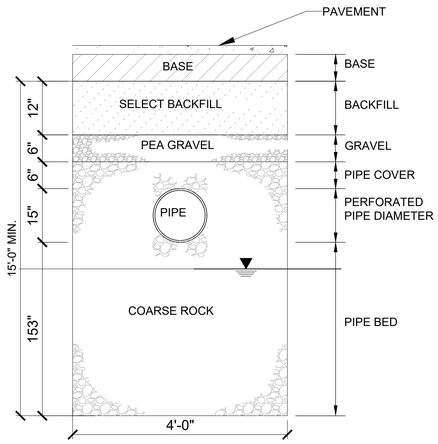
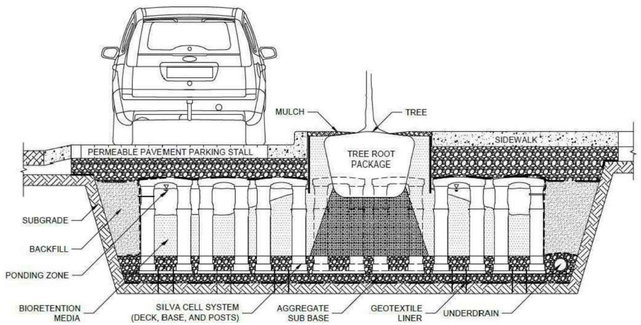


NOTES:

1. SIDES AND TOP OF TRENCH ONLY TO BE LINED WITH FILTER FABRIC. OVERLAP LINER A MINIMUM OF 2' AT THE TOP OF THE TRENCH.
2. BALLAST ROCK SHALL BE FROM FRESH WATER WASHED AND FREE OF DELETERIOUS MATTER.
3. ALL EXFILTRATION TRENCHES SHALL HAVE A POLLUTION RETARDANT BAFFLE AT EACH CONNECTION POINT TO A STRUCTURE.

A TRENCH SECTION DETAIL

SCALE: N.T.S.



B SUSPENDED PAVEMENT DETAIL

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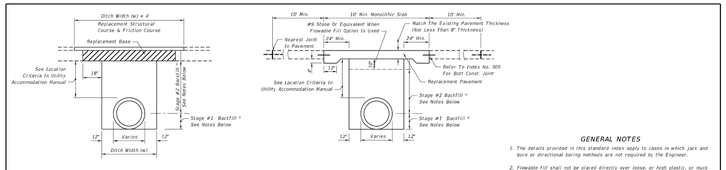

FLEXIBLE PAVEMENT NOTES

PAVEMENT REMOVAL AND REPLACEMENT

Pavement shall be mechanically sawed.

The replacement asphalt shall match the existing structural and friction courses for type and thickness in accordance with current FDOT asphalt mix specifications.

The new base materials shall be either of the same type and composition as the materials removed or of equal or greater structural adequacy (See Index No. 514).

BACKFILL

COMPACTED AND STABILIZED FILL OPTION

Backfill material shall be placed in accordance with Section 125 of the Standard Specifications.

In Stage #1, construct compacted fill beneath the haunches of the pipe, using mechanical tamps suitable for this purpose. This compaction applies to the material placed beneath the haunches of the pipe and above any bedding.

In Stage #2, construct compacted fill along the sides of the pipe and up to the bottom of the backwith the upper 12" receiving Type B Stabilization. In lieu of Type B Stabilization, the Contractor may construct using Optional Base Group 3.

*** FLOWABLE FILL OPTION**

If compaction can not be achieved through normal mechanical methods then Flowable fill may be used.

Flowable fill is to be placed in accordance with Section 121 of the Specifications, as approved by the Engineer.

Do not allow the utility being installed to float. If a method is provided to prevent flotation from occurring, Stages #1 and #2 can be combined, if approved by the Engineer.

In Stage #1, place Flowable fill midway up on both sides of the utility. Allow to harden before placing Stage #2.

In Stage #2, place Flowable fill to the bottom of the existing base course.

FLEXIBLE PAVEMENT CUT

RIGID PAVEMENT NOTES

PAVEMENT REMOVAL AND REPLACEMENT

High early strength sanked concrete (3000 psi) meeting the requirements of Standard Specification 346 shall be used for rigid pavement replacement.

Pavement shall be mechanically sawed and restored to conform with existing pavement joints within 12 hours. (See Index No. 305)

GRANULAR BACKFILL

Any edgedrain system that is removed shall be replaced with the same type materials. Any edgedrain system that is damaged shall be repaired with methods approved by the Engineer.

Fill material shall be placed in accordance with the Standard Specifications. Fill material shall be special select soil in accordance with Index No. 505.

In Stage #1, construct compacted fill beneath the haunches of the pipe, using mechanical tamps suitable for this purpose. This compaction applies to the material placed beneath the haunches of the pipe and above any bedding.

In Stage #2, construct fill along the sides of the pipe and up to the bottom of replacement pavement.

*** FLOWABLE FILL OPTION**

If mechanical compaction can not be achieved through normal mechanical methods then flowable fill may be used.

Flowable fill is to be placed in accordance with Section 121 of the Specifications, as approved by the Engineer.

Do not allow the utility being installed to float. If a method is provided to prevent flotation from occurring, Stages #1 and #2 can be combined, if approved by the Engineer.

In Stage #1, place flowable fill midway up on both sides of the utility. Allow to harden before placing Stage #2.

In Stage #2, place Flowable fill to the bottom of the slope layer.

RIGID PAVEMENT CUT

GENERAL NOTES

1. The details provided in this standard index apply to cases in which jack and bore or directional boring methods are not required by the Engineer.
2. Flowable Fill shall not be placed directly over loose, or high plastic, or muck material (see Index 505) which will cause settlement due to fill weight. Where highly compressible material exists, the amount, shape and depth of Flowable Fill must be engineered to prevent pavement settlement.
3. These details do not apply to utility cuts longitudinal to the centerline of the roadway which may require the additional use of geotextiles, special bedding and backfill, or other special requirements.
4. Method of construction must be approved by the Engineer.
5. Some pipe may require special granular backfill up to 6" above top of pipe. Geotextiles may be required to encapsulate the special granular material.
6. Where asphalt concrete overlays exist over full slab concrete pavement, the replacement pavement shall have an overlay constructed over the replacement slab. The overlay shall match the existing asphalt pavement thickness. The replacement friction course shall match the existing friction course, except structural course may be used in lieu of dense graded friction course.
7. All shoulder pavement, curb, curb and gutter, and their substructure disturbed by utility trench cut construction shall be restored in kind.
8. The use of flowable fill to reduce the time traffic is taken off a facility is acceptable but must have prior approval by the Engineer. Flowable fill use is allowed only when properly engineered for pavement crossings, whether straight or diagonal, and shall not be installed for significant depths or lengths. The maximum length shall be fifty (50) feet and a maximum depth of six (6) feet unless supported by an engineering document prepared by a registered professional engineer that specializes in soils engineering. The engineering document shall address the evaluation of local groundwater flow interruption and settlement potential.
9. Excavated flowable fill is to be used when the flowable fill option is selected.

TRENCH CUTS AND RESTORATIONS ACROSS ROADWAYS

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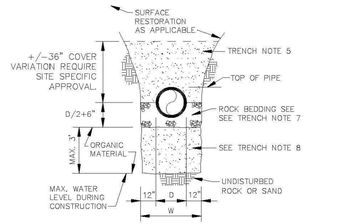
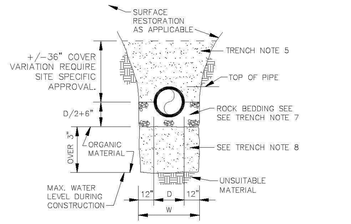


TRENCH BACKFILL / BEDDING CLASS " C "



TRENCH BACKFILL / BEDDING CLASS " D "

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	TRENCH BACKFILL / BEDDING
		SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 504-2

ENGINEERING STANDARDS 2022

TRENCH BACKFILL / BEDDING NOTES

1. OUTLINE OF TRENCH EXCAVATION IS FOR ILLUSTRATIVE PURPOSES ONLY. ACTUAL TRENCH WIDTH AND SHAPE WILL VARY WITH SOIL CONDITIONS. TRENCH EXCAVATION SHALL BE IN ACCORDANCE WITH THE "FLORIDA TRENCH SAFETY ACT" AND OSHA TRENCH SAFETY STANDARDS.
2. TYPICAL TRENCH BACKFILL/BEDDING FOR REUSE WATER MAIN AND FORCE MAIN INSTALLATIONS SHALL BE CLASS "A" AS SHOWN IN DETAIL.
3. TYPICAL TRENCH BACKFILL/BEDDING FOR GRAVITY SEWER INSTALLATION SHALL BE CLASS "B" AS SHOWN IN DETAIL.
4. TRENCH BACKFILL/BEDDING CLASS "C" AND CLASS "D" SHALL BE USED FOR PIPE INSTALLATIONS WHERE UNSUITABLE TRENCH MATERIALS ARE ENCOUNTERED.
5. TRENCH ZONE BACKFILL SHALL BE MATERIAL TYPE 1 OR TYPES A THRU H, OR ANY MIXTURE THEREOF, WHERE SURFACE RESTORATION TYPE "1" IS APPLICABLE, TRENCH ZONE BACKFILL SHALL BE PLACED IN 12" LIFTS, COMPACTED TO 90% OF THE MATERIAL'S MAXIMUM DENSITY AS DETERMINED BY ASTM D-697 (AASHTO T-99). WHERE SURFACE RESTORATION TYPES "2", "3" AND "4" ARE APPLICABLE, TRENCH BACKFILL SHALL BE PLACED IN 8" LIFTS COMPACTED TO 98% OF THE MATERIAL'S DENSITY AS DETERMINED BY ASTM D-698 (AASHTO T-99).
6. BEDDING MATERIAL FOR TYPICAL REUSE WATER MAIN INSTALLATION SHALL BE TYPE C. BEDDING SHALL BE COMPACTED TO 95% OF THE MATERIAL'S MAXIMUM DENSITY AS DETERMINED BY ASTM D-1557 (AASHTO T-180).
7. BEDDING MATERIAL FOR TYPICAL GRAVITY SEWER INSTALLATION AND ANY INSTALLATION WHERE UNSUITABLE TRENCH BOTTOM CONDITIONS ARE FOUND SHALL BE TYPE E. BEDDING SHALL BE PLACED IN LIFTS NOT TO EXCEED 6" AND COMPACTED TO 95% OF THE MATERIAL'S MAXIMUM DENSITY AS DETERMINED BY ASTM D-1557 (AASHTO T-180).
8. UNSUITABLE MATERIAL SHALL BE REMOVED TO UNDISTURBED ROCK OR SAND OR TO DEPTH AS SPECIFIED BY ENGINEER. BACKFILL MATERIAL SHALL BE TYPE C. BACKFILL SHALL BE PLACED IN 8" LIFTS COMPACTED TO 95% OF THE MATERIAL'S MAXIMUM DENSITY AS DETERMINED BY ASTM D-1557 AASHTO T-180).

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	TRENCH BACKFILL / BEDDING
		SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 504-3

ENGINEERING STANDARDS 2022

9. BEDDING TYPES – THE FOLLOWING TYPES OF SUITABLE MATERIALS ARE DESIGNATED AND DEFINED AS FOLLOWING:

TYPE A: CRUSHED LIMEROCK OR SAND WITH 100 PERCENT PASSING A 1 INCH SIEVE AND A SAND EQUIVALENT VALUE NOT LESS THAN 50.

TYPE B: CRUSHED LIMEROCK OR SAND WITH 100 PERCENT PASSING A 1/2 INCH SIEVE AND A SAND EQUIVALENT VALUE NOT LESS THAN 50.

TYPE C: SAND WITH 100 PERCENT PASSING A 3/8 INCH SIEVE, AT LEAST 90 PERCENT PASSING A NUMBER 4 SIEVE, AND A SAND EQUIVALENT VALUE NOT LESS THAN 30.

TYPE D: CRUSHED LIMEROCK WITH 100 PERCENT PASSING A 1 INCH SIEVE AND NOT MORE THAN 10 PERCENT A NUMBER 4 SIEVE.

TYPE E: CRUSHED LIMEROCK OR SAND WITH 100 PERCENT PASSING A 3/4 INCH SIEVE AND NOT MORE THAN 10 PERCENT PASSING A NUMBER 4 SIEVE.

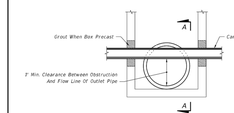
TYPE F: CRUSHED LIMEROCK MEETING THE FOLLOWING GRADATION REQUIREMENTS.

SIEVE SIZE	PERCENTAGE PASSING
2 INCH	100
1–1/2 INCH	90–100
1 INCH	20–55
3/4 INCH	0–15
NO. 200	0–3

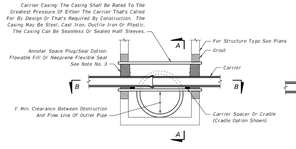
TRENCH BACKFILL / BEDDING NOTES

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	TRENCH BACKFILL / BEDDING
		SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 504-4

ENGINEERING STANDARDS 2022



SECTION LONGITUDINAL TO CARRIER PIPE (Nonpressure Or Nonfluid Carrier Installations)
No Joints Allowed Within Structure
UTILITY CONFLICT CONDITION I



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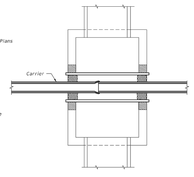
UTILITY CONFLICT CONDITION II



SECTION BB

SECTION AA

DESIGNER'S NOTE
"Sunpot" Conflict Manholes Shall Not Be Used Unless The System Is Hydraulically Designed To Account For The Headloss Generated If The Sump Is Completely Blocked

NOTES FOR UTILITY CONFLICT PIPE

1. These details are for construction field expediency to resolve utility conflicts that cannot be remedied by relocation. For conflicts determined during design, use the construction shop drawings for structure details.
2. Concrete used in conflict structures shall be as specified in ASTM C478. 4000 psi may be used in lieu of Class I. concrete.
3. Maximum opening for pipe shall be the pipe OD plus 6". Mortar used to seal the pipe into the opening will be of such mix that shrinkage will not cause leakage into or out of the structure.
4. If the conflict structure is round or there are multiple inlet or outlet pipes, then the wall section should be reviewed for strength.
5. If during construction or the plans design process it is determined that a potable water supply line must pass though a storm drain structure, it must be in compliance with Chapter 62-555.314 (3) F.A.C. and shown on the design or construction plans and submitted to the Florida Department of Environmental Protection (FDEP) Administrator For Drinking Water in the respective FDEP District for review and comment. This index and rule citation provide accepted methods for addressing conflicts when and where they cannot be reasonably avoided. To be submitted along with the plans shall be a justification describing inordinate cost and the impracticality of avoidance. If identified, property justified, and accomplished in accordance with FDEP rules, the cost of the relocation or adjustment to the FDOT for subletting is the FDEP. See the following web site for the cost of relocation or adjustment to the FDOT for subletting is the FDEP. See the following web site for District FDEP Drinking Water Contacts: www.dep.state.fl.us/water/drinkingwater/index.htm and click on "Organization" on the menu to the right.

UTILITY CONFLICT PIPES THRU STORM DRAIN STRUCTURES

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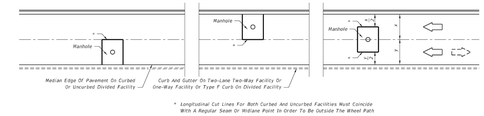
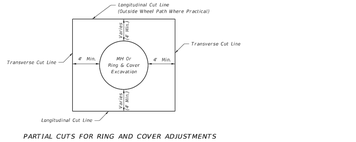


* Longitudinal Cut Lines For Both Curbed And Uncurbed Facilities Must Coincide With A Regular Seam Or Widlane Point In Order To Be Outside The Wheel Path

PLAN VIEW
FOR TWO OR MORE LANES (TWO LANES SHOWN)



PARTIAL CUTS FOR RING AND COVER ADJUSTMENTS

NOTES
1. No irregular seams are permitted. All seams must be clean sawed.
2. Pavement cut seams for underground utility structures in rigid pavement are the same longitudinally, but the transverse seams shall extend to the nearest existing joint.
3. See Sheet 1 for replacement pavement

NONTRENCH PAVEMENT CUTS FOR UNDERGROUND UTILITY STRUCTURES IN PAVEMENT

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CONEMCO ENGINEERING, INC.
DBA Conemco Consultants
SBA 8a - Civil - Structural - MEP - CEI - Program Management - Land Surveyors
782 NW 42ND AVENUE UNIT 635
MIAMI, FL 33126
MAIN NUMBER 888-536-1536
CA # 29447

JOSE A. COMPRES LICENSE No. 65557 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JOSE A. COMPRES ON THE DATE INDICATED IN THE SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Jose Compres — Digitally signed by Jose Compres Date: 2025.12.03 10:35:12 -05'00'

JOSE A COMPRES, P.E
FLORIDA P.E. LIC. # 65557

CONEMCO ENGINEERING, INC.

PROJECT NAME / ADDRESS:
324 HAUS MIXED USE / NEW BUILDING - CIVIL PLANS
REDESIGN
324 NW 6TH STREET, POMPANO BEACH, FL 33060

CLIENT/OWNER:
AUSTIN FOX ARCHITECTURE
1754 E COMMERCIAL BLVD, FORT LAUDERDALE, FL 33334

REVISIONS	DATE

DATE:	9/12/2025
SCALE:	AS SHOWN
DRAWN:	FP
CHECKED:	PS
APPVD:	JC
PROJECT ID:	FPV-C251004
CONTRACT NO:	-

SHEET NAME:

DRAWING NO.
C-500

Sheet No.
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