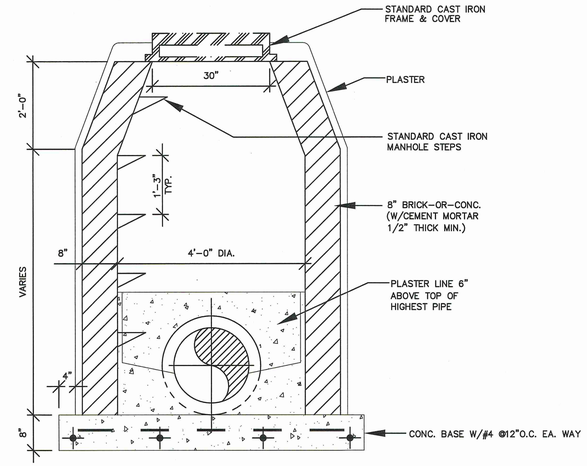
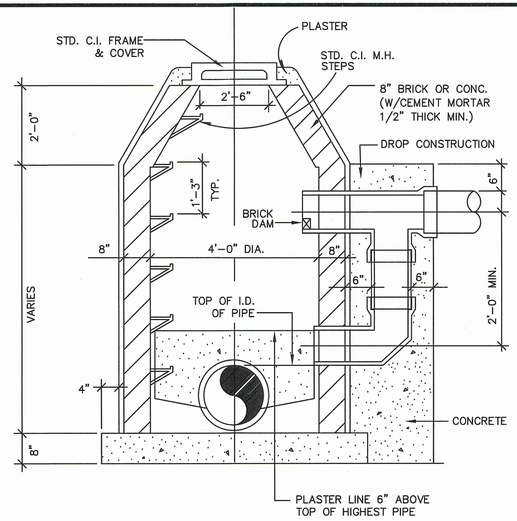


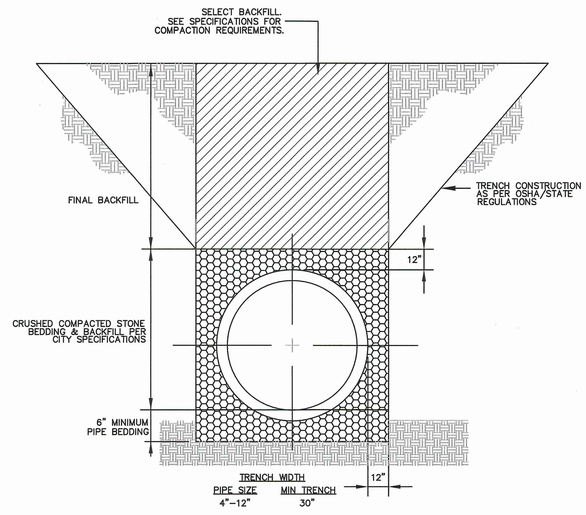
MANHOLE / JUNCTION BOX DETAIL

NO SCALE CU07



SANITARY SEWER DROP MANHOLE

NO SCALE CU04

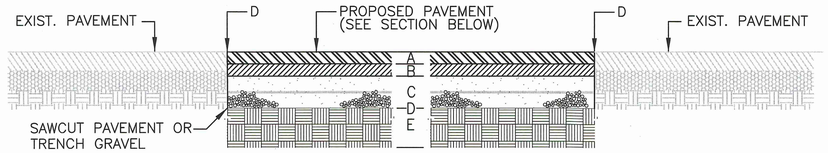


SANITARY SEWER BEDDING

NO SCALE CU20

ASPHALTIC PAVEMENT REPAIR

N.T.S.



PROPOSED ASPHALT PAVEMENT REPAIR

A. 1.5" BITUMINOUS WEARING SUPERPAVE SURFACE COURSE MIX PER DOT SPECIFICATIONS.

B. 2.0" BITUMINOUS BINDER SUPERPAVE COURSE MIX PER DOT SPECIFICATIONS.

C. 6.0" GRADED AGGREGATE BASE COURSE MATERIAL PER DOT SPECIFICATIONS, PLACED IN TWO EQUAL LIFTS WITH ONE LAYER OF TENSAR BX-1100 GEOGRID INSTALLED BETWEEN LIFTS. AGGREGATE TO BE COMPACTED TO 100% MAXIMUM DRY DENSITY IN ACCORDANCE WITH MODIFIED PROCTOR (ASTM D-1557).

D. TACK COAT PER DOT SPECIFICATIONS

E. 12.0" SUBGRADE SOILS COMPACTED TO 98% OF STANDARD PROCTOR ASTM D-698, PROOFROLLED UNDER THE OBSERVATION OF A QUALIFIED SOILS INSPECTOR, REMOVING ANY EXTREMELY SOFT OR UNSUITABLE MATERIALS.

PROPOSED GRAVEL DRIVEWAY REPAIR

A. 2.0" BITUMINOUS WEARING SUPERPAVE SURFACE COURSE MIX PER DOT SPECIFICATIONS.

B. 4.0" BITUMINOUS BINDER SUPERPAVE COURSE MIX PER DOT SPECIFICATIONS.

C. 15.0" GRADED AGGREGATE BASE COURSE MATERIAL PER DOT SPECIFICATIONS, PLACED IN TWO EQUAL LIFTS WITH ONE LAYER OF TENSAR BX-1200 GEOGRID INSTALLED BETWEEN LIFTS. AGGREGATE TO BE COMPACTED TO 100% MAXIMUM DRY DENSITY IN ACCORDANCE WITH MODIFIED PROCTOR (ASTM D-1557).

D. TACK COAT PER DOT SPECIFICATIONS

E. 12.0" SUBGRADE SOILS COMPACTED TO 98% OF STANDARD PROCTOR ASTM D-698, PROOFROLLED UNDER THE OBSERVATION OF A QUALIFIED SOILS INSPECTOR, REMOVING ANY EXTREMELY SOFT OR UNSUITABLE MATERIALS.

NOTES:

1. THIS PAVEMENT REPAIR AND PROCEDURE IS TO BE UTILIZED FOR SMALL AREAS ONLY AND ARE RECOMMENDED WITHOUT THE BENEFIT OF A GEOTECHNICAL INVESTIGATION REPORT TO INVESTIGATE THE PROBABLE CAUSE OF PAVEMENT DISTRESS AND SUBSEQUENT FAILURE. IT IS LIKELY THAT THIS REPAIR MEASURE WILL NOT ADDRESS THE UNDERLYING PAVEMENT PROBLEM, WHICH MAY RESULT IN FUTURE PAVEMENT FAILURES. SHOULD THIS BE THE CASE, WE STRONGLY RECOMMEND PERFORMING A INVESTIGATION BY A GEOTECHNICAL ENGINEER TO IDENTIFY UNDERLYING PAVEMENT PROBLEM ISSUES.
2. ALL CONSTRUCTION METHODS AND MATERIAL SHOULD BE IN ACCORDANCE WITH THE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS LATEST EDITION.
3. ALL NECESSARY PERMITS AND APPROVALS FROM AGENCIES GOVERNING THE CONSTRUCTION OF THIS WORK SHALL BE SECURED PRIOR TO BEGINNING CONSTRUCTION.
4. ANY WORK IN THE STATE'S RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS AND STANDARD SPECIFICATIONS.
5. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS OR DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB ETC., REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
6. THIS DETAIL IS FOR USE ONLY FOR ON-SITE PAVEMENT REPAR. SHOULD REPAIRS BE NECESSARY WITHIN THE PUBLIC RIGHT OF WAY OTHER APPROVALS SHALL BE OBTAINED PRIOR TO PRECEDING WITH PAVEMENT REPAIR OPERATIONS IN THE RIGHT OF WAY.
7. CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN FOR TRAFFIC MANAGEMENT DURING PAVING REMOVAL AND PATCHING OPERATIONS. THIS TRAFFIC CONTROL PLAN SHOULD COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
8. TOTAL PATCH PAVEMENT BUILDUP SHALL BE GREATER THAN OR EQUAL TO EXISTING PAVING AND STONE THICKNESS.
9. ALL SURFACE REPAIRS ARE TO MEET OR EXCEED EXISTING SURFACES.
10. ACCESSES ARE TO REMAIN UNINTERRUPTED DURING CONSTRUCTION.

PROCEDURES FOR OPEN CUT PAVEMENT REPAIRS:

1. CUT THE OUTLINE OF THE PATCH WITH A PAVEMENT SAW OR PNEUMATIC HAMMER EXTENDING AT LEAST 1 FOOT OUTSIDE OF THE TRENCHED AREA. THE OUTLINE SHOULD BE SQUARE OR RECTANGULAR WITH TWO OF THE SIDES AT RIGHT ANGLES TO THE DIRECTION OF TRAFFIC.
2. EXCAVATE AS MUCH EXISTING PAVEMENT AND STONE AS NECESSARY TO REACH FIRM SUPPORT. IF A PATCH IS TO BE AN INTEGRAL PART OF THE PAVEMENT, ITS FOUNDATION MUST BE AS STRONG OR STRONGER THAN THAT OF THE ORIGINAL ROADWAY. THIS MAY MEAN THAT SOME OF THE SUBGRADE WILL ALSO HAVE TO BE REMOVED. THE FACES OF THE EXCAVATION SHOULD BE STRAIGHT AND VERTICAL.
3. TRIM AND COMPACT THE SUBGRADE.
4. APPLY A TACK COAT TO THE VERTICAL FACES OF THE EXCAVATION. EMULSIFIED ASPHALTS OR LIQUID ASPHALT ARE ALL SUITABLE.
5. BACKFILL WITH THE ASPHALT MIXTURE. SHOVEL THE MIXTURE DIRECTLY FROM THE TRUCK INTO THE PREPARED EXCAVATION. PLACE THE MIXTURE AGAINST THE EDGES OF THE HOLE FIRST (RATHER THAN IN THE CENTER AND THEN RAKING TO THE EDGES). THE MAXIMUM LIFT THICKNESS LARGELY DEPENDS UPON THE TYPE OF ASPHALT MIXTURE AND THE AVAILABLE COMPACTION EQUIPMENT. HOT MIX ASPHALT CAN AND SHOULD BE PLACE IN DEEP LIFTS, BECAUSE THE GREATER HEAT RETENTION OF THE THICK LAYERS FACILITATES COMPACTION. FROM A COMPACTION STANDPOINT, PATCHES USING HOT MIX ASPHALT CAN BE BACKFILLED IN ONE LIFT. HOWEVER, WHEN PLACING A PATCH THAT IS DEEPER THAN 5 INCHES, IT IS OFTEN USEFUL TO LEAVE THE FIRST LIFT 1 TO 2 INCHES BELOW THE FINISHED GRADE, MAKE IT EASIER TO JUDGE THE TOTAL QUANTITY OF MIXTURE REQUIRED FOR THE PATCH.
6. SPREAD CAREFULLY TO AVOID SEGREGATION OF THE MIXTURE. AVOID PULLING THE MATERIAL FROM THE CENTER OF THE PATCH TO THE EDGES. IF MORE MATERIAL IS NEEDED AT THE EDGE, IT SHOULD BE DEPOSITED THERE AND THE EXCESS RAKED AWAY. THE AMOUNT OF MIXTURE USED SHOULD BE SUFFICIENT TO ENSURE THAT AFTER COMPACTION, THE PATCH SURFACE WILL NOT BE BELOW THAT OF THE ADJACENT PAVEMENT. ON THE OTHER HAND, IF TOO MUCH MATERIAL IS USED, A HUMP WILL RESULT.
7. COMPACT EACH LIFT OF THE PATCH THOROUGHLY. USE EQUIPMENT THAT IS SUITED FOR THE SIZE OF THE JOB. A VIBRATORY PLATE COMPACTOR IS EXCELLENT FOR SMALL JOBS, WHILE A VIBRATORY ROLLER IS LIKELY TO BE MORE EFFECTIVE FOR LARGER AREAS.
8. WHEN COMPACTING THE FINAL LIFT (WHICH MAY BE THE ONLY LIFT), OVERLAP THE FIRST PASS AND RETURN OF THE VIBRATORY ROLLER OR PLATE COMPACTOR NO MORE THAN 6 INCHES ON THE PATCH ON ONE SIDE. THEN MOVE TO THE OPPOSITE SIDE AND REPEAT THE PROCESS. ONCE THIS IS ACCOMPLISHED, PROCEED AT RIGHT ANGLES TO THE COMPACTED EDGES WITH EACH PASS AND RETURN, OVERLAPPING A FEW INCHES ON THE UNCOMPACTED MIX. IF THERE IS A GRADE, COMPACTION SHOULD PROCEED FROM THE LOW SIDE TO THE HIGH SIDE TO MINIMIZE POSSIBLE SHOVING OF THE MIX.
9. WHEN ADEQUATE COMPACTION EQUIPMENT IS USED, THE SURFACE OF THE PATCH SHOULD BE AT THE SAME ELEVATION AS THE SURROUNDING PAVEMENT. HOWEVER, IF HAND TAMPING OR OTHER LIGHT COMPACTION METHODS ARE USED, THE SURFACE OF THE COMPLETED PATCH SHOULD BE SLIGHTLY HIGHER THAN THE ADJACENT PAVEMENT BECAUSE THE PATCH IS LIKELY TO BE FURTHER COMPRESSED BY TRAFFIC.
10. CHECK THE VERTICAL ALIGNMENT AND SMOOTHNESS OF THE PATCH WITH A STRAIGHT EDGE OR STRING LINE.

Know what's below. Call before you dig.

JESSIE MARSH REGISTERED PROFESSIONAL ENGINEER 33052 STATE OF MISSISSIPPI 3/1/23

THIS DRAWING IS NOT VALID WITHOUT AN ORIGINAL BLUE INK SIGNATURE AND ORIGINAL HANDWRITTEN DATE OF A LICENSED PROFESSIONAL ENGINEER.

GENERAL DETAILS

U1.3

RC 200325
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drawn: DMT
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CERTIFICATE OF AUTHORIZATION NO. RESOURCE CONSULTING, LLC E-0696 STATE OF MISSISSIPPI

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