

NOTICE OF PUBLIC MEETING

BE IT KNOWN that the **Planning Commission**, of the City of Lake Jackson, will meet in Special meeting on **MONDAY, OCTOBER 10, 2016 at 6:30 p.m.** in the Council Chambers at the Lake Jackson City Hall, 25 Oak Drive, Lake Jackson, Texas with the following agenda:

AGENDA

- A. PLEDGE OF ALLEGIANCE
- B. VISITORS COMMENTS

At said meeting the Planning Commission will deliberate, discuss, consider and or take final action on any or all of the following matters:

- 1. FINAL REVIEW AND ACTION ON PLAT OF BLOCK 1, LOTS 1, 2, 3 & 4 OF THE RESERVE AT LAKE JACKSON FOR THE APARTMENT DEVELOPMENT LOCATED AT 202 FM 2004
- 2. FINAL REVIEW AND ACTION ON SITE PLAN OF THE RESERVE AT LAKE JACKSON FOR THE APARTMENT DEVELOPMENT LOCATED AT 202 FM 2004
- 3. FINAL REVIEW AND ACTION ON LANDSCAPE PLAN OF THE RESERVE AT LAKE JACKSON FOR THE APARTMENT DEVELOPMENT LOCATED AT 202 FM 2004
- 4. ADJOURN

I hereby certify that this Public Notice was placed on the Official Bulletin Board at City Hall on FRIDAY, OCTOBER 7, 2016 at _____ p.m.

Alice A. Rodgers, City Secretary

I hereby certify that this Public Notice was removed from the Official Bulletin Board at City Hall on this the _____ day of _____, 2016, at _____ a./p.m.

Alice A. Rodgers, City Secretary

This facility 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 (979) 415-2403 or FAX (979) 297-8823 for further information.

Memo



To: PLANNING COMMISSION
From: SAL AGUIRRE
CC: CITY SECRETARY
Date: 10-8-2016
Re: October 10, 2016 HIGHLIGHTS AND ISSUES AGENDA

1. FINAL REVIEW AND ACTION ON PLAT OF BLOCK 1, LOTS 1, 2, 3 & 4 OF THE RESERVE AT LAKE JACKSON, FOR THE APARTMENT DEVELOPMENT AT 202 FM 2004 (TENTATIVE)

(previous discussion)

The preliminary plat as submitted underwent some fluctuation due to the difference of opinion of the consultant and city staff in determination of the FEMA floodplain line location within the property. After lengthy dialogues its final agreed location was arrived and indicated in the plat. The development implications of this line on the lot line as platted was made known and acknowledged by developer with a future LOMR-F revision action in mind. The final partition configuration did not change from the preliminary and only added revisions to the utility and drainage easements on account of the needs and development discussions made known by city or drainage district staff during the period. All format and platting content has been tweaked to the required standards and the plat is ready for your approval consideration without issues.

At our previous discussion, the hold up with VDD surveyor's difference and easement ownership was brought up as having been resolved to everyone's satisfaction. The results being an agreement on the survey line description and granting VDD easement as a fee simple title to the land by creating an additional lot 4 for that purpose. This has been done in this final plat and all issues have been cleared for your consideration of final.

2. FINAL REVIEW AND ACTION ON SITE PLAN OF PHASE 1 OF THE RESERVES AT LAKE JACKSON, FOR THE APARTMENT DEVELOPMENT AT 202 FM 2004

(previous discussion)

The proposed site plan is for development of Lot 1, a 16.5 acre area for a two-story apartment complex consisting of 22 buildings with a total of 220 units. Of these, the bedroom count is proposed to be 118 – 1 bedroom, 88 – 2 bedroom and 14 – 3 bedroom. The unit count of 13.3 per acre fall well within the R-4 zone allowable of 20 unit per acre.

The site parking is provided in a mix of attached garage space in all units with tandem surface parking as well as regular surface parking. The overall space count for the complex calls for 264 garages with 94 tandem and 128 regular surface for a total of 486. The provided parking ratio of 2.2 per unit is shy of the current ordinance 2.5 per unit requirement but in line with the ongoing ordinance amendment requirements of 2 per unit. This is also an increase from the recent developer claims for reduced standards.

The infrastructure serving this site has been discussed at length throughout the process and has been addressed to the city's conditions as follows:

- *The waste collection system for this complex will be by internal collection system to a single pickup collection dumpster station. The detail of placement and facility construction will be finalized with our city department to all's satisfaction.*
- *Potable water and fire suppression supply from the existing limited source in the area has been supplemented. An existing 8" water line with limited capacity and pressure has now been looped with a 12" line from a separate feed system with additional volume and pressure for a reliable supply. This improved supply has reduced the fire fighting concerns of this outlying residential development with its sprinkler fighting system. The Fire Marshal's review show no issues with the proposed fire protection measures such as proper fire lane access widths and radius design, number exit way, gate access provision and of the fire hydrant coverage layout.*
- *The internal sanitary sewer system designed for the development meets the standards of the city and its public component crosses the highway to an existing system previously sized for this future growth demand. No major issues run with this.*

There were no changes from the preliminary review of portion of the infrastructure system supporting services of the site. There were minor revisions made to the plan detail in conformance with our review comments and recommendation made and addressed in the final documents .

(previous discussion)

The most critical infrastructure conditions of this development lie in the ground elevation of the facilities and the drainage systems required for development in this special flood hazard areas. These have also been in discussion since the early process of development and finally bared out by the Bastrop Bayou drainage study and the adopted city's flood management policy to be incorporated in the new FEMA maps. The developed area of the site will require the raising of the ground level from 2'-3' by fill while the lowest elevation of the parking fields and access drives have been set at the 15.0 base flood elevation of the new maps, and the living floor elevation set at 16.5 as a safety free board. In addition the development has incorporated the flood plain management policy conditions of retention and mitigation requirements for this special hazard areas.

Staff has reviewed the internal and outfall storm sewer systems, detention and mitigation pond sizing, along with the overall drainage. Comments have been sent to the engineer later than anticipated so little response as expected; have been obtained at the time of updating this report. With that said and base on the response history of the designed engineers, there is not drought that the engineer will adhere and comply with the stated requirements made known to him. The major changes to be made will probably result in them sizing up some of the storm sewers. The detention and mitigation ponds were found to be adequate with only housekeeping to be done justifying and documenting how they came up with the appropriate sizes. It should be noted that they will be an additional detention pond for the next phase complying with the storage requirements stipulated.

3. FINAL REVIEW AND ACTION ON LANDSCAPE PLAN OF PHASE 1 OF THE RESERVES AT LAKE JACKSON, FOR THE APARTMENT DEVELOPMENT AT 202 FM 2004

(previous discussion)

The heavy tree conditions of the site and the ground elevation buildup needs for development of the site created a landscape plan challenge for this project. The site area already curtailed by the detention and mitigation takings requires the ground fill raising of the remaining natural area. The prepared plan reflects the results of this encumbrance but also shows consideration to the ordinance landscape principal condition.

The plan as submitted contains the following results:

A tree survey has been incorporated within the proposed site development plan. This is qualified alternate plan because it leaves the landscape plan requirements of lot 2 development for the future and indicates the remaining lot 3 to stay in natural condition. The survey shows only those trees 18" and greater caliper size and not 12" - 18". Foregoing the omitted inventory, the plan claims that 116 of those in the survey will be removed while 28 will be protected within their open area plan. The required tree count of the site design calls for 82 tree (indicated as 46 by their interpretation). To supplement the count they have incorporated an additional 122 trees for a total of 150 native trees which significantly satisfies the requirement. The plan claims a credit for the 28 protected trees, but staff will recommend discounting this from the final because of future liability.

The landscape area plan indicates a mix of designed open space and detention area space to comply with ordinance requirement. Based on the site design, a total of 68000 sf of open landscape area is required which is shown in the plan (34900 sf by their interpretation). The plan claims as providing 274400 sf of open landscape which will needs to be properly accounted for validation. Staff does not anticipate the required area being met given the claimed area provision that will be confirmed in the process.

The remaining principal requirements of the ordinance relative to parking lot shrub and tree screening has been included in the plan without issues and the automatic sprinkling requirements also made part of the plan.

The final plan has been updated to address the requirements of the board from the last meeting which was to include the 12" - 18" tree survey along the west and highway boundary of the site as a minimum. This resulted in the inclusion of an additional 10 tree of which 6 would be removed and 4 to be saved.

The revised landscape condition of site consists of the following:

This is qualified alternate plan because 1) a variance tree survey has been granted 2) it allows a phased in landscape plan in lieu of a master plan by leaving landscaping development of Lot 2 for the future and indicates the remaining lot 3 to stay in natural condition. Given the tree survey modification, the plan claims that 122 of those in the survey will be removed while 32 will be protected within their open area plan. The required tree count of the site design calls for 82 tree (indicated as 52 by their interpretation) and to be corrected. To supplement the count they have incorporated an additional 122 trees for a total of 160 native trees which significantly satisfies the requirement. The plan still claims a credit for the 32 protected trees, which will need to be deleted to avoid future replacement liability. We anticipate this to happen prior the meeting.

The landscape area plan indicates a mix of designed open space and detention area space to comply with ordinance requirement. Based on the site design, a total of 68,000 sq. ft. of open landscape area is required

which is shown in the plan (34,900 sq. ft. by their interpretation) and to be corrected. The plan claims as providing 274,400 sq. ft. of open landscape which still needs to be properly accounted for validation. We anticipate this to happen prior to the meeting.

The remaining main requirements of the ordinance relative to parking lot shrub and tree screening as well as that of automatic sprinkling remain unchanged from preliminary and comply without issues remaining. Staff recommends your consideration of final approval of the alternate landscape plan.

4. SIGNATURE OF DOCUMENTS

The Reserve at Lake Jackson Apartments Plat
The Reserve at Lake Jackson Site Plan
The Reserve at Lake Jackson Landscape Plan

BLOCK 1 - LOTS 1, 2, 3 & 4 THE RESERVE AT LAKE JACKSON

Being a total of 31.492 acre tract (1,371,809.22 Sq. Ft.) being 6.742 acre tract of land same being all of that certain Bayou Plantation Subdivision Section 1, Block 1 recorded in volume 15, pages 103-104 of the Map Records of Brazoria County, Texas; and a 24.750 acre tract of land in Brazoria County Texas, out of the Jared E. Groce 5 League Grant, Abstract 66 and being the same tract called 24.787 acres conveyed to RURAL INVESTMENTS INC. as recorded under Document No. 20007039282, Official Records of Brazoria County, Texas.



VICINITY MAP SCALE: N.T.S.

STATE OF TEXAS
COUNTY OF BRAZORIA

WE, CABB JV, LLC, OWNER OF THE PROPERTY SUBDIVIDED IN THE FOREGOING PLAT OF THE RESERVE AT LAKE JACKSON, DO HEREBY MAKE SUBDIVISION OF SAID PROPERTY, ACCORDING TO THE LINES, STREETS, LOTS, ALLEYS, PARKS, BUILDING LINES AND EASEMENTS AS SHOWN HEREON, AND DEDICATE FOR PUBLIC USE, THE STREETS, ALLEY, AND PARKS AND EASEMENTS SHOWN HEREON, FOREVER, AND DO HEREBY WAIVE ALL CLAIMS FOR DAMAGES OCCASIONED BY THE ESTABLISHMENT OF GRADES, AS APPROVED FOR THE STREETS AND DRAINAGE EASEMENTS DEDICATED, OR OCCASIONED BY THE ALTERATION OF THE SURFACE, OR ANY PORTION OF THE STREETS OR DRAINAGE EASEMENTS TO CONFORM TO SUCH GRADES, AND DO HEREBY BIND OURSELVES, OUR HEIRS, SUCCESSORS AND ASSIGNS, TO WARRANT AND DEFEND THE TITLE TO THE LAND SO DEDICATE.

WITNESS OUR HAND IN AUSTIN,
TRAVIS COUNTY, TEXAS, THIS _____ DAY OF _____ 2016.

AUTHORIZED OFFICER _____

STATE OF TEXAS
COUNTY OF BRAZORIA

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED AND KNOWN TO ME, TO BE THE PERSON WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME, THAT THEY EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATIONS THEREIN SET FORTH.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, THIS _____ DAY OF _____ 2016.

NOTARY PUBLIC
IN AND FOR _____ COUNTY, TEXAS.

STATE OF TEXAS
COUNTY OF BRAZORIA

I, JARREL L. MOORE, A REGISTERED PROFESSIONAL LAND SURVEYOR OF THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THE ATTACHED PLAT OF THE RESERVE AT LAKE JACKSON, WAS PREPARED FROM A SURVEY MADE ON THE GROUND UNDER MY SUPERVISION AND THAT THIS PLAT CORRECTLY REPRESENTS THAT SURVEY.

Jarrel L. Moore
JARREL L. MOORE, R.P.L.S.
TEXAS REGISTRATION No. 4854

STATE OF TEXAS
COUNTY OF NUECES

BEFORE ME THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED JARREL L. MOORE (Tx 4854) KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGE TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSE AND CONSIDERATION THEREIN EXPRESSED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS THE _____ DAY OF _____ 2016.

NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

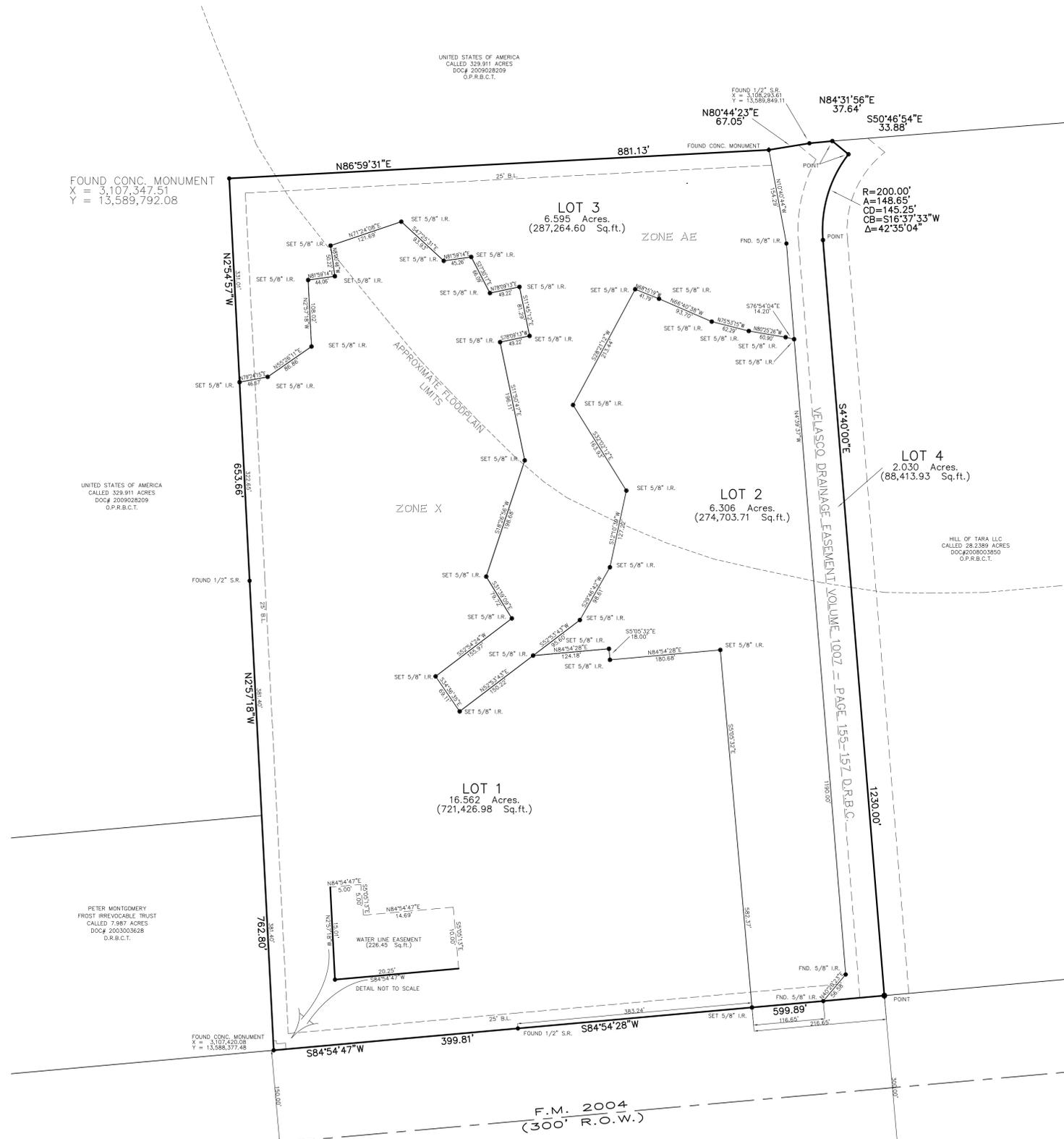
PRINT NAME _____

MY COMMISSION EXPIRES _____

Jarrel L. Moore
JARREL L. MOORE, R.P.L.S.
TEXAS REGISTRATION No. 4854

GENERAL PLAT NOTES & RESTRICTIONS

- BY GRAPHIC PLOTTING ONLY ONTO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 48039C0610H, DATED JUNE 5, 1989, PART OF THIS PROPERTY IS IN ZONE X SHADED (AREAS OF 500-YEAR FLOOD) AND PART IN ZONE AE (BASE FLOOD ELEVATIONS DETERMINED).
- THIS PROPERTY SHALL BE FOR MULTIFAMILY USES.
- ALL CONSTRUCTION SHALL COMPLY WITH STORM WATER POLLUTION PREVENTION PLAN (SW3P) REQUIREMENTS REQUIRED BY TCEQ.
- ALL BEARINGS AND COORDINATES REFER TO THE TEXAS STATE PLANE COORDINATE SYSTEM OF 1983, TEXAS SOUTH CENTRAL ZONE.
- B.L. INDICATES BUILDING LINE
- U.E. INDICATES UTILITY LINE EASEMENT
- W.L.E. INDICATES WATER LINE EASEMENT
- S.S.E. INDICATES SANITARY SEWER EASEMENT
- STM.S.E. INDICATES STORM SEWER EASEMENT
- B.C.M.R. INDICATES BRAZORIA COUNTY MAP RECORDS
- B.C.D.R. INDICATES BRAZORIA COUNTY DEED RECORDS
- B.C.C.R. INDICATES BRAZORIA COUNTY CLERK'S FILE
- ALL EASEMENTS ARE DEDICATED FOR PUBLIC USE.
- ALL CORNERS ARE MARKED AS SHOWN HEREON.



PLANNING COMMISSION APPROVAL

APPROVED THIS THE _____ DAY OF _____, 2016
BY THE PLANNING COMMISSION OF THE CITY OF LAKE JACKSON, TEXAS.

LOCKE SANDERS, CHAIR	HARRY SARGENT
BRENDA COLEGRATE, SECRETARY	JOHN FEY
JEFFREY GILBERT, VICE CHAIR	VINAY SINGHANIA

VELASCO DRAINAGE DISTRICT

THE BOARD OF SUPERVISORS OF THE VELASCO DRAINAGE DISTRICT DOES NOT WARRANT, REPRESENT OR GUARANTEE:

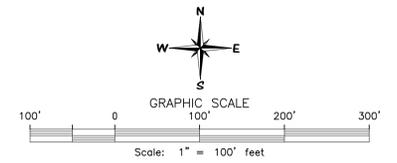
- THAT DRAINAGE FACILITIES OUTSIDE THE BOUNDARIES OF THIS SUBDIVISION ARE AVAILABLE TO RECEIVE RUNOFF FROM THE FACILITIES DESCRIBED ON THIS PLAT.
- THAT DRAINAGE FACILITIES DESCRIBED IN THIS SUBDIVISION ARE ADEQUATE FOR RAINFALL IN EXCESS OF VELASCO DRAINAGE DISTRICT MINIMUM REQUIREMENTS (10 YEAR FREQUENCY).
- THAT BUILDING ELEVATION REQUIREMENTS HAVE BEEN DETERMINED BY THE VELASCO DRAINAGE DISTRICT.
- THAT THE DISTRICT ASSUMES RESPONSIBILITY FOR CONSTRUCTION, OPERATION OR MAINTENANCE OF SUBDIVISION DRAINAGE FACILITIES.

THE DISTRICT REVIEW IS SOLELY BASED ON THE DOCUMENTATION SUBMITTED FOR REVIEW AND A RELIANCE ON SUBMISSION OF THE REPORT BY THE TEXAS PROFESSIONAL ENGINEER. THE DISTRICT'S REVIEW IS NOT INTENDED AND SHALL NOT SERVE AS A SUBSTITUTION OF THE OVERALL RESPONSIBILITY AND/OR DECISION MAKING POWER OF THE PARTY MAKING THE PLAN OR PLAT HEREIN. THEIR OR ITS PRINCIPALS OR AGENTS.

CHAIRMAN _____ VICE CHAIRMAN _____

SECRETARY _____ DATE: _____

OWNER: CABB JV, LLC.
1003 RIO GRANDE STREET
AUSTIN, TEXAS 78701
(512) 789-3440
Mr. GARY DAVIS



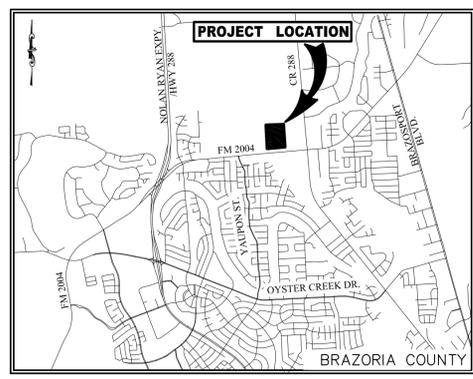
TEXAS GEO TECH
ENGINEERING AND LAND SURVEYING, INC
5525 S. STAPLES ST. SUITE B2
Corpus Christi, TX 78411
(361) 993-0808 Fax (361) 993-2955

civil engineering, LLC.
5339 ALPHA ROAD, SUITE 300 DALLAS, TEXAS 75240
972.701.9636 • 972.701.9639 FAX
TX REGISTERED ENGINEERING FIRM F-12600
www.hpcivileng.com

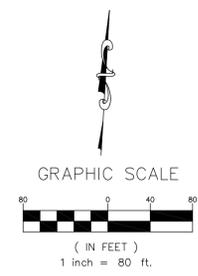
FILE: X:\Projects\091515\091515.dwg
 USER: jackson DATE: 09/21/2016
 PLOT: 15:00:00



LINE #	LENGTH	DIRECTION
L1	46.67'	N79° 24' 15"E
L2	86.86'	N55° 26' 11"E
L3	108.02'	N2° 57' 18"W
L4	44.06'	N81° 59' 14"E
L5	50.22'	N8° 00' 46"W
L6	121.69'	N71° 24' 08"E
L7	93.93'	S47° 25' 31"E
L8	45.26'	N81° 59' 14"E
L9	66.09'	S27° 30' 17"E
L10	49.22'	N78° 09' 13"E
L11	81.29'	S11° 45' 12"E
L12	49.22'	S78° 09' 13"W
L13	196.11'	S11° 50' 47"E
L14	198.68'	S18° 26' 56"W
L15	79.72'	S31° 39' 09"E
L16	155.97'	S52° 54' 24"W
L17	69.11'	S34° 36' 35"E
L18	150.22'	N52° 53' 43"E
L19	124.18'	N84° 54' 28"E
L20	18.00'	S5° 05' 32"E
L21	180.68'	N84° 54' 28"E

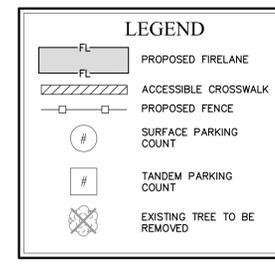


VICINITY MAP
(NOT TO SCALE)



SHEET INDEX

SHEET NO.	SHEET TITLE
C0.0	COVER SHEET
C0.1	GENERAL NOTES
C0.2	EXISTING CONDITIONS PLAN
C0.3	ALTA SURVEY
-	FINAL PLAT
SP	SITE PLAN
C1.1 - C1.3	DIMENSIONAL CONTROL PLAN
C2.1 - C2.9	GRADING PLAN
C3.1	EXISTING DRAINAGE AREA MAP
C3.2	PROPOSED OVERALL DRAINAGE AREA MAP
C3.3 - C3.4	PROPOSED DRAINAGE AREA MAP
C3.5 - C3.6	DETENTION POND PLAN AND DETAILS
C3.7	MITIGATION POND PLAN AND DETAILS
C4.1 - C4.8	STORM SEWER PLAN
C4.9 - C4.16	STORM SEWER PROFILE
C4.17	STORM SEWER CALCULATIONS
C5.1 - C5.8	WATER PLAN
C6.1 - C6.5	SANITARY SEWER PLAN
C6.6 - C6.10	SANITARY SEWER PROFILE
C7.1 - C 7.3	PAVING PLAN
C8.1 - C 8.2	EROSION CONTROL PLAN
C8.3	EROSION CONTROL DETAILS
C9.1 - C9.6	CONSTRUCTION DETAILS



L1.26 - L26.26 LANDSCAPE & IRRIGATION PLANS

THE RESERVE AT LAKE JACKSON - PHASE 1			
ZONING	MF-4	PARKING REQUIRED	
PROPOSED USE	APARTMENTS	2 SP / 1 BED	236
LOT AREA	16,562 AC (721,443 SF)	2 SP / 2 BED	176
		3 SP / 3+ BED	42
BUILDING HEIGHT	29' MAX	TOTAL	454
BUILDING AREA	MAX 35'-0"	PARKING PROVIDED	
APARTMENTS		SURFACE REGULAR	121
		SURFACE HC	7
TYPE I	1ST FLOOR 7,971 SF	TANDEM	94
	2ND FLOOR 7,365 SF	TANDEM HC	0
TYPE II	1ST FLOOR 7,551 SF	ATTACHED GARAGE	258
	2ND FLOOR 6,934 SF	REGULAR	258
		ATTACHED GARAGE HC	6
TOTAL PER BLDG		TOTAL	486
TYPE I	15,336 SF		
TYPE II	14,485 SF		
OVERALL TOTAL	29,821 SF		
CLUBHOUSE		6,257 SF	
MAINTENANCE GARAGE		384 SF	
MAIL KIOSK		578 SF	
UNIT BREAKDOWN			
	1-BED / 1-BATH	118 UNITS	
	2-BED / 2-BATH	88 UNITS	
	3-BED / 3-BATH	14 UNITS	
DENSITY		13.3 UNITS / ACRE	220 UNITS

PLANNING COMMISSION APPROVAL

APPROVED THIS _____ DAY OF _____, 2016.

BY THE PLANNING COMMISSION OF THE CITY OF LAKE JACKSON, TEXAS.

LOCKE SANDERS, CHAIR	HARRY SARGENT
BRENDA COLEGROVE, SECRETARY	JOHN FEY
JEFFREY GILBERT, VICE CHAIR	VINAY SINGHANIA

Engineer of Record:	BCA	
Drawn by:	KDA	
Date Plotted:	09/21/2016	
Issue for Pricing / Bidding:		
Issue for Permit App:	TXDOT DWY #1	
Issue for Construction:		
REVISIONS		
#	DATE	COMMENTS
A	09/21/2016	ADDENDUM A

THE RESERVE AT LAKE JACKSON
202 FM 2004
CITY OF LAKE JACKSON, BRAZORIA COUNTY, TEXAS 77566
CANAM LAKE JACKSON, LLC

icivil engineering, LLC.
5339 ALPHA ROAD, SUITE 300 DALLAS, TEXAS 75240
972.701.9636 • 972.701.9639 FAX
TX REGISTERED ENGINEERING FIRM F-12600
www.icivileng.com

PRELIMINARY
[NOT FOR CONSTRUCTION]
THIS DRAWING IS RELEASED FOR THE PURPOSE OF SCHEMATIC REVIEW ONLY AND IS NOT INTENDED FOR PERMITTING, BIDDING, OR CONSTRUCTION PURPOSES.
THESE PLANS WERE PREPARED UNDER THE DIRECT SUPERVISION OF BRIAN C. ABBOTT, P.E., TEXAS REG. #108439
DATE: 10/04/2016

SHEET TITLE
SITE PLAN

SHEET NO.
SP

HPCE #15-050

LANDSCAPE NOTES

- ALL FINISHED GRADES TO BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO THE INSTALLATION OF ANY PLANT MATERIAL.
- PLANT MATERIAL TO BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- ALL TREE LOCATIONS TO BE STAKED BY THE LANDSCAPE CONTRACTOR AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO ANY HOLES BEING DUG.
- THE CONTRACTOR IS TO PROVIDE A 2 LB SAMPLE OF THE PROPOSED MULCH FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT AND OWNER. THE CONTRACTOR SHALL PROVIDE 100% COVERAGE OF NON PAVED AREAS WITHIN THE LIMITS OF CONSTRUCTION.
- FOR ALL TREE PLANTING THAT ENCOUNTERS HARDPAN/CALICHE PROVIDE SEPARATE UNIT PRICE TO INSTALL TREES WITH AN AUGER.
- IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO INFORM THE LANDSCAPE ARCHITECT OF ANY PLANT MATERIAL CONCERNS BASED ON THE PLANTING SEASON. (E.G. SUMMER VS WINTER) SHOULD THE LANDSCAPE CONTRACTOR HAVE ANY CONCERNS ABOUT PLANT MATERIAL DUE TO HEAT OR FROST EXPOSURE. THE INSTALLER SHALL REQUEST A SUBSTITUTION OR DELAY IN PLANTING. ONCE PLANTED, ALL PLANT MATERIAL IS SUBJECT TO SPECIFIED WARRANTIES.
- ALL DECIDUOUS TREES TO BE UNCONDITIONALLY GUARANTEED FOR ONE YEAR AFTER INSTALLATION. ALL OTHER PLANTS SHALL BE GUARANTEED FOR A MINIMUM PERIOD OF 90 DAYS FROM THE DATE OF FINAL APPROVAL BY THE CITY/OWNER. ANY PLANT MATERIALS NOT APPROVED BY CITY/OWNER PRIOR TO OCTOBER 1 OF THE CALENDAR YEAR IN WHICH THEY ARE INSTALLED SHALL BE FURTHER GUARANTEED UNTIL MAY 20TH OF THE FOLLOWING CALENDAR YEAR.
- TREES, SHRUBS, VINES, GROUNDCOVERS AND TURF WHICH HAVE TO BE REPLACED UNDER THE TERMS OF THE GUARANTEE SHALL BE GUARANTEED FOR AN ADDITIONAL 90 DAYS FROM THE DATE OF REPLACEMENT.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL FINISHED GRADES AND FOR MAINTAINING POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS DURING THE FINISH GRADING PROCESS. ALL SLOPES NOT TO EXCEED 4:1 IN LANDSCAPE AREAS.
- UNDER NO CIRCUMSTANCE SHALL ANY TREE BE PLANTED WITHIN 6' OF ANY BUILDING WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.
- TREES AND SHRUBS SHALL BE PLACED A MINIMUM OF 6' FROM PUBLIC ACCESSWAYS, UTILITY CABINETS AND FIRE HYDRANTS.
- SHRUBS MUST BE AT MATURITY, 6' FROM THE REAR OF A FIRE HYDRANT. NO MATERIAL OTHER THAN GROUNDCOVERS MAY BE PLACED BETWEEN A FIRE HYDRANT AND THE STREET OR ROADWAY OR 6' ON EITHER SIDE. FIELD VERIFY ALL HYDRANT LOCATION WITH THE CIVIL ENGINEERING PLANS.
- ALL SITE IMPROVEMENTS, INCLUDING LANDSCAPE AND SITE CLEAN UP MUST BE COMPLETED PRIOR TO FINAL APPROVAL OR CERTIFICATE OF OCCUPANCY.
- TREES ADJACENT TO PEDESTRIAN WALKWAYS SHOULD HAVE MINIMUM CANOPY CLEARANCE OF 6'8"
- THE LANDSCAPE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES AND TAKE PRECAUTIONS TO PREVENT DAMAGE TO THESE UTILITIES.
- THE LANDSCAPE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANIES AND SHALL BE RESPONSIBLE FOR ALL DAMAGE TO UTILITIES.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FINE GRADING OF ALL PLANTING AREAS. INSURE POSITIVE DRAINAGE OFF LANDSCAPE BERMS.
- THE LANDSCAPE CONTRACTOR SHALL VERIFY ALL MATERIAL QUANTITIES. IN THE EVENT OF A DISCREPANCY, THE QUANTITIES ON THE PLAN WILL TAKE PRECEDENCE.
- GROUND COVER, WHEN USED, SHOULD EXTEND UNDER SHRUBS AND TREES.
- ALL PLANTING AREAS SHALL BE FERTILIZED WITH 12 LBS./1000 SF OF 10-10-10 FERTILIZER.
- ALL PLANTING BEDS OR MULCH BEDS SHALL BE SPRAYED WITH ROUND-UP OR EQUAL PRIOR TO THE INSTALLATION OF THE MULCH.
- THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE OWNER WITH WRITTEN INSTRUCTIONS ON THE PROPER CARE OF ALL SPECIFIED PLANT MATERIALS PRIOR TO FINAL PAYMENT.
- FIELD ADJUSTMENTS MAY BE REQUIRED TO AVOID CONFLICTS WITH PROPOSED UTILITIES OR OTHER SITE APPURTENANCES. NOTIFY LANDSCAPE ARCHITECT PRIOR TO FIELD ADJUSTMENTS.
- ALL VEGETATIVE MATERIAL MUST MEET THE AMERICAN STANDARD FOR NURSERY STOCK SPONSORED BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND APPROVED BY THE AMERICAN NATIONAL STANDARDS INSTITUTE, INC. (ANSI).
- ALL NEW LANDSCAPING WILL BE IN CONFORMANCE WITH THE STANDARDS OF THE CITY ORDINANCE
- ALL PLANTINGS SHALL BE IRRIGATED
- ALL LANDSCAPE ISLANDS TO BE EXCAVATED TO A MINIMUM DEPTH OF 24 INCHES.

IRRIGATION LEGEND

EMITTER SCHEDULE

PLANT TYPE	PLANT SIZE	GPH PER OUTLET	# OF OUTLET PER PLANT	TOTAL GPH PER PLANT
TREES	15 GAL	2 GPH	3	6 GPH
TREES	24" BOX	2 GPH	4	8 GPH
TREES	36" BOX	2 GPH	5	10 GPH
TREES	48" BOX	2 GPH	6	12 GPH
SHRUBS/G.C.	5 GAL	1 GPH	2	2 GPH
SHRUBS/G.C.	1 GAL	1 GPH	1	1 GPH

PIPE LEGEND

SIZE	GPM	CLASS	200 PVC
1/2"	4.22	GPM	CLASS 200 PVC
3/4"	8	GPM	5' MIN. LATERALS
1"	12	GPM	SCHED. 40 PVC
1-1/2"	30	GPM	1" MIN. MAINLINE
2"	50	GPM	SCHED. 40 PVC

D=DRIP/T-TURF VALVE SIZE

DRIP EQUIPMENT

TORO 700-1 1" ELECTRIC VALVE PRESSURE REGULATOR HYDRO RAIN WYE STRAINER VALVE BOX BY CARSON-OR APPROVE EQUAL

TORO 1-CFCHH 1/2" FLUSH VALVE OR APPROVE EQUAL

PVC DRIP SYSTEM - SEE DETAIL THIS SHEET

EMITTER LINE W/ BUB CAPS

EMITTERS PER TREE-EQUALLY SPACED

CAP OR TIE INTO EXISTING WATERLINE

SPRAY HEADS

SYSTEM DESIGN: 40 GPM FOR EACH VALVE MAX. SYSTEM DESIGN: 40 PSI

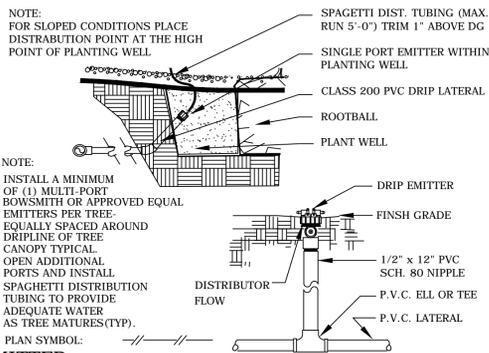
TORO 700-2 2" ELECTRIC VALVE

MFG.	BODY TYPE	GPM	PSI
SPRAY HEAD BODY	TORO 570Z-4P XF		
TORO PRN-1A PRECISION ROTATING NOZZLES		25-142	40
TORO PRN-1F PRECISION ROTATING NOZZLES		25-56	40

NOTE: USE RADI AS INSTALLATION DICTATES

IRRIGATION NOTES

- All equipment numbers reference Weathermatic equipment catalog unless otherwise indicated.
- LAWN SPRAY HEADS are LX 4" installed as per detail.
- SHRUB SPRAY HEADS are LX 12" installed as per detail (not applicable).
- ELECTRIC CONTROL VALVES shall be 11000cr installed as per detail shown. Size valves as shown on plans. Valves shall be installed in valve boxes large enough to permit manual operation, removal of solenoid and/or valve cover without any earth excavation.
- QUICK COUPLING VALVES shall be QV75L installed as per detail shown. Swing joints shall be constructed using 3/4" Sch. 80 elbows. Contractor shall supply owner with three (3) CH75 couplers and three (3) 10SHL swivel hose ells as part of this contract.
- AUTOMATIC CONTROLLER shall be installed at location shown. Power (120V) shall be located in a junction box within five feet (5') of controller location by other trades.
- All 24 volt valve wiring is to be UF 14 single conductor. All wire splices are to be permanent and waterproof.
- SLEEVES shall be installed by General Contractor. Sleeve material shall be Schedule 40. Sizes as indicated on plans.
- Ten days prior to start of construction, contractor shall verify static water pressure. If static pressure is less than 65 PSI, do not start work until notified to do so by owner.
- All mainline and lateral piping shall have a minimum of 12 inches of cover. All piping under paving shall have a minimum of 18 inches of cover.
- The irrigation contractor shall coordinate installation of the system with the landscape contractor so that all plant material will be watered in accordance with the intent of the plans and specifications.
- The irrigation contractor shall select the proper arc and radius for each nozzle to insure 100% and proper coverage of all lawn areas and plant material. No water will be allowed to spray on building or any hard surface.



EQUIPMENT

- (1) 2" WATER METER - INSTALL PER CIVIL PLAN AND ALL LOCAL CODES
- (1) FBCCO 825Y-BV 2" REDUCED PRESSURE BACKFLOW PREVENTER OR APPROVED EQUAL
- (1) IRRITROL TC-48EX-R CONTROLLER OR APPROVED EQUAL
- (1) IRRITROL TC-34EX-R CONTROLLER OR APPROVED EQUAL
- (1) IRRITROL TC-24EX-R CONTROLLER OR APPROVED EQUAL
- WATEROUS SERIES 500 2" BRASS GATE VALVE OR APPROVED EQUAL
- TORO 470 SERIES QUICK COUPLER MODEL NUMBER 075-SL-C CARSON-OR APPROVE EQUAL VALVE BOXES
- NOTE:**
- ALL EMISSION POINTS TO BE LOCATED ON THE UPHILL SIDE OF PLANT MATERIAL ONE EMISSION POINT TO BE LOCATED AT THE PLANT BALL, WITH THE ADDITIONAL POINTS WITHIN PLANT FIT PERIMETER.
 - SCREEN ENCLOSURE TO BE GUARDSHACK AS MANUFACTURED BY BACKFLOW PREVENTION DEVICE ENCLOSURES, INC. 402-788-8411 OR APPROVED EQUAL. FINISH POWDER COAT COLOR: DESERT TAN. PROVIDE 4" THICK CONC. SLAB FOR ENCLOSURE FOUNDATION.

LANDSCAPE LEGEND

TREES

Existing Trees to Remain
Oak and Pecan

Washingtonia Filifera
California Fan Palm

Carya Illinoensis
Pecan

Ulmus Americana
American Elm

Quercus Virginiana
Live Oak

Taxodium Distichum
Bald Cypress

Quercus Falcata
Southern Red Oak

Juniperus Virginiana
Eastern Red Cedar

Cercis Canadensis v. Texana
Texas Redbud

Prunus Caroliniana
Cherry-Laurel (wild peach)

Magnolia soulangiana
Saucer Magnolia

Lagerstroemia Indica
Crape Myrtle- Red

Llex Cassine
Dahoon Holly

SHRUBS

Raphiolepis indica 'Clara'
Indian Hawthorne

Pennisetum alopecuroides 'Hamlet'
Hamlet Fountain Grass

Microplylla koreana
Korean Boxwood

Ilex vomitoria var. nana
Burford Holly

Berberis thunbergii atropurpurea
Dwarf Red Barberry

Hydrangea quercifolia
Oakleaf Hydrangea

Eunonymus alata
Winged Euonymus

Loropetalum chinense
Purple Diamond

Salvia 'Indigo Spires'
Indigo Spires

Viburnum tinus compact
Compact Spring Boquet

Rosa Hybrid 'Knockout'
Knockout Rose

Elaeagnus Fruitlandi
Fruitland Silverbell

Nandina domestica
Moon Bay Nandina

GROUNDCOVERS

Ophiopogon Japonicus
Mondo Grass

Liriope muscari 'Silver Dragon'
Liriope

Trachelospermum asiaticum
Asian Jasmine

Festuca glauca
Blue Fescue

Euyonimus fortunei
Winter Creeper

SPECIES

Cynodon dactylon
Common Bermuda

MATERIALS

Shredded Hardwood Mulch
Install in all non-turf areas

SIZE/QTY

5 gallon/148

5 gallon/186

5 gallon/27

5 gallon/139

5 gallon/311

5 gallon/58

5 gallon/205

5 gallon/165

5 gallon/23

5 gallon/149

5 gallon/248

5 gallon/167

5 gallon/114

1 gallon, 18" o.c./203

1 gallon, 18" o.c./425

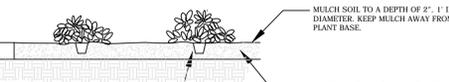
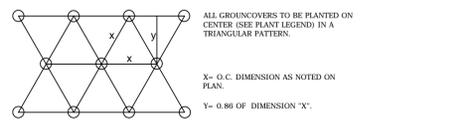
4" min. pot, 18" o.c./940

1 gallon, 18" o.c./168

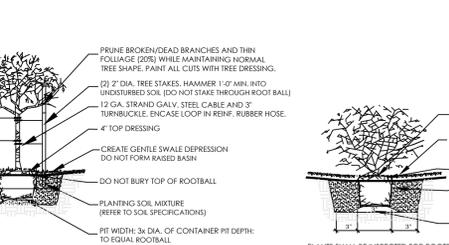
1 gallon, 18" o.c./165

Sod / 75,130 S.F.
(2 lbs per 1,000 sf, seed)

Seed/97,392.24 S.F.

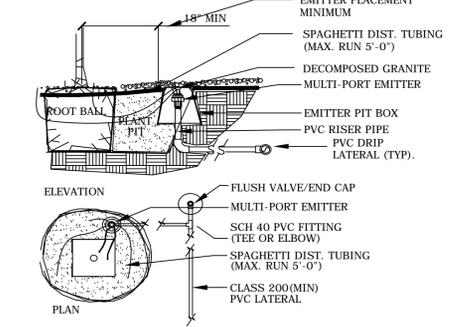


groundcover planting



tree planting

shrub planting

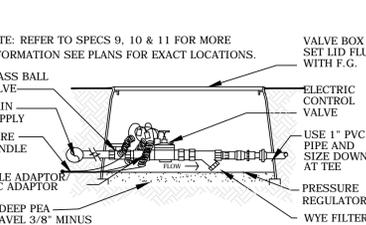
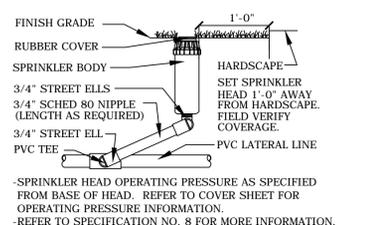
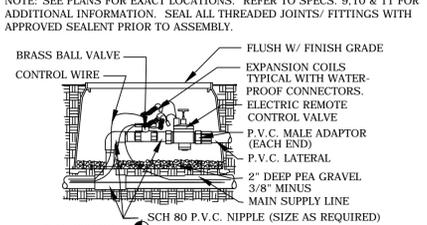
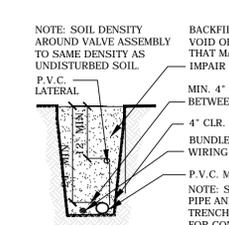


TRENCHING

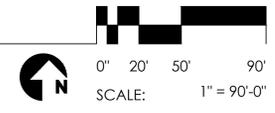
ELECTRIC REMOTE CONTROL VALVE

TURF SPRINKLER HEAD

DRIP VALVE ASSEMBLY UNIT



OVERALL SITE PLAN



OWNER:
CABB JV, LLC
1003 Rio Grande Street
Austin, Texas 78701
(512) 789. 3440
Mr. Gary Davis

TRENCHING

ELECTRIC REMOTE CONTROL VALVE

TURF SPRINKLER HEAD

DRIP VALVE ASSEMBLY UNIT

ELECTRIC CONTROLLER

GATE VALVE & COVER

FLUSH VALVE



Designed by: _____

Drawn by: _____

Architect of Record: _____

Date Plotted: 10.04.2016

Issue for Pricing / Bidding: _____

Issue for Permit Application: _____

Issue for Construction: _____

Revisions:

#	DATE	COMMENTS
A	09.21.2016	addendum A

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THE RESERVE AT LAKE JACKSON
Block 1, Lots 1, 2, 3 & 4
LAKE JACKSON, TEXAS



OWNER:
CABB JV, LLC
1003 Rio Grande Street
Austin, Texas 78701
(512) 789. 3440
Mr. Gary Davis

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www.hpldstudio.com

SHEET CONTENTS:
cover sheet

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