



ITEM FOR ENVIRONMENTAL COMMISSION AGENDA

COMMISSION MEETING DATE: December 2, 2020

NAME & NUMBER OF PROJECT: Applied Materials Logistics Service Center
SP-2020-0321C

NAME OF APPLICANT OR ORGANIZATION: Tammi Migl, Migl Engineering

LOCATION: 9614 E US 290 Hwy, Austin, TX, 78724

COUNCIL DISTRICT: District 1

ENVIRONMENTAL REVIEW STAFF: Pamela Abee-Taulli
Environmental Review Specialist Senior
512-974-1879, pamela.abee-taulli@austintexas.gov

WATERSHED: Decker Creek Watershed, Suburban Classification, Desired Development Zone

REQUEST: Variance request is as follows:
Request to vary from LDC 25-8-341 to allow cut to 12 feet.

STAFF RECOMMENDATION: Staff recommends this variance, having determined the findings of fact to have been met.

STAFF CONDITION: Applicant will stockpile and preserve topsoil for reuse in landscape, wetland mitigation, and/or biofiltration areas.



Development Services Department
Staff Recommendations Concerning Required Findings

Project Name: Applied Materials Logistics Service Center
Ordinance Standard: Watershed Protection Ordinance
Variance Request: Vary from LDC 25-8-341 to allow cut to 12 feet

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 applicant intends to combine multiple warehouses into one consolidated warehouse at this location. Automated robotic equipment and human operated wheeled equipment to be used in the facility require a consistent floor elevation. The applicant proposes 699,000 square feet of warehouse space with a consistent floor elevation, as well as loading docks, fire lanes, and parking that will be constructed at elevations appropriate for the warehouse finished floor elevation. A consistent floor elevation is necessary for this type of automated warehouse. The applicant proposes to construct this facility on a site with minimal slopes (2% to 5%). However, the size of the warehouse necessitates cut up to 12 feet to achieve a consistent finished floor elevation. The applicant proposes cut up to 12 feet, which has been minimized by use of a retaining wall, as shown in Exhibit 1.

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 materials handling needs of the warehousing process, and inclusion of a large automated storage solution within the warehouse, require a single building with a uniform finished floor elevation.

The finished floor elevation was based on 1) working around the CEF, 2) maintaining circulation to the existing campus, and 3) keeping the truck court slopes minimal for maneuverability.

Cut to 12 feet is necessary in the south truck bay to maintain a standard 4-foot dock height.

In addition, the applicant has selected a relatively flat site for the proposed warehouse. The selection of this site has helped to minimize the required grading.

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

Yes A retaining wall on the west side, parallel to Giles Lane, minimizes the extent of cut adjacent to the building. The truck court grades slope with the natural contours as much as possible while maintaining minimal slopes to facilitate the maneuverability and circulation of the truck traffic. The applicant has selected a relatively flat site for the proposed warehouse, helping to minimize the required grading.

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

Yes The development process does not pose a probability of harmful environmental consequences. The site is relatively flat, with a slope 2-5%. Based on the gentle slopes and the proposed construction activities, standard temporary and permanent erosion and sedimentation controls will contain sediment in accordance with Code and Criteria requirements.

The project will not impact any heritage trees. No floodplain or creek buffers exist within or adjacent to the limits of construction.

The project has been designed to incorporate and enhance an existing wetland critical environmental feature. The wetland is the site of an old stock pond and is very low in vigor, density and diversity. Proposed enhancements to the wetland area exceed the mitigation requirement.

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

Yes The development process does not pose a probability of harming water quality.

- 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;

Yes / No NA

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

Yes / No NA

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

Yes / No NA

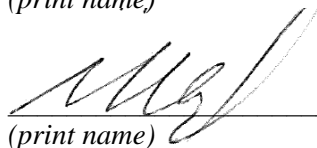
Staff Determination: Staff determines that the findings of fact have / have not been met. Staff recommends the following condition:

Environmental Reviewer
(DSD)


(print name)


Date: 11/3/20

Environmental Review
Manager (DSD)


(print name)

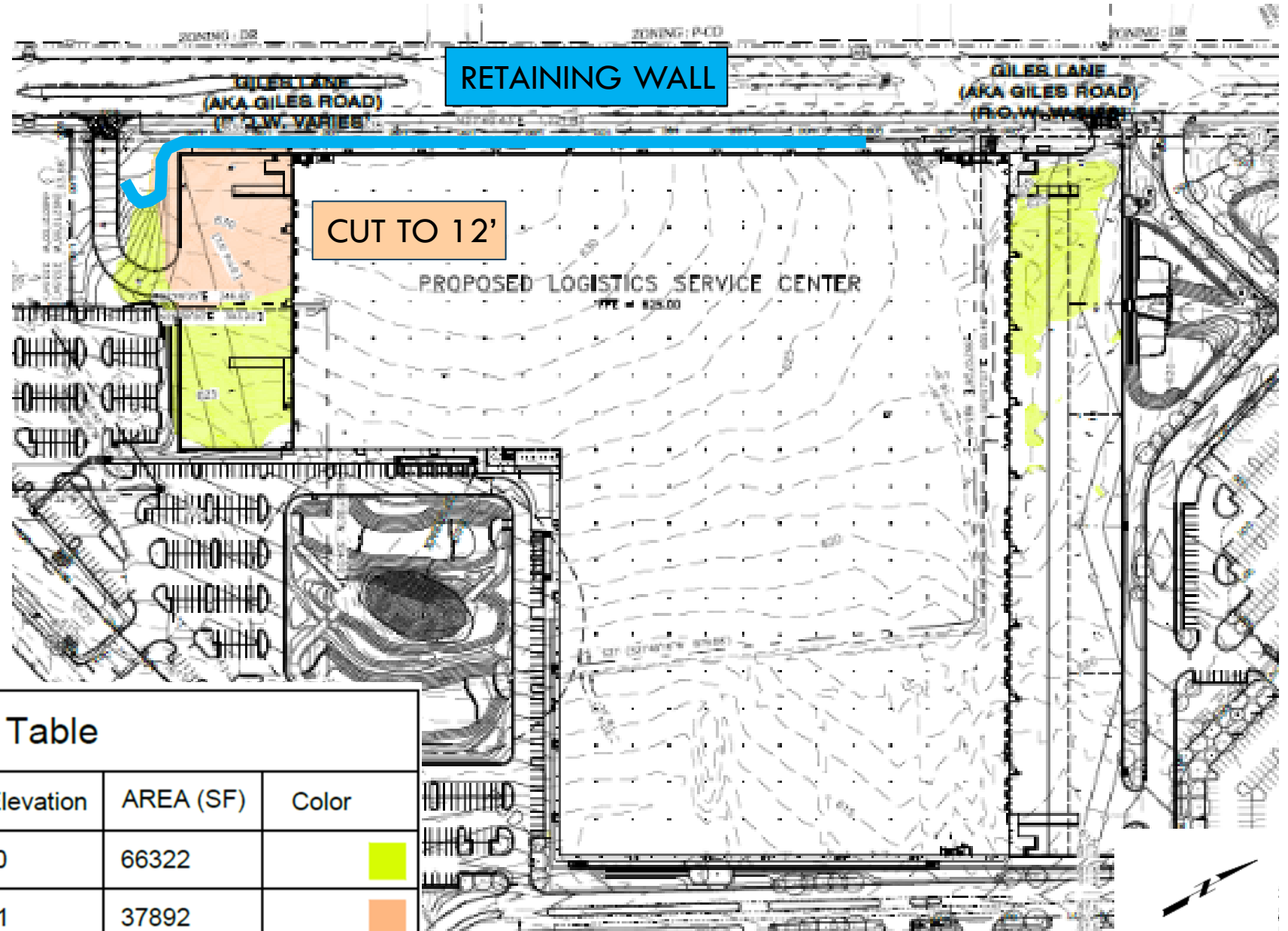
Date: 11/3/2020

Environmental Officer
(WPD)


(print name)

Date: 11/13/2020

GRADING EXHIBIT



Elevations Table

Number	Minimum Elevation	Maximum Elevation	AREA (SF)	Color
1	-8.00	-4.00	66322	Yellow
2	-12.00	-8.01	37892	Orange



ENVIRONMENTAL COMMISSION VARIANCE APPLICATION FORM

PROJECT DESCRIPTION

Applicant Contact Information

Name of Applicant	Migl Engineering and Consulting, PLLC
Street Address	9600 Escarpment Blvd, Suite 745-174
City State ZIP Code	Austin, TX 78749
Work Phone	512-750-0440
E-Mail Address	tammi@miglengineering.com

Variance Case Information

Case Name	Applied Materials Logistics Service Center
Case Number	SP-2020-0321C
Address or Location	9700 East US Hwy 290
Environmental Reviewer Name	Pamela Abee-Taulli
Environmental Resource Management Reviewer Name	
Applicable Ordinance	Watershed Protection Ordinance
Watershed Name	Decker
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	2,500 ft to Decker Creek
Water and Waste Water service to be provided by	Austin Water Utility
Request	The variance request is as follows (Cite code references): Variance from LDC Section 25-8-341 – Cut Requirements limiting cut to less than four feet of depth.

Impervious cover	Existing	Proposed (total after development)
square footage:	2,196,631	3,061,581
acreage:	50.43	70.28
percentage:	47.63	66.39
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>The project is located on the Applied Materials Harris Branch Campus. The Logistics Service Center (LSC) project will be developed as a Unified Development with the portion of the campus located south of Lake Bluebonnet; the Gross Site Area is 105.87 acres. Approximately 21.63 acres of the 44.5-acre limits of construction are undeveloped; the remaining area consists of overflow parking for the existing manufacturing/ office buildings. The site is located within the Decker Watershed, which is classified as a suburban watershed. No portion of the project limits of construction is located within the limits of the 100-year floodplain or Critical Water Quality Zone.</p> <p>Topography of the project limits of construction ranges from 610 to 634 feet AMSL. Drainage on the site generally slopes to the east at 2-5%. Undeveloped portions of the site consist of grasslands with very few trees. No heritage trees are located within the limits of construction. A stock tank is located on the eastern portion of the undeveloped area; the stock tank has been classified as a wetland CEF and will be protected with this project. The existing CEF is very low in vigor, diversity, and density and will be revegetated with the LSC project with a diverse selection of plants.</p>	

Clearly indicate in what way the proposed project does not comply with current Code (include maps and exhibits)	Construction of the LSC project will require limited areas of cut exceeding four (4) feet. Cut between 4' and 8' will be limited to an area within the north and south truck courts totaling 1.5 acres, which is 3.38 percent of the 45-acre limits of construction and 1.44 percent of the gross site area. Cut between 8' and 12' will be limited to a 0.87-acre area within the south truck court, which is 1.93 percent of the 45-acre limits of construction and 0.82 percent of the gross site area.
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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: Applied Materials Logistics Service Center

Ordinance: 25-8-341

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 / ~~NO~~

The Logistics Service Center (LSC) will include construction of a 729,000 square foot single-story building consisting of 699,000 square feet of warehouse and 30,000 square feet of supporting office space. The project will consolidate seven (7) off-site logistics facilities into one central warehouse and distribution service center. The variance request is common for large facilities of this type in this part of Austin; without this variance the Applicant would be deprived of privileges available to owners of similar projects.

The building configuration and placement on the property was based on the location of a wetland Critical Environmental Feature (CEF) that exists on the site. The building was designed to wrap around this CEF so that the wetland could be preserved to the maximum extent possible. Working around the CEF dictated the buildable area for the significant building footprint.

The materials handling needs of the warehousing process and inclusion of a large automated storage solution within the warehouse requires the finished floor elevation to be a uniform elevation. The finished floor elevation was based on preserving the wetland and maintaining grades in the area adjacent to the CEF as much as possible. The finished floor elevation of the LSC was also based on the need for the north shipping/ receiving dock to tie-into the existing Applied campus at closely matching elevations. The LSC provides warehousing and distribution support for the six (6) existing manufacturing buildings located on the campus making the seamless connection into the existing campus extremely important for site circulation.

For the aforementioned reasons of working around the CEF and maintaining circulation to the existing campus, the warehouse finished floor elevation was set at 625. The north and south truck courts are at an elevation of 621 to maintain a standard 4' dock height. Areas of cut in excess of 4' are limited to the two truck courts due to required dock heights. The primary area of cut is near the southwest corner of the building within the south truck court.

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 / No [provide summary of justification for determination]

The building configuration and placement on the property was dictated by the location of a wetland Critical Environmental Feature (CEF) that exists on the site. The building was designed to wrap around this CEF so that the wetland could be preserved to the maximum extent possible. Working around the CEF dictated the buildable area for the significant building footprint.

The scale, layout, and overall design of the site is based on the need to consolidate seven (7) off-site facilities to one central on-site location to reduce vehicle miles and increase the efficiency of the LSC. This consolidation results in greater overall environmental protection than is achievable without the variance because approximately 84,000 vehicle miles are eliminated annually, yielding:

- Less traffic congestion;
- Substantial air quality benefits due to the reduction in carbon dioxide and greenhouse gas emissions;
- Water quality benefits due to the reduction in hydrocarbons, heavy metals and TSS from fuel, oil and particle laden runoff from roadways; and
- Reduced noise pollution

The building will consist of a 729,000 square foot warehouse with 9 dock doors and a truck court on the south side of the building and 38 dock doors and a truck court on the north side of the building. The materials handling needs of the warehousing process and inclusion of a large

automated storage solution within the warehouse requires a uniform finished floor elevation similarly found in other warehouses. The building type, layout, and ingress/egress features are based upon the materials handling needs of the warehousing, shipping, and receiving processes. This layout is similar to other such facilities in the Austin area and we feel that the variance does not provide special privilege not enjoyed by other similarly situated properties and similarity timed development.

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

YES / ~~No~~

A retaining wall is proposed parallel to Giles Lane a horizontal distance of approximately fifteen (15) feet from the western edge of the building foundation. This retaining wall is an integral part of the slab on grade building foundation and acts as a vertical moisture retarder. This retaining wall also serves to minimize the extent of the cut to the 15' immediately adjacent to the building foundation on the west side; the grade at the top of the wall varies and matches existing grades. Although cut areas in the south and north truck court could not be limited due to the standard 4' dock height required, the truck court grades slope with the natural contours as much as possible while maintaining minimal slopes to facilitate the maneuverability and circulation of the truck traffic.

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

YES / ~~No~~

The proposed LSC project does not create a significant probability of harmful environmental consequences. The project will not impact any heritage trees. No floodplain or creek buffers exist within or adjacent to the limits of construction.

An old stock pond with a fringe wetland exists within the limits of construction and has been classified at a wetland CEF. This CEF is very low in vigor, density and diversity (according to site visits and review by Horizon Environmental Services, Inc and corroborated by Watershed Protection staff).

The project has been designed to incorporate and enhance the existing wetland CEF. The drainage of the site has been designed to increase the contributing drainage area to the wetland. The wetland area will be improved by not only enlarging the permanent pool but also creating several littoral shelves and vegetated benches. The littoral shelves and benches will create a safe haven, breeding place, and healthy habitat for fish and indigenous wildlife such as birds, dragonflies, and frogs around the wetland. Mosquitofish will be introduced to the wetland to control the mosquito population. Water shading plants will provide shade for aquatic life and cool water temperatures.

Mitigation for encroachment within the 150' wetland setback is required at a ratio of 1:1; 141,800 mitigation points are required. Proposed enhancements to the wetland area exceed the mitigation requirement; 152,817 mitigation points have been provided based on plantings alone. Trees, grasses and shrubs proposed increase the biodiversity of the area and will survive with varying levels of water. Species that produce berries and nuts, and pollenating plants have been selected to provide benefits to the wildlife including birds, and pollinators such as bees and butterflies. The project proposes to add three (3) biofiltration ponds and a partial sedimentation/ filtration pond; all City of Austin water quality regulations have been met. An Integrated Pest Management Plan will be developed for the areas of campus that contribute to the three (3) proposed biofiltration ponds.

The proposed LSC project results in a significant reduction in miles traveled by bringing seven (7) off-site facilities to one central on-site location. This 84,000 mile-per-year reduction not only results in less traffic congestion, but also results in substantial air quality benefits due to the reduction in carbon dioxide and greenhouse gas emissions; water quality benefits due to the reduction in hydrocarbons, heavy metals and TSS from fuel, oil and particle laden runoff from roadways; and also, a reduction in noise pollution.

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~~

Yes, the proposed LSC project will provide equal or better water quality than would have resulted if the development had proceeded without the variance. With the addition of three (3) biofiltration ponds and a partial sedimentation/ filtration pond, all City of Austin water quality regulations have been met.

In addition, the project has been designed to incorporate and enhance the existing wetland CEF. The CEF is an old stock pond with a fringe wetland around its bank and a contributing area of approximately 3.2 acres. Drainage of the site has been designed to increase the contributing drainage area to the wetland to 15 acres. Biofiltration ponds have been designed on both the east and west side of the wetland each with two sedimentation basins and a biofiltration basin. The filtration underdrains will be pumped to the wetland. In addition, condensate recovery tanks will also drain to the wetland ensuring a continual source of water to the wetland plants. The wetland CEF provides another layer of water quality to the contributing drainage area by extending biological contact time with sustainable aquatic species and vegetation.

The wetland area will be improved by not only enlarging the permanent pool but also creating several littoral shelves and vegetated benches. The littoral shelves and benches will increase the nutrient uptake and also create a safe haven, breeding place, and healthy habitat for fish and

indigenous wildlife such as birds, dragonflies, and frogs around the wetland. Mosquitofish will be introduced to the wetland to control the mosquito population. Water shading plants will not only provide shade for aquatic life and cool water temperatures, but will also provide an additional form of filtration by removing nitrogen and phosphates.

Mitigation for encroachment within the 150' wetland setback is required at a ratio of 1:1; 141,800 mitigation points are required. Proposed enhancements to the wetland area exceed the mitigation requirement; 152,817 mitigation points have been provided based on plantings alone. Trees, grasses and shrubs proposed increase the biodiversity of the area and will survive with varying levels of water. Species that produce berries and nuts, and pollenating plants have been selected to provide benefits to the wildlife including birds, and pollinators such as bees and butterflies.

As previously mentioned, four (4) water quality ponds are proposed with the LSC project. Two (2) biofiltration ponds will flank the wetland as discussed above, a third biofiltration pond is proposed north of the LSC near Giles Lane and a partial/sedimentation filtration pond is proposed southeast of the LSC near US Hwy 290. Similar to the biofiltration ponds adjacent to the wetlands, the biofiltration pond north of the LSC will have plant diversity and provide ecological benefits beyond the water quality benchmark. An Integrated Pest Management Plan will be developed for the areas of campus that contribute to the three (3) proposed biofiltration ponds.

The proposed LSC project results in a significant reduction in miles traveled by bringing seven (7) off-site facilities to one central on-site location. This 84,000 mile-per-year reduction not only results in less traffic congestion, but also results in substantial air quality benefits due to the reduction in carbon dioxide and greenhouse gas emissions; water quality benefits due to the reduction in hydrocarbons, heavy metals and TSS from fuel, oil and particle laden runoff from roadways; and also, a reduction in noise pollution.

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):.... **NA**

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.

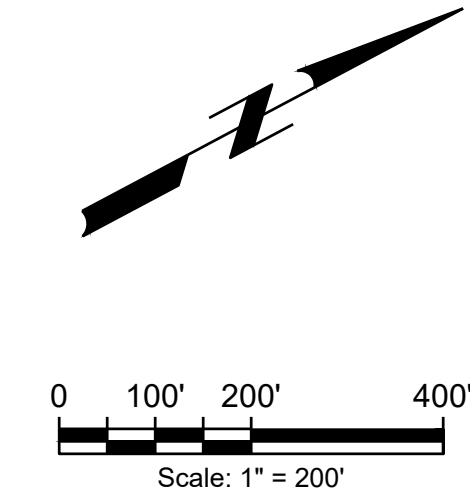
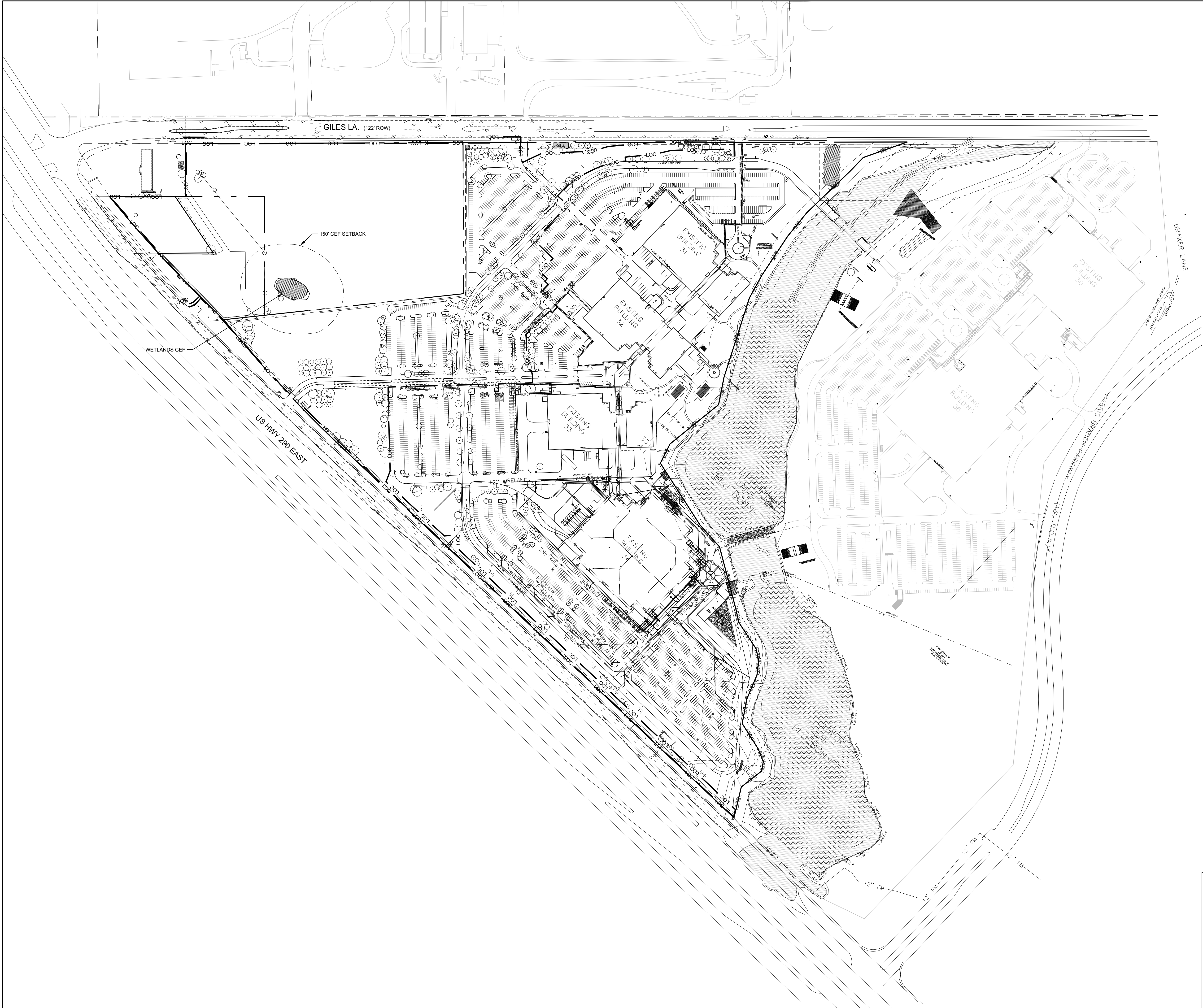
Yes / No [provide summary of justification for determination]

****Variance approval requires all above affirmative findings.**

Exhibits for Commission Variance

- Aerial photos of the site
- Site photos
- Aerial photos of the vicinity
- Context Map—A map illustrating the subject property in relation to developments in the vicinity to include nearby major streets and waterways
- Topographic Map - A topographic map is recommended if a significant grade change on the subject site exists or if there is a significant difference in grade in relation to adjacent properties.
- For cut/fill variances, a plan sheet showing areas and depth of cut/fill with topographic elevations.
- Site plan showing existing conditions if development exists currently on the property
- Proposed Site Plan- full size electronic or at least legible 11x17 showing proposed development, include tree survey if required as part of site or subdivision plan
- Environmental Map – A map that shows pertinent features including Floodplain, CWQZ, WQTZ, CEFs, Setbacks, Recharge Zone, etc.
- An Environmental Resource Inventory pursuant to ECM 1.3.0 (*if required by 25-8-121*)
- Applicant's variance request letter

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LEGEND

NOT WITHIN UDA OR PART OF THIS APPLICATION



Know what's below.
Call before you dig.

CAUTION - ELECTRICITY PRESENT

THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS THAT ENTER OR WORK ON THIS PROJECT ARE RESPONSIBLE FOR LOCATING, USING, ONE-CALL OR THE ELECTRIC UTILITIES THEMSELVES, ALL OVERHEAD AND UNDERGROUND ELECTRICAL OF ANY NATURE AND FOR SAFEGUARDING ALL PERSONNEL ON THIS PROJECT, INCLUDING ANY OFF-SITE WORK AREAS SHOWN ON THE PLAN, FROM ANY INTERFERENCE WITH THE ELECTRIC LINES OR FROM DAMAGING, DIGGING UP OR UNCOVERING THE ELECTRIC LINES. GETTING A LADDER IN HARMS WAY OR ANY OTHER ACTIVITY OF ANY NATURE THAT COULD HARM ANY INDIVIDUAL IN ANY MANNER. THIS RESPONSIBILITY HEREBY REMOVES MIGL ENGINEERING AND CONSULTING AND THE OWNER FROM ANY LIABILITY OF ANY NATURE.

SITE PLAN RELEASE

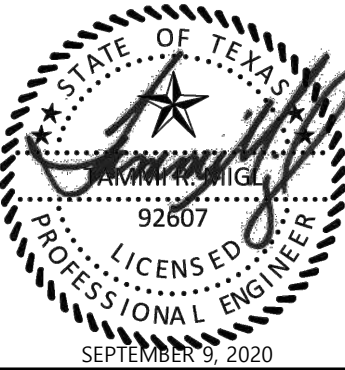
FILE NUMBER: SP-2020- EXPIRATION DATE: _____
CASE MANAGER: _____ APPLICATION DATE: _____
APPROVED ADMINISTRATIVELY ON: _____
APPROVED BY PLANNING COMMISSION ON: _____
APPROVED BY CITY COUNCIL ON: _____
Under Section _____ of Chapter _____ of the Austin City Code.

Signing for Director, Development Services Department

DATE OF RELEASE: _____ ZONING: _____
Rev. 1 _____ Correction 1: _____
Rev. 2 _____ Correction 2: _____
Rev. 3 _____ Correction 3: _____

Release of this application does not constitute a verification of all data, information and calculations supplied by the Applicant. The Engineer of record is solely responsible for the completeness, accuracy and adequacy of His/Her submittal, whether or not the application is reviewed for code compliance by City Engineers.

MIGL ENGINEERING AND CONSULTING
9600 Escarpment Blvd, Suite 745-174
Austin, TX 78749 | 512 750 0440
Texas Registered Engineering Firm F-16967



NO.	DATE	REVISIONS	RECORD

CLIENT	APPLIED MATERIALS 9700 EAST US HWY 290 AUSTIN, TX 78724
PROJECT	APPLIED MATERIALS AUSTIN LOGISTICS SERVICE CENTER 9700 EAST US HWY 290 AUSTIN, TX 78724

SHEET TITLE	EXISTING OVERALL SITE PLAN
PROJECT NO.	0120.009
SHEET NO.	C10 10 OF 119

APPLIED MATERIALS HARRIS BRANCH CAMPUS

Legend

- Bert's Dirts
- Dwyer Realty Co Inc
- Feature 1
- Liz's Grill
- Southern Tire Mart
- The Children's Courtyard
- Uncle Bob's Self Storage

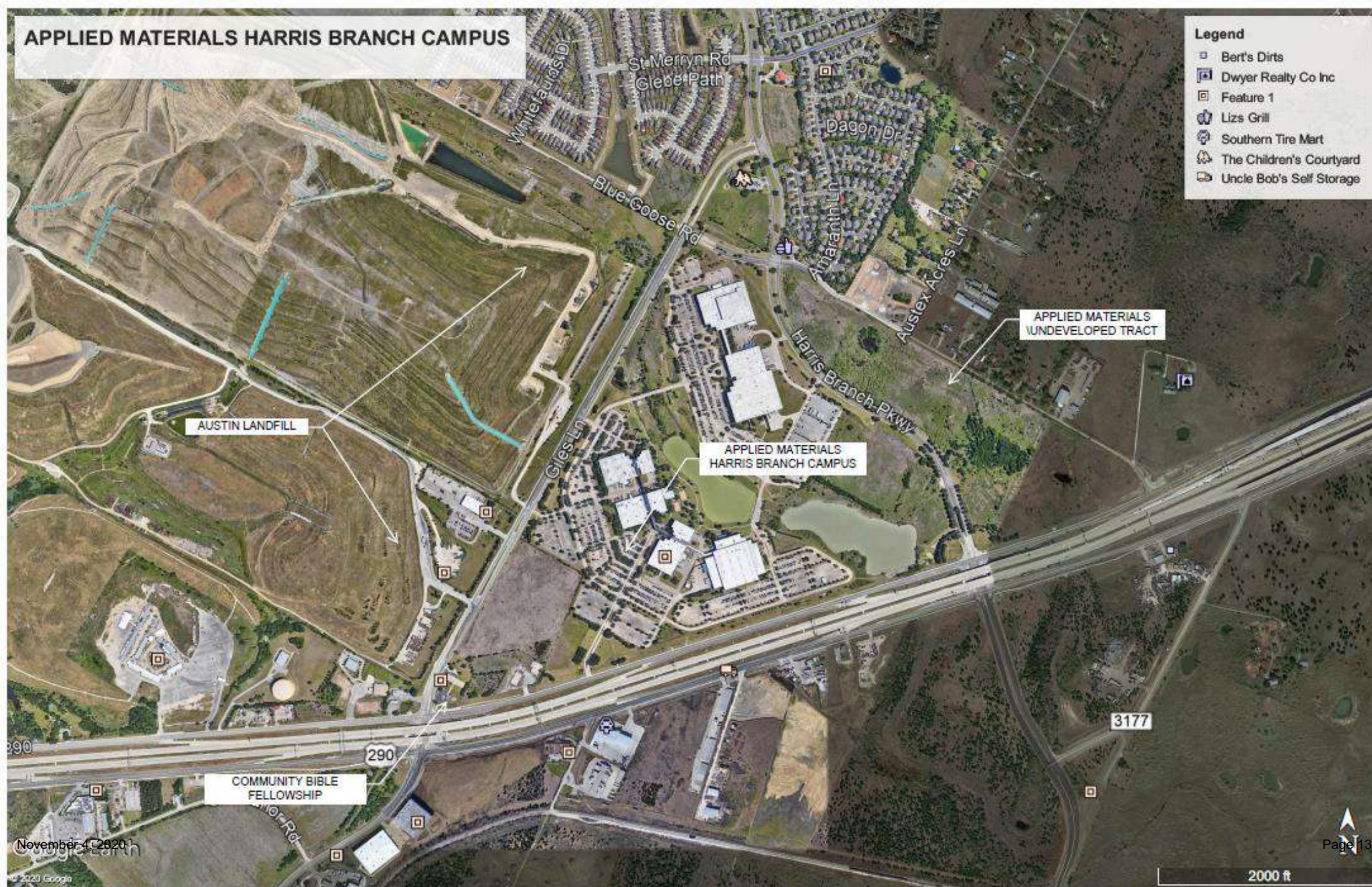






PHOTO 1
Photo of wetland CEF (W-1)



PHOTO 2
Vegetation in wetland CEF (W-1)



PHOTO 3
Typical site photo



PHOTO 4
Typical site photo

Environmental Resource Inventory

For the City of Austin
Related to LDC 25-8-121, City Code 30-5-121, ECM 1.3.0 & 1.10.0

The ERI is required for projects that meet one or more of the criteria listed in LDC 25-8-121(A), City Code 30-5-121(A).

1. SITE/PROJECT NAME: Applied Materials Logistics Service Center
2. COUNTY APPRAISAL DISTRICT PROPERTY ID (#'s): 227119
3. ADDRESS/LOCATION OF PROJECT: 10033 Giles Lane, Austin, Travis County
4. WATERSHED: Decker Creek
5. THIS SITE IS WITHIN THE (Check all that apply)

Edwards Aquifer Recharge Zone* (See note below)	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> No
Edwards Aquifer Contributing Zone*	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> No
Edwards Aquifer 1500 ft Verification Zone*	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> No
Barton Spring Zone*	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> No

*(as defined by the City of Austin – LDC 25-8-2 or City Code 30-5-2)

Note: If the property is over the Edwards Aquifer Recharge zone, the Hydrogeologic Report and karst surveys must be completed and signed by a Professional Geoscientist Licensed in the State of Texas.

6. DOES THIS PROJECT PROPOSE FLOODPLAIN MODIFICATION?.....☐ YES** ☒ NO
If yes, then check all that apply:
 - ☐ (1) The floodplain modifications proposed are necessary to protect the public health and safety;
 - ☐ (2) The floodplain modifications proposed would provide a significant, demonstrable environmental benefit, as determined by a **functional assessment** of floodplain health as prescribed by the Environmental Criteria Manual (ECM), or
 - ☐ (3) The floodplain modifications proposed are necessary for development allowed in the critical water **quality zone under LDC 25-8-261 or 25-8-262, City Code 30-5-261 or 30-5-262.**
 - ☐ (4) The floodplain modifications proposed are outside of the Critical Water Quality Zone in an area determined to be in poor or fair condition by a **functional assessment** of floodplain health.

**** If yes, then a functional assessment must be completed and attached to the ERI (see ECM 1.7 and Appendix X for forms and guidance) unless conditions 1 or 3 above apply.**

7. IF THE SITE IS WITHIN AN URBAN OR SUBURBAN WATERSHED, DOES THIS PROJECT PROPOSE A UTILITY LINE PARALLEL TO AND WITHIN THE CRITICAL WATER QUALITY ZONE? ☐ YES*** ☒ NO

*****If yes, then riparian restoration is required by LDC 25-8-261(E) or City Code 30-5-261(E) and a functional assessment must be completed and attached to the ERI (see ECM1.5 and Appendix X for forms and guidance).**

8. There is a total of 1 (#s) Critical Environmental Feature(s)(CEFs) on or within 150 feet of the project site. If CEF(s) are present, attach a detailed **DESCRIPTION** of the CEF(s), color **PHOTOGRAPHS**, the **CEF WORKSHEET** and provide **DESCRIPTIONS** of the proposed CEF buffer(s) and/or wetland mitigation. Provide the number of each type of CEFs on or within 150 feet of the site (Please provide the number of CEFs):

_____ (#'s) Spring(s)/Seep(s) _____ (#'s) Point Recharge Feature(s) _____ (#'s) Bluff(s)
 _____ (#'s) Canyon Rimrock(s) 1 (#'s) Wetland(s)

Note: Standard buffers for CEFs are 150 feet, with a maximum of 300 feet for point recharge features. Except for wetlands, if the standard buffer is not provided, you must provide a written request for an administrative variance from LDC 25-8-281(C)(1) and provide written findings of fact to support your request. Request forms for administrative variances from requirements stated in LDC 25-8-281 are available from Watershed Protection Department.

9. The following site maps are attached at the end of this report (Check all that apply and provide):

All ERI reports must include:

- ☒ **Site Specific Geologic Map with 2-ft Topography**
- ☒ **Historic Aerial Photo of the Site**
- ☒ **Site Soil Map**
- ☒ **Critical Environmental Features and Well Location Map on current Aerial Photo with 2-ft Topography**

Only if present on site (Maps can be combined):

- ☐ **Edwards Aquifer Recharge Zone with the 1500-ft Verification Zone**
(Only if site is over or within 1500 feet the recharge zone)
- ☐ **Edwards Aquifer Contributing Zone**
- ☐ **Water Quality Transition Zone (WQTZ)**
- ☐ **Critical Water Quality Zone (CWQZ)**
- ☐ **City of Austin Fully Developed Floodplains for all water courses with up to 64-acres of drainage**

10. **HYDROGEOLOGIC REPORT** – Provide a description of site soils, topography, and site specific geology below (Attach additional sheets if needed):

Surface Soils on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups*. If there is more than one soil unit on the project site, show each soil unit on the site soils map.

Soil Series Unit Names, Infiltration Characteristics & Thickness		
Soil Series Unit Name & Subgroup**	Group*	Thickness (feet)
Houston Black Clay, 1-3% slopes (HnB)	C	0-7

***Soil Hydrologic Groups Definitions (Abbreviated)**

- A. Soils having a high infiltration rate when thoroughly wetted.
- B. Soils having a moderate infiltration rate when thoroughly wetted.
- C. Soils having a slow infiltration rate when thoroughly wetted.
- D. Soils having a very slow infiltration rate when thoroughly wetted.

**Subgroup Classification – See Classification of Soil Series Table in County Soil Survey.

Description of Site Topography and Drainage *(Attach additional sheets if needed):*

Topography on the subject site ranges from 610 to 634 feet above mean sea level (USGS, 1988). Drainage on the site occurs primarily by overland sheet flow in a northwest-to-southeast direction towards an on-site pond.

List surface geologic units below:

Geologic Units Exposed at Surface		
Group	Formation	Member
Upper Taylor Marl	Navarro and Taylor Groups (Knt)	

Brief description of site geology *(Attach additional sheets if needed):*

Navarro and Taylor Groups undivided (Knt) - In areas where Pecan Gap Chalk is not present because of gradation to marl similar to that of the Marlbrook and Ozan Formations (UT-BEG, 1995).

Wells – Identify all recorded and unrecorded wells on site (test holes, monitoring, water, oil, unplugged, capped and/or abandoned wells, etc.):

There are 0 (#) wells present on the project site and the locations are shown and labeled

 (#s)The wells are not in use and have been properly abandoned.

 (#s)The wells are not in use and will be properly abandoned.

 (#s)The wells are in use and comply with 16 TAC Chapter 76.

There are 0 (#s) wells that are off-site and within 150 feet of this site.

11. **THE VEGETATION REPORT** – Provide the information requested below:

Brief description of site plant communities (Attach additional sheets if needed):

The subject site is located within the Blackland Prairie ecological area of Texas (Gould, 1975) and the Silver Bluestem-Texas Wintergrass Grassland vegetational area of Texas (McMahan et al., 1984). The subject site is dominated by grasslands with woodlands around a wetland pond.

There is woodland community on site ☐ YES ☒ NO (Check one).

If yes, list the dominant species below:

Woodland species	
Common Name	Scientific Name
Plateau live oak	Quercus fusiformis
Ashe juniper	Juniperus ashei
Honey mesquite	Prosopis glandulosa

There is grassland/prairie/savanna on site..... ☒ YES ☐ NO (Check one).

If yes, list the dominant species below:

Grassland/prairie/savanna species	
Common Name	Scientific Name
Texas grama	Bouteloua rigidiseta
Buffalograss	Bouteloua dactyloides

There is hydrophytic vegetation on site ☒ YES ☐ NO (Check one).

If yes, list the dominant species in table below (next page):

Hydrophytic plant species		
Common Name	Scientific Name	Wetland Indicator Status
Spikerush	Eleocharis sp.	OBL
Bushy bluestem	Andropogon glomeratus	FACW
Broadleaf cattail	Typha latifolia	OBL
Chinese tallow	Triadica sebifera	FAC

A tree survey of all trees with a diameter of at least eight inches measured four and one-half feet above natural grade level has been completed on the site.

☐ YES ☒ NO (Check one).

12. WASTEWATER REPORT – Provide the information requested below.

Wastewater for the site will be treated by (Check of that Apply):

- ☐ On-site system(s)
☒ City of Austin Centralized sewage collection system
☐ Other Centralized collection system

Note: All sites that receive water or wastewater service from the Austin Water Utility must comply with City Code Chapter 15-12 and wells must be registered with the City of Austin

The site sewage collection system is designed and will be constructed to in accordance to all State, County and City standard specifications.

☒ YES ☐ NO (Check one).

Calculations of the size of the drainfield or wastewater irrigation area(s) are attached at the end of this report or shown on the site plan.

☐ YES ☐ NO ☒ Not Applicable (Check one).

Wastewater lines are proposed within the Critical Water Quality Zone?

☐ YES ☒ NO (Check one). If yes, then provide justification below:

Is the project site is over the Edwards Aquifer?

☐ YES ☒ NO (Check one).

If yes, then describe the wastewater disposal systems proposed for the site, its treatment level and effects on receiving watercourses or the Edwards Aquifer.

13. One (1) hard copy and one (1) electronic copy of the completed assessment have been provided.

Date(s) ERI Field Assessment was performed: 17 December 2019
Date(s)

My signature certifies that to the best of my knowledge, the responses on this form accurately reflect all information requested.

Greg Sherrod

512-328-2430

Print Name

Telephone



greg_sherrod@horizon-esi.com

Signature

Email Address

Horizon Environmental Services, Inc.

18 December 2019

Name of Company

Date

For project sites within the Edwards Aquifer Recharge Zone, my signature and seal also certifies that I am a licensed Professional Geoscientist in the State of Texas as defined by ECM 1.12.3(A).

P.G.
Seal

City of Austin Environmental Resource Inventory - Critical Environmental Feature Worksheet

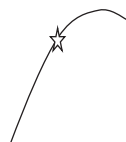
1	Project Name:	Applied Materials Logistics Service Center
2	Project Address:	10033 Giles Lane
3	Site Visit Date:	17 December 2019
4	Environmental Resource Inventory Date:	18 December 2019

5	Primary Contact Name:	Greg Sherrod
6	Phone Number:	512-328-2430
7	Prepared By:	Greg Sherrod
8	Email Address:	greg_sherrod@horizon-esi.com

[illegible]

City of Austin Use Only	
CASE NUMBER:	

For rimrock, locate the midpoint of the segment that describes the feature.



For wetlands, locate the approximate centroid of the feature and the estimated area.



For a spring or seep, locate the source of groundwater that feeds a pool or stream.



Please state the method of coordinate data collection and the approximate precision and accuracy of the points and the unit of measurement.

Method

Accuracy

GPS ☐ sub-meter ☐

Surveyed ☐ meter ☐

Other ☐ > 1 meter ☐

Professional Geologists apply seal below

ENVIRONMENTAL RESOURCE INVENTORY ATTACHMENTS

**APPLIED MATERIALS LOGISTICS SERVICE CENTER
LOCATED AT 10033 GILES LANE
AUSTIN, TRAVIS COUNTY, TEXAS
HJN 190275.001 ERI**

DATA RESOURCES USED IN COMPLETING THIS ERI

- (COA) City of Austin. Geographic Information Systems / Maps. *2012 2-foot Contours*, <<http://austintexas.gov/departments/gis-and-maps/gis-data>>. Updated 1 May 2015.
- Gould, F.W. *Texas Plants – A Checklist and Ecological Summary*. College Station: Texas A&M University. 1975.
- McMahan, Craig A., Roy G. Frye, and Kirby L. Brown. *The Vegetation Types of Texas – Including Cropland*. Austin: Texas Parks and Wildlife Department. 1984.
- (Nearmap) Nearmap US, Inc. Nearmap Vertical™ digital orthographic photograph, <<https://go.nearmap.com>>. Imagery date 28 January 2019.
- (NRCS) Natural Resources Conservation Service (formerly Soil Conservation Service), US Department of Agriculture. Web Soil Survey, <<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>>. Accessed 16 December 2019.
- (TWDB) Texas Water Development Board. Water Information Integration and Dissemination System. TWDB Groundwater Database, <<https://www2.twdb.texas.gov/apps/waterdatainteractive/groundwaterdataviewer>>. Accessed 16 December 2019.
- (TWSC) United States Geological Survey, Texas Water Science Center. Geologic Database of Texas, <<https://txpub.usgs.gov/txgeology/>>. Updated 1 February 2014; Accessed 16 December 2019.
- (USGS) US Geological Survey. 7.5-minute series topographic maps, Austin East and Manor, Texas, quadrangles. 1988.
- _____. Aerial photography, Travis County, Texas. 1995.
- (UT-BEG) University of Texas Bureau of Economic Geology, C.V. Proctor, Jr., T.E. Brown, J.H. McGowen, N.B. Waechter, and V.E. Barnes. *Geologic Atlas of Texas*, Austin Sheet, Francis Luther Whitney Memorial Edition. 1974; reprinted 1995.

**ERI WORKSHEET SECTION 8:
CRITICAL ENVIRONMENTAL FEATURES**

CEF Descriptions
Descriptions of Proposed Buffers
Color Photographs

Critical Environmental Features

CEFs observed on or within 150 feet from the subject site include:

Critical Environmental Feature	Number Observed on Subject Site	Number Observed Within 150 Feet of Subject Site
Springs/Seeps	0	0
Point Recharge Features	0	0
Bluffs	0	0
Canyon Rimrocks	0	0
Wetlands	1	0

One pond with a fringe wetland around its bank was observed on the southeastern portion of the subject site. The investigation and data analysis demonstrated that the identified wetland area met the requisite criteria (hydrophytic vegetation and hydrology) to be classified as a wetland CEF (W-1).

The CEF is mapped in Figure 4, with feature dimensions provided on the City of Austin CEF Worksheet and photographs attached.

The field delineation for wetland CEFs was conducted according to the 1987 US Army Corps of Engineers (USACE) Wetlands Delineation Manual. The hydric nature of vegetation species was determined from the 2016 USACE National Wetland Plant List. At the time of Horizon's site reconnaissance, the wetland CEF exhibited hydrology indicators (ponding, water marks, sediment deposits, and saturation) and hydrophytic vegetation was present.

Proposed Buffers

The City of Austin generally requires that 150-foot buffer zones be placed on all CEFs. No additional buffers are proposed for the on-site wetland CEF.

If development is proposed within the wetland CEF and the CEF setback, the Watershed Protection Department may administratively reduce the standard buffer or approve wetland mitigation. Wetland mitigation occurs at least at a 1:1 ratio for wetland CEFs and their associated 150-foot buffers.

All activities within the CEF and associated setback must comply with the City of Austin Land Development Code. The natural vegetative cover must be retained to the maximum extent practicable; construction is prohibited, as is wastewater disposal or irrigation.



PHOTO 1
Photo of wetland CEF (W-1)



PHOTO 2
Vegetation in wetland CEF (W-1)



PHOTO 3
Typical site photo



PHOTO 4
Typical site photo

**ERI WORKSHEET SECTION 9:
SITE MAPS**

- Figure 1. Site-Specific Geologic Map
- Figure 2. Historical Aerial Photo
- Figure 3. Site Soil Map
- Figure 4. Critical Environmental Features and Well Locations Map



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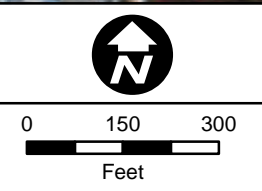
Date:	12/16/2019
Drawn:	GLS
HJN NO:	190275.001ERI
Source:	COA, 2015; Nearmap, 2019 UT-BEG, 1995

Figure 1
Site-Specific Geologic Map
Applied Materials Logistics Service Center
Located at 10033 Giles Lane
Austin, Travis County, Texas



0 150 300
Feet



	Date: 12/16/2019	Figure 2 1995 Historical Aerial Photo Applied Materials Logistics Service Center Located at 10033 Giles Lane Austin, Travis County, Texas	
	Drawn: GLS		
	HJN NO: 190275.001ERI		
	Source: USGS, 1995		



Legend

- Houston Black clay, 1-3% slopes (HnB)
- Subject Site

Horizon
Environmental Services, Inc.

Date:	12/16/2019
Drawn:	GLS
HJN NO:	190275-001ERI
Source:	Nearmap, 2019; NRCS, 2018

Figure 3
Site Soil Map
Applied Materials Logistics Service Center
Located at 10033 Giles Lane
Austin, Travis County, Texas



0 150 300
Feet



	Date: 12/18/2019	<p>Figure 4 Critical Environmental Features and Well Locations Map Applied Materials Logistics Service Center Located at 10033 Giles Lane Austin, Travis County, Texas</p>	
	Drawn: GLS		
	HJN NO: 190275.001ERI		
	Source: COA, 2015; Nearmap, 2019		