Addendum

Iowa Department of Transportation Date of Letting: January 20, 2016

Office of Contracts Date of Addendum: December 18, 2015

B.O.	Proposal ID	Proposal Work Type	County	Project Number	Addendum
020	40-0204-051-A	BRIDGE DECK OVERLAY	HAMILTON	BRFN-017-3(37)39-40 BRFN-020-4(51)39-40 IMN-035-5(102)1470E-40	20JAN020.A01

Make the following changes to the PROPOSAL SCHEDULE OF PRICES:

Delete Proposal Line No. 0770 2413-0698074 DECK REPAIR, CLASS A; 72.300 SY

Add Proposal Line No. 0794 2599-9999003 ('CUBIC YARD' ITEM) CONCRETE REPAIR, REPLACE VARIABLE DEPTH CONCRETE; 6.000 CY

Add Proposal Line No. 0795 2599-9999018 ('SQUARE YARDS' ITEM) HYDRODEMOLITION REMOVAL; 915.600 SY

Add Proposal Line No. 0796 2599-9999018 ('SQUARE YARDS' ITEM)REMOVAL, CLASS A; 91.600 SY

Delete Proposal Line No. 1140 2413-0698074 DECK REPAIR, CLASS A; 105.100 SY

Add Proposal Line No. 1194 2599-9999003 ('CUBIC YARD' ITEM) CONCRETE REPAIR, REPLACE VARIABLE DEPTH CONCRETE; 8.800 CY

Add Proposal Line No. 1195 2599-9999018 ('SQUARE YARDS' ITEM) HYDRODEMOLITION REMOVAL; 1,012.000 SY

Add Proposal Line No. 1196 2599-9999018 ('SQUARE YARDS' ITEM)REMOVAL, CLASS A; 101.200 SY

If the above changes are not made, they will be made as shown here.

Make the following change to the plans:

BRFN-017-3(37)--39-40

SHEET NUMBER 2:

Add the following note to the ESTIMATE REFERENCE INFORMATION for the item 2599-9999018 HYDRODEMOLITION REMOVAL:

"INCLUDES HYDRODEMOLITION OF THE FULL DECK AREA AS DESCRIBED ON DESIGN SHEET 5."

In General Notes, Replace

"NO PRELIMINARY DECK SURVEY IS SHOWN. THE PLAN QUANTITY FOR "CLASS A DECK REPAIR" IS ESTIMATED AS 72.3 SY BASED ON HAND SOUNDING OF THE DECK, PLUS A 25% INCREASE FOR ESTIMATING PURPOSES."

With

"NO PRELIMINARY DECK SURVEY IS SHOWN. THE PLAN QUANTITY FOR "DECK REPAIR, REPLACE VARIABLE DEPTH CONCRETE" IS ESTIMATED AS 6.0 CY BASED ON HAND SOUNDING OF THE DECK, PLUS A 25% INCREASE FOR ESTIMATING PURPOSES. AN AVERAGE DEPTH OF REPAIR OF 3" IS ASSUMED FOR ESTIMATING PURPOSES."

Add the attached SHEET NUMBER 6 to the Plan

Make the following change to the plans: IMN-035-5(102)147--0E-40

SHEET NUMBER 2:

Add the following note to the ESTIMATE REFERENCE INFORMATION for the item 2599-9999018 HYDRODEMOLITION REMOVAL:

"INCLUDES HYDRODEMOLITION OF THE FULL DECK AREA AS DESCRIBED IN THESE PLANS"

In General Notes, Replace

"NO PRELIMINARY DECK SURVEY IS SHOWN. THE PLAN QUANTITY FOR "CLASS A DECK REPAIR" IS ESTIMATED AS 105.1 SY BASED ON HAND SOUNDING OF THE DECK, PLUS 25% INCREASE FOR ESTIMATING PURPOSES"

With

"NO PRELIMINARY DECK SURVEY IS SHOWN. THE PLAN QUANTITY FOR "DECK REPAIR, REPLACE VARIABLE DEPTH CONCRETE" IS ESTIMATED AS 8.8 CY BASED ON HAND SOUNDING OF THE DECK, PLUS 25% INCREASE FOR ESTIMATING PURPOSES. AN AVERAGE DEPTH OF REPAIR OF 3" IS ASSUMED FOR ESTIMATING PURPOSES."

SHEET NUMBER 3:

In list of repairs, replace "DECK REPAIR, CLASS A"

With

"DECK REPAIR, REPLACE VARIABLE DEPTH CONCRETE"

Add the Attached SHEET NUMBER 13 to the Plan

HYDRODEMOLITION NOTES

ITS THE INTENT TO USE THE HYDODEAUCHYON PROCESS TO REMOVE LALL UNSOUND CONVERTE AS 50 DIECTED BY THE ENGINEER BY USING A HIGH PRESSURE WITER STREAM. PERMOVALS SHALL CREATE A VEFY ROUGH, BONDABLE SUBFACE FOR NEW CONCRETE TO ADHERE CONCRETE TO ADHERE CONCRETE TO ADHERE CONCRETE AS A TO WEDDEDOLITION.

THE COMPLETE BRIDGE DECK SURFACE SHALL BE MILLED TO A DEPTH OF I INCH BEFORE HYDRODEMOLITION BEGINS.

THE CONTRACTOR SHALL USE SELF-PROPELLED HYDRODEMOLITION EQUIPMENT THAT PROVIDES NEH PRESSURE WATER LET STEEM FOR CONCRETE REMOVALS. THIS EQUIPMENT SHALL BE CAPABLE OF REMOVING ANY UNSOUND CONCRETE, AS WELL AS REMOVING RUST AND CONCRETE PARTICLES FROM RYPOSED REINFORCHM STEEL.

CLEAN POTABLE WATER SHALL BE PROVIDED FOR HIGH PRESSURE REMOVALS AND THE EXCESS WITHER RECLAIMED USING VACUUM METHODS OF COLLECTION, THEN FILTERED AND REUSED AS MUCH AS PRACTICAL.

OPERATION OF THE HYDRODEMOLITION EQUIPMENT SHALL BE PERFORMED AND SUPERVISED BY QUALIFIED PERSONNEL CERTIFIED BY THE EQUIPMENT MANUFACTURER.

Я THE CONTRACTOR SHALL ENSURE CONTAINMENT OF ALL DISLOGED MATERIAL, ELVING DEBRIS AND EXCESS WATER WITHIN THE EXISTING ROADMY AMO NOT ALLOW DEBRIS WATER TO ENTER ADJACENT TRAVEL LANES OR TRAFFIC, OR BELOW THE WORK AREA.

CALIBRATING HYDRODEMOLITION:

PRIOR TO THE COMMENCEMENT OF THE REMOVAL OPERATION WITH HYDRODEMOLITION, THE CEDUMENT SHALL BE CALIBRATION ON THOS SECTIONS DESIGNANTED BY THE REMOINERT TO EDMONSTRATE HAIT EQUIPMENT, PERSONNEL AND METHODS OF OPERATION ARE CAPABLE OF PROPOLICING RESULT S. ASTISTACTORY TO THE ENVIRER. THE TRAIL SECTIONS WILL BE PROPOXIMIZED. TO GO SQUARE FEET EACH, CONSISTING OF ONE SECTION OF SQUARE FEET EACH, CONSISTING OF ONE SECTION OF SQUARE CONPERTE. THE CALIBRATION SHALL NOT INCLUDE ANY AREAS OF EXISTING OVERLAY OR PATCH MATERIAL, THE COUNTRACTOR WILL DOCUMENT

- WATER PRESSIRE GALGE (13,000 PSI MINIMUM)
 WATER THE USAGE (55 GALLONS PEER MINUTE, MINIMUM)
 MACHINE STAGING CONTROL (STEP)
 NOZZIE SPEED (TRAVEL)

AFTER THE INITIAL TEST ON SOUND CONCRETE, THE EQUIPMENT SHALL THEN BE MOVED TO THE DEFENDANCE DAREA TO VEHIFF THAT INITIAL SETTINES MILL ELULF REMOVE UNSOUND CONCRETE WITHIN THE DESIGNATED AREA. THE INITIAL SETTINES MAY NEED TO BE ADJUSTED, WITHIN THE LIMITS ESTABLISHED ABOVE, IN ORDER TO ACHIEVE TOTAL REMOVAL OF UNSOUND CONCRETE. THE CONTRACTOR SHALL DOCUMENT THE FINAL EQUIPMENT SETTINGS REQUIRED.

BRIDGE DECK REMOVAL BY HYDRODEMOLITION: CONCRETE

AFTER CALIBRATION OF THE EQUIPMENT, CONCRETE REMOVAL BY HYDRODEMOLITION SHALL BECONDUCTED ON THE RENDED ECK. THE REMOVAL SETTINGS WILL BE PREFIEED AS DECESSARY. THE EQUIPMENT SETTINGS WILL BE DOCUMENTED BY THE CONTRACTOR AND PROVIDED TO THE REMOVERER. CALIBRATION OF THE HYDRODEMOLITION EQUIPMENT SHALL BE COMDUCTED FOR EVERY DAY OF OPERATION AND, IF NECESSARY, RE-CALIBRATED TO ASSIGNE REMOVAL OF SOUND CONCRETE. AND WILL AS TO GLUBD AGAINST EXESSIVE REMOVAL OF SOUND CONCRETE. AND WORLD HAVE BE USED IN AREA STALL ARE INACCESSIBLE TO THE SELF-PROPELLED OR HAND OPERATED HYDRODEMOLITION BOUNDARY. HANDCHIPPING TOOLS (15 LBS., MAXIMOM) NAMY BE HAND OR MECHANICALLY DENIVER.

ADDITIONAL REMOVAL:

AFTER CONCRETE BRIDGE DECK REMOVAL BY HYDRODEMOLITION HAS BEEN COMPLETED FOR THE CONSTRUCTION PRASE, THE DECK WILL UNBERGEO FINAL SOUNDING TO ASSURE THAT ALL UNSCOUND CONCRETE HAS BEEN REMOVED. THE PREPARED DECK SUFFACE WILL BE CONCRETELY DRY PROPORED TO SOUNDINGS AND WILL CONSIST OF AS AMAN SUCCESSIVE SOUNDINGS AS REQUIRED TO ENSURE THAT ALL DELAMINATED OF DEBONDED CONCRETE HAS SOUNDINGS AS REQUIRED TO ENSURE THAT ALL DELAMINATED OF DEBONDED CONCRETE HAS AND SOUPPING SALVE PROPOREDIAL ITOMAL CONCRETE REMOVAL SHALL BE PERFORMED BY HAMOCHIPPING AND OFF HAMOCHIPPING SALVE BE HAND OF MECHANICALLY DRIVER AND OPERATED IN ACCORDANCE WITH ARTICLE 2413.03 OF THE STANDARD SPECIFICATIONS.

IN ADDITION, WHERE REINFORCING STEEL IS EXPOSED AND CONCRETE AND STEEL ARE NO CLORGER BONDED, REMOVE ANY CONCRETE TO CLEAR AT LEAST, "INCH ANDOUTD THE EXPOSED BARS. UN-BONDED BARS SHALL DETERMINED BY THE ENGINEER, MORE THAN ONE-HALF OF THE BAR PERINBETER ANY BE EXPOSED AND STILL DETERMINED TO BE "BONDED", NO NOT USE CHIPPING HAMREN HEAVIER THAN 15 LES. TO REMOVE CONCRETE. EXTREME CARE SHALL BE TAKEN TO ENSURE THAT NO DAMAGE IS DONE TO ANY PERINFORCING BARS EXPOSED DONE THE REMOVEL PROCESS. ANY DAMAGE DONE SHALL BE REPAIRED BY THE TATE. CONTRACTOR AS APPROVED BY THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

BRIDGE FLOOR DEPTH REPAIR OF

WHERE THE DECK IS SOUND FOR LESS THAM HALF OF ITS ORIGINAL DEPTH, THE CONCRETE SALLE BREMOVED FULL DEPTH (DESIGNARED AS CLASS B REPAIR) EXCEPT FOR LIMITED AREAS AS DETERMINED BY THE ENGINEER.

PREPARATION OF BRIDGE FLOOR PRIOR TO OVERLAY PLACEMENT

VACUUMING OF DEBRIS AND WATER SHALL BE DONE IMMEDIATELY AFTER ANY MYNODEMOLITION WORK, CONTRACTOR IS TO ENSURE ALL WATER RIN-OFF AND RESIDUAL MATERIAL IS CONTANNED WITHIN THE WORK AREA AD COLLECTED FOR DISPOSE, OF EXCESS WATER AND DEBRIS AS APPROVED BY THE ENGINEER.

CLEANING OF THE HYDRODEMOLITION DEBRIS AND SLURRY SHALL BE PERFORMED WITH A A VACUOUS SYSTEM ECUIPPED WITH A DUST CONTROL DEPLYCES, AND CAPABLE OF REMOVING WET DEBRIS AND WATER IN THE SAME PASS, THE WACUUM ECUIPMENT SHALL BE CAPABLE OF ANALING THE DEFROR WITH PRESSURIZED WATER DIRING THE WACUUM OPERATION TO DISLODGE ALL DEBRIS AND SLURRY FROM THE BRIDGE DECK SUFFACE, CLEANING SHALL BE DONE BEFORE DEBRIS AND SLURRY 15 ALLOWED TO DRY ON THE BRIDGE DECK SUFFACE.

AFTER COMPLETION OF HYDRODEMOLITION AND ADDITIONAL REMOVALS, BUT NOT MORE THAN 24 HOURS PRIGHT FOR PACKABINT OF THE OVERLAY. THE BYINGE DECK SHALL BY AND ADDISS PRIGHT OF PACKABINT OF EXPOSE FINE AND COARSE AGGREGATES AND TO REMOVE LAITANGE FROM THE SURFACE, EXPOSED REINGFORMS STEEL AND THE CONFIDETE UNDER WATER BLASTING. THE SURFACE SHALL BE THOROUGHY O'CLANDED BY SANDBLASTING OR WALTER BLASTING. THE SURFACE SHALL BE CLEANED USING COMPRESSED AIR TO REMOVE CLEANING SHALL BY AND MATER, ARE LINES FOR SANDBLASTING AND COMPRESSED AIR CLEANING SHALL BE EQUIPPED WITH OIL TRAPS.

BID ITEM INFORMATION:

HE BID ITEM "HYDRODEMOLITION REMOVAL" SHALL INCLUDE ALL COSTS FOR HYDRODEMOLITION, CLEAN-UP, MATER CONTROL, DISPOSAL, AND FINAL CLEAN-UP IN PREPARATION FOR "CONCRETE REPAIR, REPLACE VARIABLE DEPH CONCRETE".

THE BID ITEM "CONCRETE REPAIR, REPLACE VARIABLE DEPTH CONCRETE", CUBIC YARDS, STALL INCLUDE "HE ADDITIONAL CONCRETE" TO REPAIR THE DECK FROM THE HYDOOD DEMOLITION REMOVAL AND THAN PERMOVAL. FOR THE FIELD MASSIGNERN OF THIS ITEM, FROWER REMOVAL AND THE DECK OVERTHY GF. 2016 YARDS) WITH THE DESC OVERTHY GF. 2016 YARDS) WITH THE STALL BEING THE OVERTHY OPERATION. THE STALL SHOWNER THE OVERTHY OPERATION. THE STALL DECK CONCRETE (EXCLUDING AZ INCHOORER, OPERATION, THE STALL DECK CONCRETE (EXCLUDING AREAS OF CLASS B REPAIR) IN ONE OPERATION.

THE BID ITEM "DECK OVERLAY (CLASS O PPC") OR "DECK OVERLAY (CLASS HPC-0 PCC)" SHALL INCLIDE THE COST OF THE 57.2 CUBIC YARDS OF CONCRETE MATERIAL NOTED AS A DEDUCTION WHEN CALCULATING THE "CONCRETE REPAIR, REPLACE VARIABLE DEPH FONCRETE" PAY QUANTITY.

THE BID ITEM "REMOVALS, CLASS A" SHALL INCLUDE COST OF LABOR AND EQUIPMENT REQUIRED TO REMOVE UNSOUND CONNETE AND UNBRONGED CONCRETE AROUND EXPOSED REINFORMS, BARS AFTER HYDRODEMOLITION, REMOVALS WILL INVOLVE HAND CHIPPING TOOLS AND BE PAID FOR BY CONTRACT UNIT PRICE PER SQ. YD.

THE ENGINEER WILL DETERMINE THE SQ.YD.OF "REMOVALS, CLASS A" BY MEANS OF SURFACE DIMENSIONS OF THE AREAS TO BE REMOVED TO THE NEAREST O.I SQ.YD.

CONCERNING ADJUSTMENT OF PRICE FOR OVERRUN OR UNDERRUN OF THE CONTRACT QUANTITY, "REMOVALS, CLASS A" WILL NOT BE CONSIDERED A MAJOR ITEM OF WORK.

DEFECTS IN EMBEDDED REINFORCING STEE DUE TO CORROSION, WHICH HAS REDUCED THE CROSS SECTIONAL AREA OF THE STEEL BY 25% OR GREATER, SHALL HAVE NEW REINFORDING STEEL OF THE SAME SIE OR GREATER CROSS SECTIONAL AREA LAPROT 10 EACH SIDE OF THE DAMAGED AREA. 2. "APEN THORING SHALL BE USED. NW REINFORCING STALL BE CHED. WE REINFORCING STALL BE CHED. WE REINFORCING STALL BE CAN'T CARLED. NEW REINFORCING STALL BE AND FOR AS AN EXTRA WORK ORDER.

WHERE THE DECK IS UNSOUND FOR MORE THAN HALF OF ITS ORIGINAL DEPTH AS DETERMINED BY THE ENVIREN, THE CONCRETE SHALL BE REMOVED FULL DEPTH, FOR THESE AREAS OF FULL DEPTH REMOVAL (DESIGNED AS CLASS B REPAIR), THE WORK SHALL BE PAID FOR AS EXTRA WORK.

PRESTRESSED CONCRETE BEAM BRIDGE 35'-9 END SPANS DESIGN FOR REPAIRS TO A 0° SKEW 254'-6 X 32'-0 PRETENSIONED

NOVEMBER 2015 HYDRODEMOLITION NOTES 35'-9 END SPANS

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION DESIGN SHEET NO. 5 OF 5 FILE NO. 31184 DESIGN NO. 117 HAMILTON COUNTY STA, 6363+99.80

SHEET NUMBER

400117s005

HAMILTON COUNTY PROJECT NUMBER BRFN-017-3(37)--39-40 pwi/NMJS-PW1.stanleygroup.com.DataSource-INDocuments/Infrastructure Business Unit/PR4.IAD0TV25497.25497.04 - Bridge Deck Overlay Final Design/4001702013 - Hamilton117/BRFinalV40017037 STANDARD SHEET 1069 DESIGN TEAM Stanley Consultants Inc. 09039 3:46:44 PM

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HYDRODEMOLITION NOTES

ITS THE INTENT TO USE THE HYDODEAUCHYON PROCESS TO REMOVE LALL UNSOUND CONVERTE AS 50 DIECTED BY THE ENGINEER BY USING A HIGH PRESSURE WITER STREAM. PERMOVALS SHALL CREATE A VEFY ROUGH, BONDABLE SUBFACE FOR NEW CONCRETE TO ADHERE CONCRETE TO ADHERE CONCRETE TO ADHERE CONCRETE AS A TO WEDDEDOLITION.

THE COMPLETE BRIDGE DECK SURFACE SHALL BE MILLED TO A DEPTH OF I INCH BEFORE HYDRODEMOLITION BEGINS.

THE CONTRACTOR SHALL USE SELF-PROPELLED HYDRODEMOLITION EQUIPMENT THAT PROVIDES SHE PRESSURE WATER LET STERME FOR CONCRETE REMOVALS. THIS EQUIPMENT SHALL BE CAPABLE OF REMOVING ANY UNSOUND CONCRETE, AS WELL AS REMOVING RUST AND CONCRETE PRATICLES FROM EXPOSED REINFORCING STEEL

CLEAN POTABLE WATER SHALL BE PROVIDED FOR HIGH PRESSURE REMOVALS AND THE EXCESS WITHER RECLAIMED USING VACUUM METHODS OF COLLECTION, THEN FILTERED AND REUSED AS MUCH AS PRACTICAL.

OPERATION OF THE HYDRODEMOLITION EQUIPMENT SHALL BE PERFORMED AND SUPERVISED BY QUALIFIED PERSONNEL CERTIFIED BY THE EQUIPMENT MANUFACTURER.

Я THE CONTRACTOR SHALL ENSURE CONTAINMENT OF ALL DISLOGED MATERIAL, ELVING DEBRIS AND EXCESS WATER WITHIN THE EXISTING ROADMY AMO NOT ALLOW DEBRIS WATER TO ENTER ADJACENT TRAVEL LANES OR TRAFFIC, OR BELOW THE WORK AREA.

CALIBRATING HYDRODEMOLITION:

PRIOR TO THE COMMENCEMENT OF THE REMOVAL OPERATION WITH HYDRODEMOLITION, THE EQUIMENT SHALL BE CALIBRATION DESIGNATED BY THE REGINERER TO DEMONSTRATE HAIT EQUIMENT, PERSONNEL AND METHODS OF OPERATION ARE CAPABLE OF PRODUCING RESULTS ASTISKACTORY TO THE ENVIRER. THE TRAIL SECTIONS WILL BE PROPOMALIZELY 100 SQUARE FEET EACH, CONSISTING OF ONE SECTION OF SOUND CONCRET. THEN ONE SECTION OF DETERIORALED CONCRETE. THE CALIBRATION SHALL NOT INCLUDE ANY AREAS OF EXISTING OVERLAY OR PATCH MATERIAL, THE CONTRACTOR WILL DOCUMENT

THIS VALUE WATER PRESSURE CAURE (13,000 PSI MINIMUM)
WATER USAGE (55 CALLONS PER MINUTE, MINIMUM) - VERIFY NEED FOR 'MACHINE STAGNIG CONTROL (STEP)
NOZZLE STEE
NOZZLE STEED (TRAVE)

AFTER THE INITIAL TEST ON SOUND CONCRETE, THE EQUIPMENT SHALL THEN BE MOVED TO THE DEFENDANCE DAREA TO VEHIFF THAT INITIAL SETTINES MILL ELULF REMOVE UNSOUND CONCRETE WITHIN THE DESIGNATED AREA. THE INITIAL SETTINES MAY NEED TO BE ADJUSTED, WITHIN THE LIMITS ESTABLISHED ABOVE, IN ORDER TO ACHIEVE TOTAL REMOVAL OF UNSOUND CONCRETE. THE CONTRACTOR SHALL DOCUMENT THE FINAL EQUIPMENT SETTINGS REQUIRED.

BRIDGE DECK REMOVAL BY HYDRODEMOLITION: CONCRETE

AFTER CALIBRATION OF THE EQUIPMENT, CONCRETE FEMOVAL BY HYDRODEMOLITION SHALL BE CONDUCTED ON THE BRIDGE FOCK. THE REMOVAL SETTINGS WILL BE VERHIED AS NECESSARY. THE CONTRACTOR AND PROVIDED TO THE REMOVER THE NEW THE BRIDGE FOR THE WYDRODEDLITION EQUIPMENT SHALL BE CONDUCTED FOR EVERY DAY OF OPERATION AND, IN RECESSARY RE-CALIBRATED TO ANSIAR ENGINEAR SO FOLLAMINED CONCRETE AS WELL AS TO GLUARD ANAINST EXCESSARY RE-CALIBRATED TO ANAINST EXCESSIVE REMOVAL, OF SOUND CONCRETE, AMANCHIPPING MAY BE USED IN AREAS THAT ARE INACCESSIBLE TO THE SELF-PROPELLED OR HAND OPERATED HYDRODEMOLITION EQUIPMENT, HANDCHIPPING TOOLS (15 LBS, MAXIMOM) MAY BE HAND OR MECHANICALLY BINING.

ADDITIONAL REMOVAL:

AFTER CONCRETE BRIDGE DECK REMOVAL BY HYDRODEMOLITION HAS BEEN COMPLETED FOR THE CONSTRUCTION HASES, THE DECK WILL UNBESTOR FINAL SOUNDING TO ASSURE THAT ALL UNSOUND CONCRETE HAS BEEN REMOVED. THE PREPARED DECK SUFFACE WILL BE CONCRETEL DRY PRINT SOUNDING AND WILL CONSIST OF AS ANY SUCCESSIVE SOUNDINGS. AS REQUIRED TO ENSURE THAT ALL DELAMINATED OR DEBONDED CONCRETE HAS AND FOR PROPER PING AND CONCRETE FRANCH THAT ALL DELAMINATED OR DEBONDED CONCRETE HAS AND CHIPPING AND CONCRETE HAS AND CHIPPING AND CONCRETE HAS AND CHIPPING AND CHIPPING AND OPERATED IN ACCORDANCE WITH ARTICLE 2413.03 OF THE STANDARD SPECIFICATIONS.

IN ADDITION, WHERE REINFORCING STEEL IS EXPOSED AND CONCRETE AND STEEL ARE NO LONGER BONDED, FRANCE ANY CONCRETE TO CLEAR AT LEAST \$\frac{1}{2}\$ WICH ARROWN THE EXPOSED BARS. UN-BONDED BARS SHALL DETERMINED BY THE ENDINEER, MORE THAN ONE-HALF OF THE BARS BE REFINETED BARS SHALL DETERMINED TO BE "BONDED" TO NOT USE CHIPPING HAMERS HEAVIER THAN IS LBS. TO REMOVE CONCRETE. EXTREME CARE SHALL BE TAKEN TO ENSINE THAN 15 LBS. TO REMOVE CONCRETE. EXTREME CARE DURING THE REMOVAL PROCESS. ANY DAMAGE DONE TO ANY REINFORCING BARS EXPOSED DURING THE REMOVAL PROCESS. ANY DAMAGE DONE SHALL BE REPARED BY THE THE THE CONTRACTOR AS APPROVED BY THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

FULL DEPTH REPAIR OF BRIDGE FLOOR

WHERE THE DECK IS SOUND FOR LESS THAN HALF OF ITS ORIGINAL DEPTH, THE CONCRETE SALLE BERMOVED PULL DEPTH (DESIGNATED AS CLASS B REPAIR) EXCEPT FOR LIMITED AREAS AS DETERMINED BY THE ENGINEEN.

PREPARATION OF BRIDGE FLOOR PRIOR TO OVERLAY PLACEMENT:

VACUUMING OF DEBRIS AND WATER SHALL BE DONE IMMEDIATELY AFTER ANY MYNODEMOLITON WORK, CONTRACTOR IS TO ENSURE ALL WATER RUN-OFF AND RESIDUAL MATERIAL IS CONTANED WITHIN THE WORK AREA AD COLLECTED FOR DISPOSE, OF EXCESS WATER AND DEBRIS AS APPROVED BY THE ENGINEER.

CLEANING OF THE HYDRODEMOLITION DEBRIS AND SLURRY SHALL BE PERFORMED WITH A ACCOUNS SYSTEM ECUIPED WITH BUST CONTROL DEVICES AND CAPABLE OF REMOVING WET DEBRIS AND WATER IN THE SAME PASS. THE WADUIM ECUIPMENT SHALL BE CAPABLE OF ALSHING THE DECK WITH PRESSURED WATER DRINKIN THE VALUAM OPERATION TO DISLODGE ALL DEBRIS AND SLURRY FROM THE BRIDGE DECK SURFACE. CLEANING SHALL BE DONE BEFORE DEBRIS AND SLURRY IS ALLOWED TO DRY ON THE BRIDGE DECK SURFACE.

AFTER COMPLETION OF HYDRODEWOLITION AND ADDITIONAL REMOVALS, BUT NOT MORE THAN 24 HOURS FRIGHT FOR PLACEMENT OF THE OVERLAY. THE BYING EDCK SHALL BY ASADBLASTED ON WAITER BLASTED TO EXPOSE FINE AND COARSE AGGREGATES AND TREMOVE LAITANCE FROM THE SURFACE. EXPOSED REINGPOINS STEEL AND THE CONNETTE UNDER WAITER BLASTING. THE REPOSEDS STEEL SHALL BE THOROUGHY TCLANDED BY SANDBLASTING OR WAITER BLASTING. THE EXPOSED STEEL SHALL BE CLEAND USING COMPRESSED AIR TO REMOVE CLEANING SHALD SHAD SHALD SHAD SHALD SHALD HYDRODESSED AIR TO REMOVE CLEANING SHALL BE EQUIPPED WITH OIL TRAPS.

BID ITEM INFORMATION:

THE BID ITEM "HYDROSEMOLITION REMOVAL" SHALL INCLUDE ALL COSTS FOR HYDRODEMOLITION, CLENV-LIP, WATER CONTROL, DISPOSAL, AND FINAL CLEAN-LIP PREPARATION FOR "CONCRETE REPAIR, REPLAGE WARRABLE DEPH CONCRETE".

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HE BID ITEM "CONCRETE REPAIR REPLACE VARBLE DEPLACE CONCRETE", CUBIC VARDS, SHALL INCLUDE THE ADDITIONAL CONCRETE TO REPAIR THE DECK FROM THE HYDDITIONAL CONCRETE TO REPAIR THE FIELD MEASUREMENT OF THIS PURDED EDIGOLITION REMOVAL BOTH DECK VOREILAY (63.3 CUBIC "ARBOSINILL BE DEDICTED FROM THE TOTAL CONCRETE VOLUME FALSO DURING THE OFFILAY OFFILAY THE OFFILAY OFFIL

THE BID ITEM "DECK OVERLAY (CLASS O PPC ") OR "DECK OVERLAY (CLASS HPC-0 PCC)" SHALL INVILIDE THE COST OF THE 63.3 CUBIC YARDS OF CONCRETE MATERIAL NOTED AS A DEDUCTION WHEN CALCULATING THE "CONCRETE REPAIR, REPLACE VARIABLE DEPH FORCRETE PAY QUANTITY.

THE BID ITEM "REMOVALS, CLASS A" SHALL INCLUDE COST OF LABOR AND EQUIPMENT RECUIRED TO REMOVE UNSCHOOL COMPRETE AND UNBONDED CONCRETE AROUND EXPOSED REINFORCING BARS AFTER HYDROCEMOLITION, REMOVALS WILL INVOLVE HAND CHIPPING TOOLS, AND BE PAID FOR BY COMPIRACT UNIT PRICE PER SQ. YO.

THE ENGINEER WILL DETERMINE THE SQ. YD. OF "REMOVALS, CLASS A" BY MEANS OF SURFACE DIMENSIONS OF THE AREAS TO BE REMOVED TO THE NEAREST O.I SQ. YD.

CONCERNING ADJUSTMENT OF PRICE FOR OVERRUN OR UNDERRUN OF THE CONTRACT QUANTITY, "REMOVALS, CLASS A" WILL NOT BE CONSIDERED A MAJOR ITEM OF WORK.

EFECTS IN EMBEDDED ENLYPOCHUS STEEL DUE TO CORPOSION, WHICH MAS REDUCED THE CPOSS SECTIONAL AREA OF THE STEEL OF THE STEEL OF THE SAME SIZE OR GREATER CROSS SECTIONAL AREA LAPPED TO EACH SIDE OF THE SAME SIZE OR GREATER CROSS SECTIONAL AREA LAPPED TO EACH SIDE OF THE DAMAGED AREA, "2" * "LAB LEVORTHS SHALL BE USED. NAY REINFORCHMENT SHALL BE EVED. VOR AS AN EXTRA WORK OFFICE."

WHERE THE DECK IS UNSOUND FOR MORE THAN HALF OF ITS ORIGINAL DEPTH AS DETERMINED BY THE ENVINEER, THE CONCRETE SHALL BE REMOVED FULL DEPTH, FOR THESE AREAS OF FULL DEPTH REMOVAL (DESIGNED AS CLASS B REFAIR), THE WORK SHALL BE FAID FOR AS EXTRA MORK.

DESIGN FOR REPAIRS TO A 2°36' (L.A.) SKEW
287'-O X 32' CONTINUOUS
WELDED GIRDER BRIDGE
AN SPANS
2 - 93'-6 INTERIOR SPANS 50'-0 END SPANS

HYDRODEMOLITION NOTES

NOVEMBER, 2015 HAMILTON COUNTY 10MA DEPARTMENT OF TRANSPORTATION - HIGHMAY DIVISION ON SWEET NO. 12 OF 12 FILE NO. 31065 DESIGN NO. 316 STA. 2134+53.1 (SR D-20)

> DESIGN TEAM : JDK / RRE / DJA 16/2015

STANDARD SHEET 1069

HAMILTON COUNTY | PROJECT NUMBER IMN-035-5(102)147--0E-40 DESIGN SHEET NO.

400316S012

HYDRODEMOLITION NOTES