

PROJECT NAME : 205 BYPASS - Section 1
JOB NUMBER :
PROJECT DESCRIPTION : System B - Line B, Line B2 and B Laterals
ANALYSYS FREQUENCY : 100 Years
MEASUREMENT UNITS: ENGLISH

OUTPUT FOR ANALYSYS FREQUENCY of: 100 Years

Runoff Computation for Design Frequency.

Table with columns: ID, C Value, Area (acre), Tc (min), Tc Used (min), Intensity (in/hr), Supply Q (cfs), Total Q (cfs). Lists runoff data for various inlets from B-1 to OSB1.

On Grade Inlets Computation Data.

Table with columns: Inlet ID, Inlet Type, Total Q (cfs), Intercept Capacity (cfs), Allow Q Bypass (cfs), Actual Q (cfs), To Inlet ID, Required Length (ft), Actual Length (ft), Pondered Width (ft). Lists on-grade inlet data for inlets B-1 to B-14.

Sag Inlets Computation Data.

Table with columns: Inlet ID, Inlet Type, Length (ft), Grate Perim Area (ft) (sf), Total Q (cfs), Inlet Capacity (cfs), Total Head (ft), Pondered Width Left (ft), Pondered Width Right (ft). Lists sag inlet data for B-9, B-10, and OSB1.

Cumulative Junction Discharge Computations

Table with columns: Node I.D., Node Type, Weighted C-Value, Cumulat. Dr. Area (acres), Cumulat. Tc (min), Intens. (in/hr), User Supply Q (cfs), Additional Q in Node (cfs), Total Disch. (cfs). Lists cumulative discharge data for nodes B-1 through OUT.

Conveyance Configuration Data

Table with columns: Run#, Node I.D., Flowline Elev. (US, DS), Shape #, Span (ft), Rise (ft), Length (ft), Slope (%), n-value. Lists conveyance configuration data for runs 1 through 34.

Conveyance Hydraulic Computations. Tailwater = 519.000 (ft)

Table with columns: Run#, US Elev (ft), DS Elev (ft), Fr. Slope (%), Depth (Unif., Actual), Velocity (Unif., Actual), Q (cfs), Cap (cfs), Junc Loss (ft). Lists hydraulic computation data for runs 1 through 34.

* Super critical flow.

COMPUTATION SHEETS

- THIS OUTPUT FILE SHOWS RESULTS FOR ROCKWALL'S 100-YR DISCHARGE CONDITIONS FOR ENTIRE SYSTEM. HOWEVER, INLETS ARE SIZED AND PLACED BASED ON 25-YR CRITERIA, AND PIPES ARE DESIGNED BASED ON 100-YR CRITERIA.

- ALL COMPUTATIONS ARE BASED ON EXISTING WATERSHED CONDITIONS.

- JUNCTION LOSSES WERE DETERMINED BASED ON CITY OF ROCKWALL "VELOCITY HEAD LOSS COEFFICIENTS FOR CLOSED CONDUITS."

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City of Rockwall, Texas
205 BYPASS SECTION 1
HYDRAULIC DATA STORM DRAIN LINE B, LINE B2 AND B LATERALS - 100 YR FLOWS
TCB | AECOM
Unit: PW-DAL-FW, Scale: Horiz AS SHOWN, Vert: AS SHOWN, Date: 11/11/2009
Designed: SRR/SDB, Checked: TCB, Project No.: 60004153
Drawn: FG, Approved: TCB, Sheet: 79 of 217

RECORD DRAWING
This drawing is a compilation of the original sealed engineering drawing and modifications by addenda, change orders and information furnished by the contractor. Information shown that was provided by the contractor and others not associated with the design engineer cannot be verified for accuracy or completeness. Original sealed drawing is on file at the office of AECOM USA Group, Inc., TBPE REG. NO. F-3082

ORIGINAL DRAWING SEALED & SIGNED BY
Matthew L. Abbe, P.E.
TX NO. 92715