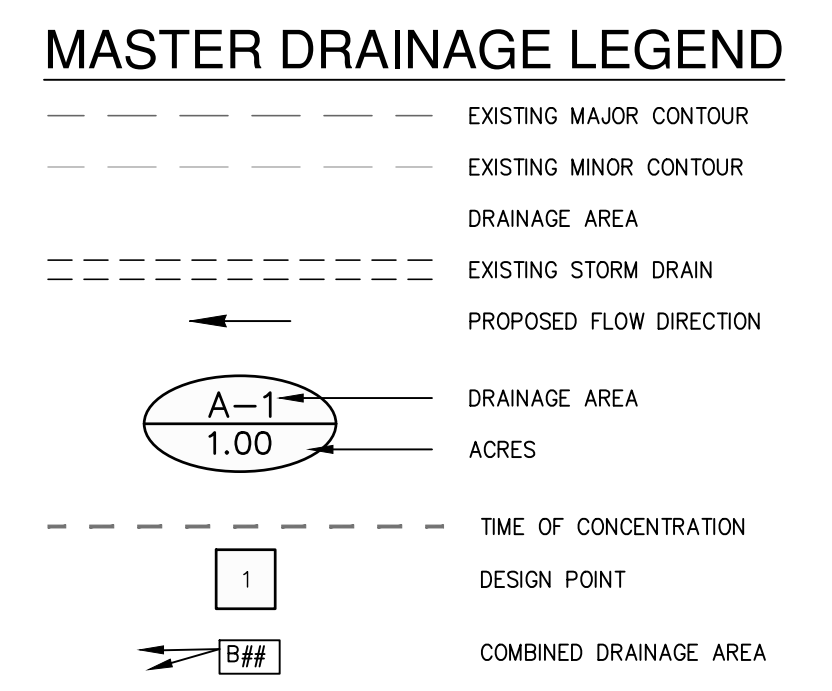
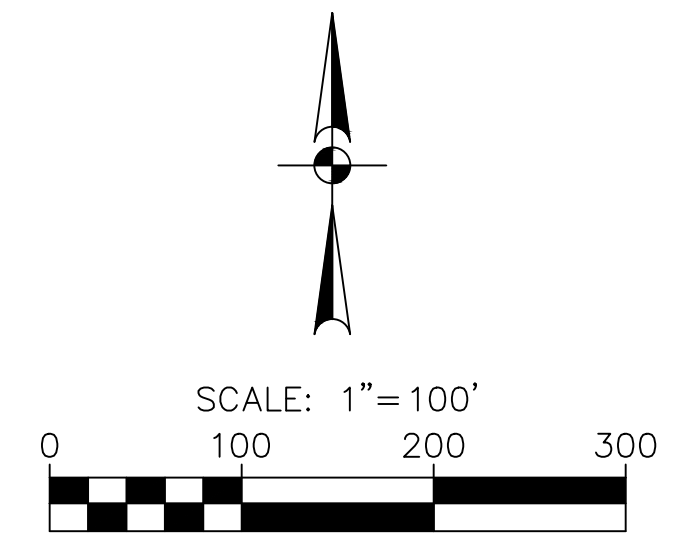


| Design Point | POST-DEVELOPMENT DRAINAGE AREA CALCULATIONS | | | | | | | | | | | |
|----------------|---|-----------------------------|-------------------------------------|-----------------------------|-------------------------------------|-------------------------------|------|----------|------------------------|----------------------------|-----------------|---------------------|
| | Area ID. | Total Drainage Area (acres) | Areas Drained | | Commercial Pavement (C<0.9) (acres) | Weighted Runoff Coefficient C | CA | Tc (min) | Design Storm Frequency | Intensity 100 Year (in/hr) | Q100 Year (cfs) | Drains To/Remarks |
| | | | Parks or Open Area (C<0.35) (acres) | Residential (C<0.5) (acres) | | | | | | | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | |
| Onsite | | | 0.35 | 0.5 | 0.9 | | | | | | | |
| 1 | A1A | 1.54 | | 1.54 | | 0.50 | 0.77 | 10 | 100 | 9.8 | 7.55 | INLET A1A |
| | A1B | 2.39 | | 2.39 | | 0.50 | 1.20 | 10 | 100 | 9.8 | 11.71 | INLET A1B |
| | A2A | 1.03 | | 1.03 | | 0.50 | 0.52 | 10 | 100 | 9.8 | 5.05 | INLET A2A |
| | A2B | 1.47 | | 1.47 | | 0.50 | 0.74 | 10 | 100 | 9.8 | 7.20 | INLET A2B |
| | A3A | 1.36 | | 1.36 | | 0.50 | 0.68 | 10 | 100 | 9.8 | 6.66 | INLET A3A |
| | A3B | 1.49 | | 1.49 | | 0.50 | 0.75 | 10 | 100 | 9.8 | 7.30 | INLET A3B |
| | B1A | 0.57 | | 0.57 | | 0.50 | 0.29 | 10 | 100 | 9.8 | 2.79 | INLET B1A |
| | B1B | 2.24 | | 2.24 | | 0.50 | 1.12 | 10 | 100 | 9.8 | 10.98 | INLET B1B |
| | B2 | 0.84 | | 0.84 | | 0.50 | 0.42 | 10 | 100 | 9.8 | 4.12 | WYE INLET B2 |
| | B2.1A | 0.43 | | 0.22 | 0.21 | 0.70 | 0.30 | 10 | 100 | 9.8 | 2.93 | INLET B2.1A |
| | B2.1B | 0.35 | | 0.13 | 0.22 | 0.75 | 0.26 | 10 | 100 | 9.8 | 2.58 | INLET B2.1B |
| | B2.2A | 0.30 | | 0.14 | 0.16 | 0.71 | 0.21 | 10 | 100 | 9.8 | 2.10 | INLET B2.2A |
| | B2.2B | 0.39 | | 0.23 | 0.16 | 0.66 | 0.26 | 10 | 100 | 9.8 | 2.54 | INLET B2.2B |
| | B2.3A | 0.33 | | | 0.33 | 0.90 | 0.30 | 10 | 100 | 9.8 | 2.91 | INLET B2.3A |
| | B2.3B | 0.21 | | | 0.21 | 0.90 | 0.19 | 10 | 100 | 9.8 | 1.85 | INLET B2.3B |
| | B3A | 0.60 | | 0.60 | | 0.50 | 0.30 | 10 | 100 | 9.8 | 2.94 | INLET B3A |
| | B3B | 1.33 | | 1.33 | | 0.50 | 0.67 | 10 | 100 | 9.8 | 6.52 | INLET B3B |
| | B4A | 0.62 | | 0.62 | | 0.50 | 0.31 | 10 | 100 | 9.8 | 3.04 | INLET B4A |
| | B4B | 0.95 | | 0.95 | | 0.50 | 0.48 | 10 | 100 | 9.8 | 4.66 | INLET B4B |
| | B5A | 1.18 | | 1.18 | | 0.50 | 0.59 | 10 | 100 | 9.8 | 5.78 | INLET B5A |
| | B5B | 1.29 | | 1.29 | | 0.50 | 0.65 | 10 | 100 | 9.8 | 6.32 | INLET B5B |
| | C1 | 0.68 | | 0.68 | | 0.50 | 0.34 | 10 | 100 | 9.8 | 3.33 | FUTURE WYE INLET C1 |
| | C1A | 0.31 | | | 0.31 | 0.90 | 0.28 | 10 | 100 | 9.8 | 2.73 | FUTURE INLET C1A |
| | C1B | 0.24 | | | 0.24 | 0.90 | 0.22 | 10 | 100 | 9.8 | 2.12 | FUTURE INLET C1B |
| | C2 | 0.76 | | 0.76 | | 0.50 | 0.38 | 10 | 100 | 9.8 | 3.72 | WYE INLET C2 |
| | C2A | 0.99 | | 0.99 | | 0.50 | 0.50 | 10 | 100 | 9.8 | 4.85 | INLET C2A |
| | C2B | 1.42 | | 1.42 | | 0.50 | 0.71 | 10 | 100 | 9.8 | 6.96 | INLET C2B |
| | C3A | 0.27 | | 0.27 | | 0.50 | 0.14 | 10 | 100 | 9.8 | 1.32 | INLET C3A |
| | C3B | 0.19 | | 0.19 | | 0.50 | 0.10 | 10 | 100 | 9.8 | 0.93 | INLET C3B |
| | D | 0.65 | | 0.65 | | 0.50 | 0.33 | 10 | 100 | 9.8 | 3.19 | POND |
| | OSA | 0.95 | | 0.95 | | 0.50 | 0.48 | 10 | 100 | 9.8 | 4.66 | WYE INLET A |
| | B11 | 1.38 | | 0.73 | 0.65 | 0.69 | 0.95 | 10 | 100 | 9.8 | 9.31 | EX INLET B11 |
| | B13 | 0.95 | | 0.48 | 0.47 | 0.70 | 0.66 | 10 | 100 | 9.8 | 6.50 | EX INLET |
| | B15 | 0.53 | | 0.25 | 0.28 | 0.71 | 0.38 | 10 | 100 | 9.8 | 3.69 | EX INLET |
| | B7 | 0.81 | | 0.41 | 0.40 | 0.70 | 0.57 | 10 | 100 | 9.8 | 5.54 | EX INLET |
| | B8 | 0.4 | | 0.13 | 0.27 | 0.77 | 0.31 | 10 | 100 | 9.8 | 3.02 | EX INLET |
| | OS-B2 | 0.64 | | 0.64 | | 0.50 | 0.32 | 10 | 100 | 9.8 | 3.14 | EX INLET |
| | JK-B1 | 0.99 | | | 0.99 | 0.90 | 0.89 | 10 | 100 | 9.8 | 8.73 | EX INLET |
| | JK-B4 | 0.67 | | | 0.67 | 0.90 | 0.60 | 10 | 100 | 9.8 | 5.91 | EX INLET |
| Design Point 1 | | 10.23 | 0 | 10.23 | 0.00 | 0.50 | 5.12 | 10 | 100 | 9.8 | 50.13 | BYPASS |
| Design Point 2 | | 11.63 | 0 | 10.34 | 1.29 | 0.54 | 6.33 | 10 | 100 | 9.8 | 62.04 | INTO POND SD-B |
| Design Point 3 | | 4.86 | 0 | 4.31 | 0.55 | 0.55 | 2.65 | 10 | 100 | 9.8 | 25.97 | INTO POND SD-C |
| Design Point 4 | | 6.37 | 0 | 2.64 | 3.73 | 0.73 | 4.68 | 10 | 100 | 9.8 | 45.83 | Into John King |
| TOTAL | | | | | | | | | | | | |

NOTE: THIS DESIGN IS BASED ON CITY OF ROCKWALL STORMWATER CRITERIA MANUAL, OCTOBER 2019

NOTE:

- REFER TO DRAINAGE MEMO DATES MARCH 19, 2021 BY PAPE-DAWSON ENGINEERS FOR FURTHER INFORMATION.
- DESIGN POINT 1 COLLECTS DRAINAGE FROM DA'S A & BYPASSES POND, OUTFALLING DIRECTLY TO DRAINAGE AREA SOUTH OF EXISTING E. QUAIL RUN ROAD. THIS BYPASS, ALONG W/ DETAINED FLOW FROM POND RELEASE LESS THAN PREDEVELOPED CONDITIONS REFER TO MEMO ABOVE FOR FURTHER DETAIL.

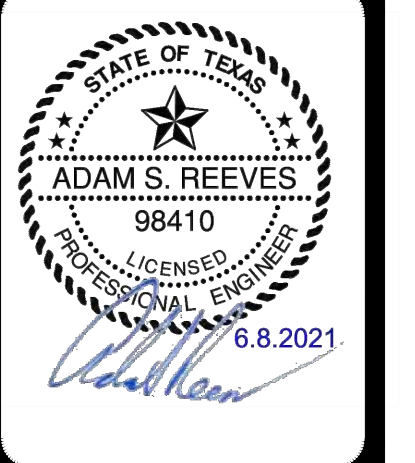


RECORD DRAWING
 THESE RECORD DRAWINGS ARE BASED ON AS-BUILT DOCUMENTS PROVIDED BY THE CONTRACTOR OR DEVELOPER. FIELD INSPECTION OF CONSTRUCTION, IF REQUIRED FOR COMPLIANCE WITH CERTAIN REGULATORY STANDARDS, WAS NOT PERFORMED BY THE DESIGN ENGINEER. IT IS NOT GUARANTEED THAT THIS DOCUMENT REPRESENTS "AS-BUILT" CONDITIONS.
 03/22/2022

UTILITY NOTE
 THE EXISTING UTILITIES SHOWN ON THESE PLANS WERE COMPILED FROM VARIOUS SOURCES AND ARE INTENDED TO SHOW THE GENERAL EXISTENCE AND LOCATION OF THE UTILITY INFORMATION ON THE PLANS. THE CONTRACTOR SHALL CONTACT A UTILITY LOCATING SERVICE 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND OF ALL EXISTING UTILITIES AND DETERMINE IF THERE ARE ANY CONFLICTS WITH THE PROPOSED FACILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICTS WITH EXISTING UTILITIES ARE DISCOVERED.

RESPONSIBILITY NOTE
 ALL RESPONSIBILITY FOR THE ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR THE ADEQUACY OR ACCURACY OF DESIGN.

| DATE | NO. | REVISION |
|------|-----|----------|
| | | |



PAPE-DAWSON ENGINEERS
 FORT WORTH | SAN ANTONIO | AUSTIN | HOUSTON | DALLAS
 6500 W HWY. STE 700 | FT. WORTH, TX 76102 | 817.870.8668
 TEXAS BOARD OF PROFESSIONAL ENGINEERS, FIRM REGISTRATION #470

GIDEON GROVE - PHASE 2
 CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS
 DRAINAGE AREA MAP
 PROPOSED

| | |
|----------|---------|
| PLAT NO. | # |
| JOB NO. | 6126300 |
| DATE | June 21 |
| DESIGNER | ML |
| CHECKED | ASR |
| DRAWN | ML |
| SHEET | 7 |

DATE: JUN 09, 2021, 4:16PM USER: P. LEONARD
 FILE: S:\projects\6126300\DWG\2.0 Design\2.1 Civil\2.1.3 Plan Sheets\SD04-6126300.dwg
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