

**COMBINED SEWER OVERFLOW
OPERATION AND MAINTENANCE PLAN
SEPTEMBER 2017**



**CITY OF JOLIET
NPDES PERMIT # IL0022519**

CSO O&M PLAN OBJECTIVES

This plan was developed in compliance with the requirements of the City's National Pollutant Discharge Elimination System (NPDES) Permit No. IL0022519. The primary objective of this plan is to provide a program for effectively improving the City's combined sewer overflow management. More specifically, the plan has been developed to comply with the following eight requirements of the NPDES permit:

1. Collection system inspection on a regular basis
2. Sewer, catch basin, and regulator cleaning and maintenance on a regular basis
3. Inspections are to be made and preventive maintenance is to be performed on all pump/lift stations
4. Collection system replacement, where necessary
5. Detection and elimination of illegal connections
6. Detection, prevention, and elimination of dry weather overflows
7. The collection system is to be operated to maximize storage capacity and delay storm entry into the system
8. The treatment and collection systems are to be operated to maximize treatment

GENERAL INFORMATION

The City of Joliet has three wastewater treatment facilities and associated collection and transmission systems. The Eastside Wastewater Treatment Plant (WWTP) is located on the east side of the Des Plaines River just upstream of the Brandon Lock and Dan at river mile 286. The Westside WWTP is located southeast of the intersection of Interstate 55 and Highway 6. The Aux Sable Creek WWTP is located west of the city near the corner of Ridge Road and Black Road. Figure 1 shows the locations of these WWTPs on a map of the city. The figure also shows the Eastside WWTP's 14-square-mile service area.

The East Side WWTP has a design average flow (DAF) of 18.2 MGD and a design maximum flow (DMF) of 45.5 MGD. The wastewater collection system tributary to the East Side WWTP in some of the areas is designed to convey both sanitary wastewater flow and runoff waters collected by curb inlets, roof and area drains, foundation drains and sump pumps, and other similar sources. In those areas, the sewer system is classified as a Combined Sewer System (CSS). In many areas of the city, stormwater and sanitary wastewater sewer systems have been separated, creating a separate Sanitary Sewer System (SSS). However, the combined and sanitary systems are joined at the major system interceptors, and much of the wastewater flow during wet weather is stormwater from the combined system.

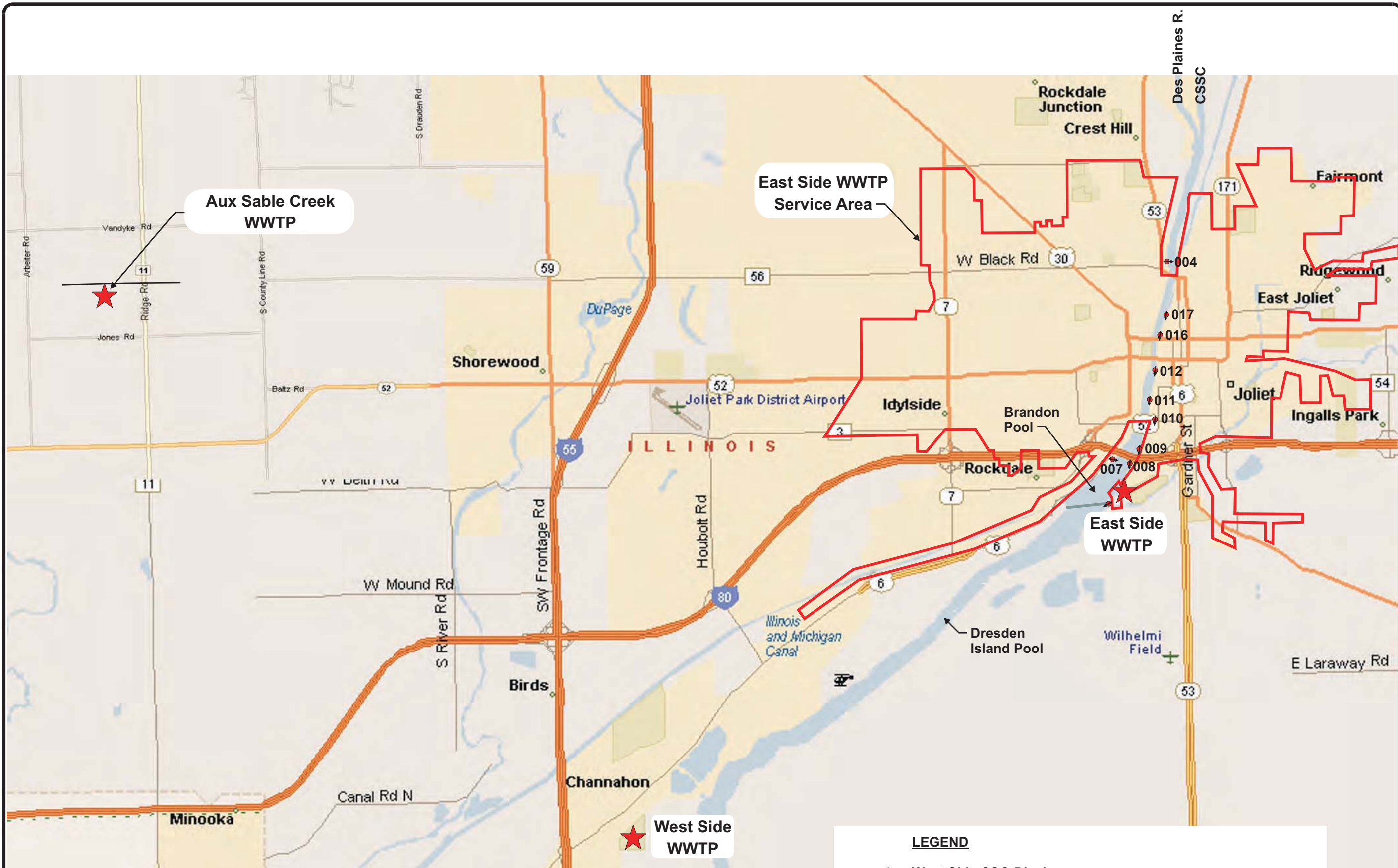
SEWER SYSTEM DESCRIPTION

Figure 2 shows Joliet's East Side sewer system in detail. The exact age of the sewer system is unknown but the original East Side WWTP was constructed between the 1955 and 1957. The material components of the sewer system primarily consist of brick and block manholes, pre-cast concrete manholes, reinforced concrete, clay and PVC pipes. The system consists of four major sewer basin areas, each consisting of several subbasins, as listed in Table 1 below. Basin and subbasin boundaries are shown in red. In general, flows from the major basins along the river (West Wall Basin and East Wall Basin) flow into interceptors in or near the river walls. Major basins on the far east and west sides of the service area flow into large intercepting sewers that generally flow south and toward the river. The areas outlined on the drawing contribute flow to the East Side WWTP.

Table 1 lists the sewer system type and acreages for each of the subbasins. For this plan, the sewer subbasin boundaries and types (separated versus combined) were evaluated from the available base sewer mapping rather than relying on information from previous studies. Therefore, basin areas and types determined for each of the subbasins may differ from those used by the City in previous studies.

A. West Side Basins

There are two major basins on the west side of the Des Plaines River. On the west bank of the river, the West Wall Basin covers approximately 1,700 acres. The west boundary of this area is Theodore Street in the north, William Street in the center, and Raynor Avenue in the south. The West Wall Basin comprises several subbasins shown on the figure and table. These subbasins include Ingalls Street, Granite Street, Ruby Street, Stone Street, Spring Street, Western







Aux Sable Creek
WWTP

East Side WWTP
Service Area

East Side
WWTP

West Side
WWTP

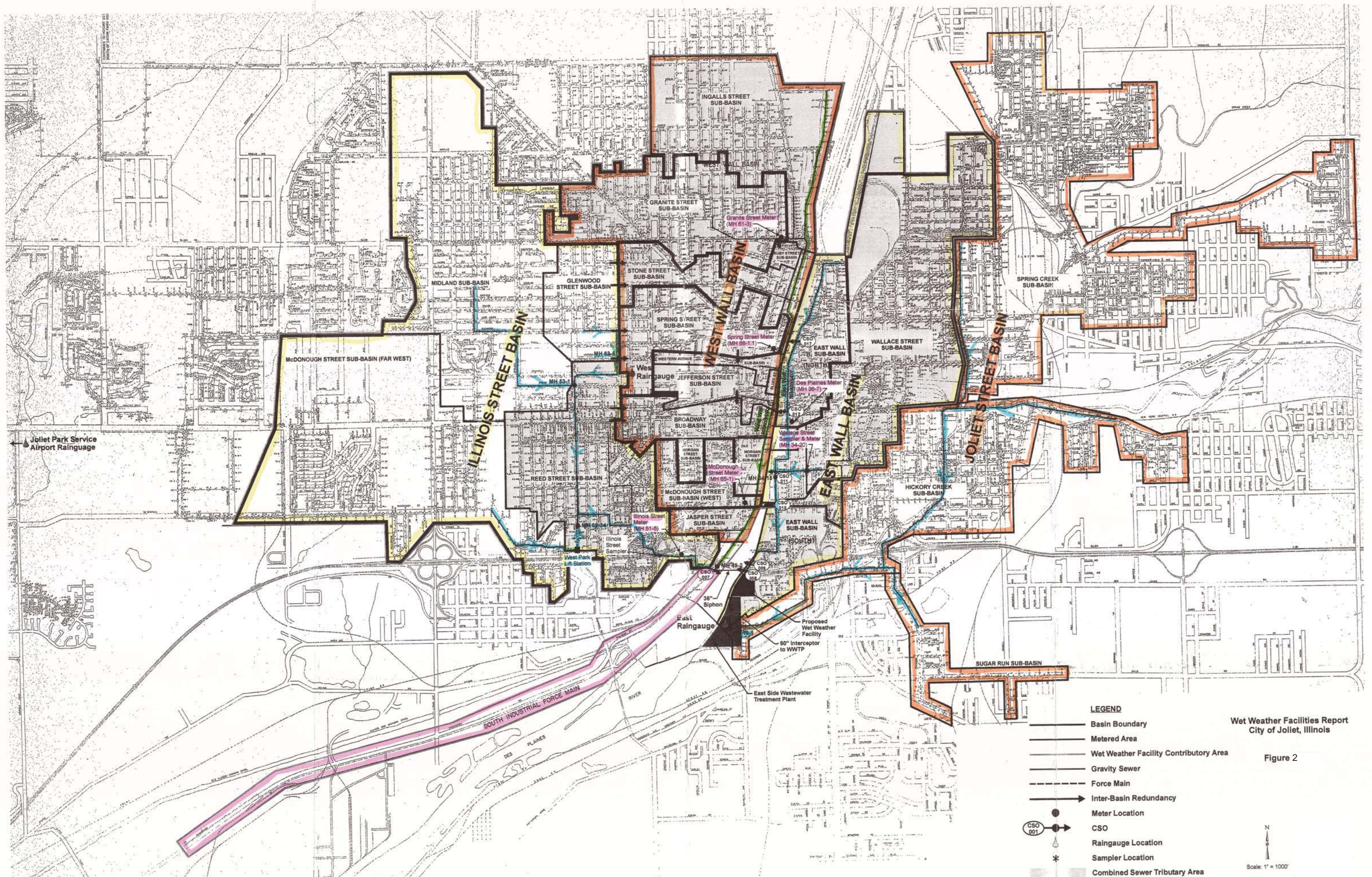
LEGEND

-  West Side CSO Discharge
-  East Side CSO Regulator Discharges to East Wall Storm Sewer
-  East Wall Storm Sewer Outfall
-  East Side WWTP Service Area



**WWTP LOCATIONS AND EAST SIDE WWTP SERVICE AREA
 LONG TERM CONTROL PLAN
 CITY OF JOLIET, ILLINOIS**

FIGURE 1
1-255-006



**Wet Weather Facilities Report
City of Joliet, Illinois**

Figure 2

- LEGEND**
- Basin Boundary
 - Metered Area
 - Wet Weather Facility Contributory Area
 - Gravity Sewer
 - Force Main
 - Inter-Basin Redundancy
 - Meter Location
 - CSO
 - Raingauge Location
 - Sampler Location
 - Combined Sewer Tributary Area

Scale: 1" = 1000'

Avenue, Bluff Street, Jefferson Street, Broadway, Morgan Street, McDonough Street (West), and Jasper Street. The West Wall Interceptor (size 30 inches to 66 inches), which closely parallels the river, serves this basin. The West Wall subbasins have portions of their sewers that are combined and are therefore designated as combined.

TABLE 1 JOLIET EAST SIDE SEWER SERVICE AREA BASIN SUMMARY

Location	Major Basin	Subbasin	Type	Size (Acres)	
West Side	West Wall	Ingalls Street	Combined	430	
		Granite Street	Combined	443	
		Ruby Street	Combined	15	
		Stone Street	Combined	137	
		Spring Street	Combined	226	
		Western Avenue	Combined	36	
		Bluff Street	Combined	8	
		Jefferson Street	Combined	89	
		Broadway Avenue	Combined	123	
		Morgan Street	Combined	71	
		McDonough Street	Combined	99	
		Jasper Street	Combined	52	
			Total		1,729
		Illinois Street	Glenwood Street	Separate	188
			Midland Street	Separate	921
			McDonough Street (Far West)	Separate	950
			Reed Street	Combined	531
			Total		2,590
	West Side Total				4,319
East Side	East Wall	East Wall (North)	Combined	258	
		Wallace Street	Combined	783	
		East Wall (South)	Combined	220	
				1,261	
		Joliet Street	Spring Creek	Separate	1,444
			Hickory Creek	Separate	718
			Sugar Run	Separate	166
		Total		2,328	
East Side Total				3,589	
East Side WWTP Sewer System Area Total				7,908	

On the far west side are the Illinois Street Basin, a 2,600-acre area comprising the Midland Street, Glenwood Street, McDonough Street (Far West), and Reed Street subbasins. The McDonough Street Subbasin (Far West) flows to the West Park Lift Station at the extreme southeast corner of the basin, which discharges into the Reed Street Interceptor (MH 69-34). The Midland Subbasin flows into the Reed Street Subbasin at the corner of Oneida and Reed Streets (MH 53-1). The Glenwood Street Subbasin flows into the Reed Street Basin at the corner of Western Avenue and William Street (MH 63-5). The Reed Street interceptor joins the West Wall interceptor at the Duncan Street West Overflow Chamber (MH49-2). Here it enters a 36-inch siphon under the Des Plaines River discharging to the main 60-inch interceptor to the East Side WWTP. Of the Illinois Street Subbasins, only Reed Street is combined.

The Duncan Street West Chamber (CSO 007) and Granite Street Chamber (CSO 004) are the only two permitted overflow on the west side of the Des Plaines River.

Also note that there are several locations in the system where there are interbasin redundancies; that is, flow from a particular area could flow in one of two directions, and the smaller diameter sewer crosses a basin boundary. In particular, there are several points in the Illinois Street Basin along William Street that could flow into the West Wall Basin.

B. East Side Basins

There are two major basins on the east side of the Des Plaines River. The East Wall Basin (1,300 acres) is served by the East Wall Interceptor, which closely parallels the river and flows directly to the East Side WWTP from the north. (Note: Unlike the West Wall Interceptor, the East Wall Interceptor is a separate pipe and is not contained within the river wall itself.) Within the East Wall Basin are the East Wall (North) Subbasin, Wallace Street Subbasin, and the East Wall (South) Subbasin. All three subbasins have portions that are combined. Of these, only the Wallace Street Subbasin enters the East Wall Interceptor at a single point (MH 34-15). The East Wall North and South Subbasins connect to the East Wall Interceptor at several points.

The Joliet Street Basin (2,300 acres) covers the easternmost portions of the service area. These include Spring Creek Basin, Hickory Creek Basin, and Sugar Run Basin. The Spring Creek Basin flows enter the Hickory Creek Basin, which then flows to the South Wall Basin. These basins flow directly to the East Side WWTP at MH 19-1.

There are six permitted CSOs on the east side of the Des Plaines River, all of which discharge to the large storm sewer contained within the river wall. Starting in the upstream reach, the Benton Street Chamber Outfall (CSO 017) near Manhole 36-16 at the corner of Benton and Joliet Streets serves a 34-acre basin that previously included significantly more combined sewers. The City of Joliet has worked to remove the large majority of stormwater catch basins, and it is the city's intent to eliminate this CSO through separation, based on previous engineering reports.

The Washington Street Overflow (CSO 012) is located at the corner of Des Plaines and Washington Streets near Manhole 36-8.3. CSO 012 serves a 22-acre area, including 17 stormwater catch basins identified by the City. This area has not yet been separated, although the intent of previous engineering work is to eliminate this CSO through separation.

Several blocks south is the Wallace Street Chamber Outfall (CSO 011), located at the corner of Wallace and Water Streets, near Manhole 34-16. This CSO serves 793 acres, one of the larger combined sewer areas in the city. Wallace Street appears to have a higher density of combined sewers than the East Wall Basin, particularly in the area bordered by Cass Street to the north, Collins Street to the east, Washington Street to the south, and Scott Street to the west.

One long block farther south is the McDonough Street Chamber Outfall (CSO 010), which serves a 29-acre combined sewer area. The City has identified ten storm catch basins within this area that could be connected to storm sewer lines to separate the system. The intent of previous engineering studies has been to eliminate this CSO through separation.

The Duncan Street Chamber East Outfall (CSO 009) is located on the corner of River Street and East Duncan Street along the East Wall Interceptor at Manhole 19-7. This serves a 190-acre area within the East Wall Basin. Although mostly separated, there are still some remaining combined sewer segments, and this basin is therefore considered combined.

Finally, the River Crossing Overflow (CSO 008), located under the I-80 bridge, provides a relief point for flow discharging from the siphon that exceeds the capacity of the East Wall Interceptor.

DESCRIPTION OF CSO SYSTEMS

The City of Joliet currently has eight permitted Combined Sewer Overflow (CSO) locations as listed in the table below.

Discharge Number	Name	Location	Receiving Waterbody
004	Granite Street Outfall	West Side, on North Bluff Street Granite Street and Ruby Street	Des Plaines River
007	Duncan Street West Outfall	West Side near I-80 crossing of Des Plaines River	Des Plaines River
008	River Crossing Outfall	East Side near I-80 crossing of Des Plaines River	Des Plaines River
009	Duncan Street East Outfall	East Side near I-80 crossing of Des Plaines River	Des Plaines River
010	McDonough Street Outfall	East Side near McDonough Street Bridge	Des Plaines River
011	Wallace Street Outfall	East Side at Wallace Street near Water Street	Des Plaines River
012	Washington Street Outfall	East Side, on South Des Plaines Street between Jefferson and Washington	Des Plaines River
017	Benton Street Outfall	East Side at Benton Street near Joliet Street	Des Plaines River

A. Outfall No. 004 – Granite Street Outfall

Outfall No. 004 is located on North Bluff Street between Granite Street and Ruby Street on the west side of the Des Plaines River. Drawings for the CSO structures are included in Exhibit A. The 10 feet by 8 feet 6 inch concrete diversion structure is located in front of 767 North Bluff Street just south of Granite Street. A 24” sewer pipe enters the structure on the north side of the diversion structure and exit on the south end. In a large wet weather event the incoming flow rises and crests the weir in the diversion structure and flows to the Des Plaines River via the 24 inch by 38 inch elliptical pipe, overflow structure, 30 inch pipe, valve vault, 24 inch by 38 inch elliptical pipe and 3 feet by 3 feet box culvert.

B. Outfall No. 007 - Duncan Street West Outfall

Outfall No. 007 is located south of Interstate 80 Bridge on the West Wall of the Des Plaines River. The diversion structure is located in a large concrete structure. The wet weather overflow consists of a 12-foot wide by 14-inch high concrete ledge located approximately 14-feet above the invert to the 60-inch incoming combined sewer. The ledge narrows to an 8-foot with by 24-inch high opening at the Des Plaines River. The outfall opening is covered with an iron plate that is attached to the top of the wall. An overflow occurs during a high intensity rain event when the incoming flow rises and crests the ledge to the river.

C. Outfall No. 008 - River Crossing Outfall

Outfall No. 008 is located under the Interstate 80 Bridge just west of River Street on the east side of the Des Plaines River. The intercepting chamber is a six sided concrete box rising about four feet above grade. The chamber is covered by a 24-inch manhole and a 10-foot by 5-foot concrete top slab. A 30-inch pipe enters the chamber carrying wastewater from the inverted siphon under the Des Plaines River; the flow enters a 16-inch and an 18-inch throttle pipe which exit the chamber to the south, carrying the flow to the 60-inch East Wall Interceptor. The overflow is a 36-inch pipe with flap gate located 4.5-feet above the invert of the throttle pipes. This 36-inch pipe discharges into the East Wall Storm Sewer.

D. Outfall No. 009 - Duncan Street East Outfall

Outfall No. 009 is located west of River Street on line with East Duncan Street extended in a wooded area. The structure is a 48-inch diameter manhole and a square 6-foot by 3-foot overflow diversion box. The intercepting chamber consists of a 36-inch sewer entering from Duncan Street with dry weather flow being diverted into a 6-inch throttle pipe. The 150-foot long by 6-inch throttle pipe discharges into the East Wall Interceptor. The wet weather overflow discharges through a 30-inch flap gate into a 30-inch sewer which discharges into the East Wall Storm Sewer.

E. Outfall No. 010 - McDonough Street Outfall

Outfall No. 010 is located in the corner of McDonough Street and Water Street. The manholes for the chamber are located in the sidewalk on the southwest corner of the intersection. An 18-inch combined sewer enters the chamber from the northeast. Dry weather flow is directed by a diversion dam to a 8-inch throttle pipe. The 175-foot long by 8-inch throttle pipe discharges south to a manhole on the East Wall Interceptor. The wet weather overflow discharges through an 18-inch flap gate into a diversion box. The 18-inch outfall from the diversion box discharges into the East Wall Storm Sewer.

F. Outfall No. 011 - Wallace Street Outfall

Outfall No. 011 is located in the middle of the intersection of Wallace and Water Streets. A 72-inch combined sewer discharges into a 12-foot by 21-foot structure from the east. Dry weather flow is directed into an 18-inch throttle pipe and a 14-inch throttle pipe. The throttle pipes discharge into the East Wall Interceptor at an outlet chamber located in Water Street approximately 200-feet south of the intercepting chamber. The wet weather overflow discharges through two 54-inch by 36-inch rectangular backwater gates into a diversion box. The 72-inch storm sewer from the diversion box flows into the East Wall Storm Sewer.

G. Outfall No. 012 - Washington Street Outfall

Outfall No. 012 is located near the corner of Washington Street and South Des Plaines Street. The intercepting chamber is located in the parking lot west of the City Building on South Des Plaines Street. A 48-inch combined sewer enters the chamber from the east. Dry weather flow is directed by a diversion dam into an 8-inch throttle pipe which discharges into the East Wall Interceptor. Wet weather flow discharges over the diversion dam into a 27-inch outfall sewer which discharges into the East Wall Storm Sewer.

H. Outfall No. 017 - Benton Street Outfall

Outfall No. 017 is located in a parking area west of the intersection of Joliet and Denton Streets. A 36-inch combined sewer enters the chamber from the east. Dry weather flow is directed by a diversion dam into an 8-inch throttle pipe. The throttle pipe discharges south into the East Wall Interceptor. Wet weather flow discharges over the diversion dam into a 36-inch outfall sewer which discharges into the East Wall Storm Sewer.

COMBINED SEWER OPERATION AND MAINTENANCE

The following maintenance performed by the City is aimed at ensuring the CSS and CSO's are operating at their maximum capacity and are in good repair. The intent of the maintenance is to prevent dry weather overflows, basement sewer backups and adverse surcharging of the manholes, reduce excessive inflow/infiltration in the system, and to minimize the amount of solids and contaminants entering the system.

A. CSS Inspections and Maintenance

The City performs inspections and as much routine maintenance as crews are available for the infrastructure of the combined sewer system (CSS) that impacts the combined sewer overflows (CSOs). All of the City's CSOs are within the Eastside WWTP service area. System mapping of the sewer system infrastructure and components are kept on file at City Hall and sewer daily logs are kept on file at the City's Washington Street Public Works Facility. The City is currently compiling and updating the mapping data of the infrastructure in GIS.

The City inspects the CSS catch basins, inlets, sanitary and storm sewers to verify they have the ability to operate at their maximum efficiency. The majority of the time, the City responds to citizen complaints of sewer backups or other identified problems. The City has one jetter truck, one vactor truck and one camera van. If a problem with a sewer line occurs, a sewer crew is assigned with the task of correcting the problem. The City televises the line and/or structure to verify the issue, then utilizes the jetter truck to clean the obstruction and then utilizes the vactor truck to remove the obstruction from a manhole. Upon completion of this process, the City will re-televises the line to verify the obstruction is removed and the line/structure is capable of operating at their maximum efficiency. The sewer crew may obtain the assistance of other sewer crews and additional equipment based on the status of the issue at hand. Records of the procedures are kept via a paper hard copy at the sewer foreman's office.

The City intends to implement and improve opportunities for inspection and maintenance of CSS infrastructure. The City has implemented a program to clean, televise and inspect 40 to 50 miles of sewer main annually. This will help reduce solids deposition in the combined sewer system. Catch basin cleaning is another area the City intends to improve.

Sewer daily log and maintenance sheets for manhole inspections, catch basin cleaning and sewer line flushing and televising are included in Exhibit B.

B. CSO Inspections and Maintenance

The City assigns a sewer crew to perform visual inspections of the eight CSOs once a week. The inspection includes observing the diversion structure is operating properly, verification of any noticeable damage to the components of the structure (throttle pipes, diversion dams) and verify if debris is in the structure. If debris is present, they utilize a jetter truck and a vactor truck to wash down the structure and remove the debris. Records of the CSO inspections are kept via a paper hard copy at the sewer foreman's office. Standard operating procedure and inspection forms for CSO structures are included in Exhibit C.

The City has installed flow meters at each CSO and developed a real-time monitoring program utilizing Emnet technology that provides email notifications to City staff when a combined sewer overflow event occurs. This program allows for the duration of the event and the volume of combined sewer discharge to be identified.

C. Lift Station Inspections and Maintenance

The sanitary sewer lift station crew is responsible for the operation and maintenance of 38 lift stations and 3 storm water lift stations within the wastewater collection system. A list of the lift stations and locations is exhibited in the table below. The sanitary sewer lift station crew visits and inspects each lift station three times per week to assure the station is operating properly and that the maximum flow is being transported to the wastewater treatment plant. Pump run time readings are taken during each visit and the general operation of the station is verified. The pump run time readings are reviewed monthly by the Plant Operations Superintendent to determine if anything unusual is occurring at the lift station that was not noticed by the lift station crew such as a pump not operating or excessive pumping by one of the pumps in the station.

Any problems noted during the station inspection are resolved by the crew if possible. If extensive work is required on the station, one of the Wastewater Plant Staff is contacted to assist. Repairing issues at a lift station has priority for the maintenance crews in order to maximize flows into the sewer system. The lift station crew is required to be available or have a back up crew available twenty-four hours a day. The lift station crew is contacted during any pump shut down at the lift station and any emergencies.

The Lift Stations are monitored by a SCADA system via cellular modem. All pump runtimes, flows, starts, stops, wetwell levels, and pressure where applicable are stored in a server allowing trends to be created for trouble shooting purposes. The Lift Station Mechanics review the trends on a weekly basis.

No.	Name of Lift Station	Address
1	Arbeiter Road	Arbeiter Road
2	Benton and Maple	Benton and Maple Road
3	Black Road	Black Road
4	Caton Crossing	Sergeant Lane
5	Cherry Hill Road	Cherry Hill Road
6	City's Edge	Channahon Road (Route 6)
7	College Park	Longford Drive
9	Eco Lab	Channahon Road (Route 6)
10	Empress Casino	Empress Casino
11	Empress Hotel	Empress Casino
12	Essington Road	Essington Road
13	Fiday Road*	Fiday Road
14	Gougar Road	Edgecreek Drive
15	Henderson Avenue*	Henderson Avenue
16	Lakewood Falls Village	Old Renwick Road
17	Lakewood On Caton	Stoneybrook Drive
18	Larkin's Point	Mappold Way
19	Lois Place	Lois Place
20	Millsdale Road	West Millsdale Road
21	Mound Road	Empress Drive

22	Neufairfield	Maple Road (Route 6)
23	Knowlton Avenue*	Parks
24	Old Oak	Oak Tree
25	Patterson Road	Patterson Road
26	Richards Street	Manhattan Road
27	Riverside	Bronk Road
28	Riverside Townes	Rivertowne Road
29	Route 66	Laraway Road
30	Saint Judes	McDonough Street
31	Spencer Road	Spencer Road
32	Springview	Maple Road
33	Springwood South	Mission Boulevard
34	Squires Mill	Fiday Road
35	Sunset Ridge	Sunset Ridge
36	Thunder Ridge	Lightening Way
37	US Route 6	Channahon Road (Route 6)
38	US Route 52	Manhattan Road (Route 52)
39	Vetter Road	Vetter Road
40	West Park	West Park Front
41	Wexford West	Graystone Drive

*Storm water lift stations that discharge storm water to the creek.

D. TREATMENT PLANT OPERATIONS

The City treats as much flow as possible through the Eastside WWTP during a wet weather event. The maximum pumping capacity of the influent pumps at the Eastside WWTP is approximately 75 MGD. If the weather forecast predicts a wet weather event, the City operators utilize as many influent pumps as possible resulting in an increased volume in capacity of the upstream sewer and influent wet well. During the increased flow through the treatment plant the operators monitor the plant to prevent solids washout.

Stormwater runoff and Des Plaines River intrusion from submerged outfalls contribute to operational difficulties and result in the need to limit the flow through the Eastside Plant to prevent washout. The Plant SCADA system is pre-set to limit the pump to a combined max flow of 50 MGD.

E. DETECTION AND ELIMINATION OF ILLEGAL CONNECTIONS

The City has a policy to remove any illegal connection upon detection. The City has implemented a program to inspect a minimum of 25% of the City's stormwater outfalls annually for illicit discharges. If Illegal connections are found during normal stormwater outfall inspections or in response to a complaint or discovered by the sewer crews during their normal activities, the connections are reported to the Utilities Operations Superintendent, who arranges for the immediate removal of the connection.

F. NON-RESIDENTIAL SEWER USERS

The City has been administering an Industrial Pretreatment Program since 1987. The Plant Operations Superintendent is the Pretreatment Program Coordinator on a daily basis. The City currently has 17 permitted Industrial Users (IU). A list of the IU is exhibited in the table below. Of the 17 permitted IU, 11 discharge wastewater to the municipal sewer system that is treated at the Eastside Waste Water Treatment Plant.

The City requires the IU to perform weekly and/or monthly sampling and testing of their wastewater. The IU is required to submit an Industrial Wastewater Discharge Monitoring Report form to the City on the 20th of January, April, July and October of each year, and a Semi-Annual Report form in April and January. The City monitors the permitted IU twice a year and once a year a complete inspection of the IU facility is performed. The City utilizes an Industrial User Inspection (IU) Checklist during the yearly inspection. The City's Industrial Pretreatment Program is monitored by the IEPA every 2-3 years and twice a year by the USEPA. Since May of 1995, the City has been utilizing an Industrial Pretreatment Program Enforcement Response Plan. The plan is on file and can be viewed at the City's Eastside Waste Water Treatment Plant. The plan outlines the City staff that is utilized to administer the program, the IU compliance monitoring the City performs, and the enforcement procedures the City could utilize for IU discharge violations. In addition, if a new IU is proposed to be connected to the City's sewer collection system, the IU needs to provide the City with an Application for Industrial Sewer Connection in accordance with the City of Joliet ordinance No. 16684.

City of Joliet Industrial Pretreatment List 06-17

No.	Company Name	Permit No.	Discharge Treatment Location	Type of Industrial User
1	Apex	J1610	Eastside WWTP	Inorganic chemical manufacturing point source
2	Apollo Colors	J2500	Eastside WWTP	Pigments
3	Ameriplate, Inc.	J3700	Eastside WWTP	Metal finishing
4	BP Amoco-Joliet	J3800	Westside WWTP	Landfill
5	Ecolab	J2700	Westside WWTP	Cleaning products manufacturer
6	Heniff	J2040	Westside WWTP	Transportation equipment cleaning
7	Kaluzny Brothers	J2900	Eastside WWTP	Grease rendering
8	MacRak	J4000	Eastside WWTP	Metal finishing
9	P Q Corporation	J1420	Eastside WWTP	Industrial inorganic chemicals
10	Panglo	J3200	Eastside WWTP	Cleaning and coating of commercial baking products
11	Presence St Joe's Medical Center	J700	Eastside WWTP	Hospital
12	Qualawash	J3420	Westside WWTP	Transportation equipment cleaning

13	RHO Chemical	J2800	Eastside WWTP	Industrial chemicals
14	T A C	J3600	Westside WWTP	Transportation equipment cleaning
15	Tote Detailing Specialist, Inc.	J3300	Eastside WWTP	Cleaning of chemical bins/totes/containers
16	Toyol America, Inc.	J2400	Eastside WWTP	Aluminum pigments/powders
17	Transport Services	J3100	Westside WWTP	Transportation equipment cleaning

The overall percentage of flow from IU is less than five percent of the total flow treated at the Eastside WWTP. The largest discharger into the municipal sewer system is Ecolab.

COMBINED SEWER IMPROVEMENTS

The City has an IEPA approved Long Term Control Plan to reduce CSO events. Proposed improvements to the combined sewer system are presented in the Long Term Control Plan on file at the Department of Public Utilities, 150 West Jefferson Street.

Discharge Monitoring

The City of Joliet (City) performs inspections of the infrastructure for the combined sewer system (CSS) that impacts the combined sewer overflows (CSOs). The sewer cleaning, prompt response to backups and regular pump station maintenance has been successful in minimizing dry weather overflows. The City has not experienced dry weather overflows due to power outages, mechanical failures, or a lack of capacity during dry weather. The conveyance system is monitored through direct observation and corrective action is taken in a prompt manner if a problem occurs. Equipment problems are immediately reviewed and repair or replacement activity is undertaken in a timely manner.

The City has not experienced dry weather overflow events but has experienced overflows during wet weather. In either case, should an overflow occur the City contacts the IEPA Regional Office in DesPlaines, Illinois via a phone call and provides a written correspondence to the Regional Office. In addition, the City provides the IEPA with their CSO Discharge Monitoring Report (DMR) on a monthly basis.

Limited sampling and water quality analysis may also be performed to improve knowledge concerning CSO characteristics and potential water quality impacts. The CSO outfalls are monitored and cleaned as necessary through the visual inspection program performed by the sewer crew personnel.

Public Notification Program

In developing the Long Term Control Plan (LTCP), the City has improved opportunities for the public to learn about the CSS, CSOs, LTCP and CSO control program.

Pollution Prevention Plan

Pollution prevention programs help to reduce the amount of contaminants and floatables that enter the combined sewer system and the receiving waters via CSOs. The City has implemented a number of pollution prevention programs that address these concerns. The following pollution prevention programs are maintained by the City:

- Street Cleaning
- Public Education
- Solid Waste Collection and Recycling
- Control of Product Use
- Illegal Dumping
- Bulk Refuse Disposal
- Hazardous Waste Collection
- Water Conservation Program
- Commercial/Industrial Pollution Prevention

The Pollution Prevention Plan is on file at the Department of Public Utilities, 150 West Jefferson Street.

EXHIBIT A

STRUCTURE SCHEDULE

- ① DIVERSION CHAMBER (SEE DETAILS PAGE 6) (19824)
RIM=543.71
N,S INV.=MATCH EXISTING
E. INV.=539.9
WEIR EL.=541.5
- ② OVERFLOW CHAMBER (SEE DETAIL PAGE 7) (19823)
RIM=543.75
W. INV.=539.6
SW. INV.=539.6
S.E. INV.=539.75
N. INV.=539.6
WEIR EL.=541.00
- ③ MH, TYA 5' DIAM.T-1 FRAME, CL
(W/ 1.5' SUMP & TF-2 TIDE FLEX CHECK VALVE) (19709)
RIM=544.5
N. INV.=539.5
S. INV.=539.5
W. INV.=541.92
- ④ CB, TYC, TY-11 FRAME AND GRATE
T/C=544.40
E. INV.=542.00
- ⑤ CB, TY A, T-1, FRAME, OL
T/C=542.50
INV.=540.25
- ⑥ BOX CULVERT & HEADWALL REPAIRS (SEE DETAILS PAGE 5)
- ⑦ CB, TYC T-11 FRAME AND GRATE
T/C=545.34
S. INV.=539.5
- ⑧ CB, TYC, T-1 FRAME, OL
RIM=552.00
N. INV.=549.5

DISCHARGE 004
GRANITE STREET
FIGURE 004-1

PIPE SCHEDULE

FROM	TO	MATERIAL	LENGTH	SLOPE
1	2	24"X38" HERCP	30'	1%
2	3	30" DIP	8'	1%
3	BOX CULVERT	24"X38" HERCP	20'	1%
4	3	12" RCP	8'	1%
5	2	12" RCP	72'	1%
2	SANITARY MANHOLE	12" DIP	52'	3%
7	BOX CULVERT	12" RCP	5'	1%
8	STORM MANHOLE	12" RCP	12'	1%



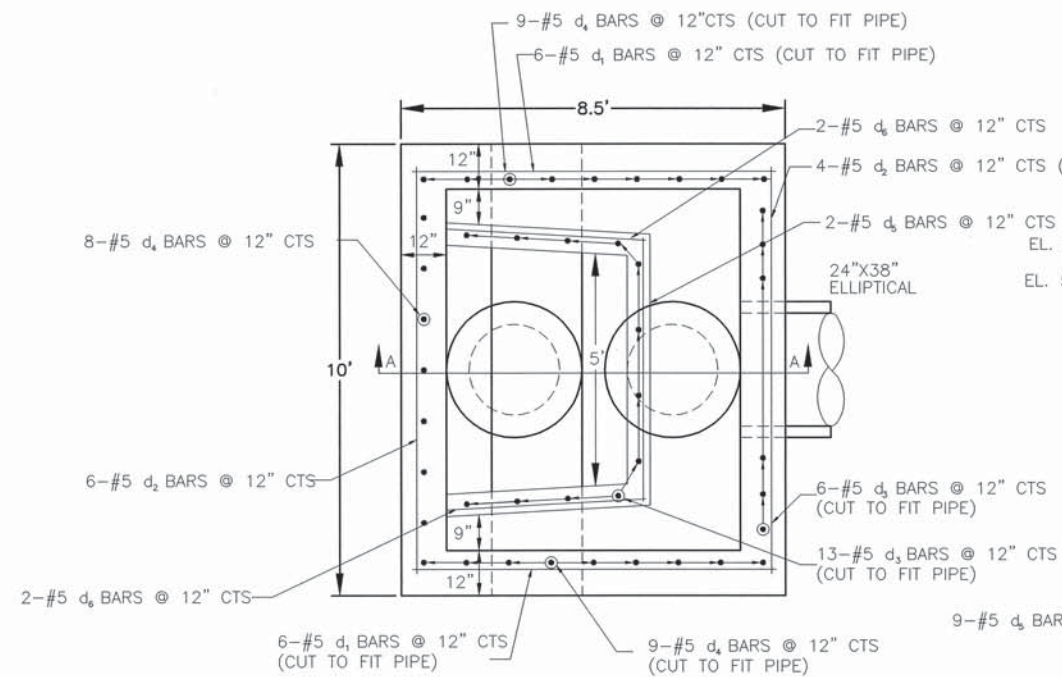
LEGEND

- T/F TOP OF FOUNDATION
- T/W TOP OF WALK
- T/C TOP OF CURB
- (XXX.X) PROPOSED ELEVATION PER FINAL GRADING PLAN
- XXX.X EXISTING ELEVATION
- XXX--- EXISTING CONTOUR
- UTILITY POLE

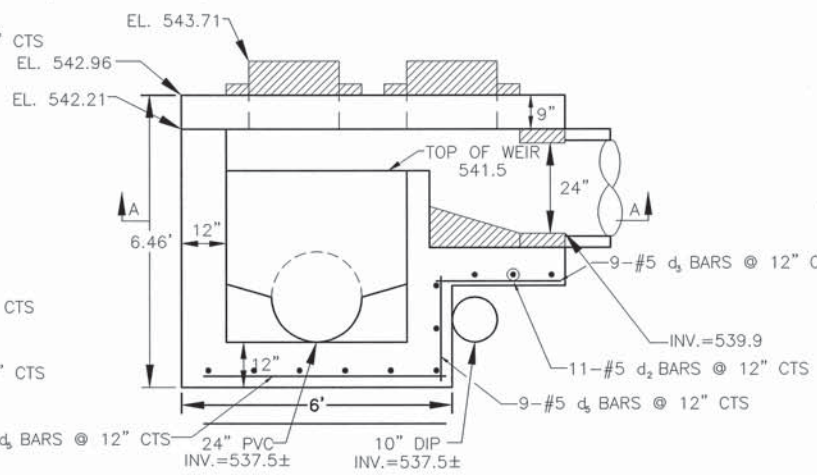
CHECKED BY: JEE
DESIGNED BY: DAW
DRAWN BY: CMC

SCALE: 1" = 2'
DATE: SEPTEMBER 2008
SHEET 6 OF 7

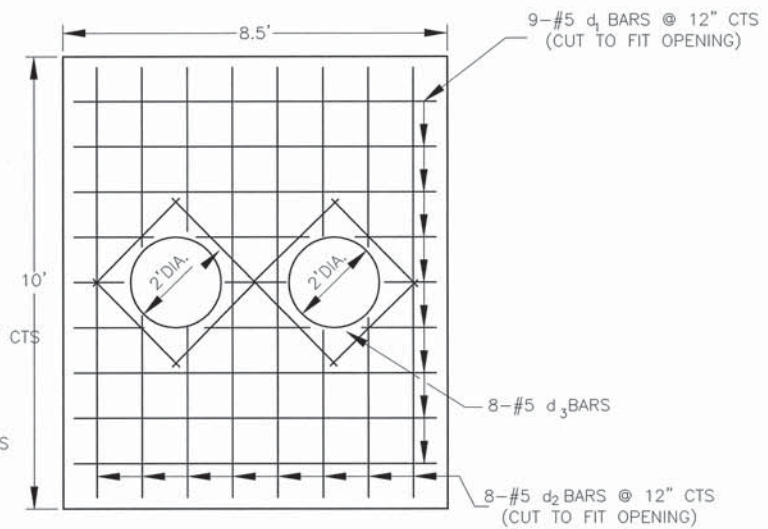
CITY OF JOLIET
DEPARTMENT OF PUBLIC UTILITIES
150 W. JEFFERSON STREET, JOLIET, ILLINOIS 60431
(815)-724-4200



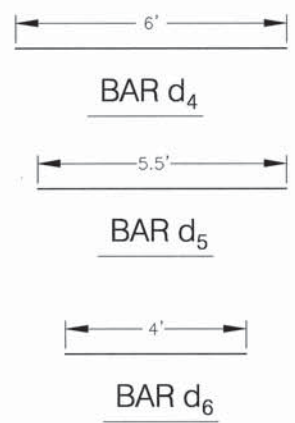
DIVERSION CHAMBER



DIVERSION CHAMBER - SECTION A-A

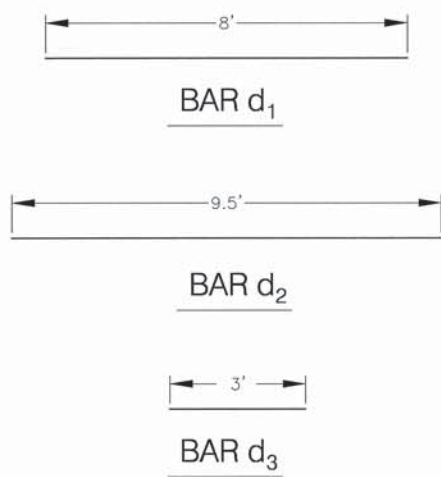


PLAN OF TOP SLAB



BAR	NO.	SIZE	LENGTH
d ₁	21	#5	8'
d ₂	29	#5	9.5
d ₃	36	#5	3
d ₄	25	#5	6'
d ₅	11	#5	5.5
d ₆	4	#5	4'
REINFORCE BARS		LBS.	812
CLASS SI		CU. YD.	12

BILL OF MATERIAL

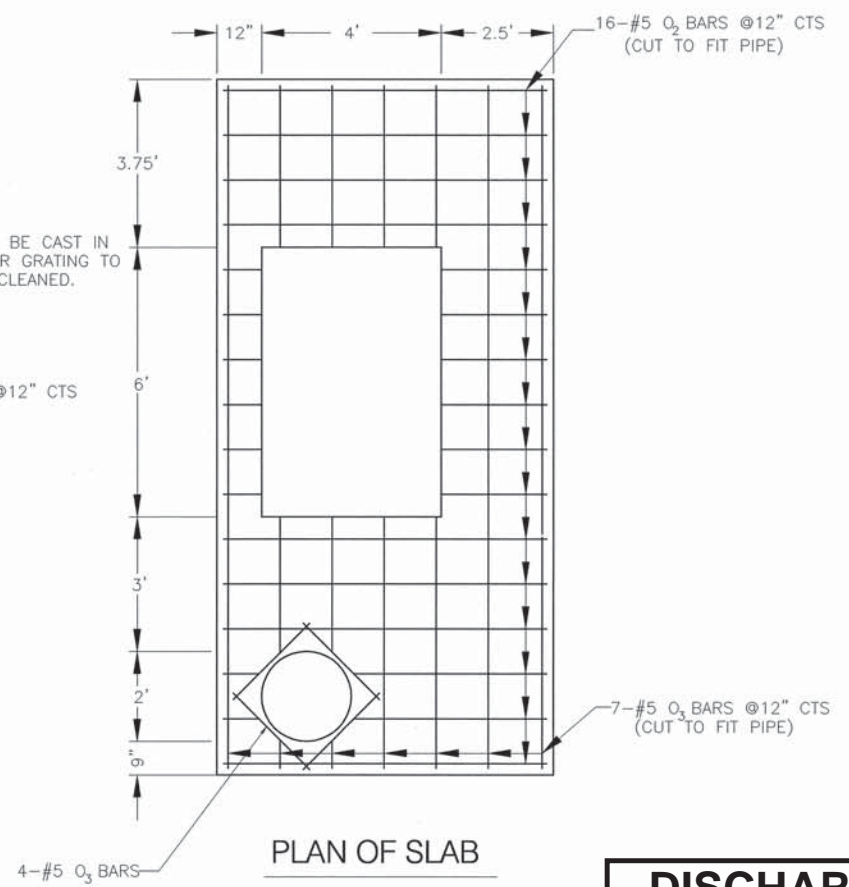
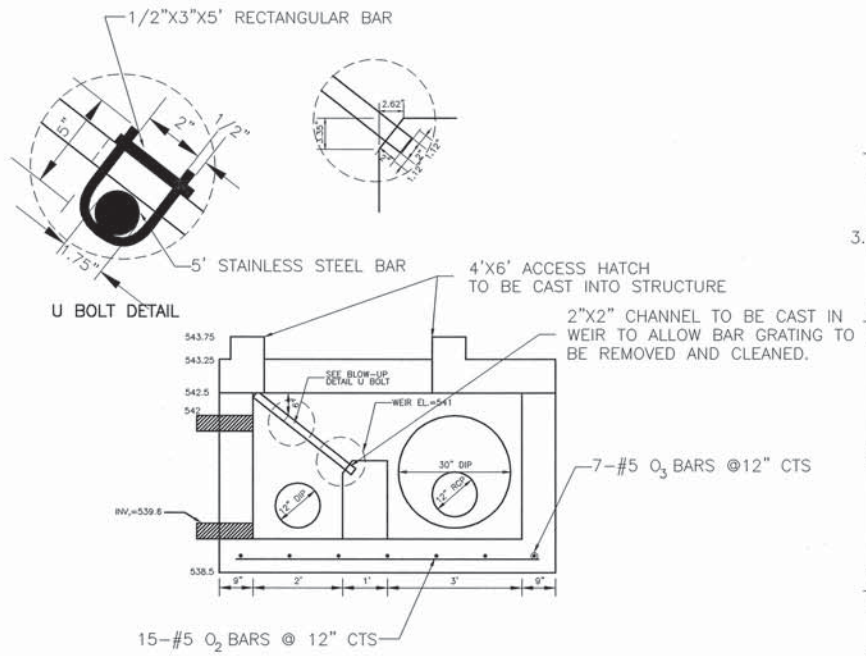
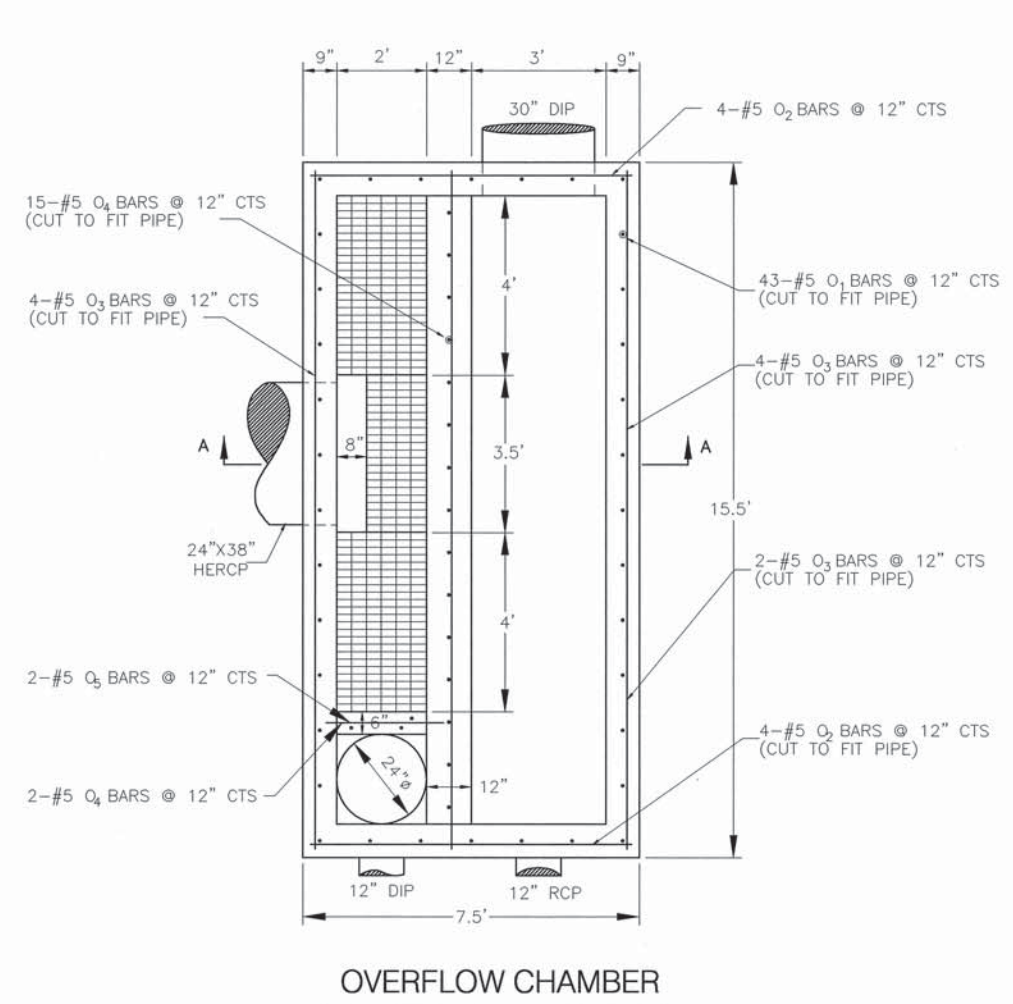


**DISCHARGE 004
GRANITE STREET**

FIGURE 004-2



NOTE: MIDDLE GRATE TO BE MOUNTED TO OUTSIDE GRATES USING 4 U BOLTS, CROSSBAR AND LOCKING BAR AS DETAILED BELOW.



**DISCHARGE 004
GRANITE STREET**

FIGURE 004-3

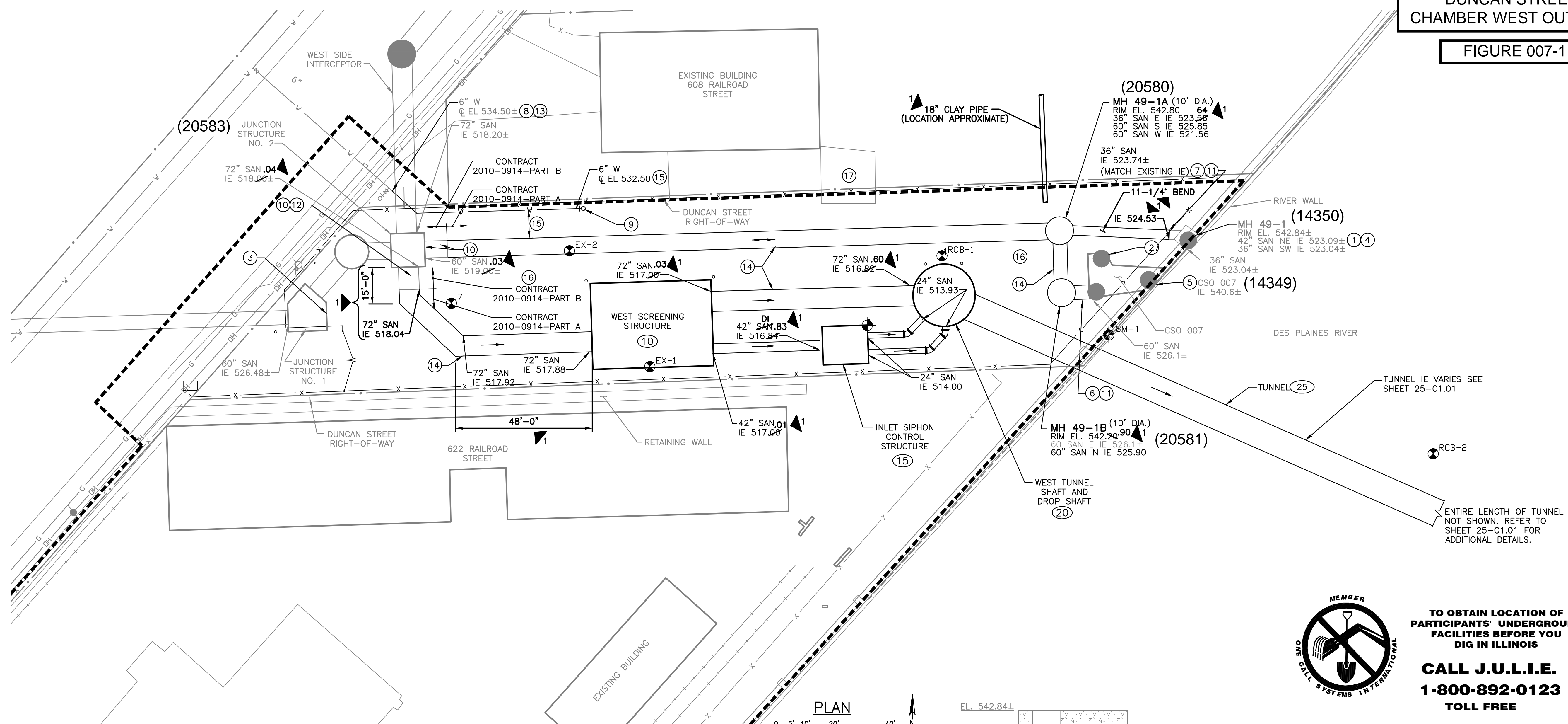


BAR	NO.	SIZE	LENGTH
O ₁	43	#5	5'
O ₂	39	#5	7'
O ₃	28	#5	15'
O ₄	17	#5	2'
O ₅	2	#5	3'
REINFORCE BARS		LBS.	990
CLASS SI		CU. YD.	16

BILL OF MATERIAL

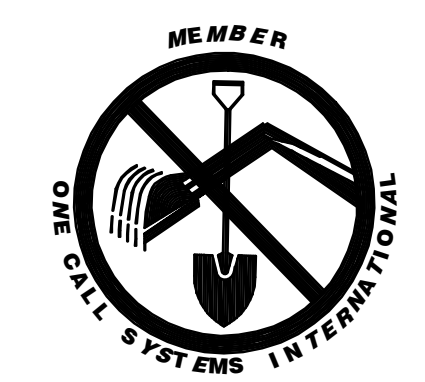
DISCHARGE 007
DUNCAN STREET
CHAMBER WEST OUTFALL

FIGURE 007-1



DATE	REVISIONS	NO.
03/20/2017		1

WEST SITE YARD PIPING PLAN
COMBINED SEWER OVERFLOW LONG TERM CONTROL PLAN
DES PLAINES RIVER COMBINED SEWER OVERFLOW TUNNEL - PART A
CITY OF JOLIET
WILL COUNTY, ILLINOIS



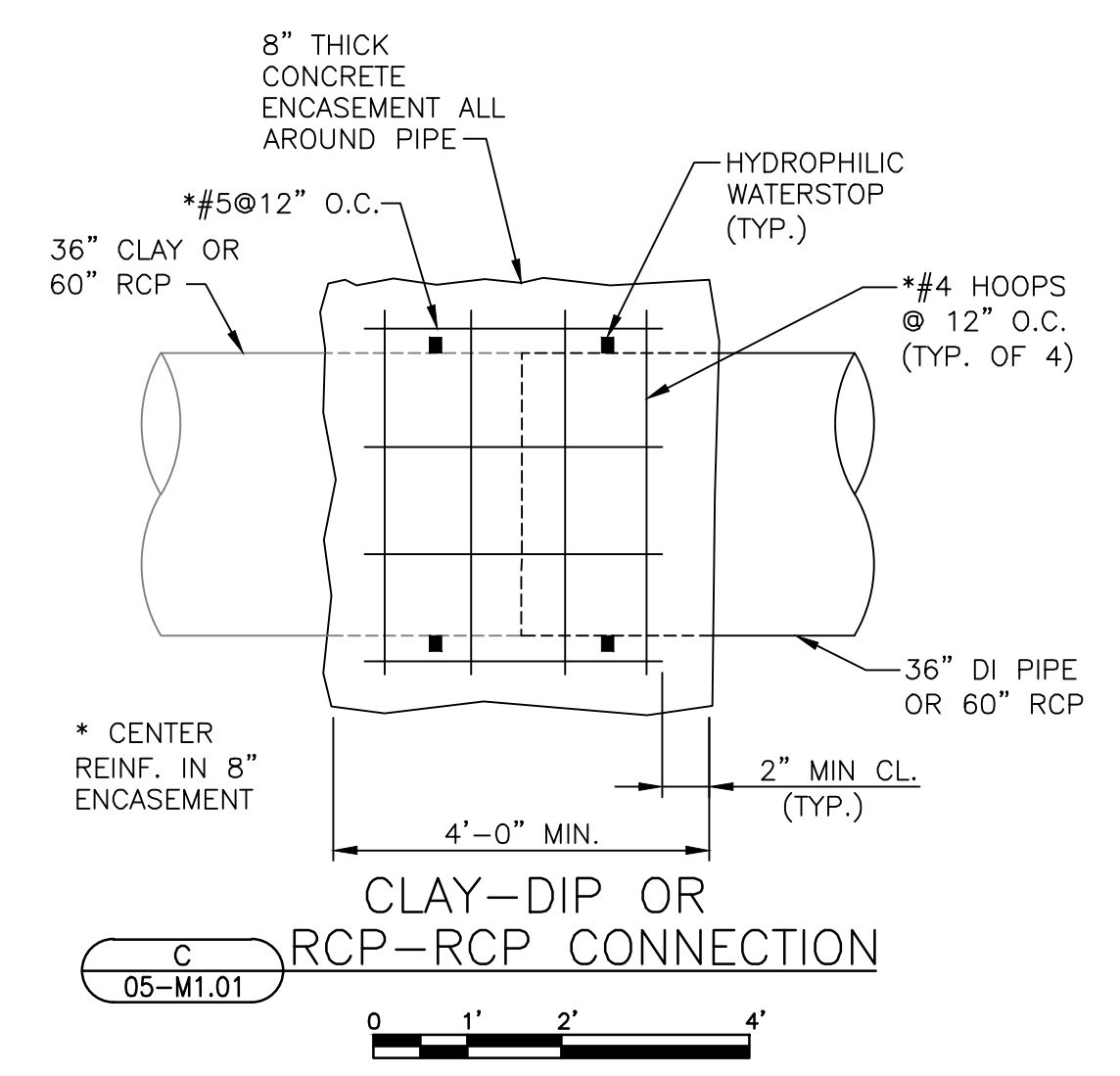
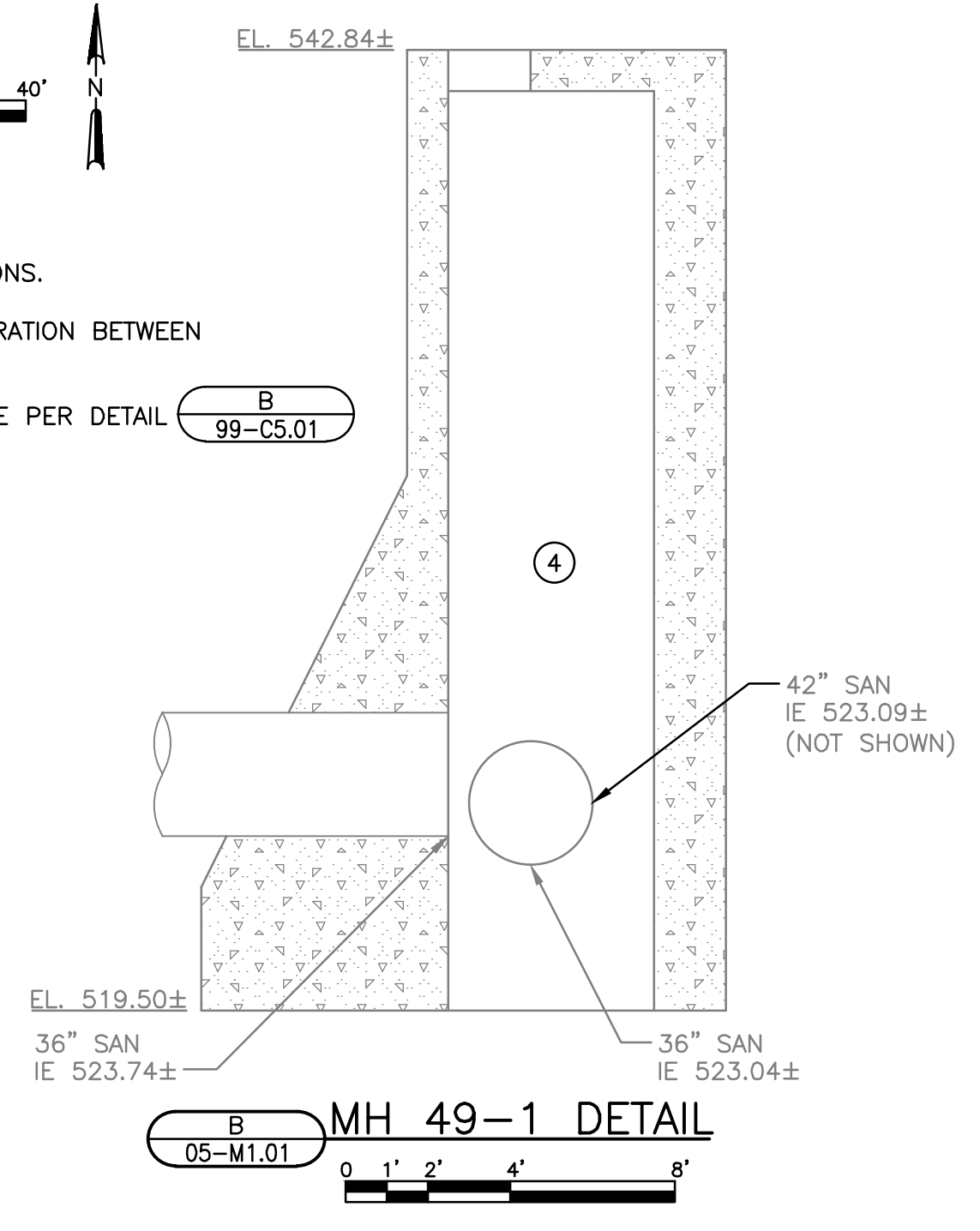
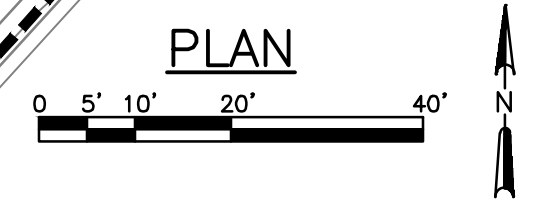
TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN ILLINOIS
CALL J.U.L.I.E.
1-800-892-0123
TOLL FREE

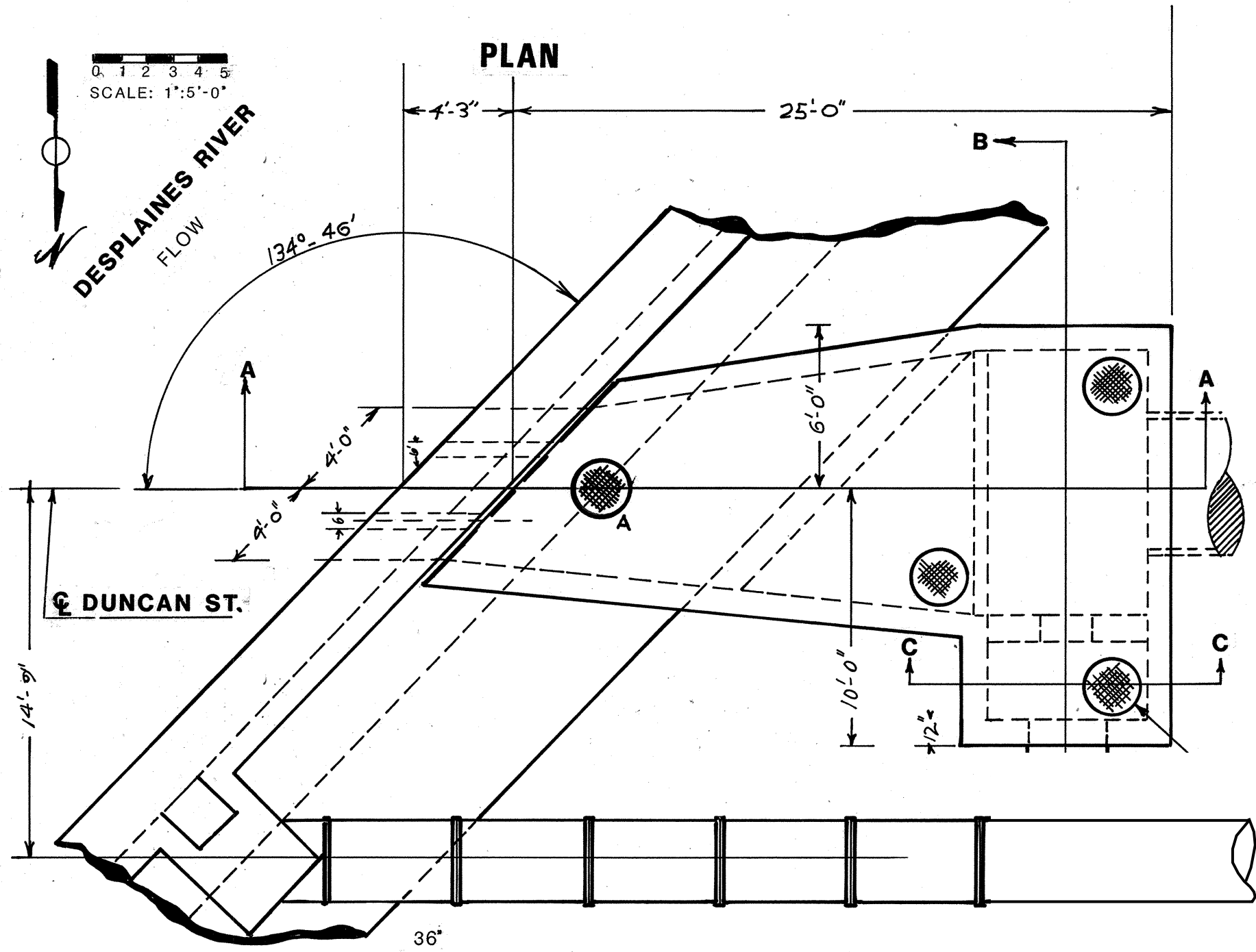
REQUIRES MIN. OF 48 HOURS NOTICE BEFORE YOU EXCAVATE. (EXCLUDING SAT., SUN., & HOL.)

- GENERAL NOTES:**
- SEE SITE LOCATION PLAN FOR BENCHMARK INFORMATION.
 - THESE DRAWINGS DO NOT INDICATE ALL PIPE FITTINGS REQUIRED TO INSTALL YARD PIPING AS SHOWN. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND PROVIDING ALL REQUIRED FITTINGS.
 - LOCATIONS AND ELEVATIONS OF EXISTING PIPING, BUILDINGS, ELECTRICAL SERVICE, AND OTHER SITE FEATURES ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY. CONTRACTOR SHALL FIELD VERIFY DEPTHS AND LOCATIONS OF EXISTING PIPING PRIOR TO INSTALLING NEW PIPING THAT CONNECT TO EXISTING.
 - CONTRACTOR SHALL CONTACT APPROPRIATE AGENCIES FOR UTILITY LOCATIONS.
 - MH - MANHOLE, SEE DRAWING 01-975-43A AND SPECIFICATIONS.
 - AT PIPE CROSSINGS ON ALL SCHEMATIC AND PIPING PLANS, THE PIPE THAT IS BROKEN DOES NOT NECESSARILY DESIGNATE THE RELATIVE LOCATION OF THE PIPES WITH RESPECT TO EACH OTHER.
 - NOT ALL PIPE ELEVATIONS AT STRUCTURES SHOWN. SEE STRUCTURAL DRAWING AND EXISTING RECORD DRAWINGS FOR ELEVATIONS.
 - ALL PIPING 16" AND LARGER SHOWN WITH DOUBLE LINES. ALL OTHER PIPING ARE SHOWN SINGLE LINE.
 - UNLESS OTHERWISE NOTED OR SPECIFIED, ALL YARD PIPING SHALL BE DUCTILE IRON. SEE SPECIFICATIONS.
 - REFER TO DRAWING 05-C1.01 FOR ADDITIONAL GENERAL NOTES.

- KEY NOTES:**
- PROVIDE SEWER BULKHEAD FOR 42" SAN TO NE PER DETAIL (05-M1.01).
 - PROVIDE SEWER BULKHEAD IN 36" SAN LOCATED ON NORTH SIDE OF STRUCTURE PER DETAIL (05-M1.01).
 - PROVIDE SEWER BULK HEAD FOR 60" SAN PER DETAIL (05-M1.01).
 - RECORD DRAWINGS FOR MH 49.1 AND RIVER WALL IN THIS AREA ARE NOT AVAILABLE. MANHOLE IS SHOWN BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. CONTRACTOR SHALL PROVIDE ALL WORK AND MATERIALS REQUIRED TO REMOVE EXISTING 36" CLAY SAN AND REPLACE WITH 36" DI SAN PIPING.
 - CONTRACTOR SHALL REMOVE EXISTING RESTRICTOR PLATE OVER CSO-007 OPENING AT RIVER WALL.
 - CONTRACTOR MAY REUSE EXISTING PIPE OR PROVIDE NEW PIPE IN EXISTING OPENING.
 - CONTRACTOR SHALL PROVIDE COUPLING FOR TRANSITION FROM CLAY TILE PIPE TO DUCTILE IRON PIPE PER DETAIL (05-M1.01).
 - REMOVE 6" PLUG FOR CONNECTION TO NEW PIPING.
 - FIRE HYDRANT, SEE SPECIFICATIONS.
 - SEE SPECIFICATIONS FOR SEQUENCING REQUIREMENTS. CONTRACTOR SHALL REMOVE TEMPORARY TIMBER BULKHEAD AND STOP LOGS FOR FINAL CONNECTIONS. MATCH EXISTING PIPE JOINTS.
 - CONTRACTOR SHALL VERIFY IE PRIOR TO FABRICATING MH 49-1A AND MH 49-1B. ADJUST PIPING AND MANHOLES AS REQUIRED.
 - CONTRACTOR SHALL FIELD VERIFY ELEVATION PRIOR TO BEGINNING CONSTRUCTION OF WEST SCREENING STRUCTURE.
 - FIELD VERIFY ELEVATION PRIOR TO INSTALLING 6" W VALVE OR FIRE HYDRANT. 6" W SHALL HAVE MINIMUM OF 5'-0" OF COVER. PROVIDE ADDITIONAL FITTINGS AS REQUIRED.

- CLASS IV RCP SEE SPECIFICATIONS.
- PROVIDE MINIMUM 10'-0" SEPARATION BETWEEN 6" W AND 60" SAN.
- ALL TRENCH BACKFILL SHALL BE PER DETAIL (99-C5.01).
- PROTECT CONCRETE SLAB.

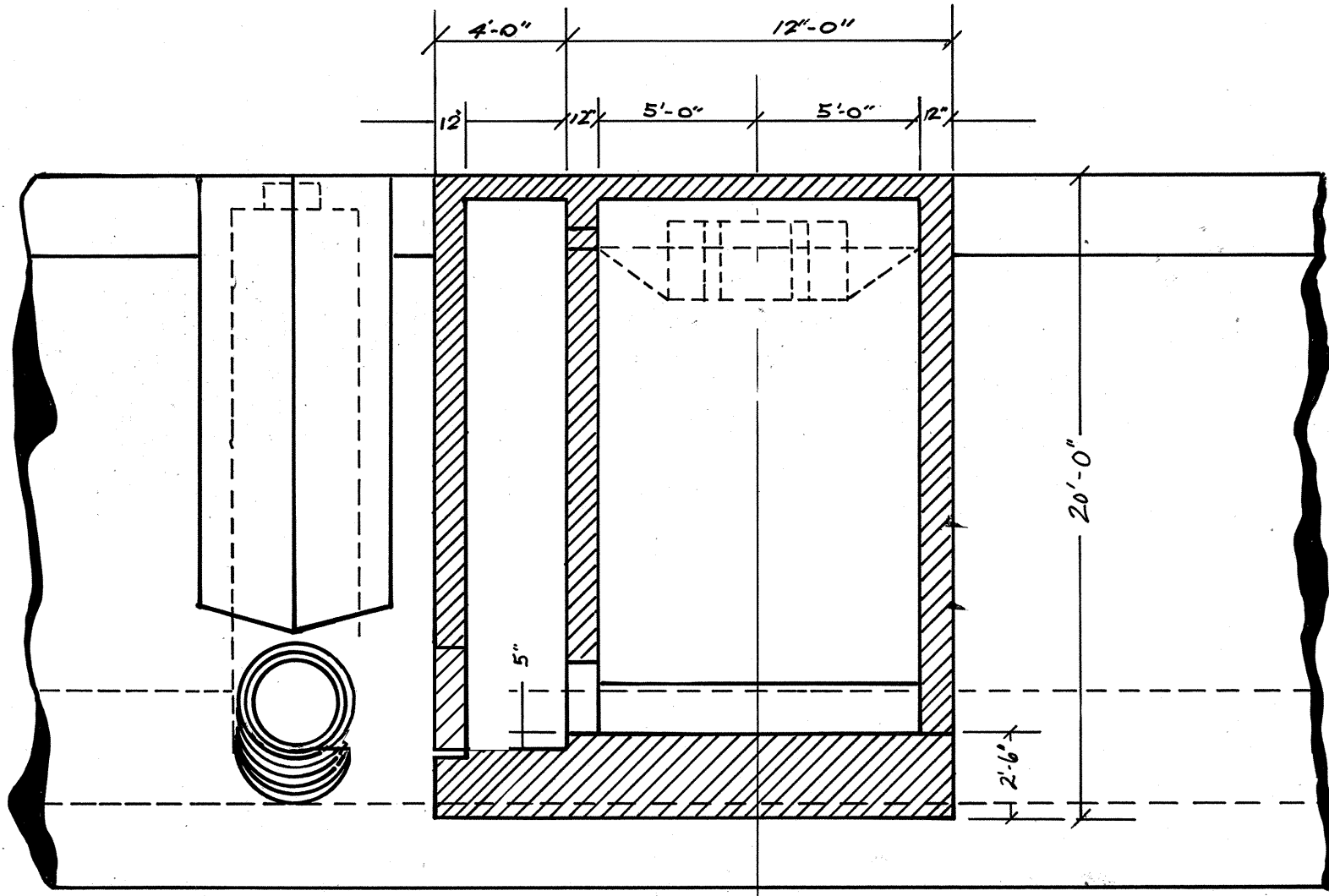




DISCHARGE 007
DUNCAN STREET
CHAMBER WEST
OUTFALL

FIGURE 007-2

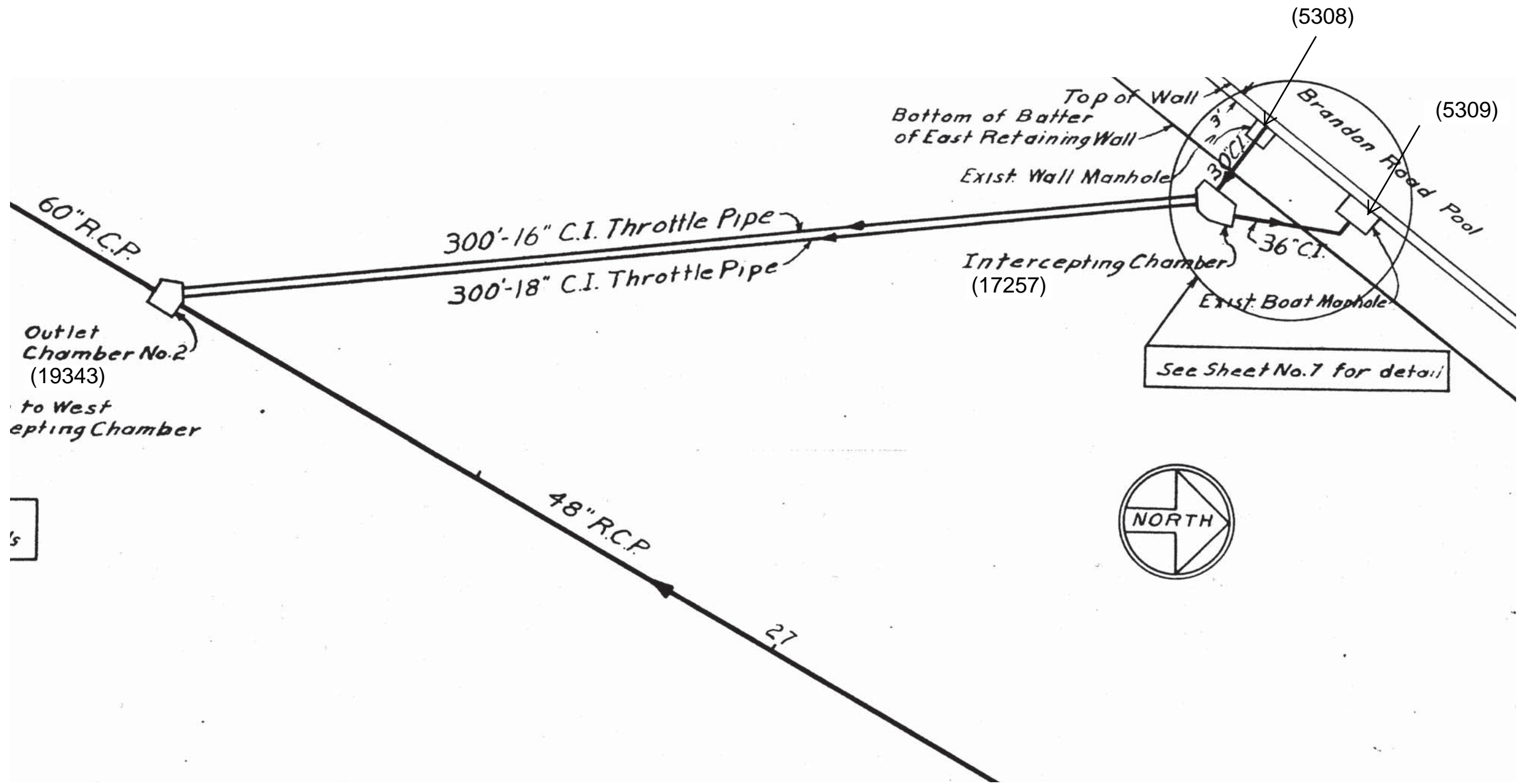
SECTION B-B



1 2 3 4 5
SCALE: 1"=5'-0"

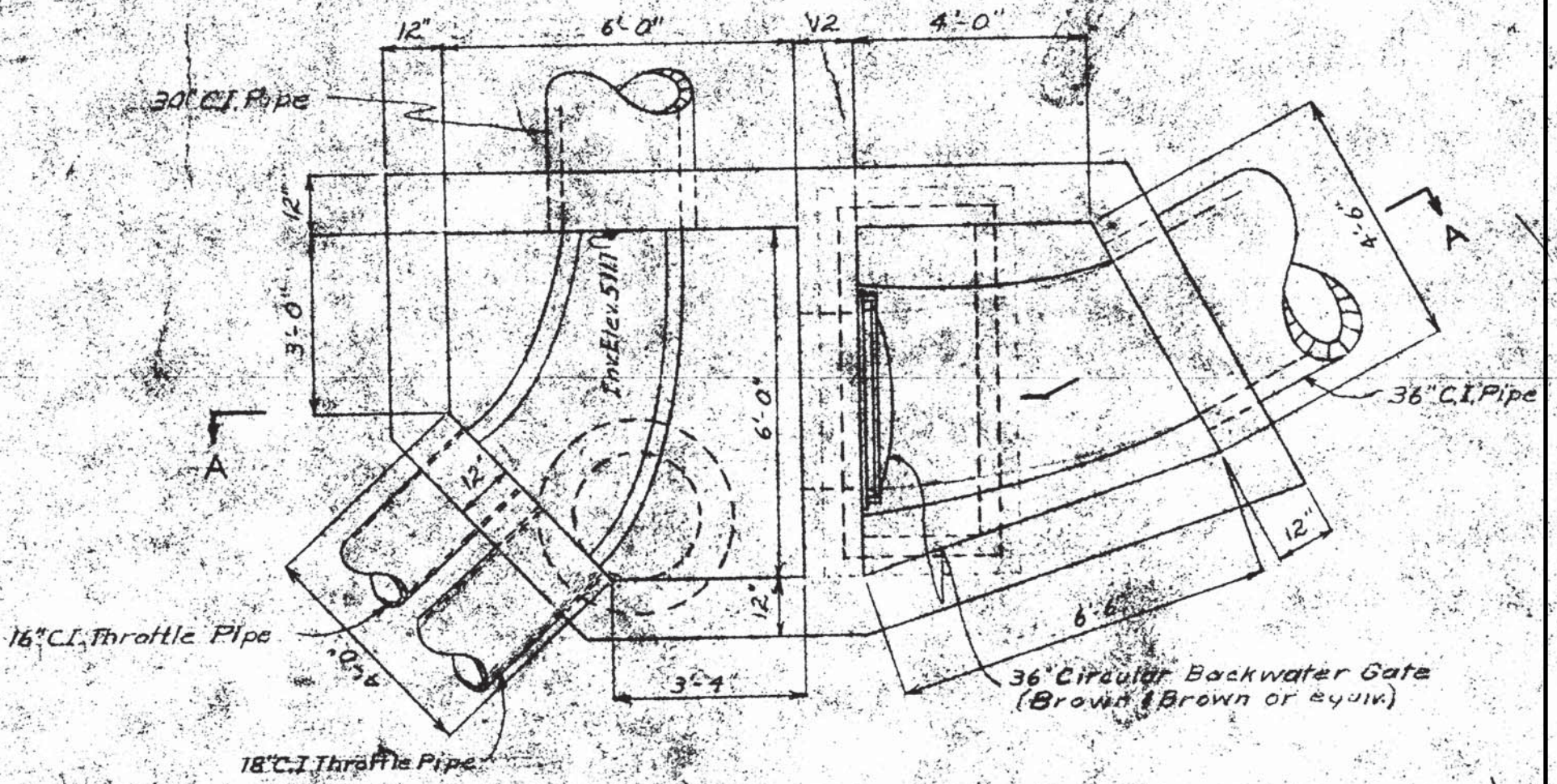
DISCHARGE 007
DUNCAN STREET
CHAMBER WEST
OUTFALL

FIGURE 007-3



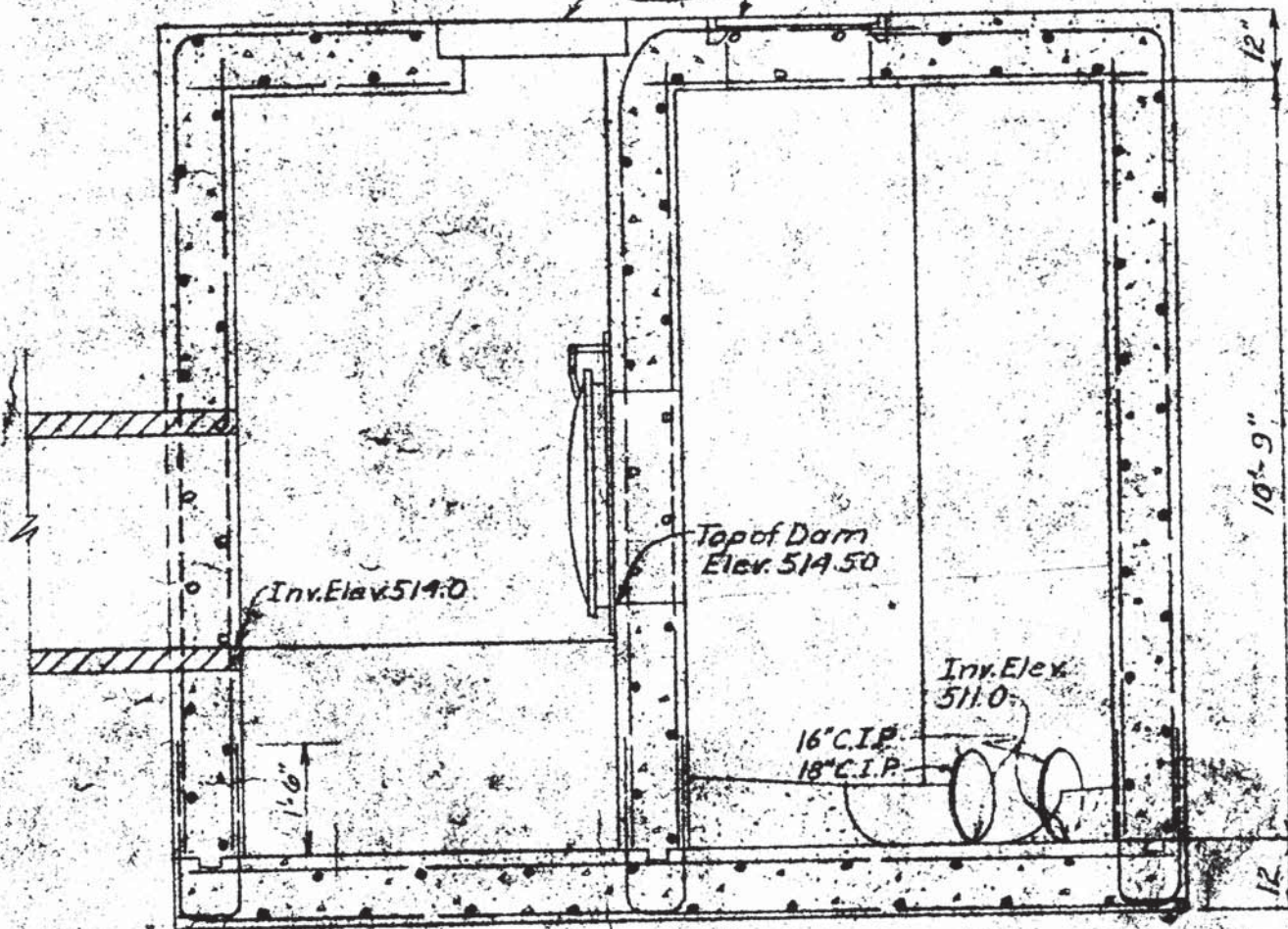
DISCHARGE 008
RIVER CROSSING
OVERFLOW OUTFALL

FIGURE 008-1



PLAN

Pre-fab. Conc. Cover Slabs (See Detail) 24" Watertight Manhole Frame & Cover



All Reinf. #5@18"

Note: Use 12" wide footing if base of Chamber is not on rock

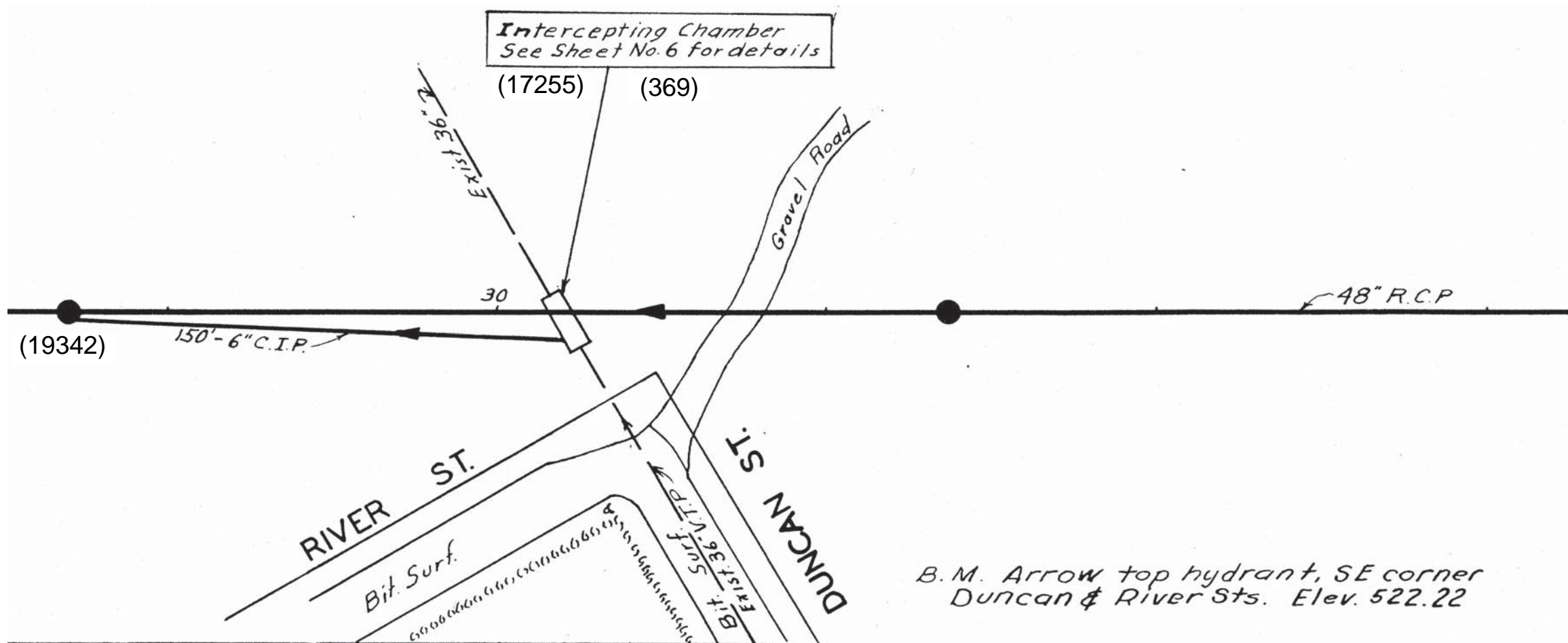
SECTION A-A

RIVER CROSSING INTERCEPTING CHAMBER

Scale: $\frac{3}{16} = 1'-0"$

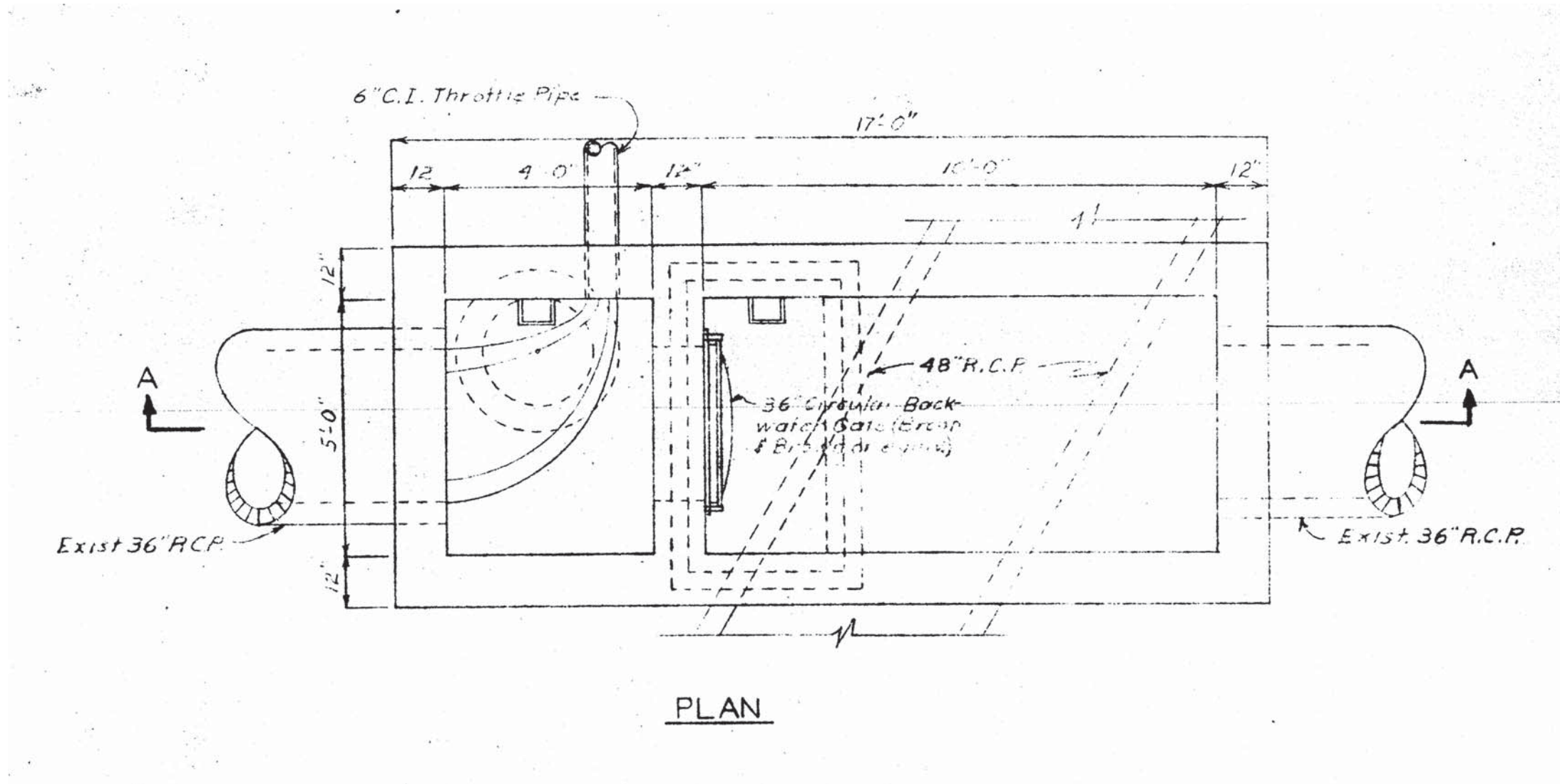
DISCHARGE 008
RIVER CROSSING
OVERFLOW OUTFALL

FIGURE 008-2



DISCHARGE 009
 DUNCAN STREET
 CHAMBER EAST OUTFALL

FIGURE 009-1



DISCHARGE 009
 DUNCAN STREET
 CHAMBER EAST OUTFALL

FIGURE 009-2

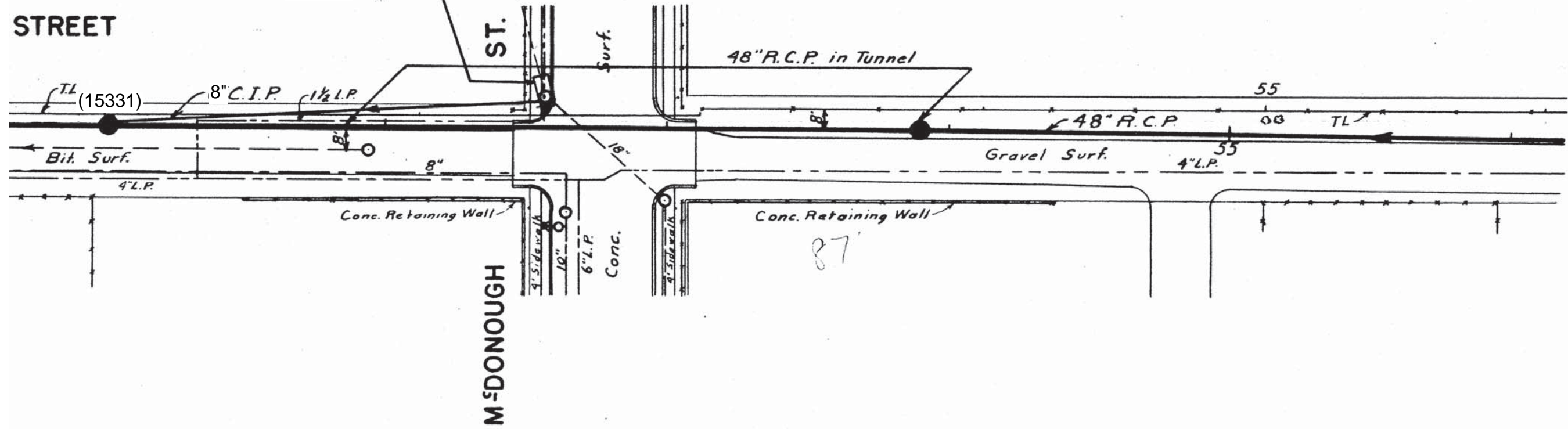
View on Hydrant on
of Munroe and



Intercepting Chamber
See Sheet No. 6 for details
(17367)

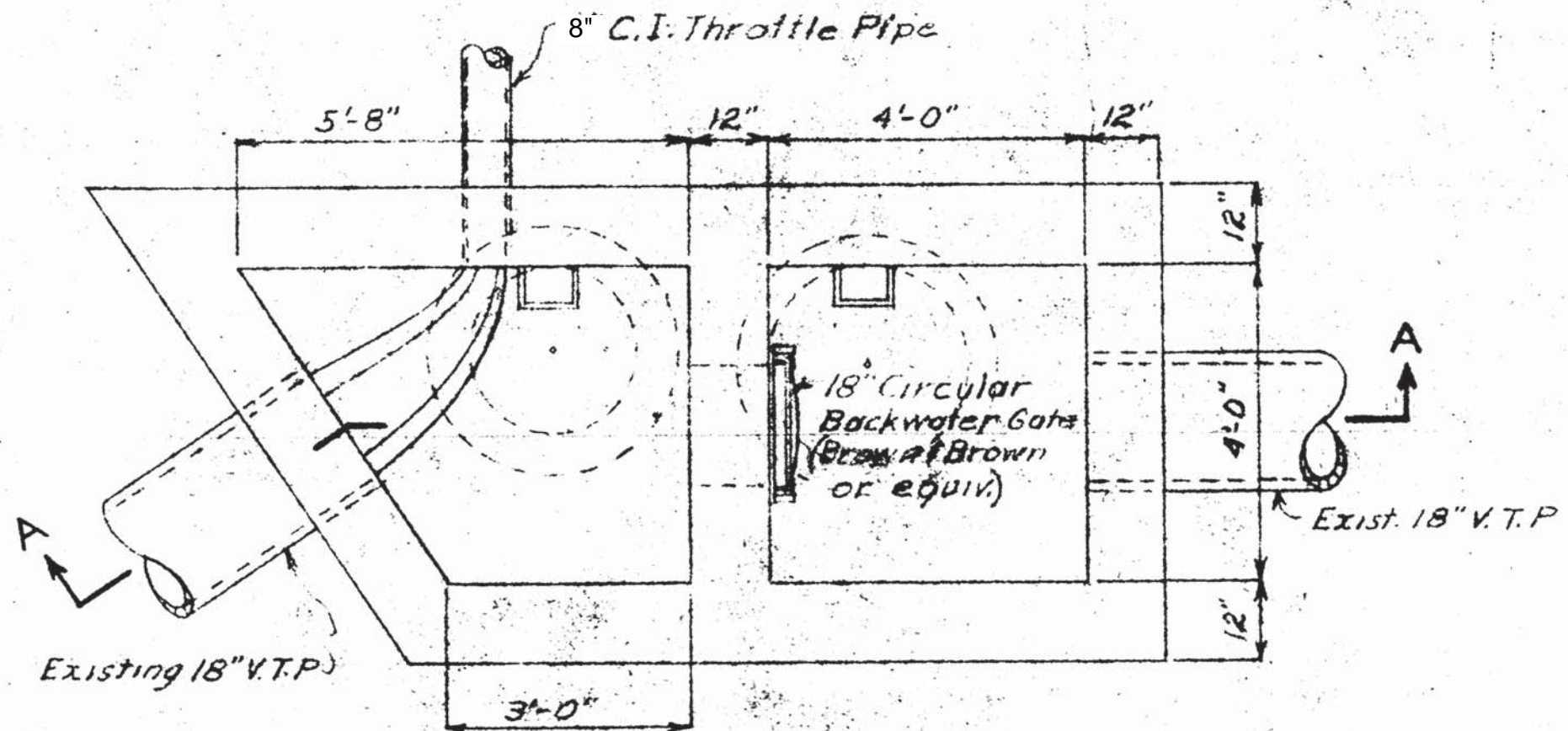
STREET

ST.



DISCHARGE 010
McDONOUGH STREET
CHAMBER OUTFALL

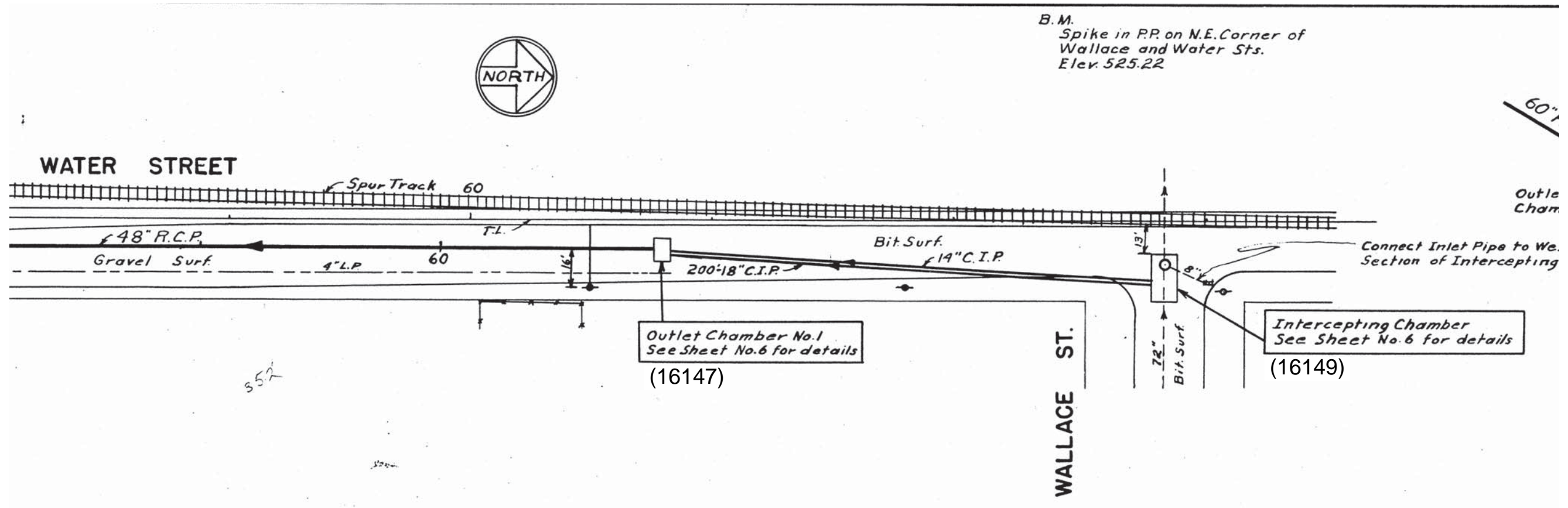
FIGURE 010-1



PLAN

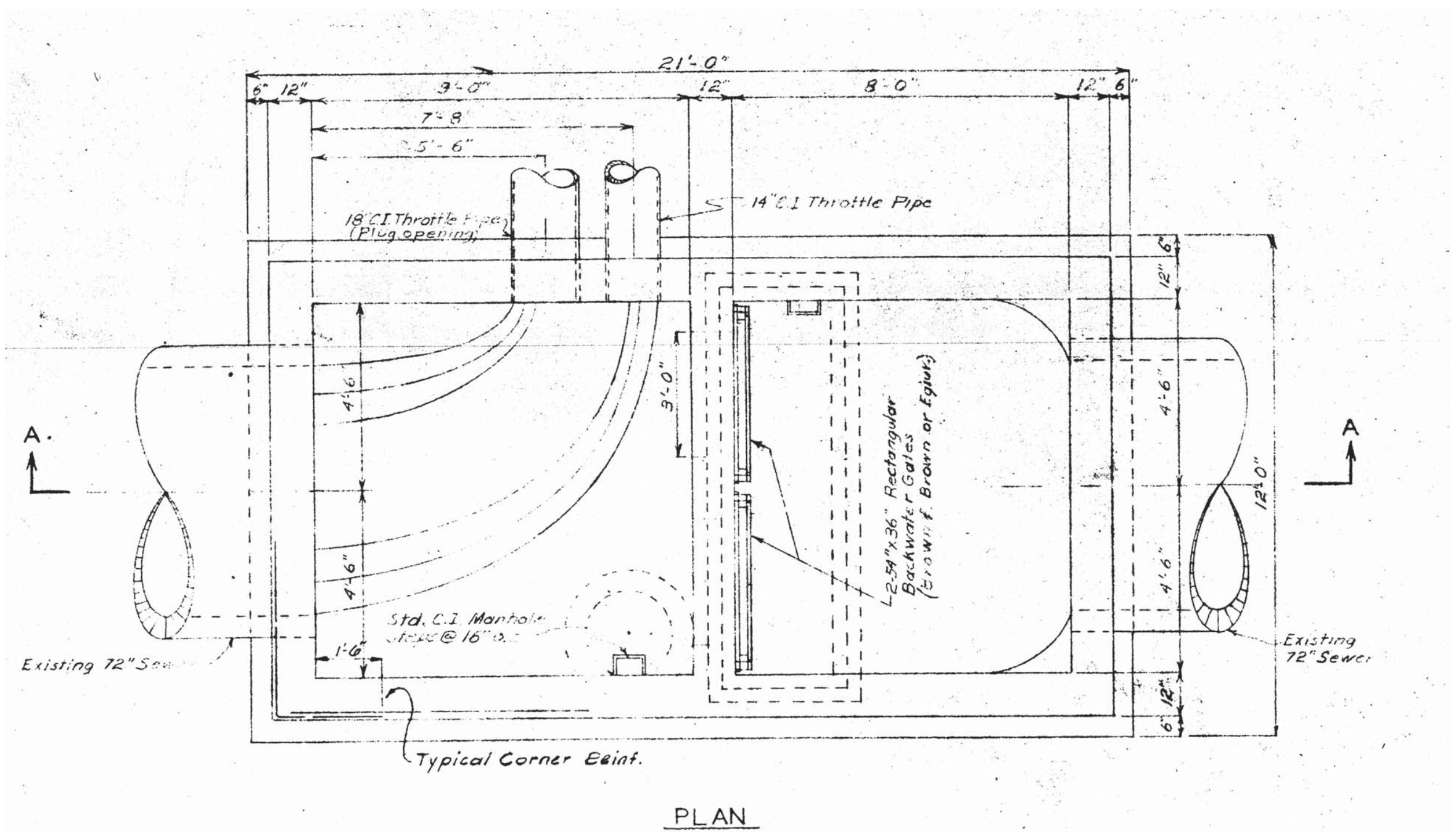
DISCHARGE 010
 McDONOUGH STREET
 CHAMBER OUTFALL

FIGURE 010-2



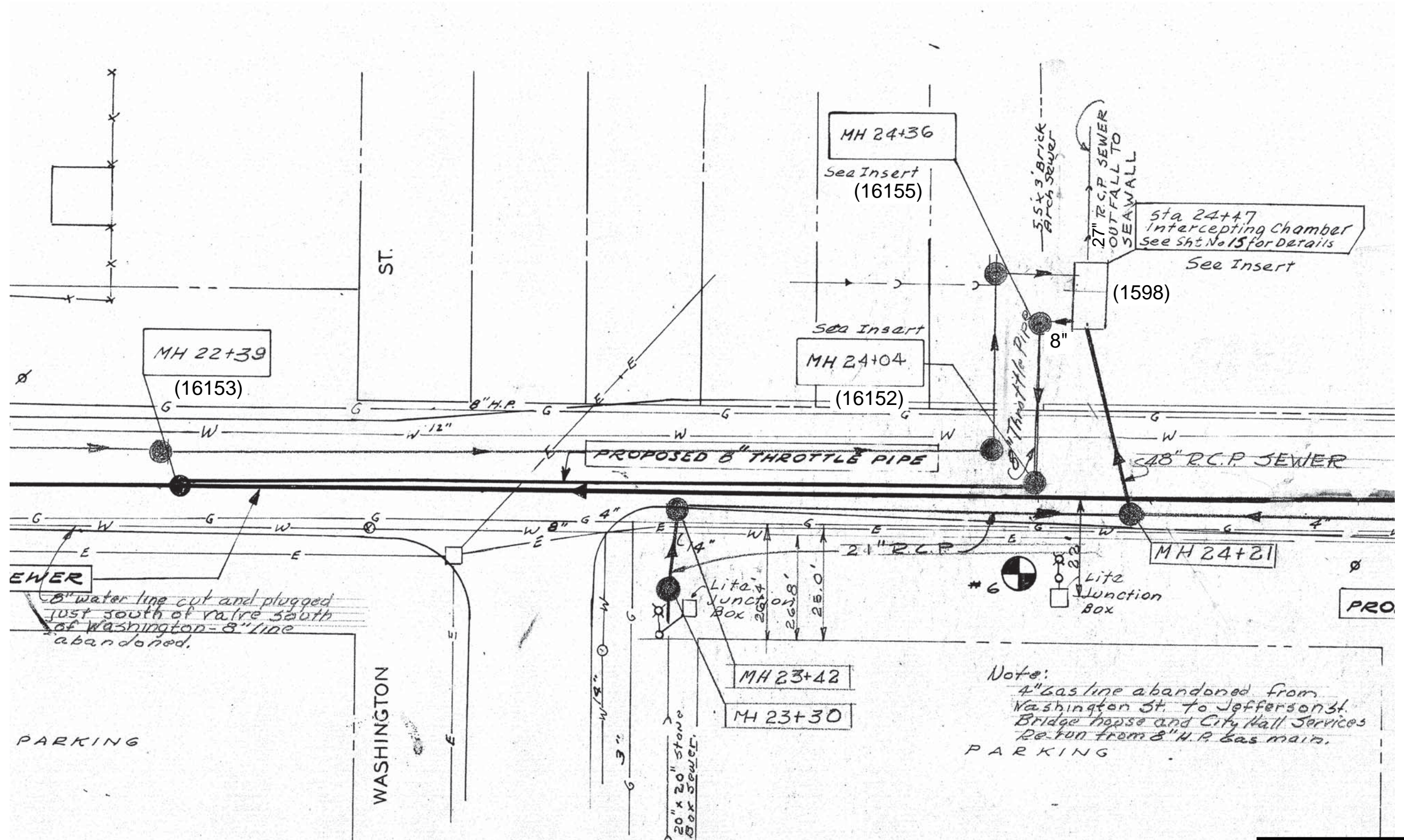
DISCHARGE 011
WALLACE STREET
CHAMBER OUTFALL

FIGURE 011-1



DISCHARGE 011
 WALLACE STREET
 CHAMBER OUTFALL

FIGURE 011-2

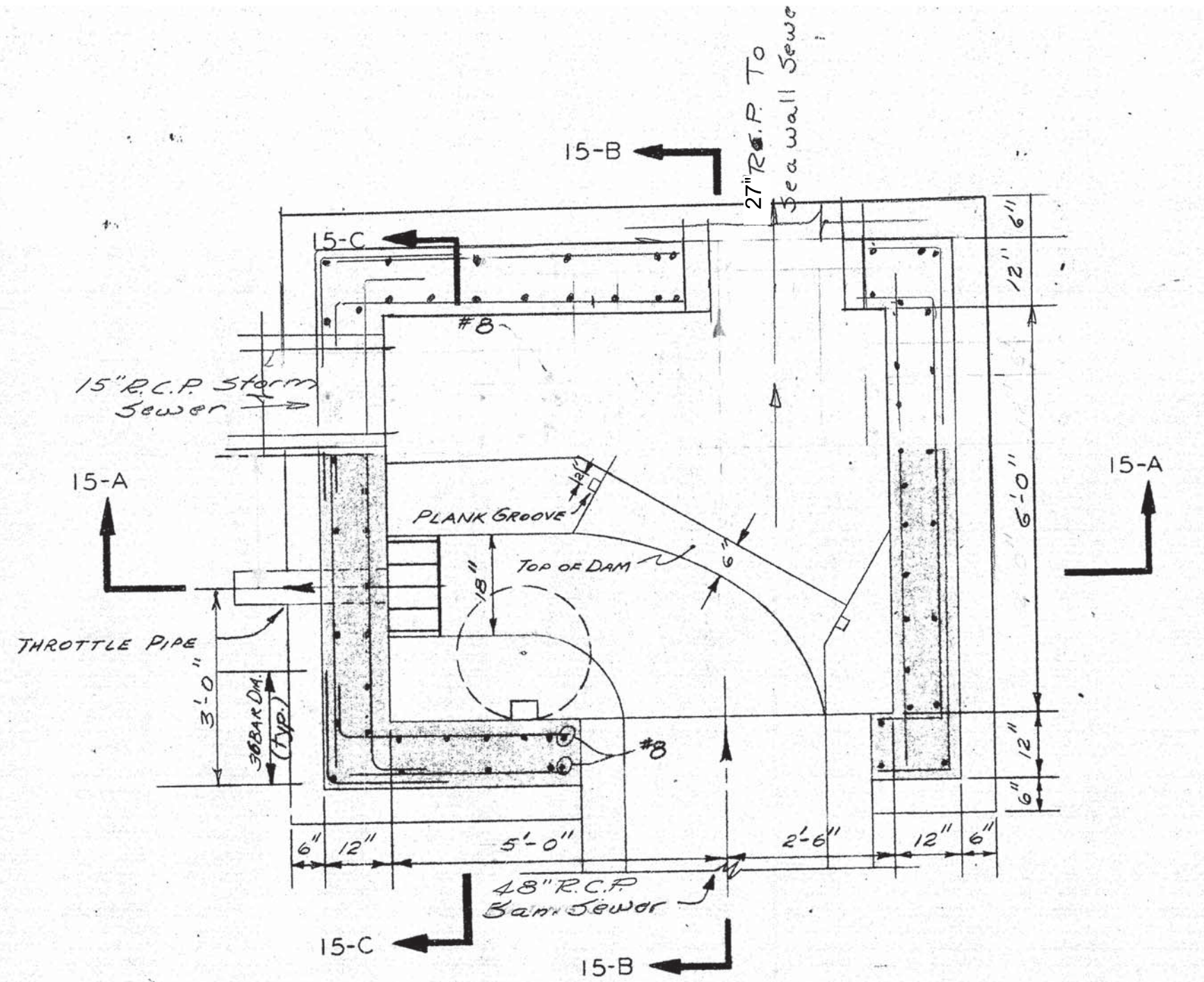


8" water line cut and plugged just south of valve south of Washington - 8" line abandoned.

Note:
 4" Gas line abandoned from Washington St. to Jefferson St. Bridge house and City Hall Services Re-run from 8" H.P. Gas main.

DISCHARGE 012
 WASHINGTON STREET
 CHAMBER OUTFALL

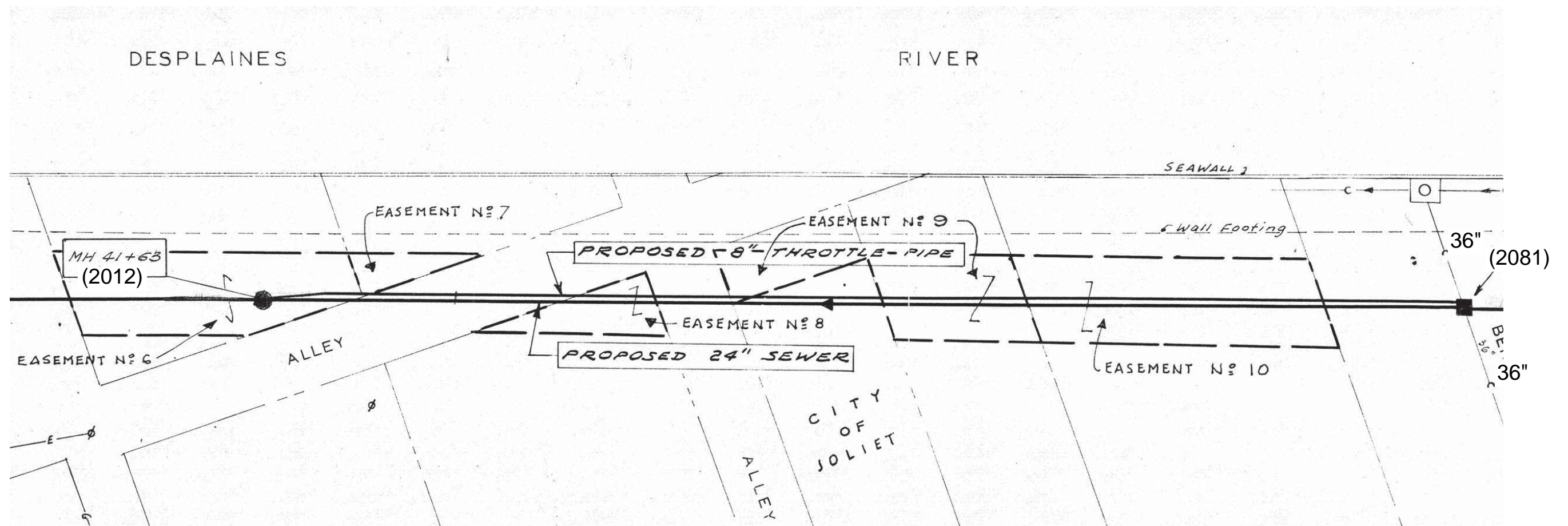
FIGURE 012-1



PLAN

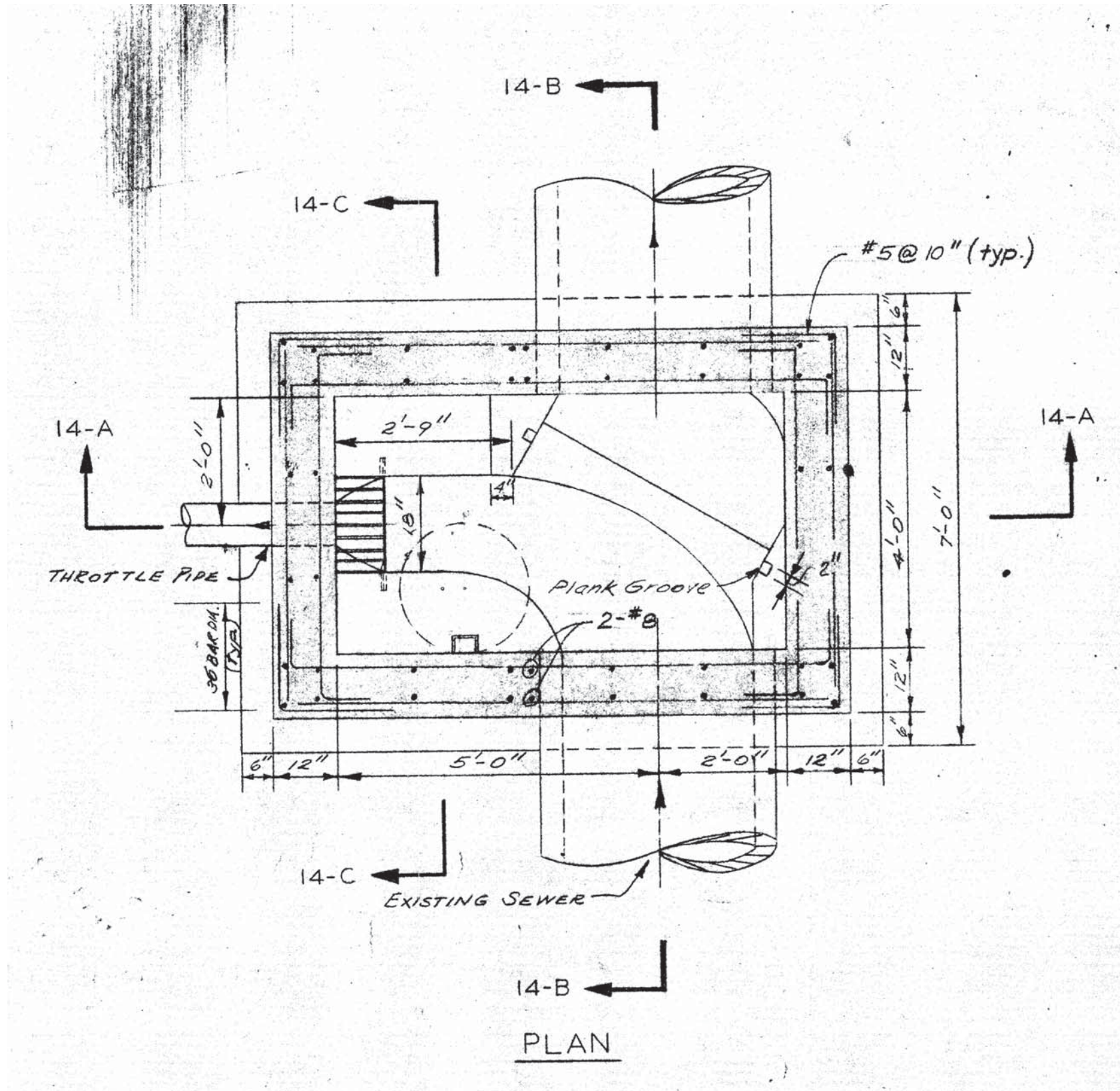
DISCHARGE 012
WASHINGTON STREET
CHAMBER OUTFALL

FIGURE 012-2



DISCHARGE 017
 BENTON STREET
 CHAMBER OUTFALL

FIGURE 017-1



PLAN

DISCHARGE 017
BENTON STREET
CHAMBER OUTFALL

FIGURE 017-2

EXHIBIT B

MANHOLE OBSERVATION SURVEY

Manhole No. _____ **Photo No.** _____
Date: _____ **Time:** _____
Personnel _____

INFLOW THROUGH THE COVER (CIRCLE AS APPROPRIATE)

Cover Type:	Concealed Pick Hole Gasketed Seal Cover	Open Pick Hole Solid Water Tight Cover	Grated Cover
Surrounding Surface Material of the Manhole:	Concrete Earth	Asphalt Other (describe):	Gravel Grass
Location of Cover/Casting With Respect to the Surrounding Surface:	Raised Other (Describe):	Flat	Depressed In Drainageway
Manhole Cover Floods:	Never Other (Describe):	Occasionally	Always

FRAME SEAL ADJUSTING RINGS (CIRCLE AS APPROPRIATE)
(Frame seal should be water-tight with structure or adjustment rings)

Adjusting Rings:	Masonry Cracked	Concrete Missing Mastic	Crushed Visible Leaks	Deteriorating Has Chimney Seal
-------------------------	--------------------	----------------------------	--------------------------	-----------------------------------

MANHOLE WALLS (CIRCLE AS APPROPRIATE)

Leak Locations:	Joints Cracks	Bench Other	Pipes
Descriptions:			
General Interior Condition:	Poor	Average	Good Excellent

MANHOLE STEPS (CIRCLE AS APPROPRIATE)

Steps are in Good Condition:	Yes	No
-------------------------------------	-----	----

RECOMMENDED METHOD OF REPAIR (CIRCLE AS APPROPRIATE)

Replace Cover	Raise Casting	Replace Casting
Replace Adjusting Rings	Install Chimney Seal	Replace Steps

Is Manhole a Candidate for Chemical Grouting, Manhole Lining?	Yes	No
Is the Bench Eroded?	Yes	No
Recommended Method of Repair for the Bench	Re-grouting	Re-pouring

Comments:

Catch Basin Maintenance / Cleaning

Manhole No. _____ **Photo No.** _____
Date: _____ **Time:** _____
Personnel _____

The catch basin maintenance and cleaning procedure is performed utilizing a vactor truck.

Procedure for Catch Basin Cleaning:

1. Remove cover from the structure and position suction hose/tube to the proper angle.
2. Lower tube into structure to remove debris, sediment and pollutants.
3. Utilize a high pressure water nozzle to loosen debris, sediment and pollutants and wash down the walls and components of the structure.
4. Discard of material removed from the structure at an approved location.
5. After cleaning, inspect the structure and sewer for any repairs that may be necessary.

COMMENTS:

Maintenance for Sewer Line Flushing and Televising

From Manhole No.	_____	To Manhole No.	_____
Sewer Line Size:	_____	Length:	_____
Date:	_____	Time:	_____
Personnel	_____		

The sewer line flushing and televising procedure is performed utilizing a vactor truck, jetter truck and camera van.

Procedure for Sewer Line Flushing:

1. Remove cover from the structure and position jetter truck and vactor truck to the appropriate location.
2. Attach appropriate jet-line head fitting to the jet hose.
3. Insert jet hose into the sewer line.
4. Jet sewer utilizing high pressure water to remove sediment/debris/blockage and clean the line. Utilize the vactor truck at the point of entry manhole to remove sediment/debris from the line.
5. Discard of material removed from the line at an approved location.
6. After the above steps, inspect the structure and televise the sewer line. Record a hard copy of the televised line. File a hard copy at the sewer foreman's office.

Comments for Necessary Repairs:

EXHIBIT C

Discharge 004 – Granite Street Chamber West Outfall

This discharge is located on North Bluff Street between Granite Street and Ruby Street on the west side of the Des Plaines River. Check for the following at this location and indicate Yes or No, comment on any action taken and initial and date inspection form. Refer to Figures 004-1, 004-2 and 004-3 and inspection form.

Diversion Structure

The diversion structure 19824 is located in front of 767 North Bluff Street just south of Granite Street. The sanitary sewage overflow through a 24” by 38” elliptical pipe to the overflow structure located approximately 30 feet east of the diversion structure in the east parkway of North Bluff Street.

1. Check for debris in the bottom of the diversion structure.
 - a. If debris is found, clean bottom of diversion structure with high pressure water jet and vacuum out debris.
2. Check for debris in the opening of the 10” throttle pipe between the diversion structure 19824 and manhole 19821.
 - a. If debris is found, clean 10” throttle pipe with high pressure water jet and vacuum out debris.
3. Check for debris in the opening of the 24” by 38” elliptical pipe between the diversion structure 19824 and overflow structure 19823.
 - a. If debris is found, clean 24” by 38” elliptical pipe with high pressure water jet and vacuum out debris.
4. Check for any flow entering the 24” by 38” elliptical overflow pipe.
 - a. If flow is entering the 24” by 38” elliptical overflow pipe, notify Public Utilities office.

Overflow Structure

The sanitary sewage overflow exits the overflow structure 19823 to the north via the 30” pipe, valve vault, 24” by 38” elliptical pipe and box culvert to the Des Plaines River.

Discharge 004 – Granite Street Chamber West Outfall (Continued)

1. Check for debris on the bar screen.
 - a. If debris is found, clean bar screen with high pressure water jet and vacuum out debris.
2. Check for debris in the bottom of the overflow structure.
 - a. If debris is found, clean bottom of overflow structure with high pressure water jet and vacuum out debris.
3. Check for debris in the opening of the 30” pipe between overflow structure 19823 and valve vault 19709.
 - a. If debris is found, clean 30” pipe with high pressure water jet and vacuum out debris.
4. Check for debris in the opening of the 12” pipe between overflow structure 19823 and manhole 19822.
 - a. If debris is found, clean 12” pipe with high pressure water jet and vacuum out debris.

Valve Vault

The valve vault 19709 is located 30 feet north of the overflow structure.

1. Check for debris on the valve.
 - a. If debris is found, clean valve with high pressure water jet and vacuum out debris.
2. Check for debris in the bottom of valve vault.
 - a. If debris is found, clean bottom of valve vault with high pressure water jet and vacuum out debris.
3. Check valve for proper operation.
 - a. If needed, adjust or repair valve.
4. Check for debris in the opening of the 24” by 38” elliptical pipe between valve vault 19709 and Des Plaines River.
 - a. If debris is found, clean 24” by 38” elliptical pipe with high pressure water jet and vacuum out debris.

Discharge 004 – Granite Street Chamber West Outfall (Continued)

Manhole 19819

The manhole is located in front of 757 North Bluff Street. There is a 6” restrictor on the 12” pipe between manhole 19819 and manhole 19820.

1. Check for debris in the bottom of the manhole.
 - a. If debris is found, clean bottom of manhole with high pressure water jet and vacuum out debris.
2. Check for debris in the opening of the 6” restrictor on 12” pipe between manhole 19819 and manhole 19820.
 - a. If debris is found, clean 6” restrictor on 12” pipe with high pressure water jet and vacuum out debris.

Manhole 19818

The manhole is located in front of 633 North Bluff Street. There is a 6” throttle pipe between manhole 2992 and manhole 19818.

1. Check for debris in the bottom of the manhole.
 - a. If debris is found, clean bottom of manhole with high pressure water jet and vacuum out debris.
2. Check for debris in the opening of the 6” throttle pipe between manhole 2992 and manhole 19818.
 - a. If debris is found, clean 6” throttle pipe with high pressure water jet and vacuum out debris.

Discharge 007 – Duncan Street Chamber West Outfall

This discharge is located at the West River Wall east of Railroad Street and south of I-80. The diversion structure is located within the locked fenced Combined Sewer Overflow Tunnel West Screening Facility. A key for a #2126 lock at the fence gate is required to enter the facility. Check for the following at this location and indicate Yes or No, comment on any action taken and initial and date inspection form. Refer to Figures 007-1, 007-2 and 007-3 and inspection form.

Diversion Structure

The diversion structure is located at the east end of the Combined Sewer Overflow Tunnel West Screening Facility. At manhole 20580, the sanitary sewage flow normally discharges through a 60” pipe to Junction Structure No. 2 20583 and in large rain events overflow to the diversion structure 14349 in the wall approximately 15 feet south of manhole 20580.

1. Check for debris in the bottom of the diversion structure 14349.
 - a. If debris is found, clean diversion structure with high pressure water jet and vacuum out debris.
2. Check for debris on the bar screen.
 - a. If debris is found, clean bar screen with high pressure water jet and vacuum out debris.
3. Check for debris in the opening of the 60” pipe between manhole 20580 and Junction Structure No. 2 20583, manhole 20580 and manhole 20581, and manhole 20581 and the diversion structure 14349.
 - a. If debris is found, clean pipe and manhole with high pressure water jet and vacuum out debris.
4. Check for any flow entering the overflow channel in the diversion structure 14349.
 - a. If flow is entering the overflow channel, notify Public Utilities office.

Overflow Channel

The 152” by 15” concrete overflow channel is located in the diversion structure 14349 and is open to the Des Plaines River. The opening is covered with a steel plate.

1. Check for debris in the overflow channel.
 - a. If debris is found, clean overflow channel with high pressure water jet and vacuum out debris.

Discharge 008 – River Crossing Overflow Outfall

This discharge is located at the East River Wall west of River Street beneath I-80. The diversion structure is located within a locked fenced area. A key for a #2126 lock at the fence gate is required to enter the area. Check for the following at this location and indicate Yes or No, comment on any action taken and initial and date inspection form. Refer to Figures 008-1 and 008-2 and inspection form.

Diversion Structure

The diversion structure 17257 is located at the East River Wall beneath the eastbound lane of I-80, west of River Street. The sanitary sewage flow discharges through 16” and 18” throttle pipes to manhole 19343 approximately 292 southeast of the diversion structure 17257 and approximately 365 feet west of 668 River Street.

1. Check for debris in the bottom of the diversion structure 17257.
 - a. If debris is found, clean bottom of diversion structure with high pressure water jet and vacuum out debris.
2. Check for debris in the opening of the 16” and 18” throttle pipes between diversion structure 17257 and manhole 19343.
 - a. If debris is found, clean throttle pipes with high pressure water jet and vacuum out debris.
3. Check 36” flap gate to make sure flap is operable. This will entail physically moving the gate to make sure it open and close properly.
 - a. If the gate is inoperable repair or lubricate as needed.
4. Check for any flow entering the 36” overflow pipe.
 - a. If flow is entering the 36” overflow pipe, notify Public Utilities office.

Overflow Pipe

The 36” overflow pipe exists to the East River Wall Storm Sewer.

1. Check for debris in diversion structure 17257 at the opening of the 36” overflow pipe.
 - a. If debris is found, clean 36” overflow pipe with high pressure water jet and vacuum out debris.

Discharge 009 – Duncan Street Chamber East Outfall

This discharge is located west of the intersection of River Street and Duncan Street and east of the East River Wall. A key for a #2126 lock is required to enter the diversion structure. Check for the following at this location and indicate Yes or No, comment on any action taken and initial and date inspection form. Refer to Figures 009-1 and 009-2 and inspection form.

Diversion Structure

The diversion structure 17255 is located approximately 50 feet west of the intersection of River Street and Duncan Street. The sanitary sewage flow discharges through a 6” throttle pipe to manhole 19342 approximately 150 southwest of the diversion structure and is located inside the locked fenced in area beneath I-80, between the third and fourth piers of westbound I-80 approximately 162 feet west of River Street. A key for a #2126 lock at the fence gate is required to enter the area.

1. Check for debris in the bottom of the diversion structure 17255.
 - a. If debris is found, clean bottom of diversion structure with high pressure water jet and vacuum out debris.
2. Check for debris in the opening of the 6” throttle pipe between diversion structure 17255 and manhole 19342.
 - a. If debris is found, clean throttle pipe with high pressure water jet and vacuum out debris.
3. Check 36” flap gate to make sure flap is operable. This will entail physically moving the gate to make sure it open and close properly.
 - a. If the gate is inoperable repair or lubricate as needed.
4. Check for any flow entering the 36” overflow pipe.
 - a. If flow is entering the 36” overflow pipe, notify Public Utilities office.

Overflow Pipe

The 36” overflow pipe exists to the East River Wall Storm Sewer.

1. Check for debris in diversion structure 17255 at the opening of the 36” overflow pipe.
 - a. If debris is found, clean 36” overflow pipe with high pressure water jet and vacuum out debris.

Discharge 010 – McDonough Street Chamber Outfall

This discharge is located at the intersection of McDonough Street and Water Street. Check for the following at this location and indicate Yes or No, comment on any action taken and initial and date inspection form. Refer to Figures 010-1 and 010-2 and inspection form.

Diversion Structure

The diversion structure 17367 is located in the sidewalk in the south west corner of McDonough Street and Water Street. The sanitary sewage flow discharges through an 8” throttle pipe to manhole 15331 approximately 148 south of the diversion structure in the southbound lane of Water Street across from 404 Water Street.

1. Check for debris in the bottom of the diversion structure.
 - a. If debris is found, clean the bottom of the diversion structure with high pressure water jet and vacuum out debris.
2. Check for debris in the opening of the 8” throttle pipe between diversion structure 17367 and manhole 15331.
 - a. If debris is found, clean throttle pipe with high pressure water jet and vacuum out debris.
3. Check 18” flap gate to make sure flap is operable. This will entail physically moving the gate to make sure it open and close properly.
 - a. If the gate is inoperable repair or lubricate as needed.
4. Check for any flow entering the 18” overflow pipe.
 - a. If flow is entering the 18” overflow pipe, notify Public Utilities office.

Overflow Pipe

The 18” overflow pipe exists to the East River Wall Storm Sewer.

1. Check for debris in diversion structure 17367 at the opening of the 18” overflow pipe.
 - a. If debris is found, clean 18” overflow pipe with high pressure water jet and vacuum out debris.

Discharge 011 – Wallace Street Chamber Outfall

This discharge is located at the intersection of Water Street and Wallace Street. Check for the following at this location and indicate Yes or No, comment on any action taken and initial and date inspection form. Refer to Figures 011-1 and 011-2 and inspection form.

Diversion Structure

The diversion structure 16149 is located 14 feet east of the intersection of Water Street and Wallace Street. The sanitary sewage flow discharges through 14” and 18” throttle pipes to manhole 16147 approximately 205 south of the diversion structure in the center of Water Street across from 308-318 Water Street.

1. Check for debris in the bottom of the diversion structure.
 - a. If debris is found, clean the bottom of the diversion structure with high pressure water jet and vacuum out debris.
2. Check for debris in the opening of the 14” and 18” throttle pipes between diversion structure 16149 and manhole 16147.
 - a. If debris is found, clean throttle pipes with high pressure water jet and vacuum out debris.
3. Check 54” by 36” flap gates to make sure flap is operable. This will entail physically moving the gate to make sure it open and close properly.
 - a. If the gate is inoperable repair or lubricate as needed.
4. Check for any flow entering the 72” overflow pipe.
 - a. If flow is entering the 72” overflow pipe, notify Public Utilities office.

Overflow Pipe

The 72” overflow pipe exists to the East River Wall Storm Sewer.

1. Check for debris in diversion structure 16149 at the opening of the 72” overflow pipe.
 - a. If debris is found, clean 72” overflow pipe with high pressure water jet and vacuum out debris.

Discharge 012 – Washington Street Chamber Outfall

This discharge is located near the corner of Washington Street and South Des Plaines Street in the parking area between South Des Plaines Street and East River Wall Storm Sewer. Check for the following at this location and indicate Yes or No, comment on any action taken and initial and date inspection form. Refer to Figures 012-1 and 012-2 and inspection form.

Diversion Structure

The diversion structure 1548 is located in the parking area on the west side of South Des Plaines Street across from City Hall. The sanitary sewage flow discharges through an 8” throttle pipe to manhole 16155.

1. Check for debris in the bottom of the diversion structure.
 - a. If debris is found, clean the bottom of the diversion structure with high pressure water jet and vacuum out debris.
2. Check for debris in the opening of the 8” throttle pipe between diversion structure 1548 and manhole 16155.
 - a. If debris is found, clean throttle pipe with high pressure water jet and vacuum out debris.
3. Check for any flow entering the 27” overflow pipe.
 - a. If flow is entering the 27” overflow pipe, notify Public Utilities office.

Overflow Pipe

The 27” overflow pipe exists to the East River Wall Storm Sewer.

1. Check for debris in diversion structure 1548 at the opening of the 27” overflow pipe.
 - a. If debris is found, clean 27” overflow pipe with high pressure water jet and vacuum out debris.

Discharge 017 – Benton Street Chamber Outfall

This discharge is located in a parking lot next to the East River Wall west of the intersection of North Joliet Street and West Benton Street. Check for the following at this location and indicate Yes or No, comment on any action taken and initial and date inspection form. Refer to Figures 017-1 and 017-2 and inspection form.

Diversion Structure

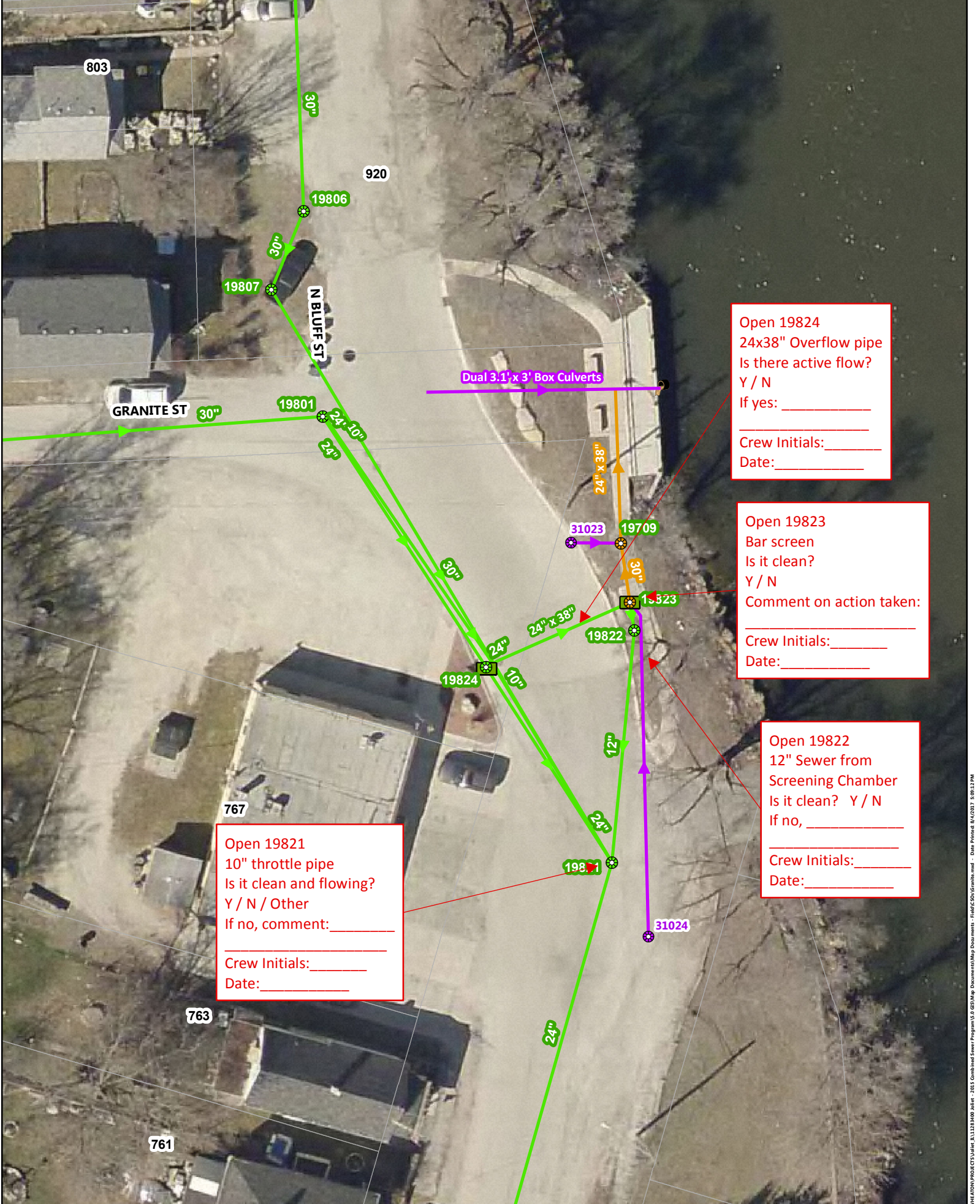
The diversion structure 2081 is located in the parking lot area west of the intersection of North Joliet Street and Benton Street. The sanitary sewage flow discharges through an 8” throttle pipe to manhole 2012.

1. Check for debris in the bottom of the diversion structure.
 - a. If debris is found, clean the bottom of the diversion structure with high pressure water jet and vacuum out debris.
2. Check for debris in the opening of the 8” throttle pipe between diversion structure 2081 and manhole 2012.
 - a. If debris is found, clean throttle pipe with high pressure water jet and vacuum out debris.
3. Check for any flow entering the 36” overflow pipe.
 - a. If flow is entering the 36” overflow pipe, notify Public Utilities office.

Overflow Pipe

The 36” overflow pipe exists to the East River Wall Storm Sewer.

1. Check for debris in diversion structure 2081 at the opening of the 36” overflow pipe.
 - a. If debris is found, clean 36” overflow pipe with high pressure water jet and vacuum out debris.

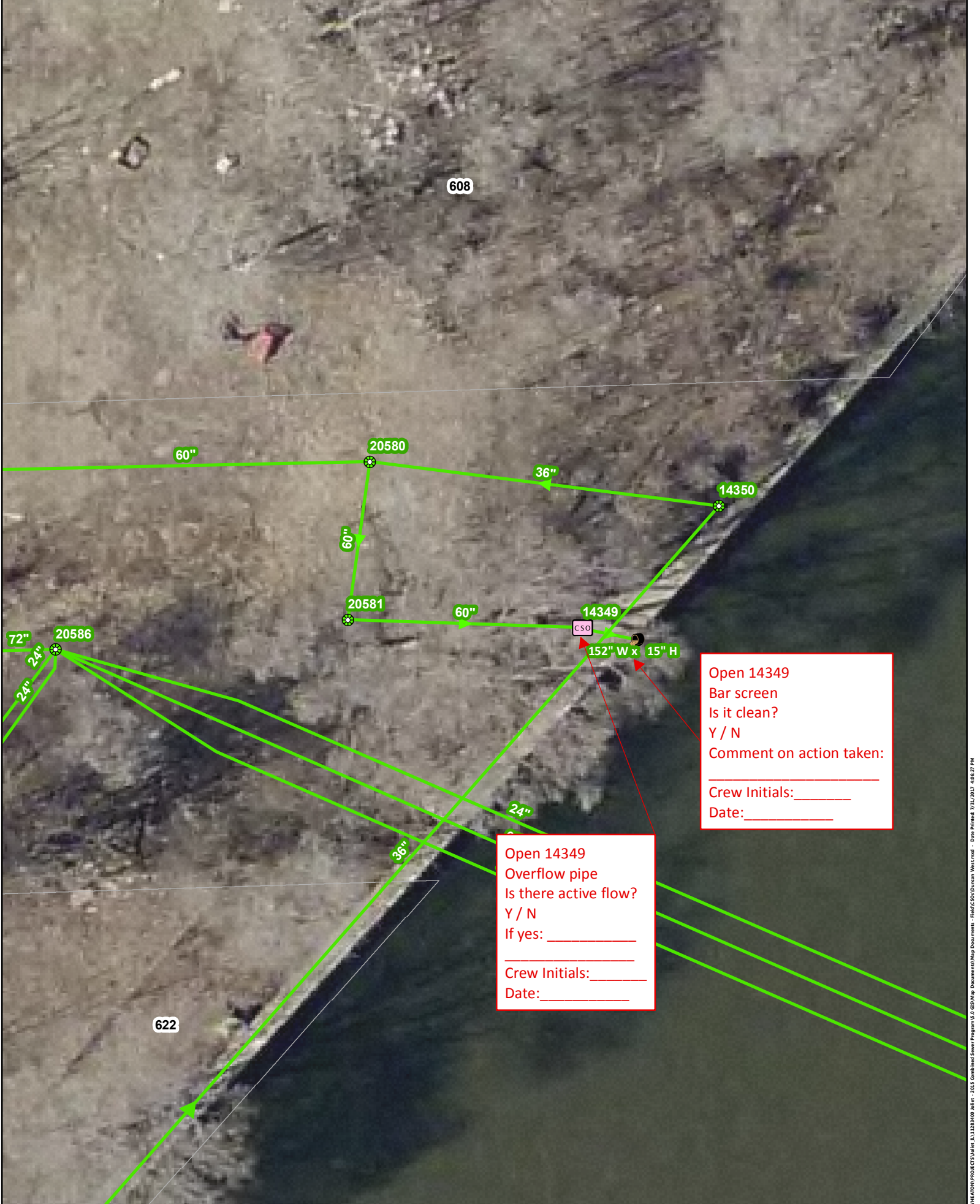


Open 19824
24x38" Overflow pipe
Is there active flow?
Y / N
If yes: _____
Crew Initials: _____
Date: _____

Open 19823
Bar screen
Is it clean?
Y / N
Comment on action taken: _____
Crew Initials: _____
Date: _____

Open 19822
12" Sewer from
Screening Chamber
Is it clean? Y / N
If no, _____
Crew Initials: _____
Date: _____

Open 19821
10" throttle pipe
Is it clean and flowing?
Y / N / Other
If no, comment: _____
Crew Initials: _____
Date: _____

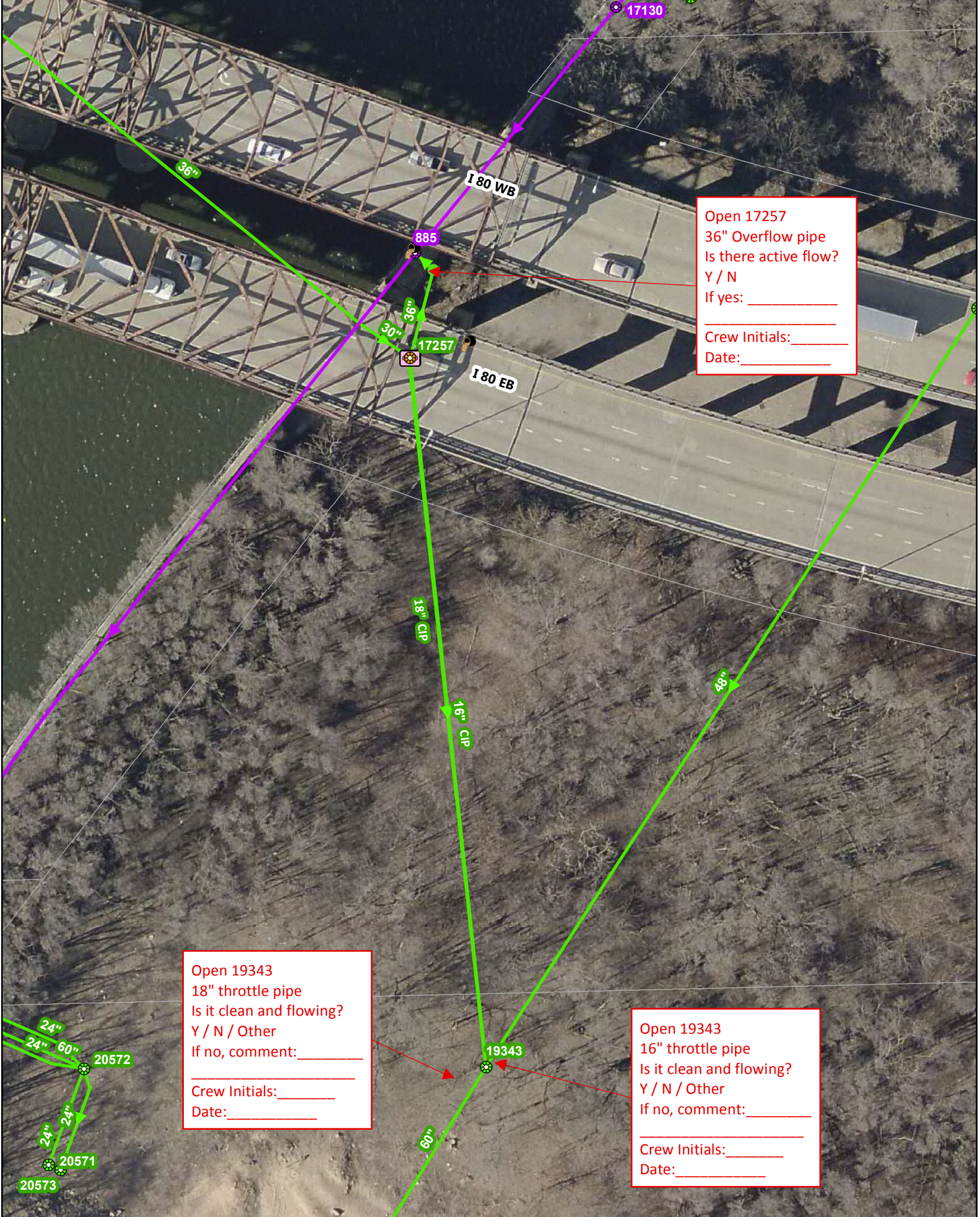


Open 14349
 Bar screen
 Is it clean?
 Y / N
 Comment on action taken:

 Crew Initials: _____
 Date: _____

Open 14349
 Overflow pipe
 Is there active flow?
 Y / N
 If yes: _____

 Crew Initials: _____
 Date: _____



Open 17257
 36" Overflow pipe
 Is there active flow?
 Y / N
 If yes: _____
 Crew Initials: _____
 Date: _____

Open 19343
 18" throttle pipe
 Is it clean and flowing?
 Y / N / Other
 If no, comment: _____
 Crew Initials: _____
 Date: _____

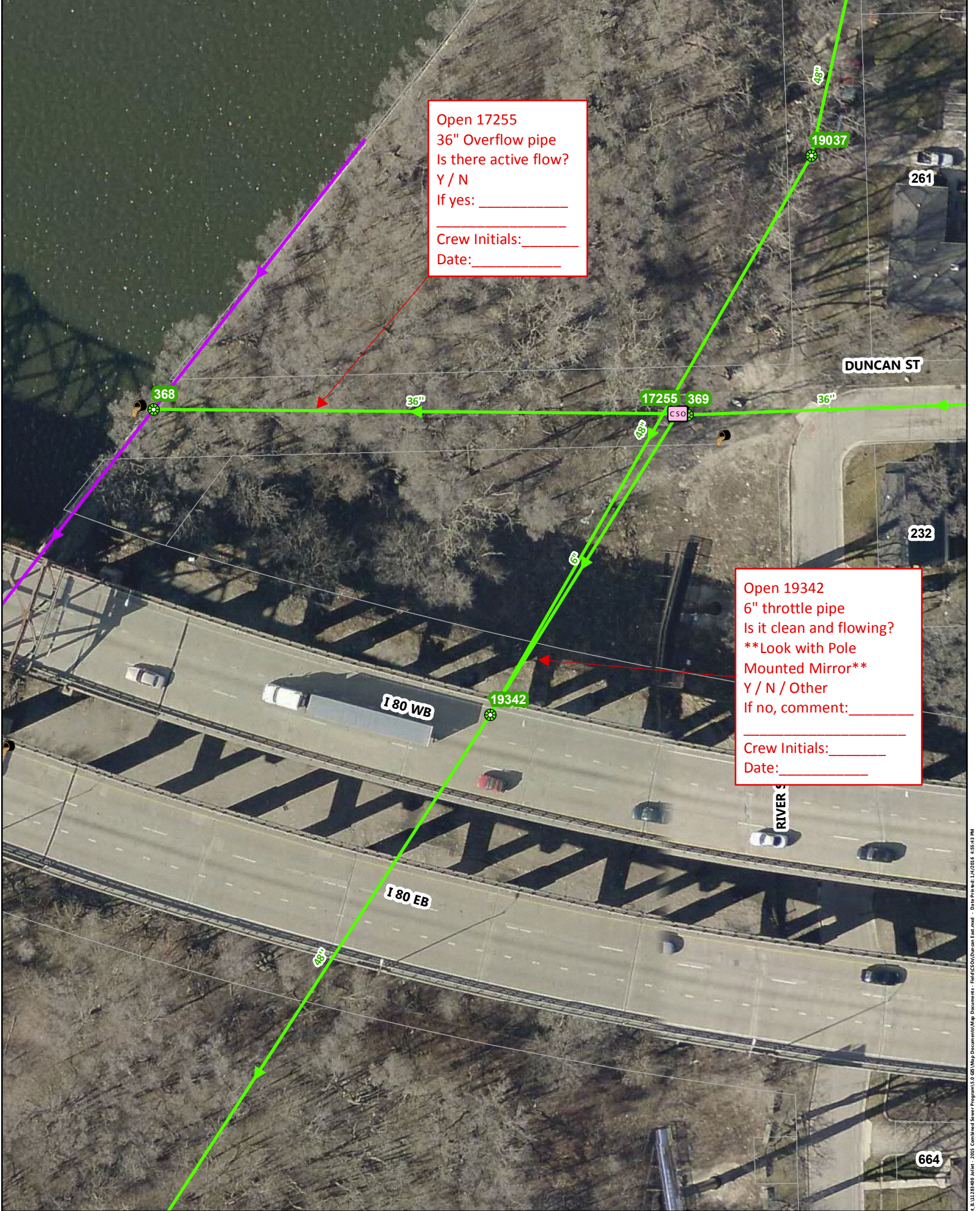
Open 19343
 16" throttle pipe
 Is it clean and flowing?
 Y / N / Other
 If no, comment: _____
 Crew Initials: _____
 Date: _____

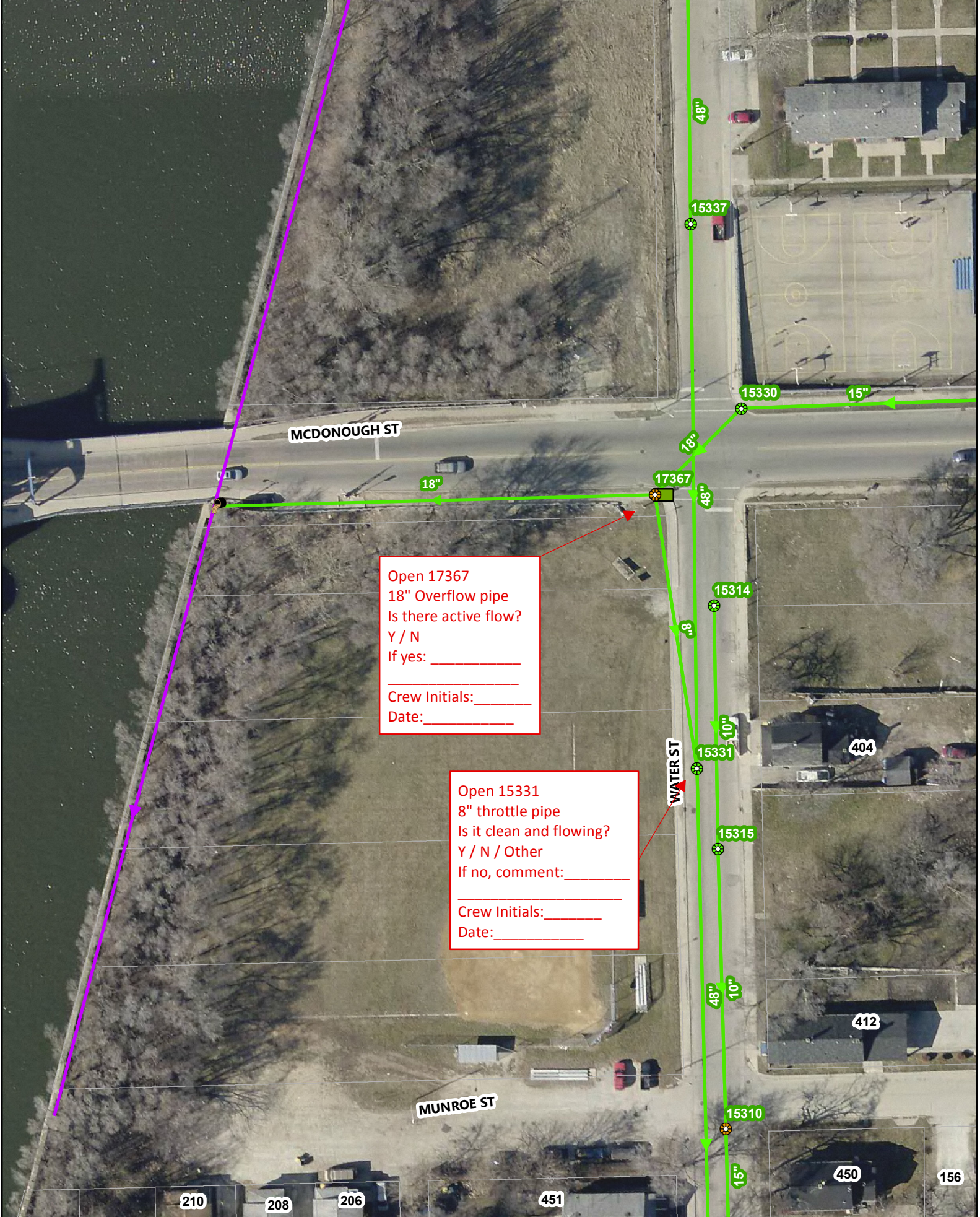
Open 17255
 36" Overflow pipe
 Is there active flow?
 Y / N
 If yes: _____

 Crew Initials: _____
 Date: _____

Open 19342
 6" throttle pipe
 Is it clean and flowing?
 **Look with Pole
 Mounted Mirror**
 Y / N / Other
 If no, comment: _____

 Crew Initials: _____
 Date: _____



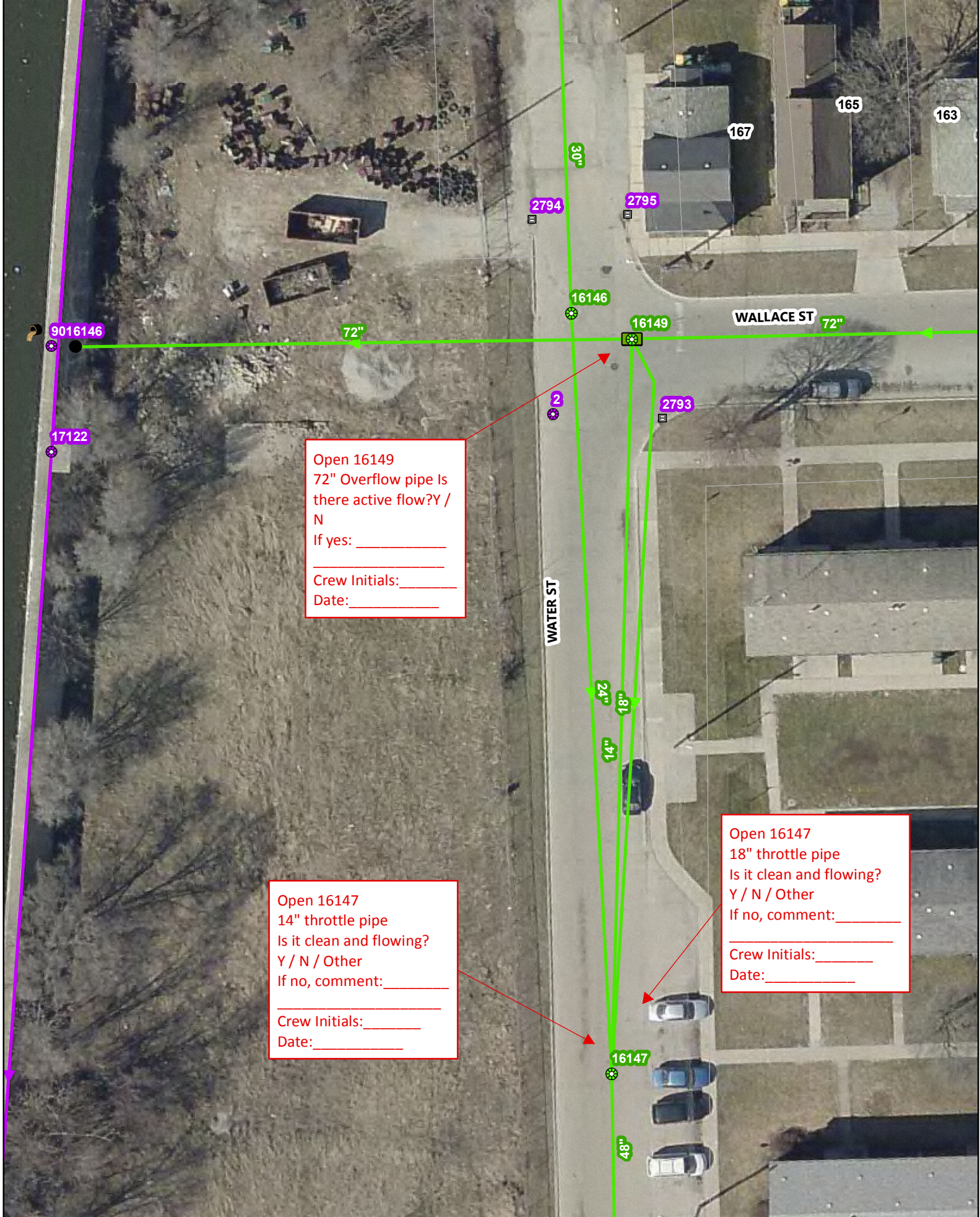


Open 17367
 18" Overflow pipe
 Is there active flow?
 Y / N
 If yes: _____

 Crew Initials: _____
 Date: _____

Open 15331
 8" throttle pipe
 Is it clean and flowing?
 Y / N / Other
 If no, comment: _____

 Crew Initials: _____
 Date: _____



Open 16149
 72" Overflow pipe Is there active flow? Y / N
 If yes: _____
 Crew Initials: _____
 Date: _____

Open 16147
 14" throttle pipe
 Is it clean and flowing?
 Y / N / Other
 If no, comment: _____
 Crew Initials: _____
 Date: _____

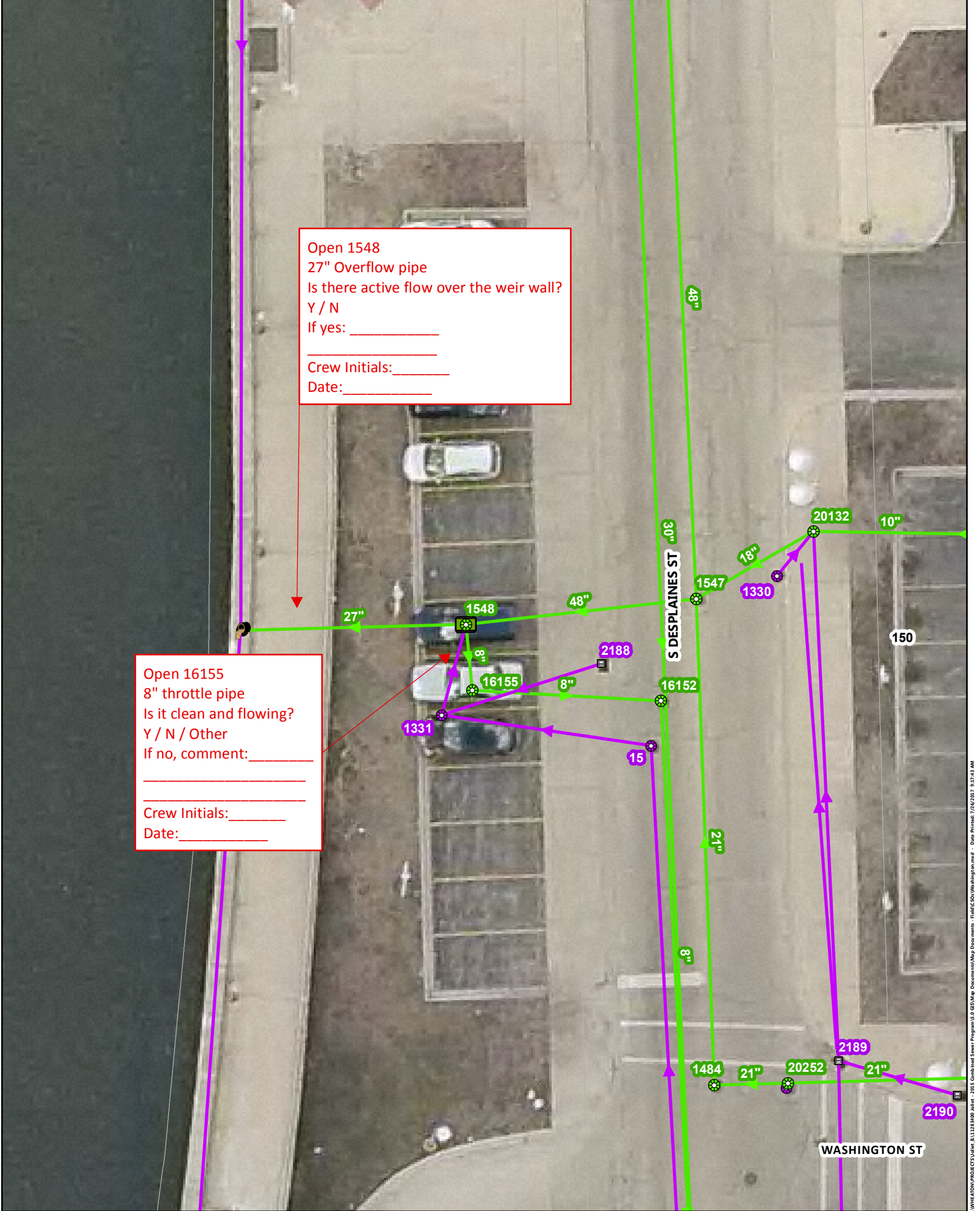
Open 16147
 18" throttle pipe
 Is it clean and flowing?
 Y / N / Other
 If no, comment: _____
 Crew Initials: _____
 Date: _____

Open 1548
 27" Overflow pipe
 Is there active flow over the weir wall?
 Y / N
 If yes: _____

 Crew Initials: _____
 Date: _____

Open 16155
 8" throttle pipe
 Is it clean and flowing?
 Y / N / Other
 If no, comment: _____

 Crew Initials: _____
 Date: _____



Open 2081
 36" Overflow pipe
 Is there active flow?
 Y / N
 If yes: _____

 Crew Initials: _____
 Date: _____

Open 2012
 8" throttle pipe
 Is it clean and flowing?
 Y / N / Other
 If no, comment: _____

 Crew Initials: _____
 Date: _____



