Angle Air Entrainn AF Anchor Bolt AB ADDL Additional ADDLAdditionalADHAdhesiveALTAlternateARCHArchitecturalB or BOTBottomB/Bottom OfBLDGBuildingBLKGBlockingBMUBrick MasonBPBaseplateBRBFBuckling ResBraced Fram

 BRBF
 Buckling Res

 BRG
 Bearing

 BTWN
 Between

 C
 Camber

 CANT
 Cantilever

 CB
 Castellated E

 C'BORE
 Counterbore

 CFMF
 Cold Formed

 Framing
 CL or €

 CIP
 Cast in Place

 CJ
 Construction

 Control Joint
 CJP

 CIP
 Complete Jo

 Penetration
 Penetration

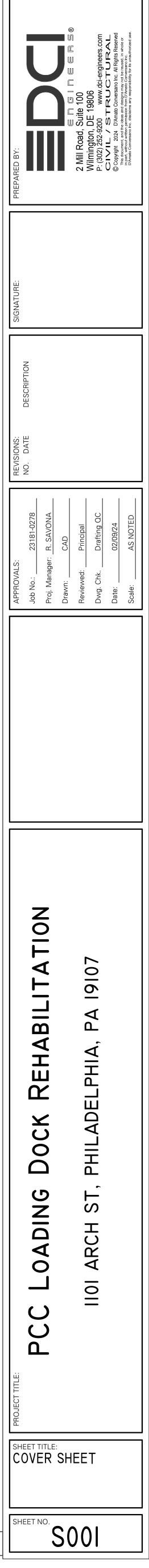
Control Joint CJP Complete Jo Penetration CLR Clear CLG Ceiling CMU Concrete Ma COL Column CONC Concrete CONN Connection CONST Construction CONST Construction CONST Construction CONST Construction CONST Construction CONT Continuous C'SINK Countersink CTRD Centered DB Drop Beam DBA Deformed Ba DBL Double DEMO Demolish DEV Developmen DF Douglas Fir DIA Diameter/Ø DIAG Diagonal DIST Distributed DL Dead Load DN Down DO Ditto DP Depth/Deep DWG Drawing (E) Existing EA Each EF Each Face EL Elevation EFEach FaceELElevationELECElectricalELEVElevatorEMBEDEmbedmentENGREngineerEQEqualEQUIPEquipmentEWEach WayEXPExpansion

ABBREVIATIONS

	AB	BREVIATIONS		
	EXP JT	Expansion Joint	PERP	Perpendicular
nment	EXT	Exterior	PLWD	Plywood
olt	FB	Factory-Built	PJP	Partial Joint Penetration
	FD	Floor Drain	PREFAB	Prefabricated
	FDN	Foundation	PSF	Pounds per Square Foot
	FIN	Finish	PSI	Pounds Per Square Inch
ıral	FLR	Floor	PSL	Parallel Strand Lumber
	FRP	Fiberglass Reinforced Plastic	P-T	Post-Tensioned
f	FRT	Fire Retardant Treated	PT	Pressure Treated
	FTG	Footing	R	Radius
	F/	Face of	RD REF	Roof Drain Refer/Reference
onry Unit	GA GALV	Gage	REINF	Reinforcing
Restrained	GEOTECH	Galvanized Geotechnical	REQD	Required
	GL	Glue Laminated Timber	RET	Retaining
ame	GWB	Gypsum Wall Board	SB	Site-Built
	HDR	Header	SCBF	Special Concentric
	HF	Hem-Fir	002	Braced Frame
	HGR	Hanger	SCHED	Schedule
d Beam	HD	Hold-down	SER	Structural Engineer of
ore	HEF	Horizontal Each Face		Record
ned Metal	HORIZ	Horizontal	SFRS	Seismic Force-
	HP	High Point		Resisting System
,	HSS = TS	(Hollow Structural Section)	SHTHG	Sheathing
ninated Timber	IBC	International Building Code	SIM	Similar
ace	ID	Inside Diameter	SL	Slope/ Sloped
ion or	IE	Invert Elevation	SLBB	Short Leg Back-to-Back
bint	IF	Inside Face	SMF	Special Moment Frame
Joint	INT	Interior	SOG	Slab on Grade
on	k	Kips	SP	Southern Pine
	KSF	Kips Per Square Foot	SPEC	Specification
	LF	Lineal Foot	SQ	Square
Masonry Unit	LL	Live Load	SR	Studrail
	LLBB	Long Leg Back-to-Back	SF SST	Square Foot
	LLH	Long Leg Horizontal	STAGG	Stainless Steel
n	LLV	Long Leg Vertical	STAGG	Stagger/Staggered Standard
ion	LP LONGIT	Low Point Longitudinal	STIFF	Stiffener
IS	LSL	Laminated Strand Lumber	STL	Steel
nk	LVL	Laminated Veneer Lumber	STRUCT	Structural
m	LW	Light Weight	SWWJ	Solid Web Wood Joist
Bar Anchor	MAS	Masonry	SYM	Symmetrical
	MAX	Maximum	Т	Тор
	MECH	Mechanical	T/	Top Of
nent	MEP	Mechanical, Electrical,	T&B	Top & Bottom
ir		Plumbing	TC AX LD	Top Chord Axial Load
Ø	MEZZ	Mezzanine	TCX	Top Chord Extension
	MFR	Manufacturer	TDSE	Turned Down Slab Edge
d	MIN	Minimum	T&G	Tongue & Groove
d	MISC	Miscellaneous	THKND	Thickened
	NIC	Not In Contract	THRD	Threaded
	NLT	Nail-Laminated Timber	THRU	Through
ер	NTS	Not To Scale	TRANSV	Transverse
	NW	Normal Weight	TS TYP	Thickened Slab
	OC OCBF	On Center Ordinany Concentric Braced	UNO	Typical Unless Noted Otherwise
	UCBF	Ordinary Concentric Braced Frame	URM	Unreinforced Masonry
<u>,</u>	OD	Outside Diameter	Onivi	Unit
	OF	Outside Face	VEF	Vertical Each Face
	OPNG	Opening	VERT	Vertical
t	OPNG	Opposite	W	Wide
ent	OWSJ	Open Web Steel Joist	Ŵ/	With
	OWWJ	Open Web Wood Joist	W/O	Without
ıt	PL	Plate	WHS	Welded Headed Stud
	PAF	Powder Actuated Fastener	WP	Working Point
ı	PC	Precast	WWF	Welded Wire Fabric

STRUCTURAL SHEET LIST					
SHEET NUMBER	SHEET TITLE				
S001	COVER SHEET				
S002	GENERAL NOTES				
S100	OVERALL LOADING DOCK PLAN				
S101	OVERALL LOADING DOCK A PLAN				
S401	PARTIAL PLAN - AREA A				
S402	PARTIAL PLAN - AREA B				
S403	PARTIAL PLAN - AREA C				
S404	PARTIAL PLAN - LOADING DOCK C/D				
S501	TYPICAL DETAILS				
Sheet Total: 9					





<u>рсі радет:</u> 23181-0285 <u>Солтаст:</u> R. SAVONA

GENERAL				
PARAGRAPH	NOTES			
G1	ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ALL DRAWINGS AND SPECIFICATIONS CONTAINED HEREIN.			
G2	ALL WORK RELATED TO THE STAGING, CONSTRUCTION PRACTICES, AND SAFETY OF THE PROJECTS WORKERS AN PROPERTY SHALL BE CONSIDERED MEANS AND METHODS AND SHALL BE COMPLETED BY THE CONTRACTOR IN ACCORDANCE WITH STANDARD INDUSTRY PRACTICE AND ALL CODES AND STANDARDS. VISITS TO THE SITE MAD BY THE ENGINEER ARE FOR THE REVIEW OF THE STRUCTURAL WORK FOR GENERAL CONFORMANCE WITH THE DRAWINGS AND SPECIFICATIONS AND ARE NOT FOR THE REVIEW OF CONTRACTOR RESPONSIBILITIES, INCLUDING BUT NOT LIMITED TO PROJECT SAFETY AND MEANS AND METHODS OF CONSTRUCTION.			
G3	ALL DRAWINGS HAVE BEEN PREPARED IN ACCORDANCE WITH THE 2018 INTERNATIONAL BUILDING CODE, PENNSYLVANIA UNIFORM CONSTRUCTION CODE, AS WELL AS ALL REFERENCED STANDARDS CONTAINED THEREI			
G4	EVALUATION AND COMPLIANCE WITH LOADING RESTRICTIONS FOR MEANS AND METHODS OF CONSTRUCTION A WELL AS STAGING FOR OTHER TRADES ARE THE RESPONSIBILITY OF THE CONTRACTOR.			
G5	ALL WORK SHALL BE INSPECTED IN ACCORDANCE WITH CHAPTER 17 OF THE REFERENCED BUILDING CODE. SUBMIT ALL REPORTS TO THE ENGINEER OF RECORD FOR REVIEW. AT THE COMPLETION OF THE PROJECT, THE SPECIAL INSPECTION REPORT SHALL BE COMPLETED, SIGNED BY THE SPECIAL INSPECTOR, AND SUBMITTED TO THE ENGINEER OF RECORD FOR RECORD PURPOSES.			
G6	SCALING OF DRAWINGS TO DETERMINE DIMENSIONS OF ELEMENTS IS NOT PERMITTED.			
G7	STRUCTURAL DRAWINGS SHALL NOT BE REPRODUCED TO CREATE SHOP DRAWINGS OR SHORING DOCUMENTATION WITHOUT THE EXPRESS WRITTEN CONSENT OF MACINTOSH ENGINEERING.			
G8	ALL HORIZONTAL AND VERTICAL DIMENSIONS CONTAINED ON THE STRUCTURAL DRAWINGS WERE DEVELOPED B OTHER DISCIPLINES FOR THE PURPOSE OF THIS PROJECT. ANY DIMENSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHOULD BE COORDINATED WITH THE OTHER DISCIPLINE DRAWINGS.			
G9	THE STRUCTURAL DOCUMENTS ARE TO BE USED IN COORDINATION WITH THE ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS AS WELL AS THOSE OF ALL OTHER DISCIPLINES. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM PRIOR TO THE COMMENCEMENT OF WORK.			
G10	ALL REQUESTED CHANGES IN WORK BY THE CONTRACTOR ARE SUBJECT TO THE APPROVAL OF THE DESIGN TEA AND OWNER AND ARE CONSIDERED TO BE COMPLETED AT NO ADDITIONAL COST UNLESS SPECIFICALLY APPROVED. APPROVAL OF REQUESTED CHANGES DOES NOT CONSTITUTE APPROVAL OF AN INCREASE IN PROJEC COSTS.			

	SHOP DRAWING REQUIREMENTS					
PARAGRAPH	NOTES					
SD1	SHOP DRAWINGS SHALL BE SUBMITTED FOR THE FOLLOWING ITEMS FOR THIS THE PROJECT:					
SD1.1	CONCRETE MIX DESIGNS INCLUDING ALL LABORATORY TESTING, MATERIALS, ETC.					
SD1.2	ALL ADMIXTURES, SEALANTS, HARDENERS, COATINGS					
SD1.3	WATERPROOFING SYSTEM, DRAINAGE SYSTEMS					
SD2	ALL SHOP DRAWINGS NOTED ABOVE SHALL BE SUBMITTED IN A TIMELY MANNER TO ALLOW FOR A 10 BUSINESS DAY REVIEW PERIOD BY THE DESIGN TEAM. ALL SUBMITTED DRAWINGS SHALL CONTAIN THE CONSTRUCTION MANAGER REVIEW STAMP.					
SD3	SHOP DRAWINGS MAY BE SUBMITTED ELECTRONICALLY, HOWEVER, A MINIMUM OF ONE (1) HARD COPY SHALL BE PROVIDED FOR ALL SHOP DRAWINGS. IF NO HARD COPY IS PROVIDED, PRINTING AND TIME COSTS WILL BE CHARGED TO ORGANIZE AND PRINT SHOP DRAWINGS.					
SD4	ELECTRONIC SHOP DRAWINGS SHALL BE SUBMITTED AS AN ORGANIZED SINGLE FILE DOCUMENT. DRAWINGS SHALL BE ORGANIZED IN NUMERIC ORDER WITH ALL REFERENCED PLANS LOCATED FIRST IN THE SUBMITTAL.					
SD5	SHOP DRAWINGS WILL BE MARKED AS NOTED ON THE REVIEW STAMP. SHOP DRAWINGS MARKED "MAKE CORRECTIONS NOTED" ARE TO BE RE-SUBMITTED FOR RECORD PURPOSES AND WILL NOT BE RE-REVIEWED AS AN ADDITIONAL SUBMITTAL. REVIEW OF "MAKE CORRECTIONS NOTED" SHOP DRAWINGS BEYOND ONE RE-SUBMITTAL WILL REQUIRE ADDITIONAL FEE.					
SD6	CONTRACTOR SHALL PROVIDE DESIGN TEAM WITH A SHOP DRAWING SUBMITTAL SCHEDULE TO ALLOW THE ENGINEERING TEAM APPROPRIATE NOTICE OF SUBMITTALS, DUE DATES, AND ALLOW FOR APPROPRIATE STAFFING SCHEDULE SHALL BE PROVIDED PRIOR THE FIRST SUBMITTAL.					

CONCRETE					
PARAGRAPH	NOTES				
C1	ALL CONCRETE SHALL BE READY-MIX AND PROPORTIONED ON THE BASIS OF LABORARORY TRIAL MIXTURE OR FIELD TEST DATA OR BOTH ACCORDING TO ACI301. DESIGN MIXTURES SHALL MEET THE REQUIREMENTS BELOW:				
C1.1	TOPPING SLABS				
C1.1.1	COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS MINIMUM.				
C1.1.2	EXPOSURE CATEGORY: C1				
C2	ALL CONCRETE EXPOSED TO EXTERIOR CONDITIONS SHALL HAVE CHARACTERISTICS IN ACCORDANCE WITH ACI BUILDING CODE (ACI 318) AND THE 2018 INTERNATIONAL BUILDING CODE, PENNSYLVANIA UNIFORM CONSTRUCTION CODE				
C3	CONTRACTOR IS RESPONSIBLE FOR THE PREPARATION OF DESIGN MIXTURES FOR EACH APPLICATION/LOCATION USED IN CONSTRUCTION AS NOTED ABOVE AND ON THE DRAWINGS.				
C4	ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE LATEST EDITIONS OF THE ACI BUILDING CODE (ACI 318), THE ACI DETAILING MANUAL (SP-66), AND THE SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301).				
C5	ALL WWF SHALL BE MANUFACTURED FROM HIGH STRENGTH STEEL CONFORMING TO ASTM A185. LAP ALL WWF MINIMUM OF 6 INCHES.				
C6	SHOP DRAWINGS FOR CONCRETE MIX DESIGNS SHALL INCLUDE THE FOLLOWING INFORMATION:				
C6.1	MIXTURE IDENTIFICATION BY APPLICATION/LOCATION				
C6.2	SPECIFIED COMPRESSIVE STRENGTH, f'C, THAT IS APPLICABLE FOR THE APPLICATION				
C6.3	SPECIFIED EXPOSURE CLASS				
C6.4	DOCUMENTATION OF STRENGTH TEST RECORDS OF SIMILAR CLASS OF CONCRETE USED TO ESTABLISH STANDARI DEVIATION IN ACCORDANCE WITH ACI 318, WHEN TEST RECORDS EXIST				
C6.5	REQUIRED AVERAGE COMPRESSIVE STRENGTH, f'CR, FOR EACH CLASS OF CONCRETE				
C6.6	DOCUMENTATION OF REQUIRED AVERAGE COMPRESSIVE STRENGTH, f'CR, USED AS THE BASIS FOR SELECTION OF CONCRETE PROPORTIONS				
C6.7	INTENDED PLACEMENT METHOD				
C6.8	SLUMP OR SLUMP FLOW				
C6.9	AIR CONTENT				
C6.10	DRY AND WET DENSITY				
C6.11	W/C RATIO				
C6.12	DOCUMENTATION SUPPORTING OTHER SPECIFIED REQUIREMENTS OF CONCRETE MIXTURES				
C6.13	NOMINAL MAXIMUM AGGREGATE SIZE OR SIZE NUMBER				
C6.14	TYPE AND INFORMATION ABOUT THE INGREDIENT MATERIALS PROPOSED FOR USE.				
C7	CONCRETE TESTING SHALL CONFORM TO THE FOLLOWING:				
C7.1	SAMPLES SHALL BE TAKEN AT LEAST ONCE PER DAY AND ONCE FOR EACH 50cy OR 5000sf OF PLACED CONCRETE				
C7.2	TAKE SLUMP, AIR, TEMPERATURE FOR EACH CONCRTE CYLINDER SET TAKEN				
C7.3	CYLINDER TESTS SHALL BE AS FOLLOWS FOR EACH SAMPLE TAKEN:				
C7.3.1	TEST ONE CYLINDER AT 7 DAYS				
C7.3.2	TEST THREE CYLINDERS AT 28 DAYS				
C7.3.3	TEST ONE CYLINDER AT 56 DAYS				
C7.3.4	PROVIDE ONE ADDITIONAL SET OF TWO FIELD CURED SPECIMENS FOR AND ADDITIONAL TEST WHERE THE COMPRESSIVE STRENGTH IS ABOVE 6,000PSI				

	EXISTING CONSTRUCTION				
PARAGRAPH	NOTES				
E1	THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, COORDINATION AND INSTALLATION OF SHORING AND STABILIZATION OF EXISTING CONSTRUCTION AS REQUIRED TO PERFORM THE WORK CONTAINED IN THE DRAWINGS AND SPECIFICATIONS.				
E2	DIMENSIONS SHOWN REFERRING TO EXISTING STRUCTURES ARE FOR REFERENCE ONLY. ALL DIMENSIONS RELATED TO EXISTING BUILDINGS AND FRAMING SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORK.				
E3	THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY INFORMATION RELATING TO THE EXISTING STRUCTURE THAT HAS BEEN UNCOVERED DUE TO DEMOLITION AND REMOVAL OF FINISHES.				

METAL FLOOR AND ROOF DECK					
PARAGRAPH	NOTES				
D1	FLOOR DECK FOR THE PROJECT SHALL BE AS FOLLOWS:				
D1.1	GALVANIZED COMPOSITE METAL DECK TO MATCH EXISTING PROFILE AND GAGE.				
D2	ALL FLOOR DECK SHALL BE MANUFACTURED BY VULCRAFT, INC. OR APPROVED EQUAL. FLOOR DECK FABRICATION AND INSTALLATION MUST COMPLY WITH THE LATEST STEEL DECK INSTITUTE STANDARDS.				

1.2 BONDING/ANTI-CORROSION AGENTS A. EPOXY-MODIFIED, CEMENTITIOUS BONDING AND ANTICORROSION AGENT: MANUFACTURED PRODUCT THAT CONSISTS OF WATER-INSENSITIVE EPOXY ADHESIVE, PORTLAND CEMENT, AND WATER-BASED SOLUTION OF CORROSION-INHIBITING CHEMICALS THAT FORMS A PROTECTIVE FILM ON STEEL REINFORCEMENT.

A. PATCHING MORTAR REQUIREMENTS: 1. ONLY USE PATCHING MORTARS THAT ARE RECOMMENDED BY MANUFACTURER FOR EACH APPLICABLE HORIZONTAL. VERTICAL, OR OVERHEAD USE ORIENTATION. 2. COLOR AND AGGREGATE TEXTURE: PROVIDE PATCHING MORTAR AND AGGREGATES OF COLORS AND SIZES NECESSARY TO PRODUCE PATCHING MORTAR WHERE INDICATED THAT MATCHES EXISTING, ADJACENT, EXPOSED CONCRETE. BLEND SEVERAL AGGREGATES IF NECESSARY TO ACHIEVE SUITABLE MATCHES 3. COARSE AGGREGATE FOR PATCHING MORTAR: ASTM C 33/C 33M, WASHED AGGREGATE, SIZE NO. 8, CLASS 5S. ADD

TO PATCHING-MORTAR MIX ONLY AS PERMITTED BY PATCHING-MORTAR MANUFACTURER. B. JOB-MIXED PATCHING MORTAR: 1 PART PORTLAND CEMENT AND 2-1/2 PARTS FINE AGGREGATE COMPLYING WITH ASTM C 144, EXCEPT 100 PERCENT PASSING A NO. 16 SIEVE. C. RAPID-STRENGTHENING, CEMENTITIOUS PATCHING MORTAR: PACKAGED, DRY MIX, ASTM C 928/C 928M FOR REPAIR OF CONCRETE.

C. IPA; IPATOP VO 2. COMPRESSIVE STRENGTH: NOT LESS THAN 4000 PSI AT 28 DAYS WHEN TESTED ACCORDING TO ASTM C 109/C 109M. 1.4 JOINT SEALANT A. ONE-COMPONENT, ELASTOMERIC POLYURETHANE SEALANT.

C. COLOR: MATCHING EXISTING JOINT.

2.1 EXAMINATION

2.2 PREPARATION

STRUCTURAL — REMEDIATION SPECIFICATIONS

PART 1 <u>— PRODUCTS</u>

1.1 MANUFACTURERS

A. SOURCE LIMITATIONS: FOR REPAIR PRODUCTS, OBTAIN EACH COLOR, GRADE, FINISH, TYPE, AND VARIETY OF PRODUCT FROM SINGLE SOURCE AND FROM SINGLE MANUFACTURER WITH RESOURCES TO PROVIDE PRODUCTS OF CONSISTENT QUALITY IN APPEARANCE AND PHYSICAL PROPERTIES.

- 1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
- A) BASE CORPORATION; CONSTRUCTION SYSTEMS; EMACO P 124
- B) EUCLID CHEMICAL COMPANY (THE); AN RPM COMPANY; DURAL 335 C) IPA; IPANOL — C

B. MORTAR SCRUB COAT: MIX CONSISTING OF 1 PART PORTLAND CEMENT AND 1 PART FINE AGGREGATE COMPLYING WITH ASTM C 144 EXCEPT 100 PERCENT PASSING A NO. 16 SIEVE.

1.3 PATCHING MORTAR

1. <u>PRODUCTS:</u> SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING: A) BASE CORPORATION; CONSTRUCTION SYSTEMS; MASTEREMACO N 400 RS MASTEREMACO T 1060 MASTEREMACO

B) EUCLID CHEMICAL COMPANY; SPEED CRETE RED LINE.

C) IPA; IPATOP HES

2. COMPRESSIVE STRENGTH: NOT LESS THAN 4000 PSI AT 28 DAYS WHEN TESTED ACCORDING TO ASTM C 109/C 109M. D. POLYMER-MODIFIED, CEMENTITIOUS PATCHING MORTAR: PACKAGED, DRY MIX FOR REPAIR OF CONCRETE AND THAT CONTAINS A LATEX ADDITIVE AS EITHER A DRY POWDER OR A SEPARATE LIQUID THAT IS ADDED DURING MIXING. 1. <u>PRODUCTS:</u> SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:

A. <u>BASF CORPORATION; CONSTRUCTION SYSTEMS;</u> MASTEREMACO N 423 RS, MASTEREMACO N 400, MASTEREMACO N 400 RS, MASTEREMACO S 440 CI MASTEREMACO T 302.

B. EUCLID CHEMICAL COMPANY; DURALTOP FLOWABLE MORTAR.

1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:

A) BASF CORPORATION; CONSTRUCTION SYSTEMS; MASTERSEAL NP1

- B) EUCLID CHEMICAL COMPANY (THE); AN RPM COMPANY; ECOLASTIC 1SL/1NS. B. POLYUREA JOINT FILLER: TWO-COMPONENT, SEMI-RIGID, 100 PERCENT SOLIDS, POLYUREA RESIN WITH A TYPE A SHORE DUROMETER HARDNESS OF AT LEAST 80 ACCORDING TO ASTM D 2240.
- 1. <u>PRODUCTS:</u> SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
- A) BASE CORPORATION; CONSTRUCTION SYSTEMS; MASTERSEAL CR 100.

1.5 EPOXY CRACK-INJECTION MATERIALS

A. EPOXY CRACK-INJECTION ADHESIVE: ASTM C 881/C 881M, BONDING SYSTEM TYPE I FREE OF VOCS.

- 1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
- A) BASE CORPORATION; CONSTRUCTION SYSTEMS; MASTERINJECT 1380, MASTERINJECT 1500.
- B) EUCLID CHEMICAL COMPANY; DURAL INJECTION GEL.
- C) IPA; IPANOL LV 2. CAPPING ADHESIVE: PRODUCT MANUFACTURED FOR USE WITH CRACK-INJECTION ADHESIVE BY SAME
- MANUFACTURER. 3. COLOR: PROVIDE EPOXY CRACK-INJECTION ADHESIVE AND CAPPING ADHESIVE THAT BLEND WITH EXISTING, ADJACENT CONCRETE AND DO NOT STAIN CONCRETE SURFACE.

1.6 CORROSION-INHIBITING MATERIALS

A. CORROSION-INHIBITING TREATMENT: WATERBORNE SOLUTION OF ALKALINE CORROSION-INHIBITING CHEMICALS FOR CONCRETE-SURFACE APPLICATION THAT PENETRATES CONCRETE BY DIFFUSION AND FORMS A PROTECTIVE FILM ON STEEL REINFORCEMENT.

- 1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
- A) BASE CORPORATION; CONSTRUCTION SYSTEMS; MASTERPROTECT 8000 CI
- B) EUCLID CHEMICAL COMPANY; DURALPREP 3020.
- C) IPA; IPANOL C

PART 2 — EXECUTION

A. NOTIFY ARCHITECT SEVEN DAYS IN ADVANCE OF DATES WHEN AREAS OF DETERIORATED OR DELAMINA

TED CONCRETE AND DETERIORATED REINFORCING BARS WILL BE LOCATED. B. PERFORM SURVEYS AS THE WORK PROGRESSES TO DETECT HAZARDS RESULTING FROM CONCRETE-MAINTENANCE

WORK.

A. ENSURE THAT SUPERVISORY PERSONNEL ARE ON-SITE AND ON DUTY WHEN CONCRETE MAINTENANCE WORK BEGINS AND DURING ITS PROGRESS.

B. PROTECT PERSONS, MOTOR VEHICLES, SURROUNDING SURFACES OF BUILDING BEING REPAIRED, BUILDING SITE, PLANTS. AND SURROUNDING BUILDINGS FROM HARM RESULTING FROM CONCRETE MAINTENANCE WORK.

- 1. COMPLY WITH EACH PRODUCT MANUFACTURER'S WRITTEN INSTRUCTIONS FOR PROTECTIONS AND PRECAUTIONS. PROTECT AGAINST ADVERSE EFFECTS OF PRODUCTS AND PROCEDURES ON PEOPLE AND ADJACENT MATERIALS, COMPONENTS, AND VEGETATION.
- 2. USE ONLY PROVEN PROTECTION METHODS APPROPRIATE TO EACH AREA AND SURFACE BEING PROTECTED. 3. PROVIDE TEMPORARY BARRICADES, BARRIERS, AND DIRECTIONAL SIGNAGE TO EXCLUDE PUBLIC FROM AREAS WHERE CONCRETE MAINTENANCE WORK IS BEING PERFORMED.
- 4. ERECT TEMPORARY PROTECTIVE COVERS OVER WALKWAYS AND AT POINTS OF PEDESTRIAN AND VEHICULAR ENTRANCE AND EXIT THAT MUST REMAIN IN SERVICE DURING COURSE OF CONCRETE MAINTENANCE WORK. 5. CONTAIN DUST AND DEBRIS GENERATED BY CONCRETE MAINTENANCE WORK AND PREVENT IT FROM REACHING THE PUBLIC OR ADJACENT SURFACES.
- 6. USE WATER-MIST SPRINKLING AND OTHER WET METHODS TO CONTROL DUST ONLY WITH ADEQUATE, APPROVED PROCEDURES AND EQUIPMENT THAT ENSURE THAT SUCH WATER WILL NOT CREATE A HAZARD OR ADVERSELY AFFECT OTHER BUILDING AREAS OR MATERIALS.
- 7. PROTECT FLOORS AND OTHER SURFACES ALONG HAUL ROUTES FROM DAMAGE, WEAR, AND STAINING. 8. PROVIDE SUPPLEMENTAL SOUND-CONTROL TREATMENT TO ISOLATE REMOVAL AND DISMANTLING WORK FROM OTHER AREAS OF THE BUILDING.
- 9. PROTECT ADJACENT SURFACES AND EQUIPMENT BY COVERING THEM WITH HEAVY POLYETHYLENE FILM AND WATERPROOF MASKING TAP OR A LIQUID STRIPPABLE MASKING AGENT. IF PRACTICAL, REMOVE ITEMS, STORE, AND REINSTALL AFTER POTENTIALLY DAMAGING OPERATIONS ARE COMPLETE.
- 10. NEUTRALIZE AND COLLECT ALKALINE AND ACID WASTES FOR DISPOSAL OFF OWNER'S PROPERTY.
- 11. DISPOSE OF DEBRIS AND RUNOFF FROM OPERATIONS BY LEGAL MEANS AND IN A MANNER THAT PREVENTS SOIL EROSION, UNDERMINING OF PAVING AND FOUNDATIONS, DAMAGE TO LANDSCAPING, AND WATER PENETRATION INTO BUILDING INTERIORS.

- DETERMINE CONDITION OF CONSTRUCTION TO BE REMOVED IN THE COURSE OF REPAIR. 1. VERIFY THAT AFFECTED UTILITIES HAVE BEEN DISCONNECTED AND CAPPED.
- SUPPORTS WHEN REQUIRED DURING PROGRESS OF REMOVAL WORK.
- D. REINFORCING-BAR PREPARATION: REMOVE LOOSE AND FLAKING RUST FROM EXPOSED REINFORCING BARS BY ABRASIVE BLAST CLEANING OR WIRE BRUSHING UNTIL ONLY TIGHTLY ADHERED LIGHT RUST REMAINS.
- 2. REMOVE ADDITIONAL CONCRETE AS NECESSARY TO PROVIDE AT LEAST 3/4-INCH CLEARANCE AT EXISTING AND REPLACEMENT BARS.
- 3. SPLICE REPLACEMENT BARS TO EXISTING BARS ACCORDING TO ACI 318 BY LAPPING, WELDING, OR USING
- MECHANICAL COUPLINGS.
- F. SURFACE PREPARATION FOR OVERLAYS:
- 1. REMOVE DELAMINATED MATERIAL AND DETERIORATED CONCRETE SURFACE MATERIAL
- 2. ROUGHEN SURFACE OF CONCRETE TO PRODUCE A SURFACE PROFILE MATCHING CSP 3 ACCORDING TO ICRI 310.2. 3. USE SAND BLASTING OR SHOT BLASTING.
- MATERIALS DETRIMENTAL TO SEALER APPLICATION.
- 1. USE SHOT BLASTING.
- 2.3 CONCRETE REMOVAL A. DO NOT OVERLOAD STRUCTURAL ELEMENTS WITH DEBRIS.

- D. REMOVE ADDITIONAL CONCRETE IF NECESSARY TO PROVIDE A DEPTH OF REMOVAL OF AT LEAST 1/2 INCH OVER ENTIRE REMOVAL AREA.
- PERIMETER OF BAR AND TO PROVIDE AT LEAST 3/4-INCH CLEARANCE AROUND BAR.
- UNTIL UNSOUND AND DEBONDED CONCRETE IS COMPLETELY REMOVED.
- G. PROVIDE SURFACES WITH A FRACTURED PROFILE OF AT LEAST 1/8 INCH THAT ARE APPROXIMATELY PERPENDICULAR OR UNLESS OTHERWISE DIRECTED. H. THOROUGHLY CLEAN REMOVAL AREAS OF LOOSE CONCRETE, DUST, AND DEBRIS.

2.4 BONDING AGENT APPLICATION

- COAT. ALLOW TO DRY BEFORE PLACING PATCHING MORTAR OR CONCRETE.
- B. EPOXY BONDING AGENT: APPLY TO REINFORCING BARS AND CONCRETE BY BRUSH, ROLLER, OR SPRAY ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS, LEAVING NO PINHOLES OR OTHER UNCOATED AREAS. APPLY TO MORTAR OR CONCRETE.
- C. LATEX BONDING AGENT, TYPE I: APPLY TO CONCRETE BY BRUSH ROLLER OR SPRAY. ALLOW TO DRY BEFORE PLACING PATCHING MORTAR OR CONCRETE.
- MANUFACTURER'S WRITTEN INSTRUCTIONS. PLACE PATCHING MORTAR OR CONCRETE WHILE BONDING AGENT IS STILL WET. IF BONDING AGENT DRIES, RECOAT BEFORE PLACING PATCHING MORTAR OR CONCRETE. SCRUBBING IT INTO SURFACE AND THOROUGHLY COATING REPAIR AREA. IF SCRUB COAT DRIES, RECOAT BEFORE
- PLACING PATCHING MORTAR OR CONCRETE. PORES AND VOIDS.

2.5 PATCHING MORTAR APPLICATION

- MANUFACTURER.
- 1. PROVIDE FORMS WHERE NECESSARY TO CONFINE PATCH TO REQUIRED SHAPE. 2. WET SUBSTRATE AND FORMS THOROUGHLY AND THEN REMOVE STANDING WATER
- B. PRETREATMENT: APPLY SPECIFIED BONDING AGENT, MORTAR SCRUB COAT, AND/OR SLURRY COAT.
- SPACE BEHIND BARS BY COMPACTING WITH TROWEL FROM SIDES OF BARS.
- EDGE. E. OVERHEAD PATCHING: PLACE MATERIAL IN LIFTS OF NOT MORE THAN 2 INCHES OR LESS THAN 1/4 INCH. DO NOT
- FEATHER EDGE.

- SURFACE MATCHING ADJACENT CONCRETE.

2.6 FLOOR-JOINT REPAIR

2.7 EPOXY CRACK INJECTION

THAN CRACK.

BOND.

C. PREPARATION FOR CONCRETE REMOVAL: EXAMINE CONSTRUCTION TO BE REPAIRED TO DETERMINE BEST METHODS TO SAFELY AND EFFECTIVELY PERFORM CONCRETE MAINTENANCE WORK. EXAMINE ADJACENT WORK TO DETERMINE WHAT PROTECTIVE MEASURES WILL BE NECESSARY. MAKE EXPLORATIONS, PROBES, AND INQUIRIES AS NECESSARY TO

2. INVENTORY AND RECORD THE CONDITION OF ITEMS TO BE REMOVED FOR REINSTALLATION OR SALVAGE. 3. PROVIDE AND MAINTAIN SHORING, BRACING, AND TEMPORARY STRUCTURAL SUPPORTS AS REQUIRED TO PRESERVE STABILITY AND PREVENT UNEXPECTED OR UNCONTROLLED MOVEMENT, SETTLEMENT, OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED AND CONSTRUCTION AND FINISHES TO REMAIN. STRENGTHEN OR ADD NEW

1. WHERE SECTION LOSS OF REINFORCING BAR IS MORE THAN 25 PERCENT, OR 20 PERCENT IN TWO OR MORE ADJACENT BARS, CUT BARS AND REMOVE AND REPLACE AS INDICATED ON DRAWINGS.

E. PREPARATION FOR CRACK REPAIR: SAW-CUT JOINTS FULL WIDTH TO EDGES AND DEPTH OF SPALLS, BUT NOT LESS THAN 3/4 INCH DEEP. CLEAN OUT DEBRIS AND LOOSE CONCRETE; VACUUM OR BLOW CLEAR WITH COMPRESSED AIR.

4. SWEEP AND VACUUM ROUGHENED SURFACE TO REMOVE DEBRIS FOLLOWED BY LOW-PRESSURE WATER CLEANING. G. NONACIDIC SURFACE PREPARATION FOR SEALERS: CLEAN CONCRETE TO REMOVE DIRT, OILS, FILMS, AND OTHER

B. SAW-CUT PERIMETER OF AREAS INDICATED FOR REMOVAL TO A DEPTH OF AT LEAST 1/2 INCH. MAKE CUTS PERPENDICULAR TO CONCRETE SURFACES AND NO DEEPER THAN COVER ON REINFORCEMENT. C. REMOVE DETERIORATED AND DELAMINATED CONCRETE BY BREAKING UP AND DISLODGING FROM REINFORCEMENT

E. WHERE HALF OR MORE OF THE PERIMETER OF REINFORCING BAR IS EXPOSED, BOND BETWEEN REINFORCING BAR AND SURROUNDING CONCRETE IS BROKEN, OR REINFORCING BAR IS CORRODED, REMOVE CONCRETE FROM ENTIRE

F. TEST AREAS WHERE CONCRETE HAS BEEN REMOVED BY TAPPING WITH HAMMER, AND REMOVE ADDITIONAL CONCRETE

PARALLEL TO ORIGINAL CONCRETE SURFACES. AT COLUMNS AND WALLS, MAKE TOP AND BOTTOM SURFACES LEVEL

A. EPOXY-MODIFIED, CEMENTITIOUS BONDING AND ANTICORROSION AGENT: APPLY TO REINFORCING BARS AND CONCRETE BY STIFF BRUSH OR HOPPER SPRAY ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS. APPLY TO REINFORCING BARS IN TWO COATS, ALLOWING FIRST COAT TO DRY TWO TO THREE HOURS BEFORE APPLYING SECOND

REINFORCING BARS IN AT LEAST TWO COATS, ALLOWING FIRST COAT TO DRY BEFORE APPLYING SECOND COAT. PLACE PATCHING MORTAR OR CONCRETE WHILE EPOXY IS STILL TACKY. IF EPOXY DRIES, RECOAT BEFORE PLACING PATCHING

D. LATEX BONDING AGENT, TYPE II: MIX WITH PORTLAND CEMENT AND SCRUB INTO CONCRETE SURFACE ACCORDING TO

E. MORTAR SCRUB COAT FOR JOB-MIXED PATCHING MORTAR AND CONCRETE: DAMPEN REPAIR AREA AND SURROUNDING CONCRETE 6 INCHES BEYOND REPAIR AREA. REMOVE STANDING WATER AND APPLY SCRUB COAT WITH A BRUSH,

F. SLURRY COAT FOR CEMENTITIOUS PATCHING MORTAR: WET SUBSTRATE THOROUGHLY AND THEN REMOVE STANDING WATER. SCRUB A SLURRY OF NEAT PATCHING MORTAR MIXED WITH LATEX BONDING AGENT INTO SUBSTRATE, FILLING

A. PLACE PATCHING MORTAR AS SPECIFIED IN THIS ARTICLE UNLESS OTHERWISE RECOMMENDED IN WRITING BY

C. GENERAL PLACEMENT: PLACE PATCHING MORTAR BY TROWELING TOWARD EDGES OF PATCH TO FORCE INTIMATE CONTACT WITH EDGE SURFACES. FOR LARGE PATCHES, FILL EDGES FIRST AND THEN WORK TOWARD CENTER, ALWAYS TROWELING TOWARD EDGES OF PATCH. AT FULLY EXPOSED REINFORCING BARS, FORCE PATCHING MORTAR TO FILL

D. VERTICAL PATCHING: PLACE MATERIAL IN LIFTS OF NOT MORE THAN 3 INCHES OR LESS THAN 1/4 INCH. DO NOT FEATHER

F. CONSOLIDATION: AFTER EACH LIFT IS PLACED, CONSOLIDATE MATERIAL AND SCREED SURFACE. G. MULTIPLE LIFTS: WHERE MULTIPLE LIFTS ARE USED, SCORE SURFACE OF LIFTS TO PROVIDE A ROUGH SURFACE FOR

PLACING SUBSEQUENT LIFTS. ALLOW EACH LIFT TO REACH FINAL SET BEFORE PLACING SUBSEQUENT LIFTS. H. FINISHING: ALLOW SURFACES OF LIFTS THAT ARE TO REMAIN EXPOSED TO BECOME FIRM AND THEN FINISH TO A

I. CURING: WET-CURE CEMENTITIOUS PATCHING MATERIALS, INCLUDING POLYMER-MODIFIED CEMENTITIOUS PATCHING MATERIALS, FOR NOT LESS THAN SEVEN DAYS BY WATER-FOG SPRAY OR WATER-SATURATED ABSORPTIVE COVER.

A. CUT OUT DETERIORATED CONCRETE AND RECONSTRUCT SIDES OF JOINT WITH PATCHING MORTAR AS INDICATED ON DRAWINGS. INSTALL JOINT FILLER IN NONMOVING FLOOR JOINTS WHERE INDICATED AND AS SPECIFIED IN THIS ARTICLE. B. DEPTH: INSTALL JOINT FILLER TO A DEPTH OF AT LEAST 1 INCH. USE FINE SILICA SAND NO MORE THAN 1/4-INCH-DEEP TO CLOSE BASE OF JOINT. DO NOT USE SEALANT BACKER RODS OR COMPRESSIBLE FILLERS BELOW JOINT FILLER. C. TOP SURFACE: INSTALL JOINT FILLER SO THAT WHEN CURED, IT IS FLUSH AT TOP SURFACE OF ADJACENT CONCRETE. IF NECESSARY, OVERFILL JOINT AND REMOVE EXCESS WHEN FILLER HAS CURED.

A. CLEAN CRACKS WITH OIL-FREE COMPRESSED AIR OR LOW-PRESSURE WATER TO REMOVE LOOSE PARTICLES B. CLEAN AREAS TO RECEIVE CAPPING ADHESIVE OF OIL, DIRT, AND OTHER SUBSTANCES THAT WOULD INTERFERE WITH

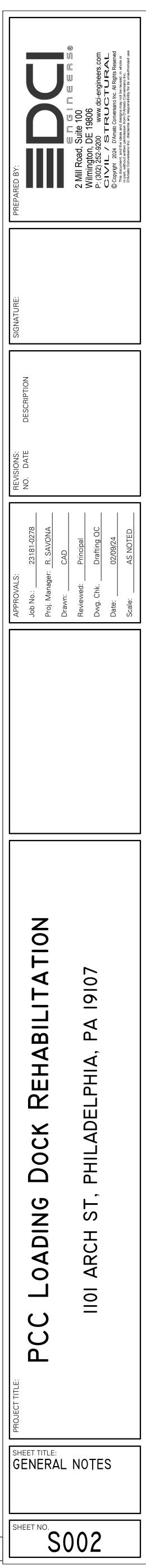
C. PLACE INJECTION PORTS AS RECOMMENDED BY EPOXY MANUFACTURER, SPACING NO FARTHER APART THAN THICKNESS OF MEMBER BEING INJECTED. SEAL INJECTION PORTS IN PLACE WITH CAPPING ADHESIVE.

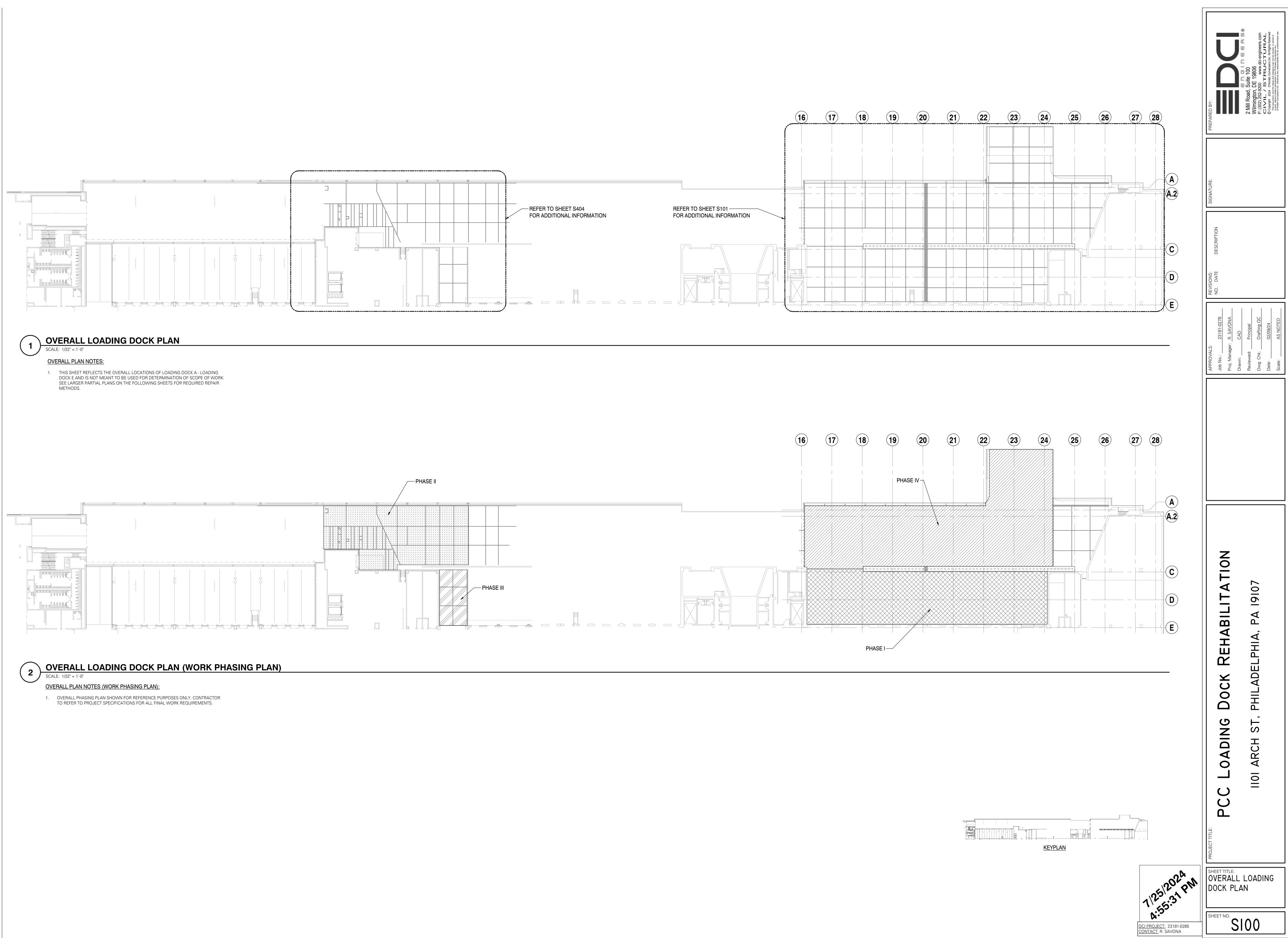
D. SEAL CRACKS AT EXPOSED SURFACES WITH A RIBBON OF CAPPING ADHESIVE AT LEAST 1/4-INCH-THICK BY 1 INCH WIDER E. INJECT CRACKS WIDER THAN 0.003 INCH TO A DEPTH OF 8 INCHES.

F. INJECT EPOXY ADHESIVE, BEGINNING AT WIDEST PART OF CRACK AND WORKING TOWARD NARROWER PARTS. INJECT ADHESIVE INTO PORTS TO REFUSAL, CAPPING ADJACENT PORTS WHEN THEY EXTRUDE EPOXY. CAP INJECTED PORTS AND INJECT THROUGH ADJACENT PORTS UNTIL CRACK IS FILLED.

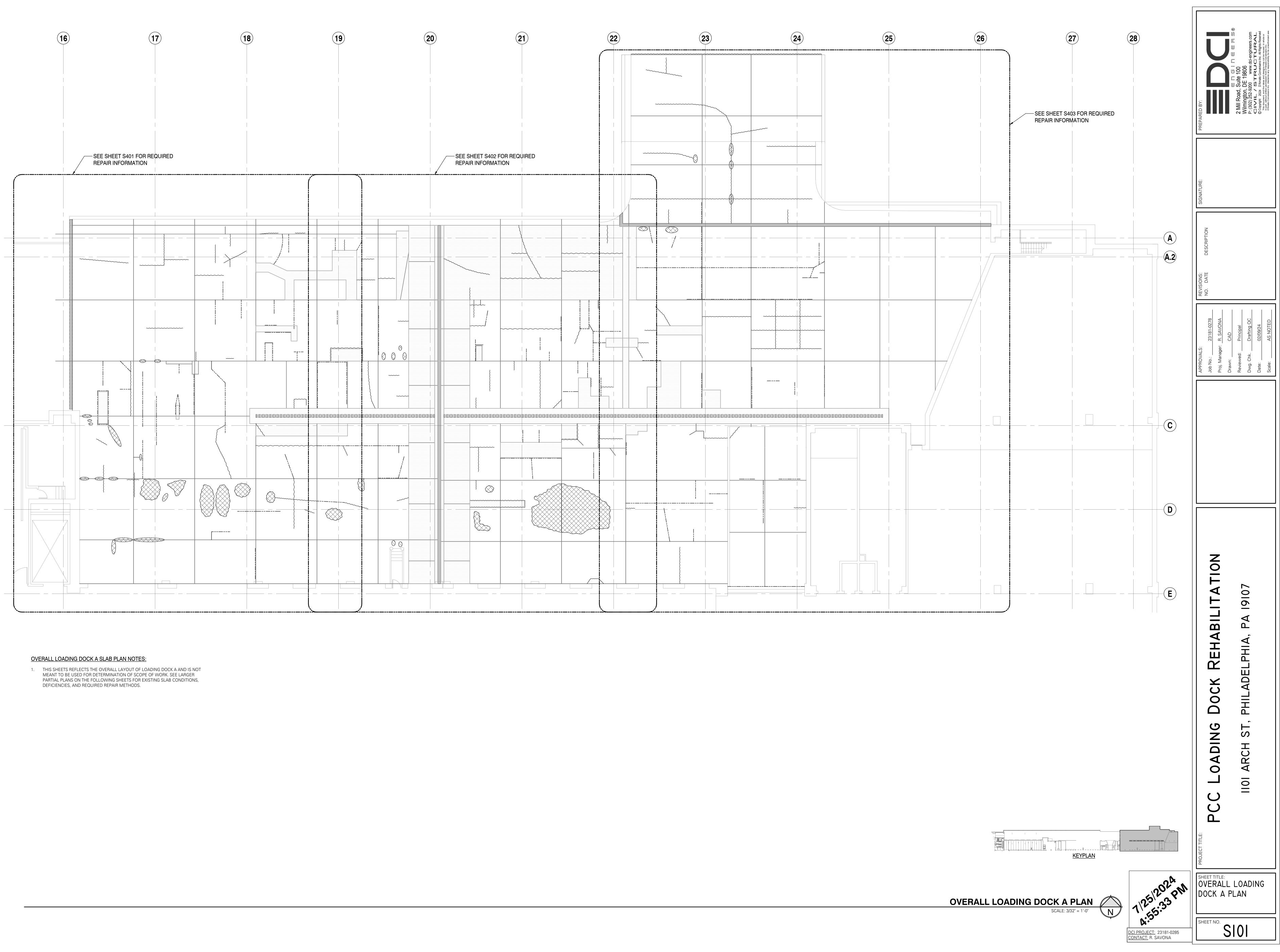
G. AFTER EPOXY ADHESIVE HAS SET, REMOVE INJECTION PORTS AND GRIND SURFACES SMOOTH.





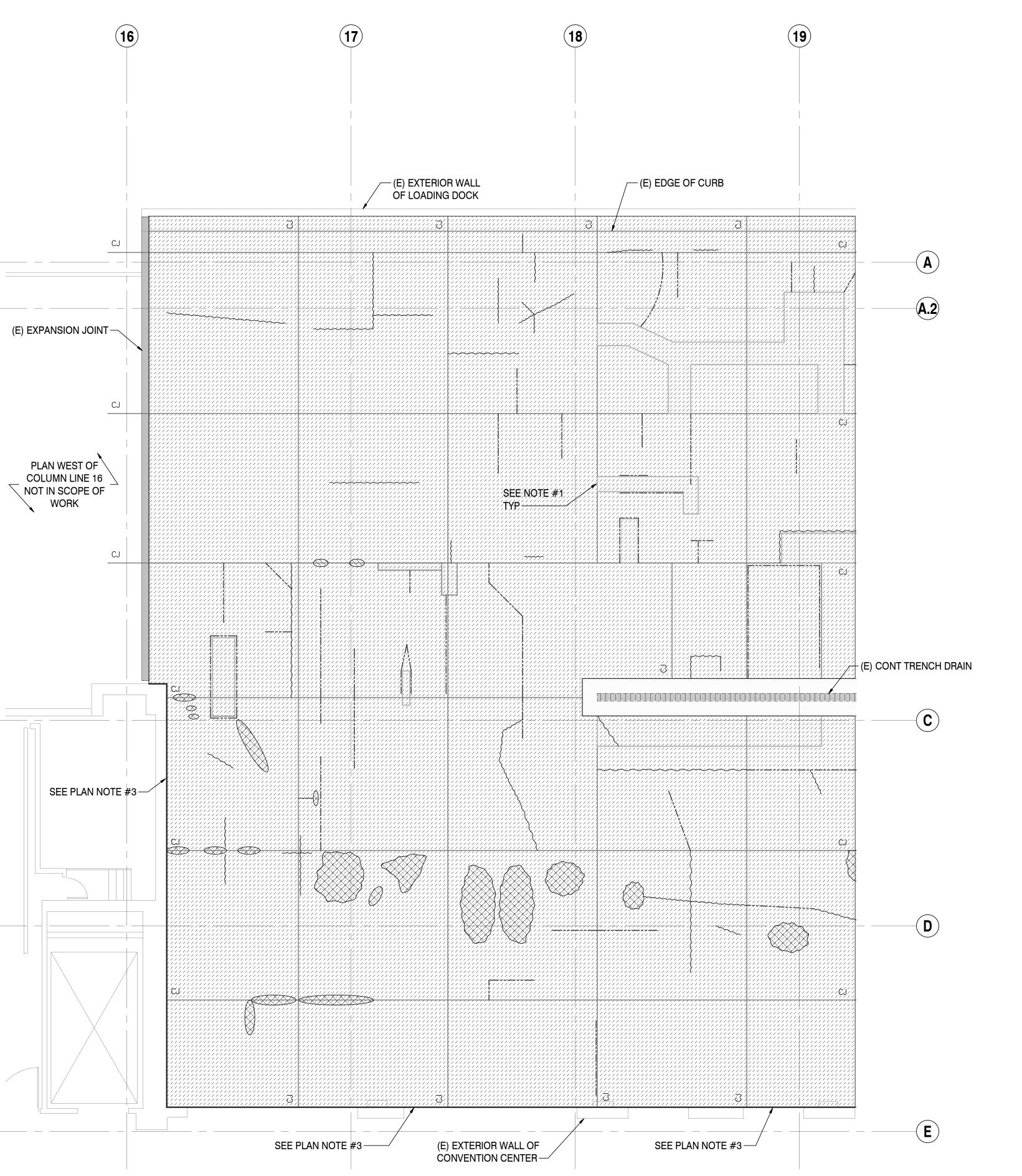


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PARTIAL LOADING DOCK SLAB PLAN NOTES:

1. INDICATES AREAS OF TOPPING SLAB PREVIOUSLY REPAIRED TO REMAIN.

2. 'CJ' INDICATES CONSTRUCTION JOINT. 3. CONTRACTOR TO PROVIDE NEW JOINT SEALANT ALONG ENTIRE LENGTH OF EXISTING BUILDING. SEE S501 FOR ADDITIONAL INFORMATION.

4. INDICATES AREA OF LOADING DOCK TO BE REMOVED AND REPLACED IN PHASES. CONTRACTOR TO COORDINATE WITH OWNER EXTENTS OF PHASED CONSTRUCTION. REFER TO 'NOTE B' IN REPAIR PROCEDURE SUMMARY FOR ADDITIONAL INFORMATION. 5. REPAIR ALL INDIVIDUAL CRACKS IN EXISTING BAYS TO REMAIN PER 'NOTE A' IN REPAIR PROCEDURE SUMMARY.

TOPPING SLAB - CRACK REPAIR

1. MODERATE CRACKS - INDIVIDUAL REPAIR ROUTE OUT CRACKS, REMOVE ALL DUST AND DEBRIS AND RINSE. APPLY SIKA MASTERSEAL 630 • REPAIR CRACKS 3" BEYOND CURRENT LENGTH, TYP BOTH SIDES.

2. SEVERE CRACKS - INDIVIDUAL REPAIR ROUTE OUT CRACKS, REMOVE ALL DUST AND DEBRIS AND RINSE. APPLY SIKA SIKADUR-33 ADHESIVE (OR APPROVED EQUAL) ALONG FULL LENGTH OF CRACK PER MANUFACTURER'S SPECIFICATIONS.

• REPAIR CRACKS 3" BEYOND CURRENT LENGTH, TYP BOTH SIDES.

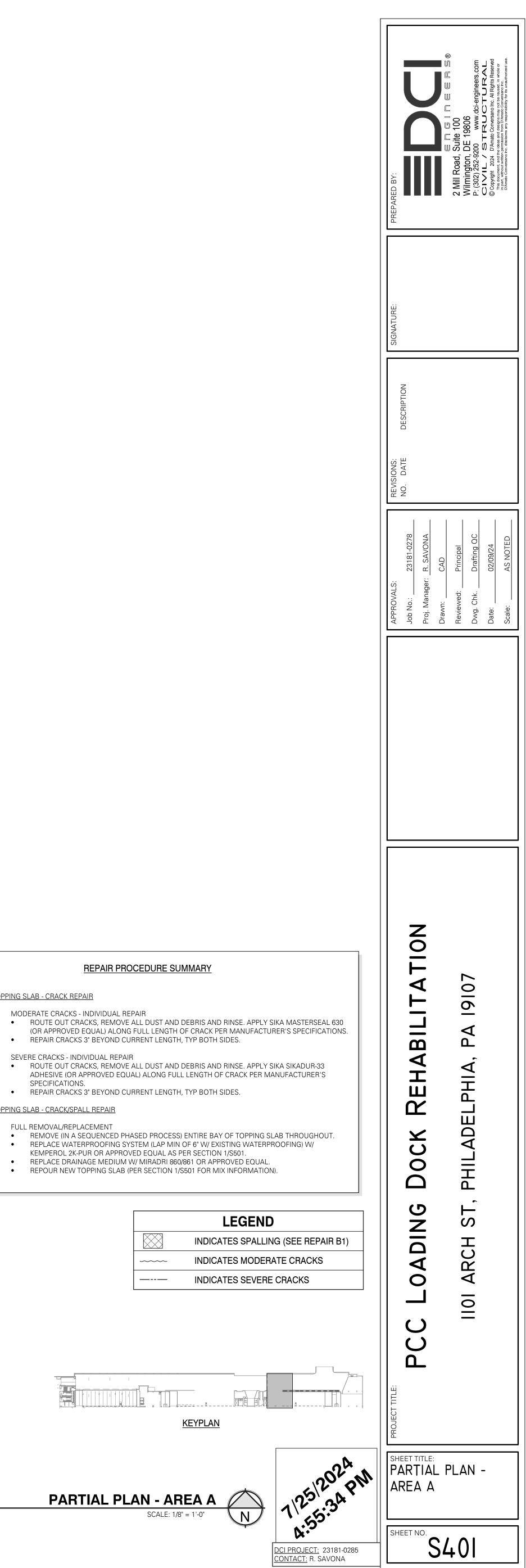
TOPPING SLAB - CRACK/SPALL REPAIR

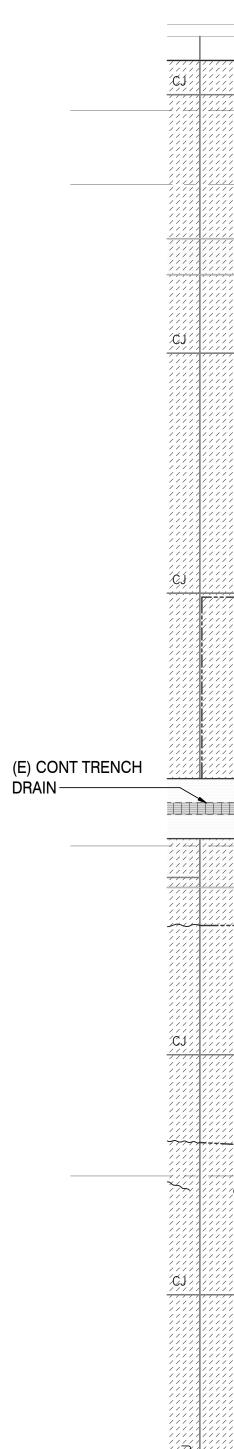
1. FULL REMOVAL/REPLACEMENT

 REPLACE WATERPROOFING SYSTEM (LAP MIN OF 6" W/ EXISTING WATERPROOFING) W/ KEMPEROL 2K-PUR OR APPROVED EQUAL AS PER SECTION 1/S501. • REPLACE DRAINAGE MEDIUM W/ MIRADRI 860/861 OR APPROVED EQUAL.

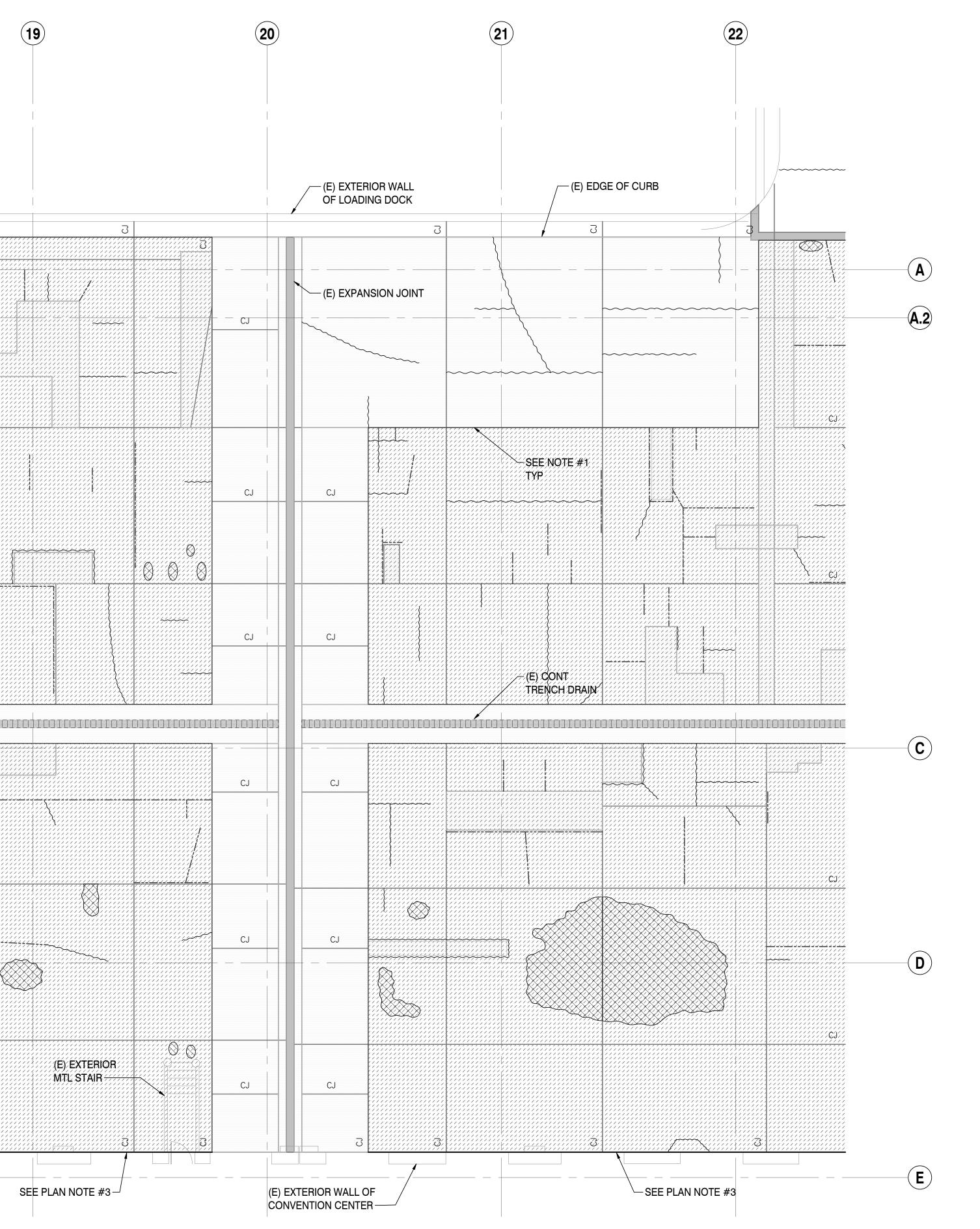
• REPOUR NEW TOPPING SLAB (PER SECTION 1/S501 FOR MIX INFORMATION).

LEGEND
INDICATES SPALLING (SEE R
 INDICATES MODERATE CRAC
 INDICATES SEVERE CRACKS





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PARTIAL LOADING DOCK SLAB PLAN NOTES:

1. INDICATES AREAS OF TOPPING SLAB PREVIOUSLY REPAIRED TO REMAIN. 2. 'CJ' INDICATES CONSTRUCTION JOINT.

3. CONTRACTOR TO PROVIDE NEW JOINT SEALANT ALONG ENTIRE LENGTH OF EXISTING BUILDING. SEE S501 FOR ADDITIONAL INFORMATION.

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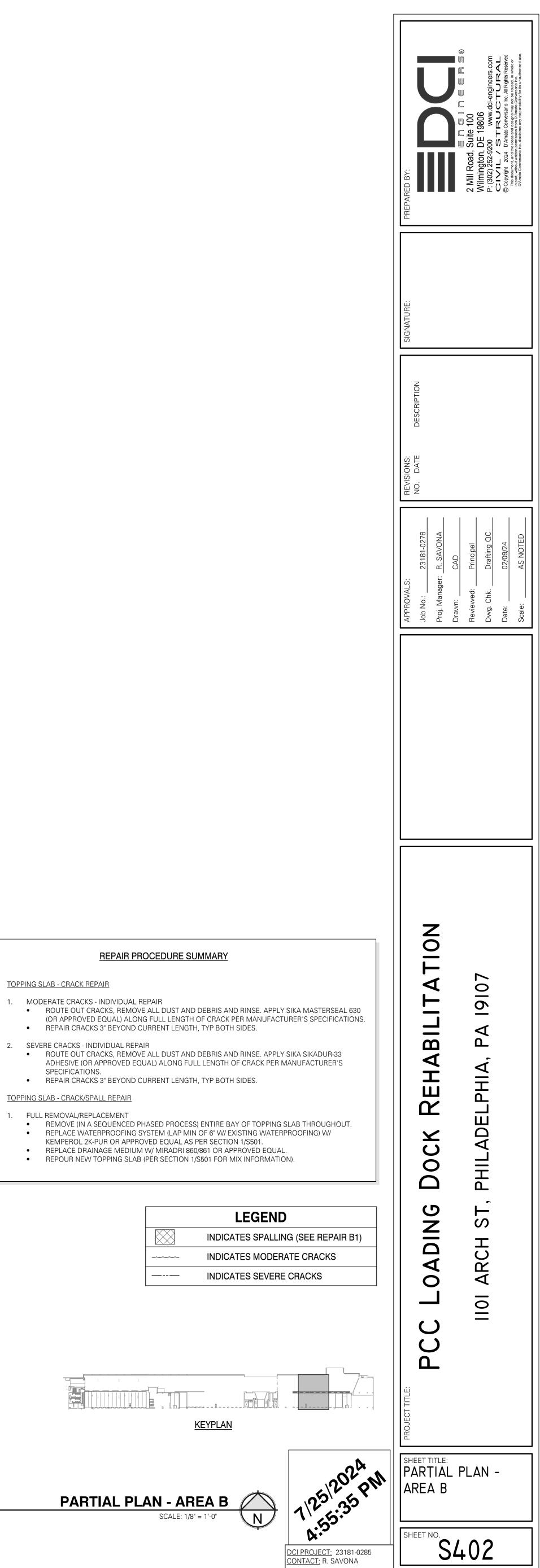
TOPPING SLAB - CRACK REPAIR

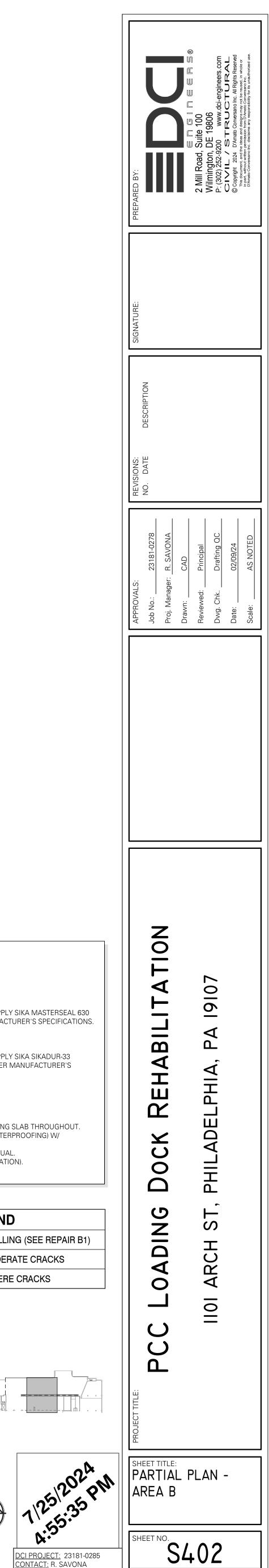
- 1. MODERATE CRACKS INDIVIDUAL REPAIR
- 2. SEVERE CRACKS INDIVIDUAL REPAIR
- SPECIFICATIONS. • REPAIR CRACKS 3" BEYOND CURRENT LENGTH, TYP BOTH SIDES.

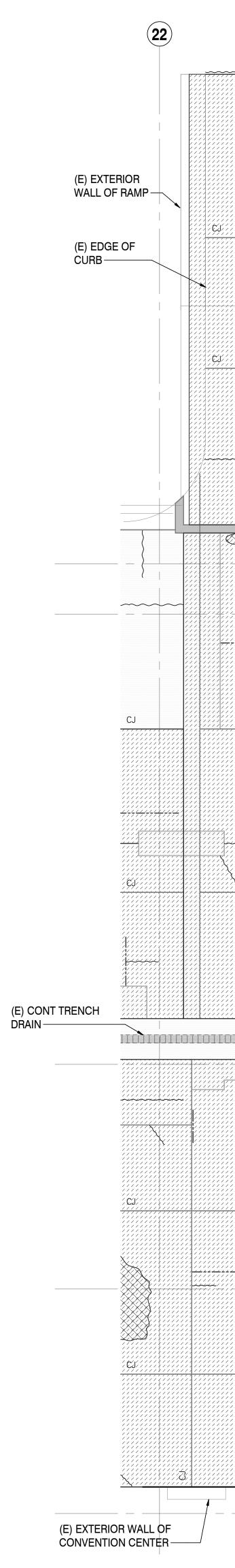
TOPPING SLAB - CRACK/SPALL REPAIR

- REMOVE (IN A SEQUENCED PHASED PROCESS) ENTIRE BAY OF TOPPING SLAB THROUGHOUT. REPLACE WATERPROOFING SYSTEM (LAP MIN OF 6" W/ EXISTING WATERPROOFING) W/ KEMPEROL 2K-PUR OR APPROVED EQUAL AS PER SECTION 1/S501.
- REPLACE DRAINAGE MEDIUM W/ MIRADRI 860/861 OR APPROVED EQUAL. • REPOUR NEW TOPPING SLAB (PER SECTION 1/S501 FOR MIX INFORMATION).

LEGEND
INDICATES SPALLING (SEE R
 INDICATES MODERATE CRAC
 INDICATES SEVERE CRACKS

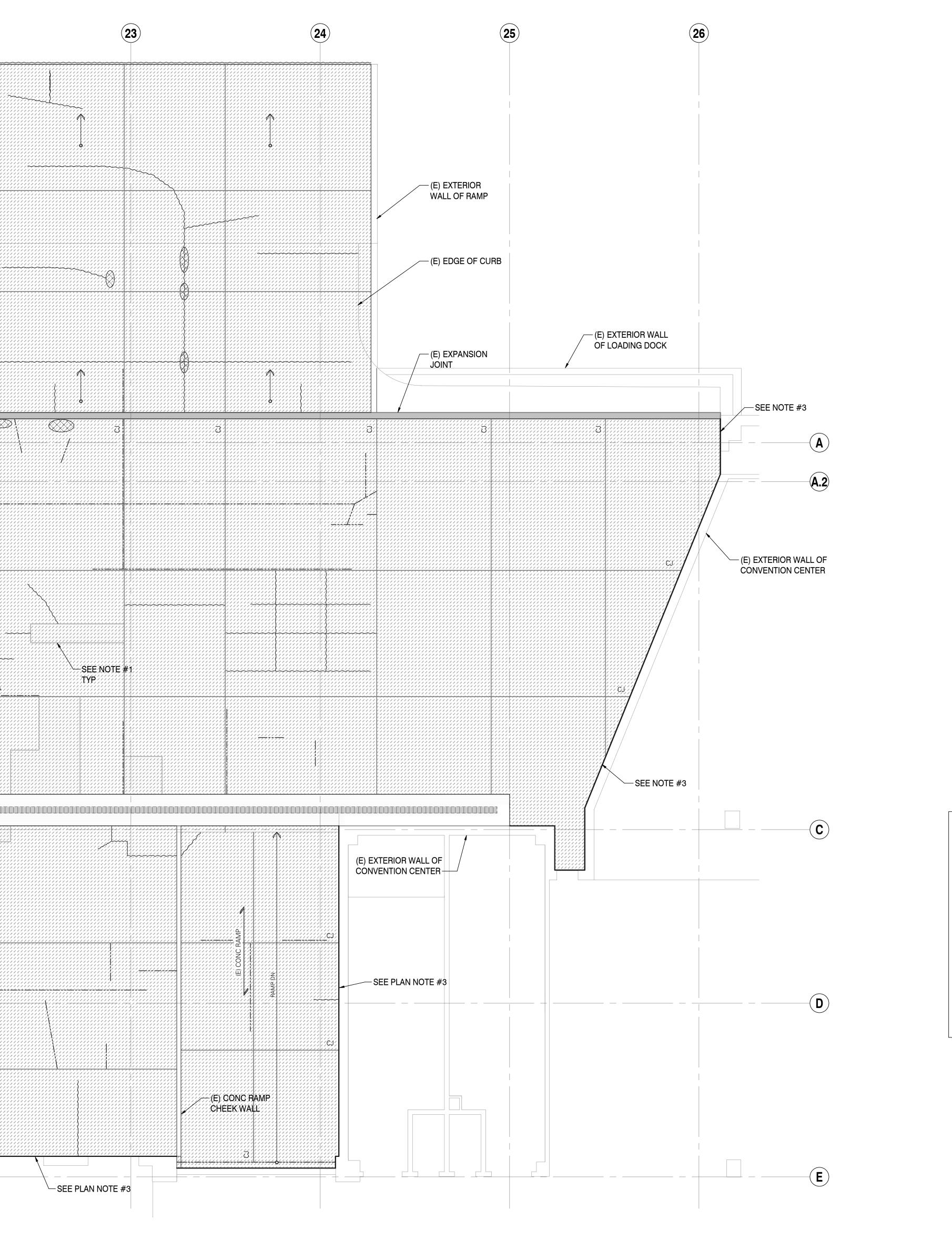






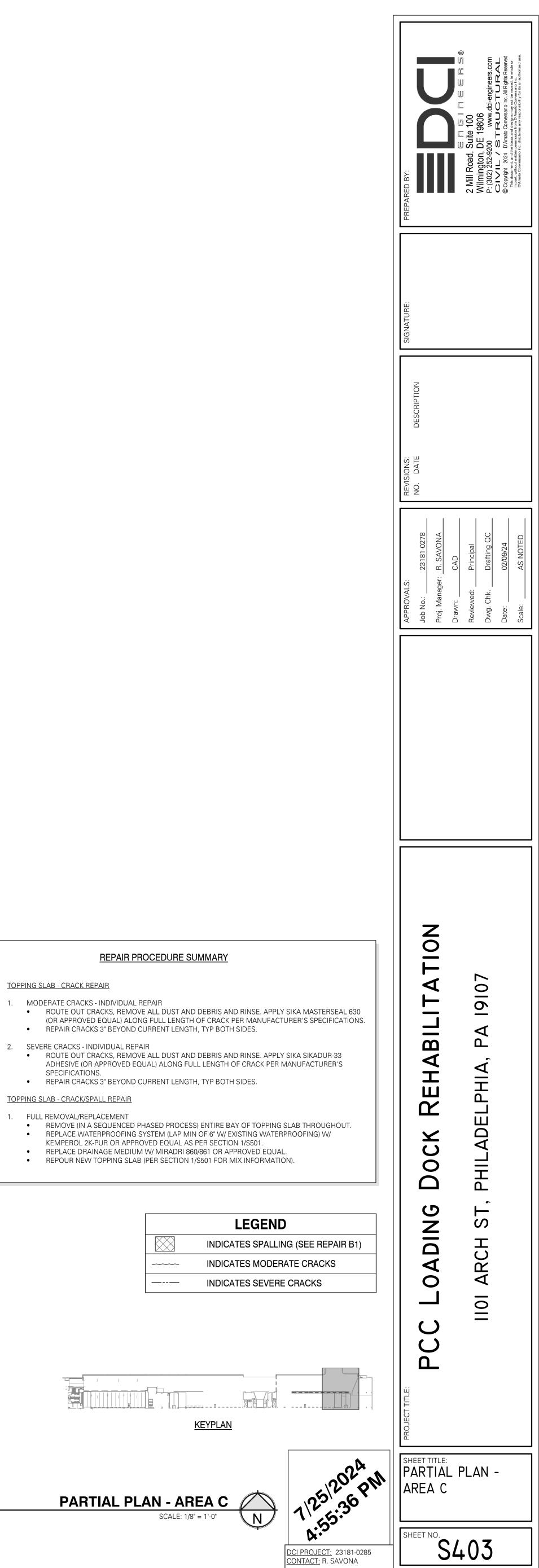
PARTIAL LOADING DOCK SLAB PLAN NOTES:

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 'CJ' INDICATES CONSTRUCTION JOINT.
- 3. CONTRACTOR TO PROVIDE NEW JOINT SEALANT ALONG ENTIRE LENGTH OF EXISTING BUILDING. SEE S501 FOR ADDITIONAL INFORMATION. 4. INDICATES AREA OF LOADING DOCK TO BE REMOVED AND REPLACED IN PHASES.
- CONTRACTOR TO COORDINATE WITH OWNER EXTENTS OF PHASED CONSTRUCTION. REFER TO 'NOTE B' IN REPAIR PROCEDURE SUMMARY FOR ADDITIONAL INFORMATION. 5. REPAIR ALL INDIVIDUAL CRACKS IN EXISTING BAYS TO REMAIN PER 'NOTE A' IN REPAIR
- PROCEDURE SUMMARY.

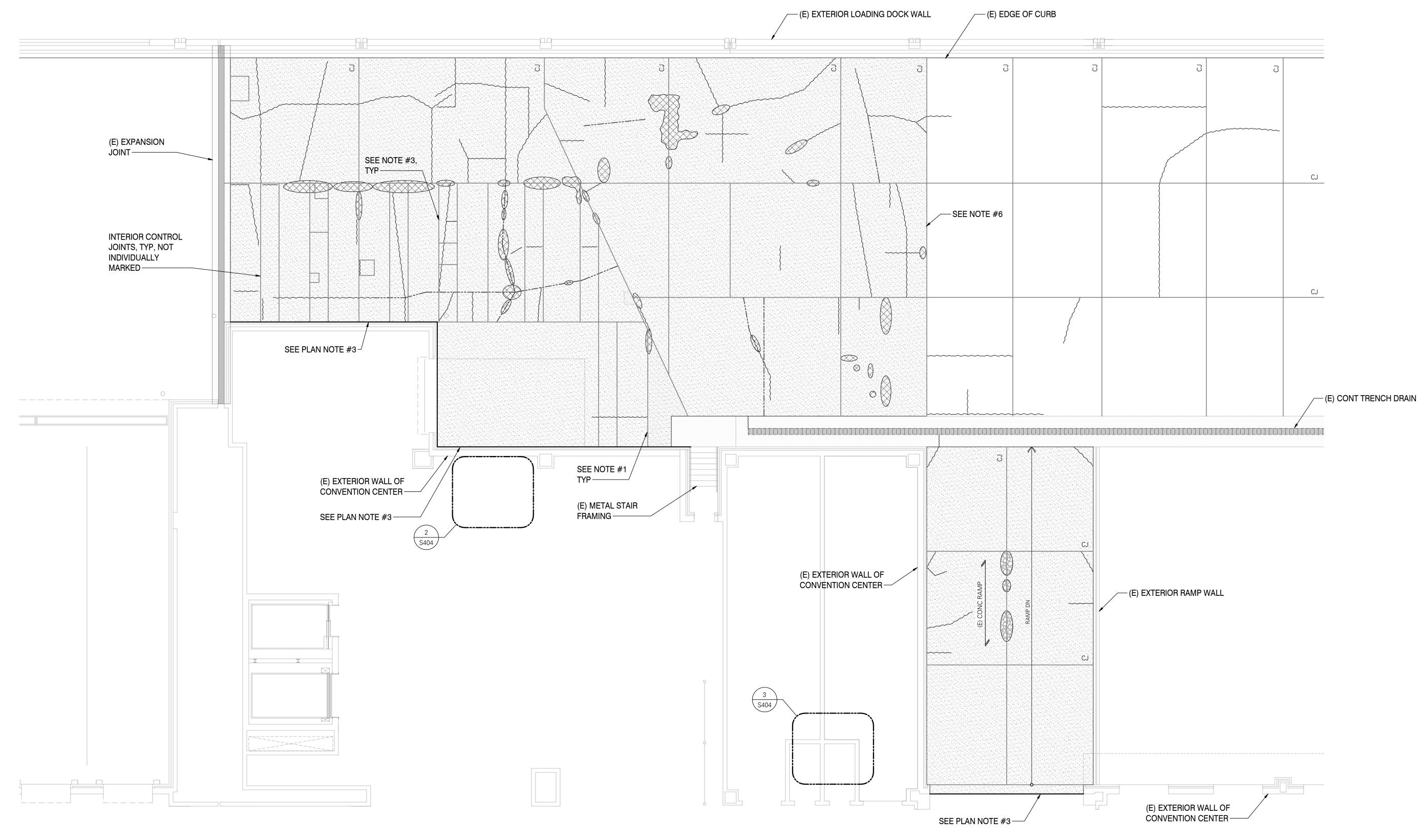


- TOPPING SLAB CRACK REPAIR
- 1. MODERATE CRACKS INDIVIDUAL REPAIR • REPAIR CRACKS 3" BEYOND CURRENT LENGTH, TYP BOTH SIDES.
- 2. SEVERE CRACKS INDIVIDUAL REPAIR • ROUTE OUT CRACKS, REMOVE ALL DUST AND DEBRIS AND RINSE. APPLY SIKA SIKADUR-33
 - SPECIFICATIONS.
- TOPPING SLAB CRACK/SPALL REPAIR
 - REMOVE (IN A SEQUENCED PHASED PROCESS) ENTIRE BAY OF TOPPING SLAB THROUGHOUT. REPLACE WATERPROOFING SYSTEM (LAP MIN OF 6" W/ EXISTING WATERPROOFING) W/
 - REPLACE DRAINAGE MEDIUM W/ MIRADRI 860/861 OR APPROVED EQUAL.

	LEGEND
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	INDICATES SEVERE CRACKS

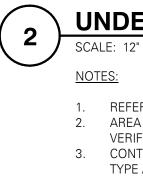






PARTIAL LOADING DOCK C/D SLAB PLAN NOTES:

- 1. 'CJ' INDICATES CONSTRUCTION JOINT. 2. ROUTE OUT ALL EXISTING CAULKING, REMOVE DUST AND DEBRIS, AND RINSE. REPAIR CONSTRUCTION JOINT WITH SIKA SIKADUR-32 HI-MOD EPOXY ADHESIVE PER
- MANUFACTURER'S SPECIFICATIONS. 3. MAJORITY OF CAULKING AT CONSTRUCTION JOINTS HAS DETERIORATED AWAY.
- REMOVE EXISTING CAULKING AND RECAULK WITH SIKAFLEX JOINT SEALANT, OR APPROVED EQUAL. PER TYPICAL DETAIL ON S501. INDICATES RECOMMENDED AREA OF EXISTING SLAB TO BE REMOVED TO 4.
- REPAIR SPALLS 5. CONTRACTOR TO REFER TO LEGEND AND REPAIR PROCEDURE SUMMARY FOR
- ADDITIONAL INFORMATION. INDICATED ENTIRE AREA OF LOADING DOCK TOPPING SLAB TO BE REMOVED AND REPAIRED PER NOTE B1. OF THE REPAIR PROCEDURE SUMMARY. 6.





2 UNDERSIDE OF LOADING DOCK SLAB ON METAL DECK SCALE: 12" = 1'-0"

1. REFER TO SECTION 7/S501 FOR TYPICAL REPAIR DETAILS AT DETERIORATED DECKING. 2. AREA INDICATED REFLECTS GENERAL AREA OF DETERIORATED STEEL DECKING. CONTRACTOR TO VERIFY EXACT LOCATION IN FIELD AND NOTIFY E.O.R. IF AREA EXTENDS BEYOND WHAT IS SHOWN. 3. CONTRACTOR TO REPLACE ALL DETERIORATED FIREPROOFING IN DESIGNATED AREA. FIREPROOFING TYPE AND THICKNESSES TO MATCH EXISTING.





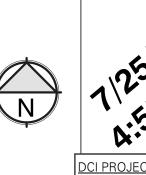
NOTES:

3. CONTRACTOR TO REPLACE ALL DETERIORATED FIREPROOFING IN DESIGNATED AREA. FIREPROOFING TYPE AND THICKNESSES TO MATCH EXISTING.

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<u>KEYPLAN</u>

PARTIAL PLAN - LOADING DOCK C/D SCALE: 1/8" = 1'-0"

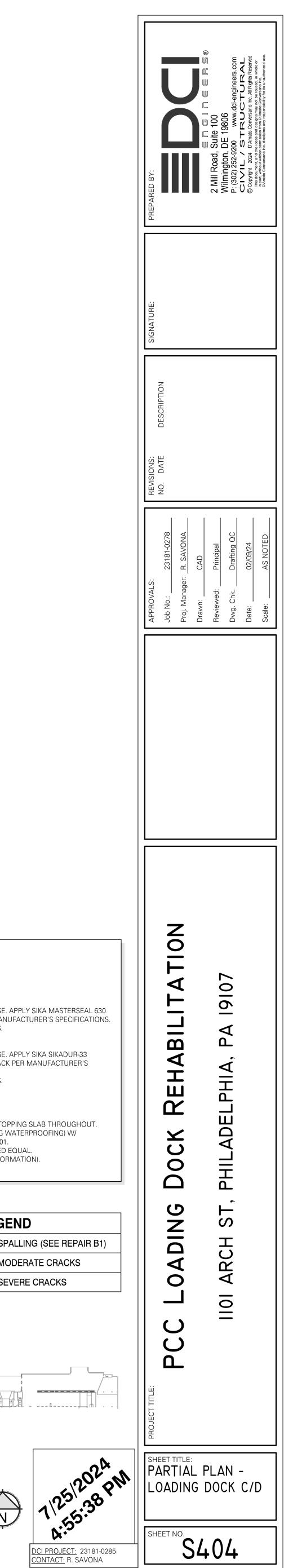


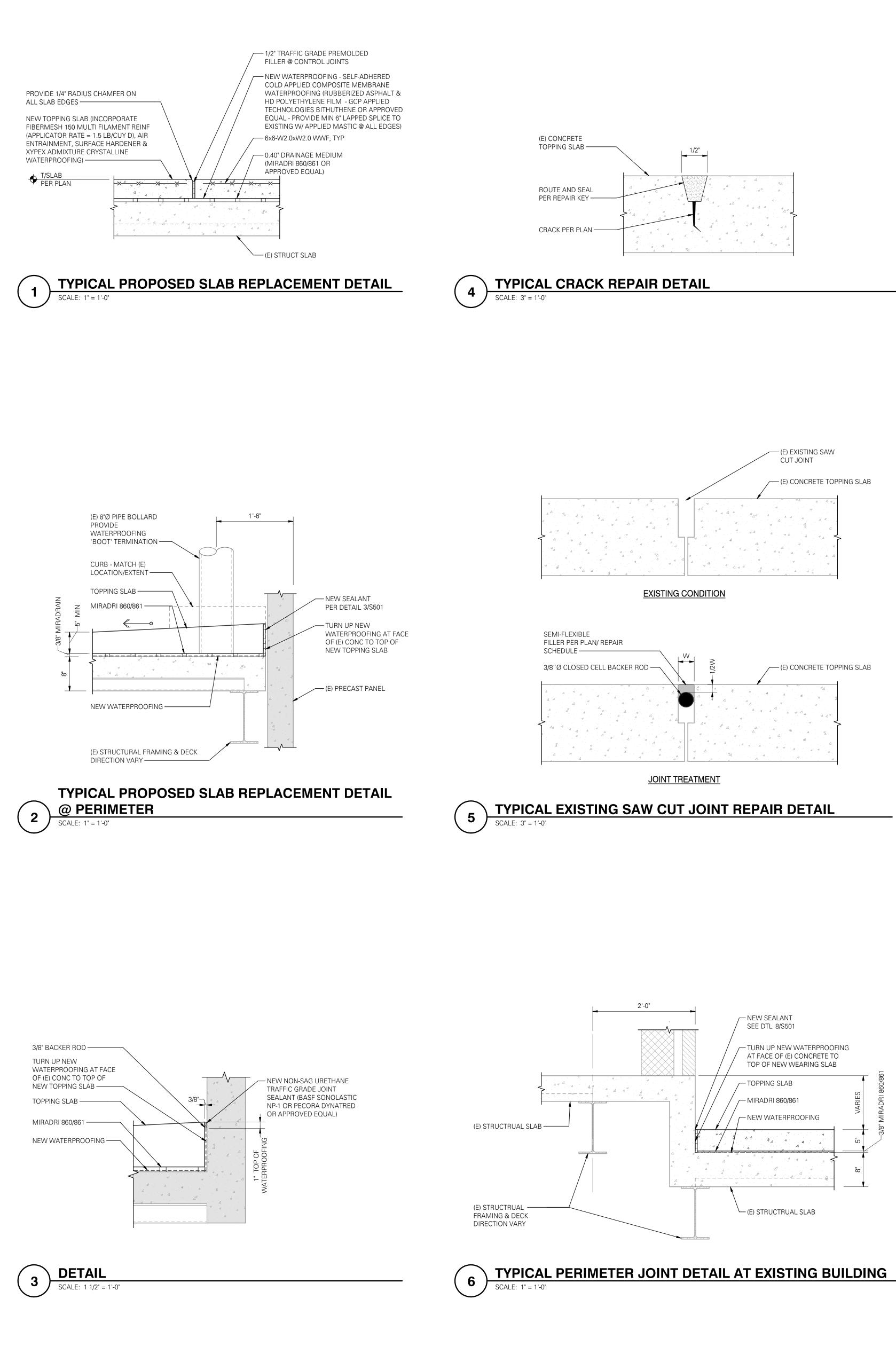
REPAIR PROCEDURE SUMMARY

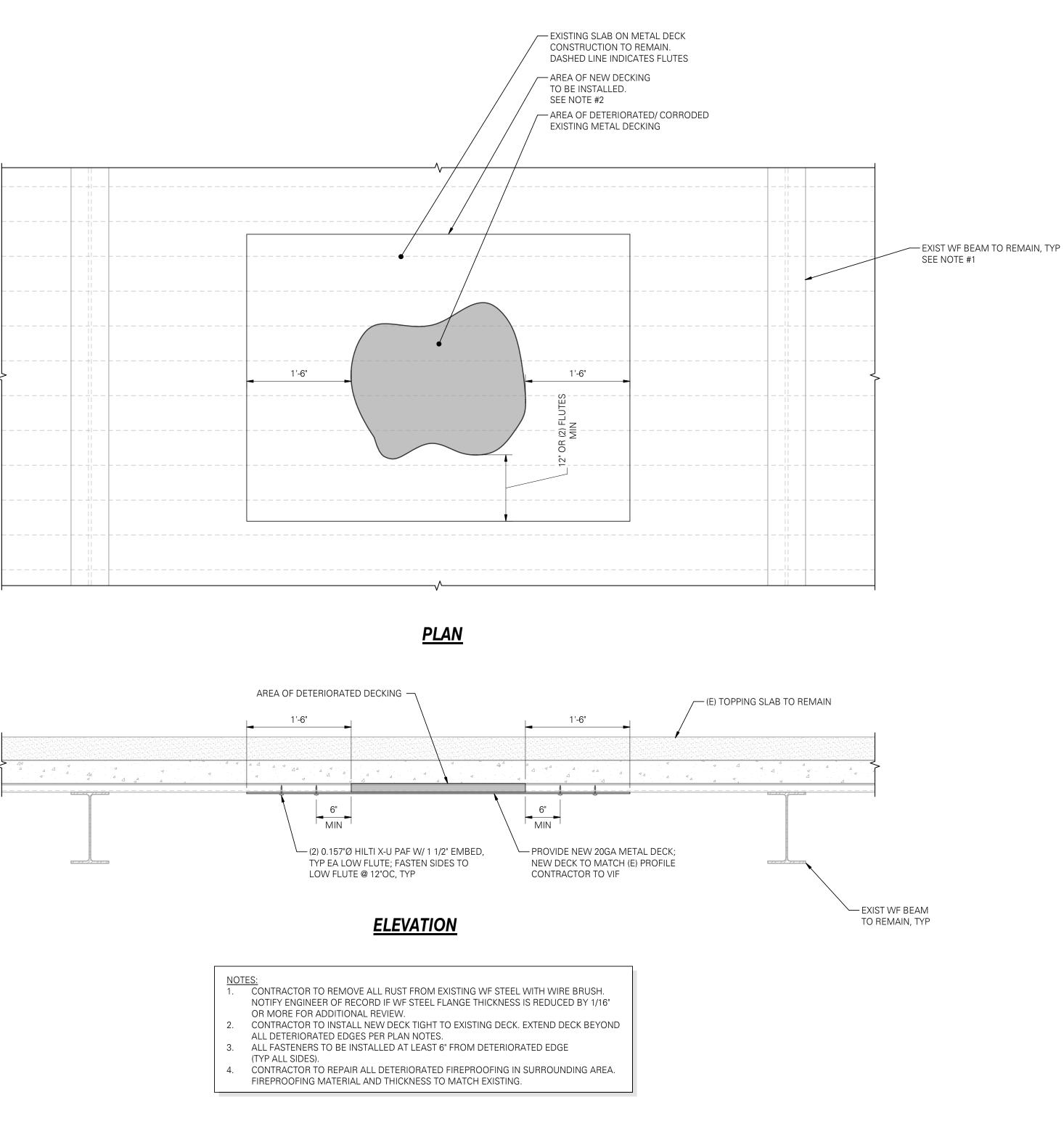
- TOPPING SLAB CRACK REPAIR
- 1. MODERATE CRACKS INDIVIDUAL REPAIR ROUTE OUT CRACKS, REMOVE ALL DUST AND DEBRIS AND RINSE. APPLY SIKA MASTERSEAL 630 (OR APPROVED EQUAL) ALONG FULL LENGTH OF CRACK PER MANUFACTURER'S SPECIFICATIONS. • REPAIR CRACKS 3" BEYOND CURRENT LENGTH, TYP BOTH SIDES.
- 2. SEVERE CRACKS INDIVIDUAL REPAIR • ROUTE OUT CRACKS, REMOVE ALL DUST AND DEBRIS AND RINSE. APPLY SIKA SIKADUR-33
- ADHESIVE (OR APPROVED EQUAL) ALONG FULL LENGTH OF CRACK PER MANUFACTURER'S SPECIFICATIONS.
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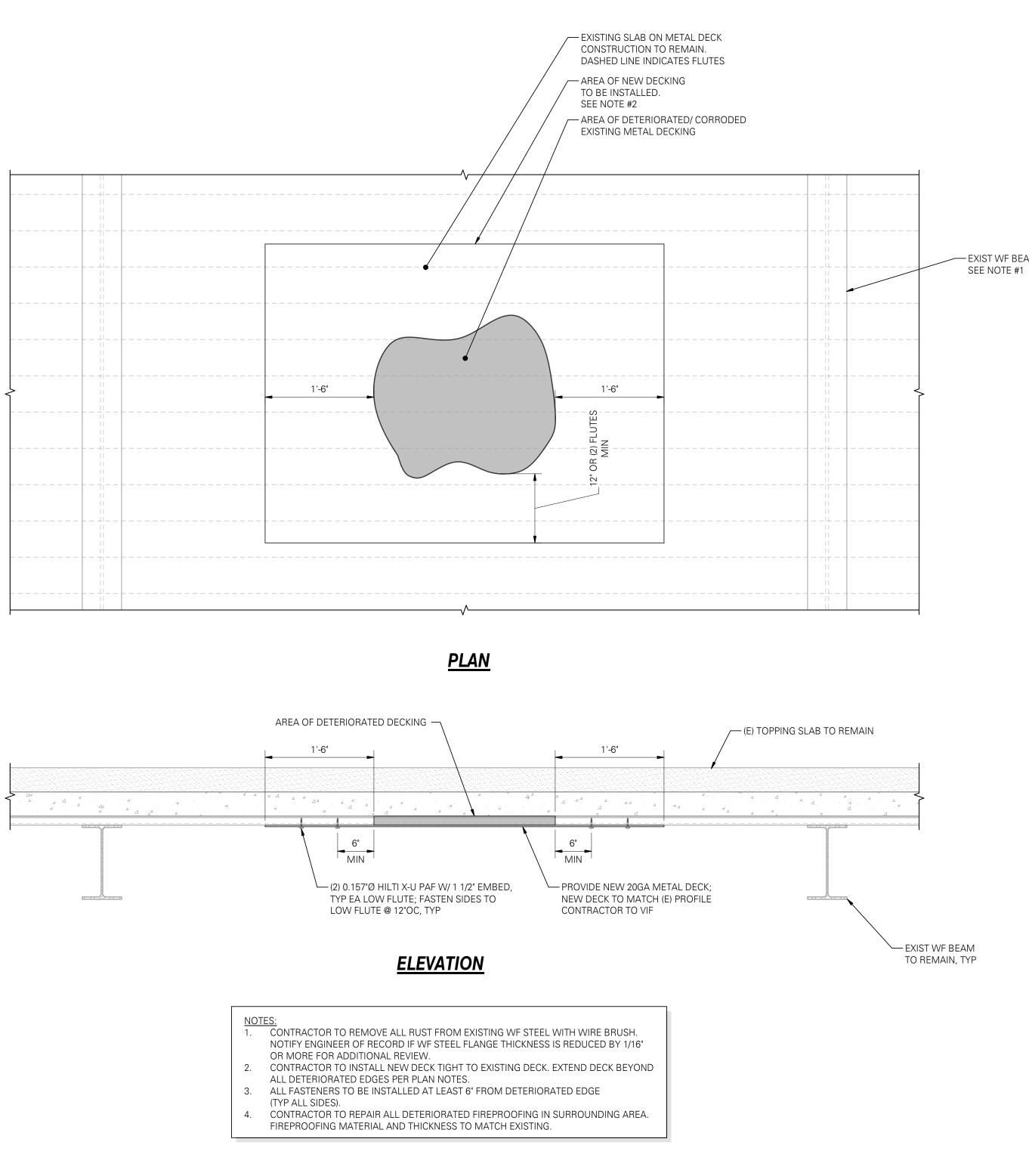
TOPPING SLAB - CRACK/SPALL REPAIR

- 1. FULL REMOVAL/REPLACEMENT • REMOVE (IN A SEQUENCED PHASED PROCESS) ENTIRE BAY OF TOPPING SLAB THROUGHOUT. REPLACE WATERPROOFING SYSTEM (LAP MIN OF 6" W/ EXISTING WATERPROOFING) W/
- KEMPEROL 2K-PUR OR APPROVED EQUAL AS PER SECTION 1/S501. • REPLACE DRAINAGE MEDIUM W/ MIRADRI 860/861 OR APPROVED EQUAL.
- REPOUR NEW TOPPING SLAB (PER SECTION 1/S501 FOR MIX INFORMATION).
- - LEGEND INDICATES SPALLING (SEE REPAIR B1) INDICATES MODERATE CRACKS $\sim\sim\sim$ INDICATES SEVERE CRACKS ____

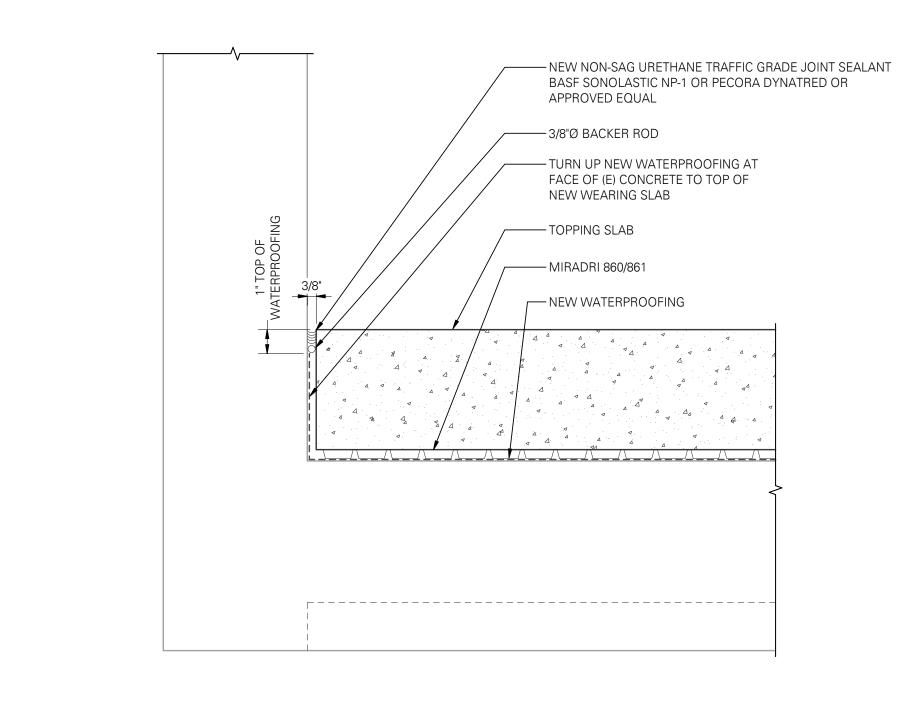
















TYPICAL SEALANT DETAIL AT EXISTING BUILDING

