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CITY OF GROVELAND STANDARD DETAILS: STREET & DRAINAGE

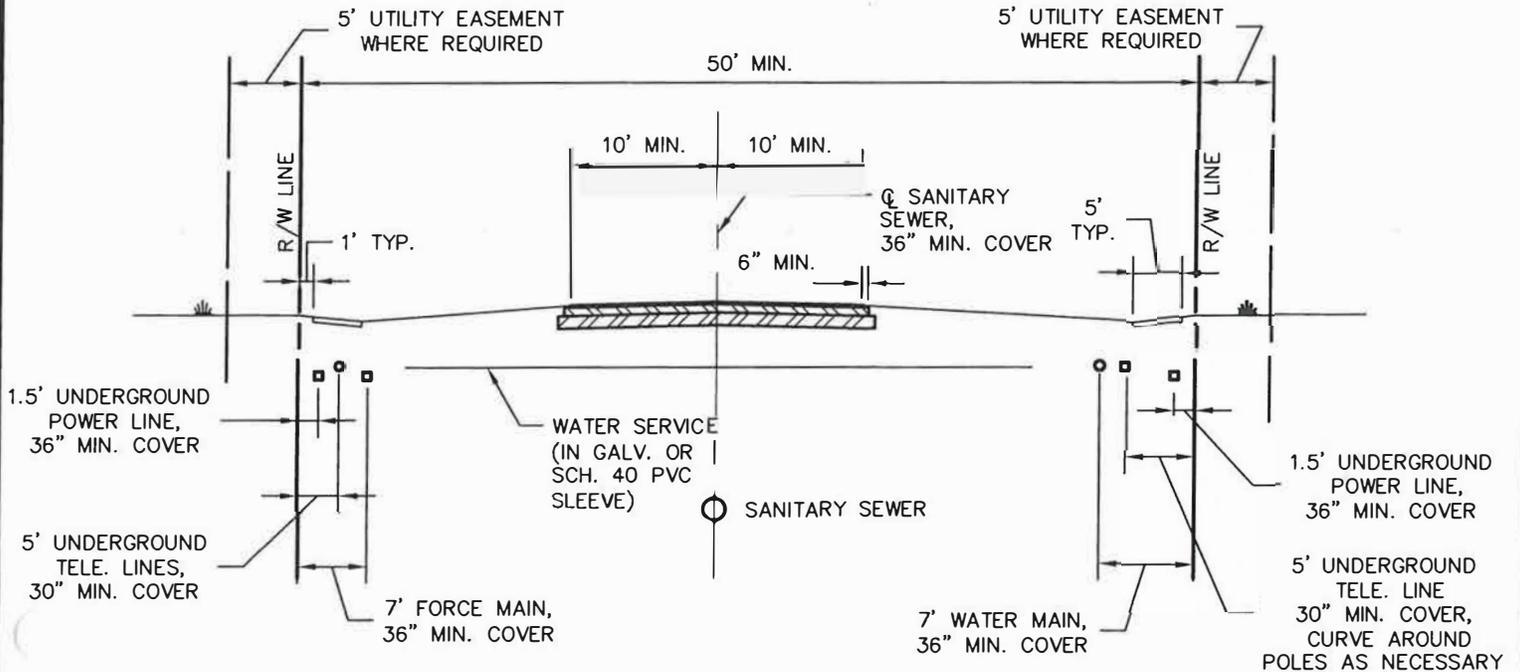


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LISTING OF STREET & DRAINAGE DETAILS

DATE: JULY 7, 2008
 SCALE: N.T.S.

D-LIST



NOTES:

1. SIDEWALKS SHALL BE A MINIMUM OF 5' WIDE AND 4" THICK, EXCEPT AT DRIVEWAYS WHERE THICKNESS SHALL BE 6".
2. ALL UTILITIES SHALL HAVE MARKER TAPE OR OTHER APPROVED MEANS OF IDENTIFICATION. REFER TO APPROPRIATE SECTION OF "CITY OF GROVELAND MANUAL OF STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE OF WATER AND SEWAGE SYSTEMS".
3. REFER TO APPROPRIATE SECTION OF "CITY OF GROVELAND MANUAL OF STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE OF WATER AND SEWAGE SYSTEMS", FOR SEWER AND WATER TRENCHING AND RESTORATION DETAILS, AND ELSEWHERE IN THESE DETAILS FOR OTHER UTILITIES TRENCHING AND RESTORATION.
4. FIRE HYDRANTS SHALL BE INSTALLED TO MINIMIZE THEIR VULNERABILITY TO TRAFFIC.

CITY OF GROVELAND STANDARD DETAILS: STREET & DRAINAGE

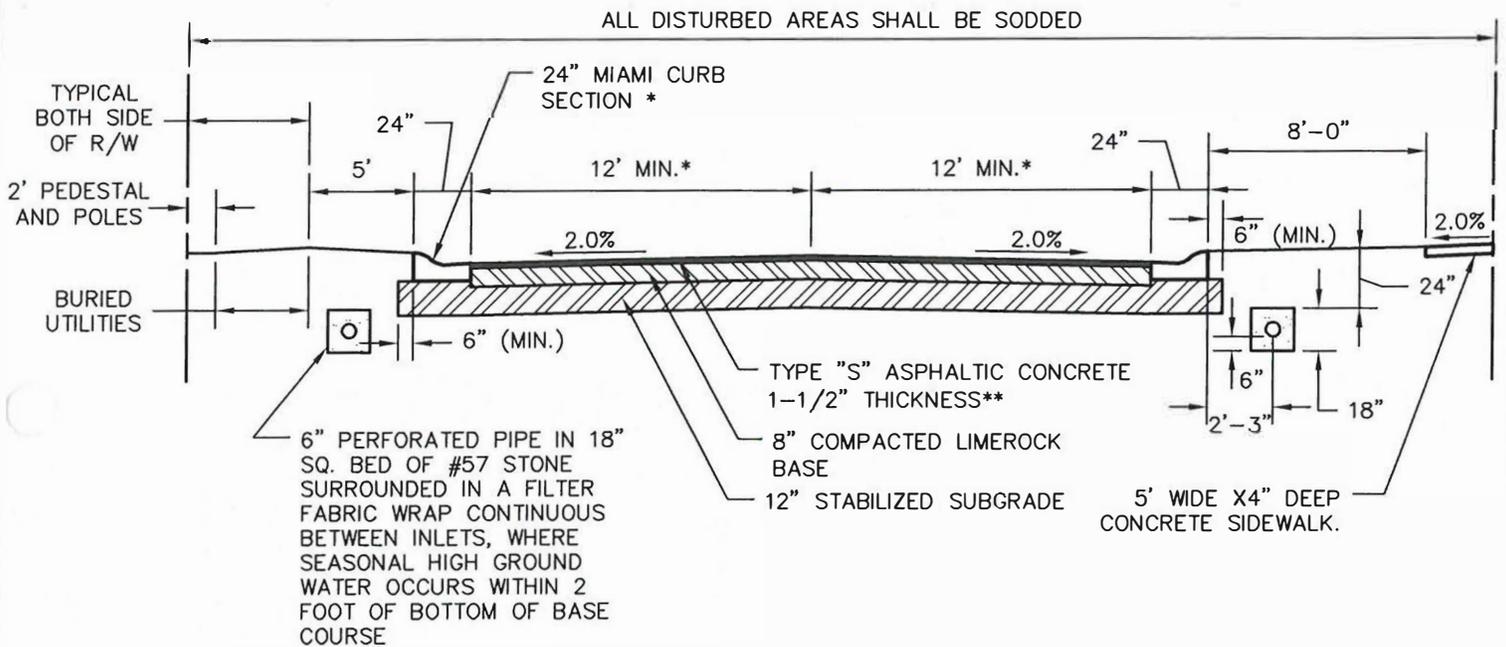


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RECOMMENDED UTILITIES LOCATIONS

DATE: JULY 7, 2008
 SCALE: N.T.S.

D-1



NOTES:-

- * UNLESS OTHERWISE APPROVED BY CITY
- ** TYPE "S" TO BE MINIMUM OF 2 INCH THICKNESS FOR COLLECTOR STREET
- *** REFER TO D-1 FOR RECOMENDED UTILITIES LOCATIONS

CITY OF GROVELAND STANDARD DETAILS: STREET & DRAINAGE

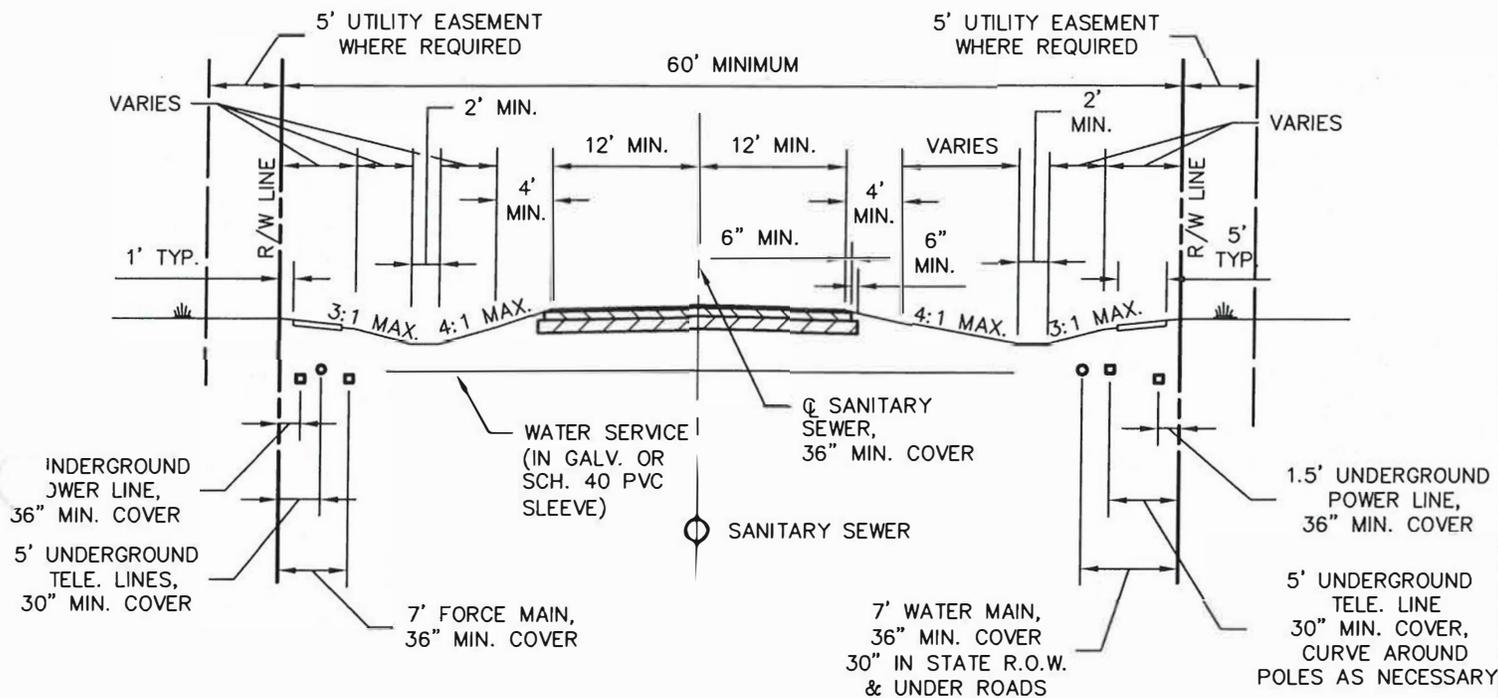


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**TYPICAL STREET SECTION
 WITH
 CURB & GUTTER**

DATE: JULY 7, 2008
 SCALE: N.T.S.

D-2



CITY OF GROVELAND STANDARD DETAILS: STREET & DRAINAGE

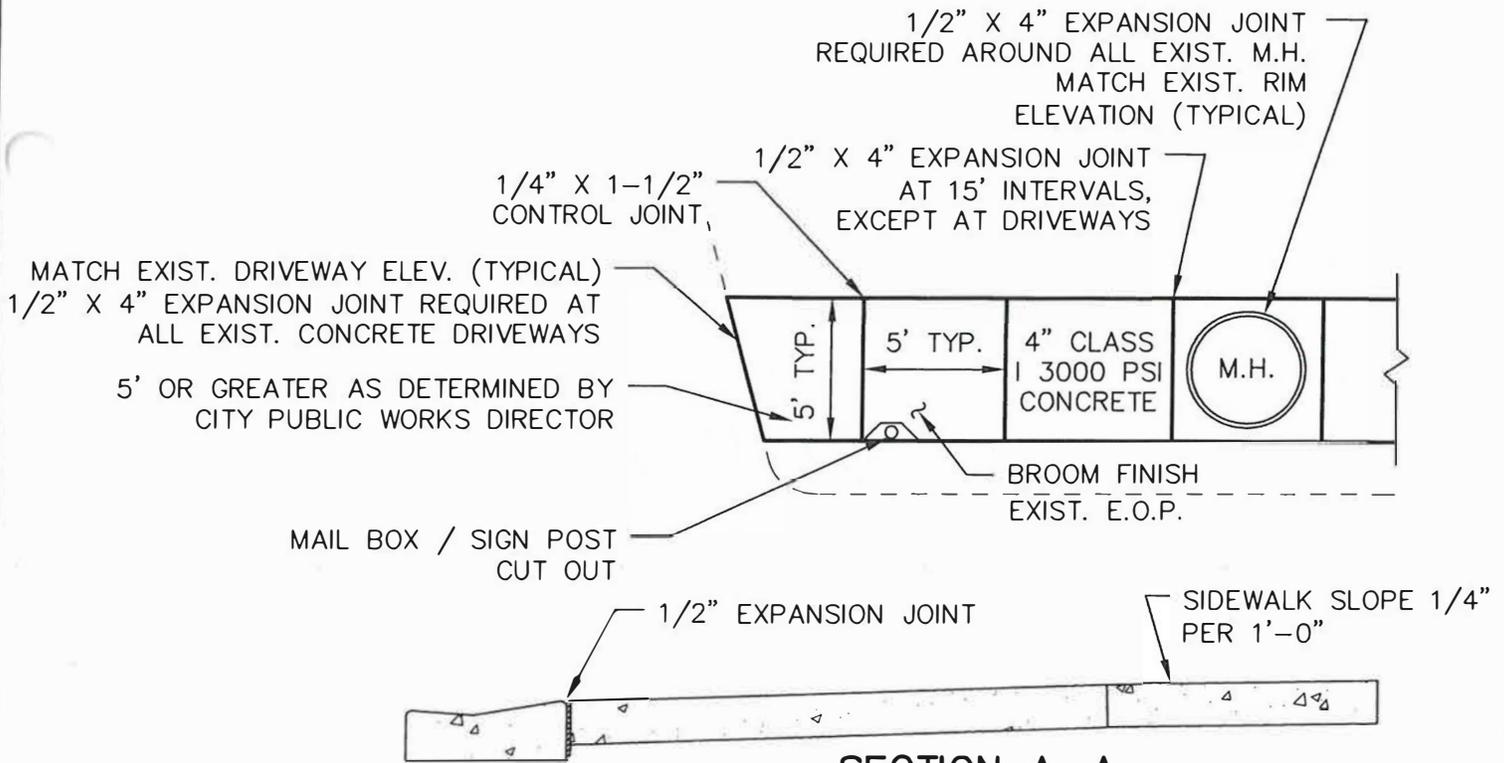


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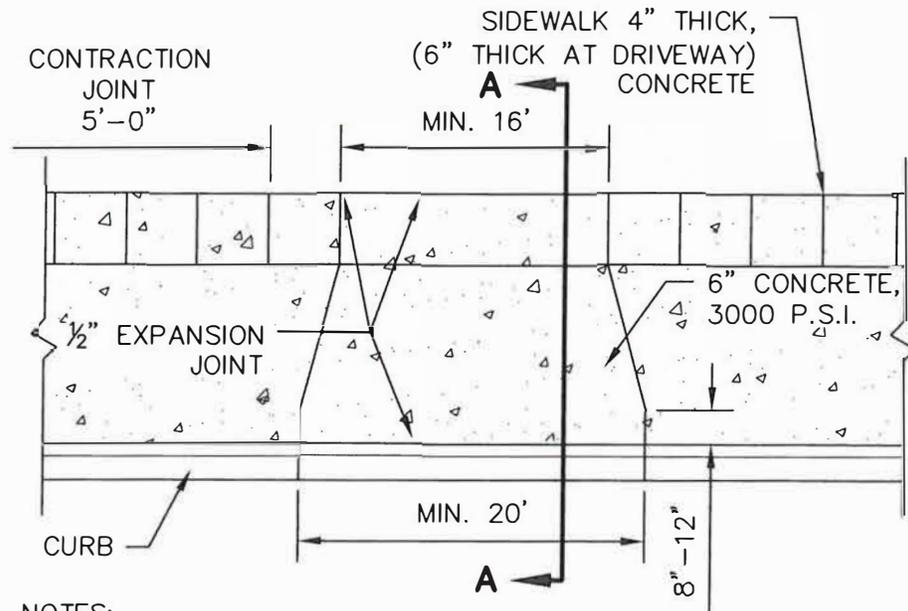
TYPICAL STREET RURAL SECTION (NON-GUTTERED)

DATE: JULY 7, 2008
 SCALE: N.T.S.

D-3



SECTION A-A



NOTES:

1. SIDEWALKS SHALL BE 4" THICK EXCEPT AT DRIVEWAYS WHERE THICKNESS SHALL BE 6".
2. SIDEWALK WIDTH SHALL BE 5 FEET UNLESS OTHERWISE DIRECTED BY CITY OF GROVELAND.
3. APRON WIDTH AT STREET SHALL BE A MINIMUM OF 2 FEET GREATER THAN DRIVEWAY WIDTH.
4. SIDEWALKS TO MATCH DRIVEWAY ELEVATIONS.

CITY OF GROVELAND STANDARD DETAILS: STREET & DRAINAGE

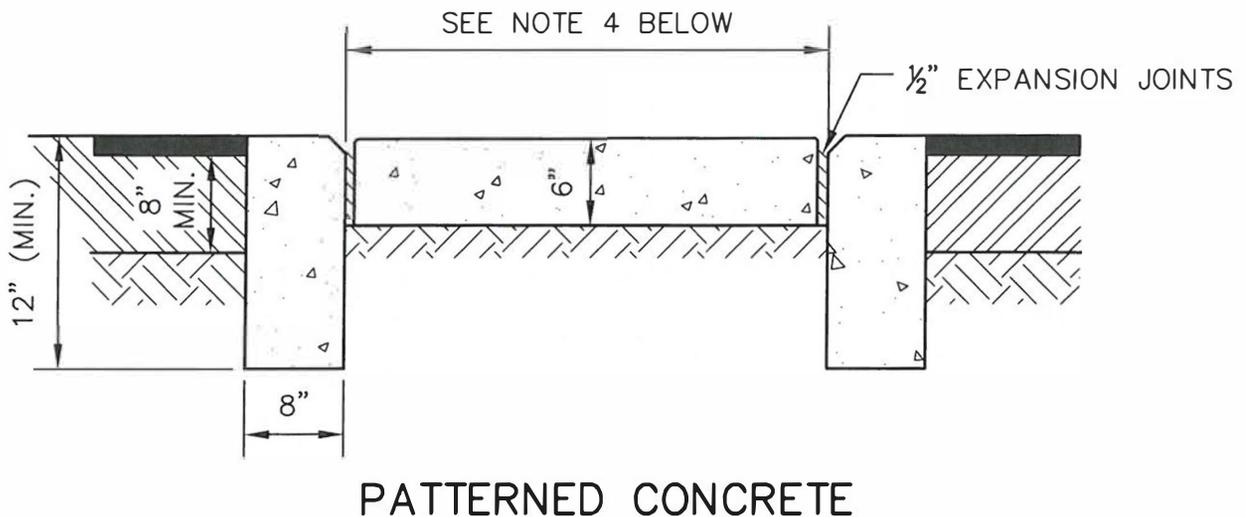
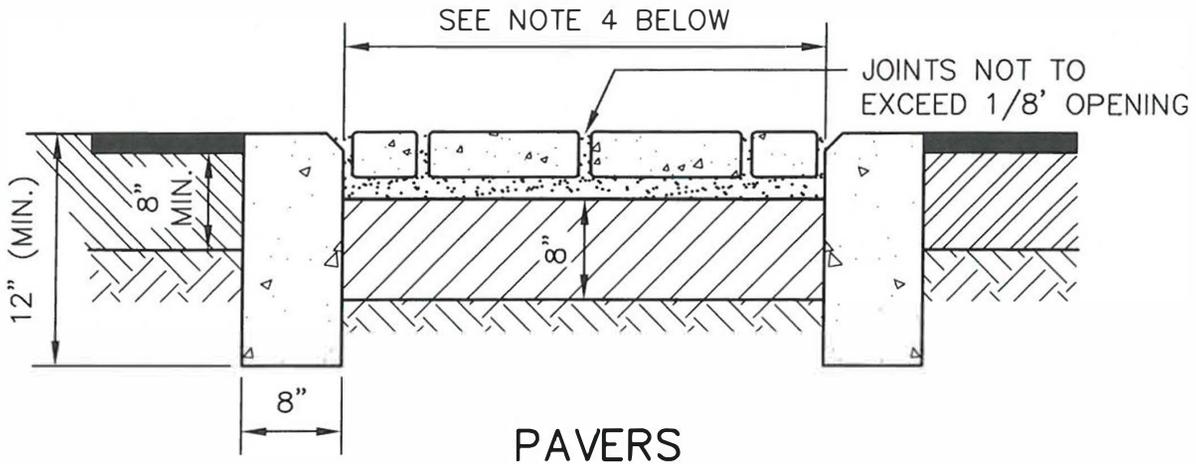


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**RESIDENTIAL SIDEWALK
& DRIVEWAY**

DATE: JULY 7, 2008
SCALE: N.T.S.

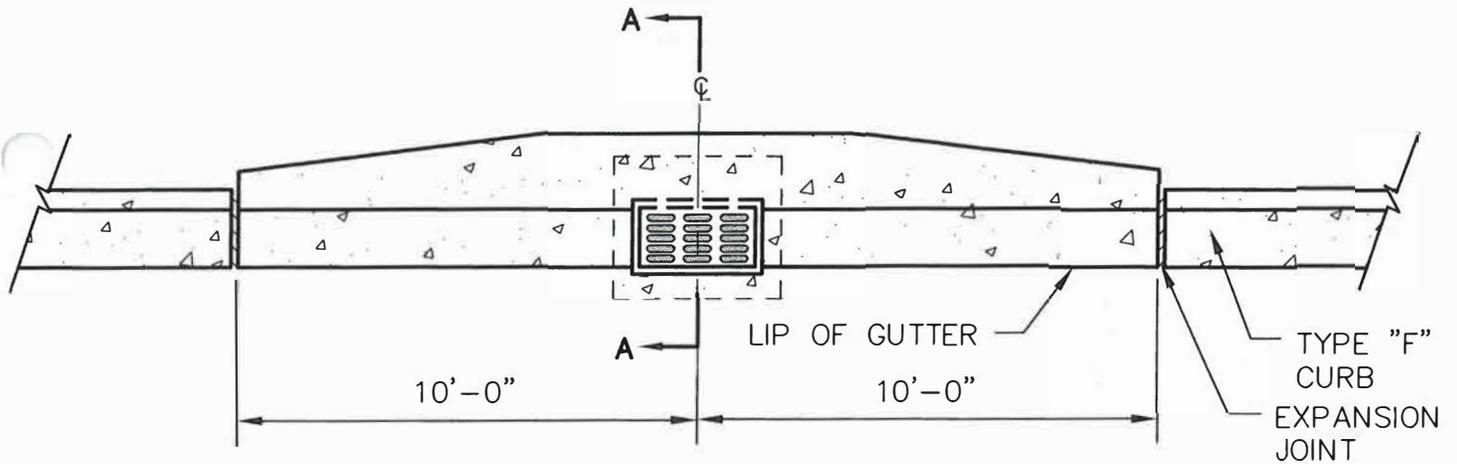
D-4



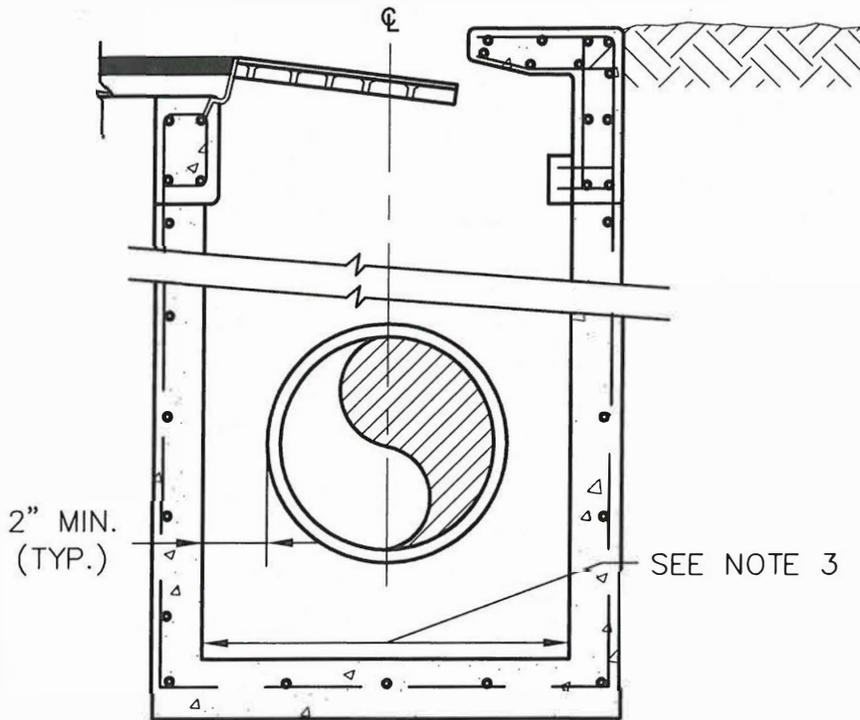
NOTES:

1. WHEEL CHAIR RAMPS SHALL BE PROVIDED WHERE CROSSWALK MEETS SIDEWALKS AND CURBS.
2. PAVERS SHALL BE 3-1/8" MINIMUM THICKNESS BEDDED IN 1-1/2" MINIMUM OF SAND OR CRUSHED STONE SCREENINGS.
3. CONCRETE AND PAVER PATTERN AND COLOR SHALL BE DETERMINED BY CITY OF GROVELAND.
4. MINIMUM WIDTH OF CROSSWALKS SHALL BE 5 FEET.
5. SEE STREET SECTIONS FOR BASE AND SUB-BASE REQUIREMENTS.

CITY OF GROVELAND STANDARD DETAILS: STREET & DRAINAGE



PLAN



SECTION "A-A"

NOTES:

1. CURB INLET TOPS SHALL BE FDOT TYPE 5 OR TYPE 6. (TYPE 6 SHOWN). FRAME AND COVER SHALL BE STEEL MEETING ASTM A-36 OR CAST IRON, CLASS No. 30 IN ACCORDANCE WITH ASTM A-48.
2. PRECAST STRUCTURES SHALL BE FDOT TYPE P OR J AND MAY BE CIRCULAR, SQUARE OR RECTANGULAR, WALL THICKNESS AND REINFORCEMENT SHALL BE IN ACCORDANCE WITH ASTM C-478.
3. MINIMUM INSIDE DIMENSIONS SHALL BE 4' DIAMETER FOR CIRCULAR AND 3'-6" FOR SQUARE OR RECTANGULAR.
4. ALTERNATE DRAINAGE INLET DESIGNS MAY BE PROPOSED BY ENGINEER.

CITY OF GROVELAND STANDARD DETAILS: STREET & DRAINAGE

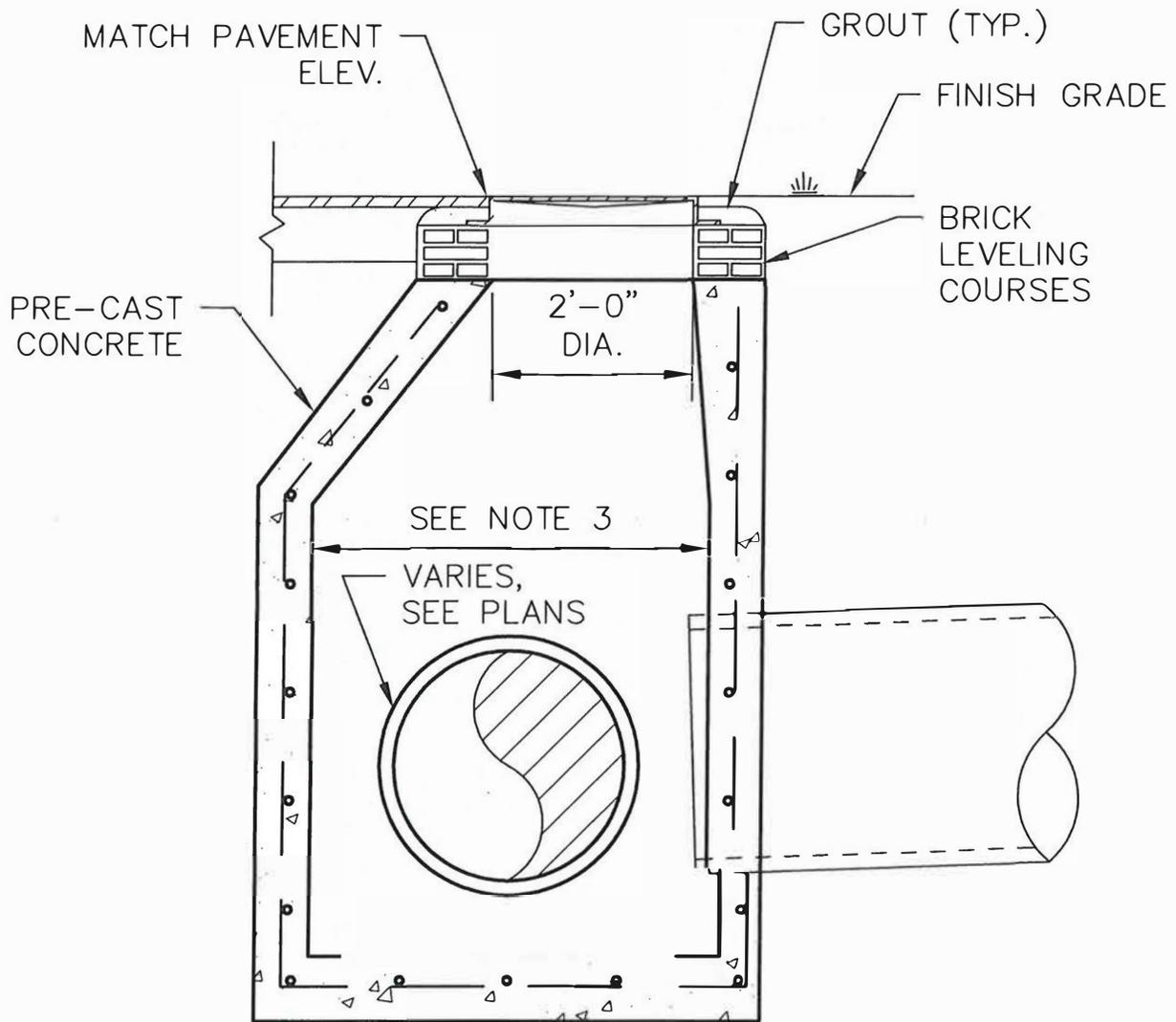


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CURB DRAINAGE INLET

DATE: JULY 7, 2008
 SCALE: N.T.S.

D-7



NOTES:

1. PRECAST CONCRETE SHALL COMPLY WITH ASTM C-478.
2. FRAME AND COVER SHALL BE NON-ROCKING, HEAVY DUTY AND SUITABLE FOR HIGHWAY TRAFFIC. COVER SHALL BE IDENTIFIED "STORM SEWER".
3. MINIMUM INSIDE DIMENSIONS SHALL BE 4' DIAMETER FOR CIRCULAR AND 3'-6" FOR SQUARE OR RECTANGULAR.
4. PROPERLY SHAPED SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS TO PROVIDE FOR SMOOTH FLOWS.

CITY OF GROVELAND STANDARD DETAILS: STREET & DRAINAGE

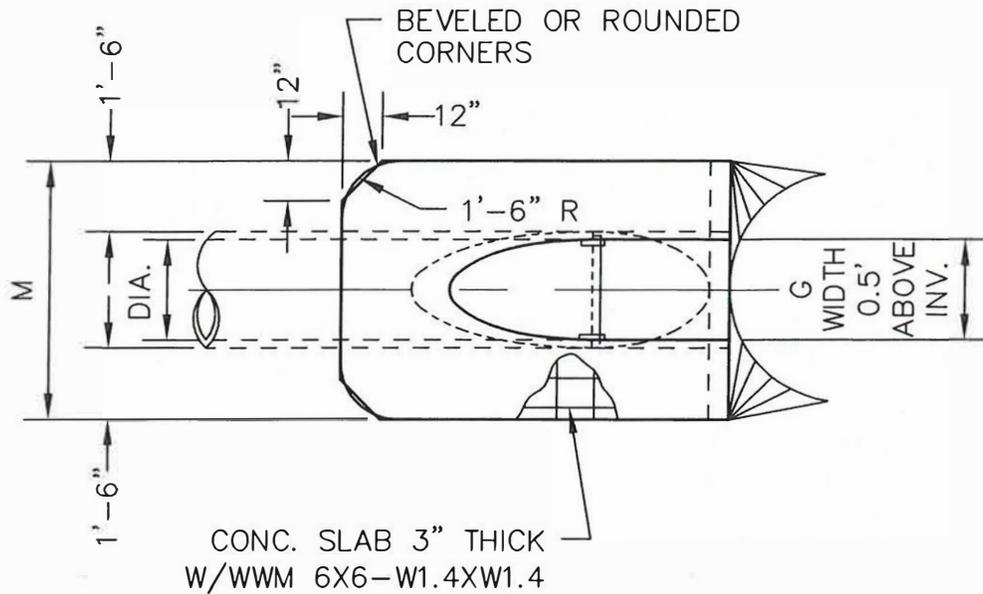


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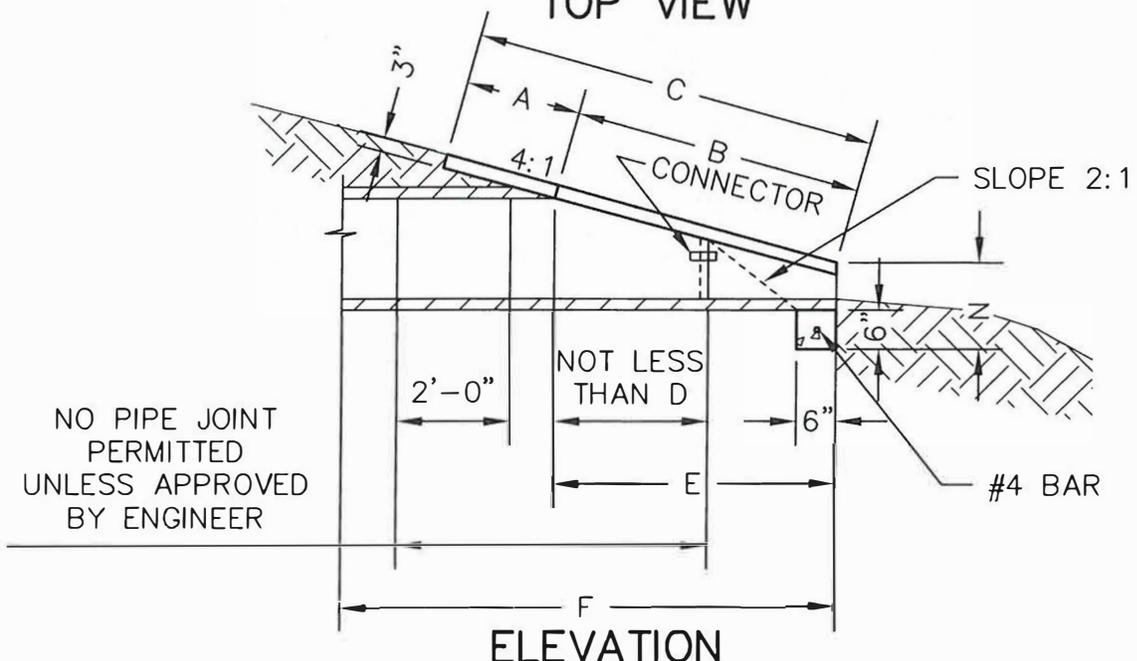
STORM SEWER MANHOLE

DATE: JULY 7, 2008
 SCALE: N.T.S.

D-8



TOP VIEW



REF. F.D.O.T. INDEX No. 272, INCLUDING VARIATIONS FOR MULTIPLE PIPES & ELLIPTICAL PIPES.

| DIA. | A | B | C | E | F | G | M | N |
|------|-------|-------|-------|-------|--------|-------|-------|-------|
| 18" | 1.97' | 2.74' | 4.71' | 2.56' | 6.00' | 1.41' | 4.92' | 1.21' |
| 24" | 2.06' | 3.85' | 5.91' | 3.56' | 7.00' | 1.73' | 5.50' | 1.25' |
| 30" | 2.15' | 4.95' | 7.10' | 4.56' | 8.00' | 2.00' | 6.08' | 1.29' |
| 36" | 2.25' | 6.08' | 8.33' | 5.56' | 9.00' | 2.24' | 6.67' | 1.33' |
| 42" | 2.34' | 7.21' | 9.55' | 6.56' | 10.00' | 2.45' | 7.25' | 1.38' |

CITY OF GROVELAND STANDARD DETAILS: STREET & DRAINAGE



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MITERED END SECTION

DATE: JULY 7, 2008
 SCALE: N.T.S.

D-9

SIDEWALK RAMP SHALL HAVE DETECTABLE WARNINGS PER FDOT STANDARD INDEX 304. SEE "FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION", LATEST EDITION.

FOR SIGN DETAILS SEE SHEET D-11

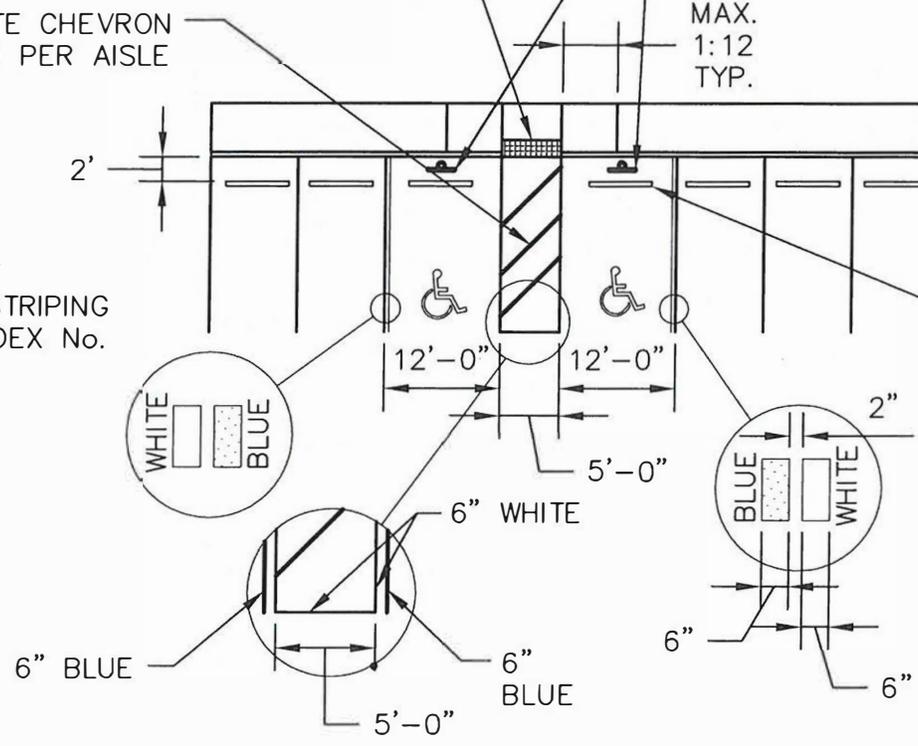
3-6" WHITE CHEVRON EQUALLY SPACED PER AISLE

MAX. 1:12 TYP.

5' MIN.

NOTE: PAVEMENT MARKINGS AND STRIPING AS PER FDOT INDEX No. 17346.

SEE NOTE 7 SHEET D-11



FACE OF CURB OR EDGE OF PAVEMENT

10'

3' OR 5' SQUARE

WHITE ON BLUE BACKGROUND

3' OR 5' SQUARE

MANDATORY

CITY OF GROVELAND STANDARD DETAILS: STREET & DRAINAGE

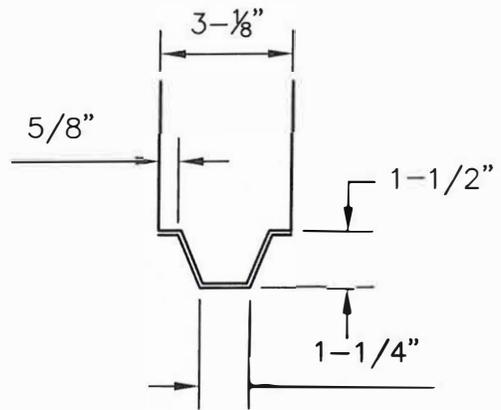
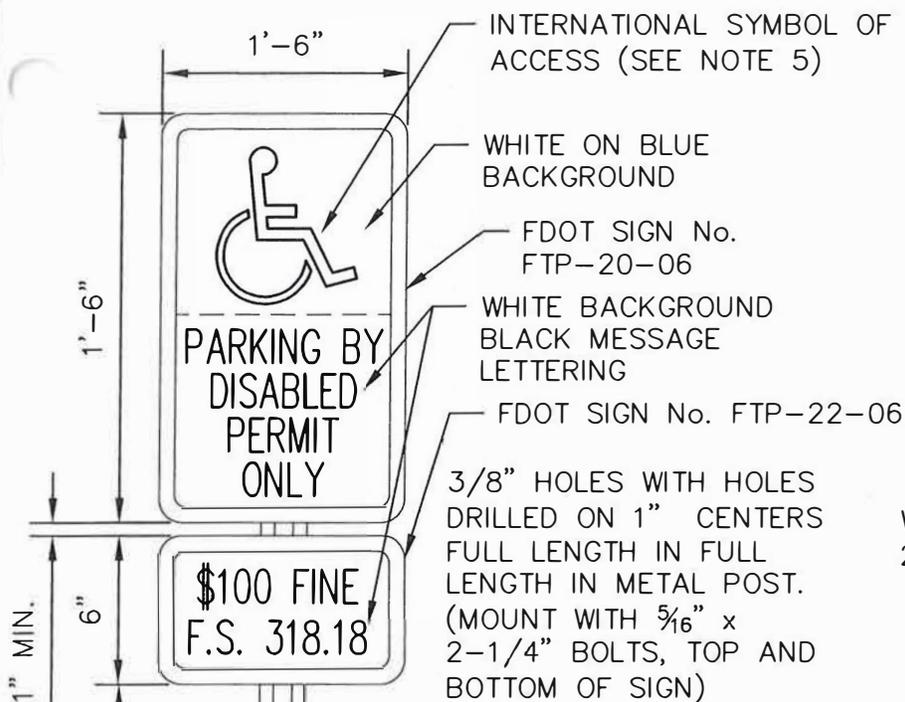


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DISABLED PARKING & MARKING
TYPICAL DETAILS

DATE: JULY 7, 2008
 SCALE: N.T.S.

D-10



**SECTION A-A
METAL POST**

WT. OF BLANK POST SHALL BE 2-2 1/2" #/FT.

NOTES:

1. METAL POST TO BE GALVANIZED. ALL BOLTS, NUTS, WASHERS AND SCREWS MUST BE RUSTPROOF.
2. CONCRETE FOR FOOTING SHALL BE PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 P.S.I.
3. SIGNS WILL BE FABRICATED BY USING REFLECTING COATING IN THE SYMBOL, MESSAGE AND BORDER APPLIED TO A SHEET ALUMINUM BACKING (.080) IN THICKNESS.
4. MESSAGE LETTERING SHALL BE UPPER CASE (BLCK) (SERIES C) 1.5" HIGH IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
5. THE SYMBOL IS COMPOSED OF TWO ELEMENTS, A WHITE WHEELCHAIR FIGURE (WHICH SHOULD ALWAYS FACE RIGHT) ON A SQUARE BACKGROUND, INTERNATIONAL BLUE IN COLOR (FED. STD. 595A, COLOR #15180).
6. SIGN POST SHALL BE MIN. 2'-0" CLEAR FROM BACK OF CURB.
7. THE USE OF PROPERLY LOCATED BOLLARDS IN ACCESSIBLE PARKING SPACES ARE ACCEPTABLE SUBSTITUTES FOR REGULAR BUMPER GUARD.
8. MINIMUM NUMBER OF ACCESSIBLE PARKING SPACES SHALL BE PER FLORIDA ACCESSIBILITY BUILDING CODE, CURRENT EDITION.

SIGN DETAIL

CITY OF GROVELAND STANDARD DETAILS: STREET & DRAINAGE



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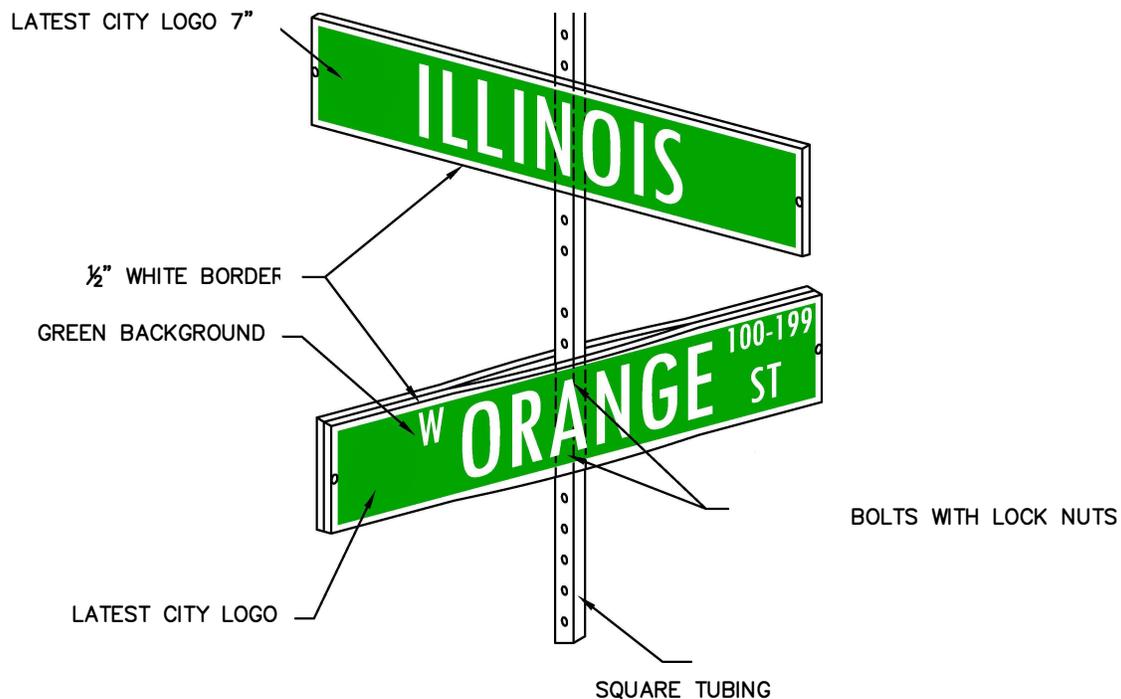
**DISABLED PARKING &
SIGNING
TYPICAL DETAILS**

DATE: JULY 7, 2008
SCALE: N.T.S.

D-11

STREET NAMES SIGNS (SEE ILLUSTRATION BELOW)

1. SIGN BLANKS .063 GAUGE ALUMINUM, CHEMICALLY TREATED TO MEET ATSM B449 STANDARD (PRETREATMENT FOR PAINT OR REFLECTIVE SHEETING) DIMENSIONS ARE TO BE 9"X24" MINIMUM / 54" MAXIMUM LENGTH. COLOR: THE BACKGROUND SHALL BE HIGH INTENSITY PRISMATIC OR GREATER WHITE SHEETING, WITH GREEN TRANSPARENT OVERLAY FILM.
2. LEGEND/LETTERING: ½" INCH WHITE BORDER, ½" FROM THE EDGE. STREET NAMES SHALL BE 6" SERIES B LETTER. THE ABBREVIATED SUFFIX "RD", "AV". "DR". ETC. SHALL BE 4" SERIES B. DISTRICT NUMBER IN THE UPPER RIGHT CORNER OF SIGN SHALL BE 1½" SERIES B.
3. MOUNTING: MOUNTING SHALL BE TWO SINGLE-SIDED SIGNS WITH ATTRIBUTES ABOVE, MOUNTED BACK TO BACK ON GALVANIZED SQUARE TUBING. NO EDGE-CLAMPING STYLE MOUNTING BLOCKS ARE TO BE USED.



REGULATORY AND WARNING SIGNAGE:

1. SIGN BLANKS FOR REGULATORY AND WARNING ARE TO BE .080 GAUGE.
2. MATERIAL/SIGN BLANKS/& FACINGS: WITH THE EXCEPTION OF THE STREET NAME SIGNS (ABOVE) ALL SIGNS SHALL CONFIRM IN COLOR, SIZE, LEGEND AND LOGO WITH SPECIFICATIONS IN THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). STOP SIGNS SHALL BE 30" X 30" MINIMUM HIGH INTENSITY PRISMATIC SHEETING OR GREATER. SHEETING FOR ALL SIGNS SHALL BE HIGH INTENSITY PRISMATIC OR GREATER.
3. PLACEMENT SPECIFICATIONS: PLACEMENT SHALL BE ACCORDANCE WITH THE MUTCD (SECTIONS 2A-21 THROUGH 2A-27) WITH RESPECT TO OFFSET FROM EDGE OF ROAD, HEIGHT, ETC. POLES SHOULD BE BURIED TO A MINIMUM DEPTH OF 2½' (30"), ALLOWING 7' TO BOTTOM OF SIGN FROM THE LEVEL OF TRAVELED ROADWAY. POLES ARE NOT TO BE CONCRETED IN PLACE.
4. POLES: SIGN POSTS SHALL BE SQUARE TUBE, NOT LESS THAN 12' IN LENGTH (14' OR 16' FOR SEVERE SHOULDER DROP-OFFS), WITH MINIMUM 1¾" GALVANIZED STEEL, MINIMUM 14 GAUGE, DRILLED ½" HOLES ON 1" CENTERS FULL LENGTH.

CITY OF GROVELAND STANDARD DETAILS: STREET & DRAINAGE

REVISED AUGUST 13, 2018
SCALE: N.T.S.