ANNEX III – EXACT LOCATION AND DESIGN CONFIGURATION OF EACH DEPOSIT AND PHOTOGRAPHIC SURVEY OF THE EXISTENT SPACES ON THEIR SURFACE

Location map:

1. Zona Universitària

**General characteristics:** This deposit is situated underneath the Parc de Bederrida, a big parking lot behind the Faculty of Physics building. Hydrologically it is located in the upper zone of the basin of Riera Blanca. The deposit consists of three rectangular shaped (in plan) compartments that come into operation progressively, each compartment only starts being filled after the previous one is full. This tank has the capacity of 105,500 m³, which is the highest in Barcelona, equivalent to about 42 Olympic swimming pools. The Parc Central del Campus Sud is planned to be built on top of the roof slab, thus it is designed to support up to 2 meters of soil load in addition to the rail freight traffic.

**GPS coordinates:** 41°22'58.39"N / 2°7'5.41"E
Selection from photographic survey (Source: Author, 2010):
2. BORI I FONTESTÀ

General characteristics: This deposit is situated underneath the Bori i Fontestà Street, between Dr. Fleming and Ganduxer streets, and also below the unbuilt triangle at the Ganduxer intersection and part of the Parc de Piscines i Esports. Hydrologically it is located in the upper watershed area of Diagonal-Barceloneta. The deposit consists of two compartments with different geometry in plan: a rectangular tank and a polygonal one adjacent to it. In terms of water intake, the rectangular compartment fills first until the water level reaches the height of the separation wall, then the water brims over to the second compartment. The tank has a total capacity of 71,000 m³, equivalent to about 27 Olympic swimming pools, with a maximum depth of 15 m. The Bori Fontestà Street is above the rectangular compartment. The existent gardens, including all their facilities like lighting, irrigation, etc., are on top of the polygonal tank.

GPS coordinates: 41°23'34.23"N / 2°8'14.76"E
Selection from photographic survey (Source: Author, 2010):
3. Parc Joan Miró

General characteristics: This deposit is situated underneath the Parc Joan Miró, next to the sidewalk Tarragona Street sidewalk, between the sculpture by Joan Miró and Diputació Street. Hydrologically it is located in the Zona Franca basin, which is the concentration point of the water from Numáncia-Tarragona. The tank has a total capacity of 55.000 m³ and consists of two parts: a shallower compartment that drains completely by gravity, and a deeper one, which has a part that can only be drained by pumping. The two compartments are separated by an internal spillway at the height of 19.70 m. In case of tank overflow, there are two emergency spillways at the height of 20.70 m. One sheds water to the Tarragona collector and the other to the Diputació collector.

GPS coordinates: 41°22'36.27"N /  2° 8'54.69"E
Selection from photographic survey (Source: Author, 2010):
4. DOCTORS DOLSA

General characteristics: This deposit is situated underneath the Jardins dels Doctors Dolsa in the side of Gran Via de Carles III, between Travessera de les Corts and Avda. Madrid. Hydrologically it is located in the upper zone of the basin of Riera Blanca. The deposit has a total capacity of 50,500 m³ and consists of two parts: a shallower compartment that drains completely by gravity, and a deeper one, which has a part that can only be drained by pumping. The two compartments are separated by an internal spillway. In case of tank overflow, there is another emergency spillway that sheds water behind the exit gates.

GPS coordinates: 41°22'52.89"N / 2°7'45.29"E
Selection from photographic survey (Source: Author, 2010):
5. Taulat

General characteristics: This deposit is situated underneath the Taulat Street. This is an anti-CSO tank, with the aim of achieving an improvement of the receiving environment. Additionally it provides a rain protection with a 10 year return period. Hydrologically, the location of the deposit covers four watersheds: Diagonal Mar, Riera d’Horta, La Catalana and Depuradora. The deposit, with a length of 640m, a width of 26m and a height of 4.5m, consists of three sections, all at the same level and separated by cleaning tanks. The three sections drain by pumping through a collector D1000mm to the sewage interceptor. In case of tank overflow, there is an emergency spillway that sheds water to the collector of the Prim Street.

GPS coordinates: 41°24’48.44”N / 2°13’17.15”E
Selection from photographic survey (Source: Author, 2010 and Google street viewer, 2010):
General characteristics: This deposit is situated underneath the existing football field of the Escola Industrial de Barcelona, on the intersection of Viladomat and Rosselló streets. Hydrologically it is located in the basin of Diagonal - Barceloneta. The tank is rectangular shaped in plan (94 by 54 meters), where the main axis is parallel to the Viladomat Street. The tank has a total capacity of 27,000 m³, equivalent to 10 Olympic swimming pools. During the heavy downpours of September 14th, 1999, it has filled to 96% of its capacity. Above the deposit a football field with artificial grass was built, which greatly improved the overall aesthetic appearance.

GPS coordinates: 41°23'13.77''N / 2° 8'53.20''E
Selection from photographic survey (Source: Author, 2010):
7. Parc Central Nou Barris

General characteristics: This deposit is situated underneath the Parc Central de Nou Barris. It is rectangular shaped in plan (except for a chamfered corner), with a length of 102 m and a width of 26.5 m. The average height of water is 5.3 m and it has a total capacity of 14,000 m³. The technical compartments, with a total length of 48 m and a width of 6.3 m, are also underground and adjacent to the deposit. Below them there is a groundwater regulation tank and the inlet/bypass collectors as well as the outlet collector. The inlet collectors are pipes with a diameter of 1800 mm and square sections of 1.80x1.80 m. Their total length is 159.06 m (Passeig d’Urrutia collector) and 14.15 m (Vilaiba dels Arcs collector).

GPS coordinates: 41°26'10.07"N / 2° 9'59.63"E
Selection from photographic survey (Source: Author, 2010):
General characteristics: This retention basin, or open sky reservoir, is integrated in Diagonal Mar’s park, inside a block surrounded by the streets Passeig de Taulat, Carrer de la selva de Mar, Carrer de Lull and Carrer de Josep Plà. Its irregular and geometrical form was designed by the architect Enric Miralles. The reservoir has a total capacity of 17,500 m³ and it is divided in two compartments.

GPS coordinates: 41°24'29.48"N / 2°12'51.02"E
Selection from photographic survey (Source: Author, 2010):
General characteristics: This retention basin, or open sky reservoir, is integrated in Poublenou’s park. It is located in-between Carrer de Carmen Amaya and Carrer de Salvador Espriu. It has a regular form which is not static once the water flow varies during the different seasons. When full, the reservoir has a total capacity of 1,400 m³.

GPS coordinates: 41°23′40.76″N / 2°12′14.32″E
Selection from photographic survey (Source: Author, 2010):
General characteristics: This deposit is situated in a private facility near the Plaza del Forum in order to reduce pollutant discharges to the sea during downpours. The tank consists of 2 compartments of different sizes interconnected through two anti return valves. The smaller compartment collects the rainwater from Parque del Sur, which is drained by gravity to the bigger one. The latter compartment, in addition to receiving the water from the first one, collects the rainwater from the Explanada del Forum and drains it to the treatment plant with the help of a pumping system. The deposit has a total capacity of 800 m3.

GPS coordinates: 41°24'29.93"N / 2°13'26.93"E
Note: During the times when the required field trip was made, the exact location of this deposit was not found. Only after it was realized that the deposit was inside a private facility and thus not only it had forbidden access but also it was not considered “public space” (one of the subjects of matter).
General characteristics: The deposit is situated underneath the Urgell Street, between Mallorca and Valencia streets. The tank, with a length of 90m, a width of 14m and a height of 12.5m, consists of a single compartment of about 16,000 m³, which drains by pumping, except for the upper 3,000 m³ that drain by gravity to the gate connecting to the outlet collector. In case of tank overflow, there is an emergency spillway that sheds water directly to the street collector.

GPS coordinates: 41° 23' 10.23" N / 2° 9' 11.85"
Selection from photographic survey (Source: Author, 2010):