

RESOLUTION NO. _____

A RESOLUTION AUTHORIZING THE MAYOR TO EXECUTE
A PARTNERSHIP AGREEMENT WITH CITY CHURCH OF
CHATTANOOGA.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CHATTANOOGA,
TENNESSEE, That it hereby authorizes the Mayor to execute a Partnership Agreement with City
Church of Chattanooga.

ADOPTED: _____, 2014

/mem

ATTACHMENT "C" Continued

Stormwater Calculation Summary Sheet



PROJECT NAME
ADDRESS

CITY CHURCH
7122 Lee Highway
Chattanooga, TN 37421

DATE
March 13, 2014

WATER QUALITY UNIT WEST.

HYDROLOGIC METHOD USED:

- Rational
- Modified Rational
- SCS (Check One)

TOTAL AREA (Acreage) 1.37

PRE-CONSTRUCTION CONDITIONS

Pervious Area, Ac 0.289
Impervious Area, Ac 0.167
Time of Concentration 16.7

C or CN Factor 61
C or CN Factor 98
Method for Tc Hydrocad

POST-CONSTRUCTION CONDITIONS

Pervious Area, Ac 0
Impervious Area, Ac 1.37
Time of Concentration 8.75'

C or CN Factor
C or CN Factor 98
Method for Tc Hydrocad

RUNOFF RESULTS

Storm Event	Pre-Development Peak Flowrate, cfs	Post-Development Peak Flowrate, cfs	Routed (detention) Flowrate, cfs
2 year	0.79	6.79	6.00
5 year	1.18	8.22	7.04
10 year	1.41	9.01	7.60
25 year	1.83	10.43	8.60
100 year	2.35	12.17	9.82

DETENTION VOLUME REQUIRED, cubic feet 24,567

- Yes
- No (check)

MULTI-STAGE OUTLET REQUIRED

FIRST FLUSH VOLUME, cubic feet 3730

WATER QUALITY TREATMENT METHOD Water quality unit

PROFESSIONAL ENGINEER CERTIFICATION

NAME Alvin R. Cook
SIGNATURE *Alvin R. Cook*
TN PE LICENSE 5405



ATTACHMENT "C" Continued

Stormwater Calculation Summary Sheet



PROJECT NAME: City Church
 ADDRESS: 7122 Lee Highway
Chattanooga, TN 37421

DATE: March 13, 2014

WATER QUALITY UNIT EAST

HYDROLOGIC METHOD USED:

- Rational
 Modified Rational
 SCS (Check One)

TOTAL AREA (Acreage): 0.844 AC

PRE-CONSTRUCTION CONDITIONS

Pervious Area, Ac: 0.544
 Impervious Area, Ac: 0
 Time of Concentration: 19.7 min

C or CN Factor: 80
 C or CN Factor: -
 Method for Tc: Hydrocad

POST-CONSTRUCTION CONDITIONS

Pervious Area, Ac: 0.637
 Impervious Area, Ac: 0.217
 Time of Concentration: 6.6 min

C or CN Factor: 80
 C or CN Factor: 98
 Method for Tc: Hydrocad

RUNOFF RESULTS

Storm Event	Pre-Development Peak Flowrate, cfs	Post-Development Peak Flowrate, cfs	Routed (detention) Flowrate, cfs
2 year	1.13	3.33	2.20
5 year	1.60	4.36	2.76
10 year	1.88	5.00	3.20
25 year	2.37	6.15	3.28
100 year	2.99	7.57	4.68

DETENTION VOLUME REQUIRED, cubic feet: 4186
 MULTI-STAGE OUTLET REQUIRED:
 FIRST FLUSH VOLUME, cubic feet: 591
 WATER QUALITY TREATMENT METHOD: Water Quality unit

- Yes No (check)

PROFESSIONAL ENGINEER CERTIFICATION

NAME: Alvin R. Cook
 SIGNATURE: Alvin R. Cook
 TN PE LICENSE: 5405

