

**SITE PLAN REVIEW SHEET
ENVIRONMENTAL VARIANCE REQUEST ONLY**

CASE: SP-2018-0579C.SH

ZAP COMMISSION DATE: 08/04/2020

PROJECT NAME: Persimmons

APPLICANT: Mike Mullone

AGENT: Dunaway Associates

ADDRESS OF SITE: 7051 Meadow Lake Boulevard, Austin, TX 7844

COUNTY: Travis

AREA: 14.65 acres

WATERSHED: Onion Creek

JURISDICTION: Full-purpose

EXISTING ZONING: SF-6

PROPOSED DEVELOPMENT: Multi-Family Housing with associated improvements.

DESCRIPTION OF VARIANCE:

The applicant requests the following:

1. Request to vary from LDC 25-8-341 to allow cut of more than four feet on slopes in excess of 15 percent gradient.

STAFF RECOMMENDATION:

Staff recommends that the required findings of fact have been met and recommend approval of the variance request with the following conditions:

1. Revegetate the top and backside of the detention pond berm with native, deep-rooted bunch grasses, and provide additional tree protection for trees 4-8" in diameter located along the steeper slopes.

ENVIRONMENTAL BOARD ACTION:

07/15/2020: The Environmental Board voted in (11) favor, (0) against, (0) absentia

ZONING AND PLATTING COMMISSION ACTION:

ENVIRONMENTAL REVIEW STAFF: Jonathan Garner

PHONE: 512-974-1665

CASE MANAGER: Clarissa E. Davis

PHONE: 512-974-1423



ENVIRONMENTAL COMMISSION MOTION 20200715-003b

Date: July 15, 2020

Subject: Persimmons, SP-2018-0579C.SH

Motion by: Kevin Ramberg

Seconded by: Pam Thompson

RATIONALE:

WHEREAS, the Environmental Commission recognizes the applicant requests a variance from LDC 25-8-341 to allow cut of more than four feet on slopes in excess of 15 percent gradient;

WHEREAS, the Environmental Commission recognizes the site is located at 7051 Meadow Lake Boulevard, Austin, TX 78744; and

WHEREAS, the Environmental Commission recognizes that staff recommends, with conditions, the variance, having determined the findings of fact to have been met.

THEREFORE, the Environmental Commission recommends the variance from LDC 25-8-341 to allow cut of more than four feet on slopes in excess of 15 percent gradient.

Staff Conditions

1. Revegetate the top and backside of the detention pond berm with native, deep-rooted bunch grasses, and provide additional tree protection for trees 4-8” in diameter located east of the proposed pond along the steeper slopes.

VOTE 11-0

For: Bedford, Creel, Smith, Thompson, Nill, Neely, Coyne, Maceo, Ramberg, Guerrero, and Gordon

Against: None

Abstain: None

Recuse: None

Absent: None

Approved By:

Linda Guerrero, Environmental Commission Chair

Staff Findings of Fact
Variance to LDC 25-8-341



Development Services Department
Staff Recommendations Concerning Required Findings

Project Name: Persimmons (SP-2018-0579C.SH)
 Ordinance Standard: Watershed Protection Ordinance
 Variance Request: Request to vary from LDC 25-8-341 to allow cut of more than four feet on slopes in excess of 15 percent gradient.

Include an explanation with each applicable finding of fact.

A. Land Use Commission variance determinations from Chapter 25-8-41 of the City Code:

1. The requirement will deprive the applicant of a privilege available to owners of similarly situated property with approximately contemporaneous development subject to similar code requirements.

Yes. The project proposes a multi-family, affordable housing project in an area conducive to such a development. All along the East William Cannon Dr. corridor, there are a number of multi-family developments that are constructed on slopes within the 0-15 percent category. All of the proposed impervious cover with this project is similarly situated on the portion of the property within the 0-15 percent slope category. The proposed water quality and detention pond are required by the Land Development Code, and the project intends to incorporate an amphitheater amenity into the design of the detention pond in order to foster community engagement by hosting events for the multi-family development.

2. The variance:
 - a) Is not necessitated by the scale, layout, construction method, or other design decision made by the applicant, unless the design decision provides greater overall environmental protection than is achievable without the variance;

Yes. The variance request is necessitated by the layout of the site plan, but to the degree that the proposed layout provides greater overall environmental protection by achieving the following:

- All of the proposed cut is located outside the 500-year floodplain;
- No Protected Class trees (>19" diameter) will be removed for the construction of the ponds;
- The slopes that will receive the cut descend towards a large area of flat open land (0-15% slopes) that is shared PARD property and a

gas line easement, and no other development will be proposed at the bottom of the slope that would be adversely impacted by the proposed construction;

- The location and footprint of the pond avoids any conflict with the existing wastewater lines at the southern end of the property;
- The pond design will make a vertical cut in the slopes and reinforce the cut side with a concrete trapezoidal wall with stone veneer (see Pond Section in exhibit labeled Detention Pond Plan, page 20); and,
- The pond takes advantage of the natural slope of the land, and by locating the pond in this proposed location, the project does not seek to significantly alter the existing drainage patterns.

- b) Is the minimum deviation from the code requirement necessary to allow a reasonable use of the property;

Yes. The project does not seek to maximize development on the property with regards to allowable impervious cover (33% Gross Site Area proposed, 65% Gross Site Area maximum allowable), therefore the cut needed for the pond to capture the required water quality and detention volume is only necessitated by the amount of impervious cover proposed on the site. If the project were to maximize the amount of allowable impervious cover on the site, the water quality and detention facility would have to be enlarged in order to capture the required volume, which would most likely require expanding the footprint of the pond and locating the cut over four feet on slopes of a steeper category (25-35% gradient).

- c) Does not create a significant probability of harmful environmental consequences.

Yes. A different layout of the pond that would not require cut of more than four feet would also require locating the 0-4' cut onto the steeper slopes (25-35% gradient), require the removal of Protected Class trees, require the outfall of the pond to be located on the steeper slopes of the site – possibly generating a need for a cut variance for the outfall structure –and, has the probability of requiring cut within the 100-year floodplain.

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

Yes. All cuts will be stable, vertical cuts that will be reinforced with concrete retaining walls to prevent erosion from occurring in the location of the cut. The disturbed areas within the vicinity of the cut will be required to be restored with native, deep-rooted bunch grasses and other forbs indicative of a Blackland Prairie.

- B. The Land Use Commission may grant a variance from a requirement of Section 25-8-422 (*Water Supply Suburban Water Quality Transition Zone*), Section 25-8-452 (*Water Supply Rural Water Quality Transition Zone*), Section 25-8-482 (*Barton Springs Zone*)

Water Quality Transition Zone), Section 25-8-368 (Restrictions on Development Impacting Lake Austin, Lady Bird Lake, and Lake Walter E. Long), or Article 7, Division 1 (Critical Water Quality Zone Restrictions), after determining that::

- 1. The criteria for granting a variance in Subsection (A) are met;
N/A
- 2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property;
N/A
- 3. The variance is the minimum deviation from the code requirement necessary to allow a reasonable, economic use of the entire property.
N/A

Staff Determination: Staff determines that the findings of fact have been met. Staff recommends the following condition:

- Revegetate the top and backside of the detention pond berm with native, deep-rooted bunch grasses; and,
- Provide additional tree protection for trees 4-8” in diameter located east of the proposed pond along the steeper slopes.

| | | |
|---------------------------------------|--|-----------------------|
| Environmental Reviewer (DSD) |  _____ <i>Jonathan Garner</i> | Date <u>6-11-2020</u> |
| Environmental Review Manager (DSD) | <i>Mike McDougal</i> _____ <i>Mike McDougal</i> | Date <u>6-11-2020</u> |
| Environmental Officer (WPD) | _____ <i>Chris Herrington</i> | Date _____ |

Application Form
Variance to LDC 25-8-341



ENVIRONMENTAL COMMISSION VARIANCE APPLICATION FORM

PROJECT DESCRIPTION

Applicant Contact Information

| | |
|---------------------|-----------------------------------|
| Name of Applicant | Mike Mullone |
| Street Address | 5707 Southwest Parkway, Suite 250 |
| City State ZIP Code | Austin, Texas 78745 |
| Work Phone | 512-399-5373 |
| E-Mail Address | mmullone@dunawayassociates.com |

Variance Case Information

| | |
|---|--|
| Case Name | Persimmon |
| Case Number | SP-2018-0579C.SH |
| Address or Location | 7051 Meadow Lake Boulevard |
| Environmental Reviewer Name | Jonathan Garner |
| Environmental Resource Management Reviewer Name | N/A |
| Applicable Ordinance | LDC 25-8-341(A)(4) |
| Watershed Name | Onion Creek |
| Watershed Classification | <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Suburban <input type="checkbox"/> Water Supply Suburban <input type="checkbox"/> Water Supply Rural <input type="checkbox"/> Barton Springs Zone |

| | |
|---|--|
| Edwards Aquifer Recharge Zone | <input type="checkbox"/> Barton Springs Segment <input type="checkbox"/> Northern Edwards Segment <input checked="" type="checkbox"/> Not in Edwards Aquifer Zones |
| Edwards Aquifer Contributing Zone | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Distance to Nearest Classified Waterway | 0.5 miles to Onion Creek (Suburban Watershed) |
| Water and Waste Water service to be provided by | City of Austin |
| Request | The variance request is as follows (Cite code references): Per LDC 25-8-341(A)(4), grading over four feet for construction of a water quality control or detention facility is not allowed on an existing slope with a gradient of more than 15 percent. |

| Impervious cover | Existing | Proposed |
|---|---|----------|
| square footage: | _____ | _____ |
| acreage: | 0.00 | 4.32 |
| percentage: | 0% | 33.1% |
| Provide general description of the property (slope range, elevation range, summary of vegetation / trees, summary of the geology, CWQZ, WQTZ, CEFs, floodplain, heritage trees, any other notable or outstanding characteristics of the property) | <p>Habitat for Humanity proposes to construct 126 affordable housing units which qualify as SMART Housing. There are no current improvements on the site. The site improvements will include 18 buildings (for 126 residential units), water and wastewater utilities, storm drain utilities, open space community play area, water quality and detention ponds. The improvements will require grading with cutting more than 8 feet on slopes over 15% for a detention pond.</p> <p>Slopes range from 1% to 25%. Highest elevation 587, Lowest elevation : 540</p> <p>Mature trees and grass are the main site vegetation. There is a CWQZ for the unnamed tributary to Onion Creek that runs along the southern end of the property. There is a floodplain for each the Onion Creek and the unnamed tributary to Onion Creek. No improvements will be located in the CWQZ or the floodplains. There are no CEFs or Heritage Trees on this Site.</p> | |

| | |
|--|--|
| <p>Clearly indicate in what way the proposed project does not comply with current Code (include maps and exhibits)</p> | <p>Per LDC 25-8-341(A)(4), grading over four feet for construction of a water quality control or detention facility is not allowed on an existing slope with a gradient of more than 15 percent.</p> <p>A detention pond and dual use amphitheater is proposed in an area where the slope is over 15%.</p> |
|--|--|

FINDINGS OF FACT

As required in LDC Section 25-8-41, in order to grant a variance the Land Use Commission must make the following findings of fact:

Include an explanation with each applicable finding of fact.

Project:

Ordinance:

A. Land Use Commission variance determinations from Chapter 25-8-41 of the City Code:

1. The requirement will deprive the applicant of a privilege available to owners of similarly situated property with approximately contemporaneous development subject to similar code requirements.

No [provide summary of justification for determination]
Due to the unique topography of this Site, it all drains to the adjacent creek. Maximizing of affordable units is clustered on the 0% - 15% slope land. The layout requires the detention pond be located in the area where the slope starts to increase toward the creek

2. The variance:
 - a) Is not necessitated by the scale, layout, construction method, or other design decision made by the applicant, unless the design decision provides greater overall environmental protection than is achievable without the variance;

No [provide summary of justification for determination]
The pond location was chosen to minimize tree removal and to be adjacent to residences so alternate use as amphitheater was assessible to home owners

- b) Is the minimum deviation from the code requirement necessary to allow a reasonable use of the property;

Yes / No [provide summary justification for determination]
-The layout maximizes green space within the development which provides increased environmental protection.
-There is minimum amount of slope impacted by the pond design.
-The construction will stabilize the slope and will not create harmful environmental consequences.
-The detention pond and associated water quality pond will meet current standards.

- c) Does not create a significant probability of harmful environmental consequences.

Yes / No [provide summary justification for determination]
The construction on slopes consists of a detention pond that will be fully revegetated with grass and new trees around the pond.

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

Yes / No [provide summary justification for determination]
The construction on slopes consist of detention pond which will be fully revegetated with grass and new trees around the pond. No impervious cover is proposed on these slopes, and no slope erosion is anticipated.

B. Additional Land Use Commission variance determinations for a requirement of Section 25-8-422 (Water Quality Transition Zone), Section 25-8-452 (Water Quality Transition Zone), Article 7, Division 1 (Critical Water Quality Zone Restrictions), or Section 25-8-368 (Restrictions on Development Impacting Lake Austin, Lady Bird Lake, and Lake Walter E. Long):

1. The criteria for granting a variance in Subsection (A) are met;

Yes / No [provide summary of justification for determination]

2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property;

Yes / No [provide summary of justification for determination]

3. The variance is the minimum deviation from the code requirement necessary to allow a reasonable, economic use of the entire property.

Yes / No [provide summary of justification for determination]

**Variance approval requires all above affirmative findings.

January 21, 2020

Jonathan Garner
City of Austin
Development Services Department
505 Barton Springs Road, 4th Floor
Austin, Texas 78704

Re: Persimmon (SP-2018-0579C.SH) Dunaway UDG # 17-949
7051 Meadow Lake Boulevard, Austin, Texas 78744
Land Use Commission Variance for Administrative Cut/Fill Variance Request
(LDC 25-8-341(A)(4))

Mr. Garner,

Habitat for Humanity proposes to construct 126 affordable housing units which qualify as SMART. There are no current improvements on the site.

The site improvements will include 18 buildings (for 126 residential units), water and wastewater utilities, storm drain utilities, open space community play area, water quality and detention ponds.

The improvements will require grading with cutting more than 8 feet on slopes over 15% for a detention pond.

Per LDC 25-8-341(A)(4), grading over four feet for construction of a water quality control or detention facility is not allowed on an existing slope with a gradient of more than 15 percent.

We are requesting support and approval from the Environmental Reviewer on this project to get variance approval from the Land Use Commission. The reasons we are requesting approval as it pertains to the Findings of Facts is as follows:

- 1.) Due to the unique topography of this Site, it all drains to the adjacent creek. Maximizing of affordable units is clustered on the 0% - 15% slope land. The layout requires the detention pond be located in the area where the slope starts to increase toward the creek.
- 2.)
 - a. The layout maximizes green space within the development which provides increased environmental protection.
 - b. There is minimum amount of slope impacted by the pond design.
 - c. The construction will stabilize the slope and will not create harmful environmental consequences.
- 3.) The detention pond and associated water quality pond will meet current standards.
- 4.) The pond location was chosen to minimize tree removal and to be adjacent to residences so alternate use as amphitheater was assessable to home owners
- 5.) The construction on slopes consist of detention pond which will be fully revegetated with grass and new trees around the pond. No impervious cover is proposed, and no slope erosion is anticipated.

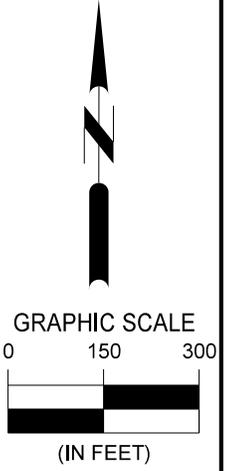
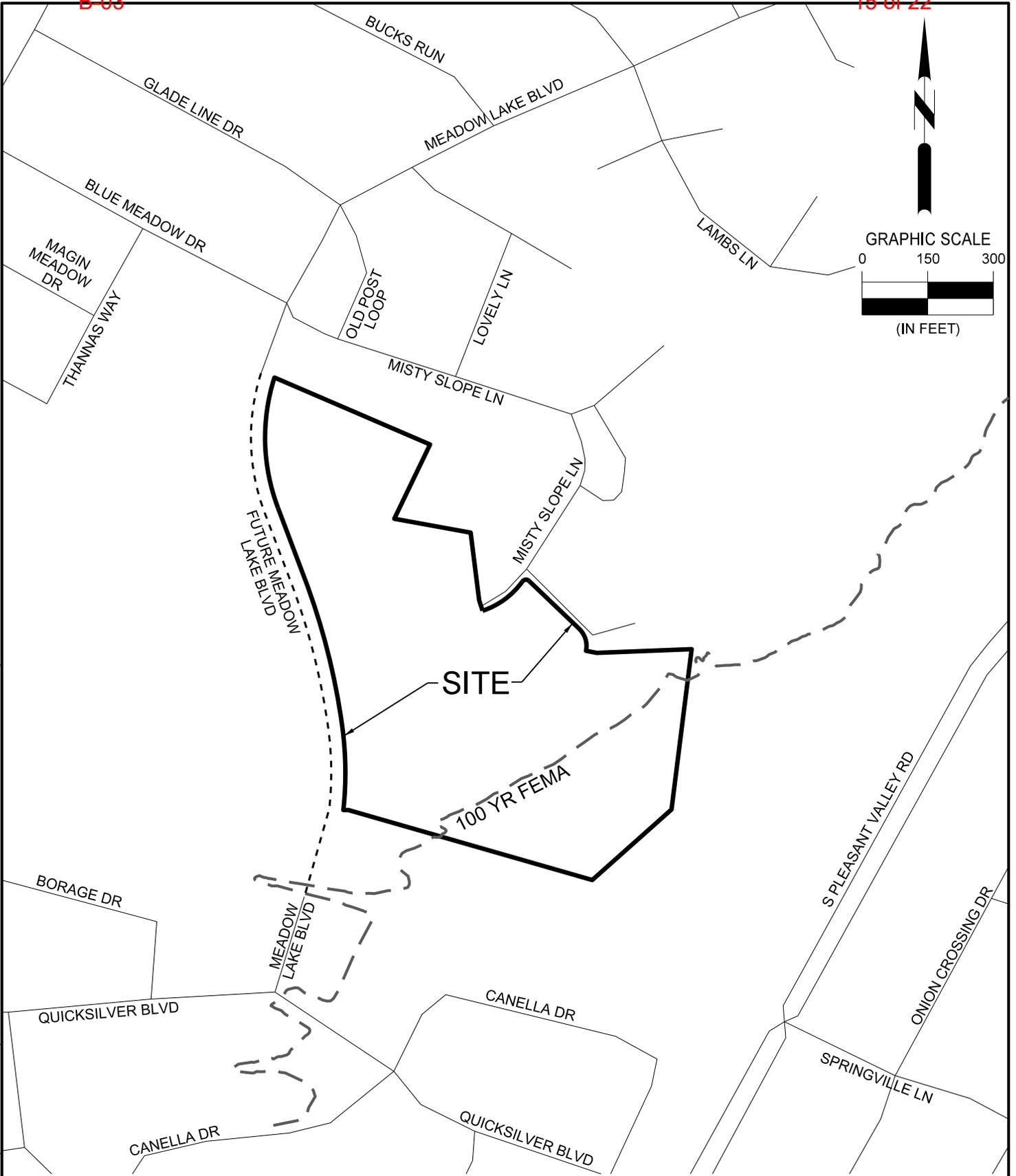
Please let me know if you have comments or questions. My phone number is 512-399-5373. E-mail at mmullone@dunawayassociates.com if there is any additional information I can provide that will facilitate your review or if any documents do not make it to you upon distribution.

Sincerely,

A handwritten signature in black ink that reads "Mike Mullone". The signature is written in a cursive, flowing style.

Mike Mullone, PE, CFM, CESSWI, CPESC

Applicant Exhibits
Variance to LDC 25-8-341



8/27/2019 \\Server\Data\Data Drive\Projects\Habitat for Humanity - 15-826\CAD\1(Plans)\Site Plan\Sheets-Exhibits & Sketches\H-FH-S-LOCATION MAP.dgn



TX Registered Engineering Firm #F-1114
 TBPLS Firm No. 10065900
 5707 Southwest Parkway
 Building 2, Suite 250
 Austin, TX 78735
 Phone: 512-306-8252

PERSIMMON LOCATION MAP



\\Server\cadd\cadd\Projects\Projects\18-026\CAD\Drawings\Site Plans\Sheets-Exhibits & Sketches\VFH-S-AERIAL_W_BNDRY.dgn
 8/27/2019



TX Registered Engineering Firm #F-1114
 TBPLS Firm No. 10065900
 5707 Southwest Parkway
 Building 2, Suite 250
 Austin, TX 78735
 Phone: 512-306-8252

PERSIMMON AERIAL WITH BOUNDARY



LEGEND

| | |
|------|---|
| (RI) | RECORD INFORMATION, SEE SURVEY NOTES |
| + | BENCHMARK SET |
| ○ | IRON ROD SET |
| ● | IRON ROD FOUND |
| ○ | IRON PIPE FOUND |
| X | X IN CONCRETE |
| ▲ | PK NAIL |
| ○ | NAIL |
| ○ | CONCRETE MONUMENT COTTON SPINDLE |
| --- | WATER INTERSECTION MAP |
| --- | PROPERTY LINE |
| --- | RIGHT OF WAY |
| --- | EASEMENT |
| --- | BUILDING OUTLINE |
| --- | CONTOUR |
| --- | GIS CONTOUR |
| --- | SPOT ELEVATION |
| --- | SIGN |
| --- | EDGE OF PAVEMENT |
| --- | WASTEWATER LINE |
| --- | ABANDONED WASTEWATER LINE |
| --- | WASTEWATER MANHOLE |
| --- | WASTEWATER CLEANOUT |
| --- | WATER LINE |
| --- | ABANDONED WATER LINE |
| --- | WATER METER |
| --- | WATER VALVE |
| --- | IRRIGATION CONTROL VALVE |
| --- | FIRE HYDRANT |
| --- | FIRE LINE |
| --- | 500 YR FLOODPLAIN |
| --- | 100 YR FLOODPLAIN |
| --- | STORM SEWER LINE |
| --- | STORM SEWER MANHOLE |
| --- | STORM GRATE INLET |
| --- | STORM CURB INLET |
| --- | DRAINAGE AREA |
| --- | GAS LINE |
| --- | GAS METER |
| --- | GAS VALVE |
| --- | OVERHEAD UTILITIES |
| --- | UTILITY POLE |
| --- | UTILITY POLE W/LUMINAIRES |
| --- | GUY WIRE |
| --- | ELECTRIC MANHOLE |
| --- | ELECTRIC METER |
| --- | ELECTRICAL LINE |
| --- | FIBER OPTICS LINE |
| --- | UNDERGROUND UTILITY |
| --- | TELECOMMUNICATION LINE |
| --- | TELEPHONE PEDESTAL |
| --- | TELECOMMUNICATION MANHOLE |
| --- | WIRE FENCE |
| --- | WOOD FENCE |
| --- | CHAIN LINK FENCE |
| --- | TREE W/ TAG |
| --- | HERITAGE TREE W/ TAG |
| --- | UNSURVEYED TREES (APPROXIMATE LOCATION BY AERIAL) |

| REV. NO. | BY | DATE | REVISION DESCRIPTION |
|----------|----|------|----------------------|
| | | | |
| | | | |
| | | | |
| | | | |

SCALE:
1" = 60'

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

THESE PLANS ARE UNDER REVIEW BY THE C.O.A. AND ARE NOT APPROVED FOR CONSTRUCTION. (THIS NOTE TO BE REMOVED ON FINAL, APPROVED PLANS.)

PERSIMMON

EXISTING CONDITIONS

DUNAWAY UG

Texas Firm No. F-1114
TBPLS Firm No. 10065900
5707 Southwest Parkway
Building 2, Suite 250
Austin, TX 78735
Phone: 512-306-8252

STATE OF TEXAS
MICHAEL C. MULLONE
127850
LICENSED PROFESSIONAL ENGINEER

Mike Mullone

1/8/2020

EXIST

SP-2018-0579C-SH

UDG JOB NO. 15-826

SHEET NUMBER 3 OF 49

SITE PLAN APPROVAL SHEET 3 OF 49
FILE NUMBER SP-2018-0579C-SH APPLICATION DATE: 12/4/2018
APPROVED BY COMMISSION ON: UNDER SECTION 112 OF CHAPTER 25-5 OF THE CITY OF AUSTIN CODE.
EXPIRATION DATE 05-31-2020 CASE MANAGER CLARISSA DAVIS
PROJECT EXPIRATION DATE (OED #970965-A) DWVZ DIZ X

Director, Development Services Department
RELEASED FOR GENERAL COMPLIANCE: ZONING: SF-4
Rev. 1: Correction 1:
Rev. 2: Correction 2:
Rev. 3: Correction 3:

Plans must be recorded by the Project Expiration Date, if applicable. Subsequent Site Plans which do not comply with the Code current at the time of filing, and all required Building Permits and/or a notice of construction (if a building permit is not required), must also be approved prior to the Project Expiration Date.

SILVERSTONE
PHASE 1 SECTION 1
BPPK-78 PAGE 381-382

SILVERSTONE
PHASE 1 SECTION 2



SCALE:
1"= 40'

LEGEND

| | |
|--|--------------------------|
| | CUT (RANGE 4.0' - 8.0') |
| | CUT (RANGE 8.0' +) |
| | FILL (RANGE 4.0' - 8.0') |
| | SLOPE - 15%+ |
| | EXISTING CONTOUR |
| | PROPOSED CONTOUR |
| | LOC |
| | LIMIT OF CONSTRUCTION |

DUNAWAY UOG
 UOG Registered Engineering Firm #F-1114
 1801
 5707 Southwest Parkway
 Building 2, Suite 250
 Austin, TX 78735

STATE OF TEXAS
 MICHAEL C. MULLONE
 127850
 LICENSED PROFESSIONAL ENGINEER
Michael Mullone
 9/30/19

PERSIMMON
 Austin, Texas

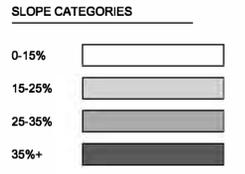
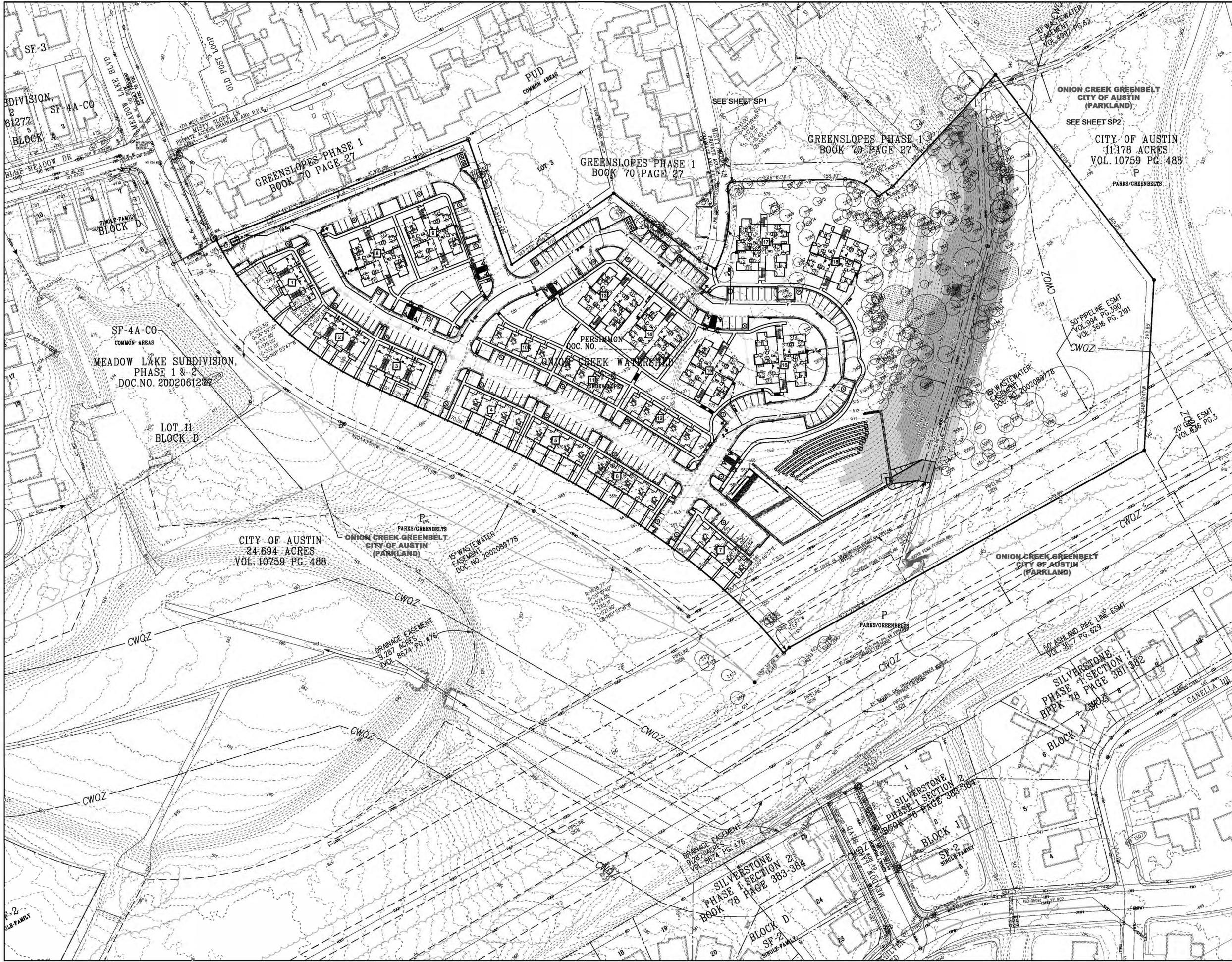
PROJECT NO : 15-826
 DATE : SEPTEMBER 2019

REVISIONS

| | |
|--|--|
| | |
| | |
| | |
| | |
| | |

CUT & FILL EXHIBIT

EXH



| REV. NO. | BY | DATE | REVISION DESCRIPTION |
|----------|----|------|----------------------|
| | | | |
| | | | |
| | | | |

SCALE:
1" = 60'

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

THESE PLANS ARE UNDER REVIEW BY THE C.O.A. AND ARE NOT APPROVED FOR CONSTRUCTION. (THIS NOTE TO BE REMOVED ON FINAL, APPROVED PLANS.)

PERSIMMON SLOPE MAP

DUNAWAY UG
Texas Firm No. F-1114
T8PLS Firm No. 10065900
5707 Southwest Parkway
Building 2, Suite 250
Austin, TX 78735
Phone: 512-306-8252



1/8/2020

SL

SP-2018-0579C-SH
UDG JOB NO. 15-826

SHEET NUMBER 9 OF 49

SITE PLAN APPROVAL SHEET 9 OF 49
FILE NUMBER SP-2018-0579C-SH APPLICATION DATE: 12/4/2018
APPROVED BY COMMISSION ON: UNDER SECTION 112 OF CHAPTER 25-5 OF THE CITY OF AUSTIN CODE.
EXPIRATION DATE: 05-31-1, LDC CASE MANAGER: CLARISSA DAVIS
PROJECT EXPIRATION DATE: (OED #97095-A) DWYZ DOZ X
Director, Development Services Department
RELEASED FOR GENERAL COMPLIANCE: ZONING: SF-6
Rev. 1: Correction 1: ZONING: SF-6
Rev. 2: Correction 2:
Rev. 3: Correction 3:
Final plan must be recorded by the Project Expiration Date, if applicable. Subsequent Site Plans which do not comply with the Code current at the time of filing, and all required Building Permits and/or a notice of construction (if a building permit is not required), must also be approved prior to the Project Expiration Date.

| Existing Hydrologic Summary | | | | | | | | | | |
|-----------------------------|-------|------------|------|------|--------------------|--------------------|--------------------|--------------------|--|--|
| Basin ID | Area | Impervious | CN | ToC | Q ² | Q ¹⁰ | Q ²⁵ | Q ¹⁰⁰ | | |
| - | ac. | % | | min. | ft ³ /s | ft ³ /s | ft ³ /s | ft ³ /s | | |
| H | 14.33 | 3 | 80.6 | 16 | 24.5 | 62.2 | 81.6 | 113.4 | | |
| R1 | 1.75 | 74 | 93.3 | 5 | 7.2 | 13.1 | 15.9 | 20.4 | | |
| R2 | 0.37 | 84 | 95.1 | 5 | 1.6 | 2.9 | 3.4 | 4.4 | | |
| Total Q (H) | | | | | 24.5 | 62.2 | 81.6 | 113.4 | | |
| Total Q (R1+R2) | | | | | 8.8 | 16.0 | 19.4 | 24.7 | | |
| Total Q (Existing) | | | | | 29.0 | 71.1 | 92.6 | 128.2 | | |

| Proposed Hydrologic Summary | | | | | | | | | | |
|-----------------------------|------|------------|------|------|--------------------|--------------------|--------------------|--------------------|--|--|
| Basin ID | Area | Impervious | CN | ToC | Q ² | Q ¹⁰ | Q ²⁵ | Q ¹⁰⁰ | | |
| - | ac. | % | | min. | ft ³ /s | ft ³ /s | ft ³ /s | ft ³ /s | | |
| H1 | 8.70 | 50 | 88.9 | 5 | 30.6 | 61.4 | 76.1 | 98.6 | | |
| H2 | 5.63 | 0 | 80.0 | 14 | 9.8 | 25.2 | 33.2 | 46.1 | | |
| R1 | 1.75 | 74 | 93.3 | 5 | 7.2 | 13.1 | 15.9 | 20.4 | | |
| R2 | 0.37 | 84 | 95.1 | 5 | 1.6 | 2.8 | 3.4 | 4.4 | | |

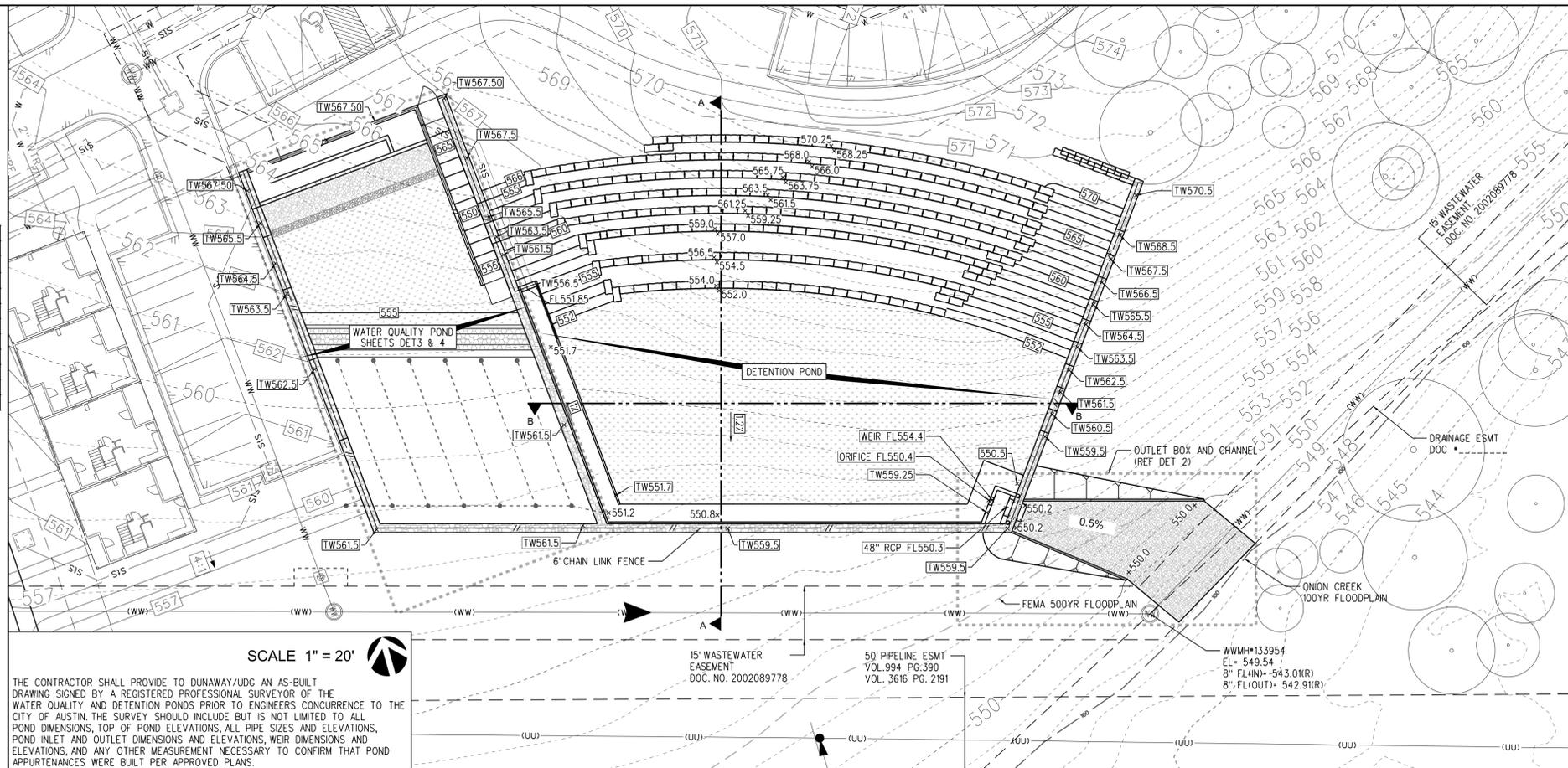
| | | | | |
|-----------------------------------|-------|-------|-------|-------|
| Detention Inflow | 30.6 | 61.4 | 76.1 | 98.6 |
| Detention Outflow | 3.9 | 29.9 | 43.7 | 64.3 |
| Detention WSEL (ft) | 554.9 | 557.1 | 557.9 | 559.0 |
| Detention Storage (ac-ft) | 0.74 | 1.22 | 1.42 | 1.69 |
| Total Proposed Q Leaving the Site | 11.1 | 54.9 | 76.8 | 110.4 |

| Q Summary | | | | |
|--------------------------|--------------------|--------------------|--------------------|--------------------|
| | Q ² | Q ¹⁰ | Q ²⁵ | Q ¹⁰⁰ |
| - | ft ³ /s | ft ³ /s | ft ³ /s | ft ³ /s |
| Existing (H) | 24.5 | 62.2 | 81.6 | 113.4 |
| Proposed w/ Det. (H1+H2) | 11.1 | 54.9 | 76.8 | 110.4 |
| Flow Reduction | -13.4 | -7.3 | -4.8 | -3.0 |

| Detention Outlet Structure | | | |
|----------------------------|-----------|------|-----------|
| Outlet # | Structure | Size | Elevation |
| 1 | Orifice | 5' | 550.4 |
| 2 | Weir | 27' | 554.4 |

| Detention Pond Summary | | | | |
|-------------------------|----------------------|-----------------------|-------|---------|
| Stage-Storage-Discharge | | | | |
| Storm | Q ^{pond in} | Q ^{pond out} | WSEL | Storage |
| | ft ³ /s | ft ³ /s | ft. | ac-ft. |
| 2YR | 30.6 | 3.9 | 554.9 | 0.74 |
| 10YR | 61.4 | 29.9 | 557.1 | 1.22 |
| 25YR | 76.1 | 43.7 | 557.9 | 1.42 |
| 100YR | 98.6 | 64.3 | 559.0 | 1.69 |

| Detention Pond Volume Summary | | | | | |
|-------------------------------|-----------------|-------|-----------------|-----------------|-----------|
| Elevation | Area | Area | Volume | Cum. Vol. | Cum. Vol. |
| ft. | ft ² | ac. | ft ³ | ft ³ | ac-ft. |
| 550.40 | 0 | 0.000 | 0 | 0 | 0 |
| 552.00 | 8152 | 0.187 | 6522 | 6522 | 0.150 |
| 554.00 | 8631 | 0.198 | 16783 | 23305 | 0.535 |
| 554.50 | 9406 | 0.216 | 4509 | 27814 | 0.639 |
| 556.50 | 9874 | 0.227 | 19280 | 47094 | 1.081 |
| 557.00 | 10706 | 0.246 | 5145 | 52239 | 1.199 |
| 559.00 | 11164 | 0.256 | 21870 | 74109 | 1.701 |
| 559.50 | 12052 | 0.277 | 5804 | 79913 | 1.835 |
| 561.50 | 12499 | 0.287 | 24551 | 104464 | 2.398 |





-  Subject Tract
-  Base Map

CASE: SP-2018-0579C.SH
 LOCATION: 7051 MEADOW LAKE BLVD.

This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.

This product has been produced by the Development Services Department for the sole purpose of geographic reference. No warranty is made by the City of Austin regarding specific accuracy or completeness.

