

MILWAUKEE-MICHIGAN PARKING STRUCTURE

535 NORTH MILWAUKEE STREET

TRAFFIC DECK RECOATING AND REPAIRS OF PARKING LEVELS 1-4



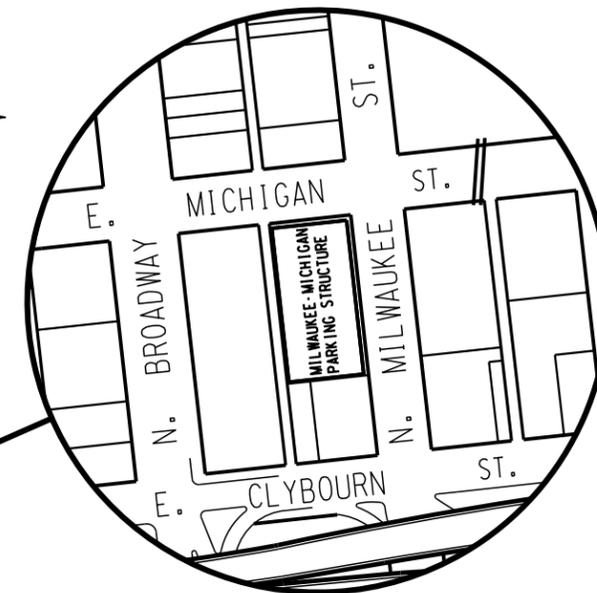
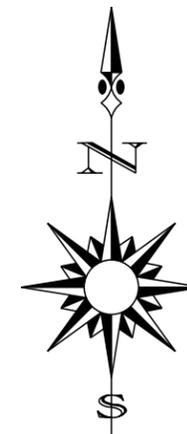
Department of Public Works

Infrastructure Services Division

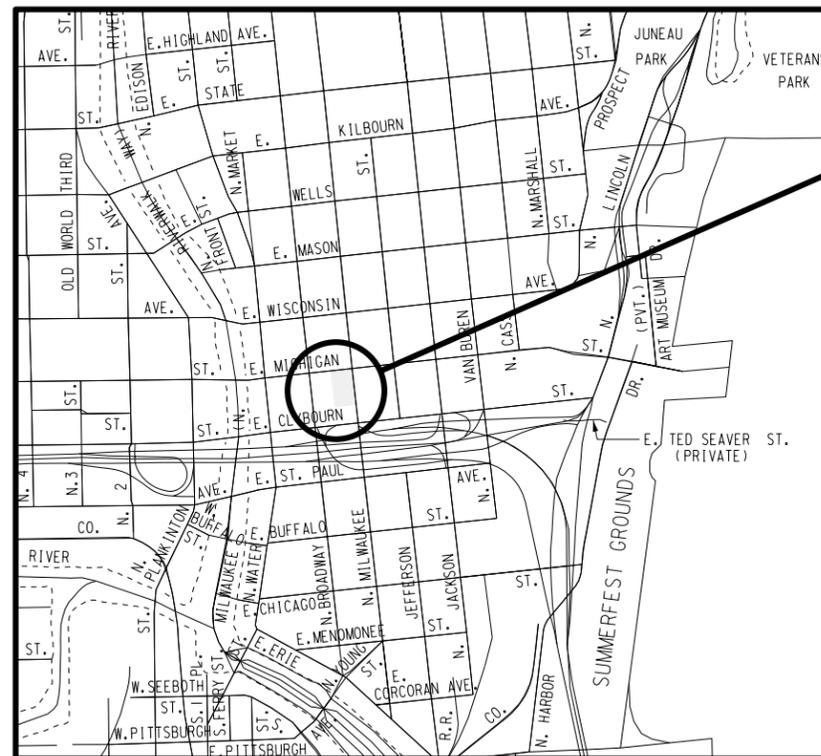
APPROVED BY: *Chris S. Roberts* 4/29/2016
 ENGINEER IN CHARGE BRIDGES & BUILDINGS DATE
William J. Palombaro Jr. 4/29/16
 CITY ENGINEER & SPECIAL DEPUTY DATE
 COMMISSIONER OF PUBLIC WORKS

MILWAUKEE-MICHIGAN PARKING STRUCTURE
 535 NORTH MILWAUKEE STREET
 TRAFFIC DECK RECOATING AND REPAIRS OF PARKING LEVELS 1-4
 TITLE SHEET

REVISIONS	
DESIGNED BY S.S.R.	
DRAWN BY D.B.	
CHECKED BY T.P.W./H.J.R.	
DATE 05/2016	SCALE NONE
JOB NUMBER PA160150302	
SHEET NUMBER 1	
OF 9	



ESTIMATED BID QUANTITIES			
ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL
100	MOBILIZATION AND GENERAL CONDITIONS	LS	1
101	TRAFFIC CONTROL AND CONSTRUCTION STAGING	LS	1
102	CONCRETE SURFACE REPAIR - HORIZONTAL	SF	220
103	CONCRETE SURFACE REPAIR - VERTICAL AND OVERHEAD	SF	111
104	DEEP CONCRETE SURFACE REPAIR	CF	2
105	EPOXY INJECTED CRACK REPAIR	LF	162
106	CONCRETE SHORING	LS	1
107	HEAVY-DUTY VEHICULAR TRAFFIC COATING	SF	81,840
108	EPOXY VEHICULAR TRAFFIC COATING	SF	5,650
109	PAVEMENT MARKING LEVEL 1	LS	1
110	PAVEMENT MARKING LEVELS 2-4	LS	1



LOCATION MAP

PROPOSED WORK AT MILWAUKEE-MICHIGAN PARKING STRUCTURE:

SURFACE PREPARATION AND MEMBRANE APPLICATION TO LEVELS 2, 3, 4 AND SELECT AREAS OF LEVEL 1 OF PARKING DECKS AS DIRECTED BY SPECIFICATIONS AND DRAWINGS.

SURFACE PREPARATION AND APPLICATION OF EPOXY VEHICULAR TRAFFIC COATING ON RAMPS BETWEEN LEVELS AS DIRECTED BY SPECIFICATIONS AND DRAWINGS.

CONCRETE SURFACE REPAIRS TO WALLS, COLUMNS, CEILINGS, DECK AND OTHER AREAS AS DIRECTED BY SPECIFICATIONS AND DRAWINGS.

EPOXY-INJECTION CRACK REPAIR AS DIRECTED BY SPECIFICATIONS AND DRAWINGS.

LAYOUT AND APPLICATION OF PAVEMENT MARKINGS TO AREAS WHERE APPLYING TRAFFIC DECK COATING. REMOVAL OF EXISTING PAVEMENT MARKINGS, AND REPAINTING OVER SLAB-ON-GRADE.

GENERAL NOTES:

ALL WORK SHALL CONFORM TO THE "GENERAL SPECIFICATIONS" OF THE DEPARTMENT OF PUBLIC WORKS, CITY OF MILWAUKEE, WISCONSIN, DATED JANUARY 31, 1992, AND ALL SUBSEQUENT ADDENDA.

DRAWINGS SHALL NOT BE SCALED. STRUCTURE DIMENSIONS SHOWN ARE BASED ON ORIGINAL STRUCTURE PLANS. CONTRACTOR SHALL VERIFY DIMENSIONS IN FIELD.

PERFORM EPOXY INJECTION ON CRACKS ON UNDERSIDE OF DECK AS SHOWN IN PLANS PRIOR TO APPLYING VEHICULAR TRAFFIC COATING.

PROVIDE TRAFFIC CONTROL, BARRICADES, SIGNAGE AND OTHER MEANS, AS NECESSARY, TO MAINTAIN TRAFFIC FLOW THROUGH PARKING STRUCTURE AT ALL TIMES.

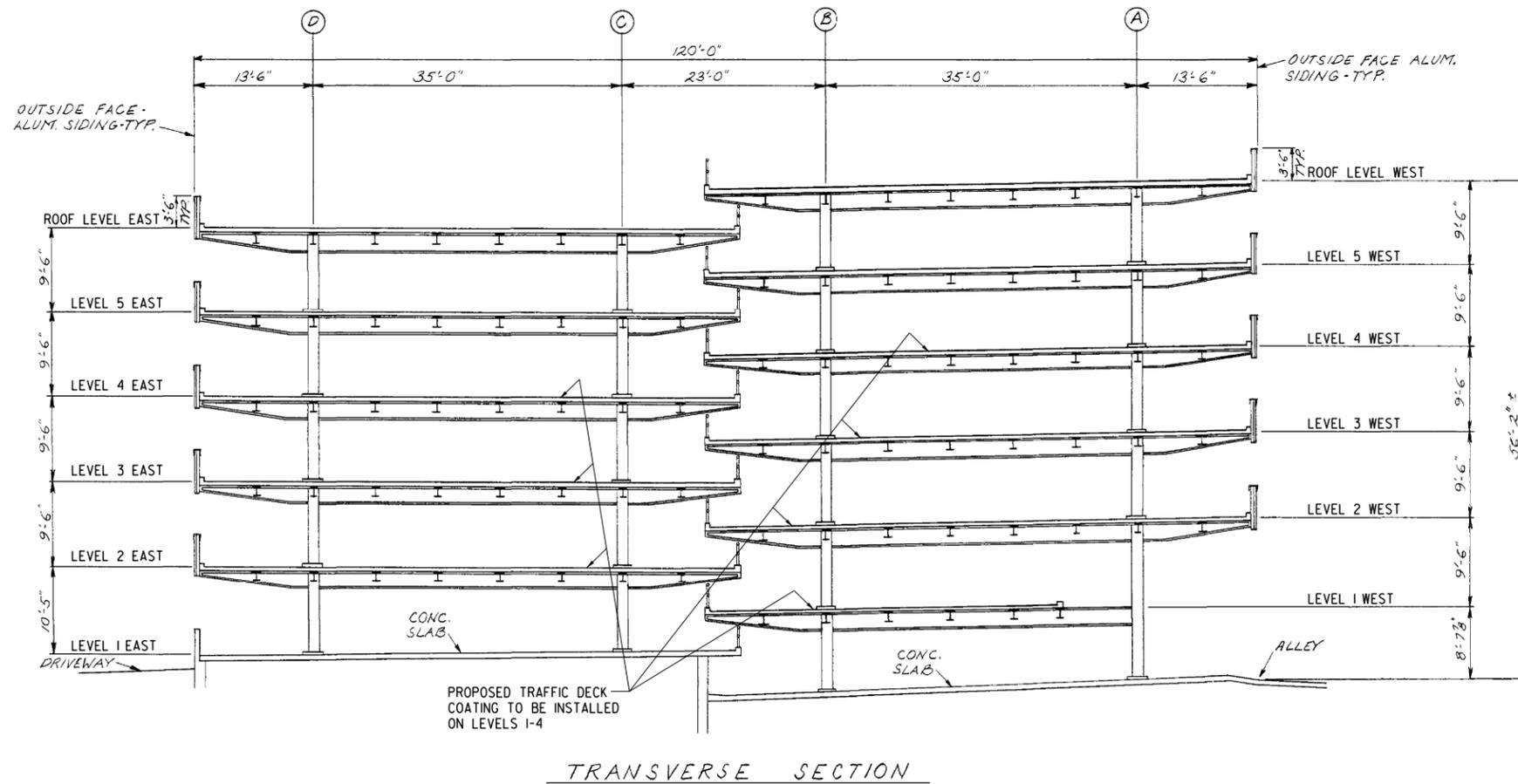
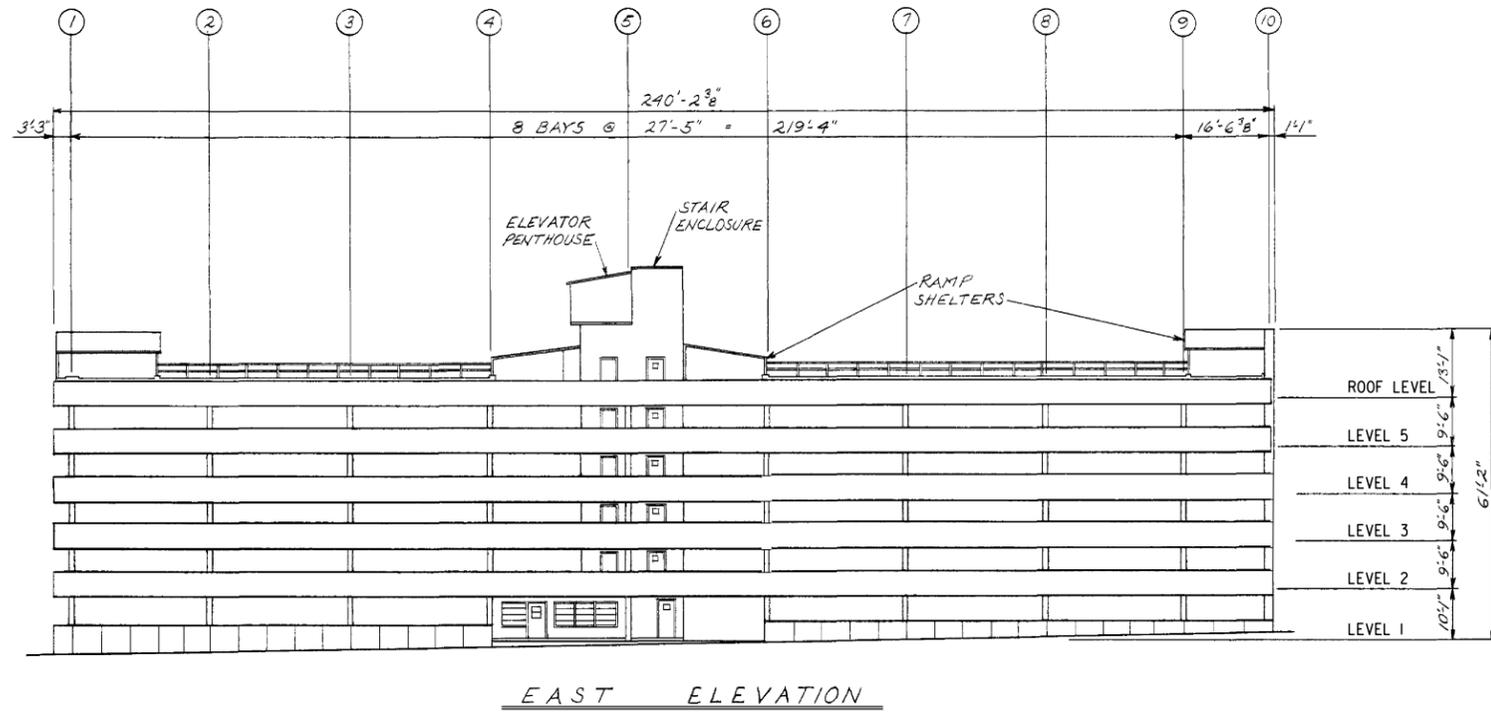
CONCRETE REPAIR AREAS AND QUANTITIES ARE FOR SELECTED AREAS ONLY. TOTAL AMOUNT OF REPAIRS SHALL BE DETERMINED DURING CONSTRUCTION AFTER CHAIN DRAG AND HAMMER SOUNDING PRIOR TO MEMBRANE APPLICATION.

EXTEND TRAFFIC DECK COATING 4" UP ALL CURBS, COLUMNS, WALLS, PIPES, ETC.

INDEX OF DRAWINGS

1. TITLE SHEET
2. EAST ELEVATION & TRANSVERSE SECTION
3. LEVEL 1 PLAN
4. LEVEL 2 PLAN
5. LEVEL 3 PLAN
6. LEVEL 4 PLAN
7. WALL/ SLAB JOINT & PAVEMENT MARKING DETAILS
8. TRAFFIC CONTROL PLAN - PHASES 1&2
9. TRAFFIC CONTROL PLAN - PHASES 3-5





MILWAUKEE-MICHIGAN PARKING STRUCTURE
 535 NORTH MILWAUKEE STREET
 TRAFFIC DECK RECOATING AND
 REPAIRS OF PARKING LEVELS 1-4
 EAST ELEVATION & TRANSVERSE SECTION

REVISIONS	
DESIGNED BY S.S.R.	SCALE NONE
DRAWN BY D.B./G.J.R.	JOB NUMBER PA160150302
CHECKED BY T.P.W./H.J.R.	SHEET NUMBER 2
DATE 05/2016	OF 9

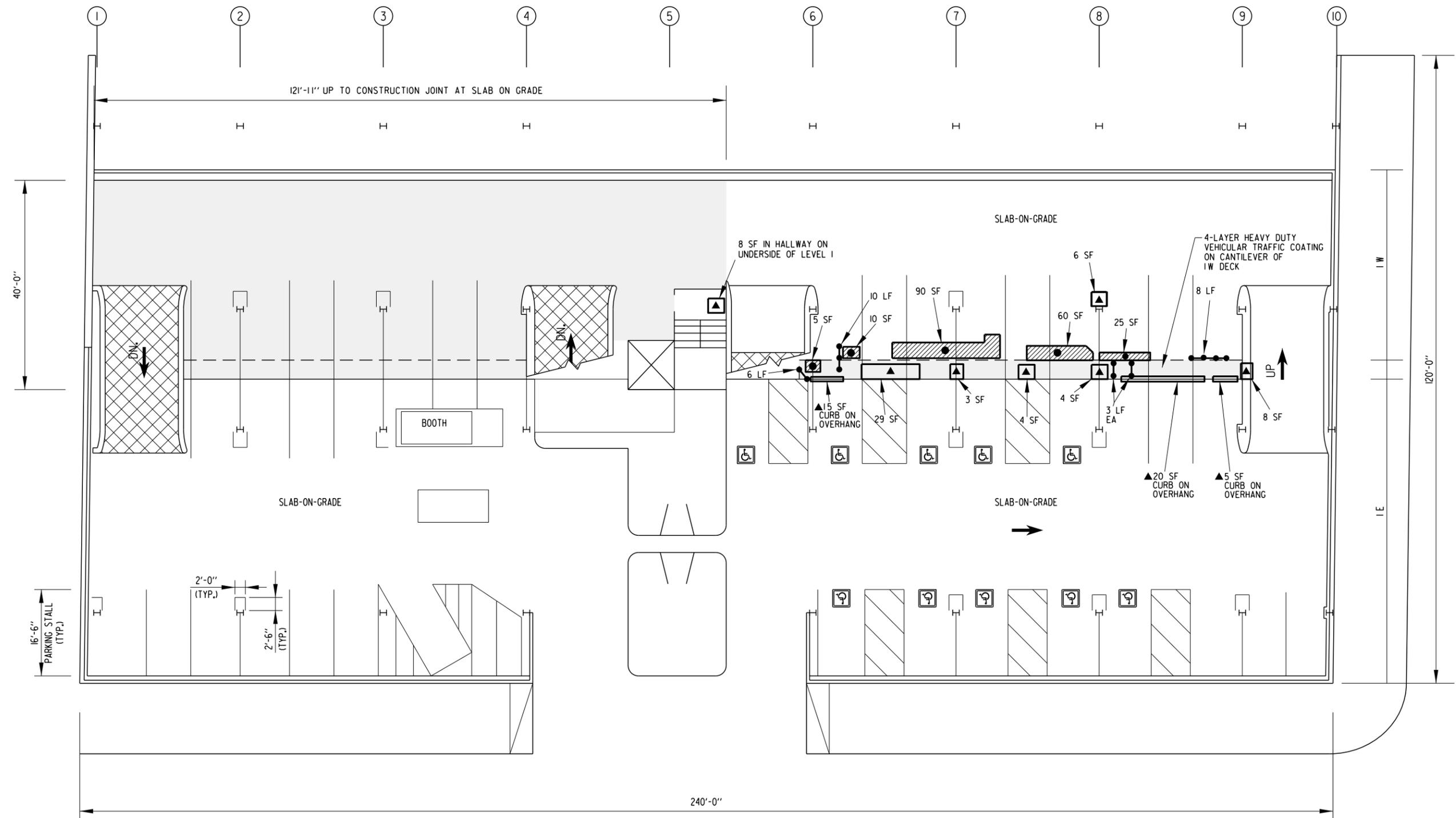


City of Milwaukee

Department of Public Works

Infrastructure Services Division

MILWAUKEE-MICHIGAN PARKING STRUCTURE
535 NORTH MILWAUKEE STREET
TRAFFIC DECK RECOATING AND
REPAIRS OF PARKING LEVELS 1-4
LEVEL 1 PLAN



N. MILWAUKEE ST.

E. MICHIGAN ST.

LEVEL 1

NOTE : REMOVE EXISTING PAVEMENT MARKINGS AT SLAB ON GRADE AT I.E. REPAINT AS INDICATED ON THESE PLANS.

LEGEND

- = CONCRETE SURFACE REPAIRS REQUIRING POST SHORING
- = CONCRETE SURFACE REPAIR- VERTICAL AND OVERHEAD
- = PAINT HANDICAP SYMBOL SEE DETAIL SHEET 7
- = ARROW PAINTED ON GROUND FOR TRAFFIC FLOW SEE DETAIL SHEET 7

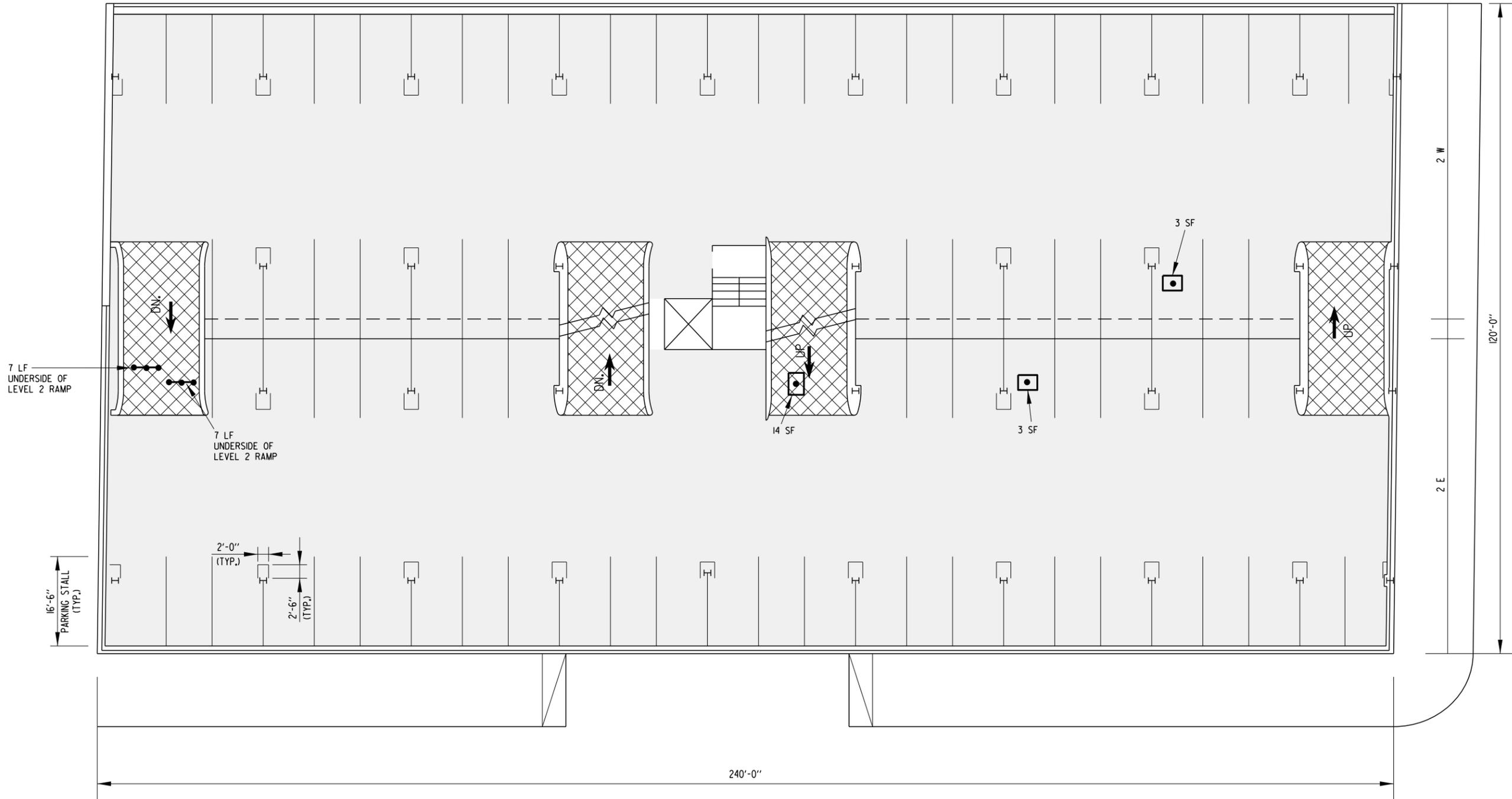
PAGE QUANTITIES

	CONCRETE SURFACE REPAIR- HORIZONTAL	190 SF
	CONCRETE SURFACE REPAIR- VERTICAL AND OVERHEAD	102 SF
	EPOXY INJECTED CRACK REPAIR	30 LF
	HEAVY DUTY VEHICULAR TRAFFIC COATING	4,395 SF
	EPOXY VEHICULAR TRAFFIC COATING	700 SF
	PARKING STALLS	43

REVISIONS

DESIGNED BY	S.S.R.
DRAWN BY	D.B./G.J.R.
CHECKED BY	H.J.R./T.P.W.
DATE	05/2016
SCALE	NONE
JOB NUMBER	PA160150302
SHEET NUMBER	3
OF	9

1 2 3 4 5 6 7 8 9 10



N. MILWAUKEE ST.

LEVEL 2

E. MICHIGAN ST.

LEGEND

→ = ARROW PAINTED ON GROUND FOR TRAFFIC FLOW SEE DETAIL SHEET 7

PAGE QUANTITIES

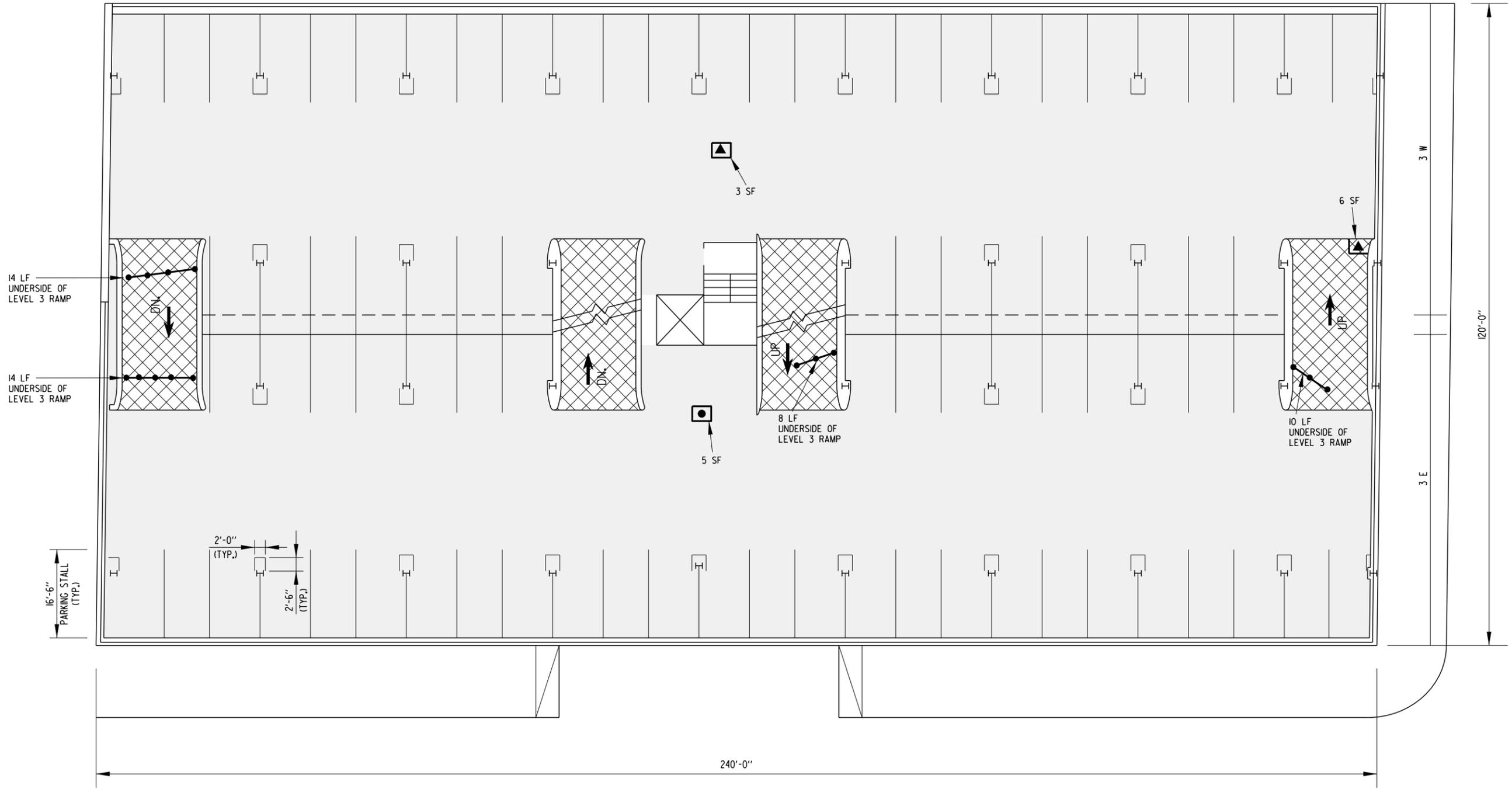
	CONCRETE SURFACE REPAIR- HORIZONTAL	20 SF
	EPOXY INJECTED CRACK REPAIR	14 LF
	HEAVY DUTY VEHICULAR TRAFFIC COATING	25,815 SF
	EPOXY VEHICULAR TRAFFIC COATING	1,800 SF
	PARKING STALLS	84

**MILWAUKEE-MICHIGAN PARKING STRUCTURE
535 NORTH MILWAUKEE STREET
TRAFFIC DECK RECOATING AND
REPAIRS OF PARKING LEVELS 1-4
LEVEL 2 PLAN**

REVISIONS	
DESIGNED BY	S.S.R.
DRAWN BY	D.B./G.J.R.
CHECKED BY	T.P.W./H.J.R.
DATE	05/2016
SCALE	NONE
JOB NUMBER	PA160150302
SHEET NUMBER	4
OF	9

W:\STRUC\ML\MWCH\2016\05-LEVEL 3 LAYOUT DETAIL.DGN 04-18-2016

1 2 3 4 5 6 7 8 9 10



E. MICHIGAN ST.

N. MILWAUKEE ST.

LEVEL 3

LEGEND
 = ARROW PAINTED ON GROUND FOR TRAFFIC FLOW SEE DETAIL SHEET 7

PAGE QUANTITIES		
	CONCRETE SURFACE REPAIR- HORIZONTAL	5 SF
	CONCRETE SURFACE REPAIR- VERTICAL AND OVERHEAD	9 SF
	EPOXY INJECTED CRACK REPAIR	46 LF
	HEAVY DUTY VEHICULAR TRAFFIC COATING	25,815 SF
	EPOXY VEHICULAR TRAFFIC COATING	1800 SF
	PARKING STALLS	84

City of Milwaukee
 Department of Public Works
 Infrastructure Services Division

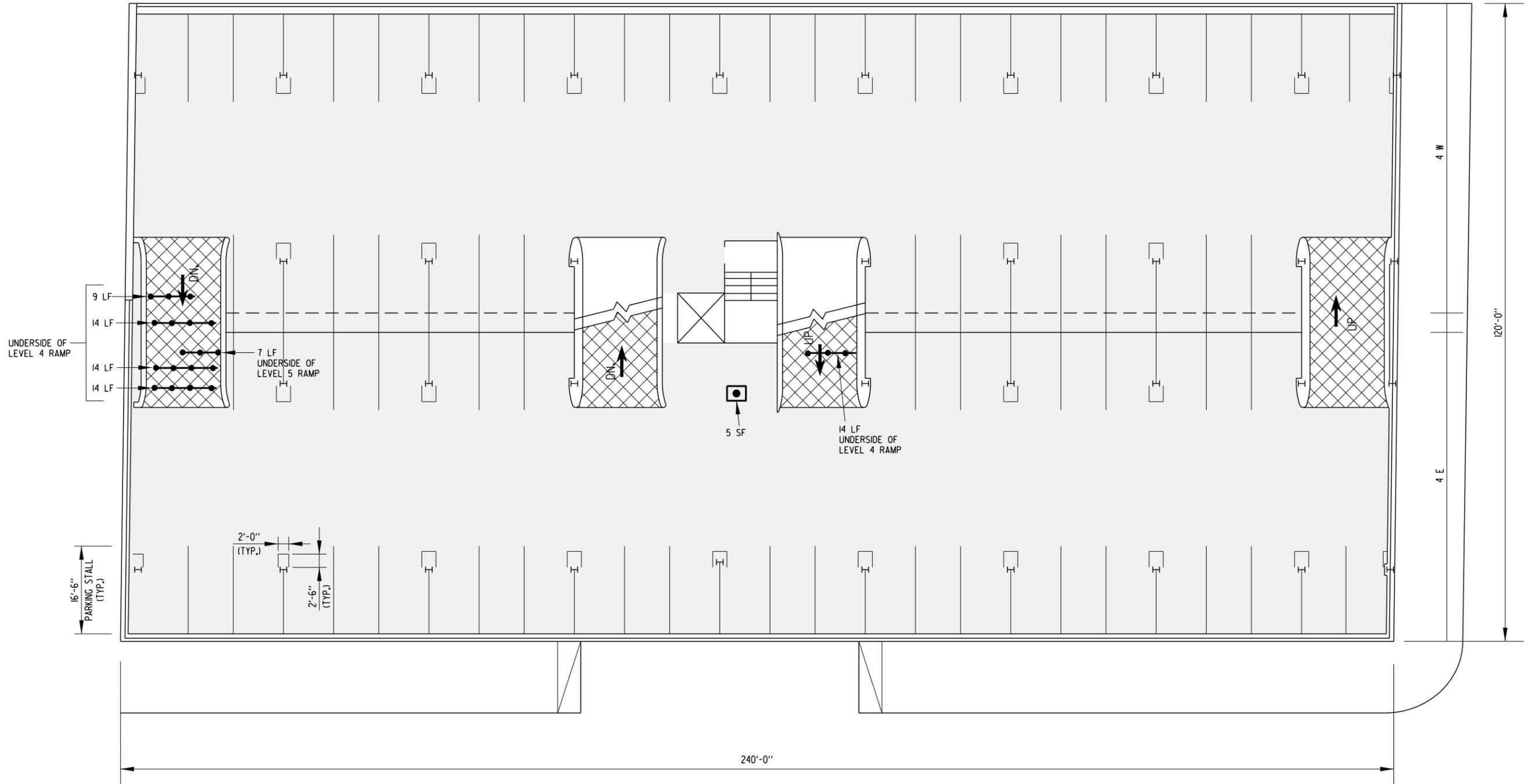
**MILWAUKEE-MICHIGAN PARKING STRUCTURE
 535 NORTH MILWAUKEE STREET
 TRAFFIC DECK RECOATING AND
 REPAIRS OF PARKING LEVELS 1-4
 LEVEL 3 PLAN**

REVISIONS

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DESIGNED BY
S.S.R.
 DRAWN BY
D.B./G.J.R.
 CHECKED BY
T.P.W./H.J.R.
 DATE
05/2016
 SCALE
NONE
 JOB NUMBER
PA160150302
 SHEET NUMBER
5
 OF
9

1 2 3 4 5 6 7 8 9 10



N. MILWAUKEE ST.

E. MICHIGAN ST.

LEVEL 4

LEGEND

→ = ARROW PAINTED ON GROUND FOR TRAFFIC FLOW SEE DETAIL SHEET 7

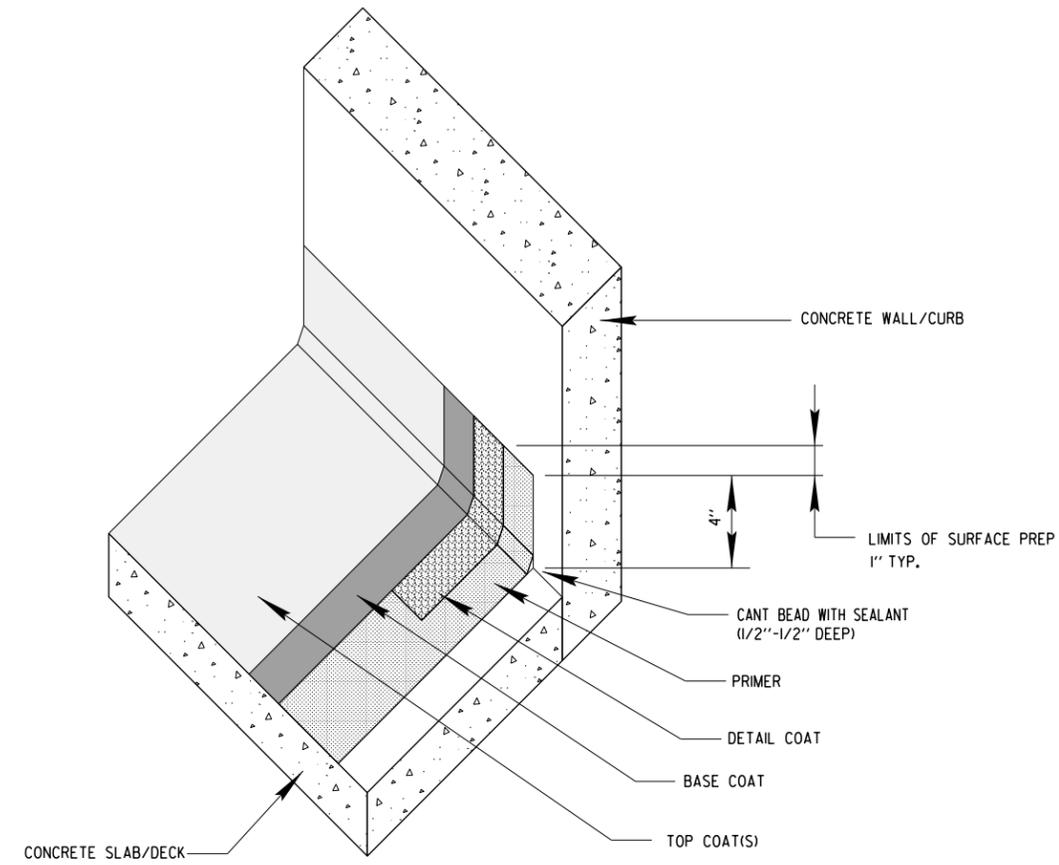
PAGE QUANTITIES		
	CONCRETE SURFACE REPAIR- HORIZONTAL	5 SF
	EPOXY INJECTED CRACK REPAIR	72 LF
	HEAVY DUTY VEHICULAR TRAFFIC COATING	25,815 SF
	EPOXY VEHICULAR TRAFFIC COATING	1,350 SF
	PARKING STALLS	84

**MILWAUKEE-MICHIGAN PARKING STRUCTURE
535 NORTH MILWAUKEE STREET
TRAFFIC DECK RECOATING AND
REPAIRS OF PARKING LEVELS 1-4
LEVEL 4 PLAN**

REVISIONS

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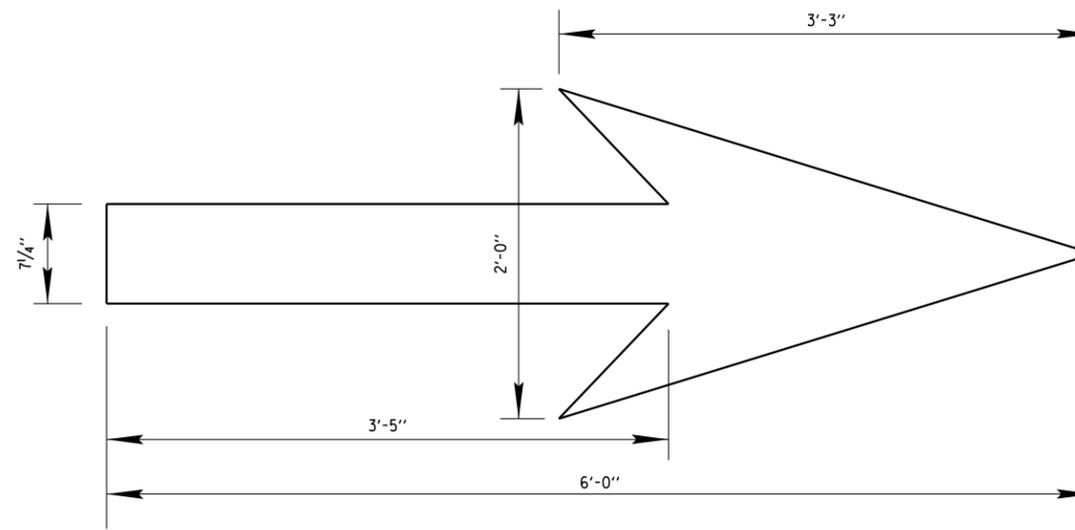
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SHEET NUMBER 6	
OF 9	



WALL SLAB JOINT DETAIL

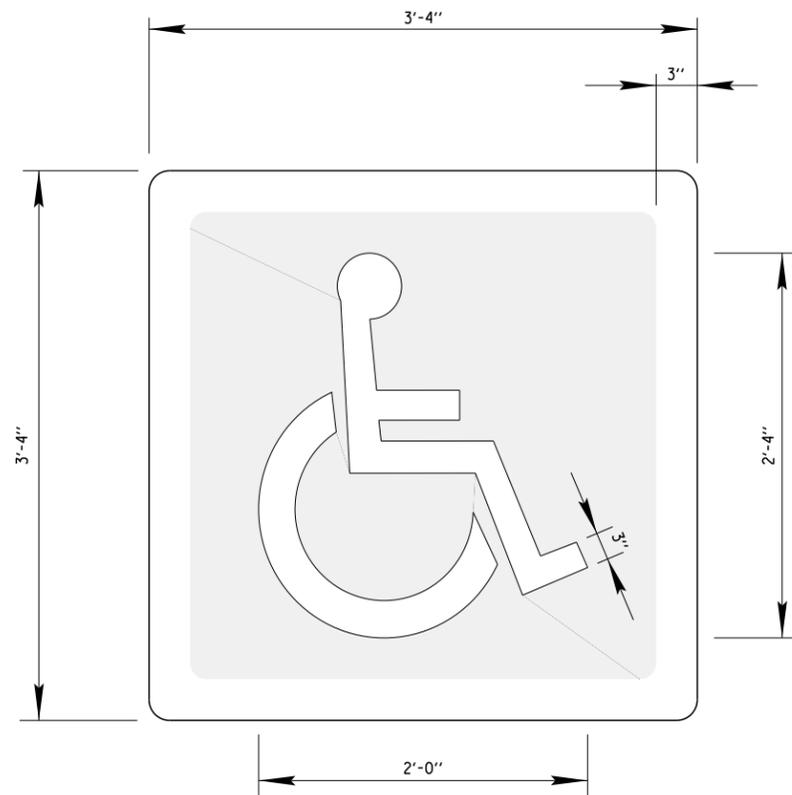
NOTES:

- CARE SHOULD BE TAKEN TO AVOID APPLYING THE PRIMER ONTO THE SEALANT AT LOCATIONS OF 4-LAYER COATING APPLICATION.
- FOR AREAS WHERE RECOATING, SEALANT IS REQUIRED AT CURB FACE/WALL AND DECK/SLAB INTERSECTION, APPLY 1/2" X 1/2" BEAD SEALANT OVER CLEAN SURFACES AND FOLLOW RECOAT SPECIFICATIONS.
- THIS WORK IS INCLUDED IN COSTS OF BID ITEMS "HEAVY DUTY VEHICULAR TRAFFIC COATING" AND "EPOXY VEHICULAR TRAFFIC COATING".



ARROW DETAIL

FEDERAL STANDARD 13538 "TRAFFIC YELLOW"



HANDICAP SYMBOL DETAIL

PAINT WITH FEDERAL STANDARD 15080 "HANDICAP BLUE"
BACKGROUND, FEDERAL STANDARD 17886 "FEDERAL HIGHWAY WHITE"
BORDER AND SYMBOL

REVISIONS

DESIGNED BY

S.S.R.

DRAWN BY

D.B./G.J.R.

CHECKED BY

H.J.R./T.P.W.

DATE

05/2016

SCALE

NONE

JOB NUMBER

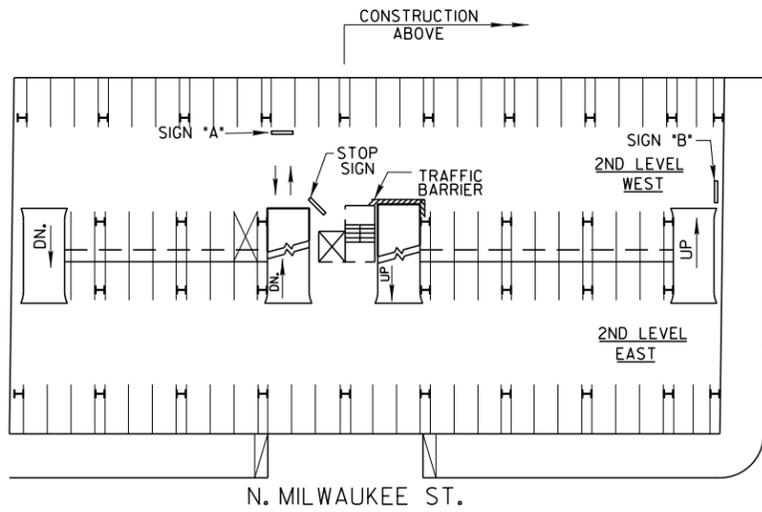
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SHEET NUMBER

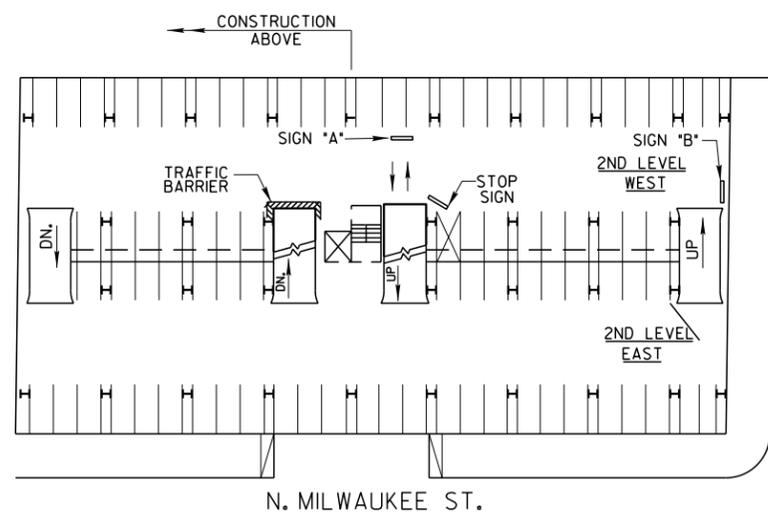
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OF

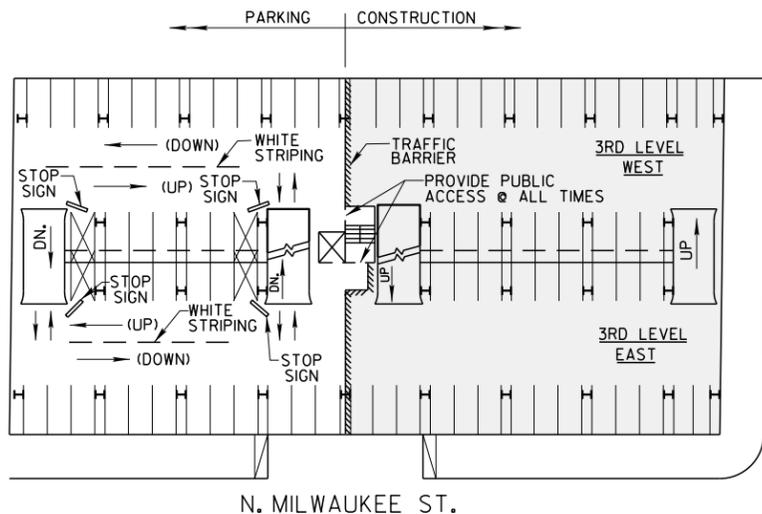
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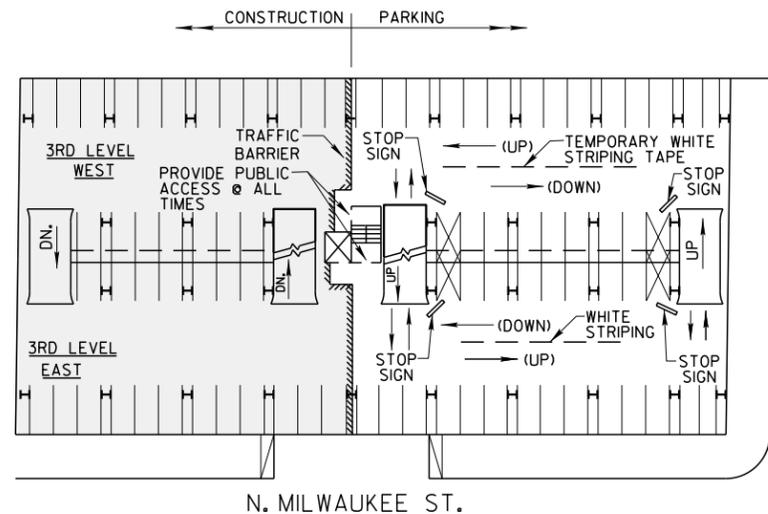
PHASE 1
TRAFFIC PATTERN - LEVEL 2



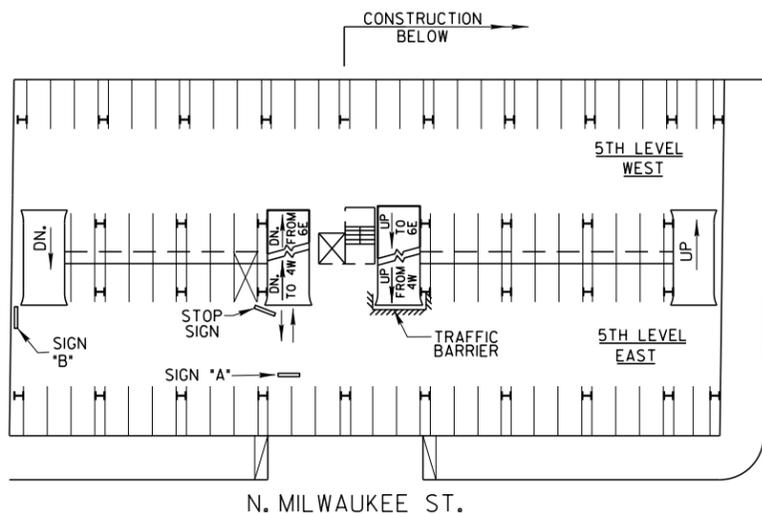
PHASE 2
TRAFFIC PATTERN - LEVEL 2



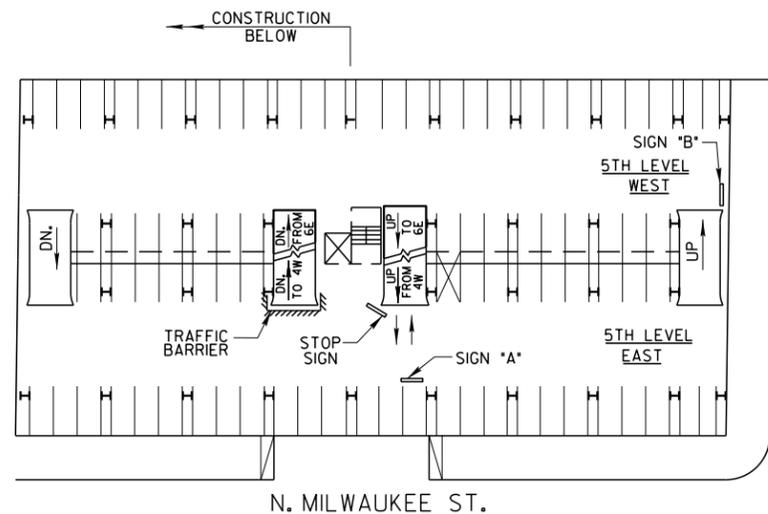
PHASE 1
TRAFFIC PATTERN - LEVEL 3
(LEVEL 4 SIMILAR)



PHASE 2
TRAFFIC PATTERN - LEVEL 3
(LEVEL 4 SIMILAR)



PHASE 1
TRAFFIC PATTERN - LEVEL 5

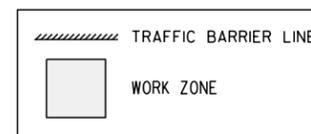


PHASE 2
TRAFFIC PATTERN - LEVEL 5



NOTES

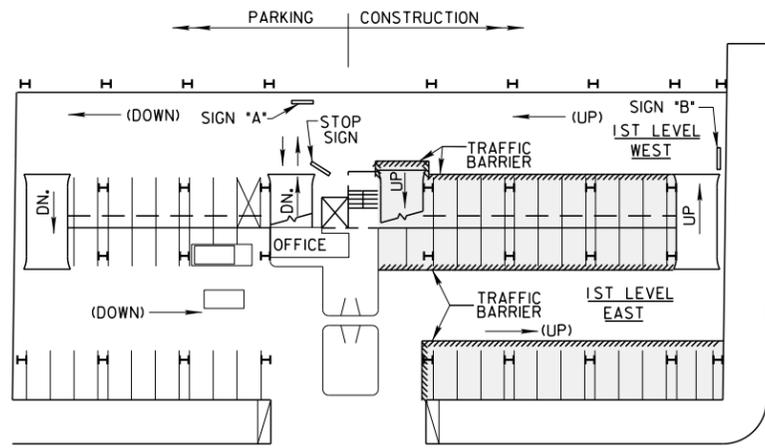
1. EACH PHASE RENOVATION SHALL BE COMPLETED AND FULLY OPENED TO PARKING PRIOR TO STARTING WORK ON THE NEXT PHASE. SEE SPECS.
2. AT THE DIRECTION OF THE ENGINEER, ANY EXISTING SIGNS WHICH MAY CONTRADICT OR CONFLICT WITH THE INTENT OF THE TEMPORARY SIGNS SHALL BE COVERED BY THE CONTRACTOR.
3. MAINTAIN PUBLIC ACCESS TO ELEVATOR OR STAIRS AT ALL TIMES.
4. "X" DENOTES A PARKING STALL TO BE BARRICADED AS SHOWN ON TRAFFIC PATTERN DRAWINGS.
5. SIGNS SHALL BE CONSTRUCTED OF PLASTIC COATED PLYWOOD WITH A MINIMUM THICKNESS OF 3/16".
6. ALL "STOP" SIGNS SHALL HAVE A "TWO WAY TRAFFIC PROCEED WITH CAUTION" SIGN MOUNTED BENEATH THEM.
7. BORDERS ON SIGNS SHALL BE 1/2" THICK 1/4" FROM EDGE.
8. PROVIDE TRAFFIC BARRIER TO PREVENT TRAFFIC FROM DRIVING INTO CONSTRUCTION AREAS IN ADDITION TO ENCLOSURE TO REDUCE DUST FROM EXITING CONSTRUCTION AREA.
9. ALL COSTS FOR SIGNS, BARRIERS, STRIPING, ETC. AS SHOWN IN THESE PLANS AND AS NEEDED TO PROVIDE SAFE, CONTINUOUS USE OF THE STRUCTURE SHALL BE INCLUDED IN THE BID ITEM "TRAFFIC CONTROL AND CONSTRUCTION STAGING".



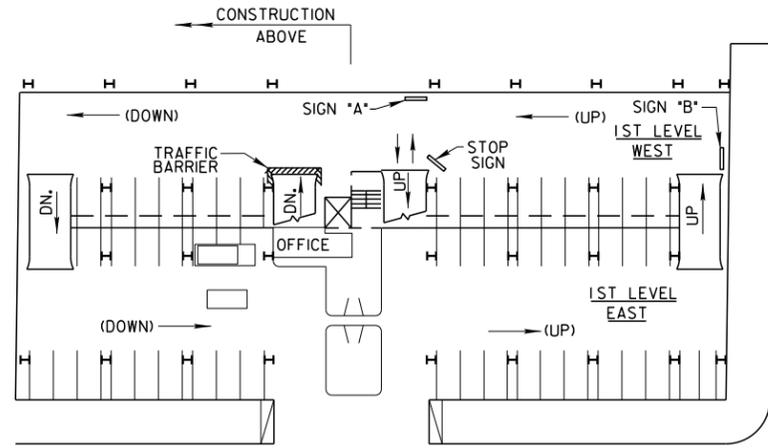
TEMPORARY SIGNS

SIGN	SIZE	COLOR	LETTERS	BORDER
STOP SIGN SHALL BE REFLECTORIZED	24" OCTAGON	RED PRIME COAT RED ENAMEL FINISH COAT	WHITE BLOCK LETTERS MIN. 8" HIGH	WHITE
TWO WAY TRAFFIC PROCEED W/ CAUTION (TO BE MOUNTED BENEATH ALL "STOP" SIGNS)	18" x 60"	WHITE PRIME COAT WHITE ENAMEL FINISH COAT	BLACK BLOCK LETTERS MIN. 6" HIGH	BLACK
SIGN "A" - TURN	24" x 24"	WHITE PRIME COAT WHITE ENAMEL FINISH COAT	BLACK BLOCK LETTERS MIN. 6" HIGH BLACK ARROW MIN. 2" THICK SHAFT	BLACK
SIGN "B" - WRONG WAY DO NOT ENTER	18" x 48"	WHITE PRIME COAT WHITE ENAMEL FINISH COAT	BLACK BLOCK LETTERS MIN. 6" HIGH	BLACK

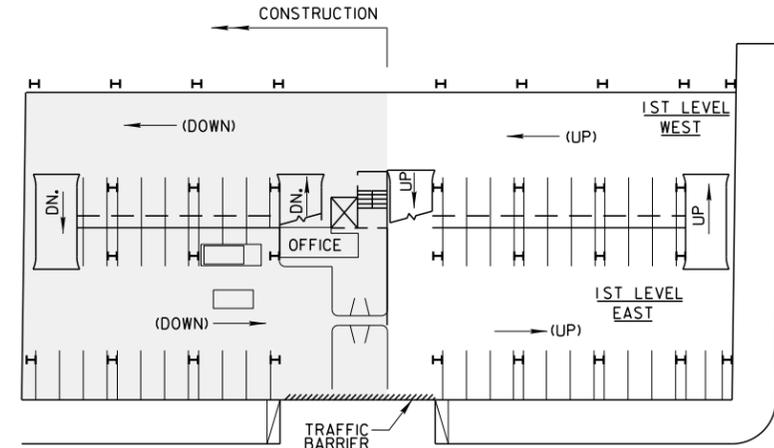
REVISIONS	
DESIGNED BY T.P.W.	SCALE NONE
DRAWN BY T.P.W.	JOB NUMBER PA160150302
CHECKED BY H.J.R.	SHEET NUMBER 8
DATE 05/2016	OF 9



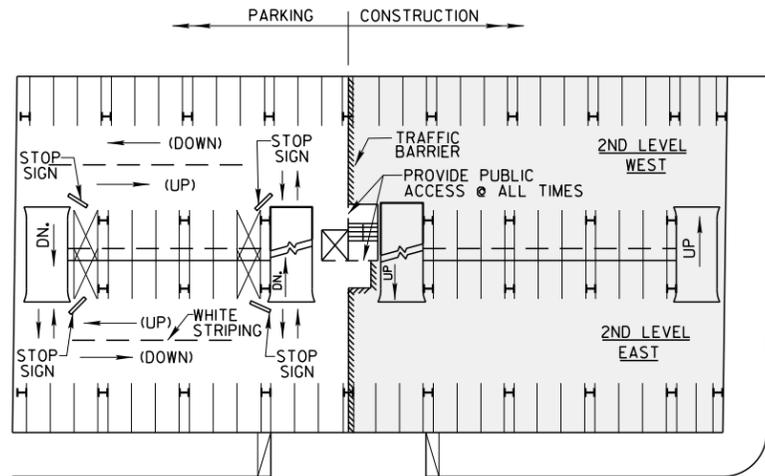
N. MILWAUKEE ST.
PHASE 3
TRAFFIC PATTERN - LEVEL 1



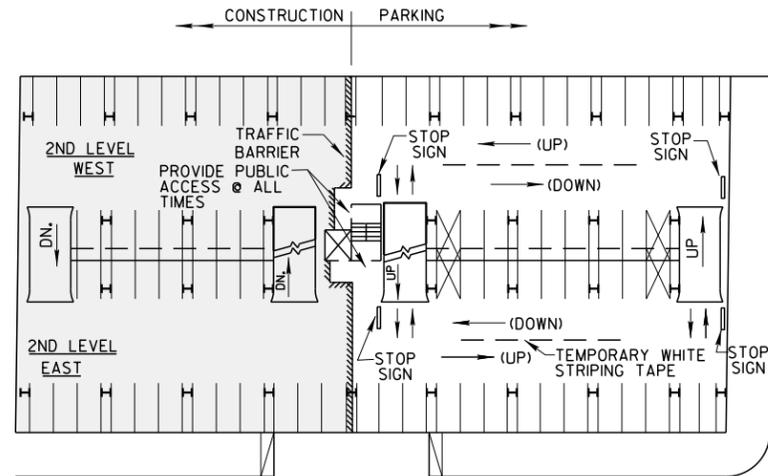
N. MILWAUKEE ST.
PHASE 4
TRAFFIC PATTERN - LEVEL 1



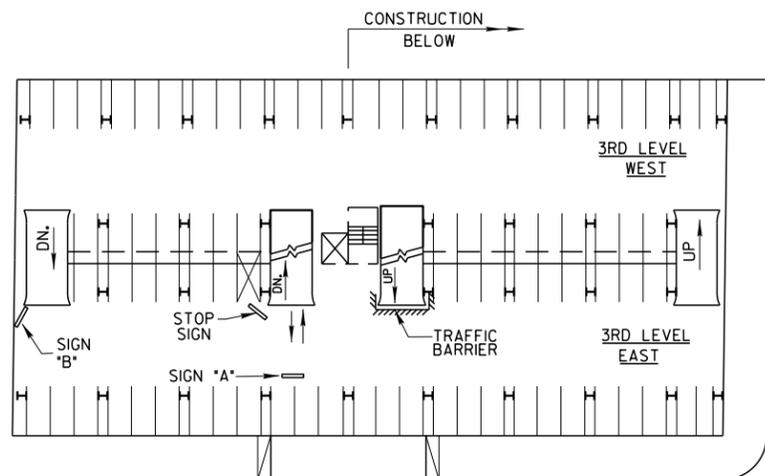
N. MILWAUKEE ST.
PHASE 5
TRAFFIC PATTERN - LEVEL 1



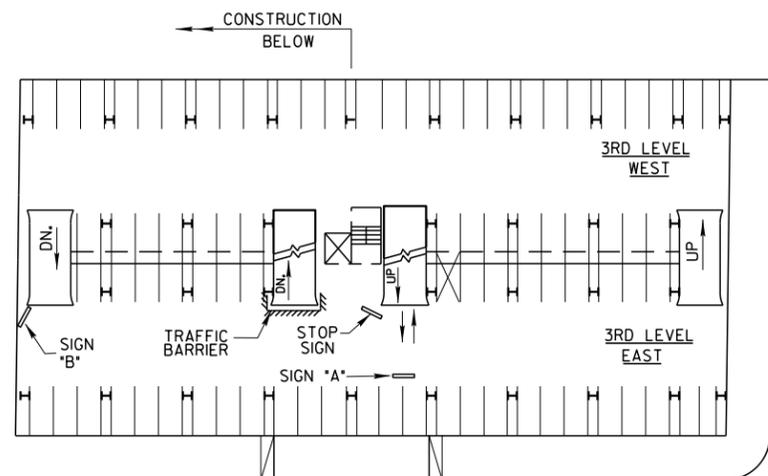
N. MILWAUKEE ST.
PHASE 3
TRAFFIC PATTERN - LEVEL 2



N. MILWAUKEE ST.
PHASE 4
TRAFFIC PATTERN - LEVEL 2



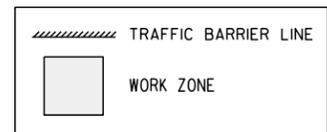
N. MILWAUKEE ST.
PHASE 3
TRAFFIC PATTERN - LEVEL 3



N. MILWAUKEE ST.
PHASE 4
TRAFFIC PATTERN - LEVEL 3

NOTES

1. EACH PHASE RENOVATION SHALL BE COMPLETED AND FULLY OPENED TO PARKING PRIOR TO STARTING WORK ON THE NEXT PHASE. SEE SPECS.
2. PHASE 5 MUST BE COMPLETED ON APPROVED WEEKENDS, STARTING AT 8:00 P.M. ON FRIDAY AND RE-OPENING TO TRAFFIC ON MONDAY AT 5:00 A.M. SHOTBLASTING AND COATING MUST BE COMPLETED AS DESCRIBED IN THE SPECIFICATIONS IN ONE WEEKEND.
3. AT THE DIRECTION OF THE ENGINEER, ANY EXISTING SIGNS WHICH MAY CONTRADICT OR CONFLICT WITH THE INTENT OF THE TEMPORARY SIGNS SHALL BE COVERED BY THE CONTRACTOR.
4. MAINTAIN PUBLIC ACCESS TO ELEVATOR OR STAIRS AT ALL TIMES.
5. "X" DENOTES A PARKING STALL TO BE BARRICADED AS SHOWN ON TRAFFIC PATTERN DRAWINGS.
6. SIGNS SHALL BE CONSTRUCTED OF PLASTIC COATED PLYWOOD WITH A MINIMUM THICKNESS OF 3/16".
7. ALL "STOP" SIGNS SHALL HAVE A "TWO WAY TRAFFIC PROCEED WITH CAUTION" SIGN MOUNTED BENEATH THEM.
8. BORDERS ON SIGNS SHALL BE 1/2" THICK 1/4" FROM EDGE.
9. PROVIDE TRAFFIC BARRIER TO PREVENT TRAFFIC FROM DRIVING INTO CONSTRUCTION AREAS IN ADDITION TO ENCLOSURE TO REDUCE DUST FROM EXITING CONSTRUCTION AREA.
10. ALL COSTS FOR SIGNS, BARRIERS, STRIPING, ETC. AS SHOWN IN THESE PLANS AND AS NEEDED TO PROVIDE SAFE, CONTINUOUS USE OF THE STRUCTURE SHALL BE INCLUDED IN THE BID ITEM "TRAFFIC CONTROL AND CONSTRUCTION STAGING".



TEMPORARY SIGNS

SIGN	SIZE	COLOR	LETTERS	BORDER
SIGN SHALL BE REFLECTORIZED	24" OCTAGON	RED PRIME COAT RED ENAMEL FINISH COAT	WHITE BLOCK LETTERS MIN. 8" HIGH	WHITE
(TO BE MOUNTED BENEATH ALL "STOP" SIGNS)	18" x 60"	WHITE PRIME COAT WHITE ENAMEL FINISH COAT	BLACK BLOCK LETTERS MIN. 6" HIGH	BLACK
SIGN "A" -	24" x 24"	WHITE PRIME COAT WHITE ENAMEL FINISH COAT	BLACK BLOCK LETTERS MIN. 6" HIGH BLACK ARROW MIN. 2" THICK SHAFT	BLACK
SIGN "B" -	18" x 48"	WHITE PRIME COAT WHITE ENAMEL FINISH COAT	BLACK BLOCK LETTERS MIN. 6" HIGH	BLACK

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