

**CITY OF CASTLE HILLS
ARCHITECTURAL REVIEW COMMITTEE MEETING
AGENDA
JANUARY 4, 2017**

Notice is hereby given that the Architectural Review Committee of the City of Castle Hills will meet on the 4th day of January 2017, at 7:00 P.M. in the Council Chambers of the City of Castle Hills City Hall, 209 Lemonwood Drive, San Antonio, Texas 78213, to consider the following agenda:

- I. **Call to order and determination of quorum.**
- II. **Consider and act upon approval of the minutes of the meeting of September 14, 2016.**
- III. **Consider and act upon an application from Rene A. Collin, regarding tree removal in conjunction with the construction of a new single family residence on the unimproved lot at 103 Hibiscus Lane, Castle Hills, Texas; Legal Description, CB 5778 (Woods West of West), Lot 1B.**

Open Public Hearing

Close Public Hearing

- IV. **Consider and act upon an application from Thomas G. Yantis representing 6812 West, LLC regarding the construction of two office buildings and proposed signage at 6812 West Avenue, Castle Hills, Texas; Legal Description CB 5778, Blk 8, Lot NE IRR 200 ft of Lot 6.**

Open Public Hearing

Close Public Hearing

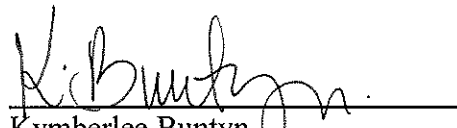
V. Adjournment

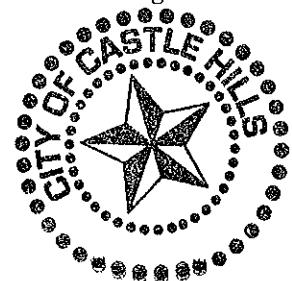
The City Council will consider the recommendations of the Architectural Review Committee regarding the above at the Regular City Council Meeting on the 10th day of January, 2017, at 6:30 P.M.

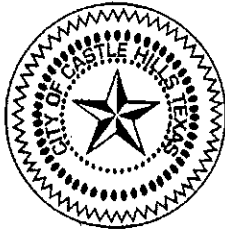
THIS NOTICE IS GIVEN PURSUANT TO THE TEXAS GOVERNMENT CODE, TITLE 5, SECTION 551-OPEN MEETINGS.

CERTIFICATION

I hereby certify that the above Notice of the Architectural Review Committee of the Castle Hills was posted on the bulletin board at the City of Castle Hills City Hall, 209 Lemonwood Drive, Castle Hills, Texas, on Friday, December 27, 2016, by 5 p.m., and remained continuously posted until after the meeting hereby posted concluded. This notice was likewise posted on the City's website at www.cityofcastlehills.com. The City of Castle Hills City Hall is wheelchair accessible and accessible parking spaces are available. Requests for accommodations or interpretive services must be made 48 hours prior to this meeting. Please contact the City Secretary's office at (210) 342-2341 or by FAX (210) 342-4525.


Kymberlee Buntyn
City Secretary





**CITY OF CASTLE HILLS
ARCHITECTURAL REVIEW COMMITTEE MEETING
SEPTEMBER 14, 2016 AT 7:00 P.M.**

**CASTLE HILLS CITY HALL
209 LEMONWOOD DR, CASTLE HILLS, TEXAS 78213**

MEETING MINUTES

I. Call to order and determination of quorum.

Chair Jack Joyce called the meeting to order at 7:15 p.m. and determined a quorum was present with the following board members present: Ana Frias and Betty Howard.

II. Consider and act upon approval of the minutes of the meeting of August 15, 2016.

Motion was made by Board Member Frias, seconded by Board Member Howard to accept the August 15, 2016 meeting minutes as presented. Motion passed unanimously.

III. Consider and act upon an application from Shanna Herbert, TreBre Holdings, Ltd. regarding tree removal in conjunction with the proposed development at 6812 West Avenue, Castle Hills, Texas, Legal Description, CB 5778, BLK 8, Lot NE IRR 200 ft. of 6.

Ms. Shanna Herbert gave an overview of the proposed development. Mr. Robert Copeland, P.E. addressed the diligence given to protecting the existing trees in the site design including preliminary approval by the fire chief regard fire safety issues of the site design. Landscape Architect Peter Olfers discussed the tree survey and the status of the trees on the property. No heritage trees will be taken for the development. He also stressed that the detention basin was carefully designed to leave as many trees as possible and serve as a green space.

Open Public Hearing

Chair Jack Joyce Opened the Public Hearing at 7:32 p.m.

Close Public Hearing

Chair Jack Joyce Closed Public Hearing at 7:34 p.m.

Resident Jana Baker asked Mr. Olfers if the trees with the ball moss were actually diseased as ball moss is not harmful. Mr. Olfers agreed with Mrs. Baker that the ball moss is harmless, but often seen on trees in decline. He agreed that "decline" is a better word for most of the trees though some were diseased. Mr. Olfers also stated that many of the trees in decline was a result of improper pruning and over pruning. Mrs. Baker suggested a change in language from "diseased" to "decline".

Motion was made by Board Member Howard, seconded by Board Member Frias to approve the application as presented for 6812 West Avenue for tree removal. Motion passed unanimously.

- IV. **Consider and act upon an application from Shanna Herbert, TreBre Holdings, Ltd. regarding tree removal at 6808 West Avenue, Castle Hills, Texas, Legal Description, CB 5778, BLK 8, Lots 7 & 8 for ingress and egress under a reciprocal easement in conjunction with the proposed development at 6812 West Avenue, Castle Hills, Texas.**

As this project was included in the earlier presentation no additional details were provided.

Open Public Hearing

Chair Jack Joyce Opened the Public Hearing at 7:36 p.m.

No citizens spoke at the public hearing.

Close Public Hearing

Chair Jack Joyce Closed Public Hearing at 7: 36 p.m.

V. Adjournment

Motion was made by Board Member Frias, seconded by Board Member Howard to adjourn the meeting at 7:38 p.m. Motion passed unanimously.

Approved by:

Jack Joyce
Chair

Attest:

Janet Thelen
Administrative Assistant

GENERAL INFORMATION
FOR ARCHITECTURAL REVIEW COMMITTEE HEARING

(Please retain pages 1-4 for your information and return pages 5 - 6 and page 7 if applicable)

Omni Custom Homes 3625 Passmore Plwy (210) 473 2678
APPLICANT'S NAME ADDRESS & PHONE #

103 Hibiscus Lane Lot 1 B Woods of West
PROPERTY ADDRESS LEGAL DESCRIPTION

Rene & Jessica Collin 12626 Hunters Chase St.
PROPERTY OWNER ADDRESS & PHONE #

New Construction
PROPOSED USE OF PROPERTY

Please provide your written request for the Hearing below:

Construction of a new single-family residence
on an unimproved lot with minimal
tree removal in efforts to save as many trees.
The following trees will be removed for development
All are 8" or larger and considered "protected" trees

Survey #	Type	Size
4996	Live Oak	13"
7042	Elm	8"
7052	Live Oak	14"
7131	Elm	17"

Approved as to form by City Manager

Date

OWNER AUTHORIZATION
(Please return with application)

I, Rene A. Collin
owner of subject property at 103 Hibiscus Ln. S.A., TX 78213
authorize (applicant) _____

to pursue a request before the City of Castle Hills Architectural Review

Committee for tree removal for the following described project:

Construction of a new single family residence
on an unimproved lot described as Lot 1B (1.063 acres)
in the Woods of West subdivision with situs
address of 103 Hibiscus.

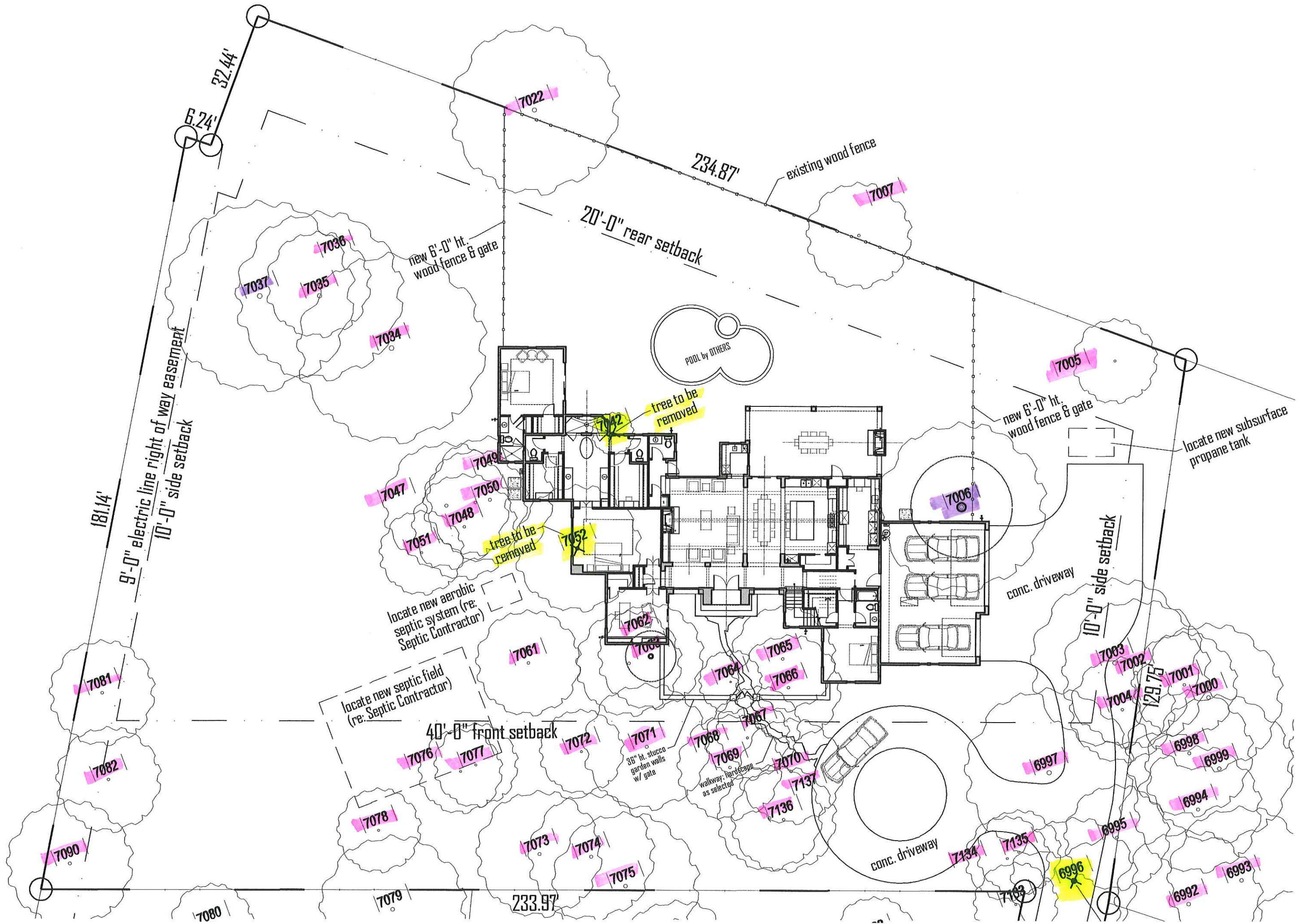
Collin, Rene A.
Printed Name of Property Owner

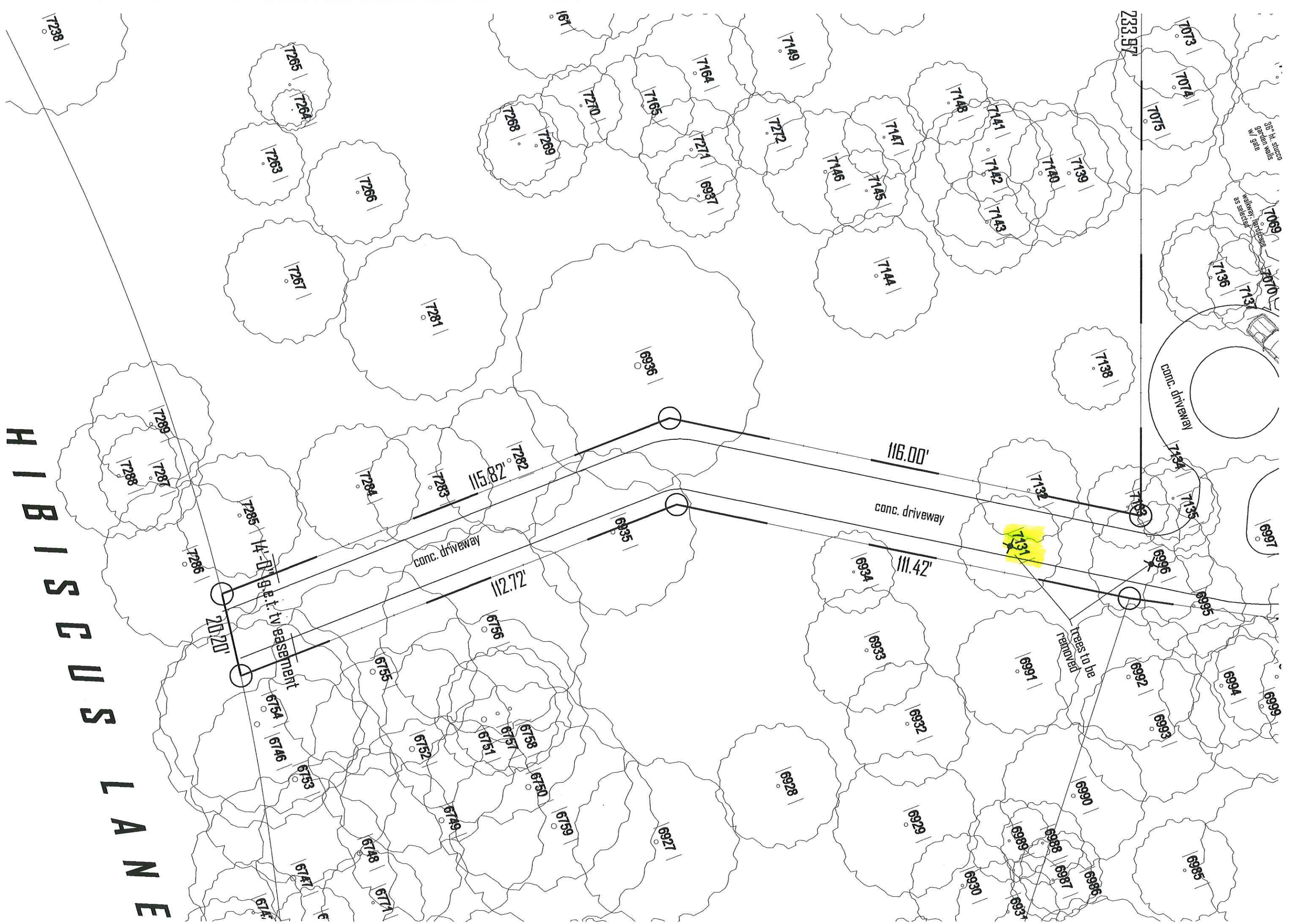
[Signature]
Signature of Property Owner

12/12/2016
Date

TREE TABLE			
POINT NUMBER	SPECIES	TRUNK DIA (IN)	SPEAD (FT)
6992	LIVE OAK	15	35
6993	LIVE OAK	15	35
6994	LIVE OAK	14	30
6995	LIVE OAK	11	25
6996	LIVE OAK	13	30
6997	LIVE OAK	15	40
6998	LIVE OAK	11	30
6999	LIVE OAK	15	35
7000	LIVE OAK	21	35
7001	LIVE OAK	11	25
7002	LIVE OAK	16	35
7003	LIVE OAK	16	40
7004	LIVE OAK	12	25
7005	LIVE OAK	10	20
7006	LIVE OAK	24	40
7007	LIVE OAK	14	25
7022	LIVE OAK	16	40
7034	ELM	23	45
7035	ELM	15	40
7036	LIVE OAK	11	25
7037	LIVE OAK	34	45
7042	ELM	8	10
7047	LIVE OAK	14	30
7048	LIVE OAK	13	25
7049	LIVE OAK	14	25
7050	LIVE OAK	19	300
7051	LIVE OAK	13	20
7052	LIVE OAK	14	30
7061	LIVE OAK	13	25
7062	LIVE OAK	12	25
7063	LIVE OAK	10	25
7064	LIVE OAK	9	15
7065	LIVE OAK	12	25
7066	LIVE OAK	12	25
7067	LIVE OAK	12	20
7068	LIVE OAK	11	20
7069	LIVE OAK	11	25
7070	LIVE OAK	13	25
7071	LIVE OAK	11	30
7072	LIVE OAK	11	20
7073	LIVE OAK	16	30
7074	LIVE OAK	16	30
7075	LIVE OAK	17	35
7076	LIVE OAK	14	20
7077	LIVE OAK	14	20
7078	LIVE OAK	13	20
7081	LIVE OAK	16	25
7082	LIVE OAK	13	25
7090	LIVE OAK	15	30
7131	ELM	17	25
7134	LIVE OAK	11	20
7135	LIVE OAK	10	20
7136	LIVE OAK	15	25
7137	LIVE OAK	13	25

- TREES SAVED
- 2 LIVE OAK HERITAGE TREES
- 2 ELM
- 46 LIVE OAK
- TREES REMOVED
- 2 ELM
- 2 LIVE OAK





GENERAL INFORMATION
FOR ARCHITECTURAL REVIEW COMMITTEE HEARING

6812 West, LLC, by Thomas G. Yantis 1802 NW Military Drive, #100, SATX 78213, 210-332-8676
APPLICANT'S NAME ADDRESS & PHONE #

6812 West Avenue, Castle Hills, Texas CB 5778, Blk 8, Lot NE IRR 200 ft of 6. Property ID 355309
PROPERTY ADDRESS LEGAL DESCRIPTION

6812 West, LLC, by Thomas G. Yantis, President 1802 NW Military Drive, #100, SATX 78213, 210-332-8676
PROPERTY OWNER ADDRESS & PHONE #

General Business, Office, and Clinic
PROPOSED USE OF BUILDING

Please provide your written request for the Hearing below:

We respectfully request a hearing by the City of Castle Hills Architectural Review Committee for approval of the proposed development of two (2) multi-use office buildings to be constructed on the above referenced property (the "Property"), including

- 1. The demolition of existing improvements on the Property consisting of two (2) sheds and one (1) small retail building, existing hardscape (as shown on the attached Demolition Plan); and
- 2. A permanent sign to be constructed on the Property (drawing attached); and
- 3. The Site and Grading Plan and all site improvements shown thereon, prepared by the engineering firm of Macina, Bose, Copeland and Associates (attached); and
- 4. The preliminary Landscape Plan as prepared by Peter Olfers and Associates; and
- 5. The building design and elevations of the two (2) proposed buildings, designed by the architectural firm of Chesney Morales Partners.


Approved as to form by City Manager

12/21/16
Date

CITY OF CASTLE HILLS
ARCHITECTURAL REVIEW HEARING
MINIMUM REQUIREMENTS


1. ☒ Completed Application
2. ☒ Proof of ownership of property or letter of authorization from property owner.
3. ☒ \$200 filing fee
4. ☒ Submit one (1) original set plus 14 complete sets of:
 - ☒ A. 8-1/2" x 11" or 11" x 17" Plat to scale showing project square footage and location of building or buildings.
 - ☒ B. Information necessary to show compliance with building code and zoning code.
 - ☐ C. Preliminary building plan includes:
 - (1) Footprint square footage
 - (2) Site and grading plan
 - (3) Tree survey showing types of trees - existing trees and/or removal
 - (4) Demolition plans (if relevant)
 - ☒ D. Exterior elevations, in color, reflecting specified exterior building materials. A sample board show all exterior materials and colors.
 - ☒ E. Landscape plans reflecting landscape areas including landscape buffer, plant specifications and locations, exterior lighting layout, parking and site screening.
 - ☒ F. Design of any permanent sign showing size, color, and other specifications, whether freestanding or building-mounted.
 - ☒ G. Photographs showing existing property, existing structures including any to be demolished, and adjacent neighbors' property.
 - ☒ H. Provisions for location of trash/garbage containers for collection and removal and for any exterior storage, plans for screening same.
 - ☒ I. Size and location of any rooftop equipment with method and design of screening.
 - ☒ J. Site and exterior building illumination


All plans for construction must be prepared, sealed, and signed by a State-Registered Architect. In the case of any new building or an addition to an existing building, the


plans will also require a licensed State Professional Engineer to provide structural engineering services.

Provide one original and 14 copies of the completed application and above minimum requirements.

If any of the above listed information is not included with this application, then the application will be returned to the applicant and will not be accepted until all information is resubmitted.

 I have verified that all required information is submitted with the Architectural Review Application.

 I understand a City provided sign must be posted on the property in question advising the public of the hearing date (must be posted within 14 days of acceptance of the application).



Signature



Date



Date of Hearing



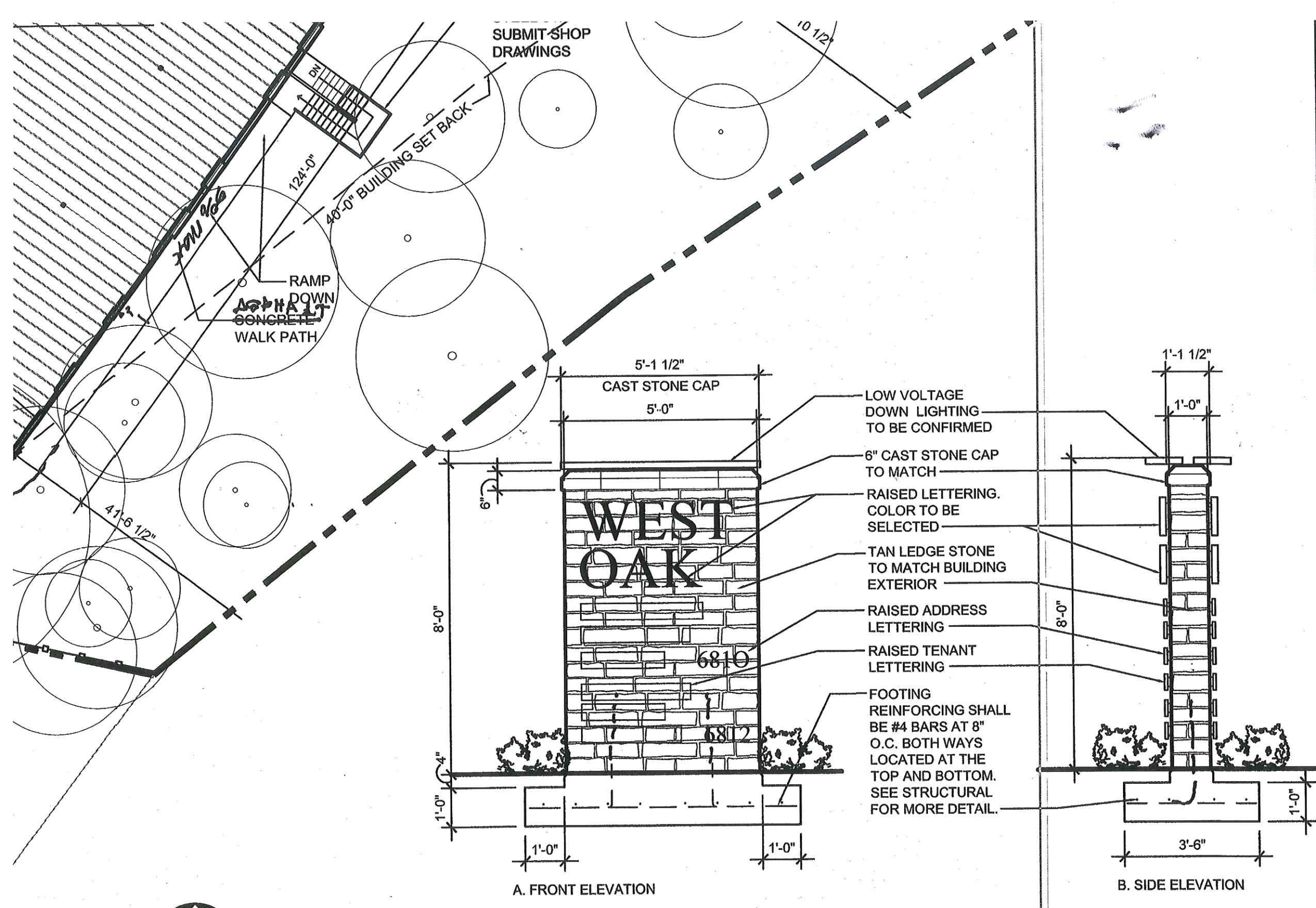
Bldg 1 Area from Drive (Existing Bldg to be Demolished)



Left Neighbor (6818 West Ave from Front of Drive



Shed to be Demolished - Parking Area



2 MONUMENT SIGN
SCALE: 3/8" = 1'-0"

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chesneymoralespartners, inc.
architecture/interior design

4901 Broadway, Suite 250 | San Antonio, Texas 78209
210.828.9481 v | 210.828.9719 f | TBAE Firm Reg BR1010
chesneymorales.com

JOB NO: 1614

DATE: 12-5-16

DRAWN BY:

CHECKED BY:

SHEET

A1.1

OF #



Site Plan



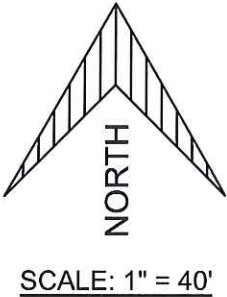
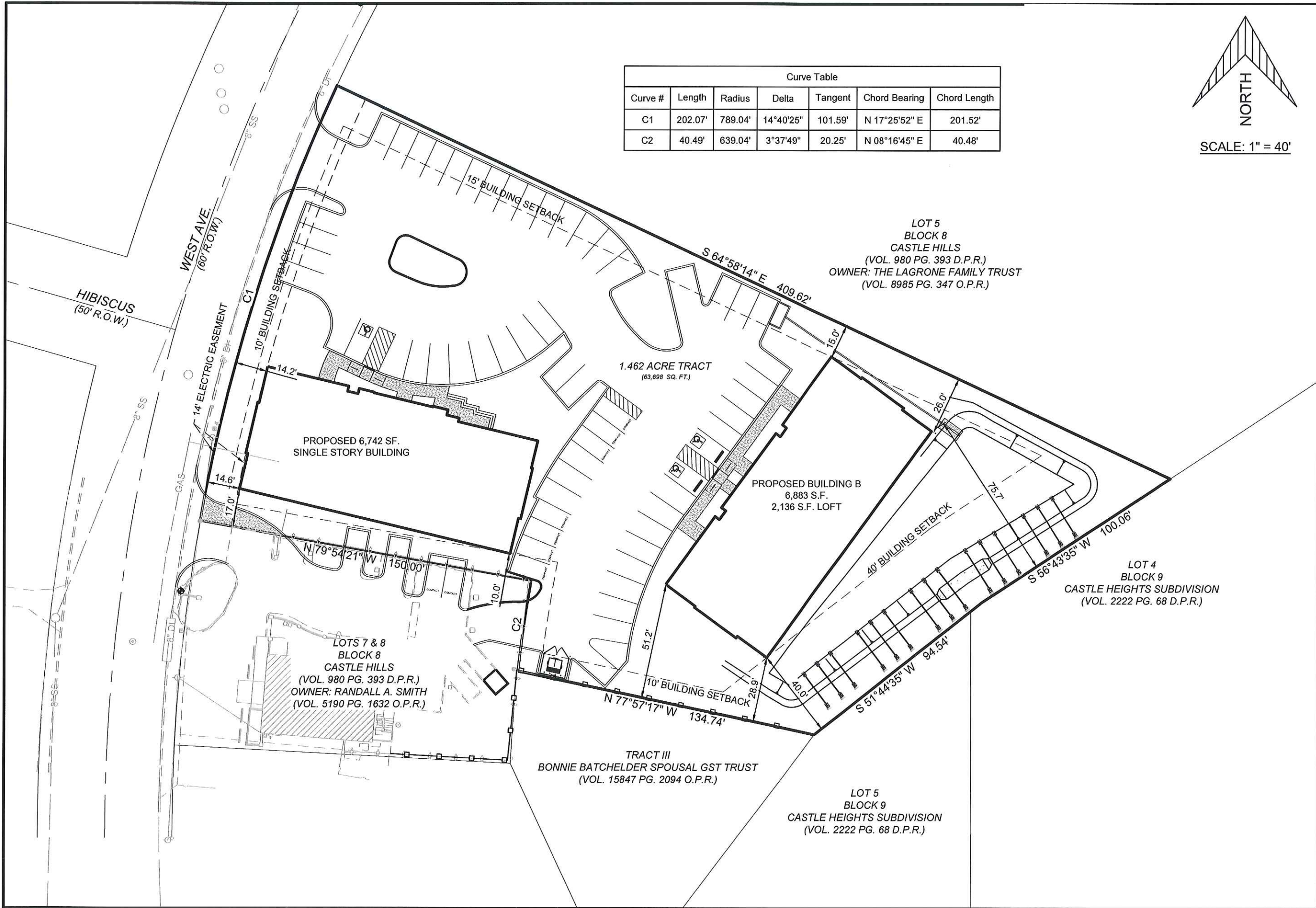


Building A Front Elevation



Building B Front Elevation



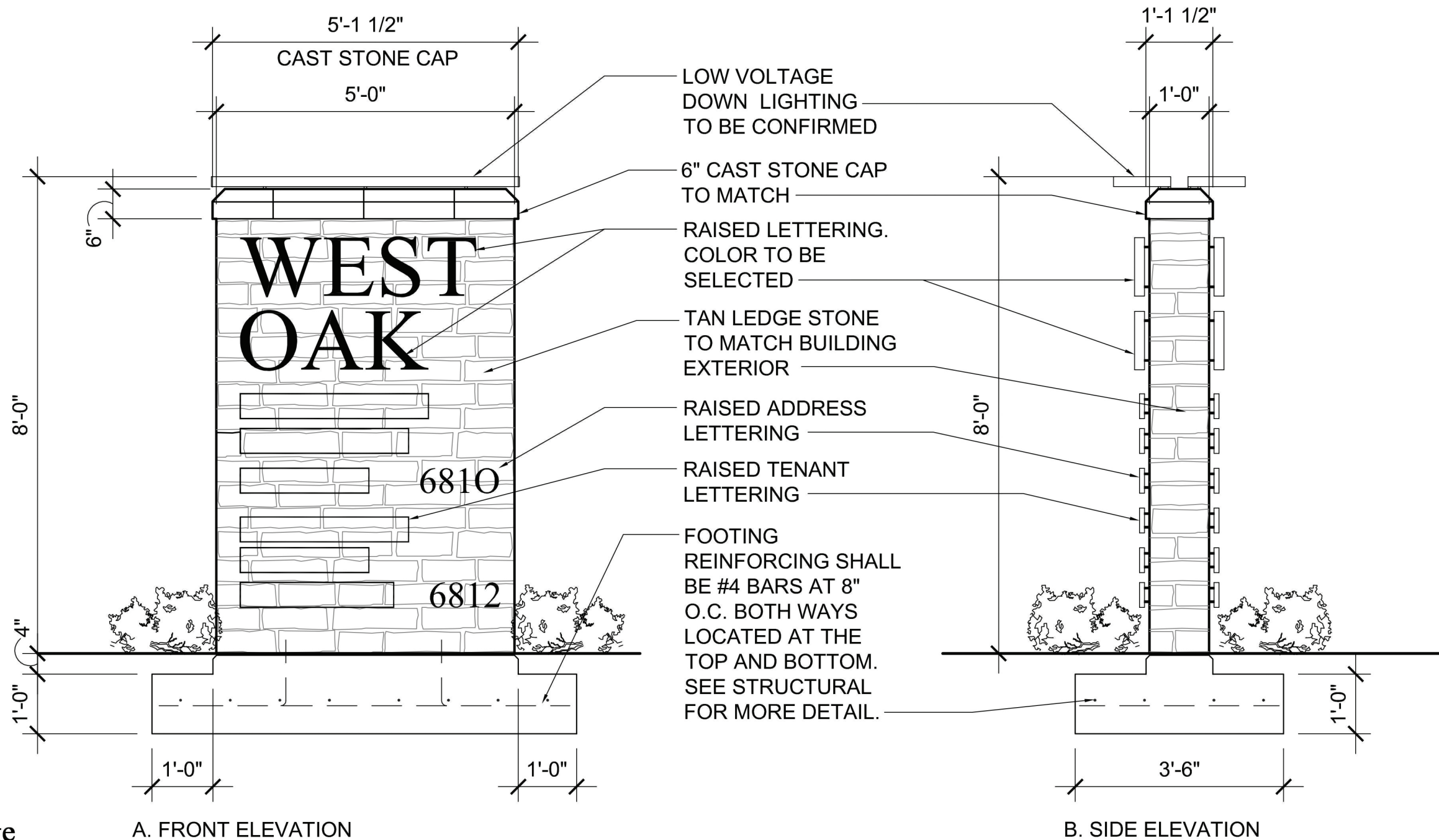


COMMERCIAL DEVELOPMENT OF WEST AVENUE
CASTLE HILLS, TEXAS
SITE EXHIBIT

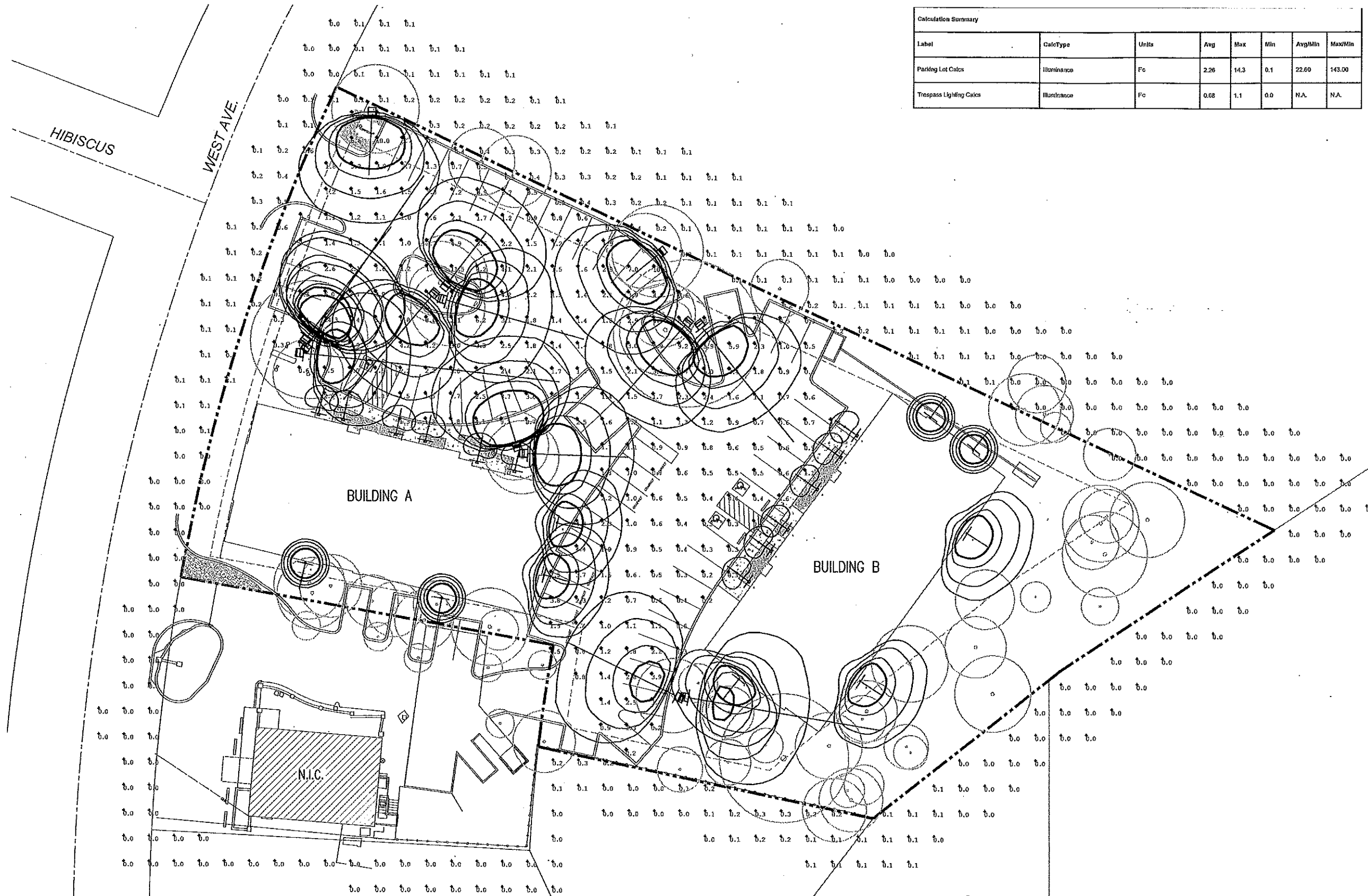


1035 Central Parkway North
San Antonio, Texas 78232
(210) 545-1122 FAX (210) 545-9302
FIRM REGISTRATION NUMBER:
T.B.P.E. F-784 & T.B.P.L.S. 10011700

DESIGN _____ RWH
DRAWN _____ RWH
CHECKED _____ RAC
DATE 12-01-2016
JOB NO. 31369-1174
SHT. 1 of 1



Mounment Site Signage



1 PHOTOMETRIC SITE PLAN
SCALE 1" = 20'-0"

Luminaire Schedule											
Tag	Symbol	Qty	Label	Arrangement	LLF	Description	Lum. Lumens	Lum. Watts	Total Watts	Housing Color	Manufacturer
A		12	Decorative Wall Sconce	SINGLE	0.800	GL-6450-B-W-TBL-A-A	781	15	180		G-LIGHTING/GROSS CHANDELIER - ST. LOUIS, MISSOURI
B		5	Wall Pack Bronze	SINGLE	0.800	121-16L-630-NW-G3-4-UNV-BZ	2614	28	140		PHILIPS GARDCO
D		14	Tree Light Flood	SINGLE	0.900	LPF4-C-4K-FL-T-8-BZ	9138	108.4	1617.6		PHILIPS STONCO
C		4	Wall Mount Cylinder	SINGLE	0.900	CF33W6V10-35K-N-D6-L9-WL	1200	11.4	45.6		Pathway

Calculation Summary						
Label	CalcType	Units	Avg	Max	Min	Avg/Min
Parking Lot Calcs	Illuminance	Fc	2.26	14.3	0.1	22.60
Trespass Lighting Calcs	Illuminance	Fc	0.08	1.1	0.0	N/A

Luminaire Mounting Height Summary		
LumNo	Label	Z
2	Tree Light Flood	19.284
3	Tree Light Flood	19.284
4	Tree Light Flood	12
5	Tree Light Flood	12
6	Tree Light Flood	12
7	Tree Light Flood	12
8	Tree Light Flood	12
9	Tree Light Flood	12
10	Tree Light Flood	12
11	Tree Light Flood	12
12	Tree Light Flood	12
13	Tree Light Flood	12
14	Decorative Wall Sconce	7
15	Decorative Wall Sconce	7
16	Decorative Wall Sconce	7
17	Decorative Wall Sconce	7
18	Decorative Wall Sconce	7
19	Decorative Wall Sconce	7
20	Decorative Wall Sconce	7
21	Decorative Wall Sconce	7
22	Decorative Wall Sconce	7
23	Decorative Wall Sconce	7
24	Decorative Wall Sconce	7
25	Decorative Wall Sconce	7
26	Wall Mount Cylinder	8
27	Wall Mount Cylinder	8
28	Wall Pack Bronze	8
29	Wall Pack Bronze	8
30	Wall Pack Bronze	8
31	Wall Pack Bronze	8
32	Wall Pack Bronze	8
33	Wall Mount Cylinder	8
34	Wall Mount Cylinder	8
37	Tree Light Flood	12
38	Tree Light Flood	12

REVISIONS		
NO	DATE	DESCRIPTION

West Oak Office Park

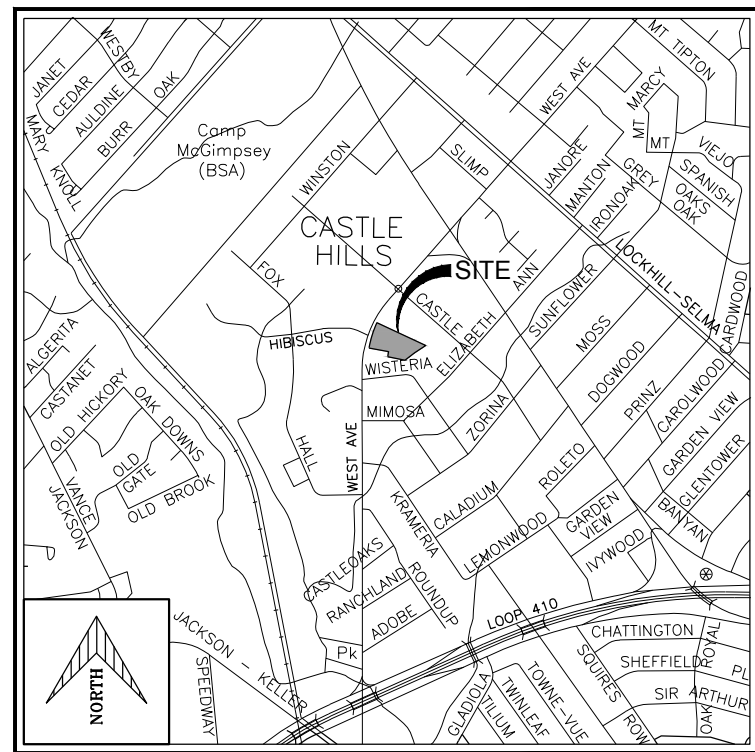
Castle Hills, Texas

chesnemordalepartners, inc.
architecture/interior design
4901 Broadway, Suite 250 San Antonio, Texas 78209
210.228.7481 v 210.228.5717 f 210.228.7481
chesnemordale.com

JOB NO: 1614
DATE: 12-2-16
DRAWN BY: E.G.
CHECKED BY: S.A.M.
SHEET

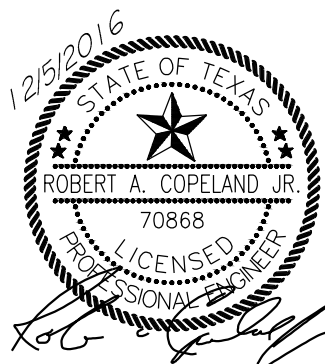
1100 NW Loop 410, Suite 610 San Antonio, Texas 78213
210.342.3483
F 210.342.3841
TELE FIRM REGISTRATION NO. F-4137
JOS NO: 19365

COMMERCIAL DEVELOPMENT OF WEST AVENUE WEST AVE. & HIBISCUS LN. CASTLE HILLS, TEXAS

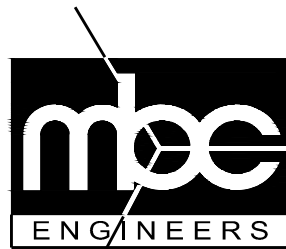


LOCATION MAP
NOT TO SCALE

CIVIL SHEET INDEX	
SHEET NAME	SHEET NUMBER
COVER SHEET	C1
DEMOLITION PLAN	C2
FIRE PROTECTION PLAN	C3
SITE PLAN	C4
GRADING PLAN	C5
UTILITY PLAN	C6
DETENTION POND PLAN	C7
DETENTION POND DETAILS	C8
EROSION CONTROL PLAN	C9
SITE DETAILS	C10



PRIMARY CONTACT PERSON: JUSTIN SHIPEY, P.E.

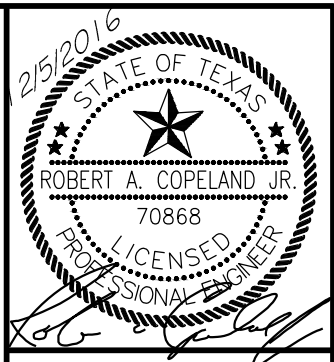
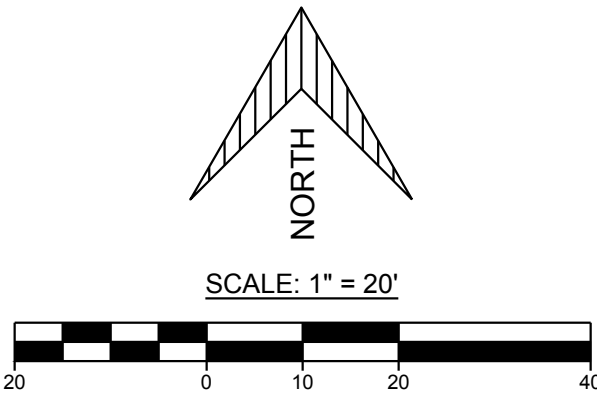
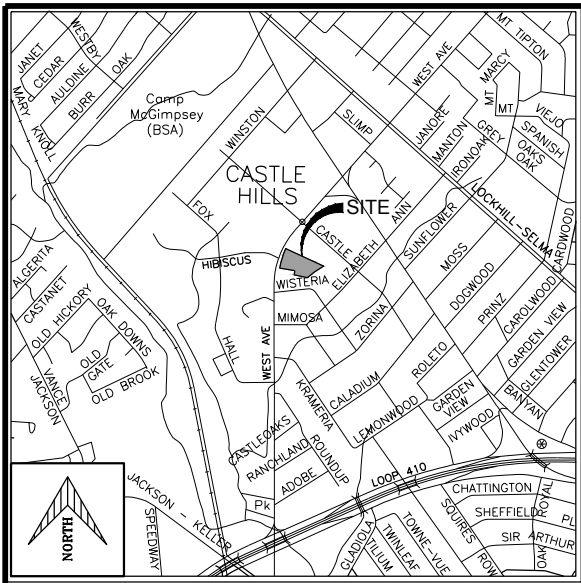


MACINA • BOSE • COPELAND & ASSOC., INC.
CONSULTING ENGINEERS AND LAND SURVEYORS

1035 Central Parkway North, San Antonio, Texas 78232
(210) 545-1122 Fax (210) 545-9302 www.mbcengineers.com
FIRM REGISTRATION NUMBER: T.B.P.E. F-784 & T.B.P.L.S. 10011700

ISSUED FOR ARCH REVIEW
12-05-16

PLAT ID# _____
A/P# _____
DESIGN JS
DRAWN GM
CHECKED JS
DATE 11-07-15
JOB NO. 31369-1174
SHT. C1 OF 10



PRIMARY CONTACT:
JUSTIN SHIPPEY, P.E.

MACINA • BOSE • COPELAND & ASSOC., INC.
CONSULTING ENGINEERS AND LAND SURVEYORS



**COMMERCIAL DEVELOPMENT OF WEST AVENUE
CASTLE HILLS, TX.**

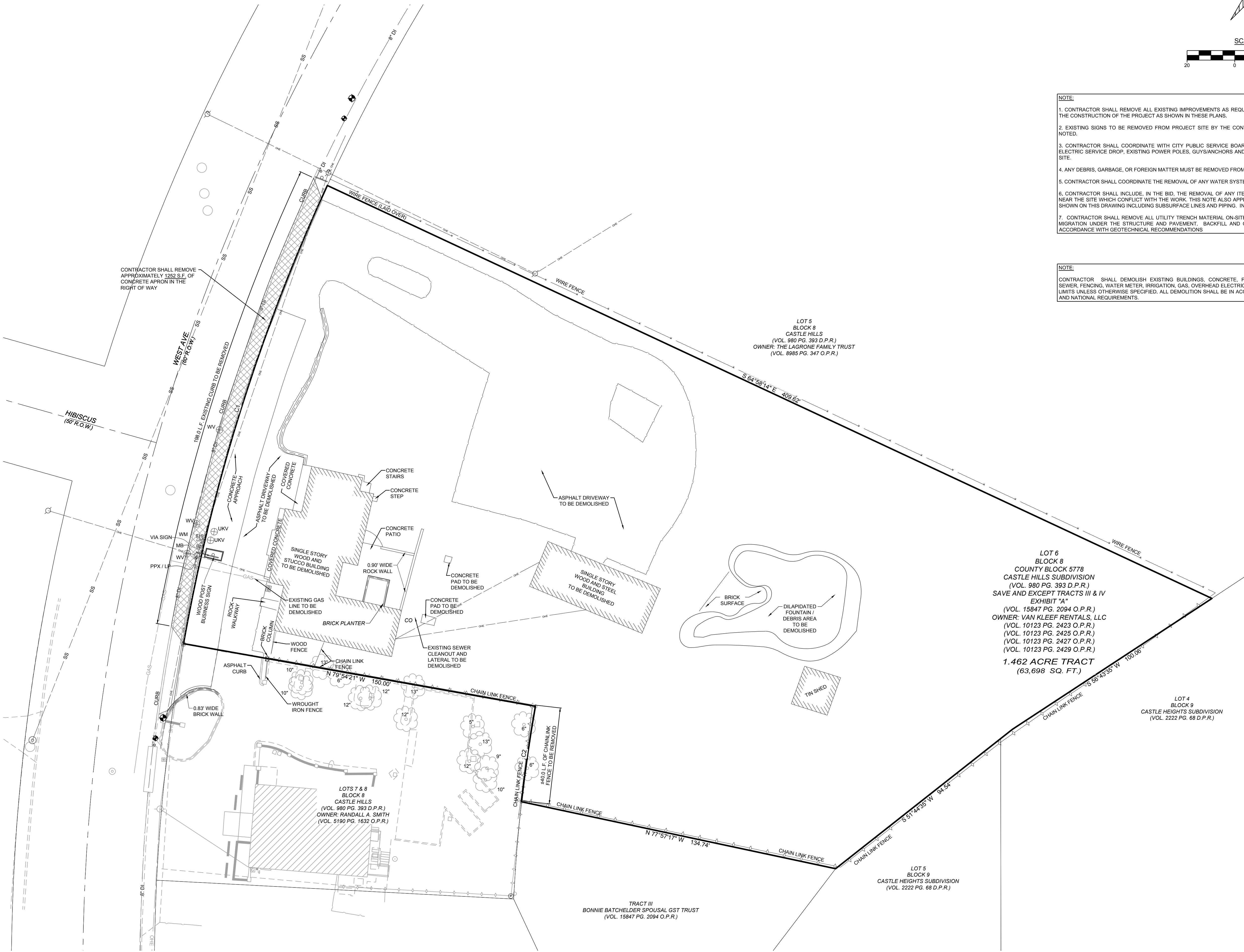
DEMOLITION PLAN

REVISIONS:	DATE	NO.	DESCRIPTION	BY

PLAT ID# _____
APP# _____
DESIGN _____ JS _____
DRAWN _____ GM _____
CHECKED _____ JS _____
DATE _____ 11-07-15 _____
JOB NO. _____ 31369-1174 _____
SHT. _____ C2 OF 10 _____

- NOTE:**
1. CONTRACTOR SHALL REMOVE ALL EXISTING IMPROVEMENTS AS REQUIRED IN ORDER TO COMPLETE THE CONSTRUCTION OF THE PROJECT AS SHOWN IN THESE PLANS.
 2. EXISTING SIGNS TO BE REMOVED FROM PROJECT SITE BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
 3. CONTRACTOR SHALL COORDINATE WITH CITY PUBLIC SERVICE BOARD THE REMOVAL OF EXISTING ELECTRIC SERVICE DROP, EXISTING POWER POLES, GUYS/ANCHORS AND ELECTRIC METERS FROM THE SITE.
 4. ANY DEBRIS, GARBAGE, OR FOREIGN MATTER MUST BE REMOVED FROM THE SITE.
 5. CONTRACTOR SHALL COORDINATE THE REMOVAL OF ANY WATER SYSTEM ITEMS WITH S.A.W.S.
 6. CONTRACTOR SHALL INCLUDE, IN THE BID, THE REMOVAL OF ANY ITEMS LOCATED ON THE SITE OR NEAR THE SITE WHICH CONFLICT WITH THE WORK. THIS NOTE ALSO APPLIES TO ITEMS WHICH ARE NOT SHOWN ON THIS DRAWING INCLUDING SUBSURFACE LINES AND PIPING. IN ADDITION.
 7. CONTRACTOR SHALL REMOVE ALL UTILITY TRENCH MATERIAL ON-SITE TO PREVENT FUTURE WATER MIGRATION UNDER THE STRUCTURE AND PAVEMENT. BACKFILL AND COMPACT THE EXCAVATION IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS

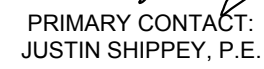
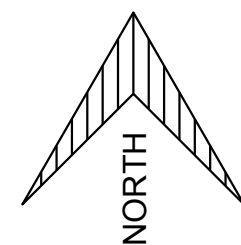
- NOTE:**
- CONTRACTOR SHALL DEMOLISH EXISTING BUILDINGS, CONCRETE, PAVEMENT, CURBING, PRIVATE SEWER, FENCING, WATER METER, IRRIGATION, GAS, OVERHEAD ELECTRIC, ETC. WITH IN THE PROPERTY LIMITS UNLESS OTHERWISE SPECIFIED. ALL DEMOLITION SHALL BE IN ACCORDANCE WITH LOCAL, STATE AND NATIONAL REQUIREMENTS.



ISSUED FOR ARCH REVIEW
12-05-16



CONTRACTOR TO COORDINATE WITH FIRE MARSHAL'S OFFICE AT BEGINNING OF CONSTRUCTION TO DETERMINE NUMBER AND LOCATION OF REQUIRED FIRE RELATED SIGNAGE PAINTING & STRIPING- INCLUDE THIS COST WITH BIDS.



1035 Central Parkway North, San Antonio, Texas 78232
(210) 545-1122 Fax (210) 545-9302 www.mbcengineers.com
FIRM REGISTRATION NUMBER: T.B.P.E. F-784 & T.B.P.L.S. 1001



FIRE PROTECTION PLAN

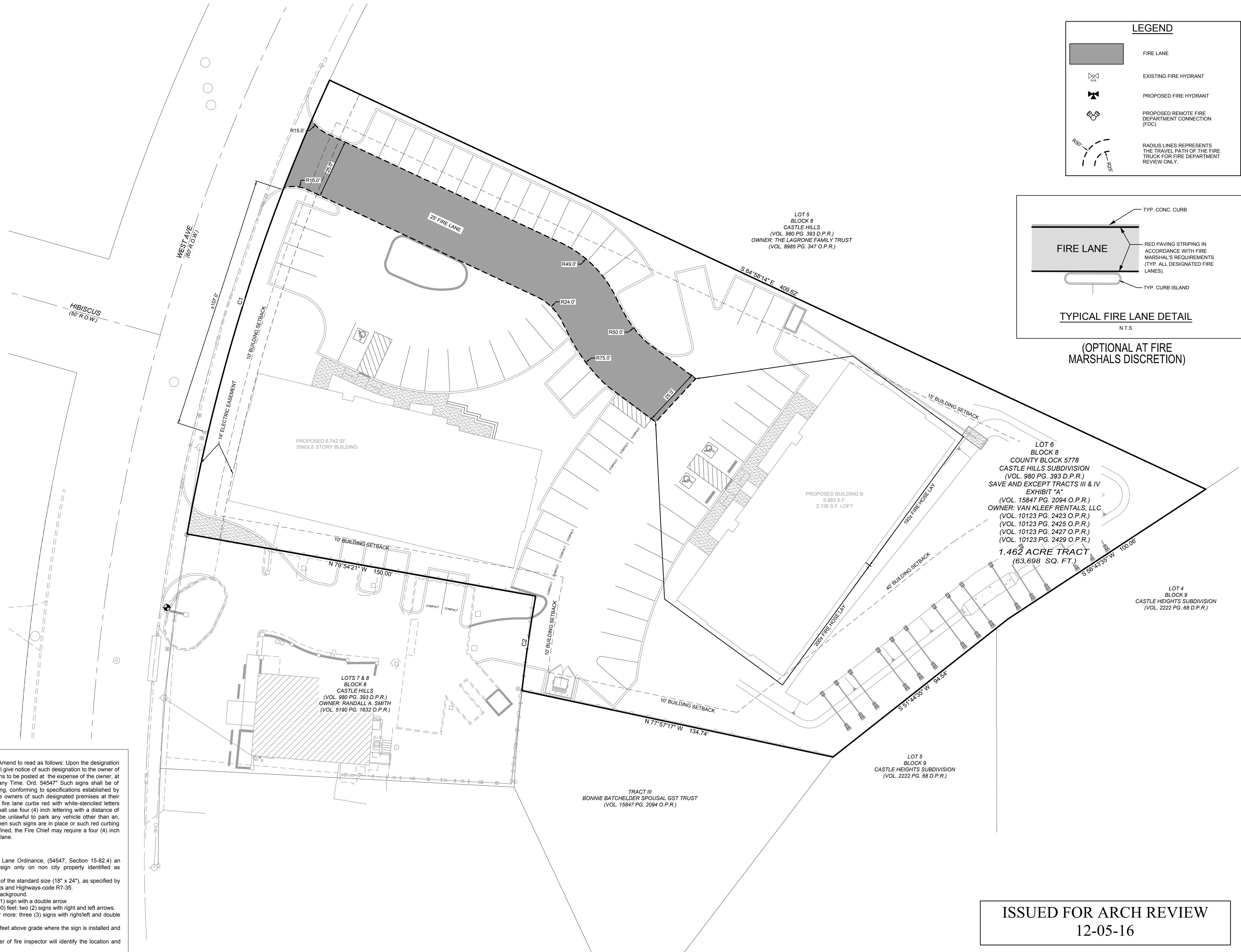
[illegible]

Date: Dec 05, 2016, 10:50am User ID: kvillarreal Layout: FIRE PROTECTION PLAN
File: P:\11743\31369-Comm Dev of West Ave\Design\Design Civil\sh-fire protection plan.dwg Layout: name: FIRE PROTECTION PLAN



Section 03.11.1.1 FIRE APPARATUS ACCESS ROADS. Amend to read as follows: Upon the designation of a fire lane pursuant to this ordinance, the Fire Chief shall give notice of such designation to the owner of such designated premise, directing the owner to cause signs to be posted at the expense of the owner at designated locations, lettered "Fire Lane-No Parking at Any Time, Ord. 54547". Such signs shall be of the type and design specified in the Fire Code, and shall conform to specifications established by the Director of Public Works. In addition to the signs, the owners of such designated premises at their option, or, if directed by the Fire Chief shall paint all fire lane curbs red with white-stenciled letters stating "Fire Lane, No Parking". Lettering for the curbs shall use four (4) inch lettering with a distance of not more than forty (40) feet between wordings. It shall be unlawful for park any vehicle other than an authorized fire apparatus on such fire lane. If such fire lane is not clearly defined by such signage, it exists. In areas where the fire lane may not be clearly defined, the Fire Chief may require a four (4) inch red stripe be painted that defines the boundaries of the fire lane.

1. Under the guidelines and restrictions of the City Fire Lane Ordinance, (54547, Section 15-82.4) an independent contractor may install the standard size sign only on non city property identified as designated pedestrian crossings.
2. Signs installed by the City of San Antonio shall only be of the standard size (18" x 24"), as specified by Texas Manual on Uniform Traffic Control Devices for Streets and Highways-code R7-35.
3. Signs should have RED letters and border on a WHITE background.
4. Signs should be placed in the lane less than 100 feet from the intersection of the lane to a double arrow.
5. For a designated fire lane from forty (40) feet to ninety (90) feet: two (2) signs with right and left arrows.
6. For a designated fire lane of one hundred (100) feet or more: three (3) signs with right/left and double arrow.
7. The bottom edge of the sign must be at least seven (7) feet above grade where the sign is installed and at least two (2) feet from the curb edge.
8. After application and photo submittal, a fire plan reviewer of fire inspector will identify the location and number of all signs required.



FIRE LANE

EXISTING FIRE HYDRANT

PROPOSED FIRE HYDRANT

PROPOSED REMOTE FIRE DEPARTMENT CONNECTION (FDC)

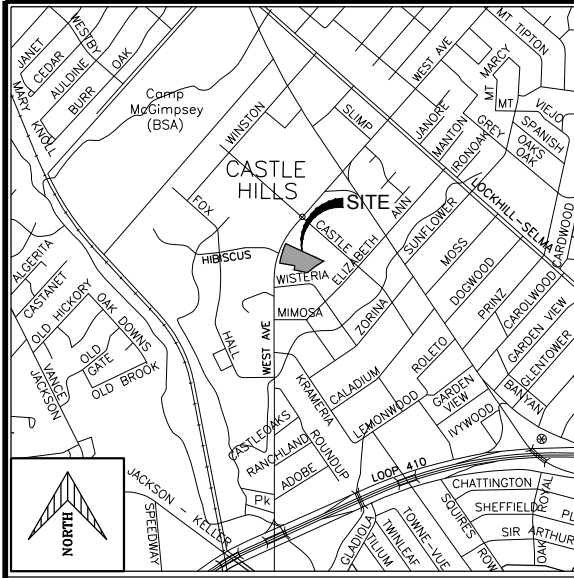
RADIUS LINES REPRESENTS THE TRAVEL PATH OF THE FIRE TRUCK FOR FIRE DEPARTMENT REVIEW ONLY.

Diagram illustrating a typical curb island. The island is shown with red paving striping in accordance with Fire Marshal's requirements (typical for all designated fire lanes). The diagram also shows the typical curb and curb island.

TYPICAL FIRE LANE DETAIL

(OPTIONAL AT FIRE
MARSHALS DISCRETION)

ISSUED FOR ARCH REVIEW
12-05-16

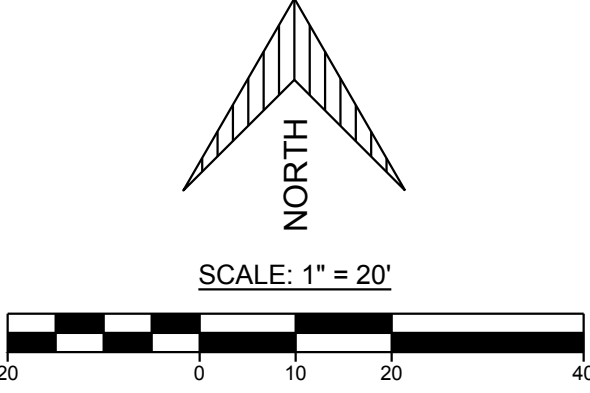
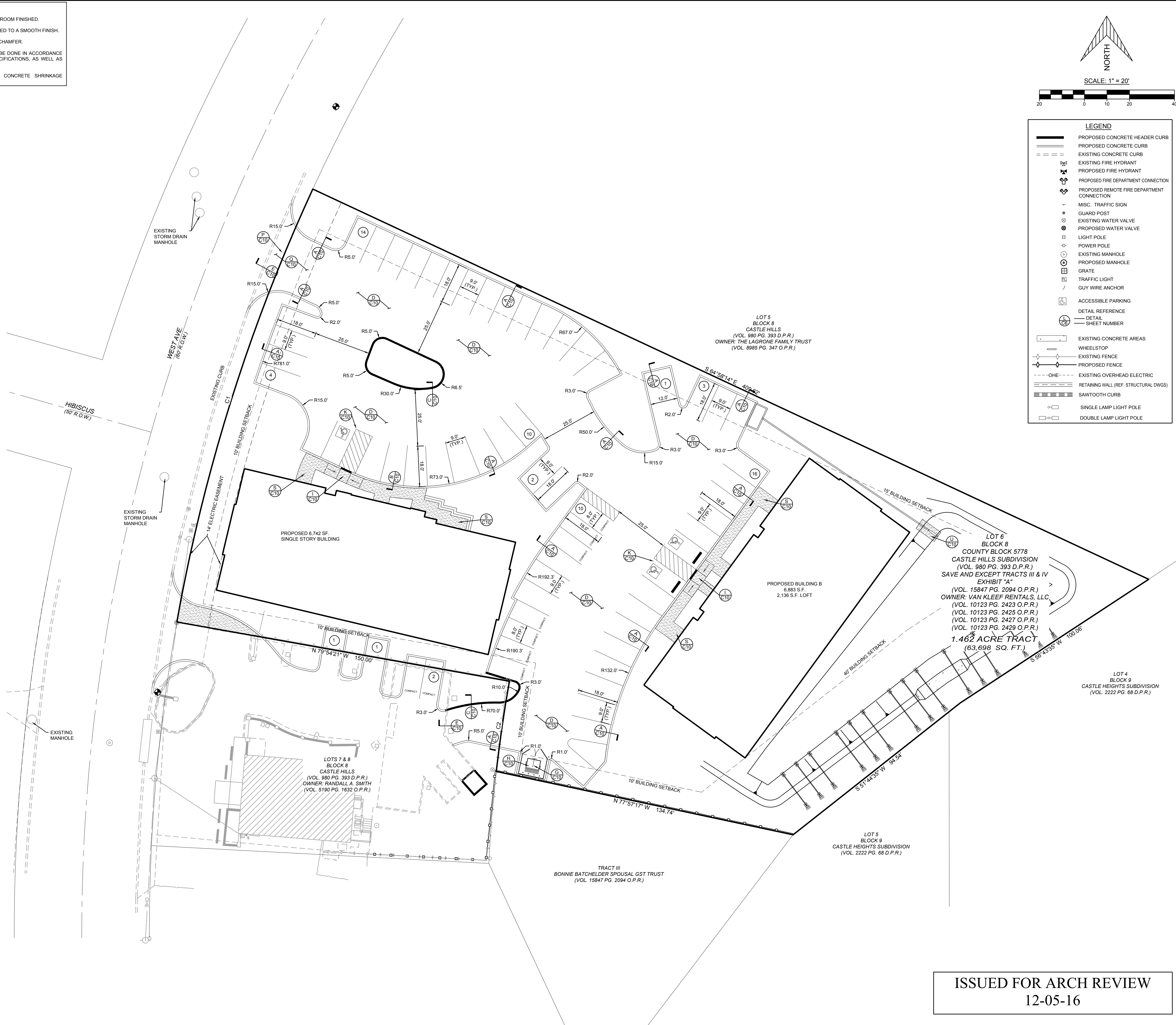


- SITE CONCRETE DRAINAGE NOTES:**
1. EXPOSED CONCRETE SURFACES SHALL BE BROOM FINISHED.
 2. ANY IRREGULAR AREA SHALL BE HAND RUBBED TO A SMOOTH FINISH.
 3. ALL EXPOSED EDGES SHALL RECEIVE A 3/4" CHAMFER.
 4. ALL MATERIALS AND WORKMANSHIP SHALL BE DONE IN ACCORDANCE WITH CITY OF SAN ANTONIO STANDARD SPECIFICATIONS, AS WELL AS ITEM 360 (TXDOT STD SPECS, LATEST ED.)
 5. JOINTS TO BE COMPLETED PRIOR TO CONCRETE SHRINKAGE OCCURRING.

PARKING TABULATION	
67	REGULAR SPACES
2	ACCESSIBLE SPACES
1	VAN ACCESSIBLE SPACES
70	TOTAL SPACES

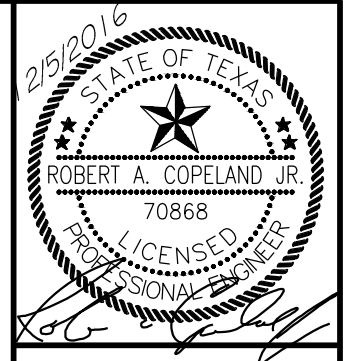
GENERAL SITE NOTES

1. CONTRACTOR SHALL COMPLY WITH THE CITY OF CASTLE HILLS BUILDING CODE AND REGULATIONS AND APPLICABLE TECHNICAL SPECIFICATIONS, AS WELL AS OTHER SAFETY CODES AND INSPECTION PROVISIONS APPLICABLE TO THIS PROJECT.
2. CONTRACTOR SHALL SECURE ALL PERMITS REQUIRED FOR CONSTRUCTION AND SHALL NOTIFY ALL RESPECTIVE GOVERNMENTAL OR UTILITY AGENCIES AFFECTED BY CONSTRUCTION PRIOR TO STARTING CONSTRUCTION.
3. LOCATION OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, IS BASED ON A COMBINATION OF FIELD SURVEYING AND AVAILABLE UTILITY MAPS. CONTRACTOR TO DETERMINE VERTICAL AND HORIZONTAL LOCATIONS OF ALL UTILITIES (WHETHER SHOWN ON PLANS OR NOT) BY COORDINATING WITH THE RESPECTIVE UTILITY AGENCIES PRIOR TO CONSTRUCTION. THE FOLLOWING ARE NUMBERS OF THE RESPECTIVE AGENCIES:
SAN ANTONIO WATER SYSTEM (WATER) 233-2009
SAN ANTONIO WATER SYSTEM (SEWER) 233-2009
CPS ENERGY (GAS & ELECTRIC) 978-3500
AT&T (TELEPHONE) 620-6229
TIME WARNER CABLE (TELEVISION) 675-4560
VALERO ENERGY CORP. 246-2394
TESS-STATEWIDE ONE CALL DAMAGE PREVENTION SYSTEM FOR BURIED UTILITIES . . . 1-800-DIG-TESS
- IF ANY NUMBER HAVE CHANGED OR ARE INCORRECT, THE CONTRACTOR IS STILL RESPONSIBLE FOR CONTACTING THE AGENCIES
4. REMOVE ALL ASPHALT AND CONCRETE WITH A SMOOTH SAW-CUT.
5. COMPACT ALL PAVEMENT SUBGRADE TO 95% MAXIMUM DRY DENSITY. COMPACT AREAS TO RECEIVE LANDSCAPING AND/OR GRASS TO 85%.
6. PRIOR TO BIDDING, THE CONTRACTOR SHALL THOROUGHLY INVESTIGATE THE SITE AND FAMILIARIZE HIMSELF WITH ALL ASPECTS OF THE SITE WHICH MAY AFFECT HIS WORK. THIS INCLUDES ACCOUNTING FOR ALL VISIBLE FEATURES WHICH MAY IMPACT THE BID OR THE WORK.
7. CONTRACTOR SHALL CAREFULLY DEMOLISH AND REMOVE ALL ITEMS (ABOVE AND BELOW GROUND) AS REQUIRED TO CONSTRUCT THE PROJECTS AS SHOWN. ALL REMOVAL AND DISPOSAL ACTIVITIES MUST COMPLY WITH APPLICABLE CODES, LAWS AND ORDINANCES.
8. REMOVE AND DISPOSE OF ALL EXCESS EXCAVATION.
9. CONTRACTOR IS RESPONSIBLE FOR ALL VERTICAL AND HORIZONTAL CONTROL.
10. BASE MATERIAL AND INSTALLATION TO BE IN CONFORMANCE WITH ITEM 247 (TXDOT, STD. SPECS, LATEST ED.), TYPE A GRADE 2. COMPACT TO 95% MAXIMUM DRY DENSITY OF THE MODIFIED PROCTOR OR 98% MAXIMUM DRY DENSITY OF THE STANDARD PROCTOR.
11. LIME STABILIZED SUBGRADE SHALL BE COMPACTED WITHIN 3% OF OPTIMUM MOISTURE CONTENT TO AT LEAST 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY STANDARD PROCTOR.
12. PRIME COAT MATERIAL AND INSTALLATION TO BE CUT-BASE ASPHALT TYPE IN ACCORDANCE WITH ITEM 310 (TXDOT, STD. SPECS, LATEST ED.) (0.2 GAL/S.Y.).
13. ALL ASPHALT MATERIAL AND INSTALLATION TO COMPLY WITH ITEM 340 TYPE "C" (TXDOT, STD. SPECS, LATEST ED.).
14. WHEELSTOPS SHALL BE OF PRE-CAST CONCRETE AND 6" IN LENGTH. DOWEL PRE-CAST CONCRETE WHEEL STOPS A MINIMUM OF 12" INTO BASE AND PAVEMENT.
15. CONTRACTOR TO FULLY COOPERATE WITH PARKING LOT LIGHT CONTRACTOR.
16. ALL SITE CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 P.S.I. IN 28 DAYS UNLESS OTHERWISE NOTED. ALL MATERIALS AND METHODOLOGIES USED SHALL CONFORM WITH ITEM 360 (TXDOT, STD. SPECS, LATEST ED.).
17. FOR ALL STRIPING AND TRAFFIC CONTROL MARKINGS, CONTRACTOR TO USE GLIDDEN TRAFFIC PAINT #63228 OR SHERWIN-WILLIAMS PRO-MAR TRAFFIC MARKING PAINT (SERIES B29W1). COLOR IS WHITE. APPLY TWO COATS.
18. INSTALL "NO PARKING - FIRE LANE" SIGNS IN ACCORDANCE WITH THE FIRE MARSHALL'S REQUIREMENTS. PAINT CURBS AS REQUIRED BY FIRE MARSHALL.
19. DIMENSIONS ARE TO THE PAVEMENT EDGE OF THE CURB, FACE OF BUILDING OR PROPERTY LINE, OR STRIPING CENTERLINE.
20. THE CONCRETE DRIVE APPROACHES WITHIN CITY RIGHT-OF-WAY ARE SUBJECT TO CITY INSPECTION.
21. MAXIMUM SIDEWALK CURB CONTROL JOINT SPACING IS 5 FEET.
22. MAXIMUM SIDEWALK CURB EXPANSION JOINT SPACING IS 40 FEET.
23. CONTRACTOR MUST KEEP ALL PERMITS ON JOB SITE.
24. ALL EXISTING SIGNS AND BENCHES (WHETHER SHOWN ON PLANS OR NOT) WHICH CONFLICT WITH CONSTRUCTION SHALL BE RELOCATED.
25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING EXISTING SPRINKLER SYSTEM COMPONENTS WHICH CONFLICT WITH CONSTRUCTION.
26. PROPOSED CURBING TO BE TRANSITIONED SMOOTHLY TO MATCH EXISTING.
27. THE CONSTRUCTION SITE IS TO BE THOROUGHLY CLEANED BY THE CONTRACTOR PRIOR TO ISSUANCE OF PAYMENT BY THE OWNER.
28. CONTRACTOR SHALL INCLUDE ALL COSTS FOR ROUTING PEDESTRIAN AND VEHICULAR TRAFFIC IN THE BID AMOUNT. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE CURRENT LEASE HOLDER IN ORDER TO INSURE CONVENIENT ACCESS.
29. DASHED LINES REPRESENT EXISTING IMPROVEMENTS.
30. P.C. = POINT OF CURVATURE, P.R.C. = POINT OF REVERSE CURVATURE, P.T. = POINT OF TANGENCY, P.C.C. = POINT OF COMPOUND CURVATURE.
31. CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATION. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.
32. REFERENCE DETAILS FOR HANDICAP SIGNAGE.
33. BARRICADES AND WARNING SIGNS SHALL CONFORM TO THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND GENERALLY BE LOCATED TO AFFORD MAXIMUM PROTECTION TO THE PUBLIC AS WELL AS CONSTRUCTION PERSONNEL AND EQUIPMENT AND TO ASSURE AN EXPEDITIOUS TRAFFIC FLOW AT ALL TIMES DURING CONSTRUCTION. DURING THE PROGRESS OF THE WORK THE CONTRACTOR SHALL PROVIDE ACCESS FOR LOCAL TRAFFIC.
34. ITEMS OF WORK NOTED "BY OTHERS" SHALL BE CONSIDERED AS NOT PART OF THIS CONTRACT.
35. THE CONTRACTOR SHALL COORDINATE (WITH OWNER/ARCHITECT) WHICH TREES ARE TO BE PROTECTED DURING CONSTRUCTION. CONTRACTOR SHALL PROTECT ACCORDINGLY AND PROVIDE WATER AS REQUIRED.
36. ON ALL GRAVITY LINES, CONTRACTOR MUST START AT DOWNSTREAM END AND PROCEED UPSTREAM TAKING CARE TO EXPOSE ALL EXISTING UTILITIES AND STRUCTURES WHICH MAY CONFLICT WITH THE PROPOSED LINE. ANY OTHER SEQUENCE OF CONSTRUCTION WILL BE AT THE CONTRACTOR'S RISK.
37. IN CASES WHERE HYDROMULCH HAS BEEN PROPERLY APPLIED, CONTRACTOR TO PROVIDE WATER AS REQUIRED TO ACHIEVE A MINIMUM OF 75% GERMINATION TOWARDS SUBSTANTIAL GROWTH.
38. PEDESTRIAN RAILING OR FENCING SHALL BE INSTALLED ALONG ALL RETAINING WALLS OR VERTICAL DROPS GREATER THAN 24". CONTRACTOR SHALL COORDINATE WITH OWNER AND/OR LANDSCAPE ARCHITECT FOR DESIGN AND SPECIFICATIONS. ANY RAILING REQUIRED CLOSER THAN 10' TO A DRIVE LANE OR PARKING SPACE SHALL BE A TRAFFIC BARRIER. CONTRACTOR TO COORDINATE WITH ENGINEER.



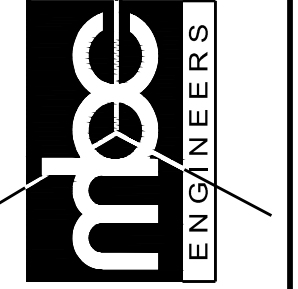
- LEGEND**
- PROPOSED CONCRETE HEADER CURB
 - PROPOSED CONCRETE CURB
 - EXISTING CONCRETE CURB
 - EXISTING FIRE HYDRANT
 - PROPOSED FIRE HYDRANT
 - PROPOSED FIRE DEPARTMENT CONNECTION
 - PROPOSED REMOTE FIRE DEPARTMENT CONNECTION
 - MISC. TRAFFIC SIGN
 - GUARD POST
 - EXISTING WATER VALVE
 - PROPOSED WATER VALVE
 - LIGHT POLE
 - POWER POLE
 - EXISTING MANHOLE
 - PROPOSED MANHOLE
 - GRATE
 - TRAFFIC LIGHT
 - GUY WIRE ANCHOR
 - ACCESSIBLE PARKING
 - DETAIL REFERENCE
 - SHEET NUMBER
 - EXISTING CONCRETE AREAS
 - WHEELSTOP
 - EXISTING FENCE
 - PROPOSED FENCE
 - EXISTING OVERHEAD ELECTRIC
 - RETAINING WALL (REF. STRUCTURAL DWGS)
 - SAWTOOTH CURB
 - SINGLE LAMP LIGHT POLE
 - DOUBLE LAMP LIGHT POLE

ISSUED FOR ARCH REVIEW
12-05-16



PRIMARY CONTACT:
JUSTIN SHIPPEY, P.E.

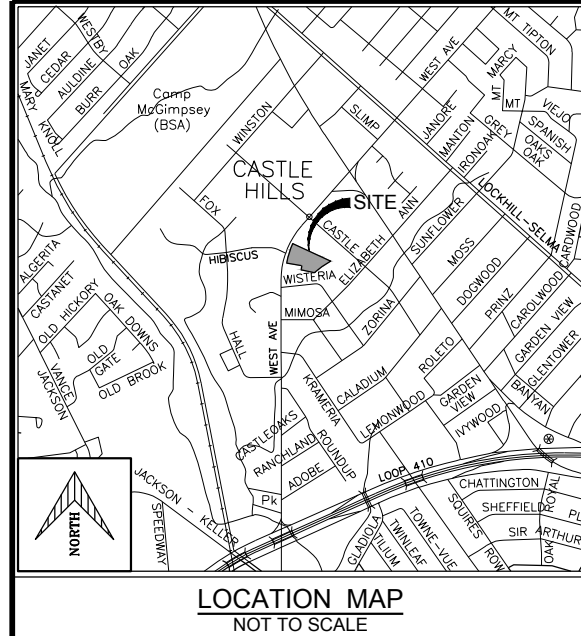
MACINA • BOSE • COPELAND & ASSOC., INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
1035 Central Parkway North, San Antonio, Texas 78232
(210) 545-1122 Fax (210) 545-9302 www.mbcengineers.com
FIRM REGISTRATION NUMBER: T.B.P.E. F-784 & T.B.P.L.S. 1001700



**COMMERCIAL DEVELOPMENT OF WEST AVENUE
CASTLE HILLS, TX.**
SITE PLAN

REVISIONS:	DATE	NO.	DESCRIPTION

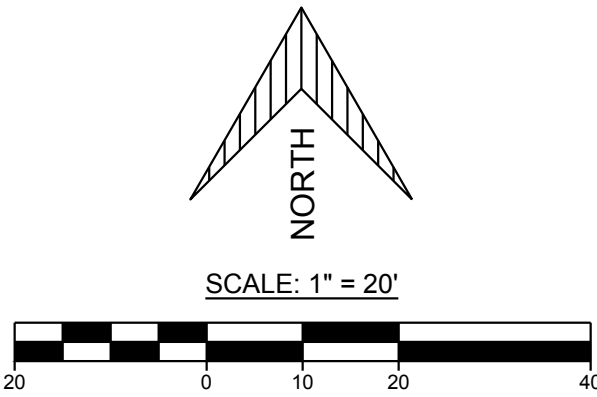
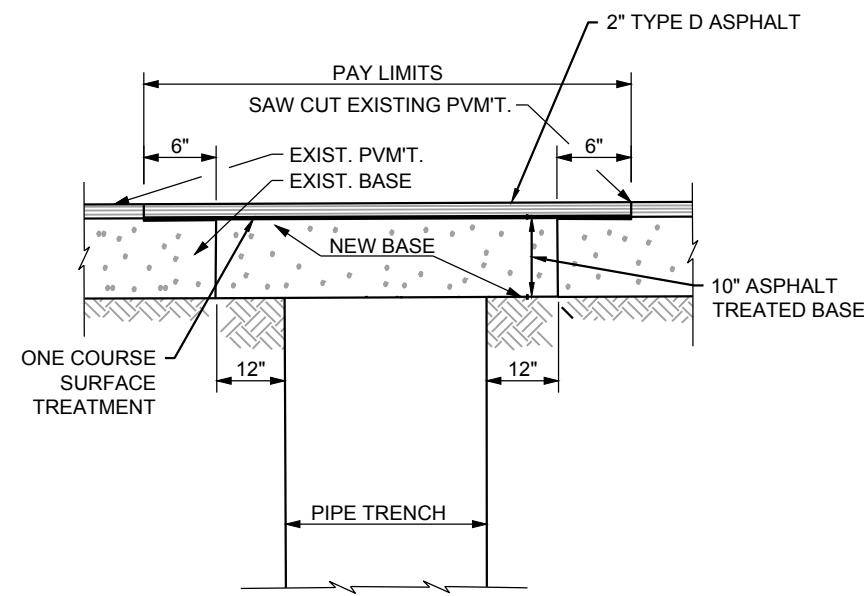
PLAT ID#	
APP#	
DESIGN	JS
DRAWN	GM
CHECKED	JS
DATE	11-07-15
JOB NO.	31369-1174
SHT.	C4 OF 10



NOTE
CONTRACTOR TO LOCATE AND FIELD VERIFY ALL EXISTING UTILITIES INCLUDING, BUT NOT LIMITED TO, WATER LINES, GAS LINES, SEWER LINES AND ELECTRIC LINES.

TRENCH EXCAVATION SAFETY PROTECTION
CONTRACTOR AND/OR CONTRACTORS INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTORS INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

NOTE
BACKFLOW PREVENTION DEVICES SHALL BE PROVIDED AS DEPICTED OR NOTED ON THE PLANS FOR FIRE LINES, IRRIGATION LINES AND IN SOME CASES DOMESTIC LINES. REFERENCE IRRIGATION PLANS AND THE MEP PLANS FOR ADDITIONAL INFORMATION CONCERNING THESE DEVICES. IN THE EVENT BACKFLOW PREVENTERS ARE NOT CLEARLY SHOWN, CONTRACTOR IS TO CONTACT THE ENGINEER AND REQUEST CLARIFICATION. ON MULTIFAMILY PROJECT BACKFLOW PREVENTION IS REQUIRED WITHIN THE BUILDINGS FOR THE FIRE SYSTEM.



LEGEND	
—SD—SD—SD—	EXISTING STORM DRAIN
—SS—SS—SS—	EXISTING SANITARY SEWER LINE
—W—W—W—	EXISTING WATER LINE
—G—G—G—	EXISTING GAS LINE
—OT—OT—OT—	EXISTING OVERHEAD TELEPHONE
—UT—UT—UT—	EXISTING UNDERGROUND TELEPHONE
—OHE—OHE—OHE—	EXISTING OVERHEAD ELECTRIC
—UE—UE—UE—	EXISTING UNDERGROUND ELECTRIC
—DW—DW—DW—	PROPOSED DOMESTIC WATER LINE
—W—W—W—	PROPOSED WATER LINE
—I—I—I—I—I—	PROPOSED IRRIGATION LINE
—SS—SS—SS—	PROPOSED SANITARY SEWER LINE
—SD—SD—SD—	PROPOSED STORM DRAIN
—G—G—G—	PROPOSED GAS LINE
—F—F—F—	PROPOSED FIRE LINE
—TB—TB—TB—	THRUST BLOCKING
ⓔ	EXISTING ELECTRIC METER
Ⓢ	EXISTING CLEAN-OUT
Ⓢ	EXISTING WATER VALVE
Ⓢ	EXISTING WATER METER
Ⓢ	PROPOSED WATER METER
Ⓢ	EXISTING FIRE HYDRANT
Ⓢ	PROPOSED FIRE HYDRANT
Ⓢ	PROPOSED REMOTE FIRE DEPARTMENT CONNECTION
Ⓢ	PROPOSED REMOTE FIRE DEPARTMENT CONNECTION
Ⓢ	EXISTING LIGHT POLE
Ⓢ	EXISTING POWER POLE
Ⓢ	EXISTING MANHOLE
Ⓢ	PROPOSED MANHOLE
Ⓢ	EXISTING GRATE
Ⓢ	EXISTING TRAFFIC LIGHT
Ⓢ	EXISTING GAS VALVE
Ⓢ	EXISTING TELEPHONE MANHOLE
Ⓢ	EXISTING ANCHOR

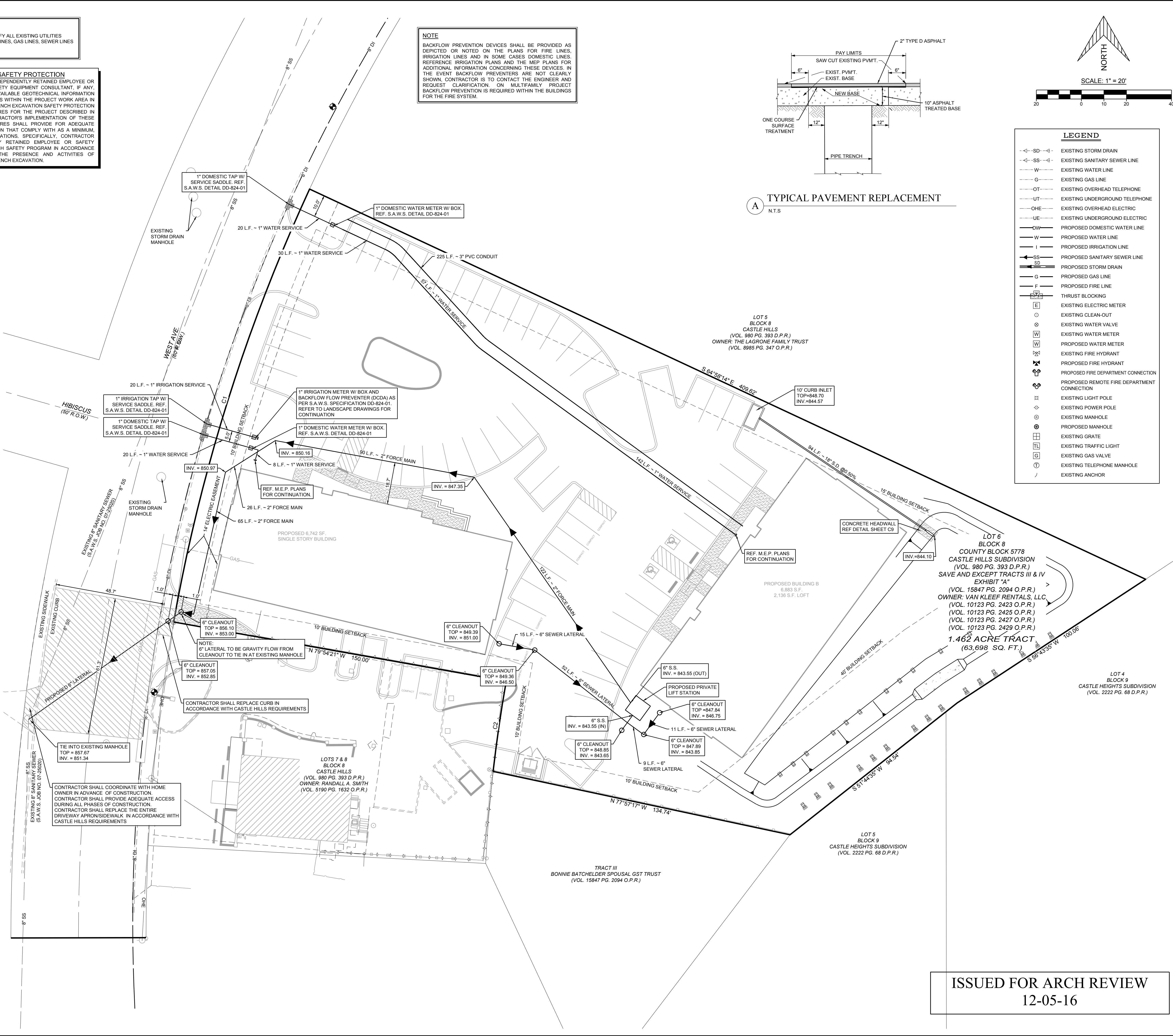
UTILITY GENERAL NOTES:

- CONTRACTOR AND/OR CONTRACTORS INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATION. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTORS INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.
- ALL MATERIALS AND WORKMANSHIP INVOLVED WITH THE CONSTRUCTION OF THE WATER SERVICE(S), INTERIOR WATER LINES AND SANITARY SEWER LINES MUST BE IN STRICT ACCORDANCE WITH APPLICABLE PORTIONS OF THE INTERNATIONAL PLUMBING CODE (2015 EDITION) OR LATEST EDITION ADOPTED BY CITY OF SAN ANTONIO AND SAN ANTONIO WATER SYSTEM.
- THIS SHEET IS TO BE USED FOR UTILITY CONSTRUCTION ONLY.
- ALL EXISTING UTILITIES MAY NOT BE SHOWN ON THIS DRAWING. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES (VERTICALLY AND HORIZONTALLY).
- THE CONTRACTOR IS REQUIRED TO FURNISH AND INSTALL ALL NECESSARY FITTINGS AND APPURTENANCES REQUIRED TO COMPLETE THE INSTALLATION OF THE SYSTEMS AS SHOWN ON THE DRAWING.
- CONNECTIONS TO WATER MAINS AND SERVICES, METERS AND METER VAULTS SHALL BE IN STRICT ACCORDANCE WITH CODES AND REGULATIONS.
- SEE IRRIGATION PLAN FOR DETAILS CONCERNING IRRIGATION METER.
- ALL WATER LINES TO BE INSTALLED A MINIMUM OF 12" ABOVE SANITARY LINES (MEASURED FROM BOTTOM OF WATER TO TOP OF SEWER).
- ALL CLEANOUTS LOCATED IN VEHICULAR AREAS SHALL BE INSTALLED WITHIN A TRAFFIC BEARING BOX. THE BOX SHALL BE SET IN A CONCRETE SLAB EXTENDING 6" FROM THE BOX PERIMETER. SLAB TO BE 6" THICK WITH 2500 P.S.I. CONCRETE. SEE DETAIL SHEET.
- WHEN SEWER LINES ARE INSTALLED IN THE VICINITY OF WATER MAINS, SUCH INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THE TCEQ REGULATION 30 TAC 217.53(d) OR ANY REVISION THERETO, (NO SEPARATE PAY ITEM).
- TOPS OF CLEANOUTS SHALL BE SET TO MATCH FINISHED GRADE.
- CONTRACTOR TO INSTALL THRUST BRACING FOR ALL WATER PIPE BENDS/FITTINGS, (3" AND GREATER DIAMETER).
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE MEP PLANS AND THE GRADING PLAN TO INSURE THAT UTILITY INSTALLATIONS DO NOT HAVE CONFLICTS WITH OTHER IMPROVEMENTS.
- CONTRACTOR IS RESPONSIBLE FOR BOTH VERTICAL AND HORIZONTAL CONTROL.
- THE CONTRACTOR SHALL DISPOSE OF ALL EXCESS MATERIAL OFF-SITE.
- ALL DEBRIS AND OTHER OBJECTIONABLE MATERIALS SHALL BE DISPOSED OF OFF-SITE BY CONTRACTOR.
- ALL SANITARY SEWERS ARE 6" PIPE WITH COMPRESSION JOINTS UNLESS OTHERWISE NOTED. PIPE SHALL BE ASTM D3034 SDR26 PVC.
- ALL WORK WITHIN PUBLIC RIGHT-OF-WAYS SHALL BE IN CONFORMANCE WITH APPLICABLE CODES AND SPECIFICATIONS.
- ALL MATERIALS AND INSTALLATION ASSOCIATED WITH THE FIRE PROTECTION SYSTEM MUST COMPLY WITH REQUIREMENTS OF THE FIRE MARSHALL'S OFFICE AND N.F.P.A. #24 (LATEST EDITION). THIS INCLUDES REQUIRED INSPECTIONS, IF THE RESULTS OF ANY MEETINGS BETWEEN THE CONTRACTOR AND THE FIRE MARSHALL MAY AFFECT THE CONSTRUCTION THE CONTRACTOR MUST NOTIFY THE OWNER AND ENGINEER IMMEDIATELY (IN WRITING).
- ALL WORK INVOLVING FIRE MAIN TO BE PERFORMED BY A STATE LICENSED SPRINKLER CONTRACTOR.
- FIRE MAIN TO BE 6000 DR18 P.V.C. AND LISTED BY UNDERWRITER LABORATORIES, INC. AS SUITABLE FOR FIRE PROTECTION USE.
- FIRE MAIN TO HAVE 4' OF COVER AS MEASURED FROM TOP OF PIPE TO FINISHED PAVEMENT OR TOPSOIL.
- THE FIRE MAIN TO BE FLUSHED AND TESTED IN ACCORDANCE WITH N.F.P.A. #24 (LATEST EDITION), PROVIDE THRUST BRACING AS REQUIRED.
- THE FIRE MAIN CONNECTION TO THE PUBLIC WATER MAIN IS PART OF THIS CONTRACT. COORDINATE WITH SAN ANTONIO WATER SYSTEM.
- LOCATION OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, IS BASED ON A COMBINATION OF FIELD SURVEYING AND AVAILABLE UTILITY MAPS. CONTRACTOR TO DETERMINE VERTICAL AND HORIZONTAL LOCATIONS OF ALL UTILITIES (WHETHER SHOWN ON PLANS OR NOT) BY COORDINATING WITH THE RESPECTIVE UTILITY AGENCIES PRIOR TO CONSTRUCTION. THE FOLLOWING ARE NUMBERS OF THE RESPECTIVE AGENCIES:

SAN ANTONIO WATER SYSTEM (WATER) 233-2009
SAN ANTONIO WATER SYSTEM (SEWER) 233-2009
CPS ENERGY (GAS & ELECTRIC) 978-3500
AT&T (TELEPHONE) 800-422-9229
TIME WARNER CABLE (TELEVISION) 675-4560
VALERO ENERGY CORP. 246-2394
TESS-STATEWIDE ONE CALL DAMAGE PREVENTION SYSTEM FOR BURIED UTILITIES 1-800-DIG-TESS

IF ANY NUMBERS HAVE CHANGED OR ARE INCORRECT, THE CONTRACTOR IS STILL RESPONSIBLE FOR CONTACTING THE AGENCIES.

- ON ALL GRAVITY LINES, CONTRACTOR MUST START AT DOWNSTREAM END AND PROCEED UPSTREAM TAKING CARE TO EXPOSE ALL EXISTING UTILITIES AND STRUCTURES WHICH MAY CONFLICT WITH THE PROPOSED LINE. ANY OTHER SEQUENCE OF CONSTRUCTION WILL BE AT THE CONTRACTOR'S RISK.
- CONTRACTOR TO APPLY FOR WATER METER PERMITS AND COORDINATE PAYMENT OF APPLICABLE IMPACT FEES AT THE START OF CONSTRUCTION. CONTRACTOR TO INSTALL WATER METERS AND MAKE APPROPRIATE MAIN CONNECTIONS AS EARLY AS POSSIBLE IN THE WATER SYSTEM INSTALLATION PROCESS. REPORT CONFLICTS TO THE ENGINEER AND OWNER AS THESE ARE DISCOVERED SO THAT ADJUSTMENTS TO THE PLANS CAN BE MADE.
- CONTRACTOR TO PLAN UTILITY LINE INSTALLATIONS IN A MANNER TO AVOID CONFLICTS WITH PROPOSED GRAVITY LINES.
- CONTRACTOR SHALL EXPOSE ALL EXISTING UTILITIES CROSSING PROPOSED GRAVITY LINES AND INSURE THERE WILL BE NO CONFLICTS PRIOR TO BEGINNING CONSTRUCTION. ADDITIONALLY, CONTRACTOR TO PLAN UTILITY LINE INSTALLATIONS IN A MANNER TO AVOID CONFLICTS WITH PROPOSED GRAVITY LINES.
- STORM DRAIN PIPE SHALL BE ULTRA FLO, HDPE, A 2000 PVC OR APPROVED EQUIVALENT BY THE ENGINEER.



ISSUED FOR ARCH REVIEW
12-05-16

2/5/2016
STATE OF TEXAS
ROBERT A. COPELAND JR.
70868
LICENSED PROFESSIONAL ENGINEER
CIVIL
EX-10000

PRIMARY CONTACT:
JUSTIN SHIPPEY, P.E.

MACINA • BOSE • COPELAND & ASSOC., INC.
CONSULTING ENGINEERS AND LAND SURVEYORS

1035 Central Parkway North, San Antonio, Texas 78223
(210) 545-1122 Fax (210) 545-9302 www.mbcengineers.com
FIRM REGISTRATION NUMBER: T.B.P.E. F-784 & T.B.P.L.S. 10017700

COMMERCIAL DEVELOPMENT OF WEST AVENUE
CASTLE HILLS, TX.

UTILITY PLAN

REVISIONS:	DATE	NO.	DESCRIPTION	BY

PLAT ID#

APP#

DESIGN#

DRAWN#

CHECKED#

DATE

JOB NO.

SHT.

JS

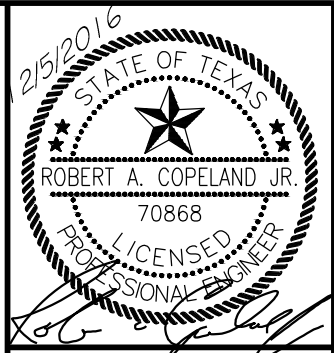
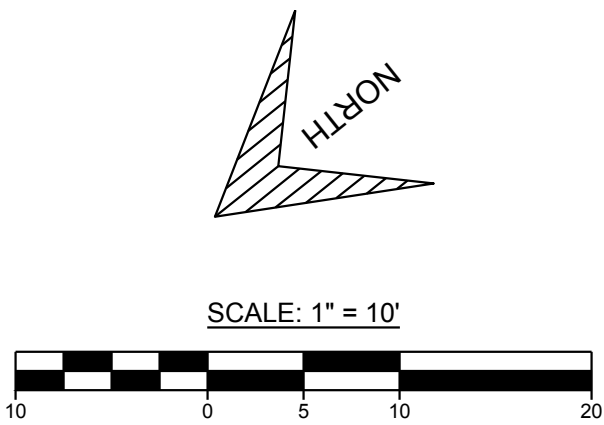
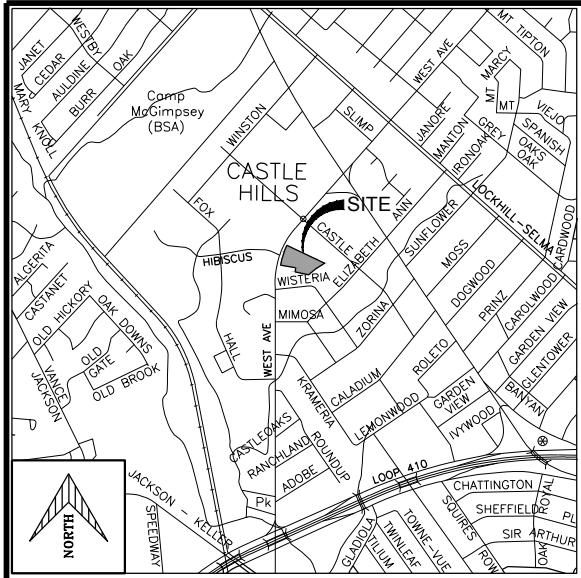
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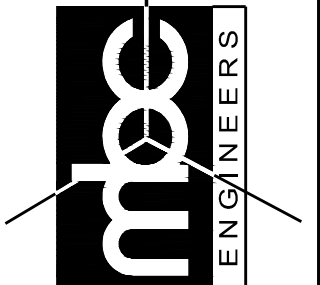
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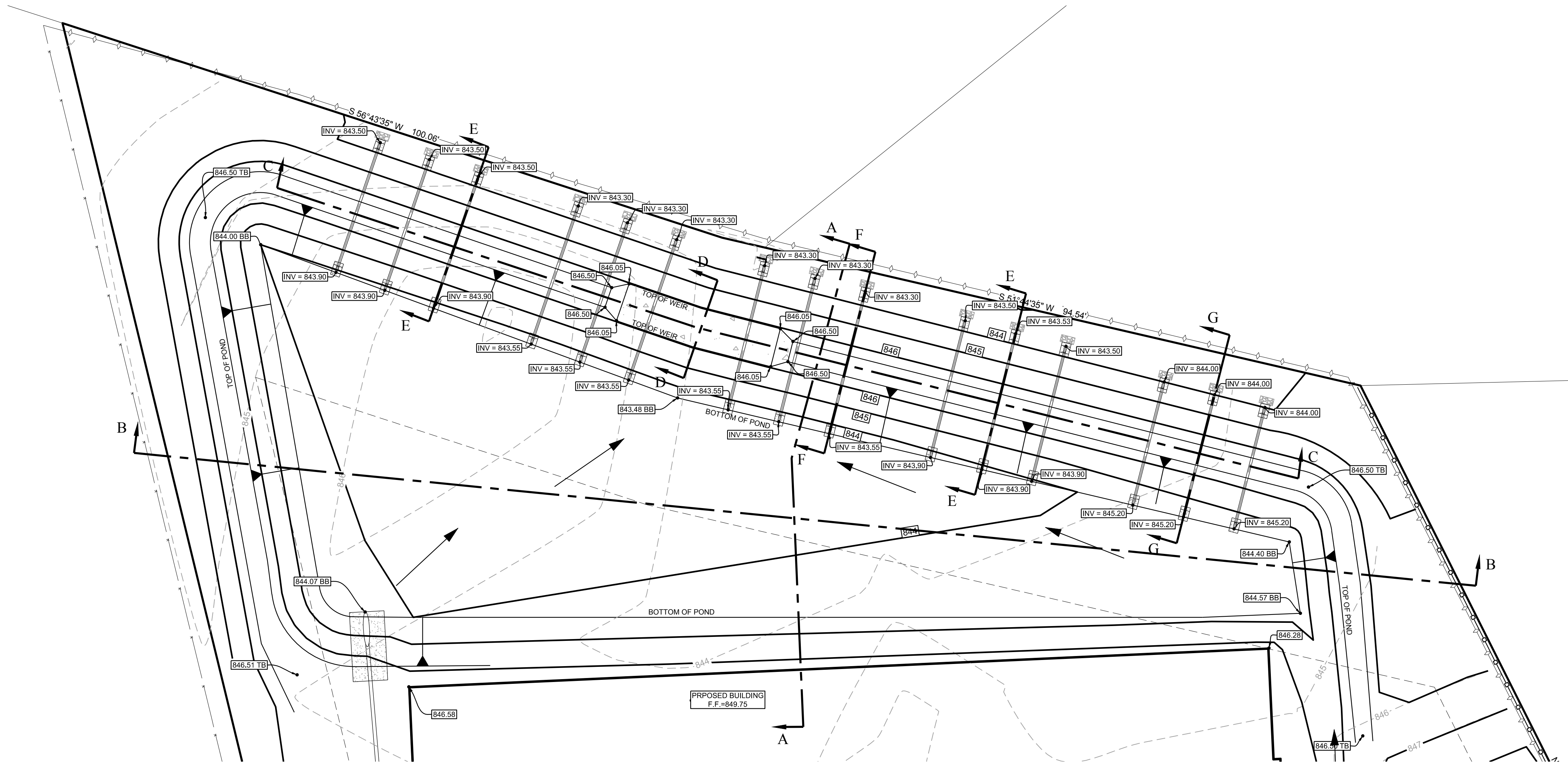
MACINA • BOSE • COPELAND & ASSOC., INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
1035 Central Parkway North, San Antonio, Texas 78232
(210) 545-1122 Fax (210) 545-9302 www.mbcengineers.com
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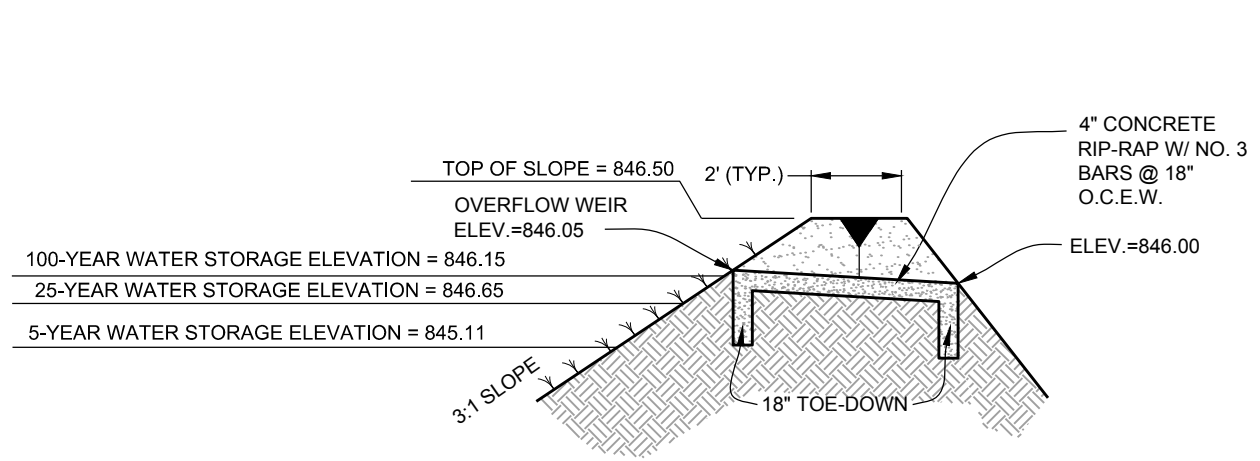
COMMERCIAL DEVELOPMENT OF WEST AVENUE
CASTLE HILLS, TX.
DETENTION POND PLAN

REVISIONS:	DATE	BY	DESCRIPTION

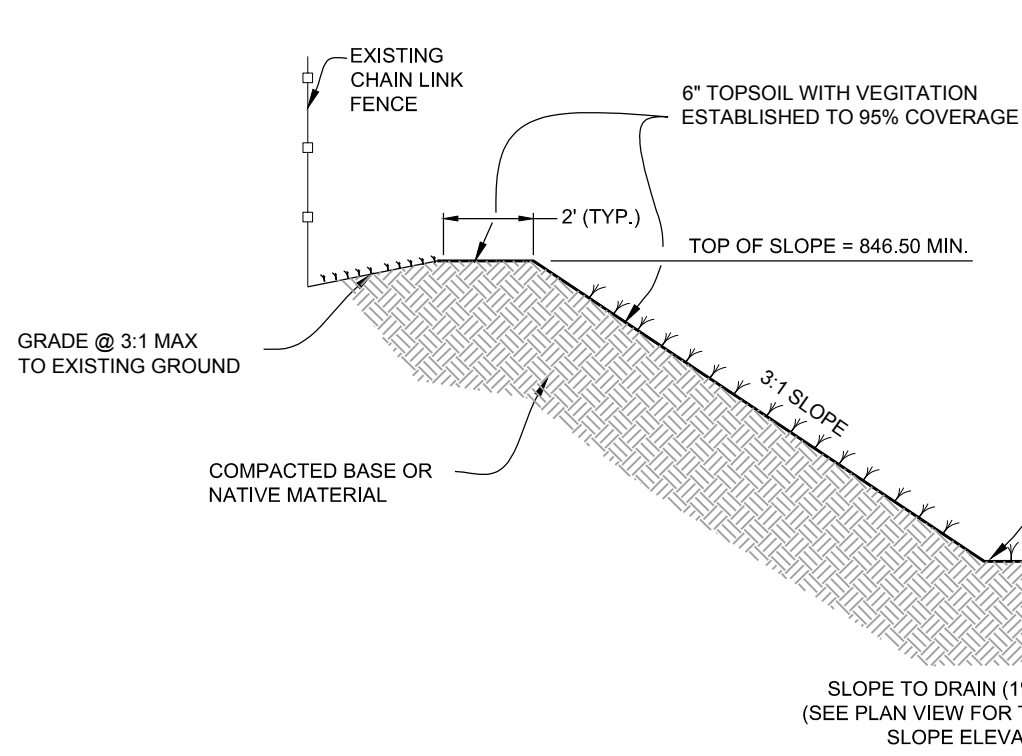
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SHT. C7 OF 10



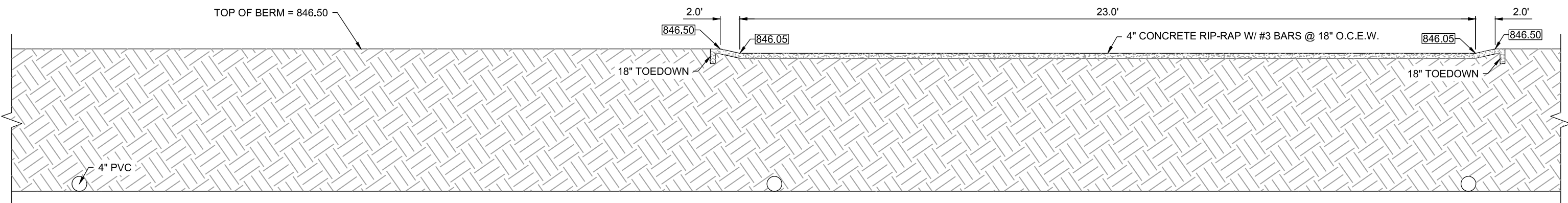
DETENTION POND
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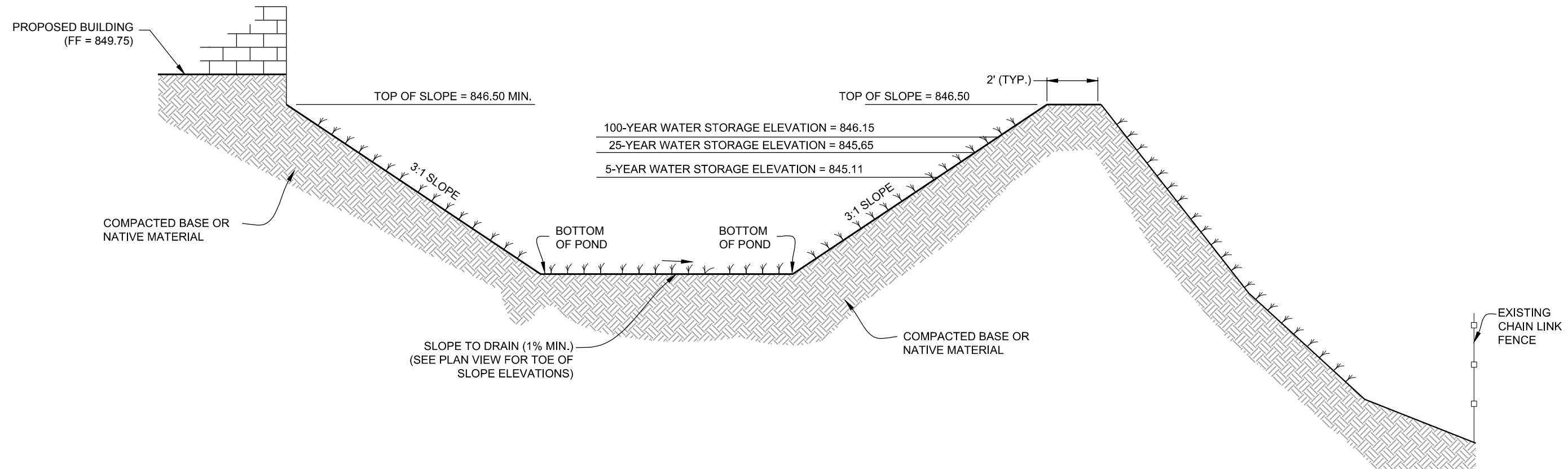
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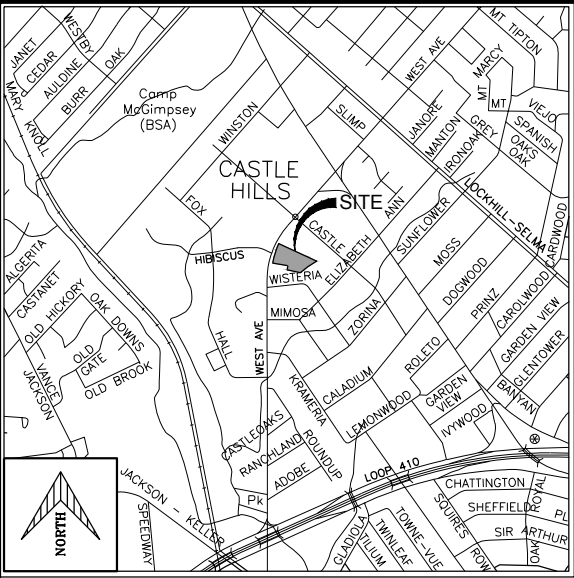
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SECTION "A-A"
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ISSUED FOR ARCH REVIEW
12-05-16

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LOCATION MAP
NOT TO SCALE

SILT FENCE

1. DESIGNATED SILT FENCES CONSIST OF THE FOLLOWING: GEOTECHNICAL FILTER FABRIC STRETCHED AND SECURED TO THREE FOOT HIGH WIRE FENCING AND SUPPORTED BY STEEL POSTS AT A MAXIMUM SPACING OF 8 FEET. THE BOTTOM 6 INCHES OF FABRIC SHALL BE BURIED.
2. MAINTENANCE AND INSPECTIONS SHALL BE AS DESIGNATED IN THE STORM WATER POLLUTION PREVENTION PLAN.
3. ALL OFF-SITE CONSTRUCTION RELATED TO THIS PROJECT, BUT NOT SHOWN ON THIS PLAN, SHALL FOLLOW BEST MANAGEMENT PRACTICES DESCRIBED HEREIN.
4. UTILITY TRENCHES CUT PARALLEL TO THE EXISTING SLOPE. CONTRACTOR SHALL STOCKPILE EXCAVATED MATERIAL TO ONE SIDE OF THE TRENCH. SILT FENCING SHALL BE INSTALLED PERPENDICULAR TO THE SLOPE OUTSIDE STOCKPILED MATERIAL AT AN INTERVAL NOT TO EXCEED 50 FEET. CONTRACTOR SHALL ALSO PLACE SILT FENCING IMMEDIATELY DOWNSTREAM OF EXCAVATION TO A WIDTH THAT WILL SUFFICIENTLY INTERSECT RUNOFF FROM ALL DISTURBED SOIL.
5. UTILITY TRENCHES CUT PERPENDICULAR TO THE EXISTING SLOPE. CONTRACTOR SHALL STOCKPILE EXCAVATED MATERIAL ON THE DOWN GRADIENT SIDE OF THE TRENCH. SILT FENCING SHALL BE PLACED DOWNGRADIENT TO THE STOCKPILE MATERIAL.

SEDIMENT TRAP NOTES

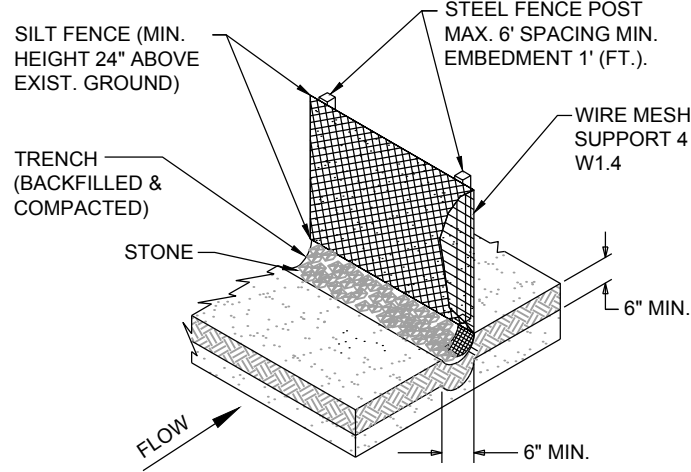
1. SEDIMENT SHOULD BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 4 INCHES OR MORE. REMOVED SEDIMENT SHOULD BE DISPOSED IN AN APPROVED AREA.
2. THE STRUCTURE SHOULD BE INSPECTED WEEKLY OR AFTER EACH RAIN AND REPAIRS MADE AS NECESSARY.
3. CONSTRUCTION SHOULD BE SCHEDULED TO MINIMIZE EROSION AND WATER POLLUTION.
4. THE STRUCTURE SHOULD BE REMOVED AND AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
5. THIS SHOULD BE LIMITED TO SMALL DRAINAGE AREAS WHERE ALL RUNOFF FROM A 10 YEAR 24 HOUR STORM CAN BE CAPTURED AND WHERE THE DRAINAGE AREA IS LESS THAN 5 ACRES.

STABILIZED CONSTRUCTION ENTRANCE (S.C.E.)

1. CLEAR THE AREA OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
2. GRADE THE AREA FOR THE ENTRANCE TO FLOW BACK ON TO THE CONSTRUCTION SITE. RUNOFF FROM THE S.C.E. ONTO A PUBLIC STREET WILL NOT BE ACCEPTED.
3. PLACE ROCK AS REQUIRED. (3" - 5" OPEN GRADED CLEAN CRUSHED STONE)
4. SIDE CONTAINMENT, AT THE CONTRACTOR'S DISCRETION, IS SUGGESTED. THE SPECIFIED 8" THICKNESS OF CRUSHED STONE MUST BE MAINTAINED.

GENERAL NOTES

1. REFERENCE POLLUTION PREVENTION PLAN FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
2. LOCATION OF SILT FENCE IS APPROXIMATE. CONTRACTOR TO DETERMINE EXACT LOCATION BASED ON WORK TO BE PERFORMED UNDER THIS CONTRACT AND WORK TO BE PERFORMED BY VARIOUS AGENCIES AND COMPANIES INVOLVED WITH THIS PROJECT.
3. THIS SHEET IS TO BE USED FOR EROSION CONTROL PURPOSES ONLY.
4. LOCATION OF STABILIZED CONSTRUCTION ENTRANCE IS TO BE AS SHOWN ON THIS PLAN UNLESS CONTRACTOR RECEIVES PRIOR WRITTEN APPROVAL FROM THE ENGINEER.
5. CONTRACTOR TO INSTALL ROCK GABION IN LOCATIONS WHERE SIGNIFICANT CONCENTRATED STORM WATER DISCHARGE OCCURS TOWARDS AN ERODABLE AREA.



TYPICAL
SILT FENCE DETAIL
NOT TO SCALE

SILT FENCE NOTES:

1. STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 1-FOOT DEEP.
2. LAY OUT FENCING DOWN-SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS 1/4 ACRE/100 FEET OF FENCE.
3. THE TOE OF THE SILT FENCE SHOULD BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW, WHERE FENCE CANNOT BE TRENCHED IN (I.E., PAVEMENT OR ROCK OUTCROP). WEIGHT FABRIC FLAP WITH 3 INCHES OF PEA GRAVEL ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
4. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
5. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHOULD BE A 3-FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
6. INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY, AS NEEDED.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES. THE SILT SHALL BE DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.
8. REPLACE ANY TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE TORN SECTION.
9. REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY. IF A SECTION OF FENCE IS OBSTRUCTING VEHICULAR ACCESS, CONSIDER RELOCATING IT TO A SPOT WHERE IT WILL PROVIDE EQUAL PROTECTION, BUT WILL NOT OBSTRUCT VEHICLES. A TRIANGULAR FILTER DIKE MAY BE PREFERABLE TO A SILT FENCE AT COMMON VEHICLE ACCESS POINTS.
10. WHEN CONSTRUCTION IS COMPLETE, THE SEDIMENT SHOULD BE DISPOSED OF IN A MANNER THAT WILL NOT CAUSE ADDITIONAL SILTATION AND THE PRIOR LOCATION OF THE SILT FENCE SHOULD BE REVEGETATED. THE FENCE ITSELF SHOULD BE DISPOSED OF IN AN APPROVED LANDFILL.
11. DESIGNATED SILT FENCE CONSIST OF THE FOLLOWING: GEOTECHNICAL FILTER FABRIC, STRETCHED AND SECURED TO THREE FOOT HIGH WIRE FENCING AND SUPPORTED BY STEEL POSTS AT A MAXIMUM SPACING OF 6 FEET. THE BOTTOM 6 INCHES OF FABRIC SHALL BE BURIED.
12. MAINTENANCE AND INSPECTIONS SHALL BE AS DESIGNATED IN THE STORM WATER POLLUTION PREVENTION PLAN.

WASHOUT PIT GENERAL NOTES:

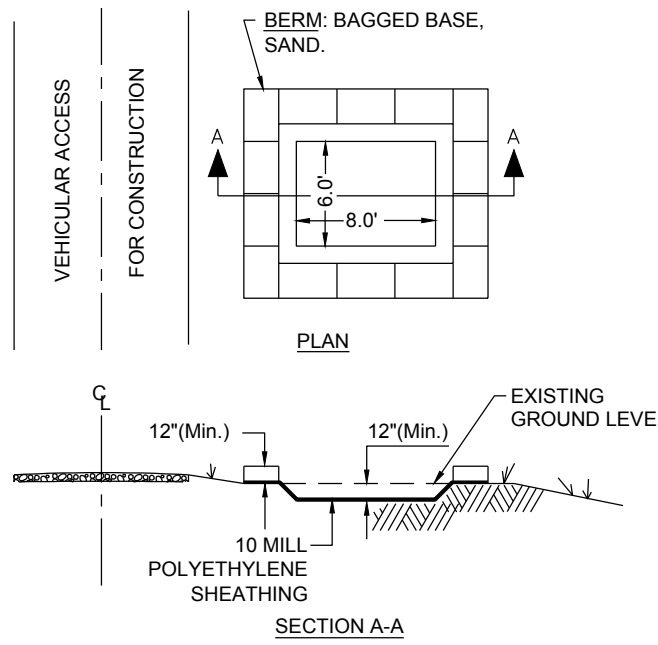
DETAILS ILLUSTRATE MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.

IF HAY BALES ARE USED FOR BERM, THEY SHALL BE ANCHORED IN PLACE WITH 2 REBAR PER BALE, DRIVEN INTO GROUND ENOUGH TO PROVIDE REASONABLE STABILITY.

WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.

WASHOUT PIT SHALL NOT BE LOCATED IN AREA SUBJECT TO INUNDATION FROM STORM WATER RUNOFF.

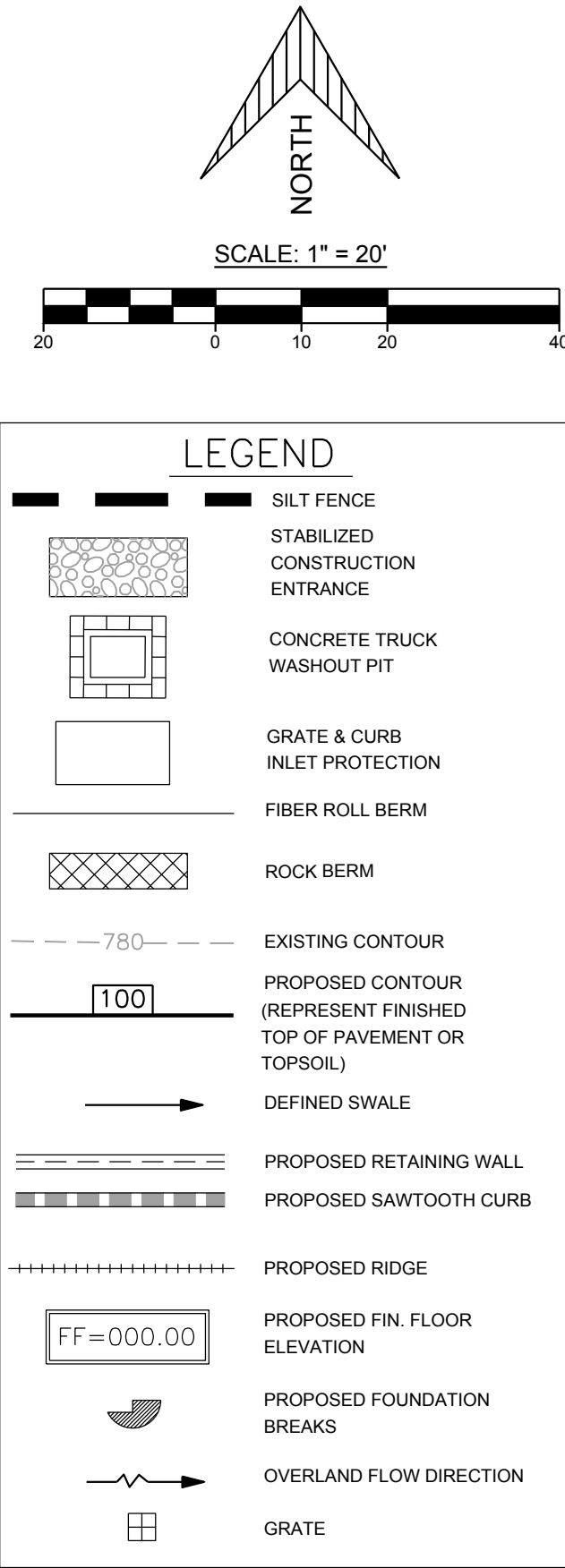
PIT SHALL NOT BE LOCATED OVER OR IN THE IMMEDIATE VICINITY OF A FEATURE OF GROUNDWATER RECHARGE.



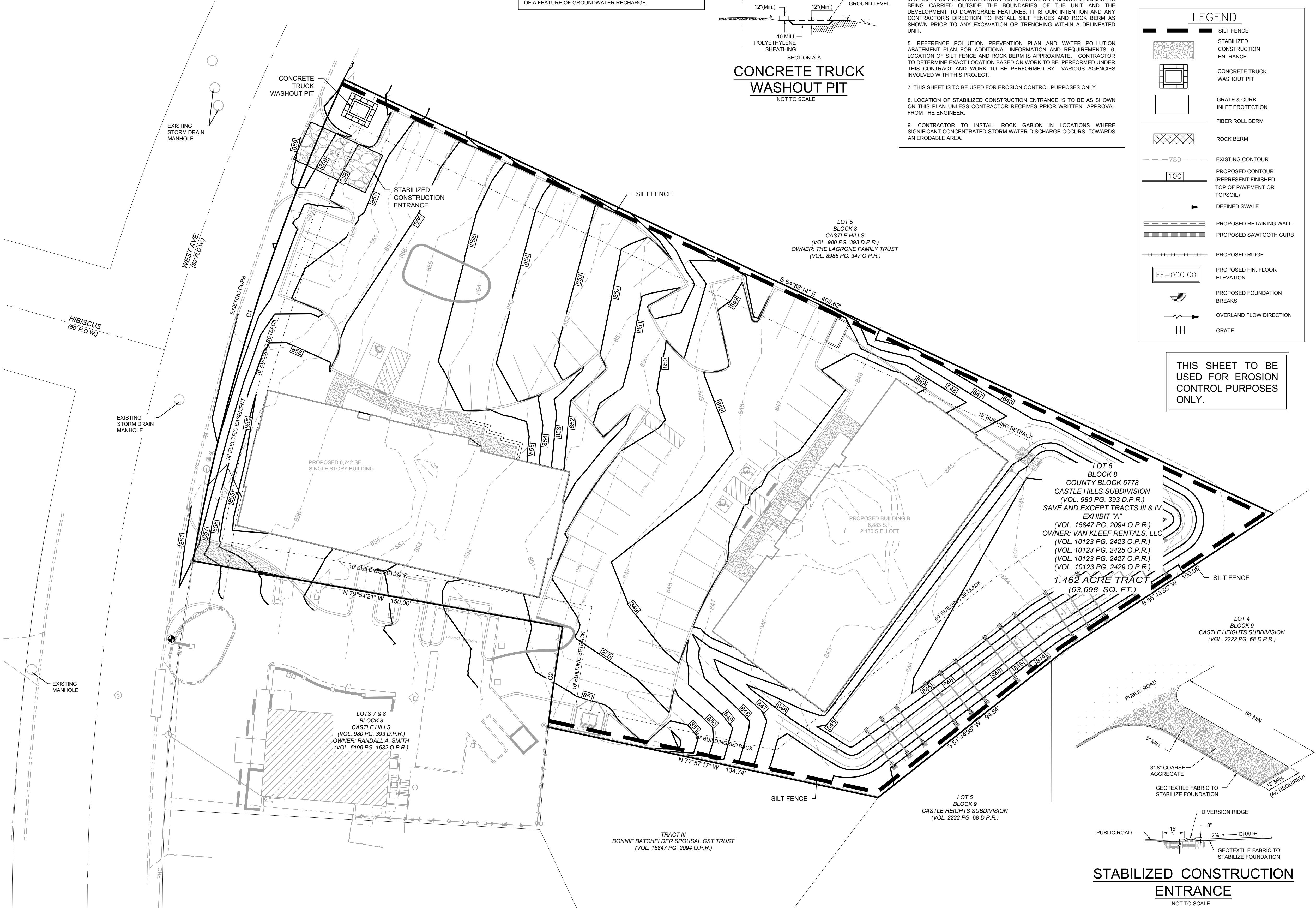
CONCRETE TRUCK
WASHOUT PIT
NOT TO SCALE

GENERAL EROSION CONTROL NOTES

1. TEMPORARY EROSION AND SEDIMENTATION CONTROLS: AS DICTATED BY THE T.C.E.Q. WHILE CONSTRUCTION IS IN PROGRESS, THE CONTRACTOR SHALL ENDEAVOR TO IMPED THE TRANSMISSION OFF THE CONSTRUCTION SITE OF ERODED TOPSOIL AND SHALL AVOID POLLUTION OF TOPSOIL/RUNOFF DUE TO FUELING OR SERVICING OF EQUIPMENT OR IMPROPER MATERIALS.
2. EXCAVATED MATERIAL NOT USED FOR STREET FILL ON-SITE SHALL NOT BE STOCKPILED INDEFINITELY ON-SITE, BUT SHALL BE PROMPTLY TRANSPORTED OFF THE SITE. A SILT FENCE SHALL BE INSTALLED DOWN-SLOPE OF ANY PLACED FILL TO INHIBIT EROSION OF THE FILL MATERIAL.
3. THE DEVELOPER WILL SEED CLEARED STREET PARKWAYS WITH BERMUDA GRASS OR SOME OTHER FORM OF HARDY GRASS/PLANTS AS SOON AS POSSIBLE AFTER STREET AND UTILITY CONSTRUCTION IS COMPLETED.
4. THE SILT FENCING AND ROCK BERM SHOWN HERE-ON IS DESIGNED TO INTERCEPT SILT-CARRYING RUNOFF ON A UNIT-BY-UNIT BASIS AND INHIBIT ITS BEING CARRIED OUTSIDE THE BOUNDARIES OF THE UNIT AND THE DEVELOPMENT TO DOWNGRADE FEATURES. IT IS OUR INTENTION AND ANY CONTRACTOR'S DIRECTION TO INSTALL SILT FENCES AND ROCK BERM AS SHOWN PRIOR TO ANY EXCAVATION OR TRENCHING WITHIN A DELINEATED UNIT.
5. REFERENCE POLLUTION PREVENTION PLAN AND WATER POLLUTION ABATEMENT PLAN FOR ADDITIONAL INFORMATION AND REQUIREMENTS. 6. LOCATION OF SILT FENCE AND ROCK BERM IS APPROXIMATE. CONTRACTOR TO DETERMINE EXACT LOCATION BASED ON WORK TO BE PERFORMED UNDER THIS CONTRACT AND WORK TO BE PERFORMED BY VARIOUS AGENCIES INVOLVED WITH THIS PROJECT.
7. THIS SHEET IS TO BE USED FOR EROSION CONTROL PURPOSES ONLY.
8. LOCATION OF STABILIZED CONSTRUCTION ENTRANCE IS TO BE AS SHOWN ON THIS PLAN UNLESS CONTRACTOR RECEIVES PRIOR WRITTEN APPROVAL FROM THE ENGINEER.
9. CONTRACTOR TO INSTALL ROCK GABION IN LOCATIONS WHERE SIGNIFICANT CONCENTRATED STORM WATER DISCHARGE OCCURS TOWARDS AN ERODABLE AREA.



THIS SHEET TO BE
USED FOR EROSION
CONTROL PURPOSES
ONLY.



STABILIZED CONSTRUCTION ENTRANCE (S. C. E.)
INSTALLATION OF CONSTRUCTION ENTRANCE:

1. CLEAR THE AREA OF DEBRIS, ROCKS, OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
2. GRADE THE AREA FOR THE ENTRANCE TO FLOW BACK ON TO THE CONSTRUCTION SITE. RUNOFF FROM THE S.C.E. ONTO A PUBLIC STREET WILL NOT BE ACCEPTED.
3. PLACE ROCK AS REQUIRED. (4" - 8" OPEN GRADED CLEAN CRUSHED STONE)
4. SIDE CONTAINMENT, AT THE CONTRACTOR'S DISCRETION, IS SUGGESTED. THE SPECIFIED 8" THICKNESS OF CRUSHED STONE MUST BE MAINTAINED.

ISSUED FOR ARCH REVIEW
12-05-16

2/5/2016
STATE OF TEXAS
ROBERT A. COPELAND, JR.
70868
PROFESSIONAL ENGINEER
LICENSE NO. 10017700

PRIMARY CONTACT:
JUSTIN SHIPPEY, P.E.

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COMMERCIAL DEVELOPMENT OF WEST AVENUE
CASTLE HILLS, TX.

EROSION CONTROL PLAN

REVISIONS	DATE	BY	DESCRIPTION

PLAT ID#

APP#

DESIGN

DRAWN

CHECKED

DATE

JOB NO.

SHT.

JS

GM

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11-07-15

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C9 OF 10

