

STILLWATER - DOUBLE CREEK PHASE 2

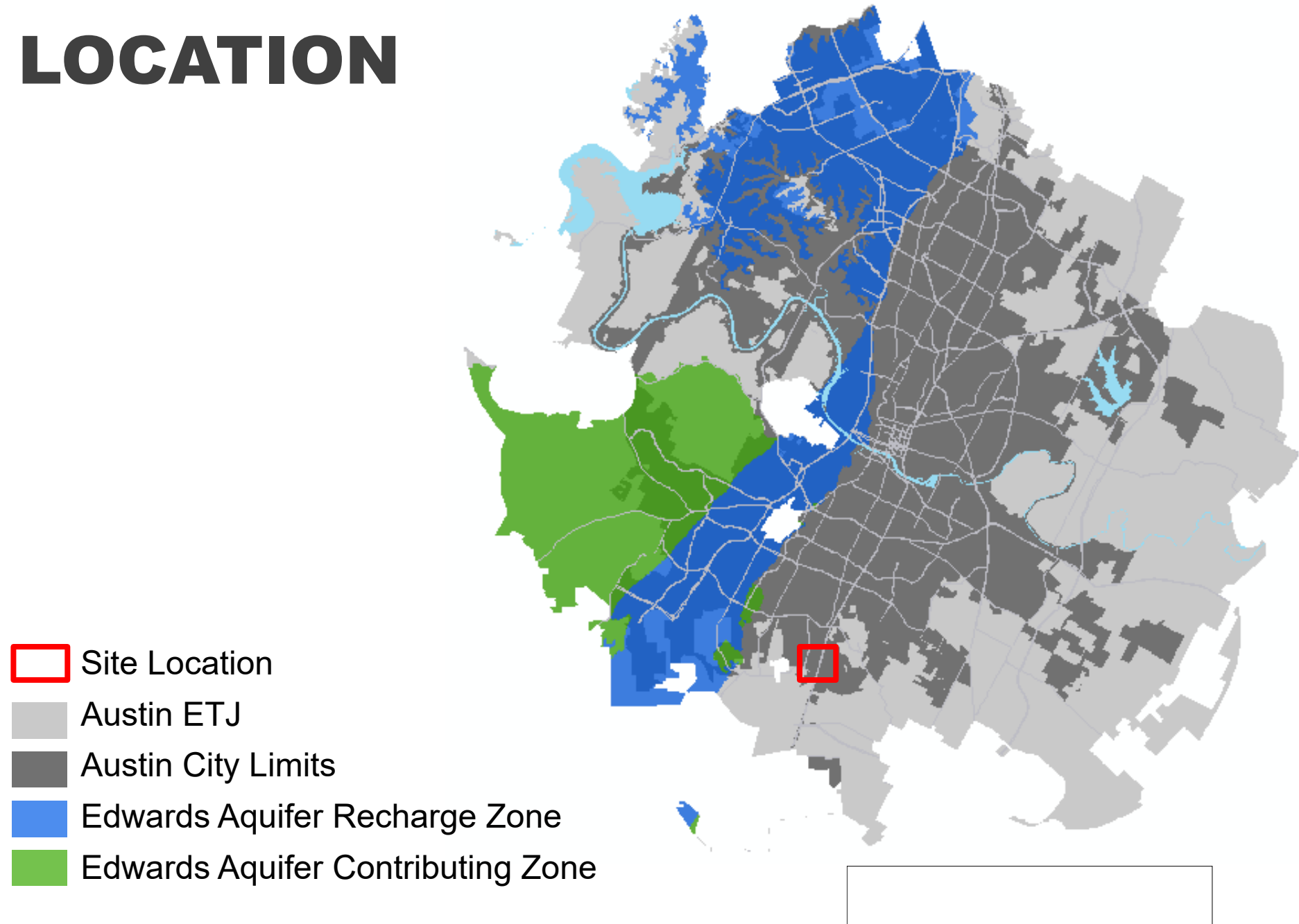
**10801 BREZZA LN
SP-2021-0178C**

Mel Fuechec

Environmental Review Specialist Senior

Development Services Department

SITE LOCATION



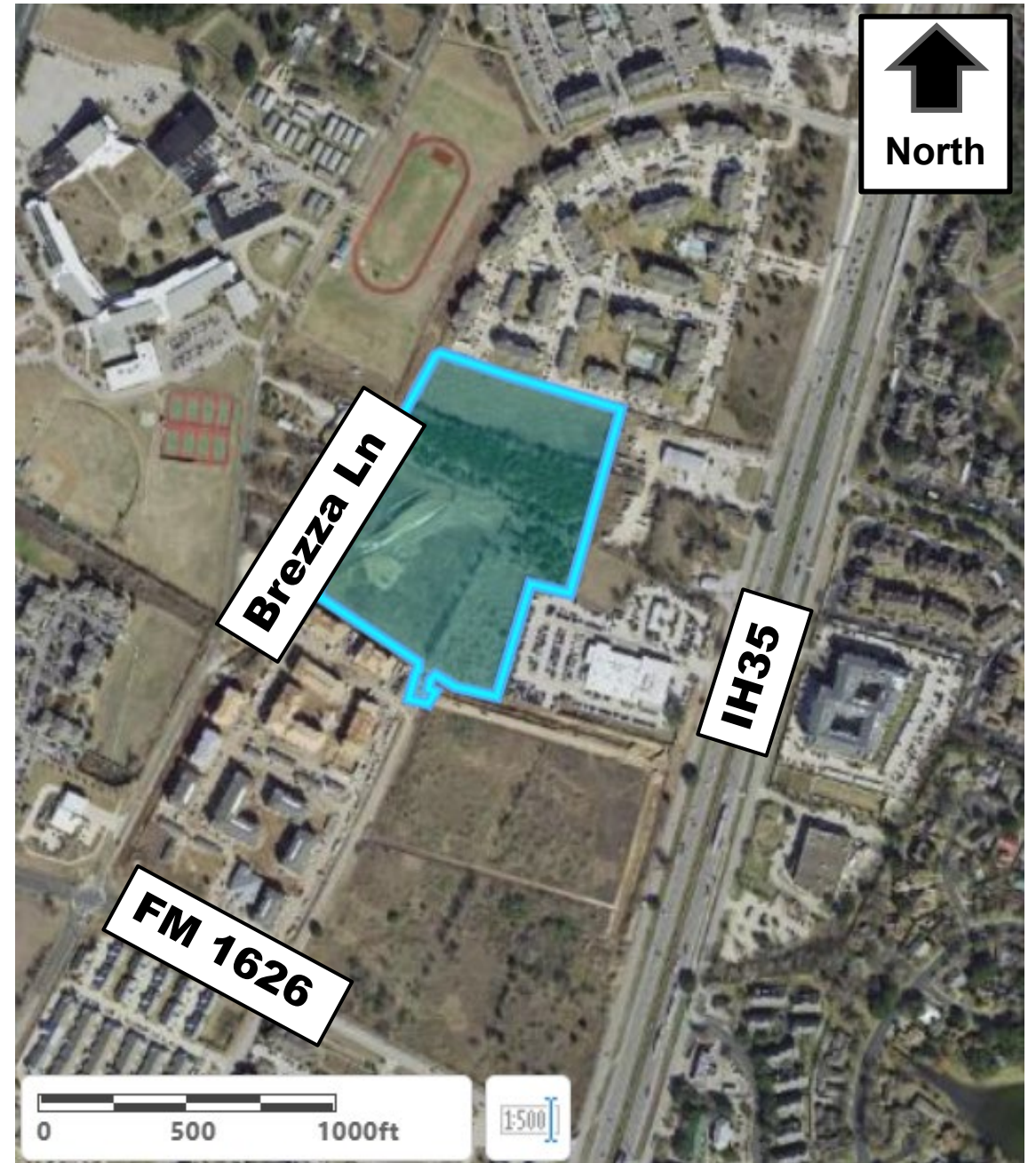
PROPERTY DATA

- **Onion Creek**
- **Suburban**
- **Desired Development Zone**
- **Full Purpose**
- **Not located over Edwards Aquifer Recharge Zone**
- **No Critical Environmental Features**
- **Council District 5**

EXISTING CONDITIONS

The lot is currently undeveloped and is bordered to the North and to the South by multi-family developments.

The proposed multi-family development is consistent with the applicable zoning and surrounding properties.

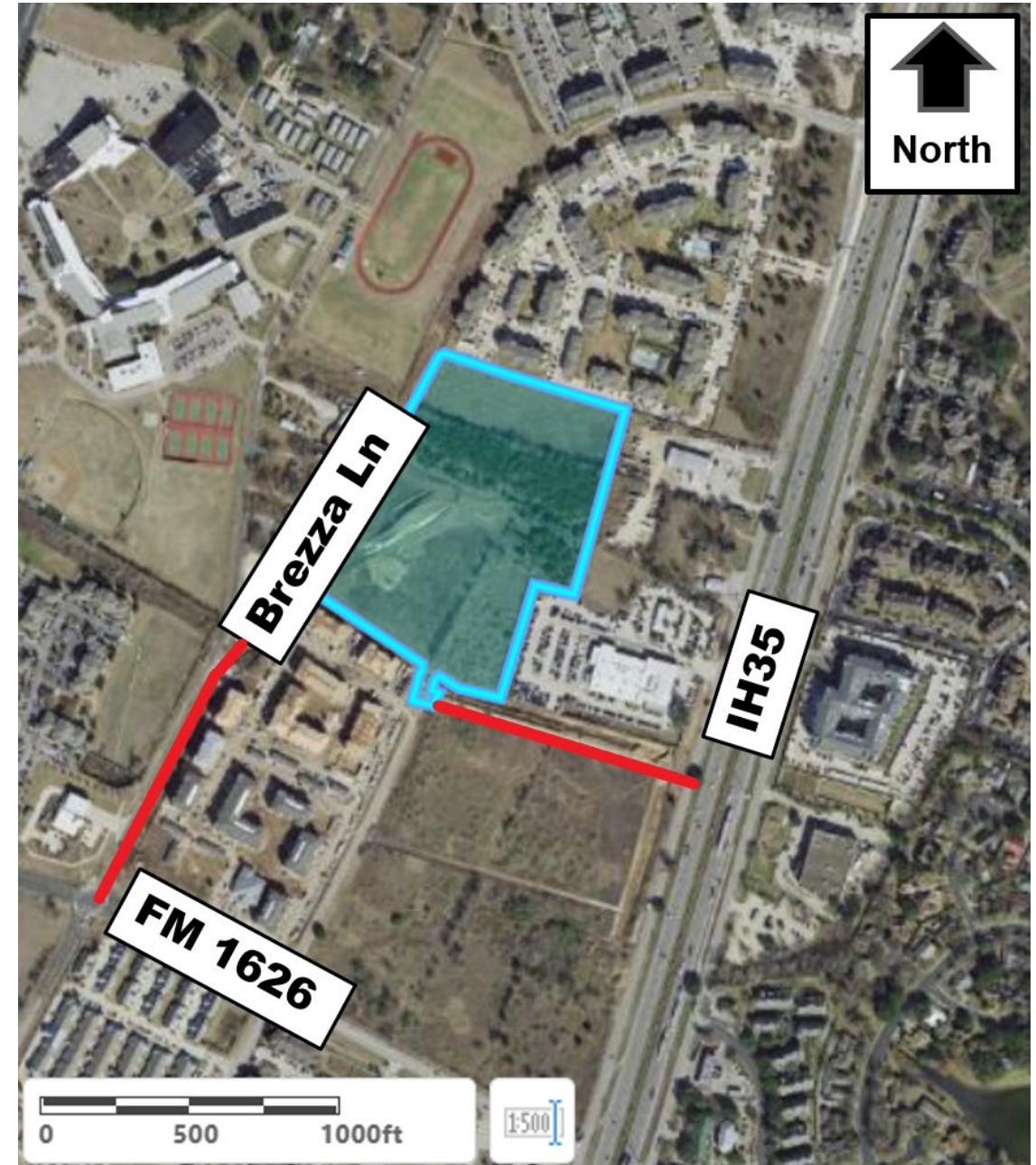


BACKGROUND

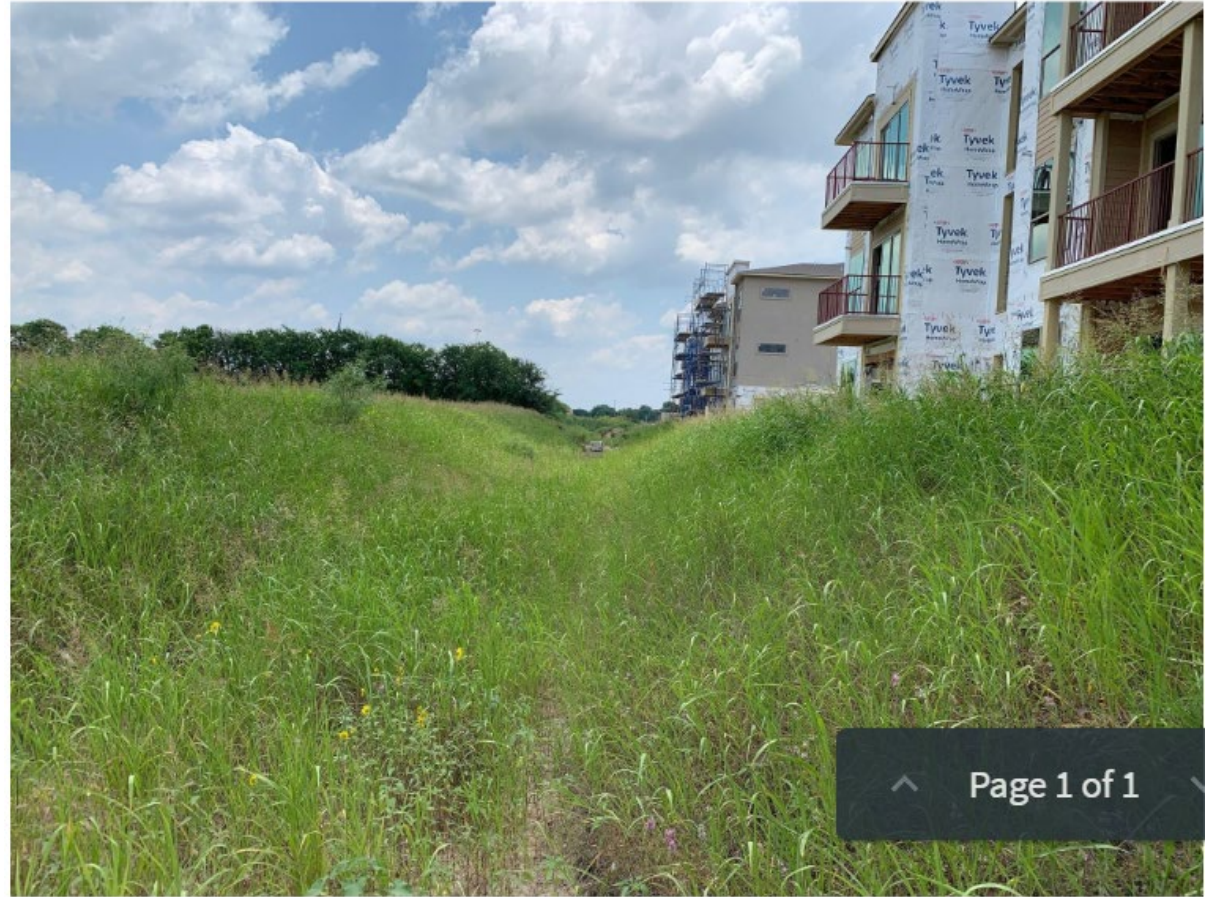
Austin Fire Department requires two points of ingress/egress.

The applicant is proposing one access on Brezza Lane leading South to FM 1626 and another access on the private road leading East to IH 35.

Brezza Lane dead ends at the North end of the lot, and there are no other points of access for this property.



CRITICAL WATER QUALITY ZONE



VARIANCE REQUEST

The request is to vary from Land Development Code 25-8-261 to allow development in the critical water quality zone for a driveway over the critical water quality zone in order to meet the health and safety requirement of having two points of ingress/egress as set by Austin Fire Department.

VARIANCE RECOMMENDATION

Staff recommends approval of the variance with the following conditions:

- 1) Internal, low-traffic pedestrian walkways throughout the site shall be constructed with permeable pavers or porous pavement in accordance with the Environmental Criteria Manual. This will decrease overall impervious cover and increase stormwater infiltration onsite and baseflow in the stream channel.**
- 2) The critical water quality zone shall be crossed with a span bridge design instead of the normal box culvert. This will reduce the bridge's footprint in the channel and allow for light to penetrate to the natural ground surface and for vegetation to grow thus maintaining a more natural stream channel.**

QUESTIONS?

ADDITIONAL INFO - BRIDGE

Example Span Bridge



Example Box Culvert



NOTES
GENERAL NOTES:

1. THIS BRIDGE HAS BEEN DESIGNED FOR GENERAL SITE CONDITIONS. THE PROJECT ENGINEER SHALL BE RESPONSIBLE FOR THE STRUCTURE'S SUITABILITY TO THE EXISTING SITE CONDITIONS AND FOR THE HYDRAULIC EVALUATION --INCLUDING SCOUR AND CONFIRMATION OF SOIL CONDITIONS.
2. PRIOR TO CONSTRUCTION, CONTRACTOR MUST VERIFY ALL ELEVATIONS SHOWN THROUGH THE ENGINEER.
3. ONLY CONTECH ENGINEERED SOLUTIONS LLC, THE CON/SPAN® APPROVED PRECASTER IN TEXAS MAY PROVIDE THE STRUCTURE DESIGNED IN ACCORDANCE WITH THESE PLANS.
4. THE USE OF ANOTHER PRECAST STRUCTURE WITH THE DESIGN ASSUMPTIONS USED FOR THE CON/SPAN® STRUCTURE MAY LEAD TO SERIOUS DESIGN ERRORS. USE OF ANY OTHER PRECAST STRUCTURE WITH THIS DESIGN AND DRAWINGS Voids ANY CERTIFICATION OF THIS DESIGN AND WARRANTY. CONTECH Engineered Solutions, LLC ASSUMES NO LIABILITY FOR DESIGN OF ANY ALTERNATE OR SIMILAR TYPE STRUCTURES.
5. ALTERNATE STRUCTURES MAY BE CONSIDERED, PROVIDED THAT DRAWINGS AND CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF TEXAS, EMPLOYED BY THE PRECAST CONCRETE BRIDGE SUPPLIER, ARE SUBMITTED TO THE ENGINEER 2 WEEKS PRIOR TO THE BID DATE FOR REVIEW AND APPROVAL.
6. ALTERNATE STRUCTURES MAY BE CONSIDERED, PROVIDED THAT THE ALTERNATE DESIGN DOES NOT REDUCE THE HYDRAULIC OPENING OF THE STRUCTURE AS SHOWN ON THE DRAWINGS. AT A MINIMUM THE ALTERNATE STRUCTURE MUST PROVIDE THE SAME OR LARGER SPAN AND RISE AS THE STRUCTURE SHOWN ON THE DRAWINGS.
7. THE PRECAST ARCH SUPPLIER MUST ATTEND THE PRE-BID MEETING, IF ONE IS HELD.
8. SUPPLIER OF PROPOSED ALTERNATES TO A CON/SPAN® BRIDGE SYSTEM MUST SUBMIT AT LEAST TWO (2) INDEPENDENTLY VERIFIED FULL SCALE LOAD TESTS THAT CONFIRM THE PROPOSED DESIGN METHODOLOGY OF THE THREE SIDED/ARCH STRUCTURE(S). THE PROPOSED ALTERNATE, UPON SATISFACTORY CONFIRMATION OF DESIGN METHODOLOGY, MAY BE CONSIDERED AN ACCEPTABLE ALTERNATE.
9. PROPOSED ALTERNATE STRUCTURES MAY BE CONSIDERED, PROVIDED THAT THE PRECAST CONCRETE BRIDGE STRUCTURES ARE PROVIDED BY A SUPPLIER THAT HAS A MINIMUM OF TWO (2) REGISTERED PROFESSIONAL ENGINEERS ON STAFF THAT ARE DEDICATED TO THE DESIGN OF THESE TYPES OF STRUCTURES. SUPPLIER MUST PROVIDE THESE NAMES, P.E. LICENSE NUMBERS AND DATES OF HIRE AT TIME OF ALTERNATE SUBMITTAL.

DESIGN DATA

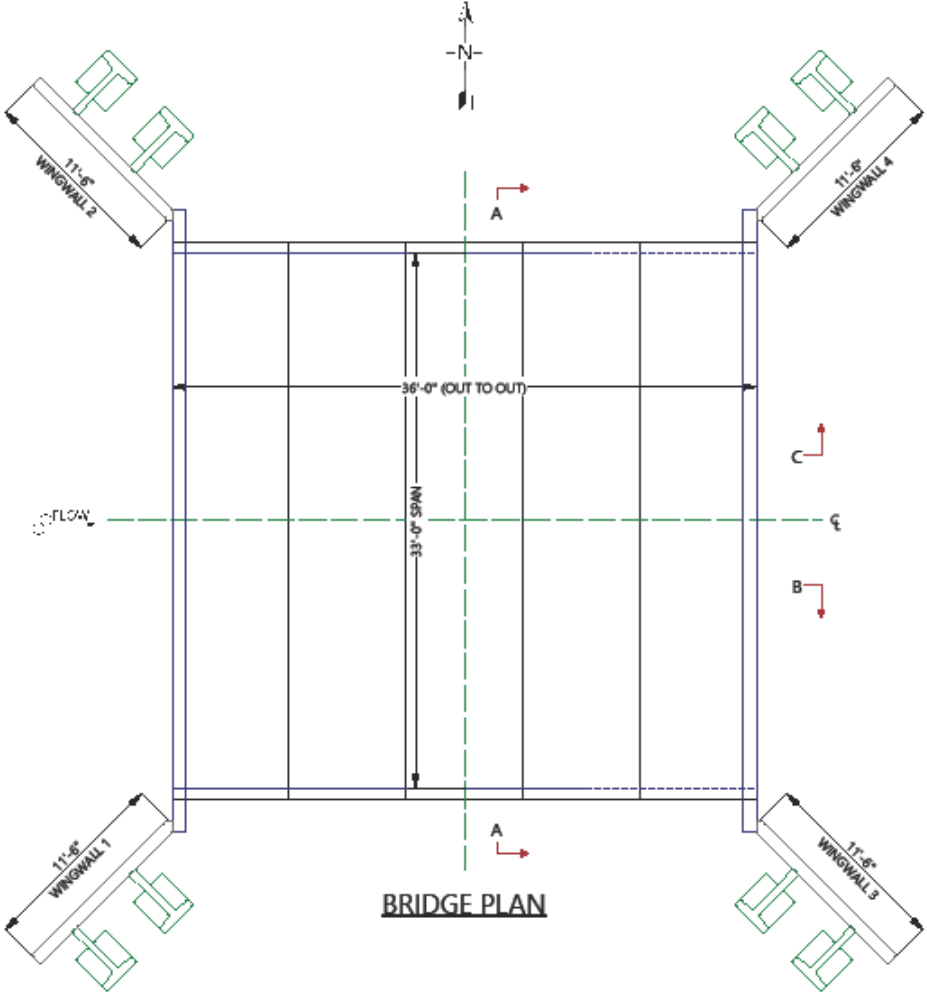
DESIGN LOADING:

BRIDGE UNITS: HL-93
HEADWALLS: EARTH PRESSURE ONLY
WINGWALLS: EARTH PRESSURE ONLY
DESIGN FILL HEIGHT: 1'-0" TO 4'-0"
FROM TOP OF CROWN TO TOP OF PAVEMENT.
DESIGN METHOD: LOAD RESISTANCE FACTOR DESIGN PER AASHTO LRFD SPECIFICATION ASSUMED NOMINAL
BEARING RESISTANCE: 0 PSF
ASSUMED FACTORED BEARING RESISTANCE: 0 PSF

*AT THE TIME OF DESIGN, A GEOTECHNICAL REPORT FOR THE PROJECT SITE WAS NOT AVAILABLE. IT IS THE PROJECT ENGINEER'S, OWNER'S AND/OR THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE ACTUAL SITE CONDITIONS AT THE TIME OF CONSTRUCTION ARE CONSISTENT WITH THE ASSUMED ALLOWABLE SOIL BEARING PRESSURE WITH A GEOTECHNICAL INVESTIGATION FROM A QUALIFIED GEOTECHNICAL ENGINEER.

MATERIALS

PRECAST UNITS SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH CON/SPAN® SPECIFICATIONS. CONCRETE FOR FOOTINGS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSF. REINFORCING STEEL FOR FOOTINGS SHALL CONFORM TO ASTM A615 OR A996-GRADE 60.



BRIDGE PLAN

PRELIMINARY
NOT FOR CONSTRUCTION

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NAME	DATE	REVISION DESCRIPTION	BY

CONTECH
ENGINEERED SOLUTIONS

9025 Centre Pointe Dr., Suite 400, West Chester, OH 45081
800-338-1122 513-645-7000 513-645-7993 FAX

PROPOSAL
DRAWING

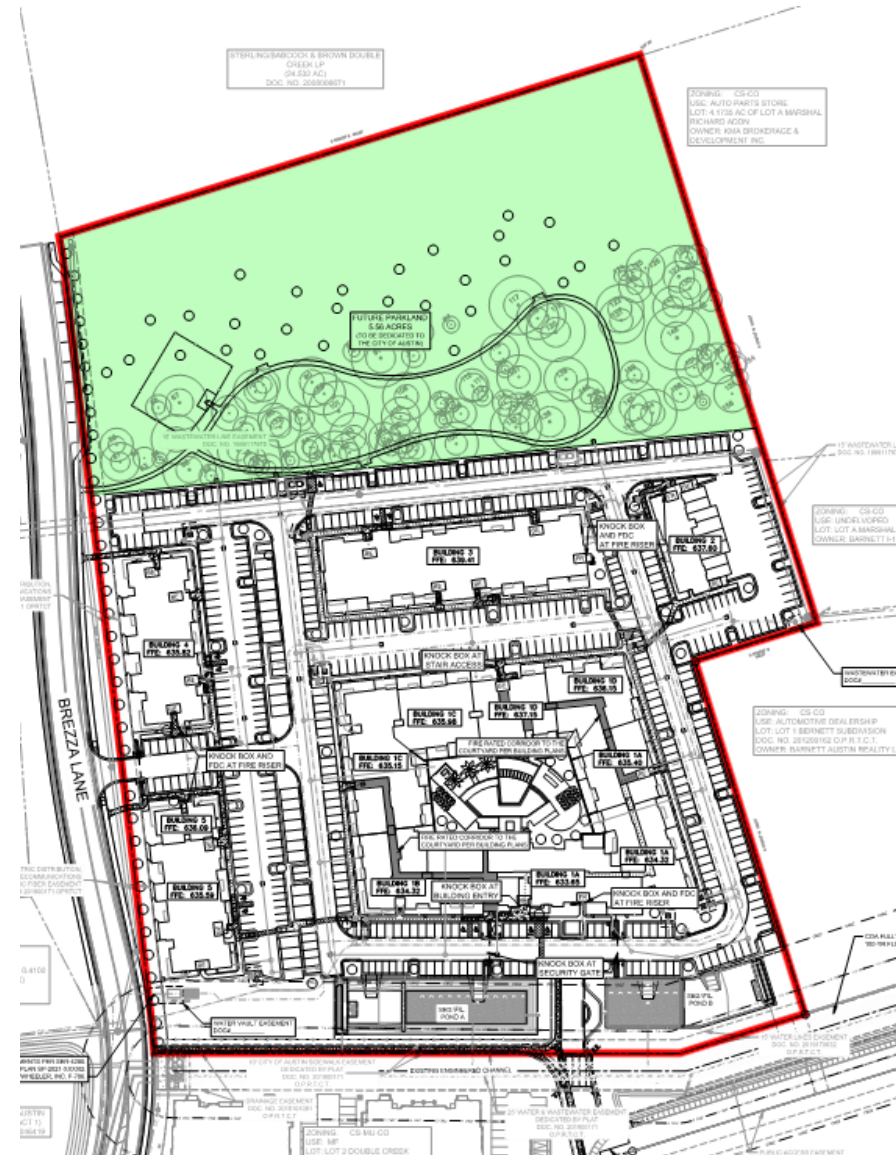
CONSPAN O SERIES O633 - 33'-0" X 6'-4"
MALONE WHEELER CHANNEL CROSSING

AUSTIN, TEXAS

Project No.: 688751	Seq No.: 010	Date: 9/9/2021
Designed: JIM	Drawn:	
Checked:	Approved:	
Sheet No:	1	OF 10

ADDITIONAL INFO - TREES

5.56 acres to be dedicated to City of Austin as parkland & 546 inches of native trees are to be planted onsite



TREE LIST

TREE NO.	DESCRIPTION
29	14" HACKBERRY
30	14" HACKBERRY
31	10" HACKBERRY
32	8" HACKBERRY
33	8" HACKBERRY
34	10" HACKBERRY
35	13" HACKBERRY
36	13" HACKBERRY
37	12" HACKBERRY
38	20" MESQUITE
39	13" HACKBERRY
40	14" HACKBERRY
41	14" CEDAR
42	17" HACKBERRY
43	14" MESQUITE
44	8" MESQUITE
45	14" HACKBERRY
46	14" HACKBERRY
47	14" HACKBERRY
48	12" HACKBERRY
49	15" HACKBERRY
50	15" MESQUITE
51	12" HACKBERRY
52	14" HACKBERRY
53	14" HACKBERRY
54	9" HACKBERRY
55	13" TWIN HACKBERRY-9",8"
56	12" HACKBERRY
57	15" HACKBERRY
58	16" TWIN MESQUITE-11",10"
59	18" MULTI-STEM CEDAR-11",4"(X3),3"
60	12" HACKBERRY
61	21" MULTI-STEM CEDAR-10",6",5",5",3",3"
62	17" CEDAR
63	12" TWIN CEDAR-10",4"
64	8" CEDAR
65	27" MULTI-STEM CEDAR-10",6",5",4"(X6)
66	14" TWIN HACKBERRY-11",6"
67	30" MULTI-STEM CEDAR-12",10",8",6",4"(X3)
68	29" MULTI-STEM CEDAR-12",6"(X3),4"(X4)
69	13" TWIN MESQUITE-9",9"
70	19" MULTI-STEM CEDAR-11",7",6",4"
71	15" CEDAR
72	22" MULTI-STEM CEDAR-9",7",6",5",4",4"
73	16" CEDAR
74	11" CEDAR
75	15" MULTI-STEM CEDAR-9",4",4",3"
76	10" CEDAR
77	10" MULTI-STEM MESQUITE-11",9",5"
78	24" MULTI-STEM CEDAR-8",4"(X8)
79	18" MULTI-STEM CEDAR-8",6",6",4",4"
80	18" MULTI-STEM CEDAR-10",7",6",4"
81	27" MULTI-STEM CEDAR-8",8",7",6",5",4"(X3)
82	22" MULTI-STEM CEDAR-10",8",6",5",5"
83	27" MULTI-STEM CEDAR-9",8",8",6",6",4",4"
84	12" CEDAR
85	17" TWIN CEDAR-12",9"
86	10" CHINABERRY
87	13" MULTI-STEM MESQUITE-8",6",4"
88	14" MULTI-STEM CEDAR-10",4",4"
89	23" MULTI-STEM CEDAR-9",5"(X3),4"(X3)
90	27" MULTI-STEM CEDAR-9",8",6",6",4"(X5)
91	32" MULTI-STEM CEDAR-10",8",6",6",4"(X6)
92	12" HACKBERRY

TREES 45-58, 60 & 62
TO BE REMOVED PER
(SP-2019-0161D)

TREE NO.	DESCRIPTION
93	13" HACKBERRY
94	12" HACKBERRY
95	13" HACKBERRY
97	9" HACKBERRY
98	17" MULTI-STEM CEDAR-10",6",4",4"
99	13" MULTI-STEM CEDAR-8",6",4"
100	17" MULTI-STEM CEDAR-11",6",4"
101	33" MULTI-STEM CEDAR-10",8",8",6"(X3),4"(X3)
102	22" MULTI-STEM CEDAR-10",6",6",4"(X3)
103	21" MULTI-STEM CEDAR-10",10",4"(X3)
104	19" MULTI-STEM CEDAR-10",6",4"(X3)
105	24" MULTI-STEM CEDAR-9",6",5"(X4),4"
106	9" CEDAR
107	13" CEDAR
108	26" MULTI-STEM CEDAR-12",9",6",6",4",4"
109	17" MULTI-STEM CEDAR-11",4"(X3)
110	8" CEDAR
111	15" MULTI-STEM CEDAR-9",6",6"
112	18" MULTI-STEM CEDAR-12",4"(X3)
113	11" TWIN MESQUITE-8",6"
114	14" MULTI-STEM MESQUITE-8",6",6"
116	21" MULTI-STEM CEDAR-10",6",4"(X4)
117	32" MULTI-STEM CEDAR-9",6"(X5),4"(X4)
118	23" MULTI-STEM CEDAR-9",8",6"(X3)
119	20" MULTI-STEM CEDAR-8",8",4"(X4)
120	32" MULTI-STEM CEDAR-9",9",6",6",4"(X6)
121	25" MULTI-STEM CEDAR-10",6",4"(6)
122	26" MULTI-STEM CEDAR-8",6",6",4"(X6)
123	18" MULTI-STEM CEDAR-8",6",6",4",4"
124	10" HACKBERRY
125	9" HACKBERRY
126	21" MULTI-STEM PECAN-12",7",6",6"
127	34" MULTI-STEM CEDAR-12",7",6"(X3),4"(X5)
128	13" HACKBERRY
129	11" TWIN WOOLY BUCKTHORN-8",6"
130	23" MULTI-STEM CEDAR-9",6",5",5",4"(X3)
132	22" MULTI-STEM CEDAR-11",6",4"(X4)
133	9" MESQUITE
134	22" MULTI-STEM CEDAR-9",6"(X3),4",4"
135	28" MULTI-STEM CEDAR-9",6"(X3),4"(X5)
136	8" CEDAR
137	24" MULTI-STEM CEDAR-8",8",6",6",4"(X3)
138	33" MULTI-STEM CEDAR-9",9",8",6"(X4),4",4"
139	24" MULTI-STEM CEDAR-10",6",6",4"(X4)
140	18" MULTI-STEM CEDAR-12",4"(X3)
141	11" CEDAR
142	9" CEDAR
143	15" MULTI-STEM CEDAR-10",6",4"
144	26" MULTI-STEM CEDAR-12",6",6",4"(X4)
145	30" MULTI-STEM CEDAR-9",6"(X3),4"(X6)
146	35" MULTI-STEM CEDAR-12",7",7",6",4"(X6)
147	22" MULTI-STEM CEDAR-8",8",6",6",4",4"
148	12" TWIN MESQUITE-9",6"
149	11" CEDAR
150	22" MULTI-STEM CEDAR-12",8",4"(X3)
151	20" MULTI-STEM CEDAR-11",6",4"(X3)
152	12" TWIN MESQUITE-8",8"
153	12" HACKBERRY
154	10" HACKBERRY
155	9" HACKBERRY
156	20" MULTI-STEM MESQUITE-12",10",6"
157	8" CHINABERRY
158	18" MULTI-STEM CEDAR-9",7",4"(X3)
159	16" TWIN CEDAR-13",6"
160	27" MULTI-STEM HACKBERRY-14",14",6"
161	10" HACKBERRY (SIGH)
162	9" HACKBERRY

163	10" HACKBERRY
164	9" HACKBERRY
165	24" MULTI-STEM MESQUITE-15",10",8"

NOTE: SURVEYOR MAKES NO GUARANTEE AS TO THE
TYPE OF TREES LISTED ABOVE. IF CRITICAL, A CERTIFIED
ARBORIST SHOULD VERIFY THIS INFORMATION.