COVER SHEET
G-000
FOR BLUEBEAM LABELING OCR:

ISSUE FOR CONSTRUCTION

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Alamo Colleges

WFAC Black Box Addition PKG 1

1801 Martin Luther King Dr.,
San Antonio, TX, 78203

ISSUE FOR CONSTRUCTION

2024/06/14

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WFAC Black Box Addition PKG 1

1801 Martin Luther King Dr.,
San Antonio, TX, 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

SHEET NUMBER	SHEET NAME
ARCHITECTURAL GENERAL	
G-000	COVER SHEET
G-002	GENERAL PROJECT INFORMATION
G-021	TEXAS ACCESSIBILITY STANDARDS
CIVIL	
C100	NOTES
C200	SITE PLAN
C201	SITE FIRE PLAN
C202	DIMENSION CONTROL & PAVING PLAN
C300	EXISTING CONDITIONS & DEMO PLAN
C400	GRADING PLAN
C401	CRAWLSPACE
C500	PRE DRAINAGE AREA MAP
C501	POST DRAINAGE AREA MAP
C600	OVERALL UTILITY
C700	ELEC. & COMNS PLAN & PROFILES
C800	STORM PLAN
C801	STORM PROFILES
C900	SANITARY PLAN & PROFILES
C1000	WATER PLAN & PROFILES
C1100	EROSION CONTROL
C1200	DETAILS
C1201	DETAILS
C1202	DETAILS
STRUCTURAL	
S -101	NOTES, SECTIONS & DETAILS
S -102	SPECIAL INPECTION NOTES
S -201	FOUNDATION FRAMING PLAN
S-301	SECTIONS & DETAILS & MECH. YARD FOUNDATION
S-302	SECTION
S-303	SECTION
S-304	SECTION
S-305	SECTION
S-306	SECTION
S-307	SECTIONS
S-308	SECTIONS
S-309	SECTIONS
S-401	CONC. BEAM SCHED & NOTES
S-402	CONC. JOIST SCHED, NOTES & DETAILS
ARCHITECTURAL SITE DEMOLITION	
ASD101	DEMOLITION ARCHITECTURAL SITE PLAN
ARCHITECTURAL SITE	
AS100	ARCHITECTURAL SITE PLAN
AS401	ARCHITECTURAL ENLARGED SITE PLANS
ARCHITECTURAL	
A-100	CRAWLSPACE FLOOR PLAN - COMPOSITE
A-811	DOOR SCHEDULE PANEL AND FRAME TYPES
MECHANICAL	
MPS-101	MECHANICAL AND PLUMBING SITE PLAN
ELECTRICAL	
EDS-101	DEMO SITE POWER PLAN
E-501	ELECTRICAL ONE LINE DIAGRAM
E-502	ELECTRICAL RISER DIAGRAM
E-601	ELECTRICAL SYMBOL LEGEND AND CONTRACTOR SCHEDULE
E-602	ELECTRICAL DETAILS
E-603	ELECTRICAL DETAILS
ES-101	SITE POWER PLAN
PLUMBING	
P-000	SYMBOLS AND ABBREAVIATIONS
PU-101-A	CRAWLSPACE PLUMBING PLAN
P-601	PLUMBING DETAILS
P-602	PLUMBING DETAILS
TECHNOLOGY	
T-001	TECHNOLOGY SYSTEM NOTES AND LEGENDS
TS-101	SITE TECHNOLOGY PLAN

ADD ALTERNATES

1. PROVIDE SEPARATE PRICING TO REMOVE THE LOBBY ADDITION IN FRONT OF THE EXISTING WATSON THEATER ENTRANCE. THIS IS TO INCLUDE PIERS, FOUNDATION,
2. MUD SLAB:
   2A - PROVIDE SEPARATE PRICING TO REDUCE MUD SLAB DOWN TO A PATHWAYS FROM THE FLOOR HATCH TO THE PLUMBING DRAINS. REFER TO SHEET A-100.
   2B - PROVIDE SEPARATE PRICING TO REMOVE THE MUD SLAB.

ABBREVIATIONS AND LEGEND KEYS

REFER TO SCHEDULES AND LEGENDS FOR ADDITIONAL ABBREVIATIONS
REFER TO OTHER DISCIPLINES FOR ADDITIONAL ABBREVIATIONS

A	
ABV	above
ACOUS	acoustical
ACT	acoustical ceiling tile
AD	area drain
ADJ	adjustable
AFF	above finished floor
ALT	alternate
ALUM	aluminum
APPROX	approximate
ARCH	architect / architectural
B	
B.O.	bottom of
BALC	balcony
BD	board
BET	between
BLDG	building
BLKG	blocking
BLW	below
BM	beam
BOT	bottom
BRKT	bracket
BULKHD	bulkhead
BUR	built up roof
C	
C.G.	corner guard
CAB	cabinet
CALK	caulking
CEM	cement
CER	ceramic
CJ	control joint
CLG	ceiling
CLOS	closet
CLR	clear
CO	cased opening
COL	column
CONC	concrete
CONT	continous
CPT	carpet
CT	ceramic tile
CTR	center
D	
DBL	double
DET	detail
DIA	diameter
DIM	dimension
DN	down
DR	door
DS	down spout
DW	dishwasher
DWG	drawing
E	
E	east
EA	each
EIFS	exterior insulation & finish system
ELEC	electric(al)
ELEV	elevation
EMER	emergency
ENCL	enclosure
EOS	edge of slab
EQ	equal
EQUIP	equipment
ETR	existing to remain
EW	each way
EXP. JT.	expansion joint
EXST	existing
F	
F.O.	face of
FA	fire alarm
FAP	fire annunciator panel
FD	floor drain
FE	fire extinguisher
FEC	fire extinguisher cabinet
FG	finish group
FH	fire hydrant
FHC	fire hose cabinet
FIN	finish
FLR	floor
FLUOR	fluorescent
FT	foot or feet
FUR	furring
G	
GAL	gallon
GALV	galvanized
GB	grab bar
GC	general contractor
GL	glass
GND	ground
GWB	gypsum wall board
GYP	gypsum
H	
H.W.H.	hot water heater
HC	handicapped
HDWD	hardwood
HDWR	hardware
HM	hollow metal
HORIZ	horizontal
HR	hour
HT	height
I	
ID	inner diameter
INCAN	incandescent
INSUL	insulation
INT	interior
J	
JAN	janitor
JST	joist
JT	joint
L	
LAM	laminate
LAV	lavatory
LB	pound(s)
LDG	landing
LT	light
M	
MAX	maximum
MECH	mechanical
MEMB	membrane
MFR	manufacturer
MIN	minimum
MISC	miscellaneous
MO	masonry opening
MTD	mounted
MTL	metal
N	
N	north
NIC	not in contract
NO	number
NOM	nominal
NTS	not to scale
O	
O.P.	overflow pipe
OA	overall
OC	on center
OD	outside diameter
OFF	office
OH	opposite hand
OPG	opening
OPP	opposite
P	
PART	partition
PCT	porcelain tile
PERM	perimeter
PG	paint grade
PLAM	plastic laminate
PLAS	plaster
PLYWD	plywood
POLYISO	polyisocyanurate
PR	pair
PT	paint
PTD	painted
R	
R	riser
RAD	radius
RCP	reflected ceiling plan
RD	roof drain
RE:	refer
REF	refrigerator
REINF	reinforced
REQD	required
RESIL	resilient
RM	room
RO	rough opening
RTU	root top unit (mech)
S	
S	south
SAFB	sound attenuation fiber batt
SC	scupper
SCHED	schedule
SEAL	sealant
SECT	section
SF	square foot
SHT	sheet
SIM	similar
SPEC	specification
SQ	square
SS	stainless steel
STD	standard
STL	steel
STOR	storage
STRUCT	structural
SUSP	suspended
SYM	symmetrical
T	
T	tread
T&G	tongue & groove
T.O.	top of
TEL	telephone
TER	terrazzo
THK	thick
THR	threshold
TYP	typical
U	
UC	undercut
UNFIN	unfinished
UNO	unless noted otherwise
UON	unless otherwise noted
UTIL	utility
V	
VCT	vinyl compostion tile
VERT	vertical
VIF	verify in field
VTR	vent termination pipe
VWC	vinyl wall covering
W	
W	west
W/	with
W/O	without
WC	watercloset
WIN	window
WP	waterproof
WS	wetstack
WSCT	wainscot
WT	weight
X	
XPS	extruded polystrene

PROJECT GRAPHIC REFERENCES

A-201A1

- SHEET NUMBER
- **FLIP SHEET** (Schedules)
- **BUILDING AREA**
- **LEVEL REFERENCE**
- **SHEET SERIES TYPE**

DISCIPLINE

G	GENERAL
C	CIVIL
CA	SPORTS CIVIL
SA	SPORTS ARCH
S	STRUCTURAL
L	LANDSCAPE
D	DEMOLITION
A	ARCHITECTURAL
M	MECHANICAL
E	ELECTRICAL
P	PLUMBING
T	TECHNOLOGY
FS	FOOD SERVICE
AV	ACOUSTICAL
TH	THEATRICAL

SUBDISCIPLINE

-	*NOT USED*
S	ARCH SITE
D	DEMO
I	INTERIOR
S	SITE
F	FURNITURE
G	GRAPHICS & SIGNAGE
Q	EQUIPMENT

0	GENERAL
1	PLANS: (Site, Floor, Finish, Graphics)
2	CEILING
3	ROOF
4	ENLARGED PLANS
5	ELEVATIONS (Exterior & Interior)
6	SECTIONS: (Bldg & Wall)
7	BLDG DETAILS
8	DIAGRAMS/COMPILED SCHEDULES: (Partition Types, Casework/Millwork, Door & Panel/Frame Types, Window Types)
9	MISCELLANEOUS

GENERAL NOTES

A. THE CONTRACT DOCUMENTS ARE TO INCLUDE AIA DOCUMENT A201 "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION". CLIENT SHALL BE DESIGNATED AS "THE OWNER", PBK ARCHITECTS, INC. SHALL BE DESIGNATED AS "THE ARCHITECT". FACILITY SHALL BE DESIGNATED AS "THE LANDLORD". THE CONTRACT DOCUMENT SHALL ALSO INCLUDE THE AGREEMENT, PERFORMANCE AND PAYMENT BONDS, GENERAL CONDITIONS, SUPPLEMENTARY CONDITIONS, THE SPECIFICATIONS, CONTRACT DRAWINGS ADDENDA, AND CONTRACT MODIFICATIONS, BUILDING RULES AND REGULATIONS & ANY OTHER DOCUMENTS REQUIRED BY THE OWNER.

B. THE WORK SHALL BE DONE IN ACCORDANCE WITH THE RULES AND REGULATIONS OF ALL APPLICABLE SAFETY AND BUILDING CODES, AND AS APPROVED BY THE AUTHORITY HAVING JURISDICTION. CONTRACTOR IS RESPONSIBLE FOR SECURING AND PAYING FOR ALL PERMITS REQUIRED FOR THE WORK AND FOR THE SCHEDULING OF ALL REQUIRED INSPECTIONS DURING THE COURSE OF THE WORK.

C. CONTRACTOR SHALL REVIEW AND VERIFY EXISTING CONDITIONS AS PROVIDED IN THE CONSTRUCTION DOCUMENTS. CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ALL DISCREPANCIES, ERRORS, INCONSISTENCIES OR AMBIGUITIES PRIOR TO PROCEEDING WITH THE WORK.

D. CONTRACTOR SHALL BE RESPONSIBLE FOR, AND PROVIDE PROTECTION OF, ANY EXISTING FINISHES, MATERIALS, AND EQUIPMENT TO REMAIN. CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGED FINISHES, MATERIALS, AND EQUIPMENT AS A RESULT OF THE WORK. ALL EXISTING FINISHES TO REMAIN SHALL BE CLEANED AT THE COMPLETION OF CONSTRUCTION. CONTRACTOR SHALL PHOTOGRAPH AND DOCUMENT ALL EXISTING DAMAGES, AND PROVIDE TO THE ARCHITECT, PRIOR TO PROCEEDING WITH THE WORK.

E. ALL MATERIALS AND SYSTEMS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL CONSTRUCTION SHALL BE OF INDUSTRY STANDARD OR BETTER. THE ARCHITECT SHALL BE FINAL JUDGE OF QUALITY.

F. ONLY NEW MATERIALS AND EQUIPMENT OF RECENT MANUFACTURE, OF STANDARD QUALITY, AND FREE FROM DEFECTS, WILL BE PERMITTED IN THE WORK, UNLESS OTHERWISE NOTED. REJECTED MATERIALS AND EQUIPMENT SHALL BE REMOVED IMMEDIATELY FROM THE WORK AND REPLACED WITH MATERIALS AND EQUIPMENT OF THE QUALITY SPECIFIED. FAILURE TO REMOVE REJECTED MATERIALS AND EQUIPMENT SHALL NOT RELIEVE CONTRACTOR FROM THE RESPONSIBILITY FOR QUALITY OF MATERIAL AND EQUIPMENT USED NOR FROM ANY OTHER OBLIGATION IMPOSED BY THE CONTRACT.

G. DO NOT SCALE DRAWINGS. STATED & WRITTEN DIMENSIONS GOVERN. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND SHALL BE RESPONSIBLE FOR THEIR ACCURACY. NO EXTRA CHARGE OR COMPENSATION SHALL BE ALLOWED BECAUSE OF DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND THOSE INDICATED ON THE DRAWINGS, UNLESS THEY CONTRIBUTE TO A CHANGE IN THE SCOPE OF THE WORK. ANY DIFFERENCE FOUND SHALL BE SUBMITTED TO THE ARCHITECT FOR COORDINATION PRIOR TO ORDERING, MANUFACTURING, OR PROCEEDING WITH THE WORK. HORIZONTAL DIMENSIONS INDICATED ARE TO/FROM FACE OF FINISH, UNLESS NOTED OTHERWISE. VERTICAL DIMENSIONS ARE FROM TOP OF FLOOR SLAB EXCEPT WHERE NOTED TO BE ABOVE FINISHED FLOOR (AFF). DIMENSIONS ARE NOT ADJUSTABLE WITHOUT APPROVAL OF ARCHITECT UNLESS NOTED +/-.

H. CONTRACTOR SHALL VERIFY THAT NO CONFLICTS EXIST BETWEEN THE LOCATIONS OF EXISTING AND PROPOSED NEW MECHANICAL, ELECTRICAL, PLUMBING, DATA, AND SPRINKLER EQUIPMENT (INCLUDING BUT NOT LIMITED TO STRUCTURAL MEMBERS, PIPING, DUCT WORK, CONDUIT AND SPRINKLERS) AND THAT CLEARANCES FOR INSTALLATION AND MAINTENANCE OF EQUIPMENT ARE PROVIDED. ELEMENTS IN CONFLICT SHALL BE DOCUMENTED AND PROVIDED TO THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.

J. CONTRACTOR SHALL PROVIDE THE ARCHITECT WITH SHOP DRAWINGS FOR REVIEW AND APPROVAL, FOR ALL, BUT NOT LIMITED TO, THE FOLLOWING: SHOP-FABRICATED MILLWORK, CARPET LAYOUT, FLOORING, LIGHT FIXTURES, DOORS, MISC. STEEL, METAL FABRICATION, GLASS/GLAZING, SPRINKLER LAYOUTS, HARDWARE. SHOP DRAWINGS SHALL BE SUBMITTED IN THE FORM OF 3 SETS OF PRINTS. SHOP DRAWINGS SHALL NOT BE REPRODUCTIONS OF CONTRACT DOCUMENTS. MATERIAL SUBMITTALS (3 SAMPLES) SHALL BE PROVIDED FOR WOOD, FASTENERS, ACRYLIC, CARPET, TILE, BASE, PAINT, LAMINATE AND ANY OTHER MATERIALS INDICATED IN THE SHOP DRAWING.

K. CONTRACTOR SHALL PROVIDE THE ARCHITECT WITH MANUFACTURER'S CUT SHEETS AND SPECIFICATIONS FOR ALL EQUIPMENT INCLUDING BUT NOT LIMITED TO: LIGHT FIXTURES, PLUMBING EQUIPMENT, ELECTRICAL EQUIPMENT, FANS, SUPPLEMENTARY HEATING AND COOLING ELEMENTS, ALL HARDWARE AND SECURITY EQUIPMENT.

L. CONTRACTOR SHALL NOT PROCEED WITH WORK FOR WHICH ADDITIONAL COMPENSATION BEYOND THE CONTRACT AMOUNT IS EXPECTED WITHOUT WRITTEN AUTHORIZATION FROM THE ARCHITECT AND OWNER. FAILURE TO OBTAIN SUCH AUTHORIZATION SHALL INVALIDATE A CLAIM FOR EXTRA COMPENSATION. CONTRACTOR SHALL NOT PROCEED WITH WORK WHICH, IF COMPLETED IN STRICT CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS, WILL RESULT IN ADDITIONAL WORK BEYOND THE SCOPE OF THE CONTRACT WITHOUT WRITTEN AUTHORIZATION FROM THE ARCHITECT AND OWNER. ANY FIELD CONDITIONS THAT SIGNIFICANTLY VARY FROM THE CONTRACT DOCUMENTS OR WILL RESULT IN ADDITIONAL WORK, SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.

M. CONTRACTOR SHALL REVIEW AND COORDINATE THE SIZE AND LOCATION OF ALL SLAB OPENINGS WITH ALL RELATED DISCIPLINES. CONTRACTOR SHALL SUBMIT PROPOSED LOCATIONS OF CORE DRILLING AND SLAB OPENINGS TO ARCHITECT AND STRUCTURAL ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO PROCEEDING WITH THE WORK.

N. PATCH, REPAIR, AND INSTALL ALL FIREPROOFING AS REQUIRED BY CODE. FIREPROOF ALL NEW PENETRATIONS AS REQUIRED FOR APPROVAL BY THE AUTHORITY HAVING JURISDICTION.

P. WHERE BUILDING THERMAL EXPANSION JOINTS ARE LOCATED, CONTRACTOR SHALL COMPLY WITH APPLICABLE CODE AND INDUSTRY BEST PRACTICES FOR ROUTING OF ALL PIPING, DUCTS, CONDUITS AND OTHER CONTINUOUS RUNS.

Q. CONTRACTOR SHALL CONTINUOUSLY CHECK ARCHITECTURAL AND STRUCTURAL CLEARANCES FOR ACCESSIBILITY OF EQUIPMENT AND MECHANICAL AND ELECTRICAL SYSTEMS. NO ALLOWANCES OF ANY KIND WILL BE MADE FOR THE GENERAL CONTRACTOR'S NEGLIGENCE TO FORESEE MEANS OF INSTALLING EQUIPMENT INTO POSITION.

R. FINISHED WORK SHALL BE FIRM, WELL-ANCHORED, IN TRUE ALIGNMENT, PLUMB, LEVEL, WITH SMOOTH, CLEAN, UNIFORM, APPEARANCE WITHOUT WAVES, DISTORTIONS, HOLES, MARKS, CRACKS, STAINS, OR DISCOLORATION. JOINTING SHALL BE CLOSE FITTING, NEAT AND WELL SCRIBED. FINISHED WORK SHALL HAVE NO EXPOSED UNSIGHTLY ANCHORS OR FASTENERS AND SHALL NOT PRESENT HAZARDOUS, UNSAFE CORNERS. ALL WORK SHALL HAVE THE PROVISION FOR EXPANSION, CONTRACTION AND SHRINKAGE AS NECESSARY TO PREVENT CRACKS, BUCKLING, AND WARPING DUE TO TEMPERATURE AND HUMIDITY CONDITIONS.

S. ATTACHMENTS, CONNECTIONS OR FASTENERS OF ANY NATURE ARE TO PROPERLY AND PERMANENTLY BE SECURED IN CONFORMANCE WITH INDUSTRY BEST PRACTICES. THE DRAWINGS HIGHLIGHT SPECIAL CONDITIONS ONLY AND BY NO MEANS ILLUSTRATE EVERY CONNECTION. THE CONTRACTOR IS RESPONSIBLE FOR IMPROVING CONNECTION ACCORDINGLY.

T. CONTRACTOR SHALL WAIVE "COMMON PRACTICE" AND "COMMON USAGE" AS CONSTRUCTION CRITERIA WHEREVER DETAILS AND CONTRACT DOCUMENTS OR GOVERNING CODES, ORDINANCES, ETC. REQUIRE QUANTITY OR BETTER QUALITY THAN COMMON PRACTICE OR COMMON USAGE WOULD REQUIRE.

U. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND SUBMITTALS AND SHALL ORDER AND SCHEDULE DELIVERY OF MATERIALS TO AVOID DELAYS IN CONSTRUCTION. IF AN ITEM IS FOUND TO BE UNAVAILABLE OR TO HAVE A LONG LEAD TIME, THE GENERAL CONTRACTOR SHALL NOTIFY ARCHITECT IMMEDIATELY WITH A PROPOSED ALTERNATIVE.

V. CONTRACTOR SHALL NOTIFY THE OWNER, THE LANDLORD, AND THE ARCHITECT IN WRITING OF ANY DEFICIENCIES IN BASE BUILDING WORK PRIOR TO THE COMMENCEMENT OF THE WORK. ANY UNREPORTED DEFICIENCIES WILL BECOME THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CORRECT.

W. CONTRACTOR SHALL EXERCISE INDUSTRY BEST PRACTICES FOR CARE AND CAUTION DURING THE CONSTRUCTION OF THE WORK, AND SHALL SCHEDULE WORK TO MINIMIZE DISTURBANCES TO OCCUPANTS, ADJACENT SPACES AND/OR STRUCTURES, PROPERTY, PUBLIC THOROUGHFARES, ETC. THE GENERAL CONTRACTOR SHALL TAKE PRECAUTIONS AND BE RESPONSIBLE FOR THE SAFETY OF ALL BUILDING OCCUPANTS DURING CONSTRUCTION PROCEDURES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COSTS INCURRED.

X. ALL DEBRIS SHALL BE REMOVED FROM THE SITE ON A DAILY BASIS, OR AS DIRECTED BY THE AUTHORITY HAVING JURISDICTION. UPON COMPLETION OF THE WORK, REMOVE ALL DEBRIS FROM THE WORK PROVIDED UNDER THIS CONTRACT AND LEAVE ALL AREAS CLEAN. TRASH IS NOT PERMITTED TO BE BURNED ON SITE.

Y. ALL ABANDONED AND MISCELLANEOUS NAILS, HANGERS, STAPLES, WIRES, CONDUITS AND DEBRIS SHALL BE REMOVED FROM EXPOSED AREAS OF THE FLOORS, WALLS, AND CEILINGS. REMOVE ALL ABANDONED PIPE SLEEVES IN FLOOR SLABS. PATCH EXISTING SLAB AS REQUIRED TO MAINTAIN UL FIRE RATING OF FLOOR SLAB WHERE PIPES AND CONDUITS HAVE BEEN REMOVED.

Z. SLAB PENETRATIONS SHALL BE SEALED AS REQUIRED TO MAINTAIN FIRE RATING, USING MATERIALS AND METHODS APPROVED BY THE AUTHORITY HAVING JURISDICTION. EXPANSION MATERIAL SHALL BE APPROVED BY THE ARCHITECT.

ZA. CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY ACCESS PANELS WHICH MAY BE REQUIRED PRIOR TO PROCEEDING WITH THE WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL TRADES. REQUIRED ACCESS PANELS SHALL BE INCLUDED IN THE CONTRACTOR'S SCOPE OF WORK.

ZB. CONTRACTOR SHALL PROVIDE THE TEAM WITH A CONSTRUCTION SCHEDULE SHOWING THE PROPOSED PHASING. LONG LEAD ITEMS THAT WILL AFFECT THE SUBSTANTIAL COMPLETION DATE SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION IMMEDIATELY.

PROJECT GRAPHIC REFERENCES

PROJECT SYMBOLS

- N — **PLAN NORTH / NORTH ARROW**
- N — **TRUE NORTH / NORTH ARROW**
- **WORKING POINT / LEVEL POINT / DATUM POINT / SPOT ELEVATION / TOP OF FRAMING/STEEL**
- M4A — **FIRE RATING TYPE / CORE STRUCTURAL WIDTH TYPE / COMPOSITION TYPE / PARTITION TYPE TAG (RE: PARTITION SCHEDULE)**
- A299 — **BLDG AREA / LEVEL / DOOR SEQUENCE (RE: DOOR SCHEDULE)**
- ROOM A299 — **ROOM NAME (RE: ROOM FINISH SCHEDULE) / ROOM SEQUENCE / LEVEL / BLDG AREA**
- **EXIT SIGN / DIRECTION SYMBOL**
- RE: 01 / A-101B — **MATCHLINE / VIEW REFERENCE**
- CW1 — **CURTAINWALL TAG / STOREFRONT TAG**
- C01 — **KEYNOTE TAG**
- 101A — **WINDOW & LOUVER TAG**
- AB-1 — **MATERIAL TAG**
- 2 RE — **REVISION TAG**
- 101 30x34 LOCK — **CASEWORK TYPE (AWI SERIES) / SIZE (WxD)**

PROJECT SYMBOLS

- ACT-1 / 8'-0" — **CEILING TYPE / CEILING HEIGHT**
- 1 / A — **COLUMN LINE REFERENCE**
- 1 / A — **EXISTING/NEW COLUMN LINE REFERENCE**
- 1 / A101 — **DETAIL NUMBER / SHEET NUMBER / CALLOUT REFERENCE**
- 1 SIM / A101 — **EXTERIOR REFERENCE / ELEVATION NUMBER / SHEET NUMBER**
- 1 SIM / A101 — **INTERIOR REFERENCE / ELEVATION NUMBER / SHEET NUMBER**
- SIM 10 / A7.10 — **REFERENCE / BUILDING SECTION REFERENCE / DETAIL NUMBER / SHEET NUMBER**
- SIM 10 / A7.10 — **REFERENCE / WALL SECTION REFERENCE / DETAIL NUMBER / SHEET NUMBER**
- ℄ — **CENTER LINE, & SYMBOL**
- **ABOVE LINE**
- **BEYOND LINE**
- **BREAK LINE**

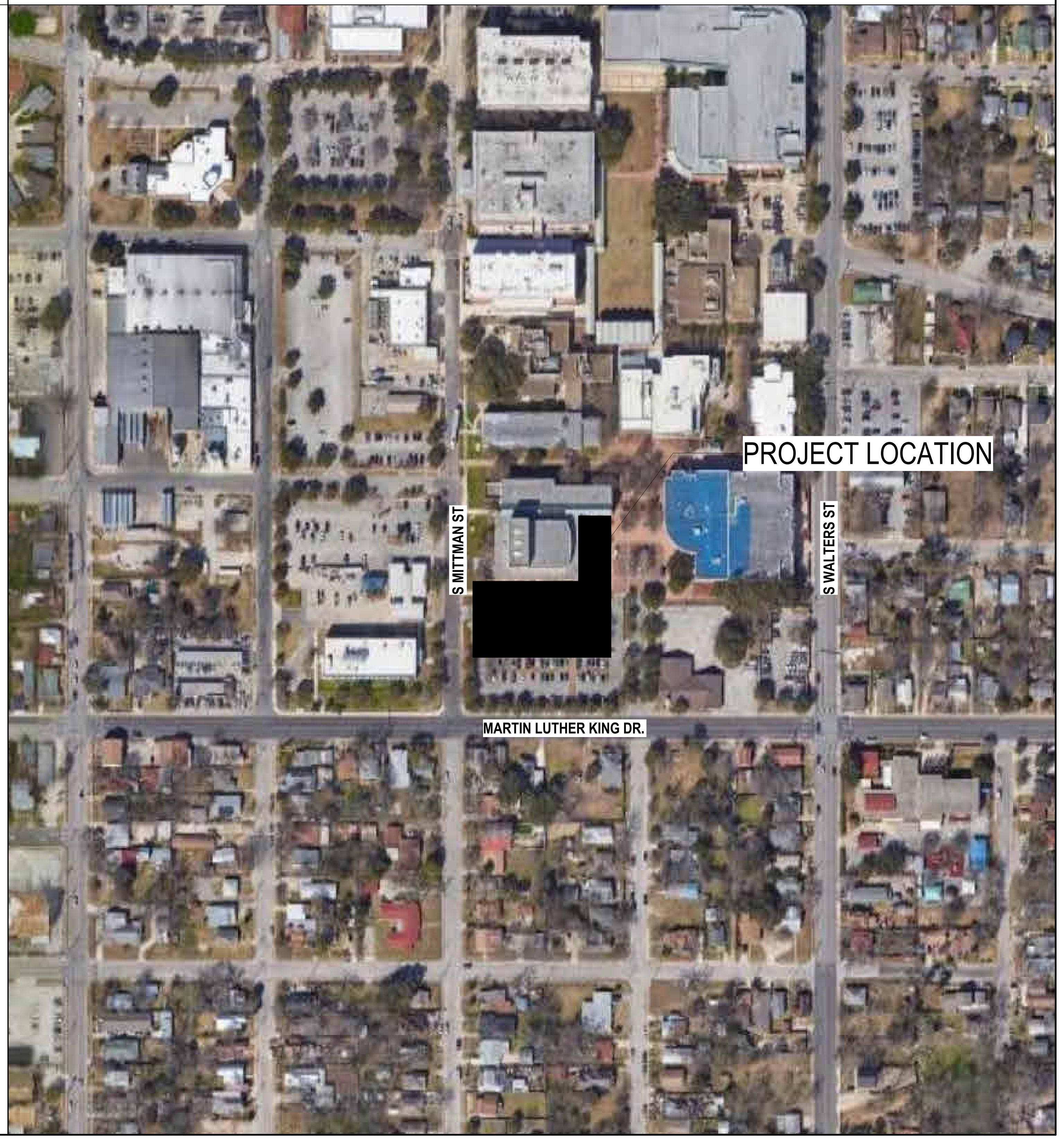
CONSTRUCTION TYPE SYMBOLS

- EXISTING CONSTRUCTION TO REMAIN
- EXISTING CONSTRUCTION TO BE DEMOLISHED
- NEW NON-RATED CONSTRUCTION

MATERIAL INDICATIONS

- CONCRETE
- BRICK
- CONC. MASONRY UNITS (CMU)
- RIGID INSULATION
- BATT INSULATION
- ACOUSTICAL TILE / FABRIC PANEL
- GYPSUM BOARD
- PLASTER ON METAL LATH
- FINISH WOOD
- CONTINUOUS WOOD
- BLOCKING / SHIM
- PLYWOOD
- EARTH
- CAST STONE / SPRAY ON INSULATION / SAND / MORTAR
- STEEL
- ALUMINUM
- STONE
- GRAVEL
- SEALANT
- ROD STOCK & SEALANT

VICINITY MAP



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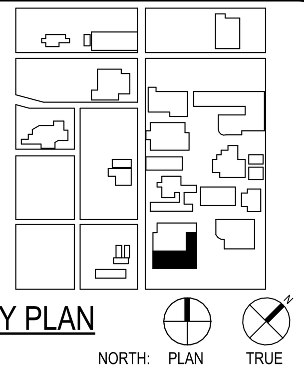
ST. PHILIP'S COLLEGE



CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/14	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER 1

GENERAL PROJECT INFORMATION

G-002

ISSUE FOR CONSTRUCTION

File Path: Autodesk Docs://Alamo CS_230462_At Philip College WBB Add/230462 WFAC - Blackbox Addition - A23.rvt

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ISSUE FOR CONSTRUCTION

TEXAS ACCESSIBILITY STANDARDS
G-021
FOR BLUEBEAM LABELING/OCR:

0"
1"

FRONT APPROACH, PULL SIDE
60" MIN.
18" MIN
(a)

FRONT APPROACH, PUSH SIDE
NOTE: x = 12" IF DOOR HAS BOTH A CLOSER AND A LATCH
48" MIN.
x
(b)/(c)

HINGE APPROACH, PULL SIDE
3' - 0"
5' - 0"
(d)

HINGE APPROACH, PULL SIDE
3' - 6"
4' - 0"
(e)

HINGE APPROACH, PUSH SIDE
NOTE: y = 48" MINIMUM IF DOOR HAS BOTH A CLOSER AND A LATCH
y = 42" MIN.
22" MIN
(g)/(f)

LATCH APPROACH, PULL SIDE
NOTE: y = 54" MINIMUM IF DOOR HAS A CLOSER
y = 48" MIN.
24" MIN.
(h)/(i)

LATCH APPROACH, PUSH SIDE
NOTE: y = 48" MINIMUM IF DOOR HAS A CLOSER
24" MIN.
y = 42" MIN.
(j)/(k)

2012 TAS 404.2.4.1 MANEUVERING CLEARANCES AT MANUAL SWINGING DOORS AND GATES

(a) HINGED DOOR
32" MIN
90°-120°
(b) SLIDING DOOR
32" MIN
(c) FOLDING DOOR
32" MIN

2012 TAS 404.2.3 CLEAR WIDTH OF DOORWAYS

(a) FRONT APPROACH
48" MIN
(b) SIDE APPROACH
42" MIN.
(c) POCKET OR HINGE APPROACH
42" MIN
22" MIN
(d) STOP OR LATCH APPROACH
42" MIN
24" MIN

2012 TAS 404.2.4.2 MANEUVERING CLEARANCES AT DOORWAYS WITHOUT DOORS, SLIDING DOORS, GATES AND FOLDING DOORS

(a) PULL SIDE
5' - 0"
18" MIN
x + 6"
(b) PUSH SIDE
4' - 0"
x + 6"
(c) PUSH SIDE, DOOR PROVIDED WITH BOTH CLOSER AND LATCH
4' - 0"
12" MIN
x + 6"

2012 TAS 404.2.4.3 MANEUVERING CLEARANCES AT RECESSED DOORS AND GATES

(a)
48" MIN
(b)
48" MIN
(c)
48" MIN

2012 TAS 404.2.6 DOORS IN SERIES AND GATES IN SERIES

ACCESSIBLE ROUTES & DOOR APPROACH CLEARANCES

CHANGES IN LEVEL
1/4" MAX
FIGURE 303.2 VERTICAL
1/2
1/4" MAX
FIGURE 303.3 BEVELED

CIRCLE TURNING SPACE
ø5' - 0"
FIGURE 304.3.1

T-SHAPED TURNING SPACE
60" MIN
36" MIN
60" MIN
24" MIN
36" MIN
12" MIN
12" MIN
FIGURE 304.3.2

CHANGES IN LEVEL, TURNING SPACE, & CLEAR FLOOR AREA

CLEAR FLOOR OR GROUND SPACE
4' - 0"
2' - 6"
2012 TAS FIGURE 305.3

POSITION OF CLEAR FLOOR OR GROUND SPACE
30" MIN
35" MIN
48" MIN
48" MIN
(a) FORWARD APPROACH
(b) PARALLEL APPROACH
2012 TAS FIGURE 305.5

MANEUVERING CLEARANCE IN AN ALCOVE, FORWARD APPROACH
60" MIN
x ≥ 24"
36" MIN
2012 TAS FIGURE 305.7.1

Maneuvering clearance in an alcove, parallel approach
60" MIN
x > 15"
2012 TAS FIGURE 305.7.2

VERTICAL CLEARANCES
X < 80"
27" MAX
FIGURE 307.4

LIMITS OF PROTRUDING OBJECTS
SIGN OR OBSTRUCTION
4" MAX
80" MIN
> 27"
FIGURE 307.2
PROTRUDING OBJECTS SHALL NOT REDUCE THE CLEAR WIDTH REQUIRED FOR ACCESSIBLE ROUTES.

UNOBSTRUCTED FORWARD REACH
15" MIN
48" MAX
FIGURE 308.2.1

UNOBSTRUCTED SIDE REACH
15" MIN
48" MAX
10" MAX
FIGURE 308.3.1

OBSTRUCTED HIGH FORWARD REACH
20" MAX
48" MAX
> 20"-25" MAX
44" MAX
(a)
(b)
FIGURE 308.2.2

OBSTRUCTED HIGH SIDE REACH
34" MAX
48" MAX
10" MAX
> 10"-24" MAX
34" MAX
48" MAX
(a)
(b)
FIGURE 308.3.2

24 TEXAS ACCESSIBILITY STANDARDS
1/4" = 1'-0"

NOTE: ALL FIXTURE SIZES , MOUNTING HEIGHTS, AND CLEARANCES MUST ABIDE BY ALL APPLICABLE ACCESSIBILITY STANDARDS

2' - 2"
TA7 AT WOMEN'S TOILET ONLY
TA11
TA7
TA3
60" MIN. CLEAR
EQ
EQ
3' - 0"MIN. (3'-2" MAX.)
*SEE ENLARGED PLANS
STANDARD TOILET STALL
PLAN DESIGNATION S3

TOP OF SEAT
17" - 19"
7" - 9"
18" MAX
25"TYP 44"MAX
TA3
TA7
EQ
EQ

NOTE: ALL FIXTURE SIZES , MOUNTING HEIGHTS, AND CLEARANCES MUST ABIDE BY ALL APPLICABLE ACCESSIBILITY STANDARDS

32"MIN. CLEAR
TA7 AT WOMEN'S TOILET ONLY
TA11
TA15
TA7
TA3
60" MIN. CLEAR
42"MIN.
12"MAX
18"
35" MIN. (37" MAX.)
*SEE ENLARGED PLANS
AMBULATORY ACCESSIBLE TOILET STALL
PLAN DESIGNATION S2

12" MAX
TA15
42" MIN
TOP OF SEAT
33" - 36"
18"
7" - 9"
18" MAX
25"TYP 44"MAX
TA3
TA7
EQ
EQ
AMBULATORY ACCESSIBLE TOILET W/ GRAB BARS TOILET PAPER DISPENSER, AND SANITARY NAPKIN DISPOSAL
AMBULATORY ACCESSIBLE TOILET W/ GRAB BARS AND TOILET PAPER DISPENSER
COORDINATE WITH PLUMBING FIXTURE AND TOILET PAPER DISPENSER HEIGHTS

1' - 5 1/2"
1' - 11 1/2"
STANDARD URINAL
PLAN DESIGNATION U1

TO RIM OF BASIN
17"MAX
4" MAX
TO HIGHEST CONTROL
27"MAX
TO RIM OF BASIN OR URINAL SCREEN
15"MAX
4" - 7" MIN
ACCESSIBLE URINAL
STANDARD URINAL

NOTE: ALL FIXTURE SIZES , MOUNTING HEIGHTS, AND CLEARANCES MUST ABIDE BY ALL APPLICABLE ACCESSIBILITY STANDARDS

32"MIN CLEAR
4"MAX
17"
TA11
TA7
TA18
TA3
TA5
42"MIN.
42"MIN
60"MIN CLEAR
4" MAX
36" MIN
6 1/4"MAX
60"MIN CLEAR
ACCESSIBLE TOILET STALL
PLAN DESIGNATION S1

COORDINATE WITH PLUMBING FIXTURE AND TOILET PAPER DISPENSER HEIGHTS
39" - 41"
TA18
TA5
12"MAX
42"MIN.
TOP OF SEAT
33" - 36"
18"
7" - 9"
18" MAX
25"TYP 44"MAX
5"MAX
36"MIN
12" MIN.
24" MIN.
TA5
TA3
TA7
17"
TA2
TA1W
34"MAX
27" MIN
40"MAX
TO BOTTOM OF REFLECTIVE SURFACE
19"MIN
17" - 19"
TA10A
1' - 5 1/2"
28" - 30"
MOUNTING DEVICE FOR HAND-HELD SHOWER HEAD
TA9
48" MAX
60"L HOSE
7" - 5 3/4"
CONTROL AREA
FROM HIGH POINT OF SHOWER FLOOR
1/2"
17" - 19"
36" MAX
SPOUT OUTLET
9" MIN
6"MAX
27" MIN
8"MIN
42"MAX
SPOUT OUTLET
6"MAX
8"MIN
17" - 19"
6"MAX SPOUT OUTLET
38"MAX SPOUT OUTLET
HIGHEST CONTROL
48"MAX
(TA6)
(TA4)
48"MAX
TO OPERABLE MECHANISM
(TA1W)
(TA19)
48"MAX
48"MAX
DISPENSER OUTLET
38"
TO OPERABLE HANDLE
15"MIN
27" MAX TO CONTROL
2'-3"
30" TO TOP OF BED WHEN OPEN
(TA16C)
(TA14)
4' - 0" TO CONTROL
(TA11)
4' - 0" AT ACCESSIBLE
ACCESSIBLE TOILET W/ GRAB BARS TOILET PAPER DISPENSER, AND SANITARY NAPKIN DISPOSAL
ACCESSIBLE TOILET W/ GRAB BARS AND TOILET PAPER DISPENSER
ACCESSIBLE LAVATORY AND MIRROR
ACCESSIBLE SHOWER
ACCESSIBLE SHOWER CONTROL WALL
ACCESSIBLE DRINKING FOUNTAIN
STANDARD DRINKING FOUNTAIN
ACCESSIBLE AND STANDARD DRINKING FOUNTAINS (COMBINED)
ACCESSIBLE SANITARY NAPKIN DISPENSER
ACCESSIBLE PAPER TOWEL DISPENSER
ACCESSIBLE SOAP DISPENSER
SEAT COVER DISPENSER
ACCESSIBLE FIRE EXTINGUISHER CABINET
ACCESSIBLE WALL SWITCH AND OUTLET
ACCESSIBLE BABY CHANGING STATION
ACCESSIBLE TOWEL DISPENSER/ WASTE RECEPTACLE
ACCESSIBLE COAT/HOOK

12 ACCESSIBILITY - AGES 13 THRU ADULT (GRADES 8 AND ABOVE)
1/4" = 1'-0"

4' - 0"
EQ
EQ
2' - 6"
3 1/2"MAX
4"MAX PROJECTION
PLAN (Side Approach)
4" MIN CLR
2' - 6"
EQ
EQ
4' - 0"
5"MAX
15" MIN
4"MAX PROJECTION
PLAN (Front Approach)

17" TO 25"
5" MAX
3 1/2" MAX. (SIDE APPROACH)
FINISHED FLOOR
SECTION
3"MIN
2" - 3"MIN
2' - 1"MAX
8"MIN
6"MAX
4' - 0"CLEAR MIN.

08 DRINKING FOUNTAIN GUIDELINE
1/4" = 1'-0"

DESCRIPTION	Ages: 13 - Adult (Grades 8 and Above)
WATER CLOSET: To Top of Seat	17" - 19"
Grab Bar Height	33" - 36"
Flush Control Height	25" TYP 44" MAX
URINAL: Max. To Rim of Basin	17"
Flush Control Height (Max)	44"
LAVATORIES: Front Approach	
Knee Clearance (Min)	27"
To Top (Max)	34"
To Faucet (Max)	25"
FIXED OR BUILT-IN:	
Height of Tables or Counter:	28" - 34"
Knee Clearance (Min)	27"
SHELVES, DISPENSERS: Max. Height to Control Device	
Frontal Approach (Max)	48"
Side Approach (Max)	48"
DRINKING FOUNTAINS:	
To Spout (Max)	36"
Knee Clearance (Min)	27"
SWITCHES AND CONTROLS	
Frontal Approach (Max)	48"
Side Approach (Max)	48"
MIRRORS: Max. Height to Bottom of Reflective Surface	
At Lavatories and Counter Tops	40"
Full Length	35"
MIRRORS: Min. Height to Top of Reflective Surface	
Full Length	74"
TOILET PAPER DISPENSER: Height to Center of Roll (Max)	19"
PAPER TOWEL DISPENSER: Height to Operating Mechanism	48"
SHOWER	
Top of Seat	17" - 19"
Grab Bar	33" - 36"
To Hand Shower Head Mounting (Max)	48"

06 TYP ELEVATOR DOOR
3/8" = 1'-0"

2"
COORDINATE WITH MANUFACTURER
2"
RE: ELEVATION
HALL LANTERN
TACTILE LEVEL INDICATOR
CALL BUTTONS
7' - 0"
5' - 0"MAX
4' - 0"MAX
8" - 0"MIN

05 TYP CUSTODIAL CLOSET
1/2" = 1'-0"

4' - 0" MIN
4' - 0" MIN
TA-8
42" MAX
2' - 6"
FRP WALL PROTECTION RE: SPECS
PLUMBING FIXTURE RE: PLUMBING
CONT. SEALANT- TYP.
MOP SINK RE: PLUMBING

04 MISC MOUNTING HEIGHTS
3/8" = 1'-0"

ALIGN STACKED DEVICES WHERE POSSIBLE
6"
FIRE ALARM (COMBINATION SPEAKER AND STROBE)
FIREMAN'S PHONE JACK
EQ
EQ
EXIT
WALL MOUNTED EXIT LIGHT
SIGNAGE, RE: 29/G-020
LIGHT SWITCH AND DIMMER
THERMOSTAT OR OTHER CONTROL DEVICE
6' - 8"
4' - 0" MAX
1' - 3" MIN
5"
1' - 0"
4' - 0" MAX TYPICAL
5' - 0" MAX
3' - 10" MAX AT COUNTERS
2' - 0" MIN
10 - 24" OBSTRUCTION
ELECTRIC, TELEPHONE, OR DATA RECEPTACLE ALIGN ITEMS WHEN POSSIBLE
1' - 6"
CLEAR SPACE AT TACTILE SIGNAGE

02 ACCESSIBLE VANITY
3/8" = 1'-0"

2' - 0"
BOTTOM OF REFLECTIVE SURFACE
2' - 3"MIN
2' - 10"MAX
3' - 4"MAX
FINISHED FLOOR
8"MIN
11"MIN
6" MAX
4' - 0"CLEAR MIN.

01 ACCESSIBILE MOUNTING HEIGHTS
1/4" = 1'-0"

This document is for interim review only

PBK

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WFAC Black Box Addition PKG 1
1801 Martin Luther King Dr.,
San Antonio, TX. 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

REGISTERED ARCHITECT
STATE OF TEXAS
6-14-2024

CLIENT
Alamo Colleges
DATE 2024/06/14
PROJECT NUMBER 230462
DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION
BUILDING NUMBER 1

TEXAS ACCESSIBILITY STANDARDS

G-021

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Sheet Grids Template
Z-000
FOR BLUEBEAM LABELING.OCR:

0"
1"

ISSUE FOR CONSTRUCTION

GENERAL NOTES:

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR MUST PROVIDE SUBMITTALS OF PROPOSED CONSTRUCTION MATERIALS FOR REVIEW BY THE DESIGN ENGINEER A MINIMUM OF 14 DAYS PRIOR TO REQUIRED USE.
2. A PRE-CONSTRUCTION MEETING WILL BE HELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. TIME AND LOCATION TO BE DETERMINED BY OWNER.
3. ALL BOUNDARY, TOPOGRAPHIC INFORMATION, AND SURVEY CONTROL WAS COMPLETED IN DECEMBER 2023 BY GEESNER SURVEY. CHANGES IN SITE OR FIELD CONDITIONS MAY HAVE OCCURRED.
4. THE CONTRACTOR SHALL PROTECT ALL SURVEY MONUMENTATION, BENCHMARKS, AND MARKERS DURING CONSTRUCTION.
5. THE CONTRACTOR MUST PROVIDE CONSTRUCTION STAKING SERVICES BASED ON THE INFORMATION PROVIDED IN THE PLANS.
6. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH FACILITY/PROPERTY OWNERS. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE DONE TO EXISTING FACILITIES, PAVEMENT, ETC. AS A RESULT OF CONSTRUCTION ACTIVITIES.
7. ALL ITEMS SHOWN ON THESE PLANS ARE ASSUMED NEW/PROPOSED UNLESS DESIGNATED OR SHOWN AS EXISTING AND SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR INCLUSIVE OF ANY MATERIALS, LABOR, EQUIPMENT, AND OTHER REQUIREMENTS FOR A COMPLETE AND FUNCTIONING SITE ELEMENT. ALL ITEMS NECESSARY FOR PROPER COMPLETION OF THE WORK NOT SPECIFICALLY CALLED FOR OR SPECIFIED ON THE PLANS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND CONSIDERED AS SUBSIDIARY TO THE WORK.
8. ALL UTILITIES AND SERVICE LINES SHOWN ARE TAKEN FROM RECORD INFORMATION SUPPLIED BY THE UTILITY OWNER OR HORIZONTALLY LOCATED BY INDEPENDENT LOCATORS. CONTRACTOR IS RESPONSIBLE TO REPORT ANY CONFLICTS BETWEEN PLAN AND ACTUAL CONDITIONS PRIOR TO CONSTRUCTION. OWNER, SURVEYOR, AND ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF INFORMATION OR DATA RELIED ON TO DEPICT UNDERGROUND FACILITIES. CONTRACTOR IS TO VERIFY THE EXACT LOCATION AND VERTICAL POSITIONING OF ALL PIPELINES, COMMUNICATION LINES, ELECTRICAL LINES, EXISTING UTILITIES, AND SERVICE LINES WITHIN THE PROJECT AREA, WHETHER SHOWN ON THE PLANS OR NOT, AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. CONTRACTOR IS TO CONTACT OWNERS OF ALL UTILITIES AND SERVICE LINES WITHIN THE PROJECT AREA AND NOTIFY OF INTENT AT LEAST 1 WEEK PRIOR TO CONSTRUCTION.
9. CONTRACTOR IS TO MAINTAIN STRUCTURAL INTEGRITY OF ALL PIPELINES, ELECTRIC TRANSMISSION POLES AND LINES, PERMANENT AND TEMPORARY UTILITIES, AND UTILITY SERVICES.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES OR SERVICE LINES DURING THE CONSTRUCTION PROCESS. WHERE EXISTING UTILITIES OR SERVICE LINES ARE DAMAGED, THE CONTRACTOR SHALL REPAIR OR REPLACE THE UTILITY OR SERVICE LINE WITH THE SAME TYPE OF MATERIAL AND CONSTRUCTION, OR BETTER. ALL MATERIAL AND LABOR SHALL BE AT THE CONTRACTOR'S EXPENSE.
11. CONTRACTOR SHALL NOTIFY TEXAS811 AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION ACTIVITY AT 811 OR HTTP://WWW.TEXAS811.ORG. THE CONTRACTOR SHALL ALSO NOTIFY APPLICABLE UTILITY COMPANIES THAT HAVE UTILITY LINES ON OR IN THE GENERAL VICINITY OF THIS PROJECT SITE AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL STANDARDS, SPECIFICATIONS, AND REGULATIONS. WHERE CONSTRUCTION DOCUMENTS CONFLICT WITH THOSE GUIDELINES, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN.
12. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THESE PLANS AND ONSITE FIELD CONDITIONS OR SPECIFICATIONS OF OTHER DISCIPLINES. CONTRACTOR IS RESPONSIBLE TO REPORT ANY CONFLICTS WITHIN PLANS OR SPECIFICATIONS AND AWAIT WRITTEN INSTRUCTION FROM ENGINEER OR ARCHITECT PRIOR TO STARTING CONSTRUCTION.
13. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS, AS WELL AS INSPECTION APPROVALS.
14. A COPY OF APPROVED CONSTRUCTION PLANS SHALL BE KEPT ON SITE AT ALL TIMES THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN A SET OF REDLINE DRAWINGS TO RECORD AS-BUILT CONDITIONS.
15. DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN AN ORDERLY PROJECT SITE. THE CONTRACTOR SHALL CLEAN, REMOVE, AND PROPERLY DISPOSE OF ANY SURPLUS OR DISCARDED MATERIALS, TEMPORARY STRUCTURES, AND DEBRIS FROM THE PROJECT SITE.
16. THE CONTRACTOR IS RESPONSIBLE FOR STORAGE AND SAFE-GUARDING OF ALL MATERIALS AND EQUIPMENT AT THE PROJECT SITE TO MAINTAIN A SAFE AND SECURE PROJECT.
17. THE CONTRACTOR SHALL COORDINATE SITE STORAGE WITH THE PROPERTY OWNER. (SEPARATELY AND IN WRITING IF UTILIZING OFF-SITE PROPERTY.)
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTAINMENT AND PROPER DISPOSAL OF ALL LIQUID AND SOLID WASTE ASSOCIATED WITH THIS PROJECT. THE CONTRACTOR SHALL USE ALL MEANS NECESSARY TO PREVENT THE OCCURRENCE OF WIND BLOWN LITTER FROM THE PROJECT SITE. THE SITE IS REQUIRED TO PROVIDE CONTAINMENT FOR WASTE PRIOR TO AND DURING DEMOLITION. SOLID WASTE ROLL OFF BOXES AND/OR METAL DUMPSTER SHALL BE SUPPLIED BY THE CONTRACTOR.
19. CONTRACTOR IS TO CONFINE ALL WORK TO OWNER'S PROPERTY. NO CONSTRUCTION ACTIVITY IS ALLOWED ON OR THROUGH PRIVATE PROPERTY UNLESS COVERED BY A PUBLIC UTILITY EASEMENT OR OTHER DOCUMENTED AGREEMENT. ANY ADJACENT RIGHT-OF-WAY (R.O.W.) OR PROPERTY AFFECTED DURING CONSTRUCTION SHALL BE RETURNED TO PRE-CONSTRUCTION CONDITION AT THE CONTRACTOR'S EXPENSE.
20. ALL EXISTING UTILITY APPURTENANCES (VALVE BOXES, FIRE HYDRANTS, MANHOLE RING AND COVER, JUNCTION BOX RING AND COVER, ETC) SHALL BE ADJUSTED TO FINAL GRADES.
21. ALL CONSTRUCTION OPERATIONS FOR THIS PROJECT SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE UNITED STATES OCCUPATIONAL AND HEALTH ADMINISTRATION (OSHA).
22. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL STATE AND FEDERAL REGULATIONS REGARDING CONSTRUCTION ACTIVITIES NEAR ENERGIZED OVERHEAD ELECTRIC LINES.
23. THESE PLANS, PREPARED BY GESSNER ENGINEERING, DO NOT EXTEND TO OR INCLUDE DESIGNS OR SYSTEMS PERTAINING TO THE SAFETY OF THE CONTRACTOR OR HIS EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED IN THE WORK.
24. CONTRACTOR SHALL BE RESPONSIBLE AND LIABLE FOR ALL JOB SITE SAFETY, FOR MANAGEMENT OF JOB SITE PERSONNEL, FOR SUPERVISION OF THE USE OF JOB SITE EQUIPMENT AND FOR DIRECTION OF ALL CONSTRUCTION PROCEDURES, METHODS, AND ELEMENTS REQUIRED TO COMPLETE THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
25. WHERE ELECTRIC FACILITIES ARE INSTALLED, BTU HAS THE RIGHT TO INSTALL, OPERATE, RELOCATE, CONSTRUCT, RECONSTRUCT, ADD TO, MAINTAIN, INSPECT, PATROL, ENLARGE, REPAIR, REMOVE AND REPLACE SAID FACILITIES UPON, OVER, UNDER AND ACROSS THE PROPERTY INCLUDED IN THE PUE, AND THE RIGHT OF INGRESS AND EGRESS ON PROPERTY ADJACENT TO THE PUE TO ACCESS ELECTRIC FACILITIES.

DEMOLITION NOTES:

1. AREAS BENEATH REMOVED PAVEMENT SHALL BE CLEARED OF ALL LOOSE OR DISTURBED MATERIAL AND WATER. THE AREA SHALL BE PROOF-ROLLED AND MANUALLY COMPACTED OR REPLACED WITH SIMILAR MATERIALS PRIOR TO NEW PAVEMENT PLACEMENT PER SPECIFICATIONS.
2. UNDER ALL IMPROVEMENTS, ALL ITEMS ARE TO BE REMOVED UNLESS OTHERWISE INDICATED. REMOVE NOT ONLY THE ABOVE GROUND ELEMENTS BUT ALL UNDERGROUND ELEMENTS FOR UTILITIES UNLESS OTHERWISE INDICATED. DURING CLEARING AND GRUBBING ACTIVITIES WHERE TREES AND BRUSH ARE TO BE REMOVED, REMOVE THE TOTAL EXTENT OF THEIR ROOT SYSTEMS. UNLESS OTHERWISE DIRECTED BY THE OWNER, ALL MATERIALS AND DEBRIS DEMOLISHED AND/OR REMOVED SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A MANNER SATISFACTORY TO THE OWNER, ARCHITECT, & ENGINEER. ON-SITE BURNING WILL NOT BE PERMITTED.
3. ALL EXCESS TOPSOIL AND CUT MATERIAL IS TO BE HAULED OFF AND DISPOSED OF OFF-SITE.
4. CONTRACTOR SHALL PREVENT TRANSPORT OF SEDIMENT TO ADJACENT PROPERTIES AND PUBLIC OR PRIVATE RIGHT OF WAYS AND IS RESPONSIBLE FOR CLEANUP IF SUCH OCCURS. CONTRACTOR IS TO ENSURE NO CONSTRUCTION DEBRIS OR MUD IS TRACKED OR DISCARDED ON TO ANY PUBLIC OR PRIVATE STREETS OR LAND AND IS RESPONSIBLE FOR SITE CLEANUP AFTER EACH DAYS WORK. CONTRACTOR IS TO MAKE USE OF BEST MANAGEMENT PRACTICES TO PREVENT SEDIMENT FROM LEAVING THE SITE OR ENTERING EXISTING STORM SEWER OR DOWNSTREAM CHANNEL AREAS. CONTRACTOR SHALL MAINTAIN EROSION CONTROL THROUGHOUT CONSTRUCTION PERIOD AND UNTIL GRASS IS ESTABLISHED.
5. CONTRACTOR TO PROTECT ALL OR INDICATED EXISTING TREES TO REMAIN DURING DEMOLITION AND CONSTRUCTION ACTIVITIES.
6. CONTRACTOR IS TO PROTECT ALL EXISTING TREES INDICATED TO REMAIN DURING DEMOLITION AND CONSTRUCTION ACTIVITIES UNLESS OTHERWISE NOTED IN THE PLANS. ALL EXISTING TREES LOCATED BETWEEN THE FENCE LINES ARE ALLOWED TO BE REMOVED AS LONG AS REMOVAL DOES NOT DAMAGE THE FENCE LINE OR OTHER PROPERTY.

DIMENSION CONTROL NOTES:

1. THE CONTRACTOR MAY OBTAIN AN ELECTRONIC COPY OF PROJECT PLANS FOR CONSTRUCTION PURPOSES, WITH THE PERMISSION OF THE OWNER. THE ELECTRONIC FILE AND INFORMATION GENERATED, BY GESSNER ENGINEERING, FOR THIS PROJECT IS CONSIDERED BY GESSNER ENGINEERING, TO BE CONFIDENTIAL. WHEN ISSUED, ITS USE IS INTENDED SOLELY FOR THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED. THE MATERIAL IS INTENDED FOR USE BY THE RECIPIENT NAMED, ONLY, AND PERMISSION IS NOT GRANTED TO THE RECIPIENT FOR DISTRIBUTION OF THIS DOCUMENTS IN ANY FORM OR FASHION. THE RECIPIENT UNDERSTANDS THAT THIS DATA IS AUTHORIZED "AS IS" WITHOUT ANY WARRANTY AS TO ITS PERFORMANCE, ACCURACY, FREEDOM FROM ERROR, OR AS TO ANY RESULTS GENERATED THROUGHOUT ITS USE. THE RECIPIENT ALSO UNDERSTANDS AND AGREES THAT GESSNER ENGINEERING, UPON RELEASE OF SUCH DATA, IS NOT LONGER RESPONSIBLE FOR THEIR USE OR MODIFICATION. THE USER AND RECIPIENT OF THE ELECTRONIC DATA ACCEPTS FULL RESPONSIBILITY AND LIABILITY FOR ANY CONSEQUENCES ARISING OUT OF THEIR USE.
2. ALL DIMENSIONS SHOWN ARE TO BE USED IN CONJUNCTION WITH THE PLANS FOR LOCATING ALL IMPROVEMENTS AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR FOR WORKABILITY PRIOR TO CONSTRUCTION OF THE IMPROVEMENTS.
3. UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE TO BACK OF CURB. REFER TO ARCHITECTURAL PLANS FOR DETAILED BUILDING DIMENSIONS.

GRADING NOTES:

1. ALL UNPAVED AREAS SHALL BE ADEQUATELY GRADED TO DRAIN AT A MINIMUM OF 2.0% SLOPE, UNLESS OTHERWISE NOTED, SO THAT NO PONDING OCCURS.
2. WHERE TOP OF CURB ELEVATIONS ARE SHOWN, THE CURB IS A STANDARD 6" CURB, UNLESS OTHERWISE NOTED.
3. ALL SPOTS ARE TOP OF CURB ELEVATIONS, UNLESS OTHERWISE NOTED.
4. CONTRACTOR SHALL FOLLOW THE GENERAL INTENT OF THE GRADING PLANS. MINOR ADJUSTMENTS TO THE ACTUAL ELEVATIONS SHOWN ON THE GRADING PLAN MAY BE REQUIRED TO MATCH EXISTING GROUND ELEVATIONS AND STRUCTURES. CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO ANY MODIFICATIONS.
5. ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER.
6. THE APPROVAL OF THE PLANS IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM AFFECTED PROPERTY OWNER(S). ANY ADJACENT PROPERTY OR RIGHT-OF-WAY DISTURBED DURING CONSTRUCTION SHALL BE RETURNED TO EXISTING CONDITIONS OR BETTER.
7. FILL MATERIAL FOR NON-STRUCTURAL AREAS (5 FOOT OUTSIDE OF EDGE OF PAVEMENT, BACK OF CURB, OR IMPROVED AREAS) SHALL BE PLACED IN 8" MAXIMUM LOOSE LIFTS AND COMPACTED TO A UNIFORM DENSITY OF AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR (ASTM D698) WITH A MOISTURE CONTENT OF +/- 2% OF OPTIMUM.
8. COMPACTION AND MOISTURE CONTROL SHALL BE VERIFIED BY IN-PLACE DENSITY TEST FOR EACH LIFT, 1 TEST PER 4,000 SF OF FILL PLACED, WITH A MINIMUM OF 1 TEST PER LIFT.
9. PRIOR TO REVEGETATION OPERATIONS. CONTRACTOR TO SPREAD/REPLACE AND CONSOLIDATE TOPSOIL TO A DEPTH OF 6" MINIMUM.
10. ALL DISRUPTED AREAS ARE TO HAVE ESTABLISHMENT OF GRASS AS OUTLINED BELOW. CONTRACTOR IS RESPONSIBLE FOR WATERING (INCLUDING TEMPORARY IRRIGATION IN AREAS NOT RECEIVING PERMANENT IRRIGATION), MAINTENANCE, AND ESTABLISHMENT OF VEGETATION FOR A PERIOD OF 90 DAYS. CONTRACTOR TO GUARANTEE ALL PLANTED MATERIAL GROWTH AND COVERAGE FOR A PERIOD OF 6 MONTHS. GROWTH AND COVERAGE SHALL BE DEFINED AS 95% OF THE PLANTED AREA WITH UNIFORM COVERAGE OF GRASS GREATER THAN 1" IN HEIGHT WITH NO BARE SPOTS GREATER THAN 2 SQUARE FEET. SECOND APPLICATION OF SEED OR HYDROMULCH OR SOD IS REQUIRED FOR BARE SPOTS NOT MEETING COVERAGE REQUIREMENT WITHIN 30 DAYS OF INITIAL APPLICATION.
11. ALL DISTURBED AREAS NOT TO BE PAVED OR LANDSCAPED ARE TO BE PREPARED AND HYDROMULCH OR SEEDED OR SOD ISNTALLED FOR PERMANENT ESTABLISHMENT OF VEGETATION. PRIOR TO OPERATIONS, CONTRACTOR IS TO REPLACE AND CONSOLIDATE TOPSOIL TO A DEPTH OF 6" MINIMUM. TOPSOIL TO BE HARLEYRAKE/TILLED TO A DEPTH OF 4" PRIOR TO SEEDING OR INSTALLATION OF SOD. FINAL GRADES WITH ESTABLISHED VEGETATION SHALL PROVIDE POSITIVE DRAINAGE. REVEGETATE PER B/CS UNIFIED TECHNICAL SPECIFICATIONS - SPEC #32-92-19 SEEDING FOR EROSION CONTROL OR PROVIDE "TEXAS TOUGH" BERMUDAGRASS AT 1.25 LBS PER THOUSAND SQUARE FEET. BERMUDAGRASS SHALL BE DRILL SEEDED TO A DEPTH OF 1/8" TO 1/4".
12. TENANT/END USER OR OWNER OR CONTRACTOR SHALL MAINTAIN EROSION CONTROL UNTIL ALL LANDSCAPE AREAS ARE ESTABLISHED. TENANT/END USER OR OWNER OR CONTRACTOR IS RESPONSIBLE FOR CLEANUP FROM LANDSCAPING MATERIALS. MULCH OR LANDSCAPE SEDIMENT TRANSPORT THAT MAY OCCUR AFTER LANDSCAPE INSTALLATION INCLUDING MAINTENANCE OF GRATES AND TRENCH DRAINS.
13. CONTRACTOR IS RESPONSIBLE FOR SUBMITTING N.O.I./N.O.T. (IF NECESSARY) TO T.C.E.Q. & PROVIDING DOCUMENTATION OF SUBMISSION TO THE CITY OF COLLEGE STATION.
14. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ETC. WITHIN THE AREA OF CONSTRUCTION. THEY MUST BE ADJUSTED TO PROPER GRADE BY THE CONTRACTOR PRIOR TO AND AFTER THE PLACING OF PAVEMENT AND GRADING.
15. SIDEWALKS SHALL HAVE A SLOPE NO GREATER THAN 5% AND A CROSS SLOPE NOT GREATER THAN 2%, UNLESS OTHERWISE NOTED.
16. HANDICAP ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL HAVE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS.
17. CONTRACTOR SHALL CONTACT GESSNER ENGINEERING IF DISCREPANCIES EXIST AT EXISTING GRADE TIE-INS.
18. CONTRACTOR TO VERIFY WITH ADJACENT PROPERTY OWNER WHEN GRADING ON ADJACENT PROPERTY. (LEAVE ONLY IF GRADING ON ADJACENT PROPERTY AND THIS HAS BEEN COORDINATED/ AGREED UPON BY ADJACENT LOT OWNER PRIOR

PAVEMENT NOTES:

1. SUBGRADE:
   - 1.A. EXISTING VEGETATION, TREES, STUMPS, AND ROOTS SHALL BE GRUBBED AND REMOVED. THE TOP 6" OF TOPSOIL AND SUBGRADE STRIPPED FROM THE AREAS TO BE COVERED BY PAVEMENT.
   - 1.B. PAVING AREAS SHALL BE PROOF-ROLLED WITH A 20 TON COMPACTOR AND, IF REQUIRED AT THE TIME OF CONSTRUCTION , THE CONTRACTOR SHALL STABILIZE WEAK AREAS BY OVER EXCAVATING AND BACKFILLING WITH SPECIFIED MATERIALS.
   - 1.C. FILL MATERIAL FOR STRUCTURAL AREAS (EXTENDING 5 FOOT BEYOND EDGE OF PAVEMENT OR BACK OF CURB) SHALL MEET THE SPECIFIED MATERIALS OR MATERIALS AS OUTLINED IN THE GEOTECH REPORT, BE PLACED IN 8" MAXIMUM LOOSE LIFTS, AND COMPACTED TO A UNIFORM DENSITY OF AT LEAST 98% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR (ASTM D698) WITH A MOISTURE CONTENT OF +/- 2% OF OPTIMUM.
   - 1.D. COMPACTION AND MOISTURE CONTROL SHALL BE VERIFIED BY IN-PLACE DENSITY TEST FOR EACH LIFT FOR EVERY 200 LINEAR FEET OF PAVEMENT OR EVERY 4,000 SF OF FILL PLACED, WHICH EVER WOULD PRODUCE THE GREATER TESTING FREQUENCY, WITH A MINIMUM OF ONE TEST PER LIFT.
   - 1.E. SOILS SHALL BE STABILIZED WITH LIME TREATMENT IF PAVEMENT SUBGRADE SOILS CONSIST OF CLAYS OR CLAYEY SANDS OF HIGH PLASTICITY (PI>20).
   - 1.F. SOILS SHALL BE STABILIZED WITH CEMENT TREATMENT IF PAVEMENT SUBGRADE SOILS CONSIST OF SANDS OR SILTS WITH LOW PLASTICITY (PI <= 15).
   - 1.G. STABILIZATION SHALL BE ACCOMPLISHED SUCH THAT A UNIFORM SUBGRADE MIX IS OBTAINED AND SHALL EXTEND TO 2 FOOT BEYOND THE BACK OF CURB OR EDGE OF PAVEMENT. PRIOR TO THE APPLICATION OF LIME OR CEMENT TO THE SUBGRADE, THE OPTIMUM PERCENTAGE TO BE ADDED SHALL BE DETERMINED BASED ON TEX-121-E LABORATORY TESTS (LIME) AND TEX-120-E LABORATORY TESTS (CEMENT) CONDUCTED ON MIXTURES OF THE SUBGRADE SOILS WITH VARYING PERCENTAGES. SUBGRADE SOIL SAMPLES SHOULD BE OBTAINED FROM THE PAVEMENT AREA AT THE PROPOSED FINAL SUBGRADE ELEVATION. THE LIME OR CEMENT SHOULD INITIALLY BE BLENDED WITH A MIXING DEVICE SUCH AS PULVERIZER OR MIXER AND SUFFICIENT WATER ADDED.
   - 1.H. THE AMOUNT OF LIME REQUIRED FOR STABILIZATION SHOULD BE THE PERCENT REQUIRED BY WEIGHT TO PRODUCE A PH NOT LESS THAN 12.4 AND TO PROVIDE A PI VALUE OF LESS THAN OR EQUAL TO 18.
   - 1.I. THE AMOUNT OF CEMENT REQUIRED FOR STABILIZATION SHOULD BE THE PERCENT REQUIRED BY WEIGHT TO PRODUCE A MINIMUM COMPRESSION STRENGTH OF 50 PSI PRIOR TO BEING OPEN TO LOCAL OR CONSTRUCTION TRAFFIC.
   - 1.J. A STABILIZATION DEPTH CHECK SHALL BE PERFORMED WITH EACH DENSITY TEST FOR THE STABILIZED LIFT.
2. CONCRETE PAVEMENT:
   - 2.A. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
   - 2.B. ALL CONCRETE SHALL BE VIBRATED WHEN PLACED.
   - 2.C. PAVEMENT CONTRACTION JOINTS SHALL BE INSTALLED PER PLAN AND DETAIL SHEET, WITH A MAXIMUM SPACING OF 24 TIMES THE THICKNESS OF THE PAVEMENT (12' FOR 6" PAVEMENT). CONTRACTION JOINTS SHALL BE INSTALLED AS SOON AS CONCRETE CURING ALLOWS AND SHALL BE CUT 1/4 OF THE THICKNESS OF THE PAVEMENT. AN EARLY ENTRY SAW IS PREFERRED. TOOLED OR FORMED JOINTS ARE NOT ALLOWED.
   - 2.D. PAVEMENT EXPANSION JOINTS SHALL BE SPACED AS SHOWN ON THE PLANS AND INSTALLED PER DETAIL SHEET. CONSTRUCTION SHALL BE STOPPED AT EXPANSION JOINTS. IF CONDITIONS REQUIRE, CONSTRUCTION TO BE STOPPED AT OTHER LOCATIONS, A COLD JOINT SHALL BE CONSTRUCTED.
   - 2.E. ISOLATION JOINTS SHALL BE PLACED AT ALL IN-PAVEMENT OBJECTS INCLUDING INLETS, LIGHT POLE FOOTINGS, CLEANOUTS, ETC.
   - 2.F. ALL JOINTS SHALL BE SEALED. PROVIDE EXPANSION JOINT WATER STOP CAPS AT NEW CONCRETE. PROVIDE EXPANSION JOINT SEALANT AT NEW TO EXISTING PAVEMENT.
   - 2.G. REFERENCE DETAIL SHEET FOR PAVEMENT AND SIDEWALK CONSTRUCTION DETAILS.
   - 2.H. TRANSPORTATION AND PLACEMENT OF THE CONCRETE SHALL BE IN ACCORDANCE WITH ACI 301. A TEST SET CONSISTING OF 4 CYLINDERS SHALL BE TAKEN FOR EVERY 75 CUBIC YARDS OF CONCRETE.
3. REINFORCING STEEL:
   - 3.A. ALL REINFORCEMENT SHALL BE ASTM A-615, GRADE 60. THE PAVEMENT REINFORCEMENT SHALL BE PER DETAILS.
   - 3.B. LAPS AND SPLICES IN REINFORCING BARS SHALL BE A MINIMUM OF 30 BAR DIAMETERS IN LENGTH. BARS SHALL BE SECURED AT EVERY OTHER INTERSECTION.
4. CURB AND GUTTER SECTION:
   - 4.A. EXPANSION JOINTS SHALL BE SPACED AT A MAXIMUM DISTANCE OF 40' AND AT ALL RADIUS POINTS, PT'S AND PC'S AND SHALL BE SEALED.
   - 4.B. CONTRACTION JOINTS SHALL BE SPACED AT A MAXIMUM OF 10' AND SHALL BE SEALED. TOOLED OR FORMED JOINTS ARE NOT ALLOWED.
5. PAINTING AND STRIPING:
   - 5.A. CONTRACTOR SHALL PAINT STRIPING FOR THE PARKING AREA AS INDICATED ON THE PLAN. THE SOLID LINE REPRESENTS A 4" WIDE SOLID WHITE LINE TO BE PAINTED. CONTRACTOR IS RESPONSIBLE TO PAINT HANDICAP MARKINGS AND LOADING ZONES IN CONFORMANCE WITH CURRENT ADA/TAS STANDARDS AND ALL FIRE LANE MARKINGS IN ACCORDANCE WITH CITY OF BRYAN REQUIREMENTS.
   - 5.B. MATERIAL AND METHODS FOR PAVEMENT MARKINGS SHALL CONFORM TO ITEM 666 OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS, AND BRIDGES

STORM NOTES:

1. ALL STORM SEWER IS PROPOSED, UNLESS OTHERWISE NOTED.
2. ALL STORM LINES TO BE EITHER REINFORCED CONCRETE PIPE (RCP), C443 ASTM C76, CLASS III AND CLASS IV OR PVC.
3. TRENCH BACKFILL SHALL BE PER DETAILS.
4. STORM SEWER MATERIAL SHALL BE AS FOLLOWS FOR THE FOLLOWING INSTALLATIONS:
   - 4.A. REINFORCED CONCRETE PIPE (RCP), ASTM C76, WALL B, CLASS III AND/OR CLASS IV, RUBBER GASKETED JOINT MEETING ASTM C443
   - 4.B. POLYVINYL CHLORIDE (PVC), ASTM D3034, SDR 26, TYPE PSM SEWER PIPE WITH BELL AND SPIGOT END FOR RUBBER GASKETED JOINTS MEETING ASTM F477
   - 4.C. REINFORCED CONCRETE BOX CULVERT (RCBC) PRECAST, ASTM C1577
   - 4.D. REINFORCED CONCRETE BOX CULVERT (RCBC) CAST-IN-PLACE, MEETING TXDOT DETAIL 4,000 PSI CONCRETE
5. CONCRETE FOR STRUCTURES (INLETS, CATCH BASINS, JUNCTIONS, ETC.)
   - 5.A. MIN 4000 PSI-28 DAY STRENGTH FOR ITEMS UP TO 10' DIMENSION
   - 5.B. MIN 5000 PSI-28 DAY STRENGTH FOR ITEMS WITH GREATER THAN 10' DIMENSION
6. CONTRACTOR IS TO USE SILT FENCING AROUND INLET AND JUNCTION BOXES AND GRAVEL FILLED PERMEABLE BAGS AROUND INLET BOX OPENINGS (AS NECESSARY) TO PREVENT SEDIMENT FROM ENTERING STORM SEWER SYSTEM PRIOR TO ACCEPTANCE OF PROJECT FOR SUBSTANTIAL COMPLETION, CONTRACTOR IS TO CLEAN ALL STORM SEWER FACILITIES OF SEDIMENT. CONTRACTOR TO USE EROSION CONTROL LOGS AROUND CULVERT INLETS AND OUTLETS TO PREVENT SEDIMENT FROM ENTERING THE CULVERTS. PRIOR TO ACCEPTANCE OF PROJECT FOR SUBSTANTIAL COMPLETION, CONTRACTOR TO CLEAN ALL CULVERTS OF ACCUMULATIONS OF SEDIMENT.
7. CONTRACTOR SHALL PROVIDE A MINIMUM OF 12 INCH CLEARANCE AT STORM SEWER AND WATER LINE CROSSINGS AND A MINIMUM OF 6 INCH CLEARANCE AT STORM AND SANITARY SEWER CROSSINGS.

SANITARY SEWER NOTES:

1. ALL SANITARY SEWER LINES TO BE POLYVINYL CHLORIDE (PVC), ASTM D3034, SDR-26, TYPE PSM SEWER PIPE WITH BELL AND SPIGOT END FOR RUBBER GASKETED JOINTS MEETING ASTM F477 SDR-26 PVC UNLESS OTHERWISE NOTED ON THE PLANS.
2. SANITARY SEWER LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT TCEQ REGULATIONS, CHAPTER 217, LOCAL JURISDICTIONAL REGULATIONS, AND IN ACCORDANCE WITH THE 2012 INTERNATIONAL PLUMBING CODE.
3. ALL SECTIONS OF THE SANITARY COLLECTION SYSTEM SHALL BE INSTALLED NO CLOSER THAN NINE FEET IN ALL DIRECTIONS TO THE POTABLE WATER DISTRIBUTION FACILITIES. ALL SEPARATION DISTANCES SHALL BE MEASURED FROM THE OUTSIDE SURFACE OF EACH OF THE RESPECTIVE PIECES. IF NINE FEET OF SEPARATION CANNOT BE MET, FOLLOW CURRENT TCEQ CHAPTER 217.53 (D) AND 290.44(E) REGULATIONS. IF CONFLICTS OCCUR, CONTACT ENGINEER.
4. ALL SANITARY SEWER LINES SHALL BE THOROUGHLY CLEANED, TESTED, AND APPROVED PRIOR TO ANY CONNECTIONS BEING MADE TO THE EXISTING SANITARY SEWER SYSTEM.
5. ALL SANITARY SEWER LINE TESTING SHALL BE IN ACCORDANCE WITH CURRENT TCEQ REGULATIONS AND THE SPECIFICATIONS. A LOW PRESSURE AIR TEST OR AN INFILTRATION/EXFILTRATION TEST SHALL BE COMPLETED IN ACCORDANCE WITH 217.57. NO SAGS GREATER THAN 2" FROM THE DESIGNATED SLOPE MAY EXTEND FOR LONGER THAN 20' UPON VISUAL CCTV INSPECTION OR CONTRACTOR MUST ENGAGE SERVICES OF A LICENSED SURVEYOR TO VERIFY THE SLOPE OF ALL GRAVITY SANITARY SEWER LINES AND PRODUCE AS-BUILT ELEVATIONS. TAMU UES TO HAVE FINAL APPROVAL.
6. ALL ASPECTS OF THE SEWER LINE, INCLUDING PIPE JOINTS AND MANHOLES, SHALL HAVE A DESIGN LIFE CYCLE OF NO LESS THAN FIFTY YEARS. IF A PIPE OR AN INTEGRAL STRUCTURAL COMPONENT OF A PIPE WILL DETERIORATE WHEN SUBJECTED TO CORROSIVE INTERNAL CONDITIONS OR IF A PIPE OR COMPONENT DOES NOT HAVE A CORROSIVE RESISTANT LINER INSTALLED BY THE MANUFACTURER, THE CONTRACTOR MUST DEMONSTRATE THE STRUCTURAL INTEGRITY OF THE PIPE DURING THE MINIMUM 50-YEAR DESIGN LIFE CYCLE.
7. CLEAN-OUT INSTALLATIONS MUST PASS ALL APPLICABLE TESTING REQUIREMENTS OUTLINED FOR GRAVITY COLLECTION PIPES IN TCEQ 217.57.
8. MANHOLES SHALL BE PRE-CAST CONCRETE MEETING ASTM C478. THE USE OF BRICKS TO ADJUST A MANHOLE COVER TO GRADE OR CONSTRUCT A MANHOLE IS PROHIBITED.
9. THE INSIDE DIAMETER OF A MANHOLE MUST BE NO LESS THAN 48 INCHES.
10. THE BOTTOM OF A MANHOLE MUST CONTAIN A U-SHAPED CHANNEL THAT IS A SMOOTH CONTINUATION OF THE INLET AND OUTLET PIPES.
11. A MANHOLE CONNECTION MUST USE WATERTIGHT, SIZE-ON-SIZE RESILIENT CONNECTORS THAT ALLOW FOR DIFFERENTIAL SETTLEMENT AND MUST CONFORM TO ASTM C-923.

WATER NOTES:

1.

Sheet Grids Template
Z400
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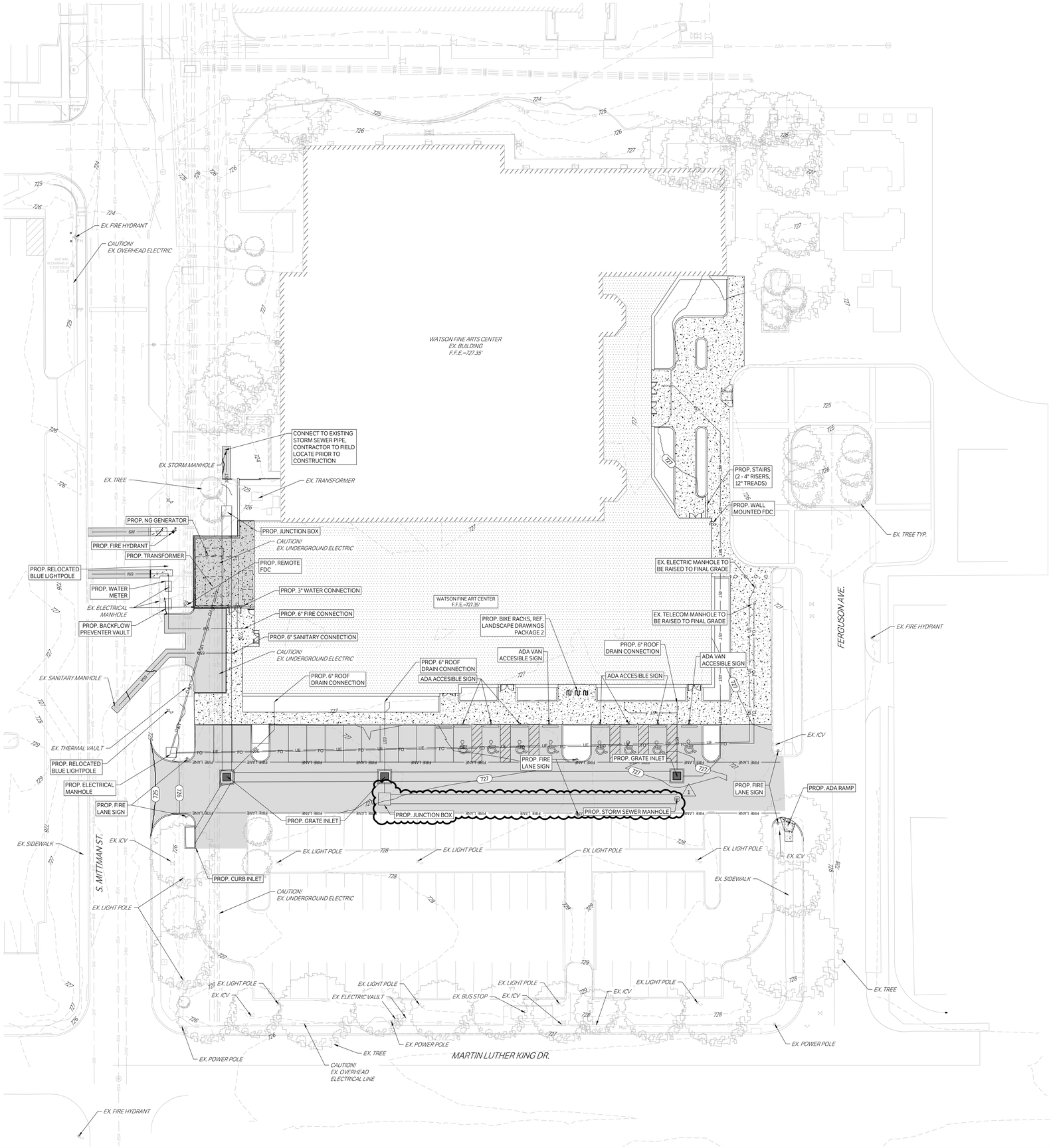
0"
1"

ISSUE FOR PERMIT



CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

N

0 20 40 60
SCALE: 1"= 20'

LEGEND

- PROPOSED ASPHALT PAVEMENT
- PROPOSED STRUCTURAL PAVEMENT REF. STRUCTURAL
- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED BUILDING
- EXISTING PAVEMENT EDGE
- PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- 340 EXISTING CONTOURS
- (340) PROPOSED CONTOURS
- ST EX. | PROP. STORM LINE
- W EX. | PROP. WATER LINE
- SA EX. | PROP. SANITARY SEWER LINE
- CWR, CWS, HWR, HWS EXISTING THERMALS
- CWR, CWS, HWR, HWS PROPOSED THERMALS
- G EX. | PROP. GAS LINE
- T EX. | PROP. DATA/TELECOM
- UE EX. | PROP. UNDERGROUND ELECTRIC
- FO EX. | PROP. FIBER OPTIC
- OE EX. | PROP. OVERHEAD ELECTRIC
- FH EX. | PROP. FIRE HYDRANT
- EX. | PROP. WATER METER
- EX. | PROP. GATE VALVE
- EX. IRRIGATION CONTROL VALVE
- FDC PROP. FIRE DEPARTMENT CONNECTION
- PIV PROP. POST INDICATOR VALVE
- HOSE LAY PROP. HOSE LAY
- S EX. | PROP. SANITARY SEWER MANHOLE
- EX. | PROP. SANITARY SEWER CLEANOUT
- EX. STORM SEWER MANHOLE
- PROP. STORM SEWER CURB INLET
- EX. | PROP. LIGHT POLE
- PAE PROPOSED PUBLIC ACCESS EASEMENT
- PUE PROPOSED UTILITY EASEMENT

PARKING TABLE

ITEM	QUANTITY
EXISTING PARKING SPOTS	125
EXISTING ADA SPOTS	9
REQUIRED ADA SPOTS	4
PROPOSED PARKING SPOTS	81
PROPOSED ADA SPOTS	8

IMPERVIOUS COVER COMPARISON

	PERVIOUS	IMPERVIOUS	TOTAL
EXISTING	15497.11	66628.36	82125.47
PROPOSED	6426.58	75698.89	82125.47
IMPERVIOUS INCREASE		9070.53	

CHECKED BY:
SH & AL
DRAWN BY:
JC

PBK

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PBK.com
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MEP
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THEATER
M.ARK
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WFAC Black Box Addition PKG 1

600 S Mittman St.
San Antonio, TX. 78203

ISSUE FOR PERMIT

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
ANDREW A. LANGE
118770
LICENSED ARCHITECT
08/05/2024

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/12	230462

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	08/05/2024

ISSUE FOR PERMIT

BUILDING NUMBER

SITE PLAN

C200

ISSUE FOR CONSTRUCTION

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Z-000
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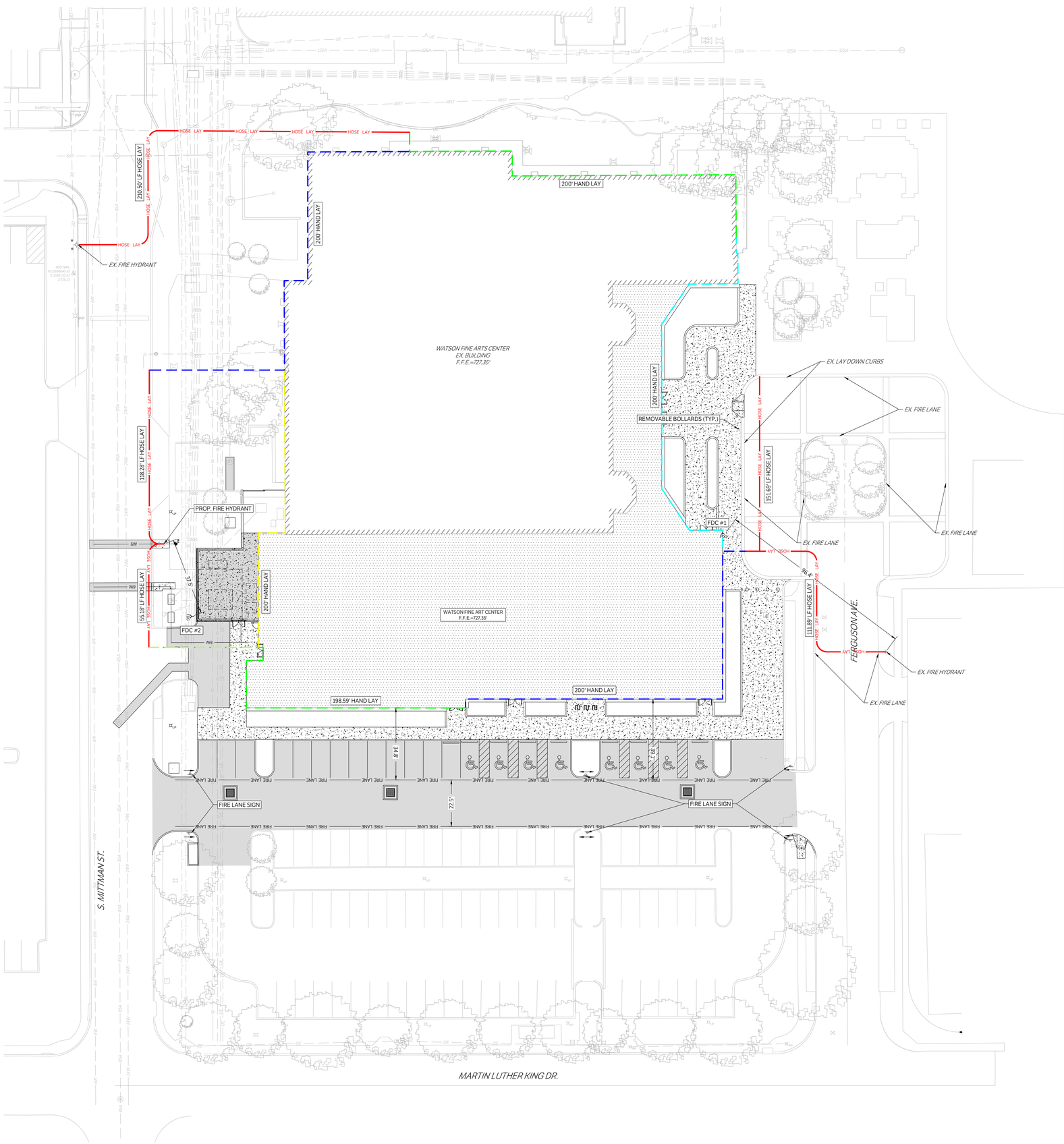

CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

N

0 20 40 60
SCALE: 1"= 20'

LEGEND

	PROPOSED ASPHALT PAVEMENT
	PROPOSED STRUCTURAL PAVEMENT REF. STRUCTURAL
	PROPOSED 4" CONCRETE SIDEWALK
	PROPOSED BUILDING
	EXISTING PAVEMENT EDGE
	PROPERTY LINE
	EXISTING EASEMENT
	PROPOSED EASEMENT
340	EXISTING CONTOURS
340	PROPOSED CONTOURS
ST	EX. | PROP. STORM LINE
W	EX. | PROP. WATER LINE
SA	EX. | PROP. SANITARY SEWER LINE
CWR CWS HWR HWS	EXISTING THERMALS
CWR CWS HWR HWS	PROPOSED THERMALS
G	EX. | PROP. GAS LINE
T	EX. | PROP. DATA/TELECOM
UE	EX. | PROP. UNDERGROUND ELECTRIC
FO	EX. | PROP. FIBER OPTIC
OE	EX. | PROP. OVERHEAD ELECTRIC
FH	EX. | PROP. FIRE HYDRANT
	EX. | PROP. WATER METER
	EX. | PROP. GATE VALVE
	EX. IRRIGATION CONTROL VALVE
FDC	PROP. FIRE DEPARTMENT CONNECTION
PIV	PROP. POST INDICATOR VALVE
HOSE LAY	PROP. HOSE LAY
SA	EX. | PROP. SANITARY SEWER MANHOLE
	EX. | PROP. SANITARY SEWER CLEANOUT
	EX. STORM SEWER MANHOLE
	PROP. STORM SEWER CURB INLET
LP	EX. | PROP. LIGHT POLE
PAE	PROPOSED PUBLIC ACCESS EASEMENT
PUE	PROPOSED UTILITY EASEMENT

FIRE PROTECTION INFO			
OWNER:	ST. PHILLIPS COLLEGE		
SITE AREA (SF)	21,863		
NO. OF STORIES	1		
PROPOSED BUILDING	TOTAL GSF	HEIGHT	TYPE
	26,114	38 ft	IIB
TOTAL RESUIRED FLOW (GPM)	3,500		
BUILDING SPRINKLER SYSTEM:	YES		
REDUCTION DUE TO SPRINKLERS:	75%		
FINAL REQUIRED FIRE FLOW	875		
AVAILABLE FLOW @20 PSI (GPM)	940		

PBK

B&A ARCHITECTS

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STRUCTURAL
LUNDY & FRANKE ENGINEERING
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MEP
LEAF
T 210-826-0123
ENVELOPE
BEAM PROFESSIONALS
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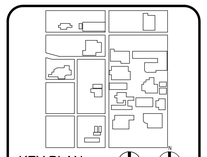
THEATER
WJHW
T 210-561-9800

WFAC Black Box Addition PKG 1

600 S Mittman St.
San Antonio, TX, 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE



KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
ANDREW A. LANGE
118770
LICENSED
06/14/2024

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/12	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER

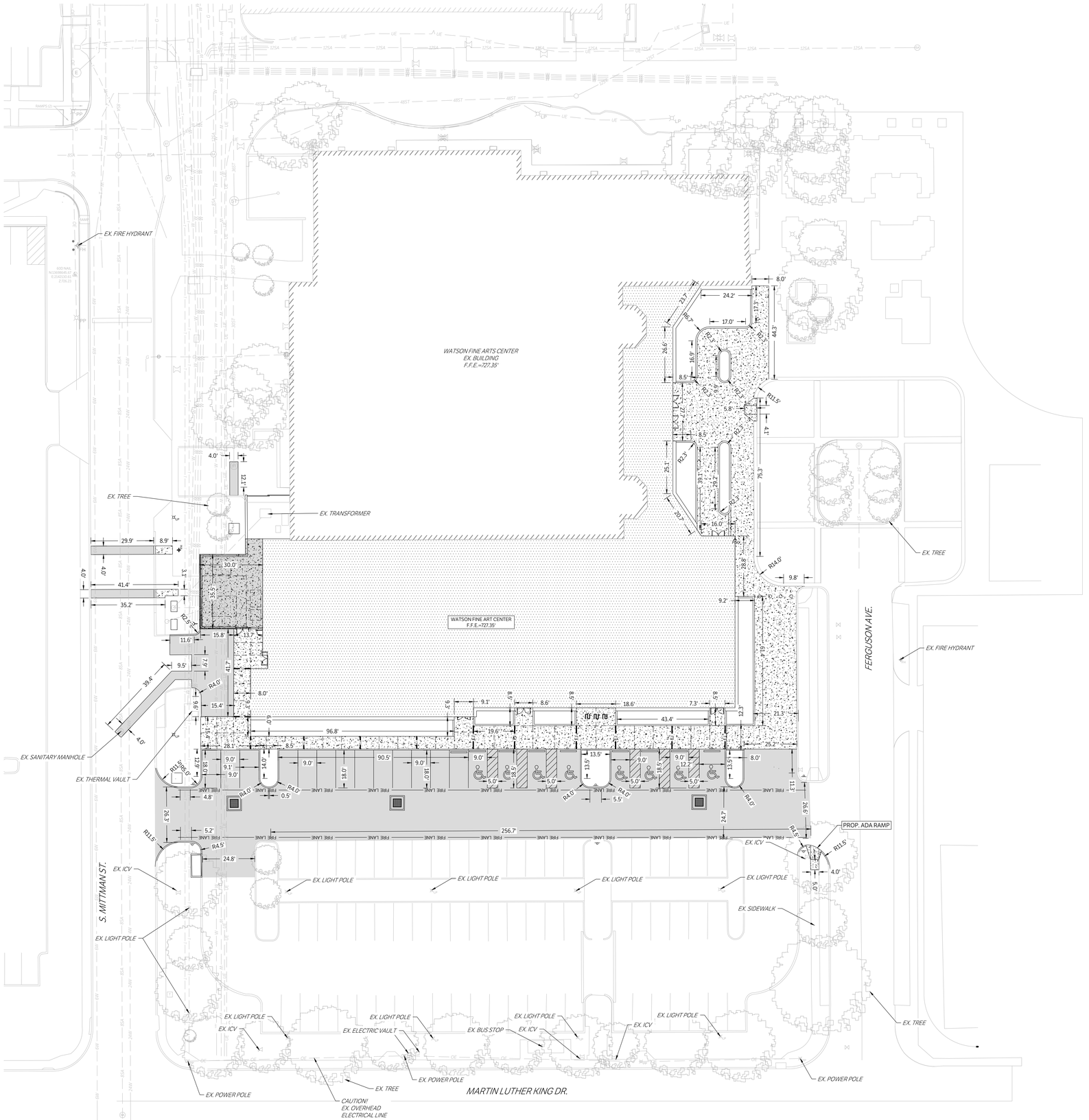
SITE FIRE PLAN

C201

CHECKED BY:
SH & AL
DRAWN BY:
JC

ISSUE FOR CONSTRUCTION

Sheet Grids Template
Z-000
FOR BLUEBEAM LABELING/OCR:



CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

N

0 20 40 60
SCALE: 1"= 20'

LEGEND

	PROPOSED ASPHALT PAVEMENT
	PROPOSED STRUCTURAL PAVEMENT REF. STRUCTURAL
	PROPOSED 4" CONCRETE SIDEWALK
	PROPOSED BUILDING
	EXISTING PAVEMENT EDGE
	PROPERTY LINE
	EXISTING EASEMENT
	PROPOSED EASEMENT
340	EXISTING CONTOURS
340	PROPOSED CONTOURS
ST	EX. | PROP. STORM LINE
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OE	EX. | PROP. OVERHEAD ELECTRIC
FH	EX. | PROP. FIRE HYDRANT
EJ	EXPANSION JOINT
	EX. | PROP. WATER METER CONTRACTION JOINT
	EX. | PROP. GATE VALVE
	EX. IRRIGATION CONTROL VALVE
FDC	PROP. FIRE DEPARTMENT CONNECTION
PIV	PROP. POST INDICATOR VALVE
HOSE LAY	PROP. HOSE LAY
SA	EX. | PROP. SANITARY SEWER MANHOLE
	EX. | PROP. SANITARY SEWER CLEANOUT
	EX. STORM SEWER MANHOLE
	PROP. STORM SEWER CURB INLET
LP	EX. | PROP. LIGHT POLE
PAE	PROPOSED PUBLIC ACCESS EASEMENT
PUE	PROPOSED UTILITY EASEMENT

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THEATER
WJHW
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WFAC Black Box Addition PKG 1

600 S Mittman St.,
San Antonio, TX, 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
ANDREW A. LANGE
118770
LICENSED
06/14/2024

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/12	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER

DIMENSION CONTROL & PAVING PLAN

C202

CHECKED BY:
SH & AL
DRAWN BY:
JC

0"
1"

Sheet Grids Template
Z-000
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ISSUE FOR CONSTRUCTION

CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

N

0 20 40 60
SCALE: 1"= 20'

LEGEND
- PROP. TREE PROTECTION FENCE
- EX. TREE TO BE REMOVED
- EX. TREE TO REMAIN
- DEMOLITION AREA

WATSON FINE ARTS CENTER
EX. BUILDING
F.F.E.=727.35'

EX. LIGHT POLE TO BE REMOVED & SALVAGE
EX. ADA RAMP TO BE REMOVE & REPLACED
EX. LIGHT POLE TO BE REMOVED & SALVAGE
EX. TREE TO REMAIN
EXISTING PIPE TO BE ABANDONED
EX. TRANSFORMER TO BE REMAIN
EX. TREE TO REMAIN
EX. ICV TO BE REMOVED
EX. FDC TO BE REMOVED
CONTRACTOR TO FIELD LOCATE EXISTING STORM SEWER CONNECTION
EX. ELECTRIC MANHOLE TO REMAIN
EX. RAMP TO REMAIN
EX. ICV TO BE REMOVED
EX. TREE TO BE REMOVED
EX. ELECTRICAL MANHOLE TO REMAIN
EX. GRATE INLET TO BE REMOVED
EX. UNDERGROUND ELECTRIC & COMM LINES TO BE REMOVED
EX. TELECOM MANHOLE TO REMAIN
FERGUSON AVE.
EX. STORM DRAIN TO BE REMOVED
EX. THERMAL VAULT TO REMAIN
EX. STORM MANHOLE TO BE REMOVED RECONNECT ANY EXISTING SEWER TO THE PROPOSED SYSTEM
EX. ICV TO BE REMOVED
EX. LIGHT POLE TO BE REMOVED
EX. SIDEWALK TO REMAIN
EX. ICV TO BE REMOVED
EX. LIGHT POLE TO BE REMOVED
EX. LIGHT POLE TO BE REMOVED
EX. RAMP TO REMAIN
EX. TREE TO REMAIN
EX. ICV TO BE REMOVED
EX. RAMP & CURB TO BE REMOVED AND REPLACED
CURBS TO BE REMOVED
EX. ICV TO REMAIN
S. MITTMAN ST.
EX. SIDEWALK TO REMAIN
EX. LIGHT POLE TO REMAIN
EX. TREE TO REMAIN
EX. LIGHT POLE TO REMAIN
EX. LIGHT POLE TO REMAIN
EX. LIGHT POLE TO REMAIN
EX. ELECTRIC VAULT TO REMAIN
EX. ICV TO REMAIN
EX. ICV TO REMAIN
EX. BUS STOP TO REMAIN
EX. LIGHT POLE TO REMAIN
EX. ICV TO REMAIN
EX. POWER POLE TO REMAIN
EX. POWER POLE TO REMAIN
EX. OVERHEAD ELECTRICAL LINE TO REMAIN
EX. TREE TO REMAIN
MARTIN LUTHER KING DR.
EX. ICV TO REMAIN
EX. POWER POLE TO REMAIN

CHECKED BY:
SH & AL
DRAWN BY:
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WFAC Black Box Addition PKG 1

600 S.Mittman St.
San Antonio, TX. 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
ANDREW A. LANGE
118770
LICENSED ARCHITECT
06/14/2024

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Alamo Colleges

DATE	PROJECT NUMBER
2024/06/12	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER

EXISTING CONDITIONS & DEMO PLAN

C300

ISSUE FOR CONSTRUCTION

Sheet Grids Template
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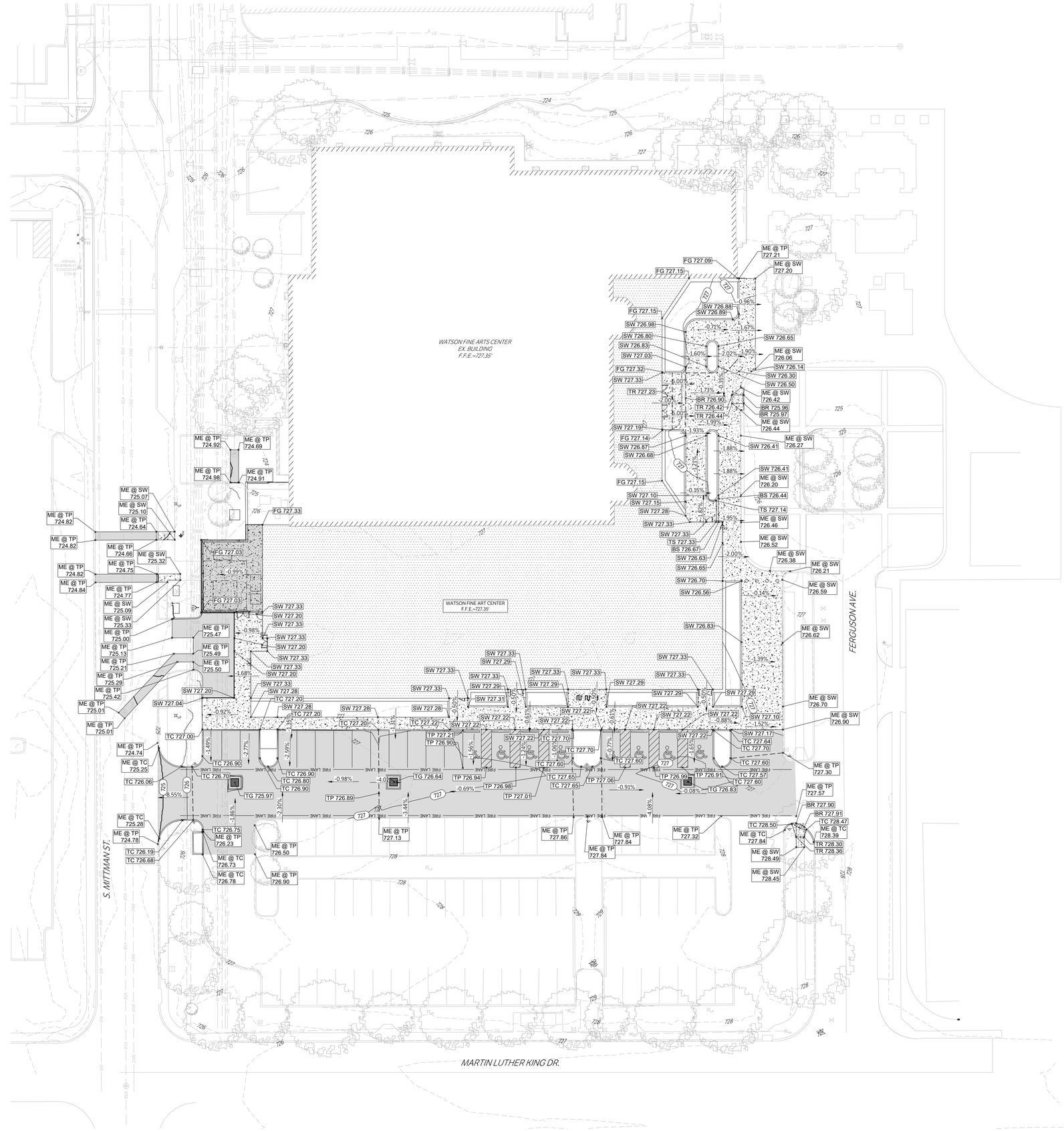

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CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

N

0 20 40 60
SCALE: 1"= 20'

LEGEND

340	EXISTING CONTOURS
340	PROPOSED CONTOURS
	PROPERTY LINE
	PROPOSED SWALE WITH DIRECTION OF FLOW ARROWS
	GRADE BREAK
BR	PROPOSED FINISHED GRADE AT BOTTOM OF RAMP
BS	PROPOSED FINISHED GRADE AT BOTTOM OF STAIR
BW	PROPOSED FINISHED GRADE AT BASE OF WALL
FG	PROPOSED FINISHED GRADE ELEVATION
FL	PROPOSED FLOWLINE ELEVATION
G	PROPOSED GUTTER FLOWLINE ELEVATION
GB	PROPOSED GRADE BREAK
JB	PROPOSED TOP OF JUNCTION BOX ELEVATION
ME @ SW	MATCH EXISTING SIDEWALK ELEVATION
ME @ TC	MATCH EXISTING TOP OF CURB ELEVATION
ME @ TP	MATCH EXISTING AT TOP OF PAVEMENT ELEVATION
SW	PROPOSED TOP OF PAVEMENT AT SIDEWALK ELEVATION
TC	PROPOSED TOP OF CURB ELEVATION
TG	PROPOSED TOP OF GRATE ELEVATION
TP	PROPOSED TOP OF PAVEMENT ELEVATION
TR	PROPOSED TOP OF RAMP ELEVATION
TW	PROPOSED TOP OF WALL ELEVATION
TMS	PROPOSED TOP MUD SLAB
BMS	PROPOSED BOTTOM OF MUD SLAB

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WFAC Black Box Addition PKG 1

600 S Mittman St.
San Antonio, TX, 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
ANDREW A. LANGE
118770
LICENSED
06/14/2024

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/12	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER

GRADING PLAN

C400

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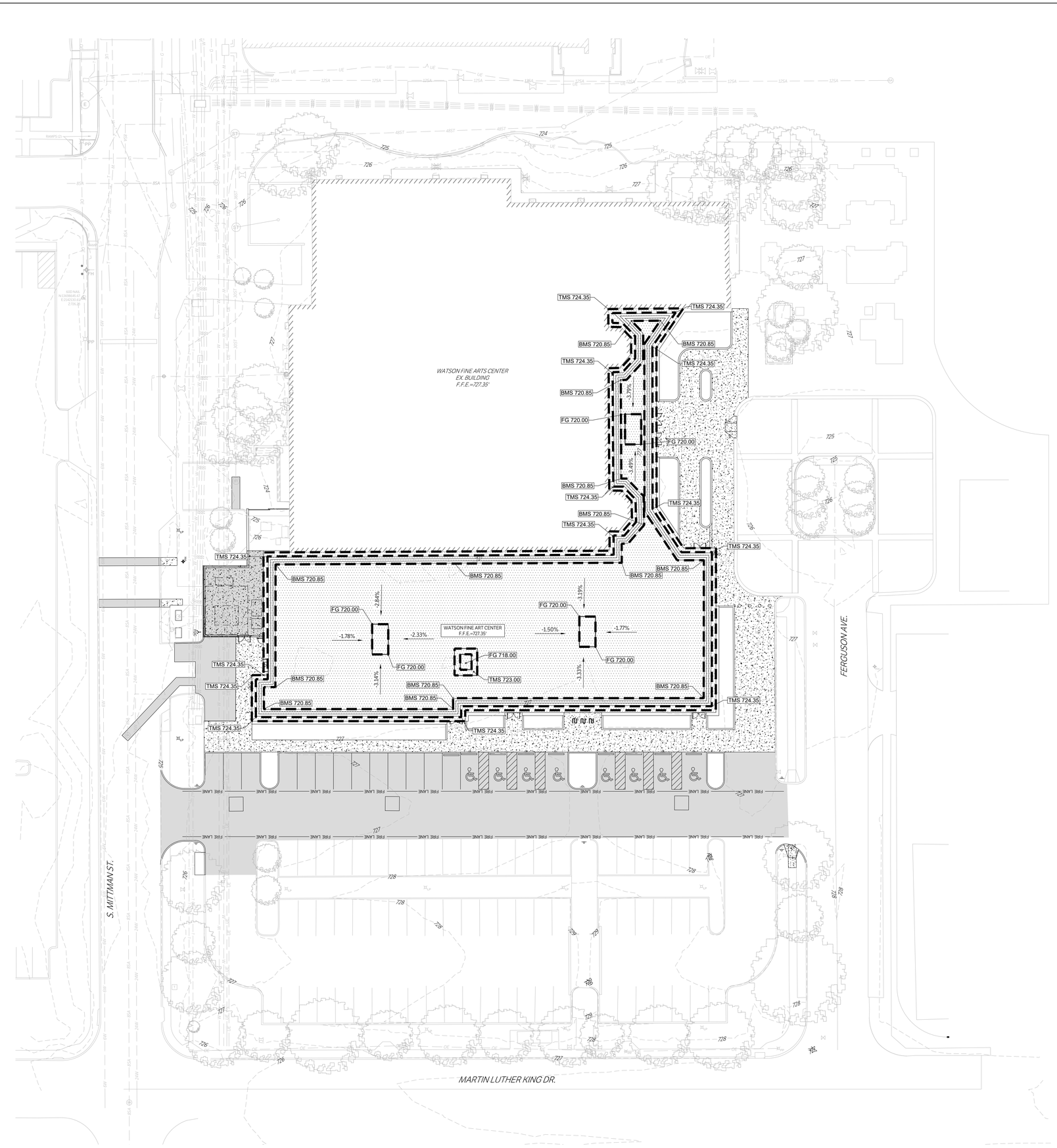
ISSUE FOR CONSTRUCTION



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N

0 20 40 60
SCALE: 1"= 20'

LEGEND

340	EXISTING CONTOURS
340	PROPOSED CONTOURS
	PROPERTY LINE
	PROPOSED SWALE WITH DIRECTION OF FLOW ARROWS
	GRADE BREAK
BR	PROPOSED FINISHED GRADE AT BOTTOM OF RAMP
BS	PROPOSED FINISHED GRADE AT BOTTOM OF STAIR
BW	PROPOSED FINISHED GRADE AT BASE OF WALL
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ME @ SW	MATCH EXISTING SIDEWALK ELEVATION
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TR	PROPOSED TOP OF RAMP ELEVATION
TW	PROPOSED TOP OF WALL ELEVATION
TMS	PROPOSED TOP MUD SLAB
BMS	PROPOSED BOTTOM OF MUD SLAB

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WFAC Black Box Addition PKG 1

600 S Mittman St.
San Antonio, TX, 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
ANDREW A. LANGE
118770
LICENSED PROFESSIONAL ENGINEER
06/14/2024

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/12	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER

CRAWLSPACE

C401

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JC

Sheet Grids Template
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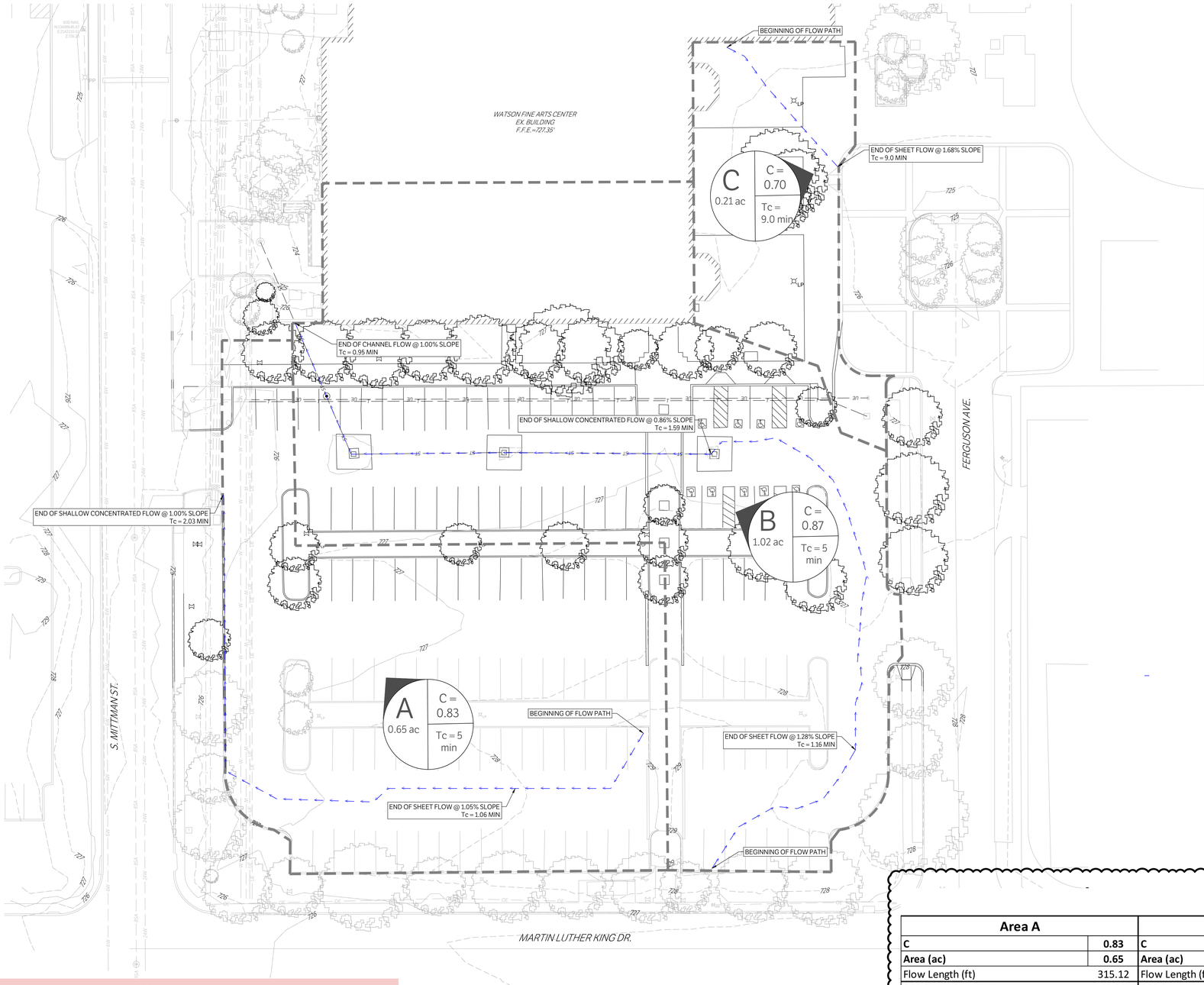
0"
1"

ISSUE FOR PERMIT



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N

0 20 40 60
SCALE: 1"= 20'

LEGEND

- DRAINAGE AREA BOUNDARY
- A1 — DRAINAGE AREA LABEL AND FLOW DIRECTION
- PROPERTY LINE
- 340 — EXISTING CONTOURS
- 340 — PROPOSED CONTOURS
- FLOW PATH

Pre

AREA A					
COVER TYPE	SURFACE DESCRIPTION	C	AREA (SF)	AREA (AC)	C x AREA
Impervious Areas	Paved parking lots, roofs driveways etc.	0.95	23001.03	0.53	0.50
Grass Cover	Grass Cover > 75%	0.35	5475.37	0.13	0.04
		TOTAL	28476.40	0.65	0.55
				C	0.83

AREA B					
COVER TYPE	SURFACE DESCRIPTION	C	AREA (SF)	AREA (AC)	C x AREA
Impervious Areas	Paved parking lots, roofs driveways etc.	0.95	38420.17	0.88	0.84
Grass Cover	Grass Cover > 75%	0.35	6070.51	0.14	0.05
		TOTAL	44490.68	1.02	0.89
				C	0.87

AREA C					
COVER TYPE	SURFACE DESCRIPTION	C	AREA (SF)	AREA (AC)	C x AREA
Impervious Areas	Paved parking lots, roofs driveways etc.	0.95	5207.16	0.12	0.11
Grass Cover	Grass Cover > 75%	0.35	3951.23	0.09	0.03
		TOTAL	9158.39	0.21	0.15
				C	0.70

PRE DEVELOPMENT PEAK RUNOFF							
AREA	SIZE (AC)	C	TC (MIN)	1 YR (CFS)	5 YR (CFS)	25 YR (CFS)	100 YR (CFS)
A	0.65	0.83	5.0	2.9	4.2	5.9	7.4
B	1.02	0.87	5.0	4.7	7.0	9.7	12.2
C	0.21	0.70	9.0	0.7	1.0	1.3	1.6

	Atlas 14 Rainfall Intensity (in/hr)			
Time (minutes)	1 - YEAR	5 - YEAR	25 - YEAR	100 - YEAR
5	5.29	7.88	11.00	13.79
6	5.07	7.45	10.43	13.08
7	4.86	7.11	9.95	12.49
8	4.64	6.81	9.54	11.97
9	4.43	6.54	9.17	11.49
10	4.21	6.30	8.82	11.05

Pre

Area A		Area B		Area C	
C	**0.83**	**C**	**0.87**	**C**	**0.70**
Area (ac)	**0.65**	**Area (ac)**	**1.02**	**Area (ac)**	**0.21**
Flow Length (ft)	315.12	Flow Length (ft)	479.97	Flow Length (ft)	70.70
SCS Sheet Flow (ft)	68.20	**SCS Sheet Flow (ft)**	85.32	**SCS Sheet Flow (ft)**	47.40
Slope (%)	1.02	Slope (%)	1.28	Slope (%)	1.78
Manning's Roughness	0.013	Manning's Roughness	0.013	Manning's Roughness	0.300
Flow Time (min)	1.06	Flow Time (min)	1.16	Flow Time (min)	8.91
SCS Shallow Concentrated Flow (ft)	246.92	**SCS Shallow Concentrated Flow (ft)**	180.17	**SCS Sheet Flow (ft)**	23.30
PAVEMENT		PAVEMENT		Slope (%)	1.57
Slope (%)	1.00	Slope (%)	0.86	Manning's Roughness	0.011
Velocity (ft/s)	2.03	Velocity (ft/s)	1.89	Flow Time (min)	0.38
Flow Time (min)	2.03	Flow Time (min)	1.59	**Time of Concentration (min)**	**9.00**
Time of Concentration (min)	**3.09**	**SCS Channel Flow (ft)**	153.60	*COSA requires min TOC of 5 min*	
COSA requires min TOC of 5 min		Slope (%)	0.21		
		Manning's Roughness	0.012		
		Velocity (ft/s)	2.95		
		Flow Time (min)	0.85		
		SCS Channel Flow (ft)	60.88		
		Slope (%)	1.79		
		Manning's Roughness	0.011		
		Velocity (ft/s)	6.50		
		Flow Time (min)	0.10		
		Time of Concentration (min)	**3.70**		
		COSA requires min TOC of 5 min			

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WFAC Black Box Addition PKG 1

600 S Mittman St.
San Antonio, TX. 78203
ISSUE FOR PERMIT

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
ANDREW A. LANGE
118770
LICENSED PROFESSIONAL ENGINEER
08/05/2024

CLIENT
Alamo Colleges
DATE 2024/06/12
PROJECT NUMBER 230462

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	08/05/2024

ISSUE FOR PERMIT
BUILDING NUMBER

PRE DRAINAGE AREA MAP

C500

Sheet Grids Template
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0"
1"

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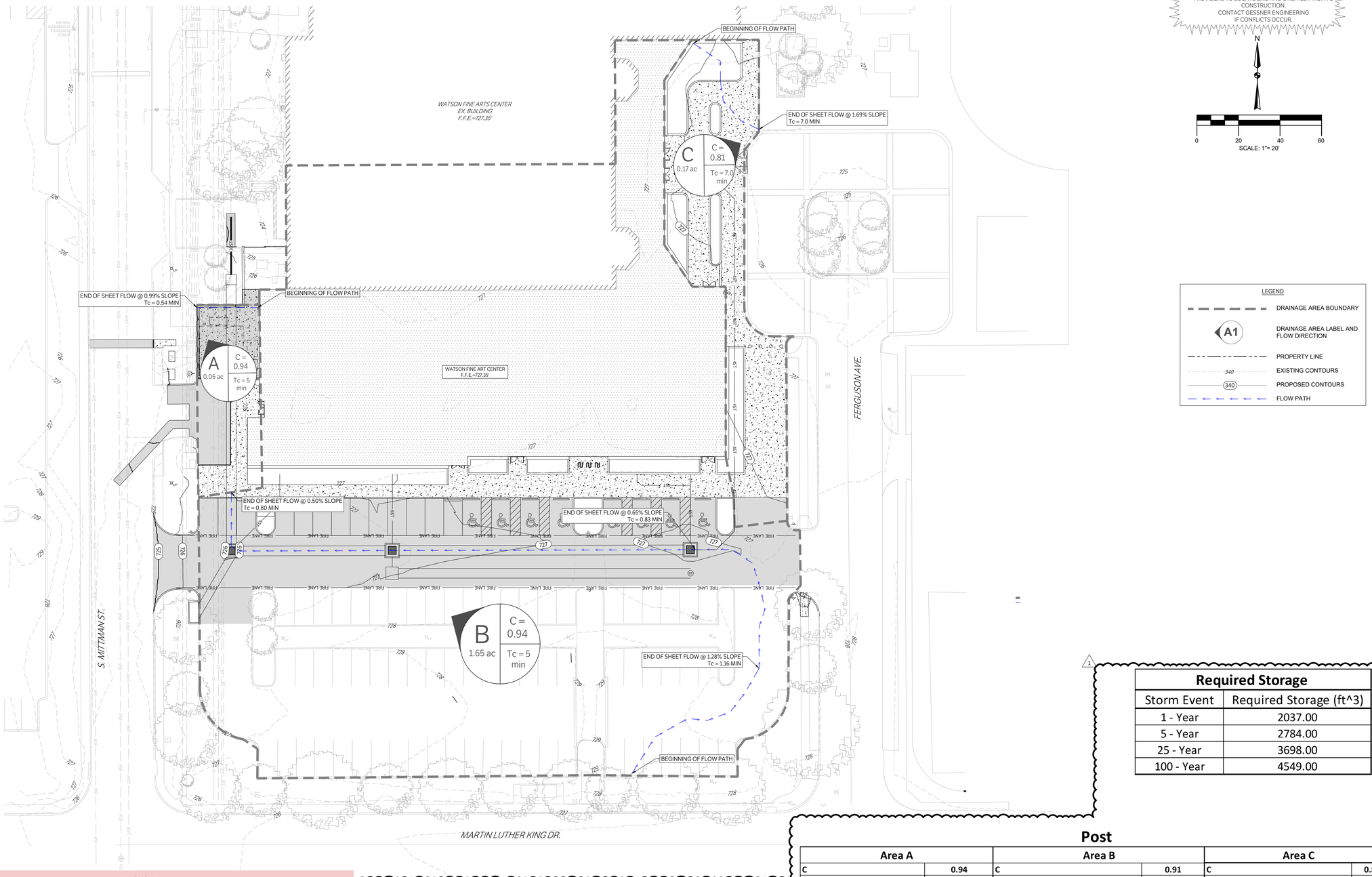

LEGEND

- DRAINAGE AREA BOUNDARY
- A1 — DRAINAGE AREA LABEL AND FLOW DIRECTION
- PROPERTY LINE
- 340 — EXISTING CONTOURS
- 340 — PROPOSED CONTOURS
- FLOW PATH

Required Storage	
Storm Event	Required Storage (ft^3)
1 - Year	2037.00
5 - Year	2784.00
25 - Year	3698.00
100 - Year	4549.00

POST

AREA A

COVER TYPE	SURFACE DESCRIPTION	C	AREA (SF)	AREA (AC)	C x AREA
Impervious Areas	Paved parking lots, roofs driveways etc.	0.95	2700.94	0.06	0.06
Grass Cover	Grass Cover > 75%	0.35	54.6	0.00	0.00
		TOTAL	2755.54	0.06	0.06
				C	0.94

AREA B

COVER TYPE	SURFACE DESCRIPTION	C	AREA (SF)	AREA (AC)	C x AREA
Impervious Areas	Paved parking lots, roofs driveways etc.	0.95	67228.61	1.54	1.47
Grass Cover	Grass Cover > 75%	0.35	4672.06	0.11	0.04
		TOTAL	71900.67	1.65	1.50
				C	0.91

AREA C

COVER TYPE	SURFACE DESCRIPTION	C	AREA (SF)	AREA (AC)	C x AREA
Impervious Areas	Paved parking lots, roofs driveways etc.	0.95	5769.34	0.13	0.13
Grass Cover	Grass Cover > 75%	0.35	1699.92	0.04	0.01
		TOTAL	7469.26	0.17	0.14
				C	0.81

POST DEVELOPMENT PEAK RUNOFF

AREA	SIZE (AC)	C	TC (MIN)	1 YR (CFS)	5 YR (CFS)	25 YR (CFS)	100 YR (CFS)
A	0.06	0.94	5.0	0.3	0.4	0.6	0.8
B	1.65	0.91	5.0	8.2	12.2	16.9	21.2
C	0.17	0.81	8.0	0.6	0.9	1.3	1.6

Time (minutes)	Atlas 14 Rainfall Intensity (in/hr)			
	1 - YEAR	5 - YEAR	25 - YEAR	100 - YEAR
5	5.29	7.88	11.00	13.79
6	5.07	7.45	10.43	13.08
7	4.86	7.11	9.95	12.49
8	4.64	6.81	9.54	11.97
9	4.43	6.54	9.17	11.49
10	4.21	6.30	8.82	11.05

Post

Area A		Area B		Area C	
C	**0.94**	**C**	**0.91**	**C**	**0.81**
Area (ac)	**0.06**	**Area (ac)**	**1.65**	**Area (ac)**	**0.17**
Flow Length (ft)	29.10	Flow Length (ft)	416.77	Flow Length (ft)	70.70
SCS Sheet Flow (ft)	29.10	**SCS Sheet Flow (ft)**	85.32	**SCS Sheet Flow (ft)**	24.73
Slope (%)	0.99	Slope (%)	1.28	Slope (%)	0.83
Manning's Roughness	0.011	Manning's Roughness	0.013	Manning's Roughness	0.300
Flow Time (min)	0.54	Flow Time (min)	1.32	Flow Time (min)	7.18
Time of Concentration (min)	**0.54**	**SCS Shallow Concentrated Flow (ft)**	81.23	**SCS Sheet Flow (ft)**	32.46
COSA requires min TOC of 5 min		PAVEMENT		Slope (%)	2.55
		Slope (%)	0.65	Manning's Roughness	0.011
		Velocity (ft/s)	1.64	Flow Time (min)	0.40
		Flow Time (min)	0.83	**Time of Concentration (min)**	**8.00**
		SCS Channel Flow (ft)	224.55	*COSA requires min TOC of 5 min*	
		Slope (%)	0.50		
		Manning's Roughness	0.011		
		Velocity (ft/s)	5.00		
		Flow Time (min)	0.74		
		SCS Channel Flow (ft)	25.67		
		Slope (%)	0.50		
		Manning's Roughness	0.011		
		Velocity (ft/s)	7.00		
		Flow Time (min)	0.06		
		Time of Concentration (min)	**2.95**		
		COSA requires min TOC of 5 min			

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DRAWN BY:
JC

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WFAC Black Box Addition PKG 1

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ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
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118770
LICENSED
ARCHITECT
08/05/2024

CLIENT
Alamo Colleges
DATE 2024/06/12
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DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	08/05/2024

ISSUE FOR PERMIT
BUILDING NUMBER

POST DRAINAGE AREA MAP

C501

0"
1"

Sheet Grids Template
Z400
FOR BLUEBEAM LABELING/OCR:

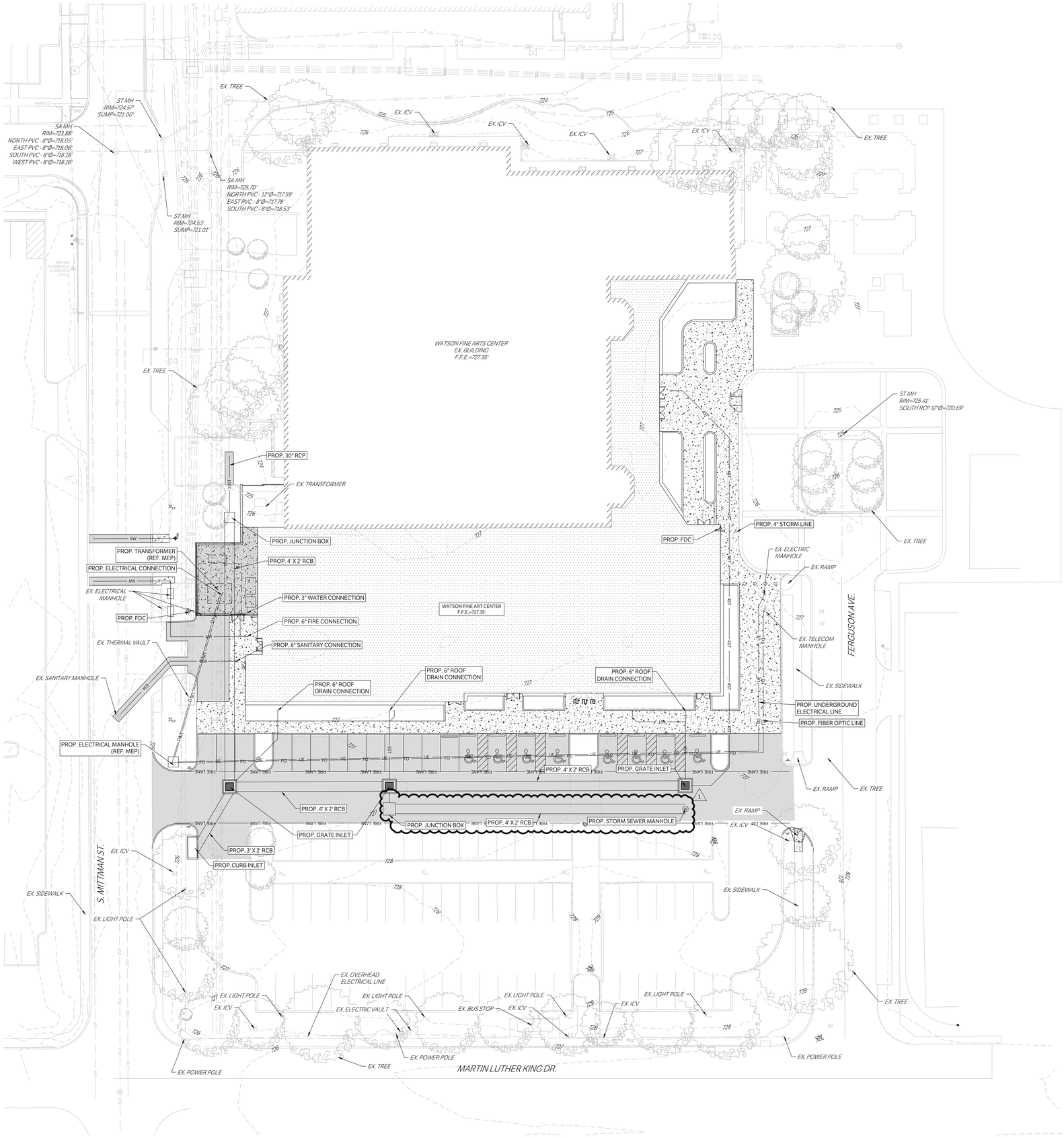
ISSUE FOR PERMIT

CHECKED BY:
SH & AL
DRAWN BY:
JC

CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

N

0 20 40 60
SCALE: 1"= 20'



LEGEND

- PROPOSED ASPHALT PAVEMENT
- PROPOSED STRUCTURAL PAVEMENT REF. STRUCTURAL
- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED BUILDING
- EXISTING PAVEMENT EDGE
- PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING CONTOURS
- PROPOSED CONTOURS
- EX. | PROP. STORM LINE
- EX. | PROP. WATER LINE
- EX. | PROP. SANITARY SEWER LINE
- EXISTING THERMALS
- PROPOSED THERMALS
- EX. | PROP. GAS LINE
- EX. | PROP. DATA/TELECOM
- EX. | PROP. UNDERGROUND ELECTRIC
- EX. | PROP. FIBER OPTIC
- EX. | PROP. OVERHEAD ELECTRIC
- EX. | PROP. FIRE HYDRANT
- EX. | PROP. WATER METER
- EX. | PROP. GATE VALVE
- EX. IRRIGATION CONTROL VALVE
- PROP. FIRE DEPARTMENT CONNECTION
- PROP. POST INDICATOR VALVE
- PROP. HOSE LAY
- EX. | PROP. SANITARY SEWER MANHOLE
- EX. | PROP. SANITARY SEWER CLEANOUT
- EX. STORM SEWER MANHOLE
- PROP. STORM SEWER CURB INLET
- EX. | PROP. LIGHT POLE
- PAE — PROPOSED PUBLIC ACCESS EASEMENT
- PUE — PROPOSED UTILITY EASEMENT

PBK

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GESSNER
T 979-690-8840

LANDSCAPE
EDGELAND GROUP
T 713-492-0998

STRUCTURAL
LUNDY & FRANKE ENGINEERING
T 210-699-7900

MEP
LEAP
T 210-829-9123

ENVELOPE
BEAM PROFESSIONALS
T 210-829-2123

THEATER
N/A
T 210-981-9800

WFAC Black Box Addition PKG 1

600 S Mittman St.
San Antonio, TX. 78203
ISSUE FOR PERMIT

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
ANDREW A. LANGE
118770
LICENSED
PROFESSIONAL ENGINEER
08/05/2024

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/12	230462

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	08/05/2024

ISSUE FOR PERMIT

BUILDING NUMBER

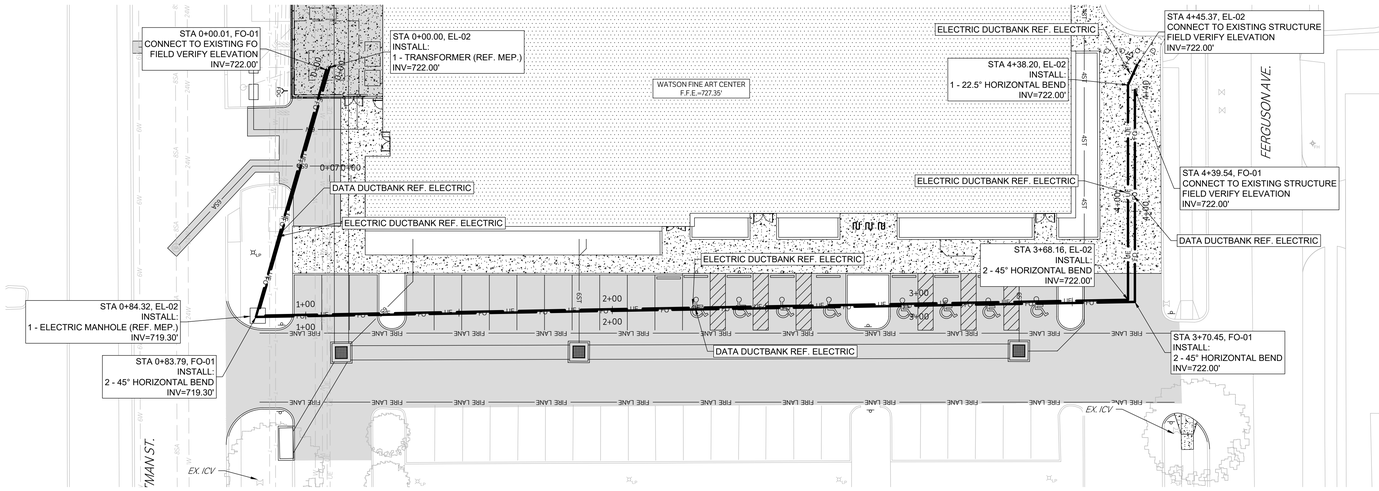
OVERALL UTILITY

C600

Sheet Grids Template
Z:400
FOR BLUEBEAM LABELING.OCR:

0"
1"

ISSUE FOR CONSTRUCTION

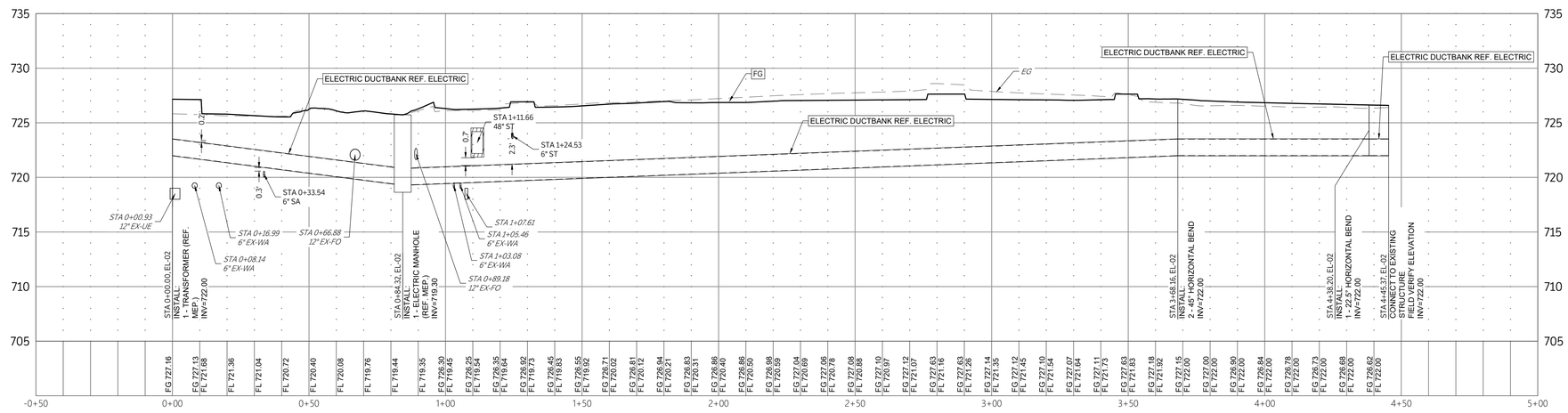


CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

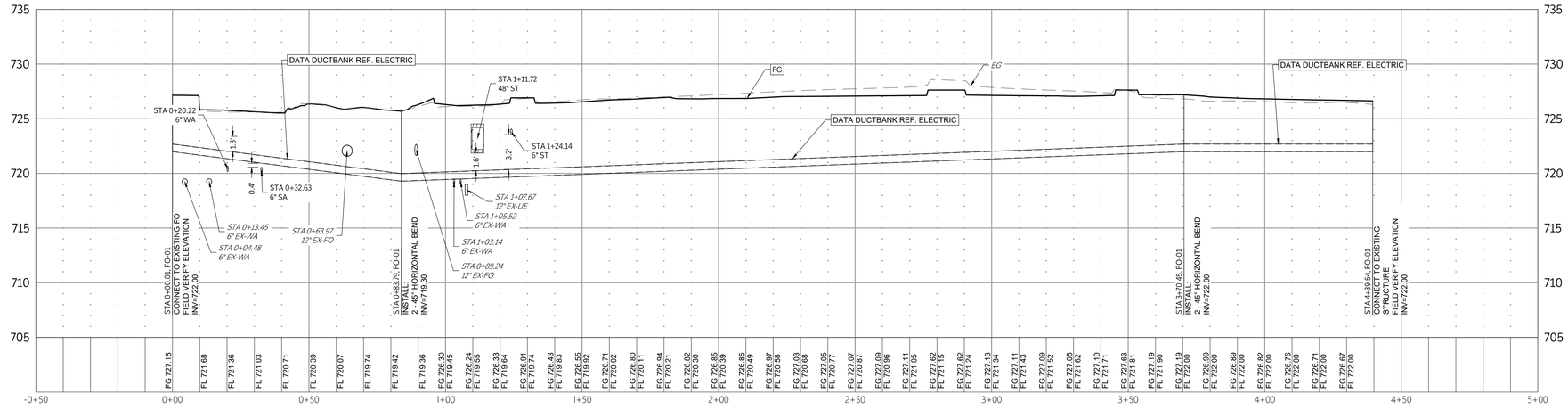
N

0 20 40 60
SCALE: 1"= 20'

NOTE:
CONTRACTOR TO FIELD VERIFY EXISTING UTILITY INVERTS PRIOR TO CONSTRUCTION



EL-02
SCALE: 1"=20' H, 1"=5' V



FO-01
SCALE: 1"=20' H, 1"=5' V

LEGEND

- PROPOSED ASPHALT PAVEMENT
- PROPOSED STRUCTURAL PAVEMENT REF. STRUCTURAL
- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED BUILDING
- EXISTING PAVEMENT EDGE
- PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- 340 EXISTING CONTOURS
- (340) PROPOSED CONTOURS
- ST EX. | PROP. STORM LINE
- W EX. | PROP. WATER LINE
- SA EX. | PROP. SANITARY SEWER LINE
- EXISTING THERMALS
- CWR, CWS, HWR, HWS PROPOSED THERMALS
- G EX. | PROP. GAS LINE
- T EX. | PROP. DATA/TELECOM
- UE EX. | PROP. UNDERGROUND ELECTRIC
- FO EX. | PROP. FIBER OPTIC
- OE EX. | PROP. OVERHEAD ELECTRIC
- FH EX. | PROP. FIRE HYDRANT
- WM EX. | PROP. WATER METER
- EX. | PROP. GATE VALVE
- EX. IRRIGATION CONTROL VALVE
- FDC PROP. FIRE DEPARTMENT CONNECTION
- PIV PROP. POST INDICATOR VALVE
- HOSE LAY PROP. HOSE LAY
- EX. | PROP. SANITARY SEWER MANHOLE
- EX. | PROP. SANITARY SEWER CLEANOUT
- EX. STORM SEWER MANHOLE
- PROP. STORM SEWER CURB INLET
- EX. | PROP. LIGHT POLE
- PAE PROPOSED PUBLIC ACCESS EASEMENT
- PUE PROPOSED UTILITY EASEMENT

CHECKED BY:
SH & AL
DRAWN BY:
JC

PBK

R&A ARCHITECTS

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BEAM PROFESSIONALS
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THEATER
N.ADLER
T.210.681.9800

WFAC Black Box Addition PKG 1

600 S Mittman St.
San Antonio, TX. 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
ANDREW A. LANGE
118770
LICENSED ARCHITECT
06/14/2024

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/12	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER

ELEC. & COMNS PLAN & PROFILES

C700

Sheet Grids Template
Z-000
FOR BLUEBEAM LABELING.OCR:

0"
1"

ISSUE FOR PERMIT

CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

N

0 20 40 60
SCALE: 1"= 20'

EX. TREE
ST MH RIM=724.57' SUMP=721.00'
SA MH RIM=723.88' NORTH PVC - 8"Ø=718.05' EAST PVC - 8"Ø=718.06' SOUTH PVC - 8"Ø=718.18' WEST PVC - 8"Ø=718.16'
SA MH RIM=725.70' NORTH PVC - 12"Ø=717.59' EAST PVC - 8"Ø=717.78' SOUTH PVC - 8"Ø=718.53'
ST MH RIM=724.53' SUMP=721.01'
EX. ICV
WATSON FINE ARTS CENTER EX. BUILDING F.F.E.=727.35'
ST MH RIM=725.41' SOUTH RCP 12"Ø=720.69'
STA 2+16.90, ST - 4 INSTALL: 1 - 4" 45° BEND TOP=724.85' INV=724.50'
STA 2+22.99, ST - 4 CONNECT TO SUMP PUMP DRAIN REF. MEP. FOR CONTINUATION INSTALL: 1 - 4" X 2" REDUCER TOP=724.88' INV=724.53'
6.09 LF 4" PVC
32.12 LF 4" PVC
STA 1+84.78, ST - 4 INSTALL: 1 - 4" 45° BEND TOP=725.02' INV=724.34'
CONNECT TO EXISTING STORM SEWER PIPE, CONTRACTOR TO FIELD LOCATE PRIOR TO CONSTRUCTION
STA 0+00.00, ST-1 CONNECT TO EX. STORM SEWER MANHOLE TOP=724.82' INV 30" IN = 721.72
29.76 LF 30" RCP
STA 0+29.76, ST-1 INSTALL: 1 - 6' X 5' I.D. JUNCTION BOX W/ OUTLET STRUCTURE (REF. SHEET C1200 FOR DETAILS) TOP=726.61' INV 48" IN = 721.89 INV 30" OUT = 721.79
130.67 LF 4'X2' RCB
STA 0+46.60, ST-3 CONNECT TO ROOF DOWNSPUT REF. MEP. FOR CONTINUATION TOP=724.44' INV 6" OUT = 723.92
STA 0+36.75, ST-2 CONNECT TO ROOF DOWNSPUT REF. MEP. FOR CONTINUATION TOP=724.79' INV 6" OUT = 724.28
STA 4+17.51, ST-1 CONNECT TO ROOF DOWNSPUT REF. MEP. FOR CONTINUATION TOP=725.27' INV 6" OUT = 724.74
159.92 LF 4" PVC
5.11 LF 6" PVC
CONNECT TO SUMP PUMP DRAIN REF. MEP FOR CONTINUATION INSTALL: 1 - 4" X 2" REDUCER TOP=724.71' INV=724.36'
CONNECT TO SUMP PUMP DRAIN REF. MEP FOR CONTINUATION INSTALL: 1 - 4" X 2" REDUCER TOP=727.29' INV=724.86'
STA 1+60.43, ST-1 = STA 0+00.00 ST-3, ST-5 INSTALL: 1 - NEENAH R-4882 TYPE A GRATE INLET (REF. DETAIL) W/ FRAME W/ 6' X 6' I.D. JUNCTION BOX TOP=725.97' INV 48" IN = 722.32 INV 6" IN = 723.43 INV 36" IN = 722.32 INV 48" OUT = 722.22
13.72 LF 6" PVC
STA 0+32.88, ST-3 INSTALL: 1 - 45° BEND TOP=724.18' INV 6" IN = 723.66 INV 6" OUT = 723.66
3.00 LF 4" PVC
INSTALL: 1 - 4" 45° BEND TOP=724.70' INV=724.35'
3.30 LF 4" PVC
INSTALL: 1 - 6" X 4" WYE TOP=724.77' INV=724.26'
5.33 LF 6" PVC
31.42 LF 6" PVC
32.88 LF 6" PVC
3.00 LF 4" PVC
INSTALL: 1 - 45° BEND TOP=727.27' INV=724.85'
INSTALL: 1 - 6" X 4" TEE TOP=725.21' INV=724.69'
31.02 LF 6" PVC
3.00 LF 4" PVC
INSTALL: 1 - 45° BEND TOP=727.25' INV=724.84'
STA 0+24.86, ST - 4 INSTALL: 1 - 4" 45° BEND TOP=724.75' INV=723.54'
23.63 LF 4" PVC
12.43 LF 4" PVC
STA 0+12.43, ST - 4 INSTALL: 1 - 4" 45° BEND TOP=724.75' INV=723.08'
12.43 LF 4" PVC
36.24 LF 3'X2' RCB
77.46 LF 4'X2' RCB
10.91 LF 24" RCP
STA 0+10.91, ST-6 INSTALL: 1 - 6' X 6' I.D. JUNCTION BOX TOP=726.96' INV 48" IN = 722.77 INV 24" OUT = 722.67
143.49 LF 4'X2' RCB
143.64 LF 4'X2' RCB
STA 0+34.53, ST-5 INSTALL: 1 - 10' CURB INLET REF. DETAIL TOP=726.65' INV 36" OUT = 722.41
STA 2+37.89, ST-1 = STA 0+00.00 ST-2 INSTALL: 1 - NEENAH R-4882 TYPE A GRATE INLET (REF. DETAIL) W/ FRAME W/ 6' X 6' I.D. JUNCTION BOX TOP=726.64' INV 48" IN = 722.62 INV 6" IN = 724.13 INV 24" IN = 722.62 INV 48" OUT = 722.51
STA 3+81.38, ST-1 = STA 0+00.00 ST-4 INSTALL: 1 - NEENAH R-4882 TYPE A GRATE INLET (REF. DETAIL) W/ FRAME W/ 6' X 6' I.D. JUNCTION BOX TOP=726.83' INV 6" IN = 724.41 INV 4" IN = 723.00 INV 48" OUT = 722.97
STA 1+54.55, ST-6 INSTALL: 1 - MANHOLE ON BOX STORM SEWER REF. DETAILS TOP=727.27' INV 48" OUT = 723.13
EX. ICV
EX. LIGHT POLE
EX. SIDEWALK
EX. OVERHEAD ELECTRICAL LINE
EX. ELECTRIC VAULT
EX. BUS STOP
EX. POWER POLE
EX. TREE
S. MITTMAN ST.
FERGUSON AVE.
MARTIN LUTHER KING DR.

LEGEND

- PROPOSED ASPHALT PAVEMENT
- PROPOSED STRUCTURAL PAVEMENT REF. STRUCTURAL
- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED BUILDING
- EXISTING PAVEMENT EDGE
- PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- 340 EXISTING CONTOURS
- (340) PROPOSED CONTOURS
- ST EX. | PROP. STORM LINE
- W EX. | PROP. WATER LINE
- SA EX. | PROP. SANITARY SEWER LINE
- CWR CWS HWR HWS EXISTING THERMALS
- CWR CWS HWR HWS PROPOSED THERMALS
- G EX. | PROP. GAS LINE
- T EX. | PROP. DATA/TELECOM
- UE EX. | PROP. UNDERGROUND ELECTRIC
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- FDC PROP. FIRE DEPARTMENT CONNECTION
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- HOSE LAY PROP. HOSE LAY
- EX. | PROP. SANITARY SEWER MANHOLE
- EX. | PROP. SANITARY SEWER CLEANOUT
- EX. STORM SEWER MANHOLE
- PROP. STORM SEWER CURB INLET
- EX. | PROP. LIGHT POLE
- PAE PROPOSED PUBLIC ACCESS EASEMENT
- PUE PROPOSED UTILITY EASEMENT

CHECKED BY:
SH & AL
DRAWN BY:
JC

PBK

B&A ARCHITECTS

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MEP LEAP T.210.829.0123
ENVELOPE BEAM PROFESSIONALS T.210.829.2123
THEATER M-RAD T.210.581.9800

WFAC Black Box Addition PKG 1

600 S Mittman St.
San Antonio, TX. 78203
ISSUE FOR PERMIT

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
ANDREW A. LANGE
118770
LICENSED PROFESSIONAL ENGINEER
08/05/2024

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/12	230462

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	08/05/2024

ISSUE FOR PERMIT

BUILDING NUMBER

STORM PLAN

C800

Sheet Grids Template
Z-000
FOR BLUEBEAM LABELING/OCR:

ISSUE FOR PERMIT

CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
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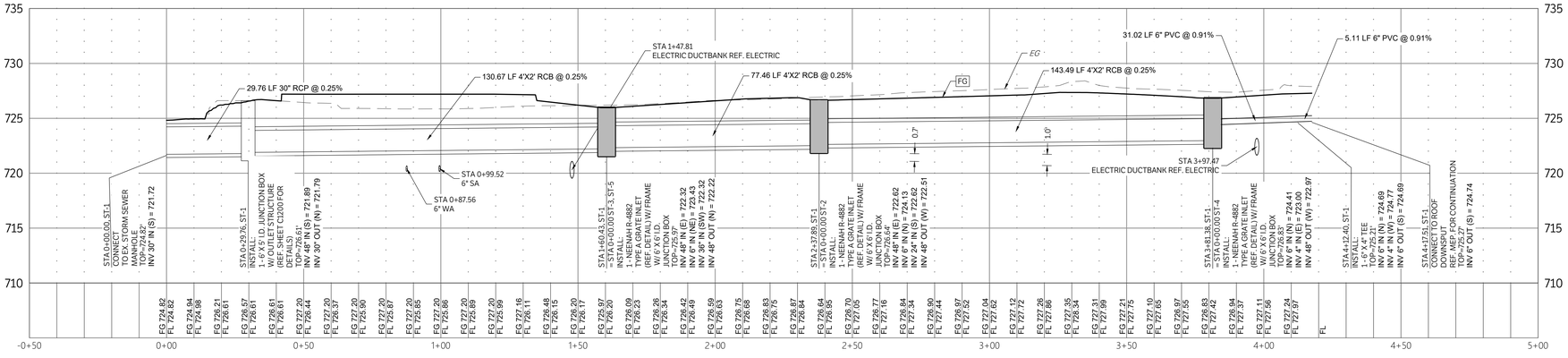
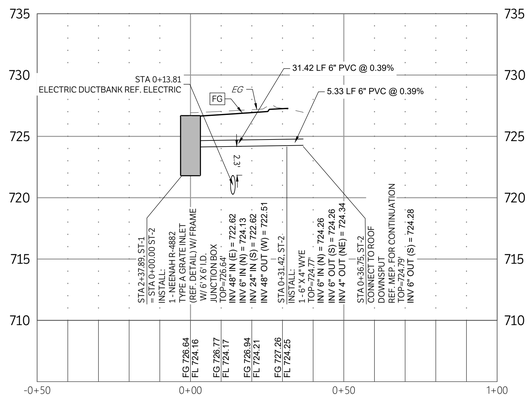
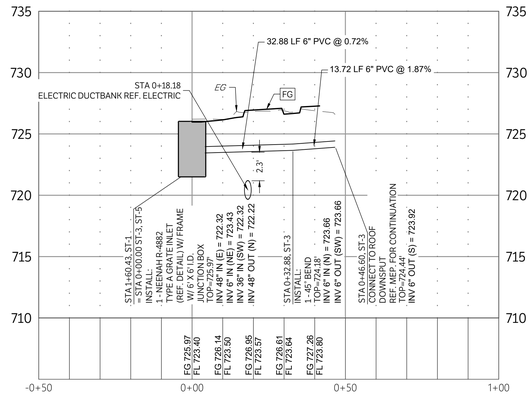


ST-1
SCALE: 1"=20' H, 1"=5' V

NOTE:
CONTRACTOR TO FIELD VERIFY EXISTING UTILITY INVERTS PRIOR TO CONSTRUCTION



ST-2
SCALE: 1"=20' H, 1"=5' V



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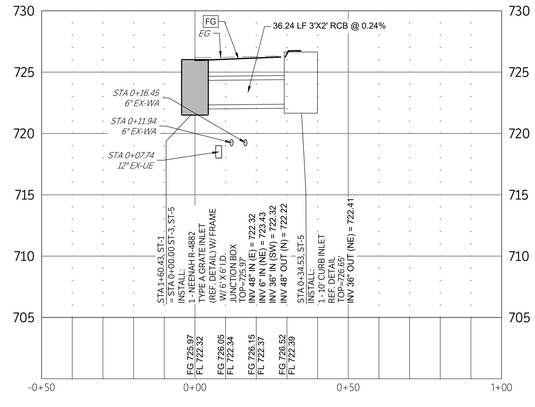
SCALE: 1"=20' H, 1"=5' V



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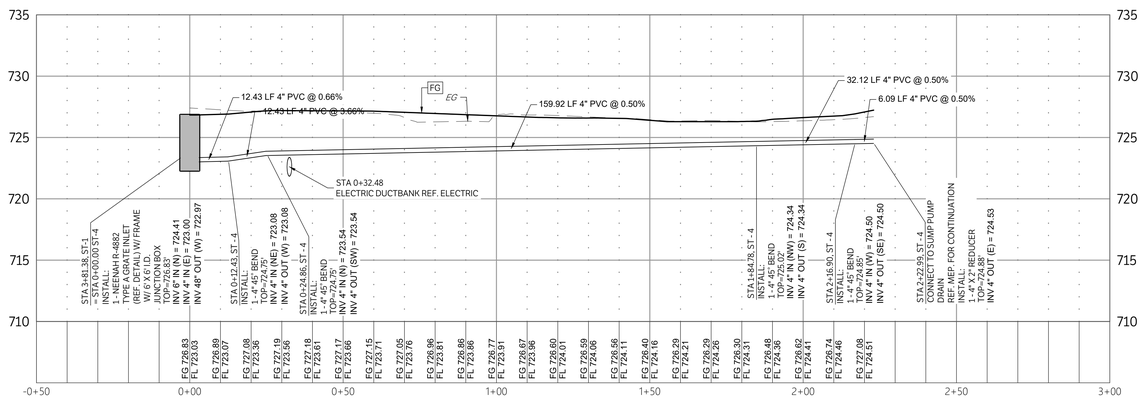
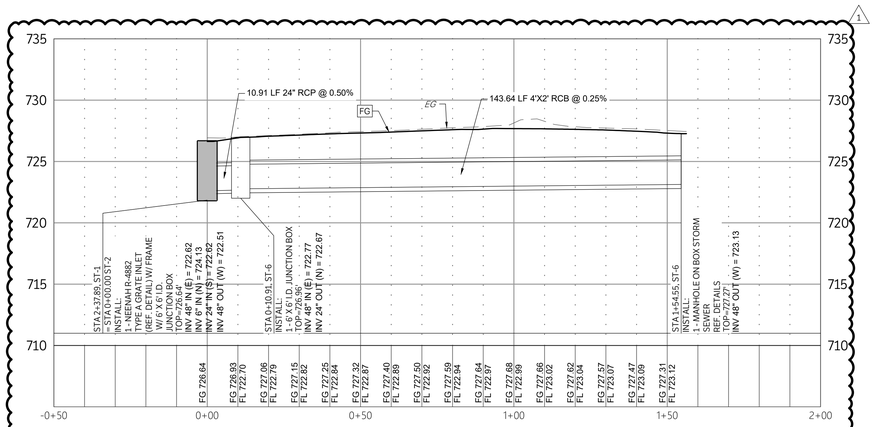
SCALE: 1"=20' H, 1"=5' V



ST - 4
SCALE: 1"=20' H, 1"=5' V



ST-6
SCALE: 1"=20' H, 1"=5' V

PBK

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STRUCTURAL
LUNDY & FRANKE ENGINEERING
T 210-829-7900
MEP
LEAF
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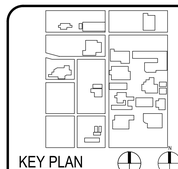
ENVELOPE
BEAM PROFESSIONALS
T 210-829-0123
THEATER
WLRW
T 210-561-9800

WFAC Black Box Addition PKG 1

600 S Mittman St,
San Antonio, TX, 78203
ISSUE FOR PERMIT

ALAMO COLLEGES
ST. PHILIP'S COLLEGE



KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
ANDREW A. LANGE
118770
LICENSED
PROFESSIONAL ENGINEER
08/05/2024

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/12	230462

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	08/05/2024

ISSUE FOR PERMIT

BUILDING NUMBER

STORM PROFILES

C801

CHECKED BY:
SH & AL
DRAWN BY:
JC

Sheet Grids Template
Z-000
FOR BLUEBEAM LABELING/OCR:

0"
1"

ISSUE FOR PERMIT

CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

N

0 20 40 60
SCALE: 1"= 20'

WATSON FINE ARTS CENTER
EX. BUILDING
F.F.E.=727.35'

WATSON FINE ART CENTER
F.F.E.=727.35'

CONNECT TO EXISTING STORM SEWER PIPE, CONTRACTOR TO FIELD LOCATE PRIOR TO CONSTRUCTION

STA 0+29.76, ST-1
INSTALL:
1 - 6' X 5' I.D. JUNCTION BOX
W/ OUTLET STRUCTURE
(REF. SHEET C802 FOR DETAILS)
TOP=726.61'
INV=721.79'

130.67 LF 4'X2' RCB @ 0.25%

STORM SEWER SYSTEM
PROVIDING DETENTION
STORAGE VOLUME
MAX. VOLUME = 4835 FT³

STA 2+37.89, ST-1
= STA 0+00.00 ST-2
INSTALL:
1 - NEENAH R-4882
TYPE A GRATE INLET
(REF. DETAIL) W/ FRAME
W/ 6' X 6' I.D.
JUNCTION BOX
TOP=726.64'
INV=722.51'

STA 1+60.43, ST-1
= STA 0+00.00 ST-3, ST-5
INSTALL:
1 - NEENAH R-4882
TYPE A GRATE INLET
(REF. DETAIL) W/ FRAME
W/ 6' X 6' I.D.
JUNCTION BOX
TOP=725.97'
INV=722.22'

10.91 LF 24" RCP @ 0.50%

143.49 LF 4'X2' RCB @ 0.25%

STA 3+81.38, ST-1
= STA 0+00.00 ST-4
INSTALL:
1 - NEENAH R-4882
TYPE A GRATE INLET
(REF. DETAIL) W/ FRAME
W/ 6' X 6' I.D.
JUNCTION BOX
TOP=726.83'
INV=722.97'

36.24 LF 3'X2' RCB @ 0.24%

77.46 LF 4'X2' RCB @ 0.25%

STA 0+10.91, ST-6
INSTALL:
1 - 6' X 6' I.D. JUNCTION BOX
TOP=726.96'
INV=722.67'

143.64 LF 4'X2' RCB @ 0.25%

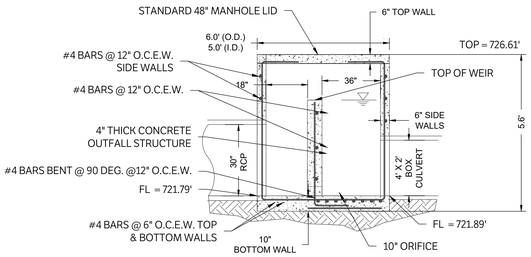
STA 1+54.55, ST-6
INSTALL:
1 - MANHOLE ON BOX STORM SEWER
REF. DETAILS
TOP=727.27'
INV=723.13'

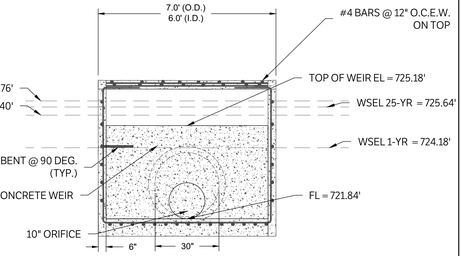
STA 0+34.53, ST-5
INSTALL:
1 - 10' CURB INLET
REF. DETAIL
TOP=726.65'
INV=722.32'

S. MITTMAN ST.

FERGUSON AVE.

MARTIN LUTHER KING DR.





UNDERGROUND DETENTION OUTLET STRUCTURE
N.T.S.
NOTES:

1. ALL REINFORCEMENT BARS TO HAVE 2" OF CLEARANCE

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SH & AL
DRAWN BY:
JC

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BEAM PROFESSIONALS
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THEATER
M.arts
T.210.581.9800

WFAC Black Box Addition PKG 1

600 S Mittman St.
San Antonio, TX. 78203
ISSUE FOR PERMIT

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
ANDREW A. LANGE
118770
LICENSED
ARCHITECT
08/05/2024

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/12	230462

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	08/05/2024

ISSUE FOR PERMIT

BUILDING NUMBER

1

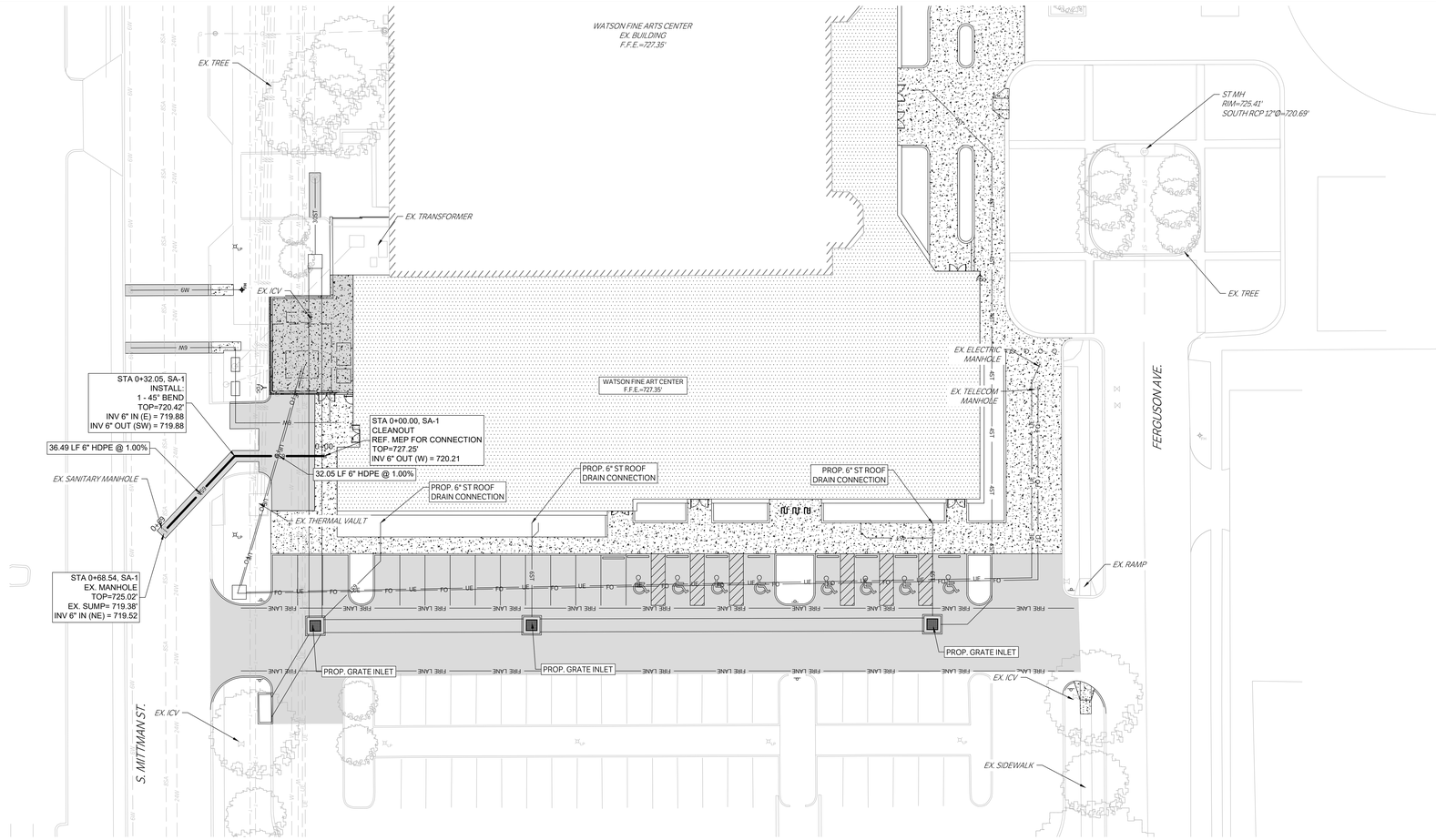
DETENTION PLAN

C802

0"
1"

Sheet Grids Template
Z-000
FOR BLUEBEAM LABELING.OCR:

ISSUE FOR CONSTRUCTION



CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

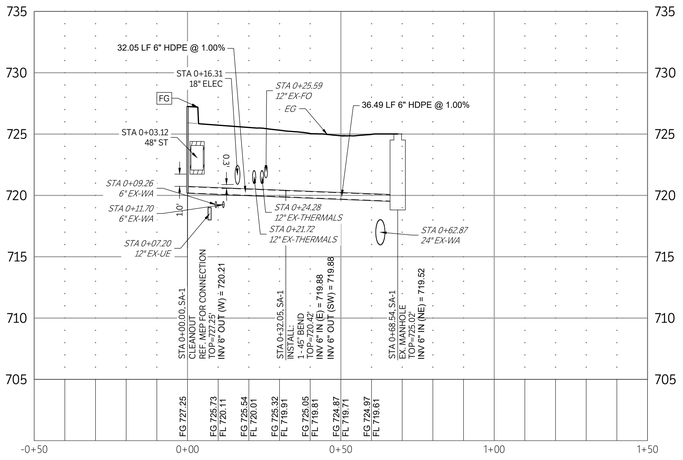
N

0 20 40 60
SCALE: 1"= 20'

NOTE:
CONTRACTOR TO FIELD VERIFY EXISTING UTILITY INVERTS PRIOR TO CONSTRUCTION

LEGEND

- PROPOSED ASPHALT PAVEMENT
- PROPOSED STRUCTURAL PAVEMENT REF. STRUCTURAL
- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED BUILDING
- EXISTING PAVEMENT EDGE
- PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING CONTOURS
- PROPOSED CONTOURS
- EX. | PROP. STORM LINE
- EX. | PROP. WATER LINE
- EX. | PROP. SANITARY SEWER LINE
- EXISTING THERMALS
- PROPOSED THERMALS
- EX. | PROP. GAS LINE
- EX. | PROP. DATA/TELECOM
- EX. | PROP. UNDERGROUND ELECTRIC
- EX. | PROP. FIBER OPTIC
- EX. | PROP. OVERHEAD ELECTRIC
- EX. | PROP. FIRE HYDRANT
- EX. | PROP. WATER METER
- EX. | PROP. GATE VALVE
- EX. IRRIGATION CONTROL VALVE
- PROP. FIRE DEPARTMENT CONNECTION
- PROP. POST INDICATOR VALVE
- PROP. HOSE LAY
- EX. | PROP. SANITARY SEWER MANHOLE
- EX. | PROP. SANITARY SEWER CLEANOUT
- EX. STORM SEWER MANHOLE
- PROP. STORM SEWER CURB INLET
- EX. | PROP. LIGHT POLE
- PAE PROPOSED PUBLIC ACCESS EASEMENT
- PUE PROPOSED UTILITY EASEMENT



SA-1
SCALE: 1"=20' H, 1"=5' V

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BEAM PROFESSIONALS
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N.ADDIS
T.210.581.9800

WFAC Black Box Addition PKG 1

600 S Mittman St.
San Antonio, TX. 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/12	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER

SANITARY PLAN & PROFILES

C900

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SH & AL
DRAWN BY:
JC

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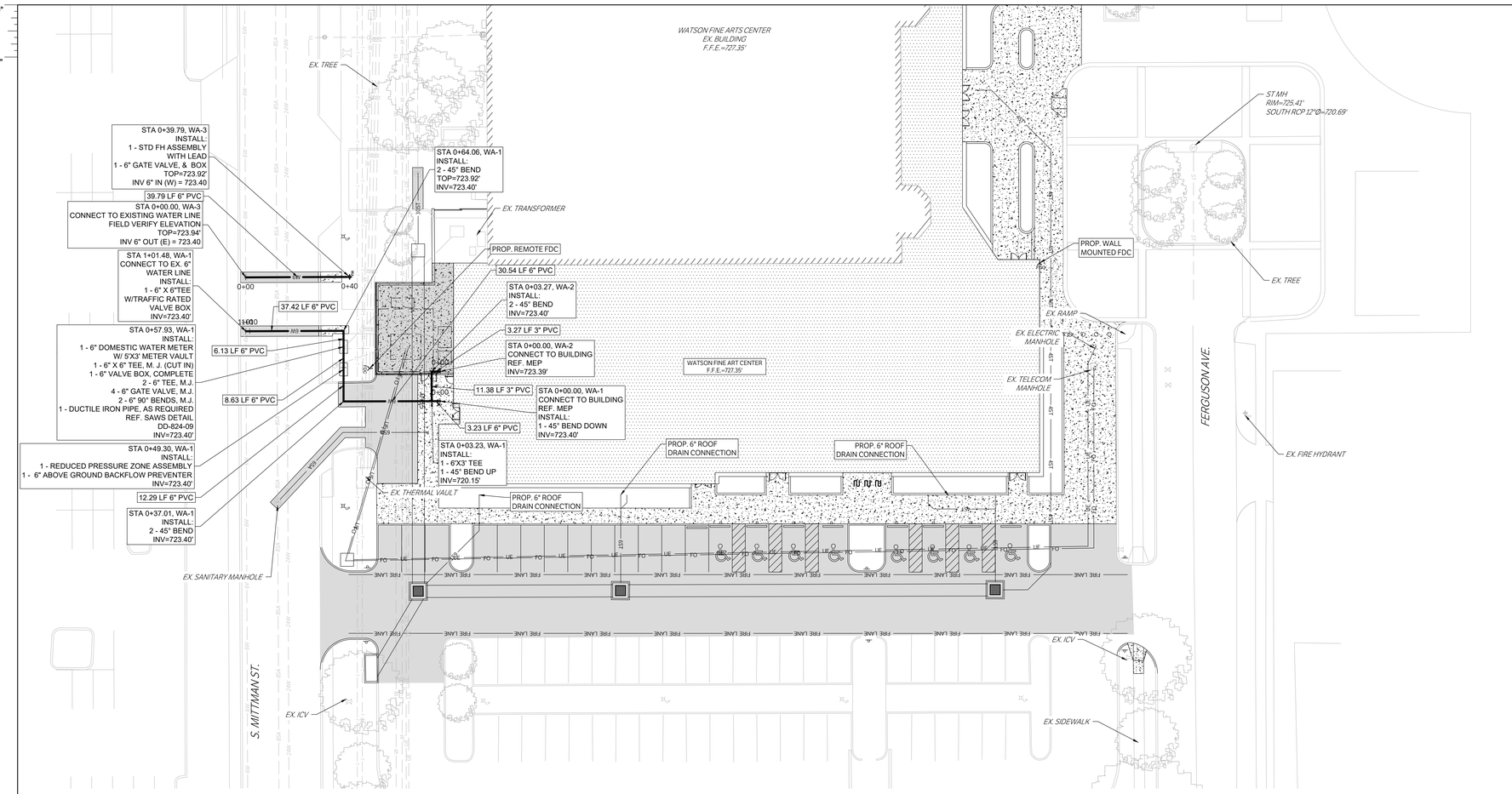
Z-000
FOR BLUEBEAM LABELING.OCR:

ISSUE FOR CONSTRUCTION



CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

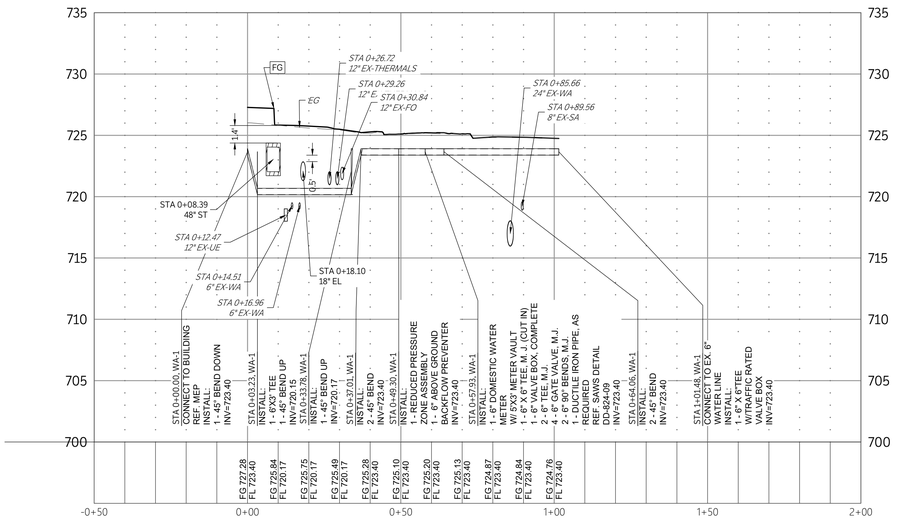
N

0 20 40 60
SCALE: 1"= 20'

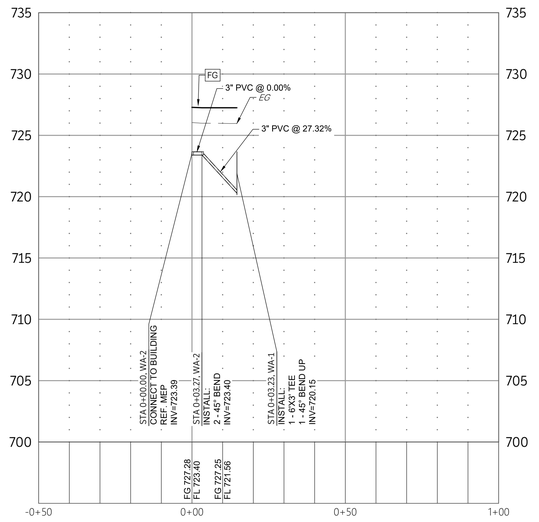
NOTE:
CONTRACTOR TO FIELD VERIFY EXISTING UTILITY INVERTS PRIOR TO CONSTRUCTION

LEGEND

- PROPOSED ASPHALT PAVEMENT
- PROPOSED STRUCTURAL PAVEMENT REF. STRUCTURAL
- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED BUILDING
- EXISTING PAVEMENT EDGE
- PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- 340 EXISTING CONTOURS
- 340 PROPOSED CONTOURS
- ST EX. | PROP. STORM LINE
- W EX. | PROP. WATER LINE
- SA EX. | PROP. SANITARY SEWER LINE
- CWR, CWS, HWR, HWS EXISTING THERMALS
- CWR, CWS, HWR, HWS PROPOSED THERMALS
- G EX. | PROP. GAS LINE
- T EX. | PROP. DATA/TELECOM
- UE EX. | PROP. UNDERGROUND ELECTRIC
- FO EX. | PROP. FIBER OPTIC
- OE EX. | PROP. OVERHEAD ELECTRIC
- FH EX. | PROP. FIRE HYDRANT
- EX. | PROP. WATER METER
- EX. | PROP. GATE VALVE
- EX. IRRIGATION CONTROL VALVE
- FDC PROP. FIRE DEPARTMENT CONNECTION
- PIV PROP. POST INDICATOR VALVE
- HOSE LAY PROP. HOSE LAY
- MH EX. | PROP. SANITARY SEWER MANHOLE
- EX. | PROP. SANITARY SEWER CLEANOUT
- EX. STORM SEWER MANHOLE
- PROP. STORM SEWER CURB INLET
- LP EX. | PROP. LIGHT POLE
- PAE PROPOSED PUBLIC ACCESS EASEMENT
- PUE PROPOSED UTILITY EASEMENT



WA-1
SCALE: 1"=20' H, 1"=5' V



WA-2
SCALE: 1"=20' H, 1"=5' V

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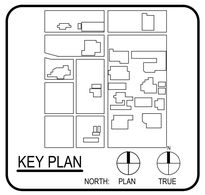
WFAC Black Box Addition PKG 1
600 S Mittman St.
San Antonio, TX. 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE



STATE OF TEXAS
ANDREW A. LANGE
118770
LICENSED
ENGINEER
06/14/2024

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/12	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER

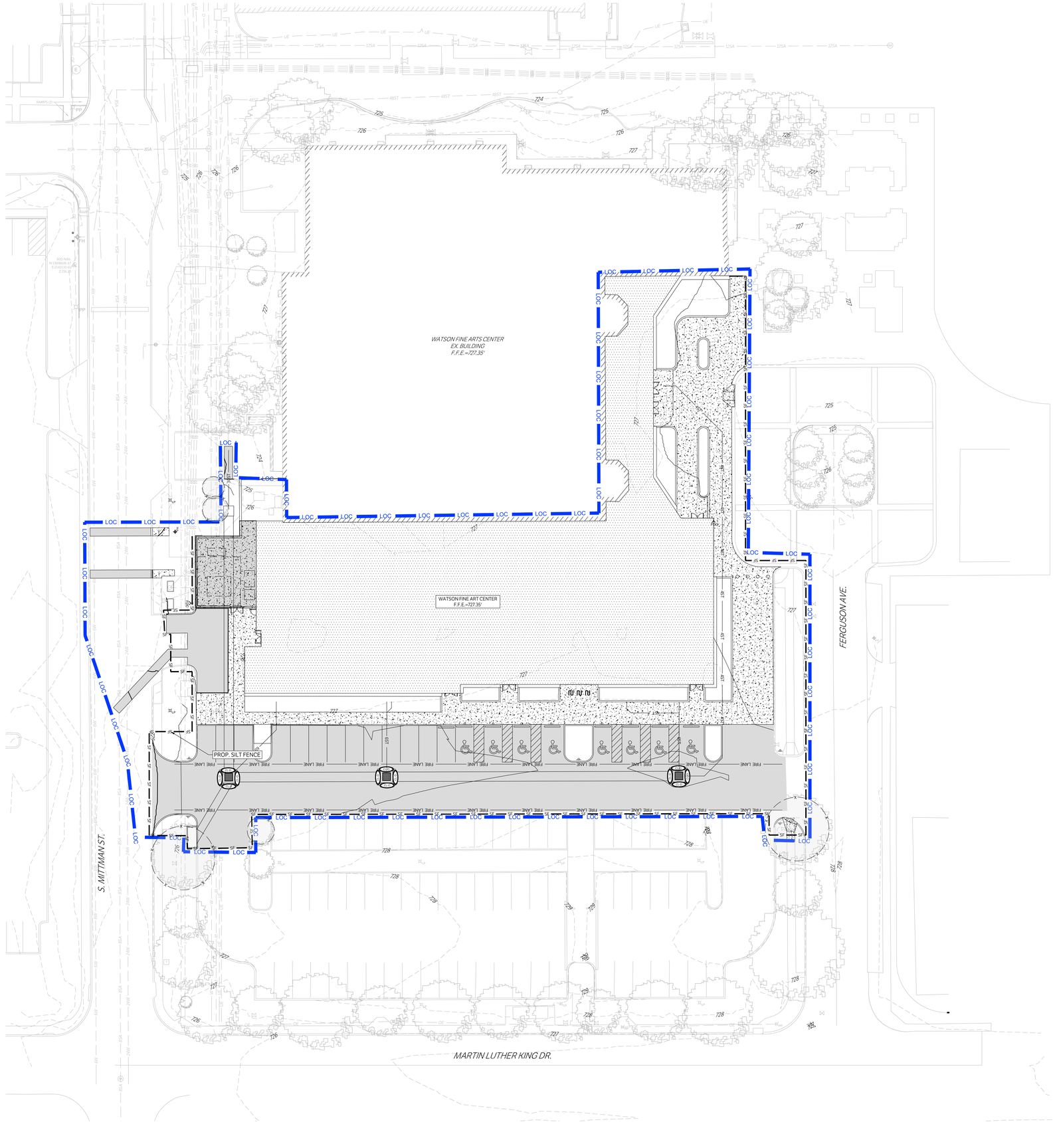
WATER PLAN & PROFILES

C1000

0"
1"

Sheet Grids Template
Z400
FOR BLUEBEAM LABELING/OCR:

ISSUE FOR CONSTRUCTION



CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

N

0 20 40 60
SCALE: 1"= 20'

LEGEND

- CONSTRUCTION ENTRANCE, INSTALLED PER DETAIL
- PROPERTY LINE
- 340 — EXISTING CONTOURS
- (340) — PROPOSED CONTOURS
- EXISTING FLOW PATH
- PROPOSED FLOW PATH
- SF SF SF — SILT FENCE, INSTALLED PER DETAIL
- CL-D — PROPOSED DAM EROSION CONTROL, LOG- 18"
- RFD3 — PROPOSED ROCK FILTER DAM TYPE 3
- LOC — PROP. TREE PROTECTION FENCE
- PROP. TREE PROTECTION FENCE

EROSION CONTROL NOTES:

OWNER INFORMATION: ST PHILLIPS COLLEGE

PROJECT NAME: ST PHILLIPS COLLEGE WATSON FINE ARTS CENTER BLACK BOX ADDITION

PROJECT LOCATION: 600 S MITTMAN ST, SAN ANTONIO, TX 78203

LATITUDE: 29°24'49.57"N
LONGITUDE: 98°27'14.61"W
TOTAL SITE AREA IS: 1.89 ACRES
TOTAL AREA OF SITE EXPECTED TO BE DISTURBED: 1.35 ACRES

EXISTING SITE CONDITIONS
LAND USE: HIGHER EDUCATION
LAND COVER: >90% IMPERVIOUS
RECEIVING WATERS: SALADO CREEK
SEGMENT NO. OF CLASSIFIED WATER BODY: SALADO CREEK

BASIN NAME: SAN ANTONIO RIVER

SOIL INFORMATION
HYDROLOGIC SOIL GROUP: D

POST DEVELOPED SITE CONDITIONS
LAND USE: HIGHER EDUCATION

NATURE OF ACTIVITIES
ACADEMIC BLDG

SEQUENCE OF MAJOR ACTIVITIES
1. INSTALL SILT FENCE AT STOCK PILE AREAS
2. CLEARING, GRADING, GENERAL CONSTRUCTION SITE.
3. INSTALL FILTER ELEMENTS IMMEDIATELY AFTER DISTURBANCE AND/OR GRADING OPERATIONS.
4. AFTER ESTABLISHMENT OF GRASS, REMOVE ALL TEMPORARY EROSION CONTROL;
5. SEED ALL AREAS NOT HAVING PERMANENT GRASS COVERAGE AFTER APPROVAL BY COUNTY INSPECTOR.

GENERAL EROSION CONTROL NOTES
1. ALL UTILITIES AND SERVICE LINES SHOWN ARE TAKEN FROM RECORD INFORMATION SUPPLIED BY THE UTILITY OWNER OR HORIZONTALLY LOCATED BY INDEPENDENT LOCATORS. CONTRACTOR IS RESPONSIBLE TO REPORT ANY CONFLICTS BETWEEN PLAN AND ACTUAL CONDITIONS PRIOR TO CONSTRUCTION. OWNER AND ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF INFORMATION OR DATA RELIED ON TO DEPICT UNDERGROUND FACILITIES. CONTRACTOR IS TO CONTACT OWNERS OF ALL UTILITIES AND SERVICE LINES WITHIN THE PROJECT AREA AND NOTIFY OF INTENT AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH FACILITY OWNERS. CONTRACTOR IS TO VERIFY THE EXACT LOCATION AND VERTICAL POSITIONING OF ALL PIPELINES, EXISTING UTILITIES, AND SERVICE LINES WITHIN THE PROJECT AREA WHETHER SHOWN ON THE PLANS OR NOT, AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. CONTRACTOR IS TO MAINTAIN STRUCTURAL INTEGRITY OF ALL PIPELINES, ELECTRIC TRANSMISSION POLES AND LINES, PERMANENT AND TEMPORARY UTILITIES. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE DONE TO EXISTING UTILITY FACILITIES, PAVEMENT, ETC. AS A RESULT OF CLEARING/DIRTWORK ACTIVITIES.
2. CONTRACTOR TO CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.
3. ALL DISTURBED AREAS NOT TO BE PAVED ARE TO HAVE ESTABLISHMENT OF GRASS.
4. ALL SWALE AREAS (BOTTOM WIDTHS & SIDE SLOPES) ARE TO BE PREPARED AND HYDROMULCHED FOR PERMANENT ESTABLISHMENT OF VEGETATION. PRIOR TO HYDROMULCHING OPERATIONS, CONTRACTOR TO REPLACE TOPSOIL TO A DEPTH OF 6". TOPSOIL IS TO BE DISKED TO A DEPTH OF AT LEAST 4" AND LIGHTLY COMPACTED. FINAL GRADES WITH ESTABLISHED VEGETATION SHALL BE AS CALLED OUT ON THE GRADING PLAN.
5. CONTRACTOR IS TO MAINTAIN EROSION CONTROL AT ALL LOCATIONS OF CONSTRUCTION, THROUGHOUT DURATION OF THE PROJECT AND UNTIL VEGETATION IS ESTABLISHED. INSURE SEDIMENT IS NOT TRANSPORTED DOWNSTREAM FROM PROJECT VIA GRAVEL FILTER BAGS AND SILT FENCE INSTALLATIONS. IF EXCESSIVE EROSION IS OBSERVED IN THE FIELD, ADDITIONAL EROSION CONTROLS SHALL BE INSTALLED.
6. CONTRACTOR SHALL NOT ALLOW SEDIMENT TO ENTER THE DOWNSTREAM CHANNEL. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING OF THE DOWNSTREAM CHANNEL AREAS AND RESTORING TO ORIGINAL CONDITION, INCLUDING ESTABLISHMENT OF REVEGETATION SHOULD CONSTRUCTION SEDIMENT BE FOUND OUTSIDE THE LIMITS OF CONSTRUCTION.
7. THE CONTRACTOR WILL REMOVE ALL EXCESS SOIL FROM CONSTRUCTION VEHICLES PRIOR TO EXITING THE SITE.
8. THE CONTRACTOR SHALL UNDERTAKE PROPER METHODS TO REDUCE DUST GENERATION FROM THE SITE.
9. THE CONTRACTOR MUST COMPLY WITH FEDERAL, STATE, AND LOCAL REGULATIONS REGARDING SEDIMENTS AND EROSION CONTROL.
10. A COPY OF THIS PLAN MUST BE KEPT AT THE CONSTRUCTION FACILITY DURING THE ENTIRE CONSTRUCTION PERIOD.
11. ALL FINISHED GRADES ARE TO BE HYDRO-MULCHED, SPOT SODDED OR SEEDED AND WATERED UNTIL GROWTH IS ESTABLISHED.
12. CONTRACTOR IS RESPONSIBLE TO FILE THE NOTICE OF INTENT AND NOTICE OF TERMINATION WITH AUTHORITY HAVING JURISDICTION.

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M.E.P.
T.210.681.9800

WFAC Black Box Addition PKG 1

600 S.Mittman St.
San Antonio, TX. 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH PLAN TRUE

STATE OF TEXAS
ANDREW A. LANGE
118770
LICENSED PROFESSIONAL ENGINEER
06/14/2024

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/12	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER

EROSION CONTROL

C1100

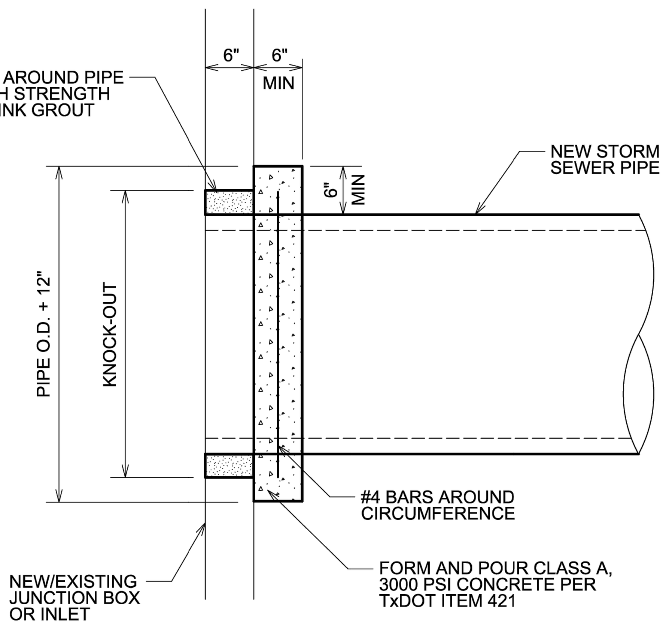
Sheet Grids Template
Z-000
FOR BLUEBEAM LABELING/OCR:

0"
1"

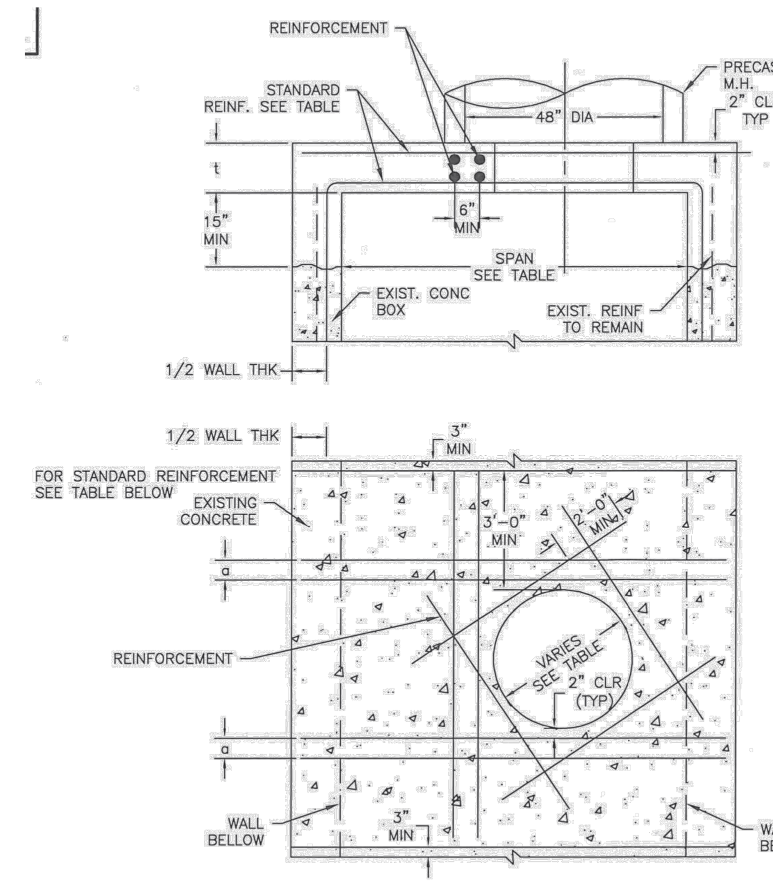
CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

GENERAL NOTES

1. NEW PIPE TO BE SET FLUSH WITH INSIDE WALL OF STRUCTURE.



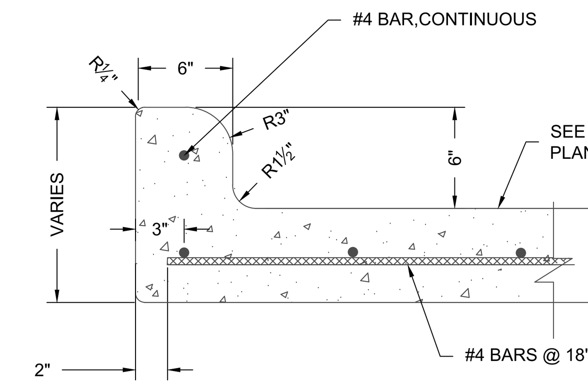
GROUTED STORM SEWER CONNECTION DETAIL
NTS



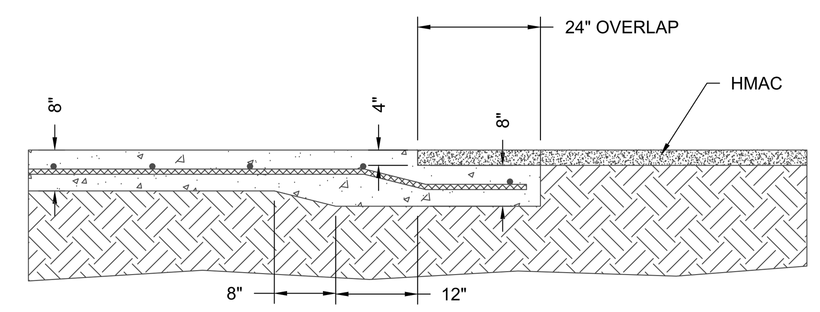
PROPOSED MANHOLE ON EXISTING BOX STORM SEWER
NTS

TABLE
SEWER SIZE VS OPENING

SEWER SIZE (INCHES)	MANHOLE BASE DIAMETER
48"	36"
54"	36"
60"	42"
66" OR GREATER	48"

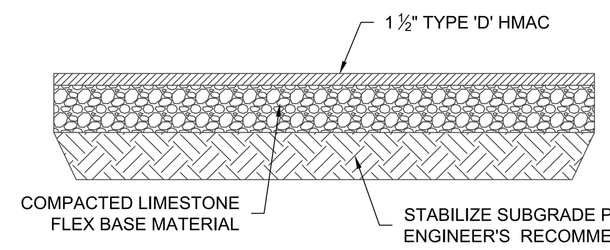


INTEGRAL CURB & GUTTER
NTS

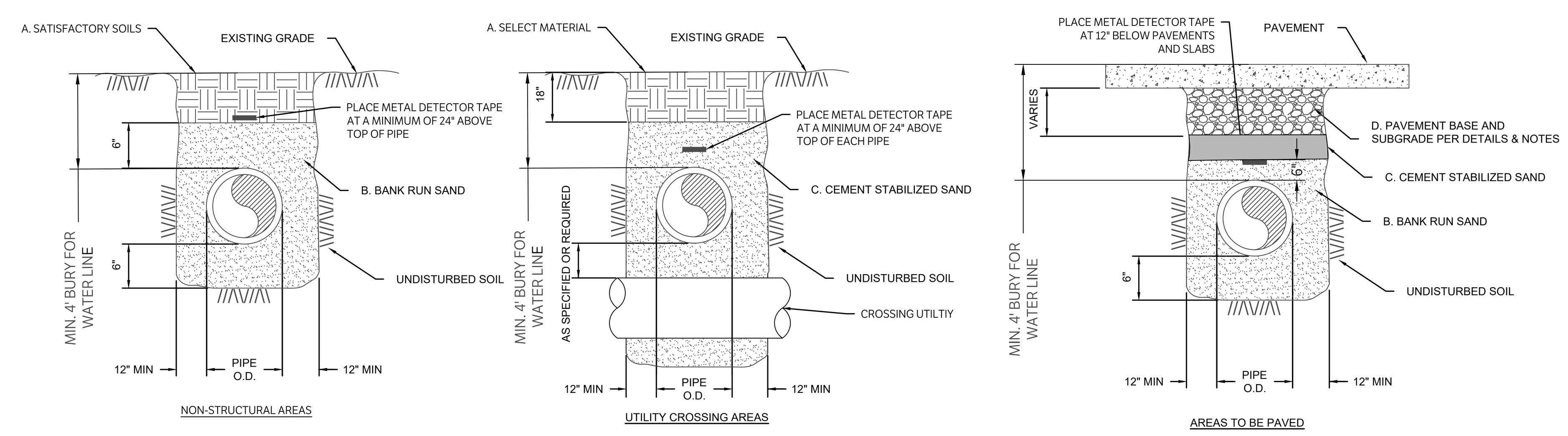


NOTE:
SEE PLAN CX.X FOR JOINT LOCATIONS

CONCRETE TO ASPHALT J-JOINT
NTS



1 1/2" HMAC PAVEMENT
NTS



A. SATISFACTORY SOILS
MATERIAL EXCAVATED FROM THE DITCH, (WHICH IS FREE OF ROCKS, LUMPS, CLODS, OR DEBRIS LARGER THAT TWO (2) INCHES IN THE LARGEST DIMENSION), COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 (STANDARD) AT MOISTURE CONTENT WITHIN OPTIMUM TO 2% OF OPTIMUM UNDER NON-STRUCTURAL AREAS (IE...YEARDS, PASTURES, EASEMENTS) AND TO A MINIMUM OF 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 (STANDARD) AT A MOISTURE CONTENT WITHIN OPTIMUM TO 2% OF OPTIMUM UNDER NEW STREET AND PAVEMENT AREAS.

B. BANK RUN SAND
GRANULAR MATERIAL FREE OF DETRIMENTAL QUANTITIES OF CLAY, DEBRIS, OR ORGANIC MATERIAL. REFERENCE SPECIFICATION FOR REQUIREMENTS.

C. CEMENT STABILIZED SAND
MATERIALS SHALL BE TYPE I PORTLAND CEMENT CONFORMING TO ASTM C150 AND CLEAN DURABLE SAND MEETING GRADING REQUIREMENTS FOR FINE AGGREGATES OF ASTM C33. THE CEMENT STABILIZED SAND SHALL HAVE A MINIMUM OF 10% CEMENT PER CUBIC YARD OF CEMENT STABILIZED SAND MIXTURE, BASED ON LOOSE DRY WEIGHT VOLUME (AT LEAST 2.5 SACKS OF CEMENT PER CUBIC YARD OF MIXTURE). COMPACT MIX TO 95% OF ASTM D558 WITH A MOISTURE CONTENT BETWEEN -2% TO 2% ABOVE OPTIMUM.

D. PAVEMENT SUBGRADE
REFERENCE PAVEMENT SECTION DETAIL AND SPECIFICATION FOR MATERIALS AND DEPTHS.

GENERAL NOTES:
ALL AREAS WHERE EXISTING VEGETATION AND GRASS COVER HAVE BEEN BARED BY CONSTRUCTION SHALL BE ADEQUATELY BLOCK SODDED OR HYDROMULCHED AND WATERED UNTIL GROWTH IS ESTABLISHED. IN DEVELOPED AREAS WHERE GRASS IS PRESENT, BLOCK SOD WILL BE REQUIRED. BARED AREAS SHALL BE SEEDED OR SODDED WITHIN 14 CALENDAR DAYS OF LAST DISTURBANCE.

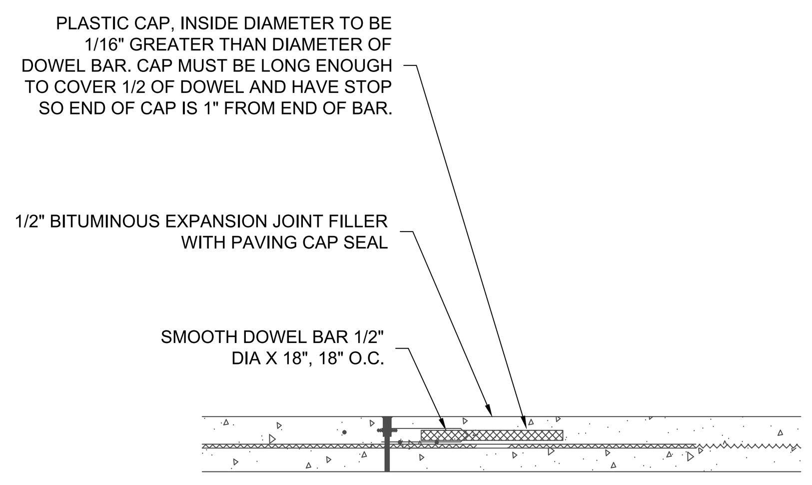
APPROVED EROSION CONTROL MEASURES MUST BE INSTALLED DURING THE ENTIRE TIME THAT EARTH HAS BEEN BARED BY CONSTRUCTION AND SHALL STAY IN PLACE UNTIL ACCEPTABLE VEGETATIVE GROWTH IS ESTABLISHED AFTER CONSTRUCTION IS COMPLETE AND THEN REMOVED BY CONTRACTOR.

ALL EROSION CONTROL MEASURES SHOULD BE CLEANED OF SILT AFTER EVERY RAIN.

ESTABLISHMENT OF VEGETATION MAY BE A WARRANTY ITEM

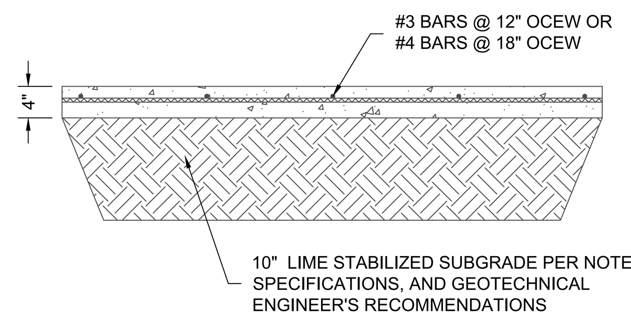
NOTES:
1. FOR BEDDING AND TRENCHING WITHIN ALL PAVED AREAS SEE DETAILS FOR OPEN CUT STREETS.
2. ALL BEDDING & INSTALLATION OF HDPE PIPE SHALL BE IN ACCORDANCE WITH ANSI/AWWA STANDARDS FOR HDPE PIPE
3. COMPACTION SHALL BE ATTAINED BY MECHANICAL TAMPING
4. RELATIVE COMPACTION SHALL BE TESTING IN THE PRESENCE OF THE ENGINEER
5. DUST RESULTING FROM THE CONTRACTOR'S PERFORMANCE OF THE WORK, EITHER INSIDE OR OUTSIDE THE RIGHT-OF-WAY, SHALL BE CONTROLLED BY THE CONTRACTOR
6. ALL TRENCHES SHALL BE BACK FILLED AND TEMPORARY PAVING OR PLATING PLACED AT THE END OF EACH WORKING DAY IN AREAS TO BE PAVED.
PROTECT ALL OPEN TRENCHES AT THE END OF EACH WORKING DAY.
7. HDPE LINES WITH WELDED JOINTS MAY BE BACKFILLED PRIOR TO TESTING AT CONTRACTOR'S RISK.

BEDDING AND TRENCH FOR HDPE PIPE
NTS



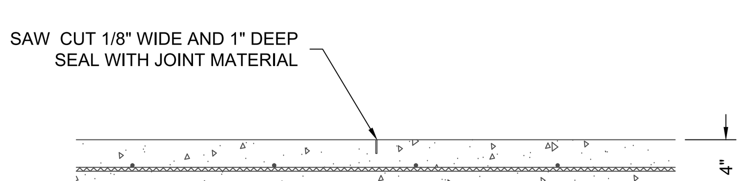
NOTE:
SIDEWALK EXPANSION JOINTS SHALL BE INSTALLED AS SHOWN ON PLANS

SIDEWALK EXPANSION JOINT
NTS



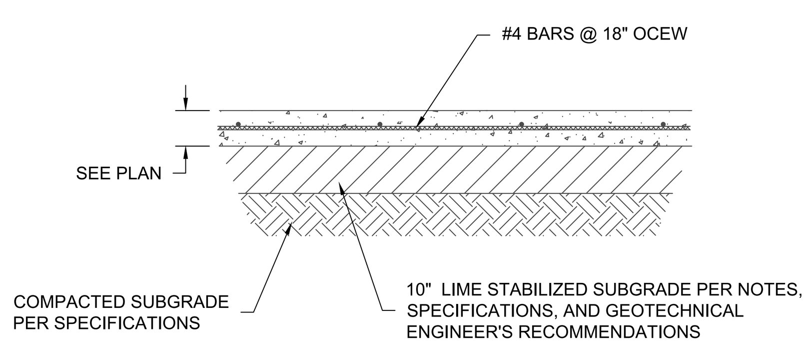
NOTES:
1. SUBGRADE STABILIZATION SHALL BE PER GEOTECHNICAL RECOMMENDATIONS AND LIME/CEMENT SERIES BASED ON ACTUAL SUBGRADE CONDITIONS.
2. SAW CUT OPERATIONS SHALL BEGIN AS SOON AS POSSIBLE AFTER CONCRETE PLACEMENT.
3. SEAL ALL EXPANSION JOINTS WITH SEAL CAP AND CONTROL JOINTS WITH SELF LEVELING JOINT SEALANT MATERIAL PER SPECIFICATIONS. USE SELF LEVELING JOINT SEALANT ADJACENT TO EXISTING PAVEMENT.

SIDEWALK SECTION
NTS



NOTE:
SIDEWALK JOINT SPACING PER LANDSCAPE ARCHITECT OR JOINT PLAN. IF NOT SPECIFIED, SPACING SHALL BE EQUAL TO SIDEWALK WIDTH WITH A MAXIMUM SPACING OF 8-FOOT.

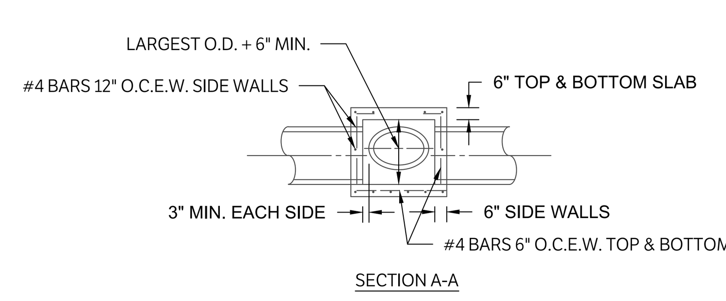
SIDEWALK CONTRACTION JOINT
NTS

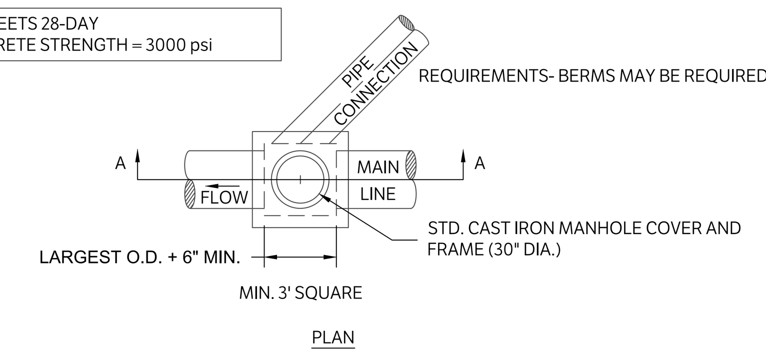


NOTES:
1. SEE PLAN FOR JOINT SPACING, COMPRESSIVE STRENGTH, PAVEMENT THICKNESS, AND REINFORCING.
2. DEPTH OF STABILIZATION SHALL BE A MINIMUM OF 6 INCHES OR BASED ON GEOTECHNICAL RECOMMENDATIONS SUBGRADE CONDITIONS.
3. SUBGRADE STABILIZATION SHALL BE PER GEOTECHNICAL RECOMMENDATIONS AND LIME/CEMENT SERIES BASED ON ACTUAL SUBGRADE CONDITIONS.

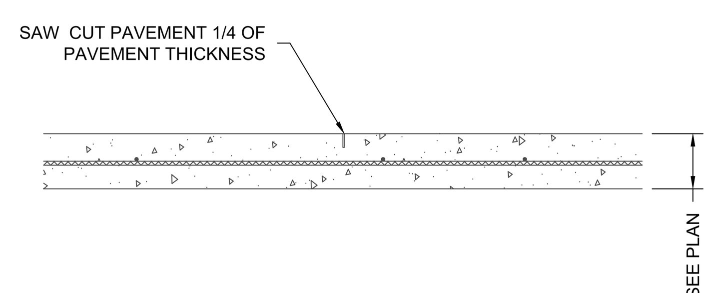
CONCRETE PAVEMENT
NTS

IN STREETS 28-DAY
CONCRETE STRENGTH = 3000 psi



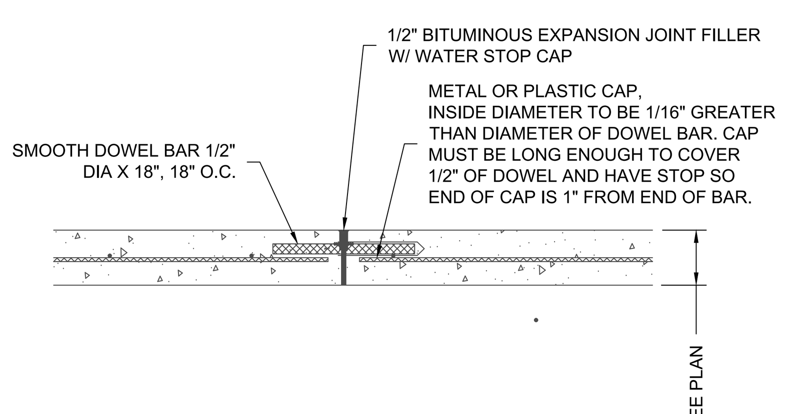


STORM SEWER JUNCTION BOX
NTS



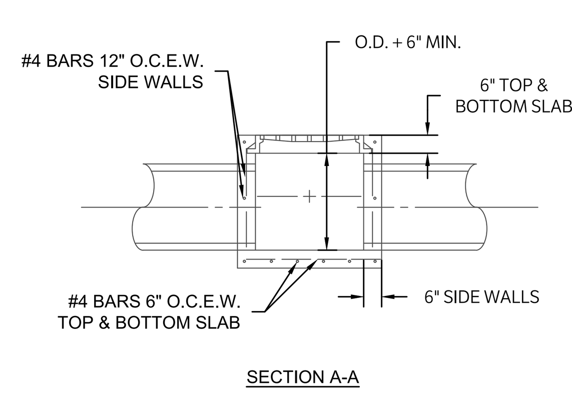
NOTES:
1. SEE PLANS FOR JOINT SPACING, COMPRESSIVE STRENGTH, PAVEMENT THICKNESS, AND REINFORCING.
2. SAW CUT OPERATIONS SHALL BEGIN AS SOON AS POSSIBLE AFTER CONCRETE PLACEMENT.
3. SEAL ALL JOINTS WITH SELF LEVELING JOINT SEALANT MATERIAL PER SPECIFICATIONS.

CONTROL JOINT
NTS

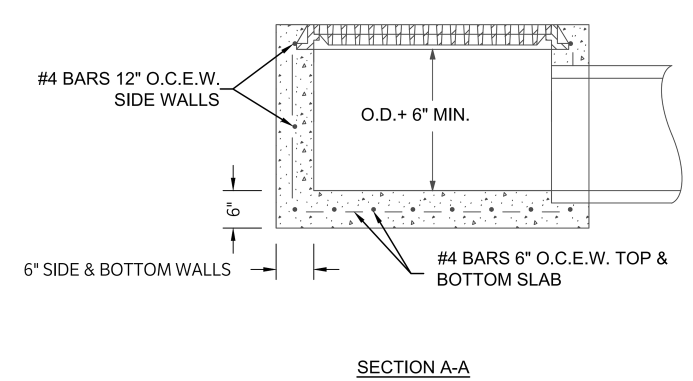


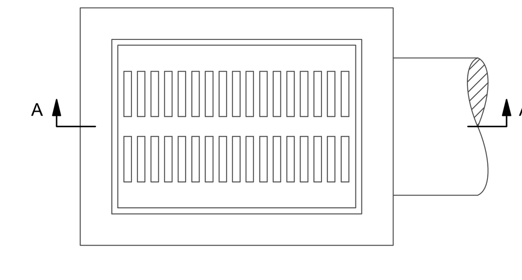
EXPANSION JOINT
NTS

PLAN



SINGLE GRATE INLET
NTS





GRATE INLET
NTS

ISSUE FOR PERMIT

CHECKED BY:
SH & AL
DRAWN BY:
JC

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B&A ARCHITECTS

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TX Firm: BR 1608
ASSOCIATE ARCHITECT
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CIVIL
GESSNER
T 979-680-8840
LANDSCAPE
EDGELAND GROUP
T 713-460-0988
STRUCTURAL
LUNDY & FRANKE ENGINEERING
T 210-979-7900
MEPT
LEAF
T 210-829-0123
ENVELOPE
BEAM PROFESSIONALS
T 210-829-0123
THEATER
WJHW
T 210-561-9800

WFAC Black Box Addition PKG 1
600 S Mittman St,
San Antonio, TX, 78203
ISSUE FOR PERMIT

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
ANDREW A. LANGE
118770
LICENSED PROFESSIONAL ENGINEER
08/05/2024

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/12	230462

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	08/05/2024

ISSUE FOR PERMIT
BUILDING NUMBER

DETAILS

C1200

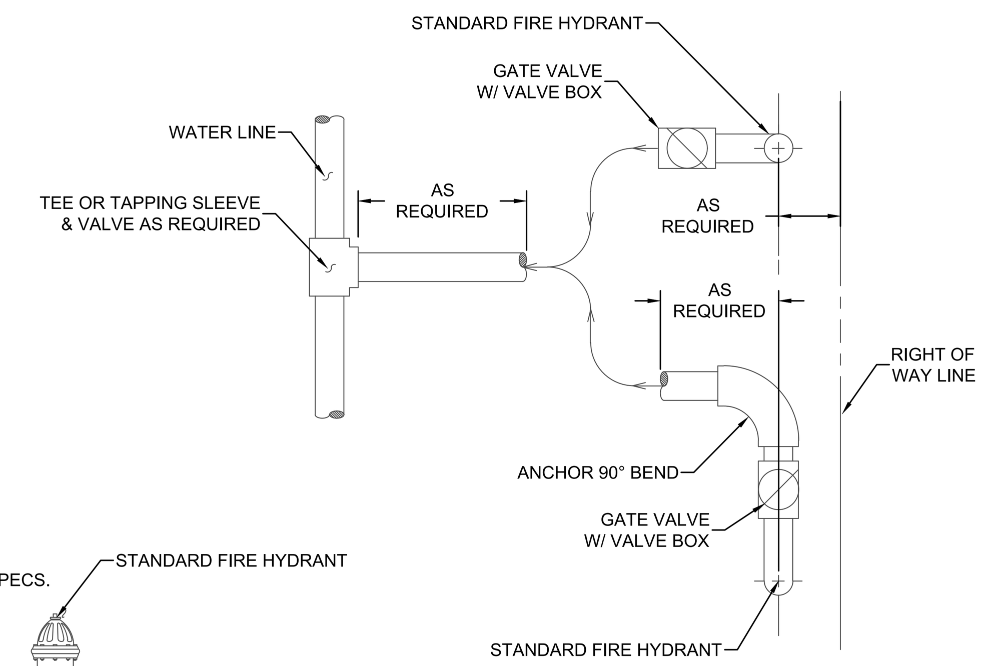
Sheet Grids Template
Z-000
FOR BLUEBEAM LABELING/OCR:

ISSUE FOR CONSTRUCTION

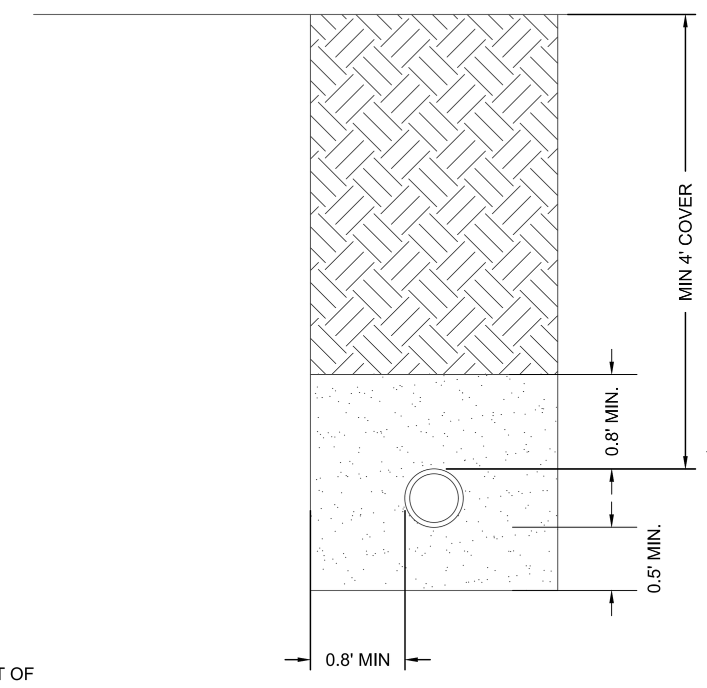
CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

GENERAL NOTES:

1. FINELY DIVIDED EARTH FREE OF ROCK, LUMPS AND CLODS EXCEEDING 6" SHALL BE PLACED BY HAND, AND COMPACTED AROUND THE CAST IRON PIPE TO A DEPTH OF 12" OVER THE TOP OF THE PIPE BEFORE BACKFILL IS BEGUN BY ANY MECHANICAL EQUIPMENT.
2. ALL CONCRETE BLOCKING SHALL BE - 28 DAY CONCRETE STRENGTH = 2000psi.
3. ALL THRUST BLOCKING SHALL PROVIDE A MINIMUM OF 2 SQUARE FEET OF BEARING AREA OF CONCRETE ON UNDISTURBED SOIL, OR AS DIRECTED BY THE ENGINEER.
4. WATER MAINS WILL NOT BE FULLY PRESSURIZED UNTIL CONCRETE HAS REACHED 7 DAY STRENGTH.
5. ALL PIPE WILL BE LAID SO AS THE ENTIRE BARRELL WILL HAVE FULL BEARING ON THE FINE GRADED TRENCH BOTTOM. BELL HOLES SHALL BE CUT FOR EACH BELL AND FIRE HYDRANT.
6. ALL FITTING SHALL BE MECHANICAL JOINTS UNLESS OTHERWISE DIRECTED.
7. HYDRANTS SHALL BE LOCATED NO CLOSER THAN 3 FEET MEASURED FROM THE BACK OF CURB TO THE FACE OF THE STEAMER ON THE FIRE HYDRANT.

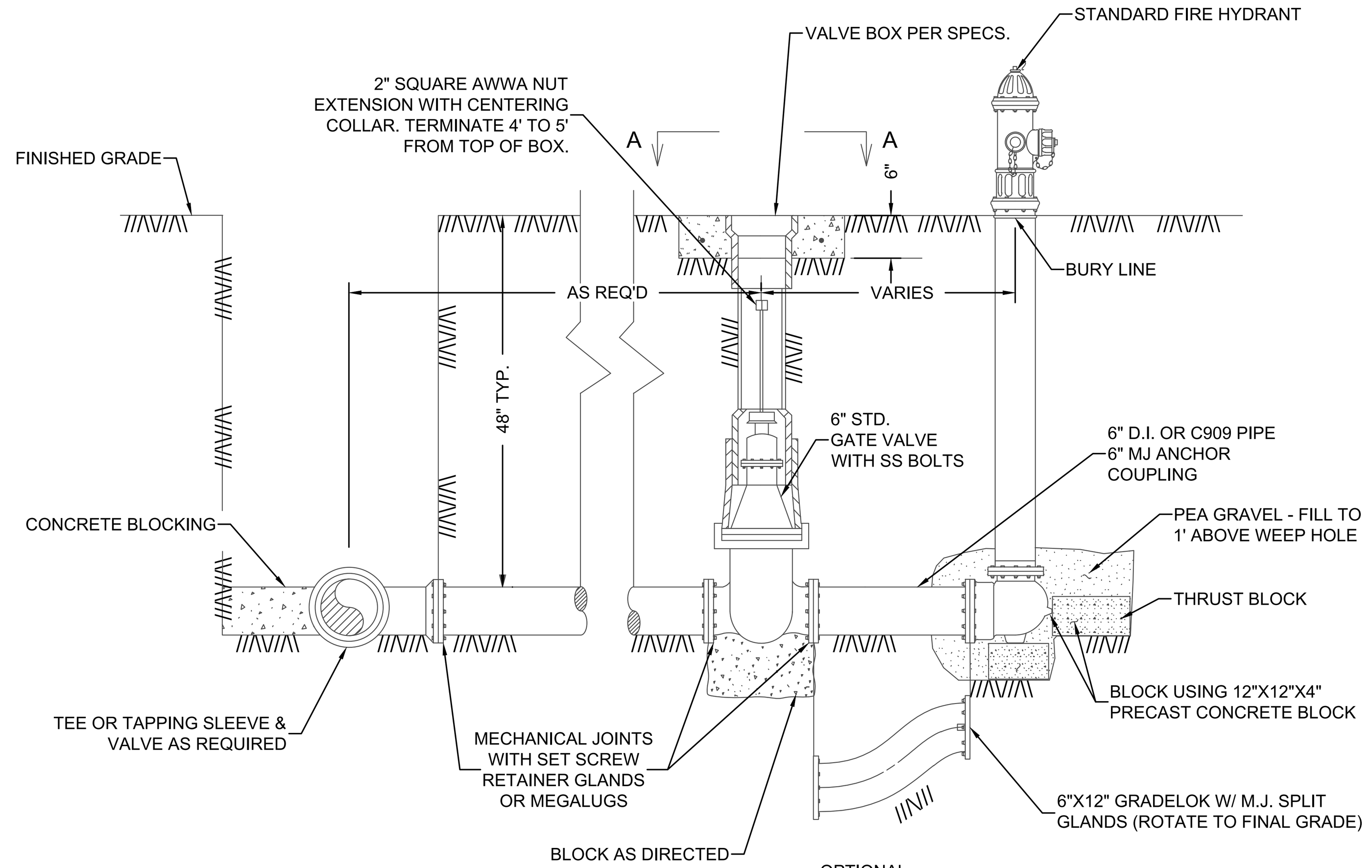


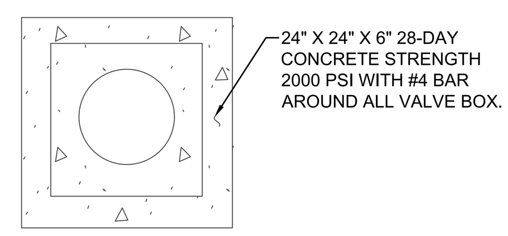
FIRE HYDRANT LOCATION REALIGN AS NEEDED



NOTES:
1. GRANULAR BACKFILL SHALL MEET THE SPECIFICATIONS OF TXDOT TYPE A.
2. ONSITE MATERIAL FOR FILL SHALL BE FREE OF DEBRIS AND GRAVEL LARGER THAN 2" IN DIAMETER.
3. UNDER PAVED AREAS, ONSITE FILL SHALL BE STABILIZED AS REQUIRED BY THE GEOTECHNICAL ENGINEER. BACKFILL SHALL BE COMPACTED TO 98% STANDARD PROCTOR DENSITY.
4. UNDER NON-PAVED AREAS, ONSITE FILL MAY BE USED AND SHALL BE COMPACTED IN 10" LIFTS TO 90% STANDARD PROCTOR DENSITY.

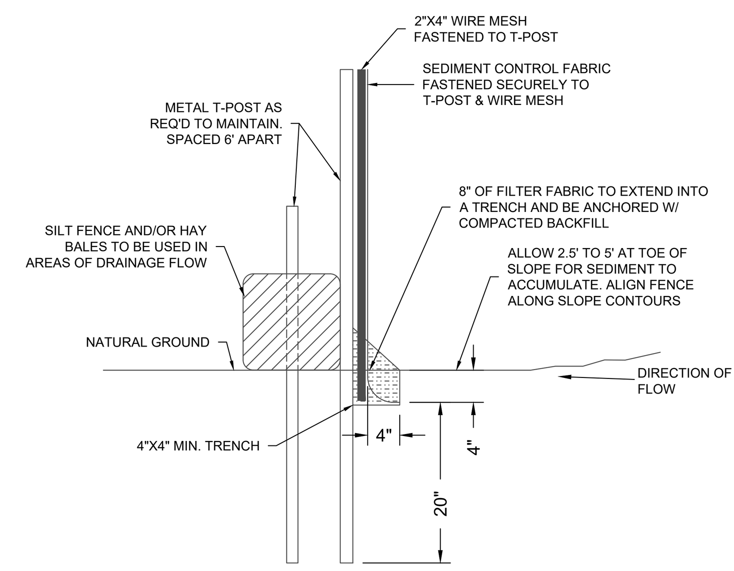
PVC EMBEDMENT TRENCH



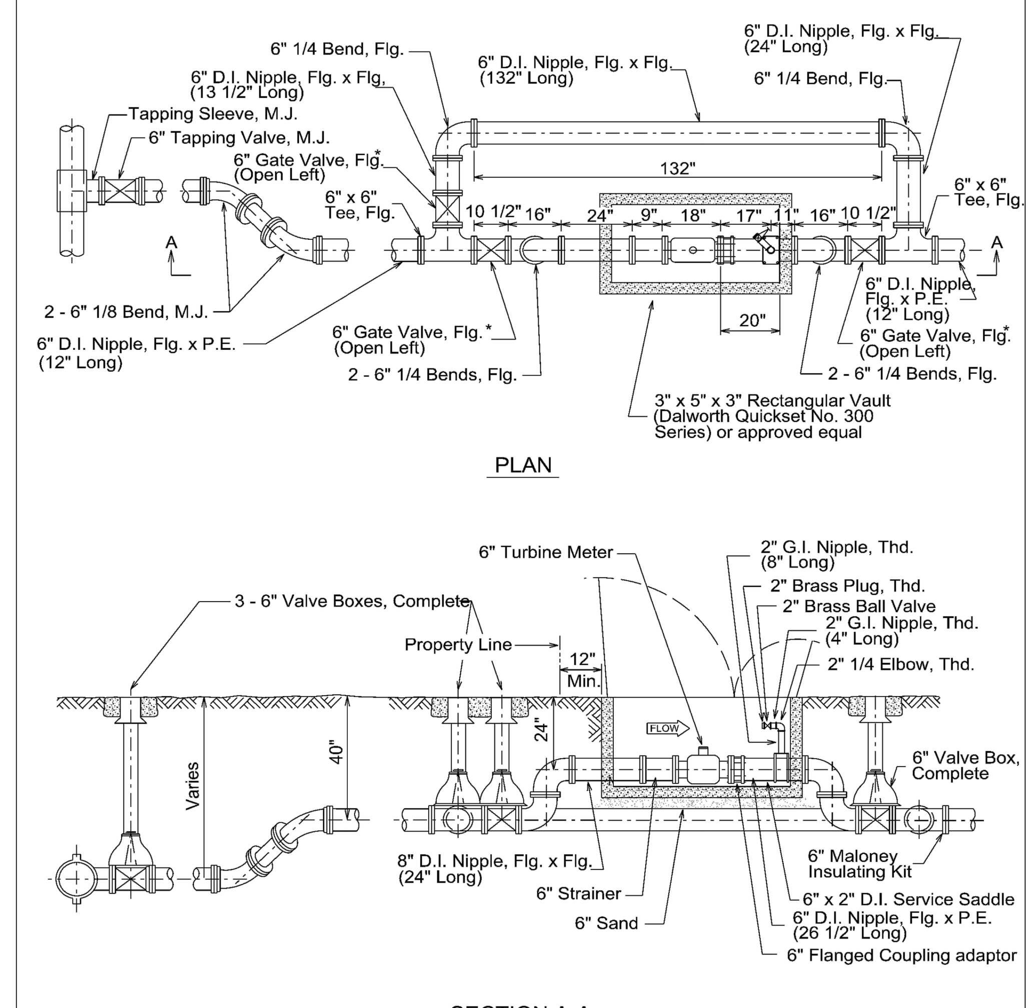


VIEW A-A

STANDARD FIRE HYDRANT ASSEMBLY
NTS



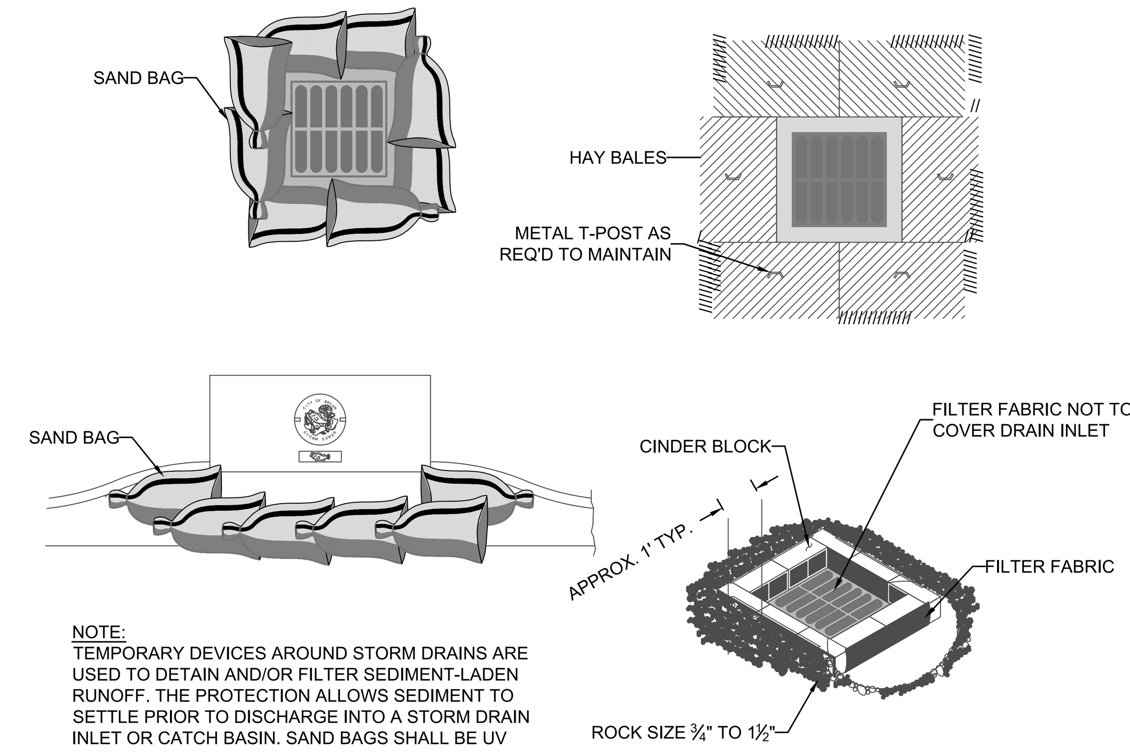
SILT CONTROL FENCE
NTS



3' x 5' x 3' RECTANGULAR CONCRETE VAULT
(TRAFFIC BEARING LOCATION)

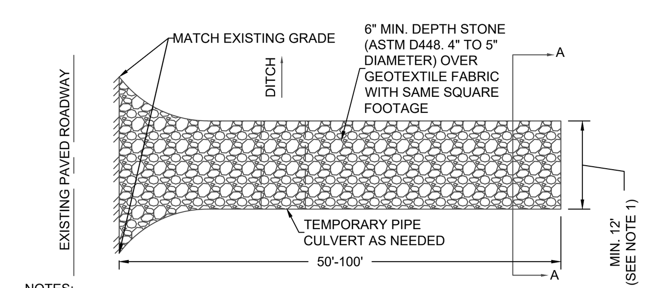
* Resilient Seat

PROPERTY OF SAN ANTONIO WATER SYSTEM SAN ANTONIO, TEXAS	6" TURBINE METER INSTALLATION	APPROVED	REVISED
		March 2008	AUG 2019
		DD-824-09	SHEET 2 OF 2

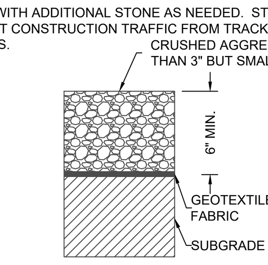


NOTE:
TEMPORARY DEVICES AROUND STORM DRAINS ARE USED TO DETAIN AND/OR FILTER SEDIMENT-LADEN RUNOFF. THE PROTECTION ALLOWS SEDIMENT TO SETTLE PRIOR TO DISCHARGE INTO A STORM DRAIN INLET OR CATCH BASIN. SAND BAGS SHALL BE UV RESISTANT AND MUST NOT DEGRADE DUE TO ATMOSPHERIC CONDITIONS. SAND BAGS SHALL BE REPLACED UPON FIRST SIGN OF DETERIORATION.

STORM DRAIN INLET PROTECTION
NTS

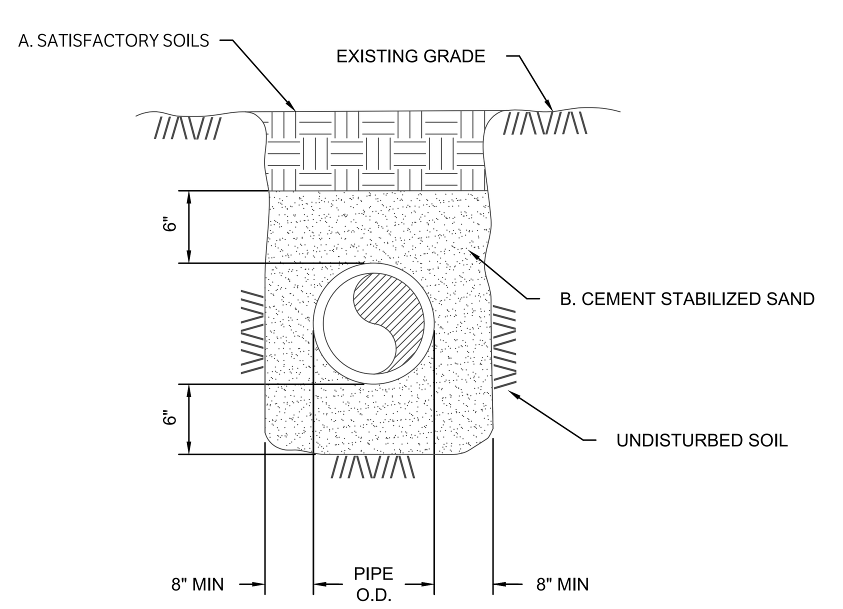


NOTES:
1. SHALL BE FULL WIDTH OF SITE ENTRANCE OR FOUR TIMES THE CIRCUMFERENCE OF THE LARGEST CONSTRUCTION VEHICLE TIRE, WHICHEVER IS GREATER.
2. CONSTRUCT SEDIMENT BARRIER AND CHANNELIZE RUNOFF TO SEDIMENT TRAPPING DEVICE.
3. DRESS WITH ADDITIONAL STONE AS NEEDED. STONE IS TO BE MAINTAINED SO AS TO PREVENT CONSTRUCTION TRAFFIC FROM TRACKING MUD ONTO ADJACENT PUBLIC STREETS.

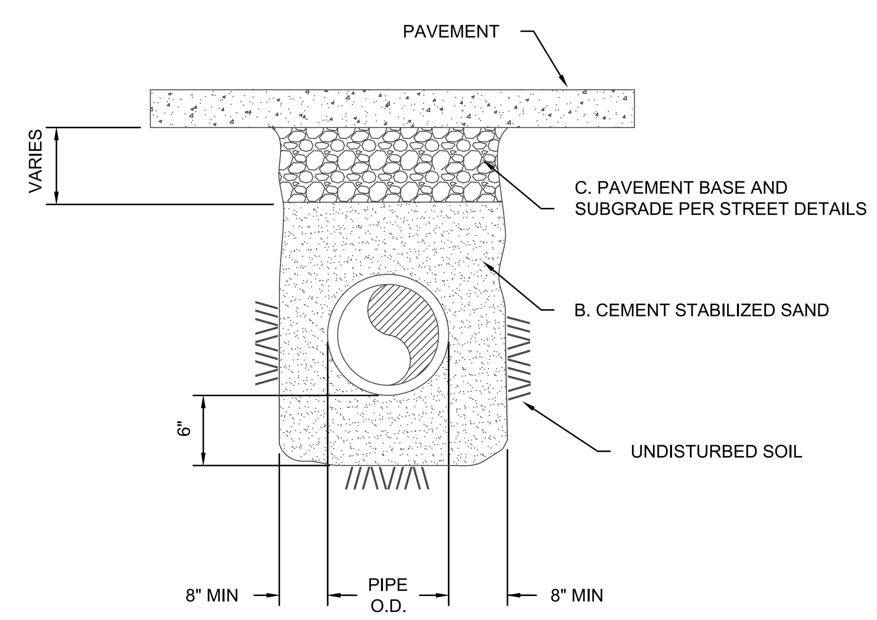


SECTION A-A

CONSTRUCTION ENTRANCE/EXIT
NTS



NON-STRUCTURAL AREAS



AREAS TO BE PAVED AND STRUCTURAL AREAS

A. SATISFACTORY SOILS
MATERIAL EXCAVATED FROM THE DITCH, (WHICH IS FREE OF ROCKS, LUMPS, CLODS, OR DEBRIS LARGER THAT TWO (2) INCHES IN THE LARGEST DIMENSION), COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 (STANDARD) AT A MOISTURE CONTENT WITHIN -2% TO 2% ABOVE OPTIMUM UNDER NON-STRUCTURAL AREAS (IE...YARDS, PASTURES, EASEMENTS) AND TO A MINIMUM OF 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 (STANDARD) AT A MOISTURE CONTENT WITHIN -2% TO 2% ABOVE OPTIMUM UNDER PAVED AREAS.

B. CEMENT STABILIZED SAND
MATERIALS SHALL BE TYPE I PORTLAND CEMENT CONFORMING TO ASTM C150 AND CLEAN DURABLE SAND MEETING GRADING REQUIREMENTS FOR FINE AGGREGATES OF ASTM C33. THE CEMENT STABILIZED SAND SHALL HAVE A MINIMUM OF 10% CEMENT PER CUBIC YARD OF CEMENT STABILIZED SAND MIXTURE, BASED ON LOOSE DRY WEIGHT VOLUME (AT LEAST 2.5 SACKS OF CEMENT PER CUBIC YARD OF MIXTURE). COMPACT MIX TO 95% OF ASTM D558 WITH A MOISTURE CONTENT BETWEEN -2% TO 2% ABOVE OPTIMUM.

C. PAVEMENT SUBGRADE
REFERENCE PAVEMENT SECTION DETAIL AND SPECIFICATION FOR MATERIALS AND DEPTHS.

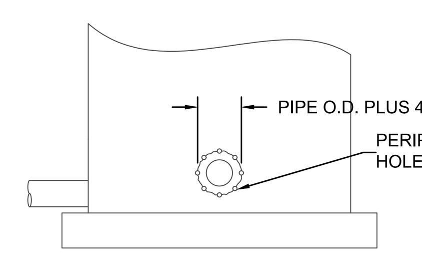
GENERAL NOTES:
ALL AREAS WHERE EXISTING VEGETATION AND GRASS COVER HAVE BEEN BARED BY CONSTRUCTION SHALL BE ADEQUATELY BLOCK SODDED OR HYDROMULCHED AND WATERED UNTIL GROWTH IS ESTABLISHED. IN DEVELOPED AREAS WHERE GRASS IS PRESENT, BLOCK SOD WILL BE REQUIRED. BARED AREAS SHALL BE SEEDED OR SODDED WITHIN 14 CALENDAR DAYS OF LAST DISTURBANCE.

APPROVED EROSION CONTROL MEASURES MUST BE INSTALLED DURING THE ENTIRE TIME THAT EARTH HAS BEEN BARED BY CONSTRUCTION AND SHALL STAY IN PLACE UNTIL ACCEPTABLE VEGETATIVE GROWTH IS ESTABLISHED AFTER CONSTRUCTION IS COMPLETE AND THEN REMOVED BY CONTRACTOR.

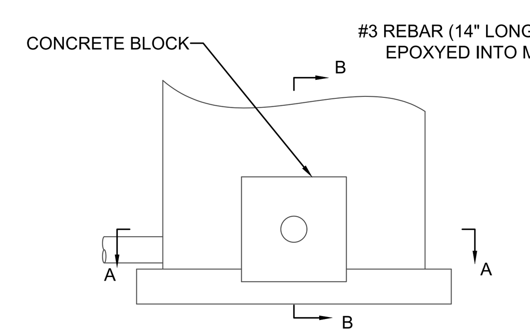
ALL EROSION CONTROL MEASURES SHOULD BE CLEANED OF SILT AFTER EVERY RAIN.

ESTABLISHMENT OF VEGETATION MAY BE A WARRANTY ITEM

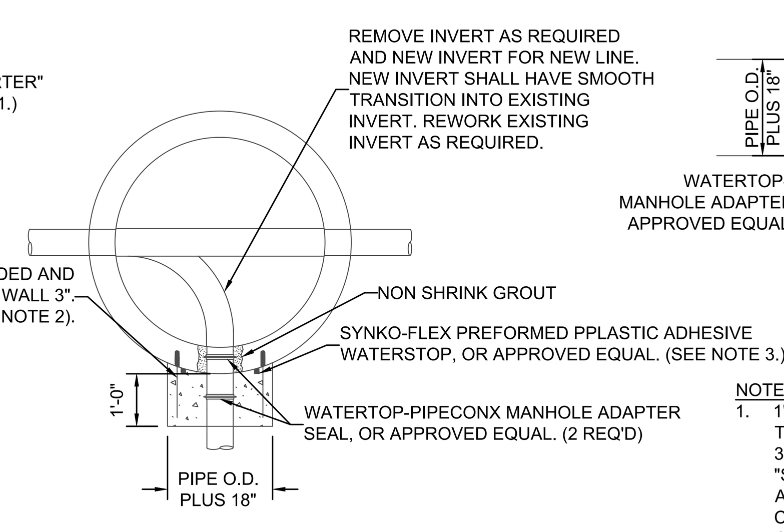
BEDDING AND TRENCH FOR REINFORCED CONCRETE PIPE
NTS



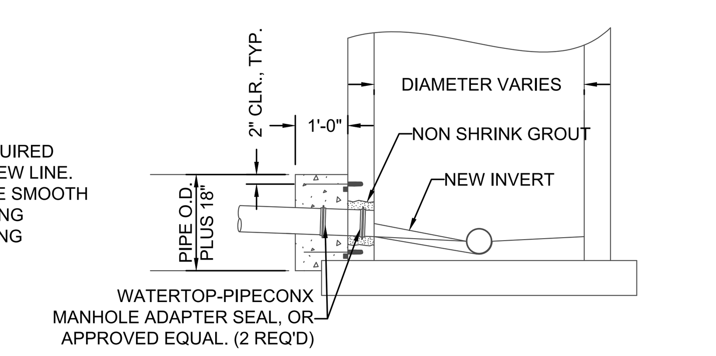
OPENING CREATION DETAIL



MANHOLE CONNECTION DETAIL



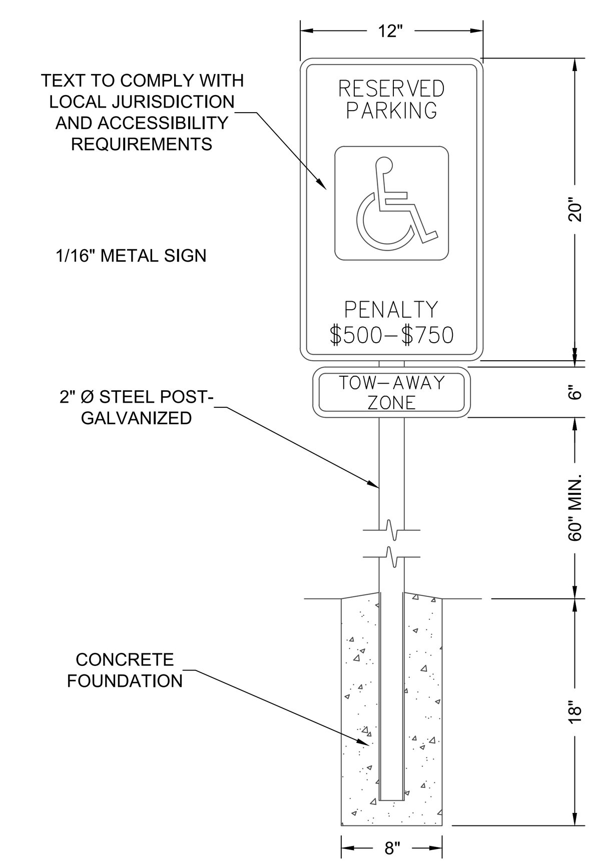
SECTION A-A



SECTION B-B

NOTE:
1. 1" DIA. "STARTER HOLES SHALL BE DRILLED THROUGH WALL OF EXISTING MANHOLE SPACED 3" APART CENTER TO CENTER. AFTER "STARTER" HOLES HAVE BEEN INSTALLED AND APPROVED BY A CITY INSPECTOR, THE CONTRACTOR SHALL BEGIN REMOVING THE CONCRETE INSIDE THE PERIPHERAL "STARTER" HOLES. CONCRETE SHALL BE REMOVED WITH PNEUMATIC HAND TOOLS.
2. THE NUMBER OF REBAR DOWELS SHALL VARY WITH SIZE OF OPENING. REBAR SHALL NOT BE SPACED MORE THAN 12" CC.
3. WATERSTOP SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.
4. CONCRETE SHALL BE 3,000 P.S.I.

STANDARD MANHOLE TIE-IN
NTS



ADA PARKING SIGN
NTS

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B&A ARCHITECTS

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MEPT
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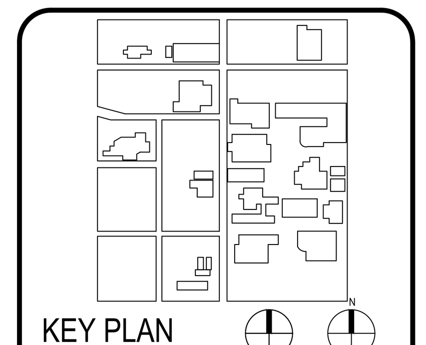
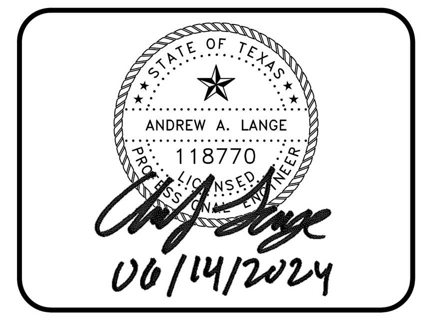
BEAM PROFESSIONALS
T 210-829-0123
THEATER
WJHW
T 210-561-9800

WFAC Black Box Addition PKG 1
600 S Mittman St,
San Antonio, TX, 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE



KEY PLAN
NORTH: PLAN TRUE



CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/12	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION
BUILDING NUMBER

DETAILS

C1201

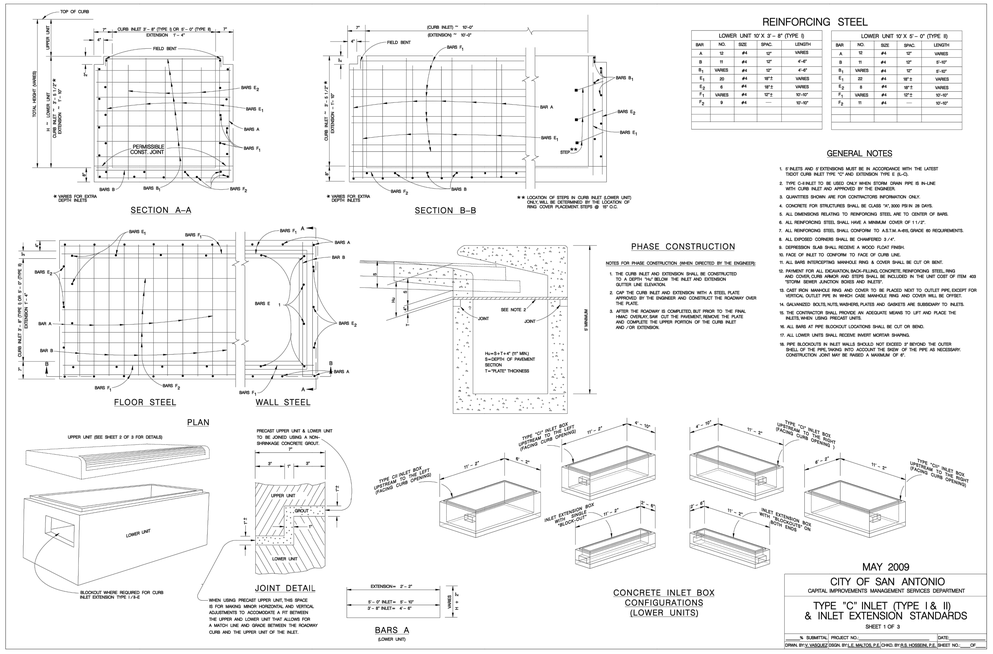
CHECKED BY:
SH & AL
DRAWN BY:
JC

Sheet Grids Template
Z-000
FOR BLUEBEAM LABELING/OCR:

0"
1"

ISSUE FOR CONSTRUCTION

CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.



LOWER UNIT 10' X 3'-8" (TYPE I)

BAR	NO.	SIZE	SPAC.	LENGTH
A	12	#4	—	VARIES
B	11	#4	12"	4'-6"
B_1	VARIES	#4	12"	4'-6"
E_1	20	#4	W'2	VARIES
E_2	8	#4	W'2	VARIES
F_1	VARIES	#4	W'2	10'-10"
F_2	9	#4	—	10'-10"

LOWER UNIT 10' X 5'-0" (TYPE II)

BAR	NO.	SIZE	SPAC.	LENGTH
A	12	#4	12"	VARIES
B	11	#4	12"	6'-10"
B_1	VARIES	#4	12"	6'-10"
E_1	20	#4	W'2	VARIES
E_2	8	#4	W'2	VARIES
F_1	VARIES	#4	W'2	10'-10"
F_2	11	#4	—	10'-10"

GENERAL NOTES

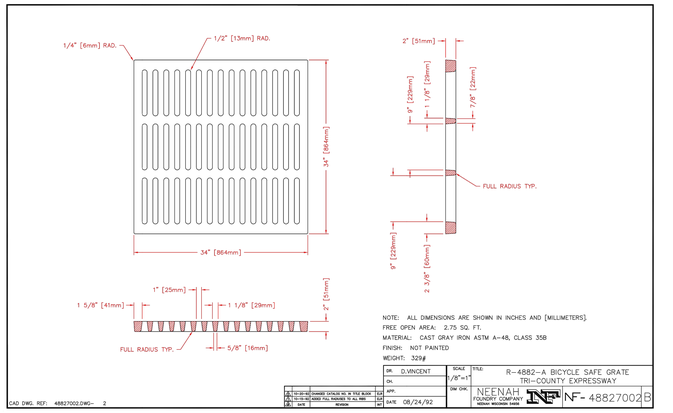
1. E INLETS AND E' EXTENSIONS MUST BE IN ACCORDANCE WITH THE LATEST TXDOT CURB INLET TYPE "C" AND EXTENSION TYPE E (L-C).
2. TYPE C-II INLET TO BE USED ONLY WHEN STORM DRAIN PIPE IS IN-LINE WITH CURB INLET AND APPROVED BY THE ENGINEER.
3. QUANTITIES SHOWN ARE FOR CONSTRUCTIONS INFORMATION ONLY.
4. CONCRETE FOR STRUCTURES SHALL BE CLASS "H", 3000 PSI IN 28 DAYS.
5. ALL DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTER OF BARS.
6. ALL REINFORCING STEEL SHALL HAVE A MINIMUM COVER OF 1 1/2".
7. ALL REINFORCING STEEL SHALL CONFORM TO A.S.T.M. A-615, GRADE 60 REQUIREMENTS.
8. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3 /4".
9. DEPRESSION SLAB SHALL RECEIVE A WOOD FLOAT FINISH.
10. FACE OF INLET TO CONFORM TO FACE OF CURB LINE.
11. ALL SAWS INTERCEPTING MANHOLE RING & COVER SHALL BE CUT OR BENT.
12. PAYMENT FOR ALL EXCAVATION, BACK-FILLING, CONCRETE, REINFORCING STEEL, RING AND COVER, CURB ARMOR AND STEPS SHALL BE INCLUDED IN THE UNIT COST OF ITEM 403 "STORM SEWER JUNCTION BOXES AND INLETS".
13. CAST IRON MANHOLE RING AND COVER TO BE PLACED NEXT TO OUTLET PIPE; EXCEPT FOR VERTICAL OUTLET PIPE IN WHICH CASE MANHOLE RING AND COVER WILL BE OFFSET.
14. GALVANIZED BOLTS, NUTS, WASHERS, PLATES AND GASKETS ARE SUBSIDIARY TO INLETS.
15. THE CONTRACTOR SHALL PROVIDE AN ADEQUATE MEANS TO LIFT AND PLACE THE INLETS, WHEN USING PRECAST UNITS.
16. ALL BARS AT PIPE BLOCKOUT LOCATIONS SHALL BE CUT OR BENT.
17. ALL LOWER UNITS SHALL RECEIVE INVERT MORTAR SHAPING.
18. PIPE BLOCKOUTS IN INLET WALLS SHOULD NOT EXCEED 3" BEYOND THE OUTER SHELL OF THE PIPE, TAKING INTO ACCOUNT THE SKEW OF THE PIPE AS NECESSARY. CONSTRUCTION JOINT MAY BE RAISED A MAXIMUM OF 6".

PHASE CONSTRUCTION

NOTES FOR PHASE CONSTRUCTION, WHEN DIRECTED BY THE ENGINEER:

1. THE CURB INLET AND EXTENSION SHALL BE CONSTRUCTED TO A DEPTH "H1" BELOW THE INLET AND EXTENSION GUTTER LINE ELEVATION.
2. CAP THE CURB INLET AND EXTENSION WITH A STEEL PLATE APPROVED BY THE ENGINEER AND CONSTRUCT THE ROADWAY OVER THE PLATE.
3. AFTER THE ROADWAY IS COMPLETED, BUT PRIOR TO THE FINAL SURFACE COURSE, CUT OUT THE PAVEMENT, REMOVE THE PLATE AND COMPLETE THE UPPER PORTION OF THE CURB INLET AND / OR EXTENSION.

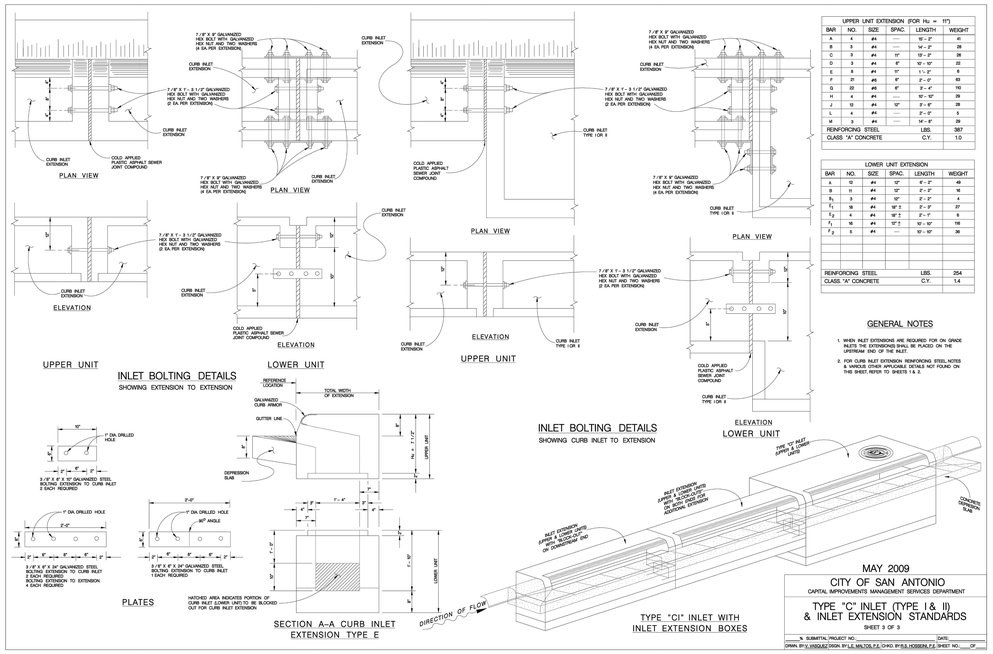
MAY 2009
CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT
TYPE "C" INLET (TYPE I & II) & INLET EXTENSION STANDARDS
SHEET 1 OF 3



NOTE: ALL DIMENSIONS ARE SHOWN IN INCHES AND [MILLIMETERS].
FREE OPEN AREA: 2.75 SQ. FT.
MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B
FINISH: NOT PAINTED
WEIGHT: 329#

DR. D.VINCENT	SCALE 1/8"=1"	TITLE: R-4882-A BICYCLE SAFE GRATE TRI-COUNTY EXPRESSWAY	
DS.			
APP.	DW CHK.	NEENAH FOUNDRY COMPANY NEENAH, WISCONSIN U.S.A.	NF- 48827002 B
DATE 08/24/92			

CAD. DWG. REF: 48827002.DWG- 2



UPPER UNIT EXTENSION (FOR Hu = 11")

BAR	NO.	SIZE	SPAC.	LENGTH	WEIGHT
A	4	#4	—	10'-2"	27
B	3	#4	—	14'-2"	28
C	3	#4	6"	10' - 10"	22
E	8	#4	1"	1'-1 2"	6
F	21	#6	6"	2'-2"	63
G	22	#6	6"	2'-4"	70
H	4	#4	—	10' - 10"	29
J	12	#4	12"	3'-6"	28
L	4	#4	—	2'-0"	5
M	3	#4	—	14'-2"	29
REINFORCING STEEL				LBS.	387
CLASS "A" CONCRETE				C.Y.	1.0

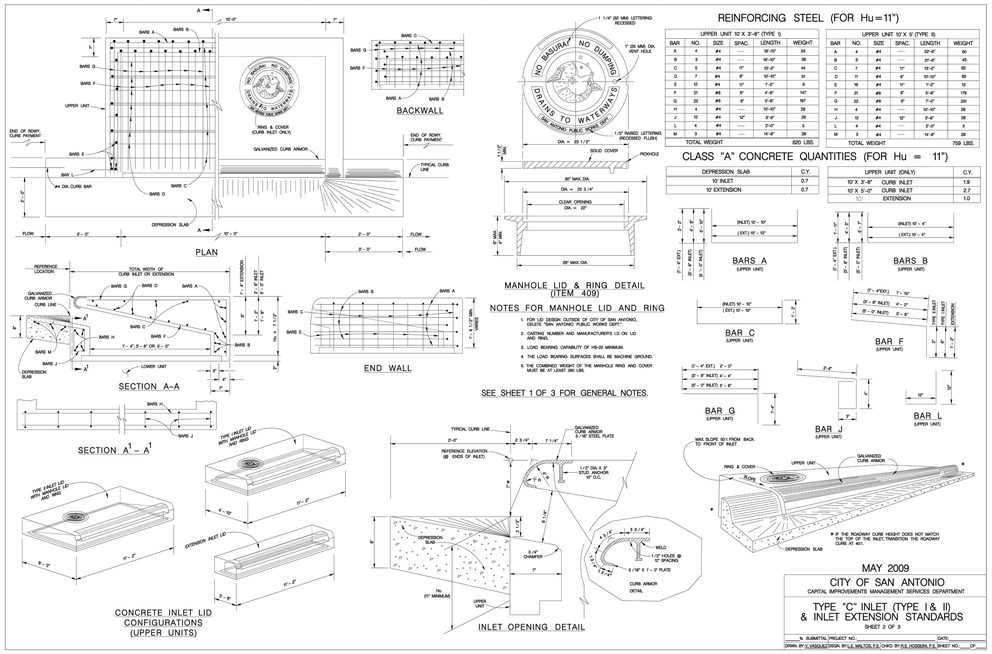
LOWER UNIT EXTENSION

BAR	NO.	SIZE	SPAC.	LENGTH	WEIGHT
A	12	#4	12"	5' - 2"	49
B	11	#4	12"	2'-2"	16
B_1	3	#4	12"	2'-2"	4
E_1	20	#4	W' 2	2'-2"	27
E_2	4	#4	W' 2	2'-2"	6
F_1	16	#4	W' 2	10' - 10"	116
F_2	5	#4	—	10' - 10"	36
REINFORCING STEEL				LBS.	254
CLASS "A" CONCRETE				C.Y.	1.4

GENERAL NOTES

1. WHEN INLET EXTENSIONS ARE REQUIRED FOR ON GRADE INLETS THE EXTENSIONS SHALL BE PLACED ON THE UPSTREAM END OF THE INLET.
2. FOR CURB INLET EXTENSION REINFORCING STEEL NOTES & VARIOUS OTHER APPLICABLE DETAILS NOT FOUND ON THIS SHEET, REFER TO SHEETS 1 & 2.

MAY 2009
CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT
TYPE "C" INLET (TYPE I & II) & INLET EXTENSION STANDARDS
SHEET 3 OF 3



REINFORCING STEEL (FOR Hu = 11")

UPPER UNIT 10' X 2'-8" (TYPE I)

BAR	NO.	SIZE	SPAC.	LENGTH	WEIGHT
A	4	#4	—	10'-10"	93
B	3	#4	—	10'-10"	38
C	5	#4	12"	10'-2"	64
D	7	#4	6"	10'-10"	91
E	12	#4	12"	1'-2"	9
F	21	#6	6"	4'-8"	147
G	22	#6	6"	5'-8"	187
H	4	#4	—	10'-10"	29
J	12	#4	12"	3'-6"	28
L	4	#4	—	2'-0"	5
M	3	#4	—	14'-8"	29
TOTAL WEIGHT					620 LBS.

UPPER UNIT 10' X 5' (TYPE II)

BAR	NO.	SIZE	SPAC.	LENGTH	WEIGHT
A	4	#4	—	22'-6"	60
B	3	#4	—	21'-6"	43
C	7	#4	12"	10'-2"	62
D	11	#4	6"	10'-10"	80
E	16	#4	12"	1'-2"	12
F	21	#6	6"	5'-8"	179
G	33	#6	6"	7'-0"	226
H	4	#4	—	10'-10"	29
J	12	#4	12"	3'-6"	28
L	4	#4	—	2'-0"	5
M	3	#4	—	14'-8"	29
TOTAL WEIGHT					759 LBS.

CLASS "A" CONCRETE QUANTITIES (FOR Hu = 11")

DEPRESSION SLAB	C.Y.
10' INLET	0.7
10' EXTENSION	0.7

UPPER UNIT (ONLY)	C.Y.
10' X 2'-8" CURB INLET	1.9
10' X 5'-0" CURB INLET	2.7
10' EXTENSION	1.0

BARS A (UPPER UNIT) — (INLET) 10' - 10" / (EXT.) 10' - 10"
BARS B (UPPER UNIT) — (INLET) 10' - 4" / (EXT.) 10' - 4"
BAR C (UPPER UNIT) — (INLET) 10' - 10" / (EXT.) 10' - 10"
BAR F (UPPER UNIT) — 5' - 10" / 5' - 4" / 5' - 4" / 5' - 4" / 5' - 4" / 5' - 4" / TYPE I INLET / TYPE II INLET / EXTENSION
BAR G (UPPER UNIT) — 5' - 4" EXT.; 5' - 0" / 5' - 8" INLETS; 4' - 4" / 5' - 8" INLETS; 4' - 4" / 5' - 8" INLETS; 4' - 4"
BAR J (UPPER UNIT) — 5'-6"
BAR L (UPPER UNIT) — 10"

MAY 2009
CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT
TYPE "C" INLET (TYPE I & II) & INLET EXTENSION STANDARDS
SHEET 2 OF 3

PBK
R&A ARCHITECTS

ARCHITECT — PBK Architects, Inc. PBK.com
SAN ANTONIO
601 N.W. Loop 410, Suite 400
San Antonio, TX 78216
210-828-0123 P
210-829-0578 F
TX Firm: BR 1608

ASSOCIATE ARCHITECT
B&A ARCHITECTS
T.210-829-1998

CIVIL
GESSNER
T.979-690-8840

LANDSCAPE
EDDELEMAN GROUP
T.713-850-0998

STRUCTURAL
LUNDY & FRANKE ENGINEERING
T.210-829-7900

MEP
LEAP
T.210-829-9123

ENVELOPE
BEAM PROFESSIONALS
T.210-829-2123

THEATER
McARDLE
T.210-581-9800

WFAC Black Box Addition PKG 1

600 S Mittman St.
San Antonio, TX. 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
ANDREW A. LANGE
118770
LICENSED PROFESSIONAL ENGINEER
06/14/2024

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/12	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER

DETAILS

C1202

CHECKED BY:
SH & AL
DRAWN BY:
JC

ISSUE FOR CONSTRUCTION

5 DETAIL
N.T.S.
PIER CAP AT "F2" FOOTINGS

6 DETAIL
N.T.S.

7 DETAIL
N.T.S.

8 DETAIL
N.T.S.

LA PROJECT NO.: 03-515-00
LA FILE NO.: WFAC -Blackbox Addition Structural R23

STEEL FRAMING NOTES:

SF-1 WIDE FLANGE STRUCTURAL STEEL SHALL CONFORM TO ASTM A992, FY=50 KSI. STRUCTURAL PIPE SHALL CONFORM TO ASTM A53, GRADE B, FY= 35. STRUCTURAL TUBING SHALL CONFORM TO ASTM A500, GRADE B, FY=46 KSI, ALL OTHERS SHALL CONFORM TO ASTM A36, FY=36 KSI. CONNECTIONS SHALL CONFORM TO REQUIREMENTS OF AISC.

SF-2 STEEL JOISTS AND BRIDGING SHALL CONFORM TO STEEL JOIST INSTITUTE SPECIFICATIONS. STEEL JOISTS HAVE BEEN DESIGNED FOR A NET UPLIFT LOAD OF 10 PSF. THE CONTRACTOR SHALL PROVIDE ALL JOIST BRIDGING REQUIRED FOR NET UPLIFT LOAD GIVEN.

SF-3 JOIST ERECTION PRECAUTION (OSHA REQUIREMENT) AT ALL COLUMNS NOT FRAMED BY BEAMS IN AT LEAST TWO DIRECTIONS: THE JOIST CLOSEST TO THE COLUMN ON BOTH SIDES OF THE BEAM SHALL BE BOLTED TO THE BEAM.

SF-4 ROOF DECK IS 1-1/2"-22 GAUGE TYPE B RIB DECK COMPLYING WITH STEEL DECK INSTITUTE; WITH MINIMUM I=.183 IN. 4/FT., SN=.192 IN. 3/FT. ATTACH TO SUPPORTING MEMBERS BY PLUG WELDING DIRECTLY THROUGH BOTTOM OF THE RIBS AT EVERY SUPPORT. WELD EACH SHEET AT BOTH SIDES AND AT OTHER RIBS SO THAT SPACING BETWEEN WELDS ACROSS THE WIDTH OF EACH SHEET DOES NOT EXCEED 18", IN ACCORDANCE WITH STEEL DECK INSTITUTE'S SPECIFICATIONS.

SF-4A ROOF DECK IS 3"-20 GAUGE TYPE B RIB DECK COMPLYING WITH STEEL DECK INSTITUTE; WITH MINIMUM I=.183 IN. 4/FT., SN=.192 IN. 3/FT. ATTACH TO SUPPORTING MEMBERS BY PLUG WELDING DIRECTLY THROUGH BOTTOM OF THE RIBS AT EVERY SUPPORT. WELD EACH SHEET AT BOTH SIDES AND AT OTHER RIBS SO THAT SPACING BETWEEN WELDS ACROSS THE WIDTH OF EACH SHEET DOES NOT EXCEED 18", IN ACCORDANCE WITH STEEL DECK INSTITUTE'S SPECIFICATIONS.

SF-5 FLOOR SLAB ON STEEL JOISTS SHALL BE 3" REGULAR WEIGHT CONCRETE SLAB (REINFORCED WITH 6x6 - W2.9xW2.9 WWF) ON GALVANIZED HEAVY DUTY 9/16" DEEP 28 GAUGE CORRUGATED STEEL DECK WITH MINIMUM I=.011 IN. 4/FT., S=.035 IN. 3/FT. (VULCRAFT TYPE 0.6C OR EQUAL). ATTACH STEEL DECK TO SUPPORTING MEMBERS BY PLUG WELDING AT EVERY SUPPORT IN ACCORDANCE WITH STEEL DECK INSTITUTE'S SPECIFICATIONS.

SF-6 WHERE METAL DECK IS SUPPORTED CONTINUOUSLY WELD DECK TO STEEL SUPPORT AT 12"o.c.

SF-7 WHERE FLOOR DECK CHANGES DIRECTIONS, PROVIDE DECK SUPPORT L 3 X 2-1/2 X 3/16 (L.L.H.) ACROSS ENDS OF SEATED JOISTS.

SF-8 TYPICAL STEEL JOIST SEAT ANCHORAGE: FIELD WELD EACH SEAT WITH TWO 1" LONG BY 1/8" WELDS FOR K-SERIES AND TWO 2" LONG BY 1/4" WELDS FOR LH-SERIES.

SF-9 STRUCTURAL FRAMING CONNECTIONS SHALL BE SEATED COLUMN CAPS, CLIP ANGLES OR WEB PLATES AS INDICATED ON DETAILS. USE A325 HIGH STRENGTH BOLTS OR WELDS SUFFICIENT TO DEVELOP REACTION CAPACITY ALLOWABLE UNIFORM LOAD/SPAN DIVIDED BY TWO AS SHOWN IN AISC MANUAL SECTION 3 (15th EDITION).

SF-10 DECK STOP ANGLES, FASCIA ANGLES, HANGERS, CLIPS AND OTHER STRUCTURAL AND MISCELLANEOUS MEMBERS SHALL BE CONNECTED OR JOINED USING 3/16" OR LARGER FILLET OR GROOVE WELDS AS REQUIRED FOR ADEQUATE CONNECTION.

SF-11 WHERE OPENINGS THROUGH ROOF ARE REQUIRED, FRAME AS DETAILED.

SF-12 WHERE BRACING ANGLES ARE SHOWN BETWEEN END OF JOIST BOTTOM CHORD AND SUPPORTING BEAM OR GIRDER, MAKE THESE CONNECTIONS AFTER ALL DEAD LOAD ON JOISTS IS IN PLACE. TEMPORARY BRACING SHALL REMAIN IN PLACE UNTIL FINAL CONNECTIONS ARE COMPLETED.

SF-13 JOIST BRACES (AT EACH COLUMN) OCCUR AT OR NEAR EVERY INTERIOR COLUMN AT THREE JOISTS THAT ARE CLOSEST TO THE COLUMN CENTERLINE; SEE PLAN AND DETAILS.

SF-14 PROVIDE ADEQUATE AND APPROPRIATE STRUCTURAL STEEL FRAMING APPROVED BY THE ENGINEER FOR THE SUPPORT AND MOUNTING OF MECHANICAL EQUIPMENT RESTING ON, OR SUSPENDED FROM, STEEL JOISTS. NO CONCENTRATED LOADS, HANGERS, ETC. SHALL BE ATTACHED TO THE TOP OR BOTTOM CHORD OF JOIST EXCEPT AT "PANEL POINTS" (THE JUNCTURES OF CHORDS AND DIAGONAL WEB MEMBERS). JOISTS SHALL BE MODIFIED OR STRENGTHENED TO CARRY SUCH LOADS.

SF-15 STEEL STAIRS TO BE DESIGNED AND DETAILED FOR LL=100 PSF BY STEEL FABRICATOR UNDER DIRECT SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER (SPECIALITY ENGINEER). SHOP DRAWINGS TO BE SIGNED AND SEALED BY THE SPECIALITY ENGINEER.

NOTES:

1. ***PRECAST CONCRETE EARTH RETAINERS SHALL BE 1 1/2" THICK APPROXIMATELY 3'-0" LONG, REINFORCED WITH 6 X 6 W1.4 X W1.4 WWF, 3,000 PSI CONCRETE.***
2. ***INSTALL ON A SLIGHT BATTER AND WIPE ALL JOINTS WITH GROUT.***
3. ***BOTTOM EDGE OF RETAINERS SHALL BE SET IN 3" DEEP CONTINUOUS GROOVES.***

3 DETAIL
N.T.S.

4 DETAIL
N.T.S.

CONCRETE NOTES:

CN-1 CONCRETE SHALL BE LABORATORY DESIGNED TO DEVELOP MINIMUM 28-DAY COMPRESSIVE STRENGTHS AS GIVEN BELOW. REFER TO SPECIFICATIONS FOR AGGREGATES, CEMENT, ADMIXTURES, ETC.

DRILLED PIERS & PIER CAPS . . . . .4,000 PSI
GRADE BEAMS, SLABS-ON-GRADE . . . . 3,000 PSI
BEAMS AND FLAT SLAB FLOOR SYSTEM . . . . .4,000 PSI
BEAM, GIRDER, AND JOIST FLOOR SYSTEM . . . . 4,000 PSI
SLABS ON METAL FORMS . . . . .3,000 PSI
COMPOSITE SLABS ON METAL FORMS . . . . .4,000 PSI
COLUMNS AND WALLS . . . . SEE SCHEDULE
PRECAST CONCRETE . . . . 5,500 PSI

NOTE: FLY ASH WILL BE PERMITTED UP TO 20% PORTLAND CEMENT REPLACEMENT FPR TYPE I, II, III IV, NO FLY ASH FOR TYPE IL, REFER TO SPECIFICATIONS.

CN-2 REINFORCING STEEL SHALL BE FROM NEW BILLET AND SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS:

A615-GR 60 . . . . FOOTING SPIRALS
A185 . . . . WELDED WIRE FABRIC
A615-GR 60 . . . . BEAM STIRRUPS, COLUMN TIES
A615-GR 60 . . . . .ALL OTHER REINFORCING
ASTM A108-60T . . . . HEADED CONCRETE ANCHORS
ASTM A496 . . . . .DEFORMED BAR ANCHORS

CN-3 DETAILING OF CONCRETE REINFORCEMENT BARS AND ACCESSORIES SHALL BE IN ACCORDANCE WITH LATEST ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI 315). BAR SUPPORTS SHALL HAVE PLASTIC COATED LEGS OR BE HOT DIPPED GALVANIZED AFTER FABRICATION.

CN-4 PROVIDE BAR LAPS AND SPLICES PER REINFORCING BAR LAP SPLICE TABLE BELOW. SEE "CORNER DETAILS" FOR CONTINUOUS BARS AT CORNERS. SPIRALS SHALL BE LAPPED 1-1/2 TURNS. WELDED WIRE MESH SHALL BE LAPPED 8" MINIMUM AT SPLICE POINTS, OR 1-1/2 MESHES, WHICHEVER IS GREATEST.

CN-5 CONTRACTOR SHALL PROVIDE NECESSARY CONSTRUCTION JOINTS IN MONOLITHIC CONCRETE FORMING SO THAT NOT MORE THAN 400 CUBIC YARDS IS POURED IN ONE DAY. LOCATION OF CONSTRUCTION JOINTS MUST HAVE PRIOR APPROVAL OF STRUCTURAL ENGINEER OF RECORD AND SHALL GENERALLY BE LOCATED AT OR NEAR MID-POINTS OF SPANS OF SLAB, BEAMS AND WALLS. ALL CONTINUOUS REINFORCING SHALL BE CARRIED THROUGH THE JOINT. SEE DETAILS FOR CONTINUOUS KEY BETWEEN ADJACENT POURS.

CN-6 SEE ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR LOCATION AND SIZES OF ALL SLAB OPENINGS AND SLEEVES, INSERTS, ANCHORS AND BOLTS REQUIRED BY ABOVE.

CN-7 REFER TO ARCHITECTURAL DRAWINGS FOR ALL FLOOR FINISHES, DIMENSIONS AND LOCATIONS OF SLAB DROPS AND DEPRESSIONS.

CN-8 MECHANICAL AND ELECTRICAL CONDUITS IN SLABS SHALL RUN UNDER THE TOP LAYER OF SLAB REINFORCING OR WELDED WIRE FABRIC. PROVIDE A MINIMUM OF 1-1/2" CLEAR BETWEEN INDIVIDUAL CONDUITS, AND BETWEEN CONDUIT AND PARALLEL REINFORCING. DO NOT "BUNDLE" CONDUITS.

CN-9 "HEADED CONCRETE ANCHORS" (HCA) SHALL BE OF 50,000 PSI STEEL ROD WITH UPSET ENDS, AUTOMATICALLY ARC WELDED THROUGH CERAMIC FERRULES, "NELSON CONCRETE ANCHORS" OR EQUAL.

MECHANICAL TESTING OF HCA IN SHOP
MECHANICAL TESTS SHALL BE MADE BEFORE INITIATION OF PRODUCTION WELDING AND AFTER ANY EQUIPMENT MAINTENANCE TO ENSURE THAT THE WELDING SCHEDULE IS SATISFACTORY. THEY MAY ALSO BE MADE DURING THE PRODUCTION RUN OR AT THE BEGINNING OF A SHIFT TO ENSURE THAT WELDING CONDITIONS HAVE NOT CHANGED. ARC WELDED STUDS ARE TESTED BY BENDING THE STUD. BENDING MAY BE DONE BY STRIKING THE STUD WITH A HAMMER OR BY BENDING IT USING A TUBE OR PIPE, THE ANGLE THROUGH WHICH THE STUD WILL BEND WITHOUT WELD FAILURE WILL DEPEND ON THE STUD AND BASE METAL COMPOSITIONS, CONDITIONS (COLD WORKED, HEAT TREATED), AND STUD DESIGN. ACCEPTABLE BENDING SHOULD BE DETERMINED WHEN THE WELDING PROCEDURE SPECIFICATION IS ESTABLISHED OR FROM THE APPLICABLE WELDING CODE. BEND TESTING MAY DAMAGE THE STUD; THEREFORE, IT SHOULD BE DONE ON QUALIFICATION SAMPLES ONLY. THE METHOD USED TO APPLY TENSILE LOAD ON AN ARC WELDED STUD WILL DEPEND ON THE STUD DESIGN. SPECIAL TOOLING MAY BE REQUIRED TO GRIP THE STUD PROPERLY WITHOUT DAMAGE, AND A SPECIAL LOADING DEVICE MAY BE NEEDED.

MECHANICAL TESTING OF HCA IN FIELD
MECHANICAL TESTS SHALL BE MADE IN THE FIELD BEFORE PLATES ARE INSTALLED IN CONCRETE. THE CONTRACTOR SHALL SUPPLY AT A MINIMUM ONE ADDITIONAL PER 50 PLATES OF EACH TYPE OR ADDITIONAL STUDS SHALL BE PLACED ON SPECIAL CONFIGURATION PLATES AND MEMBERS, THESE STUDS SHALL BE TESTED IN THE FIELD. ARC WELDED STUDS ARE TESTED BY BENDING THE STUD. BENDING MAY BE DONE BY STRIKING THE STUD WITH A HAMMER OR BY BENDING IT USING A TUBE OR PIPE. THE ANGLE THROUGH WHICH THE STUD WILL BEND WITHOUT WELD FAILURE WILL DEPEND ON THE STUD AND BASE METAL COMPOSITIONS, CONDITIONS (COLD WORKED, HEAT TREATED), AND STUD DESIGN. BEND TESTING MAY DAMAGE, THUS THEY MAY NOT BE USED. THE STUD; THEREFORE, IT SHOULD BE DONE ON QUALIFICATION SAMPLES ONLY. THE METHOD USED TO APPLY TENSILE LOAD ON AN ARC WELDED STUD WILL DEPEND ON THE STUD DESIGN. PROPERLY WITHOUT DAMAGE, AND A SPECIAL LOADING DEVICE MAY BE NEEDED.

CN-10 REFER TO SPECIFICATIONS FOR TESTING REQUIREMENTS. ALL TESTING SHALL BE AT POINT OF DISCHARGE. IF PUMP IS USED, TESTING SHALL BE AT THE END OF THE HOSE.

REINFORCING BAR LAP SPLICE TABLE (MASONRY)

BAR SIZE	POSITION	CONCRETE f'c (PSI) AND LAP CLASS 2500 B	3000 B				
#3 thru #6	ALL	40db	40db				
#7 thru #11	ALL	72db	72db				

REINFORCING BAR LAP SPLICE TABLE (BEAMS AND COLUMNS)

BAR SIZE	POSITION	CONCRETE f'c (PSI) AND LAP CLASS 3000 B	4000 B	5000 B	6000 B		
#3 thru #6	ALL	74db	64db	58db	50db		
#7 thru #11	ALL	93db	80db	72db	60db		

REINFORCING BAR LAP SPLICE TABLE (SLABS AND WALLS)

BAR SIZE	POSITION	CONCRETE f'c (PSI) AND LAP CLASS 3000 B	4000 B	5000 B			
#3 thru #6	0.75" COVER 2.0" COVER	75db 46db	64db 40db	58db 40db			
#7 thru #11	0.75" COVER 2.0" COVER	138db 74db	120db 65db	106db 56db			

REBAR LAP SPLICE TABLE NOTES:

RL-1 "db" DENOTES BAR DIAMETER.

RL-2 ALL SPLICES SHALL BE CLASS B UNLESS OTHERWISE NOTED.

RL-3 VALUES APPLY TO ALL BARS WITH MINIMUM CONCRETE COVER 1.0db AND MINIMUM CENTER TO CENTER SPACING OF 2.0db.

RL-4 FOR LIGHTWEIGHT CONCRETE, MULTIPLY BY 1.3.

RL-5 THE CHART ABOVE IS A SIMPLIFIED AND CONSERVATIVE METHOD FOR MEETING THE REQUIREMENTS OF ACI 12.2.2. THE CONTRACTOR MAY SUBMIT A DETAILED REBAR SPLICING PLAN IN ACCORDANCE WITH ACI 12.2.2 FOR APPROVAL.

GENERAL NOTES:

GN-1 THIS STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE (2021) AS AMENDED AND ADOPTED BY THE GOVERNING AUTHORITY, AND APPLICABLE INDUSTRY STANDARDS (AISC, ACI, ETC.).

GN-2 THE DESIGN LOADS ARE:

SUPERIMPOSED DEAD LOADS
MECHANICAL DUCTS/CONDUITS, CEILING, ETC. . . . . 5 PSF
MECHANICAL EQUIPMENT . . . . AS INDICATED ON PLANS

FLOOR LIVE LOAD
CORRIDOR . . . . .100 PSF
OFFICES . . . . 50 PSF
MOVEABLE PARTITIONS . . . . 20 PSF
MECHANICAL ROOMS . . . . 150 PSF
(NON REDUCIBLE)

ASSEMBLY AREAS:
FIXED SEATS . . . . 60 PSF
LOBBIES . . . . 100 PSF
MOVEABLE SEATS . . . . 100 PSF
STAGES & PLATFORMS . . . . 125 PSF
CATWALKS . . . . 40 PSF

ROOF LIVE LOAD
FLAT ROOF . . . . 20 PSF
PITCHED ROOF . . . . 20 PSF

ROOF SNOW LOAD
GROUND SNOW Pg . . . . 5 PSF
SNOW EXPOSURE FACTOR Ce 1.0
SNOW LOAD IMPORTANCE FACTOR Is 1.1
THERMAL FACTOR Ct 1.0

WIND LOAD
BASIC WIND SPEED (ULTIMATE DESIGN) 120
BUILDING CATEGORY III
WIND EXPOSURE C

EARTHQUAKE LOADS
SITE CLASS . . . . D
SPECTRAL RESPONSE ACCELERATION Ss 14%
SPECTRAL RESPONSE ACCELERATION S 3%
SPECTRAL RESPONSE COEF. SDs. 14%
SPECTRAL RESPONSE COEF. SD 5%
SEISMIC DESIGN CATEGORY . . . . A

RETAINING WALLS
GLOBAL STABILITY ANALYSIS FACTOR OF SAFETY 1.5
TYPE . . . . .CANTILEVER
EQUIVALENT FLUID PRESSURE . . . . 50 PCF
BACKFILL . . . . DRAINED/ONSITE
FOOTING BEARING . . . . 1500 PSF
SURCHARGE . . . . 200 PSF

GN-3 ALLOWABLE STRESS DESIGN LOAD COMBINATIONS (FOR ALL DESIGNS EXCEPT CONCRETE)

D
D+L
D+(Lr, or S or R)
D+0.75L+0.75(Lr, or S or R)
D+(0.6W)
D+0.75L+0.75(0.6W)+0.75(Lr or S or R)
0.6D+0.6W
D+0.7E

STRENGTH DESIGN LOAD COMBINATIONS (FOR CONCRETE DESIGN)

1.4D
1.2D+1.6L+0.5(Lr, or S or R)
1.2D+1.6(Lr, or S or R)+(L or 0.5W)
1.2D+1.0W+L+0.5(Lr, or S or R)
0.9+1.0W
1.2D+E+L+0.2S

GN-4 PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR AND FABRICATOR SHALL VERIFY ALL QUANTITIES, DIMENSIONS AND CONDITIONS AND NOTIFY ARCHITECT/STRUCTURAL ENGINEER OF RECORD OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.

GN-5 UTILITIES PENETRATING BUILDING SHALL BE FLEXIBLE, USING SLEEVE JOINTS, BENDS, LOOPS, ETC. TO PERMIT MOVEMENTS DUE TO EXPANSIVE UNDERLYING SOILS.

GN-6 PROVIDE ADEQUATE AND APPROPRIATE STRUCTURAL STEEL FRAMING FOR THE SUPPORT AND MOUNTING OF MECHANICAL EQUIPMENT RESTING ON, OR SUSPENDED FROM, STEEL SUPERSTRUCTURE.

GN-7 THE STRUCTURAL DRAWINGS FOR THIS PROJECT ARE COPYRIGHTED AND SHALL NOT BE REPRODUCED FOR USE AS FABRICATOR'S ERECTION DRAWINGS. THE CONTRACTOR SHALL ALLOW ADEQUATE TIME AND EXPENSE FOR SUBCONTRACTORS TO PRODUCE THEIR OWN ORIGINAL ERECTION AND PLACEMENT DRAWINGS.

GN-8 THE STRUCTURE HAS BEEN DESIGNED TO RESIST DESIGN LOADS ONLY AS A COMPLETED STRUCTURE. ANY PROPOSED APPLICATION OF CONSTRUCTION LOADS OR OF ANY LOADS TO THE PARTIALLY COMPLETED STRUCTURE WHICH EXCEED THE DESIGN LOADS WILL REQUIRE REANALYSIS AND PROBABLE REDESIGN.

GN-9 PROVIDE 1.0 TONS OF EXTRA REINFORCING STEEL, DETAILING, LABOR FOR PLACING AND FABRICATION AS DIRECTED IN THE FIELD AND SHOP.

COLUMN SCHEDULE

MARK	SECT.	TOP CONN.	BASE PLATE W x D x t	ANCHORS	SECT.	REMARKS
C1	HSS4x4x3/8	9/S-101	8 x 8 x 1	4-3/4" DIA. X 1'-4" HCA	2/S-101	
C2	HSS6x6x5/16	9/S-101	10 x 10 x 1	4-3/4" DIA. X 1'-4" HCA	2/S-101	
C3	HSS8x8x3/8	9/S-101	12 x 12 x 1	4-3/4" DIA. X 1'-4" HCA	2/S-101	
C4	8"Ø STD PIPE	9/S-101	12 x 12 x 1	4-3/4" DIA. X 1'-4" HCA	2/S-101	
C5	12"Ø STD PIPE	9/S-101	16 x 16 x 1	4-3/4" DIA. X 1'-4" HCA	2/S-101	
C6	HSS 6X3X1/4	-	-	-	-	STUB

STEEL COLUMN NOTES:

1. COLUMN MARKS AT ANY LEVEL INDICATE THE TYPE COLUMN WHICH IS BELOW THAT LEVEL.

2. PROVIDE 1" OF A 1/4" FILLET WELD TO EA. SIDE OF COLUMN PRIOR TO RELEASE OF COLUMN FROM ERECTION EQUIPMENT.

2 DETAIL
N.T.S.

1 DETAIL
N.T.S.

FOOTING SCHEDULE

MARK	SHAFT DIA.	VERT. BARS	SPIRAL	DEPTH
F1	30"	12-#10	3/8" DIA. @ 6" PITCH	35'-0"
F2	24"	12-#9	3/8" DIA. @ 6" PITCH	35'-0"
F3	18"	8-#8	3/8" DIA. @ 6" PITCH	35'-0"

DRILLED FOOTING NOTES:

DF-1 FOOTING SHALL BE LOCATED ON CENTERLINES OF COLUMN ABOVE UNLESS DIMENSIONED OTHERWISE ON PLAN. WHERE NO COLUMN OCCURS, LOCATE ON CENTERLINE OF BEAM OR PILASTER UNLESS SHOWN OTHERWISE ON PLANS AND SECTIONS.

DF-2 PROVIDE DOWELS FROM FOOTING INTO CONCRETE ABOVE USING SAME BAR SIZE AND PATTERN AS FOR SCHEDULED COLUMN ABOVE. WHERE NO COLUMN OCCURS, USE 4-#7 DOWELS, STANDARD 90 OR 180 DEGREE END HOOKS MAY BE USED TO DEVELOP REQUIRED EMBEDMENT WHERE SPACE LIMITATIONS PROHIBIT STRAIGHT LAPS.

DF-3 SHAFT CUT-OFF ELEVATION SHALL BE AT SOFFIT OF BEAM, WALL OR PIER CAP. FORM TOP OF SHAFT WITH FIBERFORM AT LEAST 2'-0" BELOW GRADE, OR DEEPER IF IMPROPERLY DRILLED OVERSIZE OR OUT OF ROUND, AS NOTED IN SPECIFICATION.

DF-4 REINFORCING CAGE SHALL BE HELD SECURELY AWAY FROM EARTH AT SIDES & BOTTOM BY SETS OF 3 PRECAST CONCRETE SPACER BLOCKS EVERY 8'-0" ALONG CAGE AND AT BOTTOM. DO NOT RAISE CAGE OFF OF BOTTOM.

DF-5 CASING IS REQUIRED, SECURE APPROVAL OF STRUCTURAL ENGINEER OF RECORD & REFER TO SPECIFICATIONS FOR PROCEDURES.

DF-6 SHAFT SHALL BE DRILLED PLUMB ALONG ITS TOTAL LENGTH WITHIN 1/2" PER 10'-0" OF DEPTH.

DF-7 BOTTOM OF FOOTING SHALL BE CLEAN AND FREE OF ALL LOOSE MATERIALS AND RECOMPACTED CUTTING PRIOR TO PLACING CONCRETE.

DF-8 PLACEMENT OF CONCRETE AND REINFORCING IN SHAFT SHALL BE THE SAME DAY OF DRILLING.

DF-9 REFERENCE GEOTECHNICAL REPORT BY: TERRACON, PROJECT NUMBER: 90235311, DATED: JAN 30, 2024

CONTRACTOR NOTE

THE STRUCTURAL SYSTEM FOR THIS PROJECT SHALL NOT BE CONSTRUCTED BY USING THE STRUCTURAL DRAWINGS ALONE. THESE DRAWINGS WERE DEVELOPED FROM DATA DERIVED PRIMARILY FROM THE ARCHITECTURAL DRAWINGS AND SECONDARILY FROM MEP, CIVIL AND OTHER DISCIPLINES' DOCUMENTS. IT IS INTENDED THAT CONSTRUCTION PROCEED BY UTILIZING ALL OF THE INFORMATION CONTAINED IN THE ENTIRE SET OF CONSTRUCTION DOCUMENTS TAKEN AS A WHOLE; FAILURE TO DO SO WILL RESULT IN ERRORS WHICH SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

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WFAC Black Box Addition PKG 1

1801 Martin Luther King Dr.,
San Antonio, TX, 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

DATE: 06/12/2024
STATE OF TEXAS
SHAWN J. FRANKE
82639
LICENSED PROFESSIONAL ENGINEER

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/05/23	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION
BUILDING NUMBER AB

NOTES, SECTIONS & DETAILS

S-101

ISSUE FOR CONSTRUCTION

6. MASONRY CONSTRUCTION				
EMPIRICALLY DESIGNED MASONRY, GLASS UNIT MASONRY, AND MASONRY VENEER IN NON-ESSENTIAL FACILITIES.	SPECIAL INSPECTIONS NOT REQUIRED PER 1704.5.1		IBC 1705.4	
LEVEL 1 INSPECTION:		ENGINEERED MASONRY IN NON-ESSENTIAL FACILITIES AND EMPIRICALLY DESIGNED MASONRY IN ESSENTIAL FACILITIES.	IBC 1705.4	QUALIFICATIONS BASED ON ASTM C1093
A. AS MASONRY CONSTRUCTION BEGINS, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:	N/A	1. PROPORTIONS OF SITE-PREPARED MORTAR.		
	N/A	2. CONSTRUCTION OF MORTAR JOINTS.		
	N/A	3. LOCATION OF REINFORCEMENT AND CONNECTORS.		
	N/A	4. PRESTRESSING TECHNIQUE		
	N/A	5. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES.		
B. THE INSPECTION PROGRAM SHALL VERIFY:	N/A	1. SIZE AND LOCATION OF STRUCTURAL ELEMENTS.		
	N/A	2. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTUCTION.		
	N/A	3. SPECIFIED SIZE, GRADE AND TYPE OF REINFORCEMENT.		
	N/A	4. WELDING OF REINFORCING BARS.		
	N/A	5. PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40 DEGREES F) OR HOT WEATHER (TEMPERATURE ABOVE 90 DEGREES F).		
	N/A	6. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE.		
C. PRIOR TO GROUTING, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:	N/A	1. GROUT SPACE IS CLEAN.		
	N/A	2. PLACEMENT OF REINFORCEMENT AND CONNECTORS AND PRESTRESSING TENDONS AND ANCHORAGES.		
	N/A	3. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS.		
	N/A	4. CONSTRUCTION OF MORTAR JOINTS.		
D. GROUT PLACEMENT	N/A	1. VERIFY COMPLIANCE WITH CODE AND CONSTRUCTION DOCUMENTS PROVISIONS.		
	N/A	2. GROUTING OF PRESTRESSING BONDED TENDONS.		
E. PREPARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS SHALL BE OBSERVED.	N/A	1. VERIFY COMPLIANCE WITH CODE AND CONSTRUCTION DOCUMENTS PROVISIONS.		QUALIFICATIONS BASED ON C1093
F. COMPLIANCE WITH REQUIRED INSPECTION PROVISION OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS SHALL BE VERIFIED.	N/A	1. VERIFY COMPLIANCE WITH CODE AND CONSTRUCTION DOCUMENTS PROVISIONS.		
G. TESTING OF GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS.	N/A	1. TEST ONE SET OF MORTAR CUBES PER 2000 sf OR PORTION THEREOF. 2. TEST ONE SET OF GROUT CYLINDERS PER 2000 sf OR PORTION THEREOF. 3. TEST ONE PRISM PER 6000 sf OR PORTION THEREOF. (SUBMITTED PRISM WILL BE ACCEPTABLE FOR FIRST PRISM TEST).		QUALIFICATIONS BASED ON C1093
LEVEL 1 INSPECTION CONT.:		ENGINEERED MASONRY IN NON-ESSENTIAL FACILITIES AND EMPIRICALLY DESIGNED MASONRY IN ESSENTIAL FACILITIES.	IBC 1704.5.1, IBC 1704.5.2	QUALIFICATIONS BASED ON ASTM C1093
H. POST INSTALLED REINFORCING & ANCHORS (EXPANSION ANCHORS, SCREW ANCHORS ADHESIVE ANCHORS, ECT.).	N/A	THE SPECIAL INSPECTOR SHALL BE ON THE JOB SITE CONTINUOUSLY DURING ANCHOR INSTALLATION TO VERIFY ANCHOR TYPE, ANCHOR DIMENSIONS, MASONRY TYPE AND COMPRESSION STRENGTH, PRE-DRILLED HOLE DIMENSIONS ANCHOR SPACING, EDGE DISTANCES, MASONRY THICKNESS AND ANCHOR EMBEDMENT.	ACI 318 APPENDIX D-CH. D.9.1	*QUALIFICATIONS BASED ON ASTM E329 & ASTM C1077 OR CERTIFIED MANUFACTURER REPRESENTATIVE
6. MASONRY CONSTRUCTION CONT.:				
LEVEL 2 INSPECTION:		ENGINEERED MASONRY IN ESSENTIAL FACILITIES.	IBC 1704.5.3	QUALIFICATIONS BASED ON C1093
A. FROM THE BEGINNING OF MASONRY CONSTRUCTION, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:	N/A	1. PROPORTIONS OF SITE-PREPARED MORTAR, GROUT, AND PRESTRESSING GROUT FOR BONDED TENDONS.		
	N/A	2. PLACEMENT OF MASONRY UNITS AND CONSTRUCTION OF MORTAR JOINTS.		
	N/A	3. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES.		
	N/A	4. GROUT SPACE PRIOR TO GROUTING.		
	N/A	5. PLACEMENT OF GROUT.		
	N/A	6. PLACEMENT OF PRESTRESSING GROUT.		
B. THE INSPECTION PROGRAM SHALL VERIFY:	N/A	1. SIZE AND LOCATION OF STRUCTURAL ELEMENTS.		
		2. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION.		
	N/A	3. SPECIFIED SIZE, GRADE AND TYPE OF REINFORCEMENT.		
	N/A	4. WELDING OF REINFORCEMENT.		
	N/A	PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40 DEGREES F) OR HOT WEATHER (TEMPERATURE ABOVE 90 DEGREES F).		
	N/A	6. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE.		
C. PREPARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS SHALL BE OBSERVED.	N/A	1. VERIFY COMPLIANCE WITH CODE AND CONSTRUCTION DOCUMENTS PROVISIONS.		QUALIFICATIONS BASED ON C1093
D. COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS SHALL BE VERIFIED.	N/A			
E. TESTING OF GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS.	N/A	1. TEST ONE SET OF MORTAR CUBES PER 2000 sf OR PORTION THEREOF. 2. TEST ONE SET OF GROUT CYLINDERS PER 2000 sf OR PORTION THEREOF. 3. TEST ONE PRISM PER 6000 sf OR PORTION THEREOF. (SUBMITTED PRISM WILL BE ACCEPTABLE FOR FIRST PRISM TEST).		QUALIFICATIONS BASED ON C1093

NOTES:

1 THESE INSPECTIONS DO NOT RELIEVE ENGINEER FROM STRUCTURAL OBSERVATIONS AS MAY REQUIRED BY IBC 2018, SECTION 1709, AND/OR CONTRACTUAL REQUIREMENTS OF ARCHITECT/CLIENT, (I.E. C141).

2 DEFINITIONS/TERM: PERIODIC VS. CONTINUOUS INSPECTIONS - REF. IBC SECTION 1702
ADSC - THE INTERNATIONAL ASSOCIATION OF FOUNDATION DRILLING
ASNT - AMERICAN SOCIETY FOR NONDESTRUCTIVE TESTING
ASTM - AMERICAN SOCIETY FOR TESTING MATERIALS
AWS - AMERICAN WELDING SOCIETY
CWI - CERTIFIED WELDING INSPECTOR
CRSI - CONCRETE REINFORCING STEEL INSTITUTE
PCI - PRECAST/PRESTRESSED CONCRETE INSTITUTE
PTI - POST-TENSIONING INSTITUTE
N/A - NOT APPLICABLE

*TESTING AND INSPECTION DIRECTED BY ASTM E329 GUIDELINES.

DEFERRED SUBMITTALS

BUILDING CONSTRUCTION	YES	NO	DESCRIPTION
STEEL		X	-
CONCRETE		X	-
WOOD		X	-

3. CONCRETE CONSTRUCTION CONT.				
G. PLACEMENT OF CONCRETE & SHOTCRETE.	CONTINUOUS		ACI 318-CH. 5.9, 5.10	*QUALIFICATIONS BASED ON ASTM C1077
H. MAINTENANCE OF SPECIFIED CURING TEMPERATURE & TECHNIQUES.	PERIODIC	EACH CONCRETE POUR	ACI 318-CH. 5.11, 5.13	*QUALIFICATIONS BASED ON ASTM C1077
I. PRE-STRESSED CONCRETE	N/A	1. APPLICATION OF PRESTRESSING FORCE. 2. GROUTING OF BOUNDED PRESTRESSING TENDONS IN SEISMIC-FORCE RESISTING SYSTEMS.		*QUALIFICATIONS BASED ON ASTM C1077
J. ERECTION OF PRECAST CONCRETE MEMBERS.	N/A			TECHNICIAN TRAINED IN FIELD OF WORK AND HAS AT LEAST ONE YEAR OF EXPERIENCE.
K. POST-TENSIONED CONCRETE:	N/A	1. VERIFY IN-SITU CONCRETE STRENGTH PRIOR TO STRESSING OF TENDONS.		*QUALIFICATIONS BASED ON ASTM E329
	N/A	2. THE POST-TENSIONING ENGINEER, OR A MEMBER OF HIS STAFF, SHALL INSPECT THE TENDON PLACEMENT AND CHAIRING TO INSURE COMPLIANCE WITH THE INTENT OF THE DESIGN.		
	N/A	3. CONTINUOUS INSPECTION IS REQUIRED DURING ALL STRESSING ACTIVITIES.		
	N/A	4. RECORDS OF ALL JACKING FORCES AND ELINGATIONS SHALL BE MADE IN ACCORDANCE WITH THE PTI FIELD MANUAL AND RECORDS SHALL BE PROMPTLY SUBMITTED TO THE ARCHITECT AND ENGINEER.		
L. REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	PERIODIC	VERIFY IN-SITU CONCRETE STRENGTH PRIOR TO REMOVAL.	ACI 318-CH. 5.11, 5.13	*QUALIFICATIONS BASED ON ASTM E329
M. POST INSTALLED REINFORCING & ANCHORS (EXPANSION ANCHORS, SCREW ANCHORS ADHESIVE ANCHORS, ECT.).	CONTINUOUS	THE SPECIAL INSPECTOR SHALL BE ON THE JOB SITE CONTINUOUSLY DURING ANCHOR INSTALLATION TO VERIFY ANCHOR TYPE, ANCHOR DIMENSIONS, CONRETE TYPE AND COMPRESSION STRENGTH, PRE-DRILLED HOLE DIMENSIONS ANCHOR SPACING, EDGE DISTANCES, CONCRETE THICKNESS AND ANCHOR EMBEDMENT.	ACI 318 APPENDIX D-CH. D.9.1	*QUALIFICATIONS BASED ON ASTM E329 & ASTM C1077 OR CERTIFIED MANUFACTURER REPRESENTATIVE
4. STEEL CONSTRUCTION			IBC 1705.2	
A. MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS:	N/A	1. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	STRUCTURAL STEEL GENERAL NOTES	CWI/ASSOCIATE/TECHNICAL RADIATE, AWS OR CRSI
	N/A	2. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	APPLICABLE ASTM MATERIAL SPECIFICATIONS; AISC 335, SECTION A3.4; AISC LRFD, SECTION A3.3	
4. STEEL CONSTRUCTION CONT.:			IBC 1704.3	
B. HIGH STRENGTH BOLTING:	N/A	1. BEARING-TYPE CONNECTIONS.	IBC 1705.2 STRUCTURAL STEEL GENERAL NOTES	CWI/ASSOCIATE/TECHNICAL RADIATE, AWS OR CRSI
	N/A	2. SLIP-CRITICAL CONNECTIONS.	AISC LRFD SECTION M2.5	
C. MATERIAL VERIFICATION OF STRUCTURAL STEEL:	N/A	1. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	IBC 1705.2 STRUCTURAL STEEL GENERAL NOTES	CWI/ASSOCIATE/TECHNICAL RADIATE, AWS OR CRSI
	N/A	2. MANUFACTURERS' CERTIFIED MILL TEST REPORTS.	ASTM A 6 OR ASTM A 568	
D. MATERIAL VERIFICATION OF WELD FILLER MATERIALS:	N/A	1. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS.	STRUCTURAL STEEL GENERAL NOTES	CWI/ASSOCIATE/TECHNICAL RADIATE, AWS OR CRSI
	N/A	2. MANUFACTURERS' CERTIFIED OF COMPLIANCE REQUIRED.	AISC, ASD, SECTION A3.6; AISC LRFD, SECTION A3.5	
E. WELDING: OF STRUCTURAL STEEL:	N/A	1. COMPLETE & PARTIAL PENETRATION GROOVE WELDS.	IBC 1705.2.2.1 STRUCTURAL STEEL GENERAL NOTES	CWI AND ASNT
	N/A	2. MULTIPASS FILLET WELDS.	AWS D1.1	CWI AND ASNT OR LICENSED ENGINEER
	N/A	3. SINGLE-PASS FILLET WELDS > 5/16"		
	N/A	4. SINGLE-PASS FILLET WELDS≤ 5/16"		
	N/A	5. FLOOR AND DECK WELDS.	AWS D1.3	
F. WELDING OF REINFORCING STEEL:	N/A	1. VERIFICATION OF WELD ABILITY OF REINFORCING STEEL OTHER THAN A706.	IBC 1705.2.2.1.2	CWI/ASSOCIATE/TECHNICIAN TRAINED IN FIELD OF WORK AND HAS AT LEAST ONE YEAR OF EXPERIENCE.
	N/A	2. REINFORCING STEEL-RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL REINFORCED CONCRETE SHEAR WALLS AND SHEAR REINFORCEMENT.		
	N/A	3. SHEAR REINFORCEMENT.		
	N/A	4. OTHER REINFORCING STEEL.		
G. STEEL FRAME JOINT DETAILS; COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS:	N/A	1. DETAILS SUCH AS BRACING & STIFFENING.	IBC 1705.2.1 STRUCTURAL DRAWINGS	PROJECT OF COMPLEX DETAILS: - ASSOCIATE CWI PROJECTS OF RELATIVELY SIMPLE DETAILS: - TECHNICIAN TRAINED IN FIELD OF WORK AND HAS AT LEAST ONE YEAR OF EXPERIENCE.
	N/A	2. MEMBER LOCATIONS.		
	N/A	3. APPLICATION OF JOINT DETAILS AT EACH CONNECTION.		
H. POST INSTALLED REINFORCING & ANCHORS (EXPANSION ANCHORS, SCREW ANCHORS ADHESIVE ANCHORS, ECT.).	N/A	THE SPECIAL INSPECTOR SHALL BE ON THE JOB SITE CONTINUOUSLY DURING ANCHOR INSTALLATION TO VERIFY ANCHOR TYPE, ANCHOR DIMENSIONS, CONCRETE OR MASONRY TYPE AND COMPRESSION STRENGTH, PRE-DRILLED HOLE DIMENSIONS, ANCHOR SPACING, EDGE DISTANCES, CONCRETE OR MASONRY THICKNESS AND ANCHOR EMBEDMENT.	ACI 318 APPENDIX D-CH. D.9.1	*QUALIFICATIONS BASED ON ASTM E329 & ASTM C1077 OR CERTIFIED MANUFACTURER REPRESENTATIVE
5. INSPECTION OF FABRICATORS FOR STRUCTURAL STEEL				
FABRICATION & IMPLEMENTATION PROCEDURES	N/A	FABRICATION AND IMPLEMENTATION PROCEDURES. THE SPECIAL INSPECTOR SHALL VERIFY THAT THE FABRICATOR MAINTAINS DETAILED FABRICATION AND QUALITY CONTROL OF THE WORKMANSHIP AND THE FABRICATOR'S ABILITY TO CONFORM TO APPROVED CONSTRUCTION DOCUMENTS AND REFERENCED STANDARDS. THE SPECIAL INSPECTOR SHALL REVIEW THE PROCEDURES FOR COMPLETENESS AND ADEQUACY RELATIVE TO THE CODE REQUIREMENTS FOR THE FABRICATOR'S SCOPE OF WORK. **EXCEPTION:** SPECIAL INSPECTIONS SHALL NOT BE REQUIRED WHERE THE WORK IS DONE ON THE PREMISES OF A FABRICATOR THAT IS ENROLLED IN A NATIONALLY ACCEPTED INSPECTIONS PROGRAM ACCEPTABLE TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. AT COMPLETION OF FABRICATION, THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO BUILDING OFFICIAL UPON REQUEST AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.	IBC 1705.2.1	CWI, ASNT, LICENSED ENGINEER

Pursuant to IBC Chapter 17 (1704.2.1) provide the following Special Inspector Qualifications to the RDPiRC prior to start of inspections;

1. Testing Laboratory Qualifications meeting ASTM0329 and accreditation by AASHTO and/or A2LA, and CCRL of the National Bureau of Standards.
2. Special Inspector's name and proof of meeting the qualification requirements set forth in
   a. ASTM C1077 for concrete,
   b. ASTM D3740 for soils,
   c. ASTM C1093 for masonry.
   d. ASTM D-2922 and D-3017 for Density control of compaction

IBC 1704.2.1 "written documentation demonstrating the competence and relevant experience or training of special inspectors who will perform special inspections and tests during construction. Experience or training shall be considered relevant where the documented experience or training is related in complexity to the same type of special inspection or testing activities for projects of similar complexity and material qualities." These qualifications are in addition to qualifications specified in other sections of the IBC.

TESTING & INSPECTION REQUIREMENTS (INCLUDING SPECIAL INSPECTIONS)

REQUIRED INSPECTION VERIFICATION, OR TEST	*VERIFICATION MONITORING FREQUENCY*	*TYPE AND/OR FREQUENCY OF TESTING*	*IBC SECTION & REFERENCE CRITERIA*	*INSPECTOR QUALIFICATIONS*
1. SOILS (SLAB ON GRADE)		SITE PREPARATION	IBC 1705.6	
A. SUB-GRADE 1. VISUAL OBSERVATION	PERIODIC	AT THE CONTRACTORS EXPENSE, INSTRUMENT READINGS SHALL BE TAKEN BY A LICENSED SURVEYOR TO VERIFY FINAL SUBGRADE ELEVATIONS AND SLOPES.	GEOTECHNICAL REPORT, BUILDING PAD GENERAL NOTES	*QUALIFICATIONS BASED ON ASTM D3740 LICENSED SURVEYOR
2. PROOFROLLING OBSERVATIONS	CONTINUOUS	PROOFROLLING SHALL BE MONITORED BY A GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER SHALL BE APPROVE THE TYPE OF PROOFROLLING EQUIPMENT AND PROCEDURES.	GEOTECHNICAL REPORT, BUILDING PAD GENERAL NOTES	*QUALIFICATIONS BASED ON ASTM D3740
3. MOISTURE CONDITIONING & RECOMPACTION	PERIODIC	PROVIDE (1) ON DENSITY TEST FOR EACH 3000 SQ. FT. REFER TO UNDERFLOOR FILL NOTES FOR TESTING SPECIFICATIONS.	GEOTECHNICAL REPORT, BUILDING PAD GENERAL NOTES	*QUALIFICATIONS BASED ON ASTM D3740
B. CHEMICAL INJECTION	N/A	QUALITY CONTROLLED TESTING AND EVALUATION PRIOR AND SUBSEQUENT TO INJECTION SHALL BE PERFORMED BY THE GEOTECHNICAL ENGINEER TO DETERMINE THE EFFECTIVENESS OF THE CHEMICAL INJECTION PROCESS. THE GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE SHALL MONITOR THE INJECTION PROCESS TO VERIFY AREA COVERAGE, INJECTION DEPTH AND TO REVIEW AND MONITOR THE SWELL TEST RESULTS.	GEOTECHNICAL REPORT, BUILDING PAD GENERAL NOTES	*QUALIFICATIONS BASED ON ASTM D3740
C. DURING FILL PLACEMENT	PERIODIC	VISUAL OBSERVATIONS: DURING PLACEMENT AND COMPACTION OF FILL, SPECIAL INSPECTOR SHALL DETERMINE THE MATERIAL BEING USED AND THE MAXIMUM LIFT THICKNESS COMPLY WITH ADDITIONAL SAMPLES TESTED EACH DAY, OR MORE OFTEN IF MATERIAL APPEARS TO VARY.	IBC 1705.6 GEOTECHNICAL REPORT, BUILDING PAD GENERAL NOTES	*QUALIFICATIONS BASED ON ASTM D3740
D. EVALUATION OF IN-PLACE DENSITY OF FILL	PERIODIC	PROVIDE (1) ON DENSITY TEST FOR EACH 3000 SQ. FT. REFER TO UNDERFLOOR FILL NOTES FOR TESTING SPECIFICATIONS.	IBC 1705.6 GEOTECHNICAL REPORT, BUILDING PAD GENERAL NOTES	*QUALIFICATIONS BASED ON ASTM D3740
E. TRENCH BACKFILLING:	PERIODIC	TRENCH BACKFILLING: TRENCH BACKFILLING WITH CLAY CAP AND PLACING OF CLAY PLUG SHALL BE MONITORED BY GEOTECHNICAL ENGINEER.		
2A. PILE FOUNDATIONS				
A. THE GEOTECHNICAL ENGINEER OR A QUALIFIED E.I.T. INVOLVED IN THE ORIGINAL GEOTECHNICAL INVESTIGATION AND UNDER THE DIRECT SUPERVISION OF THE GEOTECHNICAL ENGINEER SHALL BE PRESENT DURING THE EXCAVATION OF THE FIRST PILE.	N/A	1. VERIFY THE BEARING STRATUM IS ENCOUNTERED AT THE ANTICIPATED DEPTH. 2. ADDRESS UNFORESEEN SUBSURFACE CONDITIONS, IF ANY. 3. VERIFY CONFORMANCE WITH THE FOUNDATION RECOMMENDATIONS PROVIDE IN THE PROJECT "GEOTECHNICAL ENGINEERING STUDY" AND THE STRUCTURAL DRAWINGS ISSUED FOR THE PROJECT.	IBC 1705.7 GEOTECHNICAL REPORT;	GRADUATE ENGINEER *QUALIFICATIONS BASED ON ASTM E329 & ASTM C1077
B. ALL FOOTINGS SHALL BE OBSERVED AND MONITORED BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL PROVIDE THE GEOTECHNICAL ENGINEER WITH A COMPLETE SET OF STRUCTURAL DRAWINGS THAT ARE TO REMAIN WITH THE GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE.	N/A	1. PROVIDE RECORD OF EACH PILE INSTALLED. 2. RECORD LOAD TESTS, CUTOFF AND TIP OF EACH PILE.	IBC 1705.7 GEOTECHNICAL REPORT;	*QUALIFICATIONS BASED ON ASTM E329 & ASTM C1077
2B. PIER FOUNDATIONS				
A. THE GEOTECHNICAL ENGINEER OR A QUALIFIED E.I.T. INVOLVED IN THE ORIGINAL GEOTECHNICAL INVESTIGATION AND UNDER THE DIRECT SUPERVISION OF THE GEOTECHNICAL ENGINEER SHALL BE PRESENT DURING THE EXCAVATION OF THE FIRST PIER SHAFT.	CONTINUOUS	1. VERIFY THE BEARING STRATUM IS ENCOUNTERED AT THE ANTICIPATED DEPTH. 2. ADDRESS UNFORESEEN SUBSURFACE CONDITIONS, IF ANY. 3. VERIFY CONFORMANCE WITH THE FOUNDATION RECOMMENDATIONS PROVIDE IN THE PROJECT "GEOTECHNICAL ENGINEERING STUDY" AND THE STRUCTURAL DRAWINGS ISSUED FOR THE PROJECT.	IBC 1705.8 GEOTECHNICAL REPORT;	GRADUATE ENGINEER *QUALIFICATIONS BASED ON ASTM E329 & ASTM C1077
B. ALL FOOTINGS SHALL BE OBSERVED AND MONITORED BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL PROVIDE THE GEOTECHNICAL ENGINEER WITH A COMPLETE SET OF STRUCTURAL DRAWINGS THAT ARE TO REMAIN WITH THE GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE.	CONTINUOUS	1. PROVIDE RECORD OF EACH PIER INSTALLED. 2. RECORD LOAD TESTS, CUTOFF AND TIP OF EACH PIER.	IBC 1705.8 GEOTECHNICAL REPORT;	*QUALIFICATIONS BASED ON ASTM E329 & ASTM C1077
3. CONCRETE CONSTRUCTION				
A. REINFORCING STEEL	PERIODIC	PROVIDE PERIODIC INSPECTION OF REINFORCING SIZES, SPACING, GRADE OF REBAR; AND PLACEMENT AT THE FOLLOWING FREQUENCY: COLUMNS: 10% BEAMS: 30% JOIST: 10% OTHER MEMBERS: RANDOMLY @ 20%	IBC 1705.3 ACI 318: CH. 3.5, 7.1-7.7; CONCRETE AND REINFORCING GENERAL NOTES.	*QUALIFICATIONS BASED ON ASTM E329
B. REINFORCING STEEL WELDING	-	NO FIELD WELDING PERMITTED.	AWS D1.4 ACI 318: 3.5.2	CWI OR ASSOCIATE CWI
C. BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO & DURING PLACEMENT OF CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED.	CONTINUOUS	VERIFY LOCATION, SIZE AND SPACING OF ANCHORS.	IBC 1705.3	**TECHNICIAN TRAINED IN FIELD OF WORK AND HAS AT LEAST ONE YEAR EXPERIENCE.
D. ANCHORS TO BE INSTALLED IN EXISTING CONCRETE	CONTINUOUS	VERIFY LOCATION, SIZE AND SPACING OF ANCHORS.	IBC 1705.3	**TECHNICIAN TRAINED IN FIELD OF WORK AND HAS AT LEAST ONE YEAR EXPERIENCE.
E. VERIFY USE OF CONCRETE MIX DESIGN	PERIODIC	EACH CONCRETE POUR.	ACI 318-CH. 4, 5.2-5.4	*QUALIFICATIONS BASED ON ASTM C1077
F. SAMPLING OF FRESH CONCRETE.	CONTINUOUS EACH CONCRETE POUR;	1. ALL CONCRETE TESTING IS TO BE MADE AFTER WATER, IF ANY, IS ADDED AT SITE. 2. TAKE SAMPLES & PERFORM SLUMP, AIR & COMPRESSION TESTS IN ACCORDANCE WITH ASTM C-39 ON CONCRETE PLACED EACH DAY AT THE RATE OF ONHE SET OF FOUR CYLINDERS FOR EACH 80 cu. yds. OR FRACTION THEREOF. WHEN MORE THAN 80 cu. yds. IS BEING CONTINUOUSLY PLACED, THE INTERVAL BETWEEN TEST SAMPLES SHALL BE AT LEAST 50 cu. yds. SO AS TO BE REPRESENTATIVE OF THE WHOLE DAYS POUR. SAMPLES SHALL BE TAKEN AT THE THE POINT OD DEPOSIT IN THE FIELD & ALL CYLINDERS SHALL BE ACCURATELY MARKED & REFERENCED TO SHOW DATE, TIME & EXACT LOCATION IN THE STRUCTURE FROM WHICH THEY CAME. MAKE 7-DAY TEST ON TWO CYLINDERS & 28-DAY TEST ON TWO CYLINDERS. REPORST OF TESTS SHALL BE PROMPTLY SENT AS FOLLOWS: TWO TO THE PDPIRC (ARCHITECT), ONE TO THE ENGINEER AND ONE TO THE CONTRACTOR.	ACI 318-CH. 5.6, 5.8	*QUALIFICATIONS BASED ON ASTM C1077

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WFAC Black Box Addition PKG 1
1801 Martin Luther King Dr.,
San Antonio, TX, 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

DATE: 06/12/2024
STATE OF TEXAS
SHAWN J. FRANKE
82639
LICENSED
PROFESSIONAL ENGINEER

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/05/23	230462

DRAWING HISTORY

No.	Description	Date
2	City Comments	06/12/24

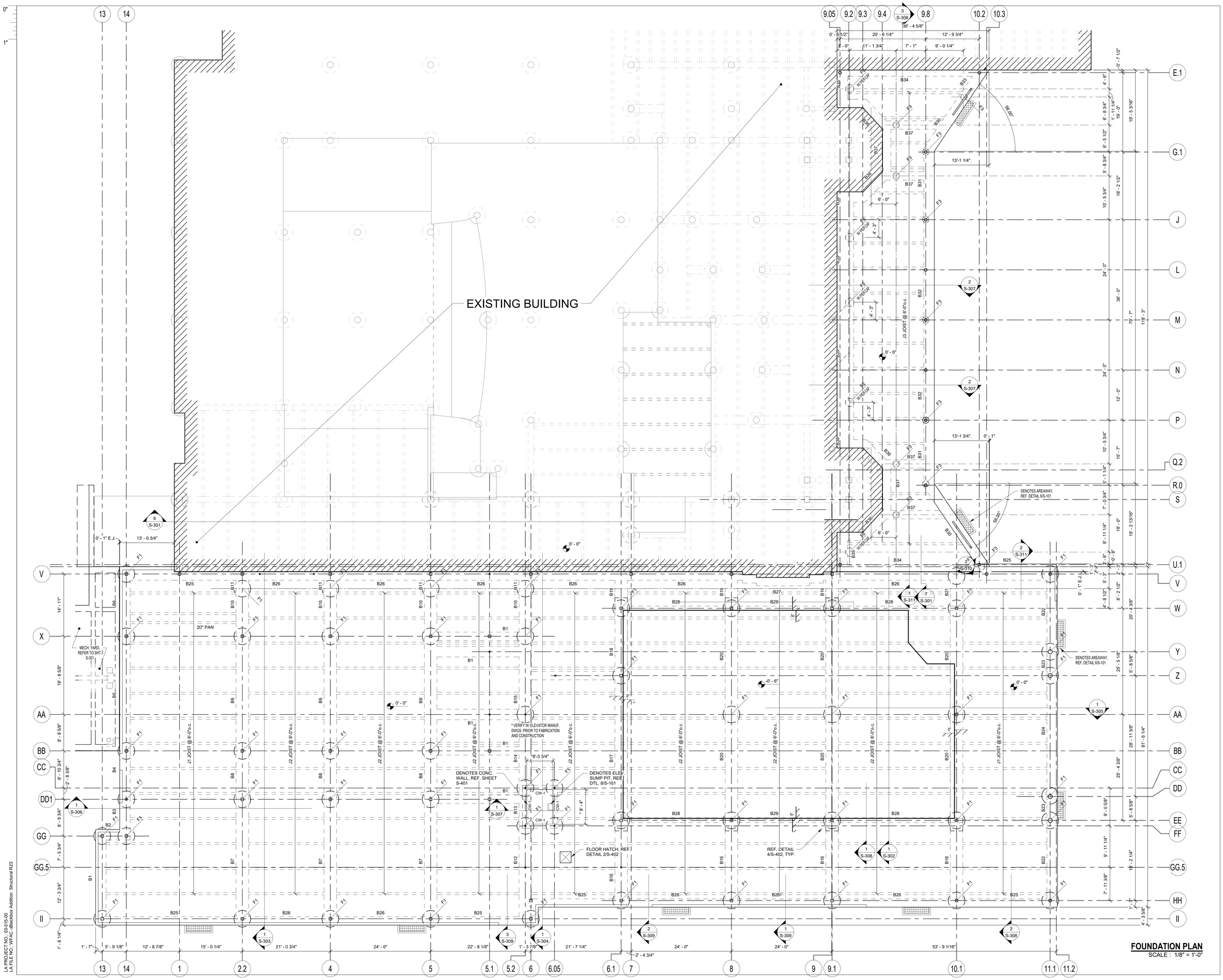
ISSUE FOR CONSTRUCTION
BUILDING NUMBER AB

SPECIAL INSPECTION NOTES

S-102

LA PROJECT NO.: 03-515-00
LA FILE NO.: WFAC -Blackbox Addition Structural R23

ISSUE FOR CONSTRUCTION



FOUNDATION PLAN
SCALE : 1/8" = 1'-0"

LA PROJECT NO.: 03-515-00
LA FILE NO.: WFAC -Blackbox Addition Structural R23

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WFAC Black Box Addition PKG 1

1801 Martin Luther King Dr.,
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ALAMO COLLEGES
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KEY PLAN
NORTH: PLAN TRUE

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2024/05/23	230462

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2	City Comments	06/12/24

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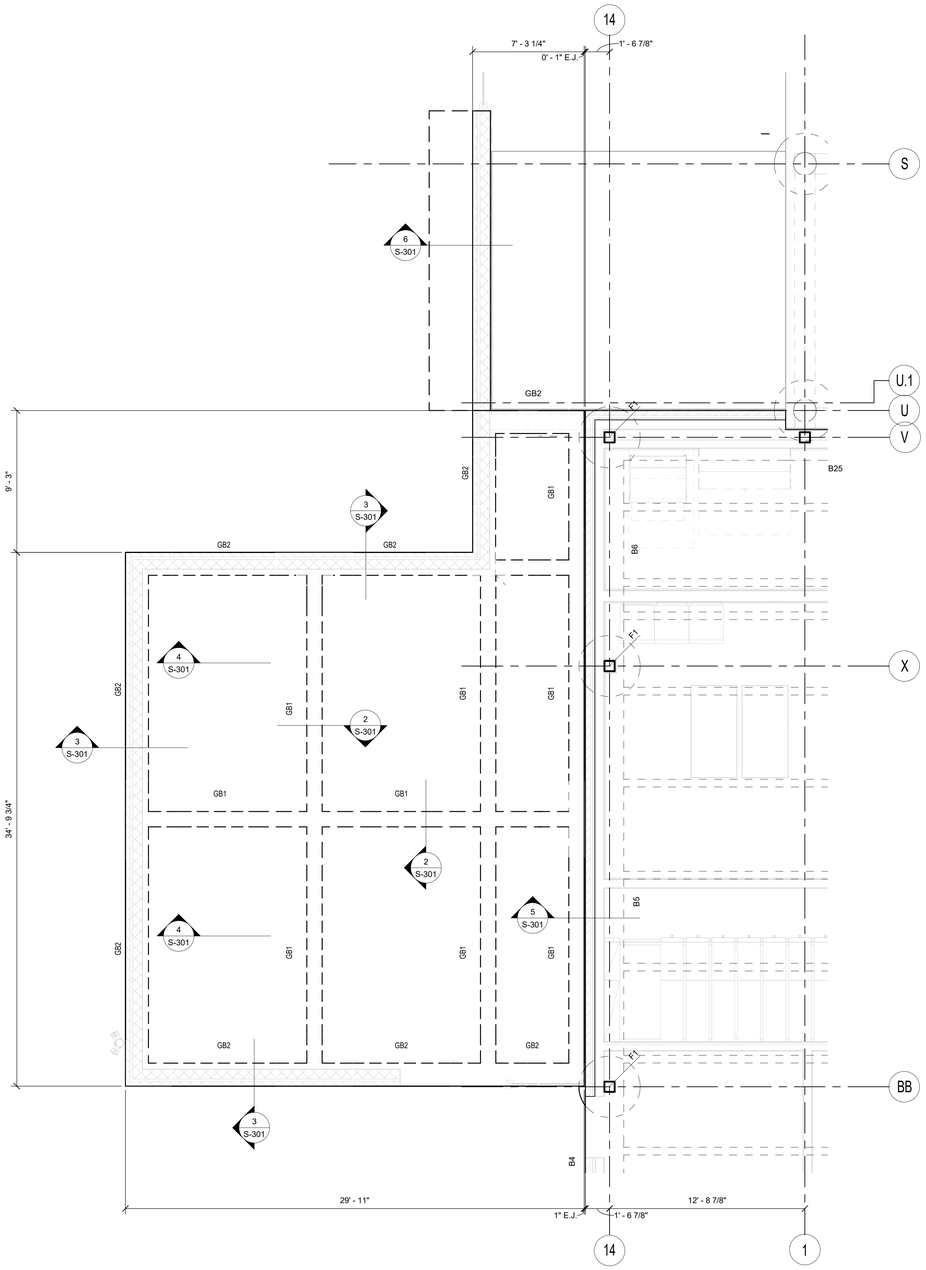
BUILDING NUMBER AB

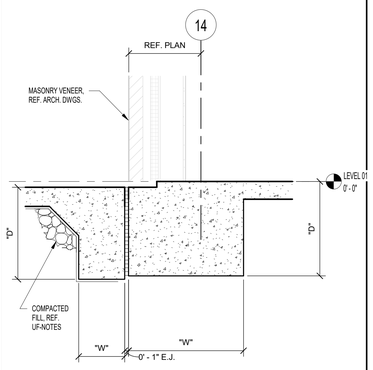
FOUNDATION FRAMING PLAN

S-201

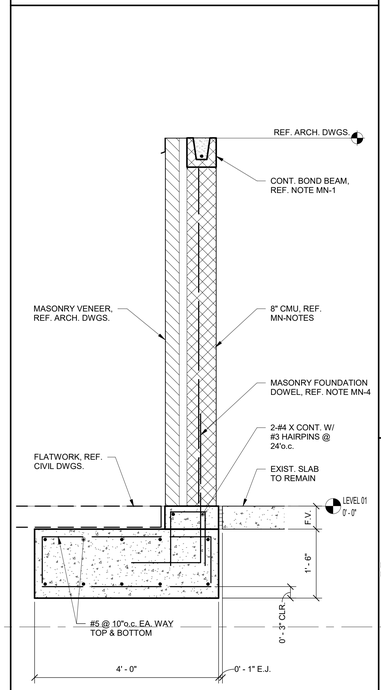
ISSUE FOR CONSTRUCTION



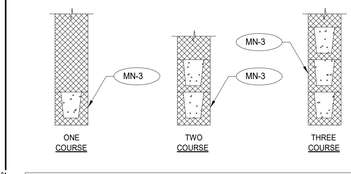
MECHANICAL YARD FOUNDATION PLAN
SCALE : 1/4" = 1'-0"



5 SECTION
3/4" = 1'-0"



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



CMU LINTEL SCHEDULE

SIZE	CLEAR OPENING		REMARKS
	GREATER THAN	UP TO	
ONE COURSE	-	4'-0"	8" BEARING @ EA. END
TWO COURSE	4'-0"	8'-6"	8" BEARING @ EA. END
THREE COURSE	8'-6"	14'-0"	8" BEARING @ EA. END

MASONRY WALL REINFORCEMENT:

MN-1 PROVIDE GROUTED REINFORCED VERTICAL CELLS AND HORIZONTAL BOND BEAMS AT WALL TOP EDGES, CORNERS, FREE ENDS, WINDOW AND DOOR JAMBS, LINTELS AND OTHER LOCATIONS WHERE SHOWN ON ARCHITECTURAL DRAWINGS. REINFORCE EACH GROUTED CELL AND BOND BEAM WITH 1-#4 BAR CONTINUOUS (REINFORCE LINTELS AS SPECIFIED BELOW).

MN-2 BASIC VERTICAL REINFORCEMENT FOR EXTERIOR WALLS SHALL BE #4 @ 32"o.c. (EVERY 4th VERTICAL CELL).

MN-3 PROVIDE GROUTED REINFORCED LINTELS WITH 8" BEARING EACH END OF ALL DOORS, WINDOWS, AND OTHER OPENINGS. USE ONE-COURSE LINTELS FOR OPENINGS UP TO 4'-0"; TWO-COURSE LINTELS FOR OPENINGS UP TO 8'-6"; THREE-COURSE LINTELS FOR OPENINGS UP TO 14'-0". REINFORCE EACH COURSE WITH 2-#5 BAR CONTINUOUS.

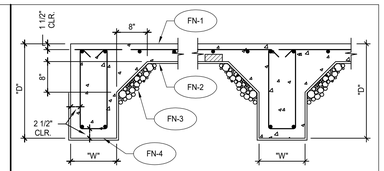
MN-4 PROVIDE MATCHING DOWELS IN FOUNDATION FOR ALL VERTICAL REINFORCEMENT.

MN-5 CMU SHALL HAVE A UNIT STRENGTH OF 1,900 PSI. USE TYPE S MORTAR. REINFORCED CMU SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF f'm=1,500 PSI. GROUT FOR FILLED CELLS SHALL BE MADE OF CEMENT, SAND AND PEA GRAVEL IN APPROXIMATE RATIO OF 1:3:2 AND SHALL HAVE 28-DAY COMPRESSIVE STRENGTH OF 2,500 PSI.

MN-6 ANCHOR MASONRY TO STRUCTURE AS SHOWN IN DETAILS. SEE SPECIFICATIONS FOR ORDINARY MASONRY ANCHORS INCLUDING DOVETAIL ANCHOR SLOTS IN ADJACENT CONCRETE MEMBERS.

MN-7 LEVEL 1 INSPECTED MASONRY REQUIRES CONTRACTOR TO SUBMIT, AT CONTRACTORS COST, COMPRESSIVE WALL DESIGN STRENGTH (f'm) VERIFIED BY INDEPENDENT TESTING LAB BY PRISM TESTS BEFORE MASONRY CONSTRUCTION BEGINS. PROVIDE UNIT MASONRY STRENGTH, GROUT MIX DESIGN AND MORTAR MIX DESIGN.

4 DETAIL
N.T.S.



1 SECTION
3/4" = 1'-0"

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

GRADE BEAM SCHEDULE

MARK	W x D*	MAIN REINFORCING	TIES
GB1	12 x 24"	2-#6 x CONT. TOP & BOTTOM	#3 @ 24"o.c.
GB2	18 x 24"	3-#6 x CONT. TOP & BOTTOM	#3 @ 24"o.c.

* REF. NOTE FN-4

FOUNDATION NOTES:

FN-1 5" CONCRETE SLAB REINFORCED W/ #4 @ 12"o.c. EACH WAY IN TOP. SUPPORT AT 4'-0"o.c. EACH WAY WITH CONCRETE BLOCKS OR BRICKS. SUPPORT BOTTOM BEAM REINFORCEMENT AT 4'-0" INTERVALS.

FN-2 15 MIL. POLYOLEFIN VAPOR RETARDER UNLESS NOTES OTHERWISE IN SPECIFICATIONS. AT ALL JOINTS PROVIDE 6" LAPS W/ 4" TAPE.

FN-3 COMPACTED SELECT FILL (SEE UF-6 "UNDERFLOOR FILL NOTES").

FN-4 ALL BEAM SOFFITS SHALL BEAR 24" MINIMUM INTO NATURAL GRADE OR COMPACTED FILL. ON PERIMETER, INCREASE SCHEDULED BEAM DEPTH AS REQUIRED FOR SOFFIT TO BEAR 24" MINIMUM BELOW FINISH GRADE, REF GEOTECHNICAL REPORT. ALL PERIMETER GRADE BEAMS SHALL BEAR ON LIMESTONE

FN-5 GRADE BEAMS AND SLAB TURNDOWNS SHALL BE FORMED BY WALLS AND SOFFIT OF CAREFULLY SHAPED TRENCH. USE A SMOOTH-MOUTHED BUCKET. IF A TOOTHED BUCKET IS USED, EXCAVATION SHALL BE STOPPED 6" ABOVE FINAL GRADE AND THE REMAINING EXCAVATION ACCOMPLISHED WITH A SMOOTH MOUTHED BUCKET OR BY HAND LABOR TO REMOVE ALL LOOSE SOILS DISTURBED BY THE BUCKET TEETH. WOODFORM EXPOSED FACES TO A DEPTH OF 8" BELOW FINISHED GRADE.

FN-6 AT ALL BEAM CORNERS & T-INTERSECTIONS, PROVIDE 4-#7 X 6'-0" CORNER BARS (2-TOP AND 2-BOTTOM).

FN-7 TRENCHES SHALL BE VERIFIED FOR SIZE TO MAINTAIN CLEARANCES AROUND REINFORCEMENT PRIOR TO PLACING REINFORCEMENT.

FN-8 WHERE BEAM DEPTH EXCEEDS 36", ADD #4 @ 12"o.c. IN EACH FACE OF BEAM.

UNDERFLOOR FILL NOTES:

UF-1 BEFORE ANY CONSTRUCTION IS BEGUN, PERFORM ROUGH GRADING AND CUT SWALES SO THAT GROUNDS WILL DRAIN AWAY FROM THE BUILDING. MAINTAIN DRAINAGE DURING ALL PHASES OF CONSTRUCTION SO THAT STORM WATER WILL BE CONDUCTED AWAY FROM THE BUILDING. KEEP EXCAVATIONS PUMPED FREE OF STORM WATER AT ALL TIMES.

UF-2 PRECAUTIONS SHALL BE TAKEN TO PROTECT OPEN EXCAVATIONS FROM EXCESSIVE LOSS OR GAIN IN NATURAL MOISTURE LEVEL PRIOR TO PLACEMENT OF BASE MATERIAL. KEEP MOIST DURING DRY WEATHER AND KEEP STORM WATER PUMPED OUT, INCLUDING NIGHTS AND WEEKENDS, DURING RAINS.

UF-3 IN THE AREA OCCUPIED BY THE FOUNDATION AND ALL ADJACENT SIDEWALKS, PLUS 3'-0", REMOVE A MINIMUM OF 7'-0" OF TOPSOIL INCLUDING ALL ORGANIC MATERIALS, ROOTS, ETC. FROM THE SITE. DO NOT USE FOR UNDERFLOOR FILL. REMOVE ADDITIONAL MATERIAL AS NECESSARY TO PROVIDE A MINIMUM OF 7'-0" OF SELECT FILL AS PER UF-6.

UF-4 THE RESULTING SURFACE SHALL BE PROOF ROLLED WITH A SUFFICIENTLY HEAVY ROLLER (15 TONS) TO LOCATE AND DENSITY WEAK AND COMPRESSIBLE ZONES. A MINIMUM OF 6 PASSES OF THE ROLLER IS REQUIRED. ANY SOFT SPOTS SHALL BE REMOVED AND REPLACED WITH COMPACTED SELECT FILL.

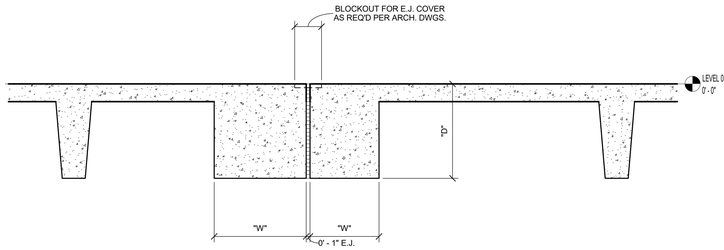
UF-5 THE ROLLED SUBGRADE SHALL BE SCARIFIED JUST PRIOR TO FILL PLACEMENT TO A MINIMUM DEPTH OF 6" AND RECOMPACTED TO MINIMUM OF 95% OF THE MAXIMUM DENSITY DETERMINED BY ASTM D698 COMPACTION TEST, MAINTAINING MOISTURE CONTENT BETWEEN -1 AND +3 PERCENTAGE POINTS UNTIL COVERED.

UF-6 FOR A DISTANCE OF 3'-0" OUTSIDE OF THE BUILDING LINE AND ALL ADJACENT SIDEWALKS, AND BEGINNING AT THE LOW END, BUILD UP TO THE ELEVATION OF THE BOTTOM OF THE SLAB WITH SELECT CRUSHED STONE FILL CONFORMING TO TxDOT SPECIFICATIONS, ITEM 247, TYPE "A" GRADE 2. A MINIMUM THICKNESS OF 7'-0" IS REQUIRED. NO DIRT FILL SHALL BE USED UNDER THE BUILDING FOUNDATION. SUBMIT WRITTEN CERTIFICATION OF COMPLIANCE WITH TxDOT, ITEM 247 SPECIFICATIONS BY TEST PERFORMED ON FIELD EXAMPLES.

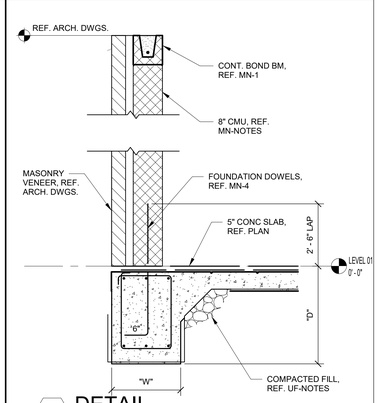
UF-7 ALL FILL SHALL BE PLACED IN 8" LOOSE HORIZONTAL LIFTS AND COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DENSITY AS DETERMINED BY ASTM D698 COMPACTION TEST, MAINTAINING MOISTURE CONTENT BETWEEN -1 AND +3 PERCENTAGE POINTS UNTIL COVERED. EXCESS FILL AT BUILDING PERIMETER SHALL BE CUT AND GRADED TO COMPLY WITH FINISHED GRADE REQUIREMENTS, AND SHALL BE OVERLAID WITH A 1'-0" THICK LAYER OF IMPERVIOUS CLAY FOR A MINIMUM DISTANCE OF 5'-0" FROM BUILDING LINE. REFER TO DETAIL ?/?.

UF-8 PERFORM ALL EARTH WORK DESCRIBED ABOVE BEFORE TRENCHING FOR GRADE BEAMS OR MECHANICAL LINES.

UF-9 REFERENCE GEOTECHNICAL REPORT BY: ? PROJECT No. ?, DATED ?.



7 SECTION
3/4" = 1'-0"



3 DETAIL
N.T.S.

LA PROJECT NO.: 03-15-00
LA FILE NO.: WFAC - Blackbox Addition Structural R23

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WFAC Black Box Addition PKG 1
1801 Martin Luther King Dr.,
San Antonio, TX. 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

DATE: 05/12/2024
STATE OF TEXAS
SHAWN J. FRANKE
82639
LICENSED PROFESSIONAL ENGINEER

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/05/23	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

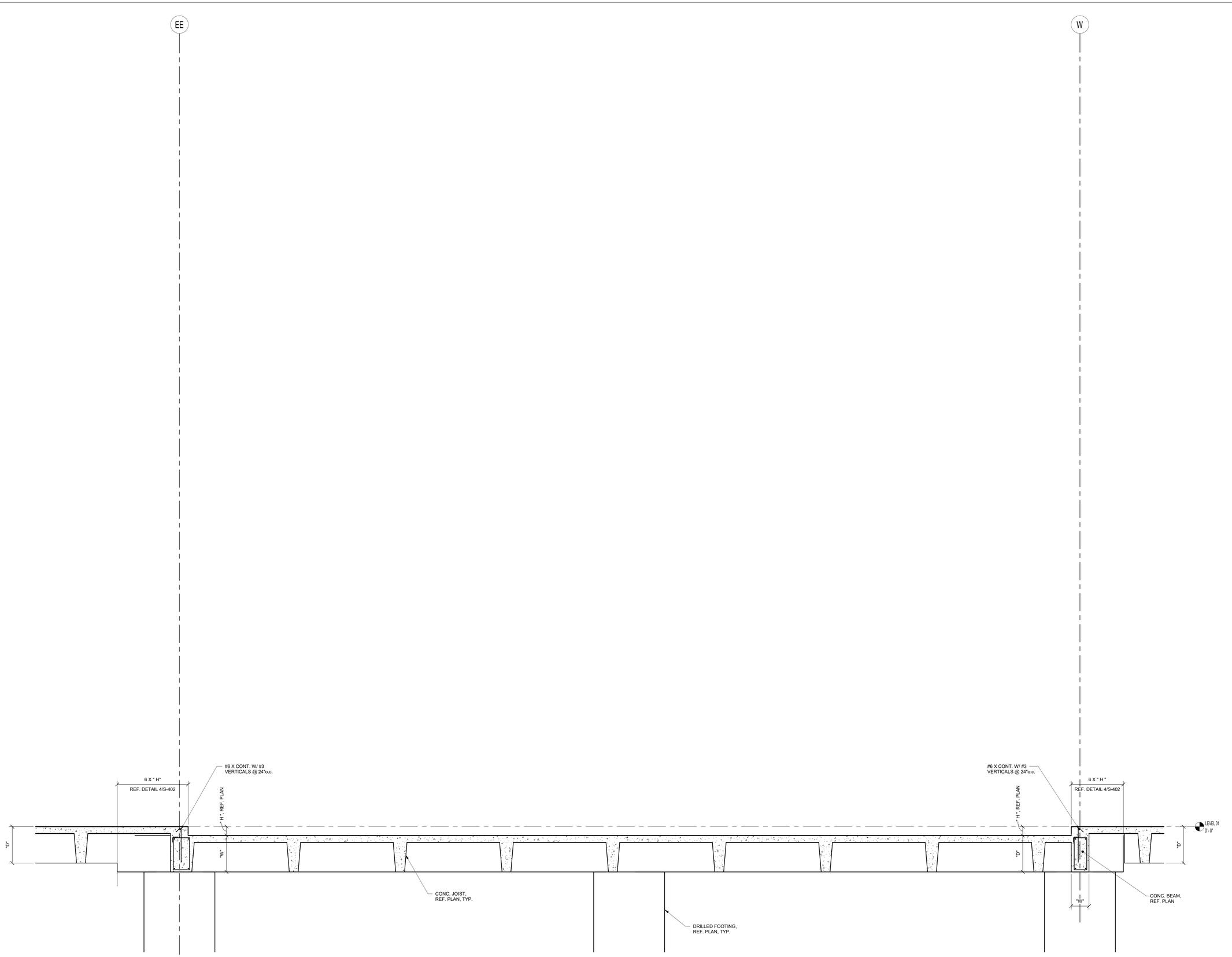
BUILDING NUMBER AB

SECTIONS, DETAILS & MECH. YARD FOUNDATION

S-301

0"
1"

ISSUE FOR CONSTRUCTION



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

LA PROJECT NO.: 03-415-00
LA FILE NO.: WFAC - Blackbox Addition_Structural R23

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WFAC Black Box Addition PKG 1

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ST. PHILIP'S COLLEGE

KEY PLAN
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DATE: 05/12/2024

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DATE	PROJECT NUMBER
2024/05/23	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER AB

SECTION

S-302

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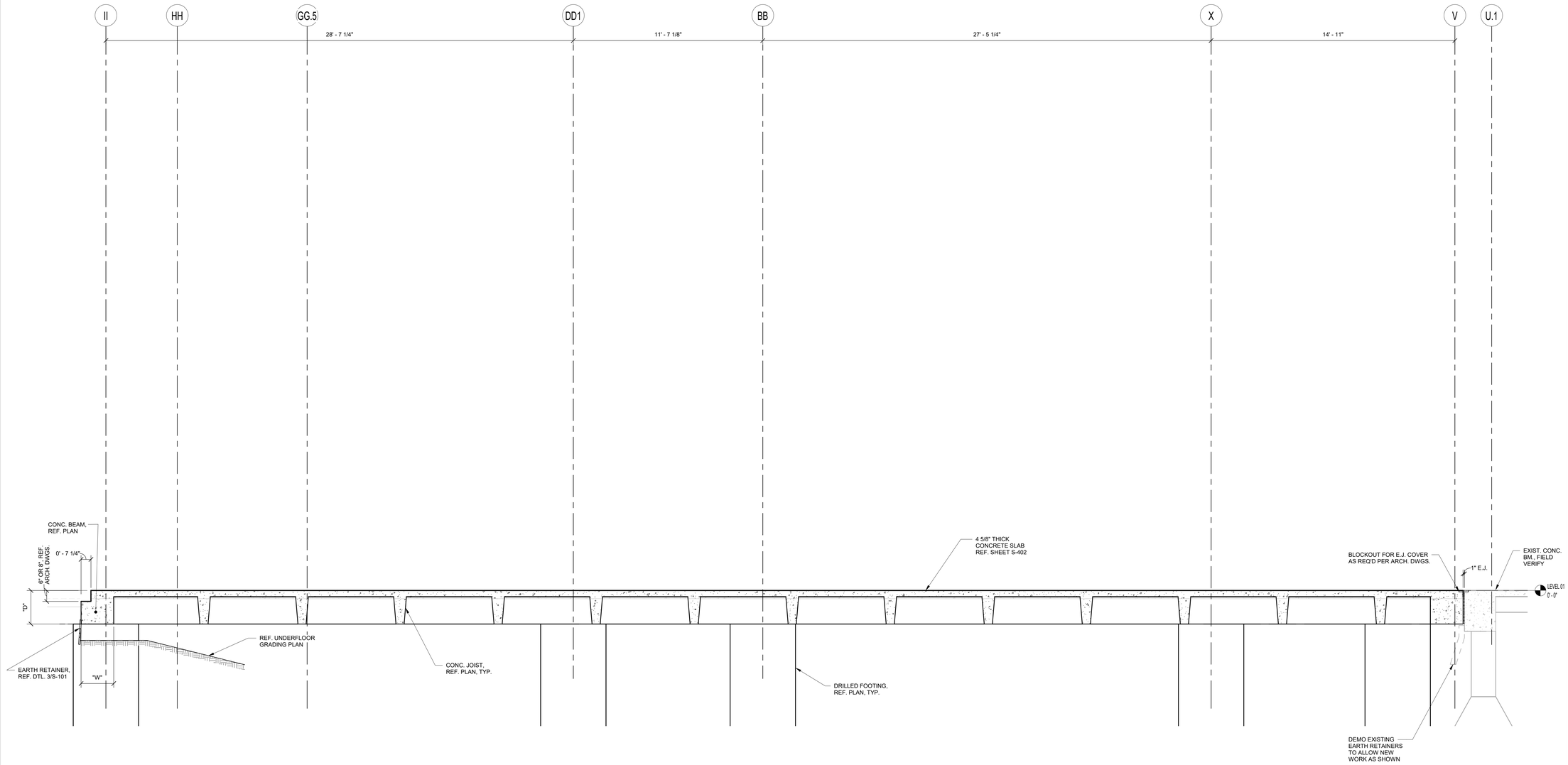

1 SECTION
3/8" = 1'-0"

LA PROJECT NO.: 03-515-00
LA FILE NO.: WFAC -xBlackbox Addition Structural R23

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WFAC Black Box Addition PKG 1

1801 Martin Luther King Dr.,
San Antonio, TX, 78203

ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
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Alamo Colleges

DATE	PROJECT NUMBER
2024/05/23	230462

DRAWING HISTORY

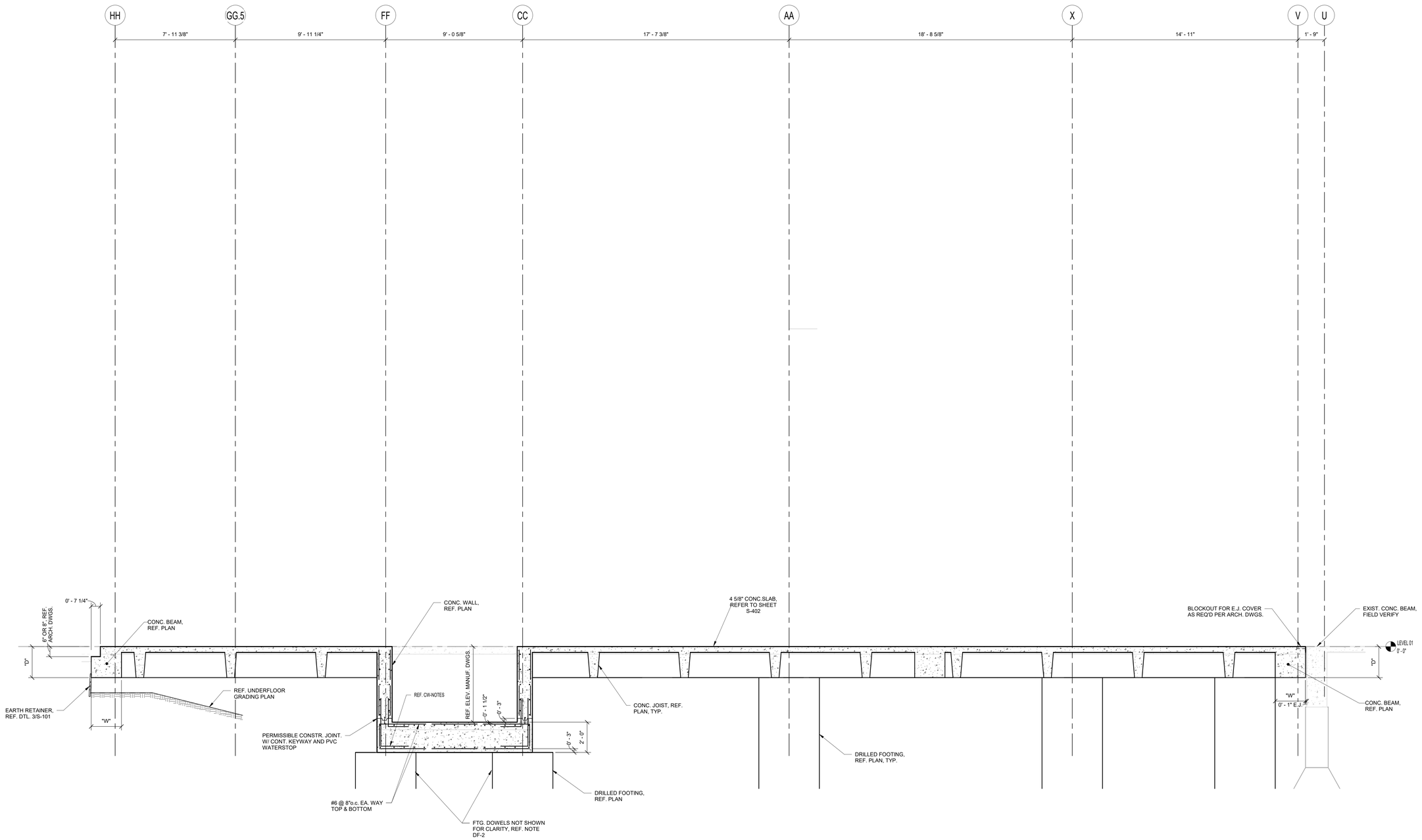
No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER AB

SECTION

S-303



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3/8" = 1'-0"

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WFAC Black Box Addition PKG 1

1801 Martin Luther King Dr.,
San Antonio, TX, 78203

ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

DATE: 06/12/2024
STATE OF TEXAS
SHAWN J. FRANKE
82639
LICENSED PROFESSIONAL ENGINEER

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/05/23	230462

DRAWING HISTORY

No.	Description	Date

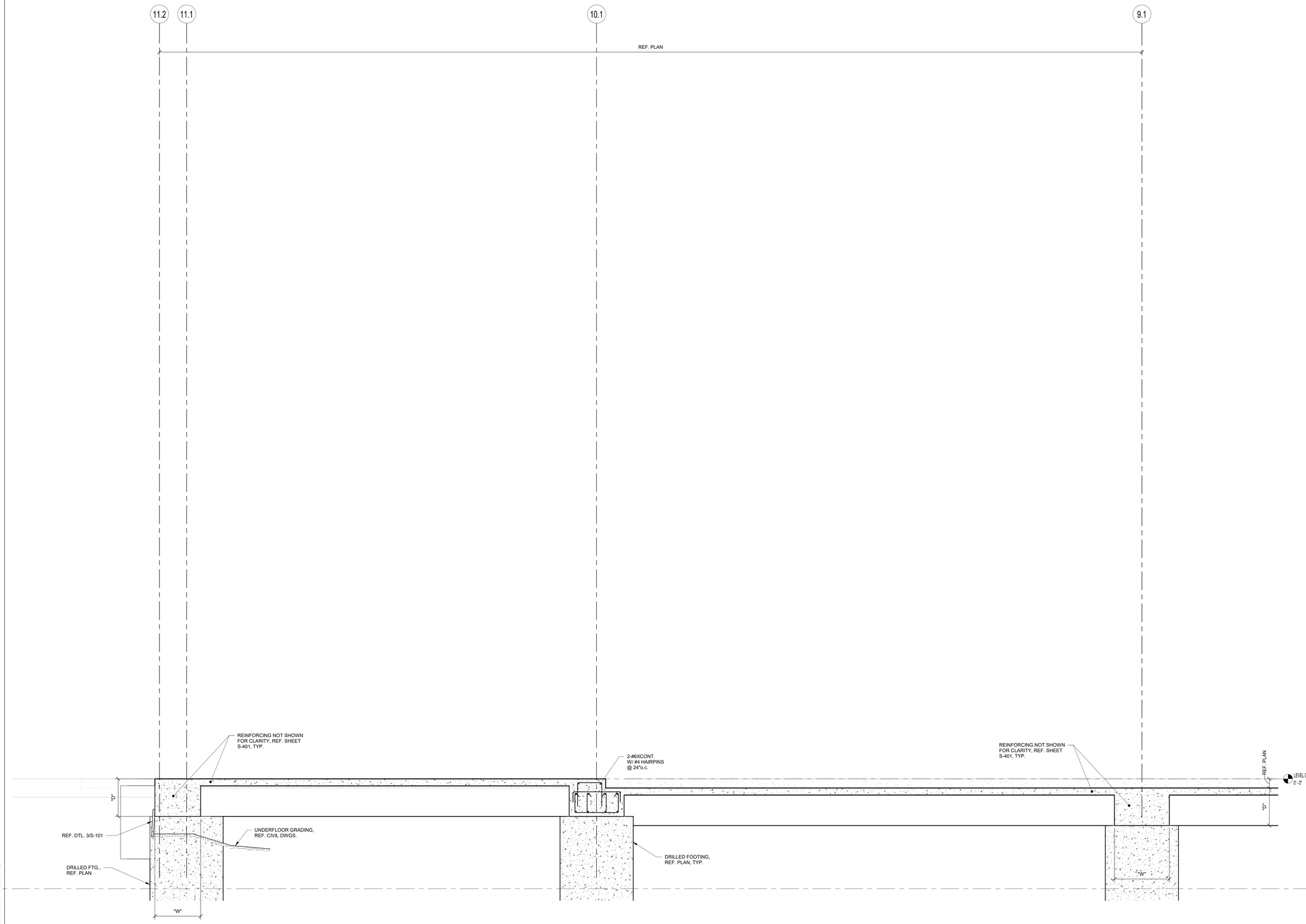
ISSUE FOR CONSTRUCTION

BUILDING NUMBER AB

SECTION

S-304

ISSUE FOR CONSTRUCTION



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

LA PROJECT NO.: 03-515-00
LA FILE NO.: WFAC -xBlackbox Addition Structural R23

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DATE	PROJECT NUMBER
2024/05/23	230462

DRAWING HISTORY

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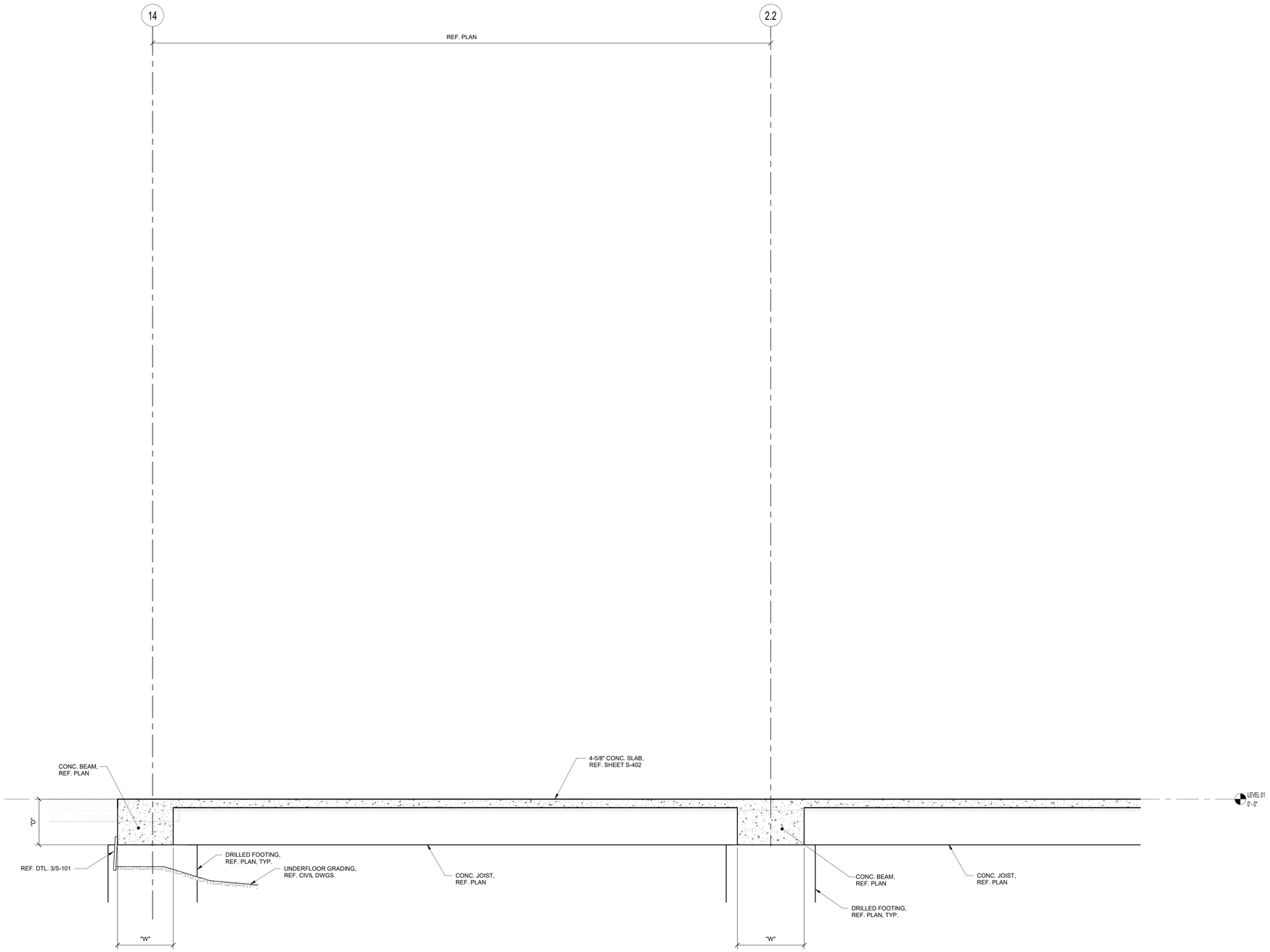
ISSUE FOR CONSTRUCTION

BUILDING NUMBER AB

SECTION

S-305

ISSUE FOR CONSTRUCTION



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

LA PROJECT NO.: 03-515-00
LA FILE NO.: WFAC -xBlackbox Addition Structural R23

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WFAC Black Box Addition PKG 1

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ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
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DATE: 06/12/2024
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DATE	PROJECT NUMBER
2024/05/23	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER AB

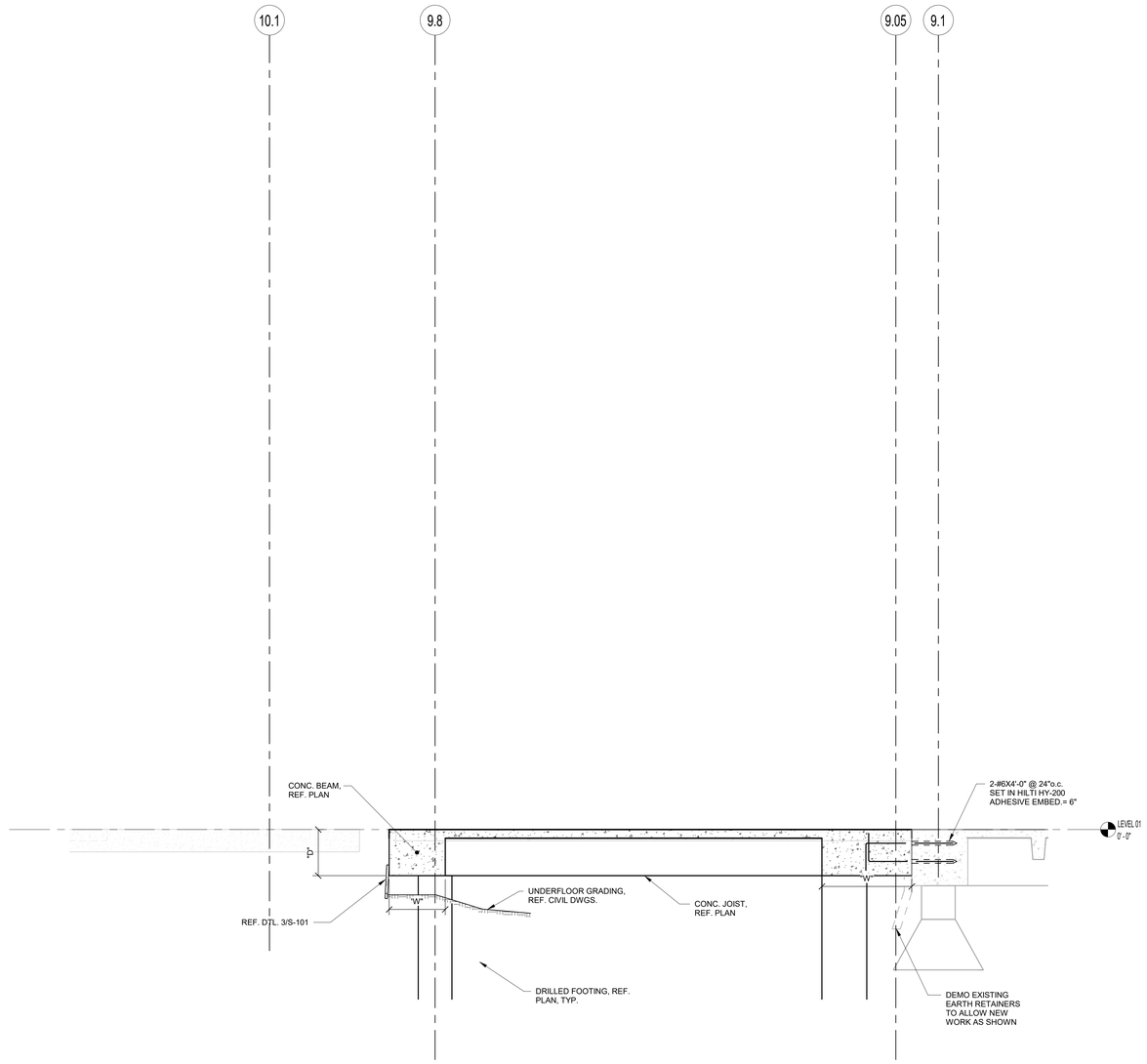
SECTION

S-306

0"

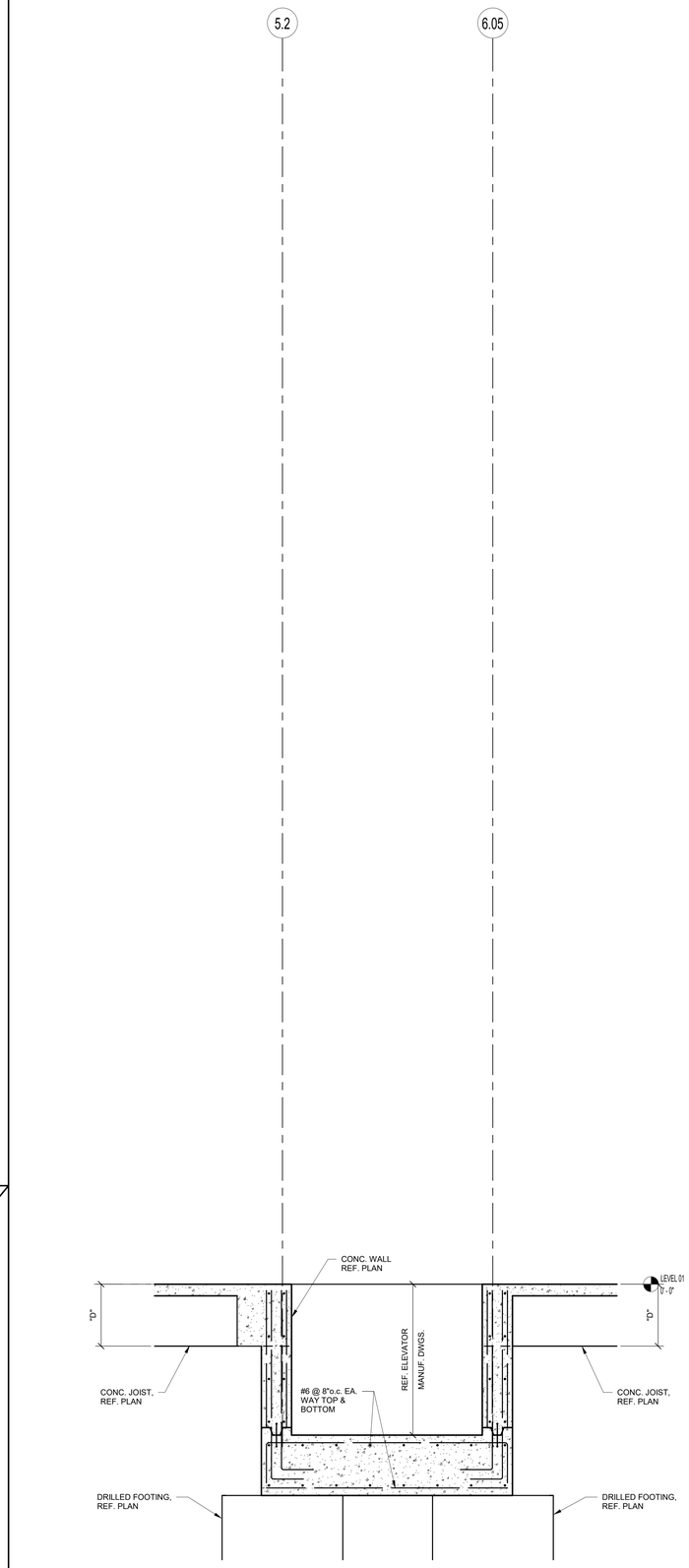
1"

ISSUE FOR CONSTRUCTION



2 SECTION
3/8" = 1'-0"

NOT USED



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

LA PROJECT NO.: 03-515-00
LA FILE NO.: WFAC-Blackbox Addition Structural R23

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WFAC Black Box Addition PKG 1

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ALAMO COLLEGES
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KEY PLAN
NORTH: PLAN TRUE

DATE: 05/17/2024
STATE OF TEXAS
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DATE	PROJECT NUMBER
2024/05/23	230462

DRAWING HISTORY

No.	Description	Date

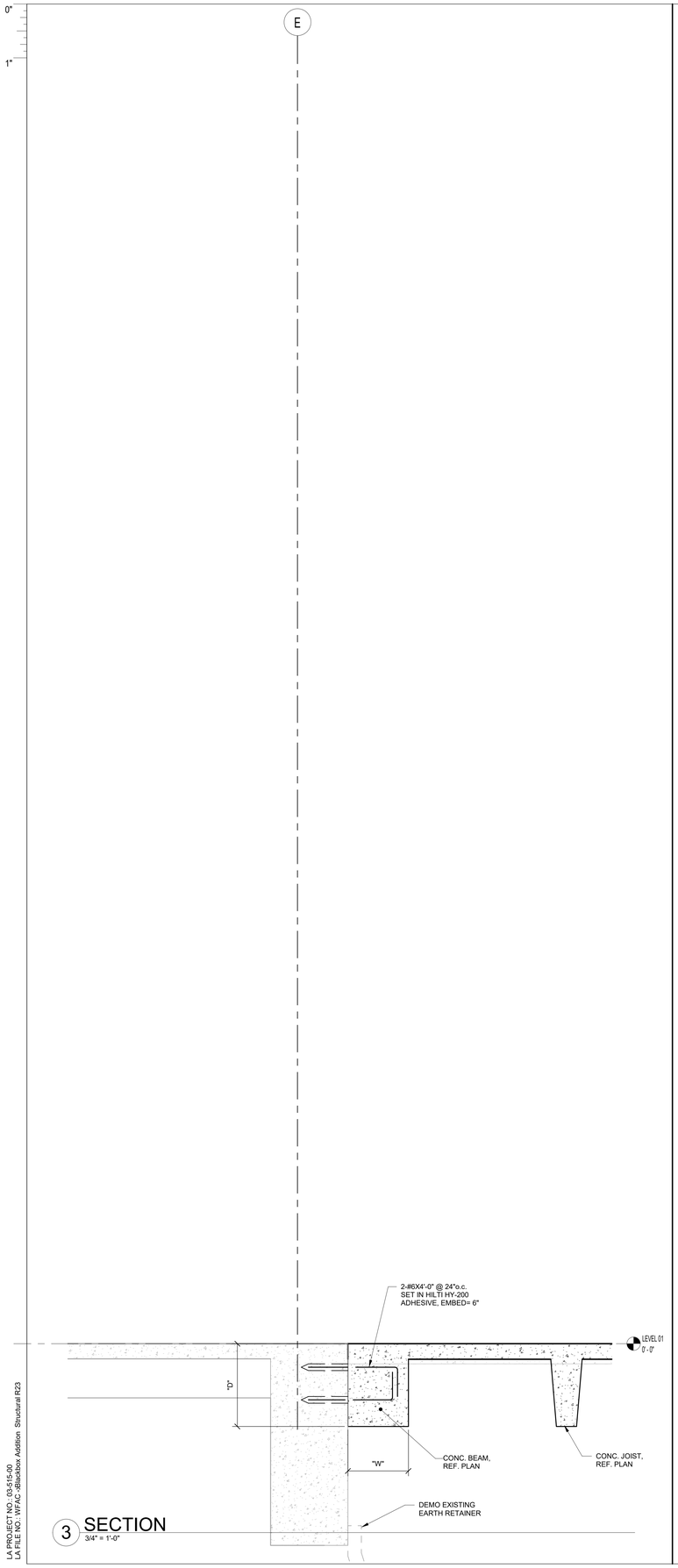
ISSUE FOR CONSTRUCTION

BUILDING NUMBER AB

SECTIONS

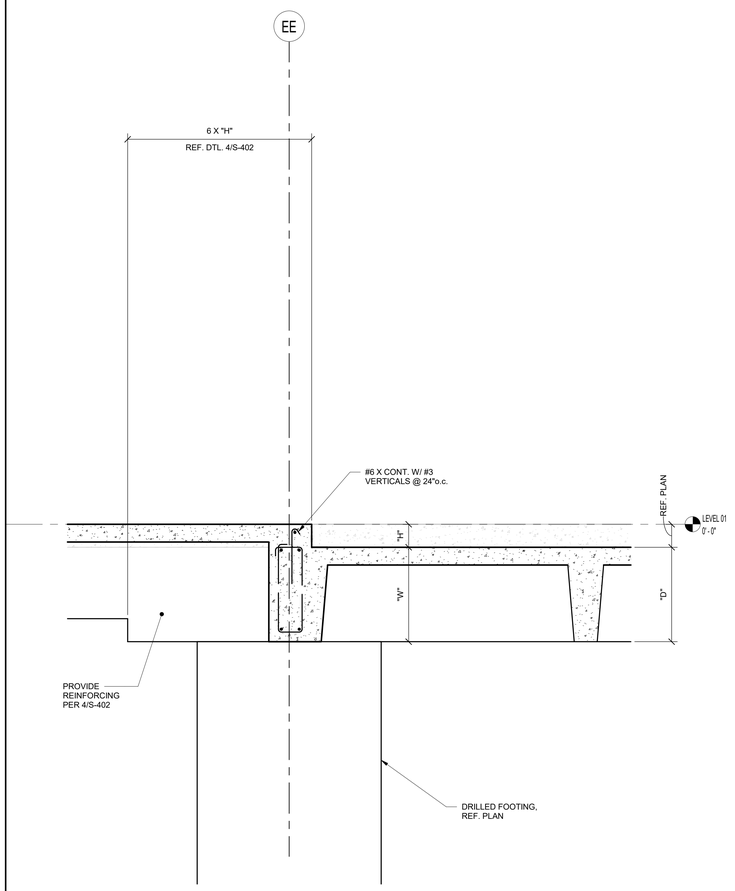
S-307

ISSUE FOR CONSTRUCTION



3 SECTION
3/4" = 1'-0"

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



1 SECTION
3/4" = 1'-0"

LA PROJECT NO.: 03-515-00
LA FILE NO.: WFAC -Blackbox Addition Structural R23

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WFAC Black Box Addition PKG 1

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KEY PLAN
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DATE: 06/12/2024
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Alamo Colleges

DATE	PROJECT NUMBER
2024/05/23	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER AB

SECTIONS

S-308

ISSUE FOR CONSTRUCTION

3 SECTION
3/4" = 1'-0"

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

1 SECTION
3/4" = 1'-0"

LA PROJECT NO.: 03-515-00
LA FILE NO.: WFAC -xBlackbox Addition Structural R23

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ALAMO COLLEGES
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DATE	PROJECT NUMBER
2024/05/23	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER AB

SECTIONS & DETAILS

S-309

CONCRETE WALL NOTES:

CW-1 UNLESS SHOWN OTHERWISE, AT CORNERS, ANGLE BENDS, AND AT JUNCTION WITH OTHER WALLS, LAP ALL HORIZONTAL BARS PER REINFORCING BAR LAP SCHEDULE.

CW-2 UNLESS SHOWN OTHERWISE, WHERE WALLS STOP, POSITION TWO (2) OF THE WALL VERTICAL BARS AT THE END OF THE WALL; PROVIDED THAT VERTICAL BARS ARE #6 OF LARGER. IF WALL VERTICAL BARS ARE SMALLER THAT #6, USE 2-#6 AT WALL VERTICAL BARS. PROVIDE #4 U-BARS (60 DIAMETER LAPS) ENCLOSING VERTICAL BARS AT END FACES, SAME SPACING AS HORIZONTAL BARS.

CW-3 UNLESS SHOWN OTHERWISE, ADD 2-#6 BARS IN EACH FACE OVER OPENING, EXTENDING 60 DIAMETERS BEYOND LIMITS OF OPENING, AND ADD 2-#5X5-0" PLACED DIAGONALLY AT EACH CORNER OF OPENING. PROVIDE #4 U-BARS (60 DIAMETERS LAPS) AT END FACES FOR EACH BAR (HORIZONTAL OR VERTICAL) INTERRUPTED BY OPENING. U-BARS SHALL ENCLOSE HORIZONTAL OR VERTICAL BARS AT OPENING. NOTIFY A/E PRIOR TO FABRICATION AND CONSTRUCTION FOR OPENINGS LARGER THAN 2'-0"X2'-0".

CW-4 UNLESS SHOWN OTHERWISE, USING REINFORCING BAR LAP SCHEDULE LAP WALL DOWELS FROM BEAM OR FOOTING TO MATCH THE SIZE AND SPACING OF ALL VERTICAL BARS IN WALL ABOVE; EXTEND INTO WALL USING REINFORCING BAR LAP SCHEDULE . AT CONSTRUCTION JOINTS, EITHER CONTINUE ALL VERTICAL BARS PROVIDE LAPS OF ALL VERTICAL BARS INTO WALL ABOVE USING REINFORCING BAR LAP SCHEDULE.

CONCRETE WALL SCHEDULE

MK	THICKNESS	VERTICAL BARS		HORIZONTAL BARS		CONCRETE STRENGTH	REMARKS
		I.S. FACE	O.S. FACE	I.S. FACE	O.S. FACE		
CW-1	12"	#5 @ 10"o.c.	#5 @ 10"o.c.	#4 @ 12"o.c.	#4 @ 12"o.c.	4000PSI	REF. CW-NOTES

1st FLOOR CONCRETE BEAM SCHEDULE

MARK	SIZE			MAIN REINFORCING							STIRRUPS			REMARKS
				TOP BARS		BOTTOM BARS		TOP BARS AT SUPPORT					SPACING AT EACH END OF BEAM	
	W	D	SECT.	REINF.	TYP.	REINF.	TYP.	REINF.	TYP.	SUPP.	SIZE	TYPE		
B1	30	24 5/8		4-#8	T1	3-#8 3-#8	B1 B8	-	-	-	#4		1 @ 2, 8 @ 10 BAL @ 24"o.c.	
B2	30	24 5/8		4-#8	T1	3-#8 3-#8	B1 B8	-	-	-	#4		1 @ 2, 8 @ 10 BAL @ 24"o.c.	
B3	30	24 5/8		4-#6	T2	3-#8 3-#8	B6 B7	-	-	-	#4		1 @ 2, 10 @ 10 BAL @ 24"o.c.	
B4	30	24 5/8		4-#6	T3	3-#8 3-#8	B3 B4	-	-	-	#4		1 @ 2, 10 @ 10 BAL @ 24"o.c.	
B5	30	24 5/8		4-#6	T3	3-#8 3-#8	B3 B4	-	-	-	#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B6	30	24 5/8		4-#6	T2	3-#8 3-#8	B6 B7	-	-	-	#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B7	48	24 5/8		4-#9	T2	3-#9 3-#9	B6 B7	-	-	-	#4		1 @ 2, 15 @ 10 BAL @ 24"o.c.	
B8	48	24 5/8		4-#9	T3	3-#9 3-#9	B3 B4	-	-	-	#4		1 @ 2, 15 @ 10 BAL @ 24"o.c.	
B9	48	24 5/8		4-#9	T3	3-#9 3-#9	B3 B4	-	-	-	#4		1 @ 2, 15 @ 10 BAL @ 24"o.c.	
B10	48	24 5/8		4-#9	T2	3-#9 3-#9	B6 B7	-	-	-	#4		1 @ 2, 10 @ 10 BAL @ 24"o.c.	EXTEND HOOK END INTO CANT.
B11	48	24 5/8		4-#9	T6	3-#9 3-#9	B3 B4				#4		1 @ 2, 10 @ 10 BAL @ 24"o.c.	CANTILEVER
B12	48	24 5/8		4-#9	T2	3-#9 3-#9	B6 B7				#4		1 @ 2, 10 @ 10 BAL @ 24"o.c.	
B13	48	24 5/8		4-#9	T2	3-#9 3-#9	B6 B7				#4		1 @ 2, 12 @ 10 BAL @ 24"o.c.	
B14	48	24 5/8		4-#9	T3	3-#9 3-#9	B3 B4				#4		1 @ 2, 12 @ 10 BAL @ 24"o.c.	
B15	48	24 5/8		4-#9	T3	3-#9 3-#9	B1 B8				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B16	48	24 5/8		4-#9	T2	3-#9 3-#9	B1 B8				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B17	48	24 5/8		4-#9	T3	3-#9 3-#9	B3 B4				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B18	48	24 5/8		4-#9	T3	3-#9 3-#9	B3 B4				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B19	48	24 5		4-#9	T1	3-#9 3-#9	B1 B8				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	CANTILEVER
B20	48	24 5/8		4-#9	T3	3-#9 3-#9	B3 B4				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B21	48	24 5/8		4-#9	T2	3-#9 3-#9	B6 B7				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B22	30	24 5/8		4-#7	T2	3-#8 3-#8	B6 B7				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B23	30	24 5/8		4-#7	T3	3-#8 3-#8	B3 B4				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B24	30	24 5/8		4-#7	T3	3-#8 3-#8	B3 B4				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B25	24	24 5/8		4-#6	T2	3-#8 3-#8	B6 B7				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B26	24	24 5/8		4-#6	T3	3-#8 3-#8	B3 B4				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B27	24	24 5/8		4-#6	T3	3-#8 3-#8	B3 B4				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B28	12	24 5/8		2-#6	T2	2-#8	B6				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B29	12	24 5/8		2-#6	T3	2-#8	B3				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B30	30	24 5/8		4-#6	T1	3-#8 3-#8	B1 B8				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B31	30	24 5/8		4-#6	T2	3-#8 3-#8	B6 B7				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	EXTEND HOOK END INTO CANT.
B32	30	24 5/8		4-#6	T3	3-#8 3-#8	B3 B4				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B33	30	24 5/8		4-#6	T6	4-#8	B5				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	CANTILEVER
B34	24	24 5/8		4-#6	T1	2-#8 2-#8	B1 B8				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B35	48	24 5/8		4-#6	T1	3-#8 3-#8	B1 B8				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B36	24	24 5/8		4-#6	T1	2-#8 2-#8	B1 B8				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B37	24	24 5/8		4-#6	T1	2-#8 2-#8	B1 B8				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B38	48	24 5/8		4-#7	T2	3-#8 3-#8	B6 B7				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	
B39	48	24 5/8		4-#7	T3	3-#8 3-#8	B3 B4				#4		1 @ 2, 6 @ 10 BAL @ 24"o.c.	

REINFORCING PLACEMENT NOTES:

RP-1 WHERE BAR TYPES T2 AND T3 LAP OVER SUPPORTS, BUNDLE VERTICALLY TO PREVENT CONGESTION. IF BAR TYPE T4 ARE ALSO SCHEDULED, USE #5 SUPPORT BARS TO HOLD THEM NEAR MIDDLE OF STIRRUP WIDTH AS SHOWN IN DIAGRAM RP-1.

RP-2 FABRICATE OFFSET BENDS IN MAIN REINFORCING BARS FOR FLOOR DROPS, OFFSET BEAM FACES, BRICK LUG VARIATIONS, ETC. SHOP BEND BARS ON A 1:6 SLOPE AND MODIFY STIRRUP SHAPE ACCORDINGLY.

RP-3 UNLESS NOTED OTHERWISE, REBARS SHALL HAVE CONCRETE COVER AS FOLLOWS: STIRRUPS AND TIES = 1-1/2" AND SLABS = 3/4".

RP-4 WHERE BEAM DEPTHS EXCEED 36", PROVIDE ADDITIONAL CONTINUOUS #4 HORIZONTAL BARS IN EACH FACE SPACED NOT MORE THAN 16"o.c.

RP-5 BARS NOTED IN SCHEDULE AS "CONT." SHALL BE FULLY CONTINUOUS USING STOCK LENGTH STEEL AND RANDOM SPLICES OF 40 BAR DIAMETERS.

RP-6 DISTANCE "X" SHALL BE THE LARGEST DISTANCE BETWEEN SUPPORTS OF THE SPANS L1, L2 OR L3 AND SHALL BE MADE THE SAME AMOUNT AT THE LEFT AND RIGHT ENDS SO THAT BARS ARE PLACED SYMMETRICALLY IN THE SPAN.

RP-7 SLEEVES THROUGH BEAMS SHALL HAVE INDIVIDUAL APPROVAL OF THE ENGINEER AND MAY REQUIRE AN INCREASE IN BEAM SIZE.

* WIDTH OF PIER, COLUMN OR BEAM WHICHEVER IS GREATEST

BEAM REINFORCING BAR PLACEMENT

* X = LARGER OF SPANS L1, L2 OR L3 SEE NOTE RP-6 FOR EXPLANATION

REINFORCING BAR TYPES

ISSUE FOR CONSTRUCTION

LA PROJECT NO.: 03-515-00
LA FILE NO.: WFAC -Blackbox Addition Structural R23

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WFAC Black Box Addition PKG 1

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ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

DATE: 06/12/2024

CLIENT	
Alamo Colleges	
DATE 2024/05/23	PROJECT NUMBER 230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER AB

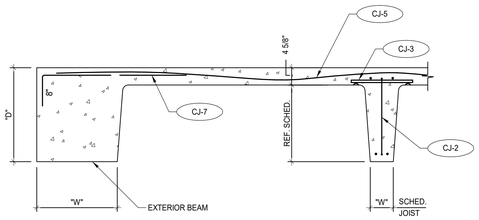
CONC. BEAM SCHED & NOTES

S-401

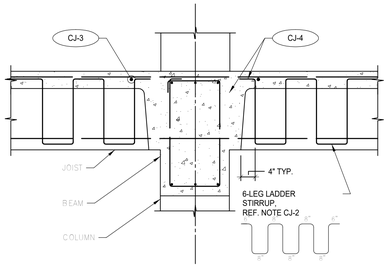
ISSUE FOR CONSTRUCTION

1st FLOOR CONCRETE JOIST SCHEDULE

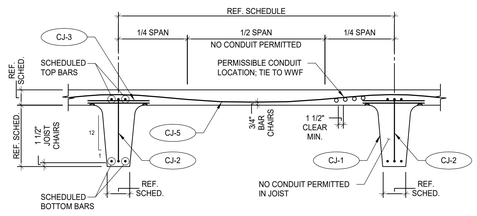
MARK	SIZE				MAIN REINFORCING							STIRRUPS			REMARKS
					TOP BARS		BOTTOM BARS		TOP BARS AT SUPPORT						
	W	D	SECT.	SPCG.	REINF.	TYP.	REINF.	TYP.	REINF.	TYP.	SUPP.	SIZE	NO. LEGS	SPACING AT EACH END OF JOIST	
J1	6	20 +4 5/8		6'-0"	2-#6	T2	1-#8 1-#8	B6 B7	-	-	-	#4	10	11" O.C.	
J2	6	20 +4 5/8		6'-0"	1-#8	T3	1-#8 1-#8	B3 B4	-	-	-	#4	10	11" O.C.	
J3	6	20 +4 5/8		6'-0"	1-#6	T1	1-#6 1-#6	B1 B8	-	-	-	#4	8	11" O.C.	



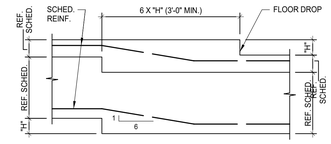
5 DETAIL — TYP. SECT. @ REINF. BM.
SCALE: 3/4" = 1'-0"



6 DETAIL — TYP. SECT. @ INT. BM.
SCALE: 3/4" = 1'-0"

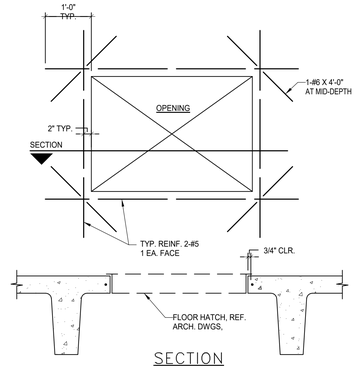


7 DETAIL — TYP. ALLOWABLE CONDUIT PLACEMENT
SCALE: 3/4" = 1'-0"



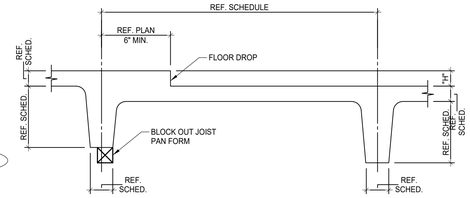
DROPS LESS THAN 6"

1 DETAIL — TYP. REINF. @ SLAB DROP
SCALE: 3/4" = 1'-0"



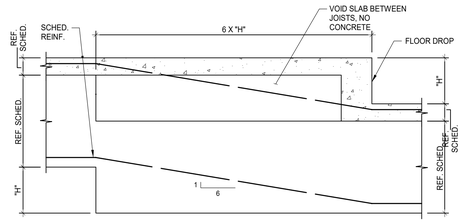
SECTION

2 DETAIL — TYP. SLAB REINF. @ ACCESS HATCH
SCALE: 3/4" = 1'-0"



DROPS LESS THAN 6"

3 DETAIL — TYP. SLAB SECT. @ FLR. DROP
SCALE: 3/4" = 1'-0"



DROPS 6" OR GREATER

4 DETAIL — TYP. REINF. @ SLAB DROP
SCALE: 3/4" = 1'-0"

CONCRETE JOIST NOTES:

CJ-1 STEEL PAN-JOIST FORMS SHALL BE SPACED SO THAT JOISTS IN ADJACENT SPANS ARE IN EXACT ALIGNMENT UNLESS SHOWN OTHERWISE. NARROWER WIDTH FORMS SHALL BE COORDINATED WITH BASIC SPACING WHERE MAKE-UP'S ARE REQUIRED.

CJ-2 WHERE STIRRUPS ARE SCHEDULED, (1) 6-LEG LADDER STIRRUP ASSEMBLY WITH VERTICAL LEGS AT 11"o.c. IS THE MINIMUM. IF SCHEDULE CALLS FOR MORE THAN 6 LEGS, USE A COMBINATION OF LADDER STIRRUP ASSEMBLIES TO PROVIDE REQUIRED NUMBER OF LEGS AT SPACING SCHEDULED.

CJ-3 JOIST TOP BARS SHALL BE SUPPORTED ON 1" DIA. X 1'-8" SUPPORT BARS PLACED ON 3/4" BAR CHAIRS ACROSS PAN FORMS AT 4'-0"o.c. TIED TO STIRRUPS BEGINNING AT FIRST LEG.

CJ-4 BEAM STEEL SHALL HAVE CLEARANCE OF 1-1/2" TO STIRRUPS AT BOTTOM AND SIDES BUT 2-1/2" AT TOP. JOIST STEEL SHALL HAVE CLEARANCE OF 1-1/2". THEREFORE, REINFORCEMENT SHALL BE PLACED IN THE FOLLOWING SEQUENCE:

1. PLACE ALL BEAM BARS.
2. PLACE BOTTOM JOIST BARS.
3. PLACE SUPPORT BARS (NOTE CJ-3).
4. PLACE TOP JOIST BARS.
5. PLACE EXTRA SLAB BARS (NOTE CJ-7)
6. PLACE WELDED WIRE FABRIC.

CJ-5 REINFORCE SLAB WITH 4x4-W3.5x3.5 WELDED WIRE FABRIC, LAPPED 1-1/2 MESHES AT SPLICES. DRAPE OVER TOP JOIST BARS AND TIE DOWN SECURELY IN BOTTOM OF SLAB MIDWAY BETWEEN JOISTS; 3/4" OFF BOTTOM WITH BAR CHAIRS AND TIED TO FROM AT 24"o.c. MESH SHALL EXTEND OVER THE ENTIRE WIDTH OF BEAMS.

CJ-6 WHERE FLOOR DROPS (DEPRESSIONS) OCCUR, ADJUST PAN FORMS SO THAT SLAB THICKNESS IS MAINTAINED AS SHOWN IN DETAILS.

CJ-7 WHERE JOIST RUN PARALLEL TO BEAMS OR WALLS, PROVIDE #3 DOWELS AT 2'-0"o.c. AT EDGE BEAMS ONLY (SEE DETAIL).

CJ-8 UNLESS SPECIFICALLY SHOWN ON FRAMING PLANS, JOISTS SHALL NOT BE INTERRUPTED OR REDUCED IN CROSS SECTIONAL AREAS WITHOUT ENGINEER'S APPROVAL.

CJ-9 IF VERTICAL MECHANICAL SLEEVE PROJECTS INTO A JOIST BY MORE THAN 1-1/2", WIDEN JOIST BY USING NEXT SMALLER PAN WIDTH FOR A DISTANCE OF 4'-0" BOTH SIDES OF SLEEVE AND FIELD DRAPE BARS AROUND SLEEVES (NO TORCHING).

CJ-10 CONDUITS IN 4-1/2" SLABS SHALL NOT BE LARGER THAN 1" DIAMETER. WHERE CONDUIT IS PARALLEL (OR NEARLY PARALLEL) TO JOIST, DO NOT LOCATE IN CENTER THIRD OF SLAB SPAN.

CJ-11 PROVIDE 6" WIDE BRIDGING JOIST WHERE INDICATED "BJ" ON PLAN. REINFORCE WITH 1-#6 CONTINUOUS TOP AND BOTTOM AND ANCHOR INTO TERMINAL BEAMS WITH #6 X 5'-0" CORNER BAR TOP AND BOTTOM.

CJ-12 WHERE PARTITIONS RUNNING PARALLEL TO JOISTS ARE DESIGNATED BY THE SYMBOL ▨ ON THE FRAMING PLAN, OR NOTED ON ARCHITECTURAL DRAWINGS, ADD #4 X 6'-0" AT 9" o.c. FOR ENTIRE LENGTH OF JOIST SPAN, IN BOTTOM OF SLAB ON 3/4" BAR CHAIRS, RUNNING PERPENDICULAR TO JOISTS FROM JOIST CENTERLINE TO JOIST CENTERLINE.

LA PROJECT NO.: 03-515-00
LA FILE NO.: WFAC - Blackbox Addition_Structural R23

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WFAC Black Box Addition PKG 1

1801 Martin Luther King Dr.,
San Antonio, TX. 78203

ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

DATE: 05/12/2024
STATE OF TEXAS
SHAWN J. FRANKE
82639
LICENSED PROFESSIONAL ENGINEER

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/05/23	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER AB

CONC. JOIST SCHED, NOTES & DETAILS

S-402

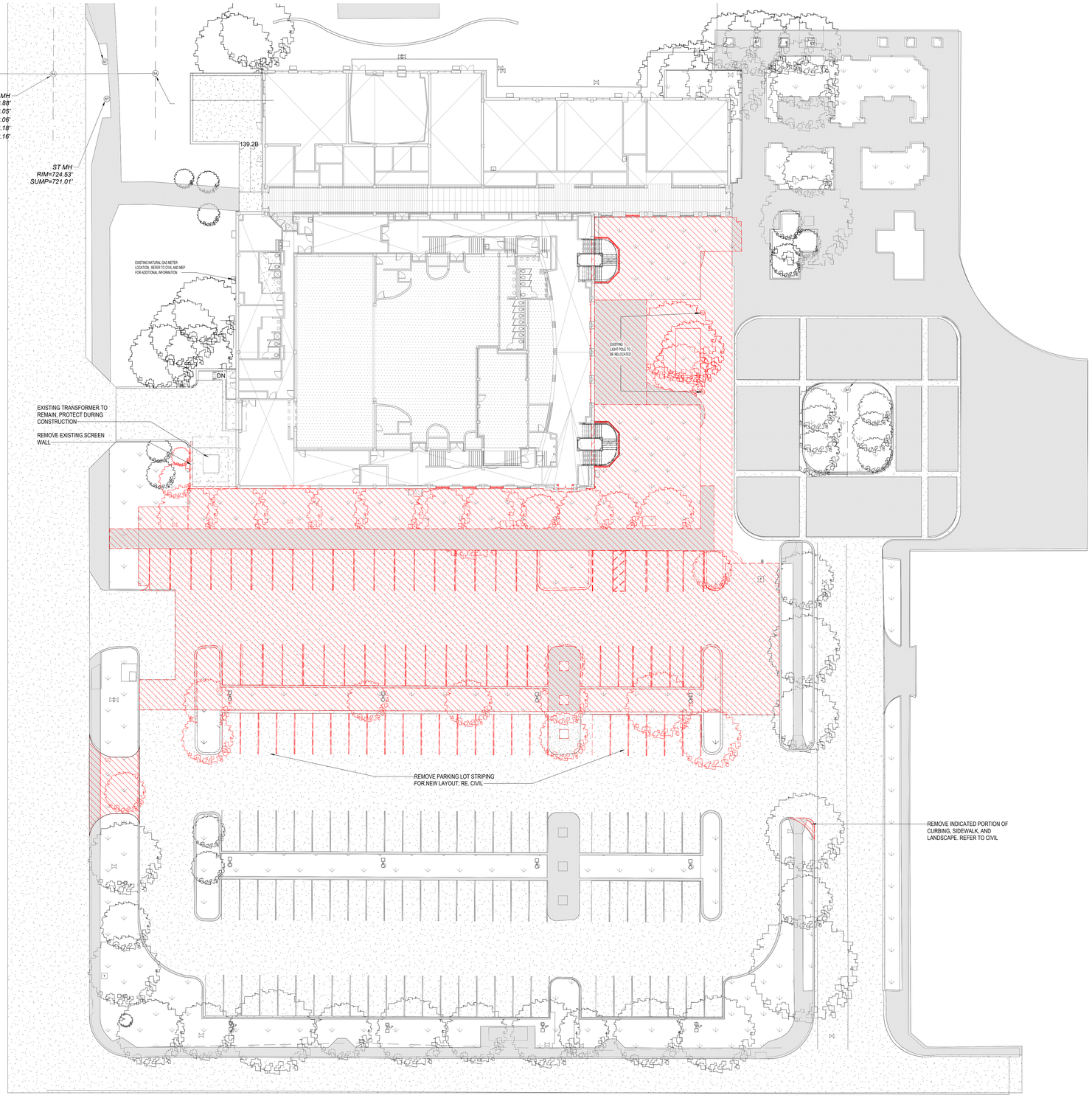
DEMOLITION ARCHITECTURAL SITE PLAN

ASD101

FOR BLUEBEAM LABELING:OOR:

ISSUE FOR CONSTRUCTION

0"
1"



06 DEMOLITION SITE PLAN
1" = 20'-0"

GENERAL SITE DEMOLITION NOTES

1. DEMOLITION PLANS INDICATE SOME OF THE SCOPE-OF-WORK INVOLVED FOR THE DEMOLITION PHASE OF THIS PROJECT. CONTRACTOR SHALL REVIEW ALL SHEETS FOR ADDITIONAL DEMOLITION SCOPE.
2. CONTRACTOR SHALL VERIFY EXISTING SITE AND BUILDING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO DEMOLITION ACTIVITIES AND WORK.
3. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES IN WRITING.
4. CONTRACTOR SHALL NOTIFY ARCHITECT AND OWNER OF ANY POSSIBLE ASBESTOS CONTAINING MATERIALS DISCOVERED BEFORE PROCEEDING WITH WORK, PROTECT INTERIOR CONSTRUCTION TO REMAIN DURING DEMOLITION AND CONSTRUCTION.
5. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS BEFORE COMMENCING WORK.
6. AFTER AWARD OF THE CONTRACT, CHANGE ORDER REQUESTS FOR ADDITIONAL MONEY WILL NOT BE APPROVED IF THE WORK COULD HAVE BEEN ANTICIPATED DURING A SITE VISIT BY THE CONTRACTOR.
7. CONTRACTOR SHALL NOT SCALE DRAWINGS.
8. CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY SHORING, TEMPORARY BRACING, AND OR TEMPORARY SUPPORTS AS REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY OF EXISTING STRUCTURE TO REMAIN AND OR EXISTING BUILDING ELEMENTS TO REMAIN.
9. CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO DEMOLITION ACTIVITIES AND WORK.
10. CONTRACTOR SHALL REMOVE TRASH AND DEBRIS REGULARLY AS NECESSARY TO ELIMINATED INTERFERENCE WITH ROADS, STREET, WALKS, AND ALL OTHER ADJACENT FACILITIES.
11. CONTRACTOR SHALL REMOVE TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
12. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF TEMPORARY DUST AND OR SOUND PARTITION BETWEEN CONSTRUCTION AREA AND AREAS NOT IN SCOPE AS NECESSARY. DEMOLITION ACTIVITIES SHALL BE PERFORMED SO AS TO PRODUCE MINIMAL DISTURBANCE TO EXISTING FACILITY AND OCCUPANTS (I.E. MINIMIZE EXCESSIVE AND PROLONGED NOISE LEVELS AND DUST).
13. CONTRACTOR SHALL REPAIR, REPLACE, OR PATCH EXISTING BUILDINGS, DRIVEWAYS, SIDEWALKS, CANOPIES, AND OR PARKING AREAS DAMAGED, MODIFIED, AND OR DISTURBED BY DEMOLITION WORK AT NO COST TO THE OWNER.
14. ALL EXISTING EQUIPMENT THAT REMAINS SHALL BE PROTECTED DURING DEMOLITION AND OR CONSTRUCTION TO PREVENT DAMAGE. ANY DAMAGE TO REMAINING EXISTING EQUIPMENT SUSTAINED DURING DEMOLITION AND OR CONSTRUCTION SHALL BE EQUIVALENTLY REPLACED OR EQUIVALENTLY REPAIRED AT NO COST TO THE OWNER.
15. CONTRACTOR SHALL PROVIDE TRAFFIC HANDLING MEASURES TO PROTECT THE GENERAL PUBLIC AT ALL TIMES, AS NECESSARY AND AS REQUIRED BY AUTHORITIES HAVING JURISDICTION.
16. DO NOT INTERRUPT EXISTING UTILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES, AS ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
17. WHEN UTILITY SERVICES ARE REQUIRED TO BE REMOVED, RELOCATED, OR ABANDONED, PROVIDE BYPASS CONNECTIONS TO MAINTAIN CONTINUITY OF SERVICE BEFORE PROCEEDING WITH DEMOLITION.
18. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES INCLUDING BUT NOT LIMITED TO THE FOLLOWING: ELECTRIC, GAS, WATER, TELEPHONE, STORM SEWER, AND SANITARY SEWER FOR FIELD LOCATION OF ALL UNDERGROUND AND OVERHEAD UTILITY LINES. PRIOR TO COMMENCEMENT OF ANY DEMOLITION WORK, CONTRACTOR SHALL IDENTIFY ALL ELECTRICAL CIRCUITS SERVICING THE AREA INVOLVED WITH THIS DEMOLITION. THOSE CIRCUITS SHALL THEN BE LOCKED OUT AND TAGGED OUT IF THEY DO NOT SERVICE ANY OF THE REMAINING BUILDING. THOSE CIRCUITS WHICH ARE IDENTIFIED TO SERVICE BOTH THE AREA TO BE DEMOLISHED AND THE REMAINING BUILDING SHALL BE SPLIT SO AS TO KILL ALL ELECTRICAL POWER TO THE AREA TO BE DEMOLISHED WHILE MAINTAINING POWER TO THE REMAINDER OF THE BUILDING.
19. CONTRACTOR SHALL RELOCATE UTILITIES AND EQUIPMENT AS REQUIRED TO ACCOMMODATE NEW HVAC, ELECTRICAL, PLUMBING, AND TECHNOLOGY REQUIREMENTS FOR NEW WORK.
20. PROTECT EXISTING SITE ELEMENTS AND EXISTING LANDSCAPING TO REMAIN. PROTECTION SHALL INCLUDE BUT NOT BE LIMITED TO EXISTING TREES AND OTHER EXISTING VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTING, BREAKING, OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIAL OR EXCAVATED MATERIAL WITHIN DRIP LINES.
21. CONTRACTOR SHALL REGRADE AND HYDROMULCH AREAS AFFECTED BY DEMOLITION.
22. OWNER HAS RIGHT OF FIRST REFUSAL OF ALL ITEMS REMOVED AS PART OF THE SCOPE OF WORK, WHETHER IDENTIFIED AS SALVAGE OR NOT.
23. NOTIFY THE BUILDING OWNER OF ANY MATERIALS, FIXTURES, ETC. TO BE REMOVED THAT ARE DEEMED SALVAGEABLE. TURN OVER ANY REQUESTED ITEMS TO THE BUILDING OWNER IN GOOD AND CLEAN CONDITION.
24. ALL FURNITURE WILL BE REMOVED OR RELOCATED BY THE OWNER AS NECESSARY PRIOR TO THE DEMOLITION WORK OF THIS PROJECT. CONTRACTOR SHALL COORDINATE WITH OWNER AS REQUIRED.

SITE DEMOLITION PLAN LEGEND

- EXISTING BUILDING
- DEMO CHAINLINK FENCE
- DEMO ENTIRE FACILITY (FOUNDATION, STRUCTURE, WALLS, ROOFS)
- DEMO ORNAMENTAL FENCE

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MEP
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M-E ENGINEERS
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WFAC Black Box Addition PKG 1

1801 Martin Luther King Dr.,
San Antonio, TX. 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/14	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION
BUILDING NUMBER 1

DEMOLITION ARCHITECTURAL SITE PLAN

ASD101

ISSUE FOR CONSTRUCTION

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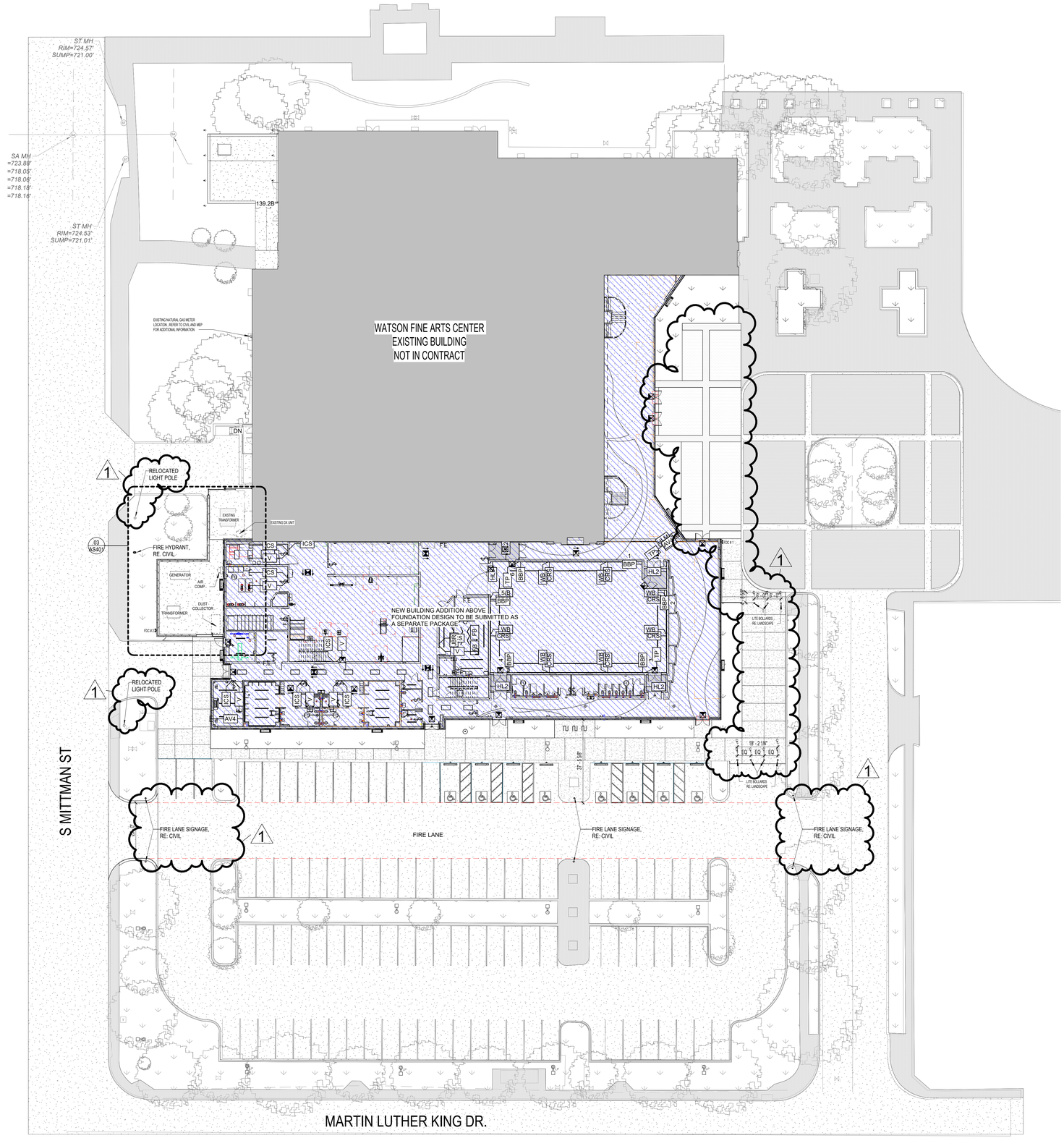
1"

ARCHITECTURAL SITE PLAN
AS100
FOR BLUEBEAM LABELING/OCR:

ISSUE FOR CONSTRUCTION



06 ARCHITECTURAL SITE PLAN
1" = 20'-0"

GENERAL ARCH SITE PLAN NOTES

1. REFER TO CIVIL DOCUMENTS.
2. COORDINATE ALL SPOT ELEVATIONS AND DIMENSIONS WITH CIVIL, LANDSCAPE, AND OR STRUCTURAL DOCUMENTS.
3. PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 1% MINIMUM, 2% MAXIMUM AT ALL EXTERIOR PAVED PEDESTRIAN AREAS, INCLUDING BUT NOT LIMITED TO SIDEWALKS, PATIOS, STAIRS, PAVING, U.N.O.
4. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 5% FOR A HORIZONTAL DISTANCE OF 10 FEET AT ALL EXTERIOR NON-PAVED AREAS U.N.O.
5. REFER TO CIVIL DOCUMENTS FOR CONCRETE SIDEWALK EXPANSION JOINTS AND CONCRETE SIDEWALK CONTROL JOINTS.
6. VERIFY AND CONFIRM ALL JOINT LAYOUTS AT ALL CONCRETE SIDEWALKS WITH ARCHITECT PRIOR TO POURING OF CONCRETE.
7. PROVIDE AND INSTALL CONCRETE SIDEWALK EXPANSION JOINTS AT AREAS NOT SPECIFICALLY INDICATED AT 50 FEET ON-CENTER MAX. U.N.O.
8. PROVIDE AND INSTALL CONCRETE SIDEWALK CONTROL JOINTS AT AREAS NOT SPECIFICALLY INDICATED AT DISTANCES EQUIVALENT TO SIDEWALK WIDTH, BUT NOT TO EXCEED 10 FEET ON-CENTER MAX.
9. VERIFY ALL SITE SIGNAGE LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION OF SITE SIGNAGE.

BRICK QUANTITY TAKEOFF

LISTED AREAS ARE ACTUAL SQ.FT. TAKE-OFF FORM FROM THE PACKAGE 2
60% CD SET. GC TO ORDER OVERAGE/WASTE AS REQUIRED.

ORANGE BRICK - 12,200 SF
WHITE BRICK - 2,275 SF

IF SPANDREL REPLACEMENT FOR BRICK VE OPTION IS SELECTED
ADDED BRICK COUNT

ORANGE BRICK - 490 SF
WHITE BRICK - 155 SF

ARCH SITE PLAN LEGEND

- EXISTING BUILDING
- NOT IN SCOPE
- NEW BUILDING / ADDITION
- GRASS
- SIDEWALK
- TOP CAST CONCRETE; RE. LANDSCAPE
- SALT FINISH CONCRETE; RE. LANDSCAPE

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WFAC Black Box Addition PKG 1

1801 Martin Luther King Dr.,
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ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

REGISTERED ARCHITECT
CLAYTON WHITTINGHAM
78645
STATE OF TEXAS
6-14-2024

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/14	230462

DRAWING HISTORY

No.	Description	Date
1	ASI #1 - CITY & OWNER COMMENTS	6-14-2024

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BUILDING NUMBER 1

ARCHITECTURAL SITE PLAN

AS100

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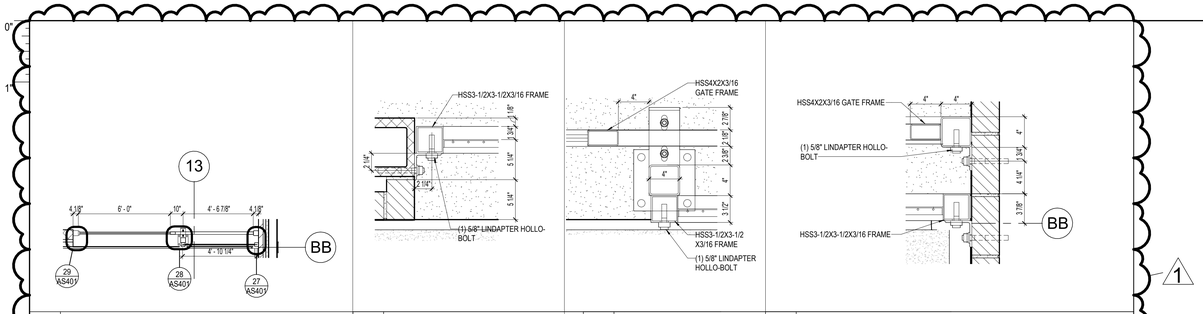
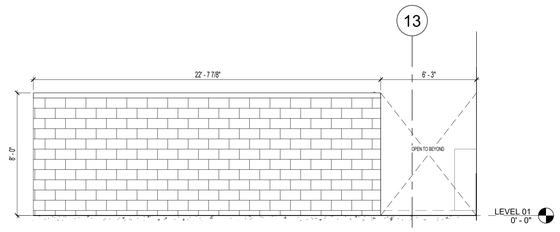


30 EXTERIOR SLIDING GATE
1/4" = 1'-0"

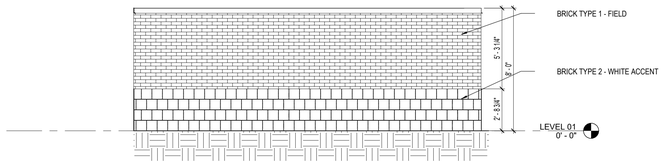
29 GATE JAMB
1 1/2" = 1'-0"

28 GATE TO FENCE
1 1/2" = 1'-0"

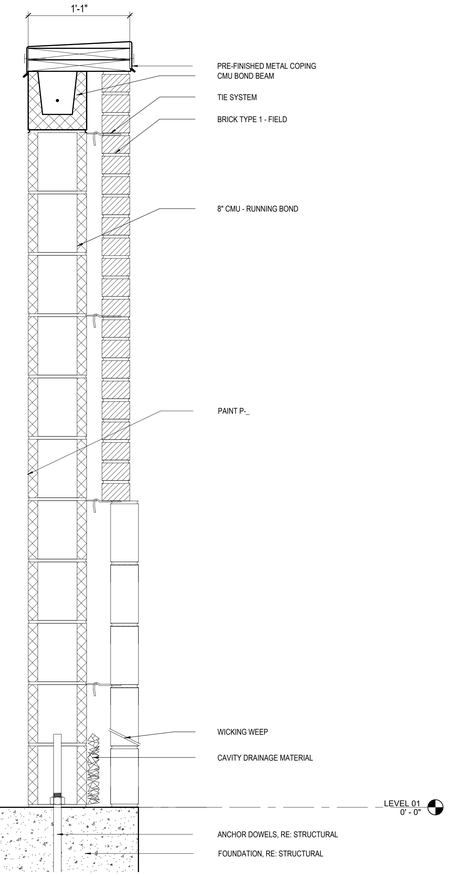
27 GATE AND FENCE WALL CONNECTION
1 1/2" = 1'-0"



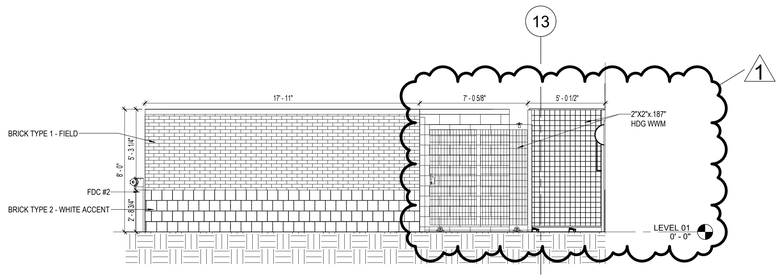
24 NORTH EQUIPMENT ELEVATION
1/4" = 1'-0"



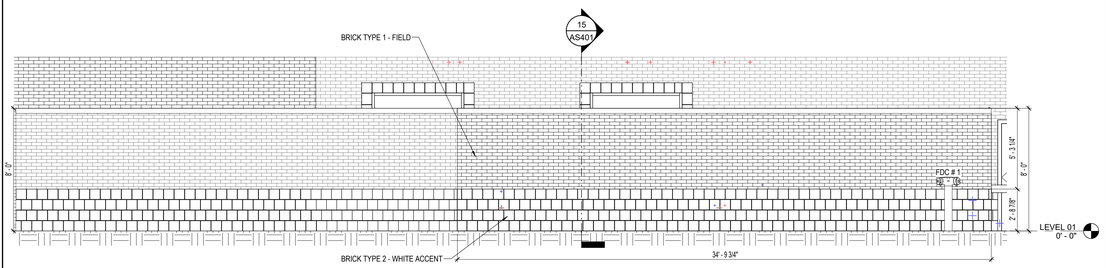
18 EQUIPMENT ELEVATION NORTH
1/4" = 1'-0"



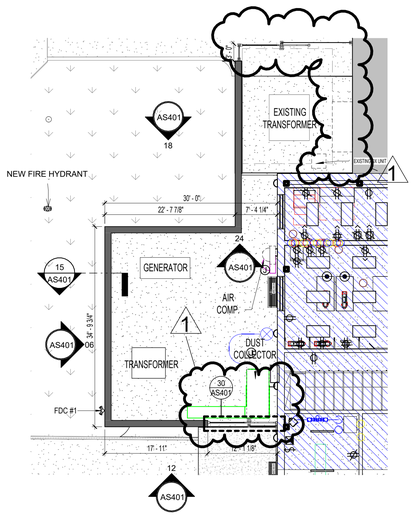
15 CMU WALL SECTION
1 1/2" = 1'-0"



12 EQUIPMENT ELEVATION SOUTH
1/4" = 1'-0"



06 EQUIPMENT ELEVATION EAST
1/4" = 1'-0"



03 EQUIPMENT ENCLOSURE
3/32" = 1'-0"

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3. PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 1% MINIMUM, 2% MAXIMUM AT ALL EXTERIOR PAVED PEDESTRIAN AREAS, INCLUDING BUT NOT LIMITED TO SIDEWALKS, PATIOS, STAIRS, PAVING, U.N.O.
4. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 5% FOR A HORIZONTAL DISTANCE OF 10 FEET AT ALL EXTERIOR NON-PAVED AREAS U.N.O.
5. REFER TO CIVIL DOCUMENTS FOR CONCRETE SIDEWALK EXPANSION JOINTS AND CONCRETE SIDEWALK CONTROL JOINTS.
6. VERIFY AND CONFIRM ALL JOINT LAYOUTS AT ALL CONCRETE SIDEWALKS WITH ARCHITECT PRIOR TO POURING OF CONCRETE.
7. PROVIDE AND INSTALL CONCRETE SIDEWALK EXPANSION JOINTS AT AREAS NOT SPECIFICALLY INDICATED AT 50 FEET ON-CENTER MAX. U.N.O.
8. PROVIDE AND INSTALL CONCRETE SIDEWALK CONTROL JOINTS AT AREAS NOT SPECIFICALLY INDICATED AT DISTANCES EQUIVALENT TO SIDEWALK WIDTH, BUT NOT TO EXCEED 10 FEET ON-CENTER MAX.
9. VERIFY ALL SITE SIGNAGE LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION OF SITE SIGNAGE.

KEYNOTE LEGEND

NUMBER	DESCRIPTION
04 05 00.CDP	CAVITY DRAINAGE MATERIAL
04 05 00.TIE	TIE SYSTEM
04 05 00.WVW	WICKING WEEP
04 20 00.BK1	BRICK TYPE 1 - FIELD
04 20 00.BK2	BRICK TYPE 2 - WHITE ACCENT
04 20 00.CBB	CMU BOND BEAM
04 20 00.CU8 (R)	8" CMU - RUNNING BOND

ARCH SITE PLAN LEGEND

- EXISTING BUILDING
- NOT IN SCOPE
- NEW BUILDING / ADDITION
- GRASS
- SIDEWALK
- TOP CAST CONCRETE; RE. LANDSCAPE
- SALT FINISH CONCRETE; RE. LANDSCAPE

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LUNDY & FRANKE ENGINEERING
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MEP
LEAP
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ENVELOPE
BEAM PROFESSIONALS
T 210-829-5123
THEATRE
N/A
T 210-561-9800

WFAC Black Box Addition PKG 1

1801 Martin Luther King Dr.,
San Antonio, TX. 78203

ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

REGISTERED ARCHITECT
CLIFFORD WHITTINGTON FRANKE
STATE OF TEXAS
6-14-2024

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/14	230462

DRAWING HISTORY

No.	Description	Date
1	ASI #1 - CITY & OWNER COMMENTS	6-14-2024

ISSUE FOR CONSTRUCTION
BUILDING NUMBER 1

ARCHITECTURAL ENLARGED SITE PLANS

AS401

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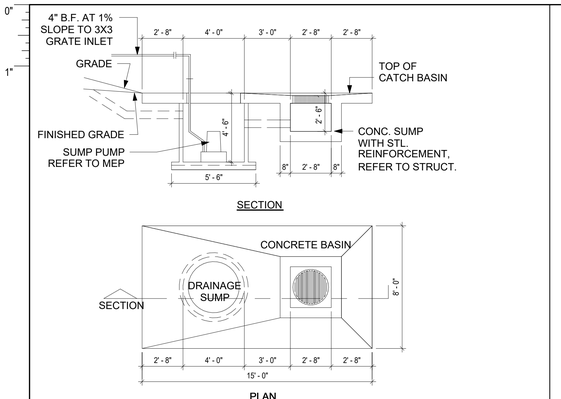
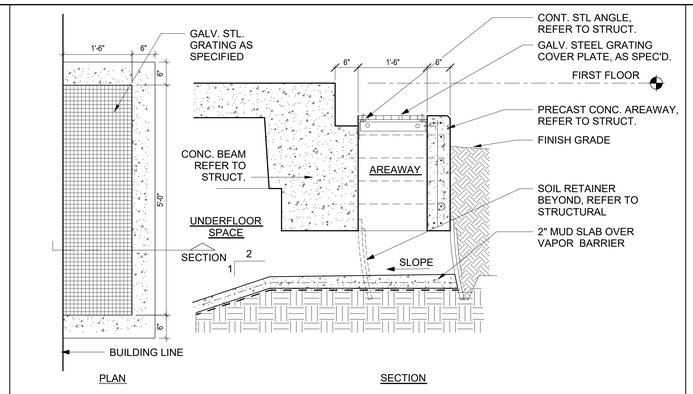
CRAWLSPACE FLOOR PLAN - COMPOSITE

A-100

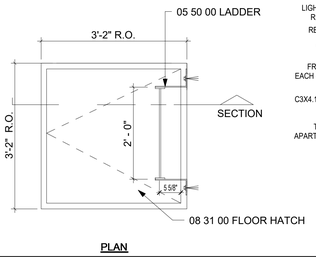
FOR BLUEBEAM LABELING/OCR:

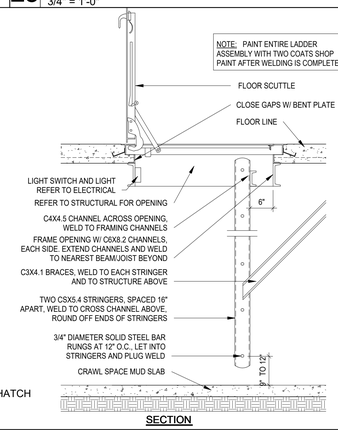


30 UNDERGROUND SUMP PUMP DETAIL
1/4" = 1'-0"

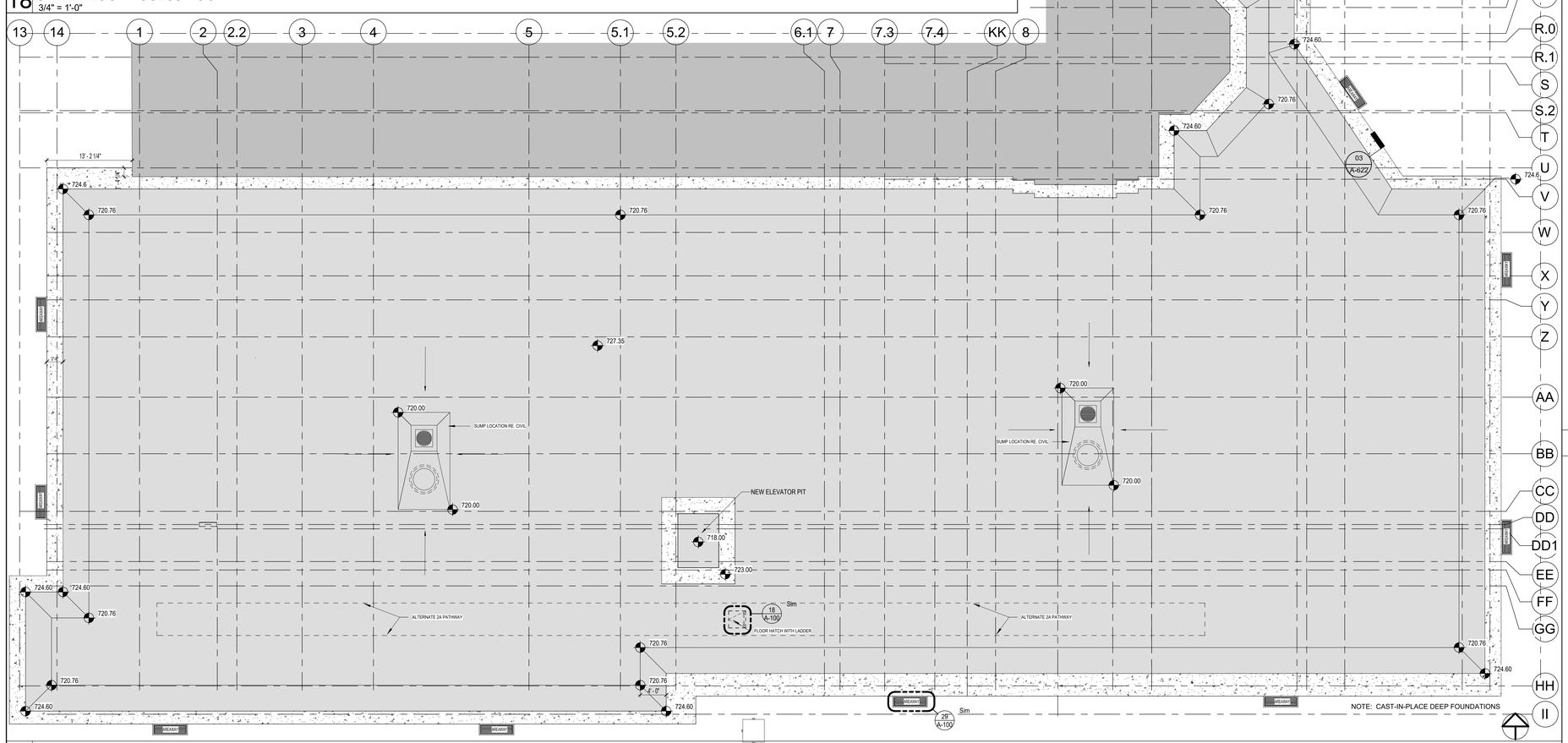


29 AREAWAY DETAIL
3/4" = 1'-0"

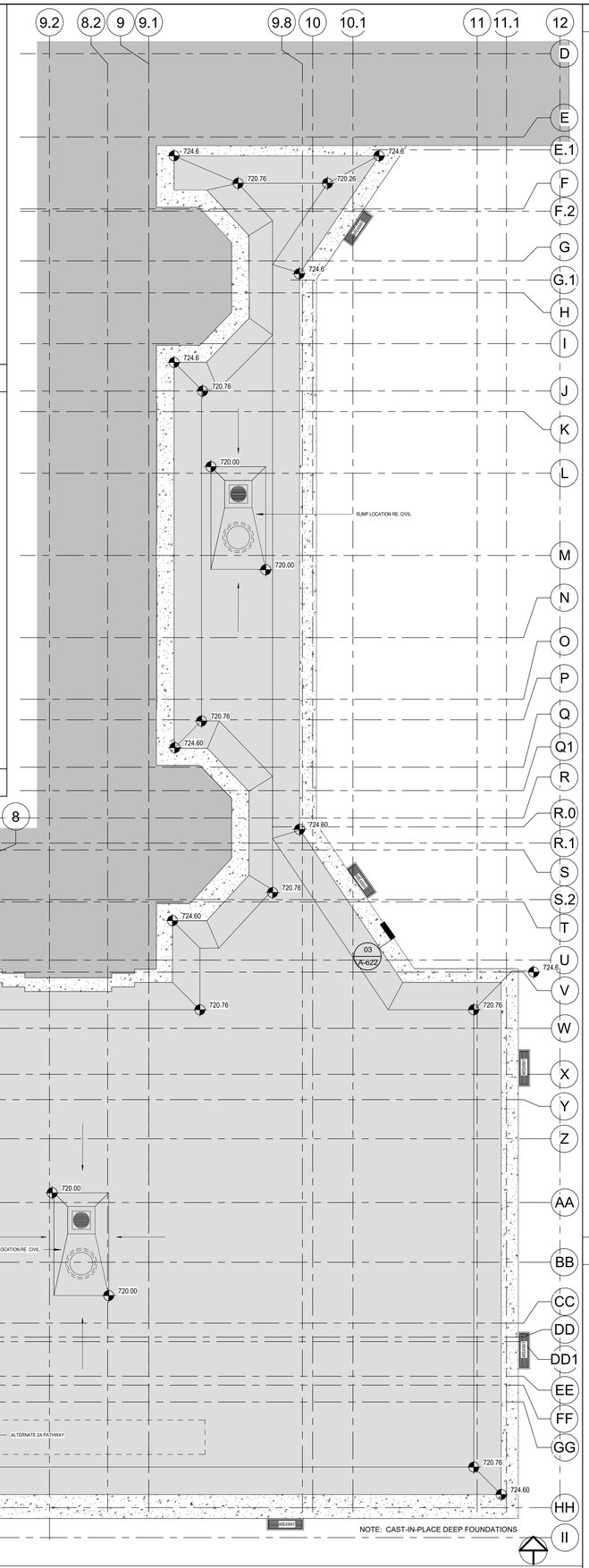




18 UNDERFLOOR ACCESS DOOR
3/4" = 1'-0"



06 CRAWLSPACE
1/8" = 1'-0"



GENERAL ARCH PLAN NOTES

1. DO NOT SCALE DRAWINGS, WRITTEN DIMENSIONS TAKE PRECEDENCE, CONTACT ARCH IF CLARIFICATION IS NECESSARY IN ORDER TO DETERMINE THE INTENT OF THE CONTRACT DOCUMENTS.
2. DRAWINGS NOTED AS "N.T.S" OR "NTS" ARE NOT TO SCALE.
3. ALL DIMENSIONS ARE TO STRUCTURAL COLUMN LINES OR THE SURFACE OF PARTITION ASSEMBLY U.N.O.
4. FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE COMMENCING WORK. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH AFFECTED WORK.
5. NOTES OR DIMENSIONS NOTED AS "TYPICAL" OR "TYP." OR "TYP" SHALL APPLY TO CONDITIONS THAT ARE THE SAME OR SIMILAR.
6. DIMENSIONS NOTED AS "FIELD VERIFY" OR "V.I.F." OR "VIF" SHALL BE MEASURED AND CONFIRMED AT THE PROJECT SITE BY THE CONTRACTOR AND REVIEWED WITH THE ARCH. BEFORE INCORPORATING INTO THE WORK.
7. DIMENSIONS NOTED AS "CLEAR" OR "CLEAR INSIDE" OR "CLR" REQUIRE SPECIFIC COORDINATION AMONG DISCIPLINES AND OR MANUFACTURERS.
8. REFER TO PARTITION TYPES ON A-600 SERIES SHEETS.
9. ALL INTERIOR PARTITIONS THIS SHEET, EXCEPT FOR FURR-OUT PARTITIONS, SHALL BE PARTITION TYPE __S6__ U.N.O.
10. ALL INTERIOR FURR-OUT PARTITIONS THIS SHEET SHALL BE PARTITION TYPE __F3___ U.N.O.
11. ALIGN FINISHED FACE OF WALLS WHERE WALL PARTITIONS OF DIFFERING THICKNESS ABUT AND OR ADJOIN IN THE SAME PLANE.
12. PROVIDE AND INSTALL CONTINUOUS REVEAL TRIM AT JOINT WHERE GYPSUM BOARD WALL PARTITIONS ABUT AND OR ADJOIN MASONRY WALL PARTITIONS IN THE SAME PLANE.
13. ALL INTERIOR CMU OUTSIDE CORNERS SHALL HAVE BULLNOSE U.N.O.
14. ALL DOORS SHALL BE SET 4 INCHES OFF THE ADJACENT PERPENDICULAR WALL ON THE HINGE SIDE OF THE DOOR U.N.O., NOTIFY ARCH. OF ANY DOOR-RELATED CONFLICTS, INCLUDING BUT NOT LIMITED TO CONFLICTS CONCERNING ACCESSIBILITY STANDARDS.
15. ALL DOOR THRESHOLDS AT ALL EXTERIOR DOORS SHALL BE SET IN FULL BED OF SEALANT.
16. COORDINATE ALL ROOF DRAIN LEADER LOCATIONS WITH FLOOR PLAN PRIOR TO FLOOR SLAB CONSTRUCTION.
17. ALL FLOOR SLOPES TO FLOOR DRAINS SHALL NOT EXCEED 1:48.
18. PROVIDE AND INSTALL SELF-LEVELING UNDERLAYMENT WHERE UNEVEN FLOOR SLAB EXISTS PRIOR TO INSTALLATION OF FLOOR FINISHES.
19. COORDINATE HOUSEKEEPING PAD LOCATIONS AND DIMENSIONS WITH EQUIPMENT TO BE INSTALLED.
20. ALL FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS U.N.O.
21. ALL FLOOR FINISH MATERIAL CHANGES SHALL HAVE REDUCER STRIPS.
22. ALL REQUIRED ACCESSIBLE CLEARANCES FOR ALL ITEMS, INCLUDING BUT NOT LIMITED TO ALL COUNTER TOPS, ALL PLUMBING FIXTURES, ALL DRINKING FOUNTAINS, ALL ELECTRIC WATER COOLERS, ALL LAVATORIES, ALL URINALS, ALL TOILETS SHALL BE STRICTLY ENFORCED.
23. APPLY BITUMINOUS COATING TO ALL CONCEALED STRUCTURAL STEEL MEMBERS AT ALL EXTERIOR CANOPY LOCATIONS.
24. REFER TO OTHER DISCIPLINE DOCUMENTS FOR ADDITIONAL SCOPE OF WORK.

FLOOR FINISH LEGEND

CONCRETE GRADE BEAM, RE. STRUCT

MUD SLAB AREA

EXISTING BUILDING

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WFAC Black Box Addition PKG 1

1801 Martin Luther King Dr.,
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ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

CLIENT
Alamo Colleges

DATE 2024/06/14
PROJECT NUMBER 230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER 1

CRAWLSPACE FLOOR PLAN - COMPOSITE

A-100

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DOOR SCHEDULE PANEL AND FRAME TYPES
A-811
FOR BLUEBEAM LABELING OCR:

ISSUE FOR CONSTRUCTION

DOOR SCHEDULE - PKG1										
				PANEL					FRAME	
MARK	ROOM NAME	PHASE	PAIR	WIDTH	HEIGHT	TYPE	MATERIAL	GLASS	TYPE	FINISH
LEVEL 01										
159	BLACKBOX	New Construction	PAIR	14' - 0"	12' - 0"	SCU		N	00UE	PAINTED STEEL

MATERIALS

AL - ALUMINUM	**VL -** VINYL
HM - HOLLOW METAL	**PL -** PLASTIC LAMINATE
HG - HOLLOW METAL GALV	**WS -** WOOD, SOLID CORE
HS - HM 24 GA. STEEL	**WH -** WOOD, HOLLOW CORE
SS - STAINLESS STEEL	**PTD# -** PAINTED TYPE

REMARKS LEGEND

1. WITH EGRESS DEVICE
2. MAGNETIC DOOR HOLDER
3. FIRE DOOR
4. ELEVATOR MACHINE ROOM DOORS
5. ELECTRICAL ROOM DOORS
6. KICK PLATE ON BOTH SIDES
7. ACCESS PANEL DOOR
8. WITH CLOSER

00UE SOUND CONTROL DOOR FRAME

DOOR FRAME CONFIGURATIONS PKG 1
1/4" = 1'-0"

SCU SOUND CONTROL UN-EQUAL LEAFS

DOOR PANEL TYPES PKG 1
1/4" = 1'-0"

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WFAC Black Box Addition PKG 1

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BUILDING NUMBER 1

DOOR SCHEDULE PANEL AND FRAME TYPES

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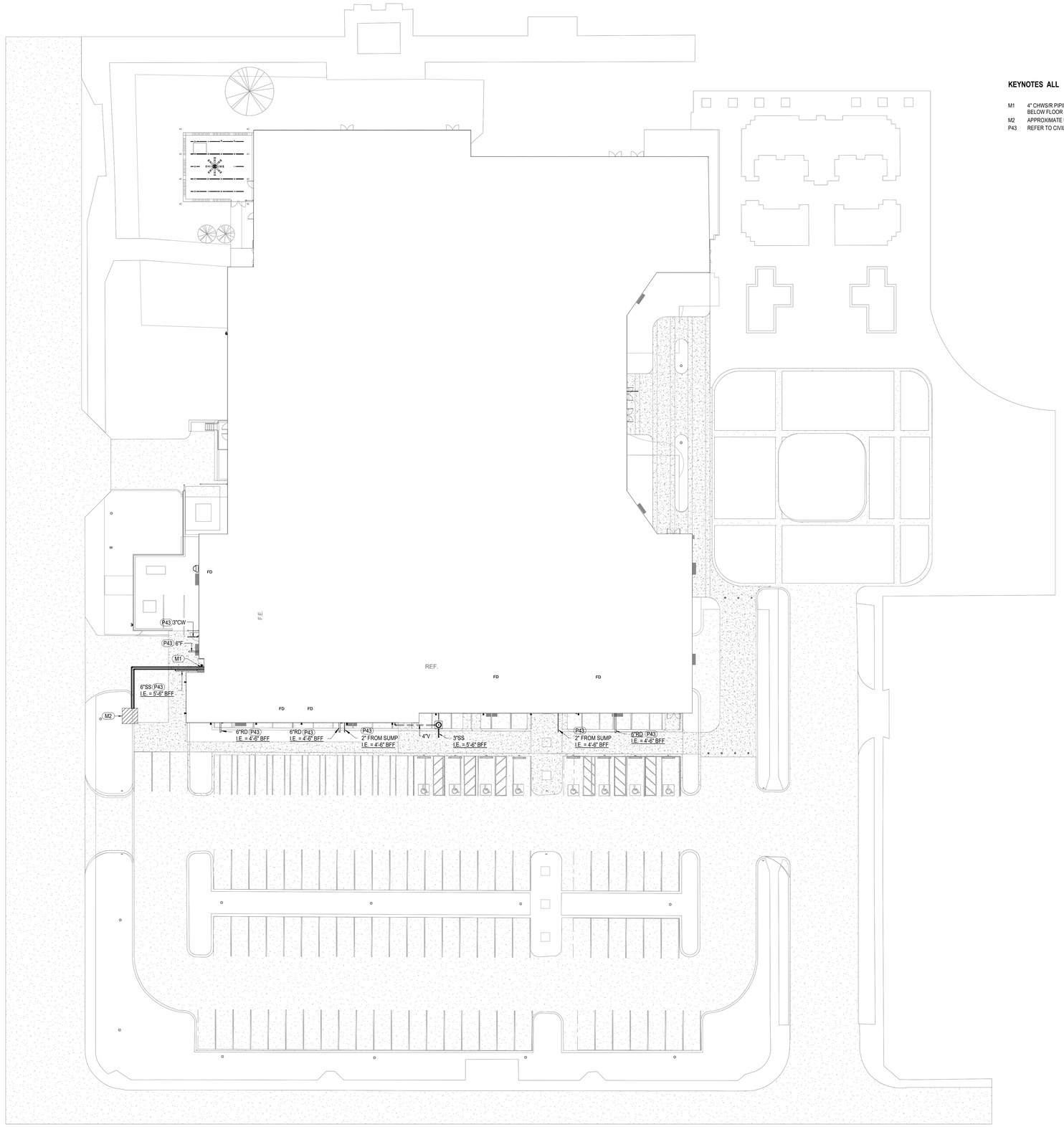
0"
1"



KEYNOTES ALL

M1 4" CHWS/R PIPING ROUTED FROM EXISTING CAMPUS LOOP VAULT BELOW FLOOR SLAB. REFER TO M-101D FOR CONTINUATION

M2 APPROXIMATE LOCATION OF EXISTING CHILLED WATER LOOP VAULT.

P43 REFER TO CIVIL DWGS. FOR CONTINUATION.

1 MECHANICAL AND PLUMBING SITE PLAN
SCALE: 1" = 20'-0"

ISSUE FOR CONSTRUCTION

MECHANICAL AND PLUMBING SITE PLAN
MPS-101
FOR BLUEBEAM LABELING/OCR:

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Wolf
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LEAF ENGINEERS

WFAC Black Box Addition PKG 1

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KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
DONALD C. RICHARDS
61572
LICENSED PROFESSIONAL ENGINEER
06/14/2024
LEAF ENGINEERS
F-18672

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DATE	PROJECT NUMBER
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DRAWING HISTORY

No.	Description	Date

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BUILDING NUMBER 1

MECHANICAL AND PLUMBING SITE PLAN

MPS-101

DEMO SITE POWER PLAN
EDS-101
FOR BLUEBEAM LABELING/OCR:

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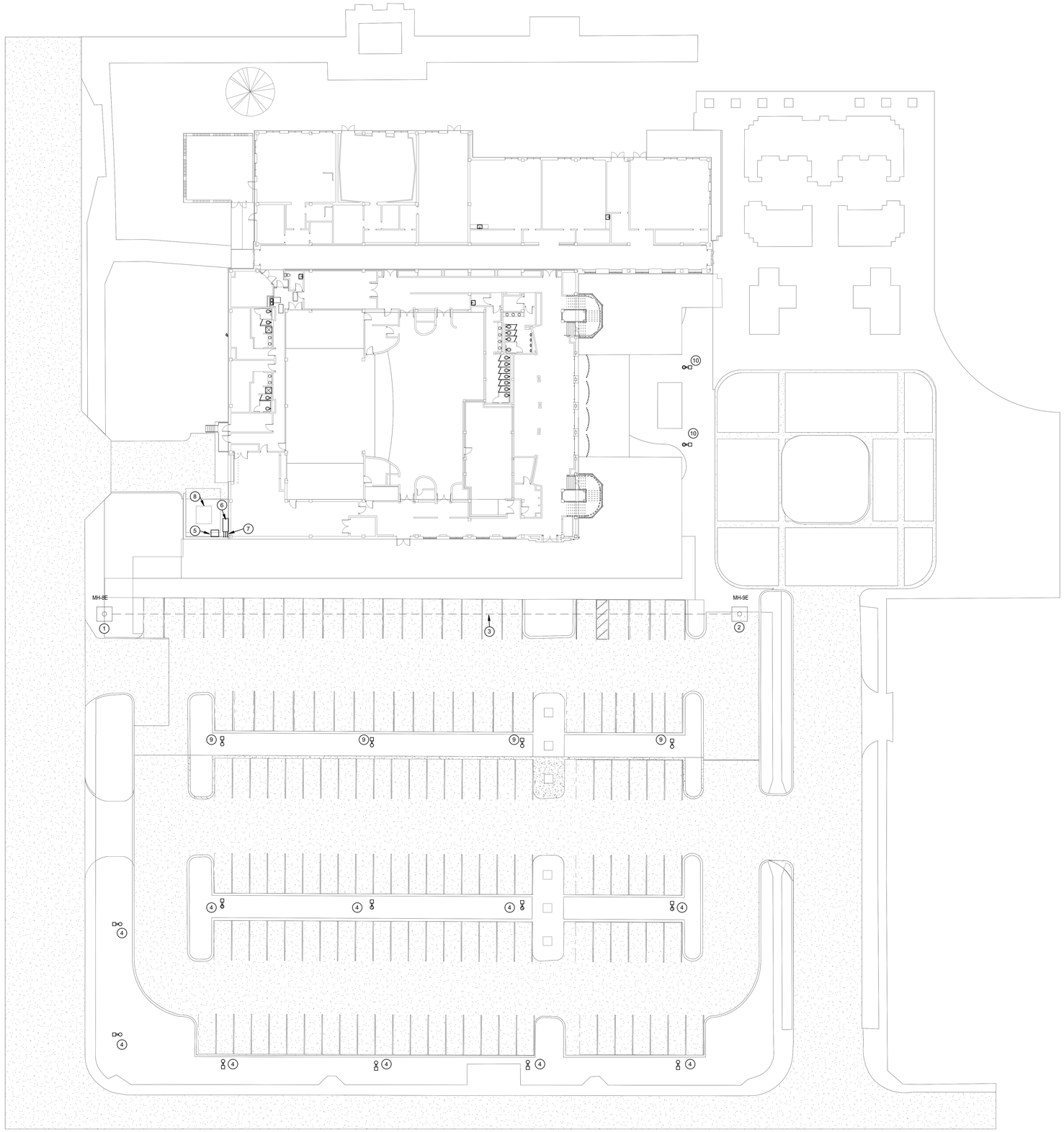

1 DEMO SITE POWER PLAN
SCALE: 1" = 20'-0"

DEMO SITE PLAN GENERAL NOTES:

1. COORDINATE ROUTING FOR ALL UNDERGROUND ELECTRICAL BRANCH CIRCUITS AND FEEDERS WITH OTHER DISCIPLINES PRIOR TO TRENCHING.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY INSTALLATION OF NEW WORK.

SITE PLAN KEYED NOTES:

1. EXISTING ELECTRCAL MANHOLE.
2. EXISTING ELECTRICAL MANHOLE SHALL BE DEMOLISHED AND RELOCATED.
3. EXISITNG UNDERGROUND ELECTRICAL DUCBANK WITH 4 EXISTING CONDUITS TO BE REROUTED FOR NEW BLACK BOX EXPANSION.
4. CONTRACTOR TO VERIFY NEW CONSTRUCTIONS DOES NOT OVERLAP EXISTING PARKING LOT LIGHTING. IF NEW CONSTRUCTIONS OVERLAPS EXISTING FEEDER FOR PARKING LOT LIGHTING.EXISITNG FEEDERS FOR SITE LIGHTING SHALL BE RELOCATED.
5. EXISITNG CONDENSING UNIT SHALL BE RELOCATED. DISCONNECT AND CONDUCTORS SHALL BE REROUTED. UTILIZE EXISTING CIRCUIT. COORDINATE EXACT LOCATION WITH MECHANICAL DRAWINGS.
6. EXISTING DISTRIBUTION/MAIN SERVICE DISCONNECT DP-6 FOR ADJACENT WATSON FINE ARTS BUILDING.
7. EXISTING CONDUITS FROM DP-6 TO WATSONS FINE ARTS BUILDING SHALL BE RELOCATED TO ACCOMADATE NEW BUILDING. CONTRACTOR SHALL VERIFY PATH WAY AND RELOCATED CONDUITS AND CONDUCTORS TO NEW AVAIBLE LOCATION WITHOUT IMPEDEING ANY OTHER SERVICES.
8. EXISTING UTILITY TRANSFORMER FOR WATSON FINE ARTS.
9. EXISTING PARKING LOT FIXTURES SHALL BE DEMOLISHED. CONTRACTOR SHALL PRESERVE CIRCUIT RUN FOR ANY EXISTING FIXTURES REMAINING OR TIED TO DEMOLISHED FIXTURES.
10. EXISTING PEDESTRIAN LOT FIXTURES SHALL BE RELOCATED. CONTRACTOR SHALL PRESERVE CIRCUIT RUN FOR ANY EXISTING FIXTURES REMAINING OR TIED TO DEMOLISHED FIXTURES.

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WFAC Black Box Addition PKG 1

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DEMO SITE POWER PLAN

EDS-101

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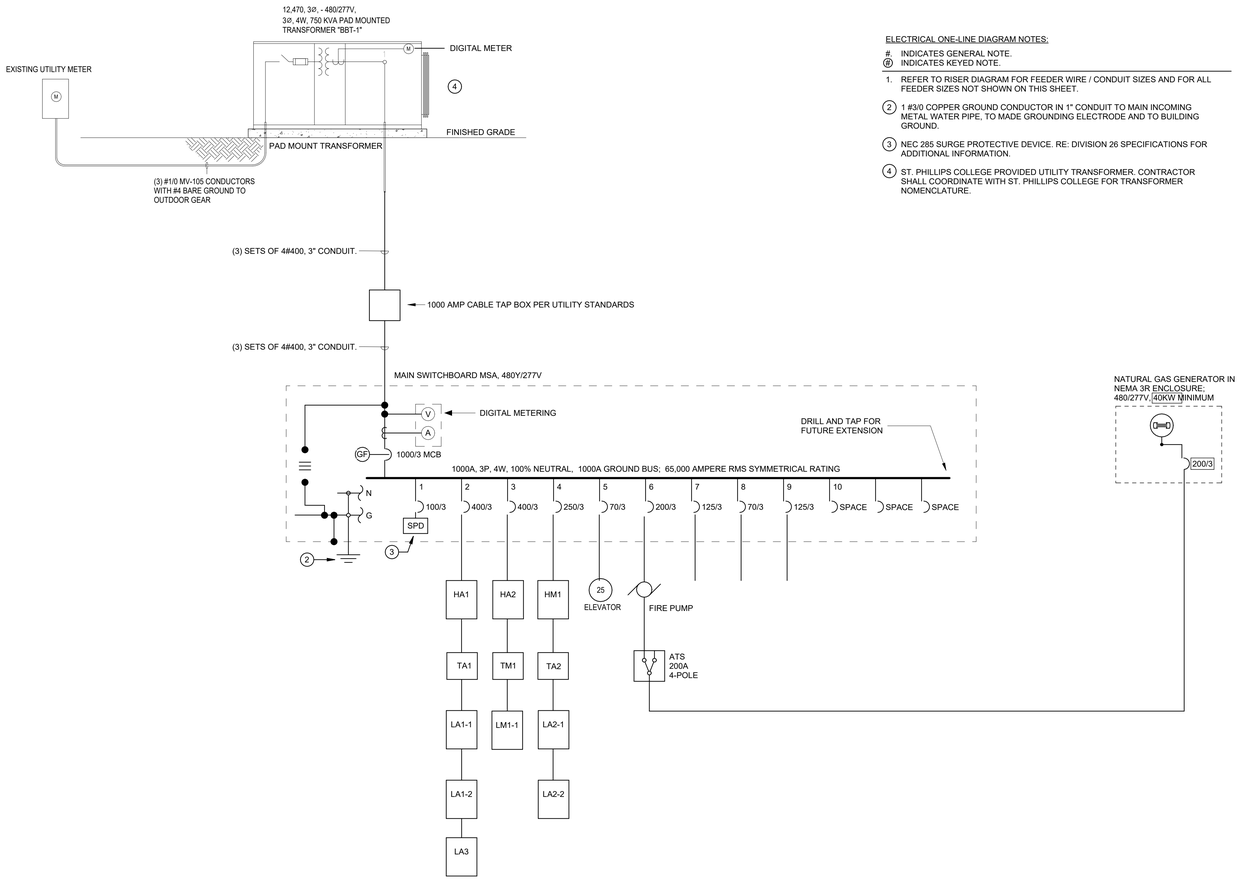
0"
1"

ELECTRICAL ONE-LINE DIAGRAM
E-501
FOR BLUEBEAM LABELING/OCR:

ISSUE FOR CONSTRUCTION



ELECTRICAL ONE-LINE DIAGRAM NOTES:

#. INDICATES GENERAL NOTE.
Ⓝ INDICATES KEYED NOTE.

1. REFER TO RISER DIAGRAM FOR FEEDER WIRE / CONDUIT SIZES AND FOR ALL FEEDER SIZES NOT SHOWN ON THIS SHEET.

(2) 1 #3/0 COPPER GROUND CONDUCTOR IN 1" CONDUIT TO MAIN INCOMING METAL WATER PIPE, TO MADE GROUNDING ELECTRODE AND TO BUILDING GROUND.

(3) NEC 285 SURGE PROTECTIVE DEVICE. RE: DIVISION 26 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

(4) ST. PHILLIPS COLLEGE PROVIDED UTILITY TRANSFORMER. CONTRACTOR SHALL COORDINATE WITH ST. PHILLIPS COLLEGE FOR TRANSFORMER NOMENCLATURE.

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WFAC Black Box Addition PKG 1

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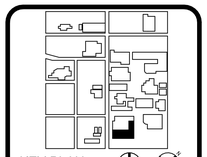

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Alamo Colleges

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BUILDING NUMBER 1

ELECTRICAL
ONE-LINE DIAGRAM

E-501

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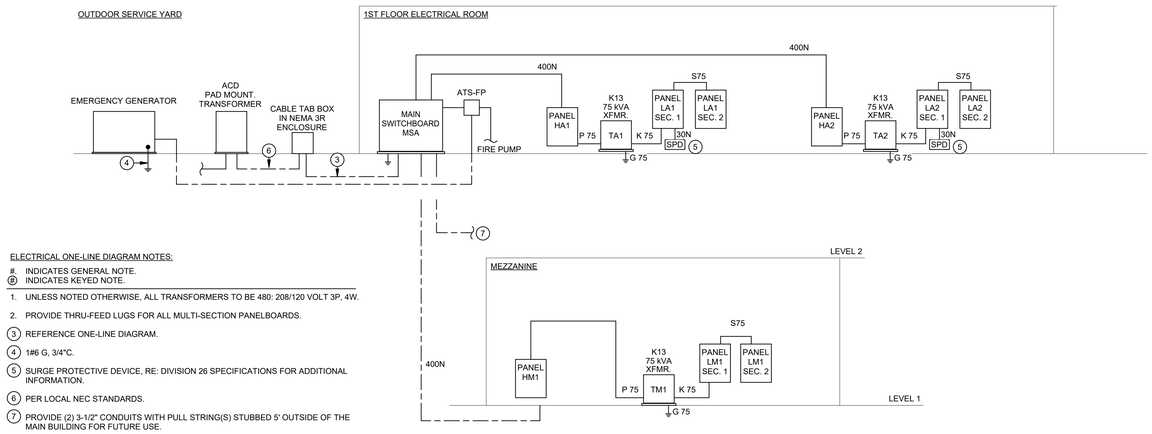
ELECTRICAL RISER DIAGRAM

E-502

FOR BLUEBEAM LABELING/OCR:

0"

1"



ELECTRICAL ONE-LINE DIAGRAM NOTES:

#. INDICATES GENERAL NOTE.
Ⓚ INDICATES KEYED NOTE.

1. UNLESS NOTED OTHERWISE, ALL TRANSFORMERS TO BE 480: 208/120 VOLT 3P, 4W.
2. PROVIDE THRU-FEED LUGS FOR ALL MULTI-SECTION PANELBOARDS.
3. REFERENCE ONE-LINE DIAGRAM.
4. 1#6 G, 3/4"C.
5. SURGE PROTECTIVE DEVICE, RE: DIVISION 26 SPECIFICATIONS FOR ADDITIONAL INFORMATION.
6. PER LOCAL NEC STANDARDS.
7. PROVIDE (2) 3-1/2" CONDUITS WITH PULL STRING(S) STUBBED 5' OUTSIDE OF THE MAIN BUILDING FOR FUTURE USE.

ALUMINUM FEEDER SCHEDULE

TAG NUMBER	CONDUCTOR QUANTITY AND SIZE	CONDUIT SIZE	SETS	COMMENTS
200	3#250, 1#4G	2"	1	
200N	4#250, 1#4G	2 1/2"	1	
225	3#300, 1#2G	2 1/2"	1	
225N	4#300, 1#2G	3"	1	
250	3#350, 1#2G	2 1/2"	1	
250N	4#350, 1#2G	3"	1	
300	3#500, 1#2G	3"	1	
300N	4#500, 1#2G	3"	1	
400	3#250, 1#1G	2 1/2"	2	
400N	4#250, 1#1G	2 1/2"	2	
600	3#500, 1#2/0G	3"	2	
600N	4#500, 1#2/0G	3 1/2"	2	
800	3#400, 1#3/0G	3"	3	
800N	4#400, 1#3/0G	3"	3	
1200	3#500, 1#3/0G	3"	4	
1200N	4#500, 1#3/0G	3 1/2"	4	

FEEDER SCHEDULE

TAG NUMBER	CONDUCTOR QUANTITY AND SIZE	CONDUIT SIZE	SETS	COMMENTS
30N	4#10, 1#10G	1"	1	
50N	4#6, 1#10G	1"	1	
60N	4#6, 1#10G	1"	1	
100	3#1, 1#6G	1 1/2"	1	
100N	4#1, 1#8G	1 1/2"	1	
125	3#1, 1#6G	1 1/2"	1	
125N	4#1, 1#6G	2"	1	
150	3#1/0, 1#6G	1 1/2"	1	
150N	4#1/0, 1#6G	2"	1	
175	3#2/0, 1#6G	2"	1	
175N	4#2/0, 1#6G	2"	1	
200	3#3/0, 1#6G	2"	1	
200N	4#3/0, 1#6G	2"	1	
225	3#4/0, 1#4G	2"	1	
225N	4#4/0, 1#4G	2 1/2"	1	
250	3#250, 1#4G	2 1/2"	1	
250N	4#250, 1#4G	3"	1	
300	3#350, 1#4G	3"	1	
300N	4#350, 1#4G	3"	1	
400	3#3/0, 1#3G	2"	2	
400N	4#3/0, 1#3G	2"	2	
400S	4#500	3 1/2"	1	
600	3#350, 1#1G	3"	2	
600N	4#350, 1#1G	3"	2	
600S	4#350	3"	2	
800	3#500, 1#1/0G	3"	2	
800N	4#500, 1#1/0G	3 1/2"	2	
800S	4#500	3 1/2"	2	
1000	3#400, 1#2/0G	3"	3	
1000N	4#400, 1#2/0G	3"	3	
1000S	4#400	3"	3	
1200	3#350, 1#3/0G	3"	4	
1200N	4#350, 1#3/0G	3"	4	
1200S	4#350	3"	4	
1600S	4#400	3"	5	
2000S	4#400	3"	6	
2500S	4#500	3 1/2"	7	
3000S	4#500	3 1/2"	8	
4000S	4#500	3 1/2"	11	

TRANSFORMER FEEDER SCHEDULE

TAG NUMBER	CONDUCTOR QUANTITY AND SIZE	CONDUIT SIZE	SETS	COMMENTS
P15	3#10, 1#10G	3/4"	1	
S15	4#6, 1#8G	1"	1	
K15	3#4, 1#6N, 1#8G	1 1/4"	1	
G15	1#8G	1/2"	1	
P15	2#8, 1#10G	3/4"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
S15	3#4, 1#6G	1 1/2"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
G15	1#6G	3/4"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
P25	2#6, 1#10G	1"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
D25	3#1, 1#6G	1 1/2"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
G25	1#6G	3/4"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
P30	3#6, 1#10G	3/4"	1	
S30	4#1, 1#6G	1 1/2"	1	
K30	3 #1/0, 1#2/0N, 1#6G	2"	1	
G30	1#6G	1/2"	1	
P37	2#1, 1#6G	1 1/4"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
D37	3#3/0, 1#4G	3"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
G37	1#4G	3/4"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
P45	3#4, 1#8G	1"	1	
S45	4#1/0, 1#6G	1 1/2"	1	
K45	3#2/0, 1#250, 1#4G	2"	1	
G45	1#6G	1/2"	1	
P50	2#1, 1#6G	1 1/4"	1	
S50	3#3/0, 1#3G	2"	1	
G50	1#3G	3/4"	1	
P75	3#1, 1#8G	1 1/2"	1	
S75	4#4/0, 1#2G	2 1/2"	1	
K75	3#4/0, 2#3/0N, 1#2G	2 1/2"	1	
G75	1#1/0G	1/2"	1	
P75	2#3/0, 1#6G	2"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
S75	3#3/0, 1#4G	2"	2	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
G75	1#4G	3/4"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
P75A	3#1, 1#8G	1 1/2"	1	FOR 480 3Ø: 120/240 3Ø TRANSFORMERS
S75A	4#4/0, 1#2G	2 1/2"	1	FOR 480 3Ø: 120/240 3Ø TRANSFORMERS
G75A	1#2G	1/2"	1	FOR 480 3Ø: 120/240 3Ø TRANSFORMERS
P112	3#2/0, #6G	2"	1	
S112	4#3/0, 1#1/0G	2"	2	
K112	3#4/0, 1#350N, 1#1/0G	2 1/2"	2	
G112	1#1/0G	3/4"	1	
P150	3#250, 1#4G	2 1/2"	1	
S150	4#350, 1#2/0G	3"	2	
K150	3#350, 2#3/0N, 1#2/0G	3"	2	
G150	1#2/0G	3/4"	1	
P167	2#4/0, 1#2/0G	2"	2	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
S167	3#350, 1#3/0G	3"	3	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
G167	1#3/0G	3/4"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
P225	3#500, 3#3G	3"	1	
S225	4#300, 1#2/0G	3"	1	
K225	3#350, 2#3/0, 1#1G	3 1/2"	3	
G225	1#2/0G	3/4"	1	

ISSUE FOR CONSTRUCTION

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LEAF ENGINEERS

WFAC Black Box Addition PKG 1

1801 Martin Luther King Dr.,
San Antonio, TX. 78203

ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN

NORTH: PLAN TRUE

06/14/2024
LEAF ENGINEERS
F-18672

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
06/14/2024	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER 1

ELECTRICAL RISER DIAGRAM

E-502

ELECTRICAL SYMBOL LEGEND AND CONTACTOR SCHEDULE

E-601

FOR BLUEBEAM LABELING/OCR:

0"

1"

ISSUE FOR CONSTRUCTION

GENERAL ELECTRICAL NOTES

1. UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS OR OTHERWISE INSTRUCTED BY THE ARCHITECT, ELECTRICAL OUTLETS SHALL HAVE THE FOLLOWING MOUNTING HEIGHTS. DIMENSIONS ARE TO CENTER OF BOX UNLESS OTHERWISE NOTED:

WALL SWITCHES	•
WALL CONVENIENCE RECEPTACLES	15" AFF TO BOTTOM OF BOX
WALL DATA/VOICE OUTLETS	15" AFF TO BOTTOM OF BOX
WALL OUTLETS FOR WALL MTD. TELEPHONE	•
WALL CLOCK OUTLETS	7'-0" AFF (OR ABOVE CHALKBOARDS WHERE REQUIRED)*
MANUAL FIRE ALARM PULL STATIONS	•
FIRE ALARM SPEAKER/HORN	1'-0" BELOW CEILING, OR IN CEILING, AS REQUIRED*
INTERIOR BELLS,BUZZERS, HORNS	1'-0" BELOW CEILING, OR IN CEILING, AS REQUIRED*
SPECIAL PURPOSE WALL OUTLETS	15" AFF TO BOTTOM OF BOX (OR HIGHER AS REQUIRED TO SERVE EQUIPMENT)
PUSH BUTTONS	
ADA VISUAL ALARM	80" AFF TO BOTTOM OF LENS OR 6" BELOW CEILING, WHICHEVER IS LOWER. ENTIRE LENS TO BE WITHIN 80" TO 96" AFF*

• TOP OF BOX SHALL BE 42" AFF MAX. FOR WHEELCHAIR FRONTAL APPROACH AND 48" AFF MAX. FOR SIDE APPROACH. VERIFY EXACT HEIGHT WITH ARCHITECT

* 7'-0" AFF TO BOTTOM OF DEVICE IF DEVICE PROTRUDES MORE THAN 4" FROM WALL (PER ADA)

AFF = ABOVE FINISHED FLOOR
AFG = ABOVE FINISHED GRADE

2. UNLESS SPECIFICALLY INDICATED ON THE ELECTRICAL DRAWINGS, OUTLETS LOCATED AT COUNTERS AND CABINETS SHALL BE MOUNTED AS SHOWN ON ARCHITECTURAL DETAILS AND ELEVATIONS, OR AS DIRECTED BY ARCHITECT.
3. COORDINATE MOUNTING HEIGHTS AND DETAILS OF ALL OUTLETS (POWER, SIGNAL, ETC.) WITH ARCHITECTURAL CASEWORK DRAWINGS PRIOR TO DIVISION 26 ROUGH-IN. PROVIDE COORDINATION DRAWINGS IN ACCORDANCE WITH DIVISION 26 SPECIFICATIONS WHERE CONFLICTS EXIST. OBTAIN APPROVAL FROM ARCHITECT BEFORE ELECTRICAL ROUGH-IN WHEN CONFLICTS ARISE.
4. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF ALL HVAC AND PLUMBING EQUIPMENT.
5. CIRCUITING
   A. BRANCH CIRCUITING IS SCHEMATIC IN NATURE AND IS INTENDED TO INDICATE CIRCUIT LOADING AND CONTROL, NOT METHODS OF INSTALLATION. REFER TO SPECIFICATIONS FOR METHODS OF INSTALLATION AND MATERIALS, INCLUDING WHETHER OR NOT BX IS ALLOWED AND WHETHER "THROUGH-FIXTURE" OR "OCTOPUS (EMT WITH FLEXIBLE WHIPS)" TYPE LIGHTING BRANCH CIRCUITING IS REQUIRED.
   B. WHERE WIRE SIZE AND CONDUIT SIZE IS NOT INDICATED ON THE DRAWINGS AND/OR PANEL SCHEDULES, REFER TO SPECIFICATIONS FOR MINIMUM SIZE REQUIRED.
   C. BRANCH CIRCUITS ON THE DRAWINGS ARE GENERALLY NOT SHOWN GROUPED IN SINGLE RACEWAYS. HOWEVER, GROUPING IS ALLOWED UNDER CERTAIN CONDITIONS. REFER TO DIVISION 26 SPECIFICATIONS UNDER SECTION ENTITLED "ELECTRICAL WIRING" FOR REQUIREMENTS.
   D. THE DRAWINGS GENERALLY INDICATE QUANTITY OF CONDUCTORS ON BRANCH CIRCUIT HOME RUNS ONLY. ELSEWHERE WITHIN CIRCUITS, PROVIDE QUANTITY OF CONDUCTORS AS NEEDED TO ACCOMPLISH CIRCUITING AND SWITCHING REQUIREMENTS SHOWN.
6. THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION, NEC, ALL STATE AND LOCAL CODES AND AMENDMENTS.

GENERAL ELECTRICAL REMODEL NOTES

1. UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS OR OTHERWISE INSTRUCTED BY THE ARCHITECT, ELECTRICAL OUTLETS SHALL HAVE THE FOLLOWING MOUNTING HEIGHTS. DIMENSIONS ARE TO CENTER OF BOX UNLESS OTHERWISE NOTED:

WALL SWITCHES	•
WALL CONVENIENCE RECEPTACLES	15" AFF TO BOTTOM OF BOX
WALL DATA/VOICE OUTLETS	15" AFF TO BOTTOM OF BOX
WALL OUTLETS FOR WALL MTD. TELEPHONE	•
WALL CLOCK OUTLETS	7'-0" AFF (OR ABOVE CHALKBOARDS WHERE REQUIRED)*
MANUAL FIRE ALARM PULL STATIONS	•
FIRE ALARM SPEAKER/HORN	1'-0" BELOW CEILING, OR IN CEILING, AS REQUIRED*
INTERIOR BELLS,BUZZERS, HORNS	1'-0" BELOW CEILING, OR IN CEILING, AS REQUIRED*
SPECIAL PURPOSE WALL OUTLETS	15" AFF TO BOTTOM OF BOX (OR HIGHER AS REQUIRED TO SERVE EQUIPMENT)
PUSH BUTTONS	
ADA VISUAL ALARM	80" AFF TO BOTTOM OF LENS OR 6" BELOW CEILING, WHICHEVER IS LOWER. ENTIRE LENS TO BE WITHIN 80" TO 96" AFF*

• TOP OF BOX SHALL BE 42" AFF MAX. FOR WHEELCHAIR FRONTAL APPROACH AND 48" AFF MAX. FOR SIDE APPROACH. VERIFY EXACT HEIGHT WITH ARCHITECT

* 7'-0" AFF TO BOTTOM OF DEVICE IF DEVICE PROTRUDES MORE THAN 4" FROM WALL (PER ADA)

AFF = ABOVE FINISHED FLOOR
AFG = ABOVE FINISHED GRADE

2. UNLESS SPECIFICALLY INDICATED ON THE ELECTRICAL DRAWINGS, OUTLETS LOCATED AT COUNTERS AND CABINETS SHALL BE MOUNTED AS SHOWN ON ARCHITECTURAL DETAILS AND ELEVATIONS, OR AS DIRECTED BY ARCHITECT.
3. COORDINATE MOUNTING HEIGHTS AND DETAILS OF ALL OUTLETS (POWER, SIGNAL, ETC.) WITH ARCHITECTURAL CASEWORK DRAWINGS PRIOR TO DIVISION 26 ROUGH-IN. PROVIDE COORDINATION DRAWINGS IN ACCORDANCE WITH DIVISION 26 SPECIFICATIONS WHERE CONFLICTS EXIST. OBTAIN APPROVAL FROM ARCHITECT BEFORE ELECTRICAL ROUGH-IN WHEN CONFLICTS ARISE.
4. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF ALL HVAC AND PLUMBING EQUIPMENT.
5. CIRCUITING
   A. BRANCH CIRCUITING IS SCHEMATIC IN NATURE AND IS INTENDED TO INDICATE CIRCUIT LOADING AND CONTROL, NOT METHODS OF INSTALLATION. REFER TO SPECIFICATIONS FOR METHODS OF INSTALLATION AND MATERIALS, INCLUDING WHETHER OR NOT BX IS ALLOWED AND WHETHER "THROUGH-FIXTURE" OR "OCTOPUS (EMT WITH FLEXIBLE WHIPS)" TYPE LIGHTING BRANCH CIRCUITING IS REQUIRED.
   B. WHERE WIRE SIZE AND CONDUIT SIZE IS NOT INDICATED ON THE DRAWINGS AND/OR PANEL SCHEDULES, REFER TO SPECIFICATIONS FOR MINIMUM SIZE REQUIRED.
   C. BRANCH CIRCUITS ON THE DRAWINGS ARE GENERALLY NOT SHOWN GROUPED IN SINGLE RACEWAYS. HOWEVER, GROUPING IS ALLOWED UNDER CERTAIN CONDITIONS. REFER TO DIVISION 26 SPECIFICATIONS UNDER SECTION ENTITLED "ELECTRICAL WIRING" FOR REQUIREMENTS.
   D. THE DRAWINGS GENERALLY INDICATE QUANTITY OF CONDUCTORS ON BRANCH CIRCUIT HOME RUNS ONLY. ELSEWHERE WITHIN CIRCUITS, PROVIDE QUANTITY OF CONDUCTORS AS NEEDED TO ACCOMPLISH CIRCUITING AND SWITCHING REQUIREMENTS SHOWN.
6. WHEN REMOVING EXISTING ELECTRICAL WORK WHERE OTHER ITEMS REMAIN ON THE SAME CIRCUIT, THE CONTRACTOR SHALL TAKE WHATEVER STEPS ARE NECESSARY TO MAINTAIN CIRCUIT CONTINUITY.
7. ALL ITEMS NOTED TO BE REMOVED ARE TO REMAIN THE PROPERTY OF THE OWNER; HOWEVER, CONTRACTOR SHALL REMOVE FROM JOB SITE ALL MATERIAL NOT RETAINED BY OWNER.
8. FIELD VERIFY CONDITION OF, AND MODIFICATIONS AND ADDITIONS TO, ALL EXISTING ELECTRICAL FIXTURES, PANELS, WIRING, ETC.
9. WHERE DOORS ARE ADDED, OR PORTIONS OF WALLS REMOVED, CONTRACTOR SHALL REMOVE OR RELOCATE ALL ELECTRICAL WORK NECESSARY FOR THE REMODELING MODIFICATION, WHETHER OR NOT THIS WORK IS NOTED ON PLANS.
10. WHERE EXISTING JUNCTION BOXES ARE COVERED OR REMOVED, CONTRACTOR SHALL TAKE WHATEVER STEPS ARE NECESSARY TO COMPLY WITH NEC 314-19.
11. EXISTING ELECTRICAL BOXES TO REMAIN IN AREAS WHERE NEW WALL FINISHES ARE TO BE APPLIED SHALL BE RESET AS NECESSARY TO PROVIDE FLUSH MOUNTING FOR BOXES.
12. CONTRACTOR SHALL FIELD VERIFY EXISTING BRANCH CIRCUIT LOADING WHEN MAKING MODIFICATIONS AND/OR ADDITIONS TO THAT CIRCUIT. IF NEW WORK WOULD OVERLOAD EXISTING CIRCUIT, CONTRACTOR SHALL LOCATE ANOTHER EXISTING CIRCUIT (THE CLOSEST), WHICH WOULD NOT BE OVERLOADED UPON ADDING NEW LOAD, AND SHALL TIE NEW LOAD INTO THAT CIRCUIT.
13. WHEN EXISTING ELECTRICAL WORK IS REMOVED, ALL EXPOSED CONDUIT, WIRING, CONTROL AND JUNCTION BOXES ALONG WALLS, FLOOR, AND CEILING SHALL BE REMOVED. BRANCH CIRCUIT WIRES SHALL BE REMOVED BACK TO CIRCUIT BREAKER(S). BLANK COVER PLATES SHALL BE PROVIDED FOR RECESSED BOXES. WHERE THIS WORK IS DONE, THE WALLS, FLOOR, AND CEILING SHALL BE PATCHES AS NECESSARY UNDER WORK COVERED IN OTHER SECTIONS.
14. EXISTING RECESSED INCANDESCENT AND HID LUMINAIRES DESIGNATED FOR TEMPORARY REMOVAL AND RE-USE SHALL BE STORED. ALL SUCH LUMINAIRES NOT THERMALLY PROTECTED PER NEC 410-118 AND 410-130(F) ARE NOT SUITABLE FOR RE-USE AND SHALL BE GIVEN TO THE OWNER. PROVIDE NEW REPLACEMENT LUMINAIRES WITH UL THERMAL PROTECTION, IDENTICAL APERTURE, EQUIVALENT PHOTOMETRICS AND NEW LAMPS.
15. CONTRACTOR TO REFER TO ARCHITECTURAL DEMOLITION PLANS AND PHASING PLANS AND HAVE A GOOD UNDERSTANDING OF SCOPE OF PROJECT PRIOR TO COMMENCEMENT OF WORK.
16. LUMINAIRE SUPPORT IN SUSPENDED CEILINGS:
   A. PROVIDE MEANS OF SUPPORT FOR LUMINAIRES PER NEC 410-16. T BAR CLIPS SHALL BE INSTALLED ON THE LUMINAIRE AND SHALL BE FIELD SECURED TO THE INVERTED CEILINGS TEES SO THAT THE LUMINAIRE IS SECURELY FASTENED TO THE CEILING SYSTEM FRAMING MEMBERS
   B. CEILING TILES SHALL NOT BEAR THE WEIGHT OF LUMINAIRES. SURFACE MOUNT LUMINAIRES, RECESSED DOWNLIGHTS, LIGHT TRACK, EXIT SIGNS, ETC. SHALL BE SUPPORTED BY PROPER FRAMES OR OTHER ATTACHMENT TO MAIN CEILING SYSTEM GRID OR BUILDING STRUCTURE ABOVE CEILING.
   C. LUMINAIRES SHALL BE CENTERED IN CEILING TILE.
   D. LUMINAIRE SHALL HAVE FLANGE OR TRIM RING FOR CLOSURE OF CEILING CUTOUT OR OPENING.
   E. FIRE-RATED CEILING ASSEMBLY: FOR LUMINAIRES TO BE FLUSH-MOUNTED INTO A FIRE-RATED CEILING OR SURFACE MOUNTED TO A FIRE-RATED CEILING, INSTALL WITH INDEPENDENT, SECURE SUPPORT, RACEWAY, CABLE ASSEMBLIES BOXES AND FITTINGS LOCATED ABOVE A FIRE-RATED FLOOR/CEILING OR ROOF CEILING ASSEMBLY SHALL NOT BE SECURED TO, OR SUPPORTED BY, THE CEILING ASSEMBLY INCLUDING CEILING SUPPORT WIRES. PROVIDE AN INDEPENDENT MEANS OF SECURE SUPPORT. INDEPENDENT SUPPORT WIRES SHALL BE DISTINGUISHABLE BY COLOR, TAGGING, OR OTHER EFFECTIVE MEANS FROM THOSE THAT ARE PART OF THE FIRE-RATED DESIGN.
17. CONTRACTOR SHALL FIELD VERIFY ANY EXISTING UNDERGROUND PIPING, WIRING, OR OTHER FACILITIES PRIOR TO TRENCHING, AND SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY INSTALLATION OF NEW WORK.
18. THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION, NEC, AND STATE AND LOCAL CODES AND AMENDMENTS.

ELECTRICAL SYMBOL LEGEND

1. EVERY SYMBOL SHOWN ON LEGEND MAY NOT APPEAR ON DRAWINGS.
2. DASHED ELEECTRICAL EQUIPMENT GENERALLY INDICATES EXISTING EQUIPMENT.
3. LONG-SHORT-SHORT-LONG DASHING GENERALLY INDICATES MATCH LINE OR DEFINES AREA FOR SPECIAL NOTE.

CIRCUIT RELATED:

LIGHTING OR POWER CIRCUIT(S). ARROW INDICATES HOME RUN, LONGER TICK(S) INDICATE NEUTRAL WIRE(S), SHORTER STRAIGHT TICK(S) INDICATE PHASE WIRE(S), SLANTED SHORTER TICK(S) INDICATE SWITCH LEG(S), DOT(S) INDICATE GROUNDING CONDUCTOR(S), DASHED WIRING (LONG-SHORT-LONG DASHES) INDICATES WIRING BELOW SLAB OR GRADE, DASHED WIRING (SERIES OF SHORT DASHES) INDICATES EXISTING WIRING, SLASH THROUGH ARROW INDICATES PARTIAL CIRCUIT, "D" ON HOMERUN ARROW INDICATES DEDICATED CIRCUIT: PROVIDE A SEPARATE NEUTRAL FOR EACH PHASE CONDUCTOR FOR ENTIRE LENGTH OF CIRCUIT FROM PANEL TO OUTLET; COUNT EACH NEUTRAL AS CURRENT-CARRYING AND GROUP A MAXIMUM OF SIX THHN/THWN CONDUCTORS IN A SINGLE RACEWAY; GROUNDING CONDUCTOR IS NOT COUNTED

J — JUNCTION BOX

GROUNDING FIXTURE

LIGHTING:

LED LIGHTING FIXTURE. LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH CONTROL, NUMBER INDICATES CIRCUIT, CROSS HATCHING INDICATES FIXTURE ON EMERGENCY SYSTEM, FOR SOLID CIRCLE WITHIN FIXTURE REFERENCE APPROPRIATE CATEGORY "A" CIRCUIT RELATED SYMBOL

STRIP TYPE LED LIGHTING FIXTURE. LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH CONTROL, NUMBER INDICATES CIRCUIT, FOR SOLID CIRCLE ATTACHED TO FIXTURE REFERENCE APPROPRIATE CATEGORY "A" CIRCUIT RELATED SYMBOL

LED LIGHTING FIXTURE. LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH CONTROL, NUMBER INDICATES CIRCUIT, FOR SOLID CIRCLE REFERENCE APPROPRIATE CATEGORY "A" CIRCUIT RELATED SYMBOL

DESIGNATES FIXTURE ON EMERGENCY POWER. RE: LIGHTING PLAN NOTES AND FIXTURE SCHEDULE NOTES FOR ADDITIONAL INFORMATION

WALL OR BRACKET MOUNTED FIXTURE OR DEVICE

EXIT LIGHT FIXTURE. LETTER INDICATES TYPE, NUMBER INDICATES CIRCUIT, NUMBER AND LOCATION OF SHADED TRIANGLE SECTIONS INDICATE NUMBER OF EXIT SIGN FACES AND DIRECTION OF EACH FACE. PROVIDE CHEVRON DIRECTIONAL INDICATORS AS SHOWN ON DRAWINGS

CONTROL:

$ — SWITCH. SMALL LETTER INDICATES FIXTURES CONTROLLED, "P" INDICATES PILOT LIGHT, "WP" INDICATES WEATHERPROOF, "K" INDICATES KEY POERATED, "MO" INDICATES SPDT MOMENTARY CONTACT, "2" INDICATES DPDT, "3" INDICATES 3-WAY, "4" INDICATES 4-WAY, "M" INDICATES MANUAL MOTOR STARTER, CIRCUIT DESIGNATION NEXT TO SWITCH INDICATES BRANCH CIRCUIT NUMBER

$D — WALL BOX DIMMER SWITCH. "MARK" INDICATES WATTAGE IF OTHER THAN 600, "3D" INDICATES 3-WAY DIMMER

$$ — MULTI-LEVEL SWITCH. CIRCUIT DESIGNATION NEXT TO SWITCH INDICATES BRANCH CIRCUIT NUMBER

$T — DIGITAL TIME SWITCH

PC — PHOTOELECTRIC CONTROL

EMERGENCY POWER OFF (EPO) PUSHBUTTON

PUSH BUTTON

$OC — WALL MOUNT OCCUPANCY SENSOR

DUAL TECHNOLOGY CEILING MOUNTED OCCUPANCY SENSOR

R — CEILING MOUNTED RESTROOM OCCUPANCY SENSOR

C — CEILING MOUNTED CORRIDOR OCCUPANCY SENSOR

HB — CEILING MOUNTED HIGH CEILING OCCUPANCY SENSOR

POWER OUTLETS:

20A-125V DUPLEX RECEPTACLE

20A-125V GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE. "WP" INDICATES WEATHER PROOF DEVICE

20A-125V DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER TOP. REFER TO ARCHITECT FOR EXACT HEIGHT ABOVE COUNTER

C — 20A-125V CONTROLLED DUPLEX RECEPTACLE

20A-125V ISOLATED GROUND TYPE DUPLEX RECEPTACLE

CH — 20A-125V DUPLEX TAMPER RESISTANT RECEPTACLE WITH (2) USB CHARGING PORTS

20A-125V FOURPLEX RECEPTACLE. SAME SYMBOLOGY AS DUPLEX RECEPTACLE

SPECIAL PURPOSE SINGLE POWER RECEPTACLE. RATED AS INDICATED (IF NO RATING INDICATED, RECEPTACLE RATING SHALL MATCH BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICE AND SHALL MEET REQUIREMENTS OF EQUIPMENT BEING CONNECTED), "C" INDICATES CLOCK OUTLET

20A-125V FLUSH FLOOR DUPLEX RECEPTACLE. 20A WHEN INDICATED OR IF BRANCH CIRCUIT SERVES ONLY SINGLE DUPLEX. PROVIDE CARPED FLANGE WHERE APPLICABLE

LC1-X — CIRCUIT DESIGNATION NEXT TO RECEPTACLE DEVICES INDICATES BRANCH CIRCUIT NUMBER. RE: PANEL SCHEDULES FOR INFORMATION.

TELEPHONE/DATA:

FLUSH FLOOR TELEPHONE OUTLET WITH CARPET FLANGE WHERE APPLICABLE

WALL COMMUNICATIONS OR DATA OUTLET. REFER TO 'TS' SERIES SHEETS FOR EXACT BOX / CONDUIT REQUIREMENTS

FLUSH FLOOR COMMUNICATIONS OR DATA OUTLET. REFER TO 'TS' SERIES SHEETS FOR EXACT BOX / CONDUIT REQUIREMENTS. PROVIDE CARPET FLANGE WHERE APPLICABLE

SURFACE FLOOR COMMUNICATIONS OR DATA OUTLET. REFER TO 'TS' SERIES SHEETS FOR EXACT BOX / CONDUIT REQUIREMENTS. PROVIDE CARPET FLANGE WHERE APPLICABLE

EQUIPMENT:

+42" — A NOTATION INDICATING THE MOUNTING HEIGHT OF A DEVICE AS MEASURED FROM FINISHED FLOOR OR GRADE TO CENTER LINE OF DEVICE

MOTOR

DISCONNECT SWITCH. FRAME SIZE/FUSE SIZE/POLES AS INDICATED, "NF" INDICATES NON-FUSIBLE. NEMA 1 ENCLOSURE UNLESS OTHERWISE NOTED. PROVIDE FUSED BUSWAY PLUG WHEN SWITCH IS INDICATED ON BUSWAY. ALL DISCONNECT SWITCHES SHALL BE 30/NF/3 UNLESS OTHERWISE NOTED

SINGLE CIRCUIT BREAKER IN INDIVIDUAL ENCLOSURE

MAGNETIC MOTOR CONTROLLER. NUMBER INDICATES NEMA SIZE. STARTER NEMA SIZE SHALL BE "NEMA 1" UNLESS OTHERWISE NOTED

COMBINATION DISCONNECT SWITCH / MOTOR CONTROLLER

CONTACTOR

PANELBOARD

SWITCHBOARD / DP

T — TRANSFORMER

GROUNDING CONNECTION TO GROUNDING ELECTRODE AS DEFINED IN NEC ARTICLE 250

B — BELL. "WP" INDICATED OUTDOOR RATED

LIGHTING FIXTURE NOTES

KEY TO NOTE PREFIXES: "G" NOTES ARE "GENERAL" LIGHTING NOTES THAT APPLY TO THE ENTIRE PROJECT. "S" NOTES ARE "SCHEDULE" NOTES THAT APPLY TO SPECIFIC LUMINAIRES.

G.1 REFER TO ARCHITECTURAL REFLECTED CEILING PLANS, ELEVATIONS, SECTIONS, AND DETAILS FOR THE EXACT LOCATION OF ALL LUMINAIRES. ARCHITECTURAL PLANS SHALL GOVERN FOR LOCATION AND LAYOUT. IF ARCHITECTURAL AND ELECTRICAL DRAWINGS CONFLICT IN EXACT COUNT OR FIXTURE TYPE, PROVIDE THE GREATER QUANTITY OR COST TYPE UNLESS OTHERWISE INSTRUCTED.

G2. REFER TO DIVISION 26 ELECTRICAL SPECIFICATIONS FOR ADDITIONAL LUMINAIRE AND ELECTRICAL REQUIREMENTS (LENS, AIR HANDLING CHARACTERISTICS, T-BAR CLIPS, BALLAST, LAMPS, TIME FRAME FOR SUBMITTAL OF SUBSTITUTE LIGHT FIXTURES FOR PRIOR APPROVAL, ETC.).

G3. FOR EACH SCHEDULED LUMINAIRE, PROVIDE ALL REQUIRED APPURTENANCES FOR INSTALLATION IN APPLICABLE STRUCTURE OR SPECIFIED ARCHITECTURAL EILING. ALL LUMINAIRES SHALL HAVE THE APPROPRIATE NEMA TYPE FRAME THAT IS COMPATIBLE WITH THE CEILING SYSTEM SPECIFIED BY THE ARCHITECT. ELECTRICAL DRAWINGS DO NOT INDICATE CEILING TYPES, CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS TO DETERMINE CEILING TYPE (GRID, FLANGE, SPLINE, SCREW SLOT, ETC.) AND PROVIDE APPROPRIATE FRAME.

G4. EXIT SIGNS AND OTHER LUMINAIRES SHALL NOT BE SUPPORTED BY CEILING TILE. PROVIDE MOUNTING FRAME OR HANGERS TO SECURELY FASTEN IN PLACE ALL LUMINAIRES MOUNTED IN CEILING TILE. FRAMING MEMBERS OF A SUSPENDED CEILING SYSTEM MAY BE USED WHERE DESIGNED FOR THE PURPOSE AND INSTALLED PER NEC 410-16(c).

G5. WHERE A SURFACE-MOUNTED LUMINAIRE CONTAINING A BALLAST IS TO BE INSTALLED ON COMBUSTIBLE LOW-DENSITY CELLULOSE FIBERBOARD, IT SHALL BE LISTED FOR THIS CONDITION OR SHALL BE SPACED NOT LESS THAN 1 1/2 INCHES FROM THE SURFACE OF THE FIBERBOARD (NEC 410-76(b)).

G6. REQUEST FOR SUBSTITUTION SHALL FOLLOW SPECIFIED PROCEDURES AND SHALL INCLUDE A WORKING SAMPLE SUITABLE FOR TABLE TOP EXAMINATION.

S1. UNLESS OTHERWISE NOTED, MOUNT EXIT SIGN DIRECTLY ABOVE EGRESS DOOR (MAXIMUM 24" ABOVE DOOR), PROVIDE WALL MOUNT EXIT SIGNS IN HIGH CEILING AREAS, PROVIDE WINDOW MULLION MOUNTING WITH CONCEALED WIRING WHERE REQUIRED. COORDINATE EXACT ELEVATION WITH ARCHITECT PRIOR TO ROUGH-IN.

CONTACTOR SCHEDULE

DESIG-NATION	CIRCUITS SERVED	CONTACTOR CHARACTERISTICS					REMARKS
		CONTACT AMPS	N.O. POLES	COIL VOLTS	CONTROL	SUPPLY CKT.	
C1	1HA-6	20	2	277	DDC	1HA-6	ASCO 918 REMOTE CONTROL SWITCH (1)

(1) PROVIDE ASCO ACCESSORY 47 SOLID STATE TWO-WIRE CONTROL INTERFACE MODULE.

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WFAC Black Box Addition PKG 1

1801 Martin Luther King Dr.,
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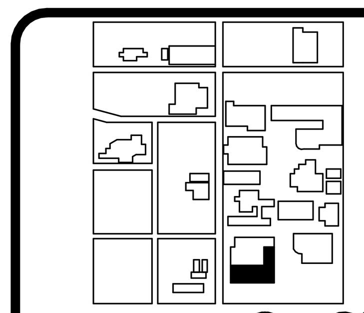

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06/14/2024
LEAF ENGINEERS
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DATE 06/14/2024	PROJECT NUMBER 230462

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BUILDING NUMBER 1

ELECTRICAL SYMBOL LEGEND AND CONTACTOR SCHEDULE

E-601

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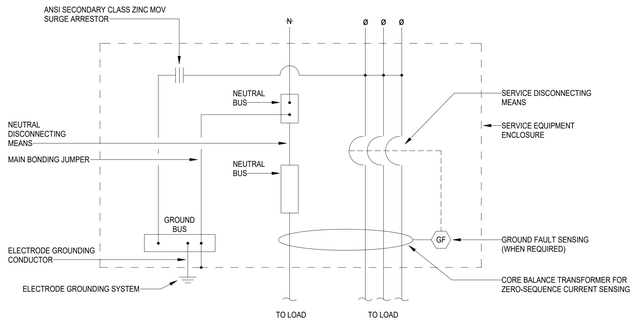
ELECTRICAL DETAILS

E-602

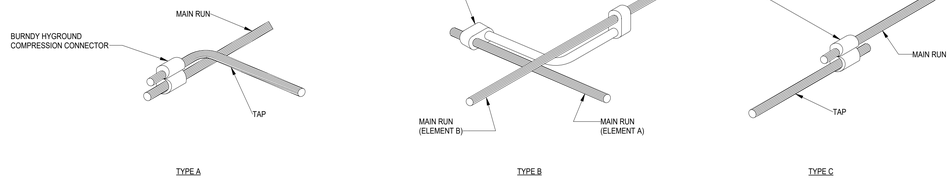
FOR BLUEBEAM LABELING/OCR:

0"

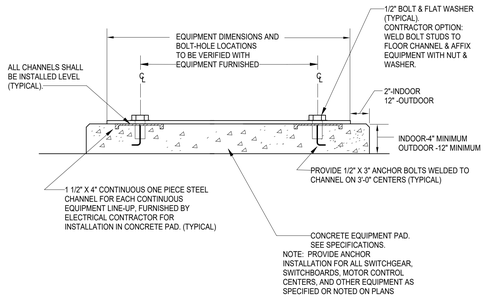
1"



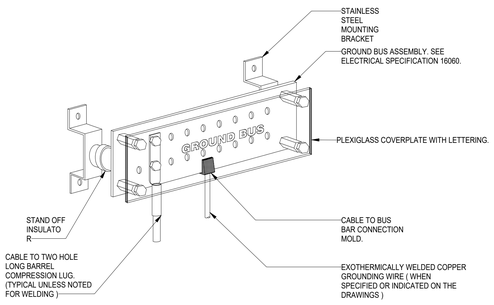
4 ELECTRIC SERVICE GROUNDING DETAIL
NOT TO SCALE



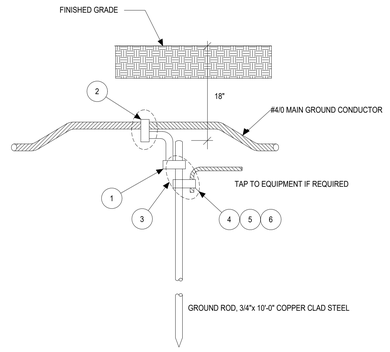
8 GROUNDING COMPRESSION CONNECTIONS
NOT TO SCALE



3 EQUIPMENT ANCHOR DETAIL
NOT TO SCALE



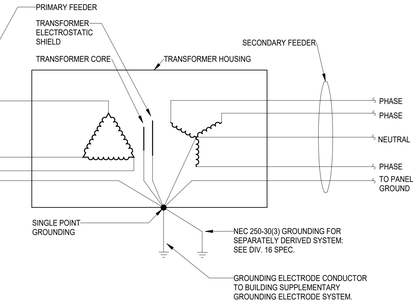
6 GROUND BUS DETAIL
NOT TO SCALE



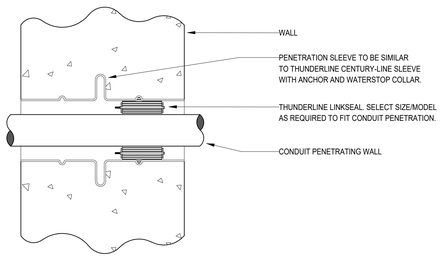
7 GROUND ROD ASSEMBLY
NOT TO SCALE

KEYED NOTES:

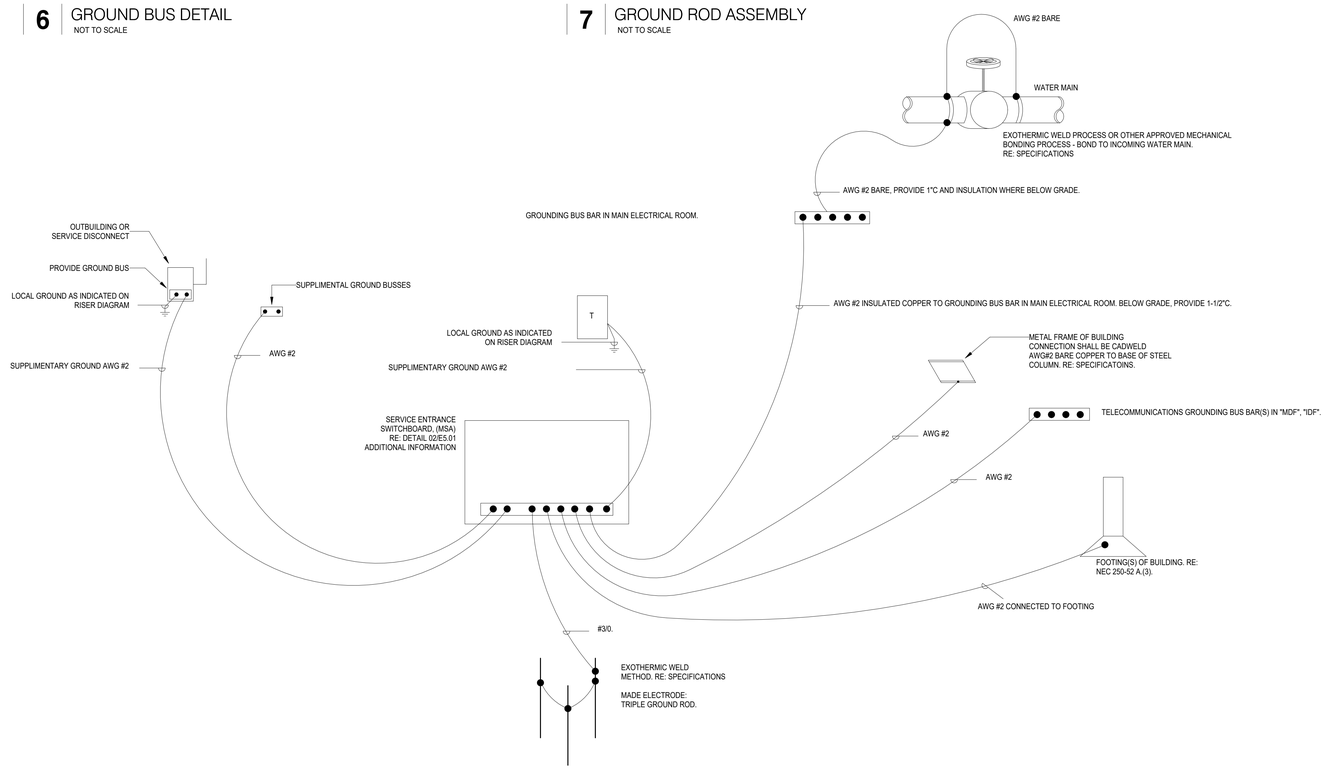
1. REQUIRES BURNDYY750 PRESS WITH U99 FOR INSTALLATION.
2. CRIMP CONNECTOR, #2 TO 250 KCMIL TO 3/4" ROD, BURNDY #YGLR29C34.
3. REQUIRES BURNDY Y750 HYPRESS WITH PU998 CRIMP DIE AND UPRECRIMP34 DIE FOR INSTALLATION.
4. CRIMP CONNECTOR, #2 TO 250 KCMIL TO 3/4" ROD, BURNDY #YGHP34C29.
5. CRIMP CONNECTOR, #4 TO #2 TO 3/4" ROD, BURNDY #YGHP34C2.
6. CRIMP CONNECTOR, #1/0 TO 2/0 KCMIL TO 3/4" ROD, BURNDY #YGHP34C26.



2 DELTA-WYE TRANSFORMER SCHEMATIC
NOT TO SCALE



1 CONDUIT PENETRATION DETAIL - EXTERIOR WALL
NOT TO SCALE



5 ELECTRICAL GROUNDING REQUIREMENTS
NOT TO SCALE

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WFAC Black Box Addition PKG 1

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ALAMO COLLEGES
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KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
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DATE	PROJECT NUMBER
06/14/2024	230462

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No.	Description	Date

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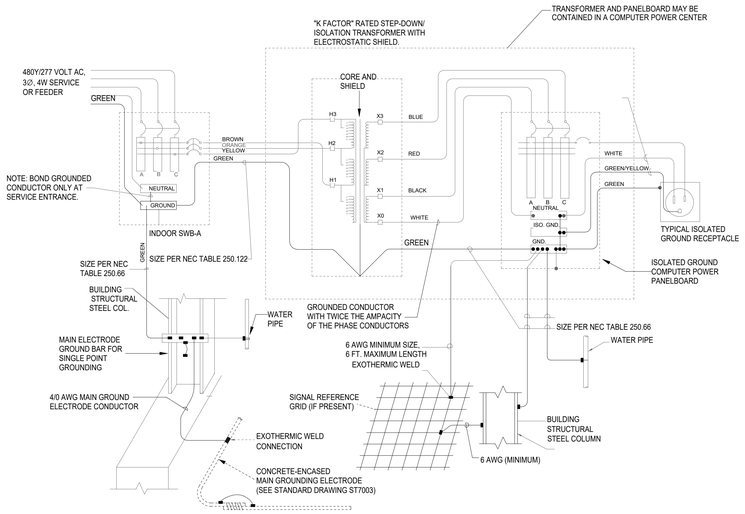
BUILDING NUMBER 1

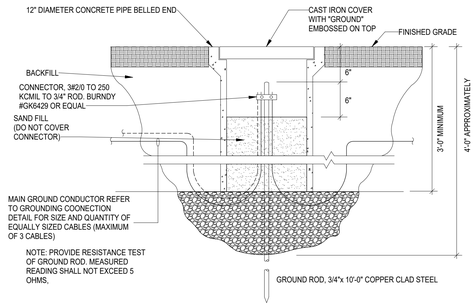
ELECTRICAL DETAILS

E-602

0"
1"



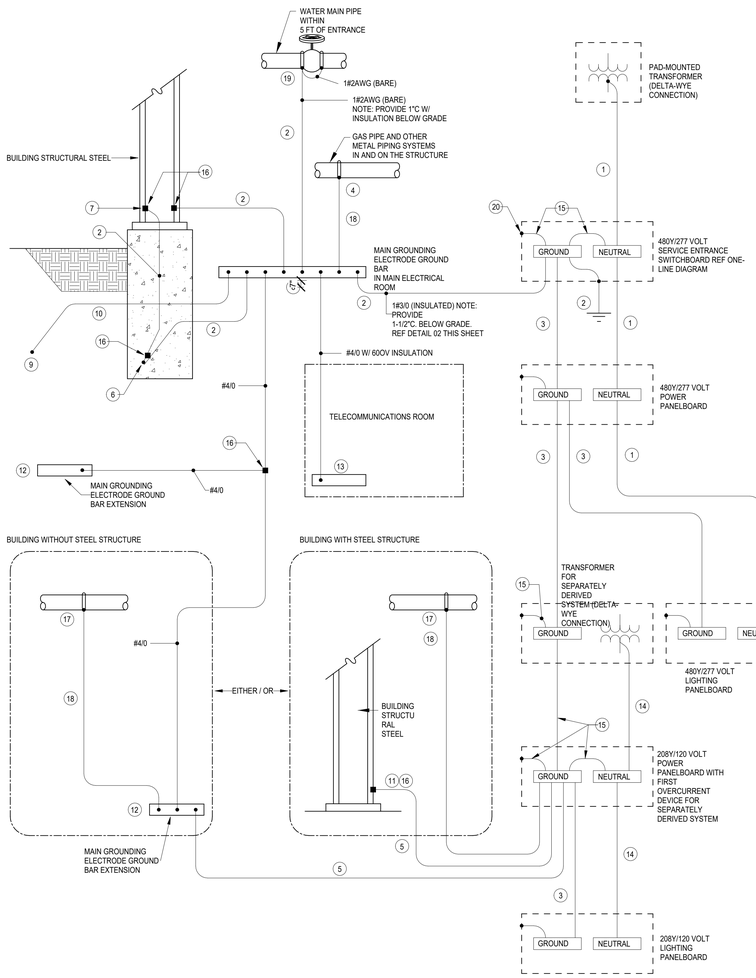
2 ISOLATED GROUND DETAIL
NOT TO SCALE



3 GROUND WELL ASSEMBLY
NOT TO SCALE

GENERAL NOTES

1. CONDUCTOR SIZES SHOWN ARE MINIMUM AND MAY BE LARGER THAN THE MINIMUM SIZES REQUIRED BY NEC.
2. INSTALL GROUNDING CONNECTIONS TO BUILDING STRUCTURE AND WATER PIPES AT LOCATIONS THAT ARE VISIBLE AND ACCESSIBLE FOR INSPECTION, MAINTENANCE, AND TESTING.
3. INSTALL AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC SERVICE ENTRANCE CONDUIT. BOND TO GROUND BUS USING CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250.66 USING THE SERVICE PHASE CONDUCTOR SIZE.
4. INSTALL AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC FEEDER CONDUIT. BOND TO GROUND BUS USING CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250.122 USING THE FEEDER CIRCUIT OVERCURRENT DEVICE SIZE OR THE SEPARATELY DERIVED SYSTEM OVERCURRENT DEVICE SIZE.
5. BOND HOT AND COLD WATER PIPING SYSTEMS.



1 GROUNDING CONNECTION DETAIL
SCALE: NOT TO SCALE

KEYED NOTES

1. INSTALL GROUNDED (NEUTRAL) CONDUCTOR SAME SIZE AS THE LARGEST PHASE CONDUCTOR IF THE LINE-TO-NEUTRAL LOAD EXCEEDS 5% OF THE CONNECTED LOAD. IF NEUTRAL LOAD IS SMALLER, INSTALL THE NEC MINIMUM GROUNDED CONDUCTOR.
2. INSTALL GROUNDING ELECTRODE CONDUCTOR, SIZED BASED ON NEC TABLE 250.66 USING THE SERVICE PHASE CONDUCTOR SIZE, BUT NOT SMALLER THAN 2 AWG UNLESS NOTED OTHERWISE.
3. INSTALL EQUIPMENT GROUNDING CONDUCTOR SIZED BASED ON NEC TABLE 250.122 USING THE FEEDER OVERCURRENT DEVICE SIZE.
4. BOND TO GAS PIPE ON THE BUILDING SIDE OF THE GAS METER.
5. INSTALL GROUNDING ELECTRODE CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250.66 USING THE SEPARATELY DERIVED SYSTEM PHASE CONDUCTOR SIZE.
6. INSTALL A CONCRETE-ENCASED MAIN GROUNDING ELECTRODE IN THE BUILDING FOUNDATION AROUND THE ENTIRE PERIMETER OF THE BUILDING. LOCATE ELECTRODE IN THE BOTTOM ONE-THIRD OF THE FOUNDATION WITH AT LEAST 3 INCHES OF CONCRETE COVER. USE EITHER OF THE FOLLOWING MATERIALS FOR THE ELECTRODE:

   BARE COPPER CABLE NOT SMALLER THAN THE GROUNDING ELECTRODE CONDUCTOR REQUIRED BY THE NEC AND NOT SMALLER THAN 2 AWG, REFER SPEC 26 05 26.

   BARE OR GALVANIZED REBARS THAT ARE MADE ELECTRICALLY CONTINUOUS USING COPPER JUMPERS NOT SMALLER THAN THE NEC REQUIRED GROUNDING ELECTRODE CONDUCTOR AND NOT SMALLER THAN 4 AWG. USE REINFORCING BARS NOT SMALLER THAN THE FOLLOWING BASED ON THE TOTAL LENGTH OF THE INTERCONNECTED AND PARALLELED REBARS:

TOTAL LENGTH	MINIMUM REBAR SIZE
112 FT	1 3/8" (#11 BAR)
150 FT	1" (#8 BAR)
192 FT	3/4" (#6 BAR)
223 FT	5/8" (#5 BAR)
268 FT	1/2" (#4 BAR)

7. BOND PERIMETER STRUCTURAL STEEL COLUMNS TO THE CONCRETE-ENCASED MAIN GROUNDING ELECTRODE. USE CADWELD CONNECTION TO ATTACH GROUNDING ELECTRODE CONDUCTOR TO BASE OF STEEL COLUMN. REFER SPEC 26 05 26.
8. INSTALL A "MAIN GROUND ELECTRODE GROUND BAR" FOR SINGLE POINT GROUNDING. LOCATE AT AN ACCESSIBLE AND VISIBLE POINT NEAR THE SERVICE ENTRANCE EQUIPMENT. MAKE CONNECTIONS TO THE GROUND BAR USING TWO-HOLE COMPRESSION SPADE LUGS THAT MEET IEEE 837 REQUIREMENTS. LABEL EACH CONNECTION TO THE GROUND BAR.
9. LIGHTNING PROTECTION GROUNDING COUNTERPOISE - 3/0 AWG COPPER (IF LIGHTING PROTECTION SYSTEM IS SPECIFIED IN PROJECT, RE: SECTION 26 41 00).
10. IF LIGHTNING PROTECTION SYSTEM IS SPECIFIED IN PROJECT (26 41 00), BOND THE LIGHTNING PROTECTION SYSTEM GROUNDING COUNTERPOISE TO THE MAIN GROUND ELECTRODE GROUND BAR. USE 4/0 AWG COPPER CABLE WITH 600 VOLT INSULATION. AT THE UNDERGROUND CONNECTION USE A COMPRESSION CONNECTOR THAT MEETS IEEE 837 REQUIREMENTS OR USE AN EXOTHERMIC WELD.
11. USE THE "MAIN GROUNDING ELECTRODE GROUND BAR" INSTEAD OF BUILDING STRUCTURAL STEEL IF THE FIRST OVERCURRENT DEVICE FOR THE SEPARATELY DERIVED SYSTEM IS WITHIN 50 FEET OF THE "MAIN GROUNDING ELECTRODE GROUND BAR".
12. IF THE BUILDING STRUCTURE IS NOT STRUCTURAL STEEL, INSTALL "MAIN GROUNDING ELECTRODE GROUND BAR EXTENSIONS" AT AN ACCESSIBLE AND VISIBLE LOCATION ADJACENT TO SEPARATELY DERIVED SYSTEMS THAT ARE MORE THAN 50 FEET FROM THE MAIN GROUNDING ELECTRODE GROUND BAR".
13. INSTALL A COPPER GROUNDING BAR IN EACH TELECOMMUNICATIONS ROOM. CONNECT TO THE "MAIN GROUNDING ELECTRODE GROUND BAR" USING 600V INSULATED 4/0 AWG COPPER CABLE AND COMPRESSION SPADE LUGS.
14. INSTALL GROUNDED (NEUTRAL) CONDUCTOR THAT IS NOT LESS THAN THE PHASE CONDUCTOR AMPACITY. IF HIGH-HARMONICS ARE PRESENT MAKE NEUTRAL AMPACITY 200% OF THE PHASE CONDUCTOR.
15. INSTALL BONDING CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250.66 USING THE SERVICE OR SEPARATELY-DERIVED SYSTEM PHASE CONDUCTOR SIZE.
16. INSTALL IRREVERSIBLE COMPRESSION CONNECTOR WITH TAMPER - PROOF HARDWARE OR INSTALL EXOTHERMIC WELD, REFER SPEC 26 05 26.
17. BOND TO METAL PIPING SYSTEMS IN THE AREA SERVED BY THE SEPARATELY DERIVED SYSTEM.
18. INSTALL BONDING JUMBER THAT IS SIZED BASED ON NEC TABLE 250.66 USING THE LARGEST SERVICE OR SEPARATELY DERIVED SYSTEM PHASE CONDUCTOR.
19. BOND TO INCOMING WATER MAIN USING EXOTHERMIC WELD PROCESS OR OTHER APPROVED MECHANICAL BONDING PROCESS, REFER SPEC 26 05 26.
20. TYPICAL EXOTHERMIC WELD PROCESS OR OTHER APPROVED MECHANICAL BONDING PROCESS, REFER SPEC 26 05 26, UNLESS NOTED OTHERWISE.

ELECTRICAL DETAILS
E-603
FOR BLUEBEAM LABELING/OCR:

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KEY PLAN
NORTH: PLAN TRUE

06/14/2024
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F-16672

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BUILDING NUMBER 1

ELECTRICAL DETAILS

E-603

SITE POWER PLAN

ES-101

FOR BLUEBEAM LABELING/OCR:

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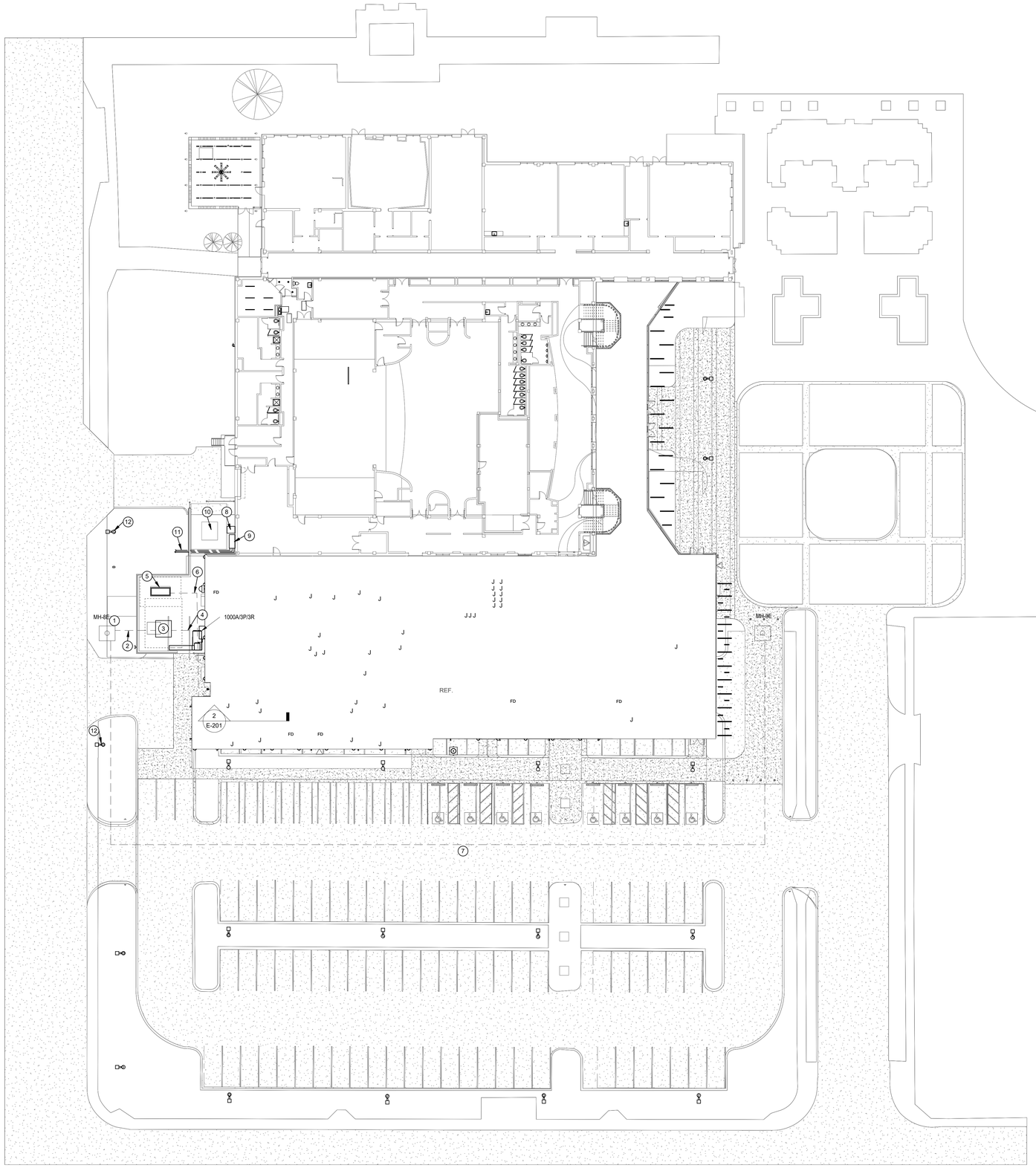
0"

1"



SITE PLAN GENERAL NOTES:

1. COORDINATE ROUTING FOR ALL UNDERGROUND ELECTRICAL BRANCH CIRCUITS AND FEEDERS WITH OTHER DISCIPLINES PRIOR TO TRENCHING.
2. UNLESS NOTED OTHERWISE ALL UNDERGROUND CONDUIT SHOWN ON THIS PLAN TO BE MINIMUM 1" IN SIZE.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY INSTALLATION OF NEW WORK.

SITE PLAN KEYED NOTES:

1. EXISTING ELECTRCAL MANHOLE.
2. NEW UNDERGROUND EASEMENT FOR NEW PRIMARY POWER FOR UTILITY TRANSFOMER. FEILD VERIFY THAT SPARE CAPACITY IS AVAILABLE.
3. NEW 480/277V 750KVA TRANSFORMER SHALL BE PROVIDED FROM ALAMO COLLEGES. CONTRACTOR SHALL COORDINATE EXACT LOCATION WITH ARCHITECTUAL PLANS.PROVIDE (1) 1 1/2" CONDUIT FOR POWER.
4. NEW UNDERGROUND ROUTE FOR SECONDARY TO MAIN SERVICE DISCONNECT. PROVIDE (2) 3" CONDUITS FOR POWER.
5. NEW 480/277V, 40 KW CUMMINS MODEL NUMBER: C40 N6 FOR FIRE PUMP.
6. NEW UNDERGROUND PATHWAY FROM GENERATOR TO 2ND FLOOR ATS IN MEZZAINE.
7. REROUTED PATHWAY FOR EXISTING UNDERGROUND DUCKBANK WITH 4 EXISTING CONDUITS. CONTRACTOR SHALL VERIFY EXACT PATHWAY OF EXISTING CONDUITS AND FEEDERS SIZES WITHIN EXISTING MANHOLES. CONTRACTOR SHALL COORDINATE NEW PATHWAY WITH ST. PHILLIPS UTILIY FACILITIES TO ENSURE PATHWAY CAN BE ROUTED.
8. RELOCATED CONDENSING UNIT AND ASSOCIATED DISONNECT. COORDINATE WITH MECHANICAL FOR EXACT LOCATION.
9. EXISTING DISTRIBUTION/MAIN SERVICE DISCONNECT DP-6 FOR ADJACENT WATSON FINE ARTS BUILDING.
10. EXISTING UTILITY TRANSFORMER FOR WATSON FINE ARTS.
11. PROPOSED NEW PATHWAY FOR RELOCATED EXISTING CONDUITS FROM DP-6. CONTRACTOR SHALL VERIFY WHERE CONDUITS ARE FED TO.
12. NEW LOCATION OF PEDESTRIAN POLES. COORDINATE EXACT LOCATION WITH ARCHITECTUAL DRAWINGS. UTILIZE EXISTING CIRCUIT IF AVAILABLE. IF CIRCUIT ISNT OBTAINABLE CONTRACTOR SHALL UTILIZE NEAREST AVAILABLE SPARE IN PANEL WITH IDENTICAL VOLTAGE.

1 **SITE POWER PLAN**
SCALE: 1" = 20'-0"

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LEAF ENGINEERS

WFAC Black Box Addition PKG 1

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SITE POWER PLAN

ES-101

SYMBOLS AND ABBREVIATIONS
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PLUMBING ABBREVIATION SCHEDULE

(A)	ITEM NOTED TO BE ABANDONED	KW	KILOWATTS
(D)	ITEM NOTED TO BE DEMOLISHED	L	LAVATORY
(E)	EXISTING ITEM	MAP	MASTER ALARM PANEL
(N)	NEW ITEM	MECH	MECHANICAL
(R)	ITEM NOTED TO BE RELOCATED	MH	MANHOLE
AAP	AREA ALARM PANEL	MS	MOP SINK
AAV	AUTOMATIC AIR VENT	NC	NORMALLY CLOSED
AFF	ABOVE FINISHED FLOOR	NIC	NOT IN CONTRACT
AP	ACCESS PANEL	NO	NORMALLY OPEN
BFF	BELOW FINISHED FLOOR	OF / CI	OWNER FURNISHED / CONTRACTOR INSTALLED
BFP	BACKFLOW PREVENTER	OF / OI	OWNER FURNISHED / OWNER INSTALLED
BOB	BOTTOM OF BEAM	OD	OVERFLOW DRAIN
BOP	BOTTOM OF PIPE	PIV	POST INDICATOR VALVE
BTUH	BRITISH THERMAL UNITS PER HOUR	PRV	PRESSURE REDUCING VALVE
C / C	CUT AND CAP	RD	ROOF DRAIN
CFH	CUBIC FEET PER HOUR	RE:	REFER TO
CFS	CUBIC FEET PER SECOND	RIC	ROUGH-IN AND CONNECT
CI	CAST IRON	RO	REVERSE OSMOSIS
CLG	CEILING	RP BFP	REDUCED PRESSURE BACKFLOW PREVENTER
CO	CLEANOUT	RPM	REVOLUTIONS PER MINUTE
CONN	CONNECTION	RVB	REFRIGERATOR VALVE BOX
CONT	CONTINUATION	SD	STORM DRAIN
DF	DRINKING FOUNTAIN	SF	SQUARE FEET
DPV	DRY PIPE VALVE	SIA	SERVICE SINK
DWG	DRAWING	SK	SINK
EA	EACH	TMV	THERMOSTATIC MIXING VALVE
EDF	ELECTRIC DRINKING FOUNTAIN	TOP	TOP OF PIPE
FCO	FLOOR CLEANOUT	TP	TRAP PRIMER
FD	FLOOR DRAIN	TYP	TYPICAL
FDV	FIRE DEPARTMENT VALVE	U	URINAL
FF	FINISHED FLOOR	U/F	UNDERFLOOR
FHC	FIRE HOSE CABINET	U/S	UNDERSLAB
FL	FLOW LINE	VB	VACUUM BREAKER
FS	FLOOR SINK	VCT	VITRIFIED CLAY TILE
FT	FEET	VTR	VENT THRU ROOF
FU	FIXTURE UNIT	WC	WATER CLOSET
GC	GENERAL CONTRACTOR	WCO	WALL CLEANOUT
GPH	GALLONS PER HOUR	WH	WALL HYDRANT
GPM	GALLONS PER MINUTE	WMB	WASHING MACHINE BOX
HB	HOSE BIBB	YH	YARD HYDRANT
HP	HORSEPOWER	ZV	ZONE VALVE
IE	INVERT ELEVATION		

NOTES:

1. NOT ALL ABBREVIATIONS MAY BE USED ON THESE DRAWINGS.

PLUMBING SYMBOLS LEGEND

DRAWINGS	DETAILS	ABV.	DESCRIPTION
	AV	AV	ACID VENT
	AW	AW	ACID WASTE
	CA	CA	COMPRESSED AIR
		CW	COLD WATER
		(D)	DEMOLISHED PIPING OR EQUIPMENT
	D	D	CONDENSATE
	DSP	DSP	DRY SPRINKLER
		(E)	EXISTING PIPING OR EQUIPMENT
	F	F	FIRE
	G	G	NATURAL GAS
	GW	GW	GREASE WASTE
		HW	HOT WATER
		HWR	HOT WATER RETURN
	OD	OD	OVERFLOW DRAIN
	SD	SD	STORM DRAIN
	SP	SP	SPRINKLER
	SS	SS	SANITARY SEWER
		V	VENT
			DIRECTION OF FLOW
			DROP IN PIPE
			RISE IN PIPE
			GATE VALVE
			BALL VALVE
			CHECK VALVE
			SUPERVISED VALVE WITH FLOW SWITCH
			PLUG VALVE / GAS COCK
			BUTTERFLY VALVE
			HOT WATER BALANCING VALVE
			PIPE UNION
			PRESSURE CONTROL VALVE
			3-WAY VALVE
			SOLENOID VALVE
	FS		FLOW SWITCH
			PRESSURE GAUGE WITH GAUGE COCK
			THERMOMETER
		RD / ORD	ROOF DRAIN / OVERFLOW DRAIN
		FD	FLOOR DRAIN
		FS	FLOOR SINK
			T & P RELIEF VALVE
			STRAINER
		CO	END OF LINE CLEANOUT
		FCO	FLOOR CLEANOUT
		WCO	WALL CLEANOUT
			CAP
			FLEXIBLE CONNECTION
			NEW CONNECTION TO EXISTING PIPING

NOTES:

1. NOT ALL SYMBOLS MAY BE USED ON THESE DRAWINGS.

PLUMBING PIPE MATERIAL SCHEDULE

PIPING SYSTEM	BELOW GRADE	ABOVE GRADE
STORM WATER	SCH 40 PVC	CAST IRON
SANITARY WASTE	SCH 40 PVC	CAST IRON
DOMESTIC WATER	TYPE 'K' COPPER	TYPE 'L' COPPER
NATURAL GAS	POLYETHYLENE PIPE W/ SLEEVE UNDER SLAB	SCH 40 BLACK STEEL
FIRE PROTECTION	SCH 40 BLACK STEEL	SCH 40 BLACK STEEL
COMPRESSED AIR	TYPE 'K' COPPER	SCH 40 GALVANIZED STEEL

WATER HAMMER ARRESTER SCHEDULE

PIPE SIZE	CROSS FIXTURE UNITS	PDI STD.
1/2"	1-11	"A"
3/4"	12-32	"B"
1"	33-60	"C"
1-1/4"	61-113	"D"
1-1/2"	114-154	"E"
2"	155-330	"F"

NOTES:

1. AIR CHAMBERS OR SHOCK ARRESTORS SHALL BE PROVIDED TO ALL FIXTURE RUNOUT AND SHALL BE SIZED ACCORDING TO LOCAL PLUMBING CODE (AHJ) & PDI. AIR CHAMBERS OR SHOCK ARRESTORS SHALL BE SIZED AND INSTALLED PER MANUFACTURER'S REQUIREMENTS. THE DEVICE SHALL HAVE LIFETIME WARRANTY AND BE INSTALLED WITHOUT REQUIRING ACCESS DOORS AND PANELS.

SLOPE OF HORIZONTAL DRAINAGE PIPE

PIPE SIZE	MINIMUM SLOPE
2-1/2" OR LESS	1/4" PER FOOT
3" TO 6"	1/8" PER FOOT
8" OR LARGER	1/16" PER FOOT

DRAWING REFERENCE KEY

REFER TO
DETAIL NUMBER
RE:01/P-401
SHEET NUMBER

PROJECT GENERAL NOTES

A. ALL EQUIPMENT AND/OR SYSTEMS NOTED ON THE DRAWINGS "TO REMAIN" SHALL BE INSPECTED AND TESTED ON SITE TO CERTIFY WORKING CONDITION. A WRITTEN REPORT ON THE CONDITION OF ALL EQUIPMENT TO REMAIN, INCLUDING A COPY OF THE TEST RESULTS WITH RECOMMENDED REMEDIAL ACTIONS AND COSTS SHALL BE MADE BY THIS CONTRACTOR TO THE ARCHITECT/ENGINEER FOR REVIEW.

B. THE PLUMBING WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE APPLICABLE CODES AS WELL AS ALL LOCAL REGULATIONS THAT MAY APPLY. IN CASE OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND A GOVERNING CODE OR ORDINANCE, THE MORE STRINGENT STANDARD SHALL APPLY.

C. ALL PLUMBING WORK SHALL BE COORDINATED WITH ALL OTHER TRADES BEFORE PROCEEDING WITH THE INSTALLATION.

D. INVERT ELEVATIONS AND EXACT LOCATIONS OF ALL EXISTING UTILITIES SHALL BE CHECKED BEFORE PROCEEDING WITH NEW WORK.

E. NO CHANGES ARE TO BE MADE IN PLUMBING LAYOUT WITHOUT WRITTEN PERMISSION BY THE ARCHITECT OR ENGINEER.

F. NO PIPING SHALL RUN EXPOSED IN FINISHED AREAS.

G. ROUGH-IN DIMENSIONS OF TOILET FIXTURES MUST BE COORDINATED WITH THE GENERAL CONTRACTOR.

H. PROVIDE SHUT-OFF VALVES FOR WATER HEATER BRANCH. PROVIDE DIELECTRIC FITTINGS OR COUPLINGS WHEREVER DISSIMILAR METALS ARE IN CONTACT.

I. PROVIDE SHUT-OFF VALVES AT EACH FIXTURE AND AT EACH FLOOR (IF FIXTURES ARE STACKED) ON HOT AND COLD WATER SUPPLY PIPES.

J. ALL ACCESS PANELS SHALL BE BY GENERAL CONTRACTOR. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR LOCATION.

K. INSTALL ALL REQUIRED CLEANOUTS TO CLEAR EQUIPMENT AND FIXTURES.

L. ALL WORK SHALL BE PROPERLY TESTED, BALANCED, CLEANED AND DISINFECTED. PROVIDE A ONE YEAR WARRANTY FROM DATE OF FINAL INSPECTION ON ALL PARTS AND LABOR.

M. PITCH ALL WASTE AND SOIL PIPING AT MAXIMUM SLOPE POSSIBLE, BUT NOT LESS THAN 1/4" PER FOOT FOR PIPING UNDER 3" AND NO LESS THAN 1/8" PER FOOT FOR PIPING 3" AND GREATER. 8" AND LARGER PIPING CAN BE SLOPED AT 1/16" PER FOOT.

N. PROVIDE ALL PIPE OPENINGS THROUGH PARTITIONS WITH PIPE SLEEVES. WHERE PENETRATING FIRE RATED PARTITIONS, THE SPACE BETWEEN THE PIPE AND THE SLEEVE SHALL BE SEALED WITH FIRE STOPPING MATERIAL.

O. PROVIDE CONDENSATE DRAIN FROM ROOF MOUNTED EQUIPMENT TO OPEN SITE DRAIN OR AS SHOWN ON DRAWINGS.

P. ALL PIPING MATERIAL SHALL BE OF DOMESTIC MANUFACTURE AND SHALL COMPLY WITH THE BUY AMERICAN ACT.

PLUMBING TESTING NOTES

1. ALL EQUIPMENT AND/OR SYSTEMS NOTED ON THE DRAWINGS "TO REMAIN" SHALL BE INSPECTED AND TESTED ON SITE TO CERTIFY WORKING CONDITION. A WRITTEN REPORT ON THE CONDITION OF ALL EQUIPMENT TO REMAIN, INCLUDING A COPY OF THE TEST RESULTS WITH RECOMMENDED REMEDIAL ACTIONS AND COSTS SHALL BE MADE BY THIS CONTRACTOR TO THE ARCHITECT/ENGINEER FOR REVIEW.

2. PIPE COVER AND BACKFILLING:
   A. AFTER HYDROSTATIC TEST, EVENLY BACKFILL ENTIRE TRENCH WIDTH BY HAND PLACING BACKFILL MATERIAL AND HAND TAMPING IN FOUR (4) INCHES COMPACTED LAYERS TO TWELVE (12) INCHES MINIMUM COVER OVER TOP OF JACKET. COMPACT TO 95 PERCENT MAXIMUM DENSITY.
   B. EVENLY AND CONTINUOUSLY BACKFILL REMAINING TRENCH DEPTH IN UNIFORM LAYERS WITH BACKFILL MATERIAL.
   C. DO NOT USE WHEELED OR TRACKED VEHICLES FOR TAMPING.

3. PRESSURE TEST ALL DOMESTIC WATER PIPING. AFTER INSTALLATION AND PRIOR TO BACKFILL OR COVER-UP, RINSE PIPING SYSTEM OF PARTICULATE CONTAMINANTS, CAP AND SUBJECT TO STATIC WATER PRESSURE OF 125 PSIG FOR FOUR (4) HOURS. REPAIR LEAKS AND DEFECTS AND RE-TEST ANY PORTION OF PIPING SYSTEM THAT FAILS. PROVIDE WRITTEN TEST REPORT INCLUDING DATE AND TIME OF TEST, PASS OR FAIL INDICATION, SUMMARY OF REMEDIAL WORK REQUIRED AND DATE AND TIME OF EACH RE-TEST.

4. PRIOR TO COVER UP, WATER PIPE, SANITARY PIPE, AND GAS PIPING SHALL BE PRESSURE TESTED. TESTS SHALL BE WITNESSED BY CONSULTANT AND OWNER. NOTIFY OWNER 48 HOURS PRIOR TO TEST. TEST SHALL BE WITNESSED BY CLIENT PLUMBING TECHNICIAN.

5. UPON COMPLETION OF THE SANITARY PIPING SYSTEM, THE CONTRACTOR SHALL NOTIFY ENGINEER AND OWNER TO OBSERVE A SMOKE TEST OF THE SYSTEM. SMOKE TESTING SHALL BE PERFORMED ON SANITARY PIPING SYSTEM TWICE DURING CONSTRUCTION.

6. ACID WASTE PIPING SYSTEMS:
   A. WATER TEST SHALL BE APPLIED TO THESE DRAINAGE SYSTEMS EITHER IN THEIR ENTIRETY OR IN SECTIONS AS REQUIRED, AFTER ROUGH PIPING HAS BEEN INSTALLED. IF THE SYSTEM IS TESTED IN SECTIONS, EACH OPENING SHALL BE TIGHTLY CLOSED EXCEPT THE HIGHEST OPENING IN THE SECTION UNDER TEST. ALL SECTIONS SHALL BE TESTED WITH A MINIMUM OF 10 FEET HEAD OF WATER. IN TESTING SUCCESSIVE SECTIONS AT LEAST THE UPPER 10 FEET OF THE NEXT PRECEDING SECTION SHALL BE TESTED SO THAT NO JOINT OF PIPING IN THE BUILDING EXCEPT THE UPPERMOST 10 FEET OF THE SYSTEM SHALL BE SUBMITTED TO A TEST OF LESS THAN 10 FOOT OF HEAD OF WATER. THE WATER SHALL BE KEPT IN THE SYSTEM FOR AT LEAST 30 MINUTES BEFORE INSPECTION STARTS; THE SYSTEM SHALL THEN BE MADE TIGHT AT ALL POINTS.
   B. ANY POINTS OF THE DRAINAGE SYSTEMS TO BE TESTED WITH AIR INSTEAD OF WATER SHALL BE MADE BY ATTACHING AN AIR COMPRESSOR TESTING APPARATUS TO ANY SUITABLE OPENING AND AFTER CLOSING ALL OTHER INLETS OR OUTLETS, FORCING AIR INTO THE SYSTEM UNTIL THERE IS A MINIMUM GAUGE PRESSURE OF 5 PSI. THIS PRESSURE SHALL BE HELD WITHOUT THE INTRODUCTION OF ADDITIONAL AIR FOR A PERIOD OF AT LEAST 30 MINUTES.
   C. EXTERIOR CONNECTIONS SHALL BE TESTED AS PART OF THE INTERIOR SYSTEMS.
   D. ADDITIONAL TESTS:
      a. PROVIDE ALL ADDITIONAL TESTS SUCH AS SMOKE OR PRESSURE TESTS AS REQUIRED BY THE REGULATIONS OR AS DIRECTED BY AUTHORITIES MAKING THE INSPECTION.
      b. PROVIDE FOR ANY REPEATED TEST AS DIRECTED BY THE OWNER'S REPRESENTATIVE, TO MAKE ALL SYSTEMS TIGHT AS REQUIRED.
      c. VISUAL INSPECTIONS OF JOINTS, VALVES, ETC. SHALL BE MADE AS DIRECTED BY THE ENGINEER
      d. PRESSURE TEST NATURAL GAS PIPING IN ACCORDANCE WITH NFPA 54. PRESSURE TEST PRIOR TO BACKFILL, MINIMUM 50 PSI FOR 24 HOURS.

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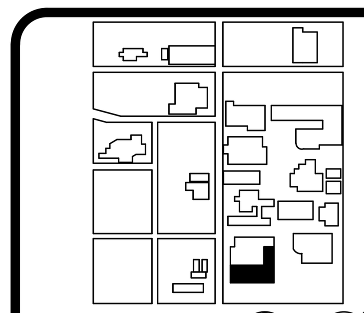
LEAF ENGINEERS

WFAC Black Box Addition PKG 1
1801 Martin Luther King Dr.,
San Antonio, TX, 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE



KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED PROFESSIONAL ENGINEER
06/14/2024
LEAF ENGINEERS
F-18672

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
06/14/2024	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION
BUILDING NUMBER 1

SYMBOLS AND ABBREVIATIONS

P-000

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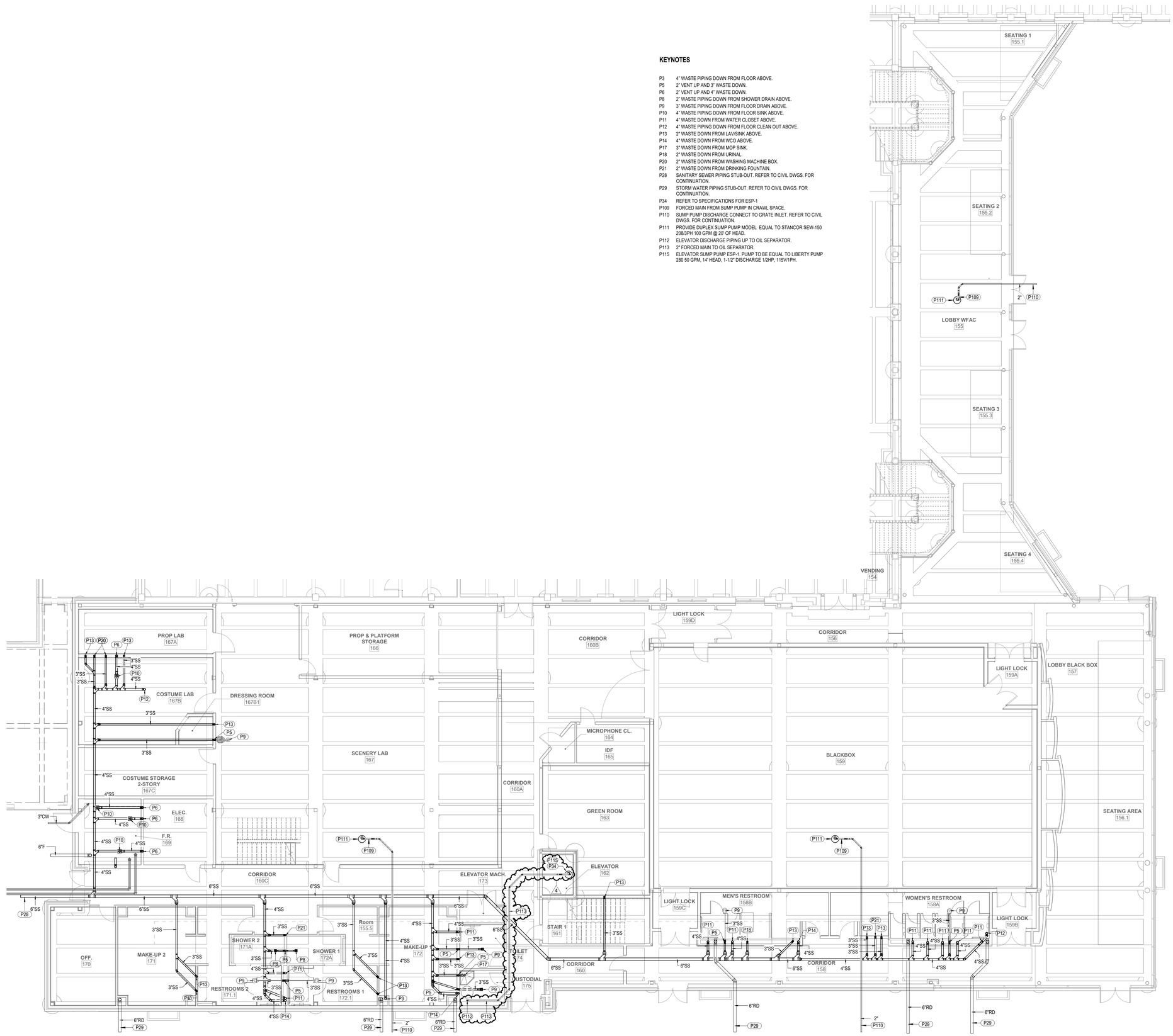
CRAWLSPACE PLUMBING PLAN

PU-101-A

FOR BLUEBEAM LABELING/OCR:

KEYNOTES

P3	4" WASTE PIPING DOWN FROM FLOOR ABOVE.
P5	2" VENT UP AND 3" WASTE DOWN.
P6	2" VENT UP AND 4" WASTE DOWN.
P8	2" WASTE PIPING DOWN FROM SHOWER DRAIN ABOVE.
P9	3" WASTE PIPING DOWN FROM FLOOR DRAIN ABOVE.
P10	4" WASTE PIPING DOWN FROM FLOOR SINK ABOVE.
P11	4" WASTE DOWN FROM WATER CLOSET ABOVE.
P12	4" WASTE PIPING DOWN FROM FLOOR CLEAN OUT ABOVE.
P13	2" WASTE DOWN FROM LAV/SINK ABOVE.
P14	4" WASTE DOWN FROM WCO ABOVE.
P17	3" WASTE DOWN FROM MOP SINK.
P18	2" WASTE DOWN FROM URINAL.
P20	2" WASTE DOWN FROM WASHING MACHINE BOX.
P21	2" WASTE DOWN FROM DRINKING FOUNTAIN.
P28	SANITARY SEWER PIPING STUB-OUT. REFER TO CIVIL DWGS. FOR CONTINUATION.
P29	STORM WATER PIPING STUB-OUT. REFER TO CIVIL DWGS. FOR CONTINUATION.
P34	REFER TO SPECIFICATIONS FOR ESP-1
P109	FORCED MAIN FROM SUMP PUMP IN CRAWL SPACE.
P110	SUMP PUMP DISCHARGE CONNECT TO GRATE INLET. REFER TO CIVIL DWGS. FOR CONTINUATION.
P111	PROVIDE DUPLEX SUMP PUMP MODEL EQUAL TO STANCOR SEW-150 208/3PH 100 GPM @ 20' OF HEAD.
P112	ELEVATOR DISCHARGE PIPING UP TO OIL SEPARATOR.
P113	2" FORCED MAIN TO OIL SEPARATOR.
P115	ELEVATOR SUMP PUMP ESP-1. PUMP TO BE EQUAL TO LIBERTY PUMP 280 50 GPM, 14' HEAD, 1-1/2" DISCHARGE 1/2HP, 115V/1PH.



1 **CRAWLSPACE PLUMBING PLAN**
SCALE: 1/8" = 1'-0"

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LEAF ENGINEERS

WFAC Black Box Addition PKG 1

1801 Martin Luther King Dr.,
San Antonio, TX. 78203
90%CD - IFR

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
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LICENSED
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07/08/2024
LEAF ENGINEERS
F-18672

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
07/08/2024	230462

DRAWING HISTORY

No.	Description	Date
1	CITY COMMENTS	06/05/2024
2	CITY COMMENTS	06/12/2024
3	CITY COMMENTS	06/24/2024
4	CITY COMMENTS	07/08/2024

90%CD - IFR

BUILDING NUMBER 1

CRAWLSPACE PLUMBING PLAN

PU-101-A

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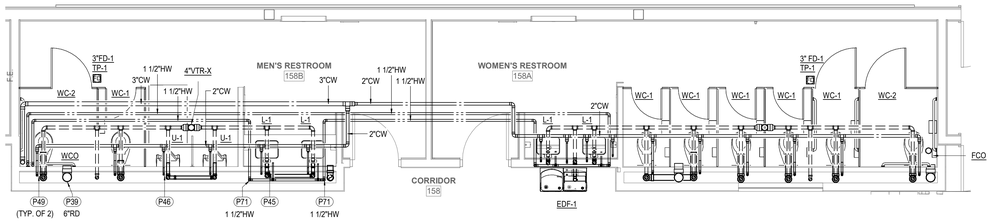
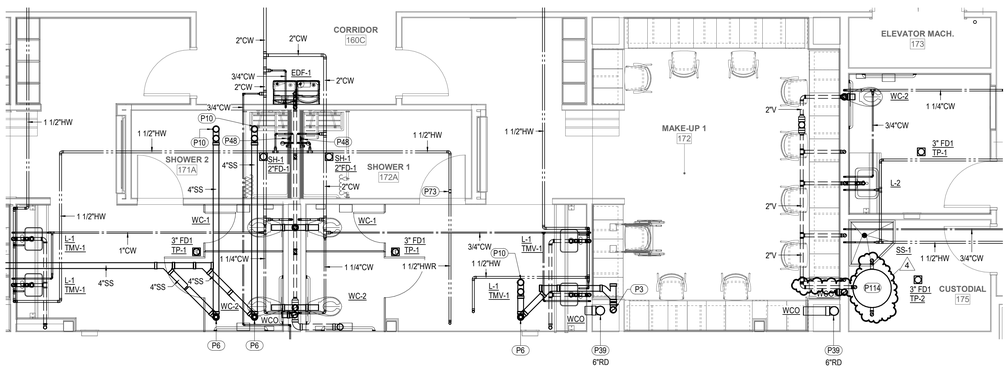
PLUMBING ENLARGED PLAN
P-401
FOR BLUEBEAM LABELING/OCR:



1 **1ST LEVEL ENLARGED PLUMBING PLAN - AREA C**
SCALE: 1/4" = 1'-0"



2 **1ST LEVEL ENLARGED PLUMBING PLAN - AREA D**
SCALE: 1/4" = 1'-0"

KEYNOTES

P3	4" WASTE PIPING DOWN FROM FLOOR ABOVE.
P6	2" VENT UP AND 4" WASTE DOWN.
P10	4" WASTE PIPING DOWN FROM FLOOR SINK ABOVE.
P39	ROOF DRAIN PIPING DOWN TO BELOW FLOOR. SIZE AS NOTED.
P45	3/4" COLD WATER, 3/4" HOT WATER DOWN AND 2" VENT UP.
P46	3/4" COLD WATER DOWN AND 2" VENT UP.
P48	3/4" COLD WATER AND 3/4" HOT WATER DOWN TO SHOWER VALVE.
P49	1 1/4" COLD WATER DOWN AND 2" VENT UP.
P71	HOT WATER DOWN IN CHASE / WALL SIZE AS NOTED.
P73	PROVIDE BALANCING VALVE.
P114	PROVIDE ELEVATOR SUMP SYSTEM EQUAL TO PARK ELVC-100. SEPARATOR MODEL ESC-100 50 GPM FLOW RATE 100 GALLON CAPACITY.

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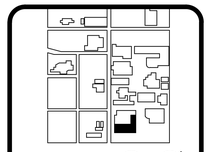

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DRAWING HISTORY

No.	Description	Date
4	CITY COMMENTS	07/08/2024

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BUILDING NUMBER 1

PLUMBING ENLARGED PLAN

P-401

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PLUMBING DETAILS
P-601
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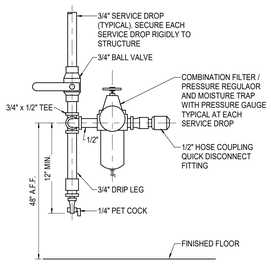
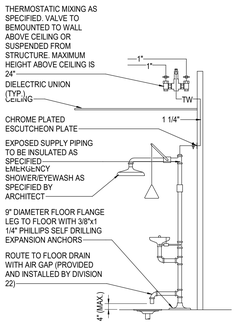
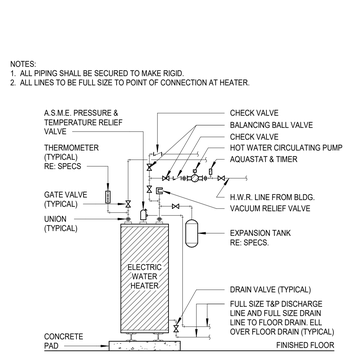


10 COMPRESSED AIR OUTLET DETAIL
SCALE: NOT TO SCALE

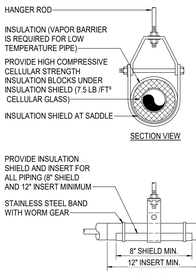


NOTES:
1. REFER TO ARCHITECTURAL FOR EXACT LOCATIONS.

7 EMERGENCY SHOWER/EYEWASH DETAIL
SCALE: NOT TO SCALE

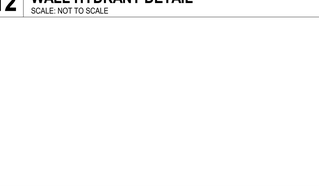


4 ELECTRIC WATER HEATER PIPING
SCALE: N.T.S



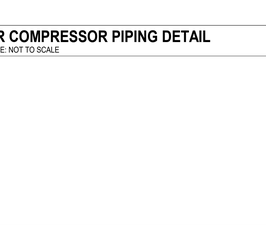
MAXIMUM PIPING / TUBING SUPPORT SPACING													
NOM. SIZE	3/4"	1"	1 1/4"	1 1/2"	2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"
PIPING	7'	7'	7'	9'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'
TUBING	5'	6'	6'	6'	8'	8'	8'	8'	8'	8'	8'	8'	8'	8'	8'	8'	8'
NOTE: FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE.																	

1 ADJUSTABLE CLEVIS PIPE HANGER DETAIL
SCALE: NOT TO SCALE



NOTES:
1. MOUNT HOSE BIBBS AT WALL INTERSECTIONS IF REQUIRED TO CONCEAL CONNECTIONS ON BACK.

11 WALL HYDRANT DETAIL
SCALE: NOT TO SCALE



8 SHOCK ARRESTOR DETAIL
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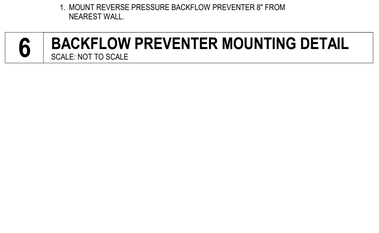
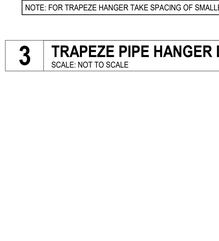
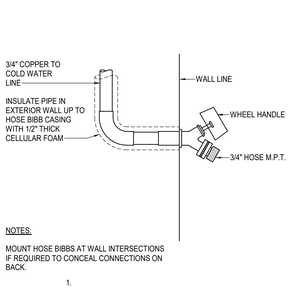


5 WASHER / DRAIN BOX CONNECTION DETAIL
SCALE: NOT TO SCALE



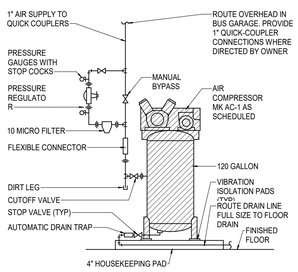
MAXIMUM PIPING / TUBING SUPPORT SPACING													
NOM. SIZE	3/4"	1"	1 1/4"	1 1/2"	2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"
PIPING	7'	7'	7'	9'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'
TUBING	5'	6'	6'	6'	8'	8'	8'	8'	8'	8'	8'	8'	8'	8'	8'	8'	8'
NOTE: FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE.																	

2 ADJUSTABLE ROLLER PIPE HANGER DETAIL
SCALE: NOT TO SCALE

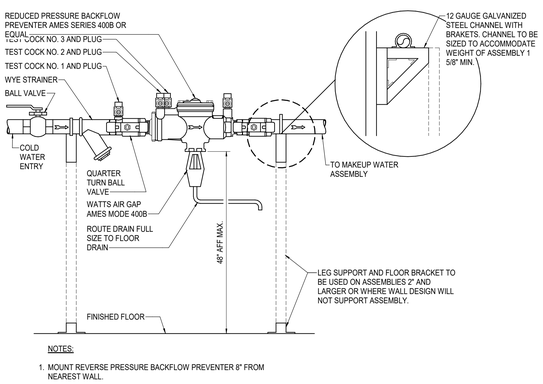


NOTES:
MOUNT HOSE BIBBS AT WALL INTERSECTIONS IF REQUIRED TO CONCEAL CONNECTIONS ON BACK.
1.

12 WALL HYDRANT DETAIL
SCALE: NOT TO SCALE

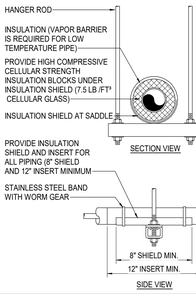


9 AIR COMPRESSOR PIPING DETAIL
SCALE: NOT TO SCALE



NOTES:
1. MOUNT REVERSE PRESSURE BACKFLOW PREVENTER 8" FROM NEAREST WALL.

6 BACKFLOW PREVENTER MOUNTING DETAIL
SCALE: NOT TO SCALE



MAXIMUM PIPING / TUBING SUPPORT SPACING													
NOM. SIZE	3/4"	1"	1 1/4"	1 1/2"	2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"
PIPING	7'	7'	7'	9'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'
TUBING	5'	6'	6'	6'	8'	8'	8'	8'	8'	8'	8'	8'	8'	8'	8'	8'	8'
NOTE: FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE.																	

3 TRAPEZE PIPE HANGER DETAIL
SCALE: NOT TO SCALE

ISSUE FOR CONSTRUCTION

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PBK
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PBK.com
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MEP
LEAF
T 210-829-9123
ENVELOPE
BEAM PROFESSIONALS
T 210-829-0123
THEATER
N/A
T 210-881-9800

LEAF ENGINEERS

WFAC Black Box Addition PKG 1

1801 Martin Luther King Dr.,
San Antonio, TX. 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED
PROFESSIONAL
ENGINEER
06/14/2024
LEAF ENGINEERS
F-10672

CLIENT
Alamo Colleges
DATE 06/14/2024
PROJECT NUMBER 230462

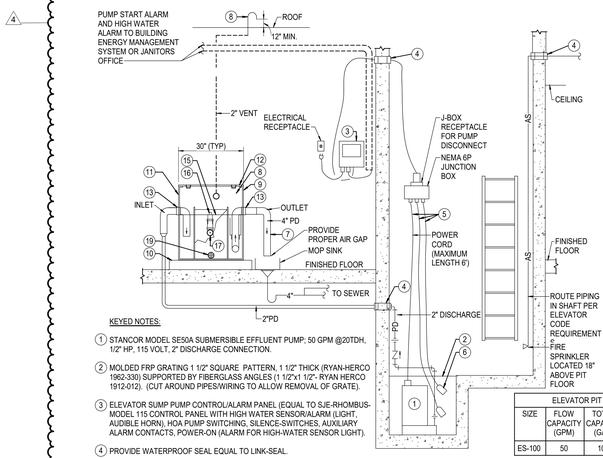
DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION
BUILDING NUMBER 1

PLUMBING DETAILS

P-601



KEYED NOTES:

1. STANCOR MODEL SE50A SUBMERSIBLE EFFLUENT PUMP; 50 GPM @20TDH, 1/2" HP, 115 VOLT, 2" DISCHARGE CONNECTION.
2. MOLDED FRP GRATING 1 1/2" SQUARE. PATTERN, 1 1/2" THICK (RYAN-HERCO 1962-330) SUPPORTED BY FIBERGLASS ANGLES (1 1/2"x1 1/2"- RYAN HERCO 1912-012). (CUT AROUND PIPES/WIRING TO ALLOW REMOVAL OF GRATE).
3. ELEVATOR SUMP PUMP CONTROL/ALARM PANEL (EQUAL TO SJE-RHOMBUS- MODEL 115 CONTROL PANEL WITH HIGH WATER SENSOR/ALARM (LIGHT, AUDIBLE HORN), HOA PUMP SWITCHING, SILENCE-SWITCHES, AUXILIARY ALARM CONTACTS, POWER-ON (ALARM FOR HIGH-WATER SENSOR LIGHT).
4. PROVIDE WATERPROOF SEAL EQUAL TO LINK-SEAL.
5. POWER, HIGH WATER ALARM, AND PUMP ON CABLES.
6. HIGH LIQUID ALARM FLOAT WITH CLAMP DEVICE TO MOUNT TO PUMP DISCHARGE PIPING.
7. DISCHARGE TO NEAREST FLOOR DRAIN OR MOP SINK WHERE AVAILABLE.
8. ROUTE 4" VENT RISER FULL SIZE TO ROOF. PROVIDE GOOSENECK WITH INSECT SCREEN.
9. OIL SEPARATOR SHALL BE PARK ENVIRONMENTAL EQUIPMENT ES-100.
10. CONCRETE HOUSEKEEPING PAD. EXTEND PAD 6" ON ALL SIDES.
11. SEPARATOR BASIN.
12. REMOVABLE STEEL COVER WITH RECESSED HANDLES, NEOPRENE GASKET, & SECURED w/ SS BOLTS.
13. 2", 3" OR 4" NPT STEEL FULL CPLG.
14. TYPICAL BAFFLE.
15. OLEOPHILLIC COALESCING PLATE PACK TO SEPARATE OIL & SOLIDS.
16. 1" ADJUSTABLE SKIMMER.
17. 2" OIL DRAIN - NPT FULL CPLG w/ PLUG.
18. 2" VENT - NPT HALF CPLG.
19. 2" DRAIN - NPT HALF CPLG w/ PLUG.

ELEVATOR PIT OIL WATER SEPARATOR						
SIZE	FLOW CAPACITY (GPM)	TOTAL CAPACITY (GAL)	OIL SPILL CAPACITY (GAL)	EMPTY WEIGHT (LB)	GROSS WEIGHT (LB)
ES-100	50	100	50	500	1250

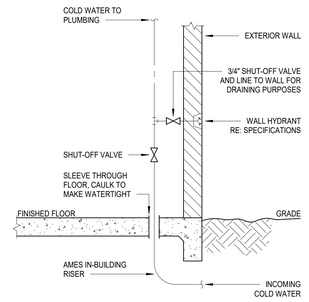
GENERAL NOTES

1. LOCAL CODES TYPICALLY USE THE ASME A17.1/CSA B 44-07 - "SAFETY CODE FOR ELEVATORS AND ESCALATORS" FOR ELEVATOR DESIGNS. THE ASME STANDARD REQUIRES THAT EACH ELEVATOR SHAFT HAVE A PUMP/DRAIN CAPABLE OF REMOVING A MINIMUM OF 3000 GAL/HR (50 GAL/MIN) OF WATER PER SHAFT. THIS WASTEWATER SHOULD BE TREATED PRIOR TO DISCHARGING INTO THE LOCAL SEWER. THE PARK ELEVATOR SEPARATOR IS DESIGNED FOR THIS PURPOSE. SERIES ES COALESCING PLATE SEPARATORS ARE DESIGNED TO RECEIVE OILY WASTEWATER BY GRAVITY OR PUMP FLOW AND PROCESS IT ON A ONCE-THRU OR CIRCULATING BASIS. THERE ARE NO MOVING PARTS TO FAIL OR THAT REQUIRE EXPENSIVE MAINTENANCE.
2. PRE-ENGINEERED COALESCING MEDIA PACKS ARE UTILIZED FOR ENHANCED SEPARATION WHICH PROVIDE SUPERIOR PERFORMANCE COMPARED TO OTHER SEPARATORS WHICH DEPEND ON BAFFLES ONLY.
3. THE PARK ES SEPARATOR IS SPECIFICALLY DESIGNED FOR ELEVATOR SUMPS WHICH ARE SUBJECT TO CONTAMINATION FROM THE ELEVATOR EQUIPMENT. THE SEPARATOR WILL REMOVE HYDRAULIC AND LUBRICATION OILS WHICH COULD BE HARMFUL TO THE CITY SEWER.
4. THE PARK ES SEPARATOR ONLY REQUIRES MINIMAL MAINTENANCE. OILS ARE REMOVED FROM THE SEPARATOR BY A LICENSED WASTE DISPOSAL COMPANY.
5. DESIGN AND ROUTE ALL ELEVATOR RELATED WORK PER ASME 17.1, (ELEVATOR CODE) LATEST VERSION.
6. GUARANTEED PERFORMANCE FOR CODE MAXIMUM OIL CONCENETRATION (SANITARY SEWER 200 PPM).
7. ALL CONTROL CABLING TO RE ROUTED IN CONDUIT.

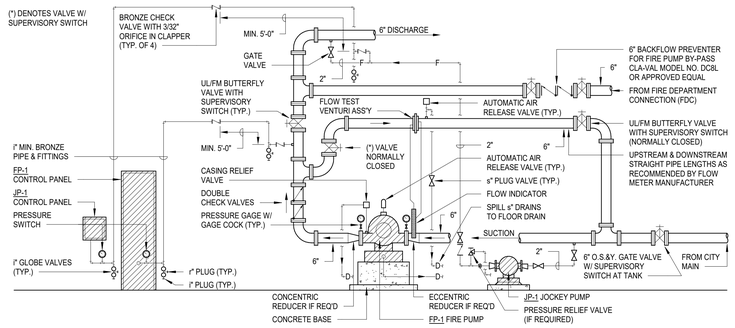
SEQUENCE OF OPERATION:

1. WATER ENTERS SUMP.
2. FLOAT SWITCH #1 INITIATES SUMP PUMP AND ALARM AT JANITOR'S OFFICE.
3. WATER DISCHARGES TO OIL SEPARATOR AT LOCATION INDICATED ON DWGS.
4. WHEN WATER CONTINUES TO RISE, HIGH WATER ALARM FLOAT SWITCH #2 SOUNDS ALARM AT JANITOR'S OFFICE.
5. PUMP EMPTIES PIT AND FLOAT SWITCH #1 DEACTIVATES PUMP AND ALARM.

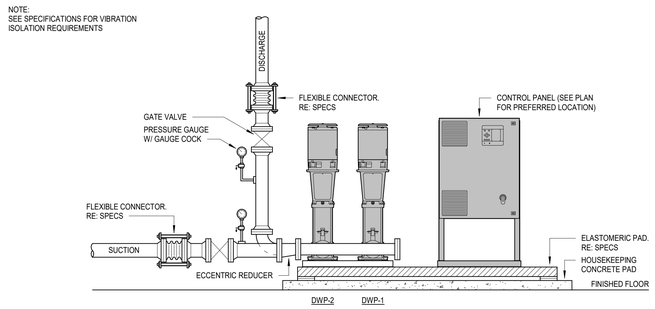
4 ELEVATOR OIL INTERCEPTOR SUMP PIT DETAIL
SCALE: NOT TO SCALE



1 DOMESTIC COLD WATER ENTRY
SCALE: N.T.S



2 FIRE PUMP
SCALE: N.T.S



3 DUPLEX PACKAGE PUMPING SYSTEM
SCALE: N.T.S

PBK
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PBK.com
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601 N.W. Loop 410, Suite 400
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BEAM PROFESSIONALS
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THEATER
WJHW
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LEAF ENGINEERS
ALAMO COLLEGES
ST. PHILIP'S COLLEGE

WFAC Black Box Addition PKG 1
1801 Martin Luther King Dr.,
San Antonio, TX. 78203
90%CD - IFR

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
DONALD C. RICHARDS
61572
LICENSED
PROFESSIONAL ENGINEER
07/08/2024
LEAF ENGINEERS
F-10672

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
07/08/2024	230462

DRAWING HISTORY

No.	Description	Date
1	CITY COMMENTS	06/05/2024
4	CITY COMMENTS	07/08/2024

90%CD - IFR

BUILDING NUMBER 1

PLUMBING DETAILS

P-602

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TECHNOLOGY SYSTEM NOTES AND LEGENDS

T-001

FOR BLUEBEAM LABELING,OOR:

ISSUE FOR CONSTRUCTION

FIRE ALARM LEGEND

GROUP	SYMBOL	DESCRIPTION
DEVICES		FOOT ADDED TO ANY SYMBOL INDICATES WALL MOUNTED.
	F	MANUAL FIRE ALARM PULL STATION. INSTALL AT 48" A.F.F. PROVIDE STOPPER II COVER WITH HORN.
	FSC	FIRE ALARM SPEAKER OR HORN. PROVIDE WEATHER RESISTANT MODELS FOR DEVICES INSTALLED ON THE EXTERIOR.
	SC	COMBINATION SPEAKER / STROBE. PROVIDE WEATHER RESISTANT MODELS FOR DEVICES INSTALLED ON THE EXTERIOR.
	S	VISUAL ALARM STROBE.
	S	SMOKE DETECTOR. NO SUBSCRIPT INDICATES IONIZATION TYPE; "P" INDICATES PHOTOELECTRIC TYPE; "D" INDICATES DUCT TYPE AND PHOTOELECTRIC.
		HEAT DETECTOR; COMBINATION RATE OF RISE AND FIXED TEMPERATURE. "F" INDICATES FIXED TEMPERATURE ONLY; "R" INDICATES RATE OF RISE ONLY, "C" INDICATES RATE COMPENSATION TYPE.
	CO	CARBON MONOXIDE DETECTOR.
	B	BEAM SMOKE DETECTOR. "T" INDICATES TRANSMITTER. "R" INDICATES RECEIVER.
	T	FIRE FIGHTER'S TELEPHONE JACK. "H" INDICATES PERMANENT EMERGENCY TELEPHONE HANDSET.
	R	AUXILIARY CONTROL RELAY. "2" INDICATES TWO RELAYS REQUIRED FOR FIRE FIGHTER OVERRIDE CONTROL.
	D	FIRE/SMOKE DUCT DAMPER WITH MOTOR ACTUATOR (BY DIV. 15). PROVIDE FIRE ALARM CONTROL RELAYS AND ADDRESSABLE MODULE.
	FTC	TERMINAL CABINET FOR FIRE ALARM SYSTEM WIRING.
	FACP	FIRE ALARM CONTROL PANEL. INSTALL AT 58" TO CENTER OF PANEL / 72" TO TOP OF PANEL.
	FAA	FIRE ALARM ANNUNCIATOR PANEL.
	FTR	FIRE ALARM TRANSPONDER.
	GV	SPRINKLER SYSTEM GATE VALVE MONITOR SWITCH.
	FS	SPRINKLER SYSTEM WATER FLOW SWITCH.
	TS	TAMPER SWITCH.
	CV	SPRINKLER SYSTEM ALARM CHECK VALVE.
	B	SPRINKLER SYSTEM ELECTRIC ALARM BELL.
	PA	SPRINKLER SYSTEM PRE-ACTION CONTROL PANEL.
	DH	DOOR HOLDER.
	MM	MONITOR MODULE

NOTE:
1. EVERY SYMBOL SHOWN ON LEGEND MAY NOT APPEAR ON DRAWINGS. REFER TO GENERAL ELECTRICAL NOTES FOR WALL-MOUNTED DEVICE MOUNTING HEIGHTS AND BACK BOX REQUIREMENTS.
2. REFERENCE SPECIFICATIONS FOR MATERIALS AND METHODS.
3. COMPLETE INSTALLATION OF ALL PRODUCTS SHALL BE IN COMPLIANCE WITH ALL CODES, INDUSTRY STANDARDS, COMMON PRACTICES AND MANUFACTURER'S INSTRUCTIONS.
4. CONTRACTOR SHALL PROVIDE BEAM SMOKE DETECTORS IN ALL HIGH CIELING AREAS AS REQUIRED BY CODE.

SEQUENCE OF OPERATIONS

1. WHEN A FIRE ALARM CONDITION IS DETECTED BY ANY OF THE SYSTEM ALARM INITIATING DEVICES THE CONTROL PANEL MUST RESPOND WITHIN 3 SECONDS, THE FOLLOWING FUNCTIONS OCCUR:
   A. THE SYSTEM COMMON ALARM LED ON THE CPU MODULE SHALL FLASH. THE INTERNAL AUDIBLE TROUBLE DEVICE SHALL SOUND. ACKNOWLEDGEMENT OR SILENCING THE ALARM CONDITION SHALL SILENCE THE ALARM SIGNALS AND CAUSE FLASHING ALARM LED's TO ILLUMINATE STEADY.
   B. AN BACK-LIT LCD DISPLAY SHALL INDICATE ALL APPLICABLE INFORMATION ASSOCIATED WITH THE ALARM CONDITION INCLUDING: ZONE, DEVICE TYPE, DIVIDE LOCATION AND TIME OF ALARM. LOCATION AND ZONING MESSAGES SHALL BE CUSTOM FIELD PROGRAMMED TO RESPECTIVE PREMISES. THE ALARM INFORMATION MUST BE STORED IN EVENT MEMORY FOR LATER REVIEW. EVENT MEMORY MUST BE AVAILABLE AT THE MAIN AND ALL REMOTE ANNUNCIATORS.
   C. ANY REMOTE OR LOCAL ANNUNCIATOR LED's ASSOCIATED WITH THE ALARM ZONE SHALL BE ILLUMINATED AS HEREIN SPECIFIED.
   D. A THREE CHANNEL DIGITAL ALARM COMMUNICATOR SHALL BE INTEGRALLY PROVIDED AND TRANSMIT TROUBLE AND ALARM SIGNALS TO AN APPROVED REMOTE STATION. (REMOTE STATION CONNECTION AND SERVICE PROVIDED BY OWNER).
   E. WHEN THE ALARMED DEVICE IS RESTORED TO NORMAL, THE CONTROL PANEL SHALL BE REQUIRED TO BE MANUALLY RESET TO CLEAR THE ALARM CONDITION, EXCEPT THAT THE ALARMS MAY BE SILENCED AS PROGRAMMED.
   F. AN ALARM SHALL BE SILENCED BY A CODE OR FIREFIGHTER KEY AT THE MAIN OR REMOTE ANNUNCIATORS. WHEN SILENCED, THIS SHALL NOT PREVENT THE RESOUNDING OF SUBSEQUENT EVENTS IF ANY OTHER EVENT SHOULD OCCUR, (SUBSEQUENT ALARM FEATURE); WHEN ALARMS ARE SILENCED THE SILENCED LED ON THE CONTROL PANEL AND ON ANY REMOTE ANNUNCIATORS SHALL REMAIN LIT UNTIL THE ALARMED DEVICE IS RETURNED TO NORMAL.
   G. ALL AUTOMATIC EVENTS PROGRAMMED TO THE ALARM POINT SHALL BE EXECUTED AND THE ASSOCIATED INDICATING DEVICE AND/OR OUTPUTS ACTIVATED. AS EACH INDICATING CIRCUIT OR CONTROL RELAY IS ACTIVATED, ITS ASSOCIATED "ON" LED SHALL BE ILLUMINATED.
   H. ACTIVATE ALL AUDIBLE/VISUAL ALARM DEVICES.
   I. DE-ACTIVATE HVAC SYSTEMS OVER 2000 CFM IN AREA OF ALARM.
   J. DISPLAY SYSTEM STATUS CHANGES ON THE REMOTE ANNUNCIATOR(S).
   K. RELEASE ALL SMOKE DOOR, FIRE DOORS, FIRE COILING DOORS, FIRE SMOKE DAMPERS AND FIRE SHUTTERS.

GENERAL FIRE ALARM NOTES

1. ALL 120V POWER REQUIRED FOR THE FUNCTIONALITY OF THE FIRE ALARM SYSTEMS SHALL BE A DEDICATED CIRCUIT AND ON EMERGENCY POWER WHEN AVAILABLE. THE INSTALLING CONTRACTOR OF EACH SYSTEM SHALL BE RESPONSIBLE FOR PROVIDING THEIR OWN 120V POWER REQUIREMENTS FOR ALL REMOTE POWER SUPPLIES. THE GENERAL CONTRACTOR'S LICENSED ELECTRICAL SUBCONTRACTOR SHALL COORDINATE ELECTRICAL PANEL LOCATIONS AND AVAILABLE SPACE DEDICATED FOR THE CONTRACTOR'S SYSTEM REQUIREMENTS. (TYPICAL). ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POWER TOMAIN CONTROL PANELS AND ALL HEAD END EQUIPMENT. SYSTEM INSTALLERS SHALL COORDINATE LOCATION AND CONNECTION OF CONTROL PANEL AND HEAD END POWER WITH THE PROJECT'S ELECTRICAL CONTRACTOR.
2. UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS OR OTHERWISE INSTRUCTED BY THE ARCHITECT OR AS NOTED IN NFPA, FIRE ALARM DEVICES SHALL HAVE THE FOLLOWING MOUNTING HEIGHTS. VERIFY EXACT HEIGHT WITH ARCHITECT. DIMENSIONS ARE TO CENTER OF BOX UNLESS OTHERWISE NOTED:
   A. MANUAL FIRE PULL STATIONS - MOUNT AT 42" AFF TO THE TOP OF BOX FOR FRONTAL WHEELCHAIR APPROACH; AND 48" AFF FOR SIDE WHEELCHAIR APPROACH. PULL STATIONS SHALL BE LOCATED THROUGHOUT THE PROTECTED AREA SO THAT THEY ARE UNOBSTRUCTED AND ACCESSIBLE; MOUNT WITHIN 5 FT. OF THE EXIT DOORWAY OPENING AT EACH EXIT ON EACH FLOOR; MOUNT ON BOTH SIDES OF GROUP OPENINGS OVER 40 FT. IN WIDTH. ADDITIONAL
   B. FIRE ALARM AUDIBLE DEVICES - IF CEILING HEIGHTS ALLOW, WALL-MOUNTED APPLIANCES SHALL HAVE THEIR TOPS ABOVE THE FINISHED FLOORS AT HEIGHTS OF NOT LESS THAN 90 IN. AND BELOW THE FINISHED CEILINGS AT HEIGHTS OF NOT LESS THAN 6 IN. THIS REQUIREMENT SHALL NOT PRECLUDE CEILING-MOUNTED OR RECESSED APPLIANCES. COMPLY WITH NFPA 72, CHAPTER A.
   C. SOUND PRESSURE LEVEL SHALL EXCEED THE PREVAILING EQUIVALENT SOUND IN THE ROOM BY AT LEAST 15 dbA OR EXCEED ANY MAX SOUND LEVEL WITH A DURATION OF 60 SECONDS BY 5 dbA, WHICHEVER IS LOUDER. SOUND LEVELS FOR ALARM SIGNALS SHALL NOT EXCEED 120 dbA.
3. FIRE ALARM VISUAL DEVICES SHALL COMPLY WITH NFPA 72, CHAPTER 4.
   A. VISUAL APPLIANCES CANDELA SHALL BE THE HIGHEST VALUE ALLOWED BY NFPA TABLE IN ORDER TO INSTALL THE FEWEST NUMBER OF STROBES.
   B. THE LAMP SHALL BE XENON STROBE TYPE OR EQUIVALENT.
   C. THE COLOR SHALL BE CLEAR OR NOMINAL WHITE.
   D. THE MAX. PULSE DURATION SHALL BE TWO TENTHS OF ONE SECOND (0.2 SEC) WITH A MAX. DUTY CYCLE OF 40%. THE PULSE DURATION IS DEFINED AS THE TIME INTERVAL BETWEEN INITIAL AND FINAL POINTS OF 10% MAX. SIGNAL.
   E. THE INTENSITY SHALL BE A MINIMUM 0F 75 CANDELA.
   F. THE FLASH RATE SHALL BE A MIN. OF 1Hz AND MAX. OF 3Hz.
4. VISUAL APPLIANCES SHALL BE PLACED 80" ABOVE THE HIGHEST FLOOR LEVEL WITHIN THE SPACE OR 6" BELOW THE CEILING, WHICHEVER IS LOWER. CEILING MOUNTED WERE INDICATED.
5. AT A MINIMUM, VISUAL SIGNALS APPLIANCES SHALL BE PROVIDED IN BUILDINGS AND FACILITIES IN EACH OF THE FOLLOWING AREAS: HALLWAYS, LOBBIES, AND ANY OTHER GENERAL USAGE AREAS.
6. ALL EQUIPMENT AND WORK PERFORMED SHALL COMPLY WITH ALL OF THE CURRENT AND APPLICABLE CODES, RULES, ORDINANCES, REGULATIONS, AND STANDARDS AS INTERPRETED AND ENFORCED BY THE AUTHORITIES HAVING JURISDICTION.
7. PROVIDE POWER FOR REMOTE BATTERY SUPPLIES AND BOOSTER PANELS AS NEEDED. FIRE ALARM CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR CIRCUIT.
8. ALL FIRE ALARM WIRING SHALL ROUTE DOWN CORRIDORS AND WALKWAYS PARALLEL AND PERPENDICULAR TO BUILDING WALLS.
9. ALL FIRE ALARM CABLING SHALL BE SUPPORTED IN DEDICATED CABLE SUPPORTS. DO NOT ROUTE IN OR TIE-WRAP DIRECTLY TO THE BUILDING'S STRUCTURE.
10. CONTRACTOR TO INSTALL RELAYS IN ALL KITCHEN HOOD ANSUL SYSTEMS TO NOTIFY MAIN FIRE ALARM PANEL UPON ACTIVATION.
11. ALL NOTIFICATION APPLIANCE CIRCUIT CABLES AND ALL OTHER FIRE ALARM SYSTEM CABLE SHALL HAVE A RED OUTER JACKET.
12. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ANY CONDUITS AND/OR BOXES REQUIRED FOR THE INSTALLATION FIRE ALARM DEVICES.
13. PROVIDE AND INSTALL PROTECTIVE BUSHINGS ON ALL STUB-OUTS AND SLEEVES TO PREVENT CABLE DAMAGE. BUSHINGS TO BE INSTALLED PRIOR TO CABLE INSTALLATION. CUTTING BUSHING AND INSTALLING AFTER CABLE IS INSTALLED WILL NOT BE ACCEPTED.
14. PROVIDE AND INSTALL STOPPER II PROTECTIVE COVERS WITH A LOCAL ALARM FOR ALL MANUAL PULL STATIONS ON THE ENTIRE PROJECT.
15. CONTRACTOR TO PROVIDE CEILING MOUNTED LED NOTIFICATION DEVICES WITH TEST BUTTON FOR ALL DUCT DETECTORS THAT ARE MOUNTED ABOVE CEILING AND/OR IN LOCATIONS NOT VISIBLE FROM THE FLOOR.
16. ALL FIRE ALARM DEVICES ARE NEW UNLESS NOTED OTHERWISE. CONTRACTOR TO CONNECT NEW DEVICES TO NEW FIRE ALARM PANEL AND CONFIGURE PANEL FOR NEW DEVICES AND LAYOUT.
17. CONTRACTOR SHALL PROVIDE AND INSTALL A RELAY FOR EACH FIRE/SMOKE DAMPER ON PROJECT. REFER TO MECHANICAL DRAWINGS FOR LOCATIONS.
18. CONTRACTOR SHALL PROVIDE DUCT DETECTORS ON ALL AIR HANDLING UNITS RATED ABOVE 2,000 CFM AND PER NFPA. PROVIDE DUCT DETECTORS IN BOTH THE HOT AND COLD DECK ON ALL OF THE AHU UNITS. REFER TO MECHANICAL DRAWINGS FOR QUANTITIES AND LOCATIONS OF ALL AHUs.
19. CONTRACTOR SHALL PROVIDE ALL CABLING AND DEVICES REQUIRED TO PROVIDE THE SHUT-DOWN OF ALL HVAC AIR HANDLING UNITS UPON THE FIRE ALARM SYSTEM ENTERING ALARM STATE AND START UP OF ALL AIR HANDLING UNITS UPON THE FIRE ALARM SYSTEM BEING RESET TO A NON-ALARM STATE.
20. CONTRACTOR SHALL PROVIDE ALL REQUISITE FIRE ALARM MODULES AND CABLING AS REQUIRED TO PROVIDE CONTROL OF THEATER / AUDITORIUM HOUSE LIGHTS IN ORDER TO BRING THE LIGHTS UP TO 100% IN AN ALARM EVENT. COORDINATE WITH OTHER TRADES.
21. PROVIDE MOUNTING SUPPORT FROM GRID OR BUILDING STRUCTURE FOR ALL DEVICES INSTALLED IN LAY-IN CEILING TILE.
22. ALL 120V POWER FOR THE SYSTEMS SHALL BE INSTALLED WITHIN THE ENCLOSURE OR INSTALLED IN CONDUIT CONNECTED TO THE ENCLOSURE SO THAT NO CABLING IS EXPOSED. MC CABLE, ROMEX, SO CABLES OR OTHER METHODS ARE NOT ACCEPTABLE.
23. CONTRACTOR SHALL PROVIDE SMOKE DETECTION DEVICES ABOVE ALL PARTIAL CEILING IN ALL CORRIDORS AND OTHER SPACES PER NFPA 72.

AUDIO & VIDEO GENERAL NOTES

1. ALL 120V POWER REQUIRED FOR THE FUNCTIONALITY OF EACH SYSTEM SHALL BE A DEDICATED CIRCUIT. THE INSTALLING CONTRACTOR'S LICENSED ELECTRICAL SUBCONTRACTOR SHALL COORDINATE ELECTRICAL PANEL LOCATIONS AND AVAILABLE SPACE DEDICATED FOR THE CONTRACTOR'S SYSTEM REQUIREMENTS (TYPICAL). ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POWER TO MAIN CONTROL PANELS AND ALL HEAD END EQUIPMENT.
2. THE PROJECT'S ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL IN WALL CONDUITS, BELOW GRADE CONDUITS, BELOW SLAB CONDUITS, CONDUITS ACROSS OPEN AREAS, BACK BOXES, SLEEVES AND PULL STRING REQUIRED FOR DEVICES AND PATHWAYS SHOWN ON THE FLOOR PLANS AND DETAIL SHEETS. ANY ADDITIONAL CONDUITS, SLEEVES, AND RACEWAY REQUIREMENTS FOR EACH SYSTEM SHALL BE THE RESPONSIBILITY OF EACH SYSTEM INSTALLER.
3. ALL EXPOSED WIRING OR WIRING ROUTING ACROSS NON ACCESSIBLE CEILINGS SHALL BE ROUTED IN CONDUIT. SIZE CONDUIT AS REQUIRED TO ROUTE SYSTEMS WITH 40% CABLE FILL RATIO. MINIMUM CONDUIT SIZE SHALL BE 3/4".
4. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL EXTERIOR WALL PENETRATIONS ARE PROPERLY SEALED TO PREVENT ELEMENTS FROM ENTERING BUILDING.
5. NO CONDUITS OR SEAL-TITE SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING.
6. ALL CONDUIT STUB OUTS AND SLEEVES SHALL HAVE PROTECTIVE BUSHINGS TO PREVENT CABLE DAMAGE. BUSHING TO BE INSTALLED PRIOR TO CABLE INSTALLATION. CUTTING BUSHING AND INSTALLING AFTER CABLE IS INSTALLED WILL NOT BE ACCEPTED. CONTRACTOR TO MAINTAIN A 40% MAXIMUM FILL RATION ON ALL SLEEVES INSTALLED.
7. ALL CABLE SHALL BE ROUTED DOWN CORRIDORS, PARALLEL AND PERPENDICULAR TO THE BUILDING'S WALLS AND STRUCTURE. CABLE TO EACH DEVICE SHALL BRANCH OFF A MAIN CORRIDOR TRUNK. ROUTING CABLES THROUGH CLASSROOMS, OFFICES, STORAGE ROOMS, RESTROOMS OR ANY TYPE OF ROOM OTHER THAN A CORRIDOR WILL NOT BE ACCEPTED. ENTER ALL ROOMS ABOVE THE ASSOCIATED ROOM DOORWAY.
8. THE SYSTEM INSTALLER SHALL PROPERLY SUPPORT ALL INSTALLED SYSTEM CABLING FROM A PANDUIT J-MOD CABLE SUPPORT SYSTEM OR OTHER SUPPORT SYSTEM AS DETAILED IN SPECIFICATIONS. NO CABLING SHALL BE ROUTED AND TIED DIRECTLY TO BUILDING STEEL, CEILING GRID SUPPORT, CONDUIT, PIPING, OR DUCTWORK. THE CABLE SUPPORT SYSTEM SHALL BE DIRECTLY CONNECTED TO THE BUILDING'S STEEL JOIST. AT LOCATIONS WHERE THE BOTTOM OF THE JOIST IS MORE THAN 5' ABOVE THE CEILING, THE SYSTEM INSTALLER SHALL PROVIDE AND INSTALL THREADED ROD AND ALL REQUIRED MATERIALS TO CONNECT THE THREADED ROD TO THE BUILDING STEEL AND THE CABLE SUPPORT SYSTEM TO THE THREADED ROD. CABLE PATHWAY SHALL NOT BE HIGHER THAN 5' ABOVE THE CEILING AT ANY LOCATIONS.
9. ALL EXTERIOR AND WALL MOUNTED SPEAKERS SHALL BE MOUNTED AT 10'-0" UNLESS OTHERWISE NOTED.
10. EXTERIOR SPEAKERS SHALL BE ON A SEPARATE LOW VOLTAGE CIRCUIT FROM INTERIOR SPEAKERS.
11. A/V CONTRACTOR SHALL COORDINATE ALL MOUNTING LOCATIONS OF ALL A/V DEVICES TO PROVIDE EVEN AND BALANCED AUDIO COVERAGE OF INTENDED LISTENING AREAS AND UNOBSTRUCTED, SQUARE AND PLUMB VIDEO IMAGE DISPLAYS.
12. ALL LAY-IN CEILING MOUNTED SPEAKERS AND DEVICES SHALL BE INSTALLED UTILIZING A TILE BRIDGE SUPPORT SYSTEM. AT NO POINT SHOULD THE WEIGHT OF A CEILING MOUNTED DEVICE BE SUPPORTED BY A CEILING TILE ALONE.
13. A/V CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL CONDUIT AND BACK BOX REQUIREMENTS.
14. A/V CONTRACTOR TO COORDINATE WITH ALL OTHER TRADES WITH REGARD TO BLOCKING AND PROPER SUPPORT OF ALL A/V DEVICES.
15. PROVIDE MOUNTING SUPPORT FROM GRID OR BUILDING STRUCTURE FOR ALL DEVICES INSTALLED IN LAY-IN CEILING TILE.

SECURITY SYSTEMS LEGEND

GROUP	SYMBOL	DESCRIPTION
DEVICES		INTERIOR VIDEO SURVEILLANCE CAMERA. PROVIDE ALL REQUISITE MOUNTING HARDWARE. PROVIDE CEILING TILE BRIDGE FOR ALL CAMERAS INSTALLED IN LAY-IN CEILING TILE. WALL MOUNTED CAMERAS INSTALLED AT 12' A.F.F. UNLESS OTHERWISE NOTED. PROVIDE SINGLE GANG BACK BOX WITH (1) 3/4" CONDUIT STUBBED OUT ABOVE NEAREST ACCESSIBLE CEILING WITH PULL STRING FOR WALL MOUNTED CAMERAS.
		EXTERIOR WALL MOUNTED CAMERA VIDEO SURVEILLANCE CAMERA INSTALLED AT 12' A.F.F. UNLESS OTHERWISE NOTED. PROVIDE ALL REQUISITE MOUNTING HARDWARE. PROVIDE SINGLE GANG BACK BOX WITH (1) 3/4" CONDUIT STUBBED OUT ABOVE NEAREST ACCESSIBLE CEILING WITH PULL STRING.
		WALL MOUNTED MOTION DETECTOR INSTALLED AT 12' A.F.F. UNLESS OTHERWISE NOTED. PROVIDE SINGLE GANG BACK BOX WITH (1) 3/4" CONDUIT STUBBED OUT ABOVE NEAREST ACCESSIBLE CEILING WITH PULL STRING.
		360 DEGREE CEILING MOUNTED MOTION DETECTOR.
	HKP	INTRUSION DETECTION SYSTEM ARM/DISARM KEYPAD WITH LOCKING VANDAL RESISTANT COVER.
	PB	PANIC BUTTON TO BE TIED TO EMERGENCY GENERATOR.
	CONT	INTRUSION DETECTION CONTROL PANELS MOUNTED ON WALL. ELECTRICAL CONTRACTOR TO PROVIDE 120V. POWER TO PANEL. PROVIDE (1) TELEPHONE LINE AND (1) NETWORK CABLE TO PANEL. COORDINATE WITH DISTRICT TECHNOLOGY DEPARTMENT ON ACTIVATING VOICE LINE AND ACQUIRING AN IP ADDRESS.
	CR	ACCESS CONTROL PROXIMITY CARD READER. MOUNT AT 42" A.F.F. PROVIDE ALTRONIX LPD FOR EACH CARD READER.
	DR	DOOR RELEASE BUTTON (TO BE CONNECTED TO DOOR INDICATED).
	DC	DOOR CONTACT. PROVIDE SURFACE MOUNT CONTACT ON ROLL-UP DOORS. PROVIDE DOOR CONTACT ON ALL ROOF HATCHES.
		CEILING MOUNTED GLASS BREAK DETECTOR.
		WALL MOUNTED GLASS BREAK DETECTOR. MOUNT AT 12'-0" A.F.F.

NOTE:
1. EVERY SYMBOL SHOWN ON LEGEND MAY NOT APPEAR ON DRAWINGS. REFER TO GENERAL ELECTRICAL NOTES FOR WALL-MOUNTED DEVICE MOUNTING HEIGHTS.
2. REFERENCE SPECIFICATIONS FOR MATERIALS AND METHODS.
3. COMPLETE INSTALLATION OF ALL PRODUCTS SHALL BE IN COMPLIANCE WITH ALL CODES, INDUSTRY STANDARDS, COMMON PRACTICES AND MANUFACTURER'S INSTRUCTIONS.

BDA/DAS SYSTEMS LEGEND

GROUP	SYMBOL	DESCRIPTION
DEVICES	BDA	BI-DIRECTIONAL AMPLIFIER (BDA) SIGNAL BOOSTER. CONTRACTOR SHALL CONNECT THE BDA SYSTEM TO THE FIRE ALARM SYSTEM FOR MONITORING PURPOSES. PROVIDE (2) DEDICATED CIRCUITS ON EMERGENCY POWER.
	BAA	BDA ANNUNCIATOR PANEL. PROVIDE FLUSH MOUNT SINGLE GANG BOX AT 54" A.F.F. WITH A 1" CONDUIT STUBBED OUT ABOVE NEAREST ACCESSIBLE CEILING.

NOTE:
1. EVERY SYMBOL SHOWN ON LEGEND MAY NOT APPEAR ON THE DRAWINGS. REFER TO THE SPECIFICATIONS AND THE TECHNOLOGY SYSTEMS GENERAL NOTES FOR INSTALLATION REQUIREMENTS.

TECHNOLOGY PLAN GENERAL NOTES

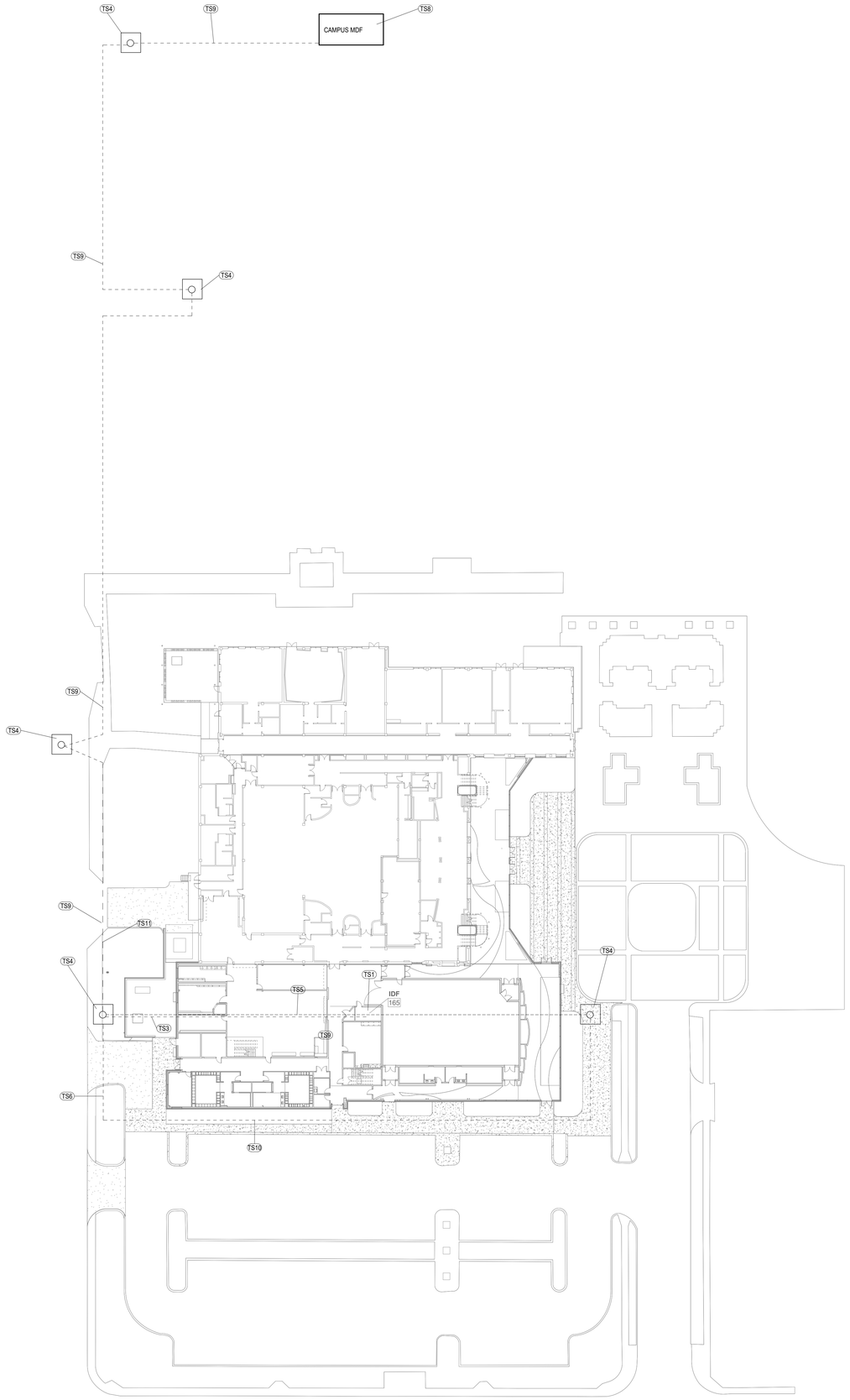
1. ALL 120V POWER REQUIRED FOR THE FUNCTIONALITY OF THE TELECOMMUNICATION, NETWORK, AUDIO/VIDEO, SECURITY AND FIRE ALARM EQUIPMENT SHALL BE A DEDICATED CIRCUIT AND ON EMERGENCY POWER WHERE POSSIBLE. CONTRACTOR SHALL COORDINATE AND INSTALL ALL 120V POWER REQUIREMENTS AND LOCATIONS AS REQUIRED FOR ALL EQUIPMENT (TYPICAL).
2. CONTRACTOR SHALL COORDINATE WITH THE TECHNOLOGY CONSULTANT PRIOR TO THE INSTALLATION OF RACKS AND RACK EQUIPMENT. NO RACKS SHALL BE PERMANENTLY INSTALLED WITHOUT WRITTEN APPROVAL OF THE TECHNOLOGY CONSULTANT.
3. THE PROJECT'S ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONDUITS, PULL STRINGS, BACK BOXES AND SLEEVES REQUIRED FOR DEVICES AND PATHWAYS SHOWN ON THE FLOOR PLANS AND DETAIL SHEETS. ANY ADDITIONAL CONDUITS, SLEEVES, AND RACEWAY REQUIREMENTS FOR EACH SYSTEM SHALL BE THE RESPONSIBILITY OF EACH SYSTEM INSTALLER.
4. THE SELECTED, INSTALLING CONTRACTOR MUST BE A CERTIFIED INTEGRATOR/INSTALLER AUTHORIZED BY THE SPECIFIED SYSTEM MANUFACTURER TO INSTALL THE CABLE PLANT AND CONNECTIVITY PRODUCTS. REFER TO SPECIFICATIONS FOR PRODUCT TYPE AND DESCRIPTION.
5. SYSTEM WIRING AND EQUIPMENT INSTALLATION SHALL BE IN ACCORDANCE WITH ENGINEERING BEST PRACTICES AS ESTABLISHED BY ANSI/EIA/TIA, BICSI, AND THE NEC.
6. ALL WIRING SHALL MEET ALL STATE AND LOCAL ELECTRICAL CODES.
7. ALL TELECOMMUNICATIONS SYSTEMS EQUIPMENT AND MOUNTING LOCATIONS SHALL BE IN COMPLIANCE WITH ADA ACCESSIBILITY STANDARDS.
8. ALL DATA CABLES ARE TO BE INSTALLED WITH A MINIMUM OF 12 INCHES OF SEPARATION FROM AC POWER CABLES AND ALL OTHER LOW VOLTAGE CABLING IN ANY PARALLEL OPEN WIRE RUN.
9. ALWAYS CROSS OTHER SYSTEM CABLES AT A 90 DEGREE ANGLE.
10. ALL CABLES AND TERMINATION COMPONENTS SHALL BE MACHINE LABELED AT BOTH ENDS. LABEL ALL CABLES PER THE TECHNOLOGY DRAWINGS AND/OR SPECIFICATIONS. FINAL CABLE/OUTLET IDENTIFICATION LABELS SHALL BE COORDINATED WITH THE OWNER AND CONSULTANT.
11. CONTRACTOR TO PROVIDE LIGHTNING PROTECTION ON ALL COMMUNICATION CABLE BETWEEN BUILDINGS AND EXTERIOR MOUNTED DEVICES.
12. ALL EXPOSED CABLING ROUTED IN PLENUM SHALL BE PLENUM-RATED. ALL NON PLENUM-RATED CABLING INSTALLED IN PLENUM SPACES SHALL BE INSTALLED IN CONDUIT.
13. NO TERMINATION OR SPLICES SHALL BE INSTALLED IN OR ABOVE CEILINGS UNLESS NOTED OTHERWISE.
14. CONTRACTOR SHALL MAINTAIN WALL RATING WITH PROPER FIRE BLOCKING METHODS.
15. CONTRACTOR SHALL ROUTE ALL LOW VOLTAGE CABLING DOWN CORRIDORS AND PERPENDICULAR OR PARALLEL TO BUILDING WALLS. ENTER INTO ALL ROOMS FROM THE CORRIDOR ABOVE THE MAIN DOORWAY.
16. ALL COMMUNICATION CABLE INSTALLED SHALL ROUTE TO THE CENTER OF THE ROOM IN WHICH IT SERVES AND THEN TO THE OUTLET LOCATION IT IS INTENDED FOR. EACH CABLE SHALL HAVE A 10' SERVICE LOOP AT THE CENTER OF EACH ROOM AND A 3' SERVICE LOOP ABOVE EACH OUTLET LOCATION.
17. THE SYSTEM INSTALLER SHALL PROPERLY SUPPORT ALL INSTALLED SYSTEM CABLING FROM A PANDUIT J-MOD CABLE SUPPORT SYSTEM OR OTHER SUPPORT SYSTEM AS DETAILED IN SPECIFICATIONS. NO CABLING SHALL BE ROUTED AND TIED DIRECTLY TO BUILDING STEEL, CEILING GRID SUPPORT, CONDUIT, PIPING, OR DUCTWORK. CABLING SUPPORT SYSTEM SHALL BE DIRECTLY CONNECTED TO THE BUILDING'S STEEL JOIST. IN LOCATIONS WHERE THE BOTTOM OF THE JOIST IS MORE THAN 5' ABOVE THE CEILING, THE SYSTEM INSTALLER SHALL PROVIDE AND INSTALL THREADED ROD AND ALL REQUIRED MATERIALS TO CONNECT THE THREADED ROD TO THE BUILDING STEEL AND THE CABLE SUPPORT SYSTEM TO THE THREADED ROD. CABLE PATHWAY SHALL NOT BE HIGHER THAN 5' ABOVE THE CEILING IN ANY LOCATION.
18. CONTRACTOR SHALL PROVIDE TWO (2) DATA CABLES ROUTED TO THE FIRE ALARM CONTROL PANEL. CONTRACTOR TO COORDINATE WITH THE SYSTEM INSTALLER FOR EXACT LOCATIONS AND TERMINATION INSTRUCTIONS PRIOR TO INSTALLATION.
19. ALL EXPOSED CABLING OR CABLING ROUTING ACROSS NON-ACCESSIBLE CEILINGS SHALL BE INSTALLED IN CONDUIT. CONDUIT SHALL BE PROPERLY SIZED TO MAINTAIN THE 40% FILL RATIO.
20. 21ALL CONDUIT STUB OUTS AND SLEEVES SHALL HAVE PROTECTIVE BUSHINGS TO PREVENT CABLE DAMAGE. BUSHING TO BE INSTALLED PRIOR TO CABLE INSTALLATION. CUTTING BUSHING AND INSTALLING AFTER CABLE IS INSTALLED WILL NOT BE ACCEPTED. CONTRACTOR TO MAINTAIN A 40% MAXIMUM FILL RATION ON ALL SLEEVES INSTALLED.
21. CONTRACTOR SHALL PROVIDE TWO (2) DATA CABLES TO THE ACCESS CONTROL HEAD-END. CONTRACTOR TO COORDINATE WITH THE SYSTEM INSTALLER FOR EXACT LOCATIONS AND TERMINATION INSTRUCTIONS PRIOR TO INSTALLATION.
22. CONTRACTOR TO PROVIDE TWO (2) DATA CABLES TO THE BUILDING AUTOMATION SYSTEM AT EACH BAS HEAD-END LOCATION. CONTRACTOR TO COORDINATE WITH THE SYSTEM INSTALLER FOR EXACT LOCATIONS AND TERMINATION INSTRUCTIONS PRIOR TO INSTALLATION.
23. CONTRACTOR TO PROVIDE TWO (2) DATA CABLES TO THE AREA OF REFUGE SYSTEM. CONTRACTOR TO COORDINATE WITH THE SYSTEM INSTALLER FOR EXACT LOCATIONS AND TERMINATION INSTRUCTIONS PRIOR TO INSTALLATION.
24. CONTRACTOR SHALL PROVIDE (1) DATA CABLE FOR EACH IP CAMERA AND IP SPEAKER ROUTED TO NEAREST IDF. COORDINATE WITH OTHER TRADES.
25. CONTRACTOR SHALL PROVIDE (2) DATA CABLES ROUTED TO THE ELEVATOR FOR THE FIRE-FIGHTER TELEPHONE.
26. CONTRACTOR SHALL PROVIDE (1) DATA CABLE TO THE INTRUSION DETECTION SYSTEM HEAD-END

SECURITY GENERAL NOTES

1. ALL 120V POWER REQUIRED FOR THE FUNCTIONALITY OF THE ACCESS CONTROL, BURGLAR ALARM, AND SECURITY CAMERA SYSTEMS SHALL BE A DEDICATED CIRCUIT AND ON EMERGENCY POWER WHEN AVAILABLE. SECURITY CONTRACTOR SHALL COORDINATE ALL 120V POWER REQUIREMENTS AND LOCATIONS WITH ELECTRICAL CONTRACTOR FOR ALL EQUIPMENT AND REMOTE POWER SUPPLIES (TYPICAL)
2. A DOOR CONTACT POSITION SENSOR IS REQUIRED AT ALL ROOF HATCHES (TYPICAL).
3. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY CONDUIT, SLEEVES, AND PROTECTIVE BUSHINGS REQUIRED TO INSTALL COMPLETE SECURITY SYSTEM. PROVIDE ALL CONDUITS REQUIRED AT EXTERIOR DOORS ANNOTATED WITH DOOR CONTACTS OR CARD READERS TO ALLOW FOR INSTALLATION OF DOOR CONTACT POSITION SENSORS AND CARD READERS.
4. SECURITY CONTRACTOR IS RESPONSIBLE FOR CONNECTING SYSTEM TO DISTRICT'S REMOTE MONITORING SERVICE.
5. ALL EXPOSED SECURITY SYSTEMS WIRING OR WIRING ROUTING ACROSS NON ACCESSIBLE CEILINGS SHALL BE ROUTED IN CONDUIT. SIZE CONDUIT AS REQUIRED TO ROUTE SYSTEMS WITH 40% CABLE FILL RATIO. MINIMUM CONDUIT SIZE SHALL BE 3/4"
6. PROVIDE PROTECTIVE COVER FOR ALL DEVICES IN GYMNASIUM AREAS.
7. ENSURE ALL EXTERIOR WALL PENETRATIONS ARE PROPERLY SEALED TO PREVENT ELEMENTS FROM ENTERING BUILDING.
8. NO CONDUITS OR SEAL-TITE SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING.
9. ALL LOW VOLTAGE CABLING SHALL BE INDIVIDUALLY

SITE TECHNOLOGY PLAN
TS-101
FOR BLUEBEAM LABELING/OCR:

ISSUE FOR CONSTRUCTION



1 SITE TECHNOLOGY PLAN
SCALE: 1" = 30'-0"

TECHNOLOGY KEYNOTES

TS1 INDICATES THE APPROXIMATE LOCATION OF THE NEW BUILDING IDF. CONDUITS SHALL BE STUB EVENTLY AT +8 A.F.F TO ENTER THE NEW MDF/IDF

TS3 CONTRACTOR TO INSTALL TWO (2) FOUR INCH (4") CONDUIT WITH A PULLING LINE FROM THIS MANHOLE ALL THE WAY TO THE NEW IDF ROUTED AT 4' B.F.G. PROVIDE TWO (2) 3-CELL MAXCELL INNERDUCT IN EACH CONDUIT. THE UNDERGROUND CONDUIT PATHWAY WILL BE INSTALLED BY THE DIV 26 CONTRACTOR.

TS4 INDICATES THE APPROXIMATE LOCATION OF AN EXISTING MANHOLE.

TS5 INDICATES THE APPROXIMATE LOCATION OF AN EXISTING CONDUIT PATHWAY TO BE REMOVED. CONTRACTOR SHALL PULL BACK EXISTING FIBER FROM THE EXISTING MANHOLE ALL THE WAY BACK TO THE PREVIOUS BOX. FIBER TO BE RE-USED IF POSSIBLE, CONTRACTOR WILL RE-ROUTE THE EXISTING FIBER AND FUSE SPLICE AT THE SAME BOX IT WAS PULLED FROM THE BEGINNING JUST FROM A DIFFERENT PATHWAY. CONTRACTOR SHALL PAY FOR ANY DAMAGE TO EXISTING FIBER.

TS6 INDICATES THE APPROXIMATE LOCATION FOR THE NEW PATHWAY FOR THE EXISTING FIBER TO BE RE-ROUTED TO MAINTAIN THE SERVICE UP AND RUNNING. CONTRACTOR TO FIELD VERIFY THE AMOUNT OF CONDUIT NEEDED FOR THIS NEW ROUTE TO WORK AS THE PREVIOUS.

TS8 INDICATES THE APPROXIMATE LOCATION OF THE EXISTING CAMPUS MDF. CONDUITS SHALL BE STUBBED EVENTLY AT +8 A.F.F TO ENTER THE MDF/IDF.

TS9 CONTRACTOR TO PULL A NEW ONE (1) 24-STRAND SINGLE MODE FIBER OUTDOOR/ARMORED-RATED FROM THE EXISTING CAMPUS MDF INTO THE NEW BLACK BOX BUILDING IDF. PROVIDE TWO (2) 3-CELL MAXCELL INNERDUCT IN EACH CONDUIT.

TS10 CONTRACTOR TO FIELD VERIFY THE EXISTING PATHWAY AND REROUTE THE EXISTING FIBER INTO THE NEW PATHWAY PRIOR TO ANY CONSTRUCTION TO MAINTAIN THE NETWORK ALIVE. CONTRACTOR TO LABEL ALL SPOOLS IN THE MANHOLE ACCORDING TO ACC STANDARDS AND REMOVED ANY NON-WORKING CABLING ALL THE WAY TO THE CAMPUS MDF PATHWAY.

TS11 CONTRACTOR TO REMOVE ALL NON-WORKING LOW VOLTAGE CABLE ALL THE WAY TO THE CAMPUS MDF DURING THE NEW FIBER PULLING FOR THIS PROJECT.

PBK

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LEAF ENGINEERS

WFAC Black Box Addition PKG 1

1801 Martin Luther King Dr.,
San Antonio, TX, 78203
ISSUE FOR CONSTRUCTION

ALAMO COLLEGES
ST. PHILIP'S COLLEGE

KEY PLAN
NORTH: PLAN TRUE

2024/06/14
LEAF ENGINEERS
F-18672

CLIENT
Alamo Colleges

DATE	PROJECT NUMBER
2024/06/14	230462

DRAWING HISTORY

No.	Description	Date

ISSUE FOR CONSTRUCTION

BUILDING NUMBER 1

SITE TECHNOLOGY PLAN

TS-101

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