## Reference Index of Standard Construction Drawings

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**Thank You, Columbus**

**Your Voted Bond Money At Work**

The City of Columbus

Michael B. Coleman
Mayor

Department of Public Service

Customer Service Center

(614) 645-3111

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**Your Bond Money At Work Sign**

Metal signs are to be mounted on 2 lb. posts. Wood signs are to be mounted on two 4"x4" posts. Wood signs may have square corners.
PAVEMENT
HEAT WELDED ASPHALT SURFACE
MINIMUM DEPTH 2"

NEAT STRAIGHT EDGE AND ITEM 407 - TACK COAT
AREA HATCHED IS TO BE HEAT WELDED
(SEE NOTE "B")

EXISTING PAVEMENT

PAVEMENT
SEE

ITEM 613 - FLOWABLE
CONTROLLED DENSITY FILL (FCDF)
OR
ITEM 912 - COMPACTED
GRANULAR MATERIAL
(SEE NOTE "C")

OPTIONAL FILL
MATERIAL
(SEE NOTE "A")

1'-0" MAX

EXISTING PAVEMENT

TYPE I
STANDARD FLEXIBLE ASPHALT REPAIR
WITH HEATWELD SURFACE
(SEE NOTE "B")

NEAT STRAIGHT EDGE AND ITEM 407 - TACK COAT
(SEE NOTE "G")

EXISTING PAVEMENT

TYPE IV
ALLEY REPAIR

SAWCUT
(FULL DEPTH)

ITEM 256
CONCRETE
(SEE NOTE "I")

EXISTING PAVEMENT

TYPE V
CONCRETE STREET REPAIR
OR
CONCRETE BUS PAD

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

T: MATCH EXISTING PAVEMENT THICKNESS,
HOWEVER, MINIMUM OF 10" ON ALL STREET CUTS
AND 6" ON ALL ALLEYS.

HEAT WELDED ASPHALT SURFACE
MINIMUM DEPTH 2"

NEAT STRAIGHT EDGE AND ITEM 407 - TACK COAT
AREA HATCHED IS TO BE HEAT WELDED
(SEE NOTE "B")

EXISTING PAVEMENT

ITEM 405 - COLDMIX
SEE NOTES "C" & "D"

TYPE II
WINTER OPERATIONS FLEXIBLE ASPHALT
REPAIR WITH HEATWELD SURFACE
(SEE NOTE "E")

BRICK

4" BRICK

BASE THICKNESS TO
MATCH EXISTING OR
MINIMUM DEPTH = 7"
OF ITEM 301 OR 305

EXISTING PAVEMENT

TYPE III
BRICK STREET REPAIR
(SEE NOTE "F")

SAWCUT

ITEM 256
CONCRETE
(SEE NOTE "I")

EXISTING PAVEMENT

TYPE V
CONCRETE STREET REPAIR
OR
CONCRETE BUS PAD

PAVEMENT & UTILITY
CUT REPAIR STANDARDS

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
1441

CITY ENGINEER

Zahn

12/1/13

SHT 1 OF 7
SIDEWALK AND CURB REPAIR DETAILS

ITEM 608 - 4" CONCRETE WALK

ITEM 911 - COMPACTED BACKFILL

ITEM 613 - FCDF BACKFILL

ITEM 608 - CURB

ITEM 609 - CURB

ITEM 659 - SEEDING AND MULCHING

ITEM 911 - COMPACTED BACKFILL

EXIST. R/W

REMOVE & REPLACE WALK TO EXISTING JOINT.

EXISTING WALK

SAWCUT

GRASS

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.

SEE GENERAL NOTES CONCERNING LARGER PAVEMENT AREAS

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

PAVEMENT & UTILITY CUT REPAIR STANDARDS

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
1441

12/1/13
SHT 2 OF 7
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 DEPARTMENT OF PUBLIC SERVICE.

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 MATERIALS SPECIFICATION (CMSC).

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

WHEN THE PAVEMENT IS 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 BITUMINOUS PATCH MATERIAL WITH A DURABLE SURFACE OR PROPERLY PLATED. (AS PER CITY CODE CHAPTER 903 &/OR SHEET 7 OF THIS STANDARD DRAWING) THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN THESE PATCHES WHILE THEY ARE IN SERVICE. THE COST OF PLACING, MAINTAINING, AND REMOVING AND DISPOSING OF THE TEMPORARY PATCHES OR PLATES WILL BE AT THE CONTRACTOR'S EXPENSE.

WHEN ITEM 613 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. ITEM 613 FCDF IS NOT PERMITTED AS A TEMPORARY DRIVING SURFACE.

THE BACKFILLING PAVEMENT REPAIR AND/OR HEAT WELDING SHALL BE DONE BY THE CONTRACTOR OR PERMITEE IN ACCORDANCE WITH CITY SPECIFICATIONS. IF DESIRED, ANY OR ALL OF 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 30 DAYS AFTER CONCLUSION OF ANY UTILITY REPAIR OR INSTALLATION ACTIVITY. CONSTRUCTION ACTIVITY COMPLETED DECEMBER THROUGH 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 DEPARTMENT OF PUBLIC SERVICE. 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 PAVING AREAS

THE PAVEMENT REPAIR SECTION SHALL CONFORM TO 3 INCHES OF ITEM 448 ASPHALT CONCRETE ON EITHER 7 INCHES OF ITEM 301 ASPHALT CONCRETE BASE OR ITEM 305 PORTLAND CEMENT CONCRETE BASE.
WHEN A TRENCH EXCEEDS 100 FT IN LENGTH, THE REPAIR SHALL INCLUDE PLANING A FULL LANE WIDTH (OR ANY OTHER LANE WIDTH AS DIRECTED BY THE DEPARTMENT OF PUBLIC SERVICE) TO A DEPTH OF 1 1/2 INCHES FOR THE ENTIRE LENGTH OF THE TRENCH. THE PLANED AREA SHALL THEN BE REPAVED WITH A PAVER IN ACCORDANCE WITH CURRENT CITY STANDARD SPECIFICATIONS. ITEM 423 - CRACK SEALING, TYPE 1 SHALL BE APPLIED TO EXPOSED JOINTS ONCE THE PAVING OPERATION HAS BEEN COMPLETED.

WHEN TRENCHING WORK CROSSES LANES, ALL AFFECTED LANES SHALL REQUIRE PLANING AND RESURFACING AS DESCRIBED ABOVE. THIS WORK SHALL INCLUDE ALL OF THE AFFECTED PAVEMENT AREA.

SPECIAL NOTES

NOTE 'A': WHEN USING FLOWABLE CONTROLLED DENSITY FILL (FCDF), 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 FT. 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 EXTEND FOR 6 INCHES BEYOND EACH SIDE OF THE CUT FOR A NOMINAL DEPTH OF 2 INCHES.

NOTE 'C': FOR TYPE I AND TYPE II PAVEMENT REPAIR, THE ITEM 448 HOT ASPHALT CONCRETE OR ITEM 405 COLD MIX SHALL BE PLACED IN LIFTS NOT EXCEEDING 3 INCHES AND COMPACTED WITH A COMBINATION VIBRATORY PLATE COMPACTOR, 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 ITEM 405 COLD MIX FULL DEPTH, MATERIAL TEMPERATURE SHALL BE 70 DEGREES OR ABOVE.

NOTE 'D': COLD MIX SHALL BE ITEM 405 COLD MIX OR OTHER COLD MIX APPROVED BY THE CITY OF COLUMBUS. IN LIEU OF COLD MIX, THE CONTRACTOR MAY STOCKPILE ITEM 448 ASPHALT CONCRETE AND REHEAT IT TO PLACE IN CUT AS PAVEMENT REPAIR. TYPE II PAVEMENT REPLACEMENT SHALL CONSIST OF FULL DEPTH ITEM 405 COLD MIX FOR SMALL EXCAVATIONS. LARGE EXCAVATIONS SHALL REQUIRE A MINIMUM OF 7 INCHES OF FAST SETTING PORTLAND CEMENT AND 2 INCHES OF ITEM 405 COLD MIX.

NOTE 'E': THE COLD MIX IS TO BE REPLACED WITH ITEM 448 ASPHALT CONCRETE WHICH IS TO BE HEAT WELDED AS SET FORTH IN NOTE 'B'. THIS WORK SHALL BE PERFORMED AS SOON AS ASPHALT IS AVAILABLE.
NOTE 'F': REPAIR OF BRICK STREETS

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

2. 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 \( \frac{1}{2} \) ITS ORIGINAL LENGTH. THIS MAY REQUIRE SAW CUTTING OF ADJACENT UNDISTURBED BRICK(S).

4. THE EXISTING BASE MATERIAL SHALL BE CUT BACK TO AS NEARLY VERTICAL AS POSSIBLE. IF SHEARING OF THE ADJACENT BASE RESULTS, THE CONTRACTOR SHALL REMOVE ADDITIONAL BASE MATERIAL UNTIL A VERTICAL FACE IS ACHIEVED.

5. THE MAXIMUM WIDTH OF A BRICK MORTAR JOINT SHALL BE \( \frac{1}{2} \) INCH. THIS RESTRICTION SHALL 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 AND CEMENT SO AS TO PROVIDE A FLUSH FINISH. THIS MAY REQUIRE MORE THAN ONE APPLICATION. FURTHER, MECHANICAL VIBRATION WILL BE REQUIRED FOR CONSOLIDATION OF DRY MORTAR MIX.

NOTE 'G': FOR ALLEY REPAIRS, THE PAVEMENT REPLACEMENT SHALL CONFORM TO THE TYPE AND THICKNESS OF THE EXISTING 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 6" OF ITEM 448 ASPHALT CONCRETE. FINISHED CONCRETE PAVEMENT IS NOT PERMITTED. MATERIALS USED SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT CMSC.

IF MORE THAN \( \frac{1}{3} \) OF THE WIDTH OF AN ALLEY IS REMOVED, THE PAVEMENT SHALL BE REPLACED AS PER TYPE 1 AND THEN OVERLAYERED OVER THE TOTAL WIDTH OF PAVEMENT AND LENGTH OF TRENCH.

NOTE 'H': ITEM 912 - COMPACTED GRANULAR MATERIAL:
THIS METHOD OF BACKFILL CAN ONLY BE USED WITH FULL TIME CITY INSPECTION. AN INSPECTION FEE MUST BE POSTED WHEN THE PERMIT IS ISSUED.

NOTE 'I': CONCRETE BASE OR PAVEMENT
IF PAVING REQUIREMENTS ALLOW FOR SUFFICIENT CURING TIME SO THAT FAST SETTING CONCRETE IS NOT NEEDED, STANDARD CONCRETE BASE OR PAVEMENT MAY BE PLACED AS PER THE CMSC. THIS OPTION MUST BE NOTED ON THE PERMIT APPLICATION AND APPROVED BY THE CITY OF COLUMBUS.

NOTE 'J': THE TRENCH WIDTH FOR SMALL PIPES AND CONDUITS SHALL BE OF SUFFICIENT WIDTH TO ALLOW FOR THE PROPER PLACEMENT OF THE BACKFILL MATERIAL. THE PAVEMENT PORTION OF THE TRENCH SHALL BE A MINIMUM OF 2 FT IN WIDTH. THIS IS TO ALLOW FOR THE PROPER COMPACTION OF THE ASPHALT PAVEMENT. IF THE TRENCH FOR PLACING CONDUIT IS NARROWER THAN 2 FT THEN THE PAVEMENT PORTION SHALL BE CUT BACK TO PROVIDE THE 2 FT MINIMUM FOR PAVING OPERATIONS.

PAVEMENT & UTILITY CUT REPAIR STANDARDS

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG 1441
12/1/13
SHT 5 OF 7
ALL STEEL PLATES MUST HAVE THE FOLLOWING INFORMATION CLEARLY AND LEGIBLY 'ETCHED' INTO THEIR TOP SURFACE:
1 OWNER'S NAME
2 A 24 HR. EMERGENCY CONTACT PHONE NUMBER.

NO STEEL PINS ARE PERMITTED.

SEE SHEET 7 FOR SIGNING REQUIREMENTS.

STEEL PLATE REQUIREMENTS
SIGNS ARE TO BE 36" x 36" FOR RESIDENTIAL AND DOWNTOWN AREAS AND 48" x 48" ON MULTI-LANE, HIGH SPEED (45 MPH OR GREATER) ROADWAYS.

SIGN COC - 327 (R/L) IS REQUIRED AT ALL PLATE LOCATIONS. SIGN COC - 328 IS REQUIRED WHEN POSTED SPEED IS 35 MPH OR GREATER.

SIGNS SHOULD BE PLACED IN ALL DIRECTIONS THAT ARE AFFECTED.

SIGNS SHOULD BE DUAL MOUNTED ON MULTI-LANE, ONE-WAY ROADWAYS.

ALL SIGNS SHALL BE MOUNTED IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD).
0.74 C.F. CONCRETE PER L.F.


SUBGRADE COMPACTION SHALL BE COMPLETED BEFORE UNDERDRAIN INSTALLATION.


FOR REPLACEMENT WORK, THE CURB SHALL BE REMOVED AT AN EXISTING JOINT OR NO CLOSER THAN 5 FEET FROM AN EXISTING JOINT.

1/2" EXPANSION MATERIAL WILL BE INSTALLED BEHIND THE CURB WHEN A CONCRETE WALK, DRIVE, OR OTHER CONCRETE ITEM IS ADJOINING IT.

UNDERDRAIN IS NOT REQUIRED WHEN CURB IS ALONG CONCRETE MEDIAN.
NOTES:


2. SUBGRADE COMPACTION SHALL BE COMPLETED BEFORE UNDERDRAIN INSTALLATION.


4. CURB SHALL BE IN NOMINAL LENGTHS OF 11 FT. FOR CLOSURE & FILL IN, THE MINIMUM CURB LENGTH ALLOWED IS 3 FT.

5. FOR REPLACEMENT WORK, THE CURB SHALL BE REMOVED AT AN EXISTING JOINT AND MINIMUM LENGTHS COMPLIED WITH.

6. 1/2" EXPANSION MATERIAL WILL BE INSTALLED BEHIND THE CURB WHEN A CONCRETE WALK, DRIVE, OR OTHER CONCRETE ITEM IS ADJOINING IT.

7. REMOVE ANY FCDF BEYOND FACE-OF-CURB TO PROVIDE FULL DEPTH PAVEMENT SECTION.

8. GRANITE CURB SHALL BE FIELD CUT AT CURB RAMPS TO ALLOW FOR FIELD ADJUSTMENTS AS DIRECTED BY THE PROJECT ENGINEER.

9. NO UNDERDRAIN SHALL BE INSTALLED WHEN CURB IS ALONG MEDIAN.
ELEVATION

- FLUSH JOINT AT TOP OF CURB
- 3/8" SHIM
- KERF (APPROX. 3"x3") BY GRANITE CURB SUPPLIER
- CONCRETE BRICK (8"x8"x4")
- FILL ALL VOIDS BETWEEN CURB AND AGGREGATE WITH ITEM 613

CURB
GRANITE
* AT CURB RAMP LOCATIONS, THE GUTTER SLOPE SHALL NOT EXCEED 4.7%. TRANSITION GUTTER OVER 3' TO MATCH EXISTING CURB & GUTTER SLOPE. THE PAVEMENT SHALL BE FLUSH AT THE GUTTER IN FRONT OF CURB RAMPS. CURB RAMPS SHALL BE BUILT PER STD DWG 2319.

1.26 C.F. CONCRETE PER L.F.


SUBGRADE COMPACTION SHALL BE COMPLETED BEFORE UNDERDRAIN INSTALLATION.


FOR REPLACEMENT WORK, THE CURB SHALL BE REMOVED AT AN EXISTING JOINT OR NO CLOSER THAN 5 FEET FROM AN EXISTING JOINT.

1/2" EXPANSION MATERIAL WILL BE INSTALLED BEHIND THE CURB WHEN A CONCRETE WALK, DRIVE, OR OTHER ITEM IS ADJOINING IT.
* AT CURB RAMP LOCATIONS, THE GUTTER SLOPE SHALL NOT EXCEED 4.7%. TRANSITION GUTTER OVER 3' TO MATCH EXISTING CURB & GUTTER SLOPE. THE PAVEMENT SHALL BE FLUSH AT THE GUTTER IN FRONT OF CURB RAMPS. CURB RAMPS SHALL BE BUILT PER STD DWG 2319.

1.26 C.F. CONCRETE PER L.F.


SUBGRADE COMPACTION SHALL BE COMPLETED BEFORE UNDERDRAIN INSTALLATION.


FOR REPLACEMENT WORK, THE CURB SHALL BE REMOVED AT AN EXISTING JOINT OR NO CLOSER THAN 5 FEET FROM AN EXISTING JOINT.

1/2" EXPANSION MATERIAL WILL BE INSTALLED BEHIND THE CURB WHEN A CONCRETE WALK, DRIVE, OR OTHER ITEM IS ADJOINING IT.
THE PAVEMENT SHALL BE FLUSH AT THE GUTTER IN FRONT OF CURB RAMPS. CURB RAMPS SHALL BE BUILT AS PER STD DWG 2319.

1.33 C.F. CONCRETE PER L.F.


SUBGRADE COMPACTION SHALL BE COMPLETED BEFORE UNDERDRAIN INSTALLATION.


FOR REPLACEMENT WORK, THE CURB SHALL BE REMOVED AT AN EXISTING JOINT OR NO CLOSER THAN 5 FEET FROM AN EXISTING JOINT.

1/2" EXPANSION MATERIAL WILL BE INSTALLED BEHIND THE CURB WHEN A CONCRETE WALK, DRIVE OR OTHER ITEM IS ADJOINING IT.
* FOR COMBINATION CURB AND GUTTER, TYPE STANDARD, THE PROFILE GRADE AND STRING LINE ELEVATIONS ARE THE SAME.

** SIDEWALK WIDTH PER STANDARD DRAWING 2300

A MINIMUM 7FT WIDE PEDESTRIAN ACCESS ROUTE (PAR) SHALL BE PROVIDED BETWEEN OPPOSING RAMPS AND SHALL HAVE A CROSS-SLOPE (THE LONGITUDINAL STREET SLOPE) NO GREATER THAN 1.56%.

TACK RATES:
a) RESURFACING = .10 GAL/SY
b) RUBBERIZED ON CONCRETE BASE OR BRICK = 0.08 GAL/SY
c) NEW CONSTRUCTION = SURFACE .08 GAL/SY
d) NEW CONSTRUCTION (INTERMEDIATE) = 0.04 GAL/SY

ITEM 407 TACK COAT SHALL BE APPLIED AT A RATE OF 0.08 GAL/SY IF STREET IS PUT INTO SERVICE PRIOR TO PLACEMENT OF FINAL PAVEMENT COURSE.

D = DIMENSION FROM PROFILE GRADE (STRING LINE) TO SUBGRADE. CALCULATE AND PROVIDE DIMENSIONS BASED ON THE PAVEMENT BUILD-UP SELECTED.
FOR COMBINATION CURB AND GUTTER, TYPE MOUNTABLE, THE PROFILE GRADE ELEVATION IS 1 1/2" ABOVE THE STRING LINE. ALL MEASUREMENTS ARE TAKEN FROM THE STRING LINE.

** SIDEWALK WIDTH PER STANDARD DRAWING 2300

A MINIMUM 7FT WIDE PEDESTRIAN ACCESS ROUTE (PAR) SHALL BE PROVIDED BETWEEN OPPOSING RAMPS AND SHALL HAVE A CROSS-SLOPE (THE LONGITUDINAL STREET SLOPE) NO GREATER THAN 1.56%.

TACK RATES:
a) RESURFACING = .10 GAL/SY
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D = DIMENSION FROM STRING LINE TO SUBGRADE. CALCULATE AND PROVIDE DIMENSIONS BASED ON PAVEMENT BUILD-UP SELECTED.
* FOR COMBINATION CURB AND GUTTER, TYPE SPECIAL 8", THE PROFILE GRADE AND STRING LINE ELEVATIONS ARE THE SAME.

** SIDEWALK WIDTH PER STANDARD DRAWING 2300

A MINIMUM 7FT WIDE PEDESTRIAN ACCESS ROUTE (PAR) SHALL BE PROVIDED BETWEEN OPPOSING RAMPS AND SHALL HAVE A CROSS-SLOPE (THE LONGITUDINAL STREET SLOPE) NO GREATER THAN 1.56%.

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D = DIMENSION FROM PROFILE GRADE (STRING LINE) TO SUBGRADE, CALCULATE AND PROVIDE DIMENSIONS BASED ON THE PAVEMENT BUILD-UP SELECTED.
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ITEM 407 TACK COAT SHALL BE APPLIED AT A RATE OF 0.08 GAL/SY IF STREET IS PUT INTO SERVICE PRIOR TO PLACEMENT OF FINAL PAVEMENT COURSE.

D = DIMENSION FROM PROFILE GRADE (STRING LINE) TO SUBGRADE. CALCULATE AND PROVIDE DIMENSIONS BASED ON THE PAVEMENT BUILD-UP SELECTED.
PAVEMENT DESIGN FOR WIDENING SHALL BE PER CITY OF COLUMBUS NON-RESIDENTIAL STREET PAVEMENT DESIGN POLICY. PAVEMENT SHALL BE EQUAL TO OR GREATER THAN EXISTING PAVEMENT TO PROVIDE POSITIVE DRAINAGE OF SUBGRADE.

1A ITEM 448 - ASPHALT CONCRETE, SURFACE COURSE
2 ITEM 605 - 4" PIPE UNDERDRAIN
3 NO. 8 OR NO. 57 AGGREGATE
4 ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING
5 ITEM 659 - SEEDING AND MULCHING
6 ITEM 254 - 1½" PAVEMENT PLANING
7 ITEM 407 - TACK COAT

NOTES:
1 DITCH DESIGN PER CITY STORM DRAINAGE MANUAL.
2 PUBLIC ACCESS EASEMENT REQUIRED FOR ANY WALK OUTSIDE OF R/W.
3 SLOPE: 4:1 PREFERRED
      3:1 MAX
1.56% 4:1 Preferred 3:1 Max

Sidewalk per Standard Drawing 2300

Item 605 - 4" Pipe Underdrain
Item 204 - Subgrade Compaction and Proof Rolling
Item 659 - Seeding and Mulching

Notes:
1. Ditch Design per City Storm Drainage Manual.
2. Public Access Easement Required for any Walk Outside of R/W.
3. Slope: 4:1 Preferred 3:1 Max
TAPER CURB HEIGHT FROM 6" TO 0" IN 10 FEET.

BERM

MATCH STREET WIDTH 4'-0"

APPROACH & PAVED SHOULDER: MATCH THE PAVEMENT BUILDUP OF THE PRIMARY ROAD.

FULL DEPTH SAWCUT TO SOUND PAVEMENT ITEM 407 - TACK COAT, VERTICAL SURFACE ITEM 429 - CRACK SEALING, TYPE I

CURBED SECTION

APPROACH TO NON-CURBED SECTION

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

2145
STD DWG

6/1/13
SHT 1 OF 1
ITEM 452

4" PIPE UNDERDRAIN

NO. 8 OR NO. 57 AGGREGATE

---

* SEE SHEET 3 OF 3 FOR SECTION A-A.

** MAINTAIN CONCRETE GUTTER AND 4" PIPE UNDERDRAIN.

*** IF SIDEWALK IS BUILT AT GRADE AND CURB IS DROPPED THEN ONLY DETECTABLE WARNINGS ARE REQUIRED.

RAISED EDGE OR CURB ON ALLEY SECTION WILL BE INCLUDED IN THE AREA OF CONCRETE PAVING AND PAID FOR UNDER THIS ITEM.

PAR = PEDESTRIAN ACCESS ROUTE.

$d =$ DISTANCE FROM STRINGLINE TO CENTERLINE INVERT.

---

SECTION AT R/W LINE

COMBINATION CURB & GUTTER

ALLEY APPROACH

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER
4" PIPE UNDERDRAIN

NO. 8 OR NO. 57 AGGREGATE

ITEM 452

7'

7'

6'

W

W1

R/W LINE

R/W LINE

R/W LINE

R/W LINE

CURB RAMP

LANDING

4" PIPE UNDERDRAIN

4" MIN PAR 1.56%

RADIUS

15'

16'

18'

20'

26'

W1

W

12'

12'

12'

12'

12'

3" UTILITY STRIP / TREE LAWN

3" UTILITY STRIP / TREE LAWN

PAVEMENT AND CURB Poured Integral (both sides)

MAINTAIN PIPE UNDERDRAIN

FACE OF CURB

* SEE SHEET 3 OF 3 FOR SECTION B-B.

** IF SIDEWALK IS BUILT AT GRADE AND CURB IS DROPPED THEN ONLY DETECTABLE WARNINGS ARE REQUIRED.

RAISED EDGE OR CURB ON ALLEY SECTION WILL BE INCLUDED IN THE AREA OF CONCRETE PAVING AND PAID FOR UNDER THIS ITEM.

PAR = PEDESTRIAN ACCESS ROUTE.

d = DISTANCE FROM STRINGLINE TO CENTERLINE INVERT.

SECTION AT R/W LINE

CURB, STRAIGHT 18"

<table>
<thead>
<tr>
<th>W</th>
<th>W1</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>15'</td>
<td>13'</td>
<td>2 3/4&quot;</td>
</tr>
<tr>
<td>16'</td>
<td>14'</td>
<td>3&quot;</td>
</tr>
<tr>
<td>18'</td>
<td>16'</td>
<td>3 3/4&quot;</td>
</tr>
<tr>
<td>20'</td>
<td>18'</td>
<td>3 1/2&quot;</td>
</tr>
<tr>
<td>26'</td>
<td>20'</td>
<td>3 3/4&quot;</td>
</tr>
</tbody>
</table>
* CAP END IF NOT CONNECTED TO PIPE UNDERDRAIN AT TIME OF CONSTRUCTION.

** SLOPE VARIES.

*** TOP OF PAVEMENT 8% MAX SLOPE FROM GUTTER TO FRONT OF WALK.

PAR = PEDESTRIAN ACCESS ROUTE.

TYPICAL SECTION

ALLEY APPROACH
DEDICATED WIDTH OF ALLEY

R/W LINE

PAVING SECTION

GRADING SECTION

STRING LINE

ITEM 452

NO. 8 OR NO. 57 AGGREGATE

ITEM 204 - SUBGRADE COMPACTION

EDGES OF PAVEMENT TO BE FINISHED WITH AN EDGING TOOL OF 3/4" RADIUS.

R/W WIDTH

PAVING WIDTH

"d"

AREA BELOW STRING LINE (EXCLUDING UNDERDRAIN TRENCH)

15'  
13'  
2 3/4"

9.07 SQ. FT.

16'  
14'  
3"

9.92 SQ. FT.

18'  
16'  
3 1/4"

11.50 SQ. FT.

20'  
18'  
3 1/2"

13.13 SQ. FT.

OVER 20'  
20'  
3 3/4"

14.79 SQ. FT.

OVER 24'  
24'  
4 1/2"

18.50 SQ. FT.

TYPICAL SECTION

ALLEY

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

6/1/13

STD DWG
2151

6/1/13
SHT 1 OF 1
4" PIPE UNDERDRAIN

GUTTER MAY BE DESIGNED TO DRAIN INTO OR OUT OF EYEBROW

OPTION

1.56 TO 3.13 %

OPTION: 1.56% FROM RADIUS TO CENTERLINE OR 1.56% FROM CENTERLINE TO RADIUS

EYEBROW

#8 OR #57 AGGREGATE

ITEM 605 - 4" PIPE UNDERDRAIN

ITEM 609 - COMBINATION CURB & GUTTER, TYPE STANDARD 2010

SAW CONTRACTION JOINTS PER STANDARD DRAWING 2155.

THE TYPE OF CURB AROUND THE EYEBROW SHALL BE THE SAME AS THE TYPE USED ON THE ADJACENT STREET.

PAVEMENT SHALL BE THE SAME AS THE PAVEMENT ON THE ADJACENT STREET.
CONSTRUCTION JOINT

EDGE OF PAVEMENT

18'
18'
18'
18'
18'
18'
18'
18'
18'
18'

R = 36.5'

VARIES 10' MIN

EXP. JOINT

BACK OF CURB

VARIES 10' MIN

R = 62'

EYEBROW

STD DWG

SHT 3 OF 3

C/L STREET

STREET

CONSTRUCTION JOINT

R/W

F/C

E/P

1'-6"

* VARIABLE - 2' MIN, 18' MAX

DETAIL APPLIES TO CONCRETE PAVEMENT OR CONCRETE BASE ONLY.

JOINT SPACING DETAIL

EYEBROW

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG

2154

6/1/13

SHT 3 OF 3
CUL-DE-SAC
FOR 26' WIDE STREET
ON A 50' RIGHT-OF-WAY

STREET DATA

FACE OF CURB DATA
DELTA = 41°24'35"
RADIUS = 62.00'
LENGTH = 44.81'

CURB DATA
DELTA = 262°49'10"
RADIUS = 38.00'
LENGTH = 174.31'

C/L CURVE DATA
DELTA = 41°24'35"
RADIUS = 62.00'
LENGTH = 44.81'

NOTE: ALL DIMENSIONS SHOWN ARE TO FACE OF CURB ONLY.

PAVEMENT AREA

NOTE: ALL DIMENSIONS SHOWN ARE FOR RIGHT-OF-WAY ONLY.

R/W CURVE DATA
DELTA = 262°49'10"
RADIUS = 50.00'
LENGTH = 229.35'
AREA = 8887.77 S.F.

NOTE: ALL DIMENSIONS SHOWN ARE FOR RIGHT-OF-WAY ONLY.

R/W CURVE DATA
DELTA = 240°00'00"
RADIUS = 50.00'
LENGTH = 229.35'
AREA = 10,422.18 S.F.

R/W CURVE DATA
DELTA = 32°12'15"
RADIUS = 162.50'
LENGTH = 91.34'

R/W CURVE DATA
DELTA = 240°00'00"
RADIUS = 50.00'
LENGTH = 209.44'
AREA = 10,422.18 S.F.

R/W CURVE DATA
DELTA = 32°12'15"
RADIUS = 162.50'
LENGTH = 91.34'

R/W CURVE DATA
DELTA = 86.60'
RADIUS = 62.00'
LENGTH = 64.93'

R/W CURVE DATA
DELTA = 32°12'15"
RADIUS = 162.50'
LENGTH = 91.34'

R/W CURVE DATA
DELTA = 86.60'
RADIUS = 62.00'
LENGTH = 64.93'

P AVEMENT AREA

AREA = 5102.09 Sq. Fl.

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2156

6/1/13
SHT 1 OF 3
FUTURE WALK
12'-0"
R/W
12'-0"
R/W
12'-0"
R/W
12'-0"
R/W

1.56% MIN. TO 3.13% MAX. FROM CENTERLINE TO RADIUS
OPTION: 1.56% MIN. TO 3.13% MAX. FROM RADIUS TO CENTERLINE OR

GUTTER MAY BE DESIGNED TO DRAIN INTO OR OUT OF CUL-DE-SAC
#8 OR #57 AGGREGATE
ITEM 605 - 4" PIPE UNDERDRAIN

SAW CONTRACTION JOINTS PER STANDARD DRAWING 2156.
THE TYPE OF CURB AROUND THE CUL-DE-SAC SHALL BE THE
SAME AS THE TYPE USED ON THE ADJACENT STREET.
PAVEMENT SHALL BE THE SAME AS THE PAVEMENT ON THE
ADJACENT STREET.

FOR PAVEMENT - SEE BELOW
ITEM 609 - COMBINATION CURB & GUTTER, TYPE STANDARD 2010
4" PIPE UNDERDRAIN
ENLARGED SECTION A-A
ENLARGED SECTION B-B

TYPICAL SECTION
COMBINATION CURB &
GUTTER, TYPE STANDARD

CUL-DE-SAC
FOR 26' WIDE STREET
ON A 50' RIGHT-OF-WAY

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
STD DWG
2156
6/1/13
SHT 2 OF 3
NOTE: DETAIL APPLIES TO CONCRETE PAVEMENT OR CONCRETE BASE ONLY.

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
2156
6/1/13
SHT 3 OF 3
10'-0"

10'-0"

2157

90' - 0"

10'-0"

10'-0"

FACE TO FACE

27'-6"

A

A

A

A

B

B

B

B

** TAPER CURB 6" TO 1".

UNDERDRAIN SHALL BE SLOPED FOR POSITIVE DRAINAGE TO CURB INLET.

R/W AND EASEMENTS FOR T-TURNAROUND TO BE DETERMINED DURING SITE DEVELOPMENT PHASE AND PLATTING PROCESS.

* 20' RADIUS IF 200' OR LESS FROM CENTERLINE OF STREET TO CENTERLINE OF TURNAROUND.

THREE-FOURTHS EXPANSION JOINTS

CONC. BASE & CURB POURED INTEGRAL PER 2171 ( BOTH SIDES )

SLOPE

COMBINATION CURB & GUTTER, TYPE STANDARDS OR COMBINATION CURB & GUTTER, TYPE MOUNTABLE

COMBINATION CURB & GUTTER, TYPE STANDARDS OR COMBINATION CURB & GUTTER, TYPE MOUNTABLE

90’ - 0”

10’-0”

4” PIPE UNDERDRAIN AND GUTTER LINE (TO BE MAINTAINED)

20' RADIUS IF 200' OR LESS FROM CENTERLINE OF STREET TO CENTERLINE OF TURNAROUND.
**USING COMBINATION CURB AND GUTTER, TYPE STANDARD PER STD DWG 2010.**

**USING COMBINATION CURB & GUTTER, TYPE MOUNTABLE PER STD DWG 2030.**

UNDERDRAIN SHALL BE SLOPED FOR POSITIVE DRAINAGE TO CURB INLET.

**TYPICAL SECTION**

**T - TURNAROUND**

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG 2157
6/1/13
SHT 2 OF 3
SIGNING SHALL BE INSTALLED TO KEEP TURNDOWN CLEAR FOR EMERGENCY VEHICLES. SIGNS ARE TO BE REMOVED IF AND WHEN THE STREET IS CUT THROUGH.

REFERENCE SUPPLEMENTAL SPECIFICATIONS 1630.

* FOR USE ON PRIVATE STREETS ONLY
CP-116.16 (L)(R)(D)
12" x 24"

** FOR USE ON PUBLIC R/W
CP-114.01 (L)(R)(D)
12" x 18"

U-CHANNEL DRIVE POST

T - TURNDOWN

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG 2157
6/1/13
SHT 3 OF 3
BACKFILL OF ALL TRENCHES SHALL BE IN ACCORDANCE WITH APPLICABLE SPECIFICATIONS.

PERMANENT REPAVING SHALL NOT BE DONE UNTIL SO ORDERED OR APPROVED BY THE ENGINEER. THE EDGE SHALL BE CUT VERTICAL AND TRIMMED TO PROVIDE A STRAIGHT LINE.

ITEM 407 - TACK COAT SHALL BE APPLIED AT A RATE OF 0.08 GAL/SY.

ALL EXISTING CONCRETE WALKS OR CONCRETE PAVEMENTS BEING REPLACED SHALL BE REMOVED AT AN EXISTING JOINT AND REPLACED PER STANDARD DRAWING.

DRIVEWAY PAVEMENT SHALL BE REPLACED BY EITHER MATCHING THE EXISTING MATERIALS & THICKNESS, OR BY USING THE ABOVE THICKNESS, WHICHEVER IS GREATER.

IF COMPLETE DRIVE APPROACH IS BEING REBUILT REFERENCE THE STANDARD DRAWING APPLICABLE TO THE DRIVE.
BACKFILL OF ALL TRENCHES SHALL BE IN ACCORDANCE WITH APPLICABLE SPECIFICATIONS.
TEMPORARY PAVEMENT SHALL BE PLACED ON THE SAME DAY THE ORIGINAL PAVEMENT IN CUT.

ITEM 304 - 6" AGGREGATE BASE

ITEM 448 - 2" ASPHALT CONCRETE, SURFACE COURSE
OR
ITEM 405 - 2" BITUMINOUS COLD MIX

ITEM 615 - TEMPORARY PAVEMENT

EXISTING PAVEMENT

TRENCH

EXISTING PAVEMENT

TOP OF TRENCH

ITEM 304 - 6" AGGREGATE BASE

SEE NOTES BELOW
"D" DENOTES WHERE DIMENSIONS ARE NEEDED

PAVEMENT REPLACEMENT SHALL BE PER STANDARD DRAWING 1441

DIRECTIONAL BORING

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG 2166

6/1/13
SHT 1 OF 2

CITY ENGINEER
MINIMUM OFFSETS SHALL BE 1 FOOT FROM RIGHT-OF-WAY LINES OR 3 FEET FROM EDGE OF PAVEMENT OR EDGE OF SHOULDER.

MINIMUM DEPTH FROM TOP OF PUSH TO TOP OF CURB FOR STANDARD COMBINED CURB AND GUTTER IS 30", STRAIGHT CURB 36", AND FLEXIBLE PAVEMENT 36" BELOW TOP OF PAVEMENT.

IF AGGREGATE DRAINS ARE DISTURBED, THEY SHALL BE REPLACED.
NOTES

GENERAL: NOTES AND DETAILS SHOWN ON THIS DRAWING SHALL BE CONSIDERED IN CONJUNCTION WITH AND SUPPLEMENTAL TO THE PERTINENT SPECIFICATIONS FOR PORTLAND CEMENT CONCRETE PAVEMENT AND BASES, AND RELATED INCIDENTALS.

JOINT COMPONENTS: THIS DRAWING IS INTENDED FOR USE WITH A UNIFORM DEPTH PAVEMENT. WHEN THE PROJECT INVOLVES THE PLACING OF VARIABLE DEPTH PAVEMENT, THE JOINT COMPONENTS SHALL BE HELD IN PLACE IN ACCORDANCE WITH THE METHOD SHOWN IN THE PLANS OR AS APPROVED BY THE ENGINEER.

CONTRACTION JOINTS: CONTRACTION JOINTS IN ITEM 305 - CONCRETE BASE SHALL BE DOWELLED WHERE THEY ARE LOCATED IN MAINLINE PAVEMENT, RAMPS, ACCELERATION/DECELERATION LANES, OR COLLECTOR/DISTRIBUTOR LANES, OR IN SHOULDERS WITHIN 500' OF A PRESSURE RELIEF JOINT.

CONTRACTION JOINTS IN ITEM 305 - CONCRETE BASE SHALL NOT BE DOWELLED IN ALLEYS, PRIVATE DRIVES, OR COMMERCIAL DRIVES.

CONTRACTION JOINTS OF THE TYPE SPECIFIED SHALL BE SPACED IN ACCORDANCE WITH THE CONTRACTION JOINT SPACING TABLE.

<table>
<thead>
<tr>
<th>CONTRACTION JOINT SPACING</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPES OF PAVEMENT OR BASE</td>
</tr>
<tr>
<td>ITEM 451 - REINFORCED CONCRETE PAVEMENT</td>
</tr>
<tr>
<td>ITEM 452 - NON-REINFORCED CONCRETE PAVEMENT</td>
</tr>
<tr>
<td>ITEM 305 - CONCRETE BASE</td>
</tr>
</tbody>
</table>

CONSTRUCTION JOINTS: IN ITEM 305 - CONCRETE BASE, A CONSTRUCTION JOINT SHALL NOT BE LOCATED CLOSER THAN 6' TO ANOTHER PARALLEL JOINT.

KERF AND SEAL CONFORMING IN ALL ASPECT TO DETAILS SHOWN FOR CONTRACTION JOINTS SHALL BE PROVIDED AT EACH CONSTRUCTION JOINT IN CONCRETE PAVEMENT AND BASE.
ITEM 451 & 452 W/UNSEALED JOINTS
(DOWEL BAR OMITTED FOR SHOULDERS, ALLEYS, DRIVEWAYS, ETC.)

ITEM 452 W/SEALED JOINTS

ITEM 305
(DOWEL BAR OMITTED FOR SHOULDERS, ALLEYS, DRIVEWAYS, ETC.)

* WHERE T > 10", THE SAWCUT DEPTH SHALL BE T/3.
SECTION THROUGH CONSTRUCTION JOINT

CONSTRUCTION JOINT

JOINT DETAILS FOR PORTLAND CEMENT CONCRETE PAVING

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
2170

6/1/13
SHT 3 OF 6
SECTION THROUGH EXPANSION JOINT

SIDE ELEVATION OF EXPANSION JOINT
(THROUGH CONCRETE PAVEMENT OR BASE)

EXPANSION JOINTS

JOINT DETAILS FOR PORTLAND CEMENT CONCRETE PAVING

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG 2170
6/1/13
SHT 4 OF 6
WELD ALTERNATE EDGES OF DOWELS

#7 GAUGE (0.177" DIA.) SHIPPING AND SPACER WIRES. REMOVE SPACER WIRES AFTER STAKING ASSEMBLY TO GRADE.

DOWEL BASKET ASSEMBLY

JOINT DETAILS FOR PORTLAND CEMENT CONCRETE PAVING
#1/0 GAUGE (0.306" DIA.) WIRE

J-LEG DETAIL (ALTERNATE)

#1/0 GAUGE (0.306" DIA.) WIRE

U-LEG DETAIL

REFER TO CMSC 451.08 B AND 709.13 FOR DOWEL SPECIFICATIONS.

WIRE SIZES SHOWN ARE MINIMUM REQUIRED.

ALL WIRE INTERSECTIONS ARE TO BE WELDED.

STAKES TYPICALLY APPLIED AT WORKING ENDS OF DOWEL.

TOLERANCES:
A) ± ¼" PER FOOT UNLESS OTHERWISE SPECIFIED.
B) CENTERLINE OF INDIVIDUAL DOWELS SHALL BE PARALLEL TO EACH OTHER, THE SURFACE AND THE CENTERLINE OF THE SLAB.
C) ON CENTERS SHOULD BE ± ½".
D) DOWELS SHOULD BE PLACED AT MID-DEPTH OF SLAB.

J-LEG OR U-LEG TO BE INSTALLED ON INSIDE OR OUTSIDE OF SUBFRAME.

DOWEL BASKET ASSEMBLY

JOINT DETAILS FOR PORTLAND CEMENT CONCRETE PAVING
TRANSITION SECTION TO BE USED WHEN WIDTH OF CONCRETE BASE MATERIAL IS LESS THAN 36".

IF LENGTH L IS GREATER THAN 9 FEET, SAW IN EQUAL SEGMENTS 5 FEET TO 9 FEET LONG.
EXISTING PAVEMENT (VARIES)

1. ITEM 448 - 1.25" ASPHALT CONCRETE, SURFACE COURSE
2. ITEM 448 - 1.5" ASPHALT CONCRETE, INTERMEDIATE COURSE
3. ITEM 448 - ASPHALT CONCRETE LEVELING COURSE AS NEEDED
4. ITEM 407 - TACK COAT (W/ COVER AGGREGATE, IF REQUIRED)
5. ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT WITH INTEGRAL CURB

ITEM 448 - PRE-LEVELING COURSE, TO BE USED FOR CROWN CORRECTION IF NECESSARY.

SECTION A - A

TRANSITION SECTION FOR CONCRETE PAVEMENT

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG 2171
6/1/13
SHT 2 OF 2
ITEM 454 - PAVEMENT RELIEF JOINTS shall be a minimum 400' apart, not to exceed maximum of 800'.

**TYPICAL LOCATION PLAN**

- **ITEM 448 - 1.25" ASPHALT CONCRETE, SURFACE COURSE**
- **ITEM 448 - 1.5" ASPHALT CONCRETE, INTERMEDIATE COURSE**

* USE ITEM 448 - ASPHALT CONCRETE, SURFACE COURSE IF LAYER IS TO BE A SURFACE COURSE

**SECTION A-A**

2" EXPANSION MATERIAL SHALL BE PLACED AT ALL PAVEMENT RELIEF JOINTS IN THE STRAIGHT CURB, OR CURB AND GUTTER AND CENTERED ON THE PAVEMENT RELIEF JOINT.

**PAVEMENT RELIEF JOINT DETAIL (RESIDENTIAL)**
BACKFILL WITHIN RIGHT-OF-WAY

PIPE INSIDE OF THIS LINE SHALL BE INSTALLED PER ITEM 901.

ITEM 911 - COMPACTED BACKFILL

ITEM 912 - COMPACTED GRANULAR MATERIAL

EDGE OF PAVEMENT OR FACE OF CURB

ROAD PAVEMENT

1 1

3'-0"
ALL SIGNS SHALL BE 18" HIGH x REQUIRED LENGTH, MOUNTED 14' ABOVE GROUND LEVEL. SIGNS SHALL BE LOCATED NEAR LEFT AND FAR RIGHT AT ALL LOCATIONS.

ARTERIAL AT NON-ARTERIAL

ALL SIGNS SHALL BE 12" HIGH x REQUIRED LENGTH, MOUNTED 14' ABOVE GROUND. SIGNS SHALL BE LOCATED FAR RIGHT FOR THE ARTERIAL WITH TWO SIGNS PER POST. IF THE COMBINED SQUARE FOOTAGE OF THE TWO SIGNS EXCEEDS 10 SQUARE FEET USE SEPARATE POST FOR EACH SIGN AS ABOVE.

LOCAL AT LOCAL

ALL SIGNS SHALL BE 9" HIGH x REQUIRED LENGTH, MOUNTED 10' ABOVE GROUND LEVEL. LOCAL COLLECTOR SHALL BE SIGNED WITH TWO SIGNS PER POST, LOCATED IN SUCH A MANNER AS TO MINIMIZE OBSTRUCTION OF OTHER TRAFFIC CONTROL SIGNS.

STREET NAME SIGN

LOCAL COLLECTOR AND RESIDENTIAL STREETS SHALL HAVE THE SAME SIZE POST AND PLACEMENT STANDARDS.
POST INSTALLATION
ARTERIAL AT ARTERIAL

4" NPS GALV. STEEL PIPE
21'-0" LONG

* WHERE LATERAL CLEARANCE IS LESS THAN 24" PLACE SIGN ON POLE AWAY FROM TRAFFIC

DIMENSIONS SHOWN SHALL BE CONSIDERED MINIMUM DIMENSIONS FOR NEW INSTALLATIONS AS WELL AS FOR INSTALLATIONS USING EXISTING SUPPORTS SUCH AS UTILITY POLES AND TRAFFIC SIGNAL POLES.

ONLY ONE STREET NAME SIGN PER SUPPORT SHALL BE LOCATED NEAR-LEFT AND FAR-RIGHT AT ALL LOCATIONS UNLESS OTHERWISE SPECIFIED.
STREET NAME SIGN

SIGNS SHALL BE LOCATED FAR-RIGHT FOR THE ARTERIAL WITH 2 SIGNS PER SUPPORT. IF THE COMBINED SQUARE FOOTAGE EXCEEDS 10 SQUARE FEET, A SEPARATE SUPPORT SHALL BE USED FOR EACH SIGN.

WHERE LATERAL CLEARANCE IS LESS THAN 24" PLACE SIGN ON POLE AWAY FROM TRAFFIC

4" NPS GALV. STEEL PIPE 21'-0" LONG

CAP

VARIES

N HIGH ST

10"

MIN 4' DEPTH

499 CLASS C, CONCRETE

CURB

24" MIN

WHERE REQUIRED

SECOND SIGN

12"
WHERE LATERAL CLEARANCE IS LESS THAN 24" PLACE SIGN ON POLE AWAY FROM TRAFFIC

2 1/2" NPS GALV. PIPE 14'-0" LONG

WHERE LATERAL CLEARANCE IS LESS THAN 24" PLACE SIGN ON POLE AWAY FROM TRAFFIC

POST INSTALLATION
LOCAL AT LOCAL

STREET NAME SIGN

LOCAL COLLECTOR AND RESIDENTIAL STREETS SHALL BE TREATED THE SAME
<table>
<thead>
<tr>
<th>SIZE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
</tr>
</thead>
<tbody>
<tr>
<td>9&quot; SIGN</td>
<td>VARIES</td>
<td>9.0”</td>
<td>2.5”</td>
<td>1.0”</td>
<td>2.0”</td>
<td>2.0” MIN</td>
<td>2.0” MIN</td>
<td>VARIES</td>
<td>VARIES</td>
<td>3.5”</td>
</tr>
<tr>
<td>12&quot; SIGN</td>
<td>VARIES</td>
<td>12.0”</td>
<td>3.0”</td>
<td>1.5”</td>
<td>3.0”</td>
<td>3.0” MIN</td>
<td>3.0” MIN</td>
<td>VARIES</td>
<td>VARIES</td>
<td>4.5”</td>
</tr>
<tr>
<td>18&quot; SIGN</td>
<td>72.0” MAX</td>
<td>18.0”</td>
<td>5.0”</td>
<td>2.0”</td>
<td>4.0”</td>
<td>4.0” MIN</td>
<td>4.0” MIN</td>
<td>VARIES</td>
<td>VARIES</td>
<td>7.0”</td>
</tr>
</tbody>
</table>

BLADE

STREET NAME SIGN
STREET NAME SIGN

FASTEN TO SUPPORT WITH PRE-ASSEMBLED BUCKLE-STRAP COMBINATION ASSEMBLY.

ADDITIONAL CANTILEVERED BRACKET

* USED WHEN SIGN AREA EXCEEDS SIX (6) SQUARE FEET. PLACE TWO (2) BRACKETS BACK TO BACK ON TOP AND BOTTOM OF SIGN BLADE.

UNIVERSAL CHANNEL CLAMP

CANTILEVERED BRACKET

UNIVERSAL CHANNEL CLAMP SLOT BAR

DOUBLE "T" SECTION

MOUNTING HARDWARE
STREET NAME SIGN

USE TYPE II TEE FOR 9" AND 12" BLADES THAT ARE 42", 48" AND 54" LONG.

USE TYPE I TEE FOR 9" AND 12" BLADES THAT ARE LESS THAN 42" LONG.

MOUNTING HARDWARE
DOUBLE TEE, TYPE II

ELEVATION

<table>
<thead>
<tr>
<th>A (inches)</th>
<th>B (inches)</th>
<th>N (number of holes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>48</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>54</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

+.018-.006 AT THROAT OPENING
0.129+.005 AT BASE

SECTION

N HOLES, 13/64" DIA FOR 3/16" RIVET

PLAN

CTR (TYP)

CTR

2185

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
2185

12/1/13
SHT 8 OF 9
USE TYPE III TEES FOR 9" AND 12" BLADES THAT ARE 60", 66" & 72" LONG AND ALL 18" BLADES WITH BACK TO BACK CANTILEVER BRACKETS.
NUMBER OF ASSEMBLIES TO BE INSTALLED:

- PAVEMENTS 24' OR LESS IN WIDTH = 2
- PAVEMENTS 25'-32' IN WIDTH = 3
- PAVEMENTS 33'-40' IN WIDTH = 4
- PAVEMENTS 41'-48' IN WIDTH = 5
- PAVEMENTS 49'-56' IN WIDTH = 6
- PAVEMENTS 57'-64' IN WIDTH = 7

THE OM4-3 IS A 18"X18", .080 GAUGE ALUMINUM PANEL COVERED WITH RED REFLECTIVE SHEETING.

REFERENCE SUPPLEMENTAL SPECIFICATION 1630.

BARRICADE FOR END OF ROADWAY PAVEMENT
3" DIA. HOLE CORE DRILLED OR FORMED THROUGH CONCRETE

MIN 2" CAP - PORTLAND CEMENT CONCRETE OR APPROVED EQUAL

PORTLAND CEMENT CONCRETE/BRICK WALK OR MEDIAN

42" MIN

SAND

NOTES: MAINTAIN STANDARD INSTALLATION DEPTH OF DRIVE POST.

REFERENCE SUPPLEMENTAL SPECIFICATION 1630.

DRIVE POST INSTALLATION THROUGH CONCRETE / BRICK

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG 2191

CITY ENGINEER

6/1/13
SHT 1 OF 1
FOR USE IN AREAS OPEN TO PEDESTRIAN TRAFFIC

3 1/2" X 18" PANEL WITH HIGH INTENSITY REFLECTIVE SHEETING
RED - NO OUTLET
YELLOW - OTHER
(TWO PER BOLLARD)

TREATED 4" X 4" WOOD POST

3/8" DEEP SAW CUT ALONG ALL FOUR SIDES

PAVEMENT SURFACE

1 1/2" LAG BOLT (2 REQ.)

PAVEMENT SURFACE

STEEL TUBING
4" X 4" X 3/8"
(PAINT W/RUST INHIBITOR)

PAVEMENT

3'-0"

5'-0"

4'-0" MINIMUM

FOR USE IN AREAS OPEN TO PEDESTRIAN TRAFFIC

BREAK-AWAY BOLLARD

TOP VIEW

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
2195

6/1/13

SHT 1 OF
FOR USE IN LIMITED ACCESS AREAS

18" X 18" PANEL WITH REFLECTIVE SHEETING
RED - NO OUTLET
YELLOW - OTHER
(TWO PER BOLLARD)

TREATED 4" X 4"
WOOD POST

3/4" DEEP SAW CUT ALONG ALL FOUR SIDES

PAVEMENT SURFACE

1 1/2" LAG BOLT (2 REQ.)

STEEL TUBING
4" X 4" X 3/8"
(PAINT WITH RUST INHIBITOR)

PAVEMENT SURFACE

TOP VIEW

BREAK-AWAY BOLLARD

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG 2195
6/1/13
SHT 2 OF 2
FOR USE ON A PARCEL WITH A SINGLE DWELLING

* CURB OR COMBINED CURB AND GUTTER SHALL BE TAKEN OUT AND REPLACED WITH CONCRETE, SEPARATED FROM THE DRIVE BY 1/2" PREMOLDED EXPANSION JOINT, WHEN LESS THAN 5' OF A CURB SECTION REMAINS AFTER THE CURB CUT IS LOCATED, IT SHALL ALSO BE REMOVED AND REPLACED. CURB SHALL BE CONSTRUCTED IN MINIMUM 5' SECTIONS AND MAXIMUM 10' SECTIONS.

** SIDEWALK WIDTH SHALL BE PER STANDARD DRAWING 2300. SIDEWALK THICKNESS SHALL BE 6" CONCRETE TO ONE FULL PANEL (MIN. 5 FT.) BEYOND EDGE OF DRIVE.

*** 5' ON ROADWAYS WITH 35 MPH SPEED LIMIT, 2' FOR SPEED LIMITS LESS THAN 35 MPH.

PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.
DRIVEWAY, RESIDENTIAL CURBED ROADWAY

SIDEWALK ADJACENT TO CURB

SECTION A-A
SEE SHEET 1 OF 4 FOR ADDITIONAL INFORMATION
USE WHEN FRONT RAMP OF DRIVE IS LONGER THAN 2'. MAINTAIN R/W CLEARANCE FOR WALK.

SIDEWALK WIDTH PER STANDARD DRAWING 2300

1.56% 7.69% MAX.

1'-0" MIN.

4'-0" MIN. PAR 1.56% MAX.

8" THICK CONCRETE 15% MAX.

2'-0" OR GREATER *

A

4'-0" (TYP)

5'-0" (TYP)

7.69% MAX.

DRIVE, RESIDENTIAL CURBED ROADWAY

SIDEWALK ADJACENT TO CURB WITH RUN-AROUND

DRIVE 12% MAX.

R/W

4'-0" MIN. PAR ACROSS DRIVE 1.56% 1'-0"

ITEM 452

COMPACTED EARTH OR
ITEM 304 - AGGREGATE BASE

GUTTER W/ DROP CURB

½" EXPANSION JOINT

6" CONCRETE

SECTION A-A
SEE SHEET 1 OF 4 FOR ADDITIONAL INFORMATION
SIDEWALK, RESIDENTIAL CURBED ROADWAY

10'-0" MINIMUM
16'-0" MINIMUM (2 CAR DRIVE)

R/W LINE

SIDEWALK WIDTH
PER STANDARD
DRAWING 2300

7.69% MAX.

6" THICK CONCRETE

PAR
1.56% MAX.

7.69% MAX.

1'-0"

R/W LINE

LOW SIDE RAMP
1:13 MAX.

COMPACTED EARTH OR
ITEM 304 - AGGREGATE BASE

6" CONCRETE

1'-0"

1:13 MAX.

HIGH SIDE RAMP

STREET GRADE | RAMP LENGTH (1:13) |
-------------|---------------------|
1%          | 5'-6"               |
2%          | 5'-0"               |
3%          | 4'-6"               |
4%          | 4'-2"               |
5%          | 3'-10"              |

* MEASURED ALONG THE BACK OF CURB

SECTION A-A
SEE SHEET 1 OF 4 FOR ADDITIONAL INFORMATION

GUTTER W/ DROP CURB

1/2 EXPANSION JOINT
THIS STANDARD DRAWING IS FOR DRIVES ON LOCAL OR COLLECTOR STREETS WITH SPEEDS ≤ 35 MPH, UNLESS APPROVED OTHERWISE BY DIVISION OF PLANNING & OPERATIONS.

* CURB OR COMBINED CURB AND GUTTER SHALL BE TAKEN OUT AND REPLACED WITH CONCRETE, SEPARATED FROM THE DRIVE BY 1/2" PREMOLDED EXPANSION JOINT. WHEN LESS THAN 5' OF A CURB SECTION REMAINS AFTER THE CURB CUT IS LOCATED, IT SHALL ALSO BE REMOVED AND REPLACED. CURB SHALL BE CONSTRUCTED IN MINIMUM 5' SECTIONS AND MAXIMUM 10' SECTIONS.

** SIDEWALK WIDTH SHALL BE PER STANDARD DRAWING 2300. SIDEWALK THICKNESS SHALL BE 8" CONCRETE TO ONE FULL PANEL (MIN. 5 FT.) BEYOND EDGE OF DRIVE.

PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.
* USE WHEN FRONT RAMP OF DRIVE IS LONGER THAN 2'. MAINTAIN ROW CLEARANCE FOR WALK.
SIDEBAND, NON-RESIDENTIAL CURBED ROADWAY

SIDEBAND ADJACENT TO CURB

DRIVEWAY, WITH FLARES

SECTION A-A
SEE SHEET 1 OF 4 FOR ADDITIONAL INFORMATION

STREET GRADE | RAMP LENGTH (1:13)
--- | ---
1% | 5'-6" | 7'-2"
2% | 5'-0" | 8'-4"
3% | 4'-6" | 10'-0"
4% | 4'-2" | 12'-6"
5% | 3'-10" | 18'-8"

* MEASURED ALONG THE BACK OF CURB
* PAVEMENT & CURB MAY BE POURRED INTEGRAL WITH PRIOR C.O.C. APPROVAL.

** 8" THICK CONCRETE SIDEWALK FOR 1 FULL PANEL (MIN. 5') BEYOND EDGE OF DRIVE.

*** MAINTAIN 4" PIPE UNDERDRAIN. CURB OR COMBINED CURB AND GUTTER SHALL BE TAKEN OUT AND REPLACED WITH CONCRETE, SEPARATED FROM THE DRIVE BY 1/2" PREMOLDED EXPANSION JOINT. WHEN LESS THAN 5' OF A CURB SECTION REMAINS AFTER THE CURB CUT IS LOCATED, IT SHALL ALSO BE REMOVED AND REPLACED. CURB/GUTTER SHALL BE CONSTRUCTED IN MINIMUM 5' SECTIONS AND MAXIMUM 10' SECTIONS.

PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.

NO DOWELS REQUIRED ON DRIVES.

DRIVEWAY, NON-RESIDENTIAL WITH RADIUS CURBED ROADWAY

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG 2203

6/1/14
SHT 1 OF 3
ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT
OR
ITEM 448 - 2.5" ASPHALT CONCRETE, SURFACE COURSE (MEDIUM TRAFFIC), PG 64-22
ITEM 407 - TACK COAT
ITEM 305 - 7" CONCRETE BASE

SECTION A-A THROUGH CROWNED PAVEMENT

ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT
OR
ITEM 448 - 2.5" ASPHALT CONCRETE, SURFACE COURSE (MEDIUM TRAFFIC), PG 64-22
ITEM 407 - TACK COAT
ITEM 305 - 7" CONCRETE BASE

SECTION A-A THROUGH FLAT PAVEMENT

DRIVEWAY, NON-RESIDENTIAL
WITH RADIUS
CURBED ROADWAY
PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.

* 8" CONCRETE.

** STRAIGHT CURB OR CONCRETE CURB & GUTTER.

SECTION B-B

DRIVEWAY, NON-RESIDENTIAL WITH RADIUS CURBED ROADWAY
FOR USE ON A PARCEL WITH A SINGLE DWELLING

* REPLACEMENT OF EXISTING DRIVES SHALL MATCH PAVEMENT (TYPE, DESIGN) IN KIND TO EXISTING DRIVE. NEW DRIVES SHALL BE PAVEMENT (TYPE, DESIGN) SIMILAR TO MAIN ROADWAY (TYPE, DESIGN).

DRIVE PAVEMENT (TYPE, FLEXIBLE)
ITEM 448 - 2" ASPHALT CONCRETE, SURFACE COURSE, (MEDIUM TRAFFIC), PG 64-22
ITEM 448 - 2" ASPHALT CONCRETE, INTERMEDIATE COURSE, (MEDIUM TRAFFIC), PG 64-22
ITEM 304 - 4" AGGREGATE BASE

** SIDEWALK SHALL BE PER STANDARD DRAWING 2300. SIDEWALK THICKNESS SHALL BE 6" CONCRETE TO ONE FULL PANEL (MIN. 5 FT.) BEYOND EDGE OF DRIVE.

PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.

SECTION A-A
FOR USE ON A PARCEL WITH A SINGLE DWELLING

* REPLACEMENT OF EXISTING DRIVES SHALL MATCH PAVEMENT (TYPE, DESIGN) IN KIND TO EXISTING DRIVE. NEW DRIVES SHALL BE PAVEMENT (TYPE, DESIGN) SIMILAR TO MAIN ROADWAY (TYPE, DESIGN).

DRIVE PAVEMENT (TYPE, RIGID)
ITEM 452 - 6" NON-REINFORCED PORTLAND CEMENT CONCRETE

** SIDEWALK SHALL BE PER STANDARD DRAWING 2300. SIDEWALK THICKNESS SHALL BE 6" CONCRETE TO ONE FULL PANEL (MIN. 5 FT.) BEYOND EDGE OF DRIVE.

PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.
** **

** DO NOT REPLACE PAVED SHOULDER IF SHOULDER HAS EQUAL OR GREATER PAVEMENT BUILD-UP.

** PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.

** ** 8" THICK CONCRETE SIDEWALK FOR 1 FULL PANEL (MIN. 5 FT.) BEYOND EDGE OF DRIVE.

** ** DRIVE PAVEMENT (FLEXIBLE DESIGN)
- ITEM 448 - 4" ASPHALT CONCRETE, SURFACE COURSE, (MEDIUM TRAFFIC), PG 64-22
- ITEM 448 - 4" ASPHALT CONCRETE, INTERMEDIATE COURSE, (MEDIUM TRAFFIC), PG 64-22
- ITEM 304 - 4" AGGREGATE BASE

ITEM 603 - DRIVE PIPE, TYPE D
MINIMUM 12" DIA. WHEN APPLICABLE

GRADED SHOULDER
BERM OR PAVED SHOULDER

SAWCUT FULL DEPTH TO SOUND PAVEMENT
ITEM 407 - TACK COAT, VERTICAL EDGE
ITEM 423 - CRACK SEALING, TYPE I

SIDEWALK PER STD DWG 2300
4'-0" MIN. PAR *
1.56% **

35'-0" MAX.

R/W

DITCH

ITEM 603 - DRIVE PIPE, TYPE D
MINIMUM 12" DIA. WHEN APPLICABLE

45° MAX

E/P

EXISTING E/P

PAVEMENT ***

MAIN ROADWAY
NON-CURBED

R/W

DITCH

8% MAX.

E/P

GRADED SHOULDER
BERM OR PAVED SHOULDER

SAWCUT FULL DEPTH TO SOUND PAVEMENT
ITEM 407 - TACK COAT, VERTICAL EDGE
ITEM 423 - CRACK SEALING, TYPE I

MAIN ROADWAY
NON-CURBED

DO NOT REPLACE PAVED SHOULDER IF SHOULDER HAS EQUAL OR GREATER PAVEMENT BUILD-UP.

** PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.

** ** 8" THICK CONCRETE SIDEWALK FOR 1 FULL PANEL (MIN. 5 FT.) BEYOND EDGE OF DRIVE.

** ** DRIVE PAVEMENT (FLEXIBLE DESIGN)
- ITEM 448 - 4" ASPHALT CONCRETE, SURFACE COURSE, (MEDIUM TRAFFIC), PG 64-22
- ITEM 448 - 4" ASPHALT CONCRETE, INTERMEDIATE COURSE, (MEDIUM TRAFFIC), PG 64-22
- ITEM 304 - 4" AGGREGATE BASE

ITEM 603 - DRIVE PIPE, TYPE D
MINIMUM 12" DIA. WHEN APPLICABLE

45° MAX

E/P

EXISTING E/P

PAVEMENT ***

MAIN ROADWAY
NON-CURBED

R/W

DITCH

8% MAX.

E/P

GRADED SHOULDER
BERM OR PAVED SHOULDER

SAWCUT FULL DEPTH TO SOUND PAVEMENT
ITEM 407 - TACK COAT, VERTICAL EDGE
ITEM 423 - CRACK SEALING, TYPE I

MAIN ROADWAY
NON-CURBED

DO NOT REPLACE PAVED SHOULDER IF SHOULDER HAS EQUAL OR GREATER PAVEMENT BUILD-UP.

** PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.

** ** 8" THICK CONCRETE SIDEWALK FOR 1 FULL PANEL (MIN. 5 FT.) BEYOND EDGE OF DRIVE.

** ** DRIVE PAVEMENT (FLEXIBLE DESIGN)
- ITEM 448 - 4" ASPHALT CONCRETE, SURFACE COURSE, (MEDIUM TRAFFIC), PG 64-22
- ITEM 448 - 4" ASPHALT CONCRETE, INTERMEDIATE COURSE, (MEDIUM TRAFFIC), PG 64-22
- ITEM 304 - 4" AGGREGATE BASE

ITEM 603 - DRIVE PIPE, TYPE D
MINIMUM 12" DIA. WHEN APPLICABLE

45° MAX

E/P

EXISTING E/P

PAVEMENT ***

MAIN ROADWAY
NON-CURBED

R/W

DITCH

8% MAX.
ITEM 423 - CRACK SEAL
FULL DEPTH SAWCUT
ITEM 407 - TACK COAT
EXIST. SLOPE
EXIST. PAVEMENT
MATCH WIDTH OF BERM OR PAVED SHOULDER, MINIMUM 2 FT.

SECTION A-A

DRIVE PAVEMENT
DRIVE PIPE
TRANSITION AT 45°
MATCH PAVEMENT TYPE & THICKNESS OF MAIN ROAD PER STD DWG 1441

COMPACTED EARTH

EDGEC BERM OR PAVED SHOULDER

1'-0" MIN.
4'-0" MIN.
1.56% PAR.

DRIVE
RW

DRIVEWAY, NON-RESIDENTIAL WITH FLARES
NON-CURBED ROADWAY

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG 2207
6/1/14
SHT 2 OF 2
** PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.

** 8" THICK CONCRETE SIDEWALK FOR 1 FULL PANEL (MIN. 5 FT.) BEYOND EDGE OF DRIVE.

*** DRIVE PAVEMENT (FLEXIBLE DESIGN)
- ITEM 448 - 4" ASPHALT CONCRETE, SURFACE COURSE, (MEDIUM TRAFFIC), PG 64-22
- ITEM 448 - 4" ASPHALT CONCRETE, INTERMEDIATE COURSE, (MEDIUM TRAFFIC), PG 64-22
- ITEM 304 - 4" AGGREGATE BASE

DO NOT REPLACE PAVED SHOULDER IF SHOULDER HAS EQUAL OR GREATER PAVEMENT BUILD-UP.
DRIVEWAY, NON-RESIDENTIAL
WITH RADIUS
NON-CURBLED ROADWAY

SECTION A-A

MATCH PAVEMENT TYPE & THICKNESS
OF MAIN ROAD PER STD DWG 1441

MATCH WIDTH OF BERM
OR PAVED SHOULDER,
-MINIMUM 2 FT.

EXIST. SLOPE

EXIST. PAVEMENT

ITEM 423 - CRACK SEAL
ITEM 407 - TACK COAT

FULL DEPTH SAWCUT

EDGE BERM OR
PAVED SHOULDER

DRIVE PAVEMENT

DRIVE PIPE

TRANSITION AT 45°

COMPACTED EARTH

8% MAX.

1'-0" MIN.

4'-0" MIN.
PAR

1.56%

DRIVE

STD DWG

2208

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

6/1/14
SHT 2 OF 2
ITEM 627 - REBOUNDABLE TRAFFIC POSTS YELLOW - 5' C-C

ITEM 609 - CONCRETE MEDIAN

DOUBLE YELLOW LINE 50' TAPER, 25' STRAIGHT (MINIMUM)

DIMENSIONS ARE TO FACE OF CURB (UNLESS OTHERWISE NOTED).

DESIGN IS FOR WB-50 TURNING TEMPLATE.

CHANGES FROM THESE DRAWINGS REQUIRE CITY OF COLUMBUS APPROVAL.

* DRIVE ISLANDS SHALL BE BUILT WITH AN ADA COMPLIANT PEDESTRIAN CROSSING. SEE STD DWG 2319.

ISLAND CORNER RADII ARE 2' MIN.

DRIVEWAY
RIGHT IN & RIGHT OUT

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2211
6/1/13
SHT 1 OF 1
DIMENSIONS ARE TO FACE OF CURB (UNLESS OTHERWISE NOTED).

DESIGN IS FOR WB-50 TURNING TEMPLATE.

* DRIVE ISLANDS SHALL BE BUILT WITH AN ADA COMPLIANT PEDESTRIAN CROSSING. SEE STD DWG 2319.

ISLAND CORNER RADII ARE 2’ MIN.

DRIVEWAY
RIGHT IN & RIGHT OUT
WITH LEFT IN
ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT WITH INTEGRAL CURB

SECTION VIEW OF DRIVE

INTEGRAL CURB, GUTTER, AND PAVEMENT FOR COMMERCIAL DRIVES

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2225

6/1/13
SHT 1 OF 1
1. STONE SIZE - USE 2" STONE OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - A MINIMUM OF 100', BUT MAY BE LONGER AS DETERMINED BY THE CITY OF COLUMBUS.
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWENTY (20) FEET MINIMUM BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. MAY BE WIDER AS DETERMINED BY THE CITY OF COLUMBUS.
5. FLARES OR RADII SHALL BE INSTALLED AT THE ENTRANCE IF THE PUBLIC ROADWAY SPEEDS AND/OR TRAFFIC CONDITIONS WARRANT IT, OR IF DIRECTED BY C.O.C. PERSONNEL.
6. FILTER FABRIC - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE.
7. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES SHALL BE PERMITTED.
8. CULVERT PIPE - 12" MINIMUM PIPE IS REQUIRED IF A STORM DITCH OR SWALE EXISTS AT THE PROPOSED ENTRANCE. THE CULVERT PIPE INVERTS SHALL MATCH THE EXISTING DITCH AT BOTH SIDES OF THE ENTRANCE.
9. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PROTECT THE PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.
10. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE INTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
11. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.
12. MAINTENANCE OF TRAFFIC SIGNAGE SHALL BE A 48" x 48" CONSTRUCTION ENTRANCE AHEAD, 200' (ADEQUATE SIGHT DISTANCE SHALL BE CONSIDERED) BEFORE THE ENTRANCE ON BOTH SIDES OF THE ROAD OR AS APPROVED BY THE C.O.C. TEMPORARY TRAFFIC CONTROL COORDINATOR.

YOU SHALL CALL THE TTCC @ 645-6269 OR 645-5845 BEFORE STARTING THE ENTRANCE WORK.
WHERE SIDEWALKS ABUT DRIVEWAYS OR ALLEY APPROACHES, THE CONCRETE THICKNESS OF THE WALK SHALL EQUAL THE THICKNESS OF THE APPROACH (6" MINIMUM) FOR A DISTANCE OF ONE (1) FULL PANEL OR MINIMUM 5 FEET. SEE STANDARD DRAWING OF THE APPLICABLE DRIVEWAY OR ALLEY.

WHERE NEW WALK ABUTS ADJOINING WALK, SAWCUT EXISTING WALK TO NEAREST JOINT AND INSTALL EXPANSION JOINT.

EXPANSION JOINT LOCATION AND SPACING PER ITEM 608.03.

WATER AND UTILITY BOXES IN THE SIDEWALK AREA SHALL BE ADJUSTED FLUSH WITH FINAL SURFACE.

ROOF DRAINS SHALL BE EXTENDED UNDER THE SIDEWALK AND THROUGH THE CURB. SEE STD DWG 2320.

WHEN A SIDEWALK IS CONSTRUCTED FOR THE ENTIRE WIDTH FROM THE CURB TO THE RW LINE, THE WALK SHALL BE CONSTRUCTED PART WIDTH AT A TIME, ALLOWING FOR SUFFICIENT UNOBLITRUCED AREA 48" WIDE FOR SAFE MOVEMENT OF PEDESTRIAN TRAFFIC, OR AS APPROVED BY ENGINEER.

ITEM NUMBERS REFER TO THE CITY OF COLUMBUS CMSC, CURRENT EDITION. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE SPECIFICATIONS.

** #57 AGGREGATE MAY BE USED FOR REPLACEMENT WORK.
WHERE NEW WALK ABUTS ADJOINING WALK, SAWCUT EXISTING WALK TO NEAREST JOINT AND INSTALL EXPANSION JOINT.

EXPANSION JOINT LOCATIONS AND SPACING PER ITEM 608.03.

WATER AND UTILITY BOXES IN THE SIDEWALK AREA SHALL BE ADJUSTED FLUSH WITH FINAL SURFACE.

ROOF DRAINS SHALL BE EXTENDED UNDER THE SIDEWALK AND THROUGH THE CURB. SEE STD DWG 2320.

WHEN A SIDEWALK IS CONSTRUCTED FOR THE ENTIRE WIDTH FROM THE CURB TO THE R/W LINE, THE WALK SHALL BE CONSTRUCTED PART WIDTH AT A TIME, ALLOWING FOR SUFFICIENT UNOBSTRUCTED AREA 48" WIDE FOR SAFE MOVEMENT OF PEDESTRIAN TRAFFIC, OR AS APPROVED BY ENGINEER.

ITEM NUMBERS REFER TO THE CITY OF COLUMBUS CMSC, CURRENT EDITION. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE SPECIFICATIONS.

** #57 AGGREGATE MAY BE USED FOR REPLACEMENT WORK.

*** THE SAND TO CEMENT RATIO IS 5 PARTS SAND TO ONE PART CEMENT.
WHERE SIDEWALKS ABUT DRIVEWAYS OR ALLEY APPROACHES, THE CONCRETE THICKNESS OF THE WALK SHALL EQUAL THE THICKNESS OF THE APPROACH (6" MINIMUM) FOR A DISTANCE OF ONE (1) FULL PANEL OR MINIMUM 5 FEET. SEE STANDARD DRAWING OF THE APPLICABLE DRIVEWAY OR ALLEY.

WHERE NEW WALK ABUTS ADJOINING WALK, SAWCUT EXITING WALK TO NEAREST JOINT AND INSTALL EXPANSION JOINT.

EXPANSION JOINT LOCATIONS AND SPACING PER ITEM 608.03.

WATER AND UTILITY BOXES IN THE SIDEWALK AREA SHALL BE ADJUSTED FLUSH WITH FINAL SURFACE.

ROOF DRAINS SHALL BE EXTENDED UNDER THE SIDEWALK AND THROUGH THE CURB. SEE STD DWG 2320.

WHEN A SIDEWALK IS CONSTRUCTED FOR THE ENTIRE WIDTH FROM THE CURB TO THE R/W LINE, THE WALK SHALL BE CONSTRUCTED PART WIDTH AT A TIME, ALLOWING FOR SUFFICIENT UNOBSTRUCTED AREA 48" WIDE FOR SAFE MOVEMENT OF PEDESTRIAN TRAFFIC, OR AS APPROVED BY ENGINEER.

ONE INCH CONTRACTION JOINTS SHALL BE SAWS IN THE CONCRETE EVERY 10 FT.

ITEM NUMBERS REFER TO THE CITY OF COLUMBUS, CMSC, CURRENT EDITION. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE SPECIFICATIONS.

** #57 AGGREGATE MAY BE USED FOR REPLACEMENT WORK.

NON-RESIDENTIAL

BRICK SIDEWALK

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG 2301
6/1/14
SHT 2 OF 3
ITEM SPECIAL - BRICK PAVERS INCLUDING CONCRETE BASE

MATERIAL NOTES:

NEOPRENE-MODIFIED ASPHALT ADHESIVE - FURNISH NEOPRENE-MODIFIED ASPHALT ADHESIVE THAT CONTAINS 2% NEOPRENE GRADE WMI OXIDIZED ASPHALT WITH A 150°F SOFTENING POINT (77 PENETRATION), AND 10% LONG FIBERED INERT MATERIAL AS SUPPLIED BY (OR APPROVED EQUAL):

SEIDEL COMPANY, INC. HASTINGS PAVEMENT COMPANY, INC.
11 MARKET SQUARE 410 LAKEVILLE ROAD
NEWBURYPORT, MASSACHUSETTS 01950 LAKE SUCCESS, NEW YORK 11042
(617) 649-6740 (516) 379-3500

BITUMINOUS SETTING BED - FURNISH ASPHALT CEMENT CONFORMING TO ASTM D3381, VISCOSITY GRADE AC-10 OR AC-20.


COMBINE THE DRIED FINE AGGREGATE WITH HOT ASPHALT CEMENT AND MIX HEAT TO APPROXIMATELY 300°F AT AN ASPHALT PLANT.

A. PROVIDE AN APPROXIMATE PROPORTION OF MATERIALS OF 7% ASPHALT CEMENT AND 93% FINE AGGREGATE.

B. PROVIDE EACH TON APPORTIONED BY WEIGHT TO 140 POUNDS OF ASPHALT CEMENT AND 1,860 POUNDS OF FINE AGGREGATE.

PAVERS - ALL BRICK PAVERS SHALL BE SOLID CONCRETE PAVING UNITS CONFORMING TO ASTM C936 (4" W x 8" L x 2 3/8" H). OTHER SIZES MAY BE USED WITH PRIOR C.O.C. APPROVAL.

CONCRETE BASE - ALL WORK FOR THE CONCRETE BASE SHALL CONFORM TO ITEM 608, EXCEPT THAT THE 608 REQUIREMENTS FOR EDGING OUTSIDE EDGES AND CONTROL JOINTS AT 5 FOOT INTERVALS SHALL BE WAIVED.

METHOD OF MEASUREMENT - PAVERS WILL BE MEASURED BY THE SQUARE FOOT FINISHED PAVERS COMPLETE IN PLACE.

BASIS OF PAYMENT - THE ACCEPTED QUANTITIES OF BRICK PAVERS WILL BE PAID FOR AT THE CONTRACT PRICES DESIGNATED FOR EACH OF THE PAVER TYPES SHOWN ON THE PLANS, EXCAVATION, BACKFILL, EXPANSION JOINT MATERIAL, ASPHALT ADHESIVE, BITUMINOUS SETTING BED, 4 INCH CONCRETE BASE, AND OTHER RELATED MISCELLANEOUS ITEMS WILL NOT BE PAID FOR SEPARATELY, BUT THE COST THEREOF SHALL BE INCLUDED IN THE COST OF THE BRICK PAVERS OF WHICH THEY ARE A PART.
NOTE:

THIS DETAIL DEFINES THE LIMITS OF PAYMENT FOR 8" CONCRETE SIDEWALK, WHICH INCLUDES CURB RAMPS.

EIGHT-INCH SIDEWALK IS NOT REQUIRED FOR SIDEWALK WHICH IS BEHIND A TREE LAWN.

ALL OTHER CONCRETE SIDEWALK INSTALLED AT THIS LOCATION OUTSIDE THIS BOUNDARY WILL BE PAID AT THE 4" CONCRETE SIDEWALK PRICE. ANY CHANGES TO THIS CRITERIA OR DETAIL MUST BE APPROVED BY THE ENGINEER.

WHERE NO CURB EXISTS PROVIDE 8" CONCRETE FROM EDGE OF PAVEMENT TO WALK OR PUSHBUTTON.
SHARED USE PATH

1. ANGLE HAND TAMPER AT 45°
2. ITEM 446 - 2-5" ASPHALT CONCRETE SURFACE COURSE (LIGHT TRAFFIC), PG 64.22
3. ITEM 304 - 6" AGGREGATE BASE
4. ITEM 204 - SUBGRADE COMPACTION

PAVEMENT DETAIL

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG 2310

6/1/14
SHT 1 OF 5
REFERENCE GUIDE TO BICYCLE FACILITIES, 4TH EDITION FOR SAFETY RAIL REQUIREMENTS.
BOLLARD LAYOUT FOR 10'-0" PAVEMENT

EDGE OF 10'-0" PAVEMENT

REMOVABLE BOLLARD SEE SHT. 4 OF 5

GRAVEL

BOLLARD SECTION

THE CONTRACTOR SHALL INSTALL THE EARTH BACKFILL IN 6" LiftS AND TAKE CARE TO PLUMB EACH POST.

THE IRON SLEEVES, ANGLE IRON, AND ANCHOR RODS SHALL BE PAINTED WITH TWO COATS OF RUST-OLEUM NO769 DAMP-PROOF RED PRIMER OR EQUAL PRIOR TO INSTALLATION.

THE CONTRACTOR MAY SUBSTITUTE A 24" CIRCULAR FOOTER IN PLACE OF THE ONE SHOWN BELOW.

WOOD BOLLARD DETAIL

SHARED USE PATH

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG 2310
6/1/14
SHT 3 OF 5
Ramps shall be ADA compliant: see standard drawings 2319/2300/2303.

Existing curb or combination curb and gutter shall be removed and replaced as required for installation of ramp. Install expansion joint at back of curb. Reference standard drawings 2000/2010/2020/2030.

For replacement work the curb or curb/gutter shall be removed to an existing joint or no closer than 5 ft. from an existing joint. When less than 5 ft. of a curb section remains after the curb cut is located, it also shall be removed and replaced. Curb shall be constructed in min. 5 ft. sections & max. 10 ft. sections.

Fills, if required, shall be per item 203 or item 304.

Ramp shall be constructed per item 608.

Expansion joints shall be placed to form utility strips where required and wherever new concrete touches existing construction.

SECTION A-A

Shared use path

RAMP

SHARED USE PATH

City of Columbus, Ohio
Department of Public Service
Division of Design and Construction

STD DWG
2310

6/1/14
SHT 5 OF 5
ALL NUMBERING BEGINS FROM THE NORTHWEST CORNER AND GOES CLOCKWISE. EACH CORNER HAS ITS SPECIFIC NUMBER THAT SHALL BE USED IF CURB RAMPS ARE IN THESE LOCATIONS.

* MEDIAN RAMPS ON THE WEST AND/OR EAST LEGS WOULD BE M1, M8, AND M4, M5 RESPECTIVELY.
1. CURB RAMPS SHALL BE INSTALLED PER STD DWGS, 2300, 2303, 2319 AND SUPPLEMENTAL SPECIFICATIONS 1551.

2. CURB RAMP COMPONENTS: THE CURB RAMP INCLUDES THE RAMP PANEL, FLARED SIDES, AND LANDING WHEN NEEDED.

3. MATERIAL: THE RAMP PANEL AND FLARED SIDES SHALL BE CONCRETE. EXCEPTION: WITH PRIOR WRITTEN APPROVAL FROM C.O.C. ADMINISTRATOR OF PLANNING AND OPERATION (OR AUTHORIZED REPRESENTATIVE) BRICK OR GRANITE PAVERS MAY BE ALLOWED FOR SPECIFIC APPLICATIONS.

4. CURB RAMP TYPE: CURB RAMPS SHALL BE SPECIFIED BY THE APPROPRIATE TYPE AND SHALL BE PERPENDICULAR TO THE CURB EXCEPT TYPES G AND H.
   - TYPE A - PERPENDICULAR RAMP WITH LONG FLARES (SHT 3)
   - TYPE C - PERPENDICULAR RAMP IN UTILITY STRIP (SHT 4)
   - TYPE D - PERPENDICULAR RAMP OBSTRUCTED ON ONE SIDE (SHT 5)
   - TYPE G - RAMP WITH RECESS LOWER LANDING FOR ALLEYS AND DRIVES. MAY BE USED AT OTHER LOCATIONS WITH PRIOR WRITTEN CITY APPROVAL (SHT 6)
   - TYPE H - RAMP WITH RECESS LOWER LANDING FOR ALLEYS AND DRIVES. MAY BE USED AT OTHER LOCATIONS WITH PRIOR WRITTEN CITY APPROVAL (SHT 7)
   - TYPE L - MEDIAN RAMP WITH CENTER LANDING (SHT 8)
   - TYPE P1 - COMBINED PERPENDICULAR AND PARALLEL RAMP (SHT 9)
   - TYPE P2 - COMBINED PERPENDICULAR AND PARALLEL RAMP IN ONE DIRECTION (SHT 10)
   NOTE: CITY OF COLUMBUS ORDER OF PREFERENCE IS (1) PERPENDICULAR AND (2) PARALLEL.

5. CURB RAMPS AT ALLEY AND ARTERIAL CROSSINGS SHALL BE 8” THICK CONCRETE.

6. RAMP RUNNING SLOPE: THE RUNNING SLOPE SHALL BE 5% TO 7.7%. THE RUNNING SLOPE MAY BE INCREASED TO 10 % WITH PRIOR WRITTEN CITY APPROVAL.

7. RAMP CROSS SLOPE: THE MAXIMUM CROSS SLOPE SHALL BE 1.56%.

8. PERPENDICULAR RAMP WIDTH: THE MINIMUM WIDTH OF A RAMP SHALL BE 4-FT.

9. PARALLEL RAMP WIDTH: TYPE P RAMPS SHALL BE A MINIMUM OF 4-FT BY 5-FT, PER THE STD DWG.

10. ALL JOINTS BETWEEN NEW AND EXISTING MATERIALS SHALL BE FLUSH.

11. LANDINGS: LANDINGS SHALL BE A MINIMUM OF 4-FT BY 4-FT WITH A 1.56% CROSS SLOPE FOR ALL CURB RAMP TYPES EXCEPT PARALLEL CURB RAMPS. OFF STREET LANDINGS FOR PARALLEL CURB RAMPS SHALL BE A MINIMUM OF 4-FT BY 5-FT AS INDICATED IN THE STD DWG. LANDINGS ARE REQUIRED AS FOLLOWS:
   - TOP LANDING - CURB RAMP TYPES A, C, D, AND L SHALL HAVE LANDINGS AT THE TOP OF THE RAMP IF TURNING IS REQUIRED.
   - LOWER RECESSED LANDING - CURB RAMP TYPES G AND H SHALL HAVE A RECESS LANDING AT THE BOTTOM OF THE RAMP WHERE IT INTERSECTS THE CURB LINE.
   - LANDING AT INTERSECTING SIDEWALKS - WHEREVER SIDEWALKS INTERSECT, THERE SHALL BE A LANDING MEETING THE ABOVE REQUIREMENTS.

12. STREET COUNTER SLOPE: THE COUNTER SLOPE AT THE BASE OF THE RAMP SHALL BE A MAXIMUM OF 5% FOR A MINIMUM OF 2-FT.


14. SURFACES: RAMP, FLARE, AND LANDING SURFACES MUST BE STABLE AND SLIP RESISTENT. RAMPS SHALL BE MEDIUM BROOMED TRANSVERSE TO THE DIRECTION OF TRAVEL. GRATINGS, VALVE BOXES, AND UTILITY BOXES SHALL NOT BE LOCATED IN THE RAMP, LANDING, OR TRANSITION AREAS.

15. OFFSET INTERSECTIONS: AT OFFSET ‘T’ INTERSECTIONS RAMPS BETWEEN OFFSET STREETS MAY BE DELETED IF THE CENTERLINES OF OFFSET STREETS ARE NO MORE THAN 200-FT APART.

16. DETECTABLE WARNINGS: DETECTABLE WARNINGS SHALL BE INSTALLED ACCORDING TO C.O.C. STD DWG 2319 SHEET 12/12 AND SUPPLEMENTAL SPECIFICATION 1551.

17. OPPOSING RAMPS SHALL HAVE A PEDESTRIAN WALKWAY ACROSS THE STREET, ATLEAST 7’ WIDE, WITH A CROSS SLOPE (LONGITUDINAL STREET SLOPE) OF NO GREATER THAN 1.56%. VERTICAL CURVES SHALL BE INSTALLED AS NEEDED.
LANDING 4'-0"

SIDEWALK

LANDING

STANDARD/COMBINED CURB AND GUTTER SECTION 12"
18"

LANDING 2'-0"

EXPANSION MATERIAL

SECTION A - A

RAMP 5% - 7.69%

LANDING 4'-0" MIN

1.56%

5% - 7.69%

ITEM 608

STANDARD/COMBINED CURB AND GUTTER SECTION

TRANSITION TO SIDEWALK THICKNESS 8" CONC.

EXPANSION MATERIAL

SECTION A - A

LANDING

90°

1.56%

90°

10 x THE CURB HEIGHT (MIN) (TYPICAL)

1.56%

5% - 7.69%

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

★ SEE SHEET 12/12 FOR DETECTABLE WARNING DETAILS

CURB RAMP

TYPE A

STD DWG

2319

6/1/13

SHT 3 OF 12
4'-0" UTILITY STRIP
1'-0" 4'-0"
1'-0"
7.69% 7.69% 1.56%
2'-0" 12"
SIDEWALK THICKNESS
RAMP 5% - 7.69%
1.56% LANDING
2'-0" 12"
8" 8" CONC. TRANSITION TO SIDEWALK THICKNESS
5% 18"
SIDEWALK TO SIDEWALK THICKNESS
ITEM 608
½" EXPANSION JOINT
SECTION A - A
CURB RAMP
TYPE C
SEE SHEET 12/12 FOR DETECTABLE WARNING DETAILS
SEATED/COMBINED CURB AND GUTTER SECTION
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
STD DWG 2319
6/1/13
SHT 4 OF 12
SEE SHEET 12/12 FOR DETECTABLE WARNING DETAILS

PERMANENT OBSTRUCTION OR NON-WALKABLE SURFACE ONE SIDE

UTILITY STRIP OR OTHER OBSTRUCTION

THE OBSTRUCTION MUST BE 15" OR CLOSER TO THE FACE OF CURB

10 X THE CURB HEIGHT MIN(TYP)

1'-0" MIN

2'-0"

18"

8" CONC.

TRANSITION TO SIDEWALK THICKNESS

½ EXPANSION JOINT

SECTION A-A

RAMP 5% - 7.69%

LANDING 1.56%

STANDARD/COMBINED CURB AND GUTTER SECTION

CURB RAMP TYPE D

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG 2319
6/1/13
SHT 5 OF 12
SUPPLEMENTAL NOTES

A. THE BOTTOM EDGE OF THE RAMP SHALL CHANGE PLANES PERPENDICULAR TO THE LANDING.
B. THE EDGE OF THE CURB SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT AND GUTTER.
C. THE LANDING AT THE BOTTOM OF THE RAMP SHALL BE >= 2.5-FT BY 4-FT WITH A MAXIMUM CROSS SLOPE OF 1.56% IN TWO DIRECTIONS.
D. THE PEDESTRIAN ACCESS ROUTE (PAR) BETWEEN THE TWO RAMPS SHALL HAVE A MAXIMUM OF 1.56% CROSS SLOPE WITH A 5% MAXIMUM RUNNING SLOPE

★ SEE SHEET 12/12 FOR DETECTABLE WARNING DETAILS

CURB RAMP
TYPE G

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
2319
6/1/13
SHT 6 OF 12
SUPPLEMENTAL NOTES

A. THE BOTTOM EDGE OF THE RAMP SHALL CHANGE PLANES PERPENDICULAR TO THE LANDING.

B. THE EDGE OF THE CURB SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT AND GUTTER.

C. THE LANDING AT THE BOTTOM OF THE RAMP SHALL BE >= 2.5-FT BY 4-FT WITH A MAXIMUM CROSS SLOPE OF 1.56% IN TWO DIRECTIONS.

D. THE PEDESTRIAN ACCESS ROUTE (PAR) BETWEEN THE TWO RAMPS SHALL HAVE A MAXIMUM OF 1.56% CROSS SLOPE WITH A 5% MAXIMUM RUNNING SLOPE.

★ THIS IS FOR EMBEDDED (NON-SURFACE APPLIED) DETECTABLE WARNINGS ONLY.

★★ SEE SHEET 12/12 FOR DETECTABLE WARNING DETAILS
SECTION B-B

SECTION A-A

CURB RAMP
TYPE L

★ SEE SHEET 12/12 FOR DETECTABLE WARNING DETAILS
See Sheet 12/12 for detectable warning details.
★ SEE SHEET 12/12 FOR DETECTABLE WARNING DETAILS

CURB RAMP
TYPE P-2

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG 2319
6/1/13
SHT 10 OF 12
1. WRITTEN APPROVAL FROM THE C.O.C. ADMINISTRATOR OF PLANNING & OPERATIONS OR AN AUTHORIZED REPRESENTATIVE SHALL BE OBTAINED PRIOR TO THE DESIGN OR CONSTRUCTION OF GRANITE OR AN ALTERNATE MATERIAL CURB RAMP.

2. ALONG WITH THE REQUIREMENT OF THIS SHEET FOR BRICK OR GRANITE CURB RAMPS, ALL OTHER APPLICABLE REQUIREMENTS OF 2319 SHALL BE FOLLOWED.

3. BRICK OR GRANITE CURB RAMPS SHALL BE TYPED PER 2319. TYPICALLY TYPE A OR TYPE D WILL BE USED. ALL APPLICABLE DIMENSIONS AND REQUIREMENTS FOR THE SELECTED TYPE OF RAMP SHALL BE FOLLOWED.

4. LONG FLARES WILL BE USED WHEREVER POSSIBLE. A MODIFIED FLARE SHALL BE USED WHEN AN OBSTRUCTION EXISTS.

5. THE INSTALLATION OF THE BRICK OR GRANITE PAVERS SHALL BE DONE PER STD DWG 2301, BRICK SIDEWALK.

★ SEE SHEET 12/12 FOR DETECTABLE WARNING DETAILS
NOTES:

1. DETECTABLE WARNINGS SHALL BE PROVIDED WHEREVER A CURB RAMP CROSSES A VEHICULAR WAY. EXCLUDING UNSIGNALIZED DRIVEWAY CROSSINGS.

2. DETECTABLE WARNINGS SHALL BE PROVIDED 24” IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE. THE DETECTABLE WARNING SHALL BE LOCATED ADJACENT TO THE CURB LINE.

3. MATERIALS SHALL COMPLY WITH C.O.C. SUPPLEMENTAL SPECIFICATION 1551.

4. DETECTABLE WARNINGS SHALL BE PLACED 6” TO 8” BEHIND THE FACE OF CURB AND BEHIND THE CURB JOINT.

5. CAST IN PLACE OR ANY NON-SURFACE APPLIED DETECTABLE WARNING SHALL HAVE A MINIMUM OF 3” OF CONCRETE ON EACH SIDE OF THE WARNING.
DISTANCE TO PROPERTY LINE VARIES

WIDTH SIDEWALK VARIES

DISTANCE FROM FACE OF CURB VARIES

PROPERTY LINE

1'-0" MIN

2" MIN

FACE OF CURB

2" MIN

PIPE SLOPE 1.56%

FACE OF CURB

WALK THICKNESS 8" FOR DISTANCE OF 1'-0" BEYOND EACH SIDE OF PIPE

3" MIN I.D. PIPE PER ITEM 603 - TYPE E - 720.08 (PVC) ***

APPLICABLE ONLY WHERE THICKNESS OF CONCRETE OVER PIPE IS LESS THAN 4".

SLOPE 1.56% ON SIDEWALK AREA.

IF THERE IS EXISTING ROOF DRAIN PIPE, THEN MATCH EXISTING SIZE.

IF EXISTING ROOF DRAIN IS LARGER THAN 3", RUN SMALLER PARALLEL PIPES TO MAINTAIN 3" PIPE AT FACE OF CURB.

MOUNTABLE CURB SHALL BE CORE DRILLED ONLY FOR ROOF DRAIN OPENING.

**

Pipe Roof Drain

STD DWG

2320

City of Columbus, Ohio
Department of Public Service
Division of Design and Construction

City Engineer

6/1/13

Sh. 1 of 1
STAIR TREADS AND RISERS SHALL BE OF EQUAL SIZE AND SHAPE. TOLERANCE BETWEEN THE LARGEST AND SMALLEST RISER HEIGHT OR BETWEEN THE LARGEST AND SMALLEST TREAD DEPTHS SHALL NOT EXCEED 3/8 INCHES.

ITEM 517 - HANDRAIL PER LOCAL BUILDING CODE

ITEM 608

T = TREAD - 11" MIN, 15" MAX
R = RISE - 4" MIN, 7" MAX

FOR "H"=24" AND UNDER
SEE SHEET 2 OR 3

<table>
<thead>
<tr>
<th>NO. OF RISERS</th>
<th>&quot;D&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>8&quot;</td>
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<tr>
<td>5</td>
<td>10&quot;</td>
</tr>
<tr>
<td>6</td>
<td>10&quot;</td>
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CONCRETE STEPS
T = TREAD - 11" MIN, 15" MAX
R = RISER - 4" MIN, 7" MAX

IF "H" IS GREATER THAN 24", SEE SHT. 1 OF 3

STAIR TREADS AND RISERS SHALL BE OF EQUAL SIZE AND SHAPE. TOLERANCE BETWEEN THE LARGEST AND SMALLEST RISER HEIGHT OR BETWEEN THE LARGEST AND SMALLEST TREAD DEPTHS SHALL NOT EXCEED 3/8 INCHES.
STAIR TREADS AND RISERS SHALL BE OF EQUAL SIZE AND SHAPE. TOLERANCE BETWEEN THE LARGEST AND SMALLEST RISER HEIGHT OR BETWEEN THE LARGEST AND SMALLEST TREAD DEPTHS SHALL NOT EXCEED \( \frac{3}{8} \) INCHES.

T = TREAD - 11" MIN, 15" MAX
R = RISER - 4" MIN, 7" MAX

IF "H" IS GREATER THAN 24", SEE SHT. 1 OF 3

THIS STANDARD DRAWING MAY BE USED WHEN CONSTRUCTING A SMALL PORCH STOOP OR WHEN MEETING EXISTING STEPS.
MIN 4'-0" 1" 1" 3" R.

BASE MATERIAL

2.74 C.F. CONCRETE PER L.F. FOR 4' WIDTH.
3.99 C.F. CONCRETE PER L.F. FOR 6' WIDTH.

JOINTS: \( \frac{1}{4} \)" CONTRACTION JOINTS SHALL BE CONSTRUCTED OR SAWED AT 10' INTERVALS TO A 2" MINIMUM DEPTH AND ALIGNED WITH TRANSVERSE CONSTRUCTION JOINTS IN BASE.

SLOPE OF TOP OF MEDIAN TO BE IN SAME DIRECTION AS PAVEMENT SLOPE ON EITHER SIDE OF MEDIAN.

MEDIAN NOSE SHALL BE TAPERED FROM 6" TO 2" IN 4'-0" OR GREATER.

CITY OF COLUMBUS PAVEMENT MARKING MANAGER SHALL BE CONTACTED FOR DIRECTION ON PAINTING REQUIREMENTS OF MEDIAN NOSE.
ITEM SPECIAL, CONCRETE BUS PAD, S.Y., SHALL INCLUDE THE FOLLOWING ITEMS:

1. 10'-0" OR LANE WIDTH,
2. MATCH EXISTING SLOPE
3. FULL DEPTH SAWCUT
4. FINISHED CONCRETE
5. EXISTING PAVEMENT
6. 10'-0" OR LANE WIDTH,
7. FINISHED CONCRETE
8. FULL DEPTH SAWCUT
9. EXISTING PAVEMENT

TYPE A: CONCRETE BUS PAD AT LOCATIONS WITH STRAIGHT CURB

TYPE B: CONCRETE BUS PAD AT LOCATIONS WITH COMBINATION CURB & GUTTER

ITEM 204 - SUBGRADE COMPACTION
ITEM 423 - CRACK SEALING, TYPE I
ITEM 609 - EXISTING CURB OR, CURB STRAIGHT 18"
ITEM SPECIAL - COMBINATION CURB AND GUTTER, TYP. SPECIAL 10"
ITEM 304 - 6" AGGREGATE BASE
ITEM 452 - 10" NON-REINFORCED CONCRETE PAVEMENT
ITEM SPECIAL, CONCRETE BUS PAD, S.Y., SHALL INCLUDE THE FOLLOWING ITEMS:
ALL SAWCUTTING, PAVEMENT REMOVAL, ITEM 203 - EXCAVATION, ITEM 204 - SUBGRADE
COMPACTION, ITEM 304 - 6" AGGREGATE BASE, ITEM 423 - CRACK SEALING, TYPE I, AND ITEM
452 - 10" NON-REINFORCED CONCRETE PAVEMENT.

FOR TYPE B CONDITION, THE EXISTING COMBINATION CURB & GUTTER SHALL BE
REPLACED TO LIMITS OF BUS PAD INSTALLATION UNLESS WAIVED BY ENGINEER.
AT LOCATIONS WHERE A CONSTRUCTION JOINT IS REQUIRED (WHERE THE BUS PAD REQUIRES PARTIAL REPLACEMENT OR LENGTHENING), 14" EPOXY COATED DOWELS ARE TO BE USED AS SHOWN IN DETAIL "B".

1) DOWELS SHALL BE SPACED AT 12" CENTERS FOR TRANSVERSE JOINTS, BEGINNING 6" FROM THE JOINT.

2) THIS WORK SHALL BE PAID FOR UNDER ITEM 509 - EPOXY COATED REINFORCING (POUNDS) AND ITEM 510 - DOWEL HOLES (EACH).

CONSTRUCTION JOINT

1) AT LOCATIONS WHERE A CONSTRUCTION JOINT IS REQUIRED (WHERE THE BUS PAD REQUIRES PARTIAL REPLACEMENT OR LENGTHENING), 1 1/2" EPOXY COATED DOWELS ARE TO BE USED AS SHOWN IN DETAIL "B".

PARTIAL BUS PAD REPLACEMENT

* ANY PARTIAL REPLACEMENT SHALL BE NO LESS THAN A FULL PANEL.
TYPICAL LOCATIONS

CONCRETE BUS PAD

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
2332
6/1/13
SHT 3 OF 3
1. ITEM 448 - 1 1/2" ASPHALT CONCRETE, SURFACE COURSE (MEDIUM TRAFFIC), PG64-22
2. ITEM 448 - VAR. ASPHALT CONCRETE, INTERMEDIATE COURSE (MEDIUM TRAFFIC), PG64-22
3. ITEM 407 - TACK COAT
4. ASPHALT REMOVED
5. ITEM 423 - CRACK SEALING, TYPE I

THE TEMPERATURE FOR ITEM 448 - ASPHALT CONCRETE, INTERMEDIATE COURSE SHALL BE < 150° F BEFORE ITEM 448 - ASPHALT CONCRETE, SURFACE COURSE CAN BE PLACED.

ITEM SPECIAL: 14' SPEED HUMP (EACH)

TOLERANCES (@ CREST) -1/4" TO +1/2"

CONTACT CITY OF COLUMBUS PAVEMENT MARKING MANAGER FOR DIRECTION ON REQUIRED PAVEMENT MARKINGS.
22' SPEED HUMP

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG 2335
6/1/13
SHT 2 OF 3
NOTE: DRAWING DOES NOT SHOW REQUIRED ASPHALT REMOVAL. REFER TO SHEETS 1 OF 3 AND 2 OF 3.
ITEM 448 - 1 1/2" ASPHALT CONCRETE, SURFACE COURSE (MEDIUM TRAFFIC), PG64-22

ITEM 448 - VAR. ASPHALT CONCRETE, INTERMEDIATE COURSE (MEDIUM TRAFFIC), PG64-22

ITEM 407 - TACK COAT

ITEM 423 - CRACK SEALING, TYPE I

THE TEMPERATURE FOR ITEM 448 - ASPHALT CONCRETE, INTERMEDIATE COURSE SHALL BE < 150° F BEFORE ITEM 448 - ASPHALT CONCRETE, SURFACE COURSE CAN BE PLACED.

X = VARIES ACCORDING TO STREET WIDTH.

ITEM SPECIAL: INTERSECTION SPEED TABLE (EACH)

CONTACT CITY OF COLUMBUS PAVEMENT MARKING MANAGER FOR DIRECTIONS ON REQUIRED PAVEMENT MARKING.
### Intersection Speed Table

<table>
<thead>
<tr>
<th>3&quot;</th>
<th>3&quot;</th>
<th>1'-0&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>6'-0&quot;</td>
<td>6'-0&quot;</td>
<td>1'-6&quot;</td>
</tr>
</tbody>
</table>

**Four-Leg Intersection**

**Three-Leg Intersection**

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**Roadway Cross-Section**

**Interchange Speed Table**

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STD DWG 2337

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

6/1/13
SHT 2 OF 2
NOTES:
1. SHIPPING WEIGHT OF RECEPTACLE SHALL BE 280 LBS, MIN.
2. RECEPTACLE SHALL HAVE SIDE DOOR ACCESS. USE OIL IMPREGNATED BRONZE BUSHINGS AND STAINLESS STEEL PIVOT PINS FOR DOOR MOVEMENT, WITH 3/16" SOLID STEEL LATCH ASSEMBLY (NO LOCK).
3. ALL FABRICATED METAL COMPONENTS SHALL BE STEEL SHOTBlastED, ETCHED, PHOSPHATIZED, PREHEATED, AND ELECTROSTATICALLY POWDER-COATED WITH T.G.I.C. POLYESTER POWDER COATINGS, 8-10 MILS THICK. ALL PARTS SHALL BE BLACK POWDER COATED.
4. RECEPTACLES SHALL NOT BE INSTALLED NEXT TO ON-STREET PARKING.

FACE OF CURB

EXISTING SIDEWALK
(WHERE NO SIDEWALK EXISTS, CONTRACTOR TO INSTALL CONCRETE PAD 36"x36"x6")

MOUNT TO CONCRETE WITH 3/8" DIA. EXPANSION ANCHOR BOLT WITH 4" EMBEDMENT

LID SHALL BE 16 GAUGE MIN. SHEET METAL RING SLOPING INWARD TO DIRECT LITTER INTO RECEPTACLE. LID SHALL BE BOLTED TO RECEPTACLE.

1/4" SQUARE ANCHOR BOLT HOLE. HOLE TO BE 1/2" FROM PAVEMENT SURFACE.

36-GALLON LINER (WEIGHT NOT TO EXCEED 6 LBS) SITS ON 1/4"x2" SUPPORT BARS

1/4" SOLID STEEL TOP RING

(42) 3/8"x1" VERTICAL SOLID STEEL BARS

(5) LEVELING FEET WITH 3/8" DIAMETER THREADED STEEL SHAFT

LITTER RECEPTACLE
36 GALLON CAPACITY

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

6/1/14

STD DWG
2400

SHT 1 OF 1