

NOTES:

3. TYPICALLY 4" TO 6".

BY MANATEE COUNTY.

--- MILL EXIST. ASPHALT.

SAW CUT JOINT-

3" WARNING TAPE 12" BELOW FINISH SURFACE OR 6" WARNING TAPE BETWEEN

2" & 24" BELOW FINISH SURFACE OVER

PIPE. TAPE SHALL BE MARKED "WATER"

SELECTED COMMON FILL-

PIPE BEDDING ENVELOR (SEE NOTE 1)

UNDISTURBED STABLE MATERIAL-

MANATEE COUNTY

PUBLIC WORKS DEPARTMENT

SLOPE: 1/4":1'

36" MIN. UNDER ROAD

1/4" OVER TOP-OF CURB

E) See section 201.0 for curb and gutter types.

G) No portion of pipe to be into sub-base.

H) Sidewalk to be constructed per section 300.

1) Sodding to be installed per section 400.1 (8).

\* Or approved equal, meeting same structural number.

TYPE "F" CURB

D) Median is to be sodded.

MAY 10, 2011

DATE OF APPROVAL

-30" MIN. UNDER SHOULDER (SEE DETAIL "A")

10" BASE

A) Asphaltic concrete surface course shall be 2" Type S-I and 1" Type S-III. Two lifts of asphalt shall be required. A performance bond shall be required if the second lift is delayed beyond initial road

B) 10" base course 850 lbs. per sq. yd. limerock\* compacted to 98% T180 AASHTO, or 8" soil cement.\*

C) 12" stabilized sub-base shell marl blended with sandy sub-grade minimum LBR 60, 98% T180 AASHTO.

J) When the first 2 lanes of an ultimate 4—lane need is approved, the outside 2 lanes shall be constructed

first. In addition, left turn lanes must be constructed at all intersections at the time of initial construction unless exempted by the Transportation Director.

12" STAB. SUB-BASE

DETAIL "A"

F) Laboratory tests are required to substantiate structural section design.

Specifications shown on this sheet are minimum requirements.

REV.BY DATE

UTILITIES

"SEWER" OR "RECLAIMED"

#10 COPPER WIRE CONTINUOUS (SEE NOTE 11)

EXISTING.

SUBGRADE

TIMES THE PIPE OD, WHICHEVER IS LESS.

1. USE OF TYPE A-2 AND A-3 PIPE BEDDING TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

4. PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.

AS EXISTING OR A MINIMUM OF 1 1/4 INCH, WHICHEVER IS GREATER.

TIMES. PERMANENT REPLACEMENT TO BE MADE AS SOON AS POSSIBLE.

8. BASE SHALL BE 8" MINIMUM THICKNESS CRUSHED CONCRETE.

11. TRACER WIRE NOT REQUIRED FOR GRAVITY SEWERS.

5. ASPHALTIC CONCRETE STRUCTURE COURSE WITH PRIME COAT SHALL BE THE SAME DEPTH AND TYPE

6. MILL 25' BACK FROM TRENCH SAW CUT. ADJUST MILLING PER INDIVIDUAL SITE TO NOT IMPACT BASE.

7. SHEETING ORDERED LEFT IN PLACE TO BE CUT OFF 24" BELOW FINISHED GRADE OR 12" BELOW

9. TEMPORARY PATCHES WILL BE INSTALLED TO PROVIDE A SMOOTH ALL WEATHER SURFACE AT ALL

12. NOTES 5. THRU 10. ARE MINIMUM REQUIREMENTS FOR A TRENCH IN A ROAD. REFER TO LATEST

EDITION OF MANATEE COUNTY HIGHWAY AND TRAFFIC STANDARDS FOR ADDITIONAL REQUIREMENTS.

1 1/2" S-III ASPHALTIC CONCRETE OVERLAY

ASPHALTIC CONCRETE W/ PRIME COAT (SEE NOTE 5)

FULL BASE REPLACEMENT

SEE NOTE 7-

PIPE O.D.

TRENCH WITH ASPHALT

PAVEMENT SURFACE TYPE

A-1 PIPE BEDDING

SURFACE COURSE -

12" STAB. SUB-BASE

-2" TYPE S-I ASPHALT 1" TYPE S-III ASPHALT

WITH PRIME COAT

[SEE 400.2 (14)]

10" BASE-

SLOPE: 1/4":1'

SEE NOTE 8-

MILL EXIST. ASPHALT

UG - 12

(SOD)

1.33'---

CURB & GUTTER

SYMMETRICAL-

ABOUT CENTERLINE

MEDIAN (FLAT+

OR RAISED)

PAGE 112

MATCH EXISTING.

-SAW CUT JOINT

10. RESTORE SIGNAGE & MARKING WITH THERMOPLASTIC PER FDOT STANDARDS, LATEST EDITION.

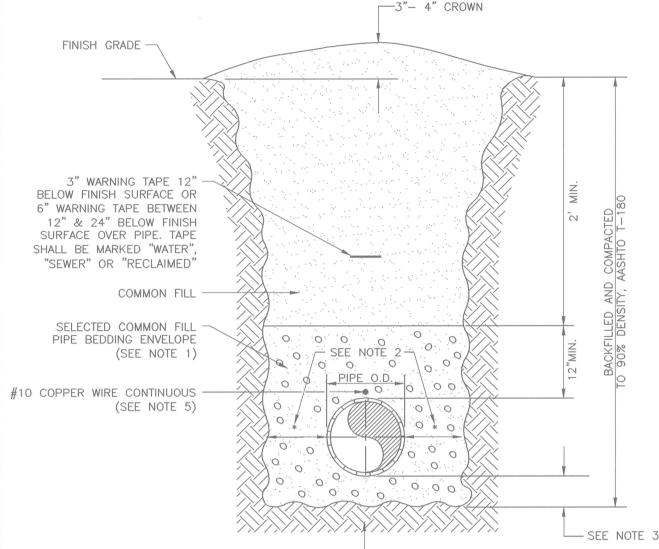
BUTT JOINT TO EXIST ASPHALT. FINAL OVERLAY LIMITS ARE FROM EDGE OF PAVEMENT TO EDGE OF

PAVEMENT. FINAL OVERLAY TO MATCH EXISTING WITH NO DISCERNABLE "BUMP" AT JOINT. MILLING LIMITS THAT IMPACT INTERSECTION SHALL BE ADDRESSED ON A CASE BY CASE BASIS AND APPROVED

2. PROVIDE ADEQUATE CLEARANCE TO PLACE AND COMPACT STAGE 1 BEDDING MATERIAL IN TRENCH AREA

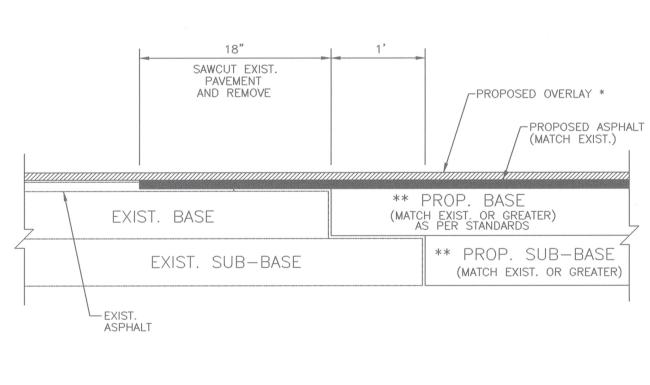
BELOW PIPE SPRINGLINE. PIPE EMBEDMENT MUST BE COMPACTED OUT TO THE TRENCH WALL OR 2.5

- NOTES: 1. USE OF TYPE A-2 AND A-3 PIPE BEDDING TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 2. PROVIDE ADEQUATE CLEARANCE TO PLACE AND COMPACT STAGE 1 BEDDING MATERIAL IN TRENCH AREA BELOW PIPE SPRINGLINE. PIPE EMBEDMENT MUST BE COMPACTED OUT TO THE TRENCH WALL OR 2.5 TIMES THE PIPE OD, WHICHEVER IS LESS.
- 3. TYPICALLY 4" TO 6".
- 4. PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 5. TRACER WIRE NOT REQUIRED FOR GRAVITY SEWERS.



MANATEE COUNTY TRENCH WITH PUBLIC WORKS DEPARTMENT REV.BY DATE UNIMPROVED SURFACE UG - 11TYPE A-1 PIPE BEDDING MAY 10, 2011 DATE OF APPROVAL PAGE 111

- UNDISTURBED STABLE MATERIAL



- \* NOTE: LIMITS OF OVERLAY EDGE OF PAVEMENT TO EDGE OF PAVEMENT AND 25' BEYOND LIMITS OF CONSTRUCTION.
- \*\* NOTE: CONNECTION TO OLDER (SUBSTANDARD THICKNESS) ROADS MAY REQUIRE THICKER PROPOSED BASE AND SUB-BASE TO MEÉT CURRENT STANDARDS.
  - SIGNAGE AND MARKING PLAN SHALL ACCOMPANY CONSTRUCTION PLAN.

ROAD CONNECTION

DETAIL

## ROAD CONNECTION DETAIL N.T.S.

TRANSPORTATION DEPARTMENT

6/12/07

DATE OF B.O.C.C. APPROVAL

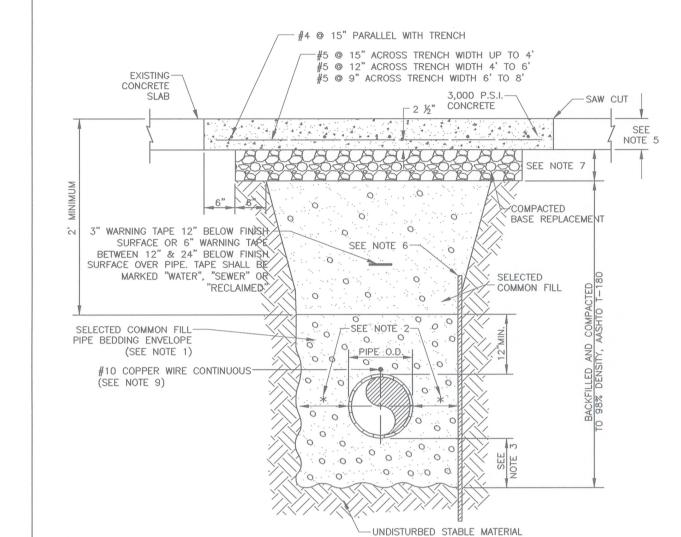
## 403.3 REV.BY DATE

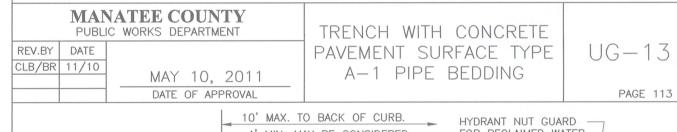
MANATEE COUNTY TRANSPORTATION DEPARTMENT 6/12/07

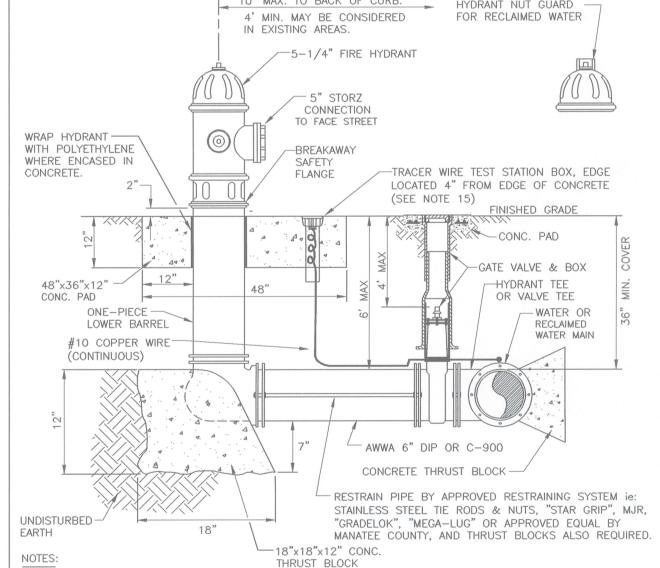
## TYPICAL 4-LANE 401.2 DIVIDED ROADWAY

NOTES:

- 1. USE OF TYPE A-2 AND A-3 PIPE BEDDING TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 2. PROVIDE ADEQUATE CLEARANCE TO PLACE AND COMPACT STAGE 1 BEDDING MATERIAL IN TRENCH AREA BELOW PIPE SPRINGLINE. PIPE EMBEDMENT MUST BE COMPACTED OUT TO THE TRENCH WALL OR 2.5 TIMES THE PIPE OD, WHICHEVER IS LESS.
- 3. TYPICALLY 4" TO 6".
- 4. PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 5. THICKNESS TO MATCH EXISTING OR BE 8" MINIMUM, WHICHEVER IS GREATER.
- 6. SHEETING ORDERED LEFT IN PLACE TO BE CUT OFF 24" BELOW FINISHED GRADE OR 12" BELOW SUBGRADE
- 7. BASE SHALL BE 8" MINIMUM THICKNESS CRUSHED CONCRETE.
- 8. TEMPORARY PATCHES WILL BE INSTALLED TO PROVIDE A SMOOTH ALL WEATHER SURFACE AT ALL TIMES. PERMANENT REPLACEMENT TO BE MADE AS SOON AS POSSIBLE.
- 9. TRACER WIRE NOT REQUIRED FOR GRAVITY SEWERS.
- 10. NOTES 5. THRU 8. ARE MINIMUM REQUIREMENTS, REFER TO MANATEE COUNTY HIGHWAY AND TRAFFIC STANDARDS FOR ADDITIONAL REQUIREMENTS.







- WEEPHOLES SHALL BE EXCLUDED FROM THE FIRE HYDRANT. 2. FIRE HYDRANTS SHALL BE A MINIMUM OF 6' OFF EDGE OF PAVEMENT AND 10' MAX. FROM BACK OF CURB. WHERE POSSIBLE AND WHERE SIDEWALK IS TO BE INSTALLED, FIRE HYDRANT SHALL BE LOCATED BETWEEN SIDEWALK AND RIGHT-OF-WAY LINE.
- HYDRANTS SHALL BE FUSION BONDED EPOXY COATED SAFETY YELLOW FOR WATER AND PURPLE (PANTONE 522C) FOR RECLAIMED WATER. HYDRANT SHALL BE DUCTILE IRON CONSTRUCTION. 4. FIRE HYDRANTS SHALL BE PLACED SO THAT STORM WATER FLOWS AWAY FROM THE HYDRANT.
- 5. FIRE HYDRANTS SHALL BE CONSTRUCTED WITH "GROUND LINE" SET TO FINISHED GRADES AS ESTABLISHED IN THE FIELD. NORMAL BURY IS 3 FEET OF COVER FOR ALL WATER LINES. . FIRE HYDRANTS MAY BE CONSTRUCTED WITH "GRADELOK" OFFSET FITTING.
- RAISED REFLECTIVE PAVEMENT MARKER (BLUE) FOR POTABLE WATER (PURPLE) FOR RECLAIMED WATER. SHALL BE INSTALLED AT CENTERLINE OF PAVEMENT ADJACENT TO EACH HYDRANT.
- B. PRECAST CONCRETE THRUST BLOCKS & PADS SHALL NOT BE USED.
- ALL EXPOSED EDGES OF CONCRETE SHALL HAVE 1/2" CHAMFER. 10. FIRE HYDRANT VALVE SHALL BE FASTENED DIRECTLY TO TEE.

DATE OF APPROVAL

REV.BY DATE

CLB/KE 11/10

- IN-LINE VALVES SHOULD BE LOCATED AT HYDRANT TEES. 12. HYDRANTS SHALL BE LOCATED ON SAME SIDE OF ROAD AS WATER MAIN UNLESS OTHERWISE APPROVED. 13. THERE MUST BE A CLEARANCE OF 7 1/2 FEET FROM FRONT AND BOTH SIDES, AND FOUR FEET TO THE REAR OF THE HYDRANT, TO ABOVE GRADE OBSTRUCTIONS INCLUDING POSTS, FENCES, TREES, ETC, PER
- THE FLORIDA FIRE PREVENTION CODE. 14. SEE STANDARD DETAIL GATE VALVE, BOX, LID AND TAG. 15. SHOULD THE FIRE HYDRANT'S CONCRETE PAD OVERLAP THE SIDEWALK, THE TRACER WIRE TEST STATION BOX SHALL NOT BE LOCATED WITHIN THE SIDEWALK.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT FIRE HYDRANT UW-5ASSEMBLY MAY 10, 2011

PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East

Bradenton, FL 34208

MANATEE COUNTY GOVERNMENT

N

DO JECT //		<u> </u>	100	.000	2000	
ROJECT #			406-6082980			
JRVEY #			3825			
EC./TWN./RGE			16,17,18/35/17			
ERT. SCALE			N.T.S.			
DRZ. SCALE			N.T.S.			
	BY			DATE		
JRVEYED	LSF/HYATT			2001/201		
SIGNED LSI		F/	'JS 2002/201			

03/2013

03/2013 CHECKED JS JAMES STOCKWELL, P.E. FLORNDASPDAVIA 67,198 LICENSTICA

BLR

DRAWN

PAGE 123