

**CITY OF HOUSTON**



**PUBLIC WORKS AND  
ENGINEERING  
PLANNING & DEVELOPMENT  
DIVISION**

## **EXECUTIVE SUMMARY**

### **Project Overview**

InControl Technologies, Inc. was retained by Malcolm Pirnie on behalf of Metro Solutions (the current property owner), to provide environmental consulting services at the North Route MSD No. 1 property located near the confluence of Interstate 10 and Interstate 45 north of downtown Houston, Harris County, Texas. The subject property consists of approximately 16.37-acres of land located northwest of downtown Houston, Harris County, Texas (**Figure B1**). The subject property is developed with a mixture of commercial and light industrial properties, parking lots, warehouses and office space.

The subject property is located within the White Oak Bayou Watershed (**Figure B2**). According to the Flood Insurance Rate Map (**Figure B3**), the subject property is located outside the 0.2% annual chance (500 year) floodplain. Approximately 85% of the subject property is covered with parking spaces, walkways, roadways, railroad and buildings. The remaining 15% is covered by grassy areas (**Figure C1**).

The subject property currently has several groundwater Protective Concentration Level Exceedance (PCLE) zones which are depicted on **Figure B4**.

### **Historical Environmental Condition**

To date, Metro Solutions has undertaken site investigation activities designed to define the nature and extent of the environmental impact from historical releases at the subject property. The subject property (North Route MSD No. 1) is subdivided into sixteen Parcels (IT\_003, NR\_803, NR\_803A, IT\_004, NR\_804, IT\_005, IT\_007D, IT\_011, IT\_016, NR\_816, IT\_018, IT\_031, NR\_830, NR\_809B, NR\_809C and NR\_808G). All of the Parcels are currently developed with commercial or light industrial uses. Historic property uses include warehousing (Parcel IT\_005), bulk fuel terminal (Parcels IT\_031 and NR\_830) and rail yard operations (Parcel IT\_016 and NR\_816). As part of the environmental due diligence, a Phase I Environmental Site Assessment (ESA) was completed for each Parcel. Phase II ESAs were conducted for METRO on select parcels (IT\_003/NR\_803/NR\_803A, IT\_004/NR\_804, IT\_005, IT\_016/NR\_816, IT\_018, and IT\_031/NR\_830) based on recognized environmental conditions reported in the Phase I ESAs. Phase II ESAs were conducted independently of METRO at select parcels (IT\_007D, IT\_011, and IT\_016/NR\_816). Soil and groundwater samples were collected to determine if historic operations associated with the Parcel or surrounding Parcels had affected soil and/ or shallow groundwater. The results were compared to the most conservative Tier 1 Protective Concentration Levels (PCLs) (**Table F1** and **Table F2**) under the Texas Risk Reduction Program (TRRP). **Figure B5** depicts the locations of the

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soil sampling points and **Figure B6** depicts the groundwater sampling points within the proposed MSD boundary.

The lateral extent of affected groundwater has been horizontally delineated in all directions (**Figure B4**). A comparison of the sampling results available for the investigation areas indicates that the affected area has remained stable over time. Compound specific PCLE zones are depicted in **Figure B8-1** through **Figure B8-3**. Based on information collected from the various reports available for each Parcel within the proposed MSD boundary, the overall direction of groundwater flow is to the southwest (i.e. toward White Oak Bayou) (**Figure B7**). Because all the groundwater elevation data are not tied to a common reference point, a groundwater gradient across the proposed MSD boundary could not be calculated.

Twenty-three water wells were identified within a ½-mile radius of the proposed MSD boundary. None of the identified water wells within a ½-mile radius are listed as domestic or public supply wells. All identified wells within the ½-mile radius are listed as industrial, de-watering or unused. Three of the identified wells are within the proposed MSD boundary. One well is located on the edge of parcel IT\_016 (well ID 65-14-733) and is drilled to a depth of greater than 1,000-ft below ground surface (bgs). The remaining two wells identified on the MSD boundary are located cross-gradient of the subject property. All other identified wells within ½-mile radius of the site are cross-gradient or downgradient. The depths of the identified wells range from 70-ft bgs to greater than 1,000-ft bgs. The wells that are completed at depths of 70-ft bgs are located cross-gradient and upgradient of the proposed MSD boundary and are unlikely to be in contact with the area of affected groundwater associated with the subject site. In general, the completion zones for the identified water wells are typically deeper than the limit of the affected groundwater associated with the proposed MSD area.

White Oak Bayou is located approximately 680-feet downgradient of the proposed MSD boundary. Numerous soil and groundwater samples have been collected between the downgradient edge of the area of affected groundwater and White Oak Bayou to confirm that surface water at the bayou is not threatened by affected groundwater (**Figure B4**).