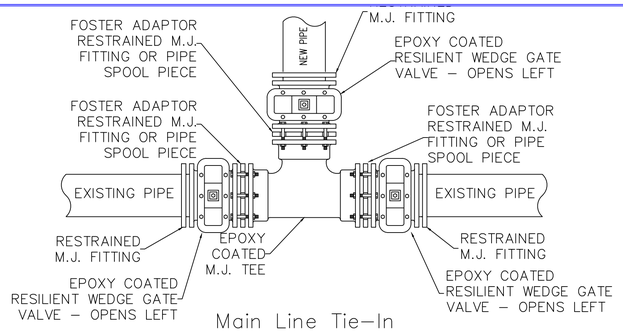
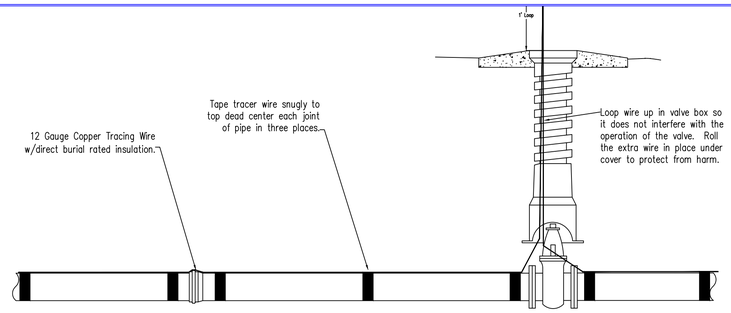
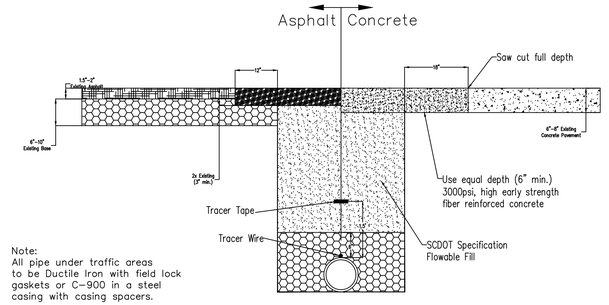


Main Line Tie–In

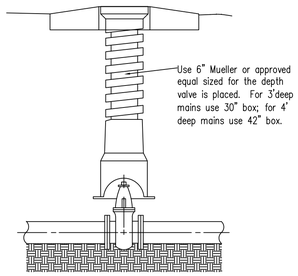


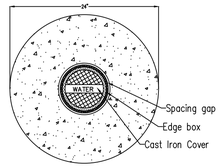
Pipe Tracer Wire



Note:
All pipe under traffic areas to be Ductile Iron with field lock gaskets or C–900 in a steel casing with casing spacers.

Pipe Trench Under Pavement

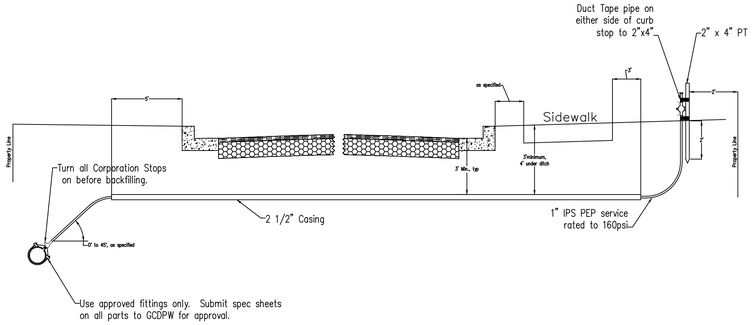




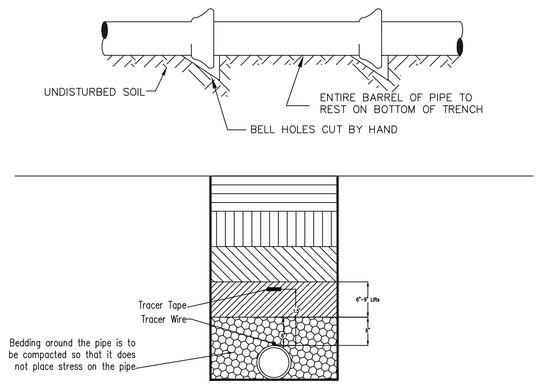
NOTE: Place stem extension on valves over 6' deep to bring operating nut within 2' of ground. Place spacers on stem extension as needed.

Valve box cover, valve box frame and top of collar are to be flush. Place outer edge of collar flush with to 1" below ground.

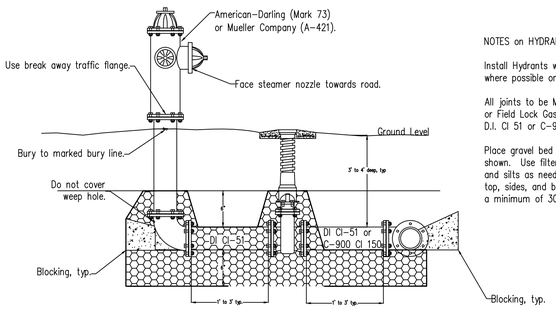
Valve Box Details



Far Side Service Line & Casing



Pipe Trench Not Under Pavement



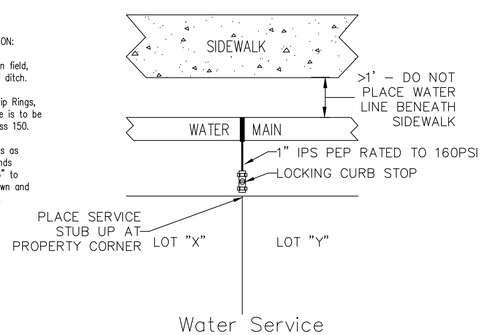
NOTES on HYDRANT INSTALLATION:

Install Hydrants where staked in field, where possible on road side of ditch.

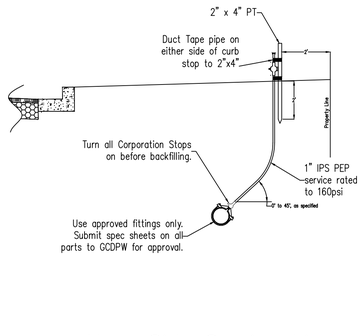
All joints to be Mega–Lugs, Grip Rings, or Field Lock Gaskets. All pipe is to be D.I. CI 51 or C–900 P.V.C. Class 150.

Place gravel bed around fittings as shown. Use filter fabric in sands and silts as needed. Bed is 6" to top, sides, and bottom as shown and a minimum of 30% void space.

Fire Hydrant Details



Water Service Plan View



Near Side Service Line

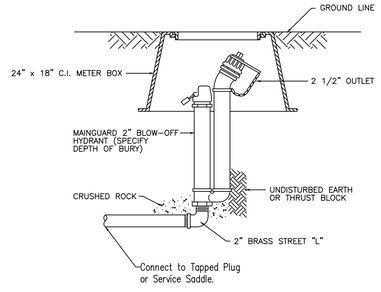
Main Line and Water Service Parts

Water Mains

1. Pipe: All water mains to be new AWWA C–900 Class 150 PVC or Class 50 Ductile Iron.
2. Valves: Use Resilient Wedge Gate Valves epoxy coated inside and outside.
3. Fittings: All fittings are to be Mechanical Joint with Grip Ring or Mega Lug.
4. Valve Boxes: Use adjustable screw type cast iron boxes set on Valve Box Adapters.
5. Tracer Wire: Use 12 gauge copper wire with direct burrial U.L. listed insulation. Tape tracer wire to the top of pipe at center and near joints. Loop up 1' in valve boxes.
6. Underground Splices: Use 3M or equivalent resin filled splice lits to splice tracer wire.
7. Tie Ins: At the tie in points use a Mechanical Joint Connecter on all three legs of the tee.
8. Valve Box Adapters: Use Adaptor, Inc. Adapter II between all valve boxes and valves.

Service Connections

1. Tapping Saddles: Use double U–bolt epoxy coated saddles (Mueller DE2A, Smith Blair 313 or equal).
2. Corporation Stop: Use Ford F1001–4 or approved equal.
3. Polyethylene Service: Use 1" IPS rated to 160psi (PE3406) to the curb stop.
4. Insert Stiffeners: All PEP will use an appropriate size insert stiffener at each pipe end.
5. Curb Stop: Use Ford B66–444 IPS Curb Stop on each stub–up, and lock out with wire seal.
6. Meter: Install Neptune Mach 10 or GCDPW approved Radio Read AMR meter with electronic register. Contractor to provide all materials and labor for commercial installs.
7. Yoke Assembly: Contact GCDPW Water Department for latest parts list.
8. Meter Box: Appropriately sized fiber concrete meter box with traffic rated lid with penetration for radio read MXU on standard in ground meter boxes.
9. Backflow: Use Reduced Pressure, Watts or Equivalent, on commercial domestic taps. Use concrete slab, place RPPA lower port 12" above adjacent ground, with Hot Box or equivalent cover. Irrigation backflow use DCVA if approved, or as specified. DCVA to be placed in below ground box. Tap and impact fees must be paid prior to backflow installation.

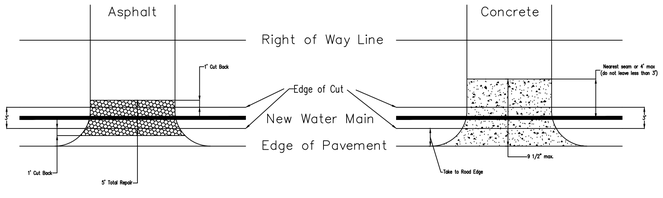


MAINGUARD NO. 78 BLOW–OFF HYDRANT

Blow–Off Hydrants shall be non–freezing, self draining type, with an overall length of 6" less than bury depth. Set underground in a 18" x 24" meter box, these hydrants will be furnished with a 2" FIP inlet, a non–turning operating rod, and shall open to the left. All of the working parts shall be of bronze–to–bronze design, and be servicable from above grade with no digging. The outlet shall also be bronze and be 2–1/2" NST. Hydrants shall be lockable to prevent unauthorized use as manufactured by Kupferle Foundry Co., St. Louis, MO, or approved equal.

Dead End Blowoff

NOTE: All repair limits are to be verified with the Owner or Engineer PRIOR to making the repairs.



Driveway Cuts and Repairs

READ THESE THOROUGHLY

1. No trees, bushes or landscape plantings are to be removed, without written approval of the Owner.
2. All pipe fittings are to be inspected prior to backfill. Pipe Tracer Wire to be inspected.
3. All disturbed areas of ground are to be sodded.
4. Immediately replace driveways with an approved temporary all weather surface.
5. The Contractor shall use silt fence between all disturbed areas and undisturbed areas.
6. Silt fence is to be checked weekly, or more often as needed, and shall be cleaned of any accumulated siltation as needed.
7. Where silt fence is not used or maintained, the contractor is responsible for cleaning all sediment from ditches at their own expense.

PALMETTO UTILITY PROTECTION SERVICE
Don't Dig! Before you call toll free 1–800–922–0983
811 Dial 811
A one call system for community and job safety.

SOUTH CAROLINA PROFESSIONAL ENGINEER LICENSED No. 25782 CHARLES E. DENSON

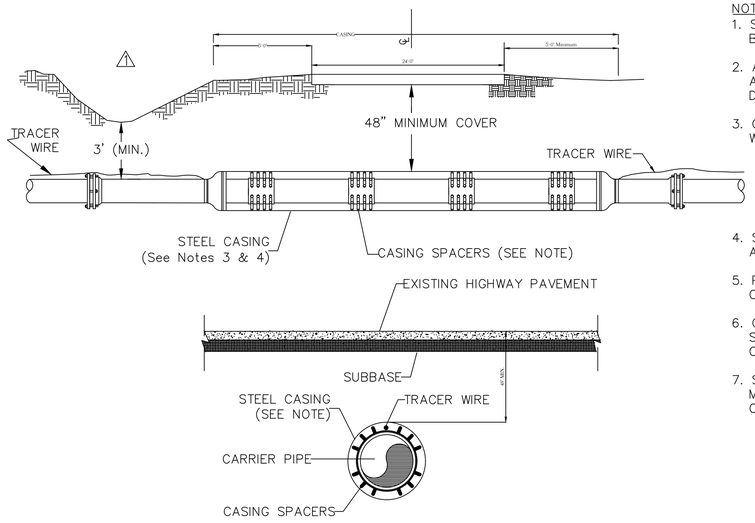
NO.	REVISIONS	BY	DATE
1.	Updated Notes	CFED	4/20
2.	Updated Meter Notes/Detail	CFED	12/20

DEPARTMENT OF PUBLIC WORKS
200 BUTTON HALL AVE. PO BOX 1768
GOOSE CREEK 29445–1768 (843)824–2200

GCDPW
Standard Details / Notes
GOOSE CREEK SOUTH CAROLINA
Construction Details / Notes

JOB NO.
DATE: 2025–03–31
DRAWN: JJT
CHECKED: JJT
SCALE: 1" = N/A

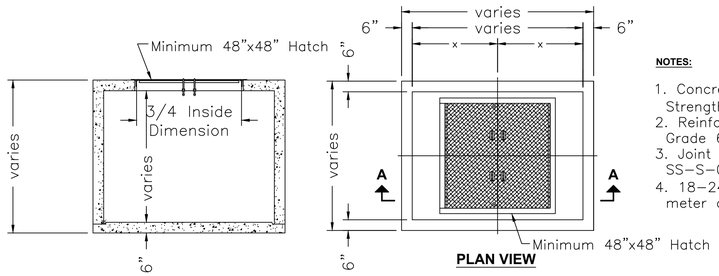
SHEET
1
1 OF 3



TYPICAL ROADWAY
BORE & JACK DETAIL

NOTES:

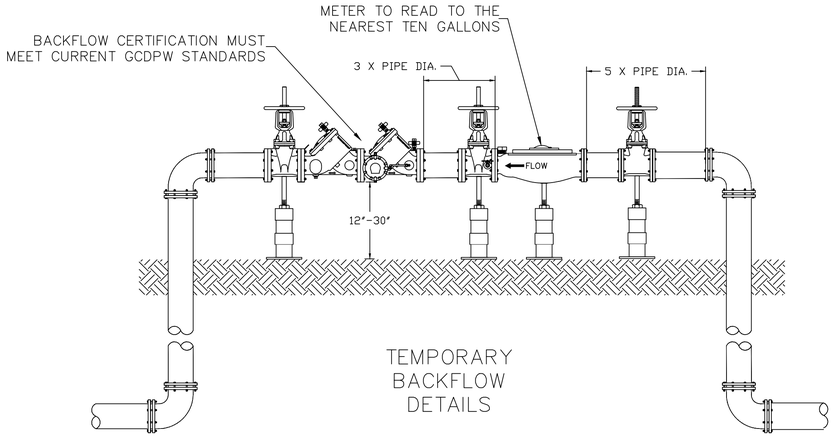
1. STEEL CASING TO EXTEND A MINIMUM OF 5' BEYOND EDGE OF PAVEMENT.
2. ALL CONSTRUCTION TO BE INSPECTED AND APPROVED BY LOCAL, COUNTY OR STATE ROAD DEPARTMENT.
3. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WELD INSPECTIONS PRIOR TO PUSHING CASING.
4. SIZE AND WALL THICKNESS OF CASING TO BE APPROVED BY GCDPW AND SCDOT.
5. PLUG BOTH ENDS OF CASING WITH CASCADE CASING PLUGS OR GCDPW APPROVED EQUAL.
6. CASING SPACERS SHALL BE ALL STAINLESS STEEL WITH PLASTIC SLIDES AS MADE BY CASCADE OR GCDPW APPROVED EQUAL.
7. SPACING OF CASING SPACERS SHALL BE PER MANUFACTURERS SPECIFICATIONS BASED UPON CARRIER PIPE MATERIAL.



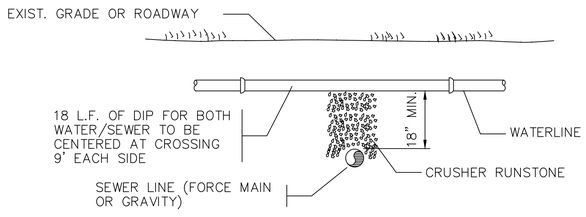
METER VAULT

NOTES:

1. Concrete: 28 Day Compressive Strength f'c = 4,500 psi.
2. Reinforcing: ASTM A-615, Grade 60.
3. Joint Sealant: Butyl Rubber SS-S-00210.
4. 18-24" of clearance between meter assembly and vault walls.

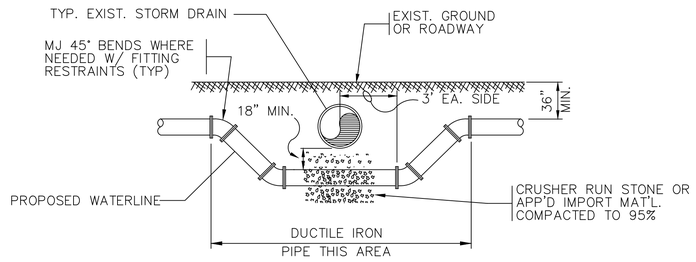


TEMPORARY
BACKFLOW
DETAILS



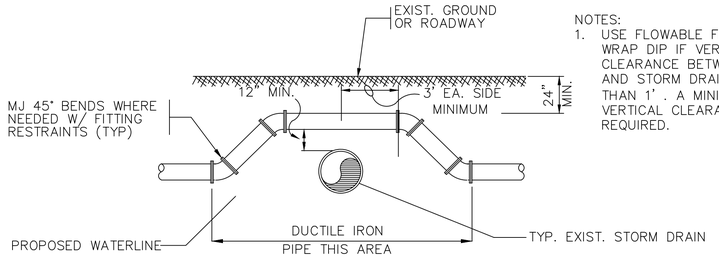
SEWER LINE CROSSING

ALTERNATE: DEPRESS WATER LINE WHENEVER POSSIBLE TO ACCOMPLISH CLEARANCE W/O USING FITTINGS.



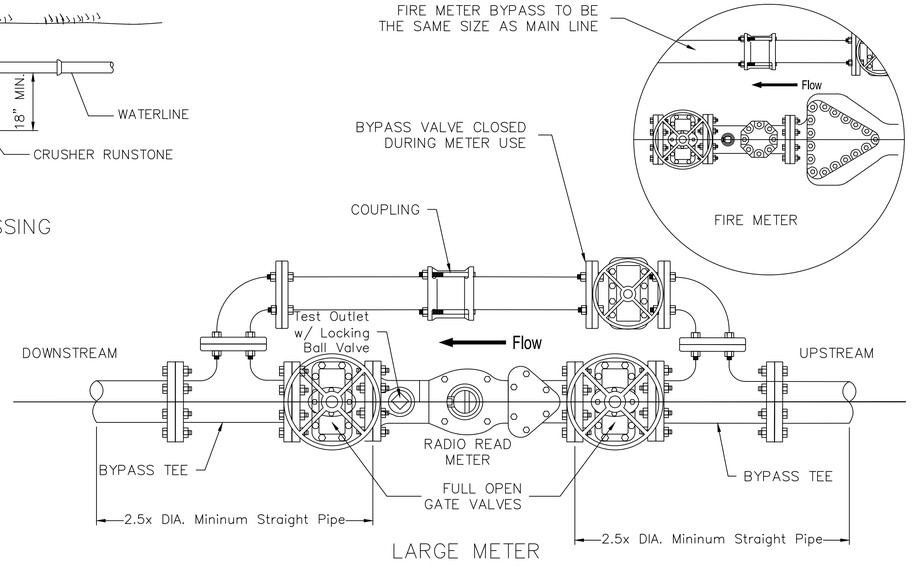
STORM DRAIN CROSSING
(UNDER)

ALTERNATE: DEFLECT WATER LINE WHENEVER POSSIBLE TO ACCOMPLISH CLEARANCE W/O USING FITTINGS.



NOTES:
1. USE FLOWABLE FILL AND POLY WRAP DIP IF VERTICAL CLEARANCE BETWEEN WATER AND STORM DRAINAGE IS LESS THAN 1' . A MINIMUM OF 0.5' VERTICAL CLEARANCE IS REQUIRED.

STORM DRAIN CROSSING
(OVER)



LARGE METER
INSTALLATION

JOSHUA CHARLES DENSON
NO. 25702
PROFESSIONAL ENGINEER
SOUTH CAROLINA

NO.	REVISIONS	BY	DATE
1.	Updated Meter Notes/Detail	CED	12/20

DEPARTMENT OF
PUBLIC WORKS
200 BUTTON HALL AVE. PO BOX 1768
GOOSE CREEK 29445-1768 (843)824-2200

GCDPW
Standard Details / Notes
GOOSE CREEK SOUTH CAROLINA
Construction Details / Notes

JOB NO.
DATE: 2021-04-19
DRAWN: CED
CHECKED: CED
SCALE: 1" = N/A

SHEET
2
2 OF 3

WATER NOTES:

1. WATER INSTALLATION SHALL BE IN ACCORDANCE WITH "TEN STATE STANDARDS," S.C.D.H.E.C., AND GOOSE CREEK DEPARTMENT OF PUBLIC WORKS (GCDPW) REQUIREMENTS.

2. CONTRACTOR SHALL BE FAMILIAR WITH ALL REQUIREMENTS OF THE GCDPW AND SHALL NOTIFY GCDPW PRIOR TO BEGINNING CONSTRUCTION AND SCHEDULE ALL INSPECTIONS 72 HOURS IN ADVANCE.

3. RADIUS (DEFLECT) WATER LINES IN LIEU OF FITTINGS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. DEFLECTION NOT TO EXCEED 75% OF MANUFACTURER'S RECOMMENDATION.

4. ALL WATER LINES SHALL HAVE A MINIMUM DIAMETER OF 4", A MINIMUM COVER OF 36" AND A MAXIMUM COVER OF 48". ALL UTILITY CROSSINGS, I.E. STORM DRAINAGE & SANITARY SEWER, SHALL HAVE A FULL SECTION OF D.I.P. CENTERED AT THE CROSSING IN ACCORDANCE WITH S.C.D.H.E.C. AND GCDPW REQUIREMENTS.

5. ALL TEES, BENDS, PLUGS AND HYDRANTS ON LINES 3 INCHES INSIDE DIAMETER OR LARGER SHALL BE PROVIDED WITH THRUST BLOCKING, TIE RODS, OR OTHER APPROVED METHOD OF RESTRAINT PER GCDPW.

6. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING WORK.

7. ALL WATER LINES UNDER TRAFFIC AREAS SHALL BE:
   A. DUCTILE IRON WITH FIELD LOCK GASKETS POLYWRAPPED TO GCDPW SPECIFICATIONS OR
   B. DUCTILE IRON IN A STEEL CASING WITH CASING SPACERS.

   THE STEEL CASING OR D.I.P. SHALL EXTEND A MINIMUM OF 3 LF BEYOND THE BACK OF CURB.

8. ALL FLATWORK CONSTRUCTION MUST BE COMPLETE PRIOR TO INSTALLATION OF RESIDENTIAL WATER METERS.

9. UPON COMPLETION OF CONSTRUCTION OF THE WATER SYSTEM, THE APPROVAL PROCEDURE SHALL BE AS FOLLOWS:
   A. A PRESSURE TEST IN ACCORDANCE WITH GCDPW REQUIREMENTS WILL BE SCHEDULED BY THE ENGINEER AND WITNESSED BY GCDPW AND THE ENGINEER.
   B. AFTER A PASSING PRESSURE TEST, THE CONTRACTOR SHALL TAKE REQUIRED SAMPLES FOR BACTERIAL TESTING.
   C. A COMPLETE WATER SYSTEM AS-BUILT DRAWING IN A FORMAT ACCEPTABLE TO GCDPW SHALL BE PROVIDED FOR FINAL INSPECTION.
   D. ANY DEFICIENCIES WILL BE CORRECTED BY THE CONTRACTOR AND FINAL INSPECTION RESCHEDULED.

10. ALL VALVES AND FIRE HYDRANTS SHALL OPEN COUNTER-CLOCKWISE AS PER GCDPW REQUIREMENTS.

11. UNDER NO CIRCUMSTANCES SHALL VALVES OR FIRE HYDRANTS BE PLACED IN SIDEWALKS, CURB AND GUTTER OR ROADWAYS WITHOUT SPECIFIC WRITTEN APPROVAL FROM GCDPW.

12. FIRE HYDRANTS SHALL BE PLACED AS FAR AS PRACTICAL FROM THE ROADWAY (SEE DETAIL).

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
No. 25702
NOSKEO
CHARLES E.

NO.	REVISIONS	BY	DATE

DEPARTMENT OF PUBLIC WORKS
200 BUTTON HALL AVE. PO BOX 1768
GOOSE CREEK 29445-1768 (843)824-2200

GCDPW Standard Details / Notes — GOOSE CREEK, SOUTH CAROLINA

Construction Details / Notes

JOB NO.
DATE: 1/04/22
DRAWN: CED
CHECKED: CED
SCALE: 1" = N/A

SHEET 3