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Inserted JIMCO Canopy Drawings Sealed 11-20-2020

Inserted Royston Layouts for reference 11-25-2020

PROJECT DESCRIPTION:

CONSTRUCT NEW CIRCLE K FACILITY, NEW 5187 S.F. STANDARD EDITION CONVENIENCE STORE, 48'- 0" x 179'- 0" FUEL ISLAND CANOPY, TWELVE MULTI-PRODUCT FUEL DISPENSERS & ASSOCIATED SITE IMPROVEMENTS

CIRCLE K STORE #XXXX
2336 WEST WOOD ROAD,
CITY OF WESTLAKE,
CALCAIEU, LOUISIANA

OWNER

CIRCLE K STORES Inc.
GULF COAST BUSINESS UNIT
25 WEST CEDAR STREET, SUITE 100
PENSACOLA, FL 32502

CONTACT: JASON HOEN
Phone: 850-449-1895

DEVELOPMENT CONTACTS

CITY OF WESTLAKE
CITY CLERK
ANDREA MAHFOUZ, LMMC,CMA,CWCP
P.O. BOX 700
WRSTLAKE, LA 70669
(337) 433-0691

CALCASIEU PARISH-WARD 3
FIRE DEPARTMENT
1011 LAKESHORE DRIVE, SUITE 202
LAKE CHARLES LA 70601
(337) 491-1359

CALCASIEU PARISH
OCUPATIONAL LICENSE
CAROLYN RASHALL
LICENSE COORDINATOR
1015 PITHON STREET
LAKE CHARLES, LA 70601
(337) 721-3640

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
LAKE CHARLES DISTRICT HEADQUARTERS
PAMELA GUILLOTTE
5827 US-90
LAKE CHARLES, LA 70615
(337) 437-9100

CALCASIEU PARISH POLICE JURY
LAKE CHARLES DISTRICT HEADQUARTERS
SEAN MAZE
5827 US-90
LAKE CHARLES, LA 70615
(337) 437-9100

CALCASIEU PARISH
DRAINAGE
DANA WATKINS
PLANNING
1015 PITHON STREET
LAKE CHARLES, LA 70601
(337) 721-3600

CITY OF WESTLAKE
LANDSCAPE
ANDREA MAHFOUZ
WESTLAKE, LA 70669
1001 MULBERRY STREET
MAILING ADDRESS P.O.BOX 700
(337) 433-0691

AT&T
TELEPHONE SERVICE
(337) 474-1941

ENTERGY
ELECTRIC SERVICE
MS. ANNETE
P.O BOX 64001
NEW ORLEANS, LA 70164
(337) 433-0691

CITY OF WESTLAKE UTILITIES
UTILITY
VICTORIA LITTLETON
1001 MULBERRY STREET
WESTLAKE, LA 70669
(337) 433-0691

LOUISIANA DEP. OF ENVIRONMENTAL QUALITY
UNDERGROUND TANK APPROVAL
MARK STANSBURY
201 EVANS ROAD, BUILDING 4, SUITE 420
NEW ORLEANS, LA 70123-5230
(504) 736-7764

LOUISIANA OFFICE OF PUBLIC HEALTH /ENVIRONMENTAL HEALTH
HRS/HEALTH DEPARTMENT
VENDETTA JOHNSON
901 LAKESHORE DRIVE, 4TH FLOOR
LAKE CHARLES, LA 70601
(337)-721-4060

ENGINEER

MDM SERVICES, INC. OF LOUISIANA
engineering • environmental • construction
3251 SW 13TH DRIVE, SUITE "D"
DEERFIELD BEACH, FLORIDA 33442
EF #5397 (954) 427-3076

CONTACT: PROJECT MANAGER – PAUL DOSS
Phone: (954) 427-3076 EXT. 106 (OFFICE)
(770) 294-4811 (MOBILE)

ENGINEER OF RECORD:

RICHARD R. MORRIS, P.E.
LA. P.E. LICENSE #21957
Office Phone: (954) 427-3076 EXT. 302

SITE VICINITY MAP

GENERAL PROJECT NOTES

A. All construction shall comply with applicable building codes and local restrictions. Contractors must comply with contractor registration requirements of all governing authorities.

B. Approved plans shall be kept in a plan box and shall not be used by workmen. All construction sets shall reflect same information. Contractor shall maintain one complete set of plans on the premises in good condition at all times. This shall include all addenda.

C. The contractor shall field verify all conditions and dimensions prior to starting any work and shall be responsible for all work and materials including those furnished by subcontractors and owner.
D. Discrepancies between portions of the contract documents, drawings and specifications are not intended. The contractor is to clarify any such discrepancies with the owner prior to commencing work.

E. Stated dimensions take precedence over graphics, do not scale drawings to determine locations. The owner shall be notified of any such discrepancies prior to continuing with work.

F. Contact owner for instructions prior to the continuation of work should any unusual conditions become apparent during grading or foundation construction. Existing elevations and locations to be jointed shall be verified by the contractor prior to construction. If they differ from those shown on the drawings, the contractor shall notify the owner so that modifications can be made before proceeding with the work.

G. It shall be the responsibility of the contractor to locate all existing utilities whether shown herein or not and to protect them from damage. The contractor shall bear the expense of repair or replacement of utilities or other property damaged by operations in conjunction with he execution of the work after so located.

H. For construction details not shown, use the manufacturer's approved shop drawings / data sheets in accordance with the project specifications.

I. Fire extinguishers to be installed at heights designated by owner and in compliance with local fire code. Final fire extinguisher locations shall be approved by fire marshal.

J. G.C.to get application for "knox/access box" from the fire marshals office. Box is to be installed prior to final inspection.

K. G.C. to supply as-built survey of constructed site to Circle K & E.O.R. in PDF format and AutoCAD format before Certificate of Completion is issued.

RICHARD R. MORRIS, PE
LA REG # 21957

LEGAL DESCRIPTION

LEGAL DESCRIPTION:

PER TITLE COMMITMENT

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE PARISH OF CALCASIEU, STATE OF LOUISIANA, AND IS DESCRIBED AS FOLLOWS:

THAT PORTION OF GROUND, together with all the buildings and improvements thereon, and all rights, ways, privileges, servitudes, appurtenances and advantages thereunto belonging or in anywise appertaining, situated in the PARISH of CALCASIEU and STATE of LOUISIANA, to-wit:

Northwest corner of Southeast Quarter, Section 23, Township 9 South, Range 9 West, Louisiana Meridian, Parish of Calcasieu, Louisiana, thence running East on Quarter Section line 306.5 feet, thence South 345.0 feet, thence West 306.5 feet, thence North 345.0 feet to the point of commencement, containing 2.43 acres gross, but then subjected to 30 foot right of way on the North side and a 30' right of way on the East side, for public roads, thus leaving 2 acres net.

ALSO LESS AND EXCEPT Parcel No. 27-2 of State Highway (LA 378) Project No. 810-12-21, containing 0.094 of an acres.

THE FOLLOWING IS FOR INFORMATIONAL PURPOSES ONLY:

The improvements thereon bear the Municipal No. 2336 WESTWOOD DRIVE, WESTLAKE, LOUISIANA 70669.

Being the same property acquired by Ashan Enterprises, L.L.C. by an act dated April 12, 2011, registered in COB 3983, folio 843.

DATES
■
■
■
■
■
■

STORE NUMBER
2

TBD

MDM PROJECT NUMBER
19075

CV-S

ISSUED FOR CONSTRUCTION 10/2/2020

CIRCLE K 5187 BLDG.
2336 WESTWOOD ROAD, WESTLAKE, LA

VICINITY MAP

SCALE 1" = 2000'

LEGEND

FOUND PROPERTY CORNER (AS NOTED)	
SET 3/4" IRON ROD (UNLESS NOTED OTHERWISE)	
EXISTING POWER POLE	
EXISTING POWER POLE WITH LIGHT	
EXISTING PARKING LOT LIGHT	
EXISTING GUY ANCHOR	
EXISTING ELECTRIC PEDESTAL	
EXISTING OVERHEAD POWER LINE	OE
EXISTING TELEPHONE PEDESTAL	
EXISTING TELEPHONE MANHOLE	
EXISTING TELEPHONE LINE	T
EXISTING CABLE TV PEDESTAL	
EXISTING GAS METER	GM
EXISTING GAS VALVE	GV
EXISTING GAS LINE	G
EXISTING WOOD FENCE LINE	
ELEVATION OF TOP OF STRUCTURE	TOP = 18.00
ELEVATION OF BOTTOM OF STRUCTURE	INV. = 15.00
EXISTING SPOT ELEVATION	× 10.63
ELEVATION OF TOP OF CURB	18.50 TC
ELEVATION OF FACE OF CURB	18.00 FC
EXISTING GROUND CONTOUR LINE	5
EXISTING SEWER MANHOLE	S
EXISTING DRAINAGE MANHOLE	D
EXISTING SUBSURFACE DRAINAGE	
EXISTING AREA INLET CATCH BASIN	
EXISTING CURB INLET CATCH BASIN	
EXISTING FIRE HYDRANT	
EXISTING WATER METER	WM
EXISTING WATER VALVE	WV
EXISTING WATER LINE	W
EXISTING REINFORCED CONCRETE PIPE	18" RCP
EXISTING POLYVINYL CHLORIDE PIPE	12" PVC

NOTES:

1.) Zoning: C3
Setback lines shall be verified by the owner, developer and or contractor prior to any construction, as an abstract has not been performed by the surveyor. Zoning and setbacks are subject to change and should be verified with the local authority's Zoning Department before any design or construction.

2.) Basis of Bearings:
The bearings shown hereon are based on the "Louisiana Coordinate System of 1983 South Zone – NAD 83" using GPS C4Gnet–RTN System accessed on November 28, 2019.
(*) Represents the Basis of Bearings. Distances shown are U.S. Survey feet.

3.) Basis of Elevations:
The elevations shown hereon are based on the "North American Vertical Datum of 1988 – NAVD 88" (Geoid 12b) using GPS C4Gnet–RTN System accessed on November 28, 2019.

4.) Flood Note: The property hereon is located in Flood Zone "X" (Shaded) in accordance with FEMA Flood Insurance Rate Map Panel Number 22019C0294F, dated February 18, 2011, for Calcasieu Parish, Louisiana.
Base Flood Elevation is subject to change and should be verified with the local authority's Flood Plain Administrator before any design or construction.

5.) Utilities: The utilities shown have been located from visible utility features, evidence of buried utilities, and previous construction drawings. The surveyor makes no guarantee that the utilities shown comprise all such utilities in the area, either in service or abandoned. Furthermore, the surveyor does not warrant that the utilities shown are in the exact location indicated. No excavations were made during the progress of this survey to locate buried utilities/ structures.

6.) No attempt has been made by Acadia Land Surveying, L.L.C. to verify title, actual legal ownership, deed restrictions servitudes, easements, alleys, right–of–ways or other burdens on the property, other than that furnished by the client or his representative. There is no representation that all applicable servitudes and restrictions are shown hereon. The surveyor has made no title search or public record search in compiling the data for this survey.

7.) Acadia Land Surveying, L.L.C. has not and does not provide Delineation of Jurisdictional Wetlands. Acadia Land Surveying, L.L.C. did not receive nor research the location of wetland areas as delineated by the appropriate authorities.

8.) The words "Certify," "Certifies" or "Certification" as used hereon is understood to be an expression of professional opinion by the surveyor, based upon his best knowledge, information, and belief, as such, it does not constitute a guarantee nor a warranty, expressed or implied.

9.) The surveyor has no knowledge or observed any evidence of the site used as a solid waste dump, sump or sanitary landfill.

10.) The surveyor has no knowledge or observed any evidence of current earth moving work, building construction or building additions.

11.) The surveyor has no knowledge or observed any evidence of proposed changes in street right of ways.

LEGAL DESCRIPTION - PER TITLE COMMITMENT

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE PARISH OF CALCASIEU, STATE OF LOUISIANA, AND IS DESCRIBED AS FOLLOWS:

THAT PORTION OF GROUND, together with all the buildings and improvements thereon, and all rights, ways, privileges, servitudes, appurtenances and advantages thereunto belonging or in anywise appertaining, situated in the PARISH of CALCASIEU and STATE of LOUISIANA, to–wit:

Northwest corner of Southeast Quarter, Section 23, Township 9 South, Range 9 West, Louisiana Meridian, Parish of Calcasieu, Louisiana, thence running East on Quarter Section line 306.5 feet, thence South 345.0 feet, thence West 306.5 feet, thence North 345.0 feet to the point of commencement, containing 2.43 acres gross, but then subjected to 30 foot right of way on the North side and a 30' right of way on the East side, for public roads, thus leaving 2 acres net.

ALSO LESS AND EXCEPT Parcel No. 27–2 of State Highway (LA 378) Project No. 810–12–21, containing 0.094 of an acres.

THE FOLLOWING IS FOR INFORMATIONAL PURPOSES ONLY:

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Being the same property acquired by Ashan Enterprises, L.L.C. by an act dated April 12, 2011, registered in COB 3983, folio 843.

TITLE EXCEPTION NOTES:

Surveyor's Comments on exceptions to title as listed in Schedule B, Section 2 of a commitment for title insurance provided by Commonwealth Land Title Insurance Company, Commitment No.: 19091895, Dated: January 9, 2020:

SCHEDULE B - SECTION II, EXCEPTIONS

Items #1–8: Non survey issue.

Item #9: Servitude in favor of Gulf States Utilities Company dated January 21, 1987, recorded as Book 1989, folio 649, Instrument No. 1928659.
Affects subject property as shown.

Item #10. Drainage Servitude in favor of The City of Westlake dated on or around November 29, 2001 and recorded as COB 2917, folio 249.
Affects subject property as shown.

Item #11. Gas line and Water line along the western side of the property as shown on that certain survey by Acadia Land Surveying, LLC, dated November 28, 2019
Affects subject property as shown.

ZONING NOTES:

Zoning information acquired from "Calcasieu Parish Police Jury Code of Ordinance Website" accessed on date 1/20/2020

ZONING DISTRICT: C–3
(CENTRAL BUSINESS COMMERCIAL)

Maximum floor area —None.
Minimum lot area —Ten thousand (10,000) square feet.
Minimum lot area for workforce housing —Five (5) acres.
Maximum height of main building —One hundred (100) feet.

Yard requirements —
Front yard—Twenty (20) feet.
Side yard—None.
Rear yard—None.

SCALE: 1" = 20'
SCALE IN FEET

20 10 0 20 40 60

ISSUED FOR CONSTRUCTION 10/2/2020

ALTA/NSPS LAND TITLE SURVEY
OF A
USABLE PARCEL
LOCATED IN SECTION 23,
TOWNSHIP 9 SOUTH – RANGE 9 WEST
LOUISIANA MERIDIAN,
CALCASIEU PARISH, LOUISIANA

ACADIA
LAND SURVEYING, LLC
LOUISIANA • MISSISSIPPI • TEXAS
206 EAST 2ND STREET, THIBODAUX, LOUISIANA 70301
Phone • (985) 449-0094 Fax • (985) 449-0085
EMAIL • ACADIA@ACADIALANDSURVEYING.COM

DATE	REVISION DESCRIPTION		INT.
06–01–2020	ADDED UNRECORDED RIGHT OF WAY EASEMENT		DAT
DRAWN BY: DAT	CHECKED BY: WMV	APPROVED BY: MPB	
FIELD BOOK: xxx, PG xx–xx	FIELD WORK COMPLETED ON: MAY 27, 2020	ALS FILE: 2019/19–02–252s/19–02–252s1.dwg	

CERTIFICATION:

To MDM Services, Commonwealth Land Title Insurance Company, Circle K stores Inc., a Texas corporation and Ashan Enterprises, L.L.C., a Louisiana limited liability company:
This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 6(a)(b), 7(a), 8, 9, 11, 13, 16, 20 & 21 of Table A thereof. The field work was completed on November 28, 2019.
This survey was done by me or under my direct supervision and control, that the survey was done on the ground and was done in accordance with the most recent Standards of Practice for Land Surveyors as set forth by the State of Louisiana, Board of Registration for Professional Engineers and Land Surveyors and that the accuracy specifications and positional tolerances are in accordance with Class "C" surveys indicated in the above standards. I also certify there are no visible encroachments across any property lines except as shown.

STATE OF LOUISIANA
MICHAEL P. BLANCHARD
REG. NO. 4861
REGISTERED
PROFESSIONAL
LAND SURVEYOR

06/01/2020

Michael P. Blanchard, P.L.S., Reg. No. 4861
This survey plat is not valid without the raised or colored seal and signature of the Registered Land Surveyor.

GENERAL SCOPE OF WORK :

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND 10 DAY NOTICE OF DEMOLITION FOR BUILDING & SITE TEAR DOWN, REMOVAL AND CLEAN-UP, DESCRIBED FOLLOWING:

1. INSTALL 5' (MIN) HIGH TEMPORARY CHAIN LINK FENCE AROUND CONSTRUCTION SITE.
2. DISCONNECTION OF EXISTING ELECTRICAL, TELEPHONE, WATER, AND SEWER SERVICES TO SITE, AS APPLICABLE.
3. INSTALLATION OF EROSION AND SEDIMENTATION PROTECTION PERIMETER OF PROPERTY AND DRAINAGE STRUCTURES AS OCCUR.
4. REMOVAL OF ALL EXISTING STRUCTURES
5. REMOVAL OF DRIVEWAY CONCRETE/PAVEMENT, SIDEWALKS, UG UTILITIES (ELECTRICAL, WATER, SEWER & STORM DRAINAGE NOT DESIGNATED TO REMAIN).

EROSION CONTROL NOTES:

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.

SITE EROSION CONTROLS SHALL BE CHECKED AND IF NECESSARY, REPAIRED WEEKLY AND WITHIN 24 HOURS AFTER EACH RAINFALL ≥ 1/2". IN THE EVENT OF CONTINUOUS RAINFALL, EROSION CONTROLS SHALL BE CHECKED DAILY.

EROSION AND SEDIMENTATION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES WILL BE INSTALLED AS DEEMED NECESSARY BY ONSITE INSPECTION.

ALL EROSION CONTROL MEASURES ARE TO CONFORM TO THE STANDARDS SET FORTH IN THE USDA "PLANNING AND DESIGN MANUAL FOR EROSION AND SEDIMENT CONTROL", AND THE LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ) "STORMWATER BMP MANUAL FOR BEST MANAGEMENT PRACTICES"; CURRENT EDITIONS.

ALL AREAS TO REMAIN BARE > 15 DAYS MUST BE TEMPORARILY STABILIZED.

WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE.

INSPECTIONS: CONTRACTOR SHALL INSPECT AND DOCUMENT EROSION AND SEDIMENT CONTROL MEASURES AND REPAIR AS NEEDED MIN. 2 TIMES PER WEEK AND AT LEAST 72 HOURS APART.

GENERAL NOTES:

1. CONSTRUCTION MATERIALS, ASSEMBLIES AND PROCEDURES ARE TO FOLLOW LOCALLY ADOPTED BUILDING CODES AND SUPPLEMENTARY ORDINANCES. WHEN A CONFLICT OCCURS BETWEEN SUCH LOCAL CODES AND INFORMATION SHOWN ON THE PLANS CONSULT ENGINEER OF RECORD FOR RESOLUTION PRIOR TO COMMENCING WORK.
2. CONTRACTOR IS TO NOTIFY ENGINEER OF RECORD IF SITE CONDITIONS OR DIMENSIONS DISAGREE WITH INFORMATION SHOWN ON THE DRAWINGS. WORK IS NOT TO PROCEED UNTIL SUCH DIFFERENCES ARE RESOLVED.
3. DRAWINGS SHALL NOT BE SCALED. "NOT TO SCALE" (INDICATED AS N.T.S.) AND THE LISTED DIMENSIONS GOVERN.
4. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR DAMAGE TO THE WORK OF EACH OF THE OTHER TRADES CAUSED BY HIS OPERATIONS. REPAIR WORK MUST RECEIVE THE PRIOR APPROVAL OF THE COMPANY REPRESENTATIVE.
5. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES AND FOR PROTECTING THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR THE COST OF REPAIR OR REPLACEMENT TO UTILITIES DAMAGED BY THE CONTRACTOR.
6. G.C. SHALL PROVIDE EROSION CONTROL/SEDIMENTATION BARRIER (HAY BALES OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS, AND WATERWAYS.
7. INGRESS AND EGRESS TO SITE, DURING CONSTRUCTION, IS ALLOWED ONLY THROUGH APPROVED SITE DRIVEWAYS.

TREE PROTECTION LEGEND

EXISTING TREE TO BE REMOVED

NOTE: PROTECT ALL TREES OUTSIDE THE LIMITS OF CONSTRUCTION WITHIN 10' OF PROPOSED CONSTRUCTION ACTIVITIES.

FIGURE

BARRIER REQUIREMENTS AND SPECIFICATIONS:

HORIZONTAL MEMBERS OF NO LESS THAN 1" X 4" LUMBER, OR UPRIGHT STAKES SPACED AT 4-5' INTERVALS OF NO LESS THAN 2" X 2" LUMBER, CONNECTED BY TWINE FLAGGED PROTECTIVE BARRIERS ARE USED DURING LAND ALTERATIONS AND CONSTRUCTION ACTIVITIES TO PROTECT TREES AND NATURAL AREAS TO BE RETAINED ON A SITE.

PROTECTIVE BARRIERS MUST BE ERECTED AROUND TREES TO BE RETAINED WITHIN AN AREA WHERE LAND ALTERATION AND CONSTRUCTION ACTIVITIES WILL OCCUR AS WELL AS ALONG NATURAL AREAS WHERE SUCH AREAS ARE ADJACENT TO PERMITTED LAND ALTERATION OR CONSTRUCTION ACTIVITIES. A PROTECTIVE BARRIER MUST REMAIN IN PLACE UNTIL THE LAND ALTERATION AND CONSTRUCTION ACTIVITIES ARE COMPLETED OR UNTIL COMMENCEMENT OF GRADE FINISHING AND SODDING. NO GROUND DISTURBANCE MUST OCCUR WITHIN THE

TO RESTRICT ACCESS INTO THE AREA WITHIN THE DRIPLINE OF A TREE, A PHYSICAL SUITABLE MATERIAL IS PLACED AROUND THE TREE AT THE DRIPLINE, EXCEPT WHERE STRUCTURE NOT LESS THAN 3 FEET IN HEIGHT, COMPRISED OF WOOD OR OTHER LAND ALTERATION OR CONSTRUCTION ACTIVITIES ARE APPROVED WITHIN THE DRIPLINE.

THE DRIP LINE OF A TREE IS THE IMAGINARY VERTICAL LINE THAT EXTENDS DOWNWARD FROM THE OUTERMOST TIPS OF THE TREE BRANCHES TO THE GROUND (FIGURE A).

FOUR CORNER UPRIGHT STAKES OF NO LESS THAN 2" X 2" LUMBER CONNECTED BY WITH PLASTIC SURVEYING TAPE AT REGULAR INTERVALS. (FIGURE B)

NOTE:
DURING LAND ALTERATION & CONSTRUCTION ACTIVITIES, IT SHALL BE UNLAWFUL TO REMOVE VEGETATION BY GRUBBING OR TO PLACE SOIL DEPOSITS, DEBRIS, SOLVENTS, CONSTRUCTION MATERIAL, MACHINERY OR OTHER EQUIPMENT OF ANY KIND WITHIN THE DRIPLINE OF A TREE TO REMAIN ON SITE UNLESS OTHERWISE APPROVED BY THE COUNTY.

C CRUSHED STONE CONSTRUCTION EXIT

NOTE:
Use 36" LADOTD approved fabric.
Use steel posts.- only

Sd SILT FENCE

NOTE:

1. ALL EROSION CONTROL MEASURES SHALL COMPLY WITH THE CITY AND STATE STANDARDS FOR EROSION CONTROL, SEDIMENT CONTROL, AND STORMWATER MANAGEMENT OF CONSTRUCTION SITES AND URBAN AREAS (LATEST EDITION).
2. EROSION CONTROL SHALL INSPECTED BY THE CITY PRIOR TO ISSUANCE OF ANY PERMITS FOR WORK ON-SITE.
3. SEE SHEET C-5.0 (EROSION CONTROL PLAN) FOR ADDITIONAL EROSION CONTROL INFORMATION.

CLIENT:

CIRCLE K STORES, INC

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA

engineering • environmental • constr

EF# 5397

NO.	DATE	REVISION DESCRIPTION
1	7/15/20	REMOVED EXIST 6" WATER L (DOES NOT EXIST)

RICHARD R. MORRIS
LA. REG # 2195

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS N□TED	MDM JOB #
DATE:	
DESIGNED BY:	
DRAWN BY: □A□	FILE NAME:
CHECKED BY: □D□SS	

DRAWING TITLE:

DEMOLITION SITE PLAN

SHEET NO:

D-1.0

ISSUED FOR CONSTRUCTION 10/2/2020

VICINITY MAP
N.T.S.

EXISTING SITE AREAS:

TOTAL SITE AREA:	82561.49 SQ.FT. OR 1.89 ACRES M.O.L.
TOTAL IMPERVIOUS AREA:	0.00 SQ.FT. OR 0.00% OF SITE
TOTAL PERVIOUS AREA:	82561.49 SQ.FT. OR 100.00% OF SITE

PROPOSED SITE AREAS:

TOTAL SITE AREA:	82561.49 SQ.FT. OR 1.89 ACRES M.O.L.
PARKING / CIRCULATION AREA:	45568.94 SQ.FT. OR 55.19% OF SITE
DETENTION POND AREA:	11,303.86 SQ.FT. OR 13.69% OF SITE
C-STORE:	5,029.64 SQ.FT. OR 6.09% OF SITE
IMPERVIOUS AREA:	50,598.588 SQ.FT. OR 61.29% OF SITE
TOTAL PERVIOUS AREA:	31962.9104 SQ.FT. OR 38.71% OF SITE

FLOOR AREAS:(1-STORY BUILDING)

TOTAL C-STORE. SQ.FT.	5,187 SQ.FT. OR 6.09% OF SITE
TOTAL C-STORE HEIGHT	23'-6"

PROPOSED CANOPY AREA:

PROPOSED 232' x 24'

CANOPY AREA:	5,568.34 SQ.FT. COVERING 6.74% OF SITE
TOTAL CANOPY. HEIGHT	17'-6"
CANOPY CLEAR HEIGHT	14'-6"

CURRENT ZONING/LAND USE:

EXISTING: (UNZONED) C-3
PROPOSED: B-1 (COMMERCIAL-COMMUNITY SHOPPING)

PARKING:

PARKING REQUIRED:

CONVIENCE STORE: 5,187 SF GROSS FLOOR AREA (TOTAL):
1 PER 150 SF GFA = 35 SPACES
TOTAL SPACES REQUIRED: 35 SPACES

PARKING PROVIDED:

(2) 12'x20' HANDICAP SPACE W/8' UNLOADING ZONE
(33) 9'x20' STANDARD PARKING SPACES
(35) TOTAL SPACES PROVIDED = 35 SPACES REQUIRED

MIN. BUILDING SETBACK REQUIREMENTS:

NORTHWEST ℄	=0'-0"	(REAR)
SOUTH ℄	=0'-0"	(SIDE)
WEST ℄	= 0'-0"	(SIDE)
SOUTHEAST ℄	= 0'-0"	(FRONT)

OWNER:

CIRCLE K STORES, INC.
GULF COAST BUSINESS UNIT
25 WEST CEDAR STREET, SUITE 100
PENSACOLA, FL 32502
CONTACT: JASON HOEHN
PHONE: 850-449-1895

ENGINEER:

MDM SERVICES, INC.
1055 KATHLEEN ROAD
LAKELAND, FLORIDA 33805
CONTACT: RUSS R. MORRIS
PHONE: 954-427-3076

SURVEYOR:

ACADIA LAND SURVEYING ,LLC
LOUISIANA.MISSISSIPPI.TEXAS
206 EAST 2ND STREET, THIBODAUX, LOUISIANA 70301
CONTACT: MICHAEL P. BLANCHARD, P.L.S.
PHONE:985-449-0094

LEGEND:

(N) CONCRETE PAVEMENT
(N) ASPHALT PAVEMENT
(N) SOD SEE LANDSCAPE PLANS
(N) NEW
(E) EXIST
FIRE ESTINGUISHER

CLIENT:

CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA
engineering • environmental • construction
3251-D SW 13th Drive * Deerfield Beach, FL 33442
Phone: (954) 427-3076
EF# 5397

NO.	DATE	REVISION DESCRIPTION
1	10/02/20	REPLACED TANKS FROM FIBER GLASS TO STEEL TANKS PER SHEET

RICHARD R. MORRIS
LA. REG # 21195

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED	MDM JOB # 19075
DATE: 12-30-2019	
DESIGNED BY:	
DRAWN BY: JAG	FILE NAME: 19075-CD-SP.DWG
CHECKED BY: P.DOSS	

DRAWING TITLE:

SITE PLAN

SHEET NO:

C-1.0

REVISED FOR CONSTRUCTION (METAL TANKS) 10-22-2020

AL One Call 811
DIAL 811 BEFORE YOU DIG
KNOW WHAT'S BELOW.
ALWAYS DIAL 811 OR 800 292-8525 FIRST. THE CALL AND THE SERVICE ARE FREE.

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA

engineering • environmental • constr

EF# 5397

NO.	DATE	REVISION DESCRIPTION

RICHARD R. MORRIS
LA. REG # 2195

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS N TED	MDM JOB #
DATE:	
DESIGNED BY:	
DRAWN BY: A	FILE NAME: CD
CHECKED BY: D SS	

DRAWING TITLE:

OVERLAY SITE PLAN

SHEET NO:

C-1.1

ISSUED FOR CONSTRUCTION 10/2/2020

LEGEND

DRAINAGE AREA BOUNDARY

RUNOFF IN C.F.S

RUNOFF IN ACRES

CENTER OF FLOW

EXIST CONDITION DRAINAGE AREA MAP

LEGEND

DRAINAGE AREA BOUNDARY

S-# DRAINAGE AREA/INLET #

RUNOFF IN ACRES

RUNOFF IN C.F.S

CUMULATIVE AREA IN PIPE (AC)

IN PIPE C.F.S

PIPE FLOW DIRECTION

GRADING SLOPE

NEW CONDITION DRAINAGE AREA MAP

One Call 811

DIAL 811 BEFORE YOU DIG

KNOW WHAT'S BELOW.

ALWAYS DIAL 811 OR 800 292-8525 FIRST. THE CALL AND THE SERVICE ARE FREE.

CLIENT:

CIRCLE K STORES, INC

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA

engineering • environmental • constr

EF# 5397

NO.	DATE	REVISION DESCRIPTION

RICHARD R. MORRIS
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SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS N□TED	MDM JOB #
DATE:	
DESIGNED BY:	
DRAWN BY: □A□	FILE NAME:
CHECKED BY: □D□SS	

DRAWING TITLE:

DRAINAGE AREA MAP

SHEET NO:

C-2.0

ISSUED FOR CONSTRUCTION 10/2/2020

Date:	January 17, 2020	Client:	MDM Services, Inc.
Computed by:	lek	Job No.:	p0000-006-001
Checked by :	mrk	Revised:	01/31/20; 02/03/20; 02/25/20; 02/28/20; 04/23/20
Pipe "n":	0.010 (unless shown otherwise)		

TABLE 1
Circle K: 2336 Westwood Rd., Westlake, Calcasieu Parish, La.
SIZE AND PROFILE OF UNDERGROUND STORM DRAINS
LaDoTD; Region 1

Inlet, MH, or Junction No. From (dnstrm)	To (upstrm)	Contrib. Area No(s).	Area (ac)	Area "C"	Total Area (ac)	Composite "C"	Distance (feet)	# of Pipes	Pipe Size (in)	Design Slope (%)	Tc (min)	Rainfall Intensity "I" (in/hr)	Actual Discharge (cfs)	Mannings "n"	Full Pipe / Ditch Capacity	Full Pipe Velocity (ft/sec)	Pipe / Ditch Flow Depth	HGL (dnstrm) (msl)	Friction Slope (%)	Change In HGL (feet)	HGL (upstrm) (msl)	Actual Velocity (ft/sec)	Velocity Head (ft)	HGL @ "To" MH Inlet (msl)	Design Inverts (dnstrm) (msl)	Design Inverts (upstrm) (msl)	Rise In Invert (feet)	Pipe Crown (dnstrm) (msl)	Pipe Crown (upstrm) (msl)	Top of Grate Elev (msl)	Comments
LINE "A"; 2-Year																															
	LaDoTD																							**5.05**		**3.80**					**Crown of LaDoTD Pipe**
LaDoTD	Restrictor				1.58	0.79	3	1	6	0.40		3.15	1.49	0.010	0.46	2.34	1.25	5.05	4.17	0.13	5.18	7.59	0.89	5.18	3.80	3.81	0.01	4.30	4.31	8.50	Pressure Flow
Restrictor	S-6	8	0.17	1.00	1.58	0.79	57	1	15	0.40	36.2	3.15	3.95	0.013	4.09	3.33	1.37	5.18	0.37	0.21	5.39	3.22	0.16	5.39	3.81	4.04	0.23	5.06	5.29	8.25	Pressure Flow
S-6	S-5	7	0.25	1.00	1.41	0.77	57	1	15	0.35	35.9	3.16	3.43	0.010	4.97	4.05	1.35	5.39	0.17	0.10	5.49	2.80	0.12	5.49	4.04	4.24	0.20	5.29	5.49	8.25	Matching Crown
S-5	Pond Out				1.16	0.72	70	1	15	0.30		5.38	4.49	0.010	4.60	3.75	1.25	5.49	0.29	0.21	5.70	3.66	0.21	5.70	4.24	4.45	0.21	5.49	5.70	8.50	Matching Crown
Pond Out	Pond In	5 6	0.52	0.48	1.16	0.72	224	1		0.25	12.3	5.38	4.49	0.040	4.17	0.97	1.25	5.70	0.00	0.00	5.70	0.16	0.00	5.70	4.45	5.01	0.56			8.50	Normal Depth In Pond
Pond In	S-4	4	0.08	0.32	0.64	0.92	41	1	15	0.25	12.0	5.43	3.18	0.010	4.20	3.42	1.25	6.26	0.14	0.10	6.36	2.59	0.10	6.36	5.01	5.11	0.10	6.26	6.36	9.25	Matching Crown
S-4	S-3	2	0.10	1.00	0.56	1.00	56	1	15	0.25	11.6	5.49	3.08	0.010	4.20	3.42	1.25	6.36	0.13	0.14	6.50	2.51	0.10	6.50	5.11	5.25	0.14	6.36	6.50	9.50	Matching Crown
S-3	S-2	2	0.28	1.00	0.46	1.00	91	1	12	0.25	11.1	5.58	2.57	0.010	2.32	2.95	1.00	6.50	0.31	0.28	6.78	3.27	0.17	6.78	5.50	5.73	0.23	6.50	6.73	9.20	Pressure Flow
S-2	S-1	1	0.18	1.00	0.18	1.00	54	1	8	0.45	10.8	5.64	1.01	0.010	1.05	3.01	0.72	6.78	0.41	0.22	7.00	2.89	0.13	7.00	6.06	6.30	0.24	6.73	6.97	8.85	Pressure Flow
LINE "A"; 25-Year																															
	LaDoTD																							**5.30**		**3.80**					**Crown of LaDoTD Pipe + 0.25'**
LaDoTD	Restrictor				1.6	0.79	3	1	6	0.40		4.43	1.87	0.010	0.46	2.34	1.50	5.30	6.54	0.20	5.50	9.50	1.40	5.50	3.80	3.81	0.01	4.30	4.31	8.50	Pressure Flow
Restrictor	S-6	8	0.17	1.00	1.6	0.79	57	1	15	0.40	42.3	4.43	5.56	0.013	4.09	3.33	1.69	5.50	0.74	0.42	5.92	4.53	0.32	5.92	3.81	4.04	0.23	5.06	5.29	8.25	Pressure Flow
S-6	S-5	7	0.25	1.00	1.4	0.77	57	1	15	0.35	42.1	4.44	4.82	0.010	4.97	4.05	1.88	5.92	0.33	0.19	6.11	3.93	0.24	6.11	4.04	4.24	0.20	5.29	5.49	8.25	Pressure Flow
S-5	Pond Out				1.2	0.72	70	1	15	0.30		7.51	6.28	0.010	4.60	3.75	1.87	6.11	0.56	0.39	6.50	5.12	0.41	6.50	4.24	4.45	0.21	5.49	5.70	8.50	Pressure Flow
Pond Out	Pond In	5 6	0.52	0.48	1.2	0.72	224	1		0.25	11.8	7.51	6.28	0.040	5.89	0.21	2.05	6.50	0.00	0.00	6.50	0.12	0.00	6.50	4.45	5.01	0.56			8.50	Normal Depth In Pond
Pond In	S-4	4	0.08	0.32	0.6	0.92	41	1	15	0.25	11.6	7.55	4.42	0.010	4.20	3.42	1.49	6.50	0.28	0.11	6.61	3.60	0.20	6.61	5.01	5.11	0.10	6.26	6.36	9.25	Pressure Flow
S-4	S-3	2	0.10	1.00	0.6	1.00	56	1	15	0.25	11.3	7.60	4.26	0.010	4.20	3.42	1.50	6.61	0.26	0.14	6.75	3.47	0.19	6.75	5.11	5.25	0.14	6.36	6.50	9.50	Pressure Flow
S-3	S-2	2	0.28	1.00	0.5	1.00	91	1	12	0.25	11.0	7.66	3.52	0.010	2.32	2.95	1.25	6.75	0.58	0.53	7.28	4.48	0.31	7.28	5.50	5.73	0.23	6.50	6.73	9.20	Pressure Flow
S-2	S-1	1	0.18	1.00	0.2	1.00	54	1	8	0.45	10.8	7.70	1.39	0.010	1.05	3.01	1.22	7.28	0.78	0.42	7.70	3.98	0.25	7.70	6.06	6.30	0.24	6.73	6.97	8.85	Pressure Flow
LINE "A"; 100-Year																															
	LaDoTD																							**5.30**		**3.80**					**Crown of LaDoTD Pipe + 0.25'**
LaDoTD	Restrictor				1.6	0.79	3	1	6	0.40		5.17	2.04	0.010	0.46	2.34	1.50	5.30	7.78	0.23	5.53	10.36	1.67	5.53	3.80	3.81	0.01	4.30	4.31	8.50	Pressure Flow
Restrictor	S-6	8	0.17	1.00	1.6	0.79	57	1	15	0.40	44.8	5.17	6.50	0.013	4.09	3.33	1.72	5.53	1.01	0.58	6.11	5.30	0.44	6.11	3.81	4.04	0.23	5.06	5.29	8.25	Pressure Flow
S-6	S-5	7	0.25	1.00	1.4	0.77	57	1	15	0.35	44.6	5.19	5.63	0.010	4.97	4.05	2.07	6.11	0.45	0.26	6.37	4.59	0.33	6.37	4.04	4.24	0.20	5.29	5.49	8.25	Pressure Flow
S-5	Pond Out				1.2	0.72	70	1	15	0.30		8.90	7.43	0.010	4.60	3.75	2.13	6.37	0.78	0.55	6.92	6.05	0.57	6.92	4.24	4.45	0.21	5.49	5.70	8.50	Pressure Flow
Pond Out	Pond In	5 6	0.52	0.48	1.2	0.72	224	1		0.25	11.7	8.90	7.43	0.040	7.02	0.19	2.47	6.92	0.00	0.00	6.92	0.11	0.00	6.92	4.45	5.01	0.56			8.50	Normal Depth In Pond
Pond In	S-4	4	0.08	0.32	0.6	0.92	41	1	15	0.25	11.5	8.94	5.24	0.010	4.20	3.42	1.91	6.92	0.39	0.16	7.08	4.27	0.28	7.08	5.01	5.11	0.10	6.26	6.36	9.25	Pressure Flow
S-4	S-3	2	0.10	1.00	0.6	1.00	56	1	15	0.25	11.3	8.98	5.03	0.010	4.20	3.42	1.97	7.08	0.36	0.20	7.28	4.10	0.26	7.28	5.11	5.25	0.14	6.36	6.50	9.50	Pressure Flow
S-3	S-2	2	0.28	1.00	0.5	1.00	91	1	12	0.25	11.0	9.05	4.16	0.010	2.32	2.95	1.78	7.28	0.81	0.74	8.02	5.30	0.44	8.02	5.50	5.73	0.23	6.50	6.73	9.20	Pressure Flow
S-2	S-1	1	0.18	1.00	0.2	1.00	54	1	8	0.45	10.8	9.09	1.64	0.010	1.05	3.01	1.96	8.02	1.09	0.59	8.61	4.70	0.34	8.61	6.06	6.30	0.24	6.73	6.97	8.85	Pressure Flow

TABLE 2
INLET SIZING
City / County: LaDoTD; Region 1
Rainfall Frequency: 2

Inlet, MH, or Junction	Station OR D.A. #	Drainage Area (ac)	Inlet Area "C"	Node In HGL (Y = Yes)	Initial Tc 5 (min)	Swale Run @ 0.35 fps	Paving Run @ 0.44 fps	Total Tc (min)	Intensity (in/hr)	Inlet Q (cfs)	Inlet Type	Inlet Cap (cfs)
S-1	1	0.180	1.00	Y	5		155	10.8	5.64	1.01	A	2.5
S-2	2	0.280	1.00	Y	5		155	10.8	5.64	1.58	A	2.5
S-3	3	0.100	1.00	Y	5		60	7.3	6.36	0.64	A	2.5
S-4	4	0.080	0.32	Y	5	110		10.2	5.75	0.15	A	2.5
	5	0.120	1.00	Y	5		80	8.0	6.20	0.74		
	6	0.400	0.32		5	220		15.5	4.90	0.63		
S-5	7	0.250	1.00	Y	5		155	10.8	5.64	1.41	A	2.5
S-6	8	0.170	1.00	Y	5		155	10.8	5.64	0.96	A	2.5
LaDoTD	1-8	1.580										

Rational Method Rainfall Intensity-Duration-Frequency Coefficients:
Intensity (i) = b/(Tc + d)^e for Tc in minutes

City / County	Coefficient	2-year	3-year	5-year	10-year	25-year	50-year	100-year
LaDoTD; Region 1	e (in)	0.8990	0.0000	0.8510	0.8260	0.7980	0.7830	0.7590
	b	111.7	0.0	115.3	118.2	121.0	125.8	122.7
	d (mins)	16.9	0.0	19.8	20.8	20.8	21.1	20.0
	Intensity (in/hr)*	3.76	0.00	4.40	4.88	5.57	6.10	6.64

Coefficient	2-year	3-year	5-year	10-year	25-year	50-year	100-year
e (mm)	0.8990	0.0000	0.8510	0.8260	0.7980	0.7830	0.7590
b	2837	0	2928	3002	3073	3195	3117
d (mins)	16.9	0.0	19.8	20.8	20.8	21.1	20.0
Intensity (mm/hr)*	95.43	0.00	111.78	123.89	141.45	155.04	168.73

* for time of Concentration = **26.6** mins

LADOTD HYDRAULICS MANUAL 2011 — PEAK DISCHARGE

REGION 1

	a	b	c
2-Year	2.815 (17.836)	0.282 (0.282)	-0.899
5-Year	3.536 (22.37)	0.330 (0.825)	-0.851
10-Year	4.016 (18.18)	0.347 (2.826)	-0.826
25-Year	4.611 (30.193)	0.346 (20.792)	-0.798
50-Year	5.097 (28.779)	0.351 (21.862)	-0.783
100-Year	5.487 (27.136)	0.334 (22.828)	-0.759

Figure 3.4-3 Region 1 Rainfall Intensity Curve (Rational Method)

AL One Call 811
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KNOW WHAT'S BELOW.
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THE CALL AND THE SERVICE ARE FREE.

CLIENT:
CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:
MDM SERVICES, INC. of LOUISIANA
engineering • environmental • constr
EF# 5397

NO.	DATE	REVISION DESCRIPTION

RICHARD R. MORRIS
LA. REG # 2195

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:
CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS N□TED
MDM JOB #
DATE:
DESIGNED BY:
DRAWN BY: □A□
CHECKED BY: □D□SS
FILE NAME:

DRAWING TITLE:
HGL & INLET CALCULATIONS

SHEET NO:
C-2.01

ISSUED FOR CONSTRUCTION 10/2/2020

DRAINAGE NOTES:

1–DRAINAGE DESIGN IS A PRIVATE SYSTEM

2–THE DRAINAGE SYSTEM WILL NOT HAVE ANY ADVERSE EFFECT ON THE STATE ROW

DRAINAGE INSPECTION:

THE CONTRACTOR MUST NOTIFY THE ENGINEER OF RECORD AND GOVERNING AUTHORITIES, 48 HOURS IN ADVANCE TO OBTAIN A DRAINAGE INSPECTION. THE DRAINAGE SYSTEM MUST BE INSPECTED PRIOR TO BACK FILLING.

DRAINAGE NOTES:

CONTRACTOR SHALL PROVIDE EROSION CONTROL/SEDIMENTATION BARRIER (HAY BALES OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS, AND WATERWAYS. IN ADDITION, CONTRACTOR SHALL PLACE STRAW, MULCH, OR OTHER SUITABLE MATERIAL ON GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT SITE. IF, IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE CONTRACTOR IS TO REMOVE AND CLEAN SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES.

A FILTER CLOTH SHALL BE PLACED AT THE SIDES AND BOTTOM OF THE UNDERGROUND TANK EXCAVATION WITH A MINIMUM 4 FOOT LAP AT THE TOP, WHEN USING PEA-GRAVEL BACKFILL.

LAND DISTURBANCE DATA:

EXISTING SITE AREAS:

TOTAL SITE AREA:	82561.49 SQ.FT. OR 1.89 ACRES M.O.L.
TOTAL IMPERVIOUS AREA:	0.00 SQ.FT. OR 0.00% OF SITE
TOTAL PERVIOUS AREA:	82561.49 SQ.FT. OR 100.00% OF SITE

PROPOSED SITE AREAS:

TOTAL SITE AREA:	82561.49 SQ.FT. OR 1.89 ACRES M.O.L.
PARKING / CIRCULATION AREA:	45568.94 SQ.FT. OR 55.19% OF SITE
DETENTION POND AREA:	11,303.86 SQ.FT. OR 13.69% OF SITE
C-STORE:	5,029.64 SQ.FT. OR 6.09% OF SITE
IMPERVIOUS AREA:	50,598.588 SQ.FT. OR 61.29% OF SITE
TOTAL PERVIOUS AREA:	31962.9104 SQ.FT. OR 38.71% OF SITE

GUTTER SCHEDULE

PIPE NO.	LF	PIPE	SLOPE	INV.IN	INV.OUT
G-1	55	8" PVC	1.00%	7.50	7.06
G-2	20	8" PVC	1.00%	7.50	7.30
G-3	12	8" PVC	1.00%	7.06	6.94

CONRAD ROAD PIPE SCHEDULE

PIPE NO.	LF	PIPE	SLOPE	INV.IN	INV.OUT
P-10	152	15" RCP	0.15%	3.59	3.37
P-11	79	15" RCP	0.15%	3.12	3.00

JOHN STINE PIPE SCHEDULE

PIPE NO.	LF	PIPE	SLOPE	INV.IN	INV.OUT
P-20	90	15" RCP	0.49%	6.11	5.67
P-21	91	15" RCP	0.49%	5.67	5.22
P-22	70	15" RCP	0.49%	5.22	4.87

SITE PIPE SCHEDULE

PIPE NO.	LF	PIPE	SLOPE	INV.IN	INV.OUT
P-1	54	8" HDPE	0.45%	6.30	6.06
P-2	91	12" HDPE	0.25%	5.73	5.50
P-3	56	15" HDPE	0.25%	5.25	5.11
P-4	41	15" HDPE	0.25%	5.11	5.01
P-5	70	15" HDPE	0.30%	4.45	4.24
P-6	57	15" HDPE	0.30%	4.24	4.04
P-7	57	15" RCP	0.40%	4.04	3.81
P-8	4	6" PVC	0.40%	3.81	3.80
P-14	33	8" PVC	0.50%	6.20	5.95
P-15	100	8" PVC	1.00%	5.95	5.85

SITE DRAINAGE STRUCTURE SCHEDULE

STRUCTURE NUMBER	STRUCTURE DESCRIPTION	TOP ELEV. "A"	BOTTOM ELEV. "B"	DEPTH "C"	PIPE OPENING INFORMATION "D" SIZE	INVERT	DIRECTION
S-1	24" CATCH BASIN w/TRAFFIC BEARING PEDESTRIAN GRATE 6" SUMP	8.85	6.30	3.04'	8" HDPE	6.30	E
S-2	24" CATCH BASIN w/TRAFFIC BEARING PEDESTRIAN GRATE 6" SUMP	9.20	5.74	3.96'	8" HDPE 12" HDPE	6.06 5.73	W E
S-3	24" CATCH BASIN w/TRAFFIC BEARING PEDESTRIAN GRATE 6" SUMP	9.50	5.51	4.49'	12" HDPE 12 HDPE	5.50 5.25	E SE
S-4	24"X24" TYPE A w/TRAFFIC BEARING GRATE	9.25	5.15	4.10'	12" HDPE 12" HDPE	5.11 5.11	NW SW
S-5	24" CATCH BASIN w/TRAFFIC BEARING PEDESTRIAN GRATE 6" SUMP	8.25	4.39	4.36'	15" HDPE 15" HDPE	4.24 4.24	E W
S-6	24" CATCH BASIN w/TRAFFIC BEARING PEDESTRIAN GRATE 6" SUMP	8.25	3.88	4.87'	8" HDPE 15" HDPE 18" HDPE	5.85 4.04 4.04	N E SW

CONRAD ROAD DRAINAGE STRUCTURE SCHEDULE

STRUCTURE NUMBER	STRUCTURE DESCRIPTION	TOP ELEV. "A"	BOTTOM ELEV. "B"	DEPTH "C"	PIPE OPENING INFORMATION "D" SIZE	INVERT	DIRECTION
CR-S-1	24"X24" TYPE A w/TRAFFIC BEARING GRATE	5.80	3.51	2.29'	15" RCP	3.59	W
CR-S-2	24"X24" TYPE A w/TRAFFIC BEARING GRATE	7.76	3.12	4.64'	15" RCP 15" RCP	3.37 3.12	E W
CR-S-3	24"X24" TYPE A w/TRAFFIC BEARING GRATE	6.43	3.00	3.43	15" RCP 15" RCP 15" RCP	3.00 3.83 2.94	E NE S

JOHN STINE ROAD DRAINAGE STRUCTURE SCHEDULE

STRUCTURE NUMBER	STRUCTURE DESCRIPTION	TOP ELEV. "A"	BOTTOM ELEV. "B"	DEPTH "C"	PIPE OPENING INFORMATION "D" SIZE	INVERT	DIRECTION
JSR-S-1	24"X24" TYPE A w/TRAFFIC BEARING GRATE	10.40	6.11	4.29'	15" RCP	6.11	W
JSR-S-2	24"X24" TYPE A w/TRAFFIC BEARING GRATE	10.18	5.46	4.72'	15" RCP 15" RCP	5.46 5.46	E W
JSR-S-3	24"X24" TYPE A w/TRAFFIC BEARING GRATE	9.96	5.22	4.74'	15" RCP 15" RCP	5.22 5.22	E W

811 One Call
DIAL 811 BEFORE YOU DIG
KNOW WHAT'S BELOW.
ALWAYS DIAL 811 OR 800 292-8525 FIRST.
THE CALL AND THE SERVICE ARE FREE.

CLIENT:

CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA
engineering • environmental • construction
3311-D SW 13th Drive * Deerfield Beach, FL 33442
Phone: (954) 427-3076
LE# 52[illegible]

REVISED FOR CONSTRUCTION 11/11/21

NO.	DATE	REVISION DESCRIPTION
2	11/11/21	REVISED CANOPY GRADES
1	6/25/20	ADDED TRENCH DRAIN

RICHARD R. MORRIS
LA. REG # 21957

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED	MDM JOB # 19075
DATE: 12-30-2019	
DESIGNED BY:	
DRAWN BY: JAG	FILE NAME: 19075-CD.DWG
CHECKED BY: D. DOSS	

DRAWING TITLE:

SITE GRADING & DRAINAGE PLAN

SHEET NO:

C-2.1

SECTION A
SCALE: HORZ. 1"=20'
VERT. 1"=2'

SECTION B
SCALE: HORZ. 1"=20'
VERT. 1"=2'

SECTION C
SCALE: HORZ. 1"=20'
VERT. 1"=2'

SECTION D
SCALE: HORZ. 1"=20'
VERT. 1"=2'

SECTION E
SCALE: HORZ. 1"=20'
VERT. 1"=2'

SECTION F
SCALE: HORZ. 1"=20'
VERT. 1"=2'

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CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA
engineering • environmental • constr
EF# 5397

NO.	DATE	REVISION DESCRIPTION
1	6/25/20	ADDED TRENCH DRAIN

ISSUED FOR CONSTRUCTION 10/2/2020

RICHARD R. MORRIS
LA. REG # 2195

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED
MDM JOB #
DATE:
DESIGNED BY:
DRAWN BY:
CHECKED BY:
FILE NAME:

DRAWING TITLE:

SITE SECTIONS

SHEET NO:

C-2.2

JOHN STINE ROAD STORM SEWER

SCALE: HORZ. 1"=20'
VERT. 1"=2'

CONRAD ROAD STORM SEWER

SCALE: HORZ. 1"=20'
VERT. 1"=2'

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CLIENT:

CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA
engineering • environmental • constr
EF# 5397

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

RICHARD R. MORRIS
LA. REG # 2195

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS N□TED	MDM JOB #
DATE:	
DESIGNED BY:	
DRAWN BY: □A□	FILE NAME:
CHECKED BY: □D□SS	

DRAWING TITLE:

OFFSITE SECTIONS

SHEET NO:

C-2.3

Flared End Section
12" - 36" Diameter Pipe

Pipe Inner Diameter (inches)	Wall Thickness (inches)	A (inches)	B (inches)	C (inches)	D (inches)	E (inches)	Slope
12	2	4	24	48 7/8	72 7/8	30	3:1
15	2 1/4	6	27	46	73	30	3:1
18	2 1/2	9	27	46	73	36	3:1
24	3	9 1/2	43 1/2	30	73 1/2	48	3:1
30	3 1/2	12	54	19 3/4	73 3/4	60	3:1
36	4	15	63	34 3/4	97 3/4	72	3:1

Notes:
1. Produced to meet ASTM specifications.

RESPONSIBILITY SCHEDULE

C□ □CIRC□E □ □C □C□NTRACT□R □ □ □T□ERS	□R□□IDED B□			INSTA□□ED B□		
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NYLOPLAST DRAIN BASIN WITH PEDESTRIAN GRATE

1 - 12" - 30" PEDESTRIAN GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - 12" - 30" FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-095.
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 24").
5 - ADAPTERS CAN BE MOUNTED 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.
6 - 12" - 24" PEDESTRIAN GRATES SHALL MEET H-10 LOAD RATING. 30" PEDESTRIAN GRATE SHALL MEET H-20 LOAD RATING (SEE DRAWING NO. 7001-110-144 FOR H-20 TRAFFIC LOAD GUIDELINES).

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DRAWN BY EBC	MATERIAL PVC	Nyloplast	3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2496 www.nyloplast-us.com
DATE 4-20-07			
REVISED BY NMH	PROJECT NO.NAME	TITLE DRAIN BASIN WITH PEDESTRIAN GRATE QUICK SPEC INSTALLATION DETAIL	
DATE 03-11-10			
DWG SIZE A	SCALE 1:40 SHEET 1 OF 1	DWG NO. 7001-110-303	REV D

2499CGP

APPROX. DRAIN AREA = 164.10 SQ IN
APPROX. WEIGHT WITH FRAME = 95.50 LBS

DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
GRATE MEETS H-10 LOAD RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
SIZE OF OPENING MEETS REQUIREMENTS OF AMERICAN DISABILITY ACT AS STATED IN FEDERAL REGISTER PART III, DEPARTMENT OF JUSTICE, 28 CFR PART 36.
LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7001-110-023

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DRAWN BY EBC	MATERIAL DUCTILE IRON	Nyloplast	3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2496 www.nyloplast-us.com
DATE 03-08-06			
REVISED BY CCA	PROJECT NO.NAME	TITLE 24 IN PEDESTRIAN GRATE ASSEMBLY - TYPE B	
DATE 08-30-13			
DWG SIZE A	SCALE 1:10 SHEET 1 OF 1	DWG NO. 7001-110-216	REV D

NON TRAFFIC INSTALLATION

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DRAWN BY CJA	MATERIAL	Nyloplast	3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2496 www.nyloplast-us.com
DATE 9-30-09			
REVISED BY NMH	PROJECT NO.NAME	TITLE DRAIN BASIN & INLINE DRAIN NON TRAFFIC INSTALLATION	
DATE 03-11-10			
DWG SIZE A	SCALE 1:25 SHEET 1 OF 1	DWG NO. 7001-110-111	REV E

Section 2721

Engineered Surface Drainage Products

GENERAL
PVC surface drainage inlets shall include the drain basin type as indicated on the contract drawing and referenced within the contract specifications. The ductile iron grates for each of these fittings are to be considered an integral part of the surface drainage inlet and shall be furnished by the same manufacturer. The surface drainage inlets shall be as manufactured by Nyloplast a division of Advanced Drainage Systems, Inc., or prior approved equal.

MATERIALS
The drain basins required for this contract shall be manufactured from PVC pipe stock, utilizing a thermoforming process to reform the pipe stock to the specified configuration. The drainage pipe connection stubs shall be manufactured from PVC pipe stock and formed to provide a watertight connection with the specified pipe system. This joint tightness shall conform to ASTM D3212 for joints for drain and sewer plastic pipe using flexible elastomeric seals. The flexible elastomeric seals shall conform to ASTM F477. The pipe bell spigot shall be joined to the main body of the drain basin or catch basin. The raw material used to manufacture the pipe stock that is used to manufacture the main body and pipe stubs of the surface drainage inlets shall conform to ASTM D1784 cell class 12454.

The grates and frames furnished for all surface drainage inlets shall be ductile iron for sizes 8", 10", 12", 15", 18", 24" and 30" and shall be made specifically for each basin so as to provide a round bottom flange that closely matches the diameter of the surface drainage inlet. Grates for drain basins shall be capable of supporting various wheel loads as specified by Nyloplast. 12" and 15" square grates will be hinged to the frame using pins. Ductile iron used in the manufacture of the castings shall conform to ASTM A536 grade 70-50-05. Grates and covers shall be provided painted black.

INSTALLATION
The specified PVC surface drainage inlet shall be installed using conventional flexible pipe backfill materials and procedures. The backfill material shall be crushed stone or other granular material meeting the requirements of class 1, class 2, or class 3 material as defined in ASTM D2321. Bedding and backfill for surface drainage inlets shall be well placed and compacted uniformly in accordance with ASTM D2321. The drain basin body will be cut at the time of the final grade. No brick, stone or concrete block will be required to set the grate to the final grade height. For load rated installations, a concrete slab shall be poured under and around the grate and frame. The concrete slab must be designed taking into consideration local soil conditions, traffic loading, and other applicable design factors. For other installation considerations such as migration of fines, ground water, and soft foundations refer to ASTM D2321 guidelines.

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DRAWN BY CJA	MATERIAL	Nyloplast	3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2496 www.nyloplast-us.com
DATE 3-10-05			
REVISED BY NMH	PROJECT NO.NAME	TITLE 8 IN - 30 IN DRAIN BASIN SPECIFICATIONS	
DATE 03-11-10			
DWG SIZE A	SCALE 1:1 SHEET 1 OF 1	DWG NO. 7001-110-011	REV H

TYPE A STYLE INLET
24" x 24"

CLIENT:

CIRCLE K STORES, INC
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA
engineering • environmental • constr
EF# 5397

NO.	DATE	REVISION DESCRIPTION

RICHARD R. MORRIS
LA. REG # 2195

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS N□TED
MDM JOB #
DATE:
DESIGNED BY:
DRAWN BY: □A□
CHECKED BY: □D□SS
FILE NAME: □□□□CD□□

DRAWING TITLE:

SITE DETAILS

SHEET NO:

C-2.4

ISSUED FOR CONSTRUCTION 10/2/2020

24" NYLOPLAST DRAINAGE BASIN (S-2)

24" NYLOPLAST DRAINAGE BASIN (S-1,S-6)

NO SCALE

24" NYLOPLAST DRAINAGE BASIN (S-2,S-3,S-5,S-6)

PLAN VIEW

1. QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05.
2. MATERIAL: DUCTILE IRON.
3. PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT.
4. APPROX DRAIN AREA = 164.94 SQ IN.
5. APPROX WEIGHT = 90.00 LBS.

NOTE:
REFER TO SHT. DRAINAGE SCHEDULE FOR PIPE SIZES, MATERIAL, INVERTS AND STRUCTURE ELEVATIONS.

PLAN VIEW

* (1) MAXIMUM RECOMMENDED OVERALL HEIGHT 10'
* (2) ADAPTERS CAN BE MOUNTED AT ANY ANGLE 0° TO 359°

T1- TRENCH PROFILE

NEW ACO FG200 CHANNEL SYSTEM W/ ADA GRATE (5.5 SECTIONS) OF F803N W/ 8" OUTLET

4", 6", OR 8" DIA. OUTLET (STD.)

DRAIN ACCESSORIES
NO SCALE

NOTE:
ACO TRENCH DRAIN SYSTEM TO BE INSTALLED AS PER MANUFACTURER'S SPECIFICATIONS.
CONTACT INFORMATION:
ACO POLYMER PRODUCTS
12080 RAVENNA ROAD
CHARDON, OH 44024
PH: (800) 543-4764
WEB: WWW.ACOUSA.COM

TYPICAL ACO TRENCH DRAIN DETAIL

NO SCALE

AL One Call 811
DIAL 811 BEFORE YOU DIG
KNOW WHAT'S BELOW.
ALWAYS DIAL 811 OR 800 292-8525 FIRST.
THE CALL AND THE SERVICE ARE FREE.

CLIENT:

CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA
engineering • environmental • constr
D S Dr D d B
EF# 5397

NO.	DATE	REVISION DESCRIPTION
1	6/25/20	ADDED TRENCH DRAIN

RICHARD R. MORRIS
LA. REG # 2195

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS N TED	MDM JOB #
DATE:	
DESIGNED BY:	
DRAWN BY: A	FILE NAME: CD
CHECKED BY: D SS	

DRAWING TITLE:

SITE DETAILS

SHEET NO:

C-2.5

ISSUED FOR CONSTRUCTION 10/2/2020

Circle K: 2336 Westwood Rd., Westlake, Calcasieu Parish, La.

DRAINAGE & DETENTION CALCULATIONS:

Step 1: Existing condition map (see Fig. 1, attached)

Step 2: Developed condition map (see Fig 2, attached)
*See Table 1 for HGL calcs. and Table 2 for Inlet sizing (attached).

Step 3: Existing & Developed Time of Concentration - Tc_e & Tc_d:
*Flow velocities are based on LaDoTD 2011 Hydraulics Manual with amendments and 2-yr HGL calcs. See Figures 1 & 2 for flow paths/lengths. Tc_e formula from LaDoTD Figure 3-C.3-1.

$$Tc_e = 0.7039(352^{0.3917})(0.30^{-1.1309})(1.14^{-0.1985}) = 26.6 \text{ min.}$$

Tc_d Paving =	155' / 0.44 fps	x	1 min. / 60 sec.	+ 5 min.	=	10.8 min.
Storm Pipe Run =	54' / 4.70 fps	x	1 min. / 60 sec.		=	0.2 min.
Storm Pipe Run =	91' / 5.30 fps	x	1 min. / 60 sec.		=	0.3 min.
Storm Pipe Run =	56' / 4.10 fps	x	1 min. / 60 sec.		=	0.2 min.
Storm Pipe Run =	41' / 4.27 fps	x	1 min. / 60 sec.		=	0.2 min.
Pond Run =	224' / 0.11 fps	x	1 min. / 60 sec.		=	32.8 min.
Storm Pipe Run =	70' / 6.05 fps	x	1 min. / 60 sec.		=	0.2 min.
Storm Pipe Run =	57' / 4.59 fps	x	1 min. / 60 sec.		=	0.2 min.
Storm Pipe Run =	57' / 5.30 fps	x	1 min. / 60 sec.		=	0.2 min.
Tc_d Total =						44.8 min.

Step 4: Existing & Developed Runoff Coefficients - C_e & C_d:
*Total area = 1.895 ac.

C_e = Undeveloped = 0.30

	C		Area			
C_d L'scape/Pond =	0.32	x	0.795	=	0.25	
C_d Awning/Bld/Paving =	1.00	x	1.10	=	1.10	
C_d =			1/1.895	x	1.35	= 0.71

Step 5: Existing & Developed Peak Discharges:
*Rainfall intensity per LaDoTD Figure 3.4-3 for Region 1, converted to minutes, attached.

	100-yr	25-yr	2-yr	Tc
i_e =	6.6 in/hr	5.6 in/hr	3.8 in/hr	26.6 min.
i_d =	5.2 in/hr	4.3 in/hr	2.7 in/hr	44.8 min.

	C		i		A		
$Q_{Pe}100$ = (	0.30	) x (	6.6	) x (	1.895	) =	3.8 cfs
$Q_{Pe}25$ = (	0.30	) x (	5.6	) x (	1.895	) =	3.2 cfs
$Q_{Pe}2$ = (	0.30	) x (	3.8	) x (	1.895	) =	2.1 cfs
$Q_{Pd}100$ = (	0.71	) x (	5.2	) x (	1.895	) =	7.0 cfs
$Q_{Pd}25$ = (	0.71	) x (	4.3	) x (	1.895	) =	5.8 cfs
$Q_{Pd}2$ = (	0.71	) x (	2.7	) x (	1.895	) =	3.7 cfs

Step 6: Hydrographs & Required Storage
*See Appendix "A" for calculations using Malcom's Method.

Required Vol: 0.43 af = 18,826 CF

Required Vol: 0.31 af = 13,292 CF

Required Vol: 0.12 af = 5,265 CF

Step 7: Storage Provided

	W.S.E.	Top Area	Bottom Area	Depth	Onsite Volume
100-Yr:	6.92	10,445	6,818	2.19	0.43 af
25-Yr:	6.50	9,728	6,818	1.77	0.34 af
2-Yr:	5.70	8,391	6,818	0.97	0.17 af

***Note:** No underground detention required.

Step 8: Restrictor Sizing (see Table 3, attached)

TABLE 3
RESTRICTOR SIZING

Top of Pond:	8.00	Spillway Flowline:	8.00
N.G. @ Outfall:	±8.5	Flowline @ Outfall:	3.80
Avg. Pond Bottom:	4.73	Restrictor Flowline:	3.80

							Deten. Rqd.	Storage Surface	Static Surface	Avg. Depth	Deten. Prvd.
100-yr Pond WSE:		6.92			100-yr "Q" Allowable: 3.8						
Dia*	Crown	h	"C"	A	Q_{100} Actual	Vel.	Ac-ft	Ac	Ac	Ft	Ac-Ft
6	4.30	2.62	0.8	0.20	2.04	10.39	0.43	0.24	0.16	2.19	0.43
25-yr Pond WSE:		6.50			10-yr "Q" Allowable: 3.2						
Dia*	Crown	h	"C"	A	Q_{10} Actual	Vel.	Ac-ft	Ac	Ac	Ft	Ac-Ft
6	4.30	2.20	0.8	0.20	1.87	9.52	0.31	0.22	0.16	1.77	0.34
2-yr Pond WSE:		5.70			2-yr "Q" Allowable: 2.1						
Dia*	Crown	h	"C"	A	Q_3 Actual	Vel.	Ac-ft	Ac	Ac	Ft	Ac-Ft
6	4.30	1.40	0.8	0.20	1.49	7.60	0.12	0.19	0.16	0.97	0.17

*Use 6" minimum restrictor to reduce clogging.

APPENDIX "A"
MALCOM'S HYDROGRAPH CALCULATIONS :

Net Area: 1.895 ac

		Excess Rainfall Runoff 100-yr	25-yr	2-yr
$\%Impv_e$	30%	10.8	7.8	3.2
$\%Impv_d$	71%	11.8	8.8	3.9

Totall Runoff Volume			
100-yr	V_e =	74,190	Existing Condition
25-yr	V_e =	53,878	
2-yr	V_e =	21,811	
100-yr	V_d =	81,548	Proposed Condition
25-yr	V_d =	60,394	
2-yr	V_d =	26,999	

Excess Runoff in Inches (in) % Impv.	100-yr	25-yr	2-yr
0%	10.0	7.1	2.6
10%	10.3	7.3	2.7
20%	10.5	7.6	2.9
30%	10.8	7.8	3.2
35%	10.9	7.9	3.2
40%	11.0	8.0	3.3
45%	11.1	8.1	3.4
50%	11.3	8.3	3.5
60%	11.5	8.5	3.7
70%	11.8	8.8	3.9
80%	12.1	9.0	4.1
90%	12.3	9.3	4.4
100%	12.6	9.6	4.8

Formulas & definitions for hydrograph development follow volume calculation table below.

		T_P Sec.	T_P Min.	$1.25T_P$ Sec.	$1.25T_P$ Min.
100-yr	T_{Pe} =	14046	234	17558	293
25-yr	T_{Pe} =	12113	202	15141	253
2-yr	T_{Pe} =	7472	125	9340	156
100-yr	T_{Pd} =	8381	140	10476	175
25-yr	T_{Pd} =	7491	125	9364	156
2-yr	T_{Pd} =	5250	88	6563	110

Peak Exist. & Devel Flow Rates from Rational Method (See Detention Calcs. Step 5)

100-yr	Q_{Pe} =	3.8
25-yr	Q_{Pe} =	3.2
2-yr	Q_{Pe} =	2.1
100-yr	Q_{Pd} =	7.0
25-yr	Q_{Pd} =	5.8
2-yr	Q_{Pd} =	3.7

	100-yr	25-yr	2-yr
Storage Rate:	0.23 af/a	0.16 af/a	0.06 af/a
Cumulative Storage:	0.43 af	0.31 af	0.12 af
Cumulative Storage:	18,826 CF	13,292 CF	5,265 CF

***NOTE:** Volume calculation truncates after peak storage is reached.

	100-yr			25-yr			2-yr		
t_i min	qI_e cfs	qI_d cfs	v_i* CF	qI_e cfs	qI_d cfs	v_i* CF	qI_e cfs	qI_d cfs	v_i* CF
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	13.3	0.0	0.0	13.5	0.0	0.0	15.9
10	0.0	0.1	34.5	0.0	0.1	34.9	0.0	0.1	40.8
15	0.0	0.2	65.9	0.0	0.2	66.5	0.1	0.3	77.0
20	0.1	0.3	107.0	0.1	0.4	107.7	0.1	0.5	123.1
25	0.1	0.5	157.2	0.1	0.6	157.8	0.2	0.7	177.2
30	0.2	0.8	215.8	0.2	0.8	215.8	0.3	1.0	237.3
35	0.2	1.0	282.0	0.2	1.1	280.7	0.4	1.3	300.9
40	0.3	1.3	354.7	0.3	1.3	351.2	0.5	1.6	365.5
45	0.3	1.6	432.9	0.4	1.7	426.0	0.6	1.9	428.6
50	0.4	2.0	515.4	0.5	2.0	503.7	0.7	2.3	487.5
55	0.5	2.4	601.1	0.6	2.4	582.8	0.9	2.6	539.7
60	0.6	2.7	688.5	0.6	2.7	661.8	1.0	2.9	582.8
65	0.7	3.1	776.3	0.8	3.1	739.1	1.1	3.1	614.9
70	0.8	3.5	863.3	0.9	3.4	813.2	1.3	3.3	634.3
75	0.9	3.9	948.0	1.0	3.8	882.6	1.4	3.5	639.7
80	1.0	4.3	1029.2	1.1	4.1	946.0	1.5	3.6	0.0
85	1.1	4.7	1105.5	1.2	4.5	1001.8	1.6	3.7	0.0
90	1.2	5.0	1175.7	1.3	4.8	1049.0	1.7	3.7	0.0
95	1.3	5.4	1238.6	1.5	5.0	1086.3	1.8	3.6	0.0
100	1.5	5.7	1293.2	1.6	5.3	1112.9	1.9	3.5	0.0
105	1.6	6.0	1338.3	1.7	5.4	1128.0	2.0	3.3	0.0
110	1.7	6.2	1373.2	1.8	5.6	1130.9	2.0	3.1	0.0
115	1.8	6.5	1397.1	1.9	5.7	0.0	2.1	2.9	0.0
120	2.0	6.7	1409.4	2.1	5.8	0.0	2.1	2.7	0.0
125	2.1	6.8	1409.6	2.2	5.8	0.0	2.1	2.5	0.0
130	2.2	6.9	0.0	2.3	5.8	0.0	2.1	2.3	0.0
135	2.4	7.0	0.0	2.4	5.7	0.0	2.1	2.2	0.0
140	2.5	7.0	0.0	2.5	5.6	0.0	2.0	2.0	0.0

OUTFALL RESTRICTOR DETAIL

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CLIENT:

CIRCLE K STORES, INC
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA
engineering • environmental • constr
EF# 5397

NO.	DATE	REVISION DESCRIPTION

RICHARD R. MORRIS
LA. REG # 2195

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED
MDM JOB #
DATE:
DESIGNED BY:
DRAWN BY:
FILE NAME:
CHECKED BY:

DRAWING TITLE:
DETENTION & RESTRICTOR CALCULATIONS

SHEET NO:
C-2.6

ISSUED FOR CONSTRUCTION 10/2/2020

LEGEND:

□□□NDATI□N S□STEMS □B□I□DIN□S□ THE EXISTING SOILS SHALL BE EXCAVATED TO DEPTH OF ± 18" - □□" BE□□□ E□ISTIN□ □RADE□AND S□I□S □RE□ARED/C□M□ACTED AS □ER □E□TEC□NICA□REC□MMENDATI□NS□T□ AC□IE□E T□E □□□NDATI□NS AND □□□□R S□AB DESI□N □RADES AND BEARIN□ □RESS□RES□ *

EXCAVATE EXISTING GRADE FOR CANOPY FOUNDATION (± 6 FT □□R S□READ □□□TERS □R □□□□T□□□R □□□□N □□□TERS □ER CAN□□□ □□ANS□□□RE□ARE S□I□S □ER □E□TEC□NICA□RE□□RT AND CAN□□□ S□□□□IER REC□MMENDATI□NS□ *

EXCAVATE EXISTING GRADE (± 15') FOR UNDERGROUND STORAGE TAN□ INSTA□ATI□N □ER □E□TEC□NICA□REC□MMENDATI□NS□ BAC□□□□ □□ER □NDER□R□□ND ST□RA□E TAN□S □ER MAN□□ACT□RER AND □E□TEC□NICA□ REC□MMENDATI□NS□T□ T□E □NDERSIDE □□T□E □A□EMENT□SEE □A□EMENT DETAI□S S□EET SD□□□SEE TAN□ □ □I□IN□ □□ANS □□R TAN□ □IT □ S□AB DETAI□S□DE□ ATERIN□ AND S□EET □I□IN□ MA□ BE RE□□IRED□ **

E□CA□ATE T□ REM□□E E□ISTIN□ □A□EMENT AND S□I□S □/□□ □EET□AND □RE□ARE E□ISTIN□ S□I□S AS S□ECI□IED IN T□E □E□TEC□NICA□RE□□RT□C□M□ACT AND C□T/ADD □I□□AS NECESSAR□ T□ AC□IE□E DESI□N □RADES □AM□□NT □□ □I□□ □ARIES SEE S□EET C□□□ □□R □RADES□AND READ□ T□ RECEI□E NE□ □A□EMENT□SEE □E□TEC□NICA□RE□□RT □□R □I□□ □□ACEMENT RE□□IREMENTS□ *

□R□D□CT □I□IN□ TRENC□ T□ BE E□CA□ATED □ER TAN□ □ □I□IN□ □□ANS AND BAC□□I□□ED □ IT□ □EAR□C□ □N□□□T□ T□E □NDERSIDE □□ □A□EMENT

C□T AS REC□MMENDED IN □E□TEC□NICA□RE□□RT□ADD □I□□ □ER □E□TEC□NICA□RE□□RT T□ AC□IE□E RE□□IRED DESI□N □RADE□ □I□□ □ARIES ACR□SS T□E SITE□ SEE □RADIN□ □□AN □□R DETAI□S□ □ANDSCA□E ACC□RDIN□ T□ □□ANS

* RE□ER T□ □E□TEC□ RE□□RT □□R C□M□□ETE S□B□□RADE □RE□ARATI□N AND □I□□ □□ACEMENT S□ECI□ICATI□N□

** RE□ER T□ □NDER□R□□ND ST□RA□E TAN□ MAN□□ACT□RER DETAI□S AND S□ECI□ICATI□NS □□R TAN□ INSTA□ATI□N□ RE□ER T□ □E□TEC□NICA□RE□□RT AND □□AN SET □□R E□CA□ATI□N □ BAC□□I□□RE□□IREMENTS□

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CLIENT:

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Gulf Coast Business Unit

DESIGN TEAM TITLE:

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engineering • environmental • constr

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EF# 5397

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RICHARD R. MORRIS
LA. REG # 2195

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS N□TED	MDM JOB # □□□□□
DATE: □□□□□□□□□	
DESIGNED BY:	
DRAWN BY: □A□	FILE NAME: □□□□□CD□□
CHECKED BY: □D□SS	

DRAWING TITLE:

CUT & FILL PLAN

SHEET NO:

C-2.7

ISSUED FOR CONSTRUCTION 10/2/2020

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N
W E
S
1" = 20'
GRAPHIC SCALE
0 10 20 40

UTILITY NOTE:

1. ALL PLUMBING SHALL COMPLY WITH THE 2015 INTERNATIONAL PLUMBING CODE AND ALL LOCAL ORDINANCES.
2. SDR 26, PVC SCHEDULE 40 D2665 OR STRONGER REQUIRED UNDER DRIVEWAYS OR PARKING LOTS.
3. ALL ABOVE GROUND WATER PIPING AND/OR BACKFLOW PREVENTER TO BE INSULATED.
4. G.C. TO INSTALL 6"ø SAMPLING PORT DOWNSTREAM OF GREASE TRAP. SEE PLAN FOR LOCATION.
5. ENSURE THAT THERE IS 1.5 FEET OF VERTICAL CLEARANCE BETWEEN STORM DRAINS AND WATER LINES.
6. PLUMBING CONTRACTOR TO LOCATE EXIST. WATER UTILITIES PRIOR TO CONSTRUCTION. IF ANY ADJUSTMENT TO PROPOSED DESIGN NEEDED BASED ON LOCATION, CONTACT ENGINEER AND CITY UTILITIES CO. & PARISH
7. PLUMBING CONTRACTOR TO LOCATE EXIST. SEWER LINE PRIOR TO CONSTRUCTION IF ANY ADJUSTMENT TO PROPOSED DESIGN NEEDED BASED ON LOCATION, CONTACT ENGINEER AND CITY UTILITIES CO. & PARISH
8. CONTRACTOR RESPONSIBLE FOR REPAIR OF DAMAGE DONE TO EXISTING UTILITIES AS A RESULT OF CONSTRUCTION ACTIVITIES FOR THIS SITE.

GREASE TRAP NOTE:

THE GREASE TRAP MUST BE SIZED BY THE PLUMBING ENGINEER TO MEET CITY OF WEST LAKE ORDINANCES REGULATING THE DISCHARGE LIMITS OF FATS, OILS, AND GREASE. THE GREASE TRAP MUST MEET STATE OF LOUISIANA LAWS REGARDING LIMITED ACCESS. THE TRAP MUST HAVE A TRAFFIC RATED LID, EITHER DUCTILE IRON OR CAST IRON. THE TRAP MUST BE MAINTAINED BY THE OWNER AT ALL TIMES.

WATER SERVICE CONNECTION SCHEMATIC
NO SCALE

NO SCALE
CLEANOUT DETAIL

NOTES:

1. ALL ABOVE GROUND PIPE AND FITTINGS 2" AND SMALLER SHALL BE THREADED BRASS.

REDUCED PRESSURE BACKFLOW PREVENTOR
3/4" = 1'-0"

LEGEND:

- (N) CONCRETE PAVEMENT
- (N) SOD SEE LANDSCAPE PLANS
- (N) ASPHALT PAVEMENT
- (N) NEW
- (E) EXIST
- (F) FIRE ESTINGUISHER

LEGEND:

CLIENT:

CIRCLE K STORES, INC

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA

engineering • environmental • constr

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RICHARD R. MORRIS
LA. REG # 2195

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OR
1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED	MDM JOB #
DATE:	
DESIGNED BY:	
DRAWN BY:	FILE NAME:
CHECKED BY:	

DRAWING TITLE:

WATER/SEWER PLAN & DETAILS

SHEET NO:

C-3.0

NOTE:
G.C. TO FIELD VERIFY ALL EXISTING UTILITIES. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND OTHER UTILITIES INCLUDING MUNICIPAL GAS, WATER, SEWER, ETC. CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO MUNICIPAL UTILITIES.

SANITARY SERVICE SINGLE LATERAL PLUMBING CONTRACTOR TO CONSTRUCT 35 L.F. DIRECTIONAL BORE TO TIE TO EXISTING MH SAN SEWER PER CITY STD'S (FIELD VERIFY)

111 LF 6" SAN SEWER LINE @ 0.75% PER FT. (MIN.) SLOPE

2-BACKFLOW PREVENTORS WITH HOT BOX COVERS

PLUMBING CONTRACTOR TO INSTALL WATER METER (HOUSE- 2" RECOMMENDED) AND INSTALL A WATER METER (IRRIGATION - 1" RECOMMENDED) METERS TO BE SIZED BY WATER COMPANY, G.C. TO COORDINATE WITH WATER COMPANY

PLUMBING CONTRACTOR TO CONNECT TO WATER LINE PER CITY STD'S. THE CONTRACTOR SHALL MOUNT THE TAPPING SADDLE AND VALVE. UTILITY DEPARTMENT WILL PUNCH THE HOLE IN THE WATER LINE.

UTILITY NOTE:

1. ALL PLUMBING SHALL COMPLY WITH THE 2015 INTERNATIONAL PLUMBING CODE AND ALL LOCAL ORDINANCES.
2. SDR 26, PVC SCHEDULE 40 D2665 OR STRONGER REQUIRED UNDER DRIVEWAYS OR PARKING LOTS.
3. ALL ABOVE GROUND WATER PIPING AND/OR BACKFLOW PREVENTER TO BE INSULATED.
4. G.C. TO INSTALL 6"ø SAMPLING PORT DOWNSTREAM OF GREASE TRAP. SEE PLAN FOR LOCATION.
5. ENSURE THAT THERE IS 1.5 FEET OF VERTICAL CLEARANCE BETWEEN STORM DRAINS AND WATER LINES.
6. PLUMBING CONTRACTOR TO LOCATE EXIST. WATER UTILITIES PRIOR TO CONSTRUCTION. IF ANY ADJUSTMENT TO PROPOSED DESIGN NEEDED BASED ON LOCATION, CONTACT ENGINEER AND CITY UTILITIES CO.
7. PLUMBING CONTRACTOR TO LOCATE EXIST. SEWER LINE PRIOR TO CONSTRUCTION IF ANY ADJUSTMENT TO PROPOSED DESIGN NEEDED BASED ON LOCATION, CONTACT ENGINEER AND CITY UTILITIES CO.
8. CONTRACTOR RESPONSIBLE FOR REPAIR OF DAMAGE DONE TO EXISTING UTILITIES AS A RESULT OF CONSTRUCTION ACTIVITIES FOR THIS SITE.

PLUMBING CONTRACTOR TO COORDINATE WATER CONNECTION WITH CITY UTILITY DEPT. PRIOR TO CONSTRUCTION. IF ANY ADJUSTMENT TO PROPOSED DESIGN NEEDED BASED ON LOCATION, G.C. TO CONTACT E.O.R.

(N) CONCRETE PAVEMENT

(N) ASPHALT PAVEMENT

(N) SOD SEE LANDSCAPE PLANS

(N) NEW

(E) EXIST

(F) FIRE ESTINGUISHER

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MDM SERVICES, INC. of LOUISIANA
engineering • environmental • constr
EF# 5397

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

RICHARD R. MORRIS
LA. REG # 2195

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED	MDM JOB #
DATE:	
DESIGNED BY:	
DRAWN BY:	FILE NAME:
CHECKED BY:	

DRAWING TITLE:

UNDERGROUND PIPING PLAN

SHEET NO:

C-4.0

EROSION CONTROL LEGEND

N
W E
S

1" = 30'
GRAPHIC SCALE
0 15 30 60

CODE	PRACTICE	SYMBOL
Co	CONSTRUCTION EXIT	
Sd1	SEDIMENT BARRIER SILT FENCE	
Sd2	INLET SEDIMENT TRAP (OPT. SILT SAVER)	
	EXISTING TREE TO REMAIN AND BE PROTECTED	

ANTICIPATED CONSTRUCTION SCHEDULE

PROJECTED START MONTH: DECEMBER 2019

	ACTIVITY	WEEKS 1	2	3	4	5	6	7	8	9	10	11	12	13
1	INSTALL INITIAL/PERIMETER SEDIMENT CONTROLS													
2	CLEARING & GRUBBING													
3	GRADING													
4	STORM DRAINAGE INSTALLATION													
5	INSTALL SEDIMENT TRAPS & STRUCTURES													
6	INSTALL UNDERGROUND STORAGE TANKS													
7	UTILITY INSTALLATION													
8	BLDG/CANOPYCONSTRUCTION													
9	PAVING													
10	GRASSING (TEMPORARY & PERMANENT)													
11	FINAL LANDSCAPING													
12	EROSION CONTROL MAINTENANCE													
13	CLEAN UP/DISPOSTION OF EROSION CONTROL													
14	FINAL INSPECTIONS & C.O.													

AL One Call 811
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C□ CRUSHED STONE CONSTRUCTION EXIT

NOTE:
Use 36" LADOTD approved fabric.
Use steel posts.– only

Sd□ SILT FENCE

Sd2 FABRIC AND SUPPORTING FRAME FOR INLET PROJECTION

(N) CONCRETE PAVEMENT

(N) ASPHALT PAVEMENT

(N) SOD
SEE LANDSCAPE PLANS

(N) NEW
(E) EXIST
(F) FIRE ESTINGUISHER

PRODUCT SPECIFIC PRACTICES:

Petroleum Based Products – Containers for products such as fuels, lubricants and tars will be inspected daily for leaks and spills. This includes on–site vehicle and machinery daily inspections and regular preventative maintenance of such equipment. Equipment maintenance areas will be located away from state water, natural drains and storm water drainage inlets. In addition, temporary fueling tanks shall have a secondary containment liner to prevent/minimize site contamination. Discharge of oils, fuels and lubricants is prohibited. proper disposal methods will include collection in a suitable container and disposal as required by local and State regulations.

Paints/Finishes/Solvents – All products will be stored in tightly sealed original containers when not in use. Excess product will not be discharged to the storm water collection system. Excess product, materials used with these products and product containers will be disposed of according to manufacturer's specifications and recommendations.

Concrete Truck Washing – NO concrete trucks will be allowed to wash out or discharge surplus concrete or drum wash water on–site.

Fertilizer/Herbicides – these products will be applied at rates that do not exceed the manufacturer's specifications or above the guidelines set forth in the crop establishment or in the Manual for Erosion and Sediment Control. Any storage of these materials will be under roof in sealed containers.

Building materials – No building or construction materials will be buried or disposed of on–site. All such material will be disposed of in proper waste disposal procedures.

Solid Waste Materials – All waste materials will be collected and stored in a securely lidded metal dumpster. The dumpster will meet all solid waste management regulations. All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied once per week or more often, if necessary, and trash will be hauled as required by local regulations. no construction waste will be buried onsite.

All personnel will be instructed on proper procedures for waste disposal. A notice stating these practices will be posted at the jobsite and the Contractor will be responsible for seeing that these procedures are followed.

Hazardous Wastes – All hazardous waste materials will be disposed of in a manner specified by local, state, and/or federal regulations and by the manufacturer of such products. The job site superintendent, who will also be responsible for seeing that these practices are followed, will instruct site personnel in these practices. Material Safety Data Sheets (MSDS's) for each substance with hazardous properties that is used on the job site will be obtained and used for the proper management of potential wastes that may result from these products. An MSDS will be posted in the immediate area where such product is stored and/or used and another copy of each MSDS will be maintained in the ESPCP file at the job site construction trailer office. Each employee who must handle a substance with hazardous properties will be instructed on the use of MSDS sheets and the specific information in the applicable MSDS for the product he/she is using, particularly regarding spill control techniques.

The contractor will implement the Spill Prevention Control and Counter– measures (SPCC) Plan found within this ESPCP and will train all personnel in the proper cleanup and handling of spilled materials. No spilled hazardous materials or hazardous waste will be allowed to come in contact with storm water discharges. If such contact occurs, the stormwater discharge will be contained on site until appropriate measures in compliance with state and federal regulations are taken to dispose of such contaminated storm water. It shall be the responsibility of the job site superintendent to properly train all personnel in the use of the SPCC plan.

Sanitary Waste – A minimum of one portable sanitary unit will be provided for every ten (10) workers on the site. All sanitary waste will be collected from the portable units a minimum of one time per week by a licensed portable facility provider in complete compliance with local and state regulations.

All sanitary waste units will be located in an area where the likelihood of the unit contributing to storm water discharge is negligible. Additional containments BMP's must be implemented, such as gravel bags or specially designed plastic skid containers around the base, to prevent wastes from contributing to storm water discharges. The location of sanitary units must be identified on the Erosion Control Plan Grading phase by the contractor once the locations have been determined.

SOIL CLEANUP AND CONTROL PRACTICES:

- local, State and manufacturer's recommended methods for spill cleanup will be clearly posted and procedures will be made available to site personnel.
- Material and equipment necessary for spill cleanup will be kept in the material storage areas. Typical materials and equipment includes, but is not limited to, brooms, dustpans, mops, rags, gloves, goggles, cat litter, sand, sawdust, and properly labeled plastic and metal waste containers.
- Spill prevention practices and procedures will be reviewed after a spill and adjusted as necessary to prevent future spills.
- All spills will be cleaned up immediately upon discovery. All spills will be reported as required by local, State and Federal regulations.
- FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER) THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1–800–426–2675.
- FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1–800–426–2675.
- FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.

SEEDING CHART

SPECIES	SEEDING RATE/ACRE	PLANTING TIME	DESIRED pH RANGE	FERTILIZATION RATE/ACRE	METHOD OF ESTABLISHMENT	ZONE OF ADAPTABILITY
COMMON BERMUDA	15 lbs alone 10 lbs mixture	3/1 – 7/15 9/1 – 11/30	6.0 – 7.0	600 lbs 13–13–13	seed or sod	All
BAHIA	40 lbs alone 30 lbs mixture	3/1 – 7/15 9/1 – 11/30	6.0 – 7.0	600 lbs 13–13–13	seed	Central South
FESCUE	40 lbs alone 30 lbs mixture	9/1 – 11/30	6.0 – 7.0	600 lbs 13–13–13	see	North Central
SAINT AUGUSTINE	---	3/1 – 7/15	6.0 – 7.0	600 lbs 13–13–13	sod only	Central South
CENTIPEDE	4 lbs alone 2.5 lbs mixture	3/1 – 7/15	6.0 – 7.0	600 lbs 13–13–13	seed or sod	All
CARPET GRASS	15 lbs alone 10 lbs mixture	3/1 – 7/15	6.0 – 7.0	600 lbs 13–13–13	seed or sod	All
OYSIA GRASS	---	3/1 – 7/15	6.0 – 7.0	600 lbs 13–13–13	sod only	All
CREEPING RED FESCUE	30 lbs alone 22.5 lbs mixture	9/1 – 11/30	6.0 – 7.0	600 lbs 13–13–13	seed	All
MEEPING LOVEGRASS	10 lbs alone 5 lbs mixture	3/1 – 7/15	6.0 – 7.0	600 lbs 13–13–13	seed	All
SERICEA LESPEDEZA	40 lbs	3/1 – 7/15 9/1 – 11/30	6.0 – 7.0	400 lbs 6–24–24	seed	All
* WHEAT	90 lbs alone	9/1 – 11/30	6.0 – 7.0	600 lbs 13–13–13	seed	All
* RYEGRASS	30 lbs	9/1 – 11/30	6.0 – 7.0	600 lbs 13–13–13	seed	All
* WHITE CLOVER	5 lbs	9/1 – 11/30	6.0 – 7.0	400 lbs 6–24–24	seed	All
* CRIMSON CLOVER	25 lbs alone 15 lbs mixture	9/1 – 11/30	6.0 – 7.0	400 lbs 6–24–24	seed	All
* HAIRY VETCH	30 lbs	9/1 – 11/30	6.0 – 7.0	400 lbs 6–24–24	seed	All
* BROWNTOP MILLET	40 lbs alone 15 lbs mixture	4/1 – 8/30	6.0 – 7.0	600 lbs 13–13–13	seed	All

* Annuals, For permanent seeding. Annuals can only be used in a mixture with perennials.

SITE NOTE:

- EROSION CONTROL SHALL BE IMPLEMENTED AND MAINTAINED AS REQUIRED AND DEEMED NECESSARY BY THE BUILDING OFFICIAL. ILLICIT DISCHARGES, INCLUDING SOIL/SEDIMENTS OR OTHER POLLUTANTS, TO THE CITY'S STORMWATER DRAIN SYSTEM ARE STRICTLY PROHIBITED. (I.E. DITCHES, CATCH BASINS, ROADWAYS, ETC.)
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE ANY AND ALL CONSTRUCTION SITE DIRT FORM THE STREET ON A DAILY BASIS.

CLIENT:

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Gulf Coast Business Unit

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engineering • environmental • constr
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DESIGNED BY:	
DRAWN BY: □A□	FILE NAME: □□□□CD□□
CHECKED BY: □D□SS	

DRAWING TITLE:

EROSION CONTROL PLAN

SHEET NO:

C-5.0

ISSUED FOR CONSTRUCTION 10/2/2020

FOR INFORMATIONAL PURPOSES ONLY
Effective 12/12/2018 Lea
ISSUED FOR CONSTRUCTION 10/2/2020

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DRAWING TITLE:

LADOTD STANDARD DETAILS

SHEET NO:

C-6.0

PEDESTRIAN FACILITIES GENERAL NOTES

Handicap Curb Ramps

1. Maximum allowable cross slope of curb ramp surfaces is 2%; desired cross slope is 1.5%.
2. The maximum longitudinal slope of a curb ramp shall be 8.33% (1:12). Where existing restricted conditions preclude the installation of a 1:12 ramp slope, a ramp slope between 1:12 and 1:10 is permitted for a maximum rise of 6" or a ramp slope between 1:10 and 1:8 is permitted for a maximum rise of 3".
3. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run.
4. Where curb ramps are located adjacent to a walking surface, a flare must be provided; otherwise a curb may be provided. For an example, refer to curb ramp Type 2 on sheet 2.
5. The landing dimensions are 5'x5' with a maximum 2% slope in any direction. The landing clear width shall be at least as wide as the widest ramp run leading to the landing.
6. Small raised channelization islands, which cannot provide a minimum 5'x5' landing at the top of ramps, shall be cut through level with the surface of the street.
7. Raised medians should be a minimum of 6' wide in the direction of pedestrian travel to serve as a pedestrian refuge area. Medians with pedestrian access routes through them shall be designed in accordance with Draft PROWAG.
8. Maneuvering space at the bottom of curb ramps shall be a minimum of 4'x4' completely contained within the crosswalk and completely outside the parallel vehicle travel lane.
9. It is desirable to provide a no-parking zone 50' from crosswalks on each intersection approach or provide a curb extension.
10. Drainage structures should be located on the upstream side of the ramp and located to prevent ponding near the curb ramp. Drainage structures should be placed outside the crosswalk.
11. Slopes of adjoining gutters and roadway surfaces immediately adjacent to the curb ramp shall not exceed 5%. Refer to the Transition from the Curb Ramp to Roadway Detail on sheet 1.
12. Curb ramps should be aligned with the direction of pedestrian travel on the crosswalk or theoretical crosswalk. Refer to sheet 4 for typical crossing layouts and refer to the pavement marking standard plans for crosswalk markings.
13. Crosswalk markings shall be placed a distance of 24" from the flare on each side of a diagonal curb ramp. Refer to sheet 4 for an example.
14. Handicap curb ramps shall include detectable warning surfaces. Refer to sheet 5 for details of detectable warning surfaces.
15. Where a handicap curb ramp is constructed within existing curb, curb and gutter and/or sidewalk, the existing curb or curb and gutter shall be removed to the nearest joint beyond the curb transition or the extent that no remaining section of curb or curb and gutter is less than 5' long or as directed by the Project Engineer. Existing sidewalks shall be removed to the nearest joint beyond the flare slope or to the extent that no remaining section of sidewalk is less than 5' long or as directed by the Project Engineer.

Sidewalks

16. Where a 5' sidewalk cannot be provided due to site constraints, 5'x5' passing areas at intervals not to exceed 200' are required.
17. Where sidewalks and crosswalks are contained within street or highway right-of-way, the grade of the sidewalk or crosswalk shall not exceed the grade of the adjacent street or highway. Where sidewalks are not contained within a street or highway right-of-way, the grade of the sidewalk shall be 5% maximum.
18. Maximum allowable cross slope of sidewalk surfaces is 2%; desired cross slope is 1.5%.
19. Vertical surface discontinuities along a sidewalk shall be 1/2" maximum. Discontinuities between 1/4" and 1/2" shall be beveled up a 1:2 maximum slope.
20. Where sidewalks intersect with streets, detectable warning surfaces are required. Refer to sheet 5 for details of detectable warning surfaces.
21. Traffic signal or illumination poles, ground boxes, controller boxes, signs, drainage facilities and other items shall be placed so as not to obstruct the accessible route.
22. When an existing driveway is in good condition and meets slope requirements, construct only as much as required for satisfactory connection with new work. When a sidewalk crosses a driveway and exceeds the 2% maximum cross slope, the driveway or driveway portion shall be reconstructed to meet the 2% maximum cross slope requirement. Refer to driveway standard plans for driveway details.
23. Handrails are not required on sidewalks unless site specific conditions dictate. Where handrails are provided, they must comply with ADAAG 505.
24. To prevent tracking of gravel onto the sidewalk, gravel driveways should be paved from the roadway edge to a point 10' behind the sidewalk or to the right-of-way, whichever is less.

ADA - Americans with Disabilities Act
ADAAG - Americans with Disabilities Act Accessibility Guidelines
Draft PROWAG - Draft Public Rights-of-Way Accessibility Guidelines

TRANSITION FROM CURB RAMP TO ROADWAY

PEDESTRIAN FACILITIES
GENERAL NOTES AND MISC. DETAILS
PED-01

DOTD
ROAD DESIGN

PEDESTRIAN FACILITIES
CURB RAMPS AND DETECTABLE WARNING LOCATIONS
PED-02

DOTD
ROAD DESIGN

GENERAL NOTES:

1. Weakened plane joints are required at all sidewalk ramps or driveways slope break lines.
2. Separate curb ramps and landings from adjacent sidewalk with preformed joint filler of 1/2".

JOINT LEGEND

- (A) 1/2" Expansion Joints (Preformed Joint Filler)
- (B) 1/8" Weakened Plane Joint
- (C) Construction Joint
- (D) Cold Joint with Bond Breaker

NOTE:
Driveways and curb ramps are shown for reference only. Refer to the driveway standard plans and curb ramps sheets for details.

PEDESTRIAN FACILITIES
JOINT DETAILS
PED-03

DOTD
ROAD DESIGN

Figure 5-12: Typical Sidewalk Locations

FOR INFORMATIONAL PURPOSES ONLY
Effective Sept. 2019 Letting

ISSUED FOR CONSTRUCTION
10/2/2020

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PLAN SHOWING TYPICAL TEMPORARY EROSION CONTROL

MULCHES

MULCHES ARE THE APPLICATION OF MATS OF MATERIAL PLACED ON THE SOIL SURFACE TO PREVENT EROSION BY PROTECTING THE SOIL SURFACE FROM RAINDROP IMPACT AND TO REDUCE THE VELOCITY OF OVERLAND FLOW. MULCHES CAN BE ORGANIC OR SYNTHETIC. MULCHES SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS FOR TEMPORARY EROSION CONTROL. A FEW GUIDELINES FOR THE USE OF MULCHES ARE:

1. USE ON CUT AND EMBANKMENT SLOPES WHICH HAVE NOT BEEN COMPLETED TO PLAN GRADE OR WHERE THE WEATHER OR SOIL CONDITIONS WILL NOT PERMIT COMPLETING THEM WITHIN A REASONABLE TIME.
2. USE ON CLEARED, GRUBBED, AND SCALPED AREAS WHERE SOIL EROSION IS LIKELY TO OCCUR
3. USE WITH TEMPORARY SEEDING

ISOMETRIC VIEW SHOWING GEOTEXTILE FABRIC

(BACKFILL SOIL NOT SHOWN)

SECTION THRU TRENCH SHOWING GEOTEXTILE FABRIC

PLAN SHOWING HAY BALES

PAY ITEM: TEMPORARY HAY OR STRAW BALES

TEMPORARY INLET SILT TRAP

THE TEMPORARY DROP INLET SILT TRAP IS TO BE USED FOR SMALL DRAINAGE AREAS LESS THAN 1 ACRE WHERE THE STORM DRAIN IS FUNCTIONAL BEFORE THE AREA IS STABILIZED. THE TRAP CAN BE EITHER GEOTEXTILE FABRIC OR HAY BALES.

1. THE GEOTEXTILE FABRIC SHALL CONFORM TO PROJECT SPECIFICATIONS FOR GEOTEXTILE FABRIC (CLASS C).
2. WOODEN STAKES SUPPORTING THE FABRIC SHALL BE 2" X 2" OR 4" X 4" SQUARE OR MINIMUM LENGTH OF 4 FEET. STAKES SHALL BE SPACED AROUND THE INLET AT A MAXIMUM SPACING OF 3 FEET.
3. THE HEIGHT OF THE FABRIC ABOVE THE INLET SHALL BE LIMITED TO 1.5 AND THE BOTTOM OF THE FABRIC SHALL BE BURIED IN A TRENCH APPROXIMATELY 4" WIDE, 3" DEEP. THE FABRIC SHALL BE STAPLED TO THE POST WITH 1½" STAPLES.
4. THE TRAP SHOULD BE INSPECTED REGULARLY AND AFTER EACH STORM. THE SEDIMENT SHOULD BE REMOVED AND EACH STORM THE AREA SHOULD BE FIRMLY IN THE GROUND.
5. HAY BALES SHALL BE PLACED SO THAT THE BINDING WIRE OR TWINE IS NOT IN CONTACT WITH THE GROUND.

SECTION C-C

SECTION B-B

TEMPORARY SILT FENCE APPLICATION

(FOR CONSTRUCTION DETAILS AND SPECIFICATIONS SEE SHEET 2 OF 2.)

ELEVATION

SECTION A-A

TEMPORARY SEDIMENT CHECK DAM (STONE)

PAY ITEM: TEMPORARY SEDIMENT CHECK DAM (STONE)

NOTES:
A STONE CHECK DAM IS A SMALL TEMPORARY DAM CONSTRUCTED ACROSS A DRAINAGE WAY OR DITCH TO REDUCE THE VELOCITY OF FLOW. THE GOAL IS TO REDUCE THE VELOCITY OF CONCENTRATED STORM WATER FLOWS, THEREBY REDUCING EROSION OF THE SWALE OR DITCH. THE STONE CHECK DAM WILL TRAP SMALL AMOUNTS OF SEDIMENTS GENERATED IN THE DITCH ITSELF, HOWEVER IT SHOULD NOT BE USED AS A SEDIMENT TRAPPING DEVICE. A FEW BASIC DESIGN GUIDELINES FOR THE USE OF STONE CHECK DAMS ARE:

1. USE IN SMALL OPEN CHANNELS WHICH DRAIN 10 ACRES OR LESS
2. DO NOT USE IN A LIVE STREAM
3. USE IN A TEMPORARY DITCH OR SWALE WHICH, BECAUSE OF THEIR SHORT LENGTH OF SERVICE, CANNOT RECEIVE A NON- ERODIBLE LINING
4. USE IN PERMANENT DITCHES OR SWALES WHICH WILL NOT RECEIVE A PERMANENT LINING FOR AN EXTENDED PERIOD OF TIME
5. USE IN TEMPORARY OR PERMANENT DITCHES OR SWALES WHICH NEED PROTECTION DURING THE ESTABLISHMENT OF GRASS LININGS
6. FOR STONE SPECIFICATIONS, SEE PROJECT SPECIFICATIONS FOR RIPRAP, (CLASS 2 LB).

TEMPORARY SEDIMENT CHECK DAM (HAY)

PAY ITEM: TEMPORARY SEDIMENT CHECK DAM (HAY)

NOTES:
A HAY BALE BARRIER IS A TEMPORARY SEDIMENT BARRIER CONSISTING OF A ROW OF ENTRENCHED AND ANCHORED BALES OF STRAW OR HAY. THE HAY BALE BARRIER IS ALSO USED AS A CHECK DAM TO REDUCE THE VELOCITY IN SMALL DITCHES OR SWALES. THE HAY BALES SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS FOR TEMPORARY EROSION CONTROL. A FEW BASIC DESIGN GUIDELINES FOR THE USE OF A HAY BALE BARRIER ARE:

1. USE WHERE EROSION WOULD OCCUR IN THE FORM OF SHEET AND RILL EROSION
2. USE IN MINOR SWALES OR DITCHES WHERE THE MAXIMUM DRAINAGE AREA IS 2 ACRES
3. ONLY USE WHERE THE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS
4. DO NOT USE IN LIVE STREAMS OR IN SWALES OR DITCHES WHERE THERE IS A POSSIBILITY OF A WASHOUT

PLAN

SECTION D-D

TEMPORARY STONE CONSTRUCTION ENTRANCE

PAY ITEM: TEMPORARY STONE CONSTRUCTION ENTRANCE

NOTE:
TEMPORARY STONE CONSTRUCTION ENTRANCE AND/OR WASH RACK

A STONE STABILIZED PAD LOCATED AT POINTS OF VEHICULAR INGRESS AND EGRESS ON THE CONSTRUCTION SITE TO REDUCE THE AMOUNT OF MUD TRANSPORTED ONTO PUBLIC ROADS. IN AN ACTIVE CONSTRUCTION SITE, TRAVELING OVER THE GRAVEL PAD IS NOT SUFFICIENT TO REMOVE THE MUD FROM THE TIRES. THEREFORE, A WASH RACK MUST BE ADDED TO ANY VEHICLE ENTERS A PUBLIC ROAD. A FEW BASIC DESIGN GUIDELINES FOR THE USE OF A STONE ENTRANCE AND/OR WASH RACKS ARE:

1. THE STONE LAYER MUST BE AT LEAST 6 INCHES THICK.
2. THE STONE SHALL CONFORM TO PROJECT SPECIFICATIONS FOR RIPRAP (CLASS 2 LB).
3. THE LENGTH OF THE PAD MUST BE A LEAST 75 FEET AND IT MUST EXTEND THE FULL WIDTH OF THE VEHICULAR INGRESS AND EGRESS.
4. A GEOTEXTILE FABRIC UNDERLINER IS REQUIRED. THE GEOTEXTILE FABRIC SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS FOR GEOTEXTILE FABRIC (CLASS C).
5. IF A WASH RACK IS NECESSARY, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF-SITE.

PLAN

ELEVATION

TEMPORARY SLOPE DRAIN

A TEMPORARY SLOPE DRAIN IS A DEVICE USED TO CARRY WATER FROM THE CONSTRUCTION WORK AREA TO A LOWER ELEVATION. SLOPE DRAINS MAY BE PLASTIC SHEET, METAL OR PLASTIC PIPE, GUTTERS, FIBER MATS, OR CONCRETE OR ASPHALT DITCHES. A FEW BASIC DESIGN GUIDELINES FOR THE USE OF A TEMPORARY SLOPE DRAIN ARE:

1. THE SPACING OF THE SLOPE DRAINS VARIES WITH THE ROAD GRADE.
   FOR GRADES 0.5% - 5.0% USE 100' SPACING
   5.0% - 8.0% USE 50' SPACING
   GREATER THAN 8.0% USE 100' SPACING
2. SLOPE DRAIN MATERIAL: SMOOTH PIPE - 18" MINIMUM - 3 MILS THICK MIN.
   CORRUGATED PIPE - 18" MINIMUM - 12" MINIMUM
   PLASTIC SHEETING - 12' WIDE MINIMUM
   PLASTIC SHEETING - 3 MILS THICK MIN.
3. PLASTIC SHEETING CAN BE STAKED DOWN OR WEIGHTED WITH ROCKS OR LOGS. THE AREA UNDER THE SHEETING SHOULD BE SHAPED TO PROVIDE AN ADEQUATE CHANNEL.
4. THE OUTLET END SHOULD BE PROTECTED OR HAVE SOME MEANS OF DISSIPATING ENERGY. THE FLOW SHOULD BE DIRECTED THROUGH A SEDIMENT TRAP SUCH AS A SILT FENCE, HAY BALES, OR OTHER APPROVED SEDIMENT CONTROL DEVICES.
5. TO INSURE PROPER OPERATION, TEMPORARY SLOPE DRAINS SHOULD BE INSPECTED REGULARLY AND AFTER EACH STORM, FOR CLOGGING OR DISPLACEMENT. EROSION AT THE OUTLET SHOULD BE CHECKED AND THE SILT TRAPS CLEANED IF NECESSARY.

CONSTRUCTION OF TEMPORARY SILT FENCING

(WIRE SUPPORTED SILT FENCE IS SHOWN. SELF SUPPORTED SILT FENCE WILL BE CONSTRUCTED ACCORDING TO MANUFACTURES SPECIFICATIONS.)

NOTES:
SILT FENCING IS A TEMPORARY SEDIMENT BARRIER CONSISTING OF A FILTER FABRIC SUPPORTED BY POSTS AND STRETCHED ACROSS AN AREA TO INTERCEPT AND DETAIN SMALL AMOUNTS OF SEDIMENT. THE SILT FENCING SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS FOR TEMPORARY EROSION CONTROL. A FEW BASIC GUIDELINES FOR THE USE OF SILT FENCING ARE:

1. USE WHERE EROSION WOULD OCCUR IN THE FORM OF SHEET AND RILL EROSION
2. USE WHERE THE MAXIMUM DRAINAGE AREA BEHIND THE SILT FENCE IS ¼ ACRE PER 100 FEET OF SILT FENCE LENGTH
3. USE WHERE THE MAXIMUM SLOPE LENGTH BEHIND THE BARRIER IS 100 FEET
4. USE THERE THE MAXIMUM GRADIENT BEHIND THE BARRIER IS 2:1
5. DO NOT USE SILT FENCES IN LIVE STREAMS OR IN DITCHES OR SWALES WHERE FLOWS EXCEED ONE CUBIC FOOT PER SECOND

GENERAL NOTES:

1. 4" Edge lines shall be placed on all roadways.
2. Place edge lines, centerlines and lane lines to avoid longitudinal joints as directed by the project engineer.
3. Edge lines in a curb and gutter section should be kept out of the gutter and clear from debris.
4. If rumble strips are used, striping details remain unchanged.
5. Centerlines shall be placed on roadways with a traveled way width of 16 feet or greater.
6. Where the clear width of a bridge is less than the clear width of the roadway, reflectorized pavement markers shall be placed adjacent to the edge line at 20' centers.
7. ⟹ indicates the direction of travel (not a pavement marker).
8. For non-interstate striping, use one Raised Reflectorized Pavement Marker.
9. White Reflectorized Pavement Marker faces same direction traffic and red faces opposing traffic.

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CLIENT:

CIRCLE K STORES, INC
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA
engineering • environmental • constr
EF# 5397

NO.	DATE	REVISION DESCRIPTION

RICHARD R. MORRIS
LA. REG # 21957

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED
MDM JOB #
DATE:
DESIGNED BY:
DRAWN BY:
CHECKED BY:
FILE NAME:

DRAWING TITLE:

LADOTD STANDARD DETAILS

SHEET NO:

C-6.2

Legend

1. Asphalt or PCCP
2. Base Course (Stone)
3. Lime Treatment
4. Class D Geotextile Fabric*
5. Non-Plastic Embankment (Stone), Thickness Varies*
6. Embankment

* Extend to foreslope at sag locations and every 250' along length of project

Note: This figure shows typical daylighting and may not be applicable to all situations. The daylighting should be designed accordingly for the given site conditions with input from the Pavement & Geotechnical Section.

Figure 5-01: Daylighting Base Course

Figure 5-07: Typical Curb and Gutter Shapes and Dimensions

SUPERELEVATION DETAILS (IN FEET) WITH REFERENCE TO HORIZONTAL LINE THROUGH GRADE SHOWN ON PROFILE

STATION RANGE	RADIUS	R	A	B	C	D	E	F	G	BEGINNING TRANSITION LENGTH	ENDING TRANSITION LENGTH	LEFT SHOULDER RATE	RIGHT SHOULDER RATE
NORMAL CROWN	N/A	N.C.	-0.375	-1.43	-1.32	-1.04	-1.32	-1.43	-0.375	N/A	N/A	2.5%	-2.5%
134+29.00 - 141+10.32	400.00'	-4.0%	0.32	-0.73	-0.60	-1.04	-1.48	-1.70	-0.64	120'	75'	3.0%	-5.0%
141+10.32 - 145+93.27	400.00'	4.0%	-0.64	-1.70	-1.48	-1.04	-0.60	-0.73	0.32	75'	120'	5.0%	-3.0%
152+93.80 - 157+26.65	750.00'	2.5%	-0.48	-1.54	-1.32	-1.04	-0.77	-0.90	-0.16	110'	110'	5.0%	-3.0%
179+87.45 - 187+92.39	750.00'	2.5%	-0.48	-1.54	-1.32	-1.04	-0.77	-0.90	-0.16	110'	110'	5.0%	-3.0%

NEGATIVE RATE DENOTES DOWN FROM LEFT TO RIGHT

Figure 8-09: Typical Section Rural 2-Lane Asphalt

Figure 8-38: Suggested Joint Layout

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10/2/2020

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MDM SERVICES, INC. of LOUISIANA

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EF# 5397

NO.	DATE	REVISION DESCRIPTION

RICHARD R. MORRIS
LA. REG # 2195

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED	MDM JOB #
DATE:	
DESIGNED BY:	
DRAWN BY:	FILE NAME:
CHECKED BY:	

DRAWING TITLE:

LADOTD STANDARD DETAILS

SHEET NO:

C-6.3

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CHAIN LINK FENCE (4', 5', AND 6')

DETAIL OF POST FOOTING

DETAIL OF GROUND WIRES FOR FENCES

FABRIC & TENSION WIRE DETAILS

GATE POST DETAIL

BRACE & TRUSS CONNECTION AT LINE POST

NOTES:

1. THE FENCE INSTALLATION AND DETAILS SHOWN ARE TYPICAL AND MAY VARY IN ACCORDANCE WITH DIFFERENT MANUFACTURERS, PROVIDED THEY MEET THE STANDARD SPECIFICATIONS.
2. TYPICAL INSTALLATION PLAN MAY VARY AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. LOCATION OF GATES TO BE SHOWN ON PLANS.
3. GROUNDING ROD ASSEMBLIES ARE TO BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
4. ALL BOLTS TO BE UPSET TO DISCOURAGE VANDALISM.
5. ALL CONNECTION METHODS TO BE APPROVED BY THE PROJECT ENGINEER.
6. LOCATION OF GATES TO BE SHOWN ON PLANS.
7. LATERAL FENCE TO BE SAME CONSTRUCTION AS FRONTAL FENCE.
8. CONTROL OF ACCESS FENCE SHALL BE 5 FT IN HEIGHT UNLESS OTHERWISE NOTED IN THE PLANS.
9. AT EACH LOCATION WHERE AN ELECTRIC TRANSMISSION, DISTRIBUTION, OR SECONDARY LINE CROSSES A FENCE, THE CONTRACTOR SHALL FURNISH AND INSTALL A GROUND CONFORMING TO ARTICLE 250 OF THE NATIONAL ELECTRIC CODE. A GROUND SHALL ALSO BE INSTALLED AT A MAXIMUM SPACING OF 500 FT. ALONG THE FENCE. GROUNDING WILL NOT BE PAID FOR SEPERATELY BUT SHALL BE INCLUDED IN THE COST OF THE FENCE.
10. SEE AASHTO M-181 FOR ADDITIONAL REQUIREMENTS.

POST & RAIL TABLE

	STANDARD		ALTERNATES			
	OUTSIDE DIA. (INCHES)	LBS. (PER LIN.FT.)	DIMENSION (INCHES)	SECTION	LBS. (PER LIN.FT.)	ASTM F1043 GROUP
LINE POST	2 3/8	3.65	2.375	ROUND	3.12	
			2.25 X 1.70	H	3.26	III
			2.25 X 1.70	HEAVY C	2.78	II
			1.875 X 1.625	STD. C	2.40	II
BRACE RAIL	1 5/8	2.27	1.660	ROUND	1.84	
COR. POST	2 7/8	5.79	2.875	ROUND	4.64	
GATE POST	4.0	9.10	3.500	ROUND	5.71	IC
GATE FRAME	1 7/8	2.72	1.900	ROUND	2.28	

7 FT FENCE

CORNER POST SUPPORT ARM

LINE POST SUPPORT ARM

BARBED WIRE TOP

SHEET NUMBER

PARISH | FEDERAL PROJECT | STATE PROJECT

DESIGNED ROAD DESIGN | CHECKED | DETAILED ROAD DESIGN | CHECKED | DATE 01-07-11 | SHEET 1 OF 1

NO.	DATE	REVISION DESCRIPTION	BY

DATE: 11-3-11

DATE | APPROVED BY CHIEF ENGINEER

STATE OF LOUISIANA

CHAIN LINK FENCE & GATES 4 FT., 5 FT., 6 FT. & 7 FT.

STANDARD PLAN: FN-01

DOTD

ROAD DESIGN

CLIENT:

CIRCLE K STORES, INC

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA

engineering • environmental • constr

EF# 5397

RICHARD R. MORRIS
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SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS N□TED | MDM JOB #

DATE:

DESIGNED BY:

DRAWN BY: □A□ | FILE NAME:

CHECKED BY: □D□SS

DRAWING TITLE:

LADOTD STANDARD DETAILS

SHEET NO:

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03-NOV-2011 08:09

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APPROVED FOR PRODUCTION:	APPROVED FOR PRODUCTION W/ CHANGES :	RESUBMITTAL REQUIRED:

SPECIFICATIONS:

CONCRETE: Class 1 concrete with design strength of 4500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall. Baffle is slide in type.

REINFORCEMENT: Grade 60 reinforced with steel rebar conforming to ASTM A-615 on required centers.

C.I. CASTINGS: Cast Iron Ring & Cover shall be nominal 24" and traffic duty

ENGINEERING DATA:

Grease Trap is structurally and hydraulically engineered conforming to Louisiana Department of Health & Hospitals Plumbing Code. Nominal liquid capacity as indicated on plan.

Field excavation and preparation shall be completed prior to delivery of grease trap. Use dimensional data as shown.

1000 GALLON GREASE TRAP

GCP-1000GT (NON-TR)

SCALE:	DATE:	DRAWN:	CHECKED:
NOT TO SCALE	5/21/11	CG	CG

gainey's CONCRETE PRODUCTS — NPCA CERTIFIED PLANT

28021 Coker-Vail Road — Holden, LA 70744
Phone (225) 567 - 2700 — Fax (225) 567 - 3089
www.gaineysconcrete.com

NOTE: GAINEY'S CONCRETE PRODUCTS OR EQUAL

STOP SIGN

TYPICAL SIGN ELEVATION

NO SCALE — REFER FDOT INDEX 700-010

NO LEFT TURN SIGN ELEVATION

NO SCALE

PORTLAND CEMENT CONCRETE

1. CONCRETE MATERIALS: CLASS A – 4000 PSI 28 DAY COMPRESSIVE STRENGTH, 5% AIR ENTRAINMENT REQUIRED. MAXIMUM 5–INCH SLUMP
2. JOINT MATERIALS: JOINT SEALANT SHALL BE A ONE COMPONENT, HOT–POURED TYPE, CONFORMING TO THE REQUIREMENTS OF ASTM D–3406.
3. SUBGRADE PREPARATION: SUBGRADE SHALL CONFORM TO THE COMPACTION AND ELEVATION TOLERANCES SPECIFIED FOR THE MATERIAL INVOLVED, SHALL BE KEPT SMOOTH AND COMPACTED, AND SHALL BE FREE OF ALL LOOSE AND EXTRANEOUS MATERIAL WHEN CONCRETE IS PLACED.
4. PAVEMENT THICKNESS: CONCRETE PAVEMENT SHALL BE A MINIMUM THICKNESS OF 6 INCHES OVER 4–INCH CRUSHED STONE, EXCEPT AT TANKS WHERE PAVEMENT WILL BE A MINIMUM OF 8 INCHES THICK OVER 4 INCH CRUSHED STONE.

NOTE:

REFER TO GEOTECHNICAL REPORT FOR SOILS SPECIFICATIONS AND RECOMMENDATIONS.

COMPACTION TESTS TO BE PROVIDED TO CIRCLE K CONSTRUCTION MANAGER PRIOR TO PLACEMENT OF PAVEMENT.

COMPACTION TESTS TO BE CONDUCTED WITH BEST MANAGEMENT PRACTICES AND PER GEOTECHNICAL RECOMMENDATIONS.

SECTION
HANDICAP RAMP AND WALKWAYS

NO SCALE

SIDEWALK DETAIL

REFER TO FDOT INDEX FOR ADDITIONAL INFORMATION

MANHOLES LOCATED OUTSIDE OF CONCRETE PAVING

NO SCALE

TABLE 1

STATES	3"RIGID BOARD STYROFOAM UNDER WALK
AL, FL, GA, MS	NO
NC, SC, TN	NO
ALL OTHERS	YES

SECTION BUILDING SIDEWALK

NO SCALE

TYPICAL ON-SITE CONCRETE PAVEMENT SECTION

NO SCALE

NO SCALE

TANK SLAB DETAIL

NO SCALE

NOTE: REFER TO PAVEMENT DETAILS FOR REBAR SPECIFICATIONS

SECTION

KEYED CONSTRUCTION JOINT IN CONCRETE SLAB

NO SCALE

D = 6" FOR CANOPY, DRIVE SLAB, TE
8" FOR TANK ONLY

NOTE: TRANSVERSE JOINTS SHALL BE 1/2" FULL DEPTH ASPHALT IMPREGNATED FIBER EXP. JOINT RECESSED 1/4" IN FROM THE FRONT FACE AND TOP OF THE CURB @ 20'-0" MAXIMUM.

ON SITE CONCRETE CURB DETAIL

NO SCALE

NOTE: REFER TO PAVEMENT DETAILS FOR REBAR SPECIFICATIONS

D =6" ALL SITE PAVEMENT EXCEPT TANK SLAB, 8" FOR TANK SLAB

SECTION

CONTROL JOINT IN CONCRETE SLAB

NO SCALE

TYP. BOLLARD DETAIL

NO SCALE

NOTE:
FOR CANOPY BOLLARDS SEE TANK & PIPING PLANS SHEET TA–5.0

NOTE: REFER TO PAVEMENT DETAILS FOR REBAR SPECIFICATIONS

SECTION

EXPANSION JOINT IN CONCRETE SLAB

NO SCALE

D = 6" ALL SITE PAVEMENT EXCEPT TANK SLAB, 8" FOR TANK SLAB

PLAN VIEW — SECTION

ICE MERCHANDISER AND PROPANE TANK SLAB DETAIL

NO SCALE

CLIENT:

CIRCLE K STORES, INC

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA

engineering • environmental • constr

EF# 5397

NO.	DATE	REVISION DESCRIPTION

RICHARD R. MORRIS
LA. REG # 21957

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS N□TED	MDM JOB #
DATE:	
DESIGNED BY:	
DRAWN BY: □A□	FILE NAME:
CHECKED BY: □D□SS	

DRAWING TITLE:

MISC. STD. DETAILS

SHEET NO:

SD-1

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NOTE:
CONTRACTOR SHALL VERIFY ALL THE REQUIRED INFORMATION NECESSARY AT EACH SIGN WITH LOCAL AUTHORITIES PRIOR TO PURCHASING.

TYP. HANDICAP SIGNAGE DETAIL

NO SCALE

TYP. PARKING DETAIL

TRAFFIC MARKINGS TO COMPLY WITH F.A.D.A. AND LOCAL MUNICIPAL CODE

N.T.S.

1 DETAIL - PAVEMENT HEADER

SCALE: NTS

2 DETAIL - PAVEMENT UNDERCUT HEADER

SCALE: NTS

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WEST LAKE, LA

SCALE: AS N□TED	MDM JOB # □□□□
DATE: □□□□□□□□□	
DESIGNED BY:	
DRAWN BY: □A□	FILE NAME: □□□□□CD□□
CHECKED BY: □□D□SS	

DRAWING TITLE:

MISC. STD. DETAILS

SHEET NO:

SD-2

GENERAL LANDSCAPE NOTES

1. All plant material conform to ANSI Z60.1 standards, and as specified in the current edition of the 'American Standards for Nursery Stock'.
2. Tree caliper measurements shall be taken at six (6") inches above natural grade. Measurements for trees over four (4') inches of caliper shall be taken at twelve (12") above natural grade. Diameter breast height (DBH) measurements to be taken at 4.5 feet above natural grade.
3. The Plant Material Schedule included with the Plans is provided only for the Contractor's convenience; it shall not be construed as to conflict or predominate over the Plans.
4. In the event of discrepancies in the quantities shown on the Plant Material Schedule/Bid Form and those shown on the Plans, the Contractor shall bid the quantity shown on the Plant Material Schedule/Bid Form and provide a note as to the quantity shown on the Plans.
5. If a conflict between the Plans and the Specifications exists, the Plans shall predominate and be considered the controlling document.
6. Contractor shall provide documentation of plant 'variety' when specified. Plants specified by Genus and Species alone shall not require documentation.
7. All materials shall be installed as specified on the Plans. If material and labor do not adhere to the Details and Specifications, they will be rejected by the Landscape Architect. Rejected materials will be replaced by the Landscape Contractor at no additional cost.
8. All necessary permits are to be provided by the installing contractor for work shown on the Plans (unless otherwise specifically stated in the Specifications or Bid Documents).
9. The Contractor shall be responsible for verification and protection of all underground and overhead utilities. Plant material shown on the Plans that conflict with the utilities shall be brought to the attention of the Landscape Architect prior to installation.
10. The Owner or Owners Representative shall provide site grading to within 0.1 foot of finish grade. The Contractor shall provide fine grading to produce a positive drainage condition on the site. Surface water shall be directed to engineered drainage structures/swales with smooth grading transitions. Debris larger than 1.5 inches shall be removed from surface of landscape beds and sodded areas.
11. All plant material shall be installed and maintained in the highest standard of workmanship and in accordance with the Details and Specifications. Plant material shall be maintained by the Contractor until Final Acceptance is granted by the Owner.
12. All B&B trees shall have strings, twine or rope removed from the top of the basket. All flagging tape, identification tags, and other objects shall be removed from the plant material prior to calling for a Substantial Completion inspection.
13. Mulch shall be Pine Bark mini-nuggets. Sod shall be "Floritam" St. Augustine.
14. The Contractor shall remove existing vegetation necessary to complete the work shown on the plans. Use of herbicide shall be in accordance to manufacturer's recommendations and supervised by licensed applicators. The Contractor is solely responsible for the means to remove existing vegetation and responsible to ensure that re-growth does not occur.
15. The Contractor shall keep a neat and orderly job site. Paved surfaces necessary for egress shall be kept clear of debris. Debris generated by the work shown on the Plans shall be removed from the site.
16. The Contractor shall provide a replacement warranty for trees of one year's duration and shrub/groundcover for three month's duration from Final Acceptance.
17. Sod shall be laid with tight joints. Sodded areas shall be rolled within three days after installation. Contractor shall apply proper irrigation water quantities prior to rolling to insure proper soil/root contact but not produce indentations from pedestrians.
18. All questions concerning the Plans, Details, or Specifications shall be directed to the Landscape Architect, (727-343-1809).
19. The proposed landscape improvement shall have 100% coverage from an automatic irrigation system or have hose bibs installed in close proximity to the landscape areas.

NOTES:

1. STAKING DETAIL ONLY FOR TREES WITH LESS THAN 3" CALIPER MEASUREMENTS. SEE ALTERNATE STAKING DETAIL FOR TREES 3 INCH OR GREATER CALIPER (LARGE TREE PLANTING/STAKING).
2. OTHER TREE STAKING SYSTEMS MAY BE ACCEPTABLE IF APPROVED BY THE LANDSCAPE ARCHITECT (727) 343-1809.
3. LANDSCAPE CONTRACTOR SHALL REMOVE STAKING AND GUYING MATERIALS AFTER ONE YEAR.

FERTILIZATION SCHEDULE

1. All plant material shall be fertilized upon installation but prior to mulching. Plant material adjacent to open bodies of water shall be mulched immediately following fertilization to reduce translocation of the granules.
2. Fertilizer shall be Scotts Osmocote 'Classic' 19-6-12 in the twelve(12) month release formulation. Contractor may use the Standard or Lo-Start mixes depending on the level of existing fertilizer from plant nursery applications.
3. Each containerized plant shall receive fertilization at the rates shown for each container size. One (1) cup equals two hundred eighty (280) grams of Scotts Osmocote 'Classic' 19-6-12 fertilizer.

1 Gallon Container	15 plants per cup
3 Gallon Container	1/4 cup
7 Gallon Container	1/2 cup
15 Gallon Container	3/4 cup
25 Gallon Container	1-1/2 cups
30 Gallon Container	1-3/4 cups
45 Gallon Container	2-1/4 cups
65 Gallon Container	2-1/4 cups
100 Gallon Container	3 cups

4. Each balled and burlapped plant shall receive one half (0.5) cup of Scotts Osmocote 'Classic' 19-6-12 in the twelve (12) month release formulation for every caliper inch of trunk. One (1) cup equals two hundred eighty (280) grams of Osmocote 'Classic' 19-6-12 fertilizer.
5. Scotts Osmocote 'Classic' 19-6-12 in the twelve (12) month release formulation shall be applied to sodded or seeded areas at a rate of ten (10) pounds per one thousand (1000) square feet.

OPTIONAL FERTILIZATION TECHNIQUES

1. The Contractor may substitute Scotts Agriform 20-10-5 Planting Tablets Plus Minors for fertilization of trees, and large containers. The application rate shall be three (3) twenty-one (21) gram tablets per inch of caliper. Use Manufacturer's recommendations for palm fertilizer tablet application rate. Contractor shall notify Landscape Architect of the election to use fertilizer tablets prior to substantial completion inspection.
2. Sodded or seeded areas over one half (0.5) acre may be fertilized (at contractor's choice) with a quick release granular fertilizer with the formulation that delivers three and one half (3.5) pounds of nitrogen, one half (0.5) pound of phosphate and one and one half (1.5) pounds of potash per one thousand (1000) square feet.

LANDSCAPE CODE REQUIREMENTS

RIGHT-OF-WAY BUFFERS:
800 LINEAR FT. OF STREET BUFFER
1 CLASS A TREE OR (3) CLASS B TREES PER 50 LINEAR FT.
TREES REQUIRED: 16 CLASS A TREE EQUIVALENTS
TREES PROVIDED: (6) BALD CYPRESS, (3) SHUMARD OAK, (6) ALLEE ELM, & (1) EAGLESTON HOLLY @ 3:1 RATIO

VEHICULAR USE AREA:
37 PARKING SPACES
1 CLASS A TREE OR (3) CLASS B TREES PER 15 PARKING SPACES
TREES REQUIRED: 9 CLASS A TREE EQUIVALENTS
TREES PROVIDED: (2) BALD CYPRESS, (5) SHUMARD OAK & (2) ALLEE ELM

1 LS1 **SMALL TREE PLANTING DETAIL (<3" CALIPER)**

NOT TO SCALE

2 LS1 **SHRUB & GROUNDCOVER PLANTING DETAIL**

NOT TO SCALE

PLANT MATERIAL SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SPECIFICATION	SPACING
			CLASS "A" TREES		
QS	8	QUERCUS SHUMARDII	SHUMARD RED OAK	2" D.B.H. MIN. 8' HT.	AS SHOWN
TD	8	TAXODIUM DISTICHUM	BALD CYPRESS	2" D.B.H. MIN. 8' HT.	AS SHOWN
UP	8	ULMUS ALATA	WINGED ELM	2" D.B.H. MIN. 8' HT.	AS SHOWN
			CLASS "B" TREES		
IAE	3	ILEX x ATTENUATA 'EAGLESTON'	EAGLESTON HOLLY	2" D.B.H. MIN. 8' HT.	AS SHOWN
			SHRUBS		
CLJ	17	CLEYERA JAPONICA	CLEYERA	3 GAL., 20" X 18", FULL	3' O.C.
ICB	143	ILEX CORNUTA BURFORDII NANA	DWARF BURFORD HOLLY	3 GAL., 20-24" HT., FULL	3' O.C.
IVS	46	ILEX VOMITORIA SHILLINGS	DWARF YAUPON HOLLY	3 GAL., 15" SPD.	2.5' O.C.

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SCALE: 1" = 20'

NORTH

0 10' 20' 40' 80'

JACOB ZIMMERMAN, RLA
REG. NO. Z-117

STATE OF LOUISIANA
JACOB A ZIMMERMAN
REG. NO. Z-117
LICENSED LANDSCAPE ARCHITECT

HEARTWOOD AND BARK PLC
LANDSCAPE ARCHITECTURE URBAN DESIGN
200 2nd St S S-433 St. Petersburg, FL 33701
(727) 343-1809 Web: www.heartwoodandbark.com
License Number: LC26000325

CIRCLE K STORES

STORE #13B
2332 WESTWOOD DRIVE
WESTLAKE, LOUISIANA
CALCASIEU PARISH

ISSUED FOR CONSTRUCTION 10/22/2020

REVISIONS
1. 5/26/20 LADOT SUBMITTAL
2.
3.
4.

DRAWN BY: [illegible]
DATE: [illegible]
20006

LANDSCAPE PLAN

LS1

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IRRIGATION LEGEND

SYMBOL	SPECIFICATION
	HUNTER ICC2 IRRIGATION CONTROLLER 12C-1600-PL (SEE GENERAL IRRIGATION NOTES FOR INSTRUCTIONS)
R	HUNTER RAIN-CLIK - RAIN SENSOR
S	WATER SOURCE: 1" POTABLE WATER METER
	BACKFLOW PREVENTION DEVICE
	HUNTER ICV 24 VOLT REMOTE CONTROL VALVE FILTER SENTRY ON WELL WATER SYSTEMS (SEE IRRIGATION ZONE TAG FOR VALVE SIZE)
	1.5" RAINBIRD XCZ-150-COM PESB-PRS-D VALVE WITH RAINBIRD 150 MESH BASKET FILTER
	POINT OF CONNECTION - PVC TO DRIP TUBING
	MAINLINE: 2" SCHEDULE 40 PVC
	LATERAL LINE: MINIMUM 160 PSI PVC (MINIMUM PIPE SIZE TO BE 3/4")
	RAIN BIRD #XFD-09-12 IN-LINE PRESSURE COMPENSATING DRIP TUBING (1.5 GPM/100' TUBING)
	SLEEVING: SCHEDULE 40 PVC (TWO NOMINAL SIZES LARGER THAN PIPE TO BE SLEEVED)

STATION NUMBER — GPM (GALLONS PER MINUTE) — ## — X.X (VALVE SIZE) — IRRIGATION ZONE TAG

6" POP-UP SPRAY HEADS WITH PLASTIC RISER

SYMBOL	MODEL #
	Hunter PROS-06 8F - 0.97 GPM
	Hunter PROS-06 8H - 0.47 GPM
	Hunter PROS-06 8Q - 0.24 GPM
	Hunter PROS-06 10F - 1.59 GPM
	Hunter PROS-06 10H - 0.88 GPM
	Hunter PROS-06 10Q - 0.42 GPM
	Hunter PROS-06 12F - 2.70 GPM
	Hunter PROS-06 12H - 1.30 GPM
	Hunter PROS-06 12Q - 0.67 GPM
	Hunter PROS-06 15F - 3.75 GPM
	Hunter PROS-06 15H - 1.86 GPM
	Hunter PROS-06 15Q - 0.97 GPM
	Hunter PROS-06 ES-515 - .65 GPM
	Hunter PROS-06 SS-530 - 1.30 GPM
	Hunter PROS-06 SS-918 - 1.72 GPM
B	Hunter PCB-101 Bubbler - 1.0 GPM

SPRAY ZONES TO BE OPERATED AT 30 PSI

6" POP-UP ROTOR HEADS WITH STAINLESS STEEL RISER

SYMBOL	MODEL #
18' O.C. SPACING WITH SHORT RADIUS NOZZLES (BLACK # 466100)	
	Hunter I-20-06-SS-36S-2.0SR 2.0 Short Radius Nozzle 2.00 GPM
	Hunter I-20-06-SS-ADS-1.0SR 1.0 Short Radius Nozzle 1.00 GPM
	Hunter I-20-06-SS-ADS-0.5SR 0.5 Short Radius Nozzle 0.50 GPM
25' O.C. SPACING WITH SHORT RADIUS NOZZLES (BLACK # 466100)	
	Hunter I-20-06-SS-36S-3.0 3.0 Short Radius Nozzle 3.0 GPM
	Hunter I-20-06-SS-ADS-1.5 1.5 Short Radius Nozzle 1.5 GPM
	Hunter I-20-06-SS-ADS-0.75 0.75 Short Radius Nozzle 0.75 GPM
40' O.C. SPACING WITH STANDARD NOZZLES	
	Hunter I-20-06-SS-36S-8.0 8.0 Nozzle 8.50 GPM
	Hunter I-20-06-SS-ADS-4.0 4.0 Nozzle 4.25 GPM
	Hunter I-20-06-SS-ADS-3.0 3.0 Nozzle 3.25 GPM
	Hunter I-20-06-SS-ADS-1.5 1.5 Nozzle 1.65 GPM

ROTOR ZONES TO BE OPERATED AT 50 PSI

GENERAL IRRIGATION NOTES

1. The Contractor shall provide a fully functional irrigation system as shown on the Plans. Irrigation heads shall provide 100% coverage of the area to be irrigated.
2. The source of water for the irrigation system shall be: 1" POTABLE WATER METER
3. The Contractor shall field verify the capability of the water source to deliver a minimum pressure (50 PSI) and volume (37 GPM) to operate the irrigation systems as designed. In the event of discrepancies contact the Landscape Architect prior to installation.
4. All questions concerning the Plans, Details or Specifications shall be directed to the Landscape Architect, (727) 343-1809.
5. All necessary permits (Including Right of Way Use Permit) are to be provided by the installing contractor for work shown on the Plans.
6. All components of the proposed irrigation system shall meet the federal, state and local codes, regulations and ordinances concerning irrigation construction.
7. In an effort to create graphic clarity, irrigation mainline, lateral line, valves and other components of the irrigation system may be shown in paved areas or inside buildings on the Plans. These components are to be installed in appropriate landscape areas to carry out the intent of the Plans.
8. The Contractor shall be responsible for verification and protection of all underground and overhead utilities.
9. The Contractor shall review the Landscape Plans prior to installing the irrigation system. Coordinate installation locations of pipes, valves and other equipment with the installation locations of trees and shrubs.
10. As-Built drawings are to be provided by the Contractor. Drawings shall be on Owner furnished base plans in hard copy or electronic versions. Contractor shall note all deviations from the Irrigation Plans as noted in Section 32 8423 of the Specifications.
11. Mainline is to be installed with a minimum of 18" depth of cover, and lateral lines are to be installed with a minimum of 12" depth of cover.
12. Sleeving is to be provided by the Contractor (unless otherwise specifically stated in the Specifications or Bid Documents).
13. The Contractor shall provide operating maintenance instructions and operation manuals to the Owner prior to acceptance of the project.
14. Owner shall provide 110 Volt power to the controller location. Electrical connection from power source to control clock is to be provided by the Contractor (unless otherwise specifically stated in the Specifications or Bid Documents). Contractor shall coordinate installation location of control clock with Owner or Owner's Representative.
15. When the irrigation system Source is a proposed well, the well and pump locations shall be coordinated with the Owner or Owner's Representative prior to installation. The Owner shall provide power to the pump location. Contractor shall coordinate voltage and phase of available power with the local electrical utility and the Owner prior to ordering of the pump. Contractor shall coordinate pump ordering lag time with the irrigation and landscape work schedules to ensure timely supply of water to the project site.
16. Contractor shall install an inline 120VAC-15A lightning surge protector between the power source and the controller. Ground each controller to a 5/8" x 8' copper clad ground rod with AWG #6 bare solid copper wire. A proper ground shall have 10 ohms or less resistance to earth. Use of multiple ground rods may be necessary to achieve the desired resistance reading.
17. Contractor shall label location and head type for each zone in the irrigation system on the inside of the controller door. Suggested zone run time shall be indicated. All zone valves shall have permanent (plastic or metal) tags attached to the valve corresponding to the number of the zone on the controller.
18. Control Clocks shall be programmed to include a watering schedule that provides 1" of water per week during the months April to November and provides 1" of water every two weeks during the months December to March. The zone run time shall be sequenced for the local watering restrictions as Program 'A'. Program 'B' shall be set as the water establishment period watering schedule in cooperation with the Landscape Contractor.
19. The rain shut-off device shall be installed to meet local codes. Contractor shall locate device so that obstructions do not alter the accurate monitoring of rainfall at the project site. All wiring to the device shall be enclosed in 1/2" PVC electrical conduit.
20. 12" pop-up spray (or rotor) heads shall be installed in all groundcover beds and masses of shrubs not exceeding 22 inches height.
21. 6" pop-up spray heads shall be installed in all turf areas. Rotor heads in turf areas to be 6" pop-ups with the exception of Hunter PGP Series (4").
22. All Hunter PGJ and PGP Rotor and Spray heads shall have heavy walled PVC IPS flex pipe for the connection between lateral line and each head. Provide adequate slack for minor head adjustment. All Hunter I-20 Rotor heads shall have rigid PVC swing joints. See Details for Shrub Riser and 12" pop-up head applications.
23. The Contractor shall adjust all heads to provide optimum coverage and minimize overthrow onto paved surfaces. Adjustable nozzles shall be used in areas where fixed spray patterns will result in overthrow onto paved surfaces. Adjust pressure regulating valves to prevent misting from heads.
24. Valve boxes shall be sized to accommodate installation and maintenance of zone valve(s). The valve box shall have a 3" deep layer of 1/2" diameter gravel as a sump installed 2" below the bottom of the valve. Valve boxes shall be installed so that the top of the box is no more than 1.5 inch above finish grade and set parallel to the surrounding grade.
25. All 24 Volt control wiring shall be UL Listed, single strand, Type UF 600 Volt control cable. Common wires to be white,AWG #12 or larger wire. Hot wires to be red, AWG #14 or larger wire. Spare wires to be any color wire except green, red or white, AWG #14 or larger wire.
26. All splices to the 24 Volt control wiring shall be made with King Technology (King 6) silicone filled safety connectors.
27. Shrub risers shall only be installed in hedges or mass plantings abutting vertical walls or objects and not extend more than 6" above the height of the shrubs. In no case shall risers be installed directly adjacent to curbs, sidewalks or other vehicular access ways. If risers are to be used in hedges abutting parking areas without concrete wheel stops, they must be placed a minimum of 30 inches away from the edge of pavement to protect the riser from damage by vehicular overhang. All risers are to be painted black.
28. Mainline piping shall have thrust blocks sized and placed in accordance with the pipe manufacturer's recommendations. Thrust blocks shall be installed at all changes in direction, reduction in pipe size, and end caps on the Mainline.
29. Irrigation Systems designed with Reclaimed Water as the Source shall include purple marking caps for all valve boxes, valves, quick couplers, hose bibs and spray or rotor heads. Rainbird PESBR-PRS-D zone valves with self cleaning scrubber shall be used on all systems connected to Reclaimed Water.

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THE CALL AND THE SERVICE ARE FREE.

SCALE:
1" = 20'
NORTH
0 10' 20' 40' 80'

JACOB ZIMMERMAN, RLA
REG. NO. Z-117
STATE OF LOUISIANA
JACOB A ZIMMERMAN
REG. NO. Z-117
LICENSED
LANDSCAPE ARCHITECT

HEARTWOOD AND BARK PLC
LANDSCAPE ARCHITECTURE URBAN DESIGN
200 2nd Ave S. S433 St. Petersburg, FL 33701
(727) 343-1809 Web: www.heartwoodandbark.com
License Number: LC26000325

CIRCLE K STORES
STORE #7138
2336 WEST ROAD
WESTLAKE, LOUISIANA CALCASIEU PARISH

ISSUED FOR CONSTRUCTION 10/2/2020

REVISIONS:
1. 5/26/20 LADOT SUBMITTAL
2.
3.
4.

DRAWN BY: [illegible]
DATE: [illegible]/2/20
20006

IRRIGATION PLAN
LS2

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1 / LS **IRRIGATION CONTROLLER**

2 / LS3 **DRIP IRRIGATION TUBING LAYOUT**

3 / LS3 **JUMBO VALVE BOX DETAIL (DRIP ZONES)**

4 / LS3 **DRIP ZONE VALVE**

5 / LS3 **6" POP-UP ROTOR HEAD- HUNTER I20-6P**

6 / LS3 **6" POP-UP SPRAY HEAD- HUNTER PROS-06**

NOTES:
1. ALL IRRIGATION SLEEVES TO BE SCHEDULE 40 PVC PIPE.
2. ALL JOINTS TO BE SOLVENT WELDED AND WATERTIGHT.
3. WHERE THERE IS MORE THAN ONE SLEEVE, EXTEND THE SMALLER SLEEVE TO 24-INCHES MIN. ABOVE FINISH GRADE.
4. MECHANICALLY TAMP TO 95% PROCTOR.

7 / LS3 **SLEEVING DETAIL**

NOTES:
1. SLEEVE BELOW ALL HARDSCAPE ELEMENTS WITH SCHEDULE 40 PVC TWICE THE DIAMETER OF THE PIPE OR WIRE BUNDLE WITHIN.
2. FOR PIPE AND WIRE BURIAL DEPTHS SEE SPECIFICATIONS.

8 / LS3 **PIPE AND WIRE TRENCHING DETAIL**

9 / LS3 **1 1/2" ZONE CONTROL VALVE**

10 / LS3 **VALVE BOX DETAIL (SPRAY & ROTOR ZONES)**

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200 2nd St S, S433 St. Petersburg, FL 33701
(727) 343-9009 www.heartwoodandbark.com
License Number: LC26000325

ISSUED FOR CONSTRUCTION 10/2/2020

CIRCLE K STORES INC.
TYPE "T" P.D.
2133 WEST WOOD DRIVE
WESTLAKE, LOUISIANA CALCASIEU PARISH

REVISIONS:
1. 5/26/20 LADOT SUBMITTAL
2.
3.
4.

JACOB ZIMMERMAN, RLA
REG. NO. Z-117

STATE OF LOUISIANA
JACOB A. ZIMMERMAN
REG. NO. Z-117
LICENSED
LANDSCAPE ARCHITECT

DRAWN BY: L
DATE: 1/2
20006

IRRIGATION DETAILS

LS3

AREA LIGHT SIDE VIEW

NTS

AREA LIGHT PLAN VIEW

NTS

□□MINAIRE □□CATI□N S□M		
□□M N□□	□ABE□	MT□□□T□
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TYPICAL MPD DISPENSER LAYOUT

NTS

EXTERIOR EMERGENCY FUEL SHUT-OFF

NTS

NOTE 1:
PROVIDE EXPLOSION PROOF SEALS-OFFS IN ACCORDANCE WITH ARTICLES 500, 501 AND 514 (CLASS 1, DIVISION 1 & 2) OF THE 2014 NATIONAL ELECTRICAL CODE
TYPICAL FOR ALL CONDUITS IN CLASS 1 LOCATIONS, INCLUDING LOW VOLTAGE CONDUITS.

NOTE 2:
ALL CONDUITS IN CLASS 1 LOCATIONS SHALL BE GROUNDED AS PER NEC. 250.100 & 501.30.

NOTE 3:
CONDUIT FILL SHALL NOT EXCEED 25% OF SEAL-OFF AS PER NEC. 501.15(A)(6)

SEAL FITTING INSTALLATION

NTS

REMOTE EMERGENCY FUEL SHUT-OFF DETAIL

SITE ELECTRICAL NOTES

1. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE, LOCAL ORDINANCES AND REGULATIONS AND STATE LAWS.
2. ELECTRICAL EQUIPMENT & WIRING LOCATED IN HAZARDOUS (CLASS I, DIV. 1&2) AREAS OF FUEL PUMPS AND ISLAND DISPENSERS SHALL COMPLY WITH THE PROVISIONS OF N.E.C. ARTICLE 501 & 514.
3. HOMERUN CONDUITS TO DISPENSERS, TANKS AND CANOPY TO BE RIGID METAL CONDUIT (RMC) AND SCHEDULE 40 PVC AS PER NEC ARTICLE 514.8, EXCEPTION NO. 2. INTERMEDIATE METAL CONDUIT (IMC) IS NOT ACCEPTABLE. THESE CONDUITS TO BURIED 24" MIN. BELOW FINISH GRADE AT BOTH ENDS WHERE SEAL-OFFS ARE INSTALLED.
4. PRIOR TO CONSTRUCTION, CONTRACTOR TO COORDINATE WITH POWER COMPANY FOR PROPOSED TRANSFORMER LOCATION, METERING REQUIREMENTS & SCHEDULING.
5. CONTRACTOR TO INSTALL TELEPHONE UTILITY CONDUIT TO UTILITY POLE. PRIOR TO CONSTRUCTION, CONTRACTOR COORDINATE WITH TELEPHONE COMPANY FOR EXACT LOCATION OF TELEPHONE SERVICE ORIGIN AND SCHEDULING.
6. TELEPHONE SERVICE CONDUIT TO BE ROUTED ONLY IN NON-HAZARDOUS AREAS AND TO BE BURIED 24" MIN. BELOW FINISH GRADE.
7. LOW VOLTAGE CABLES TO DISPENSERS & TANKS TO BE GAS AND OIL RESISTANT.
8. INSTALL AN EQUIPMENT GROUND CONDUCTOR IN ALL BRANCH CIRCUIT CONDUITS.
9. ALL CONDUITS RUN UNDER DRIVEWAYS AND PARKING AREAS TO BE BURIED 24" MIN. BELOW FINISH GRADE.
10. CONDUITS ON TOP OF CANOPY DECK TO BE EMT WITH COMPRESSION CONNECTORS.
11. CANOPY LIGHT FIXTURES TO BE INSTALLED BY CANOPY MANUFACTURE AND WIRED BY CONTRACTOR.
12. CONTRACTOR TO COORDINATE WITH SIGN CONTRACTOR FOR EXACT LOCATION OF CANOPY SIGNS.
13. CONTRACTOR TO PROVIDE DISCONNECTS FOR SIGNS PER NEC 600.6.
14. POLE LIGHTS SUPPLIED BY OWNER AND INSTALLED BY CONTRACTOR.
15. CONTRACTOR TO SUPPLY AND INSTALL LIGHT POLE BASES. SEE SHEET PH-1 FOR DETAIL.

SITE ELECTRICAL CONDUIT / WIRE SCHEDULE

EACH ITEM TO HAVE A DEDICATED HOMERUN CONDUIT. DO NOT COMBINE CONDUITS.

ITEM	QTY.	CONDUIT SIZE	CONDUIT TYPE	WIRE / CABLE	NOTES
CANOPY LIGHTS	1	1"	RMC/PVC	(7) #10 (6-H, 1-G)	POWER FROM LIGHTING CONTACTORS TO CANOPY
CANOPY SIGNS	1	1"	RMC/PVC	(5) #8 (3-H, 1-N, 1-G)	POWER FROM LIGHTING CONTACTORS TO CANOPY
LIT CANOPY FASCIA	3	1"	RMC/PVC	(5) #8 (3-H, 1-N, 1-G)	POWER FROM LIGHTING CONTACTORS TO CANOPY
CANOPY FUTURE DVR	2	1"	RMC/PVC	PULL STRING	CONDUIT FROM FRAME RELAY GUTTER TO CANOPY FOR FUTURE DVR
POLE LIGHTS	3	1"	PVC	(3) #10 (2-H, 1-G)	POWER FROM LIGHTING CONTROLS
ID & PRICE SIGN	1	1"	PVC	(5) #6 (2-H, 2-N, 1-G)	ID POWER FROM LIGHTING CONTROLS, PRICE SIGN POWER TO BE ON 24HRS
PRICE SIGN DATA	1	1"	PVC	CAT-5 BELDEN #7928A (O.E.)	CABLE FROM FRAME RELAY GUTTER TO PRICE SIGN FOR DATA, PROVIDE 30' LOOP AT GUTTER
AIR/VACUUM	1	1"	RMC/PVC	(5) #8 (2-H, 2-N, 1-G)	POWER FROM PANEL "A"
FUTURE AIR/VACUUM	1	1"	PVC	PULL STRING	CONDUIT FROM PANEL "A". INSTALL PULL BOX AT GRADE LEVEL.
HEAT TAPE	1	3/4"	PVC	(3) #10 (1-H, 1-N, 1-G)	FEED FROM PANEL "A"
DISPENSER POWER/DATA	8	1"	RMC/PVC	(5) #12 (PWR & SPARES) (3) #14 (SWITCH LEGS) (1) #18 TW-PAIR (DATA) (1) #18 TW-PAIR (CRIND) (1) #18 TW-PAIR (SPARES)	HOMERUN FROM DISP. FOR PWR, CONTROLS & DATA. DATA WIRES TO BE CONTINUOUS FROM DISP. TO DATA BOX WITH NO SPLICES.
DISPENSER INTERCOM	8	3/4"	RMC/PVC	INTERCOM-HOUSTON WIRE #50850 (O.E.) (2) PAIR TWISTED SHIELDED CABLE, 22 AWG	INTERCOM-HOMERUN FROM INTERCOM CONSOLE IN UTILITY ROOM. ONE CABLE PER DISPENSER
DISPENSER CAT 5	8	3/4"	RMC/PVC	CAT-5 BELDEN #7928A (O.E.) (4) PAIR TWISTED CABLE, 23 AWG	CAT 5-HOMERUN FROM DISPENSER TO DATA EQUIPMENT IN UTILITY ROOM ONE CABLE PER DISPENSER
DISPENSER SUMP SENSOR	8	3/4"	RMC/PVC	HOUSTON WIRE #H32600 (O.E.) (1) #18 TWISTED SHIELDED PAIR CABLE PLUS (1) #12 EGC	HOMERUN FROM VEEDER-ROOT CONSOLE IN UTILITY ROOM.
STP POWER	5	3/4"	RMC/PVC	(4) #10 (3-H, 1-G)	POWER FROM VFC
TANK SENSORS HOMERUN (12K TANK)	1	1"	RMC/PVC	HOUSTON WIRE #H32600 (4) #18 TWISTED SHIELDED PAIR CABLE PLUS (1) #12 EGC	HOMERUN FROM VEEDER-ROOT CONSOLE TO AS RISER 4-CABLES (1-ANNULAR SPACE, 1-TANK GAUGE, 1-FILL SUMP & 1-STP SUMP)
TANK SENSORS LOOPS (12K TANK)	3	3/4"	RMC	HOUSTON WIRE #H32600 (1) #18 TWISTED SHIELDED PAIR CABLE PLUS (1) #12 EGC	LOOP FROM AS RISER TO 1-TANK GAUGE, 1-FILL SUMP & 1-STP SUMP
TANK SENSORS HOMERUN (8K-12K TANK)	1	1"	RMC/PVC	HOUSTON WIRE #H32600 (7) #18 TWISTED SHIELDED PAIR CABLE PLUS (1) #12 EGC	HOMERUN FROM VEEDER-ROOT CONSOLE TO AS RISER 7-CABLES (1-ANNULAR SPACE, 2-TANK GAUGE, 2-FILL SUMP & 2-STP SUMP)
TANK SENSORS LOOPS (8K-12K TANK)	6	3/4"	RMC	HOUSTON WIRE #H32600 (1) #18 TWISTED SHIELDED PAIR CABLE PLUS (1) #12 EGC	LOOP FROM AS RISER TO 2-TANK GAUGE, 2-FILL SUMP & 2-STP SUMP
TANK SENSORS HOMERUN (20K TANK)	1	1"	RMC/PVC	HOUSTON WIRE #H32600 (5) #18 TWISTED SHIELDED PAIR CABLE PLUS (1) #12 EGC	HOMERUN FROM VEEDER-ROOT CONSOLE TO AS RISER 5-CABLES (1-ANNULAR SPACE, 1-TANK GAUGE, 1-FILL SUMP & 2-STP SUMP)
TANK SENSORS LOOPS (20K TANK)	4	3/4"	RMC	HOUSTON WIRE #H32600 (1) #18 TWISTED SHIELDED PAIR CABLE PLUS (1) #12 EGC	LOOP FROM AS RISER TO 1-TANK GAUGE, 1-FILL SUMP & 1-STP SUMP
ELECTRICAL UTILITY	2	3 1/2"	PVC	(3) #500 Cu (A,B,C) (1) #400 Cu (N)	UNDERGROUND ELECTRICAL SERVICE
TELEPHONE UTILITY	1	2"	PVC	PULL STRING	UNDERGROUND TELEPHONE UTILITY SERVICE TO GUTTER AT FRAME RELAY LOCATION

DISPENSERS AND TANKS CONDUCTOR REQUIREMENTS

DESCRIPTION	COLOR	SIZE
REGULAR #1 STP	BLACK	#10
REGULAR #2 STP	PINK	#10
REGULAR #3 STP	ORANGE	#10
PREMIUM STP	RED	#10
DIESEL #1 STP	YELLOW	#10
ALT. STP	BLUE	#10
DISPENSER POWER	BROWN, WHITE & GREEN	#12
DISPENSER SPARES	PURPLE & GRAY	#12
REGULAR #1 SWITCH LEG	BLACK	#14
REGULAR #2 SWITCH LEG	PINK	#14
REGULAR #3 SWITCH LEG	ORANGE	#14
PREMIUM SWITCH LEG	RED	#14
DIESEL #1 SWITCH LEG	YELLOW	#14
ALT. SWITCH LEG	BLUE	#14
DATA	BLACK & RED (DATA)	#18 TFFN TWISTED PAIR (10-12 TWSTS/FT)
DATA	PURPLE & YELLOW (CRIND)	#18 TFFN TWISTED PAIR (10-12 TWSTS/FT)
DATA	BLUE & ORANGE (SPARES)	#18 TFFN TWISTED PAIR (10-12 TWSTS/FT)
INTERCOM	(2) #22 SHIELDED TWISTED PAIR	HOUSTON WIRE #50850 (O.E.)
CAT 5	(4) #23 TWISTED PAIR	BELDEN #7931A (O.E.)
TLS-350 SENSORS	(1) #18 SHIELDED TWISTED PAIR	HOUSTON WIRE #H32600 (O.E.)

1. TANK ORIENTATION AND RISER LOCATIONS TO BE VERIFIED IN FIELD
NOTES: ALL SEAL-OFFS ON ALL VEEDER-ROOT CONDUITS THAT PENETRATE A SUMP
3. J-BOXES TO WP PER NEC 504.10B.

12K TANK LAYOUT

NTS

1. TANK ORIENTATION AND RISER LOCATIONS TO BE VERIFIED IN FIELD
NOTES: ALL SEAL-OFFS ON ALL VEEDER-ROOT CONDUITS THAT PENETRATE A SUMP
3. J-BOXES TO WP PER NEC 504.10B.

8K-12K TANK LAYOUT

NTS

NOTES:
1. TANK ORIENTATION AND RISER LOCATIONS TO BE VERIFIED IN FIELD
2. INSTALL SEAL-OFFS ON ALL VEEDER-ROOT CONDUITS THAT PENETRATE A SUMP
3. J-BOXES TO WP PER NEC 504.10B.

20K TANK LAYOUT

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CLIENT:

CIRCLE K STORES, INC
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA
engineering • environmental • consult
EF# 5397

NO.	DATE	REVISION DESCRIPTION

RICHARD R. MORRIS
LA. REG # 2195

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED
MDM JOB #
DATE:
DESIGNED BY:
DRAWN BY:
CHECKED BY:
FILE NAME:

DRAWING TITLE:

ELECTRICAL SITE PLAN

SHEET NO:

SE-1.0

ISSUED FOR CONSTRUCTION 10/2/2020

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CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA

engineering • environmental • constr

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NO.	DATE	REVISION DESCRIPTION

RICHARD R. MORRIS
LA. REG # 2195

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS N TED	MDM JOB #
DATE:	
DESIGNED BY:	
DRAWN BY: A	FILE NAME: CD
CHECKED BY: D SS	

DRAWING TITLE:

TANKER PATH PLAN

SHEET NO:

TR-1.0

ISSUED FOR CONSTRUCTION 10/2/2020

NOTE:

REFER TO DRAWING SD1.0 FOR CONCRETE PAVING DETAILS.
EJ = EXPANSION JOINT
CJ = CONTROL JOINT
JOINT MATERIALS SHOULD TIE INTO CURVED FEATURES ALONG THE RADIUS EXTENDED.
NO "PIE-SHAPED" SLABS ALLOWED.
NO "L-SHAPED" SLABS ALLOWED.

LEGEND:

(N) CONCRETE PAVEMENT
(N) ASPHALT PAVEMENT
(N) SOD SEE LANDSCAPE PLANS
(N) NEW
(E) EXIST
Ⓕ FIRE ESTINGUISHER

One Call 811
DIAL 811 BEFORE YOU DIG
KNOW WHAT'S BELOW.
ALWAYS DIAL 811 OR 800 292-8525 FIRST.
THE CALL AND THE SERVICE ARE FREE.

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA
engineering • environmental • constr
EF# 5397

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

RICHARD R. MORRIS
LA. REG # 2195

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS N□TED	MDM JOB #
DATE:	
DESIGNED BY:	
DRAWN BY:	FILE NAME:
CHECKED BY:	

DRAWING TITLE:

JOINT LAYOUT PLAN

SHEET NO:

JP-1.0

REFER TO SITE PLAN FOR VARIATION IN RECYCLE ENCLOSURE SIZE, PLACEMENT AND LAYOUT. SAME CONSTRUCTION DETAILS APPLY TO ALL VARIATIONS.

TRASH ENCLOSURE PLAN

SCALE: 1/4"=1'-0"

TRASH ENCLOSURE - GATE ELEVATION

SCALE: 1/4"=1'-0"

SECTION B-B

SCALE: 1/4" = 1'-0"

TRASH ENCLOSURE WALL SECTION

NOT TO SCALE

CONCRETE:

1. All concrete shall be controlled concrete complying with all ACI 318-8, and shall have a minimum ultimate compressive strength at 28 days of 4,000 p.s.i. Provide 3/4" chamfer at all exposed concrete edges.
2. All reinforcing bars shall be new billet steel, deformed type, ASTM A-615 Grade 60 (or equal). They shall be field wired in place.
3. All slabs on earth shall be reinforced with welded wire mesh (ASTM A185) or fiber mesh concrete as called for on the drawings, placed 1 1/2" from top and over any pipes or conduits in slab. Minimun lap shall be 8".
4. All concrete shall have a slump of no greater than 4" (to within a tolerance of 1".)
5. All form work and placement of concrete shall comply with good construction practices and be in accordance with all local governing codes, and regulations.
6. Determine size & location of mechanical equipment and make provisions for bolts, sleeves, pads etc from manufacturers certified drawings. This work shall be coordinated with the trades involved
7. Membrane curing & sealing compound shall conform to the latest ASTM specifications.
8. All concrete shall be moist cured a min. of 7 days

ENGINEERED UNIT MASONRY:

1. Concrete Masonry Units: Shall be two cell, Type N-i hollow units masonry in accordance with ASTM C 90 and shall have a minimum net area compressive strength of 1000 psi when using Type S mortar (ASTM C 270) to provide a design compressive strength (f' m) of 1500 psi. The reinforcement shall be Grade 60 and identified in accordance with ASTM A 615.
2. Grout: The grout shall have a maximum course aggregate size of 3/8 inch placed at an 8 to 11 inch slump and have a minimum specified compressive strength of 2000 psi at 28 days when tested in accordance with ASTM C 1019, or shall be in accordance with ASTM C 476.
3. Reinforcement Splices: Shall be a minimum of 30 inches for # 5 bars.
4. Reinforcement Substitutions: Where two #5 bars are required within the same grouted masonry cell or bond beam, one #7 bar may be substituted.
5. Bending Reinforcement: All reinforcement shall be bent cold, in the shop or in the field, provided the bend diameter, measured on the inside of the bar, is not less than six-bar diameters. Reinforcement partially embedded in concrete shall not be field bent. EXCEPTION: If bending is necessary to align dowel bars with a vertical cell, bars partially embedded in concrete shall be permitted to be bent at a slope of not more than 1 inch of horizontal displacement to 6 inches of vertical bar length.
6. Masonry Cleanouts: Cleanout openings (12 sq. in.) shall be provided for cells containing spliced reinforcement when the grout lift (pour) exceeds 5 feet in height.

TYPICAL FILLED CELL DETAIL

SCALE: N.T.S

PLANVIEW C-C

N.T.S.

CMU WALL, REINF., AND MOIST. PROTECTION

SCALE: N.T.S.

FINISH SCHEDULE (X)

(B)
- *SHERWIN WILLIAMS #SW 6115
- TOTALLY TAN
- PAINT PRIMER:"LOXON" CONCRETE & MASONRY PRIMER/SEALER PAINT PRIMMER WITH A GREY TINT COLOR
- PAINT TOP COAT: "SUPERPAINT" EXTERIOR ACRYLIC LATEX PAINT
- SHEEN: SATIN

(F)
- WESTERN (NOW SUPERLITE) BLOCK SPLITFACE CMU
- **BOOT BROWN

FREEZELESS HOT + COLD HOSE BIB DETAIL

N.T.S.

MANUFACTURER: WOODFORD
MODEL NO: V22

AL One Call 811
DIAL 811 BEFORE YOU DIG
KNOW WHAT'S BELOW.
ALWAYS DIAL 811 OR 800 292-8525 FIRST.
THE CALL AND THE SERVICE ARE FREE.

CLIENT:

CIRCLE K STORES, INC
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA
engineering • environmental • constr
DS Dr D d B
EF# 5397

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

RICHARD R. MORRIS
LA. REG # 2195

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS N TED	MDM JOB #
DATE:	
DESIGNED BY:	
DRAWN BY: A	FILE NAME: CD
CHECKED BY: D SS	

DRAWING TITLE:

TRASH ENCL. DETAILS

SHEET NO:

TE1.0

NOTE:
SIGN PERMITS ARE REQUIRED AND TO BE PROVIDED BY CONTRACTOR, ENGINEERED DRAWINGS ARE REQUIRED FOR ALL SIGNS. THIS PLAN DEMONSTRATES SQUARE FOOTAGE AND APPROXIMATE CIRCLE K PREFERRED LOCATION.

2 CANOPY SIGN ELEVATION
SCALE: NONE 36 SQ.FT.

3 CANOPY SIGN ELEVATION
SCALE: NONE 45.5 SQ.FT.

C-STORE SIDE BLDG.
4 SIGN ELEVATION
SCALE: NONE 18.16 SQ.FT.

5 C-STORE FRONT BLDG. SIGN-1 ELEVATION
SCALE: NONE 64.19 SQ.FT.

1 POLE SIGN ELEVATION
SCALE: NONE 149.50 SQ.FT. (TOTAL)

SIGNAGE CALCULATION:

PER CODE:

MAXIMUM SIZE FACE:
1 SQ.FT PER 200 SQ.FT OF LAND AREA
TOTAL SITE AREA: 82561.49 SQ.FT. OR 1.89 ACRES M.O.L.
= 413 SQ.FT
1 SQ.FT PER FIFTY FEET OF GROSS FLOOR
TOTAL BUILDING SQ.FT: 5,187 SQ.FT
=104 SQ.FT
1 SQ.FT PER 2 LINEAR FEET OF STREET FRONTAGE
STREET FRONTAGE: 282 LF – CONRAD ROAD
STREET FRONTAGE: 231 LF –SAMPSON STREET
STREET FRONTAGE: 287 LF – JOHN STINE ROAD
TOTAL STREET FRONTAGE 800 LF
TOTAL SQ.FT 400 SQ.FT

MAXIMUM HEIGHT:
FREE–STANDING SIGNS OR SIGN STRUCTURES SHALL NOT EXCEED A HEIGHT OF FORTY (40) FEET, EXCEPT WITHIN INTERSTATE HIGHWAY CORRIDORS WHERE THE HEIGHT LIMIT FOR ALL SIGNS SHALL BE SIXTY (60) FEET ABOVE GRADE ELEVATION OR THIRTY–FIVE (35) FEET ABOVE THE HEIGHT OF AN ELEVATED ROADWAY

TOTAL PROPOSED SIGNAGE

DESCRIPTION	QUANTITY	SQUARE FOOT EACH	SQUARE FOOT TOTAL
1 NEW POLE SIGN – 35' HIGH	1	195.25 S.F.	195.25 S.F.
2 NEW CANOPY SIGN	2	36.00 S.F.	72.00 S.F.
3 NEW CANOPY SIGN	1	45.50 S.F.	45.50 S.F.
4 NEW STORE FRONT BUILDING SIGN–2	1	18.16 S.F.	18.16 S.F.
5 NEW STORE FRONT BUILDING SIGN–1	1	64.19 S.F.	64.19 S.F.
		SQUARE FOOT TOTAL	396.1 S.F.

LEGEND:
NEW CONCRETE PAVEMENT
LIMITS OF SODDED AREA WITH RIGHT OF WAY

AL One Call 811
DIAL 811 BEFORE YOU DIG
KNOW WHAT'S BELOW.
ALWAYS DIAL 811 OR 800 292–8525 FIRST.
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CLIENT:
CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:
MDM SERVICES, INC. of LOUISIANA
engineering • environmental • constr
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NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

RICHARD R. MORRIS
LA. REG # 2195

± 82,561.50 SF
OR
1.89 ACRES

SITE DESIGNATIONS:
CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED
MDM JOB #
DATE:
DESIGNED BY:
DRAWN BY:
CHECKED BY:
FILE NAME:

DRAWING TITLE:
SITE SIGNAGE PLAN

SHEET NO:
SG-SP

OWNER

CIRCLE K STORES INC.

GULF COAST BUSINESS UNIT
25 WEST CEDAR STREET, SUITE 100
PENSACOLA, FL 32502
CONTACT: JASON HOEHN
PHONE: (850) 449-1895

PROJECT DESCRIPTION

UNDERGROUND STORAGE TANKS, FUEL PIPING AND DISPENSING EQUIPMENT PLANS

SITE ADDRESS:

CIRCLE K STORE #9086
2336 WEST WOOD ROAD,
CITY OF WESTLAKE,
CALCAIEU, LOUISIANA

ENGINEER

MDM SERVICES, INC. OF LOUISIANA

engineering • environmental • construction

1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130

2151 W. HILLSBORO BOULEVARD, SUITE 401
DEERFIELD BEACH, FLORIDA 33442
Phone: (954) 427-3076
LA. EF. #5397

CONTACT: Paul Doss
Phone: (954) 427-3076, EXT 301
EMAIL: paul.doss@mdmservices.com

ENGINEER: Richard R. Morris, P.E.
PHONE: (954) 427-3076, Ext 302
EMAIL: russ.morris@mdmservices.com

THIS DOCUMENT HAS BEEN BEEN DIGITALLY SIGNED AND SEALED BY:

RICHARD R. MORRIS, PE.
LA REG # 21957

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED. THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON THE ELECTRONIC COPIES.

RICHARD R. MORRIS, P.E.
LA REG # 21957

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS

GENERAL PROJECT NOTES

A. All construction shall comply with applicable building codes and local restrictions. Contractors must comply with contractor registration requirements of all governing authorities.
B. Approved plans shall be kept in a plan box and shall not be used by workmen. All construction sets shall reflect same information. Contractor shall maintain one complete set of plans on the premises in good condition at all times. this shall include all addenda.
C. The contractor shall field verify all conditions and dimensions prior to starting any work and shall be responsible for all work and materials including those furnished by subcontractors and owner.
D. Discrepancies between portions of the contract documents, drawings and specifications are not intended. The contractor is to clarify any such discrepancies with the owner prior to commencing work.
E. Stated dimensions take precedence over graphics, do not scale drawings to determine locations. The owner shall be notified of any such discrepancies prior to continuing with work.
F. Contact owner for instructions prior to the continuation of work should any unusual conditions become apparent during grading or foundation construction. Existing elevations and locations to be jointed shall be verified by the contractor prior toconstruction. If they differ from those shown on the drawings, the contractor shall notify the owner so that modifications can be made before proceeding with the work.
G. It shall be the responsibility of the contractor to locate all existing utilities whether shown herein or not and to protect them from damage. The contractor shall bear the expense of repair or replacement of utilities or other property damaged by operations in conjunction with he execution of the work after so located.
H. For construction details not shown, use the manufacturer's approved shop drawings / data sheets in accordance with the project specifications.
J. Fire extinguishers to be installed at heights designated by owner and in compliance with local fire code. Final fire extinguisher locations shall be approved by fire marshal.
K. All construction must meet all applicable Building Codes regardless of supplier as required by Jurisdiction, State, and Local Authority.

SITE VICINITY MAP

DRAWING INDEX

DWG. NO.	
TA0	COVER SHEET
C-1	SITE PLAN
UNDERGROUND STORAGE TANKS	
TA-1	GENERAL NOTES
TA-2	GENERAL NOTES
TA-2.1	FUEL PIPING PLAN
TA-3	TANK PAD PLAN & DETAILS
TA-3.1	TANK & PIPING DETAILS
TA-3.2	CONDUIT & ELECTRICAL DETAILS
TA-4	TANK SECTIONS
TA-4.1	TANK EQUIPMENT DETAILS
TA-4.2	TANK PROFILES
TA-5	DISPENSER DETAILS
TA-6	CK VEEDER ROOT SHEET 1
TA-7	ELECTRICAL SCHEMATIC, NOTES & DETAIL
TA-8	HAZARD ZONES
TA-9	OVERFILL ALARM DETAILS
SE1	SITE ELECTRICAL PLAN

VERSION:

DATES

- 10/22/20 REV PLAN SET FOR STEEL TANKS
- .
- .
- .
- .
- .

STORE NUMBER
9086
MDM PROJECT NUMBER
19075

TA0

REVISED FOR CONSTRUCTION (METAL TANKS) 10-22-2020

SITE: 9086

2336 WESTWOOD ROAD, WESTLAKE, LA

CIRCLE K

A. GENERAL

1.0 Reference to General Contractor and/or Subcontractor is denoted by Contractor.

2.0 Contractor shall be responsible to completely familiarize itself with existing site conditions and all applicable federal, state and local laws, codes and regulations. All work and materials shall be in accordance with these regulations. If there is a conflict within these documents or between these documents and site conditions and/or applicable laws, codes or regulations, the Contractor is responsible to inform the Circle K Construction Manager prior to bid. No allowance will be made for his failure to do so.

3.0 Contractor shall handle and install all items per manufacturers instructions, these drawings, and all laws, codes and regulations.

4.0 Contractor shall not deviate from materials or products specified unless through mutual agreement with Circle K Construction Manager. Approval must be IN WRITING, signed by Circle K Construction Manager, and submitted in the project close out folder as outlined in Sec. K. Substitute materials shall be described, specifying any difference in cost and performance. Only new materials shall be used. Contractor shall be certified for the installation of all equipment and materials contained in this project.

5.0 Contractor shall secure all required permits prior to commencing work. See bid documents for list of permits that Circle K will pay directly. Contractor to pay fees for all remaining permits and inspections not included on the list. Contractor shall coordinate all inspections required to complete this project.

6.0 All existing items, except those that are to be removed and junked, shall be protected by the Contractor. Contractor shall replace any and all items that are removed or damaged during the course of his work, to the same or better condition, at Contractor expense. Consult bid documents for list of equipment that will be salvaged.

7.0 Contractor is responsible for blue staking the excavation areas and locating all underground utilities.

8.0 These plans are schematic only. General scope is defined, however Circle K reserves the right to alter or expand the scope of work. Circle K will direct and pay for any additional work under separate contract or change order.

9.0 Contractor to warranty all workmanship and Contractor supplied material for 1 year, with the exception of the underground storage tank installation. Circle K shall perform a 10 month warranty inspection to evaluate Contractor performance and quality of workmanship. Contractor must complete all punch list items identified during this 10 month inspection. The underground storage tank installation shall be warranteed as outlined in section D–7.9.

10.0 Contractor shall keep the site free of waste and rubbish at all times. Contractor SHALL HAVE THE WORK AREA PROFESSIONALLY CLEANED THE DAY BEFORE CIRCLE K's FINAL PROJECT INSPECTION.

11.0 When an installation is made at an existing store, the Contractor is to schedule and perform his work so as not to interfere with the normal C–store operations. All debris, excess excavation materials, machinery and equipment to be removed and maintained clear of the driveways that are in use each day and lighted barricades shall be provided for the publics protection. When it becomes necessary to close a driveway for more than 24 hours, the Contractor will provide temporary travel service for traffic. Contractor TO PROVIDE A CIRCLE K "OPEN" SIGN AT THE START OF GASOLINE WORK, per Circle K Construction Manager's instructions.

12.0 Contractor to keep on site Safety Data sheets (SDS) for chemical compounds regulated through USEPA that will be used on–site or has the potential for human contact. (i.e., Gasoline, Dry Ice, Solvents, Glues, etc.)

13.0 Contractor shall place the highest priority on safety and health during the progress of work performed at Circle K store locations. It shall be the responsibility of the Contractor to provide and maintain a safe working environment for its employees during the progress of work and to protect the health and safety of Contractor's agents, subcontractors, the public and any third parties. All tools, materials, equipment, facilities and other items used by the Contractor and practices employed by the Contractor in accomplishing the work are considered to be part of the working environment.

14.0 While on site and during working hours, Contractor's personnel must wear shirts, long pants, hard hats when required, and acceptable foot wear per OSHA, regulations.

15.0 Contractor must provide adequate provisions to mitigate rain damage and delays (i.e. pumps, tarps, etc.).

16.0 Contractor is responsible for coordinating, receiving and unloading all Circle K supplied equipment delivered to Contractor's warehouse, or job site. The securing of equipment remains the Contractor's responsibility until the final project retainage is paid. Contractor to distribute all receiving documents to the Circle K Construction Manager. If Circle K Construction Manager is not notified one week prior to the start of construction, the replacement of any missing equipment will be the responsibility of the Contractor.

17.0 Contractor to provide all materials not listed on the equipment list on page 4 of these drawings, but required for a complete job.

18.0 Contractor is to schedule all subcontractors, including those contracted directly with Circle K. Circle K will provide list of subcontractors, contacts and phone numbers, that have contracts directly with Circle K.

19.0 A copy of the specifications and drawings, along with approved site plan, (w/as–built notations) shall be on site at all times.

20.0 Contractor is responsible for all product in tanks and in lines until location opens or reopens for gasoline business. Any product loss during construction shall be the responsibility of the Contractor. Prior to project acceptance, Circle K shall reconcile inventory by comparing product in tanks and lines to amount delivered. Shortages shall be billed to Contractor at full retail price.

21.0 The Contractor shall indemnify, defend and hold harmless Circle K from any and all claims for damages, loss, or injury of any nature received from or sustained by the general contractor, subcontractor, their employees or agents resulting from the performance of his work under this contract.

B. REMOVAL & DISPOSAL OF EXISTING TANKS (when required)

Circle K will coordinate the removal of gasoline product in each existing tank prior to the start of this project to within 3"–7" from the bottom of each tank.

Only tank manufacturer's trained and certified personnel using equipment and procedures specified by the tank manufacturer and following all governing rules and regulations shall be permitted to enter a tank.

1.0 Disconnect all power to dispensers and tank top equipment.

2.0 Evacuate product from tanks and lines:

2.1 For Submersible Turbine Pump (STP) system, drain the product lines into tank by removing STP check valve and opening safety valve test ports. Disconnect the flex piping at the STP and drain the remaining product into an approved container.

2.2 For suction system, disconnect the product lines from tank or low point and drain into an approved container.

Product removed from lines becomes property of Contractor and may be used as motor fuel.

2.3 Contractor is responsible for the removal of the liquid residue at the tank bottoms and/or "Cleaning/Rinsing" of the tanks, where required. This must be accomplished on–site prior to tank removal. Contractor shall use a Circle K approved Company to perform this work. The recovered material and rinsate shall be managed according to Local, State and Federal codes and regulations. The material must be taken to a facility that is approved by Circle K. The Circle K Construction Manager MUST sign all waste manifests. See bid documents for a list of these approved sites and companies.

2.4 Contractor is responsible for the proper transportation and disposal of all old tanks that are removed as part of this project. Contractor must provide proof of proper transportation and disposal at an approved facility in the form of a signed certificate or affidavit of proper disposal from the tank disposal facility ("Death Certificate"). This certificate must be included in the project close out folder as outlined in section K–1.0 Consult bid documents or Circle K Construction Manager for specific local information regarding this issue.

3.0 When determined safe by the Circle K Construction Manager and local inspector, if present, degas tank to less than 10% of the Lower Explosion Limit (LEL) by inserting vapors by adding a minimum of 1.5 lbs of dry ice per 100 gallons of tank capacity or other approved method allowed by local code with written approval from the Circle K Construction Manager.

4.0 Excavate to tank top, remove all tank appurtenances, plug all openings, remove tanks and place in a secure location.

5.0 Remove remaining product and vent piping from site at earliest time possible, if required.

6.0 For in–ground heating and used oil tanks, follow B–2.3 through B–5.0. as applicable. Some jurisdictions may have classified used oil as hazardous waste and must be managed as such (See B–2.3)

7.0 A separate contract will be executed with an environmental consultant to perform an environmental site assessment. Circle K Construction Manager and/or Consultant shall inspect open excavation for evidence of a hydrocarbon release. Any soil disposal required will be handled on a separate contract or change order.

C. EXCAVATION

1.0 Contractor shall follow all OSHA specifications and regulations, all Federal, State and Local codes and regulations and the tank manufacturer's installation manual regarding excavation.

2.0 Excavation shall be sized per tank manufacturer's guidelines. Pipeline trenching shall be per pipeline manufacturer's guidelines

3.0 Contractor shall provide and install tank excavation shoring (sheet piling) Contractor shall submit shoring design to Circle K construction manager for approval prior to shoring installation

4.0 Minimize surface water entering excavations by constructing diversion dams around tankfield excavation and piping trenches.

5.0 A contingency plan shall be developed with Circle K Construction Manager outlining emergency procedures for obtaining the necessary equipment and/or personnel to handle unexpected water entry into the tank field excavation or piping trenches. When water may contain hydrocarbons, consult Circle K Construction Manager prior to removing it from site.

D. TANK INSTALLATION

1.0 Contractor shall coordinate delivery date of tanks with the manufacturer, Circle K Construction Manager, and the project schedule.

2.0 Tank manufacturer's installation procedure shall be followed, and the installation checklist shall be initialed/signed by Contractor and Circle K Construction Manager, as appropriate, as each step is completed.

3.0 An underground equipment installation affidavit shall be filled out by Contractor and submitted to the Circle K Construction Manager in bound project close out folder (see section K).

4.0 Lifting equipment shall be adequate to handle tank without dragging. Use all lifting lugs and guidelines when lifting tanks. Rest tanks on smooth and debris free ground. Chock tanks to prevent rolling and tie them down if high winds are expected. Use minimum 1/2" diameter nylon or hemp rope over tank and tie to wooden stakes of adequate size to prevent tanks from being moved by high winds. DO NOT DRAG, ROLL, OR IMPACT TANKS.

5.0 Tank shall be placed according to the tank manufacturer's installation manual and the Circle K tank drawings. Please note that if the soil is unstable, the standards may be increased. Distance between tanks shall be governed by Manufacturer's or State and Local requirements whichever is greater.

5.1 Tanks shall be continuously vented, by contractor, at all times throughout construction.

6.0 PRE–INSTALLATION TANK TESTING.

6.1 Circle K Construction Manager shall witness pre–installation tank testing.

6.2 Contractor shall notify Circle K Construction Manager two working days prior to testing and tank installation.

6.3 Tanks are to be set level and backfilled to top of tank the same day as testing.

6.4 Contractor to provide tank test manifold per manufacturer's instructions and specifications.
- a) Contractor to furnish air pressure gauge with a maximum full scale reading of 15 psig with 1/4 or 1/10 psig increments. Pressure gauge to be in good repair and have a calibration date within 30 days of use. Pressure gauges damaged or out of calibration will not be permitted.
- b) The pressure relief valve on the test manifold must be rated at 6 psig to reduce the risk of over pressurizing the tank.

6.5 Testing the Primary (Internal) Tank
- a) Connect the test manifold to an available service fitting. Check each remaining service fitting to ensure tank service fittings are properly seated, adequately doped, plugged, and tightened.
- b) Pressurize the primary tank to 5 psig, add or remove air as necessary and allow the pressure to stabilize. Close the valve on the test manifold air supply line.
- c) Monitor the pressure for 1 hour. Soap test (using high foaming test solution – seam test solution manufactured by Winfin Products, Charlotte, NC, Amway Loc Soap, or approved equal) all service fitting, manways and plugs. Watch for active air bubbles which indicate a leak.
- a) Connect the test manifold to an available service fitting. Check each remaining service fitting to ensure tank service fittings are properly seated, adequately doped, plugged, and tightened.

6.6 Testing the Secondary (External) Tank
- a) Maintain pressure on the primary tank. Plug all open fittings on the secondary tank.
- b) Free the hose from the service fitting by cutting the nylon safety tie.
- c) Insert the hose into the quick disconnect check valve. This will allow air to transfer from the primary to the secondary tank.
- d) Pressurize to 5 psig. Add or remove air via the supply valve as needed and allow pressure to stabilize. Close the valve on the test manifold to the air supply line. Do not use an air compressor to pressurize the secondary tank.
- e) Monitor the pressure for 1 hour, soap the entire exterior of the tank and watch for active air bubbles which indicate a leak.
- f) When the test is complete, slowly release air pressure from the tank by disconnecting the supply line and opening the supply valve on the test manifold. When air flow from the supply valve stops, remove the test manifold.

7.0 INSTALLATION

7.1 Installing contractor shall be certified by tank manufacturer on proper tank installation procedures.

7.2 Bedding and backfill material shall be well washed and free of ice and snow and meet ASTM D–448. ASTM C–33 and AASHTO M–43 for quality and soundness. Contractor shall provide sieve analysis acceptable to Circle K Construction Manager. The tank warranty is automatically voided if material other than the following approved bed and backfill materials are employed without prior written approval from the tank manufacturer.

7.2.1 Pea gravel with particle size not less than 1/8" or more than 3/4" diameter with no more than 5% passing a No. 8 sieve. Installation of geotextile fabric tank hole liner required whenever pea gravel backfill is used unless waived by Circle K Construction Manager.

7.2.2 Crushed stone with particle size not less than 1/8" or more than 1/2" diameter with no more than 5% passing a No. 8 sieve.

7.2.3 DELETED

7.3 STANDARD INSTALLATION: PROCEDURE – DRY HOLE:

7.3.1 Place minimum 12" bedding material smooth and level over excavation floor. TANKS ARE TO BE SET LEVEL.

7.3.2 Set tanks level on bedding material. Use all lifting lugs provided and guide ropes at each tank end. Do not set tanks directly on deadmen or concrete slab if used. Measure tank diameter.

7.3.3 Place 12" backfill material evenly around tanks. Use WOODEN dowel probe to work backfill completely under tank between ribs and under endcaps. Use extreme care in backfilling beneath tank bottom, between ribs and under end caps to provide a solid support free of voids. It is extremely important that care be exercised in the backfilling of the tanks up to two feet in depth from the tank bottom as tank failures have resulted where voids were evident under the tanks. Good compaction and support for the tank can be obtained by shaping the gravel with a shovel all around the perimeter of each tank.

7.3.4 Repeat D–7.3.3 for next 12", probing to fill all voids at the critical 5 to 7 o'clock support areas of the tank (see drawing 5.)

7.3.5 Freely add additional backfill to tank tops. (Additional probing not required.) Measure tank diameter.

7.3.6 Tanks must be anchored with deadman on all wet hole installations. Anchoring shall be done in accordance with the tank manufacturer's installation instructions.

7.4 INSTALLATION PROCEDURE – WET HOLE

7.4.1 The following procedure shall apply where high water table is evident or where a future water condition is anticipated.

7.4.2 Water level should be maintained at the lowest practical level during installation. A sump and pump or a system of well points and pumps is the recommended method to minimize water level in the hole. It is recommended that an experienced dewatering Contractor be employed to dewater the excavation. The type of system required will depend on the water flow rate into the hole. The hole bottom should be level and free of rocks and debris.

7.4.3 Provide a minimum 12" thick pea gravel bed at bottom of hole. Pea gravel must be graded smooth and level to receive tanks. Carefully place tanks on pea gravel bed.

TANKS ARE TO BE SET LEVEL.

7.4.4 BALLASTING:

7.4.4.1 If water is required to sink tanks in high water table condition, the manufacturer's tank installation instructions must be adhered to exactly.

7.4.4.2 Water within the tank cannot be at a higher level than the outside ground water. If water is required to make tank installation, the contractor will be responsible to make arrangements for and pay for all water used.

7.4.4.3 Ballast tanks using potable water. Remove water ONLY after tank slab is cured. Consult Circle K Construction Manager for proper disposal of water removed from tank.

7.4.5 While leveling tanks, insure that minimum distance of 2'–0" between tanks is maintained. When anchoring, place straps over tanks and follow procedure as outlined hereinafter.

7.4.6 Tanks must be anchored with deadman on all wet hole installations. Anchoring shall be done in accordance with the tank manufacturer's installation instructions.

7.4.7 Use preformed fiberglass straps (furnished by tank fabricator) or 6" nylon hold down straps top of designated ribs (F/G Tanks). Do not use straps or cables against the tank shell between ribs of F/G tanks. Attach hold down strap to anchor points with 1/2" dia. 6x19 plow steel wire rope loops using at least three cable clamps. All straps should be tightened with turnbuckles to give snug fit of straps to tank rib. Turnbuckle dia. to be 1 1/2" hook type or 3/4" type. One tank at a time shall be set on tank bedding and securely anchored and tightened with the anchoring straps.

7.5 Riser Coating and Wrapping: Prior to completion of backfill and after pressure testing tank coat all corrodible components exposed to backfill with coal tar epoxy, "Koppers" bitumastic, and wrap with 3M Tape. All components shall be clean and corrosion free before applying coating. Extend coating 3" onto adjacent tank shell surfacing/components.

7.6 The Contractor accepts full responsibility for proper handling and installation of the underground storage tanks and shall ensure that good workmanship practices and construction procedures are followed regardless of the inclusion or omissions of any applicable suggestions in these instructions.

7.7 Unknown situations or conditions not covered in these and the manufacturer's instructions are the responsibility of the Contractor, Manufacturer's Specialists are available for consultation. The presence of the Manufacturer's Observer at any installation site does not relieve the Contractor of his responsibility for the proper installation of the tanks.

7.8 Underground fuel tanks and piping must be installed according to these instructions, the manufacturer's instructions, N.F.P.A. 30, NEC and all state and local applicable codes. Failure to follow these installation instructions will void the warranty and will result in tank and/or line failure.

7.9 Tank settlement, tank distortion, or movement in concrete cover slab cannot be tolerated and if specified materials are used and specified procedures are followed, no installation failure should occur. Therefore, if any movement, settlement or distortion occurs, it will be presumed the Contractor has not followed the specified instructions and procedures. Contractor shall immediately undertake at his sole expense, any necessary corrective measures as may be approved by Circle K up to and including complete removal and resetting of all underground tankage at the site. If it is determined that movement, settlement or distortion have been caused by factors beyond the Contractor's control, the cost of remedial measures will be borne by others. Through acceptance of the General Contract, the Contractor does hereby agree to guarantee the underground storage tank installation against failure, as outlined herein above for a period of five (5) years from the date of final acceptance.

E. PIPING

1.0 Pipe manufacturer's installation checklist shall be initialed and signed by Contractor and Circle K Construction Manager, as appropriate.

2.0 All material, workmanship and installation practices shall be in accordance with NFPA 30 & 30A, and all other applicable codes.

3.0 MATERIALS:

3.1 All vent and vapor return primary product and secondary containment lines shall be Smith Fiberglass Systems OR LCX double walled pipe. DO NOT MIX MANUFACTURER'S MATERIALS.

3.2 Tank risers shall be Schedule 40 (ASTM–5–120) galvanized iron pipe. Fittings shall be 300 psi galvanized malleable iron. All galvanized pipe and fittings exposed to backfill material (including extractor base) shall be treated by coating with "Kloppers" bitumastic or coal tar epoxy and wrapping with felt or 3M tape. All treated parts shall be clean and corrosion free prior to applying coating.

3.3 All NPT threaded connections shall be treated with "Seals Pipe" as manufactured by Permatex, "PST 567" as manufactured by Locktite, or "The Heavyweight" as manufactured by Jomar.

3.4 Contractor shall demonstrate to Circle K Construction Manager that all installed materials are new and conform to above specifications.

4.0 INSTALLATIONS:

4.1 Installing contractor shall be certified by piping manufacturer.

4.2 Bedding and backfill material shall be same as the tankfield, Product line trench sub–grade shall be compacted to 90% proctor density prior to installing bedding and backfill material.

4.3 Product lines shall slope continuously upward from STP sump a minimum of 1/8" per ft. Stage II vapor recovery lines shall slope continuously upward from vapor manifold a minimum of 1/8" per ft. Stage II lines will be stubbed up through the dispenser pan and capped if location is not scheduled for Stage II.

5.0 CONNECTIONS:

5.1 NPT THREADED CONNECTIONS:

5.1.1 Threads shall be clean of all sand and thread cutting oil prior to joining.

5.1.2 Apply thread sealant per E–3.3. Start all threaded connections by hand. Secure FRP components using only a strap wrench. Do not force threads. If connections binds, remove and reclean.

5.1.3 Do not overtighten. Torque FRP to steel connections to 75 ft. lbs. when using power tongs.

5.2 FRP BONDED CONNECTIONS:

5.2.1 Taper/scarf pipe ends per pipe manufacturer's instructions. Clean bonding surfaces using ONLY pipe manufacturer's approved cleaner. DO NOT ALLOW CLEANER TO COME INTO CONTACT WITH TANK SURFACE OR SUMP SEALING DEVICES.

5.2.2 Mix and apply adhesives per manufacturer's instructions.

5.2.3 Join components per manufacturer's instructions. Cure connection per pipe manufacturer's specifications using FRP pipe manufacturer approved electric heating collar or chemical heat pack when temperature is below or will fall below 60°F prior to curing.

6.0 LINE TESTING (prior to backfill)

6.1 Circle K Construction Manager shall witness line testing. Contractor shall notify Circle K Construction Manager two days prior to testing.

6.2 Caution: Nitrogen from a grounded source shall be used in lieu of air for testing the piping system if a motor fuel has been used to ballast a tank.

6.3 Product lines shall be tested from STP to shear valve.

6.4 Vent/vapor system shall be tested from top of vent, through manifold, extractor base and riser, stage I adapters, caps, and containment manholes, stage II vapor lines to islands & stage II flex connectors at dispenser(s). Replace ball float cages with plugs and replace stage I vapor recovery spill container drain valves with G.I. plugs. CAUTION: ENGINEER AND CONTRACTOR SHALL VERIFY EXTRACTOR PLUG IS INSTALLED AND CAP IS REMOVED FROM FILL RISER PRIOR TO PRESSURE TESTING VENT/VAPOR SYSTEM.

6.5 Slowly pressurize product lines and vent/vapor lines to 50 psi. Soap test pipe surfaces including joints and fittings. Correct any leaks and retest.

6.6 Immediately relieve pressure from stage II vr/vent system and remove extractor plugs. Reduce primary line pressure to 30 psi. Monitor daily until all yard paving is complete.

6.7 Assemble secondary system and pressurize to 5 psi. Soap test entire pipe surfaces including joints and fittings. Correct any leaks and retest. Reduce pressure to 3 psi and monitor daily until all yard paving is complete. The Circle K Construction Manager must confirm the 3 PSI pipe pressure prior to backfilling.

PIPING NOTES CONTINUED ON NEXT PAGE

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA

engineering • environmental • construction

2151 WEST HILLSBORO BLVD., SUITE 401
DEERFIELD BEACH, FLORIDA 33442
Phone: 561-427-3076

EF# 5397

NO.	DATE	REVISION DESCRIPTION
1	10/09/20	REPLACED TANKS FROM FIBERGLASS TO STEEL TANKS PER CLIENT

REVISED FOR CONSTRUCTION (METAL TANKS) 10/22/2020

RICHARD R. MORRIS
LA. REG. # 21957

TANK AND PIPING PLANS & DETAILS

SITE DESIGNATIONS:

CIRCLE K STORE # 9086
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED
MDM JOB # 19075
DATE: 12-30-2019
DESIGNED BY:
DRAWN BY: P. DOSS
FILE NAME: 19075TA1.0.DWG
CHECKED BY:

DRAWING TITLE: GENERAL NOTES

SHEET NO: TA-1.0

7.0 Complete backfilling piping trenches and top of tanks to allow for an 8" thick concrete tank slab w/#4 rebar @ 18" OCEW and 6" thick yard/canopy paving ,3000 psi, with or without fiber mesh. Consult bid documents and Circle K Construction Manager. #4 rebar dowels at 18" O.C. shall be installed connecting new piping trench concrete with existing site paving or when replacing tanks at an existing site. Consult bid documents for non tank slab concrete strength.

8.0 (If required) Contractor to install 4" diameter .020 slotted PVC observation wells, only when required by state or local codes. Observation well caps to be painted white with a black triangle in the center. Existing monitoring or compliance wells should not be disturbed. In the event a well is damaged, immediately notify the Circle K Construction Manager. Any damaged wells will be replaced at the expense of the Contractor.

F. DISPENSERS

1.0 Dispensers to be independently set "at grade" to result in an average of 0 inches of reveal.

2.0 Contractor to provide storage for dispensers, hoses, nozzles and breakaways prior to installation and shall be responsible for any damage to equipment prior to job acceptance.

3.0 Dispensers shall be securely attached to anchor bolts which shall be set at finished grade. Expansion bolts may be used with the written approval of the Circle K Construction Manager. Quantity and size of anchor bolts shall be as specified in dispenser manufacturer's installation instructions. The dispensers are to be installed level and are to be caulked with a gray silicone at grade/dispenser interface.

4.0 Dispensers shall be activated only in presence of an authorized dispenser representative. Contractor has sole responsibility for damage to dispenser(s) if this instruction is not followed.

5.0 Purge the air from the piping system using industry standard practices and a grounded container approved for storage and handling Class I flammable liquids.

6.0 ELECTRICAL CHECKOUT:

6.1 Turn off ALL STP circuit breakers.

6.2 Confirm ALL nozzles are in their boots.

6.3 Verify ALL STP's are off.

6.4 Turn on circuit breaker for one STP. One hose at a time for product grade matching activated STP, perform the following at each dispenser.

6.4.1 Remove nozzle.

6.4.2 Activate operating handle and dispense product into an approved GROUNDED container.

6.4.3 Verify ONLY correct STP turns on.

6.4.4 Verify brand panels and octane decals on each side of dispenser matches product being dispensed by STP.

6.4.5 Verify correct nozzle type is installed, i.e. unleaded, diesel.

6.5 Repeat F5.4 – 5.4.5 for each product grade.

7.0 If misconnections or other problems are detected, make corrections and repeat entire dispenser check–out procedure.

8.0 Calibrate and seal meters per local regulations. Any re–calibration required to obtain approval from local regulators shall be contractor's responsibility.

9.0 Contractor to furnish and install new dispenser filters after completing all liquid testing and product line purging. Activate each product on each dispenser and inspect filter for leaks. Recheck primary line connections at dispenser base and STP for leaks.

10.0 Contractor shall perform start–up if approved by the dispenser/EPOS manufacturer. If Contractor is not approved by the dispenser/EPOS manufacturer, then an authorized Contractor shall be subcontracted to perform start–up. Contractor shall also provide an authorized service technician to provide up to 8 hours of on–site training for store personnel. Contractor is responsible for start–up and calibration of fueling systems. Cost must be included in Contractor's base bid.

11.0 Contractor shall provide and install pump #'s, octane decals, no smoking decals and emergency shut–off signs, per Shell image guidelines and all applicable codes and regulations. Contractor shall install all Circle K provided decals, pump toppers and windshield caddies/trash cans prior to final project acceptance.

12.0 Contractor to furnish and install fire extinguishers and appropriate decals per applicable regulations.

13.0 Install and make operational the Circle K provided 3M intercom system.

G. TESTING

1.0 Contractor shall perform a pressure decay test on the tank annular space after paving is complete by pressurizing to 5 or 10 inches water column depending on state regulations from a GROUNDED nitrogen source. Pressure shall be applied for 5 minutes. ANY TANK WHICH DOES NOT HAVE "0" PRESSURE DECAY SHALL BE REJECTED. Contact tank manufacturer for repair. Circle K Construction Manager shall witness this test.

2.0 Tank, line, leak detector and Stage II testing shall be conducted by a third party testing company subcontracted to the contractor. Testing methods must be approved by the Circle K Construction Management and conform to all regulations and codes. Contractor shall schedule and coordinate the testing contractor along with any local inspections required to open the store. Contractor shall have a representative on–site during ALL testing. Circle K Construction Manager to witness all testing.

3.0 Circle K will only pay for one successful set of tank, line, leak detector and Stage II tests (include in bid price). Any costs associated with failed tests and subsequent repairs/re–tests will be the Contractor's responsibility.

4.0 Contractor must obtain a copy of all test reports from testing company to be submitted with the project close out requirements of Section K.

5.0 Hydrostatic Test for STP Sump/Bravo Box/Spill Buckets:
The Submersible Turbine Pump (STP) Sump, spill bucket, and the Dispenser Sump installation will be tested for water–tightness. This hydrostatic test will be done whether a jurisdictional hydrostatic test is requested by an oversight agency or not. The hydrostatic test can be done concurrently with the jurisdictional test, if one is required. The STP sump and spill bucket installation contractor is responsible for coordinating with the Circle K Construction Manager at least 24 hours prior to the anticipated hydrostatic test time. The dispenser sump installation contractor will be responsible for coordinating the dispenser sump hydrostatic test with the Circle K Construction Manager at least 24 hours prior to the anticipated test time.

Methodology For STP Sump Hydrostatic Test:
After all piping and electrical penetrations have been sealed, and the STP sump installed and finished to the tank, the STP Sump installation contractor will introduce water into the STP sump 24–hours prior to the arrival of the Circle K Construction Manager. Water will be introduced into the STP sump past the highest penetration into the installed and finished sump. The water level should be stable at the tangent point on the top of the highest sump penetration. This tangent point will be the reference point for the Circle K Construction Manager's inspection, so it is important that the stable water level is precisely tangent to

the top of the highest sump penetration. After water has remained in the STP Sump tangent to the top of the highest sump penetration, the Circle K Construction Manager will inspect the STP Sump for water leakage. The Circle K Construction Manager will inspect the bottom exterior of the sump for moisture collection, or to determine if leakage has occurred around the sump seal. The Circle K Construction Manager will inspect the water level to see if there is an observable subsidence of water from the top of the highest penetration. The Circle K Construction Manager will inspect to ensure that there is no observable subsidence from the tangent point of the highest sump penetration. The Circle k Construction Manager will inspect to ensure that there is no observable leakage on the exterior of any sump penetration, and to ensure that there should be no moisture collection or observable leakage around the exterior bottom of the installed and finished sump.

Methodology For Spill Bucket Hydrostatic Test:
Following installation of the spill buckets, a hydrostatic test will be conducted by the spill bucket installation contractor and witnessed by the the Circle K Construction Manager. The Contractor is to plug the riser so that water can not leak into the riser. Water will be introduced into the spill bucket to the top of the bucket. The water level should remain at the top of the bucket for a period of one hour. The Circle K Construction Manager will inspect to ensure that there is no observable subsidence from the top of the bucket.

Methodology For Dispenser Sump Hydrostatic Test:
In order to test the water tightness of the dispenser sumps a hydrostatic test will be conducted by the dispenser sump installation contractor and witnessed by the the Circle K Construction Manager. After all piping and electrical penetrations have been sealed, and the dispenser sump has been fastened to the dispenser island or drive slab, the Dispenser Sump installation contractor will introduce water into the Dispenser Sump to within 3"or 4" of the top of the dispenser sump. This will ensure that there is an adequate hydraulic head on the sealed penetrations to test water tightness. The Dispenser Sump Installation contractor will coordinate with Circle K Construction Manager 24–hours prior to the anticipated sump test inspection time. The Circle K Construction Manager will physically inspect each (side or bottom) penetration to ensure that no moisture or leakage exists around the fittings. The Circle K Construction Manager will feel each piping and electrical penetration to ensure that no moisture or leakage exists around these penetrations.

6.0 Vapor Piping (Stage I) Slope (Fall) Verification Test:
The piping Contractor will notify the Circle K Construction Manager at least 24 hours ahead of the anticipated test time. The verification of the 1/8" slope must be conducted with a standard calibrated 3' or 4' construction level. The test must be conducted when the piping backfill is nearly complete, and the tops of the vapor piping are still clear and accessible to the level. The TMC Construction Manager will start from the furthest dispenser working back toward the tanks. The Circle K CM will lay the levels at various OR continuous points on the vapor piping, checking the level bubble for the 1/8" slope. The Circle K CM will move down the length of the Stage II Vapor Piping run, measuring the tops of the back–filled piping every four feet, or as necessary to insure a proper slope. The Circle K CM will briefly sketch an 'as–built' of the Vapor Piping run, noting all high and low spots in the piping run.

H. CONCRETE/ASPHALT PAVING

1.0 Concrete and asphalt paving shall be in accordance with Circle K's paving specifications and details, sheet SD–1.0.

I. CANOPY (if required)

1.0 Circle K will contract with others for Canopy fabrication and installation. Contractor is responsible for the following regarding the canopy: removal and disposal of old canopy, new canopy layout, (elevations and location), electrical conduit, circuits and all connections, canopy footings, j–bolts, canopy drain connections, column shroud installation (where required), painting, flood testing finished canopy, safety, and scheduling and coordinating canopy contractor's work with the project schedule.

2.0 Contractor is responsible for all inspections required for the canopy work.

3.0 Canopy scuppers from parimeter gutter to fore court.

J. PAINTING

1.0 Contractor to paint all fill/Stage I manholes the colors indicated below. Contractor to use paint that is an oil based, rust free, enamel. All "+'s" are to be 2 inches wide. Contractor is to provide a stencil for all "+'s" on all fill lids. Lip under fill lid and 2" of concrete surrounding lid is to be painted appropriate colors.

* White w/Black + = Regular Unleaded
* Red w/White + = Premium Unleaded
* Yellow = Diesel
* White w/Blue + = Non Ethanol Conventional Unleaded
* Orange = Stage I vapor

2.0 Tank level monitor manholes to be painted light gray, if applicable.

3.0 Contractor to paint all islands and bumpers, canopy columns, vent riser and supports and fire extinguisher cases.

4.0 Paint finish specifications: Paint bollards white with 12" bottom shell grey.

K. REQUIRED DOCUMENTATION

A project contact list with all General Contractor and Subcontractor contacts and phone numbers shall be submitted to Circle K Construction Manager, along with a CPM schedule prior to starting this project.

1.0 The following documentation is required prior to releasing the final 10% retainage on the project. THESE DOCUMENTS SHALL BE SUBMITTED IN A BOUND PROJECT CLOSE OUT FOLDER.

* Site information (address, site #, etc.)
* Project description with start and finish dates and CPM schedule
* G.C. information along with subcontractor list
* Job progress photos (see K–3.0)
* Daily job progress logs (New builds only)
* Underground tank installation checklist (N/A)
* Piping manufacturer's installation checklist
* Copies of tank, line, and Stage II VR test results
* UST Information Sheet
* Copies of all permits and inspections
* Copy of certificate of occupancy (if required)
* Completed and signed punch list
* As–built drawings to scale depicting precise location of all components installed (including product/vapor line sizes and locations, conduit sizes, location and material, exact tank location and dimensions, etc.)
* Tank charts (Leave second copy at store)
* Final release of lien from Contractor and each subcontractor/supplier and subcontractor's affidavit
* Copy of contract, change orders, and written approvals for deviations from these drawings.
* Copy of Signed Tank Disposal Certificate and ALL waste manifests.
* Compliance Information Form
* Tank Layout Form

2.0 Contractor shall maintain and turn over 2 copies of an indexed operation and maintenance manual, consisting of booklets for all newly installed equipment. Give one copy to Circle K Construction Manager and leave one at the store. Contractor shall leave tankcharts, tankstick, manway removal device, water finding paste, and all keys at the store.

3.0 Job progress photos – fuel system installation

At a minimum, the following photos are to be submitted on a Compact Disk labeled with scope of work, store # and address, in bound project close out folder as described in K–1.0, prior to release of retainage.

1. Photos of location prior to start of construction (minimum 4).
2. Each old tank and old tank hole.
3. Open tank hole.
4. Installation of new tanks including deadman and holddown straps. (1 during, 1 at finish).
5. Pea gravel backfill (includes tamping of pea gravel at 5:00 and 7:00 position). (3 photos)
6. Installation of product lines, vent lines and electrical in tank hole.
7. Installation of fill tubes and submersible pumps.
8. Backfilled tanks just before concrete pour, showing rebar.
9. Rebar properly installed around fill and Stage 1 manhole/Stp manhole.
10. Tank field ready to receive concrete (includes rebar on chairs or brick bats).
11. Depth of new concrete.
12. Tank field complete (includes joints, painted fill caps, and vent risers). (min. 2)
13. Open trenches.
14. Product piping in trenches (properly spaced).
15. Field dressed pipe.
16. Pea gravel backfill in trenches (show pea gravel under product lines).
17. Show installation of dispenser containment boxes.
18. Product pipe trenches ready to receive concrete (show rebar doweled into existing concrete).
19. Location of photo electric cell or contactor for canopy lights and signs.
20. Installation of new canopy footings.
21. Picture of finished canopy.
22. Pictures of location at the end of construction. (minimum 4)

L. Tank and Line Monitoring System

Tank and line monitor to be installed by Veeder Root Certified Technician. Installation to include: mounting controller near electrical panel, installing all tank level probes, sump probes, liquid level sensors (if required), all conduits and wiring, connecting all cables, and system start up. Contractor to include installation in base bid.

M. ELECTRICAL

1.0 All electrical work to conform with local and national electrical codes at a minimum.

2.0 All wires must be continuous run (no splices) from dispenser to console terminal strip box.

3.0 All spare wires should be taped and looped at ends and labeled.

4.0 Submersible pump relays must be used if 1–1/2 HP pump motors are installed. If not supplied with submersible pump, consult the Circle K construction manager.

5.0 Terminate all conduits with appropriate seal–off fittings at each end.

6.0 All conduit and junction box conduit threaded connections inside sumps or dispenser pans/sumps shall be made with thread sealant per E–3.4. Bonding straps shall be installed where required by code.

7.0 Electrical unions and pull boxes are not permitted below the top of a dispenser pan/sump. Pull boxes are not permitted inside an STP sump. The only electrical union permitted inside an STP sump can only be installed between the explosion proof junction box and the STP. Seal–offs and explosion proof junction box shall be be installed wherever shown in these drawings.

8.0 Conduit system (i.e. conduit, seal–offs, explosion proof junction boxes) inside STP sumps and dispenser pans/sumps shall be soap tested to first conduit connection outside STP sump or dispenser pan/sump at 5 psi after all connections are made and prior to installing wiring. Circle K Construction manager shall witness these soap tests.

9.0 An explosion proof junction box where shown (Crouse–Hinds Model GUP215 with S302 "O"–Ring, or owner approved equal) shall be installed per NEC Sections 501 and 514, NFPA 30, 30A and 70. Conduit shall be 1" or 3/4" Dia. galvanized rigid or 3/4" schedule 40 conduit where permitted by code.

10.0 Contractor to install two emergency shut–off switch as on the front of the building near the sales area. Shut–off switch and electrical material required to make the switch operational shall be furnished by the contractor (including emergency shut–off sign). Placement of emergency shut off switch(es) and proximity to the dispensers must be in accordance with all applicable codes and regulations. More than one might be required. Consult bid documents and Circle K construction manager for quantity and location of emergency shut–off switch(es).

11.0 Contractor shall furnish all new conduits, wiring and seal offs for dispensers, STPs and monitoring equipment per these drawings. Each STP and dispenser shall have its own circuit breaker.

12.0 All exposed conduits and gutter boxes shall be painted by contractor to match building colors.

13.0 Contractor to seal all conduit builiding penetrations and clear outs.

14.0 Contractor shall type and laminate the breaker panel labels. Contractor shall label all STP control boxes.

15.0 Contractor shall furnish and install a new 100A electrical "fuel system" sub–panel and ensure that the stores electrical system is properly balanced for existing stores. (Part of CP–1 Panels)

16.0 Gilbarco STP Isolation Relay Boxes must be installed for each dispenser. If not supplied with dispenser, consult Circle K construction manager.

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA
engineering • environmental • construction
2151 WEST HILLSBORO BLVD., SUITE 401
DEERFIELD BEACH, FLORIDA 33442
Phone: 954-427-3076
EF# 5397

NO.	DATE	REVISION DESCRIPTION
1	10/09/20	REPLACED TANKS FROM FIBERGLASS TO STEEL TANKS PER CLIENT

REVISED FOR CONSTRUCTION (METAL TANKS) 10/22/2020

RICHARD R. MORRIS
LA. REG. # 21957

TANK AND PIPING PLANS & DETAILS

SITE DESIGNATIONS:

CIRCLE K STORE # 9086
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED
MDM JOB # 19075
DATE: 12-30-2019
DESIGNED BY:
DRAWN BY: P. DOSS
CHECKED BY:
FILE NAME: 19075TA2.0.DWG

DRAWING TITLE:

GENERAL NOTES

SHEET NO:

TA-2.0

One Call 811
DIAL 811 BEFORE YOU DIG
KNOW WHAT'S BELOW.
ALWAYS DIAL 811 OR 800 292-8525 FIRST. THE CALL AND THE SERVICE ARE FREE.

STATE FIRE MARSHALL NOTES

1. ALL WORKMANSHIP, MATERIALS, EQUIPMENT, TESTING, AND INSPECTIONS RELATED TO THE FUEL SYSTEM INSTALLATION AS DESCRIBED HERE-IN SHALL BE IN ACCORDANCE WITH:
   - ADEM ADMINISTRATIVE CODE, DIVISION 6-VOLUME II FOR UNDERGROUND TANK INSTALLATIONS.
   - N.F.P.A. 30 FLAMMABLE AND COMBUSTIBLE LIQUID CODE .
   - N.F.P.A 30A AUTOMOTIVE SERVICE STATION CODE
2. A CERTIFICATION OF COMPLETION OF FUEL SYSTEM INSTALLATION INSPECTION AND COMPLETION IN ACCORDANCE WITH THE APPROVED PERMIT DOCUMENTS PREPARED BY THE ENGINEER MUST BE SUBMITTED TO FIRE MARSHAL'S OFFICE PRIOR TO FINAL INSPECTION AND OCCUPANCY.

EXTERIOR EMERGENCY FUEL SHUT-OFF

NOTE 1:
PROVIDE EXPLOSION PROOF SEALS-OFFS IN ACCORDANCE WITH ARTICLES 500, 501 AND 514 (CLASS 1, DIVISION 1 & 2) OF THE 2020 NATIONAL ELECTRICAL CODE TYPICAL FOR ALL CONDUITS IN CLASS 1 LOCATIONS, INCLUDING LOW VOLTAGE CONDUITS.

NOTE 2:
ALL CONDUITS IN CLASS 1 LOCATIONS SHALL BE GROUNDED AS PER NEC. 250.100 & 501.30.

NOTE 3:
CONDUIT FILL SHALL NOT EXCEED 25% OF SEAL-OFF AS PER NEC. 501.15(A)(6)

SEAL FITTING INSTALLATION
NTS

LEGEND:

- (N) ASPHALT PAVEMENT
- (N) CONCRETE PAVEMENT
- (N) SOD SEE LANDSCAPE PLANS
- (N) NEW
- (E) EXIST
- (F) FIRE ESTINGUISHER

SCOPE OF WORK:

PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT TO COMPLETE INSTALLATION OF NEW FUEL STORAGE TANKS, PRODUCT PIPING, DISPENSERS, AND MISC. ACCESSORIES AS DETAILED HERE-IN SHEETS TA-0 THROUGH TA-9, SUMMARIZED AS FOLLOWS:

1. SHORE (SHEETPILE) TANK HOLE; PREP HOLE & PLACE LINER, SET DEADMEN, PLACE 12" MIN. TANK BED, SET TANKS, ANCHOR & BACKFILL (1) NEW 10'ø 20K D/W REGULAR & (1) NEW 8'ø 12K D/W CONVENTIONAL & (1) NEW 10'ø 20K D/W (COMPARTMENTED, 12K PREMIUM & 8K DIESEL.) ACT-100 D/W CLADSTEEL U/G STORAGE TANKS. INSTALL NEW SUMPS, FILLS, VAPOR, VENT, TURBINE, GAUGE AND LEAK DETECTION EQUIPMENT AND STATIC GROUNDING CONNECTIONS.

   NOTE: TANKS, PIPING AND ALL PETROLEUM EQUIPMENT AND ACCESSORIES TO BE PROVIDED AND INSTALLED BY CONTRACTOR UNLESS NOTED OTHERWISE.
   SEE SHEETS TA-4 & TA-5

2. *SET NEW DISPENSER CONTAINMENT BOXES PER PLAN; INSTALL NEW DOUBLE-WALL FIBERGLASS PRODUCT LINES FROM NEW TANK STP'S TO EACH CONTAINMENT BOX; PIPE NEW CONTAINMENT BOXES TO RECEIVE NEW DISPENSERS; AND TEST.*

   NOTE: STAGE II UNDERGROUND PIPING WILL NOT BE INSTALLED. NEW DISPENSERS WILL NOT BE STAGE II EQUIPPED.

3. *INSTALL NEW VENT RISER RACK ASSEMBLY. ROUTE NEW SINGLE WALL FIBERGLASS VENT PIPING FROM TANKS TO NEW SCHEDULE 40 VENT RISER.*
4. *INSTALL NEW CONDUITS AND WIRING FROM TANK FARM AND EACH DISPENSER LOCATION. CONNECT TO STP, DISPENSER, AND GAS EQUIPMENT CIRCUITS INSIDE BUILDING.*
5. *INSTALL NEW VEEDER-ROOT TLS-450, TANK LEVEL GAUGES, ANNULAR SPACE SENSORS, STP SUMP SENSORS, WIRING, AND CONNECTIONS.*

   NOTE: VEEDER-ROOT TLS-450, PROBES AND ACCESSORIES TO BE PROVIDED BY CIRCLE K AND INSTALLED BY CONTRACTOR. SEE SHEETS TA-4 & TA-5.

6. *SET NEW MANHOLES AND PRODUCT ID; FORM & POUR NEW TANK SLAB.* 1
7. *SET & CONNECT NEW OWNER FURNISHED FUEL DISPENSERS (8) EACH (3+1+1) DOUBLE-SIDED MPD'S. INSTALL CONTRACTOR FURNISHED NEW HOSES, NOZZLES, BREAKAWAYS. STARTUP, PURGE, & CALIBRATE.*
8. *EMERGENCY STOP DISCONNECTS (2 TOTAL) TO BE INSTALLED AT CORNER OF BUILDING, (1) REMOTE AT TANK AREA AND (1) AT CASHIER SALES STATION.*
9. *INSTALL NEW NFPA 30A 9.2.5.4 WARNING SIGNS --- "NO SMOKING, STOP MOTOR..." @ EACH DISPENSER/ISLAND AS OCCURS.*

   NOTE: NFPA SIGNAGE TO BE PROVIDED AND INSTALLED BY CONTRACTOR.

10. *INSTALL NEW NFPA, 5 LBS 40 BC (MIN) ADA ACCESSIBLE FIRE EXTINGUISHER @ EACH DISPENSER ISLANDS. FIRE EXTINGUISHING SYSTEMS ARE REQUIRED TO BE INSPECTED AND TAGGED BY A LICENSED FIRE EXTINGUISHER CONTRACTOR AND MAINTAINED YEARLY.*

    NOTE: NFPA SIGNAGE TO BE PROVIDED AND INSTALLED BY CONTRACTOR.

TANK, PIPING & INSTALLATION NOTES:

1. ALL NEW PETROLEUM EQUIPMENT, MATERIALS, AND ACCESSORIES SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH APPLICABLE MANUFACTURER'S INSTRUCTIONS.
2. ALL TANK AND PIPING INSTALLATION WORK IS TO BE PERFORMED BY A STATE REGISTERED POLLUTANT STORAGE SPECIALTY CONTRACTOR.
3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE STATE, COUNTY AND MUNICIPAL REQUIREMENTS---THE 2018 INTERNATIONAL BUILDING CODE; AND THE FOLLOWING REFERENCE STANDARDS:

   LOUISIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT:
   UT 014 UNDERGROUND FUEL TANK INSTALLATIONS.

   NATIONAL FIRE PROTECTION ASSOCIATION:
   - **30 FLAMMABLE AND COMBUSTIBLE LIQUID CODE**
   - **30A AUTOMOTIVE SERVICE STATION CODE**
   - 70 NATIONAL ELECTRIC CODE

   AMERICAN PETROLEUM INSTITUTE:
   - 1615 INSTALLATION OF UNDERGROUND PETROLEUM STORAGE SYSTEMS
   - 1604 RECOMMENDED PRACTICE FOR ABANDONMENT OR REMOVAL OF USED U.G. STORAGE TANKS

   PETROLEUM EQUIPMENT INSTITUTE:
   - RP100 RECOMMENDED PRACTICES FOR INSTALLATION OF U.G LIQUID STORAGE TANKS

   OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION:
   CONSTRUCTION SAFETY AND HEALTH REGULATIONS SUBPART P, 1902.50 THRU 1926.653

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING UNDERGROUND UTILITIES IDENTIFICATION BY CONTACTING AL. ONE CALL (1-800-292-8525) AND APPLICABLE MUNICIPAL JURISDICTION AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GIVING REQUIRED NOTICE(S) AND SCHEDULING APPLICABLE CITY, COUNTY AND/OR STATE INSPECTIONS AS REQUIRED FOR PERMIT CLOSE OUT(S).

ELECTRICAL NOTES:

1. ELECTRICAL INSTALLATION SHALL COMPLY WITH NEC 2018.
2. N.E.C. ARTICLE 514 CONDITIONS FOR HAZARDOUS AREAS AND FUEL DISPENSING FACILITIES APPLY.
3. PROVIDE EXPLOSION PROOF SEALS-OFFS IN ACCORDANCE WITH ARTICLES 514.3 AND 514.9(A) & (B) FOR ALL CONDUITS IN CLASS 1 HAZARDOUS LOCATIONS, INCLUDING LOW VOLTAGE CONDUITS.
4. CIRCUIT DISCONNECTS TO BE PROVIDED AS PER NEC 514.11(A) AND NEC 514.13.
5. EXTERIOR EMERGENCY CONTROLS TO BE INSTALLED AS PEC NEC 514.11(B). REFER TO THIS SHEET FOR LOCATIONS.
6. ALL UNDERGROUND ELECTRICAL CONDUIT IN HAZARDOUS AREA TO BE RIGID METAL CONDUIT (RMC) AND TO BE BURIED AT MIN. 24".
7. SEE DETAILS SHEETS TA-1 THROUGH TA-9 ATTACHED AND BUILDING/SITE ELECTRICAL FOR ADDITIONAL DETAILS.

CLIENT:

CIRCLE K STORES INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA
engineering • environmental • construction
3251-O SW 13th Drive * Deerfield Beach, FL
Phone: (954) 427-3076
EF# 5397

NO.	DATE	REVISION DESCRIPTION
2	10/09/20	REPLACED TANKS FROM FIBERGLASS TO STEEL TANKS PER CLIENT
1	6/25/20	REVISED DISPENSER & PIPING

RICHARD R. MORRIS
LA. REG # 21957

TANK AND PIPING PLANS & DETAILS

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED	MDM JOB # 19075
DATE: 12-30-2019	
DESIGNED BY:	
DRAWN BY: JAG	FILE NAME: 19075-CD-TANK
CHECKED BY: P.DOSS	

DRAWING TITLE:

FUEL PIPING PLAN

SHEET NO:

TA-2.1

REVISED FOR CONSTRUCTION (METAL TANKS) 10-22-2020

TOOLED CONTROL JOINT

TANK SLAB EDGE

TYPICAL TANK SLAB PLAN

SCALE: 3/8" = 1'-0"

NOTE:
REFER TO SITE PLAN FOR ACTUAL TANK ORIENTATION AND TANK CONFIGURATION

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA

engineering • environmental • construction

2151 WEST HILLSBORO BLVD., SUITE 401
DEERFIELD BEACH, FLORIDA 33442
Phone: 954-427-3076

EF# 5397

NO.	DATE	REVISION DESCRIPTION
1	10/09/20	REPLACED TANKS FROM FIBERGLASS TO STEEL TANKS PER CLIENT

REVISED FOR CONSTRUCTION (METAL TANKS) 10/22/2021

RICHARD R. MORRIS
LA. REG # 21957

TANK PAD PIPING PLANS & DETAILS

SITE DESIGNATIONS:

CIRCLE K STORE # 9086
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED
MDM JOB # 19075
DATE: 12-30-2019
DESIGNED BY:
DRAWN BY: P. DOSS
FILE NAME: 19075TA3.0.DWG
CHECKED BY:

DRAWING TITLE:

TANK PAD PLAN & DETAILS

SHEET NO:

TA-3.0

LEGEND

P — PREMIUM UNLEADED	P
R — REGULAR UNLEADED	R
V — VENT	V
D — DIESEL	D
NE — NON-ETHANOL	NE

F = FILL
V = TANK VENT
T = TANK LEVEL MONITOR
STP = SUBMERSIBLE TURBINE PUMP
AS = ANNULAR SPACE

N.T.S.

1 / TA-3 SCHEMATIC-GENERAL TANK, PRODUCT PIPING LAYOUT (SEE SITE PIPING & ELECTRICAL PLANS FOR SITE SPECIFIC REQUIREMENTS)

N.T.S.

2 / TA-3 VENT RISER DETAIL

TYPICAL PIPELINE TRENCH

NOTE:

1. SEE SHEET TA-2.1 FOR SITE SPECIFIC PRODUCT DISPENSER AND PIPING LAYOUT NUMBER OF PRODUCT DISPENSER VARIES.
2. SEE TA-3.2 FOR GENERAL CONDUIT REQUIREMENTS. SEE SITE ELECTRICAL PLAN FOR SITE SPECIFIC ELECTRICAL REQUIREMENTS LAYOUT
3. CONTRACTOR OF VERIFY PRODUCT CONFIGURATION AND PIPE PRODUCT ACCORDINGLY PRIOR TO INSTALLATION OF ANY EQUIPMENT OR PIPING.

CLIENT:

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RICHARD R. MORRIS
LA. REG. # 31957

TANK AND PIPING PLANS & DETAILS

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2336 WESTWOOD ROAD
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SCALE: AS NOTED
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DESIGNED BY:
DRAWN BY: P. DOSS
FILE NAME: 19075TA3.1 & 3.2.DWG
CHECKED BY:

DRAWING TITLE: TANK & PIPING DTLS

SHEET NO: TA-3.1

REVISED FOR CONSTRUCTION (METAL TANKS) 10/22/2020

NOTE:

1. SEE SHEET TA-3.1 FOR GENERAL PRODUCT PIPING LAYOUT. SEE SHEET TA-2.1 FOR SITE SPECIFIC TANK & PIPING INFORMATION.
2. SEE SITE ELECTRICAL PLAN FOR SITE SPECIFIC ELECTRICAL REQUIREMENTS LAYOUT
3. CONTRACTOR OF VERIFY PRODUCT CONFIGURATION AND PIPE PRODUCT ACCORDINGLY.

LEGEND

1"C — ELECT. CONDUIT 3/4" TO 1"— C

FILL = F
TANK VENT = V
TANK LEVEL MONITOR = T
SUBMERSIBLE TURBINE PUMP = STP
ANNULAR SPACE = AS

N.T.S.

1 / TA-3 SCHEMATIC-GENERAL CONDUIT LAYOUT AND ELECTRICAL PLAN (SEE SITE PIPING & ELECTRICAL PLANS FOR SITE SPECIFIC REQUIREMENTS)

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RICHARD R. MORRIS
LA. LIC. # 31957

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DRAWN BY: P. DOSS
FILE NAME: 19075 A3.1 & 3.2.DWG
CHECKED BY:

DRAWING TITLE:

CONDUIT & ELEC. DETAILS

SHEET NO:

TA-3.2

20,000 GALLON - UST PLAN VIEW AND PROFILE
20,000 GALLON GLASTEEL II - D/W - U/G - 2 COMPARTMENT

20,000 GALLON - UST PLAN VIEW AND PROFILE
GLASTEEL1746 TYPE I - D/W - U/G

12,000 GALLON - UST PLAN VIEW AND PROFILE
GLASTEEL TYPE II - D/W - U/G

CLIENT:

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TANK AND PIPING PLANS & DETAILS

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CHECKED BY:

DRAWING TITLE:

TANK SECTIONS

SHEET NO:

TA-4.0

REVISED FOR CONSTRUCTION (METAL TANKS) 10-22-2021

2 TA4.1 STP CONTAINMENT SUMP PLAN VIEW
N.T.S.

3.1 TA4.1 REGULAR FUEL TANK ONLY CUTAWAY VIEW OF STP SUMP
N.T.S.

3 TA4.1 CUTAWAY VIEW OF STP SUMP
N.T.S.

NO	EQUIPMENT DESCRIPTION	MANUFACTURER	MODEL	SUPPLIED BY	INSTALLED BY	NOTES
1A	20K D/W CLAD STEEL U/G STORAGE TANK (COMPARTMENTED 12K GAL CONVENTIONAL-8K GAL. DIESEL), DRY ANNULAR, AND SUMPS PER PLAN	STEEL TANK INSTITUTE ACT-100, UL LISTED, AS FABRICATED BY WATCO, HALL, MODERN WELDING, OR EQUAL	ACT-100 DOUBLE WALL COMPOSITE STEEL UST, UL 58 (TANK)/UL 1746 (CLADDING)	CK	G.C.	SEE TA-0, TA-3, TA4
1B	20K D/W CLAD STEEL U/G STORAGE TANK (COMPARTMENTED 15K GAL REGULAR-5K GAL. PREMIUM), DRY ANNULAR, AND SUMPS PER PLAN	STEEL TANK INSTITUTE ACT-100, UL LISTED, AS FABRICATED BY WATCO, HALL, MODERN WELDING, OR EQUAL	ACT-100 DOUBLE WALL COMPOSITE STEEL UST, UL 58 (TANK)/UL 1746 (CLADDING)	CK	G.C.	SEE TA-0, TA-3, TA4
1C	20K D/W CLAD STEEL U/G STORAGE TANK (REGULAR), DRY ANNULAR, AND SUMPS PER PLAN	STEEL TANK INSTITUTE ACT-100, UL LISTED, AS FABRICATED BY WATCO, HALL, MODERN WELDING, OR EQUAL	ACT-100 DOUBLE WALL COMPOSITE STEEL UST, UL 58 (TANK)/UL 1746 (CLADDING)	CK	G.C.	SEE TA-0, TA-3, TA4
2	SUBMERGED TURBINE PUMP- VARIABLE SPEED & LENGTH (2 HP)	FE PETRO	STPMVS2-VL2	CK	G.C.	
3	STP CONTROL BOX VARIABLE SPEED CONTROLLER	FE PETRO	MAG VFC 587420800	CK	G.C.	
4	MECHANICAL LINE LEAK DETECTOR	FE PETRO	STP-MLD-D 403170903	CK	G.C.	
5	2" BALL VALVE	UNIVERSAL	213FP-20	CK	G.C.	
6	MxM BRAIDED STAINLESS STEEL FLEX CONNECTOR (2"x12")	HOSE MASTER	FSMS	CK	G.C.	
7	2" FRP ADAPTER- BELL X NPT MALE	AMERON LCX		CK	G.C.	
8	2"" SUMP ENTRY BOOT	BRAVO	F-20-FF-LCX	CK	G.C.	
9	2" TERMINATION FITTING WITH TEST PORT	OPW	TBA-0200	CK	G.C.	
10	44" ROUND COMPOSITE CAM LOCK MANWAY W/10" SKIRT	EMCO WHEATON	A0716-044C	CK	G.C.	
11	4"X4"X2" EXTRACTOR FITTING W/O CAGE	OPW	233-4420	CK	G.C.	
12	SWIVEL VAPOR RECOVERY ADAPTER, BRASS FOR STAGE I VR	EMCO WHEATON	A0076-124S	CK	G.C.	
13	4" STAGE I VAPOR ADAPTER CAP	EMCO WHEATON	A0099-002	CK	G.C.	
14	4"x 15' RIVITLESS OVERFILL DROP TUBE & OVERFILL VALVE ASSEMBLY	EMCO WHEATON	A1100-056S	CK	G.C.	UPPER TUBE 89" LOWER TUBE 104"
15	FILL-5 GAL. D.W. SPILL CONTAINMENT, NO DRAIN, MONITOR STAINLESS STEEL BUCKETS W/ CAST IRON LIDS.	EMCO WHEATON	A1005-518GP	CK	G.C.	
16	VAPOR-5 GAL. THREAD ON S.W. SPILL CONTAINMENT, NO DRAIN, STAINLESS STEEL SINGLE WALL.	EMCO WHEATON	A1005-518A	CK	G.C.	
17	4" FILL PIPE, SWIVEL, ADAPTOR, BRASS	EMCO WHEATON	A0030-124S	CK	G.C.	
18	4" TIGHT FILL CAP, EPOXY COATED	EMCO WHEATON	A0097-005	CK	G.C.	
19	4"x24" THIN WALL RISER MANHOLE (DIESEL TANK ONLY).	FE PETRO	400168924	CK	G.C.	
20	FILL PIPE ID TAGS W/PRODUCT ID & TANK CAPACITY	–	DROPS PAINTED TO APPROPIATE COLORS	CK	G.C.	
21	3M SCOTCHRAP TAPE	3M	TYPE 51 20 MIL	G.C.	G.C.	
22	16' TANK STICK (TO BE LEFT @ STORE)	BAGBY	BG1-16	CK	G.C.	
23	42" DIA. OCTAGON FIBERGLASS CONTAINMENT SUMP & LID ASSEMBLY	CONTAINMENT SOLUTIONS, INC.	SW PTS (WT34)42/8-4	CK	G.C.	
24	STANDARD STP 65psi HIGH PRESSURE CHECK VALVE	FE PETRO	402459931			
25	A/G COMPATIBLE SYPHON CHECK VALVE ASSEMBLY	FE PETRO	400137937			
26	18" STANDARD MANHOLE W/ 10" SKIRT	EMCO WHEATON	A0717-018	CK	G.C.	
27	TURN BUCKLES & ANCHORS			CK	G.C.	
28	HOLD DOWN STRAPS (10' DIA. OR 8' DIA)			CK	G.C.	
29	1.5" x 12" MxM STAINLESS STEEL FLEX CONNECTOR	HOSE MASTER	FSMS120150	G.C.	G.C.	
30	4" GALV. RISER- LENGTH AS REQUIRED			G.C.	G.C.	SEE NOTE AA
31	JUNCTION BOX		CH GUP215	G.C.	G.C.	
32	SEAL OFF		CH EYD2	G.C.	G.C.	
33	4" PIPE CAP - SCH. 40 GALV.			G.C.	G.C.	
34	3" DIA PLUG FOR EXTRACTOR CROSS			G.C.	G.C.	
35	INTERSTITIAL PROBE	VEEDER ROOT	794390-420	CK	G.C.	SEE TA-2, SECTION L
36	SUMP PROBE	VEEDER ROOT	794380-208	CK	G.C.	SEE TA-2, SECTION L
37	VEEDER-ROOT AUDIBLE OVERFILL ALARM & ACKNOWLEDGEMENT SWITCH	VEEDER ROOT	790091-001 / 790095-001	CK	G.C.	
38	VEEDER-ROOT TLS 450 TANK GAUGE & LEAK DETECTION	VEEDER ROOT		CK	G.C.	SEE TA-2, SECTION L
39	3/4" OR 1" SUMP ENTRY BOOT	BRAVO	F-07-FF OR F-10-FF	CK	G.C.	AS OCCURS
40	RIGID METAL CONDUIT (RMC)			G.C.	G.C.	SEE TA-3.1
41	2" (FRP) COAX FIBERGLASS PIPE	AMERON LCX		CK	G.C.	
42	2" THREAD ON PRESSURE VACUUM VENT W/ 3" PRESSURE WATER COLUMN AND 8" VACUUM WATER COLUMN	OPW	623V-2203			
43	4" DURATUFF PIPE CAP	OPW	116-7085	CK	G.C.	
44	2"ø ALUMINUM TANK VENT	OPW	23-0033	CK	G.C.	
45	2"ø SINGLE WALL FIBERGLASS PIPE	AMERON LCX		CK	G.C.	

7 TA4.1 SUMP PENETRATION DETAIL
N.T.S.

4 TA4.1 HYDROSTATIC INTERSTITIAL SENSOR DETAIL
N.T.S.

5 TA4.1 FILL & STAGE I VAPOR RECOVERY DETAIL
N.T.S.

5A 6 DIESEL TANK EXTRACTOR DETAIL
N.T.S.

7 TA4.1 TANK GAUGE/PROBE DETAIL
N.T.S.

NOTES

- (A) CLEAN COMPACTABLE BACKFILL. ALL OTHER MATERIAL MUST BE APPROVED BY TANK MANUFACTURER AND OWNER'S FIELD REPRESENTATIVE.
- (B) PRODUCT PIPE & FITTINGS TO BE AMERON LCX AND INSTALLED PER MANUFACTURE'S SPECIFICATIONS
- (C) SLOPE CONCRETE AWAY FROM ALL MANHOLES 1" RISE OVER 12" RUN. EXCEPT WHERE INDICATED.
- (D) DO NOT USE THREAD SEALANT ON THREADS COMMON TO CAGE AND BASE. WHEN INSTALLING CAGE INTO BASE, LUBRICATE THREADS WITH LIGHT COATING OF GREASE. DO NOT OVERTIGHTEN.
- (E) TANK BOTTOMS SHALL BE INSTALLED LEVEL.
- (F) INSTALL LID ONTO SUMP RISER AND SUMP RISER ONTO SUMP BASE USING ALL SUPPLIED GASKETS/ "O" RINGS, BOLTS, STEEL PLATES, ETC. PER SUMP MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- (G) REINFORCE CONCRETE SLAB AROUND MANHOLE W/ 3-#4 REBAR 8' IN LENGTH 9"O.C.. PLACE REBAR 6" FROM SIDES OF BOX. MIN. 2" COVER.
- (H) 8" THICK 4000 PSI CONCRETE SLAB REINFORCED W/ #3 REBAR @ 18" O.C. TANK SLAB TO EXTEND 2' PAST TANK HOLE IN ALL DIRECTIONS.
- (I) MINIMUM BEND RADIUS 4".
- (J) 3/4" CONDUIT FROM EACH SUBMERSIBLE PUMP TO BUILDING. TERMINATE WITH SEAL-OFF PER NFPA SPECIFICATIONS.
- (K) 3/4" CONDUIT FOR STP SUMP SENSORS, LOOPED FROM TANK GAUGE.
- (L) ALL PENETRATIONS MUST BE PERPENDICULAR TO CONTAINMENT SUMPS.
- (M) CUT AND POSITION FILL TUBE WITH ANGLE AWAY FROM SUBMERSIBLE PUMP. OWNER'S ENGINEER SHALL VERIFY DROP TUBE HEIGHT.
- (N) INSTALL TANK ID. MARKERS IN THE SPILL CONTAINMENT MANHOLES USING WORM CLAMP AROUND FILL RISERS. INCLUDE OXYGENATED FUEL DATE TAGS WHERE APPLICABLE. SECURE IN PLACE.
- (O) PIPING SHALL BE LAID AND CONTINUOUSLY SUPPORTED ON A 6" COMPACTED BEDDING OF PEA GRAVEL. NO PIPING SHALL BE SUPPORTED BY BLOCKS, PLANKS, OR OTHER DEBRIS. MAINTAIN 7" MINIMUM COVER BETWEEN SLAB BOTTOM AND TOP OF FRP PIPE/FITTINGS. PIPING STANDARD FALL TO BE 1/4" PER FOOT. VAPOR LINE FALL TO BE VERIFIED BY CIRCLE K CONSTRUCTION MANAGER AFTER PIPING IS LAID ON GRAVEL BEDDING.
- (P) INTERIOR OF FIBERGLASS CONTAINMENT SUMP TO BE CLEAR OF SOIL, TRASH AND ANY LIQUID.
- (Q) THOROUGHLY HAND CLEAN WITH WIRE BRUSH THE G.I. RISER SURFACE WITHIN 3" OF EXISTING TANK FITTING, ALL METALLIC COMPONENTS ABOVE TANK AND LOWER 1" OF SPILL CONTAINER. APPLY EPOXY PRIMER TO THESE AREAS. WRAP WITH 3M TAPE 20 MIL THICK.
- (R) 4"ø G.I. NIPPLE, TIGHT FILL ADAPTER (OR STAGE I VR DRY BREAK) AND LOCKING CAP. MAINTAIN 1 1/2" TO 2" BETWEEN CAP AND OVERFILL CONTAINER COVER. USE STABILIZER BARS SUPPLIED WITH OVERFILL CONTAINER TO ESTABLISH CORRECT FINISHED ELEVATION.
- (S) THE TORQUE RECOMMENDATION FOR TIGHTENING THE EMCO SPILL CONTAINERS TO THE RISER PIPES IS 250FT. LBS. MAXIMUM.
- (T) 5 1/2" BELOW THE MANHOLE RIM ELEVATION.
- (U) VAPOR RECOVERY ADAPTOR FINISHED HEIGHT TO BE 3 1/2" TO 4 1/2" BELOW THE MANHOLE RIM ELEVATION.
- (V) "T&B" MODEL 3902 OR "O.Z./GEDNEY" MODEL G-100G 1/2"-1" HEAVY DUTY GROUNDING CLAMP OR OWNER APPROVED EQUAL.
- (W) #5 REINFORCING STEEL BAR, MINIMUM 8' LONG PLACED HORIZONTALLY IN NATIVE SOIL. BAR IS TO BE AT 30" MINIMUM BELOW CONCRETE SLAB.
- (X) #8 BRAIDED OR SOLID COPPER GROUNDING CONDUCTOR ROUTED IN SERIES BETWEEN BOTH SPILL CONTAINERS. CONNECT TO SPILL CONTAINERS AT GROUNDING STUDS PROVIDED. SECURELY CRIMP TO CONDUCTOR WITH "HYTOOL" NO. MR4C OR MY29. SPLICES ARE NOT PERMITTED BETWEEN GROUNDING STUDS AND/OR GROUNDING ROD.
- (Y) SLOPE PER SOILS REPORT OR TANK MANUFACTURER INSTALLATION INSTRUCTIONS

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REVISED FOR CONSTRUCTION (METAL TANKS) 10/22/2020

RICHARD R. MORRIS
LA. REG # 21957

TANK AND PIPING PLANS & DETAILS

SITE DESIGNATIONS:

CIRCLE K STORE # 9086
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED
MDM JOB # 19075
DATE: 12-30-2019
DESIGNED BY:
DRAWN BY: P. DOSS
FILE NAME: 19075TA4.1.DWG
CHECKED BY:

DRAWING TITLE:

TANK EQUIPMENT DETAILS

SHEET NO:

TA-4.1

GENERAL NOTES:

1. -CAPACITY 12,000 GALLONS, (12,000 TOTAL)
   -CAPACITY 8,000/12,000 GALLONS, (20,000 TOTAL).
   -CAPACITY 20,000 GALLONS.
2. FAB. PER UL-58 & UL-1746 SPEC'S., LABELS REQ'D.
3. INSTALL STRIKER PLATES UNDER ALL OPENINGS.
4. PRESSURE TEST PRIMARY TANK AT 3-5 PSI AIR, MAKE LEAK FREE PRIOR TO APPLYING SEPARATOR & JACKET.
5. APPLY SEPARATOR OVER EXTERIOR OF PRIMARY TANK & THEN COAT WITH MIN. 100 MILS GLASTEEL PER UL-1746.
6. AIR TEST INTERSTITIAL SPACE AT 1 PSI AIR MAX.
7. SPARK TEST JACKET AT 35,000 VOLTS.
8. TEST SECONDARY TANK BY APPLYING A VACUUM ON INTERSTITIAL SPACE (12" Hg. MIN.), HOLD FOR 24 HOURS.
9. LEAVE VALVES & GAUGES IN PLACE TO VERIFY VACUUM.
10. SHIP TANK WITH VACUUM ON INTERSTITIAL SPACE.
11. CLOSE OFF ALL OPENINGS PRIOR TO SHIPMENT.

DETAIL #1

12,000 GALLON GLASTEEL II - D/W - U/G

NOTE:
REFER TO GEOTECHNICAL REPORT FOR SHOARING, DEWATERING AND SPECIAL TANK EXCAVATION PREPARATION AND RECOMMENDATIONS.

NOTE:
BACKFILL MUST BE COMPACTED IN 12" LIFTS MAXIMUM OR PEAROCK MAY BE USED

20,000 GALLON GLASTEEL II - D/W - U/G - 2 COMPARTMENT

ANCHORING NOTES:

NEW U/G TANKS TO BE ANCHORED WITH DEADMAN TIEDOWNS

REFER TO TANK MANUFACTURER'S ANCHORING DETAILS AND REQUIREMENTS.

DEADMAN TO NOT ENCROACH BENEATH TANK SHELL

DEADMEN PROVIDED AND INSTALLED BY CONTRACTOR

NOTE:
REFER TO PE1/RP100-90 "RECOMMENDED PRACTICES FOR THE INSTALLATION OF UNDERGROUND LIQUID STORAGE TANKS", SECTION 5.

N.T.S.

1 / TA-4 UNDERGROUND TANK SECTION

20,000 GALLON GLASTEEL TYPE I - D/W - U/G

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DRAWING TITLE:

TANK PROFILES

SHEET NO:

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REVISED FOR CONSTRUCTION (METAL TANKS) 10/22/2021

1 / TA-5 GILBARCO, ENCORE 700 NL3, 4 OR 5-PRODUCT, NOZZLED DISPENSER W/CONTAINMENT BOX
N.T.S.

TYP. DISPENSER BASE DIAGRAM
(PIPE & CONDUIT LOCATIONS)
GILBARCO ENCORE 700 DISPENSER
N.T.S.

2 / TA-5 DEEP DISPENSER BOX AND PIPING TRENCH SECTION
N.T.S.

NOTES:
1. PRODUCT LINES TO SLOPE FROM DISPENSERS DOWN TO TANKS ⅛" PER FOOT MIN.
2. SHEAR SECTION OF EMERGENCY SHUT-OFF VALVE IS TO BE EVEN WITH THE TOP OF THE PUMP ISLAND ±½".

NOTES

- (A) THE SHEAR PLANE OF THE IMPACT VALVE IS TO BE MOUNTED NO MORE THAN +/- 1/2" FROM THE TOP GRADE OF THE ISLAND.
- (B) ASPHALTIC EXPANSION MATERIAL SHALL BE KERFED AT 1/2" INTERVALS IN AREAS OF BENDS. THIS FORMED MATERIAL SHALL BE SECURELY FASTENED TO THE ISLAND AT FINISHED GRADE PRIOR TO CONSTRUCTION OF ADJACENT FLATWORK. ADJACENT FLAT CONCRETE SHALLOW SHALL BE EDGED ALONG THE EXPANSION MATERIAL USING 1/4" RADIUS EDGING TOOL.
- (C) APPLY APPROVED THREAD SEALANT TO ALL RISERS AND THREADED FITTINGS.
- (D) VENT LINE SHOULD STAND NO LESS THAN 4' FROM OUTSIDE EDGE OF CURB.
- (E) PIPING SHALL BE LAID AND CONTINUOUSLY SUPPORTED ON A 6" COMPACTED BEDDING OF PEA GRAVEL. NO PIPING SHALL BE SUPPORTED BY BLOCKS, PLANKS, OR OTHER DEBRIS. MAINTAIN 7" MINIMUM COVER BETWEEN SLAB BOTTOM AND TOP OF FRP PIPE/FITTINGS.
- (F) DEEP METAL PAN WITH NON-ADA FRAME. INCLUDES PRE-MAOUNTED PRODUCT AND VAPOR SHEAR VALVES WITH ALL PENETRATION FITTINGS INCLUDED BUT NOT INSTALLED. NO FLEX CONNECTORS OR VAPOR PIPE ASSEMBLY PROVIDED
- (G) BOLLARDS TO BE PRIMED AND CONTRACTOR TO FURNISH & INSTALL IDEAL SHIELD STANDARD GRAY VINYL SLEEVES COLOR: PANTONE 11C
- (H) PRODUCT LINES SHALL SLOPE CONTINUOUSLY UPWARD FROM STP SUMP A MINIMUM OF 1/8" PER FOOT.
- (I) ITEMS (6)(7)(9)(10) & (11) ARE INCLUDED IN THE SUMP KIT. ENTRY FITTINGS IN DISPENSER PAN SHALL BE INSTALLED BY CONTRACTOR. MINIMUM BEND RADIUS 4" FOR ELECTRICAL CONDUITS.

6 / TA-5 BOLLARD DETAIL
N.T.S.

NOTE:
* TO BE MINIMUM UNLESS BOLLARD IS CONTACT WITH THE CANOPY FOOTING

5 / TA-5 STANDARD @ GRADE DISPENSER
N.T.S.

N.T.S.

4 / TA-5 DISPENSER CONTAINMENT BOX AND PIPING TRENCH PLAN VIEW

NOTE: ALL EQUIPMENT TO BE INSTALLED BY CONTRACTOR

NO	EQUIPMENT DESCRIPTION	MANUFACTURER	MODEL	QTY	SUPPLIED BY	NOTES
1	FOUR PRODUCT MPD	GILBARCO	CIRCLE K BRANDED 500/700 S 3+1	0	OWNER	ENCORE BLEND (3+1) W. VAPOR VAC
2	THREE PRODUCT MPD	GILBARCO	CIRCLE K BRANDED 500/700 S 3+0	0	OWNER	ENCORE BLEND (3+0) W. VAPOR VAC
2A	FIVE PRODUCT MPD	GILBARCO	CIRCLE K BRANDED 500/700 S 3+1+1	8	OWNER	ENCORE BLEND (3+1+1) W. VAPOR VAC
3	VAPOR VAC (IF REQUIRED)	GILBARCO	FOR ADVANTAGE		OWNER	
4	2" SUMP ENTRY BOOT	BRAVO	F-20-FF-LCX		OWNER	
5	2" TERMINATION FITTING WITH TEST PORT	OPW	TBA-0200		–	
6	1 1/2"x12" MxM SWIVEL FLEX CONNECTOR (VAPOR)	HOSEMASTER	FSMS-120150		OWNER	SEE NOTE "I"
7	1 1/2"x18" FxM SWIVEL FLEX CONNECTOR (PRODUCT)	HOSEMASTER	FSMS-180150			SEE NOTE "I"
8	BRAVO / GILBARCO ENCORE B7000	BRAVO	B7383-EO-SPLIT-F4L-CK		OWNER	SEE NOTES "F" & "I"
9	2" TERMINATION STYLE SUMP ENTRY ASSEMBLY (FOR DISPENSER SUMP)	AMERON LCX	22856821		OWNER	SEE NOTE "I"
10	1" FLEXIBLE ENTRY BOOTS (POWER HOME RUN, DISPENSER DATA LOOPED)	BRAVO	F-10-FF		OWNER	SEE NOTE "I"
11	3/4" PASS THROUGH FIBERGLASS FLANGE (INTERCOM)	BRAVO	F-07-FF		OWNER	SEE NOTE "I"
12	1-1/2" MALE, EMERGENCY VALVE W/ DOUBLE POPPET (COMBO BODY)	OPW	10BHMP-5830		OWNER	
13	2" LCX 35 PSI RUBBER CLOSURE W/TEST BOOT	AMERON	22482736		OWNER	
14	VENT DOWNWARD, ALUMINUM, 1.5" & 2" FEMALE, NPT	EMCO	A0785-001		OWNER	DIESEL/DEF VENT CAP
	VENT P-V, ALUMINUM, 2" PRES 3" VAC, 2" NPT	EMCO	A0084-200		OWNER	GASOLINE VENT CAP
15	NOZZLE-BLACK, VAPOR RECOVERY BELLOWLESS ASSIST SYSTEM (SPEC TYPE) NOZZLE (NON STAGE II ALT.)	OPW OPW	OP12VW 11BP-0400		OWNER	
16	3/4" HOSES- 8'-6" FLEXSTEEL VAPOR ASSIST HOSE	GOODYEAR	GY8'6"VAPOR		OWNER	
17	WHIP HOSE- 1' FLEXSTEEL VAPOR ASSIST HOSE WHIP HOSE- 1' (NON STAGE II ALT.) (OR EQUIVALENT)	GOODYEAR	GY1' VAPOR		OWNER	
18	INVERTED BREAKAWAY BREAKAWAY (NON-STAGE II ALT.) (OR EQUIVALENT)	HUSKY HUSKY 336. (DIESEL)	4034VR		OWNER	
19	WATER INDICATING PASTE (TO BE LEFT @ STORE)	SARGEL	SASR160		OWNER	
20	THREADED REDUCER BUSHING	–	–		G.C.	
21	SPLATTER SHIELD, BLACK	RICHARDS	R1503R-BK		OWNER	
22	3 M INTERCOM / WIRED TO MPD SPEAKERS	3M	D 20 12 CHANNEL		OWNER	
23	JUNCTION BOX		CH GUP215		CONT.	
24	SEAL OFF		CH EYD2		CONT.	
25	6" DIA. CONC. FILLED STEEL PIPE BOLLARD WITH VINYL SLEEVE				GC	
26	2" COAXIAL AMERON LCX PRODUCT PIPE	AMERON INTERNATIONAL	DUALOY 3000/LCX		OWNER	
27	2" AMERON LCX PRODUCT PIPE FOR VENT RISER	AMERON INTERNATIONAL	DUALOY 3000/LCX		OWNER	
28	2" X 2" X 2" FRP TEE	AMERON INTERNATIONAL	DUALOY 3000/LCX		OWNER	
29	FIBERGLASS TRANSITION SUMP 48" X 48" X 42"	–	–		OWNER	
30	2" FIBERGLASS TEE (FOR ALCOHOL)	AMERON LCX	22378007		OWNER	
31	2" CLAMSHELL TEE	AMERON LCX	22469203		OWNER	
32	2" 90° ELBOW	AMERON LCX	22372108		OWNER	
33	2" LCX 2-PIECE 90° CLAMSHELL ELBOW	AMERON LCX	22469201		OWNER	
34	2" SLEEVE COUPLING	AMERON LCX	22850707		OWNER	
35	2" 45° ELBOW	AMERON LCX	22371508		OWNER	
36	2" LCX 2-PIECE 45° CLAMSHELL ELBOW	AMERON LCX	22469202		OWNER	
37	2" LCX 2-PIECE CLAMSHELL COUPLING	AMERON LCX	22469204		OWNER	
38	2" x 1 1/2" REDUCER BUSHING	AMERON LCX	2Q370503		OWNER	
39	2" BELL x MALE ADAPTER	AMERON LCX	22370202		OWNER	
40	PSX20 8 OZ. SINGLE PACK ADHESIVE KIT	AMERO LCX	80210101		OWNER	
41	ENCORE DEFLECTOR PLATE	BRAVO	ENCORE		OWNER	

CLIENT:

CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA
engineering • environmental • construction
2151 WEST HILLSBORO BLVD., SUITE 401
DEERFIELD BEACH, FLORIDA 33442
Phone: 561-427-3076
EF# 5397

NO.	DATE	REVISION DESCRIPTION
2	10/19/20	REMOVE STAGE II VAPOR RECOVERY FROM DETAIL#2
1	10/09/20	REPLACED TANKS FROM FIBERGLASS TO STEEL TANKS PER CLIENT

REVISED FOR CONSTRUCTION (INSTALL TANKS) 10/22/2021

RICHARD R. MORRIS
LA. REG # 21957

TANK AND PIPING PLANS & DETAILS

SITE DESIGNATIONS:

CIRCLE K STORE # 9086
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED
MDM JOB # 19075
DATE: 12-30-2019
DESIGNED BY:
DRAWN BY: P. DOSS
FILE NAME: 19075TA5.DWG
CHECKED BY:

DRAWING TITLE:
AUTOMOBILE DISPENSER DETAILS

SHEET NO:
TA-5.0

CIRCLE K — VEEDER ROOT MONITORING SYSTEM

		PART NO.	D/W TANK D/W PIPING	D/W TANK S/W PIPING	S/W TANK D/W PIPING	S/W TANK S/W PIPING	D/W TANK S/W PIPING CA, FL	S/W TANKS S/W PIPING CA, FL	COMMENTS
	TANK SUMP COMPONENTS								
1	TLS-450+ MONITORING CONSOLE WITH PRINTER	847090-022	1	1	1	1	1	1	BASE SYSTEM
2	EXPANTION MODULE FOR TLS-450+	329260-001	1	1	1	1	1	1	FREE COMPONENT FOR FUTURE UPGRADES
3	CSLD SOFTWARE	330160-002			1	1		1	
4	FOUR RELAY OUTPUT INTERFACE MODULE	329359-001	1	1	1	1	1	1	REQUIRED FOR POSITIVE SHUTDOWN
5	FOUR INPUT PROBE INTERFACE MODULE	329356-002	1	1	1	1	1	1	
6	EIGHT INPUT LIQUID SENSOR INTERFACE MODULE	329358-001	1	1	1	1	1	1	DRY ANULAR, NONDISCRIMINATING SUMP SENSOR
	TANK SUMP COMPONENTS								
1	10' MAG 1 FOR 10' DIAMETER TANKS	847390-109	1/TANK	1/TANK	1/TANK	1/TANK	1/TANK	1/TANK	TANK LEVEL PROBE - NEED TO VERIFY DIA.
2	8' MAG 1 FOR 8' DIAMETER TANKS	846390-107							TANK LEVEL PROBE - NEED TO VERIFY DIA,
3	6' MAG 1 FOR 6' DIAMETER TANKS	846390-104							TANK LEVEL PROBE - NEED TO VERIFY DIA.
4	MAG PROBE INSTALL KIT - GASOLINE	886100-000	1/TANK	1/TANK	1/TANK	1/TANK		1/TANK	
5	4" RISER CAP AND RING KIT	312020-952	1/TANK	1/TANK	1/TANK	1/TANK	1/TANK	1/TANK	
6	PIPING SUMP SENSOR (NONDISCRIMINATEING)	749380-208	1/SUMP	1/SUMP	1/SUMP	1/SUMP	1/TANK	1/SUMP	
7	SUMP SENSOR MOUNTING KIT (ONE PER SUMP SENS.)	330020-012	1/SUMP	1/SUMP	1/SUMP	1/SUMP	1/SUMP	1/SUMP	
8	DRY INTERSTITAL SENSOR FOR ANULAR SPACE - 10' FRP	749390-409	1/TANK	1/TANK			1/SUMP		
9	INTERSTITIAL CAP AND ADAPTER	312020-939	1/TANK	1/TANK			1/TANK		
10	WPLLD W/OUT SWIFTCHECK VALVE	849490-001					1/LINE	1/LINE	WIRELESS PRESSURIZED LINE LEAK DETECTION w/FE PETRO STPs
11	WPLLD INTERFACE MODULE	330874-001					1	1	
12	WPLLD COMMUNICATIONS CONSOLE	330883-001					1	1	
13	WPLLD CONTROLLER MODULE	330841-001					1	1	
14	WPLLD LINE LEAK DETECTION SOFTWARE .1GPH & .2 GPH	330160-160					1	1	
15	VAPORLESS MECHANICAL LINE LEAK DETECTOR	LD-2000	1/STP	1/STP	1/STP	1/STP			
16	SITE DATA FAX MODEM (NON CO-OPS ONLY)	330149-002							INCLUDES SOFTWARE
17	LINE SPLITTER								
	OPTIONS								
1	INTERSTITIAL SENSOR FOR ANNULAR SPACE - STEEL	793390-420							STEEL TANKS DOUBLE WALL SENSOR
2	MAG PROBE INSTALL KIT - DIESEL	846400-001							MAG PROBE KIT FOR DIESEL TANKS
3	DUAL FLOAT HYDROSTATIC SENSOR W/ VENTED LOCKING RISER CAP FOR BRINE FILLED WET ANNULAR SPACE	794380-302							BRINE FILLED ANNULAR SPACE SENSOR
4	OVERFILL ALARM	490091-001							NOT NESESSARY WITH OPW 61SO-410C OVERFILL PROTECTION VALVE
5	OVERFILL ALARM ACKNOWLAGEMENT SWITCH	790095-001							NOT NESESSARY WITH OPW 61SO-410C OVERFILL PROTECTION VALVE
6	WPLLD w/SWIFTCHECK VALVE	849490-002							NOT USED
7	PLLD w/OUT SWIFTCHECK VALVE	848480-001							CARWASH LOCATIONS - ELEC LINE LK. DET. w/FE PETRO
8	PLLD INTERFACE MODULE	330373-001							CARWASH LOCATIONS - ELEC LINE LK. DET. w/FE PETRO
9	PLLD CONTROLER MODULE	330374-001							CARWASH LOCATIONS - ELEC LINE LK. DET. w/FE PETRO
10	PLLD LINE LEAK DETECTION SOFTWARE .1GPH & .2 GPH	330843-001							CARWASH LOCATIONS - ELEC LINE LK. DET. w/FE PETRO
11	PLLD w/SWIFTCHECK VALVE	848480-003							CARWASH LOCATIONS - ELEC LINE LK. DET. w/RED JACUET
12	VOLUMETRIC LINE LEAK DETECTION VLLD 1-INPUT LINE LEAK MOD.	329398-001					1/LINE	1/LINE	MECHANICAL BLENDER SITES - ELEC. LINE LK. DET. - NEED TLS350-R
13	VOLUMETRIC LINE LEAK DETECTOR KIT	847590-001					1/LINE	1/LINE	MECHANICAL BLENDER SITES - ELEC. LINE LK. DET. - NEED TLS350-R
14	THERMISTOR FOR VOLUMETRIC LINE LEAK DETECTOR	576010-856					1	1	MECHANICAL BLENDER SITES - ELEC. LINE LK. DET. - NEED TLS350-R

VEEDER -ROOT TLS-450+ SETUP AND CONFIGURATION REQUIREMENTS FOR ALL CIRCLE K STATIONS.

The following guidelines will be used at all Circle K Veeder-Root TLS-450+ system locations as shown in the above table. Standard setup values such as thermal coefficients and other site specific parameters will not be covered in this document. Refer to Veeder-Root System Setup.
Manual Number 576013-880 for complete setup instructions.

ONLY AUTHORIZED VEEDER-ROOT CONTRACTORS MAY PERFORM SYSTEM SETUP PROCEDURES.

I. SYSTEM SETUP

A.) Station Header....Must include xxxx digit Circle K site number along with address.
B.) Shift Start Times....This option will be up to the dealer. Otherwise, shift time #1 will be set at 6:00 a.m. (Shift times 2,3&4 will not be utilized.)
C.) Periodic 0.2GPH Test Warnings... Enabled (Days=25). Single wall tanks only
D.) Periodic 0.2GPH Test Alarms... Enabled (Days=28). Single wall tanks only. *This alarm will be assigned to perform line shut down.*
E.) Annual 0.1GPH Test Warnings... Enabled (Days=340). Single wall tanks only.
F.) Annual 0.1GHP Test Alarms... Enabled (Days=360). Single wall tanks only. *This alarm will be assigned to perform line shut down.*
G.) System Security Code... Enabled - The six digit number will be at the choosing of the programming contactor.

II. COMMUNICATION SETUP DATA

Do not change from system defaults unless site has communication capability.

III. IN-TANK SETUP DATA

Follow the normal setup procedures. Use the following information as a standard.

A.) Water Warning... Gasoline-1.5" Diesel/Racing Fuel-1.0"
B.) High Water Alarm... Gasoline-2.0" Diesel/Racing Fuel-1.5" *This alarm will be assigned to perform line shut down.*
C.) Maximum or Label Limit... Total tank capacity as per the tank chart.
D.) Overfill Limit Alarm... 90%
E.) High Level Limit Alarm... 95%
F.) Delivery Limit Warning... 20% (This may also be a dealer's option.)
G.) Low Level Limit Alarm... Use the gallon amount of a 10" level from off the tank chart. *This alarm will be assigned to perform line shut down.*
H.) Leak Alarm Limit (During In-tank testing)... 50 gallons. *This alarm will be assigned to perform line shut down.*
I.) Sudden Loss Limit (During In-tank quite time)... 50 gallons. *This alarm will be assigned to perform line shut down.*
J.) Tank Tilt... If probe is mounted in the center of the tank, then the tank tilt will be set at default 0.00. If the probe is not centered in the middle of the tank, then follow the instructions in Section 8.D.3 of the Setup Manual for calculating tank tilt. *DO NOT USE TANK TILT TO MATCH THE MANUAL STICK READING. IN MOST CASES THE TLS-450+ SHOULD NOT MATCH THE STICK.*
K.) Leak Minimum 0.1GPH Annual... 10% (Set as per local regulatory codes.)
L.) Periodic 0.2GPH Test Type... Standard
M.) Annual 0.1GPH Test Fail... Disabled
N.) Periodic 0.2GPH Test Fail... Disabled
O.) Gross 3.0GPH Test Fail... Enabled
P.) Annual 0.1GPH Test Averaging... Off
Q.) Periodic 0.2GPH Test Averaging... Off
R.) Tank Test Notify... On
S.) Tank Test Siphon Break... Off (Turn ON if tanks are manifolded and a V/R siphon break valve is installed.)
T.) Delivery Report Delay... 2 minutes.

IV. IN TANK AUTO LEAK TEST SETUP DATA (Retrofit single wall tanks only

A.) Leak Test Method... All tanks
B.) Leak Test Frequency... CSLD (0.2GPH Testing)
If the station is not operating 24 hours then in-tank testing will be programmed for when the station is closed.

V. PRESSURIZED AND VOLUMETRIC LINE LEAK SETUP (Retrofit single wall lines only)

A.) 0.1 GPH Test... Enabled (Pressure LLD requires this test to be enabled in order to run a 0.10 GPH test. Volumetric LLD is already programed for the 0.10 GPH automatically.)
B.) Shutdown Rate... 3.0 GPH only. This alarm will cause line shut down upon 3.0 gph testing failure
C.) Pumpside Test (VLLD)... Enabled only if containment is NOT being monitored with a sump sensor.
D.) Wait Mode... Temp. Meas. (If the system has a thermistor installed.) Vol. Change (If the system doesn't have a thermistor installed.)
E.) NBP Partner... Enabled (This is required if the station has mechanical blenders or if the station has single wall lines.)

VI. OUTPUT RELAY SETUP (ALL SYSTEMS EQUIPPED WITHOUT LINE LEAK DETECTION

A.) Relay Type... Standard
B.) Relay Orientation... Normally Open
C.) Assignment Method.
In-tank Alarms. (All Tanks)
1.) Periodic Test Alarms
2.) High Water Alarms
3.) Low Level Limit
4.) Leak Alarm Limit
5.) Sudden Loss Limit
Liquid Sensor Alarms. (All Sensors)
1.) Fuel Alarms.

VII. OUTPUT RELAY SETUP
(Double walled piping and/or tanks.)

A.) Relay Type... Standard
B.) Relay Orientaion... Normally Closed
C.) Assignment Method.
In-Tank Alarms. (All Tanks)
1.) Periodic Test Alarm
2.) High Water Alarm
3.) Low Level Limit
4.) Leak Alarm Limit
5.) Sudden Loss Limit
Liquid Sensor Alarms. (All Sensors)
1.) Fuel Alarms.

CLIENT:
CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:
MDM SERVICES, INC. of LOUISIANA
engineering • environmental • construction
2151 WEST HILLSBORO BLVD., SUITE 401
DEERFIELD BEACH, FLORIDA 33442
Phone: 561-427-3076
EF# 5397

NO.	DATE	REVISION DESCRIPTION
1	10/09/20	REPLACED TANKS FROM FIBERGLASS TO METAL TANKS PER CLIENT

REVISED FOR CONSTRUCTION (METAL TANKS) 10/22/2020

RICHARD R. MORRIS
LA. REG # 21957

TANK AND PIPING PLANS & DETAILS

SITE DESIGNATIONS:
CIRCLE K STORE # 9086
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED
MDM JOB # 19075
DATE: 12-30-2019
DESIGNED BY:
DRAWN BY: P. DOSS
CAD FILE NAME: 19075TA6.0.DWG
CHECKED BY:

DRAWING TITLE:
CK VEEDER ROOT SHT 1

SHEET NO:
TA-6.0

NOTE:
SEE SITE ELECTRICAL PLAN SHEET SE-1 FOR SITE SPECIFIC LAYOUT.

IMPORTANT: THIS IS A CONTROL DRAWING ONLY AND DOES NOT REFLECT THE ACTUAL LOCATIONS OF CONDUIT ENTRY (SEE NOTE 7 BELOW).

VEEDER-ROOT REQUIRES THAT ANYONE INSTALLING OUR EQUIPMENT MUST BE LEVEL I CERTIFIED. FOR MORE INFORMATION REGARDING THE HOMESTUDY INSTALLERS COURSE CONTACT 860-651-2762.

WARNING: IN INSTALLATION AND USE OF THIS PRODUCT, COMPLY WITH THE NATIONAL ELECTRICAL CODE; FEDERAL, STATE AND LOCAL CODES. IN ADDITION, TURN OFF POWER AND TAKE OTHER NECESSARY PRECAUTIONS DURING INSTALLATION, SERVICE AND REPAIR TO PREVENT PERSONAL INJURY, PROPERTY LOSS AND EQUIPMENT DAMAGE.

WARNING: DISCONNECT ALL POWER BEFORE MAKING ANY CONNECTIONS TO PREVENT DEATH, SERIOUS INJURY, EXPLOSION, OR ELECTRICAL SHOCK. MONITOR MUST NEVER BE OPERATED UNLESS THE FRONT COVER IS CLOSED OVER THE BARRIER TERMINALS IN THE INTRISICALLY SAFE AREA.

1. INTRINSICALLY SAFE WIRING
BONDED CONDUIT MEANS THAT THE METALLIC SECTIONS OF CONDUIT ARE PERMANETLY JOINED TO FORM AN ELECTRICALLY CONDUCTIVE PATH THAT WILL ASSURE ELECTRICAL CONTINUITY, AND THAT THE CONDUIT HAS THE CAPACTIY TO CONDUCT SAFELY, ANY CURRENT LIKELY TO BE IMPOSED.

a) NON-BONDED CONDUITS – ALL FIELD WIRING TO BE SHIELDED CABLE. SHIELDED CABLE MUST BE RATED LESS THAN 100 PICOFARAD PER FOOT AND BE MANUFACTURED WITH A MATERIAL SUITABLE FOR THE ENVIRONMENT SUCH AS CAROL™ C2534 OR BELDON™ 88760, 8760.

2. CONNECT THE BARRIER GROUND TO THE EARTH GROUND BUS AT THE POWER DISTRIBUTION PANEL WITH #12 AWG (OR LARGER) CONDUCTOR.

3. ● DENOTES FIELD WIRING CONNECTION USING WATERPROOF CONNECTORS SUPPLIED WITH THE PROBE(S) AND SENSOR(S).

4. INTRISICALLY SAFE WIRING SHALL BE INSTALLED IN ACCORDANCE WITH ARTICLE 504-20 OF THE NEC, ANSI/NFPA 70.

5. TO MAINTAIN INTRINSIC SAFETY, PROBE/SENSOR WIRING MUST BE INSTALLED IN SEALED CONDUIT

6. ELECTRICAL RATING POWER INPUT 120 VAC, 50/60 HZ, 100 VA MAXIMUM.

7. THIS DOCUMENT IS NOT TO BE USED AS A SUBSTITUTE FOR SPECIFIC EQUIPMENT INSTALLATION MANUALS. FOR INSTALLATION DETAILS USE THE RESPECTIVE MANUAL:

TLS-450+	576013-879
PLLD	576013-902
WPLLD	576013-923

8. SUMP SENSOR TO BE SECURED IN PLACE USING VEEDER ROOT P/N 330020-012

MAGNETOSTRICTIVE PROBE
TO JUNCTION BOX

INTERSTITIAL LIQUID SENSOR
TO JUNCTION BOX 'B'

DISCRIMINATING CONTAINMENT
SUMP SENSOR (TYPE B SENSOR)

DISCRIMINATING DISPENSER PAN
SENSOR (TYPE B SENSOR)

EPOXY SEALANT FOR
TWO-WIRE CONNECTIONS

CLIENT:
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EF# 5397

NO.	DATE	REVISION DESCRIPTION
1	10/09/20	REPLACED TANKS FROM FIBERGLASS TO STEEL TANKS PER CLIENT

REVISED FOR CONSTRUCTION (METAL TANKS) 10/22/2020

RICHARD R. MORRIS
LA. REG # 21957

TANK AND PIPING PLANS & DETAILS

SITE DESIGNATIONS:
CIRCLE K STORE # 9086
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED
MDM JOB # 19075
DATE: 12-30-2019
DESIGNED BY:
DRAWN BY: P. DOSS
CAD FILE NAME: 19075TA7.0.DWG
CHECKED BY:

DRAWING TITLE:
ELECTRICAL SCHEMATIC, NOTES & DETAILS

SHEET NO:
TA-7.0

1 FUEL ISLAND AREA CLASSIFICATION
N.T.S.

3 VENT RISER CLASSIFICATION ELEVATION
N.T.S.

SEE SHEET TA 3.0 FOR ACTUAL SUMP LOCATIONS.

2 FUEL ISLAND AREA CLASSIFICATION ELEVATION
N.T.S.

4 UST AREA CLASSIFICATION
N.T.S.

LEGEND

CLASS 1, DIV. 1
HAZARD ZONE. TYP.

CLASS 1, DIV. 2
HAZARD ZONE. TYP.

CLASSIFIED AREAS ADJACENT TO DISPENSERS IN TABLE 6.3.1, NFPA 30A, 2005

NOTE:

ALL RACEWAYS IN CLASS 1, DIVISION 1 OR 2 LOCATIONS SHALL BE THREADED RIGID METAL CONDUIT AND SHALL BE EXTENDED TO THE FIRST POINT OF CONNECTION AFTER LEAVING THE BOUNDARIES OF THE DEFINED CLASS 1 LOCATION. CONDUIT SEALS SHALL BE PROVIDED IN ACCORDANCE WITH NEC501.5 GREEN INSULATED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED IWTH PHASE AND GROUNDED CONDUCTOR. CONDUIT SHALL NOT BE USED AS SOLE MEANS OF EQUIPMENT GROUNDING FOR OTHER CONDUIT RUNS IN NON-CLASSIFIED LOCATION ANY NEC APPROVED METHOD CAN BE UTILIZED.

CLIENT:

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NO.	DATE	REVISION DESCRIPTION
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REVISED FOR CONSTRUCTION (METAL TANKS) 10/22/2020

RICHARD R. MORRIS
LA. REG # 21957

TANK AND PIPING PLANS & DETAILS

SITE DESIGNATIONS:

CIRCLE K STORE # 9086
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED
MDM JOB # 19075
DATE: 12-30-2019
DESIGNED BY:
DRAWN BY: P. DOSS
CHECKED BY:
FILE NAME: 19075TA8.0.DWG

DRAWING TITLE:

HAZARD ZONES

SHEET NO:

TA-8.0

Mounting Instructions

Overfill Alarm and Acknowledgement Switch Dimensions

Figure 1 shows the Overflow Alarm mounting dimensions and Figure 2 shows the Acknowledgement Switch mounting dimensions.

Figure 1. Overflow Alarm mounting dimensions

Figure 2. Acknowledgement Switch mounting dimensions

Mounting Instructions

OVERFILL ALARM

1. Select a mounting location where the Overfill Alarm can be seen and heard clearly from the area where the fuel tanks are filled. In addition, consider the ease of routing interconnection conduit.
2. Locate and mark mounting holes using the hole pattern in Figure 1.
3. Mount the Overfill Alarm using the four mounting tabs on the housing.

ACKNOWLEDGEMENT SWITCH

1. Select a mounting location where the Acknowledgement Switch can be easily activated by the tank truck driver. In addition, consider the ease of routing interconnection conduit.
2. Locate and mark mounting holes using the hole pattern in Figure 2.
3. Mount the Acknowledgement Switch using the four mounting tabs on the housing.
4. Install conduit between the Acknowledgement Switch, Overfill Alarm, and TLS Console.

Wiring Instructions

IMPORTANT! Wire used for this installation must have a temperature rating of at least 90ºC. be either 14 or 16 AWG, and be color coded. Splicing alarm power with TLS Console power will cause improper operation of the monitor.

Wiring Overfill Alarm with Acknowledgement Switch

1. Pull two wires from the switch to the Overfill Alarm.
2. Pull two wires for line and neutral from the switch to the power panel.
3. Pull one wire from the switch to the TLS Console for connection to the alarm relay.
4. Pull one wire for line from the alarm relay in the TLS Console to the power panel.
5. Turn power Off and connect wiring according to the wiring diagram in Figure 3 and Table 1.

Figure 3. Overfill Alarm/Acknowledgement Switch wiring connections

REMOTE E-STOP AND OVERFILL ALARM DIAGRAM

NOT TO SCALE

NOTES:

1. CONNECT VEEDER-ROOT OVERFILL ALARM POWER TO EXISTING VEEDER-ROOT CONSOLE CIRCUIT.
2. CONNECT VEEDER-ROOT OVERFILL RELAY WIRES TO VEEDER-ROOT CONSOLE.
3. REFER TO VEEDER-ROOT OVERFILL ALARM INSTALLATION GUIDE AND TLS-350 MANUAL FOR ADDITIONAL INFORMATION & PROGRAMING.

CONDUIT / WIRE SCHEDULE

ITEM	QTY.	CONDUIT SIZE	CONDUIT TYPE	WIRE / CABLE	NOTES
REMOTE E-STOP & VEEDER-ROOT ALARM	1	1"	RMC/PVC	(2) #10 (E-STOP CONTROLS) (2) #10 (TLS-350 RELAY) (2) #10 (ALARM POWER) (1) #10 (GRD)	REMOTE E-STOP CONTROLS AND VEEDER-ROOT OVERFILL ALARM TO REMOTE E-STOP J-BOX
REMOTE E-STOP	1	3/4"	RMC	(2) #12 (E-STOP CONTROLS) (1) #10 (GRD)	LOOP E-STOP CONTROLS WIRES FROM J-BOX TO REMOTE E-STOP
OVERFILL ALARM	1	3/4"	RMC	(2) #10 (TLS-350 RELAY) (2) #10 (ALARM POWER) (1) #10 (GRD)	LOOP OVERFILL ALARM WIRES FROM J-BOX TO OVERFILL ALARM -BOX

Table 1.- Console Connections

Input	TLS2 or TLS-IB Connection	TLS-50 or TLS-HLD Connection	TLS-300 Output Relay Connection	TLS-350 I/O Combo Relay Connection	TLS-350 4 Relay Output Module Connection	TLS-4XX Overfill Alarm Relay Connector
Overfill Alarm without Acknowledge Switch (see Figure 4)						
Overfill Alarm terminal 2	J6, 1	J5, 1	NO	NO	NO	NO
Line (from power panel)	J6, 2	J5, 2	C	C	C	C
Overfill Alarm with Acknowledge Switch (see Figure 3)						
Ack Switch terminal 1	J6, 1	J5, 1	NO	NO	NO	NO
Ack Switch terminal 5 (line)	J6, 2	J5, 2	C	C	C	C

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA

engineering • environmental • construction

2151 WEST HILLSBORO BLVD., SUITE 401
DEERFIELD BEACH, FLORIDA 33442
Phone: (954) 427-3076

EF# 5397

NO.	DATE	REVISION DESCRIPTION
1	10/09/20	REPLACE TANKS FROM FIBERGLASS TO STEEL TANKS PER CLIENT

REVISED FOR CONSTRUCTION (METAL TANKS) 10/22/2020

RICHARD R. MORRIS
LA. REG # 21957

TANK AND PIPING PLANS & DETAILS

SITE DESIGNATIONS:

CIRCLE K STORE # 9086
2336 WEST WOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED
MDM JOB # 19075
DATE: 12-30-2019
DESIGNED BY:
DRAWN BY: P. DOSS
FILE NAME: 19075TA9.0.DWG
CHECKED BY:

DRAWING TITLE:

OVERFILL ALARM DETAILS

SHEET NO:

TA-9.0

2 CE-1 CANOPY FRONT ELEVATION (WEST)
SCALE: N.T.S.

3 CANOPY RIGHT ELEVATION (NORTH END)
SCALE: 1/4" = 1'-0"

4 CANOPY LEFT ELEVATION (SOUTH END)
SCALE: 1/4" = 1'-0"

FINISH SCHEDULE

B
- *SHERWIN WILLIAMS #SW 6115
- TOTALLY TAN
- PAINT PRIMER:"LOXON" CONCRETE & MASONRY PRIMER/SEALER PAINT PRIMMER WITH A GREY TINT COLOR
- PAINT TOP COAT: "SUPERPAINT" EXTERIOR ACRYLIC LATEX PAINT
- SHEEN: SATIN

F
- WESTERN BLOCK SPLITFACE CMU
- **BOOT BROWN

H
- *SHERWIN WILLIAMS #SW 6090
- JAVA
- PAINT PRIMER:"LOXON" CONCRETE & MASONRY PRIMER/SEALER PAINT PRIMMER WITH A GREY TINT COLOR
- PAINT TOP COAT: "SUPERPAINT" EXTERIOR ACRYLIC LATEX PAINT
- SHEEN: SATIN

USE SHERWIN WILLIAMS MANUFACTURER ONLY
COLOR TO BE PRE-ORDERED TO ENSURE AVAILABILITY
AT TIME OF CONSTRUCTION

PLAN VIEW 2/3

SECTION

CANOPY COLUMN FRAMING DETAIL
SCALE: N.T.S.

THIS DRAWING FOR PRESENTATION ONLY CONSULT CANOPY SUPPLIER PLANS FOR CANOPY CONSTRUCTION

1 CE-1 CANOPY REAR ELEVATION (EAST)
SCALE: N.T.S.

AL One Call 811
DIAL 811 BEFORE YOU DIG
KNOW WHAT'S BELOW.
ALWAYS DIAL 811 OR 800 292-8525 FIRST.
THE CALL AND THE SERVICE ARE FREE.

CLIENT:

CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA
engineering • environmental • construction
3251-D SW 13th Drive * Deerfield Beach, FL 33442
Phone: (954) 427-3076
EF# 5397

NO.	DATE	REVISION DESCRIPTION

24' X 232' CANOPY

RICHARD R. MORRIS
LA. REG # 21957

± 82,561.50 SF OR 1.89 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED	MDM JOB # 19075
DATE: 12-30-2019	
DESIGNED BY:	
DRAWN BY: SLO/JAG	FILE NAME: 19075-CD.DWG
CHECKED BY:	

DRAWING TITLE:

CANOPY ELEVATIONS

SHEET NO:

CE-1.0

ISSUED FOR CONSTRUCTION 10/2/2020

FRAMING PLAN

SCALE: 3/32"=1'-0"

SECTION/ELEVATION

SCALE: 1/4"=1'-0"

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SPECIAL INSPECTIONS FOR THE CANOPY

IN ADDITION TO THE REGULAR INSPECTIONS, THE FOLLOWING ITEMS, IF APPLICABLE, WILL REQUIRE SPECIAL INSPECTION IN ACCORDANCE WITH THE BUILDING CODE. JIMCO SALES AND MANUFACTURING IS AN AISC APPROVED FABRICATOR (218031061-10INIT).

- STRUCTURAL STEEL – SPECIAL INSPECTION REQUIRED IN ACCORDANCE WITH THE QUALITY ASSURANCE INSPECTION REQUIREMENTS OF AISC 360 (IBC 1705.2.1).
- WELDING – SPECIAL INSPECTION IS NOT REQUIRED WHERE WELDING IS PERFORMED IN AN APPROVED FABRICATOR SHOP AS PER IBC 1704.2.5.1
- CONCRETE – SPECIAL INSPECTION IS NOT REQURIED FOR ISOLATED SPREAD CONCRETE FOOTINGS PER IBC 1705.3 EXCEPTION 1.
- ANCHOR BOLTS – PERIODIC SPECIAL INSPECTION OF ANCHOR BOLT INSTALLATION REQUIRED PER IBC TABLE 1705.3.
- HIGH STRENGTH BOLTS – IF REQUIRED A325 BOLTS SHALL BE PRETENSIONED USING AN ACCEPTABLE METHOD SUCH AS "TURN OF NUT" AS PER RCSC SPECIFICATION SECTION 8.2. PERIODIC SPECIAL INSPECTION REQUIRED.

SEISMIC FORCE RESISTING SYSTEM (SFRS)

A. REFER TO AISC 341-10 SECTION A4 AND ASCE 7-10.
B. DESIGNATION OF SFRS: G.2. STEEL ORDINARY CANTILEVER COLUMN SYSTEMS (ASCE 7-10 TABLE 12.2-1) SEE AISC 341-10 SECTION E5 (OCCS).
C. R = 1.25, CS = 0.08
D. ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE
E. MEMBERS AND CONNECTIONS THAT ARE PART OF THE SFRS:
   1. COLUMNS
   2. COLUMN BASE CONNECTION
   3. FOOTINGS
F. PROTECTED ZONES: N/A
G. SEE DETAILS AND NOTE FOR CONNECTION CONFIGURATIONS, MATERIALS SPECIFICATIONS AND SIZES.
H. WELD FILLER MATERIALS FOR WELDS PART OF THE SFRS:
   1. YEILD STRENGTH – 58 KSI MIN
   2. TENSILE STRENGTH – 70 KSI MIN
   3. ELONGATION – 22% MIN
   4. CVN TOUGHNESS – 20 FT-LB MIN @ 0° F
   SEE DETAILS AND NOTES FOR OTHER WELDING REQUIREMENTS
J. DEMAND CRITICAL WELDS – N/A
K. LOWEST ANTICIPATED SERVICE TEMPERATURE – 0° F

CANOPY NOTES

GENERAL NOTES:
A. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE.
B. OBSERVATION VISITS TO THE SITE BY THE DESIGN ENGINEER SHALL NEITHER BE CONSTRUED AS INSPECTION NOR APPROVAL OF CONSTRUCTION.
C. DURING AND AFTER CONSTRUCTION, BUILDER AND/OR OWNER SHALL KEEP LOADS ON THE STRUCTURE WITHIN LIMITS OF DESIGN LOADS.
D. TYPICAL DETAILS AND SECTIONS SHALL APPLY WHERE SPECIFIC DETAILS ARE NOT SHOWN.

1. BUILDING CODE: 2012 INTERNATIONAL BUILDING CODE
2. USE GROUP: M, CONSTRUCTION TYPE – IIB
3. DESIGN LOADS:
   A. ROOF LIVE LOAD: 20 PSF (REDUCIBLE)
   B. CANOPY DEAD LOAD: 10.70 PSF
   C. GROUND SNOW LOAD Pg: 0 PSF
      FLAT ROOF SNOW LOAD Pf: 0 PSF
      RAIN ON SNOW SURCHARGE: 0 PSF IF Pg<20
      EXPOSURE FACTOR Ce: 1.0
      IMPORTANCE FACTOR Is: 1.0
      THERMAL FACTOR Ct: 1.2
   D. ULTIMATE DESIGN WIND SPEED Vult 130 MPH
      BUILDING RISK CATEGORY: II
      EXPOSURE: C
      COMPONENT & CLADDING: ASCE 7-10 CHAPTER 30
   E. EARTHQUAKE DESIGN:
      IMPORTANCE FACTOR: 1.0
      Ss-0.093g Sds-0.099g
      S1-0.049g Sd1-0.078g
      SITE CLASS: D
      SEISMIC DESIGN CATEGORY: B
      SEISMIC FORCE RESISTING SYSTEM: G.2 STEEL ORDINARY CANTILEVERED COLUMN SYSTEM
      DESIGN BASE SHEAR: 4.73k
      SEISMIC RESPONSE COEFFICIENT: Cs = 0.08
      RESPONSE MODIFICATION FACTOR: R=1.25
      SEISMIC ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE
4. FOUNDATION DESIGN:
   ALLOWABLE BEARING PRESSURE: 2000 PSF
   PER GEOTECHNICAL REPORT BY: SOUTHERN EARTH SCIENCES, INC,
   DATED: 20 FEBRUARY 2020 (PROJECT NO. B19-223).
   LATERAL EARTH PRESSURE: 150 PSF/FT
   * SITE SOILS SHALL BE PREPARED FOR THE FOUNDATION IN ACCORDANCE WITH THE GEOTECHNICAL REPORT REFERENCED ABOVE.
5. CONCRETE AND REINFORCEMENT:
   A. CONCRETE FOOTINGS (EXPOSURE CLASSES F0, S0, W0, C0) TYPE II CEMENT COMPRESSIVE STRENGTH OF f'c = 3000 p.s.i.
   B. SLAB ON GRADE (BY OTHERS)
   C. CONCRETE DESIGNED USING f'c =2500 p.s.i. OR ABOVE SHALL HAVE SPECIAL INSPECTIONS PERFORMED, UNLESS ISOLATED SPREAD FOOTINGS ARE UTILIZED. SEE SPECIAL INSPECTIONS FOR THE CANOPY CONCRETE NOTE.
   D. REBAR: ASTM A615 GRADE 60
   E. STIRRUPS AND TIES SHALL HAVE MINIMUM 4" HOOKS.
   F. MINIMUM CONCRETE PROTECTION FOR REINFORCEMENT:
      CONCRETE EXPOSED TO GROUND-------3"
      FORMED CONCRETE EXPOSED TO GROUND----2"
      FORMED CONCRETE NOT EXPOSED TO GROUND-1 1/2"
   G. GROUT UNDER COLUMN BASE PLATES SHALL BE NON-SHRINK GROUT COMPLYING WITH ASTM C1107, f'c=5000p.s.i. AND INSTALLED PER MANUFACTURERS RECOMMENDATIONS.
   H. GENERAL CONTRACTOR IS RESPONSIBLE FOR LOCATING TOP OF FOOTING ELEVATIONS AS REQUIRED FOR UNDERGROUND PLUMBING AND ELECTRICAL.
6. STRUCTURAL STEEL:
   A. ALL STRUCTURAL STEEL SHALL COMPLY WITH AISC "SPECIFICATION FOR FOR THE DESIGN OF STRUCTURAL STEEL FOR BUILDINGS" 15TH EDITION.
   B. AISC "CODE OF STANDARD PRACTICE" EXCLUDING THE FOLLOWING SECTIONS: 4.4, 4.4.1, 4.4.2, AND 7.15.
   C. AISC "SPECIFICATIONS FOR THE DESIGN OF COLD FORMED STRUCTURAL MEMBERS".
   D. STRUCTURAL STEEL GRADES:
      STEEL BEAMS ASTM A992 GRADE 50 Fy = 50,000 psi
      HSS SQUARE & RECTANGLES ASTM500 GRADE C Fy = 50,000 psi
      HSS ROUND COLUMNS: Fy = 46,000 psi
      PIPE ASTM A53 GRADE B Fy = 35,000 psi
      BASE PLATES, CAP PLATES AND CAP PLATE STIFFENERS .....
      ..... ASTM A572 GRADE 50 Fy = 50,000 psi
      ANGLES ASTM A36 Fy = 36,000 psi
   E. ALL BOLTED CONNECTIONS SHALL BE ASTM A307 BOLTS UNLESS OTHERWISE SPECIFIED (NO SPECIAL INSPECTION REQUIRED).
   F. ALL BOLTED CONNECTIONS SHALL BE "SNUG-TIGHT", UNLESS NOTED OTHERWISE IN ACCORDANCE WITH RCSC.
   G. METAL PAN DECK SHALL BE 20ga ASTM A653 GRADE 40.

jimco SALES AND MANUFACTURING
3113 St. Louis Ave. Fort Worth, Texas (817)924-6173

DRAWING DESCRIPTION: CANOPY STRUCTURAL NOTES AND PLANS

JOB LOCATION: CIRCLE K # 2336 WESTWOOD RD WESTLAKE, LA

ENGINEER SEAL: STATE OF LOUISIANA – THOMAS R. SADLER, License No. 26683, PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

CUSTOMER: CIRCLE K STORES INC.

REVISIONS

NO.	DESCRIPTION:	DATE:	BY:

DRAWN BY:	D. CYPHERS
CHECKED BY:	T. SADLER
DATE:	11-12-2020

JOB NO. 20-2451R0

DWG. NO. CS1

OF 3 SHEETS

1 SIDE FASCIA DETAIL
SCALE: 1"=1'-0"

2 END FASCIA DETAIL
SCALE: 1"=1'-0"

STD HOLE GAGES	
FLANGE WIDTH	HOLE GAGE
4"	2"
5" - 5 1/2"	2 1/2"
6" - 7 1/2"	3"
8" - 16 1/2"	3 1/2"

SECTION C-C

3 COLUMN/BEAM CONNECTION DETAIL
SCALE: 1"=1'-0"

4 BEAM SPLICE DETAIL
SCALE: 1"=1'-0"

5 BEAM CONNECTION DETAIL
SCALE: 1"=1'-0"

NOTES:

A. CONDUIT WITH PLAIN THREADED END FURNISHED AND INSTALLED BY JIMCO. ELECTRICAL WIRING AND HOOK-UP BY GENERAL CONTRACTOR.
B. COUPLING AND CONDUIT TO CANOPY LIGHTS FURNISHED AND INSTALLED BY GENERAL CONTRACTOR.
C. COUPLING AND CONDUIT TO POWER SUPPLY FURNISHED AND INSTALLED BY GENERAL CONTRACTOR.
D. CUSTOMER TO INFORM JIMCO WHICH COLUMNS ARE TO RECIEVE CONDUITS AND WHICH DIRECTION CONDUITS ENTER COLUMNS @ BASE AT LEAST TWO WEEKS PRIOR TO SCHEDULED DELIVERY.

NOTE:

CUSTOMER REQUEST:
(5) 1" CONDUIT
W/SEAL-OFF

6 INTERNAL CONDUIT DETAIL
SCALE: 3"=1'-0"

7 SCUPPER DRAIN DETAIL
SCALE: 1"=1'-0"

8 PURLIN BRIDGING DETAIL
SCALE: 1"=1'-0"

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Jimco SALES AND MANUFACTURING
3113 St. Louis Ave. Fort Worth, Texas (817)924-6173

DRAWING DESCRIPTION: CANOPY STRUCTURAL SECTIONS AND DETAILS

JOB LOCATION: CIRCLE K # 2336 WESTWOOD RD WESTLAKE, LA

ENGINEER SEAL: STATE OF LOUISIANA — THOMAS R. SADLER, License No. 26683, PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

CUSTOMER: CIRCLE K STORES INC.

REVISIONS

NO.	DESCRIPTION:	DATE:	BY:

DRAWN BY:	D. CYPHERS
CHECKED BY:	T. SADLER
DATE:	11-12-2020

JOB NO. 20-2451R0

DWG. NO. CS2

OF 3 SHEETS

FOUDATION PLAN

SCALE: 3/32"=1'-0"

NOTE:
A) FOOTINGS INCLUDING CONCRETE, REBAR, FORMWORK AND ASSOCIATED EARTHWORK SHALL BE FURNISHED AND INSTALLED BY GENERAL CONTRACTOR EXCEPT ANCHOR BOLTS SHALL BE FURNISHED BY JIMCO AND INSTALLED BY GENERAL CONTRACTOR.
B) SEE FOUNDATION, CONCRETE NOTES ON DWG CS1.

1 BASE PLATE DETAIL

SCALE: 1"=1'-0"

FOOTING DETAIL

SCALE: 1/2"=1'-0"

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Jimco SALES AND MANUFACTURING
3113 St. Louis Ave. Fort Worth, Texas (817)924-6173

DRAWING DESCRIPTION: CANOPY FOUNDATION
SECTIONS AND DETAILS

JOB LOCATION: CIRCLE K #
5706 QUINETTE RD
WESTLAKE, LA

ENGINEER SEAL: STATE OF LOUISIANA — THOMAS R. SADLER, License No. 26683, PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

CUSTOMER: CIRCLE K STORES, INC

REVISIONS

NO.	DESCRIPTION:	DATE:	BY:

DRAWN BY:	D. CYPHERS
CHECKED BY:	T. SADLER
DATE:	11-12-2020

JOB NO.
20-2451R0

DWG. NO.
AB1

OF 3 SHEETS

ROOF FRAMING PLAN

SCALE: 1/8 = 1'-0

SECTION B

SECTION E

SECTION G

EP3.DWG

NOTE: THIS CANOPY IS DESIGNED PER ASCE 7-10
SEE FIG. 27.4-4, UNBALANCED WIND LOAD

* CLEAR WIND FLOW

NOTES:

1. THESE LOADS HAVE BEEN APPLIED TO STRUCTURE IN ACCORDANCE WITH ASCE 7-10, CHAPTER 2, 2.4.1 BASIC COMBINATIONS FOR ALLOWABLE STRESS

2. THESE STEEL MEMBERS HAVE BEEN SIZED BASED ON ASD, AISC 14th EDITION.

3. ANALYSIS OF THIS STRUCTURE HAS BEEN ACCOMPLISHED USING THE LATEST GENERATION OF MATRIX BASED SOFTWARE.

4. COLUMN SLENDERNESS FACTORS ARE BASED ON CHAPTER C, DIRECT ANALYSIS METHOD.

Kx = 1.0
Kz = 1.0

5. BASES ARE FIXED.

STRUCTURE LOADS

PARAMETER				CODE REFERENCE IBC 20[illegible]
DEAD LOAD	4.0 PSF			1606.1
LIVE LOAD	20.0 PSF	(w/ APP. RED.)		1607.12.2.1
SNOW LOAD	1.0 PSF + DRIFTS			ASCE 7-10, [illegible]
WIND SPEED	132.0 MPH 3 SEC. GUST	26.6 PSF		ASCE 7, PART 26-29
	CATEGORY II	Iw 1.0	EXP. B	
	VERT. ROOF PRESSURE			
	Case A Cnw Cnl	Case B Cnw Cnl		ASCE 7, FIG. 27.4-4
	1.20(29.37) .30(7.34)	-1.10(-26.92) -.10(-2.45)		
	HORIZ. FASCIA PRESSURE		EXP. C	
	Case A & B Cfz	Cfx		ASCE 7, FIG. 29.4-7
	1.95(51.80)	1.85(49.14)		

SESMIC DATA				
SESMIC DESIGN CATEGORY TAB. 11.6(1)(2) B				ASCE 7-10
	.2 SEC. SPECTRUM RESPONSE, Ss	0.0920		FIG. 22-1
	1 SEC. SPECTRUM RESPONSE, S1	0.0490		FIG. 22-2
	LONG PERIOD TRANSITION PERIOD, Tl	12		FIG. 22-12
	RISK CATEGORY	II		TAB. 1.5-1
	SESMIC FACTOR, Ie	1.00		TAB. 1.5-2
	SITE COEFFICIENT, Fa	1.60		TAB. 11.4-1
	SITE COEFFICIENT, Fv	2.40		TAB. 11.4-2
	SITE CLASSIFICATION	D		TAB. 20.3-1
	SITE ADJUSTMENT COEFFICENT, Sms	0.1472		EQ. 11.4-1
	SITE ADJUSTMENT COEFFICENT, Sm1	0.1176		EQ. 11.4-2
	DESIGN SPECTRAL RESPONSE, SDS	0.0982		EQ. 11.4-3
	DESIGN SPECTRAL RESPONSE, SD1	0.0784		EQ. 11.4-4
	W, Kips	30.00		12.8
		Z	X	
	SESMIC RESPONSE COEFFICIENT, Cs	0.0785	0.0785	12.8.1.1
	BASIC STRUCTURAL SYSTEM -- SESMIC RESISTING SYSTEM			
	Orid. Cant. Col./Orid. Cant. Col.			
	RESPONSE MODIFICATION FACTOR, R	1.25	1.25	TAB. 12.2-1
	METHOD OF ANALYSIS -- EQUIVALENT LATERAL FORCE	V=CsW		12.8
	BASE SHEAR, Kips	2.95	2.95	EQ. 12.8-1

Z X

PREPARED BY: CARTER-MILLER-SANSING, LTD., P.O.B 4324, MERIDIAN, MS 39304, 601-483-0[illegible]01

GENERAL NOTES

FOUNDATIONS:

THE SOIL BEARING VALUE SHALL NOT BE LESS THAN 2000 PSF. THE BEARING VALUE SHALL BE VERIFIED BY THE G.C. FOOTINGS SHALL BEAR IN UNDISTURBED SOIL. ALL T/FOOT. ELEVATION ARE TO BE THE SAME UNLESS SHOWN OTHERWISE. IF ELEVATIONS ARE NOT THE SAME C&S CONSTRUCTION MUST BE INSTRUCTED OF ELEV.'S IN WRITING WHEN CANOPY ORDER IS PLACED. FOOTINGS DESIGN COMPLIES W/ACI-318.

REINFORCING STEEL:

ALL DEFORMED BARS SHALL COMPLY w/ASTM A615 FY=60 AND SHALL BE WIRE TIED AT ALL JOINTS. RUSTY, OILY, OR DIRTY STEEL SHALL NOT BE USED.

ANCHOR BOLTS:

ANCHOR BOLTS MUST BE INSTALLED WITH A TEMPLATE AND WITHIN 1/8-INCH OF MEASUREMENTS OF THE BASE PLATE OR COLUMN WILL NOT FIT. CONCRETE CONTRACTOR IS RESPONSIBLE FOR RECESSING FOOTINGS 18"- INCHES BELOW FINISH GRADE AND FOR EXTENDING ANCHOR BOLTS 6 - INCHES ABOVE FOOTINGS IN ORDER FOR CANOPY TO TO ERECT PROPERLY. ANCHOR BOLTS SHALL BE ASTM A307.

CONCRETE:

ALL CONCRETE SHALL BE 3000 PSI IN 28 DAYS. ALL CONC. SHALL BE PLACED IN ACCORDANCE WITH ACI-318.

STRUCTURAL STEEL:

ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A992 AND SHALL BE IN ACCORDANCE WITH THE LATEST AISC SPECIFICATIONS. TUBE STEEL SHALL BE FY 46.0 KSI. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1. PROOF OF WELDERS CERTIFICATION SHALL BE AVAILABLE ON REQUEST. ALL ABOLTS SHALL BE IN ACCORDANCE w/ASTM A325.

OTHER CONCRETE ITEMS:

OTHER CONCRETE ITEMS SUCH AS DRIVE THRU SLAB, BUILDING SLAB, PERIMETER FOOTING AND LOAD BEARING FOOTINGS NOT USED FOR THE CANOPY ARE TO BE AT THE SAME ELEVATION UNLESS SHOWN OTHERWISE. IF ELEVATIONS ARE TO VARY, C & S CONSTRUCTION MUST BE INSTRUCTED OF ELEVATIONS IN WRITING WHEN ORDER IS PLACED.

FOUNDATION NOTE:

FOOTINGS PROVIDED BY CUSTOMER, C & S CONST. NOT RESPONSIBLE OF LIABLE FOR THE USE OF EXSIT. FOOTINGS.

CAP PLATE

SECTION F

NOTE: PLATE DIMENSIONS AND BOLT DIAMETER

SECTION D

SCUPPER

NO.	DATE:	BY:
1	.	.
2	.	.
3	.	.

CARTER MILLER ASSOCIATES: 2020-049
DATE: 2/5/2020

GREGORY R. MILLER
LOUISIANA (EF 5854)
LA REG. 26950

STATE OF LOUISIANA
GREGORY R. MILLER
REG. NO. 26950
REGISTERED
PROFESSIONAL ENGINEERING
IN
CIVIL ENGINEERING
2/5/20

CERTIFICATION

MANUFACTURER:

C & S CANOPY, INC.
P.O. BOX 526 / CLANTON, AL 35045
PHONE: 1-(800) 932-4549

CUSTOMER:

CIRCLE K

SCALE: NOTED
DATE:
APPROVED BY:
DRAWN:
REVISED:

LOCATION: CIRCLE K
2336 WESTWOOD ROAD
LAKE CHARLES, LA

SHT. 1 OF 2

DRAWING NO: 20016

ISSUED FOR CONSTRUCTION 10/2/2020

FOUNDATION PLAN

SCALE: 1/8 = 1'-0

OPTIONAL FOUNDATION PLAN

SECTION A

DETAIL C

DETAIL H

(OPTIONAL)

FOOTING SCHEDULE

MARK	DIMENSIONS: LxWxD	#4 STEEL MAT TOP AND BOTTOM	#5 STEEL MAT TOP AND BOTTOM	#6 STEEL MAT TOP AND BOTTOM	REMARKS
			OTHER CONCRETE ITEMS:		
F7	7'-0 x 7'-0 x 7'-0	#4@8"o/c E.W.	#5@10"o/c E.W.	#6@12"o/c E.W.	#4, #5, AND #6 OPTIONS ALL STEEL SHOWN TO BE PLACED EACH WAY.

NOTE: THIS CANOPY IS DESIGNED PER ASCE 7-10 SEE FIG. 27.4-4, UNBALANCED WIND LOAD

* CLEAR WIND FLOW

NOTES:

1. THESE LOADS HAVE BEEN APPLIED TO STRUCTURE IN ACCORDANCE WITH ASCE 7-10, CHAPTER 2, 2.4.1 BASIC COMBINATIONS FOR ALLOWABLE STRESS
2. THESE STEEL MEMBERS HAVE BEEN SIZED BASED ON ASD, AISC 14th EDITION.
3. ANALYSIS OF THIS STRUCTURE HAS BEEN ACCOMPLISHED USING THE LATEST GENERATION OF MATRIX BASED SOFTWARE.
4. COLUMN SLENDERNESS FACTORS ARE BASED ON CHAPTER C, DIRECT ANALYSIS METHOD.

   Kx = 1.0
   Kz = 1.0

5. BASES ARE FIXED.

STRUCTURE LOADS

PARAMETER				CODE REFERENCE IBC 2012
DEAD LOAD	4.0 PSF			1606.1
LIVE LOAD	20.0 PSF (w/ APP. RED.)			1607.12.2.1
SNOW LOAD	1.0 PSF + DRIFTS			ASCE 7-10, PART 7
WIND SPEED	132.0 MPH 3 SEC. GUST		26.6 PSF	ASCE 7, PART 26-29
	CATEGORY II	Iw 1.0	EXP. B	
	VERT. ROOF PRESSURE			
	Case A Cnw Cnl	Case B Cnw Cnl		ASCE 7, FIG. 27.4-4
	1.20(29.37) .30(7.34)	-1.10(-26.92) -.10(-2.45)		
	HORIZ. FASCIA PRESSURE		EXP. C	
	Case A & B Cfz	Cfx		ASCE 7, FIG. 29.4-7
	1.95(51.80)	1.85(49.14)		

SESMIC DATA				
				ASCE 7-10
SESMIC DESIGN CATEGORY TAB. 11.6(1)(2) B	.2 SEC. SPECTRUM RESPONSE, Ss	0.0920		FIG. 22-1
	1 SEC. SPECTRUM RESPONSE, S1	0.0490		FIG. 22-2
	LONG PERIOD TRANSITION PERIOD, Tl	12		FIG. 22-12
	RISK CATEGORY	II		TAB. 1.5-1
	SESMIC FACTOR, Ie	1.00		TAB. 1.5-2
	SITE COEFFICIENT, Fa	1.60		TAB. 11.4-1
	SITE COEFFICIENT, Fv	2.40		TAB. 11.4-2
	SITE CLASSIFICATION	D		TAB. 20.3-1
	SITE ADJUSTMENT COEFFICENT, Sms	0.1472		EQ. 11.4-1
	SITE ADJUSTMENT COEFFICENT, Sm1	0.1176		EQ. 11.4-2
	DESIGN SPECTRAL RESPONSE, SDS	0.0982		EQ. 11.4-3
	DESIGN SPECTRAL RESPONSE, SD1	0.0784		EQ. 11.4-4
	W, Kips	30.00		12.8
		Z	X	
	SESMIC RESPONSE COEFFICIENT, Cs	0.0785	0.0785	12.8.1.1
	BASIC STRUCTURAL SYSTEM - SESMIC RESISTING SYSTEM			
	Orid. Cant. Col./Orid. Cant. Col.			
	RESPONSE MODIFICATION FACTOR, R	1.25	1.25	TAB. 12.2-1
	METHOD OF ANALYSIS - EQUIVALENT LATERAL FORCE	V=CsW		12.8
	BASE SHEAR, Kips	2.95	2.95	EQ. 12.8-1

PREPARED BY: CARTER-MILLER-SANSING, LTD., P.O.B 4324, MERIDIAN, MS 39304, 601-483-0001

NO.	DATE:	BY:
1	.	.
2	.	.
3	.	.

CARTER MILLER ASSOCIATES: 2020-049
DATE: 2/5/2020

GREGORY R. MILLER
LOUISIANA (EF 5854)
LA REG. 26950

STATE OF LOUISIANA — GREGORY R. MILLER — REGIST. NO. 26950 — REGISTERED PROFESSIONAL ENGINEERING IN CIVIL ENGINEERING — 2/5/2020

CERTIFICATION

MANUFACTURER:
C & S CANOPY, INC.
P.O. BOX 526 / CLANTON, AL 35045
PHONE: 1-(800) 932-4549

CUSTOMER:
CIRCLE K

SCALE: NOTED
DATE:
APPROVED BY:
DRAWN:
REVISED:

LOCATION: CIRCLE K
2336 WESTWOOD ROAD
LAKE CHARLES, LA

SHT. 2 OF 2

DRAWING NO: 20016

ISSUED FOR CONSTRUCTION 10/2/2020

RESPONSIBILITY SCHEDULE

ITEM DESCRIPTION:	SUPPLIED			INSTALLED		
ARCHITECTURAL	G.C.	OWNER	OTHER	G.C.	OWNER	OTHER
ALL MILLWORK, FIXTURES AT BOOTHS AND SCREEN WALLS (M.W.C.)		X		X		
MANAGER DESK	X			X		
SALES FLOOR TILE		X		X		
RESTROOM FLOOR AND WALL TILE		X		X		
INTERIOR WALL GRAPHICS		X		X		
INTERIOR WALL FINISHES	X			X		
INTERIOR WALL GRAPHICS		X		X		
RESTROOM	G.C.	OWNER	OTHER	G.C.	OWNER	OTHER
TOILET PAPER DISPENSER		X		X		
SANITARY NAPKIN DISPOSAL UNIT	X			X		
WALL MOUNTED SOAP DISPENSER		X		X		
BABY CHANGER	X			X		
STAINLESS STEEL GRAB BARS	X			X		
MIRROR	X			X		
ROOM IDENTIFICATION / HANDICAPPED SYMBOL	X			X		
FOOD SERVICE	G.C.	OWNER	OTHER	G.C.	OWNER	OTHER
ALL FOOD SERVICE EQUIPMENT (FINAL CONNECTIONS BY E.C. AND P.C.)		X		X		
S.S. FOOD SERVICE TABLES, SHELVES, ETC. (S.S.C.)		X		X		
1" S.S. CORNER GUARDS (S.S.C.)	X			X		
S.S. TRIM AROUND SODA FOUNTAIN	X			X		
FILL GAPS AROUND SODA FOUNTAIN	X			X		
PLUMBING	G.C.	OWNER	OTHER	G.C.	OWNER	OTHER
REFER TO P1-P3						
ELECTRIC	G.C.	OWNER	OTHER	G.C.	OWNER	OTHER
REFER TO E1-E3						
CREE LIGHT FIXTURES		X		X		
ALL LIGHT FIXTURES OTHER THAN CREE	X			X		
LIGHT SENSORS/MOTION DETECTORS	X			X		
HAND DRYERS	X			X		
DISCONNECT FOR MULTIPLEX	X			X		
MECHANICAL	G.C.	OWNER	OTHER	G.C.	OWNER	OTHER
REFER TO M1.1-M1.3						
T&B AND COMMISSIONING OF HVAC (DEHUMIDIFICATION CERTIFICATION) MUST BE DONE BY A 3RD PARTY	X			X		
ADDITIONAL ITEMS	G.C.	OWNER	OTHER	G.C.	OWNER	OTHER
COAT HOOKS (M.W.C.)	X			X		
EXTERIOR SIGNAGE, INCLUDING DISCONNECTS (FINAL CONNECTIONS BY E.C.)		X		X		
A.D.A. SIGNAGE (RESTROOM, PHONE)	X			X		
SAFE, BOLT DOWN TO FLOOR		X		X		
FIRE EXTINGUISHERS & CABINETS (1 PER FUEL ISLD)	X			X		
KNOX BOX (IF REQUIRED)	X			X		
AS BUILT DRAWINGS	X			X		
KEY BOX	X			X		
THERMOPLASTIC LABELS	X			X		
ALUMINUM ROOF ACCESS LADDER	X			X		

GENERAL NOTES

A. This schedule is intended as a "quick" reference. All items listed are specified and detailed on these drawings. If the contractor encounters items that are contradictory it is the responsibility of the contractor to inform the CIRCLE K Construction Manager so that these items can be clarified prior to bid.

PAINT SCHEDULE - SHERWIN WILLIAMS

Substrate	Primer & Mils	Finish Coats (Two) & Mils per coat	Finish
Interior Drywall	S-W ProMar 200 Zero VOC Interior Latex Primer, B28W2600 (4 mils wet, 1.5 mils dry).	S-W ProMar 200 Zero VOC Latex Eg-Shel, B20 Series (4 mils wet, 1.7 mils dry per coat).	EggShell
Exterior Metal	Spot Prime- Pro-Cryl Metal Primer, Medium Grey B66A1320. (5.0-10.0 mils wet,1.9-3.8 mils dry).	S-W Pro Industrial DTM Acrylic Eg-Shel B66 Series(6.0-10.0 mils wet, 2.5-4.0 mils dry per coat).	EggShell
Exterior Metal	S-W Pro-Cryl Metal Primer, Medium Grey B66A1320. (5.0-10.0 mils wet,1.9-3.8 mils dry)	S-W Water Based Acrolon 100 Gloss Safety Red, Part A B65R720/Part B B65V720 (4.0-8.0 mils wet, 1.8-3.6 mils dry per coat).	Gloss
Masonry	n/a	S-W Loxon XP, A24-1400 Series (14.0-18.0 mils wet; 6.4-8.3 mils dry per coat).	Flat

OWNER

CIRCLE K STORES Inc.
GULF COAST BUSINESS UNIT
25 WEST CEDAR STREET, SUITE 100
PENSACOLA, FL 32502

CONTACT: ANDY SANT
Phone: (337) 962-8306 (MOBILE)

DEVELOPMENT CONTACTS

CALCASIEU PARISH PLANNING & DEVELOPMENT
CALCASIEU PARISH PLANNING AND DEVELOPMENT
1015 PITHON STREET
LAKE CHARLES, LA 70601
337-721-4100

BUILDING DEPARTMENT
901 Lakeshore Drive, 5th Floor
Lake Charles, LA 70602
337-721-3500

LAKE CHARLES GOVERMENT UTILITIES
326 Pujo St
Lake Charles, LA 70601
337 491-1220

DEPT. OF TRANSPORTATION

PUBLIC INFORMATION OFFICES
5827 US-90, Lake Charles
Lake Charles, LA 70615
337- 437-9100

LOUISIANA DEPARTMENT OF HEALTH
3236 Kirkman Street
Lake Charles, LA 70601
337- 478-6020

ELECTRIC PROVIDER:
ENTERGY LOUISIANA, LLC
CUSTOMER SERVICE
1-800-968-8243

TELEPHONE PROVIDER
AT&T

855-293-7676

ENGINEER

MDM SERVICES, INC.
engineering • environmental • construction

1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
(863) 646-9130

CONTACT: SANDIE OWENS, PROJECT MANAGER
Phone: (863) 646-9130 EXT. 107 (OFFICE)
(863) 559-3800 (MOBILE)

NOTE:
THE PRIMARY STRUCTURAL ELEMENTS OF THIS PROJECT ARE NOT CONSIDERED "LIGHT FRAME CONSTRUCTION" (FORMED BY A SYSTEM OF REPETITIVE WOOD OR LIGHT GAUGE STEEL FRAMING MEMBERS); THEREFORE, THIS PROJECT IS NOT REQUIRED TO HAVE "LIGHT FRAME CONSTRUCTION SIGNS.

(PIN: 230909-240-0019)

GENERAL PROJECT NOTES

A. All construction shall comply with applicable building codes and local restrictions. Contractors must comply with contractor registration requirements of all governing authorities.
B. Approved plans shall be kept in a plan box and shall not be used by workmen. All construction sets shall reflect same information. Contractor shall maintain one complete set of plans on the premises in good condition at all times. this shall include all addenda.
C. The contractor shall field verify all conditions and dimensions prior to starting any work and shall be responsible for all work and materials including those furnished by subcontractors and owner.
D. Discrepancies between portions of the contract documents, drawings and specifications are not intended. The contractor is to clarify any such discrepancies with the owner prior to commencing work.
E. Stated dimensions take precedence over graphics, do not scale drawings to determine locations. The owner shall be notified of any such discrepancies prior to continuing with work.
F. Contact owner for instructions prior to the continuation of work should any unusual conditions become apparent during grading or foundation construction. Existing elevations and locations to be jointed shall be verified by the contractor prior to construction. If they differ from those shown on the drawings, the contractor shall notify the owner so that modifications can be made before proceeding with the work.
G. It shall be the responsibility of the contractor to locate all existing utilities whether shown herein or not and to protect them from damage. The contractor shall bear the expense of repair or replacement of utilities or other property damaged by operations in conjunction with he execution of the work after so located.
H. For construction details not shown, use the manufacturer's approved shop drawings / data sheets in accordance with the project specifications.
J. Fire extinguishers to be installed at heights designated by owner and in compliance with local fire code. Final fire extinguisher locations shall be approved by fire marshal.
K. All construction must meet The International Building Code regardless of supplier as required by Jurisdiction, State, and local Authority.
L. G.C.to get application for "knox/access box" from the fire marshals office. Box is to be installed prior to final inspection.

CODE INFORMATION

1. APPLICABLE CODES:

BUILDING: 2015 INTERNATIONAL BUILDING CODE - BUILDING
PLUMBING: 2015 INTERNATIONAL BUILDING CODE - PLUMBING
MECHANICAL: 2015 INTERNATIONAL BUILDING CODE - MECHANICAL
ELECTRICAL: 2014 NATIONAL ELECTRICAL CODE
ENERGY: 2015 INTERNATIONAL BUILDING CODE - ENERGY CONSERVATION
ACCESSIBLITY: 2015 INTERNATIONAL BUILDING CODE - ACCESSIBILITY
LIFE SAFETY : 2015 NFPA 101 LIFE SAFETY CODE - 6TH EDITION
FIRE : 2015 INTERNATIONAL BUILDING CODE - FIRE PREVENTION
FUEL GAS: 2015 INTERNATIONAL BUILDING CODE - FUEL GAS
LIQUID STORAGE: 2015 NFPA 30 & 30A, 2015 NFPA 1
FLAMABLE/COMBUSTIBLE

2. BUILDING DESIGN CRITERIA:

CONSTRUCTION TYPE: V-B, UNPROTECTED
~~OCCUPANY/USE GROUP: M- MERCANTILE~~
WIND: ASCE 7-10, Vult 130 MPH
AS PER 2015 IBC (ASCE 7-10) AND PER ATC (Applied Technology Council)
SOILS: DESIGN BEARING CAPACITY (FBC 1818.1)
ALLOWABLE BEARING CAPACITY (FBC 1818.2)
BY A WAY OF RECOGNIZED TESTS
ROOF DESIGN LIVE LOAD: 30 PSF

1

3. PLUMBING FIXTURES:

OCCUPANT LOAD FOR PLUMBING
REQUIRED:

MEN:	1 WC, 1 LAV,
WOMEN:	1 WC, 1 LAV
SERVICE SINK:	1
DRINKING FOUNTAIN:	1

PROVIDED:

MEN:	1 WC, 1 UR, 3 LAV
WOMEN:	2 WC, 3 LAV
SERVICE SINK:	1
DRINKING FOUNTAIN:	2 (HILO)

Inserted Royston Layouts for reference 11-25-2020

DWG. NO.	
CV-B	COVER SHEET
BUILDING	
A-1.0	LIFE SAFETY AND ACCESSIBILITY FLOOR PLAN
A-1.1	ACCESSIBILITY STANDARD, NOTES & DETAILS
A-1.2	FLOOR PLAN AND ROOM FINISH SCHEDULES
A-1.2a	FIRE & SMOKE PROTECTION, FIRE STOPPING PLAN
A-1.2.1	FLOOR FINISH PLAN
A-1.3	FINISH DIMENSION FLOOR PLAN, WALL TYPES AND ENLARGED RESTROOM
A-1.4	EQUIPMENT PLAN
A-1.5	EQUIPMENT LIST
A-1.6	REFLECTED CEILING PLAN
A-1.7	ROOF PLAN AND DETAILS
A-1.7.1	ROOFING SPECIFICATIONS
A-1.8	FLOOR PENETRATION PLAN
A-1.9	SECURITY SYSTEM FLOOR PLAN
A-2.1	EXTERIOR ELEVATIONS
A-3.1	INTERIOR ELEVATIONS
A-3.2	INTERIOR ELEVATIONS
A-3.3	INTERIOR ELEVATIONS
A-4.0	BUILDING SECTIONS
A-5.1	WALL SECTIONS
A-5.2	WALL SECTIONS
A-5.3	WALL SECTIONS
A-6.0	ROOM KEY PLAN, DOOR/WINDOW SCHEDULE & TYPES NOTES
A-8.1	EXTERIOR ARCHITECTURAL DETAILS
A-8.2	EXTERIOR ARCHITECTURAL DETAILS
A-8.3	EXTERIOR ARCHITECTURAL DETAILS
A-8.4	ROOF LADDER DETAILS
A-9.1	INTERIOR ARCHITECTURAL DETAILS
A-9.2	INTERIOR ARCHITECTURAL DETAILS
A-9.3	INTERIOR ARCHITECTURAL DETAILS
STRUCTURAL	
S-1.1	GENERAL STRUCTURAL NOTES
S-2.1	FOUNDATION PLAN
S-2.2	ROOF FRAMING PLAN
S-3.1	FOUNDATION & STRUCTURAL DETAILS
S-3.2	STRUCTURAL DETAILS
MECHANICAL	
M-1.1	MECHANICAL FLOOR PLAN
M-1.1.1	MECHANICAL ROOF PLAN
M-1.2	MECHANICAL DETAILS
M-1.2.1	MECHANICAL DETAILS
M-1.2.2	MECHANICAL SCHEDULES
M-1.2.3	MECHANICAL NOTES
M-1.3	MECHANICAL SPECIFICATIONS
PLUMBING	
P-1.1	ROOF PLAN
P-1.1.1	SANITARY WASTE FLOOR PLAN
P-1.1.2	WATER SUPPLY FLOOR PLAN
P-1.2	PLUMBING SCHEMATICS
P-1.3	PLUMBING SPECIFICATIONS, SCHEDULES, NOTES & DETAILS
ELECTRICAL	
E-0.0	ELECTRICAL LEGENDS
E-0.1	ELECTRICAL SPECIFICATIONS
SE-1.0	ELECTRICAL SITE PLAN
E-2.0	ELECTRICAL FLOOR PLAN
E-3.0	LOW VOLTAGE AND EMS PLAN
E-4.0	ELECTRICAL ROOF PLAN
E-5.0	ELECTRICAL LIGHTING PLAN
E-6.0	ELECTRICAL PANEL SCHEDULES & SINGLE LINE DIAGRAM
E-7.0	CAROLINA PRODUCTS, INC. SWITCHGEAR DETAILS

SYMBOLS LEGEND

DRAWING TITLE A1.1-01 FLOOR PLAN
SCALE: 1/4" = 1'-0"
XA1-1
SHEET NUMBER
DRAWING I.D. NUMBER
LIBRARY NUMBER
DRAWING SCALE

SECTION A1.1-01
SECTION I.D. NUMBER
SHEET WHERE SECTION IS LOCATED

DETAIL A1.1-01
DETAIL I.D. NUMBER
SHEET WHERE SECTION IS LOCATED
AREA TO BE ENLARGED

DETAIL (ENLARGED) A1.1-01
DETAIL I.D. NUMBER
SHEET WHERE SECTION IS LOCATED

ELEVATION A1.1-01
ELEVATION I.D. NUMBER
SHEET WHERE SECTION IS LOCATED

CEILING HEIGHT . . . . . 10'-0"
CEILING HEIGHT ABOVE FINISHED FLOOR

DOOR 1
DOOR NUMBER DESIGNATION

KEYED NOTES 1
KEYED NOTE DESIGNATION ON APPLICABLE SHEET

REVISIONS 1
ADDENDUM NUMBER
REVISED AREA CLOUDED

ELEVATION HEIGHT . . . . . 100'-0" T.O.S.
ELEVATION HEIGHT
REFERENCE POINT

EQUIPMENT A00
EQUIPMENT NUMBER DESIGNATION

WINDOW . . . . . A
WINDOW NUMBER DESIGNATION

FINISH MATERIAL . . . . . P-1 TRIM ONLY
FINISH DESIGNATION
COMMENTS, IF APPLICABLE

SITE VICINITY MAP

VERSION: REV

DATES		
04/07/20	1	REVISED WIND SPEED PD

STORE NUMBER
TBD
MDM PROJECT NUMBER
19075

CV-B

CIRCLE K #TBD
2336 Westwood Road, West Lake LA
SITE: 5,800 SQ. FT.
ISSUED FOR CONSTRUCTION 10/2/2020

1 LIFE SAFETY & ACCESSIBILITY FLOOR PLAN

SCALE: 3/16" = 1'-0"

BUILDING CODE ANALYSIS/ FIRE CODE ANALYSIS

OCCUPANT INFORMATION
THIS BUILDING WILL BE OCCUPIED WITH ONE TENANT.
ALL EXTERIOR AND INTERIOR UNDER THIS PERMIT.

AUTOMATIC SPRINKLER SYSTEM
THIS BUILDING IS NON SPRINKLERED

FIRE ALARM SYSTEM
THIS BUILDING IS TO BE PROTECTED BY A FIRE ALARM SYSTEM

	2015 IBC		FFPC, NFPA 101		PROPOSED
OCCUPANCY CLASSIFICATION	CHAPTER 3, SEC 309.1 M (MERCANTILE)		CHAPTER 36.2.6.1 M (MERCANTILE)		
ALLOWABLE BUILDING HEIGHT & AREA	9000 S.F 40 FEET		-- --		5,693 SF 23'-8"
CONSTRUCTION TYPE	TABLE 601 TYPE - VB (NON SPRINKLERED)		TABLE A.8.2.1.2 TYPE - V (000)		
EXIT CAPACITY EGRESS WIDTH PER PERSON =	SEC 1005.1 0.2" PER PERSON		TABLE 7.3.3.1 0.2" PER PERSON		136" (EGRESS CAPACITY 680 PERSON)
MINIMUM NUMBER OF EXITS REQUIRED PROPOSED	TABLE 1006.3.1 (1-500 PERSONS) - 2		Sect. 36.2.4 (1-500 PERSONS) - 2		3
		S-1	Table A.7.6 (ANNEX A)		
	MERCANTILE	STORAGE	MERCANTILE	STORAGE	
COMMON PATH LIMIT	TABLE 1006.2.1 75'	75'	75'	75'	< 75'
DEAD-END LIMIT	SEC. 1020.4 20'	20'	20'	20'	< 20'
TRAVEL DISTANCE LIMIT	TABLE 1017.2 200'	200'	200'	200'	< 200'

ARRANGEMENT MEANS OF EGRESS:
REQUIRED DISTANCE
BETWEEN EXIT DOORS

WHERE TWO EXITS OR EXIT ACCESS DOORWAYS ARE REQUIRED FROM ANY PORTION OF THE EXIT ACCESS, THE EXIT DOORS OR EXIT ACCESS DOORWAYS SHALL BE PLACED A DISTANCE APART EQUAL TO NOT LESS THAN ONE-HALF OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE BUILDING OR AREA TO BE SERVED MEASURED IN A STRAIGHT LINE BETWEEN EXIT DOORS OR EXIT ACCESS DOORWAYS. INTERLOCKING OR SCISSOR STAIRS SHALL BE COUNTED AS ONE EXIT STAIRWAY AS PER 2015 IBC, SECTION 1007.1.1

ACTUAL STRAIGHT LINE DISTANCE BETWEEN EXITS
EXIT #1 TO #2 = 62'-2¾"

ACTUAL STRAIGHT LINE ACROSS PUBLIC AREA:
DIAGONAL AT PUBLIC AREA = 121'-3"

1/2 DIAGONAL = 60'-8"

CONCLUSION =
= 62'-3" IS GREATER THAN 60'-8" (MEETS CODE FOR NON-SPRINKLERED BUILDING)

OCCUPANT LOAD CALCULATION

NOTE:
BASED ON 2015 IBC TABLE 1004.1.2 AND FFPC NFPA 101 TBL. 7.3.1.2
HIGHEST OCCUPANCY FACTOR WAS USED TO DETERMINED HIGHEST OCCUPANCY LOAD

LABEL	ROOM NAME	OCCUPANCY OF SPACE AS PER TABLE 1004.1.2 2015 IBC	AREA	2015 IBC		FFPC NFPA 101	
				FLOOR AREA S.F. PER OCCUPANIT	# OF OCCUPANTS	FLOOR AREA S.F. PER OCCUPANIT	# OF OCCUPANTS
108	SALES AREA/BEER CAVE	MERCANTILE	3,165 SF	60 gross	53	30 gross	106
110	BACKROOM / WALK-IN COOLER AREAS	STORAGE	975 SF	300 gross	4	300 gross	4
103	MANAGER OFFICE	BUSINESS	75 SF	100 gross	1	100 gross	1
TOTAL OF OCCUPANTS					58		111

BUILDING AREAS

C-STORE SALES:	2,677 S.F.
BEER CAVE:	488 S.F.
WALK-IN COOLERS:	517 S.F.
HALLWAY/RESTROOMS (ALL):	553 S.F.
BACKROOM:	458 S.F.
OFFICE:	75 S.F.
TOTAL S.F.:	5,120 S.F.
GROSS BLDG AREA:	5,394 S.F. *

* OUT/OUT EXTERIOR WALLS

LEGEND

- = ROUTE FROM THE REMOTEST ROOM OR SPACE TO NEAREST EXIT.
- = DIAGONAL DISTANCE OF THE BUILDING OR AREA
- = STRAIGHT LINE DISTANCE BETWEEN EXITS
- = MOST REMOTE POINT WITHIN THIS AREA
- = EXIT TACTILE SIGN
- = ILLUMINATED EXIT SIGN
- = EMERGENCY LIGHT
- = 2X4 LAY-IN FIXTURE W/ EMERGENCY BALLAST
- = FIRE EXTINGUISHERS SHALL BE LOCATED PER THE REQUIREMENTS OF NFPA10. THE SIZE SHALL BE A MINIMUM OF 2-A-10-BC (MIN. OF 2) AND INSTALLED AT 48" MAX. A.F.F.
- = LED SECURITY LIGHT WITH BATTERY BACK-UP

ACCESSIBILITY SIGNS

- SIGN 1 INTERNATIONAL SYMBOL OF ACCESSIBILITY
- SIGN 2 "THIS DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS" LETTER MIN. 1" HIGH. SIGN MOUNTED ABOVE DOOR.
- SIGN 3 TACTILE EXIT SIGN SHALL COMPLY SECTION 703.3, FBCA / ANSI A117.1 2017
- SIGN 4 MEN RESTROOM
- SIGN 5 WOMEN RESTROOM
- SIGN 6 EMPLOYEES ONLY

NOTES:

INSPECTOR MAY REQUIRE ADDITIONAL EXIT SIGNS AT THE TIME OF FINAL INSPECTION. ALL EGRESS SIGNS SHALL COMPLY WITH NFPA 101, CHAPTER 7, SECTION 7.10

INSPECTOR MAY REQUIRE ADDITIONAL EMERGENCY LIGHTING AT THE TIME OF FINAL INSPECTION. ALL EMERGENCY LIGHTS SHALL COMPLY WITH NFPA 101, CHAPTER 7, SECTION 7.90

SIGNAGE COMPANY AND GC TO BOTH MAKE SURE ALL UTILITY LINES HAVE BEEN LOCATED PRIOR TO DIGGING FOOTING.

GC RESPONSIBLE TO CALL AND HAVE UTILITIES LOCATED.

SIGNAGE COMPANY RESPONSIBLE TO CONFIRM THIS HAS BEEN DONE.

GENERAL NOTES

1. MEANS OF EGRESS SHALL BE ILLUMINATED WITH AT LEAST ONE-FOOT CANDLE AT THE FLOOR LEVEL (WALKING SURFACE). REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION

ACCESSSIBILITY NOTES

1. ACCESS TO THESE FACILITIES SHALL BE PROVIDED AT PRIMARY ENTRANCES.
2. THE SLOPE OF PUBLIC WALKS SHALL NOT EXCEED MAX. - GROSS SLOPE 2%.
3. WALKING SURFACE SLOPING GREATER THAN 2% SHALL BE SLIP RESISTANT.
4. PROVIDE A 60"x60" MIN. LANDING ON STRIKE SIDE OF DOOR W/ 44" MIN. WIDTH IN DIRECTION OF TRAVEL.
5. WALKS SHALL EXTEND 24" TO THE SIDE OF THE STRIKE EDGE OF A DOOR OR GATE THAT SWINGS TOWARD THE WALK.
6. THE SLOPE OF RAMPS SHALL NOT EXCEED 1'-0" IN 15'-0" U.N.O.
7. RAMPS SHALL HAVE A NON-SLIP SURFACE.
8. RAMPS SHALL BE 48" WIDE MIN.
9. EVERY REQUIRED EXIT DOORWAY SHALL BE SIZED FOR A DOOR NOT LESS THAN 3 FT. WIDE BY NOT LESS THAN 6"-8" HIGH CAPABLE OF OPENING 90° AND MOUNTED SO THAT THE CLEAR WIDTH OF THE EXIT WAY IS 32" MIN.
10. THRESHOLD TO BE A MAX. 1/2" ABOVE ADJACENT FINISH FLOOR.
11. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 LBS.
12. THE BOTTOM 10" OF ALL DOORS EXCEPT AUTOMATIC AND SLIDING SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE.
13. PROVIDE LEVER TYPE HARDWARE, PANIC BARS, PUSH - PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE. (30" TO 44" A.F.F.)
14. EVERY EXIT DOOR SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT, FLUSH OR SURFACE BOLTS SHALL BE AUTOMATIC TYPE. LOCKABLE DOORS SHALL BE PROVIDED WITH A SIGN STATING "THESE DOORS TO REMAIN UNLOCKED DURING BUSINESS HOURS" IN MIN. 1" HIGH LETTERS.
15. EXIT SIGNS WHERE NOTED OR REQUIRED SHALL BE WORDED "EXIT" IN AND LETTERS HAVING THE PRINCIPAL STROKE OF NOT LESS THAN 3/4" WIDE AND 6" HIGH AND SHALL CONFORM TO ALL APPLICABLE CODES.
16. PROVIDE ILLUMINATED EXIT SIGNS AND EMERGENCY LIGHTING AT ALL EXIT CORRIDORS AS REQUIRED BY CODE. EMERGENCY LIGHTING SHALL PROVIDE ILLUMINATION OF ONE FOOT CANDLE AT FLOOR LEVEL.
17. DOORS TO ACCESSIBLE SANITARY FACILITIES SHALL BE IDENTIFIED BY 1/4" THICK GEOMETRIC SYMBOLS OF CONTRASTING COLOR, CENTERED ON THE DOOR AT A HEIGHT OF 60" AFF (12" EQUILATERAL TRIANGLE FOR MEN AND 12" DIAMETER CIRCLE FOR WOMEN). 12. POST INTERNATIONAL SYMBOL OF ACCESSIBILITY ON OR ADJACENT TO ALL ACCESSIBLE BUILDING ENTRANCES. LOCATION AS INDICATED BY OWNER.
18. THE MAXIMUM EFFORT REQUIRED TO OPERATE FIRE-RATED DOORS IS 15 LBS., EXIT DOORS IS 8.5 LBS. FOR EXTERIORS, AND 5 LBS. FOR INTERIOR DOORS.

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.
engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

ARIEL VALDES, AIA
LOUISIANA R.A. # 9212

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #5187
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 5187
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 00 19075 CK XXXX 5187 A1.0.DWG
CHECKED BY:	

DRAWING TITLE:

LIFE SAFETY/ ACCESSIBILITY FLOOR PLAN

SHEET NO:

A1.0

ACCESS ON TWO SIDES

ACCESS ON ONE SIDE

K1 AISLES

NO SCALE

SPACE AT DOORS – FRONT APPROACH

*NOTE: 48" MINIMUM IF DOOR HAS BOTH A LATCH AND A CLOSER.

DOOR APPROACH AT HALLWAYS – HINGE APPROACH

DOOR APPROACH AT HALLWAYS – LATCH APPROACH

CLEAR WIDTH OF AN ACCESSIBLE ROUTE

180 DEGREE TURN

CLEAR WIDTH AT TURN

K3 DOOR OPENINGS & HALLWAYS

NO SCALE

WATER CLOSET AND ACCESSORIES:

1. THE HEIGHT OF ACCESSIBLE WATER CLOSETS SHALL BE A MINIMUM OF 17" AND A MAXIMUM OF 19" MEASURED TO THE TOP OF A MAXIMUM 2" HIGH TOILET SEAT, EXCEPT THAT 3" SEATS SHALL BE PERMITTED ONLY IN ALTERATIONS WHERE THE EXISTING FIXTURE IS LESS THAN 15" HIGH.
2. THE CONTROLS FOR WATER CLOSET FLUSH VALVES SHALL BE MOUNTED ON THE WIDE SIDE OF THE TOILET AREAS. AUTOMATIC SPRING TO LIFTED POSITION SEATS ARE NOT ALLOWED.
3. THE FORCE REQUIRED TO ACTIVATE WATER CLOSET AND URINAL FLUSH VALVE CONTROLS, AND FAUCET AND OPERATING MECHANISM CONTROLS, SHALL BE NO GREATER THAN 5 LBS. ELECTRONIC OR AUTOMATIC FLUSHING CONTROLS ARE ACCEPTABLE AND PREFERABLE.
4. WHERE TOWEL, SANITARY NAPKINS, WASTE RECEPTACLES, DISPENSERS, OR OTHER EQUIPMENT AND CONTROLS ARE PROVIDED, PROVIDE AT LEAST ONE OF EACH TYPE SHALL BE ON AN ACCESSIBLE ROUTE, WITH ALL OPERABLE PARTS, INCLUDING COIN SLOTS, WITHIN 40" FROM THE FINISHED FLOOR.
5. THE TOILET TISSUE DISPENSERS SHALL BE LOCATED ON THE WALL WITHIN 7–9" OF THE FRONT EDGE OF THE TOILET SEAT, MOUNTED BELOW THE GRAB BAR AT A MINIMUM HEIGHT OF 15", AND 36" MAXIMUM AFF. DISPENSERS THAT CONTROL DELIVERY OR THAT DO NOT PERMIT CONTINUOUS PAPER FLOW SHALL NOT BE USED.

GRAB BARS:

1. THE REAR GRAB BARS SHALL BE 36" LONG MINIMUM AND EXTEND FROM THE CENTERLINE OF THE WATER CLOSET 12" MINIMUM ON ONE SIDE AND 24" MINIMUM ON THE OTHER SIDE. THE REAR GRAB BAR SHALL BE SECURELY ATTACHED AND CENTERED 33" ABOVE AND PARALLEL TO THE FLOOR, EXCEPT THAT WHERE A TANK–TYPE TOILET IS USED, WHICH OBSTRUCTS PLACEMENT AT 33", THE BAR MAY BE AS HIGH AS 36", WITH A 1–1/2" MINIMUM BETWEEN THE BAR AND TOP OF THE TANK.
2. THE DIAMETER OR WIDTH OF THE GRIPPING SURFACES OF A GRAB BAR SHALL BE 1–1/4" TO 2", OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE. IF GRAB BARS ARE MOUNTED ADJACENT TO A WALL, THE SPACE BETWEEN THE WALL AND THE GRAB BARS SHALL BE 1–1/2".
3. THE STRUCTURAL STRENGTH OF THE GRAB BARS, FASTENERS, AND MOUNTING DEVICES SHALL MEET THE FOLLOWING SPECIFICATIONS:
   A. BENDING STRESS IN A GRAB BAR OR SEAT INDUCED BY THE MAXIMUM BENDING MOMENT FROM THE APPLICATION OF A 250–LB POINT LOAD SHALL BE LESS THAN THE ALLOWABLE STRESS FOR THE MATERIAL OF THE GRAB BAR OR SEAT.
   B. SHEAR STRESS INDUCED IN A GRAB BAR OR SEAT BY THE APPLICATION OF A 250–LB POINT LOAD SHALL BE LESS THAN THE ALLOWABLE SHEAR STRESS FOR THE MATERIAL OF THE GRAB BAR OR SEAT, AND ITS MOUNTING BRACKET OR OTHER SUPPORT IS CONSIDERED TO BE FULLY RESTRAINED, THEN DIRECT AND TORSIONAL SHEAR STRESS SHALL NOT EXCEED THE ALLOWABLE SHEAR STRESS.
   C. SHEAR FORCE INDUCED IN FASTENER OR MOUNTING DEVICES FROM THE APPLICATION OF A 250–LB POINT LOAD SHALL BE LESS THAN THE ALLOWABLE LATERAL LOAD OF EITHER THE FASTENER OR MOUNTING DEVICE OR THE SUPPORTING STRUCTURE, WHICHEVER HAS THE SMALLER ALLOWABLE LOAD.
   D. TENSILE FORCE INDUCED IN A FASTENER BY A DIRECT TENSION FORCE OF A 250–LB POINT LOAD, PLUS THE MAXIMUM MOMENT FROM THE APPLICATION OF A 250–LB POINT LOAD, SHALL BE LESS THAN THE ALLOWABLE WITHDRAWAL LOAD BETWEEN THE FASTENER AND SUPPORTING STRUCTURE.
   E. GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS.
4. THE GRAB BARS AND ANY WALL OR OTHER SURFACE ADJACENT TO IT SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS. EDGES SHALL HAVE A MINIMUM RADIUS OF 1/8".

GENERAL NOTES

1. ACCESSIBILITY STANDARDS MAY VARY SLIGHTLY FROM THOSE SHOWN HERE ACCORDING TO THE REFERENCED STANDARDS OF THE APPLICABLE CODES, (ANSI A117.1 (I.B.C.)), THE YEAR OF THE CODE ADOPTED AT THE TIME OF THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY, THE LOCAL JURISDICTION REQUIREMENTS, THE CODE ITSELF AS STATED (TITLE 24 OF THE C.B.C., B.O.C.A. OR THE I.B.C.), THE REQUIREMENTS OF AN ADOPTED STATE LAW OR A PRECEDENT PREVIOUSLY SET FOR COMPLIANCE BY THE JUSTICE DEPARTMENT (A.D.A.).
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INFORM THE ARCHITECT AND/OR THE CIVIL ENGINEER OF ANY DISCREPANCIES, SUBTLE OR OTHERWISE, FROM WHAT IS SHOWN HERE AND THE APPLICABLE CODE/LAW/ORDINANCE.
3. THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AID FOR BUILDING AND CONSTRUCTION.
4. FOR ALL BACKING SUPPORT REFER TO BACKING SUPPORT DETAIL 13 SHEET A9.1

D1 WATER CLOSET AND TOILET ACCESSORIES NOTES AND INFORMATION

1/4" = 1'–0"

1. AT EVERY PRIMARY PUBLIC ENTRANCE AND AT EVERY MAJOR JUNCTION ALONG OR LEADING TO AN ACCESSIBLE ROUTE OF TRAVEL, THERE SHALL BE A SIGN DISPLAYING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. SIGNS SHALL INDICATE THE DIRECTION TO ACCESSIBLE BUILDING ENTRANCES AND FACILITIES.
2. WHEN A BUILDING CONTAINS AN ENTRANCE OTHER THAN THE MAIN ENTRANCE WHICH IS RAMPED OR LEVEL FOR USE BY DISABLED PERSONS, A SIGN SHOWING ITS LOCATION IS REQUIRED TO BE POSTED AT OR NEAR THE MAIN ENTRANCE.
3. PROVIDE SIGNS WITH INTERNATIONAL SYMBOL OF ACCESSIBILITY INDICATING LOCATION OF EACH ACCESSIBLE ENTRY. PROVIDE ADDITIONAL DIRECTIONAL SIGNS AS REQUIRED.

G5 ENTRY AND DIRECTIONAL SIGNS

NO SCALE

LAVATORY NOTES:

1. PROVIDE A CLEAR SPACE 30"x48" MIN. IN FRONT OF THE LAVATORY. THE CLEAR SPACE MAY EXTEND INTO KNEE AND TOE SPACE UNDER LAVATORY.
2. INSULATE OR CONFIGURE HOT WATER SUPPLY AND DRAIN PIPING UNDER LAVATORIES TO PREVENT CONTACT.
3. NO SHARP OR ABRASIVE ELEMENTS ARE ALLOWED UNDER LAVATORIES.
4. FAUCET CONTROLS AND OPERATING MECHANISMS ARE REQUIRED TO BE OPERABLE WITH ONE HAND AND CANNOT REQUIRE GRASPING, PINCHING, OR TWISTING OF WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS IS NOT TO EXCEED 5 LBF. LEVER OPERATED, PUSH TYPE AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGN.
5. SELF CLOSING VALVES ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS.

G7 LAVATORIES

NO SCALE

CONTROLS, SWITCHES AND OUTLETS

NOTES:

1. THE HIGHEST OPERABLE PART OF ALL CONTROLS, DISPENSERS, RECEPTACLES AND OTHER OPERABLE EQUIPMENT SHALL BE INSTALLED AT AN ACCESSIBLE LOCATION MEETING THE CLEARANCES AND REACH RANGE REQUIREMENTS.
2. CONTROLS AND SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF THE ROOM OR AREA TO CONTROL LIGHTING AND RECEPTACLE OUTLETS, APPLIANCES, OR COOLING, HEATING AND VENTILATING EQUIPMENT, SHALL BE LOCATED NO MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE OUTLET BOX NOR LESS THAN 15 INCHES MEASURED FROM THE BOTTOM OF THE OUTLET BOX TO THE LEVEL OF THE FINISH FLOOR OR WORKING PLATFORM.
3. ELECTRICAL RECEPTACLE OUTLETS ON BRANCH CIRCUITS OF 30 AMPERES OR LESS AND COMMUNICATION SYSTEM RECEPTACLES SHALL BE LOCATED NO MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE RECEPTACLE OUTLET BOX OR RECEPTACLE HOUSING NOR LESS THAN 15 INCHES MEASURED FROM THE BOTTOM OF THE RECEPTACLE OUTLET BOX OR RECEPTACLE HOUSING TO THE LEVEL OF THE FINISH FLOOR OR WORKING PLATFORM.
4. EXISTING BUILDING MUST MEET SAME REQUIREMENTS AS NEW CONSTRUCTION UNLESS AN UNREASONABLE HARDSHIP IS GRANTED BY THE ENFORCING AGENCY.

G13 CONTROLS AND OPERATING MECHANISMS

1/4" = 1'–0"

CHARACTERS ON SIGNS SHALL BE RAISED 1/32" MIN. AND HAVE A WIDTH TO HEIGHT RATIO OF BETWEEN 3:5 AND 1:1 AND A STROKE WIDTH TO HEIGHT RATIO OF BETWEEN 1:5 AND 1:10. THE MINIMUM CHARACTER HEIGHT SHALL BE 5/8" MIN. AND 2" MAX. AND SANS–SHERIF UPPER CASE.

GRADE 2 BRAILLE DOTS SHALL BE 1/10" ON CENTER IN EACH CELL WITH 2/10" SPACE BETWEEN CELLS, MEASURED FROM THE SECOND COLUMN OF DOTS IN THE FIRST CELL TO THE FIRST COLUMN OF DOTS IN THE SECOND CELL. DOTS SHALL BE RAISED A MINIMUM OF 1/40" ABOVE THE BACKGROUND.

SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH OUTSIDE THE DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE, INCLUDING DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL, PREFERABLY TO THE RIGHT.

D5 EXIT TACTILE SIGN

1 1/2"=1'–0"

WHEELCHAIR ACCESSIBLE COMPARTMENT

TOE CLEARANCE

D7 WHEELCHAIR ACCESSIBLE COMPARTMENT/ TOE CLEARANCE

1/4" = 1'–0"

REACH RANGE LIMITS

A1 REACH RANGES

NO SCALE

NOTES

1. CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND.
2. TACTILE CHARACTERS SHALL BE LOCATED 48" MIN. AFF, MEASURED FROM THE BASELINE OF THE LOWEST TACTILE CHARACTER AND 60" MAX. AFF, MEASURED FROM THE BASELINE OF THE HIGHEST TACTILE CHARACTER.
3. PROVIDE ROOM IDENTIFICATION SIGN ON LATCH SIDE OF DOOR.
4. LETTERS & NUMBERS ON SIGNS SHALL BE RAISED 1/32" MIN., SHALL BE A MIN. OF 5/8" HIGH, A MAX. OF 2" HIGH, & SHALL BE SANS–SERIF UPPERCASE CHARACTERS ACCOMPANIED BY CONTRACTED GRADE 2 BRAILLE.

A3 RESTROOM SIGNS

NO SCALE

DOOR NOTES:

1. WHEN INSTALLED, DOORWAYS SHALL HAVE A MINIMUM CLEAR OPENING OF 32 INCHES WITH THE DOOR OPEN 90 DEGREES.
2. FOR HINGED DOORS, THE OPENING WIDTH SHALL BE MEASURED WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.
3. WHERE A PAIR OF DOORS IS UTILIZED, AT LEAST ONE OF THE DOORS SHALL PROVIDE A CLEAR, UNOBSTRUCTED OPENING WIDTH OF 32 INCHES WITH THE LEAF POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.
4. THERE SHALL BE A LEVEL AND CLEAR FLOOR OR LANDING ON EACH SIDE OF A DOOR. THE LEVEL AREA SHALL HAVE A LENGTH IN THE DIRECTION OF DOOR SWING OF AT LEAST 60 INCHES AND THE LENGTH OPPOSITE THE DIRECTION OF THE DOOR SWING OF 48 INCHES AS MEASURED AT RIGHT ANGLES TO THE PLANE OF THE DOOR IN THE CLOSED POSITION. WHERE THE PLANE OF THE DOORWAY IS OFFSET OR LOCATED IN AN ALCOVE A DISTANCE MORE THAN 8 INCHES MEASURED FROM THE PLANE OF THE DOORWAY TO THE FACE OF THE WALL, THE DOOR SHALL BE PROVIDED WITH 60 INCHES MANEUVERING CLEARANCE FOR FRONT APPROACH.
5. THE WIDTH OF THE LEVEL AREA ON THE SIDE TO WHICH THE DOOR SWINGS SHALL EXTEND 24 INCHES PAST THE STRIKE EDGE OF THE DOOR FOR EXTERIOR DOORS AND 18 INCHES PAST THE STRIKE EDGE FOR INTERIOR DOORS. WHERE THE PLANE OF THE DOORWAY IS OFFSET 8 OR MORE INCHES FROM ANY OBSTRUCTION WITHIN 18 INCHES MEASURED LATERALLY ON THE LATCH SIDE, THE DOOR SHALL BE PROVIDED WITH MANEUVERING CLEARANCE FOR FRONT APPROACH.
6. PROVIDE CLEAR SPACE OF 12 INCHES PAST STRIKE EDGE OF THE DOOR ON THE OPPOSITE SIDE TO WHICH THE DOOR SWINGS IF THE DOOR IS EQUIPPED WITH BOTH A LATCH AND A CLOSER.
7. THE FLOOR OR LANDING SHALL NOT BE MORE THAN 1/2 INCH LOWER THAN THE THRESHOLD OF THE DOORWAY.
8. THE BOTTOM OF ALL DOORS WITHIN 10" ABOVE FINISH FLOOR EXCEPT AUTOMATIC AND SLIDING SHALL HAVE A SMOOTH, UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION. WHERE NARROW FRAME DOORS ARE USED, A 10 INCH HIGH SMOOTH PANEL SHALL BE INSTALLED ON THE PUSH SIDE OF THE DOOR WHICH WILL ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION.

DOOR HARDWARE NOTES:

1. DOOR HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERATING DEVICES ON DOORS REQUIRED TO BE ACCESSIBLE SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING OR TWISTING OF THE WRIST TO OPERATE. MANUALLY OPERATED BOLTS OR SURFACE BOLTS ARE NOT PERMITTED. THE UNLATCHING OF ANY DOOR OR LEAF SHALL NOT REQUIRE MORE THAN ONE OPERATION.
2. LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND WHICH ARE IN A PATH TRAVEL SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, BY PANIC BARS, PUSH–PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE.
3. HAND–ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED BETWEEN 30 INCHES AND 44INCHES ABOVE THE FLOOR.
4. WHEN AN AUTOMATIC OR POWER ASSISTED DOOR OPERATOR IS UTILIZED TO OPERATE A PAIR OF DOORS, AT LEAST ONE OF THE DOORS SHALL BE CLEAR, UNOBSTRUCTED OPENING WIDTH OF 32 INCHES WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION. AUTOMATIC DOORS SHALL COMPLY WITH BHMA A156.10 OR BHMA A156.19.

EFFORT TO OPERATE DOORS:

1. THE MAXIMUM FORCE REQUIRED TO PUSH OR PULL OPEN A DOOR SHALL COMPLY WITH THE FOLLOWING:
   A. PUSH OR PULL FORCE FOR A HINGED DOOR SHALL BE MEASURED PERPENDICUAR TO THE DOOR FACE AT THE DOOR OPENING HARDWARE OR 30 INCHES FROM THE HINGED SIDE, WHICHEVER IS FARTHER FROM THE HINGE.
   B. PUSH OR PULL FORCE FOR A SLIDING DOOR OR FOLDING DOOR SHALL BE MEASURED PARALLEL TO THE DOOR AT THE DOOR PULL OR LATCH.
   C. DOORS AND GATE OPENING FORCE PER 2010 ADA SECTION 404.2.9 FIRE DOORS SHALL HAVE A MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY. THE FORCE FOR PUSHING OR PULLING OPEN A DOOR OR GATE OTHER THAN FIRE DOORS SHALL BE AS FOLLOWS:
      1) INTERIOR HINGED DOORS AND GATES : 5 POUNDS (22.2N) MAXIMUM.
      2) SLIDING OR FOLDING DOORS : 5 POUNDS (22.2N) MAXIMUM.
   D. CLOSING SPEED – DOOR AND GATE CLOSING SHALL COMPLY WITH SECTION 404.2.8 AS FOLLOWS:
      1) DOOR CLOSERS AND GATE CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION OF 12 DEGREES FROM THE LATCH IS 5 SECONDS MINIMUM.
      2) DOOR AND GATE SPRING HINGES SHALL BE ADJUSTED SO THAT FROM THE OPEN POSITION OF 70 DEGREES, THE DOOR OR GATE SHALL MOVE TO THE CLOSED POSITION IN 1.5 SECONDS MINIMUM.

A5 DOORS

NO SCALE

CLIENT:

CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.
engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

ARIEL VALDES, AIA
LOUISANA R.A. # 9212

GCBU 5187
STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #[illegible]
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB #: [illegible]
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 01 19075-CK XXXX 5187 A1.1.DWG
CHECKED BY:	

DRAWING TITLE:

ACCESSIBILITY STANDARDS NOTES/DETAILS

SHEET NO:

A1.1

1 FLOOR PLAN
SCALE: 3/16" = 1'-0"

KEY NOTES (X)

1. CONCRETE SLAB WITH MINIMUM 10ML VAPOR BARRIER LAPPED A MINIMUM OF 6" & TAPED PER MANUFACTURER'S SPECIFICATIONS, SEE STRUCTURAL.
2. CONCRETE WALK, BROOM FINISH, SEE CIVIL
3. EXTERIOR ROOF ACCESS LADDER, SEE DETAIL 12/A8.2
4. CUSTOM CASEWORK SUPPLIED BY CIRCLE K, INSTALLED BY OTHERS
5. SALES COUNTER, SEE SHEET A1.4 FOR EQUIPMENT.
6. SOLID SURFACE COUNTER TOP SUPPLIED BY CIRCLE K, INSTALLED BY OTHERS
7. ALUMINUM STOREFRONT SYSTEM, SEE SHEET A6.0 FOR DOOR & WINDOW SCHEDULES
8. INSULATED METAL DOOR IN HOLLOW METAL FRAME, SEE DOORS SCHEDULES SHEET A6.0
9. PEBBLE SURFACE MARLITE F.R.P. PANELING TO 6" ABOVE FINISH CEILING, P-100 WHITE, OR EQUAL. SEE SHT. A3.2.
10. PROVIDE INTEGRAL SPLASH GUARD AT HAND SINK.
11. 5 LB. 2A-10BC FIRE EXTINGUISHER, SURFACE MOUNTED AT 48" A.F.F., PROVIDE BLOCKING AS REQUIRED
12. COOLER/FREEZER PROVIDED AND INSTALLED BY CIRCLE K. GENERAL CONTRACTOR RESPONSIBLE FOR ELECTRICAL AND PLUMBING CONNECTIONS.
13. COOLER REACH-IN DOOR, SUPPLIED/INSTALLED BY COOLER/FREEZER MANUFACTURER
14. BEER CAVE DOOR & WINDOW, SUPPLIED/INSTALLED BY COOLER/FREEZER BY MANUFACTURER
15. FLOOR SINK ACCESSIBLE FOR CLEANING, SEE PLUMBING DRAWING
16. MOP SINK WITH FAUCET, SEE PLUMBING DRAWING FOR SPECIFIC INFORMATION (G.C. TO ADD 24" LONG GARDEN HOSE FOR MOP SINK FAUCET)
17. HAND SINK, SEE PLUMBING DRAWINGS FOR SPECIFIC INFORMATION
18. 3-COMPARTMENT SINK, SEE PLUMBING DRAWINGS FOR SPECIFIC INFORMATION
19. 80 GALLON WATER HEATER ON SHELF ABOVE, SEE PLUMBING AND ELECTRICAL DRAWINGS FOR SPECIFIC INFORMATION
20. LEADER BOX DRAIN, SEE PLUMBING DRAWINGS, ROOF PLAN SHEET A1.7 AND DETAIL 9/A8.3.
21. LOCATION OF ELECTRICAL PANELS, SEE ELECTRICAL DRAWINGS FOR SPECIFIC INFORMATION
22.
23.
24. STEEL COLUMN, SEE STRUCTURAL DRAWINGS
25. LINE OF CANOPY / SOFFIT ABOVE, SEE REFLECTED CEILING PLAN SHEET A1.6 AND EXT. ELEVATIONS SHEET A2.1
26. KNOX BOX LOCATION, SEE RECESS DETAILS 2/A8.3 (IF REQUIRED BY FIRE DEPARTMENT)
27. PROVIDE SIGN ABOVE HAND SINK "EMPLOYEE MUST WASH HANDS BEFORE RETURNING TO WORK"
28.
29. 34" HIGH ACCESSIBLE COUNTERTOP
30. FUEL EMERGENCY SHUT-OFF SWITCH WITH COVER, PROPOSED LOCATION WHEN REQUIRED, SEE FUEL PLAN.
31. 8" CMU WALL SEE DETAIL 11/A8.1, STRUCTURAL, BUILDING SECTIONS AND EXTERIOR ELEVS.
32. 1 1/2" STAINLESS STEEL CORNER GUARDS TO 5'-0" A.F.F.
33. 6" CONC. CURB AT ELECTRICAL FLOOR PENETRATIONS
34.
35. C02 TANK AT EXTERIOR WITH STORAGE TANK CABINET. SEE DET. 2/A9.1 FOR REQUIRED SIGNS.
36. HOSE BIB, SEE PLUMBING DRAWINGS
37. 3/4" PLYWOOD WITH FRP, SEE SHT. A3.2.
38. STORAGE LOFT 7'-2" HEIGHT, SEE DETAIL 3/A9.4
39. FURRED OUT WALL TO CLOSE GAP BETWEEN WALL AND WALK IN COOLER FROM BOTTOM TO CEILING, SEE DETAIL 6/A9.2
40. 34" HIGH COUNTERTOP WITH 30"X48" ADA CLEAR FLOOR SPACE
41. WAINSCOT TILE FINISH, SEE SHTS A3.1 & A3.3
42. STAINLESS STEEL METAL CASED OPENING, SEE DETAIL 7/A9.2
43. PROVIDE HUB DRAIN AND ROUTE DRAIN TO NEAREST FLOOR SINK, SEE PLUMBING DRAWINGS
44. BREAK METAL TO CLOSE GAP BETWEEN WALL AND WALK IN COOLER FROM BOTTOM TO CEILING, SEE DETAIL 12/A9.2
45. G.C. TO PROVIDE METAL KEY STORAGE BOX FROM GRAINGER MFR.

LEGEND

- 8" CMU W/ 3 5/8" METAL STUDS @ 16" O.C. WITH BATT INSULATION
- 6" 20ga. METAL STUD AT 16" O.C. WITH BATT INSULATION. SEE SHEET A1.3 FOR WALL TYPES
- 3 5/8" 20ga. METAL STUD AT 16" O.C. (WITH BATT INSULATION IF APPLICABLE) SEE SHEET A1.3 FOR WALL TYPES
- 3 5/8" 20ga. METAL STUD AT 16" O.C. TO DECK WITH BATT INSULATION. SEE SHEET A1.3 FOR WALL TYPES
- CMU WAINSCOT/STONE VENEER PILASTER
- PRE-MANUFACTURED FREEZER/COOLER WALL
- F.R.P. PANELING, SEE KEYNOTES & SHT. A3.2
- 3/4" PLYWOOD W/ F.R.P. PANELING, SEE KEYNOTES 37 & SHT. A3.2
- (X) WINDOW TYPE: SEE WINDOWS SCHEDULE SHEET A6.0
- (X) DOOR TYPE: SEE DOOR SCHEDULE SHEET A6.0

INTERIOR FINISHES

MARK	DESCRIPTION
B1	SCHLUTER®-DILEX-AHK COVE-SHAPED PROFILE TO TRANSITION FROM FLOOR TILE TO WALL TILE. PROFILE FINISH: SATIN ANODIZED ALUMINUM
B2	6" HIGH 3/8" RADIUS COVED METAL BASE
B3	PORCELAIN BASE PROFILE: RAGNO AK56 – 6"X8" ARTE MA (COVE BASE) GROUT: HYDRO TRUCOLOR H142 "FRENCH GRAY"
B4	PORCELAIN BASE PROFILE: RAGNO AK54 – 6"X8" ARTE BG (COVE BASE) GROUT: HYDRO TRUCOLOR H135 "ANTIQUE"
C1	5/8" GYPSUM CEILING BOARD – PAINTED SW6105 DIVINE WHITE (SHERWIN WILLIAMS)
C2	5/8" GYPSUM CEILING BOARD – PRIMED, READY FOR PAINT
C3	FACTORY FINISH – METAL
C4	ARMSTRONG FF-1729 ACOUSTICAL 24"X48"X5/8" LAY-IN TILE. COLOR: PRE-FINISHED WHITE SUPPLIED AND INSTALLED BY G.C. "T" BAR GRID SUPPLIED AND INSTALLED BY G.C. TO MATCH LAY-IN TILE.
C5	ARMSTRONG, NON-PERFORATED VINYL FIRE GUARD #870. 24"X48"X5/8" SQUARE EDGE LAY-IN FIRE GUARD WITH WHITE ALUMINUM GRID. COLOR: WHITE. SUPPLIED BY G.C. INSTALLED BY G.C.
F1	EXPOSED CONCRETE VoCOMP 20 SEALER (W.R. MEADOWS), APPLY PER MFR. WRITTEN INSTRUCTIONS VoCOMP 30 SEALER (W.R. MEADOWS), APPLY PER MFR. WRITTEN INSTRUCTIONS
F2	PORCELAIN FLOOR TILE SCHLUTER PROFILE: RAGNO 12" X 24" ARTE MA (STAGGERED) GROUT: HYDRO TRUCOLOR H142 "FRENCH GRAY"
W1	5/8" GYPSUM WALL BOARD – PRIMED, READY FOR PAINT INTERIOR WALL – PAINTED SW6113 INTERACTIVE CREAM (SHERWIN WILLIAMS)
W2	FACTORY FINISH
W3	PORCELAIN WALL TILE TO SCHLUTER PROFILE (HALLWAY): RAGNO 12" X 24" ARTE MA (STAGGERED) GROUT: HYDRO TRUCOLOR H142 "FRENCH GRAY" EDGES: RONDEC-DB OUT/IN CORNERS: RONDEC EDGE FINISH: SATIN ANODIZED ALUMINUM
W4	PORCELAIN WALL TILE TO SCHLUTER PROFILE (RESTROOM): RAGNO 12" X 24" ARTE BG (STAGGERED) PORCELAIN WALL TILE (ACCENT BAND): RAGNO 13" x 13" MOS ARTE MA BRICK MOSAIC (6 COURSES TOTAL) GROUT: HYDRO TRUCOLOR H135 "ANTIQUE" EDGES: RONDEC-DB OUT/IN CORNERS: RONDEC EDGE FINISH: SATIN ANODIZED ALUMINUM
W5	FRP ON 5/8" PLYWOOD

ROOM FINISH SCHEDULE

A–REAR, B–RIGHT, C–FRONT, D–LEFT

MARK NO.	ROOM REFERENCE ORIENTATION	FLOOR: F1 EXPOSED CONCRETE	FLOOR: F2 PORCELAIN TILE RAGNO 12" X 24" ARTE MA			BASE: B1 SCHLUTER®-DILEX-AHK COVE-SHAPED PROFILE TO TRANSITION FROM FLOOR TILE TO WALL TILE.	BASE: B2 6" HIG 3/8" RADIUS COVED MTL BASE	BASE: B3 PORCELAIN BASE PROFILE: RAGNO AK56 – 6"X8" ARTE MA (COVE BASE) GROUT: HYDRO TRUCOLOR H142 "FRENCH GRAY"	BASE: B4 PORCELAIN BASE PROFILE: RAGNO AK54 – 6"X8" ARTE BG (COVE BASE) GROUT: HYDRO TRUCOLOR H135 "ANTIQUE"			INTERIOR WALLS: REAR W1 5/8" GYPSUM WALL BOARD	REAR W2 FACTORY FINISH – METAL	REAR W3 WALL TILE/GROUT	REAR W4 WALL TILE/GROUT	REAR W5 FRP – FULL HEIGHT	RIGHT W1 5/8" GYPSUM WALL BOARD	RIGHT W2 FACTORY FINISH – METAL	RIGHT W3 WALL TILE/GROUT	RIGHT W4 WALL TILE/GROUT	RIGHT W5 FRP – FULL HEIGHT	FRONT W1 5/8" GYPSUM WALL BOARD	FRONT W2 FACTORY FINISH – METAL	FRONT W3 WALL TILE/GROUT	FRONT W4 WALL TILE/GROUT	FRONT W5 FRP – FULL HEIGHT	LEFT W1 5/8" GYPSUM WALL BOARD	LEFT W2 FACTORY FINISH – METAL	LEFT W3 WALL TILE/GROUT	LEFT W4 WALL TILE/GROUT	LEFT W5 FRP – FULL HEIGHT	CEILING C1 5/8" GYP CLG BD – PAINTED	CEILING C2 5/8" GYP CLG BD – PRIMED	CEILING C3 FACTORY FINISH	CEILING C4 ARMSTRONG FF-1729 ACOUSTICAL TILE	CEILING C5 ARMSTRONG, NON-PERFORATED VINYL FIRE GUARD #870 (WASHABLE TILE)	NOTES:
–	–																																		–
101	WOMEN'S		X			X								X					X				X				X			X					SEE SHTS. A3.3 FOR MORE INFORMATION
102	MEN'S		X			X								X					X				X				X			X					SEE SHTS. A3.3 FOR MORE INFORMATION
103	MANAGER	X						X		X						X						X				X							X		
104	WALK-IN COOLER	X					X					X					X				X						X					X			
105	BEER CAVE		X				X					X					X				X						X					X			
106	WALK-IN DAIRY	X					X					X					X				X						X					X			
107	WALK-IN FREEZER	X					X					X					X				X						X					X			FLOOR BY FREEZER MFR.
108	SALES FLOOR		X					X		X					X	X					X					X							X	X	
109	CASHIER		X					X		X						X												X		X		X	X		
110	EQUIP. ROOM	X						X						X	X				X						X					X				X	F.R.P. PANELING, SEE SHTS. A3.2
111	HALLWAY		X					X		X			X		X			X			X		X				X					X			
112	PREP. AREA		X					X		X				X					X						X					X				X	F.R.P. PANELING, SEE SHTS. A3.2

1. ALL GYPSUM BOARD EXTERIOR CORNERS TO BE 1-1/2" STAINLESS STEEL
2. SEE SHEET A1.6 FOR CEILING HEIGHTS.
3. SEE SHEETS A3.1, A3.2, AND A3.3 FOR INTERIOR ELEVATIONS
4. ALL AREAS SHOWN WITH EXPOSED CONCRETE FINISH. CONCRETE MUST BE SEALED WITH ACRYLIC CONCRETE SEALER WITH SLIP RESISTANT ADDITIVE.

LEGEND

- 8" STD. CMU WALL W/ FOAM CORE INSULATION. SEE STRUCTURAL SHEETS
- 3 5/8" 20ga. METAL STUD AT 24" O.C. TO DECK WITH R-11 BATT INSULATION SEE SHEET A1.3 FOR WALL TYPES
- 3 5/8" 20ga. METAL STUD AT 24" O.C. SEE SHEET A1.3 FOR WALL TYPES
- 3 5/8" 20ga. METAL STUD AT 24" O.C. TO DECK SEE SHEET A1.3 FOR WALL TYPES
- 3 5/8" 20ga. METAL STUD AT 24" O.C. (PARTITION WALL) SEE SHEET A1.3 FOR WALL TYPES
- CMU WAINSCOT/STONE VENEER PILASTER
- PRE-MANUFACTURED FREEZER/COOLER WALL
- F.R.P. PANELING, SEE KEYNOTES & SHT. A3.2
- 3/4" PLYWOOD W/F.R.P. PANELING, SEE KEYNOTES & SHT. A3.2
- (X) WINDOW TYPE: SEE WINDOWS SCHEDULE SHEET A6.0
- (X) DOOR TYPE: SEE DOOR SCHEDULE SHEET A6.0

GENERAL NOTES

1. DIMENSIONS SHOWN ARE TO INTERIOR WALL FINISH, UNLESS OTHERWISE NOTED.
2. SEE SHEETS A1.4 & A1.5 FOR EQUIPMENT
3. COORDINATE ALL DIMENSIONS IN AREAS OF WALK-IN COOLERS WITH EQUIPMENT INSTALLERS
4. INSTALL FULL THICKNESS BATT INSULATION CONTINUOUS TO ROOF DECK IN ALL WALL SEPARATING REST ROOMS FROM ADJACENT CONVENIENCE STORE AREAS. INSULATION TO BE NON-COMBUSTIBLE, BEARING THE U.L. CLASSIFICATION MARKING
5. BRACE STUDS ABOVE CEILING AS REQUIRED TO PROVIDE RIGID WALLS THROUGHOUT, SEE STRUCTURAL DRAWINGS
6. ALL CABINETS IN FAST-FOOD AREA, INCLUDING COFFEE BAR AND SALES COUNTER, TO HAVE SOLID TOP WITH METAL SIDES PAINTED AND KICK PLATE BASE PAINTED "BLACK"
7. USE FDA APPROVED FOOD GRADE CLEAR CAULKING BETWEEN COUNTERTOPS AND WALLS AND WHERE REQUIRED PER LOCAL AND COUNTY HEALTH DEPARTMENT REQUIREMENTS
8. GENERAL CONTRACTOR SHALL COORDINATE WITH THE EQUIPMENT AND DRYWALL INSTALLERS TO ENSURE THAT ALL ELECTRICAL WIRING, WATER LINES AND REFRIGERATION LINES HAVE BEEN INSTALLED PROPERLY ON ALL EQUIPMENT PRIOR TO THE HANGING OF ANY DRYWALL, SEE THE CIRCLE K PROJECT MANAGER FOR ANY EQUIPMENT LOCATION CLARIFICATIONS.
9. ALL INSULATION SHALL NOT BE EXPOSED TO VIEW FROM INSIDE SALES FLOOR AREA
10. PROVIDE 5/8" MOISTURE-RESISTANT GYPSUM WALLBOARD THROUGHOUT WHERE REQUIRED.

CLIENT:

CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.
engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION
2	12/14/20	REV'D PER CLIENT REV'S OF 11
1	11/24/20	REV'D PER CLIENT REV'S OF

REVISED FOR CONSTRUCTION 12/15/20

ARIEL VALDES, AIA
LOUISANA R.A. # 9212

GCBU 5187
STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED
MDM JOB # 190
DATE: 01-22-2020
DESIGNED BY:
DRAWN BY: PD
CHECKED BY:
FILE NAME: 02 19019 CK XXXX 5187 A1.2.DWG

DRAWING TITLE:
FLOOR PLAN AND ROOM FINISH SCHEDULE

SHEET NO:
A1.2

1 FIRE STOPPING FLOOR PLAN

SCALE: 3/16" = 1'-0"

WALL TYPES X

A. WALL TYPE, SEE 3/A9.1
B. WALL TYPE, SEE 4/A9.1
C. WALL TYPE, SEE 12/A9.1
D. WALL TYPE, SEE 6/A9.1
E. WALL TYPE, SEE 8/A9.1
F. WALL TYPE, SEE 10/A9.1 & 11/A9.1

GENERAL NOTES

1. PER 2015 IBC SECTION 718.4.3 DRAFTSTOPPING SHALL INSTALLED IN ATTICS AND CONCEALED ROOF SPACES, SUCH THAT ANY HORIZONTAL AREA DOES NOT EXCEED 3,000 SQ. FT. (279m²).
2. PER 2015 IBC SECTION 718.5 COMBUSTIBLE MATERIALS SHALL NOT BE PERMITTED IN CONCEALED SPACES OF BUILDINGS TYPE I OR II CONSTRUCTION.
3. INSTALL FULL THICKNESS BATT INSULATION CONTINUOUS TO ROOF DECK IN ALL WALL SEPARATING REST ROOMS FROM ADJACENT CONVENIENCE STORE AREAS. INSULATION TO BE NON-COMBUSTIBLE, BEARING THE U.L. CLASSIFICATION MARKING.
4. BRACE STUDS ABOVE CEILING AS REQUIRED TO PROVIDE RIGID WALLS THROUGHOUT, SEE STRUCTURAL DRAWINGS.
5. GENERAL CONTRACTOR SHALL COORDINATE WITH THE EQUIPMENT AND DRYWALL INSTALLERS TO ENSURE THAT ALL ELECTRICAL WIRING, WATER LINES AND REFRIGERATION LINES HAVE BEEN INSTALLED PROPERLY ON ALL EQUIPMENT PRIOR TO THE HANGING OF ANY DRYWALL, SEE THE CIRCLE K PROJECT MANAGER FOR ANY EQUIPMENT LOCATION CLARIFICATIONS.
6. ALL INSULATION SHALL NOT BE EXPOSED TO VIEW FROM INSIDE SALES FLOOR AREA.
7. PROVIDE 5/8" MOISTURE-RESISTANT GYPSUM WALLBOARD THROUGHOUT WHERE REQUIRED.
8. SEE SHEET A1.2 FOR ROOM FINISH SCHEDULE.
9. SEE SHEETS A3.1, A3.2, AND A3.3 FOR INTERIOR ELEVATIONS.

LEGEND

8" CMU WALL REBAR REINFORCEMENT AT 48" O.C.
SEE STRUCTURAL SHEETS FOR MORE INFORMATION

3 5/8" 20ga. METAL STUD AT 16" O.C. TO ROOF DECK.
GYP. BD. TO CONTINUE ON ONE SIDE AFTER CEILING HEIGHT TO ROOF DECK. UNLESS OTHERWISE NOTED

PRE-MANUFACTURED FREEZER/COOLER WALL

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.

engineering • environmental • construction

1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

ARIEL VALDES, AIA
LOUISANA R.A. # 9212

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19075
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME:
CHECKED BY:	02 19075 CK XXXX 5187 Rev2a.dwg

DRAWING TITLE:

FIRE & SMOKE PROTECTION FIRE STOPPING, FLOOR PLAN

SHEET NO:

A1.2a

ISSUED FOR CONSTRUCTION 10/2/2020

KEY NOTES (X)

1. ALUMINUM THRESHOLD
2. START POINT OF TILE PATTERN
3. FLOOR DRAIN AND FLOOR SINK, SEE PLUMBING DRAWINGS
4. MOP SINK
5. 6" HIGH CONCRETE CURB FOR ELEC. PANELS & LOW VOLTAGE.
6. WATERPROOFING MEMBRANE UNDER 9" AND UP TO WALL 9"
7. 24" x 24" PORCELAIN TILE FINISH, SEE F2 "INTERIOR FINISHES" SPECS ON SHEET A1.2
8. EXPOSED SEALED CONCRETE, SEE SPEC. ON SHEET A1.2.
9. PROVIDE SCHLUTER "RENO-RAMP AERP 125 B65" FOR FLOOR TILE AND SEALED CONCRETE TERMINATION.

1 FLOOR FINISH PLAN
SCALE: 3/16" = 1'-0"

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

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1055 KATHLEEN ROAD, LAKELAND, FLORIDA
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ARIEL VALDES, AIA
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GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19075
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 02A 19075 XXXX 5187 A1.2.1.DWG
CHECKED BY:	

DRAWING TITLE:

FLOOR FINISH PLAN

SHEET NO:

A1.2.1

ISSUED FOR CONSTRUCTION 10/2/2020

1 DIMENSIONED FLOOR PLAN

SCALE: 3/16" = 1'-0"

2 ENLARGED RESTROOM PLAN

SCALE: 3/8" = 1'-0"

RESTROOM KEY NOTES (X)

1. 30"x48" ADA ACCESSIBLE SPACE AT LAV.
2. CUBICLE PARTITION
3. COUNTERTOP (SUPPLIED BY CK AND INSTALLED BY OTHERS)
4. 30"x48" ADA ACCESSIBLE SPACE AT URINAL
5. CONVENIENCE HOOKS
6. GRAB BAR 1-1/4" - 1-1/2" DIAMETER, PROVIDE ADEQUATE BLOCKING
7. FLOOR DRAIN, SEE PLUMBING DWGS.
8. INSULATED WATER AND DRAIN PIPES
9. 60" DIA. MIN. CLEAR FOR WHEELCHAIR
10. CERAMIC TILE WALLS
11. WAINSCOT TILE TO MATCH HALLWAY FINISH
12. STAINLESS STEEL CASING
13. TOILET FLUSH VALVES TO BE ON THE WIDE SIDE OF STALL
14. TOILET PAPER DISPENSER
15. SANITARY NAPKIN DISPOSAL
16. MIRROR
17. SOLID BLOCKING AT WALL FOR ALL MOUNTED EQUIPMENT
18. FLOOR SHALL SLOPE 1% TO DRAIN
19. TOILET SEAT COVER DISPENSER
20. RECESSED PAPER TOWEL DISPENSER / TRASH RECEPTACLE
21. VERTICAL MOUNT BABY CHANGING TABLE TO BE INSTALLED BY G.C.

RESTROOM SIGN NOTE:

SIGNS DENOTING THE RESTROOMS SHALL INCLUDE LETTERS AND NUMERALS THAT ARE RAISED 1/32", UPPER CASE, SANS SERIF OR SIMPLE SANS SERIF AND SHALL BE ACCOMPANIED WITH GRADE 2 BRAILLE.

MOUNTING HEIGHTS FOR THE SIGNS DENOTING THE RESTROOMS SHALL BE LOCATED 48 INCHES MINIMUM ABOVE THE FINISH FLOOR, MEASURED FROM THE BASELINE OF THE LOWEST TACTILE CHARACTER AND 60 INCHES MAXIMUM ABOVE THE FINISH FLOOR MEASURED FROM THE BASELINE OF THE HIGHEST TACTILE CHARACTER. MOUNTING LOCATION FOR THE SIGN SHALL BE SO THAT A PERSON MAY APPROACH WITHIN 3 INCHES OF THE SIGN WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF THE DOOR.

NOTES:
A. SEE ROOM FINISH SCHEDULE ON SHEET A1.2.
B. SEE EQUIPMENT SCHEDULE ON SHEETS A1.4 AND A1.5.
C. SEE DETAIL 5/A3.3 FOR RESTROOM TYPICAL WALL TILE PATTERN.
D. SEE SHEET A3.3 FOR RESTROOM ELEVATIONS AND DETAILS.

NOTE:

SERVICE HOSE SHALL BE FLEXIBLE POLYOLEFIN HOSE FOR MEDIUM PRESSURE SERVICE (STYLE 540P), COMPLIANT WITH FDA TITLE 21 FOR FOOD CONTACT, AND HAVE A MAXIMUM WORKING PRESSURE OF 2000 PSI.

ALL PIPING, REGULATORS, AND PRESSURE REGULATORS SHALL BE KEPT TIGHT TO PREVENT LEAKAGE OF ANY CO2 GASES, AS PER NFPA-55:7.3.1.3.1 (2016 EDITION)

CO2 SHALL BE EQUIPPED W/ AN EMERGENCY SHUT-OFF DEVICE, AS PER NFPA 55:7.3.11 (2016 EDITION)

3 CO2 CHASE LINE DETAIL

SCALE: N.T.S.

WALL TYPES (X)

A. WALL TYPE 'A', SEE 3/A9.1
B. WALL TYPE 'B', SEE 4/A9.1
C. WALL TYPE 'C', SEE 12/A9.1
D. WALL TYPE 'D', SEE 6/A9.1
E. WALL TYPE 'E', SEE 8/A9.1
F. WALL TYPE 'F', SEE 10/A9.1 & 11/A9.1

GENERAL NOTES

1. INTERIOR DIMENSIONS SHOWN ARE TO INTERIOR WALL FINISH, UNLESS OTHERWISE NOTED.
2. EXTERIOR DIMENSIONS SHOWN ARE TO FACE OF STUD, UNLESS OTHERWISE NOTES.
3. SEE SHEETS A1.4 AND A1.5 FOR EQUIPMENT.
4. COORDINATE ALL DIMENSIONS IN AREAS OF WALK-IN COOLERS WITH EQUIPMENT INSTALLERS.
5. INSTALL FULL THICKNESS BATT INSULATION CONTINUOUS TO ROOF DECK IN ALL WALL SEPARATING REST ROOMS FROM ADJACENT CONVENIENCE STORE AREAS. INSULATION TO BE NON-COMBUSTIBLE, BEARING THE U.L. CLASSIFICATION MARKING.
6. BRACE STUDS ABOVE CEILING AS REQUIRED TO PROVIDE RIGID WALLS THROUGHOUT, SEE STRUCTURAL DRAWINGS.
7. ALL CABINETS IN FOOD OFFERING AREA, INCLUDING COFFEE BAR AND SALES COUNTER, TO HAVE SOLID TOP WITH METAL SIDES PAINTED AND KICK PLATE BASE PAINTED "BLACK".
8. USE FDA APPROVED FOOD GRADE CLEAR CAULKING BETWEEN COUNTERTOPS AND WALLS AND WHERE REQUIRED PER LOCAL AND COUNTY HEALTH DEPARTMENT REQUIREMENTS.
9. GENERAL CONTRACTOR SHALL COORDINATE WITH THE EQUIPMENT AND DRYWALL INSTALLERS TO ENSURE THAT ALL ELECTRICAL WIRING, WATER LINES AND REFRIGERATION LINES HAVE BEEN INSTALLED PROPERLY ON ALL EQUIPMENT PRIOR TO THE HANGING OF ANY DRYWALL, SEE THE CIRCLE K PROJECT MANAGER FOR ANY EQUIPMENT LOCATION CLARIFICATIONS.
10. PROVIDE 5/8" MOISTURE-RESISTANT GYPSUM WALLBOARD THROUGHOUT, BEHIND COOLER/FREEZER, RESTROOMS, BEHIND 3-COMP SINK, BEHIND FRONT COUNTER UNDER GLASS, MOP SINK AND HOT WATER HEATER.
11. PROVIDE 1/4" MOISTURE-RESISTANT GYPSUM WALLBOARD THROUGHOUT COOLER FACE.
12. SEE SHEET A1.2 FOR ROOM FINISH SCHEDULE.
13. SEE SHEETS A3.1, A3.2, AND A3.3 FOR INTERIOR ELEVATIONS.

LEGEND

- 8" CMU W/ 3 5/8" METAL STUDS @ 16" O.C. WITH BATT INSULATION
- 6" 20ga. METAL STUD AT 16" O.C. WITH BATT INSULATION. SEE SHEET A1.3 FOR WALL TYPES
- 3 5/8" 20ga. METAL STUD AT 16" O.C. (WITH BATT INSULATION IF APPLICABLE) SEE SHEET A1.3 FOR WALL TYPES
- 3 5/8" 20ga. METAL STUD AT 16" O.C. TO DECK WITH BATT INSULATION. SEE SHEET A1.3 FOR WALL TYPES
- CMU WAINSCOT/STONE VENEER PILASTER
- PRE-MANUFACTURED FREEZER/COOLER WALL
- F.R.P. PANELING, SEE KEYNOTES & SHT. A3.2
- 3/4" PLYWOOD W/ F.R.P. PANELING, SEE KEYNOTES 37 & SHT. A3.2
- (X) WINDOW TYPE: SEE WINDOWS SCHEDULE SHEET A6.0
- (X) DOOR TYPE: SEE DOOR SCHEDULE SHEET A6.0

PAINTED SURFACES PREPARATION NOTES

DRYWALL - INTERIOR/EXTERIOR

DRYWALL MUST BE CLEAN AND DRY. ALL NAIL HEADS MUST BE SET AND SPACKLED. JOINTS MUST BE TAPED AND COVERED WITH A JOINT COMPOUND. SPACKLED NAIL HEADS AND TAPE JOINTS MUST BE SANDED SMOOTH AND ALL DUST REMOVED PRIOR TO PAINTING.

EXTERIOR SURFACES MUST BE SPACKLED WITH EXTERIOR GRADE COMPOUNDS.

STEEL - SOLVENT CLEANING

SOLVENT CLEANING IS A METHOD FOR REMOVING ALL VISIBLE OIL, GREASE, SOIL, DRAWING AND CUTTING COMPOUNDS, AND OTHER SOLUBLE CONTAMINANTS. SOLVENT CLEANING DOES NOT REMOVE RUST OR MILL SCALE.

CHANGE RAGS AND CLEANING SOLUTION FREQUENTLY SO THAT DEPOSITS OF OIL AND GREASE ARE NOT SPREAD OVER ADDITIONAL AREAS IN THE CLEANING PROCESS. BE SURE TO ALLOW ADEQUATE VENTILATION.

PLASTER

PLASTER MUST BE ALLOWED TO DRY THOROUGHLY FOR AT LEAST 30 DAYS BEFORE PAINTING.

THE ROOM MUST BE VENTILATED WHILE DRYING. IN COLD, DAMP WEATHER, ROOMS MUST BE HEATED.

DAMAGED AREAS MUST BE REPAIRED WITH AN APPROPRIATE PATCHING MATERIAL.

BARE PLASTER MUST BE CURED AND HARD.

TEXTURED, SOFT, POROUS, OR POWDERY PLASTER SHOULD BE TREATED WITH A SOLUTION OF 1 PINT HOUSEHOLD VINEGAR TO 1 GALLON OF WATER. REPEAT UNTIL THE SURFACE IS HARD, RINSE WITH CLEAR WATER AND ALLOW TO DRY.

WOOD - INTERIOR

ALL FINISHING LUMBER AND FLOORING MUST BE STORED IN DRY, WARM ROOMS TO PREVENT ABSORPTION OF MOISTURE, SHRINKAGE, AND ROUGHENING OF THE WOOD.

ALL SURFACES MUST BE SANDED SMOOTH, WITH THE GRAIN, NEVER ACROSS IT.

SURFACE BLEMISHES MUST BE CORRECTED AND THE AREA CLEANED OF DUST BEFORE COATING.

STUCCO - EXTERIOR

MUST BE CLEAN AND FREE OF ANY LOOSE STUCCO.

IF RECOMMENDED PROCEDURES FOR APPLYING STUCCO ARE FOLLOWED, AND NORMAL DRYING CONDITIONS PREVAIL, THE SURFACE MAY BE PAINTED IN 30 DAYS.

THE PH OF THE SURFACE SHOULD BE BETWEEN 6 AND 9.

PAINT TYPE SPECIFICATION NOTES

1. ALL INTERIOR NON-METAL SURFACES TO BE PAINTED SHALL BE PRIMED WITH SHERWIN WILLIAMS - ProMar® 200 Zero VOC Interior Latex Primer
2. ALL INTERIOR METAL SURFACES TO BE PAINTED SHALL BE PRIMED WITH SHERWIN WILLIAMS - Pro Industrial™ Pro-Cryl® Universal Acrylic Primer
3. ALL INTERIOR SURFACES TO BE PAINTED SHALL BE PAINTED WITH SHERWIN WILLIAMS - Duration Home® Interior Acrylic Latex Paint

** SEE SHEET A2.1 "EXTERIOR ELEVATIONS" FOR PAINT TYPE SELECTION OF EXTERIOR WALLS **

CLIENT:

CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.
engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

ARIEL VALDES, AIA
LOUISIANA R.A. # 9212

GCBU 5187
STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19075
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 03 19075 CK XXXX 5187 A1.3.DWG
CHECKED BY:	

DRAWING TITLE:

DIMENSIONED FLOOR PLAN, WALL TYPES AND ENLARGED RESTROOM

SHEET NO:

A1.3

1 EQUIPMENT PLAN

SCALE: 3/16" = 1'-0"

GENERAL NOTES

1. SEE SHEET A1.5 FOR EQUIPMENT LIST
2. EQUIPMENT SYMBOL (•)
3. VERIFY EQUIPMENT LAYOUT WITH CIRCLE K
4. SEE SHEETS A3.1, A3.2, AND A3.3 FOR INTERIOR ELEVATIONS.

ROOM REFERENCE ORIENTATION

A–REAR

D–LEFT RM. B–RIGHT

C–FRONT

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

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engineering • environmental • construction

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GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19075
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 04 19075 CK XXXX 5187 A1.4.DWG
CHECKED BY:	

DRAWING TITLE:

EQUIPMENT PLAN

SHEET NO:

A1.4

EQUIPMENT LIST

No.	ITEM	PART NO. / DESCRIP.	SUPPLIER	QTY	PURCHASED BY	INSTALLED BY	UTILITY REQUIREMENTS	DIMENSIONS/SPECIFICATIONS/NOTES
1	GONDOLA PACKAGE	LOZIER	–	–	CIRCLE K	OTHERS	–	
2	PROPANE CAGE	–	–	1	VENDOR	VENDOR	–	
3	TRASH CONTAINER	–	–	2	CIRCLE K	GENERAL CONTRACTOR	–	
4	ELECTRICAL PANELS	–	POWER INTEGRITY OR EQUIVALENT	SET	CIRCLE K	GENERAL CONTRACTOR	AS REQUIRED	
5	BATTERY BACKUP	UPS-PW3S3K	POWER INTEGRITY OR EQUIVALENT	1	CIRCLE K	OTHERS	176-276V / 50/60Hz	MAC VICTOR POWER NETWORK (MVPN-1.5)
6	PUMP CONTROL PANEL	FE PETRO STP-SCI	ANS DISTRIBUTING	1	CIRCLE K	GENERAL CONTRACTOR	120/240V / 30 AMPS	
7	MONITORING SYSTEM	VEEDER-ROOT TLS-350	ANS DISTRIBUTING	1	CIRCLE K	GENERAL CONTRACTOR	–	
8	DSL/ FRAME RELAY	–	–	1	CIRCLE K	VENDOR	ELECTRICAL POWER SUPPLY BY GENERAL CONTRACTOR	COORDINATE WITH LOCAL PHONE COMPANY
9	TELEPHONE MTG. BD.	–	–	1	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	
10	WATER DISPENSER	G21B	GLACIER	2	VENDOR	VENDOR	1-110V / 20 AMPS	
11	HOT FOOD WELLS	HFW-1	APW WYOTT	1	CIRCLE K	OTHERS	–	
12	CABINETS	–	TBD	PKG	CIRCLE K	OTHERS	–	ALL ELECTRICAL (RECEPTACLES, CONDUIT, ETC.) THRU, WITHIN CABINETS BY G.C.
13	HOT DOG ISLAND	–	TBD	–	CIRCLE K	OTHERS	–	
14	BEER CAVE, FREEZER, WALK-IN COOLER AND DAIRY	–	KPS GLOBAL	PKG	CIRCLE K	OTHERS	AS REQUIRED	SEE ELECTRICAL & MECHANICAL DRAWINGS, REMOTE CONDENSER
15	DISPLAY CASE MERCHANDISER	MEDIUM T CASE 3' SIDES	PIPER PRODUCTS/SERVOLIFT	1	CIRCLE K	OTHERS	208V/1 PHASE	CIRCLE K MEDIUM T CASE 3' SIDES – REMOTE OR SELF-CONTAINED
16	FOUNTAIN DISP/DISP TOP ICE CUBER	ED-300	CORNELIUS	3	CIRCLE K	OTHERS	115V/5.2 AMPS	62 REMOTE CONDENSER ABOVE ROOF 68 FOLLET ICE MAKER 1410 SERIES ABOVE FOUNTAIN DISPENSER
17	4 HEAD FCB	VIPER	CORNELIUS	3	CIRCLE K	OTHERS	230V ±15V 60Hz/30A/SINGLE PHASE/L6-30P	PLUG
18	ROLLER GRILL PKG	50SCBDEP	STAR MFG	3	CIRCLE K	OTHERS	120V/12.8 AMPS 1535 WATTS	WITH SNEEZE GUARD
19	FIRE EXTINGUISHER	2A-10BC	–	3	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	5 POUND EA.
20	MICROWAVE	RCS10TS	AMANA	2	CIRCLE K	OTHERS	120V/15 AMPS/60Hz	
21	COOLER SHELVING	–	ANTHONY OR GEMTRON	PKG	CIRCLE K	OTHERS	–	
22	COOLER REACH IN DOORS	–	ANTHONY OR GEMTRON	PKG	CIRCLE K	OTHERS	–	
23	BEER CAVE ENTRY DOOR	–	KPS GLOBAL	PKG 1 DOOR & WDW	CIRCLE K	OTHERS	AS REQUIRED	
24	27" BUN DISPLAY CASE	–	PIPER PRODUCTS	1	CIRCLE K	OTHERS	–	
25	COFFEE CONDIMENT RACK	–	–	2	CIRCLE K	OTHERS	–	
26	BOWL/LID DISPENSER	–	–	1	CIRCLE K	OTHERS	–	
27	FRITO DISPLAY	–	–	1	VENDOR	VENDOR	–	
28	CHILI / CHEESE DISPENSER	DUAL	GEHL'S	1	CIRCLE K	OTHERS	–	
29	DROP-IN RTR COLD WELL	RTR-4di	APW WYOTT	2	CIRCLE K	OTHERS	120V/360WATTS/60Hz/1 PHASE/3AMPS	
30	5-HD CAPPUCCINO MACHINE	PCGT5	WILBUR CURTIS	2	CIRCLE K	OTHERS	120V / 15 AMPS / 1800 WATTS /5-15P/ 60Hz	START UP BY OTHERS
31	4-HEAD CREAMISER MACHINE	MODEL 400	INTERNATIONAL DELIGHT	1	CIRCLE K	OTHERS	110/120V/2.8AMPS	
32	WORKTOP REFRIGERATOR	WTR48AHC	BEVERAGE-AIR	1	CIRCLE K	OTHERS	115V/2 AMPS/ 1/6HP/994 BTU/Hr	WITH OVER SHELF FOR WORK TABLES BY SERV-WARE
33	REACH-IN COOLER	MBR49-S	MASTER BUILT	2	CIRCLE K	OTHERS	115V/60/1 AMP	WITH 6 HEAVY DUTY CASTERS (2) LOCKING, STANDARD
34	1-HD SOFT SERVE ICE CREAM W/FLAVOR BURST	C709-27 CTP 80SS-DLX	TAYLOR	1	CIRCLE K	OTHERS	208-230V/35AMPS/1PHASE 120V/1.0AMPS/1PHASE	
35	FROZEN BEVERAGE BLENDER	BLENDING BAR, FRLB4	F'REAL	1	CIRCLE K	OTHERS	115V / 15 AMPS	COUNTER UNIT
36	TEA BREWER	RSTB	WILBUR CURTIS	2	CIRCLE K	OTHERS	120V/ 60Hz/ 13.8A/ 1600W	
37	ROLLER GRILL SNEEZE GUARD	50SD-1D	STAR MFG	3	CIRCLE K	OTHERS	–	
38	E-CIG	–	–	1	CIRCLE K	OTHERS	–	
39	THERMO DRAWER	SPTU-50	APW X-PERT SERIES	3	CIRCLE K	OTHERS	120V/5.8 AMPS/700 WATTS/NEMA 5-15P	
40	LIDS/STRAW	–	–	–	CIRCLE K	OTHERS	–	DIVERSIFIED METALS/ DISPENSE RITE
41	ICE CREAM TOPPING BAR	–	–	1	CIRCLE K	OTHERS	–	
42	42"H COUNTERTOP WITH 34" HIGH ADA	–	–	1	CIRCLE K	OTHERS	NOT APPLICABLE	
43	LOTTERY TICKET DISPENSER	IN-COUNTER	TAKE- A-TICKET	2	CIRCLE K	OTHERS	–	
44	LOTTO MACHINE	ON-COUNTER	STATE LOTTERY	1	VENDOR	VENDOR	GC TO PROVIDE ELECTRICAL POWER SUPPLY	PROVIDED BY STATE LOTTERY COMMISSION
45	EPOS	–	RADIANT	4	CIRCLE K	OTHERS	ELECTRICAL REQUIREMENTS BY GC	
46	BACK BAR CIG. RACK	–	AMERICAN DISPLAY	1	CIRCLE K	OTHERS	110V	
47	INTERCOM	3M	3M	PKG	CIRCLE K	OTHERS	–	
48	BACK BAR LIQUOR DISPLAY	–	–	2	CIRCLE K	OTHERS	110V	
49	CREDIT CARD MACHINE	–	–	1	CIRCLE K	OTHERS	–	G.C. TO PROVIDE REQUIRED ELECTRICAL
50	BEER TROUGH	–	ROYSTON	1	CIRCLE K	OTHERS	–	ICE COOLER
51	SMART SAFE	SERIES 4 TILL STORAGE VAULT + TUBE VEND	TIDEL	1	CIRCLE K	GENERAL CONTRACTOR	–	
52	WATER FILTER	EV-9437-10	EVERPURE	1	CIRCLE K	GENERAL CONTRACTOR	–	
53	BAG IN BOX	BAG IN BOX RACK	TRU-TEMP	3	CIRCLE K	OTHERS	–	
54	CO2 CABINET	–	ROYSTON	1	CIRCLE K	OTHERS	–	
55	STOOL	–	–	4	CIRCLE K	OTHERS	NOT APPLICABLE	
56	DRY STORAGE SHELVING	METRO BR	INTERMETRO OR EQUIVALENT	12	CIRCLE K	OTHERS	NOT APPLICABLE	
57	LOFT SHELVING	–	–	–	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	
58	NOT USED	–	–	–	–	–	–	
59	3-COMP SINK	312-14-3-12	EAGLE	1	CIRCLE K	GENERAL CONTRACTOR	–	72" x 23"
60	DOOR CHIME TRANSFORMER	AV-100	RODANN	1	CIRCLE K	OTHERS	–	
61	DOOR CHIME	AV-100	RODANN	3	CIRCLE K	OTHERS	–	

EQUIPMENT LIST

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62	SCHAERER COFFEE ART	C TOUCH	SCHAERER	4	CIRCLE K	OTHERS	208-220V/16 AMP/ NEMA L6-20R	POWER REQUIRED FOR EACH UNIT. SEE ELECTRICAL DRAWINGS. INSTALL NEMA 16-20R WATER FILTER AND SCALE INHIBITOR BEHIND THE MACHINE PER MANUFACTURER SPECS
63	CO2 DETECTION DEVICE	AX50	ANALOX LTD.	1	CIRCLE K	OTHERS	230/110V W/ 90 MIN. BACK-UP POWER SUPPLY (BATTERY BACK-UP REQUIRED)	63A ALARM, 63B 63C REPEATERS
64	TEA RACK	–	–	1	CIRCLE K	OTHERS	–	
65	DOOR CHIME MOTION DETECTOR	AV-100	RODANN	1	CIRCLE K	OTHERS	16.5V	–
66	NOT USED	–	–	–	–	–	–	
67	VERTICAL MOUNT CHANGING TABLE	KB111-SSWM	KOALA KARE	2	GENERAL CONTRACTOR	GENERAL CONTRACTOR	NOT APPLICABLE	PROVIDE ADEQUATE BACKING
68	RESTROOM SIGNS	ADA SQUARE MEN/WOMEN SIGNS	COUCH PHILLIPI	SET	GENERAL CONTRACTOR	GENERAL CONTRACTOR	NOT APPLICABLE	SEE DET. 1/A9.1 FOR SIGNAGE
69	WATER CLOSET	2234.015 2305.100	AMERICAN STANDARD	3	GENERAL CONTRACTOR	GENERAL CONTRACTOR	1.6 GALLONS PER FLUSH	SEE PLUMBING PLANS FOR ADDITIONAL INFORMATION
70	LAVATORY	0476.028	AMERICAN STANDARD	4	CIRCLE K	OTHERS	–	SEE PLUMBING PLANS FOR ADDITIONAL INFORMATION
71	COUNTER TOP	DEJECT	ROYSTON	2	CIRCLE K	OTHERS	–	SATIN 02/04
72	MIRROR	B-290 2436	BOBRICK	4	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	PROVIDE ADEQUATE BACKING
73	GRAB BAR	B-5806	BOBRICK	2-18" (VERT.) 2-36"(HORIZ.) 2-42" (HORIZ.)	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	1-1/4" – 1-1/2" DIAMETER, PROVIDE ADEQUATE BACKING
74	TOILET PAPER DISPENSER	B-2890	BOBRICK	3	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	PROVIDE ADEQUATE BACKING
75	RECESSED PAPER TOWEL DISPENSER/TRASH RECEPTACLE	B-43944	BOBRICK	2	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	PROVIDE ADEQUATE BACKING
76	SOAP DISPENSER	B-4112	BOBRICK	4	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	PROVIDE ADEQUATE BACKING
77	TOILET SEAT COVER DISPENSER	B-4221	BOBRICK	3	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	PROVIDE ADEQUATE BACKING
78	URINAL	6590.501	AMERICAN STANDARD	1	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	SEE PLUMBING PLANS FOR ADDITIONAL INFORMATION
79	SANITARY NAPKIN DISPOSAL	B-270	BOBRICK	2	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	PROVIDE ADEQUATE BACKING
80	CCTV SYSTEM	PACKAGE	CBE	PKG	CIRCLE K	OTHERS	115-220V (AUTO SWITCH) 50-60Hz, 350W	
81	DESK	–	–	1	GENERAL CONTRACTOR	GENERAL CONTRACTOR	NOT APPLICABLE	
82	CHAIR	–	–	1	CIRCLE K	GENERAL CONTRACTOR	NOT APPLICABLE	REFER TO DETAIL COUNTERTOP COLOR TBD BY CM
83	TELEPHONE	–	–	1	CIRCLE K	OTHERS	–	
84	NOT USED	–	–	–	–	–	–	
85	BACK OFFICE COMPUTER	–	–	1	CIRCLE K	OTHERS	ELECTRICAL REQUIREMENTS BY GC.	
86	NOT USED	–	–	–	–	–	–	
87	NOT USED	–	–	–	–	–	–	
88	BULLETIN BOARD	–	–	1	CIRCLE K	GENERAL CONTRACTOR	–	
89	ATM	TRITON RL5000	TRITON	1	CIRCLE K	OTHERS	115V/2 AMPS/60Hz	
90	WATER HEATER	A.O SMITH	DRE-80-27	1	GENERAL CONTRACTOR	GENERAL CONTRACTOR	208V/18KW 80 GAL	SEE PLUMBING PLANS
91	MOP SINK	MUSTEE	63M	1	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	SEE PLUMBING PLANS
92	40" DISPLAY CASE NON-REFRIGERATED BAKERY	BC-39-5-2H	HATCO	1	CIRCLE K	OTHERS	120V/1 AMPS, 120W	SEE ELECT & PLUMBING PLANS, 3 SIDED 40.22"W x 30"L x 66.41"H
93	CO2 SIGNS	–	–	1	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	SEE DET. 2/A9.1 FOR SIGNAGE
94	REFRIGERATED MERCHANDISER	LV10-1-B-LED	BEVERAGE AIR	1	CIRCLE K	OTHERS	115V/60Hz/5 AMPS	
95	DUAL SHELF	OS-4E-CWP	SERV-WARE	1	CIRCLE K	GENERAL CONTRACTOR	–	
96	ELKAY HAND SINK	K11515	DAYTON	2	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	
97	DISPLAY RACKS (BEV, WATER)	–	–	VARIES	CIRCLE K	OTHERS	–	
98	FLOOR SINK	Z1901	ZURN	8	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	
99	ALTERNATE ICE BAGGER W/ ICE MAKER FUTURE	INDIGO SERIES 1800 ICE CUBE MACHINE	MANITOWOC	1	CIRCLE K	GENERAL CONTRACTOR	208-230V/60Hz/1	ICE MAKER LOCATED ABOVE ICE BAGGER
100	UNDERCOUNTER DISHWASHER	UH-130B (70)	CHAMPION INDUSTRIES	1	CIRCLE K	OTHERS	208V-240/60Hz	1" ROLLER KIT (4 CASTERS INCLUDED)
101	LANDSCAPE CONTROLLER	–	–	1	GENERAL CONTRACTOR	GENERAL CONTRACTOR		
102	REFILL RACK	–	–	1	CIRCLE K	OTHERS		
103	Z-RACK DISPLAY	–	–	2	CIRCLE K	OTHERS	–	
104	PACKAGE CONDIMENTS	–	–	1	CIRCLE K	OTHERS		
105	OPTIONAL MULTIPLEX REF	50M	MULTIPLEX	0	CIRCLE K	OTHERS	208-230V/60Hz/3 Phase/25.5 WATTS	
106	UNOX OVEN W/ OVEN HOOD	XAVC-0511-EPR XAVHC-HC11	UNOX	1	CIRCLE K	OTHERS	208-240V/3PH/60Hz/19A 208-240V/1+N PH/0,5Hz/15A	
107	DOME LIDS/ FLAT LIDS	–	–	3	CIRCLE K	OTHERS		
108	BUILT-IN REFILL CUPS	–	–	–	CIRCLE K	OTHERS		
109	TV'S	–	–	5	CIRCLE K	OTHERS	ELECTRICAL REQUIREMENTS BY GC.	
110	REDBOX	–	–	1	VENDOR	VENDOR	–	
111	NOT USED	–	–	–	–	–	–	
112	WORK TABLE	T3036CWP-3-T	SERV-WARE	1	CIRCLE K	OTHERS	–	
113	UNDER-COUNTER FREEZER	UCF36A	BEVERAGE AIR	1	CIRCLE K	OTHERS	115/60Hz/1A	
114	UNDER-COUNTER FRIDGE	UCR27A	BEVERAGE AIR	1	CIRCLE K	OTHERS	115/60Hz/1A	
115	COUNTERTOP NUGGET ICE MAKER & DISPENSER	RNS-12A	MANITOWOC	1	CIRCLE K	OTHERS	120V/10.3A/1PHASE/5-15P	
116	48" PIZZA PREP STATION	K3	DUKE MANUFACTURING	1	CIRCLE K	OTHERS		
117	DISPLAY CASE HEATED	FSD-2	HATCO	1	CIRCLE K	OTHERS	120V/1440W/12A/ NEMA 5-15P	
118	DISPLAY WARMER	FS3HAC-4226	HATCO	1	CIRCLE K	OTHERS	120-240V/11.3A	
119	72" WORK TOP	K4	DUKE MANUFACTURING	1	CIRCLE K	OTHERS		
120	VITAMIN WATER	MODEL 500	LANCER	1	CIRCLE K	OTHERS	ELECTRICAL REQUIREMENTS BY GC.	G.C. TO PROVIDE REQUIRED ELECTRICAL
121	OTHER TOBACCO PRODUCT (OTP)	–	–	1	CIRCLE K	OTHERS	–	–
122	MUG DISPLAY	–	–	1	CIRCLE K	OTHERS	–	–

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.
engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

ARIEL VALDES, AIA
LOUISANA R.A. # 9212

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19-175
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 05 19075 CK XXXX 5187 A1.5 DWG
CHECKED BY:	

DRAWING TITLE:

EQUIPMENT LIST

SHEET NO:

A1.5

1 REFLECTED CEILING PLAN

SCALE: 3/16" = 1'-0"

KEY NOTES (X)

1. ROOF ACCESS LADDER, SEE DET. 12/A8.2
2. STUCCO SYSTEM WITH ACRYLIC FINISH
3. VALANCE. SUPPLIED AND INSTALLED BY VENDOR
4. GYP. BOARD VALANCE ABOVE COOLER, FINISH SAME AS ADJACENT WALL. SEE DET. 5/A9.2.
5. SOFFIT LINE
6. CONT. FRY REGLET VENT DCS-625-V-600. SEE DET. 2/A8.1
7. 1'-8" X 2'-6" CEILING ACCESS DOOR, SEE DETAIL 10/A8.1
8. ILLUMINATED EMERGENCY EXIT SIGN. SEE ELECTRICAL
9. EXTERIOR LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS AND EXTERIOR ELEVATIONS
10. SUSPENDED CEILING SYSTEM. SEE DETAILS 10/A9.2 & 11/A9.2.
11. EMERGENCY BATTERY BACKUP LIGHT. SEE ELECTRICAL.
12. 24"x24" ACCESS PANEL ABOVE COOLER DOOR.
13. MECHANICAL TOP UNIT ABOVE ROOF SHOWN FOR REFERENCE ONLY, SEE MECHANICAL AND ROOF PLAN
14. EVAPORATORS, SEE MECH.
15. EQUIPMENT BELOW, SHOW FOR REFERENCE ONLY.
16. RECESSED LIGHT, SEE ELECT.
17. LED LENS, SEE ELECT.
18. GC TO COORDINATE WITH DECOR VENDOR FOR THE COFFEE WALL LIGHTING.
19. LINE OF STORAGE LOFT SHELF, SEE DETAIL 3/A9.4
20. GC TO EXTEND ACT CEILING TO WALL

LEGEND

- C4 — CEILING TYPE
- +X'-X" — CEILING HEIGHT
- 4' 2' — SUSPENDED GRID, REFER TO ROOM FINISH SCHEDULE SHEET A1.2
- 5/8" GYP. BD. CLNG.
- 2 x 4 LED LIGHT FIXTURE (PARABOLIC)
- 2 x 4 N.L. & EMERG. LED LIGHT FIXTURE
- MOISTURE PROOF FIXTURE SUPPLIED BY CIRCLE K / INSTALLED BY GC
- EMERG. MOISTURE PROOF FIXTURE SUPPLIED BY CIRCLE K / INSTALLED BY GC
- RECESSED OR SUSPENDED CAN LIGHT FIXTURE
- EXTERIOR WALL MOUNT LIGHT FIXTURE
- ILLUM. EXIT SIGN
- EMERGENCY BATTERY BACKUP LIGHT FIXTURE
- SUPPLY AIR DIFFUSER
- RETURN AIR GRILLE
- EXHAUST FAN
- CEILING ELECT. OUTLET
- LED — LED TRANSFORMER FOR INTERIOR SIGNAGE ABOVE CEILING
- X — CAMERA LOCATION

GENERAL NOTES

1. SEE FINISH SCHEDULE ON SHEET A1.2 FOR FINISHES
2. DIMENSIONS FOR LIGHT FIXTURE LOCATIONS ARE TO CENTERLINE OF FIXTURE UNLESS OTHERWISE NOTED.

CEILING TYPES

C1	5/8" GYP. CEILING BOARD, SEE PAINT SPECS ON SHEET A1.2
C2	NOT USED
C3	FACTORY FINISH
C4	SUSPENDED 1/2" THK. 2'x4' GRID WITH WASHABLE LAY-IN VINYL CLAD SHEET ROCK TILE

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2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19-175
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 06 19019 CK XXXX 5187 A1.6.DWG
CHECKED BY:	

DRAWING TITLE:

REFLECTED CEILING PLAN

SHEET NO:

A1.6

1 ROOF PLAN

SCALE: 3/16" = 1'-0"

KEY NOTES (X)

1. ROOF LADDER, SEE SHEET A8.4 FOR DETAILS
2. 60 MIL TPO ROOFING SYSTEM OVER RIGID INSULATION. WALKWAYS AS REQUIRED BY ROOFING MANUFACTURER. ROOF SYSTEM TO BE FLOOD TESTED AFTER INSTALLATION TO ENSURE NO LEAKS.
3. TAPERED INSULATION DRAINAGE CRICKET, MINIMUM SLOPE 1/4" PER. FOOT. SEE DETAIL 5 THIS SHEET & 3/A8.1
4. ROOF TOP HVAC UNIT, SEE MECHANICAL AND STRUCT. DRAWINGS.
5. COMBINATION ROOF DRAIN / OVERFLOW DRAIN. SEE DETAIL 3/A1.7 & 4/A.17
6. ROOF TOP CONDENSING UNIT, SEE MECHANICAL AND STRUCT. DRAWINGS.
7. NOT USED
8. NOT USED
9. NOT USED
10. NOT USED
11. EXHAUST FAN ROOF JACK SEE MECHANICAL DRAWINGS.
12. NOT USED
13. EMERGENCY OVERFLOW ROOF DRAIN TAIL PIECE. EXTEND 4" BEYOND FINISH SURFACE. SEE DETAIL 4/A1.7.
14. PARAPET CORNICE, SEE EXTERIOR ELEVATIONS AND DETAIL 11/A8.2
15. 30" WIDE WALKING PATH FOR EQUIPMENT ACCESS. "VERSICO" WALKWAY PAD OR EQUAL INSTALL PER MANUFACTURER INSTRUCTIONS. VERIFY PATH LOCATION WITH CIRCLE K PROJECT MANAGER.
16. NOT USED.
17. CONDUIT SEE MECHANICAL AND ELECTRICAL
18. VTR LOCATION, SEE PLUMBING DRAWINGS.
19. NOT USED
20. STEEL BAR JOIST, SEE STRUCT. DWGS.
21. 4" CANT

GENERAL NOTES

1. SEE DETAIL 5/A8.1 FOR FLASHING AT PIPE PENETRATIONS.
2. SEE BUILDING ELEVATIONS FOR PARAPET HEIGHTS.

BUILT-UP ROOFING SPECIFICATION

ROOFING SPECIFICATION – FIRESTONE TPO ROOFING SYSTEM OVER STEEL DECK, PER FLORIDA PRODUCT APPROVAL FL10264.1–R12, TABLE C–2, SC–180

OR

JOHN MANVILLE TPO ROOFING SYSTEM OVER STEEL DECK, PER MIAMI–DADE NOA 14–0618.04, JM TPO 80

SLOPE 1/4" PER FT.
DECK: STEEL, 22 GA
INSULATION: POLYISOCYANURATE ROOF INSULATION (R–38 RIGID)
SURFACING: TPO 80 MIL, WHITE

NOTES:
1. REFER TO FIRESTONE WEBSITE FOR THE MOST CURRENT INFORMATION.
2. SCUPPER MUST BE WELDED METAL SLEEVE ROUND ALL SHEET METAL FLANGE CORNERS.
3. SEE UT-S-2a & UT-S-2b FOR DETAILED INSTALLATION INSTRUCTIONS.

FIRESTONE OVERFLOW THRU–WALL SCUPPER (WELDED SLEEVE)

5 OVERFLOW SCUPPER DETAIL

SCALE: 3/16" = 1'-0"

4 ROOF DRAIN LEADER

1"=1'-0"

3 ROOF DRAIN DETAIL

N.T.S.

CLIENT:

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Gulf Coast Business Unit

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NO.	DATE	REVISION DESCRIPTION

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LOUISANA R.A. # 9212

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19-076
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 07 19075 CK XXXX 51[illegible] 7[illegible]
CHECKED BY:	

DRAWING TITLE:

ROOF PLAN AND DETAILS

SHEET NO:

A1.7

SECTION 07 5423
THERMOPLASTIC-POLYOLEFIN ROOFING (TPO)

PART 1 GENERAL

1.01 SECTION INCLUDES

A. PROJECT NAME: CIRCLE K STORE ROOFING SPECIFICATIONS.
B. THERMOPLASTIC MEMBRANE ROOFING SYSTEM, INCLUDING ALL COMPONENTS SPECIFIED.
C. COMPLY WITH THE PUBLISHED RECOMMENDATIONS AND INSTRUCTIONS OF THE ROOFING MEMBRANE MANUFACTURER, AT HTTP://MANUAL-FSBP.COM.
D. COMMENCEMENT OF WORK BY CONTRACTOR SHALL CONSTITUTE ACKNOWLEDGEMENT BY CONTRACTOR THAT THIS SPECIFICATION CAN BE SATISFACTORILY EXECUTED, UNDER THE PROJECT CONDITIONS AND WITH ALL NECESSARY PREREQUISITES FOR WARRANTY ACCEPTANCE BY ROOFING MEMBRANE MANUFACTURER. NO MODIFICATION OF THE CONTRACT SUM WILL BE MADE FOR FAILURE TO ADEQUATELY EXAMINE THE CONTRACT DOCUMENTS OR THE PROJECT CONDITIONS.

1.02 RELATED REQUIREMENTS

A. SECTION 06 1000 - ROUGH CARPENTRY: WOOD NAILERS ASSOCIATED WITH ROOFING AND ROOF INSULATION.

1.03 DEFINITIONS

A. ROOFING TERMINOLOGY: REFER TO ASTM D1079 FOR DEFINITION OF TERMS RELATED TO ROOFING WORK NOT OTHERWISE DEFINED IN THE SECTION.
B. LTTR: LONG TERM THERMAL RESISTANCE, AS DEFINED BY CAN-ULC S770.

1.04 REFERENCE STANDARDS

A. ASTM C1289 - STANDARD SPECIFICATION FOR FACED RIGID CELLULAR POLYISOCYANURATE THERMAL INSULATION BOARD; 2014.
B. ASTM D638 - STANDARD TEST METHOD FOR TENSILE PROPERTIES OF PLASTICS; 2014.
C. ASTM D1004 - STANDARD TEST METHOD FOR TEAR RESISTANCE (GRAVES TEAR) OF PLASTIC FILM AND SHEETING; 2013.
D. ASTM D6878/D6878M - STANDARD SPECIFICATION FOR THERMOPLASTIC POLYOLEFIN BASED SHEET ROOFING; 2013.
E. CAN-ULC-S770 - STANDARD TEST METHOD DETERMINATION OF L-TERM THERMAL RESISTANCE OF CLOSED-CELL THERMAL INSULATING FOAMS; 2009.
F. PS 1 - STRUCTURAL PLYWOOD; 2009.
G. SPRI ES-1 - WIND DESIGN STANDARD FOR EDGE SYSTEMS USED WITH LOW SLOPE ROOFING SYSTEMS; 2011. (ANSI/SPRI/FM 4435/ES-1)

1.05 SUBMITTALS

A. SEE SECTION 01 3000 - ADMINISTRATIVE REQUIREMENTS, FOR SUBMITTAL PROCEDURES.
B. PRODUCT DATA:
1. PROVIDE MEMBRANE MANUFACTURER'S PRINTED DATA SUFFICIENT TO SHOW THAT ALL COMPONENTS OF ROOFING SYSTEM, INCLUDING INSULATION AND FASTENERS, COMPLY WITH THE SPECIFIED REQUIREMENTS AND WITH THE MEMBRANE MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS FOR THE SYSTEM TYPE SPECIFIED; INCLUDE DATA FOR EACH PRODUCT USED IN CONJUNCTION WITH ROOFING MEMBRANE.
C. SAMPLES: SUBMIT SAMPLES OF EACH PRODUCT TO BE USED.
D. SHOP DRAWINGS: PROVIDE:
1. THE ROOF MEMBRANE MANUFACTURER'S STANDARD DETAILS CUSTOMIZED FOR THIS PROJECT FOR ALL RELEVANT CONDITIONS, INCLUDING FLASHINGS, BASE TIE-INS, ROOF EDGES, TERMINATIONS, EXPANSION JOINTS, PENETRATIONS, AND DRAINS.
2. FOR TAPERED INSULATION, PROVIDE PROJECT-SPECIFIC LAYOUT AND DIMENSIONS FOR EACH BOARD.
E. INSTALLER QUALIFICATIONS: LETTER FROM MANUFACTURER ATTESTING THAT THE ROOFING INSTALLER MEETS THE SPECIFIED QUALIFICATIONS.

1.06 QUALITY ASSURANCE

A. INSTALLER QUALIFICATIONS: ROOFING INSTALLER SHALL HAVE THE FOLLOWING:
1. CURRENT FIRESTONE RED SHIELD LICENSED CONTRACTOR STATUS.
2. FULLY STAFFED OFFICE WITHIN 100 MILES OF THE JOB SITE.

1.07 DELIVERY, STORAGE AND HANDLING

A. DELIVER PRODUCTS IN MANUFACTURER'S ORIGINAL CONTAINERS, DRY AND UNDAMAGED, WITH SEALS AND LABELS INTACT AND LEGIBLE.
B. STORE MATERIALS CLEAR OF GROUND AND MOISTURE WITH WEATHER PROTECTIVE COVERING.
C. KEEP COMBUSTIBLE MATERIALS AWAY FROM IGNITION SOURCES.

1.08 WARRANTY

A. SEE SECTION 01 7800 - CLOSEOUT SUBMITTALS, FOR ADDITIONAL WARRANTY REQUIREMENTS.
B. COMPLY WITH ALL WARRANTY PROCEDURES REQUIRED BY MANUFACTURER, INCLUDING NOTIFICATIONS, SCHEDULING, AND INSPECTIONS.
C. WARRANTY: FIRESTONE LIMITED WARRANTY COVERING MEMBRANE, ROOF INSULATION, AND OTHER INDICATED COMPONENTS OF THE SYSTEM, FOR THE TERM INDICATED.
1. LIMIT OF LIABILITY: NO DOLLAR LIMITATION.
2. SCOPE OF COVERAGE: REPAIR LEAKS IN THE ROOFING SYSTEM CAUSED BY:
a. ORDINARY WEAR AND TEAR OF THE ELEMENTS.
b. MANUFACTURING DEFECT IN FIRESTONE BRAND MATERIALS.
c. DEFECTIVE WORKMANSHIP USED TO INSTALL THESE MATERIALS.
d. DAMAGE DUE TO WINDS UP TO 90 MPH (145 KM/H).
3. NOT COVERED:
a. DAMAGE DUE TO WINDS IN EXCESS OF 90 MPH (145 KM/H).
b. DAMAGE DUE HURRICANES OR TORNADOES.
c. HAIL.
d. INTENTIONAL DAMAGE.
e. UNINTENTIONAL DAMAGE DUE TO NORMAL ROOFTOP INSPECTIONS, MAINTENANCE, OR SERVICE.
D. METAL ROOF EDGING: FIRESTONE FULL-SYSTEM WARRANTY FOR ROOF EDGE SYSTEM, COVERING BLOW-OFF FROM WINDS UP TO 150 MPH (240 KM/H).

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. ACCEPTABLE MANUFACTURER - ROOFING SYSTEM: FIRESTONE BUILDING PRODUCTS LLC, CARMEL, IN: WWW.FIRESTONEBPCO.COM.
B. MANUFACTURER OF INSULATION AND COVER BOARDS: SAME MANUFACTURER AS ROOF MEMBRANE.
C. MANUFACTURER OF METAL ROOF EDGING: SAME MANUFACTURER AS ROOF MEMBRANE.
1. METAL ROOF EDGING PRODUCTS BY OTHER MANUFACTURERS ARE NOT ACCEPTABLE.
2. FIELD- OR SHOP-FABRICATED METAL ROOF EDGINGS ARE NOT ACCEPTABLE.
3. FACTORY FABRICATED PRODUCTS MANUFACTURED BY THE COMPANIES LISTED BELOW ARE ACCEPTABLE PROVIDED THEY ARE COMPLETELY EQUIVALENT IN MATERIALS AND PERFORMANCE:
a. METAL ERA.

2.02 ROOFING SYSTEM DESCRIPTION

A. ROOFING SYSTEM: THERMOPLASTIC POLYOLEFIN (TPO) SINGLE-PLY MEMBRANE.
1. MEMBRANE ATTACHMENT: INVISIWELD (INDUCTION WELDED)
2. WARRANTY: FULL SYSTEM WARRANTY; FIRESTONE 20 YEAR LIMITED WARRANTY COVERING MEMBRANE, ROOF INSULATION, AND MEMBRANE ACCESSORIES.
COMPLY WITH APPLICABLE LOCAL BUILDING CODE REQUIREMENTS

SC-1B3.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	None	One or more layers, any combination	Firestone Heavy Duty Fasteners and UltraPly TPO InsisiWeld Plates	1 per 4 ft² (8 parts per 4x8 ft board) Per FM LPDS 2-29	UltraPly TPO bonded to UltraPly TPO InsisiWeld Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps	-60.0

NOTE: THIS SYSTEM IS FOR BIDDING PURPOSES ONLY. ENGINEERING IS REQUIRED TO BE OBTAINED BY A LICENSED DESIGN PROFESSIONAL TO DETERMINE THE SPECIFIC NEGATIVE UPLIFT PRESSURES OF THE ROOF AREAS OF THIS BUILDING. TO COMPLY WITH FIRESTONE 90MPH EXTENDED WIND WARRANTY REQUIREMENTS A MINIMUM FASTENING RATE OF 8/14/20 IS REQUIRED.

B. ROOFING SYSTEM COMPONENTS: LISTED IN ORDER FROM THE TOP OF THE ROOF DOWN:
1. MEMBRANE: THICKNESS AS SPECIFIED.
2. INSULATION:
a. TOTAL R-VALUE OF R=38.
b. TOP LAYER: 3.3" POLYISOCYANURATE FOAM BOARD, NON-COMPOSITE; MECHANICALLY FASTENED.
c. BOTTOM LAYER: 3.3" POLYISOCYANURATE FOAM BOARD, NON-COMPOSITE; LOOSE-LAID, NO ATTACHMENT.
d. CRICKETS: TAPERED INSULATION OF SAME TYPE AS SPECIFIED FOR TOP LAYER; SLOPE SHALL BE ½" PER FOOT.

2.03 MEMBRANE MATERIALS

A. MEMBRANE: FLEXIBLE, HEAT WELDABLE SHEET COMPOSED OF THERMOPLASTIC POLYOLEFIN POLYMER AND ETHYLENE PROPYLENE RUBBER; COMPLYING WITH ASTM D6878/D6878M, WITH POLYESTER WEFT INSERTED REINFORCEMENT AND THE FOLLOWING ADDITIONAL CHARACTERISTICS:
1. THICKNESS: **0.080 INCH** (2.03 MM) PLUS/MINUS 10 PERCENT, WITH COATING THICKNESS OVER REINFORCEMENT OF 0.030 INCH (0.76 MM) PLUS/MINUS 10 PERCENT.
2. PUNCTURE RESISTANCE: 415 LBF (1868 N), MINIMUM, WHEN TESTED IN ACCORDANCE FTM 101C METHOD 2031.
3. COLOR: WHITE.
4. ACCEPTABLE PRODUCT: ULTRAPLY PLATINUM TPO BY FIRESTONE.
B. MEMBRANE FASTENERS: TYPE AND SIZE AS REQUIRED BY ROOF MEMBRANE MANUFACTURER FOR ROOFING SYSTEM AND WARRANTY TO BE PROVIDED; USE ONLY FASTENERS FURNISHED BY ROOF MEMBRANE MANUFACTURER. HEAVY DUTY FASTENERS AND INVISIWELD PLATES BY FIRESTONE.
C. CURB AND PARAPET FLASHING: SAME MATERIAL AS MEMBRANE, WITH ENCAPSULATED EDGE WHICH ELIMINATES NEED FOR SEAM SEALING THE FLASHING-TO-ROOF SPLICE; PRECUT TO 18 INCHES (457 MM) WIDE.
D. FORMABLE FLASHING: NON-REINFORCED, FLEXIBLE, HEAT WELDABLE SHEET, COMPOSED OF THERMOPLASTIC POLYOLEFIN POLYMER AND ETHYLENE PROPYLENE RUBBER.
1. THICKNESS: 0.060 INCH (1.52 MM) PLUS/MINUS 10 PERCENT.
2. TENSILE STRENGTH: 1550 PSI (10.7 MPA), MINIMUM, WHEN TESTED IN ACCORDANCE WITH ASTM D638 AFTER HEAT AGING.
3. ELONGATION AT BREAK: 650 PERCENT, MINIMUM, WHEN TESTED IN ACCORDANCE WITH ASTM D638 AFTER HEAT AGING.
4. TEARING STRENGTH: 12 LBF (53 N), MINIMUM, WHEN TESTED IN ACCORDANCE WITH ASTM D1004 AFTER HEAT AGING.
5. COLOR: WHITE.
6. ACCEPTABLE PRODUCT: ULTRAPLY TPO FLASHING BY FIRESTONE.
E. TAPE FLASHING: 5-1/2 INCH (140 MM) NOMINAL WIDE TPO MEMBRANE LAMINATED TO CURED RUBBER POLYMER SEAMING TAPE, OVERALL THICKNESS 0.065 INCH (1.6 MM) NOMINAL; TPO QUICKSEAM FLASHING BY FIRESTONE.
F. BONDING ADHESIVE: NEOPRENE AND SBR RUBBER BLEND, FORMULATED FOR COMPATIBILITY WITH THE MEMBRANE OTHER SUBSTRATE MATERIALS, INCLUDING MASONRY, WOOD, AND INSULATION FACINGS; ULTRAPLY BONDING ADHESIVE BY FIRESTONE.
G. POURABLE SEALER: TWO-PART POLYURETHANE, TWO-COLOR FOR RELIABLE MIXING; POURABLE SEALER BY FIRESTONE.
H. TERMINATION BARS: ALUMINUM BARS WITH INTEGRAL CAULK LEDGE; 1.3 INCHES (33 MM) WIDE BY 0.10 INCH (2.5 MM) THICK; FIRESTONE TERMINATION BAR BY FIRESTONE.
I. CUT EDGE SEALANT: SYNTHETIC RUBBER-BASED, FOR USE WHERE MEMBRANE REINFORCEMENT IS EXPOSED; ULTRAPLY TPO CUT EDGE SEALANT BY FIRESTONE.
J. GENERAL PURPOSE SEALANT: EPDM-BASED, ONE PART, WHITE GENERAL PURPOSE SEALANT; ULTRAPLY TPO GENERAL PURPOSE SEALANT BY FIRESTONE.
K. COATED METAL FLASHING AND EDGINGS: GALVANIZED STEEL WITH ROOFING MANUFACTURER'S BONDED TPO COATING; ULTRAPLY TPO COATED METAL BY FIRESTONE.
L. MOLDED FLASHING ACCESSORIES: UNREINFORCED TPO MEMBRANE PRE-MOLDED TO SUIT A VARIETY OF FLASHING DETAILS, INCLUDING PIPE BOOTS, INSIDE CORNERS, OUTSIDE CORNERS, ETC.; ULTRAPLY TPO SMALL AND LARGE PIPE FLASHING BY FIRESTONE.
M. WATER BLOCK SEAL: BUTYL RUBBER SEALANT FOR USE BETWEEN TWO SURFACES, NOT EXPOSED; WATER BLOCK SEAL BY FIRESTONE.
N. ROOF WALKWAY PADS: NON-REINFORCED TPO WALKWAY PADS, 0.130 INCH (3 MM) BY 30 INCHES (760 MM) BY 40 FEET (12.19 M) LONG WITH PATTERNED TRAFFIC BEARING SURFACE; ULTRAPLY TPO WALKWAY PADS BY FIRESTONE.

2.04 ROOF INSULATION AND COVER BOARDS

A. POLYISOCYANURATE BOARD INSULATION: CLOSED CELL POLYISOCYANURATE FOAM WITH BLACK GLASS REINFORCED MAT LAMINATED TO FACES, COMPLYING WITH ASTM C1289 TYPE II CLASS 1, WITH THE FOLLOWING ADDITIONAL CHARACTERISTICS:
1. THICKNESS: AS INDICATED ELSEWHERE.
2. SIZE: 48 INCHES (1220 MM) BY 96 INCHES (2440 MM), NOMINAL.
a. EXCEPTION: INSULATION TO BE ATTACHED USING ADHESIVE OR ASPHALT MAY BE NO LARGER THAN 48 INCHES (1220 MM) BY 48 INCHES (1220 MM), NOMINAL.
3. R-VALUE (RSI-VALUE) (LTTR):
a. TOTAL R-VALUE OF R=38 WILL BE ACHIEVED BY 2-LAYERS OF 3.3" POLYISOCYANURATE BOARD.
4. COMPRESSIVE STRENGTH: 20 PSI (138 KPA) WHEN TESTED IN ACCORDANCE WITH ASTM C1289.
5. OZONE DEPLETION POTENTIAL: ZERO; MADE WITHOUT CFC OR HCFC BLOWING AGENTS.
6. RECYCLED CONTENT: 19 PERCENT POST-CONSUMER AND 15 PERCENT POST-INDUSTRIAL, AVERAGE.
7. ACCEPTABLE PRODUCT: ISO 95+ GL POLYISOCYANURATE INSULATION BY FIRESTONE.
B. INSULATION FASTENERS: TYPE AND SIZE AS REQUIRED BY ROOF MEMBRANE MANUFACTURER FOR ROOFING SYSTEM AND WARRANTY TO BE PROVIDED; USE ONLY FASTENERS FURNISHED BY ROOF MEMBRANE MANUFACTURER. HEAVY DUTY FASTENERS AND INVISIWELD PLATES BY FIRESTONE.

2.05 METAL ACCESSORIES

A. METAL ROOF EDGING AND FASCIA: CONTINUOUS METAL EDGE MEMBER SERVING AS TERMINATION OF ROOF MEMBRANE AND RETAINER FOR METAL FASCIA; WATERTIGHT WITH NO EXPOSED FASTENERS; MOUNTED TO ROOF EDGE NAILER.
1. WIND PERFORMANCE:
a. MEMBRANE PULL-OFF RESISTANCE: 100 LBS/FT (1460 N/M), MINIMUM, WHEN TESTED IN ACCORDANCE WITH ANSI/SPRI/FM 4435/ES-1 TEST METHOD RE-1, CURRENT EDITION.
b. FASCIA PULL-OFF RESISTANCE: AT LEAST THE MINIMUM REQUIRED WHEN TESTED IN ACCORDANCE WITH ANSI/SPRI/FM 4435/ES-1 TEST METHOD RE-2, CURRENT EDITION.
c. PROVIDE PRODUCT LISTED IN CURRENT FACTORY MUTUAL RESEARCH CORPORATION APPROVAL GUIDE WITH AT LEAST FM 1-270 RATING.
2. DESCRIPTION: TWO-PIECE; EXTRUDED ALUMINUM T-SHAPED EDGE MEMBER SECURING TOP AND BOTTOM EDGES OF FLAT-FACED FORMED METAL FASCIA; **METAL ERA ANCHORTITE FASICA FOR SINGLE PLY.**
3. FASCIA MATERIAL AND FINISH: 0.040 INCH (1.0 MM) THICK FORMED ALUMINUM, KYNAR 500 FINISH IN MANUFACTURER'S STANDARD COLOR; MATCHING CONCEALED JOINT SPLICE PLATES; FACTORY-INSTALLED PROTECTIVE PLASTIC FILM.
4. LENGTH: 144 INCHES (3650 MM).
5. FUNCTIONAL CHARACTERISTICS: FASCIA RETAINER SUPPORTS WHILE ALLOWING FOR FREE THERMAL CYCLING OF FASCIA.
6. ALUMINUM BAR: CONTINUOUS 6063-T6 ALLOY ALUMINUM EXTRUSION WITH PRE-PUNCHED SLOTTED HOLES; MITERS WELDED; INJECTION MOLDED EPDM SPLICES TO ALLOW THERMAL EXPANSION.
7. CURVED APPLICATIONS: FACTORY MODIFIED.
8. FASTENERS: FACTORY-PROVIDED CORROSION RESISTANT FASTENERS, WITH DRIVERS; NO EXPOSED FASTENERS PERMITTED.
9. SPECIAL SHAPED COMPONENTS: PROVIDE FACTORY-FABRICATED PIECES NECESSARY FOR COMPLETE INSTALLATION, INCLUDING MITERS, SCUPPERS, AND END CAPS; MINIMUM 14 INCH (355 MM) LONG LEGS ON CORNER PIECES.
10. ACCESSORIES: PROVIDE MATCHING BRICK WALL CAP, DOWNSPOUT, EXTENDERS, AND OTHER SPECIAL FABRICATIONS AS SHOWN ON THE DRAWINGS.
11. DOWNSPOUTS AND CONDUCTOR HEADS: SHOP FABRICATED FROM .040 ALUMINUM WITH A STANDARD COLOR KYNAR FINISH.

2.06 ACCESSORY MATERIALS

A. WOOD NAILERS: PS 20 DIMENSION LUMBER, STRUCTURAL GRADE NO. 2 OR BETTER SOUTHERN PINE, DOUGLAS FIR; OR PS 1, APA EXTERIOR GRADE PLYWOOD; PRESSURE PRESERVATIVE TREATED.
1. WIDTH: 3-1/2 INCHES (90 MM), NOMINAL MINIMUM, OR AS WIDE AS THE NAILING FLANGE OF THE ROOF ACCESSORY TO BE ATTACHED TO IT.

THICKNESS: SAME AS THICKNESS OF ROOF INSULATION

PART 3 INSTALLATION (FOLLOW FIRESTONE PLATINUM 30-YR DETAILS WHERE APPLICABLE)

3.01 GENERAL

A. INSTALL ROOFING, INSULATION, FLASHINGS, AND ACCESSORIES IN ACCORDANCE WITH ROOFING MANUFACTURER'S PUBLISHED INSTRUCTIONS AND RECOMMENDATIONS FOR THE SPECIFIED ROOFING SYSTEM. WHERE MANUFACTURER PROVIDES NO INSTRUCTIONS OR RECOMMENDATIONS, FOLLOW GOOD ROOFING PRACTICES AND INDUSTRY STANDARDS. COMPLY WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
B. OBTAIN ALL RELEVANT INSTRUCTIONS AND MAINTAIN COPIES AT PROJECT SITE FOR DURATION OF INSTALLATION PERIOD.
C. DO NOT START WORK UNTIL PRE-INSTALLATION NOTICE HAS BEEN SUBMITTED TO MANUFACTURER AS NOTIFICATION THAT THIS PROJECT REQUIRES A MANUFACTURER'S WARRANTY.
D. PERFORM WORK USING COMPETENT AND PROPERLY EQUIPPED PERSONNEL.
E. TEMPORARY CLOSURES, WHICH ENSURE THAT MOISTURE DOES NOT DAMAGE ANY COMPLETED SECTION OF THE NEW ROOFING SYSTEM, ARE THE RESPONSIBILITY OF THE APPLICATOR. COMPLETION OF FLASHINGS, TERMINATIONS, AND TEMPORARY CLOSURES SHALL BE COMPLETED AS REQUIRED TO PROVIDE A WATERTIGHT CONDITION.
F. INSTALL ROOFING MEMBRANE ONLY WHEN SURFACES ARE CLEAN, DRY, SMOOTH AND FREE OF SNOW OR ICE; DO NOT APPLY ROOFING MEMBRANE DURING INCLEMENT WEATHER OR WHEN AMBIENT CONDITIONS WILL NOT ALLOW PROPER APPLICATION; CONSULT MANUFACTURER FOR RECOMMENDED PROCEDURES DURING COLD WEATHER. DO NOT WORK WITH SEALANTS AND ADHESIVES WHEN MATERIAL TEMPERATURE IS OUTSIDE THE RANGE OF 60 TO 80 DEGREES F (15 TO 25 DEGREES C).
G. PROTECT ADJACENT CONSTRUCTION, PROPERTY, VEHICLES, AND PERSONS FROM DAMAGE RELATED TO ROOFING WORK; REPAIR OR RESTORE DAMAGE CAUSED BY ROOFING WORK.
1. PROTECT FROM SPILLS AND OVERSPRAY FROM BITUMEN, ADHESIVES, SEALANTS AND COATINGS.
2. PARTICULARLY PROTECT METAL, GLASS, PLASTIC, AND PAINTED SURFACES FROM BITUMEN, ADHESIVES, AND SEALANTS WITHIN THE RANGE OF WIND-BORNE OVERSPRAY.
3. PROTECT FINISHED AREAS OF THE ROOFING SYSTEM FROM ROOFING RELATED WORK TRAFFIC AND TRAFFIC BY OTHER TRADES.
H. UNTIL READY FOR USE, KEEP MATERIALS IN THEIR ORIGINAL CONTAINERS AS LABELED BY THE MANUFACTURER.
I. CONSULT MEMBRANE MANUFACTURER'S INSTRUCTIONS, CONTAINER LABELS, AND MATERIAL SAFETY DATA SHEETS (MSDS) FOR SPECIFIC SAFETY INSTRUCTIONS. KEEP ALL ADHESIVES, SEALANTS, PRIMERS AND CLEANING MATERIALS AWAY FROM ALL SOURCES OF IGNITION.

3.02 EXAMINATION

A. EXAMINE ROOF DECK TO DETERMINE THAT IT IS SUFFICIENTLY RIGID TO SUPPORT INSTALLERS AND THEIR MECHANICAL EQUIPMENT AND THAT DEFLECTION WILL NOT STRAIN OR RUPTURE ROOF COMPONENTS OR DEFORM DECK.
B. VERIFY THAT SURFACES AND SITE CONDITIONS ARE READY TO RECEIVE WORK. CORRECT DEFECTS IN THE SUBSTRATE BEFORE COMMENCING WITH ROOFING WORK.
C. EXAMINE ROOF SUBSTRATE TO VERIFY THAT IT IS PROPERLY SLOPED TO DRAINS.
D. VERIFY THAT THE SPECIFICATIONS AND DRAWING DETAILS ARE WORKABLE AND NOT IN CONFLICT WITH THE ROOFING MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS; START OF WORK CONSTITUTES ACCEPTABLE OF PROJECT CONDITIONS AND REQUIREMENTS.
E. VERIFY THAT WOOD NAILERS HAVE BEEN PROPERLY INSTALLED.

3.03 PREPARATION

A. TAKE APPROPRIATE MEASURES TO ENSURE THAT FUMES FROM ADHESIVE SOLVENTS ARE NOT DRAWN INTO THE BUILDING THROUGH AIR INTAKES.
B. PRIOR TO PROCEEDING, PREPARE ROOF SURFACE SO THAT IT IS CLEAN, DRY, AND SMOOTH, AND FREE OF SHARP EDGES, FINS, ROUGHENED SURFACES, LOOSE OR FOREIGN MATERIALS, OIL, GREASE AND OTHER MATERIALS THAT MAY DAMAGE THE MEMBRANE.
C. FILL ALL SURFACE VOIDS IN THE IMMEDIATE SUBSTRATE THAT ARE GREATER THAN 1/4 INCH (6 MM) WIDE WITH FILL MATERIAL ACCEPTABLE INSULATION TO MEMBRANE MANUFACTURER.
D. WOOD NAILERS: PROVIDE WOOD NAILERS AT ALL PERIMETERS AND OTHER LOCATIONS WHERE INDICATED ON THE DRAWINGS, OF TOTAL HEIGHT MATCHING THE TOTAL THICKNESS OF INSULATION BEING USED.
1. INSTALL WITH 1/8 INCH GAP BETWEEN EACH LENGTH AND AT EACH CHANGE OF DIRECTION.
2. MECHANICALLY FASTEN TO DECK TO RESIST FORCE OF 200 LBF PER LINEAR FOOT (35 KN/M).

3.04 INSULATION AND COVER BOARD INSTALLATION

A. INSTALL INSULATION IN CONFIGURATION AND WITH ATTACHMENT METHOD(S) SPECIFIED IN PART 2, UNDER ROOFING SYSTEM.
B. INSTALL ONLY AS MUCH INSULATION AS CAN BE COVERED WITH THE COMPLETED ROOFING SYSTEM BEFORE THE END OF THE DAY'S WORK OR BEFORE THE ONSET OF INCLEMENT WEATHER.
C. LAY ROOF INSULATION IN COURSES PARALLEL TO ROOF EDGES.
D. NEATLY AND TIGHTLY FIT INSULATION TO ALL PENETRATIONS, PROJECTIONS, AND NAILERS, WITH GAPS NOT GREATER THAN 1/4 INCH (6 MM). FILL GAPS GREATER THAN 1/4 INCH (6 MM) WITH ACCEPTABLE INSULATION. DO NOT LEAVE THE ROOFING MEMBRANE UNSUPPORTED OVER A SPACE GREATER THAN 1/4 INCH (6 MM).
E. LOOSE LAID INSTALLATION: INSTALL INSULATION BY LAYING LOOSE OVER SUBSTRATE WITHOUT MECHANICAL SECUREMENT OF ANY KIND.
F. MECHANICAL FASTENING: USING SPECIFIED FASTENERS AND INSULATION PLATES ENGAGE FASTENERS THROUGH INSULATION INTO DECK TO DEPTH AND IN PATTERN REQUIRED BY MEMBRANE MANUFACTURER.

3.05 SINGLE-PLY MEMBRANE INSTALLATION (FOLLOW FIRESTONE PLATINUM 30-YR DETAILS WHERE APPLICABLE)

A. BEGINNING AT LOW POINT OF ROOF, PLACE MEMBRANE WITHOUT STRETCHING OVER SUBSTRATE AND ALLOW TO RELAX AT LEAST 30 MINUTES BEFORE ATTACHMENT OR SPLICING; IN COLDER WEATHER ALLOW FOR LONGER RELAX TIME.
B. LAY OUT THE MEMBRANE PIECES SO THAT FIELD AND FLASHING SPLICES ARE INSTALLED TO SHED WATER.
C. INSTALL MEMBRANE WITHOUT WRINKLES AND WITHOUT GAPS OR FISHMOUTHS IN SEAMS; BOND AND TEST SEAMS AND LAPS IN ACCORDANCE WITH MEMBRANE MANUFACTURER'S INSTRUCTIONS AND DETAILS.
D. INDUCTION WELDED MEMBRANE: INSTALL MEMBRANE AND INDUCTION WELD TO THE ULTRAPLY TPO INVISIWELD PLATES WITH RHINO BOND PORTABLE PLATE BONDING TOOL AND COOLING CLAMPS AS REQUIRED BY MEMBRANE MANUFACTURER.
E. ADHERED MEMBRANE: BOND MEMBRANE SHEET TO SUBSTRATE USING MEMBRANE MANUFACTURER'S RECOMMENDED BONDING MATERIAL, APPLICATION RATE, AND PROCEDURES.
F. EDGE SECUREMENT: SECURE MEMBRANE AT ALL LOCATIONS WHERE MEMBRANE TERMINATES OR GOES THROUGH AN ANGLE CHANGE GREATER THAN 2 IN 12 INCHES (1:6) USING MECHANICALLY FASTENED REINFORCED PERIMETER FASTENING STRIPS, PLATES, OR METAL EDGING AS INDICATED OR AS RECOMMENDED BY ROOFING MANUFACTURER.
1. EXCEPTIONS: ROUND PIPE PENETRATIONS LESS THAN 18 INCHES (460 MM) IN DIAMETER AND SQUARE PENETRATIONS LESS THAN 4 INCHES (200 MM) SQUARE.
2. METAL EDGING IS NOT MERELY DECORATIVE; ENSURE ANCHORAGE OF MEMBRANE AS INTENDED BY ROOFING MANUFACTURER.

3.06 FLASHING AND ACCESSORIES INSTALLATION (FOLLOW FIRESTONE PLATINUM 30-YR DETAILS WHERE APPLICABLE)

A. INSTALL FLASHINGS, INCLUDING LAPS, SPLICES, JOINTS, BONDING, ADHESION, AND ATTACHMENT, AS REQUIRED BY MEMBRANE MANUFACTURER'S RECOMMENDATIONS AND DETAILS.
B. METAL ACCESSORIES: INSTALL METAL EDGINGS, GRAVEL STOPS, AND COPINGS IN LOCATIONS INDICATED ON THE DRAWINGS, WITH HORIZONTAL LEG OF EDGE MEMBER OVER MEMBRANE AND FLASHING OVER METAL ONTO MEMBRANE.
1. FOLLOW ROOFING MANUFACTURER'S INSTRUCTIONS.
2. REMOVE PROTECTIVE PLASTIC SURFACE FILM IMMEDIATELY BEFORE INSTALLATION.
3. INSTALL WATER BLOCK SEALANT UNDER THE MEMBRANE ANCHORAGE LEG.
4. FLASH WITH MANUFACTURER'S RECOMMENDED FLASHING SHEET UNLESS OTHERWISE INDICATED.
5. WHERE SINGLE APPLICATION OF FLASHING WILL NOT COMPLETELY COVER THE METAL FLANGE, INSTALL ADDITIONAL PIECE OF FLASHING TO COVER THE METAL EDGE.
6. IF THE ROOF EDGE INCLUDES A GRAVEL STOP AND SEALANT IS NOT APPLIED BETWEEN THE LAPS IN THE METAL EDGING, INSTALL AN ADDITIONAL PIECE OF SELF-ADHESIVE FLASHING MEMBRANE OVER THE METAL LAP TO THE TOP OF THE GRAVEL STOP; APPLY SEAM EDGE TREATMENT AT THE INTERSECTIONS OF THE TWO FLASHING SECTIONS.
7. WHEN THE ROOF SLOPE IS GREATER THAN 1:12, APPLY SEAM EDGE TREATMENT ALONG THE BACK EDGE OF THE FLASHING.
C. OVERFLOW SCUPPERS: TO BE SHOP FABRICATED FROM TPO COATED METAL BY FIRESTONE USING FIRESTONE PLATINUM DETAIL PUT-S-06.
D. ROOFING EXPANSION JOINTS: INSTALL AS SHOWN ON DRAWINGS AND AS RECOMMENDED BY ROOFING MANUFACTURER.
E. FLASHING AT WALLS, CURBS, AND OTHER VERTICAL AND SLOPED SURFACES: INSTALL WEATHERTIGHT FLASHING AT ALL WALLS, CURBS, PARAPETS, CURBS, SKYLIGHTS, AND OTHER VERTICAL AND SLOPED SURFACES THAT THE ROOFING MEMBRANE ABUTS TO; EXTEND FLASHING AT LEAST 8 INCHES (200 MM) HIGH ABOVE MEMBRANE SURFACE.
1. USE THE LONGEST PRACTICAL FLASHING PIECES.
2. EVALUATE THE SUBSTRATE AND OVERLAY AND ADJUST INSTALLATION PROCEDURE IN ACCORDANCE WITH MEMBRANE MANUFACTURER'S RECOMMENDATIONS.
3. COMPLETE THE SPLICE BETWEEN FLASHING AND THE MAIN ROOF SHEET WITH SPECIFIED SPLICE ADHESIVE BEFORE ADHERING FLASHING TO THE VERTICAL SURFACE.
4. PROVIDE TERMINATION DIRECTLY TO THE VERTICAL SUBSTRATE AS SHOWN ON ROOF DRAWINGS.
F. ROOF DRAINS:
1. TAPER INSULATION AROUND DRAIN TO PROVIDE SMOOTH TRANSITION FROM ROOF SURFACE TO DRAIN. USE SPECIFIED PRE-MANUFACTURED TAPERED INSULATION WITH FACER OR SUITABLE BONDING SURFACE TO ACHIEVE SLOPE; SLOPE NOT TO EXCEED MANUFACTURER'S RECOMMENDATIONS.
2. POSITION MEMBRANE, THEN CUT A HOLE FOR ROOF DRAIN TO ALLOW 1/2 TO 3/4 INCH (12 TO 19 MM) OF MEMBRANE TO EXTEND INSIDE CLAMPING RING PAST DRAIN BOLTS.
3. MAKE ROUND HOLES IN MEMBRANE TO ALIGN WITH CLAMPING BOLTS; DO NOT CUT MEMBRANE BACK TO BOLT HOLES.
4. APPLY SEALANT ON TOP OF DRAIN BOWL WHERE CLAMPING RING SEATS BELOW THE MEMBRANE
5. INSTALL ROOF DRAIN CLAMPING RING AND CLAMPING BOLTS; TIGHTEN CLAMPING BOLTS TO ACHIEVE CONSTANT COMPRESSION.
G. FLASHING AT PENETRATIONS: FLASH ALL PENETRATIONS PASSING THROUGH THE MEMBRANE; MAKE FLASHING SEALS DIRECTLY TO THE PENETRATION.
1. PIPES, ROUND SUPPORTS, AND SIMILAR ITEMS: FLASH WITH SPECIFIED PRE-MOLDED PIPE FLASHINGS WHEREVER PRACTICAL; OTHERWISE USE SPECIFIED SELF-CURING ELASTOMERIC FLASHING.
2. PIPE CLUSTERS AND UNUSUAL SHAPED PENETRATIONS: PROVIDE PENETRATION POCKET AT LEAST 2 INCHES (50 MM) DEEP, WITH AT LEAST 1 INCH (25 MM) CLEARANCE FROM PENETRATION, SLOPED TO SHED WATER.
3. STRUCTURAL STEEL TUBING: IF CORNER RADII ARE GREATER THAN 1/4 INCH (6 MM) AND LONGEST SIDE OF TUBE DOES NOT EXCEED 12 INCHES (305 MM), FLASH AS FOR PIPES; OTHERWISE, PROVIDE A STANDARD CURB WITH FLASHING.
4. FLEXIBLE AND MOVING PENETRATIONS: PROVIDE WEATHERTIGHT GOOSENECK SET IN SEALANT AND SECURED TO DECK, FLASHED AS RECOMMENDED BY MANUFACTURER.
5. HIGH TEMPERATURE SURFACES: WHERE THE IN

1 FLOOR PENETRATION PLAN

SCALE: 3/16" = 1'-0"

KEY NOTES

1. CONCRETE SLAB, SEE STRUCTURAL FOR REINFORCING
2. FLOOR DRAINS, SEE PLUMBING DRAWINGS
3. FLOOR SINK, SEE PLUMBING DRAWINGS
4. 6" CONC. MOP CURB AT ELECTRICAL FLOOR PENETRATIONS
5. DOMESTIC WATER POINT OF ENTRY, REF. SHEET P1.1.2
6. CONDUIT STUB, SEE ELECTRICAL DRAWINGS FOR SPECIFIC INFORMATION.
7. CONDUIT & SLEEVE PIPE UNDER SLAB FOR DELI ISLAND REFRIGERANT LINE, SLEEVE PIPE TO BE CUT FLUSH AND LEVEL WITH SLAB, SEE MECHANICAL DRAWINGS AND DETAIL 2/A1.8.
8. NOT USED
9. 3" CONDENSATE LINE CHASE – LARGE SWEEP
10. HUB DRAINS, REF. SHEET P1.1.1

GENERAL NOTES

1. VERIFY ALL SLAB PENETRATION LOCATIONS WITH CIRCLE K PROJECT MANAGER AND EQUIPMENT
2. CONTRACTOR SHALL ADEQUATELY SEAL ALL FLOOR, WALL, AND, ROOF PENETRATIONS.

7 ENLARGED AT ELECTRICAL PANELS

SCALE: 3/8" = 1'-0"

5 ENLARGED AT HOT DOG GRILL

SCALE: 3/8" = 1'-0"

6 ENLARGED AT DELI CASE

SCALE: 3/8" = 1'-0"

4 ENLARGED AT CASHIER AREA

SCALE: 3/8" = 1'-0"

3 NOT USED

SCALE: N.T.S.

NOTE:
ELECTRICAL CONTRACTOR SHALL INSTALL A 1½" DIAMETER PVC PIPE, SCHEDULE 40, FROM TOP OF SLAB, DOWN BELOW SLAB, OVER TO DELI CASE ISLAND AND TERMINATE AT SLAB WITH PULL STRING AS SHOWN. CONTRACTOR SHALL PROVIDE LONG RADIUS TYPE "SWEEP" PIPING SHALL BE CAPPED AT OPEN ENDS AS SOON AS IT IS INSTALLED TO PREVENT DIRT, DEBRIS, AND WATER FROM COLLECTING INSIDE OF PIPE. COORDINATE TERMINATION POINT AT SLAB WITH ELECTRICAL CONTRACTOR SHALL COORDINATE ELEVATION OF PIPE BELOW SLAB WITH GENERAL CONTRACTOR.

NOTE:
MECHANICAL CONTRACTOR SHALL INSTALL A 4" DIAMETER PVC PIPE, SCHEDULE 40, FROM TOP OF SLAB, DOWN BELOW SLAB, OVER TO DELI CASE AND TERMINATE AT SLAB WITH PULL STRING AS SHOWN. THE REFRIGERANT PIPING WILL BE INSTALLED IN THIS PIPE SLEEVE. CONTRACTOR SHALL PROVIDE LONG RADIUS TYPE SWEEP ELBOWS AS REQUIRED. MECHANICAL CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR THE TIMING OF THIS INSTALLATION. PIPING SHALL BE CAPPED AT OPEN ENDS AS SOON AS IT IS INSTALLED TO PREVENT DIRT, DEBRIS, AND WATER FROM COLLECTING INSIDE OF PIPE. COORDINATE TERMINATION POINT AT SLAB WITH DELI CASE INSTALLATION INSTRUCTIONS. MECHANICAL CONTRACTOR SHALL COORDINATE ELEVATION OF PIPE BELOW SLAB WITH PLUMBING UTILITIES.

2 DELI ISLAND CONDUIT DETAIL

1"=1'-0"

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

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engineering • environmental • construction

1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
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CA. #2738-E

NO.	DATE	REVISION DESCRIPTION
2	12/14/20	REV'D PER CLIENT REV'S
1	11/18/20	REV'D PER CLIENT REV'S

REVISED FOR CONSTRUCTION 12/15/20

ARIEL VALDES, AIA
LOUISIANA R.A. # 9212

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 190
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 08 19075 CK XXXX 518 A1.8.DWG
CHECKED BY:	

DRAWING TITLE:

FLOOR PENETRATION PLAN

SHEET NO:

A1.8

1 SECURITY SYSTEM FLOOR PLAN (FOR REFERENCE ONLY)

SCALE: 3/16" = 1'-0"

GENERAL NOTES

1. SECURITY SYSTEM DESIGNED AND PROVIDED BY CIRCLE K
2. (X) INDICATES APPROXIMATE CAMERA LOCATIONS
3. FINAL CAMERA LOCATIONS TO BE DETERMINED BY CIRCLE K

NOTES

1. VERIFY MUSIC & SPEAKERS LAYOUT WITH CIRCLE K REPRESENTATIVE.
2. G.C. TO PULL ALL SPEAKER WIRE FOR STORE & CANOPY.

CLIENT:

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ISSUED FOR CONSTRUCTION 10/2/2020

ARIEL VALDES, AIA
LOUISIANA R.A. # 9212

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19075
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DRAWING TITLE:

SECURITY SYSTEM PLAN

SHEET NO:

A1.9

1 FRONT ELEVATION (WEST)
SCALE: 3/16" = 1'-0"

2 BACK ELEVATION (EAST)
SCALE: 3/16" = 1'-0"

3 SIDE ELEVATION (SOUTH)
SCALE: 3/16" = 1'-0"

4 SIDE ELEVATION (NORTH)
SCALE: 3/16" = 1'-0"

NOTE:
BUILDING CMU ENVELOPE SHALL BE FLOOD PROOFED TO MINIMUM 12" AFF TO ELEVATION 606.00 W/ XYPEX WATER PROOFING; SEE DTL. SHT S2.1

KEY NOTES (X)

1. STEEL COLUMN WRAP WITH METAL BREAK
2. LINE OF CANOPY / SOFFIT
3. DARK BRONZE W/ CLEAR GLASS WINDOW SYSTEM
4. INTERNALLY ILLUMINATED SIGN (UNDER SEPARATE PERMIT)
5. DARK BRONZE W/ CLEAR GLASS STOREFRONT SYSTEM
6. SERVICE DOOR, PAINT TO MATCH SURROUNDING WALL
7. CORNICE MOULDING WITH PRE-FINISHED METAL CAP FLASHING
8. STUCCO SYSTEM PER ESR-2564 WITH SMOOTH ACRYLIC FINISH, INTEGRALLY COLORED PAINT, OVER RIGID INSULATION.
9. WALL MOUNTED LIGHT FIXTURE, COLOR: BLACK. SEE ELECTRICAL PLAN
10. SES PANEL LOCATION. SEE ELECTRICAL PLAN
11. ROOF LINE AND HVAC UNITS
12. STUCCO EXPANSION JOINT WITH FRY REGLET PCS-375-50. SEE DETAIL 4/A8.1
13. DOWNSPOUT, RE: PLUMBING PLAN
14. ADDRESSING LOCATION: 8" TALL INCH BLACK NUMBERS. FINAL AREA LOCATION TO BE DETERMINED BY FIRE DEPARTMENT.
15. 4x8x16 ANCHORED CMU VENEER, GROUTED TO MATCH CMU COLOR
16. 4x4x8 SOLID CMU CAP INSTALL PER MFR. SPECS.
17. STUCCO SCORE LINE WITH FRY REGLET. SEE DETAILS 7/A8.1
18. PARAPET WALL BEYOND
19. (KNOX) KEY-BOX AT 6'-0" AFF (IF REQUIRED BY FIRE DEPARTMENT)
20. FIRE DEPARTMENT CONNECTION (IF REQUIRED)
21. STONE VENEER, INSTALL PER MFR. SPECS. INSTALL GROUTED. GROUT TO MATCH STONE COLOR
22. EMERGENCY FUEL SHUT-OFF SWITCH, REFER TO SHEET F1.0 - FUEL PIPING FLOOR PLAN
23. FOAM BAND
24. STONE VENEER CAP, INSTALL PER MFR. SPECS
25. CO2 TANK WITH METAL LOUVERED CONTAINER
26. EXTERIOR FINISH TO EXTEND ABOVE SIDEWALK/GRADE, SEE DET. 11/A8.3
27. LEADER BOX. SEE PLUMBING DWGS.
28. EMERGENCY OVERFLOW SCUPPER. SEE PLUMBING DWGS.
29. METAL ROOF ACCESS LADDER WITH SECURITY DOOR.

NOTE:
EXTERIOR LATH-PROVIDE 2 LAYERS OF GRADE D PAPER OVER ALL WOOD BASE SHEATHING.

FINISH SCHEDULE (X)

- (A) - *SHERWIN WILLIAMS #SW 6095 - TOASTY
- (B) - *SHERWIN WILLIAMS #SW 6115 - TOTALLY TAN
- (C) - 1" INSULATED, DOUBLE PANED CLEAR GLASS
- (D) - *SHERWIN WILLIAMS #SW 4081 - **SAFETY RED
- (E) - *SHERWIN WILLIAMS #SW 7005 - CIRCLE K WHITE
- (F) - SUPERLITE BLOCK SPLIT-FACE CMU - ***"BOOT BROWN"
- (G) - CULTURED STONE CSV 20006 - "CHARDONNAY COUNTRY LEDGESTONE" - "TEXAS TAN N" MASONRY, SPECTRUM COLORED CEMENTS BY AHI SUPPLY
- (H) - *SHERWIN WILLIAMS #SW 6090 - JAVA (USE FOR CORNICE) - FIRESTONE MANGARD BROWN SR (USE FOR PRE-FINISHED METAL COPING)
- (I) - CIRCLE K ORANGE #PMS 144

* USE SHERWIN WILLIAMS MANUFACTURER ONLY

NOTE: REFER FOR SHERWIN WILLIAMS PAINT SCHEDULE AT COVER SHEET (CV-B)

** COLOR TO BE PRE-ORDERED TO ENSURE AVAILABILITY AT TIME OF CONSTRUCTION
*** CONFIRM WITH OWNER'S REP

CLIENT:

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Gulf Coast Business Unit

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engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

ARIEL VALDES, AIA
LOUISANA R.A. # 9212

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 10-1975
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 10-19075 CK XXXX 5187 A2.1.DWG
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DRAWING TITLE:

EXTERIOR ELEVATIONS

SHEET NO:

A2.1

ELEVATION A - REAR WALL
(COFFEE WALL/ PREP AREA / CASHIER / COOLER WALL)

CASHIER COUNTER END VIEW

KEY NOTES (XX.XX)

- (06.02) CUSTOM CASEWORK SUPPLIED BY CIRCLE K, INSTALLED BY OTHERS.
- (08.01) ALUMINUM STOREFRONT SYSTEM, SEE SHEET A6.0.
- (08.02) INSULATED METAL DOOR IN HOLLOW METAL FRAME. SEE DOOR SCHEDULE ON SHEET A6.0.
- (08.03) METAL DOOR IN HOLLOW METAL FRAME. SEE DOOR SCHEDULE ON SHEET A6.0.
- (10.02) GRAPHICS SUPPLIED BY CIRCLE K – NO WALL PENETRATIONS IN GRAPHIC AREAS.
- (13.03) COOLER REACH-IN DOOR BY MANUFACTURER.
- (13.04) BEER CAVE DOOR BY MANUFACTURER.
- (16.06) LED LIGHTING BY VENDOR.
- (16.07) WALL MOUNTED BLUE LED LIGHTING. SEE ELECTRICAL.

GENERAL NOTES:

1. SEE SHEET A1.4 & A1.5 FOR EQUIPMENT. (*)
2. VERIFY EQUIPMENT LAYOUT WITH CIRCLE K
3. ATM SHALL COMPLY WITH ADAAG 4.35 AND SELF SERVICE TO COMPLY WITH ADAAG 5.6 & 4.2
4. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER THE EXPOSED PORTIONS OF DINING SURFACES AND WORK SURFACES. ICC A117.1-2009 CHAPTER 9, SEC 902.3

ELEVATION C - FRONT WALL
(SEATING AREA / ENTRY / FOOD AREA)

FRONT WINDOW COUNTER DETAIL

ELEVATION D - LEFT WALL
(FOUNTAIN WALL / HALLWAY / COFFEE WALL)

ELEVATION B - RIGHT WALL
(COOLER WALL)

1 INTERIOR ELEVATIONS AT SALES FLOOR (108)
SCALE: 1/4" = 1'-0"

COFFEE CONDIMENTS ISLAND

HOT FOOD + ROLLER GRILL ISLAND

BEER TROUGH

2 CABINET ELEVATIONS AT SALES FLOOR (108)
SCALE: 1/4" = 1'-0"

CLIENT:

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CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

ARIEL VALDES, AIA
LOUISIANA R.A. # 9212

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 11 19075
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 11 19075 CK XXXX 5187 A3.1.DWG
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DRAWING TITLE:

INTERIOR ELEVATIONS

SHEET NO:

A3.1

ELEVATION A - FRONT ELEVATION

ELEVATION B - RIGHT ELEVATION (FOUNTAIN WALL)

(SEE FOUNTAIN WALL DETAIL ON SHEET A9.3)

ELEVATION C - REAR ELEVATION

ELEVATION D - LEFT ELEVATION

1 INTERIOR ELEVATIONS AT EQUIPMENT ROOM (113)

SCALE: 1/4" = 1'-0"

ELEVATION A - FRONT ELEVATION

ELEVATION B - RIGHT ELEVATION

ELEVATION C - REAR ELEVATION

ELEVATION D - LEFT ELEVATION

2 INTERIOR ELEVATIONS AT BACK ROOM (110)

SCALE: 1/4" = 1'-0"

ELEVATION A - FRONT ELEVATION

ELEVATION B - RIGHT ELEVATION

ELEVATION C - REAR ELEVATION

ELEVATION D - LEFT ELEVATION

3 INTERIOR ELEVATIONS AT MANAGER OFFICE (103)

SCALE: 1/4" = 1'-0"

ELEVATION A - REAR ELEVATION

4 INTERIOR ELEVATIONS AT PREP. AREA (112)

SCALE: 1/4" = 1'-0"

ELEVATION B - RIGHT ELEVATION

ELEVATION C - FRONT ELEVATION

ELEVATION D - LEFT ELEVATION

4 INTERIOR ELEVATIONS AT CASHIER (109)

SCALE: 1/4" = 1'-0"

KEY NOTES (XX.XX)

- (06.02) CUSTOM CASEWORK SUPPLIED BY CIRCLE K, INSTALLED BY OTHERS
- (08.02) INSULATED METAL DOOR IN HOLLOW METAL FRAME.
- (08.03) HOLLOW METAL DOOR IN HOLLOW METAL FRAME.
- (10.02) GRAPHICS SUPPLIED BY CIRCLE K – NO WALL PENETRATIONS IN GRAPHIC AREAS.

GENERAL NOTES:

1. SEE SHEETS A1.4 & A1.5 FOR EQUIPMENT.
2. VERIFY EQUIPMENT LAYOUT WITH CIRCLE K

CLIENT:

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LOUISANA R.A. # 9212

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19-076
DATE: 01-22-2020	
DESIGNED BY:	
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DRAWING TITLE:

INTERIOR ELEVATIONS

SHEET NO:

A3.2

NOTE:
ADAAG GENERALLY SPECIFIES ACCESSIBLE COUNTER HEIGHTS UP TO 34" (902.3).

1 FIXTURE MOUNTING DETAILS

SCALE: N.T.S.

2 ELEVATIONS AT HALLWAY (111)

SCALE: 1/4" = 1'–0"

3 ELEVATIONS AT WOMEN'S RESTROOM (101)

SCALE: 1/4" = 1'–0"

NOTE:
G.C.TO PROVIDE SCHLUTER TRIM ON ALL INSIDE / OUTSIDE TILE CORNERS

4 ELEVATIONS AT MEN'S RESTROOM (102)

SCALE: 1/4" = 1'–0"

NOTE:
G.C.TO PROVIDE SCHLUTER TRIM ON ALL INSIDE / OUTSIDE TILE CORNERS

6 RESTROOM PARTITION WALL FRAMING

SCALE: 1/4" = 1'–0"

NOTE:
THIS IS A GENERIC WALL ELEVATION FOR TILE PATTERN ONLY.

PROVIDE ⅝" MOISTURE RESISTANT GYPSUM WALLBOARD THROUGHOUT WHERE REQUIRED TO COMPLY WITH SECTIONS 2509.1, 2509.2, AND 2509.3

5 TYP. RESTROOM WALL TILE PATTERN

SCALE: 1/4" = 1'–0"

KEY NOTES (XX.XX)

(06.03) CUSTOM LAVATORY COUNTERTOP SUPPLIED BY CIRCLE K, INSTALLED BY OTHERS

(08.02) INSULATED METAL DOOR IN HOLLOW METAL FRAME.

(08.03) HOLLOW METAL DOOR IN HOLLOW METAL FRAME.

GENERAL NOTES

1. SEE SHEET A1.5 FOR EQUIPMENT SCHEDULE. (X)
2. CLEAR ACCESS A MIN. OF 44" IN WIDTH THROUGHOUT SANITARY FACILITY TO REACH THE HANDICAPPED COMPARTMENT. (48" CLEAR @ HINGE SIDE APPROACH TO COMPARTMENT).
3. A CLEAR SPACE OF SUFFICIENT SIZE TO INSCRIBE A 60" DIA., CIRCLE WITHIN THE SANITARY FACILITY ROOM AT A HEIGHT OF 27" A.F.F. DOORS OTHER THAN THE TOILET COMPARTMENT DOOR MAY NOT ENCROACH MORE THAN 12".

HANDICAPPED COMPARTMENT DOOR:

1. CLEAR OPENING WIDTH OF 32" IF LOCATED AT THE END. 34" IF LOCATED AT SIDE OF COMPARTMENT.
2. COMPARTMENT DOOR PROVIDES MINIMUM 9" CLEARANCE FOR TOE CLEARANCE FOOTRESTS UNDERNEATH DOOR.
3. INSIDE AND OUTSIDE OF THE COMPARTMENT DOOR IS EQUIPPED WITH A LOOP OR U-SHAPED HANDLE IMMEDIATELY BELOW THE LATCH. THE LATCH IS A FLIP-OVER STYLE, SLIDING, OR OTHER HARDWARE NOT REQUIRING TIGHT GRASPING OR TWISTING.
4. OPENING HARDWARE IS CENTERED BETWEEN 30" AND 44" ABOVE FINISH FLOOR.

INTERIOR COMPARTMENT:

1. FLUSH VALVE IS ON WIDE SIDE OF TOILET AREA.
2. MAXIMUM HEIGHT FROM FLOOR TO FLUSH VALVE TO COMPLY SECTION 308 (ICC/ANSI 117.1).
3. 5 lb. MAXIMUM FORCE TO OPERATE VALVE.
4. SEE TOILET ACCESSORY MOUNTING HEIGHTS DETAIL FOR HEIGHTS OF GRAB BARS AND ACCESSORIES.
5. VERTICAL GRAB BARS REQUIRED AT ALL ACCESSIBLE TOILETS.
6. PROVIDE 30X48 ADA ACCESSIBLE SPACE AT LAV.
7. PROVIDE 30X48 ADA ACCESSIBLE SPACE AT URINAL
8. INSULATE WATER AND DRAIN PIPES
9. INSTALL BACKING FOR CHANGING TABLE
10. CHANGING TABLE TO BE INSTALLED BY G.C.
11. NOT USED
12. PROVIDE SOLID BLOCKING AT WALL FOR SHELVING

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ISSUED FOR CONSTRUCTION 10/2/2020

ARIEL VALDES, AIA
LOUISIANA R.A. # 9212

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19-175
DATE: 01-22-2020	
DESIGNED BY:	
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DRAWING TITLE:

INTERIOR ELEVATIONS

SHEET NO:

A3.3

1 BUILDING SECTION
SCALE: 3/16" = 1'-0"

2 BUILDING SECTION
SCALE: 3/16" = 1'-0"

3 BUILDING SECTION
SCALE: 3/16" = 1'-0"

4 BUILDING SECTION
SCALE: 3/16" = 1'-0"

KEY NOTES (X)

1. CONCRETE SLAB, SEE STRUCTURAL FOR REINFORCING.
2. ROOF JOIST, SEE STRUCTURAL DRAWINGS FOR SPECIFIC INFORMATION.
3. ROOFING SYSTEM RIGID INSULATION. WALKWAYS AS REQUIRED BY ROOFING MANUFACTURER. ROOF SYSTEM TO BE FLOOD TESTED AFTER INSTALLATION TO ENSURE NO LEAKS.
4. PARAPET BEYOND
5. ROOF TOP HVAC UNIT, SEE MECHANICAL DRAWINGS.
6. R-11 BATT INSULATION
7. R-38 RIGID INSULATION
8. ALL DUCT WORK TO GO BETWEEN/THROUGH JOIST – SEE MECH.

CLIENT:

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GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

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2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19-076
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DRAWING TITLE:

BUILDING SECTIONS

SHEET NO:

A4.0

3 WALL SECTION
SCALE: 1/2" = 1'-0"

2 WALL SECTION
SCALE: 1/2" = 1'-0"

1 WALL SECTION
SCALE: 1/2" = 1'-0"

KEY NOTES (X)

1. 5" CONC. SLAB OVER, SEE STRUCTURAL, SEE FINISH SCHEDULE FOR FINISH SHEET A1.2
2. CONCRETE WALK, BROOM FINISH., SEE SITE PLAN/CIVIL PLANS
3. CONCRETE FOOTING, SEE STRUCTURAL DRAWINGS FOR SPECIFIC INFORMATION
4. 4X8X16 CMU VENEER, ANCHOR TO WALL PER FBC SECTION 1404.4 WITH GALVANIZED STEEL ANCHORS AT 16" O.C. EACH WAY.
5. STEEL BAR JOIST, SEE STRUCTURAL DRAWINGS FOR SPECIFIC INFORMATION.
6. 16"X8"X8" CMU BLOCK WITH FOAM CORE INSULATION & (2) #6 REBAR/CONC. FILLED CELLS @ 48 O.C. W/ H&B, INC. TRUSS MASONRY JOINT REINFORCEMENT @ 16" VERT. SEE SHEET A9.4. ALSO SEE STRUCT. DWGS. FOR SPECIFIC INFORMATION.
7. CAVITY CAP @ 48" O.C. @ PARAPET REINFORCING
8. JOIST BRIDGING, SEE STRUCTURAL
9. 4" CONT. CANT. STRIP
10. STUCCO SYSTEM PER ESR-1607 WITH ACRYLIC FINISH
11. ROOFING SYSTEM. WALKWAYS AS REQUIRED BY ROOFING MANUFACTURER. ROOF SYSTEM TO BE FLOOD TESTED AFTER INSTALLATION TO ENSURE NO LEAKS
12. NOT USED
13. STUCCO OVER MOLDING SECURED TO PARAPET. SEE DET. 11/A8.2
14. PARAPET BEYOND
15. 5/8" GYP. BD. OVER 3⅝" MTL. STUDS @ 16" O.C. W/ R-11 BATT INSULATION
16. R-38 BATT INSULATION
17. FINISH GRADE. SEE CIVIL
18. DIRECT APPLIED STUCCO OVER ½" PLY. WD. SHEATHING ON 8" MTL. STUDS @ 24" O.C. ATTACHED TO CMU PILASTERS EACH END, SEE STRUCTURAL.
19. SOFFIT CEILING, SEE SHEETS A1.6 AND A1.6a FOR DETAILS
20. GRID CEILING, SEE RCP SHEET A1.6 AND DETAILS 10 & 11/A9.2
21. PROVIDE 1/2" V-CUT WATER DRIP, SEE DETAIL 3/A8.3
22. PROVIDE 1/2" STUCCO SCORE LINE WITH FRY REGLET. SEE DETAILS 7/A8.1
23. 1/2" EXPANSION JOINT MATERIAL
24. FIRESTONE ANCHORGARD PLATINUM FASCIA SECURED TO WOOD NAILER. WOOD NAILER MUST MEET 200 LBS PER LINEAR FT. MIN WIND UPLIFT IN ANY DIRECTION.
25. GYPSUM BOARD CEILING
26. PARAPET REINFORCING W/ (2) #6 REBAR @ 48" O.C. IN CONC.FILLED CELLS TO 5' BELOW DECK SUPPORT
27. JOIST BEARING PLATE, SEE STRUCT. FOR SIZE & CONNECTIONS
28. CONCRETE BOND BEAM, SEE STRUCTURAL
29. INSULATED CONCRETE SLAB AT FREEZER, SEE STRUCTURAL

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.
engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

ARIEL VALDES, AIA
LOUISIANA R.A. # 9212

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 15 19075
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 15 19075 CK XXXX 51[illegible]
CHECKED BY:	

DRAWING TITLE:

WALL SECTIONS

SHEET NO:

A5.1

3 WALL SECTION
SCALE: 1/2" = 1'-0"

2 WALL SECTION
SCALE: 1/2" = 1'-0"

1 WALL SECTION
SCALE: 1/2" = 1'-0"

KEY NOTES (X)

1. 5" CONC. SLAB, SEE STRUCTURAL, SEE FINISH SCHEDULE FOR FINISH SHEET A1.2
2. CONCRETE WALK, BROOM FINISH., SEE SITE PLAN/CIVIL PLANS
3. CONCRETE FOOTING, SEE STRUCTURAL DRAWINGS FOR SPECIFIC INFORMATION
4. 4X8X16 CMU VENEER, ANCHOR TO WALL PER FBC SECTION 14004.4 WITH GALVANIZED STEEL ANCHORS AT 16" O.C. EACH WAY.
5. STEEL BAR JOIST, SEE STRUCTURAL DRAWINGS FOR SPECIFIC INFORMATION.
6. 16"X8"X8" CMU BLOCK WITH FOAM CORE INSULATION & (1) #5 REBAR @ 48 O.C. W/ H&B, INC. TRUSS MASONRY JOINT REINFORCEMENT @ 16" VERT. IN (SECONDARY WALL.) (2) #6 REBAR @ 48 O.C. W/ H&B, INC. TRUSS MASONRY JOINT REINFORCEMENT @ 16" VERT. IN (PRIMARY WALL) FROM FDN TO PARAPET. (2) #6 REBAR @ 48 O.C. W/ H&B, INC. TRUSS MASONRY JOINT REINFORCEMENT @ 16" VERT. IN (PRIMARY WALL) FROM +/- 5'-0" BELOW DECK TO TOP OF PARAPET. SEE SHEET A9.4. ALSO SEE STRUCT. DWGS. FOR SPECIFIC INFORMATION.
7. CAVITY CAP @ 48" O.C. @ PARAPET REINFORCING
8. 2 LAYERS GRADE D BUILDING PAPER OVER 5/8" EXTERIOR GRADE PLYWOOD
9. 4" CONTINUOS CANT. STRIP
10. STUCCO SYSTEM PER ESR-1607 WITH ACRYLIC FINISH
11. BUILT-UP ROOFING SYSTEM. WALKWAYS AS REQUIRED BY ROOFING MANUFACTURER. ROOF SYSTEM TO BE FLOOD TESTED AFTER INSTALLATION TO ENSURE NO LEAKS
12. STEEL I-BEAM, SEE STRUCTURAL
13. STUCCO OVER MOLDING SECURED TO PARAPET, SEE DETAIL 11/A8.2
14. PARAPET BEYOND
15. 5/8" GYP. BD. OVER 3⅝" MTL. STUDS @ 16" O.C. W/ R-11 BATT INSULATION
16. R-38 RIGID INSULATION
17. INTERNALLY ILLUMINATED SIGN. G.C. TO ATTACH SIGN USING (8) ½" BOLTS, 1'-8" TO CENTER FROM THE TOP AND BOTTOM EQUALLY SPACED. G.C. TO INSTALL BOLTS THROUGH CROSS BRACING. (SIGN UNDER SEPARATE PERMIT). SEE SHEET SHT. S2.1.INTERNALLY ILLUMINATED SIGN (UNDER SEPARATE PERMIT)
18. GYPSUM BOARD CEILING
19. 10" MTL. STUDS @ 16" O.C., SEE STRUCTURAL
20. GRID CEILING, SEE RCP SHEET A1.6 AND DETAILS 10 & 11/A9.2
21. RECESSED SOFFIT LIGHT, SEE ELECT & RCP SHEET A1.6
22. PROVIDE 1/2" V-CUT WATER DRIP
23. 1/2" EXPANSION JOINT MATERIAL
24. ALUMINUM STOREFRONT SYSTEM
25. STEEL TUBE, SEE STRUCTURAL
26. FRY REGLET SOFFIT VENT, SEE DET. 2/A8.1
27. NOT USED
28. PILASTER BEYOND
29. FOAM BAND, SEE DETAIL 3/A8.3
30. STONE VENEER BEYOND
31. FIRESTONE ANCHORGARD PLATINUM FASCIA SECURED TO WOOD NAILER. WOOD NAILER MUST MEET 200 LBS PER LINEAR FT. MIN WIND UPLIFT IN ANY DIRECTION.
32. STEEL BEARING PLATE, SEE STRUCTURAL
33. CONCRETE BOND BEAM, SEE STRUCTURAL

CLIENT:

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Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

ARIEL VALDES, AIA
LOUISANA R.A. # 9212

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19-076
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 16 19075 CK XXXX 51 [illegible]
CHECKED BY:	

DRAWING TITLE:

WALL SECTIONS

SHEET NO:

A5.2

3 WALL SECTION

SCALE: 1/2" = 1'-0"

KEY NOTES (X)

1. 5" CONC. SLAB OVER SELECT FILL., SEE STRUCTURAL, SEE FINISH SCHEDULE FOR FINISH SHEET A1.2
2. CONCRETE WALK, BROOM FINISH., SEE SITE PLAN SHEET C1.0 /CIVIL PLANS
3. CONCRETE FOOTING, SEE STRUCTURAL DRAWINGS & GEOTECH REPORT FOR SPECIFIC INFORMATION
4. 4X8X16 CMU VENEER, DIRECT APPLIED TO WALL PER IBC SECTION 1405.10.
5. STL. JOIST, SEE STRUCTURAL DRAWINGS FOR SPECIFIC INFORMATION.
6. ⅝" GYP. BD OVER 3⅝" METAL STUD W/R-11 BATT INSUL. @ 16" O.C., U.O.N. SEE STRUCT DWGS FOR DETAILED INFORMATION." GYP. BD. OVER 3⅝" METAL STUD W/R-11 BATT INSUL. @ 16" O.C., SEE STRUCT. DWGS.
7. 3⅝" MTL. TRACK TOP PLATE @ 12'-0" A.F.F., SEE STRUCT. DWGS.
8. 3x3x18ga x 0'-4" ∠ #12 TEKS. ATTACHED TO 8" x 2" x ¼" STEEL TUBE W/ ⅛" FILLET WELD TO BAR JOIST AND 4" x "4 x ¼" STEEL ANGLE AND/OR TRACK.
9. 16X8X8 CMU BLOCK WITH FOAM CORE INSULATION & (2) #6 REBAR @ 48" O.C., SEE STRUCT. DWGS. FOR SPECIFIC INFORMATION.
10. DIRECT APPLIED/MTL. LATHE STUCCO SYSTEM PER IBC SECTION 2101 WITH ACRYLIC FINISH, OVER 8" CMU BLK. OR ⅝" EXTERIOR GRADE PLY WD. SHEATHING.
11. BUILT-UP ROOFING SYSTEM ON R-38 ISO OVER MTL. DECKING. WALKWAYS AS REQUIRED BY ROOFING MANUFACTURER. ROOF SYSTEM TO BE FLOOD TESTED AFTER INSTALLATION TO ENSURE NO LEAKS
12. 3⅝" HORIZONTAL MTL. STUD BRACING @ 16" O.C. W/ #12 TEC'S AT EACH END
13. STUCCO OVER MOLDING SECURED TO PARAPET, SEE DETAIL 11/A8.2
14. PARAPET BEYOND
15. R-11 BATT INSULATION
16. R-38 RIGID INSULATION
17. 8" x 1 5/8" x 16 GA. METAL STUDS @ 16" O.C. PROVIDE HORIZONTAL BRACING @ 16" O.C. AS NECESSARY.
18. 10" x 1 5/8" x 16 GA. METAL STUDS @ 16" O.C. PROVIDE HORIZONTAL BRACING AS NECESSARY.
19. CAVITY CAPS @ +/- 5'-0" BELOW STEEL DECK AND UNDER BOND BEAMS AS OCCUR, SEE STRUCT. DWGS.
20. GRID CEILING, SEE RCP SHEET A1.6 AND DETAILS 10 & 11/A9.2
21. RECESSED SOFFIT LIGHT, SEE ELECT & RCP SHEET A1.6
22. PROVIDE 1/2" V-CUT WATER DRIP
23. 1/2" EXPANSION JOINT MATERIAL
24. 8" CMU WALL BEYOND.
25. STEPPED DOWN ROOF FRAMING ¼":12", SEE STRUCT. DWGS FOR SPECIFIC INFORMATION
26. (2) COURSE BOND BEAM, SEE STRUCT. DWGS. FOR SPECIFIC INFORMATION
27. LATERAL LOAD SUPPORT BRACING BY MANUFACTURER.
28. PILASTER BEYOND
29. NOT USED
30. STONE VENEER, SEE EXTERIOR ELEVATIONS SHEET A2.1
31. FIRESTONE ANCHORGARD PLATINUM FASCIA SECURED TO WOOD NAILER. WOOD NAILER MUST MEET 200 LBS PER LINEAR FT. MIN WIND UPLIFT IN ANY DIRECTION.
32. NOT USED
33. NOT USED
34. 6" x 6" x 3/8" STEEL PLATE W/ (4) 1/2"ø x 6"L NELSON STUDS WELDED TO STEEL BEAM 21 X 44 (B4)
35. FIRESTONE ANCHORGARD FASCIA WITH FIRESTONE SINGLE PLY TPO CONTINUED UP PARAPET WALL UNDERNEATH FLASHING AND SEALED CONTINUOUSLY, ROOFING SYSTEM TO BE FLOOD TESTED AFTER INSTALLATION TO ENSURE NO LEAKS
36. G.C. TO CLOSE EACH SIDE OF ANGLE BRACING TRIANGLE WITH SINGLE PLY TPO ROOFING MEMBRANE OVER ⅝" PLYWOOD SHEATHING TO TUBE STEEL AND SEALED TO ENSURE NO LEAKS
37. 4" x "4 x ¼" STEEL ANGLE w ⅛" FILLET WELD TO BAR JOIST , MTL. DECK AND/OR TRACK WHERE OCCURS.

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

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engineering • environmental • construction

1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805

Phone: (863) 646-9130

CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

ARIEL VALDES, AIA

LOUISANA R.A. # 9212

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #1[illegible]
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 16-[illegible]76
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME:
CHECKED BY:	16 19075 CK XXXX S[illegible]S3.[illegible]

DRAWING TITLE:

WALL SECTIONS

SHEET NO:

A5.3

GLAZING SCHEDULE

MARK	QTY.	GLAZING LOCATION	U-FACTOR	R-VALUE	SHGC	PF	SIZE WIDTH	SIZE HEIGHT	SIZE THKN.	NOTES
A1,A2	2	LEFT & RIGHT OF ENTRY DOORS	.27	3.70	.24	.39/.57	22'-0"	6'-2"	1"	SOLARBAN 60 (2) SOLARGRAY + CLEAR 1" UNITS W/ ½" AIR SPACE AND TWO ¼" LITES.
B	2	LEFT & RIGHT OF ENTRY DOORS	.27	3.70	.24	.57	4'-0"	3'-2"	1"	SOLARBAN 60 (2) SOLARGRAY + CLEAR 1" UNITS W/ ½" AIR SPACE AND TWO ¼" LITES. TEMPERED.
B	2	LEFT & RIGHT OF ENTRY DOORS	.27	3.70	.24	.57	4'-0"	6'-10"	1"	SOLARBAN 60 (2) SOLARGRAY + CLEAR 1" UNITS W/ ½" AIR SPACE AND TWO ¼" LITES. TEMPERED.
B	1	ABOVE ENTRY DOORS	.27	3.70	.24	.57	6'-0"	3'-2"	1"	SOLARBAN 60 (2) SOLARGRAY + CLEAR 1" UNITS W/ ½" AIR SPACE AND TWO ¼" LITES. TEMPERED.
1	1	ENTRY DOORS	.27	3.70	.24	.57	6'-0"	7'-0"	1"	SOLARBAN 60 (2) SOLARGRAY + CLEAR 1" UNITS W/ ½" AIR SPACE AND TWO ¼" LITES. TEMPERED.

DOOR SCHEDULE

MARK	ROOM NO.	DOOR SIZE WIDTH	DOOR SIZE HEIGHT	DOOR SIZE THKN.	TYPE	MATERIAL	FINISH	FRAME MATERIAL	FRAME FINISH	FRAME TYPE	HDW. SET NO.	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	REMARKS
108	DBL. STOREFRONT	PR.3'-0"	7'-0"	–	1	ALUM/GLASS	PRE-FIN.	ALUM	BRONZE	–	1	4/A8.2 6/A8.2	4/A8.2 6/A8.2	3/A8.2	SINGLE SWING
101A	RESTROOM PART.	3'-0"	5'-0"	1-3/4"	6	H.M.	PAINT	H.M.	PAINT	B	5	–	1/A9.2	–	
101B	RESTROOM PART.	2'-4"	5'-0"	1-3/4"	6	H.M.	PAINT	H.M.	PAINT	B	5	–	1/A9.2	–	
102A	RESTROOM PART.	3'-0"	5'-0"	1-3/4"	6	H.M.	PAINT	H.M.	PAINT	B	5	–	1/A9.2	–	
103	MANAGER	3'-0"	7'-0"	1-3/4"	5	H.M.	PAINT	H.M.	PAINT	A	6	1/A9.2	1/A9.2	4/A9.2	WITH 18"x18" ONE-WAY GLASS WINDOW
110	BACK ROOM	3'-0"	7'-0"	1-3/4"	4	H.M.	PAINT	H.M.	PAINT	A	2	1/A9.2	1/A9.2	4/A9.2	WITH 6"x18" ONE-WAY GLASS WINDOW
111	HALLWAY	3'-0"	7'-0"	1-3/4"	3	INSUL. MTL.	PAINT	H.M.	PAINT	A	3	2/A8.2	2/A8.2	1/A8.2	EXIT DOOR
113	EQUIP. ROOM	3'-0"	7'-0"	1-3/4"	2	H.M.	PAINT	H.M.	PAINT	A	2	1/A9.2	1/A9.2	4/A9.2	WITH 18"x24" LOUVER

DOOR / WINDOWS/ ROOM KEY PLAN

WINDOWS SCHEDULE

DOOR TYPES:

HARDWARE SCHEDULE

SET No. 1
6 – HINGES – IVES 4½"x4½" NRP – 5BB1-FINISH 613
2 – MANUAL FLUSH BOLT – IVES – FB457-FINISH 613
1 – DUST PROOF STRIKE – IVES – DP1-FINISH 613
1 – DEADLOCK – ADAMS RITE – MS1850S PROVIDE BACKSET-FINISH 313
1 – CONVENTIONAL CYLINDER – SCHLAGE – 20-103 118 –FINISH 613
2 – PULL/PUSH BAR – IVES – 9190-0-NO – FINISH 613
2 – SURFACE CLOSER – LCN – 4031 SHCUSH-FINISH 695
2 – DOOR SWEEP – ZERO INTERNATIONAL – 39A 36" –FINISH AL
2 – THRESHOLD – ZERO INTERNATIONAL – 1675A 72" MSLA-10 – FINISH AL
**WEATHER-STRIPPING PACKAGE – PROVIDED W/ALUMINUM FRAME
1 – PLASTIC SIGN: "THESE DOORS TO REMAIN UNLOCKED DURING BUSINESS HOURS"

SET No. 2
3 – HINGES – IVES – 4½"x4½" NRP – 5BB1 FINISH 652
1 – ELECTRONIC DIGITAL LOCK TRILOGY T2 DL27-00-WP-IC/26D-S
1 – SURFACE CLOSER – LCN – 4031SHCUSH – FINISH 689
2 – KICK PLATE – IVES – 8400 x CS x B4E 10"x34" – FINISH 630
3 – SILENCER – IVES – SR64 – FINISH GRY

(VERIFY WITH CIRCLE K PRIOR TO INSTALLATION)

SET No. 3
2 – HINGES IVES – 4½"x4½" NRP – 5BB1 – FINISH 630
1 – ELECTRIC HINGE – IVES – 4½"x 4½" TW4 – 5BB1 – FINISH 630
1 – EXIT ALARM DEVICE – DETEX – V40 x EH (12VAC) – FINISH AL
1 – MORTISE CYLINDER – SCHLAGE – 20-013 – FINISH 626
1 – SURFACE CLOSER – LCN – 4031SHCUSH – FINISH 689
1 – HEAD SEAL – ZERO INTERNATIONAL – 429A 36" – FINISH AL
1 – SET OF SEALS – ZERO INTERNATIONAL – 328AA 2/84" – FINISH AL
1 – RAIN DRIP – ZERO INTERNATIONAL – 142A 40" – FINISH AL
1 – DOOR SWEEP – ZERO INTERNATIONAL – 39A 36" – FINISH AL
1 – THRESHOLD – ZERO INTERNATIONAL – 1675A 36" MSLA-10 – FINISH AL
1 – KICK PLATE – IVES – 8400 x CS x B4E 10"x34" – FINISH 630

SET No. 4
NOT USED

SET No. 5
3 – HINGES HAGER BB1279-NRP 4 1/2"X4 1/2" BALL BEARING, STEEL HINGE
1 – PRIVACY LOCKSET W301 QUANTUM (FALCON) 626
1 – PURSE HOOK

SET No. 6
3 – HINGES – IVES – 4½"x4½" NRP – 5BB1 FINISH 652
1 – PASSAGE LEVER SET – SCHLAGE – ND10 – FINISH 626
1 – DEADBOLT – B760P – 626 FINISH
1 – SURFACE CLOSER – LCN – 4031H FINISH 689
2 – KICK PLATE – IVES – 8400 x CS x B4E 10"x34" FINISH 630
1 – WALL STOP – IVES – WS402CVX FINISH 626
1 – VIEWER – IVES – 700B FINISH 626
3 – SILENCER – IVES – SR64 FINISH GRY

STOREFRONT

KAWNEER 451UT FRAMING SYSTEM OR EQUAL. GLAZING TO BE MANUFACTURED ACCORDING TO STOREFRONT MANUFACTURER'S SPECIFICATIONS

HARDWARE NOTES

1. ALL EXITS TO BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE.
2. MANUALLY OPERATED EDGE OR SURFACE MOUNTED FLUSH BOLTS AND SURFACE BOLTS ARE PROHIBITED.
3. ALL DOOR HARDWARE IS TO BE DISABLED ACCESSIBLE.

DOOR SIGNAGE NOTES:

1. LETTERS AND NUMBERS ON SIGNS SHALL HAVE A WIDTH TO HEIGHT RATIO BETWEEN 3:5 AND 1:1 AND STROKE WIDTH TO HEIGHT RATIO BETWEEN 1:5 AND 1:10.
2. CHARACTERS AND NUMBERS ON SIGNS SHALL BE SIZED ACCORDING TO THE VIEWING DISTANCE FROM WHICH THEY ARE TO BE READ. THE MINIMUM HEIGHT IS MEASURED USING AN UPPER CASE X. LOWER CASE CHARACTERS ARE PERMITTED (3" MIN.)
3. LETTERS AND NUMERALS SHALL BE RAISED 1/32 IN. UPPER CASE, SANS SERIF OR SIMPLE TYPE AND SHALL BE ACCOMPANIED WITH GRADE 2 BRAILLE. RAISED CHARACTERS SHALL BE AT LEAST 5/8" (16mm) HIGH, BUT NO HIGHER THAN 2 IN. (50mm). PICTOGRAMS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERVAL DESCRIPTIONS PLACED DIRECTLY BELOW THE PICTOGRAM. THE BORDER DIMENSION OF THE PICTOGRAM SHALL BE 6 IN. (152mm) MINIMUM IN HEIGHT.
4. THE CHARACTERS AND BACKGROUND OF SIGNS SHALL BE EGGSHELL MATTE OR OTHER NON GLARE FINISH. CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND.
5. WHERE PERMANENT IDENTIFICATION IS PROVIDED FOR ROOMS AND SPACES, SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR. WHERE THERE IS NO WALL SPACE TO THE LATCH SIDE OF THE DOOR, INCLUDING AT DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL. MOUNTING HEIGHT SHALL BE 48" MINIMUM MEASURED FROM THE BASELINE OF THE LOWEST TACTILE CHARACTER OR 60" MAXIMUM MEASURED FROM THE BASELINE OF THE HIGHEST TACTILE CHARACTER. MOUNTING LOCATION FOR SUCH SIGNAGE SHALL BE SO THAT A PERSON MAY APPROACH WITHIN 3 IN (76mm) OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF A DOOR.

ACCESSIBILITY NOTES:

1. ACCESS TO THESE FACILITIES SHALL BE PROVIDED AT PRIMARY ENTRANCES.
2. PROVIDE A 60"x60" MIN. LANDING ON STRIKE SIDE OF DOOR W/ 44" MIN. WIDTH IN DIRECTION OF TRAVEL.
3. EVERY REQUIRED EXIT DOORWAY SHALL BE SIZED FOR A DOOR NOT LESS THAN 3 FT. WIDE BY NOT LESS THAN 6"-8" HIGH CAPABLE OF OPENING 90°. SO THAT THE CLEAR WIDTH OF THE EXITWAY IS 32" MIN. THRESHOLD TO BE A MAX. 1/4" ABOVE ADJACENT FINISH FLOOR.
4. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 LBS.
5. THE BOTTOM 12" OF ALL DOORS EXCEPT AUTOMATIC AND SLIDING SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE.
6. PROVIDE LEVER TYPE HARDWARE, PANIC BARS, PUSH – PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE. (30" TO 44" A.F.F.)

CLIENT:

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LOUISANA R.A. # 9212

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19-076
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 17 19075 CK XXXX 5187 A6.0
CHECKED BY:	

DRAWING TITLE:

ROOM KEY PLAN, DOOR/ WINDOW SCHEDULE & TYPES AND NOTES

SHEET NO:

A6.0

12 TRANSITION – SPLIT FACE TO STUCCO (PLAN)
3"=1'-0"

9 ROOF CURB DETAIL
1 1/2"=1'-0"

6 TAPERED INSULATION DETAIL
N.T.S. USED TO CONSTRUCT ROOF CRICKETS

3 CRICKET DETAIL
1"=1'-0"

11 EXTERIOR WALL SECTION
1"=1'-0"

8 TRANSITION – BLOCK VENEER TO STUCCO
3"=1'-0"

5 SMALL PIPE PENETRATION
1-1/2"=1'-0"

2 4" SOFFIT VENT
3"=1'-0"

10 NOT USED
N.T.S.

7a STUCCO BAND DETAIL
3"=1'-0"

7b STUCCO BAND DETAIL
3"=1'-0"

4a STUCCO EXPANSION JOINT
3"=1'-0"

4b STUCCO EXPANSION JOINT
3"=1'-0"

CLIENT:

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GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 18-176
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 18 19075 CK XXXX 51[illegible]
CHECKED BY:	

DRAWING TITLE:

EXTERIOR ARCHITECTURAL DETAILS

SHEET NO:

A8.1

NOTES:
1. REFER TO FIRESTONE WEBSITE FOR MOST CURRENT INFORMATION.
2. REFER TO TECHNICAL INFORMATION SHEETS FOR FASCIA SIZES, ACCESSORIES, AND FINISHES AVAILABLE.
3. WOOD NAILER MUST BE INSTALLED TO MEET APPLICABLE BUILDING CODES OR 200 LBS IN ANY GIVEN DIRECTION.

Firestone BUILDING PRODUCTS NOBODY COVERS YOU BETTER.™ www.firestonebpco.com	ALTERNATE TERMINATION AT TOP OF WALL WITH FIRESTONE ANCHORGARD PLATINUM PLATINUM ULTRAPLY™ TPO — ACCEPTABLE SYSTEMS: ALL	ISSUE / REVISION DATE: 1/15/2015 NOT TO SCALE	MAXIMUM WARRANTY: 30 YEARS DETAIL NO. PUT-T-13

9 INTERMEDIATE MULLION
3"=1'-0"

6 ALUMINUM WINDOW JAMB (HEAD SIM.)
3"=1'-0"

3 THRESHOLD AT STOREFRONT DOOR
3" = 1'-0"

11 FOAM PARAPET
1 1/2" - 1'-0"

8 HORIZONTAL MULLION
3"=1'-0"

5 STOREFRONT WINDOW SILL AT SLAB
3" =1'-0"

2 JAMB AT H.M. DOOR (HEAD SIM.)
3"=1'-0"

10 CANT STRIP DETAIL
1 1/2"=1'-0"
SIMILAR DETAIL @ CMU PARAPET WALL

7 SINGLE-PLY ROOFING AT STUCCO
6"=1'-0"
SIMILAR DETAIL AT CMU PARAPET WALL

4 HEAD AT STOREFRONT (JAMB SIM.)
3"=1'-0"

1 THRESHOLD AT EXTERIOR DOOR
3"=1'-0"

CLIENT:

CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.
engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

ARIEL VALDES, AIA
LOUISANA R.A. # 9212

GCBU 5187
STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19075
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 19 19075 CK XXXX 51[illegible]
CHECKED BY:	

DRAWING TITLE:
EXTERIOR ARCHITECTURAL DETAILS

SHEET NO:
A8.2

12 STONE VENEER WAINSCOT DETAIL
1 1/2" = 1'-0"

9 NOT USED
N.T.S.

6 FOAM PARAPET
1 1/2" = 1'-0"

3 TRIM / DRIP SCREED DETAIL
3"=1'-0"

11 STONE VENEER SILL DETAIL
1 1/2" = 1'-0"

8 NOT USED
N.T.S.

5 FOAM PARAPET
1 1/2" = 1'-0"

2 NOT USED
N.T.S.

10 CMU PARAPET CAP DETAIL
1 1/2" = 1'-0"

7 TYP. JOIST @ CMU CONNECTION DETAIL
1" = 1'-0"

4 WEEP SCREED
3"=1'-0"

1 NOT USED
N.T.S.

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SCALE: AS NOTED	MDM JOB # 19075
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CHECKED BY:	

DRAWING TITLE:

EXTERIOR ARCHITECTURAL DETAILS

SHEET NO:

A8.3

SIDE ELEVATION
1" = 1' – 0"

FRONT ELEVATION
1" = 1' – 0"

FRONT ELEVATION
N.T.S.

SIDE ELEVATION
N.T.S.

B SECURITY DOOR
TOP VIEW 6" = 1' – 0"

A DETAIL
6" = 1' – 0"

NOTE:
ROOF ACCESS LADDER SHALL COMPLY W/ SECTION 1509.6 IBCB

CONTRACTOR TO VERIFY:

A	20'–7"	OVERALL LADDER HEIGHT
B	17'–0"	F.F. TO TOP OF PARAPET
C	24"	LADDER WIDTH
D	7"	WALL TO C.L. OF LADDER

LADDER DETAILS
1/2 FULL SCALE

ALTERNATE OFF FLOOR SUPPORT
3 = 1' – 0"

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SCALE: AS NOTED	MDM JOB #
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CHECKED BY:	

DRAWING TITLE:
ROOF LADDER DETAILS

SHEET NO:
A-8.4

typical backing support detail :

13 Typical Backing Support Detail
SCALE: 3/8"=1'-0"

wall type general notes :

1. GYPSUM WALLBOARD AND FRAMING SYSTEMS SHALL BE INSTALLED IN ACCORDANCE W/ RECOMMENDATIONS OF:
   1.1. ASTMC754 - INSTALLATION OF STEEL FRAMING MEMBERS TO RECEIVE SCREW ATTACHED GYPSUM WALLBOARD, BACKING BOARD OR WATER RESISTANT BACKING BOARD.
   1.2. GA-216 - RECOMMENDED SPECIFICATIONS FOR THE APPLICATION, INSTALLATION AND FINISHING OF GYPSUM BOARD.
2. PROVIDE BACK-TO-BACK DOUBLE MTL. STUDS FOR ANY CABINET SUPPORT. PROVIDE HEAVY GAUGE GALV. MTL STUD HORIZONTAL BACKING SECURED TO VERT. STUD W/ MIN. OF 2 SCREWS PER STUD.
3. ALL PERMANENT, FULL-HEIGHT INTERIOR WALLS AND PARTITIONS SHALL BE DESIGNED TO RESIST A LATERAL LIVE LOAD NOT LESS THAN 5 PSF (239 PA).
4. BRACING PER MANUFACTURER'S STUD LIMITING HEIGHT CHART RECOMMENDATIONS.
5. RECOMMENDED GALV. METAL FRAMING MANUFACTURER SHOULD INCLUDE DIETRICH AND MARINO/WARE.

12 SECTION AT WALL TYPE C
1"=1'-0"

10 SECTION AT WALL - TYPE F (PARTITION WALL)
1"=1'-0"

6 SECTION AT WALL - TYPE B
1"=1'-0"

3 DEMISING WALL - TYPE A
3/4"=1'-0"

5 TYP. CLIP TRACK (DEFELCTION TRACK) DETAIL
NTS

2 CO2 SIGNS
1-1/2"=1'-0"

11 RESTROOM PARTITION WALL (PLAN VIEW)
1 1/2"=1'-0"

8 SECTION AT WALL - TYPE 'E'
1"=1'-0"

4 SECTION AT WALL - TYPE B
1"=1'-0"

1 RESTROOMS SIGNS
3"=1'-0"

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WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19-075
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME:
CHECKED BY:	21 19075 CK XXXX 51 A9.1

DRAWING TITLE:

INTERIOR ARCHITECTURAL DETAILS

SHEET NO:

A9.1

12 BREAK METAL AT COOLER
N.T.S.

4 INTERIOR DOOR THRESHOLD
3"=1'-0"

11 SUSPENDED CEILING DETAIL
N.T.S.

6 CLOSURE DETAIL AT EXTERIOR WALL
3"=1'-0"

(DOUBLE SWING)
3 INTERIOR DOOR THRESHOLD
3"=1'-0"

10 SECTION AT WALL - TYPE F (PARTITION WALL)
1"=1'-0"

5 VALANCE AT WALK-IN EQUIPMENT
1 1/2"=1'-0"

(DOUBLE SWING)
2 INTERIOR DOOR JAMB (HEAD SIM.)
3"=1'-0"

1 INTERIOR DOOR JAMB (HEAD SIM.)
3"=1'-0"

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GCBU 5187
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DRAWING TITLE:
INTERIOR ARCHITECTURAL DETAILS

SHEET NO:
A9.2

ISSUED FOR CONSTRUCTION 10/2/2020

3 STORAGE LOFT DETAIL @ PREP AREA

1 1/2"=1'-0"

ALL SHELVING COMPONENTS INCLUDING FRP SHALL BE FURNISHED & INSTALLED BY GC

1 SECTION THRU WATER HEATER/MOP SINK

1"=1'-0"

CLIENT:

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Gulf Coast Business Unit

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engineering • environmental • construction

1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
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SCALE: AS NOTED	MDM JOB # 19-075
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 23 19075 CK XXXX 51 A9.3 .dwg
CHECKED BY:	

DRAWING TITLE:

INTERIOR ARCHITECTURAL DETAILS

SHEET NO:

A9.3

ABBREVIATIONS

ABBREV1

NOTE: ABBREVIATIONS MAY OR MAY NOT HAVE PERIODS, BUT SHALL BE READ AS SAME.

A.B.	ANCHOR BOLT
A.B.C.	AGGREGATE BASE COURSE
A.C.	AMERICAN CONCRETE INSTITUTE
A/C	AIR CONDITIONER
A.F.F.	ABOVE FINISHED FLOOR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
AITC	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION
ALT.	ALTERNATE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APA	AMERICAN PLYWOOD ASSOCIATION
ARCHT.	ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
A.W.T.S.	AUTOMATIC WELDED THREADED STUDS
BM	BEAM
B.F.F	BELOW FINISHED FLOOR
BLK	BLOCK
B.O.B.	BOTTOM OF BEAM
B.O.D.	BOTTOM OF DECK
B.O.F.	BOTTOM OF FOOTING
BRG	BEARING
C	CAMBER
C.C.	CENTERLINE TO CENTERLINE
CFS	COLD FORMED STEEL
C.G.	CENTER OF GRAVITY
C.I.P.	CAST IN PLACE
C.L.	CENTERLINE
C.L.B.	CENTERLINE OF BEAM
C.L.C.	CENTERLINE OF COLUMN
C.L.F.	CENTERLINE OF FOOTING
C.L.W.	CENTERLINE OF WALL
CLR	CLEAR
CONC	CONCRETE
CONC. C.J.	CONCRETE CONTROL JOINT
CONC. S.J.	CONCRETE SAWCUT JOINT
C.M.U.	CONCRETE MASONRY UNIT
CONN	CONNECTION
CONT	CONTINUOUS
CRSI	CONCRETE REINFORCING STEEL INSTITUTE
D.F. (D.F.L.)	DOUGLAS FIR LARCH
DL	DEAD LOAD
DIA	DIAMETER
DN	DOWN
DWG(S)	DRAWING(S)
E.C.	END TO CENTERLINE
E.E.	END TO END
E.O.S.	EDGE OF SLAB
EQ	EQUAL
EQUIP	EQUIPMENT
EXP. BOLT (E.B.)	EXPANSION BOLT
EXP. JT (E.J.)	EXPANSION JOINT
E.W.	EACH WAY
F.F.	FINISHED FLOOR
F.O.M.	FACE OF MEMBER
F.O.S.	FACE OF STEEL
F.O.W.	FACE OF WALL
GA	GAGE (UNIT OF MEASUREMENT)
GALV	GALVANIZED
G.S.N.	GENERAL STRUCTURAL NOTES
GLB (GLULAM)	GLUED-LAMINATED BEAM
H.F.	HEM FIR
HORIZ	HORIZONTAL REINFORCING
H.S.	HEADED STUDS
IBC	INTERNATIONAL BUILDING CODE
ICBO	INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS
ICC	INTERNATIONAL CODE COUNCIL
ICF	INSULATED CONCRETE FORMS
I.F.W.	INSIDE FACE OF WALL
I.O.D.	INTERPRETATION OF DRAWINGS
JST	JOIST
K(KIP)	1000 POUNDS
KLF	KIPS PER LINEAR FOOT
LBS (#)	POUNDS
LGR	LEDGER
LGS	LIGHT GAGE STEEL
LGSEA	LIGHT GAGE STEEL ENGINEERS ASSOCIATION
L.O.D.	LOCATION OF DETAILS
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
MAS	MASONRY
MAS. C.J.	MASONRY CONTROL JOINT
MAX	MAXIMUM
MBMA	METAL BUILDING MANUFACTURERS ASSOCIATION
MECH'L	MECHANICAL
MFR'D	MANUFACTURED
MFR('S)	MANUFACTURER('S)
MIN	MINIMUM
N/A	NOT APPLICABLE
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.F.W.	OUTSIDE FACE OF WALL
OPP	OPPOSITE
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PCI	PRECAST/PRESTRESSED CONCRETE INSTITUTE
P.C.	PRECAST CONCRETE
PCF	POUNDS PER CUBIC FOOT
PLF	POUNDS PER LINEAR FOOT
±	PLUS OR MINUS
PREFAB	PREFABRICATED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POST-TENSIONED
PTI	POST-TENSIONING INSTITUTE
REINF	REINFORCING
SDI	STEEL DECK INSTITUTE
SLH	SHORT LEG HORIZONTAL
SLV	SHORT LEG VERTICAL
SJI	STEEL JOIST INSTITUTE
SIM	SIMILAR
SQ.	SQUARE
SSMA	STEEL STUD MANUFACTURERS ASSOCIATION
STD	STANDARD
STL	STEEL
TL	TOTAL LOAD
T.O.B.	TOP OF BEAM
T.O.C.T.	TOP OF CONCRETE TOPPING
T.O.D.	TOP OF DECK
T.O.F.	TOP OF FOOTING
T.O.L.	TOP OF LEDGER
T.O.M.	TOP OF MASONRY
T.O.P.	TOP OF PLATE
T.O.P.C.	TOP OF PRECAST CONCRETE
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TPI	TRUSS PLATE INSTITUTE
TYP	TYPICAL
T&G	TONGUE AND GROOVE
UBC	UNIFORM BUILDING CODE
U.N.O.	UNLESS NOTED OTHERWISE
VERT	VERTICAL REINFORCING
WCLA	WEST COAST LUMBER ASSOCIATION
WCLIB	WEST COAST LUMBER INSPECTION BUREAU
W.W.F.	WELDED WIRE FABRIC
WWPA	WESTERN WOOD PRODUCTS ASSOCIATION
W/	WITH
W/C	WATER TO CEMENT RATIO
W/O	WITHOUT

GENERAL NOTES

1. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB SITE PRIOR TO ERECTOR STARTING WORK.
2. ANY DEVIATIONS FROM THESE DRAWINGS DUE TO FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD.
3. THE GENERAL CONTRACTOR SHALL PROVIDE PEDESTRIAN PROTECTION DURING THE CONSTRUCTION TO COMPLY WITH LOCAL CODES, FEDERAL, AND OSHA REGULATIONS.
4. THE GENERAL CONTRACTOR SHALL GRADE, BACKFILL, LEVEL AND OTHERWISE PREPARE THE JOBSITE FOR SAFE WORKING CONDITIONS PRIOR TO ERECTION OF ANY KIND.
5. NO STEEL SHALL BE ERECTED ON THE FOUNDATIONS/FOOTINGS UNTIL THE CONCRETE HAS CURED A MINIMUM OF (3) DAYS.
6. ALL ELECTRICAL WORK TO BE DONE IN ACCORDANCE WITH THE NEC, AND PERFORMED BY A LICENSED ELECTRICIAN.
7. A TYPICAL FOUNDATION DESIGN WILL BE PROVIDED. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING THAT SOIL CONDITIONS AT THE SITE ARE ADEQUATE FOR TYPICAL FOUNDATIONS PROVIDED. UPON REQUEST, THE ENGINEER OR RECORD WILL PROVIDE THE REQUIRED DESIGN LOADS AND ANCHOR BOLT PATTERNS FOR A CUSTOM FOUNDATION DESIGNED BY OTHERS.
8. THE GENERAL CONTRACTOR SHALL PROVIDE ALL THE NECESSARY MEANS FOR GARBAGE & DEBRIS REMOVAL.

SITE CONDITIONS

1. PROVIDE A DRIVE ACCESSIBLE TO WITHIN 15' OF THE PERIMETER OF THIS STRUCTURE IN ORDER TO UNLOAD MATERIALS AND PERFORM WORK.
2. FILL ALL OPEN TANK HOLES AND TRENCHES WITHIN 15' OF THE PERIMETER OF THIS STRUCTURE FROM THE TIME THAT THE STRUCTURE ARRIVES UNTIL ERECTION IS COMPLETE.
3. THE JOBSITE MUST BE DRY ENOUGH FOR VEHICLES AND PERSONNEL TO PERFORM WORK. IF NECESSARY, THE GENERAL CONTRACTOR SHOULD LAY GRAVEL IN EXCESSIVELY MUDDY AREAS TO ENSURE ADEQUATE WORKING CONDITIONS.
4. POURED CONCRETE PAVING UNDER AND AROUND THE PERIMETER OF THIS STRUCTURE TO BE EXCLUSIVELY FOR WORK SPACE AND STAGING OF MATERIALS.
5. ALL OVERHEAD OBSTRUCTIONS ARE TO BE REMOVED PRIOR TO THE ARRIVAL OF MATERIALS.
6. FORM, SET, AND POUR FOUNDATIONS AS PER PROVIDED FOUNDATION PLAN. ALL FORMS SHALL BE REMOVED PRIOR TO ARRIVAL OF MATERIALS AND ALL ANCHOR BOLT THREADS SHALL BE FREE IF DEBRIS/DUST AND SHALL BE ACCESSIBLE.
7. ALL ANCHOR BOLTS (WITH NUTS INSTALLED) SHALL BE SET AT THE PROPER ELEVATIONS WITH NO MORE THAN 1/4" TOLERANCE.
8. PROVIDE TEMPORARY POWER SOURCE (110 VOLTS) WITHIN 100 FEET OF THE STRUCTURE FOR THE ERECTORS USE.
9. OBTAIN ALL REQUIRED PERMITS FROM LOCAL AUTHORITIES AND ARRANGE ALL LOCAL INSPECTIONS UNLESS PROVIDED BY THE ENGINEER OF RECORD.

ERECTORS NOTES:

1. VERIFY ALL ITEMS UNDER THE SITE CONDITIONS. IF THESE ITEMS HAVE NOT BEEN ADDRESSED, CONTACT YOUR SUPERVISOR PRIOR TO UNLOADING MATERIALS.
2. VERIFY DIMENSIONS OF ALL FOOTING LOCATIONS PRIOR TO UNLOADING MATERIALS.
3. DESIGNATE A SAFE AND SECURE STAGING AREA AND UNLOAD ALL MATERIALS.
4. SET LEVELING NUTS TO PROPER ELEVATIONS.
   4.1. NOTE: ALL LEVELING NUTS TO BE AT THE SAME ELEVATION.
5. SET COLUMNS IN PLACE. LEVEL, PLUM, AND TIGHTEN NUTS ON ALL COLUMNS PRIOR TO PROCEEDING.
6. INSTALL ALL OVERHEAD STEEL FRAMING. ONCE ALL FRAMING HAS BEEN INSTALLED, SQUARE UP FRAMING BY VERIFYING LATERAL DIMENSIONS.
7. CLEAN ALL DECKING PRIOR TO INSTALLATION. INSTALL ALL FASTENERS AT THE CENTERLINES OF THE DECK RIBS.
8. INSTALL OVERFLOW SCUPPERS AND WATERPROOF ENTIRE GUTTER.
9. INSTALL DECK SUPPORTS AT COLUMNS WHERE DECK RIBS WERE CUT FOR INSTALLATION PURPOSES.
10. WATERPROOF THE ENTIRE STRUCTURE AND CLEAN ALL PRE-FINISHED MATERIALS. TOUCH UP ALL EXPOSED FASTENERS.
11. CLEAN UP ALL DEBRIS AND REMOVE FROM JOBSITE (EACH DAY AT THE COMPLETION).
12. REMOVE ALL METAL SHAVINGS FROM CANOPY.

STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL CONFORM TO ASTM A-50
2. SQUARE AND RECTANGULAR TUBING SHALL CONFORM TO ASTM A500, GRADE B. FY=46 KSI
3. STEEL PIPE SHALL CONFORM TO ASTM A53, GRADE B. FY=36 KSI
4. STRUCTURAL STEEL DESIGN SHALL BE DONE IN ACCORDANCE WITH AISC "MANUAL OF STEEL CONSTRUCTION".
5. ALL STRUCTURAL STEEL TO BE PAINTED ONE SHOP COAT OF RUST INHIBITIVE PAINT OR EQUAL TO RUSTOLEUM.
6. STRUCTURAL STEEL FABRICATION AND ERECTION SHALL BE DONE IN ACCORDANCE WITH THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS & BRIDGES.

ANCHOR BOLTS

1. ANCHOR BOLTS SHALL BE OF ASTM A307 MATERIAL.
2. INSTALLATION OF ANCHOR BOLTS SHALL BE IN ACCORDANCE WITH THE ANSI CODE OF STANDARD PRACTICE, SECTION 7.5.

LIGHT GAUGE STEEL

1. STRUCTURAL LIGHT GAUGE STEEL SHALL CONFORM TO ASTM A653/A.
2. STRUCTURAL LIGHT GAUGE TUBING SHALL CONFORM TO ASTM A513, GRADE MT1010, FY - 50 KSI, AS A MINIMUM.
3. BUYOUT LIGHT GAUGE STEEL SHAPES SHALL CONFORM TO THE MANUFACTURERS SPECIFICATIONS AS CALLED OUT IN THE DESIGN CALCULATIONS/DRAWINGS.
4. DESIGN OF LIGHT GAUGE STRUCTURAL STEEL SHALL BE DONE IN ACCORDANCE WITH THE ANSI COLD FORMED STEEL DESIGN MANUAL.

ALUMINUM

1. ALL ALUMINUM SHALL BE 3004/H14

WELDING

1. STRUCTURAL WELDING SHALL CONFORM TO AWS D1.1
2. STRUCTURAL LIGHT GAUGE WELDING SHALL CONFORM TO AWS D1.3
3. STRUCTURAL WELDING SHALL BE DONE IN THE SHOP OF A LICENSED FABRICATOR.
4. ALL STRUCTURAL FIELD WELDING SHALL BE PERFORMED BY A CERTIFIED WELDER.
5. AWS E70XX ELECTRODES SHALL BE USED FOR ALL STRUCTURAL WELDS, EXCEPT FOR SPECIAL CLIPS.

BOLTS

1. ALL BOLTS SHALL BE ASTM A325 HIGH STRENGTH BOLTS UNLESS NOTED OTHERWISE ON THESE DRAWINGS.
2. HIGH STRENGTH BOLTS SHALL BE INSTALLED USING THE "TURN OF NUT" TIGHTENING METHOD. BOLTS SHALL BE BROUGHT TO THE SNUG TIGHT CONDITION AND THEN TIGHTENED 1/3 TURN.

SCREWS

1. SHEET METAL SCREWS SHALL BE MADE FROM CARBON STEEL WIRE.
2. SIZE AND SPACING SHALL BE INDICATED ON THESE DRAWINGS.

POP RIVETS

1. ALL POP RIVETS SHALL BE THE BREAK MANDREL BLIND RIVET TYPE & SHALL CONFORM TO IFI STANDARD 114.
2. FINISHES SHALL BE ALUMINUM OF STAINLESS STEEL.
3. SIZE AND SPACING SHALL BE INDICATED ON THESE DRAWINGS.
4. POP RIVETS SHALL NOT BE USED IN STRUCTURAL APPLICATIONS UNLESS SPECIFICALLY CALLED FOR BY THE DESIGN CALCULATIONS.

ROOFING NOTES

1. ROOFING MATERIAL SHALL BE ATTACHED PER MANUFACTURERS SPECIFICATIONS TO MEET THE DESIGN CRITERIA PRESCRIBED IN THESE PLANS.
2. ROOF TO BE PITCHED A MINIMUM OF 1/4" PER FOOT

CONCRETE NOTES

1. ENGINEER OF RECORD MUST BE NOTIFIED WITHIN 48 HOURS OF PLACING CONCRETE.
2. CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF ACI 301 "SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS" AND ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
3. STRUCTURAL CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF ACI 301 AND SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS OF 3000 PSF. UNLESS NOTED OTHERWISE.
4. CONCRETE, WHEN PLACED, SHALL HAVE A SLUMP OF 4 INCHES PLUS OR MINUS ONE INCH.
5. PROVIDE A MINIMUM OF 6 MIL VAPOR BARRIER AT ALL AIR CONDITIONED SPACES & GARAGES.HOLES IN VAPOR BARRIER ARE NOT PERMITTED. TAPE AROUND ALL SEAMS AND CUT-OUTS.
6. ALL REINFORCING SHALL CONFORM TO ASTM A615 FOR GRADE 60 STEEL/WELDED WIRE MESH TO CONFORM TO ASTM A-185.
   6.1. PROVIDE CHAIRS & BOLSTERS
      6.1.1. BOLSTERS TO HAVE PLASTIC COATED LEGS & FEET (IF EXPOSED TO EXTERIOR ELEMENTS)
   6.2. ENSURE MESH IS EMBEDDED 1" FROM THE TOP OF THE SLAB. LAP JOINTS AT 8" & TIE.
7. WELDED WIRE FABRIC SHALL BE IN ACCORDANCE WITH ASTM A185 AND SHALL BE ADEQUATELY SUPPORTED @ 3'-0" O.C. EACH WAY.
8. THE MINIMUM CONCRETE COVERAGE SHALL BE AS FOLLOWS:
   CAST AGAINST EARTH: 3"
   EXPOSED TO EXTERIOR ELEMENTS: 1"
   FORMED SURFACES: 1"
9. CONSTRUCTION JOINTS DESIGN AND LOCATION SHALL CONFORM STRICTLY TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. ANY CONSTRUCTION OR CONTROL DESIRED OR PREFERRED BY THE CONTRACTOR SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION OF THOSE AREAS INVOLVED.
10. CHECK ALL DRAWINGS AND APPLICABLE MANUFACTURE'S SHOP DRAWINGS FOR LOCATION OF ALL EMBEDDED ITEMS, SUCH AS PIPE SLEEVES, ANCHOR BOLTS, ETC. PRIOR TO PLACING CONCRETE.
11. REINFORCEMENT FOR CONTINUOUS FOOTINGS SHALL BE CONTINUOUS AND SPLICED WITH A FULL 30 INCH LAP. PROVIDE CORNER BARS
12. CONTRACTOR SHALL PROVIDE SAWCUTS IN SLAB @ A MAX. SPACING OF 20 FEET ON CENTER EACH WAY OR 400 S.F. AND AT ALL RE-ENTRANT CORNERS. SAW CUT SHALL BE 1/4 OF THE SLAB DEPTH AND SHALL BE PERFORMED AS SOON AS THE CONCRETE HAS HARDENED SUFFICIENTLY ENOUGH TO PREVENT THE AGGREGATE FROM DISLODGED BY THE SAW BLADE. THIS IS AN EFFORT TO CONTROL THE STRESSES. AN INHERENT PROPERTY OF CONCRETE WHICH SOMETIMES RESULTS IN CRACKS (WHICH IS NOT UNCOMMON).
13. CONCRETE FOR SLABS ON GRADE AND ELEVATED SLABS SHALL HAVE 3/4" LARGE AGGREGATE. "PEAROCK" IS NOT PERMITTED FOR SLABS.
14. ALL CONCRETE THAT IS ALTERED (WATER, ADDITIVES, ETC.) SHALL BE TESTED TO ENSURE STRENGTH REQUIREMENTS ARE MET.
15. TERMINATE ALL VERTICAL REINFORCING AT THE TOP AND BOTTOM WITH 10" ACI HOOKS.
16. SOILS SHALL BE TREATED.

CONCRETE MASONRY NOTES

1. ALL MASONRY BLOCK SHALL CONFORM TO THE REQUIREMENTS OF ASTM C90 FOR LOAD BEARING CONCRETE MASONRY.
   1.1. MIN. PRISM STRENGTH OF 1500 PSI W/ 3/8" MORTAR JOINTS.
2. ALL MORTAR SHALL BE A MINIMUM TYPE M OR S MORTAR.
3. UNLESS SPECIFICALLY SHOWN OTHERWISE PROVIDE "DUR-0-WALL" TRUSS TYPE REINFORCING IN EVERY OTHER COURSE (16" O.C.)
4. ALL LAP SPLICES MUST BE 48 BAR DIAMETERS.
5. WHERE INDEPENDENT CONCRETE COLUMNS ARE ABUTTED BY MASONRY WALLS, PROVIDE DOVETAIL ANCHORS FOR THE FULL HEIGHT OF THE COLUMNS
6. ALL CONCRETE MASONRY CONSTRUCTION SHALL CONFORM WITH ACI 530.1-05/ASCE 7-05/TMS 602-05, SPECIFICATION FOR CONCRETE MASONRY STRUCTURES AND ACI 530-05/ASCE 7-05/TMS 402-05, BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES. ALL CONCRETE MASONRY UNITS SHALL COMPLY WITH ASTM C-90 WITH TYPE M OR S MORTAR COMPLYING TO ASTM C-270. MASONRY UNITS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI ON THE NET AREA.
7. ALL 8" EXTERIOR CMU WALL SHALL BE REINFORCED WITH #5 VERTICAL REINFORCING BARS WHERE SHOWN ON ARCHITECTURAL PLANS AT CENTER OF GROUTED CELL. PROVIDE 9 GA. TRUSS TYPE HORIZONTAL JOINT REINFORCING AT 16" O.C. IN ALL NEW WALLS. PROVIDE ADDITIONAL REINFORCING ON EACH SIDE OF OPENING GRATER THAN 24" WIDE & AT CORNERS & INTER- SECTIONS OF WALLS. CARE SHALL BE TAKEN DURING THE CMU WALL ERECTION TO ENSURE THAT CELLS TO BE GROUTED LINE UP PROPERLY, PROVIDING A MINIMUM CLEAR AREA OF 10 SQUARE INCHES & MIN. CLEAR DIM. OF 3" PROVIDE SAW-CUT CLEAN-OUT HOLE IN BOTTOM COURSE & REMOVE MORTAR DROPPINGS FROM CELLS AT END OF EACH DAY. PROVIDE FOOTING DOWELS TO MATCH WALL REINFORCING SIZE & SPACING. LAP SPLICE REINFORCING 48 BAR DIA. (OR AS SHOWN ON PLANS) & TERMINATE REINFORCING WITH STANDARD ACI HOOKS TO PROVIDE CONTINUOUS REINFORCING FROM FOOTING TO UPPERMOST TIEBEAMS. TIE VERTICAL REINFORCING TO INSURE PLACEMENT IS IN CENTER OF WALL.
   7.1. WHERE 2 VERTICAL BARS ARE SHOWN IN 1 CELL, INSTALL 1 BAR ON THE INTERIOR FACE OF THE WALL & 1 BAR ON THE EXTERIOR FACE OF THE WALL, 2" FROM THE EXPOSED FACE OF THE BLOCK.
8. PROVIDE BOND BEAM PER PLANS AROUND PERIMETER OF THE BUILDING @ THE TOP OF ALL WALLS AND AT JOIST BEARING.
   8.1. BOND BEAM TO HAVE A MINIMUM OF (2) #5 BARS OR (1) #7 BAR TOP AND BOTTOM (UNLESS OTHERWISE NOTED).
   8.2. H-BLOCK TIE BEAM STEEL TO STOP 8" FROM CORNERS WITH (1) #5 CORNER BAR (OR 1 #7) TOP & BOTTOM 32" MIN. LAP.
9. VERTICAL REINFORCEMENT STEEL TO HAVE A 1/2" MIN. CLEARANCE FROM MASONRY.
10. GROUTED CELLS SHALL NOT EXCEED A 12' CONTINUOUS POUR.
11. PROVIDE "CAST-CRETE" (OR APPROVED EQUAL) PRECAST CONCRETE LINTELS AT ALL MASONRY OPENINGS, UNLESS NOTED OTHERWISE.
12. ANY EPOXY SHOWN SHALL BE EITHER "HILTI HIT RE 500" WITH "HAS-E" THREADED RODS FOR MASONRY OR "SIMPSON XP22" WITH THREADED ROD.
   12.1. ALL THREADED ROD HOLES TO BE 1/8" DIA. LARGER THAN REINFORCING STEEL OR THREADED ROD FOR EASE OF INSTALLATION.

FOUNDATION NOTES

1. SOIL TO BE COMPACTED TO AT LEAST 95% OF MAX. DRY DENSITY AS DETERMINED BY ASTM - 1557 (MODIFIED PROCTOR)
2. FOUNDATIONS ARE DESIGNED BASED A PRESUMPTIVE MINIMUM SOIL BEARING PRESSURE IS 2000 PSF.
3. FOOTINGS SHALL BE PLACED ON COMPACTED SOIL FREE OF ORGANIC DEBRIS

WINDOWS & DOORS NOTES

1. WINDOWS, DOOR, SHUTTERS, AND ALL COMPONENTS SHALL BE DESIGNED AND INSTALLED PER THE MINIMUM DESIGN PRESSURES AS PRESCRIBED IN THESE PLANS.
2. ALL WINDOWS & DOORS ARE TO BE INSTALLED ON 2X PRESSURE TREATED BUCKS, AND AS PER MANUFACTURERS SPECIFICATIONS UNLESS OTHERWISE NOTED.

DESIGN PARAMETERS FOR WIND LOAD COMPLIANCE

1. RISK CATEGORY II
2. 2015 INTERNATIONAL BUILDING CODE ASCE 7-10
3. BUILDING DESIGN IS ENCLOSED
4. INTERNAL PRESSURE COEFFICIENT +/- 0.18
5. WIDTH OF END ZONE A = 4.7'
6. WIND SPEED: 130 MPH (Vult), 101 MPH (Vasd)
7. WIND EXPOSURE CLASSIFICATION: B
8. COMPONENT & CLADDING DOORS & WINDOWS: ±30 PSF

1

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.

engineering • environmental • constr

1055 KATHLEEN ROAD, LAKELAND, FLORIDA 338

Phone: (863) 646-9130

CA. #2738-E

NO.	DATE	REVISION DESCRIPTION
1	04/07/20	REVISED WIND SPEED

STATE OF LOUISIANA
MICHAEL A. ROBINSON
License No. 39945
PROFESSIONAL ENGINEER

MICHAEL A ROBINSON, PE
LOUISIANA R.A. # 12196

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19075
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME:
CHECKED BY:	25 19075 CK XXXX S1.1.DWG

DRAWING TITLE:

GENERAL STRUCTURAL NOTES

SHEET NO:

S1.1

ISSUED FOR CONSTRUCTION 10/2/2020

NOTE:
XYPEX WATERPROOFING SHALL BE APPLIED TO THE ENTIRE PERIMETER OF THE CMU WALLS TO A MINIMUM OF 1 FT ABOVE THE FINSHED FLOOR TO ELEVATION 606.00,. SEE DETAIL 4/S2.1

1 FOUNDATION PLAN
SCALE: 3/16" = 1'-0"

1. CLEAN JOINT THOROUGHLY. APPLY XYPEX CONCENTRATE SLURRY TO JOINT SURFACE AT THE RATE OF 2.0 LB./SQ.YD. (1.0 KG/M²).
2. THOROUGHLY PROFILE, CLEAN AND SATURATE THE OUTSIDE OF ALL CMU BLOCK WALLS, AS WELL AS ANY CONCRETE SURFACES THAT WILL RECEIVE XYPEX COATINGS. SURFACES TO HAVE A "TOOTH AND SUCTION" ICRI CSP-3 PROFILE AND BE FULLY SATURATED WITH NO GLISTENING WATER ON THE SURFACE.
3. AT THE BASE OF THE WALL ON THE EXTERIOR INSTALL A TRIANGULAR COVE OF GOOD QUALITY, NON-POLYMER MODIFIED MORTAR.
4. APPLY ONE COAT OF XYPEX CONCENTRATE AT THE RATE OF 2.0 LB./SQ.YD. (1.0 KG/M²). TO ALL CMU BLOCK AND CONCRETE. ALLOW XYPEX CONCENTRATE COATING TO SET AND HARDEN FOR BETWEEN 12 HOURS AND 24 HOURS AND NOT MORE THAN 48 HOURS. DURING THIS TIME, MOIST CURE COATING PER XYPEX PRODUCT DATA SHEET.
5. APPLY ONE COAT OF MEGAMIX I OVER TOP OF XYPEX CONCENTRATE COATED CMU ONLY. APPLY MEGAMIX I AT A THICKNESS OF ⅛" (3MM) OR (1.25LB./SQ.YD. (5.6 KG/M²). THICKNESS OF TOP COATING MAY BE VARIED FROM ⅛" - ⅜" (1.5 MM-10 MM) DEPENDING ON JOB CONDITIONS AND REQUIREMENTS. DAMPEN XYPEX CONCENTRATE SURFACE AHEAD OF APPLICATION OF MEGAMIX I AS REQUIRED TO MAINTAIN A DAMP BUT NOT GLISTENING SUBSTRATE (SATURATED SURFACE DRY CONDITION).
6. IN MOIST SITUATIONS, NO MOIST CURING OF XYPEX MEGAMIX I IS REQUIRED BUT IN RAPID DRYING CONDITIONS, MEGAMIX I SHOULD BE ALLOWED TO BE FULLY SET AND THEN BE MISTED PERIODICALLY TO KEEP MOIST FOR 24 HOURS. BACKFILL AND PLACE INTO SERVICE PER XYPEX COATINGS GUIDELINES.

NOTE 1: SCHEMATIC DIAGRAM SHOWS XYPEX APPLICATION DETAILS ONLY AND DOES NOT DEPICT STANDARD REQUIREMENTS FOR WATERSTOPS OR EXPANSION JOINTS INCLUSION. TYPE AND POSITION OF WATERSTOPS ARE AT THE DISCRETION OF THE DESIGNER. EXPANDING WATERSTOPS MAY BE PLACED ON XYPEX SLURRY AFTER IT HAS DRIED OR BEFORE APPLICATION SLURRY COAT MAY ONLY BE APPLIED OVER WATERSTOP IF APPROVED BY WATERSTOP MANUFACTURER.

NOTE 2: SCHEMATIC DRAWING SHOWS XYPEX COATING APPLICATION. SPECIFIER MAY CONSIDER THE ALTERNATIVE USE OF XYPEX DRY SHAKE (DS-SERIES) OR XYPEX ADDITIVE (ADMIX C-SERIES). REFER TO XYPEX STANDARD SPECIFICATIONS FOR MORE INFORMATION.

4 S2.1 XYPEX WATER PROOFING DETAIL
SCALE: 3/4" = 1'-0"

FOUNDATION BEAM & COLUMN SCHEDULE:

SYM.	DESCRIPTION
S1	5" THICK, 3000 PSI CONCRETE SLAB W/ #4 BARS @ 18" O.C. EA. WAY, CHAIRED & CENTERED IN SLAB OVER 6 MIL VAPOR RETARDER ON TERMITE TREATED CLEAN SAND FILL
F1	24"W.x12"D., 3000 PSI CONCRETE SPREAD FOOTING W/3 #5 CONT. & #5's TRANSVERSE @ 12" O.C., T.O.F. @ 2'-0" BFF.
F2	28"W.x12"D., 3000 PSI CONCRETE SPREAD FOOTING W/3 #5 CONT. & #5's TRANSVERSE @ 12" O.C., T.O.F. @ 2'-0" BFF.
F4	32"W.x12"D., 3000 PSI CONCRETE SPREAD FOOTING W/4 #5 CONT. & #5's TRANSVERSE @ 12" O.C., T.O.F. @ 2'-0" BFF.
F5	5'-0" x 3'-6" x 1'-0" D. CONCRETE FOOTING W/#5 @ 12" O.C. EACH WAY, 3" MIN. COVER TOP & BOTTOM, T.O.F. @ 2'-0" BFF.
F6	4'-0" x 4'-0" x 1'-4" D. CONCRETE FOOTING W/#5 @ 10" O.C. EACH WAY, 3" MIN. COVER TOP & BOTTOM, T.O.F. @ 2'-0" BFF.
C1	3x3x3/8 STEEL TUBE, B.O.C. @ 2'-0" BFF., TOC @ 13'-0 1/2" AFF.
C2	FORMED & POURED CONC. COLUMN: 8"X24" W/2 #5'S TO 9'-11 7/8" AFF THEN 8"X16" W/2 #5'S TO 12'-6 1/4" A.F.F., THEN 8"X8" W/2 #5'S TO 13'-8 1/2" AND #3 TIES HORIZONTALLY @ 12" OC. VERT. ACI HOOKS @ BOTTOM.
	(2) #6 VERT. IN CONC. FILLED CELL (FTG. TO PARAPET BEAM): @ WALL CENTERLINE AND 48" C.C. E.W. TO CORNERS; 3 @ EA. CORNER; 2 @ EA. SIDE OF ALL OPEN'GS.
	(2) #6 VERT. IN CONC. FILLED CELL (CAVITY CAP ±5'-0" BELOW ROOF DECK TO PARAPET BEAM) @ 48" C/C, OFFSET 24" FROM FULL HEIGHT FILLED CELLS
	(1) #5 VERT. IN CONC. FILLED CELL (FTG. TO PARAPET BEAM): @ WALL CENTERLINE AND 48" C.C. E.W. TO CORNERS; 3 @ EA. CORNER; 2 @ EA. SIDE OF ALL OPEN'GS.
	(1) #5 VERT. IN CONC. FILLED CELL (CAVITY CAP ±5'-0" BELOW ROOF DECK TO PARAPET BEAM) @ 48" C/C, OFFSET 24" FROM FULL HEIGHT FILLED CELLS
	8" C.M.U. W/ 9 GA. LADDER WIRE @ 16" V.C.
B1	8"x8" BOND BEAM W/ 2 #4's TOB @ 21'-4"
B1	8"x8" BOND BEAM W/ 2 #4's TOB @ 23'-4"
B2	8"x16" BOND BEAM W/ 4 #4's TOB @ 16'-0"
B2	8"x16" BOND BEAM W/ 2 #4's TOB @ 15'-0 3/4"
B3	8"X20" OR 2 ½ COURSE BOND BEAM LENGTH OF JOIST BEARING
B3	8"x24" BOND BEAM W/ 6 #4's TOB @ 16'-8"
B4	W14X30 TOS. @ 13'-8 1/2"

1 S2.1 CMU WALL CORNER REINF. DETAIL

CONCRETE:

1. All concrete shall be controlled concrete complying with all ACI 318-8, and shall have a minimum ultimate compressive strength at 28 days of 3,000 p.s.i. Provide 3/4" chamfer at all exposed concrete edges.
2. All reinforcing bars shall be new billet steel, deformed type, ASTM A-615 Grade 60 (or equal). They shall be field wired in place.
3. All slabs on earth shall be reinforced with welded wire mesh (ASTM A185) or fiber mesh concrete as called for on the drawings, placed 1 1/2" from top and over any pipes or conduits in slab. Minimun lap shall be 8".
4. Perimeter of the foundation shall be reinforced with no less than #4 steel transverse bars @ 12" on center.
5. All concrete shall have a slump of no greater than 4" (to within a tolerance of 1".)
6. All formwork and placement of concrete shall comply with good construction practices and be in accordance with all local governing codes, and regulations.
7. Determine size & location of mechanical equipment and make provisions for bolts, sleeves, pads etc from manufacturers certified drawings. This work shall be coordinated with the trades involved
8. Membrane curing & sealing compound shall conform to the latest ASTM specifications.
9. All concrete shall be moist cured a min. of 7 days

ENGINEERED UNIT MASONRY:

1. Concrete Masonry Units: Shall be two cell, Type N-i hollow units masonry in accordance with ASTM C 90 and shall have a minimum net area compressive strength of 1,900 psi when using Type S mortar (ASTM C 270) to provide a design compressive strength (f' m) of 1500 psi. The reinforcement shall be Grade 60 and identified in accordance with ASTM A 615.
2. Grout: The grout shall have a maximum course aggregate size of 3/8 inch placed at an 8 to 11 inch slump and have a minimum specified compressive strength of 2000 psi at 28 days when tested in accordance with ASTM C 1019, or shall be in accordance with ASTM C 476.
3. Reinforcement Splices: Shall be a minimum of 30 inches for # 5 bars.
4. Reinforcement Substitutions: Where two #5 bars are required within the same grouted masonry cell or bond beam, one #7 bar may be substituted.
5. Bending Reinforcement: All reinforcement shall be bent cold, in the shop or in the field, provided the bend diameter, measured on the inside of the bar, is not less than six-bar diameters. Reinforcement partially embedded in concrete shall not be field bent. EXCEPTION: If bending is necessary to align dowel bars with a vertical cell, bars partially embedded in concrete shall be permitted to be bent at a slope of not more than 1 inch of horizontal displacement to 6 inches of vertical bar length.
6. Masonry Cleanouts: Cleanout openings (12 sq. in.) shall be provided for cells containing spliced reinforcement when the grout lift (pour) exceeds 5 feet in height.

2 S1.0 CMU WALL AND REINFORCEMENT

3 S2.1 PARTIAL WALL ELEVATION
SCALE: 3/4" = 1'-0"

CLIENT:

CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.
engineering • environmental • construction
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Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

MICHAEL A ROBINSON, PE
LOUISIANA R.A. # 12196

GCBU 5187
STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19176
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 27 19075 CK XXXX 5187 S2.1 DWG
CHECKED BY:	

DRAWING TITLE:
FOUNDATION PLAN

SHEET NO:
S2.1

ISSUED FOR CONSTRUCTION 10/2/2020

1 ROOF FRAMING PLAN

SCALE: 3/16" = 1'-0"

3 S-2.2 JOIST BRIDGING DETAIL

N.T.S.

ROOF FRAMING NOTES – TYP U.N.O.:

1. VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS AND FIELD CONDITIONS. BUILDING DIMENSIONS, WHERE SHOWN, WERE PROVIDED BY THE ARCHITECT AND SHALL BE VERIFIED WITH SAME PRIOR TO PROCEEDING WITH THE WORK.
2. SCHEDULED MARK DESIGNATIONS ARE TYPICAL TO THE PROJECT AND MAY NOT NECESSARILY BE FOUND ON THIS PLAN.
3. FOR CLARITY, DETAILS MAY SHOW ONLY ONE SIDE OF FRAMING CONDITIONS. ALL OPENINGS MAY NOT BE SHOWN ON THIS PLAN. FOR EXACT SIZE, NUMBER AND LOCATION OF OPENINGS, SEE ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL, AND THEIR RELATED DRAWINGS. FOR FRAMING AT OPENINGS, SEE TYPICAL DETAILS.
4. VERIFY EXACT SIZE, WEIGHT AND LOCATION OF EQUIPMENT AND SUPPORTS INDICATED ON PLAN WITH ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL, AND THEIR RELATED DRAWINGS. EQUIPMENT INDICATED ARE ONLY THOSE THAT EXCEED LOADS SPECIFIED IN THE G.S.N. FOR SUPPORT OF EQUIPMENT, SEE TYPICAL DETAILS AND OTHER TRADES.

2 STRUCTURAL ELEVATION

SCALE: 3/16" = 1'-0"

NOTE:

REFER TO SHEETS A4.0, SHEETS A5.1, 5.2, SHEETS A8.1 THRU A8.3 AND SHEETS S3.1, S3.2 FOR BUILDING SECTIONS, EXTERIOR WALL SECTIONS, EXTERIOR DETAILS AND ADDITIONAL STRUCTURAL DETAILS

METAL STUD FASTENING SCHEDULE

FASTENER: #10 TEK SELF-DRILLING METAL FRAMING SCREW (TRACK TO STUD)

1 EA SIDE – STUD TO BOTTOM TRACK
1 EA SIDE – STUD TO TOP TRACK
2 EA – STUD TO STUD

FASTENER: 2 EA. #12 TEK SELF-DRILLING METAL FRAMING SCREW (STEEL)

FASTENER: 2 EA. ¼" x 1½" TAPCON (MASONRY)

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NO.	DATE	REVISION DESCRIPTION
1	04/07/20	REVISED WIND SPEED

STATE OF LOUISIANA MICHAEL A. ROBINSON License No. 39945 PROFESSIONAL ENGINEER

5-20-20

MICHAEL A ROBINSON, PE
LOUISIANA R.A. # 12196

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19075
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 27 19075 CK XXXX S2 2.DWG
CHECKED BY:	

DRAWING TITLE:

ROOF FRAMING PLAN

SHEET NO:

S2.2

ISSUED FOR CONSTRUCTION 10/2/2020

1 / S-3.1 FOUNDATION SECTION
SCALE: 1" = 1'-0"

2 / S-3.1 FOUNDATION SECTION
SCALE: 1" = 1'-0"

3 / S-3.1 FOUNDATION SECTION
SCALE: 1" = 1'-0"

8 / S-3.1 DETAIL
SCALE: 1 1/2"" = 1'-0"

ALL EXTERIOR PLYWOOD SHALL BE TYPE FIRE-X EXTERIOR GRADE FIRE RETARDANT SHEATHING

PLYWOOD SHEATHING FASTENING

FASTENING #8 x 1½" PAN HEAD SELF-DRILLING METAL FRAMING SCREW

6" C/C – FIELD
6" C/C – EDGE
4" C/C – CORNER STUDS

4 / S-3.1 FOUNDATION SECTION
SCALE: 1" = 1'-0"

NOTE:
MASK SURFACE OF CONCRETE W/ DUCT TAPE DURING INSTALLATION OF PRIMER AND SEALANT. REMOVE WHEN SEALANT HAS SET.

EXPANSION JOINT DETAIL
NTS

7 / S-3.1 TS8 TO COL. CONNECTION DETAIL
SCALE: 1 1/2" = 1'-0"

SECTION "C"
SCALE: 1 1/2" = 1'-0"

9 / S-3.1 DETAIL
SCALE: 1 1/2" = 1'-0"

NOTE:
REFER TO SHEET A4.0 FOR BUILDING SECTIONS AND SHEET A5.1–A5.2 FOR FULL WALL SECTIONS

5 / S-3.1 FREEZER FLOOR SLAB DETAIL
SCALE: NONE

NOTE: BUTT JOINTS NEED ONLY OCCUR AT EXPOSED EDGES DURING PLACEMENT UNLESS SPECIFICALLY NOTED ON THE PLANS.

NOTES:

1. CONCRETE SLAB ON GRADE.
2. SAWCUT – 1/8" WIDE x 1/4 SLAB THICKNESS IN DEPTH – CUT SHALL BE MADE SOON ENOUGH TO PREVENT SHRINKAGE CRACKING, BUT NOT SO SOON AS TO CAUSE SPALLING OF THE CONCRETE WHILE SAWING. WORK MUST BE ACCOMPLISHED WITHIN 4 TO 12 HOURS OF CONCRETE FINISH.
3. BUTT JOINT WITH 1" SAWCUT.
4. 6X6, W1.4 x W1.4 WWM
5. 2" CLEAR TO REINFORCING.

6 / S-3.1 CONTROL JOINT DETAILS
SCALE: 1 1/2" = 1'-0"

CLIENT:

CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:

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engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

MICHAEL A ROBINSON, PE
LOUISIANA R.A. # 12196

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19-075
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 28 19075 CK XXXX 5187 S3.DWG
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DRAWING TITLE:

STRUCTURAL DETAILS

SHEET NO:

S-3.1

ISSUED FOR CONSTRUCTION 10/2/2020

17 / S-3.2 FOUNDATION SECTION
SCALE: 1" = 1'-0"

16 / S-3.2 FOUNDATION SECTION
SCALE: 1" = 1'-0"

11 / S-3.2 W14 TO COL. CONNECTION DETAIL
SCALE: 1 1/2" = 1'-0"

DETAIL "A"
SCALE: 3" = 1'-0"

DETAIL "B"
SCALE: 3" = 1'-0"

14 / S-3.2 FOUNDATION SECTION
SCALE: 1" = 1'-0"

13 / S-3.2 FOUNDATION SECTION
SCALE: 1" = 1'-0"

1. PROVIDE AT PERIMETER OF ALL ROOFTOP MECHANICAL UNITS AND OPENINGS AS REQUIRED. (IN EXCESS OF 12" SQUARE)
2. SEE MECH. DWGS FOR OPENING SIZE & LOCATIONS.

10 / S-3.2 TYPICAL ROOF OPENING DETAIL
SCALE: 1/2" = 1'-0"

LEFT STOREFRONT COLUMN ELEVATION

15 / S-3.2 STEEL TO CMU ANCHOR DETAIL
SCALE: 1" = 1'-0"

RIGHT STOREFRONT COLUMN ELEVATION

RIGHT STOREFRONT COLUMN SECTION

12 / S-3.2 STEEL TO CMU ANCHOR DETAIL
SCALE: 1" = 1'-0"

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GCBU 5187 STANDARD BUILDING

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SCALE: AS NOTED	MDM JOB # 19-075
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DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 28 19075 CK XXXX 87 S3.2. DWG
CHECKED BY:	

DRAWING TITLE:

STRUCTURAL DETAILS

SHEET NO:

S-3.2

ISSUED FOR CONSTRUCTION 10/2/2020

MECHANICAL FLOOR PLAN
3/16" = 1'-0"

REFRIGERANT CALCULATION

PER TABLE 1103.1 IN 2015 IMC, MAXIMUM ALLOWABLE AMOUNT OF R-404A IS 31 LBS PER 1,000 CU FT OR 0.031 LB/CU FT.

WALK-IN COOLER 104
VOLUME = 2776 CU FT; 4 LBS OF R-404A

(4 LBS) / (2776 CU FT) = 0.0014 LBS/CU FT

NO SENSOR REQUIRED FOR WALK-IN COOLER 104

BEER CAVE 105
VOLUME = 2640 SQ FT; 3.7 LBS OF R-404A

(3.7 LBS) / (2640 SQ FT) = 0.0014 LBS/CU FT

NO SENSOR REQUIRED FOR BEER CAVE 105

WALK-IN COOLER 106
VOLUME = 1016 CU FT; 3 LBS OF R-404A

(3 LBS) / (1016 CU FT) = 0.003 LBS/CU FT

NO SENSOR REQUIRED FOR WALK-IN DAIRY 106

WALK-IN FREEZER 107
VOLUME = 936 CU FT; 5.7 LBS OF R-404A

(5.7 LBS) / (936 CU FT) = 0.006 LBS/CU FT

NO SENSOR REQUIRED FOR WALK-IN FREEZER 107

WALK-IN FREEZER 104
VOLUME = 384 CU FT; 1.3 LBS OF R-404A

(1.3 LBS) / (384 SQ FT) = 0.003 LBS/SQ FT

NO SENSOR REQUIRED FOR WALK-IN FREEZER 114

KEYED NOTES

1. PROGRAMMABLE THERMOSTAT WITH REMOTE TEMPERATURE SENSOR.
2. ROOF HATCH.
3. ROUTE ALL DUCTWORK WITHIN THE TRUSSES UNLESS OTHERWISE SPECIFIED (TYPICAL).
4. REMOTE TEMPERATURE SENSOR IN RETURN AIR. DUCT.
5. COOLER/FREEZER EVAPORATORS. (PROVIDED BY CK/OTHERS.)
6. 8"ø EXHAUST DUCT UP THRU ROOF TO FACTORY ROOF CAP.
7. DUCT SMOKE DETECTOR FOR UNIT SHUT-DOWN SHALL BE SUPPLIED AND INSTALLED BY GC.
8. FULL SIZE SUPPLY & RETURN AIR DUCTS DOWN THRU ROOF. FROM ROOFTOP PACKAGE HEAT PUMP UNIT.
9. 1 1/2" PVC CONDENSATE DRAIN DOWN IN WALL. TERMINATE AT FLOOR SINK WITH MINIMUM 2" AIR GAP
10. 1 1/2" COPPER DRAIN LINE FROM COOLER AND FREEZER EVAPORATORS DOWN IN WALL. TERMINATE AT FLOOR SINK WITH MINIMUM 2" AIR GAP.
11. MECHANICAL CONTRACTOR SHALL INSTALL A 4" DIAMETER PVC PIPE, SCHEDULE 40, FROM TOP OF SLAB, DOWN BELOW SLAB, OVER TO DELI CASE AND TERMINATE AT SLAB WITH PULL STRING AS SHOWN. THE REFRIGERANT PIPING WILL BE INSTALLED IN THIS PIPE SLEEVE. CONTRACTOR SHALL PROVIDE LONG RADIUS TYPE SWEEP ELBOWS AS REQUIRED. MECHANICAL CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR THE TIMING OF THIS INSTALLATION. PIPING SHALL BE CAPPED AT OPEN ENDS AS SOON AS IT IS INSTALLED TO PREVENT DIRT, DEBRIS, AND WATER FROM COLLECTING INSIDE OF PIPE. COORDINATE TERMINATION POINT AT SLAB WITH DELI CASE INSTALLATION INSTRUCTIONS. MECHANICAL CONTRACTOR SHALL COORDINATE ELEVATION OF PIPE BELOW SLAB WITH PLUMBING UTILITIES.
12. PROVIDE 2" UNDERCUT TO EQUIPMENT ROOM DOOR.
13. PROVIDE CO2 DETECTOR AND ALARM: Ax-50. MOUNT 12" AFF. INTERLOCK WITH EF-3. FAN TO RUN @ 3% CO2. SEE SHEET A7.1 FOR DETAIL OF Ax-50 CO2 DETECTOR AND ALARM.
14. REMOTE DISPLAY UNIT FOR CO2 DETECTOR AND ALARM.
15. CO2 LOUVRED CABINET. SEE SHEETS A7.0 FOR DETAIL.
16. ROUTE 8"X8" DUCT UP TO ROOF MOUNTED EXHAUST FAN. ROOF OPENING SHALL BE 10-1/2" B 10-1/2". SEE SHEET M1.2.2 FOR EXHAUST FAN INFO

GENERAL NOTES

A. EQUIPMENT SHALL COMPLY WITH ASHRAE STANDARDS.

B. ALL WORK SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES, LAWS, ACTS, AND AUTHORITIES HAVING JURISDICTION.

C. THE COMPLETED INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE INDUSTRY STANDARD OF GOOD PRACTICE AND SAFETY, AND THE MANUFACTURER'S STRICTEST RECOMMENDATIONS FOR EQUIPMENT AND PRODUCT APPLICATION AND INSTALLATION.

D. ALL WORK SHALL BE LOCATED TO PROVIDE ADEQUATE CLEARANCE FOR ARCHITECTURAL DESIGN AND PROPER OPERATION AND SERVICE OF EQUIPMENT.

E. FIRE SPRINKLERS AND LIGHTS TAKE PRECEDENCE OVER DIFFUSERS. CONTRACTOR TO VERIFY LOCATIONS WITH ARCHITECT.

F. ALL WORK SHALL BE LOCATED TO AVOID CONFLICTS WITH OTHER TRADES. CLOSELY COORDINATES ALL WORK WITH ALL OTHER TRADES. FAILURE OF THE CONTRACTOR TOO COORDINATE WITH ALL OTHER TRADES SHALL RELIEVE THE OWNER/ENGINEER FROM ANY ADDED COSTS.

G. DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL MAKE ANY MINOR MODIFICATIONS, INCLUDING ALL OFFSETS, TURNS, AND REROUTING REQUIRED TO COMPLETE THE INSTALLATION.

H. COORDINATE LOCATION OF ALL GRILLES, DIFFUSERS, DUCTS, ETC. WITH CEILING, LIGHTS, FIRE PROTECTION AND ARCHITECTURAL MATERIALS.

DOOR UNDERCUT SIZING CALCULATION:

AS PER ASHRAE STANDARD 90.1-2013, ENERGY STANDARD FOR BUILDINGS EXCEPT LOW-RISE RESIDENTIAL BUILDINGS

$$H = \frac{0.2\ Q}{W}$$

$$= \frac{0.2 \times 300\ CFM}{36"} = 1.67"$$

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.

engineering • environmental • construction

1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19075
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME:
CHECKED BY:	30 19075 CK XXXX 5187 M1.1.DWG

DRAWING TITLE:

MECHANICAL-FLOOR PLAN

SHEET NO:

M1.1

ISSUED FOR CONSTRUCTION 10/2/2020

1 MECHANICAL ROOF PLAN
3/16" = 1'-0"

GENERAL NOTES

A. EQUIPMENT SHALL COMPLY WITH ASHRAE STANDARDS.

B. ALL WORK SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES, LAWS, ACTS, AND AUTHORITIES HAVING JURISDICTION.

C. THE COMPLETED INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE INDUSTRY STANDARD OF GOOD PRACTICE AND SAFETY, AND THE MANUFACTURER'S STRICTEST RECOMMENDATIONS FOR EQUIPMENT AND PRODUCT APPLICATION AND INSTALLATION.

D. ALL WORK SHALL BE LOCATED TO PROVIDE ADEQUATE CLEARANCE FOR ARCHITECTURAL DESIGN AND PROPER OPERATION AND SERVICE OF EQUIPMENT.

E. ALL WORK SHALL BE LOCATED TO AVOID CONFLICTS WITH OTHER TRADES. CLOSELY COORDINATES ALL WORK WITH ALL OTHER TRADES. FAILURE OF THE CONTRACTOR TOO COORDINATE WITH ALL OTHER TRADES SHALL RELIEVE THE OWNER/ENGINEER FROM ANY ADDED COSTS.

(X) KEYED NOTES

1. ROOFTOP HVAC UNIT INSTALLED ON FACTORY CURB ON ROOF.
2. TWO (2) FACTORY ROOF CAPS FROM RESTROOM EXHAUST FANS. PROVIDE MINIMUM 10'-0" SEPARATION FROM OUTSIDE AIR INTAKES ON HVAC UNITS.
3. CONDENSING UNIT FOR REFRIGERATION EQUIPMENT BY VENDOR SHOWN FOR REFERENCE ONLY.
4. EXTERIOR ROOF ACCESS SHOWN FOR REFERENCE ONLY, REFER TO ARCHITECTURAL DRAWINGS FOR MORE INFORMATION.
5. VTR'S SHOWN FOR REFERENCE ONLY, REFER TO PLUMBING DRAWINGS FOR MORE INFORMATION. PROVIDE MINIMUM 10'-0" SEPARATION FROM OUTSIDE AIR INTAKES ON HVAC UNITS.
6. ROOFTOP EXHAUST FAN INSTALLED ON FACTORY CURB ON ROOF.
7. PIPE PORTAL FOR REFRIGERANT PIPING, ELECTRICAL CONDUIT AND/OR CONDENSATE LINE AS REQUIRED, REFER TO DETAIL 2/M1.2.1.
8. 3" GREASE TRAP VENT DOWN IN WALL AND CONNECT TO GREASE TRAP.
9. ALL CONDENSER RACK PROVIDED BY GC.

CONDENSER STAND DETAIL
N.T.S.

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NO.	DATE	REVISION DESCRIPTION

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19-075
DATE: 01-22-2020	
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DRAWN BY: PD	FILE NAME: 31 19075 CK XXXX 5187 M1.1.1.DWG
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DRAWING TITLE:

MECHANICAL-ROOF PLAN

SHEET NO:

M1.1.1

ISSUED FOR CONSTRUCTION 10/2/2020

REFER TO SMACNA HVAC DUCT CONSTRUCTION STANDARDS TABLE 4–1 FOR "RECTANGULAR DUCT HANGERS MINIMUM SIZE".

RECTANGULAR DUCT HANGER DETAIL | 7

NOTE: INSTALL EQUIPMENT PER MANUFACTURERS RECOMMENDATIONS

CEILING EXHAUST FAN DETAIL | 4

ROOF-TOP PACKAGE UNIT DETAIL | 1

REFER TO SMACNA HVAC DUCT CONSTRUCTION STANDARDS TABLE 4–2 FOR "MINIMUM HANGER SIZES FOR ROUND DUCT".

ROUND DUCT HANGER DETAIL | 8

NOTE: INSTALL EQUIPMENT PER MANUFACTURERS RECOMMENDATIONS

POWER ROOF EXHAUSTER DETAIL | 5

NOTES:

1. "LOW FLOW" TYPE DUCT SMOKE DETECTOR MOUNTED ON THE RETURN AIR DUCT WHERE SHOWN. FURNISHED, INSTALLED, AND CONTROL WIRING BY MECHANICAL CONTRACTOR. POWER WIRING BY ELECTRICAL/FIRE ALARM CONTRACTOR. SEE PLANS FOR ALL LOCATIONS. PROVIDE REMOTE VISIBLE AND AN AUDIBLE SIGNAL ALONG WITH LED BELOW CEILING AS REQUIRED PER 2015 IMC AND NFPA.
2. MECHANICAL CONTRACTOR SHALL FURNISH, INSTALL, AND PROVIDE WIRING TO HVAC UNIT TO SHUT DOWN UNIT UPON DETECTION OF SMOKE. MECHANICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY RELAYS, CONTRACTORS, POWER MODULES, ETC. AS NECESSARY TO PROVIDE A COMPLETE OPERATIONAL SYSTEM. COORDINATE WITH ELECTRICAL/FIRE ALARM CONTRACTOR TO VERIFY VOLTAGE REQUIREMENTS, LOCATIONS, ETC..
3. ELECTRICAL/FIRE ALARM CONTRACTOR SHALL PROVIDE WIRING IF FIRE DETECTION OR ALARM SYSTEMS ARE PROVIDED FOR THE BUILDING, THE SMOKE DETECTORS SHALL BE SUPERVISED BY SUCH SYSTEMS.
4. SMOKE DETECTORS REQUIRED BY 2015 IMC SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72. DUCT SMOKE DETECTORS REQUIRE A REMOTE LED INDICATOR THRU THE CEILING LEVEL. NFPA 72 3–8.3. DUCT SMOKE DETECTORS SHALL ACTIVATE A VISIBLE AND AUDIBLE SIGNAL AT A NORMALLY OCCUPIED LOCATION AND SHALL BE MONITORED BY THE FACP AND REPORT AS A SUPERVISORY SIGNAL PER NFPA 72 AND THE IMC. DUCT SMOKE DETECTORS TO PROVIDE SHUTDOWN IN 30 SECONDS OR LESS.

DUCT SMOKE DETECTOR CONNECTION DETAIL | 2

NOTE:

FABRICATE PER SMACNA DUCT CONSTRUCTION STANDARDS FIGURE #2–8.

DO NOT USE EXTRACTORS IN BRANCH DUCTWORK.

DUCT CONNECTION | 9

MITERED ELBOW WITH TURNING VANES

RADIUS ELBOW

NOTE:

RADIUS ELBOWS WITH MITERED THROAT ARE NOT ALLOWED

DUCT ELBOW DETAILS | 6

NOTES:

1. CONDENSATE DRAIN LINES SHALL BE GRADED CONTINUOUSLY AND UNIFORMLY TO POINT OF DISCHARGE. MINIMUM OF 1/8" PER FOOT.
2. CONDENSATE DRAIN LINES SHALL BE TYPE "M" HARD DRAWN COPPER TUBING ASTM B–88.
3. GENERAL CONTRACTOR TO SUPPLY AND INSTALL ALL CONDENSATE DRAINS PER MANUFACTURER'S RECOMMENDATIONS
4. INSULATE PRIMART COIL CONDENSATE INSIDE BUILDING IN ACCORDANCE WITH SHEET SPECIFICATIONS.

CONDENSATE DRAIN TRAP DETAIL | 3

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CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

GCBU 5187
STANDARD
BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB #
DATE: 01-22-2020	
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DRAWING TITLE:

MECHANICAL DETAILS (1 OF 2)

SHEET NO:

M1.2

ISSUED FOR CONSTRUCTION 10/2/2020

DIFFUSER/GRILLE CONNECTION DETAIL | 1

REFRIGERANT LINE GOOSENECK DETAIL | 2

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

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Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #1[illegible]
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 1[illegible]075
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 33 19075 CK XXXX 5187 M1.2.1. DWG
CHECKED BY:	

DRAWING TITLE:

MECHANICAL-DETAILS (2 OF 2)

SHEET NO:

M1.2.1

ISSUED FOR CONSTRUCTION 10/2/2020

2015 IECC LOAD SUMMARY

AREA DESCRIPTION	COOLING LOAD CALCULATION [MBH]		PROVIDED EQUIPMENT COOLING CAPACITY [MBH]	
	SENSIBLE	TOTAL	SENSIBLE	TOTAL
RTU–1	77.3	89.4	94.2	124
RTU–2	75.0	85.8	94.2	124

NOTES:

1. CALCULATIONS WERE PERFORMED BY THE CARRIER HAP SOFTWARE PROGRAM IN COMPLIANCE WITH ASHRAE FUNDAMENTALS.
2. EQUIPMENT SIZING MEETS THE IECC 403.2.2 REQUIREMENTS
3. ALL MECHANICAL AIR CONDITIONING EQUIPMENT TO HAVE MINIMUM EFFICIENCY RATING PER 2015 IECC, TABLE C403.2.3. SUBMIT MECHANICAL AC EQUIPMENT TO OWNER OR ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ORDER.
4. PROVIDE WITH GFCI CONVENIENCE OUTLET
5. PROVIDE WITH HAIL GUARDS
6. SELECT FAN FOR >6910 FEET ALTITUDE.

ROOFTOP PACKAGED HEAT PUMP UNIT

MARK	MANUFACTURER	MODEL	EER	INDOOR BLOWER			GROSS COOLING CAP				HEAT (MBH)	O.S.A CFM	WEIGHT (LB)	ELECTRICAL DATA			AUXILIARY HEAT	
				CFM	"ESP	HP	SEN MBH	TOT MBH	ENT. AIR DBF	ENT. AIR WBF				VOLTS	MCA	MOCP	KW	STAGES
RTU–1	CARRIER	50HC–E12J2M5–6U3G0	11.7	4,000	0.8	2.43	94.2	124	80	67	106	450	1320	208/3	53	60	7.8	1
RTU–2	CARRIER	50HC–E12J2M5–6U3G0	11.7	4,000	0.8	2.43	94.2	124	80	67	106	450	1320	208/3	53	60	7.8	1

NOTES:

1. SIZE ALL UNITS ON SUMMER AMBIENT TEMPERATURE: 95° F.
2. VERIFY VOLTAGE/PHASE WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING.
3. COOLING CAPACITY, MINIMUM HEAT CAPACITY AND CFM ARE MINIMUM OUTPUT REQUIRED. ALL UNITS SHALL HAVE NO LESS THAN 98% OF THESE CAPACITIES. COOLING CAPACITY IS GROSS COIL CAPACITY REQUIRED (FAN HEAT NOT DEDUCTED).
4. PROVIDE ROOF MOUNTING CURB, FILTERS AND FILTER RACK SIZED AT 500 FPM VELOCITY.
5. PROVIDE WITH PROGRAMMABLE THERMOSTAT WITH REMOTE SENSOR FOR RTU–1 AND RTU–2
6. SET–UP ECONOMIZER AS INDICATED IN SERVICE MANUAL. MINIMUM OUTDOOR AIR = 999.5 CFM USE REFERENCE ENTHALPY AS CONTROL POINT PER IECC C403.3.1 EXCEPTION 6 AND IECC TABLE C403.2.3(2)
7. PROVIDE RTU–1 & RTU–2 WITH A 7.8 KW AUXILIARY HEATER. MODEL# CRHEATER117A00

OUTSIDE AIR CALCULATION

OUTSIDE AIR REQUIREMENTS PER TABLE 403.3 AND 403.3.1.2, 2015 IMC

RTU-1

	SQFT	OA RATE CFM/PERSON	AREA RATE	OCCUPANT DENSITY PEOPLE/1000 SF	CFM/SQFT	OCCUPANT (CFM)	TOTAL CFM
HALLWAY	149	-	0.06	-	8.94	-	8.94
OFFICE	65	5	0.06	5	3.9	1.63	5.53
STORAGE	152	-	0.12	-	18.24	-	18.24
SALES	825	7.5	0.12	15	99	92.81	191.81
BACKROOM	417	-	0.06	-	25.02	-	25.02
PREP	135	5	0.12	5	16.2	3.38	19.58
CASHIER	309	7.5	0.12	15	37.08	34.76	71.84
TOTAL REQ'D CFM =							340.96

RTU-2

	SQFT	OA RATE CFM/PERSON	AREA RATE	OCCUPANT DENSITY	CFM/SQFT	OCCUPANT (CFM)	TOTAL CFM
SALES	1731	7.5	0.12	15	207.72	194.7375	402.4575
TOTAL REQ'D CFM =							402.46

TOTAL OA REQUIRED = 743.41
TOTAL OA SUPPLIED = 900

EXHAUST FAN SCHEDULE

MARK	AREA SERVED	MANUFACTURER	MODEL	CFM	E.S.P. ("W.C.)	MOTOR		BAROMETRIC DAMPER	DRIVE
						HP	V/PH		
EF–1	WOMENS TOILET ROOM	GREENHECK	SP–A250	200	0.125"	FRAC.	120/1	YES	DIRECT
EF–2	MENS TOILET ROOM	GREENHECK	SP–A250	200	0.125"	FRAC.	120/1	YES	DIRECT
EF–3	MECHANICAL/ ELECTRICAL ROOM	GREENHECK	G–098–B	300	0.125"	1/8	120/1	YES	DIRECT
EF–4	FOOD PREP	GREENHECK	CUE–070–VG	200	0.25"	1/6	120/1	YES	DIRECT

NOTES:

1. EF–1&2 SHALL BE PROVIDED WITH VIBRATION ISOLATORS, BACKDRAFT DAMPER, FACTORY ROOF CURB, AND FACTORY ROOF CAP.
2. EF–3 SHALL PROVIDED WITH BACKDRAFT DAMPER, FACTORY ROOF CURB, SPEED CONTROLLER. FAN SHALL BE UL LISTED. INSTALL FAN LEVEL. FAN CONTROLLED FROM LINE VOLTAGE THERMOSTAT PROVIDED BY ELECTRICAL. COORDIANTE TEMPERATURE SETTING WITH OWNERS REPRESENTATIVE
3. EF–4 SHALL BE PROVIDED WITH BACKDRAFT DAMPER, FACTORY ROOF CURB, SPEED CONTROLLER. FAN SHALL BE UL LISTED. INSTALL FAN LEVEL. FAN TO BE TIED IN WITH RTU–2.

GRILLE, REGISTER, AND DIFFUSER SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL	MATERIAL	MODULE	FRAME	FRONT BLADES	DAMPER	FINISH
A	CEILING DIFFUSER	TITUS	TMSA	STEEL	24x24	LAY–IN	4–WAY	YES	–
B	CEILING DIFFUSER	TITUS	TMSA	STEEL	12x12	SURFACE MOUNT	4–WAY	YES	–
C	CEILING DIFFUSER	TITUS	TDC	STEEL	–	SURFACE MOUNT	4–WAY	YES	–
D	RETURN GRILLE	TITUS	23R	STEEL	–	SURFACE MOUNT	LONG	YES	–
E	RETURN GRILLE	TITUS	23R	STEEL	24x24	LAY–IN	LONG	YES	–
F	EXHAUST GRILLE	TITUS	23R	STEEL	24x24	LAY–IN	LONG	YES	–

NOTE: FIELD PAINT ALL DIFFUSERS AND GRILLES – COLOR WHITE

AIR BALANCE SCHEDULE

UNIT	O.A.	R.A.	S.A.	E.A.	PRESSURE
RTU–1	450	3,550	4,000	–	+450
RTU–2	450	3,550	4,000	–	+450
EF–1	–	–	–	200	–200
EF–2	–	–	–	200	–200
EF–3	–	–	–	300	–300
EF–4	–	–	–	200	–200
TOTALS	900	7,100	8,000	900	0

CLIENT:

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NO.	DATE	REVISION DESCRIPTION

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GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED
MDM JOB # 19075
DATE: 01-22-2020
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FILE NAME: 34 19075 CK XXXX 5187 M1.2.2. DWG

DRAWING TITLE:

MECHANICAL-SCHEDULES

SHEET NO:

M1.2.2

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AC	AIR CONDITIONING UNIT
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AL	ACOUSTICAL LINING
AMP	AMPERE (AMPS)
AP	ACCESS PANEL
BF	BELOW FLOOR
BHP	BRAKE HORSE POWER
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BTU	BRITISH THERMAL UNIT
BTUH	BTU PER HOUR
BD	BACKDRAFT DAMPER
C	CELSIUS
CI	CAST IRON
CFM	CUBIC FEET PER MINUTE
CO	CLEANOUT
CONT.	CONTINUATION
D	DRAIN
Db	DECIBEL
DB	DRY BULB
DBT	DRY BULB TEMPERATURE
DIA.	DIAMETER
DX	DIRECT EXPANSION
EFF	EFFICIENCY
ENT	ENTERING
EXH	EXHAUST
EMCS	ENERGY MANAGEMENT CONTROL SYSTEM
°F	DEGREES FAHRENHEIT
FB	FLAT BOTTOM
FCO	FLOOR CLEANOUT
FCU	FAN COIL UNIT
FD	FLOOR DRAIN
FD	FIRE DAMPER
F.G.	FILTER GAUGE
FLEX	FLEXIBLE
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FS	FLOOR SINK
FT	FLAT TOP
FT.	FEET
FSD	FIRE/SMOKE DAMPER
GA	GAUGE
GAL	GALLONS
GPM	GALLONS PER MINUTE
GPH	GALLONS PER HOUR
HB	HOSE BIBB
HD	HAND DAMPER (VOLUME DAMPER)
HORZ	HORIZONTAL
HP	HORSEPOWER
HR	HOUR(S)
IN	INCHES
KVA	KILOVOLT-AMPERE
KW	KILOWATT
KWH	KILOWATT HOUR
LBS	POUNDS
MAX	MAXIMUM
MA	MAIN AIR (CONTROLS)
MCC	MOTOR CONTROL CENTER
MIN	MINIMUM
N/A	NOT APPLICABLE
NC.	NOISE CRITERIA
NIC	NOT IN CONTRACT
#,NO.	NUMBER (QUANTITY)
NO	NORMALLY OPEN
NC	NORMALLY CLOSED
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
PD	PRESSURE DROP
QTY	QUANTITY
QUAD	QUADRANT
RA	RETURN AIR
REQ	REQUIRED
RH	RELATIVE HUMIDITY
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SCD	SMOKE CONTROL DAMPER
S.DPR.	SMOKE DAMPER
SP	STATIC PRESSURE (INCHES OF WATER)
SPEC	SPECIFICATION
SQ	SQUARE
SDVV	SINGLE DUCT VARIABLE VOLUME
ST	SOUND TRAP
TEMP	TEMPERATURE
TSTAT	THERMOSTAT
TP	TOTAL PRESSURE (INCHES OF WATER)
TYP	TYPICAL
UC	UNDERCUT
V	VOLTS
VAC	VOLTS, ALTERNATING CURRENT
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VERT	VERTICAL
VTR	VENT THRU ROOF
WB	WET BULB
WCO	WALL CLEANOUT
WH	WALL HYDRANT
Z	ZONE

PIPING FLOWSTREAM ID

SYMBOL	DESCRIPTION
— D —	DRAIN LINE
— CD —	CONDENSATE DRAIN
— SCD —	SECONDARY CONDENSATE DRAIN

PIPE FITTING SYMBOLS

SYMBOL	DESCRIPTION
	ANCHOR
	ANCHOR, WALL
	BLIND FLANGE
	DROP AT END
	DROP AT MID
	TOP CONNECTION, 45° OR 90°
	BOTTOM CONNECTION, 45° OR 90°
	TEE CONNECTION
	CAPPED OUTLET
	PIPE CAP
	RISE IN PIPE
	PIPE GUIDES
	PIPE PLUG
	FLEX CONNECTION
	FLEX PIPE
	PRESSURE GAGE W/O COCK
	PRESSURE GAUGE W/ COCK
	REDUCER OR INCREASER
	ECCENTRIC REDUCER
	STRAINER
	STRAINER, FLANGED
	SWITCH, FLOW
	SWITCH, PRESSURE
	SWITCH, TEMPERATURE
	TEST & PRESSURE (T&P) FITTING
	THERMOMETER
	UNION
	ORIFICE UNION
	FLANGED UNION
DOWN	SLOPE IN DIRECTION SHOWN (DOWN)
	DIRECTION OF FLOW
	NEW PIPING
	EXISTING PIPING TO REMAIN
	EXISTING PIPING TO BE REMOVED
	NEW PIPE CONNECTION TO EXISTING PIPING
	POINT OF NEW CONNECTION TO EXISTING

ANNOTATION SYMBOLS

SYMBOL	DESCRIPTION
X	KEYED NOTE
XXX	ROOM NUMBER
* * *	SYMBOL INDICATES NEW EQUIPMENT NUMBER REFERS TO SPECIFIC EQUIPMENT OUTSIDE AIR CFM REQUIRED
XX XX	HEX SYMBOL INDICATES NEW EQUIPMENT NUMBER REFERS TO SPECIFIC EQUIPMENT IDENTIFIED IN EQUIPMENT SCHEDULE
X	REVISION TRIANGLE REVISION NUMBER
XXX XXX	DETAIL NUMBER DETAIL SYMBOL DRAWING WHERE DETAIL APPEARS
X	SECTION LETTER SECTION CUT SYMBOL
X XXX	SECTION LETTER SECTION CUT SYMBOL DRAWING WHERE SECTION APPEARS
	NORTH ARROW
	POINT OF NEW CONNECTION TO EXISTING
	FLOW ARROWS
V12	OVAL SYMBOL INDICATES A CONTROL VALVE V-NUMBER REFERS TO A SPECIFIC VALVE IDENTIFIED IN THE CONTROL VALVE SCHEDULE

DUCTWORK SYMBOLS

SYMBOL	DESCRIPTION
12x8	RECTANGULAR DUCT, WIDTH x DEPTH (INCHES)
12?	ROUND DUCT (INCHES)
12x8?	OVAL DUCT (INCHES)
	FLEXIBLE DUCT
12x8 W/1"AL	ACOUSTICAL DUCT LINING
	FLEXIBLE CONNECTION
	SUPPLY DUCT - SECTION/ END VIEW
	RETURN DUCT - SECTION/ END VIEW
	EXHAUST DUCT - SECTION/ END VIEW
	CROSS SECTION THROUGH ROUND DUCT
	VANED ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES EXCEPT TRANSFER AIR SOUND ELBOW)
	LARGE RADIUS ELBOW
	SMALL RADIUS ELBOW
	RETURN AIR CEILING GRILLE AND RETURN AIR CEILING GRILLE WITH SOUND BOOT
	CEILING DIFFUSERS (ARROWS DENOTE THROW PATTERN IF THROW IS SOMETHING OTHER THAN 4-WAY)
	EXHAUST CEILING REGISTER OR GRILLE
	LINEAR DIFFUSER
	ROUND DIFFUSER
	SIDEWALL EXHAUST OR RETURN AIR GRILLE
	SIDEWALL SUPPLY REGISTER
	DIFFUSER UNDER DUCT
	POINT OF NEW CONNECTION TO EXISTING
T	ROOM THERMOSTAT
S	ROOM TEMPERATURE SENSOR
	DUCT SMOKE DETECTOR (DSD)
	ACCESS DOOR
	MANUAL VOLUME DAMPER (VD)
	FIRE DAMPER (FD) THROUGH WALL/ FLOOR
	FIRE/SMOKE DAMPER (FSD) THROUGH WALL/ FLOOR
	MOTOR OPERATED DAMPER
	CONNECT NEW DUCT TO EXISTING DUCT
	EXISTING DUCT
	EXISTING DUCT TO BE REMOVED
	30" RISE(R)/DROP(D) IN DUCTWORK IN DIRECTION OF ARROW
	CONCENTRIC DUCT REDUCER
	ECCENTRIC DUCT REDUCER
	DUCT TRANSITION FROM RECTANGULAR TO ROUND
	CONICAL TAP FITTING
	SHOE TAP FITTING
	DUCT OVER/UNDER ANOTHER DUCT

SINGLE LINE DUCTWORK

SYMBOL	DESCRIPTION
N	NEW
E	EXISTING
R	RELOCATED
	NEW/RELOCATED SUPPLY DIFFUSER, NECK SIZE, AND BALANCE AIR AS INDICATED (MATCH EXISTING)
	NEW/RELOCATED RETURN GRILLE WITH BOOT (MATCH EXISTING)
	EXISTING SUPPLY DIFFUSER
	EXISTING RETURN GRILLE WITH BOOT
	RELOCATED EXISTING GRILLE OR DIFFUSER
T R	RELOCATED ROOM THERMOSTAT, ELECTRIC
T E	EXISTING ROOM THERMOSTAT, ELECTRIC
	1-1/2 X BRANCH DUCT FROM SIDE OF MAIN
	SQUARE ELBOW WITH TURNING VANES
	RADIUS TYPE 90° ELBOW
	DUCT TRANSITION
	ACCESS PANEL (AP)
	EXISTING DUCTWORK
	EXISTING DUCT TO BE REMOVED
	FLEXIBLE DUCT

DIFFUSER,REGISTER & GRILLE SYMBOLS

SYMBOL	DESCRIPTION
X XXXX XXX X	SYMBOL (AS SHOWN ON SCHEDULE) NECK SIZE (SQUARE, RECTANGULAR OR ROUND) NO. OF TYPICAL CFM
X XX XXX	SYMBOL (AS SHOWN ON SCHEDULE) NECK SIZE (DIA.) CFM

GENERAL NOTES

A. ALL PIPING AND DUCTS IN FINISHED ROOMS OR SPACES SHALL BE CONCEALED IN FURRED CHASES OR SUSPENDED CEILINGS, UNLESS OTHERWSE NOTED.

B. PROVIDE ACCESS PANELS OR DOORS IN UNACCESSIBLE CEILINGS AND/OR CHASES FOR ALL VALVES, TRAPS, DAMPERS, CLEANOUTS, COILS, FANS, CONTROLS, ETC. ACCESS DOOR RATING SHALL MATCH CLASSIFICATION OF WALL AND CEILING FIRE RATING.

C. COORDINATE THE LOCATION OF ALL DIFFUSERS, GRILLES, REGISTERS, ACCESS DOORS, ETC., WITH THE ARCHITECTURAL REFLECTED CEILING PLAN(S).

D. ALL ROUND RUNOUTS AND DROPS TO DIFFUSERS SHALL BE THE SAME NOMINAL SIZE AS THE SCHEDULED DIFFUSER NECK SIZE.

E. THE FIRST FIGURE OF DUCT SIZE INDICATES DIMENSION OF FACE SHOWN OR INDICATED. ALL DUCT SIZES SHOWN ON DRAWINGS ARE NET INSIDE DIMENSIONS.

F. PROVIDE TURNING VANES IN ALL SQUARE ELBOWS. EXCEPT TRANSFER AIR SOUND ELBOWS.

G. THE CFM OF EACH DIFFUSER, REGISTER, ETC., IS INDICATED IN THE SYMBOL DESIGNATION ON THE DRAWINGS.

H. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL FIRE RATED AND/OR SMOKE RATED WALLS AND ASSEMBLIES. PROVIDE APPROVED FIRE AND FIRE/SMOKE DAMPERS IN ALL REQUIRED PENETRATIONS FOR DUCTWORK, GRILLES, REGISTERS AND DIFFUSERS. ALL PIPE AND DUCTWORK PENETRATIONS OF FIRE, SMOKE AND FULL HEIGHT WALLS SHALL BE CAULKED AIRTIGHT TO THE ADJACENT STRUCTURE BY MEANS OF U.L. APPROVED FIRE PROOF CAULKING MATERIAL.

I. CONTRACTOR SHALL COORDINATE ALL DUCTWORK, PIPING, PLUMBING AND FIRE PROTECTION PIPING WITH STRUCTURAL AND ELECTRICAL SYSTEMS AND SHALL PROVIDE NECESSARY OFFSETS TO AVOID CONFLICTS AND TO MAINTAIN EQUIPMENT ACCESS AND SERVICEABILITY.

J. CONTRACTOR SHALL FURNISH ALL NECESSARY STRUCTURES, INSERTS, SLEEVES, AND HANGING DEVICES FOR INSTALLATION OF MECHANICAL AND PLUMBING EQUIPMENT, DUCTWORK AND PIPING, ETC. CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR AND ALL BUILDING TRADES TO AVOID CONFLICTS AND TO MAINTAIN EQUIPMENT ACCESS AND SERVICEABILITY.

K. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY MISCELLANEOUS ANGLES, CHANNELS, UNISTRUT, ETC., AS MAY BE REQUIRED TO ADEQUATELY SUPPORT THE MECHANICAL PIPING, DUCTWORK, AND EQUIPMENT IN A MANNER APPROVED BY THE ARCHITECT WHICH WILL NOT OVERLOAD THE BUILDING STRUCTURAL SYSTEM.

L. CONTRACTOR SHALL PROVIDE RETURN AIR OR TRANSFER AIR OPENINGS IN FULL HEIGHT WALLS SIZED AT 500 FPM (UNLESS OTHERWISE SPECIFICALLY SHOWN ON THE DRAWINGS) TO CREATE AND/OR MAINTAIN A RETURN AIR PATH AS REQUIRED. FIRE DAMPERS AND/OR SMOKE DAMPERS SHALL BE PROVIDED IN SUCH OPENINGS WHERE REQUIRED BY NOTE "H".

M. SEAL ALL TRANSVERSE JOINTS, LONGITUDINAL SEAMS, DUCT WALL PENETRATIONS AND FITTING CONNECTIONS ON ALL DUCT SYSTEMS.

CODE INFORMATION

A. 2015 INTERNATIONAL BUILDING CODE(IBC), 2015 INTERNATIONAL MECHANICAL CODE (IMC), 2014 INTERNATIONAL ENERGY CONSERVATION CODE (IECC) AND 2015 INTERNATIONAL PLUMBING CODE (IPC).

ALL SYSTEMS SHALL BE IN COMPLIANCE WITH THE ABOVE CODES AS ADOPTED BY THE CITY OF HUNTSVILLE, AL

B. OUTDOOR AIR VENTILATION PROVIDED AND BASED ON CHAPTER 4, SECTION 403.2 AND TABLE 403.3.

1. SEE SHEET M1.2.2 FOR VENTILATION CALCULATIONS.

C. ALL ROOFTOP EQUIPMENT SHALL BE PERMANENTLY IDENTIFIED AS TO THE AREA SERVED WITH A RUST-PROOF METAL NAMEPLATE PER 2015 IMC.

D. DUCT SMOKE DETECTORS REQUIRED BY 2015 IMC SECTION 606 SHALL BE INSTALLED IN THE RETURN DUCTWORK AS SHOWN ON THE PLANS PER IMC 606.2.1, 606.2.2, 606.3, AND NFPA 72. IF A FIRE ALARM SYSTEM IS AVAILABLE, THAT THE DUCT SMOKE DETECTOR(S) SHALL BE CONNECTED TO THE FIRE ALARM SYSTEM (IMC 606.4.1) AND IF A FIRE ALARM SYSTEM IS NOT AVAILABLE, PROVIDE A VISIBLE AND AUDIBLE SUPERVISORY SIGNAL AT A CONSTANTLY SUPERVISED LOCATION TRIGGERED BY THE ACTIVATION OF A DUCT SMOKE DETECTOR AND/OR THE AIR DUCT DETECTOR TROUBLE INDICATOR (LED AT THE CEILING BELOW THE DUCT DETECTOR) AS REQUIRED BY IMC 606.4.1, EXCEPTION 2.

E. EQUIPMENT AND APPLIANCES SHALL BE INSTALLED AS REQUIRED BY THE TERMS OF THEIR APPROVAL, IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING, THE MANUFACTURERS INSTALLATION INSTRUCTIONS AND THIS CODE. MANUFACTURERS INSTALLATION INSTRUCTIONS SHALL BE AVAILABLE ON THE JOB SITE AT THE TIME OF INSPECTION PER IMC SECTION 304.1.

F. ACCESS TO ROOF MOUNTED EQUIPMENT COMPLIES WITH 2015 IMC. SEE ARCHITECTURAL DRAWINGS FOR ROOF ACCESS DETAILS.

MATERIALS SPECIFICATIONS

1. ALL DUCTWORK SHALL BE CONSTRUCTED FROM NEW HOT DIPPED GALVANIZED SHEET IRON OR STEEL, ASTM A-120, IN ACCORDANCE WITH THE IMC, ASHRAE GUIDE, AND SMACNA STANDARDS FOR GAGE AND REINFORCEMENT. ALL LOW VELOCITY AIR CONDITIONING SUPPLY AIR AND RETURN AIR DUCTWORK SHALL BE 2-INCH DUCT CONSTRUCTION. CONSTRUCT AND ERECT DUCTWORK IN ACCORDANCE WITH THE CURRENT ISSUES OF THE IMC, SMACNA STANDARDS AND ASHRAE HANDBOOKS. DUCTS SHALL CONFORM TO DIMENSIONS ON THE DRAWINGS UNLESS LOCATION OF STRUCTURAL MEMBERS PROHIBITS. IN CASE OF CHANGE IN DIMENSIONS, CROSS SECTIONAL AREAS SHALL BE MAINTAINED.

2. INSULATE THE FIRST 10 FEET OF ALL RECTANGULAR SUPPLY AIR AND ALL RECTANGULAR RETURN AIR SHEET METAL DUCTWORK INTERNALLY WITH JOHNS-MANVILLE LINACOUSTIC RC FIBERGLASS DUCT LINER WITH REINFORCED COATING SYSTEM, THICKNESS 1" (R=6.0) AND DENSITY 1-1/2 PCF. ALL OTHER RECTANGULAR SUPPLY AIR AND RIGID ROUND DUCTWORK SHALL BE INSULATED WITH 2" THICK (R=6.0) JOHNS-MANVILLE MICROLITE DUCT WRAP WITH FSK VAPOR BARRIER.

3. CONDENSATE DRAIN PIPING SHALL BE ASTM B-88, TYPE "M" HARD DRAWN COPPER WITH WROT COPPER FITTINGS AND SOLDERED JOINTS, 50/50 SOLDER. INSULATE WITH 1/2" THICK FLEXIBLE CLOSED CELL FOAMED PLASTIC PIPE INSULATION, ARMSTRONG ARAMFLEX, OR EQUAL FOR ENTIRE LENGTH. FITTINGS FIELD FABRICATED OF NESTING SIZES, SECURED WITH ADHESIVE. REFRIGERANT SUCTION LINES SHALL BE INSULATED TO 1" THICKNESS.

4. FLEXIBLE DUCTS SHALL BE THERMAFLEX II TYPE M-KE, FACTORY FABRICATED ASSEMBLY, SPIRAL CONSTRUCTION, FIBERGLASS BLANKET INSULATION (R=6.0), AND MYLAR SHEATH. FLEXIBLE DUCTS UL LISTED FOR CLASS 0 DUCT AND COMPLY WITH NFPA-90A.

SYMBOLS LIST NOTES

1. SYMBOLS LISTS, NOTES, ABBREVIATIONS, ETC. ARE FOR GENERAL REFERENCE ONLY. THE PRESENCE OF SYMBOLS, NOTES, ABBREVIATIONS, ETC. DOES NOT IMPLY ITS USE ON THIS PROJECT. REFER TO DRAWINGS FOR SPECIFIC SYMBOLS, NOTES, ABBREVIATIONS, ETC. USED.

DUCT SMOKE DETECTOR TESTING

TESTING AND INSPECTION OF SMOKE CONTROL DEVICES

A. PRIOR TO TESTING SMOKE CONTROL DEVICES:

1. VERIFY PROPER OPERATION OF EACH EXISTING SMOKE DETECTOR. ACTIVATION TESTING SHALL BE PERFORMED USING "CANNED SMOKE" ACCEPTABLE TO THE AUTHORITIES HAVING JURISDICTION.

2. VERIFY ACTIVATION OF THE EXISTING SMOKE DETECTOR SHUTS DOWN THE APPROPRIATE AIR-MOVING SYSTEM(S). VERIFY ACTIVATION OF THE SMOKE DETECTOR IS SHOWN BY THE FIRE ALARM SYSTEM WHERE MONITORING IS REQUIRED.

B. INSPECTION & TESTING OF SMOKE CONTROL DEVICES:

1. TESTING OF FIRE/SMOKE DAMPERS AND SMOKE DETECTORS SHALL BE ACCOMPANIED BY THE ELECTRICIAN AND/OR THE CONTROLS SYSTEM SUPPLIER. IF THE BUILDING HAS A FIRE ALARM SYSTEM, A REPRESENTATIVE OF THE MANUFACTURER MUST BE PRESENT DURING THE TESTING.

VENTILATION VERIFICATION

AN AIR BALANCE REPORT SHOWING FRESH AIR COMPLIANCE IS REQUIRED BY THE MECHANICAL INSPECTOR FOR FINAL INSPECTION APPROVAL. VENTILATION SYSTEMS SHALL BE BALANCED BY AN APPROVED METHOD. A BALANCE REPORT SHALL VERIFY THAT THE VENTILATION SYSTEM IS CAPABLE OF SUPPLYING AIRFLOW RATES REQUIRED BY SECTION 403 (2015 IMC SECTION 403.3).

2014 IECC COMPLIANCE NOTES

A. DESIGN HEATING AND COOLING LOADS FOR THE BUILDING HAVE BEEN CALCULATED USING CARRIER HAP USING PROCEDURES RECOMMENDED BY ASHRAE.

B. ALL EQUIPMENT AND SYSTEMS HAVE BEEN SIZED TO BE NO GREATER THAN NEEDED TO MEET CALCULATED LOADS.

C. HUMIDIFICATION SYSTEMS HAVE NOT BEEN PROVIDED ON THIS PROJECT.

D. EACH HEATING OR COOLING SYSTEM ZONE HAS BEEN PROVIDED WITH ITS OWN TEMPERATURE CONTROL DEVICE.

E. THE PROGRAMMABLE THERMOSTATS SHALL BE CAPABLE OF SETTING BACK TEMPERATURE TO 55 DEGREES F DURING HEATING AND SETTING UP TO 85 DEGREES F DURING COOLING, CAPABLE OF AUTOMATICALLY SETTING BACK OR SHUTTING DOWN SYSTEMS DURING UNOCCUPIED HOURS USING 7-DIFFERENT DAY SCHEDULES, HAVE A ACCESSIBLE MANUAL 2-HOUR OVERRIDE THAT ALLOWS TEMPORARY OPERATION OF THE SYSTEM FOR UP TO 2 HOURS, HAVE A BATTERY BACK-UP CAPABLE OF MAINTAINING PROGRAMMED SETTINGS FOR AT LEAST 10 HOURS WITHOUT POWER. A SETBACK OR SHUTOFF CONTROL IS NOT REQUIRED ON THERMOSTATS THAT CONTROL SYSTEMS SERVING AREAS THAT OPERATE CONTINUOUSLY SUCH AS THE ELEVATOR EQUIPMENT ROOM AND ELECTRICAL ROOMS IF APPLICABLE.

F. OUTDOOR-AIR SUPPLY SYSTEMS WITH DESIGN AIRFLOW RATES GREATER THAN 3000 CFM AND ALL EXHAUST SYSTEMS MUST HAVE DAMPERS THAT ARE AUTOMATICALLY CLOSED WHILE EQUIPMENT IS NOT OPERATING IF APPLICABLE.

G. OUTSIDE VENTILATION HAS BEEN DESIGNED PER 2015 IMC.

H. ALL SUPPLY AND RETURN AIR DUCTS MUST BE INSULATED WITH A MINIMUM OF R-6 (2" MINIMUM THICKNESS DUCT WRAP OR 1-1/2" WHEN DUCT IS LINED). ALL DUCTS LOCATED OUTSIDE THE BUILDING MUST BE INSULATED WITH A MINIMUM OF R-8.

I. ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS, AND CONNECTIONS IN DUCTWORK MUST BE SECURELY SEALED USING WELDMENTS, MECHANICAL FASTENERS WITH SEALS, GASKETS, OR MASTICS, MESH AND MASTIC SEALING SYSTEMS, OR TAPES. TAPES AND MASTICS MUST BE LISTED AND LABELED IN ACCORDANCE WITH UL 181A OR UL 181B.

J. MECHANICAL FASTENERS AND SEALS, MASTICS, OR GASKETS MUST BE USED WHEN CONNECTING DUCTS TO FANS AND OTHER AIR DISTRIBUTION EQUIPMENT, INCLUDING MULTIPLE-ZONE TERMINAL UNITS.

K. OPERATOR AND MAINTENANCE DOCUMENTATION MUST BE PROVIDED TO THE OWNER THAT INCLUDES EQUIPMENT INPUT AND OUTPUT CAPACITY AND REQUIRED MAINTENANCE ACTIONS, EQUIPMENT OPERATION AND MAINTENANCE MANUALS, HVAC SYSTEM CONTROL MAINTENANCE AND CALIBRATION INFORMATION, INCLUDING WIRING DIAGRAMS, SCHEMATICS, AND CONTROL SEQUENCE DESCRIPTIONS. DESIRED OR FIELD DETERMINED SET POINTS MUST BE PERMANENTLY RECORDED ON THE CONTROL DRAWINGS, AT CONTROL DEVICES, OR, FOR DIGITAL CONTROL SYSTEMS, IN PROGRAMMING COMMENTS. A COMPLETE NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE.

L. EACH SUPPLY AIR OUTLET OR DIFFUSER MUST HAVE ITS OWN BALANCING DEVICE. ACCEPTABLE BALANCING DEVICES INCLUDE ADJUSTABLE DAMPERS LOCATED WITHIN THE DUCTWORK AND SUPPLY AIR DIFFUSERS.

M. WATER-HEATING EQUIPMENT AND HOT WATER STORAGE TANKS SHALL MEET THE REQUIREMENTS OF TABLE 404.2 OF THE 2014 IECC. THE EFFICIENCY SHALL BE VERIFIED THROUGH DATA FURNISHED BY THE MANUFACTURER OR THROUGH CERTIFICATION UNDER AN APPROVED CERTIFICATION PROGRAM.

N. SERVICE WATER-HEATING EQUIPMENT MUST BE PROVIDED WITH CONTROLS THAT ALLOW THE USER TO SET WATER TEMPERATURE TO 100 DEGREES F FOR DWELLING UNITS AND 90 DEGREES F FOR OTHER OCCUPANCIES. CONTROL MUST LIMIT OUTPUT TEMPERATURES OF LAVATORIES IN PUBLIC FACILITY REST ROOMS TO 110 DEGREES F.

O. WATER-HEATING EQUIPMENT NOT PROVIDED WITH INTEGRAL HEAT TRAPS AND SERVING NON-CIRCULATING SYSTEMS SHALL BE PROVIDED WITH HEAT TRAPS ON THE SUPPLY AND DISCHARGE PIPING ASSOCIATED WITH THE EQUIPMENT.

P. FOR AUTOMATIC-CIRCULATING HOT WATER SYSTEMS, PIPING SHALL BE INSULATED WITH 1" OF INSULATION HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 BTU-IN/(H xFT2xF). THE FIRST 8'-0" OF PIPING IN NON-CIRCULATING WATER HEATING SYSTEMS SERVED BY EQUIPMENT WITHOUT INTEGRAL HEAT TRAPS SHALL BE INSULATED WITH 1/2" PIPE INSULATION OF MATERIAL HAVING CONDUCTIVITY NOT EXCEEDING 0.27 BTU-IN/(H xFT2xF).

CLIENT:

CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.
engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

GCBU 5187
STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #[illegible]
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # [illegible]075
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 35 19075 CK XXXX 5187 M1.2.3. DWG
CHECKED BY:	

DRAWING TITLE:

MECHANICAL-NOTES

SHEET NO:

M1.2.3

ISSUED FOR CONSTRUCTION 10/2/2020

SECTION	MECHANICAL SPECIFICATIONS
15010 BASIC MECHANICAL REQUIREMENTS	1. ALL WORK TO BE DONE AND MATERIALS FURNISHED COMPLYING WITH APPLICABLE LAWS, AND RESOLUTIONS, INCLUDING THE CURRENTLY ENFORCED VERSIONS OF THE INTERNATIONAL MECHANICAL CODE (I.MC.), INTERNATIONAL PLUMBING CODE (I.P.C.), INTERNATIONAL BUILDING CODE (I.B.C), AND LOCAL, STATE, AND FEDERAL FIRE SAFETY CODES (NFPA). 2. ALL MATERIALS USED SHALL BE NEW AND UNDAMAGED. 3. ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH CURRENT CONSTRUCTION INDUSTRY STANDARDS AND WORKMANSHIP. 4. PRIOR TO SUBMITTING A PROPOSAL, THE CONTRACTOR SHALL VISIT THE SITE AND THOROUGHLY INSPECT ALL EXISTING CONDITIONS TO ENSURE THAT THE WORK REPRESENTED ON THE DRAWINGS AND THESE SPECIFICATIONS CAN BE INSTALLED AS INDICATED. 5. AT SUBSTANTIAL COMPLETION OF THE CONSTRUCTION, FURNISH AS–BUILT PLANS TO ARCH/ENGINEER FOR APPROVAL BEFORE THEY ARE TURNED OVER TO OWNER 6. ALL MANUFACTURED EQUIPMENT, ACCESSORIES AND MATERIALS SHALL BE USED AS INTENDED BY THE MANUFACTURER, IN STRICT ACCORDANCE WITH THE MANUFACTURERS WRITTEN INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS. 7. THE MECHANICAL CONTRACTOR SHALL PROVIDE, IN ADDITION TO ANY OTHER WARRANTIES SPECIFIED, A ONE(1) YEAR FULL LABOR AND MATERIAL WARRANTY ON ALL WORKMANSHIP, MATERIAL AND EQUIPMENT FURNISHED FOR THIS PROJECT. THE CONTRACTOR SHALL REPLACE ALL DEFECTIVE WORKMANSHIP, EQUIPMENT, AND MATERIALS WITHOUT ADDITIONAL CHARGES, INCLUDING ALL REFRIGERANT CAUSED TO BE LOST BY REPAIR OF DEFECTIVE WORK OR MATERIALS. 8. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR INSTRUCTING THE OWNER IN PROPER OPERATION AND MAINTENANCE OF THE EQUIPMENT. A WIRING DIAGRAM WITH INSTRUCTIONS FOR THE OPERATION, INSTALLER'S NAME, PHONE NUMBER, MODEL, AND MAKE OF EQUIPMENT PROVIDED, ETC., SHALL BE FURNISHED TO OWNER. AT A TIME DESIGNATED, PROVIDE AN ENGINEER OR MECHANIC TO GO OVER SYSTEM WITH OWNER'S REPRESENTATIVE TO THOROUGHLY FAMILIARIZE HIM WITH THE OPERATION AND MAINTENANCE OF THE SYSTEM. 9. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL OPENINGS AND REQUIRED LINTELS NEEDED FOR GENERAL CONTRACTOR FOR THE INSTALLATION OF MECHANICAL EQUIPMENT. 10. SAWCUTS, LINTELS, HEADERS, AND STRUCTURAL MODIFICATIONS TO THE BUILDING STRUCTURE NEEDED FOR THE INSTALLATION OF MECHANICAL EQUIPMENT SHALL BE APPROVED BY THE GENERAL CONTRACTOR, BEFORE INSTALLATION. 11. IN GENERAL, OPENINGS AND REQUIRED LINTELS SHALL BE PROVIDED BY THE GENERAL CONTRACTOR. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING DETAILS AND TEMPLATES OF ALL OPENINGS NECESSARY FOR MECHANICAL EQUIPMENT INSTALLATION INCLUDING: HOUSING, ACCESS DOORS, INSPECTION DOORS, AND PASSAGE WAYS FOR MECHANICAL EQUIPMENT. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR SEALING CRACKS AND FINISHING ROUGH EDGES LEFT FOLLOWING MECHANICAL INSTALLATION. 12. THE USE OF THE MECHANICAL EQUIPMENT FOR HEATING, COOLING, OR DRYING DURING CONSTRUCTION IS PROHIBITED, UNLESS APPROVED BY WRITTEN DOCUMENTATION BY THE OWNER. 13. ALL OTHER MANUFACTURERS BESIDES THE SPECIFIED PRODUCT MUST BE PRE–APPROVED PRIOR TO BIDDING. SUBMIT DETAILED EQUIPMENT CUT–SHEETS AND CLEARLY IDENTIFY ANY DIFFERENCES FROM THE SPECIFIED PRODUCT. ANY EQUIPMENT SUBMITTED DURING THE REGULAR SUBMITTAL PROCESS THAT WAS NOT PRE–APPROVED WILL BE AUTOMATICALLY BE REJECTED. 14. PERMITS AND INSPECTIONS: MECHANICAL CONTRACTOR IS RESPONSIBLE TO OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND LICENSES. WHEN REQUIRED BY CODE, ALL WORK MUST BE INSPECTED AND APPROVED BY LOCAL AUTHORITIES. PRIOR TO FINAL APPROVAL, FURNISH THE ARCHITECT/OWNER WITH CERTIFICATES OF INSPECTION AND APPROVALS BY LOCAL AUTHORITIES. 15. PRIOR TO SUBMITTING BID, THE MECHANICAL CONTRACTOR SHALL CAREFULLY EXAMINE THE PLANS FOR THE PROPER FITTING OF THE MATERIAL AND APPARATUSES INTO THE BUILDING. ARRANGE WORK SCHEDULE FOR MINIMUM INTERFERENCE WITH THE WORK OF OTHER TRADES. SHOULD THE PARTICULAR EQUIPMENT PROPOSED FOR INSTALLATION REQUIRE OTHER ARCHITECTURAL, STRUCTURAL, PLUMBING, OR ELECTRICAL CONDITIONS THAT THOSE SHOWN, ARRANGE FOR SUCH SPACE BEFORE SUBMITTING BID. ALL CHANGES NECESSITATED BY THE FAILURE TO COMPLY WITH THIS CLAUSE, SHALL BE MADE AT NO ADDED EXPENSE TO THE OWNER. 16. WITHIN 10 DAYS AFTER AWARD OF CONTRACT, SUBMIT (4) COPIES OF A COMPLETE WRITTEN LIST OF ALL MAJOR ITEMS OF EQUIPMENT AND MATERIALS AS WELL AS ADDITIONAL COPIES, THAT THE CONTRACTOR MAY NEED RETURNED. THE SUBMITTAL SHALL DEFINITELY AND CLEARLY STATE WHERE SUBMITTED EQUIPMENT DOES NOT AGREE WITH THE CONTRACT DOCUMENTS, AND LIST DEVIATIONS IN COLOR OTHER THAN RED. SUBMIT ALL ITEMS AT ONE TIME AND IN A NEAT AND ORDERLY MANNER. PARTIAL LISTS WILL NOT BE ACCEPTABLE. SUBMITTALS SHALL INCLUDE MANUFACTURER'S SPECIFICATIONS, PHYSICAL DIMENSIONS AND RATINGS OF ALL EQUIPMENT SUBMITTED. SUBMITTALS SHALL BE INDEXED, SEPARATED BY DIVIDERS, AND BOUND IN LOOSE LEAF RING BINDERS.
15140 SUPPORTS AND ANCHORS	1. FURNISH PIPE AND DUCT HANGERS, WHERE REQUIRED, FIRMLY SUPPORTED FROM BUILDING STEEL, CONCRETE OR MASONRY STRUCTURE. 2. SUPPORT PIPING SYSTEMS SECURELY WHILE ALLOWING FOR PIPE AND BUILDING EXPANSION AND CONTRACTION. PROVIDE COPPER PLATED HANGERS FOR COPPER PIPE. USE ADJUSTABLE STEEL BAND HANGERS. MAXIMUM SPACING SHALL BE 5' FOR 1/2" PIPING, 7' FOR 3/4" TO 1–1/4" PIPING, AND 9' FOR 1–1/2" PIPING. 3. FURNISH MECHANICAL EQUIPMENT SUPPORTS AS DETAILED OR AS REQUIRED TO SAFELY AND PERMANENTLY CARRY THE WEIGHT OF THE EQUIPMENT.
15250 MECHANICAL INSULATION	1. INSULATE ALL METAL SUPPLY AND RETURN DUCTWORK WITH 2" FOIL BACKED FIBERGLASS INSULATION. IN UNHEATED ATTICS OR IN AREAS LOCATED ABOVE THE LINE OF BUILDING INSULATION, INSULATE ALL DUCTWORK, INCLUDING RETURN AIR AND EXHAUST AIR DUCTWORK, WITH 3" FOIL–BACKED INSULATION, AND REQUEST THAT GENERAL CONTRACTOR BLOW ATTIC INSULATION OVER THE TOP OF THE INSULATED DUCTWORK, EXPOSED SPIRAL DUCTWORK, OR DUCTWORK LOCATED WITHIN A HEATED SPACE DOES NOT REQUIRE INSULATION. 2. LINE ALL SUPPLY AND RETURN DUCTWORK WITHIN FIFTEEN (15) FEET OF SUPPLY FAN WITH 1/2" DUCT LINER TO REDUCE SOUND. 3. ALL INSULATION MATERIALS TO HAVE A FLAME SPREAD RATING OF 25 OR LESS AND SMOKE DEVELOPMENT RATING OF 50 OR LESS AS TESTED BY ASTM E–84, UL–723, NFPA 90A–90–B.
15782 ROOF–TOP HEAT PUMP UNITS	1. THE OWNER SHALL FURNISH AND GENERAL CONTRACTOR SHALL INSTALL PACKAGED ROOF–TOP HEAT PUMP UNIT(S) AS SHOWN AND SCHEDULED. THE UNIT(S) SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS, AND SHALL PERFORM AT THE CONDITIONS SCHEDULED. 2. THE MECHANICAL CONTRACTOR SHALL PROVIDE TWO (2) SETS OF FILTERS FOR EACH UNIT AND SHALL BE RESPONSIBLE FOR CHANGING FILTERS WITHIN TWO (2) WEEKS OF START–UP. 3. THE MECHANICAL CONTRACTOR SHALL PROVIDE A SINGLE POWER SOURCE CONNECTION DISCONNECT AND A 15 AMP DUPLEX, WEATHERPROOF CONVENIENCE OUTLET BOX FOR EACH ROOF TOP UNIT INSTALLED.
15783 CONDENSATE AND COOLER DRAINS	1. PIPING SHALL BE TYPE "M" HARD DRAWN COPPER FOR LINES 1" AND SMALLER, "DWV" HARD DRAWN COPPER FOR 1–1/4" AND LARGER. 2. ALL PIPING SHALL CONFORM TO ASTM B88–72. 3. FITTINGS SHALL WROUGHT COPPER, DRAINAGE TYPE FOR LINES 1–1/4" AND LARGER. SOLDER WITH 50/50 SOLDER.

SECTION	MECHANICAL SPECIFICATIONS
15853 POWERED VENTILATORS	1. THE MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL VENTILATOR(S) AND/OR EXHAUST FAN(S) AS SHOWN AND SCHEDULED. THE UNIT(S) SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS, AND SHALL PERFORM AT THE CONDITIONS SCHEDULED. 2. INSTALL VENTILATOR(S) AND/OR EXHAUST FAN(S) WITH CLEARANCES FOR SERVICE AND MAINTENANCE. 3. THE MECHANICAL CONTRACTOR SHALL PROVIDE ONE (1) BACKDRAFT DAMPER FOR EACH VENTILATOR AND/OR EXHAUST FAN, OR SHALL VERIFY A BACKDRAFT DAMPER HAS BEEN FACTORY INSTALLED. 4. THE MECHANICAL CONTRACTOR SHALL ADJUST DAMPER LINKAGES FOR PROPER OPERATION.
15891 METAL DUCTWORK SYSTEMS	1. ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN COMPLIANCE WITH 2015 I.M.C. CHAPTER 6, AND SMACNA HVAC DUCT CONSTRUCTION STANDARDS. ALL DUCTWORK SHALL BE SEALED AND INSULATED IN ACCORDANCE WITH ASHRAE 90.1 2007. 2. ROUND FLEX DUCT SHALL BE USED FOR DIFFUSER–GRILL CONNECTIONS ABOVE LAY–IN CEILINGS. FLEXDUCT MAY BE USED IN OTHER AREAS WHERE THE DUCT AND GRILLE ARE PERMANENTLY AND REASONABLY ACCESSIBLE. MAXIMUM FLEX DUCT LENGTH IS 5'–0" AND THE DUCTWORK SHALL BE PRE–LINED WITH 1" INSULATION. PERFORMANCE OF FLEXIBLE DUCT SHALL MEET OR EXCEED THE RIGID DUCTWORK. 3. FLEXIBLE DUCTWORK ABOVE CEILINGS SHALL BE THERMAFLEX "M–KE" WITH ONE INCH EXTERNAL INSULATION. 4. PAINT ALL DUCTWORK, TURNING VANES, INSULATION ECT., THAT IS VISIBLE THROUGH GRILLES, REGISTERS, OR CEILING DIFFUSERS FLAT BLACK. 5. TAPE ALL JOINTS IN SHEET METAL DUCTWORK WITH ARABOL AND CANVAS OR EQUAL ADHESIVE. 6. FLEXIBLE CONNECTIONS SHALL BE 30 OUNCE, CLOSELY WOVEN, NEOPRENE COATED GLASS FABRIC THAT IS FIRE RETARDENT, WEATHERPROOF AND AIRTIGHT, A MINIMUM OF 6" WIDTH. 7. FABRICATE ALL SHEET METAL DUCTS OF PRIME GRADE, LOCKING FORMING QUALITY GALVANIZED STEEL SHEETS USING GAUGES OF METAL AND REINFORCING BETWEEN JOINTS AS FOLLOWS 7.1. 12" AND SMALLER (LONGEST SIDE)–24 GAUGE 7.2. 13"–18" (LONGEST SIDE) – 24 GAUGE. 7.3. 19"–30" (LONGEST SIDE) – 24 GAUGE, WITH 1"x1"x1/8" ANGLES AT 5 FT. ON CENTER 7.4. 31"–42" (LONGEST SIDE) – 22 GAUGE, WITH 1"x1"x1/8" ANGLES AT 5 FT. ON CENTER 8. DUCT LINER SHALL HAVE A FLAME SPREAD AND SMOKE DEVELOPMENT 25 OR LESS AND 50 OR LESS WHEN TESTED BY ASTM E–84 (NFPA 255) METHOD.
15910 DUCT ACCESSORIES	1. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING VOLUME DAMPERS, TURNING VANES, ACCESS DOORS, VIBRATION ISOLATORS, ETC. 2. THE ACCESSORIES SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS.
15975 TEMPERATURE CONTROLS	1. THE OWNER SHALL FURNISH OR CONTRACT A TEMPERATURE CONTROL CONTRACTOR TO FURNISH ALL MOTORS, DRIVES, CONTROLLERS INTEGRAL TO THE MECHANICAL EQUIPMENT SYSTEM, AND FACTORY MOUNTED CONTROLS FOR ALL MECHANICAL EQUIPMENT. 2. THE MECHANICAL CONTRACTOR OR CONTRACTED TEMPERATURE CONTROL CONTRACTOR SHALL FURNISH AND INSTALL ALL SWITCHES, FIRE STATS, FREEZE STATS, THERMOSTATS, TIMERS, CONTROL CABINETS, AND OTHER SPECIALIZED EQUIPMENT PERTAINING TO MECHANICAL CONTROL. 3. THE ROOF MOUNTED HEAT–PUMP, TAG HP–1, SHALL BE CONTROLLED BY A REMOTE TEMPERATURE SENSOR LOCATED IN THE RETURN AIR DUCT AND AN ELECTRIC THERMOSTAT. 3.1. THE TEMPERATURE CONTROLS SHALL BE ELECTRIC, 7–DAY PROGRAMMABLE, WITH FUNCTION: AUTO, MANUAL, AND FAN ONLY, UNLESS SPECIFICALLY REQUESTED BY THE GENERAL CONTRACTOR AND OWNER, AND SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR OR CONTRACTED TEMPERATURE CONTROL CONTRACTOR. 3.2. PROVIDE A HUMIDITY SENSOR IN THE RETURN AIR CONNECTED TO THE CONTROLLER FOR MONITORING HUMIDITY. 3.3. ALL CONTROL WIRING SHALL BE IN CONDUIT. CONDUIT SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR LOCATION FOR CONDUITS. THE CONTRACTOR RESPONSIBLE TO INSTALL THE CONTROLS SHALL BE RESPONSIBLE TO PULL THE CONTROL WIRE. 3.4. THE ROOF TOP UNIT SHALL UTILIZE TEMPERATURE CONTROL SYSTEM FURNISHED AS PART OF THE UNIT, OR SPECIFIED TO BE PROVIDED AS OPTIONS OR ACCESSORIES BY THE MANUFACTURER BY OF THE UNIT. ALL WIRING WILL BE DONE IN ACCORDANCE WITH APPROVED SHOP DRAWINGS FURNISHED BY THE MANUFACTURER. 4. THE ROOF–MOUNTED HEAT PUMP,HP–2, SHALL BE CONTROLLED BY A REMOTE TEMPERATURE SENSOR LOCATED IN THE RETURN AIR DUCT AND AN ELECTRIC THERMOSTAT. 4.1. THE TEMPERATURE CONTROLS SHALL BE ELECTRIC, 7–DAY PROGRAMMABLE, WITH FUNCTIONS: AUTO, MANUAL, AND FAN ONLY, UNLESS SPECIFICALLY REQUESTED BY THE GENERAL CONTRACTOR AND OWNER, AND SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR OR CONTRACTED TEMPERATURE CONTROL CONTRACTOR. 4.2. THE ROOF TOP UNIT SHALL ALL UTILIZE TEMPERATURE CONTROL SYSTEMS FURNISHED AS PART OF THE UNIT, OR SPECIFIED TO BE PROVIDED AS OPTIONS OR ACCESSORIES BY THE MANUFACTURER BY OF THE UNIT(S). ALL WIRING WILL BE DONE IN ACCORDANCE WITH APPROVED SHOP DRAWINGS FURNISHED BY THE MANUFACTURER. 5. ELECTRICAL WIRING: ALL WIRING AND STARTERS ARE INCLUDED IN THE ELECTRICAL DIVISION OF THIS PROJECT, BUT ALL CONTROLS, RELAYS, ETC., ARE INCLUDED UNDER THIS DIVISION. ROOM THERMOSTATS AND CONTROL SWITCHES SHALL BE LOCATED AS SHOWN OR DIRECTED, AND ALL CONTROLS, RELAYS, STARTERS AND WIRING SHALL CONFORM TO THE CURRENTLY ENFORCED VERSION OF THE NATIONAL ELECTRICAL CODE (NEC). ALL CONTROLS SHALL BE FURNISHED AND PROPERLY IDENTIFIED, WITH INSTRUCTIONS FOR PROPER ELECTRICAL CONNECTIONS. RESPONSIBILITY FOR PROPER CONNECTIONS AND OPERATION IS INCLUDED HEREIN.
15990 TESTING, ADJUSTING, AND BALANCING	1. THE MECHANICAL CONTRACTOR SHALL SUBCONTRACT AN AIR BALANCER TO BALANCE THE SYSTEMS DESCRIBED BELOW. 2. THE BALANCING SHALL BE COMPLETED BY AN INDEPENDENT AIR BALANCER WHO IS NOT AN EMPLOYEE OF THE MECHANICAL CONTRACTOR. 3. THE BALANCING SHALL BE DONE BY A QUALIFIED AIR BALANCER THAT HAS AT LEAST (3) YEARS OF DOCUMENTED AIR BALANCING EXPERIENCE. 4. PER COMPLIANCE WITH ASHRAE 90.1–2007, THE BALANCER SHALL SUBMIT AN AIR BALANCE REPORT TO THE ENGINEER AND CITY INSPECTOR. 5. THE BALANCE REPORT SHALL SHOW PROOF THAT THE SYSTEM HAS BEEN BALANCED TO +/– 10% OF THE DESIGNED AIRFLOW. IT IS THE MECHANICAL CONTRACTOR AND AIR BALANCER'S DUTY TO PROVIDE ACCURATE DATA, SO AREAS OF INCORRECT FLOW MAY BE DISCLOSED TO THE ENGINEER, INSPECTOR, AND OWNER. 6. ALL AIRSIDE SYSTEMS, COMPONENTS, ETC. INCLUDING SUPPLY, RETURN, OUTDOOR, AND EXHAUST AIR SYSTEMS SHALL BE BALANCED. THE BALANCER SHALL PROVIDE SHEAVES AND BELTS AS NEEDED TO PROPERLY BALANCE EQUIPMENT TO +/– 10% OF THE DESIGNED AIRFLOWS. ALL DIFFUSERS, REGISTERS, GRILLES, AND LOUVERS SHALL BE INDIVIDUALLY BALANCED AND LISTED IN THE BALANCE REPORT. ALL AIRSIDE EQUIPMENT, SUPPLY, RETURN, AND OUTDOOR AIR FLOWRATES SHALL BE LISTED IN THE BALANCE REPORT.

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.

engineering • environmental • construction

1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805

Phone: (863) 646-9130

CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19075
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 36 19075 CK XXXX 5187 M1.3. DWG
CHECKED BY:	

DRAWING TITLE:

MECHANICAL-SPECIFICATIONS

SHEET NO:

M1.3

PLUMBING ROOF PLAN
3/16" = 1'-0"

KEYED NOTES

1. 8"Hx24"W ROOF DRAIN SCUPPER. REFER TO SECONDARY SCUPPER CALCULATION FOR SIZING INFO.
2. LEADER BOX WITH 4" LEADER. SEE DETAIL 7/A8.3. REFER TO LEADER BOX CALCULATION FOR SIZING INFO.
3. 3" VTR. MAINTAIN 10'-0" FROM ALL OUTDOOR AIR INTAKES.
4. 2" VTR. MAINTAIN 10'-0" FROM ALL OUTDOOR AIR INTAKES.
5. ¾" CW UP FROM BELOW TO FREEZE PROOF HOSE BIBB SHALL BE PROVIDED WITH HEAT TAPE AND INSULATION
6. 3" GREASE TRAP VENT.
7. 3" GREASE TRAP VENT DOWN IN WALL AND CONNECT TO GREASE TRAP.

PRELIMINARY LEADER BOX CALCULATION

TOTAL ROOF DRAIN AREA = 5187
PARAPET WALL AREA = 1374
TOTAL ROOF AREA PER ROOF DRAIN =(TOTAL ROOF DRAIN AREA)/2 + (PARAPET WALL AREA)/2
= 3280.3

100 YEAR RAIN FALL RATE = 2" PER HOUR
HORIZONTAL STORM DRAIN PIPING SLOPE = 1/4" PER FT.

PER 20XX INTERNATIONAL PLUMBING CODE:
LEADER SIZE = 4"

Secondary Scupper Calculation

Roof Design Area
5228.0 Plan Area
1250.0 1/2 Vertical Wall Area
6478.0 Design Area = Plan Area + 1/2 Vertical Walls

Rainfall Intensity	7.2	Inches per 15 minute rainfall
Design Drainage Area (SF)	6478.0	
Scupper Count	2	
Drainage Area (SF)	3239.0	
Drainage (Gallons)	14536.6	per 15 minutes
Q req'd (gpm)	969.1	

For 8" x 24" Scupper

Q = 3.33(L-0.2H)H^1.5
Head @ 6 Ft from opening => 6Ft @1/4"/ft = 1.5" + 7.2"(rain) = 8.7"
Head on scupper: 8.7"-2"(bottom of scupper from roof)= 6.7"

H (ft)	0.56
L (ft)	2.0
Q (cu.ft/sec)	2.6
Q (gpm)	1177.4

CLIENT:
CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:
MDM SERVICES, INC.
engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:
CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED
MDM JOB # 19-175
DATE: 01-22-2020
DESIGNED BY:
DRAWN BY: PD
CHECKED BY:
FILE NAME: 37 19075 CK XXXX 5187 P1.DWG

DRAWING TITLE:
PLUMBING-ROOF PLAN

SHEET NO:
P1.1

ISSUED FOR CONSTRUCTION 10/2/2020

PLUMBING FLOOR PLAN: WASTE & VENT

3/16" = 1'-0"

FOUNTAIN MACHINE

COLD BEVERAGE STATION

2 HUB DRAIN INSTALLATION

N.T.S.

PLUMBING SYMBOL LIST

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	SOIL WASTE LINE (W)		SHUT OFF VALVE (GATE)
	VENT LINE (V)		CHECK VALVE
	COLD WATER (C.W.)		UNION
	HOT WATER (H.W.)		LUBRICATED PLUG VALVE
	HOT WATER RETURN		HOSE BIBB (H.B.)
G	GAS LINE		BRANCH RISE OFF MAIN
TW	TEMPERED WATER	Ø S.C.O.	SURFACE CLEANOUT
D	DRAIN LINE	Ø F.C.O.	FLOOR CLEANOUT
	BUILDING SEWER		GLOBE VALVE
	FLOOR DRAIN (F.D.)		BALL VALVE
	FLOOR SINK (F.S.)	R.D.L.	ROOF DRAIN LEADER
	ROOF DRAIN (R.D.)	O.D.L.	OVERFLOW DRAIN LEADER
	OVER FLOW DRAIN	CD	CONDENSATE DRAIN LINE
WCO	WALL CLEANOUT	ICW	INDUSTRIAL COLD WATER
	POINT OF CONNECTION		BACKWATER VALVE

NOTE: ONLY THOSE SYMBOLS SHOWN ON THE DRAWING APPLY

PLUMBING ABBREVIATIONS

SYMBOL	DESCRIPTION
SAN	SANITARY WASTE
GW	GREASE WASTE
HW	HOT WATER
CW	COLD WATER
HWR	HOT WATER RETURN

KEYED NOTES ⓧ

1. PROVIDE 3-COMPARTMENT SINK DRAIN LINE WITH FLOW CONTROL DEVICE AND RUN TO FLOOR SINK. PROVIDE 2" INDIRECT WASTE FOR 3 COMPARTMENT SINK.
2. CONTRACTOR TO COORDINATE UNDERGROUND SEWER LINE TO AVOID COLUMN FOOTING.
3. PENETRATION THROUGH RATED WALLS AND FLOORS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES. ALL MATERIALS TO BE APPROVED OR LISTED, IPC 315.1
4. 2" VTR. MAINTAIN 10'-0" FROM ALL OUTDOOR AIR INTAKES.
5. 3" VTR. MAINTAIN 10'-0" FROM ALL OUTDOOR AIR INTAKES.
6. PROVIDE WALL CLEANOUT. REFER TO SHEET P1.2
7. REFER TO DETAIL 2/P1.1.1 FOR TYPICAL HUB DRAIN INSTALLATION.
8. ROUTE COFFEE DRAIN LINES TO HUB DRAIN. ROUTE HUB DRAIN TO NEARBY FLOOR SINK.
9. DRAIN EQUIPMENT INDIRECTLY TO THE NEAREST FLOOR SINK/HUB DRAINS LOCATED UNDER CABINET. TYPICAL FOR ALL BEVERAGE EQUIPMENTS.

KITCHEN EQUIPMENT LIST ⟨XX⟩

- ⟨25⟩ PREP SINK
- ⟨58⟩ BOH HAND SINK
- ⟨59⟩ 3-COMPARTMENT SINK
- ⟨90⟩ WATER HEATER
- ⟨91⟩ MOP SINK
- ⟨96⟩ HAND SINK
- ⟨98⟩ FLOOR SINK
- ⟨100⟩ DISHWASHER (FUTURE)

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.
engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 16-176
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 37.5 19075 CK XXXX 5187 P1.1.1.DWG
CHECKED BY:	

DRAWING TITLE:

PLUMBING FLOOR PLAN: WASTE & VENT

SHEET NO:

P1.1.1

PLUMBING FLOOR PLAN: HOT & COLD WATER
3/16" = 1'-0"

GENERAL NOTES

IF POST MIX IS INSTALLED A STAINLESS R.P.B.A. MUST BE USED OR WILKINS .375X1 WITH NO COPPER INSTALLED DOWNSTREAM OF R.P.B.A.

PLUMBING SYMBOL LIST

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	SOIL WASTE LINE (W)		SHUT OFF VALVE (GATE)
	VENT LINE (V)		CHECK VALVE
	COLD WATER (C.W.)		UNION
	HOT WATER (H.W.)		LUBRICATED PLUG VALVE
	HOT WATER RETURN		HOSE BIBB (H.B.)
G	GAS LINE		BRANCH RISE OFF MAIN
TW	TEMPERED WATER	Ø S.C.O.	SURFACE CLEANOUT
D	DRAIN LINE	Ø F.C.O.	FLOOR CLEANOUT
	BUILDING SEWER		GLOBE VALVE
	FLOOR DRAIN (F.D.)		BALL VALVE
	FLOOR SINK (F.S.)	R.D.L.	ROOF DRAIN LEADER
	ROOF DRAIN (R.D.)	O.D.L.	OVERFLOW DRAIN LEADER
	OVER FLOW DRAIN	CD	CONDENSATE DRAIN LINE
WCO	WALL CLEANOUT	ICW	INDUSTRIAL COLD WATER
	POINT OF CONNECTION		BACKWATER VALVE

NOTE: ONLY THOSE SYMBOLS SHOWN ON THE DRAWING APPLY

PLUMBING ABBREVIATIONS

SYMBOL	DESCRIPTION
SAN	SANITARY WASTE
GW	GREASE WASTE
HW	HOT WATER
CW	COLD WATER
HWR	HOT WATER RETURN

KITCHEN EQUIPMENT LIST (XX)

- (10) WATER DISPENSER
- (16) FOUNTAIN DRINK DISPENSER
- (66) TOP ICE CUBER
- (17) FROZEN BEVERAGE
- (30) 5-HD CAPUCCINO MACHINE
- (35) FROZEN BEVERAGE BLENDER
- (36) ICED TEA BREWER
- (52) WATER FILTER SYSTEM
- (58) BOH HAND SINK
- (59) 3-COMPARTMENT SINK
- (62) SCHAERER COFFEE ART
- (90) WATER HEATER
- (91) MOP SINK
- (96) ELKAY HAND SINK
- (98) FLOOR SINK
- (99) ALTERNATE ICE BAGGER W/ ICE MAKER
- (100) DISHWASHER (FUTURE)
- (105) MULTIPLEX REF
- (115) COUNTERTOP ICE MAKER
- (120) VITAMIN WATER

KEYED NOTES (X)

1. MAIN WATER SUPPLY LINE UP IN WALL TO ABOVE CEILING. COORDINATE EXACT LOCATION.
2. FILTERED WATER ABOVE CEILING.
3. SHUT-OFF (BALL VALVE) ABOVE CEILING. PROVIDE ACCESS (TYPICAL).
4. 1/2" CW DOWN IN WALL AND TURN-OUT TO EXTERIOR SHALL BE PROVIDED WITH HEAT TAPE AND INSULATION. 1/2" CW TO STUB-OUT FOR WATER MACHINE. RUN DRAIN LINE FROM WATER MACHINE THRU WALL TO FLOOR SINK, PROVIDE 2" AIR GAP.
5. 3/4" CW DOWN IN WALL TO HB SHALL BE PROVIDED WITH HEAT TAPE AND INSULATION.
6. 3/4" CW UP THROUGH ROOF TO HB SHALL BE PROVIDED WITH HEAT TAPE AND INSULATION.
7. ROUTE FILTER WATER LINES DOWN WALL AND OVER HORIZONTALLY UNDER CABINET.
8. CO2 LINE TO RUN IN WALL OVERHEAD TO CONNECT TO CARBONATORS..
9. ICE MAKER MUST HAVE D.C.V.A.
10. PENETRATION THROUGH RATED WALLS AND FLOORS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES. ALL MATERIALS TO BE APPROVED AND LISTED, IPC 315.1

CLIENT:

CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.
engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

GCBU 5187
STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB #
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 38 19075 CK XXXX 5187 P1.1.2.DWG
CHECKED BY:	

DRAWING TITLE:
PLUMBING FLOOR PLAN: DOMESTIC WATER

SHEET NO:
P1.1.2

KITCHEN EQUIPMENT LIST

- 10 WATER DISPENSER
- 16 FOUNTAIN DRINK DISPENSER
- 16B TOP ICE CUBER
- 17 FROZEN BEVERAGE
- 30 5-HD CAPUCCINO MACHINE
- 35 FROZEN BEVERAGE BLENDER
- 36 ICED TEA BREWER
- 52 WATER FILTER SYSTEM
- 58 BOH HAND SINK
- 59 3-COMPARTMENT SINK
- 62 SCHAERER COFFEE ART
- 90 WATER HEATER
- 91 MOP SINK
- 96 ELKAY HAND SINK
- 98 FLOOR SINK
- 99 ALTERNATE ICE BAGGER W/ ICE MAKER
- 100 DISHWASHER (FUTURE)
- 105 MULTIPLEX REF
- 115 COUNTERTOP ICE MAKER
- 120 VITAMIN WATER

NOTES:

1. PROVIDE IAPMO APPROVED BACKFLOW PREVENTER IN-LINE TO EACH "NON-CARBONATED" KITCHEN BEVERAGES EQUIPMENT.
2. PROVIDE IAPMO APPROVED REDUCED PRESSURE BACKFLOW PREVENTER TO EACH "CARBONATED" KITCHEN BEVERAGES EQUIPMENT (STAINLESS STEEL)
3. BEVERAGES LINES OF "CARBONATORS" SHALL NOT HAVE ANY COPPER LINES DOWNSTREAM OF REDUCED PRESSURE BACKFLOW PREVENTER.
4. BACKFLOW PREVENTERS SHALL HAVE PROPER DRAINS AND ACCESSIBLE FOR MAINTENANCE.

WASTE & VENT WATER SCHEMATIC

HOT & COLD WATER SCHEMATIC

FIXTURE UNIT CALCS								
ITEM#	FIXTURE	QUANTITY	Sewage (DFU)		HW			
			DFU	Total DFU	CW	HW	COMBINE	TOTAL
WC	Water Closet-ADA	3	4	12	10	0	10	30
UR	Urinal, 1 Gallon Per Flush or Less	1	2	2	10	0	10	10
LAV	Lavatory	4	1	4	1.5	1.5	2	8
96	Hand Sink	2	2	4	2.25	2.25	3	6
SK	3-Comp Sink	1	5	5	3	3	4	4
91	Mop Service Sink	1	2	2	2.25	2.25	3	3
FD	Floor Drain (As per IPC Section 709.4.1)	2	0.5	1	0	0	0	0
FD	Floor Drain - Grease (Based on Trap Size)	1	5	5	0	0	0	0
98	Floor Sink (As per IPC Section 709.4.1)	6	0.5	3	0	0	0	0
51	Dishwasher (Future)	1	2	2	0	1.4	1.4	1.4
HB	Hose Bibb	3	0	0	0	0	0	0
Total		25		40				62.4
AS PER 20XX IPC TABLE E103.3(3)							GPM	55
AS PER 20XX IPC APPENDIX E TOTAL GPM = 55GPM + (THREE HOSE BIBBS X 5 GPM DEMAND) = 55 + (3X5) = 70 GPM								

FIXTURE UNIT CALCS					
ITEM#	FIXTURE	QUANTITY	Sewage (DFU)		
			DFU	Total DFU	ERU
96	Hand Sink - Grease	2	2	4	
SK	3-Comp Sink	1	5	5	
91	Mop Service Sink	1	2	2	
FD -G	Floor Drain - Grease (As per IPC Section 709.4.1)	0	0.5	0	
FD - G	Floor Drain - Grease (Based on Trap Size)	1	5	5	
98 - G	Floor Sink - Grease	1	0.5	0.5	
51	Dishwasher(FUTURE)	1	2	2	
Total		7		18.5	1.71
				GPM	12.85

GREASE TRAP CALCULATION

Flow Rate:
Drainage Fixture Units (DFU) less than or equal to 40: F = (0.8 * DFU)
Drainage Fixture Units (DFU) greater than 40: F = (0.3 * DFU) + 20
F = 0.8*18.5 14.8

Minimum Gravity Grease Interceptor Operating Volume (gallons) V =	Flow Rate (gallons/min) F	Retention Time (min) R	Storage Factor S
555	14.8	30	1.25

GREASE TRAP PROVIDED = 750 GALLON

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.
engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #1[illegible]
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED
MDM JOB # 19-[illegible]
DATE: 01-22-2020
DESIGNED BY:
DRAWN BY: PD
CHECKED BY:
FILE NAME: P1.2 19075 CK XXX 5187 P1.2.DWG

DRAWING TITLE:

PLUMBING-SCHEMATICS

SHEET NO:

P1.2

ISSUED FOR CONSTRUCTION 10/2/2020

GREASE TRAP DETAIL 2

WALL MOUNTED ELECTRIC WATER HEATER 1

EVERPURE WATER FILTER SYSTEM 3

2-WAY CLEANOUT DIAGRAM 4

TRAP PRIMER ASSEMBLY 5

PLUMBING FIXTURE SCHEDULE

TAG	DESCRIPTION	MFG.	MODEL	ROUGH-IN SIZE CW	HW	FW	SAN	QUANTITY OF FIXTURES	TRIM	REMARKS
BP-1	BACKFLOW PREVENTER	WATTS	SS009	–	–	–		7	STAINLESS STEEL CONSTRUCTION	REDUCED PRESSURE ZONE ASSEMBLY, ASSE1022 FOR CARBONATED BEVERAGES.
BP-2	BACKFLOW PREVENTER	WATTS	LF007	–	–	–		14	BRASS CONSTRUCTION	DOUBLE CHECK VALVE ASSEMBLY, ASSE1022
FCO	FLOOR CLEANOUT	J.R. SMITH	4100 SERIES	–	–	–	4"	7	NICKEL BRONZE TOP	TWIST TO FLOOR ADJUSTMENT
GT	RECESSED STEEL GREASE TRAP-750 GALLON	OLD CASTLE	JP750G	–	–	–	4"	–		PROVIDE WITH TRAFFIC RATED COVER
HB	HOSE BIBB	MIFAB	MHY-20	3/4"	–	–	–	4	ENCASED/NON-FREEZE WALL HYDRANT	VANDAL RESISTANT VACUUM BREAKER
WC	FL MTD, ELONGATED WATER CLOSET, FLUSH VALVE	AMERICAN STANDARD	2234.015 2305.100	1"	–	–	4"	5	VALVE, SLOAN REGAL FLUSHOMETER 111, OPEN FRONT SEAT, OLSONITE #10CC	WATER CONSERVATION 1.6 GALLONS PER FLUSH
HUR	WALL HUNG URINAL – ADA	KOHLER	K-5016-ET	3/4"	–	–	2"	1	WATER CONSERVATION 0.5 GALLONS PER FLUSH	WALL BRACKET SUPPORT SET AT ELEV. TO MEET ADA
LAV	COUNTERTOP LAVATORY 110 DEG. HOT WATER MAX	ROYSTON	0476.028	1/2"	1/2"	–	1-1/2"	2	AMERICAN STANDARD #5400.172H. PROVIDE WITH PART #V05	CHROME STOPS 1/4 TURN, SUPPLIES INSUL SUPPLIES & TRAP PER ADA
RP-1	RECIR. PUMP	TACO	003-BC	–	–	–	–	–	BRONZE CONTRUCTION	120V/1-PH, 1/40 HP, PROVIDE AQUASTAT W/TIMER
FD	FLOOR DRAIN WITH TRAP PRIMER	WADE	1002STD6.1	–	–	–	2"	4	SATIN STRAINER	
WH	ELECTRIC WATER HEATER	A.O. SMITH	DRE-80-27	1-1/4"	1-1/4"		–	–	3/4" P & T RELIEF VALVE	80 GAL STORAGE. ELECTRICAL, 27 KW, 208V, 3PH. COPER. WEIGHT: 270 LBS. DIMENSION: 60"Hx26"ø.
10	WATER DISPENSER	GLACIER	621B	1/2"	–	–	1-1/2"	2		
16	FOUNTAIN DRINK DISPENSER	TRU-TEMP	CORNELIUS ED-300	–	–	1/2"	3/4"	3	FILTERED WATER SUPPLY.	
16B	FOLLET ICE MAKER	TRU-TEMP	1400 SERIES	–	–	3/8"	3/4"	3	FILTERED WATER SUPPLY.	
17	FROZEN BEVERAGE	CORNELIUS	VIPER	–	–	1/2"	–	3	FILTERED WATER SUPPLY.	
30	5-HD CAPUCCINO MACHINE	WILBUR CURTIS	PCGT5	–	–	1/4"	–	2	FILTERED WATER SUPPLY.	
35	F'REAL BLENDER	F'REAL	FRLB4	–	–	1/2"	–	1	FILTERED WATER SUPPLY.	
36	ICED TEA BREWER	WILBUR CURTIS	RSTB	–	–	1/2"	–	2	FILTERED WATER SUPPLY.	
52	WATER FILTER	EVERPURE	EV-9437-10	1/2"	–	–	–	1	FILTERED WATER SUPPLY.	
59	3-COMP SINK	EAGLE	312-25-3-12	1/2"	1/2"	–	1-1/2"	1	GC TO SUPPLY AND INSTALL SINK	
62	SCHAERER COFFEE ART	SCHAERER	C TOUCH	–	–	3/8"	3/4"	4		
91	MOP SERVICE SINK	MUSTEE	63M	3/4"	3/4"	–	3"	1	AMERICAN STANDARD #8344.111 WALL MOUNT FAUCET TOP BRACE, VACUUM BREAK, STOPS	
96	HAND SINK	DAYTON	K11515	1/2"	1/2"	–	1-1/2"	2	FAUCET BY G.C.	CHROME STOPS 1/4 TURN SUPPLIES AND P-TRAP
98	FLOOR SINK WITH SQUARE NICKEL BRONZE STRAINER	ZURN	Z1901	–	–	–	3" & 4"	8	1/2 GRATE WITH 12"X12" (6" DEEP) PORCELAIN SEDIMENT BUCKET	
99	ALTERNATE ICE BAGGER W/ ICE MAKER	MANITOWOC	INDIGO SERIES 1800 ICE CUBE MACHINE	–	–	–	3"	1		
100	DISHWASHER (FUTURE)	CHAMPION INDUSTRIES	UH -130B(70)	1/2"	1/2"	–	5/8"	1		
105	MULTIPLEX REF	50M	MULTIPLEX	–	–	1/2"	–	1		
115	COUNTERTOP ICE MAKER	MANITOWOC	RNS12A	–	–	1/2"	–	1		
120	VITAMIN WATER	LANCER	MODEL 500	–	–	3/8"	–	1		

1– PROVIDE MIXING VALVE TO MEET ADA REQUIREMENTS, EQUAL TO WATTS USG-B, MOUNT UNDER LAV.

2– TRAP PRIMER WITH THREADED CONNECTIONS EQUAL TO PRECISION PLUMBING PRODUCTS OREGON #1 PO-500 SINGLE.

3– LAVATORY CARRIER CONCEALED ARMS, EQUAL TO WADE 520.

4– VERIFY VOLTAGE/PHASE WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING.

PLUMBING PROJECT NOTES

A. FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, FEES, PERMITS, CERTIFICATE OF INSPECTION, ETC. NECESSARY OR REASONABLE, REQUIRED FOR THE COMPLETE INSTALLATION OF ALL PLUMBING WORK.

B. WORK SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL CODES, LAWS, ACTS, ORDINANCES, REGULATIONS AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.

C. THE COMPLETED INSTALLATION SHALL BE IN ACCORDANCE WITH ALL THE APPLICABLE INDUSTRY STANDARDS OF GOOD PRACTICE, SAFETY, AND THE MANUFACTURERS STRICTEST RECOMMENDATIONS FOR EQUIPMENT AND PRODUCT APPLICATION AND INSTALLATION.

D. THESE DRAWINGS ARE DIAGRAMMATIC ONLY. CONTRACTOR SHALL MAKE MODIFICATIONS INCLUDING OFFSETS, TURNS, AND RE-ROUTING REQUIRED TO COMPLETE THE INSTALLATION. DO NOT SCALE LOCATION OF EQUIPMENT OR PIPING.

E. COORDINATE ALL PLUMBING WORK, INCLUDING EQUIPMENT AND PIPING, WITH OTHER TRADES PRIOR TO WORK.

F. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING EQUIPMENT SO THAT NO INTERFERENCES ARE ENCOUNTERED WITH OTHER EQUIPMENT OR WITH STRUCTURAL ELEMENTS.

G. ALL PLUMBING WORK IS TO RUN IN A NEAT AND PROFESSIONAL MANNER, WITH THE AESTHETICS OF THE FACILITY OF PARAMOUNT IMPORTANCE. ALL ROUGH-IN WORK TO BE HIDDEN WITHIN WALLS AND ABOVE CEILING UNLESS OTHERWISE NOTED.

H. ALL WORK SHALL BE LOCATED TO AVOID CONFLICTS WITH OTHER TRADES. CLOSELY COORDINATE ALL WORK WITH ALL OTHER TRADES. FAILURE OF THE CONTRACTOR TO COORDINATE WITH ALL OTHER TRADES SHALL RELIEVE THE ARCHITECT/ENGINEER/OWNER FROM ANY ADDED COSTS.

I. THE CONTRACTOR SHALL DO ALL NECESSARY CUTTING OF WALLS AND CEILING. PATCH AROUND ALL OPENINGS TO MATCH EXISTING CONSTRUCTION. NO STRUCTURAL MEMBER SHALL BE CUT WITHOUT PERMISSION FROM THE ENGINEER.

J. THESE DRAWINGS ARE DIAGRAMMATIC ONLY. DO NOT SCALE LOCATIONS OF FIXTURES, EQUIPMENT, LINES, ETC. COORDINATE ALL DOCUMENTS AS TO PROPER LOCATIONS OF ALL EQUIPMENT AND MATERIALS.

K. EXACT LOCATION OF PLUMBING FIXTURES SHALL BE DETERMINED FROM ARCHITECTURAL DRAWINGS.

L. CONTRACTOR SHALL VERIFY INVERT ELEVATIONS OF SEWERS TO WHICH NEW WASTE LINES ARE TO BE CONNECTED BEFORE MAKING UP OR INSTALLATION OF NEW WASTE SYSTEM.

M. NO PIPING OR EQUIPMENT SHALL BE INSTALLED ABOVE ELECTRICAL EQUIPMENT OR INSTALLED IN ELECTRICAL ROOMS.

N. WASTE AND SOIL PIPING SHALL BE SLOPED AT 1/4" PER FOOT UNLESS OTHERWISE NOTED ON PLANS.

O. DO NOT SUSPEND ANY PIPING, ACCESSORIES, OR ANY OTHER ITEMS FROM 2X JOIST IN PANELIZED ROOF SYSTEM OR THE PLYWOOD ROOF DECK ITSELF. ALL SUPPORTS SHALL CONFORM TO TRUSS MANUFACTURERS RECOMMENDATIONS.

P. SUBMIT ACCURATE "AS-BUILT" DRAWINGS TO OWNER UPON PROJECT COMPLETION.

Q. PROVIDE A READY-TO-USE SYSTEM WITH ALL WORK GUARANTEED IN WRITING AGAINST DEFECTIVE WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR MINIMUM FROM OWNER OCCUPANCY UNLESS ARCHITECT SPECIFIES A LONGER WARRANTY TERM.

R. FINISHED SURFACES ARE TO BE PATCHED AND FINISHED TO MATCH EXISTING SURFACES WHEN ROUGH-IN PIPING AND FIXTURES ARE REMOVED AND/OR RELOCATED.

S. AVOID COLUMN AND WALL FOOTING FOUNDATION.

PLUMBING SPECIFICATIONS

SECTION	PLUMBING SPECIFICATIONS
15010 BASIC MECHANICAL REQUIREMENTS	1. ALL WORK TO BE DONE AND MATERIALS FURNISHED COMPLYING WITH APPLICABLE LAWS AND REGULATIONS, INCLUDING THE STATE OF ALABAMA MECHANICAL, PLUMBING AND FIRE SAFETY CODES. OBTAIN AND PAY FOR REQUIRED PERMITS AND FEES. 2. ALL MATERIALS USED SHALL BE NEW AND UNDAMAGED. 3. ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH CURRENT CONSTRUCTION INDUSTRY STANDARDS AND WORKMANSHIP. 4. FURNISH SHOP DRAWINGS TO ARCH/ENGINEER FOR APPROVAL PRIOR TO PLACING DELIVERY ORDERS. PROVIDE SHOP DRAWINGS OF ALL MANUFACTURED EQUIPMENT AND MATERIALS EXCEPT PIPE, PIPE FITTINGS AND GALVANIZED DUCTWORK. 5. FURNISH ACCESS DOORS (RATED OR NON-RATED AS REQUIRED) WHERE VALVES OR EQUIPMENT ARE CONCEALED BEHIND A NON ACCESSIBLE CEILING OR WALL. FURNISH ACCESS DOORS TO GENERAL CONTRACTOR FOR INSTALLATION. 6. FURNISH STEEL PIPE SLEEVES WHERE PIPES PENETRATE RATED WALLS. PROVIDE FIRESTOPPING MATERIALS AND SYSTEM TO MAINTAIN THE REQUIRED RATING OF THE WALL PENETRATED. PROVIDE SHOP DRAWINGS SHOWING LISTING AND RATING OF FIRESTOPPING MATERIALS. 7. ALL MANUFACTURED EQUIPMENT, ACCESSORIES AND MATERIALS SHALL BE USED AS INTENDED BY THE MANUFACTURER IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS. 8. CONTRACTOR SHALL PROVIDE IN ADDITION TO ANY OTHER WARRANTIES SPECIFIED, A ONE YEAR FULL LABOR AND MATERIAL WARRANTY ON ALL WORKMANSHIP, MATERIAL AND EQUIPMENT FURNISHED FOR THIS PROJECT. 9. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL OPENINGS AND REQUIRED LINTELS NEEDED FOR THE GENERAL CONTRACTOR FOR THE INSTALLATION OF MECHANICAL EQUIPMENT. 10. SAWCUTS, LINTELS, HEADERS, AND STRUCTURAL MODIFICATIONS TO THE BUILDING STRUCTURE NEEDED FOR THE INSTALLATION OF MECHANICAL EQUIPMENT SHALL BE APPROVED BY THE GENERAL CONTRACTOR, BEFORE INSTALLATION. 11. IN GENERAL, OPENINGS AND REQUIRED LINTELS SHALL BE PROVIDED BY THE GENERAL CONTRACTOR. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR PROVIDING DETAILS AND TEMPLATES OF ALL OPENINGS NECESSARY FOR MECHANICAL EQUIPMENT INSTALLATION INCLUDING: HOUSING, ACCESS DOORS, INSPECTION DOORS, AND PASSAGEWAYS FOR MECHANICAL EQUIPMENT. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR SEALING CRACKS AND FINISHING ROUGH EDGES LEFT FOLLOWING MECHANICAL INSTALLATION. 12. APPROVAL EQUALS: PLUMBING ITEMS MANUFACTURED BY A COMPANY OTHER THAN THAT WHICH WAS SPECIFIED IN THE SCHEDULE MAY BE SUBSTITUDED BY APPROVED SHOP DRAWINGS CONTIGENT UPON MEETING THE DESIGN, APPEARANCE, AND FUNCTIONAL STANDARDS ESTABLISHED BY THE ORIGINALLY SPECIFIED ITEM(S). THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING DIMENSIONS, CLEARANCES, ASSEMBLY, FIT, ETC. OF THE APPROVED EQUAL(S), AND THEIR AFFECT ON OTHER EQUIPMENT FIT AND OPERATION. THE CONTRACTOR IS LIABLE FOR ANY ADDED COSTS TO HIMSELF OR OTHERS CAUSED BY THE APPROVED EQUALS.

PLUMBING SPECIFICATIONS

SECTION	PLUMBING SPECIFICATIONS
15100 VALVES	1. BALL VALVES SHALL BE CLASS 125 FOR WATER WITH ENDS AND MATERIALS TO MATCH PIPING SYSTEMS. 2. BALL VALVES 2" AND SMALLER SHALL HAVE BRONZE BODY, STAINLESS STEEL BALL, TEFLON SEATS, AND STUFFING BOX RING, LEVER HANDLE AND BALANCING STOPS, ENDS TO MATCH PIPING SYSTEM.
15140 SUPPORTS & ANCHORS	1. FURNISH PIPE AND DUCT HANGERS, WHERE REQUIRED, FIRMLY SUPPORTED FORM BUILDING STEEL, CONCRETE OR MASONRY STRUCTURE. SUPPORT PIPING SYSTEMES SECURELY WHILE ALLOWING FOR PIPE AND BUILDING EXPANSION AND CONTRACTION. PROVIDE COPPER PLATED HANGERS, FOR COPPER PIPE. USE ADJUSTABLE CLEVIS HANGERS OR ADJUSTABLE STEEL BAND HANGERS. MAXIMUM SPACING SHALL BE 5' FOR 1/2" PIPING, 7' FOR 3/4" TO 1/4" PIPING, 9' FOR 1-1/2" TO 2" PIPING. FURNISH PLUMBING EQUIPMENT SUPPORTS AS DETAILED OR AS REQUIRED TO SAFELY AND PERMANENTLY CARRY THE WEIGHT OF THE EQUIPMENT.
15250 PLUMBING INSULATION	1. INSULATE ABOVE FLOOR WATER PIPING WITH ELASTOMERIC PLACTIC PERFORMED PIPE INSULATION WITHOUT JACKETING. ALL INSULATING MATERIALS TO HAVE FLAME SPREAD RATING OF 25 OR LESS AND SMOKE DEVELOPMENT RATING OF 50 OR LESS AS TESTED BY ANSI/ASTM E 84 (NFPA 233) METHOD. INSULATE ALL PIPING WITH SURFACE TEMPERATURES BELOW 75 DEGREE F WITH 1/2" INSULATION. INSULATE ALL PIPING WITH SURFACE TEMPERATURES 75 DEGREES F AND HIGHER WITH 1" THICK INSULATION. INSTALL MINIMUM 1" INSULATION ON ALL HOT WATER PIPING AND THE FIRST 8' OF COLD WATER PIPING AT THE TANK. JOINTS IN INSULATION SHALL BE GLUED, NOT TAPED. WHERE PIPES ARE EXPOSED AND LESS THAN 8' ABOVE FLOOR, PROVIDE HEAVY DUTY METAL JACKETING OVER INSULATION. INSULATE ABOVE FLOOR HORIZONTAL STORM PIPING WITH 1" FIBERGLASS PERFORMED PIPE INSULATION WITH FACTORY APPLIED ALL PURPOSE COVER.
15411 WATER DISTRIBUTION SYSTEM	1. ABOVE GRADE, WATER PIPING SHALL BE TYPE L COPPER ASTM B 75, ASTM B 88, ASTM 251, ASTM B 447 WITH WROUGHT COPPER SOLDER-JOINT FITTINGS ASME B 16. UPSTREAM OF THE CARBONATION DEVICE. DOWNSTREAM OF THE CARBONATION DEVICE FOOD GRADE PEX-AL-PEX ASTM F1281; ASTM F2262; CSA B137.10 TUBING IS TO BE INSTALLED 2. BELOW GRADE: WATER PIPING SHALL BE TYPE K COPPER WITH WROUGHT COPPER SOLDER-JOINT FITTINGS. SOLDER SHALL BE 9596-396 TIN-ANTIMONY ANSI/ASTM B 32 FOR HEATING SYSTEM PIPING. THOROUGHLY FLUSH AND CLEAN ALL NEW AND EXISTING WATER PIPING SYSTEMS. TEST ALL PIPING SYSTEMS PER REGULATIONS IN ITEM NO.1 OR AT 225 PSI FOR A MINIMUM OF 2 HOURS WITH NO PRESSURE DROP INDICATED PRIOR TO INSTALLATING. 3. STERILIZE ALL DOMESTIC WATER PIPING PRE REQUIREMENTS OF LOCAL HEALTH DEPARTMENT.
15420 DRAINAGE & VENT SYSTEMS	1. WITHIN BUILDING, SCHEDULE 40 PVC, DWV TYPE PIPE AND SOLVENT WELDED PIPE FITTINGS, SCHEDULE 30 PVC PIPE MAY BE USED FOR VENT PIPING WHERE PERMITTED BY CODE. HORIZONTAL PIPE SHALL BE SUPPORTED BY ADJUSTABLE RING HANGERS EQUAL TO ITT-GRINNEL FIG. 97. VERTICAL PIPING SHALL BE SUPPORTED AT EACH FLOOR OR ATTIC LEVEL BY RISER.
15440 PLUMBING FIXTURES	1. PROVIDE AIR CHAMBERS AT EACH FIXTURE CONNECTION. AIR CHAMBERS SHALL BE ONE SIZE LARGER THAN SUPPLY PIPE AND SHALL BE 12" LONG. WHERE REQUIRED BY PLUMBING CODE, FURNISH AND INSTALL MANUFACTURED WATER HAMMER ARRESTORS. 2. PLUMBING FIXTURES SHALL BE INSTALLED WHERE SHOWN ON THE ARCHITECTURAL DRAWINGS. INSTALL FIXTURES LEVEL AND PLUMB. FURNISH TRAPS WHERE REQUIRED. FIXTURES SHALL BE EASILY REMOVABLE FOR SERVICE AND CLEANING. 3. PROVIDE CHROME PLATED RIGID OR FLEXIBLE SUPPLIES TO FIXTURES WITH STOP VALVES, CHROME PLATED 17 GAUGE BRASS TRAPS WITH CHROME PLATED ESCUTCHEONS. 4. SEAL ALL FIXTURES TO WALL AND FLOOR USING SILICONE SEALANT. MATCH SEALANT COLOR TO FIXTURE COLOR. 5. FIXTURES DESIGNATED BARRIER FREE SHALL BE INSTALLED IN COMPLIANCE WITH AMERICAN'S WITH DISABILITIES ACT. 6. ALL CLEANOUT COVERS TO BE STAINLESS STEEL.

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.
engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #1375
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 1075
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 40 19075 CK XXXX 5187 P1.3.DWG
CHECKED BY:	

DRAWING TITLE:

PLUMBING-SPECIFICATIONS

SHEET NO:

P1.3

LIGHTING FIXTURE SCHEDULE

ALL LIGHTING FIXTURES ARE SUPPLIED BY CIRCLE K, INSTALLED BY THE ELECTRICAL CONTRACTOR.

TYPE	MANUFACTURER CATALOG NO.	LAMP QTY. & TYPE	FIXTURE WATTAGE	VOLTS	DESCRIPTION	REMARKS
A	CREE RLA-ZR24-40L-40K-10V	LED	41.9	120	2 x 4 LED TROFFER	
B	CREE RLA-ZR24-40L-40K-10V-EB14	LED	41.9	120	2 x 4 LED TROFFER W/BATTERY BACK-UP	
C	CREE RLA-KR6-20L-40K-120V-10V+KR6T-SSGC-FF	LED	30	120	LED INTERIOR DOWN LIGHT	
D	CREE RLA-LRP38-10L-30K-25D-W/TL LAMP HOLDER	LED	12.8	120	LED TRACK LIGHT	
E	CREE RLA-WS4-63L-57K-10-FD	LED	64	120	LED SURFACE MOUNT LIGHT FIXTURE RATED FOR WET LOCATIONS	BEER CAVE, WALK-IN COOLER & FREEZER
F	CREE LS4-40L-40K	LED	64	120	LED SURFACE MOUNT LIGHT FIXTURE	REST ROOMS
G	CREE LS4-40L-40K-EB14	LED	50	120	LED SURFACE MOUNT LIGHT FIXTURE W/BATTERY BACK-UP	REST ROOMS
H	CREE RLA-KR4-13L-40K-120V-10V+KR4T-SSGC-FF	LED	18	120	LED INTERIOR DOWN LIGHT	DOWN LIGHTS FOR SIMPLY COFFEE
J	CREE XPSW-B-WM-3ME-4L-57K-UL-BZ	LED	31	120	LED WALL PACK RATED FOR WET LOCATIONS	
K	FRONTIER #J-N1WH	LED	-	120/277	WHITE EMERGENCY LIGHT UNIT WITH BATTERY BACK-UP	
L	FRONTIER TP-U-R-W-EM	LED	-	120/277	WHITE EXIT SIGN WITH BATTERY BACK-UP	
M	FRONTIER #J-NXWCRGY	LED	-	120/277	GRAY EMERGENCY LIGHT/EXIT COMBO WITH BATTERY BACK-UP RATED FOR DAMP LOCATIONS	BEER CAVE
O	DUAL-LITE LED EMERGENCY BRONZE LIGHT FIXTURE #PGX	LED	-	120	BRONZE EMERGENCY LIGHT WITH BATTERY BACK-UP RATED FOR DAMP LOCATIONS	ON EXTERIOR OF BUILDING OVER EACH EXTERIOR DOOR
P	CREE 228-PS-RM	LED	34	120	LED EXTERIOR SOFFIT LIGHT RATED FOR DAMP LOCATIONS	
Q	CREE XPSW-B-WM-4ME-8L-57K-UL-BZ	LED	71	120	LED WALL PACK RATED FOR WET LOCATIONS	

NOTE:
1. GC TO SUPPLY AND INSTALL 1/2" O.D. PIPE AS REQUIRED FOR INSTALLATION OF TRACK LIGHTING FIXTURES. MOUNTING POLES TO BE PAINTED BLACK. TRACK TO BE SUPPLIED BY CIRCLE K. TWO FOR EACH TRACK.
2. ALL LIGHT FIXTURES SHALL BE PROVIDED WITH AN INTEGRAL BALLAST DISCONNECTING DEVICE PER NEC 410.130(G) AND BATTERY BACK-UP MUST BE 90 MINUTES.

REFERENCES & ABBREVIATIONS

A	LIGHTING FIXTURE DESIGNATION	(ER)	EXISTING TO BE REMOVED
E1	DETAIL REFERENCE	FLA	FULL LOAD AMPS
1	KEYNOTE REFERENCE	G	GROUND
123	KITCHEN EQUIPMENT DESIGNATION	GFCI/GFI	GROUND FAULT CIRCUIT INTERRUPTER
A	AMPS	MCB	MAIN CIRCUIT BREAKER
AC	ABOVE COUNTER	MLO	MAIN LUGS ONLY
AFF	ABOVE FINISH FLOOR	NL	NIGHT LIGHT
C	CONDUIT	OC	ON CENTER
CO	CONDUIT ONLY W/PULL ROPE	TMB	TELEPHONE MOUNTING BOARD
CU	COPPER	UON	UNLESS OTHERWISE NOTED
(E)	EXISTING TO REMAIN	V	VOLTS
EM	EMERGENCY	VL	VERIFY LOCATION
		WP	WEATHER PROOF

OWNER SUPPLIED ITEMS

1. "CPI" SWITCHGEAR (MAIN/MTS, SECTION #1, #2 & #3.)
2. "CPI" PANEL CW WITH LIGHTING CONTROLS
3. "CPI" LOW VOLTAGE DISP. EQUIPMENT DISC. PANEL(S)
4. "CPI" CASHIER CONTROL BOX
5. "CPI" 500 VA UPS FOR CPI CONTROL POWER
6. EXTERIOR E-STOP BUTTONS
7. INTERIOR LIGHT FIXTURES AND LAMPS
8. EXTERIOR LIGHT FIXTURES, LAMPS & LIGHT POLES
9. HAND DRYERS
10. VEEDER-ROOT EQUIPMENT
11. INTERCOM EQUIPMENT
12. GAS EQUIPMENT
13. PAGING SYSTEM-INSTALLED BY SUPPLIER
14. AMBIANCE MUSIC SYSTEM-INSTALLED BY SUPPLIER
15. ENERGY MANAGEMENT SYSTEM (EMS) PANELS & DEVICES

ELECTRICAL SYMBOLS LIST

VIDEO OUTLET WITH "F" TYPE CONNECTOR MOUNTED AT +18" A.F.F.. PROVIDE 3/4" CONDUIT STUBBED TO ACCESSIBLE CEILING SPACE ABOVE.

VIDEO OUTLET MOUNTED FLUSH IN FLOOR. PROVIDE 3/4" C.O. TO NEAREST WALL AND STUB INTO ACCESSIBLE CEILING SPACE.

AV — AUDIO VIDEO FLOOR BOX WIRE-MOLD - FS 880 OMNI-BOX ; RS RFB2 (OR EQUAL)

C — CAMERA OUTLET.

HOMERUN TO DESTINATION AS INDICATED. REFER TO CONDUIT SYMBOL ABOVE.

INDICATES CONDUIT DROP WITHIN BUILDING WALL. REFER TO CONDUIT SYMBOL ABOVE.

INDICATES CONDUIT RISER WITHIN BUILDING WALL. REFER TO CONDUIT SYMBOL ABOVE.

FLEXIBLE CONDUIT CONNECTION FROM JUNCTION BOX.

SURFACE MOUNTED FLUORESCENT STRIP LIGHTING FIXTURE. "EM" AND/OR SHADED CONNECTION POINT INDICATES FIXTURE WITH EMERGENCY BATTERY PACK (MINIMUM 1100 LUMEN OUTPUT). "NL" INDICATES FIXTURE ON NIGHT LIGHT CIRCUIT.

$ — STANDARD 20A, 120/277V-1ø SPST TOGGLE SWITCH MOUNTED AT +48" A.F.F.-U.O.N.

a,b — DENOTES TWO SWITCHES AND THEIR RESPECTIVE CONTROL IDENTIFICATION.

3 — DENOTES 3-WAY SWITCH

D — DENOTES - 120V. - 1ø (AS NOTED) SLIDING TYPE DIMMER SWITCH. - LUTRON "NOVA-T" SERIES OR APPROVED EQUAL, PROVIDE SEPARATE NEUTRAL FOR EACH DIMMER AND DIMMER RACK CIRCUIT.

$T — 20A, 120V, 60 MINUTE TIMER SWITCH, INTERMATIC #FD460M, MOUNTED AT +48" A.F.F.-U.O.N.

$OS — 20A, 120V, WALL MOUNTED OCCUPANCY SENSOR, SQ-D #SLSPWS1277UW

20A, 120V, CEILING MOUNTED OCCUPANCY SENSOR, SQ-D #SLSCPS1000 PLUS POWER PACK #SLSPP1277

$L — LOCKABLE 20A, 120/277V-1ø SPST TOGGLE SWITCH

NOTE: ALL RECEPTACLE COVERS TO BE STAINLESS STEEL

ELECTRICAL SYMBOLS LIST

STANDARD 20A, 120V-1ø GROUNDING TYPE SIMPLEX RECEPTACLE MOUNTED AT +18" A.F.F. - U.O.N.

STANDARD 20A, 120V-1ø GROUNDING TYPE DUPLEX RECEPTACLE MOUNTED AT +18" A.F.F. - U.O.N.

STANDARD 20A, 120V-1ø GROUNDING TYPE DUPLEX RECEPTACLE HALF SWITCHED MOUNTED AT +18" A.F.F. - U.O.N.

STANDARD 20A, 120V-1ø GROUNDING TYPE FOUR-PLEX RECEPTACLE MOUNTED AT +18" A.F.F. - U.O.N.

STANDARD 20A, 120V-1ø GROUNDING TYPE "GROUND FAULT INTERRUPTER" (G.F.I.) RECEPTACLE MOUNTED AT +18" A.F.F. - U.O.N.

STANDARD 20A, 120V-1ø ISOLATED GROUND TYPE DUPLEX RECEPTACLE, ORANGE IN COLOR, MOUNTED AT +18" A.F.F. - U.O.N.

STANDARD 20A, 120V-1ø GROUNDING TYPE DUPLEX RECEPTACLE MOUNTED WITHIN FLUSH FLOOR OUTLET BOX W/STAINLESS STEEL COVER.

STANDARD 20A, 120V-1ø GROUNDING TYPE FOUR-PLEX RECEPTACLE MOUNTED WITHIN FLUSH FLOOR OUTLET BOX W/STAINLESS STEEL COVER.

SPECIAL RECEPTACLE MOUNTED AT +18" A.F.F. - U.O.N.. AMPS - VOLTS & PHASE AS INDICATED ON PLANS. VERIFY NEMA CONFIGURATION WITH INSTALLED EQUIPMENT SUPPLIER PRIOR TO PLACING ORDER.

STANDARD 20A, 120V-1ø ISOLATED GROUND TYPE FOUR-PLEX RECEPTACLE, ORANGE IN COLOR, MOUNTED AT +18" A.F.F. - U.O.N.

HOSPITAL GRADE 20A, 120V-1ø GROUNDING TYPE DUPLEX RECEPTACLE, RED IN COLOR, ON EMERGENCY CIRCUIT MOUNTED AT +18" A.F.F. - U.O.N.

SWITCHED OR DIMMED (AS NOTED) SIMPLEX 120V RECEPTACLE MOUNTED AT +18" A.F.F. - U.O.N.

STANDARD 15A, 120V-1ø SIMPLEX CLOCK RECEPTACLE.

J (8) — POWER CONNECTION TO ELECTRIFIED PARTITION (AS PROVIDED BY OTHERS). PROVIDE 1" FLEXIBLE CONDUIT CONNECTION PER MANUFACTURER'S REQUIREMENTS. THE CONTRACTOR SHALL VERIFY EXACT LOCATION AND CONNECTION REQUIREMENTS WITH INSTALLED EQUIPMENT MANUFACTURER PRIOR TO ANY ROUGH-IN. NUMBER IN PARENTHESIS DENOTES NUMBER OF 20A-120V DUPLEX RECEPTACLES IN FURNITURE SYSTEM TO BE CONNECTED TO CIRCUITS AS SHOWN. PROVIDE A MINUMUM 16' HARNESS.

J (8) — FLOOR BOX FOR CONNECTION TO ELECTRIFIED PARTITION (AS PROVIDED BY OTHERS). PROVIDE 1" FLEXIBLE CONDUIT CONNECTION PER MANUFACTURER'S REQUIREMENTS. THE CONTRACTOR SHALL VERIFY EXACT LOCATION AND CONNECTION REQUIREMENTS WITH INSTALLED EQUIPMENT MANUFACTURER PRIOR TO ANY ROUGH-IN. NUMBER IN PARENTHESIS DENOTES NUMBER OF 20A-120V DUPLEX RECEPTACLES IN FURNITURE SYSTEM TO BE CONNECTED TO CIRCUITS AS SHOWN. PROVIDE A MINUMUM 16' HARNESS. FLOOR BOX DEVICE: WIRE-MOLD - RFB2-S38PPTCXX (OR EQUAL).

(8) — POKE-THRU DEVICE FOR CONNECTION TO ELECTRIFIED PARTITION (AS PROVIDED BY OTHERS). PROVIDE 1" FLEXIBLE CONDUIT CONNECTION PER MANUFACTURER'S REQUIREMENTS. THE CONTRACTOR SHALL VERIFY EXACT LOCATION AND CONNECTION REQUIREMENTS WITH INSTALLED EQUIPMENT MANUFACTURER PRIOR TO ANY ROUGH-IN. NUMBER IN PARENTHESIS DENOTES NUMBER OF 20A-120V DUPLEX RECEPTACLES IN FURNITURE SYSTEM TO BE CONNECTED TO CIRCUITS AS SHOWN. PROVIDE A MINUMUM 16' HARNESS. POKE-THRU DEVICE: WIRE-MOLD - 4FFATC (POWER AND DATA-3/4", 1/4") - RC9AM2 (DATA ONLY - 2") OR EQUAL.

POKE-THRU DEVICE WIRE-MOLD - RC4 OR RC3 (OR EQUAL). POWER AND DATA DEVICE.

J — JUNCTION BOX. SIZED BY THE CONTRACTOR PER ACTUAL NUMBER OF CONDUITS AND/OR CONDUCTORS PASSING THRU.

J — FLOOR MOUNTED JUNCTION BOX. SIZED BY THE CONTRACTOR PER ACTUAL NUMBER OF CONDUITS AND/OR CONDUCTORS PASSING THRU.

SRV — COMBINATION FLOOR BOX WIRE-MOLD - FS 880 OMNIBOX ; RS RFB2 OR RF34 (OR EQUAL)

SHOW WINDOW RECEPT. MOUNTED FLUSH ON CEILING. -U.O.N.

STANDARD 20A, 120V-1ø GROUNDING TYPE DUPLEX RECEPTACLE CEILING MOUNTED.

F — FUSED DISCONNECT SWITCH. AMPS, POLES AND FUSE SIZE AS INDICATED.
OPEN - INDICATES NON-FUSED
W.P. - INDICATES NEMA 3R ENCLOSURE

MAGNETIC MOTOR STARTER. POLES AND NEMA SIZE AS INDICATED. PROVIDE COMPLETE WITH THERMAL OVERLOAD PROTECTION PER MOTOR NAMEPLATE DATA, 120V CONTROL COIL - U.O.N., AND H.O.A. (HAND-OFF-AUTO) SWITCH.

W.P. - INDICATES NEMA 3R ENCLOSURE

COMBINATION DISCONNECT SWITCH/MAGNETIC MOTOR STARTER. AMPS, POLES, FUSE SIZE, AND NEMA SIZE AS INDICATED. PROVIDE COMPLETE WITH THERMAL OVERLOAD PROTECTION PER MOTOR NAMEPLATE DATA, 120V CONTROL COIL - U.O.N., AND H.O.A. (HAND-OFF-AUTO) SWITCH.

W.P. - INDICATES NEMA 3R ENCLOSURE

$M — MANUAL MOTOR STARTER SWITCH. HORSEPOWER RATED-120V - 1ø -U.O.N. PROVIDE COMPLETE WITH THERMAL OVERLOAD PROTECTION.

MOTOR OUTLET. H.P. OR F.L.A. - VOLTS & PHASE AS INDICATED. VERIFY ELECTRICAL CHARACTERISTICS AND CONNECTION REQUIREMENTS WITH INSTALLED EQUIPMENT MFG. PRIOR TO ANY ROUGH-IN WORK.

SERVICE ENTRANCE OR DISTRIBUTION EQUIPMENT AS SPECIFIED.

BRANCH CIRCUIT PANELBOARD. FLUSH OR SURFACE MTD. AS INDICATED.

T — TRANSFORMER AS SPECIFIED.

TELEPHONE PLYWOOD BACKBOARD.

T — THERMOSTAT FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR. PROVIDE J-BOX AT +48" A.F.F. - U.O.N. PROVIDE 1/2" C.O. TO ASSOCIATED HVAC UNIT OR ACCESSIBLE CEILING SPACE.

V — VOLUME CONTROL MOUNTED AT +48" AFF. PROVIDE SINGLE GANG BACK BOX WITH 3/4" RISER TO ACCESSIBLE CEILING SPACE ABOVE OR AS OTHERWISE INDICATED.

TELEPHONE OUTLET MOUNTED AT +18" A.F.F. WITH (2) RJ45 PORTS - U.O.N.. PROVIDE 3/4" C.O. TO POINT ABOVE ACCESSIBLE CEILING SPACE OR AS OTHERWISE INDICATED. W - DENOTES WALL MOUNTED @ +48" A.F.F. U.O.N.

DATA OUTLET MOUNTED AT +18" A.F.F. WITH (2) RJ45 PORTS - U.O.N.. PROVIDE 3/4" C.O. TO POINT ABOVE ACCESSIBLE CEILING SPACE OR AS OTHERWISE INDICATED. W - DENOTES WALL MOUNTED @ +48" A.F.F. U.O.N.

COMBINATION TELE/DATA OUTLET MOUNTED AT +18" A.F.F. WITH (4) RJ45 - U.O.N.. PROVIDE (2) 3/4" C.O. TO POINT ABOVE ACCESSIBLE CEILING SPACE OR AS OTHERWISE INDICATED. W - DENOTES WALL MOUNTED @ +48" A.F.F. U.O.N.

DATA OUTLET MOUNTED FLUSH IN FLOOR. PROVIDE 3/4" C.O. TO NEAREST WALL AND STUB INTO ACCESSIBLE CEILING SPACE.

COMBINATION TELE/DATA OUTLET MOUNTED FLUSH IN FLOOR. PROVIDE 3/4" C.O. TO NEAREST WALL AND STUB INTO ACCESSIBLE CEILING SPACE.

COMBINATION TELE/DATA OUTLET MOUNTED FLUSH IN CEILING. PROVIDE 3/4" C.O. TO NEAREST WALL AND STUB INTO ACCESSIBLE CEILING SPACE.

INDICATES PHONE/DATA CONNECTION POINT TO ELECTRIFIED PARTITION. MULTI- PAIR CABLE CONNECTION TO BE EXPOSED BETWEEN FACE OF J-BOX AND GROMMET AT FURNITURE SYSTEM. THE CONTRACTOR SHALL VERIFY EXACT LOCATION AND CONNECTION REQUIREMENTS WITH INSTALLED EQUIPMENT MANUFACTURER PRIOR TO ROUGH-IN. PROVIDE (1) 2" C.O. TO POINT ABOVE ACCESSIBLE CEILING SPACE - VERIFY WITH PRE-WIRE INSTALLER PRIOR TO ANY ROUGH-IN WORK.

INDICATES FLOOR MOUNTED PHONE/DATA CONNECTION POINT TO ELECTRIFIED PARTITION. MULTI- PAIR CABLE CONNECTION TO BE EXPOSED BETWEEN FACE OF J-BOX AND GROMMET AT FURNITURE SYSTEM. THE CONTRACTOR SHALL VERIFY EXACT LOCATION AND CONNECTION REQUIREMENTS WITH INSTALLED EQUIPMENT MANUFACTURER PRIOR TO ROUGH-IN. PROVIDE (1) 2" C.O. TO POINT ABOVE ACCESSIBLE CEILING SPACE - VERIFY WITH PRE-WIRE INSTALLER PRIOR TO ANY ROUGH-IN WORK.

CLIENT:

CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.
engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

GCBU 5187
STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19-176
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME:
CHECKED BY:	

DRAWING TITLE:

ELECTRICAL LEGENDS

SHEET NO:

E0.0

ISSUED FOR CONSTRUCTION 10/2/2020

1. SECTION 16010 - BASIC ELECTRICAL REQUIREMENTS

A. THE WORK OF EACH OF THE ELECTRICAL SECTIONS INCLUDES FURNISHING AND INSTALLING THE MATERIAL, EQUIPMENT, AND SYSTEMS COMPLETE AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS. THE ELECTRICAL INSTALLATIONS, WHEN FINISHED, SHALL BE COMPLETE AND COORDINATED, READY FOR SATISFACTORY SERVICE.

THE WORK UNDER THIS CONTRACT SHALL BE DONE IN STRICT ACCORDANCE WITH ALL APPLICABLE MUNICIPAL, STATE AND OTHER LOCAL CODES, THE 2014 EDITION OF THE NATIONAL ELECTRICAL CODE AND THE 2010 ADA STANDARDS .

B. THE CONTRACTOR SHALL MAKE APPLICATION AND PAY FOR ALL PERMITS, LICENSES AND INSPECTIONS AS REQUIRED UNDER THE ABOVE CODES.

C. THE GENERAL ARRANGEMENT OF CONDUIT, WIRING AND EQUIPMENT SHALL BE AS IDENTIFIED ON THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE SITE, STRUCTURAL, AND FINISH CONDITIONS AFFECTING HIS WORK AND SHALL ARRANGE SUCH WORK ACCORDINGLY, PROVIDING SUCH FITTINGS AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS.

D. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND SERVICES NECESSARY FOR AND REASONABLY INCIDENTAL TO THE COMPLETE INSTALLATION OF THE ELECTRICAL WORK AND RELATED SYSTEMS AS INDICATED ON THE DRAWINGS OR AS NECESSARY TO PROVIDE A COMPLETE SYSTEM.

E. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY WIRING, LIGHTING AND CONSTRUCTION POWER FOR ALL TRADES AS REQUIRED TO COMPLETE THE PROJECT.

F. ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED AND COMPLETED IN A FIRST CLASS WORKMANLIKE MANNER. ALL MATERIALS SHALL BE NEW AND THE BEST OF THEIR RESPECTIVE KINDS. ALL EQUIPMENT AND SYSTEMS SHALL BE APPROVED BY UL OR SIMILAR NATIONALLY ACCEPTED TESTING AGENCY SUCH AS ETL TESTING LABORATORIES.

G. THE CONTRACTOR SHALL VISIT THE SITE AND OBSERVE THE CONDITIONS UNDER WHICH THE WORK SHALL BE COMPLETED. NO ALLOWANCE WILL BE MADE SUBSEQUENTLY IN THIS CONTRACT FOR ANY ERROR OR NEGLIGENCE IN THE CONTRACTOR'S PART.

H. THE CONTRACTOR SHALL SUBMIT DETAILED DIMENSIONED SHOP DRAWINGS, TOGETHER WITH WIRING DIAGRAMS, SPECIFICATIONS, OPERATING DATA, AND/OR CATALOG CUTS FOR ALL EQUIPMENT.

I. A THOROUGH TEST SHALL BE MADE PRIOR TO ENERGIZING THE SYSTEM TO DEMONSTRATE THAT THE SYSTEM IS ENTIRELY FREE FROM GROUND FAULTS, SHORT CIRCUITS, AND OPEN CIRCUITS; THAT THE RESISTANCE TO GROUND ALL NON-GROUNDED CIRCUITS, BEFORE AND AFTER CONNECTION OF EQUIPMENT MEETS THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND IEEE STANDARDS/RECOMMENDATIONS.

J. IDENTIFY ALL MOTOR STARTERS, SWITCHES, CONTROLS, PANELBOARDS, SWITCHBOARDS, TERMINAL BOARDS, CONTROL CENTERS AND OTHER EQUIPMENT. IDENTIFICATION PLATES SHALL BE LAMINATED PLASTIC, BLACK AND WHITE ENGRAVED LETTERS. LETTERING FOR CONTROL CENTERS, CONTROL PANELS, METERING AND INSTRUMENT PANELS SHALL BE 3/8" HIGH.

K. THE MATERIAL AND WORKMANSHIP OF ALL PARTS OF THE ELECTRICAL INSTALLATION SPECIFIED HEREIN SHALL BE GUARANTEED UNCONDITIONALLY FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE.

L. UPON COMPLETION OF THE ELECTRICAL INSTALLATION, THE CONTRACTOR SHALL DELIVER TO THE OWNER ONE (1) SET OF PRINTS OF ELECTRICAL CONTRACT DRAWINGS WHICH SHALL BE LEGIBLY MARKED IN RED PENCIL TO SHOW ALL ADDITIONS, CHANGES AND DEPARTURES OF THE INSTALLATION AS COMPARED WITH THE ORIGINAL DESIGN. THEY SHALL BE SUITABLE FOR USE IN PREPARATION OF RECORD DRAWINGS.

M. THE CONTRACTOR SHALL PREPARE THREE (3) COPIES OF A RECORD AND INFORMATION MANUAL. THE MANUAL SHALL BE BOUND IN A THREE-RING LOOSE-LEAF BINDER. PROVIDE THE FOLLOWING DATE IN THE BOOKLET:
1) CUTS OF ALL EQUIPMENT WITH TECHNICAL SPECIFICATIONS.
2) OPERATION AND MAINTENANCE PROCEDURES.
3) SERVICING INSTRUCTIONS.
4) COPIES OF PANELBOARD DIRECTORIES.
5) COPIES OF WARRANTIES.
6) LIST OF LAMPS SHOWING QUANTITY, TYPE, WATTAGE, MANUFACTURER, CATALOG NUMBER, ETC., FOR EACH FIXTURE TYPE.
7) COPIES OF TEST REPORTS.

O. EXACT LOCATIONS OF OUTLETS SHALL BE COORDINATED WITH DOOR SWINGS AND VARIOUS PROTRUSIONS. MOUNTING HEIGHTS OF THE VARIOUS ELECTRICAL DEVICES SHALL BE AS FOLLOWS:

SWITCHES	46" AFF TO CENTER OF BOX
RECEPTACLES	20" AFF TO CENTER OF BOX
TELEPHONE OUTLETS	20" AFF TO CENTER OF BOX
EXIT LIGHTS	CENTERED BETWEEN CEILING AND TOP OF DOOR (UP TO 1'-0" ABOVE DOOR), SURFACE OR CEILING MOUNTED AS SHOWN.
DISCONNECTING SWITCHES	52" AFF TO CENTER OF SWITCH

P. PROVIDE A DISCONNECT SWITCH FOR EACH MOTOR AS SHOWN ON THE DRAWINGS SIZED AS REQUIRED TO MEET THE NEC AND PROVIDE ALL WIRING CONNECTIONS FROM SOURCE. PROVIDE REQUIRED VOLTAGE.

Q. SEAL ALL CONDUIT PENETRATIONS THRU RATED WALLS AND FLOORS TO MAINTAIN FIRE INTEGRITY. REFER TO ARCHITECTURAL DRAWING FOR FIRE WALL LOCATIONS.

R. ELECTRICAL CONTRACTOR SHALL VERIFY ALL VOLTAGES OF MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.

2. SECTION 16050 - BASIC ELECTRICAL MATERIALS AND METHODS

A. INSTALL ALL WIRING CONDUIT EXCEPT AS OTHERWISE INDICATED. MINIMUM CONDUIT SIZE SHALL BE 3/4". ALL CONDUIT EMBEDDED IN CONCRETE SHALL BE 3/4" MINIMUM. INSTALL ALL CONDUIT CONCEALED UNLESS ON UNFINISHED WALLS, ON UNFURRED CEILINGS OR MECHANICAL EQUIPMENT SPACES. PROVIDE CONDUIT AS FOLLOWS:

1) RIGID STEEL CONDUIT FOR WORK EXPOSED TO WEATHER OR EMBEDDED IN CONCRETE OR MASONRY.

2) GALVANIZED ELECTRICAL METALLIC TUBING (EMT) FOR INTERIOR EXPOSED WORK, CONCEALED WORK ABOVE SUSPENDED CEILINGS, AND WITHIN INTERIOR PARTITIONS OR NON-MASONRY WALLS.

3) FLEXIBLE METAL CONDUIT IN SHORT LENGTHS (6' MAXIMUM) FOR THE CONNECTION OF RECESSED LIGHTING FIXTURES AND MOTORS.

4) LIQUID TIGHT FLEXIBLE METAL CONDUIT WHEREVER MOISTURE MAY BE PRESENT AND MOTORS IN MECHANICAL EQUIPMENT SPACES.

5) POLYVINYLCHLORIDE (PVC) SCHEDULE 40 AND 80 CONDUIT WITH GROUND CONDUCTOR FOR UNDERGROUND OUTSIDE OF BUILDING (SITE) INSTALLATION AS PERMITED BY 2008 NEC ARTICLE 352 .

B. INSTALL CONDUITS PARALLEL AND PERPENDICULAR TO WALLS AND INTERIOR SURFACES. CLEAN AND PLUG AND PROVIDE A PULL LINE IN EACH CONDUIT LEFT EMPTY. USE MANUFACTURED ELBOWS AND SCREW JOINTED CONDUIT FITTINGS. USED CAPPED BUSHINGS OR "PUSH PENNY" PLUGS. ALL FITTINGS SHALL BE STEEL OR MALLEABLE IRON. ALL EMT FITTINGS SHALL BE COMPRESSION TYPE.

C. ALL OUTLET, SWITCH AND JUNCTION BOXES, SHALL BE SHERARDIZED OR GALVANIZED STAMPED STEEL BY STEEL CITY, RACO, APPLETON, VALEN, OR EQUIVALENT. OUTLET BOXES IN CONCRETE CONSTRUCTION SHALL BE OCTAGONAL. NO "THRU-WALL" BOXES SHALL BE USED IN PARTITIONS. ALL BOXES SHALL BE FURNISHED WITH APPROPRIATE COVERS.

D. JUNCTION AND PULL BOXES SHALL BE FURNISHED AND INSTALLED AS INDICATED OR WHERE REQUIRED TO FACILITATE PULLING OF WIRES OR CABLES. BOXES FOR EXTERIOR WORK SHALL BE CAST ALUMINUM OR GALVANIZED CAST IRON TYPE WITH THREADED HUBS, UNLESS OTHERWISE DIRECTED. GASKETED COVER PLATES SHALL BE FURNISHED FOR OUTDOOR INSTALLATIONS.

E. BUILDING WIRE, UNLESS OTHERWISE INDICATED, SHALL BE COPPER, 600 VOLT, TYPE THWN/THHN INSULATION, #12 AWG MINIMUM, FOR INTERIOR AND EXTERIOR USED. TYPE MC (METAL CLAD) CABLE MAY BE USED IN THE SUSPENDED CEILING ONLY FOR LIGHTING CIRCUITS. NO ROMEX OR AC (BX) CABLE WILL BE ALLOWED ON THE PROJECT.

F. MINIMUM WIRE SIZE SHALL BE NUMBER TWELVE (12) AWG. NO SPLICES SHALL BE MADE EXCEPT WITHIN OUTLET OR JUNCTION BOXES. WIRES NUMBER EIGHT (8) AWG AND LARGER SHALL BE STRANDED. WIRES AND CABLES SHALL BE MANUFACTURED BY PIRELLI, ROYAL, TRIANGLE OR EQUIVALENT.

G. THE COLOR CODING SYSTEM LISTED BELOW SHALL BE USED THROUGHOUT THE BUILDING:

SYSTEM	PHASE A	PHASE B	PHASE C	NEUTRAL	GROUND	ISOLATED GROUND
120/208V	BLACK	RED	BLUE	WHITE	GREEN	GREEN/YELLOW
277/480V	BROWN	ORANGE	YELLOW	GRAY	GREEN	GREEN/YELLOW

H. THE WIRE SIZE INDICATED IN THE HOMERUN SHALL BE USED THROUGH THE CIRCUIT.

I. PROVIDE DISCONNECT SWITCHES WHERE INDICATED AND AS REQUIRED. SWITCHES SHALL BE OF SIZE, NUMBER OF POLES AND FUSED OR NONFUSED, AS REQUIRED FOR JOB CONDITIONS AND THE NATIONAL ELECTRICAL CODE. ALL SAFETY SWITCHES SHALL BE NEMA I ENCLOSURE "HD" WITH INTERLOCKING COVER AND HANDLE, MANUFACTURED BY SQUARE "D" OR APPROVED EQUAL. PROVIDE NEMA 3R ENCLOSURES WHERE REQUIRED.

J. PROVIDE STARTERS AND CONTROL WIRING AS INDICATED ON THE DRAWINGS, OR SPECIFIED HEREIN. ALL TEMPERATURE CONTROL WIRING AND COMPONENTS SHALL BE UNDER DIVISION 15.

K. PROVIDE THERMAL MANUAL MOTOR STARTING SWITCHES FOR FRACTIONAL HORSEPOWER, SINGLE PHASE MOTORS. THE STARTERS SHALL BE SQUARE D COMPANY, CLASS 2510, ALLEN BRADLEY BULLETIN 600, OR APPROVED EQUAL FOR SINGLE SPEED MOTORS. ENCLOSURES SHALL BE NEMA I FOR INTERIOR USE AND NEMA 3R FOR EXTERIOR USE.

L. THREE PHASE MOTOR STARTERS SHALL BE 3 POLE, FULL-VOLTAGE, MAGNETIC TYPE. ENCLOSURES SHALL BE NEMA I FOR INTERIOR USE AND NEMA 3R FOR EXTERIOR USE. PROVIDE HOA SWITCH WHEN AUTOMATICALLY CONTROLLED, PILOT INDICATING LIGHT, CONTROL TRANSFORMER, AND NO/NC AUXILIARY CONTACTS. STARTERS SHALL BE SQUARE D COMPANY, CLASS 8536 AND CLASS 8538 COMBINATION TYPE OR APPROVED EQUAL.

M. WIRING DEVICES SHALL BE ARROW HART, GENERAL ELECTRIC, P & S LEVITON OR HUBBELL:

1) WALL SWITCHES: ARROW HART 1991. THREE AND FOUR-WAY SWITCHES SHALL BE OF THE SAME MANUFACTURER AND GRADE.

2) RECEPTACLES: ARROW HART 5362 FOR 20 AMPERES. GFCI SHALL BE #GFCS20 RATED 20 AMPERE, 120 VOLT. PROVIDE TAMPER RESISTANT AND MOISTURE RESISTANT TYPE WHERE REQUIRED BY 2008 NEC.

3) DIMMERS: 600/1000/1500/2000 WATTS AS REQUIRED BY JOB CONDITIONS. LUTRON 'NOVA' SERIES OR EQUAL.

4) DEVICE PLATES: ARROW HART SWITCH PLATES SI-S6 SERIES. ARROW HART RECEPTACLE PLATES S8. ARROW HART TELEPHONE BLANK PLATES S14.

N. MOUNT WEATHERPROOF DEVICES IN CAST METAL BOXES WITH GASKETED, SPRING-HINGED LID-TYPE LOCKING COVERS HAVING CORROSION-RESISTANT FINISH.

O. THE ENTIRE ELECTRICAL SYSTEM SHALL BE SOLIDLY GROUNDED INCLUDING MAIN SERVICE EQUIPMENT, DISCONNECT SWITCHES, WIRING TROUGHS AND PULL BOXES, CONDUIT SYSTEM, OUTLET BOXES, MOTORS, ELECTRIC HEATING EQUIPMENT, LIGHTING FIXTURES, TRANSFORMERS, EMERGENCY SYSTEMS, UPS SYSTEMS, AND FIRE ALARM SYSTEMS.

P. PROVIDE EQUIPMENT GROUNDING CONDUCTORS IN ALL BRANCH CIRCUITS AND FEEDERS SIZED IN ACCORDANCE WITH THE NEC TABLE 250.112.

Q. ALL BRANCH CIRCUITS SHALL BE RUN CONCEALED IN EXISTING AND NEW WALLS. CUT AND PATCH EXISTING WALLS AND SURFACES AS REQUIRED.

R. ALL D.C. WIRING SHALL BE #10 AWG MINIMUM.

S. GROUND, PHASE AND NEUTRAL CONDUCTORS SHALL BE PIG-TAILED IN OUTLET BOXES OR MULTI-OUTLET ASSEMBLY FOR RECEPTACLES SO THAT GROUND AND ELECTRICAL SERVICE WILL NOT BE DISTURBED TO OTHER RECEPTACLES ON THE SAME MULTI-WIRE CIRCUIT IF RECEPTACLE IS REMOVED.

3. SECTION 16400 - SERVICE AND DISTRIBUTION

A. COORDINATE ALL SERVICE ENTRANCE WORK WITH THE ELECTRIC UTILITY.

B. DISTRIBUTE POWER AT 120/208V, 3 PHASE, 4 WIRE, FOR FLUORESCENT LIGHTING, AIR CONDITIONING, ELECTRIC HEATING, MOTOR CIRCUITS, AND 120/208V FOR RECEPTACLES, INCANDESCENT LIGHTS AND SMALL MOTORS.

C. PANELBOARDS SHALL BE 120/208 VOLTS, THREE PHASE EMPLOYING BREAKERS MINIMUM 10,000 SYMMETRICAL A.I.C. AT 120 VOLTS. FURNISH PANELBOARDS AS INDICATED ON DRAWINGS E6.0 AND E7.0.

D. PANELBOARDS SHALL BE FACTORY ASSEMBLED WITH BOLT-ON TYPE CIRCUIT BREAKERS. BUSS SHALL BE ALUMINUM. PROVIDE 50% GROUND BUS BAR. PANELS CONNECTED TO K-RATED TRANSFORMERS SHALL HAVE 200% RATED NEUTRAL BUS BARS.

E. PROVIDE THREE (3) 3/4 INCH SPARE CONDUITS FROM EACH RECESSED PANEL TO THE CEILING SPACE.

F. FUSES FOR SERVICE ENTRANCE EQUIPMENT SHALL BE U.L. LISTED CLASS L, J, OR RKI. FUSES FOR FEEDER CIRCUITS AND PANELBOARDS SHALL BE U.L. CLASS RKI FAST-ACTING TYPE. FUSES FOR MOTOR OVERCURRENT, MOTOR CONTROLLER, AND TRANSFORMER PROTECTION SHALL BE DUAL-ELEMENT, U.L. CLASS RKI TIME-DELAY TYPE.

G. PROVIDE ENERGY EFFICIENT, NEMA TP-1, SELF-COOLED, DRY TYPE TRANSFORMERS OF KVA, PHASE, "K" AND VOLTAGE RATINGS AS INDICATED. TRANSFORMERS 15 KVA AND LESS SHALL HAVE A CLASS F INSULATION, 115 DEGREES C RISE. TRANSFORMERS ABOVE 15 KVA SHALL HAVE CLASS H INSULATION, 115 DEGREE C RISE. PROVIDE FOUR 2-1/2 TAPS BELOW TWO 2-1/2 TAPS ABOVE RATED PRIMARY VOLTAGE. TRANSFORMERS OF 150 KVA AND LESS SHALL BE RATED 45 DB, LARGER TRANSFORMERS SHALL BE RATED 55 DB. NEUTRALS AND NEUTRAL CONNECTIONS OF ALL "K" RATED DRY TYPE TRANSFORMERS SHALL BE 200% OF THE PHASE CONDUCTOR SIZE. TRANSFORMER SHALL BE HEVI-DUTY ELECTRIC COMPANY, GENERAL ELECTRIC, SORGEL, ACME OR HOWARD INDUSTRIES.

4. SECTION 16500 - LIGHTING

A. PROVIDE A COMPLETE LIGHTING FIXTURE AT EACH LOCATION INDICATED ON THE DRAWINGS. FIXTURES SHALL BE SPECIFIED ON THE LIGHTING FIXTURE SCHEDULE ON THE DRAWINGS.

B. EACH FIXTURE SHALL BE COMPLETELY EQUIPPED WITH LAMPS OF THE SIZE, TYPE, WATTAGE AND SHAPE INDICATED AND SPECIFIED. ALL LAMPS SHALL BE MANUFACTURED BY THE GENERAL ELECTRIC CO., PHILIPS LIGHTING CO., VENTURE LIGHTING INTERNATIONAL OR SYLVANIA/OSRAM CORPORATION. LUMEN OUTPUT AND LIFE OF LAMPS SHALL BE EQUIVALENT TO THE GENERAL ELECTRIC LAMP OF THAT TYPE AND WATTAGE. EXACT VOLTAGE SHALL BE CHECKED BEFORE ORDERING LAMPS.

C. FLUORESCENT LAMPS SHALL BE GENERAL ELECTRIC RAPID START ENERGY SAVER 32 WATT F32T8/SP41/RS/2850 INITIAL LUMENS UNLESS OTHERWISE SPECIFIED. ALL INCANDESCENT LAMPS SHALL BE INSIDE FROSTED, 125-130 VOLT, UNLESS OTHERWISE SPECIFIED.

D. FLUORESCENT FIXTURES SHALL GENERALLY HAVE TWO, THREE, AND/OR FOUR LAMP BALLASTS. BALLASTS SHALL BE ELECTRONIC SOLID STATE TYPE CBM AND UL CERTIFIED, HIGH POWER FACTOR (>90%) TYPE WITH SOUND RATING "A", DISCRETE TYPE AND PROVIDE PARALLEL OPERATION. BALLAST THD SHALL NOT EXCEED 20%. BALLASTS SHALL CARRY A ONE YEAR WARRANTY WHICH INCLUDES BOTH PRODUCT REPLACEMENT AND INSTALLATION COST. BALLASTS SHALL BE MAGNETEK TRIAD OR APPROVED EQUAL OF ADVANCE, VALMONT, OR GE/MOTOROLA.

E. ALL PLASTIC DIFFUSERS SHALL BE 100 PERCENT VIRGIN ACRYLIC (NOMINAL .125 INCH THICK) AND ALL LEXAN DIFFUSERS SHALL BE LEXAN TYPE MR-4000, OR EQUAL.

F. 8-FOOT TANDEM UNITS MAY BE USED IN LIEU OF 4 FOOT UNITS IN CONTINUOUS ROWS.

G. THE CONTRACTOR SHALL CONSULT THE CEILING CONTRACTOR AND ARCHITECT'S DRAWINGS FOR APPROVED REFLECTED CEILING PLANS BEFORE ORDERING FIXTURES TO INSURE THAT ALL ARE COMPATIBLE WITH THE CEILING SYSTEM AND PROPERLY LOCATED. VERIFY THAT ADEQUATE CLEARANCE FOR INSTALLATION, MAINTENANCE, AND HEAT DISSIPATION IS AVAILABLE.

H. PROVIDE A MINIMUM OF TWO (2) GALVANIZED STEEL #12 GAUGE HANGER WIRES (ALTERNATE CORNERS) ON ALL RECESSED FIXTURES.

I. CONTRACTOR SHALL PROVIDE ADDITIONAL EXIT LIGHTS AND EMERGENCY BATTERY PACK WITH DUAL HEADS AS NEEDED TO MEET FIRE MARSHAL'S WALK-THROUGH AND ACCEPTANCE.

J. CONNECT EXIT LIGHTS, EMERGENCY BATTERY UNITS AND NIGHT LIGHTS (NL) TO UNSWITCHED PORTION OF LIGHTING CIRCUIT SERVING RESPECTIVE AREA.

5. SECTION 16700 - COMMUNICATION SYSTEMS

A. TELEPHONE SERVICE SHALL BE INSTALLED BY THE TELEPHONE COMPANY.

B. PROVIDE WALL OUTLETS IN 4" SQUARE 2-1/8" DEEP BOX WITH RAISED SINGLE GANG COVERS EQUIPPED WITH BLANK STAINLESS STEEL DEVICE PLATES. EXTEND 3/4" EMPTY CONDUIT FROM EACH OUTLET TO THE CEILING SPACE AND TERMINATE WITH INSULATED BUSHINGS. PROVIDE NYLON PULL WIRE IN ALL CONDUITS LEFT EMPTY.

CLIENT:

CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:

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engineering • environmental • construction
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NO.	DATE	REVISION DESCRIPTION

GCBU 5187
STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #1[illegible]
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # [illegible]
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME:
CHECKED BY:	

DRAWING TITLE:

ELECTRICAL SPECIFICATIONS

SHEET NO:

E0.1

ISSUED FOR CONSTRUCTION 10/2/2020

TYPICAL MPD DISPENSER LAYOUT
NTS

EXTERIOR EMERGENCY FUEL SHUT-OFF
NTS

SITE ELECTRICAL NOTES

1. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE, LOCAL ORDINANCES AND REGULATIONS AND STATE LAWS.
2. ELECTRICAL EQUIPMENT & WIRING LOCATED IN HAZARDOUS (CLASS I, DIV. 1&2) AREAS OF FUEL PUMPS AND ISLAND DISPENSERS SHALL COMPLY WITH THE PROVISIONS OF N.E.C. ARTICLE 501 & 514.
3. HOMERUN CONDUITS TO DISPENSERS, TANKS AND CANOPY TO BE RIGID METAL CONDUIT (RMC) AND SCHEDULE 40 PVC AS PER NEC ARTICLE 514.8, EXCEPTION NO. 2. INTERMEDIATE METAL CONDUIT (IMC) IS NOT ACCEPTABLE. THESE CONDUITS TO BURIED 24" MIN. BELOW FINISH GRADE AT BOTH ENDS WHERE SEAL-OFFS ARE INSTALLED.
4. PRIOR TO CONSTRUCTION, CONTRACTOR TO COORDINATE WITH POWER COMPANY FOR PROPOSED TRANSFORMER LOCATION, METERING REQUIREMENTS & SCHEDULING.
5. CONTRACTOR TO INSTALL TELEPHONE UTILITY CONDUIT TO UTILITY POLE. PRIOR TO CONSTRUCTION, CONTRACTOR COORDINATE WITH TELEPHONE COMPANY FOR EXACT LOCATION OF TELEPHONE SERVICE ORIGIN AND SCHEDULING.
6. TELEPHONE SERVICE CONDUIT TO BE ROUTED ONLY IN NON-HAZARDOUS AREAS AND TO BE BURIED 24" MIN. BELOW FINISH GRADE.
7. LOW VOLTAGE CABLES TO DISPENSERS & TANKS TO BE GAS AND OIL RESISTANT.
8. INSTALL AN EQUIPMENT GROUND CONDUCTOR IN ALL BRANCH CIRCUIT CONDUITS.
9. ALL CONDUITS RUN UNDER DRIVEWAYS AND PARKING AREAS TO BE BURIED 24" MIN. BELOW FINISH GRADE.
10. CONDUITS ON TOP OF CANOPY DECK TO BE EMT WITH COMPRESSION CONNECTORS.
11. CANOPY LIGHT FIXTURES TO BE INSTALLED BY CANOPY MANUFACTURE AND WIRED BY CONTRACTOR.
12. CONTRACTOR TO COORDINATE WITH SIGN CONTRACTOR FOR EXACT LOCATION OF CANOPY SIGNS.
13. CONTRACTOR TO PROVIDE DISCONNECTS FOR SIGNS PER NEC 600.6.
14. POLE LIGHTS SUPPLIED BY OWNER AND INSTALLED BY CONTRACTOR.
15. CONTRACTOR TO SUPPLY AND INSTALL LIGHT POLE BASES. SEE SHEET PH-1 FOR DETAIL.

SITE ELECTRICAL CONDUIT / WIRE SCHEDULE

EACH ITEM TO HAVE A DEDICATED HOMERUN CONDUIT. DO NOT COMBINE CONDUITS.

ITEM	QTY.	CONDUIT SIZE	CONDUIT TYPE	WIRE / CABLE	NOTES
CANOPY LIGHTS	1	1"	RMC/PVC	(7) #10 (6-H, 1-G)	POWER FROM LIGHTING CONTACTORS TO CANOPY
CANOPY SIGNS	1	1"	RMC/PVC	(5) #8 (3-H, 1-N, 1-G)	POWER FROM LIGHTING CONTACTORS TO CANOPY
LIT CANOPY FASCIA	3	1"	RMC/PVC	(5) #8 (3-H, 1-N, 1-G)	POWER FROM LIGHTING CONTACTORS TO CANOPY
CANOPY FUTURE DVR	2	1"	RMC/PVC	PULL STRING	CONDUIT FROM FRAME RELAY GUTTER TO CANOPY FOR FUTURE DVR
POLE LIGHTS	3	1"	PVC	(3) #10 (2-H, 1-G)	POWER FROM LIGHTING CONTROLS
ID & PRICE SIGN	1	1"	PVC	(5) #6 (2-H, 2-N, 1-G)	ID POWER FROM LIGHTING CONTROLS, PRICE SIGN POWER TO BE ON 24HRS
PRICE SIGN DATA	1	1"	PVC	CAT-5 BELDEN #7928A (O.E.)	CABLE FROM FRAME RELAY GUTTER TO PRICE SIGN FOR DATA, PROVIDE 30' LOOP AT GUTTER
AIR/VACUUM	1	1"	RMC/PVC	(5) #8 (2-H, 2-N, 1-G)	POWER FROM PANEL "A"
FUTURE AIR/VACUUM	1	1"	PVC	PULL STRING	CONDUIT FROM PANEL "A". INSTALL PULL BOX AT GRADE LEVEL.
HEAT TAPE	1	3/4"	PVC	(3) #10 (1-H, 1-N, 1-G)	FEED FROM PANEL "A"
DISPENSER POWER/DATA	8	1"	RMC/PVC	(5) #12 (PWR & SPARES) (3) #14 (SWITCH LEGS) (1) #18 TW-PAIR (DATA) (1) #18 TW-PAIR (CRIND) (1) #18 TW-PAIR (SPARES)	HOMERUN FROM DISP. FOR PWR, CONTROLS & DATA. DATA WIRES TO BE CONTINUOUS FROM DISP. TO DATA BOX WITH NO SPLICES.
DISPENSER INTERCOM	8	3/4"	RMC/PVC	INTERCOM-HOUSTON WIRE #150850 (O.E.) (2) PAIR TWISTED SHIELDED CABLE, 22 AWG	INTERCOM-HOMERUN FROM INTERCOM CONSOLE IN UTILITY ROOM. ONE CABLE PER DISPENSER
DISPENSER CAT 5	8	3/4"	RMC/PVC	CAT-5 BELDEN #7928A (O.E.) (4) PAIR TWISTED CABLE, 23 AWG	CAT 5-HOMERUN FROM DISPENSER TO DATA EQUIPMENT IN UTILITY ROOM ONE CABLE PER DISPENSER
DISPENSER SUMP SENSOR	8	3/4"	RMC/PVC	HOUSTON WIRE #632600 (O.E.) (1) #18 TWISTED SHIELDED PAIR CABLE PLUS (1) #12 EGC	HOMERUN FROM VEEDER-ROOT CONSOLE IN UTILITY ROOM.
STP POWER	5	3/4"	RMC/PVC	(4) #10 (3-H, 1-G)	POWER FROM VFC
TANK SENSORS HOMERUN (12K TANK)	1	1"	RMC/PVC	HOUSTON WIRE #632600 (4) #18 TWISTED SHIELDED PAIR CABLE PLUS (1) #12 EGC	HOMERUN FROM VEEDER-ROOT CONSOLE TO AS RISER 4-CABLES (1-ANNULAR SPACE, 1-TANK GAUGE, 1-FILL SUMP & 1-STP SUMP)
TANK SENSORS LOOPS (12K TANK)	3	3/4"	RMC	HOUSTON WIRE #632600 (1) #18 TWISTED SHIELDED PAIR CABLE PLUS (1) #12 EGC	LOOP FROM AS RISER TO 1-TANK GAUGE, 1-FILL SUMP & 1-STP SUMP
TANK SENSORS HOMERUN (8K-12K TANK)	1	1"	RMC/PVC	HOUSTON WIRE #632600 (7) #18 TWISTED SHIELDED PAIR CABLE PLUS (1) #12 EGC	HOMERUN FROM VEEDER-ROOT CONSOLE TO AS RISER 7-CABLES (1-ANNULAR SPACE, 2-TANK GAUGE, 2-FILL SUMP & 2-STP SUMP)
TANK SENSORS LOOPS (8K-12K TANK)	6	3/4"	RMC	HOUSTON WIRE #632600 (1) #18 TWISTED SHIELDED PAIR CABLE PLUS (1) #12 EGC	LOOP FROM AS RISER TO 2-TANK GAUGE, 2-FILL SUMP & 2-STP SUMP
TANK SENSORS HOMERUN (20K TANK)	1	1"	RMC/PVC	HOUSTON WIRE #632600 (5) #18 TWISTED SHIELDED PAIR CABLE PLUS (1) #12 EGC	HOMERUN FROM VEEDER-ROOT CONSOLE TO AS RISER 5-CABLES (1-ANNULAR SPACE, 1-TANK GAUGE, 1-FILL SUMP & 2-STP SUMP)
TANK SENSORS LOOPS (20K TANK)	4	3/4"	RMC	HOUSTON WIRE #632600 (1) #18 TWISTED SHIELDED PAIR CABLE PLUS (1) #12 EGC	LOOP FROM AS RISER TO 1-TANK GAUGE, 1-FILL SUMP & 1-STP SUMP
ELECTRICAL UTILITY	2	3 1/2"	PVC	(3) #500 Cu (A,B,C) (1) #400 Cu (N)	UNDERGROUND ELECTRICAL SERVICE
TELEPHONE UTILITY	1	2"	PVC	PULL STRING	UNDERGROUND TELEPHONE UTILITY SERVICE TO GUTTER AT FRAME RELAY LOCATION

NOTE 1:
PROVIDE EXPLOSION PROOF SEALS-OFFS IN ACCORDANCE WITH ARTICLES 500, 501 AND 514 (CLASS 1, DIVISION 1 & 2) OF THE 2014 NATIONAL ELECTRICAL CODE TYPICAL FOR ALL CONDUITS IN CLASS 1 LOCATIONS, INCLUDING LOW VOLTAGE CONDUITS.

NOTE 2:
ALL CONDUITS IN CLASS 1 LOCATIONS SHALL BE GROUNDED AS PER NEC. 250.100 & 501.30.

NOTE 3:
CONDUIT FILL SHALL NOT EXCEED 25% OF SEAL-OFF AS PER NEC. 501.15(A)(6)

SEAL FITTING INSTALLATION
NTS

REMOTE EMERGENCY FUEL SHUT-OFF DETAIL

DISPENSERS AND TANKS CONDUCTOR REQUIREMENTS

DESCRIPTION	COLOR	SIZE
REGULAR #1 STP	BLACK	#10
REGULAR #2 STP	PINK	#10
REGULAR #3 STP	ORANGE	#10
PREMIUM STP	RED	#10
DIESEL #1 STP	YELLOW	#10
ALT. STP	BLUE	#10
DISPENSER POWER	BROWN, WHITE & GREEN	#12
DISPENSER SPARES	PURPLE & GRAY	#12
REGULAR #1 SWITCH LEG	BLACK	#14
REGULAR #2 SWITCH LEG	PINK	#14
REGULAR #3 SWITCH LEG	ORANGE	#14
PREMIUM SWITCH LEG	RED	#14
DIESEL #1 SWITCH LEG	YELLOW	#14
ALT. SWITCH LEG	BLUE	#14
DATA	BLACK & RED (DATA)	#18 TFN TWISTED PAIR (10-12 TWSTS/FT)
DATA	PURPLE & YELLOW (CRIND)	#18 TFN TWISTED PAIR (10-12 TWSTS/FT)
DATA	BLUE & ORANGE (SPARES)	#18 TFN TWISTED PAIR (10-12 TWSTS/FT)
INTERCOM	(2) #22 SHIELDED TWISTED PAIR	HOUSTON WIRE #150850 (O.E.)
CAT 5	(4) #23 TWISTED PAIR	BELDEN #7931A (O.E.)
TLS-350 SENSORS	(1) #18 SHIELDED TWISTED PAIR	HOUSTON WIRE #132600 (O.E.)

NOTES:
1. TANK ORIENTATION AND RISER LOCATIONS TO BE VERIFIED IN FIELD
2. INSTALL SEAL-OFFS ON ALL VEEDER-ROOT CONDUITS THAT PENETRATE A SUMP
3. J-BOXES TO WP PER NEC 504.10B.

12K TANK LAYOUT
NTS

NOTES:
1. TANK ORIENTATION AND RISER LOCATIONS TO BE VERIFIED IN FIELD
2. INSTALL SEAL-OFFS ON ALL VEEDER-ROOT CONDUITS THAT PENETRATE A SUMP
3. J-BOXES TO WP PER NEC 504.10B.

8K-12K TANK LAYOUT
NTS

NOTES:
1. TANK ORIENTATION AND RISER LOCATIONS TO BE VERIFIED IN FIELD
2. INSTALL SEAL-OFFS ON ALL VEEDER-ROOT CONDUITS THAT PENETRATE A SUMP
3. J-BOXES TO WP PER NEC 504.10B.

20K TANK LAYOUT
NTS

AL One Call 811
DIAL 811 BEFORE YOU DIG
KNOW WHAT'S BELOW.
ALWAYS DIAL 811 OR 800 292-8525 FIRST.
THE CALL AND THE SERVICE ARE FREE.

CLIENT:

CIRCLE K STORES, INC.
Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC. of LOUISIANA
engineering • environmental • construction
3251-D SW 13th Drive * Deerfield Beach, FL 33442
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EF# 5397

NO.	DATE	REVISION DESCRIPTION

SOURCE2LOAD
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"Powering Solutions"
9894 Bissonnet St. Suite 340
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STATE OF LOUISIANA
CHAD X. SLATER
License No.44427
PROFESSIONAL ENGINEER
03/19/2020

±82561.50 SF OR 1.895 ACRES

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WESTWOOD ROAD
WEST LAKE, LA

SCALE: AS NOTED	MDM JOB # 19075
DATE: 12-30-2019	
DESIGNED BY:	
DRAWN BY: SLO/JAG	FILE NAME: 19075-CD.DWG
CHECKED BY:	

DRAWING TITLE:

ELECTRICAL SITE PLAN

SHEET NO:

SE-1.0

ISSUED FOR CONSTRUCTION 10/2/2020

1 ELECTRICAL FLOOR PLAN

SCALE: 3/16" = 1'-0"

CONDUIT NOTES:

1. PROVIDE (2) 1" CONCEALED CONDUITS FROM BOTTOM GUTTER TO CEILING FOR EMS CABLES.
2. PROVIDE (1) 3/4" CONCEALED CONDUIT FROM BOTTOM GUTTER TO CEILING AND THEN TO SW CORNER OF ROOF FOR PHOTO CELL.
3. PROVIDE (1) 3/4" CONCEALED CONDUIT FROM BOTTOM GUTTER TO CEILING FOR LOTTO SATELLITE INTERFACE.
4. PROVIDE (1) 3/4" CONCEALED CONDUIT FROM BOTTOM GUTTER TO CEILING FOR VEEDER-ROOT CABLE. CABLE TO GO FROM FRAME RELAY TO VEEDER-ROOT.
5. PROVIDE (1) 1" UNDERGROUND CONDUIT FROM BOTTOM GUTTER TO CPI CABINET FOR 24 VOLT EMS CONTROLS.
6. PROVIDE (1) 1" UNDERGROUND CONDUIT FROM BOTTOM GUTTER TO CASHIER CONTROL BOX FOR EMS OVERRIDE SWITCH.
7. PROVIDE (1) 3/4" UNDERGROUND CONDUIT FROM BOTTOM GUTTER TO ELECTRIC UTILITY METER.
8. PROVIDE (2) 3/4" CONCEALED CONDUITS FROM BOTTOM GUTTER TO CEILING FOR PHONE & DATA TO OFFICE & SALES AREA.

CPI CONTROL POWER & UPS INSTALLATION NOTES:

1. INSTALL (1) SINGLE RECEPTACLE FOR UPS POWER AND FEED FROM CIRCUIT C-18.
2. INSTALL (1) FLANGED MALE PLUG. RUN CONTROL POWER FROM MALE PLUG TO CPI TERMINAL STRIP FOR CONTROL POWER. REFER TO CPI DRAWING NO. 3.1 FOR TERMINATION LOCATION.
3. PROVIDE 3FT POWER CORD FOR POWER FROM LOAD SIDE OF UPS TO FLANGED MALE PLUG.

(1) CUSTOMER SUPPLIED APC UPS #550
(2) UPS POWER FOR CPI E-STOP CONTROLS (SINGLE 5-20 RECEPTACLE)
(3) CPI CONTROL POWER TO CPI TERMINAL STRIP (FLANGED MALE INLET PLUG HUBBELL #HBL528C)
(4) FACTORY POWER CORD FOR UPS LINE SIDE.
(5) 3FT POWER CORD FROM LOAD SIDE OF UPS TO FLANGED PLUG. SUPPLIED BY GC. (#10W1-04203-16)
(6) CHASE NIPPLE FOR INTERCOM CABLES

NOTE: CONDUIT STUB-UPS SHOWN ARE FOR ILLUSTRATIONAL PURPOSE ONLY. REFER TO E-1, E-2 & E-3 FOR EXACT STUB-UPS REQUIRED.

1 INTERIOR EQUIPMENT ELEVATION

SCALE: N.T.S.

NOTE:
1. AMBIANCE MUSIC AND PAGING CABLES TO BE CONCEALED IN WALL FROM UNITS TO ABOVE CEILING.

2 VEEDER-ROOT ELEVATION

SCALE: N.T.S.

KEY NOTES

1. LOW VOLTAGE SWITCH WITH 1" EMPTY CONDUIT TO COOLER MAGNETIC CONTROLS. (COORDINATE EXACT REQUIREMENTS WITH COOLER INSTALLER.)
2. 4" x 4" x 2" J-BOX WITH COVER PLATE LOCATED AT CEILING FOR FUTURE.
3. (1) 1" EMPTY CONDUIT WITH PULL STRING BACK TO PANELS (FOR FUTURE).
4. 1" EMPTY CONDUIT WITH PULL STRING.
5. 1" HOMERUN CONDUIT BACK TO PANELS FOR POWER.
6. EQUIPMENT CALL-OUT. REFER TO ARCHITECTURAL DRAWING, A1.5, FOR SCHEDULE INFORMATION.
7. EMERGENCY STOP BUTTON FOR FUEL
8. PROVIDE SPECIAL OUTLET FOR COMPLETE CONNECTION OF EQUIPMENT. VERIFY EXACT NEMA CONFIGURATION WITH SUPPLIED EQUIPMENT.
9. PROVIDE RECEPT 6" ABOVE WINDOW FRAME FOR SHOW WINDOW RECEPTS.
10. ICE MAKER CONDENSER IS FED FROM ICE MAKER
11. MULTIPLEX CHILLER CONDENSER IS FED FROM MULTIPLEX CHILLER UNIT
12. IRRIGATION TIMECLOCK, VERIFY EXACT LOCATION WITH IRRIGATION CONTRACTOR
13. PROVIDE 3/4" CONDUIT FROM ICE MAKERS TO ICE MAKER CONDENSERS FOR LOW VOLTAGE
14. 1-3/4" HOMERUN FOR DATA
15. COORDINATE LOCATION OF FLOOR OUTLET WITH OWNER AND ARCHITECT PRIOR TO INSTALLATION.
16. J-BOX WITH 3/4" EMPTY CONDUIT TO PANEL LOCATION FOR DOOR CHIME SYSTEM ITEMS 80 AND 85.
17. PROVIDE 3/4" UNDERGROUND CONDUIT FOR DATA/PHONE.
18. PROVIDE SEAL-OFF DEVICE PER NEC 300.7 AND GFCI RATED RECEPTACLES.
19. 4" x 4" x 2" J-BOX WITH COVER PLATE LOCATED AT CEILING FOR VIEW MONITOR. PROVIDE RECEPTACLE ABOVE CEILING FOR POWER CONNECTION. FIELD VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.
20. ELECTRICAL CONTRACTOR SHALL PROVIDE 4 INCH SCHEDULE 40 PVC PIPING WITH PULL STRING TO DELI CABINET (EQUIPMENT ITEM #15). THE CONTINUOUS LONG SLEEVE SHALL EXTEND FROM FINISHED FLOOR AT WING WALL, UNDER SLAB TO DELI CABINET. CONDUIT SHALL BE CUT FLUSH AT WING WALL FLOOR AND FLUSH AT DELI CABINET FLOOR. VERIFY AND CONFIRM EXACT ROUTING AND LOCATION WITH MECHANICAL PLANS AND MECHANICAL CONTRACTOR.
21. 3/4" LV CONDUIT TO DELI CASE CONDENSER
22. NOT USED
23. PROVIDE USB/DUPLEX COMBO DEVICE
24. SECURITY CAMERA TO BE FURNISHED AND INSTALLED BY OTHERS. CONTRACTOR SHALL FURNISH AND INSTALL A 4" DEEP BOX FLUSH IN WALL (+15'-0") EXTEND 3/4"C WITH PULLSTRING FROM BOX TO NEAREST ACCESSIBLE CEILING SPACE. PROVIDE BUSHED OR INSULATED FITTING ON STUBBED END. VERIFY EXACT LOCATION AND MOUNTING HEIGHT PRIOR TO ROUGH-IN.
25. PROVIDE WEATHER PROOF MOTOR RATED DISCONNECT SWITCH IN NEMA 3R ENCLOSURE. CONDUIT TO BE SEALED.
26. PROVIDE 1/2" LOW VOLTAGE CONDUIT FROM EVAPORATOR TO CONDENSER FOR CONTROLS. CONDUIT TO BE SEALED.
27. 4" x 4" x 2" J-BOX WITH COVER PLATE LOCATED AT CEILING FOR MODEM. FIELD VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.
28. PROVIDE POWER FOR FREEZER HEAT TAPE. CIRCUIT TO BE GFCI PROTECTED. CONDUIT TO BE SEALED.
29. WATER HEATER, 4.5KW AT 208V 1PH. PROVIDE 30A 250V 1P+E.G., FUSIBLE HEAVY DUTY SAFETY SWTICH IN NEMA 3R ENCLOSURE. PROVIDE 2#10, 1#10 GND, IN 3/4"C.
30. EVAPORATOR IS FED FROM CONDENSER. PROVIDE WEATHER PROOF MOTOR RATED DISCONNECT SWITCH IN NEMA 3R ENCLOSURE. CONDUIT TO BE SEALED.
31. CEILING OUTLET FOR TV. VERIFY FINAL LOCATION PRIOR TO INSTALLATION
32. CEILING MOUNTED J-BOX FOR LED TX SIGN. VERIFY FINAL LOCATION.
33. PROVIDE (1) 2" & (2) 1" CONDUIT LOOPS UNDER SAFE FOR DATA AND POWER.
34. 2-2" CONDUITS FOR DATA
    1-3/4" CONDUIT FOR CONV. POWER
    1-3/4" CONDUIT FOR IG
    1-3/4" CONDUIT FOR SPARE POWER
    1-3/4" CONDUIT FOR CASHIER CONTROL BOX
    1-3/4 CONDUIT FOR EMS OVERRIDE SWITCH

GENERAL NOTES

1. ALL EXTERIOR DEVICES SHALL BE WEATHERPROOF.
2. ALL 120V, 20A RECEPTACLES LOCATED AT FOOD SERVICE, BEVERAGE COUNTERS SHALL BE PROTECTED WITH GFCI TYPE BREAKERS IN PANELBOARDS. PROVIDE GFCI PROTECTED STICKER ON THE FACE PALATE.
3. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH PULL STRINGS.
4. REFER TO DRAWING A1.5 FOR EQUIPMENT SCHEDULE. REFER TO ARCHITECTURAL DRAWINGS FOR ISLAND DETAILS.
5. ALL EQUIPMENT WITH REMOTE CONDENSERS MOUNTED ON THE ROOF SHALL HAVE 1/2" EMPTY CONDUIT (SEE GENERAL NOTE 3) BETWEEN THE EQUIPMENT AND THE REMOTE CONDENSER FOR CONTROL CIRCUITS.
6. ELECTRICAL CONTRACTOR SHALL VERIFY ALL EQUIPMENT CONNECTIONS, MOUNTING HEIGHTS AND CORD REQUIREMENTS WITH EQUIPMENT MANUFACTURER PRIOR TO INSTALLATION. ALL EQUIPMENT SHALL BE LISTED FOR ITS INTENDED USE PER N.E.C. ART. #400.7.
7. ALL EQUIPMENT WHERE FOOD IS PREPARED OR SERVED SHALL BE GFCI PROTECTED. LABELED EACH OUTLET WITH REQUIRED GFCI PROTECTED STICKER.
8. ALL POWER CONDUITS SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR INSTALLED WITH THE BRANCH CIRCUIT CONDUCTORS.

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.
engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19-176
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME:
CHECKED BY:	

DRAWING TITLE:

ELECTRICAL FLOOR PLAN

SHEET NO:

E2.0

ISSUED FOR CONSTRUCTION 10/2/2020

1 LV AND EMS FLOOR PLAN

SCALE: 3/16" = 1'-0"

ENEREGY MANAGEMENT SYSTEM NOTES

1. INSTALL (1) 1" UNDERGROUND CONDUIT FROM EMS GUTTER TO CPI CABINET FOR 24 VOLT LIGHTING CONTROLS AND PULSE READER.
2. INSTALL (2) 1" CONDUITS FROM EMS GUTTER TO ABOVE CEILING FOR EMS OVERHEAD CABLES.
3. INSTALL (1) 3/4" UNDERGROUND CONDUIT FROM EMS TO CASHIER CONTROL BOX FOR OVERRIDE SWITCH.
4. INSTALL (2) OUTLET BOXES (60" AFF) IN OFFICE FOR (3) FLEX-STATS. PROVIDE (1) 3/4" STUB-UP INTO CEILING FOR EACH FLEX STAT.
5. INSTALL (1) SUPPLY SENSOR IN SUPPLY DUCT AT EACH HVAC UNIT.
6. INSTALL (1) REMOTE SENSOR IN RETURN DUCT AT EACH HVAC UNIT.
7. INSTALL (1) REMOTE SENSOR AT EACH COOLER, BEERCAVE & FREEZER.
8. INSTALL (1) 3/4" CONDUIT FROM CEILING TO EACH RTU FOR EMS CABLE.
9. ALL CONDUITS FROM EMS GUTTER TO CEILING TO BE TO BE CONCEALED IN THE WALL. REFER TO ELEVATION DETAIL ON SHEET E-1.
10. PROVIDE PULL STRINGS IN SPARE CONDUITS. IDENTIFY SPARE CONDUITS ON EACH END.
11. INSTALL EMS ENCLOSURE, ALL BOXES, CONDUIT, WIRING AND CABLES FOR EMS SYSTEM.
12. INSTALL TEMPORARY T-STATS AND COMMISSION AIR CONDITIONING SYSTEM PRIOR TO FSG ARRIVING ON SITE.
13. INSTALL OUTDOOR AIR ASSEMBLY (PHOTO/TEMP. SENSOR) ON RTU. MOUNT ASSEMBLY TO RTU WITH 3/4" RIGID CONDUIT. ASSEMBLY TO BE AS FAR FROM CONDENSER FAN AS POSSIBLE AND EXTEND 3' ABOVE RTU.
14. EXTERIOR LIGHTS TO MANUALLY CONTROLLED BY LIGHTING CONTROL BREAKER UNTIL EMS IS COMMISSIONED

EMS INSTALLATION RESPONSIBILITIES

ELECTRICAL CONTRACTOR:
- REQUEST EMS ENCLORURE, DEVICES & SENSORS FROM FSG AT START OF CONSTRUCTION
- INSTALL EMS ENCLOSURE & SUPPLY 120 VOLT CIRCUIT TO ENCLOSURE
- INSTALL ALL J-BOXES, CONDUITS & CABLING TO EMS DEVICES & SENSORS

MECHNICAL CONTRACTOR:
- INSTALL TEMP. T-STATS (SUPPLIED BY HVAC SUPPLIER)
- COMMISSION A/C UNITS PRIOR TO ARRIVAL OF FSG.
- INSTALL SUPPLY, RETURN, COOLER & FREEZER SENSORS
- INSTALL OUTDOOR AIR ASSEMBLY ON RTU

FACILITY SOLUTION GROUP (FSG):
- SUPPLY BOTH CONTRACTORS WITH EMS INSTALLATION DRAWINGS AT START OF CONSTRUCTION
- SUPPLY EMS ENCLOSURE
- SUPPLY EMS FLEXSTATS & ALL SENSORS
- SUPPLY OUTDOOR AIR ASSEMBLY
- INSTALL FLEXSTATS
- MAKE FINAL CONNECTIONS TO ALL SENSORS, PHOTOCELL ASSEMBLY & CPI LIGHTING RELAYS
- MAKE FINAL CONNECTIONS IN EMS ENCLOSURE & COMMISSION EMS

FSG
FACILITY SOLUTIONS GROUP
ERIC FIEDLER
512-835-6120

ENEREGY MANAGEMENT SYSTEM WIRING REQUIREMENTS

A. INSTALL (1) 18/8 CABLE FROM EACH RTU TO EACH FLEX-STAT. (PROVIDE 6' LOOP)
B. INSTALL (1) 18/2 CABLE FROM EMS TO FLEX-STAT #1. DAISY CHAIN 18/2 BETWEEN OTHER TWO FLEXSTATS (PROIDE 3' LOOP AT EACH FLEXSTAT)
C. INSTALL (1) 18/2 CABLE FROM EACH REMOTE SENSOR TO EACH FLEX-STAT. (PROVIDE 3' LOOP)
D. INSTALL (1) 18/2 CABLE FROM EACH SUPPLY SENSOR TO EACH FLEX-STAT. (PROVIDE 3' LOOP)
E. INSTALL (2) 18/2 CABLE FROM EMS PHOTO SENSOR & TEMP. SENSOR ON ROOF. IDENTIFY EACH CABLE. (PROVIDE 10' LOOP)
F. INSTALL (1) 18/2 CABLE FROM EMS TO LIGHTING OVERRIDE BUTTON AT CASHIER. (PROVIDE 10' LOOP)
G. INSTALL (1) 18/8 CABLE FROM EMS GUTTER TO LOW VOLTAGE TERMINAL STRIP IN SECTION #2 OF CPI CABINET EXTERIOR LIGHTING CONTROLS. (PROVIDE 3' LOOP)
H. NSTALL (1) 18/2 CABLE FROM EMS GUTTER TO LOW VOLTAGE TERMINAL STRIP IN SECTION #2 OF CPI CABINET FOR PULSE READER. (PROVIDE 3' LOOP)
I. INSTALL (1) 18/2 CABLE FROM EMS TO WALK-IN COOLER FOR REMOTE SENSOR. (PROVIDE 10' LOOP)
J. INSTALL (1) 18/2 CABLE FROM EMS TO BEER CAVE FOR SENSOR. (PROVIDE 10' LOOP)
K. INSTALL (1) 18/2 CABLE FROM EMS TO DAIRY COOLER FOR REMOTE SENSOR. (PROVIDE 10' LOOP)
L. INSTALL (1) 18/2 CABLE FROM EMS TO FREEZER FOR REMOTE SENSOR. (PROVIDE 10' LOOP)
M. INSTALL (1) 18/2 CABLE FROM EMS TO REAR FREEZER FOR REMOTE SENSOR. (PROVIDE 10' LOOP)
N. ALL CABLES TO BE CONTINUOUS, WITHOUT SPLICES, FROM DEVICES TO EMS AND FROM CPI EQUIPMENT TO EMS. LABEL EACH END OF ALL CABLES.

CABLE SPECIFICATIONS
BELDEN 8760 18/2 TSP or EQUIVALENT
BELDEN 5306FE 18/8 or EQUIVALENT
DO NOT USE PLENUM CABLE

T FLEX STAT IN OFFICE (60" AFF)
R REMOTE SENSOR IN COOLER, BEER CAVE & FREEZER
RS RETURN AIR SENSOR IN RETURN DUCT
S SUPPLY AIR SENSOR IN SUPPLY DUCT

EMS RISER DIAGRAM

18/2 CABLE (BELDEN #8760 18/2 TSP OR EQUAL)
18/8 CABLE (BELDEN #5306FE 18/8 TSP OR EQUAL)
NOTE: ALL WIRING TO BE CONTINUOUS, WITH NO SPLICES AND LABELED ON BOTH ENDS

PAGING SYSTEM NOTES

1. PAGING SYSTEM TO BE SUPPLIED AND INSTALLED BY ALERTTECH..
2. GC TO INSTALL (1) QUAD RECEPTACLE FOR PAGING SYSTEM AND ALARM PANEL.
3. GC TO INSTALL (1) RECESSED J-BOX AND (1) 3/4" CONCEALED CONDUIT TO CEILING FOR LV PAGING CABLES. (SEE ELEVEVATION ON SHEET E-1.0)
4. GC TO INSTALL (1) RECESSED J-BOX AND (1) 3/4" CONCEALED CONDUIT TO CEILING FOR LV ALARM CABLES. (SEE ELEVEVATION ON SHEET E-1.0)
5. SEAL ALL CONDUIT AND CABLE PENETRATIONS INTO COOLERS & FREEZERS TO PREVENT CONDENSATIONS

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.
engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #1[illegible]
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # [illegible]
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME:
CHECKED BY:	

DRAWING TITLE:

LOW VOLTAGE AND EMS PLAN

SHEET NO:

E3.0

1 ROOF POWER PLAN
SCALE: 3/16" = 1'-0"

KEY NOTES

1. WP, GFCI MOISTURE RESISTANT RECEPTACLE ON ROOF.
2. DUCT SMOKE DETECTOR.
3. WP J-BOX ON ROOF FOR SATELLITE DISH WITH 1" EMPTY CONDUIT TO CASHIER COUNTER LOTTO MACHINE. VERIFY EXACT LOCATION OF SATELLITE DISH IN FIELD.
4. POWER FOR THE MULTIPLEX REMOTE UNIT COMING FROM UNIT INSIDE. THE GC OR THE OWNER MUST INSTALL A 3" PITCH POT IN THE ROOF, THEN SEAL FOR WEATHER PROTECTION.
5. EXTEND CONDUIT AND WIRE TO THERMOSTAT FOR LINE VOLTAGE CONNECTION.
6.

GENERAL NOTES

1. ALL EXTERIOR DEVICES SHALL BE WEATHERPROOF.
2. ALL EQUIPMENT WITH REMOTE CONDENSERS MOUNTED ON THE ROOF SHALL HAVE 1/2" EMPTY CONDUIT BETWEEN THE EQUIPMENT AND THE REMOTE CONDENSER FOR CONTROL CIRCUITS.
3. ROUTE CONDUIT(S) FOR CONDENSERS THROUGH SAME WEATHERPROOF ROOF JACK USED FOR CONDENSATE PIPING - REFER TO DETAIL #2 ON SHEET M1.2.1.
4. SEAL ALL BUILDING PENETRATIONS
5. HEAT TRACE TO BE PROVIDED IN COLD REGION.

CLIENT:

CIRCLE K STORES, INC.

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DESIGN TEAM TITLE:

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engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

ISSUED FOR CONSTRUCTION 10/2/2020

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 7075
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME: 47 18306 CK XXXX 5187 E4.0.DWG
CHECKED BY:	

DRAWING TITLE:

ELECTRICAL ROOF PLAN

SHEET NO:

E4.0

1 ELECTRICAL LIGHTING PLAN

SCALE: 3/16" = 1'-0"

1/E5.0 LED MONITORS OVER SODA FOUNTAINS

SCALE: NTS

2/E5.0 LED SIGNS OVER COFFEE COUNTER

SCALE: NTS

KEY NOTES

1. NOT USED
2. REFER TO ARCHITECTURAL SHEETS FOR ACCESS PANEL FOR SIGNAGE IN THIS SOFFIT AREA.
3. PROVIDE 16"x18"x6" PULLBOX MOUNTED ABOVE ACCESSIBLE CEILING FOR CONNECTION TO LED LIGHTING. VERIFY EXACT LOCATION WITH CIRCLE 'K' REPRESENTATIVE PRIOR TO INSTALLATION. PROVIDE FINAL CONNECTION PER MANUFACTURER'S INSTRUCTIONS.
4. PROVIDE TEMPERATURE SEAL/FIRE STOP FOR ALL CONDUITS AND HOME RUNS IN THESE AREAS PER NEC 300.7.
5. PROVIDE UNSWITCHED CIRCUIT FOR EMERGENCY BATTERY BACK-UP BALLAST.
6. NOT USED

GENERAL NOTES

1. ALL EXTERIOR DEVICES SHALL BE WEATHERPROOF RATED.

CLIENT:

CIRCLE K STORES, INC.

Gulf Coast Business Unit

DESIGN TEAM TITLE:

MDM SERVICES, INC.

engineering • environmental • construction

1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

GCBU 5187 STANDARD BUILDING

SITE DESIGNATIONS:

CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED	MDM JOB # 19-076
DATE: 01-22-2020	
DESIGNED BY:	
DRAWN BY: PD	FILE NAME:
CHECKED BY:	

DRAWING TITLE:

ELECTRICAL LIGHTING PLAN

SHEET NO:

E5.0

ISSUED FOR CONSTRUCTION 10/2/2020

PANEL DP

PANELBOARD: 800 AMP MAIN LUG | 120/208 3-PHASE | 65K AIC FULLY RATED | BOLT-IN: SURFACE-NEMA 3R | NEUTRAL BAR: EQUIPMENT GROUND BAR

CIRCUIT DESCRIPTION	*	VA LOAD A	B	C	N	Brk.	Wire	Cond.	Circuit Num.	Cond.	Wire	Brk.	VA LOAD N	A	B	C	*	CIRCUIT DESCRIPTION
PANEL A	1	10140				225/3	4/0		1 2		4/0	225/3		16887			1	PANEL D
PANEL A	1		10035		15654	225/3	4/0		3 4		4/0	225/3	9610		17698		1	PANEL D
PANEL A	1			10018		225/3	4/0		5 6		4/0	225/3				17295	1	PANEL D
PANEL B	1	10109				225/3	4/0		7 8		3	100/3		5920			1	PANEL G
PANEL B	1		11970		17970	225/3	4/0		9 10		3	100/3	4520		7080		1	PANEL G
PANEL B	1			8128		225/3	4/0		11 12		3	100/3				6820	1	PANEL G
PANEL C	1	10805				225/3	4/0		13 14		4/0	225/3		7481			1	PANEL E
PANEL C	1		10158		7970	225/3	4/0		15 16		4/0	225/3	15960		6847		1	PANEL E
PANEL C	1			9711		225/3	4/0		17 18		4/0	225/3				8501	1	PANEL E
SPACE									19 20									SPACE
SPACE									21 22									SPACE
SPACE									23 24									SPACE
SPACE									25 26									SPACE
SPACE									27 28									SPACE
SPACE									29 30									SPACE
		31054.4	32163	27856	41594								30090	30087	31625	32818		

CONNECTED VA (A) 61141.4
CONNECTED VA (B) 63789.9
CONNECTED VA (C) 60471.9
CONNECTED VA (ABC) 185401

		CONNECTED		DEMAND
NON-CONTINUOUS	*1	185401	100%	185401
CONTINUOUS	*2	0	125%	0
KITCHEN EQUIPMENT	*3	0	65%	0
SUBTOTAL		185401		185401
NON-CONCIDENTAL		0		0
TOTAL		185401		185401

TOTAL NEUTRAL LOAD: 71,684 / (208X1.73) = 199.1 AMPS

TOTAL DEMAND LOAD: 185,401 / (208x1.73) = 515.0 AMPS

PANEL C

PANELBOARD: 225 AMP MAIN LUG | 120/208 3-PHASE | 65K AIC SERIES RATED | BOLT-IN: SURFACE-NEMA 3R | NEUTRAL BAR: EQUIPMENT GROUND BAR

CIRCUIT DESCRIPTION	*	VA LOAD A	B	C	N	Brk.	Wire	Cond.	Circuit Num.	Cond.	Wire	Brk.	VA LOAD N	A	B	C	*	CIRCUIT DESCRIPTION
COOLER DOOR LTG HEATER	2	600			600	20/1	10	50"	1 2	.75"	10	20/3					3	MECH. DELI CASE COND.
COOLER DOOR LTG HEATER	2		600		600	20/1	10	50"	3 4	.75"	10	20/3			1230		3	MECH. DELI CASE COND.
COOLER DOOR LTG HEATER	2			600	600	20/1	10	50"	5 6	.75"	10	20/3				1230	3	MECH. DELI CASE COND.
COOLER DOOR LTG HEATER	2	600			600	20/1	10	50"	7 8	.75"	10	25/3	1632				3	SALES AREA FREEZER CONDENSER
MECH. 12 DOOR DAIRY COND.	3	1200				50/3	8	.75"	9 10	.75"	10	25/3			1632		3	SALES AREA FREEZER CONDENSER
MECH. 12 DOOR DAIRY COND.	3		1200			50/3	8	.75"	11 12	.75"	10	25/3				1632	3	SALES AREA FREEZER CONDENSER
MECH. 12 DOOR DAIRY COND.	3			1200		50/3	8	.75"	13 14	.75"	10	15/2	780				3	BACK ROOM COOLER
MECH. - BEER CAVE COND.	3	1200				30/3	10	.75"	15 16	.75"	10	15/2			780		3	BACK ROOM COOLER
MECH. - BEER CAVE COND.	3		1200			30/3	10	.75"	17 18	.50"	12	20/1 GFI	1200			1200	3	MECH. - ICE TEA BREWER
MECH. - BEER CAVE COND.	3			1200		30/3	10	.75"	19 20	.50"	12	20/1 GFI	1200	1200			3	REC. - EQUIP. 36 - ICE TEA BREWER
MECH. 4 DOOR DAIRY COND.	3	1432				30/3	10	.75"	21 22	.50"	10	20/1	650		650		3	MECH. - 7 DR. DAIRY EVAP. COOLER
MECH. 4 DOOR DAIRY COND.	3		1432			30/3	10	.75"	23 24	.50"	10	20/1	650			650	3	MECH. - 5 DR. DAIRY EVAP. COOLER
MECH. 4 DOOR DAIRY COND.	3			1432		30/3	10	.75"	25 26	.50"	10	20/1	650	650			3	MECH. - BACK ROOM EVAP. COOLER
MULTIPLEX CHILLER	3	1560				30/3	10	.75"	27 28	.50"	10	20/1 GFI	250		250		3	SALES AREA FREEZER HEAT TAPE
MULTIPLEX CHILLER	3		1560			30/3	10	.75"	29 30	.50"	10	20/1 GFI	250			250	3	BACK ROOM FREEZER HEAT TAPE
MULTIPLEX CHILLER	3	1560				30/3	10	.75"	31 32	.75"	10	25/3		1152			3	MECH. - BACKROOM FREEZER
REAR & ROOF RECEPTACLES	1		720		720	20/1 GFI	10	50"	33 34	.75"	10	20/3			1152		3	MECH. - BACKROOM FREEZER
									35 36	.75"	10	25/3				1152	3	MECH. - BACKROOM FREEZER
									37 38	.75"	10	20/3		2280			3	UNOX OVEN
									39 40	.75"	10	20/3			2280		3	UNOX OVEN
									41 42	.75"	10	20/3				2280	3	UNOX OVEN
		6592	6712	5992	3120								4850	8924	7974	8394		

CONNECTED VA (A) 15516
CONNECTED VA (B) 14686
CONNECTED VA (C) 14396
CONNECTED VA (ABC) 44588

		CONNECTED		DEMAND
NON-CONTINUOUS	*1	720	100%	720
CONTINUOUS	*2	2400	125%	3000
KITCHEN EQUIPMENT	*3	41468	65%	26954
SUBTOTAL		44588		30674
NON-CONCIDENTAL		0		0
TOTAL		44588		30674

TOTAL NEUTRAL LOAD: 7,970 / (208X1.73) = 22.1 AMPS

TOTAL DEMAND LOAD: 30,674 / (208x1.73) = 85.2 AMPS

PANEL A

PANELBOARD: 225 AMP MAIN LUG | 120/208 3-PHASE | 65K AIC SERIES RATED | BOLT-IN: SURFACE-NEMA 3R | NEUTRAL BAR: EQUIPMENT GROUND BAR

CIRCUIT DESCRIPTION	*	VA LOAD A	B	C	N	Brk.	Wire	Cond.	Circuit Num.	Cond.	Wire	Brk.	VA LOAD N	A	B	C	*	CIRCUIT DESCRIPTION
EXTERIOR WALL PACKS	2	680			680	20/1	10	.50"	1 2	1"	8	20/3	528	528			2	LTG. - CANOPY SIGN
EXTERIOR SOFFIT LIGHTS	2		740		740	20/1	10	.50"	3 4	1"	8	20/3	528		528		2	LTG. - CANOPY SIGN
BUILDING SIGNS	2			620	620	20/1	10	.50"	5 6	1"	8	20/3	528			528	2	LTG. - CANOPY SIGN
									7 8	1"	10	20/2		750			2	LTG. - CANOPY LIGHTS
									9 10	1"	10	20/2			750		2	LTG. - CANOPY LIGHTS
BFP HEAT TAPE	1		360	360	20/1 GFI	10	.75"	11 12	1"	10	20/2					750	2	LTG. - CANOPY LIGHTS
CANOPY LIT FASCIA	2	620		620	20/3	8	1"	13 14	1"	10	20/2		750				2	LTG. - CANOPY LIGHTS
CANOPY LIT FASCIA	2		620	620	20/3	8	1"	15 16	1"	10	20/2			750			2	LTG. - CANOPY LIGHTS
CANOPY LIT FASCIA	2			620	20/3	8	1"	17 18	1"	10	20/2				750		2	LTG. - CANOPY LIGHTS
CANOPY LIT FASCIA	2	620		620	20/3	8	1"	19 20	1"	10	20/2		750				2	LTG. - CANOPY LIGHTS
CANOPY LIT FASCIA	2		620	620	20/3	8	1"	21 22	1"	10	20/2			750			2	LTG. - CANOPY LIGHTS
CANOPY LIT FASCIA	2			620	620	20/3	8	1"	23 24									
CANOPY LIT FASCIA	2	620			620	20/3	8	1"	25 26									
CANOPY LIT FASCIA	2		620		620	20/3	8	1"	27 28									
CANOPY LIT FASCIA	2			620	620	20/3	8	1"	29 30	1"	10	20/2			525		2	LTG. - EXTERIOR PARKING - POLES
NORTH ID SIGN	2	760		760	20/1	8	1"	31 32	1"	10	20/2		525				2	LTG. - EXTERIOR PARKING - POLES
NORTH PRICE SIGN	2		840	840	20/1	8	1"	33 34	1"	10	20/2			525			2	LTG. - EXTERIOR PARKING - POLES
AIR STAND	1			1420	1420	30/1	6	1"	35 36	1"	10	20/2			525		2	LTG. - EXTERIOR PARKING - POLES
VACUUM	1	1230			1230	30/1	6	1"	37 38	1"	10	20/2		525			2	LTG. - EXTERIOR PARKING - POLES
SOUTH ID SIGN	2		760	760	20/1	6	1"	39 40	1"	10	20/2			525			2	LTG. - EXTERIOR PARKING - POLES
SOUTH PRICE SIGN	2			840	840	20/1	6	1"	41 42	.50"	12	20/1	240		240		1	MISC. - IRRIGATION CONTROLS
		4530	4200	5100	13830								1824	3828	3828	3318		

CONNECTED VA (A) 8358
CONNECTED VA (B) 8028
CONNECTED VA (C) 8418
CONNECTED VA (ABC) 24804

		CONNECTED		DEMAND
NON-CONTINUOUS	*1	3250	100%	3250
CONTINUOUS	*2	21554	125%	26943
KITCHEN EQUIPMENT	*3	0	65%	0
SUBTOTAL		24804		30193
NON-CONCIDENTAL		0		0
TOTAL		24804		30193

TOTAL NEUTRAL LOAD: 15,654 / (208X1.73) = 43.5 AMPS

TOTAL DEMAND LOAD: 30,193 / (208x1.73) = 83.9 AMPS

PANEL B

PANELBOARD: 225 AMP MAIN LUG | 120/208 3-PHASE | 65K AIC SERIES RATED | BOLT-IN: SURFACE-NEMA 3R | NEUTRAL BAR: EQUIPMENT GROUND BAR

CIRCUIT DESCRIPTION	*	VA LOAD A	B	C	N	Brk.	Wire	Cond.	Circuit Num.	Cond.	Wire	Brk.	VA LOAD N	A	B	C	*	CIRCUIT DESCRIPTION
FOUNTAIN DRINK & ICE MAKER	3		620		620	20/1 GFI	12	.50"	1 2	.75"	10	20/2			3330		3	COFFEE BREWER
FOUNTAIN DRINK & ICE MAKER	3			620	620	20/1 GFI	12	.50"	3 4	.75"	10	20/2				3330	3	COFFEE BREWER
FOUNTAIN DRINK & ICE MAKER	3	620			620	20/1 GFI	12	.50"	5 6	.75"	10	20/2		1920			3	COFFEE BREWER
ICE CREAM	1		600		600	20/1	10	.50"	7 8	.75"	10	20/2			1920		3	COFFEE BREWER
REC.-EQUIP. 118-HEATED DISP. MER.	3			1220		20/2	12	.75"	9 10	.50"	12	20/1 GFI	1300			1300	3	CAPUCCINO
REC. EQUIP. 118-HEATED DISP. MER.	3	1200				20/2	12	.75"	11 12	.50"	12	20/1 GFI	620	620			3	CAPUCCINO
REC. - MANAGER DESK	1		360		360	20/1	12	.50"	13 14	.75"	10	20/2			1920		3	COFFEE BREWER
COFFEE BREWER	3			1920		20/2	10	.75"	15 16	.75"	10	20/2				1920	3	COFFEE BREWER
COFFEE BREWER	3	1920				20/2	10	.75"	17 18	.50"	12	20/1	100	100			1	REC. - EQUIP. 89 - ATM
BAG-N-BOX	1		180		180	20/1 GFI	12	.50"	19 20	.75"	12	20/1 GFI	620		620		3	COFFEE COUNTER
REC.-EQUIP. 118-HEATED DISP. MER.	3			1220	1200	20/2	12	.75"	21 22	.75"	12	20/1 GFI	620			620	3	COFFEE COUNTER
REC. EQUIP. 118-HEATED DISP. MER.	3	1200			1200	20/2	12	.75"	23 24	.75"	12	20/1 GFI	620	620			3	COFFEE COUNTER
EXTERIOR RECEPTACLES	1		180		180	20/1 GFI	10	.50"	25 26	.50"	12	20/1 GFI	180		180		1	REC. - ROOF
EXTERIOR RECEPTACLES	1			180	180	20/1 GFI	10	.50"	27 28	.50"	12	20/1 GFI	180			180	1	REC. - EQUIP. 99 - LOTTO MERCH
EXTERIOR RECEPTACLES	1	180			180	20/1 GFI	10	.50"	29 30	.50"	12	20/1	120	120			1	CIGARETTE RACK
LTG. - SALES AREA	2		900		900	20/1	10	.50"	31 32	.50"	12	20/1	720		720		2	WINDOW CEILING RECEPTACLE
LTG. - SALES AREA	2			900	900	20/1	10	.50"	33 34	.50"	12	20/1	720			720	2	WINDOW CEILING RECEPTACLE
EXTERIOR RECEPTACLES	1	180			180	20/1 GFI	10	.50"	35 36	.50"	10	20/1	740	740			2	LTG. - RESTROOMS
LTG. - LED DOWN LIGHTS	2		750		750	20/1	10	.50"	37 38	.50"	12	20/1	180		180		1	MONITOR
LTG. - BACK ROOM	2			900	900	20/1	10	.50"	39 40	.50"	10	20/1	450			450	2	LTG. -COOLER/FREEZER
FRONT WALL RECEPTACLES	1		720	720	20/1	10	.50"	41 42	.50"	10	20/1	510			510	2	WALK-IN COOLER LED SIGNS
		5300	3590	7680	10290								7680	4120	8870	9030		

CONNECTED VA (A) 9420
CONNECTED VA (B) 12460
CONNECTED VA (C) 16710
CONNECTED VA (ABC) 38590

		CONNECTED		DEMAND
NON-CONTINUOUS	*1	3340	100%	3340
CONTINUOUS	*2	6590	125%	8238
KITCHEN EQUIPMENT	*3	28660	65%	18629
SUBTOTAL		38590		30207
NON-CONCIDENTAL		0		0
TOTAL		38590		30207

TOTAL NEUTRAL LOAD: 17,970 / (208X1.73) = 49.9 AMPS

TOTAL DEMAND LOAD: 30,207 / (208x1.73) = 83.9 AMPS

PANEL D

PANELBOARD: 225 AMP MAIN LUG | 120/208 3-PHASE | 65K AIC SERIES RATED | BOLT-IN: SURFACE-NEMA 3R | NEUTRAL BAR: EQUIPMENT GROUND BAR

CIRCUIT DESCRIPTION	*	VA LOAD A	B	C	N	Brk.	Wire	Cond.	Circuit Num.	Cond.	Wire	Brk.	VA LOAD N	A	B	C	*	CIRCUIT DESCRIPTION
MECH HP #1	1	4500				60/3	4	1"	1 2	.50"	10	20/1 GFI	360	360			1	LOW VOLTAGE RR FAUCETS
MECH HP #1	1		4500			60/3	4	1"	3 4	.50"	10	20/1	1210		1210		1	MEN'S HAND DRYER
MECH HP #1	1			4500		60/3	4	1"	5 6	.50"	10	20/1	1210			1210	1	WOMEN'S HAND DRYER
MECH HP #2	1	4500				60/3	4	1"	7 8	.50"	10	20/1 GFI	960	960			3	F-REAL BLENDER
MECH HP #2	1		4500			60/3	4	1"	9 10	.50"	10	20/1 GFI	1300		1300		3	F-REAL FREEZER
MECH HP #2	1			4500		60/3	4	1"	11 12	.50"	10	20/3				1280	3	FROYO DISPENSER #1
WATER HEATER	3	3000				30/3	10	.75"	13 14	.50"	10	20/3		1280			3	FROYO DISPENSER #1
WATER HEATER	3		3000			30/3	10	.75"	15 16	.50"	10	20/3			1280		3	FROYO DISPENSER #1
WATER HEATER	3			3000		30/3	10	.75"	17 18	.50"	12	20/1 GFI	580			580	3	CASHIER COOLER
UNOX OVEN	3	2280				25/3	10	.75"	19 20	.50"	12	20/1	100	100			1	CASHIER COUNTER
UNOX OVEN	3		2280			25/3	10	.75"	21 22	.50"	12	20/1	180		180		1	CASHIER COUNTER
UNOX OVEN	3			2280		25/3	10	.75"	23 24									
FROYO RECEPTACLE	3	210			210	20/1 GFI	10	.50"	25 26									
PEZZA CART	3		520		520	20/1	10	.50"	27 28									
GONDOLA	1			180	180	20/1	10	.75"	29 30	.50"	12	20/1 GFI	620			620	3	GONDOLA
GONDOLA	1	180			180	20/1	10	.75"	31 32	.75"	8	35/3		1900			3	BACKROOM ICE MAKER CONDENSER
UNOX OVEN VENTLESS HOOD	3		60			15/2	12	.50"	33 34	.75"	8	35/3			1900		3	BACKROOM ICE MAKER CONDENSER
UNOX OVEN VENTLESS HOOD	3			60		15/2	12	.50"	35 36	.75"	8	35/3				1900	3	BACKROOM ICE MAKER CONDENSER
GONDOLA	1	180			180	20/1	10	.75"	37 38	.50"	12	20/1 GFI	620	620			1	BACKROOM ICE MAKER
GONDOLA	1		180		180	20/1	10	.75"	39 40	.50"	12	20/1	420		420		1	EXHAUST FAN
GONDOLA	1			180	180	20/1	10	.75"	41 42	.50"	12	20/1	420			420	1	EXHAUST FAN
		14850	15040	14700	1630								7980	5200	6270	5990		

CONNECTED VA (A) 20050
CONNECTED VA (B) 21310
CONNECTED VA (C) 20690
CONNECTED VA (ABC) 62050

		CONNECTED		DEMAND
NON-CONTINUOUS	*1	32420	100%	32420
CONTINUOUS	*2	0	125%	0
KITCHEN EQUIPMENT	*3	29630	65%	19260
SUBTOTAL		62050		51680
NON-CONCIDENTAL		0		0
TOTAL		62050		51680

TOTAL NEUTRAL LOAD: 9,610 / (208X1.73) = 26.7 AMPS

TOTAL DEMAND LOAD: 51,680 / (208x1.73) = 143.6 AMPS

PANEL E

PANELBOARD: 225 AMP MAIN LUG | 120/208 3-PHASE | 65K AIC SERIES RATED | BOLT-IN: SURFACE-NEMA 3R | NEUTRAL BAR: EQUIPMENT GROUND BAR

CIRCUIT DESCRIPTION	*	VA LOAD A	B	C	N	Brk.	Wire	Cond.	Circuit Num.	Cond.	Wire	Brk.	VA LOAD N	A	B	C	*	CIRCUIT DESCRIPTION
REC. - EQUIP. 18 - HOT DOG ROLLER	3	1540				60/3	4	1"	1 2									
REC. - EQUIP. 18 - HOT DOG ROLLER	3		1540			60/3	4	1"	3 4									
REC. - EQUIP. 18 - HOT DOG ROLLER	3			1540		60/3	4	1"	5 6									
HOT DOG ISLAND RECEPTACLE	3	600				60/3	4	1"	7 8									
HOT DOG ISLAND RECEPTACLE	3		600			60/3	4	1"	9 10									
HOT DOG ISLAND RECEPTACLE	3			600		60/3	4	1"	11 12	1"	12	20/1 GFI	1230			1230	3	MICROWAVE
HOT DOG ISLAND RECEPTACLE	3	600				60/3	4	1"	13 14	1"	12	20/1 GFI	1230	1230			3	MICROWAVE
HOT DOG ISLAND RECEPTACLE	3		600			60/3	4	1"	15 16	.50"	12	20/1 GFI	180				3	BACKROOM RECEPTACLE
LTG. - EXTERIOR BLDG. LIGHTS	2			540	540	20/1	10	.50"	17 18	1"	12	20/1 GFI	180			180	2	DELI CASE LIGHTS
LTG. - EXTERIOR BLDG. LIGHTS	2	540				540	20/1	10	.50"	19 20	.50"	12	20/1 GFI	180	180			3	BACKROOM RECEPTACLE
LTG. - EXTERIOR BLDG. SIGNS	2		730			730	20/1	10	.50"	21 22	.50"	12	20/1 GFI	180		180		3	BACKROOM RECEPTACLE
LTG. - EXTERIOR BLDG. SIGNS	2	730				730	20/1	10	.50"	23 24	.50"	12	20/1 GFI	710			710	3	BACKROOM FRIG
EQUIP. 17 - FROZEN BEVERAGE #1	3	960				30/2	10	.50"	25 26	.50"	12	20/1 GFI	710	710			3	BACKROOM FREEZER
EQUIP. 17 - FROZEN BEVERAGE #1	3		960			30/2	10	.50"	27 28	1"	12	20/1 GFI	600		600		3	HOT DOG ISLAND RECEPTACLE
EQUIP. 17 - FROZEN BEVERAGE #2	3			960		30/2	10	.50"	29 30	1"	12	20/1 GFI	600			600	3	HOT DOG ISLAND RECEPTACLE
EQUIP. 17 - FROZEN BEVERAGE #2	3	960				30/2	10	.50"	31 32	.75"	8	35/3		1230			3	ICE MAKER #1 (CRUSHED ICE)
EQUIP. 17 - FROZEN BEVERAGE #3	3		960			30/2	10	.50"	33 34	.75"	8	35/3			1230		3	ICE MAKER #1 (CRUSHED ICE)
EQUIP. 17 - FROZEN BEVERAGE #3	3			960		30/2	10	.50"	35 36	.75"	8	35/3				1230	3	ICE MAKER #1 (CRUSHED ICE)
ICE MAKER #3 (CRUSHED ICE)	3	1230				35/3	8	.75"	37 38	.75"	8	35/3		1230			3	ICE MAKER #2 (CUBED ICE)
ICE MAKER #3 (CRUSHED ICE)	3		1230			35/3	8	.75"	39 40	.75"	8	35/3			1230		3	ICE MAKER #2 (CUBED ICE)
ICE MAKER #3 (CRUSHED ICE)	3			1230		35/3	8	.75"	41 42	.75"	8	35/3				1230	3	ICE MAKER #2 (CUBED ICE)
		7160	6620	5830	10160								5800	4580	3240	5180		

CONNECTED VA (A) 11740
CONNECTED VA (B) 9860
CONNECTED VA (C) 11010
CONNECTED VA (ABC) 32610

		CONNECTED		DEMAND
NON-CONTINUOUS	*1	0	100%	0
CONTINUOUS	*2	2720	125%	3400
KITCHEN EQUIPMENT	*3	29890	65%	19429
SUBTOTAL		32610		22829
NON-CONCIDENTAL		0		0
TOTAL		32610		22829

TOTAL NEUTRAL LOAD: 15,960 / (208X1.73) = 44.3 AMPS

TOTAL DEMAND LOAD: 22,829 / (208x1.73) = 63.4 AMPS

PANEL U

PANELBOARD: 100 AMP MAIN LUG | 120/208 1-PHASE | 10K AIC FULLY RATED | BOLT-IN: SURFACE-NEMA 3R | NEUTRAL BAR: EQUIPMENT GROUND BAR

CIRCUIT DESCRIPTION	*	VA LOAD A	B	N	Brk.	Wire	Cond.	Circuit Num.	Cond.	Wire	Brk.	VA LOAD N	A	B	*	CIRCUIT DESCRIPTION
CASHIER POS #1 & #2	1	180		180	20/1	12	.50"	1 2	.50"	12	20/1	180	180		1	VEEDER-ROOT
CASHIER POS #3 & #4	1		180	180	20/1	12	.50"	3 4	.50"	12	20/1	180		180	1	DISPENSER DATA BOX
SAFE	1	180		180	20/1	12	.50"	5 6	.50"	12	20/1	180	180		1	INTERCOM
LOTTO	1		180	180	20/1	12	.50"	7 8	.50"	12	20/1	180		180	1	EMS
ATM	1	180		180	20/1	12	.50"	9 10	.50"	12	20/1	180	180		1	FRAME RELAY
	1		180	180	20/1	12	.50"	11 12	.50"	12	20/1	180		180	1	OFFICE COMPUTER
								13 14	.50"	12	20/1	180	180		1	IMAGE VAULT
MAIN BREAKER					30/2	10		15 16	.50"	12	20/1	180		180	1	CPI CONTROL POWER
MAIN BREAKER					30/2	10		17 18	.50"	12	20/1	180	180		1	ALARM PANEL & PAGING
		540	540	1080								1620	900	720		

CONNECTED VA (A) 1440
CONNECTED VA (B) 1260
CONNECTED VA (AB) 2700

		CONNECTED	DEMAND
NON-CONTINUOUS	*1	2700	2700
CONTINUOUS	*2	0	0
KITCHEN EQUIPMENT	*3	0	0
SUBTOTAL		2700	2700
NON-CONCIDENTAL		0	0
TOTAL		2700	2700

TOTAL NEUTRAL LOAD: 2,700 / 208 = 13.0 AMPS

TOTAL DEMAND LOAD: 2,700 / 208 = 13.0 AMPS

PANEL G

PANELBOARD: 225 AMP MAIN LUG | 120/208 3-PHASE | 65K AIC SERIES RATED | BOLT-IN: SURFACE-NEMA 3R | NEUTRAL BAR: EQUIPMENT GROUND BAR

CIRCUIT DESCRIPTION	*	VA LOAD A	B	C	N	Brk.	Wire	Cond.	Circuit Num.	Cond.	Wire	Brk.	VA LOAD N	A	B	C	*	CIRCUIT DESCRIPTION
DISPENSER 1/2	1				260	SWN$_1$	12	1"	1 2	.75"	10	20/3		900			1	STP REGULAR #1
DISPENSER 1/2	1		260			20/1^1	12	1"	3 4	.75"	10	20/3			900		1	STP REGULAR #1
DISPENSER 3/4	1				260	SWN$_1$	12	1"	5 6	.75"	10	20/3				900	1	STP REGULAR #1
DISPENSER 3/4	1	260				20/1^1	12	1"	7 8	.75"	10	20/3		900			1	STP REGULAR #2
DISPENSER 5/6	1				260	SWN$_1$	12	1"	9 10	.75"	10	20/3			900		1	STP REGULAR #2
DISPENSER 5/6	1			260		20/1^1	12	1"	11 12	.75"	10	20/3				900	1	STP REGULAR #2
DISPENSER 7

INTERIOR CABINET VIEW

DEADFRONT CABINET VIEW

EXTERIOR CABINET VIEW

FUELING CONTROLLER
FI-DCS-8D-4P

FUELING CONTROL SCREEN PROVIDES ISOLATION AND CONTROL OF UP TO 8 DISPENSERS AND 4 SUBMERSIBLE PUMPS. INCLUDES MAINTENANCE SWITCHES FOR DISPENSERS AND SUBMERSIBLE PUMPS.

PUMP SCHEDULE	
PUMP	PRODUCT
1	SUB PUMP 1
2	SUB PUMP 2
3	SUB PUMP 3
4	SUB PUMP 4

WIRE LEGEND
FACTORY WIRING
FIELD WIRING

1.0 CPI SYSTEM DETAILS
TYPE 3R SYSTEM

ENCLOSURE DIMENSIONS:
12.25"W X 16.375"H X 3.75"D

1.1 DISPENSING EQUIPMENT DISCONNECT (DED) DETAIL

OPTIONAL REMOTE CASHIER CONTROL PANEL. PROVIDED BY CPI. FIELD INSTALLED AND WIRED BY E.C.

1.3 CASHIER CONTROL PANEL DETAIL
CCP-ESR-4BPS

FUELING CONTROLLER
FI-DCS-8D-4P

FUELING CONTROL SCREEN PROVIDES ISOLATION AND CONTROL OF UP TO 8 DISPENSERS AND 4 SUBMERSIBLE PUMPS. INCLUDES MAINTENANCE SWITCHES FOR DISPENSERS AND SUBMERSIBLE PUMPS.

PUMP SCHEDULE	
PUMP	PRODUCT
1	SUB PUMP 1
2	SUB PUMP 2
3	SUB PUMP 3
4	SUB PUMP 4

1.4 FUELING NOTES

NOTES:

1. COMPLETE SYSTEM IS UL LISTED AND MEETS REQUIREMENTS OF CURRENT NFPA 70 NATIONAL ELECTRIC CODE.
2. AVERAGE INSTALLATION TIME IS 2 HOURS ONCE SYSTEM HAS BEEN SET INTO PLACE.
3. FOR INFORMATION AND ORDERING CONTACT:

CAROLINA PRODUCTS, INC.
(800) 736-4455 (PH)
(704) 367-1215 (FAX)

1.5 GENERAL NOTES

NOTE: PRIOR TO CONSTRUCTION, CONTRACTOR TO OBTAIN SHOP DRAWINGS FROM CAROLINA PRODUCTS INC. FOR COMPLETE INSTALLATION, WIRING REQUIREMENTS AND DIMENSIONS OF SWITCHGEAR AND COMPONENTS.

CAROLINA PRODUCTS, INC.
1132 PRO AM DR.
CHARLOTTE, NC 28211
PH.(704)364-9029 , FX.(704)367-1215

CPI
CAROLINA PRODUCTS, INC
CONTROL AND POWER INTEGRATION

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REVISION
REVISION
REVISION
REVISION

CIRCLE K
CPI DETAIL SHEET

CPI PROJECT #
CPI DRAWING #
SHEET: S
DATE: 01/02/14
DRAWN BY: PDM

CLIENT:
CIRCLE K STORES, INC
Gulf Coast Business Unit

DESIGN TEAM TITLE:
MDM SERVICES, INC.
engineering • environmental • construction
1055 KATHLEEN ROAD, LAKELAND, FLORIDA 33805
Phone: (863) 646-9130
CA. #2738-E

NO.	DATE	REVISION DESCRIPTION

GCBU 5187
STANDARD BUILDING

SITE DESIGNATIONS:
CIRCLE K STORE #TBD
2336 WEST WOOD ROAD
WEST LAKE, LOUISIANA

SCALE: AS NOTED
MDM JOB # 19
DATE: 01-22-2020
DESIGNED BY:
DRAWN BY: PD
CHECKED BY:
FILE NAME:

DRAWING TITLE:
CAROLINA PRODUCTS INC. SWITCHGEAR DETAILS

SHEET NO:
E7.0

ISSUED FOR CONSTRUCTION 10/2/2020

SCALE:

PLAN VIEW: 1/4"=1'-0"
ISOMETRIC VIEWS: NONE

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CIRCLE K - GC
STORE #9086 - 5187 NTI
WESTLAKE, LA
JASON HOEHN

Revisions

UPDATE: REMOVED LOTTERY CUT-OUT. TJN-11/17/2020

Drawn By: T.J.N.

Date: 11/10/2020

Sheet: 1 of 2

ROYSTON gets retail

Drawing Number: 9052642

Sheet Number: A1

SCALE:

PLAN VIEW: 1/4"=1'-0"
ISOMETRIC VIEWS: NONE

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CIRCLE K - GC
STORE #9086 - 5187 NTI
WESTLAKE, LA
JASON HOEHN

Revisions

Drawn By: T.J.N.

Date: 11/10/2020

Sheet: 2 of 2

ROYSTON gets retail

Drawing Number: 9052642

Sheet Number: A2