

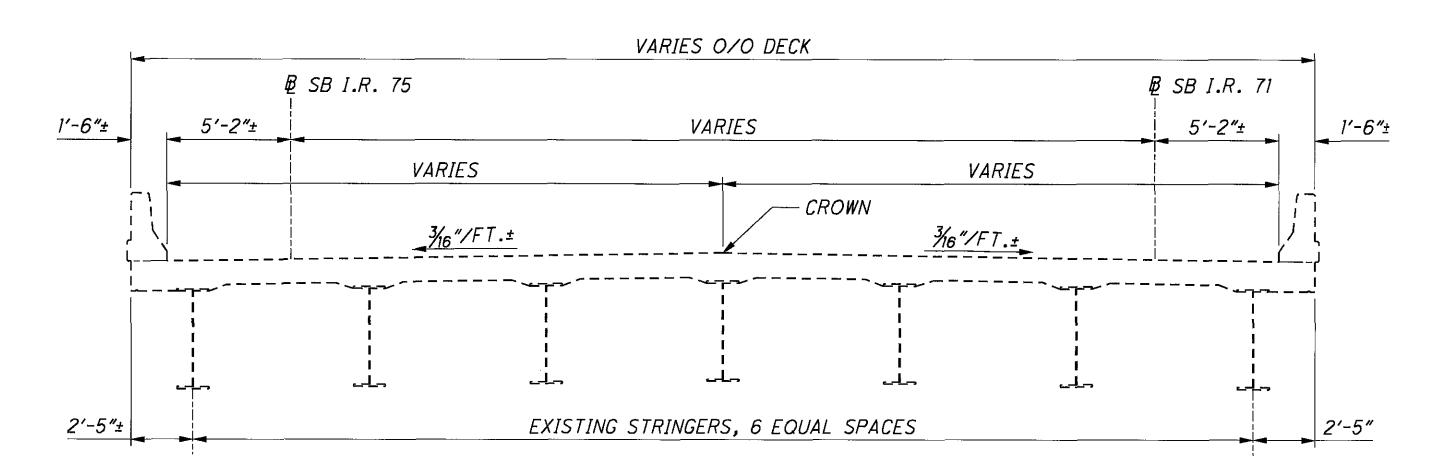
SOUTHBOUND

<u>NOTE</u>

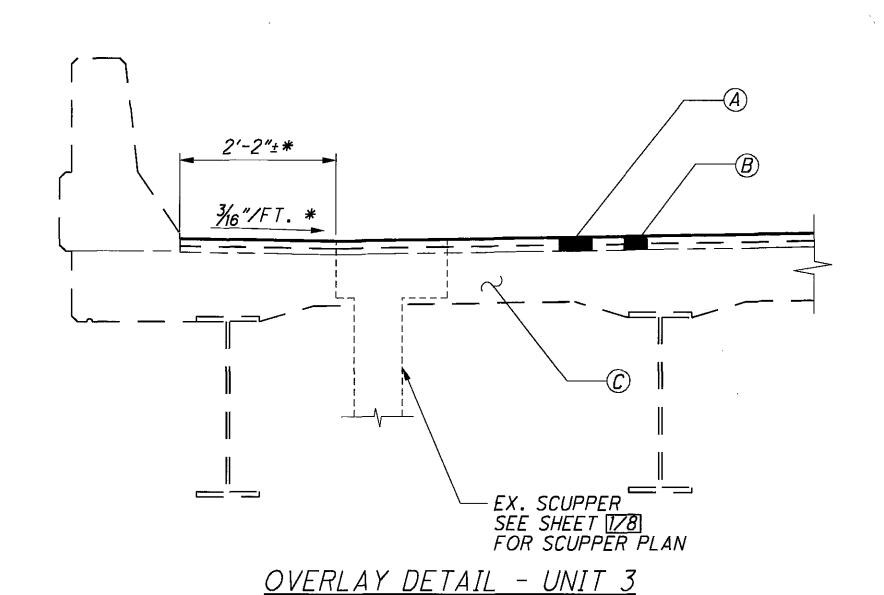
SEE MAINTENANCE OF TRAFFIC PLANS FOR PHASE CONSTRUCTION DETAILS AND NOTES.

<u>LEGEND</u>

APPROXIMATE LIMITS OF PERMANENT TRAFFIC PROTECTION INSTALLED BETWEEN THE EXISTING BEAMS. SEE SHEET 878 FOR ADDITIONAL DETAILS.



TRANSVERSE SECTION - UNIT 3
UNIT 4 SIMILAR



<u>LEGEND</u>

* DIMENSIONS APPLY ONLY AT THE EXISTING SCUPPER LOCATIONS. ALL OTHER AREAS SHALL FOLLOW THE EXISTING DECK GRADES AS OUTLINED BY THE TRANSVERSE SECTION.

UNIT 4 SIMILAR

PROPOSED WORK (UNITS 3 & 4)

- A REMOVE EXISTING 21/4" SDC OVERLAY PLUS AN ADDITIONAL 1/2" OF ORIGINAL DECK
- B PLACE NEW MICRO SILICA CONCRETE OVERLAY 23/4" THICK
- C PARTIAL AND FULL DEPTH PEPAIRS TO THE DECK TO BE MADE AS DIRECTED BY THE ENGINEER

HAM-71-0.00 HAM-75-0.22 PID No. 80931

GENERAL BRIDGE NO.

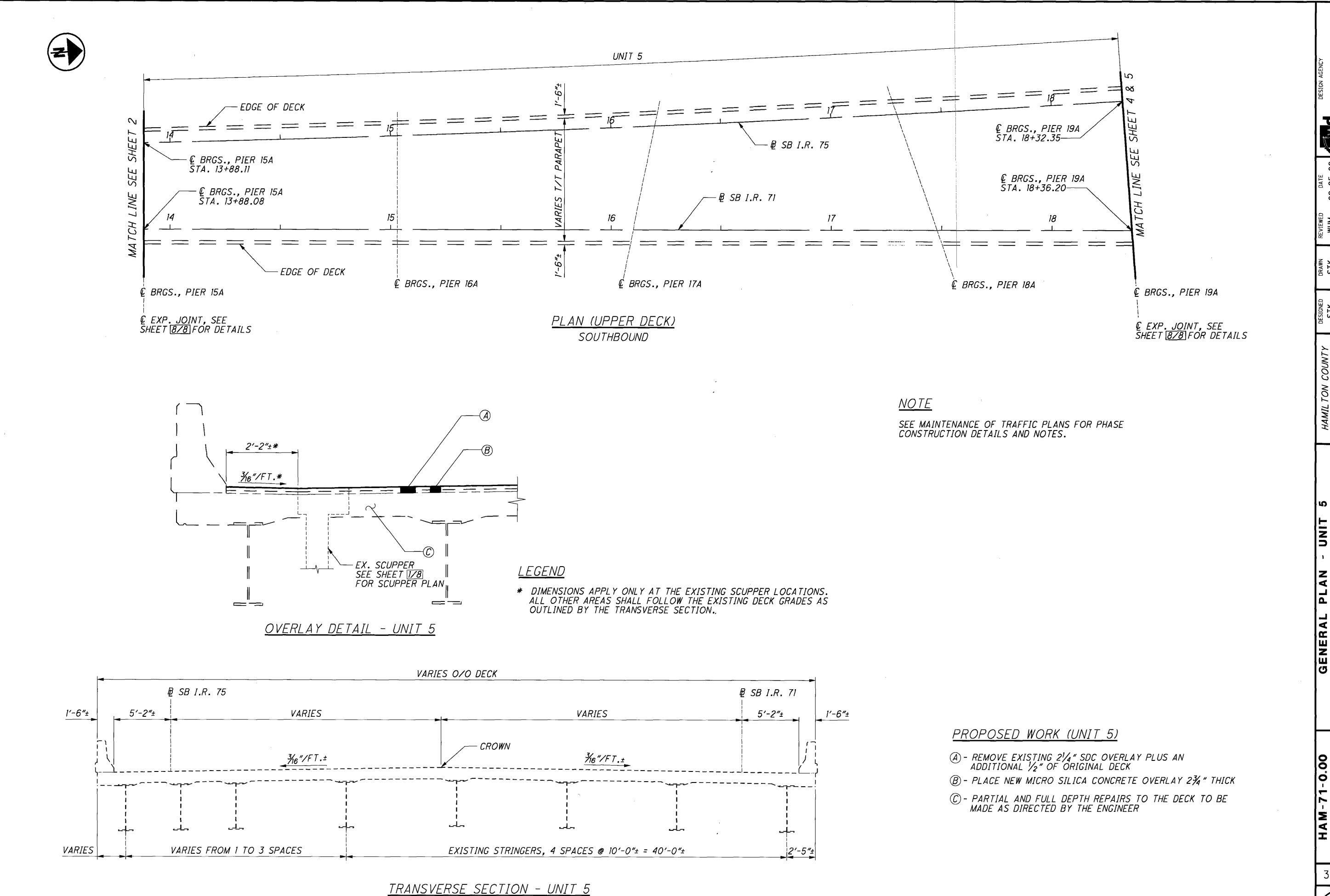
7007 Discovery Dublin, Ohio 43

HAMIL TON COUNT STA. 4+07.75 STA. 23+87.69

UNITS

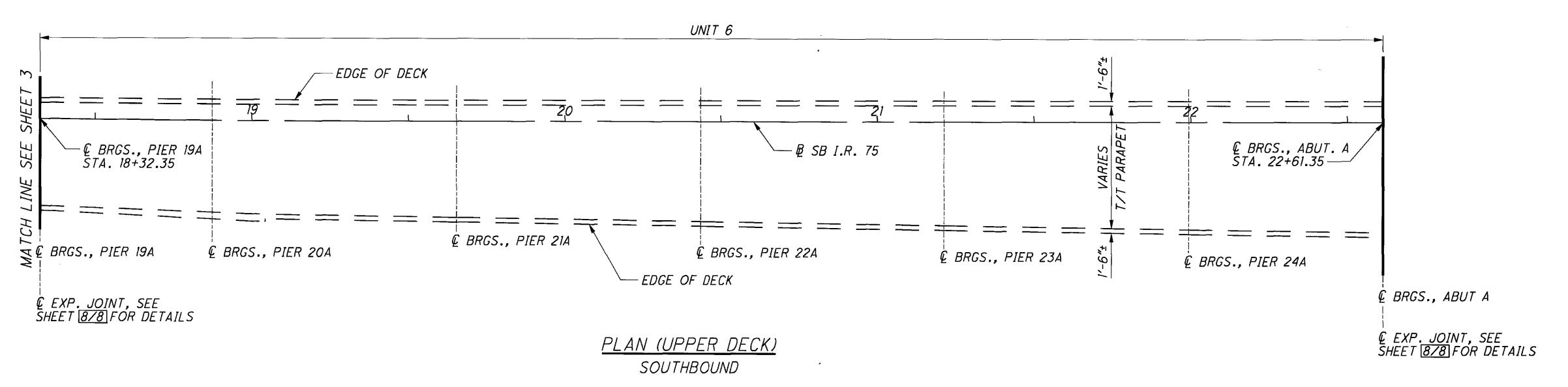
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39 44



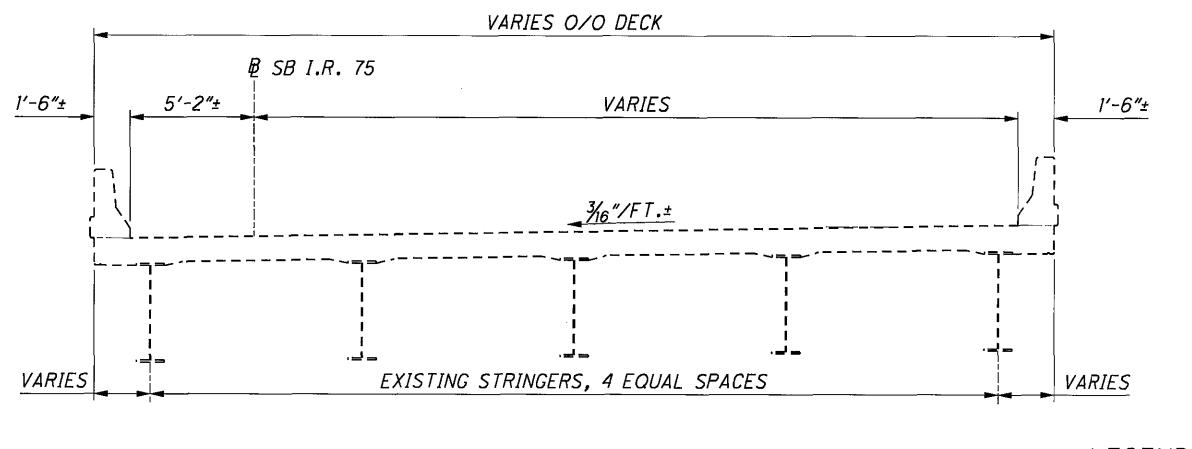


<u>NOTE</u>

SEE MAINTENANCE OF TRAFFIC PLANS FOR PHASE CONSTRUCTION DETAILS AND NOTES.

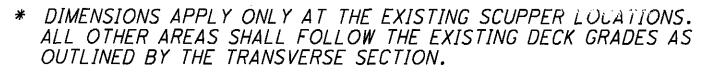
PROPOSED WORK (UNIT 6)

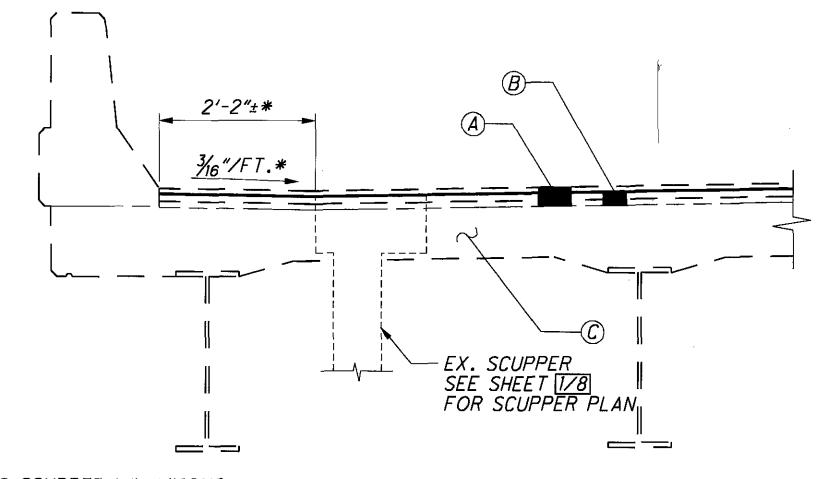
- A REMOVE EXISTING 2" ASPHALT OVERLAY AND 21/4" SDC OVERLAY PLUS AN ADDITIONAL 1/2" OF THE ORIGINAL DECK
- B PLACE NEW MICRO SILICA CONCRETE OVERLAY 23/4" THICK
- © PARTIAL AND FULL DEPTH REPAIRS TO THE DECK TO BE MADE AS DIRECTED BY THE ENGINEER



TRANSVERSE SECTION - UNIT 6

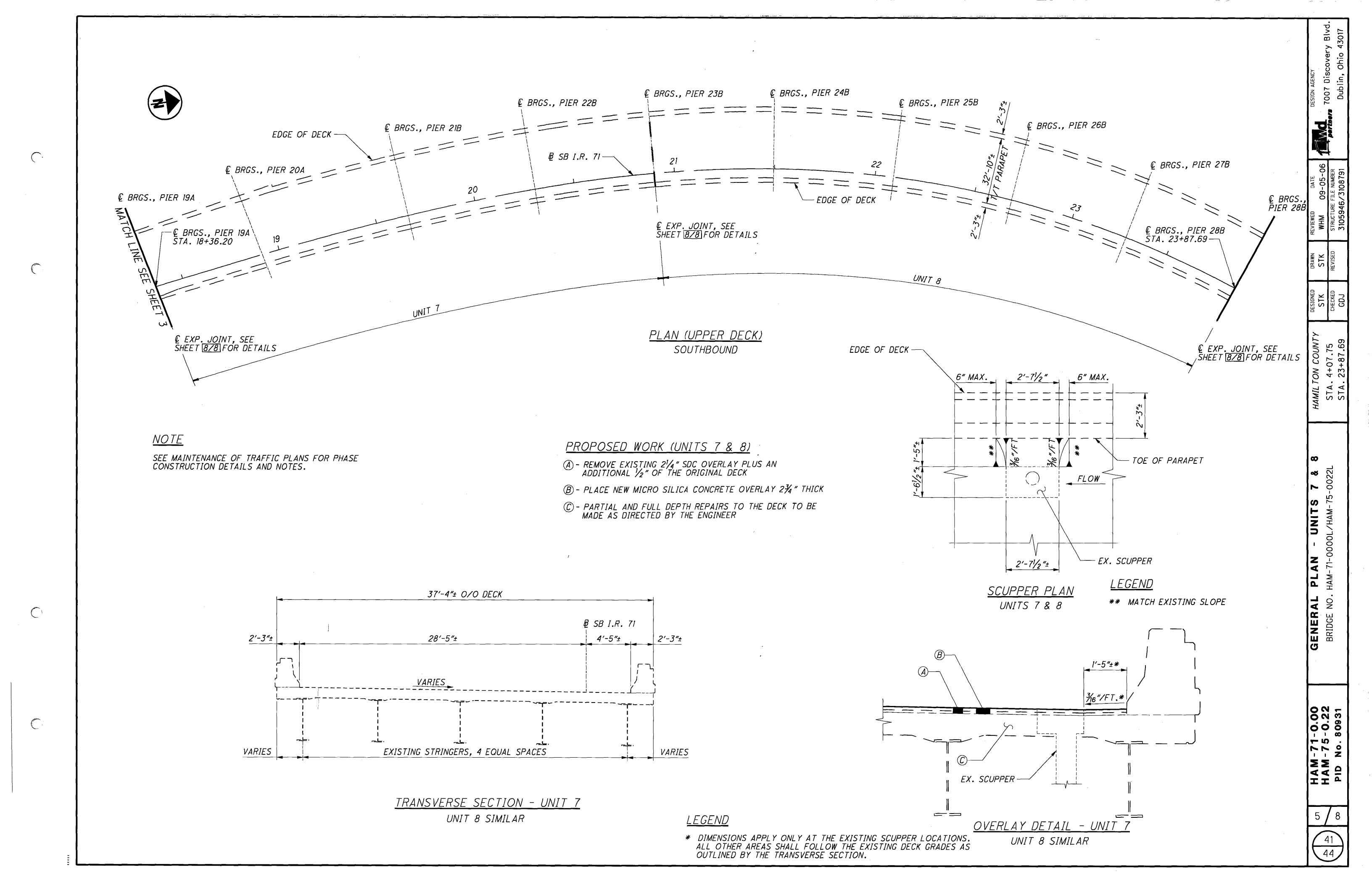






OVERLAY DETAIL - UNIT 6

UNIT



848 DATED 4/15/05

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002, AND THE ODOT BRIDGE DESIGN MANUAL.

DECK PROTECTION METHOD

MICRO SILICA MODIFIED CONCRETE OVERLAY

PROPOSED WORK

CLOSE LANES IN PHASES PER THE MAINTENANCE OF TRAFFIC PLANS. REMOVE EXISTING SDC AND ASPHALT OVERLAYS, PERFORM HYDRODEMOLITION TO THE BRIDGE DECK, SEAL EXPANSION JOINTS, CLEAN OUT STRUCTURAL DRAINAGE SYSTEM AND PROVIDE A NEW MICRO SILICA MODIFIED CONCRETE OVERLAY AS OUTLINED IN THE PLAN SET.

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE). AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CONSTRUCTION AND MATERIAL SPECIFICATIONS 512, THIS ITEM SHALL INCLUDE CLEANING OF THE CONCRETE SURFACES TO BE SEALED AS DESCRIBED HEREIN. CLEAN AND SEAL CONCRETE SURFACES ON THE PIER CAPS AT PIERS 15A, 19A, AND 23B OF STRUCTURE HAM-71-0000L. ALSO CLEAN AND SEAL THE ENTIRE COLUMNS FULL HEIGHT AT PIER 15A, AND THE FIRST 10 FEET OF COLUMNS UNDER THE PIER CAPS AT PIERS 19A AND 23B. CLEANING SHALL PRECEDE APPLICATION OF THE SEALING COMPOUND BY NO MORE THAN 24 HOURS. CLEANING SHALL INCLUDE REMOVAL OF DEBRIS FROM BEAM SEATS, ABRASIVE BLAST CLEANING OF EXPOSED REINFORCEMENT, AND SURFACE PREPARATION OF CONCRETE SURFACES USING WATER OR SANDBLASTING AS PER 512.03. ALL DESINTEGRATED AND LOOSE CONCRETE SHALL BE REMOVED. CARE SHALL BE TAKEN NOT TO REMOVE ANY SOUND CONCRETE. REMOVAL AND DISPOSAL OF DEBRIS SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. EPOXY-URETHANE SHALL BE APPLIED TO ALL SURFACES OF THE PIER CAPS EXCEPT FOR THE TOP OF THE PIER CAP, THE FULL HEIGHT OF COLUMNS AT PIER 15A, AND THE FIRST 10 FEET OF COLUMNS UNDER THE CAPS FOR PIERS 19A AND 23B. THE COLOR OF THE SEALER SHALL BE FEDERAL STANDARD NO. 5958-17778 (LIGHT NEUTRAL).

THIS WORK SHALL BE PAID FOR AT THE UNIT PRICE BID PER SQUARE YARD, THE PRICE AND PAYMENT OF WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN CONFORMANCE WITH THESE REQUIREMENTS, AND TO THE SATISFACTION OF THE ENGINEER.

ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC .: JOINT SEALING SYSTEM. AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CONSTRUCTION AND MATERIALS SPECIFICATIONS 516.06, THIS ITEM SHALL BE USED TO SEAL THE EXPANSION JOINTS AT THE LOCATIONS SHOWN IN THESE PLANS. JOINTS SHALL BE SEALED AS PER THE MANUFACTURER'S REQUIREMENTS USING A TWO COMPONENT SYNTHETIC RUBBER JOINT SEALANT SYSTEM. THE CONTRACTOR SHALL OBTAIN THE SERVICES OF THE FOLLOWING APPLICATORS, OR AN APPROVED EQUAL, WHO SHALL FURNISH AND INSTALL THE EXPANSION JOINT SEALER:

DOW CORNING 902 RCS

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CMA SUPPLY COMPANY 9984 COMMERCE PARK DRIVE CINCINNATI, OH 45246 TEL .: (513) 942-6663 OR (866) 826-6663

PAYMENT SHALL BE AT THE UNIT PRICE PER FOOT OF SEALED JOINT IN PLACE.

ITEM 518 - STRUCTURE DRAINAGE, MISC .: DRAINAGE SYSTEM CLEANOUT. AS PER PLAN

THIS ITEM INCLUDES FREEING DRAINAGE SYSTEMS FROM DEBRIS ON ALL BRIDGE DECKS DOWN TO THE GROUND. THIS INCLUDES DOWNSPOUTS, COLLECTOR SYSTEMS, AND DRAIN INLETS. ALL WORK AND MATERIALS SHALL CONFORM TO ITEM 518.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE WATER SUPPLY USED DURING THE CLEANING OPERATION AND SHALL BE RESPONSIBLE FOR PROPER DISPOSAL OF ANY DEBRIS COLLECTED DURING THESE OPERATIONS.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE LUMP SUM BID PRICE FOR ITEM 518-STRUCTURE DRAINAGE, MISC .: DRAINAGE SYSTEM CLEANOUT, AS PER PLAN, THE PRICE AND PAYMENT OF WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN CONFORMANCE WITH THESE REQUIREMENTS, AND TO THE SATISFACTION OF THE ENGINEER.

ITEM 530 - STRUCTURE, MISC .: PERMANENT TRAFFIC PROTECTION, AS PER PLAN

PRIOR TO CONSTRUCTING THE PERMANENT TRAFFIC PROTECTION, ALL DIMENSIONS SHALL BE FIELD VERIFIED (E.G. STIFFENERS, CROSS FRAMES, BEAM SPACING, ETC.) PROTECTION SHALL BE PROVIDED TO ALL AREAS WHERE THE SOUTHBOUND STRUCTURE FALLS DIRECTLY ABOVE THE NORTHBOUND DECK. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL MATERIALS, LABOR, AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL THE PERMANENT TRAFFIC PROTECTION SHALL BE MADE AT THE CONTRACT PRICE BID FOR ITEM SPECIAL - STRUCTURE, MISC .: PERMANENT TRAFFIC PROTECTION, AS PER PLAN.

ESTIMATED QUANTITIES						DESIGN: STK DATE: 08/22/08	CHECKED: GDJ DATE: 08/23/06	SPEC & AS
ITEM	ITEM EXT.	TOTAL	UN!T	DESCRIPTION	PIERS			PER PLAN SHEET NO.
·					FIERS	SUPER	GEN'L	SHEET NO.
			_	HAM-71-0000L 100% STATE MAJOR BRIDGE				
512	10101	697	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN	667	·		
				TO THE TENT OF THE TENT	697	`		6
516	14600	273	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC .: JOINT SEALING SYSTEM, AS PER PLAN		277		
				LA TENTENT OF THE TENTE OF THE TENTE		273		6
518	63300	LUMP	-	STRUCTURE DRAINAGE, MISC .: DRAINAGE SYSTEM CLEANOUT, AS PER PLAN	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		1 1 1 1 1 1 1 1 1	
6556111							LUMP	6
SPECIAL	53000600	30300	SQ FT	STRUCTURE, MISC .: PERMANENT TRAFFIC PROTECTION, AS PER PLAN		30300		
0.40						30300		6,8
848	10001	9987	SO YD	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (T = 23/4")		9987		6
848	20000	9987	30 10	SURFACE PREPARATION USING HYDRODEMOLITION		9987		
848	30000	344	CU YD	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY		344		
848	50000	<i>550</i>	SO YU	HAND CHIPPING		550		
848	50100	LUMP	· • • • • • • • • • • • • • • • • • • •	TEST SLAB		LUMP		
848	F0200	70	044 20			201111		
848	50200 50320	30	CO YO	FULL-DEPTH REPAIR		30		
848	50340	9987	<u> </u>	EXISTING CONCRETE OVERLAY REMOVED (T = 21/4")		9987		
040	30340	1249	30 TU	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY	· · · · · · · · · · · · · · · · · · ·	1249		
<u></u>		,	· · · · · · · · · · · · · · · · · · ·					
EIC	14600			HAM-75-0022L 100% STATE DISTRICT ALLOCATION				
516	14600	44	<u> </u>	STRUCTURAL JOINT OR JOINT SEALER, MISC .: JOINT SEALING SYSTEM, AS PER PLAN		44		6
F10	67700	4 4 4 4 5	··-					
518	63300	LUMP	-	STRUCTURE DRAINAGE, MISC .: DRAINAGE SYSTEM CLEANOUT, AS PER PLAN			LUMP	6
848	10001	1760					201111	
848	10001 20000	1762	SO YD	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (T = 23/4")		1762		6
848	30000	1762 60	30 10	SURFACE PREPARATION USING HYDRODEMOLITION		1762		
848	50000	97	CU YD	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY HAND CHIPPING		60		
848	50100	LUMP	<u> </u>	TEST SLAB		97		
		LOW	·	TEST SLAB		LUMP		
848	50200	7	CU YD	FULL-DEPTH REPAIR				
848	50300	1762	SO YO	WEARING COURSE REMOVED, ASPHALT		3		
848	50320	1762	SO YO	EXISTING CONCRETE OVERLAY REMOVED (T = 21/47)		1762		
848	50340	220	SQ YD	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY		1762		
				THE OF SECONDED ON BETENTONATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY		220		

ITEM 848 - MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION. AS PER PLAN (T = 23/4")

OVERLAY WORK SHALL CONFORM TO SUPPLEMENTAL SPECIFICATION 848 - BRIDGE DECK REPAIR AND OVERLAY WITH CONCRETE USING HYDRODEMOLITION AND WITH THE FOLLOWING CONDITIONS AND REVISIONS:

- A. THE WET CURE TIME IS REDUCED FROM 72 HOURS TO 24 HOURS OR UNTIL BEAM BREAK OF I. THE OVERLAY SURFACE EVAPORATION RATE REQUIREMENTS ARE IN EFFECT FROM 9:30 AM 600 PSI IS ACHIEVED, WHICHEVER IS GREATER. AFTER THE 24 HOUR WET CURE, THE FINISHED OVERLAY SURFACE SHALL BE CURED BY SPRAYING A UNIFORM APPLICATION OF CURING MATERIAL 705.07, TYPE I OR ID, AS PER CMS 511.17 METHOD B OF MEMBRANE CURING. THE DECK SURFACE MUST BE DRY PRIOR TO PLACEMENT OF THE CURING MATERIAL. IF THE CURING COMPOUND CANNOT BE PLACED WITHIN THE SAME SHORT-TERM CLOSURE PERIOD AS THE OVERLAY WORK, THE CONTRACTOR MAY ALLOW TRAFFIC ONTO THE OVERLAY, AND SHALL HAVE 24 HOURS FROM REMOVAL OF THE WET CURE TO APPLY THE MEMBRANE-CURING COMPOUND.
- B. TRAFFIC WILL NOT BE PERMITTED ON THE FINISHED OVERLAY SURFACE UNTIL AFTER THE COMPLETION OF THE 24 HOUR WET CURE, AND AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF 600 PSI.
- C. FOR EACH POUR, THE CONTRACTOR SHALL PROVIDE ENOUGH MATERIAL FOR TWO BEAM BREAKS EACH AT 12 HOURS, 24 HOURS, 36 HOURS, AND 48 HOURS. THE DEPARTMENT WILL PERFORM THE BEAM BREAK TESTS AND DOCUMENT THE TIME OF THE POUR, THE TIME OF THE BEAM BREAK TESTS AND THE MODULUS OF RUPTURE FOR EACH BEAM UNTIL THE MODULUS OF RUPTURE OF TWO TESTS IS NOT LESS THAN 650 PSI. TRAFFIC IS ALLOWED ON THE OVERLAY AT 600 PSI.
- D. TWO TEST SLABS WILL BE REQUIRED IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 848 IF A PERIOD OF 30 DAYS OR MORE HAS ELAPSED SINCE THE POURING OF THE TEST SLABS OR ANY OVERLAY OPERATION AS PART OF THIS PROJECT.
- E. THE MAXIMUM AMOUNT OF OVERLAY MATERIAL TO BE CARRIED BY ANY ONE VEHICLE DURING THE OVERLAY OPERATIONS IS 6 CUBIC YARDS.
- F. THE REMOVAL OPERATIONS SHALL NOT BEGIN IF SUSTAINED RAINS (5 HOURS OR MORE WITH BREAKS BETWEEN SHOWERS LESS THAN I 1/2 HOURS) ARE PREDICTED WITHIN 48 HOURS OF COMMENCEMENT.

- G. THE FINAL SOUNDING MAY TAKE PLACE WITHIN 24 HOURS OF A RAIN, AND THE DECK DOES NOT HAVE TO BE COMPLETELY DRY. HAND CHIPPING IS FOR THE PURPOSE OF CHIPPING AREAS WHERE THE HYDRODEMOLITION MACHINE DOES NOT HAVE ACCESS. IF THE DESIRED DEPTH IS ACHIEVED BY HYDRODEMOLITION. NO FURTHER REMOVAL IS NECESSARY.
- H. FULL DEPTH REPAIR WILL NOT BE REQUIRED IF LESS THAN ONE HALF OF THE DECK ORIGINAL CONCRETE THICKNESS IS SOUND.
- TO 11:00 PM. THEY ARE NOT IN EFFECT FROM 11:00 PM TO 9:30 AM.
- J. MECHANICAL MEANS MAY BE USED TO REMOVE THE EXISTING RIGID OR ASPHALT OVERLAY. THE REMAINING O.5 INCH OF ORIGINAL DECK SHALL BE REMOVED BY HYDRODEMOLITION.

UTILITY LINES: THE UTILITIES SHALL BORE ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITIES ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

EXISTING STRUCTURE VERIFICATION: DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05 AND 105.02.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

STK STK REVISED

OUANTITIES I-75-0022L TIMATED ES 71-0 S & HAM NOTE E NO. 1

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