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\*ALL DETAILS SHALL REFERENCE BROWARD COUNTY AND FDOT STANDARD SPECIFICATIONS

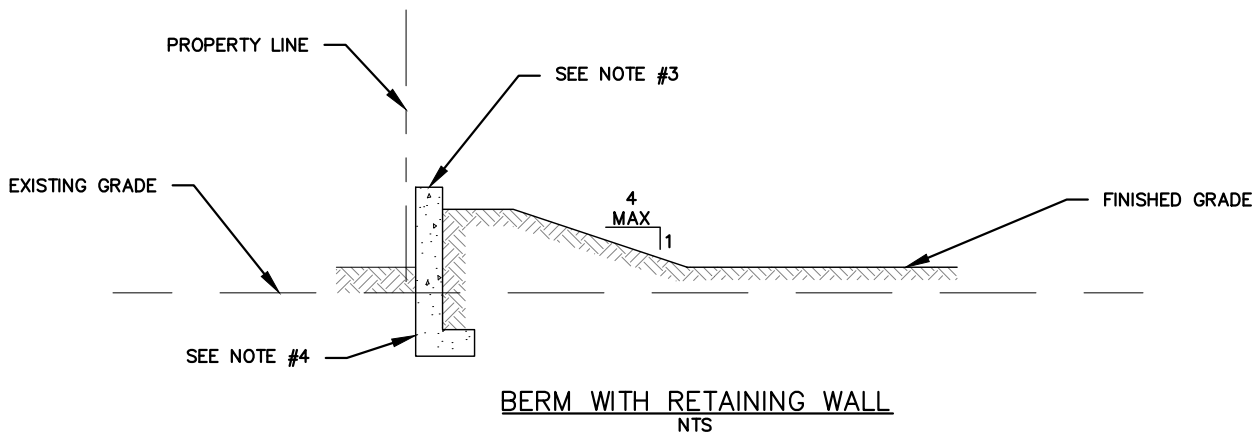
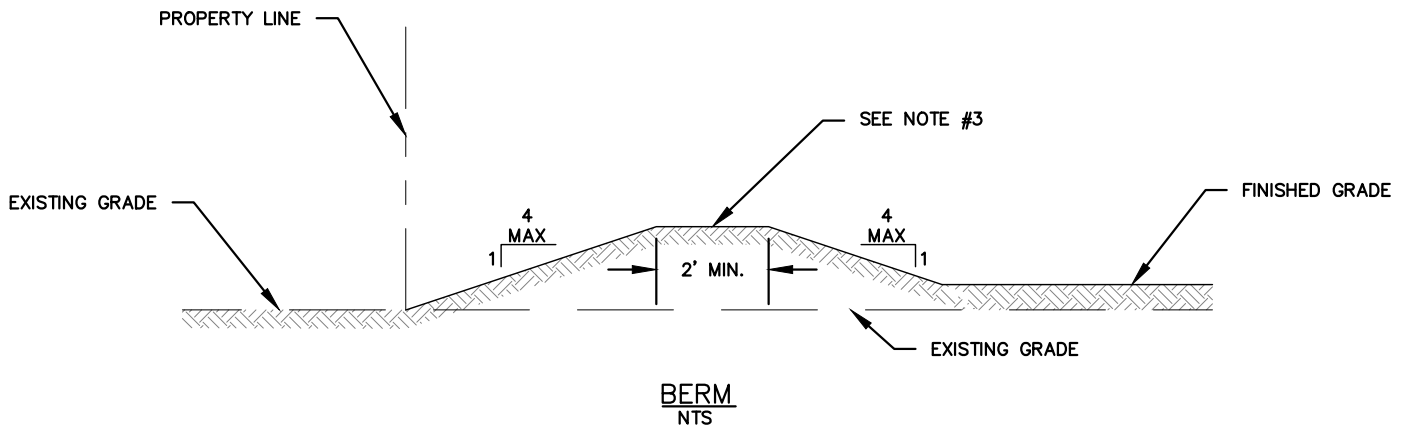
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CITY OF MARGATE, FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
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**DETAIL INDEX- NON UTILITY**



**NOTES:**

1. BERM TO BE CONSTRUCTED OF SUITABLE FILL MATERIAL. NO MUCK OR OPEN GRADED SILICA (SUGAR) SAND WILL BE ACCEPTABLE.
2. BERM TO BE COMPACTED TO 92% DENSITY AND SODDED OR STABILIZED IN AN APPROVED METHOD TO PREVENT EROSION.
3. TOP OF BERM OR WALL TO BE CONSTRUCTED TO A MINIMUM ELEVATION EQUAL TO THE PROJECTED 25 YEAR EVENT STORM.
4. RETAINING WALL AND FOOTER TO BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF FLORIDA. SHAPE AND DESIGN TO BE DETERMINED BY ENGINEER OF RECORD. ALL ASPECTS OF RETAINING WALL, INCLUDING ENTIRE FOOTER/FOUNDATION, SHALL BE SITUATED COMPLETELY WITHIN PRIVATE PROPERTY.

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**TYPICAL PERIMETER  
BERM DETAILS**

**G-28**

#### EROSION AND SEDIMENT CONTROL

1. CONTRACTOR TO EMPLOY BEST MANAGEMENT PRACTICES THROUGHOUT CONSTRUCTION IN ORDER TO ENSURE POLLUTION PREVENTION. CONTRACTOR TO COMPLY WITH ALL LOCAL STATE AND OTHER GOVERNMENTAL ENVIRONMENTAL REGULATIONS THROUGHOUT CONSTRUCTION.
2. DURING CONSTRUCTION ALL CATCH BASIN INLETS SHALL BE PROTECTED TO PREVENT SEDIMENT AND DEBRIS FROM ENTERING THE CATCH BASIN.
3. SILT FENCES SHALL BE INSTALLED AS NECESSARY TO CONTROL OR PREVENT DISCHARGE OF SEDIMENT ONTO ADJACENT UNDISTURBED AREAS, OR OFF-SITE AREAS.
4. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE STABILIZED WITHIN A REASONABLE PERIOD OF TIME TO ASSURE MINIMUM EROSION OF SOILS.
5. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
6. ALL EXPOSED AREAS SHALL BE SODDED AS SPECIFIED WITHIN 30 DAYS OF FINAL GRADING.
7. MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN AND AT LEAST ONCE A WEEK.
8. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE.
9. CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
10. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY CITY, COUNTY, AND STATE OF FLORIDA ON SITE INSPECTION, AT NO ADDITIONAL COST TO THE OWNER.
11. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES.
12. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
13. BURNING OF DEBRIS WILL NOT BE ALLOWED.
14. CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
15. CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIER (HAY BALES OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATER WAYS. IN ADDITION CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL ON GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT SITE IF IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES IF EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC. THE CONTRACTOR IS TO REMOVE AND CLEAN SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES. EROSION CONTROL BARRIER SHALL BE ESTABLISHED AS THE FIRST ITEM OF WORK.
16. THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S STORMWATER PERMITTING PROGRAM APPLIES TO ALL CONSTRUCTION ACTIVITY THAT: 1) CONTRIBUTE STORMWATER DISCHARGES TO SURFACE WATER OF THE STATE OR INTO A MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4); 2) DISTURBS ONE OR MORE ACRES OF LAND; OR 3) LESS THAN ONE ACRE IS INCLUDED IF THE ACTIVITY IS PART OF A LARGER COMMON PLAN OF DEVELOPMENT THAT WILL MEET OR EXCEED THE ONCE ACRE THRESHOLD. DISTURB INCLUDES CLEARING, GRADING AND EXCAVATING.
17. FOR CONSTRUCTION ACTIVITY THAT IS SUBJECT TO THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S STORMWATER PERMITTING PROGRAM, THE CONTRACTOR SHALL:
  - 17.1.1. OBTAIN A GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION DOCUMENT 62-621.300(4)(A).
  - 17.1.2. COMPLY WITH ALL REQUIREMENTS OF THE GENERIC PERMIT.
  - 17.1.3. DEVELOP AND IMPLEMENT A STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
  - 17.1.4. COMPLETE A NOTICE OF INTENT (NOI) FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION FORM 62-621.300(4)(B) IN ITS ENTIRETY USING THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S WEBSITE.
18. SUBMIT COPIES OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND THE NOTICE OF INTENT (NOI) TO THE ENGINEER AS INFORMATIONAL RECORDS. THESE SUBMITTALS WILL NOT BE REVIEWED BY THE ENGINEER.
19. CONTRACTOR TO CLEAN AND REPAIR ALL EXISTING STORMWATER INFRASTRUCTURE THAT IS IMPACTED BY CONSTRUCTION ACTIVITIES, BEFORE LEAVING THE JOBSITE.
20. CONTRACTOR TO REMOVE ALL FILTER FABRIC AND POLLUTION PREVENTION ITEMS BEFORE THE FINAL WALK-THROUGH.
21. CONTRACTOR TO USE SEDIMENT TANK IF AVAILABLE WHEN DEWATERING.

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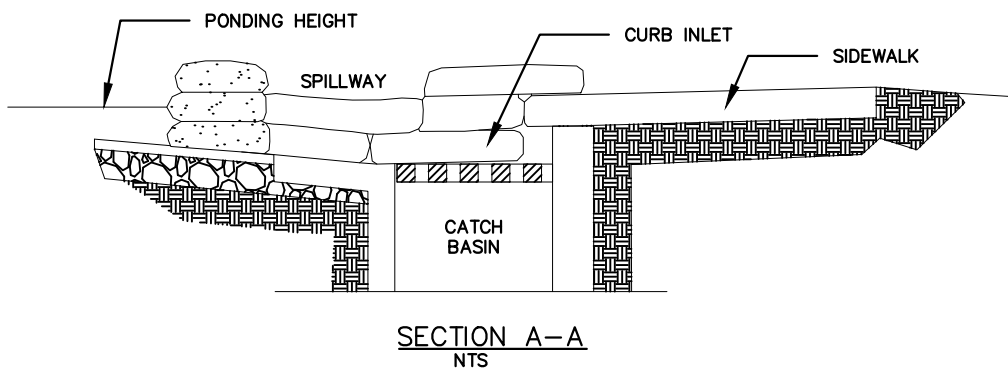
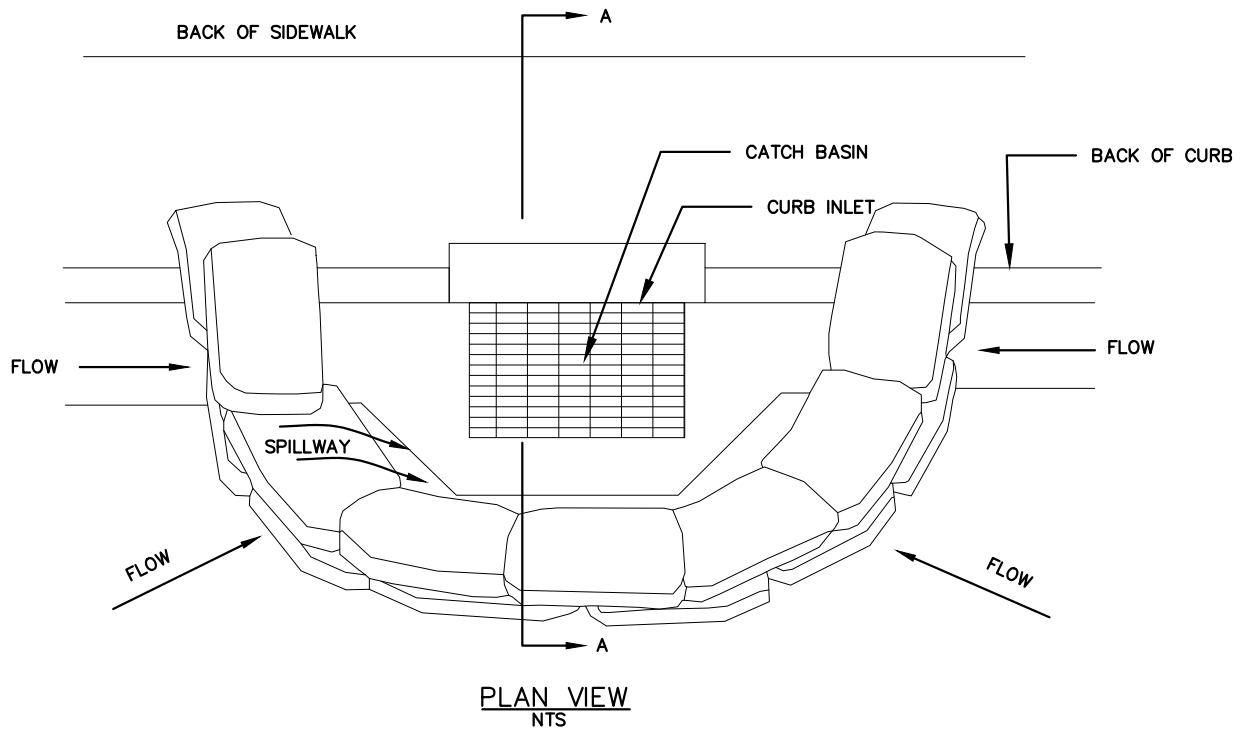
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## STORMWATER POLLUTION PREVENTION NOTES SHEET 1 OF 11

G-29A



**NOTES:**

1. PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREET SEGMENTS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. SANDBAGS, OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC, ARE FILLED WITH GRAVEL, LAYERED AND PACKED TIGHTLY.
3. LEAVE ONE SANDBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY FOR OVERFLOW.
4. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

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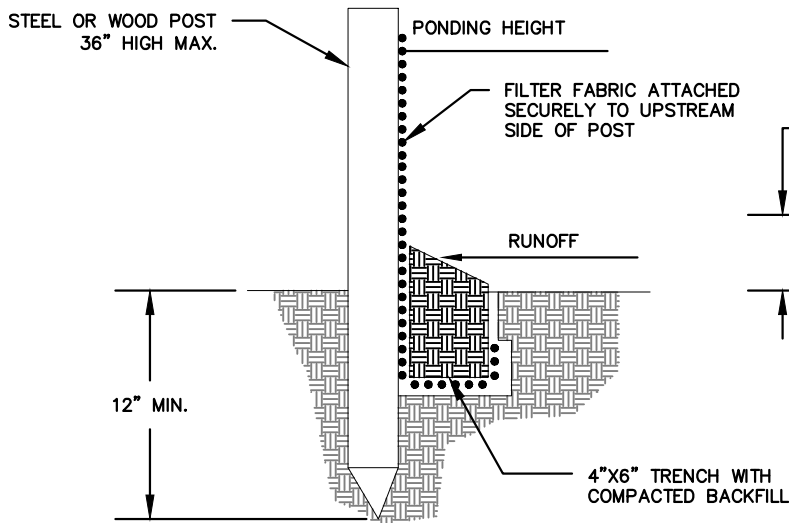
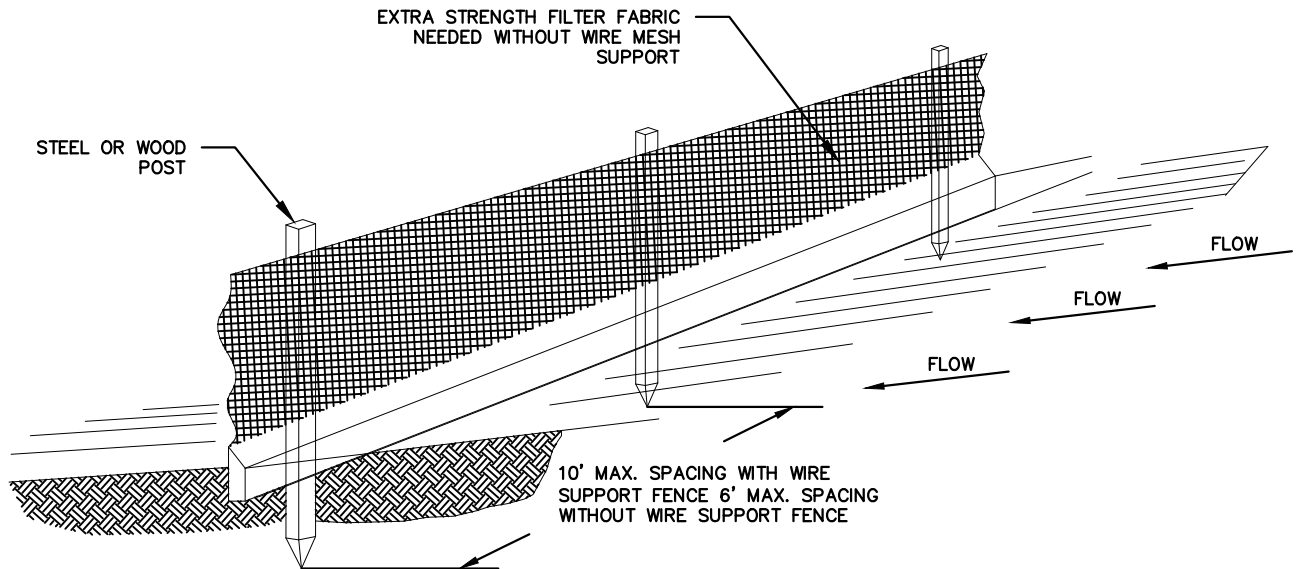
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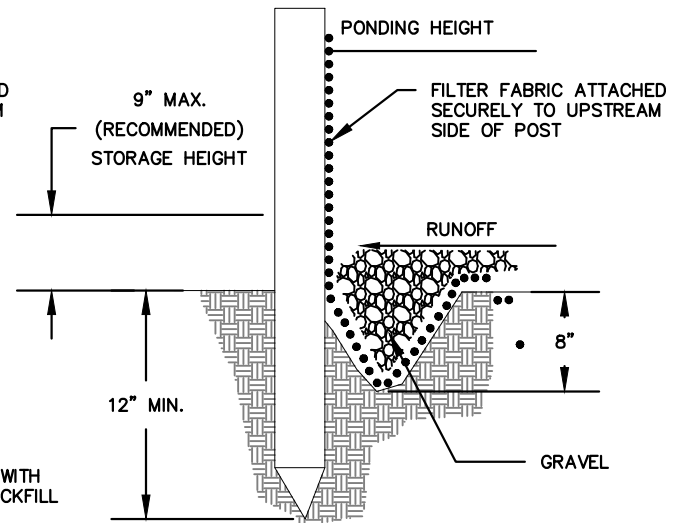
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**STORMWATER POLLUTION  
PREVENTION - CURB INLET  
SEDIMENT BARRIER SHEET 2 OF 11**

**G-29B**



STANDARD DETAIL  
TRENCH WITH NATIVE BACKFILL



ALTERNATE DETAIL  
TRENCH WITH GRAVEL

NOTE:

1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

DATE: 12/24

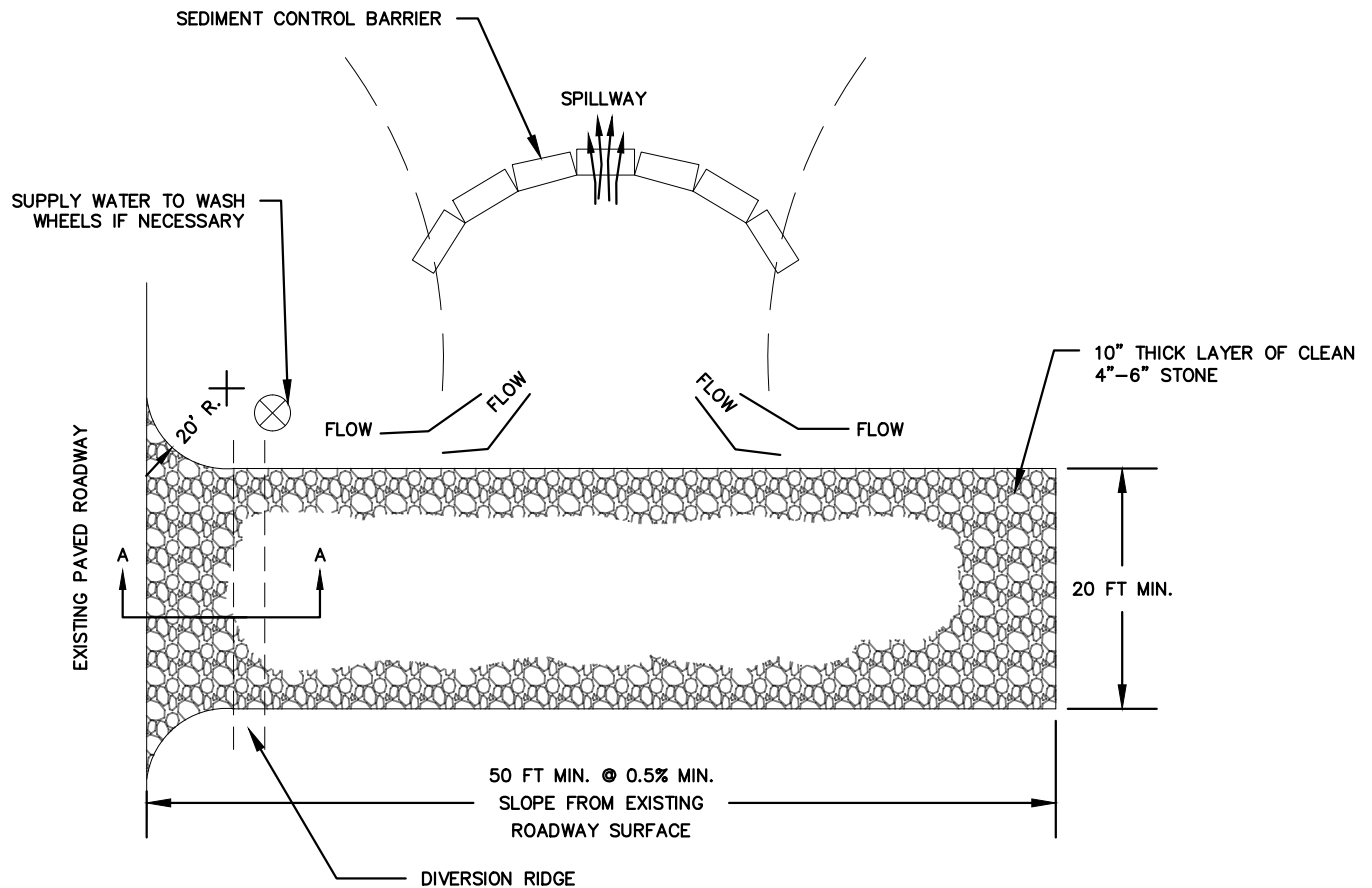
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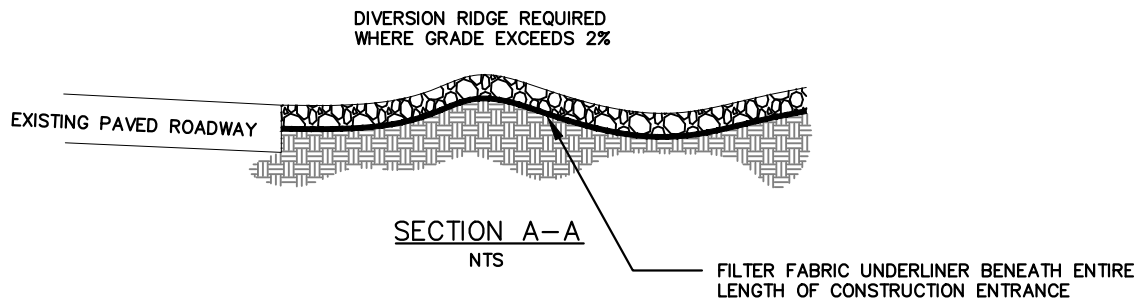
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DEPARTMENT OF ENVIRONMENTAL  
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**STORMWATER POLLUTION  
PREVENTION - SILT FENCE  
SHEET 3 OF 11**

**G-29C**



PLAN VIEW



NOTES:

1. USE SANDBAGS, STRAW BALES OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BASIN AS REQUIRED.
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
3. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
4. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

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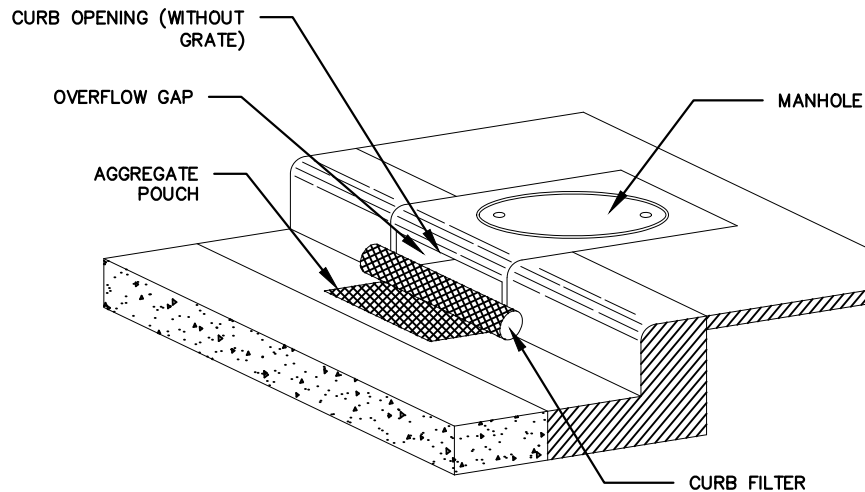
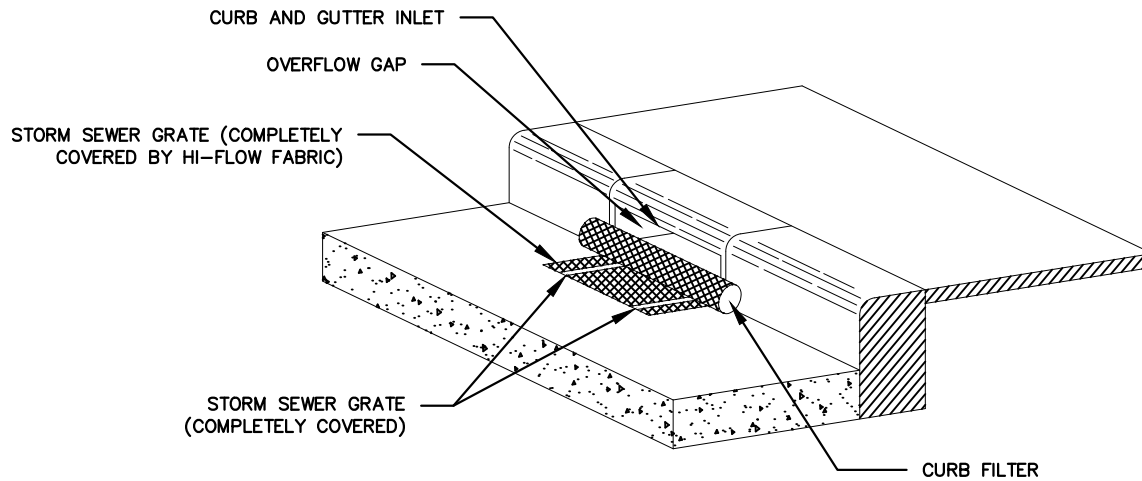
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**STORMWATER POLLUTION  
PREVENTION - STABILIZED  
CONSTRUCTION ENTRANCE  
SHEET 4 OF 11**

**G-29D**



**NOTES:**

1. INSTALL CURB FILTERS AT ALL INLETS WITHOUT GRATES TO KEEP SILT, SEDIMENT AND CONSTRUCTION DEBRIS OUT OF THE STORM SYSTEM
2. THE CURB FILTER SHALL BE DANDY CURB AS MANUFACTURED BY DANDY PRODUCTS INC., OR EQUAL. SUBMIT SHOP A SHOP DRAWING FOR THE CURB FILTERS.
3. THE CURB FILTER SHALL FORM OF A CYLINDRICAL TUBE PLACED IN FRONT OF AND EXTENDING BEYOND THE INLET OPENING ON BOTH SIDES.
4. THE CURB FILTER SHALL HAVE A POUCH ON THE STREET SIDE OF THE UNIT FOR STONE AGGREGATE TO HOLD THE FILTER IN PLACE.
5. THE CURB FILTER SHALL BE CONSTRUCTED OF A HIGH VISIBILITY ORANGE MONOFILAMENT FABRIC.
6. FILL POUCH WITH FDOT #57 STONE AGGREGATE TO A LEVEL (AT LEAST HALF-FULL) THAT WILL KEEP UNIT IN PLACE DURING A RAIN EVENT AND CREATE A SEAL BETWEEN THE CURB FILTER AND THE SURFACE OF THE STREET.
7. CENTER THE UNIT AGAINST CURB OR MEDIAN INLET OPENING SO THAT THE CURB SIDE OF THE UNIT CREATES A SEAL WITH THE CURB OR MEDIAN BARRIER AND INLET STRUCTURE. THERE WILL BE APPROXIMATELY TWELVE (12) INCHES OF THE INLET PROTECTION UNIT OVERHANGING ON EACH SIDE OF THE OPENING.
8. THE CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM SURFACE AND VICINITY OF UNIT AFTER EACH RAIN EVENT.

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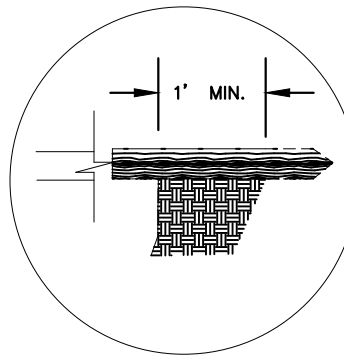
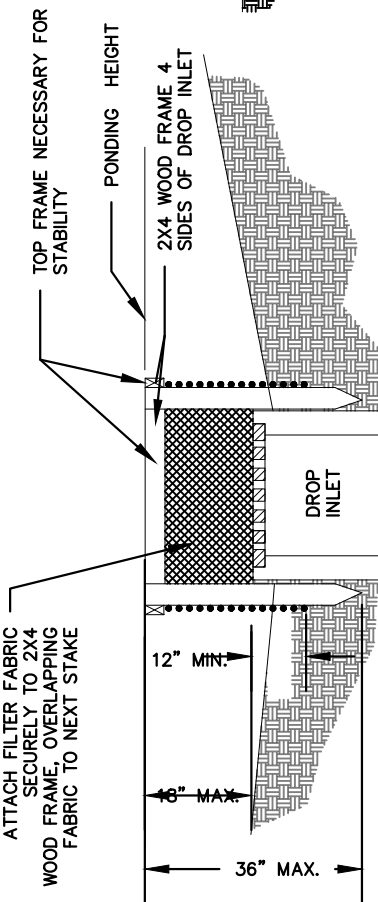
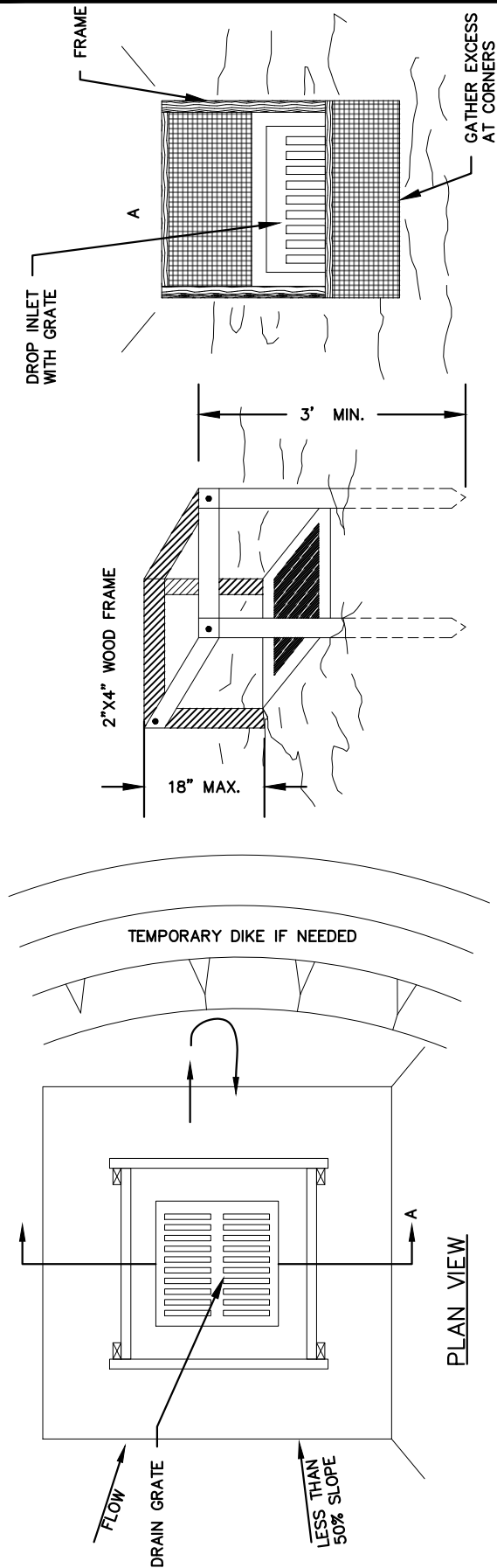
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**STORMWATER POLLUTION  
PREVENTION - CURB  
INLET SEDIMENT  
CONTROL SHEET 5 OF 11**

**G-29E**



**ELEVATION OF STAKE AND FABRIC ORIENTATION**

**NOTES:**

1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS
2. USE 2X4 OR EQUIVALENT METAL STAKES, (3' MIN. LENGTH)
3. INSTALL 2X4 TOP WOOD FRAME TO INSURE STABILITY.
4. THE TOP OF THE FRAME (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY PASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.
5. THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS IS A RELATIVELY FLAT AREA (SLOPE NO GREATER THAN 5%) WHERE THE INLET SHEET OR OVERLAND FLOWS (NOT EXCEEDING 1 C.F.S.) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

DATE: 12/24

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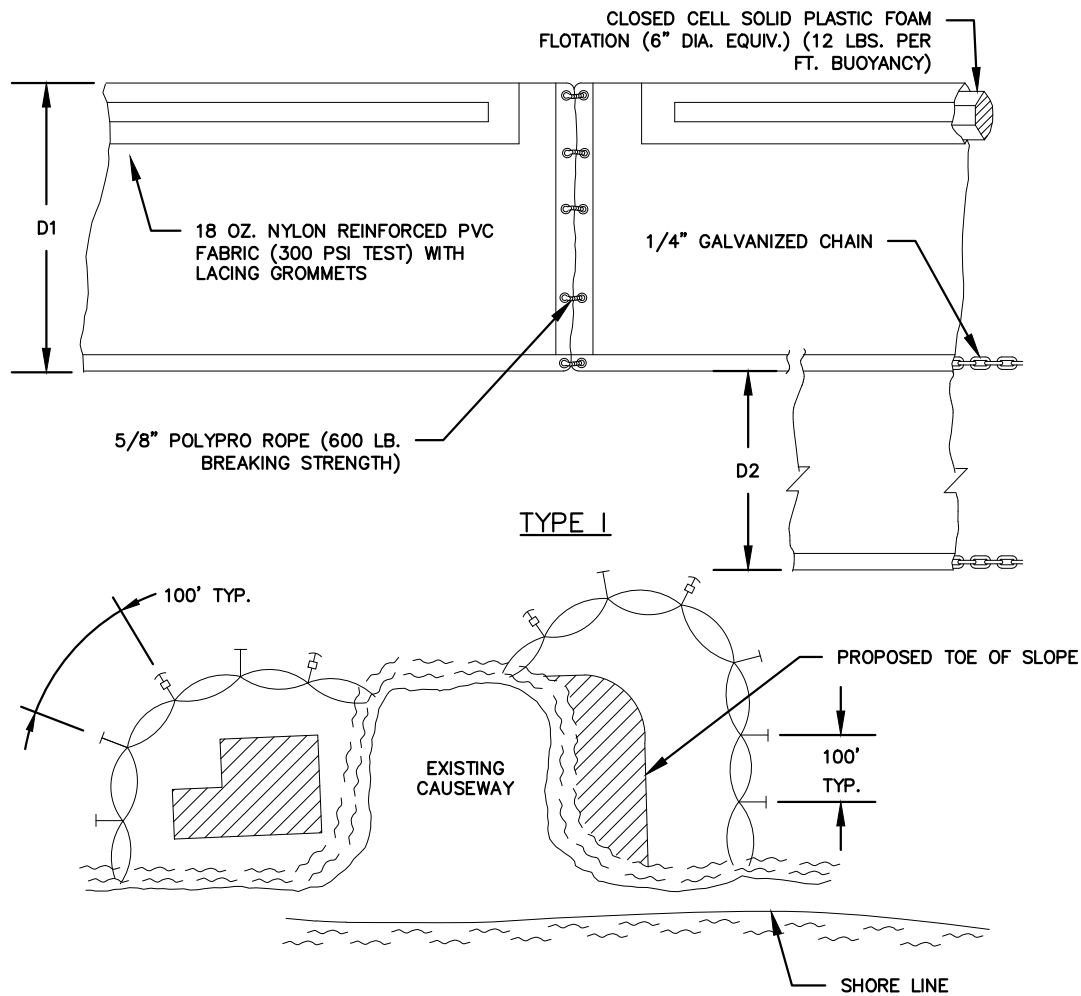


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


**STORMWATER POLLUTION  
PREVENTION - FILTER FABRIC  
DROP INLET SEDIMENT  
BARRIER SHEET 6 OF 11**

**G-29F**





### LEGEND

- PILE LOCATIONS
-  DREDGE OR FILL AREA
-  MOORING BUOY W/ANCHOR
-  ANCHOR
-  BARRIER MOVEMENT DUE TO CURRENT ACTION

1. D1=5' STD. (SINGLE PANEL FOR DEPTHS 5' OR LESS). D2=5' STD. (ADDITIONAL PANEL FOR DEPTHS 5').
2. CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FEET. TWO PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FEET UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.

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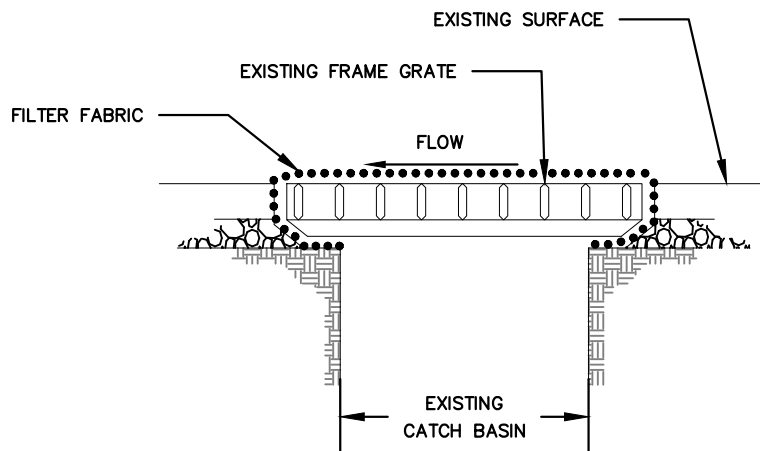
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**STORMWATER POLLUTION  
PREVENTION - FLOATING  
TURBIDITY BARRIER  
SHEET 7 OF 11**

**G-29G**



**NOTES:**

1. CONTRACTOR SHALL PERFORM DAILY INSPECTIONS OF GEO-TEXTILE FABRIC BARRIER AND AS NECESSARY REPLACE OR REPAIR AS REQUIRED. SPECIFICALLY AFTER STORM EVENTS AND LARGE RAINFALL EVENTS.
2. SEDIMENTATION AND DEBRIS THAT ARE REMOVED FROM BARRIERS SHALL BE LEGALLY DISPOSED OF AT AN AUTHORIZED OFF-SITE DISPOSAL FACILITY.

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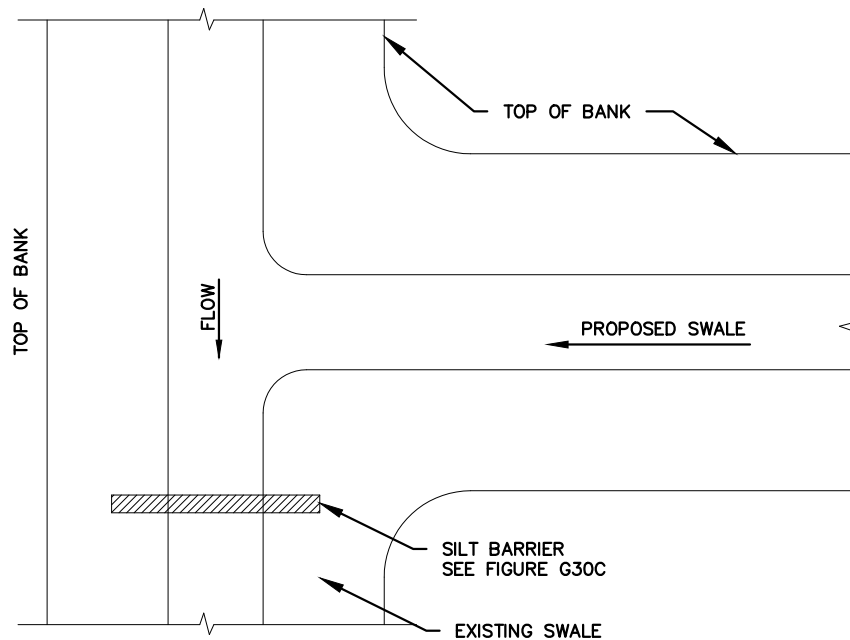
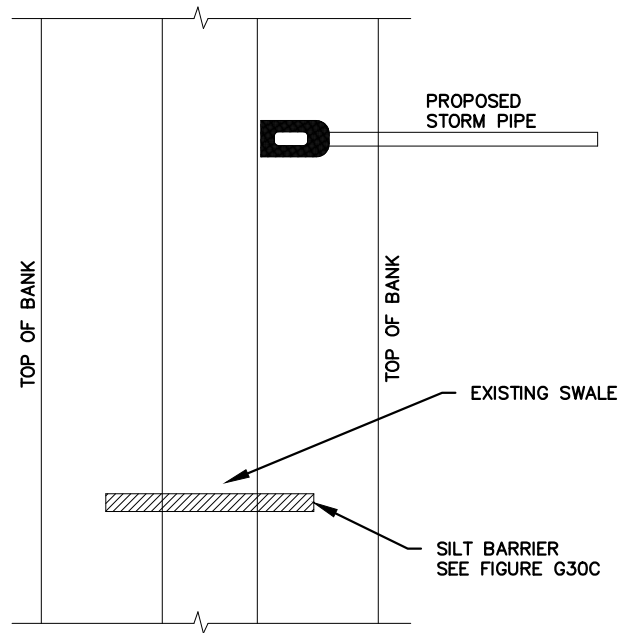
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**STORMWATER POLLUTION  
PREVENTION - DROP INLET  
SEDIMENT BARRIER SHEET 8 OF 11**

**G-29H**



DATE: 12/24

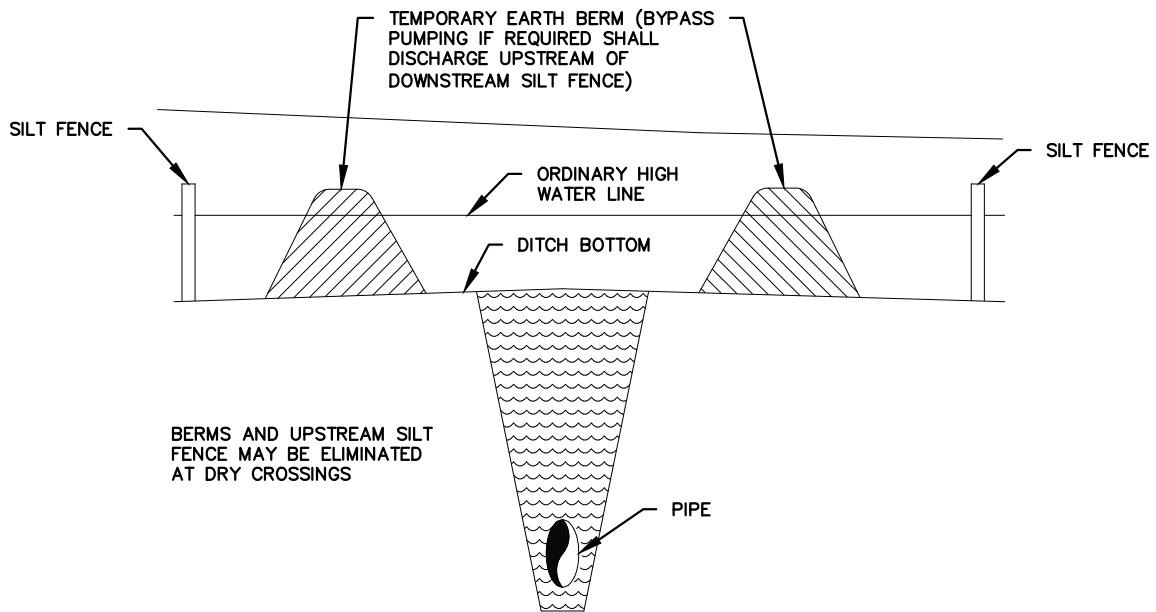
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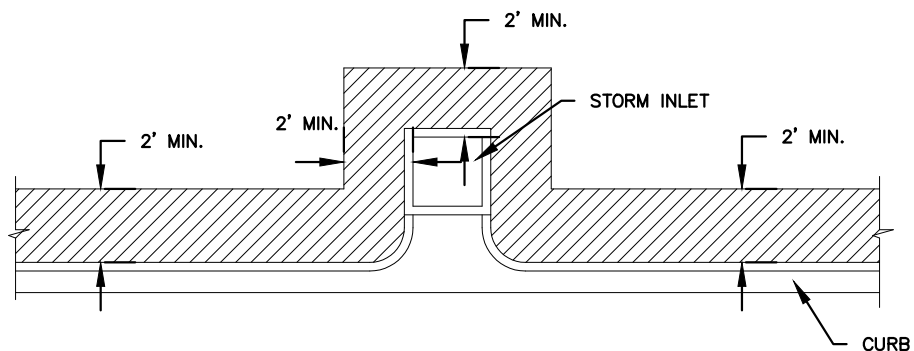
**STORMWATER POLLUTION  
PREVENTION - EXISTING  
SWALE SILT BARRIER  
SHEET 9 OF 11**

**G-29I**



### UNDERGROUND PIPE CROSSING

NTS



### SOD ALONG CURB AND AROUND INLET

NTS

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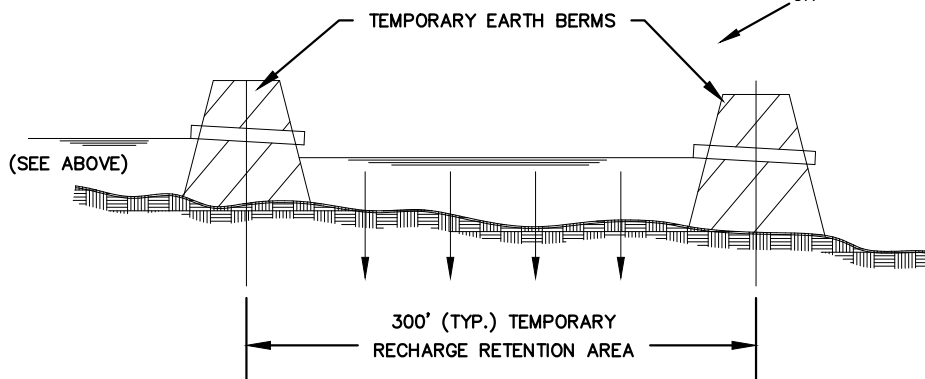
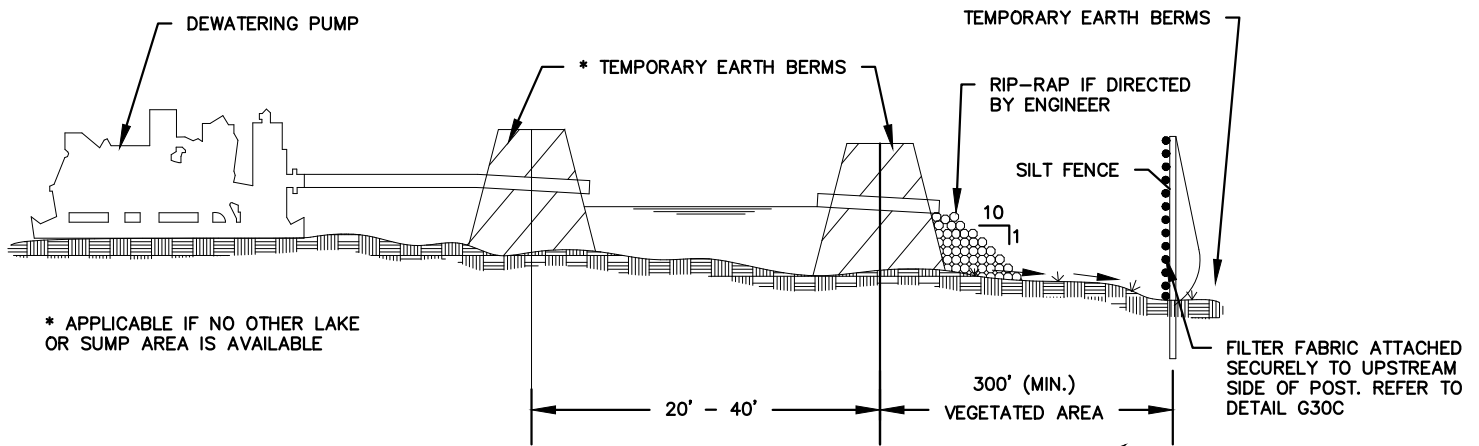
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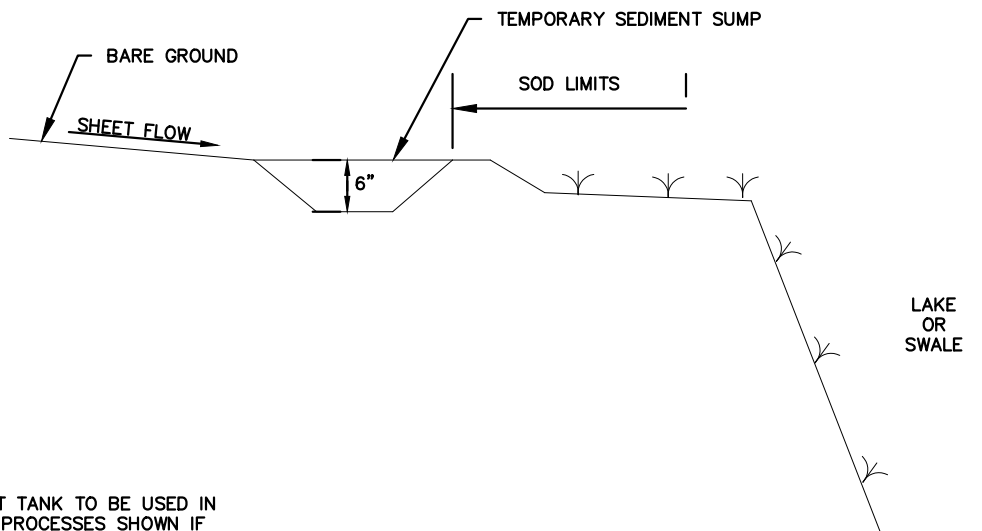
**STORMWATER POLLUTION  
PREVENTION- DEWATERING  
DISCHARGE PLAN  
SHEET 10 OF 11**

**G-29J**



TYPICAL DEWATERING DISCHARGE PLAN

NTS



NOTE:  
SEDIMENT TANK TO BE USED IN LIEU OF PROCESSES SHOWN IF AVAILABLE

TEMPORARY SEDIMENT SUMP

NTS

DATE: 12/24

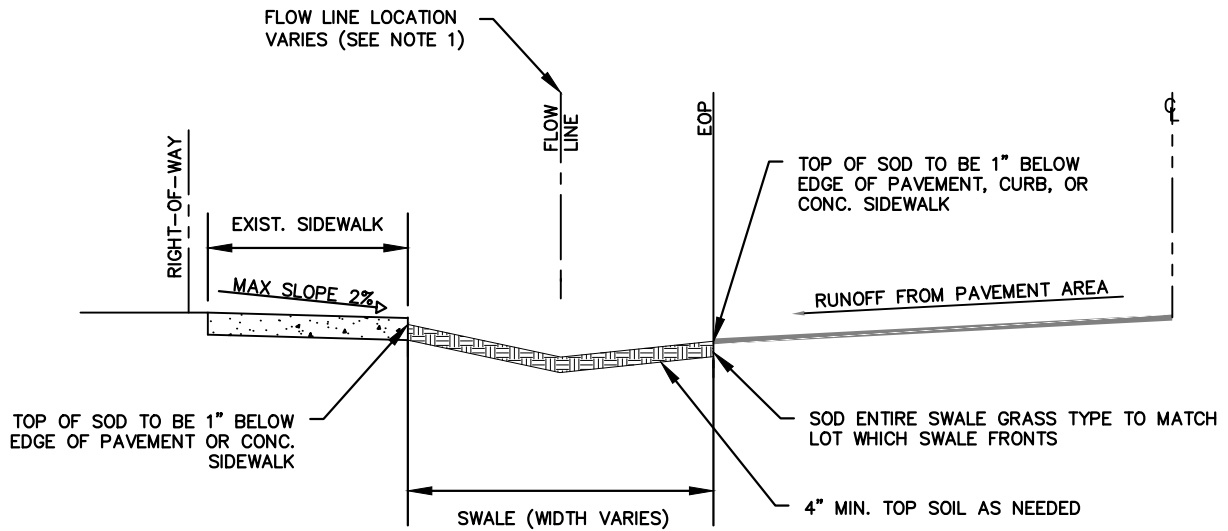
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**STORMWATER POLLUTION  
PREVENTION - DEWATERING  
DISCHARGE PLAN  
SHEET 11 OF 11**

**G-29K**



**NOTES:**

1. HORIZONTAL BOTTOM (FLOW LINE) OF SWALE TO BE 1"-2" BELOW THE EDGE OF PAVEMENT.
2. TOP OF SOD ELEVATION AS SHOWN ABOVE

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**SWALE CUT**

**G-30**

**GENERAL NOTES:**

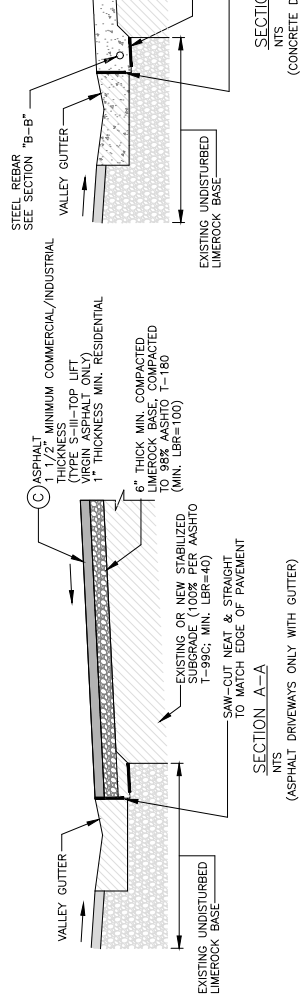
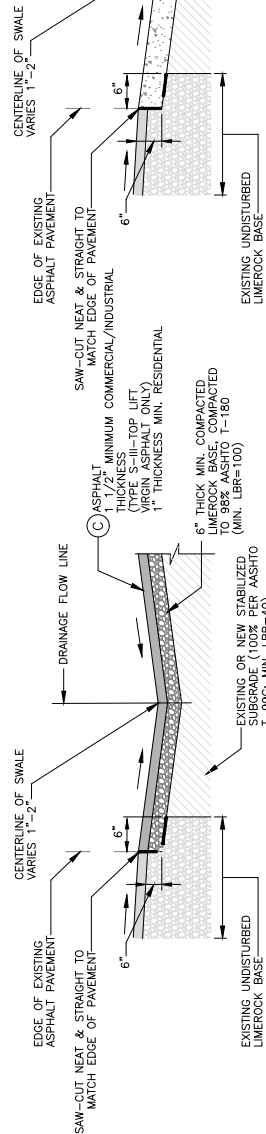
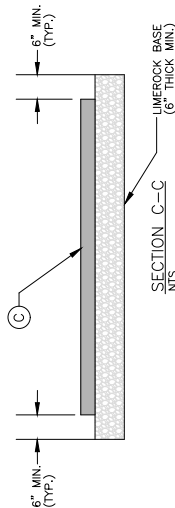
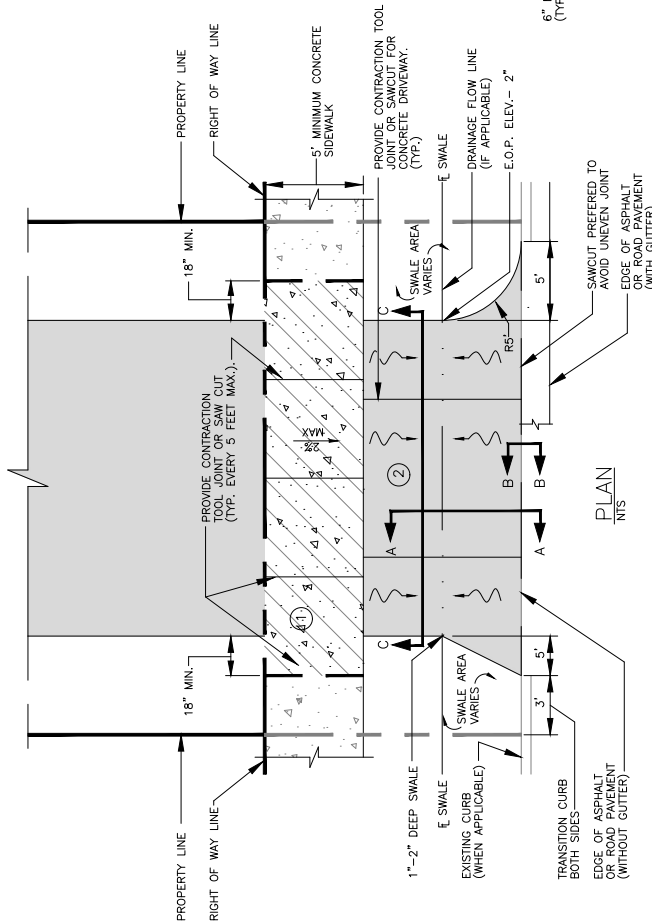
1. 2' WIDE FLARE OR OPTIONAL 4' RADIUS
2. UTILITY LOCATES SHALL BE CALLED AND DOCUMENTED PRIOR TO FIRST INSPECTION.
3. IF NEW DRIVEWAY LIMITS COVER EXISTING SEWER LATERAL:
  - A. NEW CLEAN-OUT SHALL BE INSTALLED AT THE PROPERTY LINE WITH A NEW TRAFFIC RATED BOX OR
  - B. EXISTING SEWER LATERAL SHALL BE RELOCATED WITH A NEW CLEAN-OUT INSTALLED AT PROPERTY LINE
4. ALL MATERIALS, WORKMANSHIP, AND RESTORATION OF FEATURES IN THE RIGHT-OF-WAY SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER OR INSPECTOR. MATERIAL CERTIFICATIONS, SAMPLES, SHOP DRAWINGS & DENSITY TESTS MAY BE REQUIRED BY CITY INSPECTOR FOR VERIFICATION.
5. GRADING AND PREPARATION OF SUBGRADE SHALL BE APPROVED BY THE CITY ENGINEER AND ROCK AS-BUILTS REQUIRED PRIOR TO APPLICATION OF PAVING MATERIALS.

**DRAWING NOTES:**

1. ALL SIDEWALKS SHALL BE CONSTRUCTED OF TWO THOUSAND FIVE HUNDRED (2500) PSI CONCRETE NOT LESS THAN NINE (9) FEET IN WIDTH FOR PUBLIC DEDICATED RIGHTS-OF-WAY. SIDEWALKS SHALL BE CONSTRUCTED WITH A MINIMUM OF FOUR (4) INCHES, PROVIDED, HOWEVER, THAT ALL SIDEWALKS CROSSING AT VEHICULAR DRIVEWAY SHALL HAVE A THICKNESS OF NOT LESS THAN SIX (6) INCHES.
2. DRIVEWAY APRON GRADE TO MATCH SWALE GRADE BETWEEN SIDEWALK AND PAVEMENT.

**DRIVEWAY NOTE:**

CONTRACTION JOINTS IN CONCRETE DRIVEWAY SHALL BE NO GREATER THAN 12 FEET APART.



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# STANDARD DRIVEWAY DETAIL ASPHALT / CONCRETE

G-31 A

DATE:12/24

DRAWN:KHA

CITY OF MARGATE, FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
AND ENGINEERING SERVICES

## PAVER DRIVEWAY DETAIL

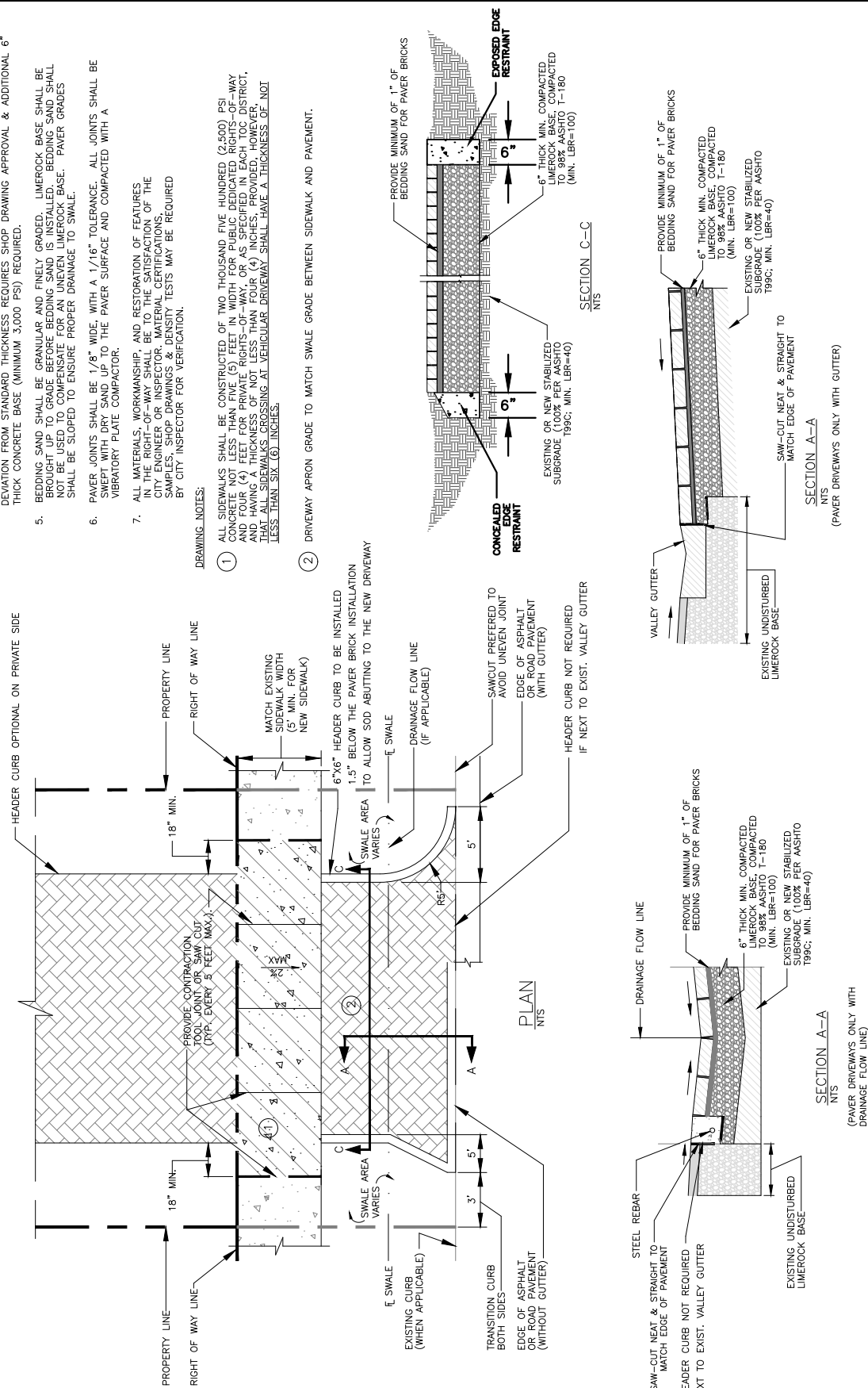
# G-31B

GENERAL NOTES:

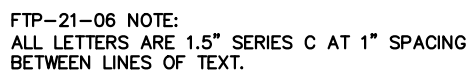
1. 2" WIDE FLARE OR OPTIONAL 4" RADIUS
2. UTILITY LOCATES SHALL BE CALLED AND DOCUMENTED PRIOR TO FIRST INSPECTION.
3. IF NEW DRIVEWAY LIMITS COVER EXISTING SEWER LATERAL:
  - A. NEW CLEAN-OUT SHALL BE INSTALLED AT THE PROPERTY LINE WITH A NEW TRAFFIC RATED BOX OR
  - B. EXISTING SEWER LATERAL SHALL BE RELOCATED WITH A NEW CLEAN-OUT INSTALLED AT PROPERTY LINE.
4. CONCRETE PAVERS SHALL CONFORM TO ASTM C-936. CLAY PAVERS SHALL HARD-BURNED AND SHALL CONFORM TO ASTM C-902. THE MINIMUM PAVEMENT THICKNESS SHALL BE 3 1/8". DEVIATION FROM STANDARD THICKNESS REQUIRES SHOP DRAWING APPROVAL & ADDITIONAL 6" THICK CONCRETE BASE (MINIMUM 3,000 PSI) REQUIRED.
5. BEDDING SAND SHALL BE GRANULAR AND FINELY GRADED. LIMESTONE BASE SHALL BE BROUGHT UP TO GRADE BEFORE BEDDING SAND IS INSTALLED. BEDDING SAND SHALL NOT BE USED TO COMPENSATE FOR AN UNEVEN LIMESTONE BASE. PAVEMENT GRADES SHALL BE SLOPED TO ENSURE PROPER DRAINAGE TO SWALE.
6. PAVEMENT JOINTS SHALL BE 1/8" WIDE, WITH A 1/16" TOLERANCE. ALL JOINTS SHALL BE SWEEPED WITH DRY SAND UP TO THE PAVEMENT SURFACE AND COMPACTED WITH A VIBRATORY PLATE COMPACTOR.
7. ALL MATERIALS, WORKMANSHIP, AND RESTORATION OF FEATURES IN THE RIGHT-OF-WAY SHALL BE TO THE SATISFACTION OF THE DISTRICT ENGINEER. MATERIALS, WORKMANSHIP, AND RESTORATION OF FEATURES SHALL BE VERIFIED BY CITY INSPECTORS AND DENSITY TESTS MAY BE REQUIRED BY CITY INSPECTORS FOR VERIFICATION.

## DRAWING NOTES:

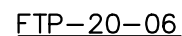
- ① ALL SIDEWALKS SHALL BE CONSTRUCTED OF TWO THOUSAND FIVE HUNDRED (2,500) PSI CONCRETE NOT LESS THAN FIVE (5) FEET IN WIDTH FOR PUBLIC DEDICATED RIGHTS-OF-WAY AND FOUR (4) FEET FOR PRIVATE RIGHTS-OF-WAY, OR AS SPECIFIED IN EACH TOWNSHIP, AND HAVING A THICKNESS OF NOT LESS THAN FOUR (4) INCHES, PROVIDED, HOWEVER, THAT SIDEWALKS CROSSING AT VEHICULAR DRIVEWAY SHALL HAVE A THICKNESS OF NOT LESS THAN SIX (6) INCHES.
- ② DRIVEWAY APRON GRADE TO MATCH SWALE GRADE BETWEEN SIDEWALK AND PAVEMENT.







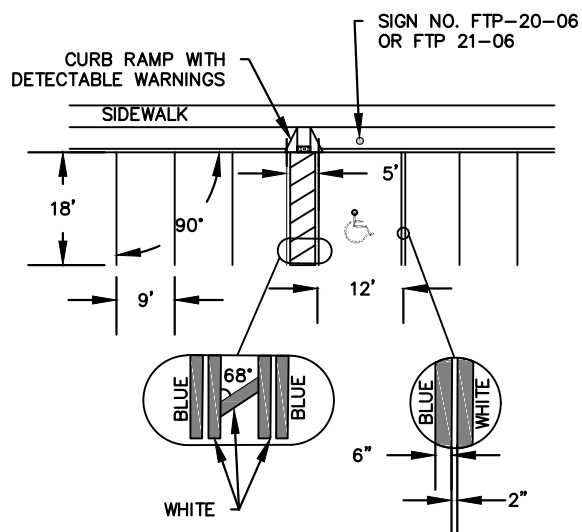
PROVIDED UNIVERSAL SYMBOL OF  
ACCESSIBILITY IN HANDICAPPED PARKING  
SPACES. THE SYMBOL SHALL BE WHITE IN  
COLOR AND 5 FEET HIGH.  
RE: FDOT INDEX NO. 17346



FTP-20-06 NOTE:  
ALL LETTERS ARE 1" SERIES AT 1" SPACING.

**NOTE:**

1. TOP PORTION OF FTP-20-06 AND FTP-21-06 SHALL HAVE A REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND BORDER.
2. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND BORDER.
3. FTP 21-06 & FTP 20-06 MAY BE FABRICATED ON ONE PANEL OR TWO.
4. FTP 20-06 IS FOR USE IN AREAS WHERE SPACE IS LIMITED.
5. A HANDICAP SPACE SHALL BE TWELVE FEET IN WIDTH PER FDOT INDEX 711-001.

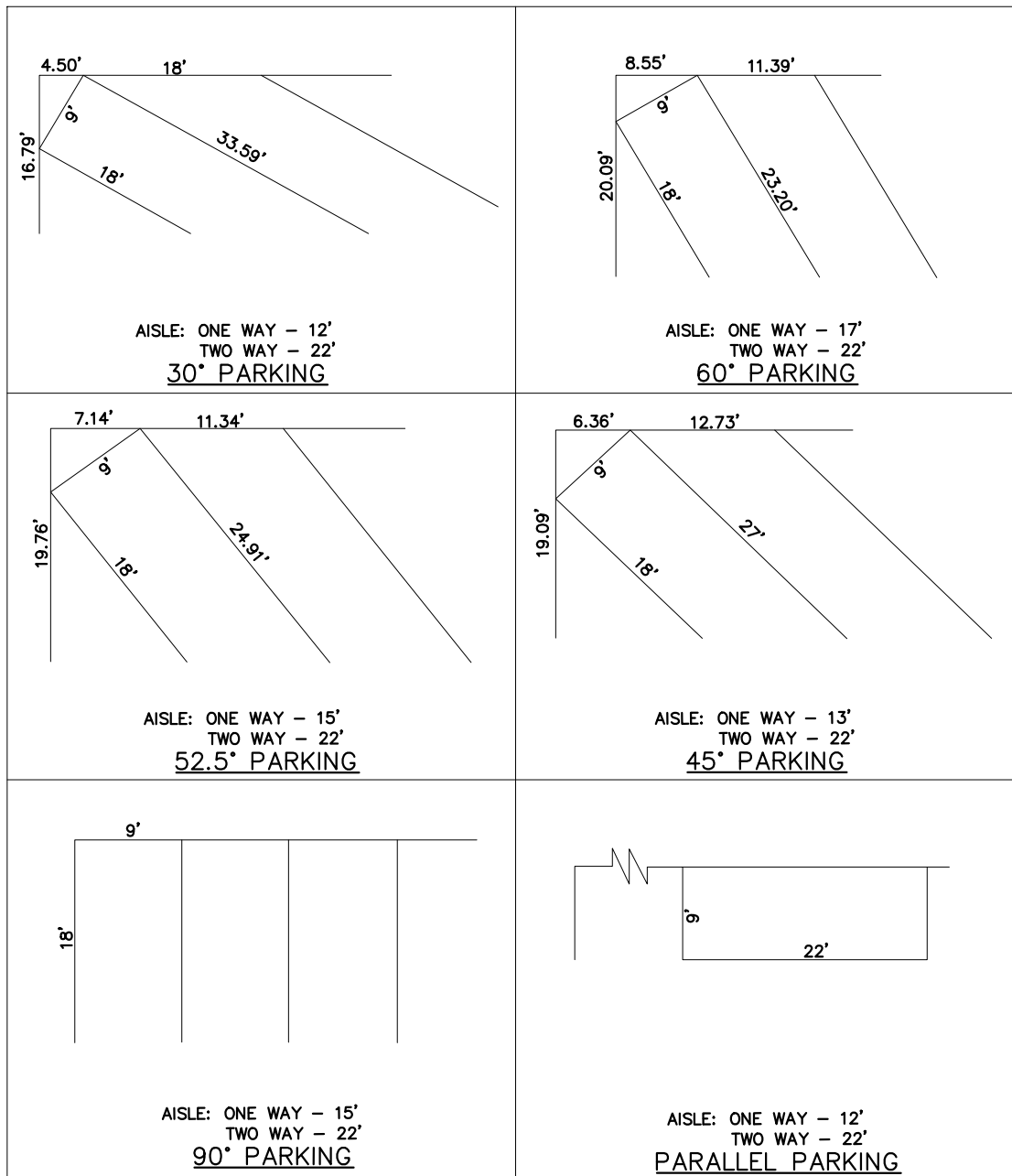


DRAWN: KHA



## HANDICAP PARKING DETAILS

**G-32**



**NOTES:**

1. ALL INTERLOCKING NINETY-DEGREE PARKING STALLS SHALL BE SEPARATED BY A CURBED LANDSCAPE MEDIAN NO LESS THAN SEVEN (7) FEET IN WIDTH. PARKING STALLS OF LESS THAN NINETY (90) DEGREES SHALL BE SEPARATED BY A CURBED MEDIAN WITH AN AVERAGE WIDTH OF SEVEN (7) FEET. THIS REQUIREMENT SHALL ONLY APPLY TO NEW DEVELOPMENTS AND REDEVELOPMENTS WITHIN THE CITY.
2. NO PARKING STALL SHALL BE LESS THAN NINE (9) FEET IN WIDTH AND EIGHTEEN (18) FEET IN LENGTH, EXCEPT THAT PARALLEL PARKING STALLS SHALL BE NO LESS THAN NINE (9) FEET IN WIDTH AND TWENTY-TWO (22) FEET IN LENGTH. ANY PARKING STALL ABUTTING A CURBED LANDSCAPE AREA NO LESS THAN SEVEN (7) FEET IN WIDTH MAY REDUCE STALL LENGTH BY TWO (2) FEET.
3. NO OFF-STREET PARKING AREA DRIVE-AISLE SHALL BE LESS THAN TWENTY-TWO (22) FEET IN WIDTH FOR TWO-WAY TRAFFIC. THE FOLLOWING STANDARDS SHALL APPLY TO ONE-WAY DRIVE AISLES IN PARKING AREAS:
  - A. ONE-WAY DRIVE-AISLES FOR THIRTY-DEGREE ANGLED PARKING AND PARALLEL PARKING SHALL BE NO LESS THAN TWELVE (12) FEET IN WIDTH.
  - B. ONE-WAY DRIVE AISLES FOR FORTY-FIVE-DEGREE ANGLED PARKING SHALL BE NO LESS THAN THIRTEEN (13) FEET IN WIDTH.
  - C. ONE-WAY DRIVE AISLES FOR FIFTY-TWO AND ONE-HALF-DEGREE ANGLED PARKING SHALL BE NO LESS THAN 15 FEET IN WIDTH.
  - D. ONE-WAY DRIVE AISLES FOR SIXTY-DEGREE PARKING SHALL BE NO LESS THAN SEVENTEEN (17) FEET IN WIDTH.
  - E. ONE-WAY DRIVE AISLES FOR NINETY-DEGREE PARKING SHALL BE NO LESS THAN TWENTY-TWO (22) FEET IN WIDTH.
4. REFERENCE MARGATE CODE 40.705 OF MUNICODE FOR ALL OTHER PARKING REQUIREMENTS.

DATE: 12/24

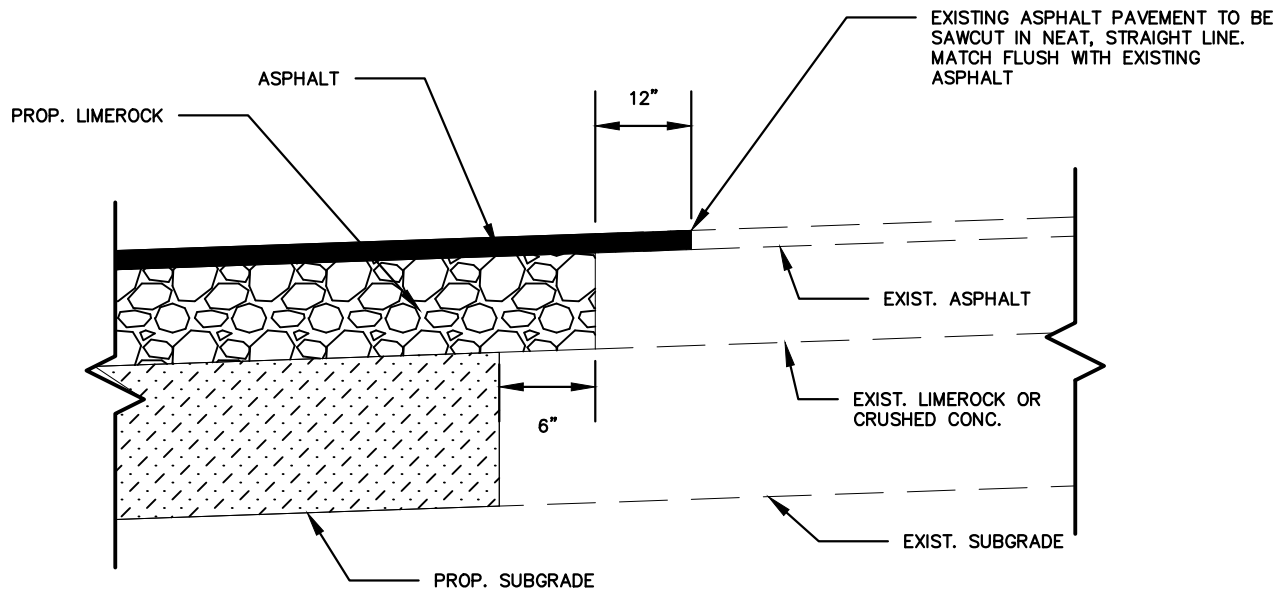
DRAWN: KHA



CITY OF MARGATE, FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
AND ENGINEERING SERVICES

## PARKING SPACE AND DRIVE AISLES

**G-33**



**NOTE:**  
REFER TO DETAIL G-35 FOR THICKNESS AND COMPACTION REQUIREMENTS FOR ASPHALT,  
BASE, AND SUBGRADE.

### CONNECTION TO EXISTING PAVEMENT DETAIL

NTS

DATE: 12/24

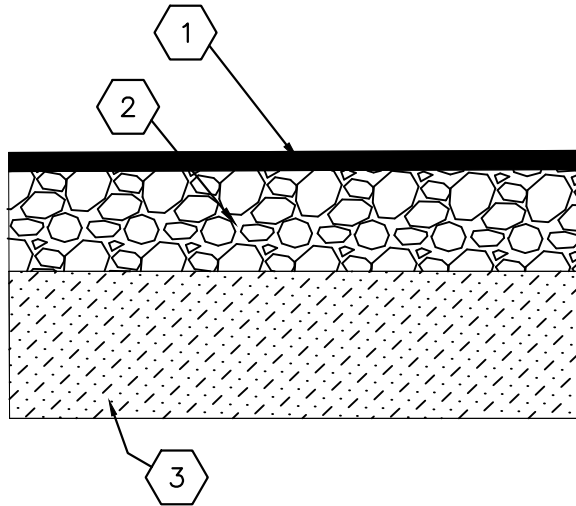
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CITY OF MARGATE, FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
AND ENGINEERING SERVICES

**CONNECTION TO EXISTING  
PAVEMENT**

**G-34**



#### PAVING LEGEND



MINIMUM 3/4" LIFTS EACH FOR A TOTAL OF 1-1/2" ASPHALT SURFACE TYPE SP-9.5 OR APPROVED EQUAL. A TACK COAT SHALL BE APPLIED BETWEEN LIFTS PER FDOT STANDARDS, IF PLACED IN (2) TWO LIFTS.



MINIMUM 8" FOR ROAD AND 6" FOR PARKING LOTS LIMEROCK BASE COMPACTED IN 1 LIFT WITH MINIMUM LBR OF 100 TO 98% MAX. DENSITY PER AASHTO T-180. A PRIME COAT SHALL BE UNIFORMLY APPLIED TO THE SURFACE OF THE FINISHED ROCK BASED UPON RATES PER FDOT STANDARDS.



12" THICK SUBGRADE COMPACTED AND STABILIZED WITH MINIMUM DESIGN LBR OF 40 COMPACTED TO AT LEAST 98% OF MAXIMUM DRY DENSITY (AASHTO T-180)

#### PAVEMENT CROSS-SECTION

NTS

DATE: 12/24

DRAWN: KHA

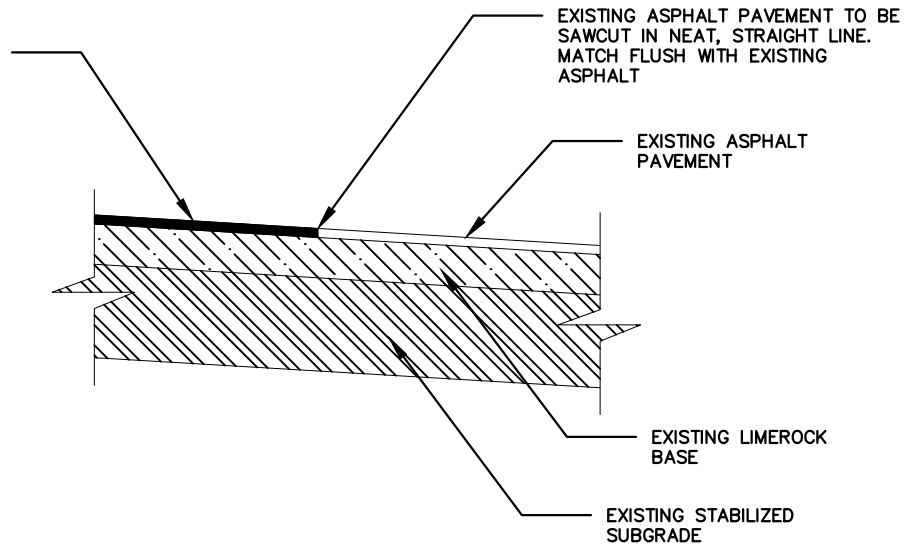


CITY OF MARGATE, FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
AND ENGINEERING SERVICES

**PAVEMENT CROSS-SECTION**

**G-35**

ROADWAY: MILL 1- $\frac{1}{2}$ " (1" FOR PARKING LOT) MINIMUM EXISTING ASPHALT SURFACE AND OVERLAY WITH 1- $\frac{1}{2}$ " (1" MINIMUM FOR PARKING LOT) PROPOSED TYPE SP-9.5 ASPHALT PAVEMENT TO BUTT AGAINST AND BE FLUSH WITH EXISTING PAVEMENT



**NOTE:**

1. LEVELING COURSE MAY NEED TO BE APPLIED TO UNEVEN SURFACES AS DIRECTED BY CITY OF MARGATE.
2. TACK COAT TO BE APPLIED IF LIMEROCK EXPOSED AS A RESULT OF MILLING.
3. THE MINIMUM WIDTH FOR PAVEMENT RESTORATION PARALLEL TO TRAFFIC IS ONE FULL LANE. THE MINIMUM WIDTH FOR PAVEMENT RESTORATION PERPENDICULAR TO TRAFFIC IS THE TRENCH WIDTH PLUS A MINIMUM OF 2' ON EACH SIDE OR AS DIRECTED BY THE CITY OF MARGATE.

ASPHALT MILLING AND RESURFACING DETAIL

NTS

DATE: 12/24

DRAWN: KHA



CITY OF MARGATE, FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
AND ENGINEERING SERVICES

**ASPHALT MILLING AND  
RESURFACING**

**G-36**

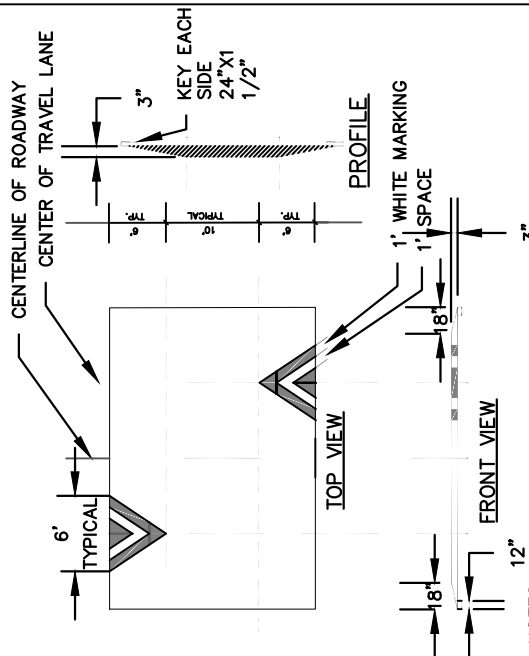


## NTS

1. OVERLAY WITH FDOT TYPE SP-9.5 (FINE MIX) ASPHALTIC CONCRETE SURFACE COURSE (1" MIN. THICKNESS) AS SHOWN.
2. AT THE BEGINNING & END OF ASPHALT OVERLAY AND AT EDGE OF PAVEMENT ADJACENT TO CURBS, THE EXIST. PAVEMENT SHALL BE SAWCUT TO AN APPROXIMATE DEPTH OF 1" TO MAKE A CLEAN BUTT JOINT, & ENOUGH MATERIAL REMOVED FOR A SMOOTH TIE-IN AS SHOWN IN THE DETAIL.
3. CONTRACTOR TO PROVIDE SMOOTH AND CONTINUOUS GRADING DURING ASPHALT OVERLAY PROCESS TO AVOID AREAS OF STANDING WATER. THE COST SHALL BE INCLUDED IN THE ASPHALTIC CONCRETE SURFACE COURSE OVERLAY PAY ITEM.
4. SURFACE ON LOW SIDE OF PAVEMENT TO BE  $\frac{1}{4}$ " ABOVE LIP OF GUTTER. SURFACE ON HIGH SIDE TO BE FLUSH WITH LIP OF CURB OR CURB & GUTTER.

**G-37**

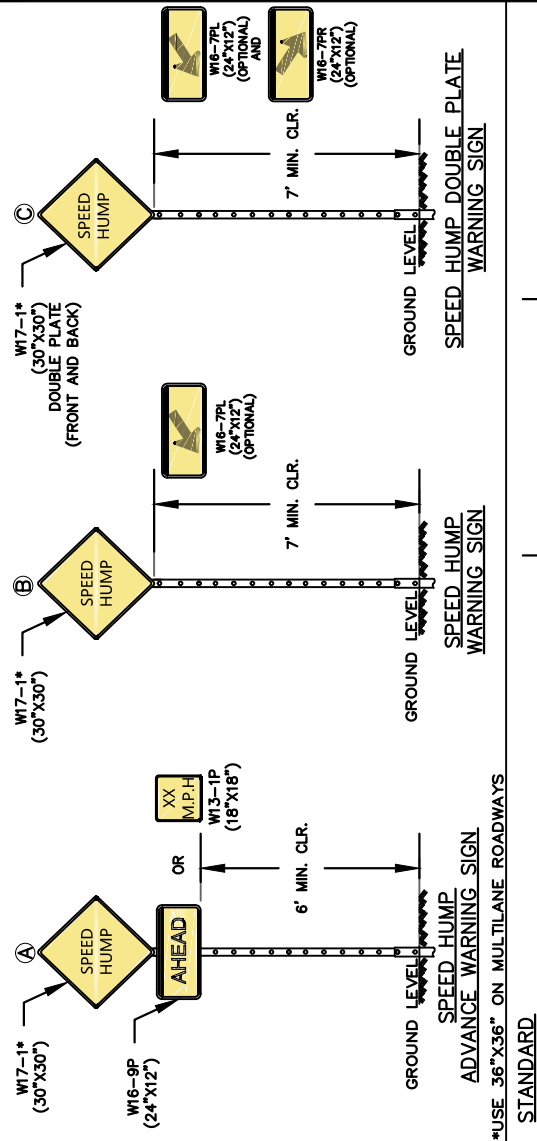
FLAT TOPPED SPEED TABLE  
MUTCD MARKINGS FIGURE 3B-30,  
OPTION "A"



NOTES:  
THE FOLLOWING IS A TYPICAL INSTALLATION OF A SPEED HUMP WITHIN THE CITY OF MARGATE.

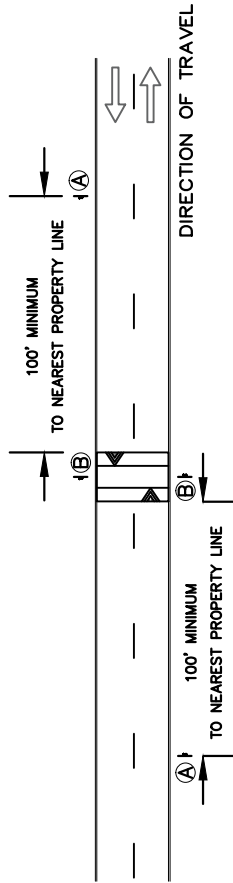
1. THE SPEED HUMP SHALL BE TWENTY-TWO (22) FEET IN LENGTH FOR THE WIDTH OF THE ROADWAY (TYPICALLY TWENTY-TWO [22] FEET), WITH THE FOLLOWING CHARACTERISTICS:
    - a. HEIGHT OF THREE (3) INCHES.
    - b. TEN (10) FOOT FLAT TOP.
    - c. SIX (6) FOOT TRANSITIONS ON BOTH THE NEAR AND THE FAR SIDES.
    - d. EIGHTEEN (18) INCH TRANSITIONS ON BOTH CURB SIDES.
  2. KEY CUT TWENTY-FOUR (24) INCHES ON BOTH THE NEAR AND THE FAR SIDES WITH TWELVE (12) INCHES NEXT TO SPEED HUMP AND TWELVE INCHES UNDERNEATH, FOR A DEPTH OF ONE AND A HALF (1 1/2) INCHES.
  3. KEY CUT TWELVE (12) INCHES ON BOTH CURB AND SIDE EDGES, UNDERNEATH THE SPEED HUMP, FOR A DEPTH OF ONE AND A HALF (1 1/2) INCHES.
  4. PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FIGURE 3B-30 OPTION "A".
    - a. FOR EACH DIRECTION OF TRAVEL, INSTALL TWO (2) CHEVRONS, ONE (1) FOOT WHITE PAVEMENT MARKING, SPACED ONE (1) FOOT APART ON A LENGTH OF SIX (6) FEET CENTERED ON THE TRAVEL LANE, PLACED ON THE TRANSITION ONLY.
    - b. SIX (6) INCH WHITE THERMOPLASTIC EDGE LINE TO BE REPLACED ALONG SIDE OF THE SPEED HUMP, IF THIS EDGE LINE PREVIOUSLY EXISTED.
- OTHER INFORMATION:
1. ALL SPEED HUMPS SHALL BE INSTALLED IN TWO (2) LIFTS OF S3 ASPHALT.
  2. TACK COAT TO BE APPLIED PRIOR TO LAYING THE S3 ASPHALT.
  3. AN APPROVED MAINTENANCE OF TRAFFIC PLAN SHALL BE ESTABLISHED FOR EACH SPEED HUMP INSTALLATION.
  4. INSTALLATION SHALL BE IN COMPLIANCE WITH THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2023-2024.

SPEED HUMP WARNING SIGNS PER MUTCD FIGURE 2C-6

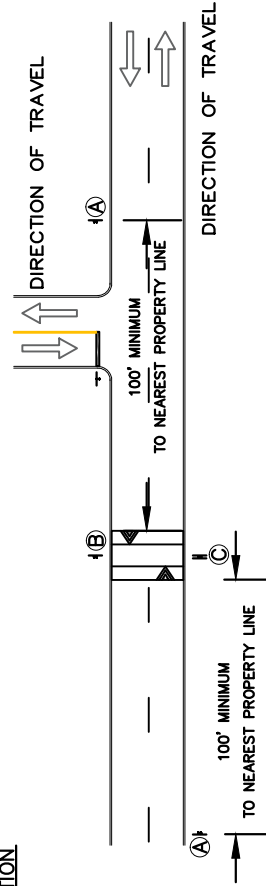


\*USE 36"X36" ON MULTILANE ROADWAYS

STANDARD



INTERSECTION



DATE: 12/2024

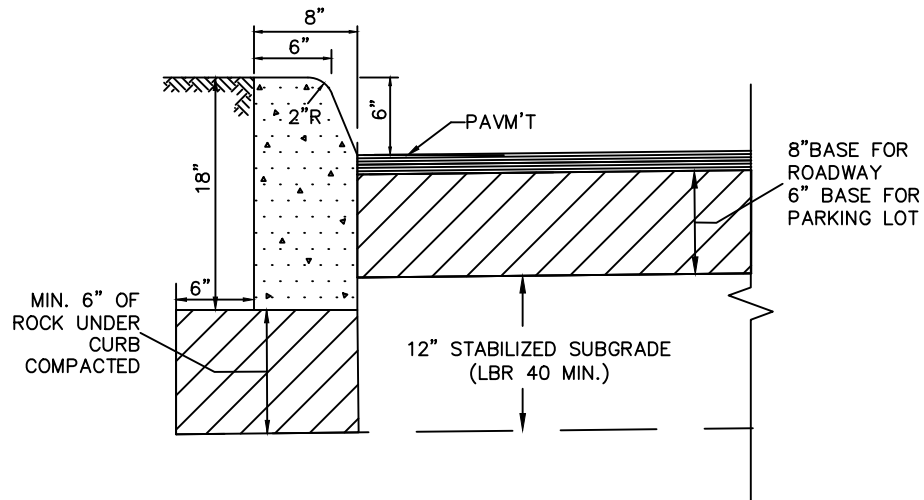
DRAWN: KHA



CITY OF MARGATE, FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
AND ENGINEERING SERVICES

TEMPORARY SPEED TABLE

G-38



CURB NOTES:

1. PROVIDE 1/4" WIDE SAW CUT CONTRACTION JOINT A MINIMUM OF 1-1/2" DEEP AND AT 10' SPACING MAXIMUM FOR ALL CURBS.
2. CONCRETE SHALL BE 3000 P.S.I. MIN. @ 28 DAYS.
3. TYPE "D" CURB FOR PARKING LOTS MAY BE INSTALLED AS "TRENCHED" D CURB WITH EXTRUDED TOP AT THE CONTRACTOR'S OPTION. TRENCHED CURB REQUIRES CITY TRENCH INSPECTION AND APPROVAL. EXTRUDED CURB MUST BE PLACED WITHIN 15 MINUTES OF PLACEMENT OF TRENCH CONCRETE. EXTRUDED CURB AND TRENCH CONCRETE SHALL BE MONOLITHIC.

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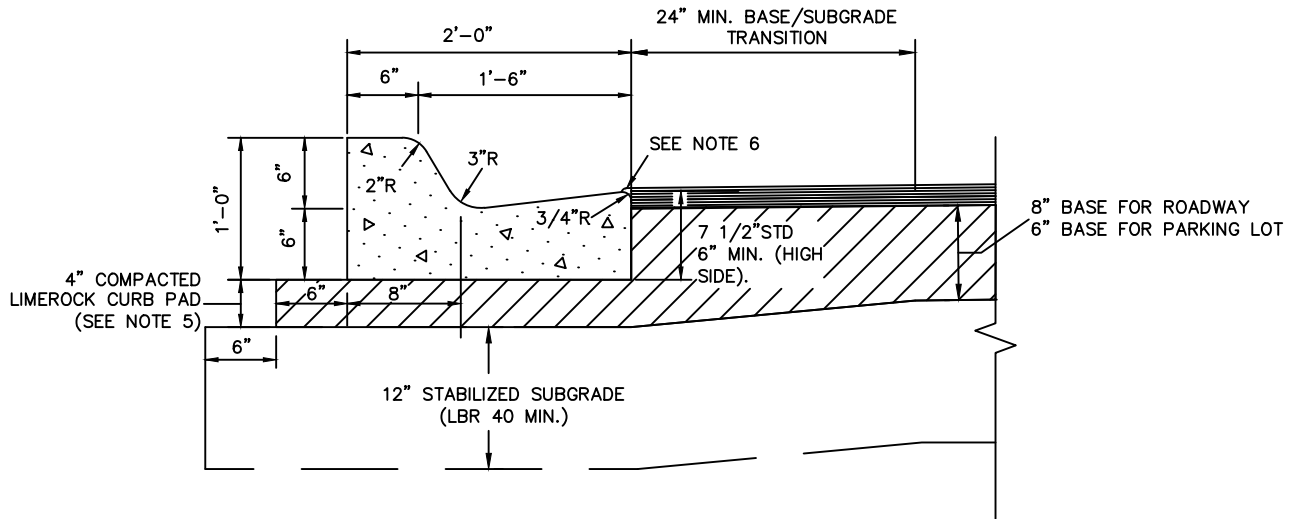


CITY OF MARGATE, FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
AND ENGINEERING SERVICES

**TYPE 'D' CURB**

**G-39**





**CURB NOTES:**

1. WHEN USED ON THE HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF TYPE "F" GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT.
2. PROVIDE 1/4" WIDE SAW CUT CONTRACTION JOINT A MINIMUM OF 1-1/2" DEEP AND AT 10' SPACING MAXIMUM FOR ALL CURBS.
3. CONCRETE SHALL BE 3000 P.S.I. MIN. @ 28 DAYS.
4. FOR COMMUNITY DEVELOPMENT DEPARTMENT CAPITAL PROJECT DIVISION PROJECTS COST OF CURB PAD TO BE INCLUDED IN COST OF CURB.
5. COMPACT CURB PAD TO A DENSITY OF 98% OF AASHTO T-180 SPECIFICATION.
6. SURFACE ON LOW SIDE OF PAVEMENT TO BE 1/4" ABOVE LIP OF GUTTER. SURFACE ON HIGH SIDE TO BE FLUSH WITH LIP OF CURB OR CURB & GUTTER.

DATE:12/24

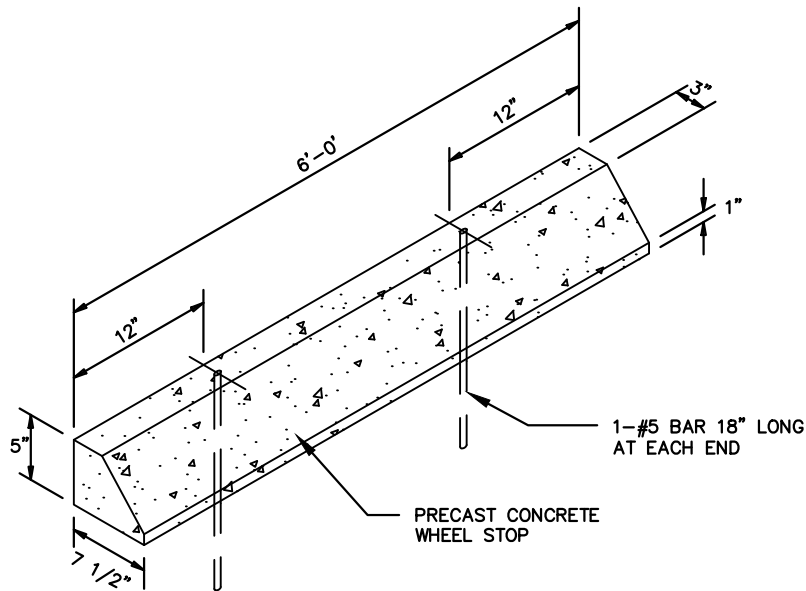
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CITY OF MARGATE, FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
AND ENGINEERING SERVICES

**TYPE 'F' CURB AND GUTTER**

**G-40**



# WHEELSTOP DETAIL

NTS

## NOTES:

1. CONCRETE STRENGTH SHALL BE 3,000 P.S.I.
2. 2 FT OVERHANG REQUIRED FROM FRONT OF WHEELSTOP TO EDGE OF PAVEMENT.

DATE: 12/24

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CITY OF MARGATE, FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
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**WHEELSTOP**

**G-41**

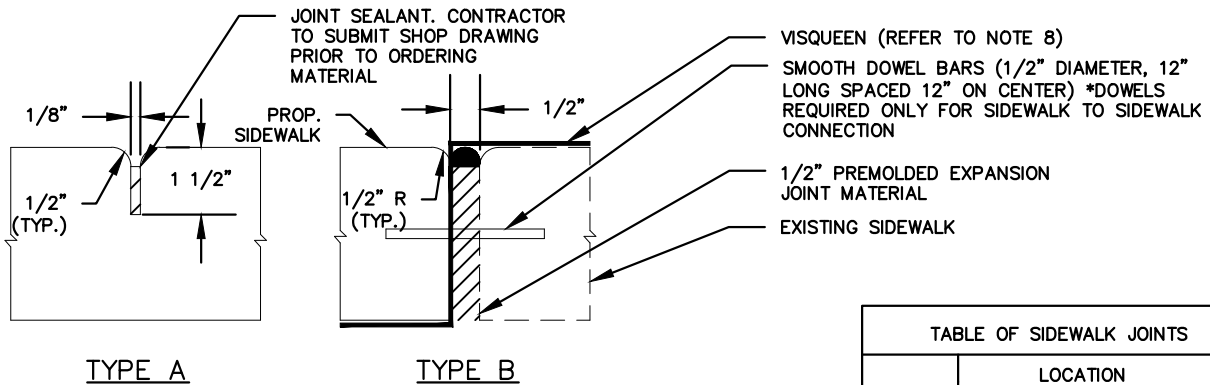
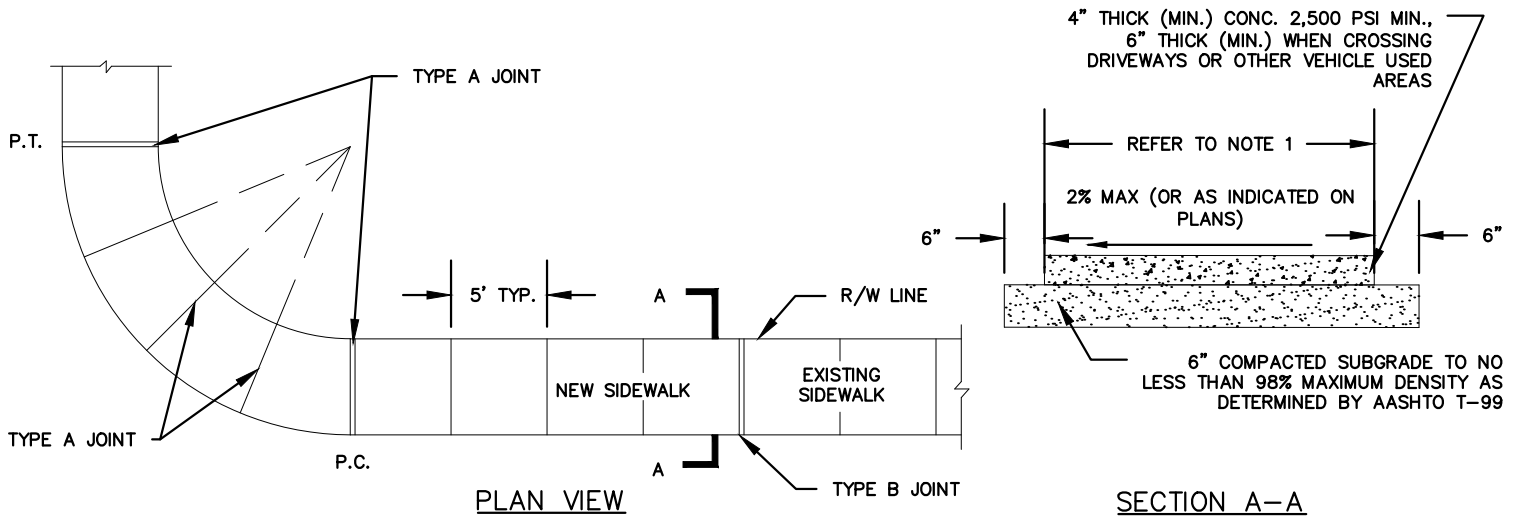


TABLE OF SIDEWALK THICKNESS - T	
LOCATION	
STANDARD SIDEWALK	4" (MIN.)
AT DRIVEWAYS AND OTHER VEHICLE USED AREAS	6" (MIN.)

### SIDEWALK DESIGN STANDARDS

NTS

TABLE OF SIDEWALK JOINTS	
	LOCATION
A	5'-0" CENTER TO CENTER ON SIDEWALK AND AT P.C. AND P.T. OF CURVES
B	WHERE SIDEWALK ABUTS CONCRETE CURBS, DRIVEWAYS, EXISTING SIDEWALK AND SIMILAR STRUCTURES.

NEW SIDEWALK TO INCLUDE A 3/8" EXPANSION JOINT AT 100' INTERVALS IF NEW STRETCH OF SIDEWALK EXCEEDS 100'.

#### NOTES:

- ALL SIDEWALKS SHALL BE CONSTRUCTED OF TWO THOUSAND FIVE HUNDRED (2,500) PSI CONCRETE NOT LESS THAN FIVE (5) FEET IN WIDTH FOR PUBLIC DEDICATED RIGHTS-OF-WAY AND FOUR (4) FEET FOR PRIVATE RIGHTS-OF-WAY, OR AS SPECIFIED IN EACH TOC DISTRICT, AND HAVING A THICKNESS OF NOT LESS THAN FOUR (4) INCHES, PROVIDED, HOWEVER, THAT ALL SIDEWALKS CROSSING AT VEHICULAR DRIVEWAY SHALL HAVE A THICKNESS OF NOT LESS THAN SIX (6) INCHES.
- CURE ALL CONCRETE WITH CLEAN SAND, PLASTIC MEMBRANE, OR OTHER APPROVED METHOD.
- TOOLED JOINTS WHILE WET AND SAWCUT 36 HOURS AFTER POURING TO OCCUR AT INTERVALS EQUAL TO WIDTH OF SIDEWALK
- SIDEWALK TO HAVE LIGHT BROOM FINISH PERPENDICULAR TO PATH OF TRAVEL.
- CONTRACTOR SHALL REPAIR AND RESTORE ALL AREAS WITHIN THE ABUTTING R/W DISTURBED DURING CONSTRUCTION TO A CONDITION EQUAL TO OR BETTER THAN EXISTING AT NO ADDITIONAL COST TO THE OWNER.
- ALL DEMOLISHED SIDEWALKS AND ADDITIONS ARE TO BE REPLACED WITH CONCRETE SIDEWALK TO MATCH EXISTING AT NO ADDITIONAL COST TO THE OWNER.
- ALL DEMOLISHED SIDEWALK RAMPS ARE TO BE REPLACED AS PER ADA STANDARDS AND INCLUDE ADA COMPLIANT DETECTABLE WARNINGS AT NO ADDITIONAL COST TO THE OWNER.
- THE USE OF VISQUEEN (PLASTIC SHEETING) IS REQUIRED TO PROTECT ADJACENT EXISTING CONCRETE STRUCTURES OR AREAS WHEN PERFORMING NEW CONCRETE WORK. THE VISQUEEN SHALL OVERLAP ALL THE EXISTING CONCRETE AREAS BY A MINIMUM OF 2 FEET AND COVER THE AREAS TO BE POURED BY AT LEAST 6 INCHES. AFTER THE CONCRETE IS POURED, THE EXCESS VISQUEEN MATERIAL SHALL BE CAREFULLY REMOVED. ENSURE THAT NO VISQUEEN IS LEFT IN PLACE WHERE IT COULD CAUSE TRIPPING HAZARDS, INTERFERE WITH THE CURING PROCESS, OR OBSTRUCT ANY OTHER ONGOING WORK ACTIVITIES.
- HANDRAIL REQUIRED WHEN RUNNING SLOPE EXCEEDS 5% OR THERE IS A DROP OFF HAZARD AS DEFINED IN THE FLORIDA GREEN BOOK. HANDRAIL TO BE ALUMINUM AND MEET FDOT STANDARD REQUIREMENTS.
- THE CITY MAY REQUIRE ADDITIONAL TESTING, WHICH SHALL BE PROVIDED AT NO ADDITIONAL COST.

DATE:12/24

DRAWN:KHA



CITY OF MARGATE, FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
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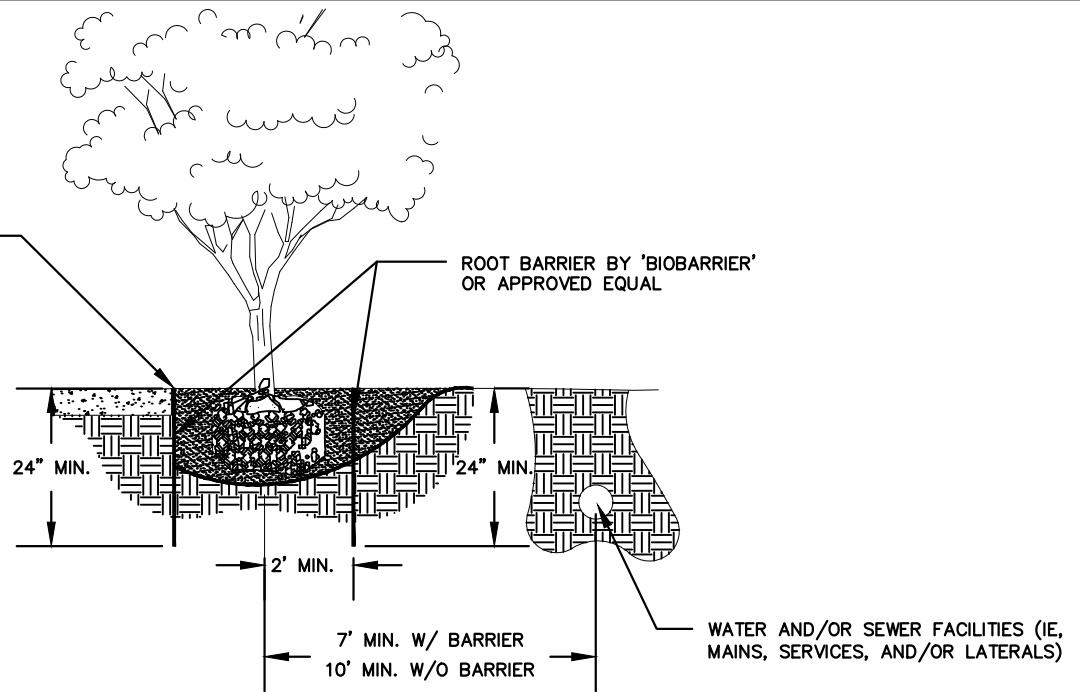
## SIDEWALK DESIGN STANDARD

G-42

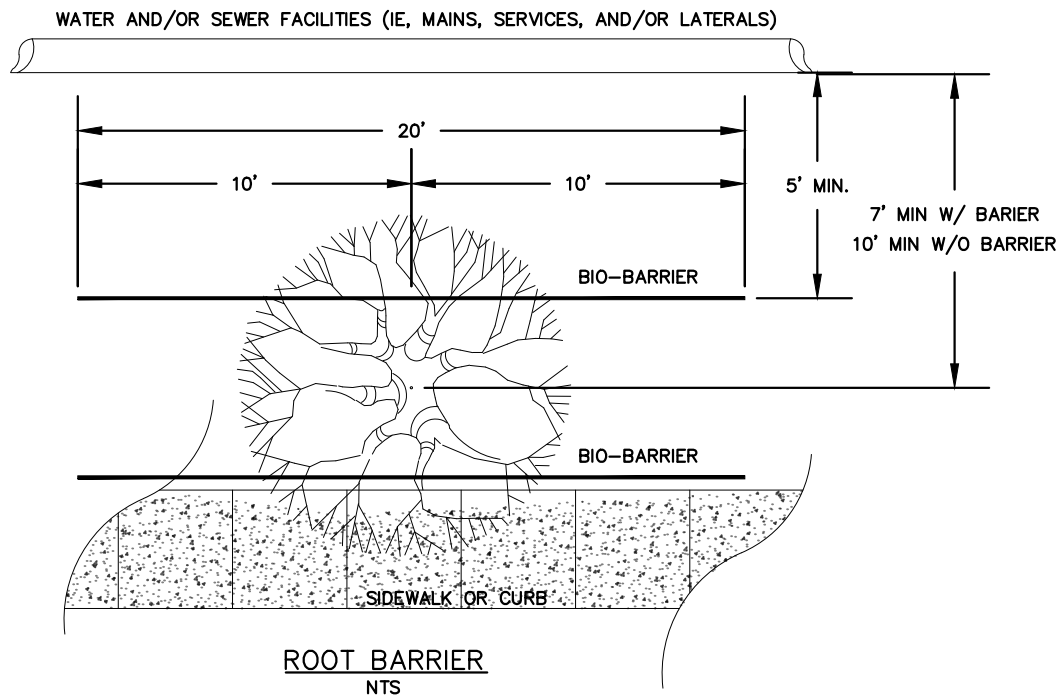


## ELEVATION

INSTALL ROOT BARRIER ADJACENT TO SIDEWALKS AND CURBS AT LOCATIONS SHOWN ON PLANS AND/OR AS PER NOTES BELOW.



## PLAN VIEW



### NOTES:

1. TREES SHALL BE LOCATED IN THE FIELD PRIOR TO CONSTRUCTION.
2. WHERE SHOWN ON PLANS, INSTALL ROOT BARRIER ADJACENT TO SIDEWALKS AND CURBS, PER MANUFACTURER'S SPECIFICATION.
3. INSTALL BIO-BARRIER PER MANUFACTURER'S SPECIFICATION ADJACENT TO SIDEWALKS AND AS SHOWN ON THIS DETAIL IN PROXIMITY TO UNDERGROUND UTILITIES.
4. ALL SHADE TREES, EXCEPT PALMS, INSTALLED WITHIN SIX (6) FEET OF PUBLIC INFRASTRUCTURE, INCLUDING, BUT NOT LIMITED TO, UTILITY LINES, SIDEWALKS, CURBING, ASPHALT AND PAVED RIGHTS-OF-WAY, SHALL UTILIZE AT LEAST A TWENTY-FOUR-INCH DEEP ROOT BARRIER SYSTEM, STRUCTURE SOIL OR SUSPENDED PAVEMENT SYSTEM AS APPROVED BY THE DEPARTMENT OF ENVIRONMENTAL AND ENGINEERING SERVICES.
5. ALL TERMINAL ISLANDS OF LESS THAN ELEVEN (11) FEET DUE TO TURNING RADII REQUIREMENTS SHALL HAVE POLYETHYLENE ROOT BARRIERS INSTALLED AGAINST THE FULL PERIMETER OF THE ISLAND. (REFERENCE MARGATE CODE 40.704 OF MUNICODE)

DATE:12/24

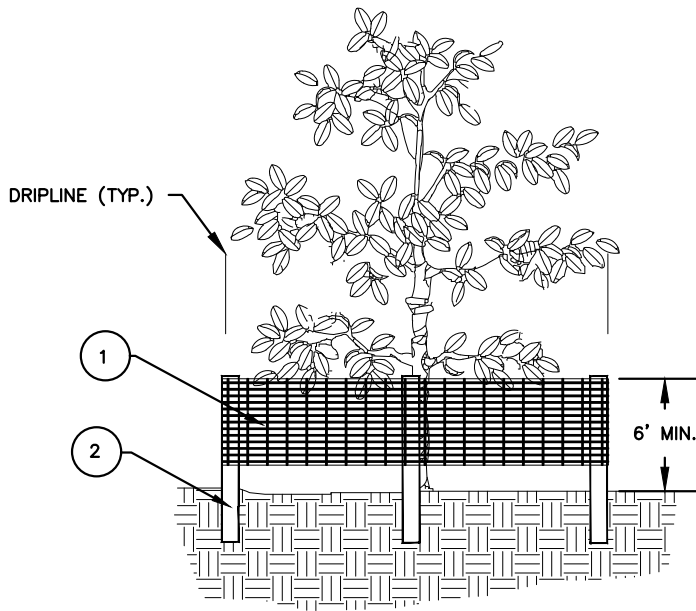
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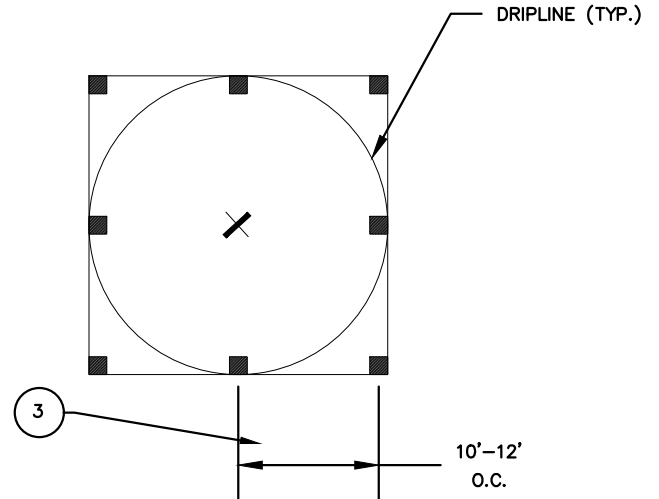
CITY OF MARGATE, FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
AND ENGINEERING SERVICES

ROOT BARRIER

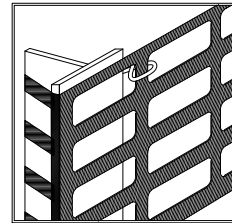
G-44



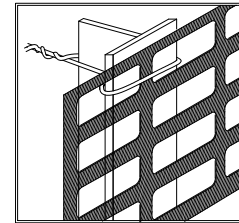
ELEVATION



PLAN VIEW



CORNER CONNECTION



CONNECTION

TREE PROTECTION DETAIL

NTS

1. 6' HIGH OWNER'S REPRESENTATIVE APPROVED FENCE. SUBMIT PRODUCT INFORMATION FOR APPROVAL PRIOR TO INSTALLATION.
2. 8' TALL METAL "T" POSTS OR 2" x 2" x 8' PRESSURE TREATED WOOD POSTS WITH 24" BURIAL BELOW GRADE.
3. IF TREE DIAMETER EXCEEDS 18-INCHES, BARRIERS OF 10' TO 12' SHALL BE UTILIZED.

NOTES:

1. POST SELECTION SHOULD BE BASED ON EXPECTED STRENGTH NEEDS AND THE LENGTH OF TIME FENCE WILL BE IN PLACE. FLEXIBLE FIBERGLASS ROD POSTS ARE RECOMMENDED FOR PARKS, ATHLETIC EVENTS AND CROWD CONTROL INSTALLATIONS. METAL "T" POSTS OR TREATED WOOD POSTS ARE TYPICALLY USED FOR CONSTRUCTION AND OTHER APPLICATIONS.
2. POSTS SHOULD BE DRIVEN INTO THE GROUND TO A DEPTH OF 1/4 OF THE HEIGHT OF THE POST. FOR EXAMPLE, A 8' POST SHOULD BE SET AT LEAST 2' INTO THE GROUND.
3. SPACE POSTS EVERY 6' (MIN.) TO 8' (MAX.).
4. SECURE FENCING TO POST WITH NYLON CABLE TIES (AVAILABLE FROM CONWED PLASTICS). WOOD STRIPS MAY BE ALSO BE USED TO PROVIDE ADDITIONAL SUPPORT AND PROTECTION BETWEEN TIES AND POSTS.
5. ALL EXISTING TREES WITHIN THE RIGHT-OF-WAY ARE TO REMAIN AND SHALL BE PROTECTED IN ACCORDANCE WITH THIS DETAIL.
6. IF WIRE TIES ARE USED, AVOID DIRECT CONTACT WITH FENCE. WIRE MAY DAMAGE FENCE OVER TIME.

DATE:12/24

DRAWN:KHA



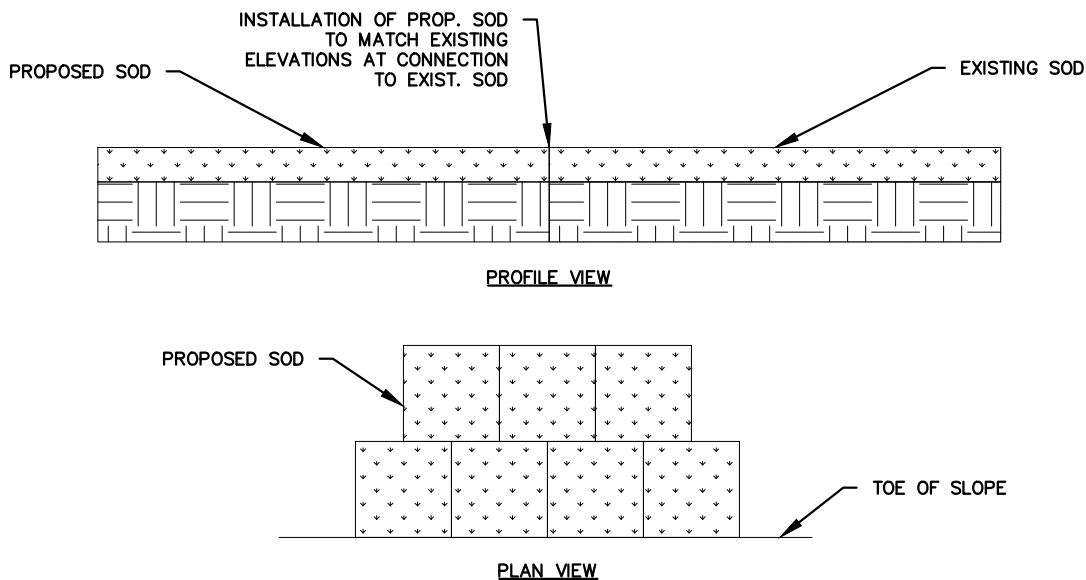
CITY OF MARGATE, FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
AND ENGINEERING SERVICES

**TREE PROTECTION**

**G-45**

## SOD INSTALLATION:

1. INSTALLATION SHALL BE IN ACCORDANCE WITH THE GUIDELINES SPECIFIED BY THE SOUTHERN SEED CERTIFICATION ASSOCIATION, INC. AND INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
2. INSTALLER MUST BE EQUIPPED WITH PROPER TOOLS TO CUT AND SMOOTH OUT DEPRESSIONS CREATED BY LOADERS, FORKLIFTS, ETC., AND MUST HAVE ON-SITE EQUIPMENT TO MOVE SOD PALLETS. GROUND PREPARATION WILL BE THE INSTALLER'S RESPONSIBILITY.
3. ALL SOD SHALL BE PLANTED WITHIN FORTY-EIGHT (48) HOURS OF CUTTING AND SHALL BE KEPT SHADED AND MOIST. SOD SHALL BE CAREFULLY PLACED EDGE-TO-EDGE BY HAND WITH TIGHTLY FITTED JOINTS (OVERLAPPING WILL NOT BE ALLOWED).
4. THERE SHALL BE NO GAPS WHEN SOD IS INSTALLED; HOWEVER, SAND MAY BE USED TO COVER FOR GAPS. IF AT LEAST 10% OF THE AREA REQUIRES SANDING, THE SOD INSTALLATION MUST BE REDONE.
5. SOD SHALL BE IMMEDIATELY PRESSED FIRMLY INTO PLACE BY HAND TAMPING OR ROLLER. THE INSTALLATION OPERATION SHALL PROVIDE A TRUE AND EVEN SURFACE AND ENSURE KNITTING WITHOUT DISPLACEMENT TO SOD OR DEFORMATION OF THE SURFACE OF THE SODDED AREAS. AREAS INACCESSIBLE TO ROLLER SHALL BE HAND TAMPED.
6. ON SLOPES HAVING A RATIO GREATER THAN OR EQUAL TO 1:3, SOD SHALL BE PEGGED INTO PLACE WITH NOT LESS THAN TWO STAKES PER SQUARE YARD.
7. THE SOD SHALL BE MOIST AND SHALL BE PLACED ON MOIST SOIL. PITCHFORKS SHALL NOT BE USED IN HANDLING SOD, AND DUMPING FROM VEHICLES SHALL NOT BE PERMITTED.
8. THE SOD SHALL BE CAREFULLY PLACED BY HAND, EDGE-TO-EDGE, IN ROWS AT RIGHT ANGLES TO THE SLOPE, COMMENCING AT THE BASE OF THE AREA TO BE SODDEN AND WORKING UPWARD IN A STAGGERED PATTERN.
9. THE EDGES OF THE SODDEN AREAS SHALL BE STAGGERED IN A CORRESPONDING MANNER, PROVIDING THE OFFSET ALONG THE EDGE DOES NOT EXCEED SIX INCHES (6"). ALL VERTICAL EDGING ADJACENT TO SODDEN AREAS SHALL BE TAMPED AS TO PRODUCE A FEATHER EDGE. SHOULD THE CONTRACTOR USE A ROLLER, THEY SHALL COORDINATE ITS USE AS NECESSARY TO AVOID DAMAGE TO OTHER WORK IN PLACE.
10. IMMEDIATELY AFTER COMPLETING THE PLACEMENT OF SOD, BEGIN WATER OPERATION. WATER SHALL BE APPLIED IN THE AMOUNT NECESSARY TO KEEP THE SOD MOISTENED TO THE FULL DEPTH OF THE ROOT ZONE FOR A PERIOD OF NOT LESS THAN TWO (2) WEEKS.
11. AFTER THE SOD HAS BEEN INSTALLED, PALLETS AND OTHER DEBRIS CREATED BY THE CONTRACTOR SHALL BE REMOVED FROM THE PROJECT. ANY PAVED AREAS, INCLUDING CURBS AND SIDEWALKS WHICH HAVE BEEN STREWN WITH SOIL, SOD WASTE, OR FERTILIZER, SHALL BE THOROUGHLY SWEEPED.
12. IN THE EVENT THAT WEEDS OR OTHER UNDESIRABLE VEGETATION BECOME PREVALENT TO SUCH AN EXTENT THAT EITHER CUT OR UNCUT, THEY THREATEN TO SMOTHER THE GRASS SPECIES, THEY SHALL BE REMOVED AS DIRECTED BY THE MAINTENANCE SUPERVISOR. IF NECESSARY, IT SHALL BE REPLACED AS NEEDED.
13. INSTALLATION MUST BE AS TIGHT AS POSSIBLE IN STAGGERED JOINTS, EDGE TO EDGE. ALL SOD SHALL BE ALIVE, FRESH, UNINJURED, AND FREE OF INSECTS, PESTS, WEEDS, DISEASE, AND NEMATODES.



DATE:12/24

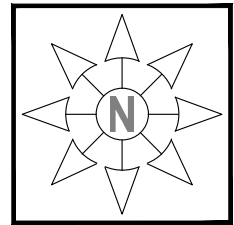
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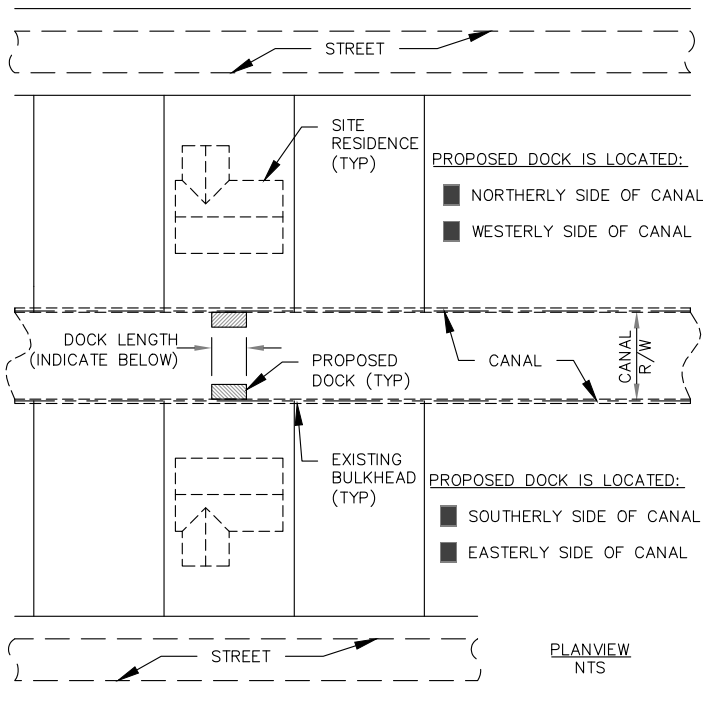
CITY OF MARGATE, FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
AND ENGINEERING SERVICES

**SOD DETAIL**

**G-46**



IDENTIFY NORTH:  
MARK APPROPRIATE  
ARROWHEAD



REQUIRED INFORMATION:

NAME: \_\_\_\_\_

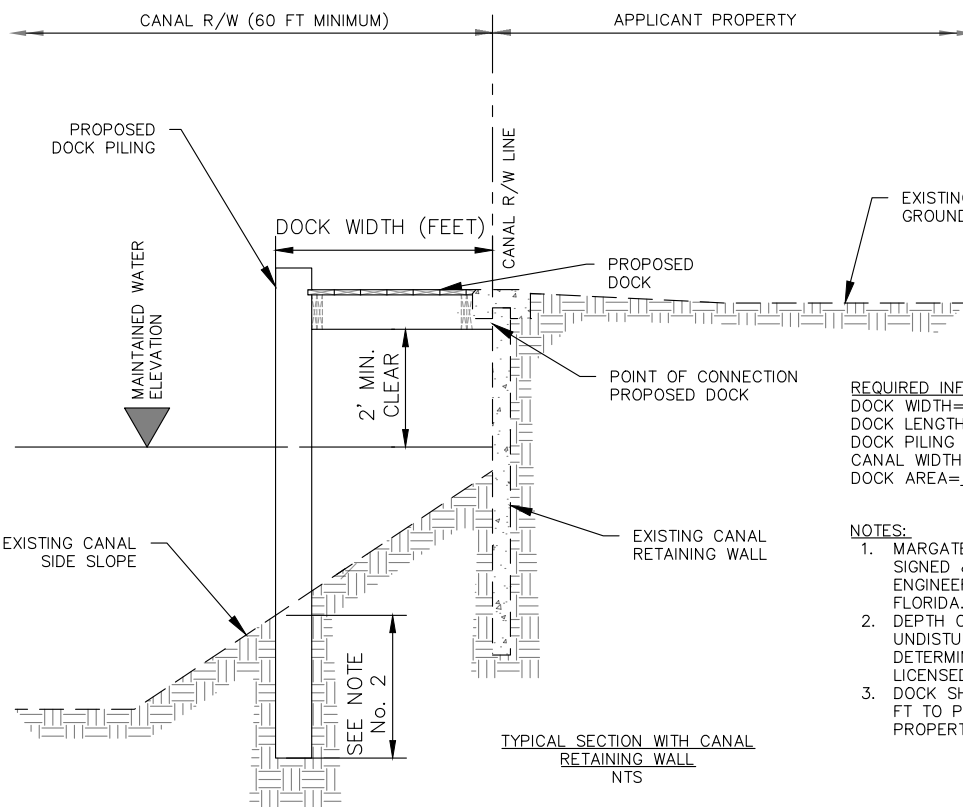
DATE: \_\_\_\_\_

SITE ADDRESS: \_\_\_\_\_

SUBDIVISION: \_\_\_\_\_

LOT NUMBER: \_\_\_\_\_ BLOCK NUMBER: \_\_\_\_\_

CANAL No: \_\_\_\_\_



REQUIRED INFORMATION:

DOCK WIDTH= \_\_\_\_\_ FEET  
DOCK LENGTH= \_\_\_\_\_ FEET  
DOCK PILING PENETRATION DEPTH= \_\_\_\_\_ FEET  
CANAL WIDTH= \_\_\_\_\_ FEET  
DOCK AREA= \_\_\_\_\_ SQUARE FEET

NOTES:

1. MARGATE REQUIRES DESIGN DRAWINGS SIGNED & SEALED BY A PROFESSIONAL ENGINEER LICENSED WITH THE STATE OF FLORIDA.
2. DEPTH OF PILING PENETRATION INTO UNDISTURBED GROUND MUST BE DETERMINED BY A PROFESSIONAL ENGINEER LICENSED WITH THE STATE OF FLORIDA.
3. DOCK SHALL NOT EXTEND CLOSER THAN 10 FT TO PROPERTY LINE OF THE ADJACENT PROPERTY.

DATE: 12/24

DRAWN: KHA

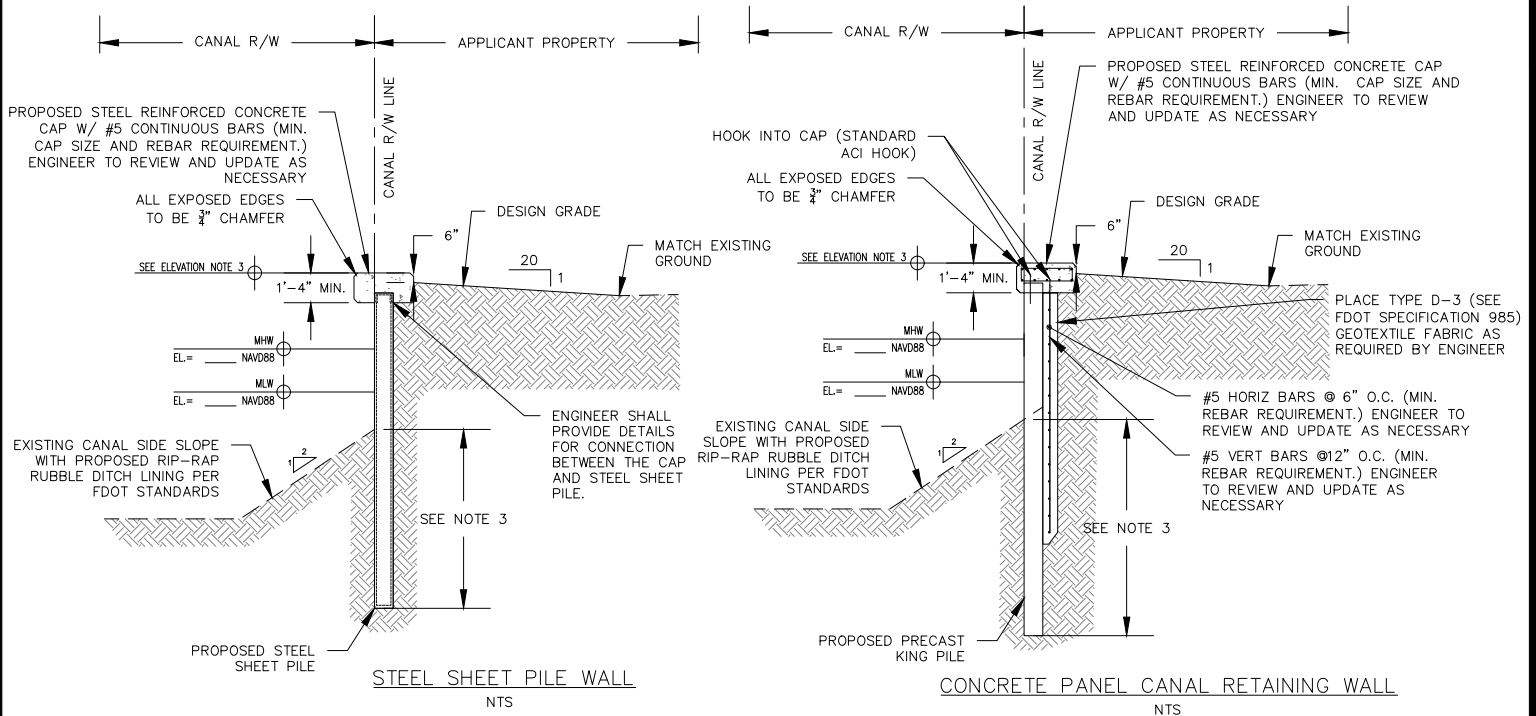


CITY OF MARGATE, FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
AND ENGINEERING SERVICES

**DOCK**

**G-47**





#### NOTES:

1. THESE STANDARD DETAILS ARE FOR CONSTRUCTION OF NEW CANAL RETAINING WALLS.
2. DESIGN TO BE REVIEWED AND ALTERED BY ENGINEER OF RECORD AS REQUIRED.
3. CITY OF MARGATE REQUIRES DESIGN DRAWINGS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF FLORIDA. SIGNED AND SEALED CALCULATIONS SHALL BE PROVIDED TO SUPPORT STRUCTURAL DESIGN.
4. DEPTH OF PILING PENETRATION INTO UNDISTURBED GROUND MUST BE DETERMINED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF FLORIDA. PILE PENETRATION (T-PILE, STEEL SHEET PILE, KING PILE, AND WALL PANEL)—AS REQUIRED FOR BEARING, BUT NOT LESS THAN TEN (10) FEET BELOW BERM ELEVATION, EXCEPT THAT PILING MAY BE TERMINATED AT POINT OF REFUSAL. CONCRETE SHEET PILING PENETRATION—AS REQUIRED FOR BEARING, BUT NOT LESS THAN FIVE (5) FEET BELOW BERM ELEVATION, EXCEPT THAT SHEETING MAY TERMINATE AT POINT OF REFUSAL.
5. THE FOLLOWING STRUCTURAL NOTES APPLY TO THE PRECAST REINFORCED CONCRETE (T-PILE, KING PILE, AND WALL PANEL) AND SHEET PILING STANDARD DETAILS. THE STANDARD DETAILS DESIGN IS BASED SOLELY ON THE PARAMETERS DESCRIBED IN THE NOTES AND DRAWINGS HEREIN. A STRUCTURAL ENGINEER LICENSED IN FLORIDA SHALL PREPARE CALCULATIONS AND STRUCTURAL DRAWINGS AS PER FLORIDA BUILDING CODE (FBC) LATEST VERSION AND IN ACCORDANCE WITH APPLICABLE CODES AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.
6. IT IS THE INTENT OF THESE PLANS TO COMPLY WITH LOCAL, STATE, AND FEDERAL ENVIRONMENTAL PERMITS ISSUED FOR THIS PROJECT. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO FAMILIARIZE AND GOVERN HIMSELF/HERSELF BY ALL PROVISIONS OF THESE PERMITS.
7. NO CANAL RETAINING WALL SHALL BE CONSTRUCTED IN THE CITY WITHOUT APPROPRIATE LOCAL, STATE, AND FEDERAL APPROVALS. THE CONTRACTOR SHALL COMPLY WITH ALL NECESSARY LOCAL, STATE, AND FEDERAL ENVIRONMENTAL PERMITS ISSUED FOR THE PROJECT. IT IS THE CONTRACTORS RESPONSIBILITY TO BECOME FAMILIAR WITH AND BE GOVERNED BY ALL PROVISIONS OF THESE PERMITS.
8. A BOUNDARY SURVEY PREPARED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER FOR THE UPLAND OWNER DATED WITHIN ONE YEAR OF THE BUILDING PERMIT APPLICATION MUST BE PROVIDED.
9. UPON COMPLETION OF CONSTRUCTION AN AS-BUILT SURVEY AND/OR ENGINEER OF RECORD CERTIFICATION WILL BE REQUIRED TO CLOSE ENGINEERING PERMIT. ENGINEER OF RECORD (EOR) CERTIFICATION MUST CONFIRM THAT THE RETAINING WALL HAS BEEN CONSTRUCTED AS APPROVED IN THE PERMITTING PLANS AND INDICATE ANY DEVIATIONS.
10. THE CITY PREFERS CANAL RETAINING WALL TYPES AS INDICATED IN THE CODE. IT IS STRONGLY RECOMMENDED THAT ANY NEW RETAINING WALL MATCH EXISTING CONDITIONS IN THE AREA TO MAINTAIN AN UNIFORM AND COHESIVE LOOK ALONG THE WATERFRONT.

#### CONCRETE AND REINFORCING STEEL:

1. ALL CONCRETE (EXCEPT PRECAST PILES) SHALL HAVE A 0.40 WATER/CEMENT RATIO AND SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH ( $f'_c$ ) OF 5000 P.S.I. AT THE END OF 28 DAYS. SIX (6) CONCRETE CYLINDERS SHALL BE TAKEN FOR EACH 50 CUBIC YARDS OR FRACTION THEREOF AND SHALL BE TESTED AT 3, 7, AND 28 DAYS IN ACCORDANCE WITH ASTM C39. SLUMP SHALL NOT EXCEED 5" ( $\pm 1$ ").
2. ALL REINFORCEMENT SHALL BE 60000 PSI MINIMUM YIELD ( $F_y$ ) NEW BILLET STEEL IN ACCORDANCE WITH ASTM A615 GRADE 60. ALL REINFORCING STEEL SHALL BE FROM DOMESTIC MILLS AND SHALL HAVE THE MANUFACTURER'S MILL MARKING ROLLED INTO THE BAR WHICH SHALL INDICATE THE PRODUCER, SIZE, TYPE AND GRADE. ALL BAR LAPS SHALL BE A MINIMUM OF 48 BAR DIAMETERS. PLACING OF REINFORCEMENT SHALL CONFORM TO THE LATEST ACI MANUAL OF STANDARD PRACTICE CODES.
3. ALL CONCRETE SHALL BE PLACED WITHIN 90 MINUTES FROM BATCH TIME, AND VIBRATED AS REQUIRED BY THE ACI MANUAL OF CONCRETE PRACTICE. TEMPERATURE OF CONCRETE AT THE TIME OF PLACEMENT SHALL BE BETWEEN 75° AND 100° F.

#### ELEVATIONS:

1. ELEVATIONS OF PROPOSED AND EXISTING IMPROVEMENTS MUST BE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988) AND BE NOTED ON THE DRAWING.
2. THE SITE-SPECIFIC MEAN HIGH WATER (MHW) AND MEAN LOW WATER (MLW) LEVEL MUST BE INCLUDED IN THE PLANS.
3. CHECK LOCAL JURISDICTION REQUIREMENTS FOR CAP ELEVATION.

DATE:12/24

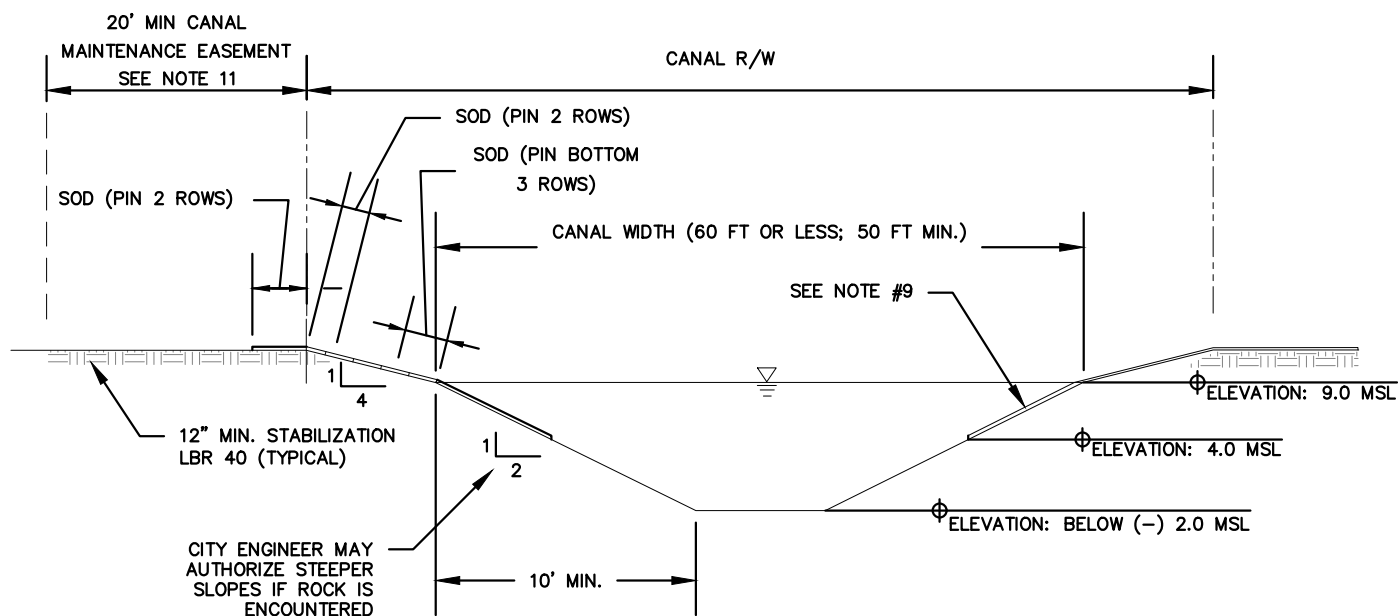
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CITY OF MARGATE, FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
AND ENGINEERING SERVICES

## CANAL RETAINING WALL DETAIL

G-48



\*MSL = MEAN SEA LEVEL

- NOTES:**
1. SOD TO BE INSTALLED TO THE WATERS EDGE.
  2. MINIMUM CANAL BOTTOM IS 10' WIDE.
  3. ALL PROPERTIES ADJACENT TO THE CANAL MUST MAINTAIN BANK SLOPES AND SOD AS SHOWN ABOVE, AND PROVIDE AS-BUILTS FOR CONSTRUCTION.
  4. THERE SHALL BE NO MUCK WITHIN THE CANAL RIGHT OF WAY AND MAINTENANCE EASEMENT.
  5. SOD PINS MUST BE WOOD
  6. WHERE THE CANAL SECTION EXCEEDS SIXTY (60) FEET, THERE SHALL BE FIFTEEN (15) FEET MAINTENANCE EASEMENTS ON BOTH SIDES OF THE CANAL DEDICATION.
  7. NO FINAL INSPECTION WILL BE MADE UNTIL "AS-BUILT" CROSS SECTIONS PREPARED BY THE DESIGNING ENGINEER ARE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.
  8. ALL CANALS SHALL BE KEPT CLEAN AND FREE OF DEBRIS AND AQUATIC GROWTH UNTIL FINAL INSPECTION AND APPROVAL BY THE CITY ENGINEER.
  9. ALL BANKS SHALL BE CONSTRUCTED UNIFORMLY IN A STRAIGHT LINE.
  10. THE BANKS OF THE CANAL ABOVE ELEVATION 4.0 MEAN SEA LEVEL SHALL BE STABILIZED WITH A STAND OF PERENNIAL GRASS. NO PAVING AND DRAINAGE CONSTRUCTION SHALL BE CONSIDERED FINAL UNTIL THE STAND OF GRASS HAS BECOME PERMANENTLY ESTABLISHED.
  11. NO TREES TO BE PLANTED, NOR UTILITIES TO BE INSTALLED WITHIN THE 20' MAINTENANCE EASEMENT.

DATE:12/24

DRAWN:KHA



CITY OF MARGATE, FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
AND ENGINEERING SERVICES

## CANAL MINIMUM DESIGN SECTION AND CANAL MAINTENANCE EASEMENT

G-49

NOTES:

1. All permit applicants shall utilize a licensed Professional Engineer to undertake and complete the engineering design and Wind Loading Analysis calculations required.
2. All poles, guy-wires, anchors, etc. shall not be installed within nor encroach sidewalks.
3. All poles, guy-wires, anchors, etc. shall maintain ADA accessibility, and shall not conflict with existing driveway access, driver's sight distance, or driver's visibility of signs, signals or other traffic control devices.
4. New construction of poles, guy-wires, anchors, cabinets, pedestals, etc. shall be installed per current FDOT Florida Greenbook standard details criteria.
5. Plans shall label distances to nearest cross streets, Edge of Pavement (EOP), Front of Curb (FOC), and include H x W x D dimensions for proposed at-grade cabinets/pedestals.
6. All risers on the poles shall be identified with tags made of materials which are weather, corrosion, and ultraviolet (UV) resistant.
7. Landscaping including but not limited to sod, shrubs, trees, ect. shall be restored as required by the City of Margate DEES.
8. Stones (57 rock) shall be 12"–18" below finished grade, filled with topsoil for sod, and sodded.

DATE:03/25

DRAWN:DEES



CITY OF MARGATE, FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
AND ENGINEERING SERVICES

**POLE DETAIL**

**G-50**