## Irrigation

| Symbol | Description | Part # | Pressure | Flow | Radius |
|---|---|---|---|---|---|
| | Rain Bird 5H | 5H | 30 | 0.2 | 5 |
| | Rain Bird 5Q | 5Q | 30 | 0.1 | 5 |
| | Rain Bird 5F | 5F | 30 | 0.4 | 5 |
| | Rain Bird 8F | 8F | 30 | 1.05 | 8 |
| | Rain Bird 8H | 8H | 30 | 0.52 | 8 |
| | Rain Bird 8Q | 8Q | 30 | 0.26 | 8 |
| | Rain Bird 10F | 10F | 30 | 1.58 | 10 |
| | Rain Bird 10H | 10H | 30 | 0.79 | 10 |
| | Rain Bird 10Q | 10Q | 30 | 0.39 | 10 |
| | Rain Bird 12F | 12F | 30 | 2.6 | 12 |
| | Rain Bird 12H | 12H | 30 | 1.3 | 12 |
| | Rain Bird 12Q | 12Q | 30 | 0.65 | 12 |
| | Rain Bird 15H | 15H | 30 | 1.85 | 15 |
| | Rain Bird 15Q | 15Q | 30 | 0.92 | 15 |
| | Rain Bird 15SST | 15SST | 30 | 1.21 | 30 |
| | Rain Bird 15EST | 15EST | 30 | .62 | 30 |
| | Rain Bird 1404 | BUBBLER | | | |
| | HUNTER PGJ | | 40 | | |
| | | | | | |
| | Febco 765 | | | | |
| | Rain Bird PEB | | | | |
| | | | | | |
| | Hunter I-Core 1200-M w/n mini clik | | | | |
| | Nibco isolation valve | | | | |
| | 1 inch meter | | | | |
| | Lateral Line | | | | |
| | 1.5" Mainline - SCH 40 | | | | |
| | PVC SLEEVE - Size noted on plan (6) | | | | |
| | | | | | |

### PIPE SIZING CHART:

CLASS 200 PVC LATERAL LINES (1/2" IS SCH. 40 )

| SIZE | GALLONS |
|---|---|
| 1/2" | 0 - 6 |
| 3/4" | 6.1 - 10 |
| 1" | 10.1 - 17 |
| 1 1/4" | 17.1 - 26 |
| 1 1/2" | 26.1 - 36 |
| 2" | 36.1 - 55 |

### NOTES

1. USE 4" POP-UPS IN LAWN AREAS.
2. USE 12" POP-UPS IN BED AREAS.
3. USE 4" POP-UPS IN FRONT OF HEAD IN PARKING

### IRRIGATION NOTES:

1. Irrigation system shall be installed by a Licensed Irrigator. Irrigator shall provide an as-built locating mainline and valves with installed calculations after construction. This plan is to be used as a reference and for bidding purposes only.

2. Except as otherwise noted, the contractor shall procure permits and licenses, pay charges and fees and give notices necessary and incidental to the due lawful prosecution of the work. The contractor shall make arrangements and pay costs for installation of irrigation water meters at the approximate locations. Verify with Owner's Representative for the addresses for each.

3. The contractor shall follow the applicable City/County Department of Public Works specifications for installation of water meter and hot tapping.

4. The contractor shall notify pertinent utility companies 48 hours prior to construction for current utility locations. Extreme care shall be exercised in excavating and working near existing utilities. Contractor shall verify the location and condition of utilities and be responsible for damage to utilities.

5. The contractor shall at all times protect his work from damage and theft, and replace all damaged or stolen parts until the work is accepted in writing by owner.

6. The contractor shall not willfully install the sprinkler system as shown on the drawings when it is obvious in the field that obstructions, grade differences or differences in the area's dimensions exist that might not have been in the design. Such obstructions or differences shall be brought to the attention of the Landscape Architect. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.

7. The contractor shall clearly mark exposed excavations and materials and equipment. Cover or barricade trenches when contractor is not on site.

8. For purposed of clarity, some irrigation lines and valves may be shown outside of property, easements, or in paved areas. Locate all lines and valves in planting area unless otherwise noted.

9. Adjust arc of irrigation heads for even coverage. Head layout should be as per plans.

10. Avoid existing or future location of tree balls when laying pipe.

11. The contractor shall stake controller and PVB locations for approval by Landscape Architect or owner's representative prior to their installation.

12. Patch and repair any and all damage done to existing plant material and grading during installation of this work.

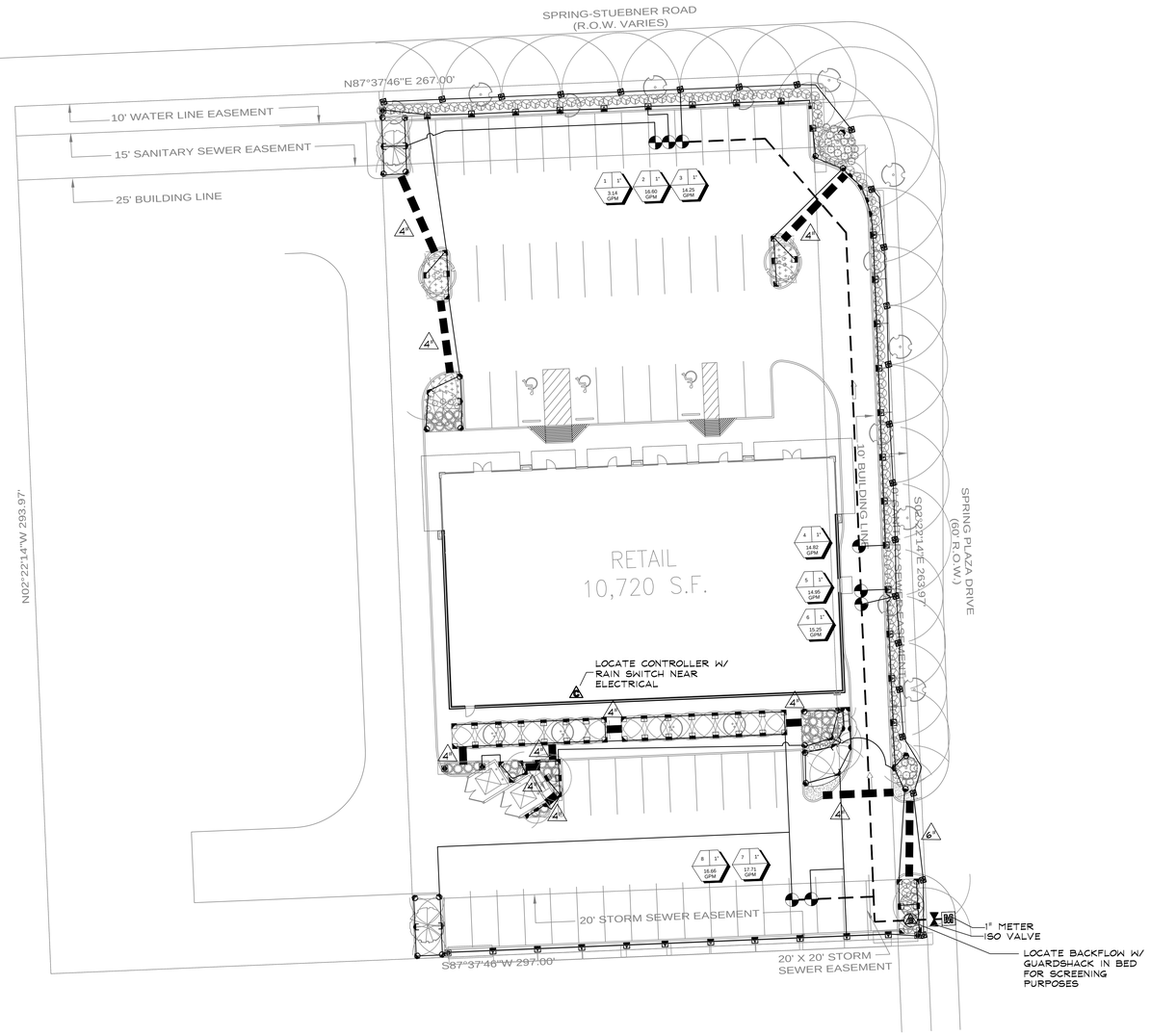
13. Contractor shall provide original and 2 copies of Pressure Vacuum Breaker certification to the Owner at completion of project.

14. Irrigation cycles shall be set to take place prior to sunrise and not to interfere with business unless otherwise instructed by the Owner, except during visits of grounds maintenance personnel during such visits the irrigation system may be operated as desired by those personnel.

15. Complete sprinkler system servicing shall be performed as required to maintain sprinklers in correct operating condition including all required labor. Check shall include visual "inspection" of all accessible components of the irrigation system including but not limited to controllers, remote control valves, quick couplers, and heads.

16. Adjust the sprinklers to avoid damage to windows, building and sign walls also adjust heads to keep water off the street. Make repairs and alterations to the sprinkling system and water lines. All sprinkler repairs such as cleaning of heads or breaks caused by the Contractor shall be the Contractor's responsibility.

17. The contractor, in the end, shall install a fully functional irrigation system with full coverage. The purpose of this plan is for bidding and reference. However, any changes shall be brought to the attention of the Landscape Architect. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.




SCALE 1" = 20'-0"

0 50

CMB
LANDSCAPE
ARCHITECTURE
18135 FM 362
Navasota, TX 77868
832-428-1209

01/31/2019
PERMIT / BID ISSUE

REGISTERED LANDSCAPE ARCHITECT
CHRISTOPHER M. BOWEN
2241
STATE OF TEXAS
Date: 2-13-19

CDA Architects
Member American Institute of Architects
20445 State Hwy 249, Suite 200
Houston, Texas 77070
832/678-9232 Fax 832/678-9240

ASHTON GRAY
DEVELOPMENT

IRRIGATION PLAN

10,720 SF Retail Shell
SPRING STUEBNER @ SPRING PLAZA
SPRING, TEXAS 77389

SCALE AS NOTED
PROJECT 19007
DATE 01/31/19