

FINAL PLANS FOR

Walmart

WALMART # 5672-00

2662 WEST LUCAS ROAD

CITY OF LUCAS  
COLLIN COUNTY, TEXAS

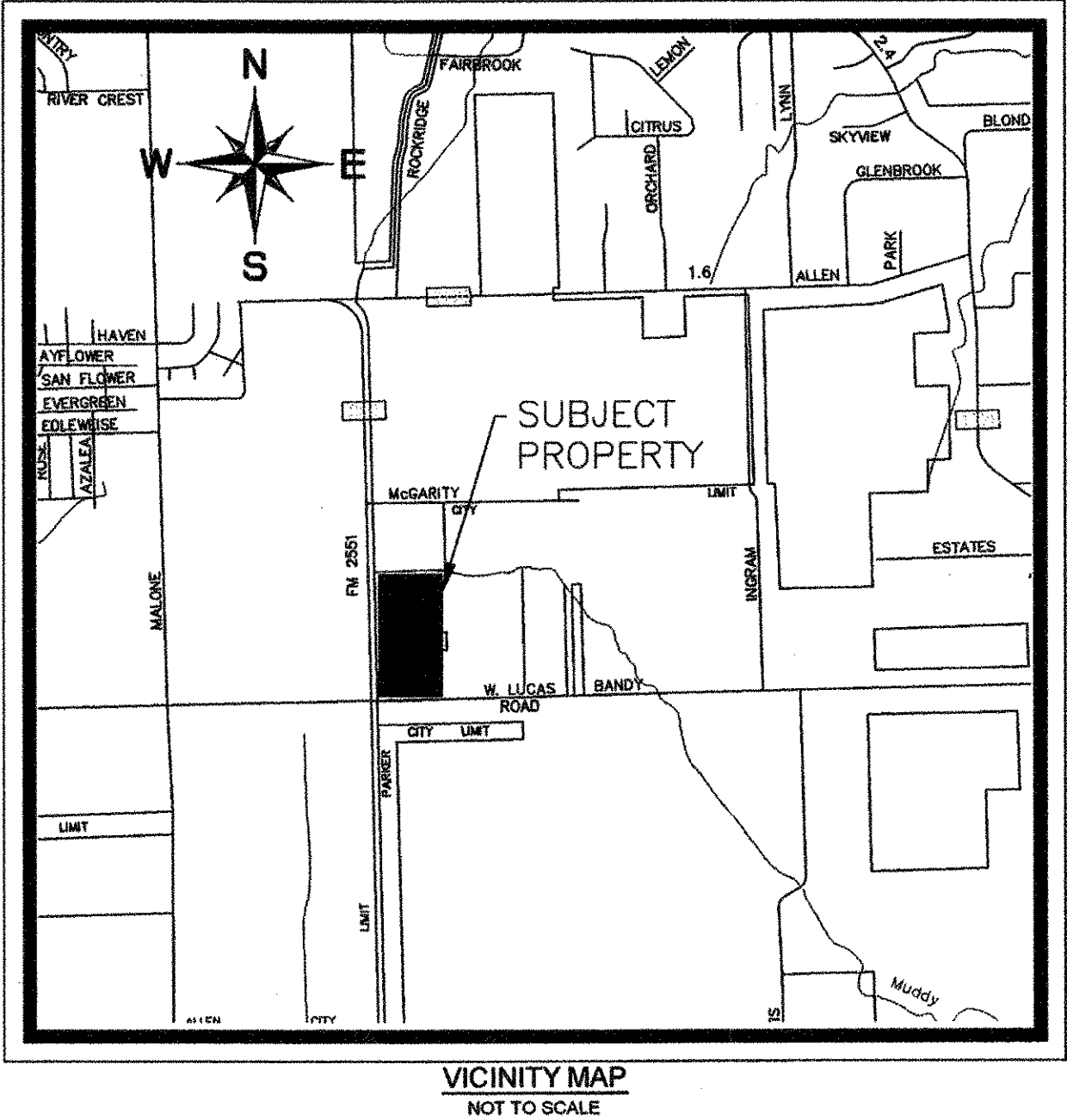
UTILITY RESPONSIBILITY MATRIX FOR THIS PROJECT

UTILITY/GOVERNING AGENCIES CONTACTS	CONTRACTOR RESPONSIBILITY-	OTHERS RESPONSIBILITY-
<b>GAS</b> ATMOS GAS 1310 STATE HWY. 66 GARLAND, TX 75040 CONTACT: JOE CABEZUELA PHONE: (972) 485-8234	-COORDINATE CONSTRUCTION ACTIVITIES WITH GAS COMPANY TO ENSURE INSTALLATION OF GAS LINES ARE COMPLETED PRIOR TO CONCRETE OR CURB PLACEMENT  -INSTALL BOLLARD PROTECTION AS SHOWN ON THE PLANS AND PER THE GAS COMPANY REQUIREMENTS  -GENERAL CONTRACTOR SHALL USE AN ATMOS APPROVED CONTRACTOR TO DO ALL GAS LINE INSTALLATIONS.  -OBTAIN A COPY OF THE APPROVED GAS SERVICE LINE DESIGN FROM GEORGE LONG TO BE PROVIDED TO THE ATMOS APPROVED CONTRACTOR.  -GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR ALL PAYMENTS ASSOCIATED WITH INSTALLATION OF GAS SERVICE.	-INSTALLATION OF GAS SERVICE LINE WILL BE BY AN ATMOS APPROVED CONTRACTOR.  -INSTALLATION AND SETTING OF METER WILL BE BY AN ATMOS APPROVED CONTRACTOR.
<b>TELEPHONE</b> AT&T 2301 RIDGEVIEW DRIVE FLOOR 2 PLANO, TX 75025 CONTACT: JOHN MARSHALL PHONE: (972) 569-4761	-COORDINATE CONSTRUCTION ACTIVITIES WITH TELEPHONE COMPANY TO ENSURE INSTALLATION OF UNDERGROUND LINES ARE COMPLETED PRIOR TO CONCRETE OR CURB PLACEMENT  -PROVIDE AND INSTALL 2-4" SCHEDULE 40 PVC CONDUITS WITH PULL ROPES, INCLUDING ALL TRENCHING AND BACKFILLING, FROM THE RIGHT OF WAY UP TO THE BUILDING	-TELEPHONE COMPANY WILL PROVIDE AND INSTALL ALL TELEPHONE CABLES FROM THE POINT OF CONNECTION UP TO THE BUILDING.
<b>ELECTRIC</b> GRAYSON-COLLIN ELECTRIC GROUP PO BOX 548 - 1096 NORTH WACO VAN ALSTYNE, TX 75465 CONTACT: MICHAEL LAUER PHONE: (903) 482-7183	-COORDINATE CONSTRUCTION ACTIVITIES WITH ELECTRIC COMPANY TO ENSURE INSTALLATION OF UNDERGROUND LINES ARE COMPLETED PRIOR TO CONCRETE OR CURB PLACEMENT  -PROVIDE AND INSTALL 11-4" SCHEDULE 40 PVC CONDUITS AND ELECTRIC LINE FROM SECONDARY CABINET TO SWITCHGEAR LOCATED INSIDE BUILDING.  -GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR PAYMENTS ASSOCIATED WITH INSTALLATION OF CONDUITS AND ELECTRIC SERVICE FROM SECONDARY CABINET TO SWITCHGEAR LOCATED INSIDE BUILDING.	-ELECTRIC COMPANY WILL PROVIDE AND INSTALL ALL MATERIALS NEEDED TO ESTABLISH PRIMARY UNDERGROUND SERVICE FROM POINT OF CONNECTION AT THE EXISTING OVERHEAD ELECTRIC LINE UP TO THE SECONDARY CABINET.  -ELECTRIC COMPANY WILL PROVIDE AND INSTALL PRIMARY CABLE FOR ALL UNDERGROUND LINES FROM OVERHEAD POLE TO SECONDARY CABINET.
<b>SANITARY SEWER</b> CITY OF LUCAS 665 COUNTRY CLUB ROAD LUCAS, TX 75002 CONTACT: STACY CAUDELL PHONE: (972) 727-8999	-PROVIDE AND INSTALL SANITARY SEWER LINES AND ASSOCIATED APPURTENANCES PER THE PLANS AND SPECIFICATION  -ALL PUBLIC AND PRIVATE SANITARY SEWER LINES SHALL BE PVC AND RATED SDR 26, SDR 35, AND DUCTILE IRON  -COORDINATE REQUIRED INSPECTION SERVICES WITH THE CITY OF LUCAS. SEE UTILITY PLAN FOR REQUIREMENTS	
<b>WATER</b> CITY OF LUCAS 665 COUNTRY CLUB ROAD LUCAS, TX 75002 CONTACT: STACY CAUDELL PHONE: (972) 727-8999	-PROVIDE AND INSTALL ALL WATER MAINS AND ASSOCIATED APPURTENANCES PER THE PLANS AND SPECIFICATION  -ALL PUBLIC AND PRIVATE WATER MAINS SHALL BE C-900 DR-18 PVC FOR UNDERGROUND APPLICATIONS.  -ALL PORTIONS OF THE FIRE PROTECTION WATER SYSTEM SHALL BE INSTALLED BY A LICENSED FIRE SPRINKLER CONTRACTOR  -ALL PORTIONS OF OTHER NON FIRE PROTECTION RELATED LINES MAY BE INSTALLED BY THE PLUMBING CONTRACTOR  -COORDINATE REQUIRED INSPECTION SERVICES WITH THE CITY OF LUCAS. SEE UTILITY PLAN FOR REQUIREMENTS	
<b>STORM</b> CITY OF LUCAS 665 COUNTRY CLUB ROAD LUCAS, TX 75002 CONTACT: STACY CAUDELL PHONE: (972) 727-8999	-PROVIDE AND INSTALL ALL STORM SEWER LINES AND ASSOCIATED APPURTENANCES PER THE PLANS AND SPECIFICATION.	
<b>EXISTING POWER POLE RELOCATION ALONG FM 2551</b> ONCOR ELECTRIC DELIVERY 400 W. VIRGINIA MCKINNEY, TX 75069 CONTACT: DANNY LILLEY PHONE: (972) 569-6316	-COORDINATE ALL CONSTRUCTION ACTIVITIES WITH ONCOR ELECTRIC TO ENSURE RELOCATION OF POWER POLE PRIOR TO INSTALLATION OF DRIVE AISLE	-ONCOR WILL HANDLE POWER POLE RELOCATION  -CONTRACTOR IS RESPONSIBLE FOR PAYMENT OF POWER POLE RELOCATION
<b>TXDOT</b> TXDOT 2208 S. SH 6 MCKINNEY, TX 75069 CONTACT: MO KHOSHAKAR PHONE: (972) 542-2345	-CONTRACTOR SHALL COORDINATE WITH TXDOT BEFORE BEGINNING ANY WORK IN TXDOT RIGHT-OF-WAY.  -CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED TXDOT INSPECTIONS.	

THIS MATRIX HAS BEEN PROVIDED FOR INFORMATIONAL PURPOSES. THE CONTRACTOR SHALL PROVIDE ANY AND ALL APPURTENANCES, TRENCHING AND BACKFILL, AND OTHER INCIDENTALS TO MEET OR EXCEED THE SPECIFICATIONS OF THE ITEMS LISTED.

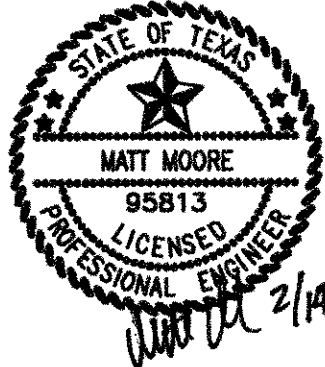
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C-3	PHASE I EROSION AND SEDIMENTATION CONTROL PLAN - SITE MAP	02/14/2012	
C-4	PHASE II EROSION AND SEDIMENTATION CONTROL PLAN - SITE MAP	02/14/2012	
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- NOTES:
- THE SITEWORK FOR THE WALMART PORTION OF THIS PROJECT SHALL MEET OR EXCEED THE "SITE SPECIFIC SPECIFICATIONS."
  - ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO CONTRACT COMPLETION AND THE FINAL CONNECTION OF SERVICES.
  - IF REPRODUCED, THE SCALES SHOWN ON THESE PLANS ARE BASED ON A 24" X 36" SHEET.
  - CONSTRUCTION HOURS IN THE CITY OF LUCAS ARE MON-SAT 7:00 AM - 6:00 PM.
  - CITY OF LUCAS MEDIAN AGE IS 34.5.

"RECORD DRAWING"  
THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY EMJ CORP TO KIMLEY-HORN AND ASSOCIATES, INC. AND CONSIDERED TO BE SIGNIFICANT. THIS DRAWING IS NOT GUARANTEED TO BE "AS-BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE.  
DATE: 02/12/2013 BY: LAUREN NUFFER, P.E.



ENGINEER

**Kimley-Horn and Associates, Inc.**  
801 CHERRY STREET, UNIT 11 FORT WORTH, TEXAS 76102  
PH. (817) 335-6511  
CONTACT: MATT MOORE, P.E.

OWNER

WALMART REAL ESTATE BUSINESS TRUST  
2001 SE 10TH STREET, MS 5570  
BENTONVILLE, AR 72716  
PH. (479) 273-4000

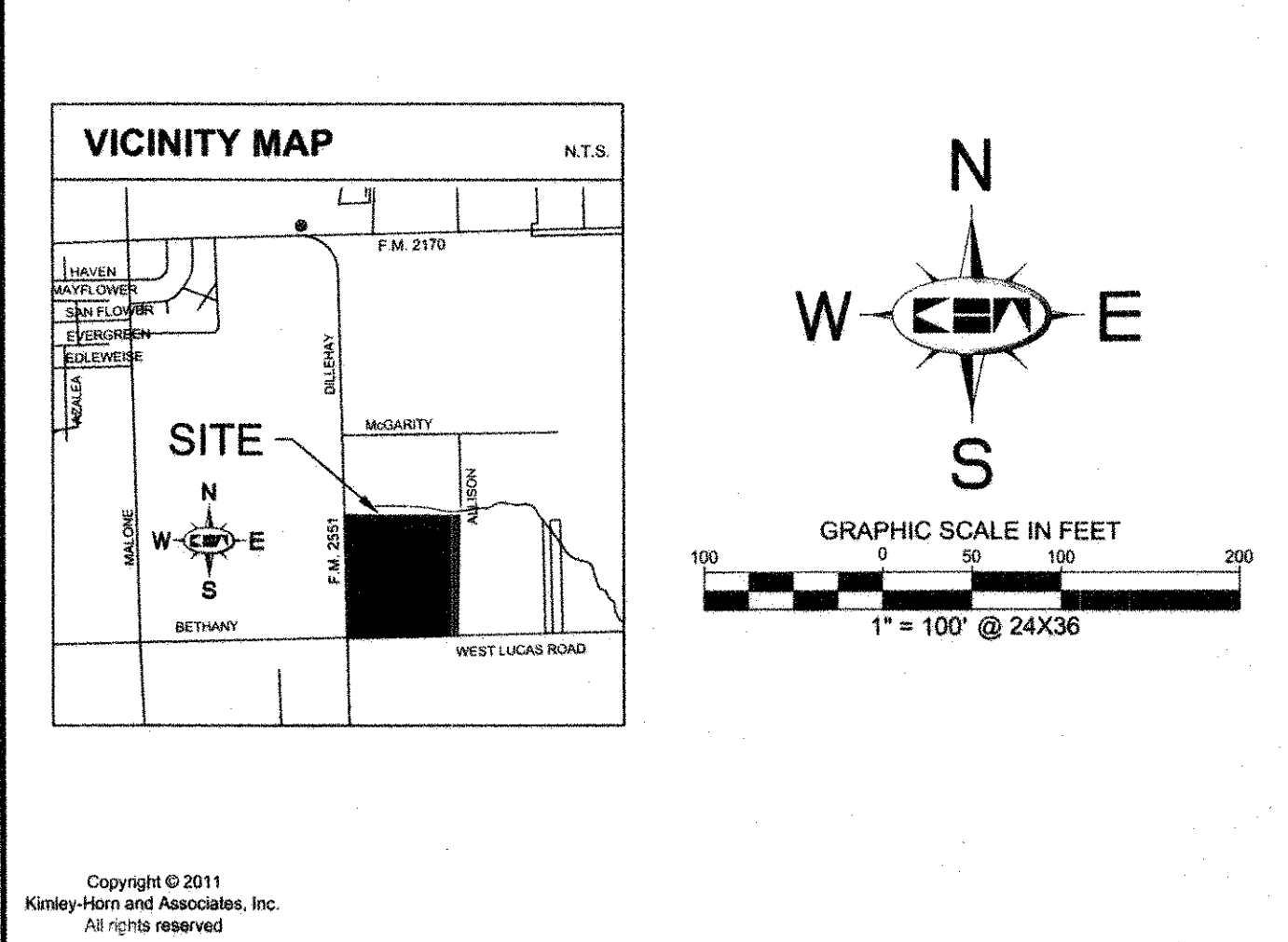
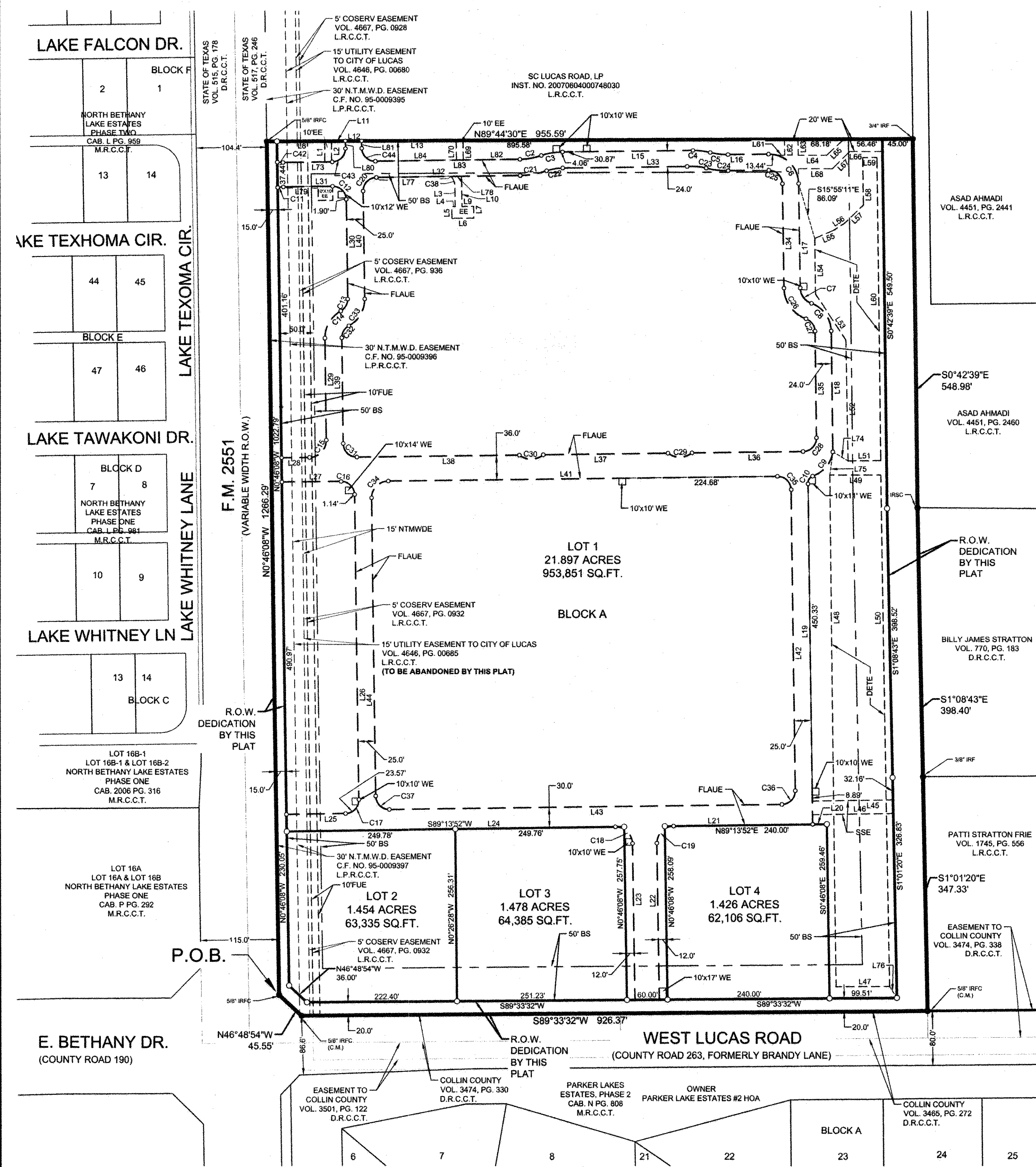
DEVELOPER

WALMART REAL ESTATE BUSINESS TRUST  
2001 SE 10TH STREET, MS 5570  
BENTONVILLE, AR 72716  
PH. (479) 273-4000

February 2012

**STOP!**  
**CALL BEFORE YOU DIG**  
DIG TESS  
1-800-DIG-TESS  
(@ least 72 hours prior to digging)





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LINE TABLE			LINE TABLE		
NO.	BEARING	LENGTH	NO.	BEARING	LENGTH
L1	N00°15'30"W	32.35'	L46	N89°01'49"E	119.30'
L2	N00°15'30"W	32.26'	L47	S89°35'30"W	78.95'
L3	S00°45'53"E	31.16'	L48	N00°39'11"W	758.58'
L4	S89°15'58"W	5.00'	L49	N89°42'22"E	75.20'
L5	S00°46'08"E	17.57'	L50	S00°56'11"E	758.46'
L6	N89°13'52"E	32.20'	L51	S89°17'46"W	48.01'
L7	N00°46'08"W	17.55'	L52	N01°04'01"W	177.32'
L8	S89°42'37"W	70.53'	L53	N33°17'29"W	81.84'
L9	S89°15'58"W	17.20'	L54	N00°46'08"W	82.73'
L10	N00°46'08"W	45.14'	L55	N66°11'44"E	30.66'
L11	N89°50'55"E	20.72'	L56	N56°29'52"E	19.79'
L12	N89°44'30"E	24.00'	L57	N45°15'49"E	38.62'
L13	N89°45'35"E	140.11'	L58	S00°40'21"E	70.55'
L14	N89°13'52"E	72.81'	L59	N89°19'38"E	20.90'
L15	N89°13'56"E	192.83'	L60	S00°40'22"E	449.13'
L16	N89°18'53"E	60.28'	L61	N90°00'00"W	10.70'
L17	S00°46'08"E	156.39'	L62	S00°46'08"E	25.17'
L18	S00°46'08"E	177.58'	L63	S00°46'08"E	25.43'
L19	S00°46'18"E	453.83'	L64	N90°00'00"W	42.10'
L20	S89°13'52"W	21.01'	L65	S45°00'00"W	36.40'
L21	S89°13'52"W	206.00'	L66	S89°44'30"W	48.39'
L22	S00°46'13"E	233.02'	L67	S45°00'00"W	36.45'
L23	N00°46'13"W	232.82'	L68	N90°00'00"W	50.12'
L24	S89°13'52"W	486.54'	L69	S00°45'53"E	30.53'
L25	S89°13'52"W	87.54'	L70	S00°45'53"E	30.53'
L26	S00°46'08"E	450.62'	L71	N89°13'52"E	72.81'
L27	N89°27'59"E	87.63'	L74	S59°45'18"E	28.16'
L28	S89°27'59"E	41.48'	L73	N07°20'35"E	34.57'
L29	S00°46'08"E	149.89'	L76	S32°41'48"E	20.05'
L30	S00°46'08"E	149.67'	L77	N89°13'52"E	110.44'
L31	N89°13'52"E	72.79'	L78	N89°13'52"E	15.69'
L32	N89°13'52"E	212.98'	L79	N89°13'46"E	51.29'
L33	N89°13'56"E	183.84'	L80	S00°46'08"E	12.03'
L34	S00°46'08"E	156.39'	L81	S00°46'08"E	11.82'
L35	S00°46'08"E	156.45'	L82	N89°13'52"E	83.87'
L36	S89°13'52"W	164.62'	L83	N89°13'52"E	213.98'
L37	S89°13'52"W	184.29'	L84	N89°13'52"E	120.10'
L38	S89°13'53"W	240.67'			
L39	N00°46'08"W	155.31'			
L40	N00°46'08"W	161.67'			
L41	N89°13'52"E	578.00'			
L42	S00°46'08"E	445.33'			
L43	S89°13'52"W	581.00'			
L44	N00°46'08"W	440.33'			
L45	N89°01'49"E	119.21'			

CURVE TABLE					
NO.	DELTA	RADIUS	LENGTH	CHORD BEARING	CHORD
C1	9°42'52"	50.00'	8.48'	S85°54'42"E	8.47'
C2	18°22'05"	100.00'	32.06'	N80°02'50"E	31.92'
C3	18°22'05"	100.00'	32.06'	S80°02'50"W	31.92'
C4	14°32'24"	100.00'	25.70'	N82°55'35"W	25.63'
C5	15°12'15"	100.00'	26.54'	S83°10'00"E	26.46'
C6	89°54'59"	44.00'	69.09'	N45°43'37"W	62.18'
C7	69°38'44"	25.00'	30.39'	S35°35'29"E	28.58'
C8	69°38'44"	44.00'	53.48'	N35°35'30"W	50.25'
C9	62°34'50"	45.00'	49.15'	N39°54'12"E	46.74'
C10	71°57'52"	10.00'	12.56'	S35°12'41"W	11.75'
C11	9°44'14"	50.00'	8.50'	S84°21'45"W	8.49'
C12	90°00'00"	20.00'	31.42'	N45°46'08"W	28.28'
C13	62°11'07"	20.00'	21.71'	N30°19'28"E	20.66'
C14	62°11'07"	45.00'	48.84'	S30°19'28"W	46.48'
C15	90°14'04"	25.00'	39.37'	N44°20'54"E	35.43'
C16	89°45'56"	20.00'	31.33'	N45°39'06"W	28.23'
C17	90°00'00"	20.00'	31.42'	N44°13'52"E	28.28'
C18	89°59'55"	25.00'	39.27'	N45°46'10"W	35.35'
C19	90°00'00"	25.00'	39.27'	S44°13'50"W	35.36'
C20	90°00'00"	20.00'	31.42'	S44°13'52"W	28.28'
C21	18°22'05"	124.00'	39.75'	N80°02'50"E	39.58'
C22	18°22'05"	76.00'	24.36'	S80°02'50"W	24.26'
C23	14°39'10"	76.00'	19.44'	N82°53'28"W	19.38'
C24	15°11'44"	124.00'	32.89'	S83°09'45"E	32.79'
C25	89°54'59"	20.00'	31.39'	N45°43'37"W	28.26'
C26	69°38'45"	49.00'	59.56'	S35°35'30"E	55.96'
C27	69°38'45"	20.00'	24.31'	N35°35'29"W	22.84'
C28	90°00'00"	20.00'	31.42'	N44°13'52"E	28.28'
C29	74°52'21"	29.13'	38.07'	N89°13'52"E	35.42'
C30	75°02'24"	29.01'	37.99'	N89°13'52"E	35.33'
C31	89°59'59"	20.00'	31.42'	S45°46'07"E	28.28'
C32	62°11'07"	20.00'	21.71'	S30°19'28"W	20.66'
C33	62°11'07"	45.00'	48.84'	N30°19'28"E	46.48'
C34	90°00'01"	25.00'	39.27'	S44°13'52"W	35.36'
C35	90°00'00"	20.00'	31.42'	N45°46'08"W	28.28'
C36	90°00'00"	20.00'	31.42'	N44°13'52"E	28.28'
C37	89°59'59"	20.00'	31.42'	S45°46'08"E	28.28'
C38	44°18'55"	20.00'	15.47'	S22°55'20"E	15.09'
C42	9°42'52"	50.00'	8.48'	S85°54'42"E	8.47'
C43	90°00'00"	20.00'	31.42'	N44°13'52"E	28.28'

OWNER'S CERTIFICATE  
STATE OF TEXAS \$  
COUNTY OF COLLIN \$

WHEREAS, WAL-MART REAL ESTATE BUSINESS TRUST, is the owner of a tract of land situated in the William Snider Survey, Abstract No. 821, City of Lucas, Collin County, Texas and being all of a tract of land described in Special Warranty Deed to Wal-Mart Real Estate Business Trust recorded in Instrument No. 2011111001226530, Land Records of Collin County, Texas and all of a tract of land described in Special Warranty Deed to Wal-Mart Real Estate Business Trust recorded in Instrument No. 2011111001226540, Land Records of Collin County, Texas and being more particularly described as follows:

BEGINNING at a 5/8" iron rod with aluminum cap found at the northernmost end of a right-of-way corner clip at the intersection of the east right-of-way line of F.M. 2551 (a variable width right-of-way) and the north right-of-way line of West Lucas Road (a variable width right-of-way);

THENCE with said east right-of-way line, North 00°46'08" West, a distance of 1266.29 feet to a 5/8" iron rod with aluminum cap found at the southeast corner of a tract of land described in Special Warranty Deed to SC Lucas Road, LP, recorded in Instrument No. 20070604000748030, Land Records of Collin County, Texas;

THENCE departing said east right-of-way line and with the south line of said SC Lucas Road, LP, tract, North 89°44'30" East, a distance of 955.59 feet to a point for corner;

THENCE with the west line of said Ahmadi tract, South 00°42'39" East, a distance of 548.98 feet to a 5/8" iron rod with "KHA" cap set at the southwest corner of said Ahmadi tract and the northwest corner of a tract of land described in deed to Billy James Stratton recorded in Volume 770, Page 183, Deed Records of Collin County, Texas;

THENCE with the west line of said Stratton tract, South 01°08'43" East, a distance of 396.40 feet to a 3/8" iron rod found at the southwest corner of said Stratton tract and the northwest corner of a tract of land described in deed to Patti Stratton Frie recorded in Volume 1745, Page 556, Land Records of Collin County, Texas;

THENCE with the west line of said Frie tract, South 01°01'20" East, a distance of 347.33 feet to a 5/8" iron rod with aluminum cap found at the southeast corner of a tract of land described in Special Warranty Deed to Wal-Mart Real Estate Business Trust, recorded in Instrument No. 2011111001226530, Land Records of Collin County, Texas;

THENCE with said north right-of-way line, South 89°33'32" West, a distance of 926.37 feet to a 5/8" iron rod with aluminum cap found at the southernmost end of said right-of-way corner clip;

THENCE with said north right-of-way line, South 89°33'32" West, a distance of 45.55 feet to the POINT OF BEGINNING and containing 28.448 acres or 1,239,197 square feet of land.

The bearing system is based on a bearing of North 89°44'30" East, for the north line of tract of land described in Special Warranty Deed to Wal-Mart Real Estate Business Trust, recorded in Instrument No. 2011111001226530, Land Records of Collin County, Texas.

NOW THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

That WAL-MART REAL ESTATE BUSINESS TRUST, acting by and through its duly authorized agent, does hereby bind itself and its heirs, assigns and successors of title this plat designating the hereinabove described property as WAL-MART LUCAS ADDITION, an addition to the City of Lucas, and do hereby dedicate to the public use forever the streets, alleys, and right-of-way easements shown thereon, and do hereby reserve the easement strips shown on this plat for the mutual use and accommodation of garbage collection agencies and all public utilities desiring to use or using same. Any public utility shall have the right to remove and keep removed all or part of any buildings, fences, trees, shrubs, or other improvements or growths that in any way endanger or interfere with the construction, maintenance or efficiency of its respective systems on any of these easement strips, and any public utility shall at all times have the right of ingress and egress to and from and upon the said easement strips for the purpose of constructing, reconstructing, inspecting, patrolling, without the necessity at any time of procuring the permission of anyone. Additionally, I certify that WAL-MART REAL ESTATE BUSINESS TRUST is the sole owner of the dedicated property and that no other's interest are attached to this property unless otherwise indicated on the required Mortgage Holder Certification that is included on this plat. This plat approved subject to all platting ordinances, rules, regulations and resolutions of the City of Lucas, Texas.

Witness my hand at LUCAS, Texas, this 11th day of November, 2012.

WAL-MART REAL ESTATE BUSINESS TRUST

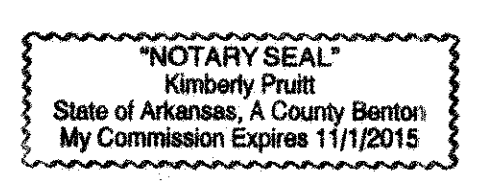
BY:   
Name: MICHAEL ALLEN  
Title: PRESIDENT OF PARKER OESLIN

STATE OF ARKANSAS \$  
COUNTY OF BENTON \$

Before me, the undersigned authority, a Notary Public in the State of Arkansas, on this day personally appeared Michael Allen, known to me to be the persons whose names are subscribed to the foregoing instrument and acknowledged to me that they each executed the same for the purpose and considerations therein expressed.

Given under my hand and seal of office, this 11th day of November, 2012.

Notary Public in and for the State of Arkansas



SURVEYOR'S CERTIFICATION  
KNOW ALL MEN BY THESE PRESENTS:

That I, Dana Brown, do hereby certify, that I prepared this plat from an actual on the ground survey of the land as described and that the corner monuments shown thereon were properly placed under my personal supervision in accordance with the Platting Rules and Regulations of the City of Lucas Planning and Zoning Commission.

Dana Brown  
Registered Professional Land Surveyor No. 5336  
Kimley-Horn and Associates, Inc.  
12750 Merit Drive, Suite 1000  
Dallas, Texas 75251-1516  
Ph. 972-770-1300  
dana.brown@kimley-horn.com

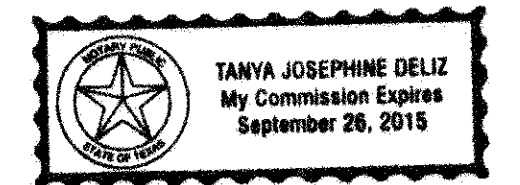


STATE OF TEXAS \$  
COUNTY OF DALLAS \$

Before me, the undersigned authority, a Notary Public in and for said County and State, on this day personally appeared Dana Brown, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same for the purpose and considerations therein expressed.

Given under my hand and seal of office, this 13th day of November, 2012.

Notary Public in and for the State of Texas

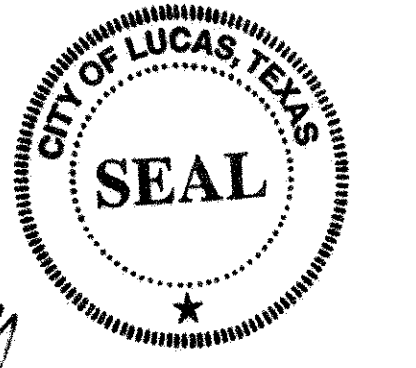


CITY APPROVAL CERTIFICATE

This plat is hereby approved by the Planning and Zoning Commission of the City of Lucas, Texas

Chairman, Planning and Zoning Commission Date

ATTEST:  
  
Signature Date  
  
Name & Title



The Director of Public Works of the City of Lucas, Texas hereby certifies that to the best of his/her knowledge or belief, this subdivision plat conforms to all requirements of the Code of Ordinances and with engineering construction standards and processes adopted by the City of Lucas, Texas as to which his/her approval is required.

Director of Public Works Date

The Director of Planning and Community Development of the City of Lucas, Texas hereby certifies that to the best of his/her knowledge or belief, this subdivision plat conforms to all requirements of the Code of Ordinances, or as may have been amended or modified, as allowed, by the Planning and Zoning Commission as to which his/her approval is required.

Director of Planning and Community Development Date

Filed and Recorded  
Official Public Records  
Stacy Kemp, County Clerk  
Collin County, TEXAS  
12/06/2012 01:52:35 PM  
\$21.00 FEE  
20121006010003070



FINAL PLAT  
WAL-MART LUCAS ADDITION  
LOT 1, LOT 2, LOT 3 & LOT 4, BLOCK A  
BEING 28.448 ACRES OUT OF THE  
WILLIAM SNIDER SURVEY  
ABSTRACT NO. 821  
CITY OF LUCAS, COLLIN COUNTY, TEXAS

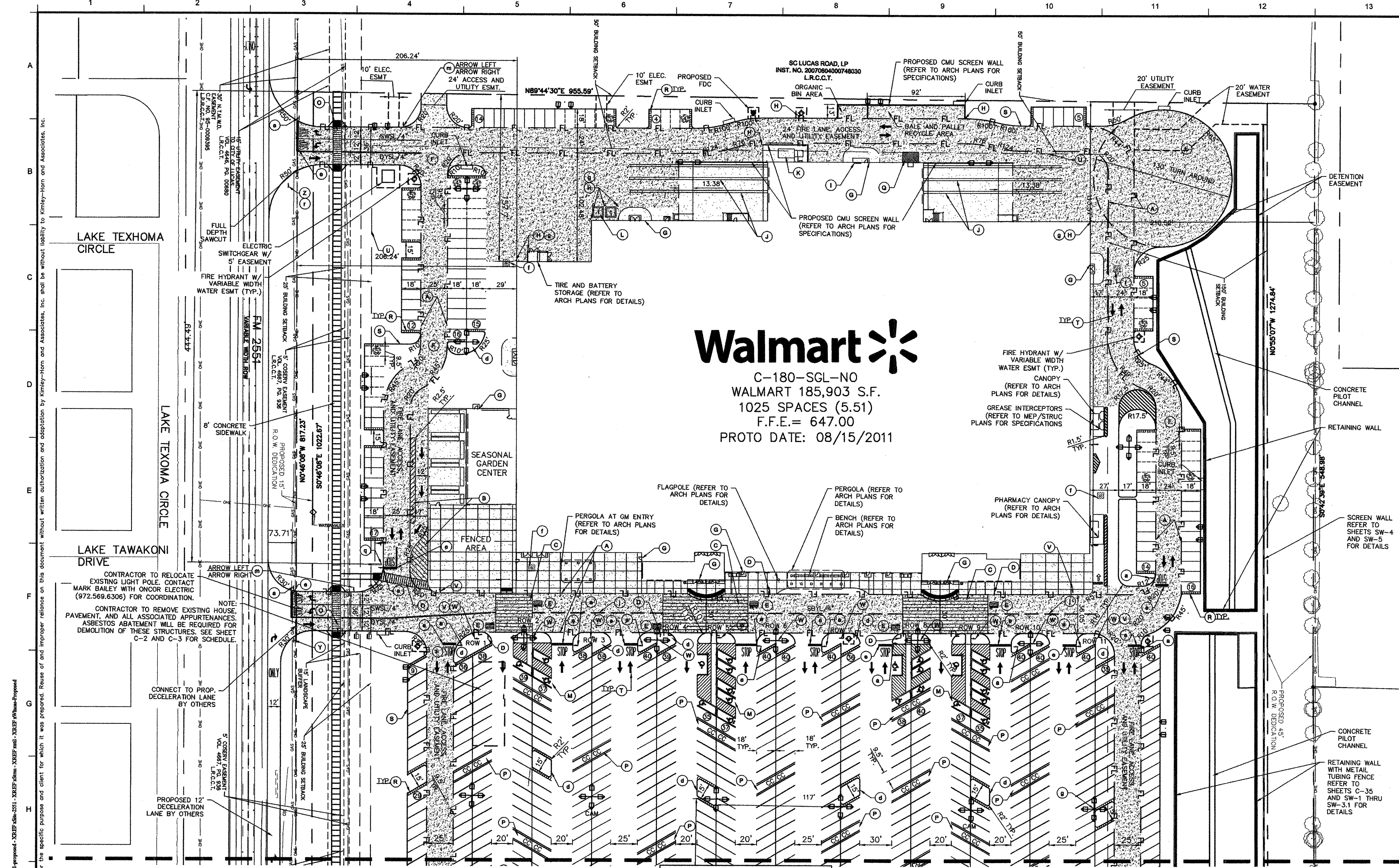
Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
1" = 100'	SRD	DAB	NOV. 2012	063362198	1 OF 1

ENGINEER:  
KIMLEY-HORN AND ASSOC., INC.  
5750 GENESIS COURT, SUITE 200  
FRISCO, TEXAS 75034  
CONTACT: Lauren Nuffer  
lauren.nuffer@kimley-horn.com

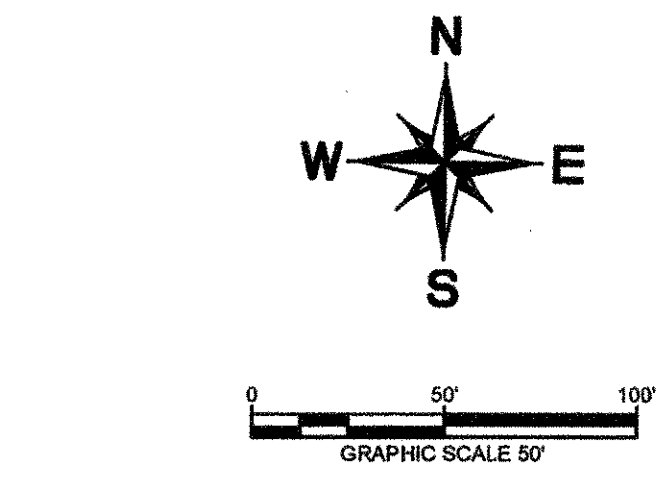
SURVEYOR:  
KIMLEY-HORN AND ASSOC., INC.  
12750 MERIT DRIVE, SUITE 1000 DALLAS, TEXAS 75251  
CONTACT: Dana Brown  
dana.brown@kimley-horn.com

OWNER:  
Wal-Mart Real Estate Business Trust  
2001 SE 10th Street  
Bentonville, Arkansas 72716-0550  
Ph. No.: (479) 273-4000





**Walmart**  
C-180-SGL-NO  
WALMART 185,903 S.F.  
1025 SPACES (5.51)  
F.F.E.= 647.00  
PROTO DATE: 08/15/2011



- LEGEND**
- PROPERTY LINE
  - BUILDING SETBACK LINE
  - FIRE LANE
  - SCREEN WALL
  - SIDEWALK
  - CART CORRAL
  - PARKING SPACES
  - ASSOCIATE PARKING

- STANDARD DUTY CONCRETE PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- ASPHALT PAVEMENT
- ARCHITECTURAL APRON SEE ARCH. PLANS

**LIGHT LEGEND**

KEY	ATTRIBUTES
[Symbol]	DESCRIPTION: 2-EAMMSM4F574CBLCKF (LABEL: D1F12.25) 22 FOOT POLE, 3 FOOT BASE, ARRANGEMENT: BACK-BACK
[Symbol]	DESCRIPTION: 1-EAMMSM4L574CBLCKF & 1-EAMMSM4R574CBLCKF (LABEL: D2F12.25) 22 FOOT POLE, 3 FOOT BASE, ARRANGEMENT: ROTATED OPTICS
[Symbol]	DESCRIPTION: 1-EAMMSM4L574CBLCKF & 1-EAMMSM4R574CBLCKF (LABEL: D2F8.25) 22 FOOT POLE, 3 FOOT BASE, ARRANGEMENT: ROTATED OPTICS
[Symbol]	DESCRIPTION: 1-EAMMSF3L574CBLCKF & 1-EAMMSF3R574CBLCKF (LABEL: D2W6.25) 22 FOOT POLE, 3 FOOT BASE, ARRANGEMENT: ROTATED OPTICS
[Symbol]	DESCRIPTION: 4-EAMMSM4F574CBLCKF (LABEL: QF10.25) 22 FOOT POLE, 3 FOOT BASE, ARRANGEMENT: 4 @ 90 DEGREES
[Symbol]	DESCRIPTION: 4-EAMMSM4F574CBLCKF (LABEL: QF10.25) 22 FOOT POLE, 3 FOOT BASE, ARRANGEMENT: 4 @ 90 DEGREES
[Symbol]	DESCRIPTION: 1-EAMMSF3L574CBLCKF & 1-EAMMSF3R574CBLCKF WITH 4-ELSEAMWS3BLCK (LABEL: QF10.25) 22 FOOT POLE, 3 FOOT BASE, ARRANGEMENT: 4 @ 90 DEGREES

NOTE: REFER TO ARCH. PLANS FOR SITE LIGHTING ELECTRICAL PLAN.

- PAINT STRIPING LEGEND**
- SWSL/4" - SINGLE WHITE SOLID LINE/ 4" WIDE
  - DYSL/4" - DOUBLE YELLOW SOLID LINE/ 4" WIDE
  - SBYL/4" - SOLID BROKEN YELLOW LINE/ 4" WIDE

- BENCHMARK**
- BENCHMARK NO. 1  
"X" CUT FOUND ON THE WESTERLY CURB RETURN AT THE SOUTHWEST CORNER OF LAKE WHITNEY DRIVE AND LAKE TEXHOMA DRIVE.  
ELEV. = 647.32
- BENCHMARK NO. 2  
"X" CUT FOUND ON TOP OF A CONCRETE CURB LOCATED APPROXIMATELY 50 FEET WEST OF THE WEST RIGHT-OF-WAY LINE OF DILLEHAY DRIVE.  
ELEV. = 647.27
- BENCHMARK NO. 3  
RAILROAD SPIKE SET ON THE WEST SIDE OF A TRAFFIC SIGNAL POLE LOCATED ON THE NORTHEAST CORNER OF THE INTERSECTION OF W. LUCAS ROAD AND FM 2551.  
ELEV. = 644.00
- BENCHMARK NO. 4  
"X" CUT SET ON THE NORTHEAST CORNER OF A CONCRETE HEADWALL LOCATED ON THE EAST SIDE OF FM 2551 APPROXIMATELY 1600 FEET NORTH OF W. LUCAS ROAD.  
ELEV. = 645.52

**PROPOSED SITE ANALYSIS**

BUILDING	185,897 S.F.
WALMART (ASSOCIATE AND CUSTOMER)	966 SPACES
ACCESSIBLE	23 SPACES
CART CORRALS*	18 CORRALS /36 SPACES
TOTAL PARKING	1025 SPACES
* RATIO	5.51/1,000 S.F.

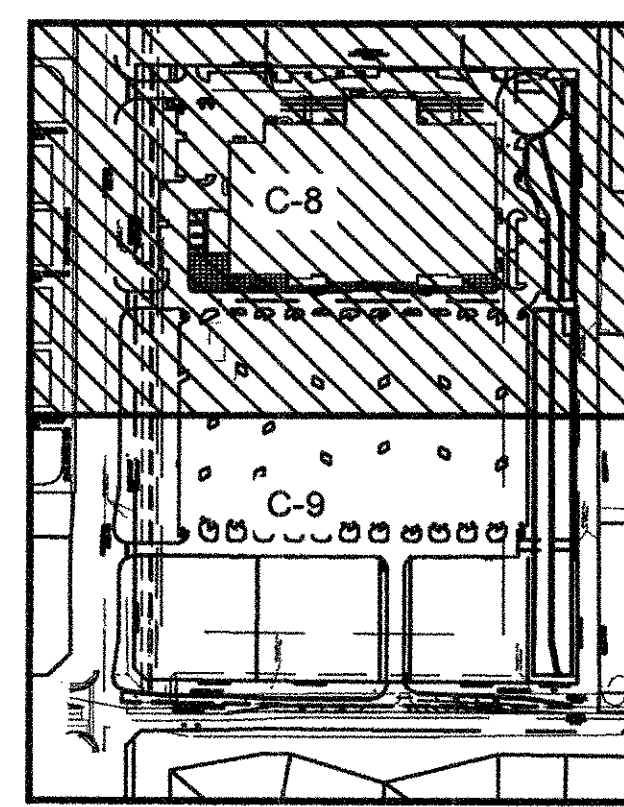
\* PARKING RATIO DOES INCLUDE CART CORRAL SPACES.  
CITY OF LUCAS MEDIAN AGE IS 34.5.

**ALERT TO CONTRACTOR:**  
ALL WORK GENERAL CONTRACTOR WORK TO BE COMPLETED (EARTHWORK, FINAL UTILITIES, AND FINAL GRADING) BY THE MILESTONE DATE IN PROJECT DOCUMENTS. OUTLOT AREA TO BE KEPT FREE OF JOB TRAILERS AND STORAGE AFTER THE CONTRACT MILESTONE DATE FOR THE OUTLOT. WM GENERAL CONTRACTOR TO PROVIDE CLEAR ACCESS FOR OUTLOT CONTRACTOR TO THE SPECIFIC PARCEL AT ALL TIMES AFTER MILESTONE DATE. PURCHASER OF OUTLOT TO PROVIDE PERMIT DOCUMENTS AND SWPPP REQUIRED BY STATE/LOCAL REQUIREMENTS FOR SPECIFIC OUTLOT.

**STOP!**  
**CALL BEFORE YOU DIG**  
DIG TESS  
1-800-DIG-TESS  
(@ least 72 hours prior to digging)

**CAUTION!**  
CONTRACTOR IS TO VERIFY PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

"RECORD DRAWING"  
THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY EMJ CORP TO KIMLEY-HORN AND ASSOCIATES, INC. AND CONSIDERED TO BE "AS-BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE.  
DATE: 02/12/2013 BY: LAUREN NUFFER, P.E.



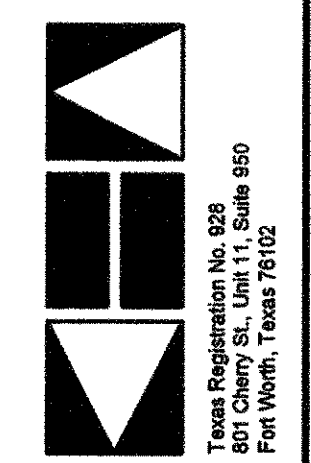
**SITE LEGEND**

- (A) 6" WIDE FIRE LANE STRIPING PAINTED TRAFFIC RED W/ "NO PARKING FIRE LANE" PAINTED WITH 4" HIGH WHITE LETTERING AT 25' O.C. SEE DETAIL SHEET.
- (B) AREA STRIPED AT SYS/4" AT 45° @ 2'-0" O.C.
- (C) PEDESTRIAN CROSSWALK WITH 6" WIDE PAINTED WHITE STRIPING PARALLEL TO DIRECTION OF TRAFFIC AT 2'-0" O.C. AND (1/4)" WHITE STRIPE PERPENDICULAR ON BOTH ENDS UNLESS NOTED OTHERWISE. SEE SITE PLAN FOR DIMENSIONS.
- (D) PEDESTRIAN CROSSING SIGN TYPICAL AT PEDESTRIAN CROSSWALKS AS NOTED ON PLANS.
- (E) "YIELD" PAINTED WHITE ON PAVEMENT TYPICAL. SEE DETAIL SHEET.
- (F) CONCRETE JOINTING AND FILLERS TO BE COMPLETED PER DETAIL (TYPICAL OF ALL EXTERIOR CONCRETE EXCLUSIVE OF ARCHITECTURAL CONCRETE).
- (G) EXIT PORCH. SEE ARCHITECTURAL PLANS FOR EXACT SIZE, LOCATION FOR STOODS, STAIRS AND/OR RAMPS THAT MAY BE REQUIRED. RAMP PAVEMENT FLUSH WITH THE TOP OF STOOD.
- (H) 6" DIA. PIPE BOLLARD TYPICAL UNLESS NOTED OTHERWISE. SEE DETAIL SHEET.
- (I) AT GRADE OVERHEAD DOOR LOCATION. SEE ARCHITECTURAL PLANS FOR EXACT SIZE AND LOCATION FOR COORDINATION WITH CIVIL PLANS.
- (J) 4" WIDE x 130' LONG YELLOW PAINTED TRUCK ALIGNMENT STRIPES TYPICAL.
- (K) 16" X 42" CONCRETE COMPACTOR PAD AND 12" X 42" HEAVY DUTY PAD (ORIENT FOR TRUCK LOADING). REFER TO ARCHITECTURAL PLAN FOR EXACT LOCATION AND SLOPE.
- (L) CONCRETE TRANSFORMER PAD. CONTRACTOR TO COORDINATE WITH LOCAL POWER COMPANY FOR DETAILS.
- (M) ACCESSIBLE PARKING SPACE TYPICAL. SEE DETAIL SHEET FOR ACCESSIBLE PARKING SPACE SIZE, SIGN AND SYMBOL ("VAN"-INDICATES VAN ACCESSIBLE SPACE).
- (N) NOT USED.
- (O) 8'-0" WIDE PEDESTRIAN CROSSWALK. EDGE LINES PAINTED SWSL/8" WITH INSIDE STRIPING PAINTED SWSL/8" AT 2'-0" O.C. PERPENDICULAR TO EDGE LINES.
- (P) CART CORRAL TYPICAL. SEE DETAIL SHEET FOR CART CORRAL DETAIL.
- (Q) 10' X 15' STRIPED AREA PAINTED SYS/4" AT 45° @ 2'-0" O.C. AT JIB CRANE LOCATION. SEE ARCH. PLANS.
- (R) 2'-0" LOADING ZONE AT ALL CURBED PARKING SPACES. 4" PAINTED YELLOW STRIPING AT 2'-0" O.C. PERPENDICULAR TO PARKING SPACE. SEE DETAIL SHEET.
- (S) 6" TYPE B INTEGRAL CURB TYPICAL. SEE DETAIL SHEET.
- (T) ARROW PAVEMENT MARKINGS TYPICAL. SEE PLAN FOR TYPE. SEE DETAIL SHEET.
- (U) BUILDING SETBACK LINE PER ZONING ORDINANCE.
- (V) "NO PARKING FIRE LANE" SIGN. SEE PLAN FOR LOCATION. SEE DETAIL SHEET.
- (W) AISLE INDICATOR SIGNS TYPICAL. SEE DETAIL SHEET.
- (X) NOT USED.
- (Y) "NO TRUCKS" SIGN. SEE DETAIL SHEET.
- (Z) "TRUCK DRIVE" SIGN. SEE PLAN FOR LOCATION.
- (a) "STOP" SIGN. SEE DETAIL SHEET.
- (b) NOT USED.
- (c) NOT USED.
- (d) INTERIOR LANDSCAPE ISLAND.
- (e) STOP BAR. SEE DETAIL SHEET.
- (f) 6"x6" PAINTED STRIPED AREA CENTERED ON SIPHONIC BREAK STORM MANHOLE. 4" PAINTED SOLID TRAFFIC YELLOW STRIPES 18" O.C. @ 45°. SEE DETAIL SHEET.
- (g) ISOLATION JOINT TYPICAL AT FIXED STRUCTURES (BUILDINGS, RETAINING WALLS, DOCK WALLS, DROP INLETS, MANHOLES, LIGHT POLE BASES AND BOLLARDS). SEE DETAIL SHEET.
- (h) NOT USED.
- (i) NOT USED.
- (j) 6' LONG STRIPE WITH 18" GAPS SBYL/4" - TYPICAL.
- (k) OPTIONAL MOVEMENT LANE CONTROL SIGN. SEE DIRECTION INDICATED AT SYMBOL. SEE DETAIL SHEET.
- (m) ADVANCED INTERSECTION LANE CONTROL SIGN. SEE DIRECTION INDICATED AT SYMBOL. SEE DETAIL SHEET.
- (n) "DELIVERY TRAFFIC ONLY" SIGN. SEE DETAIL SHEET.
- (o) NOT USED.
- (p) NOT USED.
- (q) MONUMENT SIGN.
- (r) "TRUCK ENTRANCE" SIGN. SEE DETAIL SHEET.
- (s) "TRUCK EXIT" SIGN. SEE DETAIL SHEET.

**SITE NOTES**

- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
- CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SLOPE PAVING, SIDEWALKS, EXIT PORCHES, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
- ALL DISTURBED AREAS ARE TO RECEIVE FOUR INCHES OF TOPSOIL, SEED, MULCH AND WATER UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED. SEE 02900 SPECIFICATION.
- ALL CURBED RADII ARE TO BE 10' AND 2' UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE ABANDONED, REMOVED OR RELOCATED AS NECESSARY. ALL COST SHALL BE INCLUDED IN BASE BID.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES REQUIREMENTS AND PROJECT SITE WORK SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
- A BLUE REFLECTIVE MARKER IS REQUIRED TO BE PLACED IN THE ROAD, DRIVE AISLE, OR PARKING LOT ADJACENT TO FIRE HYDRANTS PER THE CITY OF LUCAS.
- SITE BOUNDARY, TOPOGRAPHY, UTILITY AND ROAD INFORMATION TAKEN FROM A SURVEY BY A LAND SURVEYOR.
- TOTAL LAND AREA IS 22.8666 ACRES.
- NO WETLANDS WERE PRESENT ON THIS SITE AS INDICATED BY THE LETTER FROM THE U.S. ARMY CORP OF ENGINEERS LETTER DATE 08/22/2011. (REFERENCE)
- THE SITE WORK FOR THIS PROJECT SHALL MEET OR EXCEED THE SITE SPECIFIC SPECIFICATIONS.
- REFER TO ARCH. PLANS FOR SITE LIGHTING ELECTRICAL PLAN.

**Kimley-Horn and Associates, Inc.**  
Tel. No. (817) 335-0511  
© 2011  
Fax No. (817) 335-0500

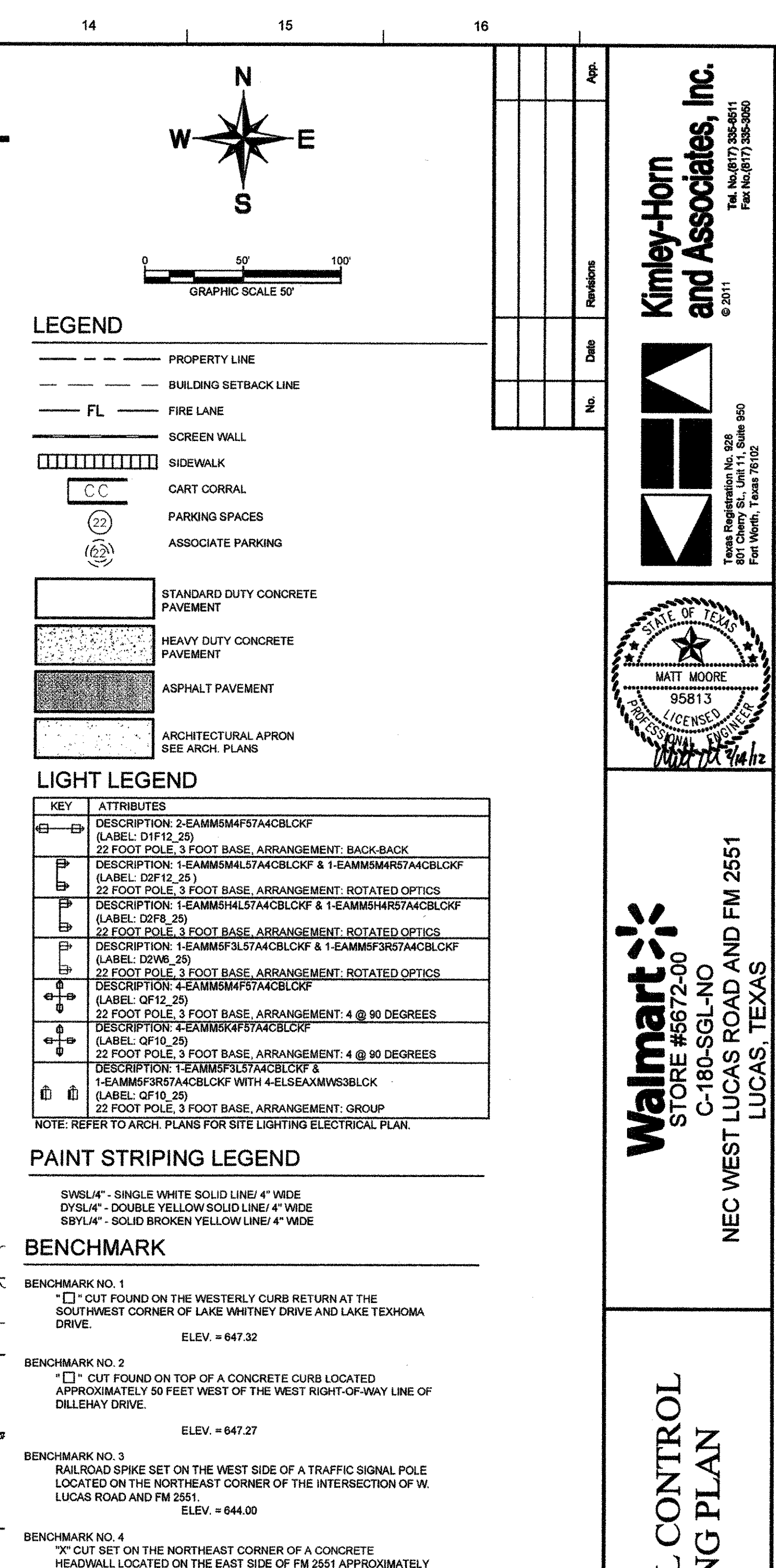


**Walmart**  
STORE #5672-00  
C-180-SGL-NO  
NEC WEST LUCAS ROAD AND FM 2551  
LUCAS, TEXAS

**DIMENSIONAL CONTROL AND PAVING PLAN**

Scale:	AS SHOWN
Designed by:	CLC
Drawn by:	CLC
Checked by:	MM
Date:	February 2012
Project No.:	000202198
SHEET	C-8





1/26/2013 3:58 PM

<b>State:</b>	AS SHOWN
<b>Designed by:</b>	CLC
<b>Drawn by:</b>	CLC
<b>Checked by:</b>	MM
<b>Date:</b>	February 2012
<b>Project No.:</b>	003362146

**SHEET**

**C-9**

DIMENSIONAL CONTROL  
AND PAVING PLAN

Walmart

STORE #5672-00  
C-180-SGL-NO  
NEC WEST LUCAS ROAD AND FM 2551  
LUCAS, TEXAS

Kimley-Horn  
and Associates, Inc.

© 2011  
Tex. No.(817) 335-8611  
Fax No.(817) 335-3050

Texas Registration No. 928  
801 Cherry St., Unit 11, Suite 950  
Fort Worth, Texas 76102







**CAUTION!!**  
**CONTRACTOR IS TO VERIFY  
PRESENCE AND EXACT  
LOCATION OF ALL UTILITIES  
PRIOR TO CONSTRUCTION.**

Diagram illustrating a 20' wide lane with various markings and dimensions:

- 8' WHITE RIGHT TURN ARROW TYP.
- 8' WHITE "ONLY" LETTERING TYP.
- EX. LANE STRIPE
- 32' (four segments)
- 8" WIDE SOLID WHITE STRIPING W/ RAISED PAVEMENT MARKINGS @ 20' CENTERS

1. ALL DIMENSIONS ARE TO FACE OF CURB, UNLESS OTHERWISE NOTED.
2. ALL WORK AND MATERIALS SHALL COMPLY WITH CITY OF LUCAS SPECIFICATIONS AS WELL AS O.S.H.A. STANDARDS.
3. CONTRACTOR TO VERIFY T.A.S. COMPLIANCE, FOR ANY QUESTIONS CONTACT CIVIL ENGINEER IMMEDIATELY.
4. ALL FIRE LINES SHALL BE CONSTRUCTED PER CITY OF LUCAS SPECIFICATIONS. REFER TO DETAILS FOR FIRELANE STRIPING.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES REQUIREMENTS AND PROJECT SITE WORK SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN THE BID.



1. FOR PREPARATION OF PAVEMENT SUBGRADE, FILL PLACED AT THE FINISHED SUBGRADE ELEVATION IN FILL AREAS AND AT THE SURFACE IN ALL AREAS TO BE PAVED SHALL BE COMPACTED TO AT LEAST 98% OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY AT -1 TO +3% ABOVE OPTIMUM MOISTURE CONTENT (ASTM D 698). FILL PLACED BELOW THIS LEVEL SHALL BE COMPACTED TO AT LEAST 95% OF THE MATERIALS MAXIMUM DRY DENSITY.
2. AFTER PROOFROLLING WITH A LOADED TANDEM AXLE DUMP TRUCK AND REPAIRING DEEP SUBGRADE DEFICIENCIES, THE ENTIRE SUBGRADE SHALL BE SCARRIED TO A DEPTH OF 6 INCHES AND UNIFORMLY COMPACTED TO AT LEAST 98% OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY AT -1 TO +3% ABOVE OPTIMUM MOISTURE CONTENT. MAINTAIN DENSITY AND MOISTURE CONTENT LEVELS OF SUBGRADE UNTIL IMMEDIATELY PRIOR TO PLACEMENT OF THE CRUSHED BASE COURSE.
3. AFTER FINAL SUBGRADE ELEVATION IS ACHIEVED, THE EXPOSED SURFACE OF THE PAVEMENT SHALL BE SCARRIED TO A DEPTH OF 6 INCHES AND MIXED WITH AT LEAST 8% HYDRATED LIME IN CONFORMANCE WITH COMBINATION 1 OF THE SPECIFICATIONS. THE MIXED SURFACE SHALL BE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY AT 0 TO +4% ABOVE OPTIMUM MOISTURE CONTENT.
4. THE NOTED ASPHALTIC MIXTURES SHOWN IN THE ASPHALT PAVING DETAIL SHALL BE PRODUCED IN ACCORDANCE WITH THE TxDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.



**Walmart**  
STORE #5672-00  
C-180-SGL-NO  
11000 WEST LUCAS ROAD AND FM 2551  
LUCAS, TEXAS

**WEST LUCAS ROAD  
IMPROVEMENTS PLAN**

SHEET  
C-10

**Kimley-Horn  
and Associates, Inc.**  
Tel. No. (817) 335-5511  
Fax No. (817) 335-3050  
© 2011

**TEXAS REGISTRATION NO. 928**  
401 Cherry St., Unit 11, Suite 950  
Fort Worth, Texas 76102

STATE OF TEXAS  
MATT MOORE  
95813  
LICENSED  
PROFESSIONAL ENGINEER  
10/1/12

**Walmart**  
STORE #5672-00  
C-180-SGL-NO  
11000 WEST LUCAS ROAD AND FM 2551  
LUCAS, TEXAS

**WEST LUCAS ROAD  
IMPROVEMENTS PLAN**

Scale:	AS SHOWN
Designed by:	CLC
Drawn by:	CLC
Checked by:	MAM
Date:	February 2012
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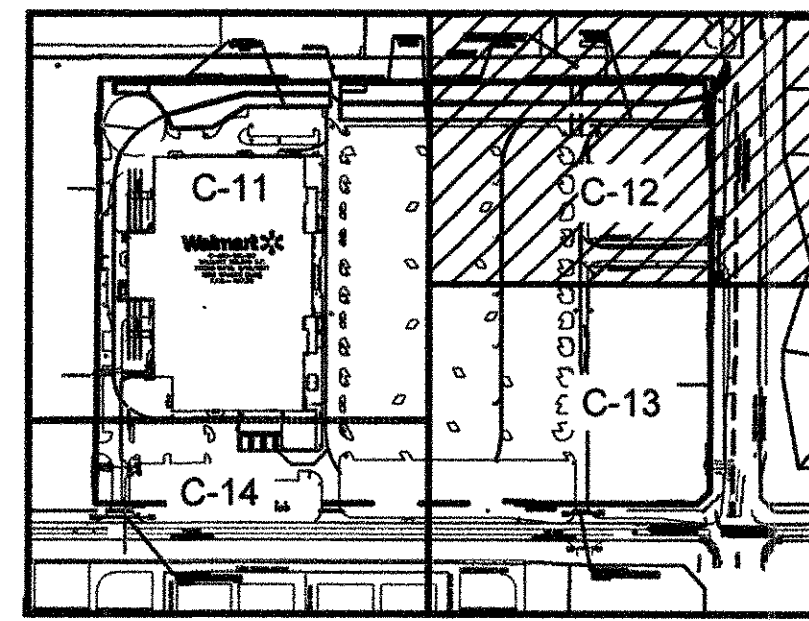
SHEET  
C-10







"RECORD DRAWING"  
THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES  
DURING THE CONSTRUCTION PROCESS REPORTED BY EMJ  
CORP TO KIMLEY-HORN AND ASSOCIATES, INC. AND  
CONSIDERED TO BE SIGNIFICANT. THIS DRAWING IS NOT  
GUARANTEED TO BE "AS-BUILT" BUT IS BASED ON THE  
INFORMATION MADE AVAILABLE.  
DATE: 02/12/2013 BY: LAUREN NUFFER, P.E.



KEY MAP  
N.T.S.

FOUNDATION SUBSURFACE PREPARATION  
WALMART SUPERCENTER STORE # 5672-06  
NEC F.M.2251 AND WEST LUCAS ROAD  
LUCAS, TEXAS  
ALPHA REPORT NO. G101323  
AUGUST 4, 2011

UNLESS SPECIFICALLY INDICATED OTHERWISE IN THE DRAWINGS AND/OR SPECIFICATIONS, THE LIMITS OF THIS SUBSURFACE PREPARATION ARE CONSIDERED TO BE THAT PORTION OF THE SITE DIRECTLY BENEATH AND 5 FEET BEYOND THE BUILDING AND APPURTENANCES.

APPURTENANCES ARE THOSE ITEMS ATTACHED TO THE BUILDING PROPER (REFER TO DRAWING SHEET SPI), TYPICALLY INCLUDING, BUT NOT LIMITED TO, THE BUILDING SIDEWALKS, EXTERIOR GARDEN CENTER, PORCHES, RAMPS, STOOPS, TRUCK WELLS/DOCKS, COMPACTOR PAD, MONUMENT SIGN, PLANTERS, BALE AND PALLET RECYCLING AREA, ETC. THE BASE WHERE REQUIRED, DOES NOT EXTEND BEYOND THE LIMITS OF THE ACTUAL BUILDING AND THE APPURTENANCES.

ESTABLISH THE FINAL SUBGRADE ELEVATION TO ALLOW FOR THE CONCRETE SLAB AND BASE. REFERENCE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR REQUIRED SLAB THICKNESS. THE 4" THICKNESS BASE MATERIAL SHALL CONFORM TO TEXAS DOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, SECTION 247 FLEXIBLE BASE, GRADE 1 WITH MINIMUM 88% PASSING 4.75" SIEVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ACCURATE MEASUREMENTS FOR SPACING AND FILL DEPTHS REQUIRED, ANY PROPOSED EQUIVALENT ALTERNATIVE BASE MATERIAL MUST BE SUBMITTED FOR APPROVAL WITHIN 30 DAYS AFTER AWARD OF CONTRACT. ANY EQUIVALENT ALTERNATIVE SHALL ONLY BE USED IF APPROVED IN WRITING BY THE CEC AND AOR.

THE BASE AND SLAB SHALL BE SUPPORTED ON AN ENGINEERED PAD CONSISTING OF A MINIMUM OF 14" FEET OF SELECT, NON-EXPANSIVE FILL MATERIAL OVER MOISTURE CONDITIONED ON-SITE SOIL TO THE TOP OF SHALY LIMESTONE. THE THICKNESS OF SELECT, NON-EXPANSIVE FILL SHALL BE 2 FEET IN AREAS THAT DO NOT INCLUDE THE BASE (UNDER APPURTENANCES AND OUTSIDE THE BUILDING PERIMETER). SELECT, NON-EXPANSIVE FILL MATERIAL SHALL NOT EXTEND BEYOND 5 FEET OF THE BUILDING PERIMETER AND/OR APPURTENANCES.

THE SELECT FILM SHALL BE NON-EXPANSIVE MATERIAL WITH A LIQUID LIMIT LESS THAN 5% AND A PLASTICITY INDEX BETWEEN 5 AND 15. THE SELECT FILM SHALL BE COMPACTED TO A MINIMUM OF 98 PERCENT OF THE STANDARD PROCTOR DENSITY. DRYING OF THE SELECT FILM TO A MOISTURE CONTENT WITHIN 2 PERCENT OF THE STANDARD PROCTOR DENSITY TO A MOISTURE CONTENT WITHIN 2 PERCENT OF OPTIMUM. NOTE: THE PLASTICITY INDEX AND LIQUID LIMIT OF MATERIAL USED FOR SELECT, NON-EXPANSIVE FILM SHALL BE VERIFIED DURING THE TESTING OF THE MATERIAL. THE TESTING OF THE MATERIAL FOR CLASSIFICATION SHALL NOT BE RELIED UPON TO CONFIRM THE MATERIAL TO BE USED AS SELECT, NON-EXPANSIVE FILM SATISFIES THE ABOVE CRITERIA. CRACKING OF THE SELECT, NON-EXPANSIVE FILM SHALL BE PERFORMED AT A FREQUENCY OF AT LEAST ONE TEST PER EVERY 16 FT (THICK) PER EVERY 5000 SQ FT. CRACKING OF THE SELECT, NON-EXPANSIVE FILM SHALL BE STAGGERED BETWEEN VARIOUS LOTS WITHIN EACH 5000 SQ FT.

ON-SITE SOIL THAT IS MOISTURE-CONDITIONED BELOW THE SELECT FILL SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS. MOISTURE-CONDITIONED SOIL SHALL BE COMPACTED TO A MINIMUM OF 93 PERCENT OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D 698) AT A MOISTURE CONTENT OF AT LEAST 5 PERCENTAGE POINTS ABOVE OPTIMUM. FREE SWELL OF THE IMPROVED MATERIAL SHALL BE VERIFIED AT A FREQUENCY OF AT LEAST ONE SWELL TEST PER EVERY 3 FT (THICK) PER EVERY 5,000 SQ FT.

EXISTING FOUNDATIONS, SLABS, PAVEMENTS, AND BELOW-GRADE STRUCTURES SHALL BE REMOVED FROM THE BUILDING AREA. REMOVE SURFACE VEGETATION, TOPSOIL, ROOT SYSTEMS, ORGANIC MATERIAL, EXISTING FILL, AND SOFT OR OTHERWISE UNSUITABLE MATERIAL FROM THE BUILDING AREA. PROOFROLL EXPOSED SOIL SUBGRADE. REMOVE AND REPLACE UNSUITABLE AREAS WITH SUITABLE MATERIAL. SUBGRADE MATERIAL SHALL BE FREE OF ORGANIC AND OTHER DELETERIOUS MATERIALS AND SHALL MEET THE FOLLOWING REQUIREMENTS:

LOCATION WITH RESPECT TO FINAL GRADE	P.I.	L.L.
BUILDING AREA, BASE	12 MAX	35 MAX
BUILDING AREA, SELECT FILL, BASE TO 1½ FT	15 MAX	35 MAX
BUILDING AREA, BELOW 1½ FEET: MOISTURE CONDITIONED SITE SOILS		

THE FOUNDATION SYSTEM SHALL BE DRILLED, STRAIGHT SHAFT PIERS.

THIS FOUNDATION SUBSURFACE PREPARATION DOES NOT CONSTITUTE A COMPLETE SITE WORK SPECIFICATION. IN CASE OF CONFLICT, INFORMATION COVERED IN THIS PREPARATION SHALL TAKE PRECEDENCE OVER THE WALMART SPECIFICATIONS. REFER TO THE SPECIFICATIONS FOR SPECIFIC INFORMATION NOT COVERED IN THIS PREPARATION. THIS INFORMATION WAS TAKEN FROM A GEOTECHNICAL REPORT PREPARED BY ALPHA TESTING, INC., (ALPHA REPORT G101323) DATED AUGUST 4, 2011 (GEOTECHNICAL REPORT IS FOR INFORMATION ONLY AND IS NOT A CONSTRUCTION SPECIFICATION).

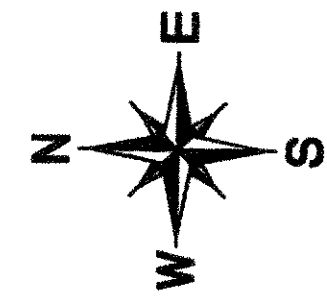
GEOTECHNICAL ENGINEER EMAIL ADDRESS IS - [bpowell@alphatesting.com](mailto:bpowell@alphatesting.com)

**CAUTION!!**

CONTRACTOR IS TO VERIFY  
PRESENCE AND EXACT  
LOCATION OF ALL UTILITIES  
PRIOR TO CONSTRUCTION.

**STOP!**  
**CALL BEFORE YOU DIG**

**DIG TESS**  
**1-800-DIG-TESS**  
(@ least 72 hours prior to digging)



### LEGEND

-----	PROPERTY LINE
----- 475 -----	PROPOSED CONTOUR
----- 475 -----	EXISTING CONTOUR
----- > -----	PROPOSED SWALE
=====	SCREEN WALL
X 500.00	PROPOSED SPOT ELEVATION
TG	TOP OF GRATE ELEVATION
ME	MATCH EXISTING ELEVATION
TW	TOP OF WALL ELEVATION
BW	BOTTOM OF WALL ELEVATION
TP	TOP OF PAVEMENT
TC	TOP OF CURB

## GRADING NOTES

1. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY.
2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
3. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
4. EXISTING GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT.
5. PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT INTERVALS.
6. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
7. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE EPA OR APPLICABLE STATE GENERAL N.P.D.E. PERMIT FOR STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES AND THE WAL-MART SPECIAL CONDITIONS, SECTION 8, ENVIRONMENTAL COMPLIANCE AND STORM WATER POLLUTION PREVENTION.
8. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
9. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
10. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY KIMLEY-HORN. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE PROJECT FOR REVIEW.
11. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED.
12. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
13. ALL ELEVATIONS ARE TOP OF PAVEMENT UNLESS OTHERWISE NOTED.

**ALERT TO CONTRACTOR:**

ALL VM GENERAL CONTRACTOR WORK TO BE COMPLETED (EARTHWORK, FINAL UTILITIES, AND FINAL GRADING) BY THE MILESTONE DATE IN PROJECT DOCUMENTS. OUTLOT AREA TO BE KEPT FREE OF JOB TRAILERS AND STORAGE AFTER THE CONTRACT MILESTONE DATE FOR THE OUTLOT. VM GENERAL CONTRACTOR TO PROVIDE CLEAR ACCESS FOR OUTLOT CONTRACTOR TO THE SPECIFIC PARCEL AT ALL TIMES AFTER MILESTONE DATE. PURCHASER OF OUTLOT TO PROVIDE PERMIT DOCUMENTS AND SWPPP REQUIRED BY STATE/LOCAL REQUIREMENTS FOR SPECIFIC OUTLOT.

## DEWATERING NOTE

WHEN PERFORMING GRADING OPERATIONS DURING PERIODS OF WET WEATHER, PROVIDE ADEQUATE DEWATERING, DRAINAGE AND GROUND WATER MANAGEMENT TO CONTROL MOISTURE OF SOILS. REFER TO MASTER SITE SPECIFICATIONS.

## BENCHMARK

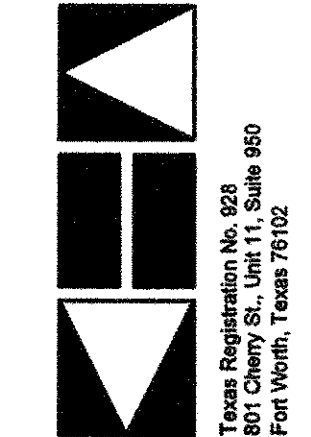
BENCHMARK NO. 1  
 "C" CUT FOUND ON THE WESTERLY CURB RETURN AT THE  
 SOUTH-WEST CORNER OF LAKE WHITNEY DRIVE AND LAKE TEXHOMA  
 DRIVE.  
 ELEV. = 647.32

BENCHMARK NO. 2  
 "C" CUT FOUND ON TOP OF A CONCRETE CURB LOCATED  
 APPROXIMATELY 50 FEET WEST OF THE WEST RIGHT-OF-WAY LINE OF  
 DILLENHAY DRIVE.  
 ELEV. = 647.27

BENCHMARK NO. 3  
 RAILROAD SPIKE SET ON THE WEST SIDE OF A TRAFFIC SIGNAL POLE  
 LOCATED ON THE NORTHEAST CORNER OF THE INTERSECTION OF W  
 LUCAS ROAD AND FM 2551.  
 ELEV. = 644.00

BENCHMARK NO. 4  
 "X" CUT SET ON THE NORTHEAST CORNER OF A CONCRETE  
 HEADWALL LOCATED ON THE EAST SIDE OF FM 2551 APPROXIMATELY  
 1800 FEET NORTH OF W LUCAS ROAD.  
 ELEV. = 646.52

**Kimley-Horn  
and Associates, Inc.**  
© 2011  
Tel. No. (817) 335-6811  
Fax No. (817) 335-3050



**Walmart**  
STORE #5672-00  
C-180-SGL-NO  
INCEC WEST LUCAS ROAD AND FM 2551  
LUCAS, TEXAS

## GRADING PLAN

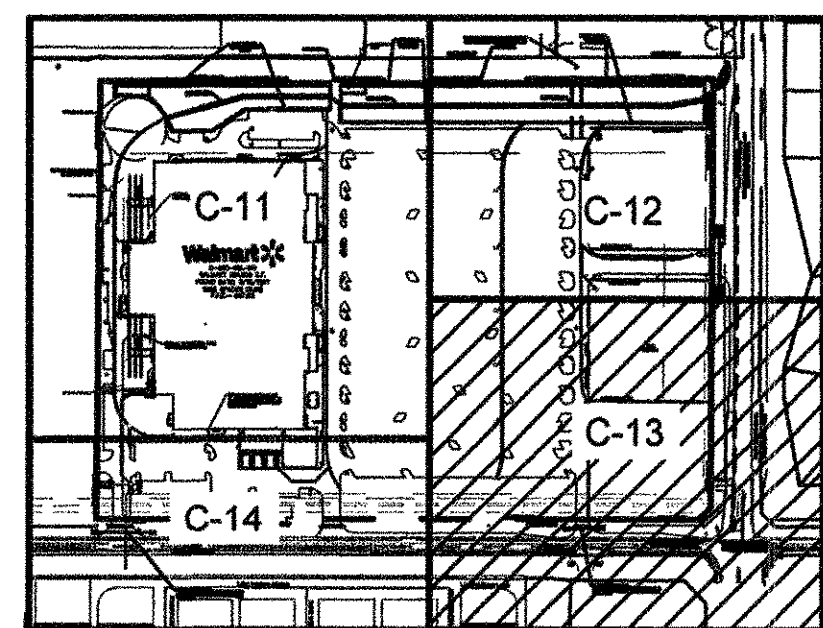
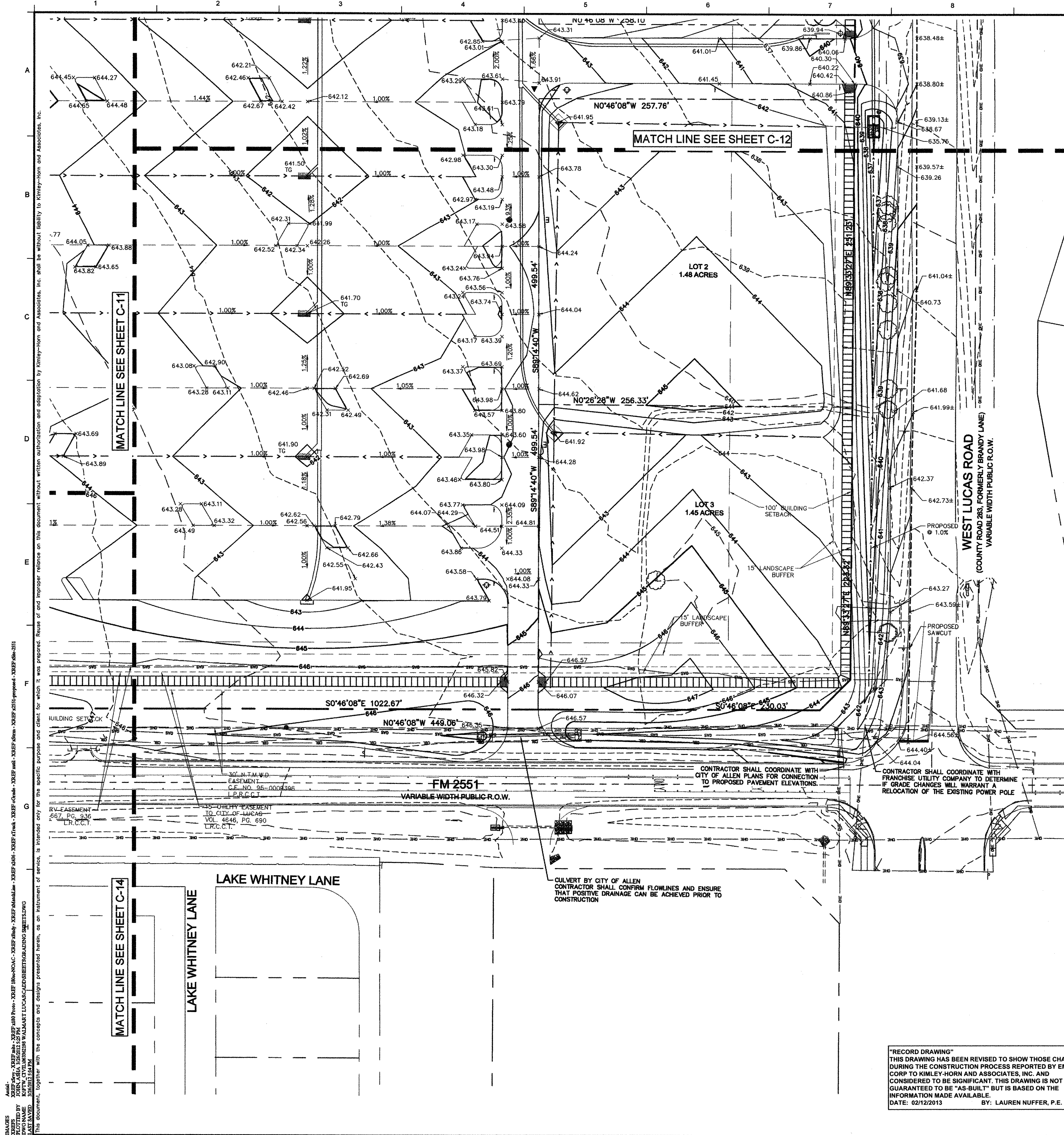
Scale:	AS SHOWN
Designed by:	GLC
Drawn by:	GLC
Checked by:	MAM
Date:	February 2012
Project No.	063362198

SHEET  
C-12

XREF advy - XREF midc - XREF x800 Photo - XREF 960xNOAC - XREF sfatallin - XREF 9486 - XREF sGrade - XREF endc - XREF sSum - XREF 2531 proposed - XREF SSite-2531  
JOHN ASHA 3/26/2012 1:55 PM  
KSTW\_CIVIL0606049 WALMART LUCAS CAD SHEETS GRADING SHEETS.DWG  
F G

Aerial -  
IMAGES  
XREFS  
PLOTTED BY  
DWG NAME





## FOUNDATION SUBSURFACE PREPARATION

UNLESS SPECIFICALLY INDICATED OTHERWISE IN THE DRAWINGS AND/OR SPECIFICATIONS, THE LIMITS OF THIS SUBSURFACE PREPARATION ARE CONSIDERED TO BE THAT PORTION OF THE SITE DIRECTLY BENEATH AND 5 FEET BEYOND THE BUILDING AND APPURTENANCES.

APPURTENANCES ARE THOSE ITEMS ATTACHED TO THE BUILDING PROPER (REFER TO DRAWING SHEET SP), TYPICALLY INCLUDING, BUT NOT LIMITED TO, THE BUILDING SIDEWALKS, EXTERIOR GARDEN CENTER, PORCHES, RAMPS, STOPS, TRUCK WELLS/DOCKS, COMPACTOR PAD, MONUMENT AND CONCRETE SLAB, CURB, SIDEWALK, GUTTER, DRAINAGE, ETC. THE BASE WHERE REQUIRED, DOES NOT EXTEND BEYOND THE LIMITS OF THE ACTUAL BUILDING AND THE APPURTENANCES.

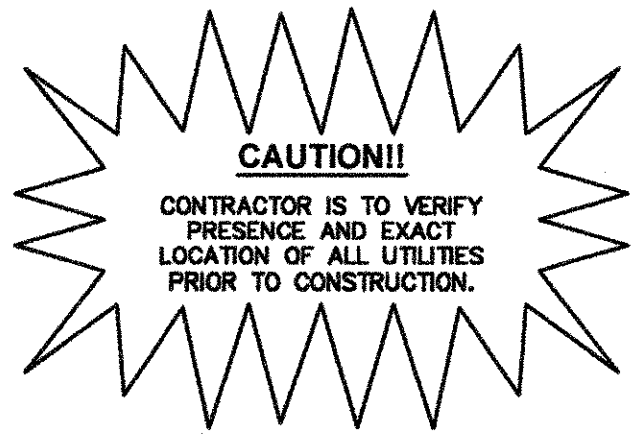
THE BASE AND SB SHALL BE SUPPORTED ON AN ENGINEERED PAD CONSISTING OF A MINIMUM OF 14 FEET OF SELECT, NON-EXPANSIVE FILL MATERIAL OVER MOISTURE CONDITIONED ON-SITE SOIL TO THE TOP OF SHALY LIMESTONE. THE THICKNESS OF SELECT, NON-EXPANSIVE FILL SHALL BE 2 FEET IN AREAS THAT DO NOT INCLUDE THE BASE (UNDER APPURTENANCES AND OUTSIDE THE BUILDING PERIMETER). SELECT, NON-EXPANSIVE FILL MATERIAL SHALL NOT EXTEND BEYOND 5 FEET OF THE BUILDING PERIMETER AND/OR APPURTENANCES.

ON-SITE SOIL THAT IS MOISTURE-CONDITIONED BELOW THE SELECT FILL SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS. MOISTURE-CONDITIONED SOIL SHALL BE COMPACTED TO A MINIMUM OF 93 PERCENT OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D 698) AT A MOISTURE CONTENT OF AT LEAST 5 PERCENTAGE POINTS ABOVE OPTIMUM. FREE SWELL OF THE IMPROVED MATERIAL SHALL BE VERIFIED AT A FREQUENCY OF AT LEAST ONE SWELL TEST PER EVERY 3 FT (THICK) PER EVERY 5,000 SQ FT.

LOCATION WITH RESPECT TO FINAL GRADE	P.I.	L.L.
BUILDING AREA, BASE	12 MAX	35 MAX
BUILDING AREA, SELECT FILL, BASE TO 1½ FT	15 MAX	35 MAX
BUILDING AREA, BELOW 1½ FEET: MOISTURE CONDITIONED SITE SOILS		

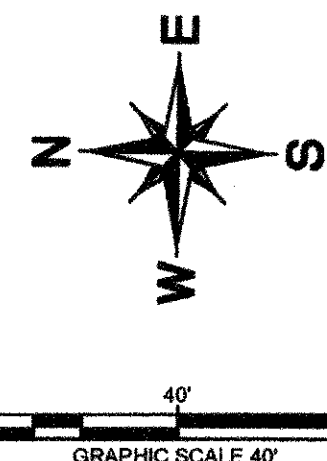
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GEOTECHNICAL ENGINEER EMAIL ADDRESS IS - [bpowell@alphatesting.com](mailto:bpowell@alphatesting.com)



CONTRACTOR IS TO VERIFY  
PRESENCE AND EXACT  
LOCATION OF ALL UTILITIES  
PRIOR TO CONSTRUCTION.

**DIG TESS**  
**1-800-DIG-TESS**  
 (@ least 72 hours prior to digging)



## LEGEND

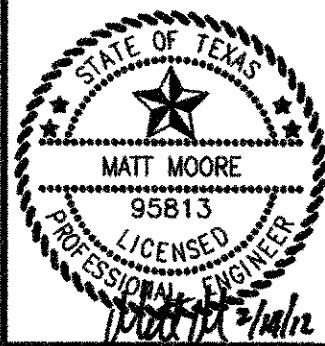
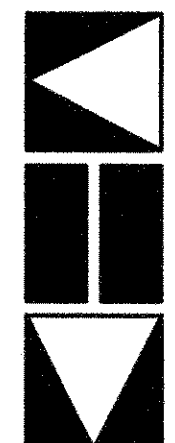
## GRADING NOTES

**ALERT TO CONTRACTOR:**

## DEWATERING NOTE

## BENCHMARK

No.	Date	Revisions	App.



**Walmart**  
STORE #5672-00  
C-180-SGL-NO  
NEC WEST LUCAS ROAD AND FM 2551  
LUCAS, TEXAS

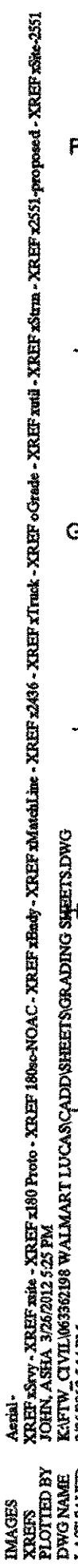
# GRADING PLAN

Scale:	AS SHOWN
Designed by:	CLC
Drawn by:	CLC
Checked by:	MAM
Date:	February 2012
Project No.	063362198

SHEET

C-13





LAKE TEXHOMA CIRCLE

LAKE TAWAKONI DRIVE

LAKE WHITNEY LANE

MATCH LINE SEE SHEET C-13

CULVERT BY CITY OF ALLEN  
CONTRACTOR SHALL CONFIRM FLOWLINES AND ENSURE  
THAT POSITIVE DRAINAGE CAN BE ACHIEVED PRIOR TO  
CONSTRUCTION

"RECORD DRAWING"  
THIS DRAWING HAS BEEN REVISED TO SHOW  
DURING THE CONSTRUCTION PROCESS REVISIONS  
CORP TO KIMLEY-HORN AND ASSOCIATES, INC.  
CONSIDERED TO BE SIGNIFICANT. THIS DRAWING IS  
GUARANTEED TO BE "AS-BUILT" BUT IS BASED ON  
INFORMATION MADE AVAILABLE.  
DATE: 02/12/2013 BY: LAUREN



WALMART SUPERCENTER STORE # 5672-0  
NEC F.M.2251 AND WEST LUCAS ROAD  
LUCAS, TEXAS  
ALPHA REPORT NO. G101323  
AUGUST 4, 2011

APPEARANCES ARE THOSE ITEMS ATTACHED TO THE BUILDING PROPER (REFER TO DRAWING SHEET SP1), TYPICALLY INCLUDING, BUT NOT LIMITED TO, THE BUILDING SIDEWALKS, EXTERIOR GARDEN CENTER, PORCHES, RAMPS, STOPS, TRUCK WELLS/DOCKS, COMPACTOR PAD, MONUMENT SIGN, PLANTERS, BALE AND PALLET RECYCLING AREA, ETC. THE BASE WHERE REQUIRED, DOES NOT EXTEND BEYOND THE LIMITS OF THE ACTUAL BUILDING AND THE APPEARANCES.

ESTABLISH THE FINAL SUBGRADE ELEVATION TO ALLOW FOR THE CONCRETE SLAB AND BASE REFERENCE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR REQUIRED SLAB THICKNESS. THE 4" THICK CONCRETE SLAB SHALL BE CAST TO MEET THE STANDARD SPECIFICATIONS FOR CONSTRUCTION, SECTION 747 FLEXIBLE BASE, GRADE 1 WITH MINIMUM 88% RETAINED ON 200 SIEVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ACCURATE MEASUREMENTS FOR ALL CUT AND FILL DEPTHS REQUIRED. ANY PROPOSED EQUIVALENT ALTERNATIVE BASE MATERIAL MUST BE SUBMITTED FOR APPROVAL WITHIN 30 DAYS AFTER AWARD OF CONTRACT. ANY EQUIVALENT ALTERNATIVE SHALL ONLY BE USED IF APPROVED IN WRITING BY THE CBC AND AOR.

THE BASE AND LAB SHALL BE SUPPORTED ON AN ENGINEERED PAD CONSISTING OF A MINIMUM OF 14 FEET OF SELECT, NON-EXPANSIVE FILL MATERIAL OVER MOISTURE CONDITIONED ON-SITE SOIL TO THE TOP OF SHALY LIMESTONE. THE THICKNESS OF SELECT, NON-EXPANSIVE FILL SHALL BE 2 FEET IN AREAS THAT DO NOT INCLUDE THE BASE (UNDER APPURTENANCES AND OUTSIDE THE BUILDING PERIMETER). SELECT, NON-EXPANSIVE FILL MATERIAL SHALL NOT EXTEND BEYOND 5 FEET OF THE BUILDING PERIMETER AND/OR APPURTENANCES.

THE SELECT PLIST SHALL BE NON-EXPANSIVE MATERIAL WITH A LIQUID LIMIT LESS THAN 5 AND A PLASTICITY INDEX BETWEEN 5 AND 15. THE SELECT PLIST SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT EXCEEDING 8 INCHES IN THICKNESS. SELECT, NON-EXPANSIVE PLIST EXCEEDING TO A MINIMUM OF 96 PERCENT OF THE STANDARD PROCTOR. THE SELECT PLIST DENSITY (ASTM D 690) AT A MOISTURE CONTENT WITHIN 1 PERCENT OF POINT BEING TO BE 115 PERCENT OF THE STANDARD PROCTOR. (NOTE: THE PLASTICITY INDEX AND LIQUID LIMIT OF MATERIAL USED AS SELECT, NON-EXPANSIVE PLIST SHALL BE VERIFIED DURING PLIST TESTING BY THE TESTING LABORATORY.) THE SELECT, NON-EXPANSIVE PLIST CLASSIFICATION SHALL NOT BE RELIED UPON TO CONFIRM THE MATERIAL TO BE USED AS SELECT, NON-EXPANSIVE PLIST SATISFIES THE ABOVE REQUIREMENTS. CHECKING OF THE PLIST CLASSIFICATION SHALL BE PERFORMED AT A FREQUENCY OF AT LEAST ONE TEST PER EVERY 15 FT (THICK) PER EVERY 5,000 SQ. FT. ATTENTION SHALL BE STAGGERED DURING EACH VERIFICATION. DURING EACH 5,000 SQ. FT.

ON-SITE SOIL. THAT IS MOISTURE-CONDITIONED BELOW THE SELECT FILL SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS. MOISTURE-CONDITIONED SOIL SHALL BE COMPACTED TO A MINIMUM OF 93 PERCENT OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D 698) AT A MOISTURE CONTENT OF AT LEAST 5 PERCENTAGE POINTS ABOVE OPTIMUM. FREE SWELL OF THE IMPROVED MATERIAL SHALL BE VERIFIED AT A FREQUENCY OF AT LEAST ONE SWELL TEST PER EVERY 3 FT (THICK) PER EVERY 5,000 SQ FT.

EXISTING FOUNDATIONS, SLABS, PAVEMENTS, AND BELOW-GRADE STRUCTURES SHALL BE REMOVED FROM THE BUILDING AREA. REMOVE SURFACE VEGETATION, TOPSOIL, ROOT SYSTEMS, ORGANIC MATERIAL, EXISTING FILL, AND SOFT OR OTHERWISE UNSUITABLE MATERIAL FROM THE BUILDING AREA. PROOFROLL EXPOSED SOIL SUBGRADE. REMOVE AND REPLACE UNSUITABLE AREAS WITH SUITABLE MATERIAL. SUBGRADE MATERIAL SHALL BE FREE OF ORGANIC AND OTHER DELETERIOUS MATERIALS AND SHALL MEET THE FOLLOWING REQUIREMENTS:













LOCATION WITH RESPECT TO FINAL GRADE	P.I.	L.L.
BUILDING AREA, BASE	12 MAX	35 MAX
BUILDING AREA, SELECT FILL, BASE TO 1½ FT	15 MAX	35 MAX
BUILDING AREA, BELOW 1½ FEET: MOISTURE CONDITIONED SITE SOILS		

THE FOUNDATION SYSTEM SHALL BE DRILLED, STRAIGHT SHAFT PIERS

THIS FOUNDATION SUBSURFACE PREPARATION DOES NOT CONSTITUTE A COMPLETE SITE WORK SPECIFICATION. IN CASE OF CONFLICT, INFORMATION COVERED IN THIS PREPARATION SHALL TAKE PRECEDENCE OVER THE WALMART SPECIFICATIONS. REFER TO THE SPECIFICATIONS FOR SPECIFIC INFORMATION NOT COVERED IN THIS PREPARATION. THIS INFORMATION WAS TAKEN FROM A GEOTECHNICAL REPORT PREPARED BY ALPHA TESTING, INC., (ALPHA REPORT G101323) DATED AUGUST 4, 2011 (GEOTECHNICAL REPORT IS FOR INFORMATION ONLY AND IS NOT A CONSTRUCTION SPECIFICATION).

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	PROPERTY LINE
	PROPOSED CONTOUR
	EXISTING CONTOUR
	PROPOSED SWALE
	SCREEN WALL
	PROPOSED SPOT ELEVATION
	TOP OF GRATE ELEVATION
	MATCH EXISTING ELEVATION
	TOP OF WALL ELEVATION
	BOTTOM OF WALL ELEVATION
	TOP OF PAVEMENT
	TOP OF CURB

1. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY.
2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR IS ADVISED TO CONTACT THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
3. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
4. EXISTING GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT.
5. PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT INTERVALS.
6. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
7. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE EPA OR APPLICABLE STATE GENERAL N.P.D.E.S. PERMIT FOR STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES AND THE WAL-MART SPECIAL CONDITIONS, SECTION 8, ENVIRONMENTAL COMPLIANCE AND STORM WATER POLLUTION PREVENTION.
8. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
9. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
10. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY KIMLEY-HORN. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW.
11. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED.
12. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
13. ALL ELEVATIONS ARE TOP OF PAVEMENT UNLESS OTHERWISE NOTED.

ALL VM GENERAL CONTRACTOR WORK TO BE COMPLETED (EARTHWORK, FINAL UTILITIES, AND FINAL GRADING) BY THE MILESTONE DATE IN PROJECT DOCUMENTS. OUTLOT AREA TO BE KEPT FREE OF JOB TRAILERS AND STORAGE AFTER THE CONTRACT MILESTONE DATE FOR THE OUTLOT. VM GENERAL CONTRACTOR TO PROVIDE CLEAR ACCESS FOR OUTLOT CONTRACTOR TO THE SPECIFIC PARCEL AT ALL TIMES AFTER MILESTONE DATE. PURCHASER OF OUTLOT TO PROVIDE PERMIT DOCUMENTS AND SWPPP REQUIRED BY STATE/LOCAL REQUIREMENTS FOR SPECIFIC OUTLOT.

WHEN PERFORMING GRADING OPERATIONS DURING PERIODS OF WET WEATHER, PROVIDE ADEQUATE DEWATERING, DRAINAGE AND GROUND WATER MANAGEMENT TO CONTROL MOISTURE OF SOILS. REFER TO MASTER SITE SPECIFICATIONS.

BENCHMARK NO. 1

"□" CUT FOUND ON THE WESTERLY CURB RETURN AT THE  
SOUTHWEST CORNER OF LAKE WHITNEY DRIVE AND LAKE TEXHOMA  
DRIVE.

ELEV. = 647.32

BENCHMARK NO. 2

"□" CUT FOUND ON TOP OF A CONCRETE CURB LOCATED  
APPROXIMATELY 50 FEET WEST OF THE WEST RIGHT-OF-WAY LINE OF  
DILLEHAY DRIVE.

ELEV. = 647.27

BENCHMARK NO. 3

RAILROAD SPIKE SET ON THE WEST SIDE OF A TRAFFIC SIGNAL POLE  
LOCATED ON THE NORTHWEST CORNER OF THE INTERSECTION OF W.  
LUCAS ROAD AND FM 2551.

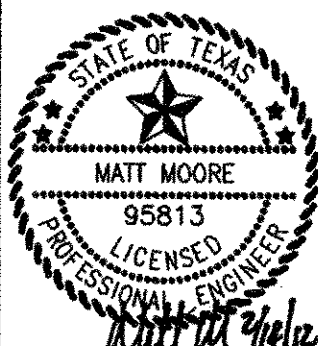
ELEV. = 644.00

BENCHMARK NO. 4

"X" CUT SET ON THE NORTHEAST CORNER OF A CONCRETE  
HEADWALL LOCATED ON THE EAST SIDE OF FM 2551 APPROXIMATELY  
1600 FEET NORTH OF W. LUCAS ROAD.

ELEV. = 645.82

No.	Date	Revisions	App.



**Walmart\***  
STORE #5672-00  
C-180-SGL-NO  
10000 W. LUCAS ROAD AND FM 2551  
LUCAS, TEXAS

## GRADING PLAN

Scale:	AS SHOWN
Designed by:	CLC
Drawn by:	CLC
Checked by:	MAM
Date:	February, 2012
Project No.	063352198

**SHEET**

C-14



THIS DOCUMENT, INCLUDING ALL ATTACHED EXHIBITS, IS THE PROPERTY OF KIMLEY-HORN AND ASSOCIATES, INC. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF KIMLEY-HORN AND ASSOCIATES, INC. ANY UNAUTHORIZED USE OF THIS DOCUMENT IS PROHIBITED AND WILL BE AT THE USER'S SOLE RISK. THE USER AGREES TO HOLD KIMLEY-HORN AND ASSOCIATES, INC. HARMLESS FROM ANY AND ALL CLAIMS, DAMAGES, LOSSES, AND EXPENSES, INCLUDING ATTORNEY'S FEES, THAT MAY BE ASSERTED AGAINST OR INCURRED BY KIMLEY-HORN AND ASSOCIATES, INC. DUE TO OR RESULTING FROM ANY SUCH UNAUTHORIZED USE. THIS AGREEMENT SHALL BE GOVERNED BY THE LAWS OF THE STATE OF TEXAS. DATE: 02/12/2013 BY: LAUREN NUFFER, P.E.

#### DETENTION POND CALCULATIONS

STAGE (FEET)	DISCHARGE (CFS)
633.2	0
634	2.57
635	10.71
636	17.82
637	23.84
638	70.77
639	91.5
640	108.25

\*\* DRAINAGE AREAS E-1 THROUGH E-3 ARE NOT ACCOUNTED FOR IN THIS TABLE

STAGE-STORAGE TABLE			
UPPER POND		LOWER POND	
STAGE (FEET)	STORAGE (AC-FT)	STAGE (FEET)	STORAGE (AC-FT)
633.2	0.00	633.2	0.00
637	0.01	633	0.01
638	0.15	634	0.23
639	0.55	635	0.80
640	1.09	636	1.71
641	1.64	637	2.90
642	2.20	638	4.20
643	2.76	639	5.50
644	3.34	640	6.81

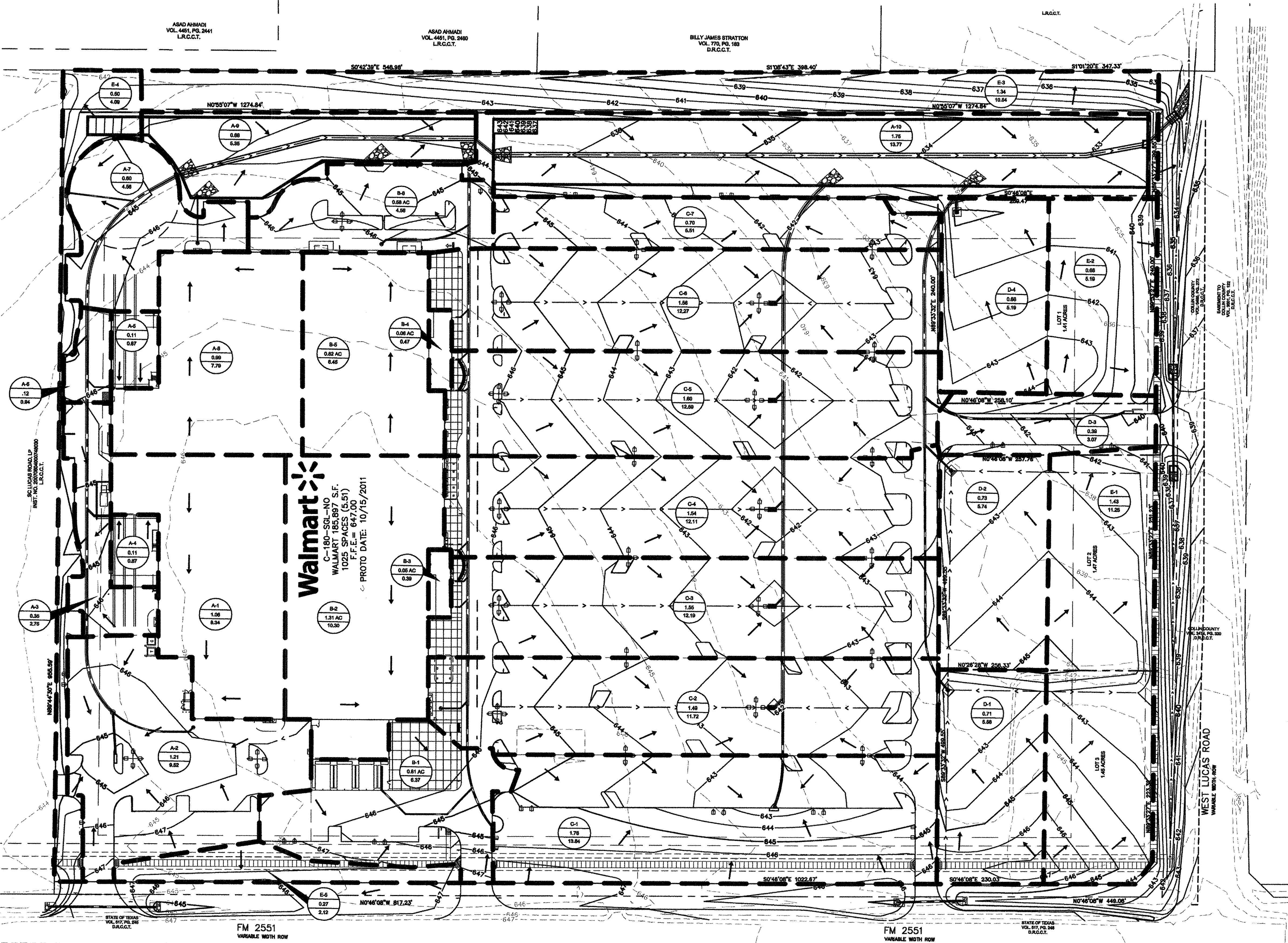
DETENTION POND SUMMARY			
100 YR STORM		25 YR STORM	
EXISTING		EXISTING	
PEAK DISCHARGE = 102.75 CFS		PEAK DISCHARGE = 80.38 CFS	
PROPOSED		PROPOSED	
PEAK INFLOW = 187.51 CFS		PEAK INFLOW = 153.25 CFS	
PEAK OUTFLOW = 97.28 CFS		PEAK OUTFLOW = 80.05 CFS	
PEAK WSEL UPPER POND = 642.32 FT		PEAK WSEL UPPER POND = 641.6 FT	
PEAK WSEL LOWER POND = 638.85 FT		PEAK WSEL LOWER POND = 638.27 FT	
PEAK VOLUME UPPER POND = 2.38 AC-FT		PEAK VOLUME UPPER POND = 1.97 AC-FT	
PEAK VOLUME LOWER POND = 5.31 AC-FT		PEAK VOLUME LOWER POND = 4.55 AC-FT	
10 YR STORM		2 YR STORM	
EXISTING		EXISTING	
PEAK DISCHARGE = 65.07 CFS		PEAK DISCHARGE = 31.2 CFS	
PROPOSED		PROPOSED	
PEAK INFLOW = 129.43 CFS		PEAK INFLOW = 75.65 CFS	
PEAK OUTFLOW = 57.18 CFS		PEAK OUTFLOW = 22.47 CFS	
PEAK WSEL UPPER POND = 641.11 FT		PEAK WSEL UPPER POND = 639.95 FT	
PEAK WSEL LOWER POND = 637.98 FT		PEAK WSEL LOWER POND = 636.73 FT	
PEAK VOLUME UPPER POND = 1.70 AC-FT		PEAK VOLUME UPPER POND = 1.06 AC-FT	
PEAK VOLUME LOWER POND = 4.17 AC-FT		PEAK VOLUME LOWER POND = 2.58 AC-FT	

\*\* DRAINAGE AREAS E-1 THROUGH E-3 WILL UTILIZE EXISTING DRAINAGE PATTERNS AND WILL NOT DRAIN TO THE DETENTION POND, THESE FLOWS ARE ACCOUNTED FOR IN THE PEAK OUTFALL SHOWN IN THE CALCULATIONS.

#### BENCHMARK

- BENCHMARK NO. 1  
\* CUT FOUND ON THE WESTERLY CURB RETURN AT THE SOUTHWEST CORNER OF LAKE WHITNEY DRIVE AND LAKE TEXHOMA DRIVE.  
ELEV. = 647.32
- BENCHMARK NO. 2  
\* CUT FOUND ON TOP OF A CONCRETE CURB LOCATED APPROXIMATELY 50 FEET WEST OF THE WEST RIGHT-OF-WAY LINE OF DILLEHAY DRIVE.  
ELEV. = 647.27
- BENCHMARK NO. 3  
RAILROAD SPIKE SET ON THE WEST SIDE OF A TRAFFIC SIGNAL POLE LOCATED ON THE NORTHEAST CORNER OF THE INTERSECTION OF W. LUCAS ROAD AND FM 2551.  
ELEV. = 644.00
- BENCHMARK NO. 4  
\* CUT SET ON THE NORTHEAST CORNER OF A CONCRETE HEADWALL LOCATED ON THE EAST SIDE OF FM 2551 APPROXIMATELY 1600 FEET NORTH OF W. LUCAS ROAD.  
ELEV. = 645.52

"RECORD DRAWING"  
THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY EMJ CORP TO KIMLEY-HORN AND ASSOCIATES, INC. AND CONSIDERED TO BE SIGNIFICANT. THIS DRAWING IS NOT GUARANTEED TO BE "AS-BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE.  
DATE: 02/12/2013 BY: LAUREN NUFFER, P.E.



#### LEGEND

- A-1  
X.XX  
X.XX
- DRAINAGE AREA NUMBER  
DRAINAGE AREA (ACRES)  
FLOW (CFS)
- 729  
729
- DRAINAGE AREA  
PROPOSED CONTOUR  
EXISTING CONTOUR  
FLOW ARROW

#### NOTES

- DRAINAGE CRITERIA IS PER CITY OF LUCAS DRAINAGE SYSTEM DESIGN REQUIREMENTS:  
TC = 10 MIN  
C = 0.90  
H100 = 8.74 IN/H (10-MIN, 100-YR)  
A = DRAINAGE AREA (ACRES)  
Q100 = C\*H100\*A (CFS)
- ACCORDING TO THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 48085C0405J, DATED JUNE 2, 2009 FOR COLLIN COUNTY, TEXAS, THIS PROPERTY IS LOCATED IN ZONE X.

#### STORMWATER DRAINAGE CALCULATIONS

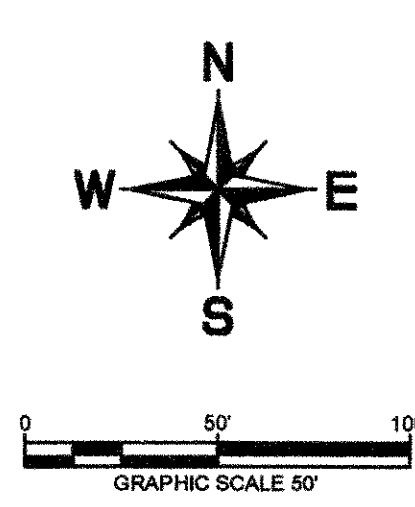
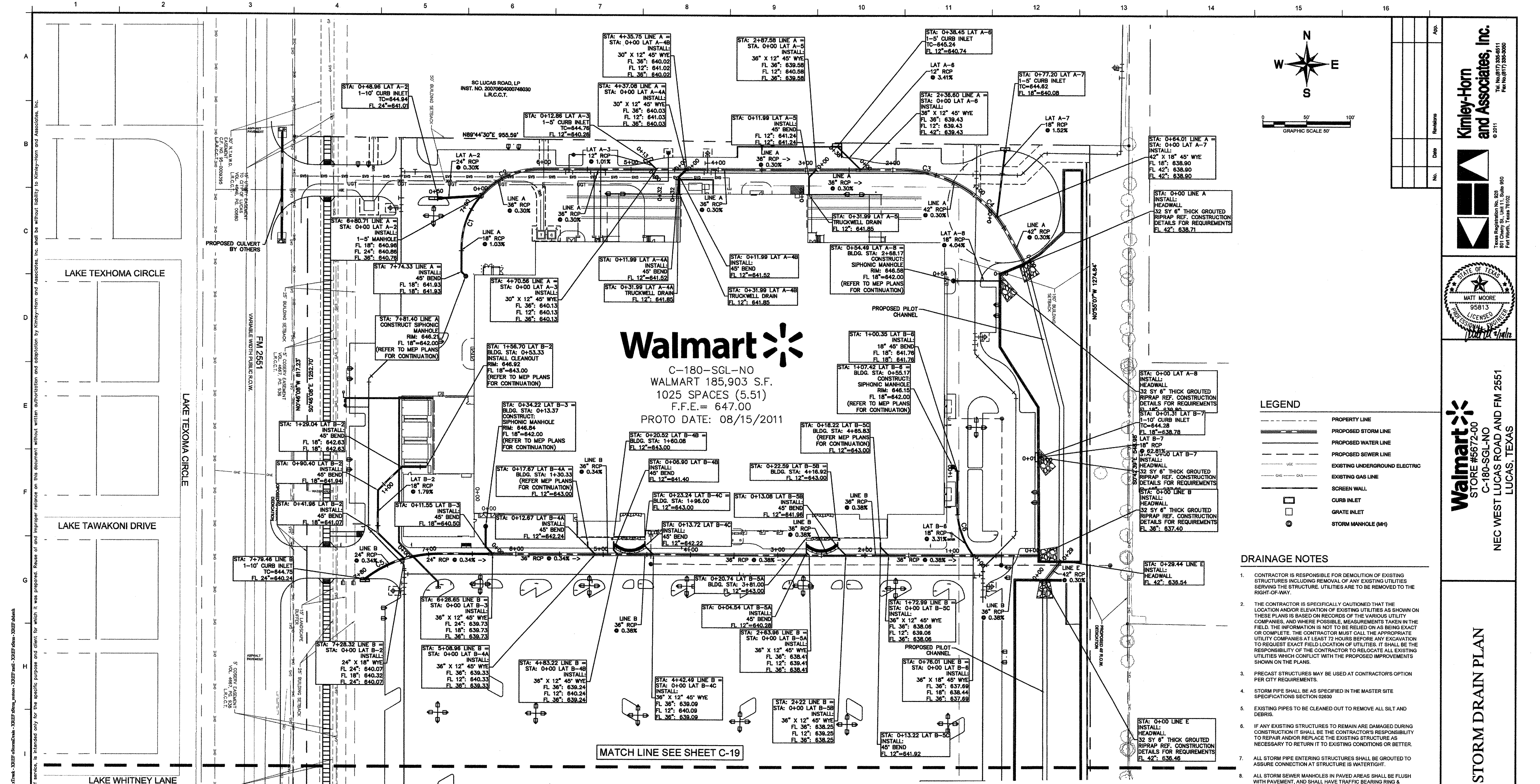
DRAINAGE AREA	AREA (AC)	C	CA	TC (min)	I <sub>100</sub> (IN/H)	Q <sub>100</sub> (CFS)	Collection Point
A-1	1.06	0.90	0.95	10	8.74	8.34	DOWNSPOUT
A-2	1.21	0.90	1.09	10	8.74	9.52	10' CURB INLET
A-3	0.35	0.90	0.32	10	8.74	2.75	5' CURB INLET
A-4	0.11	0.90	0.10	10	8.74	0.87	TRUCKWELL DRAIN
A-5	0.11	0.90	0.10	10	8.74	0.87	TRUCKWELL DRAIN
A-6	0.12	0.90	0.11	10	8.74	0.94	5' CURB INLET
A-7	0.50	0.90	0.54	10	8.74	4.72	DOWNSPOUT
A-8	0.99	0.90	0.88	10	8.74	7.79	5' CURB INLET
A-9	0.68	0.90	0.61	10	8.74	5.35	DETENTION POND
A-10	1.75	0.90	1.58	10	8.74	13.77	DETENTION POND
B-1	0.81	0.90	0.73	10	8.74	6.97	10' CURB INLET
B-2	1.31	0.90	1.18	10	8.74	10.30	DOWNSPOUT
B-3	0.05	0.90	0.05	10	8.74	0.39	DOWNSPOUT
B-4	0.06	0.90	0.05	10	8.74	0.47	DOWNSPOUT
B-5	0.82	0.90	0.74	10	8.74	6.45	DOWNSPOUT
B-6	0.58	0.90	0.52	10	8.74	4.56	DOWNSPOUT
C-1	1.76	0.90	1.58	10	8.74	13.84	10' CURB INLET
C-2	1.49	0.90	1.34	10	8.74	11.72	2-40X GRATE INLET
C-3	1.55	0.90	1.40	10	8.74	12.19	2-40X GRATE INLET
C-4	1.54	0.90	1.39	10	8.74	12.11	2-40X GRATE INLET
C-5	1.60	0.90	1.44	10	8.74	12.59	2-40X GRATE INLET
C-6	1.56	0.90	1.40	10	8.74	12.27	2-40X GRATE INLET
C-7	0.70	0.90	0.63	10	8.74	5.51	10' CURB INLET
D-1	0.71	0.90	0.64	10	8.74	5.58	2X5' "Y" INLET
D-2	0.73	0.90	0.66	10	8.74	5.74	3X5' "Y" INLET
D-3	0.39	0.90	0.35	10	8.74	3.07	10' CURB INLET
D-4	0.66	0.90	0.59	10	8.74	5.19	3X5' "Y" INLET
E-1	1.43	0.90	1.29	10	8.74	11.25	DRAINS OFFSITE
E-2	0.86	0.90	0.79	10	8.74	5.19	DRAINS OFFSITE
E-3	1.34	0.90	1.21	10	8.74	10.54	DRAINS OFFSITE
E-4	0.50	0.90	0.45	10	8.74	3.93	DRAINS OFFSITE
E-5	0.27	0.90	0.24	10	8.74	2.12	DRAINS OFFSITE
SUBTOTAL OFFSITE	3.93					30.91	

**Walmart**  
STORE #5672-00  
C-180-SGL-NO  
NEC WEST LUCAS ROAD AND FM 2551  
LUCAS, TEXAS

#### DRAINAGE AREA MAP

Scale:	AS SHOWN
Designed by:	CLC
Drawn by:	CLC
Checked by:	MAM
Date:	February 2012
Project No.:	06392198





**Walmart**  
C-180-SGL-NO  
WALMART 185,903 S.F.  
1025 SPACES (5.51)  
F.F.E. = 647.00  
PROTO DATE: 08/15/2011

- LEGEND**
- PROPERTY LINE
  - PROPOSED STORM LINE
  - PROPOSED WATER LINE
  - PROPOSED SEWER LINE
  - EXISTING UNDERGROUND ELECTRIC
  - EXISTING GAS LINE
  - SCREEN WALL
  - CURB INLET
  - GRATE INLET
  - STORM MANHOLE (MH)

- DRAINAGE NOTES**
- CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY.
  - THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
  - PRECAST STRUCTURES MAY BE USED AT CONTRACTOR'S OPTION PER CITY REQUIREMENTS.
  - STORM PIPE SHALL BE AS SPECIFIED IN THE MASTER SITE SPECIFICATIONS SECTION 02630.
  - EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
  - IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
  - ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
  - ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RINGS & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
  - THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE EPA OR APPLICABLE STATE GENERAL N.P.D.E.S. PERMIT FOR STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES AND THE WALMART SPECIAL CONDITIONS, SECTION 8, ENVIRONMENTAL COMPLIANCE AND STORM WATER POLLUTION PREVENTION.
  - CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
  - ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT TO INVERT OUT.
  - CONTRACTOR SHALL TV ALL EXISTING STORM LINES AND DOWN SPOUTS TO VERIFY THERE ARE NO LEAKS, GAPS, TREE ROOTS OR BROKEN PIPES. IF BROKEN PIPES ARE FOUND IN THE EXISTING ON SITE STORM SYSTEM, CONTRACTOR SHALL REPLACE.

CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C1	90.00'	64.81'	S19°51'39"W	63.42'	41°15'34"	33.88'
C2	90.00'	76.56'	N64°51'39"E	74.27'	48°44'26"	40.77'
C3	140.00'	149.61'	S60°09'12"E	142.60'	61°13'51"	82.85'
C4	140.00'	149.61'	S60°09'12"E	142.60'	61°13'51"	82.85'
C5	140.00'	93.45'	N70°52'39"E	91.73'	38°14'43"	48.54'
C6	90.00'	60.01'	S19°06'06"E	58.90'	38°12'12"	31.17'
C7	140.00'	53.24'	S79°52'31"E	52.92'	21°47'13"	26.94'
C8	130.00'	96.22'	S69°33'51"E	94.04'	42°24'33"	50.44'
C9	90.00'	70.69'	S66°43'52"W	68.88'	45°00'00"	37.28'
C10	140.00'	109.97'	N68°15'54"W	107.17'	45°00'28"	58.00'
C11	90.00'	38.83'	S12°21'37"E	38.53'	24°43'15"	19.72'
C12	90.00'	68.62'	S21°23'35"W	67.90'	44°19'26"	36.66'

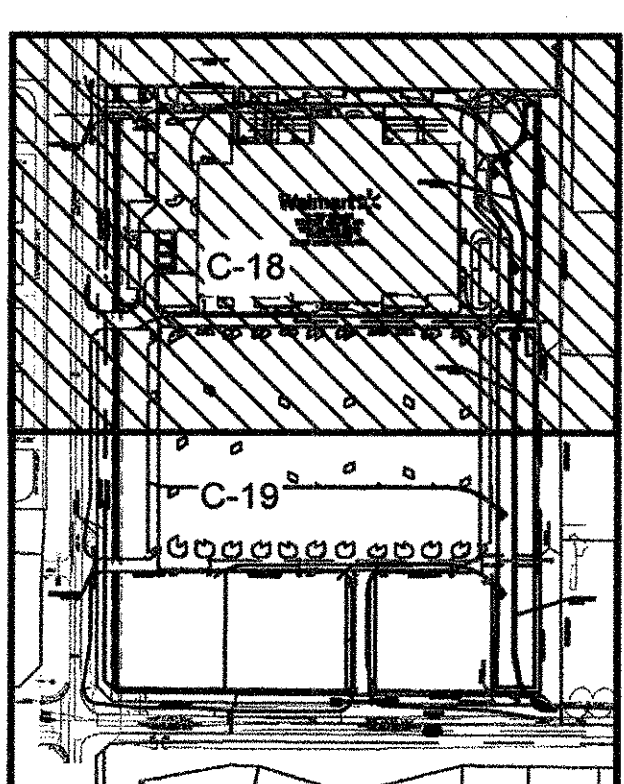
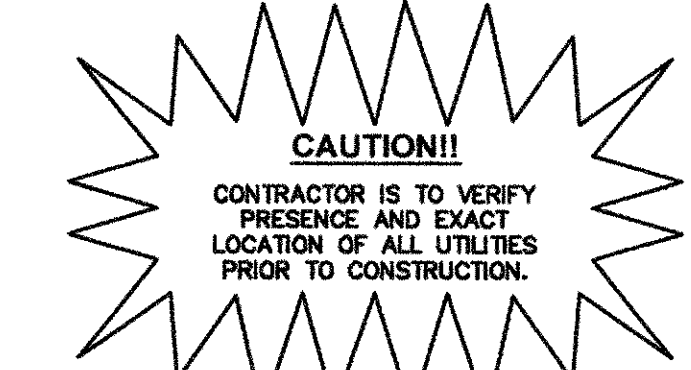
**"RECORD DRAWING"**  
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DATE: 02/12/2013 BY: LAUREN NUFFER, P.E.

**DEWATERING NOTE**  
WHEN PERFORMING GRADING OPERATIONS DURING PERIODS OF WET WEATHER, PROVIDE ADEQUATE DEWATERING, DRAINAGE AND GROUND WATER MANAGEMENT TO CONTROL MOISTURE OF SOILS. REFER TO MASTER SITE SPECIFICATIONS.

**ALERT TO CONTRACTOR:**  
ALL WALMART GENERAL CONTRACTOR WORK TO BE COMPLETED (EARTHWORK, FINAL UTILITIES, AND FINAL GRADING) BY THE MILESTONE DATE IN PROJECT DOCUMENTS.

- BENCHMARK**
- BENCHMARK NO. 1  
"X" CUT FOUND ON THE WESTERLY CURB RETURN AT THE SOUTHWEST CORNER OF LAKE WHITNEY DRIVE AND LAKE TEXHOMA DRIVE.  
ELEV. = 647.32
  - BENCHMARK NO. 2  
"X" CUT FOUND ON TOP OF A CONCRETE CURB LOCATED APPROXIMATELY 50 FEET WEST OF THE WEST RIGHT-OF-WAY LINE OF DILLERY DRIVE.  
ELEV. = 647.27
  - BENCHMARK NO. 3  
RAILROAD SPIKE SET ON THE WEST SIDE OF A TRAFFIC SIGNAL POLE LOCATED ON THE NORTHEAST CORNER OF THE INTERSECTION OF W. LUCAS ROAD AND FM 2551.  
ELEV. = 644.00
  - BENCHMARK NO. 4  
"X" CUT SET ON THE NORTHEAST CORNER OF A CONCRETE HEADWALL LOCATED ON THE EAST SIDE OF FM 2551 APPROXIMATELY 1600 FEET NORTH OF W. LUCAS ROAD.  
ELEV. = 645.52

**STOP!**  
**CALL BEFORE YOU DIG**  
DIG TESS  
1-800-DIG-TESS  
(at least 72 hours prior to digging)



KEY MAP  
N.T.S.

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**Kimley-Horn and Associates, Inc.**  
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Fax (877) 355-9050  
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Texas Registration No. 628  
801 Cherry St., Unit 11, Suite 950  
Fort Worth, Texas 76102

**STATE OF TEXAS**  
MATT MOORE  
95813  
LICENSED PROFESSIONAL ENGINEER  
02/12/2013

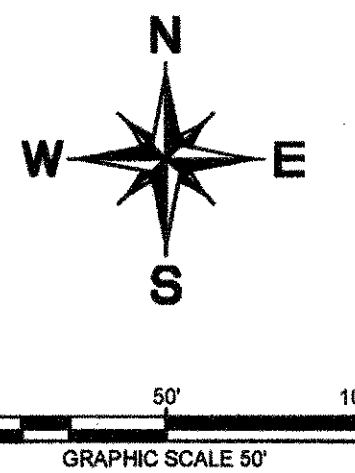
**Walmart**  
STORE #5672-NO  
C-180-SGL-NO  
NEC WEST LUCAS ROAD AND FM 2551  
LUCAS, TEXAS

**STORM DRAIN PLAN**

Scale: AS SHOWN  
Designed by: CLC  
Drawn by: CLC  
Checked by: MAM  
Date: February 2012  
Project No.: 00532108

SHEET  
**C-18**





No.	Date	Revisions	App.

**Kimley-Horn  
and Associates, Inc.**  
© 2011  
Tel. No. (817) 335-6511  
Fax No. (817) 335-3050



**walmart**  
STORE #5672-00  
C-180-SGL-NO  
11000 W. LUCAS ROAD AND FM 2551  
LUCAS, TEXAS

# STORM DRAIN PLAN

Designed by:	CLC
Drawn by:	CLC
Checked by:	MAM
Date:	February 2012
Project No.	063352198

SHEET

C-19

CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C1	90.00'	64.81'	S19°51'39"W	63.42'	41°15'34"	33.88'
C2	90.00'	76.56'	N64°51'39"E	74.27'	48°44'26"	40.77'
C3	140.00'	149.61'	S60°09'12"E	142.60'	61°13'51"	82.85'
C4	140.00'	149.61'	S60°09'12"E	142.60'	61°13'51"	82.85'
C5	140.00'	93.45'	N70°52'39"E	91.73'	38°14'43"	48.54'
C6	90.00'	60.01'	S19°06'06"E	58.90'	38°12'12"	31.17'
C7	140.00'	53.24'	S79°52'31"E	52.92'	21°47'13"	26.94'
C8	130.00'	96.22'	S69°33'51"E	94.04'	42°24'33"	50.44'
C9	90.00'	70.69'	S66°43'52"W	68.88'	45°00'00"	37.28'
C10	140.00'	109.97'	N68°15'54"W	107.17'	45°00'28"	58.00'
C11	90.00'	36.83'	S12°21'37"E	36.53'	24°43'15"	19.72'
C12	90.00'	69.62'	S21°23'35"W	67.90'	44°19'26"	36.66'

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DURING THE CONSTRUCTION PROCESS REPORTED BY EMJ  
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INFORMATION MADE AVAILABLE.  
DATE: 02/12/2013 BY: LAUREN NUFFER, P.E.

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## BENCHMARK

## BENCHMARK NO. 1

"□" CUT FOUND ON THE WESTERLY CURB RETURN AT THE  
SOUTHWEST CORNER OF LAKE WHITNEY DRIVE AND LAKE TEXHOMA  
DRIVE.  
ELEV. = 647.32

## BENCHMARK NO. 2

\* ☐ " CUT FOUND ON TOP OF A CONCRETE CURB LOCATED APPROXIMATELY 50 FEET WEST OF THE WEST RIGHT-OF-WAY LINE OF DILLEHAY DRIVE.

### BENCHMARK NO. 3

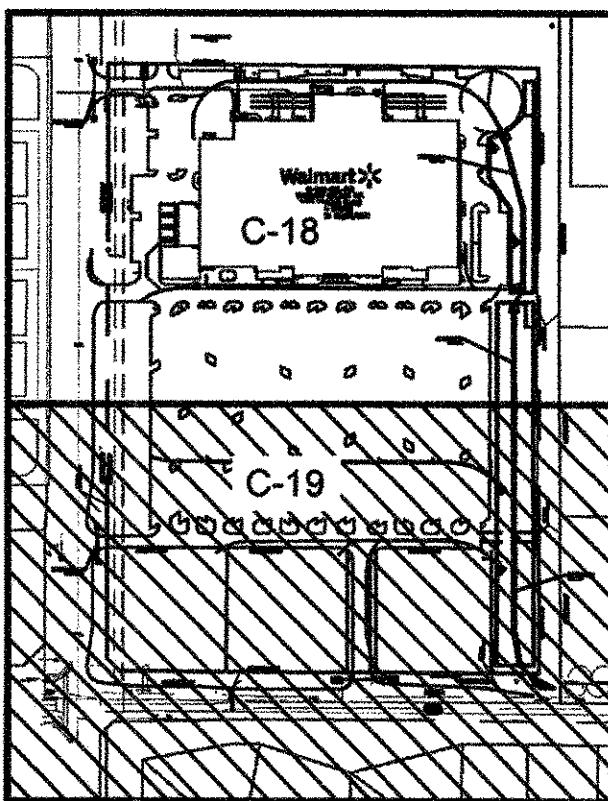
RAILROAD SPIKE SET ON THE WEST SIDE OF A TRAFFIC SIGNAL POLE.  
LOCATED ON THE NORTHEAST CORNER OF THE INTERSECTION OF W.  
LUCAS ROAD AND FM 2551.  
ELEV. = 644.00

#### BENCHMARK NO. 4

"X" CUT SET ON THE NORTHEAST CORNER OF A CONCRETE  
HEADWALL LOCATED ON THE EAST SIDE OF FM 2551 APPROXIMATELY  
1600 FEET NORTH OF W. LUCAS ROAD.  
ELEV. = 845.52

**STOP!**  
**CALL BEFORE YOU DIG**

**DIG TESS**  
**1-800-DIG-TESS**  
 (@ least 72 hours prior to digging.)



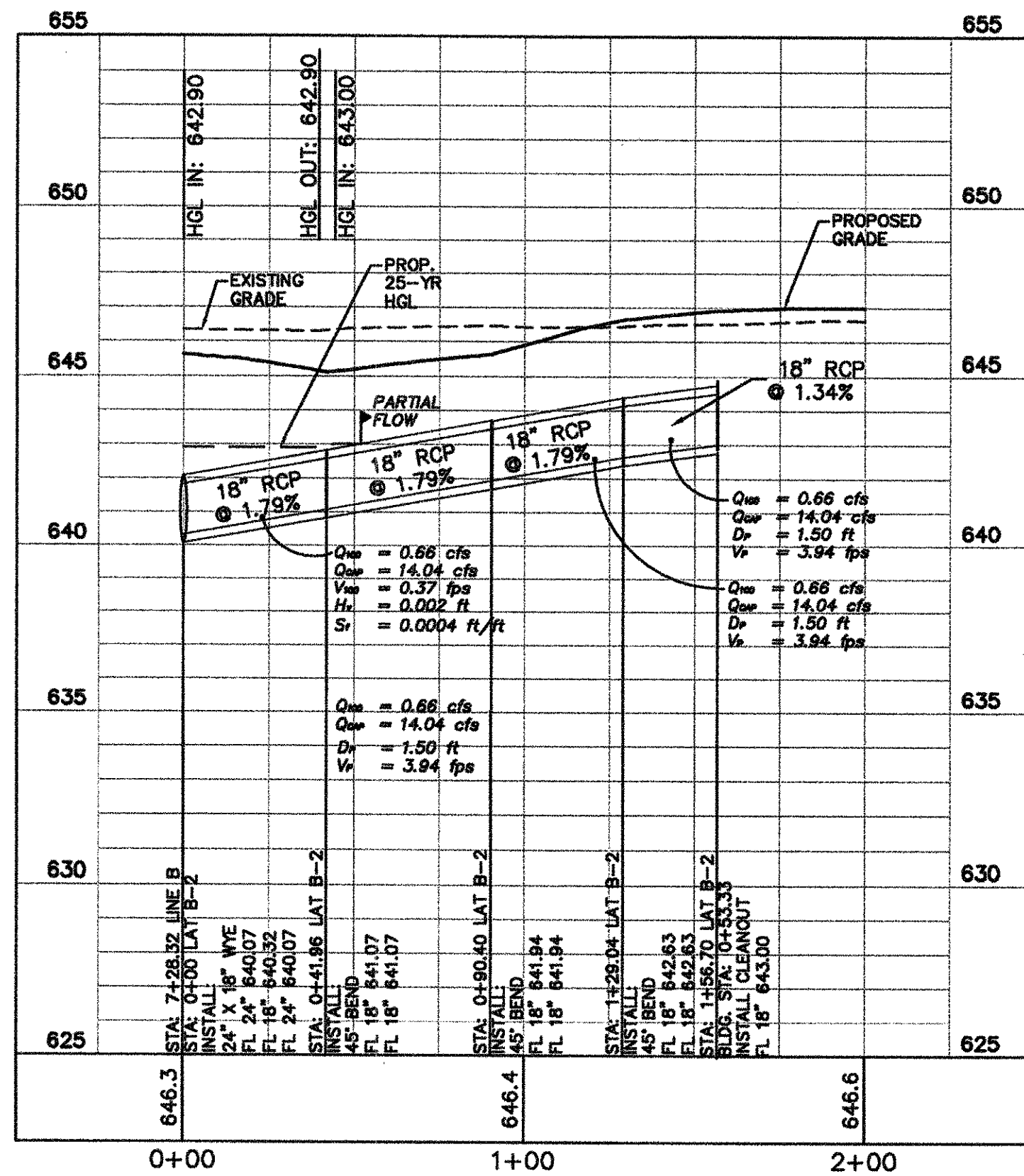
**KEY MAP**  
N.T.S.

[illegible]

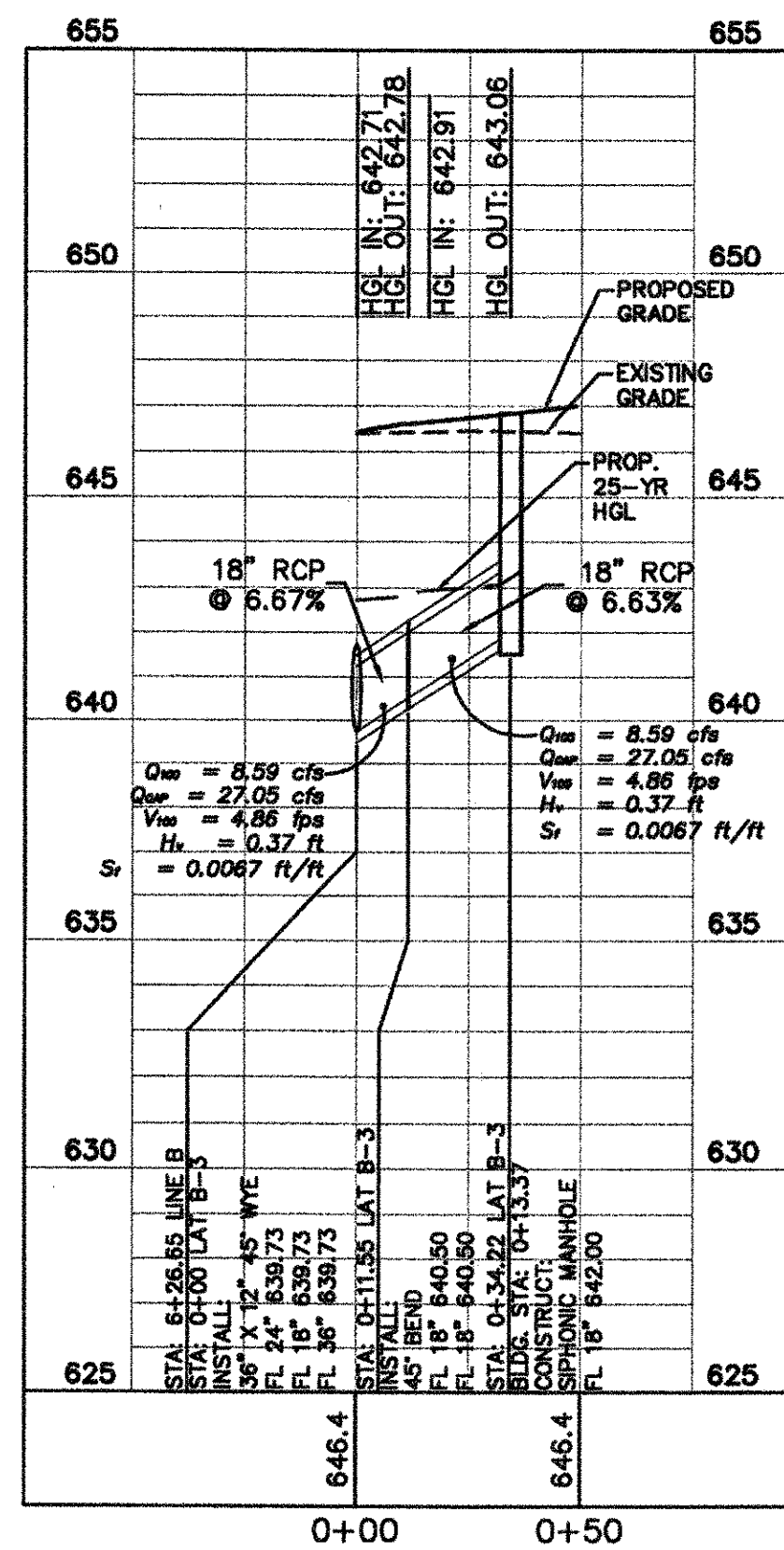




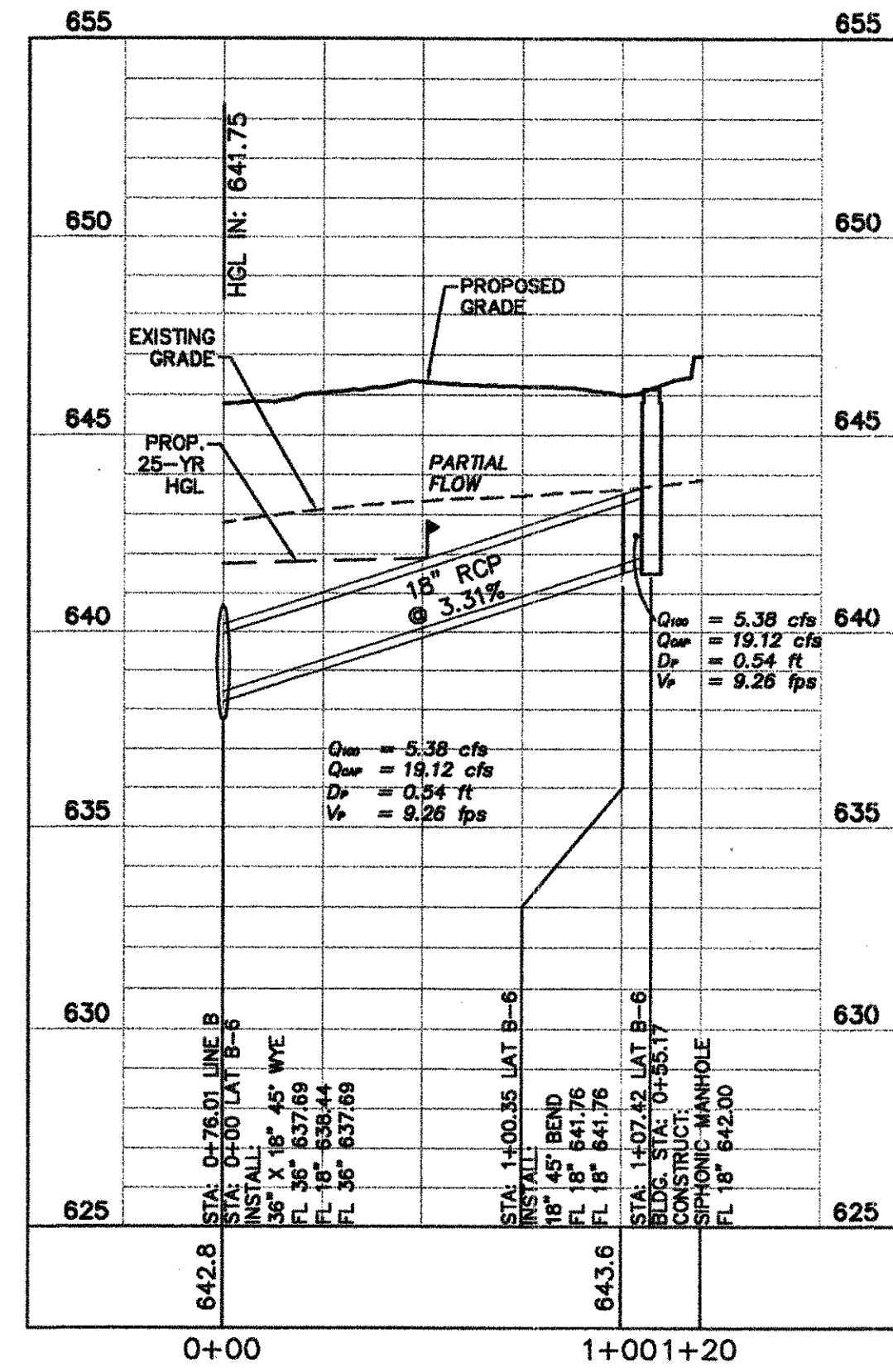




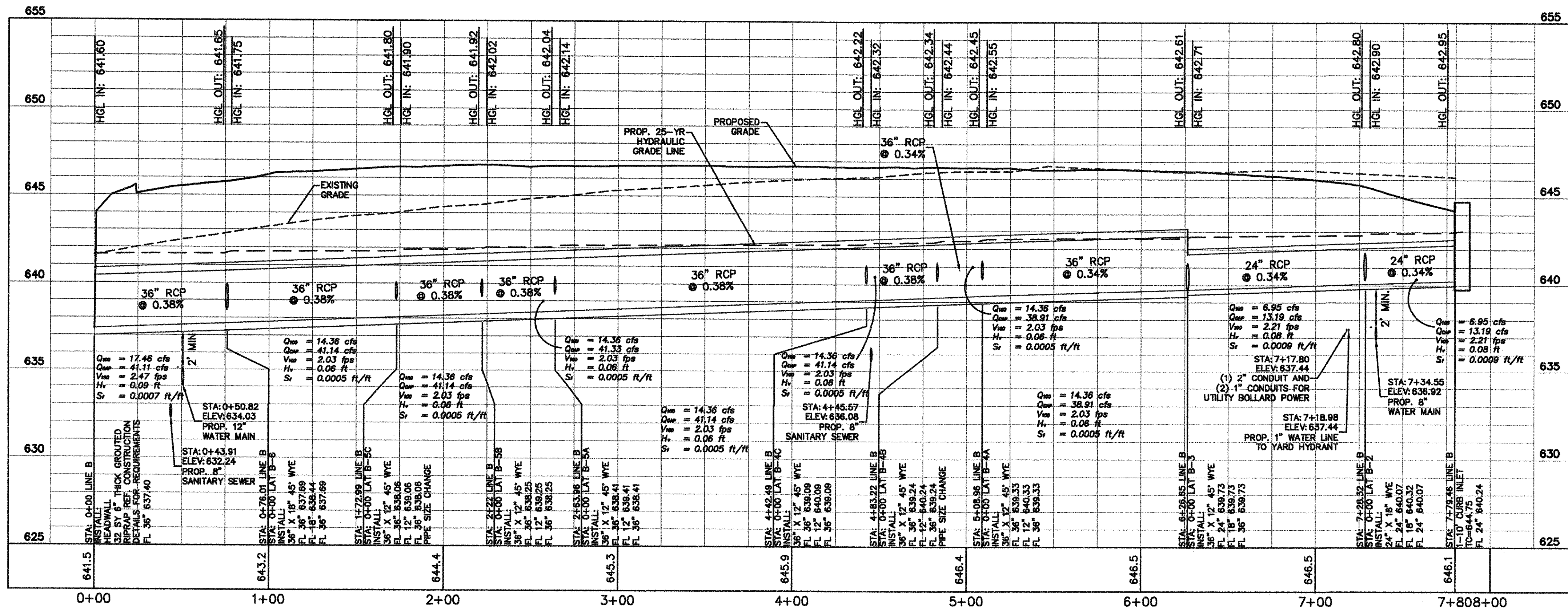
STORM DRAIN LATERAL "B-2"



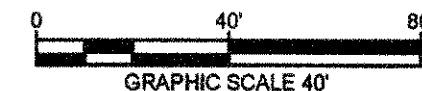
STORM DRAIN LATERAL "B-3"



STORM DRAIN LATERAL "B-6"



STORM DRAIN LINE "B"

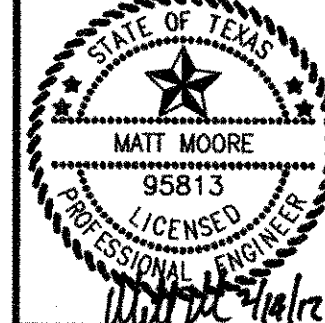


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DATE: 02/12/2013 BY: LAUREN NUFFER, P.E.

Scale: AS SHOWN  
Designed by: CLC  
Drawn by: CLC  
Checked by: MAM  
Date: February 2012  
Project No.: 093202198

# STORM DRAIN PROFILES

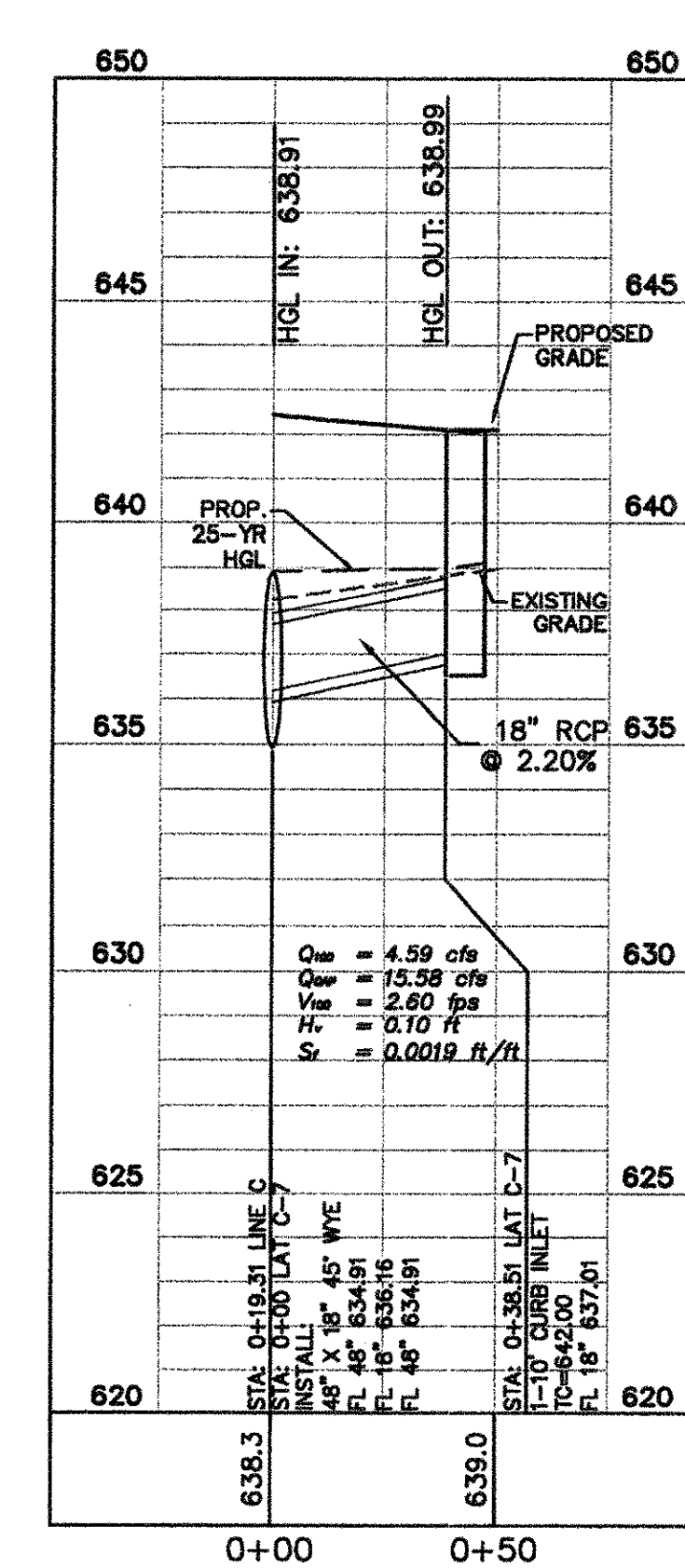
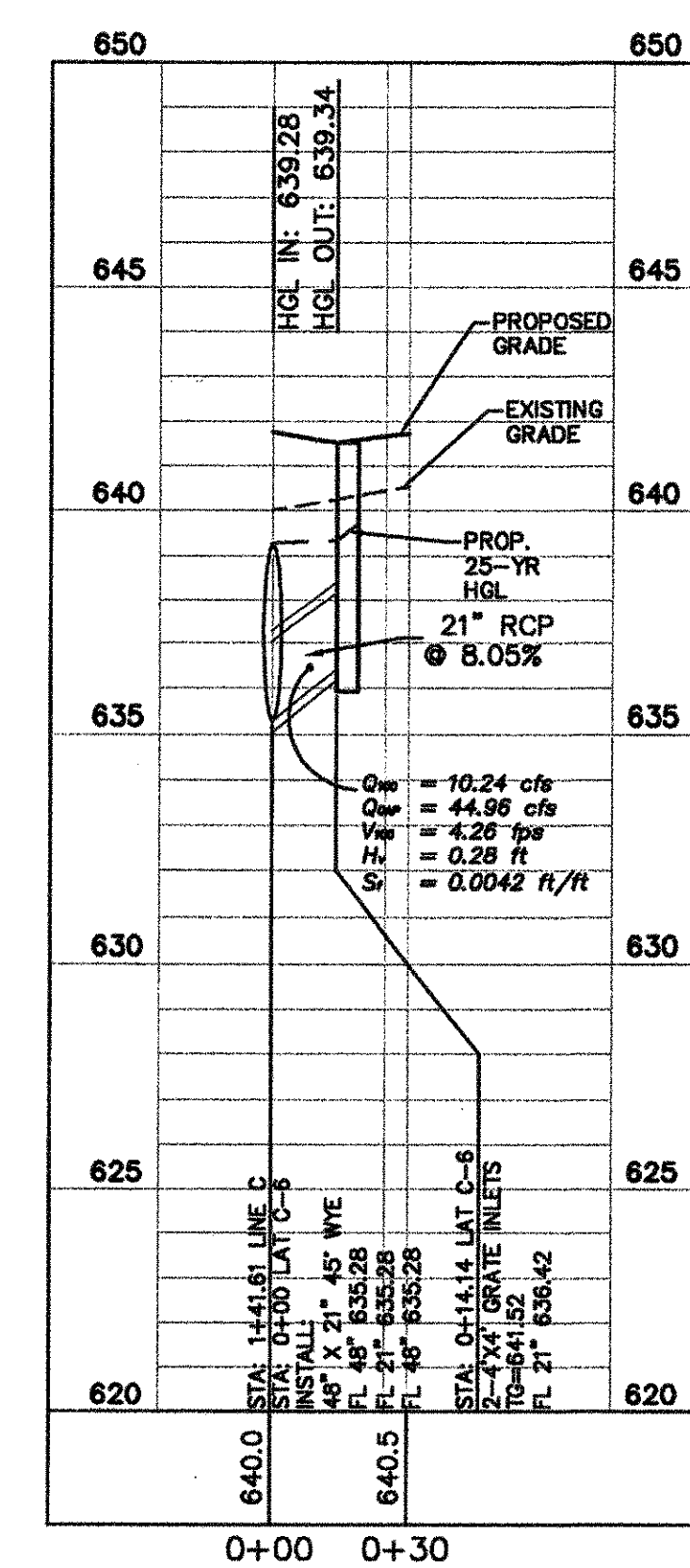
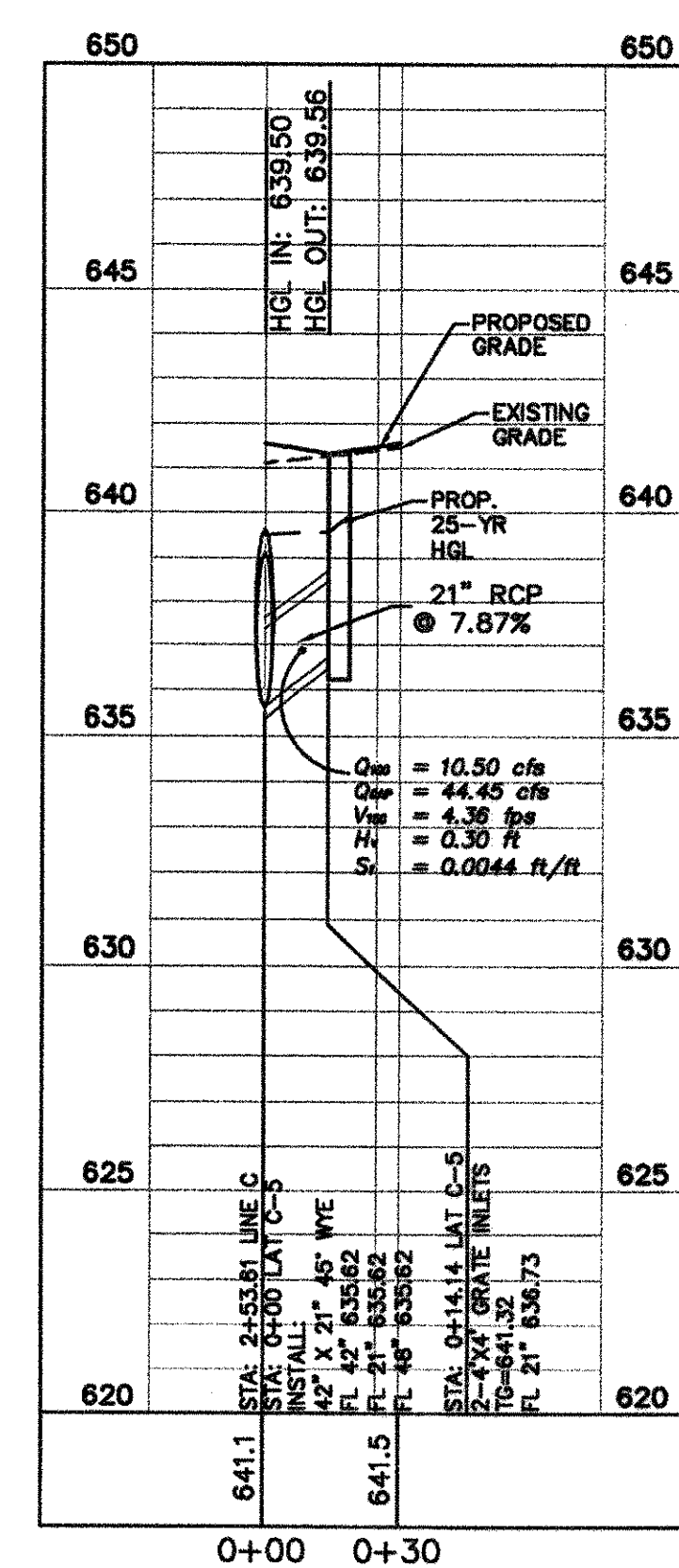
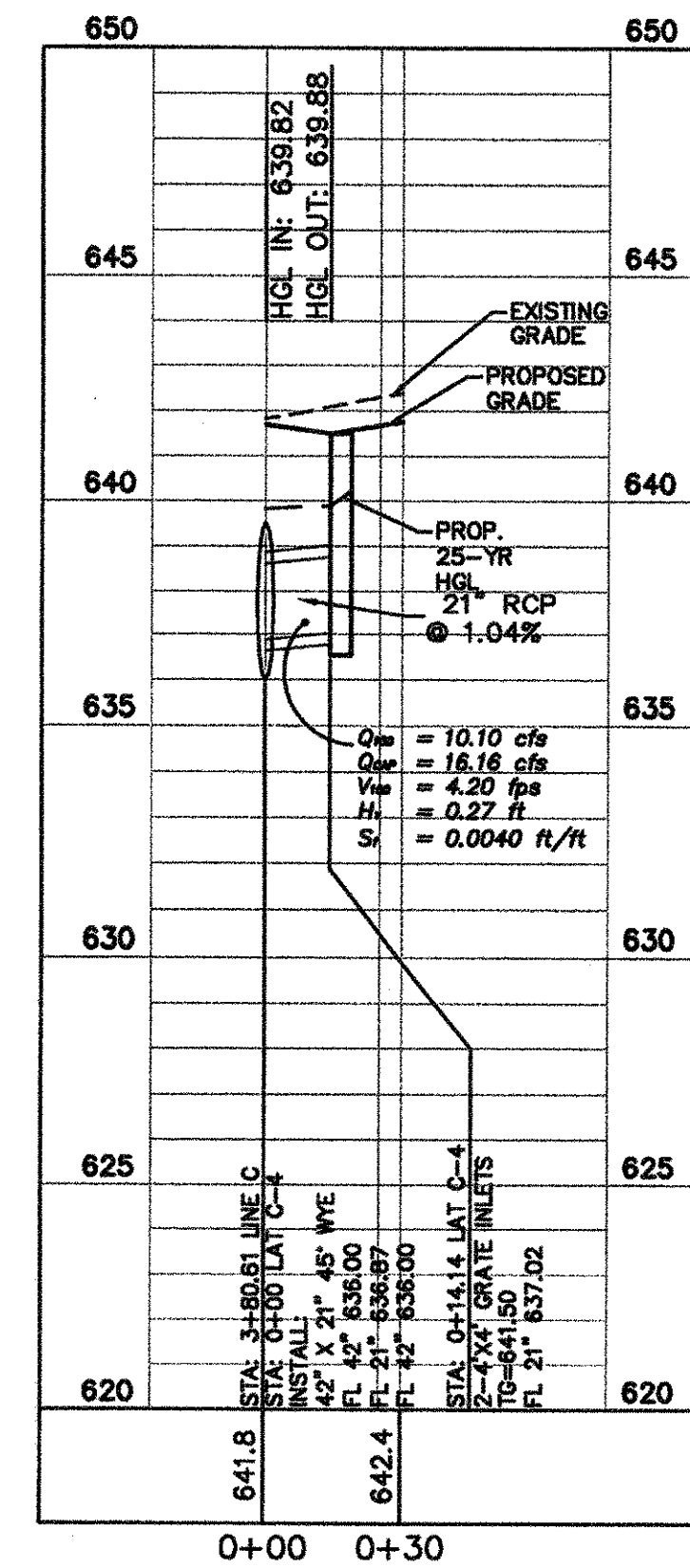
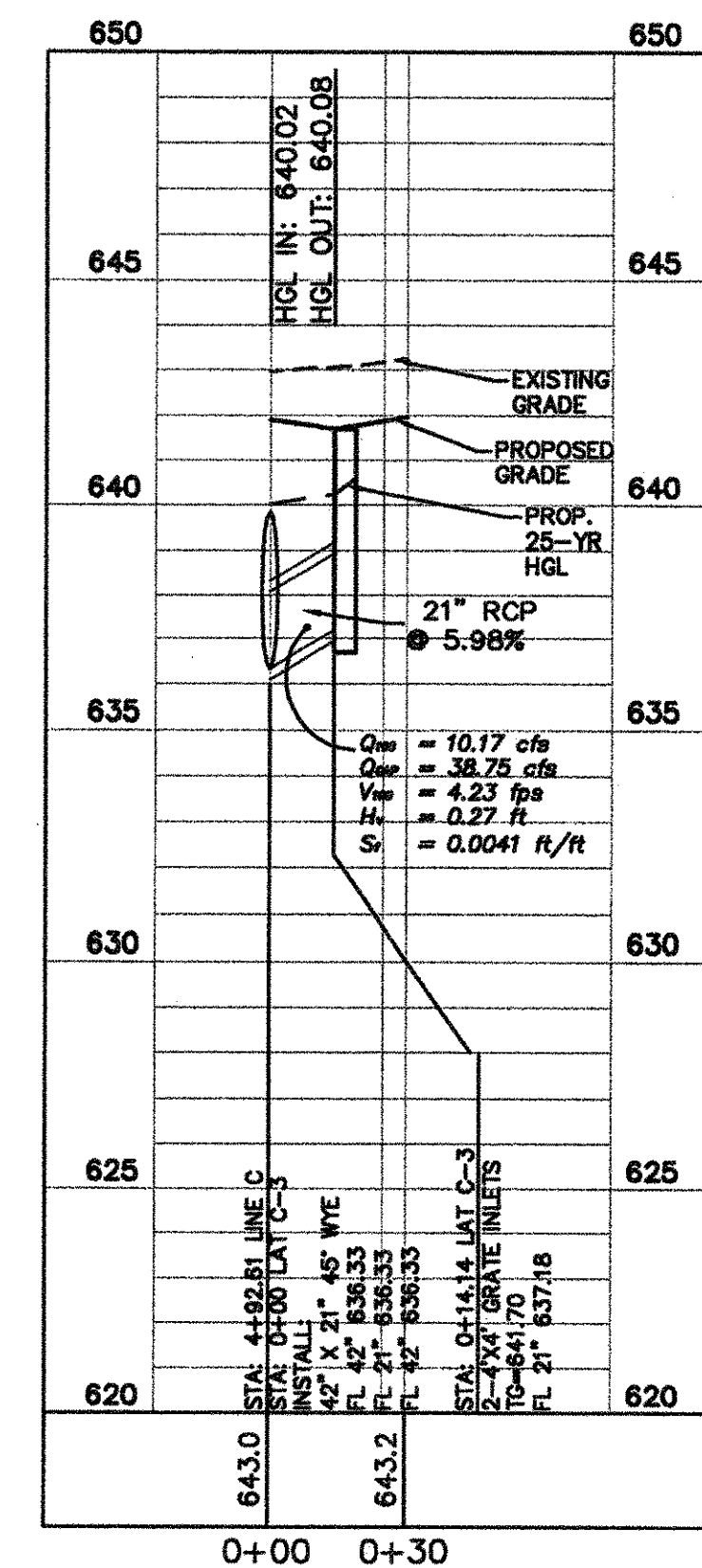
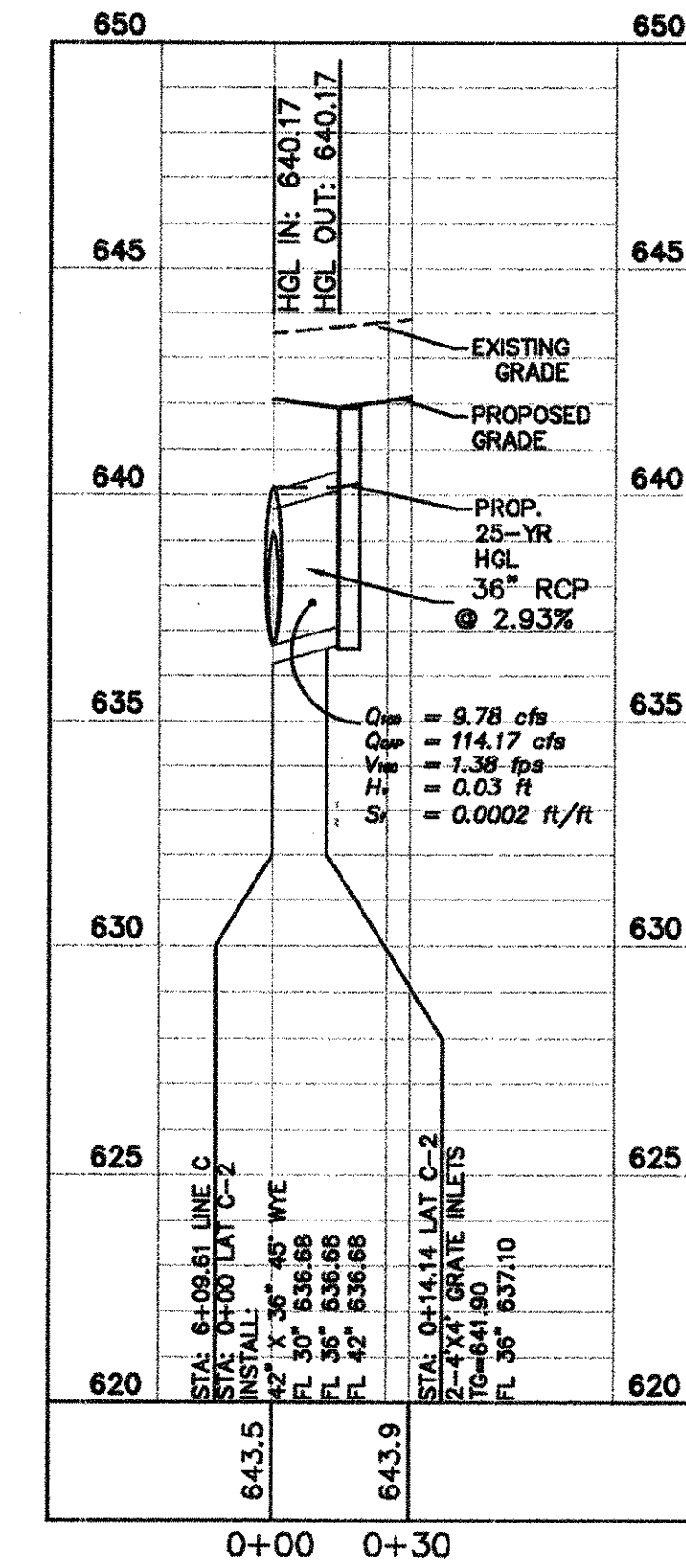
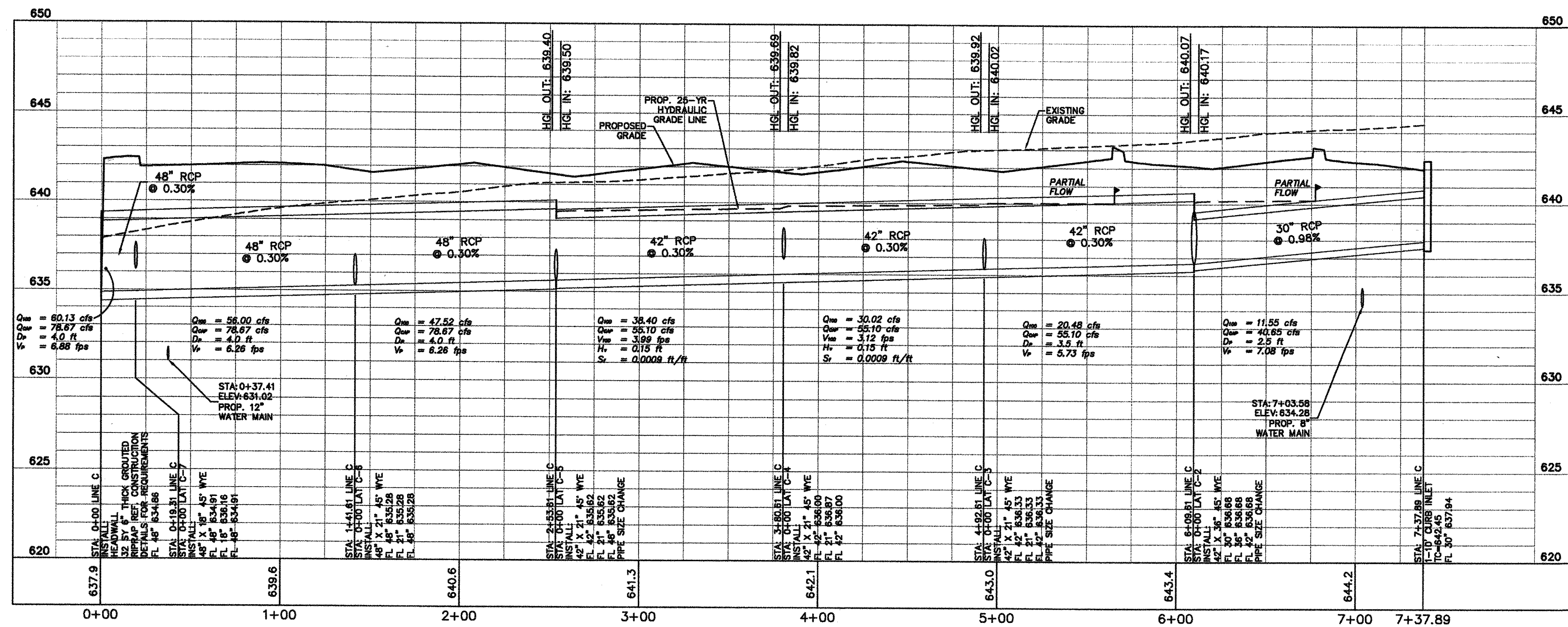
Walmart  
STORE #6672-00  
C-180-SGL-NO  
NEC WEST LUCAS ROAD AND FM 2551  
LUCAS, TEXAS



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Fax. No. (817) 335-3050

No.	Date	Revisions	App.

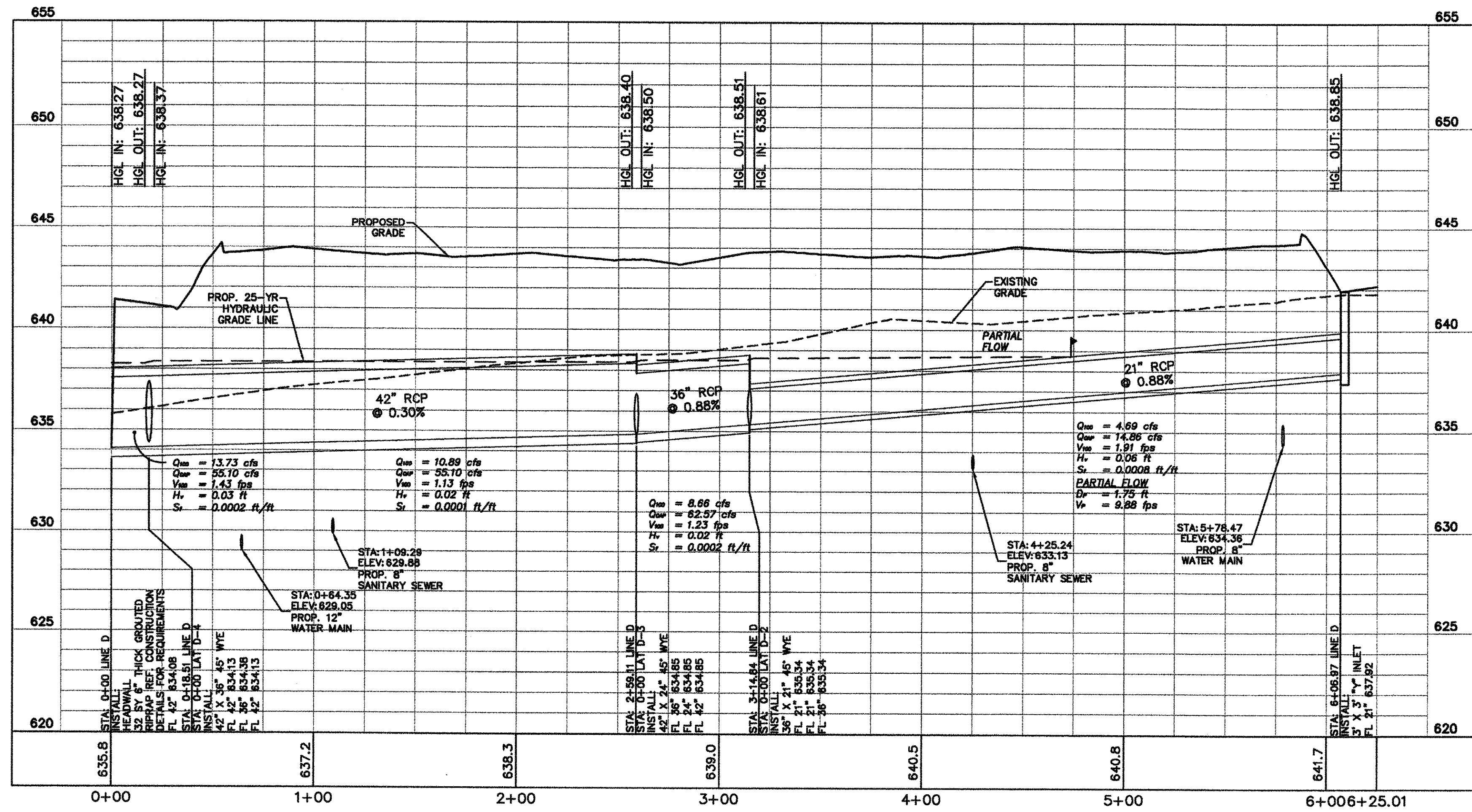




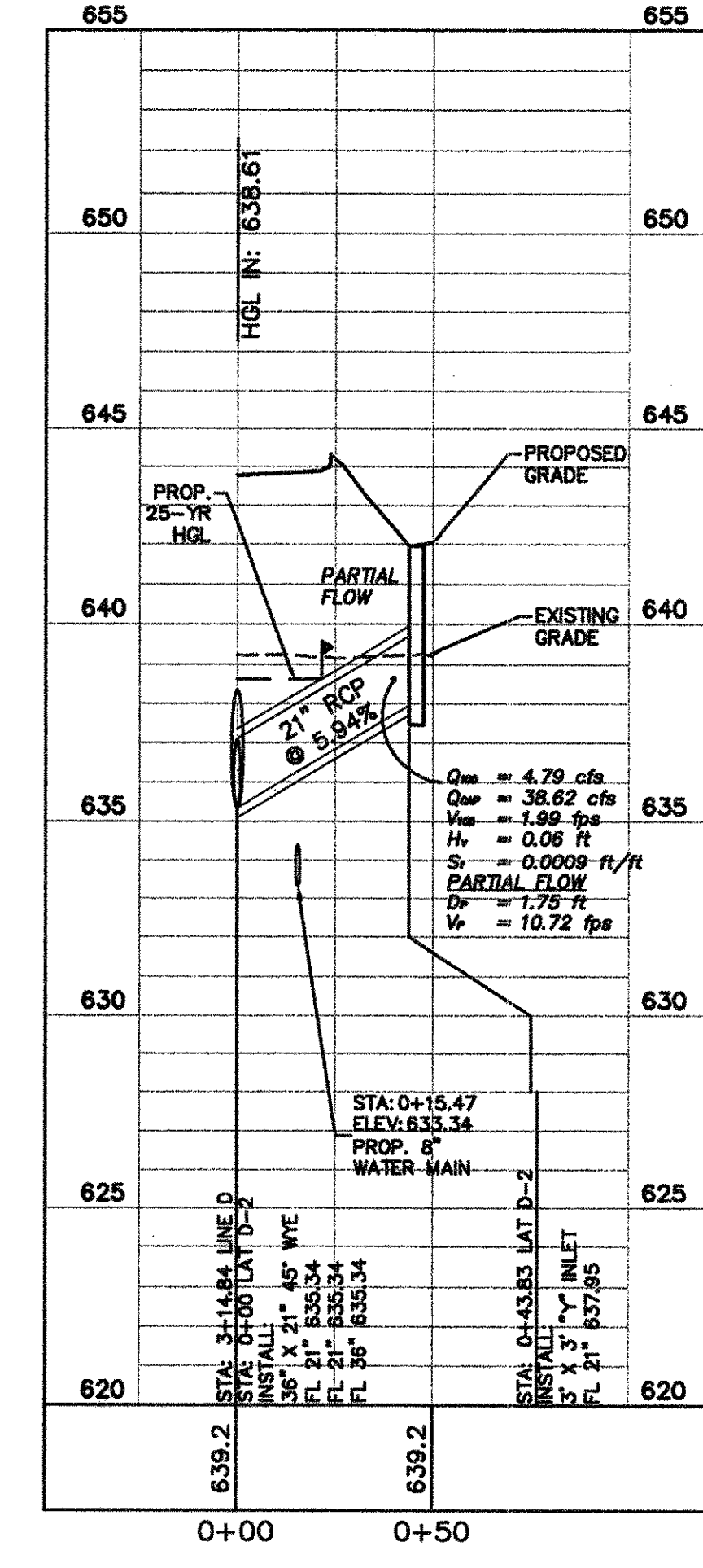
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DURING THE CONSTRUCTION PROCESS REPORTED BY EMJ  
CORP TO KIMLEY-HORN AND ASSOCIATES, INC. AND  
CONSIDERED TO BE SIGNIFICANT. THIS DRAWING IS NOT  
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DATE: 02/12/2013 BY: LAUREN NUFFER, P.E.



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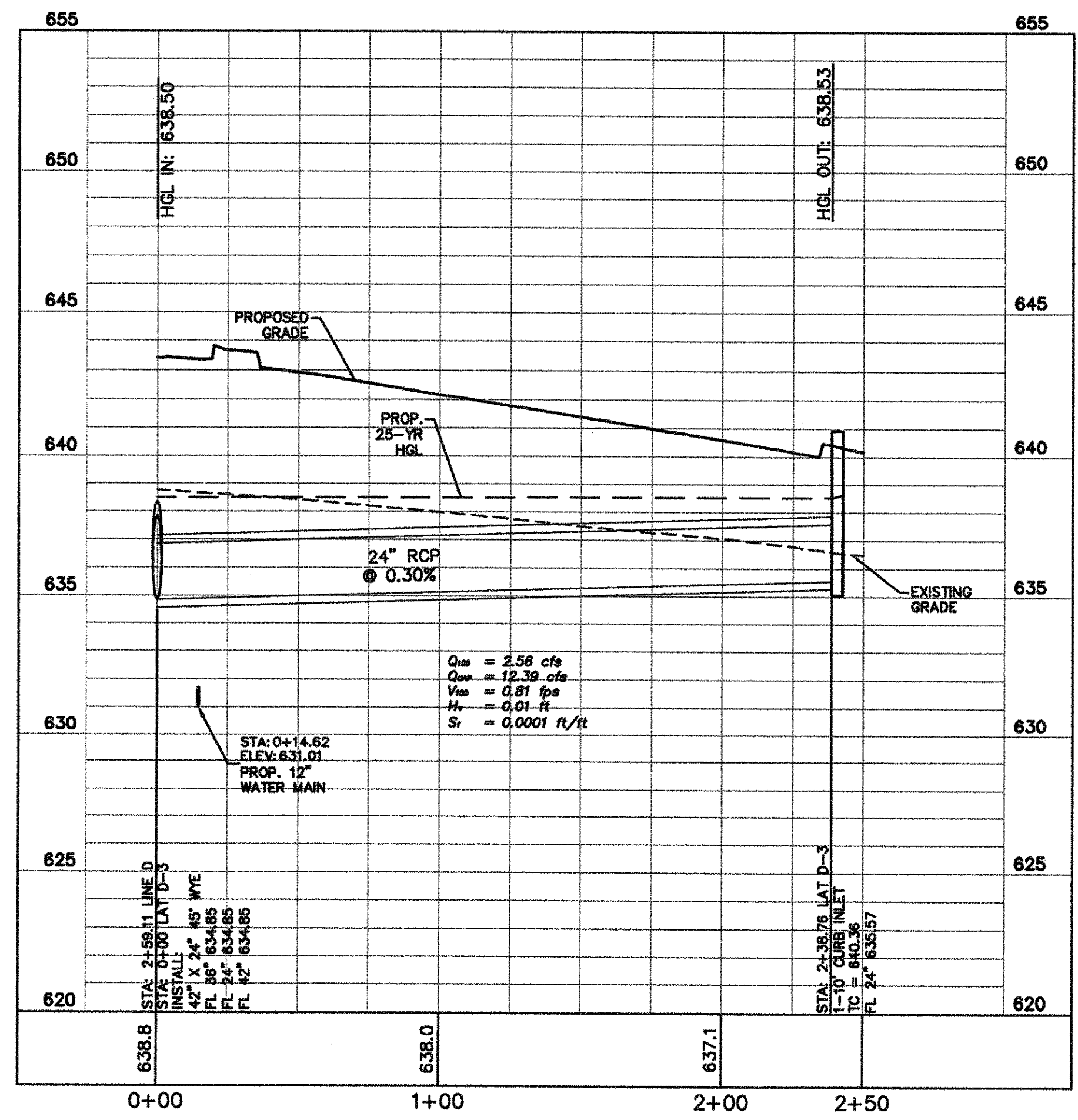


STORM DRAIN LINE "D"

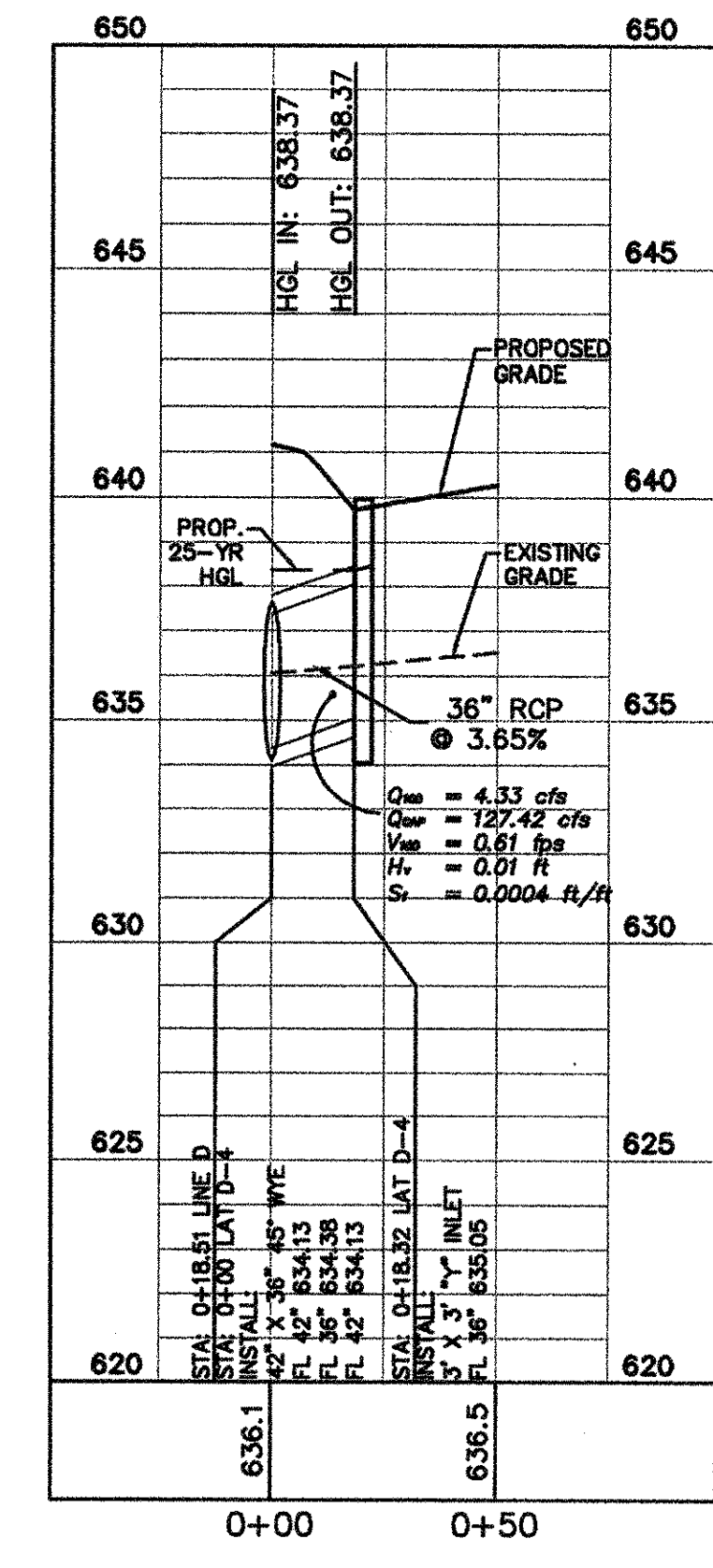


STORM DRAIN LATERAL "D-1"

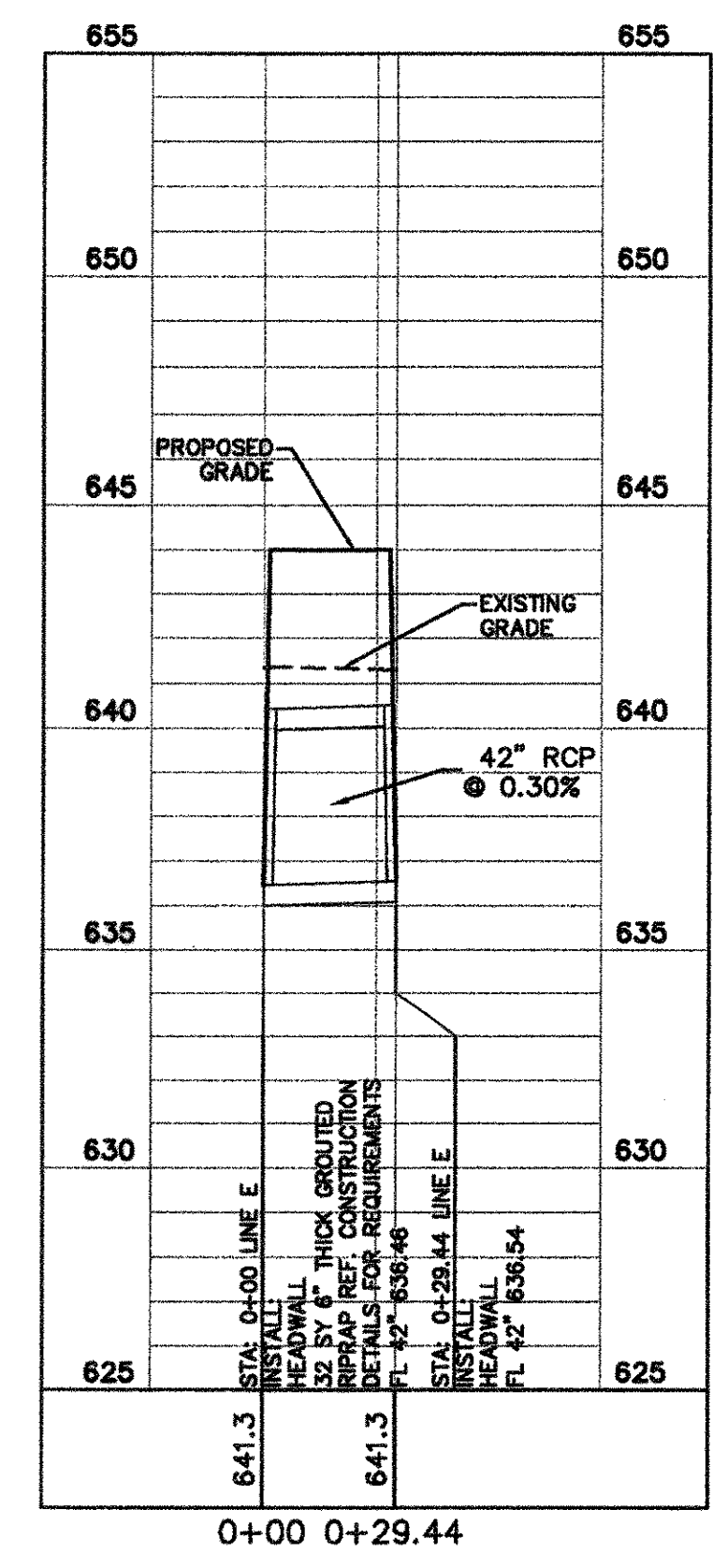
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CORP TO KIMLEY-HORN AND ASSOCIATES, INC. AND  
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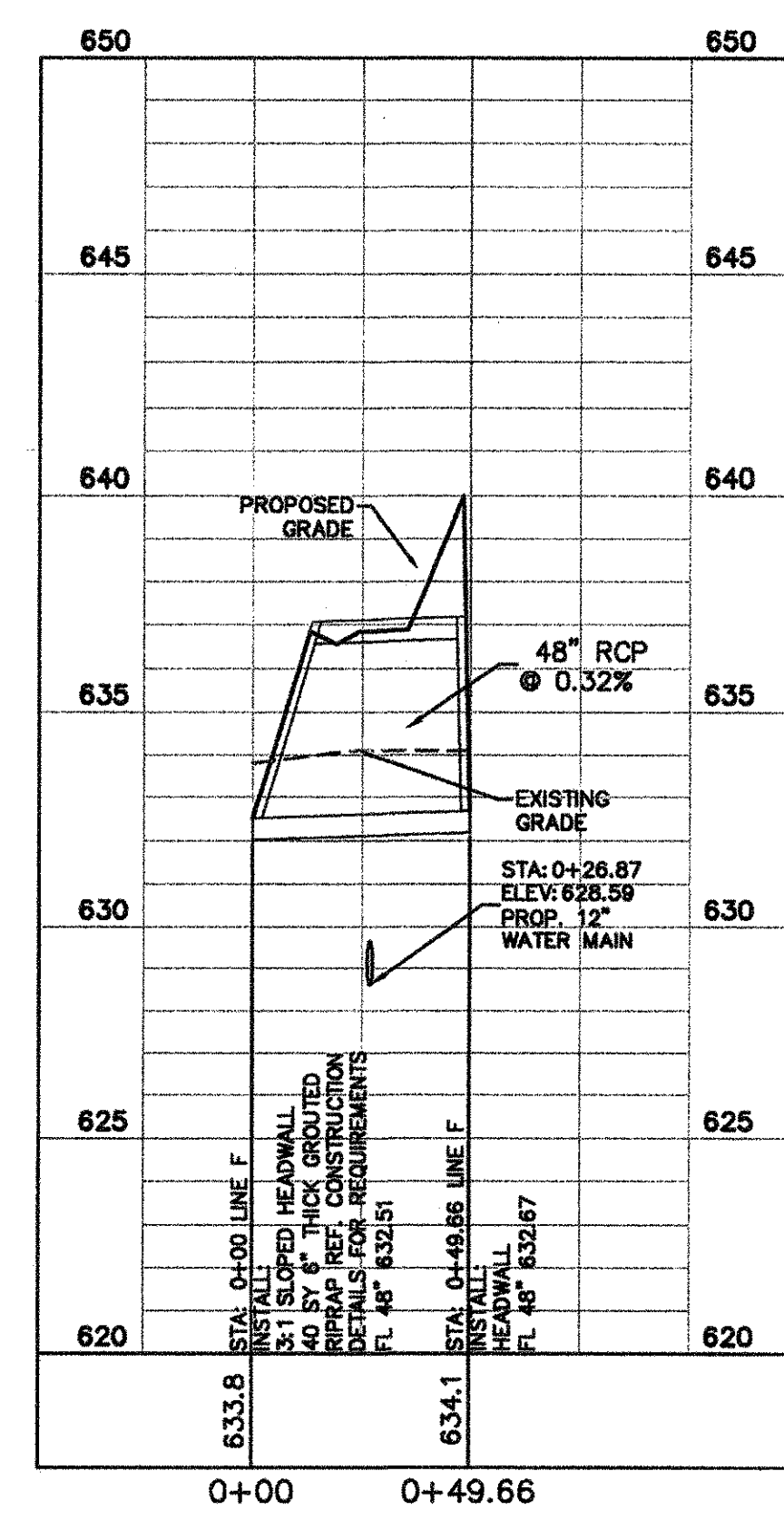
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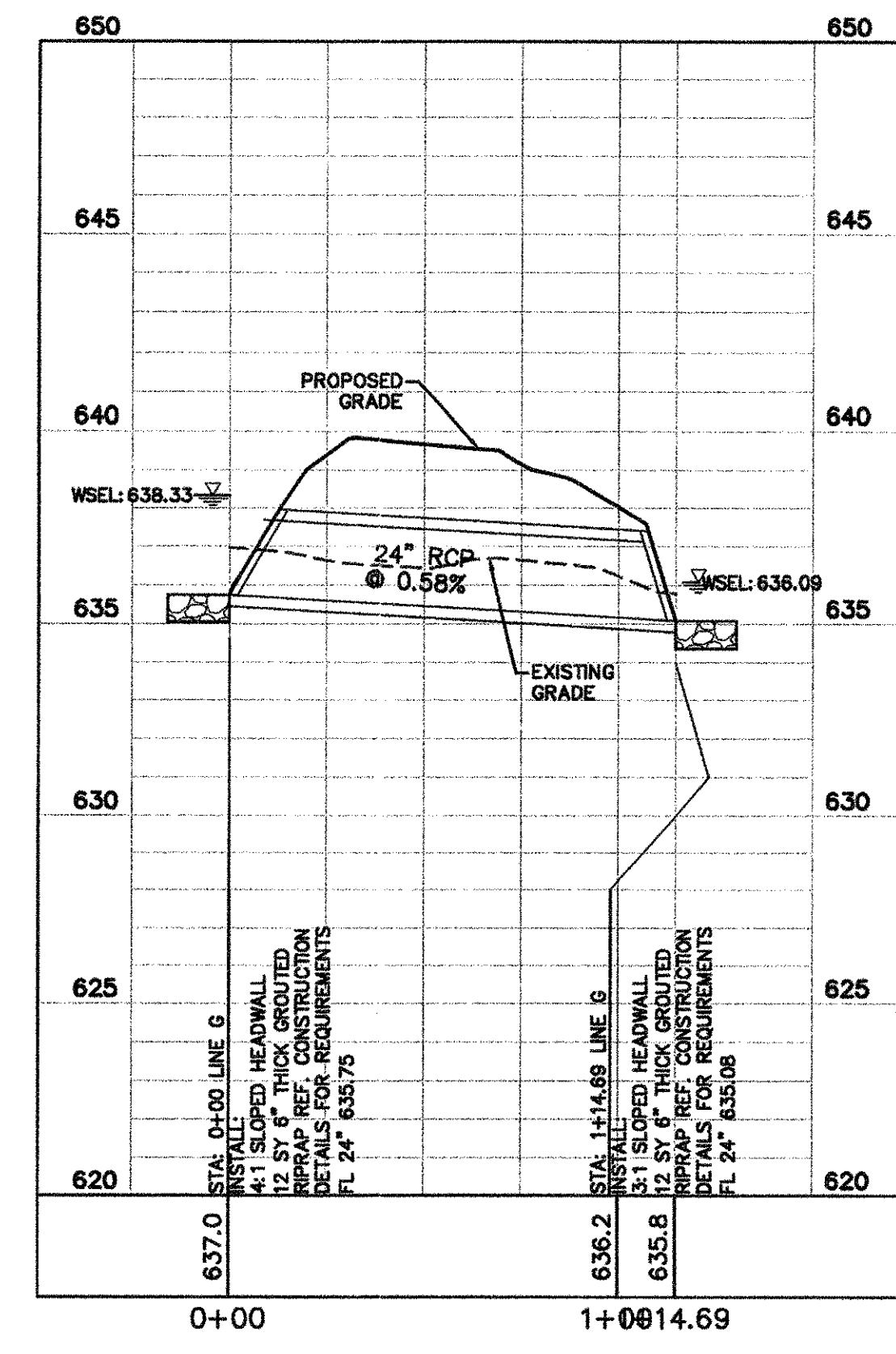
STORM DRAIN LATERAL "D-3"



STORM DRAIN LINE "E"



STORM DRAIN LINE "F"



STORM DRAIN LINE "G"

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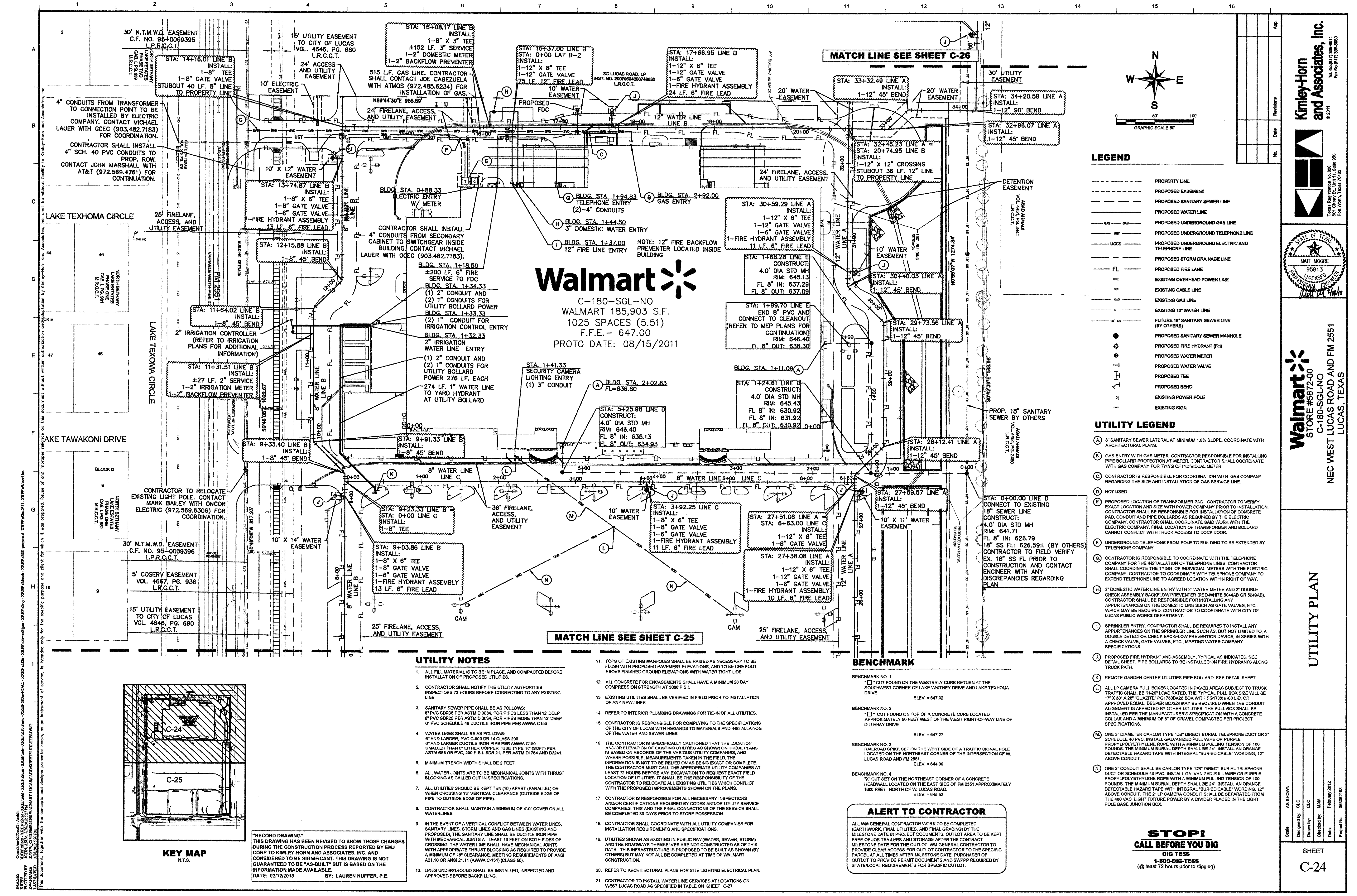
STATE OF TEXAS  
MATT MOORE  
95813  
LICENSED PROFESSIONAL ENGINEER

Walmart  
STORE #5672-00  
C-180-SGL-NO  
NEC WEST LUCAS ROAD AND FM 2551  
LUCAS, TEXAS

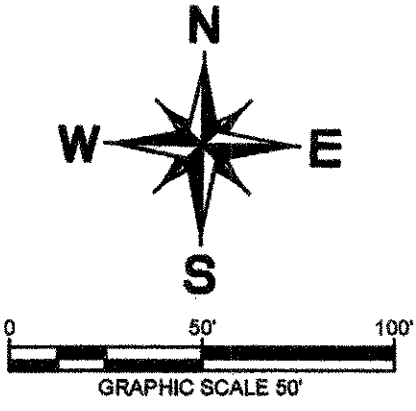
STORM DRAIN PROFILES

SHEET  
C-23





**Walmart**  
C-180-SGL-NO  
WALMART 185,903 S.F.  
1025 SPACES (5.51)  
F.F.E. = 647.00  
PROTO DATE: 08/15/2011



**LEGEND**

- PROPERTY LINE
- PROPOSED EASEMENT
- PROPOSED SANITARY SEWER LINE
- PROPOSED WATER LINE
- PROPOSED UNDERGROUND GAS LINE
- PROPOSED UNDERGROUND TELEPHONE LINE
- PROPOSED UNDERGROUND ELECTRIC AND TELEPHONE LINE
- PROPOSED STORM DRAINAGE LINE
- PROPOSED FIRE LINE
- EXISTING OVER-HEAD POWER LINE
- EXISTING CABLE LINE
- EXISTING GAS LINE
- EXISTING 12" WATER LINE
- FUTURE 18" SANITARY SEWER LINE (BY OTHERS)
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED FIRE HYDRANT (FH)
- PROPOSED WATER METER
- PROPOSED WATER VALVE
- PROPOSED TEE
- PROPOSED BEND
- EXISTING POWER POLE
- EXISTING SIGN

**UTILITY LEGEND**

- (A) 8" SANITARY SEWER LATERAL AT MINIMUM 1.0% SLOPE. COORDINATE WITH ARCHITECTURAL PLANS.
- (B) GAS ENTRY WITH GAS METER. CONTRACTOR RESPONSIBLE FOR INSTALLING PIPE BOLLARD PROTECTION AT METER. CONTRACTOR SHALL COORDINATE WITH GAS COMPANY FOR TYPING OF INDIVIDUAL METER.
- (C) CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH GAS COMPANY REGARDING THE SIZE AND INSTALLATION OF GAS SERVICE LINE.
- (D) NOT USED
- (E) PROPOSED LOCATION OF TRANSFORMER PAD. CONTRACTOR TO VERIFY EXACT LOCATION AND SIZE WITH POWER COMPANY PRIOR TO INSTALLATION. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF CONCRETE PAD, CONDUIT AND PIPE BOLLARDS AS REQUIRED BY THE ELECTRIC COMPANY. CONTRACTOR SHALL COORDINATE WITH THE ELECTRIC COMPANY, FINAL LOCATION OF TRANSFORMER AND BOLLARD CANNOT CONFLICT WITH TRUCK ACCESS TO DOCK DOOR.
- (F) UNDERGROUND TELEPHONE FROM POLE TO BUILDING TO BE EXTENDED BY TELEPHONE COMPANY.
- (G) CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE TELEPHONE COMPANY FOR THE INSTALLATION OF TELEPHONE LINES. CONTRACTOR SHALL COORDINATE THE TYPING OF INDIVIDUAL METERS WITH THE ELECTRIC COMPANY. CONTRACTOR TO COORDINATE WITH TELEPHONE COMPANY TO EXTEND TELEPHONE LINE TO AGREED LOCATION WITHIN RIGHT OF WAY.
- (H) 3" DOMESTIC WATER LINE ENTRY WITH 2" WATER METER AND 2" DOUBLE CHECK ASSEMBLY BACKFLOW PREVENTER (RED-WHITE 5044AB OR 5048AB). CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ANY APPURTENANCES ON THE DOMESTIC LINE SUCH AS GATE VALVES, ETC., WHICH MAY BE REQUIRED. CONTRACTOR TO COORDINATE WITH CITY OF LUCAS PUBLIC WORKS DEPARTMENT.
- (I) SPRINKLER ENTRY. CONTRACTOR SHALL BE REQUIRED TO INSTALL ANY APPURTENANCES ON THE SPRINKLER LINE SUCH AS, BUT NOT LIMITED TO, A DOUBLE DETECTOR CHECK BACKFLOW PREVENTION DEVICE, IN SERIES WITH A CHECK VALVE, GATE VALVES, ETC., MEETING WATER COMPANY SPECIFICATIONS.
- (J) PROPOSED FIRE HYDRANT AND ASSEMBLY, TYPICAL AS INDICATED. SEE DETAIL SHEET. PIPE BOLLARDS TO BE INSTALLED ON FIRE HYDRANTS ALONG TRUCK PATH.
- (K) REMOTE GARDEN CENTER UTILITIES PIPE BOLLARD. SEE DETAIL SHEET.
- (L) ALL LP CAMERA PULL BOXES LOCATED IN PAVED AREAS SUBJECT TO TRUCK TRAFFIC SHALL BE "H-20" LOAD RATED. THE TYPICAL PULL BOX SIZE WILL BE 17" X 30" X 28" QUAZITE PG1730BA28 BOX WITH PG1730H00 LID, OR APPROVED EQUAL. DEEPER BOXES MAY BE REQUIRED WHEN THE CONDUIT ALIGNMENT IS AFFECTED BY OTHER UTILITIES. THE PULL BOX SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATION WITH A CONCRETE COLLAR AND A MINIMUM OF 8" OF GRAVEL COMPACTED PER PROJECT SPECIFICATIONS.
- (M) ONE 3" DIAMETER CARLON TYPE "DB" DIRECT BURIAL TELEPHONE DUCT OR "S" SCHEDULE 40 PVC. INSTALL GALVANIZED PULL WIRE OR PURPLE PROPOLYETHYLENE ROPE WITH A MINIMUM PULLING TENSION OF 100 POUNDS. THE MINIMUM BURIAL DEPTH SHALL BE 24". INSTALL AN ORANGE DETECTABLE HAZARD TAPE WITH INTEGRAL "BURIED CABLE" WORDING, 12" ABOVE CONDUIT. THE 2" LP CAMERA CONDUIT SHALL BE SEPARATED FROM THE 480 VAC LIGHT FIXTURE POWER BY A DIVIDER PLACED IN THE LIGHT POLE BASE JUNCTION BOX.
- (N) ONE 2" CONDUIT SHALL BE CARLON TYPE "DB" DIRECT BURIAL TELEPHONE DUCT OR SCHEDULE 40 PVC. INSTALL GALVANIZED PULL WIRE OR PURPLE PROPOLYETHYLENE ROPE WITH A MINIMUM PULLING TENSION OF 100 POUNDS. THE MINIMUM BURIAL DEPTH SHALL BE 24". INSTALL AN ORANGE DETECTABLE HAZARD TAPE WITH INTEGRAL "BURIED CABLE" WORDING, 12" ABOVE CONDUIT. THE 2" LP CAMERA CONDUIT SHALL BE SEPARATED FROM THE 480 VAC LIGHT FIXTURE POWER BY A DIVIDER PLACED IN THE LIGHT POLE BASE JUNCTION BOX.

**UTILITY NOTES**

- 1. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
- 2. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
- 3. SANITARY SEWER PIPE SHALL BE AS FOLLOWS:  
8" PVC SDR35 PER ASTM D 3034, FOR PIPES LESS THAN 12" DEEP  
8" PVC SDR26 PER ASTM D 3034, FOR PIPES MORE THAN 12" DEEP  
6" PVC SCHEDULE 40 DUCTILE IRON PIPE PER AWWA C150
- 4. WATER LINES SHALL BE AS FOLLOWS:  
6" AND LARGER, PVC C-90 OR 14 CLASS 200  
6" AND LARGER DUCTILE IRON PIPE PER AWWA C150  
SMALLER THAN 6" EITHER COPPER TUBE TYPE "K" (80FT) PER ASTM B88 OR PVC, 200 P.S.I., SDR 21, PER ASTM D1784 AND D2241.
- 5. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
- 6. ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH THRUST BLOCKING AS CALLED OUT IN SPECIFICATIONS.
- 7. ALL UTILITIES SHOULD BE KEPT TEN (10) FEET (PARALLEL) OR WHEN CROSSING 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE).
- 8. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4'-0" COVER ON ALL WATER LINES.
- 9. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING. THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING AS REQUIRED TO PROVIDE A MINIMUM OF 18" CLEARANCE. MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50).
- 10. LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.

- 11. TOPS OF EXISTING MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS, AND TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATIONS WITH WATER TIGHT LIDS.
- 12. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
- 13. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
- 14. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
- 15. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE CITY OF LUCAS WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
- 16. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- 17. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION.
- 18. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS FOR INSTALLATION.
- 19. UTILITIES SHOWN AS EXISTING IN PUBLIC ROW (WATER, SEWER, STORM) AND THE ROADWAYS THEMSELVES ARE NOT CONSTRUCTED AS OF THIS DATE. THIS INFRASTRUCTURE IS PROPOSED TO BE BUILT AS SHOWN (BY OTHERS) BUT MAY NOT BE ALL COMPLETED AT TIME OF WALMART CONSTRUCTION.
- 20. REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING ELECTRICAL PLAN.
- 21. CONTRACTOR TO INSTALL WATER LINE SERVICES AT LOCATIONS ON WEST LUCAS ROAD AS SPECIFIED IN TABLE ON SHEET C-27.

**BENCHMARK**

- BENCHMARK NO. 1  
"X" CUT FOUND ON THE WESTERLY CURB RETURN AT THE SOUTHWEST CORNER OF LAKE WHITNEY DRIVE AND LAKE TEXHOMA DRIVE.  
ELEV. = 647.32
- BENCHMARK NO. 2  
"X" CUT FOUND ON TOP OF A CONCRETE CURB LOCATED APPROXIMATELY 50 FEET WEST OF THE WEST RIGHT-OF-WAY LINE OF DILLEYHAY DRIVE.  
ELEV. = 647.27
- BENCHMARK NO. 3  
RAILROAD SPIKE SET ON THE WEST SIDE OF A TRAFFIC SIGNAL POLE LOCATED ON THE NORTHEAST CORNER OF THE INTERSECTION OF W. LUCAS ROAD AND FM 2551.  
ELEV. = 644.00
- BENCHMARK NO. 4  
"X" CUT SET ON THE NORTHEAST CORNER OF A CONCRETE HEADWALL LOCATED ON THE EAST SIDE OF FM 2551 APPROXIMATELY 1600 FEET NORTH OF W. LUCAS ROAD.  
ELEV. = 645.52

**ALERT TO CONTRACTOR**

ALL WM GENERAL CONTRACTOR WORK TO BE COMPLETED (EARTHWORK, FINAL UTILITIES, AND FINAL GRADING) BY THE MILESTONE DATE IN PROJECT DOCUMENTS. OUTLOT AREA TO BE KEPT FREE OF JOB TRAILERS AND STORAGE AFTER THE CONTRACT MILESTONE DATE FOR THE OUTLOT. WM GENERAL CONTRACTOR TO PROVIDE CLEAR ACCESS FOR OUTLOT CONTRACTOR TO THE SPECIFIC PARCEL AT ALL TIMES AFTER STONE DATE. PURCHASE THE OUTLOT TO PROVIDE PERMIT DOCUMENTS AND SWPPP REQUIRED BY STATE/LOCAL REQUIREMENTS FOR SPECIFIC OUTLOT.

**KEY MAP**  
N.T.S.

"RECORD DRAWING"  
THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY EMJ CORP TO KIMLEY-HORN AND ASSOCIATES, INC. AND CONSIDERED TO BE "AS-BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE.  
DATE: 02/12/2013 BY: LAUREN NUFFER, P.E.

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Texas Registration No. 928  
Professional Engineer  
Fort Worth, Texas 76102

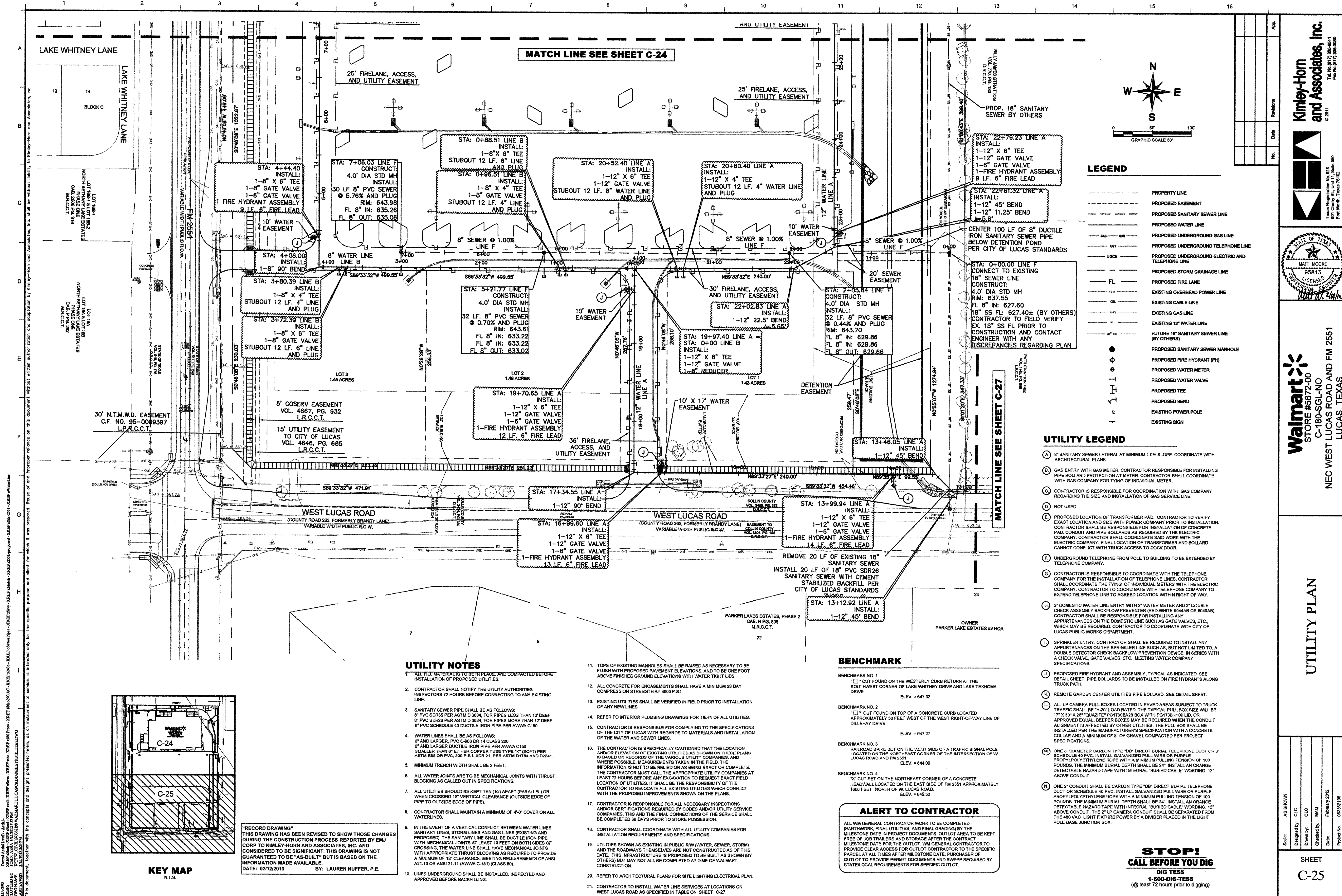
**Walmart**  
STORE #5672-00  
C-180-SGL-NO  
NEC WEST LUCAS ROAD AND FM 2551  
LUCAS, TEXAS

**UTILITY PLAN**

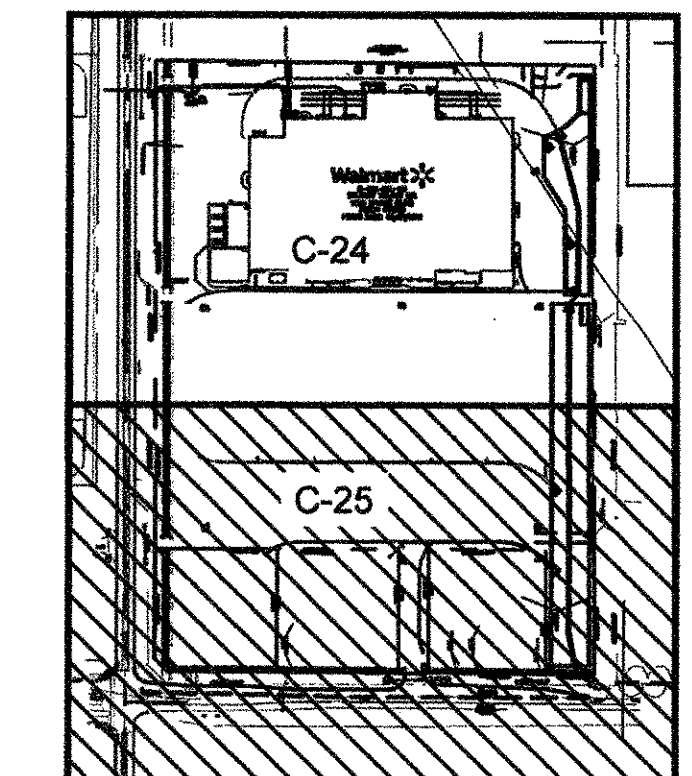
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Drawn by:	CLC
Checked by:	MAH
Date:	February 2012
Project No.:	06392188

SHEET  
C-24



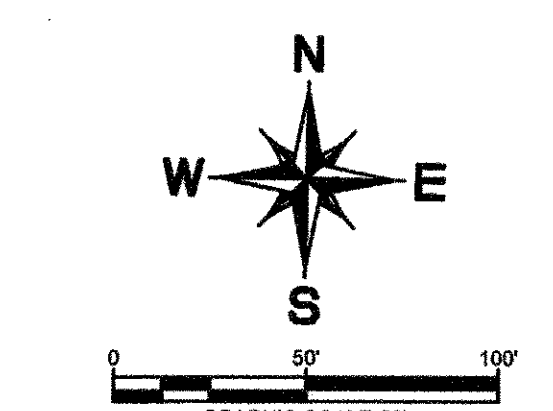


Drawn by: J. Kimley-Horn  
Checked by: J. Kimley-Horn  
Date: 06/28/2013  
Project No: 063352198



**KEY MAP**  
N.T.S.

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DATE: 02/12/2013 BY: LAUREN NUFFER, P.E.



**LEGEND**

- PROPERTY LINE
- PROPOSED EASEMENT
- PROPOSED SANITARY SEWER LINE
- PROPOSED WATER LINE
- PROPOSED UNDERGROUND GAS LINE
- PROPOSED UNDERGROUND TELEPHONE LINE
- PROPOSED UNDERGROUND ELECTRIC AND TELEPHONE LINE
- PROPOSED STORM DRAINAGE LINE
- PROPOSED FIRE LINE
- EXISTING OVERHEAD POWER LINE
- EXISTING CABLE LINE
- EXISTING GAS LINE
- EXISTING 12" WATER LINE
- FUTURE 18" SANITARY SEWER LINE (BY OTHERS)
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED FIRE HYDRANT (FH)
- PROPOSED WATER METER
- PROPOSED WATER VALVE
- PROPOSED TEE
- PROPOSED BEND
- EXISTING POWER POLE
- EXISTING SIGN

**UTILITY LEGEND**

- 8" SANITARY SEWER LATERAL AT MINIMUM 1.0% SLOPE. COORDINATE WITH ARCHITECTURAL PLANS.
- GAS ENTRY WITH GAS METER. CONTRACTOR RESPONSIBLE FOR INSTALLING PIPE BOLLARD PROTECTION AT METER. CONTRACTOR SHALL COORDINATE WITH GAS COMPANY FOR TYPING OF INDIVIDUAL METER.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH GAS COMPANY REGARDING THE SIZE AND INSTALLATION OF GAS SERVICE LINE.
- NOT USED
- PROPOSED LOCATION OF TRANSFORMER PAD. CONTRACTOR TO VERIFY EXACT LOCATION AND SIZE WITH POWER COMPANY PRIOR TO INSTALLATION. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF CONCRETE PAD, CONDUIT AND PIPE BOLLARDS AS REQUIRED BY THE ELECTRIC COMPANY. CONTRACTOR SHALL COORDINATE SAID WORK WITH THE ELECTRIC COMPANY. FINAL LOCATION OF TRANSFORMER AND BOLLARD CANNOT CONFLICT WITH TRUCK ACCESS TO DOCK DOOR.
- UNDERGROUND TELEPHONE FROM POLE TO BUILDING TO BE EXTENDED BY TELEPHONE COMPANY.
- CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE TELEPHONE COMPANY FOR THE INSTALLATION OF TELEPHONE LINES. CONTRACTOR SHALL COORDINATE THE TYPING OF INDIVIDUAL METERS WITH THE ELECTRIC COMPANY. CONTRACTOR TO COORDINATE WITH TELEPHONE COMPANY TO EXTEND TELEPHONE LINE TO AGREED LOCATION WITHIN RIGHT OF WAY.
- 3" DOMESTIC WATER LINE ENTRY WITH 2" WATER METER AND 2" DOUBLE CHECK ASSEMBLY BACKFLOW PREVENTER (RED-WHITE 5044AB OR 5040AB). CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ANY APPURTENANCES ON THE DOMESTIC LINE SUCH AS GATE VALVES, ETC., WHICH MAY BE REQUIRED. CONTRACTOR TO COORDINATE WITH CITY OF LUCAS PUBLIC WORKS DEPARTMENT.
- SPRINKLER ENTRY. CONTRACTOR SHALL BE REQUIRED TO INSTALL ANY APPURTENANCES ON THE SPRINKLER LINE SUCH AS, BUT NOT LIMITED TO, A DOUBLE DETECTOR CHECK BACKFLOW PREVENTION DEVICE, IN SERIES WITH A CHECK VALVE, GATE VALVES, ETC., MEETING WATER COMPANY SPECIFICATIONS.
- PROPOSED FIRE HYDRANT AND ASSEMBLY, TYPICAL AS INDICATED. SEE DETAIL SHEET. PIPE BOLLARDS TO BE INSTALLED ON FIRE HYDRANTS ALONG TRUCK PATH.
- REMOTE GARDEN CENTER UTILITIES PIPE BOLLARD. SEE DETAIL SHEET.
- ALL LP CAMERA PULL BOXES LOCATED IN PAVED AREAS SUBJECT TO TRUCK TRAFFIC SHALL BE 12"20" LOAD RATED. THE TYPICAL PULL BOX SIZE WILL BE 17" X 30" X 28" "QUAZITE" PG1730H400 BOX WITH PG1730H400 LID, OR APPROVED EQUAL. DEEPER BOXES MAY BE REQUIRED WHEN THE CONDUIT ALIGNMENT IS AFFECTED BY OTHER UTILITIES. THE PULL BOX SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATION WITH A CONCRETE COLLAR AND A MINIMUM OF 8" OF GRAVEL COMPACTED PER PROJECT SPECIFICATIONS.
- ONE 3" DIAMETER CARLON TYPE "DB" DIRECT BURIAL TELEPHONE DUCT OR 3" SCHEDULE 40 PVC. INSTALL GALVANIZED PULL WIRE OR PURPLE POLYPROPYLENE POLYETHYLENE ROPE WITH A MINIMUM PULLING TENSION OF 100 POUNDS. THE MINIMUM BURIAL DEPTH SHALL BE 24". INSTALL AN ORANGE DETECTABLE HAZARD TAPE WITH INTEGRAL "BURIED CABLE" WORDING, 12" ABOVE CONDUIT. THE 2" LP CAMERA CONDUIT SHALL BE SEPARATED FROM THE 480 VAC LIGHT FIXTURE POWER BY A DIVIDER PLACED IN THE LIGHT POLE BASE JUNCTION BOX.
- ONE 2" CONDUIT SHALL BE CARLON TYPE "DB" DIRECT BURIAL TELEPHONE DUCT OR SCHEDULE 40 PVC. INSTALL GALVANIZED PULL WIRE OR PURPLE POLYPROPYLENE POLYETHYLENE ROPE WITH A MINIMUM PULLING TENSION OF 100 POUNDS. THE MINIMUM BURIAL DEPTH SHALL BE 24". INSTALL AN ORANGE DETECTABLE HAZARD TAPE WITH INTEGRAL "BURIED CABLE" WORDING, 12" ABOVE CONDUIT. THE 2" LP CAMERA CONDUIT SHALL BE SEPARATED FROM THE 480 VAC LIGHT FIXTURE POWER BY A DIVIDER PLACED IN THE LIGHT POLE BASE JUNCTION BOX.

**Kimley-Horn and Associates, Inc.**  
Tel. No. 817/355-6611  
Fax No. 817/355-6660  
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801 Cherry Street, Suite 850  
Fort Worth, Texas 76102

**STATE OF TEXAS**  
MATT MOORE  
95813  
LICENSED PROFESSIONAL ENGINEER

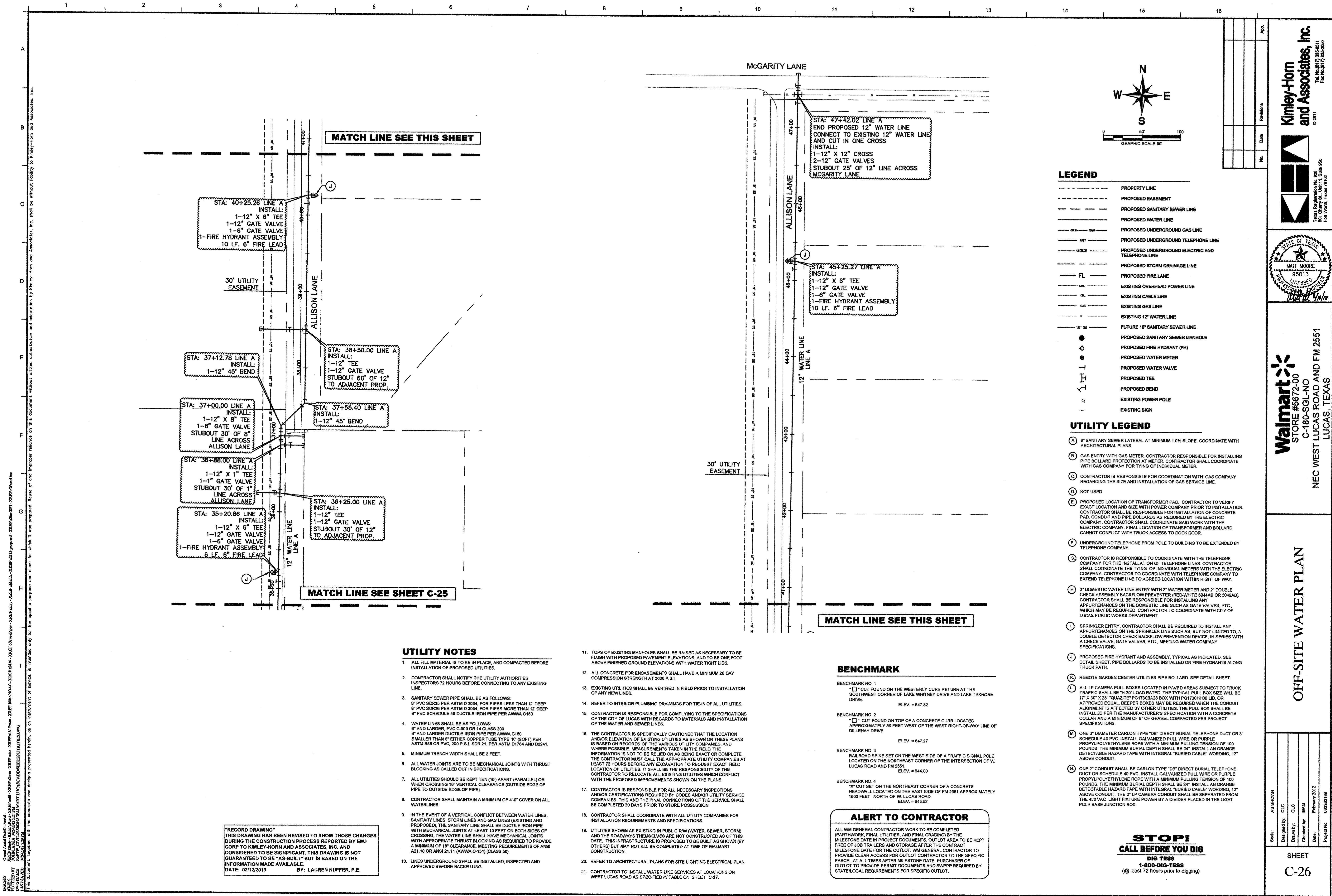
**Walmart**  
STORE #5672-00  
C-180-SGL-NO  
NEC WEST LUCAS ROAD AND FM 2551  
LUCAS, TEXAS

**UTILITY PLAN**

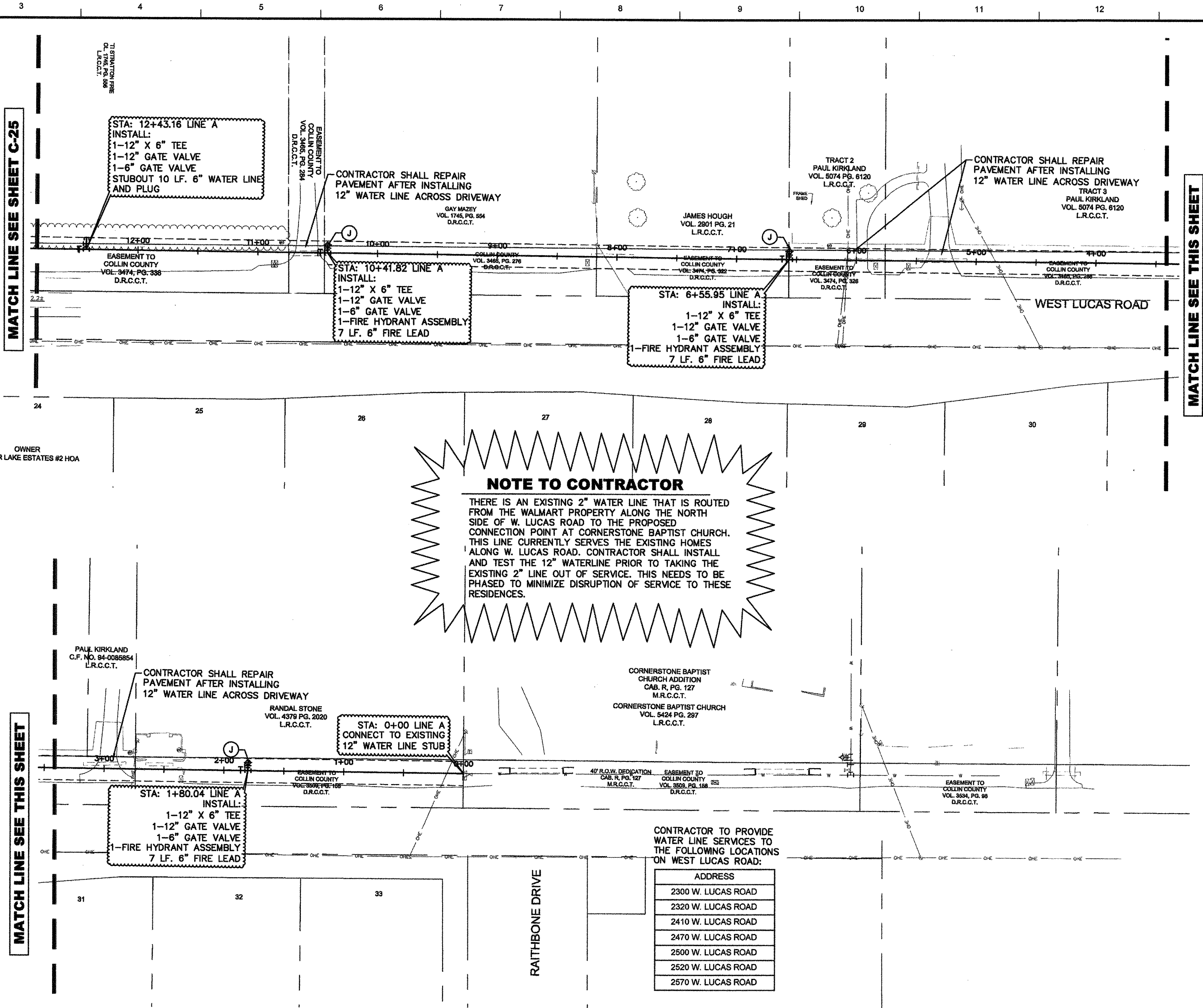
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Designed by: CLC  
Drawn by: CLC  
Checked by: MAM  
Date: February 2012  
Project No: 063352198

**SHEET**  
C-25









**NOTE TO CONTRACTOR**

THERE IS AN EXISTING 2" WATER LINE THAT IS ROUTED FROM THE WALMART PROPERTY ALONG THE NORTH SIDE OF W. LUCAS ROAD TO THE PROPOSED CONNECTION POINT AT CORNERSTONE BAPTIST CHURCH. THIS LINE CURRENTLY SERVES THE EXISTING HOMES ALONG W. LUCAS ROAD. CONTRACTOR SHALL INSTALL AND TEST THE 12" WATERLINE PRIOR TO TAKING THE EXISTING 2" LINE OUT OF SERVICE. THIS NEEDS TO BE PHASED TO MINIMIZE DISRUPTION OF SERVICE TO THESE RESIDENCES.

CONTRACTOR TO PROVIDE WATER LINE SERVICES TO THE FOLLOWING LOCATIONS ON WEST LUCAS ROAD:

ADDRESS
2300 W. LUCAS ROAD
2320 W. LUCAS ROAD
2410 W. LUCAS ROAD
2470 W. LUCAS ROAD
2500 W. LUCAS ROAD
2520 W. LUCAS ROAD
2570 W. LUCAS ROAD

### UTILITY NOTES

- ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
- CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
- SANITARY SEWER PIPE SHALL BE AS FOLLOWS:  
8" PVC SD35 PER ASTM D 3034, FOR PIPES LESS THAN 12' DEEP  
8" PVC SD25 PER ASTM D 3034, FOR PIPES MORE THAN 12' DEEP  
6" PVC SCHEDULE 40 DUCTILE IRON PIPE PER AWWA C150
- WATER LINES SHALL BE AS FOLLOWS:  
8" AND LARGER, PVC C-900 OR 14 CLASS 200  
6" AND LARGER DUCTILE IRON PIPE PER AWWA C150  
SMALLER THAN 6" EITHER COPPER TUBE TYPE "K" (SOFT) PER ASTM B88 OR PVC, 200 P.S.I. SDR 21, PER ASTM D1784 AND D2241.
- MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
- ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH THRUST BLOCKING AS CALLED OUT IN SPECIFICATIONS.
- ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE).
- CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4'-0" COVER ON ALL WATERLINES.
- IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 40 FEET ON BOTH SIDES OF CROSSING. THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING AS REQUIRED TO PROVIDE A MINIMUM OF 18" CLEARANCE. MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50).
- ALL LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.

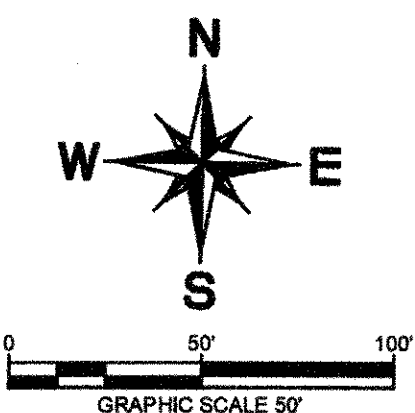
- TOPS OF EXISTING MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS, AND TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATIONS WITH WATER TIGHT LIDS.
- ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
- EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
- REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
- CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE CITY OF LUCAS WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION.
- CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
- UTILITIES SHOWN AS EXISTING IN PUBLIC R/W (WATER, SEWER, STORM) AND THE ROADWAYS THEMSELVES ARE NOT CONSTRUCTED AS OF THIS DATE. THIS INFRASTRUCTURE IS PROPOSED TO BE BUILT AS SHOWN (BY OTHERS) BUT MAY NOT ALL BE COMPLETED AT TIME OF WALMART CONSTRUCTION.
- REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING ELECTRICAL PLAN.
- CONTRACTOR TO INSTALL WATER LINE SERVICES AT LOCATIONS ON WEST LUCAS ROAD AS SPECIFIED IN TABLE ON THIS SHEET.

### BENCHMARK

- BENCHMARK NO. 1  
"1" CUT FOUND ON THE WESTERLY CURB RETURN AT THE SOUTHWEST CORNER OF LAKE WHITNEY DRIVE AND LAKE TEXHOMA DRIVE.  
ELEV. = 647.32
- BENCHMARK NO. 2  
"1" CUT FOUND ON TOP OF A CONCRETE CURB LOCATED APPROXIMATELY 50 FEET WEST OF THE WEST RIGHT-OF-WAY LINE OF DILLEYHAY DRIVE.  
ELEV. = 647.27
- BENCHMARK NO. 3  
RAILROAD SPIKE SET ON THE WEST SIDE OF A TRAFFIC SIGNAL POLE LOCATED ON THE NORTHEAST CORNER OF THE INTERSECTION OF W. LUCAS ROAD AND FM 2551.  
ELEV. = 644.00
- BENCHMARK NO. 4  
"X" CUT SET ON THE NORTHEAST CORNER OF A CONCRETE HEADWALL LOCATED ON THE EAST SIDE OF FM 2551 APPROXIMATELY 1800 FEET NORTH OF W. LUCAS ROAD.  
ELEV. = 645.52

### ALERT TO CONTRACTOR

ALL WM GENERAL CONTRACTOR WORK TO BE COMPLETED (EARTHWORK, FINAL UTILITIES, AND FINAL GRADING) BY THE MILESTONE DATE IN PROJECT DOCUMENTS. OUTLOT AREA TO BE KEPT FREE OF JOB TRAILERS AND STORAGE AFTER THE CONTRACT MILESTONE DATE FOR THE OUTLOT. WM GENERAL CONTRACTOR TO PROVIDE CLEAR ACCESS FOR OUTLOT CONTRACTOR TO THE SPECIFIC PARCEL AT ALL TIMES AFTER MILESTONE DATE. PURCHASER OF OUTLOT TO PROVIDE PERMIT DOCUMENTS AND SWPPP REQUIRED BY STATE/LOCAL REQUIREMENTS FOR SPECIFIC OUTLOT.



### LEGEND

- PROPERTY LINE
- PROPOSED EASEMENT
- PROPOSED SANITARY SEWER LINE
- PROPOSED WATER LINE
- PROPOSED UNDERGROUND GAS LINE
- PROPOSED UNDERGROUND TELEPHONE LINE
- PROPOSED UNDERGROUND ELECTRIC AND TELEPHONE LINE
- PROPOSED STORM DRAINAGE LINE
- PROPOSED FIRE LANE
- EXISTING OVERHEAD POWER LINE
- EXISTING CABLE LINE
- EXISTING GAS LINE
- EXISTING 12" WATER LINE
- FUTURE 18" SANITARY SEWER LINE
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED FIRE HYDRANT (FH)
- PROPOSED WATER METER
- PROPOSED WATER VALVE
- PROPOSED TEE
- PROPOSED BEND
- EXISTING POWER POLE
- EXISTING SIGN

### UTILITY LEGEND

- 8" SANITARY SEWER LATERAL AT MINIMUM 1.0% SLOPE. COORDINATE WITH ARCHITECTURAL PLANS.
- GAS ENTRY WITH GAS METER. CONTRACTOR RESPONSIBLE FOR INSTALLING PIPE BOLLARD PROTECTION AT METER. CONTRACTOR SHALL COORDINATE WITH GAS COMPANY FOR TYING OF INDIVIDUAL METER.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH GAS COMPANY REGARDING THE SIZE AND INSTALLATION OF GAS SERVICE LINE.
- NOT USED
- PROPOSED LOCATION OF TRANSFORMER PAD. CONTRACTOR TO VERIFY EXACT LOCATION AND SIZE WITH POWER COMPANY PRIOR TO INSTALLATION. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF CONCRETE PAD, CONDUIT AND PIPE BOLLARDS AS REQUIRED BY THE ELECTRIC COMPANY. CONTRACTOR SHALL COORDINATE SAID WORK WITH THE ELECTRIC COMPANY. FINAL LOCATION OF TRANSFORMER AND BOLLARD CANNOT CONFLICT WITH TRUCK ACCESS TO DOCK DOOR.
- UNDERGROUND TELEPHONE FROM POLE TO BUILDING TO BE EXTENDED BY TELEPHONE COMPANY.
- CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE TELEPHONE COMPANY FOR THE INSTALLATION OF TELEPHONE LINES. CONTRACTOR SHALL COORDINATE THE TYING OF INDIVIDUAL METERS WITH THE ELECTRIC COMPANY. CONTRACTOR TO COORDINATE WITH TELEPHONE COMPANY TO EXTEND TELEPHONE LINE TO AGREED LOCATION WITHIN RIGHT OF WAY.
- 3" DOMESTIC WATER LINE ENTRY WITH 2" WATER METER AND 2" DOUBLE CHECK ASSEMBLY BACKFLOW PREVENTER (RED-WHITE 5044B OR 5048AB). CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ANY APPURTENANCES ON THE DOMESTIC LINE SUCH AS GATE VALVES, ETC., WHICH MAY BE REQUIRED. CONTRACTOR TO COORDINATE WITH CITY OF LUCAS PUBLIC WORKS DEPARTMENT.
- SPRINKLER ENTRY. CONTRACTOR SHALL BE REQUIRED TO INSTALL ANY APPURTENANCES ON THE SPRINKLER LINE SUCH AS, BUT NOT LIMITED TO, A DOUBLE DETECTOR CHECK BACKFLOW PREVENTION DEVICE, IN SERIES WITH A CHECK VALVE, GATE VALVES, ETC., MEETING WATER COMPANY SPECIFICATIONS.
- PROPOSED FIRE HYDRANT AND ASSEMBLY, TYPICAL AS INDICATED. SEE DETAIL SHEET. PIPE BOLLARDS TO BE INSTALLED ON FIRE HYDRANTS ALONG TRUCK PATH.
- REMOTE GARDEN CENTER UTILITIES PIPE BOLLARD. SEE DETAIL SHEET.
- ALL LP CAMERA PULL BOXES LOCATED IN PAVED AREAS SUBJECT TO TRUCK TRAFFIC SHALL BE "120" LOAD RATED. THE TYPICAL PULL BOX SIZE SHALL BE 17" X 30" X 28" QUAZITE® PG1730BA28 BOX WITH PG1730H400 LID, OR APPROVED EQUAL. DEEPER BOXES MAY BE REQUIRED WHEN THE CONDUIT ALIGNMENT IS AFFECTED BY OTHER UTILITIES. THE PULL BOX SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATION WITH A CONCRETE COLLAR AND A MINIMUM OF 6" OF GRAVEL COMPACTED PER PROJECT SPECIFICATIONS.
- ONE 3" DIAMETER CARLON TYPE "DB" DIRECT BURIAL TELEPHONE DUCT OR 3" SCHEDULE 40 PVC. INSTALL GALVANIZED PULL WIRE OR PURPLE PROPOLYETHYLENE ROPE WITH A MINIMUM PULLING TENSION OF 100 POUNDS. THE MINIMUM BURIAL DEPTH SHALL BE 24". INSTALL AN ORANGE DETECTABLE HAZARD TAPE WITH INTEGRAL "BURIED CABLE" WORDING, 12" ABOVE CONDUIT.
- ONE 2" CONDUIT SHALL BE CARLON TYPE "DB" DIRECT BURIAL TELEPHONE DUCT OR SCHEDULE 40 PVC. INSTALL GALVANIZED PULL WIRE OR PURPLE PROPOLYETHYLENE ROPE WITH A MINIMUM PULLING TENSION OF 100 POUNDS. THE MINIMUM BURIAL DEPTH SHALL BE 24". INSTALL AN ORANGE DETECTABLE HAZARD TAPE WITH INTEGRAL "BURIED CABLE" WORDING, 12" ABOVE CONDUIT. THE 2" LP CAMERA CONDUIT SHALL BE SEPARATED FROM THE 480 VAC LIGHT FIXTURE POWER BY A DIVIDER PLACED IN THE LIGHT POLE BASE JUNCTION BOX.

**STOP!**  
**CALL BEFORE YOU DIG**  
**DIG TESS**  
**1-800-DIG-TESS**  
(@ least 72 hours prior to digging)

**Kimley-Horn and Associates, Inc.**  
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Fax No. (817) 382-3850  
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MATT MOORE  
95813  
LICENSED PROFESSIONAL ENGINEER  
STATE OF TEXAS

**Walmart**  
STORE #5672-00  
C-180-SGL-NO  
NEC WEST LUCAS ROAD AND FM 2551  
LUCAS, TEXAS

**OFF-SITE WATER PLAN**

Scale: AS SHOWN

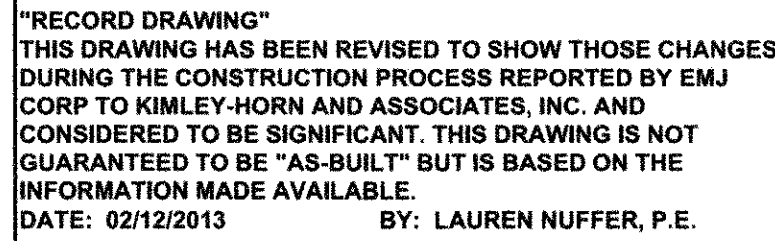
Designed by:	CLC	Drawn by:	CLC	Checked by:	MM	Date:	February 2012
Project No.:	063352198						

SHEET  
**C-27**

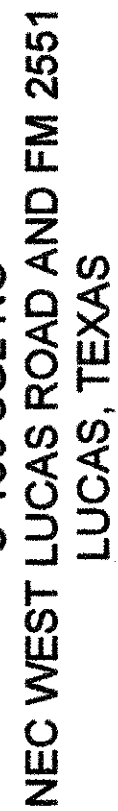
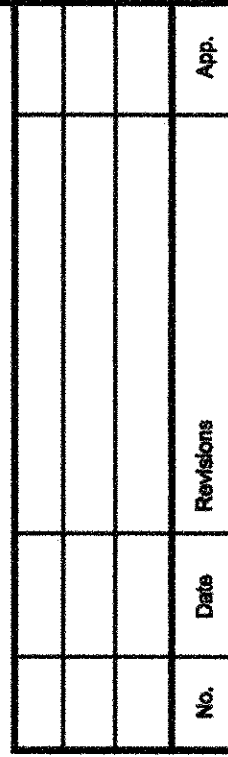
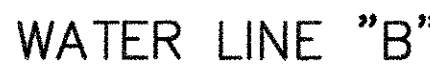




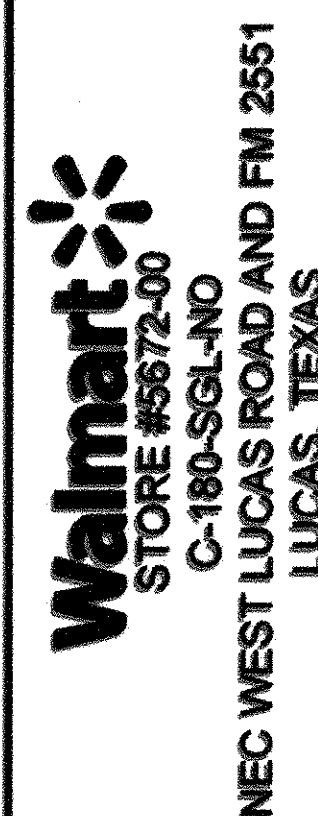












Settle:	AS-SHOWAN
Designed by:	CEC
Drawn by:	CEC
Checked by:	MAAM
Date:	February, 2012
Project No.	068393198

THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY ENU CORP. TO KIMLEY-HORN AND ASSOCIATES, INC. AND CONSIDERED TO BE SIGNIFICANT. THIS DRAWING IS NOT GUARANTEED TO BE "AS-BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE.

DATE: 02/12/2013 BY: LAUREN NUFFER, P.E.

