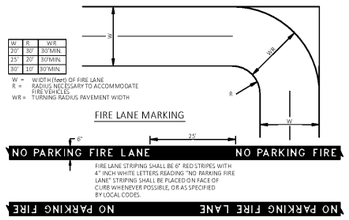


W	R	WR
20'	50'	30'MIN.
25'	29'	30'MIN.
30'	110'	30'MIN.

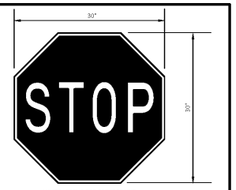
W = WIDTH (WIDTH OF FIRE LANE
R = RADIUS NECESSARY TO ACCOMMODATE FIRE VEHICLES
WR = TURNING RADIUS PAVEMENT WIDTH

FIRE LANE STRIPING SHALL BE 6" RED STRIPES WITH 4" INCH WHITE LETTERS, READING "NO PARKING FIRE LANE" STRIPING SHALL BE PLACED ON FACE OF CURB WHENEVER POSSIBLE, OR AS SPECIFIED BY LOCAL CODES.

FIRE LANE MARKING

N.T.S.

10C

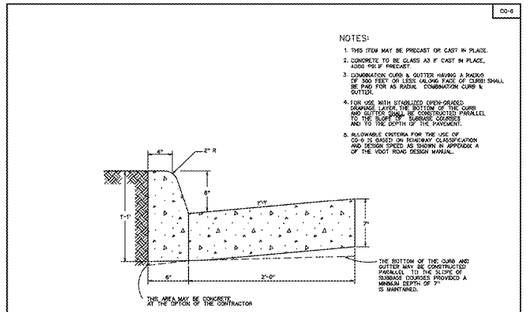


R1-1

"STOP" SIGN

N.T.S.

12G



NOTES:

1. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
2. CONCRETE TO BE CLASS A3 IF CAST IN PLACE, A2DD "P1" IF PRECAST
3. COMBINATION CURB & GUTTER HAVING A RADIUS OF 500 FEET OR LESS ALONG FACE OF CURB SHALL BE MAD FOR AS RADIAL COMBINATION CURB & GUTTER.
4. FOR USE WITH STABILIZED SUBGRADES. GRADING LINE AT THE BOTTOM OF THE CURB FOR THE SLOPE FROM THE ROADWAY PARALLEL AND TO THE DEPTH OF THE PAVEMENT.
5. ALLOWABLE CRITERIA FOR THE USE OF CG-6 IS BASED ON ROADWAY CLASSIFICATION AND DESIGN SPEED AS SHOWN IN APPENDIX A OF THE VDOT ROAD DESIGN MANUAL.

SPECIFICATION REFERENCE: 103, 502

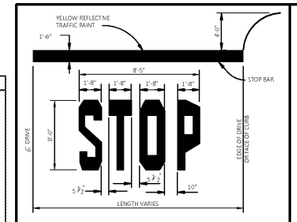
COMBINATION 6" CURB & GUTTER

VIRGINIA DEPARTMENT OF TRANSPORTATION

CG-6

REV. 8/06

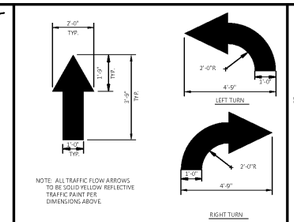
201.03



STOP BAR

N.T.S.

10I

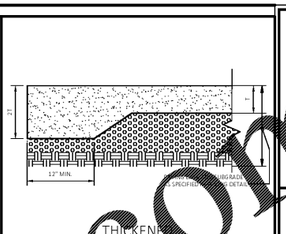


NOTE: ALL TRAFFIC FLOW ARROWS TO BE SOLID YELLOW REFLECTIVE TRAFFIC PAINT PER DIMENSIONS ABOVE.

TRAFFIC FLOW ARROW

N.T.S.

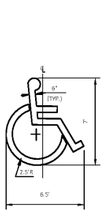
10A



THICKENED EDGE OF PAVEMENT

N.T.S.

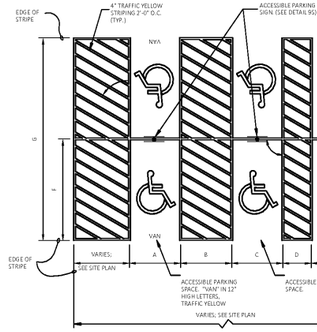
08G



ACCESSIBLE PARKING SYMBOL

N.T.S.

9U



LOCATE AT EDGE OF PARKING SPACE UNLESS ACCOMPANIED BY "VAN" LETTERING

NOTES:

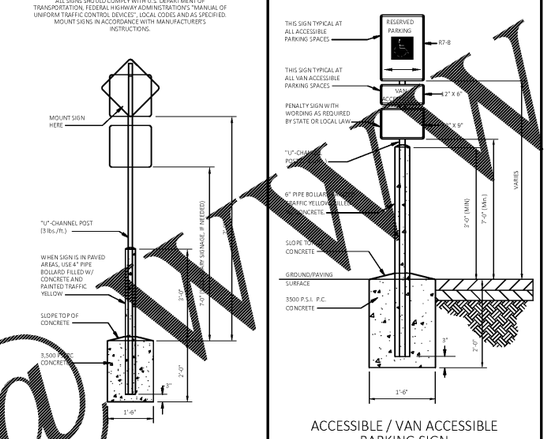
1. THIS DETAIL IS FOR DIMENSION PURPOSES ONLY. SEE SITE PLAN FOR EXACT LAYOUT.
2. ALL DIMENSIONS ARE TO ℄ OF STRIPE UNLESS OTHERWISE INDICATED.
3. A MINIMUM 8' ACCESS AISLE SHALL BE PLACED ON PASSENGER SIDE OF VAN SPACES.
4. SEE SITE PLAN FOR TYPICAL DIMENSIONS

DIMENSION CHART																	
A	8'	8'	8'														
B	8'	8'	8'	VARIES	VARIES	VARIES											
C				8'	8'	8'											
D				5'	5'	5'	VARIES	VARIES	VARIES	VARIES	VARIES	VARIES	VARIES	VARIES	VARIES	VARIES	VARIES
E							9'	9.5'	10'	9'	9.5'	10'	9'	9.5'	10'	9'	9.5'	10'
F	18'	19'	20'	18'	19'	20'	18'	18'	18'	19'	19'	19'	20'	20'	20'	20'	20'	20'
G	36'	38'	40'	36'	38'	40'	36'	36'	36'	38'	38'	38'	40'	40'	40'	40'	40'	40'

"VAN" ACCESSIBLE PARKING SPACE STRIPING

N.T.S.

9N



SIGN BASE

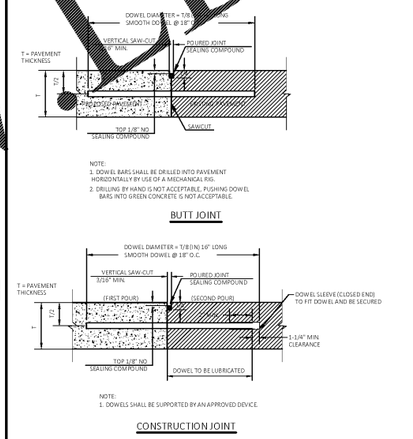
N.T.S.

12F

ACCESSIBLE / VAN ACCESSIBLE PARKING SIGN

N.T.S.

09S

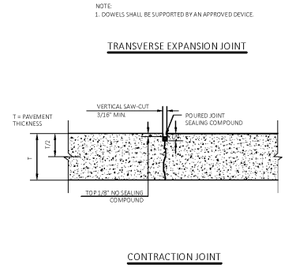


NOTE:
1. DOWEL BARS SHALL BE DRILLED INTO PAVEMENT HORIZONTALLY BY USE OF A MECHANICAL RIG.
2. DRILLING BY HAND IS NOT ACCEPTABLE. PUSHING DOWEL BARS INTO GREEN CONCRETE IS NOT ACCEPTABLE.

BUTT JOINT

NOTE:
1. DOWELS SHALL BE SUPPORTED BY AN APPROVED DEVICE.

CONSTRUCTION JOINT



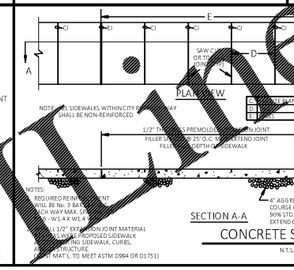
NOTE:
1. DOWELS SHALL BE SUPPORTED BY AN APPROVED DEVICE.

TRANSVERSE EXPANSION JOINT

CONCRETE JOINT DETAILS

N.T.S.

08R



PRECAST CONCRETE WHEELSTOP

N.T.S.

02A

NOTES:
1. REQUIRED REINFORCEMENT WILL BE No. 3 BAR MESH, WWF 6X6-W1.4XW1.4 OR WWF 6X6-W2.1XW2.1
2. 1/2" EXPANSION JOINT MATERIAL AT ALL PROPOSED SIDEWALK ABUTTING SIDEWALK, CURBS, OR STRUCTURE.
3. MATL. TO MEET ASTM D994 OR D1751)

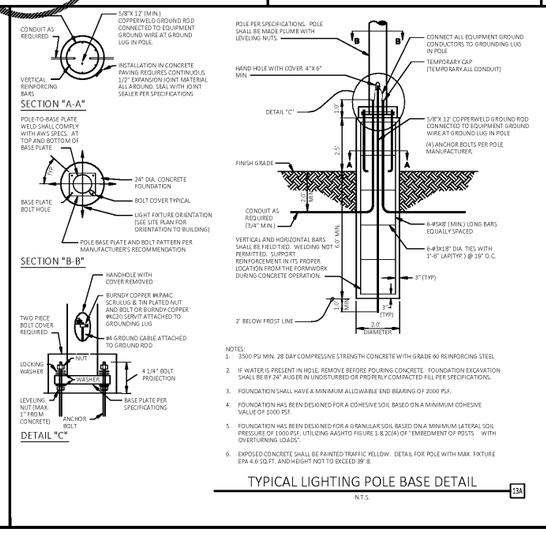
SECTION A-A

SECTION B-B

CONCRETE SIDEWALK

N.T.S.

08D

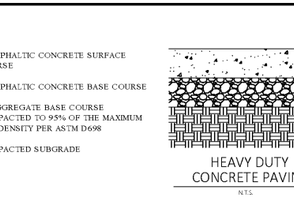


NOTES:
1. 3500 PSI MIN. 28 DAY COMPRESSIVE STRENGTH CONCRETE WITH GRADE 60 REINFORCING STEEL
2. IF WATER IS PRESENT IN HOLE, REMOVE BEFORE POURING CONCRETE. FOUNDATION EXCAVATION SHALL BE BY 24" AUGER IN UNDISTURBED OR PROPERLY COMPACTED FILL PER SPECIFICATIONS.
3. FOUNDATION SHALL HAVE A MINIMUM ALLOWABLE END BEARING OF 2000 PSF.
4. FOUNDATION HAS BEEN DESIGNED FOR A COHESIVE SOIL BASED ON A MINIMUM COHESIVE VALUE OF 1000 PSF.
5. FOUNDATION HAS BEEN DESIGNED FOR A GRANULAR SOIL BASED ON A MINIMUM LATERAL SOIL PRESSURE OF 1000 PSF, UTILIZING AASHTO FIGURE 1.8.2(A) OF "EMBEDMENT OF POSTS WITH OVERTURNING LOADS".
6. EXPOSED CONCRETE SHALL BE PAINTED TRAFFIC YELLOW. DETAIL FOR POLE WITH MAX. FIXTURE EPA 4.6 SQ.FT. AND HEIGHT NOT TO EXCEED 39' 8.

TYPICAL LIGHTING POLE BASE DETAIL

N.T.S.

13A



HEAVY DUTY ASPHALT PAVING

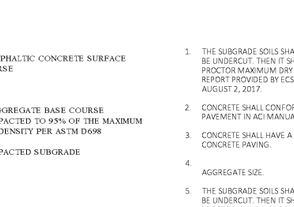
N.T.S.

08S

HEAVY DUTY CONCRETE PAVING

N.T.S.

04C



STANDARD DUTY ASPHALT PAVING

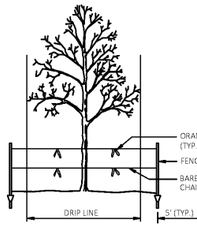
N.T.S.

08A

1. THE SUBGRADE SOILS SHALL BE PROOF-ROLLED TO DETERMINE SOFT AREAS THAT NEED TO BE UNDERCUT. THEN IT SHALL BE COMPACTED TO AT LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY REFER TO GEOTECHNICAL ENGINEERING SERVICES REPORT PROVIDED BY ECS MID-ATLANTIC, LLC - PROJECT NUMBER 07:13871, DATED AUGUST 2, 2017.
2. CONCRETE SHALL CONFORM TO THE REQUIREMENTS FOR REINFORCED CONCRETE PAVEMENT IN ACI MANUAL OF CONCRETE PRACTICE.
3. CONCRETE SHALL HAVE A MIN. 28 DAY FLEXURAL STRENGTH OF 550 PSI FOR ALL CONCRETE PAVING.
4. AGGREGATE SIZE.
5. THE SUBGRADE SOILS SHALL BE PROOF-ROLLED TO DETERMINE SOFT AREAS THAT NEED TO BE UNDERCUT. THEN IT SHALL BE COMPACTED TO AT LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY.
6. A MAXIMUM CONTROL JOINT SPACING OF 15 FEET IS REQUIRED FOR CONCRETE PAVEMENT. SAW CUT CONTROL JOINTS SHOULD BE CUT WITHIN 6 TO 12 HOURS OF CONCRETE PLACEMENT.

TREE PROTECTION NOTES:

1. ALL TREES SHOWN ON THIS PLAN TO BE RETAINED SHALL BE PROTECTED DURING ALL PHASES OF DEMOLITION/CONSTRUCTION WITH TEMPORARY FENCING. IT SHALL BE THE GENERAL CONTRACTORS RESPONSIBILITY TO COORDINATE WITH LANDSCAPE CONTRACTOR.
2. TREE PROTECTION FENCES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR GRADING). CLEARING SHALL BE DONE BY HAND.
3. FENCES SHALL COMPLETELY SURROUND TREE OR CLUSTERS OF TREES; SHALL BE LOCATED 5' FROM THE OUTERMOST LIMITS OF THE TREE BRANCHES (DRIP LINE); AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION BY CONTRACTOR. PROJECT IN ORDER TO PREVENT THE FOLLOWING:
   A. SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT OR MATERIALS.
   B. ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN 6 INCHES CUT OR FILL) OR TRENCHING.
   C. WOUNDS TO EXPOSED ROOTS, TRUNK OR LIMBS BY MECHANICAL EQUIPMENT.
   D. OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMCAL STORAGE, CEMENT TRUCK CLEANING, AND FIRES.
4. EXCEPTIONS TO INSTALLING FENCES 5' FROM TREE DRIP LINES MAY BE PERMITTED IN THE FOLLOWING CASES:
   A. WHERE PERMEABLE PAVING IS TO BE INSTALLED: ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA.
   B. WHERE TREES ARE CLOSE TO THE PROPOSED BUILDING; ERECT THE FENCE NO CLOSER THAN 6 FEET TO THE BUILDING.
5. WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN 4 FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED-ON PLANKING TO A HEIGHT OF 8 FEET (OR TO THE LIMITS OF LOWER BRANCHES) IN ADDITION TO THE REDUCED FENCING PROVIDED.
6. WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN AREAS OF UNPROTECTED ROOT ZONES (UNDER DRIP LINES), THOSE AREAS SHOULD BE COVERED WITH 4 INCHES OF ORGANIC MULCH TO MINIMIZE SOIL COMPACTION.
7. ALL GRADING WITHIN PROTECTED ROOT ZONE AREAS SHALL BE DONE BY HAND OR WITH SMALL EQUIPMENT TO MINIMIZE ROOT DAMAGE. PRIOR TO GRADING, REMOVE PROTECTIVE FENCING TO 2 FEET BEYOND THE GRADE CHANGE. DO NOT CUT OVER 1 INCH DIAMETER WILL BE CUT.
8. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED WITH A CLEAN CUT FLUSH WITH THE SOIL. BACKFILL ROOTS WITH GOOD QUALITY TOP SOIL IMMEDIATELY. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN 2 DAYS, COVER THEM WITH ORGANIC MATERIAL OR MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
9. PRIOR TO EXCAVATION OR GRADE CHANGE WITHIN DRIP LINES, MAKE A CLEAN CUT BETWEEN THE DISTURBED AND UNDISTURBED ROOT ZONES WITH A ROCK SAW OR SIMILAR EQUIPMENT TO MINIMIZE DAMAGE TO REMAINING ROOTS.
10. TREES MOST HEAVILY IMPACTED BY CONSTRUCTION ACTIVITIES SHOULD BE WATERED DEEPLY ONCE A WEEK DURING PERIODS OF HOT, DRY WEATHER. TREE CROWNS SHOULD BE SPRAYED WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON THE LEAVES.
11. NO CONDUIT OR UTILITIES CAN BE INSTALLED WITHIN TREE PROTECTION AREAS. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.
12. NO LANDSCAPE TOPSOIL DRESSING GREATER THAN 4 INCHES SHALL BE PERMITTED WITHIN THE DRIP LINE OF TREES. NO SOIL IS PERMITTED ON THE ROOT FLARE OF ANY TREE. GRADING LIMITED TO 3 INCH CUT.
13. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC AND EQUIPMENT SHALL TAKE PLACE BEFORE CONSTRUCTION BEGINS.
14. ALL PRUNING MUST BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES) BY A CERTIFIED ARBORIST AND SHALL BE APPROPRIATELY SUPERVISED BY OWNERS REPRESENTATIVE OR PROFESSIONAL ARBORIST.
15. DAMAGE TO TREES OR ANY NATURAL RESOURCE DUE TO CONTRACTOR NEGLIGENCE DURING THE CONSTRUCTION PHASE SHALL BE APPRAISED BY THE OWNERS REPRESENTATIVE AND ORDERED REPAIRED, REPLACED, OR COMPENSATED.



TREE PROTECTION

N.T.S.

05H

Order Plans @ WWW.DLINE.COM

THIS DRAWING IS THE PROPERTY OF BRIDGESTONE RETAIL OPERATIONS, LLC AND IS LOANED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN THE PROJECT SPECIFICALLY ACCEPTANCE OF THIS DRAWING SHALL BE CONSTRUED AS AN ACCEPTANCE OF THIS CONDITION AND AGREEMENT BY THE BORROWER TO RETURN THE DRAWING BY BRIDGESTONE RETAIL OPERATIONS, LLC.

Firestone COMPLETE AUTO CARE

CEI Engineering Associates, Inc.
Civil Engineers • Land Surveyors • Landscape Architects
1000 Abernathy Road, Suite 1400, Atlanta, GA 30328
(770) 396-2555 • FAX (770) 396-2556
GEORGIA • NORTH CAROLINA • SOUTH CAROLINA • VIRGINIA
CERTIFICATE OF AUTHORIZATION NO. LSF000809

NEW FCAC STORE
8-BAY-FCAC-ER-RIGHT
1900 RICHMOND RD
WILLIAMSBURG, VA

6 DIGIT NO.: 785533
4 DIGIT NO.: 6868
ENTITY ID NO.: 756595
SITE ID NO.: 1412
PROPERTY NO.: 167739

FILE NAME: 29944-CS.dwg
CEI PROJECT NUMBER: 29944
REVISION: REV-1 DATE: 08/14/17

SHEET TITLE:

DETAIL SHEET I

CEI JOB NUMBER: 29944

SHEET NUMBER: C10

JOB # 29944 DRAWING: 29944-CS.dwg LAST SAVED BY: BHARTY