## CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



Mayor Timothy M. Keller

June 10, 2025

Mike Walla, P.E. Walla Engineering 6501 Americas Pwky NE, Suite 301 Albuquerque, NM 87110

RE: Harvey-Abruzzo Residence 9902 Masters Drive NE Grading & Drainage Plan Engineer's Stamp Date: 6/5/25 Hydrology File: E21D036 Case # HYDR-2025-00202

Dear Mr. Walla:

PO Box 1293 Based upon the information provided in your submittal received 06/05/2025, the Grading & Drainage Plan is approved for Building Permit and Grading Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

#### Albuquerque **PRIOR TO CERTIFICATE OF OCCUPANCY:**

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 505-924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 505-924-3314 or amontoya@cabq.gov.

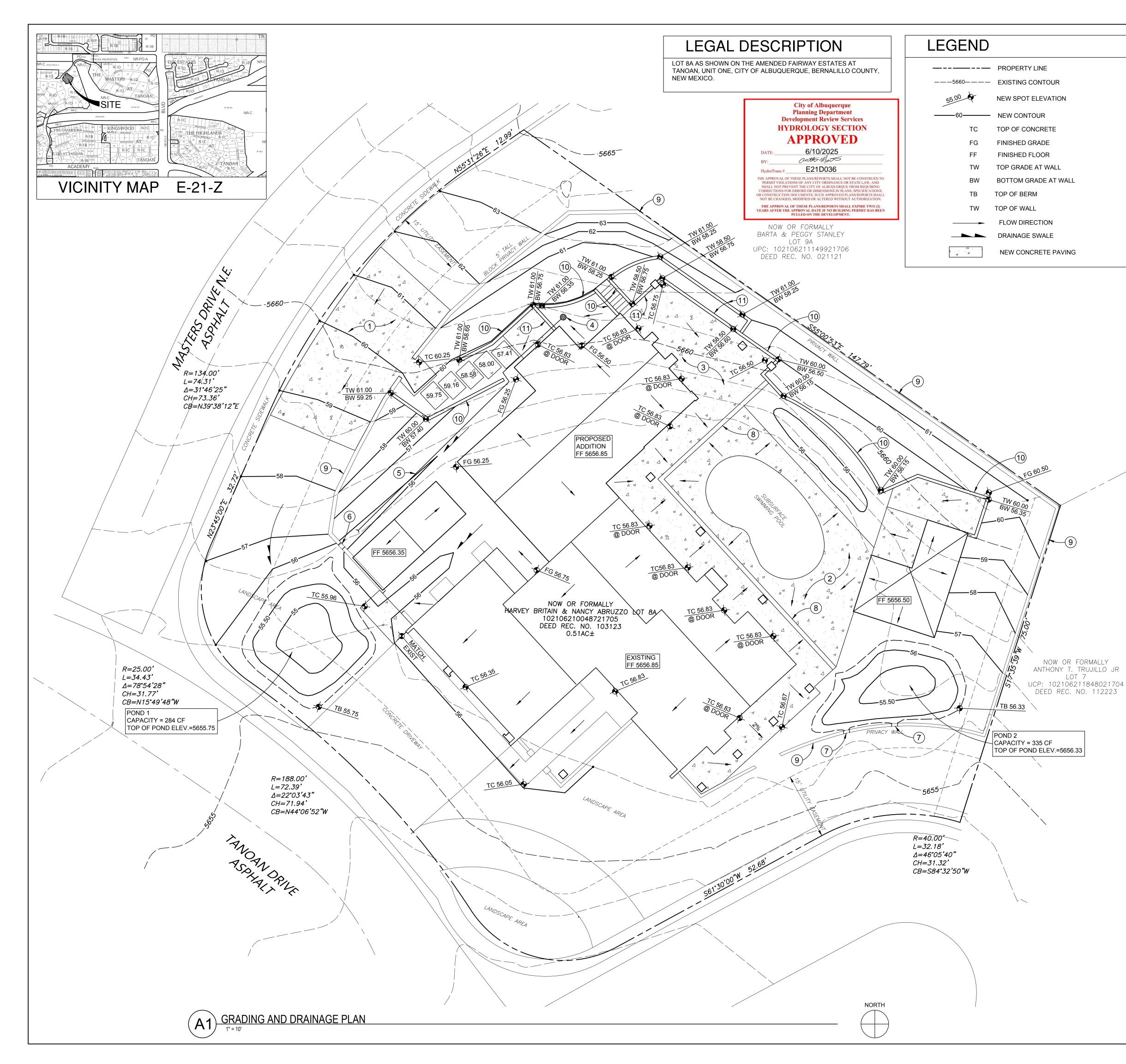
Sincerely,

NM 87103

www.cabq.gov

anthe Mart

Anthony Montoya, Jr., P.E. CFM Senior Engineer, Hydrology Planning Department, Development Review Services



# SHEET GENERAL NOTES

A PROVIDE SPLASH BLOCKS AT ALL ROOF DOWN SPOUTS AND DRAINS AT GRADE

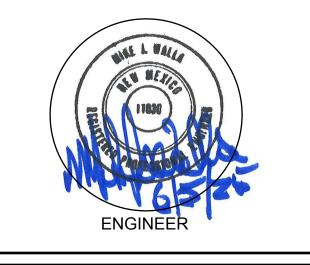
### SHEET KEYNOTES

- 1 NEW CONCRETE PARKING
- 2 NEW CONCRETE POOL DECK
- 3 NEW CONCRETE PATIO
- 4 NYLOPLAST AREA DRAIN WITH 4"Ø PVC OUTLET PIPE TOP OF GRATE ELEVATION = 56.25
- 5 4"Ø PVC DRAIN LINE DAYLIGHT AT GRADE
- 6 6"x16" DRAIN BLOCK IN WALL AT GRADE INVERT = 55.67 +/-
- 7 6"X16" DRAIN BLOCK IN WALL AT GRADE INVERT = 56.33
- 8 POOL DECK DRAIN
- 9 EXISTING CMU WALL TO REMAIN
- 10 NEW CONCRETE RETAINING WALL PER DETAIL A1/C-201
- 11 NEW CONCRETE RETAINING WALL PER DETAIL A2/C-201



500 Marquette Avenue NW • Suite 1500 Albuquerque • New Mexico • 87102 (505) 881-3008

CONTRACTOR



## HARVEY-ABRUZZO RESIDENCE

9902 MASTERS DRIVE NE ALBUQUERQUE, NEW MEXICO 87111

MARK DATE REVISION -0125

| PROJECT NO:   | A65-0 |
|---------------|-------|
| CAD DWG FILE: |       |
| DRAWN BY:     | LEK   |
| CHECKED BY:   | MJW   |

SHEET TITLE

# GRADING and DRAINAGE PLAN

#### Hydrology Calculations

9902 Masters Dr. NE – Site Area = 0.51 acres

| Precipitation Zone<br>Excess Precipitatio                                                                                                                                                               | -                                                                                                                |                                                                                                                                                                       | ble 6.2.7 and Fi                                                                                                             | gure 6.2.3                                                            |             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------|
| Peak Discharge for                                                                                                                                                                                      | •                                                                                                                |                                                                                                                                                                       | ble 6.2.14                                                                                                                   |                                                                       |             |
| PRE-DEVELOPED C                                                                                                                                                                                         | ONDITIONS                                                                                                        | – Entire Site                                                                                                                                                         |                                                                                                                              |                                                                       |             |
| Land Treatment                                                                                                                                                                                          | Area (ac)                                                                                                        | Excess Preci                                                                                                                                                          | o. 'E" (in) Peak                                                                                                             | Q (cfs/ac) Coe                                                        | efficient ( |
| А                                                                                                                                                                                                       | 0.000                                                                                                            | 0.67                                                                                                                                                                  | 1.84                                                                                                                         | Ļ                                                                     | 0.37        |
| В                                                                                                                                                                                                       | 0.382                                                                                                            | 0.86                                                                                                                                                                  | 2.49                                                                                                                         | )                                                                     | 0.50        |
| С                                                                                                                                                                                                       | 0.000                                                                                                            | 1.09                                                                                                                                                                  | 3.17                                                                                                                         | ,                                                                     | 0.64        |
| D                                                                                                                                                                                                       | 0.128                                                                                                            | 2.58                                                                                                                                                                  | 4.49                                                                                                                         | )                                                                     | 0.91        |
| Weighted E: [(0.38                                                                                                                                                                                      | 2 x 0.86) + (                                                                                                    | 0.128 x 2.58)]/                                                                                                                                                       | 0.510 = 1.292 ir                                                                                                             | 1                                                                     |             |
| V360 = 1.292 x 0.51                                                                                                                                                                                     | 0 x 43560/1                                                                                                      | .2 = 2392 CF                                                                                                                                                          |                                                                                                                              |                                                                       |             |
| Total Qp = (0.382 x                                                                                                                                                                                     | <b>( 2.49) + (0.</b> 2                                                                                           | 128 x 4.49) = 1.                                                                                                                                                      | 53 CFS                                                                                                                       |                                                                       |             |
|                                                                                                                                                                                                         |                                                                                                                  |                                                                                                                                                                       |                                                                                                                              |                                                                       |             |
| POST-DEVELOPED                                                                                                                                                                                          |                                                                                                                  |                                                                                                                                                                       |                                                                                                                              |                                                                       |             |
| Land Treatment                                                                                                                                                                                          | Area (ac)                                                                                                        | Excess Preci                                                                                                                                                          | <u>o. 'E" (in) Peak</u>                                                                                                      | Q (cfs/ac) Coe                                                        | efficient   |
| А                                                                                                                                                                                                       | 0.000                                                                                                            | 0.67                                                                                                                                                                  | 1.84                                                                                                                         | Ļ                                                                     | 0.37        |
| В                                                                                                                                                                                                       | 0.273                                                                                                            | 0.86                                                                                                                                                                  | 2.49                                                                                                                         | )                                                                     | 0.50        |
| С                                                                                                                                                                                                       | 0.000                                                                                                            | 1.09                                                                                                                                                                  | 3.17                                                                                                                         | ,                                                                     | 0.64        |
|                                                                                                                                                                                                         | 0.237                                                                                                            | 2.58                                                                                                                                                                  |                                                                                                                              |                                                                       | 0.91        |
| D                                                                                                                                                                                                       |                                                                                                                  | 0 007 0 0011                                                                                                                                                          | '0 510 - 1 650 in                                                                                                            |                                                                       |             |
| Weighted E: [(0.27                                                                                                                                                                                      |                                                                                                                  |                                                                                                                                                                       | 0.510 - 1.055 1                                                                                                              | 1                                                                     |             |
| Weighted E: [(0.27<br>V360 = 1.659 x 0.51                                                                                                                                                               | 0 x 43560/1                                                                                                      | 2 = 3072 CF                                                                                                                                                           |                                                                                                                              | 1                                                                     |             |
| Weighted E: [(0.27<br>V360 = 1.659 x 0.51                                                                                                                                                               | 0 x 43560/1                                                                                                      | 2 = 3072 CF                                                                                                                                                           |                                                                                                                              | 1                                                                     |             |
| Weighted E: [(0.27<br>V360 = 1.659 x 0.51<br>Total Qp = (0.273 x                                                                                                                                        | 0 x 43560/1<br>< 2.49) + (0.2                                                                                    | 2 = 3072 CF<br>237 x 4.49) = 1.                                                                                                                                       | 74 CFS                                                                                                                       |                                                                       |             |
| Weighted E: [(0.27<br>V360 = 1.659 x 0.51<br>Total Qp = (0.273 x<br>Rational Method C                                                                                                                   | 0 x 43560/1<br>( 2.49) + (0.2<br>Check: 12-m                                                                     | 2 = 3072 CF<br>237 x 4.49) = 1.<br>inute Peak Inte                                                                                                                    | 74 CFS<br>nsity, I = 4.96 in                                                                                                 | /hr                                                                   |             |
| Weighted E: [(0.27<br>V360 = 1.659 x 0.51<br>Total Qp = (0.273 x<br>Rational Method C                                                                                                                   | 0 x 43560/1<br>( 2.49) + (0.2<br>Check: 12-m                                                                     | 2 = 3072 CF<br>237 x 4.49) = 1.<br>inute Peak Inte                                                                                                                    | 74 CFS<br>nsity, I = 4.96 in                                                                                                 | /hr                                                                   |             |
| Weighted E: [(0.27<br>V360 = 1.659 x 0.51<br>Total Qp = (0.273 x<br>Rational Method C<br>Q = CIA = (0.50 x 4                                                                                            | 0 x 43560/1<br>< 2.49) + (0.2<br>Check: 12-m<br>I.96 x 0.273                                                     | 2 = 3072 CF<br>237 x 4.49) = 1.<br>inute Peak Inte<br>) + ( 0.91 x 4.96                                                                                               | 74 CFS<br>nsity, I = 4.96 in                                                                                                 | /hr                                                                   |             |
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| Weighted E: $[(0.27) V_{360} = 1.659 \times 0.51)$<br>Total Qp = $(0.273 \times 0.51)$<br>Rational Method C<br>Q = CIA = $(0.50 \times 4)$<br>Storm Water Quali<br>Impervious Area =                    | 0 x 43560/1<br>< 2.49) + (0.7<br>Check: 12-m<br>I.96 x 0.273<br>ity Volume,<br>0.237 ac                          | 2 = 3072 CF<br>237 x 4.49) = 1.<br>inute Peak Inte<br>) + ( 0.91 x 4.96<br>(SWQV)                                                                                     | 74 CFS<br>insity, I = 4.96 in<br>5 x 0.237) = 1.75                                                                           | /hr                                                                   |             |
| Weighted E: $[(0.27)$<br>V <sub>360</sub> = 1.659 x 0.51<br>Total Qp = $(0.273 \times$<br>Rational Method C<br>Q = CIA = $(0.50 \times 4)$<br>Storm Water Quali<br>Impervious Area =                    | 0 x 43560/1<br>< 2.49) + (0.7<br>Check: 12-m<br>I.96 x 0.273<br>ity Volume,<br>0.237 ac                          | 2 = 3072 CF<br>237 x 4.49) = 1.<br>inute Peak Inte<br>) + ( 0.91 x 4.96<br>(SWQV)                                                                                     | 74 CFS<br>insity, I = 4.96 in<br>5 x 0.237) = 1.75                                                                           | /hr                                                                   |             |
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| Weighted E: [(0.27<br>V <sub>360</sub> = 1.659 x 0.51<br>Total Qp = (0.273 x<br>Rational Method C<br>Q = CIA = (0.50 x 4<br>Storm Water Quali<br>Impervious Area =<br>BMP Volume Requ                   | 0 x 43560/1<br>< 2.49) + (0.2<br>Check: 12-m<br>1.96 x 0.273<br>ity Volume,<br>0.237 ac<br>iired: 0.26"          | 2 = 3072 CF<br>237 x 4.49) = 1.<br>inute Peak Inte<br>) + ( 0.91 x 4.96<br>(SWQV)<br>x 0.237 x 43560<br><u>Contour</u>                                                | 74 CFS<br>insity, I = 4.96 in<br>5 x 0.237) = 1.75<br>D/12 = 224 CF<br>Area                                                  | /hr<br>CFS OK                                                         |             |
| Weighted E: $[(0.27) V_{360} = 1.659 \times 0.51)$<br>Total Qp = $(0.273 \times 0.51)$<br>Rational Method C<br>Q = CIA = $(0.50 \times 4)$<br>Storm Water Quali<br>Impervious Area =<br>BMP Volume Requ | 0 x 43560/1<br>< 2.49) + (0.2<br>Check: 12-m<br>1.96 x 0.273<br>ity Volume,<br>0.237 ac<br>iired: 0.26"          | 2 = 3072 CF<br>237 x 4.49) = 1.<br>inute Peak Inte<br>) + ( 0.91 x 4.96<br>(SWQV)<br>x 0.237 x 43560<br><u>Contour</u><br>55.75                                       | 74 CFS<br>ensity, I = 4.96 in<br>5 x 0.237) = 1.75<br>D/12 = 224 CF<br><u>Area</u><br>621 SF                                 | /hr<br>CFS OK<br>Volume                                               |             |
| Weighted E: $[(0.27) V_{360} = 1.659 \times 0.51)$<br>Total Qp = $(0.273 \times 0.51)$<br>Rational Method C<br>Q = CIA = $(0.50 \times 4)$<br>Storm Water Quali<br>Impervious Area =<br>BMP Volume Requ | 0 x 43560/1<br>< 2.49) + (0.2<br>Check: 12-m<br>1.96 x 0.273<br>ity Volume,<br>0.237 ac<br>iired: 0.26"          | $2 = 3072 \text{ CF}$ $237 \times 4.49) = 1.$ inute Peak Intervention (SWQV) $x 0.237 \times 43560$ $\frac{\text{Contour}}{55.75}$ 55.50                              | 74 CFS<br>ensity, I = 4.96 in<br>5 x 0.237) = 1.75<br>D/12 = 224 CF<br><u>Area</u><br>621 SF<br>440 SF                       | /hr<br>CFS OK<br>Volume<br>132 CF<br>152 CF                           |             |
| Weighted E: [(0.27<br>V360 = 1.659 x 0.51<br>Total Qp = (0.273 x                                                                                                                                        | 0 x 43560/1<br>< 2.49) + (0.2<br>Check: 12-m<br>1.96 x 0.273<br>ity Volume,<br>0.237 ac<br>iired: 0.26"          | $2 = 3072 \text{ CF}$ $237 \times 4.49) = 1.$ inute Peak Intervention (SWQV) $x 0.237 \times 43560$ $\frac{\text{Contour}}{55.75}$ 55.50                              | 74 CFS<br>ensity, I = 4.96 in<br>5 x 0.237) = 1.75<br>0/12 = 224 CF<br><u>Area</u><br>621 SF<br>440 SF<br>168 SF             | /hr<br>CFS OK<br>Volume<br>132 CF<br>152 CF                           |             |
| Weighted E: $[(0.27) V_{360} = 1.659 \times 0.51)$<br>Total Qp = $(0.273 \times 0.51)$<br>Rational Method C<br>Q = CIA = $(0.50 \times 4)$<br>Storm Water Quali<br>Impervious Area =<br>BMP Volume Requ | 0 x 43560/1<br>< 2.49) + (0.2<br>Check: 12-m<br>I.96 x 0.273<br>ity Volume,<br>0.237 ac<br>iired: 0.26"<br>LUME: | $2 = 3072 \text{ CF}$ $237 \times 4.49) = 1.$ inute Peak Intervention (SWQV) $x 0.237 \times 43560$ $\frac{\text{Contour}}{55.75}$ 55.50                              | 74 CFS<br>ensity, I = 4.96 in<br>5 x 0.237) = 1.75<br>0/12 = 224 CF<br><u>Area</u><br>621 SF<br>440 SF<br>168 SF             | /hr<br>CFS OK<br>Volume<br>132 CF<br>152 CF                           |             |
| Weighted E: [(0.27<br>V <sub>360</sub> = 1.659 x 0.51<br>Total Qp = (0.273 x<br>Rational Method C<br>Q = CIA = (0.50 x 4<br>Storm Water Quali<br>Impervious Area =<br>BMP Volume Requ<br>SWQV POND 1 VO | 0 x 43560/1<br>< 2.49) + (0.2<br>Check: 12-m<br>I.96 x 0.273<br>ity Volume,<br>0.237 ac<br>iired: 0.26"<br>LUME: | $2 = 3072 \text{ CF}$ $237 \times 4.49) = 1.$ inute Peak Inter $+ (0.91 \times 4.96)$ (SWQV) $\times 0.237 \times 43560$ $\frac{\text{Contour}}{55.75}$ 55.50 $55.00$ | 74 CFS<br>ensity, I = 4.96 in<br>5 x 0.237) = 1.75<br>0/12 = 224 CF<br><u>Area</u><br>621 SF<br>440 SF<br>168 SF<br>SUB TOTA | /hr<br>CFS OK<br><u>Volume</u><br>132 CF<br><u>152 CF</u><br>L 284 CF |             |

 119 SF
 150 CF

 SUB TOTAL
 335 CF

119 SF

55.50

SWQV Total: 284 CF + 335 CF = 619 CF > 224 CF OK

C-101