Technical Presentation

ARGO Drain Project

A project funded by City of Los Angeles Proposition O and Los Angeles World Airports
Argo Drain – Project Overview

Project Cost: $36M
Clients: City of Los Angeles
  Dept of Public Work – Bureau of Engineering
  Dept of Public Works – LA Sanitation
  Los Angeles World Airports

Engineer of Record: AECOM
General Contractor: OHL USA
Construction Manager: PMCS Group
"We can no longer afford to let stormwater run off as pollution into our ocean. We must clean it, we must capture it and we must put it to good use."

Argo Drain Background

- Argo is a Best Management Practices (BMP) stormwater project located on LAX property. LAWA and LASAN entered into a 50-year Lease Agreement to allow the project to be constructed and operated.

- The Project will treat stormwater runoff from a 2,320-acre drainage area, including areas of LAX, that would normally discharge to the Pacific Ocean/Dockweiler Beach.

- Argo will capture approximate the first ¾-inch rainfall from the (i) Argo Drain, (ii) 8-foot by 9-foot box County of LA Drain #647, and (iii) 84-inch diameter City of LA Falmouth Drain, which discharge into Santa Monica.
The Project will treat stormwater runoff from a 2320-acre drainage area.
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Treatment Process

(1) Pre-treated to remove trash,
(2) Diverted to a pump station,
(3) Move into a clarifier to settle out suspended solids,
(4) Flow to a 250-foot diameter x 30-foot deep underground open bottom Infiltration Tank (IT) with an 8.1 million gallon capacity.
(5) Additional volume not handled by the IT is diverted to a set of 18 – 36” dia. X 100 ft deep wells.
Aerial View
Location of ARGO Channel And Low Flow Diversion Structure
Location of Tunnel Between ARGO Low Flow Diversion Structure and Pump Station – 42” RCP
Location of LA County Storm Drain Intercept and Low Flow Diversion
Location of Pump Station
Location of Tunnel Between Pump Station and Clarifier – 66” Steel Casing
Location of Clarifier
Location of Underground Infiltration Tank
Location of Infiltration Wells
TREATMENT PROCESS

TREATMENT PROCESS SECTION

UNDERGROUND INFILTRATION FACILITY (UIF) SECTION

PUMP STATION FACILITY SECTION

ARGO DRAIN SUBBASIN FACILITY PROJECT - SECTIONS
Argo Structure Low Flow Diversion
ARGO Structure – Low Flow Diverison to the Right
LA County Storm Drain Intercept and Low Flow Diversion
Screening and Trash Capture
Tunnel Operations
Pump Station Construction
SOE Install
Lift Pumps
Infiltration Tank – Post Tensioned
Infiltration Tank Backfill
Final Project Rendering
Interesting Data

• Approx. 68,000 cubic yards of soil exported out of site - equivalent to 7000 truck loads
• Approx. 9,500 cubic yards of concrete – equivalent to 1000 concrete trucks.
• Infiltration Tank concrete walls wrapped with approx. 4 miles of steel cable and post-tensioned to 18,000 lb force.
• 800 feet of tunneling under major roadways.
• Pump Station includes 3 vertical lift pumps each capable of lifting 3500 gallons per minute a height of 30 feet.
Conclusion

• Q and A

• If you need more info please feel free to contact me:
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• Happy Conference!