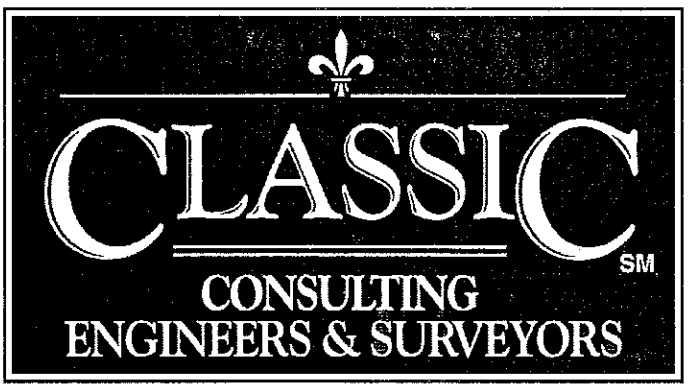

MASTER DEVELOPMENT DRAINAGE PLAN
FOR
MARKETPLACE AT INTERQUEST
AND
FINAL DRAINAGE REPORT
FOR
MARKETPLACE AT INTERQUEST FILING NO. 1 AND FILING NO. 2

APRIL 2007

PREPARED FOR:
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CLASSIC
CONSULTING
ENGINEERS & SURVEYORS

MASTER DEVELOPMENT DRAINAGE PLAN FOR
MARKETPLACE AT INTERQUEST AND
FINAL DRAINAGE REPORT FOR
MARKETPLACE AT INTERQUEST FILING NO. 1 AND FILING NO. 2

DRAINAGE REPORT STATEMENT

ENGINEER'S STATEMENT:
The attached drainage plan and report were prepared under my direction and supervision and are correct to the best of my knowledge and belief. Said drainage report has been prepared according to the criteria established by the City for drainage reports and said report is in conformity with the master plan of the drainage basin. I accept responsibility for any liability caused by any negligent acts, errors, or omissions on my part in preparing this report.

Kyle R. Campbell, Colorado P.E. #29794 — Date: 8.20.07

DEVELOPER'S STATEMENT:
I, the developer, have read and will comply with all of the requirements specified in this drainage report and plan.

Business Name: INTERQUEST MARKETPLACE, LLC

By:

Title:

Address: 111 S TEJON ST. SUITE 222

COLO SPRINGS, CO 80903

CITY OF COLORADO SPRINGS:
Filed in accordance with Section 7.7.906 of the Code of the City of Colorado Springs, 2001 as amended.

City Engineer — Date: AUGUST 21, 2007

Conditions:

CLASSIC
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ENGINEERS & SURVEYORS

MASTER DEVELOPMENT DRAINAGE PLAN FOR
MARKETPLACE AT INTERQUEST AND
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TABLE OF CONTENTS:

APPENDICES

DRAINAGE MAPS

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MASTER DEVELOPMENT DRAINAGE PLAN FOR MARKETPLACE AT INTERQUEST AND FINAL DRAINAGE REPORT FOR MARKETPLACE AT INTERQUEST FILING NO. 1 AND FILING NO. 2

PURPOSE

The purpose of this Master Development Drainage Plan (MDDP) and the Final Drainage Report (FDR) is to identify the existing drainage patterns and present improvements to safely route runoff both on-site and tributary flows through the site to existing identified improved and unimproved facilities.

GENERAL DESCRIPTION

The Marketplace at Interquest development is a phased commercial and hotel development located in northeastern area of the City of Colorado Springs. The development is located on the land that lies west of Voyager Parkway and north of Interquest Parkway and east of Interstate 25 and south of the Black Squirrel Creek. The development lies in the southern downstream portion of the Black Squirrel Drainage Basin and in a upstream portion of the Elkhorn Drainage Basin. The development will be constructed in phases. The total acreage subject to master planning covers approximately 258.7 acres.

The property subject to development is located in a portion of Section 20 of Township 12 South, Range 66 West of the 6th Principal Meridian in the City of Colorado Springs, County of El Paso, State of Colorado. The watershed contains areas within the City of Colorado Springs and unincorporated El Paso County. The total watershed area studied covers approximately 390 acres. The project site is shown on the Vicinity Map in the Appendix of this report.

The average soil condition reflects Hydrologic Group "A" (Blakeland) (11% of the overall site area) and Hydrologic Group "B" (Stapleton) (89% of the overall site area) as determined by the "Soil Survey of El Paso County Area", prepared by the Soil Conservation Service (see map in the Appendix of this report).

The site is drained by two drainage basins, the Black Squirrel drainage basin and the Elkhorn drainage basin. Within these two overall drainage basins, the runoff is divided into six sub-basins,

basins Elkhorn-3, Elkhorn-4, Elkhorn-5, Black Squirrel-1, Black Squirrel-2 and Black Squirrel-3. The existing drainage patterns of these basins are shown on the Existing Drainage Map in the appendix of this report.

The runoff from the Elkhorn-3 drainage basin discharges into an existing 24" RCP culvert acting as outlet control at a detention pond at the northeast corner of Interstate 25 and Interquest Parkway and continues to flow west into the Monument Creek Drainage Basin across the U.S. Air Force Academy property. The runoff from the Elkhorn-4 drainage basin discharges into an existing 24" RCP culvert under I-25 and continues to flow west into the Monument Creek Drainage Basin across the U.S. Air Force Academy property. The runoff from the Elkhorn-5 drainage basin discharges into an existing 24" RCP culvert under I-25 and continues to flow west into the Monument Creek Drainage Basin across the U.S. Air Force Academy property. The runoff from the Black Squirrel-1 drainage basin discharges into the Black Squirrel Creek at an approximate distance of 5600' upstream of the existing box culvert passing the Black Squirrel Drainage basin under Interstate 25. The runoff from the Black Squirrel-2 drainage basin discharges into the Black Squirrel Creek at an approximate distance of 4300' upstream of the existing box culvert passing the Black Squirrel Drainage basin under Interstate 25. The runoff from the Black Squirrel-3 drainage basin discharges into the Black Squirrel Creek at an approximate distance of 570' upstream of the existing box culvert passing the Black Squirrel Drainage basin under Interstate 25.

The Master Development Drainage Plan Update (MDDP) portion of this report is divided into three different development conditions. The conditions analyzed were: Existing Condition, Fully Developed Condition and the Filing No. 1 & 2 Interim Condition. The Existing Condition development stage is how the basin functions as of the time of this report, April 2007. The Fully Developed Condition stage is how the basin is projected to function once the overall development is fully built. The Filing No. 1 & 2 Interim Condition is how the basin is projected to function once these phases of development are completed. Detailed descriptions, calculations and drainage maps describing these three conditions follow.

The Final Drainage Report Filing No. 1 & 2 portion of this report specifies smaller, more detailed drainage basins associated with the first phase of construction. A drainage map showing these basins, design points, and pipe runs is also found in the appendix.

HYDROLOGY / HYDRAULICS

The hydrologic methods used to evaluate the drainage basin are consistent with the methods outlined in the City/County Storm Drainage Criteria manual. Topography for the site was compiled at a two-foot contour interval and a horizontal scale of one inch to 200-feet. This topography was used to verify the onsite sub-basin boundaries. Offsite sub-basin boundaries were determined using the referenced reports, the City of Colorado Springs FIMS mapping base, and the USGS quadrangle maps for the area.

Peak discharges for Existing, Fully Developed and Filing No. 1 & 2 Interim Conditions were determined for the 2, 5, 10, 25, 50 and 100-year recurrence intervals. The 24-hour storm duration was modeled using a SCS method Type IIA rainfall distribution. The software used to model the drainage system was PondPack 10.0. On-site storm facilities associated with Filing No. 1 are sized using the Modified Rational Method to provide a more conservative design for storm runoff interception and conveyance (See Appendix for Calculations). The SCS analysis is completed to prove the functionality of the overall drainage basin and conformance of release rates to prior drainage studies (i.e. D.B.P.S. and M.D.D.P.). All of the drainage maps and majority of the discussion within this report will reference the SCS calculated flow quantities.

Curve numbers for the sub-watersheds used in this update are consistent with the values used in previous references and the City of Colorado Springs Drainage Criteria. The curve numbers for the existing and developed sub-basins were determined by measurement of the impervious areas off of the topographic mapping referenced above. SCS curve numbers in this report are established as being a portion Cn=98 (impervious areas), Cn=61 (undeveloped areas) and Cn=69 (graded and grassed developed areas) per City of Colorado Springs Drainage Criteria Manual, Table 5-5, Type B soils. Times of concentrations in this report are calculated assuming an average overland flow of 100' for undeveloped areas and 50' for developed areas at 2% slope and the balance of the flow length as channel flow at 3% slope. This produces times of concentrations consistent with values in previous reports. The calculations for each basin are in the appendix of this report. These slopes are typical for the area subject to master planning.

Included in the appendix of this report is a copy of a letter from the Air Force Academy to the City of Colorado Springs dated November 30, 2000. The letter addresses concerns from increased storm water runoff from upstream basins to the Academy property. The letter states: "Development occurring upstream of the Academy shall ensure that peak flows for the 2-, 5-, 10-, 50- and 100- year storm frequencies are not increased over historical "undeveloped" flows. Proposed development occurring upstream of the Academy must adequately demonstrate that storm water facilities (i.e., detention / retention ponds) will function in conjunction with other facilities within drainage and not increase peak flows for the frequencies listed above or adversely impact water quality". This criterion has been adhered to in this study for the subject site.

EXISTING CONDITIONS

All off-site land that produces storm runoff tributary to the proposed site is modeled in this report using the SCS drainage analysis method. The majority of the reference drainage reports for the existing developments have used the Modified Rational drainage analysis method. This creates a discrepancy in flow quantities that can be seen when directly comparing flow values at similar design points. The Modified Rational analysis gives more conservative (higher) flow values.

ELKHORN-3 DRAINAGE BASIN

Basin O2B (Q_5= 1.71 cfs, Q_{100}= 13.24) is 12.4 acres in area. The overall area of this sub-basin is 44.6 acres in area. The runoff is diverted into the Elkhorn-3 Basin from the overflow above an existing 24" culvert draining into the Elkhorn-1 basin. The "Master Development Drainage Plan Update, Fairlane Technological Park," by Kiowa Engineering (last revised February 2001), quantifies the capacity of the existing 24" culvert as 35 cfs. Everything more than 35 cfs will overtop and flow into the Elkhorn-3 Basin. This report models this by using an area of 12.4 acres, which produces the correct amount of excess runoff that will reach the proposed site. The overflow runoff from this basin will sheet flow into an existing drainage channel (Conveyance 1) north of New Life Drive, flowing to the west to a point at Design Point 1. Basin O2B is an undeveloped parcel. Any future development of this basin will require that the developed runoff be detained to historic flow rates.

Basin EX-A (Q_5= 1.74 cfs, Q_{100}= 12.83) is 10.5 acres in area. The runoff from this basin will sheet flow into an existing drainage channel (Conveyance 1) north of New Life Drive, flowing to the west to a point at Design Point 1. Basin EX-A is an undeveloped parcel. Any future development of this basin will require that the developed runoff be detained to historic flow rates.

Basin EX-B, the International Bible Society Filing No. 1 site, (Q_5= 11.21 cfs, Q_{100}= 26.58 cfs) is 7.1 acres. Runoff from this basin will sheet flow into the 'IBS' detention pond located at the southwest corner of the basin. The design for this pond is discussed in Reference 11, 'Preliminary and Final Drainage Report for International Bible Society Filing No. 1', prepared by URS Consultants, dated August 1988. Pond design volumes and outlet releases are taken from this reference and used in this report. The Final Drainage Report for the International Bible Society uses the Modified Rational calculation method. Therefore the values calculated within this report (SCS method) do not match the existing report. However, the basin and pond has been modeled exactly per the original design and report.

In the referenced report, the historic 100 year undeveloped flow at the pond outlet is calculated to be 13.9 cfs. After the development of the site, the flow into the pond is 27.7 cfs and restricted to 4.0 cfs at the ponding elevation of 6692.6. This report models the developed inflow into the pond as (Q_5= 11.21 cfs, Q_{100}= 26.58 cfs). This report models the restricted flows from the pond as (Q_5= 2.03 cfs, Q_{100}= 2.78 cfs), 100 year ponding elevation = 6790.03. The restricted flows from the detention pond (Conveyance 2) combine with Conveyance 1 at Design Point 1 (Q_5= 4.18 cfs, Q_{100}= 24.02 cfs). At this location, an existing 36" RCP (Conveyance 3) will accept both the 5-yr. and 100-yr. flows. Conveyance 3 routes the flows to Design Point 2, the west side of Jet Stream Drive.

Basin EX-C1 (Q_5= 0.84 cfs, Q_{100}= 1.43 cfs), a portion of the Jet Stream Drive right-of-way north of New Life Drive is 0.27 acres in area. The runoff from this basin sheet flows in Jet Stream Drive to an existing inlet near the intersection of Jet Stream Drive and New Life Drive. This inlet conveys flows to the existing 36" pipe, modeled as Design Point 2. This basin, as well as the following 4 basins, has most recently been studied in the "Preliminary/Final Drainage Report for New Life Church Filing No. 3," by JR Engineering, dated December 2003. Basin information and modeling has been taken from this report.

Basin EX-C2 (Q_5= 1.22 cfs, Q_{100}= 2.22 cfs), a portion of the Jet Stream Drive right-of-way north of New Life Drive is 0.44 acres in area. The runoff from this basin sheet flows in Jet Stream Drive to an existing inlet near the intersection of Jet Stream Drive and New Life Drive. Design Point 2 (Q_5= 4.59 cfs, Q_{100}= 24.44 cfs) combines the runoff from the previous described upstream basins. At this location, an existing grass-lined channel (Conveyance 4) will convey the runoff west, to Design Point 3.

Basin PR-D (Q_5= 1.21 cfs, Q_{100}= 9.69 cfs), an undeveloped parcel to the north of New Life Drive between Voyager Parkway and Jet Stream Drive is 11.4 acres in area. The runoff from this basin sheet flows into an existing drainage channel along the north of New Life Drive (Conveyance 4) to Design Point 3 (Q_5= 5.58 cfs, Q_{100}= 33.57 cfs). Any future development of this basin will require that the developed runoff be detained to historic flow rates.

Basin EX-H (Q_5= 2.23 cfs, Q_{100}= 3.81 cfs), is a portion of the New Life Drive right-of-way of about 1.2 acres in area. Approximately 60% of the runoff from this basin is collected by an existing at-grade inlet, with the remainder continuing west then south down Voyager Pkwy. The intercepted storm runoff is routed via an existing storm pipe to the north and into the existing channel (Conveyance 4).

Basin EX-G (Q_5= 0.93 cfs, Q_{100}= 1.59 cfs) is a portion of the New Life Drive right-of-way of about 1.0 acre in area. Approximately 40% of the runoff from this basin is collected by an existing at-grade inlet, with the remainder continuing south down Voyager Pkwy. The intercepted storm runoff is routed via an existing storm pipe directly into the existing 36" storm within the intersection of Voyager and New Life Drive (Conveyance 5). Design Point 3a (Q_5= 7.10 cfs, Q_{100}= 33.87 cfs) represents the total flow coming into the site from this pipe. Conveyance 8 conveys the flows in a shallow grass lined channel across the basin O-3B area to Design Point 5.

Basin O-3B (Q_5= 7.27 cfs, Q_{100}= 58.28 cfs) is 70.5 acres in area and consists of undeveloped grassed areas. Runoff from Basin O-3B sheet flows across the basin site to an existing grass lined swale north of Interquest Parkway (Conveyance 7) and continues to Design Point 5. Basin O-3B is the

beginning point of the area subject to master planning. Basin O-3B is currently undeveloped as are all the other on-site sub-basins discussed in this report.

Basin VP-1 (Q_5= 2.43 cfs, Q_{100}= 5.12 cfs), the eastern half of the Voyager Parkway right-of-way north of Interquest Parkway and south of New Life Drive, is 1.2 acres in area. This basin has an overall drainage area of 2.3 acres, however as documented in previous studies and verified in the field, the existing curb inlet located at the northwest corner of the intersection of Interquest Parkway and Voyager Drive is undersized and approximately 1.2 acres of drainage area flows by the inlet. This runoff continues flowing west in the existing curb line / drainage swale along the northern edge of Interquest Parkway and eventually into the Elkhorn-3 drainage basin. The balance of the basin runoff (1.1 acres) will be captured into the existing storm sewer system and is conveyed south to the Elkhorn-1 drainage basin.

Basin IP-1 (Q_5= 2.61 cfs, Q_{100}= 5.52 cfs), the northern half of the Interquest Parkway right-of-way west of Voyager Parkway and east of Federal Drive, is 1.3 acres in area. This basin has an overall drainage area of 2.5 acres, however as documented in previous studies and verified in the field, the existing curb inlet located along the northern edge of paving of Interquest Parkway at the intersection of Interquest Parkway and Federal Drive is undersized. Approximately 1.3 acres of drainage area flows by the inlet and continues flowing in the existing curb line / drainage swale along the northern edge of Interquest Parkway and eventually into the Elkhorn-3 drainage basin. The balance of the basin runoff (1.2 acres) will be captured into the existing storm sewer system and is conveyed south to the Elkhorn-1 drainage basin. At this location (Design Point 4), an existing shallow partially paved partially grass lined channel (Conveyance 7) will accept both the 5-yr. and 100-yr. flows (Q_5= 4.77 cfs, Q_{100}= 10.40 cfs) and will convey the flows to Design Point 5 (Q_5= 14.52 cfs, Q_{100}= 87.99 cfs). Basin IP-2 represents the flow by from an existing inlet on Interquest Pkwy, similar to IP-1 and VP-1, that also collects at DP-5. At this location, an existing shallow grass lined channel (Conveyance 9) will accept both the 5-yr. and 100-yr. flows and convey the flows to Design Point 6.

Basin O-3C1 (Q_5= 2.04 cfs, Q_{100}= 16.06 cfs) is 16.4 acres in area and consists of undeveloped grassed areas. Runoff from Basin O-3C1 sheet flows across the basin site and basins SE-1 and AF-1 into the existing detention pond EK-3A at Design Point 6.

Basin SE-1 (Q_5= 0.94 cfs, Q_{100}= 6.66 cfs) is 5.0 acres in area. The basin is an existing undeveloped parcel separate from the subject site. Runoff from Basin SE-1 sheet flows across the basin site and basin AF-1 into the existing detention pond EK-3A at Design Point 6. Any future development of this basin will require that the developed runoff be detained to historic flow rates.

Basin AF-1 (Q_5= 1.96 cfs, Q_{100}= 14.45 cfs) is 11.6 acres in area consists of undeveloped grassed areas of a western portion of the Interstate 25 right-of-way north of Interquest Parkway and south of Black Squirrel Creek. The basin includes the existing detention pond EK-3A. The quantity of flow at Design Point 6 is Q_5= 18.37 cfs and Q_{100}= 112.59 cfs.

Design Point 6 represents the inflow into the existing detention pond EK-3A. This detention pond was planned and designed at the time of the construction of the interchange with Interstate 25 at Interquest Parkway. The design for this pond is discussed in Reference 8, 'Interstate 25 Fairlane Parkway Interchange - Final Hydraulic Report (Phase I), prepared by DMJM, Inc, dated August 26, 1998. In this reference the pond is referred to as Pond 'A'. Pond design volumes and outlet releases are taken from this reference and used in this report. In the reference, the historic 100-year flow at the pond is calculated to be 95 cfs, with the construction of Interquest Parkway (formerly know as Fairlane Parkway), the flows into the pond is 102 cfs and restricted to 22 cfs at ponding elevation 6611.33. The inflow developed from this report into the pond is 112.59 cfs for the 100-year event and restricted to 22.50 cfs at ponding elevation 6611.42, matching closely to the flows and ponding elevations of Reference 8. Reference 8 and subsequent memos state that the purpose of Pond A was to detain the increase flows from the construction of Interquest Parkway and the interchange with Interstate 25 to historic flow rates or the capacity of existing storm sewer conveyances under Interstate 25 whichever is less. The pond was not sized for any future development in the basin. The outlet control for the pond is an existing 24" RCP culvert that flows beneath the Interstate 25 northbound on-ramp. The basin runoff in the existing 100 year condition (22 cfs) is modeled to be significantly less than the historic flow for the basin (95 cfs) and within the capacity of the storm sewer system at the existing 24" RCP culvert (32 cfs) and is safely conveyed to the receiving Air Force Academy drainage system downstream eventually draining into Monument Creek.

ELKHORN-4 DRAINAGE BASIN

Basin O3C-2 (Q_5= 4.11 cfs, Q_{100}= 32.32 cfs) is 33.0 acres and consists of undeveloped grassed areas. Runoff from this basin will sheet flow across the basin area and across basin AF-2 to Design Point 8.

Basin AF-2 (Q_5= 3.33 cfs, Q_{100}= 24.76 cfs) is 20.5 acres and consists of undeveloped grassed areas of a western portion of the Interstate 25 right-of-way north of Interquest Parkway and south of Black Squirrel Creek. Runoff from this basin will sheet flow across the basin area to Design Point 8 (Q_5= 7.06 cfs, Q_{100}= 55.25 cfs), the existing 24" RCP culvert under Interstate 25. This point is analyzed as a detention pond to model the ponding at the culvert entrance. This ponding is referred to as 'Backwater Pond I25-4'. The restricted flows leaving the pond are: (Q_5= 4.65 cfs, Q_{100}= 22.78 cfs), 100 year ponding elevation = 6603.42. Reference 8 has established this point (Design Point 11 in Reference 8) as having a 100-year historic flow of 117 cfs for the basin at the inlet of the 24" RCP culvert. The basin flows conveyed by the culvert are less than the historic flow for the basin and is within the capacity (31.99 cfs) of the 24" RCP culvert and is safely conveyed to the receiving Air Force Academy drainage system downstream eventually draining into Monument Creek.

ELKHORN-5 DRAINAGE BASIN

Basin EK-1 (Q_5= 1.84 cfs, Q_{100}= 13.80 cfs) is 11.8 acres and consists of undeveloped grassed areas. Runoff from this basin will sheet flow across the basin area and across basin AF-3 to Design Point 10.

Basin AF-3 (Q_5= 2.56 cfs, Q_{100}= 19.17 cfs) is 16.4 acres and consists of undeveloped grassed areas of a western portion of the Interstate 25 right-of-way north of Interquest Parkway and south of Black Squirrel Creek. Runoff from this basin will sheet flow across the basin area to Design Point 10 (Q_5= 4.40 cfs, Q_{100}= 32.97 cfs), the existing 24" RCP culvert under Interstate 25. This point is analyzed as a detention pond to model the ponding at the culvert entrance. This ponding is referred to as 'Backwater Pond I25-5'. The restricted flows leaving the pond are: (Q_5= 2.49 cfs, Q_{100}= 18.88 cfs), 100 year ponding elevation = 6602.76. Reference 8 has established this point (Design Point 12 in Reference 8) as having a 100-year historic flow of 61 cfs for the basin at the inlet of the 24" RCP culvert. The basin flows conveyed by the culvert are less than the historic flow for the basin and is within the capacity (31.99 cfs) of the 24" RCP culvert and is safely conveyed to the receiving Air Force Academy drainage system downstream eventually draining into Monument Creek.

BLACK SQUIRREL – 1 DRAINAGE BASIN

Basin BS-1 (Q_5= 2.86 cfs, Q_{100}= 22.28 cfs) is 21.5 acres and consists of undeveloped grassed areas. Runoff from this basin will sheet flow across the basin area to Design Point 12 (Q_5= 2.86 cfs, Q_{100}= 22.28 cfs). At this location the flow is joined to the main channel flow of the Black Squirrel Creek and is conveyed approximately 5600' downstream to the existing culvert crossing under Interstate 25. The existing Black Squirrel Creek is currently an unimproved channel with a series of pond structures along the reach adjoining the northern edge of the subject property. The three sub-basins in the Black Squirrel drainage basin were analyzed at the location of the proposed discharge points of future detention ponds.

BLACK SQUIRREL – 2 DRAINAGE BASIN

Basin BS-2 (Q_5= 4.94 cfs, Q_{100}= 39.57 cfs) is 46.7 acres and consists of undeveloped grassed areas. Runoff from this basin will sheet flow across the basin area to Design Point 13 (Q_5= 4.94 cfs, Q_{100}= 39.57 cfs). At this location the flow is joined to the main channel flow of the Black Squirrel Creek and is conveyed approximately 4300' downstream to the existing culvert crossing under Interstate 25.

BLACK SQUIRREL – 3 DRAINAGE BASIN

Basin BS-3 (Q_5= 6.22 cfs, Q_{100}= 49.82 cfs) is 58.8 acres and consists of undeveloped grassed areas. Runoff from this basin will sheet flow across the basin area to Design Point 14 (Q_5= 6.22 cfs, Q_{100}= 49.82 cfs). At this location the flow is joined to the main channel flow of the Black Squirrel Creek and is conveyed approximately 570' downstream to the existing culvert crossing under Interstate 25.

FULLY DEVELOPED CONDITIONS (see "Developed Conditions Drainage Map)

ELKHORN-3 DRAINAGE BASIN

Basin EK-3A (Q_5= 54.02 cfs, Q_{100}= 99.80 cfs) is 20.2 acres and consists of future building, landscaping and parking lot flows. Runoff from this basin will sheet flow across the proposed parking lot and travel as sheet flow and curb and gutter flow into the future storm sewer system to Design Point 20 / Private Detention Pond EK-3C (Q_5= 54.02 cfs, Q_{100}= 99.80 cfs). The developed

flows are restricted by this pond (Q_5= 0.62 cfs, Q_{100}= 0.84 cfs), 100 year ponding elevation = 6706.19 with a 100 year storage volume of 4.94 acre-feet. The water quality volume required for the developed area in Basin EK-3A (20.2 acres of development) is 0.731 acre-feet. The water quality orifice is planned to be a metal plate attached to a 4' x 4' grated open top concrete riser, with an invert of 6698.00 and a top elevation 6707.00. The orifice plate will have two rows of 8 circular orifices with a diameter of 0.875 inch each, from elevation 6698.00 to 6700.50. The detention pond emergency spillway crest elevation would be 6707.00, above the 100-year ponding elevation, with a width of 32', with a flow depth of 1.0'. Any emergency spillway overflow would discharge into the existing curb line of Interquest Parkway and flow to the west eventually into the storm water detention pond EK-3A. Adding 2' of freeboard to the depth of emergency flow would yield a minimum crest elevation of 6707.00' + 1.0' + 2.0' = 6710.00. The outlet structure would be drained by a 36" RCP pipe at 2.0% slope, Conveyance 14 to Design Point 21 continuing in Conveyance 15, a 36" RCP to the west. As with all Private Detention Facilities within the proposed site, maintenance of such ponds and structures will be by the 'Interquest North Business Improvement District'. This pond will be built with the future development of Basin EK-3A and final design of the pond and outlet structure is subject to change.

Basin VP-2 (Q_5= 2.51 cfs, Q_{100}= 5.24 cfs), the eastern half of the Voyager Parkway right-of-way north of a proposed drive entrance to the site and south of New Life Drive, is 1.2 acres in area. The runoff from the basin sheet flows along the existing curb line of Voyager Parkway to the south flowing into Interquest Parkway. There is an existing inlet at the northwest corner of the Voyager/Interquest intersection, but only collects a portion of the flow. The remaining storm water continues to the west within Interquest Parkway to the next storm inlet (See Existing Conditions).

Basin IP-1 (Q_5= 2.60 cfs, Q_{100}= 5.53 cfs), the northern half of the Interquest Parkway right-of-way west of Voyager Parkway and east of Federal Drive, is 1.3 acres in area. This basin has an overall drainage area of 2.5 acres, however as documented in previous studies and verified in the field, the existing curb inlet located along the northern edge of paving of Interquest Parkway at the intersection of Interquest Parkway and Federal Drive is undersized and approximately 1.3 acres of drainage area flows by the inlet and continues flowing in the existing curb line along the northern edge of Interquest Parkway. The proposed construction of Federal Drive includes a sump / low point just north of Interquest Parkway. The storm flow-by from both basins VP-2 and IP-1 will collect at these

sump inlets proposed within Federal Drive. The ultimate point of discharge of this storm water is the same as in the existing condition, existing detention pond EK-3A. The basin runoff intercepted within the existing inlet in Interquest Pkwy. (1.2 acres) is conveyed south to the Elkhorn-1 Drainage Basin. The flow intercepted on the proposed site will be conveyed within the proposed storm system to the west, and is modeled at Design Point 22.

Basin EK-3B (Q_5= 22.55 cfs, Q_{100}= 41.45 cfs) is 8.3 acres and consists of future buildings, Federal Drive right-of-way, landscaping and parking lot flows. Runoff from this basin will sheet flow across the future parking lot and drives and travel as sheet flow and curb and gutter flow into the storm sewer system to Design Point 22 (Q_5= 27.97 cfs, Q_{100}= 52.69 cfs) combining with flows from Conveyance 15. At this point, a 48" RCP pipe (Conveyance 16) will accept both the 5-yr. and 100-yr. developed flows and convey them to Design Point 23.

Basin EK-3C (Q_5= 15.39 cfs, Q_{100}= 28.12 cfs) is 5.6 acres and consists of future building, landscaping and parking lot flows. Runoff from this basin will sheet flow across the future parking lot and drives and travel as sheet flow and curb and gutter flow into the storm sewer system to Design Point 23 (Q_5= 42.96 cfs, Q_{100}= 80.39 cfs) combining with flows from Conveyance 16. At this point, a 48" RCP pipe (Conveyance 17) will accept both the 5-yr. and 100-yr. developed flows and route them to Design Point 25/ Pond EK-3B.

Basin EK-3D (Q_5= 46.27 cfs, Q_{100}= 85.47 cfs) is 17.3 acres and consists of future building, Federal Drive right-of-way, landscaping and parking lot flows. Runoff from this basin will sheet flow across the proposed parking lot and drives and travel as sheet flow and curb and gutter flow into the proposed storm sewer system to a point where a 54" RCP pipe (Conveyance 18) will accept both the 5-yr. and 100-yr. developed flows and convey them to Design Point 24.

Basin EK-3E (Q_5= 40.92 cfs, Q_{100}= 75.06 cfs) is 15.0 acres and consists of future building, landscaping and parking lot flows. Runoff from this basin will sheet flow across the parking lot and drives and travel as sheet flow and curb and gutter flow into the storm sewer system to Design Point 24 (Q_5= 86.58 cfs, Q_{100}= 159.91 cfs) combining with flows from Conveyance 18. At this point, a 60" RCP pipe (Conveyance 19) will accept both the 5-yr. and 100-yr. developed flows and release them in Pond EK-3B, Design Point 25.

Basin EK-3F (Q_5= 20.62 cfs, Q_{100}= 37.67 cfs) is 7.5 acres and consists of future building, landscaping and parking lot flows. Runoff from this basin will sheet flow across the parking lot and drives and travel as sheet flow and curb and gutter flow into the storm sewer system to Design Point 25 (Pond EK-3B).

Basin EK-3G (Q_5= 9.50 cfs, Q_{100}= 17.47 cfs) is 3.5 acres and consists landscaping and private detention pond EK-3B areas. Runoff from basin EK-3G combines with basin EK-3F and conveyances 17 and 19 at Design Point 25, Detention pond EK-3B (Q_5= 159.25 cfs, Q_{100}= 294.78 cfs). The developed flows are restricted by this pond (Q_5= 12.73 cfs, Q_{100}= 79.95 cfs), 100 year ponding elevation = 6639.20 with a 100 year storage volume of 10.42 acre-feet. The water quality capture volume required for the developed area in basins EK-3B, EK-3C, EK-3D, EK-3E and EK-3F (53.7 acres of development) is 2.156 acre-feet. The detention pond size required for ½ the water quality capture volume and the 100 yr detention is 14.14 acre-feet. The pond will have a bottom elevation of 6626.00 and a top elevation of 6642.00. The starting water surface elevation for detention starts at an elevation of 6631.00, with the area between elevations 6626.00 to 6631.00 consisting of the 2.50' micro pool and ½ the WQCV. Pond inflow points will have rock-berm forbays with concrete lined bottoms for ease of cleaning. The water quality orifice is planned to be a metal plate attached to a 7' x 4' grated open top concrete riser. The bottom orifice will have an invert of 6629.00. The water quality orifice plate will have 3 rows of 16 circular orifices with a diameter of ¾" each, from elevation 6629.00 to 6634.25. There is a planned a 1.50' wide rectangular weir at invert 6634.25, to assist in draining the 5 year and higher storms. The detention pond emergency spillway crest elevation would be 6641.00, at the 100-year ponding elevation, with a width of 116', with a flow depth of 1.0'. Any emergency spillway overflow would discharge into the existing curb line of Interquest Parkway and flow to the west eventually into the storm water detention pond EK-3A. The outlet structure would be drained by a 48" RCP pipe at 0.5% slope, Conveyance 20 to Design Point 6. Detailed construction plans will be prepared and submitted to the City prior to any construction of the detention pond. As with all Private Detention Facilities within the proposed site, maintenance of such ponds and structures will be by the "Interquest North Business Improvement District".

Basin IP-2 (Q_5= 3.80 cfs, Q_{100}= 8.19 cfs), the northern half of the Interquest Parkway right-of-way west of Federal Drive, is 2.0 acres in area. This basin has an overall drainage area of 4.0 acres, however as documented in previous studies and verified in the field, the existing curb inlet located along the northern edge of paving of Interquest Parkway is undersized and approximately 2.0 acres of drainage area flows by the inlet and continues flowing in the existing curb line / drainage swale along the northern edge of Interquest Parkway flow towards the west into an existing shallow grass lined channel (Conveyance 9). Conveyance 9 routes the flows from DP-5 (IP-2 plus Pond EK-3B outfall) to Design Point 6, existing pond EK-3A, carrying flows of (Q_5= 8.75 cfs and Q_{100}= 91.13 cfs.

Basin SE-1 (Q_5= 0.94 cfs, Q_{100}= 6.65 cfs) is 5.0 acres in area. The basin is an existing undeveloped parcel separate from the subject site. Runoff from Basin SE-1 sheet flows into across the basin site and basin AF-1 into the existing detention pond EK-3A at Design Point 6. Any future development of this basin will require that the developed runoff be detained to historic flow rates.

Basin AF-1 (Q_5= 1.97 cfs, Q_{100}= 14.50 cfs) is 11.6 acres in area consists of undeveloped grassed areas of a western portion of the Interstate 25 right-of-way north of Interquest Parkway and south of Black Squirrel Creek. The basin includes the existing detention pond EK-3A. Runoff from Basin SE-1 sheet flows into across the basin site and basin AF-1 into the existing detention pond EK-3A at Design Point 6 (Q_5= 9.22 cfs, Q_{100}= 101.13 cfs).

Design Point 6 represents the inflow into the existing detention pond EK-3A. This detention pond was planned and designed at the time of the construction of the interchange with Interstate 25 at Interquest Parkway. The design for this pond is discussed in Reference 8, 'Interstate 25 Fairlane Parkway Interchange - Final Hydraulic Report (Phase I), prepared by DMJM, Inc, dated August 26, 1998. In this reference the pond is referred to as Pond 'A'. Pond design volumes and outlet releases are taken from this reference and used in this report. As stated in Reference 8 the construction of Interquest Parkway (formerly know as Fairlane Parkway), the flow into the pond is 102 cfs and is restricted to 22 cfs at ponding elevation 6611.33. The fully developed flow into the pond (calculated in this report) is 101.13 cfs for the 100 year event and restricted to 22.26 cfs at ponding elevation 6611.38, matching closely to the flows and ponding elevations of just the Interquest Parkway road being developed and routed through the pond in Reference 8. The restricted outflows of the pond for the fully developed 100-year condition (22.26 cfs) is modeled to be significantly less than the historic

flow for the basin (95 cfs) and within the capacity of the storm sewer system at the existing 24" RCP culvert (31.99 cfs) and is safely conveyed to the receiving Air Force Academy drainage system downstream eventually draining into Monument Creek. Detention Pond EK-3A is not planned to be modified in volume or outlet control from its present condition. Detention Ponds EK-3B and EK-3C provide the storage volume and outlet configuration to achieve the flow rates described above.

ELKHORN-4 DRAINAGE BASIN

Basin EK-4A (Q_5= 30.06 cfs, Q_{100}= 54.84 cfs) is 10.9 acres and consists of building, landscaping and parking lot flows. Runoff from this basin will sheet flow across the proposed parking lot and drives and travel as sheet flow and curb and gutter flow into the proposed storm sewer system to Design Point 26 (Q_5= 30.06 cfs, Q_{100}= 54.84 cfs). Design Point 26 is the inflow into Private Detention pond EK-4. The developed flows are restricted by this pond (Q_5= 2.44 cfs, Q_{100}= 30.64 cfs), 100 year ponding elevation = 6637.85 with a 100 year storage volume of 1.71 acre-feet. A plunge pool at the pond outlet pipe, prior to the property line, will be installed to better release these restricted flows at a slower rate over a larger length. This pool will be about 2.0' in depth and release water over a length of about 45'. This will help prevent erosion and maintain drainage patterns more equivalent to historic conditions. The water quality volume required for the developed area in basin EK-4 (10.9 acres of development) is 0.438 acre-feet. The outlet structures will typically be a metal plate attached to a 7' x 4' grated open top concrete riser, with an invert of 6632.80 and a top elevation 6637.45. The orifice plate will have 1 row of 5 circular orifices with a diameter of 1.25 inch each, from elevation 6632.8 to 6634.6. The detention pond emergency spillway crest elevation would be 6639.00, just above the 100-year ponding elevation, with a width of 18', with a flow depth of 1.0'. The outlet structure would be drained by a 30" RCP pipe at 1.0% slope, Conveyance 21 to Design Point 27. At the site property line at Design Point 27, the existing flows at this point (Basin O-3C2) (Q_5= 4.11 cfs, Q_{100}= 32.32 cfs). The fully developed flows released from pond EK-4 would be (Q_5= 2.44, Q_{100}= 30.64. The over detention and outlet pipe plunge pool is to compensate for the concentrating of the developed flow. Detailed construction plans for the detention pond and outlet system will be prepared and submitted to the City prior to construction of the pond.

Basin AF-2 (Q_5= 3.33 cfs, Q_{100}= 24.76 cfs) is 20.5 acres and consists of undeveloped grassed areas of a western portion of the Interstate 25 right-of-way north of Interquest Parkway and south of Black Squirrel Creek. Runoff from this basin will sheet flow across the basin area to Design Point 8 (Q_5=

4.52 cfs, Q_{100}= 52.65 cfs), the existing 24" RCP culvert under Interstate 25. This point is analyzed as a detention pond to model the ponding at the culvert entrance. This ponding is referred to as 'Backwater Pond I25-4'. The restricted flows leaving the pond are: (Q_5= 3.38 cfs, Q_{100}= 21.10 cfs), 100 year ponding elevation = 6603.12. Reference 8 has established this point (Design Point 11 in Reference 8) as having a 100-year historic flow of 117 cfs for the basin at the inlet of the 24" RCP culvert. The basin flow conveyed by the culvert in the fully developed condition (21.10 cfs – 100 yr.) is significantly less than the historic flow (117 cfs) for the basin and is within the capacity (31.99 cfs) of the 24" RCP culvert and is safely conveyed to the receiving Air Force Academy drainage system downstream eventually draining into Monument Creek.

ELKHORN-5 DRAINAGE BASIN

Basin EK-5A (Q_5= 0.34 cfs, Q_{100}= 2.00 cfs) is 1.2 acres and consists of developed landscaped areas. Runoff from this basin will sheet flow across the basin area and across basin AF-3 to Design Point 10.

Basin AF-3 (Q_5= 2.56 cfs, Q_{100}= 19.17 cfs) is 16.4 acres and consists of undeveloped grassed areas of a western portion of the Interstate 25 right-of-way north of Interquest Parkway and south of Black Squirrel Creek. Runoff from this basin will sheet flow across the basin area to Design Point 10 (Q_5= 2.66 cfs, Q_{100}= 20.12 cfs), the existing 24" RCP culvert under Interstate 25. This point is analyzed as a detention pond to model the ponding at the culvert entrance. This ponding is referred to as 'Backwater Pond I25-5'. The restricted flows leaving the pond are: (Q_5= 1.32 cfs, Q_{100}= 14.29 cfs), 100 year ponding elevation = 6602.16. Reference 8 has established this point (Design Point 12 in Reference 8) as having a 100-year historic flow of 61 cfs for the basin at the inlet of the 24" RCP culvert. The basin flows conveyed by the culvert are less than the historic flows for the basin and is within the capacity (31.99 cfs) of the 24" RCP culvert and is safely conveyed to the receiving Air Force Academy drainage system downstream eventually draining into Monument Creek.

BLACK SQUIRREL – 1 DRAINAGE BASIN

In the fully developed condition, the drainage area in basins O2B, EX-A, EX-B, EX-C1, EX-C2, EX-G, EX-H, and PR-D are proposed to be diverted to the Black Squirrel -1 drainage basin. These additional flows will be accounted for in the sizing of the detention pond BS-1. The purpose of this change is to relieve the Elkhorn -3 drainage basin, which has limited capacities and divert the above

reference areas (Q_5= 7.10 cfs, Q_{100}= 33.87 cfs) into the Black Squirrel Creek. The drainage from these areas is contained in an existing 36" RCP, Conveyance 5. Any future development of the parcels in this basin area must provide adequate detention and water quality measures to keep the released flow rates at or below the historic flow rates. The drainage area being diverted is on the lower part of the much larger Black Squirrel drainage basin. As part of the subject site development, there are planned major improvements for the reach of the Black Squirrel Creek between Interstate 25 and Voyager Parkway including channel widening, drop structures and other erosion control measures. Please see "Final Design Report for Allison Valley On-Site Reaches of Black Squirrel Creek and Middle Tributary Creek Channel Improvements," by Classic Consulting, June 2007 for specifics.

The Existing Conditions portion of this report details the drainage characteristics of the basins mentioned above and development of the proposed site does not change any off-site drainage patterns. Therefore, Design Points 1, 2, 3, & 30 are the same in the ultimate developed conditions as in the existing conditions. Any future development of this basin will require that the developed runoff be detained to historic flow rates. Conveyance 25 represents the proposed 36" storm main that connects to the existing main and conveys the flows to the west within New Life Drive.

Basin BS-1A (Q_5= 41.52 cfs, Q_{100}= 76.49 cfs) is 15.4 acres and consists of future building, landscaping, New Life Drive extension and parking lot flows. Runoff from this basin will sheet flow across the parking lot and drives and travel as sheet flow and curb and gutter flow into the storm sewer system to Design Point 31 (Q_5= 47.97 cfs, Q_{100}= 96.23 cfs) combining with flows from Conveyance 25. At this point, a 54" RCP pipe (Conveyance 26) will accept both the 5-yr. and 100-yr. developed flows and route them to Design Point 32/ Pond BS-1..

Basin BS-1B (Q_5= 38.56 cfs, Q_{100}= 71.02 cfs) is 14.3 acres and consists of future building, landscaping and parking lot flows. Runoff from this basin will sheet flow across the parking lot and drives and travel as sheet flow and curb and gutter flow into a future storm sewer system to Design Point 32.

Basin BS-1C (Q_5= 40.76 cfs, Q_{100}= 74.76 cfs) is 15.0 acres and consists of future building, landscaping and parking lot flows. Runoff from this basin will sheet flow across the parking lot and

drives and travel as sheet flow and curb and gutter flow into the storm sewer system (48" RCP, Conveyance 27") to Design Point 32 (Q_5= 126.40 cfs, Q_{100}= 239.38 cfs)

Basin BS-1D (Q_5= 1.40 cfs, Q_{100}= 9.59 cfs) is 6.8 acres in area is a portion of the basin that will not be developed and will bypass Detention Pond BS-1. Runoff from this basin will drain to Design Point 12.

Design Point 32 is the inflow into Public Detention Pond BS-1. The developed flows are restricted by this pond (Q_5= 4.67 cfs, Q_{100}= 57.62 cfs), 100 year ponding elevation = 6676.16 with a 100 year storage volume of 9.92 acre-feet. The water quality volume required for the developed area in basin BS-1 (44.7 acres of development) is 1.795 acre-feet. The detention pond size required for ½ the water quality capture volume and the 100 yr detention is 15.98 acre-feet. The pond will have a bottom elevation of 6666.00 and a top elevation of 6680.00. The starting water surface elevation for detention starts at an elevation of 6669.00, with the area between elevations 6666.00 to 6680.00 consisting of the 2.50' micro pool and ½ the WQCV. Pond inflow points will have rock-berm forbays with concrete lined bottoms for ease of cleaning. The water quality orifice is planned to be a metal plate attached to a 7' x 4' grated open top concrete riser. The bottom orifice will have an invert of 6669.50. The water quality orifice plate will have 2 rows of 11 circular orifices with a diameter of 1" each, from elevation 6669.50 to 6673.25. There is a planned a 2.00' rectangular weir at invert 6673.25, to assist in draining the 5 year and higher storms. The detention pond emergency spillway crest elevation would be 6679.00, at the 100-year ponding elevation, with a width of 100', with a flow depth of 1.0'. This detention pond has been sized to contain the 100 yr storm with minimal use of the spillway to prevent erosion of the Black Squirrel Creek Channel improvements . In the event of total outlet structure failure 11.47 cfs will spill over the spillway into Black Squirrel Creek while to remaining flows are contained within the detention facility. The outlet structure would be drained by a 36" RCP pipe. Conveyance 28 to Design Point 12 (Q_5= 4.67 cfs, Q_{100}= 57.62 cfs). The existing flow at Design Point 12 is (Q_5= 2.86 cfs, Q_{100}= 22.28 cfs). The allowable flow for Design Point 12 (Q_5= 8.42 cfs, Q_{100}= 63.14 cfs) (based upon the historic flow from an equal area of land draining to Design Point 12 in the developed condition). The City of Colorado Springs will maintain the inlet and outlet structures associated with this Detention Pond. Surface maintenance and maintenance of the water quality structure will be the responsibility of the 'Interquest North Business Improvement District'. This detention pond is intended to be constructed with the Black

Squirrel Creek channel improvements due to permitting requirements from the Core of Engineers and Fish and Wildlife. If channel improvements have not been started when this detention facility is required, a temporary private detention pond will be provided at that time. Upon construction of the permanent detention facility (BS-1) the temporary detention facility will be removed.

BLACK SQUIRREL – 2 DRAINAGE BASIN

Basin BS-2A (Q_5= 17.72 cfs, Q_{100}= 33.20 cfs) is 6.9 acres and consists of building, landscaping, a portion of the Federal Drive extension and parking lot flows. Runoff from this basin will sheet flow across the proposed parking lot and drives and travel as sheet flow and curb and gutter flow into the proposed storm sewer system to Design Point 35 (Q_5= 85.55 cfs, Q_{100}= 158.06 cfs) combining with flows from Basins BS-2B and BS-2C. At this point, where a 60" RCP pipe Conveyance 31) will accept both the 5-yr. and 100-yr. developed flows and convey them to Design Point 36/ Pond BS-2.

Basin BS-2B (Q_5= 37.35 cfs, Q_{100}= 68.43 cfs) is 13.7 acres and consists of future building, landscaping and parking lot flows. Runoff from this basin will sheet flow across the parking lot and drives and travel as sheet flow and curb and gutter flow into the storm sewer system to point, where a 42" RCP pipe (Conveyance 30) will accept both the 5-yr. and 100-year developed flows conveying them to Design Point 35.

Basin BS-2C (Q_5= 30.92 cfs, Q_{100}= 56.77 cfs) is 11.4 acres and consists of future building, landscaping and parking lot flows. Runoff from this basin will sheet flow across the parking lot and drives and travel as sheet flow and curb and gutter flow into the storm sewer system to Design Point 35.

Basin BS-2D (Q_5= 4.63 cfs, Q_{100}= 8.49 cfs) is 1.7 acres and is the area for Detention Pond BS-2. Runoff from this basin will flow to Design Point 36/ Pond BS-2 (Q_5= 90.18 cfs, Q_{100}= 166.54 cfs).

Basin BS-2E (Q_5= 0.44 cfs, Q_{100}= 2.81 cfs) is 1.8 acres in area is a portion of the basin that will not be landscaped and will bypass Detention Pond BS-2. Runoff from this basin will drain to Design Point 13.

Design Point 36 (Q_5= 90.18 cfs, Q_{100}= 166.54 cfs), is the inflow into Private Detention Pond BS-2 and Design Point 13 represents the restricted released flows. The allowable flow for Design Point 13 (Q_5= 5.83 cfs, Q_{100}= 43.98 cfs) (based upon the historic flow from an equal area of land draining to Design Point 13 in the developed condition). This pond has been modeled to release flows which are close to the allowable rates (Q_{100}= 42.40 cfs). However, final pond design and appropriate outlet structure will be specified at the time of known site development within a specific final drainage report.

BLACK SQUIRREL – 3 DRAINAGE BASIN

Basin BS-3A (Q_5= 24.83 cfs, Q_{100}= 45.54 cfs) is 9.1 acres and consists of building, landscaping and parking lot flows. Runoff from this basin will sheet flow across the parking lot and drives and travel as sheet flow and curb and gutter flow into the storm sewer system to a point, where a 36" RCP pipe (Conveyance 35) will route the flows to Design Point 41.

Basin BS-3B (Q_5= 37.10 cfs, Q_{100}= 71.98 cfs) is 15.2 acres and consists of future building, roadway, landscaping and parking lot flows. Runoff from this basin will sheet flow across the parking lot and drives and travel as sheet flow and curb and gutter flow into the storm sewer system to Design Point 41 (Q_5= 61.45 cfs, Q_{100}= 117.03 cfs), where a 48" RCP pipe (Conveyance 36) will convey the developed flows to Design Point 42.

Basin BS-3C (Q_5= 40.58 cfs, Q_{100}= 74.48 cfs) is 14.9 acres and consists of future building, landscaping and parking lot flows. Runoff from this basin will sheet flow across the parking lot and drives and travel as sheet flow and curb and gutter flow into the storm sewer system to Design Point 42 (Q_5= 100.66 cfs, Q_{100}= 183.49 cfs), where a 60" RCP pipe (Conveyance 37) will convey the flows to Design Point 43/ Pond BS-3.

Basin BS-3D (Q_5= 54.90 cfs, Q_{100}= 101.33 cfs) is 20.4 acres and consists of future building, landscaping and parking lot flows. Runoff from this basin will sheet flow across the parking lot and drives and travel as sheet flow and curb and gutter flow into the storm sewer system to Design Point 43/ Pond BS-3.

Basin BS-3E (Q_5= 34.63 cfs, Q_{100}= 63.98 cfs) is 12.9 acres and consists of future building, landscaping and parking lot flows. Runoff from this basin will sheet flow across the parking lot and drives and travel as sheet flow and curb and gutter flow into the storm sewer system to a point, where a 42" RCP pipe (Conveyance 38) will accept both the 5-yr. and 100-yr. developed flows and route to Design Point 43/ Pond BS-3.

Basin BS-3F (Q_5= 10.61 cfs, Q_{100}= 19.48 cfs) is 3.9 acres and is the area for Detention Pond BS-3. Runoff from this basin will flow to Design Point 43 (Q_5= 197.70 cfs, Q_{100}= 366.68 cfs).

Basin BS-3G (Q_5= 13.91 cfs, Q_{100}= 26.23 cfs) is 5.6 acres in area is a portion of the basin that will not be developed and will bypass Detention Pond BS-3. Runoff from this basin will drain to Design Point 14.

Design Point 43 (Q_5= 197.70 cfs, Q_{100}= 366.68 cfs) is the inflow into Private Detention Pond BS-3 and DP-14 represents the restricted pond release. The allowable flow for Design Point 14 (Q_5= 11.06 cfs, Q_{100}= 84.58 cfs) (based upon the historic flow from an equal area of land draining to Design Point 13 in the developed condition). This pond has been modeled to release flows which are close to the allowable rates (Q_{100}= 83.77 cfs). However, final pond design and appropriate outlet structure will be specified at the time of known site development within a specific final drainage report. See "Final Design Report for Allison Valley On-Site Reaches of Black Squirrel Creek and Middle Tributary Creek Channel Improvements," by Classic Consulting, June 2007 for creek/channel improvement specifics.

INTERIM CONDITIONS – Filing Nos. 1 & 2 (see "Interim Conditions Drainage Map)

The purpose of this analysis is to prove adequate release rates using the SCS drainage analysis method at the main overall basin outfalls across Interstate 25 with the development of the first phase of construction (Filing No. 1 & 2).

ELKHORN-3 DRAINAGE BASIN

Basin EK-3M (Q_5= 4.97 cfs, Q_{100}= 29.65 cfs) is 22.2 acres and consists of a temporarily undeveloped area. Runoff from this basin will sheet flow across the basin and travel as sheet flow and shallow channel flow into a temporary sediment basin. The runoff will collect in the proposed 36" RCP storm sewer, which will convey the flow toward Pond EK-3B.

Basin EK-3N (Q_5= 7.45 cfs, Q_{100}= 25.10 cfs) is 10.1 acres and consists of a temporarily undeveloped area and the extension of Federal Drive. The storm water within Federal will collect in the proposed inlets and storm system (See Final Drainage Report Analysis) and runoff from the undeveloped portion of this basin will sheet flow west to a temporary sediment basin at Design Point 50. At this point, a 48" RCP pipe (Conveyance 51) will accept both the 5-yr. and 100-yr. developed flows and convey them to Design Point 52.

Basin EK-3P (Q_5= 2.42 cfs, Q_{100}= 18.43 cfs) is 16.5 acres and consists of a temporarily undeveloped area. Runoff from this basin will sheet flow across the basin and travel as sheet flow and shallow channel flow into a temporary sediment basin and proposed 30" RCP storm sewer system stub into Conveyance 52, 54" RCP.

Basin EK-3Q (Q_5= 23.71 cfs, Q_{100}= 79.99 cfs) is 37.4 acres and consists of a temporarily undeveloped area, proposed collector road and the extension of Federal Drive flows. Runoff from this basin will sheet flow across the basin and travel as sheet flow and curb and gutter flow into the proposed storm sewer system and temporary sediment basin to Design Point 51 (Q_5= 24.52 cfs, Q_{100}= 94.75 cfs) combining with flows from Conveyance 52. At this point, a 60" RCP pipe (Conveyance 53) will accept both the 5-yr. and 100-yr. developed flows and route them to Design Point 52/ Pond EK-3B.

Basin EK-3O (Q_5= 39.74 cfs, Q_{100}= 72.85 cfs) is 14.6 acres and consists of mostly proposed, and some undeveloped areas, of parking, landscaping and detention pond EK-3B areas. Runoff from this basin will sheet flow across the proposed parking lot and drives and travel as sheet flow and curb and gutter flow into the proposed storm sewer system combining at Design Point 52 (Q_5= 69.67 cfs, Q_{100}= 206.51 cfs). Runoff from basin EK-3O combines with Conveyances 51 and 53 at Design Point 52, the inflow of Private Detention pond EK-3B. The developed flows are restricted by this pond

(Q_5= 1.29 cfs, Q_{100}= 18.13 cfs), 100 year ponding elevation = 6638.17 with a 100 year storage volume of 8.22 acre-feet. The outlet box and pond design will be as described in the Fully Developed Conditions since the flow rates and water quality volumes are higher in that condition. The outlet structure would be drained by a 48" RCP pipe at 0.5% slope, Conveyance 54 to Design Point 6. Detailed construction plans will be prepared and submitted to the City prior to any construction of the private detention pond.

The Basins VP-1, VP-2, IP-1, & IP-2 will act as described in the Fully Developed Conditions portion of this report. The sump inlets in Federal Drive, just north of Interquest Parkway, will be constructed with Filing 1 and 2 of Marketplace at Interquest and will collect the storm runoff which flows by the existing inlets on Voyager and Interquest. This location is modeled as Design Point 4, Q_5= 8.42 cfs and Q_{100}= 37.77 cfs.

Basin SE-1 (Q_5= 0.94 cfs, Q_{100}= 6.66 cfs) is 5.0 acres in area. The basin is an existing undeveloped parcel separate from the subject site. Runoff from Basin SE-1 sheet flows into across the basin site and basin AF-1 into the existing detention pond EK-3A at Design Point 6. Any future development of this basin will require that the developed runoff be detained to historic flow rates.

Basin AF-1 (Q_5= 1.96 cfs, Q_{100}= 14.45 cfs) is 11.6 acres in area consists of undeveloped grassed areas of a western portion of the Interstate 25 right-of-way north of Interquest Parkway and south of Black Squirrel Creek. The basin includes the existing detention pond EK-3A. Runoff from Basin SE-1 sheet flows into across the basin site and basin AF-1 into the existing detention pond EK-3A at Design Point 6 (Q_5= 6.29 cfs, Q_{100}= 29.63 cfs).

Design Point 6 represents the inflow into the existing detention pond EK-3A. This detention pond was planned and designed at the time of the construction of the interchange with Interstate 25 at Interquest Parkway. The design for this pond is discussed in Reference 8, 'Interstate 25 Fairlane Parkway Interchange - Final Hydraulic Report (Phase I), prepared by DMJM, Inc, dated August 26, 1998. In this reference the pond is referred to as Pond 'A'. Pond design volumes and outlet releases are taken from this reference and used in this report. As stated in Reference 8 the construction of Interquest Parkway (formerly know as Fairlane Parkway), the flow into the pond is 102 cfs and is restricted to 22 cfs at ponding elevation 6611.33. The interim condition developed flow into the

pond (calculated in this report) is 29.63 cfs for the 100 year event and restricted to 13.43 cfs at ponding elevation 6610.12, significantly less than the flows and ponding elevations of just the Interquest Parkway road being developed and restricted through the pond in Reference 8. The restricted outflows of the pond in the Interim developed 100-year condition (13.43 cfs) is modeled to be significantly less than the historic flow for the basin (95 cfs) and within the capacity of the storm sewer system at the existing 24" RCP culvert (31.99 cfs) and is safely conveyed to the receiving Air Force Academy drainage system downstream eventually draining into Monument Creek. Detention Pond EK-3A is not planned to be modified in volume or outlet control from its present condition. In the interim condition, Detention Pond EK-3B provides the storage volume and outlet configuration to achieve the flow rates described above.

ELKHORN-4 DRAINAGE BASIN

The drainage patterns and descriptions within this basin are exactly the same as in the Fully Developed Conditions of this report. All of the area tributary to Private Detention Pond EK-4 will be built with the proposed Marketplace at Interquest Filing 1 and 2.

ELKHORN-5 DRAINAGE BASIN

Basin EK-5M (Q_5= 0.68 cfs, Q_{100}= 4.27 cfs) is 3.0 acres and consists of developed landscaped areas. Runoff from this basin will sheet flow across the basin area and across basin AF-3 to Design Point 10.

Basin AF-3 (Q_5= 2.56 cfs, Q_{100}= 19.17 cfs) is 16.4 acres and consists of undeveloped grassed areas of a western portion of the Interstate 25 right-of-way north of Interquest Parkway and south of Black Squirrel Creek. Runoff from this basin will sheet flow across the basin area to Design Point 10 (Q_5= 3.17 cfs, Q_{100}= 23.26 cfs), the existing 24" RCP culvert under Interstate 25. This point is analyzed as a detention pond to model the ponding at the culvert entrance. This pond is referred to as 'Backwater Pond I25-5'. The restricted flows leaving the pond are: (Q_5= 1.61 cfs, Q_{100}= 15.30 cfs), 100 year ponding elevation = 6602.27. Reference 8 has established this point (Design Point 12 in Reference 8) as having a 100-year historic flow of 61 cfs for the basin at the inlet of the 24" RCP culvert. The basin flows conveyed by the culvert are less than the historic flows for the basin and is within the capacity (31.99 cfs) of the 24" RCP culvert and is safely conveyed to the receiving Air Force Academy drainage system downstream eventually draining into Monument Creek.

BLACK SQUIRREL – 1 DRAINAGE BASIN

As with the Fully Developed Condition, in the Interim Condition, the drainage area in basins O2B, EX-A, EX-B, EX-C1, EX-C2, EX-G, EX-H, & PR-D are proposed to be diverted to the Black Squirrel -1 drainage basin. The Existing Conditions portion of this report details the drainage characteristics of the basins mentioned above and development of the proposed site does not change any off-site drainage patterns. Therefore, Design Points 1, 2, 3, & 30 are the same in the ultimate developed and interim conditions as in the existing conditions. However, Design Point 30 in the Existing and Ultimate Conditions is referred to as Design Point 55 in the Interim Conditions. Any future development of this basin will require that the developed runoff be detained to historic flow rates. At the discharge of Conveyance 5, Conveyance 60 conveys the flow (Q_5= 7.10 cfs, Q_{100}= 33.87 cfs) in a 36" RCP storm sewer to Design Point 56.

Basin BS-1M (Q_5= 8.33 cfs, Q_{100}= 41.69 cfs) is 27.8 acres and consists of a temporarily undeveloped area, landscaping and New Life Drive and Federal Drive extension flows. Runoff within the proposed roadways will be collected by multiple inlets whereas the runoff from the undeveloped area will sheet flow across the basin and collect at the proposed storm sewer stub at Design Point 56 (Q_5= 14.27 cfs, Q_{100}= 69.64 cfs) combining with flows from Conveyance 60. At this point, a 54" RCP pipe (Conveyance 61) will accept both the 5-yr. and 100-yr. developed flows and convey them to Design Point 57.

Basin BS-1N (Q_5= 1.54 cfs, Q_{100}= 6.71 cfs) is 3.6 acres and consists of temporarily undeveloped area, landscaping and detention pond flows. Runoff from this basin will enter into Detention Pond BS-1T, Design Point 57. Design Point 57 (Q_5= 15.18 cfs, Q_{100}= 73.71 cfs) is the inflow into Detention Pond BS-1T. The quantity of storm runoff collected in this pond is larger in the Fully Developed Conditions; therefore Public Detention Pond BS-1 will be sized and constructed as described in the previous section of the report. The release rates in the Interim condition (Q_5= 0.91 cfs, Q_{100}= 3.79 cfs) are far less than that of the Fully Developed condition.

Basin BS-1O (Q_5= 2.12 cfs, Q_{100}= 16.34 cfs) is 15.3 acres in area is a portion of the basin that will not be developed and will bypass Detention Pond BS-1. Runoff from this basin will drain to Design Point 12.

BLACK SQUIRREL – 2 DRAINAGE BASIN

Basin BS-2M (Q_5= 1.32 cfs, Q_{100}= 6.02 cfs) is 3.1 acres and consists of landscaping and undeveloped area flows. Runoff from this basin will sheet flow across the basin and travel as sheet flow to Design Point 13 (Q_5= 1.32 cfs, Q_{100}= 6.02 cfs). The existing flow at Design Point 13 (Q_5= 4.94 cfs, Q_{100}= 39.57 cfs). The allowable flow for Design Point 13 (Q_5= 5.83 cfs, Q_{100}= 43.98 cfs) (based upon the historic flow from an equal area of land draining to Design Point 13 in the developed condition).

BLACK SQUIRREL – 3 DRAINAGE BASIN

Basin BS-3M (Q_5= 20.79 cfs, Q_{100}= 71.66 cfs) is 34.6 acres and consists of overlot graded areas, landscaping and Federal Drive extension flows. Runoff from this basin will sheet flow across the basin and travel as sheet flow and curb and gutter flow into the proposed storm sewer system to a point, where a grass lined channel (Conveyance 65) will accept both the 5-yr. and 100-yr. developed flows and route them to Design Point 60.

Basin BS-3N (Q_5= 21.05 cfs, Q_{100}= 38.31 cfs) is 7.6 acres and consists of roadway, landscaping and parking lot flows. Runoff from this basin will sheet flow across the parking lot and drives and travel as sheet flow and curb and gutter flow into the storm sewer system to a 48" RCP pipe (Conveyance 66) will accept both the 5-yr. and 100-yr. developed flows and convey them to Design Point 60.

Basin BS-3O (Q_5= 23.15 cfs, Q_{100}= 42.24 cfs) is 8.4 acres and consists of building, roadway, landscaping and parking lot flows. Runoff from this basin will sheet flow across the proposed parking lot and drives and travel as sheet flow and curb and gutter flow into the proposed storm sewer system to Design Point 60. At this location a grass lined swale (Conveyance 67) will convey the developed flows to Design Point 61/ Pond BS-3.

Basin BS-3P (Q_5= 3.62 cfs, Q_{100}= 22.01 cfs) is 16.8 acres and consists of a temporarily undeveloped area flows. Runoff from this basin will sheet flow across the basin and travel as sheet flow into Detention Pond BS-3T at Design Point 61 (Q_5= 53.50 cfs, Q_{100}= 149.13 cfs). Design Point 61 is the inflow into Detention Pond BS-3T. The developed flows are restricted by this pond (Q_5= 0.54 cfs, Q_{100}= 42.91cfs), 100 year ponding elevation = 6630.53 with a 100 year storage volume of 5.66 acre-feet. The water quality volume required for the developed area in basin BS-3 (67.4 acres of partial

development) is 1.312 acre-feet. The detention pond size required for ½ the water quality capture volume and the 100 yr detention is 9.93 acre-feet. The pond will have a bottom elevation of 6622.00 and a top elevation of 6632.00. The starting water surface elevation for detention starts at an elevation of 6625.00, with the area between elevations 6622.00 to 6625.00 consisting of the 2.50' micro pool and ½ the WQCV. Pond inflow points will have a rip rap run down in lieu of a concrete lined forebay. This is due to the temporary nature of this pond. If this pond will be in place for an extended period of time it will be retrofitted with a forebay at a later date. The water quality orifice is planned to be a metal plate attached to a 4' x 4' grated open top concrete riser. The riser will have an elevation of 6628.50. The bottom orifice will have an invert of 6624.50. The water quality orifice plate will have 1 rows of 11 circular orifices with a diameter of 1 1/4" each, from elevation 6624.50 to 6628.50. The detention pond spillway crest elevation would be 6630.30. This spillway will be utilized for the 100 and the 50 year events and will discharge flows over the spillway weir at a depth of 0.23' to reduce erosion. The wide spillway is provided to spread out the release into a sheet flow form. The outlet structure would be drained by a 12" RCP pipe with flows discharged from the pipe at a max of 9.62 cfs. Conveyance 68 to Design Point 14 (Q_5= 0.53 cfs, Q_{100}= 42.91 cfs). The existing flow at Design Point 14 (Q_5= 6.22 cfs, Q_{100}= 49.82 cfs). The allowable flow for Design Point 14 (Q_5= 11.06 cfs, Q_{100}= 84.58 cfs) (based upon the historic flow from an equal area of land draining to Design Point 13 in the developed condition). With the development of this area, pond BS-3T will be removed and all drainage will be routed to the permanent Pond BS-3 as described in the Fully Developed conditions of this report.

FILING NO. 1 & 2 FINAL DRAINAGE REPORT

Marketplace at Interquest Filing No. 1 and No. 2

Based upon the existing and developed flow conditions outlined in the MDDP portion of this report, the following is a description of the individual developed basins, flows, and required storm facilities associated with the currently proposed two filings. The Interim Conditions portion of this report contains the same proposed site development conditions as this section. The following drainage calculations have been completed using the Modified Rational drainage analysis, a more conservative estimate of flow quantities. This has been done to conservatively size on-site inlets, area drains, pipes, swales, and riprap.

Filing No. 1 (Federal Drive to Pond EK-3B – Southern Storm Main)

Design Point 1: In the Interim development conditions, this area is a temporary sediment basin collecting water from the undeveloped Basins 3Ma, 3Mb and 3D-A. Temporary swales are proposed to route all of these 'historic' flows to this design point. The amount of storm runoff in the Interim conditions to this point is Q_5 = 13 cfs and Q_{100} = 32 cfs. However, in the Fully Developed conditions, this design point will see very minor flows from a future pond release (Pond EK-3C) as well as fully developed flows from Basins 3Mb and 3D-A. The storm water is quantified as Q_5 = 25 cfs and Q_{100} = 45 cfs in the Fully Developed (worst case) condition and will be used in the remainder of the downstream pipe sizing. A 36" storm pipe (Pipe 1) will be stubbed at this location for future connection, and a temporary 8" drain will be connected to the storm system to drain the temporary sediment basin (See Construction Drawings).

Design Point 2: A proposed public 6' sump inlet collects flows (Q_5 = 5 cfs, Q_{100} = 10 cfs) from a portion of Federal Drive, between the proposed southerly roundabout and Interquest Parkway, and a portion of the storm water which does not get collected at Design Points 72 & 73. The flow-by water from Voyager and Interquest Parkways is discussed in more detail in the MDDP portion of this report. The proposed grading of the Federal Drive connection creates the low point situation, which intercepts this excess stormwater within Interquest Parkway. It is estimated, based on the proposed grades that DP-2 receives about a quarter of the flow-by from Interquest Pkwy. and DP-3 receives the rest. The intercepted flows are conveyed to the 36" storm main running west (Pipe 3, 36" RCP, Q_5 = 30 cfs and Q_{100} = 53 cfs), within an 18" storm pipe (Pipe 2).

Design Point 3: A proposed public 12' sump inlet collects flows (Q_5 = 8 cfs, Q_{100} = 17 cfs) from a portion of Federal Drive, between the proposed southerly roundabout and Interquest Parkway, and the majority of the storm water that does not get collected at Design Points 72 & 73. The intercepted flows are conveyed to the 36" storm main running west (Pipe 5A, 36" RCP, Q_5 = 36 cfs and Q_{100} = 69 cfs), within a 24" storm pipe (Pipe 4).

Pipes 5B – 5D:

The proposed Basin 3B-A is a planned future commercial development but an exact layout has not been completed at this time. Therefore, storm sewer stubs at multiple locations are proposed to extend out into this future site. Estimates in sizes and locations were conservatively taken and the

flow quantities within the main can be seen within the calculations. From east to west, the three stubs shown are 24", 30", and 30". The flow in the 42" RCP main, Pipe Run 5D, is Q_5 = 59 cfs and Q_{100} = 110 cfs.

Design Point 4: In the Interim development conditions, this area is a temporary sediment basin collecting water from the undeveloped Basin 3B-A. Temporary swales are proposed to route all of these 'historic' flows to this design point. The amount of storm runoff in the Interim conditions to this point is Q_5 = 8 cfs and Q_{100} = 17 cfs. However, in the Fully Developed conditions, this design point will see approximately a quarter of the developed flows from Basin
3B-A. The storm water is quantified slightly higher in the developed conditions, Q_5 = 10 cfs and Q_{100} = 18 cfs. Therefore, the higher values will be used in the remainder of the downstream pipe sizing. A 30" storm pipe (Pipe 6) will be stubbed at this location for future connection, and a temporary 8" drain will be connected to the storm system to drain the temporary sediment basin (See Construction Drawings). Pipe 6 connects with the 42" main at Pipe 5E (Q_5 = 64 cfs, Q_{100} = 118 cfs).

Design Point 5: A proposed private 8' sump inlet collects flows (Q_5 = 7 cfs, Q_{100} = 14 cfs) from a portion of Federal Drive, a portion of Rampart Hills View, and the east half of proposed Market Center Point. The intercepted flows are conveyed to the west within a 24" storm main (Pipe 7). This pipe connects to the inlet at DP-6.

Design Point 6: A proposed private 4' sump inlet collects flows from the west half of proposed Market Center Point. A 24" main (Pipe 8, Q_5 = 9 cfs, Q_{100} = 16 cfs) containing flows from DP-5 & DP-6 connects with the storm main at a proposed type 1 storm manhole. At this manhole, the storm main which outfalls at pond EK-3B, increases to a 48" RCP (Pipe 9A, Q_5 = 71 cfs, Q_{100} = 132 cfs).

Pipes 9A – 9C:

The proposed Basin M-2 is a planned future commercial development but an exact layout has not been completed at this time. Therefore, storm sewer stubs at two locations are proposed to extend out into this future site. Estimates in sizes and locations were conservatively taken and the flow quantities within the main can be seen within the calculations. Both storm stubs are proposed 24" RCP. The worst case, fully developed flow into Pond EK-3B from this 48" RCP main (Pipe Run 9C) is Q_5 = 76 cfs and Q_{100} = 140 cfs.

Filing No. 1 (Federal Drive South Roundabout to Pond EK-3B – Rampart Hills View)

Design Point 7: A proposed public 4' sump inlet collects flows (Q_5 = 4 cfs, Q_{100} = 7 cfs) from a portion of the southerly Federal Drive roundabout (Basins F & G). The intercepted flows are conveyed to the north within an 18" storm main (Pipe 10). This pipe connects to the main which runs west within Rampart Hills View and ultimately discharges into Pond EK-3B. Sump inlets within any roundabout shall be CDOT Type R inlets.

Design Point 9: In the Interim development conditions, this area is a temporary sediment basin collecting water from the undeveloped Basins 3P, 1A-A, & 3D-B. Temporary swales are proposed to route all of these 'historic' flows to this design point. The amount of storm runoff in the Interim conditions to this point is Q_5 = 10 cfs and Q_{100} = 26 cfs. However, in the Fully Developed conditions, this design point will receive the entire developed flows from Basin 3D-B. The storm water is quantified higher in the developed conditions, Q_5 = 16 cfs and Q_{100} = 29 cfs. Therefore, the higher values will be used in the remainder of the downstream pipe sizing. A 30" storm pipe (Pipe 13) will be stubbed at this location for future connection, and a temporary 8" drain will be connected to the storm system to drain the temporary sediment basin (See Construction Drawings). Pipe 13 combines with the flows from DP 7 and continues west within Rampart Hills View in a 30" RCP main (Pipe 14A, Q_5 = 19 cfs, Q_{100} = 35 cfs).

Design Point 10-X: A proposed private 24" storm stub which will collect flows from the future commercial development north of Rampart Hills View. This location and pipe size has been estimated since there is no exact layout proposed for this future development. Pipe 14B represents the storm main downstream of this point. The fully developed flows will be Q_5 = 27 cfs and Q_{100} = 48 cfs.

Design Point 14: Dual private 4' sump inlets collect flows from a portion of Federal Drive and a portion of Rampart Hills Drive. This low point is proposed to lessen the amount of water at the main low point of Rampart Hill Drive (DP 12 & 13). In the Interim Condition, the adjacent curb and asphalt to these inlets will be installed but will remain closed to traffic until development of Basin 3D-C takes place. A 24" main will route these intercepted flows to the 42" RCP Rampart Hills main (Pipe 14C, Q_5 = 30 cfs, Q_{100} = 54 cfs).

Design Point 10-Y: A proposed private 36" storm stub which will collect flows from the future commercial development north of Rampart Hills View (estimated 2/3 of Basin 3D-C). This location and pipe size has been estimated since there is no exact layout proposed for this future development. Pipe 14D represents the storm main downstream of this point. The fully developed flows will be Q_5 = 44 cfs and Q_{100} = 79 cfs.

Design Point 11-X: A proposed private 36" storm stub which will collect flows from the future commercial development north of Rampart Hills View (estimated 40% of Basin 3E-A). Pipe 15 represents the storm main downstream of this point. The fully developed flows within the 48" RCP main (Pipe 15) will be Q_5 = 60 cfs and Q_{100} = 108 cfs.

Design Point 11-A: A proposed private 30" storm stub which will collect flows from the future commercial development north of Rampart Hills View (estimated 20% of Basin 3E-A). Pipe 15B (Q_5 = 66 cfs, Q_{100} = 118 cfs) represents the storm main downstream of this point.

Design Point 11-Y: In the Interim development conditions, this area is a temporary sediment basin collecting water from the undeveloped Basins 3D-C, 3E-A, & 3A-A. Temporary swales are proposed to route all of these 'historic' flows to this design point. The amount of storm runoff in the Interim conditions to this point is Q_5 = 27 cfs and Q_{100} = 62 cfs. However, the fully developed flows of this entire basin are higher than these 'historic' flows. Therefore the developed flows are used in the modeling of the downstream storm system. The storm stub to this point is a 36" RCP which is capable of handling the entire 'historic' flow amount. Future connection to this stub is possible, but is only estimated to receive 10% of the developed flows from Basin 3E-A. A temporary 8" drain will be connected to the storm system (Pipe 16) to drain the temporary sediment basin (See Construction Drawings). Pipe 16 connects to the Rampart Hill View storm main at a Type 1 storm manhole within the roadway. The storm system then continues toward Pond EK-3B.

Design Point 12: A proposed private 6' sump inlet collects flows (Q_5 = 5 cfs, Q_{100} = 9 cfs) from a 1.1-acre portion of Rampart Hills View. The intercepted flows are conveyed to the east across Rampart Hills View within a 24" storm main (Pipe 17). This pipe connects into the sump inlet of DP-13.

Design Point 13: A proposed private 16' sump inlet collects flows (Q_5 = 11 cfs, Q_{100} = 21 cfs) from a large portion of Rampart Hills View. The intercepted flows combine with those from DP-12, and are conveyed to the south within a 36" storm main (Pipe 18, Q_5 = 16 cfs, Q_{100} = 29 cfs). This pipe continues toward the Type 1 storm manhole discussed at DP-11-Y.

Design Point 11-B: A proposed private 36" storm stub, which will collect flows from the future commercial development north of Rampart Hills View (estimated 40% of Basin 3E-A). 36" RCP Pipe 18B (Q_5 = 34 cfs, Q_{100} = 61 cfs) represents the storm main downstream of this point. This 36" combines with Pipes 16 and 15B at the Type 1 storm manhole and continues within a 54" main (Pipe 19) into the Private Pond EK-3B releasing flows of Q_5 = 100 cfs and Q_{100} = 180 cfs.

Filing No. 1 (Parking Lot South of Theater to Pond EK-3B)

Design Point 15: A proposed private 6' sump inlet collects flows (Q_5 = 6 cfs, Q_{100} = 11 cfs) from a 1.3 acres of parking lot and landscaping south of the proposed theater. The intercepted flows are conveyed to the south within a 24" storm main (Pipe 20). This pipe connects into the storm system of the following design points.

Design Point 16: A proposed private 6' sump inlet collects flows (Q_5 = 3 cfs, Q_{100} = 6 cfs) from a 0.7 acres of parking lot and landscaping south of the proposed theater. The intercepted flows are routed to the 24" main within an 18" storm pipe (Pipe 21). The 24" RCP Pipe 22, represents the combined flows from DP 15 & 16 (Q_5 = 9 cfs, Q_{100} = 16 cfs). This pipe continues south toward Pond EK-3B.

Design Point 17: A proposed private 16' sump inlet collects flows (Q_5 = 12 cfs, Q_{100} = 22 cfs) from a large area (2.8 acres) of parking lot and landscaping south of the proposed theater. The intercepted flows are conveyed within a 24" main (Pipe 23) to the east where it combines with the flows from DP 15 & 16 and continues to the south to pond EK-3B. A 36" RCP Pipe 24, continues to the south and contains flows of Q_5 = 21 cfs and Q_{100} = 37 cfs.

Design Point 18: In the Interim Condition, this design point will be a temporary sediment basin receiving flows from the undeveloped basin M. Temporary swales are proposed to allow all

'historic' flows to enter the temporary sediment basin. The future development of this basin will require a 14' sump inlet to be placed within the curb and attached to this 24" storm stub. The amount of storm runoff in the Interim conditions to this point is Q_5 = 3 cfs and Q_{100} = 7 cfs. However, the fully developed flows of this entire basin are higher than these 'historic' flows, Q_5 = 10 cfs and Q_{100} = 18 cfs. Therefore the developed flows are used in the modeling of the downstream storm system. A temporary 8" drain will be connected to the storm system (Pipe 25) to drain the temporary sediment basin (See Construction Drawings). Pipe 25 connects to the 36" RCP storm main heading into Pond EK-3B (Pipe 26, Q_5 = 30 cfs, Q_{100} = 54 cfs).

Filings No. 1 & 2 (Private Storm from Both Filings to Pond EK-4)

Design Point 20: With the development of Basin N, this design point will be a private 6' sump inlet which will collect flows (Q_5 = 6 cfs, Q_{100} = 10 cfs) from the future parking lot and landscaping of a future commercial site. With the construction of Filing 1 and 2, an 18" RCP storm (Pipe 28) will be 'stubbed' toward DP-20 and the 'historic' drainage from Basin N will continue to drain east toward I-25. The fully developed intercepted flows will be conveyed north by this 18" main toward Pond EK-4.

Design Point 21: With the development of Basin P, this design point will be a private 4' sump inlet which will collect flows (Q_5 = 2 cfs, Q_{100} = 3 cfs) from the future parking lot and landscaping of a future commercial site. With the construction of Filing 1 and 2, an 18" RCP storm (Pipe 29) will be 'stubbed' toward DP-21 and the 'historic' drainage from Basin P will continue to drain east toward I-25. The fully developed intercepted flows will combine with the flows from DP-20 at a Type 1 storm manhole. A private 24" storm main (Pipe 30, Q_5 = 7 cfs, Q_{100} = 13 cfs) will route these flows from the manhole to the north toward Pond EK-4.

Design Point 22: A proposed 8" private roof drain collects runoff from a quarter of the proposed theater building (Basin X, Q_5 = 1.1 cfs, Q_{100} = 2.0 cfs). The 8" roof drain will connect to the 24" storm main (Pipe 32, Q_5 = 8 cfs, Q_{100} = 14 cfs).

Design Point 23: A proposed private 6' sump inlet collects flows (Basin Q, Q_5 = 5 cfs, Q_{100} = 9 cfs) from a 1.1 acres of parking lot and landscaping east of the proposed theater. The intercepted flows

are routed to the 24"/30" main within an 18" storm pipe (Pipe 33). The 30" private main continues north toward Pond EK-4 (Pipe 35, Q_5 = 13 cfs, Q_{100} = 22 cfs).

Design Point 24: A proposed private 6' sump inlet collects flows (Basin R, Q_5 = 5 cfs, Q_{100} = 9 cfs) from a 1.1 acres of parking lot and landscaping north-east of the proposed theater. The intercepted flows are routed to the 24"/30" main within an 18" storm pipe (Pipe 34). The 30" private main (Pipe 36) continues into Pond EK-4, releasing flows of Q_5 = 17 cfs and Q_{100} = 31 cfs.

Design Point 26: A proposed private 4' sump inlet collects flows (Basin S, Q_5 = 3 cfs, Q_{100} = cfs) from a 0.3 acre parcel of parking lot and landscaping west of the proposed theater plus a roof drain from the theater that collects a quarter of the roofs runoff. An 8" roof rain and possible area drain will connect to the 4' sump inlet. The flows are routed to the north in an 18" main (Pipe 38) to DP 27.

Design Point 27: A proposed private 4' sump inlet collects flows (Basin T, Q_5 = 1 cfs, Q_{100} = 2 cfs) from a small area of parking/landscaping west of the theater. The intercepted runoff combines with that from DP 26 within a private 18" RCP and continues north then east around the theater toward Pond EK-4.

Design Point 29: A proposed 8" private roof drain collects runoff from a quarter of the proposed theater building (Basin V, Q_5 = 1.1 cfs, Q_{100} = 2.0 cfs). The 8" roof drain will connect to the 18" storm main (Pipe 39, Q_5 = 4 cfs, Q_{100} = 7 cfs).

Design Point 28: A proposed private 6' sump inlet collects flows (Basin U, Q_5 = 5 cfs, Q_{100} = 10 cfs) from a large area of parking/landscaping and service yard between the hotel and theater. The storm runoff not collected at the at-grade inlet (DP-34) is also collected within this 6' sump inlet. The intercepted runoff combines with the flows in Pipe 39. A proposed private 24" RCP main (Pipe 41, Q_5 = 10 cfs, Q_{100} = 19 cfs) conveys these combined flows to the east, toward Pond EK-4.

Design Point 30: A proposed 8" private roof drain collects runoff from a quarter of the proposed theater building (Basin V, Q_5 = 1.1 cfs, Q_{100} = 2.0 cfs). The 8" roof drain will connect to the 24" storm main (Pipe 44) which releases flows of Q_5 = 11 cfs and Q_{100} = 21 cfs into Pond EK-4.

Hotel RD-11: All basins with a name of RD-'X' represent a proposed roof drain from the hotel. All roof drain basin acreages were provided from the architect, as well as roof drain sizes. All of the information provided has been verified and will be used throughout the calculations. RD-11 is an 8" roof drain receiving storm runoff from 0.19 acres of rooftop. This pipe conveys the flows to the east, toward Pond EK-4.

Hotel RD-12: A proposed 10" roof drain receiving storm runoff from 0.28 acres of hotel roof top. The 10" roof drain combines with that from RD-11 and continues east toward the pond in a 12" storm main (Pipe 46, $Q_5 = 2.2$ cfs, $Q_{100} = 4.1$ cfs).

Design Point 34: A proposed private 8' at-grade inlet collects the majority of flows (Basin Z, $Q_5 = 3$ cfs, $Q_{100} = 6$ cfs) from a large area of parking/landscaping south of the proposed hotel. The intercepted runoff is conveyed north by an 18" storm main (Pipe 47) to a storm manhole where the flows combine with those from Pipe 46. A proposed private 18" RCP main (Pipe 48, $Q_5 = 5$ cfs, $Q_{100} = 8$ cfs) conveys these combined flows to the east, toward Pond EK-4.

Hotel RD-13: A proposed 10" roof drain receiving storm runoff from 0.28 acres of hotel roof top. The 10" roof drain combines with the 18" storm main and continues east toward the pond.

Hotel RD-14: A proposed 8" roof drain receiving storm runoff from 0.15 acres of hotel roof top. The 8" roof drain connects to the 18"/24" main (Pipe 50, $Q_5 = 7$ cfs, $Q_{100} = 11$ cfs).

Hotel RD-15: A proposed 6" roof drain receiving storm runoff from 0.17 acres of hotel roof top. The 8" roof drain connects to the area drain system at Basin BB.

Basin BB: This area is 0.03 acres of an open-toped building enclosure. Two small area drains are proposed to drain this area. The 6" roof drain from RD-15 connects to this storm system. The area/roof drain outfall connects to the 24" main draining to Pond EK-4.

Basin AA: This area is 0.05 acres of an open-toped building enclosure. Two small area drains are proposed to drain this area as well. This 10" area drain connects to the 24" main (Pipe 52) which releases flows of Q_5 = 8 cfs and Q_{100} = 14 cfs into Pond EK-4.

Hotel RD-16: A proposed 10" roof drain receiving storm runoff from 0.43 acres of hotel roof top. This pipe conveys the flows to the southwest, toward the pond.

Design Point 38: A proposed private 3'x 3' D-9 area inlet collects the flows (Basin W, Q_5 = 2 cfs, Q_{100} = 3 cfs) from a small area of access drive and landscaping on the south-east side of the hotel. The runoff combines with that from RD-16 and is directly released into Pond EK-4 within a private 12" storm (Pipe 54, Q_5 = 4 cfs, Q_{100} = 7 cfs).

Design Point 39: A proposed private 3'x 3' D-9 area inlet collects the flows (Basin DD, Q_5 = 2 cfs, Q_{100} = 3 cfs) from a small area of access drive and landscaping on the east side of the hotel. The runoff is conveyed within a 12" storm (Pipe 55) to the south, toward Pond EK-4.

Hotel RD-2: A proposed 8" roof drain receiving storm runoff from 0.32 acres of hotel roof top. The 8" roof drain combines with the 12" area drain from DP-39 at Pipe 57 (Q_5 = 3 cfs, Q_{100} = 6 cfs) as it continues into Pond EK-4.

Design Point 41: A proposed private 3'x 3' D-9 area inlet collects the flows (Basin FF, Q_5 = 2 cfs, Q_{100} = 4 cfs) from a small area of access drive and landscaping on the south-east side of the hotel. The runoff combines with that from Pipe 57 and is directly released into Pond EK-4 within a private 18" storm (Pipe 58, Q_5 = 6 cfs, Q_{100} = 10 cfs).

Filing No. 2 (Rampart Hills View, North & East of Hotel to Swale/Temporary Pond BS-3)

Design Point 48: A proposed private 48" storm pipe 'stubbed' to the south-east of intersection of Rampart Hills View and the road between the hotel and theater. This 48" RCP (Pipe 64) will convey the fully developed flows from Basin 3A-A to the north, including the roof drains of any proposed buildings within this basin. In the Interim Condition, the runoff from undeveloped Basin 3A-A flows south to the temporary sediment basin previously described at DP 11-X. Pipe 64 runs north in Rampart Hills View toward DP 47 and ultimately to temporary pond BS-3.

Design Point 43a: A proposed private 4' sump inlet collects flows (Basin HH, Q_5 = 3 cfs, Q_{100} = 6 cfs) from a 0.7 acres of parking lot in the far east parking lot of the hotel. The intercepted flows are routed to the inlet at DP 43b in an 18" storm (Pipe 59A).

Design Point 43b: A proposed private 4' sump inlet collects flows (Basin II, Q_5 = 3 cfs, Q_{100} = 6 cfs) from a 0.7 acres of parking lot far east parking lot of the hotel. The combined flows from this inlet and DP 43a are conveyed west toward Rampart Hills View in a 24" main (Pipe 59B, Q_5 = 6 cfs, Q_{100} = 11 cfs).

Design Point 44a: A proposed private 4' sump inlet collects flows (Basin JJ, Q_5 = 5 cfs, Q_{100} = 9 cfs) from a 1.1 acres of parking lot in the far east parking lot of the hotel. The intercepted flows are routed to the inlet at DP 44b in an 18" storm (Pipe 60A).

Design Point 44b: A proposed private 4' sump inlet collects flows (Basin KK, Q_5 = 4 cfs, Q_{100} = 7 cfs) from a 0.9 acres of parking lot far east parking lot of the hotel. The combined flows from this inlet and DP 44a are conveyed to the 24"/30" main (Pipe 61, Q_5 = 16 cfs, Q_{100} = 28 cfs).

Design Point 45a: A proposed private 6'x 3' D-9 area inlet collects the flows (Basin GG, Q_5 = 4 cfs, Q_{100} = 7 cfs) from an area of parking lot and landscaping in the east parking lot of the hotel. The runoff is conveyed within an 18" storm (Pipe 62A) to the north, toward DP 45b.

Design Point 45b: A proposed private 3'x 3' D-9 area inlet collects the flows (Basin EE, Q_5 = 0.5 cfs, Q_{100} = 0.9 cfs) from an area of parking lot and landscaping in the east parking lot of the hotel. The runoff combines with that from DP 45a and is conveyed north to the 30" main (Pipe 63, Q_5 = 20 cfs, Q_{100} = 36 cfs).

Design Point 47: A proposed private 6' sump inlet collects flows (Basin LL, Q_5 = 5 cfs, Q_{100} = 9 cfs) from a portion of Rampart Hills View. Also, in the Interim Condition, the undeveloped flows from Basin 2A-A will sheet flow onto Rampart Hills View and into this inlet. Approximately half the runoff from the undeveloped basin will reach DP 47. Development of Basin 2A-A will require on-site detention and routing of flows to the pipe at DP 74. The intercepted runoff from the Rampart

Hills sump inlet are conveyed north in an 18" RCP to the 30"/36" main (Pipe 65, Q_5 = 23 cfs, Q_{100} = 41 cfs). Pipe 65 continues to the 48" main in Rampart Hills View and Type 1 storm manhole.

Design Point 46: A proposed private 6' sump inlet collects flows (Basin CC, Q_5 = 6 cfs, Q_{100} = 10 cfs) from 1.2 acres of parking lot in the far east parking lot of the hotel. The intercepted flows are routed to the Type 1 storm manhole in Rampart Hills View. A private 60" RCP (Pipe 67, Q_5 = 75 cfs, Q_{100} = 134 cfs) storm will convey the combined flows of DP 46 and Pipe 65 to the northwest across the main hotel parking lot and entrance.

Design Point 49: A proposed private 6' sump inlet collects flows (Basin MM, Q_5 = 2 cfs, Q_{100} = 4 cfs) from 0.5 acres of Rampart Hills View roadway. The flows are routed north in an 18" storm (Pipe 66, Q_5 = 3 cfs, Q_{100} = 6 cfs) that also contains the runoff from RD-10 (0.21 acres of hotel rooftop). RD-10 is conveyed to the 18" main in a XX" storm pipe. Pipe 66 connects to the 60" main (Pipe 67B, Q_5 = 76 cfs, Q_{100} = 136 cfs) continuing to the northwest.

Design Point 74: A proposed private 30" storm pipe 'stubbed' to Basin 2A-A, east of Rampart Hills View. This main (Pipe 68A) will convey the full developed flows from Basin 2A-A to the east, connecting with the 60" main (Pipe 69, Q_5 = 88 cfs, Q_{100} = 156 cfs). In the Interim Condition, the runoff from undeveloped Basin 2A-A sheet flows onto Rampart Hills View and into the inlets at DP 47 & DP 60.

Design Point 55: A proposed private 12' sump inlet collects flows (Basin SS, Q_5 = 9 cfs, Q_{100} = 15 cfs) from 1.9 acres of the hotel's north parking lot and main entrance. The flows are routed in a 24" storm (Pipe 70) to the 60" main heading northwest (Pipe 71, Q_5 = 93 cfs, Q_{100} = 166 cfs).

Design Point 56: A proposed private 6' sump inlet collects flows (Basin TT, Q_5 = 6 cfs, Q_{100} = 10 cfs) from 1.2 acres of the hotel's main entrance drive and roundabout. The flows are routed in a 24" storm (Pipe 72) to the 60" main heading northwest (Pipe 73, Q_5 = 95 cfs, Q_{100} = 170 cfs).

Design Point 54: A proposed private 4' sump inlet collects flows (Basin RR, Q_5 = 3 cfs, Q_{100} = 5 cfs) from 0.6 acres of the hotel's north parking lot and drive aisle. The flows are routed in an 18" storm (Pipe 75) to the east along the front of the hotel for the multiple area and roof drains to connect onto.

Pipe 75 also contains the flows from RD-7, RD-8, and RD-9 (0.23 ac., 0.23 ac., and 0.18 ac. of hotel rooftop respectively).

Pipe 76 (24" RCP, Q_5 = 11 cfs, Q_{100} = 19 cfs) combines the runoff contained within Pipe 75 with that from RD-4, RD-5, and RD-6. The 24" main continues northwest parallel with the hotel front as Pipe 77. This section of the main also contains the remaining hotel roof flows, RD-1 & RD-3. The 24" main connects with the 60" main (Pipe 81, Q_5 = 97 cfs, Q_{100} = 173 cfs) and continues to the swale to temporary Pond BS-3.

Design Point 57: A proposed private 4' sump inlet collects flows (Basin UU, Q_5 = 3 cfs, Q_{100} = 5 cfs) from 0.6 acres of parking lot in the northwest parking area of the hotel. The intercepted flows are routed along the curb line to the inlet at DP 58 in an 18" storm (Pipe 82).

Design Point 58: A proposed private 8' sump inlet collects flows (Basin VV, Q_5 = 8 cfs, Q_{100} = 14 cfs) from 1.7 acres of pavement in the northwest parking lot of the hotel. The intercepted flows are combined with the flows from DP 57 and routed in a 24" storm (Pipe 83) to the 60" main. This 60" main (Pipe 85) releases flows of Q_5 = 104 cfs and Q_{100} = 187 cfs into the proposed swale 'x'. This swale directs the runoff into the temporary detention pond BS-3.

Filing No. 2 (Federal Drive - North, Roundabout to Swale/Temporary Pond BS-3)

Design Point 60: A proposed public 8' sump inlet collects flows (Basin DDD, Q_5 = 6 cfs, Q_{100} = 14 cfs) from a portion of Rampart Hills View and Federal Drive. Also, in the Interim Condition, the undeveloped flows from Basin 2A-A will sheet flow onto Rampart Hills View and into this inlet. Approximately half the runoff from the undeveloped basin will reach DP 60. Development of Basin 2A-A will require on-site detention and routing of flows to the pipe at DP 74. The intercepted runoff from the roundabout sump inlet is conveyed northwest in a public 24" RCP (Pipe 87) to a Type 1 storm manhole.

Design Point 61: In the Interim development conditions, this area is a temporary sediment basin collecting water from the undeveloped Basin 2A-B. Temporary swales are proposed to route all of these 'historic' flows to this design point as well as an additional temporary sediment basin (See Construction Drawings). The amount of storm runoff in the Interim conditions to this storm 'stub' is

Q_5 = 19 cfs and Q_{100} = 44 cfs. However, the fully developed flows of this entire basin are higher than these 'historic' flows. Therefore the developed flows are used in the modeling of the downstream storm system. The storm main 'stubbed' for future fully developed flows is a 48" RCP (Pipe 88, Q_5 = 55 cfs, Q_{100} = 114 cfs). A temporary 8" drain will be connected to the storm system (Pipe 88) to drain the temporary sediment basin. The private 48" main conveys the runoff to the north proposed Type 1 storm manhole.

Design Point 62: A proposed public 16' sump inlet collects flows (Basin WW, Q_5 = 13 cfs, Q_{100} = 24 cfs) from 2.9 acres of Federal Drive R.O.W. The intercepted flows are routed to the north toward DP 63 within a 24" RCP (Pipe 89).

Design Point 63: A proposed public 16' sump inlet collects flows (Basin XX, Q_5 = 14 cfs, Q_{100} = 25 cfs) from 3.3 acres of Federal Drive R.O.W. The intercepted flows combine with those from DP 62 in a 30" RCP (Pipe 91, Q_5 = 25 cfs, Q_{100} = 48 cfs). This 30" pipe runs to the proposed Type 1 storm manhole where the flows from Pipes 87, 88, and 91 combine. The outfall pipe of this manhole, 60" RCP (Pipe 92), releases flows of Q_5 = 77 cfs and Q_{100} = 153 cfs into the proposed swale 'A'. This swale directs the runoff to the west where it connects with swale 'B' before flowing directly into the temporary detention pond BS-3.

Filing No. 2 (New Life Drive and a portion of Federal Drive to Pond BS-1)

Design Point 65: Represents the off-site storm runoff that drains onto the site in an existing public 36" RCP storm sewer at New Life Drive and Voyager Parkway. A more individual description of the source of the off-site storm sewer can be seen in the previous MDDP portion of the report. Per the Northgate MDDP, the maximum amount of storm water to outfall within that 36" RCP is limited to Q_5 = 20 cfs and Q_{100} = 50 cfs in the fully developed conditions. This amount of flow will be used in the calculations of the downstream storm system. Pipe Run 95 represents the proposed 36" RCP storm that connects to the existing pipe and conveys the runoff west under proposed New Life Drive.

Design Point 66: A proposed private 42" storm pipe stub (Pipe 96) which will convey the full developed flows from the area shown as Basin 1A-A (Q_5 = 38 cfs and Q_{100} = 67 cfs). This Basin includes the roof drains of any future buildings and all areas of asphalt and landscaping.

Design Point 71: A proposed public 12' at-grade storm inlet collects flows from the north half of proposed New Life Drive. The flow-by from this inlet runs south to the sump inlet at DP-69 within Federal Drive. The intercepted flows are conveyed to the storm main within New Life Drive (Pipe 97B, 48" RCP, Q_5 = 53 cfs and Q_{100} = 113 cfs), within an 18" storm pipe (Pipe 104).

Design Point 67: A proposed public 12' at-grade storm inlet collects flows from the south half of proposed New Life Drive. The flow-by from this inlet runs south to the sump inlet at DP-69 within Federal Drive. The intercepted flows are conveyed to the storm main within New Life Drive (Pipe 99, 48" RCP, Q_5 = 56 cfs and Q_{100} = 117 cfs), within an 18" storm pipe (Pipe 98).

Design Point 68: A proposed public 4' sump storm inlet collects flows from a portion of Federal Drive, Basin CCC. The intercepted flows are conveyed in an 18" storm sewer (Pipe 100, 18" RCP, Q_5 = 3 cfs and Q_{100} = 5 cfs).

Design Point 69: A proposed public 4' sump storm inlet collects flows from a portion of Federal Drive, Basin BBB, and the flow-by from Design Points 71 & 67. The intercepted flows are conveyed in an 18" storm sewer (Pipe 101, 24" RCP, Q_5 = 7 cfs and Q_{100} = 15 cfs). This pipe combines with the pipe from DP 68 (Pipe 102) and runs north to a manhole at the intersection of New Life Drive and Federal Drive. The outfall pipe of the storm manhole contains the flows from Pipe 102 and Pipe 99. Pipe 103 is a 48" storm public storm main that runs north toward Pond BS-1 and contains Q_5 = 61 cfs and Q_{100} = 128 cfs.

Design Point 70: A proposed private 30" storm sewer with a flared end section intercepting flows from Basin 1A-B, and undeveloped parcel draining toward the intersection of Federal and New Life Drives. Future development of this basin may wish to use this storm stub based on the proposed grading, but all storm runoff is to ultimately reach Pond BS-1. The existing ground produces runoff to this design point of Q_5 = 12 cfs and Q_{100} = 30 cfs). The intercepted flows connect to the main running north in Federal Drive (Pipe 106).

Pond BS-1: The Storm Pipe 106 was compared in the different stages of development and the case where the flows are the highest is with the full development of Basin 1A-A and Design Point 70 accepting flows as described above. The Public 54" RCP will directly release flows of Q_5 = 73 cfs

and Q_{100} = 159 cfs into Pond BS-1, also known as Detention Pond 'B' in the construction drawings for this development. The Public Detention Pond and drainage structures will be designed as described within the MDDP portion of this report. The inlet and outlet structures of the proposed pond will be maintained by the City of Colorado Springs, with surface maintenance by the Interquest North Business Improvement District. A 30" RCP storm pipe will serve as the pond outfall into Black Squirrel Creek.

STORM WATER QUALITY CALCULATIONS

Storm water quality calculations were performed in accordance with the City of Colorado Springs Drainage Criteria Volume 2. The SCS method was used to estimate storm water runoff anticipated from design storms 2, 5, 10, 25, 50 and 100-year recurrence interval. Detailed discussion of each basin and the facilities proposed are included in the Fully Developed Conditions section and the Filing No. 1 & 2 Interim Conditions section.

CONSTRUCTION COST OPINION

Marketplace at Interquest Filing No. 1 Public Drainage Facilities (Non-Reimbursable)

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
1.	4' D-10-R Inlet	1 EACH	$3,000/EA	$ 3,000.00
2.	6' D-10-R Inlet	1 EACH	$3,800/EA	$ 3,800.00
3.	12' D-10-R Inlet	1 EACH	$6,500/EA	$ 6,500.00
4.	18" RCP Storm Drain	193 LF	$27/LF	$ 5,211.00
5.	24" RCP Storm Drain	42 LF	$36/LF	$ 1,512.00
SUB-TOTAL				**$ 20,023.00**
15% ENGINEERING & CONTINGENCIES				**$ 3,003.45**
TOTAL				**$ 23,026.45**

CONSTRUCTION COST OPINION

Marketplace at Interquest Filing No. 2 Public Drainage Facilities (Non-Reimbursable)

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
6.	4' D-10-R Inlet	1 EACH	$3,000/EA	$ 3,000.00
7.	6' D-10-R Inlet	1 EACH	$3,800/EA	$ 3,800.00
8.	8' D-10-R Inlet	1 EACH	$4,800/EA	$ 4,800.00

9.	12' D-10-R Inlet	2 EACH	$6,500/EA	$ 13,000.00
10.	16' D-10-R Inlet	2 EACH	$8,000/EA	$ 16,000.00
11.	18" RCP Storm Drain	87 LF	$27/LF	$ 2,349.00
12.	24" RCP Storm Drain	758 LF	$36/LF	$ 27,288.00
13.	30" RCP Storm Drain	65 LF	$45/LF	$ 2,925.00
14.	36" RCP Storm Drain	1,240 LF	$60/LF	$ 74,400.00
15.	48" RCP Storm Drain	1045 LF	$105/LF	$ 109,725.00
16.	TYPE I MH	4 EACH	$8,000/EA	$ 32,000.00
17.	TYPE III MH	1 EACH	$4,500/EA	$ 4,500.00

SUB-TOTAL	**$ 293,787.00**
15% ENGINEERING & CONTINGENCIES	**$ 44068.05**
TOTAL	**$ 337,855.05**

DRAINAGE AND BRIDGE FEES (Filing No. 1 and Filing No. 2)

Filing No. 1 (Elkhorn Drainage Basin)
All portions of the area proposed to be platted as Filing No. 1 are within the Elkhorn Drainage Basin therefore no fees are due.

Filing No. 2
Black Squirrel Drainage Basin

Drainage Fees:		
14.69 acres x $10,369/ac	=	$152,320.61
14.69 acres x $ 1,184/ac.	=	$ 17,392.96
Pond Fees:		
Land:		
14.69 acres x 789/ac.	=	$ 11,590.41
TOTALS:		**$181,303.98**

We respectfully ask that drainage fees associated with the Black Squirrel Creek Drainage Basin be waived in lieu of the significant cost of the proposed Black Squirrel Drainage Channel Improvements proposed by Classic Companies & Nor'wood Development Group. Channel Improvement plans for the Black Squirrel Drainage Channel are in progress and under review at this time for final approvals.

Elkhorn Drainage Basin

All other areas of the Filing No. 2 plat are within the "closed" Elkhorn Drainage Basin therefore no fees are required.

All drainage, bridge, and pond fees required for the Black Squirrel Creek Drainage Basin will be offset by future construction obligations by the Developer including the Black Squirrel Creek Channel Improvements, Ridgeline Drive crossing Black Squirrel Creek and the regional detention facilities associated with the overall site, therefore no fees are required as a part of platting Filing No. 1 or Filing No. 2.

EROSION CONTROL PLAN

The City of Colorado Springs Drainage Criteria Manual specifies an Erosion Control Plan and associated cost estimate be submitted with the Final Drainage Report. We respectfully request that the Erosion Control Plan and cost estimate be submitted in conjunction with the Grading Plan and construction assurances posted prior to obtaining a grading permit.

FLOODPLAIN STATEMENT

There are portions of the overall study area that lie within a 100-year floodplain as depicted in the Colorado Springs Flood Insurance Study, prepared by the Federal Emergency Management Agency (FEMA) as shown on FIRM Panel 08041C0506 F, dated March 17, 1997. The FIRM Panel is shown in the Appendix of this report. No portions of any area being platted as part of Marketplace at Interquest Filing No. 1 or 2 are located within a FEMA floodplain.

CONCLUSIONS

Based upon the existing, fully developed and interim buildout scenarios described in this report no adverse impact to downstream or adjacent properties is anticipated. The use of regional detention facilities and regional stormwater quality help to mitigate the impacts of developed flows. Subsequent Final Drainage Reports (beyond Filing No. 1 & 2) will continue to monitor the hydraulic

characteristics of the proposed storm facilities to ensure Air Force Academy historic flow rates are being adhered to.

PREPARED BY:

Classic Consulting, Engineers & Surveyors, LLC

Matthew A. Larson, E.I.
Project Engineer

REFERENCES

1. Soil Survey for el Paso County, Colorado, dated June 1981.

2. "City of Colorado Springs/El Paso County Drainage Criteria Manual", prepared by City of Colorado Springs, El Paso County, dated May 1987, revised 1996.

3. "Flood Insurance Studies for Colorado Springs, and El Paso County, Colorado", prepared by the Federal Emergency Management Agency (FEMA), revised March, 1997.

4. Master Development Drainage Plan, Fairlane Technological Park prepared by URS Consultants, Inc., dated October 1993, revised January 1994.

5. Master Development Drainage Plan Update, Fairlane Technological Park prepared by Ayres Associates, Inc., dated November 1997.

6. Drainage Memorandum for Pikes Peak Community College North Campus, prepared by URS Consultants, Inc., dated October 1996.

7. Drainage Addendum No. 1 for the New Life Church Filing No. 2, prepared by Haynes and Associates, Ltd., dated May 1996.

8. Final Hydraulic Report, Interstate 25 and Fairlane Parkway Interchange, Phase 1, prepared by DMJM, Inc., dated August 1998

9. Final Hydraulic Report, Interstate 25, Interquest Parkway/S. H. 83 Relocation, prepared by DMJM, Inc., dated March 1999.

10. Master Development Drainage Plan Update, Fairlane Technological Park, prepared by Kiowa Engineering Corporation, dated November 27, 2000 revised February 8, 2001.

11. Preliminary and Final Drainage Report for International Bible Society Filing No.1, prepared by URS Consultants, dated August 1998.

12. Preliminary / Final Drainage Report for Voyager Parkway Phase 3B (Jet Stream Drive to Interquest Parkway), prepared by JR Engineering, dated April 2000, revised May 2000.

CLASSIC
CONSULTING
ENGINEERS & SURVEYORS

APPENDIX

DEPARTMENT OF THE AIR FORCE

10TH CIVIL ENGINEER GROUP
USAF ACADEMY COLORADO

PUBLIC WORKS

30 NOV 2000

Mr. Thomas M. Mitchell
Deputy Civil Enginner
8120 Edgerton Drive, Suite 40
USAF Academy CO 80840-2400

Mr. David S. Zelenok
Group Support Manager
City of Colorado Springs
PO Box 1575, Mail Code 450
Colorado Springs CO 80901-1575

Dear Mr. Zelenok

Increased storm water flow from development along tributaries to Monument Creek has the potential to impact the riparian environment and infrastructure on the Academy and downstream neighbors' property. We have tried to get developers to voluntarily detain increased flows to the Academy and limit their discharge to historical levels. This has been unsuccessful. Therefore, to maintain the health of the Monument Creek system, we ask that the city enforce the following criteria for development occurring upstream of the Academy to ensure that developed flows do not adversely affect water quality, riparian habitat or our infrastructure.

> Development occurring upstream of the Academy shall ensure that peak flows for the 2-, 5-, 10-, 50- and 100-year storm frequencies are not increased over historical "undeveloped" flows. Proposed development occurring upstream of the Academy must adequately demonstrate that storm water facilities (i.e., detention/retention ponds) will function in conjunction with other facilities within the drainage and not increase peak flows for the frequencies listed above or adversely impact water quality.

We believe that these requirements are consistent with Colorado case law (Docheff v. City of Broomfield, 623 P.2d 69 (Colo. App1980), Hankins v. Borland, 163 Colo. 575 (1967); City of Boulder v. Boulder and White Rock Ditch and Reservoir Co., 73 Colo. 462 (1926)) and with the Academy's Conservation and Management Plan and agreement with the US Fish and Wildlife Service for the Preble's meadow jumping mouse (signed on 6 June 2000 by the Academy's Superintendent and the US Fish and Wildlife Service, Region 6 Director).

Please feel free to contact me or have your staff contact Josh Kellar at 333-6709 if there are any questions regarding this material.

Sincerely

THOMAS M. MITCHELL

TABLE 5-5
RUNOFF CURVE NUMBERS FOR HYDROLOGIC SOIL COVER COMPLEXES - URBAN AND SUBURBAN CONDITIONS 1/
(Antecedent Moisture Condition II)
(From: U.S. Dept. of Agriculture, Soil Conservation Service, 1977)

Land Use		Hydrologic Soil Group A	B	C	D
Open spaces, lawns, parks, golf courses, cemeteries, etc.					
Good condition:	grass cover on 75% or more of the area	39*	61	74	80
Fair condition:	grass cover on 50% to 75% of the area	49*	69	79	84
Commercial and Business areas (85% Impervious)		89*	92	94	95
Industrial Districts 72% Impervious)		81*	88	91	93
Residential: 2/					
Acres per Dwelling Unit	Average % Impervious 3/				
1/8 acre or less	65	77*	85	90	92
1/4 acre	38	61*	75	83	87
1/3 acre	30	57*	72	81	86
1/2 acre	25	54*	70	80	85
1 acre	20	51*	68	79	84
Paved parking lots, roofs, driveways, etc.		98	98	98	98
Streets and Roads:					
paved with curbs and storm sewers		98	98	98	98
gravel		76*	85	89	91
dirt		72*	82	87	89

1/ For a more detailed description of agricultural land use curve numbers, refer to the National Engineering Handbook (U.S. Dept. of Agriculture, Soil Conservation Service, 1972).
2/ Curve numbers are computed assuming the runoff from the house and driveway is directed towards the street with a minimum of roof water directed to lawns where additional infiltration could occur.
3/ The remaining pervious areas (lawn) are considered to be in good pasture condition for these curve numbers.

* Not to be used wherever overlot grading or filling is to occur.

TABLE 5-1

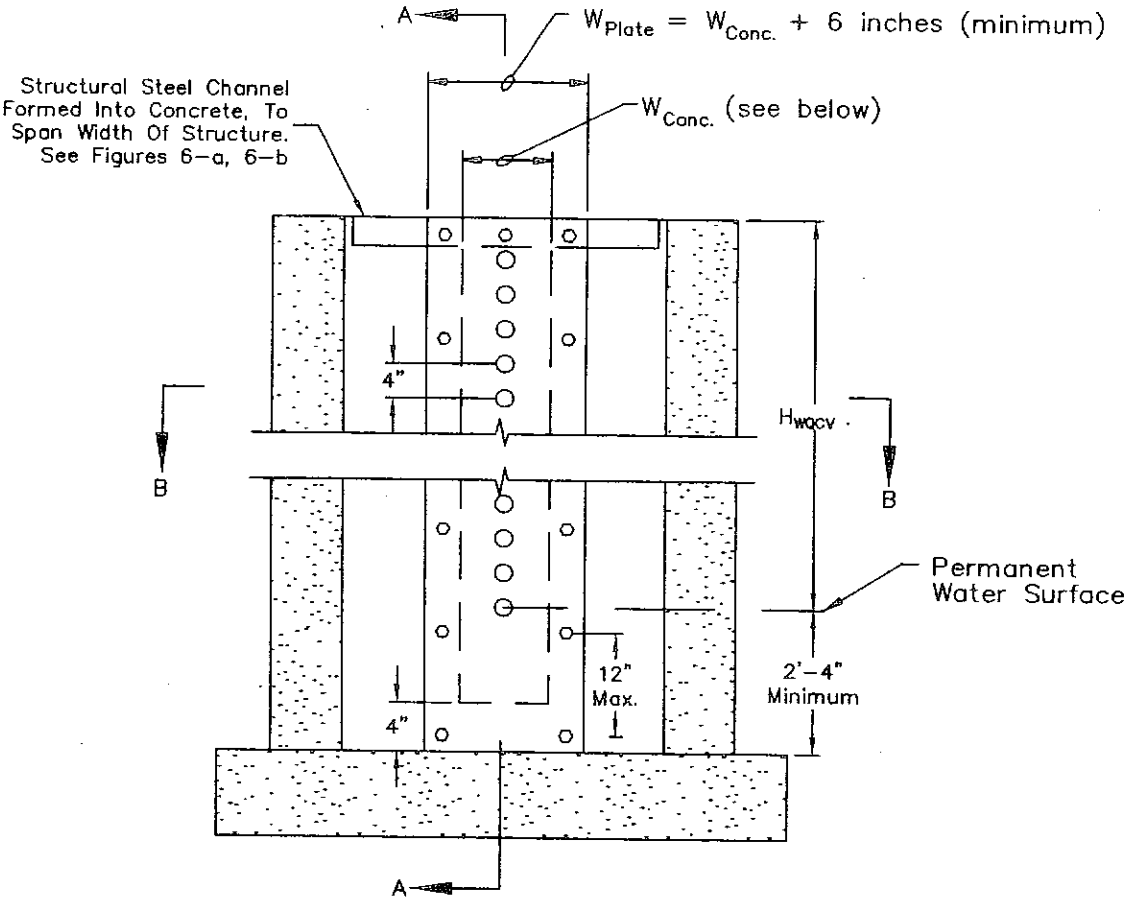
RECOMMENDED AVERAGE RUNOFF COEFFICIENTS AND PERCENT IMPERVIOUS

LAND USE OR SURFACE CHARACTERISTICS	PERCENT IMPERVIOUS	"C" FREQUENCY 10 A&B*	10 C&D*	100 A&B*	100 C&D*
Business					
Commercial Areas	95	0.90	0.90	0.90	0.90
Neighborhood Areas	70	0.75	0.75	0.80	0.80
Residential					
1/8 Acre or less	65	0.60	0.70	0.70	0.80
1/4 Acre	40	0.50	0.60	0.60	0.70
1/3 Acre	30	0.40	0.50	0.55	0.60
1/2 Acre	25	0.35	0.45	0.45	0.55
1 Acre	20	0.30	0.40	0.40	0.50
Industrial					
Light Areas	80	0.70	0.70	0.80	0.80
Heavy Areas	90	0.80	0.80	0.90	0.90
Parks and Cemeteries	7	0.30	0.35	0.55	0.60
Playgrounds	13	0.30	0.35	0.60	0.65
Railroad Yard Areas	40	0.50	0.55	0.60	0.65
Undeveloped Areas					
Historic Flow Analysis- Greenbelts, Agricultural	2	0.15	0.25	0.20	0.30
Pasture/Meadow	0	0.25	0.30	0.35	0.45
Forest	0	0.10	0.15	0.15	0.20
Exposed Rock	100	0.90	0.90	0.95	0.95
Offsite Flow Analysis (when land use not defined)	45	0.55	0.60	0.65	0.70
Streets					
Paved	100	0.90	0.90	0.95	0.95
Gravel	80	0.80	0.80	0.85	0.85
Drive and Walks	100	0.90	0.90	0.95	0.95
Roofs	90	0.90	0.90	0.95	0.95
Lawns	0	0.25	0.30	0.35	0.45

* Hydrologic Soil Group

9/30/90

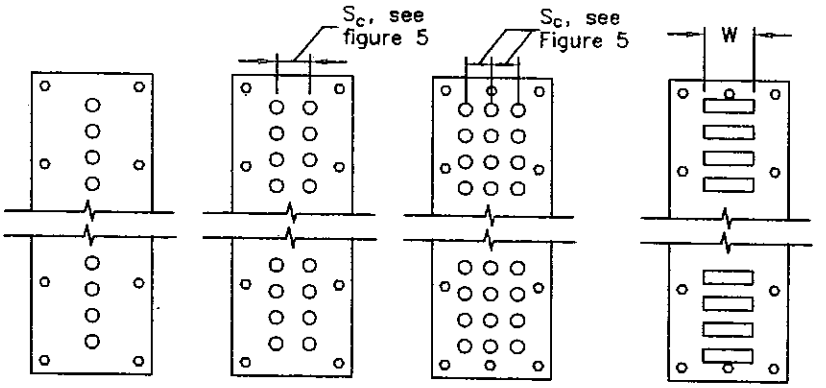
Orifice Perforation Details



Circular Openings: $W_{Conc.}$ Obtained From Table 6a–1

Rectangular Openings: $W_{Conc.}$ = (Width of Rectangular Perforation W) + 12"

Rectangular Openings: $W_{Opening}$ (see Figure 6–b) Obtained From Table 6b–1



Example Perforation Patterns

Note: The goal in designing the outlet is to minimize the number of columns of perforations that will drain the WQCV in the desired time. Do not, however, increase the diameter of circular perforations or the height of the rectangular perforations beyond 2 inches. Use the allowed perforation shapes and configurations shown above along with Figure 5 to determine the pattern that provides an area per row closest to that required without exceeding it.

Urban Drainage and Flood Control District Drainage Criteria Manual (V.3) File: Details.dwg	Figure 4 Orifice Details for Draining WQCV

Orifice Plate Perforation Sizing

Circular Perforation Sizing

Chart may be applied to orifice plate or vertical pipe outlet.

Hole Dia (in) *	Hole Dia (in)	Min. S_c (in)	Area per Row (sq in)		
			n=1	n=2	n=3
1/4	0.250	1	0.05	0.10	0.15
5/16	0.313	2	0.08	0.15	0.23
3/8	0.375	2	0.11	0.22	0.33
7/16	0.438	2	0.15	0.30	0.45
1/2	0.500	2	0.20	0.39	0.59
9/16	0.563	3	0.25	0.50	0.75
5/8	0.625	3	0.31	0.61	0.92
11/16	0.688	3	0.37	0.74	1.11
3/4	0.750	3	0.44	0.88	1.33
13/16	0.813	3	0.52	1.04	1.56
7/8	0.875	3	0.60	1.20	1.80
15/16	0.938	3	0.69	1.38	2.07
1	1.000	4	0.79	1.57	2.36
1 1/16	1.063	4	0.89	1.77	2.66
1 1/8	1.125	4	0.99	1.99	2.98
1 3/16	1.188	4	1.11	2.22	3.32
1 1/4	1.250	4	1.23	2.45	3.68
1 5/16	1.313	4	1.35	2.71	4.06
1 3/8	1.375	4	1.48	2.97	4.45
1 7/16	1.438	4	1.62	3.25	4.87
1 1/2	1.500	4	1.77	3.53	5.30
1 9/16	1.563	4	1.92	3.83	5.75
1 5/8	1.625	4	2.07	4.15	6.22
1 11/16	1.688	4	2.24	4.47	6.71
1 3/4	1.750	4	2.41	4.81	7.22
1 13/16	1.813	4	2.58	5.16	7.74
1 7/8	1.875	4	2.76	5.52	8.28
1 15/16	1.938	4	2.95	5.90	8.84
2	2.000	4	3.14	6.28	9.42
n = Number of columns of perforations					
Minimum steel plate thickness			1/4 "	5/16 "	3/8 "

* Designer may interpolate to the nearest 32nd inch to better match the required area, if desired.

Rectangular Perforation Sizing

Only one column of rectangular perforations allowed.

Rectangular Height = 2 inches

$$\text{Rectangular Width (inches)} = \frac{\text{Required Area per Row (sq in)}}{2"}$$

Rectangular Hole Width	Min. Steel Thickness
5"	1/4 "
6"	1/4 "
7"	5/32 "
8"	5/16 "
9"	11/32 "
10"	3/8 "
>10"	1/2 "

Urban Drainage and Flood Control District

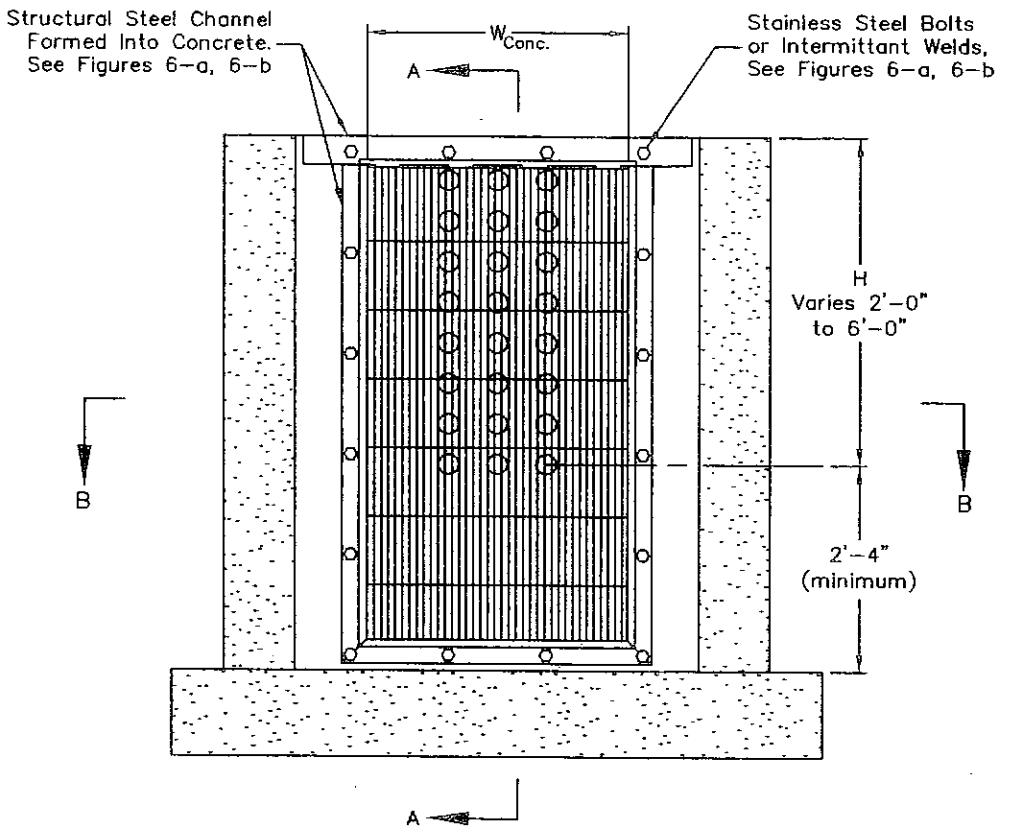
Drainage Criteria Manual (V.3)

File: Details.dwg

Figure 5

WQCV Outlet Orifice Perforation Sizing

Note: Vertical WQCV Trash Racks are shown in Figures 6, 6–a, and 6–b for suggested standardized outlet design. Adverse–Slope Trash Rack design may be used for non–standardized designs, but must meet minimum design criteria.



Elevation

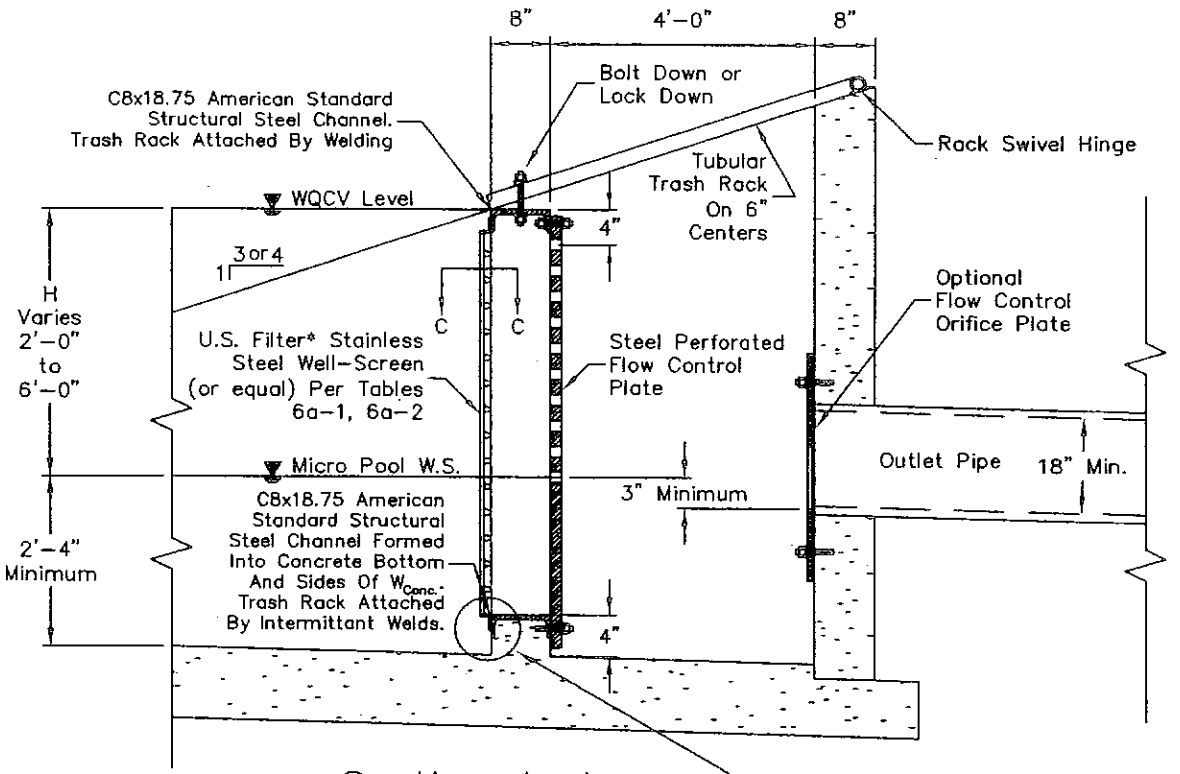
WQCV Trash Racks:

1. Well–screen trash racks shall be stainless steel and shall be attached by intermittant welds along the edge of the mounting frame.
2. Bar grate trash racks shall be aluminum and shall be bolted using stainless steel hardware.
3. Trash Rack widths are for specified trash rack material. Finer well–screen or mesh size than specified is acceptable, however, trash rack dimensions need to be adjusted for materials having a different open area/gross area ratio (R value)
4. Structural design of trash rack shall be based on full hydrostatic head with zero head downstream of the rack.

Overflow Trash Racks:

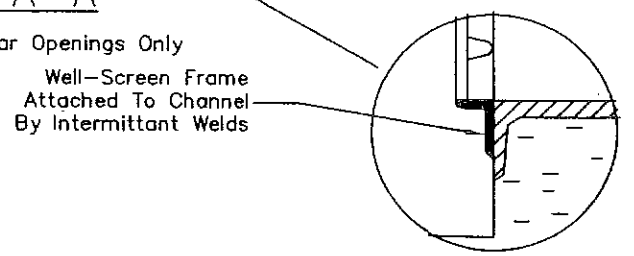
1. All trash racks shall be mounted using stainless steel hardware and provided with hinged and lockable or boltable access panels.
2. Trash racks shall be stainless steel, aluminum, or steel. Steel trash racks shall be hot dip galvanized and may be hot powder painted after galvanizing.
3. Trash Racks shall be designed such that the diagonal dimension of each opening is smaller than the diameter of the outlet pipe.
4. Structural design of trash rack shall be based on full hydrostatic head with zero head downstream of the rack.

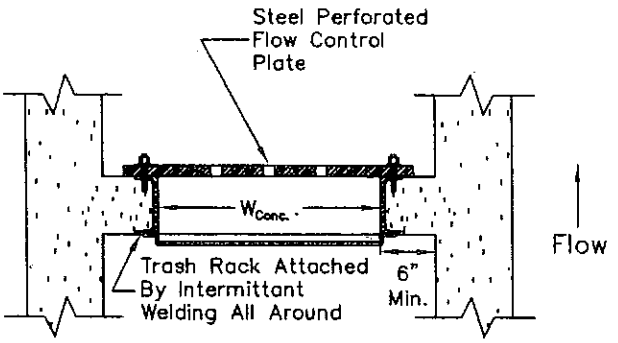
Urban Drainage and Flood Control District Drainage Criteria Manual (V.3) File: Details.dwg	Figure 6 Suggested WQCV Outlet Standardized Trash Rack Design



Section A-A

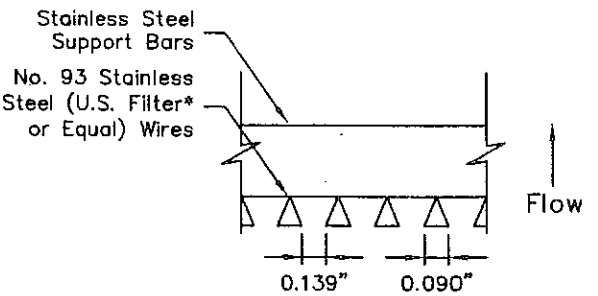
From Figure 6, Circular Openings Only





Section B-B - Plan View

From Figure 6, Circular Openings Only



Section C-C

From Figure 6, Circular Openings Only

Limits for this Standardized Design:

1. All outlet plate openings are circular.
2. Maximum diameter of opening = 2 inches.

*U.S. Filter, St. Paul, Minnesota, USA

R Value = (net open area)/(gross rack area)
= 0.60

Urban Drainage and Flood Control District Drainage Criteria Manual (V.3) File: Details.dwg	Figure 6-a Suggested Standardardized Trash Rack and Outlet Design For WQCV Outlets With Circular Openings

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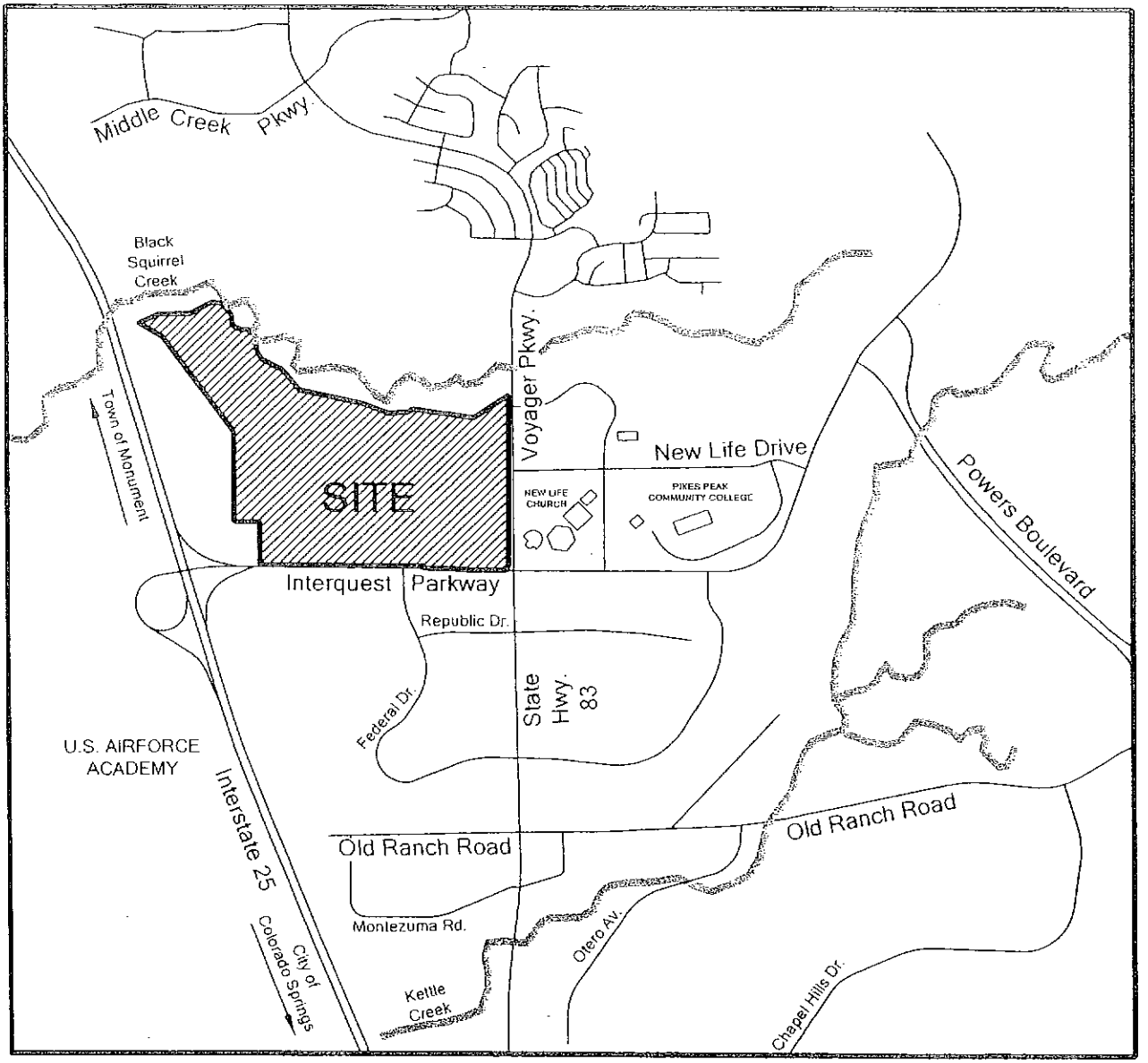
VICINITY MAP



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Vicinity Map

N.T.S.

N

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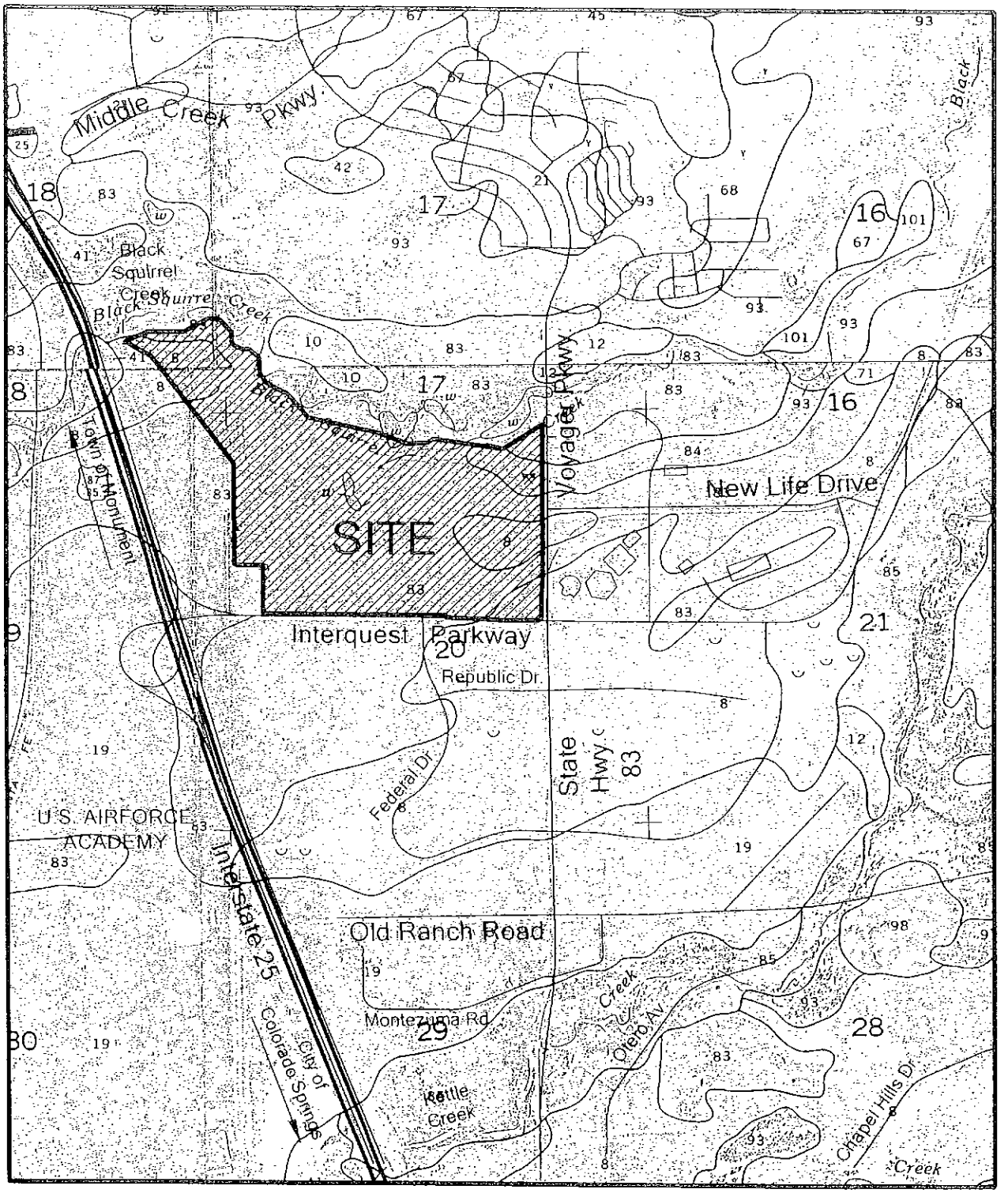
SOILS MAP (S.C.S SURVEY)



Key

8	Blakeland	Hydrologic Group A
83	Stapleton	Hydrologic Group B
84	Stapleton	Hydrologic Group B

2000′ 1000′ 0 2000′ 4000′

SCALE: 1″ = 2000′

N

CLASSIC SM
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Soils Map

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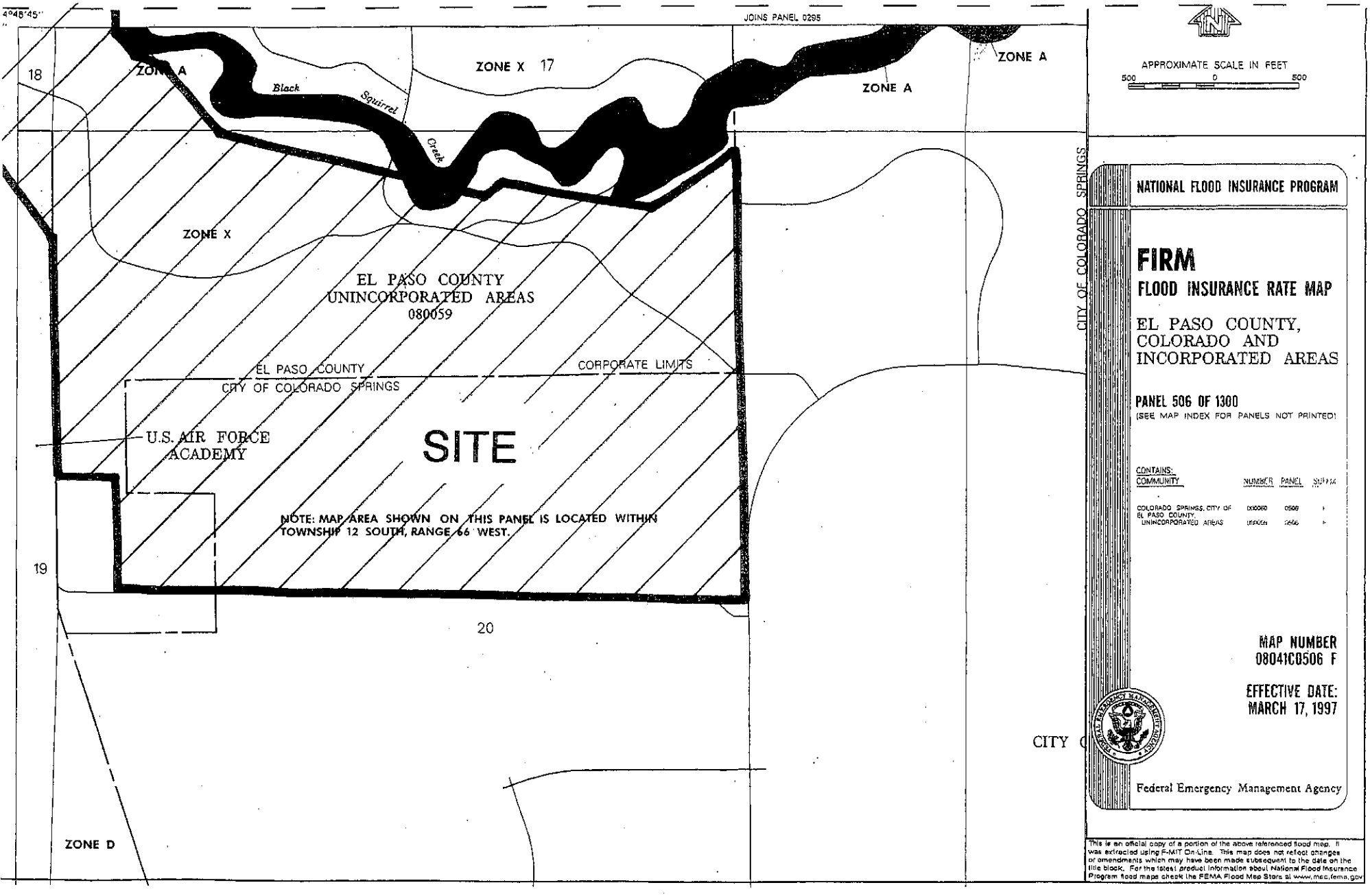
F.E.M.A. MAP


4948'45"
JOINS PANEL 0295
18
ZONE A
Black
Squirrel
Creek
ZONE X 17
ZONE A
ZONE A
ZONE X
EL PASO COUNTY
UNINCORPORATED AREAS
080059
EL PASO COUNTY
CITY OF COLORADO SPRINGS
CORPORATE LIMITS
U.S. AIR FORCE
ACADEMY
SITE
NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN
TOWNSHIP 12 SOUTH, RANGE 66 WEST.
19
20
ZONE D
CITY OF COLORADO SPRINGS
CITY
APPROXIMATE SCALE IN FEET
500 0 500
NATIONAL FLOOD INSURANCE PROGRAM
FIRM
FLOOD INSURANCE RATE MAP
EL PASO COUNTY,
COLORADO AND
INCORPORATED AREAS
PANEL 506 OF 1300
(SEE MAP INDEX FOR PANELS NOT PRINTED)
CONTAINS:
COMMUNITY
NUMBER
PANEL
SUFFIX
COLORADO SPRINGS, CITY OF
EL PASO COUNTY
UNINCORPORATED AREAS
080060
080059
0506
F
MAP NUMBER
08041C0506 F
EFFECTIVE DATE:
MARCH 17, 1997
Federal Emergency Management Agency
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

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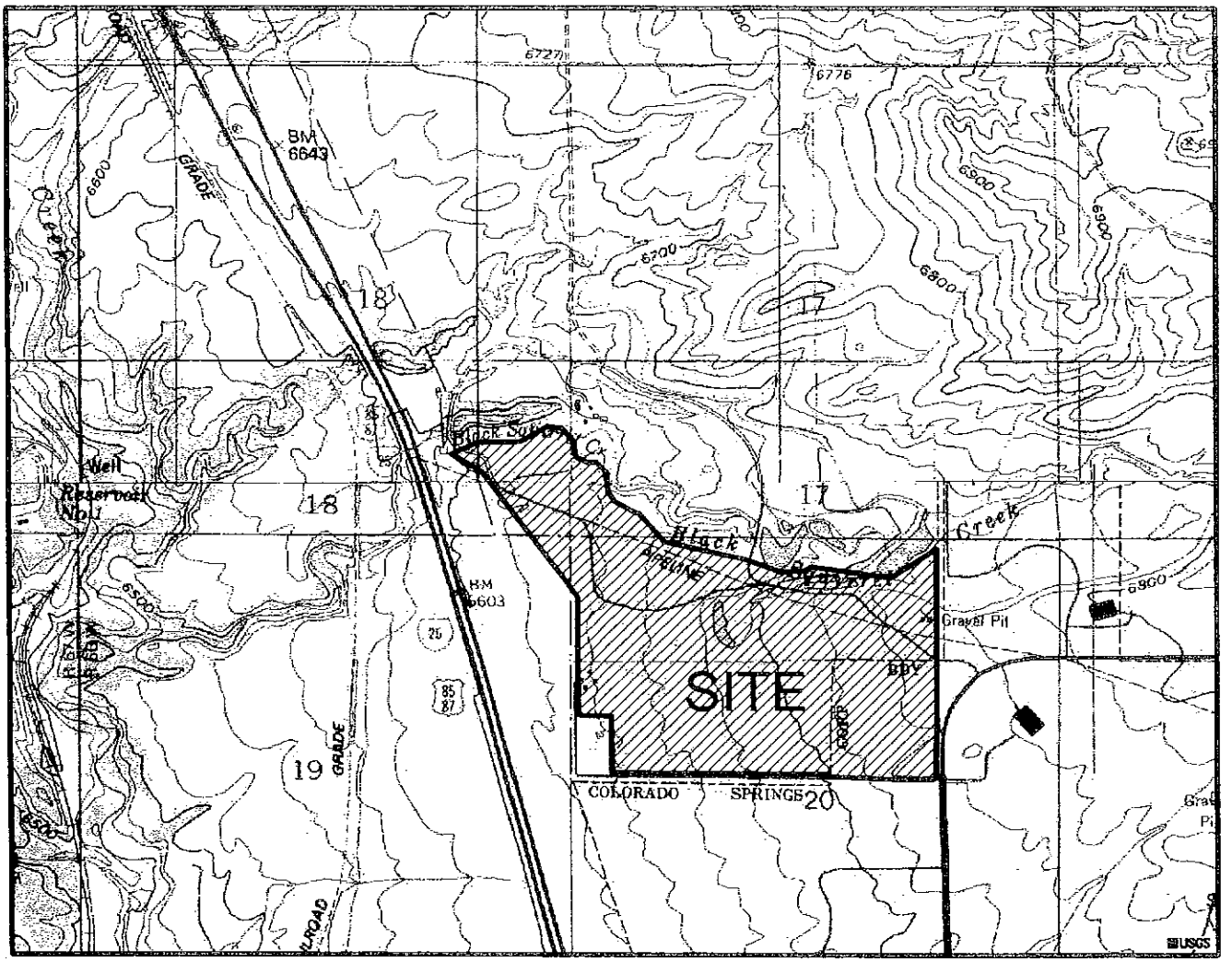
U.S.G.S. MAP



2000′ 1000′ 0 2000′ 4000′

SCALE: 1″ = 2000′

N

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USGS Map

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HYDROLOGIC / HYDRAULIC CALCULATIONS
EXISTING CONDITIONS

COMPOSITE C_N VALUES - EXISTING CONDITIONS

BASIN (label)	BASIN AREA (ac)	LAND USE	SUB-AREA LAND USE 1		AREA (AC)	LAND USE	SUB-AREA LAND USE 2		AREA (AC)	TOTAL BASIN AREA (ac)	TOTAL BASIN AREA (sq mi)	WEIGHTED C_N
			ESTIMATED PERCENT IMPERIOUS	ESTIMATED			ESTIMATED PERCENT IMPERIOUS	ESTIMATED C_N				
02B	12.4	UNDEV.	0	61	12.4	ROADS	100	98	0	12.4	0.01938	61.0
EX-A	10.5	UNDEV.	0	61	9.6	ROADS	100	98	0.0	9.6	0.01500	61.0
EX-B	7.1	UNDEV.	0	61	3.5	ROADS	100	98	3.6	7.1	0.01109	79.8
EX-C1	0.3	UNDEV.	0	61	0.1	ROADS	100	98	0.2	0.3	0.00047	85.7
EX-C2	0.4	UNDEV.	0	61	0.1	ROADS	100	98	0.2	0.3	0.00047	85.7
PR-D	11.4	UNDEV.	0	61	6.6	ROADS	100	98	0.0	6.6	0.01031	61.0
VP-1	1.2	UNDEV.	0	61	0.4	ROADS	100	98	0.8	1.2	0.00188	85.7
IP-1	1.3	UNDEV.	0	61	0.4	ROADS	100	98	0.9	1.3	0.00203	85.7
IP-2	2.0	UNDEV.	0	61	0.7	ROADS	100	98	1.3	2.0	0.00313	85.7
O-3B	70.5	UNDEV.	0	61	70.5	ROADS	100	98	0.0	70.5	0.11016	61.0
O-3C1	16.4	UNDEV.	0	61	16.4	ROADS	100	98	0.0	16.4	0.02563	61.0
SE-1	5.0	UNDEV.	0	61	5.0	ROADS	100	98	0.0	5.0	0.00781	61.0
AF-1	11.8	UNDEV.	0	61	11.8	ROADS	100	98	0.0	11.8	0.01844	61.0
O-3C2	33.0	UNDEV.	0	61	33.0	ROADS	100	98	0.0	33.0	0.05156	61.0
AF-2	20.5	UNDEV.	0	61	20.5	ROADS	100	98	0.0	20.5	0.03203	61.0
EK-1	11.8	UNDEV.	0	61	11.8	ROADS	100	98	0.0	11.8	0.01844	61.0
AF-3	16.4	UNDEV.	0	61	16.4	ROADS	100	98	0.0	16.4	0.02563	61.0
BS-1	21.5	UNDEV.	0	61	21.5	ROADS	100	98	0.0	21.5	0.03359	61.0
BS-2	46.7	UNDEV.	0	61	46.7	ROADS	100	98	0.0	46.7	0.07297	61.0
BS-3	58.8	UNDEV.	0	61	58.8	ROADS	100	98	0.0	58.8	0.09188	61.0

TIME OF CONCENTRATION

BASIN	Cn	C(5)	Length (ft)	OVERLAND Height (ft)	Tc (min)	STREET / CHANNEL FLOW Length (ft)	Velocity (fps)	Tc (min)	Tc TOTAL (min)	Tc TOTAL (hr)	Lagtime TOTAL (hr)
02B	61.0	0.25	100	2	12.6	1800	3.0	10.0	22.6451	0.3774	0.2265
EX-A	61.0	0.25	75	2	10.0	1400	3.0	7.8	17.7369	0.2956	0.1774
EX-B	79.8	0.65	50	2	3.8	500	3.0	2.8	6.5436	0.1091	0.0654
EX-C1	85.7	0.75	50	2	2.9	350	3.0	1.9	4.8734	0.0812	0.0487
EX-C2	85.7	0.75	50	2	2.9	350	3.0	1.9	4.8734	0.0812	0.0487
PR-D	61.0	0.25	100	2	12.6	1100	3.0	6.1	18.7562	0.3126	0.1876
VP-1	85.7	0.75	50	2	2.9	1200	3.0	6.7	9.5956	0.1599	0.0960
IP-1	85.7	0.75	50	2	2.9	1300	3.0	7.2	10.1512	0.1692	0.1015
IP-2	85.7	0.75	50	2	2.9	1900	3.0	10.6	13.4845	0.2247	0.1348
O-3B	61.0	0.25	100	2	12.6	3700	3.0	20.6	33.2006	0.5533	0.3320
O-3C1	61.0	0.25	100	2	12.6	2400	3.0	13.3	25.9784	0.4330	0.2598
SE-1	61.0	0.25	100	2	12.6	400	3.0	2.2	14.8673	0.2478	0.1487
AF-1	61.0	0.25	100	2	12.6	900	3.0	5.0	17.6451	0.2941	0.1765
O-3C2	61.0	0.25	100	2	12.6	2400	3.0	13.3	25.9784	0.4330	0.2598
AF-2	61.0	0.25	100	2	12.6	1000	3.0	5.6	18.2006	0.3033	0.1820
EK-1	61.0	0.25	100	2	12.6	1200	3.0	6.7	19.3117	0.3219	0.1931
AF-3	61.0	0.25	100	2	12.6	1200	3.0	6.7	19.3117	0.3219	0.1931
BS-1	61.0	0.25	100	2	12.6	2000	3.0	11.1	23.7562	0.3959	0.2376
BS-2	61.0	0.25	100	2	12.6	3500	3.0	19.4	32.0895	0.5348	0.3209
BS-3	61.0	0.25	100	2	12.6	3500	3.0	19.4	32.0895	0.5348	0.3209

BASIN SUMMARY - EXISTING CONDITIONS

BASIN (label)	TOTAL BASIN AREA (acres)	TOTAL BASIN AREA (sq mi)	WEIGHTED CN	TOTAL LAG TIME (hours)	TOTAL Tc (hours)	Q 2 Yr. (cfs)	Q 5 Yr. (cfs)	Q 10 Yr. (cfs)	Q 25 Yr. (cfs)	Q 50 Yr. (cfs)	Q 100 Yr. (cfs)
02B	12.4	0.0194	61.0	0.2265	0.3774	0.14	1.71	3.56	7.19	10.05	13.24
EX-A	10.5	0.0164	61.0	0.1774	0.2956	0.13	1.74	3.57	7.09	9.84	12.83
EX-B	7.1	0.0111	79.8	0.0654	0.1091	6.63	11.21	14.48	19.57	23.05	26.58
EX-C1	0.3	0.0004	98.0	0.0487	0.0812	0.64	0.84	0.97	1.17	1.30	1.43
EX-C2	0.4	0.0007	93.0	0.0487	0.0812	0.88	1.22	1.44	1.78	2.00	2.22
PR-D	11.4	0.0178	61.0	0.1876	0.5317	0.12	1.21	2.53	5.17	7.31	9.69
EX-H	1.2	0.0019	98.0	0.0487	0.0833	1.70	2.23	2.58	3.11	3.46	3.81
EX-G	1.0	0.0016	98.0	0.0487	0.0833	0.71	0.93	1.08	1.30	1.44	1.59
VP-1	1.2	0.0019	85.7	0.0960	0.1599	1.57	2.43	3.01	3.91	4.51	5.12
IP-1	1.3	0.0020	85.7	0.1015	0.1692	1.69	2.61	3.24	4.21	4.86	5.52
IP-2	2.0	0.0031	85.7	0.1348	0.2247	2.43	3.80	4.75	6.20	7.18	8.18
O-3B	70.5	0.1102	61.0	0.3320	0.5533	0.74	7.27	15.15	31.04	43.91	58.28
O-3C1	16.4	0.0256	61.0	0.2598	0.4330	0.18	2.04	4.25	8.65	12.15	16.06
SE-1	5.0	0.0078	61.0	0.1487	0.2478	0.07	0.94	1.90	3.71	5.12	6.66
AF-1	11.8	0.0184	61.0	0.1765	0.2941	0.14	1.96	4.03	7.99	11.08	14.45
O-3C2	33.0	0.0516	61.0	0.2598	0.4330	0.36	4.11	8.56	17.41	24.46	32.32
AF-2	20.5	0.0320	61.0	0.1820	0.3033	0.25	3.33	6.85	13.61	18.94	24.76
EK-1	11.8	0.0184	61.0	0.1931	0.3219	0.14	1.84	3.79	7.57	10.53	13.80
AF-3	16.4	0.0256	61.0	0.1931	0.3219	0.19	2.56	5.27	10.52	14.64	19.17
BS-1	21.5	0.0336	61.0	0.2376	0.3959	0.24	2.86	5.95	12.05	16.92	22.28
BS-2	46.7	0.0730	61.0	0.3209	0.5348	0.49	4.94	10.31	21.11	29.84	39.57
BS-3	58.8	0.0919	61.0	0.3209	0.5348	0.62	6.22	12.98	26.58	37.58	49.82

CONVEYANCE CHART - EXISTING CONDITIONS

Conveyance Label	Type	Length ft.	Bottom Width ft.	Slope %	Side Slope H to 1	Manning's N value	Available Depth ft.	Q 5 Yr. cfs	Q 100 Yr. cfs	Q Capacity cfs
C1	Grass Lined Channel	1200	4.0	0.7850	3.0	0.035	1.500	1.02	11.05	46.20
C2	18" RCP	285	1.5	0.4980	N/A	0.013	N/A	2.03	2.78	7.41
C3	36" RCP	250	3.0	1.0000	N/A	0.013	N/A	4.18	24.02	66.69
C4	Grass Lined Channel	1050	4.0	3.4360	3.0	0.035	2.000	4.33	23.87	177.86
C5	36" RCP	250	3.0	1.0000	N/A	0.013	N/A	5.57	33.52	66.69
C6	Paved Channel	1500	2.0	2.4000	10.0	0.013	1.000	2.22	4.93	141.43
C7	Paved Channel	2000	2.0	3.0000	10.0	0.013	1.000	4.25	9.83	158.12
C8	Grass Lined Channel	3600	20.0	2.9860	10.0	0.035	1.000	4.76	26.00	181.19
C9	Grass Lined Channel	1000	3.0	2.8500	5.0	0.035	1.500	14.34	87.17	102.15
C10	24" RCP	100	2.0	2.0000	N/A	0.013	N/A	6.21	22.50	31.99
C11	24" RCP	150	2.0	2.0000	N/A	0.013	N/A	4.65	22.78	31.99
C12	24" RCP	150	2.0	2.0000	N/A	0.013	N/A	2.49	18.88	31.99

DESIGN POINTS - EXISTING CONDITIONS

Design Point (label)	Q 2 Yr. Q (cfs) Ponding (ft)	Q 5 Yr. Q (cfs) Ponding (ft)	Q 10 Yr. Q (cfs) Ponding (ft)	Q 50 Yr. Q (cfs) Ponding (ft)	Q 100 Yr. Q (cfs) Ponding (ft)
IBS IN	6.63	11.21	14.48	23.05	26.58
IBS OUT	1.82 / 6788.08	2.03 / 6788.46	2.20 / 6788.77	2.63 / 6789.68	2.78 / 6790.03
1	1.94	4.18	7.07	18.32	24.02
2	3.15	4.59	7.30	18.68	24.44
3	3.30	5.58	9.69	25.52	33.57
3a	4.81	7.10	9.91	25.81	33.87
4	3.01	4.77	5.97	9.12	10.40
5	6.95	14.52	25.60	66.87	87.99
6	6.71	18.37	32.58	85.48	112.59
EK3A IN	6.71	18.37	32.58	85.48	112.59
EK3A OUT	3.02 / 6608.34	8.52 / 6609.04	12.85 / 6609.46	22.69 / 6610.75	24.34 / 6611.29
7	2.35	6.21	10.05	19.64	22.50
8	0.59	7.06	14.69	41.90	55.25
I25-4 IN	0.59	7.06	14.69	41.90	55.25
I25-4 OUT	0.43 / 6600.27	4.65 / 6601.04	10.92 / 6601.78	19.46 / 6602.85	22.78 / 6603.42
9	0.43	4.65	10.92	19.46	22.78
10	0.33	4.40	9.05	25.17	32.97
I25-5 IN	0.33	4.40	9.05	25.17	32.97
I25-5 OUT	0.22 / 6600.16	2.49 / 6600.73	6.32 / 6601.25	15.92 / 6602.35	18.88 / 6602.76
11	0.22	2.49	6.32	15.92	18.88
12	0.24	2.86	5.95	16.92	22.28
13	0.49	4.94	10.31	29.84	39.57
14	0.62	6.22	12.98	37.58	49.82

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POND PACK OUTPUT

EXISTING CONDITIONS

MASTER DESIGN STORM SUMMARY

Network Storm Collection: C Springs

Return Event	Total Depth in	Rainfall Type	RNF ID
2	2.0000	Synthetic Curve	TYPEIIA 24HR
5	2.6000	Synthetic Curve	TYPEIIA 24HR
10	3.0000	Synthetic Curve	TYPEIIA 24HR
25	3.6000	Synthetic Curve	TYPEIIA 24HR
50	4.0000	Synthetic Curve	TYPEIIA 24HR
100	4.4000	Synthetic Curve	TYPEIIA 24HR

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
AF-1	AREA	2	.072		6.1875	.14		
AF-1	AREA	5	.223		6.1380	1.96		
AF-1	AREA	10	.359		6.1215	4.03		
AF-1	AREA	25	.608		6.1050	7.99		
AF-1	AREA	50	.799		6.1050	11.08		
AF-1	AREA	100	1.007		6.0885	14.45		
DP 1	JCT	2	.471		6.1710	1.94		
DP 1	JCT	5	.998		6.1875	4.18		
DP 1	JCT	10	1.435		6.1710	7.07		
DP 1	JCT	25	2.194		6.1545	13.21		
DP 1	JCT	50	2.757		6.1545	18.32		
DP 1	JCT	100	3.359		6.1380	24.02		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
DP 2	JCT	2	.559		6.0060	3.15		
DP 2	JCT	5	1.120		6.0225	4.59		
DP 2	JCT	10	1.580		6.1710	7.30		
DP 2	JCT	25	2.374		6.1710	13.52		
DP 2	JCT	50	2.960		6.1545	18.68		
DP 2	JCT	100	3.585		6.1545	24.44		
DP 3	JCT	2	.673		6.0225	3.30		
DP 3	JCT	5	1.394		6.2535	5.58		
DP 3	JCT	10	1.996		6.2370	9.69		
DP 3	JCT	25	3.045		6.2205	18.39		
DP 3	JCT	50	3.826		6.2040	25.52		
DP 3	JCT	100	4.662		6.2040	33.57		
DP 3A	JCT	2	.779		6.0225	4.81		
DP 3A	JCT	5	1.536		6.0225	7.10		
DP 3A	JCT	10	2.162		6.2535	9.91		
DP 3A	JCT	25	3.247		6.2205	18.64		
DP 3A	JCT	50	4.052		6.2205	25.81		
DP 3A	JCT	100	4.912		6.2040	33.87		
DP 4	JCT	2	.177		6.0390	3.01		
DP 4	JCT	5	.276		6.0390	4.77		
DP 4	JCT	10	.346		6.0390	5.97		
DP 4	JCT	25	.455		6.0225	7.80		
DP 4	JCT	50	.530		6.0225	9.12		
DP 4	JCT	100	.606		6.0225	10.40		
DP 5	JCT	2	1.526		6.0885	6.95		
DP 5	JCT	5	3.362		6.2040	14.52		
DP 5	JCT	10	4.929		6.2535	25.60		
DP 5	JCT	25	7.698		6.2535	48.11		
DP 5	JCT	50	9.778		6.2535	66.87		
DP 5	JCT	100	12.017		6.2535	87.99		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
DP 6	JCT	2	1.728		6.1545	6.71		
DP 6	JCT	5	3.988		6.2040	18.37		
DP 6	JCT	10	5.939		6.2205	32.58		
DP 6	JCT	25	9.409		6.2040	61.39		
DP 6	JCT	50	12.026		6.2205	85.48		
DP 6	JCT	100	14.850		6.2040	112.59		
*DP 7	JCT	2	1.678		7.8045	2.35		
*DP 7	JCT	5	3.937		7.5075	6.21		
*DP 7	JCT	10	5.889		7.3095	10.05		
*DP 7	JCT	25	9.358		7.2270	15.70		
*DP 7	JCT	50	11.975		7.2435	19.64		
*DP 7	JCT	100	14.799	R	7.2600	22.50		
EX-A	AREA	2	.064		6.1875	.13		
EX-A	AREA	5	.198		6.1380	1.74		
EX-A	AREA	10	.319		6.1215	3.57		
EX-A	AREA	25	.541		6.1050	7.09		
EX-A	AREA	50	.711		6.1050	9.84		
EX-A	AREA	100	.896		6.1050	12.83		
EX-B	AREA	2	.333		6.0060	6.63		
EX-B	AREA	5	.567		6.0060	11.21		
EX-B	AREA	10	.740		6.0060	14.48		
EX-B	AREA	25	1.015		6.0060	19.57		
EX-B	AREA	50	1.208		6.0060	23.05		
EX-B	AREA	100	1.406		6.0060	26.58		
EX-C1	AREA	2	.040		5.9565	.64		
EX-C1	AREA	5	.053		5.9565	.84		
EX-C1	AREA	10	.062		5.9895	.97		
EX-C1	AREA	25	.076		5.9565	1.17		
EX-C1	AREA	50	.085		5.9565	1.30		
EX-C1	AREA	100	.094		5.9730	1.43		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
EX-C2	AREA	2	.048		5.9895	.88		
EX-C2	AREA	5	.069		5.9895	1.22		
EX-C2	AREA	10	.083		5.9895	1.44		
EX-C2	AREA	25	.104		5.9895	1.78		
EX-C2	AREA	50	.118		5.9895	2.00		
EX-C2	AREA	100	.132		5.9895	2.22		
EX-G	AREA	2	.044		5.9565	.71		
EX-G	AREA	5	.059		5.9400	.93		
EX-G	AREA	10	.069		5.9565	1.08		
EX-G	AREA	25	.084		5.9565	1.30		
EX-G	AREA	50	.094		5.9565	1.44		
EX-G	AREA	100	.104		5.9565	1.59		
EX-H	AREA	2	.106		5.9730	1.70		
EX-H	AREA	5	.142		5.9730	2.23		
EX-H	AREA	10	.166		5.9730	2.58		
EX-H	AREA	25	.202		5.9730	3.11		
EX-H	AREA	50	.226		5.9730	3.46		
EX-H	AREA	100	.250		5.9565	3.81		
IBS	IN POND	2	.333		6.0060	6.63		
IBS	IN POND	5	.567		6.0060	11.21		
IBS	IN POND	10	.740		6.0060	14.48		
IBS	IN POND	25	1.015		6.0060	19.57		
IBS	IN POND	50	1.208		6.0060	23.05		
IBS	IN POND	100	1.406		6.0060	26.58		
IBS	OUT POND	2	.332		6.1050	1.82	6788.08	.104
IBS	OUT POND	5	.567		6.1215	2.03	6788.46	.216
IBS	OUT POND	10	.739		6.1380	2.20	6788.77	.307
IBS	OUT POND	25	1.015		6.1710	2.45	6789.29	.462
IBS	OUT POND	50	1.207		6.1875	2.63	6789.68	.574
IBS	OUT POND	100	1.406		6.1710	2.78	6790.03	.693

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
IP-1	AREA	2	.092		6.0225	1.69		
IP-1	AREA	5	.144		6.0225	2.61		
IP-1	AREA	10	.180		6.0225	3.24		
IP-1	AREA	25	.237		6.0225	4.21		
IP-1	AREA	50	.276		6.0225	4.86		
IP-1	AREA	100	.315		6.0060	5.52		
IP-2	AREA	2	.141		6.0390	2.43		
IP-2	AREA	5	.221		6.0390	3.80		
IP-2	AREA	10	.277		6.0390	4.75		
IP-2	AREA	25	.365		6.0390	6.20		
IP-2	AREA	50	.424		6.0390	7.18		
IP-2	AREA	100	.485		6.0225	8.18		
O-3B	AREA	2	.430		6.6990	.74		
O-3B	AREA	5	1.329		6.3030	7.27		
O-3B	AREA	10	2.145		6.2865	15.15		
O-3B	AREA	25	3.633		6.2535	31.04		
O-3B	AREA	50	4.773		6.2535	43.91		
O-3B	AREA	100	6.016		6.2370	58.28		
O-3C1	AREA	2	.100		6.5835	.18		
O-3C1	AREA	5	.309		6.2205	2.04		
O-3C1	AREA	10	.499		6.2040	4.25		
O-3C1	AREA	25	.845		6.1875	8.65		
O-3C1	AREA	50	1.110		6.1710	12.15		
O-3C1	AREA	100	1.399		6.1710	16.06		
O2B	AREA	2	.076		6.5670	.14		
O2B	AREA	5	.234		6.1875	1.71		
O2B	AREA	10	.377		6.1710	3.56		
O2B	AREA	25	.639		6.1545	7.19		
O2B	AREA	50	.840		6.1380	10.05		
O2B	AREA	100	1.058		6.1380	13.24		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
POND EK-3A IN	POND	2	1.728		6.1545	6.71		
POND EK-3A IN	POND	5	3.988		6.2040	18.37		
POND EK-3A IN	POND	10	5.939		6.2205	32.58		
POND EK-3A IN	POND	25	9.409		6.2040	61.39		
POND EK-3A IN	POND	50	12.026		6.2205	85.48		
POND EK-3A IN	POND	100	14.850		6.2040	112.59		
POND EK-3A OUT	POND	2	1.678		7.8045	2.35	6608.56	.386
POND EK-3A OUT	POND	5	3.937		7.5075	6.21	6609.24	.958
POND EK-3A OUT	POND	10	5.889		7.3095	10.05	6609.71	1.545
POND EK-3A OUT	POND	25	9.358		7.2270	15.70	6610.43	2.796
POND EK-3A OUT	POND	50	11.975		7.2435	19.64	6610.95	3.872
POND EK-3A OUT	POND	100	14.799	R	7.2600	22.50	6611.42	5.156
PR-D	AREA	2	.069		6.6000	.12		
PR-D	AREA	5	.215		6.2865	1.21		
PR-D	AREA	10	.347		6.2700	2.53		
PR-D	AREA	25	.587		6.2535	5.17		
PR-D	AREA	50	.772		6.2370	7.31		
PR-D	AREA	100	.973		6.2205	9.69		
SE-1	AREA	2	.030		6.1380	.07		
SE-1	AREA	5	.094		6.1050	.94		
SE-1	AREA	10	.152		6.0885	1.90		
SE-1	AREA	25	.258		6.0885	3.71		
SE-1	AREA	50	.339		6.0720	5.12		
SE-1	AREA	100	.427		6.0720	6.66		
VP-1	AREA	2	.085		6.0225	1.57		
VP-1	AREA	5	.133		6.0225	2.43		
VP-1	AREA	10	.166		6.0225	3.01		
VP-1	AREA	25	.219		6.0060	3.91		
VP-1	AREA	50	.255		6.0060	4.51		
VP-1	AREA	100	.291		6.0060	5.12		

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = C Springs

Storm Tag Name = 5

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR
Storm Frequency = 5 yr
Total Rainfall Depth= 2.6000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	.567		6.0060	11.21	EX-B	
		DL	.567		6.0060	11.21		
		DN	.567		6.0060	11.21	IBS	IN
ADDLINK 100	ADD	UN	.309		6.2205	2.04	O-3C1	
		DL	.309		6.2205	2.04		
		DN	3.988		6.2040	18.37	DP 6	
ADDLINK 110	ADD	UN	1.329		6.3030	7.27	O-3B	
		DL	1.329		6.3030	7.27		
		DN	3.362		6.2040	14.52	DP 5	
ADDLINK 120	ADD	UN	3.988		6.2040	18.37	DP 6	
		DL	3.988		6.2040	18.37		
		DN	3.988		6.2040	18.37	POND EK-3A	IN
ADDLINK 130	ADD	UN	.059		5.9400	.93	EX-G	
		DL	.059		5.9400	.93		
		DN	1.394		6.2535	5.58	DP 3	
ADDLINK 140	ADD	UN	.142		5.9730	2.23	EX-H	
		DL	.142		5.9730	2.23		
		DN	1.536		6.0225	7.10	DP 3A	
ADDLINK 20	ADD	UN	.053		5.9565	.84	EX-C1	
		DL	.053		5.9565	.84		
		DN	1.120		6.0225	4.59	DP 2	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 30	ADD	UN	.069		5.9895	1.22	EX-C2	
		DL	.069		5.9895	1.22		
		DN	1.120		6.0225	4.59	DP 2	
ADDLINK 40	ADD	UN	.215		6.2865	1.21	PR-D	
		DL	.215		6.2865	1.21		
		DN	1.394		6.2535	5.58	DP 3	
ADDLINK 50	ADD	UN	.144		6.0225	2.61	IP-1	
		DL	.144		6.0225	2.61		
		DN	.276		6.0390	4.77	DP 4	
ADDLINK 60	ADD	UN	.198		6.1380	1.74	EX-A	
		DL	.198		6.1380	1.74		
		DN	.998		6.1875	4.18	DP 1	
ADDLINK 70	ADD	UN	.221		6.0390	3.80	IP-2	
		DL	.221		6.0390	3.80		
		DN	3.362		6.2040	14.52	DP 5	
ADDLINK 80	ADD	UN	.223		6.1380	1.96	AF-1	
		DL	.223		6.1380	1.96		
		DN	3.988		6.2040	18.37	DP 6	
ADDLINK 90	ADD	UN	.094		6.1050	.94	SE-1	
		DL	.094		6.1050	.94		
		DN	3.988		6.2040	18.37	DP 6	
CONVEYANCE 1	REACH	UN	.234		6.1875	1.71	O2B	
		DL	.233		6.3525	1.02		
		DN	.998		6.1875	4.18	DP 1	
CONVEYANCE 10	PONDrt	UN	3.988		6.2040	18.37	POND EK-3A	IN
CONVEYANCE 10			3.937		7.5075	6.21	POND EK-3A	OUT
		DL	3.937		7.5075	6.21		
		DN	3.937		7.5075	6.21	DP 7	
CONVEYANCE 2	PONDrt	UN	.567		6.0060	11.21	IBS	IN
CONVEYANCE 2			.567		6.1215	2.03	IBS	OUT
		DL	.567		6.1215	2.03		
		DN	.998		6.1875	4.18	DP 1	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points
CONVEYANCE 3	REACH	UN	.998		6.1875	4.18	DP 1
		DL	.998		6.1875	4.18	
		DN	1.120		6.0225	4.59	DP 2
CONVEYANCE 4	REACH	UN	1.120		6.0225	4.59	DP 2
		DL	1.120		6.2205	4.33	
		DN	1.394		6.2535	5.58	DP 3
CONVEYANCE 5	REACH	UN	1.394		6.2535	5.58	DP 3
		DL	1.394		6.2700	5.57	
		DN	1.536		6.0225	7.10	DP 3A
CONVEYANCE 6	REACH	UN	.133		6.0225	2.43	VP-1
		DL	.132		6.0555	2.22	
		DN	.276		6.0390	4.77	DP 4
CONVEYANCE 7	REACH	UN	.276		6.0390	4.77	DP 4
		DL	.276		6.0885	4.25	
		DN	3.362		6.2040	14.52	DP 5
CONVEYANCE 8	REACH	UN	1.536		6.0225	7.10	DP 3A
		DL	1.535		6.5340	4.76	
		DN	3.362		6.2040	14.52	DP 5
CONVEYANCE 9	REACH	UN	3.362		6.2040	14.52	DP 5
		DL	3.362		6.2700	14.34	
		DN	3.988		6.2040	18.37	DP 6

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = C Springs

Storm Tag Name = 100

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR
Storm Frequency = 100 yr
Total Rainfall Depth= 4.4000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	1.406		6.0060	26.58	EX-B	
		DL	1.406		6.0060	26.58		
		DN	1.406		6.0060	26.58	IBS	IN
ADDLINK 100	ADD	UN	1.399		6.1710	16.06	O-3C1	
		DL	1.399		6.1710	16.06		
		DN	14.850		6.2040	112.59	DP 6	
ADDLINK 110	ADD	UN	6.016		6.2370	58.28	O-3B	
		DL	6.016		6.2370	58.28		
		DN	12.017		6.2535	87.99	DP 5	
ADDLINK 120	ADD	UN	14.850		6.2040	112.59	DP 6	
		DL	14.850		6.2040	112.59		
		DN	14.850		6.2040	112.59	POND EK-3A	IN
ADDLINK 130	ADD	UN	.104		5.9565	1.59	EX-G	
		DL	.104		5.9565	1.59		
		DN	4.662		6.2040	33.57	DP 3	
ADDLINK 140	ADD	UN	.250		5.9565	3.81	EX-H	
		DL	.250		5.9565	3.81		
		DN	4.912		6.2040	33.87	DP 3A	
ADDLINK 20	ADD	UN	.094		5.9730	1.43	EX-C1	
		DL	.094		5.9730	1.43		
		DN	3.585		6.1545	24.44	DP 2	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 30	ADD	UN	.132		5.9895	2.22	EX-C2	
		DL	.132		5.9895	2.22		
		DN	3.585		6.1545	24.44	DP 2	
ADDLINK 40	ADD	UN	.973		6.2205	9.69	PR-D	
		DL	.973		6.2205	9.69		
		DN	4.662		6.2040	33.57	DP 3	
ADDLINK 50	ADD	UN	.315		6.0060	5.52	IP-1	
		DL	.315		6.0060	5.52		
		DN	.606		6.0225	10.40	DP 4	
ADDLINK 60	ADD	UN	.896		6.1050	12.83	EX-A	
		DL	.896		6.1050	12.83		
		DN	3.359		6.1380	24.02	DP 1	
ADDLINK 70	ADD	UN	.485		6.0225	8.18	IP-2	
		DL	.485		6.0225	8.18		
		DN	12.017		6.2535	87.99	DP 5	
ADDLINK 80	ADD	UN	1.007		6.0885	14.45	AF-1	
		DL	1.007		6.0885	14.45		
		DN	14.850		6.2040	112.59	DP 6	
ADDLINK 90	ADD	UN	.427		6.0720	6.66	SE-1	
		DL	.427		6.0720	6.66		
		DN	14.850		6.2040	112.59	DP 6	
CONVEYANCE 1	REACH	UN	1.058		6.1380	13.24	O2B	
		DL	1.058		6.2370	11.05		
		DN	3.359		6.1380	24.02	DP 1	
CONVEYANCE 10	PONDrt	UN	14.850		6.2040	112.59	POND EK-3A	IN
CONVEYANCE 10			14.799	R	7.2600	22.50	POND EK-3A	OUT
		DL	14.799	R	7.2600	22.50		
		DN	14.799	R	7.2600	22.50	DP 7	
CONVEYANCE 2	PONDrt	UN	1.406		6.0060	26.58	IBS	IN
CONVEYANCE 2			1.406		6.1710	2.78	IBS	OUT
		DL	1.406		6.1710	2.78		
		DN	3.359		6.1380	24.02	DP 1	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points
CONVEYANCE 3	REACH	UN	3.359		6.1380	24.02	DP 1
		DL	3.359		6.1545	24.02	
		DN	3.585		6.1545	24.44	DP 2
CONVEYANCE 4	REACH	UN	3.585		6.1545	24.44	DP 2
		DL	3.585		6.1875	23.87	
		DN	4.662		6.2040	33.57	DP 3
CONVEYANCE 5	REACH	UN	4.662		6.2040	33.57	DP 3
		DL	4.662		6.2040	33.52	
		DN	4.912		6.2040	33.87	DP 3A
CONVEYANCE 6	REACH	UN	.291		6.0060	5.12	VP-1
		DL	.291		6.0390	4.93	
		DN	.606		6.0225	10.40	DP 4
CONVEYANCE 7	REACH	UN	.606		6.0225	10.40	DP 4
		DL	.606		6.0555	9.83	
		DN	12.017		6.2535	87.99	DP 5
CONVEYANCE 8	REACH	UN	4.912		6.2040	33.87	DP 3A
		DL	4.910		6.3690	26.00	
		DN	12.017		6.2535	87.99	DP 5
CONVEYANCE 9	REACH	UN	12.017		6.2535	87.99	DP 5
		DL	12.017		6.2865	87.17	
		DN	14.850		6.2040	112.59	DP 6

MASTER DESIGN STORM SUMMARY

Network Storm Collection: El Paso County

Return Event	Total Depth in	Rainfall Type	RNF ID
2 Yr.	2.0000	Synthetic Curve	TYPEIIA 24HR
5 Yr.	2.6000	Synthetic Curve	TYPEIIA 24HR
10 Yr.	3.0000	Synthetic Curve	TYPEIIA 24HR
25 Yr.	3.6000	Synthetic Curve	TYPEIIA 24HR
50 Yr.	4.0000	Synthetic Curve	TYPEIIA 24HR
100 Yr	4.4000	Synthetic Curve	TYPEIIA 24HR

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
AF-2	AREA	2	.125		6.2040	.25		
AF-2	AREA	5	.387		6.1380	3.33		
AF-2	AREA	10	.624		6.1215	6.85		
AF-2	AREA	25	1.056		6.1050	13.61		
AF-2	AREA	50	1.388		6.1050	18.94		
AF-2	AREA	100	1.749		6.1050	24.76		
DP 8	JCT	2	.326		6.6000	.59		
DP 8	JCT	5	1.009		6.1710	7.06		
DP 8	JCT	10	1.628		6.1545	14.69		
DP 8	JCT	25	2.757		6.1545	29.81		
DP 8	JCT	50	3.622		6.1380	41.90		
DP 8	JCT	100	4.565		6.1380	55.25		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID		Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
*DP 9		JCT	2	.326		7.2270	.43		
*DP 9		JCT	5	1.009		6.3525	4.65		
*DP 9		JCT	10	1.628		6.2865	10.92		
*DP 9		JCT	25	2.756		6.3525	16.19		
*DP 9		JCT	50	3.622		6.3855	19.46		
*DP 9		JCT	100	4.565		6.4020	22.78		
I25-4	IN	POND	2	.326		6.6000	.59		
I25-4	IN	POND	5	1.009		6.1710	7.06		
I25-4	IN	POND	10	1.628		6.1545	14.69		
I25-4	IN	POND	25	2.757		6.1545	29.81		
I25-4	IN	POND	50	3.622		6.1380	41.90		
I25-4	IN	POND	100	4.565		6.1380	55.25		
I25-4	OUT	POND	2	.326		7.2270	.43	6600.27	.026
I25-4	OUT	POND	5	1.009		6.3525	4.65	6601.04	.099
I25-4	OUT	POND	10	1.628		6.2865	10.92	6601.78	.169
I25-4	OUT	POND	25	2.756		6.3525	16.19	6602.39	.403
I25-4	OUT	POND	50	3.622		6.3855	19.46	6602.85	.657
I25-4	OUT	POND	100	4.565		6.4020	22.78	6603.42	.969
O-3C2		AREA	2	.201		6.6330	.36		
O-3C2		AREA	5	.622		6.2205	4.11		
O-3C2		AREA	10	1.004		6.2040	8.56		
O-3C2		AREA	25	1.700		6.1875	17.41		
O-3C2		AREA	50	2.234		6.1710	24.46		
O-3C2		AREA	100	2.816		6.1710	32.32		

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = El Paso County

Storm Tag Name = 100 Yr

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR
Storm Frequency = 100 yr
Total Rainfall Depth= 4.4000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	1.749		6.1050	24.76	AF-2	
		DL	1.749		6.1050	24.76		
		DN	4.565		6.1380	55.25	DP 8	
ADDLINK 130	ADD	UN	2.816		6.1710	32.32	O-3C2	
		DL	2.816		6.1710	32.32		
		DN	4.565		6.1380	55.25	DP 8	
ADDLINK 20	ADD	UN	4.565		6.1380	55.25	DP 8	
		DL	4.565		6.1380	55.25		
		DN	4.565		6.1380	55.25	I25-4	IN
C11	PONDrt	UN	4.565		6.1380	55.25	I25-4	IN
C11			4.565		6.4020	22.78	I25-4	OUT
		DL	4.565		6.4020	22.78		
		DN	4.565		6.4020	22.78	DP 9	

MASTER DESIGN STORM SUMMARY

Network Storm Collection: El Paso County

Return Event	Total Depth in	Rainfall Type	RNF ID
2 Yr.	2.0000	Synthetic Curve	TYPEIIA 24HR
5 Yr.	2.6000	Synthetic Curve	TYPEIIA 24HR
10 Yr.	3.0000	Synthetic Curve	TYPEIIA 24HR
25 Yr.	3.6000	Synthetic Curve	TYPEIIA 24HR
50 Yr.	4.0000	Synthetic Curve	TYPEIIA 24HR
100 Yr	4.4000	Synthetic Curve	TYPEIIA 24HR

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
AF-3	AREA	2	.100		6.2370	.19		
AF-3	AREA	5	.309		6.1545	2.56		
AF-3	AREA	10	.499		6.1380	5.27		
AF-3	AREA	25	.845		6.1215	10.52		
AF-3	AREA	50	1.110		6.1215	14.64		
AF-3	AREA	100	1.399		6.1050	19.17		
DP 10	JCT	2	.172		6.2205	.33		
DP 10	JCT	5	.532		6.1545	4.40		
DP 10	JCT	10	.858		6.1380	9.05		
DP 10	JCT	25	1.453		6.1215	18.09		
DP 10	JCT	50	1.909		6.1215	25.17		
DP 10	JCT	100	2.406		6.1050	32.97		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
*DP 11	JCT	2	.172		7.1610	.22		
*DP 11	JCT	5	.532		6.3030	2.49		
*DP 11	JCT	10	.858		6.2535	6.32		
*DP 11	JCT	25	1.453		6.2205	13.32		
*DP 11	JCT	50	1.909		6.2535	15.92		
*DP 11	JCT	100	2.406		6.2700	18.88		
EK-1	AREA	2	.072		6.2040	.14		
EK-1	AREA	5	.223		6.1545	1.84		
EK-1	AREA	10	.359		6.1380	3.79		
EK-1	AREA	25	.608		6.1215	7.57		
EK-1	AREA	50	.799		6.1215	10.53		
EK-1	AREA	100	1.007		6.1050	13.80		
I25-5	IN POND	2	.172		6.2205	.33		
I25-5	IN POND	5	.532		6.1545	4.40		
I25-5	IN POND	10	.858		6.1380	9.05		
I25-5	IN POND	25	1.453		6.1215	18.09		
I25-5	IN POND	50	1.909		6.1215	25.17		
I25-5	IN POND	100	2.406		6.1050	32.97		
I25-5	OUT POND	2	.172		7.1610	.22	6600.16	.013
I25-5	OUT POND	5	.532		6.3030	2.49	6600.73	.058
I25-5	OUT POND	10	.858		6.2535	6.32	6601.25	.100
I25-5	OUT POND	25	1.453		6.2205	13.32	6602.05	.174
I25-5	OUT POND	50	1.909		6.2535	15.92	6602.35	.270
I25-5	OUT POND	100	2.406		6.2700	18.88	6602.76	.394

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = El Paso County

Storm Tag Name = 100 Yr

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR
Storm Frequency = 100 yr
Total Rainfall Depth= 4.4000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	1.399		6.1050	19.17	AF-3	
		DL	1.399		6.1050	19.17		
		DN	2.406		6.1050	32.97	DP 10	
ADDLINK 130	ADD	UN	1.007		6.1050	13.80	EK-1	
		DL	1.007		6.1050	13.80		
		DN	2.406		6.1050	32.97	DP 10	
ADDLINK 20	ADD	UN	2.406		6.1050	32.97	DP 10	
		DL	2.406		6.1050	32.97		
		DN	2.406		6.1050	32.97	I25-5	IN
C12	PONDrt	UN	2.406		6.1050	32.97	I25-5	IN
C12			2.406		6.2700	18.88	I25-5	OUT
		DL	2.406		6.2700	18.88		
		DN	2.406		6.2700	18.88	DP 11	

MASTER DESIGN STORM SUMMARY

Network Storm Collection: C Springs

Return Event	Total Depth in	Rainfall Type	RNF ID
2	2.0000	Synthetic Curve	TYPEIIA 24HR
5	2.6000	Synthetic Curve	TYPEIIA 24HR
10	3.0000	Synthetic Curve	TYPEIIA 24HR
25	3.6000	Synthetic Curve	TYPEIIA 24HR
50	4.0000	Synthetic Curve	TYPEIIA 24HR
100	4.4000	Synthetic Curve	TYPEIIA 24HR

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
BS-1	AREA	2	.131		6.5835	.24		
BS-1	AREA	5	.405		6.2040	2.86		
BS-1	AREA	10	.654		6.1875	5.95		
BS-1	AREA	25	1.108		6.1710	12.05		
BS-1	AREA	50	1.456		6.1545	16.92		
BS-1	AREA	100	1.835		6.1545	22.28		
*DP 12	JCT	2	.131		6.5835	.24		
*DP 12	JCT	5	.405		6.2040	2.86		
*DP 12	JCT	10	.654		6.1875	5.95		
*DP 12	JCT	25	1.108		6.1710	12.05		
*DP 12	JCT	50	1.456		6.1545	16.92		
*DP 12	JCT	100	1.835		6.1545	22.28		

MASTER DESIGN STORM SUMMARY

Network Storm Collection: C Springs

Return Event	Total Depth in	Rainfall Type	RNF ID
2	2.0000	Synthetic Curve	TYPEIIA 24HR
5	2.6000	Synthetic Curve	TYPEIIA 24HR
10	3.0000	Synthetic Curve	TYPEIIA 24HR
25	3.6000	Synthetic Curve	TYPEIIA 24HR
50	4.0000	Synthetic Curve	TYPEIIA 24HR
100	4.4000	Synthetic Curve	TYPEIIA 24HR

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
BS-2	AREA	2	.285		6.6825	.49		
BS-2	AREA	5	.881		6.3030	4.94		
BS-2	AREA	10	1.421		6.2700	10.31		
BS-2	AREA	25	2.406		6.2535	21.11		
BS-2	AREA	50	3.162		6.2370	29.84		
BS-2	AREA	100	3.985		6.2370	39.57		
*DP 13	JCT	2	.285		6.6825	.49		
*DP 13	JCT	5	.881		6.3030	4.94		
*DP 13	JCT	10	1.421		6.2700	10.31		
*DP 13	JCT	25	2.406		6.2535	21.11		
*DP 13	JCT	50	3.162		6.2370	29.84		
*DP 13	JCT	100	3.985		6.2370	39.57		

MASTER DESIGN STORM SUMMARY

Network Storm Collection: C Springs

Return Event	Total Depth in	Rainfall Type	RNF ID
2	2.0000	Synthetic Curve	TYPEIIA 24HR
5	2.6000	Synthetic Curve	TYPEIIA 24HR
10	3.0000	Synthetic Curve	TYPEIIA 24HR
25	3.6000	Synthetic Curve	TYPEIIA 24HR
50	4.0000	Synthetic Curve	TYPEIIA 24HR
100	4.4000	Synthetic Curve	TYPEIIA 24HR

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
BS-3	AREA	2	.358		6.6825	.62		
BS-3	AREA	5	1.109		6.3030	6.22		
BS-3	AREA	10	1.789		6.2700	12.98		
BS-3	AREA	25	3.030		6.2535	26.58		
BS-3	AREA	50	3.981		6.2370	37.58		
BS-3	AREA	100	5.017		6.2370	49.82		
*DP 14	JCT	2	.358		6.6825	.62		
*DP 14	JCT	5	1.109		6.3030	6.22		
*DP 14	JCT	10	1.789		6.2700	12.98		
*DP 14	JCT	25	3.030		6.2535	26.58		
*DP 14	JCT	50	3.981		6.2370	37.58		
*DP 14	JCT	100	5.017		6.2370	49.82		

CLASSIC
CONSULTING
ENGINEERS & SURVEYORS

HYDROLOGIC / HYDRAULIC CALCULATIONS
FULLY DEVELOPED CONDITIONS

Design Procedure Form: Extended Detention Basin (EDB) - Sedimentation Facility

Designer: David Gibson
Company: Classic Consulting
Date: March 12, 2007
Project: Interquest North
Location: Pond EK-3B

1. Basin Storage Volume	
A) Tributary Area's Imperviousness Ratio (i = I_a / 100)	I_a = 90.00 % i = 0.90
B) Contributing Watershed Area (Area)	Area = 53.70 acres
C) Water Quality Capture Volume (WQCV) (WQCV =1.0 * (0.91 * I^3 - 1.19 * I^2 + 0.78 * I)) D) Design Volume: Vol = (WQCV / 12) * Area * 1.2	WQCV = 0.40 watershed inches Vol = 2.156 acre-feet
2. Outlet Works	
A) Outlet Type (Check One)	X Orifice Plate Perforated Riser Pipe Other:
B) Depth at Outlet Above Lowest Perforation (H)	H = 5.24 feet
C) Required Maximum Outlet Area per Row, (A_o)	A_o = 1.27 square inches
D) Perforation Dimensions **(enter one only)**: i) Circular Perforation Diameter **OR** ii) 2" Height Rectangular Perforation Width	D = 0.7500 inches, **OR** W = inches
E) Number of Columns (nc, See Table 6a-1 For Maximum)	nc = 3 number
F) Actual Design Outlet Area per Row (A_o)	A_o = 1.33 square inches
G) Number of Rows (nr)	nr = 16 number
H) Total Outlet Area (A_{ot})	A_{ot} = 20.83 square inches
3. Trash Rack	
A) Needed Open Area: A_t = 0.5 * (Figure 7 Value) * A_{ot}	A_t = 731 square inches
B) Type of Outlet Opening (Check One)	X ≤ 2" Diameter **Round** 2" High **Rectangular** Other:
C) For 2", or Smaller, **Round Opening** (Ref.: Figure 6a): i) Width of Trash Rack and Concrete Opening (W_{conc}) from Table 6a-1	W_{conc} = 18 inches
ii) Height of Trash Rack Screen (H_{TR})	H_{TR} = inches

Design Procedure Form: Extended Detention Basin (EDB) - Sedimentation Facility

Designer: David Gibson
Company: Classic Consulting
Date: March 12, 2007
Project: Interquest North
Location: Pond EK-3C

1. Basin Storage Volume	
A) Tributary Area's Imperviousness Ratio (i = I_a / 100)	I_a = 90.00 % i = 0.90
B) Contributing Watershed Area (Area)	Area = 20.20 acres
C) Water Quality Capture Volume (WQCV) (WQCV =1.0 * (0.91 * I^3 - 1.19 * I^2 + 0.78 * I))	WQCV = 0.40 watershed inches
D) Design Volume: Vol = (WQCV / 12) * Area * 1.2	Vol = 0.811 acre-feet
2. Outlet Works	
A) Outlet Type (Check One)	X Orifice Plate Perforated Riser Pipe Other:
B) Depth at Outlet Above Lowest Perforation (H)	H = 2.50 feet
C) Required Maximum Outlet Area per Row, (A_o)	A_o = 1.27 square inches
D) Perforation Dimensions **(enter one only)**: i) Circular Perforation Diameter **OR** ii) 2" Height Rectangular Perforation Width	D = 0.8750 inches, **OR** W = inches
E) Number of Columns (nc, See Table 6a-1 For Maximum)	nc = 2 number
F) Actual Design Outlet Area per Row (A_o)	A_o = 1.20 square inches
G) Number of Rows (nr)	nr = 8 number
H) Total Outlet Area (A_{ot})	A_{ot} = 9.02 square inches
3. Trash Rack	
A) Needed Open Area: A_t = 0.5 * (Figure 7 Value) * A_{ot}	A_t = 312 square inches
B) Type of Outlet Opening (Check One)	X ≤ 2" Diameter **Round** 2" High **Rectangular** Other:
C) For 2", or Smaller, **Round Opening** (Ref.: Figure 6a):	
i) Width of Trash Rack and Concrete Opening (W_{conc}) from Table 6a-1	W_{conc} = 12 inches
ii) Height of Trash Rack Screen (H_{TR})	H_{TR} = inches

Design Procedure Form: Extended Detention Basin (EDB) - Sedimentation Facility

Designer: David Gibson
Company: Classic Consulting
Date: March 12, 2007
Project: Interquest North
Location: Pond EK-4

1. Basin Storage Volume			
A) Tributary Area's Imperviousness Ratio (i = I_a / 100)	I_a =	90.00	%
	i =	0.90	
B) Contributing Watershed Area (Area)	Area =	10.90	acres
C) Water Quality Capture Volume (WQCV) (WQCV =1.0 * (0.91 * I^3 - 1.19 * I^2 + 0.78 * I))	WQCV =	0.40	watershed inches
D) Design Volume: Vol = (WQCV / 12) * Area * 1.2	Vol =	0.438	acre-feet
2. Outlet Works			
A) Outlet Type (Check One)	X	Orifice Plate	
		Perforated Riser Pipe	
		Other:	
B) Depth at Outlet Above Lowest Perforation (H)	H =	1.80	feet
C) Required Maximum Outlet Area per Row, (A_o)	A_o =	1.08	square inches
D) Perforation Dimensions **(enter one only)**:			
i) Circular Perforation Diameter **OR**	D =	1.2500	inches, **OR**
ii) 2" Height Rectangular Perforation Width	W =		inches
E) Number of Columns (nc, See Table 6a-1 For Maximum)	nc =	1	number
F) Actual Design Outlet Area per Row (A_o)	A_o =	1.23	square inches
G) Number of Rows (nr)	nr =	5	number
H) Total Outlet Area (A_{ol})	A_{ol} =	6.63	square inches
3. Trash Rack			
A) Needed Open Area: A_t = 0.5 * (Figure 7 Value) * A_{ol}	A_t =	218	square inches
B) Type of Outlet Opening (Check One)	X	≤ 2" Diameter **Round**	
		2" High **Rectangular**	
		Other:	
C) For 2", or Smaller, **Round Opening** (Ref.: Figure 6a):			
i) Width of Trash Rack and Concrete Opening (W_{conc}) from Table 6a-1	W_{conc} =	9	inches
ii) Height of Trash Rack Screen (H_{TR})	H_{TR} =		inches

Design Procedure Form: Extended Detention Basin (EDB) - Sedimentation Facility

Designer: David Gibson
Company: Classic Consulting
Date: March 12, 2007
Project: Interquest North
Location: Pond BS-1

1. Basin Storage Volume		
A) Tributary Area's Imperviousness Ratio (i = I_a / 100)	I_a = 90.00 % i = 0.90	
B) Contributing Watershed Area (Area)	Area = 44.70	acres
C) Water Quality Capture Volume (WQCV) (WQCV =1.0 * (0.91 * I^3 - 1.19 * I^2 + 0.78 * I))	WQCV = 0.40	watershed inches
D) Design Volume: Vol = (WQCV / 12) * Area * 1.2	Vol = 1.795	acre-feet
2. Outlet Works		
A) Outlet Type (Check One)	_ Orifice Plate _ Perforated Riser Pipe _ Other:	
B) Depth at Outlet Above Lowest Perforation (H)	H = 3.75	feet
C) Required Maximum Outlet Area per Row, (A_o)	A_o = 1.65	square inches
D) Perforation Dimensions **(enter one only)**: i) Circular Perforation Diameter **OR** ii) 2" Height Rectangular Perforation Width	D = 1.0000 W =	inches, **OR** inches
E) Number of Columns (nc, See Table 6a-1 For Maximum)	nc = 2	number
F) Actual Design Outlet Area per Row (A_o)	A_o = 1.57	square inches
G) Number of Rows (nr)	nr = 11	number
H) Total Outlet Area (A_{ol})	A_{ol} = 17.67	square inches
3. Trash Rack		
A) Needed Open Area: A_t = 0.5 * (Figure 7 Value) * A_{ol}	A_t = 601	square inches
B) Type of Outlet Opening (Check One)	X ≤ 2" Diameter **Round** _ 2" High **Rectangular** _ Other:	
C) For 2", or Smaller, **Round Opening** (Ref.: Figure 6a):		
i) Width of Trash Rack and Concrete Opening (W_{conc}) from Table 6a-1	W_{conc} = 18	inches
ii) Height of Trash Rack Screen (H_{TR})	H_{TR} =	inches

Design Procedure Form: Extended Detention Basin (EDB) - Sedimentation Facility

Designer: **David Gibson**
Company: **Classic Consulting**
Date: **February 9, 2007**
Project: **Interquest North**
Location: **Pond BS-2**

1. Basin Storage Volume	
A) Tributary Area's Imperviousness Ratio (i = I_a / 100)	I_a = 90.00 % i = 0.90
B) Contributing Watershed Area (Area)	Area = 37.20 acres
C) Water Quality Capture Volume (WQCV) (WQCV =1.0 * (0.91 * I^3 - 1.19 * I^2 + 0.78 * I))	WQCV = 0.40 watershed inches
D) Design Volume: Vol = (WQCV / 12) * Area * 1.2	Vol = 1.494 acre-feet
2. Outlet Works	
A) Outlet Type (Check One)	x Orifice Plate Perforated Riser Pipe Other:
B) Depth at Outlet Above Lowest Perforation (H)	H = 3.30 feet
C) Required Maximum Outlet Area per Row, (A_o)	A_o = 1.62 square inches
D) Perforation Dimensions **(enter one only)**: i) Circular Perforation Diameter **OR** ii) 2" Height Rectangular Perforation Width	 D = 1.3750 inches, **OR** W = inches
E) Number of Columns (nc, See Table 6a-1 For Maximum)	nc = 1 number
F) Actual Design Outlet Area per Row (A_o)	A_o = 1.48 square inches
G) Number of Rows (nr)	nr = 10 number
H) Total Outlet Area (A_{ot})	A_{ot} = 14.70 square inches
3. Trash Rack	
A) Needed Open Area: A_t = 0.5 * (Figure 7 Value) * A_{ot}	A_t = 477 square inches
B) Type of Outlet Opening (Check One)	X ≤ 2" Diameter **Round** 2" High **Rectangular** Other:
C) For 2", or Smaller, **Round Opening** (Ref.: Figure 6a): i) Width of Trash Rack and Concrete Opening (W_{conc}) from Table 6a-1	 W_{conc} = 15 inches
ii) Height of Trash Rack Screen (H_{TR})	H_{TR} = inches

Design Procedure Form: Extended Detention Basin (EDB) - Sedimentation Facility

Designer: David Gibson
Company: Classic Consulting
Date: February 9, 2007
Project: Interquest North
Location: Pond BS-3

1. Basin Storage Volume	
A) Tributary Area's Imperviousness Ratio ($i = I_a / 100$)	I_a = 90.00 % i = 0.90
B) Contributing Watershed Area (Area)	Area = 74.20 acres
C) Water Quality Capture Volume (WQCV) $(WQCV = 1.0 * (0.91 * I^3 - 1.19 * I^2 + 0.78 * I))$	WQCV = 0.40 watershed inches
D) Design Volume: Vol = (WQCV / 12) * Area * 1.2	Vol = 2.979 acre-feet
2. Outlet Works	
A) Outlet Type (Check One)	x Orifice Plate Perforated Riser Pipe Other:
B) Depth at Outlet Above Lowest Perforation (H)	H = 4.30 feet
C) Required Maximum Outlet Area per Row, (A_o)	A_o = 2.29 square inches
D) Perforation Dimensions **(enter one only)**: i) Circular Perforation Diameter **OR** ii) 2" Height Rectangular Perforation Width	D = 0.9380 inches, **OR** W = inches
E) Number of Columns (nc, See Table 6a-1 For Maximum)	nc = 3 number
F) Actual Design Outlet Area per Row (A_o)	A_o = 2.07 square inches
G) Number of Rows (nr)	nr = 13 number
H) Total Outlet Area (A_{ot})	A_{ot} = 26.74 square inches
3. Trash Rack	
A) Needed Open Area: A_t = 0.5 * (Figure 7 Value) * A_{ot}	A_t = 917 square inches
B) Type of Outlet Opening (Check One)	X ≤ 2" Diameter **Round** 2" High **Rectangular** Other:
C) For 2", or Smaller, **Round Opening** (Ref.: Figure 6a):	
i) Width of Trash Rack and Concrete Opening (W_{conc}) from Table 6a-1	W_{conc} = 27 inches
ii) Height of Trash Rack Screen (H_{TR})	H_{TR} = inches

COMPOSITE C_N VALUES - DEVELOPED CONDITIONS

BASIN (label)	BASIN AREA (ac)	SUB-AREA LAND USE 1			SUB-AREA LAND USE 2				TOTAL BASIN AREA (ac)	TOTAL BASIN AREA (sq mi)	WEIGHTED C_N
		LAND USE	ESTIMATED PERCENT IMPERIOUS	ESTIMATED	AREA (AC)	LAND USE	ESTIMATED PERCENT IMPERIOUS	ESTIMATED C_N	AREA (AC)			
02B	12.4	UNDEV.	0	61	12.4	UNDEV.	100	98	0	12.4	0.01938	61.0
EX-A	9.6	UNDEV.	0	61	9.6	UNDEV.	100	98	0.0	9.6	0.01500	61.0
EX-B	7.1	DEV.	0	61	3.5	DEV.	100	98	3.6	7.1	0.01109	79.8
EX-C1	0.3	ROAD	0	61	0.1	ROAD	100	98	0.2	0.3	0.00047	85.7
EX-C2	0.3	ROAD	0	61	0.1	ROAD	100	98	0.2	0.3	0.00047	85.7
PR-D	6.6	UNDEV.	0	61	6.6	UNDEV.	100	98	0.0	6.6	0.01031	61.0
VP-2	1.2	ROAD	0	61	0.4	ROAD	100	98	0.8	1.2	0.00188	85.7
VP-3	1.1	ROAD	0	61	0.4	ROAD	100	98	0.7	1.1	0.00172	85.7
IP-1	1.3	ROAD	0	61	0.4	ROAD	100	98	0.9	1.3	0.00203	85.7
IP-2	2.0	ROAD	0	61	0.7	ROAD	100	98	1.3	2.0	0.00313	85.7
SE-1	5.0	UNDEV.	0	61	5.0	UNDEV.	100	98	0.0	5.0	0.00781	61.0
AF-1	11.8	UNDEV.	0	61	11.8	UNDEV.	100	98	0.0	11.8	0.01844	61.0
AF-2	20.5	UNDEV.	0	61	20.5	UNDEV.	100	98	0.0	20.5	0.03203	61.0
AF-3	16.4	UNDEV.	0	61	16.4	UNDEV.	100	98	0.0	16.4	0.02563	61.0
EK-3A	20.2	DEV.	0	61	3.0	DEV.	100	98	17.2	20.2	0.03156	92.5
EK-3B	8.3	DEV.	0	61	1.2	DEV.	100	98	7.1	8.3	0.01297	92.5
EK-3C	5.6	DEV.	0	61	0.8	DEV.	100	98	4.8	5.6	0.00875	92.5
EK-3D	17.3	DEV.	0	61	2.6	DEV.	100	98	14.7	17.3	0.02703	92.5
EK-3E	15.0	DEV.	0	61	2.3	DEV.	100	98	12.8	15.0	0.02344	92.5
EK-3F	7.5	DEV.	0	61	1.1	DEV.	100	98	6.4	7.5	0.01172	92.5
EK-3G	3.5	DEV.	0	61	0.5	DEV.	100	98	3.0	3.5	0.00547	92.5
EK-4A	10.9	DEV.	0	61	1.6	DEV.	100	98	9.3	10.9	0.01703	92.5
EK-5A	1.2	DEV.	0	61	1.2	DEV.	100	98	0.0	1.2	0.00188	61.0
BS-1A	15.4	DEV.	0	61	2.3	DEV.	100	98	13.1	15.4	0.02406	92.5
BS-1B	14.3	DEV.	0	61	2.1	DEV.	100	98	12.2	14.3	0.02234	92.5
BS-1C	15.0	DEV.	0	61	2.3	DEV.	100	98	12.8	15.0	0.02344	92.5
BS-1D	6.8	DEV.	0	61	6.8	DEV.	100	98	0.0	6.8	0.01063	61.0
BS-2A	11.0	DEV.	0	61	1.7	DEV.	100	98	9.4	11.0	0.01719	92.5
BS-2B	13.7	DEV.	0	61	2.1	DEV.	100	98	11.6	13.7	0.02141	92.5
BS-2C	11.4	DEV.	0	61	1.7	DEV.	100	98	9.7	11.4	0.01781	92.5
BS-2D	1.7	DEV.	0	61	0.3	DEV.	100	98	1.4	1.7	0.00266	92.5
BS-2E	1.8	DEV.	0	61	1.8	DEV.	100	98	0.0	1.8	0.00281	61.0
BS-3A	9.1	DEV.	0	61	1.4	DEV.	100	98	7.7	9.1	0.01422	92.5
BS-3B	11.3	DEV.	0	61	1.7	DEV.	100	98	9.6	11.3	0.01766	92.5
BS-3C	14.9	DEV.	0	61	2.2	DEV.	100	98	12.7	14.9	0.02328	92.5
BS-3D	20.4	DEV.	0	61	3.1	DEV.	100	98	17.3	20.4	0.03188	92.5
BS-3E	12.9	DEV.	0	61	1.9	DEV.	100	98	11.0	12.9	0.02016	92.5
BS-3F	3.9	DEV.	0	61	0.6	DEV.	100	98	3.3	3.9	0.00609	92.5
BS-3G	5.6	DEV.	0	61	0.8	DEV.	100	98	4.8	5.6	0.00875	92.5

TIME OF CONCENTRATION

BASIN	Cn	C(5)	Length (ft)	OVERLAND Height (ft)	Tc (min)	STREET / CHANNEL FLOW Length (ft)	Velocity (fps)	Tc (min)	Tc TOTAL (min)	Tc TOTAL (hr)	Lagtime TOTAL (hr)
02B	61.0	0.25	100	2	12.6	1800	3.0	10.0	22.6451	0.3774	0.2265
EX-A	61.0	0.25	75	2	10.0	1400	3.0	7.8	17.7369	0.2956	0.1774
EX-B	79.8	0.65	50	2	3.8	500	3.0	2.8	6.5436	0.1091	0.0654
EX-C1	85.7	0.75	50	2	2.9	350	3.0	1.9	4.8734	0.0812	0.0487
EX-C2	85.7	0.75	50	2	2.9	350	3.0	1.9	4.8734	0.0812	0.0487
PR-D	61.0	0.25	100	2	12.6	1100	3.0	6.1	18.7562	0.3126	0.1876
VP-2	85.7	0.75	50	2	2.9	750	3.0	4.2	7.0956	0.1183	0.0710
VP-3	85.7	0.75	50	2	2.9	500	3.0	2.8	5.7067	0.0951	0.0571
IP-1	85.7	0.75	50	2	2.9	1300	3.0	7.2	10.1512	0.1692	0.1015
IP-2	85.7	0.75	50	2	2.9	1900	3.0	10.6	13.4845	0.2247	0.1348
SE-1	61.0	0.25	100	2	12.6	400	3.0	2.2	14.8673	0.2478	0.1487
AF-1	61.0	0.25	100	2	12.6	900	3.0	5.0	17.6451	0.2941	0.1765
AF-2	61.0	0.25	100	2	12.6	1000	3.0	5.6	18.2006	0.3033	0.1820
AF-3	61.0	0.25	100	2	12.6	1200	3.0	6.7	19.3117	0.3219	0.1931
EK-3A	92.5	0.90	50	2	1.7	1600	3.0	8.9	10.5626	0.1760	0.1056
EK-3B	92.5	0.90	50	2	1.7	1200	3.0	6.7	8.3404	0.1390	0.0834
EK-3C	92.5	0.90	50	2	1.7	900	3.0	5.0	6.6737	0.1112	0.0667
EK-3D	92.5	0.90	50	2	1.7	1600	3.0	8.9	10.5626	0.1760	0.1056
EK-3E	92.5	0.90	50	2	1.7	1100	3.0	6.1	7.7848	0.1297	0.0778
EK-3F	92.5	0.90	50	2	1.7	900	3.0	5.0	6.6737	0.1112	0.0667
EK-3G	92.5	0.35	50	2	6.3	400	3.0	2.2	8.4986	0.1416	0.0850
EK-4A	92.5	0.90	50	2	1.7	700	3.0	3.9	5.5626	0.0927	0.0556
EK-5A	61.0	0.35	50	2	6.3	200	3.0	1.1	7.3875	0.1231	0.0739
BS-1A	92.5	0.90	50	2	1.7	1400	3.0	7.8	9.4515	0.1575	0.0945
BS-1B	92.5	0.90	50	2	1.7	1400	3.0	7.8	9.4515	0.1575	0.0945
BS-1C	92.5	0.90	50	2	1.7	1200	3.0	6.7	8.3404	0.1390	0.0834
BS-1D	61.0	0.35	50	2	6.3	1200	3.0	6.7	12.9430	0.2157	0.1294
BS-2A	92.5	0.90	50	2	1.7	2300	3.0	12.8	14.4515	0.2409	0.1445
BS-2B	92.5	0.90	50	2	1.7	1100	3.0	6.1	7.7848	0.1297	0.0778
BS-2C	92.5	0.90	50	2	1.7	1250	3.0	6.9	8.6181	0.1436	0.0862
BS-2D	92.5	0.35	50	2	6.3	300	3.0	1.7	7.9430	0.1324	0.0794
BS-2E	61.0	0.35	50	2	6.3	600	3.0	3.3	9.6097	0.1602	0.0961
BS-3A	92.5	0.90	50	2	1.7	1000	3.0	5.6	7.2293	0.1205	0.0723
BS-3B	92.5	0.90	50	2	1.7	1050	3.0	5.8	7.5070	0.1251	0.0751
BS-3C	92.5	0.90	50	2	1.7	1050	3.0	5.8	7.5070	0.1251	0.0751
BS-3D	92.5	0.90	50	2	1.7	1300	3.0	7.2	8.8959	0.1483	0.0890
BS-3E	92.5	0.90	50	2	1.7	1350	3.0	7.5	9.1737	0.1529	0.0917
BS-3F	92.5	0.35	50	2	6.3	250	3.0	1.4	7.6653	0.1278	0.0767
BS-3G	92.5	0.35	50	2	6.3	1650	3.0	9.2	15.4430	0.2574	0.1544

BS-1	61.0	0.25	100	2	12.6	1200	3.0	6.7	19.3117	0.3219	0.1931
BS-2	61.0	0.25	100	2	12.6	1300	3.0	7.2	19.8673	0.3311	0.1987
BS-3	61.0	0.25	100	2	12.6	1600	3.0	8.9	21.5339	0.3589	0.2153

BASIN SUMMARY - DEVELOPED CONDITIONS

BASIN (label)	TOTAL BASIN AREA (acres)	TOTAL BASIN AREA (sq mi)	WEIGHTED CN	TOTAL LAG TIME (hours)	TOTAL Tc (hours)	Q 2 Yr. (cfs)	Q 5 Yr. (cfs)	Q 10 Yr. (cfs)	Q 25 Yr. (cfs)	Q 50 Yr. (cfs)	Q 100 Yr. (cfs)
02B	12.4	0.0194	61.0	0.2265	0.3774	0.14	1.71	3.56	7.19	10.05	13.24
EX-A	10.5	0.0164	61.0	0.1774	0.2956	0.13	1.74	3.57	7.09	9.84	12.83
EX-B	7.1	0.0111	79.8	0.0654	0.1091	6.63	11.21	14.48	19.57	23.05	26.58
EX-C1	0.3	0.0004	85.7	0.0487	0.0833	0.64	0.84	0.97	1.17	1.30	1.43
EX-C2	0.4	0.0007	85.7	0.0487	0.0833	0.88	1.22	1.44	1.78	2.00	2.22
PR-D	11.4	0.0178	61.0	0.1876	0.5317	0.12	1.21	2.53	5.17	7.31	9.69
EX-G	1.0	0.0016	98.0	0.0487	0.0833	0.71	0.93	1.08	1.30	1.44	1.59
EX-H	1.2	0.0019	98.0	0.0487	0.0833	1.70	2.23	2.58	3.11	3.46	3.81
VP-2	1.2	0.0019	85.7	0.0710	0.1183	1.65	2.51	3.10	4.01	4.63	5.24
VP-3	1.1	0.0017	85.7	0.0571	0.0951	0.00	0.00	0.00	0.00	0.00	0.00
IP-1	1.3	0.0020	85.7	0.1015	0.1692	1.69	2.60	3.24	4.21	4.87	5.53
IP-2	2.0	0.0031	85.7	0.1348	0.2247	2.44	3.80	4.74	6.21	7.20	8.19
SE-1	5.0	0.0078	61.0	0.1487	0.2478	0.07	0.94	1.90	3.72	5.13	6.65
AF-1	11.6	0.0181	61.0	0.1765	0.2941	0.14	1.97	4.03	7.98	11.09	14.50
AF-2	20.5	0.0320	61.0	0.1820	0.3033	0.25	3.33	6.85	13.61	18.94	24.76
AF-3	16.4	0.0256	61.0	0.1931	0.3219	0.19	2.56	5.27	10.52	14.64	19.17
EK-3A	20.2	0.0316	92.5	0.1056	0.1760	38.67	54.02	64.24	79.51	89.65	99.80
EK-3B	8.3	0.0130	92.5	0.0834	0.1390	16.21	22.55	26.78	33.09	37.28	41.45
EK-3C	5.6	0.0088	92.5	0.0667	0.1112	11.10	15.39	18.24	22.50	25.32	28.12
EK-3D	17.3	0.0270	92.5	0.1056	0.1760	33.11	46.27	55.02	68.10	76.78	85.47
EK-3E	15.0	0.0234	92.5	0.0778	0.1297	29.43	40.92	48.56	59.96	67.52	75.06
EK-3F	7.5	0.0117	92.5	0.0667	0.1112	14.87	20.62	24.43	30.13	33.90	37.67
EK-3G	3.5	0.0055	92.5	0.0850	0.1416	6.83	9.50	11.28	13.94	15.71	17.47
EK-4A	10.9	0.0170	92.5	0.0556	0.0927	21.71	30.06	35.61	43.88	49.37	54.84
EK-5A	1.2	0.0019	61.0	0.0739	0.1231	0.03	0.34	0.63	1.17	1.57	2.00
BS-1A	15.4	0.0241	92.5	0.0945	0.1575	29.77	41.52	49.34	61.02	68.77	76.49
BS-1B	14.3	0.0223	92.5	0.0945	0.1575	27.64	38.56	45.82	56.66	63.86	71.02
BS-1C	15.0	0.0234	92.5	0.0834	0.1390	29.31	40.76	48.37	59.72	67.25	74.76
BS-1D	6.8	0.0106	61.0	0.1294	0.2157	0.10	1.40	2.80	5.40	7.40	9.59
BS-2A	6.9	0.0108	92.5	0.1445	0.2409	12.60	17.72	21.18	26.34	29.78	33.20
BS-2B	13.7	0.0214	92.5	0.0778	0.1297	26.89	37.35	44.29	54.65	61.54	68.43
BS-2C	11.4	0.0178	92.5	0.0862	0.1436	22.22	30.92	36.70	45.34	51.07	56.77
BS-2D	1.7	0.0027	92.5	0.0794	0.1324	3.33	4.63	5.49	6.78	7.63	8.49
BS-2E	1.8	0.0028	61.0	0.0961	0.1602	0.03	0.44	0.85	1.62	2.19	2.81
BS-3A	9.1	0.0142	92.5	0.0723	0.1205	17.86	24.83	29.47	36.38	40.97	45.54
BS-3B	15.2	0.0238	92.5	0.0751	0.1251	25.58	37.10	44.85	56.49	64.25	71.98
BS-3C	14.9	0.0233	92.5	0.0751	0.1251	29.17	40.58	48.16	59.49	67.00	74.48
BS-3D	20.4	0.0319	92.5	0.0890	0.1483	39.31	54.90	65.28	80.79	91.07	101.33
BS-3E	12.9	0.0202	92.5	0.0917	0.1529	24.78	34.63	41.19	50.99	57.50	63.98
BS-3F	3.9	0.0061	92.5	0.0767	0.1278	7.62	10.61	12.59	15.56	17.52	19.48
BS-3G	5.6	0.0088	92.5	0.1544	0.2574	9.87	13.91	16.62	20.72	23.48	26.23

CONVEYANCE CHART - DEVELOPED CONDITIONS

Conveyance Label	Type	Length ft.	Upper Invert ft.	Lower Invert ft.	Bottom Width ft.	Slope %	Side Slope H to 1	Manning's N value	Available Depth ft.	Q 5 Yr. cfs	Q 100 Yr. cfs	Q Capacity cfs
C1	Grass Lined Channel	1200	6794.00	6784.58	4.0	0.7850	3.0	0.035	1.5	1.02	11.05	46.20
C2	18" RCP	100	6786.00	6784.58	1.5	1.4200	N/A	0.013	1.5	2.03	2.78	7.41
C3	36" RCP	250	6784.58	6782.08	3.0	1.0000	N/A	0.013	3.0	4.18	24.02	66.69
C4	Grass Lined Channel	1050	6782.08	6746.00	4.0	3.4362	3.0	0.035	2.0	4.33	23.87	177.86
C5	36" RCP	250	6746.00	6743.50	3.0	1.0000	N/A	0.013	3.0	5.57	33.52	66.69
C9	Grass Lined Channel	1250	6636.00	6607.50	3.0	2.2800	5.0	0.035	1.5	8.72	87.27	102.15
C10	24" RCP	100	6607.50	6605.50	2.0	2.0000	N/A	0.013	2.0	6.31	22.26	31.99
C11	24" RCP	100	6600.00	6598.00	2.0	2.0000	N/A	0.013	2.0	3.38	21.10	31.99
C12	24" RCP	100	6600.00	6598.00	2.0	2.0000	N/A	0.013	2.0	1.32	14.29	31.99
C14	36" RCP	50	6698.00	6697.00	3.0	2.0000	N/A	0.013	3.0	0.62	0.84	94.33
C15	42" RCP	1300	6697.00	6690.50	3.5	0.5000	N/A	0.013	3.5	0.62	0.84	71.14
C16	48" RCP	800	6663.00	6659.00	4.0	0.5000	N/A	0.013	4.0	27.71	52.45	101.57
C17	48" RCP	200	6640.00	6639.00	4.0	0.5000	N/A	0.013	4.0	42.90	80.31	101.57
C18	54" RCP	850	6669.00	6664.75	4.5	0.5000	N/A	0.013	4.5	45.95	85.20	139.05
C19	60" RCP	250	6646.00	6644.75	5.0	0.5000	N/A	0.013	5.0	86.44	159.80	184.16
C20	48" RCP	300	6629.00	6627.50	4.0	0.5000	N/A	0.013	4.0	12.73	79.95	101.57
C21	36" RCP	100	6632.80	6631.80	3.0	1.0000	N/A	0.013	3.0	2.49	30.64	66.70
C22	Grass Lined Channel	1000	6631.80	6600.00	10.0	3.1800	5.0	0.035	1.5	2.46	27.90	204.33
C25	42" RCP	1350	6743.50	6736.75	3.5	0.5000	N/A	0.013	3.5	6.71	33.25	71.14
C26	54" RCP	900	6697.00	6692.50	4.5	0.5000	N/A	0.013	4.5	47.59	95.38	139.05
C27	48" RCP	700	6711.00	6707.50	4.0	0.5000	N/A	0.013	4.0	40.49	74.42	101.57
C28	36" RCP	200	6667.00	6663.00	3.5	2.0000	N/A	0.013	3.5	4.67	57.62	94.32
C30	42" RCP	800	6673.00	6669.00	3.5	0.5000	N/A	0.013	3.5	37.05	68.18	71.14
C31	60" RCP	150	6653.00	6652.25	5.0	0.5000	N/A	0.013	5.0	85.55	158.06	184.16
C32	42" RCP	200	6641.00	6637.00	3.5	2.0000	N/A	0.013	3.5	1.25	42.40	142.28
C35	36" RCP	1100	6665.00	6659.50	3.0	0.5000	N/A	0.013	3.0	24.35	45.05	47.16
C36	48" RCP	1100	6652.00	6646.50	4.0	0.5000	N/A	0.013	4.0	60.08	109.01	101.57
C37	60" RCP	1400	6632.00	6625.00	5.0	0.5000	N/A	0.013	5.0	98.13	182.44	184.16
C38	42" RCP	650	6614.00	6610.75	3.5	0.5000	N/A	0.013	3.5	34.07	63.42	71.14
C39	48" RCP	200	6597.00	6593.00	4.0	2.0000	N/A	0.013	4.0	2.89	83.77	203.14
C40	Grass Lined Channel	400	6593.00	6591.00	4.0	0.5000	3.0	0.035	2.5	2.89	83.56	110.63

DESIGN POINTS - DEVELOPED CONDITIONS

Design Point (label)	Q 2 Yr. Q (cfs) Ponding (ft)	Q 5 Yr. Q (cfs) Ponding (ft)	Q 10 Yr. Q (cfs) Ponding (ft)	Q 50 Yr. Q (cfs) Ponding (ft)	Q 100 Yr. Q (cfs) Ponding (ft)
20	38.67	54.02	64.24	89.65	99.80
EK3C IN	38.67	54.02	64.24	89.65	99.80
EK3C OUT	0.52 / 6701.92	0.62 / 6703.01	0.68 / 6703.76	0.80 / 6705.51	0.84 / 6706.19
21	0.52	0.62	0.68	0.80	0.84
22	19.79	27.97	33.45	47.21	52.69
23	30.48	42.96	51.28	72.09	80.39
24	61.97	86.58	102.94	143.66	159.91
25	113.75	159.25	189.53	264.77	294.78
EK3B IN	113.75	159.25	189.53	264.77	294.78
EK3B OUT	4.33 / 6634.97	12.73 / 6636.07	20.15 / 6636.81	53.49 / 6638.61	79.95 / 6639.20
5	3.77	8.75	18.14	61.55	91.13
6	3.45	9.22	19.76	68.70	101.13
EK3A IN	4.56	13.91	24.00	63.78	94.28
EK3A OUT	4.03 / 6608.51	10.06 / 6609.19	14.31 / 6609.60	22.49 / 6610.68	24.04/ 6611.20
7	1.84	6.31	10.55	19.70	22.26
26	21.71	30.06	35.61	49.37	54.84
EK4A IN	21.71	30.06	35.61	49.37	54.84
EK4A OUT	0.35 / 6636.28	2.49 / 6636.63	5.78 / 6636.96	22.64 / 6637.65	30.64 / 6637.85
27	0.35	2.49	5.78	22.64	30.64
8	0.52	4.52	10.92	38.88	52.65
I25-4 IN	0.48	4.52	10.92	38.88	52.65
I25-4 OUT	0.39 / 6600.28	3.38 / 6600.86	8.02 / 6601.45	17.99 / 6602.63	21.10 / 6603.12
9	0.45	3.38	8.02	17.99	21.10
10	0.20	2.66	5.48	15.35	20.12
I25-5 IN	0.20	2.66	5.48	15.35	20.12
I25-5 OUT	0.14 / 6600.10	1.32 / 6600.52	3.54 / 6600.89	12.23 / 6601.92	14.29 / 6602.16
11	0.14	1.32	3.54	12.23	14.29
IBS IN	4.29	11.21	14.48	23.05	26.58
IBS OUT	1.79 / 6788.03	2.03 / 6788.46	2.20 / 6788.77	2.63 / 6789.68	2.78 / 6790.03
1	1.94	4.18	7.07	18.32	24.02
2	3.15	4.59	7.30	18.68	24.44
3	3.30	5.58	9.69	25.52	33.57
30	4.81	7.10	9.91	25.81	33.87
31	34.05	47.97	57.41	84.02	96.23
32	90.27	126.40	150.56	213.15	239.38
BS-1 IN	90.27	126.40	150.56	213.15	239.38
BS-1 OUT	0.95 / 6672.61	4.67 / 6673.94	9.00 / 6674.43	37.27 / 6675.71	57.62 / 6676.16
12	1.47	5.77	10.90	36.63	54.53
35	61.24	85.55	101.77	142.07	158.06
36	64.53	90.18	107.27	149.70	166.54
BS-2 IN	64.53	90.18	107.27	149.70	166.54
BS-2 OUT	1.08 / 6646.21	1.25 / 6647.87	2.24 / 6648.71	25.26 / 6649.69	42.40 / 6650.17
13	1.09	1.52	2.27	25.69	43.18
41	42.93	61.45	73.85	104.75	117.03
42	70.71	100.66	120.64	170.01	183.49
43	139.38	197.70	236.64	332.91	366.68
BS-3 IN	139.38	197.70	236.64	332.91	366.68
BS-3 OUT	2.11 / 6603.18	2.89 / 6604.66	9.48 / 6605.08	51.56 / 6606.37	83.77 / 6607.07
44	2.11	2.89	9.48	51.56	83.77
14	11.54	15.84	18.68	58.30	91.25

POND (label)	WQ BASIN AREA (acres)	WQ BASIN % Impervious	WQ VOLUME REQUIRED (acre-feet)	WQ PONDING ELEV. (feet)	WQ PONDING HEIGHT (feet)	# WQ ORIFICE COLUMNS	# WQ ORIFICE ROWS	WQ ORIFICE DIAMETER (inches)
EK-3C	20.2	90	0.811	6700.5	2.5	2	8	0.875
EK-3B	53.7	90	2.156	6632.7	3.7	3	16	0.750
EK-4	10.9	90	0.438	6634.6	1.8	1	5	1.125
BS-1	44.7	90	1.795	6673.0	3.8	2	11	1.000
BS-2	37.2	90	1.494	6644.3	3.3	1	10	1.375
BS-3	74.2	90	2.979	6601.3	4.3	3	13	0.938

POND (label)	RISER DIMENSIONS (feet)	RISER CREST ELEV. (feet)	OUTLET PIPE DIAMETER (inches)	OUTLET PIPE INVERT (feet)	OUTLET PIPE SLOPE (%)	INVERT OF POND (feet)	INVERT OF EMERG. SPILLWAY (feet)	LENGTH OF EMERG. SPILLWAY (feet)	EMERGENCY SPILLWAY FLOW DEPTH (feet)	FREE-BOARD DEPTH (feet)	CREST OF DAM (feet)	100 YR. PONDING VOLUME (acre-feet)
EK-3C	7.0' x 4.0'	6707.00	36" RCP	6698.0	2.0	6698.00	6707.00	32	1.0	2.0	6710.00	5.204
EK-3B	7.0' x 4.0'	6638.00	48" RCP	6628.2	0.5	6626.00	6641.00	116	1.0	2.8	6642.00	10.420
EK-3A	N/A	N/A	24" RCP	6607.5	2.0	6607.50	6611.33	90	1.0	0.7	6613.00	3.797
EK-4	7.0' x 4.0'	6637.45	36" RCP	6632.8	1.0	6632.80	6638.00	18	1.0	2.0	6641.00	1.997
I25-4	N/A	N/A	24" RCP	6600.0	2.0	6600.00	N/A	N/A	N/A	6.5	6609.00	0.298
I25-5	N/A	N/A	24" RCP	6600.0	2.0	6600.00	N/A	N/A	N/A	0.8	6603.00	0.208
IBS	N/A	N/A	18" RCP	6786.0	1.4	6786.00	N/A	N/A	N/A	1.0	6791.00	0.693
BS-1	7.0' x 4.0'	6675.00	42" RCP	6669.2	2.0	6666.00	6679.00	100	1.0	3.8	6680.00	9.928
BS-2	7.0' x 4.0'	6650.10	42" RCP	6641.0	2.0	6641.00	6651.00	62	1.0	2.0	6654.00	6.831
BS-3	7.0' x 4.0'	6605.80	48" RCP	6597.0	2.0	6597.00	6607.00	119	1.0	2.0	6610.00	13.252

EXISTING / ALLOWABLE / PHASE I / DEVELOPED FLOW COMPARISION

DESIGN POINT	DRAINAGE BASIN	2 YEAR EXISTING FLOW (cfs)	2 YEAR ALLOWABLE FLOW (cfs)	2 YEAR PHASE I FLOW (cfs)	2 YEAR DEVELOPED FLOW (cfs)	DEVELOPED VS. ALLOWABLE (% change)
7	EK-3	3.02	3.02	1.26	3.70	123
9	EK-4	0.43	0.43	0.45	0.45	105
11	EK-5	0.22	0.22	0.16	0.14	64
12	BS-1	0.24	2.15	0.00	0.95	44
13	BS-2	0.49	4.18	0.30	1.09	26
14	BS-3	0.62	8.06	0.98	11.54	143

DESIGN POINT	DRAINAGE BASIN	5 YEAR EXISTING FLOW (cfs)	5 YEAR ALLOWABLE FLOW (cfs)	5 YEAR PHASE I FLOW (cfs)	5 YEAR DEVELOPED FLOW (cfs)	DEVELOPED VS. ALLOWABLE (% change)
7	EK-3	8.52	8.52	1.77	8.57	101
9	EK-4	4.65	4.65	3.38	3.38	73
11	EK-5	2.49	2.49	1.61	1.32	53
12	BS-1	2.86	8.42	0.20	4.67	55
13	BS-2	4.94	5.83	1.32	1.52	26
14	BS-3	6.22	11.06	5.65	15.84	143

DESIGN POINT	DRAINAGE BASIN	10 YEAR EXISTING FLOW (cfs)	10 YEAR ALLOWABLE FLOW (cfs)	10 YEAR PHASE I FLOW (cfs)	10 YEAR DEVELOPED FLOW (cfs)	DEVELOPED VS. ALLOWABLE (% change)
7	EK-3	12.85	12.85	3.87	12.46	97
9	EK-4	10.92	10.92	8.02	8.02	73
11	EK-5	6.32	6.32	4.16	3.54	56
12	BS-1	5.95	17.34	0.41	9.00	52
13	BS-2	10.31	12.03	2.19	2.27	19
14	BS-3	12.98	22.91	13.89	18.68	82

DESIGN POINT	DRAINAGE BASIN	50 YEAR EXISTING FLOW (cfs)	50 YEAR ALLOWABLE FLOW (cfs)	50 YEAR PHASE I FLOW (cfs)	50 YEAR DEVELOPED FLOW (cfs)	DEVELOPED VS. ALLOWABLE (% change)
7	EK-3	22.69	22.69	13.01	20.09	89
9	EK-4	19.46	19.46	17.99	17.99	92
11	EK-5	15.92	15.92	13.29	12.23	77
12	BS-1	16.92	48.19	1.03	37.27	77
13	BS-2	29.84	33.58	4.84	25.69	77
14	BS-3	37.58	64.46	49.21	58.30	90

DESIGN POINT	DRAINAGE BASIN	100 YEAR EXISTING FLOW (cfs)	100 YEAR ALLOWABLE FLOW (cfs)	100 YEAR PHASE I FLOW (cfs)	100 YEAR DEVELOPED FLOW (cfs)	DEVELOPED VS. ALLOWABLE (% change)
7	EK-3	24.34	24.34	16.35	22.39	92
9	EK-4	22.78	22.78	21.10	21.10	93
11	EK-5	18.88	18.88	15.30	14.29	76
12	BS-1	22.28	63.14	1.94	57.62	91
13	BS-2	39.57	43.98	6.02	43.18	98
14	BS-3	49.82	84.58	68.65	91.25	108

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POND PACK OUTPUT

FULLY DEVELOPED CONDITIONS

MASTER DESIGN STORM SUMMARY

Network Storm Collection: COLO SPRGS

Return Event	Total Depth in	Rainfall Type	RNF ID
100	4.4000	Synthetic Curve	TYPEIIA 24HR
50	4.0000	Synthetic Curve	TYPEIIA 24HR
10	3.0000	Synthetic Curve	TYPEIIA 24HR
5	2.6000	Synthetic Curve	TYPEIIA 24HR
2	2.0000	Synthetic Curve	TYPEIIA 24HR

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
BS-1A	AREA	100	4.633		6.0060	76.49		
BS-1A	AREA	50	4.132		6.0060	68.77		
BS-1A	AREA	10	2.893		6.0060	49.34		
BS-1A	AREA	5	2.405		6.0060	41.52		
BS-1A	AREA	2	1.687		6.0060	29.77		
BS-1B	AREA	100	4.302		6.0060	71.02		
BS-1B	AREA	50	3.837		6.0060	63.86		
BS-1B	AREA	10	2.686		6.0060	45.82		
BS-1B	AREA	5	2.233		6.0060	38.56		
BS-1B	AREA	2	1.566		6.0060	27.64		
BS-1C	AREA	100	4.513		5.9895	74.76		
BS-1C	AREA	50	4.025		6.0060	67.25		
BS-1C	AREA	10	2.818		6.0060	48.37		
BS-1C	AREA	5	2.342		6.0060	40.76		
BS-1C	AREA	2	1.643		6.0060	29.31		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
BS-1D	AREA	100	.580		6.0555	9.59		
BS-1D	AREA	50	.460		6.0555	7.40		
BS-1D	AREA	10	.207		6.0720	2.80		
BS-1D	AREA	5	.128		6.0885	1.40		
BS-1D	AREA	2	.041		6.1215	.10		
DP 1	JCT	100	3.359		6.1380	24.02		
DP 1	JCT	50	2.757		6.1545	18.32		
DP 1	JCT	10	1.435		6.1710	7.07		
DP 1	JCT	5	.998		6.1875	4.18		
DP 1	JCT	2	.471		6.1710	1.94		
*DP 12	JCT	100	14.893	R	6.2700	59.91		
*DP 12	JCT	50	12.500	R	6.4515	38.39		
*DP 12	JCT	10	6.902	R	7.3095	9.23		
*DP 12	JCT	5	4.868	R	8.1345	4.79		
*DP 12	JCT	2	2.486	R	15.0315	1.06		
DP 2	JCT	100	3.585		6.1545	24.44		
DP 2	JCT	50	2.960		6.1545	18.68		
DP 2	JCT	10	1.580		6.1710	7.30		
DP 2	JCT	5	1.120		6.0225	4.59		
DP 2	JCT	2	.559		6.0060	3.15		
DP 3	JCT	100	4.662		6.2040	33.57		
DP 3	JCT	50	3.826		6.2040	25.52		
DP 3	JCT	10	1.996		6.2370	9.69		
DP 3	JCT	5	1.394		6.2535	5.58		
DP 3	JCT	2	.673		6.0225	3.30		
DP 30	JCT	100	4.912		6.2040	33.87		
DP 30	JCT	50	4.052		6.2205	25.81		
DP 30	JCT	10	2.162		6.2535	9.91		
DP 30	JCT	5	1.536		6.0225	7.10		
DP 30	JCT	2	.779		6.0225	4.81		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
DP 31	JCT	100	9.544		6.0225	96.23		
DP 31	JCT	50	8.184		6.0225	84.02		
DP 31	JCT	10	5.055		6.0060	57.41		
DP 31	JCT	5	3.941		6.0060	47.97		
DP 31	JCT	2	2.466		6.0225	34.05		
DP 32	JCT	100	18.359		6.0225	239.38		
DP 32	JCT	50	16.046		6.0225	213.15		
DP 32	JCT	10	10.558		6.0225	150.56		
DP 32	JCT	5	8.516		6.0225	126.40		
DP 32	JCT	2	5.676		6.0225	90.27		
EX-A	AREA	100	.896		6.1050	12.83		
EX-A	AREA	50	.711		6.1050	9.84		
EX-A	AREA	10	.319		6.1215	3.57		
EX-A	AREA	5	.198		6.1380	1.74		
EX-A	AREA	2	.064		6.1875	.13		
EX-B	AREA	100	1.406		6.0060	26.58		
EX-B	AREA	50	1.208		6.0060	23.05		
EX-B	AREA	10	.740		6.0060	14.48		
EX-B	AREA	5	.567		6.0060	11.21		
EX-B	AREA	2	.333		6.0060	6.63		
EX-C1	AREA	100	.094		5.9730	1.43		
EX-C1	AREA	50	.085		5.9565	1.30		
EX-C1	AREA	10	.062		5.9895	.97		
EX-C1	AREA	5	.053		5.9565	.84		
EX-C1	AREA	2	.040		5.9565	.64		
EX-C2	AREA	100	.132		5.9895	2.22		
EX-C2	AREA	50	.118		5.9895	2.00		
EX-C2	AREA	10	.083		5.9895	1.44		
EX-C2	AREA	5	.069		5.9895	1.22		
EX-C2	AREA	2	.048		5.9895	.88		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID		Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
EX-G		AREA	100	.104		5.9565	1.59		
EX-G		AREA	50	.094		5.9565	1.44		
EX-G		AREA	10	.069		5.9565	1.08		
EX-G		AREA	5	.059		5.9400	.93		
EX-G		AREA	2	.044		5.9565	.71		
EX-H		AREA	100	.250		5.9565	3.81		
EX-H		AREA	50	.226		5.9730	3.46		
EX-H		AREA	10	.166		5.9730	2.58		
EX-H		AREA	5	.142		5.9730	2.23		
EX-H		AREA	2	.106		5.9730	1.70		
IBS	IN	POND	100	1.406		6.0060	26.58		
IBS	IN	POND	50	1.208		6.0060	23.05		
IBS	IN	POND	10	.740		6.0060	14.48		
IBS	IN	POND	5	.567		6.0060	11.21		
IBS	IN	POND	2	.333		6.0060	6.63		
IBS	OUT	POND	100	1.406		6.1710	2.78	6790.03	.693
IBS	OUT	POND	50	1.207		6.1875	2.63	6789.68	.574
IBS	OUT	POND	10	.739		6.1380	2.20	6788.77	.307
IBS	OUT	POND	5	.567		6.1215	2.03	6788.46	.216
IBS	OUT	POND	2	.332		6.1050	1.82	6788.08	.104
O2B		AREA	100	1.058		6.1380	13.24		
O2B		AREA	50	.840		6.1380	10.05		
O2B		AREA	10	.377		6.1710	3.56		
O2B		AREA	5	.234		6.1875	1.71		
O2B		AREA	2	.076		6.5670	.14		
POND BS-1	IN	POND	100	18.359		6.0225	239.38		
POND BS-1	IN	POND	50	16.046		6.0225	213.15		
POND BS-1	IN	POND	10	10.558		6.0225	150.56		
POND BS-1	IN	POND	5	8.516		6.0225	126.40		
POND BS-1	IN	POND	2	5.676		6.0225	90.27		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
POND BS-1 OUT	POND	100	14.313	R	6.3030	57.62	6676.16	9.928
POND BS-1 OUT	POND	50	12.039	R	6.4515	37.27	6675.71	9.268
POND BS-1 OUT	POND	10	6.696	R	7.3590	9.00	6674.43	7.468
POND BS-1 OUT	POND	5	4.740	R	8.2005	4.67	6673.94	6.808
POND BS-1 OUT	POND	2	2.445	R	15.0315	1.04	6672.91	5.481
PR-D	AREA	100	.973		6.2205	9.69		
PR-D	AREA	50	.772		6.2370	7.31		
PR-D	AREA	10	.347		6.2700	2.53		
PR-D	AREA	5	.215		6.2865	1.21		
PR-D	AREA	2	.069		6.6000	.12		

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 5

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR
Storm Frequency = 5 yr
Total Rainfall Depth= 2.6000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	.567		6.0060	11.21	EX-B	
		DL	.567		6.0060	11.21		
		DN	.567		6.0060	11.21	IBS	IN
ADDLINK 100	ADD	UN	.059		5.9400	.93	EX-G	
		DL	.059		5.9400	.93		
		DN	1.394		6.2535	5.58	DP 3	
ADDLINK 110	ADD	UN	.142		5.9730	2.23	EX-H	
		DL	.142		5.9730	2.23		
		DN	1.536		6.0225	7.10	DP 30	
ADDLINK 20	ADD	UN	.053		5.9565	.84	EX-C1	
		DL	.053		5.9565	.84		
		DN	1.120		6.0225	4.59	DP 2	
ADDLINK 30	ADD	UN	.069		5.9895	1.22	EX-C2	
		DL	.069		5.9895	1.22		
		DN	1.120		6.0225	4.59	DP 2	
ADDLINK 40	ADD	UN	.215		6.2865	1.21	PR-D	
		DL	.215		6.2865	1.21		
		DN	1.394		6.2535	5.58	DP 3	
ADDLINK 50	ADD	UN	2.405		6.0060	41.52	BS-1A	
		DL	2.405		6.0060	41.52		
		DN	3.941		6.0060	47.97	DP 31	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 60	ADD	UN	.198		6.1380	1.74	EX-A	
		DL	.198		6.1380	1.74		
		DN	.998		6.1875	4.18	DP 1	
ADDLINK 70	ADD	UN	2.233		6.0060	38.56	BS-1B	
		DL	2.233		6.0060	38.56		
		DN	8.516		6.0225	126.40	DP 32	
ADDLINK 80	ADD	UN	8.516		6.0225	126.40	DP 32	
		DL	8.516		6.0225	126.40		
		DN	8.516		6.0225	126.40	POND BS-1	IN
ADDLINK 90	ADD	UN	.128		6.0885	1.40	BS-1D	
		DL	.128		6.0885	1.40		
		DN	4.868	R	8.1345	4.79	DP 12	
C1	REACH	UN	.234		6.1875	1.71	O2B	
		DL	.233		6.3525	1.02		
		DN	.998		6.1875	4.18	DP 1	
C2	PONDrt	UN	.567		6.0060	11.21	IBS	IN
C2			.567		6.1215	2.03	IBS	OUT
		DL	.567		6.1215	2.03		
		DN	.998		6.1875	4.18	DP 1	
C25	REACH	UN	1.536		6.0225	7.10	DP 30	
		DL	1.536		6.0390	6.71		
		DN	3.941		6.0060	47.97	DP 31	
C26	REACH	UN	3.941		6.0060	47.97	DP 31	
		DL	3.941		6.0225	47.59		
		DN	8.516		6.0225	126.40	DP 32	
C27	REACH	UN	2.342		6.0060	40.76	BS-1C	
		DL	2.342		6.0225	40.49		
		DN	8.516		6.0225	126.40	DP 32	
C28	PONDrt	UN	8.516		6.0225	126.40	POND BS-1	IN
C28			4.740	R	8.2005	4.67	POND BS-1	OUT
		DL	4.740	R	8.2005	4.67		
		DN	4.868	R	8.1345	4.79	DP 12	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points
C3	REACH	UN	.998		6.1875	4.18	DP 1
		DL	.998		6.1875	4.18	
		DN	1.120		6.0225	4.59	DP 2
C4	REACH	UN	1.120		6.0225	4.59	DP 2
		DL	1.120		6.2205	4.33	
		DN	1.394		6.2535	5.58	DP 3
C5	REACH	UN	1.394		6.2535	5.58	DP 3
		DL	1.394		6.2700	5.57	
		DN	1.536		6.0225	7.10	DP 30

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 100

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR
Storm Frequency = 100 yr
Total Rainfall Depth= 4.4000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	1.406		6.0060	26.58	EX-B	
		DL	1.406		6.0060	26.58		
		DN	1.406		6.0060	26.58	IBS	IN
ADDLINK 100	ADD	UN	.104		5.9565	1.59	EX-G	
		DL	.104		5.9565	1.59		
		DN	4.662		6.2040	33.57	DP 3	
ADDLINK 110	ADD	UN	.250		5.9565	3.81	EX-H	
		DL	.250		5.9565	3.81		
		DN	4.912		6.2040	33.87	DP 30	
ADDLINK 20	ADD	UN	.094		5.9730	1.43	EX-C1	
		DL	.094		5.9730	1.43		
		DN	3.585		6.1545	24.44	DP 2	
ADDLINK 30	ADD	UN	.132		5.9895	2.22	EX-C2	
		DL	.132		5.9895	2.22		
		DN	3.585		6.1545	24.44	DP 2	
ADDLINK 40	ADD	UN	.973		6.2205	9.69	PR-D	
		DL	.973		6.2205	9.69		
		DN	4.662		6.2040	33.57	DP 3	
ADDLINK 50	ADD	UN	4.633		6.0060	76.49	BS-1A	
		DL	4.633		6.0060	76.49		
		DN	9.544		6.0225	96.23	DP 31	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 60	ADD	UN	.896		6.1050	12.83	EX-A	
		DL	.896		6.1050	12.83		
		DN	3.359		6.1380	24.02	DP 1	
ADDLINK 70	ADD	UN	4.302		6.0060	71.02	BS-1B	
		DL	4.302		6.0060	71.02		
		DN	18.359		6.0225	239.38	DP 32	
ADDLINK 80	ADD	UN	18.359		6.0225	239.38	DP 32	
		DL	18.359		6.0225	239.38		
		DN	18.359		6.0225	239.38	POND BS-1	IN
ADDLINK 90	ADD	UN	.580		6.0555	9.59	BS-1D	
		DL	.580		6.0555	9.59		
		DN	14.893	R	6.2700	59.91	DP 12	
C1	REACH	UN	1.058		6.1380	13.24	O2B	
		DL	1.058		6.2370	11.05		
		DN	3.359		6.1380	24.02	DP 1	
C2	PONDrt	UN	1.406		6.0060	26.58	IBS	IN
C2			1.406		6.1710	2.78	IBS	OUT
		DL	1.406		6.1710	2.78		
		DN	3.359		6.1380	24.02	DP 1	
C25	REACH	UN	4.912		6.2040	33.87	DP 30	
		DL	4.912		6.2535	33.25		
		DN	9.544		6.0225	96.23	DP 31	
C26	REACH	UN	9.544		6.0225	96.23	DP 31	
		DL	9.544		6.0390	95.38		
		DN	18.359		6.0225	239.38	DP 32	
C27	REACH	UN	4.513		5.9895	74.76	BS-1C	
		DL	4.512		6.0060	74.42		
		DN	18.359		6.0225	239.38	DP 32	
C28	PONDrt	UN	18.359		6.0225	239.38	POND BS-1	IN
C28			14.313	R	6.3030	57.62	POND BS-1	OUT
		DL	14.313	R	6.3030	57.62		
		DN	14.893	R	6.2700	59.91	DP 12	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points
C3	REACH	UN	3.359		6.1380	24.02	DP 1
		DL	3.359		6.1545	24.02	
		DN	3.585		6.1545	24.44	DP 2
C4	REACH	UN	3.585		6.1545	24.44	DP 2
		DL	3.585		6.1875	23.87	
		DN	4.662		6.2040	33.57	DP 3
C5	REACH	UN	4.662		6.2040	33.57	DP 3
		DL	4.662		6.2040	33.52	
		DN	4.912		6.2040	33.87	DP 30

MASTER DESIGN STORM SUMMARY

Network Storm Collection: COLO SPRGS

Return Event	Total Depth in	Rainfall Type	RNF ID
100	4.4000	Synthetic Curve	TYPEIIA 24HR
50	4.0000	Synthetic Curve	TYPEIIA 24HR
10	3.0000	Synthetic Curve	TYPEIIA 24HR
5	2.6000	Synthetic Curve	TYPEIIA 24HR
2	2.0000	Synthetic Curve	TYPEIIA 24HR

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
BS-2A	AREA	100	2.076		6.0225	33.20		
BS-2A	AREA	50	1.851		6.0225	29.78		
BS-2A	AREA	10	1.296		6.0225	21.18		
BS-2A	AREA	5	1.077		6.0225	17.72		
BS-2A	AREA	2	.756		6.0390	12.60		
BS-2B	AREA	100	4.121		5.9895	68.43		
BS-2B	AREA	50	3.676		5.9895	61.54		
BS-2B	AREA	10	2.573		6.0060	44.29		
BS-2B	AREA	5	2.139		6.0060	37.35		
BS-2B	AREA	2	1.501		6.0060	26.89		
BS-2C	AREA	100	3.430		6.0060	56.77		
BS-2C	AREA	50	3.059		6.0060	51.07		
BS-2C	AREA	10	2.141		6.0060	36.70		
BS-2C	AREA	5	1.780		6.0060	30.92		
BS-2C	AREA	2	1.249		6.0060	22.22		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
BS-2D	AREA	100	.511		5.9895	8.49		
BS-2D	AREA	50	.456		5.9895	7.63		
BS-2D	AREA	10	.319		6.0060	5.49		
BS-2D	AREA	5	.265		6.0060	4.63		
BS-2D	AREA	2	.186		6.0060	3.33		
BS-2E	AREA	100	.154		6.0390	2.81		
BS-2E	AREA	50	.122		6.0390	2.19		
BS-2E	AREA	10	.055		6.0555	.85		
BS-2E	AREA	5	.034		6.0555	.44		
BS-2E	AREA	2	.011		6.0720	.03		
*DP 13	JCT	100	7.274	R	6.1875	43.18		
*DP 13	JCT	50	6.189	R	6.2370	25.69		
*DP 13	JCT	10	3.627	R	8.1840	2.27		
*DP 13	JCT	5	3.156	R	6.0555	1.52		
*DP 13	JCT	2	2.621	R	8.0025	1.09		
DP 35	JCT	100	9.627		6.0060	158.06		
DP 35	JCT	50	8.586		6.0060	142.07		
DP 35	JCT	10	6.011		6.0060	101.77		
DP 35	JCT	5	4.996		6.0060	85.55		
DP 35	JCT	2	3.505		6.0225	61.24		
DP 36	JCT	100	10.138		6.0060	166.54		
DP 36	JCT	50	9.042		6.0060	149.70		
DP 36	JCT	10	6.330		6.0060	107.27		
DP 36	JCT	5	5.262		6.0060	90.18		
DP 36	JCT	2	3.691		6.0225	64.53		
POND BS-2 IN	POND	100	10.138		6.0060	166.54		
POND BS-2 IN	POND	50	9.042		6.0060	149.70		
POND BS-2 IN	POND	10	6.330		6.0060	107.27		
POND BS-2 IN	POND	5	5.262		6.0060	90.18		
POND BS-2 IN	POND	2	3.691		6.0225	64.53		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
POND BS-2	OUT POND	100	7.121	R	6.1875	42.40	6650.17	5.947
POND BS-2	OUT POND	50	6.067	R	6.2370	25.26	6649.69	5.491
POND BS-2	OUT POND	10	3.572	R	8.2005	2.24	6648.71	4.606
POND BS-2	OUT POND	5	3.122	R	9.7020	1.25	6647.87	3.862
POND BS-2	OUT POND	2	2.610	R	9.2730	1.08	6646.21	2.599

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 5

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR
Storm Frequency = 5 yr
Total Rainfall Depth= 2.6000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	1.780		6.0060	30.92	BS-2C	
		DL	1.780		6.0060	30.92		
		DN	4.996		6.0060	85.55	DP 35	
ADDLINK 20	ADD	UN	1.077		6.0225	17.72	BS-2A	
		DL	1.077		6.0225	17.72		
		DN	4.996		6.0060	85.55	DP 35	
ADDLINK 30	ADD	UN	.265		6.0060	4.63	BS-2D	
		DL	.265		6.0060	4.63		
		DN	5.262		6.0060	90.18	DP 36	
ADDLINK 40	ADD	UN	.034		6.0555	.44	BS-2E	
		DL	.034		6.0555	.44		
		DN	3.156	R	6.0555	1.52	DP 13	
ADDLINK 50	ADD	UN	5.262		6.0060	90.18	DP 36	
		DL	5.262		6.0060	90.18		
		DN	5.262		6.0060	90.18	POND BS-2	IN
C30	REACH	UN	2.139		6.0060	37.35	BS-2B	
		DL	2.139		6.0060	37.05		
		DN	4.996		6.0060	85.55	DP 35	
C31	ADD	UN	4.996		6.0060	85.55	DP 35	
		DL	4.996		6.0060	85.55		
		DN	5.262		6.0060	90.18	DP 36	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
C32	PONDrt	UN	5.262		6.0060	90.18	POND BS-2	IN
C32			3.122	R	9.7020	1.25	POND BS-2	OUT
		DL	3.122	R	9.7020	1.25		
		DN	3.156	R	6.0555	1.52	DP 13	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 100

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR
Storm Frequency = 100 yr
Total Rainfall Depth= 4.4000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	3.430		6.0060	56.77	BS-2C	
		DL	3.430		6.0060	56.77		
		DN	9.627		6.0060	158.06	DP 35	
ADDLINK 20	ADD	UN	2.076		6.0225	33.20	BS-2A	
		DL	2.076		6.0225	33.20		
		DN	9.627		6.0060	158.06	DP 35	
ADDLINK 30	ADD	UN	.511		5.9895	8.49	BS-2D	
		DL	.511		5.9895	8.49		
		DN	10.138		6.0060	166.54	DP 36	
ADDLINK 40	ADD	UN	.154		6.0390	2.81	BS-2E	
		DL	.154		6.0390	2.81		
		DN	7.274	R	6.1875	43.18	DP 13	
ADDLINK 50	ADD	UN	10.138		6.0060	166.54	DP 36	
		DL	10.138		6.0060	166.54		
		DN	10.138		6.0060	166.54	POND BS-2	IN
C30	REACH	UN	4.121		5.9895	68.43	BS-2B	
		DL	4.121		6.0060	68.18		
		DN	9.627		6.0060	158.06	DP 35	
C31	ADD	UN	9.627		6.0060	158.06	DP 35	
		DL	9.627		6.0060	158.06		
		DN	10.138		6.0060	166.54	DP 36	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
C32	PONDrt	UN	10.138		6.0060	166.54	POND BS-2	IN
C32			7.121	R	6.1875	42.40	POND BS-2	OUT
		DL	7.121	R	6.1875	42.40		
		DN	7.274	R	6.1875	43.18	DP 13	

MASTER DESIGN STORM SUMMARY

Network Storm Collection: COLO SPRGS

Return Event	Total Depth in	Rainfall Type	RNF ID
100	4.4000	Synthetic Curve	TYPEIIA 24HR
50	4.0000	Synthetic Curve	TYPEIIA 24HR
10	3.0000	Synthetic Curve	TYPEIIA 24HR
5	2.6000	Synthetic Curve	TYPEIIA 24HR
2	2.0000	Synthetic Curve	TYPEIIA 24HR

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
BS-3	IN POND	100	23.069		6.0000	366.68		
BS-3	IN POND	50	20.119		6.0000	332.91		
BS-3	IN POND	10	14.009		6.0000	236.64		
BS-3	IN POND	5	11.608		6.0000	197.70		
BS-3	IN POND	2	8.089		6.0000	139.38		
BS-3	OUT POND	100	23.069		6.2500	83.77	6607.07	13.539
BS-3	OUT POND	50	20.118		6.3000	51.56	6606.37	12.006
BS-3	OUT POND	10	14.008		7.2500	9.48	6605.08	9.380
BS-3	OUT POND	5	11.608		10.3500	2.89	6604.66	8.551
BS-3	OUT POND	2	8.089		9.8000	2.11	6603.18	5.728
BS-3A	AREA	100	2.738		6.0000	45.54		
BS-3A	AREA	50	2.442		6.0000	40.97		
BS-3A	AREA	10	1.709		6.0000	29.47		
BS-3A	AREA	5	1.421		6.0000	24.83		
BS-3A	AREA	2	.997		6.0000	17.86		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
BS-3B	AREA	100	4.180		6.0000	71.98		
BS-3B	AREA	50	3.698		6.0000	64.25		
BS-3B	AREA	10	2.513		6.0000	44.85		
BS-3B	AREA	5	2.053		6.0000	37.10		
BS-3B	AREA	2	1.386		6.0000	25.58		
BS-3C	AREA	100	4.482		6.0000	74.48		
BS-3C	AREA	50	3.998		6.0000	67.00		
BS-3C	AREA	10	2.799		6.0000	48.16		
BS-3C	AREA	5	2.327		6.0000	40.58		
BS-3C	AREA	2	1.632		6.0000	29.17		
BS-3D	AREA	100	6.137		6.0000	101.33		
BS-3D	AREA	50	5.474		6.0000	91.07		
BS-3D	AREA	10	3.832		6.0000	65.28		
BS-3D	AREA	5	3.185		6.0000	54.90		
BS-3D	AREA	2	2.235		6.0000	39.31		
BS-3E	AREA	100	3.881		6.0000	63.98		
BS-3E	AREA	50	3.461		6.0000	57.50		
BS-3E	AREA	10	2.423		6.0000	41.19		
BS-3E	AREA	5	2.014		6.0000	34.63		
BS-3E	AREA	2	1.413		6.0000	24.78		
BS-3F	AREA	100	1.173		6.0000	19.48		
BS-3F	AREA	50	1.046		6.0000	17.52		
BS-3F	AREA	10	.733		6.0000	12.59		
BS-3F	AREA	5	.609		6.0000	10.61		
BS-3F	AREA	2	.427		6.0000	7.62		
BS-3G	AREA	100	1.685		6.0000	26.23		
BS-3G	AREA	50	1.503		6.0000	23.48		
BS-3G	AREA	10	1.052		6.0500	16.62		
BS-3G	AREA	5	.874		6.0500	13.91		
BS-3G	AREA	2	.613		6.0500	9.87		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
*DP 14	JCT	100	24.753		6.2500	91.25		
*DP 14	JCT	50	21.621		6.2500	58.30		
*DP 14	JCT	10	15.060		6.0500	18.68		
*DP 14	JCT	5	12.482		6.0500	15.84		
*DP 14	JCT	2	8.702		6.0500	11.54		
DP 41	JCT	100	6.918		6.0000	117.03		
DP 41	JCT	50	6.139		6.0000	104.75		
DP 41	JCT	10	4.222		6.0000	73.85		
DP 41	JCT	5	3.473		6.0000	61.45		
DP 41	JCT	2	2.382		6.0000	42.93		
DP 42	JCT	100	11.878	R	6.0000	183.49		
DP 42	JCT	50	10.137		6.0000	170.01		
DP 42	JCT	10	7.021		6.0000	120.64		
DP 42	JCT	5	5.800		6.0000	100.66		
DP 42	JCT	2	4.015		6.0000	70.71		
DP 43	JCT	100	23.069		6.0000	366.68		
DP 43	JCT	50	20.119		6.0000	332.91		
DP 43	JCT	10	14.009		6.0000	236.64		
DP 43	JCT	5	11.608		6.0000	197.70		
DP 43	JCT	2	8.089		6.0000	139.38		
DP 44	JCT	100	23.069		6.2500	83.77		
DP 44	JCT	50	20.118		6.3000	51.56		
DP 44	JCT	10	14.008		7.2500	9.48		
DP 44	JCT	5	11.608		10.3500	2.89		
DP 44	JCT	2	8.089		9.8000	2.11		

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 5

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR
Storm Frequency = 5 yr
Total Rainfall Depth= 2.6000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	2.053		6.0000	37.10	BS-3B	
		DL	2.053		6.0000	37.10		
		DN	3.473		6.0000	61.45	DP 41	
ADDLINK 20	ADD	UN	2.327		6.0000	40.58	BS-3C	
		DL	2.327		6.0000	40.58		
		DN	5.800		6.0000	100.66	DP 42	
ADDLINK 30	ADD	UN	3.185		6.0000	54.90	BS-3D	
		DL	3.185		6.0000	54.90		
		DN	11.608		6.0000	197.70	DP 43	
ADDLINK 40	ADD	UN	11.608		6.0000	197.70	DP 43	
		DL	11.608		6.0000	197.70		
		DN	11.608		6.0000	197.70	BS-3	IN
ADDLINK 50	ADD	UN	.874		6.0500	13.91	BS-3G	
		DL	.874		6.0500	13.91		
		DN	12.482		6.0500	15.84	DP 14	
ADDLINK 60	ADD	UN	.609		6.0000	10.61	BS-3F	
		DL	.609		6.0000	10.61		
		DN	11.608		6.0000	197.70	DP 43	
C35	REACH	UN	1.421		6.0000	24.83	BS-3A	
		DL	1.421		6.0000	24.35		
		DN	3.473		6.0000	61.45	DP 41	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
C36	REACH	UN	3.473		6.0000	61.45	DP 41	
		DL	3.473		6.0000	60.08		
		DN	5.800		6.0000	100.66	DP 42	
C37	REACH	UN	5.800		6.0000	100.66	DP 42	
		DL	5.800		6.0000	98.13		
		DN	11.608		6.0000	197.70	DP 43	
C38	REACH	UN	2.014		6.0000	34.63	BS-3E	
		DL	2.014		6.0000	34.07		
		DN	11.608		6.0000	197.70	DP 43	
C39	PONDrt	UN	11.608		6.0000	197.70	BS-3	IN
C39			11.608		10.3500	2.89	BS-3	OUT
		DL	11.608		10.3500	2.89		
		DN	11.608		10.3500	2.89	DP 44	
C40	REACH	UN	11.608		10.3500	2.89	DP 44	
		DL	11.608		10.4000	2.89		
		DN	12.482		6.0500	15.84	DP 14	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 100

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR
Storm Frequency = 100 yr
Total Rainfall Depth= 4.4000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	4.180		6.0000	71.98	BS-3B	
		DL	4.180		6.0000	71.98		
		DN	6.918		6.0000	117.03	DP 41	
ADDLINK 20	ADD	UN	4.482		6.0000	74.48	BS-3C	
		DL	4.482		6.0000	74.48		
		DN	11.878	R	6.0000	183.49	DP 42	
ADDLINK 30	ADD	UN	6.137		6.0000	101.33	BS-3D	
		DL	6.137		6.0000	101.33		
		DN	23.069		6.0000	366.68	DP 43	
ADDLINK 40	ADD	UN	23.069		6.0000	366.68	DP 43	
		DL	23.069		6.0000	366.68		
		DN	23.069		6.0000	366.68	BS-3	IN
ADDLINK 50	ADD	UN	1.685		6.0000	26.23	BS-3G	
		DL	1.685		6.0000	26.23		
		DN	24.753		6.2500	91.25	DP 14	
ADDLINK 60	ADD	UN	1.173		6.0000	19.48	BS-3F	
		DL	1.173		6.0000	19.48		
		DN	23.069		6.0000	366.68	DP 43	
C35	REACH	UN	2.738		6.0000	45.54	BS-3A	
		DL	2.738		6.0000	45.05		
		DN	6.918		6.0000	117.03	DP 41	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
C36	REACH	UN	6.918		6.0000	117.03	DP 41	
		DL	7.396	R	5.9500	109.01		
		DN	11.878	R	6.0000	183.49	DP 42	
C37	REACH	UN	11.878	R	6.0000	183.49	DP 42	
		DL	11.878		6.0000	182.44		
		DN	23.069		6.0000	366.68	DP 43	
C38	REACH	UN	3.881		6.0000	63.98	BS-3E	
		DL	3.881		6.0000	63.42		
		DN	23.069		6.0000	366.68	DP 43	
C39	PONDrt	UN	23.069		6.0000	366.68	BS-3	IN
C39			23.069		6.2500	83.77	BS-3	OUT
		DL	23.069		6.2500	83.77		
		DN	23.069		6.2500	83.77	DP 44	
C40	REACH	UN	23.069		6.2500	83.77	DP 44	
		DL	23.069		6.3000	83.56		
		DN	24.753		6.2500	91.25	DP 14	

MASTER DESIGN STORM SUMMARY

Network Storm Collection: COLO SPRGS

Return Event	Total Depth in	Rainfall Type	RNF ID
100	4.4000	Synthetic Curve	TYPEIIA 24HR
50	4.0000	Synthetic Curve	TYPEIIA 24HR
10	3.0000	Synthetic Curve	TYPEIIA 24HR
5	2.6000	Synthetic Curve	TYPEIIA 24HR
2	2.0000	Synthetic Curve	TYPEIIA 24HR

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
AF-1	AREA	100	1.007		6.0976	14.50		
AF-1	AREA	50	.799		6.0976	11.09		
AF-1	AREA	10	.359		6.1142	4.03		
AF-1	AREA	5	.223		6.1309	1.97		
AF-1	AREA	2	.072		6.1809	.14		
DP 20	JCT	100	6.077		5.9976	99.80		
DP 20	JCT	50	5.420		6.0143	89.65		
DP 20	JCT	10	3.794		6.0143	64.24		
DP 20	JCT	5	3.154		6.0143	54.02		
DP 20	JCT	2	2.213		6.0143	38.67		
DP 21	JCT	100	2.157	R	13.2780	.84		
DP 21	JCT	50	2.048	R	14.1610	.80		
DP 21	JCT	10	1.740	R	12.2784	.68		
DP 21	JCT	5	1.588	R	12.8449	.62		
DP 21	JCT	2	1.314	R	10.0127	.52		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
DP 22	JCT	100	5.258	R	5.9976	52.69		
DP 22	JCT	50	4.804	R	5.9976	47.21		
DP 22	JCT	10	3.643	R	5.9976	33.45		
DP 22	JCT	5	3.158	R	6.0143	27.97		
DP 22	JCT	2	2.398	R	6.0143	19.79		
DP 23	JCT	100	6.941	R	5.9976	80.39		
DP 23	JCT	50	6.305	R	5.9976	72.09		
DP 23	JCT	10	4.694	R	6.0143	51.28		
DP 23	JCT	5	4.031	R	6.0143	42.96		
DP 23	JCT	2	3.009	R	6.0143	30.48		
DP 24	JCT	100	9.717		5.9976	159.91		
DP 24	JCT	50	8.667		5.9976	143.66		
DP 24	JCT	10	6.067		6.0143	102.94		
DP 24	JCT	5	5.043		6.0143	86.58		
DP 24	JCT	2	3.538		6.0143	61.97		
DP 25	JCT	100	19.966	R	5.9976	294.78		
DP 25	JCT	50	17.922	R	6.0143	264.77		
DP 25	JCT	10	12.827	R	6.0143	189.53		
DP 25	JCT	5	10.791	R	6.0143	159.25		
DP 25	JCT	2	7.752	R	6.0143	113.75		
DP 5	JCT	100	17.629	R	6.1642	84.16		
DP 5	JCT	50	15.594	R	6.1975	56.36		
DP 5	JCT	10	10.591	R	6.1809	21.33		
DP 5	JCT	5	8.625	R	6.5640	13.11		
DP 5	JCT	2	5.763	R	8.0135	4.44		
DP 6	JCT	100	19.039		6.1975	94.28		
DP 6	JCT	50	16.709	R	6.1975	63.78		
DP 6	JCT	10	11.080	R	6.2142	24.00		
DP 6	JCT	5	8.920	R	6.2642	13.91		
DP 6	JCT	2	5.844	R	8.0468	4.56		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
*DP 7	JCT	100	18.948		7.9968	24.04		
*DP 7	JCT	50	16.619	R	7.9801	22.49		
*DP 7	JCT	10	10.993	R	7.9968	14.31		
*DP 7	JCT	5	8.835	R	8.1134	10.06		
*DP 7	JCT	2	5.763	R	9.1463	4.03		
EK-3A	AREA	100	6.077		5.9976	99.80		
EK-3A	AREA	50	5.420		6.0143	89.65		
EK-3A	AREA	10	3.794		6.0143	64.24		
EK-3A	AREA	5	3.154		6.0143	54.02		
EK-3A	AREA	2	2.213		6.0143	38.67		
EK-3B	AREA	100	2.497		5.9976	41.45		
EK-3B	AREA	50	2.227		5.9976	37.28		
EK-3B	AREA	10	1.559		5.9976	26.78		
EK-3B	AREA	5	1.296		5.9976	22.55		
EK-3B	AREA	2	.909		6.0143	16.21		
EK-3C	AREA	100	1.685		5.9976	28.12		
EK-3C	AREA	50	1.503		5.9976	25.32		
EK-3C	AREA	10	1.052		5.9976	18.24		
EK-3C	AREA	5	.874		5.9976	15.39		
EK-3C	AREA	2	.613		5.9976	11.10		
EK-3D	AREA	100	5.204		5.9976	85.47		
EK-3D	AREA	50	4.642		6.0143	76.78		
EK-3D	AREA	10	3.250		6.0143	55.02		
EK-3D	AREA	5	2.701		6.0143	46.27		
EK-3D	AREA	2	1.895		6.0143	33.11		
EK-3E	AREA	100	4.512		5.9976	75.06		
EK-3E	AREA	50	4.025		5.9976	67.52		
EK-3E	AREA	10	2.818		5.9976	48.56		
EK-3E	AREA	5	2.342		5.9976	40.92		
EK-3E	AREA	2	1.643		5.9976	29.43		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
EK-3F	AREA	100	2.256		5.9976	37.67		
EK-3F	AREA	50	2.012		5.9976	33.90		
EK-3F	AREA	10	1.409		5.9976	24.43		
EK-3F	AREA	5	1.171		5.9976	20.62		
EK-3F	AREA	2	.822		5.9976	14.87		
EK-3G	AREA	100	1.053		5.9976	17.47		
EK-3G	AREA	50	.939		5.9976	15.71		
EK-3G	AREA	10	.657		5.9976	11.28		
EK-3G	AREA	5	.546		5.9976	9.50		
EK-3G	AREA	2	.383		6.0143	6.83		
IP-1	AREA	100	.315		6.0143	5.53		
IP-1	AREA	50	.276		6.0143	4.87		
IP-1	AREA	10	.180		6.0143	3.24		
IP-1	AREA	5	.144		6.0143	2.60		
IP-1	AREA	2	.092		6.0309	1.69		
IP-2	AREA	100	.485		6.0309	8.19		
IP-2	AREA	50	.424		6.0309	7.20		
IP-2	AREA	10	.277		6.0309	4.74		
IP-2	AREA	5	.221		6.0476	3.80		
IP-2	AREA	2	.141		6.0476	2.44		
POND EK-3A	IN POND	100	19.039		6.1975	94.28		
POND EK-3A	IN POND	50	16.709	R	6.1975	63.78		
POND EK-3A	IN POND	10	11.080	R	6.2142	24.00		
POND EK-3A	IN POND	5	8.920	R	6.2642	13.91		
POND EK-3A	IN POND	2	5.844	R	8.0468	4.56		
POND EK-3A	OUT POND	100	18.949	R	7.9968	24.04	6611.20	4.530
POND EK-3A	OUT POND	50	16.619	R	7.9801	22.49	6610.68	3.306
POND EK-3A	OUT POND	10	10.993	R	7.9968	14.31	6609.60	1.409
POND EK-3A	OUT POND	5	8.835	R	8.1134	10.06	6609.19	.886
POND EK-3A	OUT POND	2	5.763	R	9.1463	4.03	6608.51	.358

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
POND EK-3B IN	POND	100	19.966	R	5.9976	294.78		
POND EK-3B IN	POND	50	17.922	R	6.0143	264.77		
POND EK-3B IN	POND	10	12.827	R	6.0143	189.53		
POND EK-3B IN	POND	5	10.791	R	6.0143	159.25		
POND EK-3B IN	POND	2	7.752	R	6.0143	113.75		
POND EK-3B OUT	POND	100	17.143	LR	6.1809	79.95	6639.20	10.420
POND EK-3B OUT	POND	50	15.169	LR	6.2142	53.49	6638.61	9.541
POND EK-3B OUT	POND	10	10.313	LR	6.3475	20.15	6636.81	6.987
POND EK-3B OUT	POND	5	8.404	LR	6.5974	12.73	6636.07	5.978
POND EK-3B OUT	POND	2	5.621	LR	8.0468	4.33	6634.97	4.611
POND EK-3C IN	POND	100	6.077		5.9976	99.80		
POND EK-3C IN	POND	50	5.420		6.0143	89.65		
POND EK-3C IN	POND	10	3.794		6.0143	64.24		
POND EK-3C IN	POND	5	3.154		6.0143	54.02		
POND EK-3C IN	POND	2	2.213		6.0143	38.67		
POND EK-3C OUT	POND	100	2.157	R	13.2780	.84	6706.19	4.938
POND EK-3C OUT	POND	50	2.048	R	14.1610	.80	6705.51	4.352
POND EK-3C OUT	POND	10	1.740	R	12.2784	.68	6703.76	2.939
POND EK-3C OUT	POND	5	1.588	R	12.8449	.62	6703.01	2.395
POND EK-3C OUT	POND	2	1.314	R	10.0127	.52	6701.92	1.611
SE-1	AREA	100	.427		6.0809	6.65		
SE-1	AREA	50	.339		6.0809	5.13		
SE-1	AREA	10	.152		6.0976	1.90		
SE-1	AREA	5	.094		6.0976	.94		
SE-1	AREA	2	.030		6.1309	.07		
VP-2	AREA	100	.291		5.9976	5.24		
VP-2	AREA	50	.255		5.9976	4.63		
VP-2	AREA	10	.166		5.9976	3.10		
VP-2	AREA	5	.133		6.0143	2.51		
VP-2	AREA	2	.085		6.0143	1.65		

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 5

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR
Storm Frequency = 5 yr
Total Rainfall Depth= 2.6000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	.133		6.0143	2.51	VP-2	
		DL	.133		6.0143	2.51		
		DN	3.158	R	6.0143	27.97	DP 22	
ADDLINK 100	ADD	UN	2.342		5.9976	40.92	EK-3E	
		DL	2.342		5.9976	40.92		
		DN	5.043		6.0143	86.58	DP 24	
ADDLINK 110	ADD	UN	10.791	R	6.0143	159.25	DP 25	
		DL	10.791	R	6.0143	159.25		
		DN	10.791	R	6.0143	159.25	POND EK-3B	IN
ADDLINK 120	ADD	UN	8.920	R	6.2642	13.91	DP 6	
		DL	8.920	R	6.2642	13.91		
		DN	8.920	R	6.2642	13.91	POND EK-3A	IN
ADDLINK 130	ADD	UN	.221		6.0476	3.80	IP-2	
		DL	.221		6.0476	3.80		
		DN	8.625	R	6.5640	13.11	DP 5	
ADDLINK 140	ADD	UN	.144		6.0143	2.60	IP-1	
		DL	.144		6.0143	2.60		
		DN	3.158	R	6.0143	27.97	DP 22	
ADDLINK 20	ADD	UN	3.154		6.0143	54.02	EK-3A	
		DL	3.154		6.0143	54.02		
		DN	3.154		6.0143	54.02	DP 20	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 30	ADD	UN	3.154		6.0143	54.02	DP 20	
		DL	3.154		6.0143	54.02		
		DN	3.154		6.0143	54.02	POND EK-3C	IN
ADDLINK 40	ADD	UN	1.296		5.9976	22.55	EK-3B	
		DL	1.296		5.9976	22.55		
		DN	3.158	R	6.0143	27.97	DP 22	
ADDLINK 50	ADD	UN	.874		5.9976	15.39	EK-3C	
		DL	.874		5.9976	15.39		
		DN	4.031	R	6.0143	42.96	DP 23	
ADDLINK 60	ADD	UN	.546		5.9976	9.50	EK-3G	
		DL	.546		5.9976	9.50		
		DN	10.791	R	6.0143	159.25	DP 25	
ADDLINK 70	ADD	UN	1.171		5.9976	20.62	EK-3F	
		DL	1.171		5.9976	20.62		
		DN	10.791	R	6.0143	159.25	DP 25	
ADDLINK 80	ADD	UN	.223		6.1309	1.97	AF-1	
		DL	.223		6.1309	1.97		
		DN	8.920	R	6.2642	13.91	DP 6	
ADDLINK 90	ADD	UN	.094		6.0976	.94	SE-1	
		DL	.094		6.0976	.94		
		DN	8.920	R	6.2642	13.91	DP 6	
C14	PONDrt	UN	3.154		6.0143	54.02	POND EK-3C	IN
C14			1.588	R	12.8449	.62	POND EK-3C	OUT
		DL	1.588	R	12.8449	.62		
		DN	1.588	R	12.8449	.62	DP 21	
C15	REACH	UN	1.588	R	12.8449	.62	DP 21	
		DL	1.586	R	12.6449	.62		
		DN	3.158	R	6.0143	27.97	DP 22	
C16	REACH	UN	3.158	R	6.0143	27.97	DP 22	
		DL	3.157	R	6.0143	27.71		
		DN	4.031	R	6.0143	42.96	DP 23	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
C17	REACH	UN	4.031	R	6.0143	42.96	DP 23	
		DL	4.030	R	6.0143	42.90		
		DN	10.791	R	6.0143	159.25	DP 25	
C18	REACH	UN	2.701		6.0143	46.27	EK-3D	
		DL	2.701		6.0309	45.95		
		DN	5.043		6.0143	86.58	DP 24	
C19	REACH	UN	5.043		6.0143	86.58	DP 24	
		DL	5.043		6.0143	86.44		
		DN	10.791	R	6.0143	159.25	DP 25	
C20	PONDrt	UN	10.791	R	6.0143	159.25	POND EK-3B	IN
C20			8.404	LR	6.5974	12.73	POND EK-3B	OUT
		DL	8.404	LR	6.5974	12.73		
		DN	8.625	R	6.5640	13.11	DP 5	
C9	REACH	UN	8.625	R	6.5640	13.11	DP 5	
		DL	8.603	R	6.6140	13.08		
		DN	8.920	R	6.2642	13.91	DP 6	
CONVEYANCE 10	PONDrt	UN	8.920	R	6.2642	13.91	POND EK-3A	IN
CONVEYANCE 10			8.835	R	8.1134	10.06	POND EK-3A	OUT
		DL	8.835	R	8.1134	10.06		
		DN	8.835	R	8.1134	10.06	DP 7	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 100

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR
Storm Frequency = 100 yr
Total Rainfall Depth= 4.4000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	.291		5.9976	5.24	VP-2	
		DL	.291		5.9976	5.24		
		DN	5.258	R	5.9976	52.69	DP 22	
ADDLINK 100	ADD	UN	4.512		5.9976	75.06	EK-3E	
		DL	4.512		5.9976	75.06		
		DN	9.717		5.9976	159.91	DP 24	
ADDLINK 110	ADD	UN	19.966	R	5.9976	294.78	DP 25	
		DL	19.966	R	5.9976	294.78		
		DN	19.966	R	5.9976	294.78	POND EK-3B	IN
ADDLINK 120	ADD	UN	19.039		6.1975	94.28	DP 6	
		DL	19.039		6.1975	94.28		
		DN	19.039		6.1975	94.28	POND EK-3A	IN
ADDLINK 130	ADD	UN	.485		6.0309	8.19	IP-2	
		DL	.485		6.0309	8.19		
		DN	17.629	R	6.1642	84.16	DP 5	
ADDLINK 140	ADD	UN	.315		6.0143	5.53	IP-1	
		DL	.315		6.0143	5.53		
		DN	5.258	R	5.9976	52.69	DP 22	
ADDLINK 20	ADD	UN	6.077		5.9976	99.80	EK-3A	
		DL	6.077		5.9976	99.80		
		DN	6.077		5.9976	99.80	DP 20	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 30	ADD	UN	6.077		5.9976	99.80	DP 20	
		DL	6.077		5.9976	99.80		
		DN	6.077		5.9976	99.80	POND EK-3C	IN
ADDLINK 40	ADD	UN	2.497		5.9976	41.45	EK-3B	
		DL	2.497		5.9976	41.45		
		DN	5.258	R	5.9976	52.69	DP 22	
ADDLINK 50	ADD	UN	1.685		5.9976	28.12	EK-3C	
		DL	1.685		5.9976	28.12		
		DN	6.941	R	5.9976	80.39	DP 23	
ADDLINK 60	ADD	UN	1.053		5.9976	17.47	EK-3G	
		DL	1.053		5.9976	17.47		
		DN	19.966	R	5.9976	294.78	DP 25	
ADDLINK 70	ADD	UN	2.256		5.9976	37.67	EK-3F	
		DL	2.256		5.9976	37.67		
		DN	19.966	R	5.9976	294.78	DP 25	
ADDLINK 80	ADD	UN	1.007		6.0976	14.50	AF-1	
		DL	1.007		6.0976	14.50		
		DN	19.039		6.1975	94.28	DP 6	
ADDLINK 90	ADD	UN	.427		6.0809	6.65	SE-1	
		DL	.427		6.0809	6.65		
		DN	19.039		6.1975	94.28	DP 6	
C14	PONDrt	UN	6.077		5.9976	99.80	POND EK-3C	IN
C14			2.157	R	13.2780	.84	POND EK-3C	OUT
		DL	2.157	R	13.2780	.84		
		DN	2.157	R	13.2780	.84	DP 21	
C15	REACH	UN	2.157	R	13.2780	.84	DP 21	
		DL	2.155	R	13.4946	.84		
		DN	5.258	R	5.9976	52.69	DP 22	
C16	REACH	UN	5.258	R	5.9976	52.69	DP 22	
		DL	5.256	R	6.0143	52.45		
		DN	6.941	R	5.9976	80.39	DP 23	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
C17	REACH	UN	6.941	R	5.9976	80.39	DP 23	
		DL	6.940	R	6.0143	80.31		
		DN	19.966	R	5.9976	294.78	DP 25	
C18	REACH	UN	5.204		5.9976	85.47	EK-3D	
		DL	5.204		6.0143	85.20		
		DN	9.717		5.9976	159.91	DP 24	
C19	REACH	UN	9.717		5.9976	159.91	DP 24	
		DL	9.717		6.0143	159.80		
		DN	19.966	R	5.9976	294.78	DP 25	
C20	PONDrt	UN	19.966	R	5.9976	294.78	POND EK-3B	IN
C20			17.143	LR	6.1809	79.95	POND EK-3B	OUT
		DL	17.143	LR	6.1809	79.95		
		DN	17.629	R	6.1642	84.16	DP 5	
C9	REACH	UN	17.629	R	6.1642	84.16	DP 5	
		DL	17.607	R	6.2308	80.74		
		DN	19.039		6.1975	94.28	DP 6	
CONVEYANCE 10	PONDrt	UN	19.039		6.1975	94.28	POND EK-3A	IN
CONVEYANCE 10			18.949	R	7.9968	24.04	POND EK-3A	OUT
		DL	18.949	R	7.9968	24.04		
		DN	18.948		7.9968	24.04	DP 7	

MASTER DESIGN STORM SUMMARY

Network Storm Collection: COLO SPRGS

Return Event	Total Depth in	Rainfall Type	RNF ID
100	4.4000	Synthetic Curve	TYPEIIA 24HR
50	4.0000	Synthetic Curve	TYPEIIA 24HR
10	3.0000	Synthetic Curve	TYPEIIA 24HR
5	2.6000	Synthetic Curve	TYPEIIA 24HR
2	2.0000	Synthetic Curve	TYPEIIA 24HR

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
AF-2	AREA	100	1.749		6.1050	24.76		
AF-2	AREA	50	1.388		6.1050	18.94		
AF-2	AREA	10	.624		6.1215	6.85		
AF-2	AREA	5	.387		6.1380	3.33		
AF-2	AREA	2	.125		6.2040	.25		
DP 27	JCT	100	2.747	R	6.0720	30.64		
DP 27	JCT	50	2.402	R	6.0720	22.64		
DP 27	JCT	10	1.559	R	6.1380	5.78		
DP 27	JCT	5	1.235	R	6.5175	2.49		
DP 27	JCT	2	.778	R	9.9990	.35		
DP 8	JCT	100	4.492	R	6.1050	52.65		
DP 8	JCT	50	3.785	R	6.1215	38.88		
DP 8	JCT	10	2.179	R	6.1545	10.92		
DP 8	JCT	5	1.617	R	6.1710	4.52		
DP 8	JCT	2	.898	R	6.5670	.52		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID		Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
*DP 9		JCT	100	4.477	R	6.3690	21.10		
*DP 9		JCT	50	3.770	R	6.3525	17.99		
*DP 9		JCT	10	2.165	R	6.3360	8.02		
*DP 9		JCT	5	1.602	R	6.6165	3.38		
*DP 9		JCT	2	.883	R	8.0520	.45		
EK-4	IN	POND	100	3.279		5.9895	54.84		
EK-4	IN	POND	50	2.925		5.9895	49.37		
EK-4	IN	POND	10	2.047		5.9895	35.61		
EK-4	IN	POND	5	1.702		5.9895	30.06		
EK-4	IN	POND	2	1.194		5.9895	21.71		
EK-4	OUT	POND	100	2.747	R	6.0720	30.64	6637.85	1.708
EK-4	OUT	POND	50	2.402	R	6.0720	22.64	6637.65	1.593
EK-4	OUT	POND	10	1.559	R	6.1380	5.78	6636.96	1.214
EK-4	OUT	POND	5	1.235	R	6.5175	2.49	6636.63	1.036
EK-4	OUT	POND	2	.778	R	9.9990	.35	6636.28	.851
EK-4A		AREA	100	3.279		5.9895	54.84		
EK-4A		AREA	50	2.925		5.9895	49.37		
EK-4A		AREA	10	2.047		5.9895	35.61		
EK-4A		AREA	5	1.702		5.9895	30.06		
EK-4A		AREA	2	1.194		5.9895	21.71		
I25-4	IN	POND	100	4.492	R	6.1050	52.65		
I25-4	IN	POND	50	3.785	R	6.1215	38.88		
I25-4	IN	POND	10	2.179	R	6.1545	10.92		
I25-4	IN	POND	5	1.617	R	6.1710	4.52		
I25-4	IN	POND	2	.898	R	6.5670	.52		
I25-4	OUT	POND	100	4.477	R	6.3690	21.10	6603.12	.805
I25-4	OUT	POND	50	3.770	R	6.3525	17.99	6602.63	.537
I25-4	OUT	POND	10	2.165	R	6.3360	8.02	6601.45	.138
I25-4	OUT	POND	5	1.602	R	6.6165	3.38	6600.86	.082
I25-4	OUT	POND	2	.883	R	8.0520	.45	6600.28	.027

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 5

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR
Storm Frequency = 5 yr
Total Rainfall Depth= 2.6000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	.387		6.1380	3.33	AF-2	
		DL	.387		6.1380	3.33		
		DN	1.617	R	6.1710	4.52	DP 8	
ADDLINK 20	ADD	UN	1.617	R	6.1710	4.52	DP 8	
		DL	1.617	R	6.1710	4.52		
		DN	1.617	R	6.1710	4.52	I25-4	IN
ADDLINK 60	ADD	UN	1.702		5.9895	30.06	EK-4A	
		DL	1.702		5.9895	30.06		
		DN	1.702		5.9895	30.06	EK-4	IN
C11	PONDrt	UN	1.617	R	6.1710	4.52	I25-4	IN
C11			1.602	R	6.6165	3.38	I25-4	OUT
		DL	1.602	R	6.6165	3.38		
		DN	1.602	R	6.6165	3.38	DP 9	
C21	PONDrt	UN	1.702		5.9895	30.06	EK-4	IN
C21			1.235	R	6.5175	2.49	EK-4	OUT
		DL	1.235	R	6.5175	2.49		
		DN	1.235	R	6.5175	2.49	DP 27	
C22	REACH	UN	1.235	R	6.5175	2.49	DP 27	
		DL	1.231	R	6.5670	2.46		
		DN	1.617	R	6.1710	4.52	DP 8	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 100

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR
Storm Frequency = 100 yr
Total Rainfall Depth= 4.4000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	1.749		6.1050	24.76	AF-2	
		DL	1.749		6.1050	24.76		
		DN	4.492	R	6.1050	52.65	DP 8	
ADDLINK 20	ADD	UN	4.492	R	6.1050	52.65	DP 8	
		DL	4.492	R	6.1050	52.65		
		DN	4.492	R	6.1050	52.65	I25-4	IN
ADDLINK 60	ADD	UN	3.279		5.9895	54.84	EK-4A	
		DL	3.279		5.9895	54.84		
		DN	3.279		5.9895	54.84	EK-4	IN
C11	PONDrt	UN	4.492	R	6.1050	52.65	I25-4	IN
C11			4.477	R	6.3690	21.10	I25-4	OUT
		DL	4.477	R	6.3690	21.10		
		DN	4.477	R	6.3690	21.10	DP 9	
C21	PONDrt	UN	3.279		5.9895	54.84	EK-4	IN
C21			2.747	R	6.0720	30.64	EK-4	OUT
		DL	2.747	R	6.0720	30.64		
		DN	2.747	R	6.0720	30.64	DP 27	
C22	REACH	UN	2.747	R	6.0720	30.64	DP 27	
		DL	2.743	R	6.1215	27.90		
		DN	4.492	R	6.1050	52.65	DP 8	

MASTER DESIGN STORM SUMMARY

Network Storm Collection: COLO SPRGS

Return Event	Total Depth in	Rainfall Type	RNF ID
100	4.4000	Synthetic Curve	TYPEIIA 24HR
50	4.0000	Synthetic Curve	TYPEIIA 24HR
10	3.0000	Synthetic Curve	TYPEIIA 24HR
5	2.6000	Synthetic Curve	TYPEIIA 24HR
2	2.0000	Synthetic Curve	TYPEIIA 24HR

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
AF-3	AREA	100	1.399		6.1050	19.17		
AF-3	AREA	50	1.110		6.1215	14.64		
AF-3	AREA	10	.499		6.1380	5.27		
AF-3	AREA	5	.309		6.1545	2.56		
AF-3	AREA	2	.100		6.2370	.19		
DP 10	JCT	100	1.502		6.1050	20.12		
DP 10	JCT	50	1.192		6.1050	15.35		
DP 10	JCT	10	.536		6.1215	5.48		
DP 10	JCT	5	.332		6.1380	2.66		
DP 10	JCT	2	.107		6.2040	.20		
*DP 11	JCT	100	1.502		6.2205	14.29		
*DP 11	JCT	50	1.191		6.2040	12.23		
*DP 11	JCT	10	.535		6.2700	3.54		
*DP 11	JCT	5	.332		6.3360	1.32		
*DP 11	JCT	2	.107		7.1280	.14		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
EK-5A	AREA	100	.102		6.0225	2.00		
EK-5A	AREA	50	.081		6.0225	1.57		
EK-5A	AREA	10	.037		6.0225	.63		
EK-5A	AREA	5	.023		6.0390	.34		
EK-5A	AREA	2	.007		6.0555	.03		
I25-5	IN POND	100	1.502		6.1050	20.12		
I25-5	IN POND	50	1.192		6.1050	15.35		
I25-5	IN POND	10	.536		6.1215	5.48		
I25-5	IN POND	5	.332		6.1380	2.66		
I25-5	IN POND	2	.107		6.2040	.20		
I25-5	OUT POND	100	1.502		6.2205	14.29	6602.16	.208
I25-5	OUT POND	50	1.191		6.2040	12.23	6601.92	.154
I25-5	OUT POND	10	.535		6.2700	3.54	6600.89	.071
I25-5	OUT POND	5	.332		6.3360	1.32	6600.52	.041
I25-5	OUT POND	2	.107		7.1280	.14	6600.10	.008

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 5

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR
Storm Frequency = 5 yr
Total Rainfall Depth= 2.6000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	.309		6.1545	2.56	AF-3	
		DL	.309		6.1545	2.56		
		DN	.332		6.1380	2.66	DP 10	
ADDLINK 130	ADD	UN	.023		6.0390	.34	EK-5A	
		DL	.023		6.0390	.34		
		DN	.332		6.1380	2.66	DP 10	
ADDLINK 20	ADD	UN	.332		6.1380	2.66	DP 10	
		DL	.332		6.1380	2.66		
		DN	.332		6.1380	2.66	I25-5	IN
C12	PONDrt	UN	.332		6.1380	2.66	I25-5	IN
C12			.332		6.3360	1.32	I25-5	OUT
		DL	.332		6.3360	1.32		
		DN	.332		6.3360	1.32	DP 11	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 100

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR
Storm Frequency = 100 yr
Total Rainfall Depth= 4.4000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	1.399		6.1050	19.17	AF-3	
		DL	1.399		6.1050	19.17		
		DN	1.502		6.1050	20.12	DP 10	
ADDLINK 130	ADD	UN	.102		6.0225	2.00	EK-5A	
		DL	.102		6.0225	2.00		
		DN	1.502		6.1050	20.12	DP 10	
ADDLINK 20	ADD	UN	1.502		6.1050	20.12	DP 10	
		DL	1.502		6.1050	20.12		
		DN	1.502		6.1050	20.12	I25-5	IN
C12	PONDrt	UN	1.502		6.1050	20.12	I25-5	IN
C12			1.502		6.2205	14.29	I25-5	OUT
		DL	1.502		6.2205	14.29		
		DN	1.502		6.2205	14.29	DP 11	

CLASSIC
CONSULTING
ENGINEERS & SURVEYORS

HYDROLOGIC / HYDRAULIC CALCULATIONS
FILING NO. 1 & 2 CONDITIONS

Design Procedure Form: Extended Detention Basin (EDB) - Sedimentation Facility

Designer: David Gibson
Company: Classic Consulting
Date: March 16, 2007
Project: Interquest North
Location: Pond EK-3B

1. Basin Storage Volume		
A) Tributary Area's Imperviousness Ratio (i = I_a / 100)	I_a = 16.27 % i = 0.16	
B) Contributing Watershed Area (Area)	Area = 100.80	acres
C) Water Quality Capture Volume (WQCV) (WQCV =1.0 * (0.91 * I^3 - 1.19 * I^2 + 0.78 * I))	WQCV = 0.10	watershed inches
D) Design Volume: Vol = (WQCV / 12) * Area * 1.2	Vol = 1.001	acre-feet
2. Outlet Works		
A) Outlet Type (Check One)	X Orifice Plate Perforated Riser Pipe Other:	
B) Depth at Outlet Above Lowest Perforation (H)	H = 2.60	feet
C) Required Maximum Outlet Area per Row, (A_o)	A_o = 1.49	square inches
D) Perforation Dimensions **(enter one only)**: i) Circular Perforation Diameter **OR** ii) 2" Height Rectangular Perforation Width	 D = 1.3750 W =	 inches, **OR** inches
E) Number of Columns (nc, See Table 6a-1 For Maximum)	nc = 1	number
F) Actual Design Outlet Area per Row (A_o)	A_o = 1.48	square inches
G) Number of Rows (nr)	nr = 8	number
H) Total Outlet Area (A_{ot})	A_{ot} = 11.58	square inches
3. Trash Rack		
A) Needed Open Area: A_t = 0.5 * (Figure 7 Value) * A_{ot}	A_t = 376	square inches
B) Type of Outlet Opening (Check One)	X ≤ 2" Diameter **Round** 2" High **Rectangular** Other:	
C) For 2", or Smaller, **Round Opening** (Ref.: Figure 6a): i) Width of Trash Rack and Concrete Opening (W_{conc}) from Table 6a-1	 W_{conc} = 12	 inches
ii) Height of Trash Rack Screen (H_{TR})	H_{TR} =	inches

Design Procedure Form: Extended Detention Basin (EDB) - Sedimentation Facility

Designer: David Gibson
Company: Classic Consulting
Date: March 16, 2007
Project: Interquest North
Location: Pond EK-4

1. Basin Storage Volume		
A) Tributary Area's Imperviousness Ratio (i = I_a / 100)	I_a = 85.00 % i = 0.85	
B) Contributing Watershed Area (Area)	Area = 10.90	acres
C) Water Quality Capture Volume (WQCV) (WQCV =1.0 * (0.91 * I^3 - 1.19 * I^2 + 0.78 * I))	WQCV = 0.36	watershed inches
D) Design Volume: Vol = (WQCV / 12) * Area * 1.2	Vol = 0.395	acre-feet
2. Outlet Works		
A) Outlet Type (Check One)	X Orifice Plate Perforated Riser Pipe Other:	
B) Depth at Outlet Above Lowest Perforation (H)	H = 1.80	feet
C) Required Maximum Outlet Area per Row, (A_o)	A_o = 0.97	square inches
D) Perforation Dimensions **(enter one only)**: i) Circular Perforation Diameter **OR** ii) 2" Height Rectangular Perforation Width	D = 1.1250 W =	inches, **OR** inches
E) Number of Columns (nc, See Table 6a-1 For Maximum)	nc = 1	number
F) Actual Design Outlet Area per Row (A_o)	A_o = 0.99	square inches
G) Number of Rows (nr)	nr = 5	number
H) Total Outlet Area (A_{ot})	A_{ot} = 5.37	square inches
3. Trash Rack		
A) Needed Open Area: A_t = 0.5 * (Figure 7 Value) * A_{ot}	A_t = 180	square inches
B) Type of Outlet Opening (Check One)	X ≤ 2" Diameter **Round** 2" High **Rectangular** Other:	
C) For 2", or Smaller, **Round Opening** (Ref.: Figure 6a): i) Width of Trash Rack and Concrete Opening (W_{conc}) from Table 6a-1	W_{conc} = 9	inches
ii) Height of Trash Rack Screen (H_{TR})	H_{TR} =	inches

Design Procedure Form: Extended Detention Basin (EDB) - Sedimentation Facility

Designer: **David Gibson**
Company: **Classic Consulting**
Date: **March 16, 2007**
Project: **Interquest North**
Location: **Pond BS-1T**

1. Basin Storage Volume	
A) Tributary Area's Imperviousness Ratio (i = I_a / 100)	I_a = 9.50 % i = 0.10
B) Contributing Watershed Area (Area)	Area = 31.40 acres
C) Water Quality Capture Volume (WQCV) (WQCV =1.0 * (0.91 * I^3 - 1.19 * I^2 + 0.78 * I))	WQCV = 0.06 watershed inches
D) Design Volume: Vol = (WQCV / 12) * Area * 1.2	Vol = 0.201 acre-feet
2. Outlet Works	
A) Outlet Type (Check One)	X Orifice Plate Perforated Riser Pipe Other:
B) Depth at Outlet Above Lowest Perforation (H)	H = 1.50 feet
C) Required Maximum Outlet Area per Row, (A_o)	A_o = 0.65 square inches
D) Perforation Dimensions **(enter one only)**: i) Circular Perforation Diameter **OR** ii) 2" Height Rectangular Perforation Width	D = 0.9380 inches, **OR** W = inches
E) Number of Columns (nc, See Table 6a-1 For Maximum)	nc = 1 number
F) Actual Design Outlet Area per Row (A_o)	A_o = 0.69 square inches
G) Number of Rows (nr)	nr = 5 number
H) Total Outlet Area (A_{ot})	A_{ot} = 3.11 square inches
3. Trash Rack	
A) Needed Open Area: A_t = 0.5 * (Figure 7 Value) * A_{ot}	A_t = 107 square inches
B) Type of Outlet Opening (Check One)	X ≤ 2" Diameter **Round** 2" High **Rectangular** Other:
C) For 2", or Smaller, **Round Opening** (Ref.: Figure 6a): i) Width of Trash Rack and Concrete Opening (W_{conc}) from Table 6a-1	W_{conc} = 6 inches
ii) Height of Trash Rack Screen (H_{TR})	H_{TR} = inches

Design Procedure Form: Extended Detention Basin (EDB) - Sedimentation Facility

Designer:	David Gibson
Company:	Classic Consulting
Date:	March 16, 2007
Project:	Interquest North
Location:	Pond BS-3T

1. Basin Storage Volume			
A) Tributary Area's Imperviousness Ratio (i = I_a / 100)	I_a =	45.65	%
	i =	0.46	
B) Contributing Watershed Area (Area)	Area =	67.40	acres
C) Water Quality Capture Volume (WQCV) (WQCV =1.0 * (0.91 * I^3 - 1.19 * I^2 + 0.78 * I))	WQCV =	0.19	watershed inches
D) Design Volume: Vol = (WQCV / 12) * Area * 1.2	Vol =	1.312	acre-feet
2. Outlet Works			
A) Outlet Type (Check One)	x	Orifice Plate	
		Perforated Riser Pipe	
		Other:	
B) Depth at Outlet Above Lowest Perforation (H)	H =	4.00	feet
C) Required Maximum Outlet Area per Row, (A_o)	A_o =	1.11	square inches
D) Perforation Dimensions **(enter one only)**:			
i) Circular Perforation Diameter **OR**	D =	2.0000	inches, **OR**
ii) 2" Height Rectangular Perforation Width	W =		inches
E) Number of Columns (nc, See Table 6a-1 For Maximum)	nc =	1	number
F) Actual Design Outlet Area per Row (A_o)	A_o =	3.14	square inches
G) Number of Rows (nr)	nr =	12	number
H) Total Outlet Area (A_{ot})	A_{ot} =	37.70	square inches
3. Trash Rack			
A) Needed Open Area: A_t = 0.5 * (Figure 7 Value) * A_{ot}	A_t =	1,133	square inches
B) Type of Outlet Opening (Check One)	X	≤ 2" Diameter **Round**	
		2" High **Rectangular**	
		Other:	
C) For 2", or Smaller, **Round Opening** (Ref.: Figure 6a):			
i) Width of Trash Rack and Concrete Opening (W_{conc}) from Table 6a-1	W_{conc} =	27	inches
ii) Height of Trash Rack Screen (H_{TR})	H_{TR} =		inches

COMPOSITE C_N VALUES - FILING NO. 1 & 2 CONDITIONS

BASIN (label)	BASIN AREA (ac)	SUB-AREA LAND USE 1			SUB-AREA LAND USE 2				TOTAL BASIN AREA (ac)	TOTAL BASIN AREA (sq mi)	WEIGHTED C_N
		LAND USE	ESTIMATED PERCENT IMPERIOUS	ESTIMATED	AREA (AC)	LAND USE	ESTIMATED PERCENT IMPERIOUS	ESTIMATED C_N	AREA (AC)			
02B	12.4	UNDEV.	0	61	12.40	UNDEV.	100	98	0.00	12.4	0.01938	61.0
EX-A	9.6	UNDEV.	0	61	9.60	UNDEV.	100	98	0.00	9.6	0.01500	61.0
EX-B	7.1	DEV.	0	61	3.50	DEV.	100	98	3.60	7.1	0.01109	79.8
EX-C1	0.3	ROAD	0	61	0.10	ROAD	100	98	0.20	0.3	0.00047	85.7
EX-C2	0.3	ROAD	0	61	0.10	ROAD	100	98	0.20	0.3	0.00047	85.7
PR-D	6.6	UNDEV.	0	61	6.60	UNDEV.	100	98	0.00	6.6	0.01031	61.0
VP-1	1.1	ROAD	0	61	0.37	ROAD	100	98	0.73	1.1	0.00172	85.7
IP-1	1.3	ROAD	0	61	0.43	ROAD	100	98	0.87	1.3	0.00203	85.7
IP-2	2.0	ROAD	0	61	0.67	ROAD	100	98	1.33	2.0	0.00313	85.7
SE-1	5.0	UNDEV.	0	61	5.00	UNDEV.	100	98	0.00	5.0	0.00781	61.0
AF-1	11.6	UNDEV.	0	61	11.60	UNDEV.	100	98	0.00	11.6	0.01813	61.0
AF-2	20.5	UNDEV.	0	61	20.50	UNDEV.	100	98	0.00	20.5	0.03203	61.0
AF-3	16.4	UNDEV.	0	61	16.40	UNDEV.	100	98	0.00	16.4	0.02563	61.0
EK-3M	22.2	DEV.	0	61	16.00	DEV.	0	69	6.20	22.2	0.03469	63.2
EK-3N	10.1	DEV.	0	61	0.00	DEV.	0	69	10.10	10.1	0.01578	69.0
EK-3O	14.6	DEV.	0	61	2.19	DEV.	100	98	12.41	14.6	0.02281	92.5
EK-3P	16.5	DEV.	0	61	16.50	DEV.	100	98	0.00	16.5	0.02578	61.0
EK-3Q	37.4	DEV.	100	98	4.00	DEV.	0	69	33.40	37.4	0.05844	72.1
EK-4M	10.9	DEV.	0	61	1.64	DEV.	100	98	9.27	10.9	0.01703	92.5
EK-5M	3.0	DEV.	0	61	2.60	DEV.	0	69	0.40	3.0	0.00469	62.1
BS-1M	27.8	DEV.	0	61	24.80	DEV.	100	98	3.00	27.8	0.04344	65.0
BS-1N	3.6	DEV.	0	61	1.50	DEV.	0	69	2.10	3.6	0.00563	65.7
BS-1O	15.3	DEV.	0	61	15.30	DEV.	100	98	0.00	15.3	0.02391	61.0
BS-2M	3.1	DEV.	0	61	1.80	DEV.	0	69	1.30	3.1	0.00484	64.4
BS-3M	34.6	DEV.	100	98	3.50	DEV.	0	69	31.10	34.6	0.05406	71.9
BS-3N	7.6	DEV.	0	61	1.14	DEV.	100	98	6.46	7.6	0.01188	92.5
BS-3O	8.4	DEV.	0	61	1.26	DEV.	100	98	7.14	8.4	0.01313	92.5
BS-3P	16.8	DEV.	0	61	13.20	DEV.	0	69	3.60	16.8	0.02625	62.7
BS-3Q	30.4	DEV.	0	61	30.40	DEV.	100	98	0.00	30.4	0.04750	61.0

TIME OF CONCENTRATION

BASIN	Cn	C(5)	Length (ft)	OVERLAND Height (ft)	Tc (min)	STREET / CHANNEL FLOW Length (ft)	Velocity (fps)	Tc (min)	Tc TOTAL (min)	Tc TOTAL (hr)	Lagtime TOTAL (hr)
02B	61.0	0.25	100	2	12.6	1800	3.0	10.0	22.6451	0.3774	0.2265
EX-A	61.0	0.25	75	2	10.0	1400	3.0	7.8	17.7369	0.2956	0.1774
EX-B	79.8	0.65	50	2	3.8	500	3.0	2.8	6.5436	0.1091	0.0654
EX-C1	85.7	0.75	50	2	2.9	350	3.0	1.9	4.8734	0.0812	0.0487
EX-C2	85.7	0.75	50	2	2.9	350	3.0	1.9	4.8734	0.0812	0.0487
PR-D	61.0	0.25	100	2	12.6	1100	3.0	6.1	18.7562	0.3126	0.1876
VP-1	85.7	0.75	50	2	2.9	1250	3.0	6.9	9.8734	0.1646	0.0987
IP-1	85.7	0.75	50	2	2.9	1300	3.0	7.2	10.1512	0.1692	0.1015
IP-2	85.7	0.75	50	2	2.9	1900	3.0	10.6	13.4845	0.2247	0.1348
SE-1	61.0	0.25	100	2	12.6	400	3.0	2.2	14.8673	0.2478	0.1487
AF-1	61.0	0.25	100	2	12.6	900	3.0	5.0	17.6451	0.2941	0.1765
AF-2	61.0	0.25	100	2	12.6	1000	3.0	5.6	18.2006	0.3033	0.1820
AF-3	61.0	0.25	100	2	12.6	1200	3.0	6.7	19.3117	0.3219	0.1931
EK-3M	63.2	0.35	100	2	11.2	1500	3.0	8.3	19.4907	0.3248	0.1949
EK-3N	69.0	0.90	50	2	1.7	1050	3.0	5.8	7.5070	0.1251	0.0751
EK-3O	92.5	0.90	50	2	1.7	1150	3.0	6.4	8.0626	0.1344	0.0806
EK-3P	61.0	0.25	100	2	12.6	1500	3.0	8.3	20.9784	0.3496	0.2098
EK-3Q	72.1	0.35	100	2	11.2	1700	3.0	9.4	20.6018	0.3434	0.2060
EK-4M	92.5	0.90	50	2	1.7	900	3.0	5.0	6.6737	0.1112	0.0667
EK-5M	62.1	0.25	100	2	12.6	400	3.0	2.2	14.8673	0.2478	0.1487
BS-1M	65.0	0.25	100	2	12.6	1300	3.0	7.2	19.8673	0.3311	0.1987
BS-1N	65.7	0.35	100	2	11.2	450	3.0	2.5	13.6574	0.2276	0.1366
BS-1O	61.0	0.25	100	2	12.6	1800	3.0	10.0	22.6451	0.3774	0.2265
BS-2M	64.4	0.35	50	2	6.3	300	3.0	1.7	7.9430	0.1324	0.0794
BS-3M	71.9	0.35	100	2	11.2	1700	3.0	9.4	20.6018	0.3434	0.2060
BS-3N	92.5	0.90	50	2	1.7	600	3.0	3.3	5.0070	0.0835	0.0501
BS-3O	92.5	0.90	50	2	1.7	750	3.0	4.2	5.8404	0.0973	0.0584
BS-3P	62.7	0.25	100	2	12.6	1100	3.0	6.1	18.7562	0.3126	0.1876
BS-3Q	61.0	0.25	100	2	12.6	1800	3.0	10.0	22.6451	0.3774	0.2265

BASIN SUMMARY - PHASE I CONDITIONS

BASIN (label)	TOTAL BASIN AREA (acres)	TOTAL BASIN AREA (sq mi)	WEIGHTED CN	TOTAL LAG TIME (hours)	TOTAL Tc (hours)	Q 2 Yr. (cfs)	Q 5 Yr. (cfs)	Q 10 Yr. (cfs)	Q 25 Yr. (cfs)	Q 50 Yr. (cfs)	Q 100 Yr. (cfs)
02B	12.4	0.0194	61.0	0.2265	0.3774	0.14	1.71	3.56	7.19	10.05	13.24
EX-A	10.5	0.0164	61.0	0.1774	0.2956	0.13	1.74	3.57	7.09	9.84	12.83
EX-B	7.1	0.0111	79.8	0.0654	0.1091	6.63	11.21	14.48	19.57	23.05	26.58
EX-C1	0.3	0.0004	98.0	0.0487	0.0833	0.64	0.84	0.97	1.17	1.30	1.43
EX-C2	0.4	0.0007	93.0	0.0487	0.0833	0.88	1.22	1.44	1.78	2.00	2.22
PR-D	11.4	0.0178	61.0	0.1876	0.5317	0.12	1.21	2.53	5.17	7.31	9.69
EX-H	1.2	0.0019	98.0	0.0487	0.0833	1.70	2.23	2.58	3.11	3.46	3.81
EX-G	1.0	0.0016	98.0	0.0487	0.0833	0.71	0.93	1.08	1.30	1.44	1.59
VP-1	1.1	0.0017	85.7	0.0987	0.1646	1.44	2.21	2.75	3.57	4.12	4.68
IP-1	1.3	0.0020	85.7	0.1015	0.1692	1.69	2.61	3.24	4.21	4.86	5.52
IP-2	2.0	0.0031	85.7	0.1348	0.2247	2.43	3.80	4.75	6.20	7.18	8.18
SE-1	5.0	0.0078	61.0	0.1487	0.2478	0.07	0.94	1.90	3.71	5.12	6.66
AF-1	11.6	0.0181	61.0	0.1765	0.2941	0.14	1.96	4.03	7.99	11.08	14.45
AF-2	20.5	0.0320	61.0	0.1820	0.3033	0.25	3.33	6.85	13.61	18.94	24.76
AF-3	16.4	0.0256	61.0	0.1931	0.3219	0.19	2.56	5.27	10.52	14.64	19.17
EK-3M	22.2	0.0347	63.2	0.1949	0.3248	0.78	4.97	9.18	17.04	23.04	29.65
EK-3N	10.1	0.0158	69.0	0.0751	0.1251	3.01	7.45	10.94	16.70	20.81	25.10
EK-3O	14.6	0.0228	92.5	0.0806	0.1344	28.60	39.74	47.14	58.19	65.51	72.85
EK-3P	16.5	0.0258	61.0	0.2098	0.3496	0.18	2.42	5.00	10.05	14.01	18.43
EK-3Q	37.4	0.0584	72.1	0.2060	0.3434	10.14	23.71	34.54	52.82	66.09	79.99
EK-4M	10.9	0.0170	92.5	0.0667	0.1112	21.71	30.06	35.61	43.88	49.37	54.84
EK-5M	3.0	0.0047	62.1	0.1487	0.2478	0.08	0.68	1.30	2.43	3.32	4.27
BS-1M	27.8	0.0434	65.0	0.1987	0.3311	1.94	8.33	14.23	24.90	32.94	41.69
BS-1N	3.6	0.0056	65.7	0.1366	0.2276	0.43	1.54	2.50	4.16	5.39	6.71
BS-1O	15.3	0.0239	61.0	0.2265	0.3774	0.17	2.12	4.39	8.87	12.40	16.34
BS-2M	3.1	0.0048	64.4	0.0794	0.1324	0.30	1.32	2.19	3.72	4.84	6.02
BS-3M	34.6	0.0541	71.9	0.2060	0.3434	8.90	20.79	30.61	47.15	59.11	71.66
BS-3N	7.6	0.0119	92.5	0.0501	0.0835	15.23	21.05	24.92	30.68	34.50	38.31
BS-3O	8.4	0.0131	92.5	0.0584	0.0973	16.72	23.15	27.43	33.80	38.03	42.24
BS-3P	16.8	0.0263	62.7	0.1876	0.3126	0.56	3.62	6.68	12.58	17.10	22.01
BS-3Q	30.4	0.0475	61.0	0.2265	0.3774	0.34	3.97	8.24	16.85	23.63	31.08

CONVEYANCE CHART - FILING NO. 1 & 2 CONDITIONS

Conveyance Label	Type	Length ft.	Upper Invert ft.	Lower Invert ft.	Bottom Width ft.	Slope %	Side Slope H to 1	Manning's N value	Available Depth ft.	Q 5 Yr. cfs	Q 100 Yr. cfs	Q Capacity cfs
C1	Grass Lined Channel	1200	6794.00	6784.58	4.0	0.7850	3.0	0.035	1.5	1.02	11.05	46.20
C2	18" RCP	100	6786.00	6784.58	1.5	1.4200	N/A	0.013	1.5	2.03	2.78	7.41
C3	36" RCP	250	6784.58	6782.08	3.0	1.0000	N/A	0.013	3.0	4.18	24.02	66.69
C4	Grass Lined Channel	1050	6782.08	6746.00	4.0	3.4362	3.0	0.035	2.0	4.33	23.87	177.86
C5	36" RCP	250	6746.00	6743.50	3.0	1.0000	N/A	0.013	3.0	5.57	33.52	66.69
C6	Paved Channel	1400	6738.00	6696.00	2.0	3.0000	10.0	0.013	1.0	2.07	4.53	158.12
C9	Grass Lined Channel	1250	6636.00	6607.50	3.0	2.2800	5.0	0.035	1.5	3.43	18.58	102.15
C10	24" RCP	100	6607.50	6605.50	2.0	2.0000	N/A	0.013	2.0	1.34	13.43	31.99
C11	24" RCP	100	6600.00	6598.00	2.0	2.0000	N/A	0.013	2.0	3.38	21.10	31.99
C12	24" RCP	100	6600.00	6598.00	2.0	2.0000	N/A	0.013	2.0	1.61	15.30	31.99
C50	42" RCP	1250	6693.00	6686.75	3.5	0.5000	N/A	0.013	3.5	8.39	37.71	71.14
C51	48" RCP	700	6654.00	6650.50	4.0	0.5000	N/A	0.013	4.0	14.21	58.21	101.57
C52	54" RCP	1700	6693.00	6684.50	4.5	0.5000	N/A	0.013	4.5	1.81	16.98	139.05
C53	60" RCP	250	6646.00	6644.75	5.0	0.5000	N/A	0.013	5.0	24.52	94.63	184.16
C54	48" RCP	300	6629.00	6627.50	4.0	0.5000	N/A	0.013	4.0	1.29	18.13	101.57
C55	36" RCP	100	6632.80	6631.80	3.0	1.0000	N/A	0.013	3.0	2.49	30.64	66.70
C22	Grass Lined Channel	1000	6631.80	6600.00	10.0	3.1800	5.0	0.035	1.5	2.46	27.90	204.33
C60	42" RCP	1350	6743.50	6736.75	3.5	0.5000	N/A	0.013	3.5	6.71	33.25	71.14
C61	54" RCP	900	6697.00	6692.50	4.5	0.5000	N/A	0.013	4.5	13.99	69.11	139.05
C62	42" RCP	200	6667.00	6663.00	3.5	2.0000	N/A	0.013	3.5	0.91	3.79	142.28
C65	Grass Lined Channel	750	6650.00	6639.00	8.0	1.4667	3.0	0.035	2.0	19.90	69.59	176.37
C66	48" RCP	1100	6652.00	6646.50	4.0	0.5000	N/A	0.013	4.0	20.71	38.06	101.57
C67	Grass Lined Channel	600	6639.00	6622.00	8.0	2.8333	3.0	0.035	2.0	50.80	128.64	245.13
C68	12" RCP	100	6622.00	6621.00	1.5	1.0000	N/A	0.013	1.5	0.53	9.26	10.50
C69	Grass Lined Channel	500	6621.00	6616.00	8.0	1.0000	3.0	0.035	2.0	0.53	9.26	145.63

DESIGN POINTS - FILING NO. 1 & 2 CONDITIONS

Design Point (label)	Q 2 Yr. Q (cfs) Ponding (ft)	Q 5 Yr. Q (cfs) Ponding (ft)	Q 10 Yr. Q (cfs) Ponding (ft)	Q 50 Yr. Q (cfs) Ponding (ft)	Q 100 Yr. Q (cfs) Ponding (ft)
50	6.10	14.71	22.62	47.60	59.05
51	10.16	24.52	37.14	76.72	94.75
52	38.82	69.67	95.04	171.66	206.51
EK-3B IN	38.82	69.67	95.04	171.66	206.51
EK-3B OUT	1.22 / 6632.62	1.53 / 6634.26	3.94 / 6634.90	17.96 / 6636.61	26.60 / 6637.38
4	3.19	8.42	13.61	30.13	37.77
5	2.60	3.98	4.95	11.77	18.60
6	2.29	6.29	10.24	22.93	29.63
EK-3A IN	3.08	7.25	11.28	24.52	32.55
EK-3A OUT	1.43 / 6608.07	2.28 / 6608.21	4.12 / 6608.52	15.08 / 6609.67	19.53 / 6610.13
7	0.38	1.34	2.84	10.50	13.43
53	21.71	30.06	35.61	49.37	54.84
EK-4 IN	21.71	30.06	35.61	49.37	54.84
EK-4 OUT	0.35 / 6636.28	2.49 / 6636.63	5.78 / 6636.96	22.64 / 6637.65	30.64 / 6637.85
54	0.35	2.49	5.78	22.64	30.64
8	0.52	4.52	10.92	38.88	52.65
I25-4 IN	0.52	4.52	10.92	38.88	52.65
I25-4 OUT	0.45 / 6600.28	3.38 / 6600.86	8.02 / 6601.45	17.99 / 6602.63	21.10 / 6603.12
9	0.45	3.38	8.02	17.99	21.10
10	0.26	3.17	6.46	17.79	23.26
I25-5 IN	0.26	3.17	6.46	17.79	23.26
I25-5 OUT	0.16 / 6600.12	1.61 / 6600.57	4.16 / 6600.97	13.29 / 6602.04	15.30 / 6602.27
11	0.16	1.61	4.16	13.29	15.30
IBS IN	6.63	11.21	14.48	23.05	26.58
IBS OUT	1.82 / 6788.08	2.03 / 6788.46	2.20 / 6788.77	2.63 / 6789.68	2.78 / 6790.03
1	1.94	4.18	7.07	18.32	24.02
2	3.15	4.59	7.30	18.68	24.44
3	3.30	5.58	9.69	25.52	33.57
55	4.81	7.10	9.91	25.81	33.87
56	5.62	14.27	22.91	54.08	69.64
57	5.85	15.18	24.43	57.33	73.71
BS-1T IN	5.00	15.18	24.43	57.33	73.71
BS-1T OUT	0 / 6668.95	0.20 / 6670.16	0.41 / 6670.87	1.03 / 6672.89	1.94 / 6673.51
12	0.63	2.54	4.91	13.20	17.23
13	0.30	1.32	2.19	4.84	6.02
60	33.17	52.81	68.45	112.69	131.83
61	32.22	53.50	71.97	125.49	149.13
BS-3T IN	22.38	53.50	71.97	125.49	149.13
BS-3T OUT	0.54 / 6626.80	0.88 / 6628.34	2.64 / 6628.77	12.56 / 6630.33	42.91 / 6630.53
62	0.70	4.77	11.45	36.42	49.80
14	0.98	5.65	13.89	49.21	68.65

WATER QUALITY SUMMARY

POND (label)	WQ BASIN AREA (acres)	WQ BASIN % Impervious	WQ VOLUME REQUIRED (acre-feet)	WQ PONDING ELEV. (feet)	WQ PONDING HEIGHT (feet)	# WQ ORIFICE COLUMNS	# WQ ORIFICE ROWS	WQ ORIFICE DIAMETER (inches)
EK-3B	100.8	16.3	1.001	6631.6	2.6	3	16	0.750
EK-4	10.9	85.0	0.395	6634.6	1.8	1	5	1.250
BS-1T	44.7	95.0	0.201	6668.5	1.5	2	11	1.000
BS-3T	67.4	25.4	0.918	6625.3	3.3	1	12	2.000

DETENTION POND SUMMARY

POND (label)	RISER DIMENSIONS (feet)	RISER CREST ELEV. (feet)	OUTLET PIPE DIAMETER (inches)	OUTLET PIPE INVERT (feet)	OUTLET PIPE SLOPE (%)	INVERT OF POND (feet)	INVERT OF EMERG. SPILLWAY (feet)	LENGTH OF EMERG. SPILLWAY (feet)	EMERGENCY SPILLWAY FLOW DEPTH (feet)	FREE-BOARD DEPTH (feet)	CREST OF DAM (feet)	100 YR. PONDING VOLUME (acre-feet)
EK-3B	7.0' x 4.0'	6638.00	48" RCP	6629.0	0.5	6629.00	6641.00	116	0.6	2.4	6642.00	7.768
EK-3A	N/A	N/A	24" RCP	6607.5	2.0	6607.50	6611.33	90	1.0	0.7	6613.00	1.696
EK-4	7.0' x 4.0'	6637.45	36" RCP	6632.8	1.0	6632.80	6638.00	18	1.0	2.0	6641.00	1.997
I25-4	N/A	N/A	24" RCP	6600.0	2.0	6600.00	N/A	N/A	N/A	6.5	6609.00	0.298
I25-5	N/A	N/A	24" RCP	6600.0	2.0	6600.00	N/A	N/A	N/A	0.8	6603.00	0.245
IBS	N/A	N/A	18" RCP	6786.0	1.4	6786.00	N/A	N/A	N/A	1.0	6791.00	0.693
BS-1T	7.0' x 4.0'	6675.00	36" RCP	6669.2	2.0	6666.00	6679.00	100	1.0	2.0	6680.00	6.245
BS-3T	4.0' x 4.0'	6628.50	12" RCP	6624.0	1.0	6622.00	6630.30	100	0.2	N/A	6632.00	5.660

CLASSIC
CONSULTING
ENGINEERS & SURVEYORS

POND PACK OUTPUT
EXISTING CONDITIONS

MASTER DESIGN STORM SUMMARY

Network Storm Collection: COLO SPRGS

Return Event	Total Depth in	Rainfall Type	RNF ID
100	4.4000	Synthetic Curve	TYPEIIA 24HR: 1
50	4.0000	Synthetic Curve	TYPEIIA 24HR: 1
10	3.0000	Synthetic Curve	TYPEIIA 24HR: 1
5	2.6000	Synthetic Curve	TYPEIIA 24HR: 1
2	2.0000	Synthetic Curve	TYPEIIA 24HR: 1

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
BS-1M	AREA	100	2.938		6.1050	41.69		
BS-1M	AREA	50	2.383		6.1050	32.94		
BS-1M	AREA	10	1.172		6.1215	14.23		
BS-1M	AREA	5	.778		6.1380	8.33		
BS-1M	AREA	2	.313		6.1710	1.94		
BS-1N	AREA	100	.400		6.0555	6.71		
BS-1N	AREA	50	.326		6.0555	5.39		
BS-1N	AREA	10	.163		6.0720	2.50		
BS-1N	AREA	5	.110		6.0720	1.54		
BS-1N	AREA	2	.046		6.0885	.43		
BS-1O	AREA	100	1.306		6.1380	16.34		
BS-1O	AREA	50	1.036		6.1380	12.40		
BS-1O	AREA	10	.466		6.1710	4.39		
BS-1O	AREA	5	.289		6.1875	2.12		
BS-1O	AREA	2	.093		6.5835	.17		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
DP 1	JCT	100	3.359		6.1380	24.02		
DP 1	JCT	50	2.757		6.1545	18.32		
DP 1	JCT	10	1.435		6.1710	7.07		
DP 1	JCT	5	.998		6.1875	4.18		
DP 1	JCT	2	.471		6.1710	1.94		
*DP 12	JCT	100	4.438	R	6.1380	16.34		
*DP 12	JCT	50	3.192	R	6.1380	12.40		
*DP 12	JCT	10	1.256	R	6.1710	4.39		
*DP 12	JCT	5	.609	R	6.1875	2.12		
*DP 12	JCT	2	.093		6.5835	.17		
DP 2	JCT	100	3.585		6.1545	24.44		
DP 2	JCT	50	2.960		6.1545	18.68		
DP 2	JCT	10	1.580		6.1710	7.30		
DP 2	JCT	5	1.120		6.0225	4.59		
DP 2	JCT	2	.559		6.0060	3.15		
DP 3	JCT	100	4.662		6.2040	33.57		
DP 3	JCT	50	3.826		6.2040	25.52		
DP 3	JCT	10	1.996		6.2370	9.69		
DP 3	JCT	5	1.394		6.2535	5.58		
DP 3	JCT	2	.673		6.0225	3.30		
DP 55	JCT	100	4.912		6.2040	33.87		
DP 55	JCT	50	4.052		6.2205	25.81		
DP 55	JCT	10	2.162		6.2535	9.91		
DP 55	JCT	5	1.536		6.0225	7.10		
DP 55	JCT	2	.779		6.0225	4.81		
DP 56	JCT	100	7.849		6.1380	69.64		
DP 56	JCT	50	6.434		6.1380	54.08		
DP 56	JCT	10	3.334		6.1215	22.91		
DP 56	JCT	5	2.314		6.1215	14.27		
DP 56	JCT	2	1.092		6.0885	5.62		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
DP 57	JCT	100	8.249		6.1380	73.71		
DP 57	JCT	50	6.760		6.1380	57.33		
DP 57	JCT	10	3.498		6.1380	24.43		
DP 57	JCT	5	2.424		6.1380	15.18		
DP 57	JCT	2	1.138		6.1380	5.85		
EX-A	AREA	100	.896		6.1050	12.83		
EX-A	AREA	50	.711		6.1050	9.84		
EX-A	AREA	10	.319		6.1215	3.57		
EX-A	AREA	5	.198		6.1380	1.74		
EX-A	AREA	2	.064		6.1875	.13		
EX-B	AREA	100	1.406		6.0060	26.58		
EX-B	AREA	50	1.208		6.0060	23.05		
EX-B	AREA	10	.740		6.0060	14.48		
EX-B	AREA	5	.567		6.0060	11.21		
EX-B	AREA	2	.333		6.0060	6.63		
EX-C1	AREA	100	.094		5.9730	1.43		
EX-C1	AREA	50	.085		5.9565	1.30		
EX-C1	AREA	10	.062		5.9895	.97		
EX-C1	AREA	5	.053		5.9565	.84		
EX-C1	AREA	2	.040		5.9565	.64		
EX-C2	AREA	100	.132		5.9895	2.22		
EX-C2	AREA	50	.118		5.9895	2.00		
EX-C2	AREA	10	.083		5.9895	1.44		
EX-C2	AREA	5	.069		5.9895	1.22		
EX-C2	AREA	2	.048		5.9895	.88		
EX-G	AREA	100	.104		5.9565	1.59		
EX-G	AREA	50	.094		5.9565	1.44		
EX-G	AREA	10	.069		5.9565	1.08		
EX-G	AREA	5	.059		5.9400	.93		
EX-G	AREA	2	.044		5.9565	.71		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
EX-H	AREA	100	.250		5.9565	3.81		
EX-H	AREA	50	.226		5.9730	3.46		
EX-H	AREA	10	.166		5.9730	2.58		
EX-H	AREA	5	.142		5.9730	2.23		
EX-H	AREA	2	.106		5.9730	1.70		
IBS	IN POND	100	1.406		6.0060	26.58		
IBS	IN POND	50	1.208		6.0060	23.05		
IBS	IN POND	10	.740		6.0060	14.48		
IBS	IN POND	5	.567		6.0060	11.21		
IBS	IN POND	2	.333		6.0060	6.63		
IBS	OUT POND	100	1.406		6.1710	2.78	6790.03	.693
IBS	OUT POND	50	1.207		6.1875	2.63	6789.68	.574
IBS	OUT POND	10	.739		6.1380	2.20	6788.77	.307
IBS	OUT POND	5	.567		6.1215	2.03	6788.46	.216
IBS	OUT POND	2	.332		6.1050	1.82	6788.08	.104
O2B	AREA	100	1.058		6.1380	13.24		
O2B	AREA	50	.840		6.1380	10.05		
O2B	AREA	10	.377		6.1710	3.56		
O2B	AREA	5	.234		6.1875	1.71		
O2B	AREA	2	.076		6.5670	.14		
POND BS-1	IN POND	100	8.249		6.1380	73.71		
POND BS-1	IN POND	50	6.760		6.1380	57.33		
POND BS-1	IN POND	10	3.498		6.1380	24.43		
POND BS-1	IN POND	5	2.424		6.1380	15.18		
POND BS-1	IN POND	2	1.138		6.1380	5.85		
POND BS-1	OUT POND	100	3.132	R	19.9815	1.94	6673.51	6.245
POND BS-1	OUT POND	50	2.156	R	20.3115	1.03	6672.89	5.457
POND BS-1	OUT POND	10	.790	R	23.0505	.41	6670.87	3.042
POND BS-1	OUT POND	5	.321	R	23.6610	.20	6670.16	2.262
POND BS-1	OUT POND	2	.000		3.9930	.00	6668.95	1.136

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
PR-D	AREA	100	.973		6.2205	9.69		
PR-D	AREA	50	.772		6.2370	7.31		
PR-D	AREA	10	.347		6.2700	2.53		
PR-D	AREA	5	.215		6.2865	1.21		
PR-D	AREA	2	.069		6.6000	.12		

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 5

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR: 1
Storm Frequency = 5 yr
Total Rainfall Depth= 2.6000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	.567		6.0060	11.21	EX-B	
		DL	.567		6.0060	11.21		
		DN	.567		6.0060	11.21	IBS	IN
ADDLINK 100	ADD	UN	.059		5.9400	.93	EX-G	
		DL	.059		5.9400	.93		
		DN	1.394		6.2535	5.58	DP 3	
ADDLINK 110	ADD	UN	.142		5.9730	2.23	EX-H	
		DL	.142		5.9730	2.23		
		DN	1.536		6.0225	7.10	DP 55	
ADDLINK 20	ADD	UN	.053		5.9565	.84	EX-C1	
		DL	.053		5.9565	.84		
		DN	1.120		6.0225	4.59	DP 2	
ADDLINK 30	ADD	UN	.069		5.9895	1.22	EX-C2	
		DL	.069		5.9895	1.22		
		DN	1.120		6.0225	4.59	DP 2	
ADDLINK 40	ADD	UN	.215		6.2865	1.21	PR-D	
		DL	.215		6.2865	1.21		
		DN	1.394		6.2535	5.58	DP 3	
ADDLINK 50	ADD	UN	.778		6.1380	8.33	BS-1M	
		DL	.778		6.1380	8.33		
		DN	2.314		6.1215	14.27	DP 56	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 60	ADD	UN	.198		6.1380	1.74	EX-A	
		DL	.198		6.1380	1.74		
		DN	.998		6.1875	4.18	DP 1	
ADDLINK 70	ADD	UN	.110		6.0720	1.54	BS-1N	
		DL	.110		6.0720	1.54		
		DN	2.424		6.1380	15.18	DP 57	
ADDLINK 80	ADD	UN	2.424		6.1380	15.18	DP 57	
		DL	2.424		6.1380	15.18		
		DN	2.424		6.1380	15.18	POND BS-1	IN
ADDLINK 90	ADD	UN	.289		6.1875	2.12	BS-1O	
		DL	.289		6.1875	2.12		
		DN	.609	R	6.1875	2.12	DP 12	
C1	REACH	UN	.234		6.1875	1.71	O2B	
		DL	.233		6.3525	1.02		
		DN	.998		6.1875	4.18	DP 1	
C2	PONDrt	UN	.567		6.0060	11.21	IBS	IN
C2			.567		6.1215	2.03	IBS	OUT
		DL	.567		6.1215	2.03		
		DN	.998		6.1875	4.18	DP 1	
C3	REACH	UN	.998		6.1875	4.18	DP 1	
		DL	.998		6.1875	4.18		
		DN	1.120		6.0225	4.59	DP 2	
C4	REACH	UN	1.120		6.0225	4.59	DP 2	
		DL	1.120		6.2205	4.33		
		DN	1.394		6.2535	5.58	DP 3	
C5	REACH	UN	1.394		6.2535	5.58	DP 3	
		DL	1.394		6.2700	5.57		
		DN	1.536		6.0225	7.10	DP 55	
C60	REACH	UN	1.536		6.0225	7.10	DP 55	
		DL	1.536		6.0390	6.71		
		DN	2.314		6.1215	14.27	DP 56	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
C61	REACH	UN	2.314		6.1215	14.27	DP 56	
		DL	2.314		6.1545	13.99		
		DN	2.424		6.1380	15.18	DP 57	
C62	PONDrt	UN	2.424		6.1380	15.18	POND BS-1	IN
C62			.321	R	23.6610	.20	POND BS-1	OUT
		DL	.321	R	23.8590	.20		
		DN	.609	R	6.1875	2.12	DP 12	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 100

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR: 1
Storm Frequency = 100 yr
Total Rainfall Depth= 4.4000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	1.406		6.0060	26.58	EX-B	
		DL	1.406		6.0060	26.58		
		DN	1.406		6.0060	26.58	IBS	IN
ADDLINK 100	ADD	UN	.104		5.9565	1.59	EX-G	
		DL	.104		5.9565	1.59		
		DN	4.662		6.2040	33.57	DP 3	
ADDLINK 110	ADD	UN	.250		5.9565	3.81	EX-H	
		DL	.250		5.9565	3.81		
		DN	4.912		6.2040	33.87	DP 55	
ADDLINK 20	ADD	UN	.094		5.9730	1.43	EX-C1	
		DL	.094		5.9730	1.43		
		DN	3.585		6.1545	24.44	DP 2	
ADDLINK 30	ADD	UN	.132		5.9895	2.22	EX-C2	
		DL	.132		5.9895	2.22		
		DN	3.585		6.1545	24.44	DP 2	
ADDLINK 40	ADD	UN	.973		6.2205	9.69	PR-D	
		DL	.973		6.2205	9.69		
		DN	4.662		6.2040	33.57	DP 3	
ADDLINK 50	ADD	UN	2.938		6.1050	41.69	BS-1M	
		DL	2.938		6.1050	41.69		
		DN	7.849		6.1380	69.64	DP 56	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 60	ADD	UN	.896		6.1050	12.83	EX-A	
		DL	.896		6.1050	12.83		
		DN	3.359		6.1380	24.02	DP 1	
ADDLINK 70	ADD	UN	.400		6.0555	6.71	BS-1N	
		DL	.400		6.0555	6.71		
		DN	8.249		6.1380	73.71	DP 57	
ADDLINK 80	ADD	UN	8.249		6.1380	73.71	DP 57	
		DL	8.249		6.1380	73.71		
		DN	8.249		6.1380	73.71	POND BS-1	IN
ADDLINK 90	ADD	UN	1.306		6.1380	16.34	BS-1O	
		DL	1.306		6.1380	16.34		
		DN	4.438	R	6.1380	16.34	DP 12	
C1	REACH	UN	1.058		6.1380	13.24	O2B	
		DL	1.058		6.2370	11.05		
		DN	3.359		6.1380	24.02	DP 1	
C2	PONDrt	UN	1.406		6.0060	26.58	IBS	IN
C2			1.406		6.1710	2.78	IBS	OUT
		DL	1.406		6.1710	2.78		
		DN	3.359		6.1380	24.02	DP 1	
C3	REACH	UN	3.359		6.1380	24.02	DP 1	
		DL	3.359		6.1545	24.02		
		DN	3.585		6.1545	24.44	DP 2	
C4	REACH	UN	3.585		6.1545	24.44	DP 2	
		DL	3.585		6.1875	23.87		
		DN	4.662		6.2040	33.57	DP 3	
C5	REACH	UN	4.662		6.2040	33.57	DP 3	
		DL	4.662		6.2040	33.52		
		DN	4.912		6.2040	33.87	DP 55	
C60	REACH	UN	4.912		6.2040	33.87	DP 55	
		DL	4.912		6.2535	33.25		
		DN	7.849		6.1380	69.64	DP 56	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
C61	REACH	UN	7.849		6.1380	69.64	DP 56	
		DL	7.849		6.1545	69.11		
		DN	8.249		6.1380	73.71	DP 57	
C62	PONDrt	UN	8.249		6.1380	73.71	POND BS-1	IN
C62			3.132	R	19.9815	1.94	POND BS-1	OUT
		DL	3.132	R	19.9815	1.94		
		DN	4.438	R	6.1380	16.34	DP 12	

MASTER DESIGN STORM SUMMARY

Network Storm Collection: COLO SPRGS

Return Event	Total Depth in	Rainfall Type	RNF ID
100	4.4000	Synthetic Curve	TYPEIIA 24HR: 1
50	4.0000	Synthetic Curve	TYPEIIA 24HR: 1
10	3.0000	Synthetic Curve	TYPEIIA 24HR: 1
5	2.6000	Synthetic Curve	TYPEIIA 24HR: 1
2	2.0000	Synthetic Curve	TYPEIIA 24HR: 1

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
BS-3M	AREA	100	5.037		6.1000	71.66		
BS-3M	AREA	50	4.210		6.1000	59.11		
BS-3M	AREA	10	2.330		6.1000	30.61		
BS-3M	AREA	5	1.676		6.1000	20.79		
BS-3M	AREA	2	.843		6.1500	8.90		
BS-3N	AREA	100	2.286		6.0000	38.31		
BS-3N	AREA	50	2.039		6.0000	34.50		
BS-3N	AREA	10	1.428		6.0000	24.92		
BS-3N	AREA	5	1.187		6.0000	21.05		
BS-3N	AREA	2	.833		6.0000	15.23		
BS-3O	AREA	100	2.527		6.0000	42.24		
BS-3O	AREA	50	2.254		6.0000	38.03		
BS-3O	AREA	10	1.578		6.0000	27.43		
BS-3O	AREA	5	1.312		6.0000	23.15		
BS-3O	AREA	2	.920		6.0000	16.72		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
BS-3P	AREA	100	1.601		6.1000	22.01		
BS-3P	AREA	50	1.285		6.1000	17.10		
BS-3P	AREA	10	.606		6.1000	6.68		
BS-3P	AREA	5	.390		6.1500	3.62		
BS-3P	AREA	2	.142		6.2000	.56		
BS-3Q	AREA	100	2.594		6.1500	31.08		
BS-3Q	AREA	50	2.058		6.1500	23.63		
BS-3Q	AREA	10	.925		6.1500	8.24		
BS-3Q	AREA	5	.573		6.2000	3.97		
BS-3Q	AREA	2	.185		6.6000	.34		
BS-3T IN	POND	100	11.450		6.0500	149.13		
BS-3T IN	POND	50	9.787		6.0500	125.49		
BS-3T IN	POND	10	5.941		6.0500	71.97		
BS-3T IN	POND	5	4.564		6.0500	53.50		
BS-3T IN	POND	2	2.737		6.0000	32.22		
BS-3T OUT	POND	100	10.748	R	6.4000	42.91	6630.53	5.665
BS-3T OUT	POND	50	9.089	R	6.9000	12.56	6630.33	5.438
BS-3T OUT	POND	10	5.256	R	8.5000	2.64	6628.77	3.828
BS-3T OUT	POND	5	3.908	R	19.6500	.88	6628.34	3.400
BS-3T OUT	POND	2	2.215	R	19.0000	.54	6626.80	2.024
*DP 14	JCT	100	13.342		6.4500	52.78		
*DP 14	JCT	50	11.147		6.2000	24.91		
*DP 14	JCT	10	6.181		6.1500	8.60		
*DP 14	JCT	5	4.481		6.2000	4.27		
*DP 14	JCT	2	2.400		8.0500	.70		
DP 60	JCT	100	9.850		6.0000	131.83		
DP 60	JCT	50	8.503		6.0000	112.69		
DP 60	JCT	10	5.335		6.0000	68.45		
DP 60	JCT	5	4.174		6.0000	52.81		
DP 60	JCT	2	2.595		6.0000	33.17		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
DP 61	JCT	100	11.450		6.0500	149.13		
DP 61	JCT	50	9.787		6.0500	125.49		
DP 61	JCT	10	5.941		6.0500	71.97		
DP 61	JCT	5	4.564		6.0500	53.50		
DP 61	JCT	2	2.737		6.0000	32.22		
DP 62	JCT	100	10.748	R	6.4000	42.91		
DP 62	JCT	50	9.089	R	6.9000	12.56		
DP 62	JCT	10	5.256	R	8.5000	2.64		
DP 62	JCT	5	3.908	R	19.6500	.88		
DP 62	JCT	2	2.215	R	19.0000	.54		

MASTER DESIGN STORM SUMMARY

Network Storm Collection: COLO SPRGS

Return Event	Total Depth in	Rainfall Type	RNF ID
100	4.4000	Synthetic Curve	TYPEIIA 24HR: 1
50	4.0000	Synthetic Curve	TYPEIIA 24HR: 1
10	3.0000	Synthetic Curve	TYPEIIA 24HR: 1
5	2.6000	Synthetic Curve	TYPEIIA 24HR: 1
2	2.0000	Synthetic Curve	TYPEIIA 24HR: 1

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
BS-3M	AREA	100	5.037		6.1000	71.66		
BS-3M	AREA	50	4.210		6.1000	59.11		
BS-3M	AREA	10	2.330		6.1000	30.61		
BS-3M	AREA	5	1.676		6.1000	20.79		
BS-3M	AREA	2	.843		6.1500	8.90		
BS-3N	AREA	100	2.286		6.0000	38.31		
BS-3N	AREA	50	2.039		6.0000	34.50		
BS-3N	AREA	10	1.428		6.0000	24.92		
BS-3N	AREA	5	1.187		6.0000	21.05		
BS-3N	AREA	2	.833		6.0000	15.23		
BS-3O	AREA	100	2.527		6.0000	42.24		
BS-3O	AREA	50	2.254		6.0000	38.03		
BS-3O	AREA	10	1.578		6.0000	27.43		
BS-3O	AREA	5	1.312		6.0000	23.15		
BS-3O	AREA	2	.920		6.0000	16.72		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
BS-3P	AREA	100	1.601		6.1000	22.01		
BS-3P	AREA	50	1.285		6.1000	17.10		
BS-3P	AREA	10	.606		6.1000	6.68		
BS-3P	AREA	5	.390		6.1500	3.62		
BS-3P	AREA	2	.142		6.2000	.56		
BS-3Q	AREA	100	2.594		6.1500	31.08		
BS-3Q	AREA	50	2.058		6.1500	23.63		
BS-3Q	AREA	10	.925		6.1500	8.24		
BS-3Q	AREA	5	.573		6.2000	3.97		
BS-3Q	AREA	2	.185		6.6000	.34		
BS-3T IN	POND	100	11.450		6.0500	149.13		
BS-3T IN	POND	50	9.787		6.0500	125.49		
BS-3T IN	POND	10	5.941		6.0500	71.97		
BS-3T IN	POND	5	4.564		6.0500	53.50		
BS-3T IN	POND	2	2.737		6.0000	32.22		
BS-3T OUT	POND	100	10.748	R	6.4000	42.91	6630.53	5.665
BS-3T OUT	POND	50	9.089	R	6.9000	12.56	6630.33	5.438
BS-3T OUT	POND	10	5.256	R	8.5000	2.64	6628.77	3.828
BS-3T OUT	POND	5	3.908	R	19.6500	.88	6628.34	3.400
BS-3T OUT	POND	2	2.215	R	19.0000	.54	6626.80	2.024
*DP 14	JCT	100	13.342		6.4500	52.78		
*DP 14	JCT	50	11.147		6.2000	24.91		
*DP 14	JCT	10	6.181		6.1500	8.60		
*DP 14	JCT	5	4.481		6.2000	4.27		
*DP 14	JCT	2	2.400		8.0500	.70		
DP 60	JCT	100	9.850		6.0000	131.83		
DP 60	JCT	50	8.503		6.0000	112.69		
DP 60	JCT	10	5.335		6.0000	68.45		
DP 60	JCT	5	4.174		6.0000	52.81		
DP 60	JCT	2	2.595		6.0000	33.17		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
DP 61	JCT	100	11.450		6.0500	149.13		
DP 61	JCT	50	9.787		6.0500	125.49		
DP 61	JCT	10	5.941		6.0500	71.97		
DP 61	JCT	5	4.564		6.0500	53.50		
DP 61	JCT	2	2.737		6.0000	32.22		
DP 62	JCT	100	10.748	R	6.4000	42.91		
DP 62	JCT	50	9.089	R	6.9000	12.56		
DP 62	JCT	10	5.256	R	8.5000	2.64		
DP 62	JCT	5	3.908	R	19.6500	.88		
DP 62	JCT	2	2.215	R	19.0000	.54		

NETWORK SUMMARY -- NODES
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 5

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR: 1
Storm Frequency = 5 yr
Total Rainfall Depth= 2.6000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

	Node ID		Type	HYG Vol ac-ft	Trun.	Qpeak hrs	Qpeak cfs	Max WSEL ft
	BS-3M		AREA	1.676		6.1000	20.79	
	BS-3N		AREA	1.187		6.0000	21.05	
	BS-3O		AREA	1.312		6.0000	23.15	
	BS-3P		AREA	.390		6.1500	3.62	
	BS-3Q		AREA	.573		6.2000	3.97	
	BS-3T	IN	POND	4.564		6.0500	53.50	
	BS-3T	OUT	POND	3.908	R	19.6500	.88	6628.34
Outfall	DP 14		JCT	4.481		6.2000	4.27	
	DP 60		JCT	4.174		6.0000	52.81	
	DP 61		JCT	4.564		6.0500	53.50	
	DP 62		JCT	3.908	R	19.6500	.88	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 5

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR: 1
Storm Frequency = 5 yr
Total Rainfall Depth= 2.6000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	4.564		6.0500	53.50	DP 61	
		DL	4.564		6.0500	53.50		
		DN	4.564		6.0500	53.50	BS-3T	IN
ADDLINK 20	ADD	UN	.390		6.1500	3.62	BS-3P	
		DL	.390		6.1500	3.62		
		DN	4.564		6.0500	53.50	DP 61	
ADDLINK 30	ADD	UN	.573		6.2000	3.97	BS-3Q	
		DL	.573		6.2000	3.97		
		DN	4.481		6.2000	4.27	DP 14	
ADDLINK 70	ADD	UN	1.312		6.0000	23.15	BS-3O	
		DL	1.312		6.0000	23.15		
		DN	4.174		6.0000	52.81	DP 60	
C65	REACH	UN	1.676		6.1000	20.79	BS-3M	
		DL	1.676		6.1500	19.90		
		DN	4.174		6.0000	52.81	DP 60	
C66	REACH	UN	1.187		6.0000	21.05	BS-3N	
		DL	1.187		6.0000	20.71		
		DN	4.174		6.0000	52.81	DP 60	
C67	REACH	UN	4.174		6.0000	52.81	DP 60	
		DL	4.174		6.0500	50.80		
		DN	4.564		6.0500	53.50	DP 61	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
C68	PONDrt	UN	4.564		6.0500	53.50	BS-3T	IN
C68			3.908	R	19.6500	.88	BS-3T	OUT
		DL	3.908	R	19.6500	.88		
		DN	3.908	R	19.6500	.88	DP 62	
C69	REACH	UN	3.908	R	19.6500	.88	DP 62	
		DL	3.908		19.8500	.88		
		DN	4.481		6.2000	4.27	DP 14	

NETWORK SUMMARY -- NODES
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 100

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR: 1
Storm Frequency = 100 yr
Total Rainfall Depth= 4.4000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

	Node ID		Type	HYG Vol ac-ft	Trun.	Qpeak hrs	Qpeak cfs	Max WSEL ft
	BS-3M		AREA	5.037		6.1000	71.66	
	BS-3N		AREA	2.286		6.0000	38.31	
	BS-3O		AREA	2.527		6.0000	42.24	
	BS-3P		AREA	1.601		6.1000	22.01	
	BS-3Q		AREA	2.594		6.1500	31.08	
	BS-3T	IN	POND	11.450		6.0500	149.13	
	BS-3T	OUT	POND	10.748	R	6.4000	42.91	6630.53
Outfall	DP 14		JCT	13.342		6.4500	52.78	
	DP 60		JCT	9.850		6.0000	131.83	
	DP 61		JCT	11.450		6.0500	149.13	
	DP 62		JCT	10.748	R	6.4000	42.91	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 100

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR: 1
Storm Frequency = 100 yr
Total Rainfall Depth= 4.4000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	11.450		6.0500	149.13	DP 61	
		DL	11.450		6.0500	149.13		
		DN	11.450		6.0500	149.13	BS-3T	IN
ADDLINK 20	ADD	UN	1.601		6.1000	22.01	BS-3P	
		DL	1.601		6.1000	22.01		
		DN	11.450		6.0500	149.13	DP 61	
ADDLINK 30	ADD	UN	2.594		6.1500	31.08	BS-3Q	
		DL	2.594		6.1500	31.08		
		DN	13.342		6.4500	52.78	DP 14	
ADDLINK 70	ADD	UN	2.527		6.0000	42.24	BS-3O	
		DL	2.527		6.0000	42.24		
		DN	9.850		6.0000	131.83	DP 60	
C65	REACH	UN	5.037		6.1000	71.66	BS-3M	
		DL	5.036		6.1500	69.59		
		DN	9.850		6.0000	131.83	DP 60	
C66	REACH	UN	2.286		6.0000	38.31	BS-3N	
		DL	2.286		6.0000	38.06		
		DN	9.850		6.0000	131.83	DP 60	
C67	REACH	UN	9.850		6.0000	131.83	DP 60	
		DL	9.850		6.0500	128.64		
		DN	11.450		6.0500	149.13	DP 61	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
C68	PONDrt	UN	11.450		6.0500	149.13	BS-3T	IN
C68			10.748	R	6.4000	42.91	BS-3T	OUT
		DL	10.748	R	6.4000	42.91		
		DN	10.748	R	6.4000	42.91	DP 62	
C69	REACH	UN	10.748	R	6.4000	42.91	DP 62	
		DL	10.748		6.4500	41.83		
		DN	13.342		6.4500	52.78	DP 14	

MASTER DESIGN STORM SUMMARY

Network Storm Collection: COLO SPRGS

Return Event	Total Depth in	Rainfall Type	RNF ID
100	4.4000	Synthetic Curve	TYPEIIA 24HR: 1
50	4.0000	Synthetic Curve	TYPEIIA 24HR: 1
10	3.0000	Synthetic Curve	TYPEIIA 24HR: 1
5	2.6000	Synthetic Curve	TYPEIIA 24HR: 1
2	2.0000	Synthetic Curve	TYPEIIA 24HR: 1

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
AF-1	AREA	100	1.007		6.0885	14.45		
AF-1	AREA	50	.799		6.1050	11.08		
AF-1	AREA	10	.359		6.1215	4.03		
AF-1	AREA	5	.223		6.1380	1.96		
AF-1	AREA	2	.072		6.1875	.14		
DP 4	JCT	100	2.697		6.0885	37.77		
DP 4	JCT	50	2.207		6.0885	30.13		
DP 4	JCT	10	1.133		6.0885	13.61		
DP 4	JCT	5	.780		6.0885	8.42		
DP 4	JCT	2	.358		6.0555	3.19		
DP 5	JCT	100	13.340	R	6.6330	27.24		
DP 5	JCT	50	10.967	R	6.7650	18.41		
DP 5	JCT	10	5.672	R	6.0390	6.00		
DP 5	JCT	5	4.009	R	6.0390	4.97		
DP 5	JCT	2	2.964	R	6.0555	3.44		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
DP 50	JCT	100	3.988		6.0390	59.05		
DP 50	JCT	50	3.273		6.0390	47.60		
DP 50	JCT	10	1.697		6.0390	22.62		
DP 50	JCT	5	1.173		6.0390	14.71		
DP 50	JCT	2	.540		6.0390	6.10		
DP 51	JCT	100	6.852		6.1215	94.75		
DP 51	JCT	50	5.668		6.1215	76.72		
DP 51	JCT	10	3.020		6.1215	37.14		
DP 51	JCT	5	2.123		6.1380	24.52		
DP 51	JCT	2	1.011		6.1380	10.16		
DP 52	JCT	100	15.232		6.0390	206.51		
DP 52	JCT	50	12.858		6.0390	171.66		
DP 52	JCT	10	7.460		6.0390	95.04		
DP 52	JCT	5	5.576		6.0390	69.67		
DP 52	JCT	2	3.151		6.0390	38.82		
DP 6	JCT	100	14.773	R	6.1215	32.55		
DP 6	JCT	50	12.104	R	6.1050	24.52		
DP 6	JCT	10	6.182	R	6.1050	11.28		
DP 6	JCT	5	4.322	R	6.1215	7.25		
DP 6	JCT	2	3.062	R	6.1380	3.08		
*DP 7	JCT	100	14.752	R	8.1675	19.74		
*DP 7	JCT	50	12.082	R	8.2335	15.10		
*DP 7	JCT	10	6.152	R	9.3720	4.13		
*DP 7	JCT	5	4.285	R	6.9135	2.18		
*DP 7	JCT	2	3.035	R	8.0355	1.42		
EK-3M	AREA	100	2.115		6.1050	29.65		
EK-3M	AREA	50	1.698		6.1050	23.04		
EK-3M	AREA	10	.801		6.1380	9.18		
EK-3M	AREA	5	.515		6.1380	4.97		
EK-3M	AREA	2	.188		6.1875	.78		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
EK-3N	AREA	100	1.291		6.0225	25.10		
EK-3N	AREA	50	1.066		6.0225	20.81		
EK-3N	AREA	10	.564		6.0225	10.94		
EK-3N	AREA	5	.393		6.0225	7.45		
EK-3N	AREA	2	.183		6.0390	3.01		
EK-3O	AREA	100	4.392		5.9895	72.85		
EK-3O	AREA	50	3.917		6.0060	65.51		
EK-3O	AREA	10	2.742		6.0060	47.14		
EK-3O	AREA	5	2.280		6.0060	39.74		
EK-3O	AREA	2	1.599		6.0060	28.60		
EK-3P	AREA	100	1.408		6.1215	18.43		
EK-3P	AREA	50	1.117		6.1380	14.01		
EK-3P	AREA	10	.502		6.1545	5.00		
EK-3P	AREA	5	.311		6.1710	2.42		
EK-3P	AREA	2	.101		6.2370	.18		
EK-3Q	AREA	100	5.444		6.1050	79.99		
EK-3Q	AREA	50	4.551		6.1050	66.09		
EK-3Q	AREA	10	2.518		6.1215	34.54		
EK-3Q	AREA	5	1.812		6.1215	23.71		
EK-3Q	AREA	2	.911		6.1380	10.14		
IP-1	AREA	100	.315		6.0060	5.52		
IP-1	AREA	50	.276		6.0225	4.86		
IP-1	AREA	10	.180		6.0225	3.24		
IP-1	AREA	5	.144		6.0225	2.61		
IP-1	AREA	2	.092		6.0225	1.69		
IP-2	AREA	100	.485		6.0225	8.18		
IP-2	AREA	50	.424		6.0390	7.18		
IP-2	AREA	10	.277		6.0390	4.75		
IP-2	AREA	5	.221		6.0390	3.80		
IP-2	AREA	2	.141		6.0390	2.43		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
POND EK-3A IN	POND	100	14.773	R	6.1215	32.55		
POND EK-3A IN	POND	50	12.104	R	6.1050	24.52		
POND EK-3A IN	POND	10	6.182	R	6.1050	11.28		
POND EK-3A IN	POND	5	4.322	R	6.1215	7.25		
POND EK-3A IN	POND	2	3.062	R	6.1380	3.08		
POND EK-3A OUT	POND	100	14.752	R	8.1675	19.74	6610.13	2.183
POND EK-3A OUT	POND	50	12.082	R	8.2335	15.10	6609.67	1.502
POND EK-3A OUT	POND	10	6.152	R	9.3720	4.13	6608.53	.366
POND EK-3A OUT	POND	5	4.285	R	6.9135	2.18	6608.23	.187
POND EK-3A OUT	POND	2	3.035	R	8.0355	1.42	6608.08	.095
POND EK-3B IN	POND	100	15.232		6.0390	206.51		
POND EK-3B IN	POND	50	12.858		6.0390	171.66		
POND EK-3B IN	POND	10	7.460		6.0390	95.04		
POND EK-3B IN	POND	5	5.576		6.0390	69.67		
POND EK-3B IN	POND	2	3.151		6.0390	38.82		
POND EK-3B OUT	POND	100	12.855	R	6.6660	26.60	6637.38	7.768
POND EK-3B OUT	POND	50	10.543	R	6.7980	17.96	6636.61	6.712
POND EK-3B OUT	POND	10	5.395	R	8.2665	3.94	6634.90	4.527
POND EK-3B OUT	POND	5	3.788	R	14.9820	1.53	6634.26	3.741
POND EK-3B OUT	POND	2	2.823	R	9.2895	1.22	6632.62	1.894
SE-1	AREA	100	.427		6.0720	6.66		
SE-1	AREA	50	.339		6.0720	5.12		
SE-1	AREA	10	.152		6.0885	1.90		
SE-1	AREA	5	.094		6.1050	.94		
SE-1	AREA	2	.030		6.1380	.07		
VP-1	AREA	100	.267		6.0060	4.68		
VP-1	AREA	50	.233		6.0060	4.12		
VP-1	AREA	10	.152		6.0225	2.75		
VP-1	AREA	5	.122		6.0225	2.21		
VP-1	AREA	2	.078		6.0225	1.44		

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 5

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR: 1
Storm Frequency = 5 yr
Total Rainfall Depth= 2.6000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	.393		6.0225	7.45	EK-3N	
		DL	.393		6.0225	7.45		
		DN	1.173		6.0390	14.71	DP 50	
ADDLINK 110	ADD	UN	5.576		6.0390	69.67	DP 52	
		DL	5.576		6.0390	69.67		
		DN	5.576		6.0390	69.67	POND EK-3B	IN
ADDLINK 120	ADD	UN	4.322	R	6.1215	7.25	DP 6	
		DL	4.322	R	6.1215	7.25		
		DN	4.322	R	6.1215	7.25	POND EK-3A	IN
ADDLINK 130	ADD	UN	.221		6.0390	3.80	IP-2	
		DL	.221		6.0390	3.80		
		DN	4.009	R	6.0390	4.97	DP 5	
ADDLINK 140	ADD	UN	.144		6.0225	2.61	IP-1	
		DL	.144		6.0225	2.61		
		DN	.780		6.0885	8.42	DP 4	
ADDLINK 20	ADD	UN	2.280		6.0060	39.74	EK-3O	
		DL	2.280		6.0060	39.74		
		DN	5.576		6.0390	69.67	DP 52	
ADDLINK 30	ADD	UN	1.812		6.1215	23.71	EK-3Q	
		DL	1.812		6.1215	23.71		
		DN	2.123		6.1380	24.52	DP 51	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 40	ADD	UN	.515		6.1380	4.97	EK-3M	
		DL	.515		6.1380	4.97		
		DN	.780		6.0885	8.42	DP 4	
ADDLINK 80	ADD	UN	.223		6.1380	1.96	AF-1	
		DL	.223		6.1380	1.96		
		DN	4.322	R	6.1215	7.25	DP 6	
ADDLINK 90	ADD	UN	.094		6.1050	.94	SE-1	
		DL	.094		6.1050	.94		
		DN	4.322	R	6.1215	7.25	DP 6	
C10	PONDrt	UN	4.322	R	6.1215	7.25	POND EK-3A	IN
C10			4.285	R	6.9135	2.18	POND EK-3A	OUT
		DL	4.285	R	6.9135	2.18		
		DN	4.285	R	6.9135	2.18	DP 7	
C50	REACH	UN	.780		6.0885	8.42	DP 4	
		DL	.780		6.1050	8.39		
		DN	1.173		6.0390	14.71	DP 50	
C51	REACH	UN	1.173		6.0390	14.71	DP 50	
		DL	1.173		6.0720	14.21		
		DN	5.576		6.0390	69.67	DP 52	
C52	REACH	UN	.311		6.1710	2.42	EK-3P	
		DL	.311		6.2865	1.81		
		DN	2.123		6.1380	24.52	DP 51	
C53	REACH	UN	2.123		6.1380	24.52	DP 51	
		DL	2.123		6.1380	24.52		
		DN	5.576		6.0390	69.67	DP 52	
C54	PONDrt	UN	5.576		6.0390	69.67	POND EK-3B	IN
C54			3.788	R	14.9820	1.53	POND EK-3B	OUT
		DL	3.788	R	14.9820	1.53		
		DN	4.009	R	6.0390	4.97	DP 5	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points
C6	REACH	UN	.122		6.0225	2.21	VP-1
		DL	.121		6.0555	2.07	
		DN	.780		6.0885	8.42	DP 4
C9	REACH	UN	4.009	R	6.0390	4.97	DP 5
		DL	4.005	R	6.1050	4.38	
		DN	4.322	R	6.1215	7.25	DP 6

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 100

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR: 1
Storm Frequency = 100 yr
Total Rainfall Depth= 4.4000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	1.291		6.0225	25.10	EK-3N	
		DL	1.291		6.0225	25.10		
		DN	3.988		6.0390	59.05	DP 50	
ADDLINK 110	ADD	UN	15.232		6.0390	206.51	DP 52	
		DL	15.232		6.0390	206.51		
		DN	15.232		6.0390	206.51	POND EK-3B	IN
ADDLINK 120	ADD	UN	14.773	R	6.1215	32.55	DP 6	
		DL	14.773	R	6.1215	32.55		
		DN	14.773	R	6.1215	32.55	POND EK-3A	IN
ADDLINK 130	ADD	UN	.485		6.0225	8.18	IP-2	
		DL	.485		6.0225	8.18		
		DN	13.340	R	6.6330	27.24	DP 5	
ADDLINK 140	ADD	UN	.315		6.0060	5.52	IP-1	
		DL	.315		6.0060	5.52		
		DN	2.697		6.0885	37.77	DP 4	
ADDLINK 20	ADD	UN	4.392		5.9895	72.85	EK-3O	
		DL	4.392		5.9895	72.85		
		DN	15.232		6.0390	206.51	DP 52	
ADDLINK 30	ADD	UN	5.444		6.1050	79.99	EK-3Q	
		DL	5.444		6.1050	79.99		
		DN	6.852		6.1215	94.75	DP 51	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 40	ADD	UN	2.115		6.1050	29.65	EK-3M	
		DL	2.115		6.1050	29.65		
		DN	2.697		6.0885	37.77	DP 4	
ADDLINK 80	ADD	UN	1.007		6.0885	14.45	AF-1	
		DL	1.007		6.0885	14.45		
		DN	14.773	R	6.1215	32.55	DP 6	
ADDLINK 90	ADD	UN	.427		6.0720	6.66	SE-1	
		DL	.427		6.0720	6.66		
		DN	14.773	R	6.1215	32.55	DP 6	
C10	PONDrt	UN	14.773	R	6.1215	32.55	POND EK-3A	IN
C10			14.752	R	8.1675	19.74	POND EK-3A	OUT
		DL	14.752	R	8.1675	19.74		
		DN	14.752	R	8.1675	19.74	DP 7	
C50	REACH	UN	2.697		6.0885	37.77	DP 4	
		DL	2.697		6.0885	37.71		
		DN	3.988		6.0390	59.05	DP 50	
C51	REACH	UN	3.988		6.0390	59.05	DP 50	
		DL	3.988		6.0555	58.21		
		DN	15.232		6.0390	206.51	DP 52	
C52	REACH	UN	1.408		6.1215	18.43	EK-3P	
		DL	1.408		6.1875	16.98		
		DN	6.852		6.1215	94.75	DP 51	
C53	REACH	UN	6.852		6.1215	94.75	DP 51	
		DL	6.852		6.1215	94.63		
		DN	15.232		6.0390	206.51	DP 52	
C54	PONDrt	UN	15.232		6.0390	206.51	POND EK-3B	IN
C54			12.855	R	6.6660	26.60	POND EK-3B	OUT
		DL	12.855	R	6.6660	26.60		
		DN	13.340	R	6.6330	27.24	DP 5	

NETWORK SUMMARY -- LINKS

(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points
C6	REACH	UN	.267		6.0060	4.68	VP-1
		DL	.267		6.0390	4.53	
		DN	2.697		6.0885	37.77	DP 4
C9	REACH	UN	13.340	R	6.6330	27.24	DP 5
		DL	13.339	R	6.6990	27.13	
		DN	14.773	R	6.1215	32.55	DP 6

MASTER DESIGN STORM SUMMARY

Network Storm Collection: COLO SPRGS

Return Event	Total Depth in	Rainfall Type	RNF ID
100	4.4000	Synthetic Curve	TYPEIIA 24HR: 1
50	4.0000	Synthetic Curve	TYPEIIA 24HR: 1
10	3.0000	Synthetic Curve	TYPEIIA 24HR: 1
5	2.6000	Synthetic Curve	TYPEIIA 24HR: 1
2	2.0000	Synthetic Curve	TYPEIIA 24HR: 1

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
AF-2	AREA	100	1.749		6.1050	24.76		
AF-2	AREA	50	1.388		6.1050	18.94		
AF-2	AREA	10	.624		6.1215	6.85		
AF-2	AREA	5	.387		6.1380	3.33		
AF-2	AREA	2	.125		6.2040	.25		
DP 54	JCT	100	2.747	R	6.0720	30.64		
DP 54	JCT	50	2.402	R	6.0720	22.64		
DP 54	JCT	10	1.559	R	6.1380	5.78		
DP 54	JCT	5	1.235	R	6.5175	2.49		
DP 54	JCT	2	.778	R	9.9990	.35		
DP 8	JCT	100	4.492	R	6.1050	52.65		
DP 8	JCT	50	3.785	R	6.1215	38.88		
DP 8	JCT	10	2.179	R	6.1545	10.92		
DP 8	JCT	5	1.617	R	6.1710	4.52		
DP 8	JCT	2	.898	R	6.5670	.52		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
*DP 9	JCT	100	4.477	R	6.3690	21.10		
*DP 9	JCT	50	3.770	R	6.3525	17.99		
*DP 9	JCT	10	2.165	R	6.3360	8.02		
*DP 9	JCT	5	1.602	R	6.6165	3.38		
*DP 9	JCT	2	.883	R	8.0520	.45		
EK-4 IN	POND	100	3.279		5.9895	54.84		
EK-4 IN	POND	50	2.925		5.9895	49.37		
EK-4 IN	POND	10	2.047		5.9895	35.61		
EK-4 IN	POND	5	1.702		5.9895	30.06		
EK-4 IN	POND	2	1.194		5.9895	21.71		
EK-4 OUT	POND	100	2.747	R	6.0720	30.64	6637.85	1.708
EK-4 OUT	POND	50	2.402	R	6.0720	22.64	6637.65	1.593
EK-4 OUT	POND	10	1.559	R	6.1380	5.78	6636.96	1.214
EK-4 OUT	POND	5	1.235	R	6.5175	2.49	6636.63	1.036
EK-4 OUT	POND	2	.778	R	9.9990	.35	6636.28	.851
EK-4M	AREA	100	3.279		5.9895	54.84		
EK-4M	AREA	50	2.925		5.9895	49.37		
EK-4M	AREA	10	2.047		5.9895	35.61		
EK-4M	AREA	5	1.702		5.9895	30.06		
EK-4M	AREA	2	1.194		5.9895	21.71		
I25-4 IN	POND	100	4.492	R	6.1050	52.65		
I25-4 IN	POND	50	3.785	R	6.1215	38.88		
I25-4 IN	POND	10	2.179	R	6.1545	10.92		
I25-4 IN	POND	5	1.617	R	6.1710	4.52		
I25-4 IN	POND	2	.898	R	6.5670	.52		
I25-4 OUT	POND	100	4.477	R	6.3690	21.10	6603.12	.805
I25-4 OUT	POND	50	3.770	R	6.3525	17.99	6602.63	.537
I25-4 OUT	POND	10	2.165	R	6.3360	8.02	6601.45	.138
I25-4 OUT	POND	5	1.602	R	6.6165	3.38	6600.86	.082
I25-4 OUT	POND	2	.883	R	8.0520	.45	6600.28	.027

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 5

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR: 1
Storm Frequency = 5 yr
Total Rainfall Depth= 2.6000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	.387		6.1380	3.33	AF-2	
		DL	.387		6.1380	3.33		
		DN	1.617	R	6.1710	4.52	DP 8	
ADDLINK 20	ADD	UN	1.617	R	6.1710	4.52	DP 8	
		DL	1.617	R	6.1710	4.52		
		DN	1.617	R	6.1710	4.52	I25-4	IN
ADDLINK 60	ADD	UN	1.702		5.9895	30.06	EK-4M	
		DL	1.702		5.9895	30.06		
		DN	1.702		5.9895	30.06	EK-4	IN
C11	PONDrt	UN	1.617	R	6.1710	4.52	I25-4	IN
C11			1.602	R	6.6165	3.38	I25-4	OUT
		DL	1.602	R	6.6165	3.38		
		DN	1.602	R	6.6165	3.38	DP 9	
C22	REACH	UN	1.235	R	6.5175	2.49	DP 54	
		DL	1.231	R	6.5670	2.46		
		DN	1.617	R	6.1710	4.52	DP 8	
C55	PONDrt	UN	1.702		5.9895	30.06	EK-4	IN
C55			1.235	R	6.5175	2.49	EK-4	OUT
		DL	1.235	R	6.5175	2.49		
		DN	1.235	R	6.5175	2.49	DP 54	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 100

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR: 1
Storm Frequency = 100 yr
Total Rainfall Depth= 4.4000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	1.749		6.1050	24.76	AF-2	
		DL	1.749		6.1050	24.76		
		DN	4.492	R	6.1050	52.65	DP 8	
ADDLINK 20	ADD	UN	4.492	R	6.1050	52.65	DP 8	
		DL	4.492	R	6.1050	52.65		
		DN	4.492	R	6.1050	52.65	I25-4	IN
ADDLINK 60	ADD	UN	3.279		5.9895	54.84	EK-4M	
		DL	3.279		5.9895	54.84		
		DN	3.279		5.9895	54.84	EK-4	IN
C11	PONDrt	UN	4.492	R	6.1050	52.65	I25-4	IN
C11			4.477	R	6.3690	21.10	I25-4	OUT
		DL	4.477	R	6.3690	21.10		
		DN	4.477	R	6.3690	21.10	DP 9	
C22	REACH	UN	2.747	R	6.0720	30.64	DP 54	
		DL	2.743	R	6.1215	27.90		
		DN	4.492	R	6.1050	52.65	DP 8	
C55	PONDrt	UN	3.279		5.9895	54.84	EK-4	IN
C55			2.747	R	6.0720	30.64	EK-4	OUT
		DL	2.747	R	6.0720	30.64		
		DN	2.747	R	6.0720	30.64	DP 54	

MASTER DESIGN STORM SUMMARY

Network Storm Collection: COLO SPRGS

Return Event	Total Depth in	Rainfall Type	RNF ID
100	4.4000	Synthetic Curve	TYPEIIA 24HR: 1
50	4.0000	Synthetic Curve	TYPEIIA 24HR: 1
10	3.0000	Synthetic Curve	TYPEIIA 24HR: 1
5	2.6000	Synthetic Curve	TYPEIIA 24HR: 1
2	2.0000	Synthetic Curve	TYPEIIA 24HR: 1

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
AF-3	AREA	100	1.399		6.1050	19.17		
AF-3	AREA	50	1.110		6.1215	14.64		
AF-3	AREA	10	.499		6.1380	5.27		
AF-3	AREA	5	.309		6.1545	2.56		
AF-3	AREA	2	.100		6.2370	.19		
DP 10	JCT	100	1.670		6.1050	23.26		
DP 10	JCT	50	1.326		6.1050	17.79		
DP 10	JCT	10	.599		6.1215	6.46		
DP 10	JCT	5	.372		6.1380	3.17		
DP 10	JCT	2	.122		6.1875	.26		
*DP 11	JCT	100	1.670		6.2205	15.30		
*DP 11	JCT	50	1.326		6.2040	13.29		
*DP 11	JCT	10	.598		6.2535	4.16		
*DP 11	JCT	5	.372		6.3195	1.61		
*DP 11	JCT	2	.121		7.1280	.16		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID		Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
EK-5M		AREA	100	.271		6.0720	4.27		
EK-5M		AREA	50	.216		6.0720	3.32		
EK-5M		AREA	10	.100		6.0885	1.30		
EK-5M		AREA	5	.063		6.1050	.68		
EK-5M		AREA	2	.022		6.1215	.08		
I25-5	IN	POND	100	1.670		6.1050	23.26		
I25-5	IN	POND	50	1.326		6.1050	17.79		
I25-5	IN	POND	10	.599		6.1215	6.46		
I25-5	IN	POND	5	.372		6.1380	3.17		
I25-5	IN	POND	2	.122		6.1875	.26		
I25-5	OUT	POND	100	1.670		6.2205	15.30	6602.27	.245
I25-5	OUT	POND	50	1.326		6.2040	13.29	6602.04	.173
I25-5	OUT	POND	10	.598		6.2535	4.16	6600.97	.078
I25-5	OUT	POND	5	.372		6.3195	1.61	6600.57	.046
I25-5	OUT	POND	2	.121		7.1280	.16	6600.12	.009

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 5

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR: 1
Storm Frequency = 5 yr
Total Rainfall Depth= 2.6000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	.309		6.1545	2.56	AF-3	
		DL	.309		6.1545	2.56		
		DN	.372		6.1380	3.17	DP 10	
ADDLINK 130	ADD	UN	.063		6.1050	.68	EK-5M	
		DL	.063		6.1050	.68		
		DN	.372		6.1380	3.17	DP 10	
ADDLINK 20	ADD	UN	.372		6.1380	3.17	DP 10	
		DL	.372		6.1380	3.17		
		DN	.372		6.1380	3.17	I25-5	IN
C12	PONDrt	UN	.372		6.1380	3.17	I25-5	IN
C12			.372		6.3195	1.61	I25-5	OUT
		DL	.372		6.3195	1.61		
		DN	.372		6.3195	1.61	DP 11	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = COLO SPRGS

Storm Tag Name = 100

Data Type, File, ID = Synthetic Storm TYPEIIA 24HR: 1
Storm Frequency = 100 yr
Total Rainfall Depth= 4.4000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .2500 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
ADDLINK 10	ADD	UN	1.399		6.1050	19.17	AF-3	
		DL	1.399		6.1050	19.17		
		DN	1.670		6.1050	23.26	DP 10	
ADDLINK 130	ADD	UN	.271		6.0720	4.27	EK-5M	
		DL	.271		6.0720	4.27		
		DN	1.670		6.1050	23.26	DP 10	
ADDLINK 20	ADD	UN	1.670		6.1050	23.26	DP 10	
		DL	1.670		6.1050	23.26		
		DN	1.670		6.1050	23.26	I25-5	IN
C12	PONDrt	UN	1.670		6.1050	23.26	I25-5	IN
C12			1.670		6.2205	15.30	I25-5	OUT
		DL	1.670		6.2205	15.30		
		DN	1.670		6.2205	15.30	DP 11	

CLASSIC
CONSULTING
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HYDROLOGIC / HYDRAULIC CALCULATIONS
FILING NO. 1 & 2 FINAL DRAINAGE REPORT

JOB NAME: *INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER: *22206.00*
DATE: *07/24/07*
CALCULATED BY: *MAL*

FINAL DRAINAGE REPORT ~ BASIN RUNOFF COEFFICIENT SUMMARY

BASIN	TOTAL AREA (AC)	SUB-AREA (1)			SUB-AREA (2)			WEIGHTED		WEIGHTED CA	
		AREA (AC)	C(5)	C(100)	AREA (AC)	C(5)	C(100)	C(5)	C(100)	CA(5)	CA(100)
3Ma	17.0	17.00	0.25	0.35	0.00	0.20	0.30	0.25	0.35	**4.25**	**5.95**
3Mb - EX	1.8	1.80	0.25	0.35	0.00	0.20	0.30	0.25	0.35	**0.45**	**0.63**
3Mb	1.8	1.80	0.90	0.90	0.00	0.20	0.30	0.90	0.90	**1.62**	**1.62**
A	0.7	0.70	0.90	0.95	0.00	0.25	0.35	0.90	0.95	**0.63**	**0.67**
B	0.6	0.60	0.90	0.95	0.00	0.25	0.35	0.90	0.95	**0.54**	**0.57**
3B-A - EX	8.7	8.70	0.35	0.45	0.00	0.25	0.35	0.35	0.45	**3.05**	**3.92**
3B-A	8.7	8.70	0.90	0.90	0.00	0.25	0.35	0.90	0.90	**7.83**	**7.83**
D	1.6	1.60	0.90	0.95	0.00	0.25	0.35	0.90	0.95	**1.44**	**1.52**
E	0.3	0.30	0.90	0.95	0.00	0.25	0.35	0.90	0.95	**0.27**	**0.29**
F	0.4	0.40	0.90	0.95	0.00	0.25	0.35	0.90	0.95	**0.36**	**0.38**
3D-A - EX	3.7	3.70	0.25	0.35	0.00	0.25	0.35	0.25	0.35	**0.93**	**1.30**
3D-A	3.7	3.70	0.90	0.90	0.00	0.25	0.35	0.90	0.90	**3.33**	**3.33**
G	0.4	0.40	0.90	0.95	0.00	0.25	0.35	0.90	0.95	**0.36**	**0.38**
3D-B - EX	3.7	3.70	0.25	0.35	0.00	0.25	0.35	0.25	0.35	**0.93**	**1.30**
3D-B	3.7	3.70	0.90	0.90	0.00	0.25	0.35	0.90	0.90	**3.33**	**3.33**
3P	3.3	3.30	0.25	0.35	0.00	0.25	0.35	0.25	0.35	**0.83**	**1.16**
3D-C - EX	5.6	5.60	0.35	0.45	0.00	0.25	0.35	0.35	0.45	**1.96**	**2.52**
3D-C	5.6	5.60	0.90	0.90	0.00	0.25	0.35	0.90	0.90	**5.04**	**5.04**
3E-A - EX	12.4	12.40	0.35	0.45	0.00	0.25	0.35	0.35	0.45	**4.34**	**5.58**
3E-A	12.4	12.40	0.90	0.90	0.00	0.25	0.35	0.90	0.90	**11.16**	**11.16**
H-1	1.2	1.20	0.90	0.95	0.00	0.25	0.35	0.90	0.95	**1.08**	**1.14**
H-2	1.2	1.20	0.90	0.95	0.00	0.25	0.35	0.90	0.95	**1.08**	**1.14**
H-3	1.2	1.06	0.90	0.95	0.13	0.25	0.35	0.83	0.88	**0.99**	**1.05**
I	1.1	0.94	0.90	0.95	0.17	0.25	0.35	0.80	0.86	**0.88**	**0.95**
J	1.3	1.30	0.90	0.90	0.00	0.25	0.35	0.90	0.90	**1.17**	**1.17**
K	0.7	0.70	0.90	0.90	0.00	0.25	0.35	0.90	0.90	**0.63**	**0.63**
L	2.5	2.50	0.90	0.90	0.00	0.25	0.35	0.90	0.90	**2.25**	**2.25**
M	2.7	2.70	0.90	0.90	0.00	0.25	0.35	0.90	0.90	**2.43**	**2.43**
M-EX	2.7	0.00	0.90	0.90	2.70	0.25	0.35	0.25	0.35	**0.68**	**0.95**
M-2	2.7	2.70	0.90	0.90	0.00	0.25	0.35	0.90	0.90	**2.43**	**2.43**
N	1.2	1.20	0.90	0.90	0.00	0.25	0.35	0.90	0.90	**1.08**	**1.08**
P	0.4	0.40	0.90	0.90	0.00	0.25	0.35	0.90	0.90	**0.36**	**0.36**
Q	1.1	1.10	0.90	0.90	0.00	0.25	0.35	0.90	0.90	**0.99**	**0.99**
R	1.1	1.10	0.90	0.90	0.00	0.25	0.35	0.90	0.90	**0.99**	**0.99**

JOB NAME: *INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER: *22206.00*
DATE: *07/24/07*
CALCULATED BY: *MAL*

FINAL DRAINAGE REPORT ~ BASIN RUNOFF COEFFICIENT SUMMARY

BASIN	TOTAL AREA (AC)	SUB-AREA (1)			SUB-AREA (2)			WEIGHTED		WEIGHTED CA	
		AREA (AC)	C(5)	C(100)	AREA (AC)	C(5)	C(100)	C(5)	C(100)	CA(5)	CA(100)
S	0.3	0.30	0.90	0.90	0.00	0.25	0.35	0.90	0.90	0.27	0.27
T	0.3	0.30	0.90	0.90	0.00	0.25	0.35	0.90	0.90	0.27	0.27
U	1.0	1.00	0.90	0.90	0.00	0.25	0.35	0.90	0.90	0.90	0.90
V	0.5	0.50	0.90	0.90	0.00	0.25	0.35	0.90	0.90	0.45	0.45
W	0.4	0.40	0.90	0.90	0.00	0.25	0.35	0.90	0.90	0.36	0.36
X	0.5	0.50	0.90	0.90	0.00	0.25	0.35	0.90	0.90	0.45	0.45
Z	0.7	0.70	0.90	0.90	0.00	0.25	0.35	0.90	0.90	0.63	0.63
AA	0.05	0.05	0.90	0.90	0.00	0.25	0.35	0.90	0.90	0.05	0.05
BB	0.03	0.03	0.90	0.90	0.00	0.25	0.35	0.90	0.90	0.03	0.03
CC	1.2	1.20	0.90	0.90	0.00	0.25	0.35	0.90	0.90	1.08	1.08
DD	0.4	0.40	0.90	0.90	0.00	0.25	0.35	0.90	0.90	0.36	0.36
EE	0.1	0.11	0.90	0.90	0.00	0.25	0.35	0.90	0.90	0.10	0.10
FF	0.5	0.50	0.90	0.90	0.00	0.25	0.35	0.90	0.90	0.45	0.45
GG	0.9	0.90	0.90	0.90	0.00	0.25	0.35	0.90	0.90	0.81	0.81
HH	0.7	0.70	0.90	0.90	0.00	0.25	0.35	0.90	0.90	0.63	0.63
II	0.7	0.70	0.90	0.90	0.00	0.25	0.35	0.90	0.90	0.63	0.63
JJ	1.1	1.10	0.90	0.90	0.00	0.25	0.35	0.90	0.90	0.99	0.99
KK	0.9	0.90	0.90	0.90	0.00	0.25	0.35	0.90	0.90	0.81	0.81
3A-A - EX	13.4	13.40	0.35	0.45	0.00	0.25	0.35	0.35	0.45	4.69	6.03
3A-A	13.4	13.40	0.90	0.90	0.00	0.25	0.35	0.90	0.90	12.06	12.06
LL	0.6	0.60	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.54	0.57
MM	0.5	0.50	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.45	0.48
RR	0.6	0.60	0.90	0.90	0.00	0.25	0.35	0.90	0.90	0.54	0.54
SS	1.9	1.90	0.90	0.90	0.00	0.25	0.35	0.90	0.90	1.71	1.71
TT	1.2	1.20	0.90	0.90	0.00	0.25	0.35	0.90	0.90	1.08	1.08
UU	0.6	0.60	0.90	0.90	0.00	0.25	0.35	0.90	0.90	0.54	0.54
VV	1.7	1.70	0.90	0.90	0.00	0.25	0.35	0.90	0.90	1.53	1.53
2A-A - EX	3.9	3.90	0.35	0.45	0.00	0.25	0.35	0.35	0.45	1.37	1.76
2A-A	3.9	3.90	0.90	0.90	0.00	0.25	0.35	0.90	0.90	3.51	3.51
2A-B - EX	24.6	24.60	0.35	0.45	0.00	0.25	0.35	0.35	0.45	8.61	11.07
2A-B	24.6	24.60	0.65	0.75	0.00	0.25	0.35	0.65	0.75	15.99	18.45
WW	2.9	2.90	0.90	0.95	0.00	0.25	0.35	0.90	0.95	2.61	2.76
XX	3.3	3.30	0.90	0.95	0.00	0.25	0.35	0.90	0.95	2.97	3.14
OS-1	36.3	36.30	0.25	0.35	0.00	0.25	0.35	0.25	0.35	9.08	12.71
1A-A - EX	9.6	0.00	0.90	0.90	9.60	0.25	0.35	0.25	0.35	2.40	3.36
1A-A	9.6	9.60	0.90	0.90	0.00	0.25	0.35	0.90	0.90	8.64	8.64

JOB NAME: *INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER: *22206.00*
DATE: *07/24/07*
CALCULATED BY: *MAL*

FINAL DRAINAGE REPORT ~ BASIN RUNOFF COEFFICIENT SUMMARY

BASIN	TOTAL AREA (AC)	SUB-AREA (1)			SUB-AREA (2)			WEIGHTED		WEIGHTED CA	
		AREA (AC)	C(5)	C(100)	AREA (AC)	C(5)	C(100)	C(5)	C(100)	CA(5)	CA(100)
ZZ	1.5	1.50	0.90	0.95	0.00	0.25	0.35	0.90	0.95	1.35	1.43
AAA	1.2	1.20	0.90	0.95	0.00	0.25	0.35	0.90	0.95	1.08	1.14
BBB	0.7	0.70	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.63	0.67
CCC	0.6	0.60	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.54	0.57
DDD	0.6	0.60	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.54	0.57
1A-B	18.8	18.80	0.25	0.35	0.00	0.25	0.35	0.25	0.35	4.70	6.58
OS-2	2.3	2.30	0.90	0.95	0.00	0.25	0.35	0.90	0.95	2.07	2.19
OS-3	2.4	2.40	0.90	0.95	0.00	0.25	0.35	0.90	0.95	2.16	2.28
RD1	0.28	0.28	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.25	0.27
RD2	0.32	0.32	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.29	0.30
RD3	0.27	0.27	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.24	0.26
RD4	0.38	0.38	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.34	0.36
RD5	0.38	0.38	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.34	0.36
RD6	0.31	0.31	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.28	0.29
RD7	0.23	0.23	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.21	0.22
RD8	0.23	0.23	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.21	0.22
RD9	0.18	0.18	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.16	0.17
RD10	0.21	0.21	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.19	0.20
RD11	0.19	0.19	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.17	0.18
RD12	0.28	0.28	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.25	0.27
RD13	0.28	0.28	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.25	0.27
RD14	0.15	0.15	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.14	0.14
RD15	0.17	0.17	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.15	0.16
RD16	0.43	0.43	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.39	0.41

JOB NAME: *INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER: *22206.00*
DATE: *07/24/07*
CALC'D BY: *MAL*

FINAL DRAINAGE REPORT ~ BASIN RUNOFF SUMMARY

BASIN	WEIGHTED		OVERLAND				STREET / CHANNEL FLOW				Tc	INTENSITY						TOTAL FLOWS					
	CA(5)	CA(100)	C(5)	Length (ft)	Height (ft)	Tc (min)	Length (ft)	Slope (%)	Velocity (fps)	Tc (min)	TOTAL (min)	I(2) (in/hr)	I(5) (in/hr)	I(10) (in/hr)	I(25) (in/hr)	I(50) (in/hr)	I(100) (in/hr)	Q(2) (cfs)	Q(5) (cfs)	Q(10) (cfs)	Q(25) (cfs)	Q(50) (cfs)	Q(100) (cfs)
3Ma	4.25	5.95	0.25	1000	34	33.6	0	3.0%	6.1	0.0	33.6	1.65	2.27	2.66	3.41	3.86	4.04	7	10	11	20	23	24
3Mb - EX	0.45	0.63	0.25	275	8	18.5	0	3.0%	6.1	0.0	18.5	2.26	3.13	3.65	4.70	5.32	5.57	1	1	2	3	3	4
3Mb	1.62	1.62	0.25	0	1	#DIV/0!	500	3.0%	6.1	1.4	5.0	3.71	5.10	5.96	7.66	8.68	9.07	6	8	10	12	14	15
A	0.63	0.67	0.25	25	0	#DIV/0!	350	3.0%	6.1	1.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	2	3	4	5	6	6
B	0.54	0.57	0.25	25	0	#DIV/0!	350	3.0%	6.1	1.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	2	3	3	4	5	5
3B-A - EX	3.05	3.92	0.35	600	22	28.4	0	3.0%	6.1	0.0	28.4	1.82	2.50	2.93	3.75	4.25	4.44	6	8	9	15	17	17
3B-A	7.83	7.83	0.9	300	24	3.3	500	3.0%	6.1	1.4	5.0	3.71	5.10	5.96	7.66	8.68	9.07	29	40	47	60	68	71
D	1.44	1.52	0.25	25	0	#DIV/0!	1300	3.0%	6.1	3.6	5.0	3.71	5.10	5.96	7.66	8.68	9.07	5	7	9	12	13	14
E	0.27	0.29	0.25	25	1	5.0	100	3.0%	6.1	0.3	5.0	3.71	5.10	5.96	7.66	8.68	9.07	1	1	2	2	2	3
F	0.36	0.36	0.25	25	1	5.0	150	3.0%	6.1	0.4	5.0	3.71	5.10	5.96	7.66	8.68	9.07	1	2	2	3	3	3
3D-A - EX	0.93	1.30	0.25	525	15	25.8	0	3.0%	6.1	0.0	25.8	1.92	2.64	3.08	3.96	4.48	4.69	2	2	3	5	6	6
3D-A	3.33	3.33	0.25	25	1	5.0	700	3.0%	6.1	1.9	6.0	3.53	4.86	5.67	7.29	8.26	8.64	12	16	19	24	28	29
G	0.36	0.36	0.25	25	1	5.0	125	3.0%	6.1	0.3	5.0	3.71	5.10	5.96	7.66	8.68	9.07	1	2	2	3	3	3
3D-B - EX	0.93	1.30	0.25	480	14	24.5	0	3.0%	6.1	0.0	24.5	1.97	2.71	3.16	4.07	4.61	4.82	2	3	3	5	6	6
3D-B	3.33	3.33	0.25	25	1	5.0	700	3.0%	6.1	1.9	6.0	3.53	4.86	5.67	7.29	8.26	8.64	12	16	19	24	28	29
3P	0.83	1.16	0.25	250	8	17.1	1500	0.0%	0.0	#DIV/0!	17.1	2.36	3.25	3.80	4.88	5.53	5.79	2	3	3	5	6	7
3D-C - EX	1.96	2.52	0.35	560	12	25.8	0	3.0%	6.1	0.0	25.8	1.91	2.63	3.07	3.95	4.48	4.68	4	5	6	10	11	12
3D-C	5.04	5.04	0.25	20	0.4	5.7	490	3.0%	6.1	1.3	7.0	3.37	4.64	5.41	6.96	7.89	8.25	17	23	27	35	40	42
3E-A - EX	4.34	5.58	0.35	700	20	26.2	0	3.0%	6.1	0.0	26.2	1.90	2.61	3.05	3.92	4.44	4.64	8	11	13	22	25	25
3E-A	11.16	11.16	0.25	25	1	5.0	1000	3.0%	6.1	2.7	7.8	3.26	4.49	5.23	6.73	7.63	7.98	36	50	58	75	85	89
H-1	1.08	1.14	0.25	25	1	5.0	1900	3.0%	6.1	5.2	5.0	3.71	5.10	5.96	7.66	8.68	9.07	4	6	6	9	10	10
H-2	1.08	1.14	0.25	25	1	5.0	1900	3.0%	6.1	5.2	5.0	3.71	5.10	5.96	7.66	8.68	9.07	4	6	6	9	10	10
H-3	0.99	1.05	0.25	25	1	5.0	1900	3.0%	6.1	5.2	5.0	3.71	5.10	5.96	7.66	8.68	9.07	4	5	6	8	9	10
I	0.88	0.96	0.25	25	1	5.0	800	3.0%	6.1	2.2	5.0	3.71	5.10	5.96	7.66	8.68	9.07	3	5	5	7	8	9
J	1.17	1.17	0.25	25	1	5.0	400	3.0%	6.1	1.1	5.0	3.71	5.10	5.96	7.66	8.68	9.07	4	6	7	9	10	11
K	0.63	0.63	0.25	25	1	5.0	275	3.0%	6.1	0.8	5.0	3.71	5.10	5.96	7.66	8.68	9.07	2	3	4	6	5	6
L	2.25	2.25	0.25	25	1	5.0	400	3.0%	6.1	1.1	6.0	3.53	4.86	5.67	7.29	8.26	8.64	8	11	13	16	19	19
M	2.43	2.43	0.25	25	1	5.0	300	3.0%	6.1	0.8	5.8	3.62	4.98	5.81	7.47	8.46	8.85	9	12	14	18	21	22
M-EX	0.68	0.95	0.25	25	1	5.0	300	3.0%	6.1	0.8	7.0	3.37	4.64	5.41	6.96	7.89	8.25	2	3	4	7	7	8

JOB NAME: *INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER: *22266.00*
DATE: *07/24/07*
CALC'D BY: *MAL*

FINAL DRAINAGE REPORT ~ BASIN RUNOFF SUMMARY

BASIN	WEIGHTED		OVERLAND				STREET / CHANNEL FLOW				Tc	INTENSITY						TOTAL FLOWS					
	CA(5)	CA(100)	C(5)	Length (ft)	Height (ft)	Tc (min)	Length (ft)	Slope (%)	Velocity (fps)	Tc (min)	TOTAL (min)	I(2) (in/hr)	I(5) (in/hr)	I(10) (in/hr)	I(25) (in/hr)	I(50) (in/hr)	I(100) (in/hr)	Q(2) (cfs)	Q(5) (cfs)	Q(10) (cfs)	Q(25) (cfs)	Q(50) (cfs)	Q(100) (cfs)
M-2	2.43	2.43	0.25	25	1	5.0	300	3.0%	6.1	0.8	5.0	3.71	5.10	5.96	7.66	8.68	9.07	9	12	14	19	21	22
N	1.08	1.08	0.25	25	1	5.0	350	3.0%	6.1	1.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	4	6	6	8	9	10
P	0.36	0.36	0.25	25	1	5.0	50	3.0%	6.1	0.1	5.0	3.71	5.10	5.96	7.66	8.68	9.07	1	2	2	3	3	3
Q	0.99	0.99	0.25	25	1	5.0	300	3.0%	6.1	0.8	5.0	3.71	5.10	5.96	7.66	8.68	9.07	4	5	6	8	9	9
R	0.99	0.99	0.25	25	1	5.0	250	3.0%	6.1	0.7	5.0	3.71	5.10	5.96	7.66	8.68	9.07	4	5	6	8	9	9
S	0.27	0.27	0.25	25	1	5.0	150	3.0%	6.1	0.4	5.0	3.71	5.10	5.96	7.66	8.68	9.07	1	1	2	2	2	2
T	0.27	0.27	0.25	25	1	5.0	150	3.0%	6.1	0.4	5.0	3.71	5.10	5.96	7.66	8.68	9.07	1	1	2	2	2	2
U	0.90	0.90	0.25	25	1	5.0	350	3.0%	6.1	1.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	3	5	5	7	8	8
V	0.45	0.45	0.25	25	1	5.0	150	3.0%	6.1	0.4	5.0	3.71	5.10	5.96	7.66	8.68	9.07	2	2	3	3	4	4
W	0.36	0.36	0.25	25	1	5.0	150	3.0%	6.1	0.4	5.0	3.71	5.10	5.96	7.66	8.68	9.07	1	2	2	3	3	3
X	0.45	0.45	0.25	25	1	5.0	150	3.0%	6.1	0.4	5.0	3.71	5.10	5.96	7.66	8.68	9.07	2	2	3	3	4	4
Z	0.63	0.63	0.25	25	1	5.0	150	3.0%	6.1	0.4	5.0	3.71	5.10	5.96	7.66	8.68	9.07	2	3	4	5	5	6
AA	0.05	0.05	0.25	25	1	5.0	100	3.0%	6.1	0.3	5.0	3.71	5.10	5.96	7.66	8.68	9.07	0.17	0.23	0.27	0.34	0.39	0.41
BB	0.03	0.03	0.25	25	1	5.0	50	3.0%	6.1	0.1	5.0	3.71	5.10	5.96	7.66	8.68	9.07	0.10	0.14	0.16	0.21	0.23	0.25
CC	1.08	1.08	0.25	25	1	5.0	200	3.0%	6.1	0.5	5.0	3.71	5.10	5.96	7.66	8.68	9.07	4	6	6	8	9	10
DD	0.36	0.36	0.25	25	1	5.0	200	3.0%	6.1	0.5	5.0	3.71	5.10	5.96	7.66	8.68	9.07	1	2	2	3	3	3
EE	0.10	0.10	0.25	25	1	5.0	100	3.0%	6.1	0.3	5.0	3.71	5.10	5.96	7.66	8.68	9.07	0	1	1	1	1	1
FF	0.45	0.45	0.25	25	1	5.0	100	3.0%	6.1	0.3	5.0	3.71	5.10	5.96	7.66	8.68	9.07	2	2	3	3	4	4
GG	0.81	0.81	0.25	25	1	5.0	350	3.0%	6.1	1.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	3	4	5	6	7	7
HH	0.63	0.63	0.25	25	1	5.0	350	3.0%	6.1	1.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	2	3	4	5	5	6
II	0.63	0.63	0.25	25	1	5.0	300	3.0%	6.1	0.8	5.0	3.71	5.10	5.96	7.66	8.68	9.07	2	3	4	5	5	6
JJ	0.99	0.99	0.25	25	1	5.0	400	3.0%	6.1	1.1	5.0	3.71	5.10	5.96	7.66	8.68	9.07	4	5	6	8	9	9
KK	0.81	0.81	0.25	25	1	5.0	550	3.0%	6.1	1.5	5.0	3.71	5.10	5.96	7.66	8.68	9.07	3	4	5	6	7	7
3A-A - EX	4.69	6.03	0.35	870	26	28.8	0	3.0%	6.1	0.0	28.8	1.80	2.46	2.89	3.72	4.21	4.41	8	12	14	22	26	27
3A-A	12.06	12.06	0.25	65	1	11.1	1600	3.0%	6.1	4.4	9.0	3.10	4.27	4.98	6.40	7.25	7.58	37	51	60	77	87	91
LL	0.54	0.57	0.25	25	1	5.0	400	3.0%	6.1	1.1	5.0	3.71	5.10	5.96	7.66	8.68	9.07	2	3	3	4	5	5
MM	0.45	0.48	0.25	25	1	5.0	300	3.0%	6.1	0.8	5.0	3.71	5.10	5.96	7.66	8.68	9.07	2	2	3	4	4	4
RR	0.54	0.54	0.25	25	1	5.0	200	3.0%	6.1	0.5	5.0	3.71	5.10	5.96	7.66	8.68	9.07	2	3	3	4	5	5
SS	1.71	1.71	0.25	25	1	5.0	300	3.0%	6.1	0.8	5.5	3.62	4.98	5.81	7.47	8.46	8.85	6	9	10	13	14	15
TT	1.08	1.08	0.25	25	1	5.0	450	3.0%	6.1	1.2	5.0	3.71	5.10	5.96	7.66	8.68	9.07	4	6	6	8	9	10
UU	0.54	0.54	0.25	25	1	5.0	350	3.0%	6.1	1.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	2	3	3	4	5	5
VV	1.53	1.53	0.25	25	1	5.0	300	3.0%	6.1	0.8	5.0	3.71	5.10	5.96	7.66	8.68	9.07	6	8	9	12	13	14
2A-A - EX	1.37	1.76	0.35	300	6	19.3	0	3.0%	6.1	0.0	19.3	2.23	3.07	3.58	4.60	5.21	5.45	3	4	5	8	9	10

JOB NAME: *INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER: *22206.00*
DATE: *07/24/07*
CALC'D BY: *MAL*

FINAL DRAINAGE REPORT ~ BASIN RUNOFF SUMMARY

BASIN	WEIGHTED		OVERLAND				STREET / CHANNEL FLOW				Tc	INTENSITY						TOTAL FLOWS					
	CA(5)	CA(100)	C(5)	Length (ft)	Height (ft)	Tc (min)	Length (ft)	Slope (%)	Velocity (fps)	Tc (min)	TOTAL (min)	I(2) (in/hr)	I(5) (in/hr)	I(10) (in/hr)	I(25) (in/hr)	I(50) (in/hr)	I(100) (in/hr)	Q(2) (cfs)	Q(5) (cfs)	Q(10) (cfs)	Q(25) (cfs)	Q(50) (cfs)	Q(100) (cfs)
2A-A	3.51	3.51	0.25	25	1	5.0	700	3.0%	6.1	1.9	6.9	3.53	4.86	5.67	7.29	8.26	8.64	12	17	20	26	29	30
2A-B - EX	8.61	11.07	0.35	950	20	33.8	0	2.0%	4.9	0.0	33.8	1.64	2.26	2.64	3.39	3.84	4.02	14	19	23	38	43	44
2A-B	15.99	18.45	0.25	75	1	12.5	0	3.0%	6.1	0.0	15.0	2.52	3.46	4.04	5.19	5.89	6.16	40	55	65	96	109	114
WW	2.81	2.76	0.25	1	1	0.3	2000	3.0%	6.1	5.5	5.8	3.56	4.90	5.71	7.34	8.32	8.70	9	13	15	20	23	24
XX	2.97	3.14	0.25	50	20	3.3	1500	3.0%	6.1	4.1	7.5	3.31	4.55	5.31	6.82	7.73	8.09	10	14	16	21	24	25
OS-1	9.06	12.71	0.25	200	1	26.3	2500	3.0%	6.1	6.9	35.1	1.81	2.21	2.58	3.32	3.76	3.93	15	20	23	42	48	50
1A-A - EX	2.40	3.36	0.25	700	24	28.0	0	3.0%	6.1	0.0	28.0	1.83	2.52	2.94	3.78	4.28	4.48	4	6	7	13	14	15
1A-A	8.64	8.64	0.25	50	4	5.7	900	2.5%	5.5	2.7	8.4	3.18	4.38	5.11	6.56	7.44	7.78	27	38	44	57	64	67
ZZ	1.35	1.43	0.25	25	1	5.0	1450	3.0%	6.1	4.0	9.0	3.71	5.10	5.96	7.66	8.68	9.07	5	7	8	11	12	13
AAA	1.08	1.14	0.25	25	1	5.0	1450	3.0%	6.1	4.0	9.0	3.71	5.10	5.96	7.66	8.68	9.07	4	6	6	9	10	10
BBB	0.63	0.67	0.25	25	1	5.0	400	3.0%	6.1	1.1	6.0	3.71	5.10	5.96	7.66	8.68	9.07	2	3	4	5	6	6
CCC	0.54	0.57	0.25	25	1	5.0	400	3.0%	6.1	1.1	6.0	3.71	5.10	5.96	7.66	8.68	9.07	2	3	3	4	5	5
DDD	0.54	0.57	0.25	25	1	5.0	400	3.0%	6.1	1.1	6.0	3.71	5.10	5.96	7.66	8.68	9.07	2	3	3	4	5	5
1A-B	4.70	5.56	0.25	560	20	24.7	700	3.5%	6.5	1.8	26.5	1.99	2.60	3.03	3.90	4.42	4.62	9	12	14	26	29	30
OS-2	2.07	2.19	0.25	10	1	2.4	1300	1.8%	4.7	4.6	7.0	3.38	4.65	5.42	6.97	7.90	8.25	7	10	11	15	17	18
RD1	0.25	0.27	0.25	10	1	2.4	0	2.8%	5.9	0.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	0.9	1.3	1.5	2.0	2.3	2.4
RD2	0.29	0.30	0.25	10	1	2.4	0	2.8%	5.9	0.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	1.1	1.5	1.7	2.3	2.6	2.8
RD3	0.24	0.26	0.25	10	1	2.4	0	2.8%	5.9	0.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	0.9	1.2	1.4	2.0	2.2	2.3
RD4	0.34	0.36	0.25	10	1	2.4	0	2.8%	5.9	0.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	1.3	1.7	2.0	2.8	3.1	3.3
RD5	0.34	0.36	0.25	10	1	2.4	0	2.8%	5.9	0.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	1.3	1.7	2.0	2.8	3.1	3.3
RD6	0.26	0.28	0.25	10	1	2.4	0	2.8%	5.9	0.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	1.0	1.4	1.7	2.3	2.6	2.7
RD7	0.21	0.22	0.25	10	1	2.4	0	2.8%	5.9	0.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	0.8	1.1	1.2	1.7	1.9	2.0
RD8	0.21	0.22	0.25	10	1	2.4	0	2.8%	5.9	0.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	0.8	1.1	1.2	1.7	1.9	2.0
RD9	0.16	0.17	0.25	10	1	2.4	0	2.8%	5.9	0.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	0.6	0.8	1.0	1.3	1.5	1.6
RD10	0.19	0.20	0.25	10	1	2.4	0	2.8%	5.9	0.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	0.7	1.0	1.1	1.5	1.7	1.8
RD11	0.17	0.18	0.25	10	1	2.4	0	2.8%	5.9	0.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	0.6	0.9	1.0	1.4	1.6	1.6
RD12	0.25	0.27	0.25	10	1	2.4	0	2.8%	5.9	0.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	0.9	1.3	1.5	2.0	2.3	2.4
RD13	0.25	0.27	0.25	10	1	2.4	0	2.8%	5.9	0.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	0.9	1.3	1.5	2.0	2.3	2.4
RD14	0.14	0.14	0.25	10	1	2.4	0	2.8%	5.9	0.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	0.5	0.7	0.8	1.1	1.2	1.3
RD15	0.15	0.16	0.25	10	1	2.4	0	2.8%	5.9	0.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	0.6	0.8	0.9	1.2	1.4	1.5
RD16	0.39	0.41	0.25	10	1	2.4	0	2.8%	5.9	0.0	5.0	3.71	5.10	5.96	7.66	8.68	9.07	1.4	2.0	2.3	3.1	3.5	3.7

JOB NAME: *INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER: *22206.00*
DATE: *07/24/07*
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FINAL DRAINAGE REPORT ~ SURFACE ROUTING SUMMARY

Design Point(s)	Contributing Basins	Equivalent CA(5)	Equivalent CA(100)	Maximum Tc	Intensity		Flow		Inlet Size
					I(5)	I(100)	Q(5)	Q(100)	
1A	EX. 3Ma + EX. 3D-A + EX. 3Mb	5.63	7.88	33.6	2.27	4.04	13	32	36" stub
1B	Future Pond Release + DEV. 3Mb + DEV. 3D-A	5.23	5.16	6.0	4.86	8.64	25	45	Fut. Pond and Wye
2	A + 1/4 FB FROM DP-73	0.95	1.12	6.0	4.86	8.64	5	10	6' D-10-R
3	B + 3/4 FB FROM DP-73	1.50	1.93	5.0	5.10	9.07	8	17	12' D-10-R
4A	3B-A - EX	3.05	3.92	28.4	2.50	4.44	8	17	30" FES
4B	1/4 OF 3B-A	1.96	1.96	5.0	5.10	9.07	10	18	Fut. Storm System
5	D	1.44	1.52	5.0	5.10	9.07	7	14	8' D-10-R
6	E	0.27	0.29	5.0	5.10	9.07	1	3	4' D-10-R
7	F + G	0.72	0.76	5.0	5.10	9.07	4	7	4' D-10-R
9A	EX. 3P + EX. 1A-A + EX. 3D-B +	4.15	5.81	28.0	2.52	4.48	10	26	30" FES
9B	DEV. 3D-B	3.33	3.33	6.0	4.86	8.64	16	29	30" FES
10-X	1/3 OF 3D-C	1.68	1.68	7.0	4.64	8.25	8	14	Fut. Storm System
10-Y	2/3 OF 3D-C	3.36	3.36	7.0	4.64	8.25	16	28	Fut. Storm System
11-A	20% OF 3E-A	2.23	2.23	7.8	4.49	7.98	10	18	Fut. Storm System
11-B	40% OF 3E-A	4.46	4.46	7.8	4.49	7.98	20	36	Fut. Storm System
11-X	40% OF 3E-A	4.46	4.46	7.8	4.49	7.98	20	36	Fut. Storm System
11-Y	10% OF 3E-A	1.12	1.12	5.0	5.10	9.07	6	10	Fut. Storm System
11B	EX. 3A-A + EX. 3D-C + EX. 3E-A	10.99	14.13	28.8	2.48	4.41	27	62	36" FES

JOB NAME: *INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER: *22206.00*
DATE: *07/24/07*
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FINAL DRAINAGE REPORT ~ SURFACE ROUTING SUMMARY

Design Point(s)	Contributing Basins	Equivalent CA(5)	Equivalent CA(100)	Maximum Tc	Intensity		Flow		Inlet Size
					I(5)	I(100)	Q(5)	Q(100)	
12	I	0.88	0.95	5.0	5.10	9.07	5	9	6' D-10-R
13	H-1 + H-2	2.16	2.28	5.0	5.10	9.07	11	21	16' D-10-R
14	H-3	0.99	1.05	5.0	5.10	9.07	5	10	20' D-10-R
15	J	1.17	1.17	5.0	5.10	9.07	6	11	6' D-10-R
16	K	0.63	0.63	5.0	5.10	9.07	3	6	6' D-10-R
17	L	2.25	2.25	6.0	4.86	8.64	11	19	16' D-10-R
18	M (DEV.)	2.43	2.43	5.5	4.98	8.85	12	22	16' D-10-R
20	N	1.08	1.08	5.0	5.10	9.07	6	10	6' D-10-R
21	P	0.36	0.36	5.0	5.10	9.07	2	3	4' D-10-R
22	1/2 OF X	0.23	0.23	5.0	5.10	9.07	1.1	2.0	ROOF DRAIN
23	Q	0.99	0.99	5.0	5.10	9.07	5	9	6' D-10-R
24	R	0.99	0.99	5.0	5.10	9.07	5	9	6' D-10-R
26	S + 1/2 OF V	0.50	0.50	5.0	5.10	9.07	3	4	4' D-10-R
27	T	0.27	0.27	5.0	5.10	9.07	1	2	4' D-10-R
28	U + FB DP-34	1.05	1.13	5.0	5.10	9.07	5	10	6' D-10-R
29	1/2 OF V	0.23	0.23	5.0	5.10	9.07	1	2	ROOF DRAIN
30	1/2 OF X	0.23	0.23	5.0	5.10	9.07	1	2	ROOF DRAIN

JOB NAME: *INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER: *22206.00*
DATE: *07/24/07*
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FINAL DRAINAGE REPORT ~ SURFACE ROUTING SUMMARY

Design Point(s)	Contributing Basins	Equivalent CA(5)	Equivalent CA(100)	Maximum Tc	Intensity		Flow		Inlet Size
					I(5)	I(100)	Q(5)	Q(100)	
34	Z	0.63	0.63	5.0	5.10	9.07	3	6	8' AT-GRADE
38	W	0.36	0.36	5.0	5.10	9.07	2	3	3.0' X 3.0' D-9
39	DD	0.36	0.36	5.0	5.10	9.07	2	3	3.0' X 3.0' D-9
41	FF	0.45	0.45	5.0	5.10	9.07	2	4	3.0' X 3.0' D-9
43a	HH	0.63	0.63	5.0	5.10	9.07	3	6	4' D-10-R
43b	II	0.63	0.63	5.0	5.10	9.07	3	6	4' D-10-R
44a	JJ	0.99	0.99	5.0	5.10	9.07	5	9	4' D-10-R
44b	KK	0.81	0.81	5.0	5.10	9.07	4	7	4' D-10-R
45a	GG	0.81	0.81	5.0	5.10	9.07	4	7	6.0' X 3.0' D-9
45b	EE	0.10	0.10	5.0	5.10	9.07	0.5	0.9	3.0' X 3.0' D-9
46	CC	1.08	1.08	5.0	5.10	9.07	6	10	6' D-10-R
47	LL + 1/2 OF EX. 2A-A	1.22	1.45	13.0	3.69	6.56	5	9	6' D-10-R
48	3A-A	12.06	12.06	9.0	4.27	7.58	51	91	48" STUB
49	MM	0.45	0.48	5.0	5.10	9.07	2	4	4' D-10-R
54	RR	0.54	0.54	5.0	5.10	9.07	3	5	4' D-10-R
55	SS	1.71	1.71	5.5	4.98	8.85	9	15	12' D-10-R
56	TT	1.08	1.08	5.0	5.10	9.07	6	10	6' D-10-R

JOB NAME: *INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER: *22206.00*
DATE: *07/24/07*
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FINAL DRAINAGE REPORT ~ SURFACE ROUTING SUMMARY

Design Point(s)	Contributing Basins	Equivalent CA(5)	Equivalent CA(100)	Maximum Tc	Intensity		Flow		Inlet Size
					I(5)	I(100)	Q(5)	Q(100)	
57	UU	0.54	0.54	5.0	5.10	9.07	3	5	4' D-10-R
58	V V	1.53	1.53	5.0	5.10	9.07	8	14	8' D-10-R
60	DDD + 1/2 OF EX. 2A-A	1.74	2.25	15.0	3.46	6.16	6	14	8' D-10-R
61a	EX. 2A-B	8.61	11.07	33.8	2.26	4.02	19	44	54" FES
61B	2A-B	15.99	18.45	15.0	3.46	6.16	55	114	Fut. Storm (54")
62	W W	2.61	2.76	5.8	4.90	8.70	13	24	16' D-10-R
63	X X	2.97	3.14	7.5	4.55	8.09	14	25	16' D-10-R
65	OS-1	9.08	12.71	35.1	2.21	3.93	20	50	36" RCP
66	1A-A	8.64	8.64	8.4	4.38	7.78	38	67	42" RCP STUB
67	ZZ	1.35	1.43	5.0	5.10	9.07	7	13	12' D-10-R At-grade
68	CCC	0.54	0.57	5.0	5.10	9.07	3	5	4' D-10-R
69	BBB + FB DP-67 + FB DP-71	1.37	1.69	5.0	5.10	9.07	7	15	10' D-10-R
70	EX. 1A-B	4.70	6.58	26.5	2.60	4.62	12	30	30" FES
71	AAA	1.08	1.14	5.0	5.10	9.07	6	10	12' D-10-R At-grade
72	OS-2	2.07	2.19	7.0	4.65	8.26	10	18	5.5' D-10-R (EXIST.)
73	OS-3 + FB OS-2	2.07	2.19	5.0	5.10	9.07	11	20	16' D-10-R (EXIST.)
74	DEV. 2A-A	3.51	3.51	6.0	4.86	8.64	17	30	Fut. Storm System (30")

JOB NAME: *INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER: *22206.00*
DATE: *07/24/07*
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* PIPES ARE LISTED AT MAXIMUM SIZE REQUIRED TO ACCOMMODATE Q100 FLOWS AT MINIMUM GRADE.
REFER TO INDIVIDUAL PIPE SHEETS FOR HYDRAULIC INFORMATION.

FINAL DRAINAGE REPORT ~ PIPE ROUTING SUMMARY

Pipe Run	Contributing Basins	Equivalent CA(5)	Equivalent CA(100)	Maximum Tc	Intensity		Flow		Pipe Size*
					I(5)	I(100)	Q(5)	Q(100)	
1	DP 1	5.23	5.16	6.0	4.86	8.64	25	45	36" @ 0.5%
2	DP 2	0.95	1.12	6.0	4.86	8.64	5	10	18" @ 0.9%
3	PIPES 1 + 2	6.18	6.28	6.3	4.79	8.51	30	53	36" @ 1.0%
4	DP 3	1.50	1.93	5.0	5.10	9.07	8	17	24" @ 0.6%
5A	PIPES 3 + 4	7.68	8.21	6.6	4.73	8.42	36	69	42" @ 0.5% (36" @ 1.1%)
5B	5A + 1/4 OF DEV. 3B-A	9.63	10.16	6.9	4.66	8.28	45	84	42" @ 0.7%
5C	5B + 1/4 OF DEV. 3B-A	11.59	12.12	7.8	4.48	7.97	52	97	42" @ 1.0%
5D	5C + 1/4 OF DEV. 3B-A	13.55	14.08	8.4	4.37	7.78	59	110	42" @ 1.2%
5E	5D + 1/4 OF DEV. 3B-A (PIPE 6)	15.51	16.04	9.7	4.15	7.38	64	118	42" @ 1.4%
6	DP 4B	1.96	1.96	5.0	5.10	9.07	10	18	30" @ 0.2%
7	DP 5	1.44	1.52	5.0	5.10	9.07	7	14	24" @ 0.4%
8	DP 6 + PIPE 7	1.71	1.81	5.1	5.08	9.02	9	16	24" @ 0.5%
9A	PIPES 5E + 8	17.22	17.84	9.7	4.15	7.38	71	132	48" @ 0.9%
9B	PIPE 9A + 1/2 OF DEV. M-2	18.43	19.06	10.5	4.03	7.17	74	137	48" @ 0.9%

JOB NAME: *INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
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* PIPES ARE LISTED AT MAXIMUM SIZE REQUIRED TO ACCOMMODATE Q100 FLOWS AT MINIMUM GRADE. REFER TO INDIVIDUAL PIPE SHEETS FOR HYDRAULIC INFORMATION.

FINAL DRAINAGE REPORT ~ PIPE ROUTING SUMMARY

Pipe Run	Contributing Basins	Equivalent CA(5)	Equivalent CA(100)	Maximum Tc	Intensity		Flow		Pipe Size*
					I(5)	I(100)	Q(5)	Q(100)	
9C	PIPE 9B + 1/2 OF DEV. M-2	19.65	20.27	11.4	3.89	6.92	76	140	48" @ 1.0%
10	DP 7	0.72	0.76	5.0	5.10	9.07	4	7	18" @ 0.5%
12	PIPES 10	0.72	0.76	5.0	5.10	9.07	4	7	18" @ 0.5%
13	DP 9 (use Dev. As worst case for Tc)	3.33	3.33	6.0	4.86	8.64	16	29	30" @ 0.6%
14A	PIPES 12 + 13	4.05	4.09	6.3	4.79	8.51	19	35	30" @ 0.7%
14B	PIPE 14A + DP 10-X	5.73	5.77	7.0	4.63	8.24	27	48	36" @ 0.5%
14C	PIPE 14B + DP 14	6.72	6.82	7.8	4.48	7.97	30	54	42" @ 0.5%
14D	PIPE 14C + DP 10-Y	10.08	10.18	8.3	4.39	7.80	44	79	42" @ 0.5%
15	PIPE 14D + DP 11-X	14.54	14.65	9.7	4.15	7.39	60	108	48" @ 0.5%
15B	PIPE 15 + DP 11-A	16.77	16.88	11.1	3.93	6.99	66	118	48" @ 0.8%
16	DP 11-Y	1.12	1.12	5.0	5.10	9.07	6	10	36" @ 0.8%
17	DP 12	0.88	0.95	5.0	5.10	9.07	5	9	24" @ 0.2%
18	PIPE 17 + DP 13	3.04	3.23	5.0	5.10	9.07	16	29	36" @ 0.3%
18B	PIPE 18 + DP 11-B	7.51	7.69	7.8	4.49	7.98	34	61	36" @ 0.6%
19	PIPES 15B + 16 + 18B	25.40	25.68	11.1	3.93	6.99	100	180	54" @ 0.8%
20	DP 15	1.17	1.17	5.0	5.10	9.07	6	11	24" @ 0.2%
21	DP 16	0.63	0.63	5.0	5.10	9.07	3	6	18" @ 0.3%

JOB NAME: *INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER: *22206.00*
DATE: *07/24/07*
CALCULATED BY: *MAL*

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FINAL DRAINAGE REPORT ~ PIPE ROUTING SUMMARY

Pipe Run	Contributing Basins	Equivalent CA(5)	Equivalent CA(100)	Maximum Tc	Intensity		Flow		Pipe Size*
					I(5)	I(100)	Q(5)	Q(100)	
22	PIPES 20 + 21	1.80	1.80	5.3	5.03	8.95	9	16	24" @ 0.5%
23	DP 17	2.25	2.25	6.0	4.86	8.64	11	19	24" @ 1.0%
24	PIPES 22 + 23	4.05	4.05	6.0	4.86	8.64	20	35	30" @ 0.8%
25	DP 18	2.43	2.43	5.5	4.98	8.85	12	22	24" @ 0.6%
26	PIPES 24 + 25	6.48	6.48	6.5	4.75	8.44	31	55	36" @ 0.7%
28	DP 20	1.08	1.08	5.0	5.10	9.07	6	10	18" @ 0.7%
29	DP 21	0.36	0.36	5.0	5.10	9.07	2	3	18" @ 0.1%
30	PIPES 28 + 29	1.44	1.44	5.6	4.95	8.81	7	13	24" @ 0.3%
31	DP 22	0.23	0.23	5.0	5.10	9.07	1	2	18" @ 0.2%
32	PIPES 30 + 31	1.67	1.67	6.0	4.85	8.62	8	14	24" @ 0.4%
33	DP 23	0.99	0.99	5.0	5.10	9.07	5	9	18" @XX%
34	DP 24	0.99	0.99	5.0	5.10	9.07	5	9	18" @ 0.2%
35	PIPES 32 + 33	2.66	2.66	6.6	4.73	8.41	13	22	30" @ 0.4%
36	PIPES 34 + 35	3.65	3.65	6.6	4.73	8.41	17	31	30" @ 0.5%
38	DP 26	0.50	0.50	5.0	5.10	9.07	3	4	18" @ 0.2%
39	DP 27 + PIPE 38	0.77	0.77	5.1	5.09	9.05	4	7	18" @ 0.4%
41	DP 28 & 29 + PIPES 39	2.04	2.12	5.1	5.09	9.05	10	19	24" @ 0.6%

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FINAL DRAINAGE REPORT ~ PIPE ROUTING SUMMARY

Pipe Run	Contributing Basins	Equivalent CA(5)	Equivalent CA(100)	Maximum Tc	Intensity		Flow		Pipe Size*
					I(5)	I(100)	Q(5)	Q(100)	
44	PIPES 41 + DP 30	2.26	2.34	5.6	4.95	8.81	11	21	24" @ 0.9%
46	RD-11 + RD-12	0.42	0.45	5.0	5.10	9.07	2.2	4.1	12" @ 0.2%
47	Int. flows from DP 34	0.48	0.40	5.0	5.10	9.07	2	4	18" @ 0.2%
48	PIPES 46 + 47	0.91	0.85	5.0	5.10	9.07	5	8	18" @ 0.7%
50	PIPES 48 + RD-13 + RD-14	1.29	1.26	5.0	5.10	9.07	7	11	24" @ 0.3%
52	PIPE 50 + BASINS AA & BB + RD-15	1.52	1.49	5.0	5.10	9.07	8	14	24" @ 0.4%
54	DP 38 + RD-16	0.75	0.77	5.0	5.10	9.07	4	7	18" @ 0.7%
55	DP 39	0.36	0.36	5.0	5.10	9.07	2	3	12" @ 0.2%
57	PIPES 55 + RD-2	0.65	0.66	5.0	5.10	9.07	3	6	18" @ 0.4%
58	DP 41 + PIPE 57	1.10	1.11	5.0	5.10	9.07	6	10	24" @ 0.4%
59A	DP 43a	0.63	0.63	5.0	5.10	9.07	3	6	18" @ 0.2%
59B	PIPE 59 + DP 43b	1.26	1.26	5.0	5.10	9.07	6	11	18" @ 0.8%
60A	DP 44a	0.99	0.99	5.0	5.10	9.07	5	9	18" @ 0.2%
60B	PIPE 60A + DP 44b	1.80	1.80	5.0	5.10	9.07	9	16	24" @ 0.5%
61	PIPE 59B + PIPE 60B	3.06	3.06	5.1	5.08	9.04	16	28	30" @ 0.5%
62A	DP 45a	0.81	0.81	5.0	5.10	9.07	4	7	18" @ 0.8%
62B	PIPE 62A + DP 45b	0.91	0.91	5.0	5.10	9.07	5	8	18" @ 0.8%

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REFER TO INDIVIDUAL PIPE SHEETS FOR HYDRAULIC INFORMATION.

FINAL DRAINAGE REPORT ~ PIPE ROUTING SUMMARY

Pipe Run	Contributing Basins	Equivalent CA(5)	Equivalent CA(100)	Maximum Tc	Intensity		Flow		Pipe Size*
					I(5)	I(100)	Q(5)	Q(100)	
63	PIPE 61 + PIPE 62B	3.97	3.97	5.3	5.04	8.95	20	36	30" @ 0.5%
64	DP 48	12.06	12.06	9.0	4.27	7.58	51	91	48"
65	PIPE 63 + DP 47	4.51	4.54	5.3	5.04	8.95	23	41	36"
66	DP 49 + RD-10	0.64	0.67	5.0	5.10	9.07	3	6	18" @ 0.1%
67	PIPE 64 + PIPE 65 + PIPE 68B	17.65	17.68	9.0	4.27	7.58	75	134	48" @ 0.8%
67B	PIPE 66 + 67	18.29	18.35	9.5	4.18	7.43	76	136	48" @ 0.8%
68A	DP 74	3.51	3.51	6.0	4.86	8.64	17	30	30"
68B	DP 46	1.08	1.08	5.0	5.10	9.07	6	10	18"
69	PIPE 67B + PIPE 68A	21.80	21.86	10.5	4.03	7.16	88	156	30" @ 0.5%
70	DP 55	1.71	1.71	5.5	4.98	8.85	9	15	12" @ 0.6%
71	PIPE 69 + PIPE 70	23.51	23.57	11.0	3.95	7.03	93	166	12" @ 0.6%
72	DP 56	1.08	1.08	5.0	5.10	9.07	6	10	18" @ 0.2%
73	PIPE 71 + 72	24.59	24.65	11.5	3.88	6.90	95	170	18" @ 0.2%
75	DP 54 + RD7 + RD8 + RD9	1.12	1.12	5.0	5.10	9.07	6	10	18" @ 0.2%
76	PIPE 75 + RD4 + RD5 + RD6	2.08	2.13	5.0	5.10	9.07	11	19	24" @ 0.3%
77	PIPE 76 + RD1 + RD3	2.57	2.66	5.0	5.10	9.07	13	24	18"
81	PIPE 73 + PIPE 77	27.16	27.31	14.0	3.57	6.35	97	173	54" @ 0.7%

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REFER TO INDIVIDUAL PIPE SHEETS FOR HYDRAULIC INFORMATION.

FINAL DRAINAGE REPORT ~ PIPE ROUTING SUMMARY

Pipe Run	Contributing Basins	Equivalent CA(5)	Equivalent CA(100)	Maximum Tc	Intensity		Flow		Pipe Size*
					I(5)	I(100)	Q(5)	Q(100)	
82	DP 57	0.54	0.54	5.0	5.10	9.07	3	5	18" @ 0.7%
83	PIPE 82 + DP 58	2.07	2.07	5.0	5.10	9.07	11	19	24"
85	PIPE 81 + PIPE 83	29.23	29.38	14.0	3.57	6.35	104	187	54" @ 0.9%
85INTERIM	PIPE 85 W/O PIPE 64	28.42	28.57	14.0	3.57	6.35	102	181	54" @ 0.9%
87	DP 60 (DEV.)	0.54	0.57	5.0	5.10	9.07	3	5	24" (INTERIM) @ 0.4%
88	DP 61	15.99	18.45	15.0	3.46	6.16	55	114	48" @ 0.6%
89	DP 62	2.61	2.76	5.8	4.90	8.70	13	24	30" @ 0.3%
90	DP 63	2.97	3.14	7.5	4.55	8.09	14	25	30" @ 0.4%
91	PIPES 89 + 90	5.58	5.89	7.5	4.55	8.09	25	48	36" @ 0.5%
92	PIPES 87 + 88 + 91	22.11	24.91	15.0	3.46	6.16	77	153	60" @ 0.6%
92INTERIM	92 w/DP 61 -INTERIM	14.73	17.53	33.8	2.26	4.02	33	70	60" @ 0.6%
95	DP 65	9.08	12.71	35.1	2.21	3.93	20	50	36" @ 0.6%
96	DP 66 (DEV.)	8.64	8.64	8.4	4.38	7.78	38	67	42" @ 0.4%
97	PIPES 95 + 96	17.72	21.35	22.0	2.87	5.10	51	109	48" @ 0.6%
97B	PIPES 104 + 97	18.49	22.05	22.0	2.87	5.10	53	113	48" @ 0.6%
98	DP 67	0.92	0.83	5.0	5.10	9.07	5	8	18" @ 0.6%
99	PIPES 97B + 98	19.41	22.88	22.0	2.87	5.10	56	117	48" @ 0.7%

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FINAL DRAINAGE REPORT ~ PIPE ROUTING SUMMARY

Pipe Run	Contributing Basins	Equivalent CA(5)	Equivalent CA(100)	Maximum Tc	Intensity		Flow		Pipe Size*
					I(5)	I(100)	Q(5)	Q(100)	
99TEST	PIPE SIZE TEST (NO OFFSITE BASIN)	10.33	10.18	8.4	4.38	7.78	45	79	48" @ 0.3%
100	DP 68	0.54	0.57	5.0	5.10	9.07	3	5	18" @ 0.2%
101	DP 69	1.37	1.69	5.0	5.10	9.07	7	15	24" @ 0.4%
102	PIPES 100 + 101	1.91	2.26	5.2	5.06	8.99	10	20	24" @ 0.8%
103	PIPES 99 + 102	21.32	25.15	22.1	2.86	5.09	61	128	48" @ 0.8%
104	DP 71	0.78	0.71	5.0	5.10	9.07	4	6	18" @ 0.3%
105	DP 70 (INT.)	4.70	6.58	26.5	2.60	4.62	12	30	30" @ 0.5%
106	PIPE 103 + 105	26.02	31.73	22.7	2.82	5.02	73	159	54" @ 0.7%
106(DEV.)	PIPE 103	21.32	25.15	22.7	2.82	5.02	60	126	48" @ 0.8%
106TEST	PIPE SIZE TEST (NO OFFSITE BASIN)	13.02	13.15	8.4	4.38	7.78	57	102	54" @ 0.3%
106INTERIM	PIPE 106 W/O PIPE 96	17.38	23.09	22.7	2.82	5.02	49	116	54" @ 0.3%
SWALE 'A'	PIPE 92	22.11	24.91	15.0	3.46	6.16	77	153	GRASS SWALE
SWALE 'B'	PIPE 92 + PIPE 85	50.53	53.48	15.0	3.46	6.16	175	329	GRASS SWALE

JOB NAME: *INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER: *22206.00*
DATE: *07/24/07*
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FINAL DRAINAGE REPORT ~ PIPE TRAVEL TIMES

PIPE RUN	STREET / CHANNEL FLOW			
	Length (ft)	Slope (%)	Velocity (fps)	Tc (min)
1	110	2.6%	5.6	0.3
2	50	3.0%	6.1	0.1
3	80	2.6%	5.6	0.2
4	10	3.0%	6.1	0.0
5A	125	2.6%	5.6	0.4
5B	290	2.6%	5.6	0.9
5C	200	2.6%	5.6	0.6
5D	450	2.6%	5.6	1.3
6	30	3.0%	6.1	0.1
7	40	3.0%	6.1	0.1
8	160	3.0%	6.1	0.4
9A	220	1.9%	4.8	0.8
9B	220	1.9%	4.8	0.8
9C	100	5.0%	7.8	0.2
10	120	3.0%	6.1	0.3
12	30	3.0%	6.1	0.1
13	120	3.0%	6.1	0.3
14A	255	3.0%	6.1	0.7
14B	280	3.0%	6.1	0.8
14C	170	2.5%	5.5	0.5
14D	450	2.5%	5.5	1.4
15	440	2.0%	4.9	1.5
16	40	3.0%	6.1	0.1
17	250	3.0%	6.1	0.7
19	260	3.0%	6.1	0.7
20	100	3.0%	6.1	0.3
21	65	3.0%	6.1	0.2
22	60	3.0%	6.1	0.2
23	100	3.0%	6.1	0.3
24	180	3.0%	6.1	0.5
25	20	3.0%	6.1	0.1
26	230	3.0%	6.1	0.6

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FINAL DRAINAGE REPORT ~ PIPE TRAVEL TIMES

PIPE RUN	STREET / CHANNEL FLOW			
	Length (ft)	Slope (%)	Velocity (fps)	Tc (min)
28	220	3.0%	6.1	0.6
29	50	3.0%	6.1	0.1
30	160	3.0%	6.1	0.4
31	240	3.0%	6.1	0.7
32	190	3.0%	6.1	0.5
33	80	3.0%	6.1	0.2
34	30	3.0%	6.1	0.1
35	70	3.0%	6.1	0.2
36	70	3.0%	6.1	0.2
38	20	3.0%	6.1	0.1
39	150	2.0%	4.9	0.5
41	200	3.0%	6.1	0.5
44	180	3.0%	6.1	0.5
46	170	3.0%	6.1	0.5
47	80	3.0%	6.1	0.2
48	150	2.0%	4.9	0.5
50	130	3.0%	6.1	0.4
52	160	3.0%	6.1	0.4
54	130	3.0%	6.1	0.4
55	100	3.0%	6.1	0.3
57	70	3.0%	6.1	0.2
58	30	3.0%	6.1	0.1
59A	20	3.0%	6.1	0.1
59B	300	3.0%	6.1	0.8
60A	20	3.0%	6.1	0.1
60B	30	3.0%	6.1	0.1
61	55	2.0%	4.9	0.2
62A	300	0.5%	2.5	2.0
63	400	3.0%	6.1	1.1
64	20	3.0%	6.1	0.1
65	270	3.0%	6.1	0.7
67B	150	0.5%	2.5	1.0
68A	100	3.0%	6.1	0.3
70	180	3.0%	6.1	0.5

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FINAL DRAINAGE REPORT ~ PIPE TRAVEL TIMES

PIPE RUN	STREET / CHANNEL FLOW			
	Length (ft)	Slope (%)	Velocity (fps)	Tc (min)
71	30	3.0%	6.1	0.1
72	100	3.0%	6.1	0.3
73	50	3.0%	6.1	0.1
75	130	3.0%	6.1	0.4
76	140	3.0%	6.1	0.4
77	40	3.0%	6.1	0.1
81	150	1.0%	3.5	0.7
82	70	3.0%	6.1	0.2
83	30	3.0%	6.1	0.1
85	20	3.0%	6.1	0.1
87	470	3.0%	6.1	1.3
88	70	3.0%	6.1	0.2
89	50	3.0%	6.1	0.1
90	70	3.0%	6.1	0.2
91	60	3.0%	6.1	0.2
92	40	3.0%	6.1	0.1
95	1250	3.0%	6.1	3.4
96	80	3.0%	6.1	0.2
97	150	3.0%	6.1	0.4
98	20	3.0%	6.1	0.1
99	30	3.0%	6.1	0.1
100	65	3.0%	6.1	0.2
101	20	3.0%	6.1	0.1
102	220	3.0%	6.1	0.6
103	50	3.0%	6.1	0.1
104	40	3.0%	6.1	0.1
105	40	3.0%	6.1	0.1
106INTERIM	800	3.0%	6.1	2.2

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JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 2

Total Flow: Q_5 = 5 cfs

Q_{100} = 10 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 4 foot inlet required

INSTALL A PUBLIC 6 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 3

Total Flow: Q_5 = 8 cfs

Q_{100} = 17 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event:	4	foot inlet required
100-Year Event:	12	foot inlet required
INSTALL A PUBLIC	12	FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

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JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 5

Total Flow: Q_5 = 7 cfs

Q_{100} = 14 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 8 foot inlet required

INSTALL A PUBLIC 8 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

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DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 6

Total Flow: Q_5 = 1 cfs

Q_{100} = 3 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event:	4	foot inlet required
100-Year Event:	4	foot inlet required
INSTALL A PUBLIC	4	FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 7

Total Flow: Q_5 = 4 cfs

Q_{100} = 7 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 4 foot inlet required

INSTALL A PUBLIC 4 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 12

Total Flow: Q_5 = 5 cfs

Q_{100} = 9 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 4 foot inlet required

INSTALL A PUBLIC 6 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 13

Total Flow: Q_5 = 11 cfs

Q_{100} = 21 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 6 foot inlet required

100-Year Event: 16 foot inlet required

INSTALL A PUBLIC 16 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 14

Total Flow: Q_5 = 5 cfs

Q_{100} = 10 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: [4] foot inlet required

100-Year Event: [4] foot inlet required

INSTALL A PUBLIC [4] FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 15

Total Flow: Q_5 = 6 cfs

Q_{100} = 11 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 6 foot inlet required

INSTALL A PUBLIC 6 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 16

Total Flow: Q_5 = 3 cfs

Q_{100} = 6 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: [4] foot inlet required

100-Year Event: [4] foot inlet required

INSTALL A PUBLIC [6] FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 17

Total Flow: Q_5 = 11 cfs

Q_{100} = 19 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 6 foot inlet required

100-Year Event: 14 foot inlet required

INSTALL A PUBLIC 16 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 18

Total Flow: Q_5 = 12 cfs

Q_{100} = 22 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 6 foot inlet required

100-Year Event: 16 foot inlet required

INSTALL A PUBLIC 16 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 20

Total Flow: Q_5 = 6 cfs

Q_{100} = 10 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 4 foot inlet required

INSTALL A PUBLIC 6 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 21

Total Flow: Q_5 = 2 cfs

Q_{100} = 3 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 4 foot inlet required

INSTALL A PUBLIC 4 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 23

Total Flow: Q_5 = 5 cfs

Q_{100} = 9 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 4 foot inlet required

INSTALL A PUBLIC 6 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 24

Total Flow: Q_5 = 5 cfs

Q_{100} = 9 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 4 foot inlet required

INSTALL A PUBLIC 6 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT **26**

Total Flow: Q_5 = 3 cfs

Q_{100} = 4 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 4 foot inlet required

INSTALL A PUBLIC 4 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 27

Total Flow: Q_5 = 1 cfs

Q_{100} = 2 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 4 foot inlet required

INSTALL A PUBLIC 4 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 28

Total Flow: Q_5 = 5 cfs

Q_{100} = 10 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: [4] foot inlet required

100-Year Event: [4] foot inlet required

INSTALL A PUBLIC [6] FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 34 **100 YEAR FLOW**

Q(100)	6	I(100)	9.1		
DEPTH	0.32	Fr	1.51	Inlet size ? L(i) =	8
SPREAD	9.5	L(1)	12.5	If Li < L(2) then Qi =	4
CROSS SLOPE	3.0%	L(2)	8.1	If Li > L(2) then Qi =	4
STREET SLOPE	1.4%	L(3)	23.7	FB =	2
				CA(eqv.)=	0.23

5 YEAR FLOW

Q(5)	3	I(5)	5.1		
DEPTH	0.26	Fr	1.40	Inlet size ? L(i) =	8
SPREAD	6.8	L(1)	8.2	If Li < L(2) then Qi =	3
CROSS SLOPE	3.0%	L(2)	5.4	If Li > L(2) then Qi =	2
STREET SLOPE	1.4%	L(3)	15.6	FB =	1
				CA(eqv.)=	0.15

JOB NAME: *INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER: *22206.00*
DATE: *7/24/2007*
CALCULATED BY: *MAL*

DESIGN POINT 38

Total Flow: Q(5) = 2 cfs
Q(100) = 3 cfs

Maximum allowable ponding depth at sump:

D(5) = 0.50 (d)
D(100) = 0.50 (dmax)

Qi = [(3.0)(P)(d1.5)]/F (Weir Conditions)

Clogging Factor (F) = 2.0

5-Year Event: 3.5 foot perimeter required

100-Year Event: 6.2 foot perimeter required

INSTALL A PUBLIC 3'x3' FT D-9 INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME: *INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER: *22206.00*
DATE: *7/24/2007*
CALCULATED BY: *MAL*

DESIGN POINT 39

Total Flow: Q(5) = 2 cfs
Q(100) = 3 cfs

Maximum allowable ponding depth at sump:

D(5) = 0.50 (d)
D(100) = 0.50 (dmax)

Qi = [(3.0)(P)(d1.5)]/F (Weir Conditions)

Clogging Factor (F) = 2.0

5-Year Event: 3.5 foot perimeter required

100-Year Event: 6.2 foot perimeter required

INSTALL A PUBLIC 3' x 3' FT D-9 INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME: *INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER: *22206.00*
DATE: *7/24/2007*
CALCULATED BY: *MAL*

DESIGN POINT 41

Total Flow: Q(5) = 2 cfs
Q(100) = 4 cfs

Maximum allowable ponding depth at sump:

D(5) = 0.50 (d)
D(100) = 0.67 (dmax)

Qi = [(3.0)(P)(d1.5)]/F (Weir Conditions)

Clogging Factor (F) = 2.0

5-Year Event: 4.3 foot perimeter required

100-Year Event: 5.0 foot perimeter required

INSTALL A PUBLIC 3' X 3' FT D-9 INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 43a

Total Flow: Q_5 = 3 cfs

Q_{100} = 6 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 4 foot inlet required

INSTALL A PUBLIC 4 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 43b

Total Flow: Q_5 = 3 cfs

Q_{100} = 6 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: [4] foot inlet required

100-Year Event: [4] foot inlet required

INSTALL A PUBLIC [4] FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 44a

Total Flow: Q_5 = 5 cfs

Q_{100} = 9 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 4 foot inlet required

INSTALL A PUBLIC 4 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 44b

Total Flow: Q_5 = 4 cfs

Q_{100} = 7 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 4 foot inlet required

INSTALL A PUBLIC 4 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME: *INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER: *22206.00*
DATE: *7/24/2007*
CALCULATED BY: *MAL*

DESIGN POINT 45a

Total Flow: Q(5) = 4 cfs
Q(100) = 7 cfs

Maximum allowable ponding depth at sump:

D(5) = 0.50 (d)
D(100) = 0.50 (dmax)

Qi = [(3.0)(P)(d1.5)]/F (Weir Conditions)

Clogging Factor (F) = 2.0

5-Year Event: 7.8 foot perimeter required

100-Year Event: 13.9 foot perimeter required

INSTALL A PUBLIC 6' X 3' FT D-9 INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME: *INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER: *22206.00*
DATE: *7/24/2007*
CALCULATED BY: *MAL*

DESIGN POINT 45b

Total Flow: Q(5) = 1 cfs
Q(100) = 1 cfs

Maximum allowable ponding depth at sump:

D(5) = 0.50 (d)
D(100) = 0.50 (dmax)

Qi = [(3.0)(P)(d1.5)]/F (Weir Conditions)

Clogging Factor (F) = 2.0

5-Year Event: 1.0 foot perimeter required

100-Year Event: 1.7 foot perimeter required

INSTALL A PUBLIC 3' X 3' FT D-9 INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 46

Total Flow: Q_5 = 6 cfs

Q_{100} = 10 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 4 foot inlet required

INSTALL A PUBLIC 6 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 47

Total Flow: Q_5 = 5 cfs

Q_{100} = 9 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 4 foot inlet required

INSTALL A PUBLIC 6 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT **49**

Total Flow: Q_5 = 2 cfs

Q_{100} = 4 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: [4] foot inlet required

100-Year Event: [4] foot inlet required

INSTALL A PUBLIC [6] FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 54

Total Flow: Q_5 = 3 cfs

Q_{100} = 5 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 4 foot inlet required

INSTALL A PUBLIC 4 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT **55**

Total Flow: Q_5 = 9 cfs

Q_{100} = 15 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 10 foot inlet required

INSTALL A PUBLIC 12 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT **56**

Total Flow: Q_5 = 6 cfs

Q_{100} = 10 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 4 foot inlet required

INSTALL A PUBLIC 6 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 57

Total Flow: Q_5 = 3 cfs

Q_{100} = 5 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 4 foot inlet required

INSTALL A PUBLIC 6 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 58

Total Flow: Q_5 = 8 cfs

Q_{100} = 14 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: [4] foot inlet required

100-Year Event: [8] foot inlet required

INSTALL A PUBLIC [8] FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT **60**

Total Flow: Q_5 = 6 cfs

Q_{100} = 14 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: [4] foot inlet required

100-Year Event: [8] foot inlet required

INSTALL A PUBLIC [8] FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 62

Total Flow: Q_5 = 13 cfs

Q_{100} = 24 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.55 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: [8] foot inlet required

100-Year Event: [16] foot inlet required

INSTALL A PUBLIC [16] FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 63

Total Flow: Q_5 = 14 cfs

Q_{100} = 25 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.60 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 8 foot inlet required

100-Year Event: 16 foot inlet required

INSTALL A PUBLIC 16 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 67 **100 YEAR FLOW**

Q(100)	13	I(100)	9.1		
DEPTH	0.36	Fr	2.32	Inlet size ? L(i) =	12
SPREAD	11.5	L(1)	20.6	If Li < L(2) then Qi =	8
CROSS SLOPE	2.0%	L(2)	12.4	If Li > L(2) then Qi =	8
STREET SLOPE	3.5%	L(3)	44.1	FB =	5
				CA(eqv.)=	0.59

5 YEAR FLOW

Q(5)	7	I(5)	5.1		
DEPTH	0.30	Fr	2.19	Inlet size ? L(i) =	12
SPREAD	8.8	L(1)	14.8	If Li < L(2) then Qi =	6
CROSS SLOPE	2.0%	L(2)	8.9	If Li > L(2) then Qi =	5
STREET SLOPE	3.5%	L(3)	31.7	FB =	2
				CA(eqv.)=	0.43

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT **68**

Total Flow: Q_5 = 3 cfs

Q_{100} = 5 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 4 foot inlet required

INSTALL A PUBLIC 4 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 69

Total Flow: Q_5 = 7 cfs

Q_{100} = 15 cfs

Maximum allowable ponding depth at sump:

D_5 = 0.50

D_{100} = 0.50 (dmax)

Qi = 1.7(Li+1.8(W))(dmax + w/12)^1.85

Clogging Factor = 1.25

Li (1.25) = Length of inlet opening

5-Year Event: 4 foot inlet required

100-Year Event: 10 foot inlet required

INSTALL A PUBLIC 10 FT D-10-R INLET TO ACCEPT BOTH 5YR & 100 YR DEVELOPED FLOWS AT THIS DESIGN POINT.

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 71 **100 YEAR FLOW**

Q(100)	10	I(100)	9.1		
DEPTH	0.34	Fr	2.28	Inlet size ? L(i) =	12
SPREAD	10.5	L(1)	18.4	If Li < L(2) then Qi =	7
CROSS SLOPE	2.0%	L(2)	11.1	If Li > L(2) then Qi =	6
STREET SLOPE	3.5%	L(3)	39.5	FB =	4
				CA(eqv.)=	0.43

5 YEAR FLOW

Q(5)	6	I(5)	5.1		
DEPTH	0.28	Fr	2.14	Inlet size ? L(i) =	12
SPREAD	7.8	L(1)	12.7	If Li < L(2) then Qi =	5
CROSS SLOPE	2.0%	L(2)	7.7	If Li > L(2) then Qi =	4
STREET SLOPE	3.5%	L(3)	27.3	FB =	2
				CA(eqv.)=	0.30

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 72 **100 YEAR FLOW**

Q(100)	18	I(100)	8.3		
DEPTH	0.45	Fr	1.78	Inlet size ? L(i) =	5.8
SPREAD	16.0	L(1)	21.9	If Li < L(2) then Qi =	5
CROSS SLOPE	2.0%	L(2)	13.1	If Li > L(2) then Qi =	8
STREET SLOPE	1.8%	L(3)	46.9	FB =	13
				CA(eqv.)=	1.61

5 YEAR FLOW

Q(5)	10	I(5)	4.6		
DEPTH	0.37	Fr	1.69	Inlet size ? L(i) =	5.8
SPREAD	12.3	L(1)	15.9	If Li < L(2) then Qi =	4
CROSS SLOPE	2.0%	L(2)	9.6	If Li > L(2) then Qi =	5
STREET SLOPE	1.8%	L(3)	34.1	FB =	6
				CA(eqv.)=	1.32

JOB NAME:	*INTERQUEST NORTH - FILINGS NO. 1 & 2 FDR*
JOB NUMBER:	*22206.00*
DATE:	*07/24/07*
CALCULATED BY:	*MAL*

DESIGN POINT 73 **100 YEAR FLOW**

Q(100)	30	I(100)	8.6		
DEPTH	0.50	Fr	2.32	Inlet size ? L(i) =	16
SPREAD	18.5	L(1)	33.0	If Li < L(2) then Qi =	15
CROSS SLOPE	2.0%	L(2)	19.8	If Li > L(2) then Qi =	17
STREET SLOPE	2.9%	L(3)	70.8	FB =	16
				CA(eqv.)=	1.81

5 YEAR FLOW

Q(5)	17	I(5)	4.9		
DEPTH	0.40	Fr	2.19	Inlet size ? L(i) =	16
SPREAD	13.8	L(1)	23.2	If Li < L(2) then Qi =	12
CROSS SLOPE	2.0%	L(2)	13.9	If Li > L(2) then Qi =	11
STREET SLOPE	2.9%	L(3)	49.7	FB =	6
				CA(eqv.)=	1.28

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DRAINAGE MAP
EXISTING CONDITIONS

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DRAINAGE MAP

FILING NO. 1 & 2 INTERIM CONDITIONS

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DRAINAGE MAP

FULLY DEVELOPED CONDITIONS

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DRAINAGE MAP

FILING NO. 1 & 2 FINAL DRAINAGE REPORT

MASTER DEVELOPMENT DRAINAGE PLAN
MARKETPLACE AT INTERQUEST
EXISTING CONDITIONS DRAINAGE MAP

DRAINAGE BASIN SUMMARY

BASIN (label)	TOTAL BASIN AREA (acres)	TOTAL BASIN AREA (sq mi)	WEIGHTED CN	TOTAL LAG TIME (hours)	TOTAL Tc (hours)	Q 2 Yr. (cfs)	Q 5 Yr. (cfs)	Q 10 Yr. (cfs)	Q 25 Yr. (cfs)	Q 50 Yr. (cfs)	Q 100 Yr. (cfs)
02B	12.4	0.0194	61.0	0.2265	0.3774	0.14	1.71	3.56	7.19	10.05	13.24
EX-A	10.5	0.0164	61.0	0.1774	0.2956	0.13	1.74	3.57	7.09	9.94	12.83
EX-B	7.1	0.0111	79.8	0.0654	0.1091	6.63	11.21	14.48	19.57	23.05	26.58
EX-C1	0.3	0.0004	98.0	0.0487	0.0812	0.64	0.84	0.97	1.17	1.30	1.43
EX-C2	0.4	0.0007	93.0	0.0487	0.0812	0.88	1.22	1.44	1.76	2.00	2.22
PR-D	11.4	0.0178	61.0	0.1876	0.5317	0.12	1.21	2.53	5.17	7.31	9.69
EX-H	1.2	0.0019	98.0	0.0487	0.0833	1.70	2.23	2.58	3.11	3.46	3.81
EX-G	1.0	0.0016	98.0	0.0487	0.0833	0.71	0.93	1.08	1.30	1.44	1.59
VP-1	1.2	0.0019	85.7	0.0960	0.1599	1.57	2.43	3.01	3.91	4.51	5.12
IP-1	1.3	0.0020	85.7	0.1015	0.1692	1.69	2.61	3.24	4.21	4.86	5.52
IP-2	2.0	0.0031	85.7	0.1348	0.2247	2.43	3.80	4.75	6.20	7.18	8.18
O-3B	70.5	0.1102	61.0	0.3320	0.5533	0.74	7.27	15.15	31.04	43.91	58.28
O-3C1	16.4	0.0256	61.0	0.2598	0.4330	0.18	2.04	4.25	8.65	12.15	16.06
SE-1	5.0	0.0078	61.0	0.1487	0.2478	0.07	0.94	1.90	3.71	5.12	6.66
AF-1	11.8	0.0184	61.0	0.1785	0.2941	0.14	1.96	4.03	7.99	11.08	14.45
O-3C2	33.0	0.0516	61.0	0.2598	0.4330	0.38	4.11	8.56	17.41	24.46	32.32
AF-2	20.5	0.0320	61.0	0.1820	0.3033	0.25	3.33	6.85	13.61	18.94	24.76
EK-1	11.8	0.0184	61.0	0.1931	0.3219	0.14	1.94	3.79	7.57	10.53	13.80
AF-3	16.4	0.0256	61.0	0.1931	0.3219	0.19	2.56	5.27	10.52	14.64	19.17
BS-1	21.5	0.0336	61.0	0.2376	0.3959	0.24	2.86	5.95	12.05	16.92	22.28
BS-2	46.7	0.0730	61.0	0.3209	0.5348	0.49	4.94	10.31	21.11	29.84	39.57
BS-3	58.8	0.0919	61.0	0.3209	0.5348	0.62	6.22	12.98	26.58	37.58	49.82

DRAINAGE DESIGN POINTS SUMMARY

Design Point (label)	Q 2 Yr. Q (cfs) Ponding (ft)	Q 5 Yr. Q (cfs) Ponding (ft)	Q 10 Yr. Q (cfs) Ponding (ft)	Q 50 Yr. Q (cfs) Ponding (ft)	Q 100 Yr. Q (cfs) Ponding (ft)
IBS IN	8.63	11.21	14.48	23.05	26.58
IBS OUT	1.82 / 6788.08	2.03 / 6788.46	2.20 / 6788.77	2.63 / 6789.68	2.78 / 6790.03
1	1.94	4.18	7.07	18.32	24.02
2	3.15	4.59	7.30	18.68	24.44
3	3.30	5.58	9.69	25.52	33.57
3a	4.81	7.10	9.91	25.81	33.87
4	3.01	4.77	5.97	9.12	10.40
5	6.95	14.52	25.60	66.87	87.92
6	6.71	18.37	32.58	85.48	112.59
EK3A IN	6.71	18.37	32.58	85.48	112.59
EK3A OUT	3.02 / 6608.34	8.52 / 6609.04	12.85 / 6609.46	22.69 / 6610.75	24.34 / 6611.29
7	2.35	6.21	10.05	19.64	22.50
8	0.59	7.06	14.69	41.90	55.25
I25-4 IN	0.59	7.06	14.69	41.90	55.25
I25-4 OUT	0.43 / 6600.27	4.65 / 6601.04	10.92 / 6601.78	19.46 / 6602.85	22.78 / 6603.42
9	0.43	4.65	10.92	19.46	22.78
10	0.33	4.40	9.05	25.17	32.97
I25-5 IN	0.33	4.40	9.05	25.17	32.97
I25-5 OUT	0.22 / 6600.16	2.49 / 6600.73	5.27 / 6601.25	15.92 / 6602.35	18.88 / 6602.76
11	0.22	2.49	6.32	15.92	18.88
12	0.24	2.86	5.95	15.92	22.28
13	0.49	4.94	10.31	29.84	39.57
14	0.62	6.22	12.98	37.58	49.82

DRAINAGE CONVEYANCE SUMMARY

Conveyance Label	Type	Length ft.	Bottom Width ft.	Slope %	Side Slope H to 1	Manning's N value	Available Depth ft.	Q 5 Yr. cfs	Q 100 Yr. cfs	Q Capacity cfs
C1	Grass Lined Channel	1200	4.0	0.7850	3.0	0.035	1.500	1.02	11.05	46.20
C2	18" RCP	285	1.5	0.4980	N/A	0.013	N/A	2.03	2.78	7.41
C3	36" RCP	250	3.0	1.0000	N/A	0.013	N/A	4.16	24.02	66.69
C4	Grass Lined Channel	1050	4.0	3.4360	3.0	0.035	2.000	4.33	23.87	177.86
C5	36" RCP	250	3.0	1.0000	N/A	0.013	N/A	5.57	33.52	66.69
C6	Paved Channel	1500	2.0	2.4000	10.0	0.013	1.000	2.22	4.93	141.43
C7	Paved Channel	2000	2.0	3.0000	10.0	0.013	1.000	4.25	9.83	158.12
C8	Grass Lined Channel	3600	20.0	2.9860	10.0	0.035	1.000	4.76	26.00	181.19
C9	Grass Lined Channel	1000	3.0	2.8500	5.0	0.035	1.500	14.34	87.17	102.15
C10	24" RCP	100	2.0	2.0000	N/A	0.013	N/A	6.21	22.50	31.99
C11	24" RCP	150	2.0	2.0000	N/A	0.013	N/A	4.65	22.78	31.99
C12	24" RCP	150	2.0	2.0000	N/A	0.013	N/A	2.49	18.88	31.99

LEGEND

DESCRIPTION	SYMBOL
EXISTING 10' INDEX CONTOUR	
EXISTING 2' INTERMEDIATE CONTOUR	
LIMITS OF DEVELOPMENT	
DRAINAGE BASIN BOUNDARY	
DRAINAGE SUB-BASIN BOUNDARY	
CONVEYANCE CHANNEL UN-PAVED SWALE	
CONVEYANCE CHANNEL PAVED SWALE / STORM PIPE	
LIMITS OF DETENTION POND	
PROPOSED STORM SEWER	
BASIN IDENTIFIER ID / AREA IN ACRES	A12 / 31.1 Ac.
DESIGN POINT ID	88
CONVEYANCE CHANNEL ID	E-4
BLACK SQUIRREL - ELK HORN DRAINAGE BASIN DIVISION LINE	

BLACK SQUIRREL-3
BLACK SQUIRREL-2
BLACK SQUIRREL-1
INTERSTATE 25
U.S. AIR FORCE ACADEMY PROPERTY
INTERSTATE 25 RIGHT-OF-WAY
BS-3 58.8 Ac.
BLACK SQUIRREL-3 UN-DEVELOPED
BS-1 21.5 Ac.
BLACK SQUIRREL-1 UN-DEVELOPED
BS-2 46.7 Ac.
BLACK SQUIRREL-2 UN-DEVELOPED
APPROX. LIMITS OF PONDING DUE TO UNDERSIZED CULVERT.
AF-3 16.4 Ac.
ELKHORN-5 INTERSTATE 25 RIGHT-OF-WAY
EK-1 11.8 Ac.
ELKHORN-5 UN-DEVELOPED
BACKWATER POND 125-5
ELKHORN-5 EXISTING 24" RCP CULVERT CAPACITY: 20 cfs HISTORIC 100 YR. FLOW: 61 cfs * * INTERSTATE 25-FAIRLANE INTERCHANGE FINAL HYDRAULIC REPORT PHASE 1
APPROX. LIMITS OF PONDING DUE TO UNDERSIZED CULVERT.
AF-2 20.5 Ac.
ELKHORN-4 INTERSTATE 25 RIGHT-OF-WAY
BACKWATER POND 125-4
O-3C2 63.0 Ac.
ELKHORN-4 UN-DEVELOPED
ELKHORN-4 EXISTING 24" RCP CULVERT CAPACITY: 55 cfs HISTORIC 100 YR. FLOW: 117 cfs * * INTERSTATE 25-FAIRLANE INTERCHANGE FINAL HYDRAULIC REPORT PHASE 1
DETENTION POND EK-3A
AF-1 11.6 Ac.
ELKHORN-3 INTERSTATE 25 RIGHT-OF-WAY
U.S. AIR FORCE ACADEMY PROPERTY
O-3C1 16.4 Ac.
ELKHORN-3 UN-DEVELOPED
SE-1 5.0 Ac.
ELKHORN-3 UN-DEVELOPED
ELKHORN-3 EXISTING 24" RCP CULVERT CAPACITY: 22 cfs HISTORIC 100 YR. FLOW: 95 cfs * * INTERSTATE 25-FAIRLANE INTERCHANGE FINAL HYDRAULIC REPORT PHASE 1
IP-2 4.0 Ac.
2.0 AC. FLOW BY TO ELKHORN-3
2.0 AC. INLET CAPTURE ELKHORN-2
INTERQUEST PARKWAY RIGHT-OF-WAY
O-3B 70.5 Ac.
ELKHORN-3 UN-DEVELOPED
VP-1 2.3 Ac.
1.2 AC. FLOW BY TO ELKHORN-3
1.1 AC. INLET CAPTURE ELKHORN-1
VOYAGER PARKWAY RIGHT-OF-WAY
IP-1 2.5 Ac.
1.3 AC. FLOW BY TO ELKHORN-3
1.2 AC. INLET CAPTURE ELKHORN-1
INTERQUEST PARKWAY RIGHT-OF-WAY
VOYAGER PARKWAY
ELKHORN-3 DRAINAGE BASIN
ELKHORN-2 DRAINAGE BASIN
ELKHORN-3 DRAINAGE BASIN
ELKHORN-1 DRAINAGE BASIN
INTERQUEST PARKWAY
LOT 4, FAIRLANE TECHNOLOGY PARK FILING NO. 2
ELKHORN-2 UN-DEVELOPED
FIRST UNITED BANK
INTERQUEST FILING NO. 3
ELKHORN-1 PARTIALLY DEVELOPED
ELKHORN-2 EXISTING 24" RCP CULVERT CAPACITY: 36 cfs
STATE HIGHWAY 83
BLACK SQUIRREL DRAINAGE BASIN
EX-C1 0.27 Ac.
ELKHORN-2 JETSTREAM DRIVE RIGHT-OF-WAY
INTERNATIONAL BIBLE SOCIETY FILING NO. 1
EX-C2 0.44 Ac.
ELKHORN-3 JETSTREAM DRIVE RIGHT-OF-WAY
EX-B 7.1 Ac.
ELKHORN-3 DEVELOPED DETENTION POND IBS
PR-D 11.4 Ac.
ELKHORN-3 UN-DEVELOPED
JETSTREAM DRIVE
EX-A 10.5 Ac.
ELKHORN-3 UN-DEVELOPED
02B 44.6 Ac.
12.4 AC. FLOW BY TO ELKHORN-3
32.2 AC. PIPE CAPTURE TO ELKHORN-1
UN-DEVELOPED
ELKHORN-3 DRAINAGE BASIN
BLACK SQUIRREL DRAINAGE BASIN
ELKHORN-3 DRAINAGE BASIN
NEW LIFE DRIVE
ELKHORN-1 DRAINAGE BASIN
EXISTING 24" CULVERT CAPACITY = 35 CFS PER "MASTER DEVELOPMENT DRAINAGE PLAN UPDATE, FAIRLANE TECH. PARK", REVISED FEBRUARY 2001. EXCESS FLOW TO OVERTOP AND CONTINUE WEST INTO EK-3 BASIN.
EX-G 1.0 Ac.
EX-H 1.2 Ac.
NEW LIFE CHURCH
B3 40.0 Ac.
ELKHORN-1 DEVELOPED
PIKES PEAK COMMUNITY COLLEGE
B2 62.7 Ac.
ELKHORN-1 PARTIALLY DEVELOPED
NEW LIFE CHURCH DETENTION POND
PIKES PEAK COMMUNITY COLLEGE DETENTION POND
INTERQUEST PARKWAY-RELOCATED STATE HWY. 83
LOT 1, FAIRLANE TECHNOLOGY PARK FILING NO. 1
A1 56.9 Ac.
ELKHORN-1 UN-DEVELOPED
ELKHORN-1 DRAINAGE BASIN
KETTLE CREEK DRAINAGE BASIN

N

200' 100' 0 200' 400'

SCALE: 1" = 200'

EXISTING CONDITIONS DRAINAGE MAP
MARKETPLACE AT INTERQUEST

SHEET 1 OF 1

CLASSIC CONSULTING ENGINEERS & SURVEYORS
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Colorado Springs, Colorado 80919
(719)785-0790
(719)785-0799 (Fax)

MASTER DEVELOPMENT DRAINAGE PLAN

MARKETPLACE AT INTERQUEST

INTERIM CONDITIONS DRAINAGE MAP

WATER QUALITY SUMMARY

POND (label)	WQ BASIN AREA (acres)	WQ BASIN % Impervious	WQ VOLUME REQUIRED (acre-feet)	WQ PONDING ELEV. (feet)	WQ PONDING HEIGHT (feet)	# WQ ORIFICE COLUMNS	# WQ ORIFICE ROWS	WQ ORIFICE DIAMETER (inches)
EK-3B	100.8	18.3	1.001	6631.8	2.8	3	16	0.750
EK-4	10.9	85.0	0.395	6634.6	1.8	1	5	1.250
BS-1T	44.7	85.0	0.201	6668.5	1.5	2	11	1.000
BS-3T	67.4	25.4	0.918	6625.3	3.3	1	12	2.000

DETENTION POND SUMMARY

POND (label)	RISER DIMENSIONS (feet)	RISER CREST ELEV. (feet)	OUTLET PIPE DIAMETER (inches)	OUTLET PIPE INVERT (feet)	OUTLET PIPE SLOPE (%)	INVERT OF POND (feet)	INVERT OF EMERG. SPILLWAY (feet)	LENGTH OF EMERG. SPILLWAY (feet)	EMERGENCY SPILLWAY FLOW DEPTH (feet)	FREE-BOARD DEPTH (feet)	CREST OF DAM (feet)
EK-3B	7.0' x 4.0'	6638.00	48" RCP	6629.00	0.5	6629.00	6641.00	116	0.8	2.4	6642.00
EK-3A	N/A	N/A	24" RCP	6607.5	2.0	6607.50	6611.33	90	1.0	0.7	6613.00
EK-4	7.0' x 4.0'	6637.45	36" RCP	6632.6	1.0	6632.60	6638.00	18	1.0	2.0	6641.00
I25-4	N/A	N/A	24" RCP	6600.0	2.0	6600.00	N/A	N/A	N/A	6.5	6609.00
I25-5	N/A	N/A	24" RCP	6600.0	2.0	6600.00	N/A	N/A	N/A	0.8	6603.00
IBS	N/A	N/A	18" RCP	6786.0	1.4	6786.00	N/A	N/A	N/A	1.0	6791.00
BS-1T	7.0' x 4.0'	6675.00	36" RCP	6669.2	2.0	6669.00	6679.00	100	1.0	2.0	6680.00
BS-3T	4.0' x 4.0'	6628.50	12" RCP	6624.0	1.0	6622.00	6630.30	100	0.2	N/A	6632.00

DRAINAGE DESIGN POINTS SUMMARY

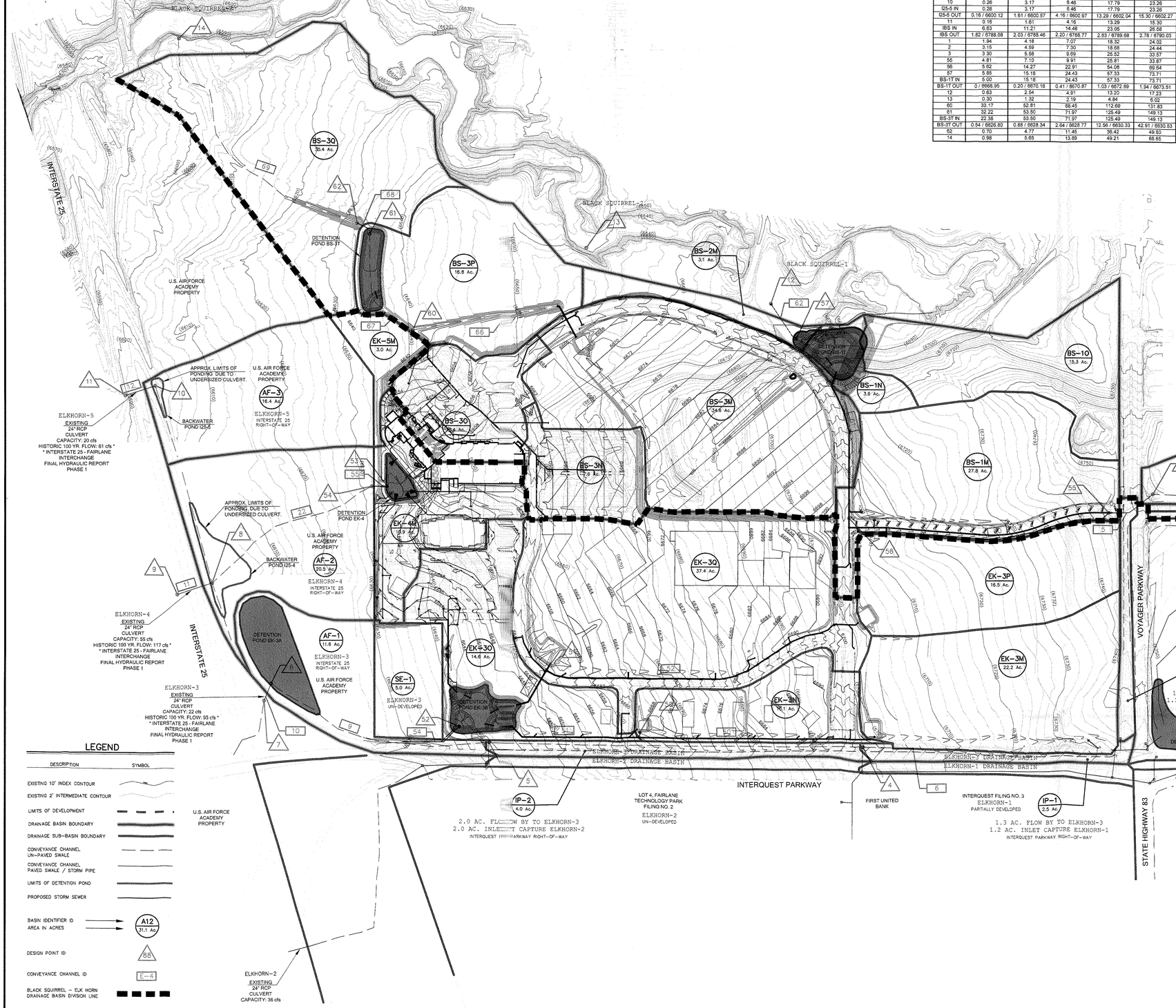
Design Point (label)	Q 2 Yr. Q (cfs) Ponding (ft)	Q 5 Yr. Q (cfs) Ponding (ft)	Q 10 Yr. Q (cfs) Ponding (ft)	Q 50 Yr. Q (cfs) Ponding (ft)	Q 100 Yr. Q (cfs) Ponding (ft)
50	6.10	14.71	22.65	47.60	59.05
51	10.16	24.52	37.14	76.72	94.76
52	38.82	89.67	95.04	171.66	206.51
EK-3B IN	38.82	89.67	95.04	171.66	206.51
EK-3B OUT	1.22 / 6632.82	1.53 / 6634.26	3.94 / 6634.90	17.96 / 6636.61	26.80 / 6637.38
4	3.19	8.42	13.61	30.13	37.77
5	2.60	3.98	4.56	11.77	18.60
6	2.29	6.29	10.24	22.93	29.63
EK-3A IN	3.06	7.25	11.28	24.82	32.55
EK-3A OUT	1.43 / 6608.07	2.28 / 6608.21	4.12 / 6608.52	15.09 / 6609.67	19.53 / 6610.13
7	0.38	1.34	2.84	10.50	13.43
53	21.71	30.06	35.61	49.37	54.84
EK-4 IN	21.71	30.06	35.61	49.37	54.84
EK-4 OUT	0.35 / 6636.28	2.49 / 6636.63	5.78 / 6638.96	22.64 / 6637.85	30.64 / 6637.85
54	0.35	2.49	5.78	22.64	30.64
8	0.52	4.52	10.92	38.88	52.65
I25-4 IN	0.52	4.52	10.92	38.88	52.65
I25-4 OUT	0.45 / 6600.28	3.38 / 6600.86	8.02 / 6601.45	17.99 / 6602.63	21.10 / 6603.12
9	0.45	3.38	8.02	17.99	21.10
10	0.26	3.17	6.46	17.79	23.26
I25-5 IN	0.26	3.17	6.46	17.79	23.26
I25-5 OUT	0.16 / 6600.12	1.61 / 6600.57	4.16 / 6600.97	13.29 / 6602.04	15.30 / 6602.27
11	0.16	1.61	4.16	13.29	15.30
IBS IN	6.63	11.21	14.48	23.05	26.58
IBS OUT	1.82 / 6788.08	2.03 / 6788.46	2.20 / 6788.77	2.63 / 6789.68	2.78 / 6790.03
1	1.94	4.18	7.07	18.32	24.02
2	3.15	4.59	7.30	18.68	24.44
3	3.30	5.58	8.69	25.52	33.57
55	4.81	7.10	9.91	25.81	33.87
56	5.62	14.27	22.91	54.08	69.64
57	5.85	15.18	24.43	57.33	73.71
BS-1T IN	5.00	15.18	24.43	57.33	73.71
BS-1T OUT	0 / 6666.95	0.20 / 6670.16	0.41 / 6670.87	1.03 / 6672.89	1.94 / 6673.51
12	0.63	2.54	4.91	13.20	17.23
13	0.30	1.32	2.19	4.84	6.02
60	33.17	52.81	68.45	112.69	131.83
61	32.22	53.50	71.97	125.49	149.13
BS-3T IN	22.38	53.50	71.97	125.49	149.13
BS-3T OUT	0.54 / 6626.80	0.88 / 6628.34	2.64 / 6628.77	12.56 / 6630.33	42.91 / 6630.63
62	0.70	4.77	11.46	36.42	49.83
14	0.98	5.65	13.89	49.21	66.65

DRAINAGE BASIN SUMMARY

BASIN (label)	TOTAL BASIN AREA (acres)	TOTAL BASIN AREA (sq mi)	WEIGHTED CN	TOTAL LAG TIME (hours)	TOTAL Tc (hours)	Q 2 Yr. Q (cfs)	Q 5 Yr. Q (cfs)	Q 10 Yr. Q (cfs)	Q 25 Yr. Q (cfs)	Q 50 Yr. Q (cfs)	Q 100 Yr. Q (cfs)
12B	12.4	0.0194	61.0	0.2260	0.3774	0.14	1.71	3.55	7.19	10.09	13.24
EXA	10.5	0.0164	61.0	0.1774	0.2956	0.13	1.74	3.57	7.09	9.84	12.83
EXB	7.1	0.0111	70.8	0.0954	0.1091	6.63	11.21	14.48	19.57	23.05	26.58
EXC1	0.3	0.0004	98.0	0.0487	0.0833	0.94	0.94	0.97	1.17	1.30	1.43
EXC2	0.4	0.0007	93.0	0.0487	0.0833	0.88	1.22	1.44	1.78	2.00	2.22
PR-D	11.4	0.0178	61.0	0.1876	0.3317	0.12	1.61	2.53	5.17	7.31	9.69
EXH	1.2	0.0019	98.0	0.0487	0.0833	1.70	2.23	2.58	3.11	3.45	3.81
EXG	1.0	0.0016	98.0	0.0487	0.0833	0.71	0.93	1.08	1.30	1.44	1.59
VP-1	1.1	0.0017	85.7	0.0987	0.1646	1.44	2.21	2.75	3.57	4.12	4.68
IP-1	1.3	0.0020	85.7	0.1016	0.1692	1.69	2.61	3.24	4.21	4.86	5.52
IP-2	2.0	0.0031	85.7	0.1349	0.2247	2.43	3.80	4.75	6.20	7.18	8.18
SE-1	5.0	0.0078	61.0	0.1487	0.2478	0.07	0.94	1.90	3.71	5.12	6.66
AF-1	11.6	0.0181	61.0	0.1765	0.2941	0.14	1.96	4.03	7.99	11.08	14.45
AF-2	20.5	0.0320	61.0	0.2307	0.3843	0.25	3.33	6.85	13.61	18.94	24.76
AF-3	16.4	0.0256	61.0	0.1931	0.3219	0.19	2.56	5.27	10.52	14.64	19.17
EK-3M	22.2	0.0347	93.2	0.1949	0.3248	0.78	4.97	9.18	17.04	23.04	29.55
EK-3N	10.1	0.0158	69.0	0.0751	0.1251	3.01	7.45	10.94	16.70	20.81	25.10
EK-3O	14.6	0.0228	92.5	0.0836	0.1344	28.60	39.74	47.14	56.19	65.51	72.85
EK-3P	16.5	0.0258	61.0	0.2298	0.3496	0.18	2.42	5.00	10.06	14.01	18.43
EK-3Q	37.4	0.0584	72.1	0.2060	0.3434	10.14	23.71	34.64	52.82	66.09	79.99
EK-4M	10.9	0.0170	92.5	0.0967	0.1112	21.71	30.06	35.61	43.88	49.37	54.84
EK-5M	3.0	0.0047	62.1	0.1487	0.2478	0.08	0.68	1.30	2.43	3.32	4.27
BS-1M	27.8	0.0434	65.0	0.1987	0.3311	1.94	5.33	14.23	24.90	32.94	41.69
BS-1N	3.6	0.0060	65.7	0.1366	0.2276	0.43	1.54	2.60	4.16	5.39	6.71
BS-1O	15.3	0.0239	61.0	0.2265	0.3774	0.17	2.12	4.39	8.87	12.40	16.34
BS-2M	3.1	0.0048	94.4	0.0794	0.1324	0.30	1.32	2.19	3.72	4.84	6.02
BS-3M	34.6	0.0541	71.9	0.2060	0.3434	8.90	20.79	30.61	47.15	59.11	71.66
BS-3N	7.6	0.0119	92.5	0.0501	0.0835	15.23	21.05	24.92	30.68	34.50	38.31
BS-3O	8.4	0.0131	92.5	0.0584	0.0973	16.72	23.15	27.43	33.80	38.00	42.24
BS-3P	16.8	0.0263	62.7	0.1876	0.3126	0.56	3.62	6.68	12.58	17.10	22.01
BS-3Q	30.4	0.0475	61.0	0.2265	0.3774	0.34	3.97	8.24	16.85	23.03	31.06

DRAINAGE CONVEYANCE SUMMARY

Conveyance Label	Type	Length ft.	Upper Invert ft.	Lower Invert ft.	Bottom Width ft.	Slope %	Side Slope H to 1	Manning's N value	Available Depth ft.	Q 5 Yr. cfs	Q 100 Yr. cfs	Q Capacity cfs
C1	Grass Lined Channel	1200	6794.00	6784.58	4.0	0.7850	3.0	0.035	1.5	1.02	11.06	48.20
C2	18" RCP	100	6786.00	6784.58	1.5	1.4200	N/A	0.013	1.5	2.03	2.78	7.41
C3	36" RCP	250	6784.58	6782.08	3.0	1.0000	N/A	0.013	3.0	4.18	24.02	66.69
C4	Grass Lined Channel	1050	6782.08	6746.00	4.0	3.4362	3.0	0.035	2.0	4.33	23.87	177.88
C5	48" RCP	250	6746.00	6743.50	3.0	1.0000	N/A	0.013	3.0	5.57	33.82	66.69
C6	Paved Channel	1420	6738.00	6696.00	2.0	3.0000	10.0	0.013	1.0	2.07	4.53	158.12
C9	Grass Lined Channel	1250	6636.00	6607.50	3.0	2.2800	5.0	0.035	1.5	3.43	18.58	102.15
C10	24" RCP	100	6607.50	6605.50	2.0	2.0000	N/A	0.013	2.0	1.34	13.43	31.99
C11	24" RCP	100	6600.00	6598.00	2.0	2.0000	N/A	0.013	2.0	3.38	21.10	31.99
C12	24" RCP	100	6600.00	6598.00	2.0	2.0000	N/A	0.013	2.0	1.61	15.30	31.99
C50	42" RCP	1250	6593.00	6590.75	3.5	0.5000	N/A	0.013	3.5	8.39	37.71	71.14
C51	48" RCP	700	5954.00	5950.50	4.0	0.5000	N/A	0.013	4.0	14.21	58.21	101.57
C52	54" RCP	1700	6693.00	6684.50	4.5	0.5000	N/A	0.013	4.5	1.81	16.98	139.25
C53	60" RCP	250	6646.00	6644.75	5.0	0.5000	N/A	0.013	5.0	24.52	94.53	194.16
C54	48" RCP	500	6629.00	6627.50	4.0	0.6000	N/A	0.013	4.0	1.29	18.13	101.57
C55	36" RCP	100	6632.80	6631.80	3.0	1.0000	N/A	0.013	3.0	2.49	30.84	66.70
C22	Grass Lined Channel	1000	6631.80	6600.00	10.0	3.1800	5.0	0.035	1.5	2.48	27.90	204.33
C60	42" RCP	1350	6743.50	6736.75	3.5	0.5000	N/A	0.013	3.5	6.71	33.25	71.14
C61	54" RCP	900	6697.00	6692.50	4.5	0.5000	N/A	0.013	4.5	13.99	69.11	139.25
C62	42" RCP	200	6667.00	6663.00	3.5	2.0000	N/A	0.013	3.5	0.91	3.79	142.28
C66	Grass Lined Channel	750	6693.00	6639.00	8.0	1.4867	3.0	0.035	2.0	18.90	89.58	176.37
C56	48" RCP	1100	6652.00	6646.50	4.0	0.5000	N/A	0.013	4.0	20.71	36.06	101.57
C67	Grass Lined Channel	600	6639.00	6622.00	8.0	2.8333	3.0	0.035	2.0	50.80	128.64	245.13
C68	12" RCP	100	6622.00	6621.00	1.5	1.0000	N/A	0.013	1.5	0.53	9.26	10.82
C69	Grass Lined Channel	500	6621.00	6616.00	8.0	1.0000	3.0	0.035	2.0	0.53	9.26	145.63



LEGEND

DESCRIPTION	SYMBOL
EXISTING 10' INDEX CONTOUR	
EXISTING 2' INTERMEDIATE CONTOUR	
LIMITS OF DEVELOPMENT	
DRAINAGE BASIN BOUNDARY	
DRAINAGE SUB-BASIN BOUNDARY	
CONVEYANCE CHANNEL UN-PAVED SWALE	
CONVEYANCE CHANNEL PAVED SWALE / STORM PIPE	
LIMITS OF DETENTION POND	
PROPOSED STORM SEWER	
BASIN IDENTIFIER ID / AREA IN ACRES	A12 / 31.1 Ac.
DESIGN POINT ID	68
CONVEYANCE CHANNEL ID	E-4
BLACK SQUIRREL – ELK HORN DRAINAGE BASIN DIVISION LINE	

U.S. AIR FORCE ACADEMY PROPERTY

INTERIM CONDITIONS
DRAINAGE MAP
MARKETPLACE AT INTERQUEST
(PROPOSED FILING NO. 1 & 2)
SHEET 1 OF 1

CLASSIC CONSULTING ENGINEERS & SURVEYORS
6385 Corporate Drive, Suite 101
Colorado Springs, Colorado 80919
(719)785-0790
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MASTER DEVELOPMENT DRAINAGE PLAN
MARKETPLACE AT INTERQUEST
DEVELOPED CONDITIONS DRAINAGE MAP

WATER QUALITY SUMMARY

POND (label)	WQ BASIN AREA (acres)	WQ BASIN % Impervious	WQ VOLUME REQUIRED (acre-feet)	WQ PONDING ELEV. (feet)	WQ PONDING HEIGHT (feet)	# WQ ORIFICE COLUMNS	# WQ ORIFICE ROWS	WQ ORIFICE DIAMETER (inches)
EK-3C	20.2	90	0.811	6700.5	2.5	2	8	0.875
EK-3E	63.7	90	2.155	6632.7	3.7	3	16	0.750
EK-4	10.9	90	0.438	6634.6	1.8	1	5	1.125
BS-1	44.7	90	1.795	6673.0	3.8	2	11	1.000
BS-2	37.2	90	1.494	6644.3	3.3	1	10	1.375
BS-3	74.2	90	2.979	6601.3	4.3	3	13	0.938

DETENTION POND SUMMARY

POND (label)	RISER DIMENSIONS (feet)	RISER CREST ELEV. (feet)	OUTLET PIPE DIAMETER (inches)	OUTLET PIPE INVERT (feet)	OUTLET PIPE SLOPE (%)	INVERT OF POND (feet)	INVERT OF EMERG. SPILLWAY (feet)	LENGTH OF EMERG. SPILLWAY (feet)	EMERGENCY SPILLWAY FLOW DEPTH (feet)	FREE-BOARD DEPTH (feet)	CREST OF DAM (feet)
EK-3C	7.0' x 4.0'	6707.00	36" RCP	6698.0	2.0	6698.00	6707.00	32	1.0	2.0	6710.00
EK-3E	7.0' x 4.0'	6638.00	48" RCP	6628.2	0.5	6626.00	6641.00	116	1.0	2.8	6642.00
EK-3A	N/A	N/A	24" RCP	6607.5	2.0	6607.50	6611.33	90	1.0	0.7	6613.00
EK-4	7.0' x 4.0'	6637.45	36" RCP	6632.8	1.0	6632.80	6638.00	18	1.0	2.0	6641.00
ES-4	N/A	N/A	24" RCP	6633.0	2.0	6632.00	N/A	N/A	1.0	6.5	6639.00
ES-5	N/A	N/A	24" RCP	6603.0	2.0	6602.00	N/A	N/A	N/A	0.8	6603.00
BS	N/A	N/A	18" RCP	6786.0	1.4	6785.00	N/A	N/A	N/A	1.0	6791.00
BS-1	7.0' x 4.0'	6675.00	42" RCP	6666.2	2.0	6666.00	6679.00	100	1.0	3.0	6680.00
BS-2	7.0' x 4.0'	6650.10	42" RCP	6641.0	2.0	6641.00	6651.00	62	1.0	2.0	6654.00
BS-3	7.0' x 4.0'	6605.80	48" RCP	6597.0	2.0	6597.00	6607.00	119	1.0	2.0	6610.00

DRAINAGE DESIGN POINTS SUMMARY

Design Point (label)	Q 2 Yr. Q (cfs) Ponding (ft)	Q 5 Yr. Q (cfs) Ponding (ft)	Q 10 Yr. Q (cfs) Ponding (ft)	Q 50 Yr. Q (cfs) Ponding (ft)	Q 100 Yr. Q (cfs) Ponding (ft)
20	38.67	54.02	64.24	89.65	99.80
EK3C IN	38.67	54.02	64.24	89.65	99.80
EK3C OUT	0.62 / 6701.92	0.62 / 6703.01	0.68 / 6703.76	0.80 / 6705.51	0.94 / 6706.19
21	0.62	0.62	0.68	0.80	0.94
22	19.79	27.97	33.45	47.21	52.69
23	30.48	42.96	51.28	72.09	80.39
24	61.97	86.58	102.94	143.68	159.91
25	113.75	159.25	189.53	264.77	294.78
EK3B IN	113.75	159.25	189.53	264.77	294.78
EK3B OUT	4.33 / 6634.97	12.73 / 6636.07	20.15 / 6638.51	53.49 / 6638.61	79.95 / 6639.20
5	3.77	8.75	18.14	61.55	91.13
6	3.45	9.22	19.76	68.10	101.13
EK3A IN	4.56	13.91	24.00	83.78	94.28
EK3A OUT	4.03 / 6608.51	10.06 / 6609.19	14.31 / 6609.82	22.49 / 6610.88	24.02 / 6611.20
7	1.84	6.31	10.56	19.70	22.28
26	21.71	30.08	35.61	49.37	54.84
EK4A IN	21.71	30.08	35.61	49.37	54.84
EK4A OUT	0.35 / 6636.28	2.49 / 6636.63	5.78 / 6636.96	22.84 / 6637.55	30.64 / 6637.85
27	0.35	2.49	5.78	22.64	30.64
8	0.62	4.52	10.92	38.88	52.65
25-4 IN	0.46	4.52	10.92	38.88	52.65
25-4 OUT	0.39 / 6600.28	3.38 / 6600.86	8.02 / 6601.45	17.99 / 6602.63	21.10 / 6603.12
9	0.45	3.38	8.02	17.99	21.10
10	0.20	2.66	5.46	15.35	20.12
25-5 IN	0.20	2.66	5.46	15.35	20.12
25-5 OUT	0.14 / 6600.10	1.32 / 6600.52	3.54 / 6600.89	12.23 / 6601.92	14.29 / 6602.16
11	0.14	1.32	3.54	12.23	14.29
IBS IN	4.29	11.21	14.48	23.05	26.68
IBS OUT	1.79 / 6788.03	2.03 / 6788.46	2.20 / 6788.77	2.63 / 6789.66	2.78 / 6790.03
1	1.94	4.16	7.07	18.32	24.02
2	3.15	4.59	7.30	18.68	24.44
3	3.30	5.58	9.66	25.52	33.57
30	4.81	7.10	9.91	25.81	33.97
31	34.05	47.07	57.41	84.02	96.23
32	90.27	126.40	150.56	213.15	239.39
BS-1 IN	90.27	126.40	150.56	213.15	239.38
BS-1 OUT	0.95 / 6672.61	4.67 / 6673.94	9.03 / 6674.43	37.27 / 6675.71	57.62 / 6676.16
12	1.47	5.77	10.90	35.63	54.53
35	61.24	85.55	101.77	142.07	158.08
36	64.53	90.18	107.27	149.70	166.54
BS-2 IN	64.53	90.18	107.27	149.70	166.54
BS-2 OUT	1.06 / 6648.21	1.25 / 6647.87	2.24 / 6648.71	25.25 / 6649.69	42.40 / 6650.17
13	1.09	1.53	2.27	25.69	43.15
41	42.93	61.46	73.85	104.75	117.03
42	70.71	100.66	120.64	170.01	183.49
43	139.38	197.70	236.64	332.91	366.68
BS-3 IN	139.38	197.70	236.64	332.91	366.68
BS-3 OUT	2.11 / 6603.18	2.89 / 6604.66	5.48 / 6605.08	51.55 / 6605.37	83.77 / 6607.07
44	2.11	2.89	9.48	51.56	83.77
14	11.54	15.84	18.68	58.30	91.25

DRAINAGE BASIN SUMMARY

BASIN (label)	TOTAL BASIN AREA (acres)	TOTAL BASIN AREA (sq mi)	WEIGHTED CN	TOTAL LAG TIME (hours)	TOTAL Tc (hours)	Q 2 Yr. (cfs)	Q 5 Yr. (cfs)	Q 10 Yr. (cfs)	Q 25 Yr. (cfs)	Q 50 Yr. (cfs)	Q 100 Yr. (cfs)
02B	12.4	0.0194	61.0	0.2266	0.3774	0.14	1.71	3.98	7.19	10.05	13.24
EX-A	10.5	0.0164	61.0	0.1774	0.2956	0.13	1.74	3.97	7.09	9.84	12.83
EX-B	7.1	0.0111	79.8	0.0664	0.1091	6.63	11.21	14.48	19.57	23.05	26.56
EX-C1	0.3	0.0004	85.7	0.0487	0.0833	0.64	0.84	0.97	1.17	1.30	1.43
EX-C2	0.4	0.0007	85.7	0.0487	0.0833	0.89	1.22	1.41	1.78	2.00	2.22
PR-D	11.4	0.0178	61.0	0.1876	0.5317	0.12	1.31	3.03	5.17	7.31	9.69
EX-G	1.0	0.0016	98.0	0.0487	0.0833	0.71	0.93	1.08	1.30	1.44	1.59
EX-H	1.2	0.0019	98.0	0.0487	0.0833	1.70	2.23	2.58	3.11	3.46	3.81
VP-2	1.2	0.0019	85.7	0.0710	0.1183	1.66	2.61	3.10	4.01	4.63	5.24
VP-3	1.1	0.0017	85.7	0.0671	0.0951	0.00	0.00	0.00	0.00	0.00	0.00
IP-1	1.3	0.0020	85.7	0.1018	0.1692	1.69	2.60	3.24	4.21	4.87	5.53
IP-2	2.0	0.0031	85.7	0.1348	0.2247	2.44	3.80	4.74	6.21	7.20	8.19
SE-1	5.0	0.0078	61.0	0.1487	0.2478	0.07	0.94	1.90	3.72	5.13	6.66
AF-1	11.6	0.0181	61.0	0.1765	0.2941	0.14	1.97	4.03	7.96	11.09	14.50
AF-2	20.5	0.0320	61.0	0.1830	0.3033	0.25	3.33	6.85	13.61	18.94	24.76
AF-3	16.4	0.0256	61.0	0.1957	0.3219	0.19	2.56	5.27	10.52	14.64	19.17
EK-3A	20.2	0.0316	92.5	0.1066	0.1760	38.67	54.02	64.24	79.51	89.68	99.80
EK-3B	8.3	0.0130	92.5	0.2614	0.1390	16.21	22.55	26.78	33.08	37.28	41.46
EK-3C	5.6	0.0088	92.5	0.0967	0.1112	11.10	15.39	18.24	22.50	25.32	28.12
EK-3D	17.3	0.0270	92.5	0.1066	0.1760	33.11	46.27	55.02	68.10	76.78	85.47
EK-3E	15.0	0.0234	92.5	0.0778	0.1297	29.43	40.92	48.56	59.96	67.52	75.06
EK-3F	7.5	0.0117	92.5	0.0967	0.1112	14.87	20.62	24.43	30.13	33.90	37.67
EK-3G	3.5	0.0055	92.5	0.0850	0.1416	6.83	9.50	11.28	13.94	15.71	17.47
EK-4A	10.9	0.0170	92.5	0.0999	0.0927	21.71	30.06	35.61	43.86	49.37	54.84
EK-4B	1.2	0.0019	61.0	0.0739	0.1231	0.03	0.34	0.83	1.17	1.67	2.00
BS-1A	15.4	0.0241	92.5	0.0945	0.1575	29.77	41.52	49.34	61.02	68.77	76.49
BS-1B	14.3	0.0223	92.5	0.0945	0.1576	27.64	38.56	45.82	56.66	63.86	71.02
BS-1C	15.0	0.0234	92.5	0.0834	0.1390	29.31	40.76	48.37	59.72	67.25	74.76
BS-1D	6.8	0.0106	61.0	0.1294	0.2157	0.10	1.40	2.83	5.40	7.40	9.59
BS-2A	6.9	0.0108	92.5	0.1440	0.2409	12.60	17.72	21.18	26.34	29.78	33.20
BS-2B	13.7	0.0214	92.5	0.0778	0.1297	26.89	37.35	44.29	54.66	61.54	68.43
BS-2C	11.4	0.0178	92.5	0.0992	0.1436	22.22	30.92	36.70	45.34	51.07	56.77
BS-2D	1.7	0.0027	92.5	0.0764	0.0764	3.33	4.63	5.49	6.78	7.63	8.49
BS-3A	9.1	0.0142	92.5	0.0723	0.1205	17.86	24.83	29.47	36.38	40.97	45.54
BS-3B	15.2	0.0238	92.5	0.0751	0.1251	25.38	37.10	44.85	56.49	64.23	71.98
BS-3C	14.9	0.0233	92.5	0.0751	0.1251	29.17	40.58	48.18	59.49	67.00	74.48
BS-3D	20.4	0.0319	92.5	0.0690	0.1483	39.31	54.90	65.28	80.79	91.07	101.33
BS-3E	12.9	0.0202	92.5	0.0917	0.1529	24.16	34.63	41.19	50.90	57.40	63.86
BS-3F	3.9	0.0061	92.5	0.0767	0.1278	7.62	10.81	12.99	15.96	17.92	19.46
BS-3G	5.6	0.0088	92.5	0.1544	0.2574	9.87	13.91	16.62	20.72	23.48	26.23

DRAINAGE CONVEYANCE SUMMARY

Conveyance Label	Type	Length ft.	Upper Invert ft.	Lower Invert ft.	Bottom Width ft.	Slope %	Side Slope H to 1	Manning's N value	Available Depth ft.	Q 5 Yr. cfs	Q 100 Yr. cfs	Q Capacity cfs
C1	Grass Lined Channel	1200	6784.00	6784.58	4.0	0.1650	3.0	0.035	1.5	1.02	13.05	40.20
C2	18" RCP	100	6786.00	6784.58	1.5	1.4200	N/A	0.013	1.5	2.03	2.78	7.41
C3	36" RCP	250	6784.58	6782.08	3.0	1.0000	N/A	0.013	3.0	4.18	24.02	69.89
C4	Grass Lined Channel	1050	6782.08	6746.00	4.0	3.4362	3.0	0.035	2.0	4.33	23.67	177.66
C5	36" RCP	250	6746.00	6743.50	3.0	1.0000	N/A	0.013	3.0	5.57	33.52	66.99
C9	Grass Lined Channel	1250	6636.00	6607.50	3.0	2.2800	5.0	0.035	1.5	1.02	8.72	87.27
C10	24" RCP	100	6607.50	6605.50	2.0	2.0000	N/A	0.013	2.0	6.31	22.26	31.99
C11	24" RCP	100	6605.50	6596.00	2.0	2.0000	N/A	0.013	2.0	3.38	21.10	31.99
C12	24" RCP	100	6600.00	6598.00	2.0	2.0000	N/A	0.013	2.0	1.32	14.29	31.99
C14	36" RCP	50	6668.00	6667.00	3.0	2.0000	N/A	0.013	3.0	0.52	0.84	94.33
C15	42" RCP	1300	6697.00	6690.50	3.5	0.5000	N/A	0.013	3.5	0.52	0.84	73.14
C16	48" RCP	500	6693.00	6690.50	4.0	0.5000	N/A	0.013	4.0	27.71	52.46	101.57
C17	48" RCP	200	6640.00	6639.00	4.0	0.5000	N/A	0.013	4.0	42.90	80.31	101.57
C18	54" RCP	850	6666.00	6664.75	4.5	0.1500	N/A	0.013	4.5	87.95	86.20	176.15
C19	60" RCP	250	6646.00	6644.75	5.0	0.5000	N/A	0.013	5.0	88.44	169.80	184.16
C20	48" RCP	300	6639.00	6637.50	4.0	0.5000	N/A	0.013	4.0	42.90	80.31	101.57
C21	36" RCP	100	6632.60	6631.80	3.0	1.0000	N/A	0.013	3.0	2.49	24.02	66.70
C22	Grass Lined Channel	1000	6831.80	6800.00	10.0	3.1800	5.0	0.035	1.5	2.46	27.90	204.33
C25	42" RCP	1350	6741.50	6736.00	3.5	0.4074	N/A	0.013	3.5	8.71	33.25	71.14
C26	54" RCP	900	6697.00	6692.50	4.5	0.5000	N/A	0.013	4.5	47.59	95.38	159.05
C27	48" RCP	700	6711.00	6707.50	4.0	0.5000	N/A	0.013	4.0	40.49	74.42	101.57
C28	36" RCP	200	6667.50	6663.00	3.5	2.5000	N/A	0.013	3.5	4.87	57.62	94.32
C30	48" RCP	800	6670.00	6666.00	3.5	0.5000	N/A	0.013	3.5	37.05	68.18	71.14
C31	60" RCP	150	6663.00	6662.25	5.0	0.5000	N/A	0.013	5.0	88.55	159.66	184.16
C32	42" RCP	200	6641.00	6637.00	3.5	2.0000	N/A	0.013	3.5	7.35	42.40	142.28
C35	36" RCP	1100	6665.00	6659.50	3.0	0.5000	N/A	0.013	3.0	24.35	45.55	47.16
C36	48" RCP	1100	6652.00	6646.50	4.0	0.5000	N/A	0.013	4.0	60.08	109.01	101.57
C37	60" RCP	1400	6632.00	6625.00	5.0	0.5000	N/A	0.013	5.0	98.13	182.44	184.16
C38	42" RCP	650	6614.00	6610.75	3.5	0.5000	N/A	0.013	3.5	34.07	63.42	71.14
C39	48" RCP	200	6597.00	6593.00	4.0	2.0000	N/A	0.013	4.0	2.69	83.77	203.14
C40	Grass Lined Channel	400	6593.00	6591.00	4.0	0.5000	3.0	0.035	2.5	2.69	83.56	110.63

COMPARISION OF FLOWS

DESIGN POINT	DRAINAGE BASIN	2 YEAR EXISTING FLOW (cfs)	2 YEAR ALLOWABLE FLOW (cfs)	2 YEAR PHASE I FLOW (cfs)	2 YEAR DEVELOPED FLOW (cfs)	DEVELOPED VS. ALLOWABLE (% change)
7	EK-3	3.02	3.02	1.28	3.70	123
9	EK-4	0.43	0.45	0.45	0.45	105
11	EK-5	0.22	0.22	0.16	0.14	64
12	BS-1	0.24	2.18	0.00	0.95	44
13	BS-2	0.49	4.18	0.30	1.09	26
14	BS-3	0.62	8.06	0.98	11.54	143

DESIGN POINT	DRAINAGE BASIN	5 YEAR EXISTING FLOW (cfs)	5 YEAR ALLOWABLE FLOW (cfs)	5 YEAR PHASE I FLOW (cfs)	5 YEAR DEVELOPED FLOW (cfs)	DEVELOPED VS. ALLOWABLE (% change)
7	EK-3	8.52	8.52	1.77	8.57	101
9	EK-4	4.65	4.65	3.38	3.38	73
11	EK-5	2.49	2.49	1.61	1.32	53
12	BS-1	2.86	8.42	0.20	4.67	55
13	BS-2	4.94	5.83	1.32	1.52	26
14	BS-3	6.22	11.06	5.65	15.84	143

DESIGN POINT	DRAINAGE BASIN	10 YEAR EXISTING FLOW (cfs)	10 YEAR ALLOWABLE FLOW (cfs)	10 YEAR PHASE I FLOW (cfs)	10 YEAR DEVELOPED FLOW (cfs)	DEVELOPED VS. ALLOWABLE (% change)
7	EK-3	12.85	12.85	3.97	12.48	97
9	EK-4	10.92	10.92	8.02	8.02	73
11	EK-5	6.32	6.32	4.16	3.54	56
12	BS-1	5.95	17.34	0.41	9.00	52
13	BS-2	10.31	12.03	2.19	2.27	19
14	BS-3	12.98	22.91	13.89	18.88	82

DESIGN POINT	DRAINAGE BASIN	50 YEAR EXISTING FLOW (cfs)	50 YEAR ALLOWABLE FLOW (cfs)	50 YEAR PHASE I FLOW (cfs)	50 YEAR DEVELOPED FLOW (cfs)	DEVELOPED VS. ALLOWABLE (% change)
7	EK-3	22.69	22.69	13.01	20.09	89
9	EK-4	19.46	19.46	17.99	17.99	92
11	EK-5	15.92	15.92	13.29	12.23	77
12	BS-1	16.92	46.19	1.03	37.27	81
13	BS-2	29.84	33.58	4.84	25.69	77
14	BS-3	37.58	64.46	49.21	58.30	90

DESIGN POINT	DRAINAGE BASIN	100 YEAR EXISTING FLOW (cfs)	100 YEAR ALLOWABLE FLOW (cfs)	100 YEAR PHASE I FLOW (cfs)	100 YEAR DEVELOPED FLOW (cfs)	DEVELOPED VS. ALLOWABLE (% change)
7	EK-3	24.34	24.34	16.35	22.39	92
9	EK-4	22.78	22.78	21.10	21.10	93
11	EK-5	18.88	18.88	15.30	14.29	76
12	BS-1	22.28	63.14	1.84	57.62	91
13	BS-2	39.57	43.98	6.02	43.18	98
14	BS-3	49.82	84.58	68.66	91.25	108

FOR INFORMATION ON BLACK SQUIRREL CREEK IMPROVEMENTS SEE "FINAL DESIGN REPORT FOR ALLISON VALLEY ON-SITE REACHES OF BLACK SQUIRREL CREEK AND MIDDLE TRIBUTARY CREEK CHANNEL IMPROVEMENTS," JUNE 2007, BY CLASSIC CONSULTING.

LEGEND

DESCRIPTION	SYMBOL
EXISTING 10' INDEX CONTOUR	
EXISTING 2' INTERMEDIATE CONTOUR	
LIMITS OF DEVELOPMENT	
DRAINAGE BASIN BOUNDARY	
DRAINAGE SUB-BASIN BOUNDARY	
CONVEYANCE CHANNEL UN-PAVED SWALE	
CONVEYANCE CHANNEL PAVED SWALE / STORM PIPE	
LIMITS OF DETENTION POND	
PROPOSED STORM SEWER	
BASIN IDENTIFIER ID / AREA IN ACRES	A12 / 31.1 Ac
DESIGN POINT ID	88
CONVEYANCE CHANNEL ID	E-4
BLACK SQUIRREL – ELK HORN DRAINAGE BASIN DIVISION LINE	

DETENTION POND E
ELKHORN-2

DEVELOPED CONDITIONS
DRAINAGE MAP
MARKETPLACE AT INTERQUEST

SHEET 1 OF 1

SCALE: 1" = 200'

CLASSIC CONSULTING ENGINEERS & SURVEYORS
6385 Corporate Drive, Suite 101
Colorado Springs, Colorado 80919
(719)785-0790
(719)785-0799 (Fax)

DRAINAGE BASIN RUNOFF COEFFICENTS

FINAL DRAINAGE REPORT ~ BASIN RUNOFF COEFFICIENT SUMMARY

BASIN	TOTAL AREA (AC)	SUB-AREA (1) AREA (AC)	C(5)	C(100)	SUB-AREA (2) AREA (AC)	C(5)	C(100)	WEIGHTED C(5)	C(100)	WEIGHTED CA CA(5)	CA(100)
[illegible]											
RD13	0.28	0.28	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.25	0.27
RD14	0.15	0.15	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.14	0.14
RD15	0.17	0.17	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.15	0.16
RD16	0.43	0.43	0.90	0.95	0.00	0.25	0.35	0.90	0.95	0.39	0.41

DRAINAGE BASIN TIME OF CONCENTRATION

FINAL DRAINAGE REPORT ~ BASIN RUNOFF SUMMARY

[illegible]

DESIGN POINT SUMMARY

FINAL DRAINAGE REPORT ~ SURFACE ROUTING SUMMARY

Design Point(s)	Contributing Basins	Equivalent CA(5)	Equivalent CA(100)	Maximum Tc	Intensity I(5)	I(100)	Flow Q(5)	Q(100)	Inlet Size
1A	EX. 3Ma + EX. 3D-A + EX. 3Mb	5.63	7.88	33.6	2.27	4.04	13	32	36" stub
1B	Future Pond Release + DEV. 3Mb + DEV. 3D-A	5.23	5.16	6.0	4.86	8.64	25	45	Fut. Pond and Wye
2	A + 1/4 FB FROM DP-73	0.95	1.12	6.0	4.86	8.64	5	10	6' D-10-R
3	B + 3/4 FB FROM DP-73	1.50	1.93	5.0	5.10	9.07	8	17	12' D-10-R
4A	3B-A - EX	3.05	3.92	28.4	2.50	4.44	8	17	30" FES
4B	1/4 OF 3B-A	1.96	1.96	5.0	5.10	9.07	10	18	Fut. Storm System
5	D	1.44	1.52	5.0	5.10	9.07	7	14	8' D-10-R
6	E	0.27	0.29	5.0	5.10	9.07	1	3	4' D-10-R
7	F + G	0.72	0.76	5.0	5.10	9.07	4	7	4' D-10-R
9A	EX. 3P + EX. 1A-A + EX. 3D-B +	4.15	5.81	28.0	2.52	4.48	10	26	30" FES
9B	DEV. 3D-B	3.33	3.33	6.0	4.86	8.64	16	29	30" FES
10-X	1/3 OF 3D-C	1.68	1.68	7.0	4.64	8.25	8	14	Fut. Storm System
10-Y	2/3 OF 3D-C	3.36	3.36	7.0	4.64	8.25	16	28	Fut. Storm System
11-A	20% OF 3E-A	2.23	2.23	7.8	4.49	7.98	10	18	Fut. Storm System
11-B	40% OF 3E-A	4.46	4.46	7.8	4.49	7.98	20	36	Fut. Storm System
11-X	40% OF 3E-A	4.46	4.46	7.8	4.49	7.98	20	36	Fut. Storm System
11-Y	10% OF 3E-A	1.12	1.12	5.0	5.10	9.07	6	10	Fut. Storm System
11B	EX. 3A-A + EX. 3D-C + EX. 3E-A	10.99	14.13	28.8	2.48	4.41	27	62	36" FES
12	I	0.88	0.95	5.0	5.10	9.07	5	9	6' D-10-R
13	H-1 + H-2	2.16	2.28	5.0	5.10	9.07	11	21	16' D-10-R
14	H-3	0.99	1.05	5.0	5.10	9.07	5	10	20' D-10-R
15	J	1.17	1.17	5.0	5.10	9.07	6	11	6' D-10-R
16	K	0.63	0.63	5.0	5.10	9.07	3	6	6' D-10-R
17	L	2.25	2.25	6.0	4.86	8.64	11	19	16' D-10-R
18	M (DEV.)	2.43	2.43	5.5	4.98	8.85	12	22	16' D-10-R
20	N	1.08	1.08	5.0	5.10	9.07	6	10	6' D-10-R
21	P	0.36	0.36	5.0	5.10	9.07	2	3	4' D-10-R
22	1/2 OF X	0.23	0.23	5.0	5.10	9.07	1.1	2.0	ROOF DRAIN
23	Q	0.99	0.99	5.0	5.10	9.07	5	9	6' D-10-R
24	R	0.99	0.99	5.0	5.10	9.07	5	9	6' D-10-R
26	S + 1/2 OF V	0.50	0.50	5.0	5.10	9.07	3	4	4' D-10-R
27	T	0.27	0.27	5.0	5.10	9.07	1	2	4' D-10-R
28	U + FB DP-34	1.05	1.13	5.0	5.10	9.07	5	10	6' D-10-R
29	1/2 OF V	0.23	0.23	5.0	5.10	9.07	1	2	ROOF DRAIN
30	1/2 OF X	0.23	0.23	5.0	5.10	9.07	1	2	ROOF DRAIN
34	Z	0.63	0.63	5.0	5.10	9.07	3	6	8' AT-GRADE
38	W	0.36	0.36	5.0	5.10	9.07	2	3	3.0' X 3.0' D-9
39	DD	0.36	0.36	5.0	5.10	9.07	2	3	3.0' X 3.0' D-9
41	FF	0.45	0.45	5.0	5.10	9.07	2	4	3.0' X 3.0' D-9
43a	HH	0.63	0.63	5.0	5.10	9.07	3	6	4' D-10-R
43b	II	0.63	0.63	5.0	5.10	9.07	3	6	4' D-10-R
44a	JJ	0.99	0.99	5.0	5.10	9.07	5	9	4' D-10-R
44b	KK	0.81	0.81	5.0	5.10	9.07	4	7	4' D-10-R
45a	GG	0.81	0.81	5.0	5.10	9.07	4	7	6.0' X 3.0' D-9
45b	EE	0.10	0.10	5.0	5.10	9.07	0.5	0.9	3.0' X 3.0' D-9
46	CC	1.08	1.08	5.0	5.10	9.07	6	10	6' D-10-R
47	LL + 1/2 OF EX. 2A-A	1.22	1.45	13.0	3.69	6.56	5	9	6' D-10-R
48	3A-A	12.06	12.06	9.0	4.27	7.58	51	91	48" STUB
49	MM	0.45	0.48	5.0	5.10	9.07	2	4	4' D-10-R
54	RR	0.54	0.54	5.0	5.10	9.07	3	5	4' D-10-R
55	SS	1.71	1.71	5.5	4.98	8.85	9	15	12' D-10-R
56	TT	1.08	1.08	5.0	5.10	9.07	6	10	6' D-10-R
57	UU	0.54	0.54	5.0	5.10	9.07	3	5	4' D-10-R
58	VV	1.53	1.53	5.0	5.10	9.07	8	14	8' D-10-R
60	DDD + 1/2 OF EX. 2A-A	1.74	2.25	15.0	3.46	6.16	6	14	8' D-10-R
61a	EX. 2A-B	8.61	11.07	33.8	2.26	4.02	19	44	54" FES
61B	2A-B	15.99	18.45	15.0	3.46	6.16	55	114	Fut. Storm (54")
62	WW	2.61	2.76	5.8	4.90	8.70	13	24	16' D-10-R
63	XX	2.97	3.14	7.5	4.55	8.09	14	25	16' D-10-R
65	OS-1	9.08	12.71	35.1	2.21	3.93	20	50	36" RCP
66	1A-A	8.64	8.64	8.4	4.38	7.78	38	67	42" RCP STUB
67	ZZ	1.35	1.43	5.0	5.10	9.07	7	13	12' D-10-R At-grade
68	CCC	0.54	0.57	5.0	5.10	9.07	3	5	4' D-10-R
69	BBB + FB DP-67 + FB DP-71	1.37	1.69	5.0	5.10	9.07	7	15	10' D-10-R
70	EX. 1A-B	4.70	6.58	26.5	2.60	4.62	12	30	30" FES
71	AAA	1.08	1.14	5.0	5.10	9.07	6	10	12' D-10-R At-grade
72	OS-2	2.07	2.19	7.0	4.65	8.26	10	18	5.5' D-10-R (EXIST.)
73	OS-3 + FB OS-2	2.07	2.19	5.0	5.10	9.07	11	20	16' D-10-R (EXIST.)
74	DEV. 2A-A	3.51	3.51	6.0	4.86	8.64	17	30	Fut. Storm System (30")

FINAL DRAINAGE REPORT ~ PIPE ROUTING SUMMARY

Pipe Run	Contributing Basins	Equivalent CA(5)	Equivalent CA(100)	Maximum Tc	Intensity I(5)	I(100)	Flow Q(5)	Q(100)	Pipe Size*
1	DP 1	5.23	5.16	6.0	4.86	8.64	25	45	36" @ 0.5%
2	DP 2	0.95	1.12	6.0	4.86	8.64	5	10	18" @ 0.9%
3	PIPES 1 + 2	6.18	6.28	6.3	4.79	8.51	30	53	36" @ 1.0%
4	DP 3	1.50	1.93	5.0	5.10	9.07	8	17	24" @ 0.6%
5A	PIPES 3 + 4	7.68	8.21	6.6	4.73	8.42	36	69	42" @ 0.5% (36" @ 1.1%)
5B	5A + 1/4 OF DEV. 3B-A	9.63	10.16	6.9	4.66	8.28	45	84	42" @ 0.7%
5C	5B + 1/4 OF DEV. 3B-A	11.59	12.12	7.8	4.48	7.97	52	97	42" @ 1.0%
5D	5C + 1/4 OF DEV. 3B-A	13.55	14.08	8.4	4.37	7.78	59	110	42" @ 1.2%
5E	5D + 1/4 OF DEV. 3B-A (PIPE 6)	15.51	16.04	9.7	4.15	7.38	64	118	42" @ 1.4%
6	DP 4B	1.96	1.96	5.0	5.10	9.07	10	18	30" @ 0.2%
7	DP 5	1.44	1.52	5.0	5.10	9.07	7	14	24" @ 0.4%
8	DP 6 + PIPE 7	1.71	1.81	5.1	5.08	9.02	9	16	24" @ 0.5%
9A	PIPES 5E + 8	17.22	17.84	9.7	4.15	7.38	71	132	48" @ 0.9%
9B	PIPE 9A + 1/2 OF DEV. M-2	18.43	19.06	10.5	4.03	7.17	74	137	48" @ 0.9%
9C	PIPE 9B + 1/2 OF DEV. M-2	19.65	20.27	11.4	3.89	6.92	76	140	48" @ 1.0%
10	DP 7	0.72	0.76	5.0	5.10	9.07	4	7	18" @ 0.5%
12	PIPES 10	0.72	0.76	5.0	5.10	9.07	4	7	18" @ 0.5%
13	DP 9 (use Dev. As worst case for Tc)	3.33	3.33	6.0	4.86	8.64	16	29	30" @ 0.6%
14A	PIPES 12 + 13	4.05	4.09	6.3	4.79	8.51	19	35	30" @ 0.7%
14B	PIPE 14A + DP 10-X	5.73	5.77	7.0	4.63	8.24	27	48	36" @ 0.5%
14C	PIPE 14B + DP 14	6.72	6.82	7.8	4.48	7.97	30	54	42" @ 0.5%
14D	PIPE 14C + DP 10-Y	10.08	10.18	8.3	4.39	7.80	44	79	42" @ 0.5%
15	PIPE 14D + DP 11-X	14.54	14.65	9.7	4.15	7.39	60	108	48" @ 0.5%
15B	PIPE 15 + DP 11-A	16.77	16.88	11.1	3.93	6.99	66	118	48" @ 0.8%
16	DP 11-Y	1.12	1.12	5.0	5.10	9.07	6	10	36" @ 0.8%
17	DP 12	0.88	0.95	5.0	5.10	9.07	5	9	24" @ 0.2%
18	PIPE 17 + DP 13	3.04	3.23	5.0	5.10	9.07	16	29	36" @ 0.3%
18B	PIPE 18 + DP 11-B	7.51	7.69	7.8	4.49	7.98	34	61	36" @ 0.6%
19	PIPES 15B + 16 + 18B	25.40	25.68	11.1	3.93	6.99	100	180	54" @ 0.8%
20	DP 15	1.17	1.17	5.0	5.10	9.07	6	11	24" @ 0.2%
21	DP 16	0.63	0.63	5.0	5.10	9.07	3	6	18" @ 0.3%
22	PIPES 20 + 21	1.80	1.80	5.3	5.03	8.95	9	16	24" @ 0.5%
23	DP 17	2.25	2.25	6.0	4.86	8.64	11	19	24" @ 1.0%
24	PIPES 22 + 23	4.05	4.05	6.0	4.86	8.64	20	35	30" @ 0.8%
25	DP 18	2.43	2.43	5.5	4.98	8.85	12	22	24" @ 0.6%

DRAINAGE CONVEYANCE SUMMARY

26	PIPES 24 + 25	6.48	6.48	6.5	4.75	8.44	31	55	36" @ 0.7%
28	DP 20	1.08	1.08	5.0	5.10	9.07	6	10	18" @ 0.7%
29	DP 21	0.36	0.36	5.0	5.10	9.07	2	3	18" @ 0.1%
30	PIPES 28 + 29	1.44	1.44	5.6	4.95	8.81	7	13	24" @ 0.3%
31	DP 22	0.23	0.23	5.0	5.10	9.07	1	2	18" @ 0.2%
32	PIPES 30 + 31	1.67	1.67	6.0	4.85	8.62	8	14	24" @ 0.4%
33	DP 23	0.99	0.99	5.0	5.10	9.07	5	9	18" @XX%
34	DP 24	0.99	0.99	5.0	5.10	9.07	5	9	18" @ 0.2%
35	PIPES 32 + 33	2.66	2.66	6.6	4.73	8.41	13	22	30" @ 0.4%
36	PIPES 34 + 35	3.65	3.65	6.6	4.73	8.41	17	31	30" @ 0.5%
38	DP 26	0.50	0.50	5.0	5.10	9.07	3	4	18" @ 0.2%
39	DP 27 + PIPE 38	0.77	0.77	5.1	5.09	9.05	4	7	18" @ 0.4%
41	DP 28 & 29 + PIPES 39	2.04	2.12	5.1	5.09	9.05	10	19	24" @ 0.6%
44	PIPES 41 + DP 30	2.26	2.34	5.6	4.95	8.81	11	21	24" @ 0.9%
46	RD-11 + RD-12	0.42	0.45	5.0	5.10	9.07	2.2	4.1	12" @ 0.2%
47	Int. flows from DP 34	0.48	0.40	5.0	5.10	9.07	2	4	18" @ 0.2%
48	PIPES 46 + 47	0.91	0.85	5.0	5.10	9.07	5	8	18" @ 0.7%
50	PIPES 48 + RD-13 + RD-14	1.29	1.26	5.0	5.10	9.07	7	11	24" @ 0.3%
52	PIPE 50 + BASINS AA & BB + RD-15	1.52	1.49	5.0	5.10	9.07	8	14	24" @ 0.4%
54	DP 38 + RD-16	0.75	0.77	5.0	5.10	9.07	4	7	18" @ 0.7%
55	DP 39	0.36	0.36	5.0	5.10	9.07	2	3	12" @ 0.2%
57	PIPES 55 + RD-2	0.65	0.66	5.0	5.10	9.07	3	6	18" @ 0.4%
58	DP 41 + PIPE 57	1.10	1.11	5.0	5.10	9.07	6	10	24" @ 0.4%
59A	DP 43a	0.63	0.63	5.0	5.10	9.07	3	6	18" @ 0.2%
59B	PIPE 59 + DP 43b	1.26	1.26	5.0	5.10	9.07	6	11	18" @ 0.8%
60A	DP 44a	0.99	0.99	5.0	5.10	9.07	5	9	18" @ 0.2%
60B	PIPE 60A + DP 44b	1.80	1.80	5.0	5.10	9.07	9	16	24" @ 0.5%
61	PIPE 59B + PIPE 60B	3.06	3.06	5.1	5.08	9.04	16	28	30" @ 0.5%
62A	DP 45a	0.81	0.81	5.0	5.10	9.07	4	7	18" @ 0.8%
62B	PIPE 62A + DP 45b	0.91	0.91	5.0	5.10	9.07	5	8	18" @ 0.8%
63	PIPE 61 + PIPE 62B	3.97	3.97	5.3	5.04	8.95	20	36	30" @ 0.5%
64	DP 48	12.06	12.06	9.0	4.27	7.58	51	91	48"
65	PIPE 63 + DP 47	4.51	4.54	5.3	5.04	8.95	23	41	36"
66	DP 49 + RD-10	0.64	0.67	5.0	5.10	9.07	3	6	18" @ 0.1%
67	PIPE 64 + PIPE 65 + PIPE 68B	17.65	17.68	9.0	4.27	7.58	75	134	48" @ 0.8%
67B	PIPE 66 + 67	18.29	18.35	9.5	4.18	7.43	76	136	48" @ 0.8%
68A	DP 74	3.51	3.51	6.0	4.86	8.64	17	30	30"
68B	DP 46	1.08	1.08	5.0	5.10	9.07	6	10	18"

69	PIPE 67B + PIPE 68A	21.80	21.86	10.5	4.03	7.16	88	156	30" @ 0.5%
70	DP 55	1.71	1.71	5.5	4.98	8.85	9	15	12" @ 0.6%
71	PIPE 69 + PIPE 70	23.51	23.57	11.0	3.95	7.03	93	166	12" @ 0.6%
72	DP 56	1.08	1.08	5.0	5.10	9.07	6	10	18" @ 0.2%
73	PIPE 71 + 72	24.59	24.65	11.5	3.88	6.90	95	170	18" @ 0.2%
75	DP 54 + RD7 + RD8 + RD9	1.12	1.12	5.0	5.10	9.07	6	10	18" @ 0.2%
76	PIPE 75 + RD4 + RD5 + RD6	2.08	2.13	5.0	5.10	9.07	11	19	24" @ 0.3%
77	PIPE 76 + RD1 + RD3	2.57	2.66	5.0	5.10	9.07	13	24	18"
81	PIPE 73 + PIPE 77	27.16	27.31	14.0	3.57	6.35	97	173	54" @ 0.7%
82	DP 57	0.54	0.54	5.0	5.10	9.07	3	5	18" @ 0.7%
83	PIPE 82 + DP 58	2.07	2.07	5.0	5.10	9.07	11	19	24"
85	PIPE 81 + PIPE 83	29.23	29.38	14.0	3.57	6.35	104	187	54" @ 0.9%
85INTERIM	PIPE 85 W/O PIPE 64	28.42	28.57	14.0	3.57	6.35	102	181	54" @ 0.9%
87	DP 60 (DEV.)	0.54	0.57	5.0	5.10	9.07	3	5	24" (INTERIM) @ 0.4%
88	DP 61	15.99	18.45	15.0	3.46	6.16	55	114	48" @ 0.6%
89	DP 62	2.61	2.76	5.8	4.90	8.70	13	24	30" @ 0.3%
90	DP 63	2.97	3.14	7.5	4.55	8.09	14	25	30" @ 0.4%
91	PIPES 89 + 90	5.58	5.89	7.5	4.55	8.09	25	48	36" @ 0.5%
92	PIPES 87 + 88 + 91	22.11	24.91	15.0	3.46	6.16	77	153	60" @ 0.6%
92INTERIM	92 w/DP 61 -INTERIM	14.73	17.53	33.8	2.26	4.02	33	70	60" @ 0.6%
95	DP 65	9.08	12.71	35.1	2.21	3.93	20	50	36" @ 0.6%
96	DP 66 (DEV.)	8.64	8.64	8.4	4.38	7.78	38	67	42" @ 0.4%
97	PIPES 95 + 96	17.72	21.35	22.0	2.87	5.10	51	109	48" @ 0.6%
97B	PIPES 104 + 97	18.49	22.05	22.0	2.87	5.10	53	113	48" @ 0.6%
98	DP 67	0.92	0.83	5.0	5.10	9.07	5	8	18" @ 0.6%
99	PIPES 97B + 98	19.41	22.88	22.0	2.87	5.10	56	117	48" @ 0.7%
99TEST	PIPE SIZE TEST (NO OFFSITE BASIN)	10.33	10.18	8.4	4.38	7.78	45	79	48" @ 0.3%
100	DP 68	0.54	0.57	5.0	5.10	9.07	3	5	18" @ 0.2%
101	DP 69	1.37	1.69	5.0	5.10	9.07	7	15	24" @ 0.4%
102	PIPES 100 + 101	1.91	2.26	5.2	5.06	8.99	10	20	24" @ 0.8%
103	PIPES 99 + 102	21.32	25.15	22.1	2.86	5.09	61	128	48" @ 0.8%
104	DP 71	0.78	0.71	5.0	5.10	9.07	4	6	18" @ 0.3%
105	DP 70 (INT.)	4.70	6.58	26.5	2.60	4.62	12	30	30" @ 0.5%
106	PIPE 103 + 105	26.02	31.73	22.7	2.82	5.02	73	159	54" @ 0.7%
106(DEV.)	PIPE 103	21.32	25.15	22.7	2.82	5.02	60	126	48" @ 0.8%
106TEST	PIPE SIZE TEST (NO OFFSITE BASIN)	13.02	13.15	8.4	4.38	7.78	57	102	54" @ 0.3%
106INTERIM	PIPE 106 W/O PIPE 96	17.38	23.09	22.7	2.82	5.02	49	116	54" @ 0.3%
SWALE 'A'	PIPE 92	22.11	24.91	15.0	3.46	6.16	77	153	GRASS SWALE
SWALE 'B'	PIPE 92 + PIPE 85	50.53	53.48	15.0	3.46	6.16	175	329	GRASS SWALE

MARKETPLACE AT INTERQUEST
FILING NO. 1 & 2
FINAL DRAINAGE REPORT

SHEET 2 OF 2

CLASSIC CONSULTING ENGINEERS & SURVEYORS
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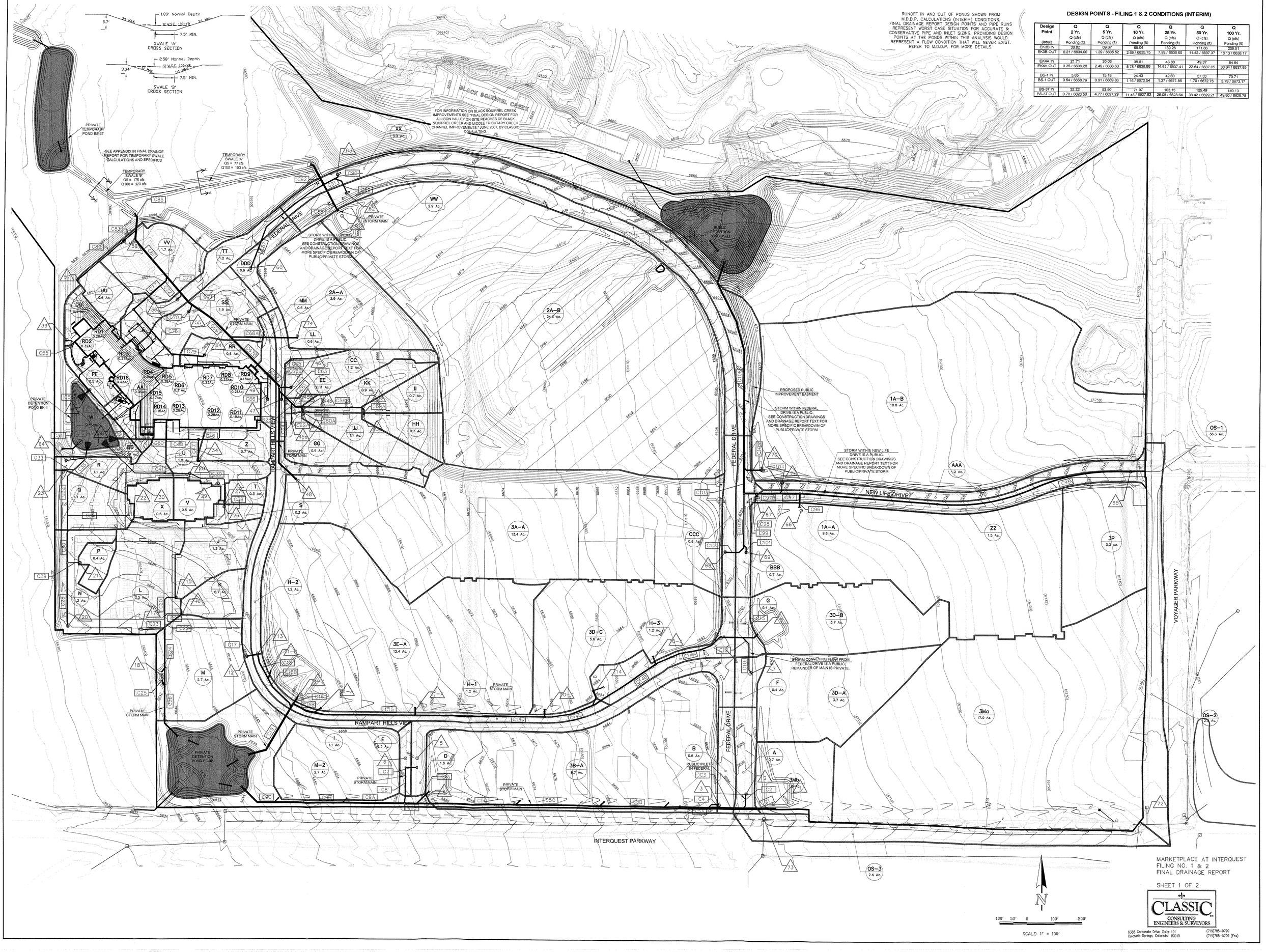

DESIGN POINTS - FILING 1 & 2 CONDITIONS (INTERIM)

Design Point (label)	Q 2 Yr. Q (cfs) Ponding (ft)	Q 5 Yr. Q (cfs) Ponding (ft)	Q 10 Yr. Q (cfs) Ponding (ft)	Q 25 Yr. Q (cfs) Ponding (ft)	Q 50 Yr. Q (cfs) Ponding (ft)	Q 100 Yr. Q (cfs) Ponding (ft)
EKSB IN	38.82	69.57	95.04	139.28	171.66	206.51
EKSB OUT	0.21 / 6634.00	1.29 / 6635.52	2.69 / 6635.75	7.93 / 6636.60	11.42 / 6637.37	18.13 / 6638.17
EKAA IN	21.71	30.08	35.61	43.88	49.37	54.64
EKAA OUT	0.35 / 6636.28	2.49 / 6636.63	5.78 / 6636.98	14.81 / 6637.41	22.64 / 6637.65	30.64 / 6637.85
BS-1 IN	5.85	15.18	24.43	42.60	57.33	73.71
BS-1 OUT	0.54 / 6668.79	0.91 / 6669.83	1.16 / 6670.54	1.37 / 6671.85	1.70 / 6672.75	3.79 / 6673.17
BS-3T IN	32.22	53.50	71.97	103.15	125.48	149.13
BS-3T OUT	0.70 / 6826.56	4.77 / 6827.29	11.45 / 6827.82	25.05 / 6828.64	38.42 / 6829.21	49.80 / 6829.78

MARKETPLACE AT INTERQUEST
FILING NO. 1 & 2
FINAL DRAINAGE REPORT

SHEET 1 OF 2

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