

**AGREEMENT**  
**BETWEEN THE PORT OF CORPUS CHRISTI AUTHORITY**  
**OF NUECES COUNTY, TEXAS**  
**AND THE CITY OF CORPUS CHRISTI REGARDING CONSTRUCTION AND**  
**DONATION OF A NEW WATER SERVICE MAIN TO BE USED FOR PROVISION OF**  
**POTABLE WATER**

THE STATE OF TEXAS    §  
  §       **KNOW ALL MEN BY THESE PRESENTS THAT:**  
COUNTY OF NUECES    §

This Agreement regarding Construction and Donation of a New Water Service Main (the “*Agreement*”) is made and entered into and effective as of the \_\_\_\_\_ of \_\_\_\_\_, 2016 (the “*Effective Date*”) by and between the **Port of Corpus Christi Authority of Nueces County, Texas**, a navigation district operating under Article XVI, Section 59 of the Texas Constitution (“*Authority*”), whose mailing address is 222 Power Street, Corpus Christi, Texas 78403, and the **City of Corpus Christi, Texas**, a municipal corporation and home rule city of the State of Texas (“*City*”), whose mailing address is P.O. Box 9277, Corpus Christi, Texas 78469. Authority and City are sometimes referred to in this Agreement as “*Parties*” and individually as a “*Party*”.

WHEREAS, the City currently owns and operates a 16-inch water main that transitions to a 24-inch water main (“*Existing Water Main*”) and provides potable water service to an area along the Joe Fulton International Trade Corridor, which service terminates in the general vicinity of the Authority’s Bulk Terminal entrance on the Joe Fulton International Trade Corridor on the north side of the Corpus Christi Ship Channel, and

WHEREAS, the Authority owns and is developing property located in Nueces County along the Joe Fulton International Trade Corridor west of the Existing Water Main; and,

WHEREAS, M&G Resigns USA, LLC, a Delaware limited liability company (“*M&G*”), whose mailing address is 27610 Huntington Road, Apple Grove, West Virginia, 25502, is developing property along the Joe Fulton International Trade Corridor west of the Existing Water Main; and,

WHEREAS, CCI Corpus Christi LLC, a Texas limited liability company (“*CCI*”), whose mailing address is 811 Main Street, Suite 3500, Houston Texas 77002, intends to develop property along the Joe Fulton Corridor west of the Existing Water Main; and,

WHEREAS, the City owned and operated water system terminates east of the properties being developed as referenced above; and,

WHEREAS, the Authority, M&G, and CCI will benefit from potable water service; and,

WHEREAS, the Authority has requested that the City provide water service along the Joe Fulton International Trade Corridor extending from at or near the current point of termination to a point a sufficient distance to the west to provide service for the properties referenced above in addition to other current or future enterprises or entities along the proposed water service extension; and,

**Agreements:**

NOW THEREFORE, for and in consideration of the mutual promises and covenants set forth herein, this Agreement is entered into by and between the City and Authority and based on the consideration, undertakings and agreements, the receipt and sufficiency of which is hereby acknowledged, the parties agree, covenant and contract as follows:

1. Authority agrees to design and construct a new water main pipeline ("***New Water Main***") from at or near the terminus of the Existing Water Main generally to a point on Authority's property, ("***End Point***"), which is in the vicinity of M&G's property and the Authority's Oil Dock 14 site on the north side of the Viola Channel, a length of approximately 14,256 linear feet. The beginning point, End Point, and proposed alignment of the New Water Main are shown on **Exhibit A** attached hereto and incorporated herein by reference. Authority further agrees to provide design, construction, and any required permitting and land acquisition for the New Water Main at no cost to the City.
2. The New Water Main will provide potable water service in an area adjacent to the New Water Main between Nueces Bay and the Viola and Tule Lake Channels ("***Service Area***"). The Service Area is depicted on the attached **Exhibit B** and the initial anticipated developments, including M&G, CCI, the Authority's Oil Dock 14, and other Authority customers are depicted on **Exhibit B**, which is incorporated herein by reference.
3. The Authority will construct the New Water Main to meet the minimum standards of the Authority and the City current and effective at the time of construction. The New Water Main will be constructed of 12-inch and 16-inch nominal diameter PVC pipe conforming to the American Water Works Association (AWWA) C900 and AWWA C905 specifications and will be buried at least 36-inches below ground, except where the pipeline crosses existing drainage features, in which case the New Water Main may be constructed above ground.
4. The City will be provided access to the New Water Main during construction to conduct inspection, as deemed appropriate by the City to confirm that the construction is in accordance with applicable City Codes and requirements.
5. The New Water Main will be designed and constructed with such pipeline accessories (tees, flanges, valves, etc.) such that service lines for currently identified customers may be connected to the New Water Main, and so that New Water Main can be extended beyond the End Point at some time in the future.

6. Upon completion and acceptance of the New Water Main, this facility will be donated to the City free of cost or charge to the City by the Authority. Further, the Authority will grant to the City an easement on Authority lands for the New Water Main as defined, and under the terms and conditions stated herein.
7. The City agrees to utilize the New Water Main to furnish potable water to the Authority, M&G, CCI and other future Authority tenants or customers within the New Water Main Service Area in accordance with the City's standard practices, terms and conditions for such service.
8. The City agrees to maintain all water service facilities it owns, including the improvements constructed pursuant to this Agreement, or which come under its dominion under this Agreement, with reasonable and normal care to the extent that such maintenance is necessary or desirable to provide potable water service under the terms and conditions defined herein. The term "maintain" is intended to include required replacement subject to availability of funding budgeted for such purpose.
9. City shall furnish the Authority upon completion of any modification to New Water Main, an As-Built drawing of the location of the improvements and any modification in compliance with the Texas Public Information Act
10. The City may establish, impose and collect charges for the water service it provides within the New Water Main Service Area under this Agreement. City may separately meter water provided to third parties whose facilities are situated within the New Water Main Service Area. Any services from the New Water Main shall be subject to water connection charges in accordance with established City charges for such service and connection.
11. The City agrees to use its best efforts to monitor, operate and maintain the New Water Main to achieve 1.5 milligram per liter total chlorine residual at the End Point under normal operating conditions. The Authority agrees to install an automated flushing system near the End Point as part of construction of the New Water Main. The City will maintain the New Water Main in accordance with the City's "Dead End Main Flushing Program" as described in attached and incorporated **Exhibit C, hereinafter referred to as "the Flushing Program"**. However, if City determines through normal operation and maintenance of the New Water Main that the volume of water flushing required to meet the Flushing Program is excessive, the City and Authority agree to develop a mutually agreeable New Water Main flushing protocol where in such case the Authority shall contribute and compensate the City for the required flushing of the New Water Main regardless of the amount of water flushed, but at a cost not to exceed \$1,500 in any one month for the flushing occurring within such month.
12. The Parties hereto acknowledge and agree that the water supply for the City is dependent upon natural resources from which the supply is variable in quantity and beyond the control of the City. No liability shall attach to the City under this Agreement by virtue of

any failure to accurately anticipate the availability of the water supply or because of an actual failure of the water supply.

13. The Parties hereto acknowledge and agree that the City may, in order to comply with water conservation and preservation, and to enable providing an adequate supply of potable water in times of shortage, limit the delivery and restrict the use of potable water under this Agreement. The extent to which limitation of water delivery may be necessary to enable the City to provide potable water adequately for residential customers is a fact to be determined by the City in its sole discretion as occasion may require and shall be done in accordance with the City of Corpus Christi Drought Contingency Plan.
14. The New Water Main and associated water service may be extended ("*Extension of New Water Main*") in the future upon mutual written agreement of the City and the Authority.
15. This Agreement shall remain in force until terminated by mutual agreement, or as otherwise stated herein. This Agreement will automatically terminate concurrent with the termination of the right-of way and easement, as granted herein, and in accordance with the terms of said right-of-way and easement.
16. The City's obligations under this Agreement and continuation of this Agreement beyond the current City fiscal year are subject to availability of funding through the City's annual budget process. In the event that payments or expenditures are made, they shall be made from current funds as required by Chapter 791, Texas Government Code.

#### Easement:

NOW THEREFORE the Authority hereunto duly authorized for and in valuable consideration, including the installation of the facilities herein described and the covenants and conditions herein made and provided to be kept and performed by City, has **GRANTED AND CONVEYED** and by these presents does **GRANT AND CONVEY** to the City, a right-of-way and easement on and through the Authority's land located in Nueces County, Texas, for the operation, maintenance, repair, replacement and removal of the New Water Main.

This right-of-way and easement is granted subject to the following:

1. The easement hereby granted is described on **Exhibit D** and depicted on **Exhibit E**, each of which is attached hereto and shall be provided to the City by the Authority upon completion of construction of the New Water Main and then incorporated herein by reference for all purposes ("*Pipeline Easement*").
2. After initial construction is complete the width of the Pipeline Easement shall be limited to the width of the New Water Main as installed.
3. During any subsequent maintenance, repair, replacement or removal of the New Water Main, City shall be entitled to utilize additional temporary work space (if available)

alongside the Pipeline Easement as reasonably necessary to efficiently carry out such activities.

**TO HAVE AND TO HOLD** unto City, its successors and assigns, the rights and privileges hereby conveyed for so long as the easement granted is used for the New Water Main, and upon the following covenants and conditions which are a part of the consideration for this grant, which covenants and conditions are and shall be construed as covenants running with the land, and which covenants and conditions by its acceptance hereof City covenants and agrees to keep and perform.

- A. The rights of ingress and egress hereinabove referred to in City shall be confined to the above-described easement and City shall not have the right to cross Authority's adjacent land, store materials or equipment thereon or to conduct any of its operations thereon, unless the prior consent of the Authority is obtained in writing, which consent will not be unreasonably withheld. Except in the case of an emergency, City agrees to notify the Authority not less than seventy-two (72) hours prior to its employees, agents or contractors entering upon the easement for construction, maintenance, repairs, replacement, removal or other operations.
- B. City's use of the easement herein granted and its operations in relation to it shall at all times comply with all applicable laws, statutes, rules and regulations of federal, state and local government.
- C. City shall be responsible for coordination of its construction and use in the easement with any other existing users and easement holders in or near the City's easement. City shall promptly restore any portion of the right-of-way damaged by City. All restoration work shall be appropriately tested at City's expense.
- D. The easement herein granted shall be subject to any and all easements heretofore granted by Authority to other parties whether of record in Nueces County or not. The Authority reserves the right to grant easements upon, over, under and across the property embraced by the easement herein granted and to use or grant rights of use, leases and easements above, below and on the surface of such property.
- E. The rights herein granted may not be assigned without the prior written consent of the Authority, which consent will not be unreasonably withheld. This easement shall be deemed a covenant running with the land and shall inure to the benefit of and be binding upon the parties hereto, their successors and assigns.
- F. This easement and all rights to use and occupy the easement shall terminate if City shall at any time abandon or cease the use of the same for the purposes herein granted for a continuous period of two (2) years; and such termination will occur upon the expiration of the said two (2) year period. This easement and all of City's interest hereunder, at the option of Authority, shall forthwith terminate upon breach by City of any of the conditions hereof and the failure of City to remedy the same within ninety (90) days after written notice from the Authority so to do. City agrees it will within ninety (90) days after the

termination of this easement remove the New Water Main existing in the easement and restore Authority's lands to the condition in which same existed prior to the existence of the pipeline. In the event City fails to remove the New Water Main, the Authority may either declare the termination of City's interest in the New Water Main and all of City's interest therein shall thereupon terminate, or the Authority may cause the New Water Main or any part thereof, to be removed and disposed of, and the lands of the Authority restored, all at the cost of City.

- G. The execution of this easement shall be conclusive of the Agreement of City to all of the terms and conditions hereof, whereupon this easement and all of its provisions shall extend to and be binding upon the legal representatives, successors and assigns of City and Authority, respectively.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by duly authorized offices as of the dates provided below each signature, to be effective, however, for all purposed, as of the Effective Date.

**(Signatures are on the next page)**

WITNESS this \_\_\_\_\_ day of \_\_\_\_\_ 2016.

**PORT OF CORPUS CHRISTI AUTHORITY  
OF NUECES COUNTY, TEXAS**

By: \_\_\_\_\_

John P. LaRue  
Executive Director

"Authority"

**CITY OF CORPUS CHRISTI**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

"City"

**(Acknowledgements are on the next page)**

STATE OF TEXAS §

COUNTY OF NUECES §  
§

This instrument was acknowledged before me on the \_\_\_\_\_ day of \_\_\_\_\_, 2016, by JOHN P. LaRUE, Executive Director of Port of Corpus Christi Authority of Nueces County, Texas, on behalf of the Port.

\_\_\_\_\_  
NOTARY PUBLIC, STATE OF TEXAS

My commission expires: \_\_\_\_\_

STATE OF TEXAS §  
COUNTY OF NUECES §  
§

This instrument was acknowledged before me on the \_\_\_\_\_ day of \_\_\_\_\_, 2016, by \_\_\_\_\_, \_\_\_\_\_ of the City of Corpus Christi, a Texas Home Rule municipal corporation, on behalf of said City.

\_\_\_\_\_  
NOTARY PUBLIC, STATE OF TEXAS

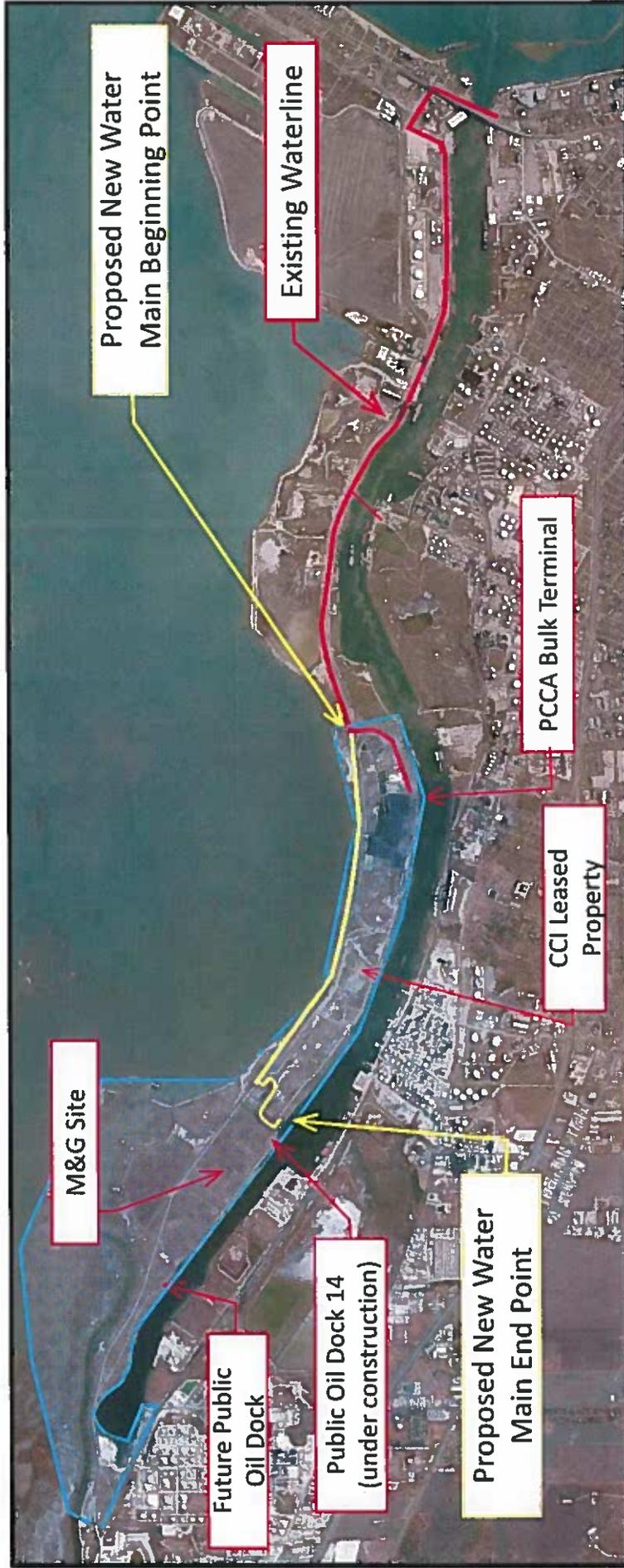
My commission expires: \_\_\_\_\_

# EXHIBIT A Proposed Alignment of New Water Main



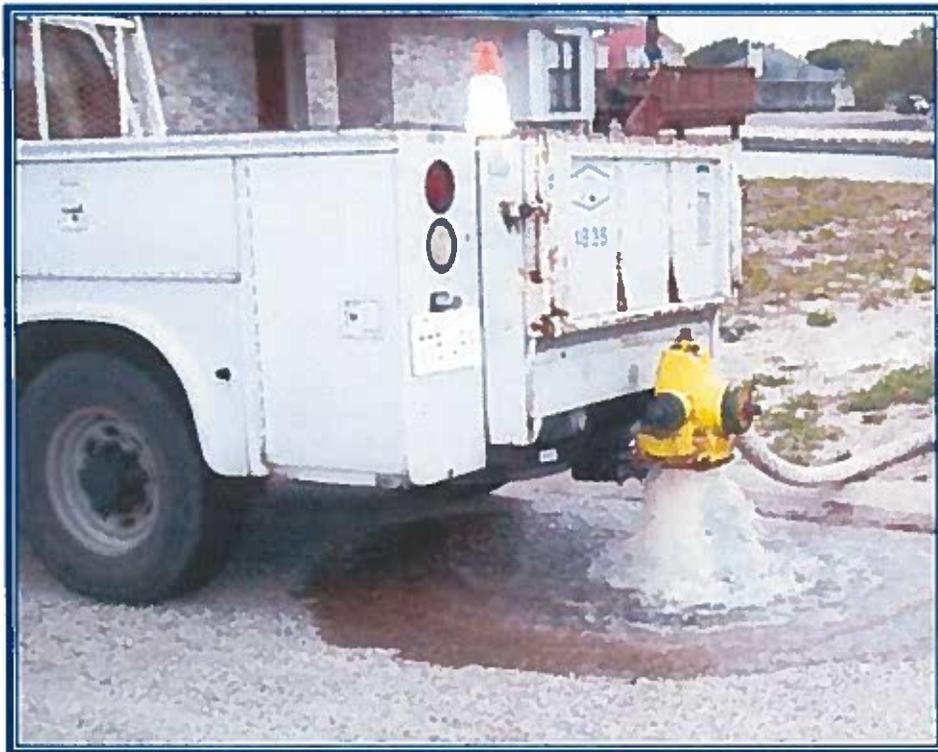
- Legend:
- Proposed Alignment of New Water Main
  - Existing Water Line

# EXHIBIT B Service Area of New Water Main



- Legend:
- Proposed Alignment of New Water Main
  - Existing Water Line
  - Service Area of New Water Main (approximate)

# Flusher's Manual



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## **Background**

The “Unidirectional Flushing Program” began in 2008 in the City of Corpus Christi. The process of flushing fire hydrants is an important preventive maintenance activity. Although it may appear to waste water, this process is part of a routine maintenance program necessary to maintain the integrity of the water system and to continue to deliver the highest quality water possible to our customers.

Flushing is a process by which water is moved through a water pipe at a high velocity so that a scouring action is created. Water is then discharged through a fire hydrant which in turn removes any material build-up from the pipe. The material removed from the process is harmless and requires no special treatment.

Flushing is generally done around areas known as DEMs (dead-end-mains) and CDSs (cul-de-sacs). This is because the water that goes into these mains has no exit point and can contribute to water quality issues. Periodic flushing of water pipes removes mineral deposits that may build up in underground pipes. Buildup can contribute to corrosion and water color problems if we do not facilitate the removal of excess water.

Flushing can help in many different ways other than the removal of sediments from mainline pipes, flushing can also verify the proper operation of fire hydrants and valves, help find weaknesses in the water system, check for closed valves and weak flows in the water mains, and also verify ample flow for fire fighting purposes.

Should customers notice a reddish, yellow or brown tint in the water, please recommended that they not use the water or do laundry for about two hours. After that point they can run their faucets for a few minutes to make sure the water is clear at which time they can resume normal water use. Explain to them that if the water does not clear within 1 hour, they can notify the City Call Center at (361) 826-2489.

## Equipment List

### Testing Supplies

- Water Bottle
- 250 mL Beaker
- 20 mL Graduated Cylinder
- Tray
- Scissors
- Pocket Colorimeter
- Colorimeter Standards

### Safety Supplies

- Hard Hat
- Rubber Boots
- Hydrant Wrench
- Vest
- Gloves
- Safety Glasses
- City Phone
- Car Charger
- Safety Cones
- Bug Spray
- Sunscreen

### Paperwork

- Blue Tags
- Prefills
- Dirty Water Call Form
- Pens
- Map Book (Zone Book or Zone Book Pages)
- Flusher Manual

# **S.O.P.S**

## ***Field Procedures***

### **Procedures Flushing Dead-End-Mains (DEMs) & Cul-De-Sacs (CDSs)**

SOP#: WQ-001.02

Date: November 2, 2008

Author: Don Hollingshead

1. At the beginning of the day, obtain “Grids” and “Pre-fill” (See Page 7) sheets from the coordinator.
2. Go to location indicated in the “Pre-fill” sheets.
3. Safely park work vehicle away from incoming traffic (See HR Policy 40.0: Operation of City and Personal Vehicles, Driving Rules and Regulations).
4. Make sure to have all applicable personal safety cones to create a safe work area away from incoming traffic.
5. Place safety cones to create a safe work area away from incoming traffic.
6. Proceed to hydrant with valve wrench, remove 2” hydrant cap. Connect one end of the diffuser hose to the open hydrant and the other end to the bumper mounted diffuser on your city truck. Open the hydrant valve slowly (NOTE: It is important to open valve slowly to avoid water hammers).
7. Record “start” time on pre-filled sheet.
8. Flush hydrant to clear stagnant/dirty water collected inside the barrel. If this takes more than 30 minutes, call the flushing coordinator for further instructions.
9. Collect water sample for “Start” Total chlorine test, as per Total Chlorine Testing SOP.
10. Measure total chlorine residual using the pocket colorimeter and record the sample collection time and total chlorine residual results in DEM pre-filled sheet.
11. If the starting total chlorine residual is greater than 1.5 mg/L, slowly close the hydrant valve and record the “Finished” time on the pre-filled sheet. Do not collect and measure second total chlorine residual.

- If the starting chlorine residual is less than 1.5 mg/L, continue flushing and measuring the total chlorine residual until a value of 1.5 mg/L or greater is achieved. Be sure to record all additional sample collection times and total chlorine residual results in the pre-filled sheet. If after flushing for 30 minutes, the chlorine residual is still less than 1.5 mg/L, call the flushing coordinator for further instructions.

12. After the chlorine test is completed, close valve slowly to avoid a water hammer. Remove the diffuser hose from the truck and hydrant and stow the hose in the city truck. Replace the hydrant cap.

13. Pack up equipment and proceed to next flushing site.



Always flush using a diffuser to avoid property damage.



## Procedures for Responding to Dirty Water Calls.

SOP#: WQ-002.01

Date: November 2, 2008

Author: Don Hollingshead

Once you have been contacted by dispatch for flushing of a dirty water complaint, do the following:

1. Contact the customer if possible and do the following:
  - a. Introduce yourself
  - b. Let them know you are there responding to a Dirty Water call.
  - c. Provide the customer with the work order number.
  
2. Go to location and locate the nearest fire hydrant for flushing.

Note: if customer is not available, leave a blue tag with the WO number and the call back number of Water Quality department at 361-826-1847.

3. Flush the closest hydrant as per WQ-001.01: Procedures for Flushing DEMs and CDSs.
4. Contact the customer and let them know that work has been performed and completed. Advise the customer to **flush inside the house** to get rid of the remaining dirty water from the service line.
5. Complete "Dirty Water Field Form" (see page 9).
6. Call back dispatch (826-1818) and let them know to change the status of the work order to work complete.

**DIRTY WATER FIELD FORM  
WATER QUALITY GROUP**

Work Order Number	Date	Time "Start"	Time "Finish"	Total Time Required for Flushing	Residual "Start"	Residual "Finish"	Pressure Zone	Fire Zone	Grid #	Comments

**Dirty Water Field Form**

**HR Policy 40.0: Operation of City and Personal Vehicles,  
Driving Rules and Regulations**



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# City Policies

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SUBJECT: OPERATION OF CITY & PERSONAL VEHICLES  
DRIVING RULES & REGULATIONS

HR 40.0

EFFECTIVE: 02/96  
REVISED: 10/01/03  
REVISED: 08/18/05  
REVISED: 07/11/06  
REVISED: 01/17/08

APPROVED:   
George K. Noe, City Manager

DATE: 1-21-08

## I. PURPOSE

The purpose of this policy is to outline the rules and regulations for the operation of a City-owned vehicle or personal vehicle in the course and scope of employment. Included in the policy are specific instructions for a variety of scenarios a City employee may encounter while driving a City vehicle or a personal vehicle on City business. These rules and regulations are designed to prevent employee injuries, vehicle accidents, and damage to city property.

## II. SCOPE

This policy applies to all City employees, including part time employees, temporary employees paid by the City, and volunteers. The policy also applies to uniformed police and fire employees.

## III. DEFINITIONS

Incident: a situation where by a City vehicle or personal vehicle on City business is involved in a breakdown, accident, vandalism or other act that involves the loss of City property or property damage.

## IV. POLICY

It is the policy of the City that no employee will voluntarily, or be directed to, operate a vehicle for which he/she does not have both the appropriate Texas Driver's License classification and City Driver's Authorization Card.

Failure to follow the rules and regulations established in this policy may result in the loss of driving privileges and/or termination. (See Rules and Regulations of the Civil Service Board – Article IV.)

## **V. PROCEDURES**

In order to operate a City or personal vehicle of any type, an individual must have completed the following:

- a. Employees with an occupational driving license have the following restrictions:
  1. The license must specifically allow the employee to drive during business hours in order for that employee to drive on the job;
  2. If the person has lost their license due to a DWI, and obtained an occupation license, they cannot drive on the job;
- b. Have in his or her possession a current Texas driver's license.
- c. Obtain a City Driver's Authorization Card through the Risk Management Division.
- d. Register for and complete the Defensive Driving course offered by the City staff within 60 working days of being hired, and every three years thereafter. Attendance records for the Defensive Driving course are maintained by the Human Resources Dept.
- e. Read and understand City driving rules and insurance requirements and procedures.
- f. Train as needed in maintenance and use of vehicle(s) especially with heavy equipment and off-the-road types.

### **A. Accident and Breakdown Procedures for City and Personal Vehicles**

If a City employee in the course and scope of their employment is involved in an accident, regardless of the severity or location, the Police Department will be called to the scene to make a report. The Risk Management Division and the employee's department head shall also be contacted. Should the accident occur outside the city limits the local law enforcement agency, the Corpus Christi Police Department, the Risk Management Division, and the employee's department head shall all be contacted. Refer to section IX of Policy HR 15.0 for post accident drug testing requirements.

If the employee is driving his/her personal vehicle he/she shall give all necessary driver's license information, City Driver's Authorization Card, and insurance information to the other party involved. Drivers of City owned vehicles, however, will give their driver's license information and City Driver's Authorization Card to the other party and explain that the City of Corpus Christi is self-insured and that all communications regarding losses, injuries, etc, are to be directed to the Risk Management Division of the City of Corpus Christi, 1201 Leopard, 826-3679.

If a City vehicle is disabled as the result of an accident, or if a vehicle breaks down at any time, the mechanical repair division of the Maintenance Services Department will be notified. The number to call from 6:00 a.m. to 7:00 p.m. is 857-1919. At any other time the investigating officer should be asked to call a rotation wrecker and have the vehicle towed to the Maintenance Service yard.

When an incident occurs involving a City vehicle or use of a personal vehicle in pursuit of City business, whether it is a breakdown, accident, vandalism or other incident, notify the office of Risk Management or Director of General Services. They will advise you of the proper action to be taken.

#### B. Driving Rules and Regulations

Before the initial use of any vehicle each day, the driver will walk around and inspect the vehicle for damage, inoperable lights, loose hardware, tire condition or any other condition which might create an unsafe condition. Mileage and service dates shall be reviewed to determine if the vehicle is due for preventative maintenance. Any deficiency encountered in City vehicles will be reported to a supervisor immediately. It is the supervisor's responsibility to ensure that corrective action is taken.

All employees driving in the course and scope of their employment will comply with all applicable laws of the State of Texas as well as the following regulations of the City of Corpus Christi.

#### C. Parking

1. City vehicles are prohibited from "NO PARKING" zones except in emergency situations.
2. No City vehicle of any type shall be left unattended with the key left in the ignition. (Emergency vehicles are excluded).
3. When leaving your vehicle set the parking brake. For security reasons, lock the door.

4. Employees who occupy a metered parking space will pay the meter for the duration of the stay.
5. Employees are ultimately responsible for the vehicles issued to them.
6. Drivers of all City owned vehicles will be required to place a traffic cone at either the front and/or rear of the vehicle in all parking situations in the course and scope of work. If the City vehicle is driven into a parking spot, the cone shall be placed within 12 inches of the rear bumper. City vehicles parked in parallel parking spots may place traffic cone at either the front or rear of the vehicle.
  - a) Parking situations are defined as, but not limited to, work sites, break/lunch stops, and all parking lots.
  - b) The purchase of traffic cones will be the responsibility of the departments. 28" tall, double stripe traffic cones are an inventory stock item at the City warehouse and can be procured with a warehouse requisition form. All Motor Pool vehicles must have a traffic cone in each of the vehicles. It will be the responsibility of the City employee assigned to the vehicle to place the traffic cone in the appropriate location.
  - c) Exceptions to the requirements of section V C6 include, but are not limited to: City vehicles that are stopped while the engine remains on and the driver stays in the vehicle, vehicles that are parked at the final destination of the work day, City vehicles that are backed into a parking spot, privately owned vehicles on City business, unmarked City vehicles, City vehicles parked inside work zone traffic control barriers, Animal Care officers in pursuit of stray animals, and public safety vehicles that are equipped with emergency lights.
  - d) The purpose of section V C6 is to implement a proactive program aimed at eliminating backing accidents. Exemptions to the requirements of this section are available with a Risk Management approved, department specific program aimed at eliminating backing accidents. Those departments without any such program shall be required to follow the aforementioned guidelines.

#### D. Equipment

1. Seat belts will be worn at all times.
2. Windshields will be in place while the vehicle is in motion.

3. Doors will not be removed from any vehicle nor will they be tied open.
4. Turn signals will be in working order and utilized by drivers in ample time to warn oncoming or following vehicles of their intent.
5. Vehicles in motion, day or night, will use headlights, not just parking lights, when visibility is limited.
6. Drivers will ensure that windows, headlights, taillights, and wipers are clean and in operating order at all times.
7. Tailgates will be up and locked when vehicles are in motion. If a vehicle's function requires that the tailgate remain open, a red flag will be attached to the outward corners of the gate.
8. In all cases, including the loading of trucks, compliance with State law and the condition of the vehicles is solely the driver's responsibility during operation of the vehicle.
9. If a vehicle does not have a tailgate but is loaded, the driver of the vehicle will ensure that the load is secure and that overhangs are properly marked in accordance with State law.
10. Drivers hauling loose materials (dirt, rock, etc.) will take appropriate action in order to prevent falling debris. Tarps or tie-downs will be used at all times when hauling debris.
11. A card indicating the City's status as a self insured municipality shall be present in all City-owned vehicles to verify State law requirements for financial responsibility. For additional copies contact Risk Management at 826-3679.

#### E. Special Equipment

1. Special equipment such as hi-lifts, high rangers, graders, mowers, cranes, or any unit which has a special device added for specific kinds of work, may require formal training and instruction prior to use by a driver. This special training will be provided by the department and include the following:
  - a. Explanation and demonstration of all control devices.
  - b. Explanation and demonstration of all safety equipment.
  - c. Maintenance items such as fuel, water, oil or other minimum operating needs of the unit.

- d. Demonstration of operation of the unit or special equipment.
  - e. Instruction in driving to and from or on and off trailers, parking procedures, and method of shut down and securing.
  - f. A report of this training will be maintained in the employee's department.
2. Passengers will ride only in seats designated for passengers.
  3. When backing, operators of special equipment will look around and if available, have another person guiding them.
  4. Heavy construction equipment will travel at less than 25 mph – without exception. This equipment will use the right hand lane except when a left turn is required. Headlights will be on at all times the vehicle is in motion. A chase vehicle using its emergency lights will also accompany this equipment, if one is available.

#### F. General

When the driver does not have a clear view of the entire area behind the vehicle, backing of large vehicles such as crew trucks, dump trucks, flatbed trucks, etc. will be done with the assistance of a guide, if available. If a second person is in the vehicle, he/she will get out and guide the vehicle using appropriate hand and voice signals.

1. Riding on the sides (except refuse/recycling vehicles), toolboxes, tailgates, roofs of any truck or vehicle, standing in the back of any truck, or riding in the bed of pickup trucks is prohibited.
2. Drivers will have in their possession at all times their valid Texas State driver's license and City Driver's Authorization Card. Suspension or loss of driving privileges could result in disciplinary action up to and including termination. This applies to both State licenses and City authorization cards.
3. All employees who drive in the course and scope of their employment are required to report within one working day a suspension or revocation of his/her license, or a driving while intoxicated conviction or probation regardless of whether the violation was committed on or off the job, to his/her supervisor who will in turn immediately advise the Risk Management Division of this fact. Failure of an employee to report a change in license status, or driving while intoxicated conviction or

probation within one working day shall result in disciplinary action up to and including termination.

4. Posted speed limits must be obeyed.
5. Drivers will direct their attention to driving safely. Necessary inspections of streets, trees, signs, etc, while driving will be done with care. This also applies to the use of mobile phones and radio communication systems.
6. During periods of limited visibility or any time windshield wipers are in use, the headlights will be on.
7. It is recommended for supervisors, at least once a year, to ride with all the drivers for review of their driving ability. Also, periodic training exercises should be conducted for special driving skills.
8. Driving while intoxicated, or consumption of or driving under the influence of alcoholic beverages or narcotics, while operating a City vehicle in the course and scope of employment is prohibited as stated in the City of Corpus Christi's Civil Service Board Rules and Regulations, and city policies regarding alcohol & drug abuse.
9. Trailers will be fastened securely to hitches. Safety pins and pintle locks will be used. Safety chains will be crossed under the hitch and securely fastened before moving the vehicle.
10. All items transported either in a truck or trailer, which may move around during transport, will be secured.
11. No more than three (3) persons will ride in the front seat of any vehicle. Where only two single seats exist, there should be only one rider per seat.
12. City vehicles are to be used for official business only. Transportation of private citizens, unless as a part of an official or authorized function, is prohibited.
13. Commercial-sized vehicles (larger than pickups) should not be driven in the extreme left lane of the expressways except when passing or when traffic hazards require it. (Emergency vehicles are excluded).
14. With the exception of specific cases which require their use, headsets (I-Pods, MP3 players, etc.) can be hazardous because of the wearer's inability to hear verbal orders, warnings, emergency vehicles, railroad engine horns, or even normal traffic sounds. Consequently, all City employees, unless specifically ordered to do so, will not wear any radio

headset or like device during working hours. This rule is for your safety and will be strictly enforced.

**G. Decisions Regarding Personnel**

The department shall contact the Human Resources Department for assistance in making decisions from a personnel standpoint when they have an employee who cannot drive, (i.e. promotions, provisions, etc.)

**VI. POLICY UPDATES**

This policy shall be reviewed on an annual basis and any revisions to the policy shall be approved by the City Manager and the Safety & Risk Manager.

**VII. CONSEQUENCES FOR VIOLATION OF THIS POLICY**

Failure to comply with this policy will result in disciplinary action up to and including termination.

**VIII. QUESTIONS REGARDING THIS POLICY**

Questions regarding this Policy shall be directed to the Safety & Risk Manager, or designee, who may be contacted at 361/826-3679.

## ***Equipment***

### **Procedures for Testing Total Chlorine Residual**

SOP#: WQ-003.01

Date: November 2, 2008

Author: Don Hollingshead

#### **Measuring Hints**

1. Analyze sample immediately.
2. Do not use plastic containers to collect samples.
3. For best results, dedicate a set of cells to total chlorine tests.

#### **Instrument Check**

1. Place colorless spec. blank in cell weld with alignment mark facing key pad.
2. Tightly cover cell with instrument cap.
3. Press zero key (displays 0.00), then remove.
4. Place standard 1 cell into weld, cover with twist cap.
5. Press read/enter key.
6. Record concentration measure on the Daily Check for Water Quality Field Instruments (see page 20).
7. Repeat steps 3&4 with cells labeled standard 2 and standard 3.
8. Compare with previous measurement to verify instrument is performing consistently.
9. This check is to be performed daily before use, and after every 5 samples during use.

#### **Low Range (samples between 0.02 mg/L to 2.0 mg/L)**

1. Fill 10 mL cell with sample (blank) and replace cap.
2. Press power key to turn meter on. Arrow should indicate low range channel (LR).
3. Remove meter cap. Place blank in cell weld with diamond mark facing the keypad. Fit cap over cell to cover. (Note: wipe excess water & finger prints off sample cell.)

4. Press zero/scroll key to zero the instrument, then remove blank.
5. Fill a second 10 mL cell to 10 mL mark with sample.
6. Add contents of one DPD total chlorine power pillow to the sample in the cell.
7. Cap and gently shake for 20 seconds.
8. Place prepared sample in cell weld with diamond mark facing the key pad, and cover with instrument cap, wait 3 to 6 minutes after adding the DPD total chlorine pillow.
9. Press read/enter key.
10. Report results in mg/L chlorine.

### **High Range (samples that exceed 2.0 mg/L by 10%)**

Note: the High Range protocol should be used when the HACH pocket colorimeter II low range is over-range flashing above stated test range.

1. Fill 10 mL cell with sample (blank) and replace cap.
2. Press power key to turn meter on. Arrow should indicate low range channel (LR).
3. Remove meter cap. Place blank in cell weld with diamond mark facing the keypad. Fit cap over cell to cover. (Note: wipe excess water & finger prints off sample cell.)
4. Press zero/scroll key to zero the instrument, then remove blank.
5. Dilute the sample "2X" by filling a 10 mL cell to the 5 mL mark with sample.
6. Add deionized water to the sample until it reaches the 10 mL mark.
7. Add contents of one DPD total chlorine power pillow to the sample in the cell.
8. Cap and gently shake for 20 seconds.
9. Place prepared sample in cell weld with diamond mark facing the key pad, and cover with instrument cap, wait 3 to 6 minutes after adding the DPD total chlorine pillow.
10. Press read/enter key.
11. Multiply the results by 2.
12. Report results in mg/L chlorine.

If the results from the 2X dilution are still reading as over-range, use the following dilution.

1. Fill 10 mL cell with sample (blank) and replace cap.
2. Press power key to turn meter on. Arrow should indicate low range channel (L R).
3. Remove meter cap.
4. Place blank in cell weld with diamond mark facing the keypad. Fit cap over cell to cover. (Note: wipe excess water & finger prints off sample cell.)
5. Press zero/scroll key to zero the instrument, then remove blank.
6. Dilute the sample "5X" by filling a 10 mL cell to the 2 mL mark with sample.
7. Add deionized water to the sample until it reaches the 10 mL mark.
8. Add contents of one DPD total chlorine power pillow to the sample in the cell.
9. Cap and gently shake for 20 seconds.
10. Place prepared sample in cell weld with diamond mark facing the key pad, and cover with instrument cap, wait 3 to 6 minutes after adding the DPD total chlorine pillow.
11. Press read/enter key.
12. Multiply the results by 5.
13. Report results in mg/L chlorine.

## Water Quality Instrument Check Form

Date: \_\_\_\_\_

Name: \_\_\_\_\_

ID #: \_\_\_\_\_

### Pocket colorimeter II daily check

Instrument Identification: \_\_\_\_\_

Zero the Pocket colorimeter II with the provided blank in the gel kit.

Standard Vial	Expected Response	Response 1	Response 2
1			
2			
3			

Gel Standard Kit. Lot# \_\_\_\_\_ Expiration Date \_\_\_\_\_

### pH probe daily check

Instrument Identification: \_\_\_\_\_

Buffer Solution	Lot #	Expiration Date	pH Probe Reading	Temperature (°C)
4				
7				
10				
8				

Notes/Comments:

Ensure to note ALL lot numbers and expiration dates for the standards used in this check.

DO NOT USE EXPIRED STANDARDS FOR ANY REASON

## Operation & Use of Oakton Instruments pH Tester 30 pH Meter

SOP# WQ-004.01

Date: 7/22/2008

Author: Bruce Short

The Oakton Instruments pH Tester 30 pH meter is used for field measurements of both pH and temperature of water. The instrument measures pH in  $\pm 0.01$  pH units, and temperature in  $\pm 0.1$  °C or °F. Using the built in temperature sensor, any change in temperature is compensated to give the actual pH reading of the sample tested.

Before use, the pH tester's electrode must be conditioned by immersing the probe in tap water or electrode storage solution for at least 30 minutes. This is normally accomplished by keeping the sponge insert inside the instrument's protective storage cap moistened with tap water. **Do Not Use De-ionized Water!**

**pH Calibration:** The Oakton Instruments pH Tester 30 pH meters should be calibrated daily before use. Additionally, re-calibrate the instrument whenever batteries are changed, or the electrode replaced.

Daily Calibration will be conducted using pH buffers at pH 4.0, 7.0, and 10.0. After this three point calibration, a performance check will be conducted by measuring and recording the reading of a pH 8.0 buffer.

### Stepwise Calibration Procedure

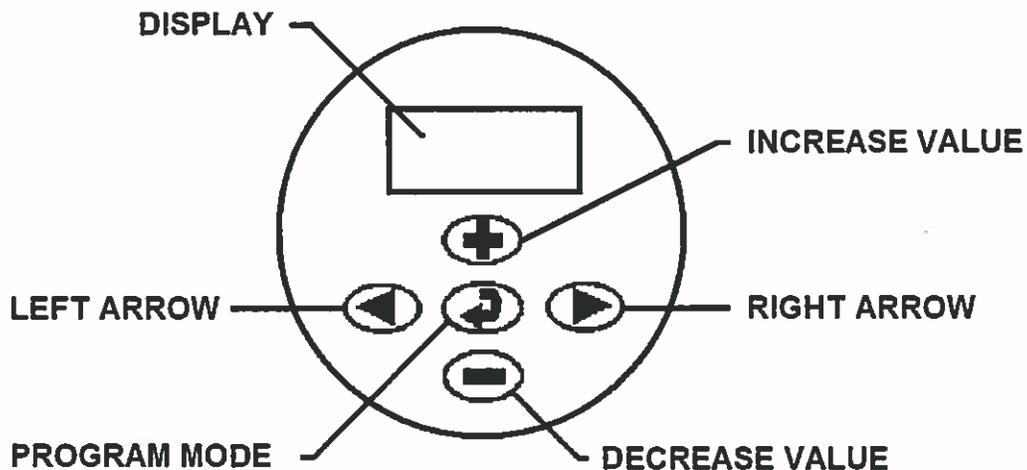
1. Press ON/OFF button to switch the unit on.
2. Dip the electrode about 2 to 3 cm into the pH 4 buffer solution and press the 'CAL' button. The upper display will show the measured reading based on the last calibration, while the lower display should indicate which pH buffer solution is being used.
3. Allow the upper display reading to stabilize then press the HOLD/ENT button to confirm the first calibration point. The upper display will be calibrated to the pH standard buffer solution. Record this value in the appropriate section of the Daily pH Meter Calibration Log.
4. Repeat steps 2 and 3 for pH 7.0 buffer, then pH 10.0 buffer. Rinse the electrode in tap water between buffers.
5. After completing the calibration with the three buffers as described above, the meter will automatically return to the measure mode. Using the

procedure below for pH measurement, measure and record the value for a pH 8.0 buffer on the Daily pH Meter Calibration Log.

**Stepwise Procedure for pH Measurements**

1. Press ON/OFF button to switch the unit on.
2. Dip the electrode about 2 to 3 cm into the test solution. Stir and let the reading stabilize.
3. Note the pH value or press HOLD/ENT button to freeze the reading. To release the reading, press HOLD/ENT again.
4. Press ON/OFF to turn off tester. If you do not press a button for 8.5 minutes, the tester will automatically shut off to conserve batteries.

**Programming Autoflushers**  
**SVC CONTROLLER**  
**PROGRAMMING GUIDE**  
10/20/05  
**SVC CONTROLLER INTRODUCTION**



THE PROGRAM MODE  BUTTON ALLOWS YOU TO NAVIGATE BETWEEN PROGRAM MODES. PRESS THE PROGRAM MODE  BUTTON TO FIRST WAKE UP THE UNIT.

DURING A SHORT PERIOD OF INACTIVITY, THE DISPLAY WILL SHUT OFF (GO TO SLEEP) TO CONSERVE BATTERY POWER. THE CONTROLLER WILL STILL CARRY OUT THE FLUSHING PROGRAM LAST ENTERED.

WHEN PROGRAMMING, THE FLASHING PORTION OF THE DISPLAY CAN BE CHANGED BY PRESSING THE INCREASE OR DECREASE VALUE  or  BUTTON.

TO CHANGE SOMETHING THAT IS NOT FLASHING, PRESS THE RIGHT OR LEFT ARROW  or  BUTTONS UNTIL THE DESIRED FIELD IS FLASHING.

## SVC CONTROLLER OVERVIEW

THERE ARE SIX DISPLAY MODE SCREENS YOU CAN TOGGLE THROUGH WHEN YOU WAKE UP THE UNIT BY PRESSING THE PROGRAM MODE  BUTTON. THESE ARE;

1. BATTERY POWER INDICATOR & LAST PROGRAMMED CURRENT TIME & DAY.



2. CURRENT TIME & DAY PROGRAM MODE



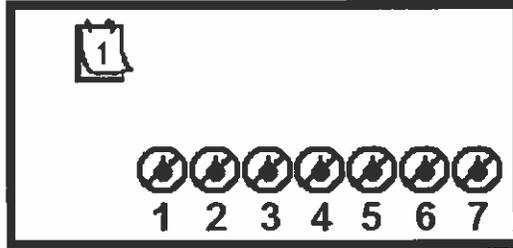
3. FLUSHING START & STOP PROGRAM MODE (UP TO 9 START TIMES AVAILABLE)



4. RUN TIME PROGRAM MODE (LENGTH OF EACH FLUSHING)

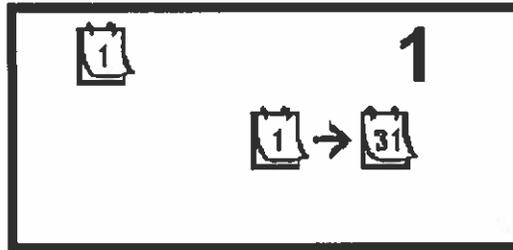


5. "DAY OF THE WEEK" FLUSHING PROGRAM MODE



1 = SUNDAY  
OR

"INTERVAL" FLUSHING PROGRAM MODE



NOTE: THE SCREEN THAT WILL APPEAR WILL DEPEND ON WHICH FLUSHING MODE THE UNIT WAS LAST EXITED FROM.

6. UNIT OFF DISPLAY MODE SCREEN



## PROGRAMMING THE SVC CONTROLLER

### STEP #1 – SETTING THE CURRENT DAY AND TIME

1. PRESS THE  BUTTON UNTIL THE CURRENT TIME/DAY ICON  IS DISPLAYED.
2. HOURS WILL BE FLASHING. PRESS THE  or  BUTTON TO CHANGE THE HOUR SHOWN ON THE DISPLAY. PRESS THE RIGHT ARROW  BUTTON TO PROCEED TO SETTING THE MINUTES.
3. MINUTES WILL BE FLASHING. USE THE  or  BUTTON TO CHANGE THE MINUTES SHOWN ON THE DISPLAY. PRESS THE RIGHT ARROW  BUTTON TO PROCEED TO SETTING THE AM/PM OR 24 HOUR TIME.
4. THE TIME WILL BE DISPLAYED AND THE TIME OF DAY FLASHING. PRESS THE  or  BUTTON TO SELECT AM, PM OR 24 HOUR. PRESS THE RIGHT ARROW  BUTTON TO PROCEED TO SETTING THE DAY OF THE WEEK.
5. THE NUMBER 1 WILL BE FLASHING, INDICATING THE FIRST DAY OF THE WEEK. PRESS THE  or  BUTTONS THE DAY OF THE WEEK (1-7 CORRESPONDING TO THE DAY).

THE TIME AND DAY HAVE NOW BEEN SET.

## STEP #2 – SETTING & ELIMINATING FLUSHING START TIMES

### A. SETTING FLUSHING START TIMES

1. PUSH THE PROGRAM MODE  BUTTON UNTIL THE START TIMES  ICON IS DISPLAYED.
2. USE THE  or  BUTTON TO CHANGE THE START TIME (THE START TIMES ADVANCE IN 15 MINUTE INCREMENTS). HOLD EITHER BUTTON DOWN FOR 1 SECOND TO CHANGE TIME RAPIDLY.
3. PRESS THE RIGHT ARROW  BUTTON TO SELECT THE NEXT START TIME (UP TO 9 START TIMES ARE AVAILABLE).

### B. ELIMINATING A START TIME

WITH THE DISPLAY IN THE FLUSHING START TIME MODE, PUSH THE  or  BUTTON UNTIL YOU REACH 12:00AM (MIDNIGHT). FROM HERE PUSH THE  BUTTON ONCE TO REACH THE OFF POSITION.

NOTE: IF THE SVC HAS ALL 9 START TIMES TURNED OFF, THEN THE CONTROLLER IS OFF.

## STEP #3 – SETTING THE RUN TIME (LENGTH OF FLUSHING).

1. PRESS THE PROGRAM MODE  BUTTON UNTIL THE RUN TIME  ICON IS DISPLAYED.
2. THE DISPLAY WILL SHOW THE LAST RUN TIME ENTERED.
3. USE THE  or  BUTTONS TO INCREASE OR DECREASE LENGTH OF FLUSHING TIME (FROM 1 MINUTE UP TO 4 HOURS). FOR RAPID ADVANCEMENT, HOLD THE BUTTONS DOWN FOR 2 SECONDS.

STEP #4 – SELECT AND PROGRAM THE FLUSHING MODE –  
SELECT BETWEEN THREE DIFFERENT MODES AS FOLLOWS:

- A. DAYS OF THE WEEK
- B. INTERVAL
- C. MANUAL

A. “DAYS OF THE WEEK” – EXAMPLE: FLUSH ON MONDAY,  
WEDNESDAYS AND FRIDAYS.

1. TO SELECT THE DAYS OF THE WEEK MODE, PUSH THE  BUTTON UNTIL THE FLUSHING DAYS  ICON IS DISPLAYED ALONG WITH THE SEVEN DAYS OF THE WEEK WITH A FLUSHING WATER DROP  OR A NO-FLUSHING WATER DROP  ICON ABOVE THE NUMBERED DAYS.

- a. THE  ICON REPRESENTS AN “ON” FLUSHING DAY
- b. THE  ICON REPRESENTS A “OFF” FLUSHING DAY.

2. TO SELECT SPECIFIC DAYS OF THE WEEK TO FLUSH, WITH THE  CURSOR ON A SPECIFIC DAY (THE CURSOR ALWAYS STARTS WITH DAY 1), PRESS THE  BUTTON TO ACTIVATE A PARTICULAR DAY OF THE WEEK TO FLUSH. PRESS THE  BUTTON TO CANCEL FLUSHING FOR THAT DAY. AFTER PRESSING A BUTTON THE CURSOR AUTOMATICALLY ADVANCES TO THE NEXT DAY.

3. REPEAT STEP 2 UNTIL ALL DESIRED DAYS HAVE BEEN SELECTED. THE SELECTED DAYS WILL SHOW WITH AN  ICON TO INDICATE THEIR STATUS AS ON. THE LAST  ICON IS THE LAST FLUSHING DAY FOR THE PROGRAM.

4. YOU HAVE FINISHED PROGRAMMING FOR “DAYS OF THE WEEK” FLUSH MODE.

DO NOT PRESS ANY MORE KEYS. ALLOW THE UNIT TO GO INTO SLEEP MODE AUTOMATICALLY.

B. "INTERVAL" – EXAMPLE: FLUSH EVERY OTHER DAY OR EVERY 3RD DAY, ETC.

1. TO SELECT "INTERVAL" FLUSHING MODE FROM 1 TO 31 DAYS, FIRST PUSH  THE BUTTON UNTIL THE "DAYS OF THE WEEK" MODE SCREEN IS DISPLAYED. THEN PRESS THE  BUTTON AND MOVE THE CURSOR TO THE 7<sup>TH</sup> DAY OF THE WEEK. FINALLY, PRESS THE  AGAIN UNTIL THE  INTERVAL FLUSHING ICON AND TWO CALENDARS  →  APPEAR ON THE DISPLAY.
2. PRESS THE  or  BUTTONS TO SELECT THE NUMBER OF DAYS BETWEEN FLUSHING DAYS (1-31). THIS IS CALLED THE INTERVAL.

EXAMPLE:

- 1 = EVERY DAY OR 24 HOURS BETWEEN FLUSHES.
- 2 = EVERY OTHER DAY OR 48 HOURS BETWEEN FLUSHES
- 3 = EVERY THREE DAYS OR 72 HOURS BETWEEN FLUSHES, ETC.

3. YOU HAVE FINISHED PROGRAMMING FOR "INTERVAL" MODE.

DO NOT PRESS ANYMORE KEYS. ALLOW THE UNIT TO GO INTO SLEEP MODE AUTOMATICALLY.

C. "MANUAL" – EXAMPLE: FLUSHING ON DEMAND.

1. PRESS THE  BUTTON ONCE TO DISPLAY THE CURRENT TIME OF DAY.
2. PRESS AND HOLD  THE BUTTON FOR TWO SECONDS TO DISPLAY THE MANUAL FLUSHING ICON.
3. USE THE  or  BUTTON TO ADJUST THE MANUAL FLUSH RUN TIME FROM 1 MINUTE TO 4 HOURS.
4. RELEASE THE BUTTONS AND THE CONTROLLER WILL COUNT DOWN 10 SECONDS BEFORE ACTIVATING THE MANUAL CYCLE.
5. THE FLASHING FLUSHING  ICON WILL APPEAR ON THE DISPLAY WHEN FLUSHING IS OCCURRING.

NOTE: TO STOP MANUAL FLUSHING.

PRESS THE  BUTTON UNTIL THE OFF FLUSHING SYSTEM

 ICON IS DISPLAYED. WAIT 4 SECONDS AND "OFF" WILL APPEAR ON THE DISPLAY. PRESS THE  AGAIN AND THE SVC WILL FLUSH BASED UPON THE CURRENT PROGRAM.

## PROGRAMMING TIPS

1. IF YOU HAVE PROGRAMMED FOR “INTERVAL” AND YOU WISH TO CHANGE TO “DAYS OF THE WEEK” MODE WHILE IN THE “INTERVAL” PROGRAMMING MODE, THEN PRESS THE RIGHT ARROW  BUTTON TO GO BACK TO THE “DAYS OF THE WEEK” MODE. REMEMBER, TO GO FROM THE “DAYS OF THE WEEK MODE BACK TO THE “INTERVAL MODE’ YOU MUST PRESS THE RIGHT ARROW  BUTTON AND MOVE THE CURSOR TO THE LAST DAY OF THE WEEK AND THEN PRESS THE RIGHT ARROW  BUTTON AGAIN TO GO TO THE “INTERVAL MODE”.
2. THE LAST FLUSHING PROGRAM MODE, “DAYS OF THE WEEK” OR “INTERVAL”, LEFT DISPLAYED ON THE SCREEN WHEN FINISHED PROGRAMMING AND THEN ALLOW THE UNIT TO GO TO SLEEP AUTOMATICALLY, IS THE MODE IT WILL OPERATE IN.
3. IF YOU WANT TO TURN OFF THE CONTROLLER COMPLETELY, GO TO THE LAST PROGRAMMING MODE SCREEN DISPLAY BY REPEATEDLY PRESSING THE PROGRAM MODE KEY UNTIL YOU REACH THE SYSTEM OFF  ICON . THEN WAIT APPROXIMATELY 3 SECONDS AND THE WORD OFF WILL ALSO BE DISPLAYED. THE CONTROLLER IS NOW OFF AND WILL NOT CARRY OUT ANY PROGRAM FUNCTIONS. THE DISPLAY & CONTROLLER FUNCTIONS WILL AUTOMATICALLY SHUT OFF.
4. TO REACTIVATE THE CURRENT PROGRAMS IN THE “DAYS OF THE WEEK” OR “INTERVAL” PROGRAM MODE, GO TO STEP #4 AND EXIT THE DESIRED PROGRAM MODE BY ALLOWING THE DISPLAY TO SHUT OFF (GO TO SLEEP) AUTOMATICALLY WHILE IN THAT MODE.

## SVC CONTROLLER RESETTING PROCEEDURE

THIS INFO IS FOR THE PEOPLE HAVING TROUBLE WITH THIER CONTROLLER GOING NUTS AND ACTING LIKE IT'S LOST. THE PROCEEDURE WILL REBOOT IT AND GET IT BACK TO THE WAY IT WAS BEFORE ANY PROGRAMMING WAS DONE.

The reset procedure for the SVC controllers is as follows. Remove the 9 volt battery and wait three minutes. Next, press and hold down the PLUS, the MINUS and the LEFT ARROW buttons all at the same time. While your are holding the buttons down insert the battery into the SVC controller. The display should now read 12:00AM and is ready to be re-programmed. Contact Technical Services a Kupferle Foundry Company if you have questions or comments. Our phone number is 800-231-3990. We are available Monday through Friday from 7:30 am - 4:00 pm Central Standard Time.

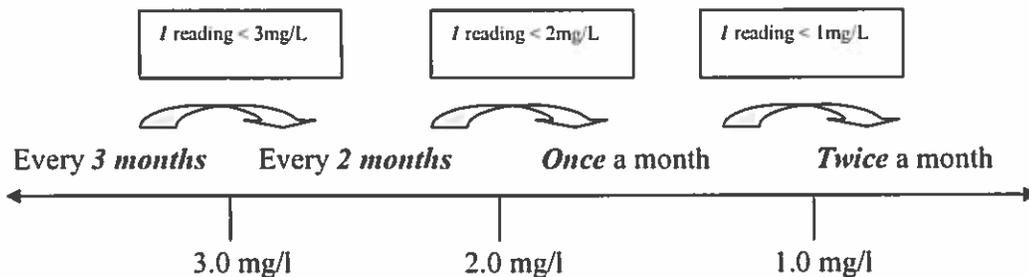
## Monthly Performance Evaluation

At the end of every month an analysis will take place to evaluate DEM performance. Performance is defined as the “ability of a DEM to maintain certain chlorine residual from flushing cycle to flushing cycle”.

The following methodology will be used to evaluate DEM performance on a monthly basis. This methodology is based on “start” TRC readings.

### How a DEM moves ‘down’ a flushing group

One “bad” reading will cause a DEM to automatically fall down to the flushing group that corresponds to that reading (see diagram below). A DEM may drop more than one flushing group. When the TRC reading is below 1.0 mg/L the DEM will automatically fall to the *Twice a month* flushing group.



### How a DEM moves ‘up’ a flushing group

One “good” reading will not cause a DEM to automatically move up to a higher flushing group. Instead, a DEM will need a series of sequential “good” readings logged before it can be moved up a level

Requirements for DEM promotion for each flushing frequency group:

To *move up* to the *Every 3 months* flushing group:

**Requirement:** DEM has 2 consecutive readings above 3.0 mg/l while in the *Every 2 months* group.

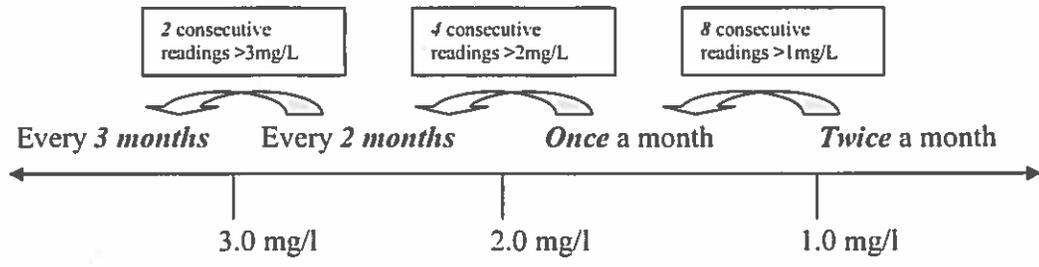
To *move up* to the *Every 2 months* flushing group:

**Requirement:** DEM has 4 consecutive readings above 2.0 mg/l while in the *Once a month* group.

To *move up* to the *Once a month* flushing group:

**Requirement:** DEM has 8 consecutive readings above 1.0 mg/l while in the *Twice a month* group.

All these requirements add up to **4 months of “good” readings** before a DEM can advance to a more lenient flushing group.



**Examples of how a DEM can move between flushing groups.**

This example illustrates how a DEM can **“drop”** to a lower flushing group and then **“move up”** to a higher flushing group; including corresponding good reading counts (GRC) and print range counts (PRC)

DEM ID#	Sept 11 Batch1 TRC (mg/L)	Sept 11 Batch2 TRC (mg/L)	Oct 11 Batch1 TRC (mg/L)	Oct 11 Batch2 TRC (mg/L)	Nov Batch1 TRC (mg/L)	Nov 11 Batch2 TRC (mg/L)	Dec 11 Batch1 TRC (mg/L)	Dec 11 Batch2 TRC (mg/L)	Jan 12 Batch1 TRC (mg/L)	Jan 12 Batch2 TRC (mg/L)
1212	1.5		0.9	1.8	1.5	1.4	1.5	1.2	1.4	1.8
GRC	0		0	1	2	3	4	5	6	7
PRC	2	1	1	1	1	1	1	1	1	1

DEM ID#	Feb 12 Batch1 TRC (mg/L)	Feb 12 Batch2 TRC (mg/L)	Mar 12 Batch1 TRC (mg/L)
1212	1.5		To be flushed
GRC	0		
PRC	2	1	

1. Assume DEM #1212, is in the **Once a month** flushing group
2. For the month of Oct 11 the TRC level is 0.9 mg/L, this automatically drops the DEM to the **Twice a month** group. Now the DEM needs **8** consecutive TRC above 1.0 mg/L to move up to the **Once a month** flushing group.
3. Assume DEM #1212 obtains readings above 1.0 mg/L for the next **4** consecutive months. Now, DEM #1212 goes back to the **Once a month** flushing group and the next flushing operation will be scheduled for Mar 12 Batch 1.

This example illustrates how a DEM can stay in its current flushing group; including corresponding good reading counts (GRC) and print range counts (PRC)

DEM ID#	Sept 11 Batch1 TRC (mg/L)	Sept 11 Batch2 TRC (mg/L)	Oct 11 Batch1 TRC (mg/L)	Oct 11 Batch2 TRC (mg/L)	Nov Batch1 TRC (mg/L)	Nov 11 Batch2 TRC (mg/L)	Dec 11 Batch1 TRC (mg/L)	Dec 11 Batch2 TRC (mg/L)	Jan 12 Batch1 TRC (mg/L)	Jan 12 Batch2 TRC (mg/L)
1000	2.5				2.6				2.4	
GRC	0				0				0	
PRC	4	3	2	1	4	3	2	1	4	3

DEM ID#	Feb 12 Batch1 TRC (mg/L)	Feb 12 Batch2 TRC (mg/L)	Mar 12 Batch1 TRC (mg/L)
1000			To be flushed
GRC			
PRC	2	1	

1. Assume DEM #1000, is in the *Every 2 months* flushing group
2. Every 2 months the DEM is flushed and the residuals obtained are within the Every 2 months flushing range (2.0 mg/L to 3.0 mg/L) so this DEM never obtains any GRC and the next flushing operation will be scheduled for Mar 12 Batch 1.

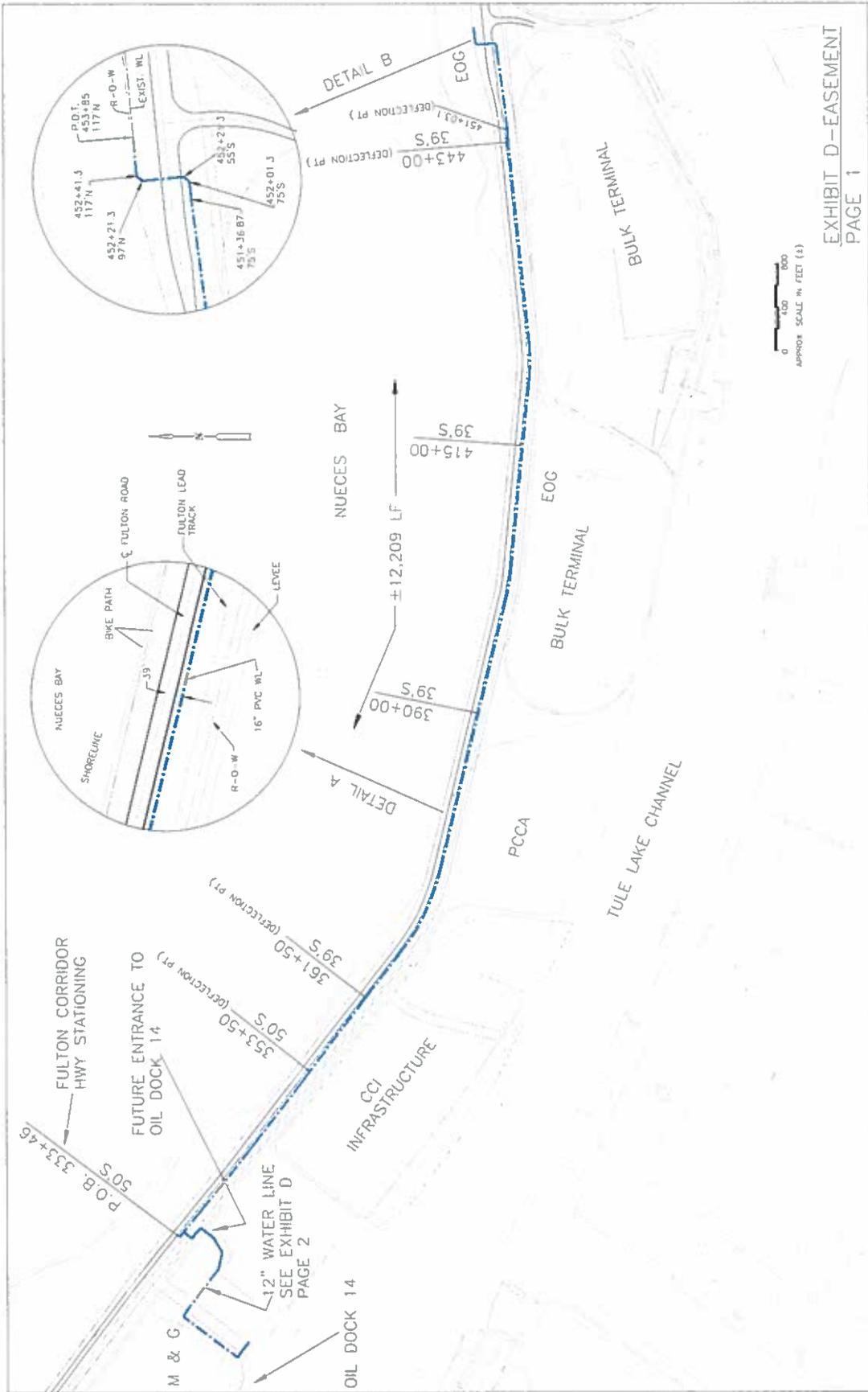


EXHIBIT D-EASEMENT  
PAGE 1

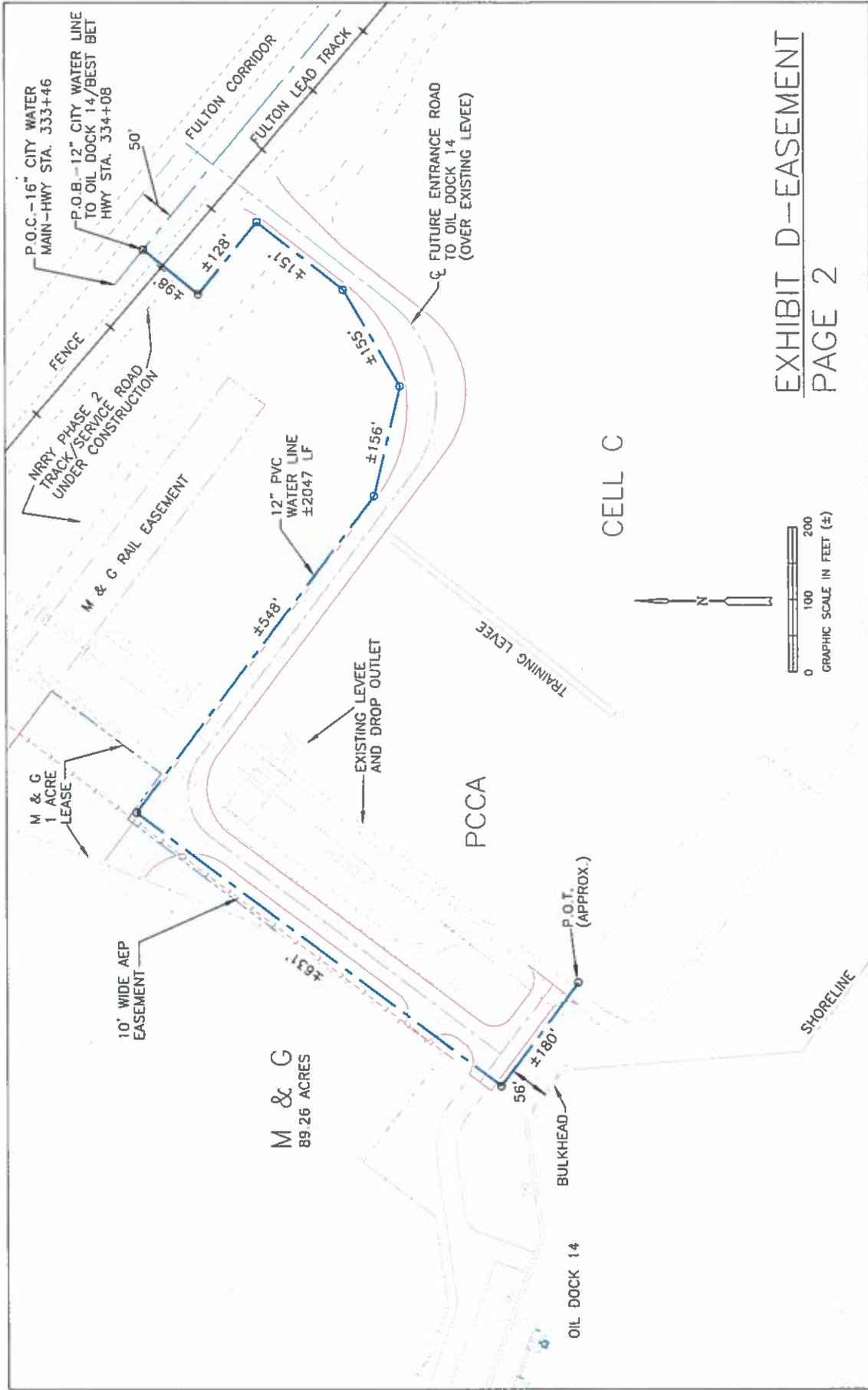
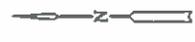


EXHIBIT D - EASEMENT  
PAGE 2



## Exhibit E

### Description of Easement – 16 inch Waterline

BEING approximately 12,209 linear feet of a 16 inch PVC waterline situated in Port of Corpus Christi Authority property out of the submerged land patented to Nueces County Navigation District (now known as Port of Corpus Christi Authority) by the State of Texas on May 7, 1930, recorded in Vol. 192, page 579 and referred to as Patent 84 (Section 939) and out of a portion of Patent 446 recorded in Vol. 719, page 358, deeds records of Nueces County, Texas. Centerline easement of said waterline further described as follows:

- BEGINNING at point (P.O.B.) 50 feet south of the centerline of Joe Fulton International Trade Corridor at Station 333+46.
- THENCE, along centerline of said easement, parallel to and 50 feet south of centerline of Joe Fulton International Trade Corridor to a deflection point at Station 353+50.
- THENCE, along centerline of easement in a southeasterly direction to a point being 39 feet south of centerline Joe Fulton International Trade Corridor at Station 361+50 to a deflection point.
- THENCE, continuing along centerline of easement, parallel to and 39 feet south of Joe Fulton International Trade Corridor centerline to a deflection point at Station 443+00.
- THENCE, in an easterly direction to a deflection point being 74.8 feet south of Joe Fulton International Trade Corridor centerline at Station 451+03.1.
- THENCE, continuing along said easement centerline, parallel to and 75 feet south of Joe Fulton International Trade Corridor centerline to a pipe bend at Station 452+01.3.
- THENCE, in a northeasterly direction for a distance of approximately 29 feet to pipe bend being 55 feet south of Joe Fulton International Trade Corridor centerline at Station 452+21.3.
- THENCE, in a northerly direction along easement, crossing under Joe Fulton International Trade Corridor for a distance of approximately 152 feet to a pipe bend being 97 feet north of Joe Fulton International Trade Corridor center line at Station 452+21.3.
- THENCE, in a northeasterly direction for a distance of approximately 20 feet to a pipe bend being 117 feet north of Joe Fulton International Trade Corridor centerline at Station 452+41.3.
- THENCE, in an easterly direction along centerline of said easement for a distance of approximately 144 feet to a point being 117 feet north of Joe Fulton International Trade Corridor centerline at Station 453+85 to the Point of Terminus with a total length of approximately 12,209 linear feet more or less.

Easement description based from office records—to be amended per as-built location of water line.

## Exhibit E

### Description of Easement – 12 inch Waterline

BEING approximately 1,891 linear feet of a 12 inch PVC waterline situated in Port of Corpus Christi Authority property out of the submerged land patented to Nueces County Navigation District (now known as Port of Corpus Christi Authority) by the State of Texas on May 7, 1930, recorded in Vol. 192, page 579 and referred to as Patent 84 (Section 939) Deeds records of Nueces County, Texas. Centerline easement of said waterline further described as follows:

- COMMENCING at a point (P.O.C) 50 feet south of centerline of Joe Fulton International Trade Corridor at station 333+46 said P.O.C. Also being the point of beginning (P.O.B.) of a 16 inch City waterline easement as described in the accompanying Exhibits D & E (Page 1).
- THENCE, along centerline of said 16 inch waterline for a distance of approximately 62 feet to the P.O.B. said point being 50 feet south of Joe Fulton International Trade Corridor at station 334+08.
- THENCE, in a southwesterly direction at a right angle to said 16 inch waterline, passing under Fulton Lead Track and Nueces River Rail Yard Phase 2 track for a distance of approximately 98 feet to a deflection point.
- THENCE, along centerline of this easement parallel to and approximately 98 feet south of said 16 inch waterline for a distance of approximately 128 feet to a deflection point.
- THENCE, in a southwesterly direction, approximately 27 feet west of and parallel to the designed location of centerline entrance road to Oil Dock 14 for a distance of approximately 151 feet to a deflection point.
- THENCE, deflecting to the right at approximately 22.5° for a distance of approximately 155 feet.
- THENCE, deflecting to the right at approximately 45° for a distance of approximately 156 feet to a point being approximately 24 feet north of said centerline of designed location of entrance road.
- THENCE, along centerline of this easement, approximately 24 feet north of and parallel to said designed location of entrance road for a distance of approximately 548 feet to a deflection point, said point being midway between design location of entrance road edge of pavement and the southeast boundary line of a one acre lease from Port of Corpus Christi to M&G Group.
- THENCE, along said centerline of easement, in a southwesterly direction, 16 feet east of and parallel to a common boundary between Port of Corpus Christi and M&G Group for a distance of approximately 655 feet to the P.O.T. (Point of Terminus) with a total length of approximately 1,891 linear feet, more or less.

Easement description based from office records-to be amended per as-built location of waterline.