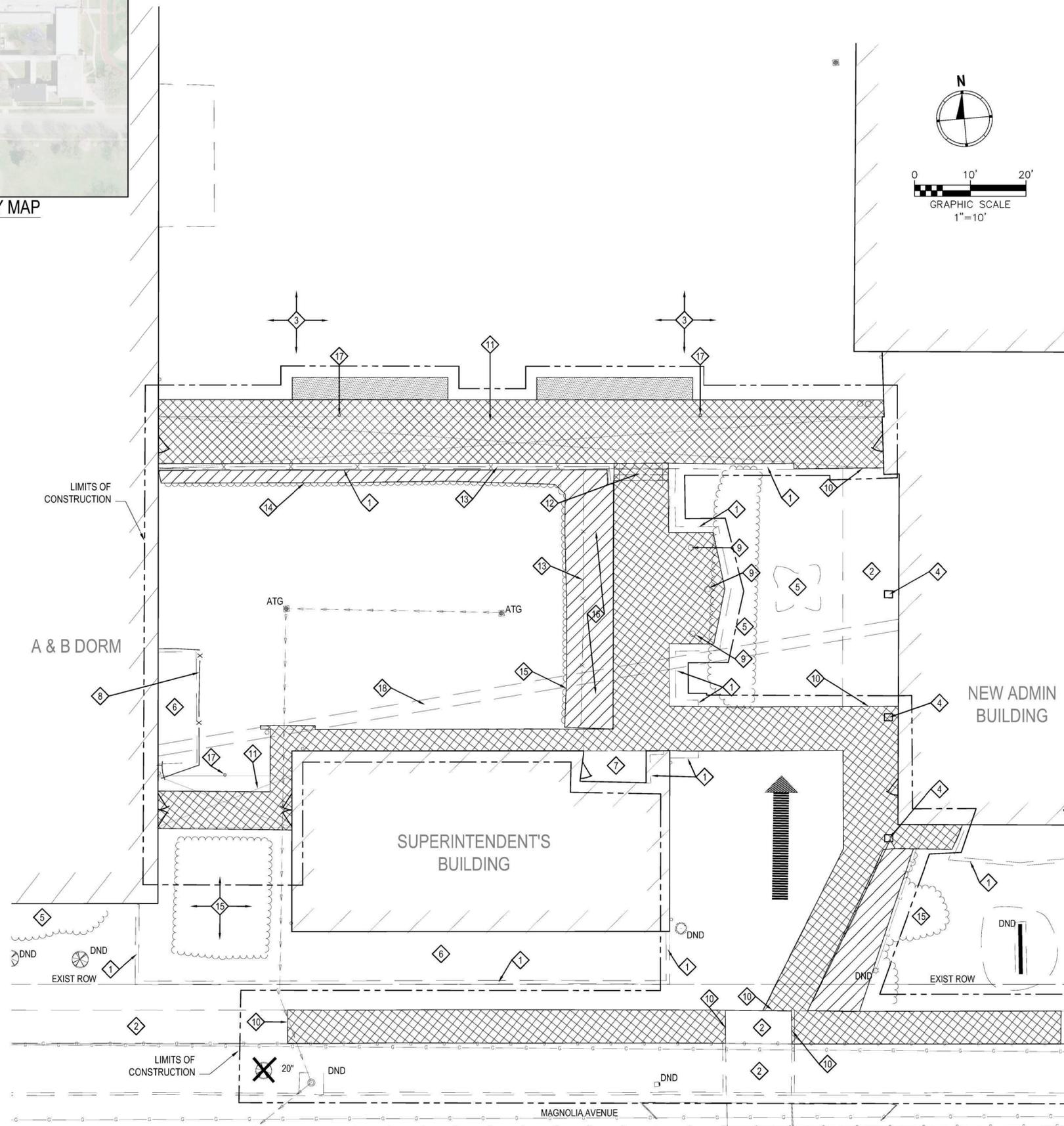
MSD
CONSTRUCTION
NOTES

SHEET NUMBER:

C-002



KEY MAP



1 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, TO BE REMOVED AND REPLACED WITH NEW CEDAR FENCE, SEE ARCHITECTURAL PLANS
- 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 BELOW 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.



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. 001198



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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: _____

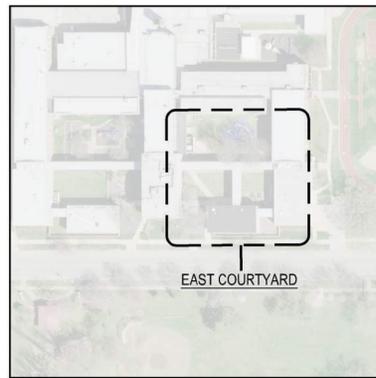
CAD DWG FILE: _____
DRAWN BY: _____
CHECKED BY: _____
DESIGNED BY: _____

SHEET TITLE:
**DEMOLITION
PLANS - WEST
COURTYARD**

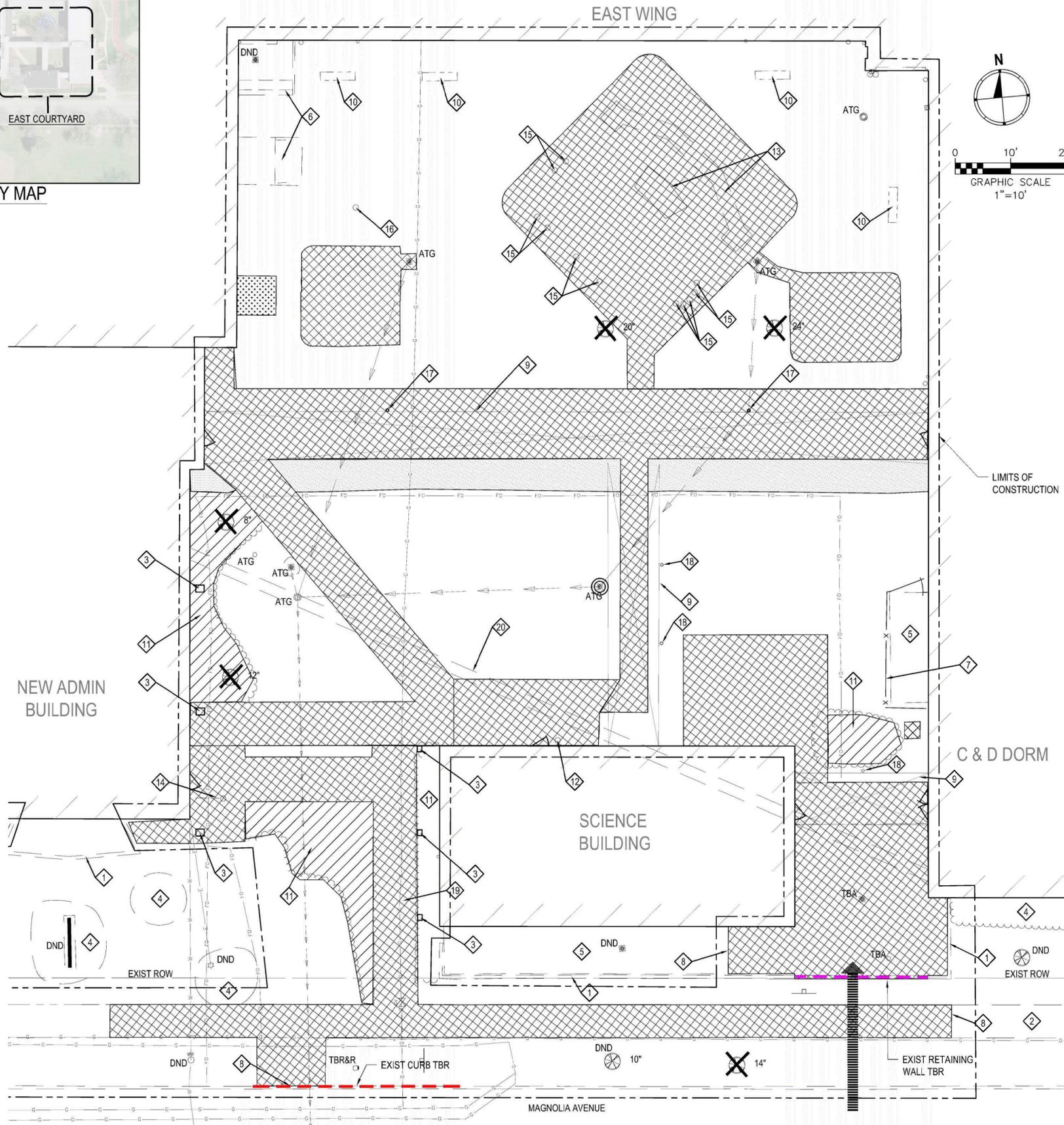
SHEET NUMBER:

C-100

6 OF 74 SHEETS
10/18/2019



KEY MAP



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 AND REPLACED WITH NEW CEDAR FENCE, SEE ARCH
- 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
- 17 EXISTING CATWALK ROOF DRAIN TO BE REUSED, REMOVE EXISTING ABOVE GRADE, REUSE EXISTING DRAINAGE STRUCTURES BELOW GRADE
- 18 EXISTING CATWALK ROOF DRAIN TO BE REMOVED AND CAPPED BELOW GRADE
- 19 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.
- 20 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 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.



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. 001186



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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: _____

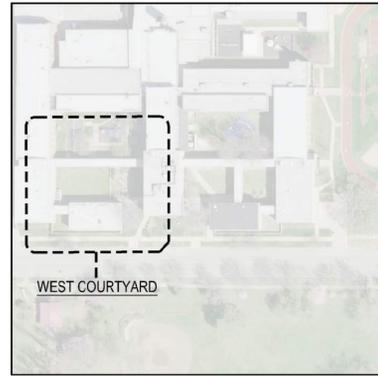
SHEET TITLE:
**DEMOLITION
PLANS - EAST
COURTYARD**

SHEET NUMBER:

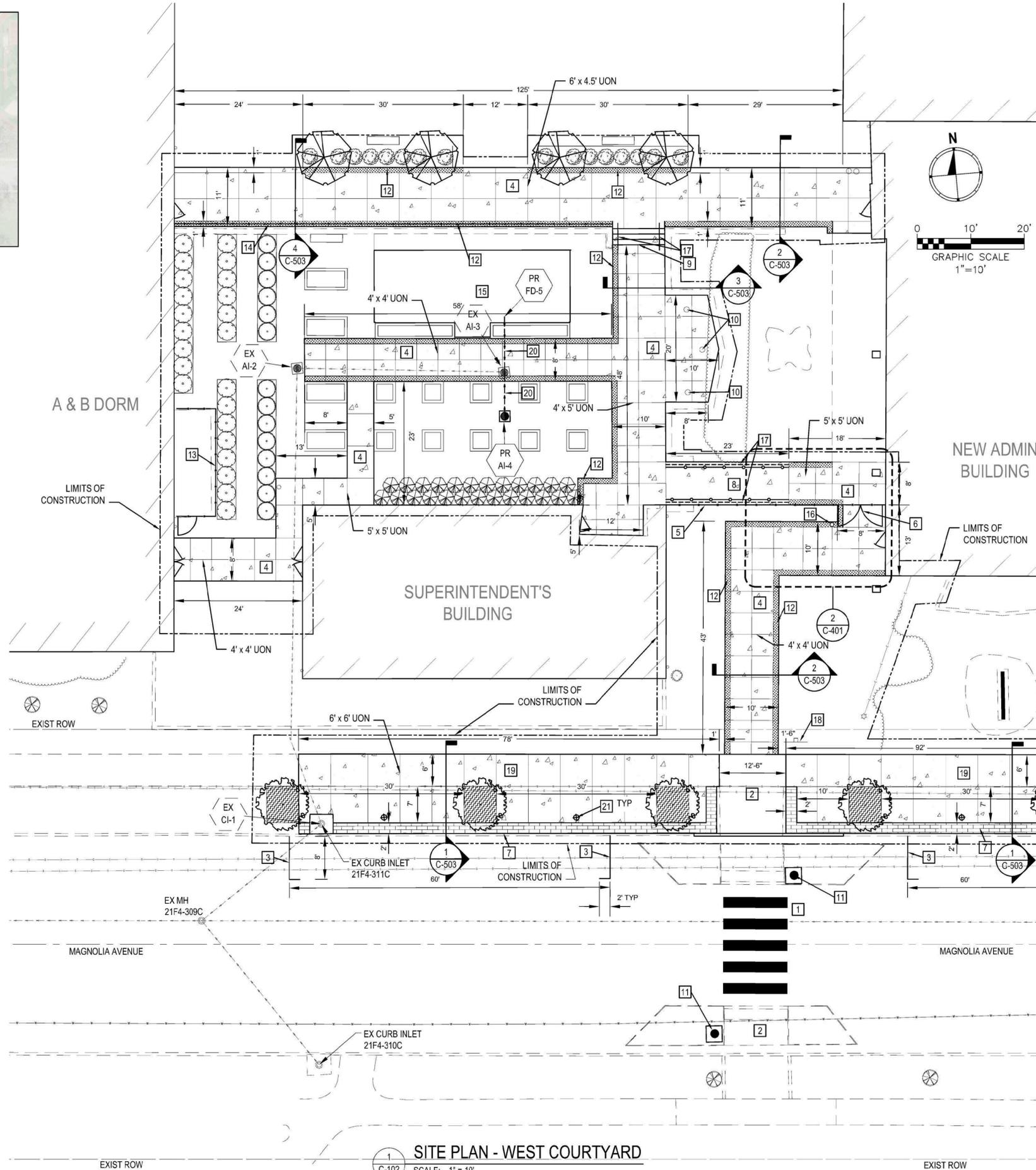
C-101

7 OF 74 SHEETS
10/18/2019

1 DEMOLITION PLAN - EAST COURTYARD
C-101 SCALE: 1" = 10'



KEY MAP



1 SITE PLAN - WEST COURTYARD
C-102 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&6/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 8/C-502.
- 12 NEW 1' WIDE AGGREGATE CONCRETE DETECTION STRIP, SEE SIDEWALK TYPICAL SECTION DETAILS, SHEET C-503 & C-504.
- 13 NEW CEDAR FENCE, SEE LANDSCAPE PLANS
- 14 NEW 4' TALL ORNAMENTAL FENCE, SEE 4' TALL ORNAMENTAL FENCE DETAIL, DETAIL 5/C-506.
- 15 NEW GREENHOUSE, SEE LANDSCAPE AND STRUCTURAL PLANS
- 16 NEW KEY CARD PEDESTAL, SEE KEY CARD PEDESTAL DETAIL, DETAIL 5/C-507.
- 17 HANDRAILS, SEE CONCRETE RAMP OR STAIR DETAIL, DETAIL 5 & 6/C-501.
- 18 ADA ACCESSIBLE ENTRANCE DIRECTIONAL SIGN, SEE ADA ENTRANCE DIRECTIONAL SIGN DETAIL, DETAIL 4/C-502.
- 19 NEW CONCRETE SIDEWALK 5", SEE MAGNOLIA AVENUE SIDEWALK TYPICAL SECTION DETAIL, DETAIL 1/C-503.
- 20 NEW 8" PVC PIPE, SEE PROFILES, SHEET C-604.
- 21 NEW STREETLIGHTS, SEE LANDSCAPE AND ELECTRICAL PLANS

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.



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. 001198



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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:	_____

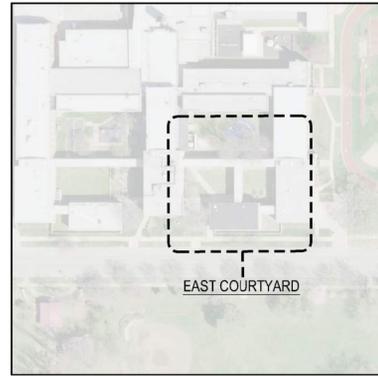
CAD DWG FILE:
DRAWN BY: _____
CHECKED BY: _____
DESIGNED BY: _____

SHEET TITLE:
SITE PLAN -
WEST COURTYARD

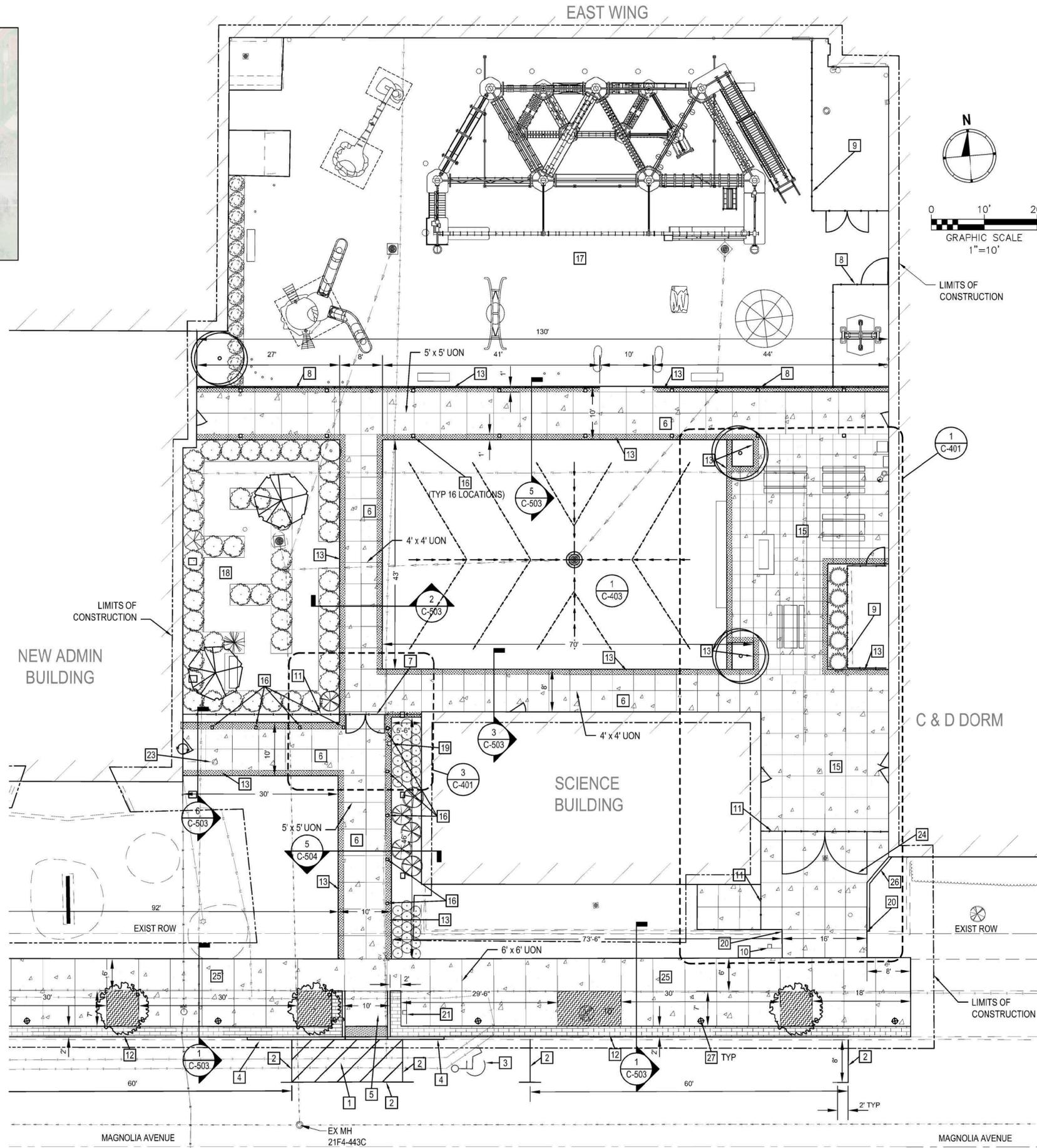
SHEET NUMBER:

C-102

8 OF 74 SHEETS
10/18/2019



KEY MAP



1 SITE PLAN - EAST COURTYARD
C-103 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 GRANITE 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 (ALTERNATE BID)
- 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 NOT USED
- 15 NEW CONCRETE PATIO, SEE ENLARGED PLAN 1/C-401 FOR MORE INFORMATION
- 16 NEW CATWALK OR 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 5/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

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.



720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Collinsville, St. Louis, Belleville, St. Charles
MISSOURI DESIGN FIRMS LICENSE NO. 001198



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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
9 OF 74 SHEETS
10/18/2019



10/18/2019
EXPIRES 12/31/2019

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. 001196



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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: _____

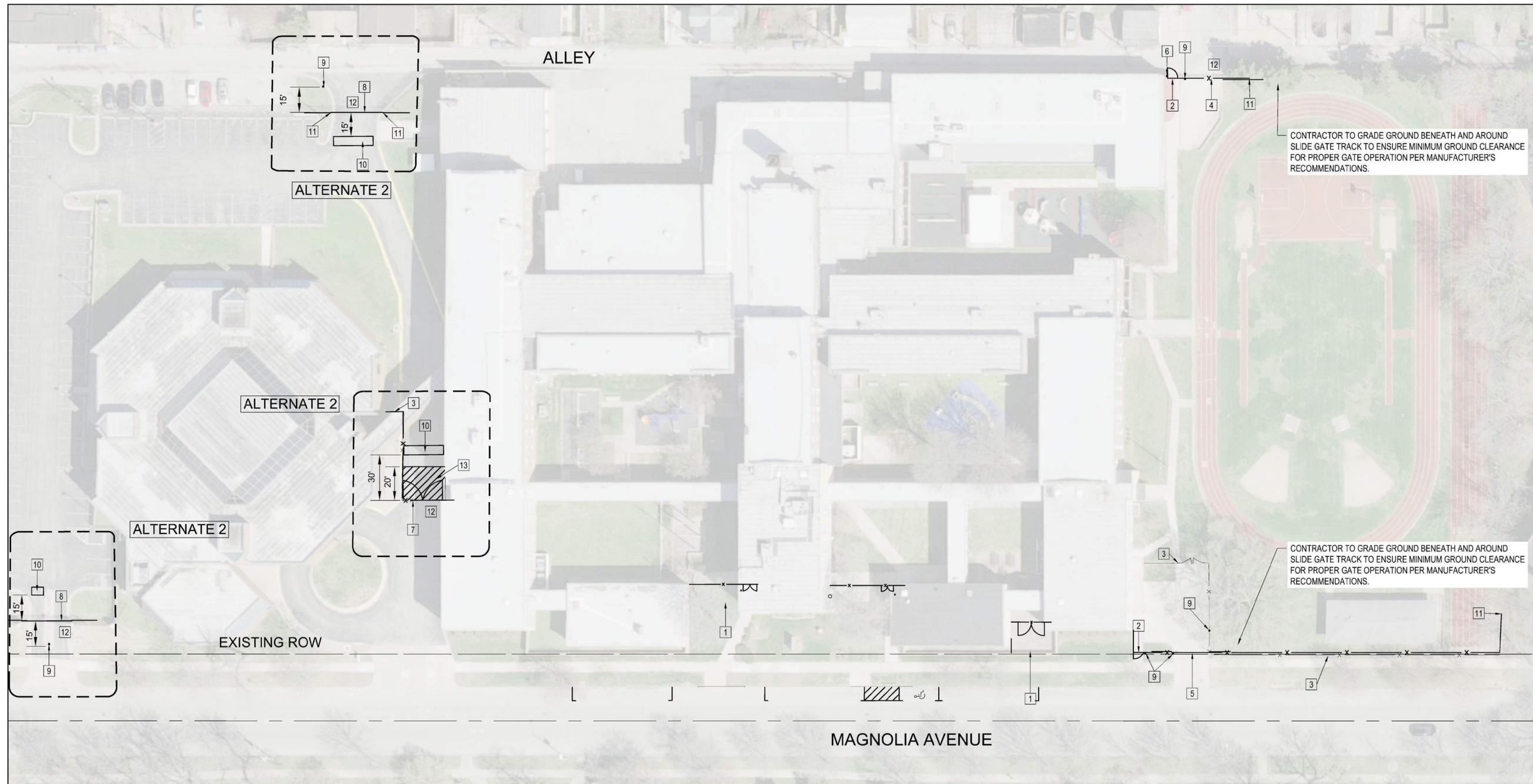
SHEET TITLE:

**PERIMETER
SECURITY SITE
PLAN**

SHEET NUMBER:

C-106

12 OF 74 SHEETS
10/18/2019



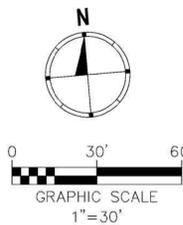
1 SITE PLAN - PERIMETER SECURITY
C-106 SCALE: 1" = 30'

PERIMETER SECURITY NOTES

- 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 MOTORIZED 20' CANTILEVER GATE, - RIGHT SLIDE, SEE CANTILEVER SLIDING GATE DETAIL, DETAIL 2/C-506
- 6 NEW CARD READER MOUNTED TO EXTERIOR WALL, SEE ELECTRICAL SHEETS FOR ADDITIONAL INFORMATION
- 7 NEW 15' MOTORIZED DOUBLE VEHICLE SWING GATE, SEE VEHICLE SWING GATE DETAIL, DETAIL 3/C-506
- 8 NEW MOTORIZED DOUBLE CANTILEVER GATE, 17' EACH, SEE CANTILEVER SLIDING GATE DETAIL, DETAIL 2/C-506
- 9 NEW KEY CARD PEDESTAL, SEE KEY CARD PEDESTAL DETAIL, DETAIL 5/C-507
- 10 SAW CUT NEW DETECTOR LOOPS IN PAVEMENT, SEE DETECTOR LOOP WIRE PLACEMENT DETAIL, DETAIL 4/C-507
- 11 CONNECT TO EXISTING FENCE
- 12 EXISTING GATE TO BE REMOVED
- 13 NEW 4' WHITE PAINTED ISLAND W/ 4" PAINT DIAGONAL MARKINGS AT 36" SPACING TYPICAL





10/18/2019
EXPIRES 12/31/2019

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. 001198



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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: _____

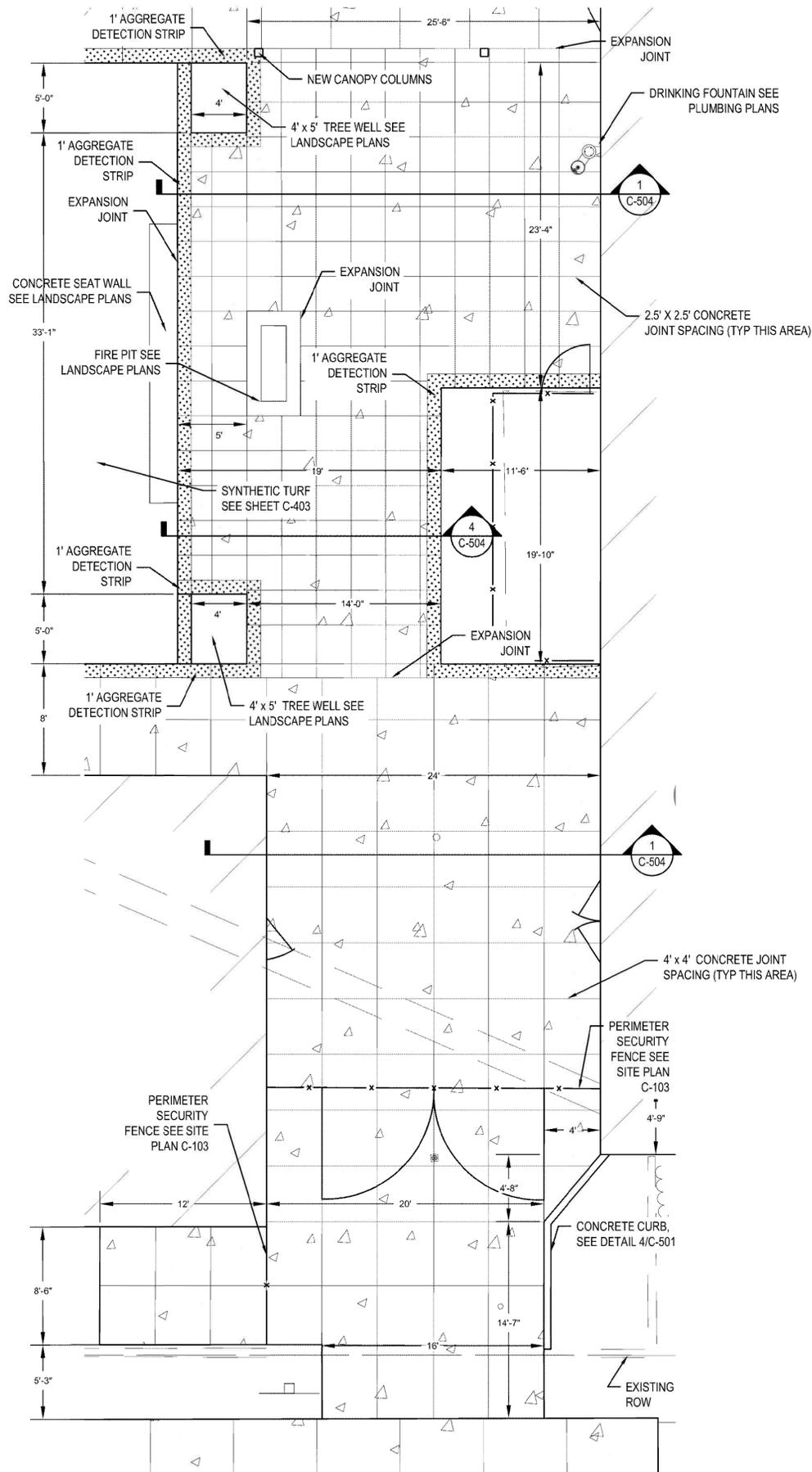
CAD DWG FILE: _____
DRAWN BY: _____
CHECKED BY: _____
DESIGNED BY: _____

SHEET TITLE:
**ENLARGED PLANS
PATIO &
PEDESTRIAN
ENTRANCES**

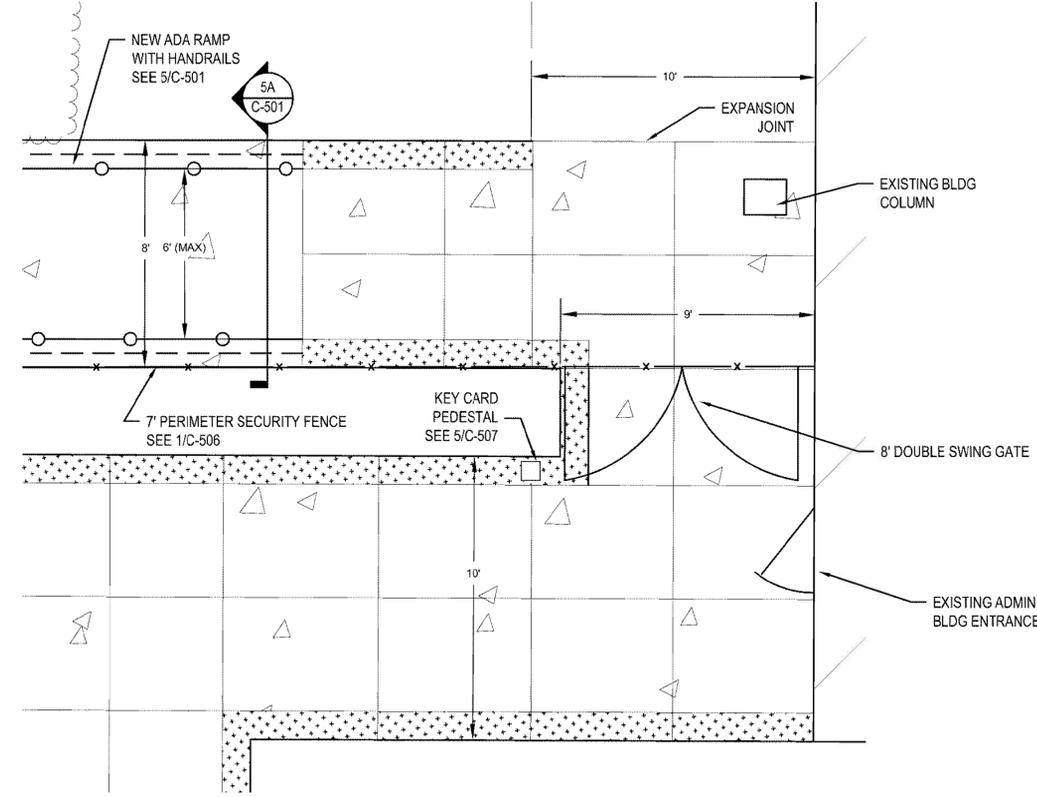
SHEET NUMBER:

C-401

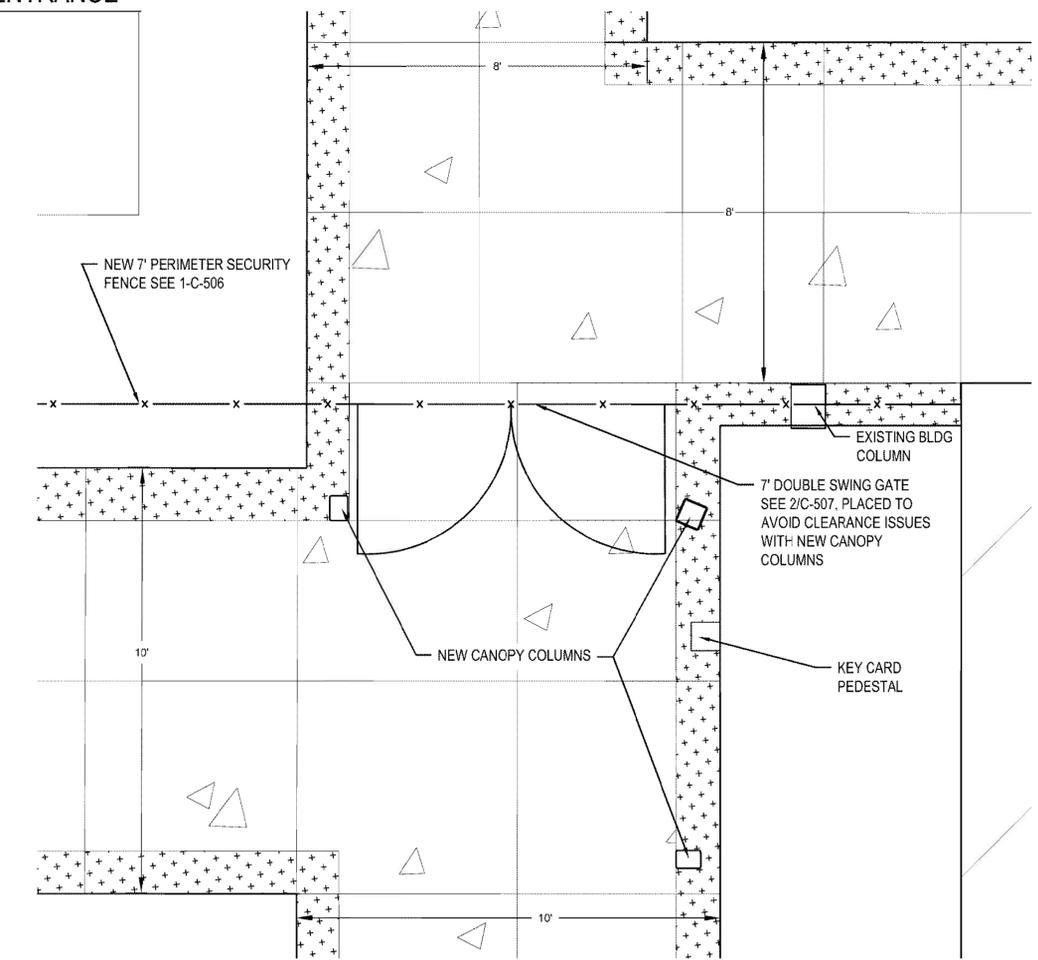
13 OF 74 SHEETS
10/18/2019



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



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



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



10/18/2019

EXPIRES 12/31/2019

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. 001198



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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: _____

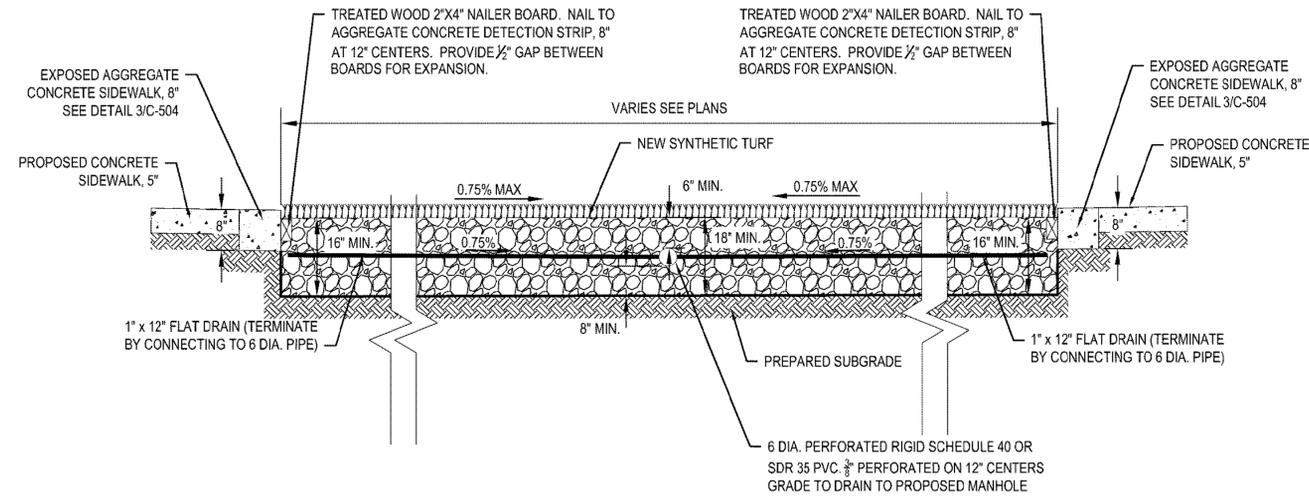
CAD DWG FILE: _____
DRAWN BY: _____
CHECKED BY: _____
DESIGNED BY: _____

SHEET TITLE:
ENLARGED PLANS
SYNTHETIC TURF
DETAILS

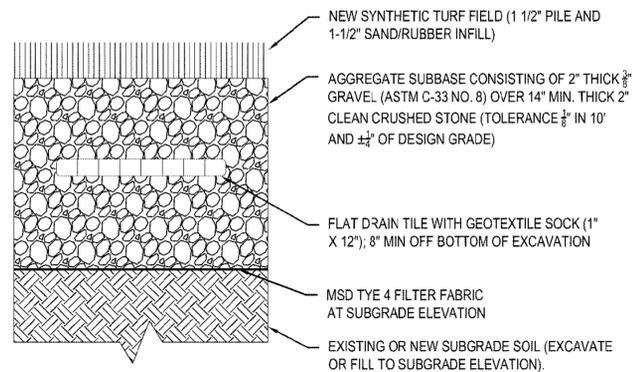
SHEET NUMBER:

C-402

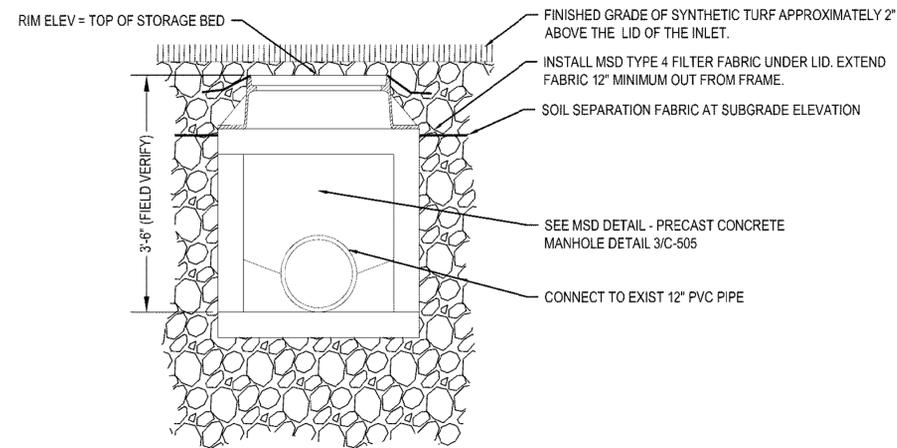
14 OF 74 SHEETS
10/18/2019



1 SYNTHETIC FIELD COLLECTION DRAIN DETAIL
C-402 SCALE: NO SCALE



2 SYNTHETIC TURF BASE CONSTRUCTION
C-402 SCALE: NO SCALE



3 UNDERGROUND MANHOLE DETAIL
C-402 SCALE: NO SCALE



10/18/2019
EXPIRES 12/31/2019

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. 001198



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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: _____

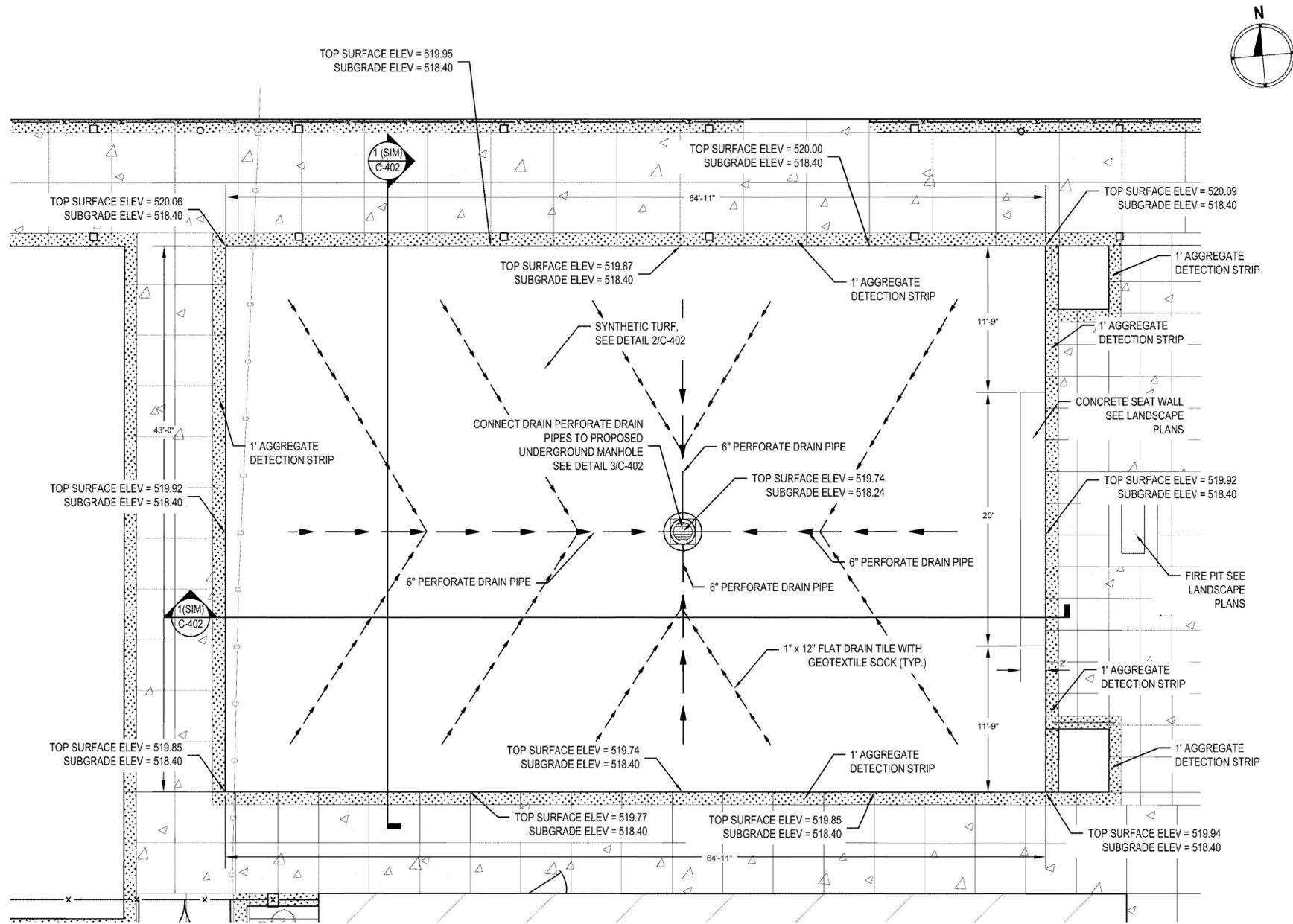
CAD DWG FILE: _____
DRAWN BY: _____
CHECKED BY: _____
DESIGNED BY: _____

SHEET TITLE:
ENLARGED PLANS
EAST COURTYARD
- SYNTHETIC TURF
LAYOUT

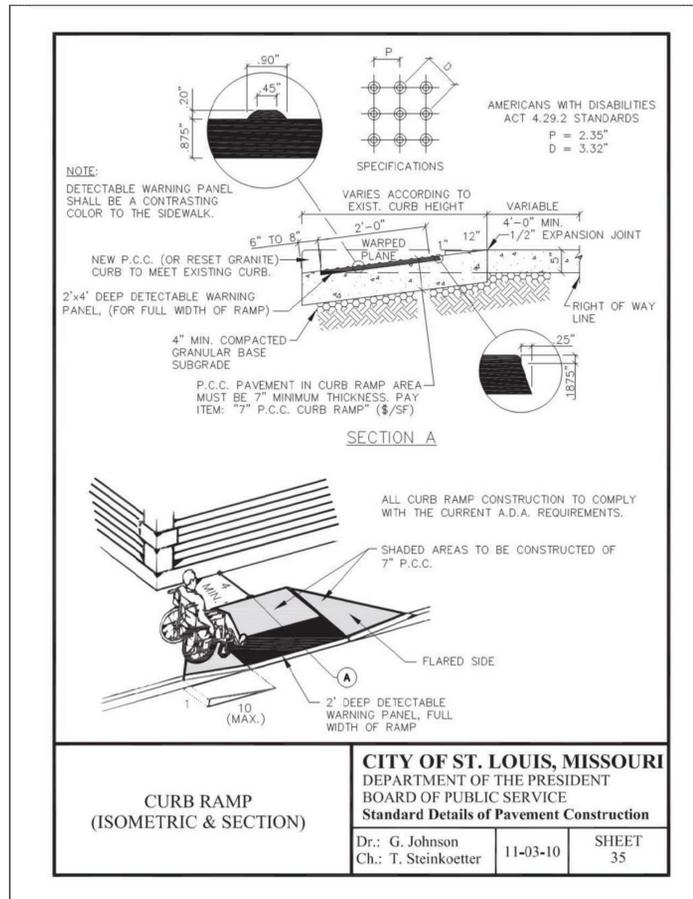
SHEET NUMBER:

C-403

15 OF 74 SHEETS
10/18/2019

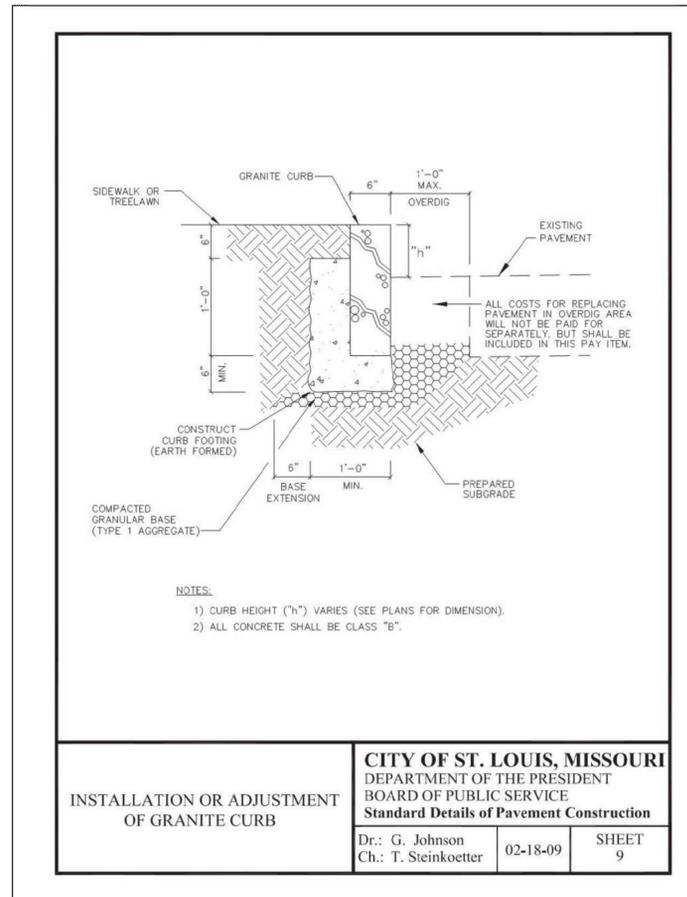


1 MULTI-PURPOSE TURF LAYOUT
C-403 SCALE: 1" = 5'



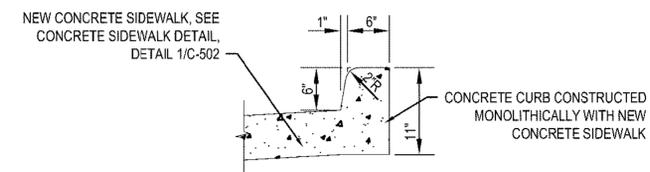
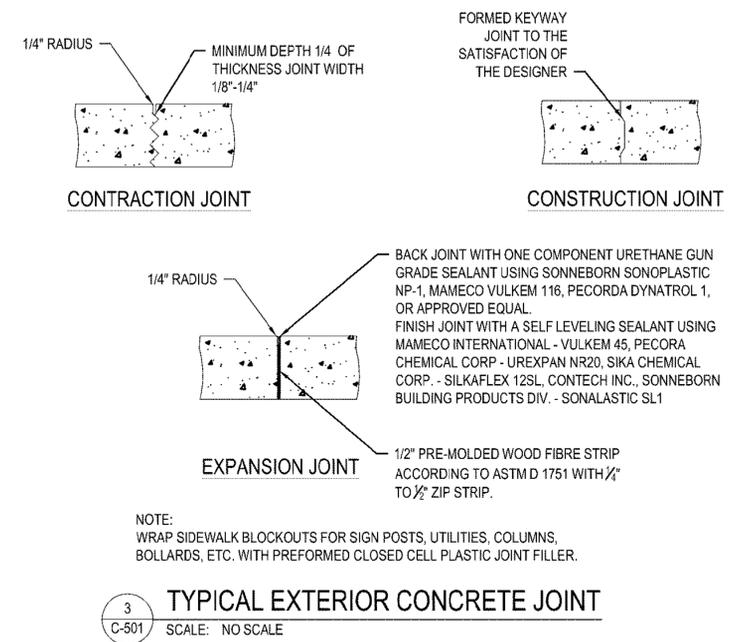
1
C-501 SCALE: NO SCALE

CURB RAMP (ISOMETRIC & SECTION)



2
C-501 SCALE: NO SCALE

INSTALLATION OR ADJUSTMENT OF GRANITE CURB

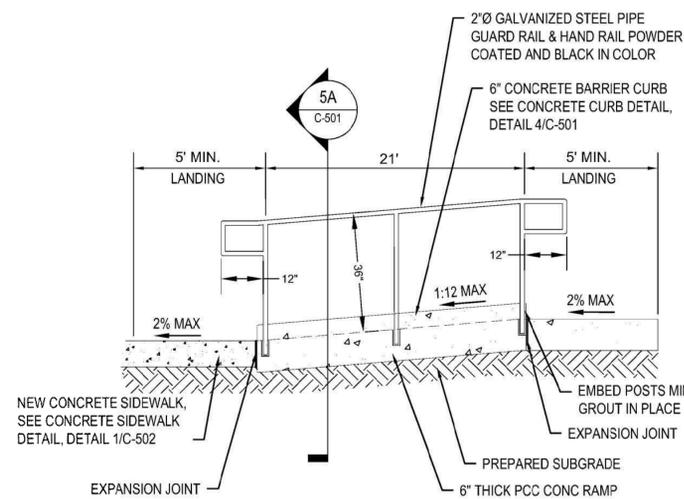


4
C-501 SCALE: NO SCALE

CONCRETE CURB

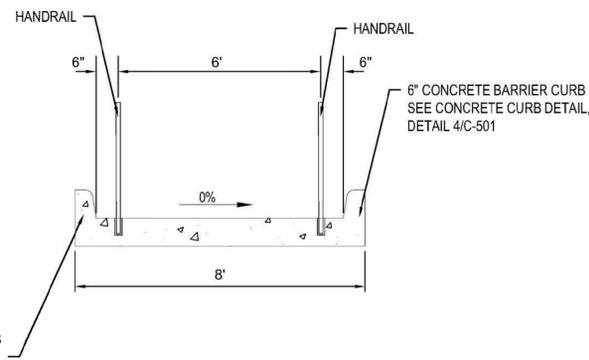
NOTES:

- 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.
- REINFORCING BARS SHALL BE EPOXY COATED. REINFORCEMENT WILL NOT BE PAID FOR SEPARATELY.
- GUARD RAIL & HAND RAIL SHALL BE POWDER COATED AND BLACK IN COLOR.
- CONCRETE STEPS SHALL BE CONSTRUCTED OF 4,000 PSI CONCRETE.
- A MINIMUM OF 2" SHALL BE MAINTAINED BETWEEN THE FACE OF CONCRETE AND THE NEAREST EDGE OF ALL REINFORCEMENT.
- DIMENSIONS FOR HANDRAIL CONSTRUCTION AND TREAD AND RISERS TO BE VERIFIED PRIOR TO CONSTRUCTION.
- EXPANSION JOINT SHALL BE PLACED WHERE STAIRS ARE ADJACENT TO CONCRETE LANDING AND AT STRUCTURES.



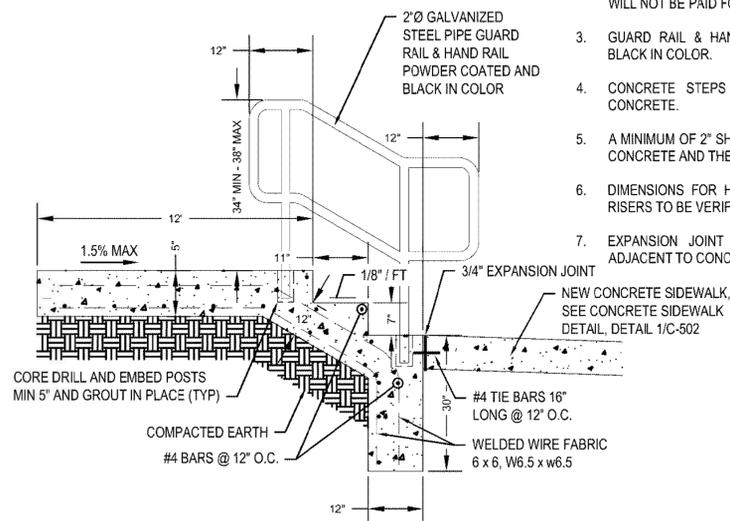
5
C-501 SCALE: NO SCALE

CONCRETE RAMP



5A
C-501 SCALE: NO SCALE

SECTION (TYP)



6
C-501 SCALE: NO SCALE

CONCRETE STAIRS



10/18/2019
EXPIRES 12/31/2019

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. 001196



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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

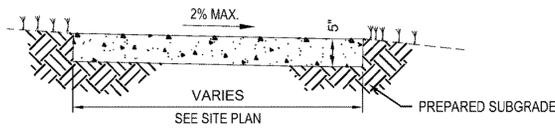
16 OF 74 SHEETS
10/18/2019

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.



CONCRETE SIDEWALK

1 C-502 SCALE: NO SCALE

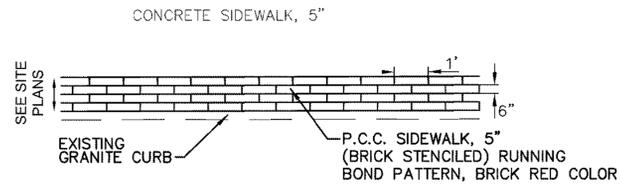
NOTES:

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.

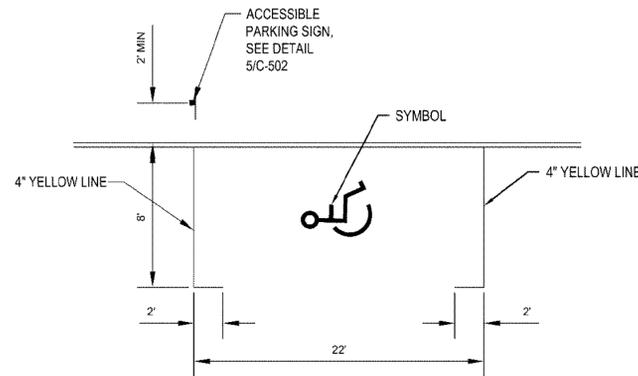
CONCRETE SHALL BE FULLY COLORED WITH AN IMPRINTED TEXTURE. THE COST OF THE CONCRETE IMPRINTING AND COLOR SHALL BE CONSIDERED AS INCLUDED IN THE COST OF CONCRETE SIDEWALK.

SEE CONCRETE SIDEWALK DETAIL FOR ADDITIONAL INFORMATION.



DECORATIVE STAMP

2 C-502 SCALE: NO SCALE



ON-STREET ACCESSIBLE PARKING

3 C-502 SCALE: NO SCALE

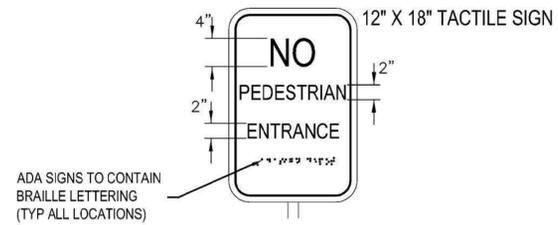
12" X 18" TACTILE SIGN

ADA SIGNS TO CONTAIN BRAILLE LETTERING (TYP ALL LOCATIONS)



ADA ENTRANCE DIRECTIONAL SIGN

4 C-502 SCALE: NO SCALE



ADA SIGNS TO CONTAIN BRAILLE LETTERING (TYP ALL LOCATIONS)

NO PEDESTRIAN ENTRANCE SIGN

7 C-502 SCALE: NO SCALE

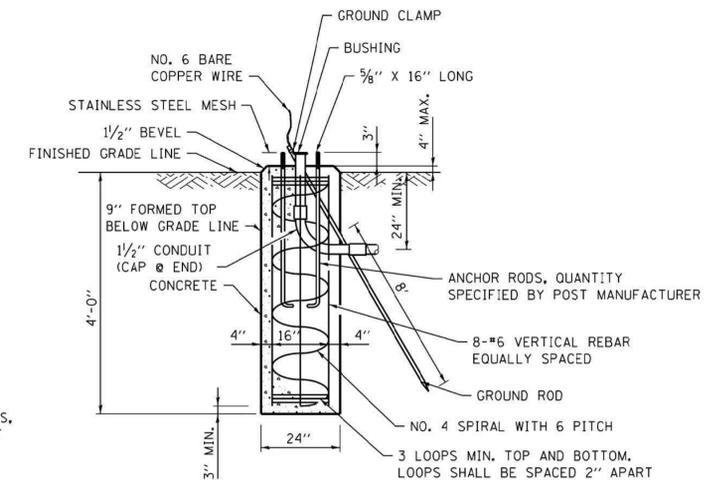
BOLT CIRCLE AND QUANTITY OF ANCHOR RODS AS SPECIFIED BY POST MANUFACTURER



TOP VIEW
(NOT TO SCALE)

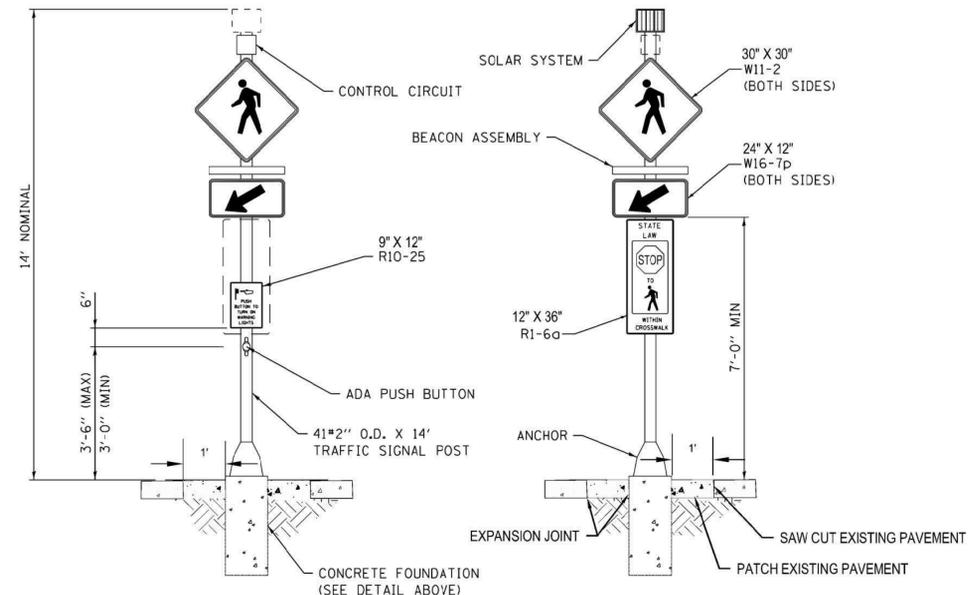
NOTES:

- SEE SPECIAL PROVISION FOR SOLAR-POWERED FLASHING BEACON ASSEMBLY (COMPLETE).
- CONCRETE FOUNDATIONS, SIGN PANELS, CONTROL CIRCUITS, ADA PUSH BUTTON ETC SHALL BE INCLUDED IN THE COST OF SOLAR-POWERED FLASHING BEACON ASSEMBLY (COMPLETE).
- POST AND FOUNDATION SHALL BE ACCORDING TO SECTION 902 OF THE MISSOURI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
- 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)

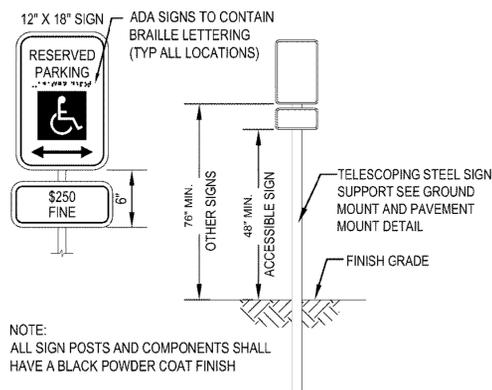
BACK VIEW
(NOT TO SCALE)

SOLAR-POWERED FLASHING BEACON ASSEMBLY (COMPLETE)

(NOT TO SCALE)

SOLAR-POWERED FLASHING BEACON ASSEMBLY

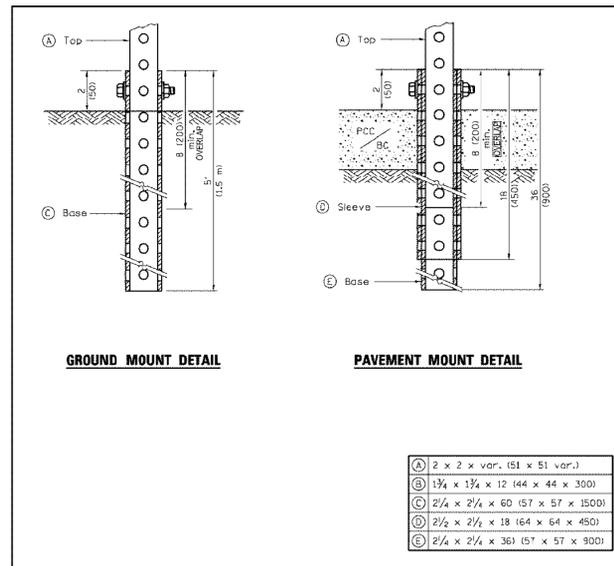
6 C-502 SCALE: NO SCALE



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

ADA TELESCOPING SIGN

5 C-502 SCALE: NO SCALE



10/18/2019
EXPIRES 12/31/2019

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. 001198



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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

17 OF 74 SHEETS
10/18/2019



10/18/2019
EXPIRES 12/31/2019

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. 001198



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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: _____

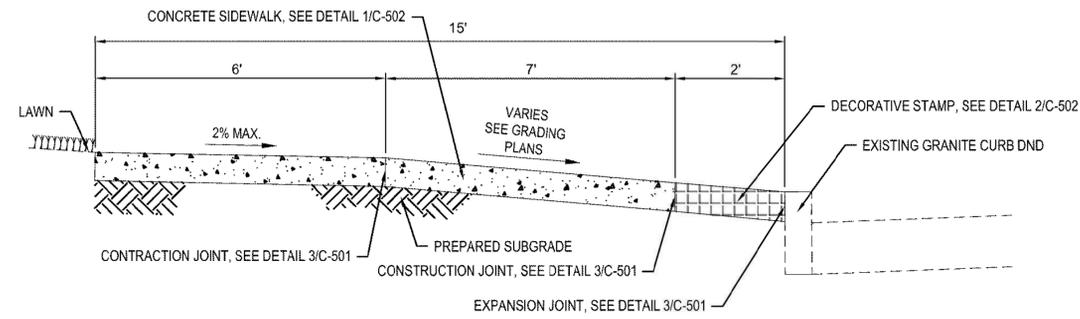
CAD DWG FILE: _____
DRAWN BY: _____
CHECKED BY: _____
DESIGNED BY: _____

SHEET TITLE:
CIVIL PLAN
DETAILS

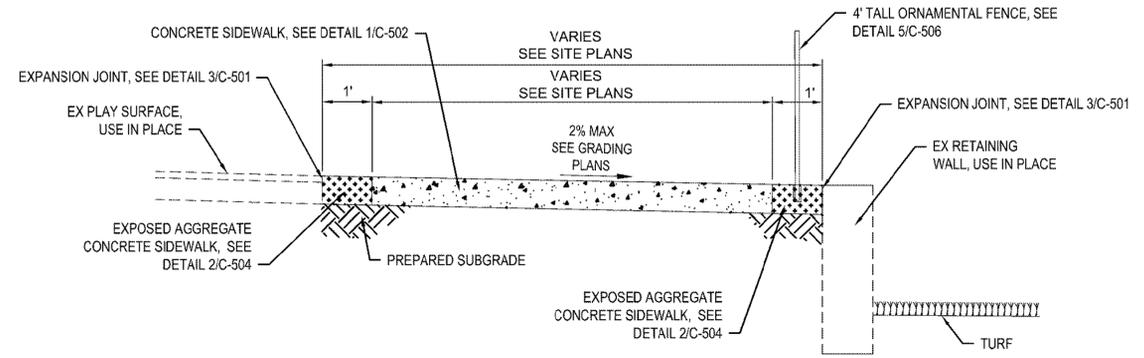
SHEET NUMBER:

C-503

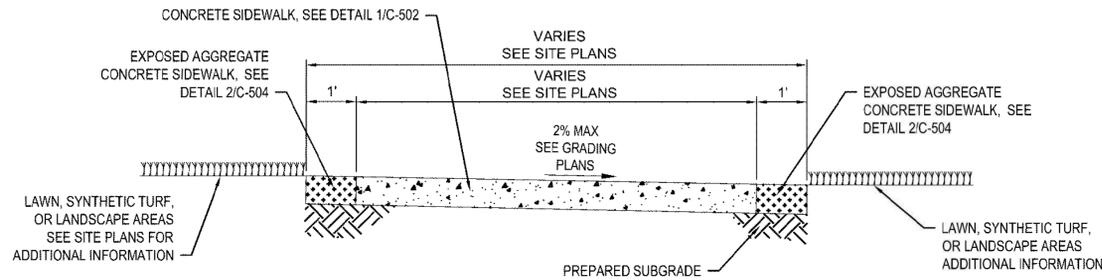
18 OF 74 SHEETS
10/18/2019



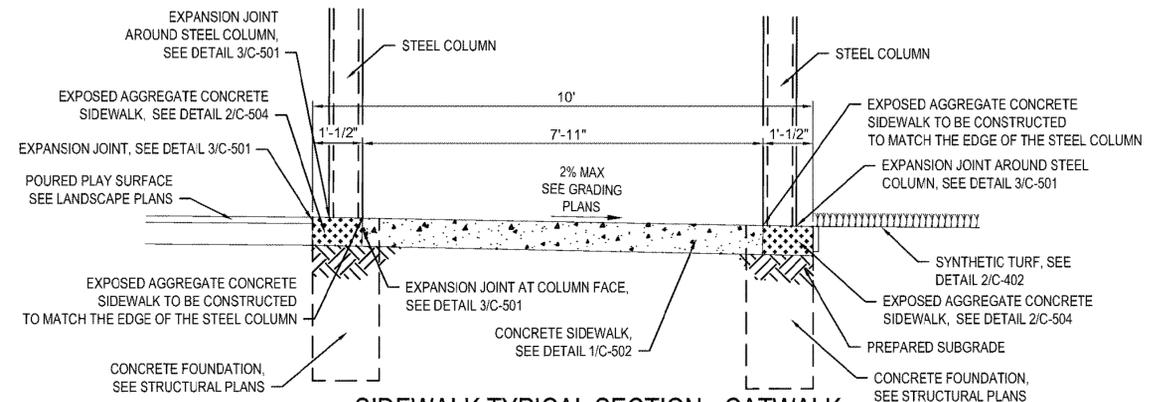
1
C-503 SCALE: NO SCALE
MAGNOLIA AVENUE SIDEWALK TYPICAL SECTION



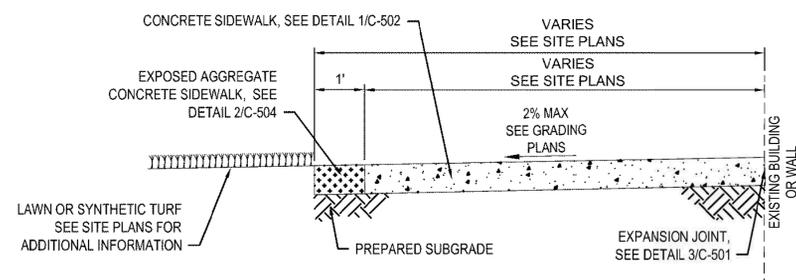
4
C-503 SCALE: NO SCALE
SIDEWALK TYPICAL SECTION - EX WALL ON ONE SIDE



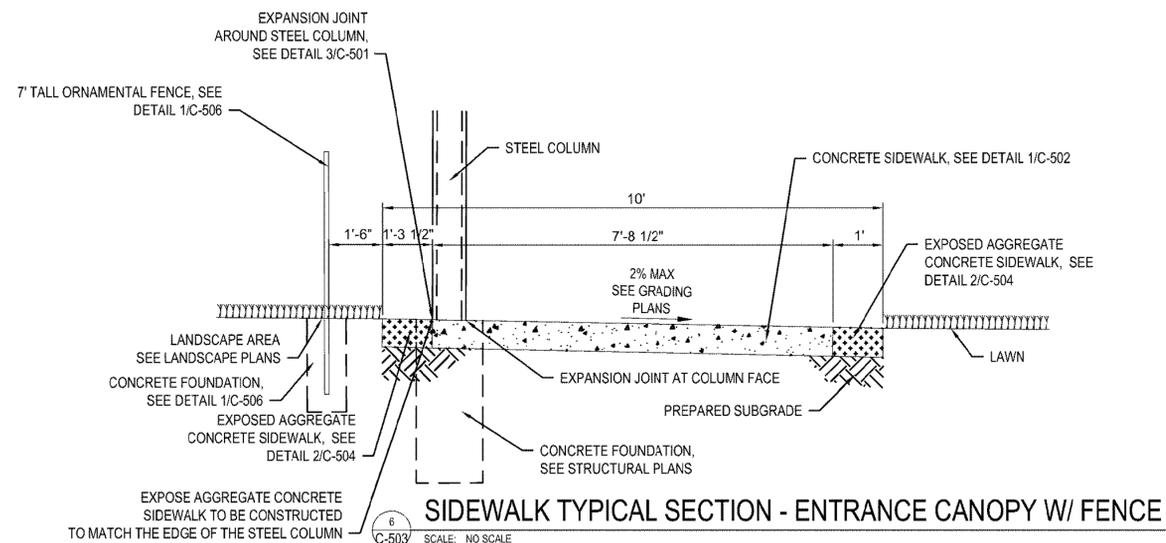
2
C-503 SCALE: NO SCALE
SIDEWALK TYPICAL SECTION - BUFFER ON BOTH SIDES



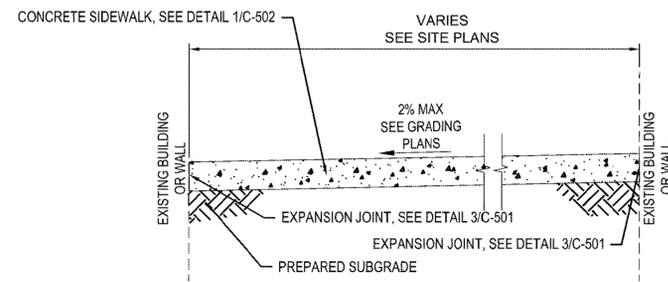
5
C-503 SCALE: NO SCALE
SIDEWALK TYPICAL SECTION - CATWALK



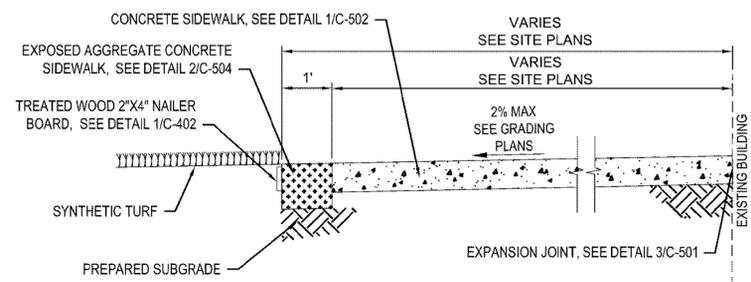
3
C-503 SCALE: NO SCALE
SIDEWALK TYPICAL SECTION - BUILDING OR WALL ON ONE SIDE



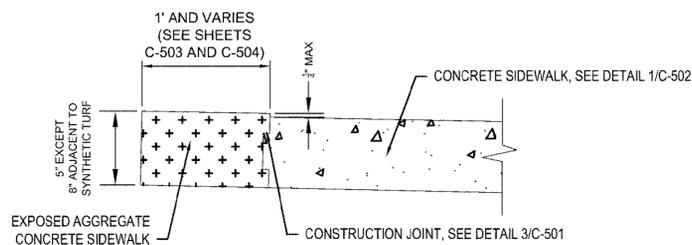
6
C-503 SCALE: NO SCALE
SIDEWALK TYPICAL SECTION - ENTRANCE CANOPY W/ FENCE



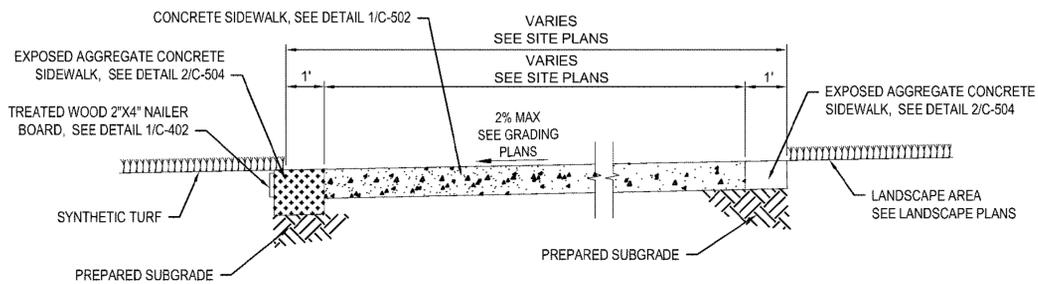
1
C-504 SCALE: NO SCALE
SIDEWALK TYPICAL SECTION - BUILDINGS ON BOTH SIDES



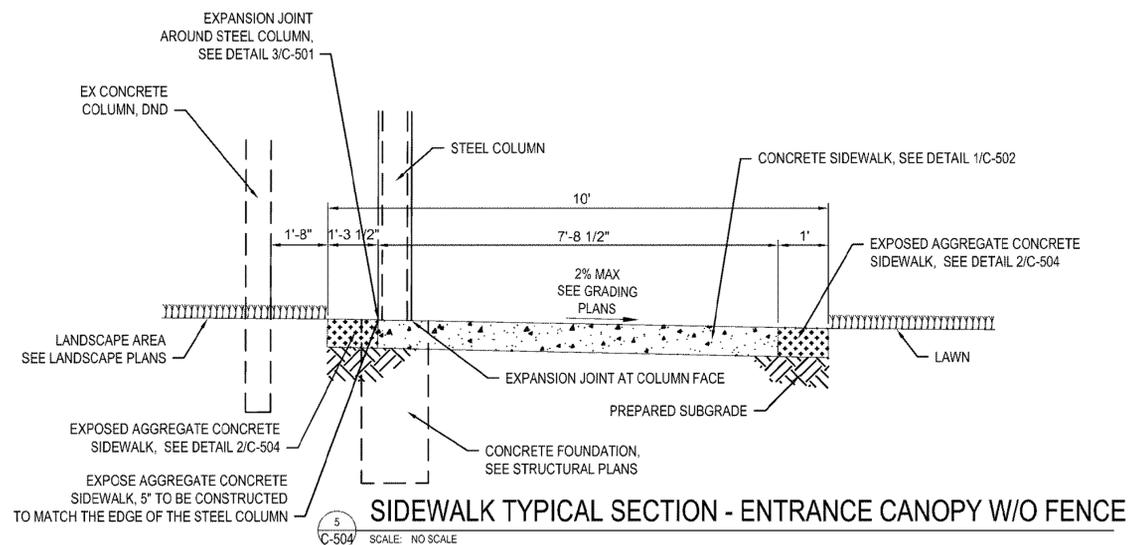
3
C-504 SCALE: NO SCALE
PATIO TYPICAL SECTION - BUFFER ON ONE SIDE



2
C-504 SCALE: NO SCALE
EXPOSED AGGREGATE CONCRETE SIDEWALK DETAIL



4
C-504 SCALE: NO SCALE
PATIO TYPICAL SECTION - BUFFER ON BOTH SIDES



5
C-504 SCALE: NO SCALE
SIDEWALK TYPICAL SECTION - ENTRANCE CANOPY W/O FENCE



10/18/2019
EXPIRES 12/31/2019

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. 001198



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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: _____

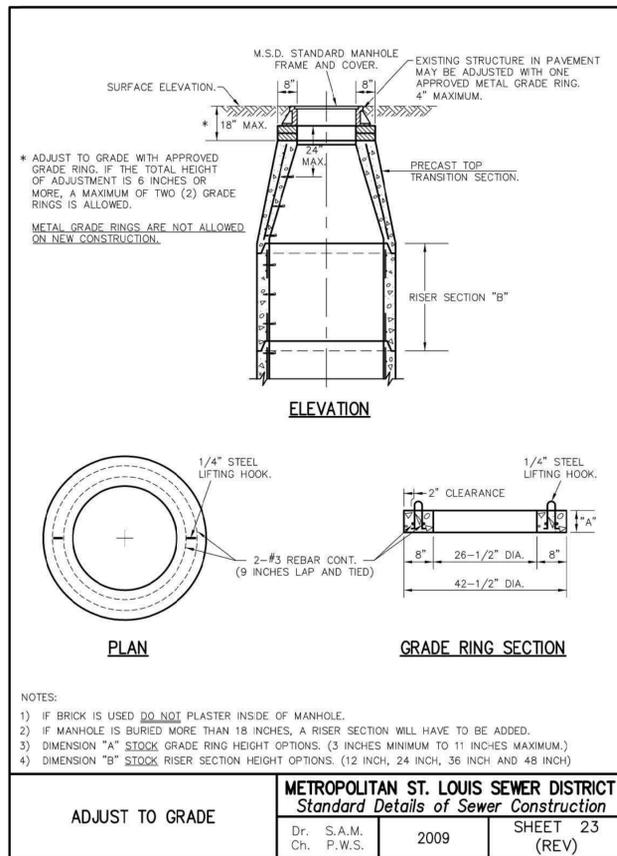
CAD DWG FILE: _____
DRAWN BY: _____
CHECKED BY: _____
DESIGNED BY: _____

SHEET TITLE:
**CIVIL PLAN
DETAILS**

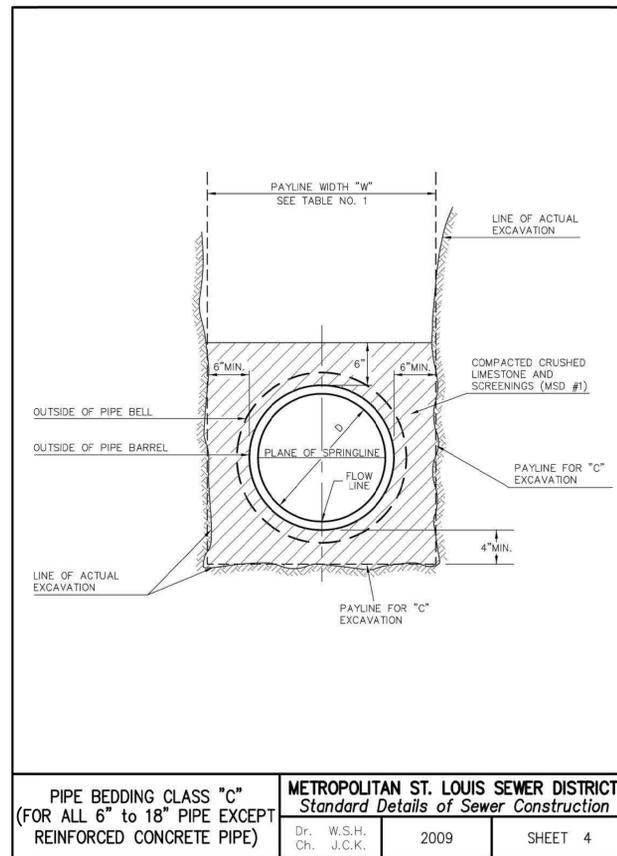
SHEET NUMBER:

C-504

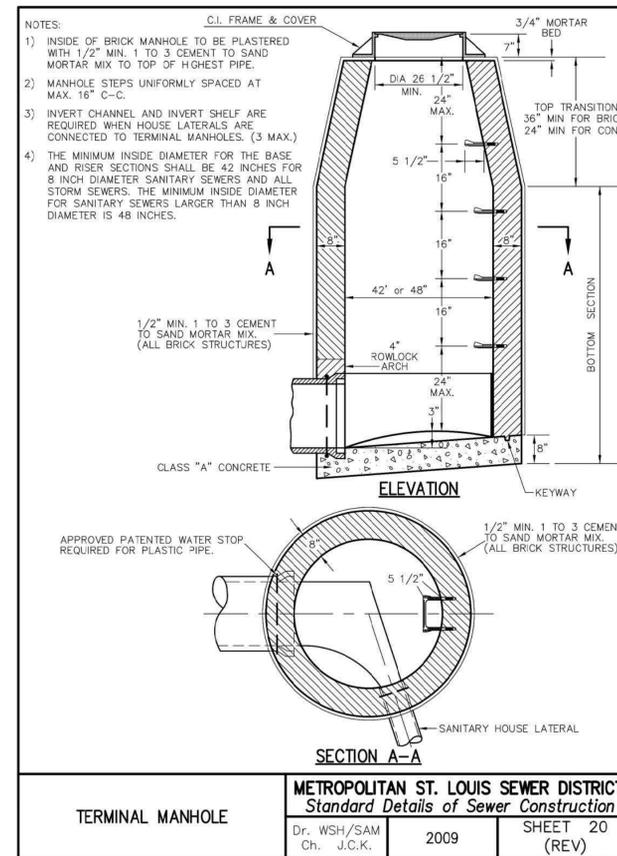
19 OF 74 SHEETS
10/18/2019



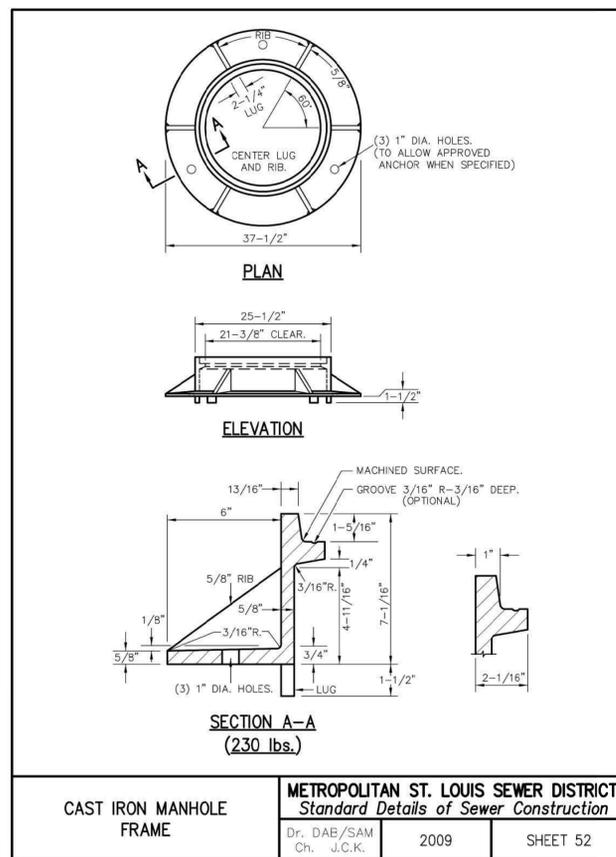
1
C-505 SCALE: NO SCALE



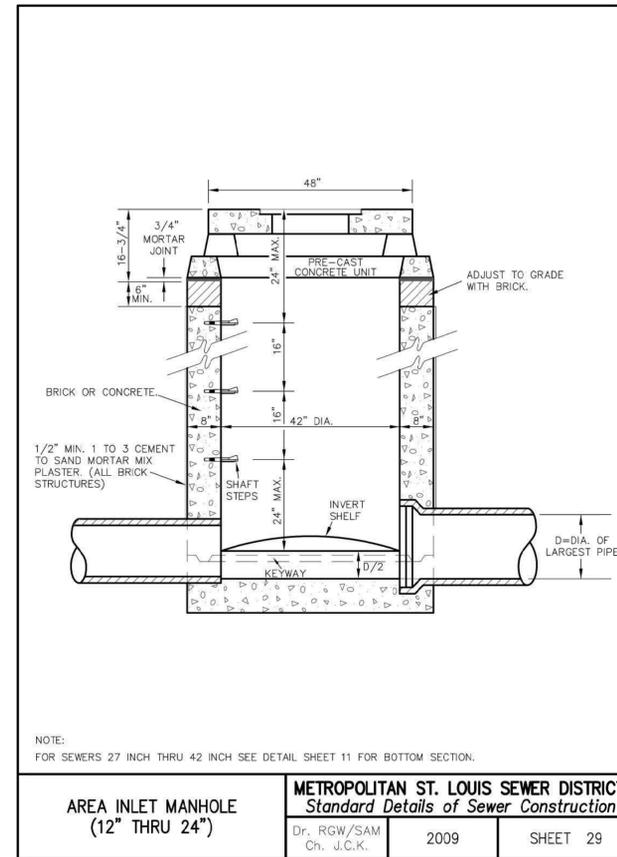
2
C-505 SCALE: NO SCALE



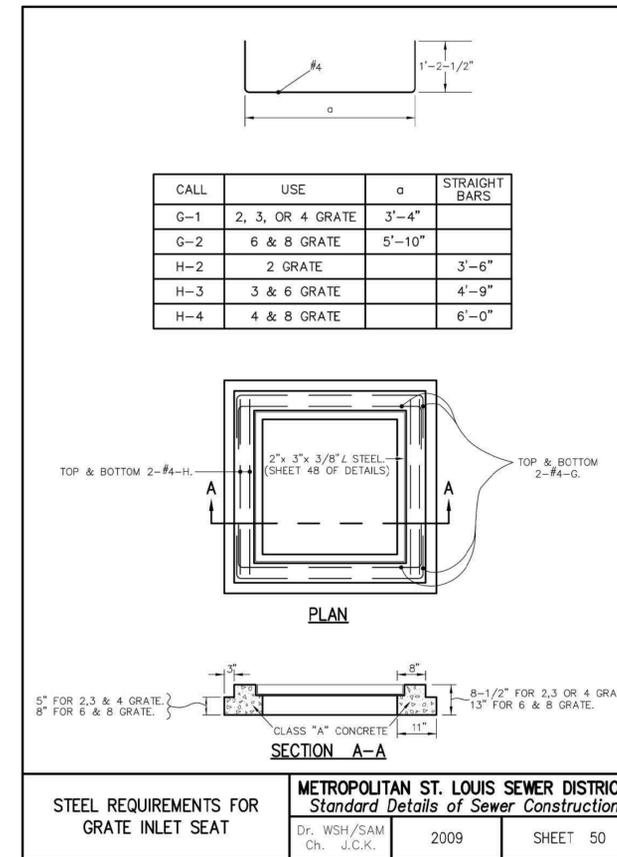
3
C-505 SCALE: NO SCALE



4
C-505 SCALE: NO SCALE



5
C-505 SCALE: NO SCALE



6
C-505 SCALE: NO SCALE



10/18/2019
EXPIRES 12/31/2019

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

Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO. 001198

OATES ASSOCIATES

MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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: _____

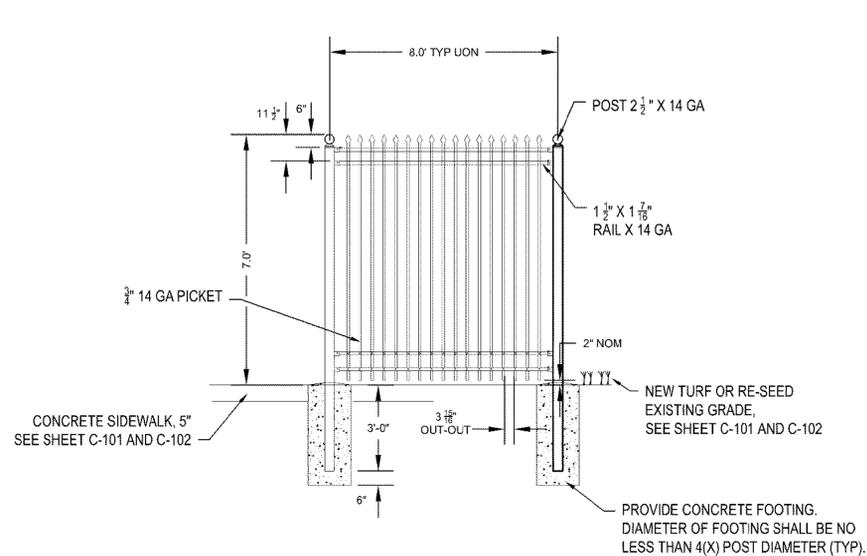
CAD DWG FILE:
DRAWN BY: _____
CHECKED BY: _____
DESIGNED BY: _____

SHEET TITLE:
**CIVIL PLAN
DETAILS**

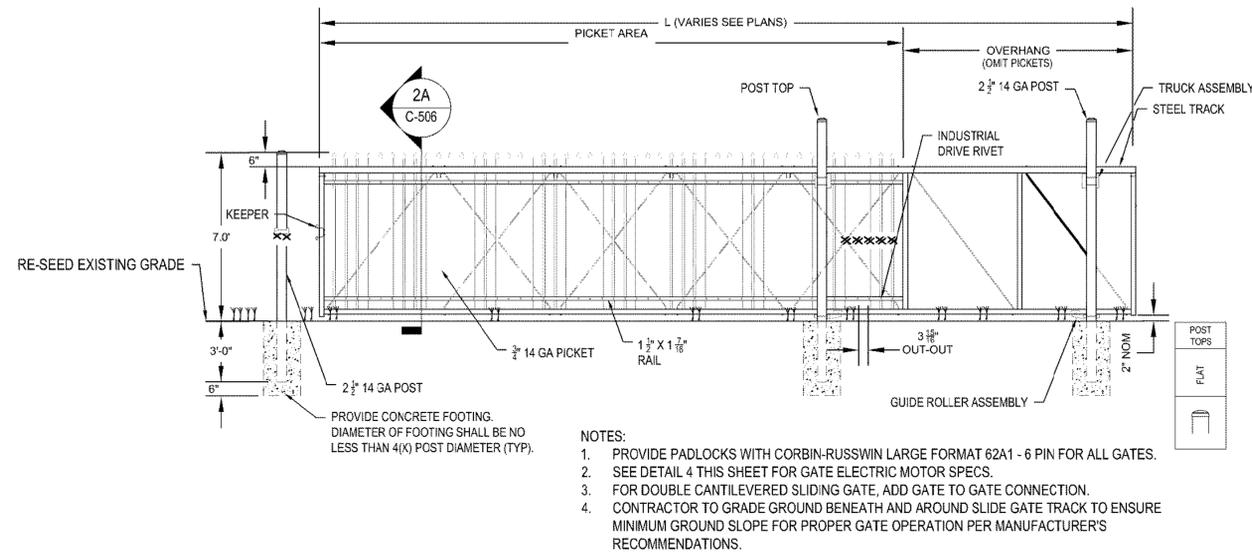
SHEET NUMBER:

C-505

20 OF 74 SHEETS
10/18/2019

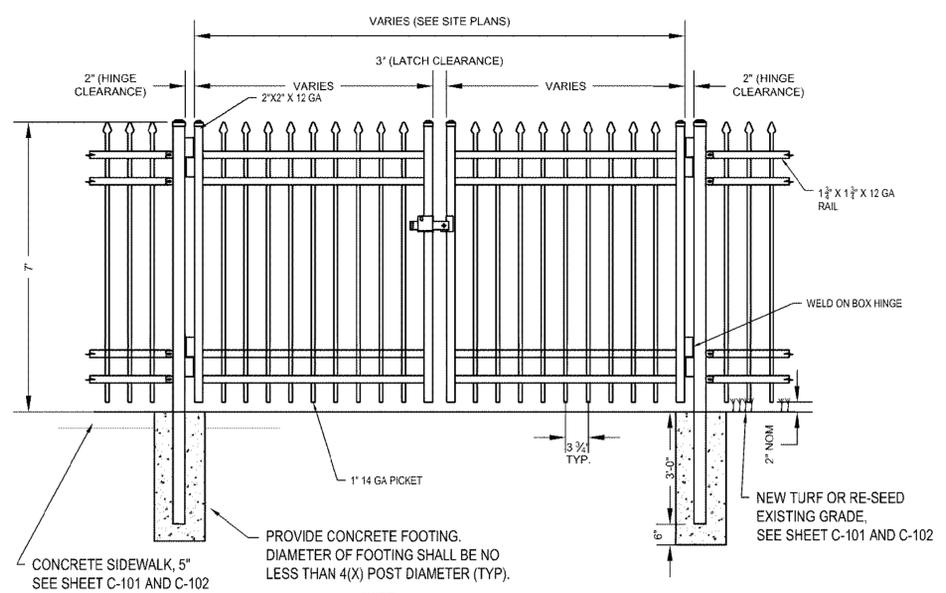
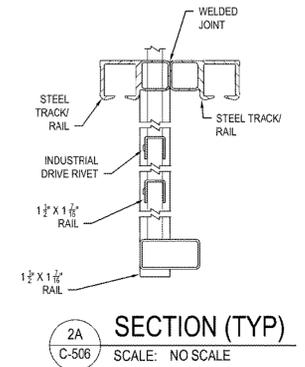


1 7' TALL ORNAMENTAL FENCE
C-506 SCALE: NO SCALE



- 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 CANTILEVERED SLIDING GATE
C-506 SCALE: NO SCALE



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

3 VEHICLE SWING GATE
C-506 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.

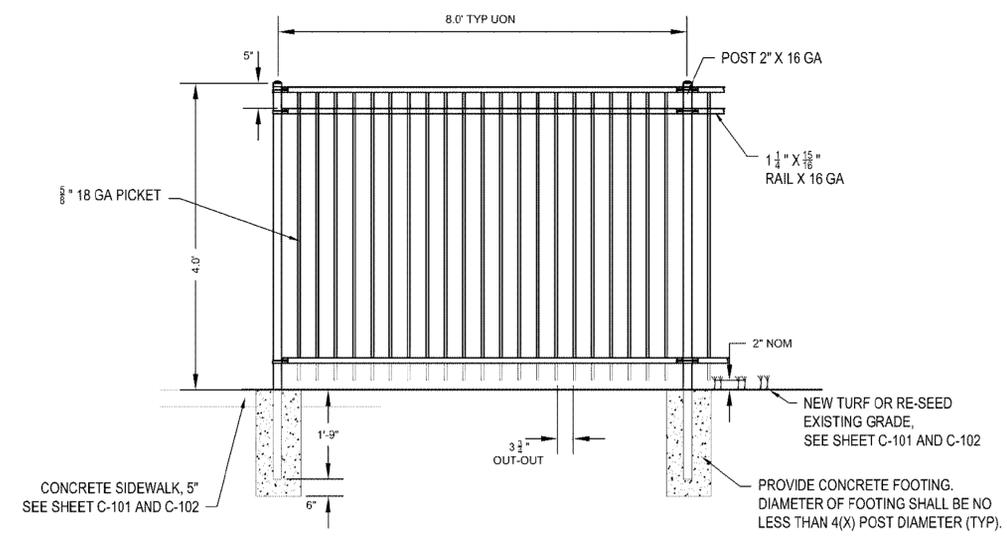
PROVISIONS ON TERMINAL STRIP AND IN CONTROLS FOR SECURITY INTERFACE FOR REMOTE OPEN COMMAND.

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 GATE ELECTRIC MOTOR
C-506 SCALE: NO SCALE



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



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. 001196



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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



10/18/2019
EXPIRES 12/31/2019

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. 001198



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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: _____

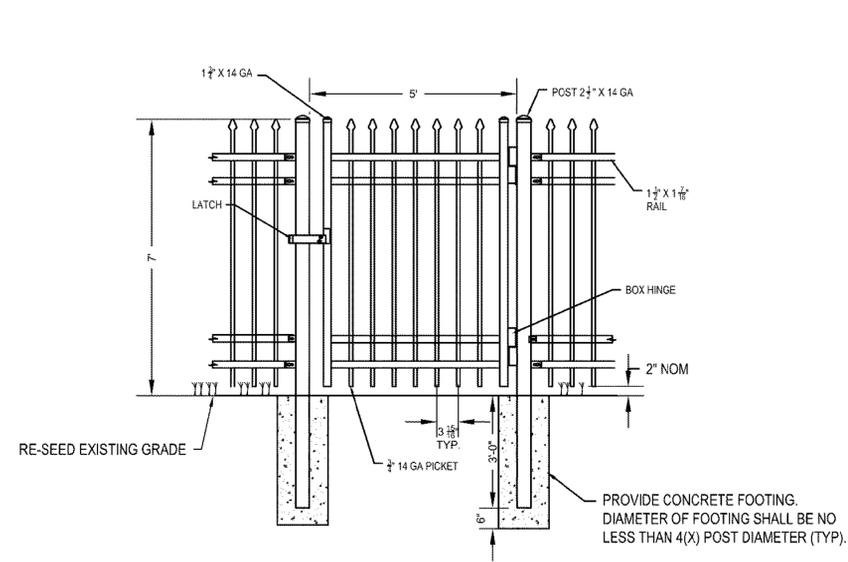
SHEET TITLE:

PERIMETER
SECURITY
DETAILS

SHEET NUMBER:

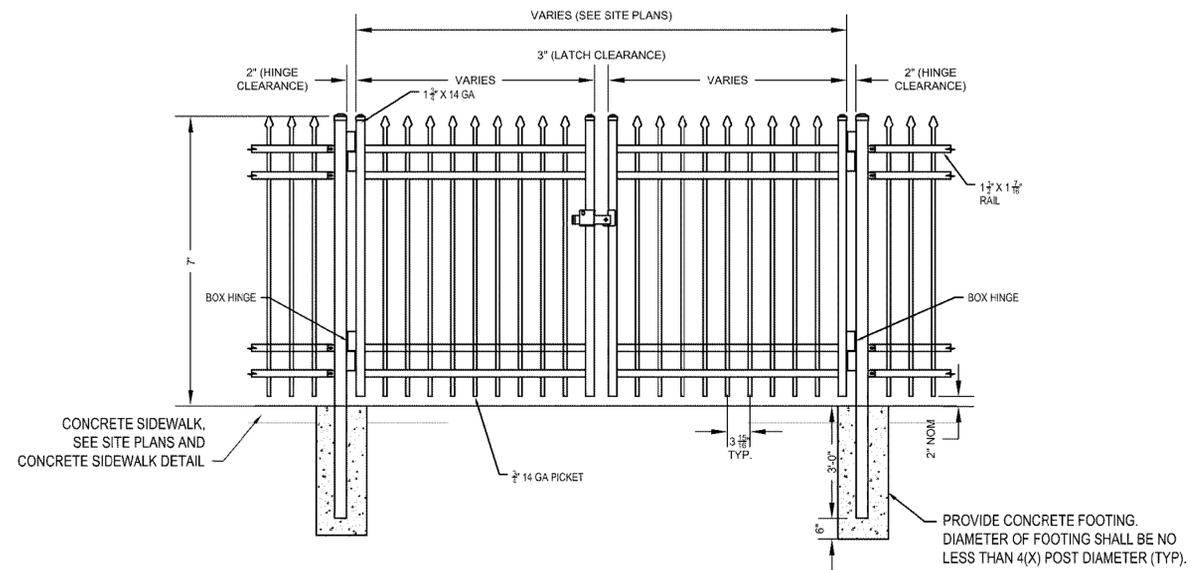
C-507

22 OF 74 SHEETS
10/18/2019



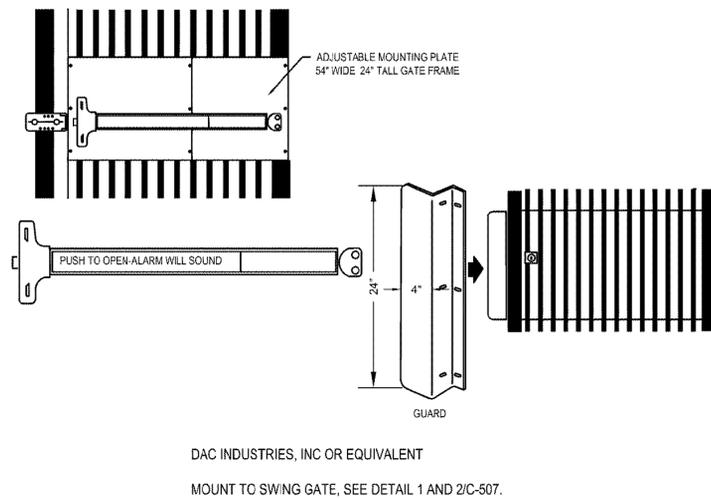
NOTE:
1. PROVIDE EMERGENCY EXIT PUSH BARS ON GATE, SEE EMERGENCY EXIT SWING GATE CRASH BARS, DETAIL 3/C-507.

1 SWING GATE
C-507 SCALE: NO SCALE



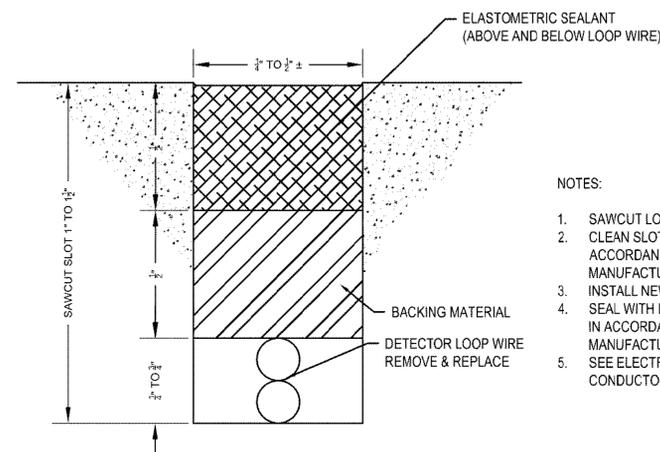
NOTE:
1. PROVIDE EMERGENCY EXIT PUSH BARS ON BOTH GATES, SEE EMERGENCY EXIT SWING GATE CRASH BARS, DETAIL 3/C-507.
2. GATE TO GATE CONNECTION PER MANUFACTURER RECOMMENDATIONS

2 DOUBLE SWING GATE
C-507 SCALE: NO SCALE



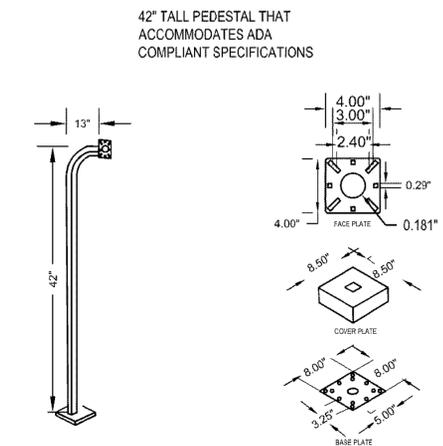
DAC INDUSTRIES, INC OR EQUIVALENT
MOUNT TO SWING GATE, SEE DETAIL 1 AND 2/C-507.

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



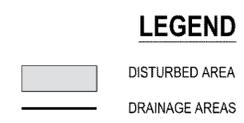
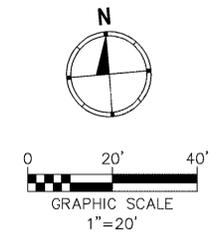
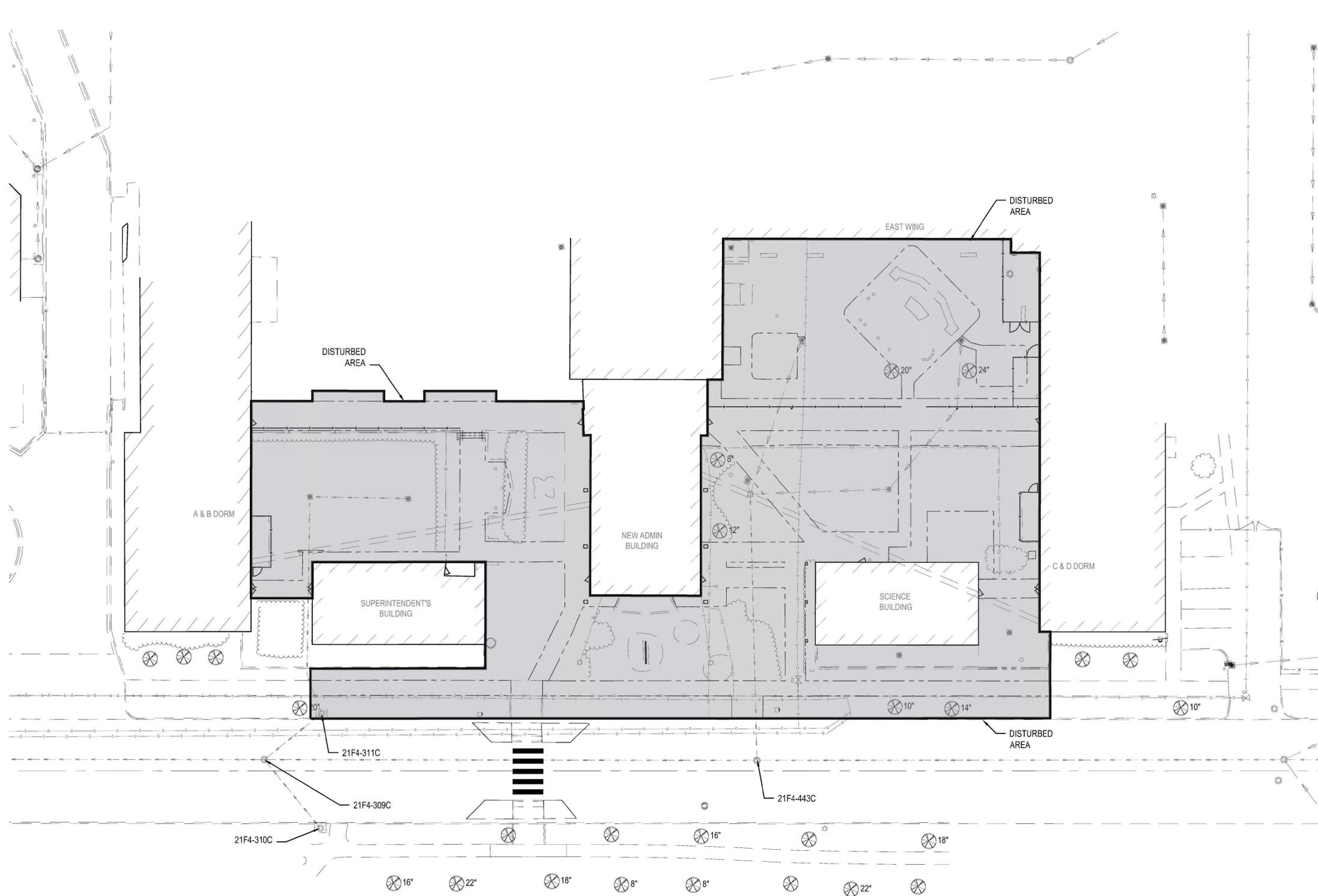
NOTES:
1. SAWCUT LOOP SLOT
2. CLEAN SLOT AND PREPARE IN ACCORDANCE TO SEALANT MANUFACTURER.
3. INSTALL NEW DETECTOR LOOP WIRE
4. SEAL WITH ELASTOMETRIC SEALANT IN ACCORDANCE TO SEALANT MANUFACTURER.
5. SEE ELECTRICAL DETAILS FOR CONDUCTOR DETAILS

4 DETECTOR LOOP WIRE PLACEMENT
C-507 SCALE: NO SCALE



SEE ELECTRICAL DETAILS FOR
KEY CARD READER

5 KEY CARD PEDESTAL
C-507 SCALE: NO SCALE



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

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



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. 001198



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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: _____

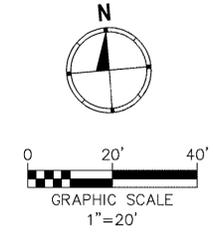
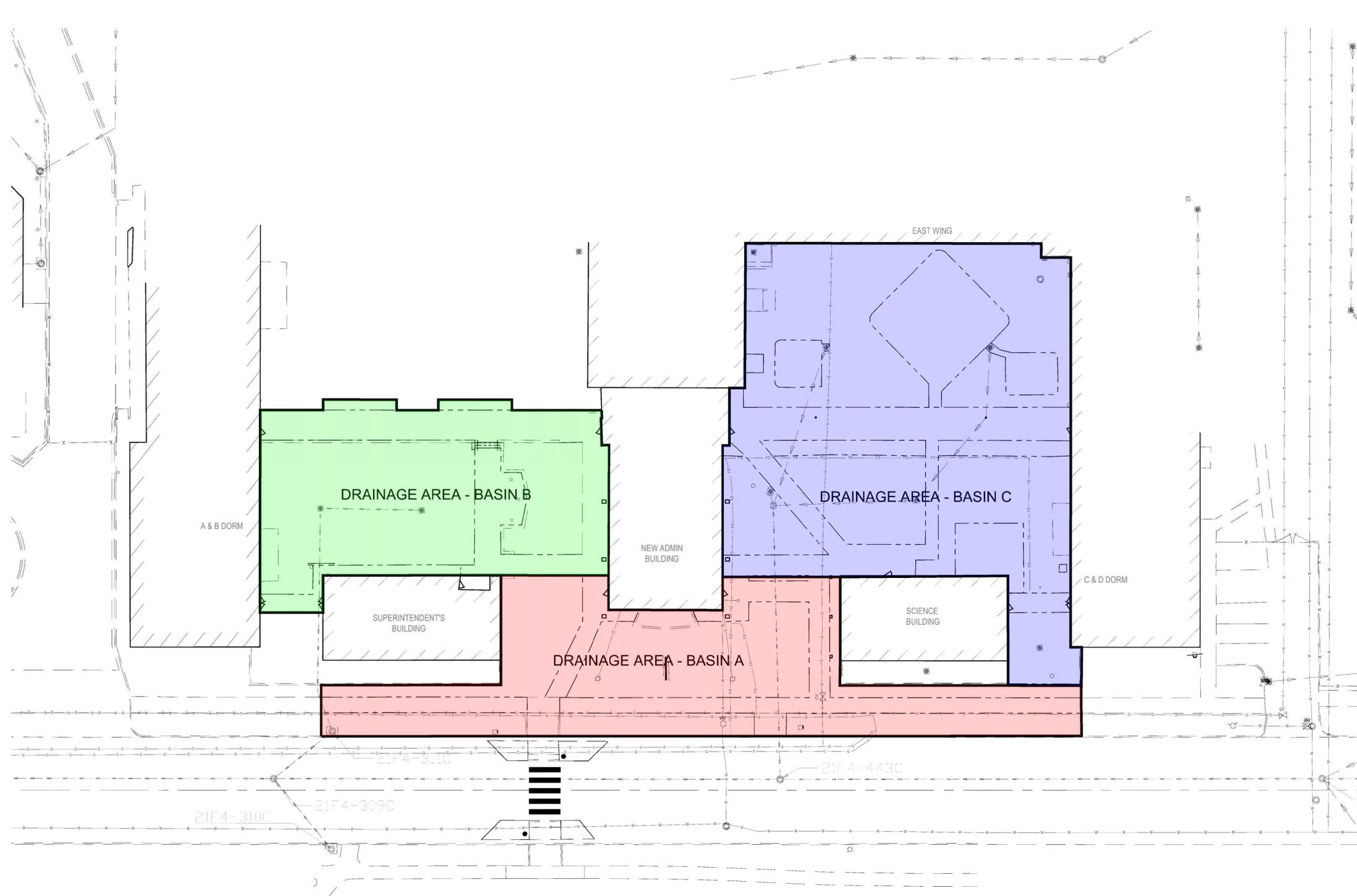
CAD DWG FILE: _____
DRAWN BY: _____
CHECKED BY: _____
DESIGNED BY: _____

SHEET TITLE:

**TOTAL
DISTURBED
AREA**

SHEET NUMBER:

C-601



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

DRAINAGE AREA NAME	TOTAL AREA PRE-CONSTR (ACRE)	IMP. AREA PRE-CONSTR. (ACRE)	% IMP. PRE-CONSTR.	PIPRE (20 YR/20 MIN STORM)	QPRE = 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	0.40	0.00	0%	1.78	0.71
Total				1.50	

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



10/18/2019
 EXPIRES 12/31/2019

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. 001198



MSD PROJECT#: 19MSD-0038
 BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
 DIVISION OF FACILITIES
 MANAGEMENT,
 DESIGN AND CONSTRUCTIO

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

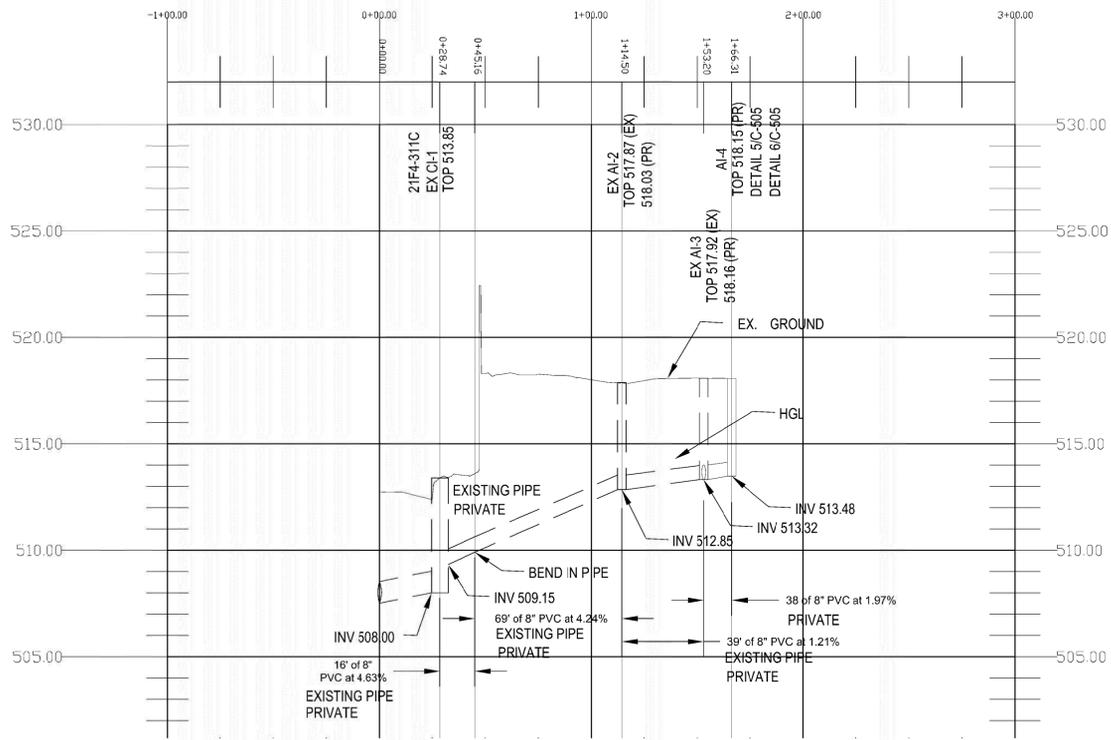
REVISION: _____
 DATE: _____
 REVISION: _____
 DATE: _____
 REVISION: _____
 DATE: _____
 ISSUE DATE: _____

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

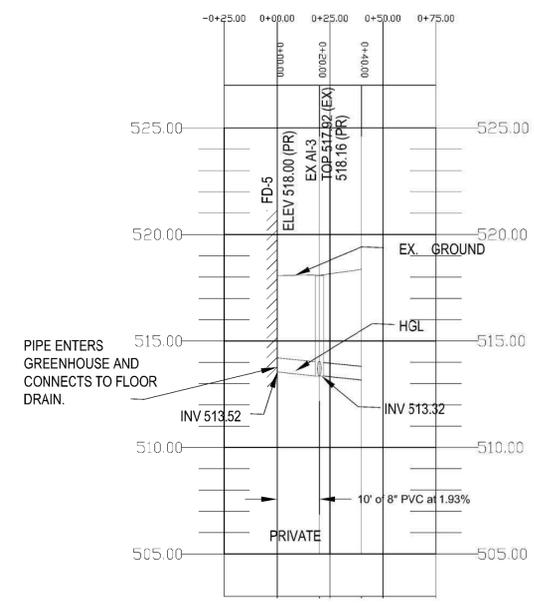
SHEET TITLE:
**PRE-CONSTR
 DRAINAGE
 AREAS**

SHEET NUMBER:

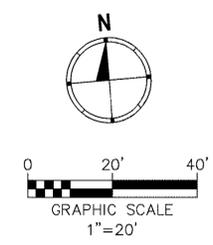
C-602



2 CI-1 TO AI-4 PROFILE
SCALE: NOT TO SCALE



3 FD-5 TO AI-3 PROFILE
SCALE: C-603

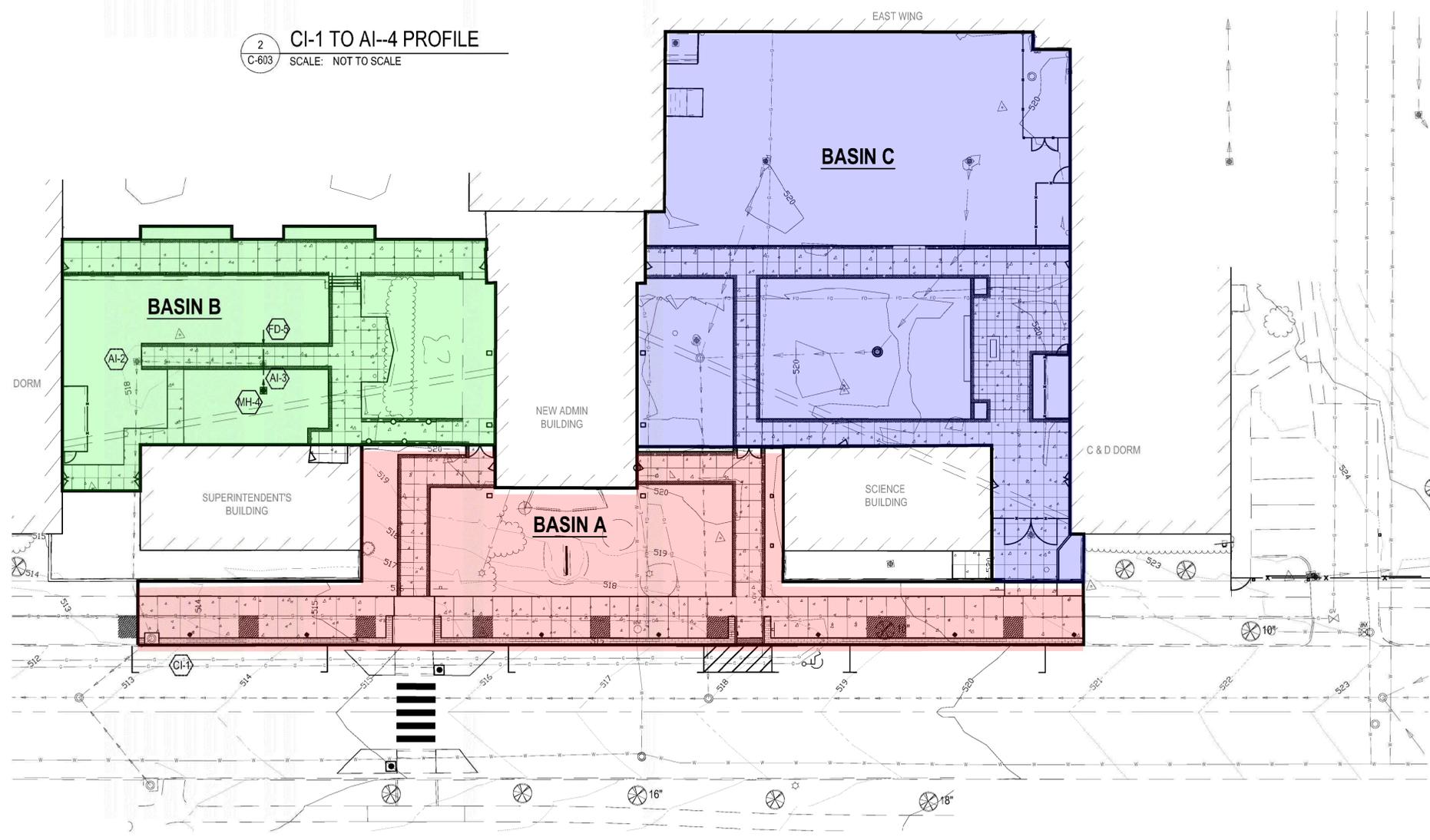


DRAINAGE AREA NAME	TOTAL AREA POST-CONSTR. (ACRE)	IMP. AREA POST-CONSTR. (ACRE)	% IMP. POST-CONST. R.	PIPOST (20 YR/20 MIN STORM)	QPOST = P/A (CFS)
Basin A	0.24	0.12	50%	2.69	0.65
Basin B	0.20	0.11	55%	2.78	0.56
Basin C	0.40	0.28	70%	3.13	1.25
Total				8.60	2.45

Runoff Differential = 2.45 CFS - 1.50 CFS = 0.96 CFS

LEGEND

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



1 POST-CONSTRUCTION DRAINAGE AREAS
SCALE: 1" = 20'



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



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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

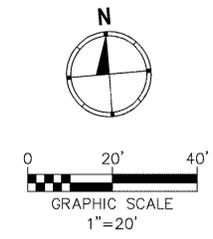
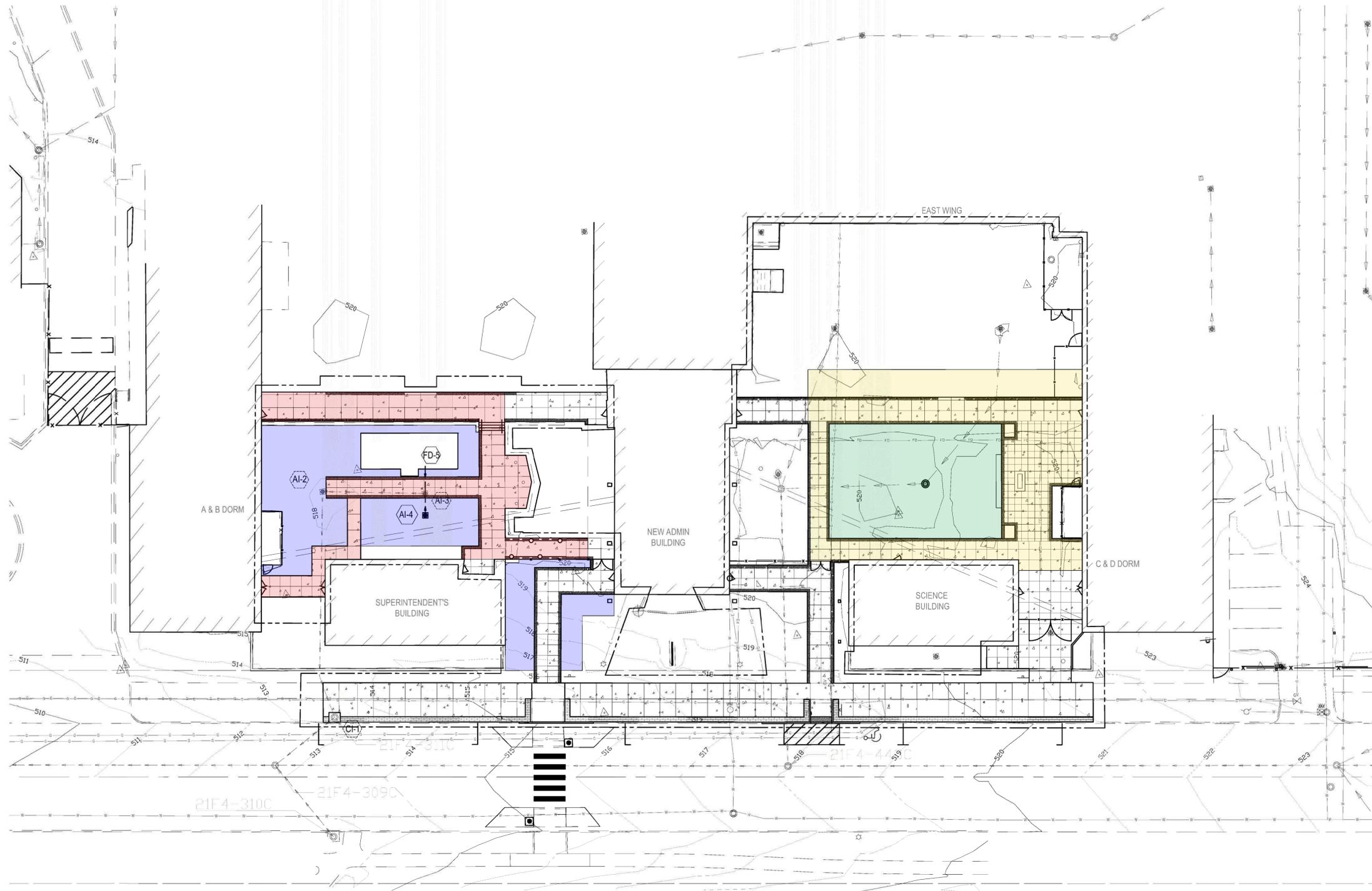
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: _____

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

SHEET TITLE:
**POST-CONSTR
DRAINAGE
AREAS**

SHEET NUMBER:

C-603



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



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. 001198



MSD PROJECT#: 19MSD-0038
BASEMAP: 21F4

OFFICE OF ADMINISTRATIO
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTIO

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:
**BMP DRAINAGE
AREAS**

SHEET NUMBER:

C-604

1 **BMP DRAINAGE AREAS**
C-604 SCALE: 1" = 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: RGV
DESIGNED BY: SLB

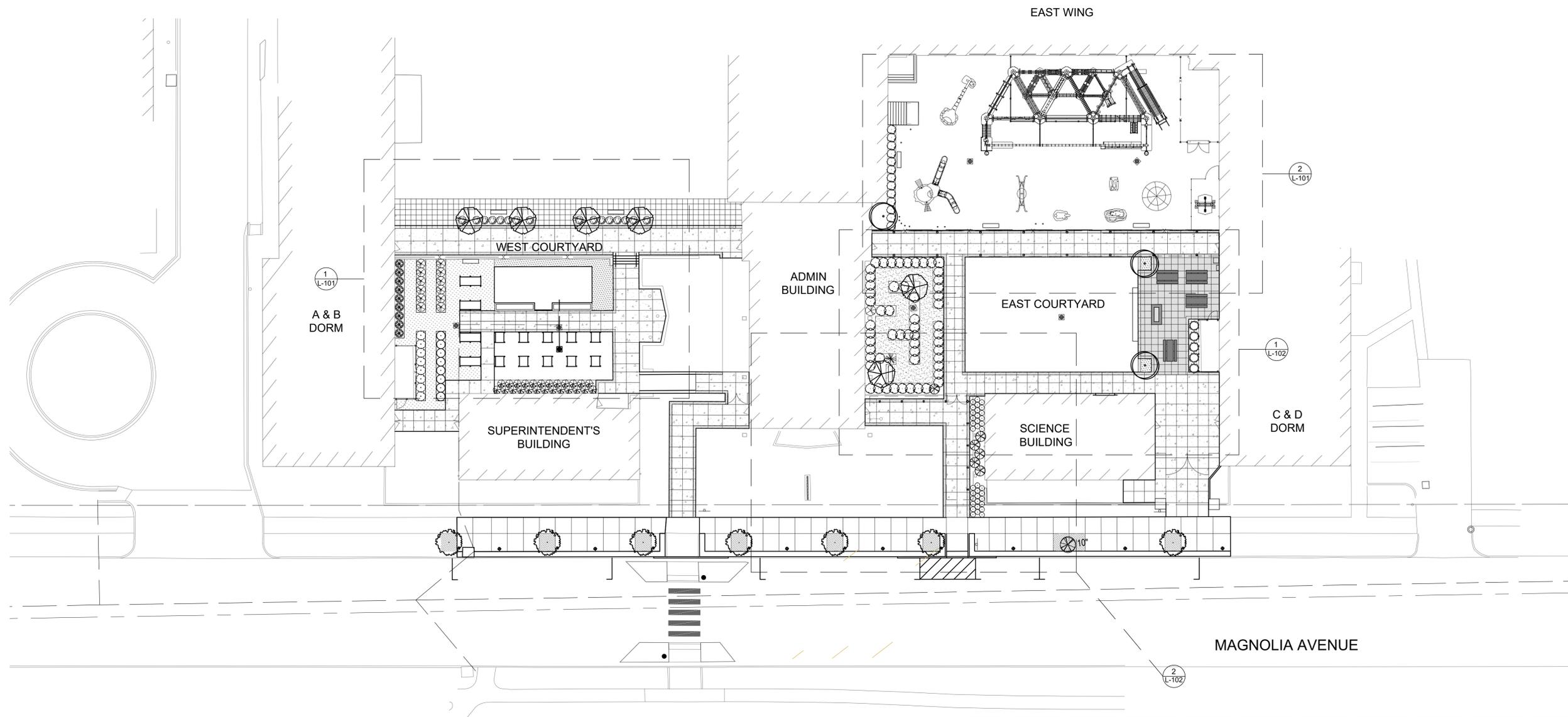
SHEET TITLE:
**ARCHITECTURAL
SITE PLAN**

SHEET NUMBER:

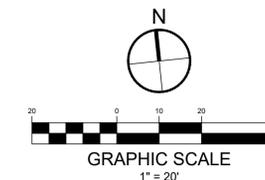
L-100

27 OF 74 SHEETS
10/18/2019

- 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.



1 L-100 ARCHITECTURAL SITE PLAN





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: _____

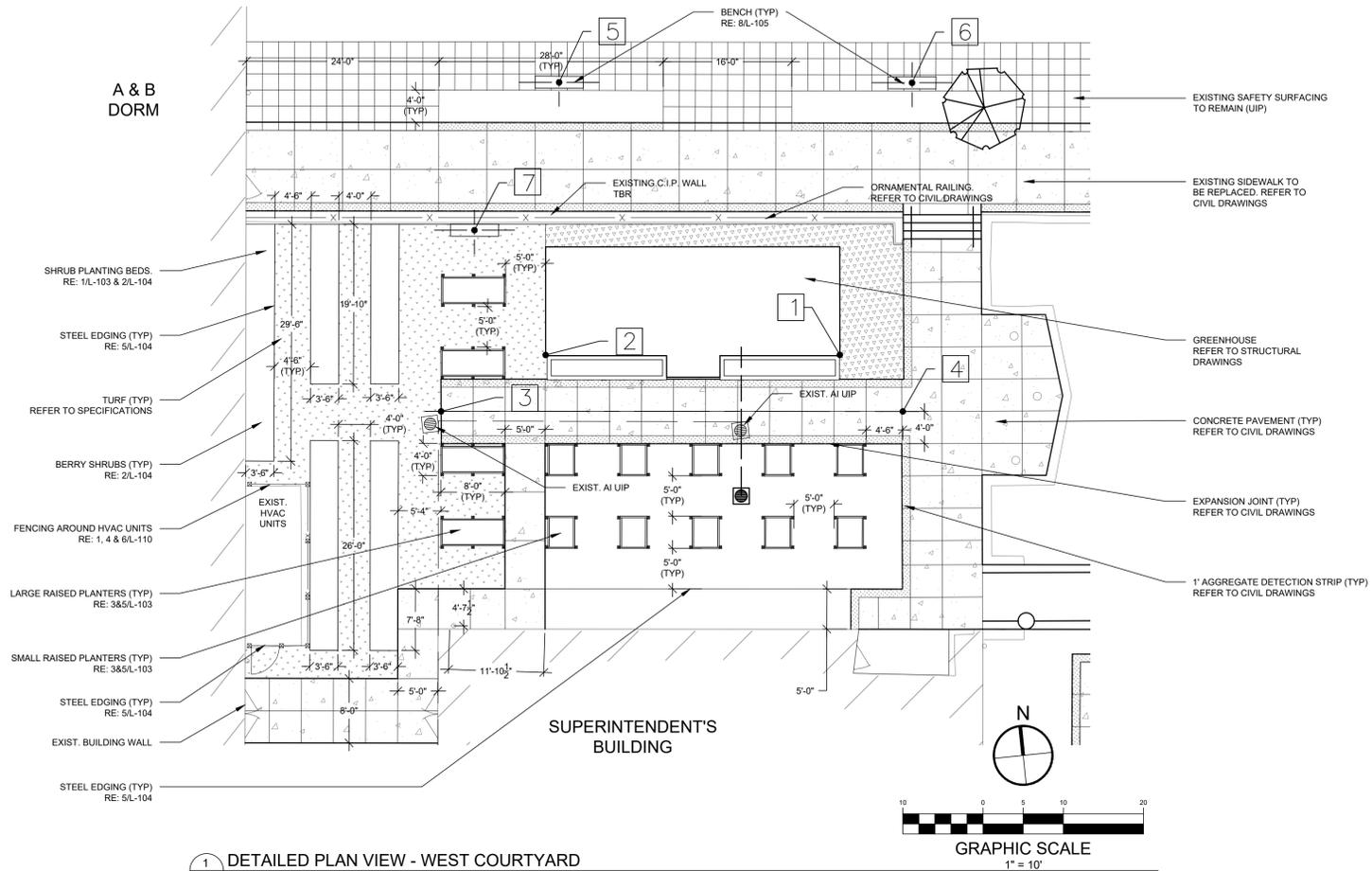
CAD DWG FILE: L-101
DRAWN BY: SLB
CHECKED BY: SLB
DESIGNED BY: SLB

SHEET TITLE:
**DETAIL
LAYOUT &
DIMENSION PLAN**

SHEET NUMBER:

L-101

28 OF 74 SHEETS
10/18/2019



1 DETAILED PLAN VIEW - WEST COURTYARD

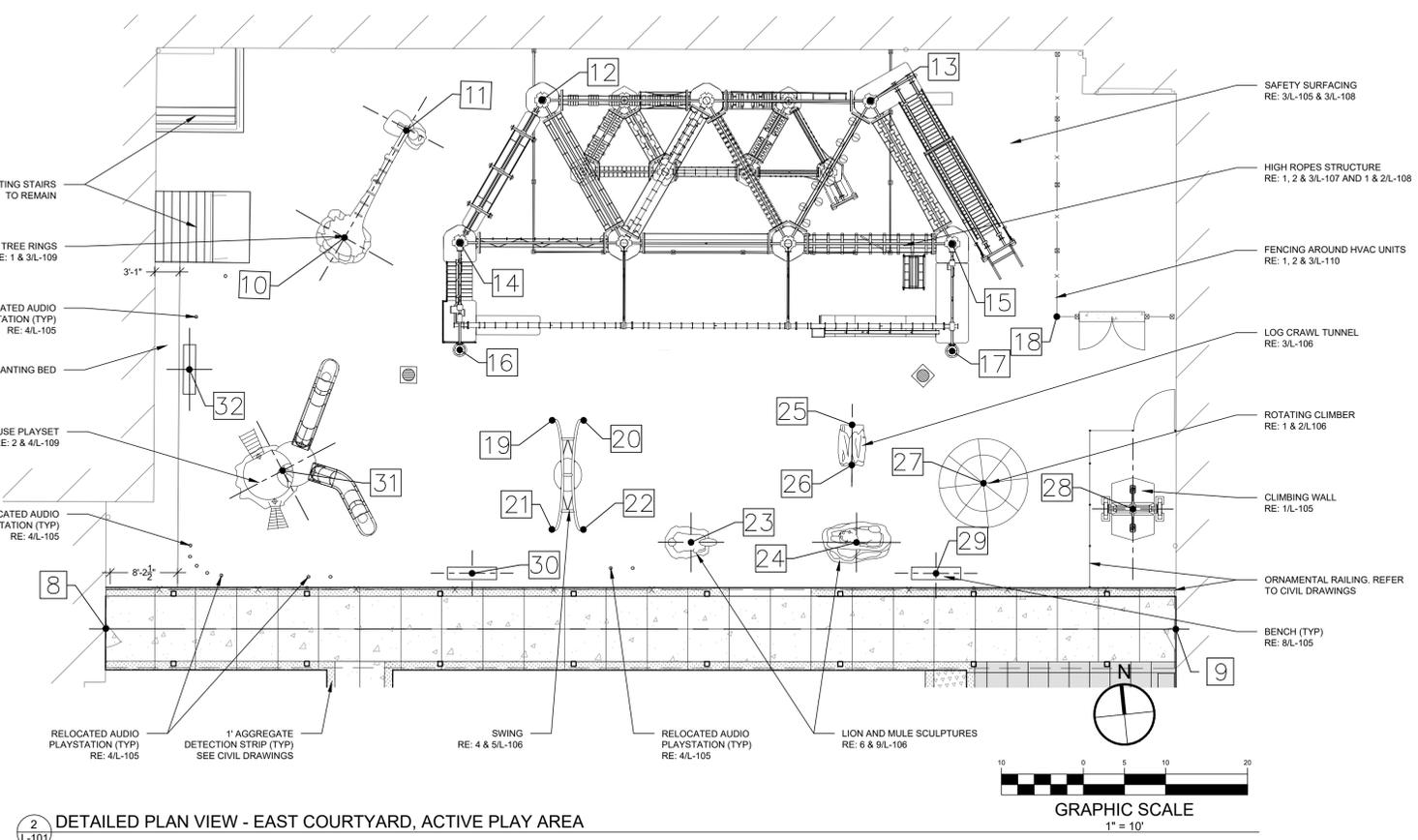
- NOTES
- REFER TO CIVIL SHEETS FOR UTILITY INFORMATION.
 - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO ANY CONSTRUCTION.
 - UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. LOCATIONS AND QUANTITIES ARE APPROXIMATE AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE OR VERIFY THEIR EXISTENCE AND EXACT LOCATION AND AVOID ANY DAMAGE.
 - THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UNDERGROUND UTILITIES DURING CONSTRUCTION.
 - REPORT ANY DISCREPANCIES FOUND WITH REGARD TO EXISTING CONDITIONS OR PROPOSED DESIGN IMMEDIATELY TO OWNER'S REPRESENTATIVE.
 - 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.
 - REFER TO CIVIL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION ON LIGHTING, WIRING SCHEMATICS, AND FIXTURE SCHEDULE.
 - 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.
 - 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	1010289.59	893232.61	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	893286.17	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)



2 DETAILED PLAN VIEW - EAST COURTYARD, ACTIVE PLAY AREA



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: _____

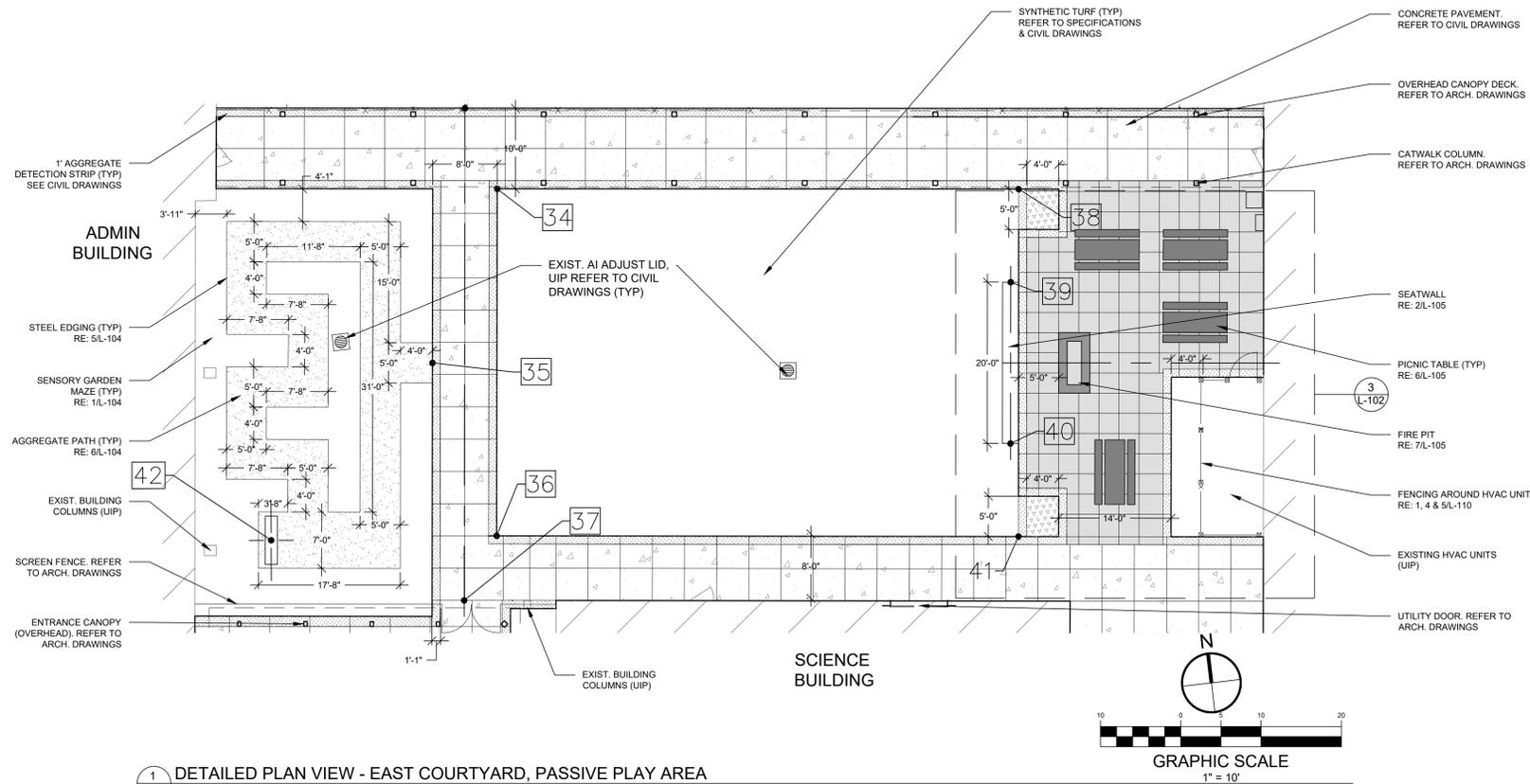
CAD DWG FILE: L-102
DRAWN BY: SLB
CHECKED BY: SLB
DESIGNED BY: SLB

SHEET TITLE:
**DETAIL
LAYOUT &
DIMENSION PLAN**

SHEET NUMBER:

L-102

29 OF 74 SHEETS
10/18/2019



1 DETAILED PLAN VIEW - EAST COURTYARD, PASSIVE PLAY AREA

NOTES

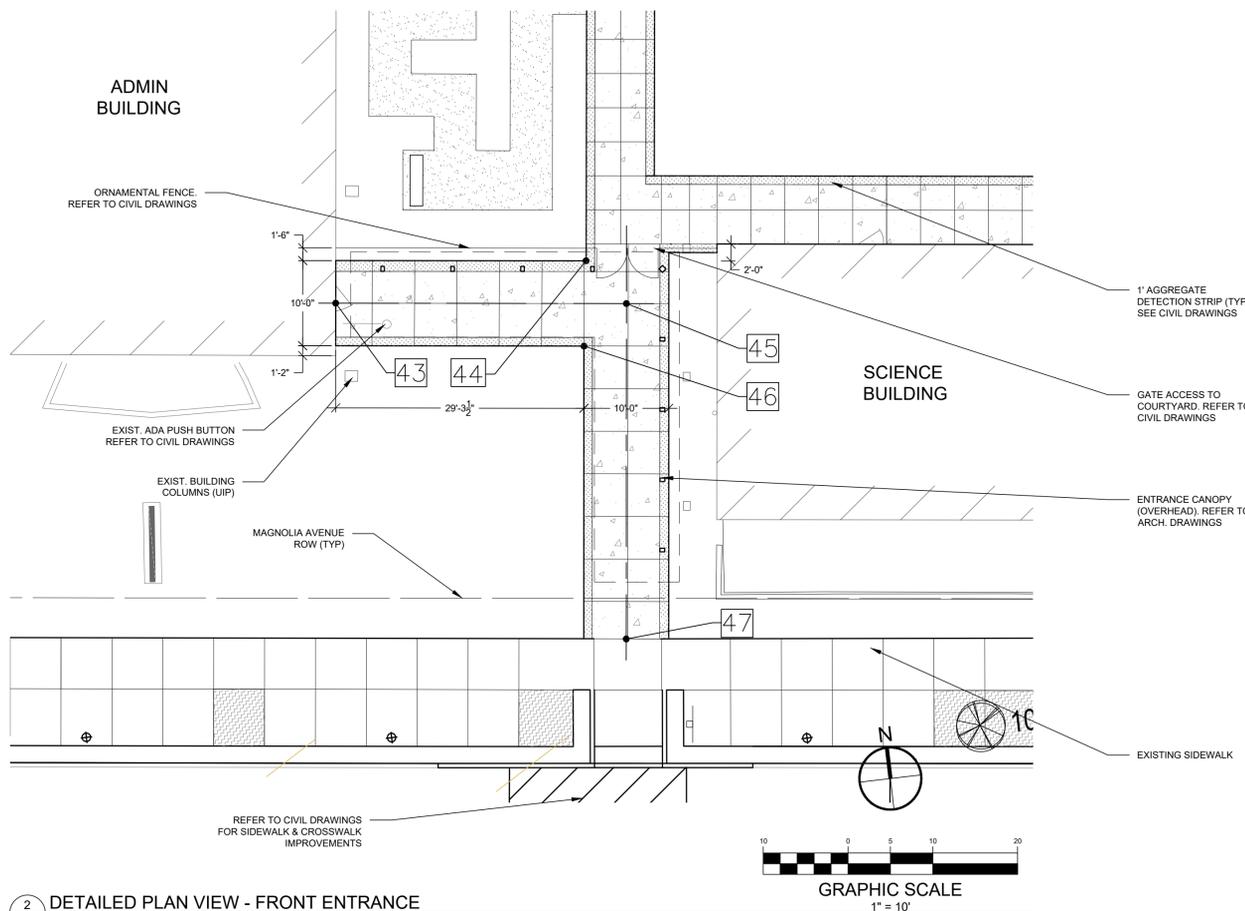
- REFER TO CIVIL SHEETS FOR UTILITY INFORMATION.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO ANY CONSTRUCTION.
- UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. LOCATIONS AND QUANTITIES ARE APPROXIMATE AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE OR VERIFY THEIR EXISTENCE AND EXACT LOCATION AND AVOID ANY DAMAGE.
- THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UNDERGROUND UTILITIES DURING CONSTRUCTION.
- REPORT ANY DISCREPANCIES FOUND WITH REGARD TO EXISTING CONDITIONS OR PROPOSED DESIGN IMMEDIATELY TO OWNERS REPRESENTATIVE.
- 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.
- REFER TO CIVIL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION ON LIGHTING, WIRING SCHEMATICS, AND FIXTURE SCHEDULE.
- 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.
- LANDSCAPE ARCHITECT AND CONSTRUCTION ADMINISTRATOR TO FIELD VERIFY LAYOUT OF IMPROVEMENTS PRIOR TO INSTALLATION.

COORDINATE SCHEDULE

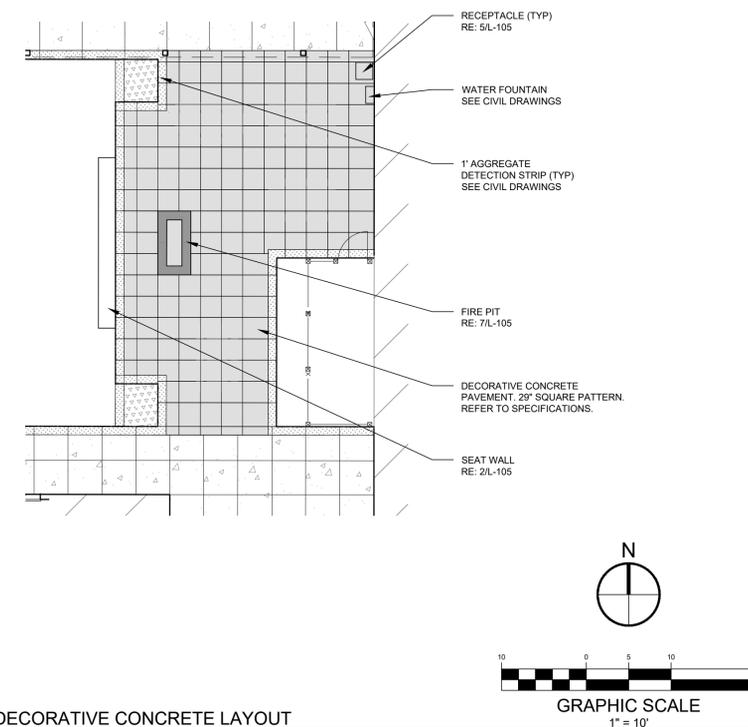
POINT #	POINT TYPE	NORTHING	EASTING	DESCRIPTION
33	CL	1010286.21	893225.44	Center Line of Sidewalk
34	EOP	1010275.80	893228.26	Edge of Pavement
35	EOP	1010255.31	893217.74	Edge of Pavement
36	EOP	1010233.09	893223.16	Edge of Pavement
37	EOP	1010225.61	893218.22	Center Line of Sidewalk
38	EOP	1010268.20	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)



2 DETAILED PLAN VIEW - FRONT ENTRANCE



3 DETAILED PLAN VIEW - DECORATIVE CONCRETE LAYOUT



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: SLB
DESIGNED BY: SLB

SHEET TITLE:
**DETAIL
LANDSCAPE PLAN**

SHEET NUMBER:

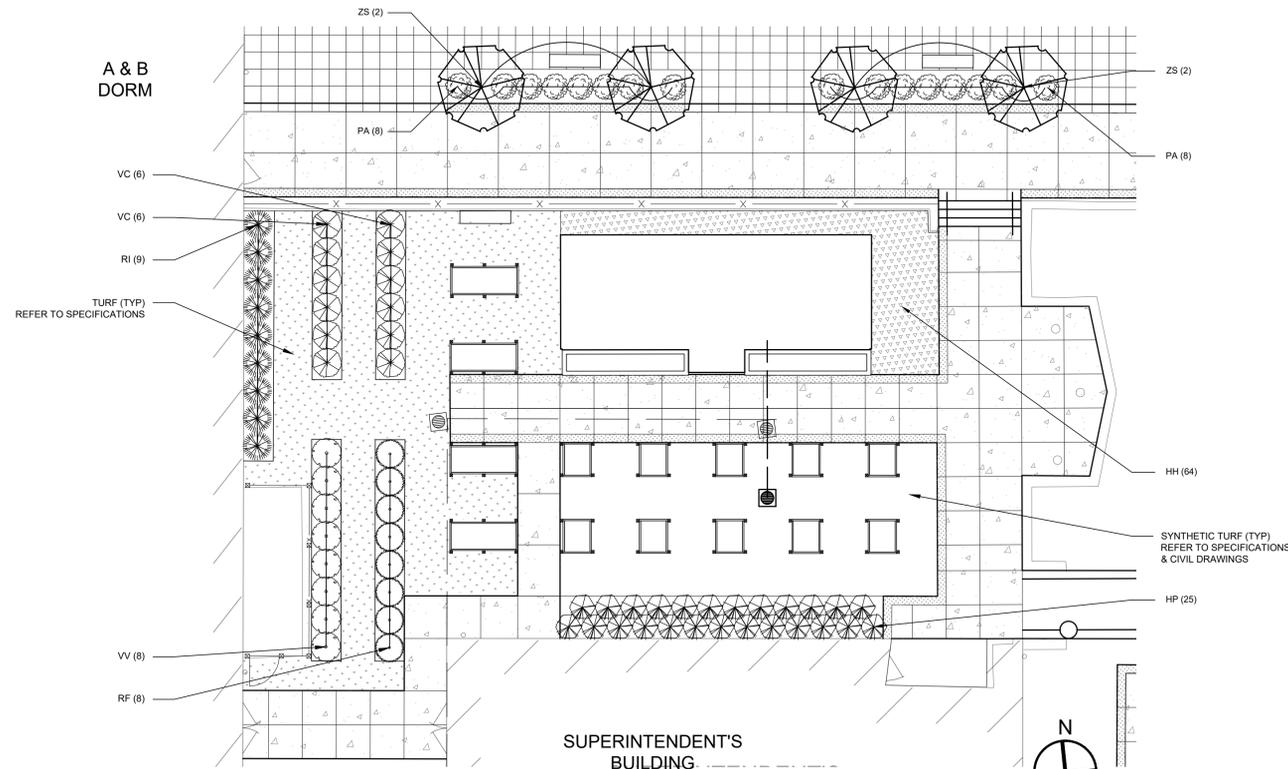
L-103

30 OF 74 SHEETS
10/18/2019

- NOTES
- REFER TO CIVIL SHEETS FOR UTILITY INFORMATION.
 - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO ANY CONSTRUCTION.
 - 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.
 - THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UNDERGROUND UTILITIES DURING CONSTRUCTION.
 - REPORT ANY DISCREPANCIES FOUND WITH REGARD TO EXISTING CONDITIONS OR PROPOSED DESIGN IMMEDIATELY TO OWNER'S REPRESENTATIVE.
 - 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.
 - REFER TO CIVIL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION ON LIGHTING, WIRING SCHEMATICS, AND FIXTURE SCHEDULE.
 - 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.
 - LANDSCAPE ARCHITECT AND CONSTRUCTION ADMINISTRATOR TO FIELD VERIFY LAYOUT OF IMPROVEMENTS PRIOR TO INSTALLATION.

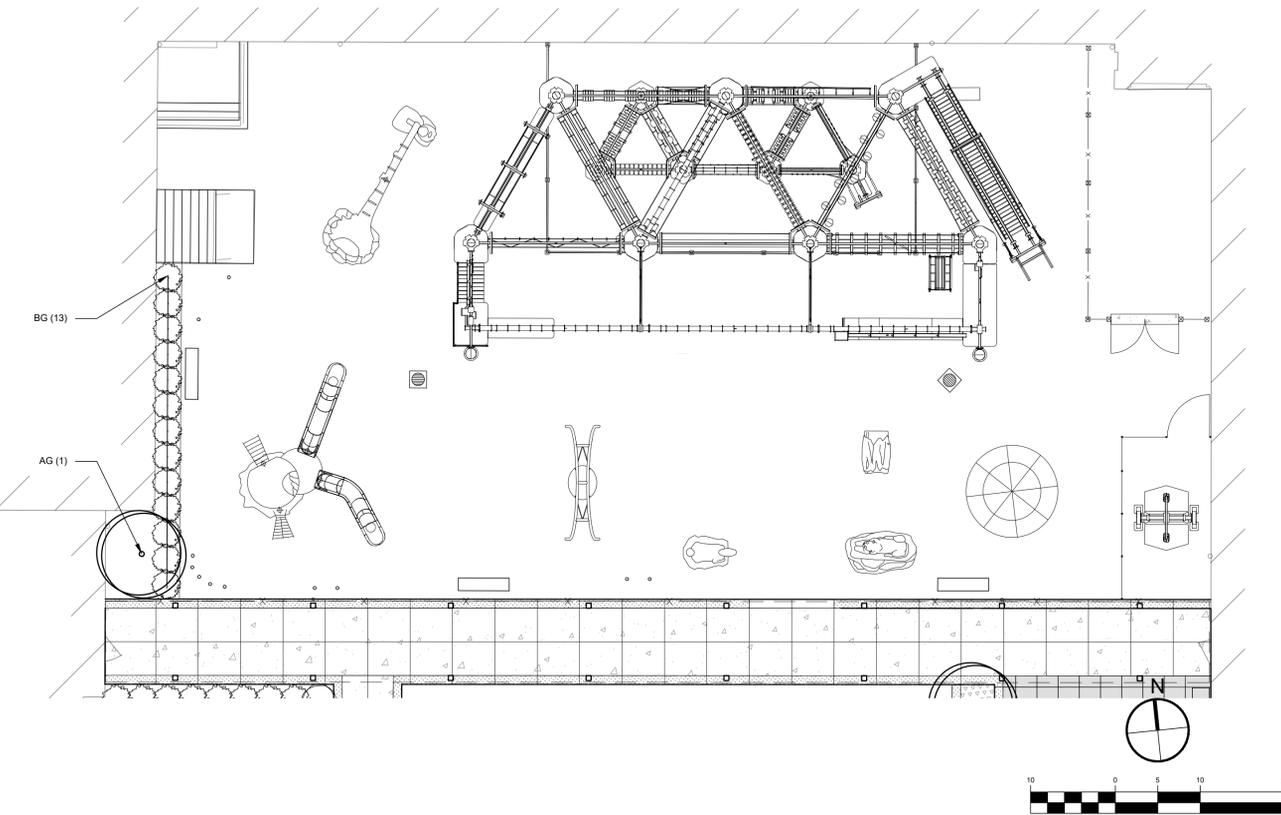
PLANTING SCHEDULE

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



1 DETAILED PLAN VIEW - WEST COURTYARD

L-103



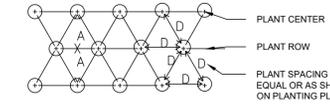
4 DETAILED PLAN VIEW - EAST COURTYARD, ACTIVE PLAY AREA

L-103

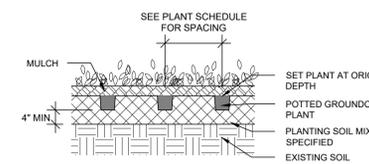
SPACING "D"	ROW "A"	NUMBER OF BULBS PER SQ. FT.
12" OC	10.4"	1.15
10" OC	8.7"	1.86
8" OC	6.9"	2.60

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

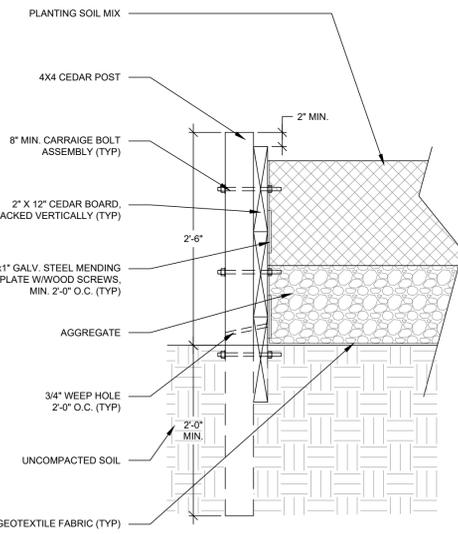


PLANT SPACING (NTS)



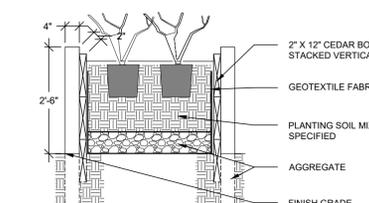
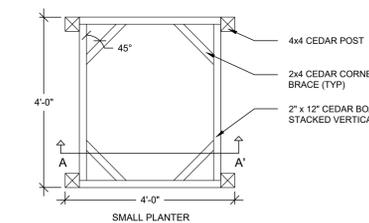
2 GROUNDCOVER PLANTING

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



3 RAISED PLANTER DETAIL

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



5 RAISED PLANTER A-A'

L-103 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



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: SLB
DESIGNED BY: SLB

SHEET TITLE:
**DETAIL
LANDSCAPE PLAN**

SHEET NUMBER:

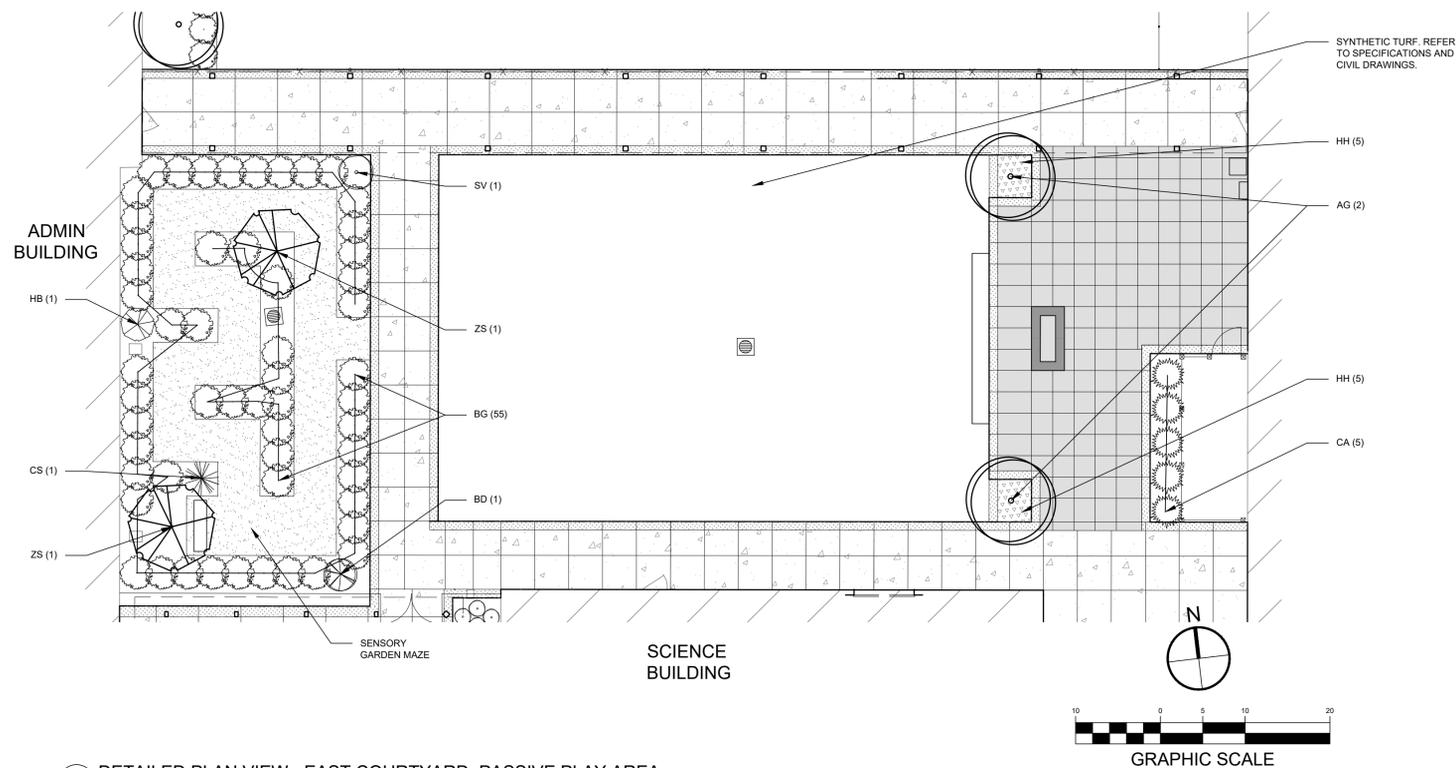
L-104

31 OF 74 SHEETS
10/18/2019

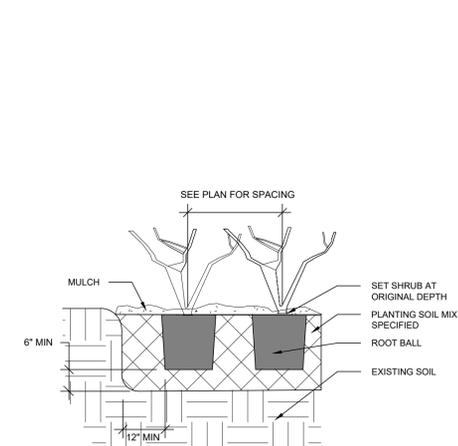
- NOTES
- REFER TO CIVIL SHEETS FOR UTILITY INFORMATION.
 - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO ANY CONSTRUCTION.
 - UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. LOCATIONS AND QUANTITIES ARE APPROXIMATE AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE OR VERIFY THEIR EXISTENCE AND EXACT LOCATION AND AVOID ANY DAMAGE.
 - THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UNDERGROUND UTILITIES DURING CONSTRUCTION.
 - REPORT ANY DISCREPANCIES FOUND WITH REGARD TO EXISTING CONDITIONS OR PROPOSED DESIGN IMMEDIATELY TO OWNER'S REPRESENTATIVE.
 - 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.
 - REFER TO CIVIL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION ON LIGHTING, WIRING SCHEMATICS, AND FIXTURE SCHEDULE.
 - 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.
 - 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	<i>Amelanchier grandiflora</i>	AUTUMN BRILLIANCE SERVICEBERRY	3" CAL.	B&B
GB	-	<i>Ginkgo biloba 'Princeton Sentry'</i>	PRINCETON SENTRY GINKGO	3" CAL.	B&B
ZS	2	<i>Zelkova serata</i>	JAPANESE ZELKOVA	3" CAL.	B&B
SHRUBS					
BD	6	<i>Buddleja davidii 'Peakeep'</i>	PEACOCK BUTTERFLY BUSH	3 GAL.	CONT.
BG	55	<i>Buxus 'Green Velvet'</i>	BOXWOOD	5 GAL.	CONT.
CS	1	<i>Cornus sanguinea 'Midwinter Fire'</i>	BLOODTWIG DOGWOOD	3 GAL.	CONT.
HB	1	<i>Hypericum beanii</i>	ST. JOHN'S WORT	3 GAL.	CONT.
HP	-	<i>Hosta 'Patriot'</i>	PATRIOT HOSTA	1 GAL.	CONT.
HR	36	<i>Hemerocallis 'Ribbons and Curis'</i>	RIBBONS AND CURLS DAYLILY	1 GAL.	CONT.
PA	-	<i>Perovskia atriplicifolia 'Little Spire'</i>	RUSSIAN SAGE	3 GAL.	CONT.
RF	-	<i>Rubus fruticosus</i>	BLACKBERRY	3 GAL.	CONT.
RI	-	<i>Rubus idaeus 'Improved Titan'</i>	RASPBERRY	3 GAL.	CONT.
SV	1	<i>Syringa vulgaris 'Little Boy Blue'</i>	LITTLE BOY BLUE LILAC	3 GAL.	CONT.
VC	-	<i>Vaccinium corymbosum</i>	BLUEBERRY	3 GAL.	CONT.
VV	-	<i>Vaccinium vitis-idaea</i>	LINGONBERRY	3 GAL.	CONT.
GROUNDCOVER/GRASSES					
CA	5	<i>Calamagrostis x acutiflora 'Karl Foerster'</i>	FEATHER REED GRASS	3 GAL.	4" OC
HH	10	<i>Hedera helix</i>	ENGLISH IVY	1 PINT.	CONT.
JH	-	<i>Juniperus horizontalis 'Plumosa'</i>	CREeping JUNIPER	1 GAL.	CONT.

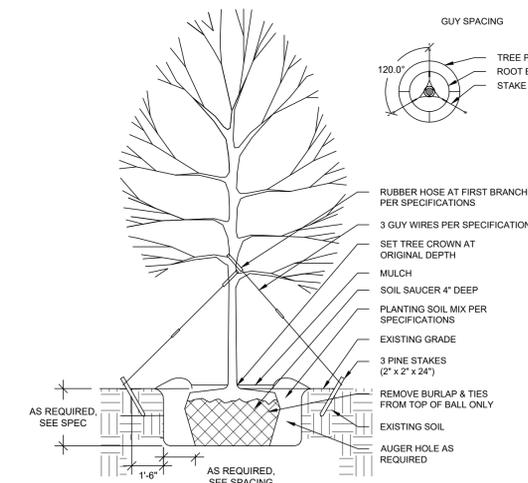


1 L-104 DETAILED PLAN VIEW - EAST COURTYARD, PASSIVE PLAY AREA

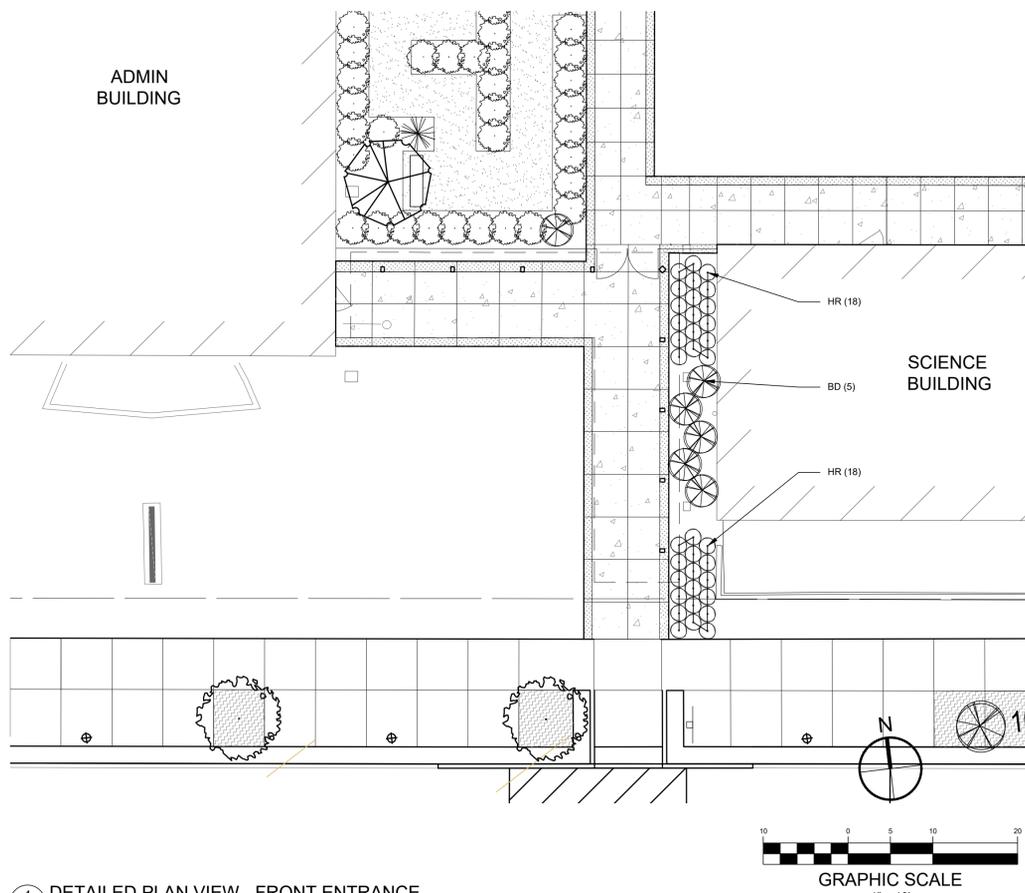


2 L-104 SHRUB PLANTING
1/2" = 1'-0"

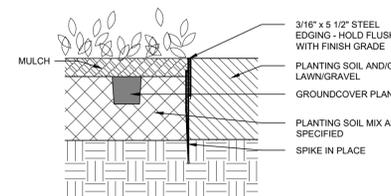
NOTES
-STEEL EDGING REQUIRED FOR SHRUB PLANTING BEDS IN SENSORY MAZE AND WEST COURTYARD BERRY SHRUB PLANTING BEDS.



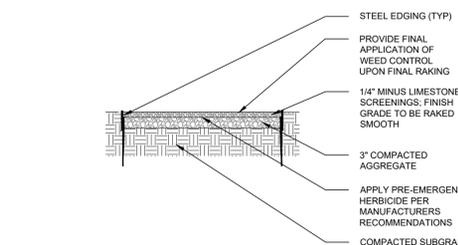
3 L-104 DECIDUOUS TREE PLANTING
1/4" = 1'-0"



4 L-104 DETAILED PLAN VIEW - FRONT ENTRANCE



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



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



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: _____

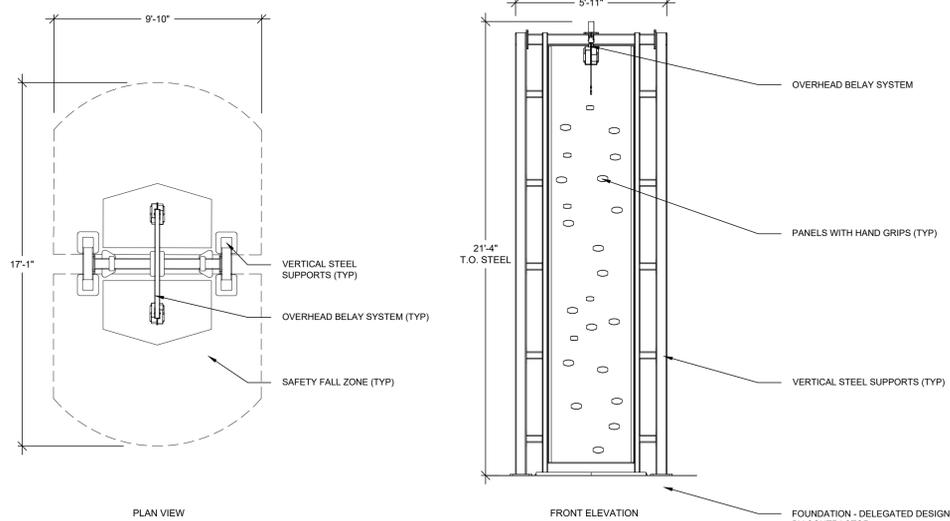
CAD DWG FILE: L-105
DRAWN BY: SLB
CHECKED BY: SLB
DESIGNED BY: SLB

SHEET TITLE:
**LANDSCAPE
DETAILS**

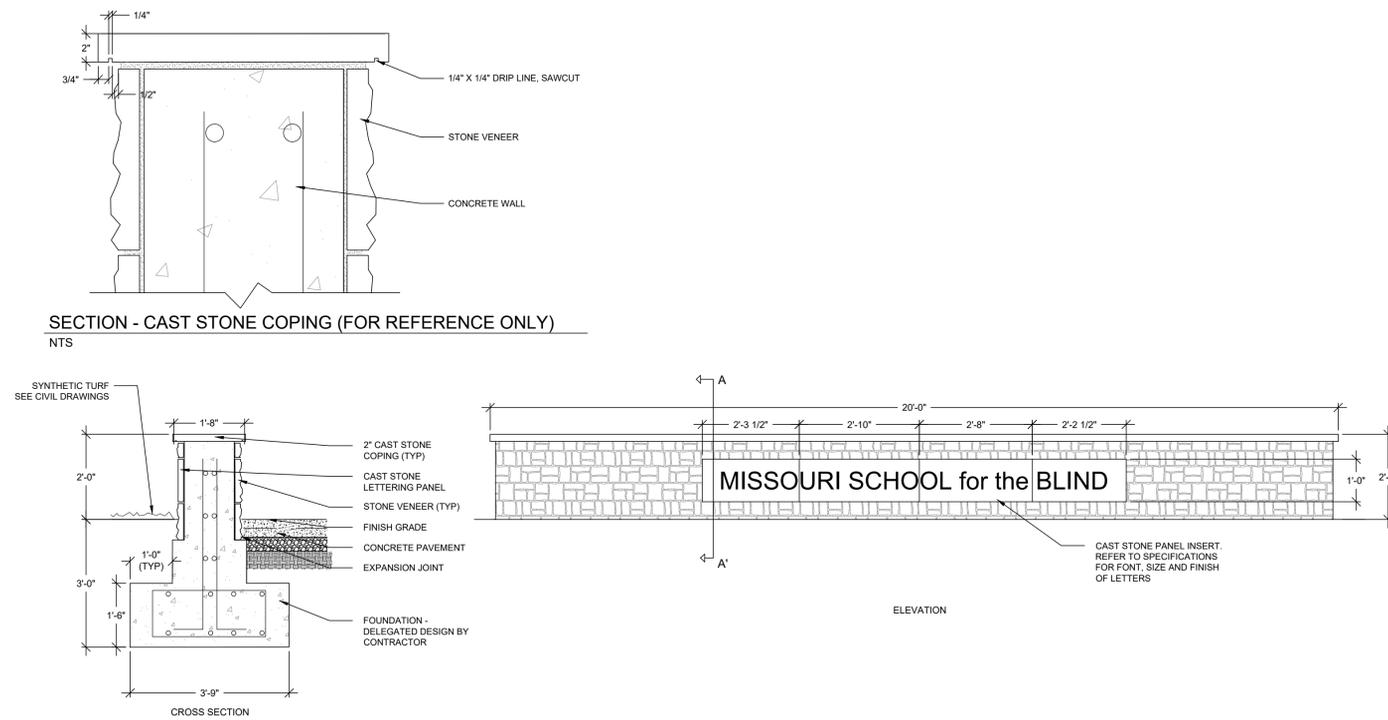
SHEET NUMBER:

L-105

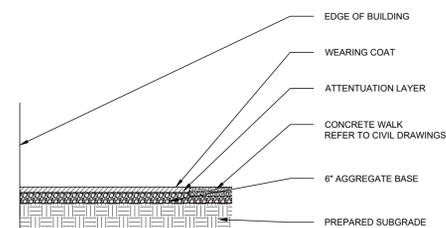
32 OF 74 SHEETS
10/18/2019



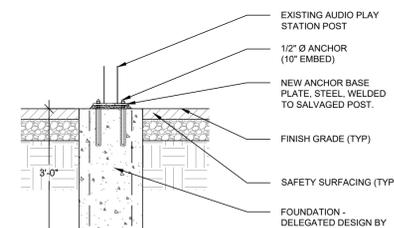
1 FACE TO FACE CLIMBING WALL
L-105 1/4" = 1'-0"



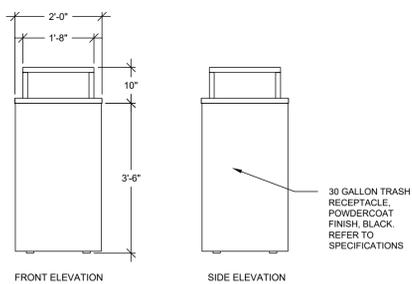
2 SEAT WALL DETAIL A-A'
L-105 1/2" = 1'-0"



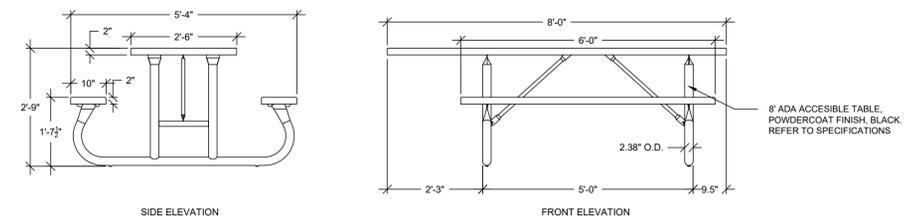
3 SAFETY SURFACING
L-105 1/4" = 1'-0"



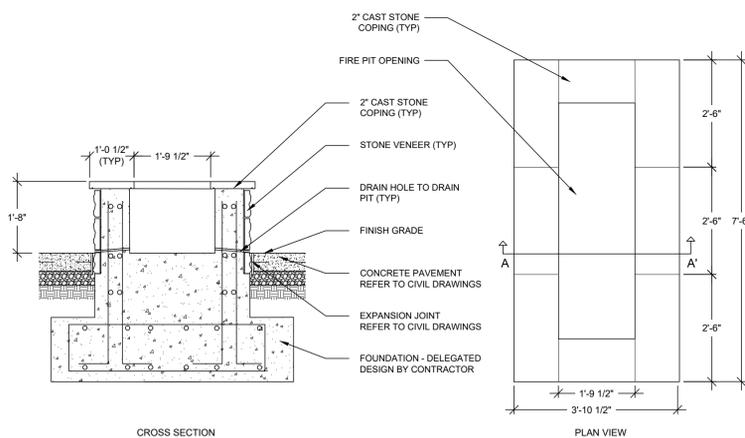
4 RELOCATED AUDIO PLAY
STATION FOUNDATION
L-105 1/2" = 1'-0"



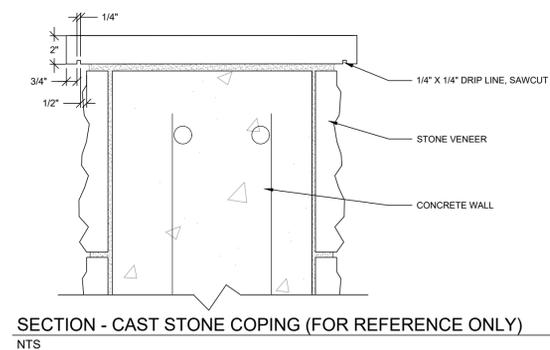
5 RECEPTACLE DETAIL
L-105 1/2" = 1'-0"



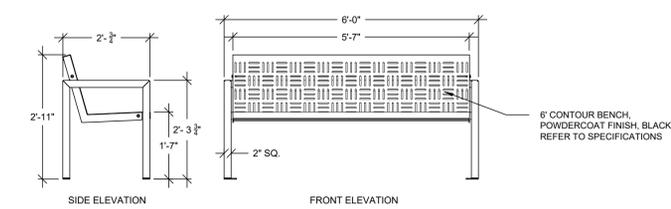
6 TABLE DETAIL
L-105 1/2" = 1'-0"



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



SECTION - CAST STONE COPING (FOR REFERENCE ONLY)
NTS



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



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: _____

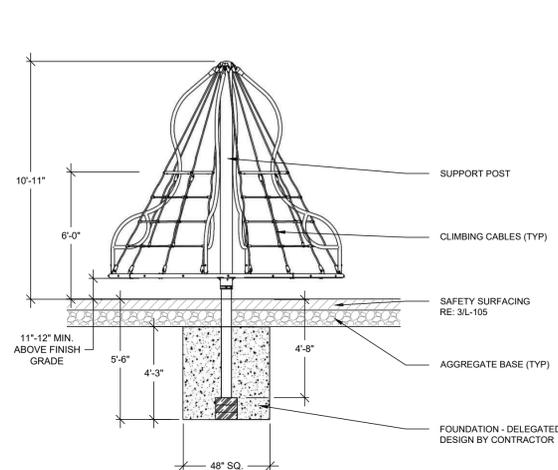
CAD DWG FILE: L-106
DRAWN BY: SLB
CHECKED BY: SLB
DESIGNED BY: SLB

SHEET TITLE:
LANDSCAPE
DETAILS

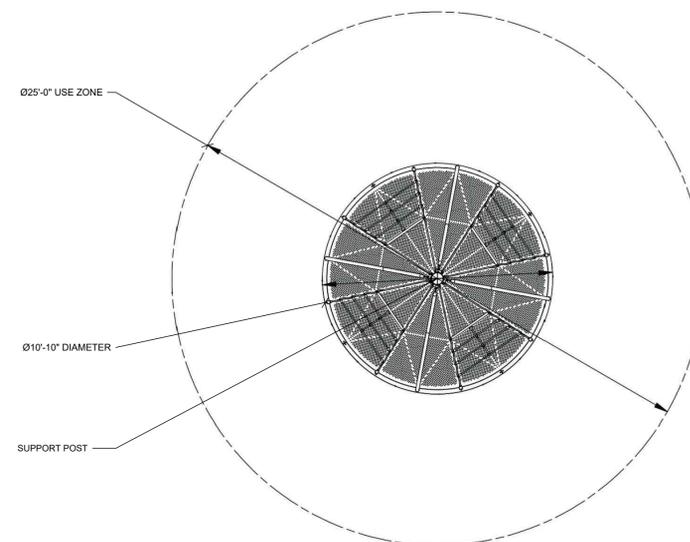
SHEET NUMBER:

L-106

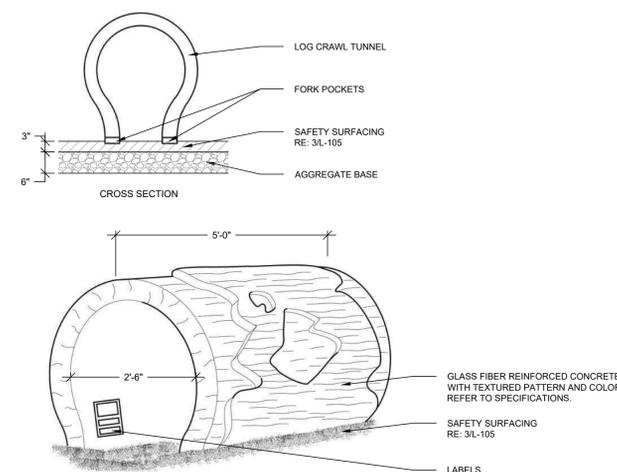
33 OF 74 SHEETS
10/18/2019



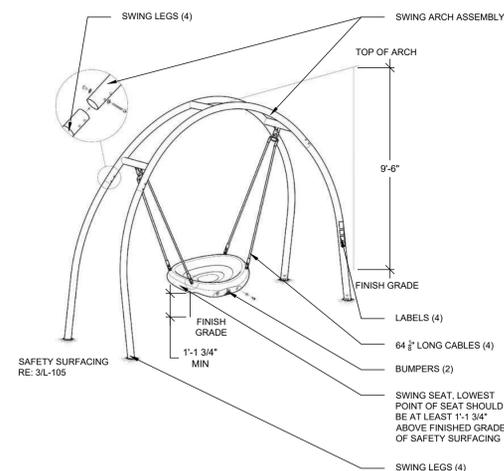
1 ROTATING CLIMBER ELEVATION VIEW
L-106 1/4" = 1'-0"



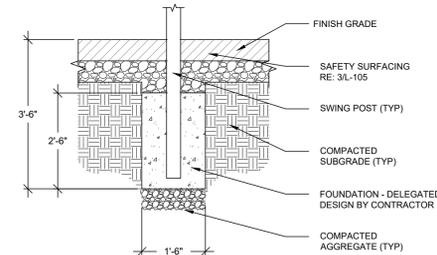
2 ROTATING CLIMBER PLAN VIEW
L-106 1/4" = 1'-0"



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



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

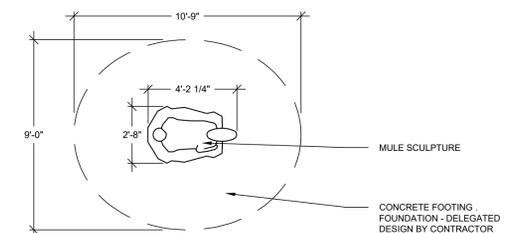


5 SWING CONNECTION FOOTING
L-106 1/2" = 1'-0"



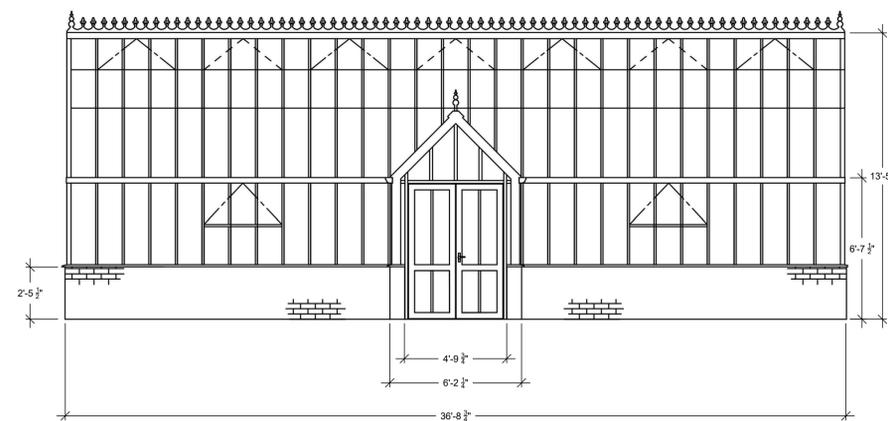
ELEVATION VIEW
1" = 1'-0"

6 MULE SCULPTURE
L-106

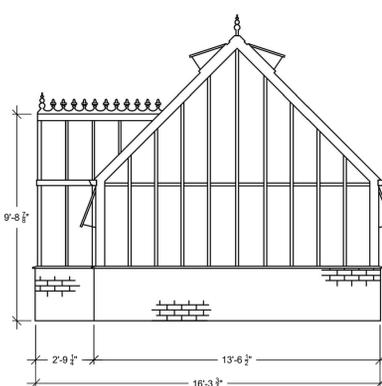


PLAN VIEW
1/4" = 1'-0"

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



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

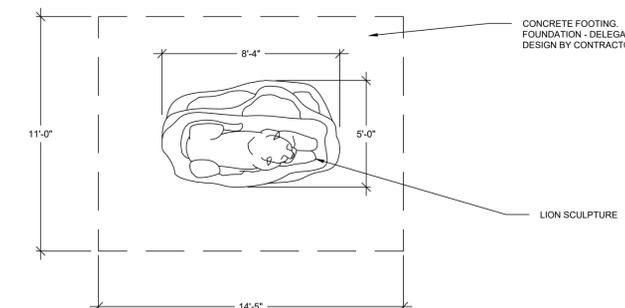


8 GREENHOUSE EAST ELEVATION VIEW
(FOR REFERENCE ONLY - REFER TO STRUCTURAL DRAWINGS)
L-106 1/4" = 1'-0"



ELEVATION VIEW
1" = 1'-0"

9 LION SCULPTURE
L-106

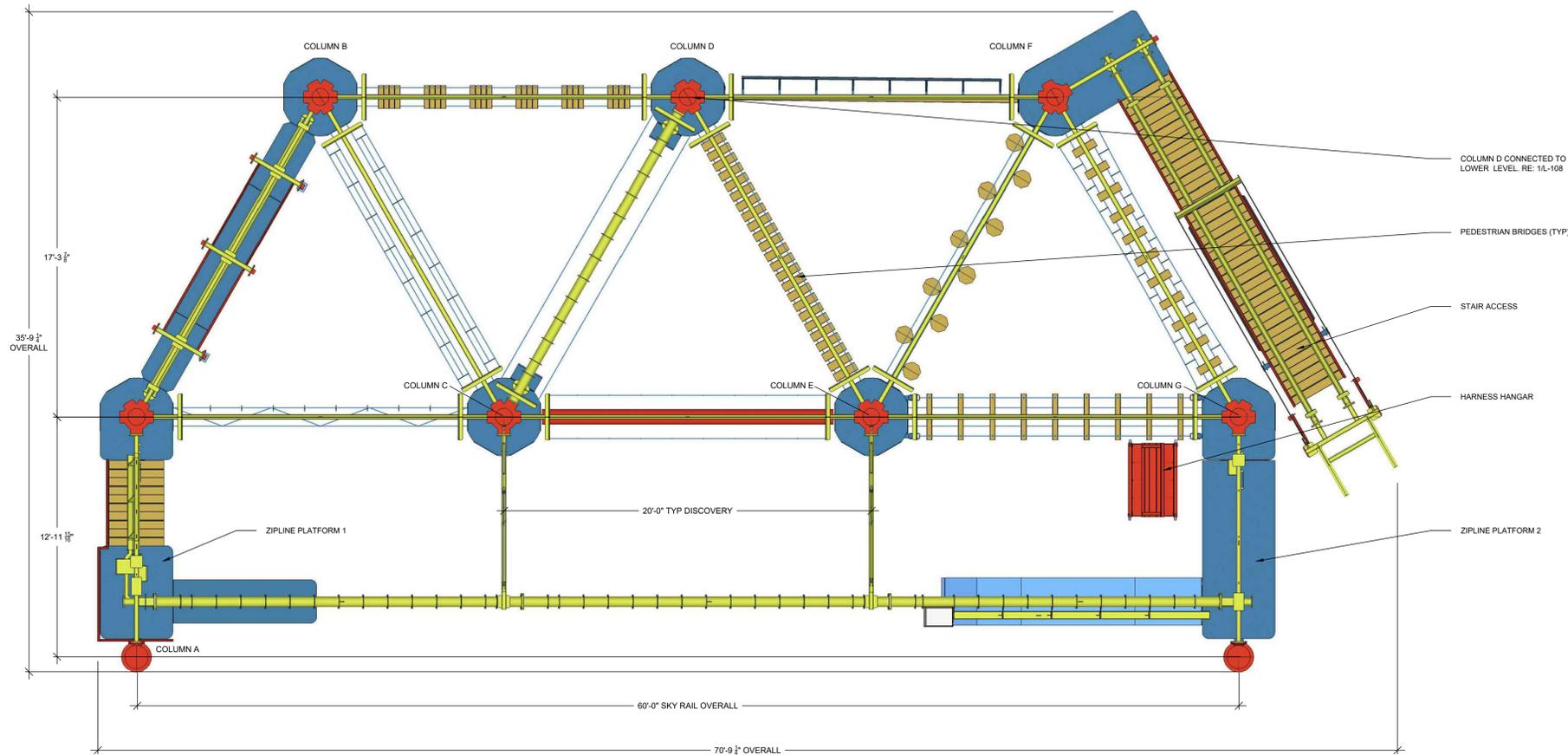


PLAN VIEW
1/4" = 1'-0"

CONCRETE FOOTING:
FOUNDATION - DELEGATED
DESIGN BY CONTRACTOR

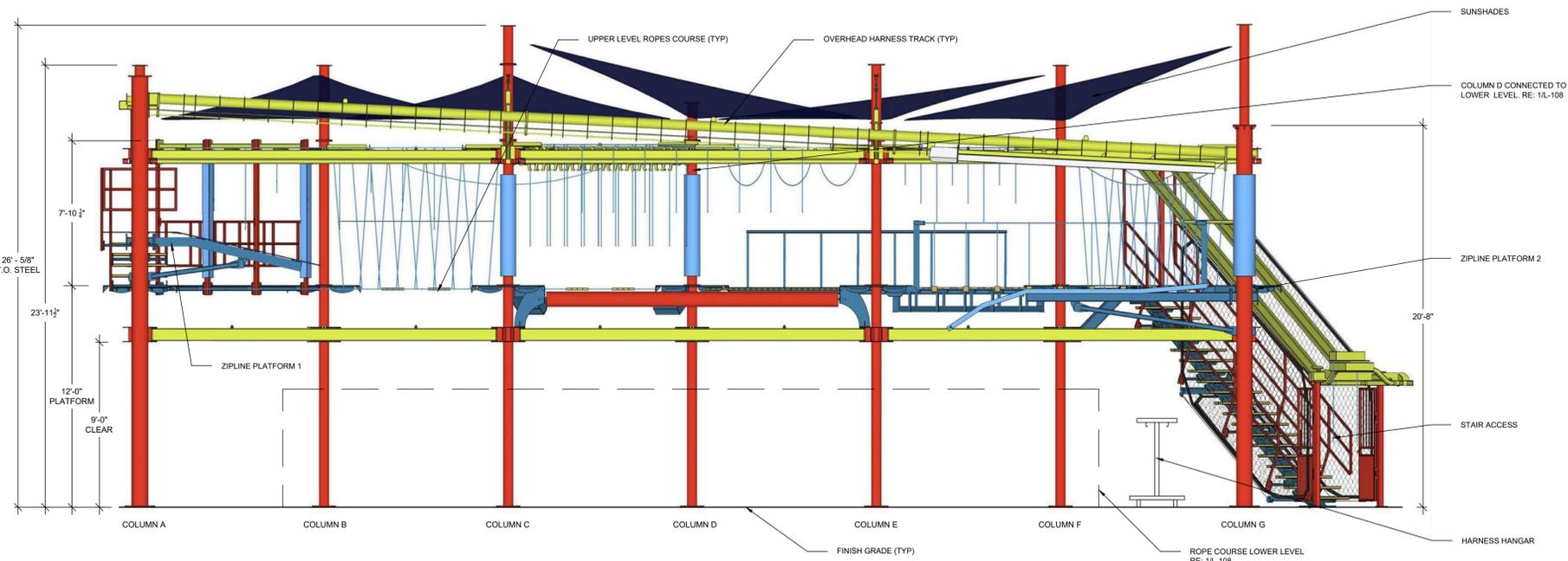
LION SCULPTURE

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



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



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



3 ROPES COURSE ISOMETRIC VIEW
L-107 NOT TO SCALE

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: L-107
DRAWN BY: SLB
CHECKED BY: SLB
DESIGNED BY: SLB

SHEET TITLE:
LANDSCAPE
DETAILS

SHEET NUMBER:

L-107

34 OF 74 SHEETS
10/18/2019



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: _____

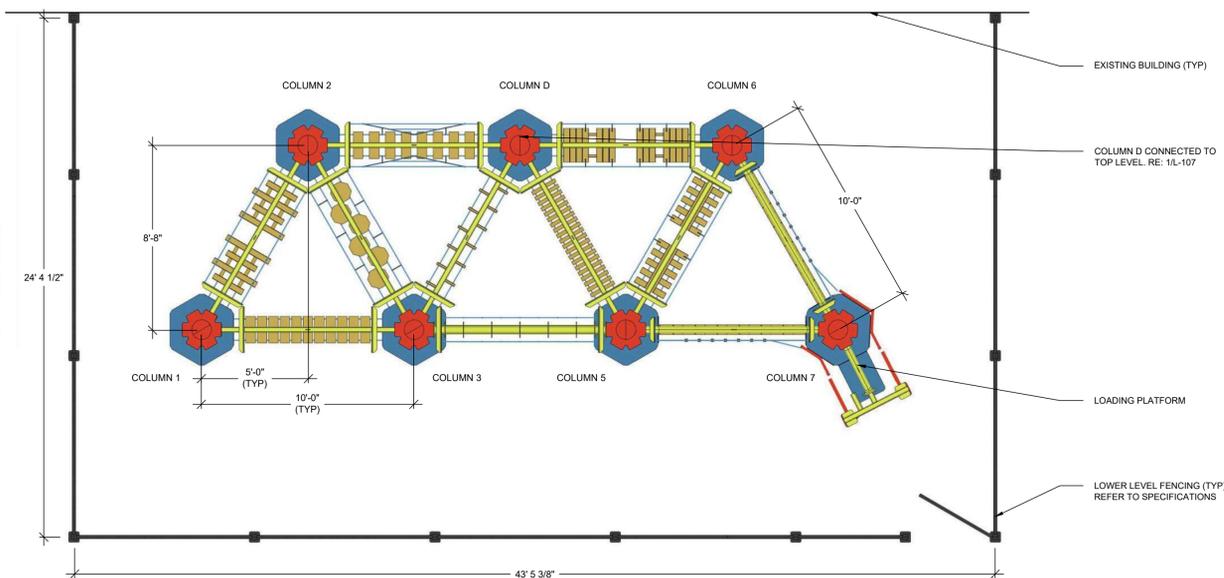
CAD DWG FILE: L-108
DRAWN BY: SLB
CHECKED BY: SLB
DESIGNED BY: SLB

SHEET TITLE:
LANDSCAPE
DETAILS

SHEET NUMBER:

L-108

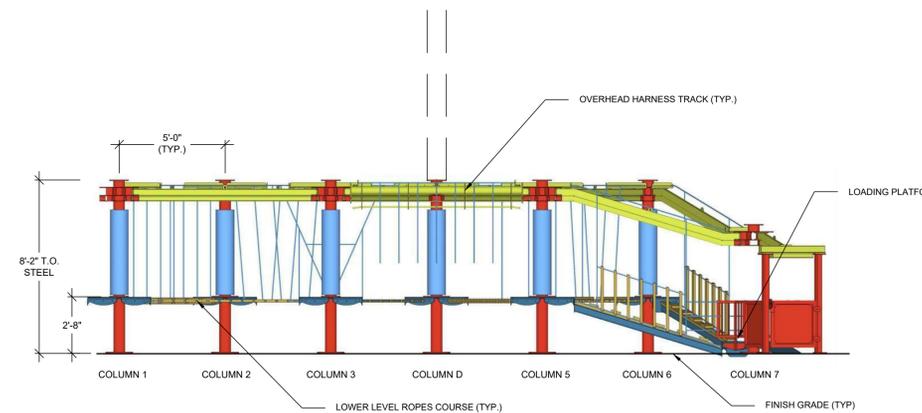
35 OF 74 SHEETS
10/18/2019



- 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 58\"/>

1 ROPES COURSE LOWER LEVEL PLAN VIEW

L-108 1/4" = 1'-0"



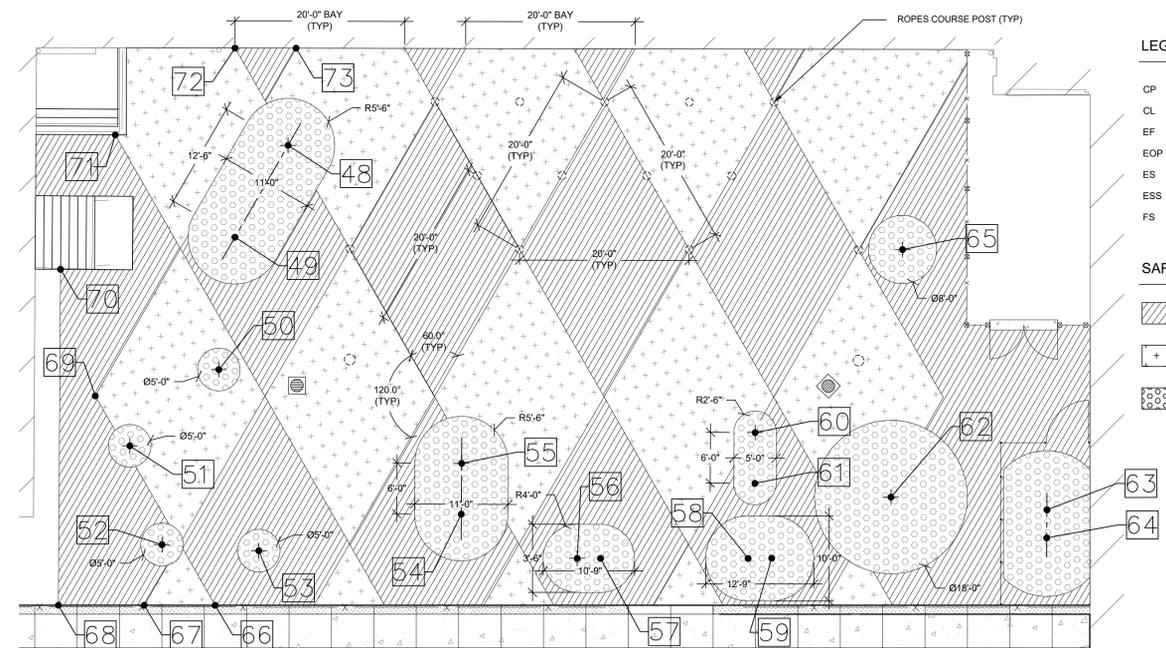
2 ROPES COURSE LOWER LEVEL (SOUTH ELEVATION)

L-108 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	893284.82	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 (CENTERMIDPOINT)

SAFETY SURFACING COLORS

- Blue, PANTONE 2185C
- Green, PANTONE 2247C
- Yellow, PANTONE 380C

3 SAFETY SURFACING LAYOUT

L-108 1" = 10'-0"



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: _____

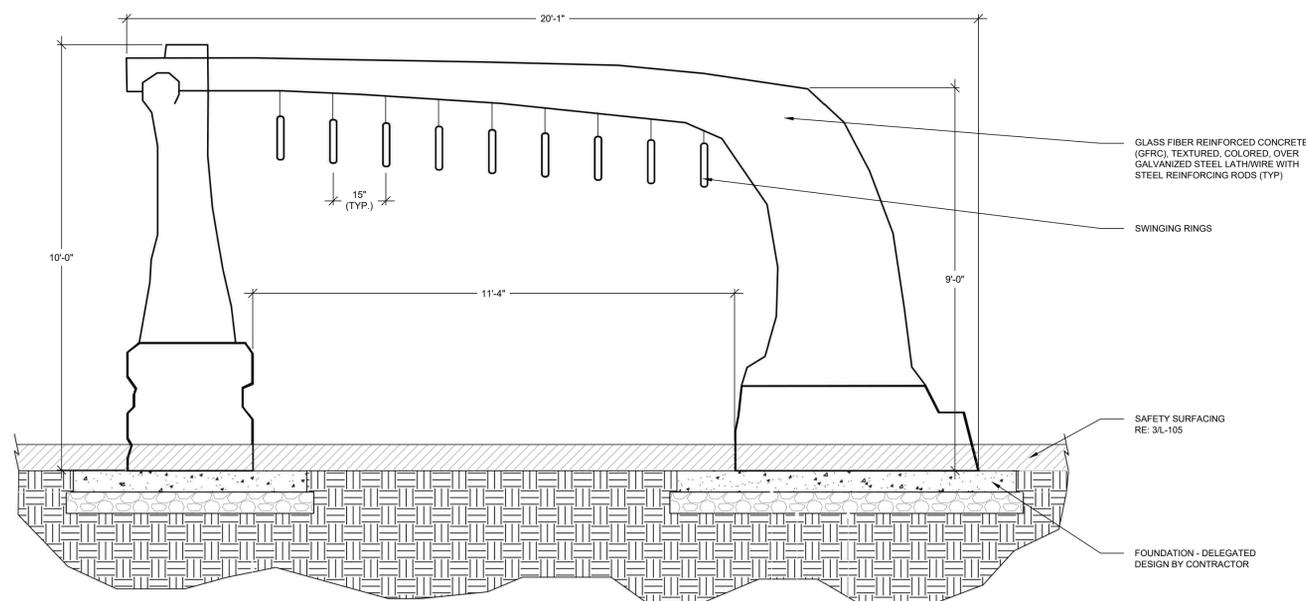
CAD DWG FILE: L-109
DRAWN BY: SLB
CHECKED BY: SLB
DESIGNED BY: SLB

SHEET TITLE:
**LANDSCAPE
DETAILS**

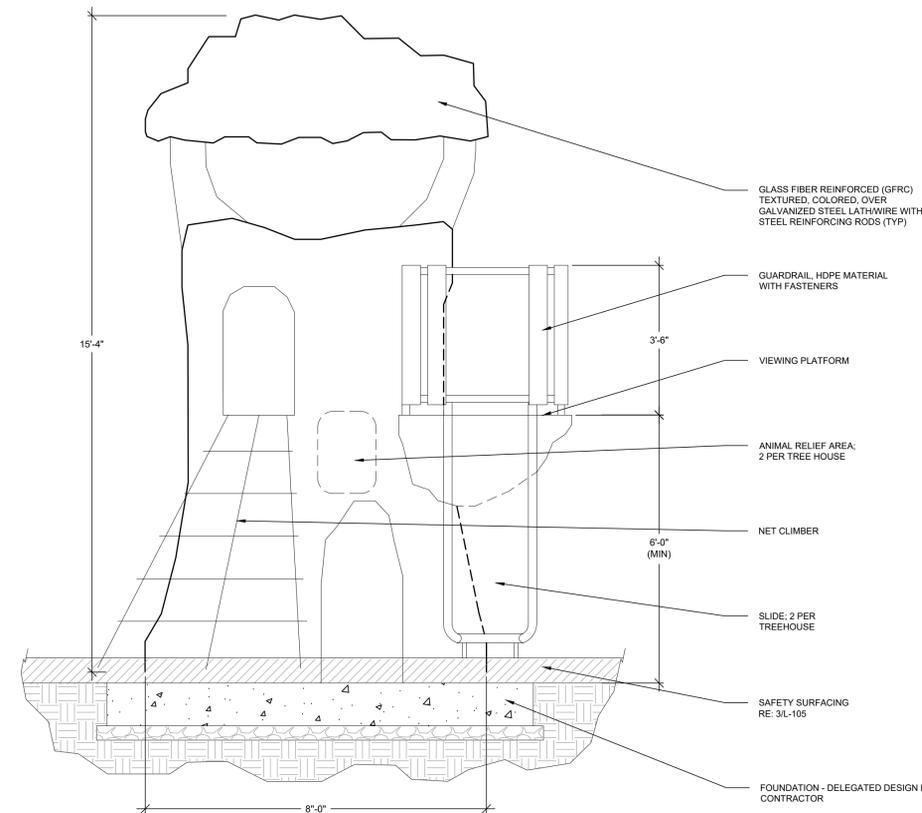
SHEET NUMBER:

L-109

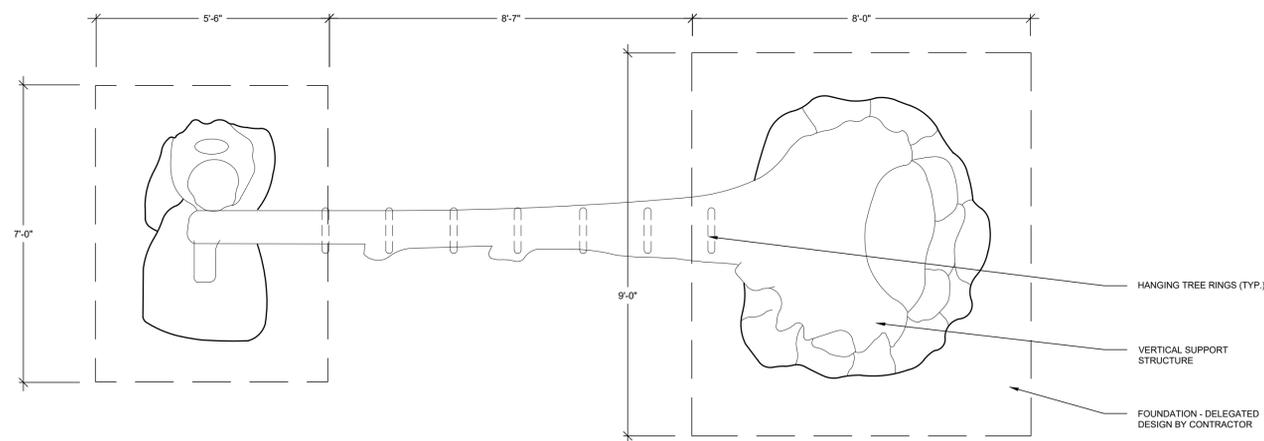
36 OF 74 SHEETS
10/18/2019



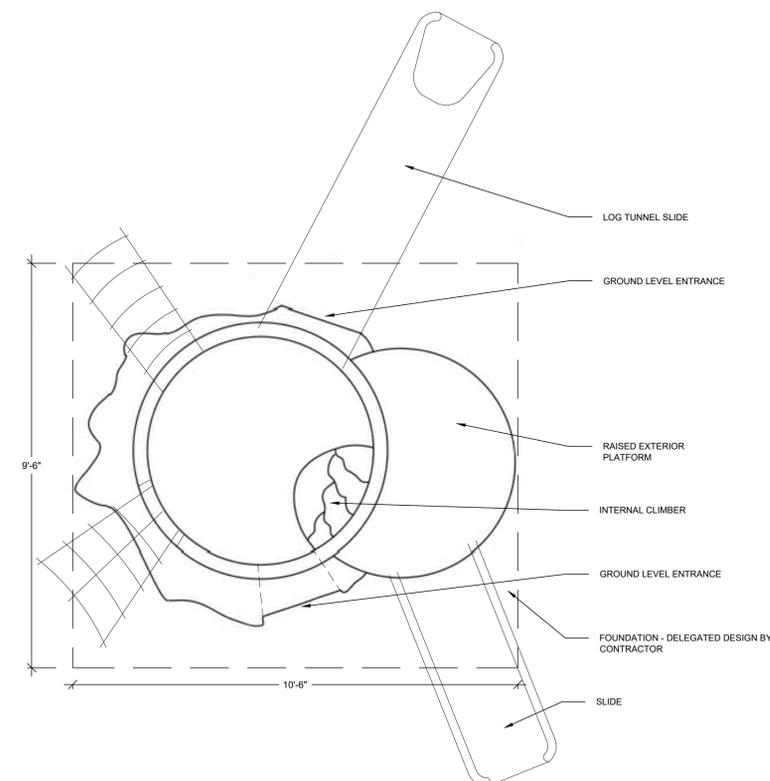
1 LEANING TREE RINGS ELEVATION VIEW
L-109 1/2" = 1'-0"



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



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



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



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: SLB
DESIGNED BY: SLB

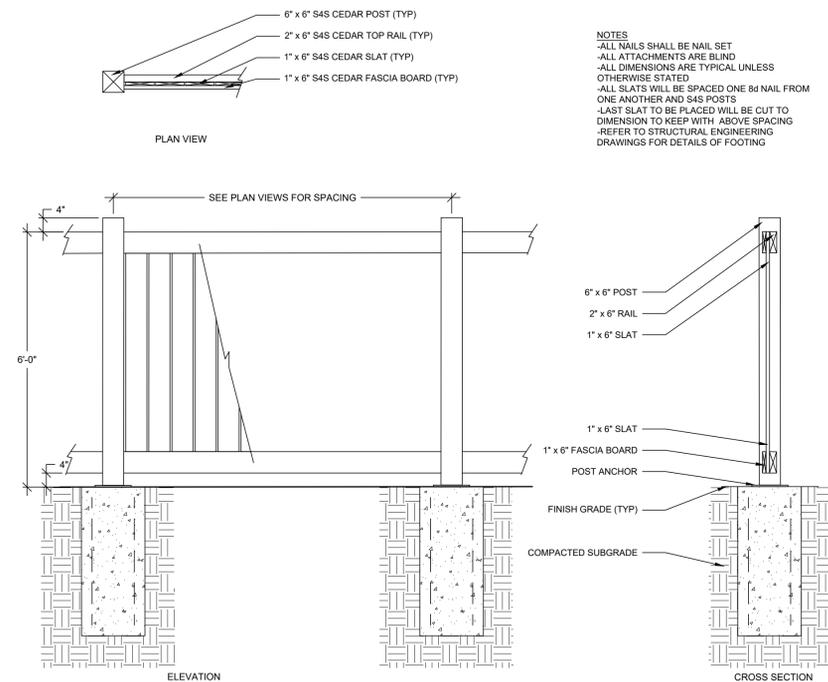
SHEET TITLE:

LANDSCAPE
DETAILS

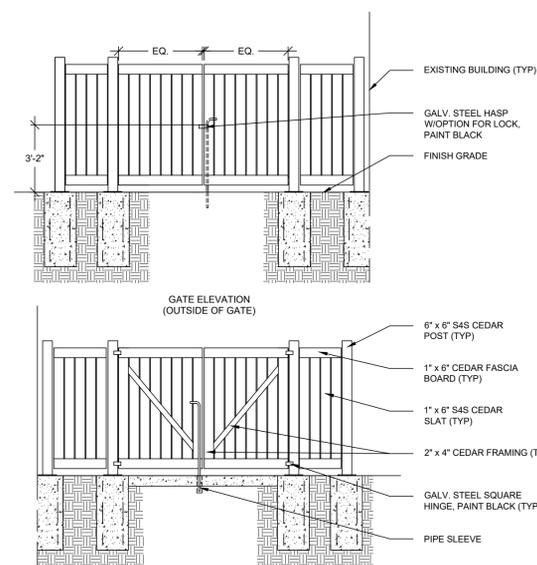
SHEET NUMBER:

L-110

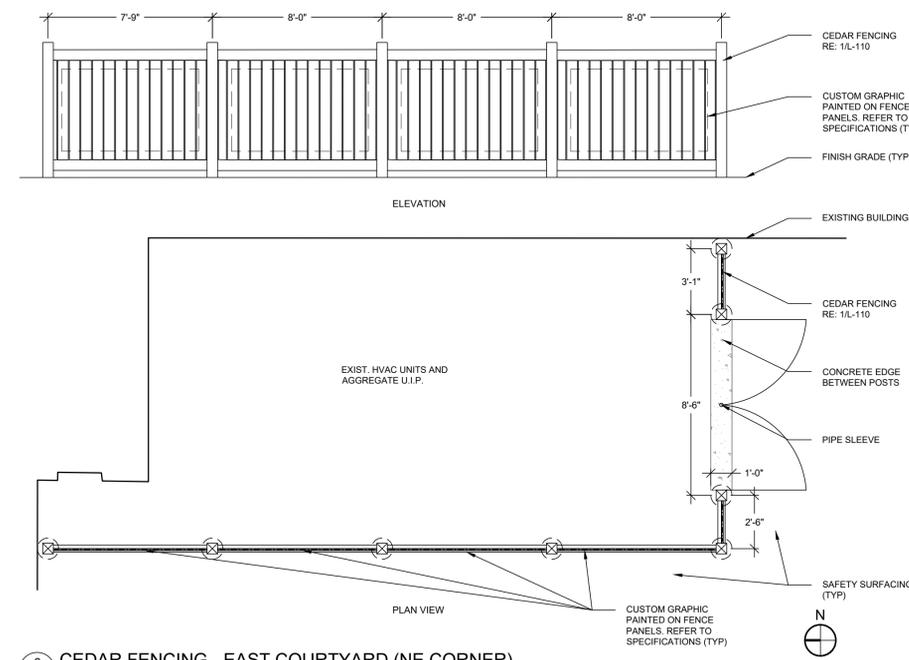
37 OF 74 SHEETS
10/18/2019



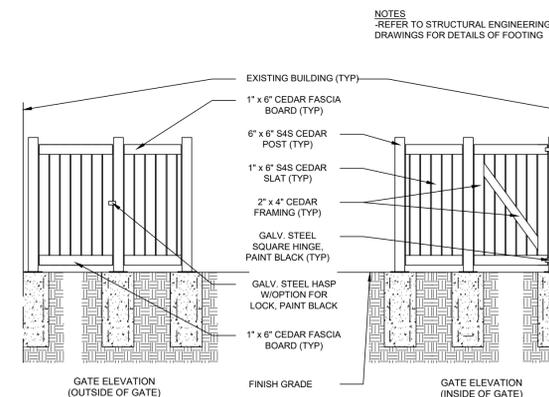
1 CEDAR FENCING
L-110 1/2" = 1'-0"



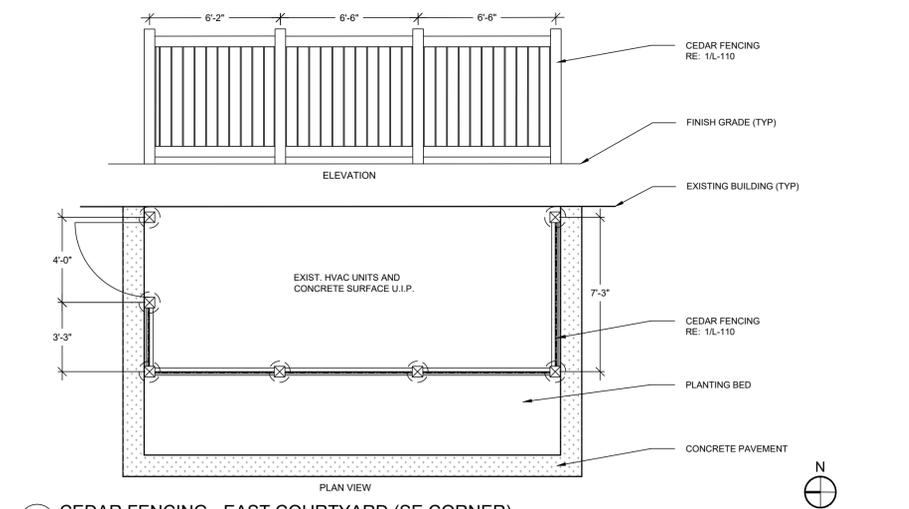
2 DOUBLE SWING GATE - EAST COURTYARD (NE CORNER)
L-110 1/4" = 1'-0"



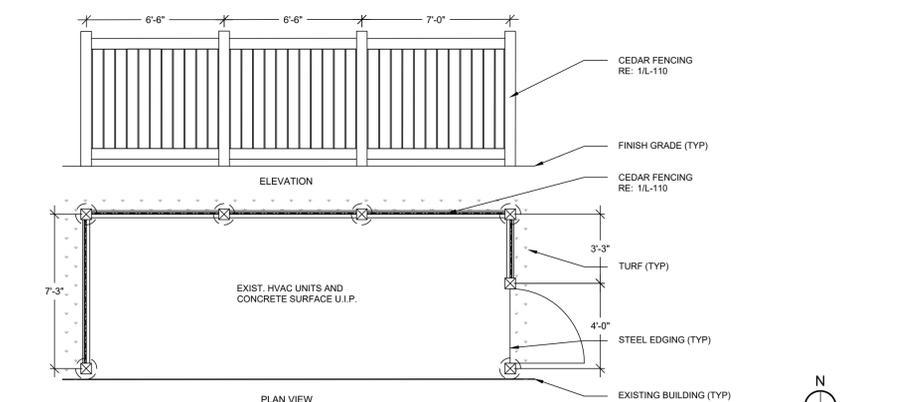
3 CEDAR FENCING - EAST COURTYARD (NE CORNER)
L-110 1/4" = 1'-0"



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



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



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



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: 110
DRAWN BY: SLB
CHECKED BY: SLB
DESIGNED BY: SLB

SHEET TITLE:

**LANDSCAPE
DETAILS**

SHEET NUMBER:

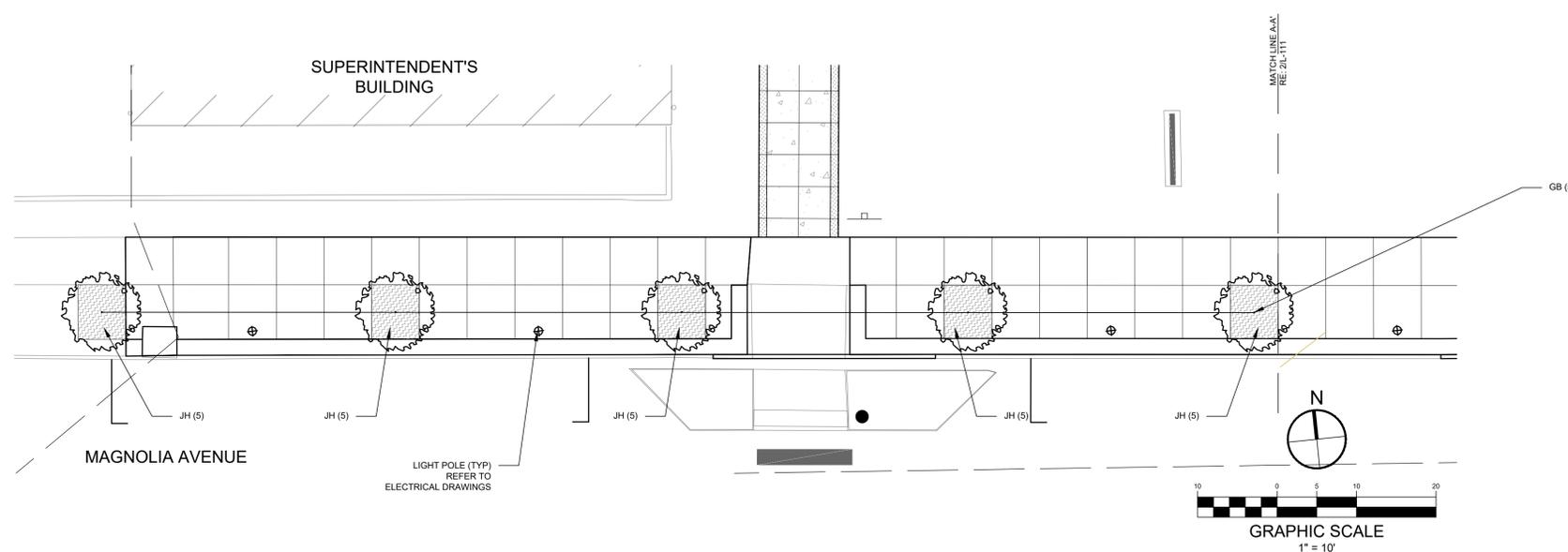
L-111

38 OF 74 SHEETS
10/18/2019

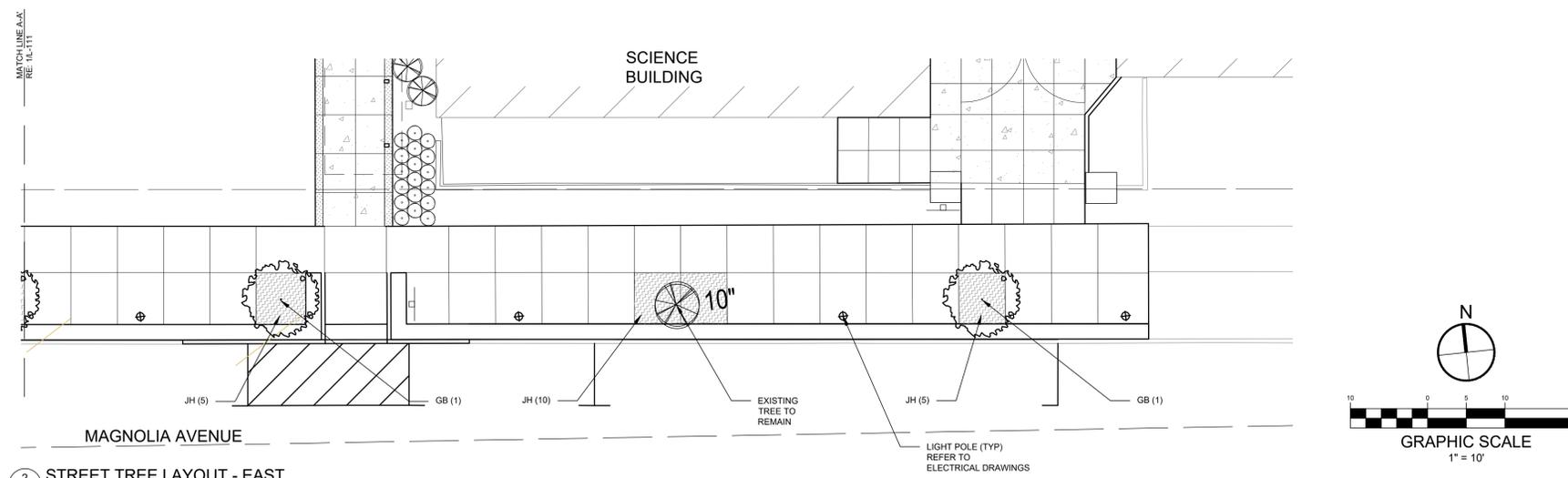
- NOTES
- REFER TO CIVIL SHEETS FOR UTILITY INFORMATION.
 - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO ANY CONSTRUCTION.
 - UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. LOCATIONS AND QUANTITIES ARE APPROXIMATE AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE OR VERIFY THEIR EXISTENCE AND EXACT LOCATION AND AVOID ANY DAMAGE.
 - THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UNDERGROUND UTILITIES DURING CONSTRUCTION.
 - REPORT ANY DISCREPANCIES FOUND WITH REGARD TO EXISTING CONDITIONS OR PROPOSED DESIGN IMMEDIATELY TO OWNERS REPRESENTATIVE.
 - 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.
 - REFER TO CIVIL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION ON LIGHTING, WIRING SCHEMATICS, AND FIXTURE SCHEDULE.
 - 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.
 - LANDSCAPE ARCHITECT AND CONSTRUCTION ADMINISTRATOR TO FIELD VERIFY LAYOUT OF IMPROVEMENTS PRIOR TO INSTALLATION.

PLANTING SCHEDULE

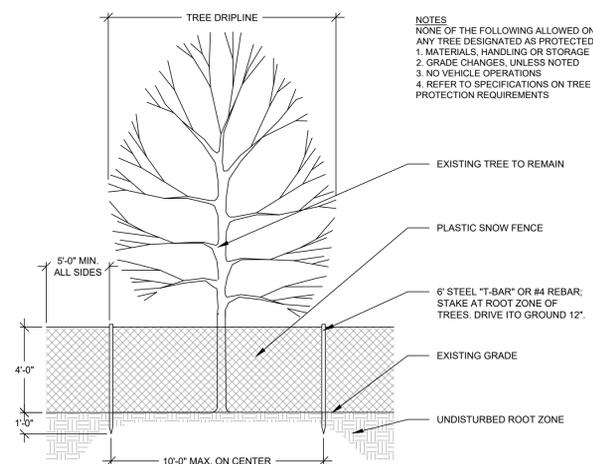
SYM	QTY	BOTANICAL NAME	COMMON NAME	SIZE	METHOD
TREES					
AG	-	Amelanchier grandiflora	AUTUMN BRILLIANCE SERVICEBERRY	3" CAL.	B&B
GB	7	Ginkgo biloba 'Princeton Sentry'	PRINCETON SENTRY GINKGO	3" CAL.	B&B
ZS	-	Zelkova serrata	JAPANESE ZELKOVA	3" CAL.	B&B
SHRUBS					
BD	-	Buddleja davidii 'Peakeep'	PEACOCK 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 Curis'	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.
GROUND COVER/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.



1 STREET TREE LAYOUT - WEST
L-111



2 STREET TREE LAYOUT - EAST
L-111



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

GENERAL NOTES: FINISH

- 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.
- IDENTIFY AND INFORM CONSTRUCTION TEAM OF ALL CRITICAL PATH ITEMS, CRITICAL DEADLINES, AND DATE OF SUBSTANTIAL COMPLETION.
- 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.
- THE FINISH NAME TAKES PRECEDENCE OVER THE FINISH PRODUCT NUMBER WHEN ORDERING MATERIALS. CONTACT ARCHITECT WITH DISCREPANCIES BEFORE ORDERING MATERIALS.
- 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.
- 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.
- MAINTAIN AND PROTECT EXISTING FLOORING AND FINISHES NOTED TO REMAIN FOR DURATION OF CONSTRUCTION.
- ALL INTERIOR FINISHES TO MEET OR EXCEED APPLICABLE CODE REQUIREMENTS, INCLUDING BUT NOT LIMITED TO FLAME SPREAD AND SMOKE DEVELOPMENT.
- ALL INTERIOR FINISH AND SURFACES TO MEET OR EXCEED CLASS II FLAME SPREAD, 26 - 75 AND SMOKE DEVELOPMENT RATING LESS THAN 450 AND ALL OTHER APPLICABLE CODES.
- 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.
- ALL VINYL WALL COVERING FIRE HAZARD CLASSIFICATION (ASTM-E-84) FLAME SPREAD 5, FUEL CONTRIBUTION 0, SMOKE DENSITY FACTOR 5.
- 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.
- 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

- ALL NOTES IN THESE DOCUMENTS INSTRUCT THE GENERAL CONTRACTOR OR, AT THEIR DISCRETION, THEIR SELECTED SUBCONTRACTORS.
- IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE ALL SUBCONTRACTORS RECEIVE THIS SHEET OF GENERAL NOTES IN ADDITION TO TRADE-SPECIFIC INFORMATION.
- 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.
- 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.
- 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.
- 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. DO NOT SCALE DRAWINGS, DIMENSIONS GOVERN. LARGE SCALE DETAILS GOVERN OVER SMALL SCALE.
- 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.
- 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.
- 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.
- 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.
- 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.
- PROVIDE STRUCTURAL TESTS AND SPECIAL INSPECTIONS AS REQUIRED BY CODE.
- 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.
- 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.
- 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

- 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 DOCUMENTS. THE CONTRACTOR SHALL COORDINATE THEIR WORK WITH NIC ITEMS AND COOPERATE TO AFFECT THE IMPLEMENTATION OF SUCH WORK OR INSTALLATION.
- 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.
- DO NOT SCALE DRAWINGS, DIMENSIONS GOVERN. LARGE SCALE DETAILS GOVERN OVER SMALL SCALE.
- 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.
- UNO ALL PARTITIONS TO BE PARTITION AS DETAILED ON DETAIL 4/A-101.
- 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.
- 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.
- PARTITIONS ARE DIMENSIONED TO FACE OF PARTITION UNLESS NOTED OTHERWISE.
- INSTALL MOISTURE RESISTANT GYP BOARD AT ALL WALLS, INCLUDING BUT NOT LIMITED TO LAVATORY LOCATIONS.
- PROVIDE 6" METAL STUDS AT ALL PARTITIONS WHERE NEW PLUMBING WASTE OR VENT LINES ARE LOCATED.
- 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.
- 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 FLAT, 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.
- 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.
- ALL MATERIALS USED IN FIRE-RATED ASSEMBLIES SHALL BE APPROVED BY UL OTHER RECOGNIZED STANDARD FOR USE IN SUCH ASSEMBLIES.
- 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.
- REPAIR SPRAY-ON FIRE PROOFING AT ALL AREAS WITHIN SCOPE OF WORK TO ACHIEVE REQUIRED FIRE RESISTANCE.
- 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.
- 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.
- 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.
- 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.
- ALL MODIFIED BUILDING ENTRANCES / EXITS SHALL BE ACCESSIBLE.
- 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.
- 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.
- ALL SALVAGED, REPAIRED OR REPLACED BUILDING STANDARD BLINDS TO BE REINSTALLED. 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.
- 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.
- 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

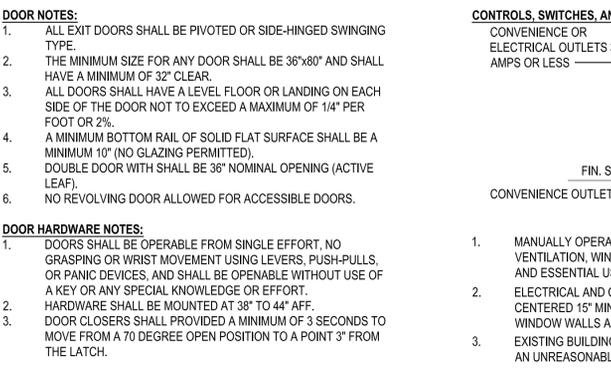
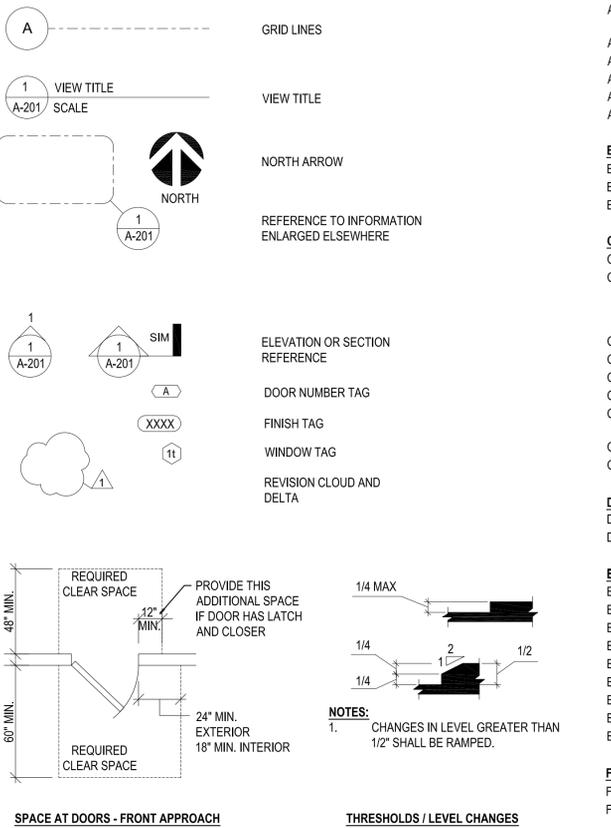
GENERAL NOTES: ACCESSIBILITY

- 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.).
- 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.
- THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AID FOR BUILDING AND CONSTRUCTION.
- 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

- PROVIDE TEMPORARY BARRICADES AND OTHER FORMS OF PROTECTION AS REQUIRED TO PROTECT OWNERS' AND CLIENT'S PERSONNEL AND GENERAL PUBLIC FROM INJURY DUE TO SELECTIVE DEMOLITION WORK.
- 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.
- 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.
- PROVIDE BYPASS CONNECTIONS AS NECESSARY TO MAINTAIN CONTINUITY OF SERVICE TO OCCUPIED AREAS OF THE BUILDING.
- REVIEW/COORDINATE SCHEDULE OF WORK TO BE DEMOLISHED WITH BUILDING MANAGEMENT TO LIMIT INTERRUPTIONS OF OWNER-OCCUPIED SPACES.
- MAINTAIN FIRE PROTECTION SERVICES DURING SELECTIVE DEMOLITION.
- COVER AND PROTECT EQUIPMENT AND FIXTURES INDICATED "TO REMAIN" FROM SOLAGE OR DAMAGE.
- LOCATE, IDENTIFY, STUB OFF, AND DISCONNECT UTILITY SERVICES THAT ARE NOT INDICATED TO REMAIN.
- PERFORM SELECTIVE DEMOLITION WORK IN A SYSTEMATIC MANNER.
- WHERE CLEANED ON DRAWINGS AS "SALVAGE AND STORE," CAREFULLY REMOVE INDICATED ITEMS, INCLUDING, STORE, AND REUSE AS REQUIRED. DELIVER UNUSED ITEMS AT COMPLETION OF PROJECT TO CLIENT.
- 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.
- UNO ALL EXISTING PARTITIONS, FIRE EXTINGUISHERS AND CABINETS, MILLWORK, DOORS, HARDWARE, SIDELITES, CLERESTORIES, ETC. TO REMAIN.
- 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.
- REMOVE ELECTRICAL TERMINATIONS, BOXES, CONDUIT, AND WIRING BACK TO SOURCE PANEL.

GENERAL DRAWING SYMBOLS LEGEND:

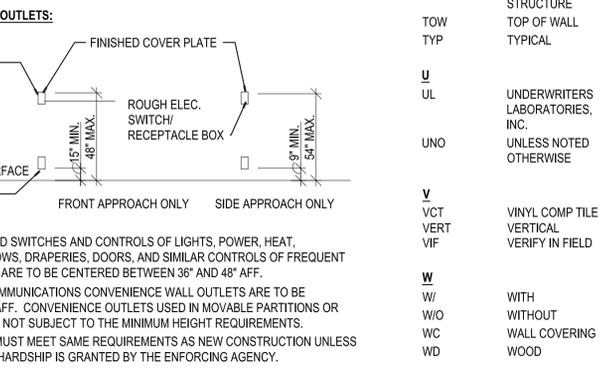


DEFINITION OF TERMS:

- THE WORD "CLIENT" AS USED IN THESE DOCUMENTS REFERS TO THE ENTITY WHO HAS CONTRACTED THE ARCHITECT TO PERFORM PROFESSIONAL SERVICES ON THIS PROJECT.
- THE WORD "PROJECT" AS USED IN THESE DOCUMENTS REFERS TO THE SCOPE OF WORK DESCRIBED IN THESE DOCUMENTS.
- 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.
- THE WORD "ARCHITECT" AS USED IN THESE DOCUMENTS REFERS ARCTURIS.
- 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.
- THE WORD "ALIGN" AS USED IN THESE DOCUMENTS SUPERSEDES ANY DIMENSIONAL INFORMATION INDICATED. IF DISCREPANCIES OCCUR, NOTIFY ARCHITECT IMMEDIATELY THE GENERAL CONTRACTOR.
- THE WORD "PROVIDE" AS USED IN THESE DOCUMENTS MEANS FURNISH AND INSTALL.
- 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.
- 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.
- 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.
- THE WORD "TYPICAL" AS USED IN THESE DOCUMENTS SHALL MEAN THE CONDITION OR DIMENSION IS THE SAME OR REPRESENTATIVE FOR SIMILAR CONDITIONS THROUGHOUT.
- 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	ACOUSTICAL CEILING TILE	FEC	FIRE EXTINGUISHER CABINET	O	ON CENTER
ACT	ALTERNATE	FIN	FINISHED FLOOR	OC	OWNER FURNISHED, CONTRACTOR INSTALLED
AFF	APPROXIMATE(LY)	FIN FLR	FINISHED FLOOR	OFI	OWNER FURNISHED, OWNER INSTALLED
ALT	APPROVED	FLR	FLOOR	OH	OPPOSITE HAND
ALUM	ARCHITECT(URAL)	FLUOR	FLUORESCENT	OPG	OPENING
APPROX		FRT	FIRE-RETARDANT TREATED	OPP	OPPOSITE
ARCH		G		P	
		GA	GAUGE	PLAM	PLASTIC LAMINATE
		GYP BD	GYPSUM BOARD	PT	PAINT(ED)
B	BOARD	H	HOLLOW CORE	PTN	PARTITION
BD	BUILDING BLOCKING	HC	HOLLOW CORE	PWD	PLYWOOD
BLDG	BLOCKING	HCP	HANDICAP(PED)	Q	QUANTITY
BLKG		HDW	HARDWARE	R	
		HM	HOLLOW METAL	RB	RESILIENT BASE
		HOR	HORIZONTAL	REF	REFERENCE
		HR	HOUR	REINF	REINFORCE(ED)
		HT	HEIGHT	REQ	REQUIRED
				REV	REVISION
C	CENTERLINE	J	JOINT	S	
CIL	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED	JT	JOINT	SC	SOLID CORE
CFCI		L	LAM	SF	SQUARE FOOT (FEET)
		LAM	LAMINATE	SIM	SIMILAR
		LX	MAXIMUM	SPEC	SPECIFICATION
		MECH	MECHANICAL, ELECTRICAL, AND PLUMBING	SQ	SQUARE
		MEP	MECHANICAL, ELECTRICAL, AND PLUMBING, AND FIRE PROTECTION	SQ FT	SQUARE FOOT (FEET)
CJ	CONTROL JOINT	MEPPF	MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION	STL	STEEL
CLG	CEILING	MIN	MINIMUM	SUSP	SUSPEND(ED)
CLR	CLEAR	MISC	MISCELLANEOUS	SYM	SYMMETRICAL
CLR	CLEAR	MTL	METAL	I	
CONC	CONCRETE	N	NOT IN CONTRACT	TEMP	TEMPERED
CONT	CONTINUE, CONTINUOUS	NIC	NOT TO SCALE	TFCI	TENANT(CLIENT) FURNISHED, CONTRACTOR INSTALLED
CORR	CORRIDOR	NTS	NOT TO SCALE	TFTI	TENANT (CLIENT) FURNISHED, TENANT (CLIENT) INSTALLED
CT	CERAMIC TILE			TOS	TOP OF STRUCTURE
				TOW	TOP OF WALL
D	DIAMETER			UL	UNDERWRITERS LABORATORIES, INC.
DIA	DIAMETER			UNO	UNLESS NOTED OTHERWISE
DIM	DIMENSION(S)			V	
				VCT	VINYL COMP TILE
				VERT	VERTICAL
				VIF	VERIFY IN FIELD
E	EACH			W	
EA	EACH			W/	WITH
EJ	EXPANSION JOINT			W/O	WITHOUT
ELEC	ELECTRICAL			WC	WALL COVERING
ELEV	ELEVATION			WD	WOOD
EQ	EQUAL				
EQUIP	EQUIPMENT				
EXIST	EXISTING				
EXP	EXPANSION				
EXT	EXTERIOR				
F	FLOOR DRAIN				
FD	FLOOR DRAIN				
FE	FIRE EXTINGUISHER				



- 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.
- 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.
- EXISTING BUILDING MUST MEET SAME REQUIREMENTS AS NEW CONSTRUCTION UNLESS AN UNREASONABLE HARDSHIP IS GRANTED BY THE ENFORCING AGENCY.



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,
 5012011004

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
 39 OF 74 SHEETS
 10/18/2019



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**

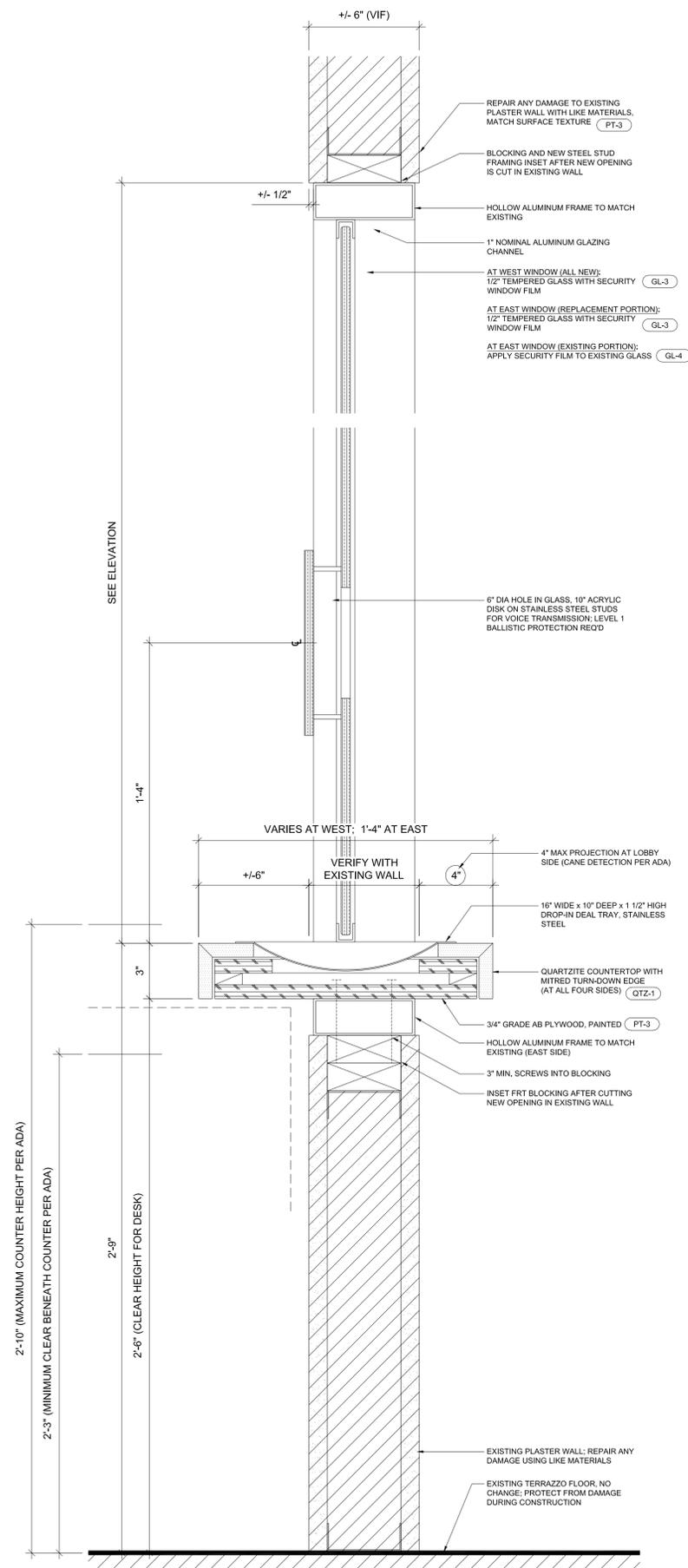
SHEET NUMBER:

A-101

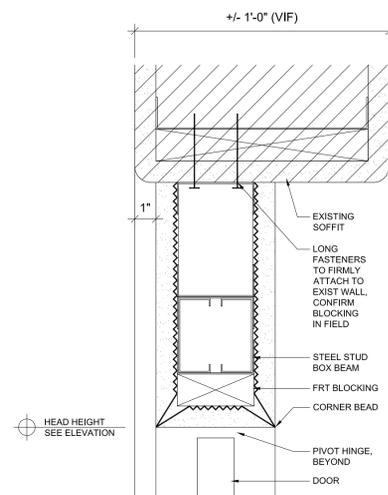
40 OF 74 SHEETS
10/18/2019

INTERIOR DOORS:	
(SECTIONS 084226 & 089000)	
G	NEW FRONT DOOR (QTY: 1 PAIR): (GL-3)
DOORS: ALL GLASS, TOP & BOTTOM RAIL FILLS: FULL-LENGTH BAR LATCHES: MAGLOCK; HAGER 2941 OR APVD EQUAL; 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; HAGER 2925 OR APVD EQ HINGES: EXISTING TO REMAIN FLOOR STOP: EXISTING TO REMAIN CARD READER SYSTEM; SEE BRIC DRAWINGS	
SEE EXTERIOR ALUM FRAME DOORS ON A-103 SEE EXTERIOR ALUM FRAME WINDOWS ON A-104	
GENERAL OPENING NOTES: ALL DIMENSIONS SHALL BE VERIFIED IN FIELD; DIMENSIONS SHOWN FOR APPROXIMATE PRICING ONLY	

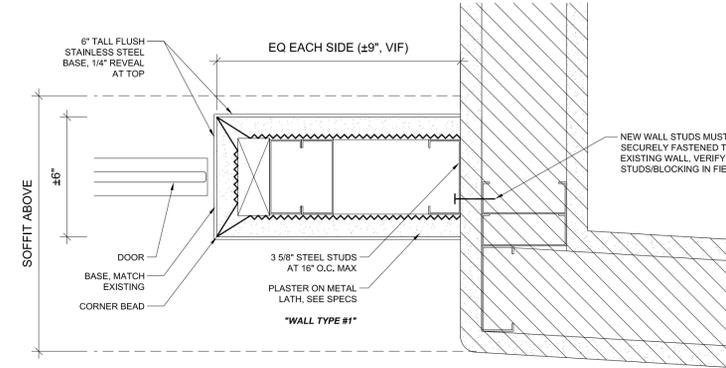
FINISH LEGEND:	
BRICK (SECTION 040120.63):	
(BR-1)	BRICK, MATCH EXISTING
CONCRETE (REFER TO STRUCT. LANDSCAPE):	
(CON-1)	STANDARD GREY CONCRETE, BROOM FINISH, SEE STRUCTURAL SPECS FOR ADDITIONAL PERFORMANCE REQS
(CON-2)	STANDARD GREY CONCRETE, BROOM FINISH, PATTERNED AT EDGES; REFER TO LANDSCAPE/CIVIL 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):	
(GL-1)	CLEAR, TEMPERED, INSULATED GLAZING
(GL-2)	BACK-PAINTED, TEMPERED, INSULATED SPANDREL GLAZING
(GL-3)	CLEAR, TEMPERED, 1/2" THICK GLAZING WITH SECURITY FILM APPLIED
(GL-4)	EXISTING GLAZING, APPLY SECURITY FILM
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 PLANKING (SECTION 061063):	
(WD-1)	CLEAR CEDAR STRIPS, 1" X 1 1/2" ACTUAL; CLEAR TEAK OIL FINISH



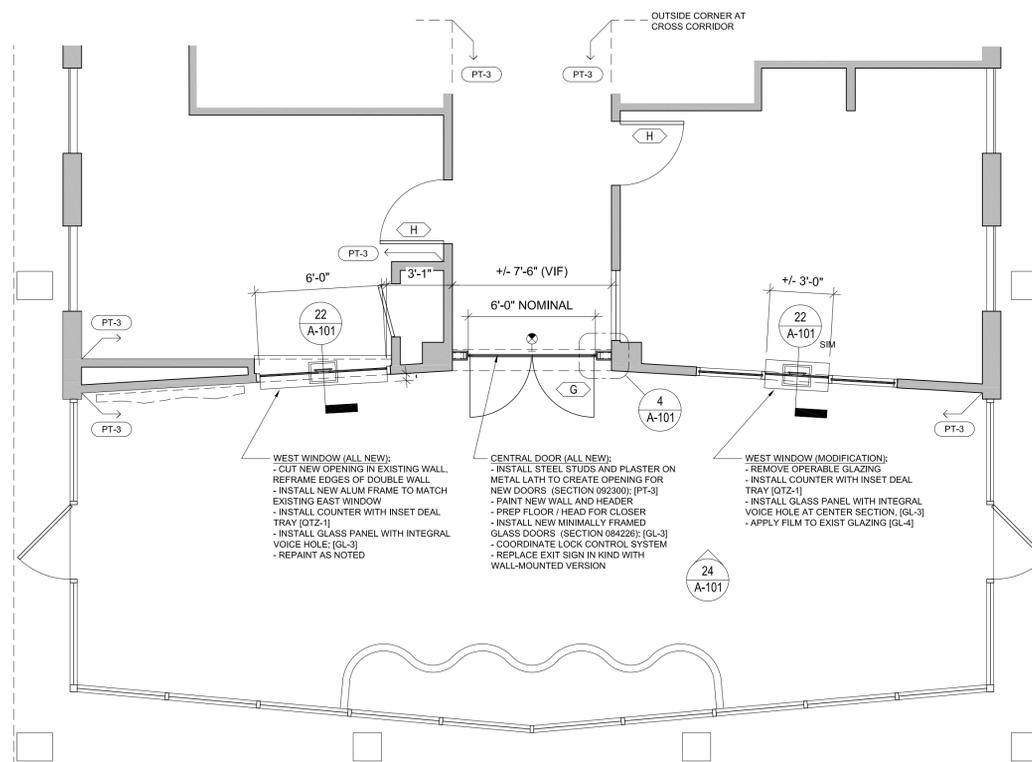
22 ENTRANCE LOBBY - SECTION DETAIL - CHECK-IN WINDOW
A-101 3" = 1'-0"



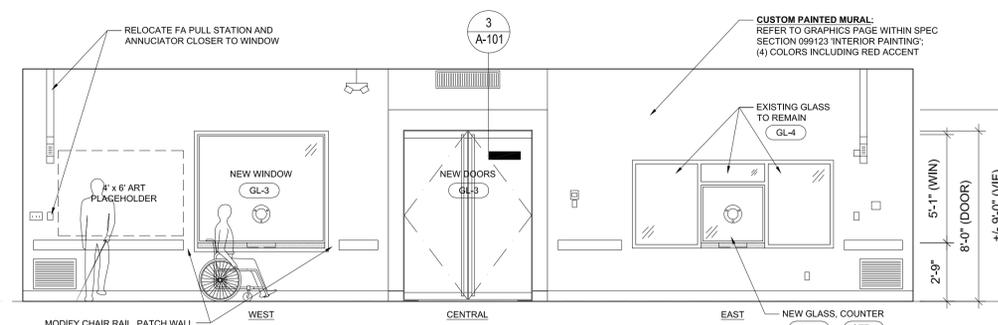
3 ENTRANCE LOBBY - SECTION DETAIL - DOOR HEAD
A-101 1/4" = 1'-0"



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



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



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



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: _____

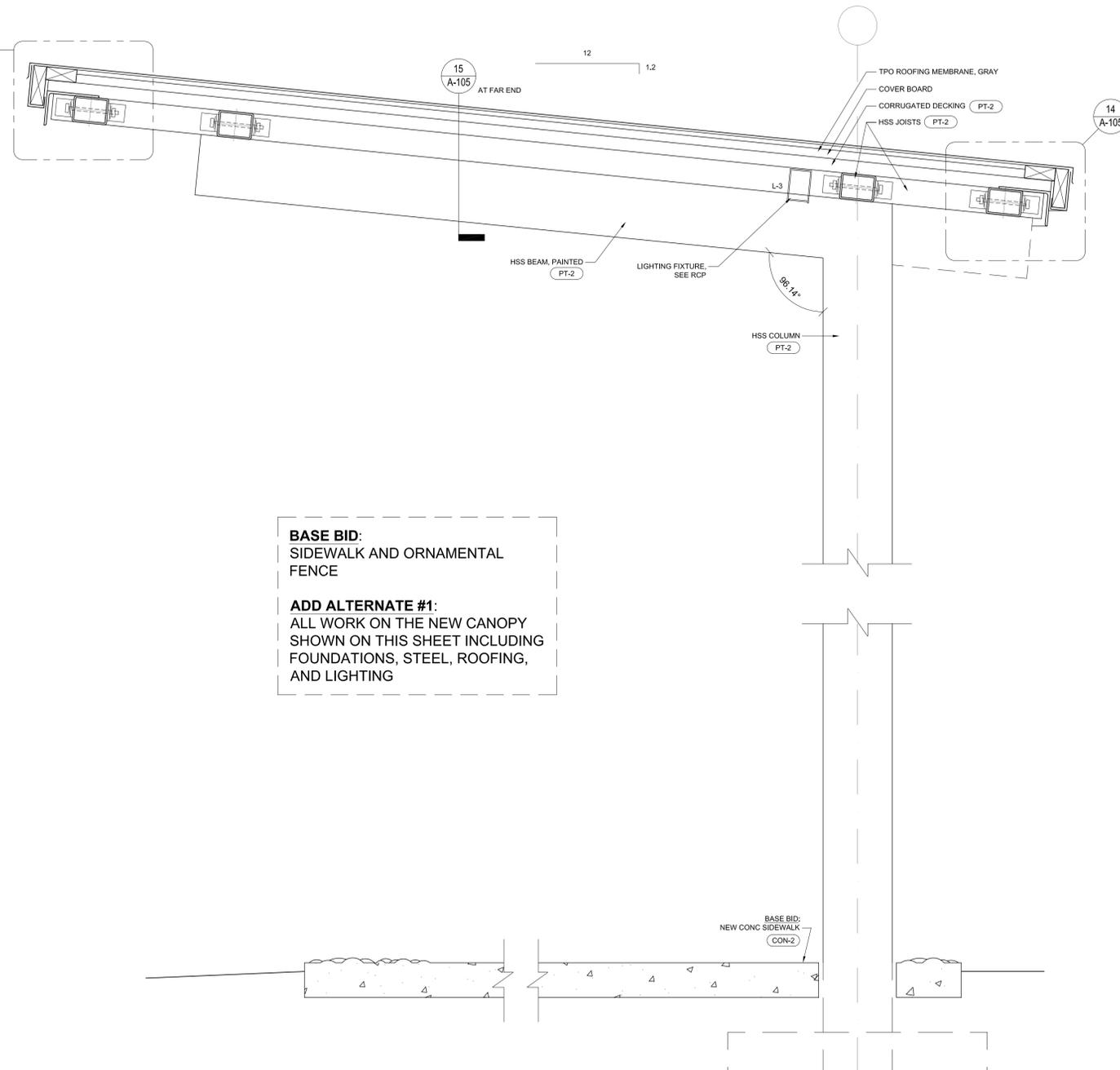
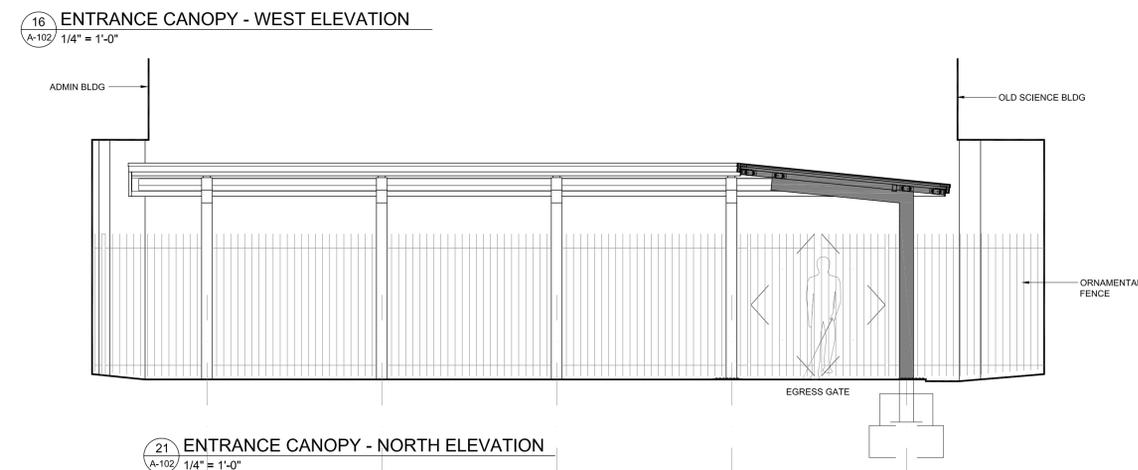
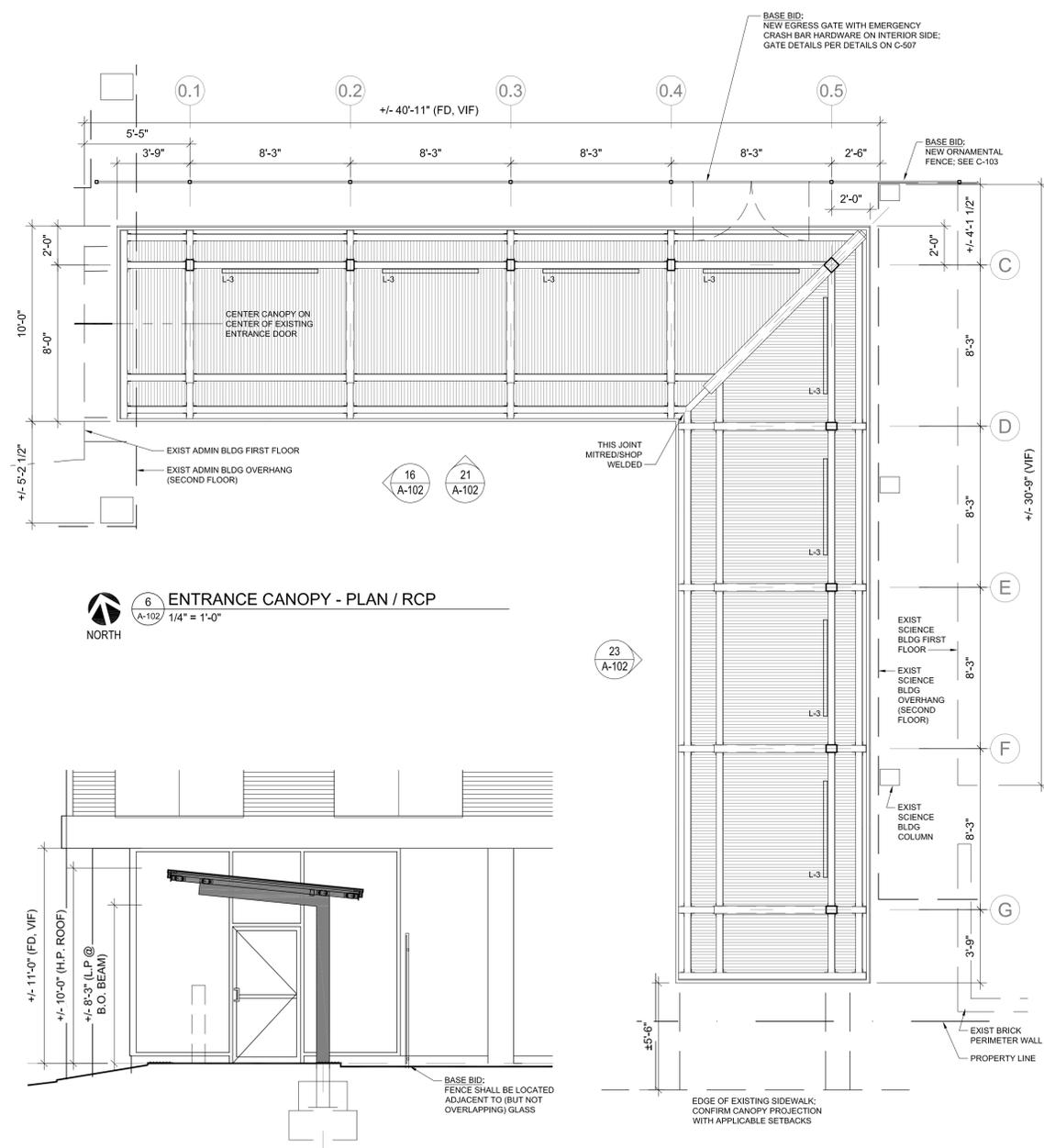
CAD DWG FILE: A-102
DRAWN BY: MJN
CHECKED BY: MJN
DESIGNED BY: MJN

SHEET TITLE:
**ENLARGED ARCH
PLANS & ELEVS
ENTRY CANOPY**

SHEET NUMBER:

A-102

41 OF 74 SHEETS
10/18/2019



BASE BID:
SIDEWALK AND ORNAMENTAL FENCE

ADD ALTERNATE #1:
ALL WORK ON THE NEW CANOPY SHOWN ON THIS SHEET INCLUDING FOUNDATIONS, STEEL, ROOFING, AND LIGHTING



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: _____

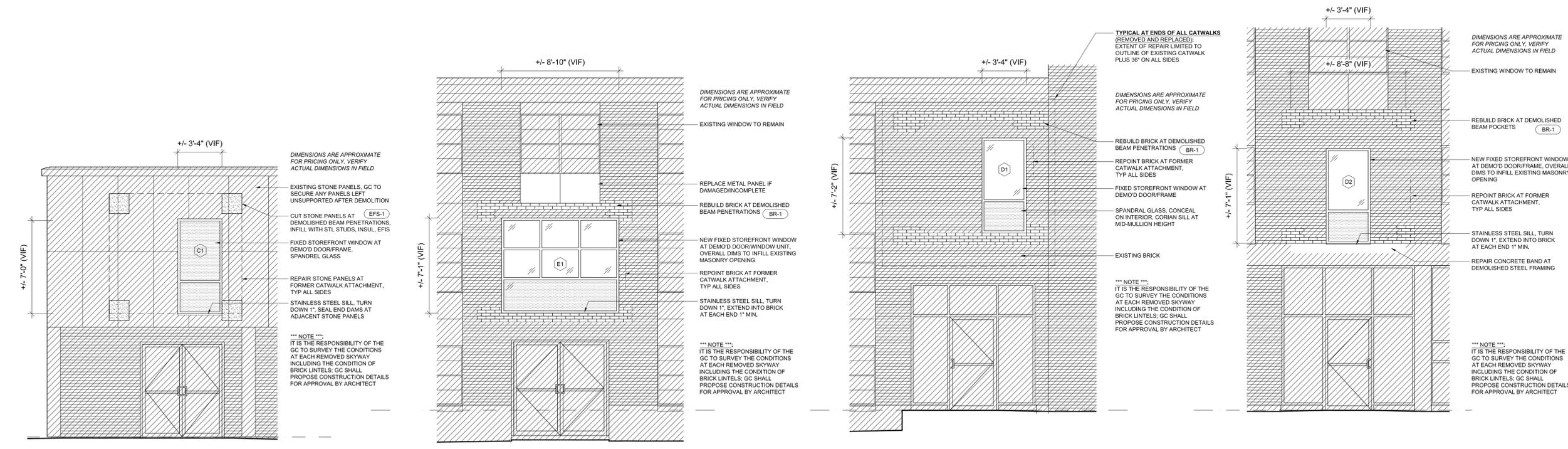
CAD DWG FILE: A-104
DRAWN BY: MJN
CHECKED BY: MJN
DESIGNED BY: MJN

SHEET TITLE:
**ENLARGED ARCH
ELEVATIONS
CATWALK INFILLS**

SHEET NUMBER:

A-104

43 of 74 SHEETS
10/18/2019

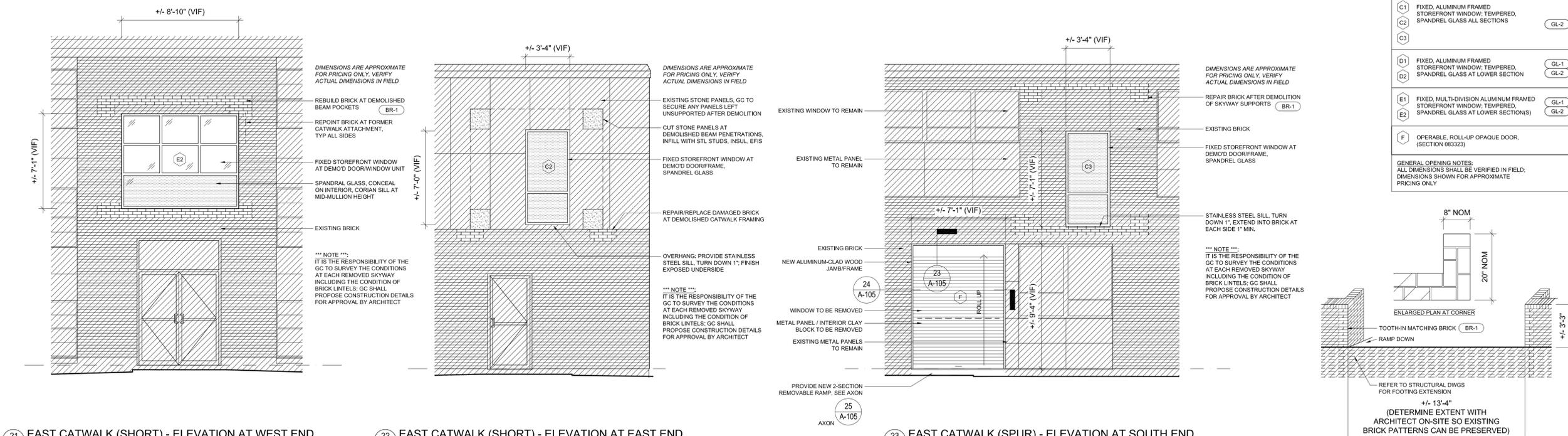


1 WEST CATWALK (SHORT) - ELEVATION AT EAST END
A-104 1/4" = 1'-0"

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

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

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



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

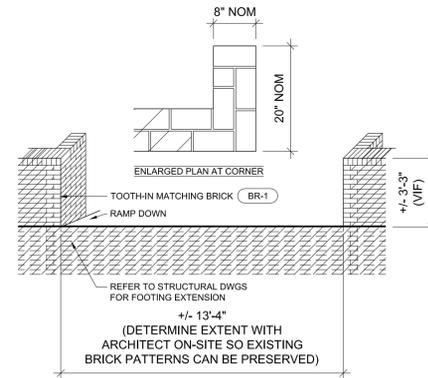
22 EAST CATWALK (SHORT) - ELEVATION AT EAST END
A-104 1/4" = 1'-0"

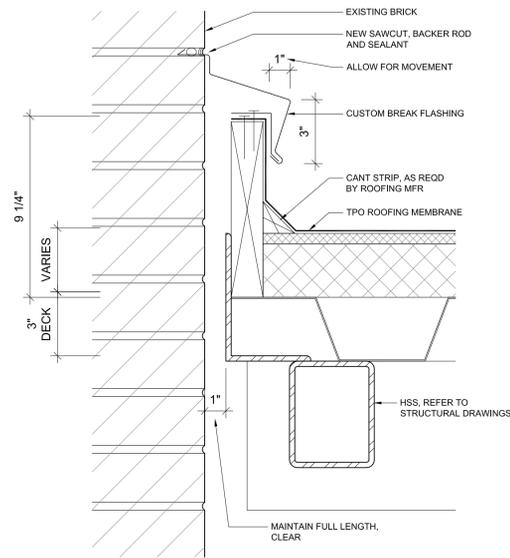
23 EAST CATWALK (SPUR) - ELEVATION AT SOUTH END
A-104 1/4" = 1'-0"

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

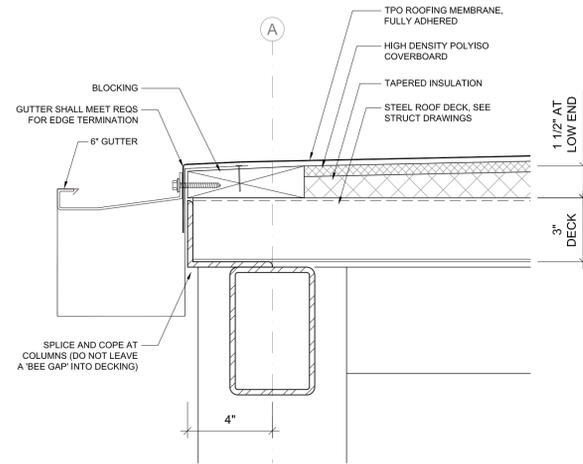
ALUMINUM WINDOWS: (SECTIONS 084113 & 088000)	
A	SEE A-103
B	SEE A-103
AA	SEE A-103
BB	SEE A-103
C1	FIXED, ALUMINUM FRAMED STOREFRONT WINDOW; TEMPERED, SPANDREL GLASS ALL SECTIONS (GL-2)
C2	
C3	
D1	FIXED, ALUMINUM FRAMED STOREFRONT WINDOW; TEMPERED, SPANDREL GLASS AT LOWER SECTION (GL-1, GL-2)
D2	
E1	FIXED, MULTI-DIVISION ALUMINUM FRAMED STOREFRONT WINDOW; TEMPERED, SPANDREL GLASS AT LOWER SECTION(S) (GL-1, GL-2)
E2	
F	OPERABLE, ROLL-UP OPAQUE DOOR, (SECTION 08323)

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

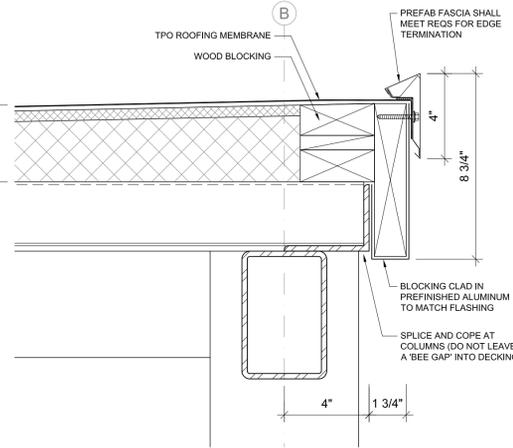




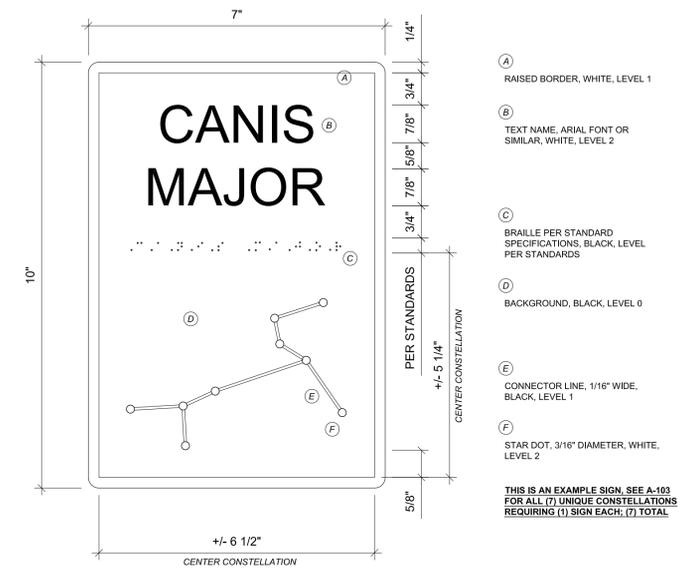
6 NEW CATWALK - SECTION AT ROOF/BUILDING EDGE
A-105/ 3" = 1'-0"



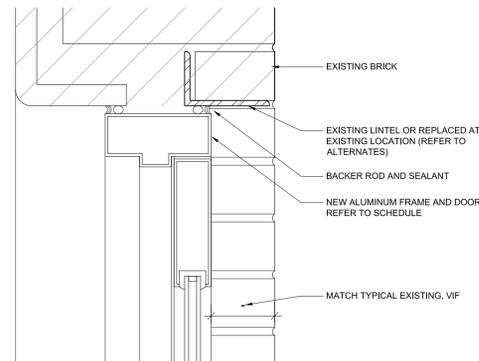
7 NEW CATWALK - SECTION AT ROOF, LOW END
A-105/ 3" = 1'-0"



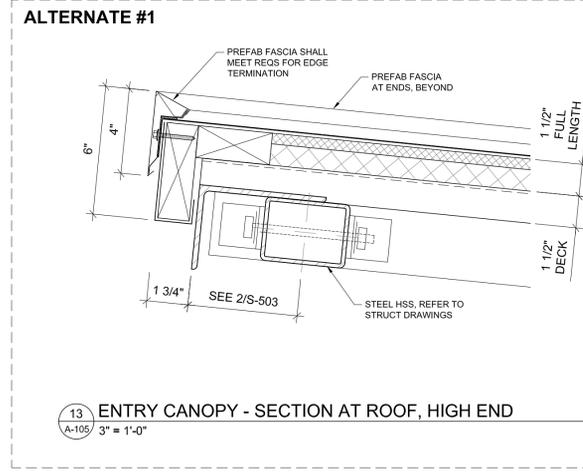
8 NEW CATWALK - SECTION AT ROOF, HIGH END
A-105/ 3" = 1'-0"



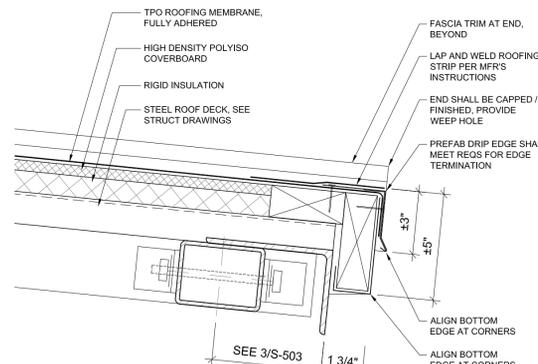
9 NEW CATWALK - CONSTELLATION SIGN EXAMPLE
A-105/ HALF SCALE



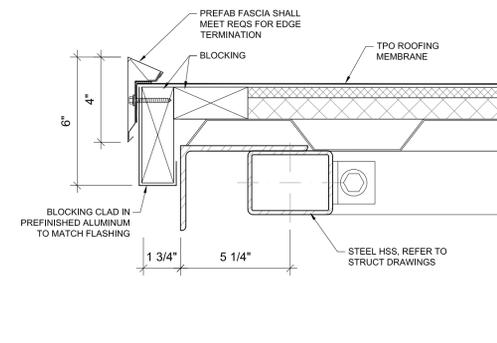
11 NEW CATWALK - SECTION AT SECOND FLR DOOR HEAD
A-105/ 3" = 1'-0"



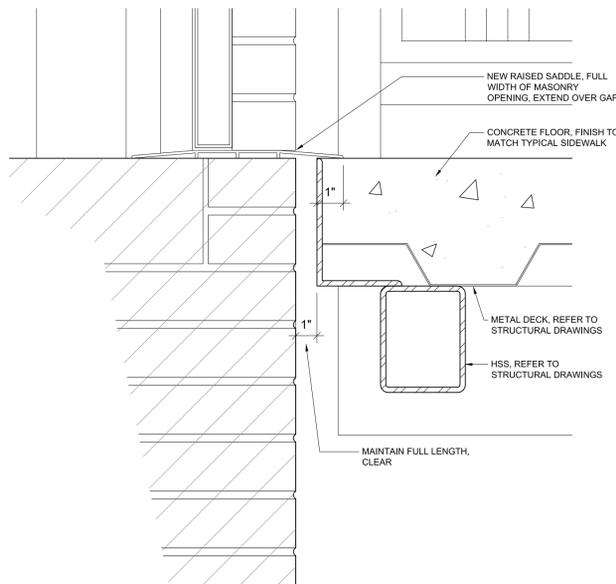
13 ENTRY CANOPY - SECTION AT ROOF, HIGH END
A-105/ 3" = 1'-0"



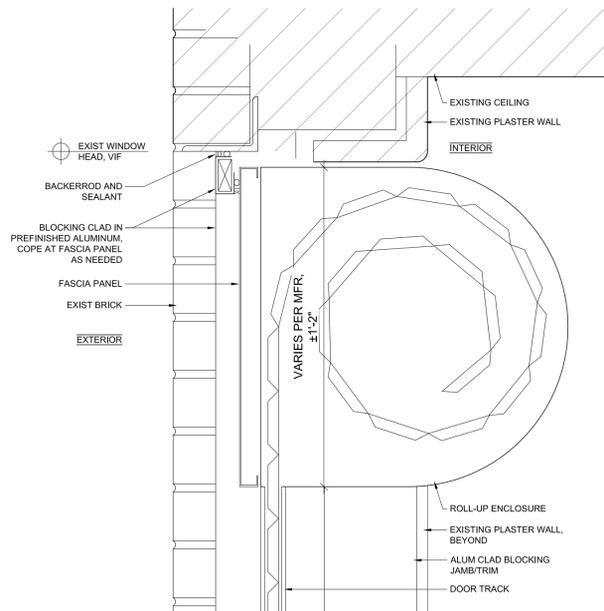
14 ENTRY CANOPY - SECTION AT ROOF, LOW END
A-105/ 3" = 1'-0"



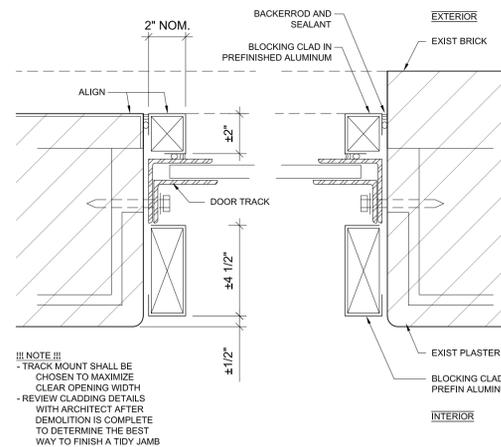
15 ENTRY CANOPY - SECTION AT ROOF, END
A-105/ 3" = 1'-0"



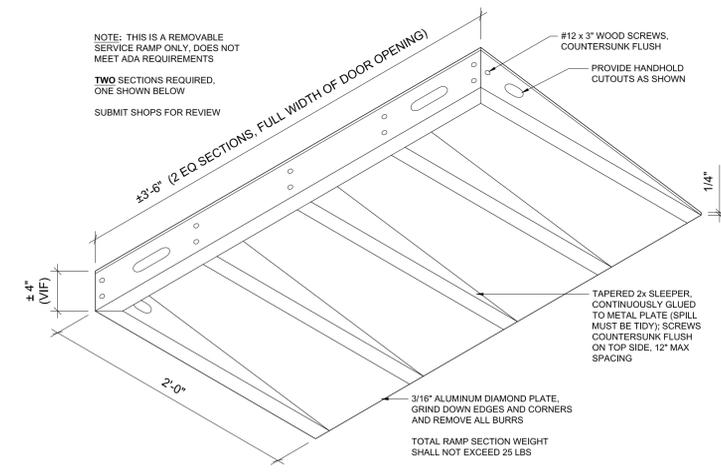
21 NEW CATWALK - SECTION AT SECOND FLOOR SILL
A-105/ 3" = 1'-0"



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



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



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



GENERAL NOTES

BUILDING CODE

- PROJECT IS DESIGNED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE - 2018, INCLUDING ALL REFERENCED STANDARDS AS LISTED IN CHAPTER 35.
- MINIMUM LOADING CONDITIONS ARE PER THE ASCE STANDARD, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ASCE 7-16".
- 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, P _g	20 PSF
FLAT-ROOF SNOW LOAD, P _f	20 PSF
TERRAIN CATEGORY	C
SNOW EXPOSURE FACTOR, C _e	1.0
IMPORTANCE FACTOR, I _s	1.0
THERMAL FACTOR, C _t	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 _s ⁰	0.417 g
1 SECOND PARAMETER, S ₁ ⁰	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

- 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.
- THE STRUCTURE IS DESIGNED TO PERFORM AS A UNIT UPON COMPLETION OF CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE 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.
- CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN THE CONTRACT DOCUMENTS AND THE ACTUAL FIELD CONDITIONS.
- 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.
- 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.
- PLAN DRAWINGS AND DETAILS SHALL NOT BE SCALED. USE DIMENSIONS NOTED. SEE ARCHITECTURAL DRAWINGS OR SUBMIT FOR CLARIFICATION.

- DO NOT ALTER THE SIZE, DIMENSION, GRADE, OR OTHER MEMBER PROPERTIES WITHOUT WRITTEN APPROVAL FROM THE ENGINEER.
- NO OPENINGS OR MODIFICATIONS TO ANY STRUCTURAL ELEMENTS SHALL BE PERFORMED WITHOUT WRITTEN APPROVAL FROM THE ENGINEER.
- 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.
- VERIFY DIMENSIONS, WEIGHTS, LOCATIONS, AND DETAILS OF ELEVATORS, STAIRS, EQUIPMENT PITS, DUNNAGE, EQUIPMENT CURBS, SPECIALTY FURNISHINGS, ETC. PRIOR TO FABRICATION OF MATERIALS.
- 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

- 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
- ENGINEER SHALL BE A REGISTERED PROFESSIONAL OR STRUCTURAL ENGINEER AS APPLICABLE IN THE STATE WHERE THE PROJECT IS LOCATED.
- SUBMITTAL SHALL BE SIGNED AND SEALED BY THE RESPONSIBLE ENGINEER PRIOR TO REVIEW BY ENGINEER OF RECORD.
- SUBMITTAL REVIEW WILL INCLUDE GENERAL CONFORMANCE TO DESIGN CRITERIA INCLUDED IN THE PROJECT DOCUMENTS.

EXISTING CONDITIONS

- CONTRACTOR SHALL BECOME FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING AND PROVIDE THE NECESSARY MEANS AND METHODS TO ACCOMPLISH THE SPECIFIED WORK.
 - FIELD VERIFY ALL CONDITIONS, SIZES, SPACING AND DIMENSIONS OF EXISTING STRUCTURES OR OBSTACLES PRIOR TO FABRICATION AND/OR NEW CONSTRUCTION. CONTACT ENGINEER IF EXISTING CONDITIONS, ETC. VARY FROM THOSE SHOWN ON THESE DRAWINGS.
 - 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
- 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.
 - 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.
 - 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.
 - 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.
 - AT THE CONCLUSION OF CONSTRUCTION, A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF PREVIOUSLY NOTED DISCREPANCIES SHALL BE SUBMITTED.
 - STATEMENT OF SPECIAL INSPECTION REQUIREMENTS FOR SEISMIC RESISTANCE SHALL BE IN ACCORDANCE WITH IBC SECTION 1705 TOGETHER WITH LOCAL AND STATE AMENDMENTS.

FOUNDATION

- THE FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL REPORT. SEE DESIGN CRITERIA.
- FOUNDATIONS SHALL BEAR ON VIRGIN SOILS OR ENGINEERED FILL CAPABLE OF PROVIDING THE DESIGN ALLOWABLE BEARING PRESSURE.
- 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.
- PROVIDE DEWATERING SYSTEMS AS REQUIRED TO KEEP EXCAVATIONS FREE OF WATER.
- DO NOT PLACE CONCRETE IN EXCAVATIONS WITH ICE OR FROZEN GROUND. PROTECT SUBGRADE AS NECESSARY.

- FOOTINGS PLACED BELOW GRADE MAY BE EARTH FORMED PROVIDED AN ADDITIONAL INCH OF CONCRETE COVER IS PROVIDED ALL AROUND.
- THE CONTRACTOR SHALL SUBMIT, FOR REVIEW, CHECKED SHOP DRAWINGS FOR ALL REINFORCING MATERIALS.

CONCRETE

- CONCRETE MATERIALS AND CONSTRUCTION SHALL ADHERE TO THE "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY", ACI 318, YEAR ACCORDING TO PROJECT BUILDING CODE.
- GENERAL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR STRUCTURAL CONCRETE", ACI 301.
- 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
- 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.
- 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.
- 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
- 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.
- 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.
- 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.
- 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.
- 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.
- PROVIDE 3/4" CHAMFERS AT ALL EDGES THAT ARE EXPOSED TO VIEW IN THE FINISHED STRUCTURE UNLESS SHOWN OTHERWISE IN THE ARCHITECTURAL DRAWINGS.
- CONCRETE EXPOSED TO FREEZE THAW CYCLES SHALL HAVE 6% AIR ENTRAINMENT. DO NOT AIR ENTRAIN CONCRETE TO BE TROWEL FINISHED.
- CONCRETE FINISH SHALL CONFORM TO ACI 301 UNO ON ARCHITECTURAL DRAWINGS.
- 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.
- 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.
- ALL STEEL ELEMENTS LOCATED BELOW GRADE SHALL BE COATED WITH A MINIMUM OF 1/8" MASTIC AND COVERED WITH 3" MINIMUM CONCRETE FOR PROTECTION.
- EQUIPMENT PADS, TOPPING SLABS, FILL SLABS, ETC. SHALL BE REINFORCED WITH 6x6 - W2.9xW2.9 WELDED WIRE FABRIC UNO.
- 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.
- 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.
- 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.
- CONDUITS, PIPES, AND SLEEVES PASSING THROUGH A SLAB, WALL, OR BEAM SHALL NOT IMPAIR SIGNIFICANTLY THE STRENGTH OF THE CONSTRUCTION.
- CONDUITS AND PIPES EMBEDDED WITHIN A SLAB, WALL, OR BEAM (OTHER THAN THOSE MERELY PASSING THROUGH) SHALL SATISFY THE FOLLOWING:

WIDE FLANGE SHAPES	A992
STEEL PIPE	A53, Gr B
HOLLOW STRUCTURAL SECTIONS	A500, Gr C
CHANNELS, ANGLES, PLATES	A36

- THEY SHALL NOT BE LARGER IN OUTSIDE DIAMETER THAN 1/2 THE OVERALL THICKNESS OF THE SLAB, WALL, OR BEAM IN WHICH THEY ARE EMBEDDED;
- THEY SHALL NOT BE SPACED CLOSER THAN 3 DIAMETERS OR WIDTHS;
- THEY SHALL NOT SIGNIFICANTLY IMPAIR THE STRENGTH OF THE CONSTRUCTION.
- CONCRETE COVER FOR PIPES, CONDUIT, AND THEIR FITTINGS SHALL NOT BE LESS THAN 1 1/2 INCH FOR CONCRETE EXPOSED TO EARTH OR WEATHER, NOR LESS THAN 3/4 INCH FOR CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND.

REINFORCED MASONRY

- 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.
- 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.
- MASONRY UNITS SHALL BE NORMAL WEIGHT CONCRETE, 125 PCF MINIMUM, PER ASTM C90.
- 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.
- REINFORCING SHALL COMPLY WITH ASTM A615, GRADE 60. JOINT REINFORCING SHALL COMPLY WITH ASTM A951.
- CONCRETE CONTRACTOR SHALL FURNISH DOWELS PROJECTING FROM CAST IN PLACE CONCRETE. MASONRY CONTRACTOR SHALL FURNISH ALL OTHER REINFORCING.
- 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.
- WHERE DOWELS DO NOT LINE UP WITHIN A BLOCK CELL, THEY MAY BE SLOPED NO MORE THAN ONE HORIZONTAL TO SIX VERTICAL.
- REINFORCING AT SPLICES SHALL BE LAPPED ACCORDING TO ACI 530/530.1, MINIMUM OF 24". REINFORCING SHALL BE WIRED TOGETHER.
- VERTICAL REINFORCING SHALL BE POSITIONED TO MAINTAIN A CLEARANCE OF 1/2" FROM THE MASONRY SURFACE.
- REINFORCING SHALL BE FIRMLY POSITIONED WITHIN THE MASONRY CONSTRUCTION AND INSPECTED PRIOR TO THE START OF GROUTING.
- CONTROL JOINTS SHALL BE LOCATED PER ARCH DWGS. IF CONTROL JOINTS ARE NOT LOCATED, SUBMIT A CONTROL JOINT PLAN FOR REVIEW.
- 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.
- ALL ANCHOR BOLTS, HEADED STUDS, REINFORCING, POST-INSTALLED ANCHORS, ETC. SHALL BE PLACED IN SOLID GROUTED CELLS.
- ALL MASONRY BELOW GRADE SHALL BE GROUTED SOLID. CAVITIES OF MULTI-WYTHE WALLS BELOW GRADE SHALL BE GROUTED SOLID. DO NOT EMBED ALUMINUM ITEMS IN MASONRY UNLESS EFFECTIVELY COATED TO RESIST THE REACTION DUE TO DISSIMILAR MATERIALS.
- 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.
- 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.
- OPENINGS SHALL BE CORED OR CUT WITH A MASONRY SAW LEAVING CLEAN EDGES AND NO OVERCUT CORNERS.
- TEMPORARY SHORING/BRACING OF WALLS IS BY CONTRACTOR. DO NOT REMOVE UNTIL THE THE STRUCTURE'S LATERAL LOAD RESISTING SYSTEM IS COMPLETE.
- INFORMATION FOR MASONRY CONSTRUCTION IS PROVIDED FOR THE STRUCTURAL REQUIREMENTS ONLY. ADDITIONAL INFORMATION MAY BE FOUND ON DRAWINGS BY OTHER DISCIPLINES.
- 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

- 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.
- 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.
- GALVANIZE ALL STRUCTURAL STEEL PERMANENTLY EXPOSED TO THE WEATHER. CLEAN AND TOUCH UP GALVANIZING AFTER ERECTION.
- SEE SPECIFICATION SECTION 051200, "STRUCTURAL STEEL FRAMING", FOR ADDITIONAL REQUIREMENTS NOT NOTED HEREIN.
- 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

- 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.
- 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).
- ANCHOR BOLTS SHALL BE ASTM F1554, GRADE 36.
- 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.
- SPLICING OF STEEL MEMBERS, UNLESS SHOWN ON THE DRAWINGS, IS PROHIBITED WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
- 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.
- NO FINAL BOLTING OR WELDING SHALL BE MADE UNTIL AS MUCH OF THE STRUCTURE AS WILL BE STIFFENED THEREBY HAS BEEN PROPERLY ALIGNED.
- ALL EXPOSED STRUCTURAL STEEL IS TO BE PREPARED FOR ARCHITECTURAL FINISHES ACCORDING TO AISC CODE OF STANDARD PRACTICE, SECTION 10, ARCHITECTURALLY EXPOSED STRUCTURAL STEEL.
- AN "UNSTABLE STEEL FRAME" SHALL BE CONSIDERED TO EXIST UNTIL ALL FLOOR AND ROOF STRUCTURE AND PERMANENT BRACING OR SHEAR WALLS ARE COMPLETED.
- 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.
- 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".
- THE MINIMUM NUMBER OF BOLTS PER CONNECTION SHALL BE TWO (2) - 3/4 INCH DIAMETER, A325 BOLTS.
- MINIMUM FILLET WELD SIZES SHALL COMPLY WITH THE AISC SPECIFICATION REQUIREMENTS, BUT SHALL NOT BE LESS THAN 1/4 INCH, UNO.
- THE CONTRACTOR SHALL SUBMIT DETAILED, ENGINEERED, COORDINATED AND CHECKED SHOP DRAWINGS FOR ALL STRUCTURAL STEEL MEMBERS FOR REVIEW PRIOR TO THE START OF FABRICATION.
- ALL BEAMS SHALL BE FABRICATED WITH THE NATURAL CAMBER UP.
- ALL STRUCTURAL STEEL BEAMS FRAMING INTO NEW AND/OR EXISTING CONCRETE OR MASONRY MEMBERS SHALL BE DETAILED TO SUIT THE HORIZONTAL FIELD TOLERANCES.
- 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.
- 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.
- 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



EXPIRES 12-31-2020

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

Oates
St. Louis
Belleville
St. Charles
Missouri Design Pro License No. 001106



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: 10/18/19

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

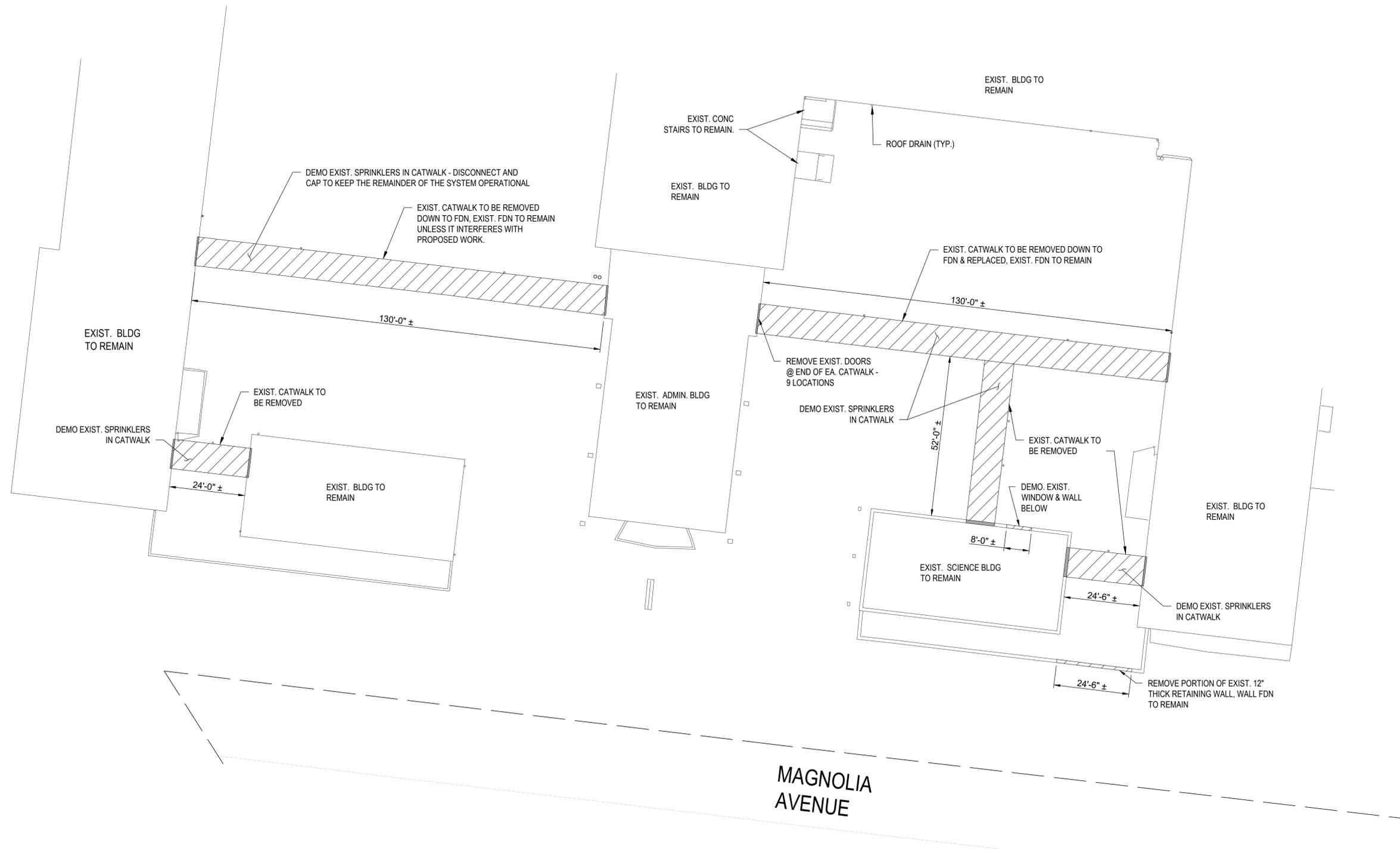
SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:

S-001

46 OF 74 SHEETS
10/18/2019



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



720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Oates Associates, Inc.
Missouri Design Firm License No. 001166



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: 10/18/19

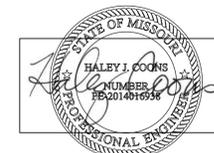
CAD DWG FILE: _____
DRAWN BY: SLP
CHECKED BY: HJC
DESIGNED BY: SLP

SHEET TITLE:
STRUCTURAL
DEMOLITION
PLAN

SHEET NUMBER:

SD-101

48 OF 74 SHEETS
10/18/2019



EXPIRES 12-31-2020

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



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: 10/18/19

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

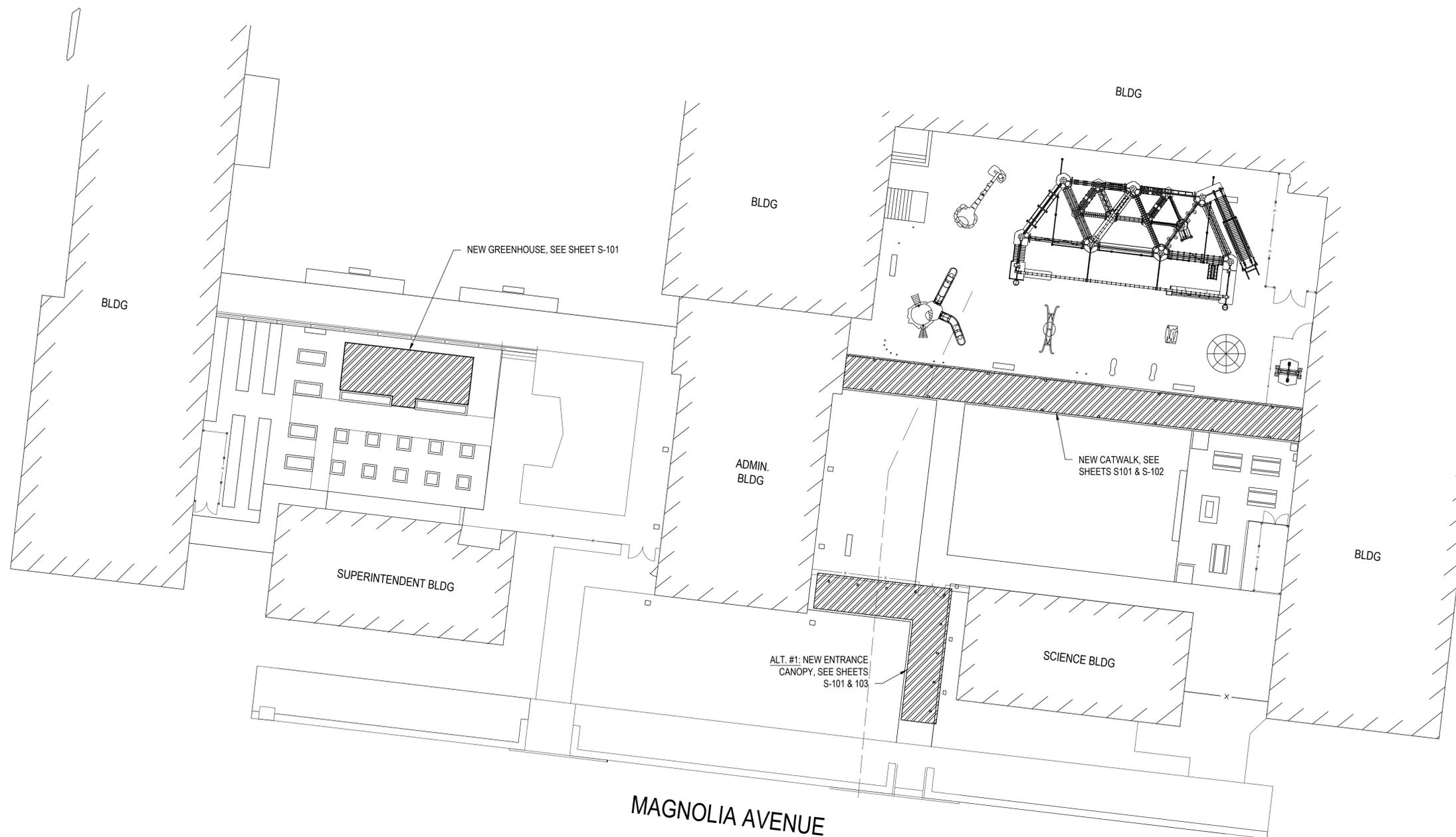
SHEET TITLE:

OVERALL SITE
PLAN

SHEET NUMBER:

S-100

49 OF 74 SHEETS
10/18/2019



1 OVERALL SITE PLAN
S-100 SCALE: 1/16"=1'-0"





10-18-19
EXPIRES 12-31-2020

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

Callinville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRMS 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: 10/18/19

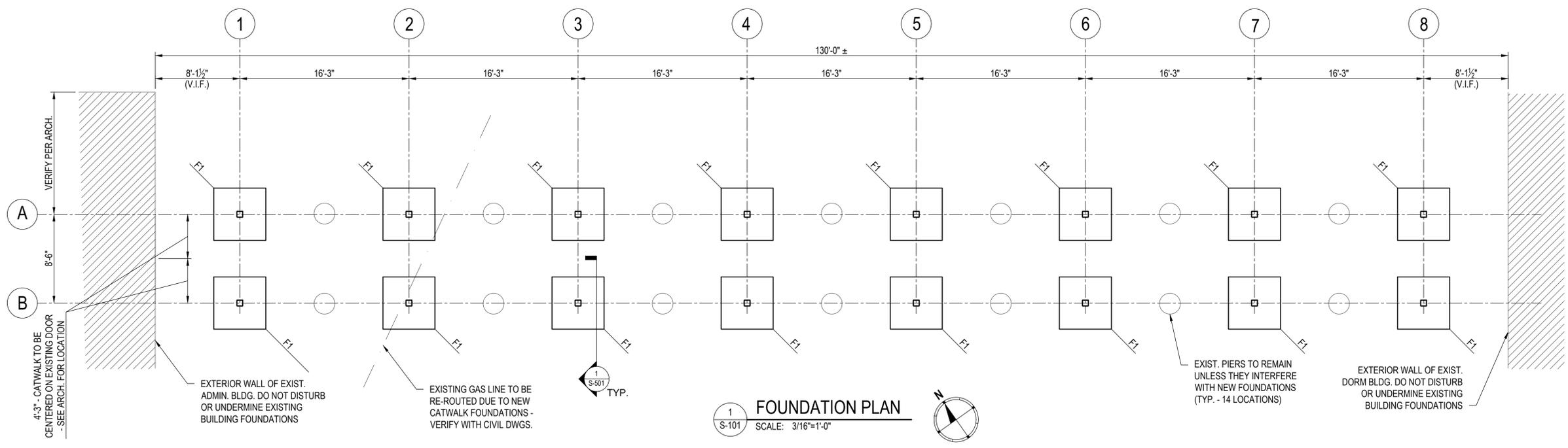
CAD DWG FILE:
DRAWN BY: SLP
CHECKED BY: HJC
DESIGNED BY: SLP

SHEET TITLE:
**FOUNDATION
PLANS**

SHEET NUMBER:

S-101

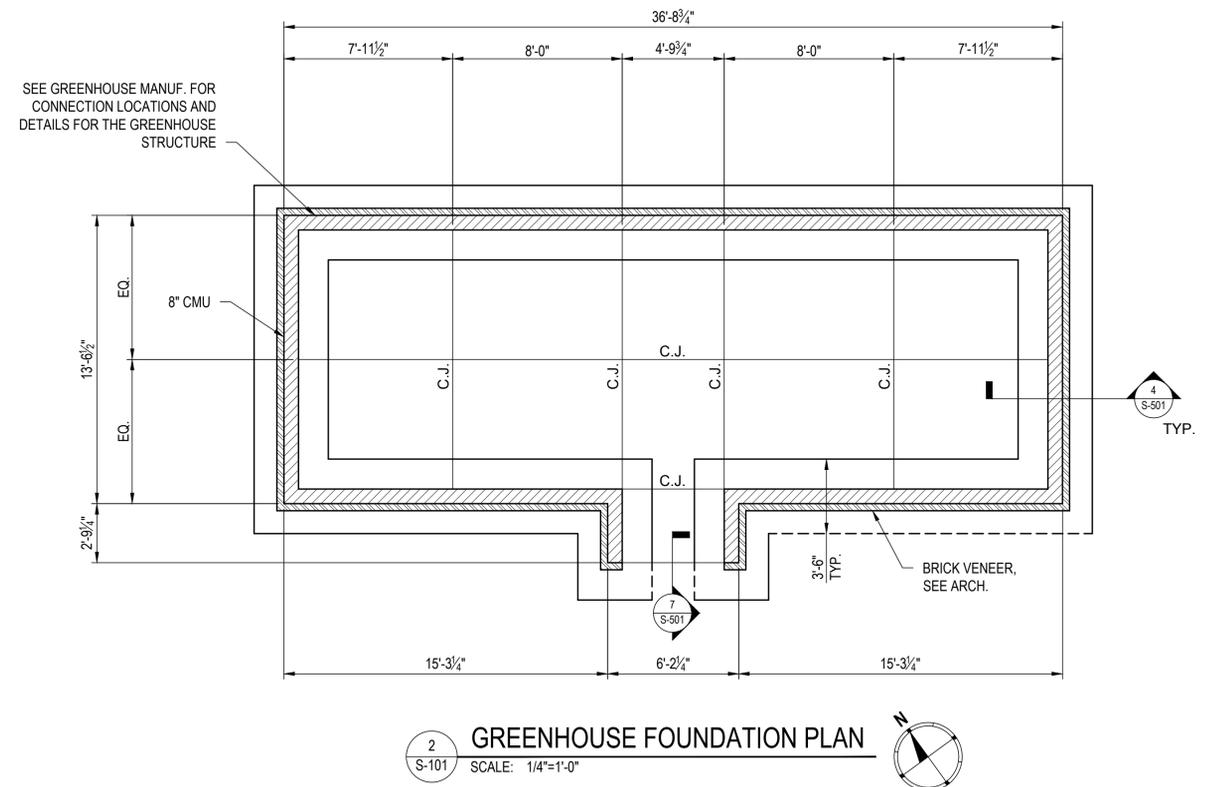
50 OF 74 SHEETS
10/18/2019



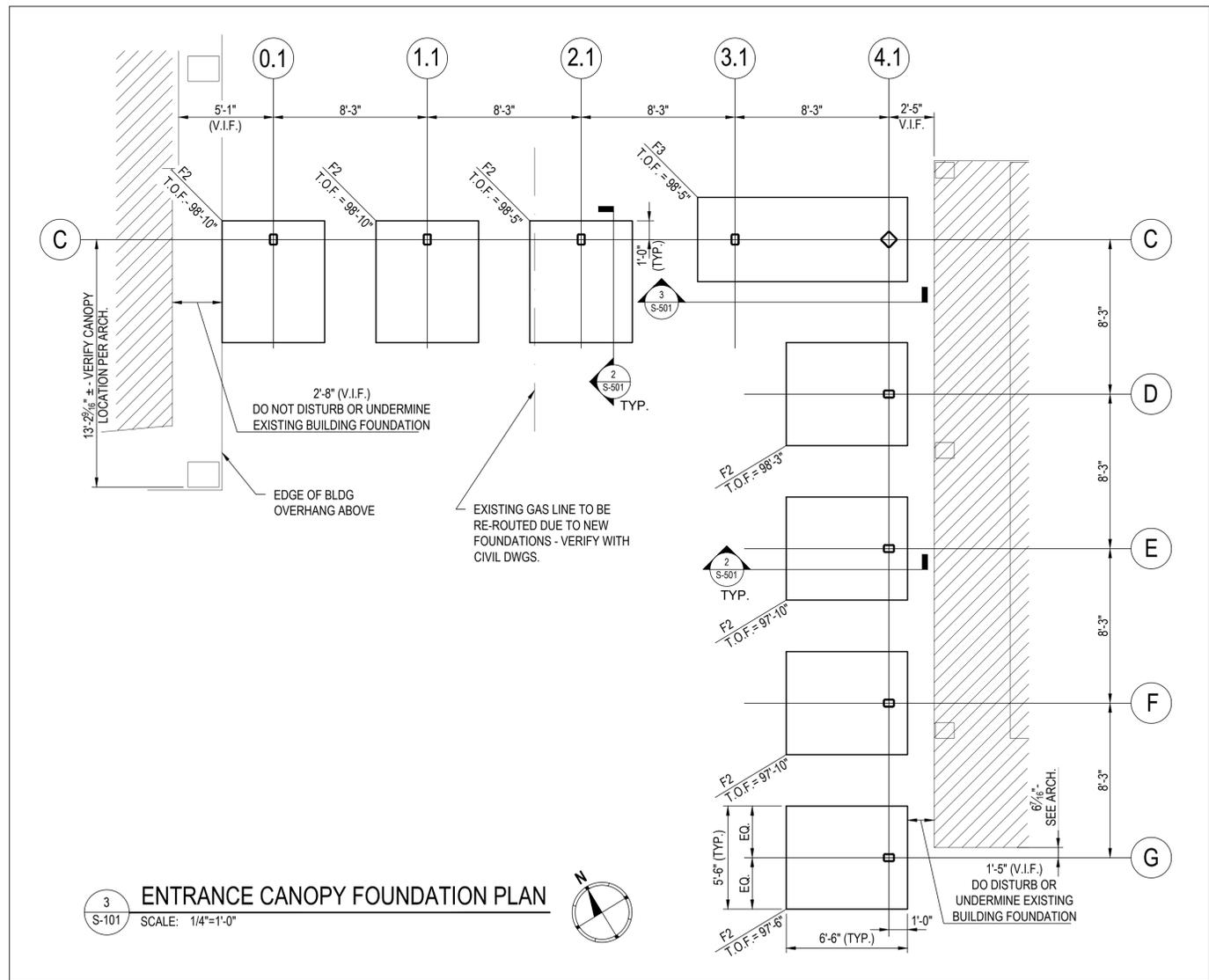
1
S-101 FOUNDATION PLAN
SCALE: 3/16"=1'-0"

FOOTING SCHEDULE		
MARK	SIZE (LxWxD)	TOP & BOT. REINF. (EA. WAY)
F1	5'-0" x 5'-0" x 1'-0"	(6) #5
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
- SEE SHEETS S-001 & S-002 FOR GENERAL NOTES & TYPICAL DETAILS.
 - SEE SITE PLAN, SHEET S-100, FOR EAST CATWALK, ENTRANCE CANOPY & GREENHOUSE LOCATION
 - TOP OF PILASTER ELEVATION (T.O.F.) = 98'-10" (U.N.O.)
 - TOP OF FOOTING ELEVATION @ CATWALK (T.O.F.) = 97'-10" (U.N.O.)



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



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

ALTERNATE #1: ENTRANCE CANOPY



EXPIRES 12-31-2020

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



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: 10/18/19

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

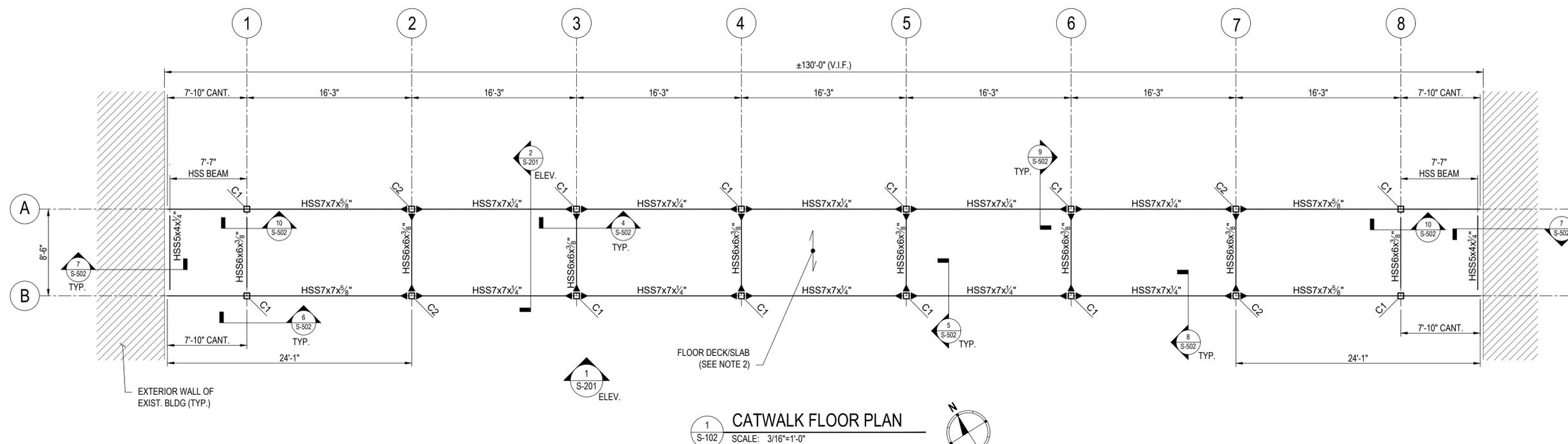
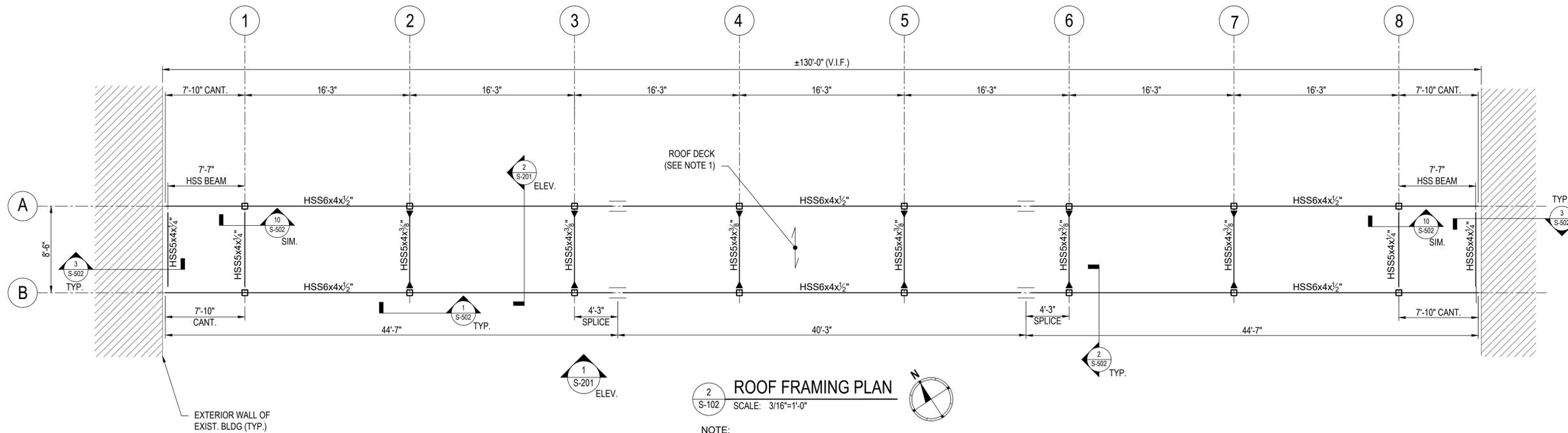
SHEET TITLE:

CATWALK
FRAMING
PLANS

SHEET NUMBER:

S-102

51 OF 74 SHEETS
10/18/2019



COLUMN SCHEDULE			
MARK	SIZE	BASE PLATE (TYPE)	A.B. w/ EMB. DEPTH
C1	HSS 7 x 7 x 3/8"	14x14x3/4" (TYPE A)	4 - 3/4"Ø x 9" EMB.
C2	HSS 7 x 7 x 1/2"	14x14x3/4" (TYPE A)	4 - 3/4"Ø x 9" EMB.
C3	HSS 7 x 5 x 3/8"	15x15x1-1/4" (TYPE B)	4 - 3/4"Ø x 12" EMB.
C4	HSS 7 x 7 x 3/8"	15x15x1-1/4" (TYPE B)	4 - 3/4"Ø x 12" EMB.

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

- PLAN NOTES:
- CATWALK ROOF CONSTRUCTION: 3" x 18/20 GA. CELLULAR METAL ROOF DECK TYPE NP. SEE TYPICAL METAL DECK DETAILS ON SHEET S-002 FOR CONNECTION TO STRUCTURE.
 - CATWALK FLOOR CONSTRUCTION: 4" CONC. SLAB ON 2" x 18 GA. METAL DECK TYPE VLI. SEE TYPICAL METAL DECK DETAILS ON SHEET S-002 FOR CONNECTION TO STRUCTURE.
 - MOMENT CONNECTION INDICATED BY



EXPIRES 12-31-2020

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



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: 10/18/19

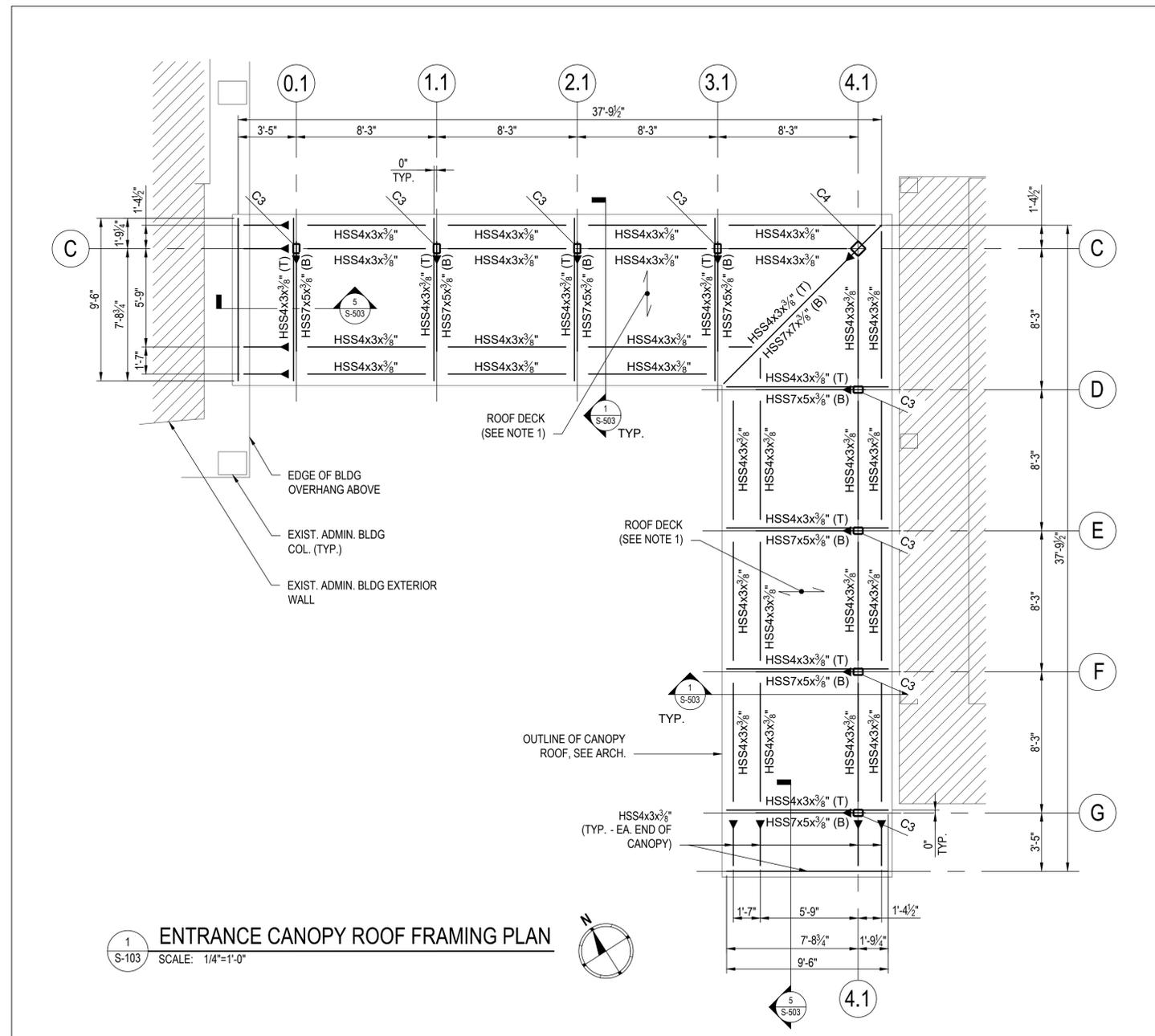
CAD DWG FILE: _____
DRAWN BY: SLP
CHECKED BY: HJC
DESIGNED BY: SLP

SHEET TITLE:
ENTRANCE
CANOPY
FRAMING PLAN

SHEET NUMBER:

S-103

52 OF 74 SHEETS
10/18/2019



ALTERNATE #1: ENTRANCE CANOPY

COLUMN SCHEDULE			
MARK	SIZE	BASE PLATE (TYPE)	A.B. w/ EMB. DEPTH
C1	HSS 7 x 7 x 3/8"	14x14x3/4" (TYPE A)	4 - 3/4"Ø x 9" EMB.
C2	HSS 7 x 7 x 1/2"	14x14x3/4" (TYPE A)	4 - 3/4"Ø x 9" EMB.
C3	HSS 7 x 5 x 3/8"	15x15x1-1/4" (TYPE B)	4 - 3/4"Ø x 12" EMB.
C4	HSS 7 x 7 x 3/8"	15x15x1-1/4" (TYPE B)	4 - 3/4"Ø x 12" EMB.

NOTES:

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

PLAN NOTES:

- 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.
- MOMENT CONNECTION INDICATED BY



10-18-19
EXPIRES 12-31-2020

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



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: 10/18/19

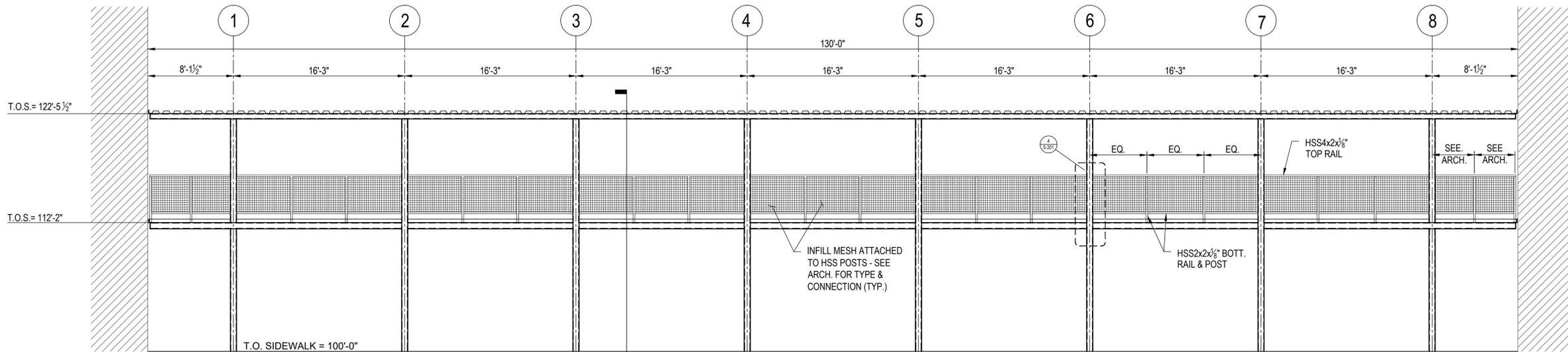
CAD DWG FILE: _____
DRAWN BY: SLP
CHECKED BY: HJC
DESIGNED BY: SLP

SHEET TITLE:
CATWALK
ELEVATIONS

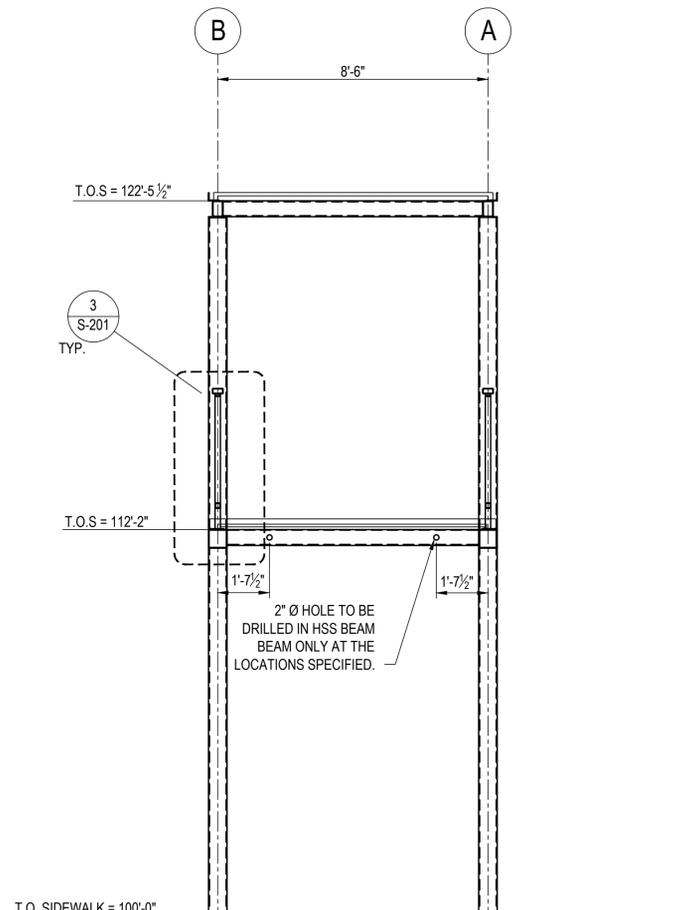
SHEET NUMBER:

S-201

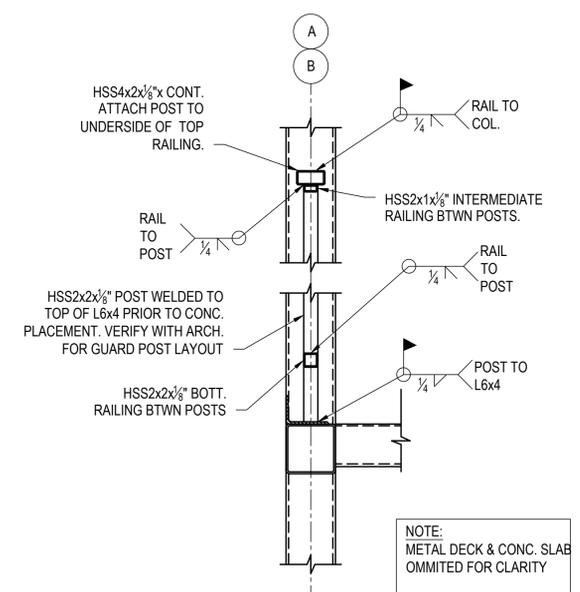
53 OF 74 SHEETS
10/18/2019



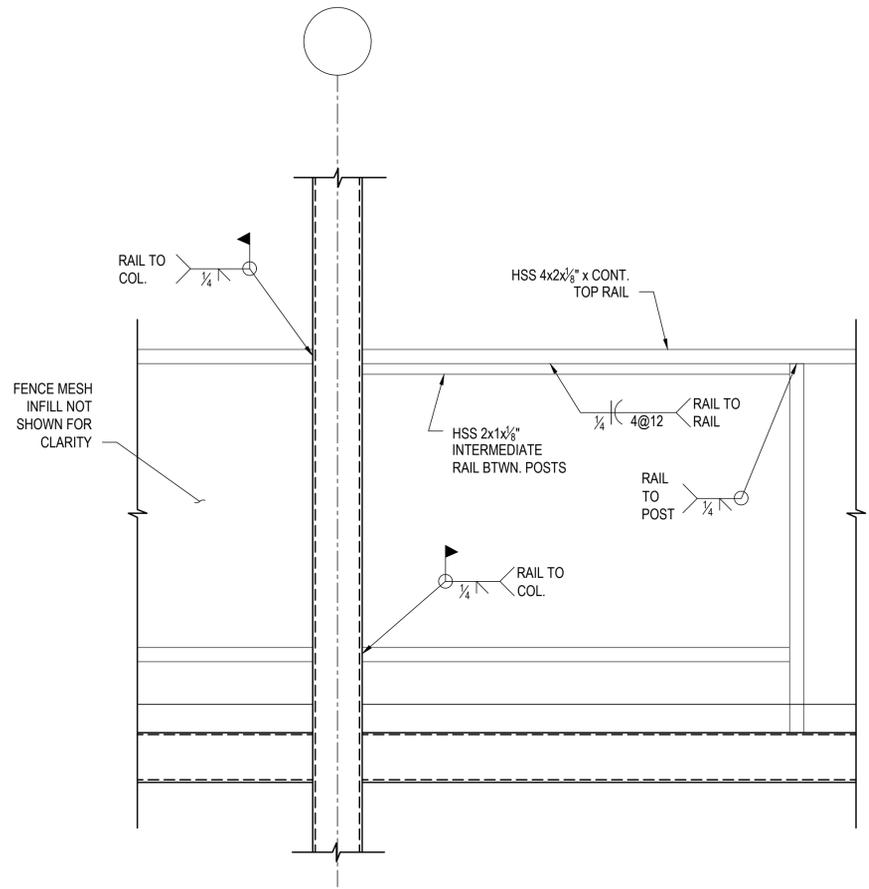
1 CATWALK ELEVATION
S-201 SCALE: 3/16"=1'-0"



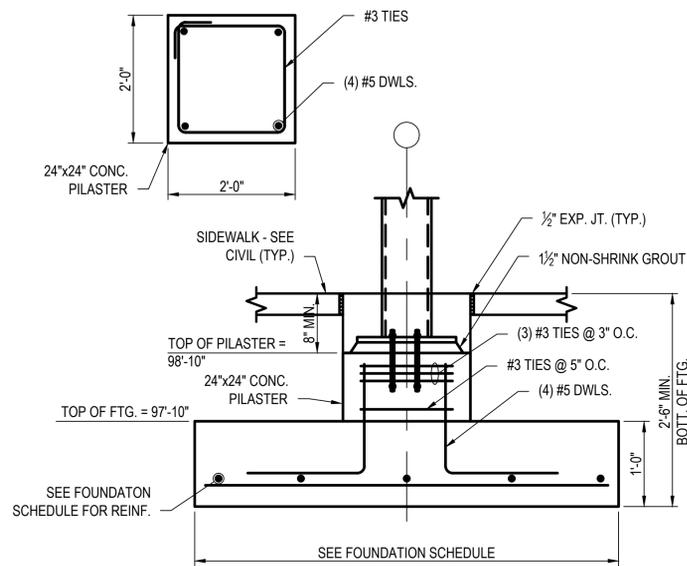
2 SECTION
S-201 SCALE: 3/8"=1'-0"



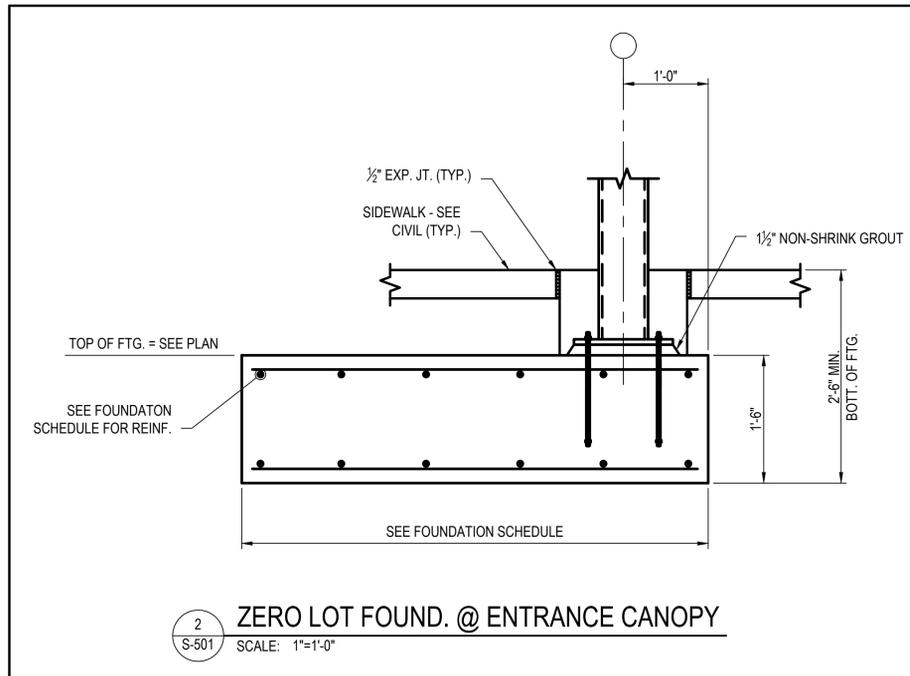
3 CATWALK GUARDRAIL
S-201 SCALE: 1"=1'-0"



4 CATWALK GUARDRAIL
S-201 SCALE: 1"=1'-0"

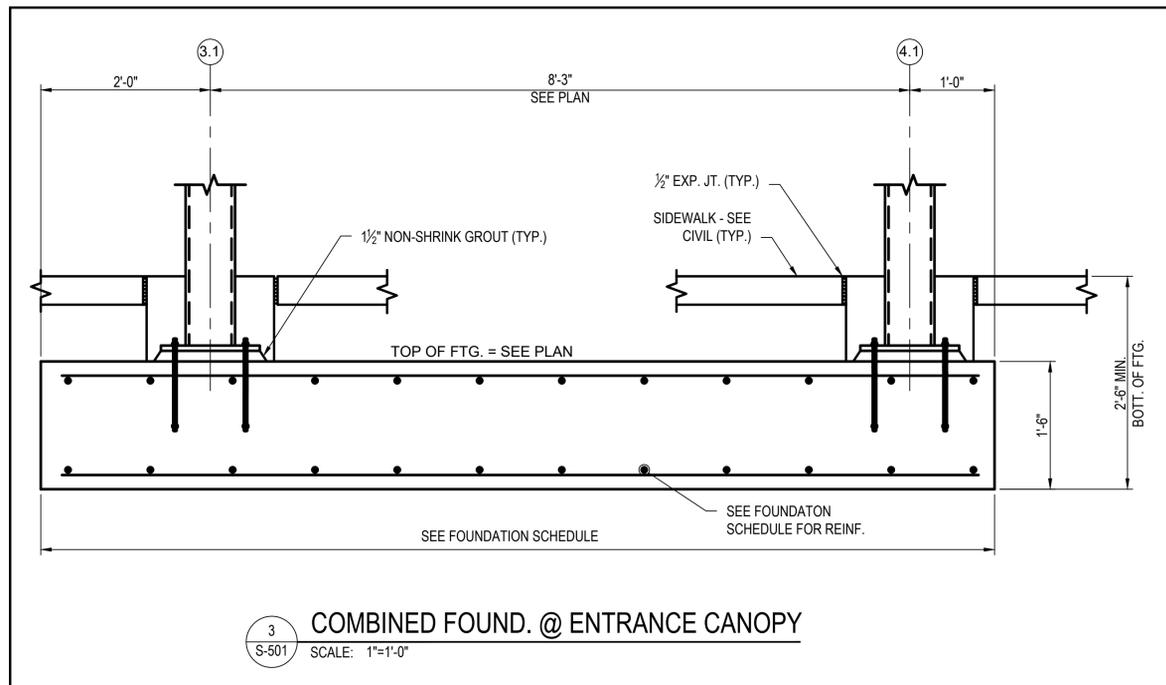


1 TYP. FOUNDATION @ CATWALK
S-501 SCALE: 1"=1'-0"



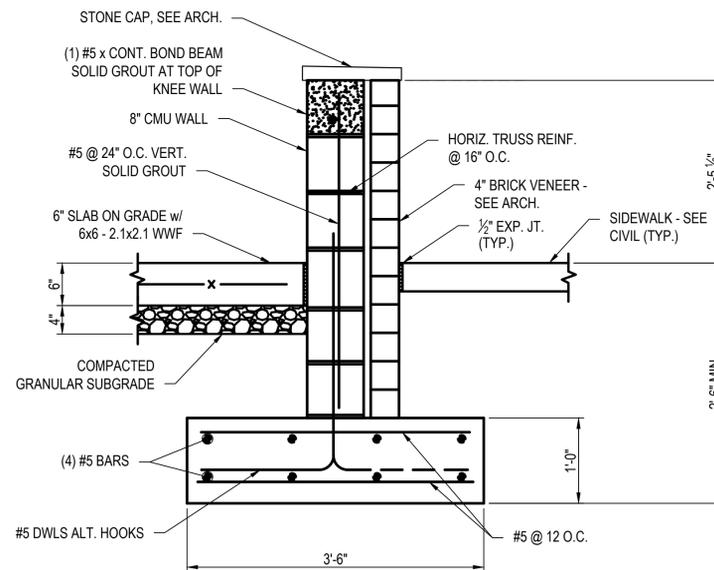
2 ZERO LOT FOUND. @ ENTRANCE CANOPY
S-501 SCALE: 1"=1'-0"

ALTERNATE #1 - ENTRANCE CANOPY

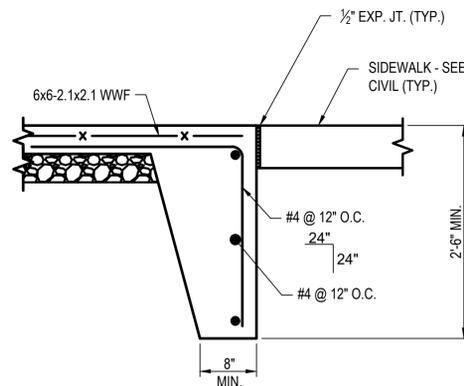


3 COMBINED FOUND. @ ENTRANCE CANOPY
S-501 SCALE: 1"=1'-0"

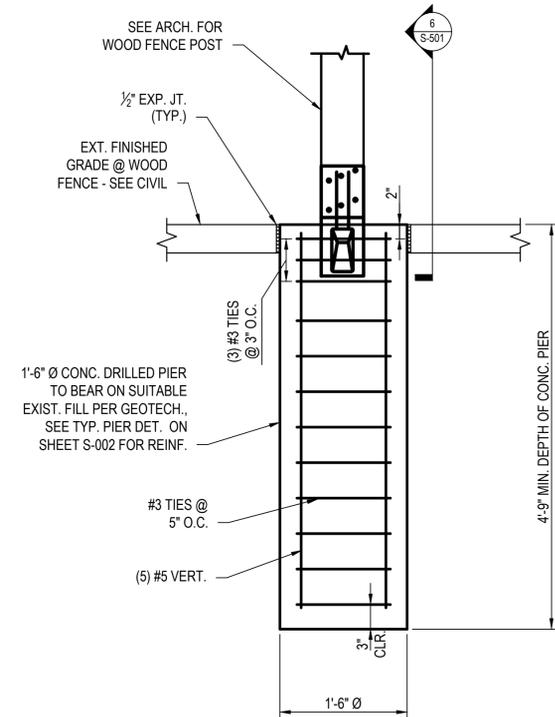
ALTERNATE #1 - ENTRANCE CANOPY



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

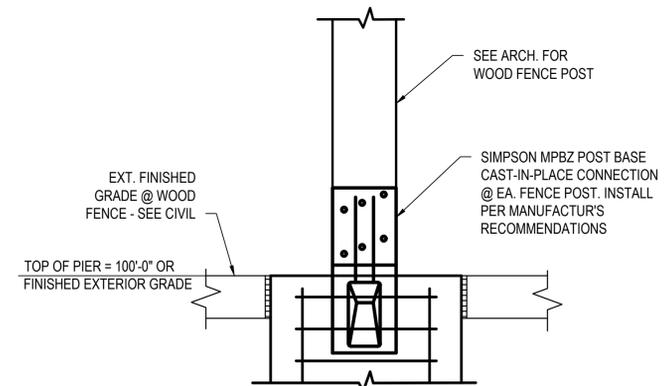


7 SECTION
S-501 SCALE: 1"=1'-0"



5 TYP. FENCE POST FOUNDATION
S-501 SCALE: 1"=1'-0"

NOTE:
1. FENCE HEIGHT NOT TO EXCEED 7-FEET.



6 TYP. WOOD FENCE POST
S-501 SCALE: 1 1/2"=1'-0"



10-18-19
EXPIRES 12-31-2020

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



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:	10/18/19

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

SHEET TITLE:
FOUNDATION
DETAILS

SHEET NUMBER:

S-501

54 OF 74 SHEETS
10/18/2019



10-18-19
EXPIRES 12-31-2020

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



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: 10/18/19

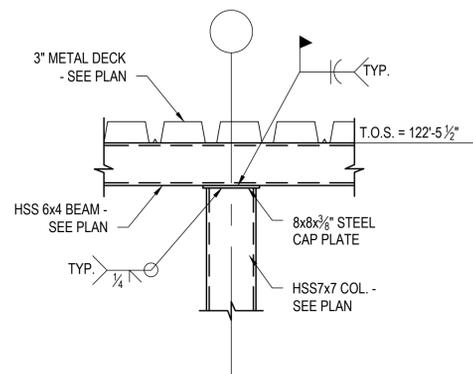
CAD DWG FILE:
DRAWN BY: SLP
CHECKED BY: HJC
DESIGNED BY: SLP

SHEET TITLE:
CATWALK
FRAMING DETAILS

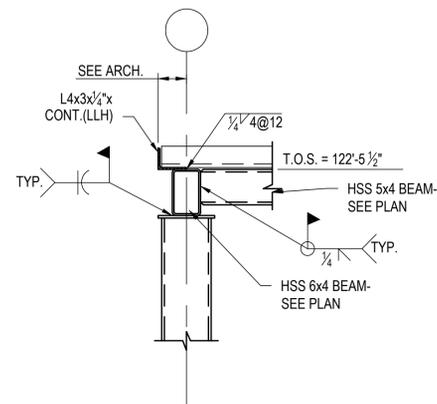
SHEET NUMBER:

S-502

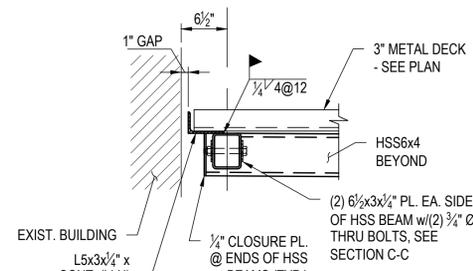
55 OF 74 SHEETS
10/18/2019



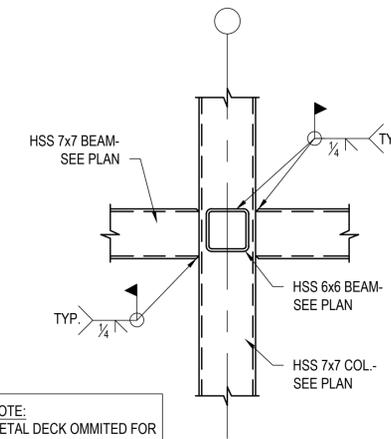
1 SECTION
S-502 SCALE: 1"=1'-0"



2 SECTION
S-502 SCALE: 1"=1'-0"

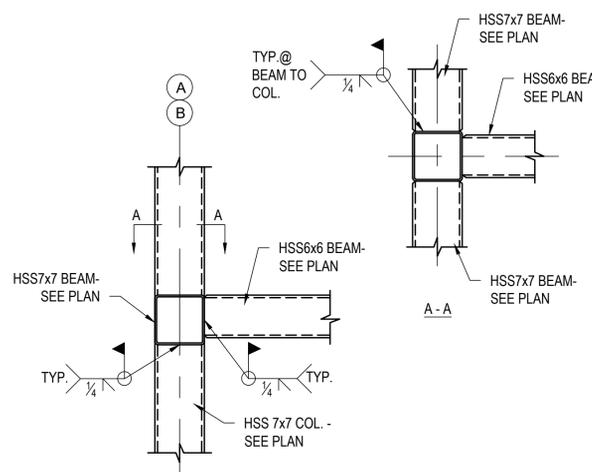


3 SECTION
S-502 SCALE: 1"=1'-0"

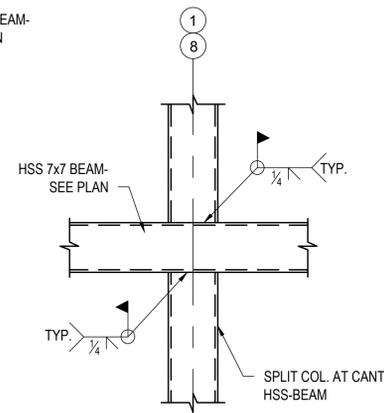


4 SECTION
S-502 SCALE: 1"=1'-0"

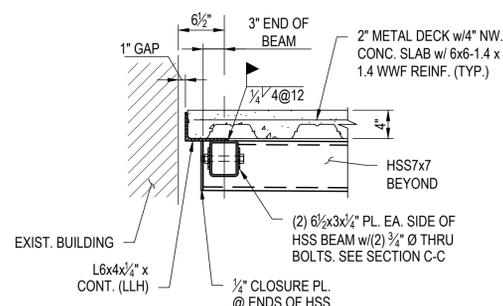
NOTE:
METAL DECK OMITTED FOR
CLARITY



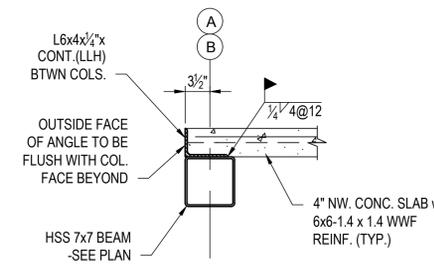
5 SECTION
S-502 SCALE: 1"=1'-0"



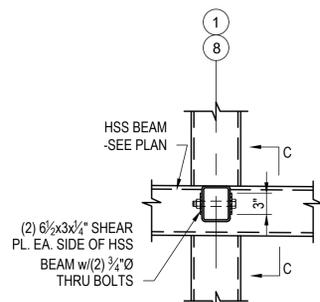
6 SECTION
S-502 SCALE: 1"=1'-0"



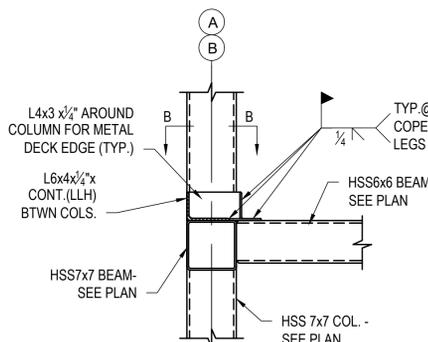
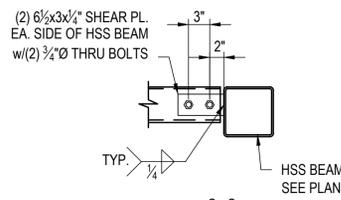
7 SECTION
S-502 SCALE: 1"=1'-0"



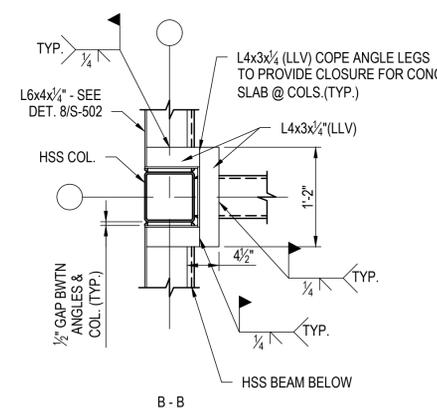
8 SECTION
S-502 SCALE: 1"=1'-0"



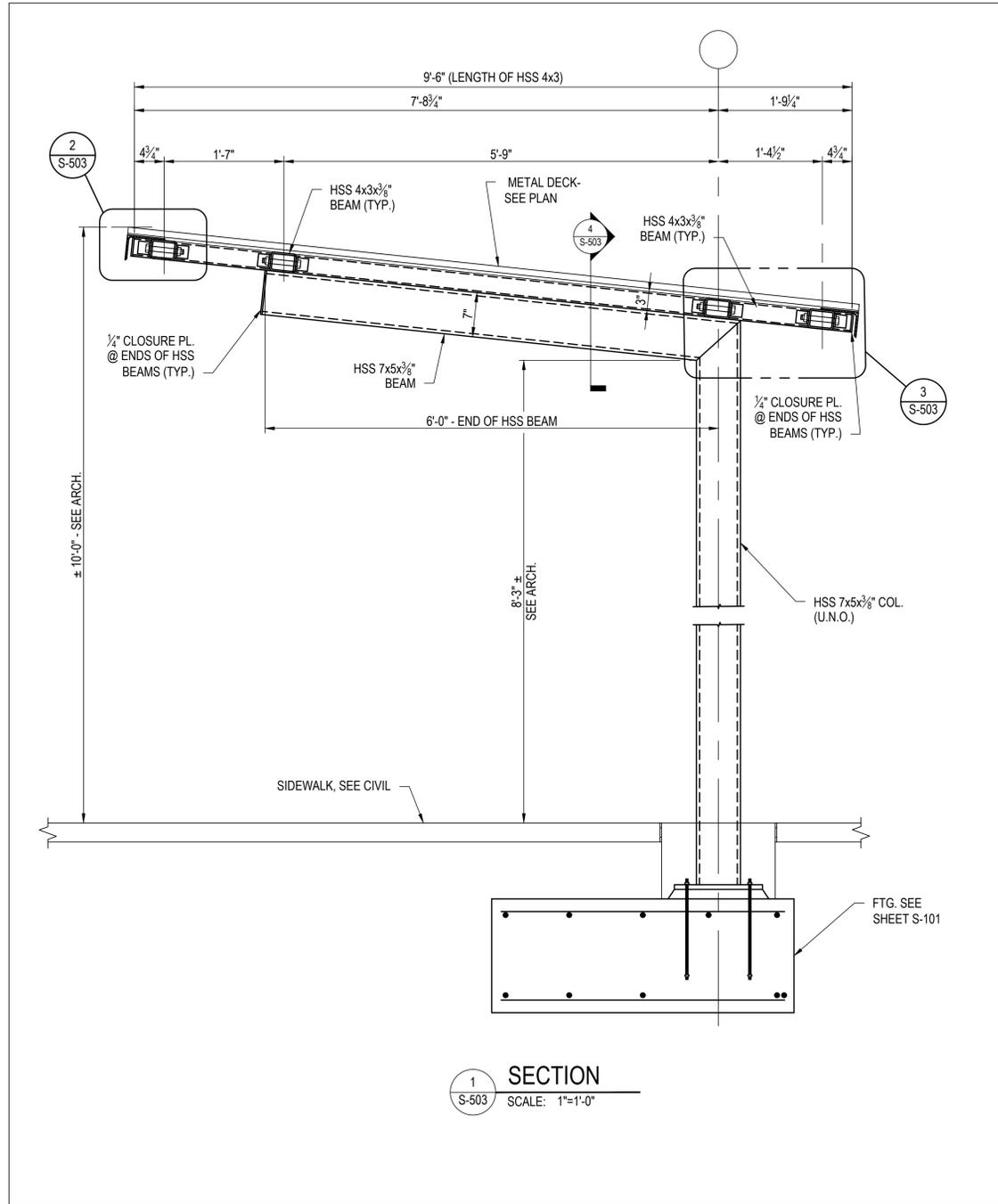
10 SECTION
S-502 SCALE: 1"=1'-0"



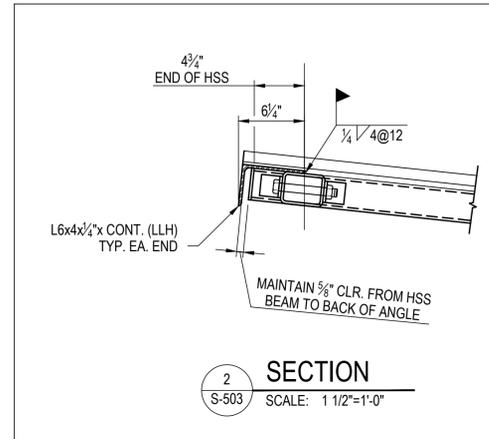
9 SECTION
S-502 SCALE: 1"=1'-0"



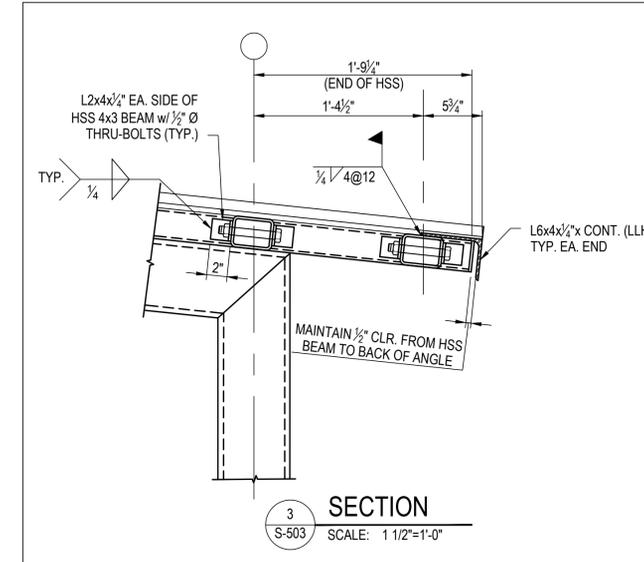
NOTE:
1. METAL DECK OMITTED FOR
CLARITY
2. SIM. CONNECTION AT
CATWALK FLOOR & ROOF



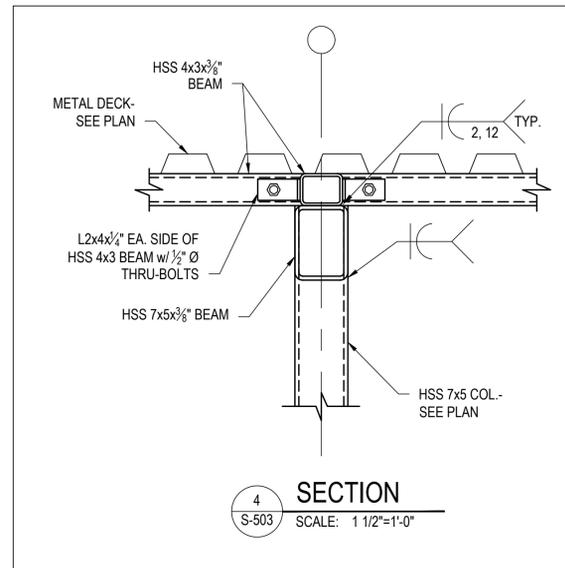
ALTERNATE #1: ENTRANCE CANOPY



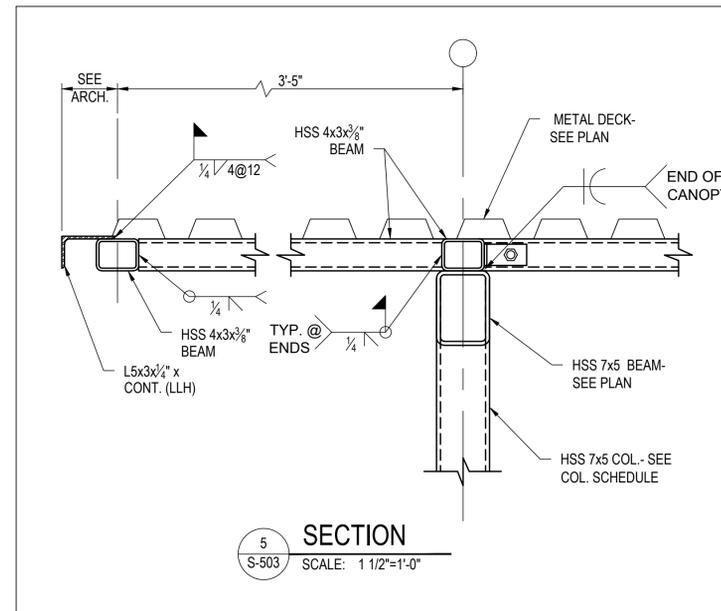
ALTERNATE #1: ENTRANCE CANOPY



ALTERNATE #1: ENTRANCE CANOPY



ALTERNATE #1: ENTRANCE CANOPY



ALTERNATE #1: ENTRANCE CANOPY



10-18-19
EXPIRES 12-31-2020

720 Olive, Suite 700
St. Louis, MO 63101
314.588.8381
www.oatesassociates.com
Oates Associates, Inc.
St. Louis, Belleville, St. Charles
MISSOURI DESIGN FIRMS LICENSE NO. 001166



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: 10/18/19

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

SHEET TITLE:
ENTRANCE CANOPY
FRAMING DETAILS

SHEET NUMBER:

S-503

56 OF 74 SHEETS
10/18/2019



MICHAEL R. HOFF
MO. LICENSE NO. 2013000576 EXP: 12/31/2019



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

57 OF 74 SHEETS
10/18/2019

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
SIS	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
	ACID VENT
	ACID WASTE
	DRAIN PIPING
	DEIONIZED WATER PIPING
	REVERSE OSMOSIS PIPING (RO)
	DOMESTIC COLD WATER PIPING (CW)
	DOMESTIC HOT WATER PIPING (HW)
	DOMESTIC HOT WATER RETURN PIPING (HWR)
	NON-POTABLE WATER PIPING
	PUMP DISCHARGE PIPING
	SANITARY PIPING
	SUBSOIL DRAINAGE PIPING
	STORM PIPING
	OVERFLOW STORM PIPING
	TEMPERED WATER
	VENT PIPING
	EXISTING FIXTURE TO BE REMOVED
	EXISTING FIXTURE
	NEW FIXTURE
	FLEXIBLE CONNECTION
	FLOOR DRAIN/FLOOR SINK (FD/FS)
	CIRCULATION PUMP

COMMON PFF 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
	DETAIL DESIGNATION
	EQUIPMENT DESIGNATION
	KEYED NOTE
	REVISION NOTE
	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

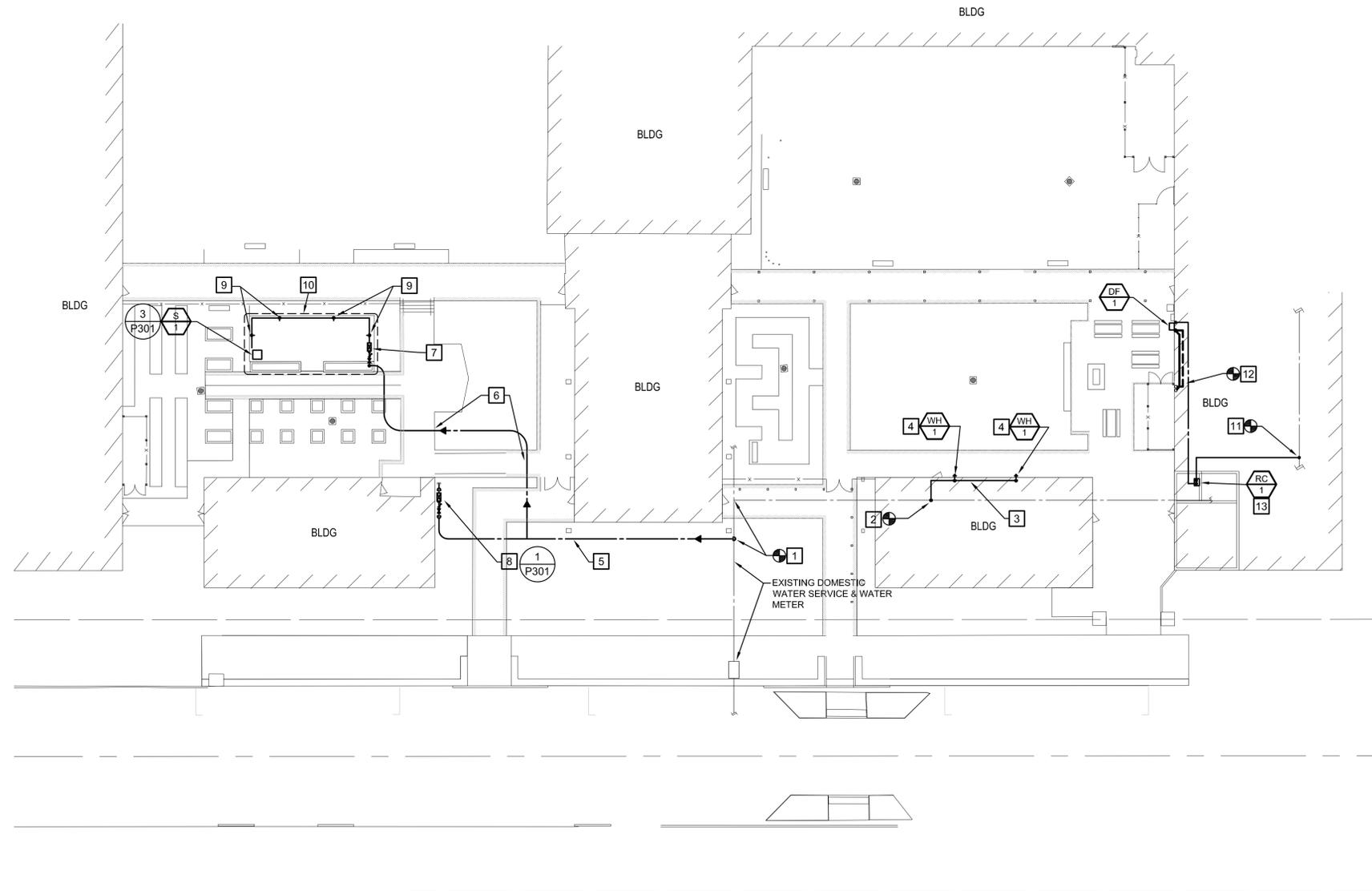
**ANCHORAGE AND SWAY BRACING FOR PLUMBING
SYSTEM COMPONENTS RELATED TO SEISMIC LOAD RESISTANCE**

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
	NOT PROVIDED	PROVIDED	NOT PROVIDED	PROVIDED	ON CONSTRUCTION DOCUMENTS			
					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.

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.

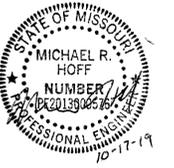


1 SITE PLAN - PLUMBING
1"= 20'-0"

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



MICHAEL R. HOFF
MO. LICENSE NO. 2013000576 EXP: 12/31/2019

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

58 OF 74 SHEETS
10/18/2019

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



MICHAEL R. HOFF
MO. LICENSE NO. 2013000576 EXP: 12/31/2019

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: JEP
DESIGNED BY: JEP

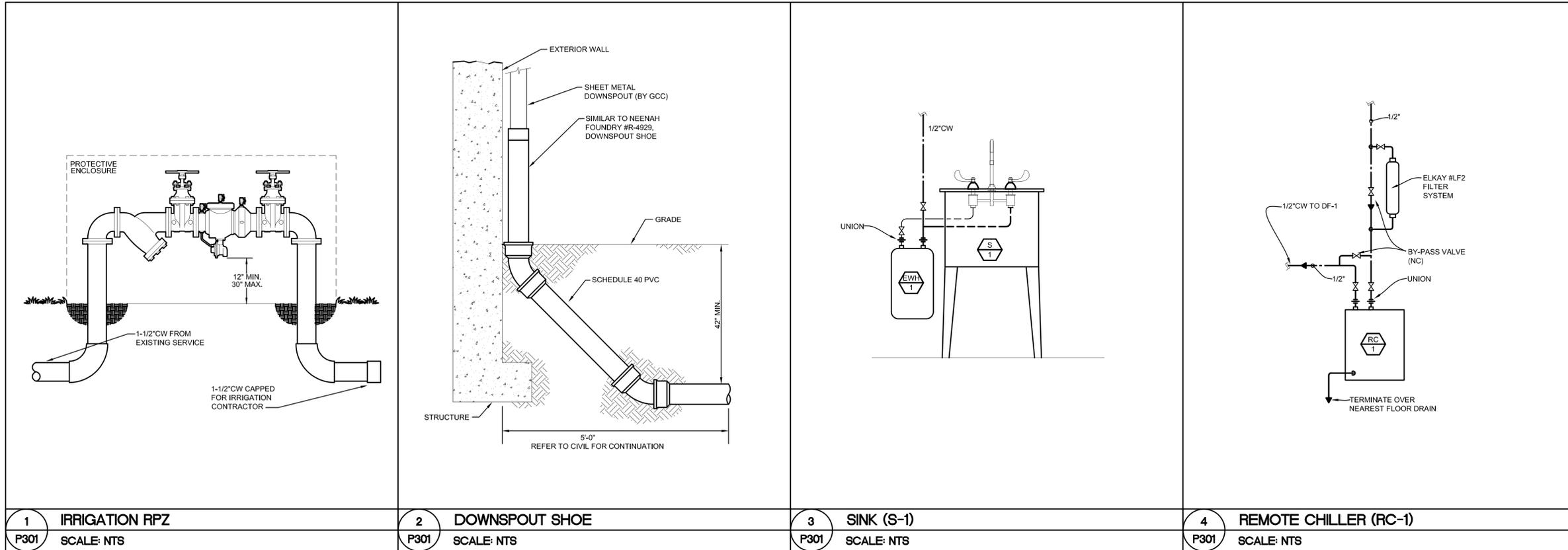
SHEET TITLE:

PLUMBING DETAILS
& SCHEDULES

SHEET NUMBER:

P-301

59 OF 74 SHEETS
10/18/2019



PLUMBING FIXTURE SCHEDULE							
MARK	MANUFACTURER & MODEL NUMBER	UTILITIES				REMARKS	NOTES
		WASTE	VENT	CW	HW		
S-1	FIXTURE: ADVANCE TABCO #FS-1-3624					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" BACKSPASH	
	FAUCET: CHICAGO FAUCETS #510-G613L12XKCAB	2"	2"	1/2"	1/2"	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.	

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



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



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

60 OF 74 SHEETS
10/18/2019

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.

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.

LIGHTING FIXTURES

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

SHADING
INDICATES
FACE(S)

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	WEATHERPROOF
GFI	GROUND FAULT CIRCUIT INTERRUPTER
PC	PHOTO CELL
HAF	HORIZONTAL AIRFLOW FAN

DRAWING REFERENCES

	DETAIL NUMBER
	PLAN DETAIL REFERENCE TITLE
	DRAWING NUMBER
	KEYED NOTE DESIGNATION
	NORTH ARROW
	ROOM NUMBERS
	SECTION NUMBER
	SECTION REFERENCE TITLE
	DRAWING NUMBER

POWER EQUIPMENT

	CEILING-MOUNTED JUNCTION BOX (4"x4"x1-1/2" MIN.)
	PULL BOX
	SWITCHBOARD
	PANELBOARD
	SEQUENCE NUMBER
	TYPE L - LIGHTING P - POWER E - EMERGENCY/EQUIPMENT BRANCH LS - LIFE SAFETY BRANCH C - CRITICAL BRANCH X - X-RAY
	VOLTAGE H - 480V L - 240V OR 208/120V FLOOR
	DISCONNECT SWITCH, FUSED OR UNFUSED AS NOTED
	DUPLEX RECEPTACLE OUTLET
	GROUND ROD
	PHOTO CELL

SWITCHES - LIGHTING CONTROL

TYPICAL MOUNTING HEIGHT - 48" AFF	
	SWITCHES - SINGLE POLE, 2 POLE, 3-WAY, 4-WAY
	DIMMER SWITCH

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



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

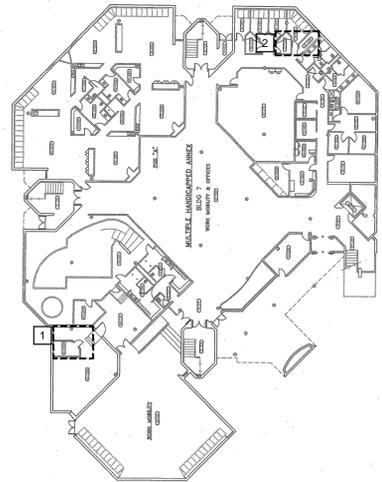
61 OF 74 SHEETS
10/18/2019

GENERAL NOTES:

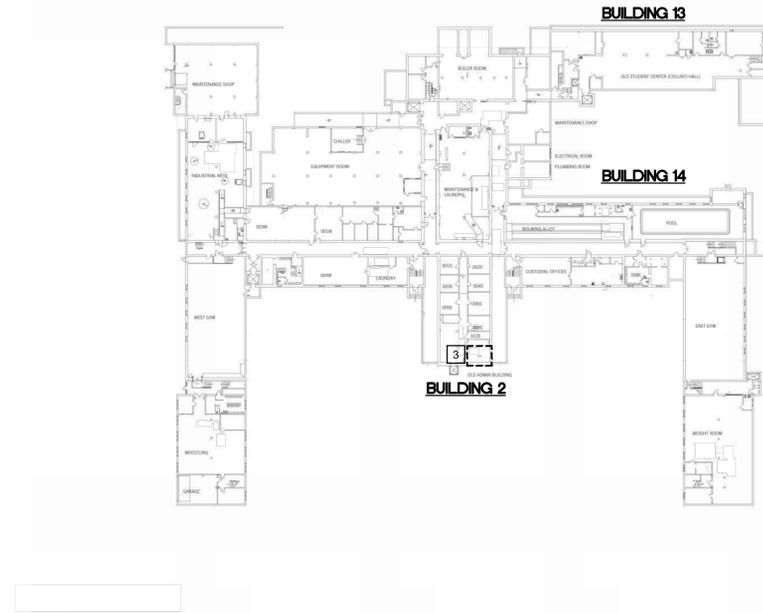
1. DASHED HEAVY LINES DENOTE OUTLINES OF ELECTRICAL ROOMS CONTAINING PANEL BOARDS.
2. PLANS ARE DIAGRAMMATIC IN NATURE. THEY REFLECT THE AVAILABLE INFORMATION OBTAINED FROM FIELD OBSERVATION AND EXISTING DOCUMENTATION. ACTUAL LOCATIONS OF ELEMENTS AND EQUIPMENT MAY DEVIATE FROM THE LOCATIONS AND QUANTITIES 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:

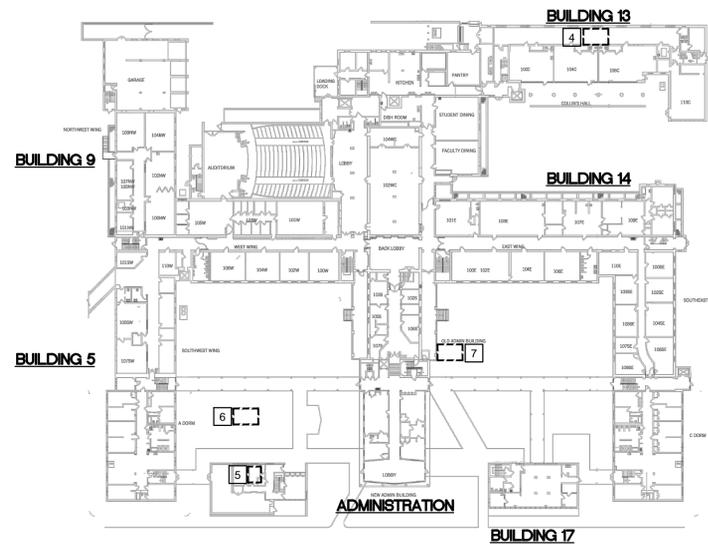
- 1 LOCATION OF EXISTING PANEL BOARDS 'PL-1' & 'LID'.
- 2 LOCATION OF EXISTING PANEL BOARDS 'PIB' & 'LIB'.
- 3 LOCATION OF EXISTING PANEL BOARD 'SDP-4'.
- 4 LOCATION OF EXISTING PANEL BOARD 'LPFI'.
- 5 LOCATION OF EXISTING PANEL BOARD 'LPM-1'.
- 6 LOCATION OF NEW GREENHOUSE PANEL BOARD, 'PP-1'.
- 7 LOCATION OF NEW EAST COURTYARD PANEL BOARD, 'PP-2'.



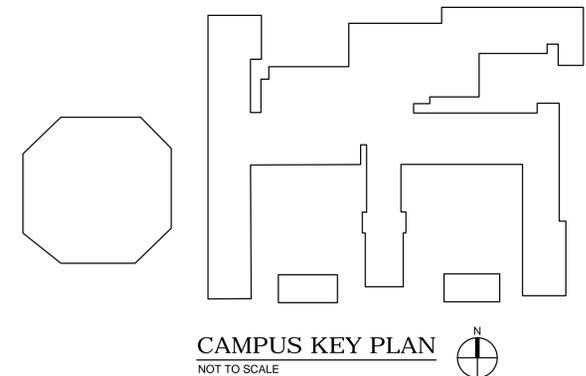
1 ANNEX 1ST FLOOR ELECTRICAL
NO SCALE



2 MSB BASEMENT ELECTRICAL
NO SCALE



3 MSB 1ST FLOOR ELECTRICAL
NO SCALE



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



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

62 OF 74 SHEETS
10/18/2019



1 SITE PLAN - POWER
1"= 20'-0"

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. PROVIDE (3) #10 AND 1 #10 GROUND IN 3/4" CONDUIT FOR ALLEY DOUBLE CANTILEVER GATE. EXTEND CIRCUIT TO EXISTING PANEL 'PIB' AND PROVIDE 15 AMP 3-POLE BREAKER IN EXISTING SPACE.
2. PROVIDE (3) #10 AND 1 #10 GROUND IN 3/4" CONDUIT FOR ANNEX/MSB SWING GATE. EXTEND CIRCUIT TO EXISTING PANEL 'PIB' AND PROVIDE 15 AMP 3-POLE BREAKER IN EXISTING SPACE.
3. PROVIDE (3) #10 AND 1 #10 GROUND IN 3/4" CONDUIT FOR 39TH STREET CANTILEVER GATE. EXTEND CIRCUIT TO EXISTING PANEL 'PL-1' AND PROVIDE 15 AMP 3-POLE BREAKER IN EXISTING SPACE.
4. PROVIDE (2) #10 AND (1) #10 GROUND IN 3/4" CONDUIT FOR COURTYARD GATE. EXTEND CIRCUIT TO NEW PANEL 'PP-1'. SEE PANEL SCHEDULE PP-1 ON E-202.
5. PROVIDE (2) #10 AND (1) #10 GROUND IN 3/4" CONDUIT FOR COURTYARD GATE. EXTEND CIRCUIT TO NEW PANEL 'PP-2'. SEE PANEL SCHEDULE PP-2 ON E-202.
6. PROVIDE (3) #10 AND (1) #10 GROUND IN 3/4" CONDUIT FOR SOUTHEAST PARKING LOT GATE. EXTEND CIRCUIT TO NEW PANEL 'PP-2' AND PROVIDE 15 AMP 3-POLE BREAKER. SEE PANEL SCHEDULE PP-2 ON E-202.
7. PROVIDE (3) #10 AND (1) #10 GROUND IN 3/4" CONDUIT FOR COLLINS HALL PLAYGROUND GATE. EXTEND CIRCUIT TO EXISTING PANEL 'LPIF' AND PROVIDE 15 AMP 3-POLE BREAKER IN EXISTING SPACE.
8. PROVIDE NEMA 3R 200 AMP 4 WIRE 3 PHASE 208/120V PANEL. LOCATED IN THE GREENHOUSE. SEE PANEL BOARD SCHEDULE ON SHEET E-202.
9. 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.
10. REMOVE 30 AMP 3-POLE BREAKER, CIRCUIT #67/69/71, LOCATED IN PANEL 'SDP-4'.
11. PROVIDE 60 AMP 3-POLE CIRCUIT BREAKER, UTILIZE CIRCUIT #67/69/71 FOR 60 AMP 3 PHASE 4 WIRE 208/120V PANEL PP-2.
12. PROVIDE NEMA ONE 60 AMP 4 WIRE 3 PHASE 208/120V PANEL PP-2, LOCATED IN THE BASEMENT ELECTRICAL ROOM.
13. PROVIDE (4) #4 AND (1) #8 GROUND IN A 1-3/4" CONDUIT TO THE BASEMENT ELECTRICAL ROOM 60 AMP PANEL 'PP-2'.
14. EXISTING GATE MOTORS AND WIRES ARE TO BE REMOVED AND DEMOED BACK TO SOURCE.
15. EXISTING CATWALK LIGHTING, RECEPTACLES, SWITCHES, WIRES, AND CONDUIT ARE TO BE REMOVED AND DEMOED BACK TO SOURCE.
16. 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.
17. PROVIDE NEW 3/4" X 10 COPPER-CLAD GROUND ROD. EXTEND (1) #6 COPPER CONDUCTOR IN 3/4" CONDUIT TO PANEL LPM-1 AND TERMINATE TO GROUND BUS, BOND TO BUILDING STEEL PER NEC 250.
18. MOTORIZED FENCES AND CONTROLS AT FRONT OF ANNEX SHALL BE APART OF ALTERNATIVE #1.
19. MOTORIZED FENCES AND CONTROLS AT BACK OF ANNEX SHALL BE APART OF ALTERNATIVE #1.
20. MOTORIZED FENCES AND CONTROLS AT SIDE OF ANNEX SHALL BE APART OF ALTERNATIVE #1.

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



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



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: _____

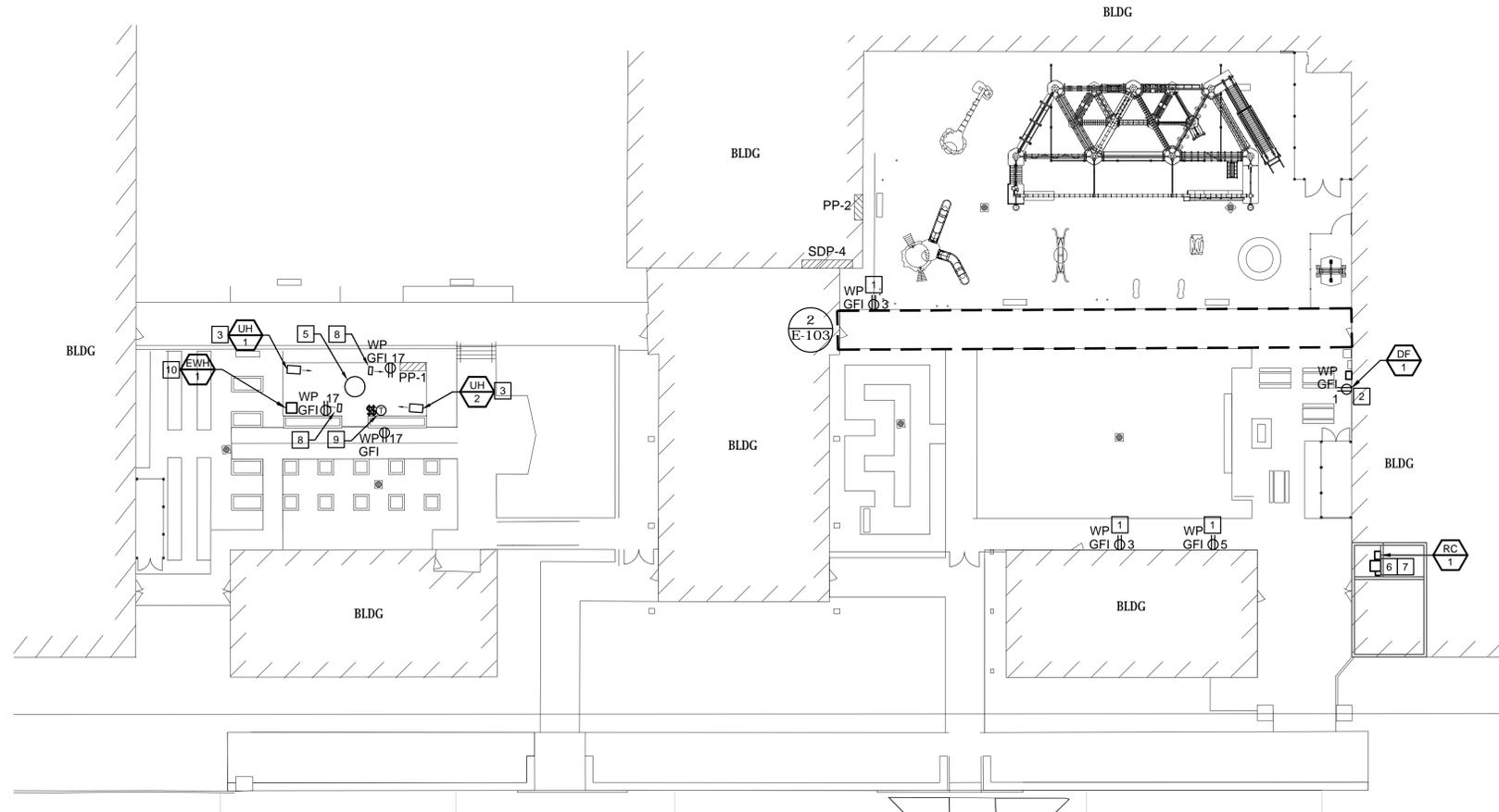
CAD DWG FILE: _____
DRAWN BY: TSM
CHECKED BY: CVH
DESIGNED BY: TSM

SHEET TITLE:
ENLARGED
SITE PLAN
ELECTRICAL

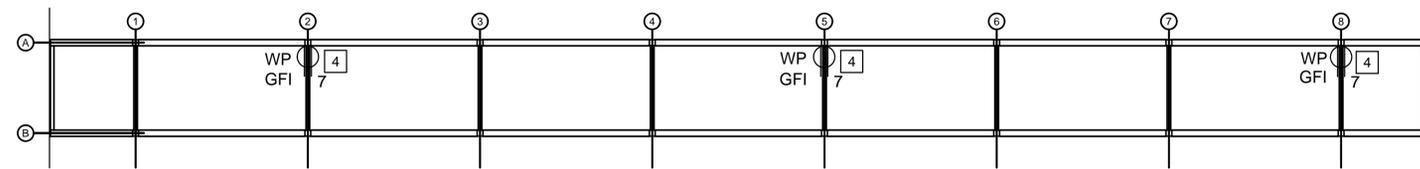
SHEET NUMBER:

E-103

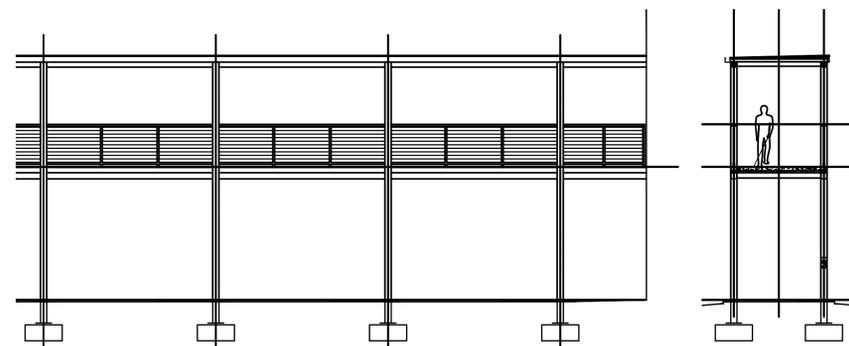
63 OF 74 SHEETS
10/18/2019



1 ENLARGED SITE PLAN - ELECTRICAL
1" = 20'



2 2ND LEVEL CATWALK - ELECTRICAL
1/8" = 1'



3 2ND LEVEL CATWALK - ELECTRICAL
1/8" = 1'

GENERAL NOTES

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

KEYED NOTES

- PROVIDE (2) #10 AND (1) #10 GROUND IN 3/4" CONDUIT FOR 20A GFI WP OUTLET. EXTEND CIRCUIT TO PANEL 'PP-2'.
- PROVIDE (2) #10 AND (1) #10 GROUND IN 3/4" CONDUIT FOR EF-1. EXTEND DEDICATED CIRCUIT TO PANEL 'PP-2'.
- PROVIDE (3) #1 AND (1) #6 GROUND IN 1-1/2" CONDUIT FOR UH-1 & UH-2. EXTEND CIRCUIT BACK TO PANEL 'PP-1'. UNIT HEATER MOUNTED OVERHEAD AT GREENHOUSE STRUCTURE APPROXIMATELY 10' AFF. PROVIDE UNIT SUPPORT PER DETAIL. COORDINATE EXACT MOUNTING HARDWARE WITH GREENHOUSE CONSTRUCTION.
- PROVIDE (2) #10 AND (1) #10 GROUND IN 3/4" CONDUIT FOR 20A GFI WP OUTLET. EXTEND CIRCUIT TO PANEL 'PP-2'.
- 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/ 3-PRONG PLUG, CORROSION RESISTANT FINISH. COORDINATE COLOR WITH ARCHITECT. FAN SHALL BE MANUFACTURED BY CANARM, J&D MANUFACTURING, TPI.
- PROVIDE NEMA TYPE 1 NON-FUSIBLE 30 AMP DISCONNECT FOR REMOTE CHILLER. COORDINATE WITH CHILLER INSTALLER.
- PROVIDE (2) #10 AND (1) #10 GROUND IN 3/4" CONDUIT FOR REMOTE WATER CHILLER. EXTEND DEDICATED CIRCUIT TO PANEL 'PP-2'.
- 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.
- (1) SWITCH FOR CEILING FAN CONTROL, (1) SWITCH FOR HAF FAN CONTROL, (1) THERMOSTAT FOR UNIT HEATER CONTROL. COORDINATE EXACT LOCATION IN FIELD. ALL ITEMS SHALL BE RATED FOR OUTDOOR INSTALLATION.
- PROVIDE (2) #10 AND (1) #10 GROUND IN 3/4" CONDUIT FOR REMOTE WATER HEATER. EXTEND DEDICATED CIRCUIT TO PANEL 'PP-2'.

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



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: _____

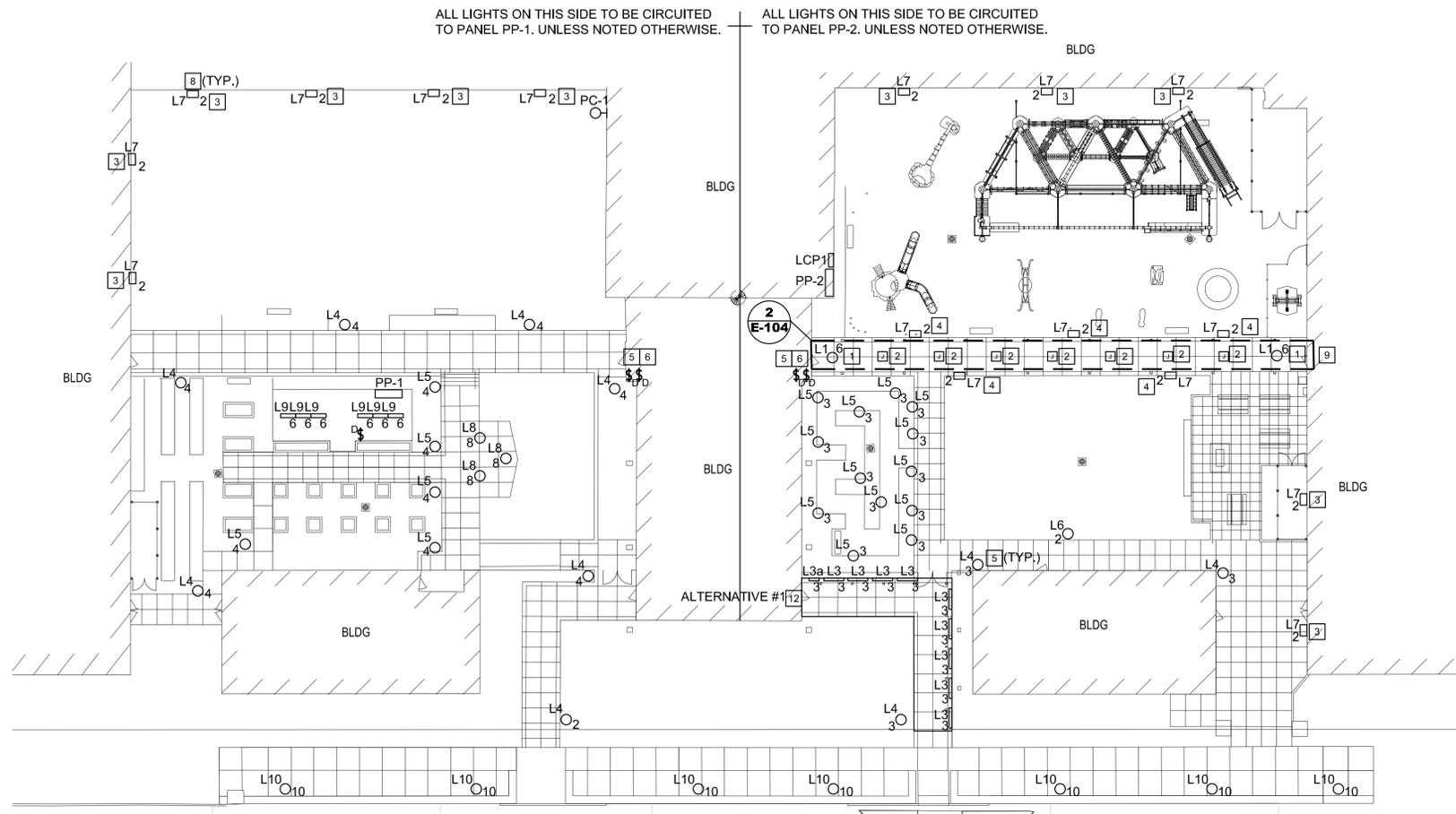
CAD DWG FILE:
DRAWN BY: TSM
CHECKED BY: CVH
DESIGNED BY: TSM

SHEET TITLE:
**SITE PLAN
LIGHTING**

SHEET NUMBER:

E-104

64 OF 74 SHEETS
10/18/2019



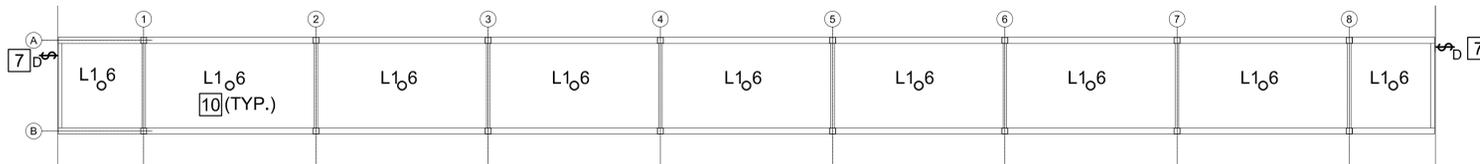
GENERAL NOTES

- REFER TO ARCHITECTURAL SHEETS A-102 AND A-103 FOR FURTHER INFORMATION.
- ALL ELECTRICAL DEVICES LOCATED IN EXTERIOR SPACES SHALL BE IN NEMA 3R ENCLOSURES.
- ALL CONDUIT FEEDING CONSTELLATION (L2) CIRCUITS SHALL BE RIGID ALUMINUM FITTINGS TO BE THREADED AND WATERTIGHT.
- ALL L-4 POLE MOUNTED FIXTURES SHALL BE MOUNTED AT 14FT ABOVE GRADE.
- ALL L-6 POLE MOUNTED FIXTURES SHALL BE MOUNTED AT 15FT ABOVE GRADE.

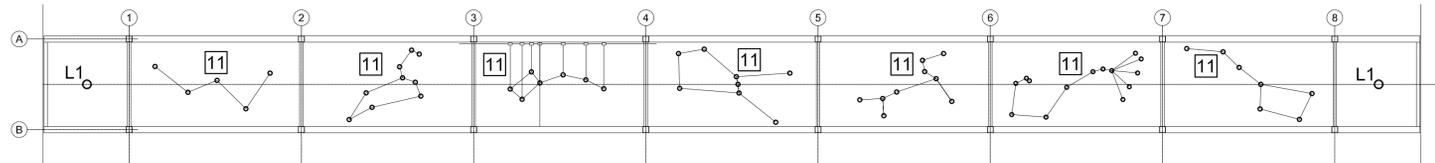
KEYED NOTES

- L-1 FIXTURES SHALL BE INSTALLED IN THE FLOOR OF THE CANOPY, SEE ARCHITECTURAL SHEET A-103 FOR MORE DETAIL.
- JUNCTION BOXES SHALL BE PROVIDED FOR ALL L-2 FIXTURES. L-2 FIXTURES SHALL BE INSTALLED IN THE FLOOR OF THE CANOPY, SEE ARCHITECTURAL SHEET A-103 FOR MORE DETAIL.
- ALL L-7 WALL MOUNTED FIXTURES SHALL BE MOUNTED AT 25FT ABOVE GRADE.
- ALL L-7 FIXTURES MOUNTED ON THE CATWALK SHALL BE MOUNTED AT 12FT ABOVE GRADE.
- PROVIDE DIMMING SWITCH FOR THE COURTYARD SITE LIGHTING.
- PROVIDE DIMMING SWITCH FOR THE COURTYARD PEDESTRIAN LIGHTING.
- PROVIDE 3-WAY DIMMING SWITCH FOR 2ND LEVEL CATWALK LIGHTING.
- ROUTE SURFACE MOUNTED CONDUIT ON WALL AND PAINT CONDUIT TO MATCH BRICK.
- EXTEND ALL 1ST & 2ND FLOOR CATWALK LIGHTING CIRCUITS TO THE NEW PANEL 'PP-2'. SEE PANEL SCHEDULE 'PP-2' ON E-202 FOR MORE DETAIL.
- L-1 FIXTURES SHALL BE INSTALLED IN THE CEILING OF THE CANOPY, SEE ARCHITECTURAL SHEET A-103 FOR MORE DETAIL.
- CONSTELLATION FIXTURES TO BE TYPE L-2 AND DO NOT REPRESENT CONDUIT ROWS.
- CANOPY LIGHT FIXTURES SHALL BE APART OF ALTERNATIVE #1.

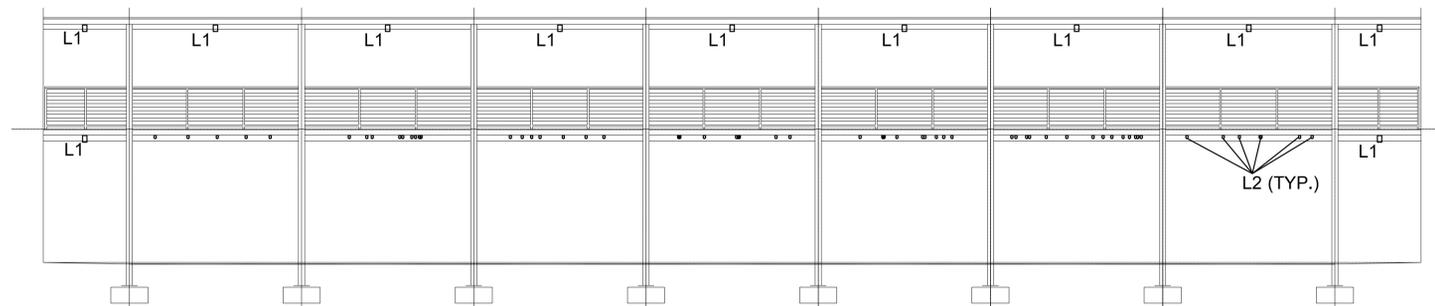
1 ENLARGED SITE PLAN - LIGHTING
1" = 20'



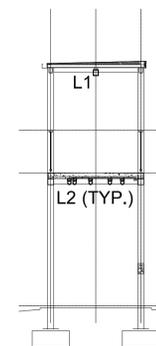
2 2ND LEVEL CATWALK - LIGHTING PLAN
1/8" = 1'



3 1ST LEVEL CATWALK - LIGHTING PLAN
1/8" = 1'

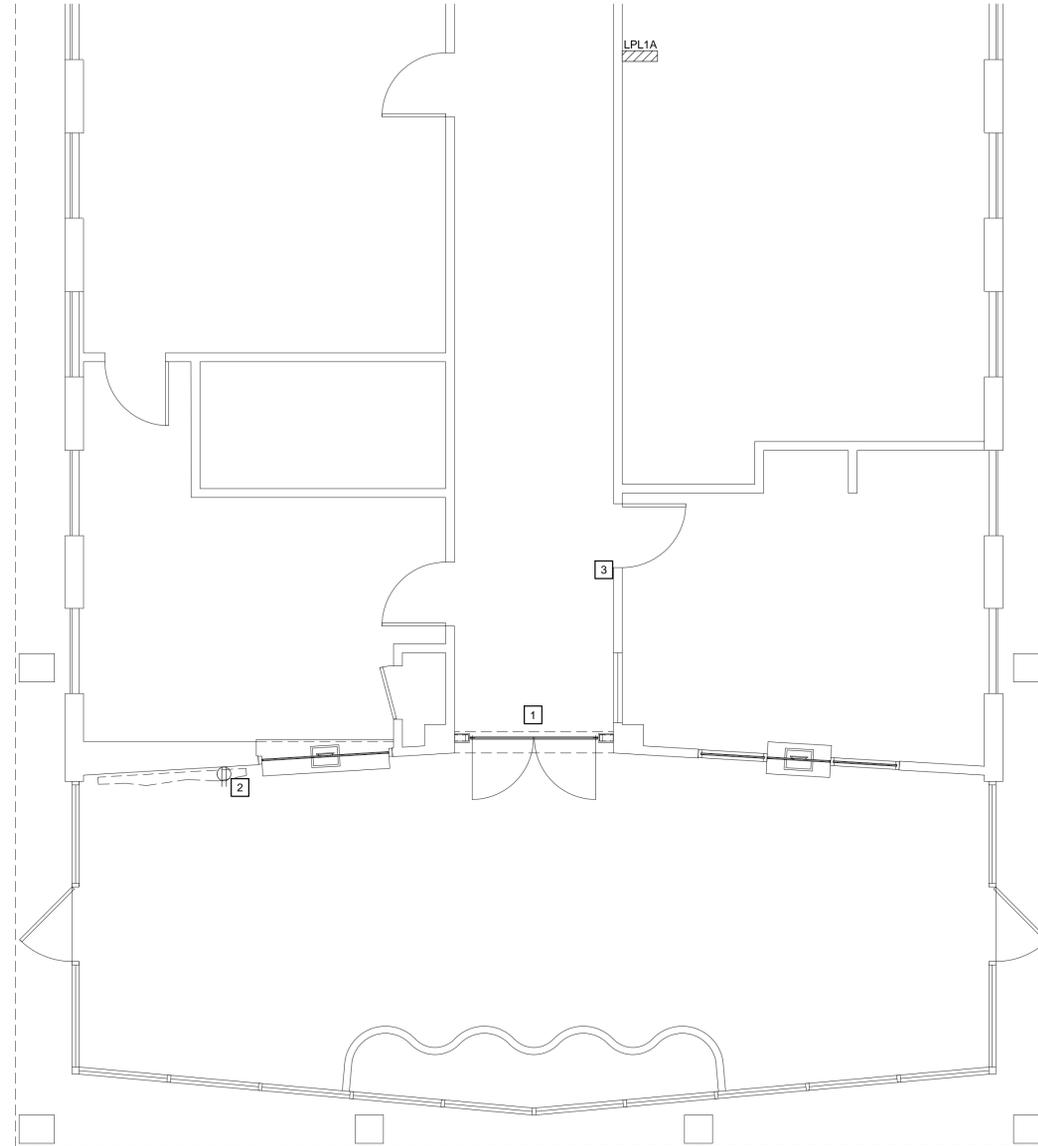


4 SIDE CATWALK - LIGHTING SECTION
1/8" = 1'



5 FORWARD CATWALK - LIGHTING SECTION
1/8" = 1'

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. COORDINATE ALL WORK WITH ARCHITECTURAL AND CIVIL PLANS AND SPECIFICATIONS.
2. FOR MORE INFORMATION ON DOOR HARDWARE REFER TO ARCH SHEET A-101.

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'.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



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



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: _____

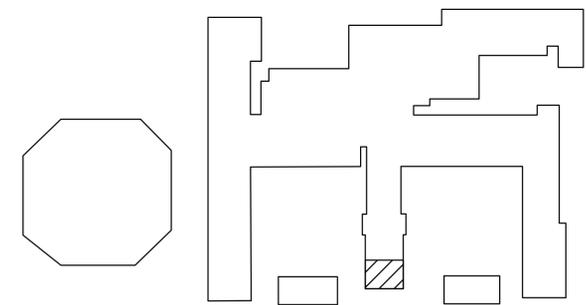
CAD DWG FILE: _____
DRAWN BY: TSM _____
CHECKED BY: CVH _____
DESIGNED BY: TSM _____

SHEET TITLE:
LOBBY PLAN
ELECTRICAL

SHEET NUMBER:

E-105

65 OF 74 SHEETS
10/18/2019



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



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: _____

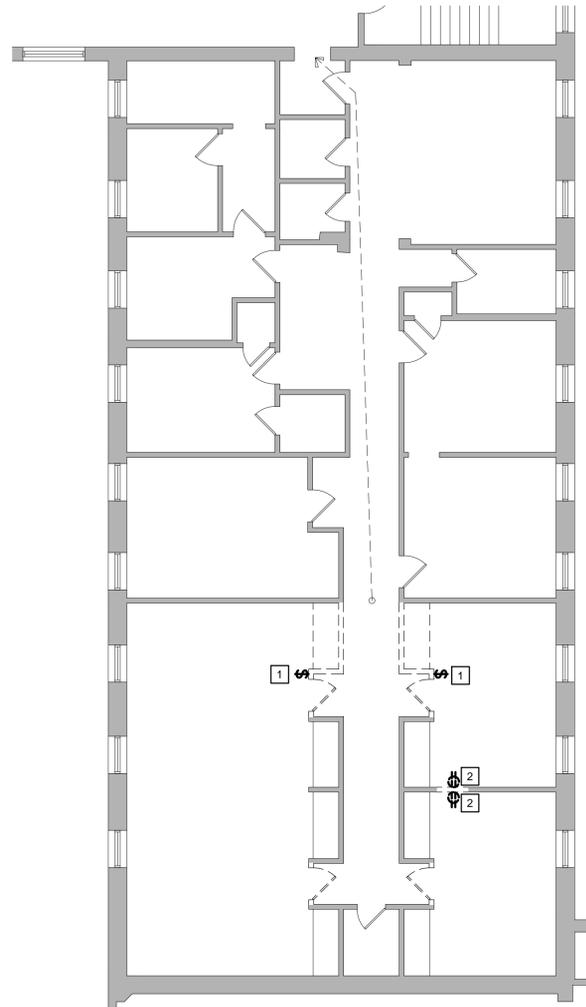
CAD DWG FILE: _____
DRAWN BY: TSM
CHECKED BY: CVH
DESIGNED BY: TSM

SHEET TITLE:
**SECOND FLOOR PLAN
ELECTRICAL**

SHEET NUMBER:

E-106

66 OF 74 SHEETS
10/18/2019



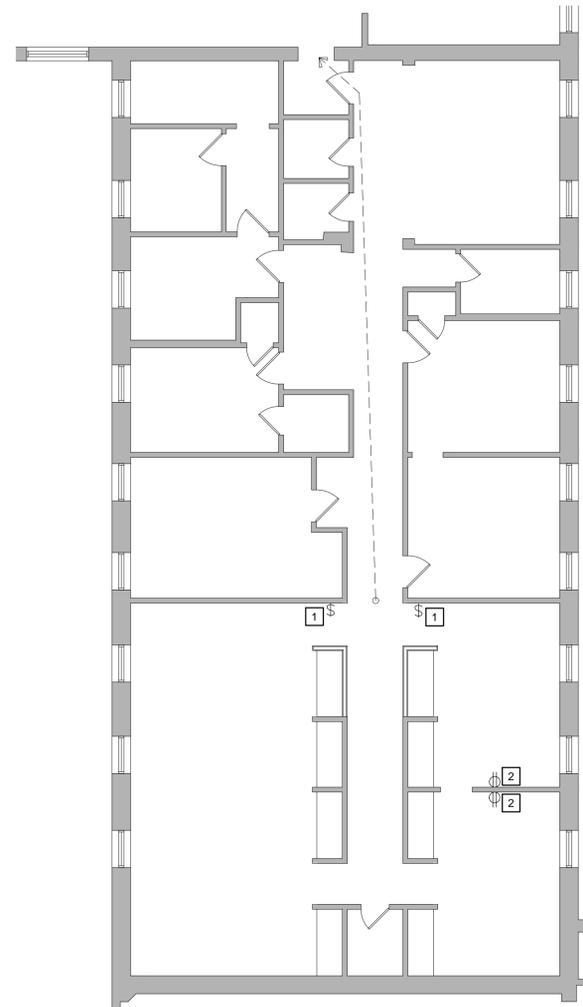
GENERAL NOTES-DEMOLITION

- ALL DEVICES SHOWN ARE EXISTING TO BE DEMOLISHED UNLESS NOTED OTHERWISE AS EXISTING TO REMAIN (ETR).
- 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.
- 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.
- DEMOLITION REFERS TO THE DISCONNECTION AND REMOVAL OF EQUIPMENT, WIRES, AND COMPONENTS BACK TO SOURCE.
- CONTRACTOR SHALL PROVIDE ALL CUTTING AND PATCHING AS REQUIRED FOR EXECUTION OF DEMOLITION WORK AND INSTALLATION OF NEW WORK.
- 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.
- 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.
- CONTRACTOR SHALL REPAIR AND/OR REROUTE EXISTING CIRCUITS THAT ARE DISRUPTED BY DEMOLITION.

KEYED NOTES-DEMOLITION

- 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.
- 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.

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



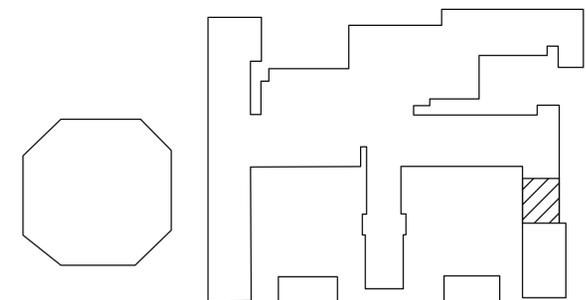
GENERAL NOTES-NEW WORK

- 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.

KEYED NOTES-NEW WORK

- PROVIDE LIGHT SWITCH UTILIZING EXISTING CIRCUIT FOR LIGHTS IN THIS AREA. EXTEND CIRCUIT AS REQUIRED.
- PROVIDE RECEPTACLE AND (2) #12 AND (1) #12 GROUND FOR RECEPTACLE. EXTEND CONDUIT AND CONDUCTORS AS REQUIRED.

2 SECOND FLOOR PLAN NEW WORK - POWER
1/8" = 1'-0"



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



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



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: _____

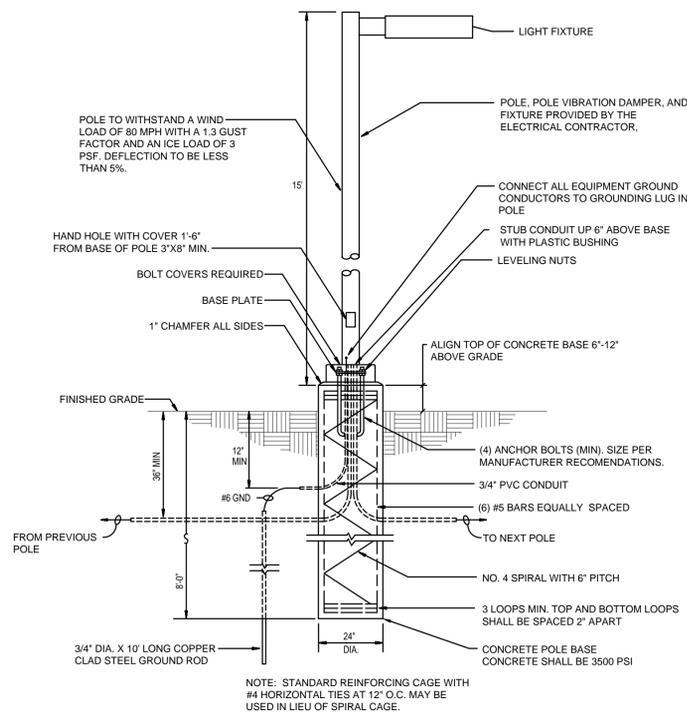
CAD DWG FILE: _____
DRAWN BY: TSM
CHECKED BY: CVH
DESIGNED BY: TSM

SHEET TITLE:
ELECTRICAL
DETAILS

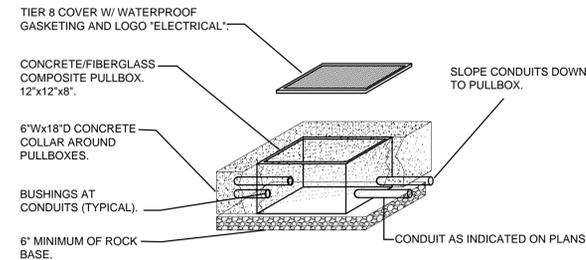
SHEET NUMBER:

E-201

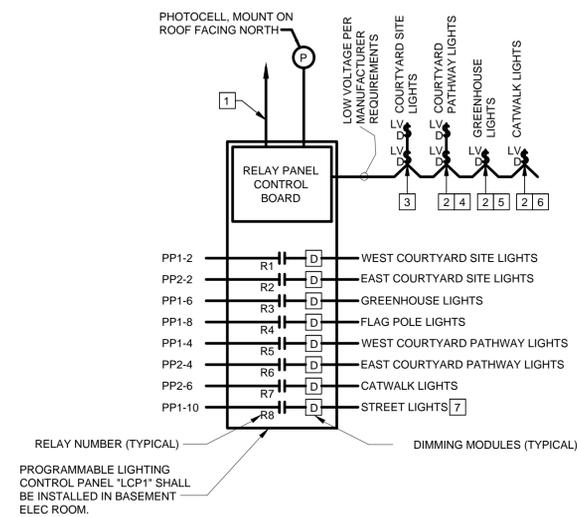
67 OF 74 SHEETS
10/18/2019



1 LIGHT POLE DETAIL
NTS



2 PULL BOX DETAIL
NTS



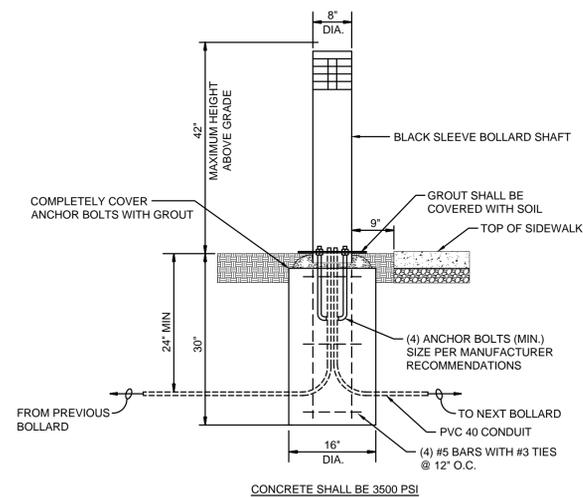
LIGHTING CONTROL SYSTEM GENERAL NOTES

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.

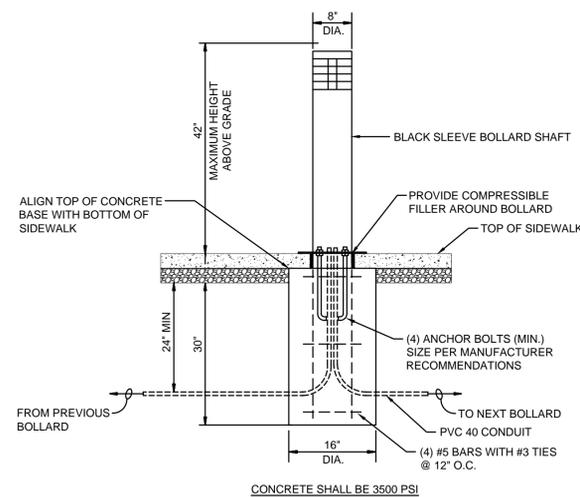
KEYED NOTES

- 1 PROVIDE CONNECTION TO BUILDING AUTOMATION SYSTEMS (BAS) MS/T/P 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 RELAY R1, R2.
- 4 PROGRAM LOW VOLTAGE WALL SWITCHES TO CONTROL RELAY R3.
- 5 PROGRAM LOW VOLTAGE WALL SWITCHES TO CONTROL RELAY 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.

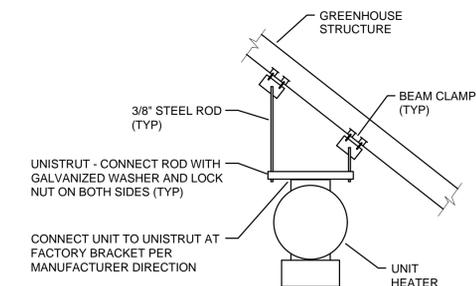
3 LIGHTING CONTROL SYSTEM DIAGRAM
NTS



4 BOLLARD BASE DETAIL (GRASS AREA)
NTS



5 BOLLARD BASE DETAIL (SIDEWALK AREA)
NTS



6 UNIT HEATER MOUNTING DETAIL
NTS

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



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



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

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 99822	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	0.46 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	N/A	120V	STRESSCRETE KLC 10' POLE, POLISHED FINISH, FLUSH BASE PLATE	K16 CAPITAL SOLID SPUN ALUMINUM TOP, #2 FINIAL

LIGHT FIXTURE SCHEDULE GENERAL NOTES

- 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.
- REFER TO ARCHITECTURAL DOCUMENTS FOR EXACT MOUNTING LOCATIONS OF LIGHT FIXTURES.
- WHEN INSTALLING LUMINARIES, THE CONTRACTOR SHALL USE THE LIGHT FIXTURE MANUFACTURER'S MOUNTING HARDWARE AND FOLLOW ALL MANUFACTURER'S INSTALLATION DIRECTIONS.
- 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.
- ALL RECESSED DOWNLIGHTS SHALL HAVE SELF-FLANGED REFLECTORS.
- ALL LIGHT FIXTURES SHALL HAVE A U.L. LABEL.
- ALL FIXTURES SHALL OPERATE AT 120 VOLTS OR OTHER VOLTAGE AS REQUIRED BY THE CIRCUITS AND/OR PANELS TO WHICH THEY ARE CONNECTED.
- WHEN FIXTURES ARE INSTALLED IN CONTINUOUS ROWS 2 OR MORE, FIXTURES SHALL BE APPROVED FOR USE AS WIREWAY.
- REFER TO DIVISION 26 SPECIFICATIONS FOR ADDITIONAL INFORMATION CONCERNING FIXTURES, FINISHES, DRIVERS, ETC.
- 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.
 ④ THREE POSITION SWITCH - OFF/HEAT/FAN.
 ⑤ SINGLE POINT POWER CONNECTION. INTEGRAL DISCONNECT WITH ENCLOSURE INTERLOCK.
 ⑥ AUTO RESET THERMAL CUTOUT.
 ⑦ INLET GRILLE AND DISCHARGE GRILLE.
 ⑧ UNIT SHALL MEET ALL UL, NEC, AND OSHA REQUIREMENTS.
 ⑨ UNIT SHALL BE INSTALLED AND WIRED IN ACCORDANCE WITH MANUFACTURER DIRECTION AND ALL APPLICABLE CODES.

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

68 OF 74 SHEETS
10/18/2019

PANEL: PP1 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

TYPE	CKT	DESCRIPTION	NOTES	OC	P	A	B	C	P	OC	NOTES	DESCRIPTION	CKT	TYPE
H	1	UH-1		100 A	3	6667 VA	469 VA		1	20 A		SITE LIGHTING	2	L
H	3	UH-1		100 A	3	6667 VA	289 VA		1	20 A		PEDESTRIAN LIGHTING	4	L
H	5	UH-1		100 A	3			6667 VA	1	20 A		GREENHOUSE LIGHTING	6	L
H	7	UH-2		100 A	3	6667 VA			1	20 A		FLAG POLE LIGHTING	8	L
H	9	UH-2		100 A	3		6667 VA	960 VA	1	20 A		STREET LIGHTING	10	L
H	11	UH-2		100 A	3			6667 VA					12	
M	13	COURTYARD GATE		20 A	3	1440 VA	1000 VA		3	100 A		LPM-1	14	O
M	15	COURTYARD GATE		20 A	3		1440 VA	1000 VA	3	100 A		LPM-1	16	O
M	17	COURTYARD GATE		20 A	3			1440 VA	1000 VA	3	100 A	LPM-1	18	O
H	19	WATER HEATER		20 A	1	1440 VA							20	
R	21	GREENHOUSE RECEPTACLES					720 VA						22	
	23												24	
	25												26	
	27												28	
	29												30	
	31												32	
	33												34	
	35												36	
	37												38	
	39												40	
	41												42	

TOTAL CONNECTED LOAD: 51452 VA TOTAL DEMAND LOAD: 51945 VA
 TOTAL CONNECTED AMPS: 143 A TOTAL DEMAND AMPS: 144 A

NOTES:
1.

PANEL: PP2 BREAKER ENCLOSURE: NEMA 3R MAINS: MAIN CIRCUIT BREAKER CONTINUOUS: 60 A
LOCATION: EASTCOURTYARD BOLT ON MOUNTING: SURFACE WIRING: 3-PHASE, 4-WIRE BUS SC RATING:
FED FROM: SDP-4 VOLTAGE: 120/208V FAULT CURRENT

TYPE	CKT	DESCRIPTION	NOTES	OC	P	A	B	C	P	OC	NOTES	DESCRIPTION	CKT	TYPE
R	1	EW-1		20 A	1	600 VA	863 VA		1	20 A		SITE LIGHTING	2	L
R	3	GARAGE RECEPTACLE		20 A	1			180 VA	765 VA	1	20 A	PEDESTRIAN & CANOPY LIGHTING	4	L
R	5	GARAGE RECEPTACLE		20 A	1			180 VA	332 VA	1	20 A	CATWALK LIGHTING	6	L
R	7	CATWALK RECEPTACLES		20 A	1	540 VA							8	
	9						600 VA						10	
	11												12	
M	13	SOUTHEAST PARKING LOT GATE		15 A	3	577 VA							14	
M	15	SOUTHEAST PARKING LOT GATE		15 A	3			577 VA					16	
M	17	SOUTHEAST PARKING LOT GATE		15 A	3				577 VA				18	
	19												20	
	21												22	
	23												24	
	25												26	
	27												28	
	29												30	
	31												32	
	33												34	
	35												36	
	37												38	
	39												40	
	41												42	

TOTAL CONNECTED LOAD: 5791 VA TOTAL DEMAND LOAD: 5681 VA
 TOTAL CONNECTED AMPS: 16 A TOTAL DEMAND AMPS: 16 A

NOTES:
1.

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



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



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

69 OF 74 SHEETS
10/18/2019

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 RECORDING 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 WALL MOUNT FIRE ALARM COMBINATION SPEAKER, STROBE, NOTIFICATION LIGHTS: MOUNT WITH BOTTOM OF STROBE LENS AT THE LOWER OF 8'0" A.F.F. OR 6' BELOW CEILING. NUMERICAL WHEN USED INDICATES CANDELA RATING OF MORE THAN 15.
- SD SMOKE DETECTOR: PHOTO-ELECTRIC TYPE.
- DH FIRE ALARM ELECTROMAGNETIC DOOR HOLDER.
- EMERGENCY MASS NOTIFICATION PUSH BUTTONS:
EARTHQUAKE
TERRORIST
INTRUDER
TORNADO

OTHER:

- DETAIL REFERENCE. "4" INDICATES DETAIL # "T301" INDICATES SHEET. REFER TO DETAIL FOR ADDITIONAL REQUIREMENTS.
- 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.

SECURITY SYMBOLS:

- CR CARD READER: DEVICE SHALL BE MOUNTED AT APPROXIMATELY 48" A.F.F. TO CENTER OF DEVICE.
- PS DOOR POSITION SWITCH/CONTACTS.
- L DOOR LOCKING MECHANISM - ELECTRONIC.
- ML DOOR LOCKING MECHANISM - MAGNETIC LOCK.
- RXM REQUEST TO EXIT DEVICE.
RXB = WALL MOUNT PUSH BUTTON
RXM = WALL MOUNT MOTION SENSOR ABOVE DOOR
- ICM INTERCOM MASTER STATION WITH REMOTE DOOR RELEASE
- IC AUDIO/VIDEO INTERCOM STATION
- SMS SECURITY MASTER COMPUTER STATION
- GCC SECURITY GATE CONTROL CABINET (REFER TO CIVIL DRAWINGS AND SPECIFICATIONS)
- PUSH BUTTON FOR REMOTE DOOR RELEASE
- VIDEO SURVEILLANCE CAMERA

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



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

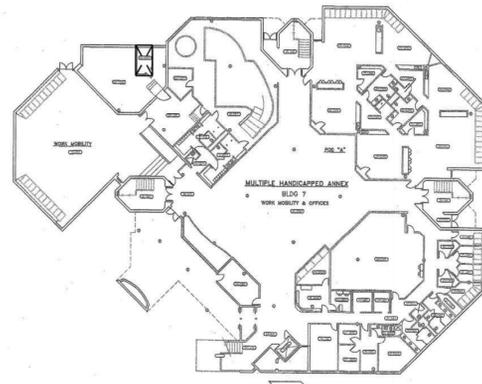
SHEET NUMBER:

T-101

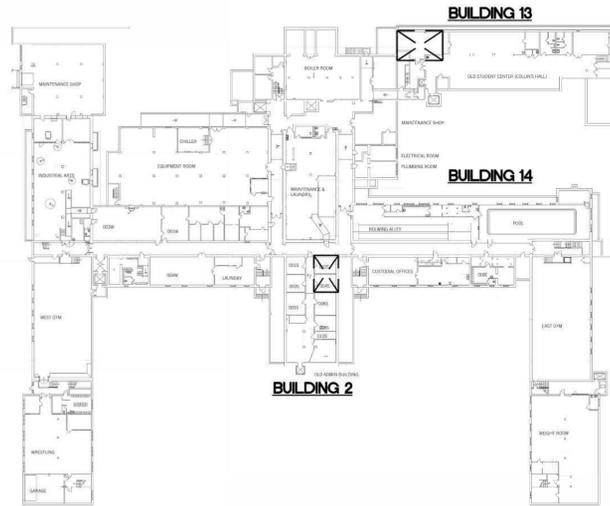
70 OF 74 SHEETS
10/18/2019

GENERAL NOTES:

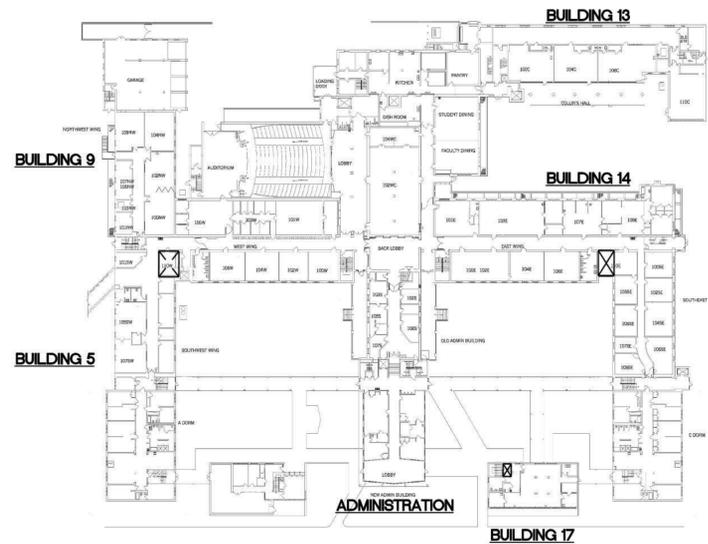
- A. DASHED HEAVY LINES DENOTE OUTLINE OF COMMUNICATION ROOM CONTAINING SECURITY EQUIPMENT AND COMPONENTS.
- B. PLANS ARE DIAGRAMMATIC IN NATURE. THEY REFLECT THE AVAILABLE INFORMATION OBTAINED FROM FIELD OBSERVATION AND EXISTING DOCUMENTATION. ACTUAL LOCATION OF ELEMENTS AND EQUIPMENT MAY DEVIATE FROM 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.



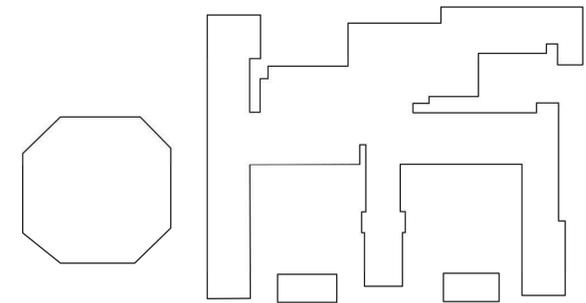
1 ANNEX 1ST FLOOR COMMUNICATION ROOM LOCATIONS
NO SCALE



2 MSB BASEMENT COMMUNICATION ROOM LOCATIONS
NO SCALE



2 MSB 1ST FLOOR COMMUNICATION ROOM LOCATIONS
NO SCALE



CAMPUS KEY PLAN
NOT TO SCALE





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:

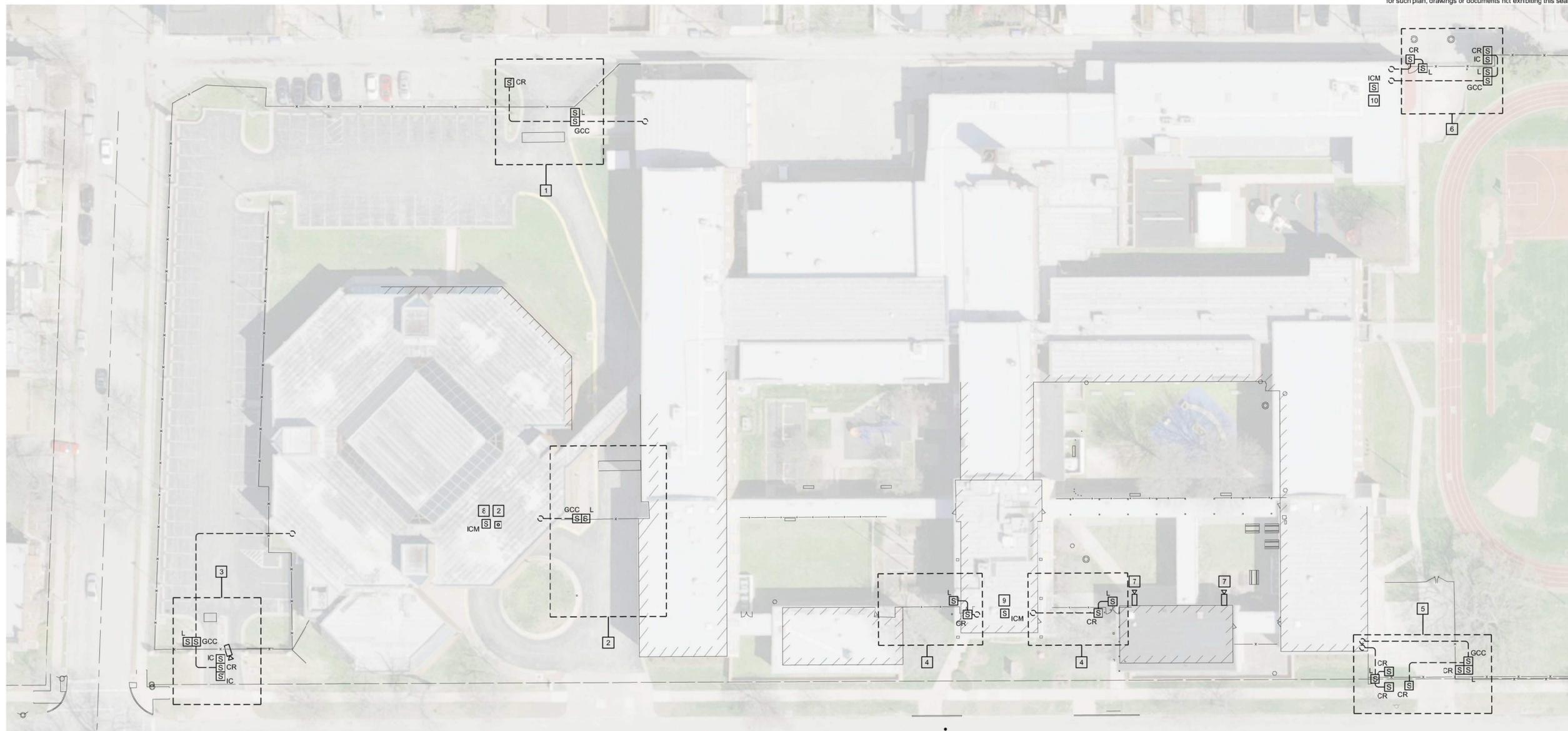
**SITE PLAN
TECHNOLOGY**

SHEET NUMBER:

T-102

71 OF 74 SHEETS
10/18/2019

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"

GENERAL NOTES:

- COORDINATE ALL WORK WITH ARCHITECTURAL AND CIVIL PLANS AND SPECIFICATIONS.
- COORDINATE MOUNTING OF ALL CARD READERS AND INTERCOM SYSTEMS WITH ARCHITECTURAL AND CIVIL DRAWINGS AND SPECIFICATIONS FOR GATES AND PEDESTALS.
- TYPE AND LOCATION OF GATE LOCKING MECHANISM SHALL BE COORDINATED WITH CIVIL. PRIOR TO ROUGH-IN OF PATHWAYS AND INSTALLATION OF CABLING.
- 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.
- CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, COMPONENTS, PATHWAYS, CABLING, AND POWER FOR A COMPLETE AND OPERABLE SYSTEM.
- FOR ALTERNATES, REFER TO ARCHITECTURAL SPECIFICATIONS FOR ADDITIONAL DESCRIPTIONS, REQUIREMENTS AND INFORMATION.

PATHWAY NOTES AND REQUIREMENTS:

- PATHWAYS SHOWN ARE GENERIC AND SHOWN FOR GENERAL ROUTING PURPOSES. CONTRACTOR SHALL COORDINATE EXACT PATHWAYS WITH EXISTING CONDITIONS.
- 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.
- WHERE POSSIBLE, SHARE SIMILAR ROUTING OF COMMUNICATION AND ELECTRICAL PATHWAYS. COORDINATE WITH ELECTRICAL AND CIVIL.
- COORDINATE CONDUIT ROUTING WITH CIVIL AND CONTROL EQUIPMENT CABINET LOCATIONS. REFER TO CIVIL GATE PLANS AND SPECIFICATIONS.
- CONDUIT PATHWAYS ARE FOR ROUTING OF ACCESS CONTROL CABLING, VIDEO INTERCOM CABLING AND VIDEO SURVEILLANCE CAMERA CABLING.
- PROVIDE 2" CONDUIT FROM CONTROL EQUIPMENT CABINET TO DESIGNATED BUILDING FOR ROUTING OF SECURITY CABLING.
- PROVIDE 1" CONDUIT FROM CONTROL EQUIPMENT CABINET TO GATE LOCKING MECHANISM.
- PROVIDE 1-1/4" CONDUIT FROM CONTROL EQUIPMENT CABINET TO PEDESTAL LOCATION FOR CARD READER, INTERCOM STATION AND VIDEO SURVEILLANCE CAMERA.

KEYED NOTES:

- ALTERNATE #2 - ALLEY GATE:**
PROVIDE CARD READER MOUNTED ON PEDESTAL LOCATED AT SECURITY GATE FOR ENTRY. UPON VALID CREDENTIAL, GATE LOCK SHALL RELEASE AND GATE SHALL OPEN. EXITING AT GATE SHALL BE SENSOR LOOP (REFER TO CIVIL DRAWINGS). CABLING FOR ACCESS CONTROL SYSTEM SHALL TERMINATE IN IT ROOM IN FIRST FLOOR IT ROOM OF BUILDING #5.
- ALTERNATE #2 - ANNEX/MSB GATE:**
PROVIDE GATE LOCKING MECHANISM. GATE SHALL HAVE A MASTER OVER-RIDE PUSH-BUTTON STATION LOCATED IN ANNEX. UPON INITIAL DEPRESSION OF BUTTON, GATE SHALL OPEN AND REMAIN OPEN. UPON SECOND DEPRESSION OF BUTTON, GATE SHALL CLOSE AND REMAIN CLOSED. GATE SHALL BE WIRED AND MONITORED WITH ACCESS CONTROL SYSTEM FOR THE SCHEDULING OF GATE TO OPEN AND CLOSE. WHEN GATE IS CLOSED, EXITING AT GATE SHALL BE SENSOR LOOP (REFER TO CIVIL DRAWINGS).
- ALTERNATE #2 - 35TH STREET GATE:**
PROVIDE CARD READER MOUNTED ON LOWER TIER OF PEDESTAL LOCATED AT SECURITY GATE FOR ENTRY. UPON VALID CREDENTIAL, GATE LOCK SHALL RELEASE AND GATE SHALL OPEN. CABLING FOR ACCESS CONTROL SYSTEM SHALL TERMINATE IN ANNEX IT ROOM. PROVIDE INTERCOM SYSTEM MOUNTED ON LOWER TIER OF PEDESTAL ADJACENT TO CARD READER FOR COMMUNICATION WITH ANNEX SECURITY. PROVIDE SIGNAGE STATING "PRESS BUTTON FOR ACCESS TO ANNEX" OR SIMILAR. PROVIDE INTERCOM SYSTEM MOUNTED ON LOWER TIER OF PEDESTAL ADJACENT TO ANNEX INTERCOM FOR COMMUNICATION WITH MSB OFFICE LOCATION. PROVIDE SIGNAGE STATING "PRESS BUTTON FOR ACCESS TO MISSOURI SCHOOL FOR THE BLIND" OR SIMILAR. PROVIDE MASTER INTERCOM STATION LOCATED IN ANNEX SECURITY STATION. UPON MASTER INTERCOM REMOTE RELEASE, GATE SHALL RELEASE AND OPEN. PROVIDE MASTER INTERCOM STATION LOCATED IN ADMINISTRATION AREA OF MSB. UPON MASTER INTERCOM REMOTE RELEASE, GATE SHALL RELEASE AND OPEN. EXITING AT GATE SHALL BE SENSOR LOOP. PROVIDE VIDEO SURVEILLANCE CAMERA ON TOP TIER OF PEDESTAL MOUNTED ON ARM AND AIMED AT ENTRY PORTION OF GATE.
- 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).
- SOUTHEAST PARKING LOT 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 CARD READER MOUNTED ON PEDESTAL LOCATED AT SECURITY GATE FOR EXIT AT VEHICLE GATE. UPON VALID CREDENTIAL, GATE LOCK SHALL RELEASE AND GATE SHALL OPEN. 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. CABLING FOR ACCESS CONTROL SHALL TERMINATE IN 1ST FLOOR IT ROOM IN BUILDING #14. EXITING AT MAN GATE SHALL ALSO BE EMERGENCY EGRESS HARDWARE (REFER TO ARCHITECTURAL AND CIVIL).
- 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).
- PROVIDE VIDEO SURVEILLANCE CAMERAS MOUNTED ON EXTERIOR GARAGE, AIMED TO PLAYGROUND AREA. COMMUNICATION CABLING SHALL TERMINATE IN BUILDING 17 IT ROOM.
- INTERCOM MASTER STATION SHALL RELEASE GATES AS REFERENCED IN KEYED NOTES #2 AND #3. PRIOR TO ROUGH-IN AND INSTALLATION, COORDINATE EXACT LOCATION WITH OWNER.
- INTERCOM MASTER STATION SHALL RELEASE GATES AS REFERENCED IN KEYED NOTES #3. REFER TO SHEET T-102 FOR APPROXIMATE LOCATION.
- INTERCOM MASTER STATION SHALL RELEASE GATES AS REFERENCED IN KEYED NOTES #6. PRIOR TO ROUGH-IN AND INSTALLATION, COORDINATE EXACT LOCATION WITH OWNER.

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



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

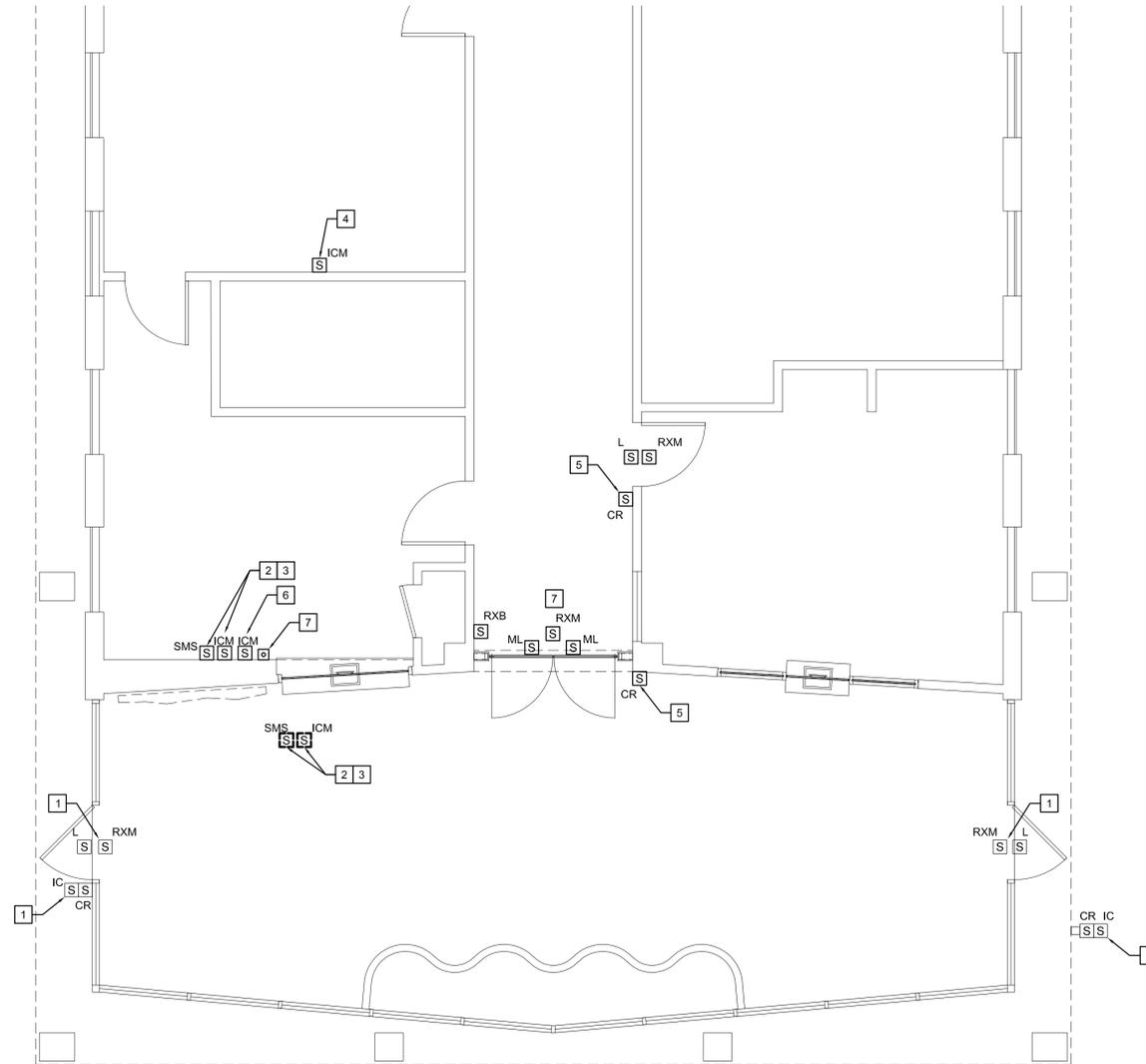
72 OF 74 SHEETS
10/18/2019

GENERAL NOTES

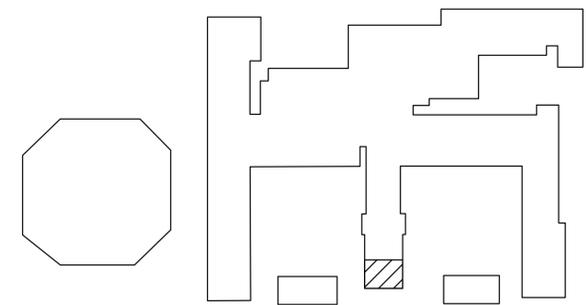
- A. COORDINATE ALL WORK WITH ARCHITECTURAL AND CIVIL PLANS AND SPECIFICATIONS.
- B. COORDINATE MOUNTING OF ALL CARD READERS AND INTERCOM SYSTEMS WITH ARCHITECTURAL PLANS, ELEVATIONS AND SPECIFICATIONS.
- C. ACCESS CONTROL EQUIPMENT AND COMPONENTS SHALL TERMINATE IN COMMUNICATION ROOM LOCATED ON SECOND 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 LOCATION OF NEW INTERCOM MASTER STATION FOR REMOTE RELEASE OF 39TH STREET GATE. REFER TO T-101 SITE PLAN. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN AND INSTALLATION.
- 7 PROVIDE REMOTE RELEASE PUSH BUTTON. UPON DEPRESSION, LOBBY VESTIBULE DOUBLE DOORS SHALL UNLOCK FOR ENTRY.



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



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



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: _____

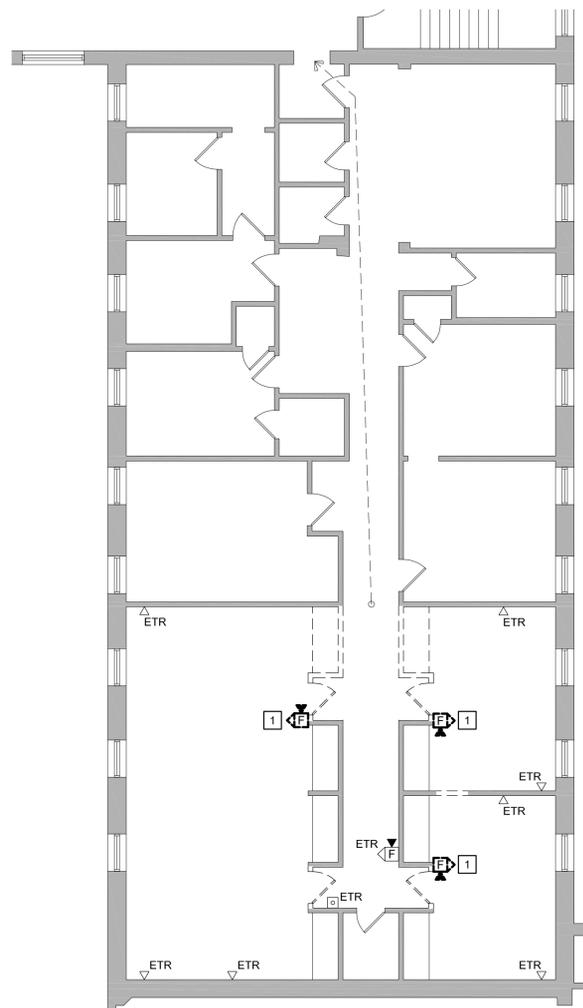
CAD DWG FILE: _____
DRAWN BY: JLC
CHECKED BY: CVH
DESIGNED BY: JLC

SHEET TITLE:
SECOND FLR PLAN
TECHNOLOGY

SHEET NUMBER:

T-104

73 OF 74 SHEETS
10/18/2019



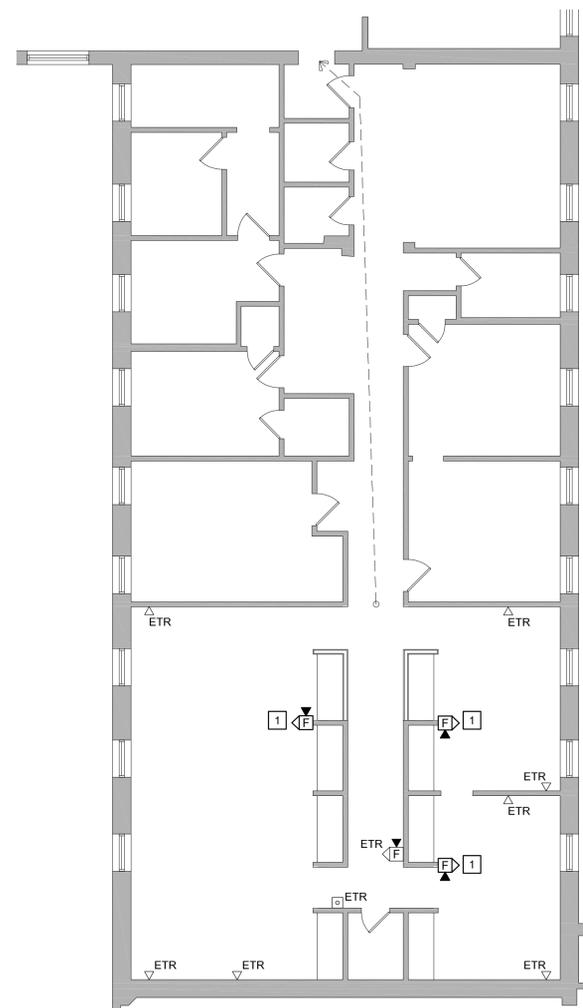
1 SECOND FLOOR PLAN DEMOLITION - TECHNOLOGY
1/8" = 1'-0"

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. REFER TO NEW WORK PLAN FOR NEW LOCATION.



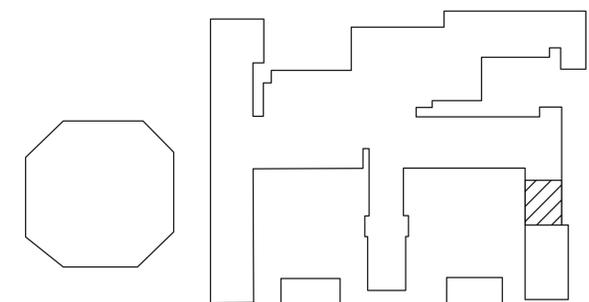
2 SECOND FLOOR PLAN NEW WORK - TECHNOLOGY
1/8" = 1'-0"

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.

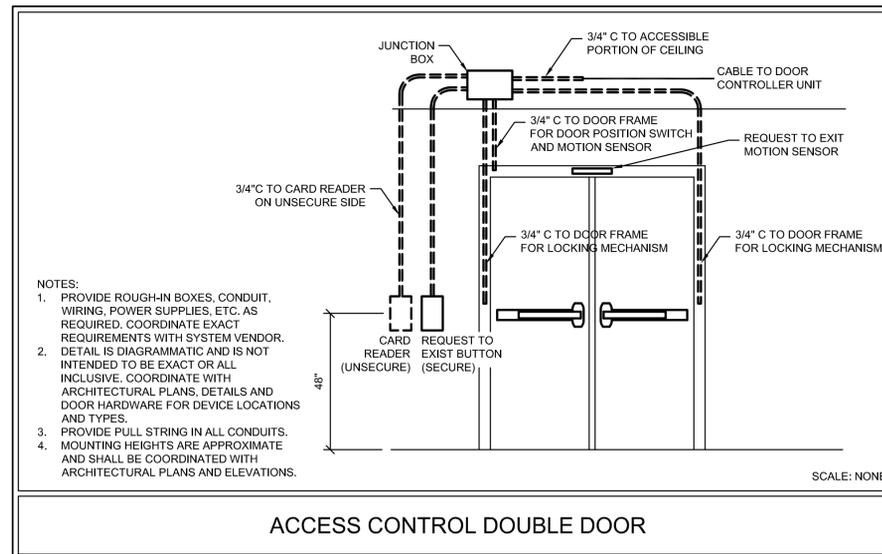
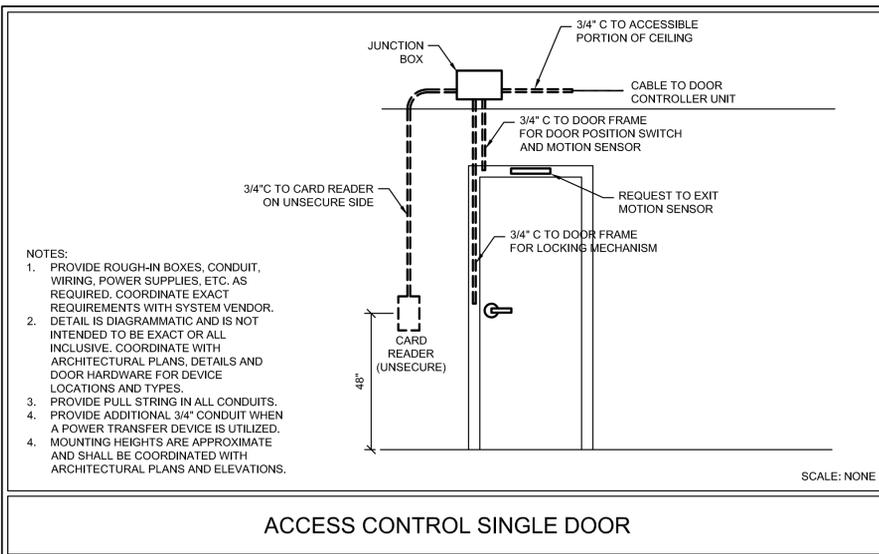
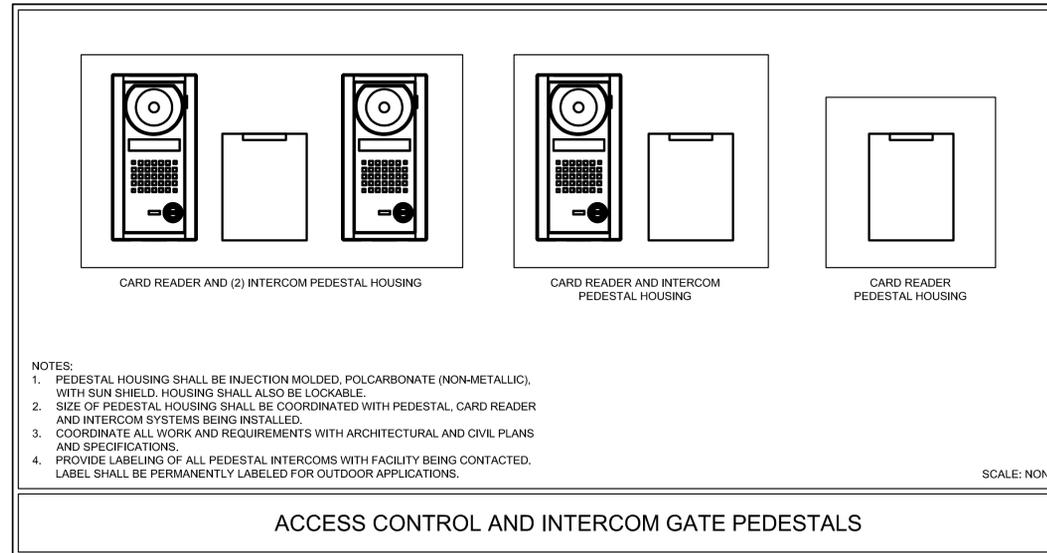
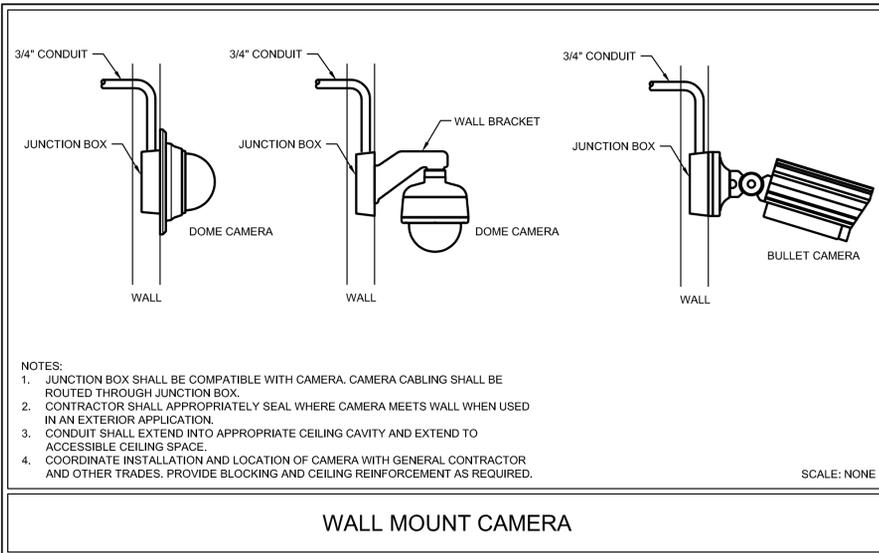
KEYED NOTES NEW WORK

- 1** REINSTALL EXISTING FIRE ALARM SPEAKER/STROBE/LIGHT UTILIZING EXISTING FIRE ALARM CABLE.



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



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

74 OF 74 SHEETS
10/18/2019