

PART 1 GENERAL

1.01 Scope

The work covered by this Specification consists of furnishing all labor, tools, materials, supervision, and equipment in performing all operations in connection with constructing the site infrastructure as specified herein or shown on Drawings.

1.02 Protection of Facilities

Existing utility lines, sidewalks, fencing, pavement or other structures shown on the Drawings, as shown to the Contractor or mentioned in the Plans and Specifications shall be kept free of damage by the Contractor's operations. It shall be the responsibility of the Contractor to verify the existence and location of all underground utilities on the site and insure that they are adequately marked to prevent damage.

PART 2 CLEARING AND GRUBBING

2.01 General

All vegetation, trees, stumps, roots, rubbish, trash, and other debris shall be cleared and grubbed within the clearing limits of all areas to receive structures or utility lines before beginning grading operations. All material from clearing and grubbing operations shall be removed from the site in conformance to applicable Federal, State and Local laws and regulations.

2.02 Stripping and Topsoiling

Areas to be graded shall be stripped of topsoil. All topsoil shall be stripped and spread in non-critical grading areas. Topsoil shall be stockpiled for use on finished grades or other areas graded or disturbed by Contractor.

PART 3 EROSION CONTROL

3.01 General

Soil erosion and sediment control shall be provided by the Contractor at his expense for all areas of the site which are disturbed by construction operations throughout the life of the project. Control measures shall be in place prior to any land disturbing activity and expanded as needed during the project. Maintenance of these facilities shall be continuous by the Contractor until the disturbed area is protected by ground cover (Final Stabilization).

PART 4 STORM DRAINAGE SYSTEM

4.01 General

Each pipe shall be laid on a firm bed, true to line and grade, and in such manner as to form a close concentric joint with the adjoining pipe and to prevent sudden offsets of the flow line or disturbance of the line and grade. All pipes shall be laid with the bell end pointing up grade. Each section of storm pipe installation shall begin at the lowest point and must be laid continuously between manholes, headwalls, or to completion. Where pipe is to be laid in material of poor supporting value, the unsuitable material shall be replaced with a layer of No. 57 crushed stone.

4.02 Products

Reinforced concrete pipe (RCP) shall comply with the requirements of ASTM Designation, C76. Class III or Class IV as indicated on the Drawings. Joints shall be tongue-and groove joints with Butyl rubber mastic sealant, which shall comply with Federal Specification SS-S-210. All pipes shall be circular with circular reinforcement.

Precast drainage structures are not allowed in the YORK COUNTY without prior written approval. Waffle or knock-out boxes are never to be used.

When allowed, all precast manholes and catch basins shall meet YORK COUNTY Specifications and shall be approved prior to installation.

PART 5 PARKING LOT CONSTRUCTION

5.01 General

All lots/sites shall be graded as shown on the Drawings. Sub-grade shall be sloped for effective drainage at all times. Equipment ruts shall be leveled at the end of each work day. Water-holding depressions shall not be left in grading areas overnight. All sub-grade shall be proof rolled with a fully loaded tandem, rubber-tired roller or similar approved equipment. The proof roller should make at least two (2) passes over each location. Any areas which wave, rut or deflect excessively and continue to do so after several passes of the proof roller shall be undercut to firmer soils. Graded areas shall be fine graded to spot elevations and contours shown on Drawings for sub-grade after allowances made for base and pavement thickness. Sidewalks shall be to a thickness as shown on the standard detail and constructed on an adequately graded base. Sub-grade shall be compacted to 95% SPD. The surface of the sidewalk shall be steel trowel and light broom finished and cured with an acceptable curing compound. The light broom finish shall have the brush marks perpendicular to the sidewalk line. Tooled joints shall be provided at intervals of not less than five (5) feet and expansion joints at intervals of not less than forty-five (45) feet. The sidewalk shall have a lateral slope of one-quarter inch (1/4") per foot.

5.02 Products

Concrete curb and gutter, sidewalk, and driveways shall be poured with minimum compressive strength of 3600 PSI 28 days, four inch slump per ASTM C39, air content of 3%-6%. Location, width and thickness shall be as indicated on the Drawings. Aggregate base course, binder and surface course shall be installed and compacted in accordance with SCDOT Specifications. Type and thickness shall be as indicated on the drawings.

PART 6 GRADING AND EXCAVATION

6.01 General

After clearing, grubbing and stripping have been completed, excavation for buildings, parking lots, drainage ditches and all other construction, shall be performed to the lines and grades indicated by the Drawings. Site excavation shall be unclassified regardless of the nature of material encountered. When material encountered within the limits of the work is considered unsuitable by the Engineer, such material shall be excavated below the grades shown on the Drawings or as directed by the Engineer and shall be replaced with suitable material. Excavation materials which are not required for fills shall be considered as waste and shall be disposed of off-site in an approved land fill. The excavations for footings and slabs shall be carried to the exact grades as shown on the Drawings. Undercutting will not be permitted. Should the Contractor excavate below the proper grade under concrete slabs or footings, earth fill will not be permitted, and concrete shall be poured to the bottom of excavation. No extra compensation will be granted the Contractor for extra concrete used for re-fill. Embankment and fill compaction shall be accomplished by thoroughly compacting each layer with sheeps foot rollers, pneumatic rollers, and mechanical tampers in places inaccessible to rollers, or other equipment. When material has too much moisture, grading operations shall be limited to drying soil by spreading and turning drying by the sun and aeration. When material is dry, moisture shall be added by sprinkling by approved means.

All embankments and fills shall be compacted to the following percentages of the maximum dry density and within the following moisture range, terms of optimum moisture as determined by the Standard Proctor Density Test, ASTM, D698.

The following table shall be used unless otherwise specified.

TABLE OF COMPACTION AND MOISTURE

| Class of Fills or Embankments | Zone | Minimum Density % | Moisture Range |
|-------------------------------|---------------|-------------------|----------------|
| Structure | Top 12-inches | 98 | +1 to -2 |
| | Remainder | 95 | +4 to -3 |
| Roadway | Top 30-inches | 98 | +1 to -2 |
| | Remainder | 95 | +2 to -3 |
| Parking Lot | Top 18-inches | 98 | +1 to -2 |
| | Remainder | 95 | +3 |
| Dam/Dike | All Depths | 95 | +1 to -3 |
| | Common | All Depths | +3 to -4 |

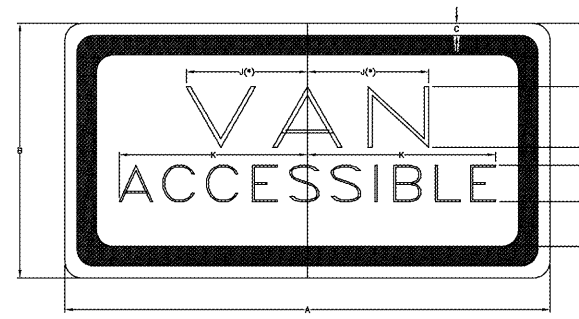
Class of fills or Embankments are defined as follows:

- Structure - beneath concrete slabs of buildings, pumping stations, floors, foundations, etc.
- Roadway - beneath all roads, streets, truck operations.
- Parking Lot - automobile parking lots.
- Dam/Dike - embankment for ponds, lagoons.
- Common - all other embankments.

Any required borrow material shall be provided by the contractor at no additional cost to the owner. Excavated materials not suited for backfill and excavated material in excess of that needed to complete the work shall be wasted on the project site where directed by the Owner. Waste areas shall be left in a graded and sloped condition to allow natural drainage of the surrounding area.

All work shall be performed in accordance with the Geotechnical Report/Evaluation prepared for this site and project.

SITE WORK SPECIFICATIONS



R7-8P

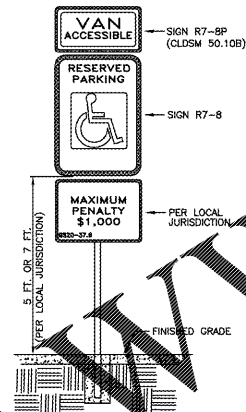
| DIMENSIONS (INCHES) | | | | | | | | | | |
|---------------------|---|-----|-----|-------|-------|-----|----|-------|---|-------|
| A | B | C | D | E | F | G | H | J | K | L |
| 12 | 6 | 3/8 | 3/8 | 1-1/2 | 1-1/2 | 1/2 | 1D | 2-1/2 | 4 | 1-1/2 |

* INCREASE SPACING 50%
 D-FHWA (FEDERAL HIGHWAY ADMINISTRATION/USDOT)
 SERIES D LETTERS

LEGEND AND BORDER - GREEN
 BACKGROUND - WHITE

SUPPLEMENTAL VAN ACCESSIBLE SIGN (R7-8P)
 NOT TO SCALE

NOTE: SUPPLEMENTAL VAN ACCESSIBLE SIGN (R7-8P) USED IF THERE IS ONLY ONE REQUIRED ACCESSIBLE PARKING SPACE (MUST BE VAN ACCESSIBLE) AND AT EACH ADDITIONAL REQUIRED VAN ACCESSIBLE SPACE. (SEE STD. NO. 50.106)



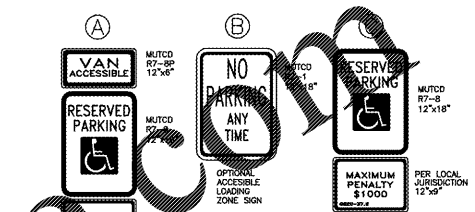
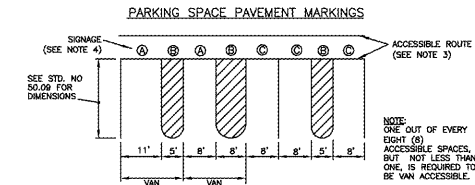
ACCESSIBLE PARKING REQUIREMENTS

| TOTAL PARKING SPACES PROVIDED | MINIMUM NUMBER OF ACCESSIBLE SPACES REQUIRED | MINIMUM NUMBER OF ACCESSIBLE SPACES REQUIRED TO BE VAN ACCESSIBLE |
|-------------------------------|--|---|
| 1 TO 25 | 1 | 1 |
| 26 TO 50 | 2 | 1 |
| 51 TO 75 | 3 | 1 |
| 76 TO 100 | 4 | 1 |
| 101 TO 150 | 5 | 1 |
| 151 TO 200 | 6 | 1 |
| 201 TO 300 | 7 | 1 |
| 301 TO 400 | 8 | 1 |
| 401 TO 500 | 9 | 2 |
| 501 TO 1000 | 2% OF TOTAL | 1 IN EVERY 8 ACCESSIBLE SPACES |
| 1001 AND OVER | 2% PLUS 1 FOR EACH 100 OVER 1000 | 1 IN EVERY 8 ACCESSIBLE SPACES |

REFERENCE: SECTION 208 OF THE ADA STANDARDS FOR ACCESSIBLE DESIGN

NOTES:

- ALL 12"x18" ACCESSIBLE SIGNS (R7-8 & R7-1) SHALL BE MOUNTED AT 7 FEET FROM GRADE TO BOTTOM EDGE OF SIGN FACE (MUTCO). MOUNTING HEIGHT CAN BE REDUCED TO 5 FEET IF PLACED IN AN AREA BETWEEN SIDEWALK AND BUILDING FACE IN WHICH PEDESTRIANS ARE NOT EXPECTED TO USE.
- REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCO) U.S. DEPARTMENT OF TRANSPORTATION AND SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION SUPPLEMENT.
- IF ACCESSIBLE ROUTE IS A RAISED SIDEWALK AREA, THEN RAMPS ARE REQUIRED AT LOADING ZONE AREA.
- SIGNAGE MUST NOT OBSTRUCT ACCESSIBLE ROUTE OR RAMPS.



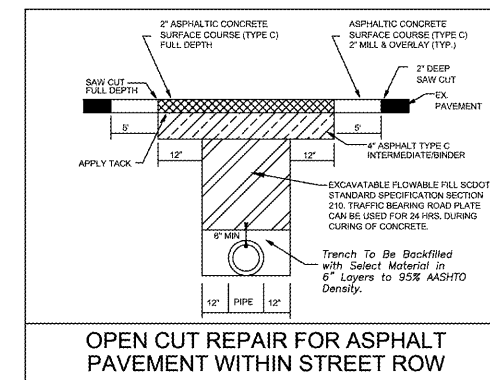
ACCESSIBLE PARKING AND SIGNAGE STANDARDS
 NOT TO SCALE

LEGEND AND BORDER - GREEN
 BACKGROUND - WHITE

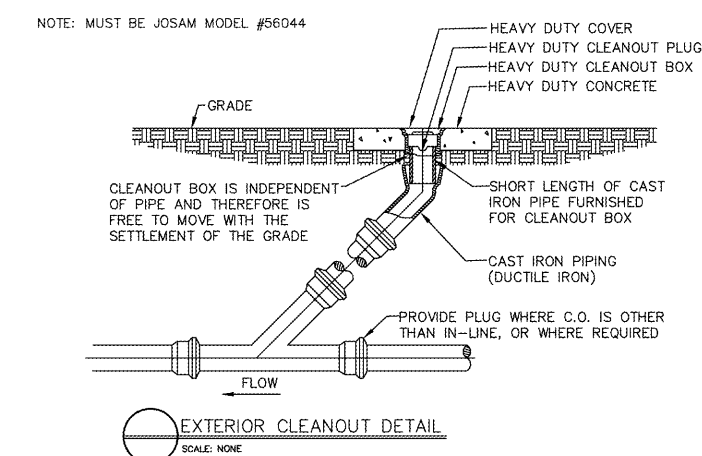
SIGN APPROVED FOR USE UNDER GENERAL STATUTE 20-37.6

THIS PENALTY SIGN IS REQUIRED TO ACCOMPANY ALL R7-8 PARKING SIGNS ERECTED AFTER DECEMBER 31,1990
 COORDINATE FINE AMOUNT LOCAL JURISDICTION.

SUPPLEMENTAL ACCESSIBLE SIGN
 NOT TO SCALE

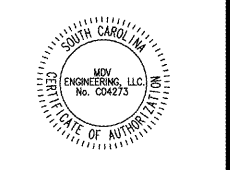


OPEN CUT REPAIR FOR ASPHALT PAVEMENT WITHIN STREET ROW



EXTERIOR CLEANOUT DETAIL
 SCALE: NONE

MDN Engineering
 C/O Ayer Design Group
 215 Johnston Street
 Rock Hill, SC 29730
 Phone: 704-400-1044 Email: michael@mdveng.com



PROJECT
Arbys
RESTAURANT
 with
DRIVE-THRU
 2385 LEN PATTERSON RD
 FORT MILL, SC 29708
 (YORK COUNTY)

FOR
BRG
Brumit Restaurant Group
 BRUMIT RESTAURANT GROUP, LLC
 P.O. BOX 15726
 ASHEVILLE, NC 28813
 PH: 828.274.5835

REVISIONS

| NO. | DATE | DESCRIPTION |
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DWG. NAME : 2019-111
 DRAWN BY : MDN
 DATE : 8.2.19
 SCALE : N.T.S.

DETAIL SHEET
C.11