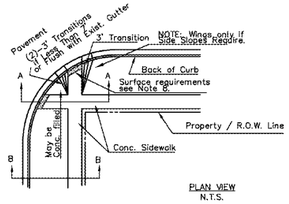
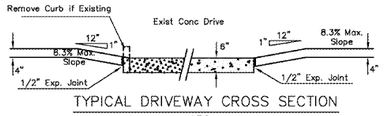
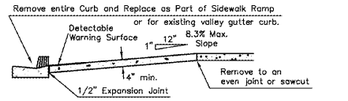


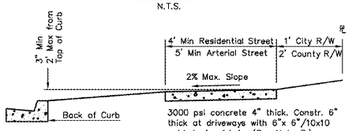
PLAN VIEW
N.T.S.



TYPICAL DRIVEWAY CROSS SECTION
N.T.S.



SECTION A–A
N.T.S.



SECTION B–B
N.T.S.

NOTES:

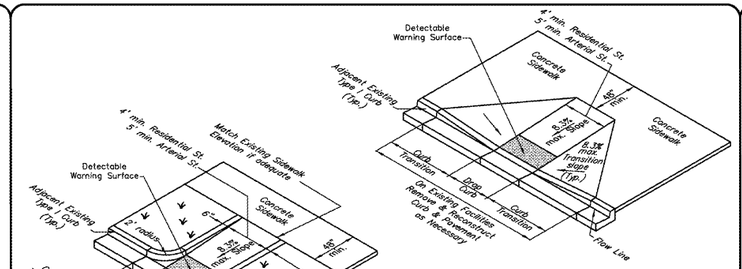
1. Provide tooled joints at distances matching the width. Also place expansion joints at driveways.
2. If some physical obstruction exists which prevents the placing of sidewalks as shown, contact the Engineering Division for alternate location or design.
3. Wooden and other spacers will not be permitted in sidewalks or driveways.
4. No coatings of any kind will be permitted on concrete sidewalks or driveways without specific approval of the City Engineer.
5. All concrete shall be 3000 psi min. @ 28 days, with fiber mesh reinforcing.
6. Concrete surface to be light broom finish.
7. Concrete driveway construction shall be 6" thick w 6"x 6"/10x10 welded wire fabric reinforcement.
8. Ramps shall have a detectable warning surface in conformance with requirements of FDOT Roadway and Traffic Design Standards, Detail 304 or most recent modifications.

DATE	REVISION DESCRIPTION	APP
6/12	REV. TO MAX SLOPE	TM
5/11	REV TO NOTE 8	TM

CITY OF CLEARWATER
ENGINEERING DEPARTMENT
STREET SECTIONS AND DETAILS

TYPICAL SIDEWALK CONSTRUCTION & RAMP DETAIL

INDEX NO.	PAGE NO.
109	1 OF 5
LATEST REVISION	2/22/2016



RETURNED CURB RAMPS
N.T.S.

RAMP IN PEDESTRIAN ROUTE
N.T.S.

NOTES:

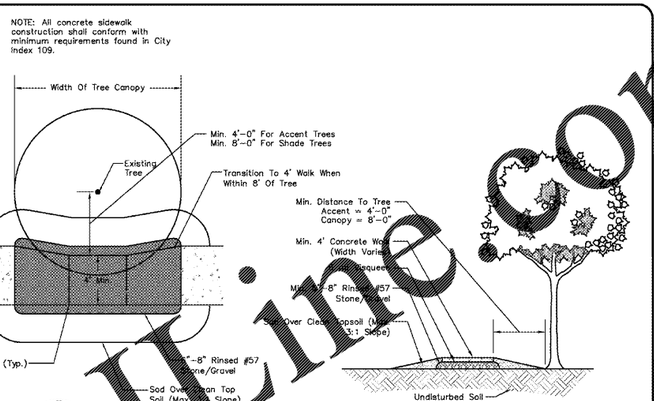
1. Public sidewalk curb ramps are designed to the Florida Department of Transportation (FDOT) Design Standards (most recent modifications) Index 304 to comply with the Americans with Disabilities Act.
2. Curb ramp detectable warning surfaces shall extend the full width of the ramp and shall be 24" deep. Detectable warning surfaces shall be constructed in accordance with FDOT Standard Specifications for Road and Bridge Construction, Section 527. Transition slopes are not to have detectable warning surfaces.
3. Depending on actual site conditions, alternate curb ramp designs are available for use. See FDOT Design Standards (most recent version) Index 304.
4. Ramp thickness shall be 4" minimum.

DATE	REVISION DESCRIPTION	APP
11/2/2015	DETAIL REDRAWN	S.R.

CITY OF CLEARWATER
ENGINEERING DEPARTMENT
STREET SECTIONS AND DETAILS

TYPICAL SIDEWALK CURB RAMPS

INDEX NO.	PAGE NO.
109	2 OF 5
LATEST REVISION	2/22/2016



PLAN VIEW

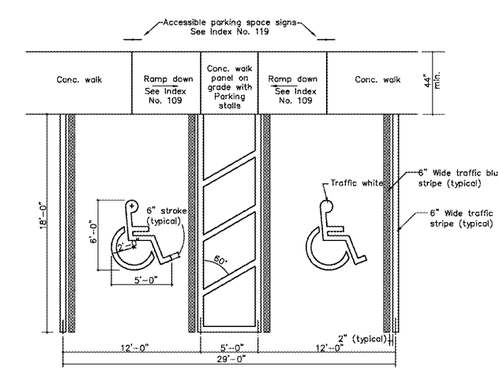
CROSS–SECTION
N.T.S.

DATE	REVISION DESCRIPTION	APP

CITY OF CLEARWATER
ENGINEERING DEPARTMENT
STREET SECTIONS AND DETAILS

SIDEWALK CONSTRUCTION WITH TREE PROTECTION

INDEX NO.	PAGE NO.
109	4 OF 5
LATEST REVISION	2/22/2016



NOTE:
All pavement markings to be thermoplastic.

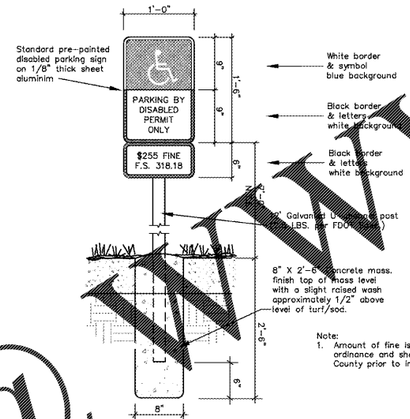
N.T.S.

DATE	REVISION DESCRIPTION	APP
5/18/15	ADDED NOTE	S.R.
2/15/13	CHANGE DETAIL NAME	H.P.

CITY OF CLEARWATER
ENGINEERING DEPARTMENT
STREET SECTIONS AND DETAILS

ACCESSIBLE PARKING STALL – DOUBLE

INDEX NO.	PAGE NO.
118	2 OF 2
LATEST REVISION	2/22/2016



Note:
1. Amount of fine is designated by county ordinance and shall be verified with Pinellas County prior to installation.

N.T.S.

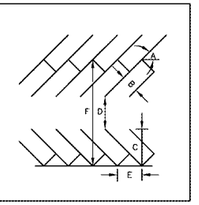
DATE	REVISION DESCRIPTION	APP
2/15/12	CHANGE DETAIL TITLE	H.P.
10/09	CHG. SIGN POST TYPE	H.P.

CITY OF CLEARWATER
ENGINEERING DEPARTMENT
STREET SECTIONS AND DETAILS

TYPICAL ACCESSIBLE PARKING SIGN

INDEX NO.	PAGE NO.
119	1 OF 1
LATEST REVISION	2/22/2016

A	B	C	D	E	F
0	8.0	8.0	12.0	23.0	28.0
45	9.0	19.5	13.0	12.7	52.0
50	9.0	20.0	14.0	11.7	54.0
60	9.0	20.5	18.0	10.4	59.0
70	9.0	20.0	19.0	9.6	59.0
80	9.0	19.5	24.0	9.1	63.0
90	9.0	18.0	24.0	9.0	60.0



A. Parking angle (Degrees)
B. Stall width (Feet)
C. Stall to curb (Feet)
D. Aisle width (Feet)
E. Curb length (Feet)
F. Min. overall double row with aisle between (Feet)

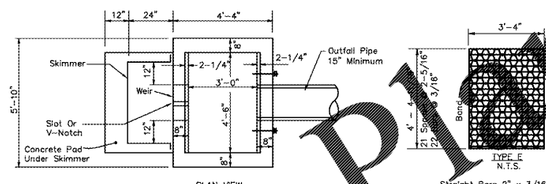
NOTES
1. All parking space striping to be white in color.
2. If a parking lot serves a use which generates 2,500 or more vehicle trips a day, such parking spaces shall be marked by white thermoplastic lines.
3. All City of Clearwater projects shall be in thermoplastic.

DATE	REVISION DESCRIPTION	APP
12/09	CHANGED NOTE NO. 2	T.E.

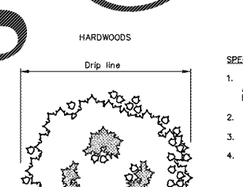
CITY OF CLEARWATER
ENGINEERING DEPARTMENT
STREET SECTIONS AND DETAILS

STANDARD PARKING STALL

INDEX NO.	PAGE NO.
120	1 OF 1
LATEST REVISION	2/22/2016

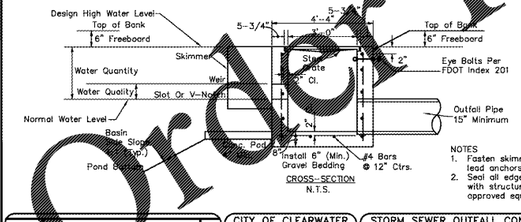


PLAN VIEW
N.T.S.



TYPE E
N.T.S.

Straight Bars 2" x 3/16"
Reticuline Bars 1–1/4" x 3/16"
Bands 1–1/2" x 1/4"
Approx. Weight 215 Lbs.



CROSS–SECTION
N.T.S.

NOTES
1. Fasten skimmer with 4 stainless steel bolts with lead anchors
2. Seal all edges of skimmer at contact points with structure with waterproof caulking or approved equal

DATE	REVISION DESCRIPTION	APP
6/16/15	REVISED DRAWING	S.R.

CITY OF CLEARWATER
ENGINEERING DEPARTMENT
STORM DETAILS

STORM SEWER OUTFALL CONTROL STRUCTURE
FDOT TYPE E INLET (MODIFIED)
WITH SLOT OR V–NOTCH (WET POND)

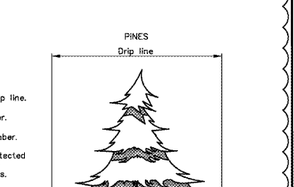
INDEX NO.	PAGE NO.
216	1 OF 1
LATEST REVISION	2/22/2016

N.T.S.

SPECIFICATIONS – WOOD BARRIER

1. Minimum radius to be protected:
   A. Hardwoods – 2/3 drip line
   B. Conifers & Sabal Palms – Entire drip line.
2. Uprights – No less than 2" X 2" lumber.
3. Horizontals – No less than 1" X 4" lumber.
4. Barriers shall be erected around all protected trees and palms, and inspected by city representative before construction begins.
5. Upright posts are to be at least 4 feet in length with a minimum of 1 foot anchored in ground and 3 feet above ground.
6. Barriers to remain in place until all paving, construction and heavy equipment is out of area.

Further information may be obtained from the Land Resource Specialist at 562–4741.



N.T.S.

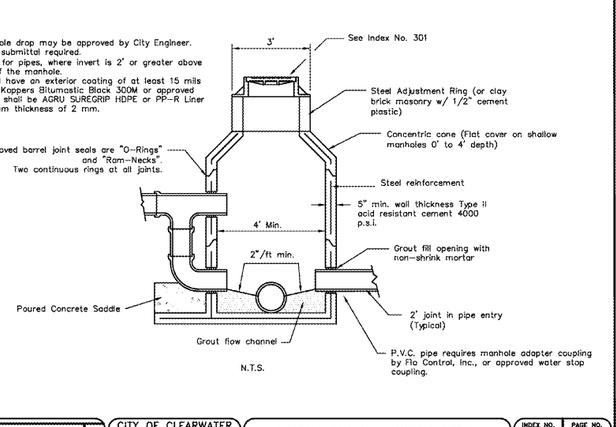
DATE	REVISION DESCRIPTION	APP
5/17/12	DEPARTMENT NAME	TLM

CITY OF CLEARWATER
ENGINEERING DEPARTMENT
LANDSCAPE DETAILS

TREE BARRICADES

INDEX NO.	PAGE NO.
909	1 OF 1
LATEST REVISION	2/22/2016

NOTES
1. Precast manhole drop may be approved by City Engineer. Shop drawing submittal required.
2. Drop required for pipes, where invert is 2' or greater above the bottom of the manhole.
3. Manholes shall have an exterior coating of at least 15 mils dry thickness Koppers Bitumastic Black 300M or approved equal. Interior shall be AGRU SUREGRIP HDPE or PP–R Liner with a minimum thickness of 2 mm.



N.T.S.

DATE	REVISION DESCRIPTION	APP
5/15/2012	REV. NOTES	DSR

CITY OF CLEARWATER
ENGINEERING DEPARTMENT
SANITARY SEWER DETAILS

PRECAST SANITARY MANHOLE DETAIL
OUTSIDE DROP

INDEX NO.	PAGE NO.
302	1 OF 1
LATEST REVISION	2/22/2016

Order Plans @ www.LDLine.com

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY BOWMAN CONSULTING SHALL BE WITHOUT LIABILITY TO BOWMAN CONSULTING.

Bowman
CONSULTING
Certificate of Authorization License No. 30482
Bowman Consulting Group, Ltd.
One Urban Centre
4830 W. Kennedy Blvd.
Suite 600
Tampa, FL 33609
Phone: (813) 509-2403
www.bowmanconsulting.com
© Bowman Consulting Group, Ltd.

CITY DETAILS
WAWA
COUNTRYSIDE BLVD & U.S. HWY 19
CLEARWATER, PINELLAS COUNTY
FLORIDA

SEAL
ERIK D. JULIANO LICENSE No. 68423 STATE OF FLORIDA PROFESSIONAL ENGINEER

ERIK D. JULIANO, P.E.
LICENSE NO. 68423
05/24/2017

PLAN STATUS

DATE	DESCRIPTION
02/10/17	FDOT ACCESS REVIEW
03/09/17	CITY REVIEW
05/16/17	CITY REVIEW

JM DESIGN	JM DRAWN	JM CHKD

SCALE AS SHOWN

JOB No. 010455–01–002

DATE 05/24/2017

FILE C–8.0 CITY DETAILS.DWG

SHEET C8.0

FDOT PERMIT (2017-A-799-007, 2017-D-799-005)
ROADWAY SECTION 15150 / SR No. 55, MP 22.117-22.182

C:\Users\jmartinez\Documents_Project Management\Projects\Wagner Property Group\Wawa -- US Hwy 19 N & Countryside Blvd, Clearwater, FL\Engineering Plans\C–8.0 CITY DETAILS.dwg