NOTE: BACKFILL FOR ALL TYPES SHALL MEET THE REQUIREMENTS SHOWN IN TYPE I ABOVE.

1. MATCH EXISTING PAVEMENT THICKNESS, HOWEVER, MINIMUM OF 9" ON ALL STREET CUTS.
SIDEWALK AND CURB REPAIR DETAILS

EXIST. R/W

ITEM 608
4" CONCRETE SIDEWALK

GRASS

REMOVE & REPLACE WALK TO EXISTING JOINT.

SAWCUT

COMPACTED BACKFILL ITEM 911

SAWCUT

ITEM 609 CURB

SAWCUT

CURB & GUTTER SECTION

SAWCUT

SAWCUT

NOTE: IF THE DISTANCE FROM THE CUT TO THE NEAREST JOINT IN THE CURB IS LESS THAN 5', THE CURB/GUTTER SHALL BE REMOVED AND REPLACED TO THE JOINT IF THE DISTANCE IS GREATER THAN 5', THE CURB MAY REMAIN.

CDF BACKFILL ITEM 636 OR ITEM 912 (SEE NOTE "H")

ITEM 659

ITEM 608 CONCRETE WALK 3/16"

EXIST. R/W

CDF BACKFILL ITEM 636 OR COMPACTED BACKFILL ITEM 911

BOTTOM OF EXCAVATION

ALL GRASS AREAS SHALL BE SEeded IN ACCORDANCE WITH ITEM 659 SEEDING AND MULCHING.

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
TRANSPORTATION DIVISION

PAVEMENT & UTILITY CUT REPAIR STANDARDS

1441 DR. A

REV. 07/15/02
GENERAL NOTES

EXCAVATION PERMIT REQUIRED: A CITY OF COLUMBUS STREET EXCAVATION PERMIT IS REQUIRED FOR ALL EXCAVATIONS WITHIN THE PUBLIC RIGHT-OF-WAY, AS SET FORTH BY COLUMBUS CITY CODE, CHAPTER 903, AND ISSUED IN ACCORDANCE WITH PROVISIONS IN THE GENERAL RULES AND REGULATIONS OF THE TRANSPORTATION DIVISION.

SCOPE OF WORK:

THIS WORK SHALL CONSIST OF PAVEMENT REMOVAL, NECESSARY EXCAVATION, AND PAVEMENT REPLACEMENT IN ACCORDANCE WITH THE DETAILS SHOWN HEREIN. ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS (CCMS).

PROCEDURES USED FOR THE PAVEMENT REMOVAL AND REPLACEMENT SHALL NOT CAUSE SPALLING OR CRACKING OF ADJACENT PAVEMENT.

WHEN THE PAVEMENT HAS BEEN REMOVED AND THE CONTRACTOR IS UNABLE TO COMPLETE THE REQUIRED REPLACEMENT IN TIME FOR IT TO BE OPENED TO TRAFFIC AS INDICATED ON THE PERMIT, THE EXCAVATION SHALL BE FILLED WITH A PATCH MATERIAL WITH A DURABLE SURFACE OR PLATED. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN THESE PATCHES WHILE THEY ARE IN SERVICE. THE COST OF PLACING, MAINTAINING, REMOVING, AND DISPOSING OF THE TEMPORARY PATCHES OR PLATES WILL BE AT THE CONTRACTOR’S EXPENSE.

WHEN ITEM 636 FCDF IS USED AS A BACKFILL, NO PAVEMENT SHALL BE PLACED UNTIL BLEED WATER HAS BEEN EVAPORATED FROM THE FCDF SURFACE OR HAS BEEN DRAINED OR REMOVED FROM THE SURFACE.

THE BACKFILLING PAVEMENT REPAIR AND/OR HEAT WELDING SHALL BE DONE BY THE CONTRACTOR OR PERMITTEE IN ACCORDANCE WITH CITY SPECIFICATIONS. IF DESIRED ANY OR ALL THIS WORK CAN BE PERFORMED BY THE CITY OF COLUMBUS. THE CITY SHALL COLLECT APPROPRIATE FEES AT THE TIME THE PERMIT IS ISSUED FOR SAID WORK.

RESTORATION OF ANY SIDEWALK, CURB, STREET PAVEMENT, ETC., SHALL OCCUR NO LATER THAN 20 DAYS AFTER CONCLUSION OF ANY UTILITY REPAIR OR INSTALLATION ACTIVITY. CONSTRUCTION ACTIVITY COMPLETED DECEMBER THRU APRIL SHALL BE RESOLVED NO LATER THAN MAY 31ST. ADDITIONAL PERMITS SHALL NOT BE ISSUED UNTIL THE VIOLATIONS ARE CORRECTED TO THE SATISFACTION OF THE CITY ENGINEER. IN ADDITION, EACH VIOLATION MAY BE DEALT WITH IN ACCORDANCE WITH SECTION 903.99 OF THE COLUMBUS CITY CODE.

** PAVING STANDARDS FOR LARGE TRENCHES OR PAVEMENT AREAS:

A SMALL LATERAL TRENCH CUT AND SMALL PAVEMENT AREAS SHALL BE DEFINED AS 5 FEET IN WIDTH OR LESS AND 100 FEET IN LENGTH. WHEN REPAIR AREAS EXCEED THESE DIMENSIONS, THE PAVEMENT REPAIR SECTION SHALL CONFORM TO 2" OF ITEM 404 ASPHALT CONCRETE ON EITHER 7" ITEM 301 BITUMINOUS AGGREGATE BASE OR ITEM 305 PORTLAND CEMENT CONCRETE BASE - ARTERIAL. OTHERWISE PLANS SHOULD REFLECT REPLACEMENT OF THE PAVEMENT IN ACCORDANCE WITH CITY STANDARD TYPICAL SECTIONS AND ARE SUBJECT TO APPROVAL BY THE CITY ENGINEER.

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
TRANSPORTATION DIVISION

PAVEMENT & UTILITY CUT REPAIR STANDARDS

1441 DR. A
WHEN A TRENCH EXCEEDS 100 FEET IN LENGTH, THE REPAIR SHALL INCLUDE PLANING AN 11' PAVEMENT WIDTH AND 1-1/4" IN DEPTH THE ENTIRE LENGTH OF THE TRENCH. THE PLANED AREA SHALL THEN BE RE-PAVED WITH A PAVER IN ACCORDANCE WITH CURRENT CITY STANDARD SPECIFICATIONS. ITEM 413 CRACK SEALING SHALL BE APPLIED TO EXPOSED JOINTS ONCE THE PAVING OPERATION HAS BEEN COMPLETED.

MARKING OF UTILITY PAVEMENT CUTS:

THE CITY REQUIRES THE MARKING OF REPAIR WORK IN PUBLIC RIGHT-OF-WAY PAVED SURFACES RESULTING FROM EXCAVATION PERMITS. EACH PAVEMENT CUT SHALL BE PERMANENTLY TAGGED AND CONFORM TO THE REQUIREMENTS OF THE RULES AND REGULATIONS FOR THE TRANSPORTATION DIVISION. BRICK REPAIR WORK IS EXEMPT FROM THIS MARKING REQUIREMENT.

SPECIAL NOTES

NOTE "A": WHEN USING FCDW, THE OPTIONAL FILL AREA OVER THE CONDUIT MAY BE BACKFILLED WITH SAND, GRANULAR MATERIAL, OR OTHER SUITABLE 912 MATERIAL, FOR A DISTANCE NOT TO EXCEED 1'-0". A PROTECTIVE BARRIER OF VISQUEEN OR SIMILAR MATERIAL IS PERMITTED.

NOTE "B": FOR TYPE I AND TYPE II CUT REPAIRS, THE AREA TO BE HEAT-WELDED IS TO INCLUDE THE CUT AND EXTENDING FOR SIX INCHES BEYOND EACH SIDE OF THE CUT FOR A NOMINAL DEPTH OF TWO INCHES.

NOTE "C": FOR TYPE I AND TYPE II PAVEMENT REPAIR THE ITEM 404 HOT ASPHALT OR COLD MIX SHALL BE PLACED IN LIFTS NOT EXCEEDING THREE INCHES AND COMPACTED WITH A COMBINATION VIBRATORY PLATE COMPACTOR EQUIPMENT, OR A VIBRATORY STEEL WHEELED ROLLER WITH A MINIMUM CERTIFIED FORCE OF 2000 POUNDS. IN ALL CASES THE SURFACE LIFT SHALL BE COMPACTED WITH THE VIBRATORY STEEL WHEELED ROLLER WHEN PLACING HPM COLDMIX FULL DEPTH, MATERIAL TEMPERATURE SHALL BE 70' OR ABOVE.

NOTE "D": COLD MIX SHALL BE HPM COLDMIX OR OTHER COLD MIX APPROVED BY THE CITY OF COLUMBUS. IN LIEU OF COLD MIX THE CONTRACTOR MAY STOCKPILE 404 ASPHALT AND REHEAT IT TO PORTION IN CUT AS PAVEMENT REPAIR. TYPE II PAVEMENT REPLACEMENT SHALL CONSIST OF FULL DEPTH HPM COLDMIX FOR SMALL EXCAVATIONS. LARGE EXCAVATIONS SHALL REQUIRE A MINIMUM OF SEVEN (7) INCHES OF FAST SETTING PORTLAND CEMENT AND TWO (2) INCHES OF HPM COLD MIX.

NOTE "E": THE COLD MIX IS TO BE REPLACED WITH ITEM 404 ASPHALT WHICH IS TO BE HEAT-WELDED AS SET FORTH IN NOTE "B". THIS WORK SHALL BE PERFORMED AS SOON AS HOT ASPHALT IS AVAILABLE.

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
TRANSPORTATION DIVISION

PAVEMENT & UTILITY CUT REPAIR STANDARDS

1441 DR. A 4/6
NOTE "F": REPAIR OF BRICK STREETS:

1. BRICKS REMOVED FROM A REPAIR AREA SHALL BE STORED IN A SAFE PLACE, BY THE CONTRACTOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPLACING ANY BRICKS THAT ARE STOLEN OR DAMAGED, AT NO ADDITIONAL COST TO THE CITY.

2. BRICKS MAY BE PURCHASED FROM THE CITY AT A NOMINAL COST TO THE CONTRACTOR. IF BRICKS ARE SUPPLIED BY THE CONTRACTOR, THEY MUST FIRST BE APPROVED BY THE CITY BEFORE THEY ARE USED.

3. SAW CUTTING ALL PARTIAL BRICKS SHALL BE SAWCUT. FURTHER, NO BRICK WILL BE PERMITTED TO BE CUT, FOR REPLACEMENT, TO A LENGTH LESS THAN ONE-HALF OF ITS ORIGINAL LENGTH. THIS MAY REQUIRE SAW CUTTING OF ADJACENT UNDISTURBED BRICK(S).


5. THE MAXIMUM WIDTH OF A BRICK MORTAR JOINT SHALL BE 1/2'. THIS RESTRICTION WILL ALSO APPLY TO THE JOINT FORMED ADJACENT TO THE PERIMETER OF A REPAIR AREA, WHERE THE ROWS MAY NOT BE PARALLEL TO ONE ANOTHER.

6. MORTARING OF JOINTS: ALL JOINTS SHALL BE MORTARED WITH A 50/50 MIXTURE BY VOLUME OF SAND/CEMENT, SO AS TO PROVIDE FOR A FLUSH FINISH. THIS MAY REQUIRE MORE THAN ONE APPLICATION. FURTHER, MECHANICAL VIBRATION WILL BE REQUIRED FOR CONSOLIDATION OF DRY MORTAR MIX.

7. ALLOWABLE BASE MATERIAL SHALL BE DETERMINED BY THE TRENCH SIZE AS APPLICABLE FOR SMALL OR LARGE EXCAVATIONS, AS SPECIFIED ON PAGE 3 OF 6.

NOTE "C": FOR ALLEY REPAIRS, THE PROPOSED PAVEMENT REPLACEMENT SHALL CONFORM TO THE EXISTING TYPE AND THICKNESS OF THE PAVEMENT. CHIP AND SEAL TYPE ALLEYS SHALL REQUIRE MATCHING THE EXISTING THICKNESS OF PAVEMENT WITH THE APPROPRIATE COMBINATION OF MATERIALS BASED ON THE SIZE OF THE EXCAVATION. THE MINIMUM SHALL CONSIST OF THREE (3) INCHES OF ITEM 404 ASPHALT CONCRETE. FINISH CONCRETE PAVEMENT IS NOT PERMITTED. MATERIALS USED SHALL CONFORM TO THE REQUIREMENT OF THE CURRENT CMSC.

IF MORE THAN 1/3 OF THE WIDTH OF AN ALLEY IS REMOVED, THE PAVEMENT SHALL BE REPLACED AS PER TYPICAL AND THEN OVERLAI'D OVER THE TOTAL WIDTH OF PAVEMENT AND LENGTH OF TRENCH WITH A FEATHER SECTION AT BOTH ENDS.

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
TRANSPORTATION DIVISION

PAVEMENT & UTILITY CUT REPAIR STANDARDS

1441 DR. A 5/6
REPAIR/REPLACE EXISTING CONDUIT

I. Quantity
The base bid shall include the indicated number of feet of repair to existing duct.

II. Material

a. Conduit - The non-metallic conduit shall be schedule 40 polyvinyl chloride. It shall be designed to form a sound, strong duct, free from defects. It shall be non-magnetic, resistant to corrosive action, unaffected by electrolysis and shall not soften, deform or deteriorate when exposed to the maximum safe operating temperature of cables. The inside surface of the conduit shall be smooth, and round and shall have a 2" nominal inside diameter. The conduit shall be Carlon heavy wall PV-duit plus or an approved equal.

b. Couplings - The couplings shall be of the same material as the conduit, and shall be sufficiently tight to prevent silt or concrete from entering the conduit.

c. Spacers - Plastic base type for 2" conduit.

III. Installation

a. If the existing conduit is broken down and the new circuit cannot be installed the Contractor shall locate and repair the damaged duct.

The damaged section of duct shall be removed and replaced with a new piece of conduct as shown on Division of Electricity drawing 01S0076.

b. After removal of the damaged section of duct the remaining concrete envelope shall be chipped away to expose 3" of solid duct at each end. On one end of the new duct a solid coupling shall be used. On the other end split coupling shall be used.

The split coupling shall be taped in place in such a manner to assure concrete does not seep into duct run.

c. Concrete envelope, backfill, and restoration shall be as shown on Division of Electricity drawings 01S0014, 01S0020, and 01S0023.

IV. Quotation

The repair of existing conduit as hereinbefore specified shall be quoted on as a unit price per lineal foot in the appropriate place of this document.

11/91
MIS-18
NOTE

CONCRETE ENVELOPE, BACKFILL, AND RESTORATION SHALL BE AS SHOWN ON DOE DWGS 01S0014, 01S0020, AND 01S0023.
SEEDING AND MULCHING
ITEM 623

RETURN SPOILS AS
BACKFILL (SEE NOTE 2)

UNDERGROUND
HAZARD TAPE

PVC CONDUIT
(SIZE AND NUMBER AS SPECIFIED)
* ENCASED IN CONCRETE

* IN RESIDENTIAL AREAS SELECTED SPOILS
MAY BE USED IN PLACE OF CONCRETE.

NOTES

1. CONCRETE ENCASEMENT 2” MIN. ALL SIDES
   ITEM 499 CLASS C

2. THE BACKFILL SHALL BE POWER TAMPED IN LAYERS
   NOT EXCEEDING 4” IN THICKNESS LOOSE MEASUREMENT
   COMPLYING WITH SOIL DENSITY COMPACTION
   REQUIREMENTS UNDER ITEM 203.12

3. ITEM NUMBERS ARE FROM THE CITY OF COLUMBUS
   CONSTRUCTION AND MATERIAL SPECIFICATIONS. (LATEST
   REVISION)

MEL&P
MUNICIPAL ELECTRIC LIGHT & POWER SYSTEM
CITY OF COLUMBUS, OHIO
DEPT. OF UTILITIES & AVIATION - DIV. OF ELECTRICITY

CONDUIT IN OPEN AREAS

SCALE
NONE

DRAWN
LSZ 7/83

DRAWING NO.
01S0014

C. O. NUMBER

APPROVED

SHEET OF
NOTES

1. CONCRETE ENCASEMENT 2" MIN. ALL SIDES (4" MAX)
   ITEM 499 CLASS C

2. ITEM NUMBER FROM THE CITY OF COLUMBUS
   CONSTRUCTION AND MATERIALS SPECIFICATIONS
   (LATEST REVISION)
Pavement Repair & C.D.F. Backfill
Per Division of Engineering & Construction
Standard 1441 Dr. A.

Pavement Replacement

Existing Pavement

6" MIN.
Typ. MIN.
Shoulder.

2'-0" MIN.

6" MIN.
(10" MAX)

(See Note #1)

NOTES:
1) Concrete encasement 3" MIN. (4" MAX) all sides item 499 Class C.
2) Conduit to pass under curbs and sub-drains.
3) Item numbers are from the City of Columbus Construction and materials Specifications.

PVC Conduit
(Size as req.)
Encased in Concrete.

MELP
MUNICIPAL ELECTRIC LIGHT & POWER SYSTEM
CITY OF COLUMBUS, OHIO
DEPT. OF UTILITIES & AVIATION - DIV. OF ELECTRICITY

CONDUIT UNDER STREET PAVEMENT

SCALE NONE
DRAWN PC 4/91
DRAWING NO. 01S0023
C. O. NUMBER
APPROVED
SHEET 1 OF 1