

CITY OF MADISON

2024 PARKING GARAGE MAINTENANCE
MADISON, WISCONSIN
CITY OF MADISON CONTRACT NO. 9493
BID DOCUMENTS



5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CLIENT:



Madison Municipal Building
215 Martin Luthing King Blvd
Suite 109
Madison, Wisconsin 53703

PROJECT TITLE:

2024 PARKING GARAGE
MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

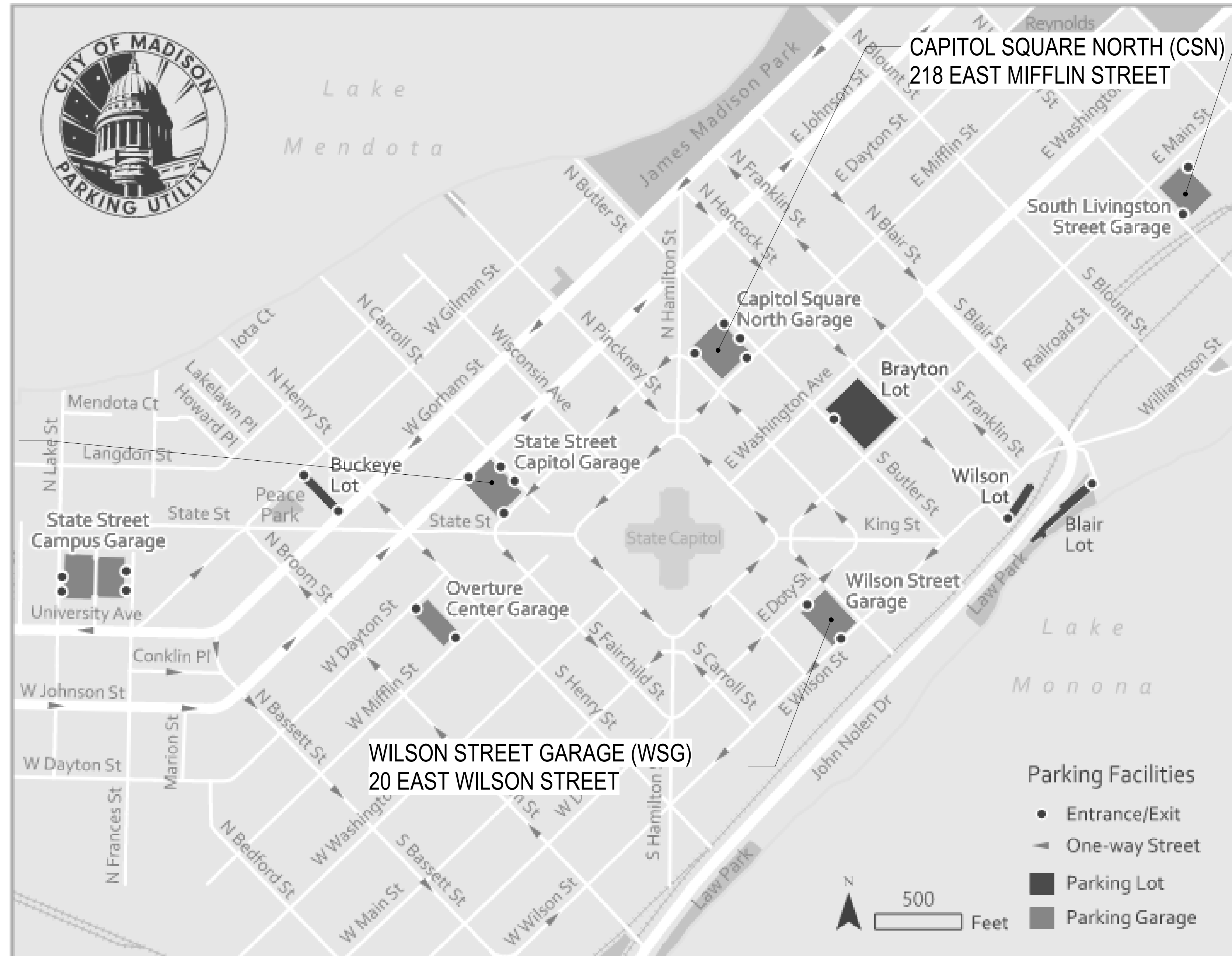
PROJECT NUMBER: 2023-5008.02
DATE: 12/08/2023
DRAWN BY: AMG
CHECKED BY: AMG
APPROVED BY: DFW
SCALE: AS NOTED

SHEET TITLE:

COVER SHEET

SHEET NUMBER:

G001



SOUTH LIVINGSTON STREET (SLS)
111 SOUTH LIVINGSTON STREET

CAPITOL SQUARE NORTH (CSN)
218 EAST MIFFLIN STREET

STATE STREET CAPITOL (SSCO)
214 NORTH CARROLL STREET

WILSON STREET GARAGE (WSG)
20 EAST WILSON STREET

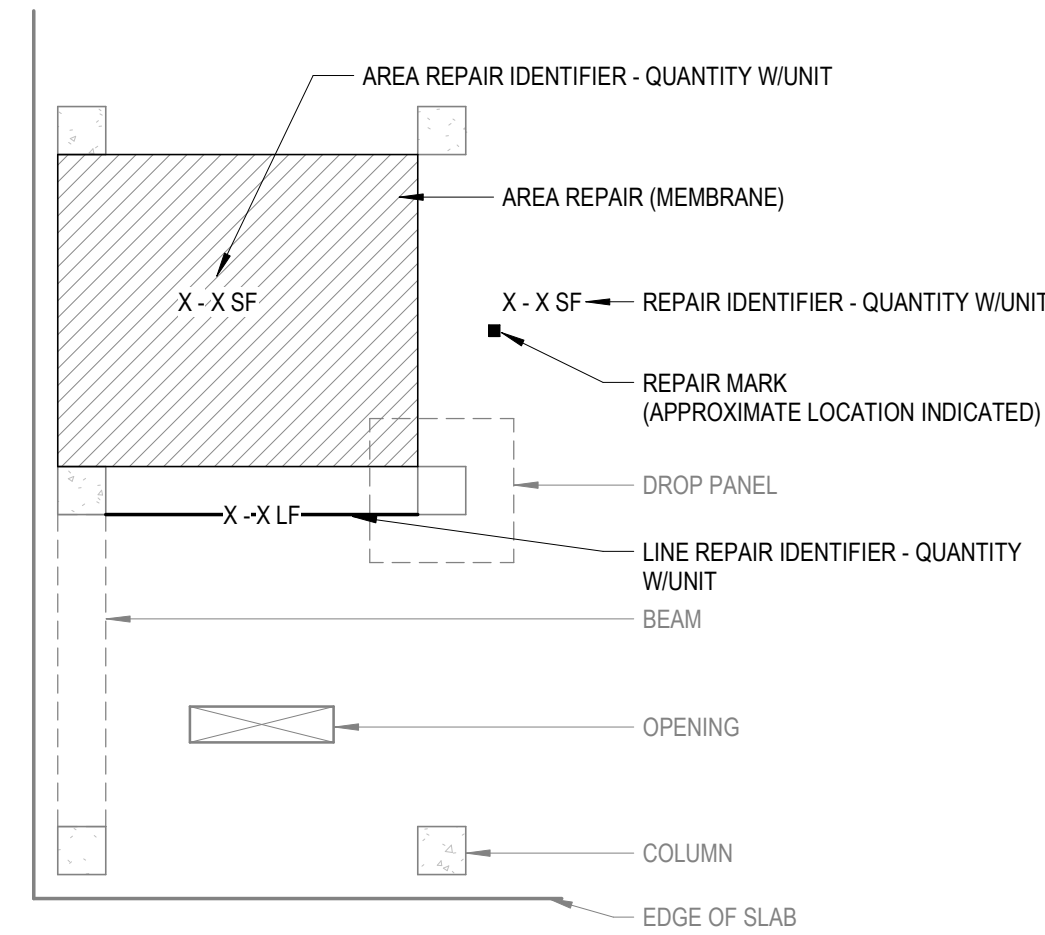
SHEET INDEX

Sheet Number	Sheet Name
G001	COVER SHEET
G002	ESTIMATED PLAN QUANTITIES
SC-S100	STATE STREET CAPITOL LOWER LEVEL PLAN
SC-S101	STATE STREET CAPITOL LEVEL 1 PLAN
SC-S102	STATE STREET CAPITOL LEVEL 2 PLAN
SC-S103	STATE STREET CAPITOL LEVEL 3 PLAN
SC-S104	STATE STREET CAPITOL LEVEL 4 PLAN
SC-S105	STATE STREET CAPITOL LEVEL 5 PLAN
SC-S106	STATE STREET CAPITOL LEVEL 6 PLAN
CN-S100	CAPITOL SQUARE NORTH LOWER LEVEL PLAN
CN-S101	CAPITOL SQUARE NORTH LEVEL 1 PLAN
CN-S102	CAPITOL SQUARE NORTH LEVEL 2 PLAN
CN-S103	CAPITOL SQUARE NORTH LEVEL 3 PLAN
CN-S104	CAPITOL SQUARE NORTH LEVEL 4 PLAN
LS-S101	SOUTH LIVINGSTON STREET LEVEL 1 PLAN
LS-S104	SOUTH LIVINGSTON STREET LEVEL 4 PLAN
LS-S105	SOUTH LIVINGSTON STREET LEVEL 5 PLAN
WS-S098	WILSON STREET LOWER LEVEL 2 PLAN
WS-S099	WILSON STREET LOWER LEVEL 1 PLAN
WS-S100	WILSON STREET LOWER LEVEL 0 PLAN
WS-S101	WILSON STREET LEVEL 1 PLAN
P-001	PLUMBING SYMBOLS, SCHEDULES, & ABBREVIATIONS
P-002	LEVEL U2 PLUMBING PLAN - SANITARY & VENT
P-003	LEVEL U1 PLUMBING PLAN - SANITARY & VENT
P-004	LEVEL U0 PLUMBING PLAN - SANITARY & VENT
SS01	DETAILS

ESTIMATED PLAN QUANTITIES

PAY ITEM	X - X UNIT DESCRIPTION	DETAIL REFERENCE(S)	UNITS	SSCO QTY	CSN QTY	SLS QTY	WSG QTY	TOTAL QTY
1	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4 / S501	SF	50	125	0	95	270
2	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C4 / S501	SF	100	15	0	0	115
3	CONCRETE VERTICAL SURFACE REPAIR	A3 / S501 A4 / S501	SF	35	115	0	0	150
4	CONCRETE BEAM SPALL REPAIR	B3 / S501	SF	10	10	0	0	20
5	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A	SF	0	19900	0	1990	21060
6	CONCRETE SLAB CRACK REPAIR ROUT AND SEAL	B2 / S501	LF	0	250	0	0	250
7	CONCRETE SLAB CRACK REPAIR ROUT WITH SLOT AND SEAL (WSG)	A2 / S501	LF	0	0	0	1500	1500
8	CMU CRACK/MORTAR JOINT REPAIR	N/A	LF	0	550	0	0	550
9	CMU REPLACEMENT	N/A	SF	0	30	0	0	30
10	SILANE SEALER APPLICATION (SSCO)	N/A	SF	301500	0	0	0	301500
11	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A	LF	600	600	0	300	1500
12	STEEL BARRIER REPAIRS (CSN)	B1 / S501	EACH	0	2	0	0	2
13	REFASTEN EXISTING STAIR TREADS/COVER PLATES	N/A	EACH	10	10	0	0	20
14	INSTALL NEW PRECAST WALL/PANEL CONNECTION	SEE PLAN	EACH	2	0	4	0	6
15	INSTALL NEW FLOOR DRAINS	A5 / P001	EACH	0	0	0	7	7

CONCRETE REPAIR PLAN LEGEND



ABBREVIATIONS

1WAY	ONE-WAY	LD BRG	LOAD-BEARING
AB	ANCHOR BOLT	LDH	LONG DIMENSION HORIZONTAL
ADDL	ADDITIONAL	LDV	LONG DIMENSION VERTICAL
ADDM	ADDENDUM	LL	LIVE LOAD
AHU	AIR HANDLING UNIT	LLBB	LONG LEG BACK TO BACK
ALT	ALTERNATE	LLH	LONG LEG HORIZONTAL
APPROX	APPROXIMATE	LLV	LONG LEG VERTICAL
AR	AS REQUIRED	LVL	LAMINATED VENEER LUMBER
ARCH	ARCHITECT	LVR	LOUVER
B PL	BASE PLATE	M	MOMENT
B/B	BACK TO BACK	MAX	MAXIMUM
BC	BOTTOM CHORD	MBR	MEMBER
BF	BOTH FACES	MC	MOMENT CONNECTION
BF	BOTTOM FACE	MD	METAL DECK
BM	BEAM	MECH	MECHANICAL
BO	BOTTOM OF _ (REFER TO TOP OF _)	MEZZ	MEZZANINE
BOT	BOTTOM	MFR	MANUFACTURER
BRDG	BRIDGING	MFR REC	MANUFACTURER'S RECOMMENDATION
BRG PL	BEARING PLATE	MID	MIDDLE
BS	BOTH SIDES	MIN	MINIMUM
BSMT	BASEMENT	MISC	MISCELLANEOUS
BW	BOTH WAYS	ML	MONOLITHIC
C	CHANNEL	MO	MASONRY OPENING
C TO C	CENTER TO CENTER	MTL	METAL
CANTIL	CANTILEVER	MULT	MULTIPLE
CIP	CAST-IN-PLACE	N	NORTH
CJ	CONSTRUCTION JOINT	NF	NEAR FACE
CJ	CONTROL JOINT	NIC	NOT IN CONTRACT
CL	CENTER LINE	NLB	NON-LOAD-BEARING
CMU	CONCRETE MASONRY UNIT	NO	NUMBER
COL	COLUMN	NOM	NOMINAL
CONC	CONCRETE	NS	NEAR SIDE
CONN	CONNECT	NTS	NOT TO SCALE
CONSTR	CONSTRUCTION	OC	ON CENTER
CONT	CONTINUE/CONTINUOUS	OD	OUTSIDE DIAMETER
CONTR	CONTRACTOR	OF	OUTSIDE FACE
CPRS	COMPRESSIBLE	OPNG	OPENING
CTRL	CONTROL	OPH	OPPOSITE HAND
CU	CUBIC	OPP	OPPOSITE
CU FT	CUBIC FEET	OPT	OPTIONAL
CU IN	CUBIC INCH	OIO	OUT TO OUT
CU YD	CUBIC YARD	PCC	PRECAST CONCRETE
D	DEEP	PCF	POUNDS PER CUBIC FOOT
D	DEPTH	PL	PLATE
DBE	DECK BEARING ELEVATION	PLF	POUNDS PER LINEAR FOOT
DBL	DOUBLE	PLYWD	PLYWOOD
DEG	DEGREE	PCST	PRECAST
DET	DETAIL	PRELIM	PRELIMINARY
DEMO	DEMOLITION	PS CONC	PRESTRESSED CONCRETE
DIA	DIAMETER	PSF	POUNDS PER SQUARE FOOT
DIAG	DIAGONAL	PSI	POUNDS PER SQUARE INCH
DIM	DIMENSION	PT	POST-TENSIONED
DIR	DIRECTION	PT	PRESSURE TREATED
DL	DEAD LOAD	PT CONC	POST-TENSIONED CONCRETE
DWG	DRAWING	QTY	QUANTITY
E	EAST	R	RADIUS
EA	EACH	RD	ROOF DRAIN
EE	EACH END	REF	REFERENCE
EF	EACH FACE	REINF	REINFORCE
EJ	EXPANSION JOINT	REQD	REQUIRED
EL	ELEVATION	REV	REVISION
ELEC	ELECTRIC	RS	ROUGH SAWN
ELEV	ELEVATOR	RTU	ROOF TOP UNIT
ENGR	ENGINEER	S	SOUTH
EOD	EDGE OF DECK	SCHED	SCHEDULE
EOG	EDGE OF GRATING	SCHEM	SCHEMATIC
EOS	EDGE OF SLAB	SE	STRUCTURAL ENGINEER
EQ	EQUAL	SECT	SECTION
EQL SP	EQUALLY SPACED	SF	SQUARE FOOT (FEET)
EQUIP	EQUIPMENT	SHT	SHEET
EQUIV	EQUIVALENT	SIM	SIMILAR
EW	EACH WAY	SL	SLAB
EXC	EXCAVATE	SLBB	SHORT LEG BACK TO BACK
EXIST, (E)	EXISTING	SP	SUMP PIT
EXP	EXPANSION	SPCL	SPECIAL
EXP BT	EXPANSION BOLT	SPEC	SPECIFICATION
EXT	EXTERIOR	SQ	SQUARE
FD	FLOOR DRAIN	SQ IN	SQUARE INCH
FDTN	FOUNDATION	SQ YD	SQUARE YARD
FF	FAR FACE	STD	STANDARD
FLR	FLOOR	STIF	STIFFENER
FR	FRAME	STL JST	STEEL JOIST
FS	FAR SIDE	STRUC	STRUCTURAL
FSTNR	FASTENER	SYMM	SYMMETRICAL
FT	FEET	T&B	TOP AND BOTTOM
FTG	FOOTING	TB	THROUGH BOLT
FUT	FUTURE	TC	TOP CHORD
GA	GAGE	TEMJ	TOP ELEVATION MATCHES JOIST
GALV	GALVANIZED	TEMP	TEMPORARY
GC	GENERAL CONTRACTOR	THK	THICKNESS
GLU LAM	GLUE LAMINATED WOOD	THRU	THROUGH
GR BM	GRADE BEAM	TOB	TOP OF BEAM
GRTG	GRATING	TOC	TOP OF CONCRETE
H	HIGH	TOD	TOP OF DECK
HDR	HEADER	TOF	TOP OF FOUNDATION
HGR	HANGER	TOG	TOP OF GRATING
HORIZ, H	HORIZONTAL	TOP	TOP OF PIER
HS	HIGH STRENGTH	TOS	TOP OF STEEL
HSKPG	HOUSEKEEPING	TOW	TOP OF WALL
HT	HEIGHT	TS	TUBE STEEL
I	MOMENT OF INERTIA	TYP	TYPICAL
ID	INSIDE DIAMETER	UNO	UNLESS NOTED OTHERWISE
IF	INSIDE FACE	VAR	VARIES
INFO	INFORMATION	VERT, V	VERTICAL
INT	INTERIOR	VIF	VERIFY IN FIELD
JST	JOIST	W	WEST
JST BRG	JOIST BEARING	W	WIDE
K	KIP	WI	WITH
KB	KNEE BRACE	W/O	WITHOUT
KIP	THOUSAND POUNDS	WBL	WOOD BLOCKING
KLF	KIPS PER LINEAR FOOT	WD	WOOD
KOP	KNOCK OUT PANEL	WF	WIDE FLANGE
KSF	KIPS PER SQUARE FOOT	WP	WORK POINT
KSI	KIPS PER SQUARE INCH	WT	WEIGHT
KWY	KEYWAY	WWF	WELDED WIRE FABRIC
L	ANGLE	WWM	WELDED WIRE MESH
LATL	LATERAL	YD	YARD
LB	POUND		



5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CLIENT:



Madison Municipal Building
215 Martin Luthing King Blvd
Suite 109
Madison, Wisconsin 53703

PROJECT TITLE:

2024 PARKING GARAGE
MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

PROJECT NUMBER: 2023-5008.02

DATE: 12/08/2023

DRAWN BY: AMG

CHECKED BY: AMG

APPROVED BY: DFW

SCALE: AS NOTED

SHEET TITLE:

ESTIMATED PLAN QUANTITIES

SHEET NUMBER:

G002

1 2 3 4 5



5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CLIENT:



Madison Municipal Building
215 Martin Luthing King Blvd
Suite 109
Madison, Wisconsin 53703

PROJECT TITLE:

2024 PARKING GARAGE
MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

PROJECT NUMBER: 2023-5008.02
DATE: 12/08/2023
DRAWN BY: AMG
CHECKED BY: AMG
APPROVED BY: DFW
SCALE: AS NOTED

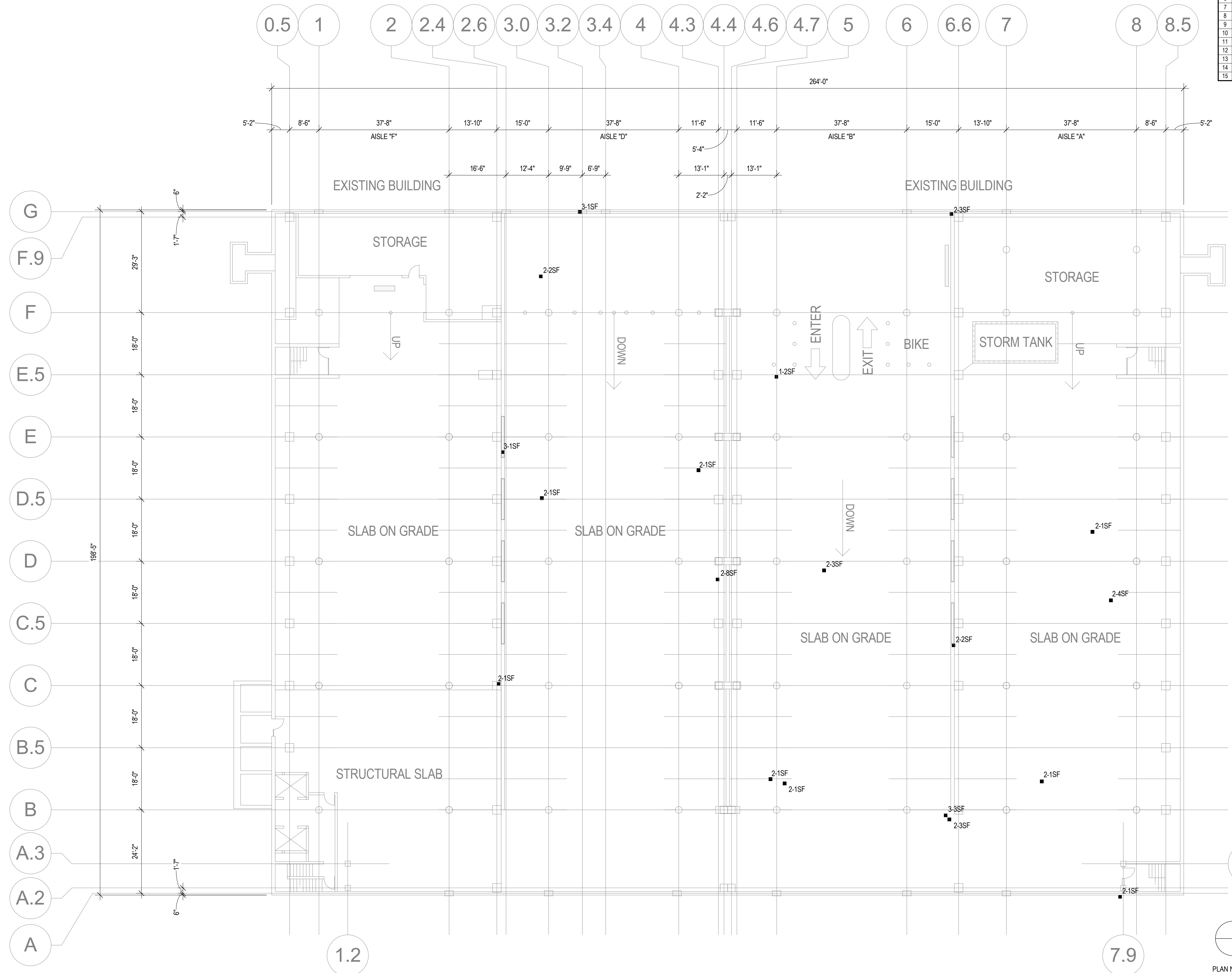
SHEET TITLE:

STATE STREET CAPITOL LOWER
LEVEL PLAN

SHEET NUMBER:

SC-S100

ITEM	X-UNIT DESCRIPTION	DETAIL REFERENCE(S)
1	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4 / S501
2	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C4 / S501
3	CONCRETE VERTICAL SURFACE SPALL REPAIR	A3 / S501 A4 / S501
4	CONCRETE BEAM SPALL REPAIR	B3 / S501
5	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A
6	CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL	B2 / S501
7	CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG)	A2 / S501
8	CMU CRACK/MORTAR JOINT REPAIR	N/A
9	CMU REPLACEMENT	N/A
10	SILANE SEALER APPLICATION (SSCO)	N/A
11	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A
12	STEEL BARRIER REPAIRS (CSN)	B1 / S501
13	REFASTEN EXISTING STAIR TREADS/COVER PLATES	N/A
14	INSTALL NEW PRECAST WALL/PANEL CONNECTION	SEE PLAN
15	INSTALL NEW FLOOR DRAINS	A5 / P001



LEVEL L FLOOR PLAN

STATE STREET CAPITOL (SSCO) - LOWER LEVEL

1/16" = 1'-0"

1 2 3 4 5

12/16/2023 1:50:28 PM



5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CLIENT:



Madison Municipal Building
215 Martin Luthing King Blvd
Suite 109
Madison, Wisconsin 53703

PROJECT TITLE:

2024 PARKING GARAGE
MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

PROJECT NUMBER: 2023-5008.02
DATE: 12/08/2023
DRAWN BY: AMG
CHECKED BY: AMG
APPROVED BY: DFW
SCALE: AS NOTED

SHEET TITLE:

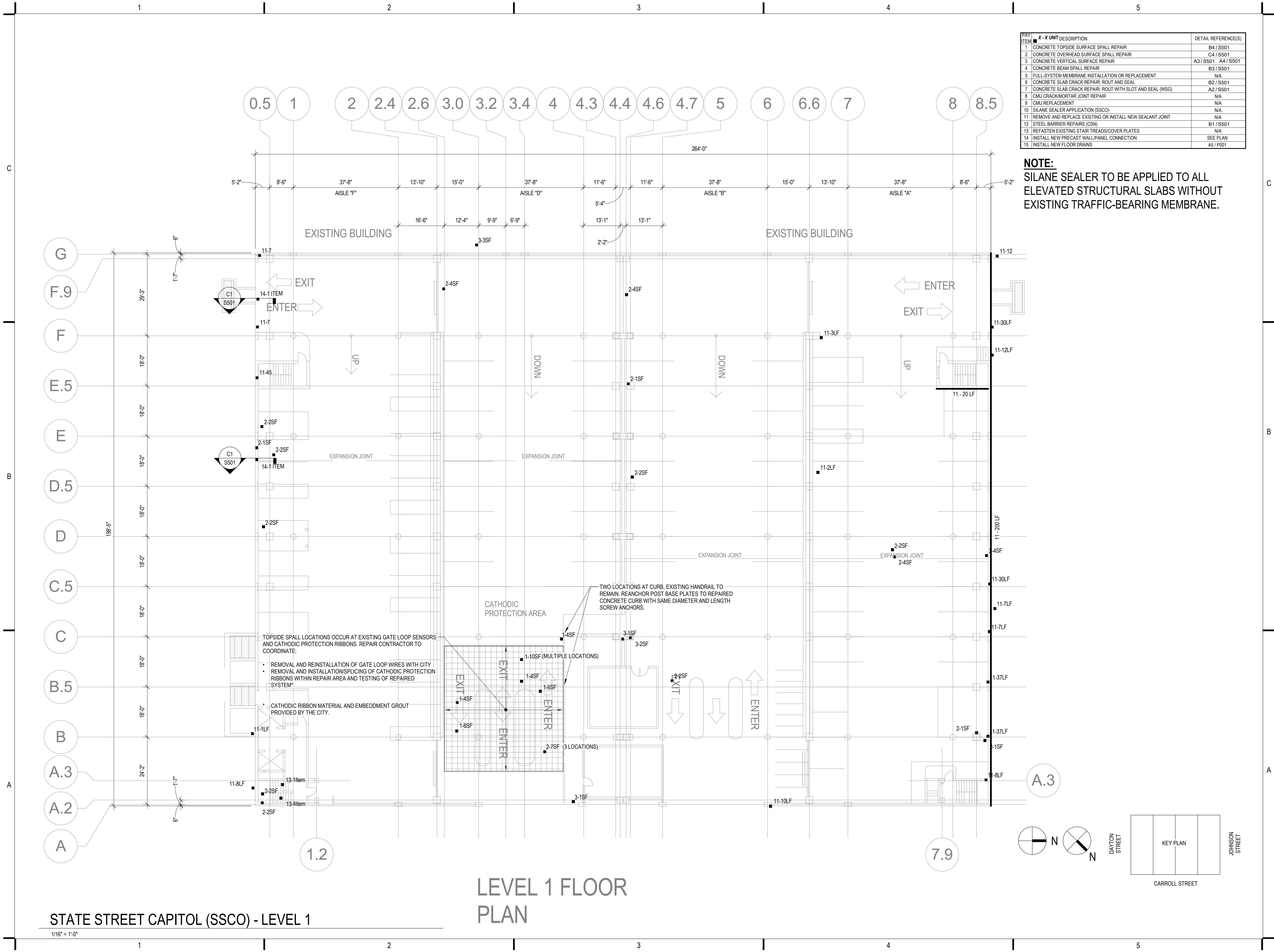
STATE STREET CAPITOL LEVEL 1
PLAN

SHEET NUMBER:

SC-S101

ITEM	X - X UNIT DESCRIPTION	DETAIL REFERENCE(S)
1	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4 / S501
2	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C4 / S501
3	CONCRETE VERTICAL SURFACE SPALL REPAIR	A3 / S501 A4 / S501
4	CONCRETE BEAM SPALL REPAIR	B3 / S501
5	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A
6	CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL	B2 / S501
7	CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG)	A2 / S501
8	CMU CRACK/MORTAR JOINT REPAIR	N/A
9	CMU REPLACEMENT	N/A
10	SILANE SEALER APPLICATION (SSCO)	N/A
11	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A
12	STEEL BARRIER REPAIRS (CSN)	B1 / S501
13	REFASTEN EXISTING STAIR TREADS/COVER PLATES	N/A
14	INSTALL NEW PRECAST WALL/PANEL CONNECTION	SEE PLAN
15	INSTALL NEW FLOOR DRAINS	A5 / P001

NOTE:
SILANE SEALER TO BE APPLIED TO ALL
ELEVATED STRUCTURAL SLABS WITHOUT
EXISTING TRAFFIC-BEARING MEMBRANE.



LEVEL 1 FLOOR
PLAN

STATE STREET CAPITOL (SSCO) - LEVEL 1

1/16" = 1'-0"

12/8/2023 12:29:05 PM

1 2 3 4 5



5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CLIENT:



Madison Municipal Building
215 Martin Luthing King Blvd
Suite 109
Madison, Wisconsin 53703

PROJECT TITLE:

2024 PARKING GARAGE
MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

PROJECT NUMBER: 2023-5008.02
DATE: 12/08/2023
DRAWN BY: AMG
CHECKED BY: AMG
APPROVED BY: DFW
SCALE: AS NOTED

SHEET TITLE:

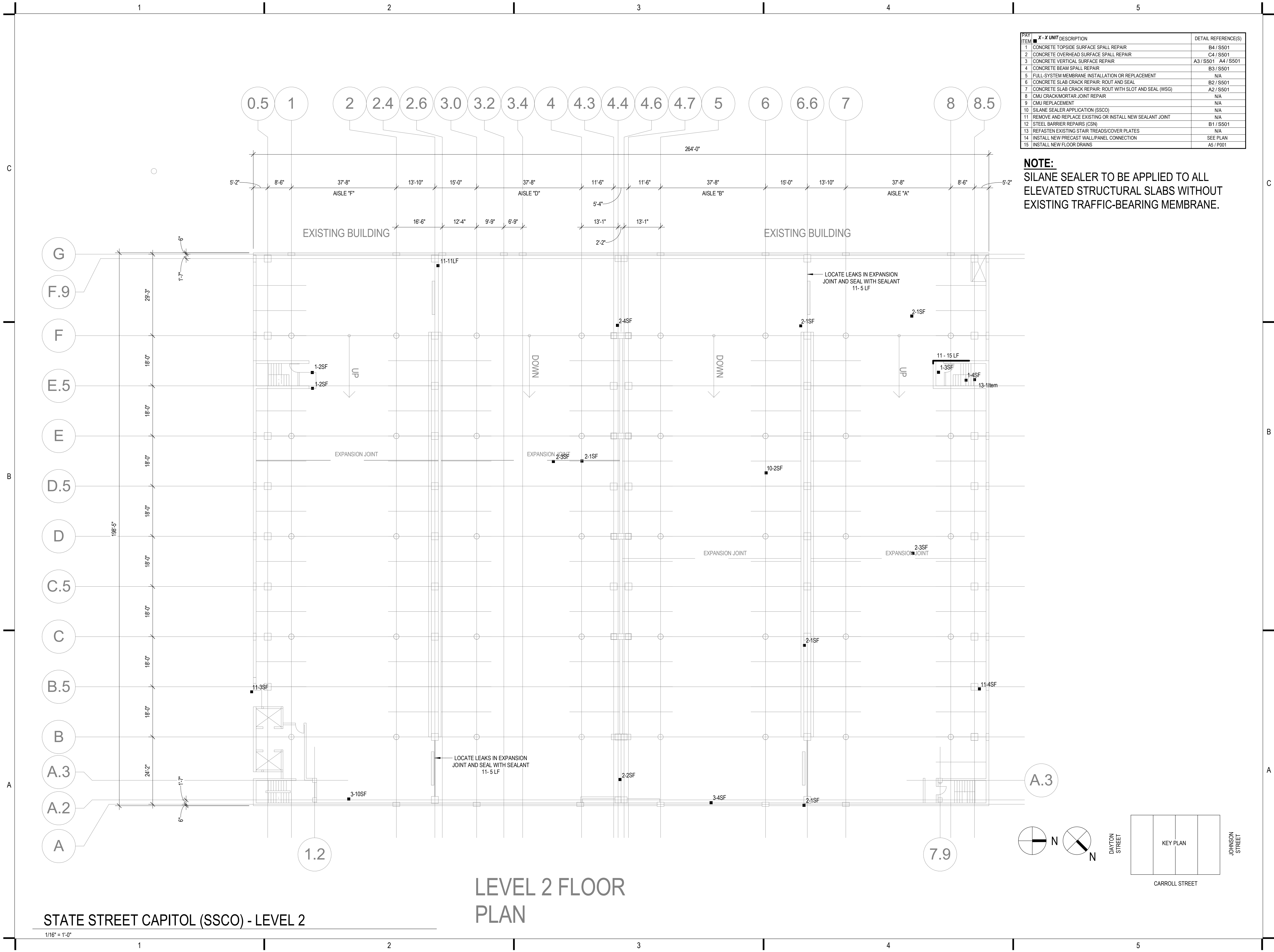
STATE STREET CAPITOL LEVEL 2
PLAN

SHEET NUMBER:

SC-S102

ITEM	X-UNIT DESCRIPTION	DETAIL REFERENCE(S)
1	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4 / S501
2	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C4 / S501
3	CONCRETE VERTICAL SURFACE REPAIR	A3 / S501 A4 / S501
4	CONCRETE BEAM SPALL REPAIR	B3 / S501
5	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A
6	CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL	B2 / S501
7	CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG)	A2 / S501
8	CMU CRACK/MORTAR JOINT REPAIR	N/A
9	CMU REPLACEMENT	N/A
10	SILANE SEALER APPLICATION (SSCO)	N/A
11	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A
12	STEEL BARRIER REPAIRS (CSN)	B1 / S501
13	REFASTEN EXISTING STAIR TREADS/COVER PLATES	N/A
14	INSTALL NEW PRECAST WALL/PANEL CONNECTION	SEE PLAN
15	INSTALL NEW FLOOR DRAINS	A5 / P001

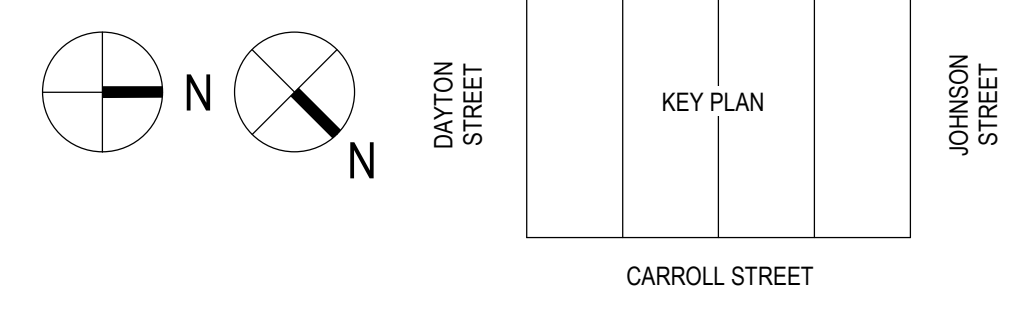
NOTE:
SILANE SEALER TO BE APPLIED TO ALL
ELEVATED STRUCTURAL SLABS WITHOUT
EXISTING TRAFFIC-BEARING MEMBRANE.



LEVEL 2 FLOOR PLAN

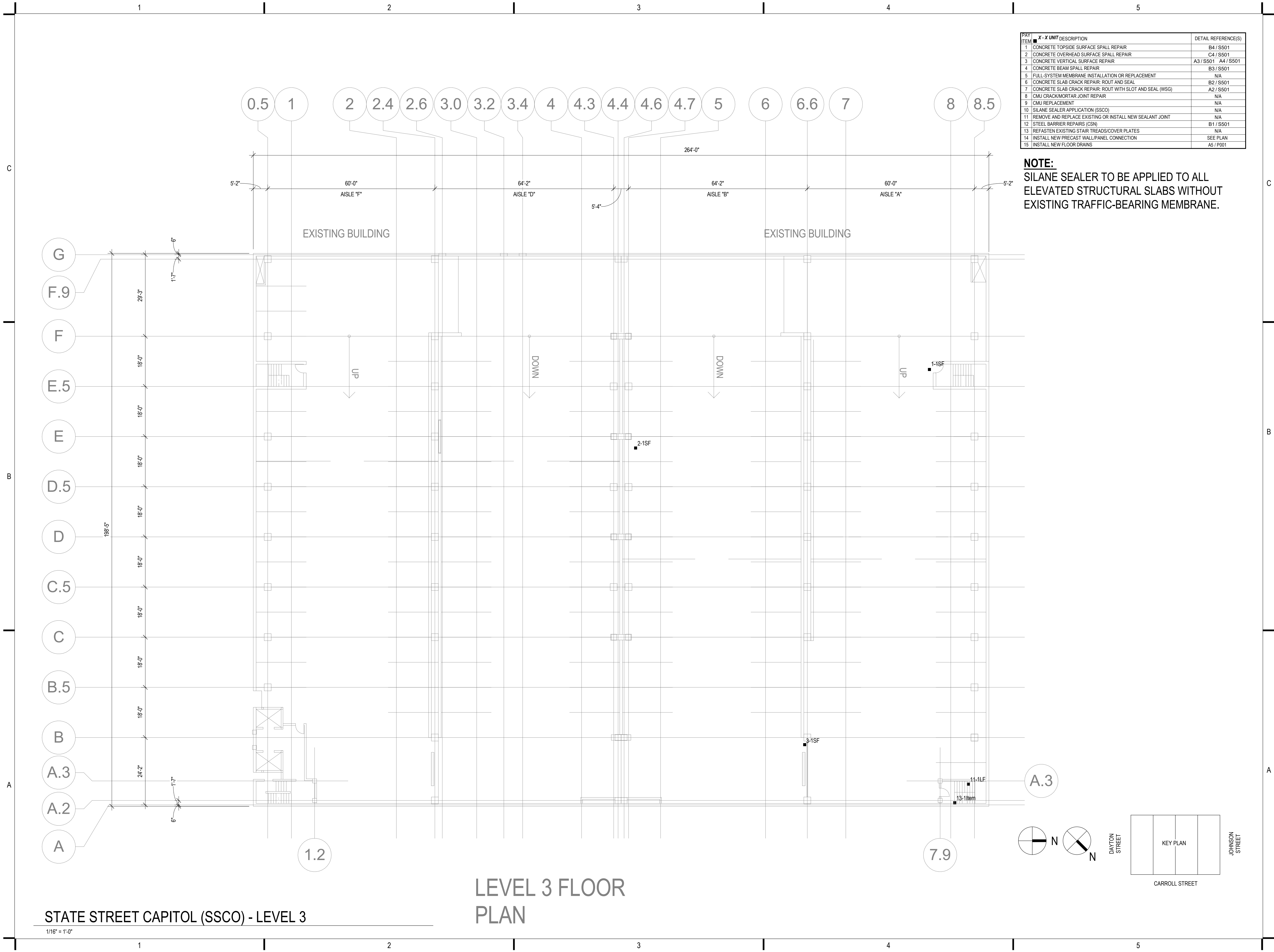
STATE STREET CAPITOL (SSCO) - LEVEL 2

1/16" = 1'-0"



12/16/2023 1:50:28 PM

12/16/2023 1:50:28 PM



ITEM	X - X UNIT DESCRIPTION	DETAIL REFERENCE(S)
1	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4 / S501
2	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C4 / S501
3	CONCRETE VERTICAL SURFACE SPALL REPAIR	A3 / S501 A4 / S501
4	CONCRETE BEAM SPALL REPAIR	B3 / S501
5	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A
6	CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL	B2 / S501
7	CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG)	A2 / S501
8	CMU CRACK/MORTAR JOINT REPAIR	N/A
9	CMU REPLACEMENT	N/A
10	SILANE SEALER APPLICATION (SSCO)	N/A
11	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A
12	STEEL BARRIER REPAIRS (CSN)	B1 / S501
13	REFASTEN EXISTING STAIR TREADS/COVER PLATES	N/A
14	INSTALL NEW PRECAST WALL/PANEL CONNECTION	SEE PLAN
15	INSTALL NEW FLOOR DRAINS	A5 / P001

NOTE:
 SILANE SEALER TO BE APPLIED TO ALL ELEVATED STRUCTURAL SLABS WITHOUT EXISTING TRAFFIC-BEARING MEMBRANE.



5126 West Terrace Drive,
 Suite 111
 Madison, WI 53718-8346
 608 / 242 1550
 608 / 242 0787 fax

www.graef-usa.com

CLIENT:



Madison Municipal Building
 215 Martin Luthing King Blvd
 Suite 109
 Madison, Wisconsin 53703

PROJECT TITLE:

2024 PARKING GARAGE
 MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

PROJECT NUMBER: 2023-5008.02
 DATE: 12/08/2023
 DRAWN BY: AMG
 CHECKED BY: AMG
 APPROVED BY: DFW
 SCALE: AS NOTED

SHEET TITLE:

STATE STREET CAPITOL LEVEL 3
 PLAN

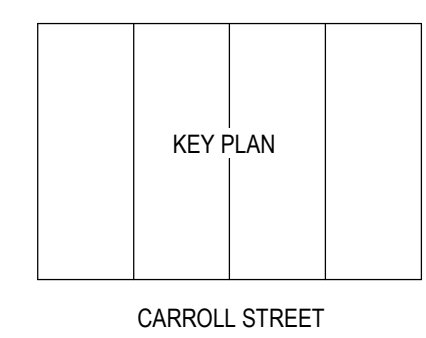
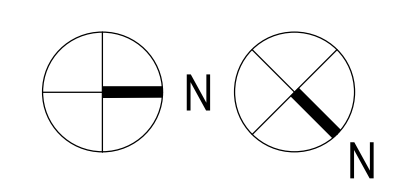
SHEET NUMBER:

SC-S103

STATE STREET CAPITOL (SSCO) - LEVEL 3

1/16" = 1'-0"

LEVEL 3 FLOOR
 PLAN



1

2

3

4

5



5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CLIENT:



Madison Municipal Building
215 Martin Luthing King Blvd
Suite 109
Madison, Wisconsin 53703

PROJECT TITLE:

2024 PARKING GARAGE
MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

PROJECT NUMBER: 2023-5008.02
DATE: 12/08/2023
DRAWN BY: AMG
CHECKED BY: AMG
APPROVED BY: DFW
SCALE: AS NOTED

SHEET TITLE:

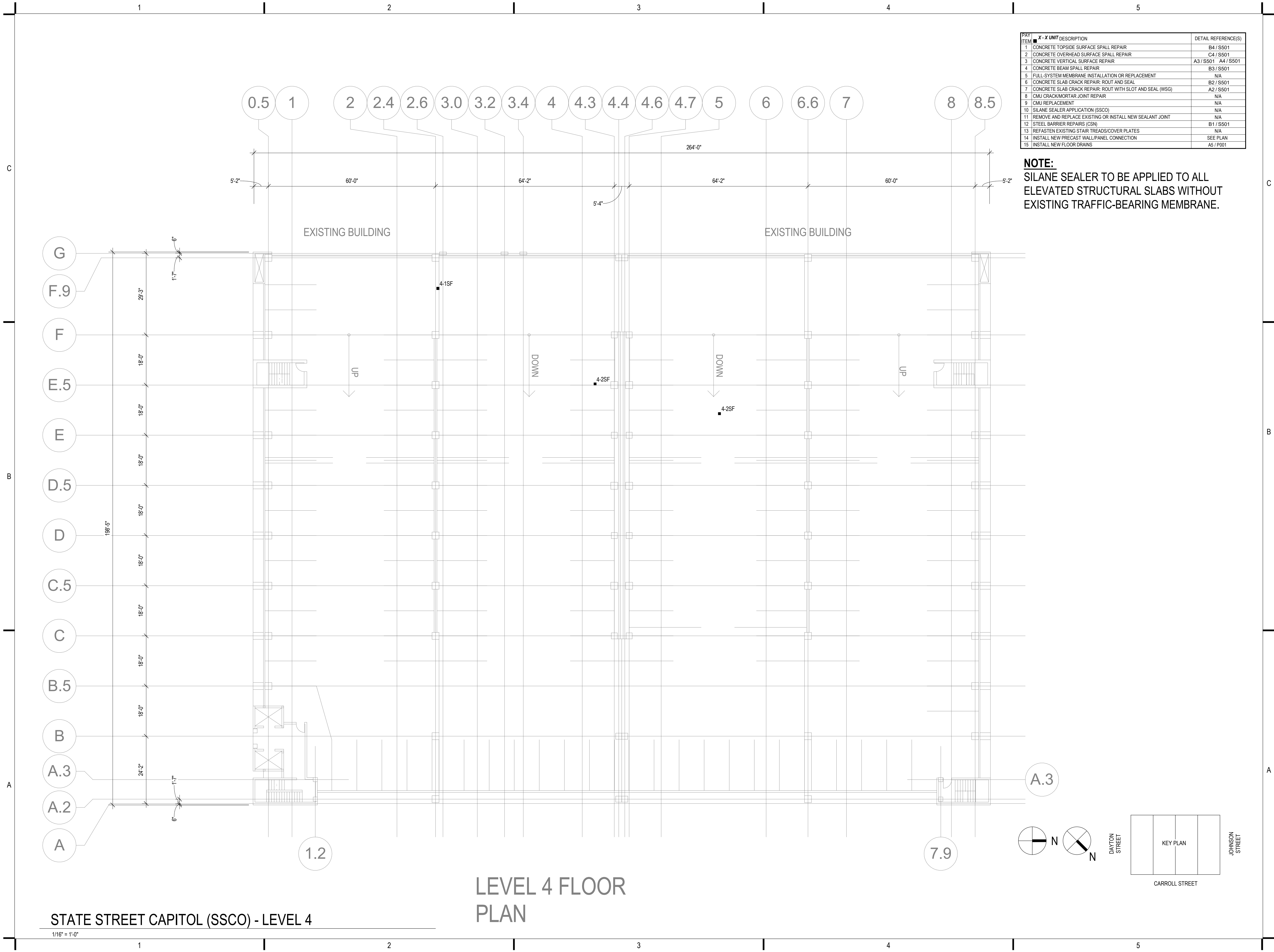
STATE STREET CAPITOL LEVEL 4
PLAN

SHEET NUMBER:

SC-S104

ITEM	X - X UNIT DESCRIPTION	DETAIL REFERENCE(S)
1	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4 / S501
2	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C4 / S501
3	CONCRETE VERTICAL SURFACE SPALL REPAIR	A3 / S501 A4 / S501
4	CONCRETE BEAM SPALL REPAIR	B3 / S501
5	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A
6	CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL	B2 / S501
7	CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG)	A2 / S501
8	CMU CRACK/MORTAR JOINT REPAIR	N/A
9	CMU REPLACEMENT	N/A
10	SILANE SEALER APPLICATION (SSCO)	N/A
11	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A
12	STEEL BARRIER REPAIRS (CSN)	B1 / S501
13	REFASTEN EXISTING STAIR TREADS/COVER PLATES	N/A
14	INSTALL NEW PRECAST WALL/PANEL CONNECTION	SEE PLAN
15	INSTALL NEW FLOOR DRAINS	A5 / P001

NOTE:
SILANE SEALER TO BE APPLIED TO ALL
ELEVATED STRUCTURAL SLABS WITHOUT
EXISTING TRAFFIC-BEARING MEMBRANE.



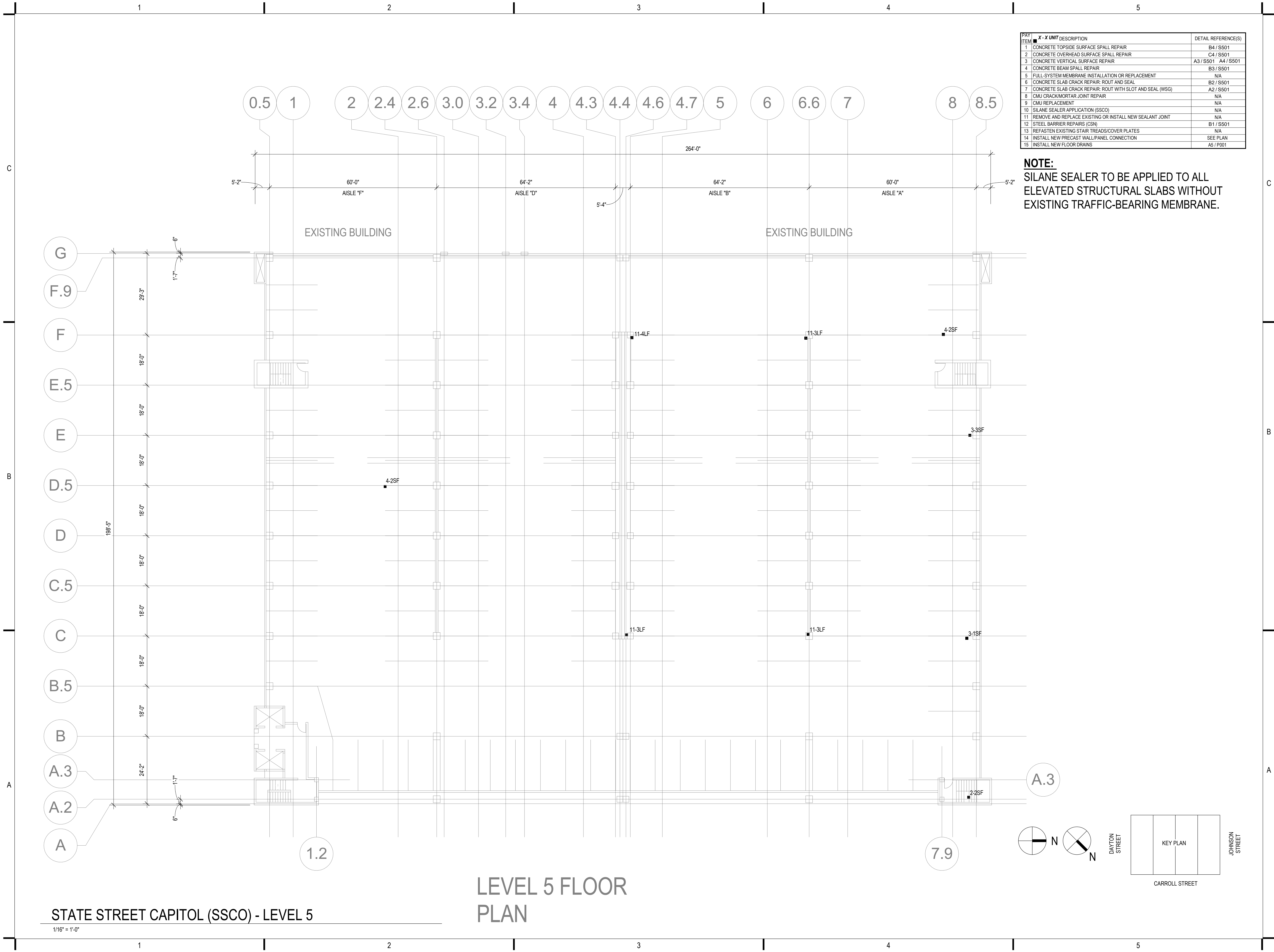
LEVEL 4 FLOOR PLAN

STATE STREET CAPITOL (SSCO) - LEVEL 4

1/16" = 1'-0"

12/6/2023 1:50:28 PM

12/16/2023 1:50:29 PM



ITEM	X - X UNIT DESCRIPTION	DETAIL REFERENCE(S)
1	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4 / S501
2	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C4 / S501
3	CONCRETE VERTICAL SURFACE SPALL REPAIR	A3 / S501 A4 / S501
4	CONCRETE BEAM SPALL REPAIR	B3 / S501
5	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A
6	CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL	B2 / S501
7	CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG)	A2 / S501
8	CMU CRACK/MORTAR JOINT REPAIR	N/A
9	CMU REPLACEMENT	N/A
10	SILANE SEALER APPLICATION (SSCO)	N/A
11	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A
12	STEEL BARRIER REPAIRS (CSN)	B1 / S501
13	REFASTEN EXISTING STAIR TREADS/COVER PLATES	N/A
14	INSTALL NEW PRECAST WALL/PANEL CONNECTION	SEE PLAN
15	INSTALL NEW FLOOR DRAINS	A5 / P001

NOTE:
 SILANE SEALER TO BE APPLIED TO ALL ELEVATED STRUCTURAL SLABS WITHOUT EXISTING TRAFFIC-BEARING MEMBRANE.



5126 West Terrace Drive,
 Suite 111
 Madison, WI 53718-8346
 608 / 242 1550
 608 / 242 0787 fax

www.graef-usa.com

CLIENT:



Madison Municipal Building
 215 Martin Luthing King Blvd
 Suite 109
 Madison, Wisconsin 53703

PROJECT TITLE:

2024 PARKING GARAGE
 MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

PROJECT NUMBER: 2023-5008.02
 DATE: 12/08/2023
 DRAWN BY: AMG
 CHECKED BY: AMG
 APPROVED BY: DFW
 SCALE: AS NOTED

SHEET TITLE:

STATE STREET CAPITOL LEVEL 5
 PLAN

SHEET NUMBER:

SC-S105

1

2

3

4

5



5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CLIENT:



Madison Municipal Building
215 Martin Luthing King Blvd
Suite 109
Madison, Wisconsin 53703

PROJECT TITLE:

2024 PARKING GARAGE
MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

PROJECT NUMBER: 2023-5008.02
DATE: 12/08/2023
DRAWN BY: AMG
CHECKED BY: AMG
APPROVED BY: DFW
SCALE: AS NOTED

SHEET TITLE:

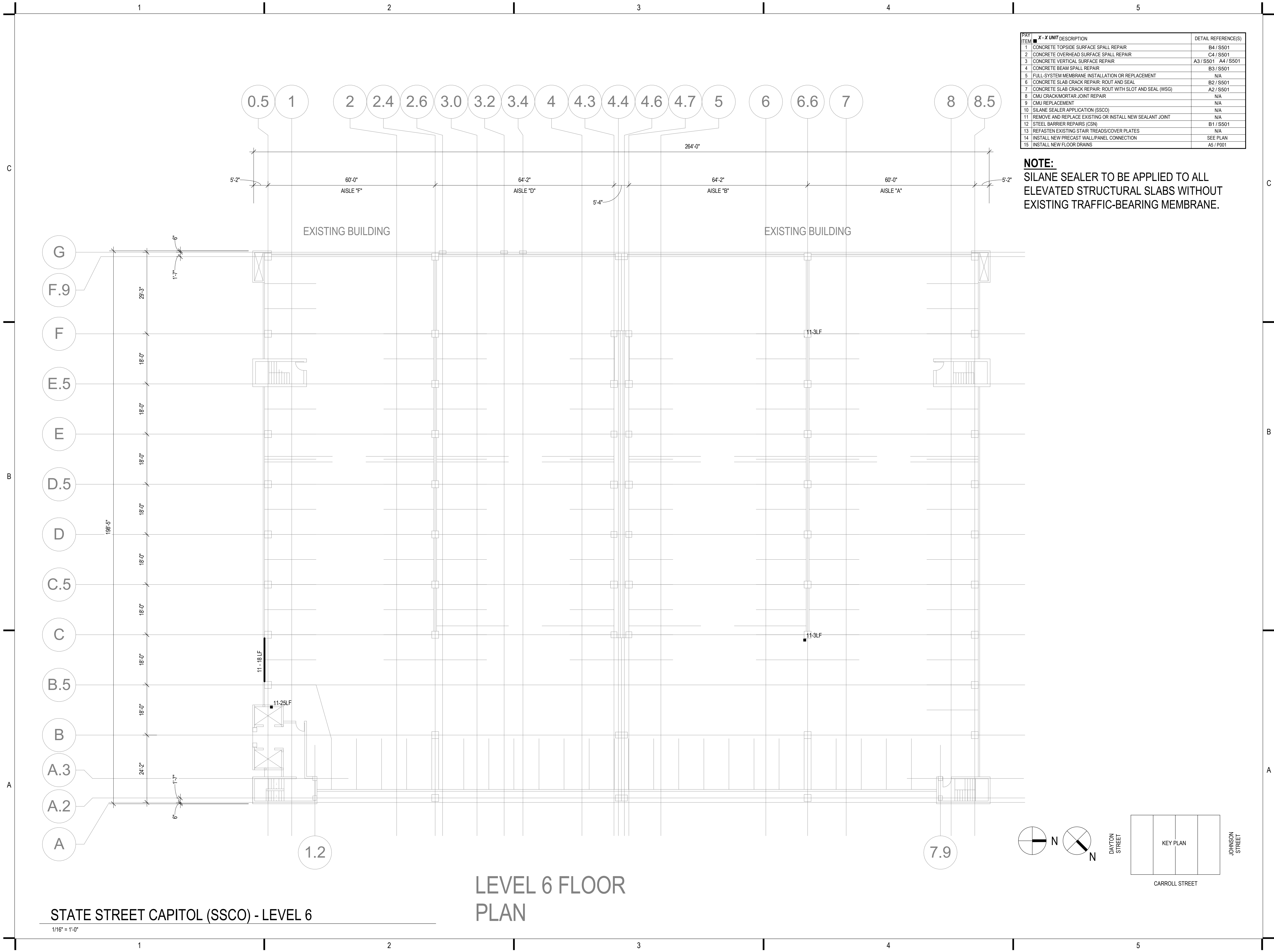
STATE STREET CAPITOL LEVEL 6
PLAN

SHEET NUMBER:

SC-S106

ITEM	X - X UNIT DESCRIPTION	DETAIL REFERENCE(S)
1	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4 / S501
2	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C4 / S501
3	CONCRETE VERTICAL SURFACE SPALL REPAIR	A3 / S501 A4 / S501
4	CONCRETE BEAM SPALL REPAIR	B3 / S501
5	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A
6	CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL	B2 / S501
7	CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG)	A2 / S501
8	CMU CRACK/MORTAR JOINT REPAIR	N/A
9	CMU REPLACEMENT	N/A
10	SILANE SEALER APPLICATION (SSCO)	N/A
11	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A
12	STEEL BARRIER REPAIRS (CSN)	B1 / S501
13	REFASTEN EXISTING STAIR TREADS/COVER PLATES	N/A
14	INSTALL NEW PRECAST WALL/PANEL CONNECTION	SEE PLAN
15	INSTALL NEW FLOOR DRAINS	A5 / P001

NOTE:
SILANE SEALER TO BE APPLIED TO ALL
ELEVATED STRUCTURAL SLABS WITHOUT
EXISTING TRAFFIC-BEARING MEMBRANE.



LEVEL 6 FLOOR PLAN

STATE STREET CAPITOL (SSCO) - LEVEL 6

1/16" = 1'-0"

12/16/2023 1:50:29 PM

1

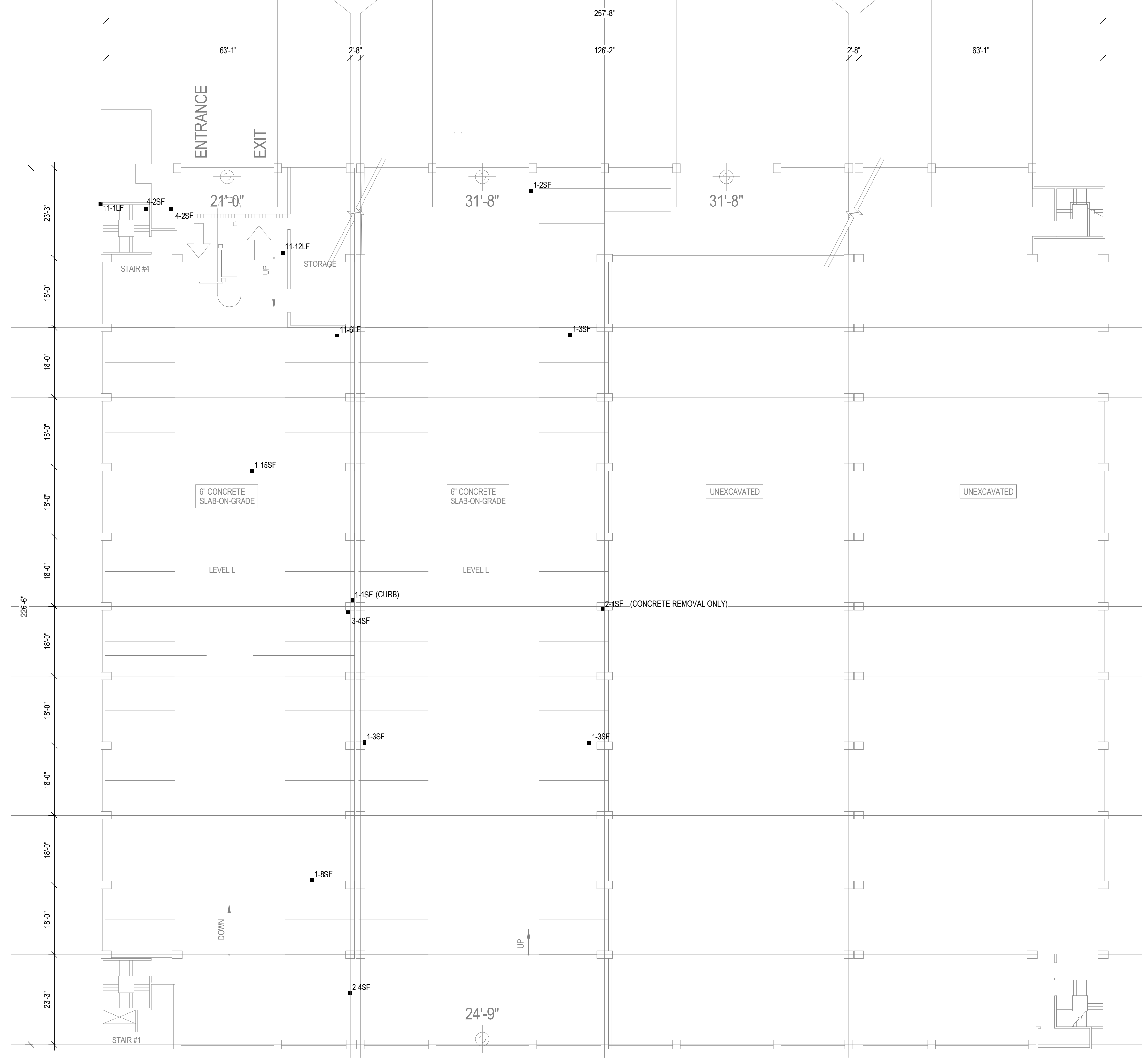
2

3

4

5

A A.3 A.7 B C C.3 C.7 D D.3 D.7 E F F.3 F.7 G



ITEM	X-UNIT DESCRIPTION	DETAIL REFERENCE(S)
1	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4 / S501
2	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C4 / S501
3	CONCRETE VERTICAL SURFACE REPAIR	A3 / S501 A4 / S501
4	CONCRETE BEAM SPALL REPAIR	B3 / S501
5	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A
6	CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL	B2 / S501
7	CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG)	A2 / S501
8	CMU CRACK/MORTAR JOINT REPAIR	N/A
9	CMU REPLACEMENT	N/A
10	SILANE SEALER APPLICATION (SSCO)	N/A
11	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A
12	STEEL BARRIER REPAIRS (CSN)	B1 / S501
13	REFASTEN EXISTING STAIR TREADS/COVER PLATES	N/A
14	INSTALL NEW PRECAST WALL/PANEL CONNECTION	SEE PLAN
15	INSTALL NEW FLOOR DRAINS	A5 / P001



5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CLIENT:



Madison Municipal Building
215 Martin Luthing King Blvd
Suite 109
Madison, Wisconsin 53703

PROJECT TITLE:

2024 PARKING GARAGE
MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

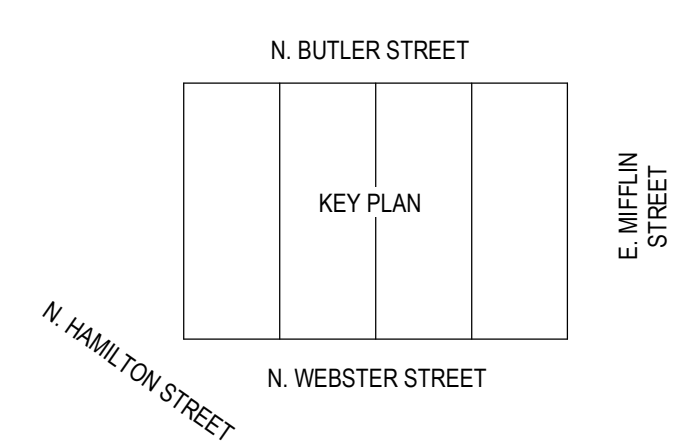
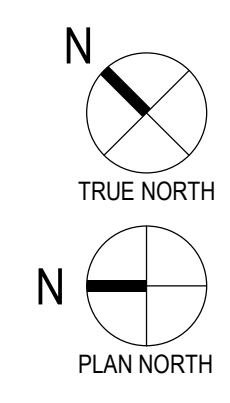
PROJECT NUMBER: 2023-5008.02
DATE: 12/08/2023
DRAWN BY: AMG
CHECKED BY: AMG
APPROVED BY: DFW
SCALE: AS NOTED

SHEET TITLE:

CAPITOL SQUARE NORTH LOWER
LEVEL PLAN

SHEET NUMBER:

CN-S100



12/16/2023 1:50:29 PM

CAPITOL SQUARE NORTH (CSN) - LOWER LEVEL

1/16" = 1'-0"

1 2 3 4 5



5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CLIENT:



Madison Municipal Building
215 Martin Luthing King Blvd
Suite 109
Madison, Wisconsin 53703

PROJECT TITLE:

2024 PARKING GARAGE
MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

PROJECT NUMBER: 2023-5008.02
DATE: 12/08/2023
DRAWN BY: AMG
CHECKED BY: AMG
APPROVED BY: DFW
SCALE: AS NOTED

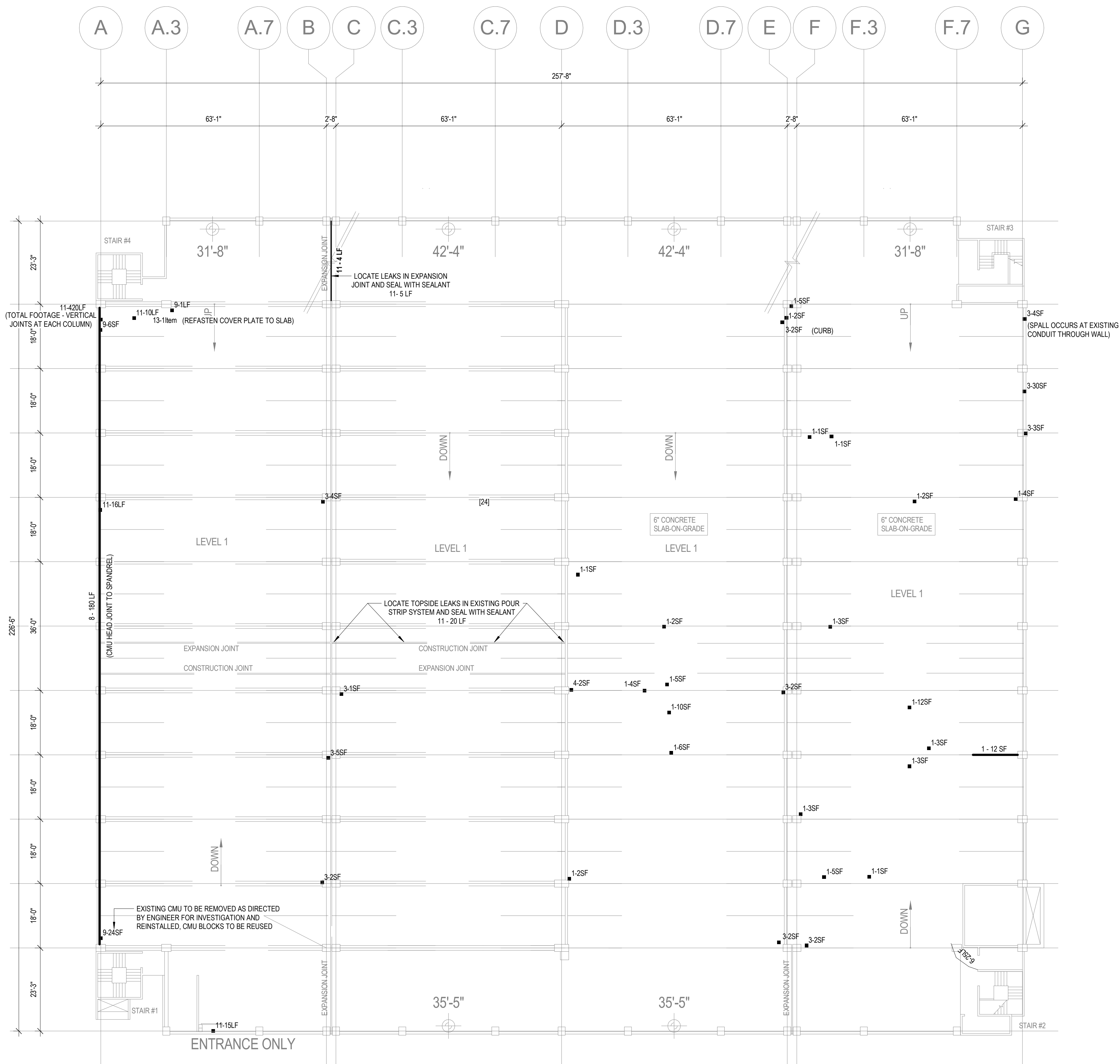
SHEET TITLE:

CAPITOL SQUARE NORTH LEVEL 1
PLAN

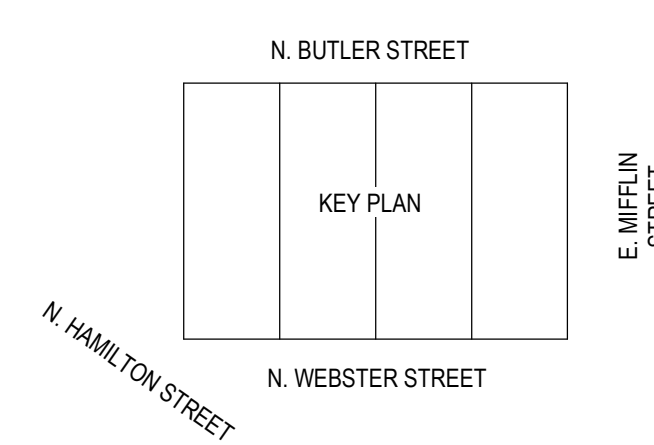
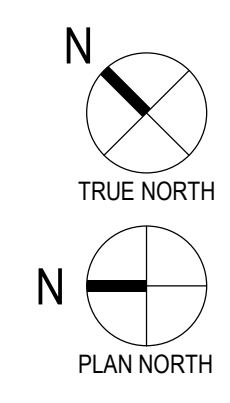
SHEET NUMBER:

CN-S101

ITEM	X-UNIT DESCRIPTION	DETAIL REFERENCE(S)
1	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4 / S501
2	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C4 / S501
3	CONCRETE VERTICAL SURFACE REPAIR	A3 / S501 A4 / S501
4	CONCRETE BEAM SPALL REPAIR	B3 / S501
5	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A
6	CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL	B2 / S501
7	CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG)	A2 / S501
8	CMU CRACK/MORTAR JOINT REPAIR	N/A
9	CMU REPLACEMENT	N/A
10	SILANE SEALER APPLICATION (SSCO)	N/A
11	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A
12	STEEL BARRIER REPAIRS (CSN)	B1 / S501
13	REFASTEN EXISTING STAIR TREADS/COVER PLATES	N/A
14	INSTALL NEW PRECAST WALL/PANEL CONNECTION	SEE PLAN
15	INSTALL NEW FLOOR DRAINS	A5 / P001



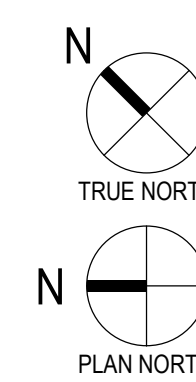
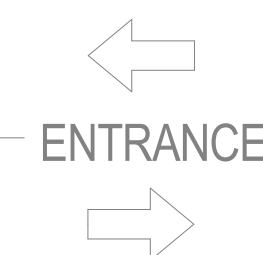
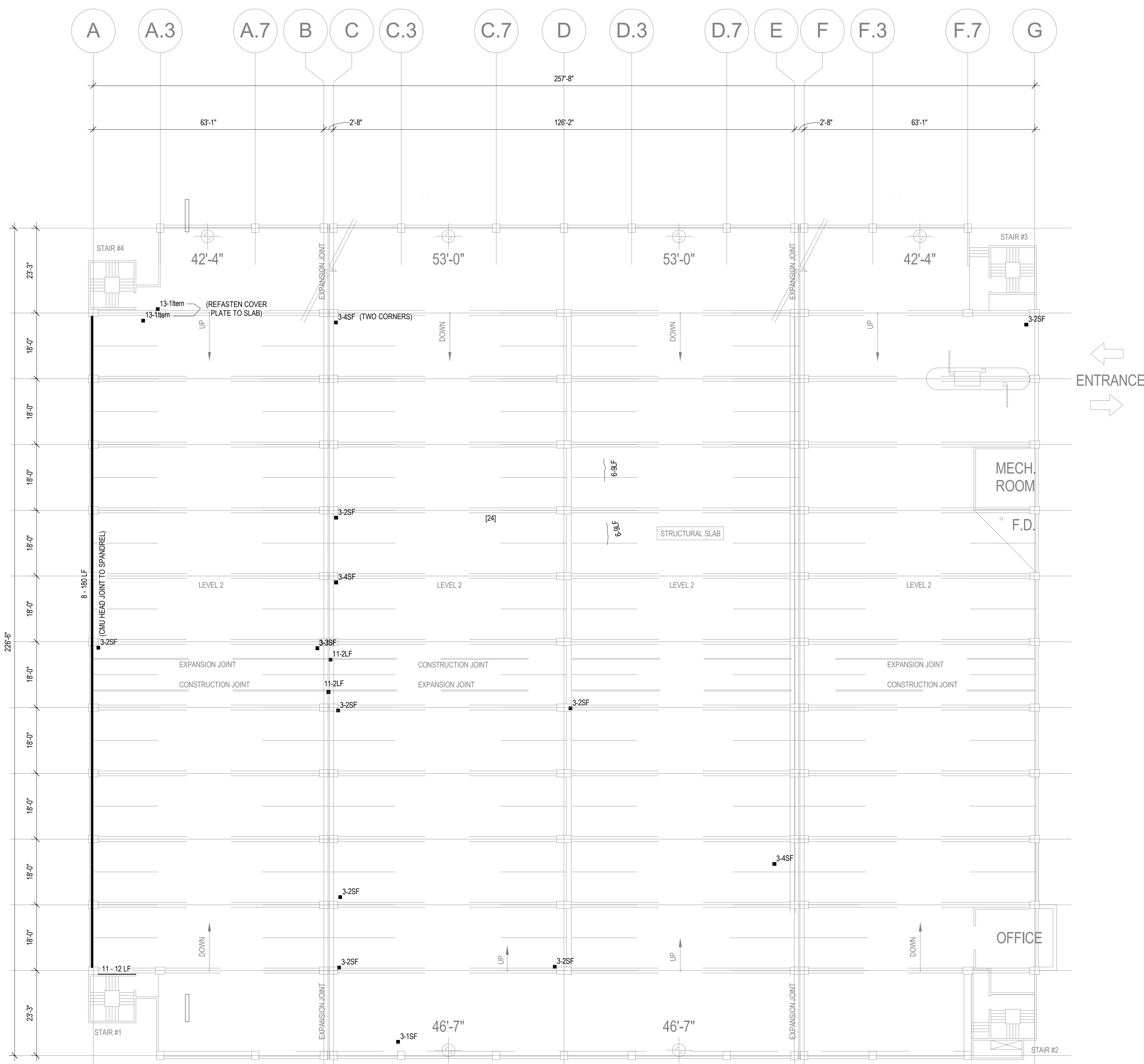
CAPITOL SQUARE NORTH (CSN) - LEVEL 1 PLAN
1/16" = 1'-0"



12/16/2023 1:50:29 PM



ITEM	X-UNIT DESCRIPTION	DETAIL REFERENCE(S)
1	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4 / S501
2	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C4 / S501
3	CONCRETE VERTICAL SURFACE REPAIR	A3 / S501 A4 / S501
4	CONCRETE BEAM SPALL REPAIR	B3 / S501
5	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A
6	CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL	B2 / S501
7	CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG)	A2 / S501
8	CMU CRACK/MORTAR JOINT REPAIR	N/A
9	CMU REPLACEMENT	N/A
10	SILANE SEALER APPLICATION (SSCO)	N/A
11	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A
12	STEEL BARRIER REPAIRS (CSN)	B1 / S501
13	REFASTEN EXISTING STAIR TREADS/COVER PLATES	N/A
14	INSTALL NEW PRECAST WALL/PANEL CONNECTION	SEE PLAN
15	INSTALL NEW FLOOR DRAINS	A5 / P01



CAPITOL SQUARE NORTH (CSN) - LEVEL 2 PLAN

1/16" = 1'-0"

1 2 3 4 5



5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CLIENT:



Madison Municipal Building
215 Martin Luthing King Blvd
Suite 109
Madison, Wisconsin 53703

PROJECT TITLE:

2024 PARKING GARAGE
MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

PROJECT NUMBER: 2023-5008.02
DATE: 12/08/2023
DRAWN BY: AMG
CHECKED BY: AMG
APPROVED BY: DFW
SCALE: AS NOTED

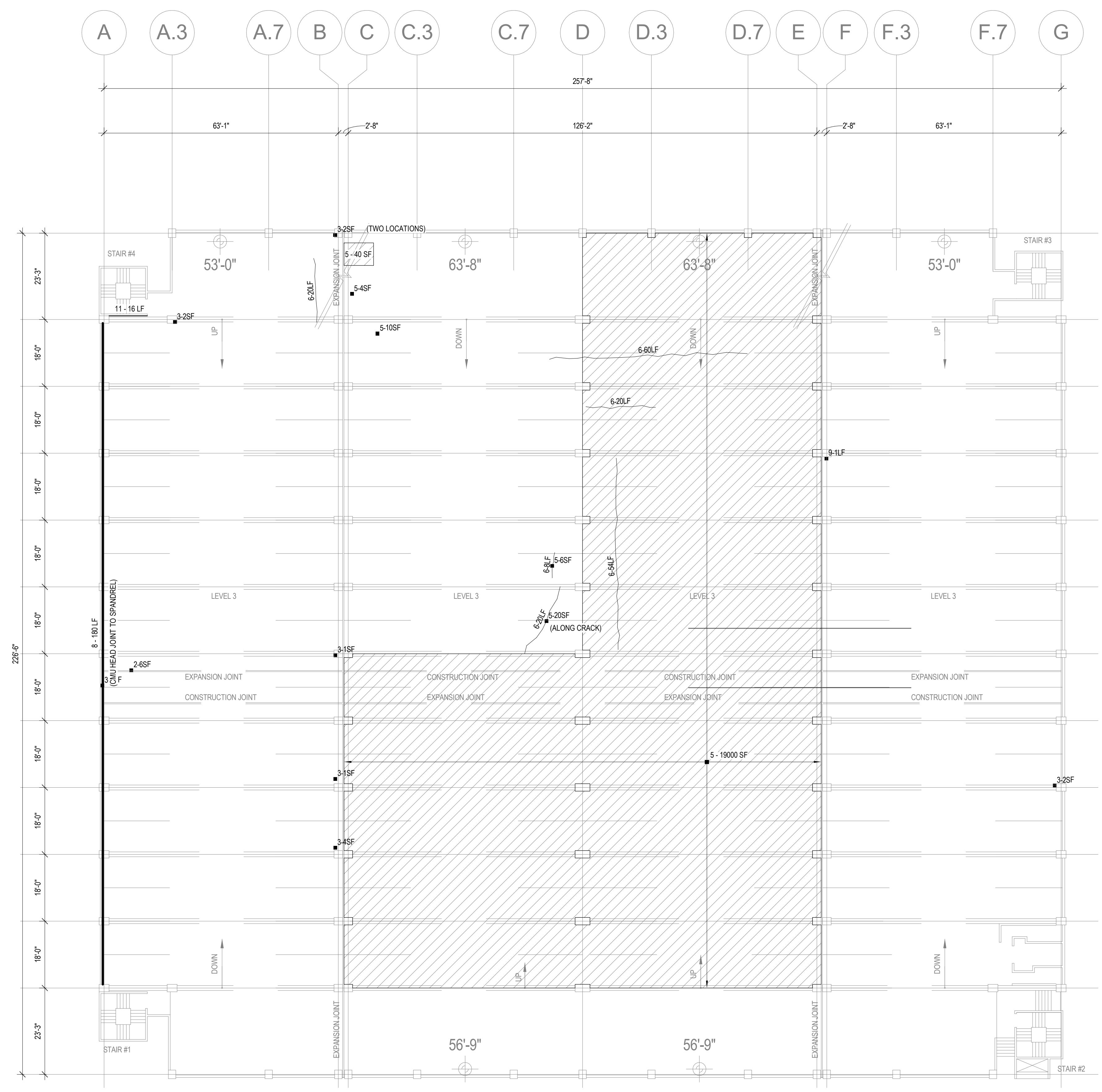
SHEET TITLE:

CAPITOL SQUARE NORTH LEVEL 3
PLAN

SHEET NUMBER:

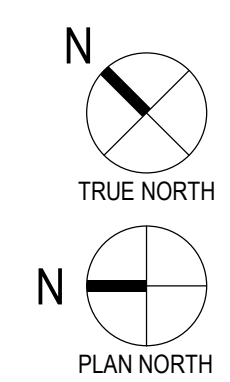
CN-S103

ITEM	X - X UNIT DESCRIPTION	DETAIL REFERENCE(S)
1	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4 / S501
2	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C4 / S501
3	CONCRETE VERTICAL SURFACE REPAIR	A3 / S501 A4 / S501
4	CONCRETE BEAM SPALL REPAIR	B3 / S501
5	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A
6	CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL	B2 / S501
7	CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG)	A2 / S501
8	CMU CRACK/MORTAR JOINT REPAIR	N/A
9	CMU REPLACEMENT	N/A
10	SILANE SEALER APPLICATION (SSCO)	N/A
11	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A
12	STEEL BARRIER REPAIRS (CSN)	B1 / S501
13	REFASTEN EXISTING STAIR TREADS/COVER PLATES	N/A
14	INSTALL NEW PRECAST WALL/PANEL CONNECTION	SEE PLAN
15	INSTALL NEW FLOOR DRAINS	A5 / P001



CAPITOL SQUARE NORTH (CSN) - LEVEL 3 PLAN

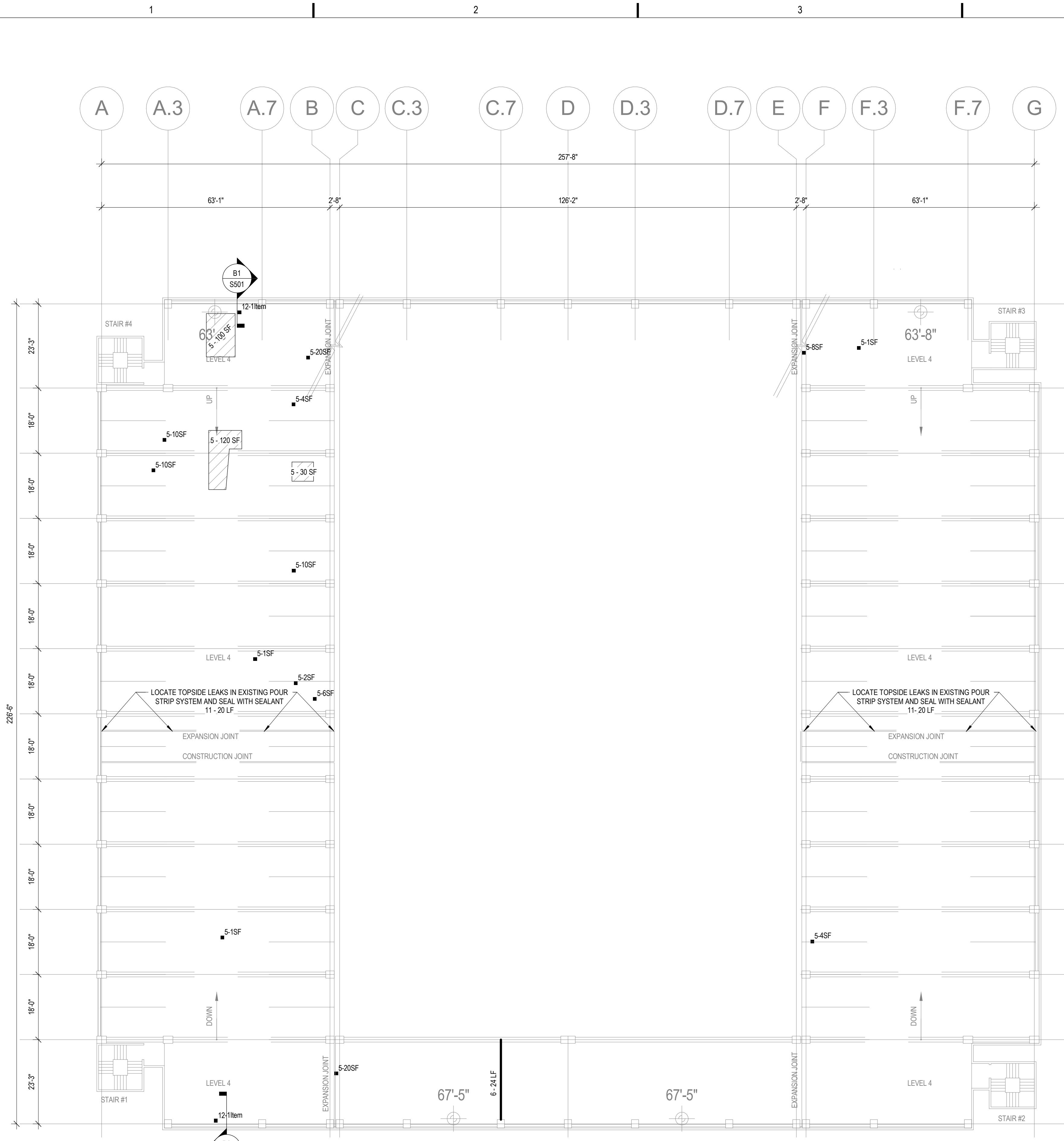
1/16" = 1'-0"



12/16/2023 1:50:29 PM

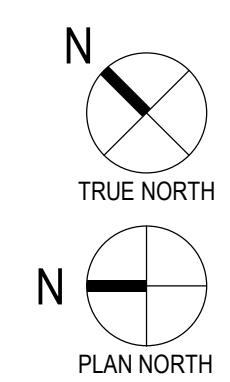


ITEM	X-UNIT DESCRIPTION	DETAIL REFERENCE(S)
1	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4 / S501
2	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C4 / S501
3	CONCRETE VERTICAL SURFACE REPAIR	A3 / S501 A4 / S501
4	CONCRETE BEAM SPALL REPAIR	B3 / S501
5	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A
6	CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL	B2 / S501
7	CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG)	A2 / S501
8	CMU CRACK/MORTAR JOINT REPAIR	N/A
9	CMU REPLACEMENT	N/A
10	SILANE SEALER APPLICATION (SSCO)	N/A
11	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A
12	STEEL BARRIER REPAIRS (CSN)	B1 / S501
13	REFASTEN EXISTING STAIR TREADS/COVER PLATES	N/A
14	INSTALL NEW PRECAST WALL/PANEL CONNECTION	SEE PLAN
15	INSTALL NEW FLOOR DRAINS	A5 / P001

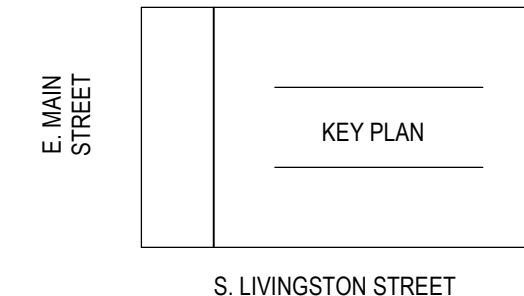
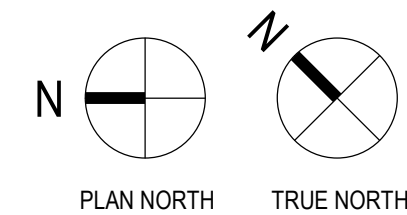
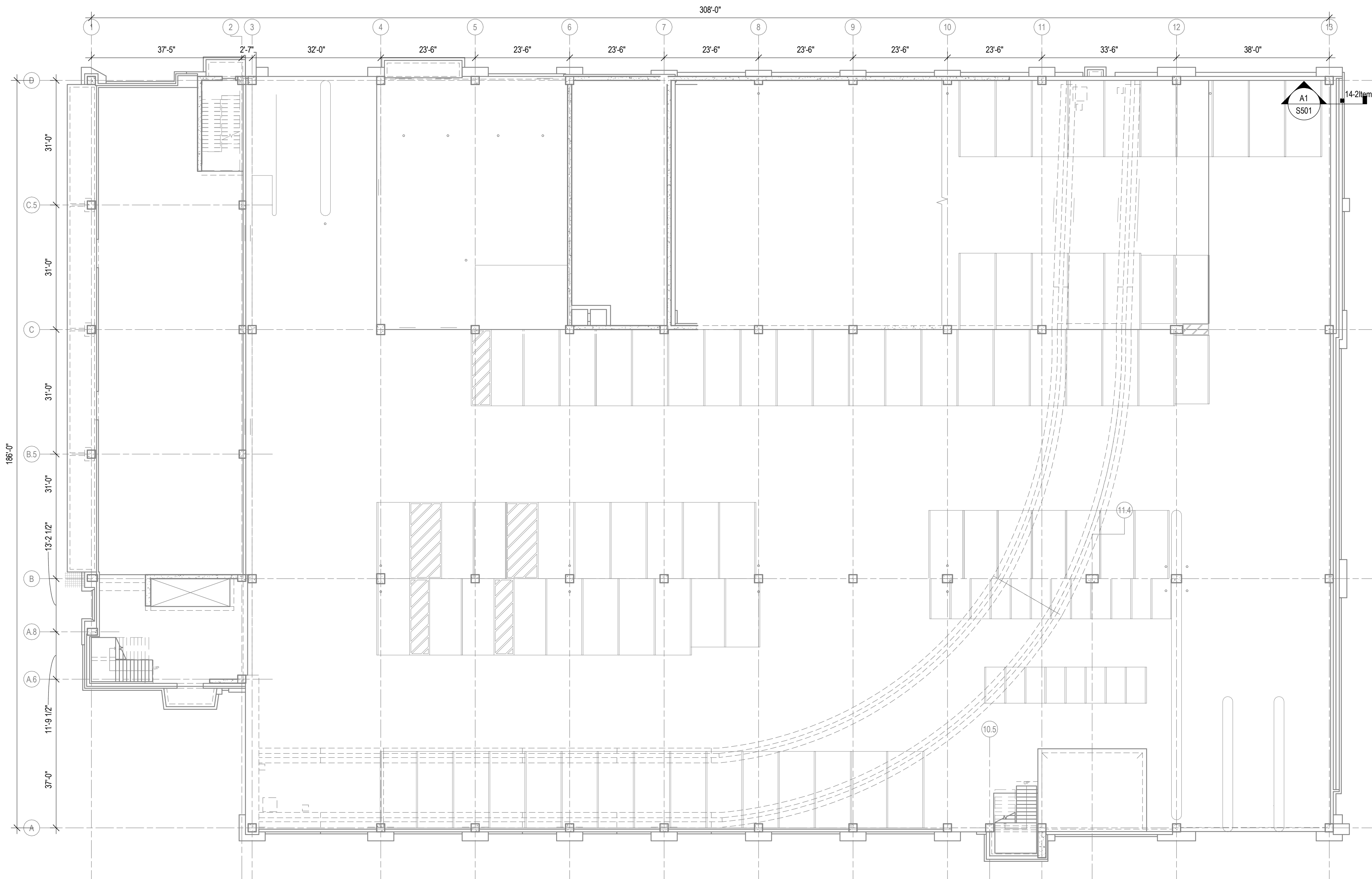


CAPITOL SQUARE NORTH (CSN) - LEVEL 4 PLAN

1/16" = 1'-0"



12/16/2023 1:50:30 PM



SOUTH LIVINGSTON STREET (SLS) - LEVEL 1

1/16" = 1'-0"

1

2

3

4

5



5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CLIENT:



Madison Municipal Building
215 Martin Luthing King Blvd
Suite 109
Madison, Wisconsin 53703

PROJECT TITLE:

2024 PARKING GARAGE
MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

PROJECT NUMBER: 2023-5008.02
DATE: 12/08/2023
DRAWN BY: AMG
CHECKED BY: AMG
APPROVED BY: DFW
SCALE: AS NOTED

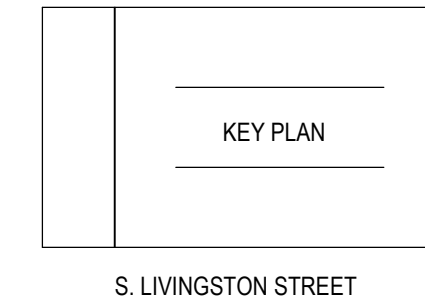
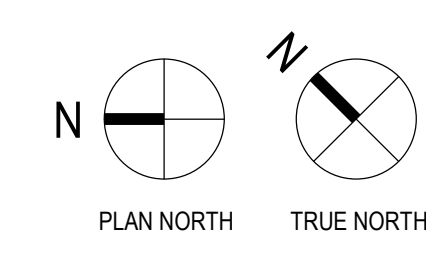
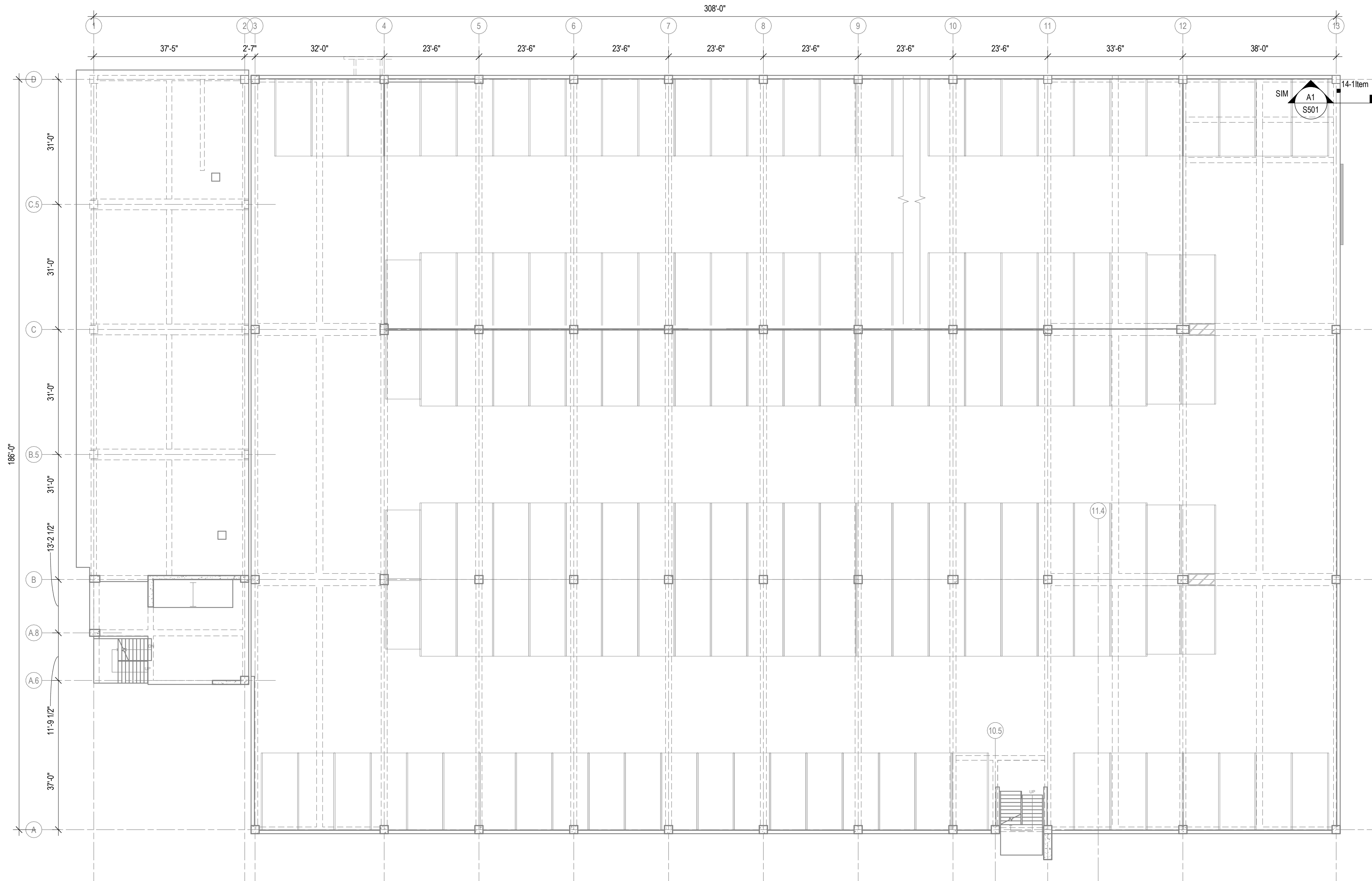
SHEET TITLE:

SOUTH LIVINGSTON STREET
LEVEL 4 PLAN

SHEET NUMBER:

LS-S104

ITEM	X - X UNIT DESCRIPTION	DETAIL REFERENCE(S)
1	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4 / S501
2	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C4 / S501
3	CONCRETE VERTICAL SURFACE REPAIR	A3 / S501 A4 / S501
4	CONCRETE BEAM SPALL REPAIR	B3 / S501
5	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A
6	CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL	B2 / S501
7	CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG)	A2 / S501
8	CMU CRACK/MORTAR JOINT REPAIR	N/A
9	CMU REPLACEMENT	N/A
10	SILANE SEALER APPLICATION (SSCO)	N/A
11	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A
12	STEEL BARRIER REPAIRS (CSN)	B1 / S501
13	REFASTEN EXISTING STAIR TREADS/COVER PLATES	N/A
14	INSTALL NEW PRECAST WALL/PANEL CONNECTION	SEE PLAN
15	INSTALL NEW FLOOR DRAINS	A5 / P001



SOUTH LIVINGSTON STREET (SLS) - LEVEL 4

1/16" = 1'-0"

12/16/2023 1:50:30 PM

1

2

3

4

5

1

2

3

4

5

C

B

A

C

B

A

ITEM	X-UNIT DESCRIPTION	DETAIL REFERENCE(S)
1	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4 / S501
2	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C4 / S501
3	CONCRETE VERTICAL SURFACE SPALL REPAIR	A3 / S501 A4 / S501
4	CONCRETE BEAM SPALL REPAIR	B3 / S501
5	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A
6	CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL	B2 / S501
7	CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG)	A2 / S501
8	CMU CRACK/MORTAR JOINT REPAIR	N/A
9	CMU REPLACEMENT	N/A
10	SILANE SEALER APPLICATION (SSCO)	N/A
11	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A
12	STEEL BARRIER REPAIRS (CSN)	B1 / S501
13	REFASTEN EXISTING STAIR TREADS/COVER PLATES	N/A
14	INSTALL NEW PRECAST WALL/PANEL CONNECTION	SEE PLAN
15	INSTALL NEW FLOOR DRAINS	A5 / P001



5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CLIENT:



Madison Municipal Building
215 Martin Luthing King Blvd
Suite 109
Madison, Wisconsin 53703

PROJECT TITLE:

2024 PARKING GARAGE
MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

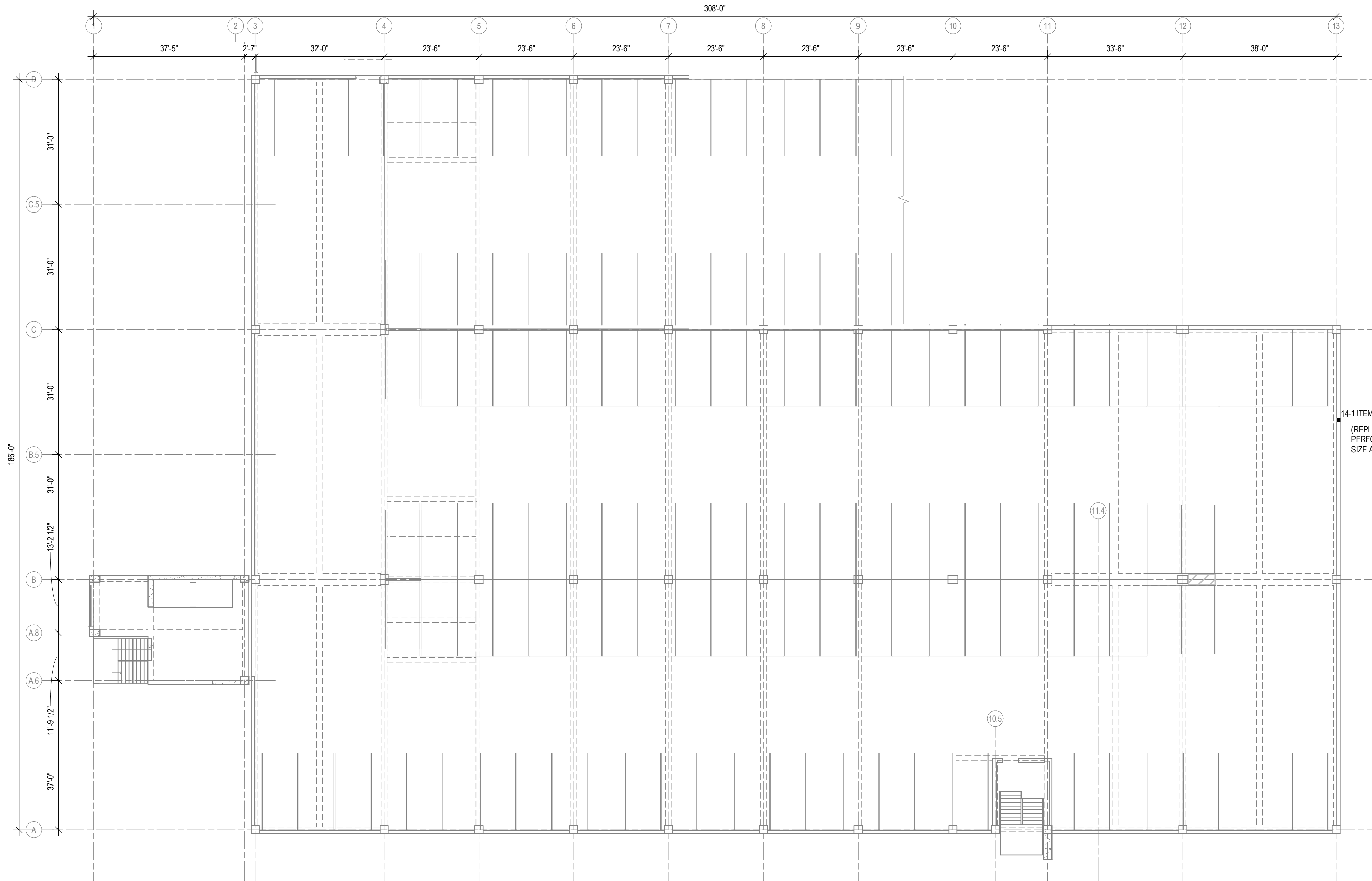
PROJECT NUMBER: 2023-5008.02
DATE: 12/08/2023
DRAWN BY: AMG
CHECKED BY: AMG
APPROVED BY: DFW
SCALE: AS NOTED

SHEET TITLE:

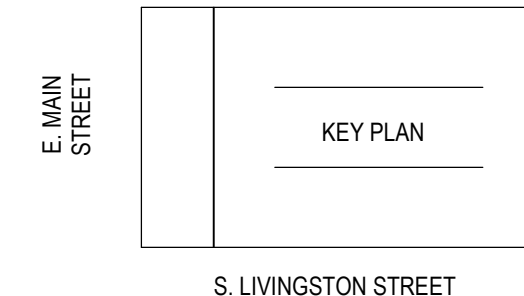
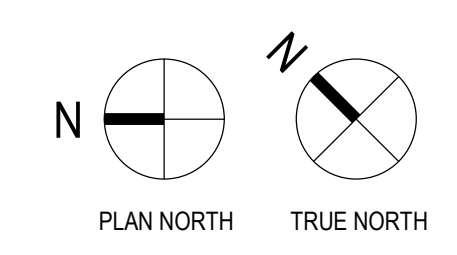
SOUTH LIVINGSTON STREET
LEVEL 5 PLAN

SHEET NUMBER:

LS-S105



14-1 ITEM
(REPLACE MISSING STAINLESS STEEL
PERFORATED PANEL FASTENER, MATCH
SIZE AND DIAMETER OF EXISTING)



SOUTH LIVINGSTON STREET (SLS) - LEVEL 5

1/16" = 1'-0"

12/16/2023 1:50:30 PM

1

2

3

4

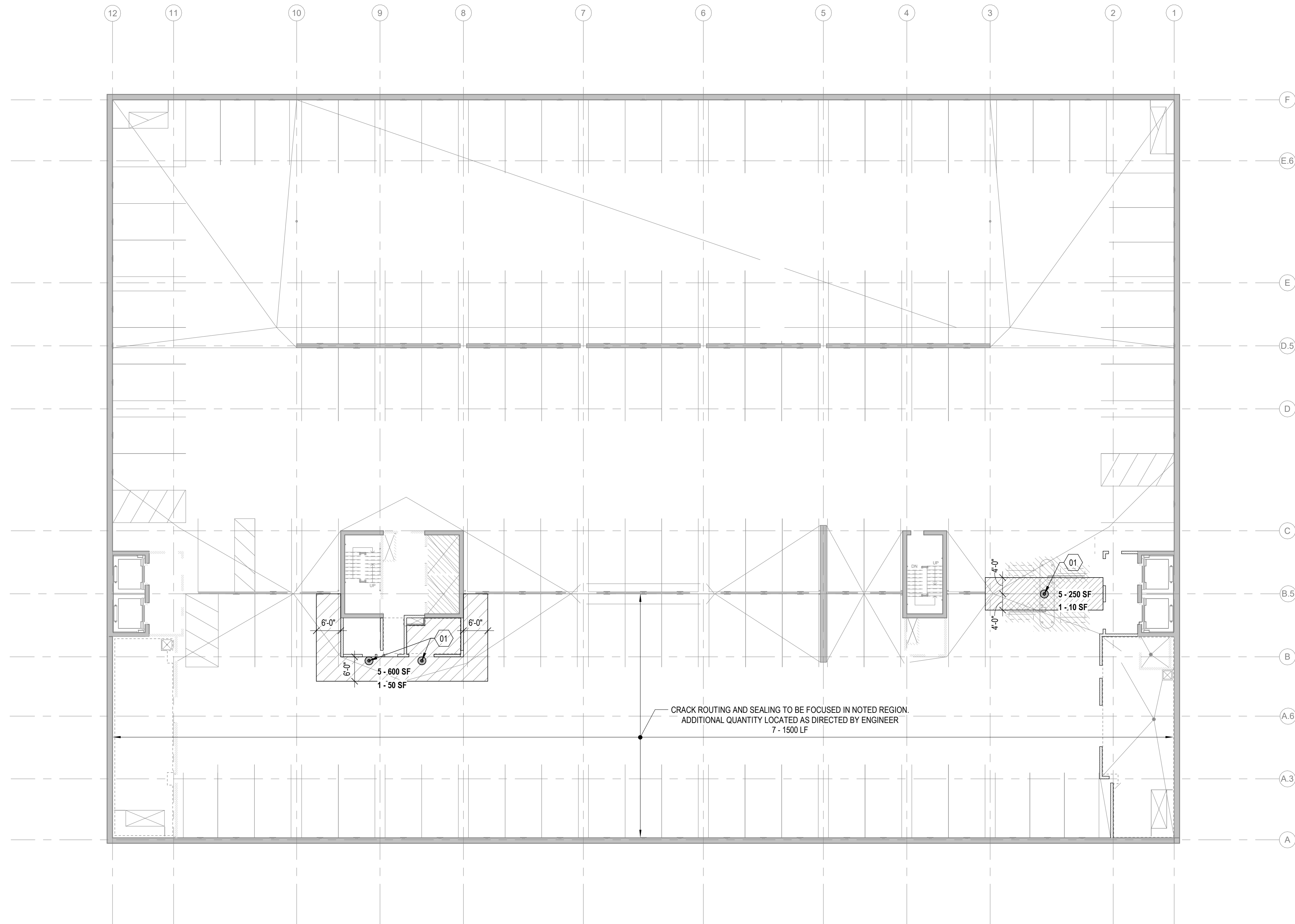
5



SHEET KEYNOTES

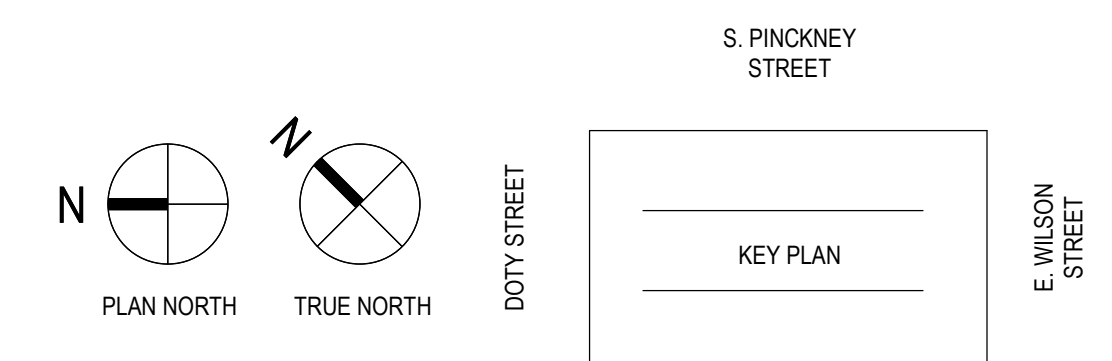
01 NEW FLOOR DRAIN(S) WITH LOCALIZED RESLOPING OF CONCRETE - LOCATION OF DRAIN(S) AND EXTENTS OF RESLOPING TO BE DETERMINED BY THE ENGINEER. CONCRETE WORK BY REPAIR CONTRACTOR PER PAY ITEM 1 WHERE NOTED ON PLAN. PLUMBING WORK BY PLUMBING SUBCONTRACTOR. REFER TO PLUMBING SHEETS FOR ADDITIONAL INFORMATION. LOCATE EXISTING AND AVOID REINFORCING IN CONCRETE SLAB BY GPR SCANNING. ENGINEER TO APPROVE ALL PENETRATIONS PRIOR TO CORING.

PAY ITEM	X-UNIT DESCRIPTION	DETAIL REFERENCE(S)
1	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4 / S501
2	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C4 / S501
3	CONCRETE VERTICAL SURFACE REPAIR	A3 / S501 A4 / S501
4	CONCRETE BEAM SPALL REPAIR	B3 / S501
5	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A
6	CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL	B2 / S501
7	CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG)	A2 / S501
8	CMU CRACK/MORTAR JOINT REPAIR	N/A
9	CMU REPLACEMENT	N/A
10	SILANE SEALER APPLICATION (SSCO)	N/A
11	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A
12	STEEL BARRIER REPAIRS (CSN)	B1 / S501
13	REFASTEN EXISTING STAIR TREADS/COVER PLATES	N/A
14	INSTALL NEW PRECAST WALL/PANEL CONNECTION	SEE PLAN
15	INSTALL NEW FLOOR DRAINS	A5 / P001



WILSON STREET (WSG) - LOWER LEVEL 2 PLAN

1/16" = 1'-0"

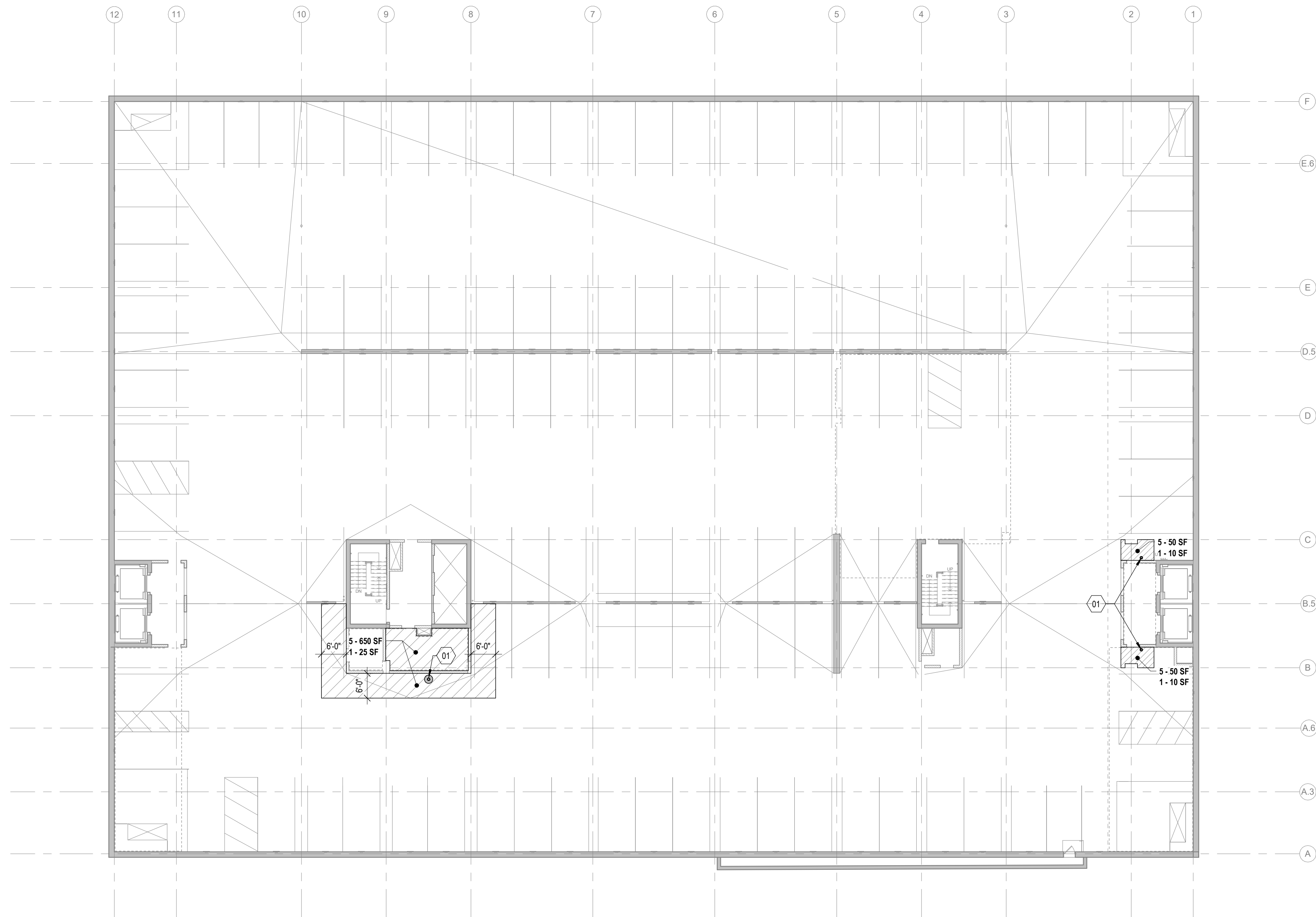




SHEET KEYNOTES

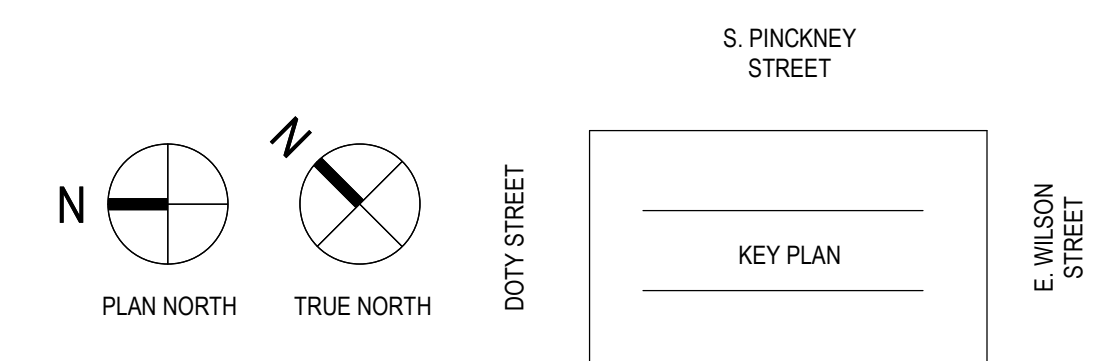
01 NEW FLOOR DRAIN(S) WITH LOCALIZED RESLOPING OF CONCRETE - LOCATION OF DRAIN(S) AND EXTENTS OF RESLOPING TO BE DETERMINED BY THE ENGINEER. CONCRETE WORK BY REPAIR CONTRACTOR PER PAY ITEM 1 WHERE NOTED ON PLAN. PLUMBING WORK BY PLUMBING SUBCONTRACTOR. REFER TO PLUMBING SHEETS FOR ADDITIONAL INFORMATION. LOCATE EXISTING AND AVOID REINFORCING IN CONCRETE SLAB BY GPR SCANNING. ENGINEER TO APPROVE ALL PENETRATIONS PRIOR TO CORING.

PAY ITEM	X-UNIT DESCRIPTION	DETAIL REFERENCE(S)
1	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4 / S501
2	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C4 / S501
3	CONCRETE VERTICAL SURFACE REPAIR	A3 / S501 A4 / S501
4	CONCRETE BEAM SPALL REPAIR	B3 / S501
5	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A
6	CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL	B2 / S501
7	CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG)	A2 / S501
8	CMU CRACK/MORTAR JOINT REPAIR	N/A
9	CMU REPLACEMENT	N/A
10	SILANE SEALER APPLICATION (SSCO)	N/A
11	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A
12	STEEL BARRIER REPAIRS (CSN)	B1 / S501
13	REFASTEN EXISTING STAIR TREADS/COVER PLATES	N/A
14	INSTALL NEW PRECAST WALL/PANEL CONNECTION	SEE PLAN
15	INSTALL NEW FLOOR DRAINS	A5 / P001



WILSON STREET (WSG) - LOWER LEVEL 1 PLAN

1/16" = 1'-0"



1

2

3

4

5

SHEET KEYNOTES

01 NEW FLOOR DRAIN(S) WITH LOCALIZED RESLOPING OF CONCRETE - LOCATION OF DRAIN(S) AND EXTENTS OF RESLOPING TO BE DETERMINED BY THE ENGINEER. CONCRETE WORK BY REPAIR CONTRACTOR PER PAY ITEM 1 WHERE NOTED ON PLAN. PLUMBING WORK BY PLUMBING SUBCONTRACTOR. REFER TO PLUMBING SHEETS FOR ADDITIONAL INFORMATION. LOCATE EXISTING AND AVOID REINFORCING IN CONCRETE SLAB BY GPR SCANNING. ENGINEER TO APPROVE ALL PENETRATIONS PRIOR TO CORING.

PAY ITEM	X-UNIT DESCRIPTION	DETAIL REFERENCE(S)
1	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4 / S501
2	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C4 / S501
3	CONCRETE VERTICAL SURFACE REPAIR	A3 / S501 A4 / S501
4	CONCRETE BEAM SPALL REPAIR	B3 / S501
5	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A
6	CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL	B2 / S501
7	CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG)	A2 / S501
8	CMU CRACK/MORTAR JOINT REPAIR	N/A
9	CMU REPLACEMENT	N/A
10	SILANE SEALER APPLICATION (SSCO)	N/A
11	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A
12	STEEL BARRIER REPAIRS (CSN)	B1 / S501
13	REFASTEN EXISTING STAIR TREADS/COVER PLATES	N/A
14	INSTALL NEW PRECAST WALL/PANEL CONNECTION	SEE PLAN
15	INSTALL NEW FLOOR DRAINS	A5 / P001



5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CLIENT:



Madison Municipal Building
215 Martin Luthing King Blvd
Suite 109
Madison, Wisconsin 53703

PROJECT TITLE:

2024 PARKING GARAGE
MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

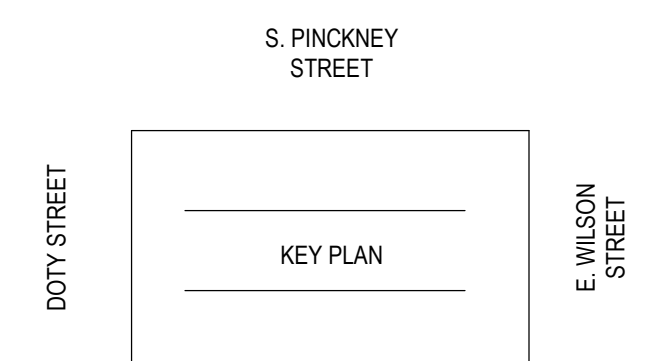
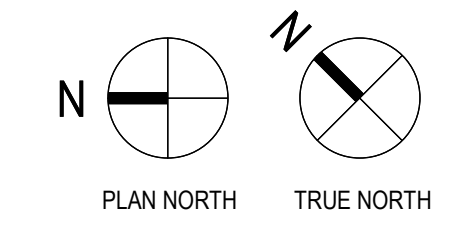
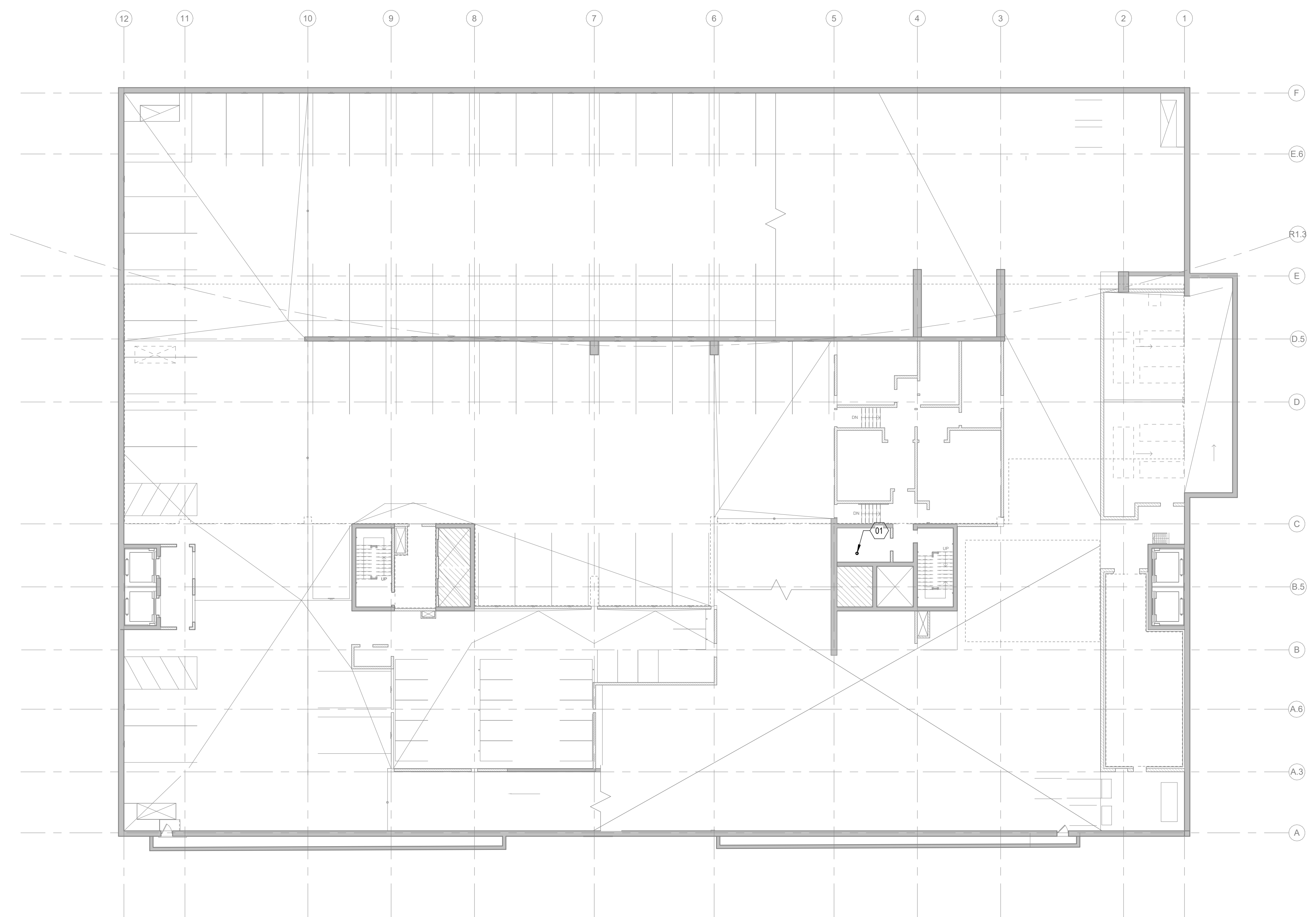
PROJECT NUMBER: 2023-5008.02
DATE: 12/08/2023
DRAWN BY: AMG
CHECKED BY: AMG
APPROVED BY: DFW
SCALE: AS NOTED

SHEET TITLE:

WILSON STREET LOWER LEVEL 0
PLAN

SHEET NUMBER:

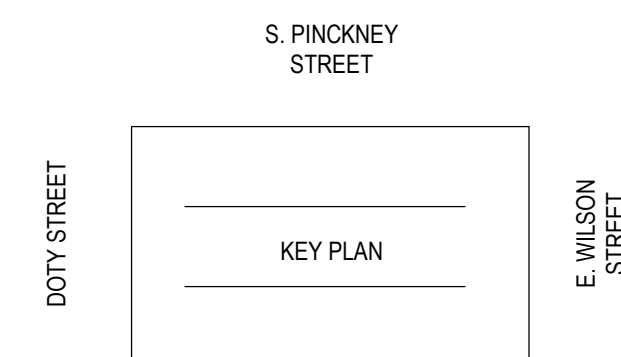
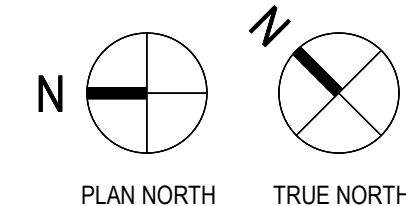
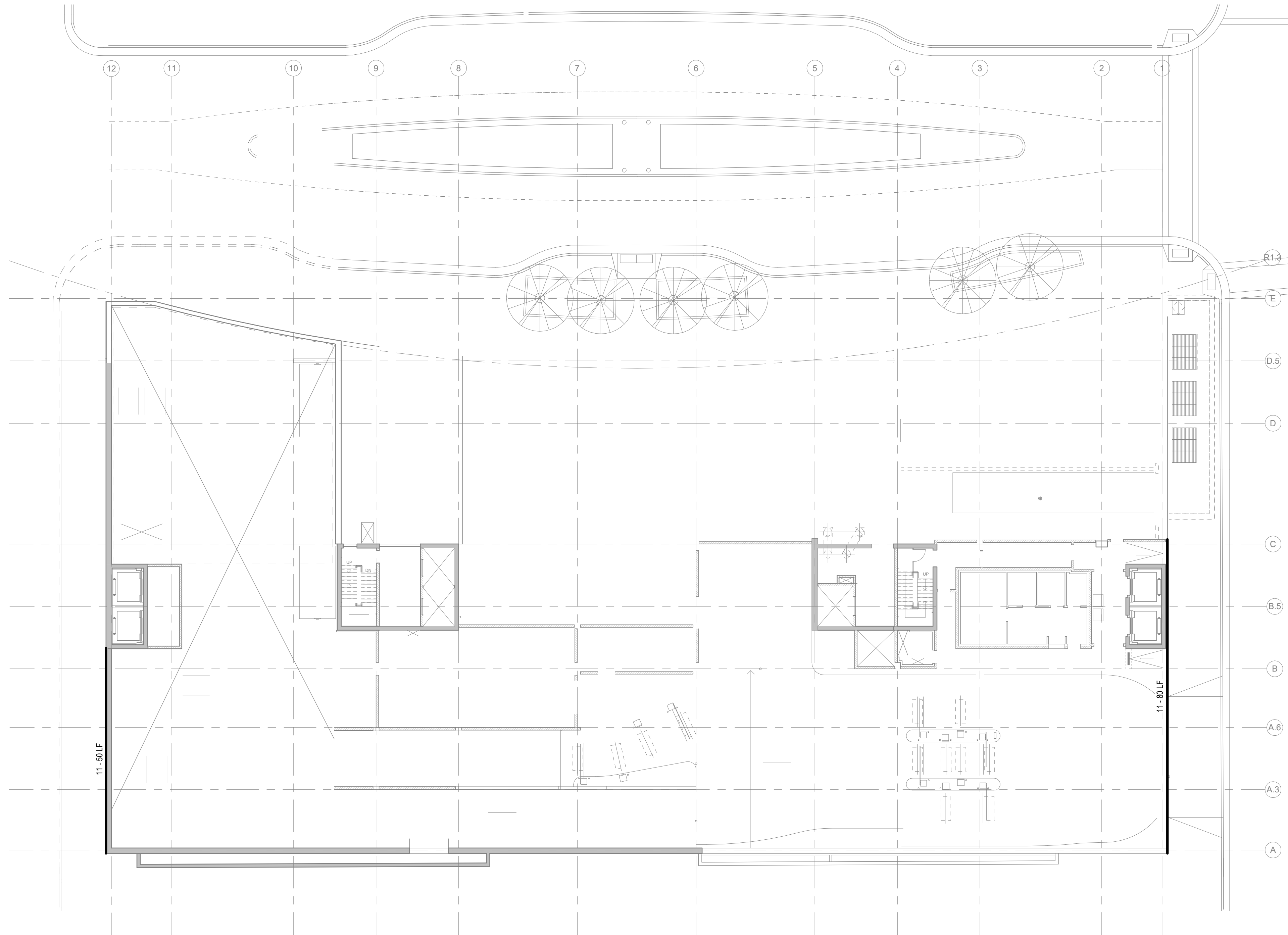
WS-S100



WILSON STREET (WSG) - LOWER LEVEL 0 PLAN

1/16" = 1'-0"

12/8/2023 12:24:09 PM



WILSON STREET (WSG) - LEVEL 1 PLAN

1/16" = 1'-0"

PLUMBING SYMBOLS, ABBREVIATIONS, SCHEDULES & SHEET INDEX

NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS INDICATED HERE ARE USED IN THE DRAWINGS AND MAY NOT APPLY TO THIS PROJECT. ADDITIONAL SYMBOLS MAY BE INDICATED IN THE DRAWINGS.

PLUMBING ABBREVIATIONS			
AP - ACCESS PANEL	E/EX - EXISTING	M - METER	RD - ROOF DRAIN
AD - AREA DRAIN	EEW - EMERGENCY EYE WASH	MAX - MAXIMUM	RI - ROUGH-IN
AFF - ABOVE FINISHED FLOOR	ESEW - EMERGENCY SHOWER / EYE WASH STATION	MB - MOP BASIN	RO - REVERSE OSMOSIS
AFG - ABOVE FINISHED GRADE	ELEV - ELEVATION	MECH - MECHANICAL	RCP - RECIRCULATION PUMP
ANB - ACID NEUTRALIZING BASIN	EOD - EMERGENCY OVERFLOW DRAIN PIPING	MEP - MECHANICAL, ELECTRICAL, AND PIPING	RPM - REVOLUTIONS PER MINUTE
ARCH - ARCHITECTURAL	EQUIP - EQUIPMENT	MEZZ - MEZZANINE	RPZ - REDUCED PRESSURE ZONE VALE
B/S - BELOW SLAB	EXT - EXPANSION TANK	MFR - MANUFACTURER	RV - RELIEF VALVE
BFP - BACKFLOW PREVENTER	EWC - ELECTRIC WATER COOLER	MH - MANHOLE	RH - ROOF HYDRANT
BLDG - BUILDING	EWB - ELECTRIC WATER HEATER	MIN - MINIMUM OR MINUTES	S - SINK
BOP - BOTTOM OF PIPE	F - FAHRENHEIT	MISC - MISCELLANEOUS	SAN - SANITARY PIPING
BOT - BOTTOM	FCO - FLOOR CLEANOUT	MS - MOP SINK	SCH - SCHEDULE
BV - BALL VALVE	FD - FLOOR DRAIN	NA - NOT APPLICABLE	SD - SITE DRAIN
BWV - BACKWATER VALVE	FDC - FIRE DEPARTMENT CONNECTION	N.C. - NORMALLY CLOSED	SE - SEWAGE EJECTOR
CLG - CEILING	FH - FUME HOOD	NIC - NOT IN CONTRACT	SF - SQUARE FOOT
CO - CLEANOUT	FS - FLOOR SINK	NO - NUMBER	SH - SHOWER
COL - COLUMN	FT - FEET	N.O. - NORMALLY OPEN	SL - SLOPE
CONC - CONCRETE	FU - FIXTURE UNITS	NPWC - NON POTABLE COLD WATER	SP - SUMP PUMP
CONN - CONNECTION	FV - FLUSH VALVE	NPHW - NON POTABLE HOT WATER	SP - STANDPIPE
CTR - CENTER	GAL - GALLON	NPHWR - NON POTABLE HOT WATER RETURN	SS - SPECIFICATION
CU - COPPER	GGO - GRADE OR GROUND CLEANOUT	NPS - NOMINAL PIPE SIZE	SS - SERVICE SINK
CV - CHECK VALVE	GI - GREASE INTERCEPTOR	NTS - NOT TO SCALE	STD - STANDARD
CW - COLD WATER	GPH - GALLONS PER HOUR	OBV - OIL BASIN VENT	STM - STORM PIPING
CWFU - COLD WATER FIXTURE UNITS	GPM - GALLONS PER MINUTE	OC - ON CENTER	T&P - TEMPERATURE AND PRESSURE
CPVC - CHLORINATED POLYVINYL CHLORIDE	GMV - GATE VALVE	OD - OUTSIDE DIAMETER	TD - TRENCH DRAIN
DCV - DOUBLE CHECK VALVE	HB - HOSE BIBB	OHD - OPEN HUB DRAIN	TEMP - TEMPERATURE
DCW - DOMESTIC COLD WATER	HD - HUB DRAIN	OSSY - OUTSIDE SCREW AND YOKE	TH - THERMOMETER
DD - DECK DRAIN	HR - HOUR	OI - OIL INTERCEPTOR	TMV - THERMOSTATIC MIXING VALVE
DET - DETAIL	HS - HOSE STATION	ORD - EMERGENCY OVERFLOW ROOF DRAIN	TOF - TOP OF FOOTING
DF - DRINKING FOUNTAIN	HW - HOT WATER	PBV - PRESSURE BALANCING VALVE	TOP - TOP OF PIPE
DFU - DRAINAGE FIXTURE UNITS	HWFU - HOT WATER FIXTURE UNITS	PC - PLUMBING CONTRACTOR	TOS - TOP OF SLAB
DHW - DOMESTIC HOT WATER	HWR - HOT WATER RETURN	PG - PRESSURE GAUGE	TYP - TYPICAL
DHWR - DOMESTIC HOT WATER RETURN	HYD - HYDRAULIC	PH - PHASE	U / UR - URINAL
DI - DEIONIZED WATER	HX - HEAT EXCHANGER	PITCH - PITCHES UP OR DOWN	V - VENT
DIA - DIAMETER	ID - INSIDE DIAMETER	PIV - POST INDICATOR VALVE	VIF - VERIFY IN FIELD
DN - DOWN	IE - INVERT ELEVATION	PLBG - PLUMBING	VTR - VENT THROUGH ROOF
DS - DOWNSPOUT	IM - ICE MACHINE	POC - POINT OF CONNECTION	WTR - WATER
DT - DRAIN TILE	IN - INCHES	PRESS - PRESSURE	W - WASTE
DTW - DOMESTIC TEMPERED WATER	INSUL - INSULATION	PRV - PRESSURE RELIEF VALVE	WHA - WATER HAMMER ARRESTOR
DW - DRAIN VALVE	IW - INDIRECT WASTE	PSF - POUNDS PER SQUARE FOOT	WH - WALL HYDRANT
DWG - DRAWING	KW - KITCHEN WASTE	PSI - POUNDS PER SQUARE INCH	WCO - WALL CLEANOUT
DWH - DOMESTIC WATER HEATER	L - LAVATORY	PSIG - POUNDS PER SQUARE INCH GAUGE	WC - WATER CLOSET
	LPM - LITERS PER MINUTE	PVC - POLYVINYL CHLORIDE	WF - WASH FOUNTAIN
	LS - LAB SINK	QTY - QUANTITY	WM - WASHING MACHINE
	LT - LAUNDRY TUB		WOB - WALL OUTLET BOX
	LW - LAUNDRY WASTE OR LAB WASTE		WSFU - WATER SUPPLY FIXTURE UNITS
			YH - YARD HYDRANT

PLUMBING SYMBOLS			
	ANGLE VALVE (AV)		FLOOR DRAIN
	AQUASTAT		FLOOR SINK
	BACKFLOW PREVENTER (BFP or RPZ)		FLOW DIRECTION ARROW
	BALANCING VALVE (BV)		FLOW SWITCH (FS)
	BALL VALVE		GATE VALVE (GV)
	BRANCH, BOTTOM CONNECTION		GLOBE VALVE (GLV)
	BRANCH, TOP CONNECTION		HOSE BIBB OR WALL HYDRANT
	BUTTERFLY VALVE (BFV)		HUB DRAIN
	CAP ON END OF PIPE		PRESSURE GAUGE WITH VALVE (PG)
	CHECK VALVE (CV)		PRESSURE-REDUCING VALVE (PRV)
	CLEANOUT PLUG (CO)		PRESSURE SWITCH (PS)
	DOUBLE SANITARY TEE		PRESSURE TRANSMITTER
	DRAIN WITH P-TRAP		RECIRCULATION PUMP
	FLOOR/GRADE CLEANOUT (FCO/GCO)		RISER DOWN (ELBOW)
	RISER UP (ELBOW)		ROOF DRAIN
	SANITARY TEE		SOLENOID VALVE (SV)
	STRAINER		TEMPERATURE TRANSMITTER
	TEE BRANCH		THERMOMETER
	THERMOSTATIC MIXING VALVE		UNION (SCREWED)
	WALL CLEANOUT WITH SIZE (WCO)		WATER HAMMER ARRESTER (WHA) WITH PDI SIZING
	WATER METER (WM)		WYE & 1/8TH BEND

DESIGN CRITERIA	
APPLICABLE CODES	1. 2015 WISCONSIN PLUMBING CODE 2. 2015 INTERNATIONAL BUILDING CODE WITH LOCAL AMENDMENTS 3. 2013 ASME A17.1 SAFETY CODE FOR ELEVATORS AND ESCALATORS

VIEW LOCATION LEGEND						
D1	D2	D3	D4	D5	D6	
C1	C2	C3	C4	C5	C6	
B1	B2	B3	B4	B5	B6	
A1	A2	A3	A4	A5	A6	

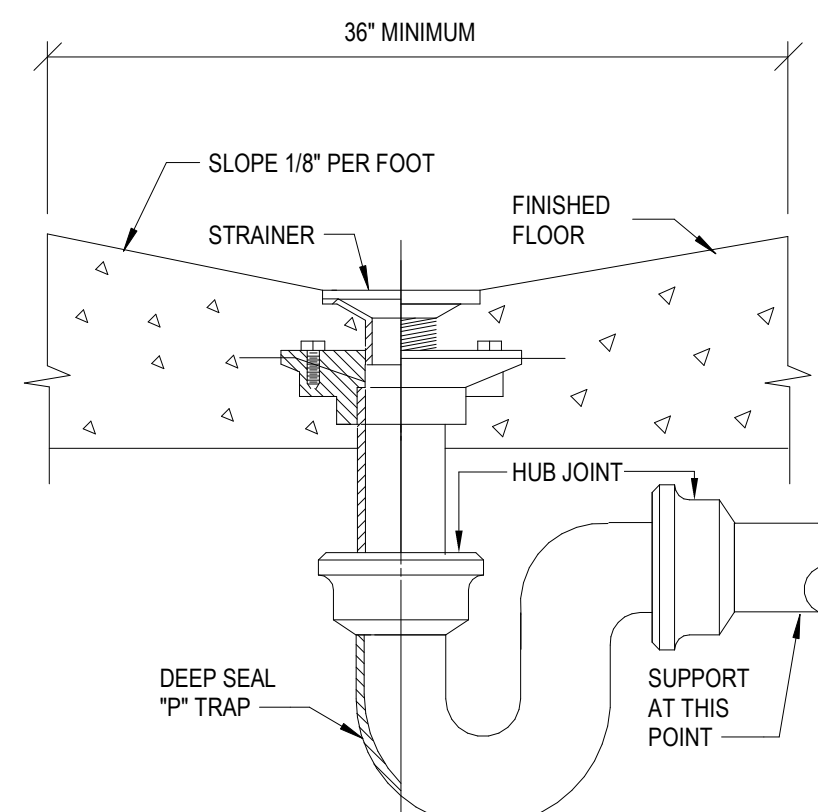
GENERAL SYMBOLS			
	REVISION CLOUD WITH TAG		INVERT ELEVATION
	VIEW CALLOUT (ENLARGED PLANS)		ELEVATION MARKER
	SECTION VIEW		POINT OF CONNECTION (POC)
	STACK REFERENCE		POINT OF DISCONNECTION
	VIEW REFERENCE (DETAIL TAGS)		PLAN KEYED NOTE
	ISOMETRIC TAG	TAG → TAG ●	PIPE TAG
	PIPING, EQUIPMENT, DEVICES, ETC. TO BE DEMOLISHED		
	EXISTING PIPING OR EQUIPMENT TO REMAIN		
	NEW PIPING OR EQUIPMENT		

PLUMBING SYSTEM ABBREVIATIONS			
DCW	DOMESTIC COLD WATER	ROCW	REVERSE OSMOSIS / DIONIZED COLD WATER
DHW	DOMESTIC HOT WATER	ROHW	REVERSE OSMOSIS / DIONIZED HOT WATER
DHWR	DOMESTIC HOT WATER RETURN	V	SANITARY VENT
DTW	DOMESTIC TEMPERED WATER (80°F)	SAN	SANITARY SEWER
DTWR	DOMESTIC TEMPERED WATER RETURN	ST	STORM SEWER
PCW	PROCESS COLD WATER (SOFTENED)	PV	PROCESS VENT
PHW	PROCESS HOT WATER (SOFTENED)	PSAN	PROCESS SANITARY
PHWR	PROCESS HOT WATER RETURN (SOFTENED)		

DRAIN AND CLEANOUT SCHEDULE									
TAG	MANUFACTURER	MODEL NO.	SERVICE	BODY MATERIAL	STRAINER		OUTLET SIZE (IN)	DESCRIPTION	NOTES
					SIZE (IN)	FINISH			
AD-1	JR SMITH	2140-B	P-Sanitary	CAST IRON	5	CAST IRON	3"	HEAVY DUTY ROUND FLOOR DRAIN WITH SEDIMENT BUCKET	

- PLUMBING GENERAL NOTES**
- REFERENCE THE SPECIFICATIONS FOR MATERIAL AND EQUIPMENT INSTALLATION STANDARDS.
 - VERIFY ALL MEASUREMENTS, PIPE SIZES, PIPE LOCATIONS, ELEVATIONS, ETC. AT SITES.
 - THE PLUMBING INSTALLATION SHALL COMPLY WITH ALL STATE AND LOCAL CODES.
 - UTILITIES AND SERVICES INDICATED ARE TAKEN FROM VARIOUS OLD AND NEW SURVEYS. AS-BUILT RECORDS AND FIELD INVESTIGATIONS. UNFORESEEN CONDITIONS MAY EXIST AND NEW WORK MAY NOT BE FIELD LOCATED EXACTLY AS SHOWN ON DRAWINGS. COOPERATION WITH OTHER TRADES IN ROUTING AND BURIAL DEPTHS, AS DETERMINED DURING CONSTRUCTION, WILL BE NECESSARY.
 - INVERT ELEVATIONS IN THIS SET ARE REFERENCED TO BUILDING FIRST FLOOR DATUM.
 - DRAWINGS OF ALL OTHER TRADES SHALL BE REVIEWED. COORDINATE THE INSTALLATION AND SCHEDULING OF THE WORK WITH OTHER TRADES TO PREVENT INTERFERENCE WITH THEIR RESPECTIVE INSTALLATION.
 - FIELD VERIFY EXISTING INSTALLATIONS. MODIFY EXISTING PLUMBING SYSTEMS, WHICH ARE TO REMAIN ACTIVE, TO FACILITATE RECONNECTION AND EXTENSION OF THE NEW WORK.
 - NOTIFY OWNER AT LEAST 24 HOURS PRIOR TO INTERRUPTING EXISTING SERVICE. SCHEDULE DISCONNECTION AND TIE-INS TO MINIMIZE DISRUPTION OF SERVICES. SERVICES ARE NOT TO BE LEFT DISRUPTED DURING NON-NORMAL CONTRACTOR WORKING HOURS.
 - PIPE ROUTING SHOWN IS DIAGRAMMATIC AND IS NOT INTENDED TO INDICATE EXACT ROUTING. CONTRACTOR SHALL PROVIDE ANY ADDITIONAL OFFSETS AND FITTINGS REQUIRED FOR PROPER INSTALLATION AND TO MAINTAIN CLEARANCES. VERIFY STRUCTURAL, MECHANICAL AND ELECTRICAL INSTALLATIONS AND OTHER POTENTIAL OBSTRUCTIONS AND ROUTE PIPING TO AVOID INTERFERENCES.
 - PLUMBING CONTRACTOR SHALL SURVEY EXISTING UNDERGROUND STORM BUILDING DRAINS PRIOR TO NEW CONNECTIONS TO EXISTING PIPING. VERIFY ELEVATIONS. TURN TWO COPIES OF VIDEO OVER TO OWNER FOR HIS RECORDS. PLUMBING CONTRACTOR SHALL MARKUP A SET OF PRINTS WITH EXISTING DRAIN LOCATIONS AND TURN OVER TO ENGINEER AND INCLUDE ON RECORD DRAWINGS. REFER TO PROJECT SPECIFICATIONS FOR MORE INFORMATION.
 - PROVIDE ALL OFFSETS AND FITTINGS AND MAKE CONNECTION TO SITE UTILITIES.
 - CONFLICT BETWEEN DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO BID OPENING. THE ENGINEER RESERVES THE RIGHT TO FINAL DECISION.
 - CONCEAL PIPING ABOVE CEILINGS, WITHIN WALLS OR CHASES EXCEPT IN MECHANICAL ROOMS OR AS SPECIFICALLY NOTED.
 - PROVIDE ACCESS PANELS FOR ALL VALVES CONCEALED IN WALLS OR ABOVE NON-ACCESSIBLE CEILINGS.
 - SLEEVE AND/OR FIRESTOP ALL PENETRATIONS THROUGH RATED WALLS, CEILINGS, AND FLOORS WITH UL LISTED ASSEMBLIES. FIRESTOP ASSEMBLIES SHALL BE EQUAL TO OR EXCEED THE RATING OF THE WALL, CEILING OR FLOOR. SEE ARCHITECTURAL DRAWINGS FOR FINAL FINISHES.
 - FLASH AND COUNTER-FLASH ROOF PENETRATIONS.
 - PROVIDE FOUNDATION PAD PENETRATION SLEEVES. ALLOW 1" MINIMUM CLEARANCE BETWEEN SLEEVE INSIDE SURFACE AND PIPE EXTERIOR.
 - SEE ARCHITECTURAL DRAWINGS FOR FIXTURE LOCATIONS AND MOUNTING HEIGHTS.
 - PROVIDE AN AIR GAP, WHEN REQUIRED BY CODE, SERVING INDIVIDUAL FIXTURES, DEVICES, APPLIANCES AND APPARATUS.
 - ALL EXPOSED PIPE AND FITTINGS IN FINISHED AREAS SHALL BE CHROME PLATED.
 - PROVIDE CLEANOUTS IN ACCORDANCE WITH ALL STATE AND LOCAL CODES. INSTALL CLEANOUTS WITH COVER FLUSH TO FINISH SURFACE.
 - COORDINATE EXACT FLOOR DRAIN LOCATIONS WITH ARCHITECTURAL DRAWINGS. SET FLOOR DRAINS BELOW FINISHED FLOOR TO ALLOW FOR FLOOR SLOPING TO THE DRAIN.
 - IT IS THE INTENT OF THESE DRAWINGS THAT A COMPLETE WORKING SYSTEM PROPERLY TESTED, WILL BE OPERATIONAL UPON COMPLETION OF INSTALLATION.
 - COORDINATE PIPING WITH ALL ELECTRICAL EQUIPMENT (PANELS, TRANSFORMERS, ETC.) PRIOR TO ANY INSTALLATION. DO NOT ROUTE ANY PIPING OVER ANY ELECTRICAL PANELS UNDER ANY CIRCUMSTANCES. ANY PIPING RUN OVER PANELS SHALL BE RE-ROUTED AT NO ADDITIONAL COST.
 - PROVIDE SANITARY WASTE, VENT, DOMESTIC WATER, ETC. ROUGH-IN AND MAKE FINAL CONNECTIONS (TO INCLUDE PROVIDING ALL NECESSARY RELATED STOPS, VALVES, TRAPS, ETC. AND MAKE READY FOR USE) TO ALL EQUIPMENT, WHETHER FURNISHED BY THIS CONTRACTOR OR FURNISHED BY OTHERS.
 - UNLESS NOTED OTHERWISE, ALL PIPING 3" AND LARGER SHALL BE INSTALLED AT A SLOPE OF 1/8" PER FOOT AND PIPING 2" AND SMALLER AT 1/4" PER FOOT.
 - PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING OF HOLES AND OPENINGS IN EXISTING WALLS AND FLOORS.

PLUMBING SHEET INDEX	
P-001	PLUMBING SYMBOLS, SCHEDULES, & ABBREVIATIONS
P-101	LEVEL U2 PLUMBING PLAN - SANITARY & VENT
P-102	LEVEL U1 PLUMBING PLAN - SANITARY & VENT
P-103	LEVEL U0 PLUMBING PLAN - SANITARY & VENT



A5 FLOOR DRAIN
NTS



5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com



Madison Municipal Building
215 Martin Luthing King Blvd
Suite 109
Madison, Wisconsin 53703

CLIENT:

PROJECT TITLE:

2024 PARKING GARAGE
MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

PROJECT NUMBER: 2023-5008.02
DATE: 12/08/2023
DRAWN BY: AMM
CHECKED BY: JLC
APPROVED BY: JLC
SCALE: AS NOTED

SHEET TITLE:

PLUMBING SYMBOLS,
SCHEDULES, & ABBREVIATIONS

SHEET NUMBER:

P-001

1

2

3

4

5

EXISTING PROJECT CONDITIONS
 INFORMATION PERTAINING TO EXISTING PROJECT CONDITIONS, SUCH AS LOCATIONS OF ARCHITECTURAL AND STRUCTURAL BUILDING COMPONENTS, MECHANICAL AND ELECTRICAL EQUIPMENT, PIPING, DUCTWORK, ROUGH-INS AND OTHER MISCELLANEOUS CONSTRUCTION, APPEARS ON PROJECT DRAWINGS. THIS INFORMATION IS BASED ON AVAILABLE RECORDS AS WELL AS INFORMATION COLLECTED WITH REASONABLE CARE AT THE PROJECT SITE. CONTRACTORS SHALL BE SOLELY RESPONSIBLE FOR VERIFYING DIMENSIONS AND RELATED INFORMATION AT THE PROJECT SITE PRIOR TO PROCURING ANY MATERIALS, PRODUCTS OR EQUIPMENT TO PERFORM THEIR WORK.

GENERAL SHEET NOTES

- PRIOR TO CORING ANY PENETRATIONS THROUGH CONCRETE STRUCTURE, PLUMBING CONTRACTOR TO SCAN FOR CONCRETE REBAR AND AVOID. PLUMBING CONTRACTOR RESPONSIBLE FOR CORING AND SCANNING. GENERAL CONTRACTOR RESPONSIBLE FOR CONCRETE SLOPING AT DRAINS.
- P-TRAPS AND VENTS SHALL NOT BE INSTALLED AT AREA DRAINS THAT ARE SUBJECT TO FREEZING TEMPERATURES. ALL OPEN AREAS OF THE PARKING STRUCTURE ARE CONTINUOUSLY VENTILATED YEAR ROUND, EXPOSING ALL AREA DRAINS TO SUB-FREEZING TEMPERATURES DURING WINTER MONTHS. AREA DRAINS THAT ARE INSTALLED ON SLAB ON LEVEL U4 ARE TRAPPED AND VENTED PER CODE.

SHEET KEYNOTES

- CONNECT NEW SANITARY INTO EXISTING SANITARY RISER. CONTRACTOR TO VERIFY EXACT LOCATION IN FIELD.
- PRIOR TO CORING ANY PENETRATIONS THROUGH CONCRETE STRUCTURE, PLUMBING CONTRACTOR SHALL SCAN FOR CONCRETE REBAR AND AVOID. PLUMBING CONTRACTOR RESPONSIBLE FOR CORING AND SCANNING. GENERAL CONTRACTOR RESPONSIBLE FOR CONCRETE SLOPING AT DRAINS.



5126 West Terrace Drive,
 Suite 111
 Madison, WI 53718-8346
 608 / 242 1550
 608 / 242 0787 fax

www.graef-usa.com



Madison Municipal Building
 215 Martin Luthing King Blvd
 Suite 109
 Madison, Wisconsin 53703

PROJECT TITLE:
 2024 PARKING GARAGE
 MAINTENANCE

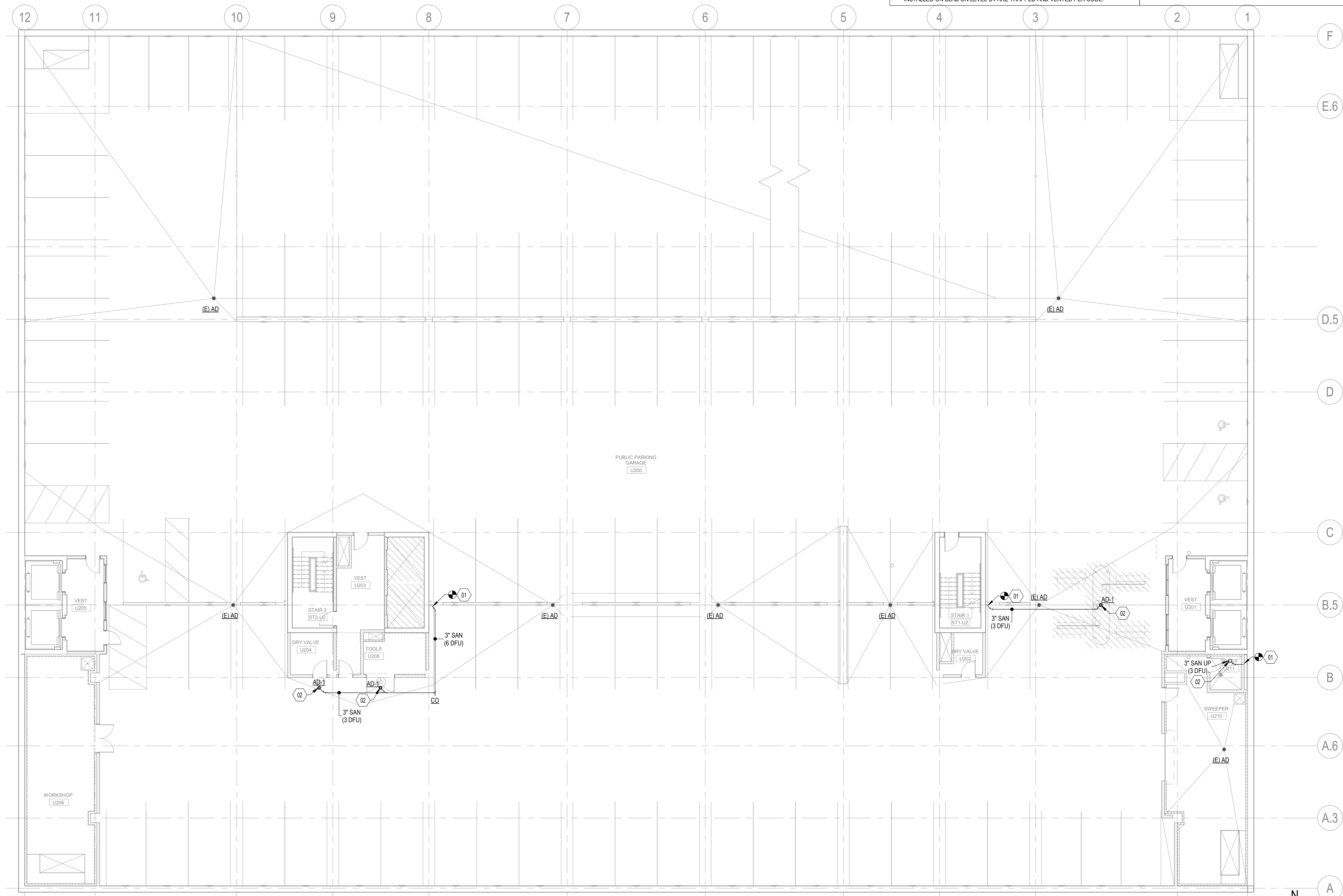
ISSUE:
 1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:
 PROJECT NUMBER: 2023-5008.02
 DATE: 12/08/2023
 DRAWN BY: AMM
 CHECKED BY: JLC
 APPROVED BY: JLC
 SCALE: AS NOTED

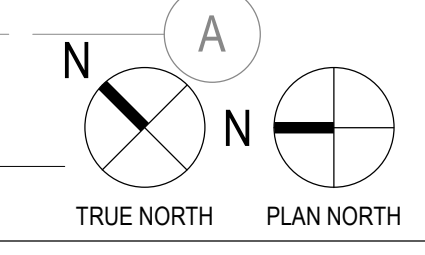
SHEET TITLE:
 LEVEL U2 PLUMBING PLAN -
 SANITARY & VENT

SHEET NUMBER:

P-101



A1 LEVEL U2 PLUMBING PLAN - SANITARY & VENT
 3/32" = 1'-0"



12/4/2023 9:34:36 AM

EXISTING PROJECT CONDITIONS
 INFORMATION PERTAINING TO EXISTING PROJECT CONDITIONS, SUCH AS LOCATIONS OF ARCHITECTURAL AND STRUCTURAL BUILDING COMPONENTS, MECHANICAL AND ELECTRICAL EQUIPMENT, PIPING, DUCTWORK, ROUGH-INS AND OTHER MISCELLANEOUS CONSTRUCTION, APPEARS ON PROJECT DRAWINGS. THIS INFORMATION IS BASED ON AVAILABLE RECORDS AS WELL AS INFORMATION COLLECTED WITH REASONABLE CARE AT THE PROJECT SITE. CONTRACTORS SHALL BE SOLELY RESPONSIBLE FOR VERIFYING DIMENSIONS AND RELATED INFORMATION AT THE PROJECT SITE PRIOR TO PROCURING ANY MATERIALS, PRODUCTS OR EQUIPMENT TO PERFORM THEIR WORK.

GENERAL SHEET NOTES

- PRIOR TO CORING ANY PENETRATIONS THROUGH CONCRETE STRUCTURE, PLUMBING CONTRACTOR TO SCAN FOR CONCRETE REBAR AND AVOID. PLUMBING CONTRACTOR RESPONSIBLE FOR CORING AND SCANNING. GENERAL CONTRACTOR RESPONSIBLE FOR CONCRETE SLOPING AT DRAINS.
- P-TRAPS AND VENTS SHALL NOT BE INSTALLED AT AREA DRAINS THAT ARE SUBJECT TO FREEZING TEMPERATURES. ALL OPEN AREAS OF THE PARKING STRUCTURE ARE CONTINUOUSLY VENTILATED YEAR ROUND, EXPOSING ALL AREA DRAINS TO SUB-FREEZING TEMPERATURES DURING WINTER MONTHS. AREA DRAINS THAT ARE INSTALLED ON SLAB ON LEVEL U4 ARE TRAPPED AND VENTED PER CODE.

SHEET KEYNOTES

- CONNECT NEW SANITARY INTO EXISTING SANITARY RISER. CONTRACTOR TO VERIFY EXACT LOCATION IN FIELD.
- PRIOR TO CORING ANY PENETRATIONS THROUGH CONCRETE STRUCTURE. PLUMBING CONTRACTOR SHALL SCAN FOR CONCRETE REBAR AND AVOID. PLUMBING CONTRACTOR RESPONSIBLE FOR CORING AND SCANNING. GENERAL CONTRACTOR RESPONSIBLE FOR CONCRETE SLOPING AT DRAINS.



5126 West Terrace Drive,
 Suite 111
 Madison, WI 53718-8346
 608 / 242 1550
 608 / 242 0787 fax

www.graef-usa.com



Madison Municipal Building
 215 Martin Luthing King Blvd
 Suite 109
 Madison, Wisconsin 53703

PROJECT TITLE:
 2024 PARKING GARAGE
 MAINTENANCE

ISSUE:
 1 12/08/2023 BID DOCUMENTS

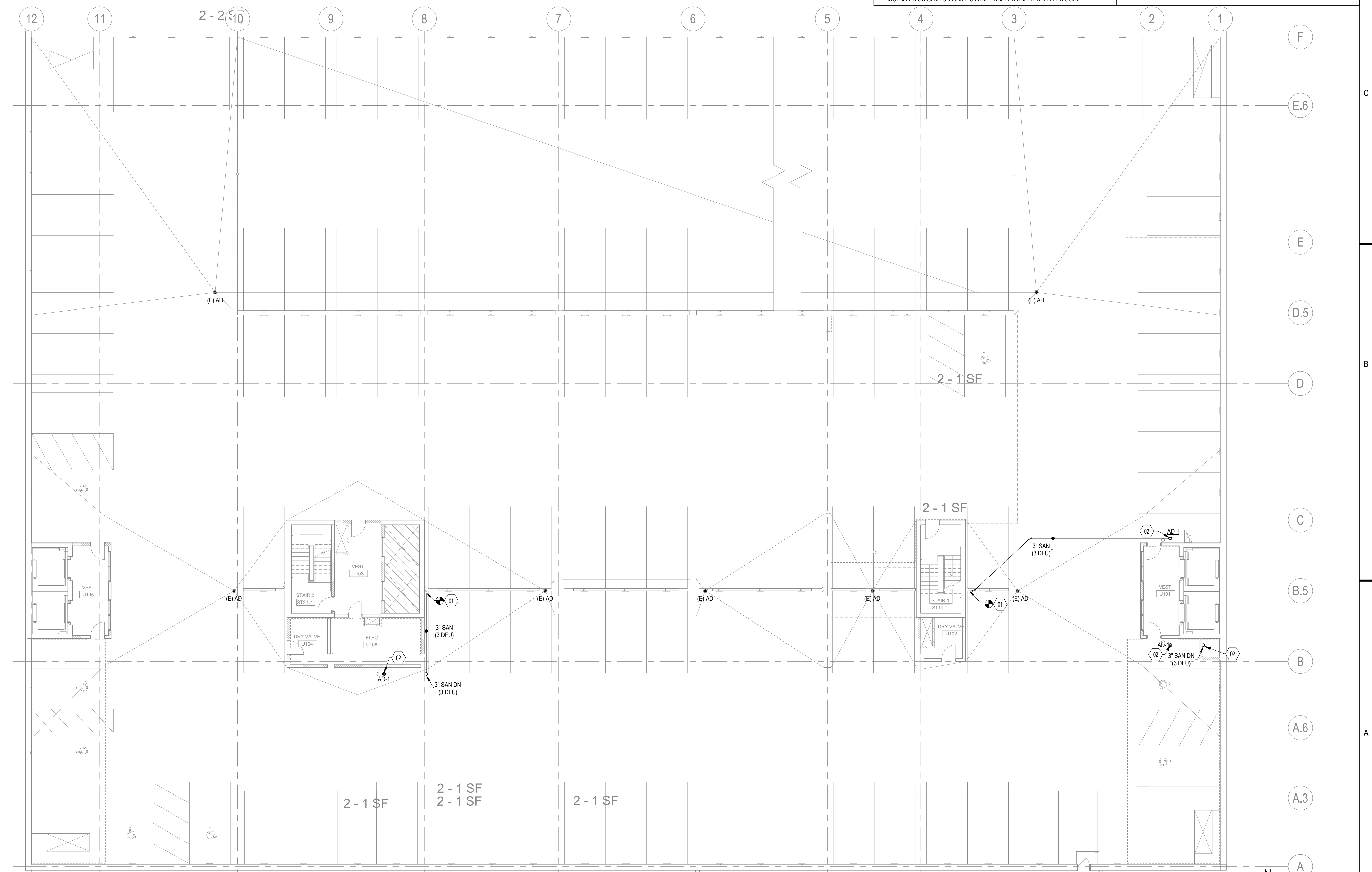
PROJECT INFORMATION:
 PROJECT NUMBER: 2023-5008.02
 DATE: 12/08/2023
 DRAWN BY: AMM
 CHECKED BY: JLC
 APPROVED BY: JLC
 SCALE: AS NOTED

SHEET TITLE:
 LEVEL U1 PLUMBING PLAN -
 SANITARY & VENT

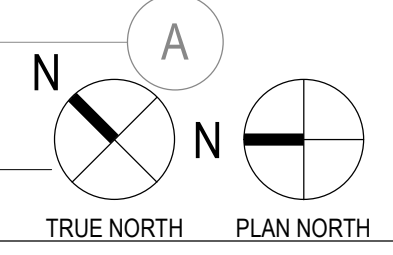
SHEET NUMBER:

P-102

12/4/2023 9:34:36 AM



A1 LEVEL U1 PLUMBING PLAN - SANITARY & VENT
 3/32" = 1'-0"



1

2

3

4

5

EXISTING PROJECT CONDITIONS
 INFORMATION PERTAINING TO EXISTING PROJECT CONDITIONS, SUCH AS LOCATIONS OF ARCHITECTURAL AND STRUCTURAL BUILDING COMPONENTS, MECHANICAL AND ELECTRICAL EQUIPMENT, PIPING, DUCTWORK, ROUGH-INS AND OTHER MISCELLANEOUS CONSTRUCTION, APPEARS ON PROJECT DRAWINGS. THIS INFORMATION IS BASED ON AVAILABLE RECORDS AS WELL AS INFORMATION COLLECTED WITH REASONABLE CARE AT THE PROJECT SITE. CONTRACTORS SHALL BE SOLELY RESPONSIBLE FOR VERIFYING DIMENSIONS AND RELATED INFORMATION AT THE PROJECT SITE PRIOR TO PROCURING ANY MATERIALS, PRODUCTS OR EQUIPMENT TO PERFORM THEIR WORK.

GENERAL SHEET NOTES

- PRIOR TO CORING ANY PENETRATIONS THROUGH CONCRETE STRUCTURE, PLUMBING CONTRACTOR TO SCAN FOR CONCRETE REBAR AND AVOID. PLUMBING CONTRACTOR RESPONSIBLE FOR CORING AND SCANNING. GENERAL CONTRACTOR RESPONSIBLE FOR CONCRETE SLOPING AT DRAINS.
- P-TRAPS AND VENTS SHALL NOT BE INSTALLED AT AREA DRAINS THAT ARE SUBJECT TO FREEZING TEMPERATURES. ALL OPEN AREAS OF THE PARKING STRUCTURE ARE CONTINUOUSLY VENTILATED YEAR ROUND, EXPOSING ALL AREA DRAINS TO SUB-FREEZING TEMPERATURES DURING WINTER MONTHS. AREA DRAINS THAT ARE INSTALLED ON SLAB ON LEVEL U4 ARE TRAPPED AND VENTED PER CODE.

SHEET KEYNOTES

- CONNECT NEW SANITARY INTO EXISTING SANITARY RISER. CONTRACTOR TO VERIFY EXACT LOCATION IN FIELD.
- PRIOR TO CORING ANY PENETRATIONS THROUGH CONCRETE STRUCTURE, PLUMBING CONTRACTOR SHALL SCAN FOR CONCRETE REBAR AND AVOID. PLUMBING CONTRACTOR RESPONSIBLE FOR CORING AND SCANNING. GENERAL CONTRACTOR RESPONSIBLE FOR CONCRETE SLOPING AT DRAINS.



5126 West Terrace Drive,
 Suite 111
 Madison, WI 53718-8346
 608 / 242 1550
 608 / 242 0787 fax

www.graef-usa.com



Madison Municipal Building
 215 Martin Luthing King Blvd
 Suite 109
 Madison, Wisconsin 53703

PROJECT TITLE:

2024 PARKING GARAGE
 MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

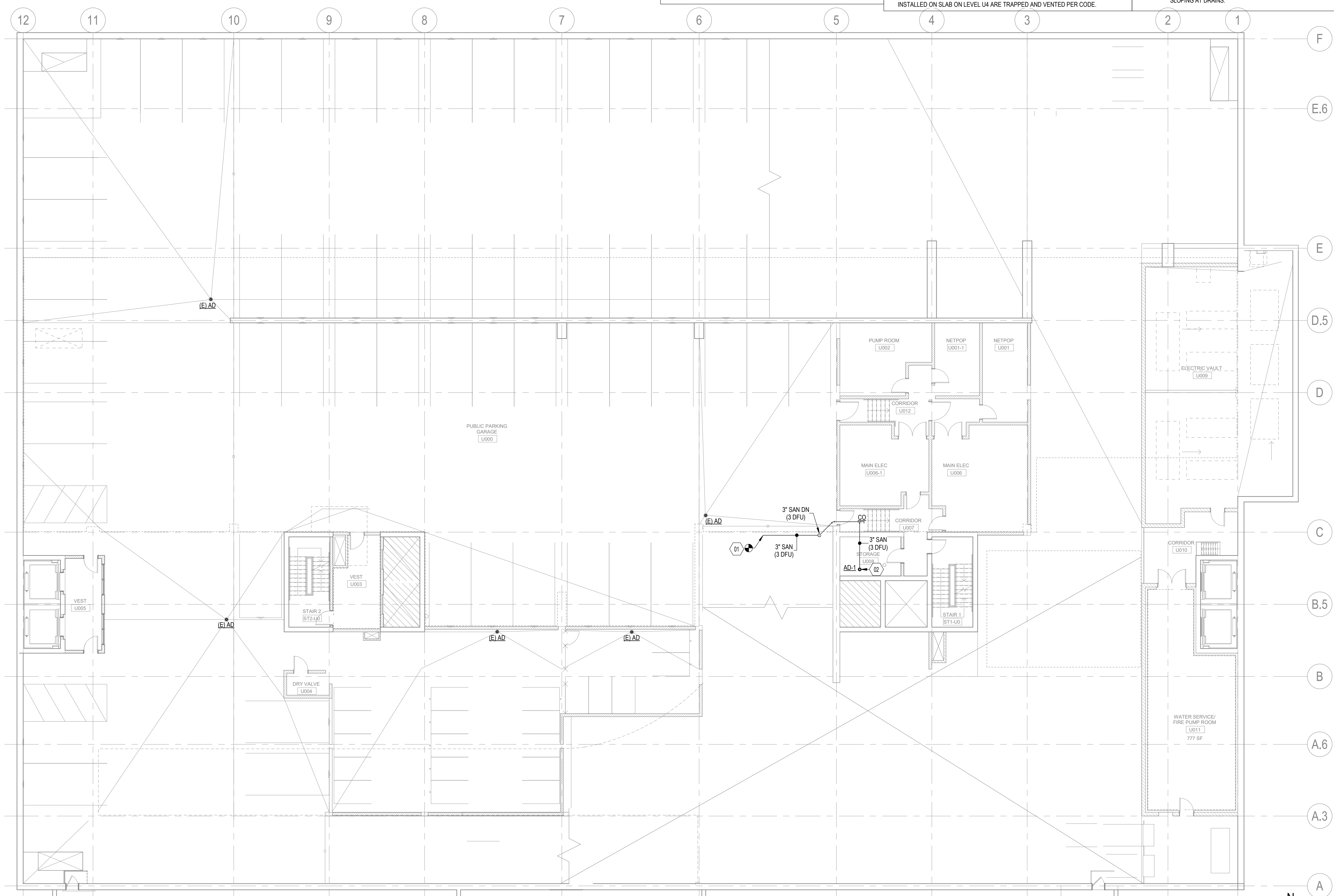
PROJECT NUMBER: 2023-5008.02
 DATE: 12/08/2023
 DRAWN BY: AMM
 CHECKED BY: JLC
 APPROVED BY: JLC
 SCALE: AS NOTED

SHEET TITLE:

LEVEL U0 PLUMBING PLAN -
 SANITARY & VENT

SHEET NUMBER:

P-103

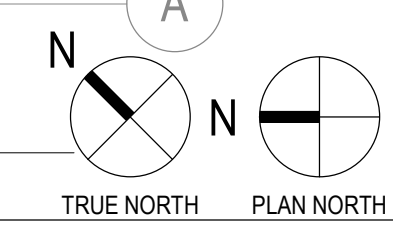


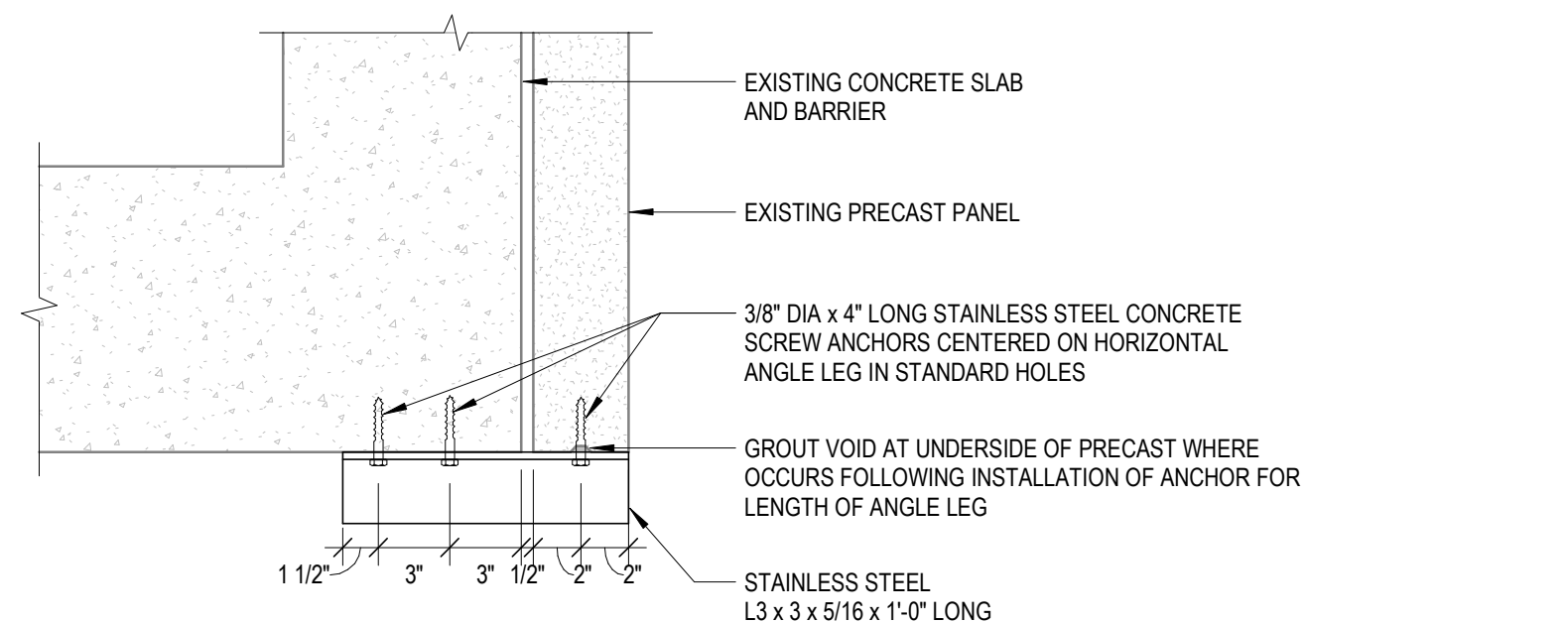
12/14/2023 9:34:37 AM

A1

LEVEL U0 PLUMBING PLAN - SANITARY & VENT

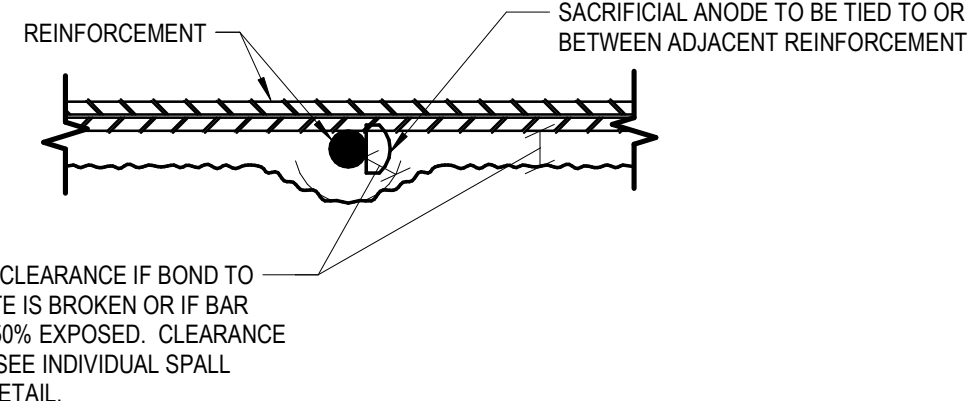
3/32" = 1'-0"





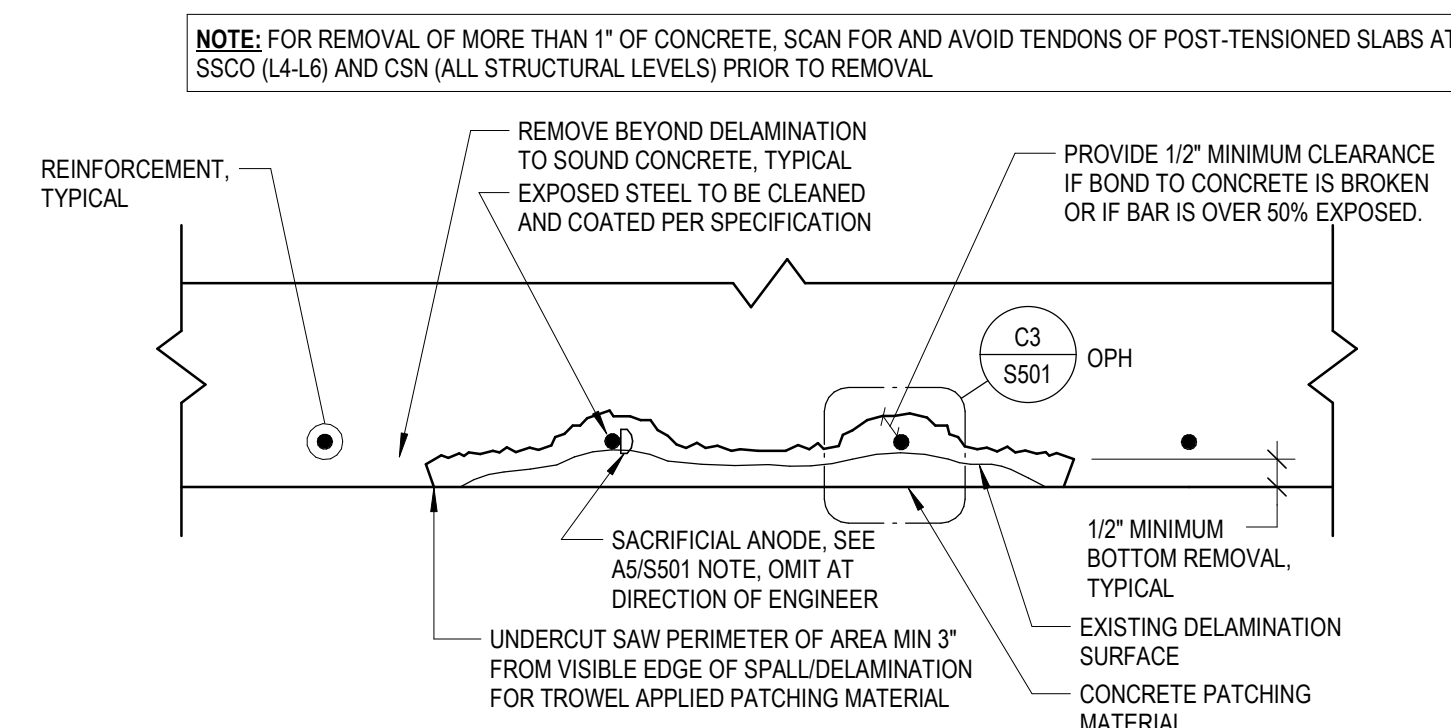
C1 POST-INSTALLED PRECAST
PANEL CONNECTION (SSCO)

1 1/2" = 1'-0"



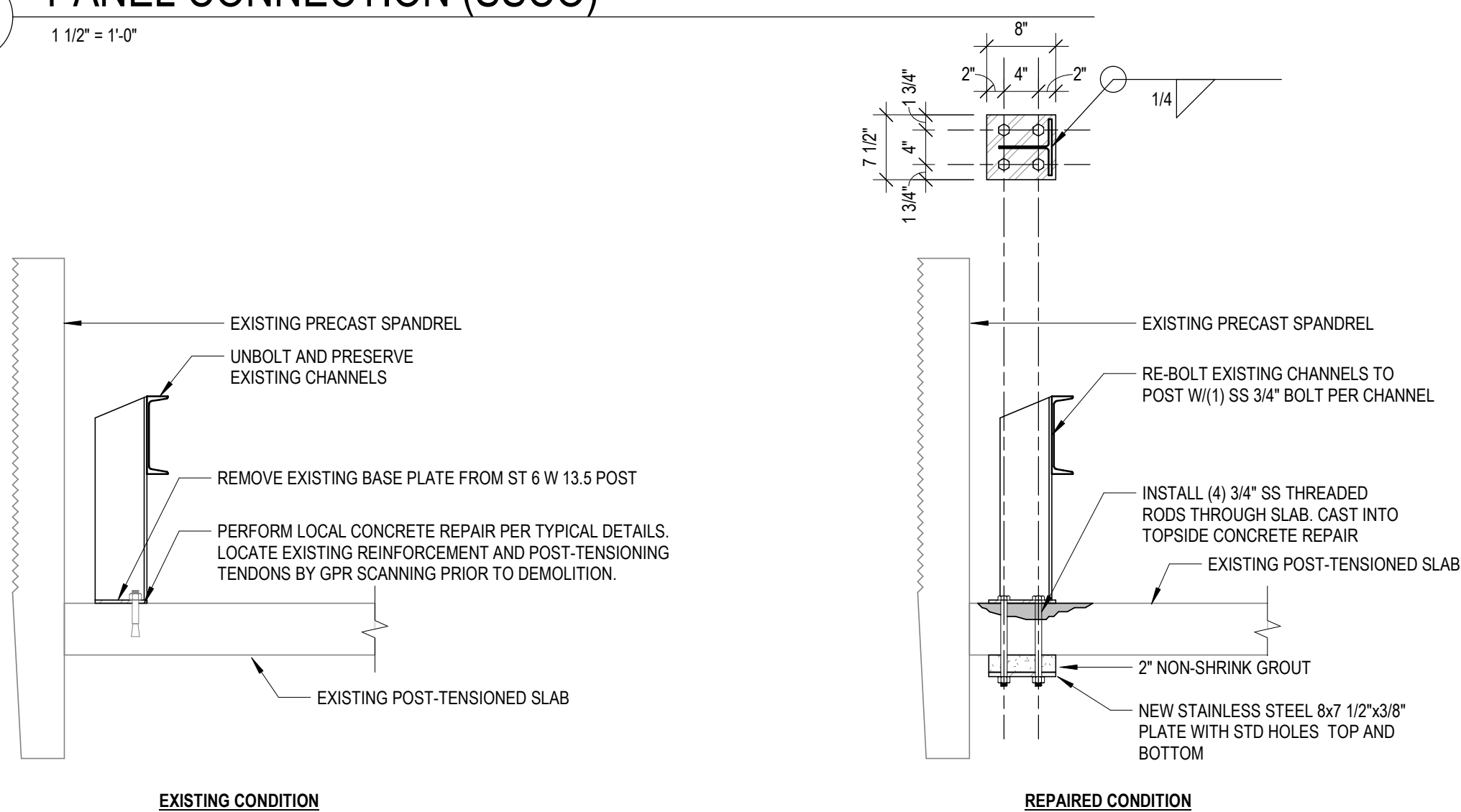
C3 TYPICAL REBAR/STRAND CLEARANCE

3" = 1'-0"



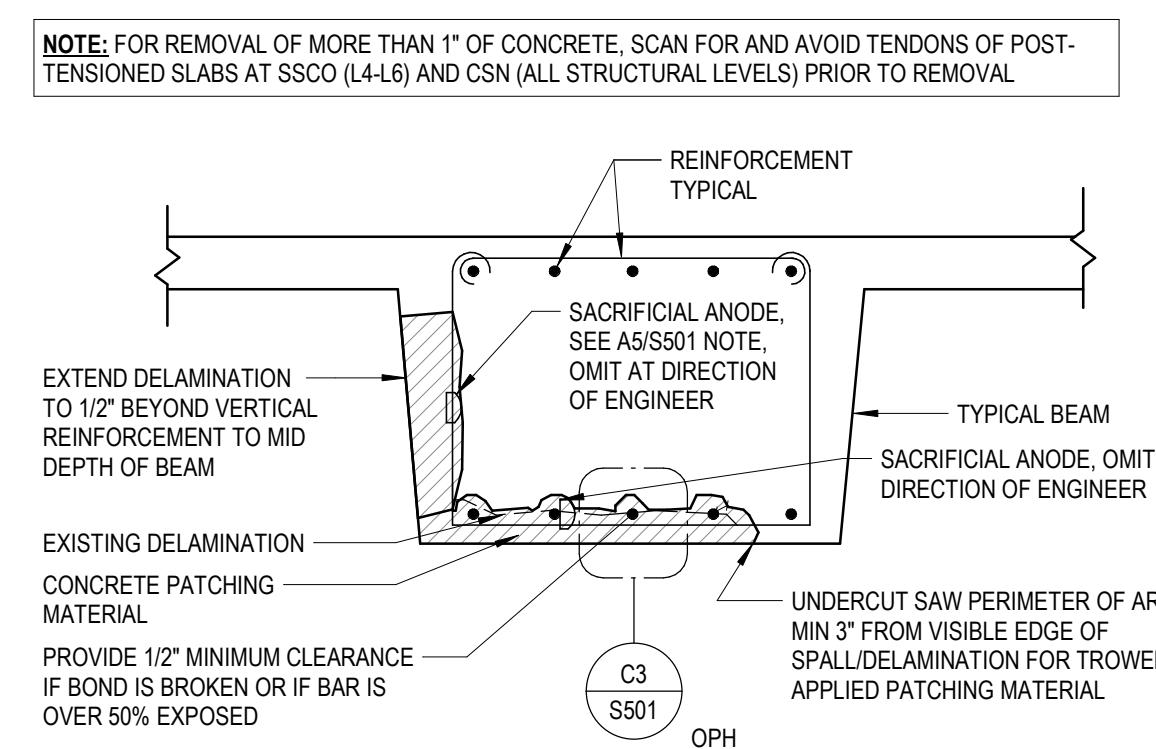
C4 TYPICAL OVERHEAD SPALL REPAIR

1 1/2" = 1'-0"



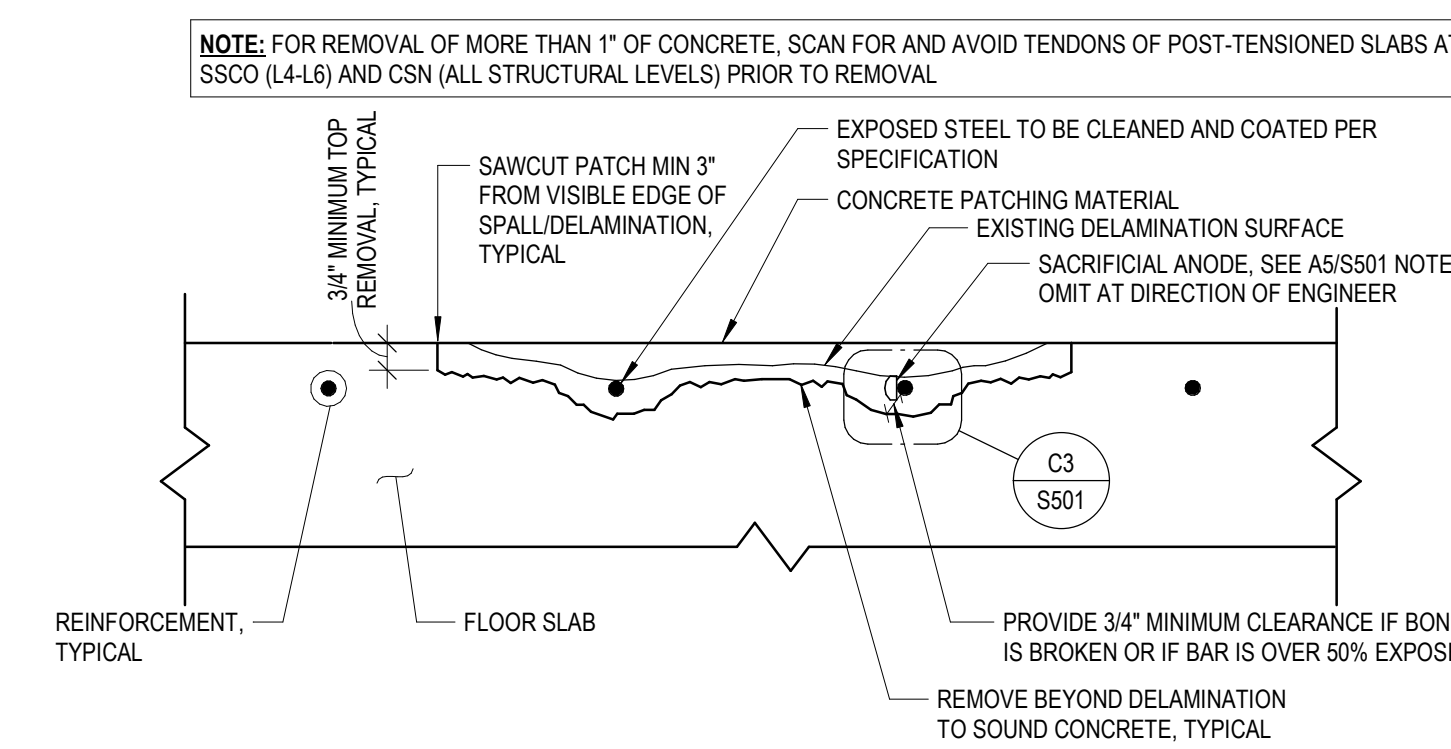
B1 BARRIER POST REPAIRS (CSN)

3/4" = 1'-0"



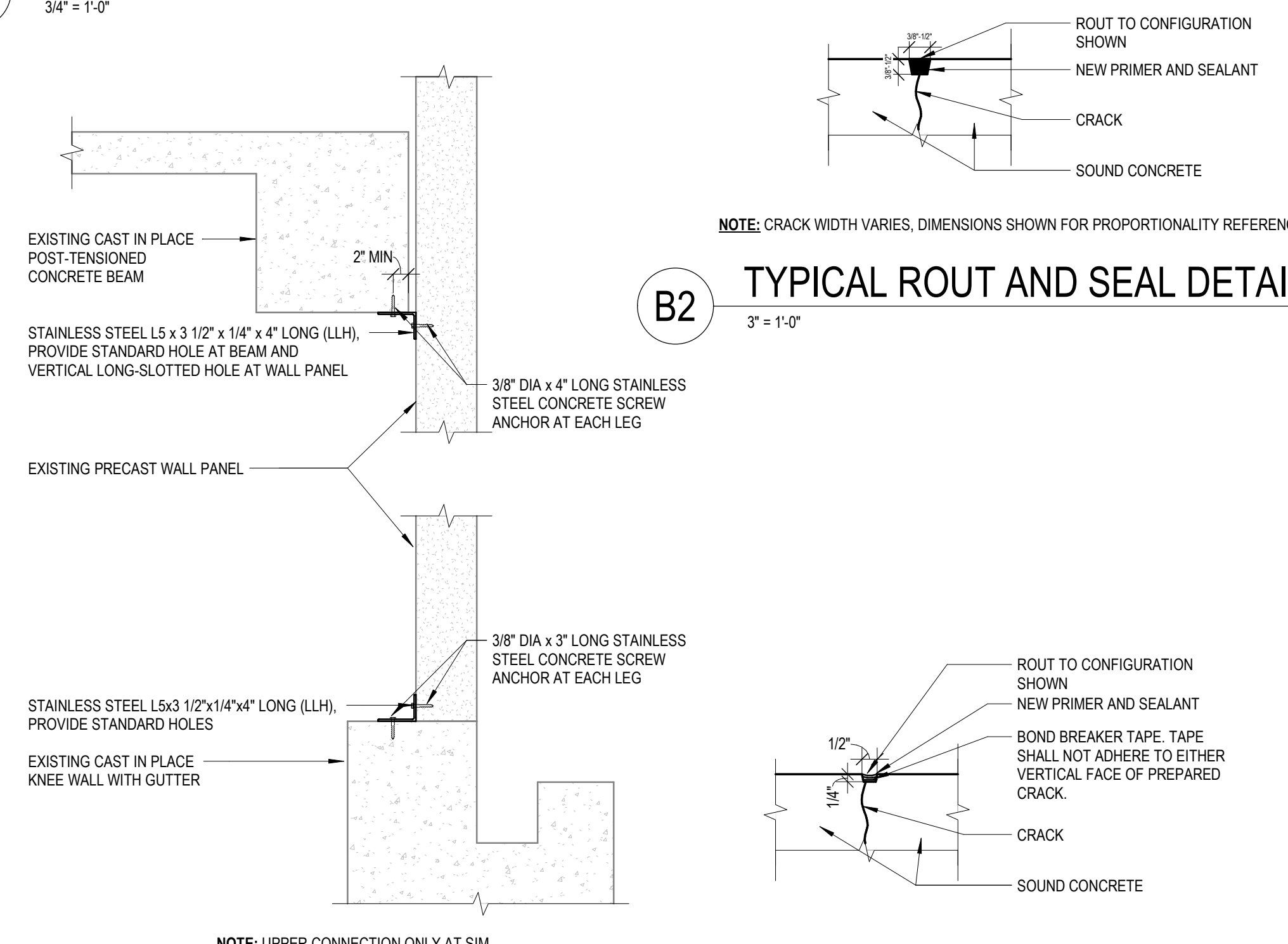
B3 TYPICAL BEAM SPALL REPAIR

3/4" = 1'-0"



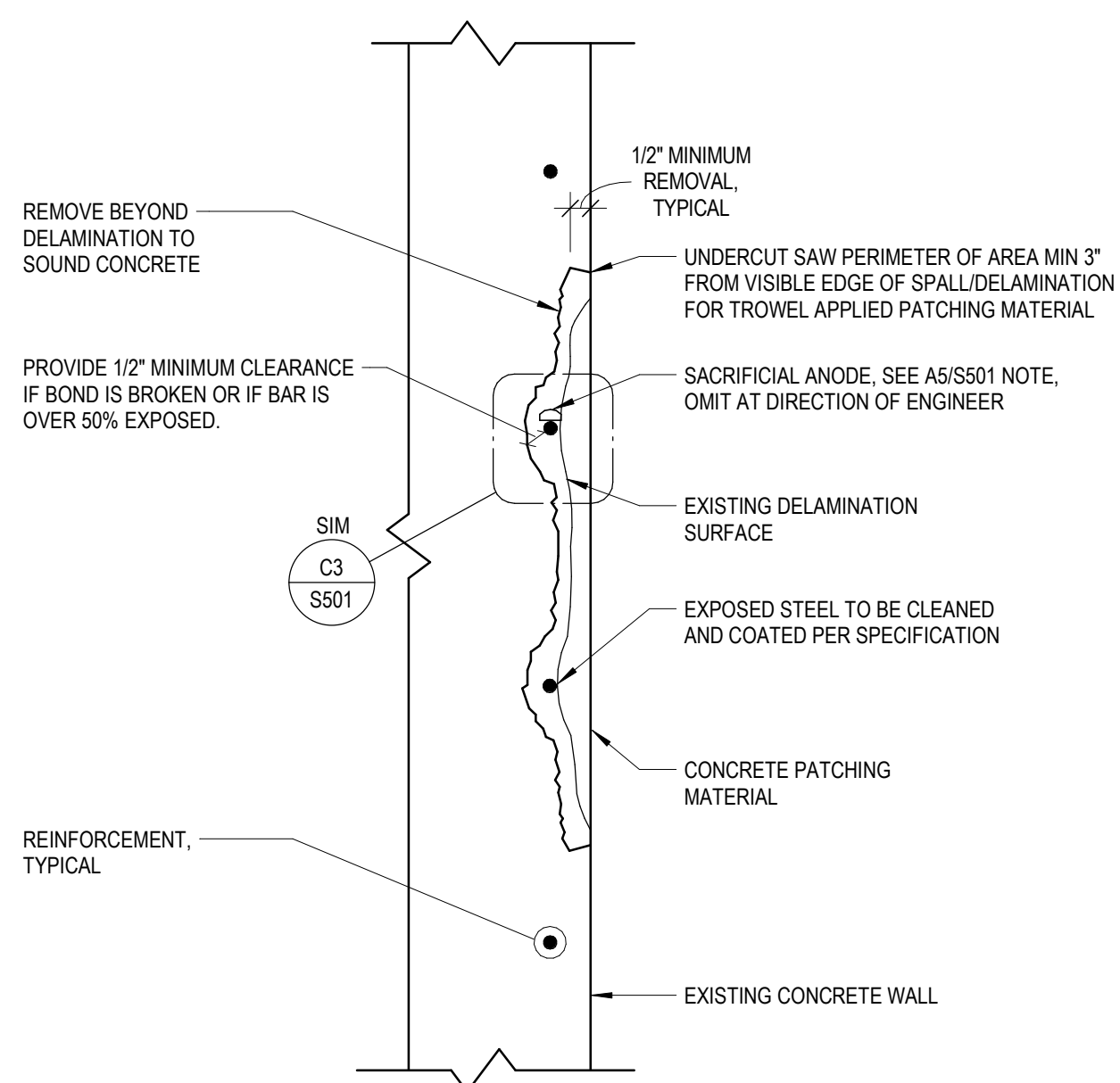
B4 TYPICAL TOPSIDE SPALL REPAIR

1 1/2" = 1'-0"



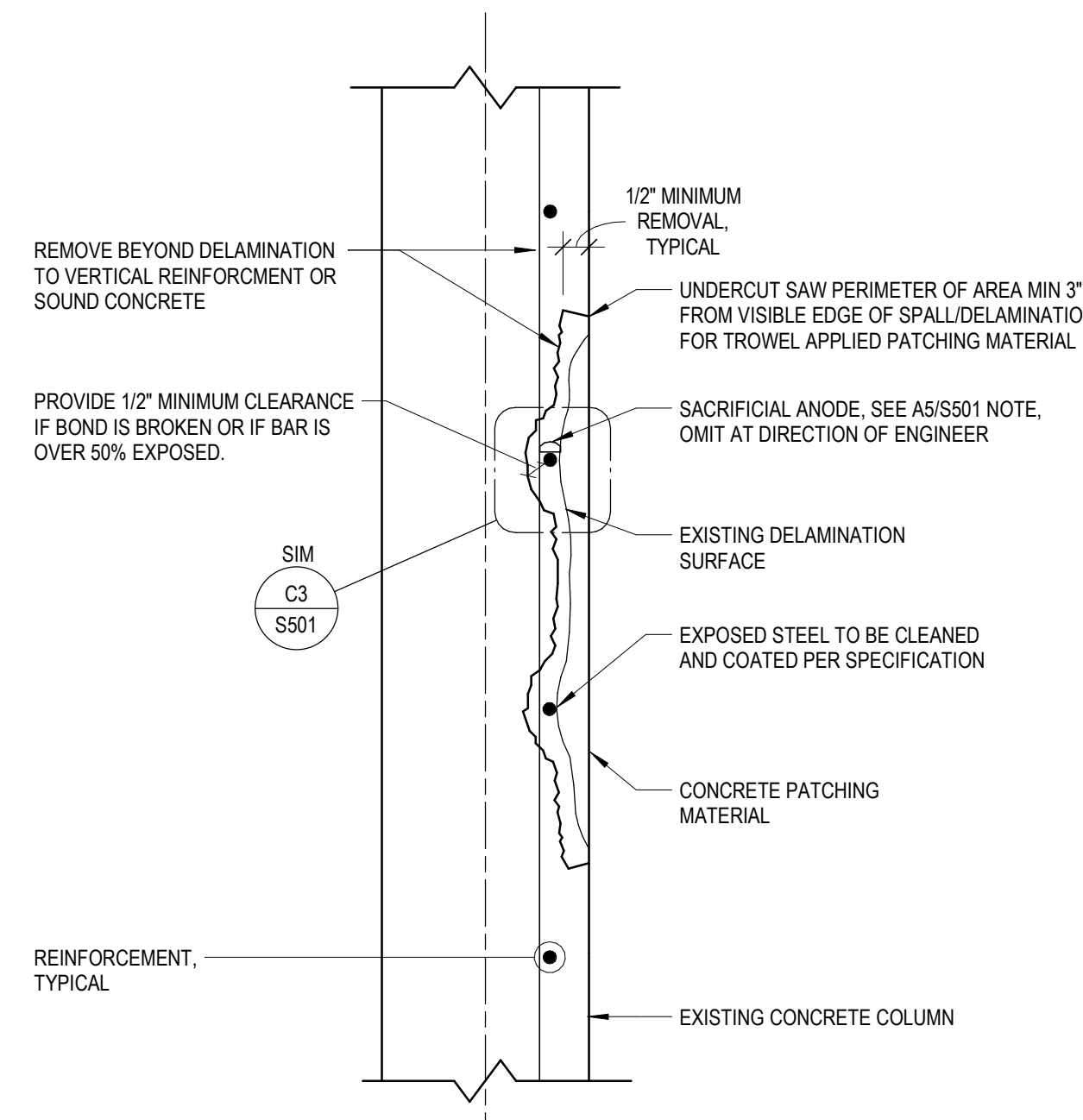
B2 TYPICAL ROUT AND SEAL DETAIL

3" = 1'-0"



A3 TYPICAL CONCRETE WALL SPALL REPAIR

1 1/2" = 1'-0"



A4 TYPICAL COLUMN SPALL REPAIR

1 1/2" = 1'-0"

A1 POST-INSTALLED PRECAST
PANEL CONNECTION (SLS)

3/4" = 1'-0"

A2 ROUT AND SEAL WITH
BOND BREAKER DETAIL

3" = 1'-0"