CITY OF WEST DES MOINES
CITY COUNCIL MEETING COMMUNICATION

Date: February 9, 2015

ITEM: Chick-fil-A, 4502 University Avenue – Approval to construct a 4,684 sq. ft. drive through restaurant and parking lot – SP-002570-2014

RESOLUTION: Approval of Site Plan

FINANCIAL IMPACT: Undetermined.

BACKGROUND: The applicant, Chick-fil-A, Inc., represented by Joe Vavrina of HR Green Inc., requests approval of a site plan to construct a 4,684 square foot drive through restaurant with parking lot and associated site improvements on that property located at 4502 University Avenue. The property is the current Macaroni Grill restaurant location. The applicant is proposing to demolish the Macaroni Grill building to construct the new Chick-fil-A building.

Plan and Zoning Commission Action:
Vote: 4-0 approval, with Commissioners Brown, Cownie and Hatfield absent
Date: February 2, 2015
Motion: Adopt a resolution recommending the City Council approve the Site Plan Request

OUTSTANDING ISSUES: There are no outstanding issues. The applicant has stated that they are in agreement with all of staff's recommendations and conditions.

The following items of interest are noted in the attached Plan and Zoning Commission report (see Exhibit I):

- Applicant's Request
- History
- City Council Subcommittee - *Development & Planning: 10/23/2014*
- Staff Review and Comments
  - *Parking Lot Modifications*
  - *Parking*
- Comprehensive Plan Consistency
- Findings
- Staff Recommendations and Conditions of Approval
- Owner/Applicant/Applicant Representative Information

RECOMMENDATION: Based upon the preceding review and a finding of consistency with the goals and policies of the Comprehensive Plan, the Plan and Zoning Commission recommends the City Council approve the Chick-fil-A Site Plan to allow the construction of an approximately 4,684 square foot drive through restaurant with parking lot and associated site improvements, subject to the applicant meeting all City Code requirements and the following conditions of approval:

1. Prior to initiation of any site work, including grading, the applicant providing a copy of the Iowa DNR issued NPDES General Permit #2 to staff; and

2. Prior to issuance of an occupancy permit, including Temporary Occupancy, the applicant making necessary modifications to the retention ponds immediately to the east as outlined in the Storm Water Management Plan to comply with West Des Moines Storm Water Management Standards.

Lead Staff Member: Brian Portz, AICP BP

Staff Reviews:

Department Director	
Appropriations/Finance	
Legal	
Agenda Acceptance	

PUBLICATION(S) (if applicable)

Published In	not requried
Date(s) Published	N/A
Letter sent to surrounding property owners	

SUBCOMMITTEE REVIEW (if applicable)

Committee	Development & Planning		
Date Reviewed	10/23/2014		
Recommendation	Yes ☒	No ☐	Split ☐

ATTACHMENTS:

- Exhibit I - Plan and Zoning Commission Communication
  - Attachment A - Commission Resolution
    - Exhibit A Conditions of Approval
  - Attachment B - Location Map
  - Attachment C - Site Plans
  - Attachment D - Elevations
- Exhibit II - City Council Resolution
  - Exhibit A - Conditions of Approval

EXHIBIT I

CITY OF WEST DES MOINES
PLAN AND ZONING COMMISSION COMMUNICATION

Meeting Date: February 2, 2015

Item: Chick-fil-A, 4502 University Avenue – Approval to construct a 4,684 sq. ft. drive through restaurant and parking lot – SP-002570-2014

Requested Action: Approval of Site Plan

Case Advisor: Brian Portz, AICP BP

Applicant's Request: The applicant, Chick-fil-A, Inc., represented by Joe Vavrina of HR Green Inc., requests approval of a site plan to construct a 4,648 sq. ft. drive through restaurant with parking lot and associated site improvements on that property located at 4502 University Avenue. The property is the current Macaroni Grill restaurant location. The applicant is proposing to demolish the Macaroni Grill building to construct the new Chick-fil-A building.

History: The property is located within the Three Fountains Commercial PUD. The Three Fountains PUD was established in 1994, an amendment in 1998 rewrote the PUD, and an amendment in 1999 amended the signage portion of the ordinance. In November 2014, the City Council approved an additional amendment to the PUD to allow up to two drive-through uses in PUD Parcel A (the parcel in which Chick-fil-A will be located) and to change the building setback from University Avenue for accessory structures in Parcel A from 120 feet from the ultimate right-of-way line to 100 feet from the ultimate right-of-way line of University Avenue.

City Council Subcommittee: This project was presented to the Development and Planning City Council Subcommittee on October 23, 2014. The Subcommittee was supportive of the project.

Staff Review and Comment: This request was distributed to other City departments and other agencies for their review and comment. There are no outstanding issues with them. Staff would note the following:

- *Parking Lot Modifications:* Modifications to the parking lot north of the proposed building are being completed to abide by a recommendation of the traffic study that was completed for the project. The traffic study did not identify any negative impacts of the proposed development on the adjacent City streets, but it did note that the northernmost access from the existing parking lot to the main drive aisle that connects to University Avenue should be removed because of its close proximity to the University Avenue intersection. The proposed site plan removed this access and reconfigured the parking lot to move the access point further away from University Avenue.
- *Parking:* Customers of Chick-fil-A will have access to the modified parking lot north of the building and to the parking spaces west of the building. These parking spaces are not located on the property that will be owned by Chick-fil-A, but are located on the property of the Shoppes at Three Fountains. There is an existing Declaration of Covenants, Conditions, Restrictions and Easements between the Shoppes at Three Fountains property and the Chick-fil-A property that will allow Chick-fil-A customers to use the parking lot on the larger property, just as Macaroni Grill has done in the past.

Comprehensive Plan Consistency: The project has been reviewed for consistency with the Comprehensive Plan. Based upon that review, a finding has been made that the proposed project is consistent with the Comprehensive Plan in that the project is consistent with all of the goals and policies of the Comprehensive Plan and the land use map of the Comprehensive Plan.

Findings: This proposed project was distributed to various city departments for review and comment. Based upon that review, the following findings have been made on the proposed project:

1. The proposed development and use is consistent with the West Des Moines Comprehensive Plan in that the project has been reviewed for consistency with the Comprehensive Plan. Based upon that review, a finding has been made that the proposed project is consistent with the Comprehensive Plan in that the project is consistent with all of the goals and policies of the Comprehensive Plan.

2. The proposed development and use does assure compatibility of property uses within the zone and general area in that this project was reviewed by various City Departments for compliance with the Zoning Ordinance.

3. All applicable standards and conditions have been imposed which protects the public health, safety and welfare in that this project was reviewed by various City Departments and public agencies for compliance with the various state and local regulations. Based upon that review a finding is made that the project has been adequately conditioned to protect the health, welfare and safety of the community.

4. There is adequate on-site and off-site public infrastructure to support the proposed development in that this project was reviewed by various public agencies and City Departments and public utilities to ensure that either the petitioner will construct or the project has been conditioned to construct adequate public infrastructure to serve the development.

5. The proposed development and use has met the requirements contained in the City Code in that this project was reviewed by various City Departments and the project has complied with or has been conditioned to comply with all City Code requirements.

6. The proposed development and use is in keeping with the scale and nature of the surrounding neighborhood in that the proposed project is consistent with the zoning designation and Comprehensive Plan which designates this site as suitable for development such as that proposed by this project.

Staff Recommendation And Conditions Of Approval: Based upon the preceding review and a finding of consistency with the goals and policies of the Comprehensive Plan, staff recommends the Plan and Zoning Commission adopt a resolution recommending the City Council approve the Chick-fil-A Site Plan to allow the construction of an approximately 4,684sf drive through restaurant with parking lot and associated site improvements, subject to the applicant meeting all City Code requirements and the following:

1. Prior to initiation of any site work, including grading, the applicant providing a copy of the Iowa DNR issued NPDES General Permit #2 to staff; and

2. Prior to issuance of an occupancy permit, including Temporary Occupancy, the applicant making necessary modifications to the retention ponds immediately to the east as outlined in the Storm Water Management Plan to comply with West Des Moines Storm Water Management Standards.

Property Owner: Eric Siu Ng & Le Ai Pham
2277 Wind River Land
Rowland Heights, CA 91748

Applicant(s): Chick-fil-A, Inc.
5200 Buffington Road
Atlanta, GA 30349
Jason.hill@chick-fill-a.com

Applicant's Representative:

Joe Vavrina
H.R. Green, Inc.
420 N. Front Street
McHenry, IL 60050
jvavrina@hrgreen.com

ATTACHMENTS:

Attachment A	-	Plan and Zoning Commission Resolution
Exhibit A	-	Conditions of Approval
Attachment B	-	Location Map
Attachment C	-	Site Plans
Attachment D	-	Elevations

ATTACHMENT A

RESOLUTION NO. PZC-15-006

A RESOLUTION OF THE PLAN AND ZONING COMMISSION OF THE CITY OF WEST DES MOINES, RECOMMENDING TO THE CITY COUNCIL THAT IT APPROVE A SITE PLAN ALLOWING CONSTRUCTION OF A DRIVE THROUGH RESTAURANT AT 4502 UNIVERSITY AVENUE

WHEREAS, pursuant to the provisions of Title 10, Chapter 1 et seq, of the West Des Moines Municipal Code, the applicant, Chick-fil-A, Inc., in cooperation with the property owners, Eric Siu Ng & Le Ai Pham, have requested approval of the Chick-fil-A Site Plan (SP-002570-2014) for that 0.35 acre site located at 4502 University Avenue to allow the construction of an approximately 4,648 sq. ft. drive through restaurant with parking lot and associated site improvements;

WHEREAS, studies and investigations were made, and staff reports and recommendations were submitted which is made a part of this record and herein incorporated by reference;

WHEREAS, on February 2, 2015 this Commission held a duly-noticed public meeting to consider the application for a Site Plan (SP-002570-2014);

NOW, THEREFORE, THE PLAN AND ZONING COMMISSION OF THE CITY OF WEST DES MOINES DOES RESOLVE AS FOLLOWS:

SECTION 1. The findings, for approval, in the staff report dated February 2, 2015, or as amended orally at the Plan and Zoning Commission meeting of February 2, 2015 are adopted.

SECTION 2. SITE PLAN (SP-002570-2014) to allow construction of an approximately 4,648 sq. ft. drive through restaurant with parking lot and associated site improvements, is recommended to the City Council for approval, subject to compliance with all the conditions in the staff report dated February 2, 2015, including conditions added at the meeting, and attached hereto as Exhibit "A." Violation of any such conditions shall be grounds for revocation of the permit, as well as any other remedy which is available to the City.

PASSED AND ADOPTED on February 2, 2015.

Erica Andersen, Chairperson
Plan and Zoning Commission

ATTEST:

Recording Secretary

I HEREBY CERTIFY that the foregoing resolution was duly adopted by the Plan and Zoning Commission of the City of West Des Moines, Iowa, at a regular meeting held on February 2, 2015, by the following vote:

AYES: Andersen, Costa, Crowley, Erikcson
NAYS: -0-
ABSTENTIONS: -0-
ABSENT: Brown, Cownie, Hatfield

ATTEST:

Recording Secretary

Exhibit A
Conditions of Approval

1. Prior to initiation of any site work, including grading, the applicant providing a copy of the Iowa DNR issued NPDES General Permit #2 to staff; and

2. Prior to issuance of an occupancy permit, including Temporary Occupancy, the applicant making necessary modifications to the retention ponds immediately to the east as outlined in the Storm Water Management Plan to comply with West Des Moines Storm Water Management Standards.

ATTACHMENT B

Chick-fil-A

Legend

- Parcels
- Parks
- Greenways

250.0 0 125.00 250.0 Feet

NAD_1983_StatePlane_Iowa_South_FIPS_1402_Feet

© City of West Des Moines, Iowa

Disclaimer: The City of West Des Moines makes no warranties regarding the accuracy or completeness of the data provided herein.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

ATTACHMENT C

WEST DES MOINES, IOWA

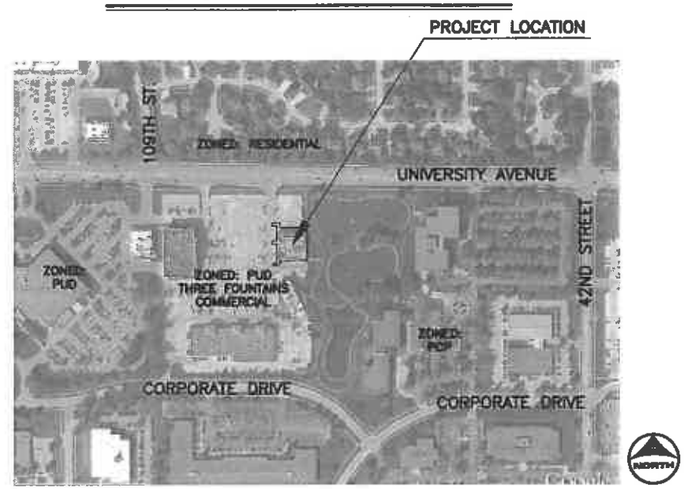
4502 UNIVERSITY AVENUE, WEST DES MOINES

ZONED

PUD#40
UNDERLYING ZONING:
PROFESSIONAL BUSINESS PARK

COMPREHENSIVE PLAN LAND USE DESIGNATION:
EXISTING: SUPPORT COMMERCIAL (SC)
REQUESTED: SUPPORT COMMERCIAL (SC)

LOCATION MAP



APPLICANT INFORMATION:

APPLICANT AND BUSINESS OWNER:

5200 BUFFINGTON ROAD
ATLANTA, GEORGIA 30349-2998
(404)-884-8530
MR. JASON HILL, P.E.
EMAIL: jason.hill@chick-fil-a.com

TYPE OF USE:
COMMERCIAL FAST FOOD RESTAURANT WITH DRIVE-THRU

PROPERTY OWNER LOT 1

ERIC SIU WAN NG AND LE AI PHAM
AS TRUSTEES OF THE NG & PHAM FAMILY TRUST
DATED MARCH 3, 2011
2277 RIVER LANE
ROWLAND HEIGHTS, CALIFORNIA 91748

ADJACENT PROPERTY OWNER

SHOPPES AT THREE FOUNTAINS, LLC.
1225 JORDAN CREEK PARKWAY
SUITE 200
WEST DES MOINES, IA 50266
PHONE: (515)-223-4500

ELECTRICAL CONSULTANT

W-T MECHANICAL/ELECTRICAL ENGINEERING, LLC.
2675 PRATUM AVENUE
HOFFMAN ESTATES, IL 60192
PHONE: (224)-293-8312
KENNETH MEDDINGS – ELECTRICAL ENGINEER

ARCHITECTS:

CHIPMAN DESIGN ARCHITECTURE, INC
1550 N. NORTHWEST HWY., SUITE 400
PARK RIDGE, ILLINOIS 60068
PHONE: (847) 298-6900
STEVE AJSTER – PROJECT MANAGER

ENGINEER:

HR GREEN, INC.
420 NORTH FRONT STREET, SUITE 100
MCHENRY IL. 60050
PHONE: (815) 385-1778
JOSEPH F. VAVRINA, P.E. – PROJECT MANAGER

SURVEYOR:

BISHOP ENGINEERING CO., INC.
3501 104TH STREET
DES MOINES, IA 50322
PHONE: 515-276-0467
SCOTT A. CATRON, P.L.S. – SURVEYOR

LANDSCAPING CONSULTANT

HR GREEN, INC.
420 NORTH FRONT STREET, SUITE 100
MCHENRY IL. 60050
PHONE: (815) 385-1778
MARISA ROMME – LANDSCAPE ARCHITECT

UTILITY CONTACTS:

(NOTIFY ALL 48 HOURS PRIOR TO CONSTRUCTION)

UTILITY ONE-CALL SERVICE
(800) 292-8989

CITY OF WEST DES MOINES WATER WORKS
WATER SERVICE:
KEVIN L. TREVILLYAN
515-222-3465
ktrevillyan@wdmww.com

CITY OF WEST DES MOINES PUBLIC WORKS
DRAINAGE SERVICE:
BEN MCALISTER
515-222-3479
ben.mcalister@wdm.iowa.gov

CITY OF WEST DES MOINES PUBLIC WORKS
SANITARY SERVICE:
JASON SCHLICKBERND
515-222-3477
jason.schlickbernd@wdm.iowa.gov

CITY OF WEST DES MOINES PUBLIC WORKS
TRAFFIC SERVICE:
RICK KNOWLES
rick.knowles@wdm.iowa.gov
515-230-5535

CENTURYLINK LOCAL NETWORK - TELEPHONE
TOM STURMER
303-864-9080
Thomas.sturmer@centurylink.com

MIDAMERICAN ENERGY COMPANY - ELECTRIC
NORM TRENTMAN
515-252-6621
NETrentman@midamerican.com

MIDAMERICAN ENERGY COMPANY- GAS
NORM TRENTMAN
515-252-6621
NETrentman@midamerican.com

MEDIACOM COMMUNICATIONS CORP
PAUL MAY
515-246-2252
pmay@mediacomcc.com

SITE BENCHMARKS:

BENCH MARK No. 69
INTERSECTION OF 28th STREET AND UNIVERSITY AVENUE. SOUTHWEST CORNER OF INTERSECTION 41.5 FEET SOUTH OF CENTERLINE OF UNIVERSITY AVENUE. 65.5 FEET WEST OF CENTER LINE OF 28th STREET.
WEST DES MOINES DATUM ELEVATION 96.56

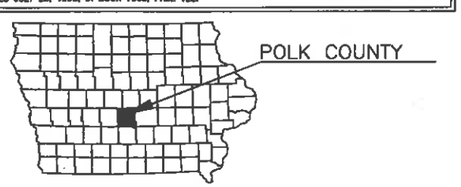
BENCH MARK No. 73
INTERSECTION OF WEST LAKES PARKWAY AND UNIVERSITY AVENUE. SOUTHEAST CORNER OF INTERSECTION 58.5 FEET EAST OF CENTERLINE OF WEST LAKES PARKWAY, 73.0 FEET SOUTH OF CENTER LINE OF UNIVERSITY AVENUE.
WEST DES MOINES DATUM ELEVATION 170.91

SITE BENCHMARK #1:
"X" CUT ON TOP OF CURB AT SOUTH NOSE OF CONCRETE ISLAND WEST OF ENTRANCE DRIVE AT THE NORTHWEST CORNER OF PROPERTY.
WEST DES MOINES DATUM ELEVATION 178.17

SITE BENCHMARK #2:
"X" CUT ON TOP OF CURB AT NORTH NOSE OF CONCRETE ISLAND WEST OF ENTRANCE DRIVE AT THE SOUTHWEST CORNER OF PROPERTY.
WEST DES MOINES DATUM ELEVATION 180.01

LEGAL DESCRIPTION OF SUBJECT PARCEL

PARCEL 1:
LOT 1, THREE FOUNTAINS PLAT No. 2, AN OFFICIAL PLAT, NOW INCLUDED IN AND FORMING A PART OF THE CITY OF WEST DES MOINES, POLK COUNTY, IOWA.
PARCEL 2:
TOGETHER WITH THE BENEFIT OF EASEMENTS FOR ACCESS AND CONTAINED IN THAT CERTAIN MASTER DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS FOR THE SHOPPES AT THREE FOUNTAINS, DATED SEPTEMBER 18, 1996 AND FILED SEPTEMBER 18, 1996 IN BOOK 7488 AT PAGE 269, AS AMENDED BY THAT CERTAIN SUPPLEMENTAL DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS, AND EASEMENTS FOR PARCEL A, LOT 6 THREE FOUNTAINS, DATED SEPTEMBER 18, 1996 IN BOOK 7488 AT PAGE 280, AND AS AMENDED BY THAT CERTAIN SUPPLEMENTAL DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS, AND EASEMENTS FOR PROPERTY TO BECOME LOT 2, THREE FOUNTAINS PLAT No. 2, DATED APRIL 1, 1997, IN BOOK 7855 AT PAGE 427, AND AS AMENDED BY THAT CERTAIN FIRST AMENDMENT TO MASTER DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS, AND EASEMENTS FOR THE SHOPPES AT THREE FOUNTAINS, DATED AS OF JUNE 15, 1998, FILED JULY 23, 1998, IN BOOK 7985, PAGE 122.



NOTE:

- HR GREEN, INC. IS TO BE NOTIFIED 3 DAYS PRIOR TO CONSTRUCTION START.
- HR GREEN, INC. SHALL BE INCLUDED IN ALL PRE-CONSTRUCTION MEETINGS.
- PLANS WERE PREPARED WITH THE INTENT THAT HR GREEN, INC. WILL DO ALL CONSTRUCTION STAKING.
- ANY DISCREPANCIES ON THIS PLAN SET MUST BE NOTED AND HR GREEN, INC. NOTIFIED PRIOR TO ACTUAL CONSTRUCTION.

The Iowa Statewide Urban Design and Specifications (SUDAS) for Private Infrastructure, plus General Supplemental Specifications; and applicable Supplemental Specifications, Developmental Specifications, and Special Provisions, shall apply to construction on this project.

HRGreen

5525 MERLE HAY ROAD, SUITE 200 | JOHNSTON, IOWA 50131
Phone: 515.278.2913 | Toll Free: 800.728.7805 | Fax: 515.278.1846 | HRGreen.com

SHEET INDEX

CIVIL/SITEWORK

C-0.0	COVER SHEET
C-0.1	GENERAL NOTES, SPECIFICATIONS & LEGEND
C-1.0	EXISTING CONDITION PLAN
C-1.1	SITE DEMOLITION PLAN
C-2.0	SITE PLAN
C-3.0	GRADING PLAN
C-3.1	EROSION CONTROL PLAN
PS-1.0	PLUMBING SITE PLAN
C-4.0	STANDARD CONSTRUCTION DETAILS
C-4.1	STANDARD CONSTRUCTION DETAILS
C-4.2	STANDARD CONSTRUCTION DETAILS
C-4.3	STANDARD CONSTRUCTION DETAILS
C-5.0	EROSION CONTROL DETAILS

LANDSCAPING

L-1.0	TREE PRESERVATION PLAN
L-1.1	LANDSCAPE PLAN
L-1.2	LANDSCAPE DETAILS
L-1.3	LANDSCAPE SPECIFICATIONS

IRRIGATION PLANS

L-2.0	IRRIGATION PLAN
L-2.1	IRRIGATION DETAILS

PHOTOMETRIC PLANS

ES1.3	ELECTRICAL PHOTOMETRIC PLAN

AUTOTURN EXHIBIT

AT-1	AUTOTURN EXHIBIT

STANDARD DETAILS

The Iowa Statewide Urban Design and Specifications (SUDAS), plus General Supplemental Specifications; and applicable Supplemental Specifications, Developmental Specifications, and Special Provisions, shall apply to construction on this project.

FIGURE	NOTE	FIGURE	NOTE
3010.101		6010.601	TYPE A
3010.102		6010.602	TYPE E
3010.103		6010.603	TYPE R
4010.203		6010.604	TYPE 4B
5010.101		7010.102	
6010.301		7030.201	CLASS A
6010.308		9040.19	
6010.401		9040.20	
6010.501		9040.30	
7030.207	CLASS B	7030.204	

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

DAVID W. SCHULTZ, P.E. DATE
License Number: 19880
My license renewal date is December 31, 2015.
Pages or sheets covered by this seal:
C-SHEETS. (EXCEPT C-1.0) & PS-1.0 SHEET

IOWA ONE CALL
1-800-292-8989
WWW.IOWAONECALL.COM

CALL: 1-800-292-8989
WITH THE FOLLOWING:
COUNTY Polk
CITY-TOWNSHIP West Des Moines
PARCEL ID. NO.# 4502 University Avenue
48 hours before you dig
(Excluding Sat. Sun. & Holidays)

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

REVISIONS

	DATE:	BY:	DESCRIPTION:
3			
2	01/26/15	MRJ	PER CITY COMMENTS
1	01/16/15	MRJ	ISSUED FOR PERMIT

HRGreen.com
HRGreen

STORE #3526
UNIVERSITY AVENUE
4502 University Avenue
West Des Moines, IA
50266

SHEET TITLE
COVER SHEET

DWG EDITION V2
REVISION 01-2015

Job No. : 86140076
Store : 3526
Date : 01.19.15
Drawn By : MRJ
Checked By: JFV

Sheet
C-0.0

Plotted By:mjlarsen, Plotted:Jan 28, 2015 - 3:18pm,
Xrefs: xg1-CHICK-24X36-BDR.dwg;86140076-xV-Aerial.dwg,
Images: 86140076-Aerial.jpg
Comp. File: C:\JobSolutions\86140076\CAD\Dwgs\C\86140076_Cover.dwg, Layout: Title Cover.

SPECIFICATIONS & GENERAL NOTES

All items of this project shall be governed by specifications included in the documents listed below:

- A. Iowa Statewide Urban Design and Specifications (SUDAS), for Public Improvement (latest edition).
- B. Des Moines Metro Design Standards, for Public Improvement (latest edition).
- C. West Des Moines Standard Construction Specifications for Public Improvements
- D. West Des Moines Addendums
- E. Iowa Department of Transportation Design Manual, (latest edition).
- F. Iowa Construction Site Erosion Control Manual bu the Iowa Department of Natural Resources.
- G. Manual on uniform traffic control devices (MUTCD), (latest edition).

In addition the following special provisions supplement the said specifications, and in case of conflict with any part or parts of said specifications, these special provisions shall take precedence and shall govern.

1. SCOPE OF WORK. The proposed improvement consists of supplying all the necessary labor, material and equipment to satisfactorily construct and install all improvements according to the plans designated as CHICK-FIL-A, West Des Moines, IA.

2. CONSTRUCTION OF UNDERGROUND UTILITIES

   A. Excavation: Where working conditions and right-of-way permit, pipe line trenches with sloping sides may be used.

   The slopes shall not extend below the top of the pipe, and trench excavations below this point shall be made with vertical sides with widths not exceeding those specified herein for the various sizes of pipe.

   Open-cut trenches shall be sheeted and braced as required by the governing State and Federal laws and municipal ordinances, and as may be necessary to protect life, property, or the work.

   Where firm foundation is not encountered at the grade established due to unsuitable soil, all such unsuitable material shall be removed and replaced with approved compacted granular material.

   B. Removal of water: Contractors shall, at all times during construction, provide and maintain ample means and devices with which to remove and properly dispose of all water entering the excavations. No sanitary sewer shall be used for disposal of trench water.

   C. Bedding of pipe: All pipe shall be installed on a bed of approved, compacted granular material unless otherwise approved by the City Engineer. The bedding and backfilling of excavated materials shall cleared with City first and be installed as per typical trench backfill detail.

   D. Special backfill: Whenever the excavation is in existing or proposed street, parking areas, driveways, or other paved areas, the trench shall be backfilled with CA-6 crushed stone, compacted in place. The top 12" of the backfill shall be filled with road gravel or crushed stone and maintained as a temporary surface for the normal use of the area. Special backfill shall consist of CA-6 crushed stone and shall be compacted in place to ninety-five percent (95%) of maximum density at optimum moisture as determined by the Standard Proctor Test. Refer to the City standard trench detail.

   E. Restoration of drainage: As soon as possible after backfilling the trench, all ditching, grading and shaping necessary to restore the original drainage in the area of work shall be performed. Culverts removed during the course of the work shall be replaced as soon as practicable.

   Adequate temporary drainage facilities shall be provided during construction.

   F. Utilities: The Contractor shall notify all utility companies prior to the installation of any pipe lines. Where conflict exists between underground utilities and the proposed underground piping requiring a revision to the plans, such construction shall not be undertaken until such changes are approved by the City Engineer in writing.

   G. Removal of Storm and Sanitary Sewer Pipes: This work consist of removing and disposal of all storm and sanitary sewer structures and related pipes as shown on the plans. Storm and Sanitary Sewer removal will be paid for at the contract per lineal foot price. Structures shall be paid for at the contract unit price each. Both are to include all labor to remove the pipes and structures

3. The subgrade shall be free of unsuitable material and shall be compacted to a minimum of ninety-five percent (95%) of modified Proctor density. Testing for compaction shall be the responsibility of the Contractor. The owner will require a proof-roll test. This also applies to the parking lot and aisle subgrade and also upon gravel placement. All topsoil and any organic materials must be removed. The contractor shall notify the owner.

4. Easements for the existing utilities, both public and private, and utilities within public rights-of-way are shown on the plans according to available records. The Contractor shall be responsible for determining the exact location in the field of these utility lines and their protection from damage due to construction operations. If existing utility lines of any nature are encountered which conflict in location with new construction, the Contractor shall notify the Engineer so that the conflict may be resolved.

5. Contractor shall be responsible for securing all Permits including municipal permits.

6. INSPECTION. All improvements shall be subject to inspection by a duly authorized and qualified City inspector both during the course of construction and after construction is complete. The inspector shall have authority over materials of construction, methods of construction and workmanship to insure compliance with working drawings and specifications. The Contractor shall provide for reasonable tests and proof of quality of materials as requested by the inspector. The contractor shall notify the City of West Des Moines, Building Department (515-222-3630) at least 48 hours prior to any storm sewer, sanitary sewer, water main, or paving operations.

7. PIPE MATERIAL. Material permitted for use in sanitary sewers and services shall follow SUDAS.

8. Wherever a sewer crosses under a water main, the minimum vertical distance from the top of the sewer to the bottom of the water main shall be 18". Furthermore, a minimum horizontal distance of 10' between sanitary sewers and water mains shall be maintained. If either the vertical or horizontal distances described above cannot be maintained, or the sewer crosses above the water main, the sewer pipe shall be pipe of water main type quality, or the water main shall be encased in a steel sleeve for a perpendicular distance of 10' on each side of the sewer.

9. WATER AND SEWER – Pipe and Structure material shall follow SUDAS Specifications. Sewer Pipe:

10. SAN. MH, 48" DIA. Manholes shall be constructed of prefabricated concrete sections meeting the requirements of ASTM C-478. Sections shall be joined using either flexible rubber gaskets or preformed bituminous plastic gaskets. The manhole bottom shall be precast with the first riser section. Manholes shall have the pipe cast in place through the manhole or a water tight joint cast in the manhole wall to receive the pipe. Manhole frames and lids shall be of self-sealing type Neenah R-1642 with Type E or equal with approval by the municipality.

11. Sanitary sewer manholes shall be 4'-0" diameter precast structures, with appropriate frame and lids. Resilient connectors, conforming to ASTM C-923, shall be used between manhole and pipe(s).

12. All manholes to be eccentric, lids to have utility name.

13. All manholes and valve vaults shall be equipped with steps.

14. STORM SEWERS. Storm sewers shall be of reinforced concrete pipe meeting the requirements of ASTM designation C76. Pipe class shall be determined using the standard specifications listed previously. All joints shall be in accordance with ASTM C-443. And have O-rings to provide a water tight seal. See Storm Sewer Tabulations on sheet C-3.0 for detailed information.

15. STORM SEWER FRAMES AND LIDS. Frame and grates designated on the plans open lid shall be Neenah R-2401 or approved equal. See plans for appropriate open lid style. All frames and grates in the B-6.18 curb and gutter shall be Neenah R-3290A or approved equal.

16. WATER SERVICES. The domestic water services shall be 6" with valve and valve box as shown on the detail sheets. The valve box shall be a Clow corporation F-2450, screw type with F-2450 drop cover or approved equal.

17. PROTECTION OF WATER MAIN AND WATER SERVICE LINES. Water mains and water service lines shall be protected from sanitary sewers, storm sewers, combined sewers, house sewer service connections and drains as follows;

   A. Water Service Lines

   (1.) Horizontal Separation

   a. Water mains shall be laid at least 10' horizontally from any existing or proposed drain, storm sewer, sanitary sewer, combined sewer or sewer service connection.

   b. Water mains may be laid closer than 10' to a sewer line when:

   (1) Local conditions present a lateral separation of 10';

   (2) The water main invert is at least 18" above the crown of the sewer; and

   (3) The water main is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer with a minimum vertical separation of 18".

   c. Both the water main and drain or sewer shall be constructed of slip-on or mechanical joint cast or ductile iron pipe. The drain or sewer shall be pressure tested to the maximum expected surcharge head before backfilling.

   (2.) Vertical Separation

   a. A water main shall be laid so that its invert is 18" above the crown of the drain or sewer whenever water mains cross storm sewers, sanitary sewers or sewer service connections. The vertical separation shall be maintained for that portion of the water main located within 10' horizontally of any sewer or drain crossed. A length of water main pipe shall be centered over the sewer to be crossed with joints equidistant from the sewer or drain.

   b. Both the water main and sewer shall be constructed of slip-on or mechanical joint cast or ductile iron pipe, or PVC pipe meeting requirements of Section 653.111 when:

   (1) It is impossible to obtain the proper vertical separation as described in (a) above; and

   (2) The water main passes under a sewer or drain.

   c. A vertical separation of 18" between the invert of the sewer or drain and the crown of the water main shall be maintained where a water main crosses under a sewer. Support the sewer or drain lines to prevent settling and breaking the water main.

   d. Construction shall extend on each side of the crossing until the normal distance from the water main to the sewer or drain line is at least 10'.

   B. Special Conditions. Alternate solutions shall be presented to the City when extreme topographical, geological or existing structural conditions make strict compliance with (1) and (2) above technically and economically impractical." Alternate solutions will be approved provided water-tight construction structurally equivalent to approved water main material is proposed.

18. The Contractor may not remove any material from the site except as directed by the Owner or Engineer in the case of excess material.

19. EROSION CONTROL. It shall be the Contractor's responsibility to properly control erosion on the jobsite. Any siltation of conduits, structures, or ditches shall be cleaned and maintained by the Contractor until the seeding has taken hold. All washouts, gullies, etc. will be regraded and reseeded by the Contractor.

   The Contractor's responsibility for erosion control shall extend throughout the construction process. The Contractor shall be responsible for clean-up of paved surfaces within and adjacent to the project on a timely basis and/or at the direction of the City of West Des Moines IDNR General Permit #2.

   All construction will adhere to the requirements set forth in the EPA's new construction site activities National Pollutant Discharge Elimination System (NPDES) Storm Water Permit.

20. TOPSOIL PLACEMENT. Contractor shall place stockpiled topsoil or imported material on all disturbed areas with 6" topsoil raked smooth to be ready for landscaping (seeding, sod, etc.).

21. The Engineer and City of West Des Moines shall be notified if, during construction, any buried field tiles are exposed or disturbed. The Contractor shall reconnect said field tiles if deemed necessary.

22. All handicapped parking signs must have a $250.00 fine sign attached.

23. Lighting shall be constructed as per the Lighting plan, done under separate contract by Developer.

   All conduit shall be placed outside of any municipal easements except for authorized 90' crossings.

24. DISINFECTION AND CHLORINATION. All disinfection and chlorination shall follow SUDAS Specifications.

25. PRESSURE AND LEAKAGE TESTING. All pressure and leakage testing shall follow SUDAS Specifications.

   After the hydrostatic pressure test has been satisfactorily completed, all new work shall be subjected to a full-bore flush – 1000 G.P.M. flow test.

   The Contractor shall provide all labor, materials, tools and equipment necessary to perform the pressure and leakage tests.

   The Contractor shall satisfactorily perform the pressure and leakage tests prior to requesting the Engineer to and/or Building/Fire Inspector to witness the official tests.

   The Contractor shall notify the Engineer at least 48 hours prior to the time that the official tests are requested. Depending on traffic conditions, public hazard, or other reasons, the Engineer may direct when tests of new work shall be conducted, and may order the tests to be made in relatively short sections of new water mains.

   All testing shall follow City procedures and requirements in addition to those already listed.

   All testing shall be coordinated with Building Department and City of West Des Moines Public Works Department.

   It is the responsibility of the contractor to coordinate the required tests with the City of West Des Moines Public Works Department and the Building Department.

29. The Engineer shall be responsible for the following:

   A. To visit the construction site in order to better carry out the duties and responsibilities assigned by the Owner and undertaken by the Engineer; and

   B. The Engineer shall not, during such visits or as a result of such observations of the Contractor's work in progress, supervise, direct, have control over the Contractor's work, nor shall the Engineer have the authority over the responsibility for the means, methods, techniques, sequences, or procedures of construction selected by the Contractor, for safety precautions and programs incidental to the work of the Contractor, or for any failure of the Contractor to comply with laws, rules, regulations, ordinances, codes or orders applicable to the Contractor furnishing and performing his work. Accordingly, the Engineer can neither guarantee the performance of the construction contracts by the Contractor nor assume responsibility for the Contractor's failure to furnish and perform his work in accordance with the Contract Documents.

30. **No construction plans shall be used for construction unless specifically marked "For Construction." Prior to commencement of construction, the Contractor shall verify all dimensions and conditions affecting their work with the actual conditions at the job site. In addition, the Contractor must verify the Engineer's line and grade stakes. If there are any discrepancies from what is shown on the construction plans, he must immediately report same to the Engineer before doing any work, otherwise the Contractor assumes full responsibility. In the event of disagreement between the construction plans, standard specifications and/or special details, the Contractor shall secure written instructions from the Engineer prior to proceeding with any part of the work affected by omissions or discrepancies. Failing to secure such instructions, the Contractor will be considered to have proceeded at his own risk and expense.**

   In the event of any doubt or question arising with respect to the true meaning of the construction plans or specifications, the decision of the Engineer shall be final and conclusive.

31. Sawing of removal items as noted on the plans, or as required by the engineer, shall be considered incidental to the cost of the item being removed, and no extra compensation will be allowed, unless otherwise specified. All pavement removed within the 1-foot sawcut along the access drive shall be considered incidental to earth excavation.

32. All curb & gutter crossings over trench locations shall be reinforced with 2-#4 rebar extended 2' beyond each side of trench

33. All storm sewer pipe to have o-rings

34. All pavement markings on main access drives, approaches and parking lot shall be painted with two (2) coats of WHITE SHERWIN WILLIAMS "PROMAR TRAFFIC MARKING WHITE."

35. CONCRETE PAVEMENT. The curing requirements should follow Section 2301.03, K with fugitive dye as noted in the Iowa Department of Transportation Standard Specifications for Road and Bridge Construction, Latest Edition. Sealers should follow Section 4139 of the Iowa Department of Transportation Standard Specifications for Road and Bridge Construction, Latest Edition.

   Joint Sealing shall follow Section 4136 of the Iowa Department of Transportation Standard Specifications for Road and Bridge Construction, Latest Edition.

   The concrete curb shall be tied to the concrete pavement. Use No. 6, 30" long bar at 48" O.C. Alternatively the curb can be poured monolithically with the concrete pavement.

   Contractor to submit shop drawings of all curing and sealing materials to engineer prior to use.

SYMBOL LEGEND

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- —SAN— SANITARY SEWER
- —ST— STORM SEWER
- —G— GAS LINE
- —W— WATER LINE
- —U/E— UNDERGROUND ELECTRIC
- —O/E— OVERHEAD ELECTRIC
- —T— TELEPHONE LINE
- —F/O— FIBER OPTIC
- —CATV— CABLE TV
- TELEPHONE RISER
- TELEPHONE MANHOLE
- GROUND LIGHT
- LIGHT POLE
- POWER POLE
- TRANSFORMER POLE
- ELECTRIC TRANSFORMER
- ELECTRIC METER
- CLEAN-OUT
- INTAKE
- SURFACE INTAKE
- TRAFFIC SIGNAL MANHOLE
- FIRE HYDRANT
- WATER VALVE
- GAS METER
- (7) DENOTES NUMBER OF PARKING STALLS

Chick-fil-A
5200 Buffington Rd.
Atlanta Georgia,
30349-2998

REVISIONS

#	DATE:	BY:	DESCRIPTION:
1	01/19/15	MRJ	ISSUED FOR PERMIT
2	01/26/15	MRJ	PER CITY COMMENTS

HRGreen.com
HRGreen

STORE #3526
UNIVERSITY AVENUE
4502 University Avenue
West Des Moines, IA
50266

SHEET TITLE
SPECIFICATIONS, GENERAL NOTES AND LEGEND

DWG EDITION V2
REVISION 01-2015

Job No. : 86140076
Store : 3526
Date : 01.19.15
Drawn By : MRJ
Checked By: JFV

Sheet
C-0.1

Plotted By:mjarosi, Plotted:Jan 26, 2015 - 3:18pm,
Xrefs: xgt-CHICK-24X36-BDR.dwg;86140076-xV-Aerial.dwg,
Images:3502_GEP.jpg:,
Comp. File:(\\HRGMHNAS\Data\86140076\CAD\Dwgs\C\86140076_Cover.dwg), Layout Tab:Spec.

CHICK-FIL-A
WEST DES MOINES IOWA

PROPERTY DESCRIPTION:
PARCEL 1:
LOT 1, THREE FOUNTAINS PLAT No. 2, AN OFFICIAL PLAT, NOW INCLUDED IN AND FORMING A PART OF THE CITY OF WEST DES MOINES, POLK COUNTY, IOWA.
PARCEL 2:
TOGETHER WITH THE BENEFIT OF EASEMENTS FOR ACCESS AND CONTAINED IN THAT CERTAIN MASTER DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS FOR THE SHOPPES AT THREE FOUNTAINS, DATED SEPTEMBER 18, 1996 AND FILED SEPTEMBER 18, 1996 IN BOOK 7486 AT PAGE 265, AS AMENDED BY THAT CERTAIN SUPPLEMENTAL DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS, AND EASEMENTS FOR PARCEL A, LOT 8 THREE FOUNTAINS, DATED SEPTEMBER 18, 1996 IN BOOK 7486 AT PAGE 290, AND AS AMENDED BY THAT CERTAIN SUPPLEMENTAL DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS, AND EASEMENTS FOR PROPERTY TO BECOME LOT 2, THREE FOUNTAINS PLAT No. 2, DATED APRIL 1, 1997, IN BOOK 7605 AT PAGE 427, AND AS AMENDED BY THAT CERTAIN FIRST AMENDMENT TO MASTER DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS, AND EASEMENTS FOR THE SHOPPES AT THREE FOUNTAINS, DATED AS OF JUNE 15, 1998, FILED JULY 23, 1998, IN BOOK 7965, PAGE 122.

PROPERTY DESCRIPTION (METES AND BOUNDS)
BEGINNING AT THE NORTHEAST CORNER OF LOT 1 IN THREE FOUNTAINS PLAT No. 2, AN OFFICIAL PLAT, WEST DES MOINES, POLK COUNTY, IOWA; THENCE S00°06'15"E (BEARING BASIS IOWA STATE PLAIN COORDINATE SYSTEM SOUTH ZONE) ALONG THE EAST LINE OF SAID LOT 1, A DISTANCE OF 122.67 FEET TO THE SOUTHEAST CORNER OF SAID LOT 1; THENCE S89°53'45"W ALONG THE SOUTH LINE OF SAID LOT 1, A DISTANCE OF 105.00 FEET; THENCE S00°06'15"E ALONG THE SOUTHERLY LINE OF SAID LOT 1, A DISTANCE OF 12.50 FEET; THENCE SOUTHWESTERLY ALONG THE SOUTHERLY LINE OF SAID LOT 1 AND ALONG A 4.00 FEET RADIUS CURVE CONCAVE NORTHWESTERLY, A DISTANCE OF 6.28 FEET, SAID CURVE HAVING A CHORD BEARING OF S44°53'45"W AND A CHORD LENGTH OF 5.66 FEET; THENCE S89°53'45"W ALONG THE SOUTHERLY LINE OF SAID LOT 1, A DISTANCE OF 18.50 FEET TO THE WESTERLY LINE OF SAID LOT 1; THENCE NORTHWESTERLY ALONG THE WESTERLY LINE OF SAID LOT 1 AND ALONG A 4.00 FEET RADIUS CURVE CONCAVE NORTHEASTERLY, A DISTANCE OF 6.28 FEET, SAID CURVE HAVING A CHORD BEARING OF N45°06'15"W AND A CHORD LENGTH OF 5.66 FEET; THENCE N00°06'15"W ALONG THE WESTERLY LINE OF SAID LOT 1, A DISTANCE OF 0.67 FEET; THENCE NORTHEASTERLY ALONG THE WESTERLY LINE OF SAID LOT 1 AND ALONG A 3.00 FEET RADIUS CURVE CONCAVE SOUTHEASTERLY, A DISTANCE OF 4.71 FEET, SAID CURVE HAVING A CHORD BEARING OF N44°53'45"E AND A CHORD LENGTH OF 4.24 FEET; THENCE N89°53'45"E ALONG THE WESTERLY LINE OF SAID LOT 1, A DISTANCE OF 13.50 FEET; THENCE N00°06'15"W ALONG THE WESTERLY LINE OF SAID LOT 1, A DISTANCE OF 69.50 FEET; THENCE S89°53'45"W ALONG THE WESTERLY LINE OF SAID LOT 1, A DISTANCE OF 13.00 FEET; THENCE NORTHWESTERLY ALONG THE WESTERLY LINE OF SAID LOT 1 AND ALONG A 4.00 FEET RADIUS CURVE CONCAVE NORTHEASTERLY, A DISTANCE OF 6.28 FEET, SAID CURVE HAVING A CHORD BEARING OF N45°06'15"W AND A CHORD LENGTH OF 5.66 FEET; THENCE N00°06'15"W ALONG THE WESTERLY LINE OF SAID LOT 1, A DISTANCE OF 7.00 FEET; THENCE NORTHEASTERLY ALONG THE WESTERLY LINE OF SAID LOT 1 AND ALONG A 4.00 FEET RADIUS CURVE CONCAVE SOUTHEASTERLY, A DISTANCE OF 6.28 FEET, SAID CURVE HAVING A CHORD BEARING OF N44°53'45"E AND A CHORD LENGTH OF 5.66 FEET; THENCE N89°53'45"E ALONG THE WESTERLY LINE OF SAID LOT 1, A DISTANCE OF 13.00 FEET; THENCE N00°06'15"W ALONG THE WESTERLY LINE OF SAID LOT 1, A DISTANCE OF 54.50 FEET; THENCE S89°53'45"W ALONG THE WESTERLY LINE OF SAID LOT 1, A DISTANCE OF 12.50 FEET; THENCE NORTHWESTERLY ALONG THE WESTERLY LINE OF SAID LOT 1 AND ALONG A 4.00 FEET RADIUS CURVE CONCAVE NORTHEASTERLY, A DISTANCE OF 6.28 FEET, SAID CURVE HAVING A CHORD BEARING OF N45°06'15"W AND A CHORD LENGTH OF 5.66 FEET; THENCE N00°06'15"W ALONG THE WESTERLY LINE OF SAID LOT 1, A DISTANCE OF 4.00 FEET; THENCE NORTHEASTERLY ALONG THE WESTERLY LINE OF SAID LOT 1 AND ALONG A 4.00 FEET RADIUS CURVE CONCAVE SOUTHEASTERLY, A DISTANCE OF 6.28 FEET, SAID CURVE HAVING A CHORD BEARING OF N44°53'45"E AND A CHORD LENGTH OF 5.66 FEET TO THE NORTHERLY LINE OF SAID LOT 1; THENCE N89°53'45"E ALONG THE NORTHERLY LINE OF SAID LOT 1, A DISTANCE OF 21.50 FEET; THENCE SOUTHEASTERLY ALONG THE NORTHERLY LINE OF SAID LOT 1 AND ALONG A 4.00 FEET RADIUS CURVE CONCAVE SOUTHWESTERLY, A DISTANCE OF 6.28 FEET, SAID CURVE HAVING A CHORD BEARING OF S45°06'15"E AND A CHORD LENGTH OF 5.66 FEET; THENCE S00°06'15"E ALONG THE NORTHERLY LINE OF SAID LOT 1, A DISTANCE OF 15.50 FEET; THENCE N89°53'45"E ALONG THE NORTHERLY LINE OF SAID LOT 1, A DISTANCE OF 102.00 FEET TO THE POINT OF BEGINNING.
SAID TRACT OF LAND CONTAINS 15,079 SQUARE FEET OR 0.346 ACRES.

PROPRIETORS:
ERIC SIU WAH NG AND LE AI PHAM, AS TRUSTEES OF THE NG AND PHAM FAMILY TRUST DATED MARCH 2, 2011.

NOTES:
CHICAGO TITLE INSURANCE COMPANY COMMITMENT FOR TITLE INSURANCE COMMITMENT No. 235473 WITH AND EFFECTIVE DATE OF JUNE 3, 2014
SCHEDULE B – SECTION 2 EXCEPTIONS AFFECTING THE SURVEY ARE AS FOLLOWS:

ITEMS 1 THRU 11 INCLUSIVE ARE NON-SURVEY ITEMS AND NOT ADDRESSED ON THIS SURVEY.

ITEM 12. TERMS AND CONDITIONS OF DECLARATION OF COVENANTS, RESTRICTIONS AND DRAINAGE WAY EASEMENT FOR WESTOWN BUSINESS PARK FILED DECEMBER 30, 1983 IN BOOK 5315 AT PAGE 194.

PARTIAL REVOCATION OF COVENANT, CONDITIONS, RESTRICTIONS AND DRAINAGEWAY EASEMENT FOR WESTOWN BUSINESS PARK FILED APRIL 10, 1985 IN BOOK 5443 AT PAGE 699 REVOKES ARTICLES II, III AND IV SHOWN IN DECLARATION OF COVENANTS, ARTICLE V ARTICLES V & VI STORM WATER AND STORM DRAINAGE EASEMENT FOR WESTOWN BUSINESS PARK FILED DECEMBER 30, 1983 IN BOOK 5315 AT PAGE 194 AFFECTS THE SUBJECT PROPERTY AS TO PURPOSE, USES, APPROVAL OF PLANS BY THE DEVELOPER AFFECTS PROPERTY EAST OF THE SUBJECT PROPERTY AND IS SHOWN.

AMENDED RESTATED DECLARATION OF INDENTURES FOR THREE FOUNTAINS RECORDED MARCH 17, 2014 IN BOOK 15130 AT PAGE 589 INTENDED TO RENEW THE WESTOWN PARKWAY CC&R'S RESTATEMENT OF INDENTURES AND DECLARATION OF COMMON AREAS DATE OF THE RECORDATION. THIS DOCUMENT RENEWS THE EFFECTIVENESS OF THE WESTOWN PARKWAY CC&Rs AND IS SUBORDINATE TO THE RETAIL CC&Rs.

ITEM 13. TERMS AND CONDITIONS OF EASEMENTS, RESTRICTIONS AND SETBACK LINES SHOWN ON THE FINAL PLAT OF THREE FOUNTAINS FILED OCTOBER 26, 1985 IN BOOK Z AT PAGE 378 AFFECTS THE SUBJECT PROPERTY AND ARE SHOWN.

ITEM 14. TERMS AND CONDITIONS OF DECLARATION OF INDENTURES FOR THREE FOUNTAINS FILED SEPTEMBER 27, 1985 IN BOOK 5502 AT PAGE 87 DETAILS THE DEVELOPMENT, MAINTENANCE, USE AND RESPONSIBILITIES AFFECTS THE SUBJECT PROPERTY BUT CANNOT BE PLOTTED.
AMENDED BY DECLARATION OF INDENTURES FOR THREE FOUNTAINS FILED DECEMBER 8, 1988 IN BOOK 6007 AT PAGE 480 DETAILS THE DEVELOPMENT, MAINTENANCE, USE AND RESPONSIBILITIES, AND DEFINES OWNERSHIP AFFECTS THE SUBJECT PROPERTY BUT CANNOT BE PLOTTED.
AMENDED BY DESIGNATION OF COMMON AREAS THREE FOUNTAINS FILED OCTOBER 27, 1989 IN BOOK 6185 AT PAGE 846 DEFINES COMMON AREAS, STORM SEWER AND OVERLAND FLOWAGE EASEMENT AND DETENTION BASIN FACILITIES WITHIN THE PLAT OF THREE FOUNTAINS. AFFECTS THE SUBJECT PROPERTY BUT IS OFF SITE AND EAST OF THE SUBJECT PROPERTY.
AMENDED RESTATED DECLARATION OF INDENTURES FOR THREE FOUNTAINS RECORDED MARCH 17, 2014 IN BOOK 15130 AT PAGE 589 INTENDED TO RENEW THE WESTOWN PARKWAY CC&R'S RESTATEMENT OF INDENTURES AND DECLARATION OF COMMON AREAS DATE OF THE RECORDATION. THIS DOCUMENT RENEWS THE EFFECTIVENESS OF THE WESTOWN PARKWAY CC&Rs AND IS SUBORDINATE TO THE RETAIL CC&Rs.

ITEM 15. TERMS AND CONDITIONS OF ORDINANCE 1106 FILED AUGUST 2, 1996 IN BOOK 7458 AT PAGE 133 DEFINES LAND USE, DEVELOPMENT STANDARDS AND RESPONSIBILITIES FOR THE DEVELOPMENT, AFFECTS THE SUBJECT PROPERTY BUT CANNOT BE PLOTTED.

ITEM 16. TERMS AND CONDITIONS OF MASTER DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS, AND EASEMENTS FOR THE SHOPPES AT TREE FOUNTAINS, FILED SEPTEMBER 18, 1996 IN BOOK 7486 AT PAGE 265 DESCRIBES THE DEVELOPMENT, MAINTENANCE, USE ACCESS, PARKING REQUIREMENTS, EASEMENTS AND RIGHT TO ESTABLISH AN ASSOCIATION BOARD AFFECTS THE SUBJECT PROPERTY BUT CANNOT BE PLOTTED.
TERMS AND CONDITIONS OF AMENDED SUPPLEMENTAL DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS, AND EASEMENTS FILED SEPTEMBER 18, 1996 IN BOOK 7486 AT PAGE 290 RESTRICTS BUILDING LOCATION ON ADJACENT PROPERTY AND EASEMENTS AFFECTS THE SUBJECT PROPERTY AND IS SHOWN.
TERMS AND CONDITIONS OF AMENDED SUPPLEMENTAL DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS FILED APRIL 2, 1997 IN BOOK 7605 AT PAGE 427 FOR PROPERTY TO BECOME LOT 2 THREE FOUNTAINS PLAT No. 2, (ROCK BOTTOM) IS SOUTH OF THE SUBJECT PROPERTY AND OFF SITE.
TERMS AND CONDITIONS OF AMENDED BY FIRST AMENDMENT TO MASTER DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS, AND EASEMENTS FOR THE SHOPPES AT TREE FOUNTAINS, FILED JULY 23, 1998 IN BOOK 7965 AT PAGE 122 AND ACKNOWLEDGEMENT AND APPROVAL OF FIRST AMENDMENT TO MASTER DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS, AND EASEMENTS FOR THE SHOPPES AT TREE FOUNTAINS, FILED JULY 31, 1998 IN BOOK 7971 AT PAGE 904 AFFECTS THE DEVELOPMENT, MAINTENANCE AND USE OF THE ADJOINING PROPERTY, AFFECTS THE SUBJECT PROPERTY BUT CANNOT BE PLOTTED.

ITEM 17. INFORMATION AS SHOWN ON PLAT OF SURVEY OF PARCEL A OF LOT 8, THREE FOUNTAINS FILED SEPTEMBER 18, 1996 IN BOOK 7486 AT PAGE 307, SURVEY INFORMATION SHOWN DEFINES THE SUBJECT PROPERTY BOUNDARY AND IS SHOWN.

ITEM 18. TERMS AND CONDITIONS OF STREET RIGHT-OF-WAY AND UTILITY EASEMENTS FILED NOVEMBER 27, 1996 IN BOOK 7531 AT PAGE 367 IS NORTH OF THE SUBJECT PROPERTY. THIS EASEMENT DOES NOT AFFECT THE SUBJECT PROPERTY BUT IS SHOWN ON THE SURVEY.

ITEM 19. TERMS AND CONDITIONS OF INSTRUMENT FILED MARCH 6, 1997 IN BOOK 7586 AT PAGE 496 DEFINES RESPONSIBILITIES OF STORM INTAKE ON ADJACENT PROPERTY NORTH OF SUBJECT PROPERTY IS OFF SITE AND DOES NOT AFFECT THE SUBJECT PROPERTY.

ITEM 20. TERMS AND CONDITIONS OF RESOLUTION FILED MAY 30, 1997 IN BOOK 7645 AT PAGE 572 APPROVING THE FINAL PLAT OF THREE FOUNTAINS PLAT No. 2. SUBJECT PROPERTY IS PART OF THE PLAT AND AFFECTS THE SURVEY DATA AND IS SHOWN.

ITEM 21. TERMS AND CONDITIONS OF ORDINANCE No. 1206 FILED APRIL 21, 1998 IN BOOK 7864 AT PAGE 153 AMENDS PUD ZONING ORDINANCE No. 1106 AND DEFINES USES, ACCESS AND DEVELOPMENT REQUIREMENTS OF DEVELOPMENT TO ADOPT RESTRICTIONS, EASEMENTS, COVENANTS IN ACCORDANCE WITH THE FINAL PLAT OF THREE FOUNTAINS PLAT No. 2 AFFECTS THE SUBJECT PROPERTY AND ITEMS SHOWN ON THE FINAL PLAT OF THREE FOUNTAINS PLAT No.2 ARE SHOWN ON THE SURVEY.

ITEM 22. EASEMENTS, RESTRICTIONS AND SETBACK LINES SHOWN ON THE FINAL PLAT OF THREE FOUNTAINS PLAT No. 2 FILED MARCH 30, 1998 IN BOOK 7864 AT PAGE 232 AFFECTS THE SUBJECT PROPERTY AND ARE SHOWN.

ITEM 23. TERMS AND CONDITIONS OF MID-AMERICAN ENERGY COMPANY UNDERGROUND ELECTRIC LINE EASEMENT FILED JULY 16, 1998 IN BOOK 7958 AT PAGE 489 AFFECTS THE SUBJECT PROPERTY AND IS SHOWN.

ITEM 24. TERMS AND CONDITIONS OF AMENDMENT TO THE PUD ZONING FOR THREE FOUNTAINS COMMERCIAL PUD, ORDINANCE No. 1290 FILED JULY 20, 1999 IN BOOK 8273 AT PAGE 488 REPEALS OF THE SIGNAGE REGULATION, AFFECTS THE SUBJECT PROPERTY BUT CANNOT BE PLOTTED.

ITEM 25. TERMS AND CONDITIONS OF MEMORANDUM OF LEASE FILED JANUARY 3, 2008 IN BOOK 12558 AT PAGE 287 DESCRIBES THE PURPOSE OF THE MEMORANDUM AND GIVES PUBLIC NOTICE OF THE LEASE, AFFECTS THE SUBJECT PROPERTY BUT CANNOT BE PLOTTED.

ITEM 26. TERMS AND CONDITIONS OF SUBORDINATION, NON-DISTURBANCE AND ATTORNMENT AGREEMENT RECORDED JUNE 10, 2011 IN BOOK 13874 AT PAGE 30-38 DESCRIBED AGREEMENT BETWEEN LENDER, BORROWER AND LEASE HOLDER AFFECT THE SUBJECT PROPERTY BUT CANNOT BE PLOTTED.

ITEM 27. PROPERTY SUBJECT TO ANY RIGHT, INTEREST OR CLAIM AGAINST TITLE IN ACCORDANCE WITH THE PERISHABLE AGRICULTURAL COMMODITIES ACT OF 1930 AS AMENDED AND THE PACKERS AND STOCKYARDS ACT OF 1921, AS AMENDED OR ANY STATE LAWS.

ITEM 28. TERMS AND CONDITIONS OF EASEMENT FOR UTILITIES AND SIGNALS RECORDED MARCH 28, 2002 IN BOOK 9109 AT PAGE 758 AFFECTS THE SUBJECT PROPERTY AND IS SHOWN.

ITEM 29. TERMS AND CONDITIONS OF HAZARDOUS SUBSTANCES CERTIFICATE AND INDEMNITY RECORDED SEPTEMBER 10, 1998 IN BOOK 8005 AT PAGE 516 AFFECTS THE SUBJECT PROPERTY AS TO THE USE STORAGE MANUFACTURE OF DISPOSAL OF HAZARDOUS MATERIAL BUT CANNOT BE PLOTTED.

ITEM 30. CITY OF WEST DES MOINES IOWA RESOLUTION RECORDED OCTOBER 23, 2003 IN BOOK 10229 AT PAGE 370 GRANTS APPROVAL OF A 10'X10' FREE STANDING AUTOMATIC TELLER MACHINE ON A PART OF LOT 2, THREE FOUNTAINS PLAT 3 IS ON LOT SURROUNDING SUBJECT PROPERTY BUT IS NOT LOCATED WITHIN THE PERIMETER OF THIS SURVEY LIMITS.

ITEM 31. TERMS AND CONDITIONS OF SETBACK LINES SHOWN ON THE FINAL PLAT OF THREE FOUNTAINS PLAT 3 RECORDED JANUARY 19, 1999 IN BOOK 8117 AT PAGE 875 AFFECTS THE SUBJECT PROPERTY AND IS SHOWN.

SURVEYOR'S NOTES:
THERE IS NO EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS AT THE TIME OF THIS SURVEY.
THERE ARE NO PLANS FOR CHANGES IN THE STREET RIGHT OF WAY LINES ACCORDING TO THE CITY OF WEST DES MOINES, IOWA.
THERE IS NO EVIDENCE OF THE SITE USED AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.
THERE ARE NO WETLANDS ESTABLISHED ON THE SUBJECT PROPERTY.
ALL MATTERS SHOWN ON THE RECORDED PLATS PROVIDED TO THE SURVEYOR ARE SHOWN ON THIS SURVEY.
PARKING SPACES PROVIDED: NONE ON SUBJECT PROPERTY
PARCEL 1 HAS INDIRECT ACCESS TO UNIVERSITY AVENUE, A PUBLICLY DEDICATED STREET, VIA THE EASEMENT SET FORTH ON PARCEL 2

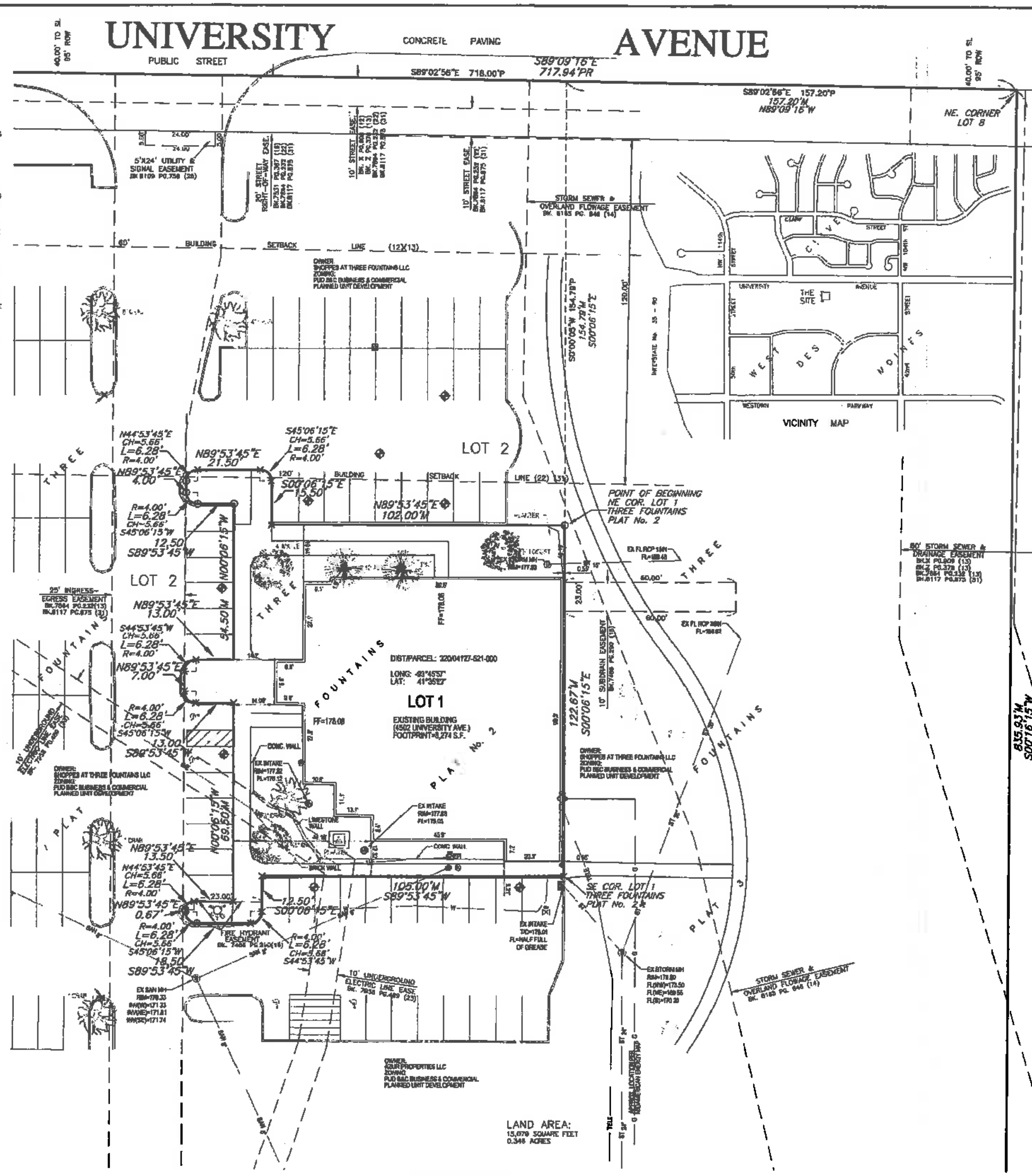
FLOOD HAZARD CERTIFICATION:
THIS SITE IS LOCATED IN A ZONE "X". AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO THE FIRM (FLOOD INSURANCE RATE MAP) ISSUED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) ON FLOOD INSURANCE RATE MAP 19025100030C, WITH AN EFFECTIVE DATE OF NOVEMBER 01, 1979 AND A REVISED DATE OF FEBRUARY 18, 2005, THIS CERTIFICATION IS BASED ON THE LATEST KNOWN MAP FOR THIS PARCEL.

SURVEYOR'S CERTIFICATION:
TO: CHICAGO TITLE INSURANCE COMPANY, AND CHICK-FIL-A, INC., A GEORGIA CORPORATION;

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 6(b), 7(a)(b1), 8, 9, 11(b), 13, 16, 17, 18, 19 AND 21 ($1,000,000 MINIMUM THRESHOLD) OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON AUGUST 22, 2014.

01/19/15
JOEL R. ROMEY PLS IOWA 12971 — DATE
jromey@bishopengr.com

JOEL R. ROMEY — LICENSED — 12971 — IOWA — PROFESSIONAL LAND SURVEYOR



SCALE: 1"=20'
BAR SCALE 0 10 20 30 40

LEGEND:
- ● INDICATES LOT CORNER FOUND 5/8" IRON ROD UNLESS OTHERWISE NOTED
- ○ INDICATES LOT CORNER PLACED 3/4" IRON PIPE WITH ORANGE PLASTIC ID. #12971 UNLESS OTHERWISE NOTED
- P INDICATES PLATTED DISTANCE
- M INDICATES MEASURED DISTANCE
- YPC YELLOW PLASTIC ID CAP
- POC POINT OF COMMENCEMENT
- POB POINT OF BEGINNING
- SL SECTION LINE
- ROW RIGHT-OF-WAY

ZONING: PUD B&C
BUSINESS & COMMERCIAL
PLANNED UNIT DEVELOPMENT

FRONT YARD SETBACK: NONE REQUIRED
REAR YARD SETBACK: 40 FEET
SIDE YARD SETBACK: 25 FEET

MAXIMUM HEIGHT: 45 FEET
MAXIMUM BULK COVERAGE
(F.A.R.): NO MINIMUM REQUIREMENT
MINIMUM LOT SIZE: NO MINIMUM REQUIREMENT
MINIMUM FRONTAGE: NO MINIMUM REQUIREMENT

CONTACTS:

DRAINAGE SERVICE:
CITY OF WEST DES MOINES
PUBLIC WORKS
BEN MCALISTER
515-222-3470
ben.mcalister@wdm.iowa.gov

SANITARY SERVICE:
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PUBLIC WORKS
JASON SCHLICKBERND
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jason.schlickbernd@wdm.iowa.gov

WATER SERVICE:
CITY OF WEST DES MOINES
WATER WORKS
KEVIN L. TREVILLYAN
515-222-3465
ktrevillyan@wdmww.com

TRAFFIC SERVICE:
CITY OF WEST DES MOINES
PUBLIC WORKS
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515-238-5535

GAS SERVICE:
MIDAMERICAN ENERGY COMPANY
NORM TRENTMAN
515-252-6621
NETrentman@midamerican.com

ELECTRIC SERVICE:
MIDAMERICAN ENERGY COMPANY
NORM TRENTMAN
515-252-6621
NETrentman@midamerican.com

TELEPHONE SERVICE:
CENTURYLINK LOCAL NETWORK
TOM STURMER
303-664-5090
Thomas.sturmer@centurylink.com

MEDIACOM COMMUNICATIONS CORP
PAUL MAY
515-246-3252
pmay@mediacomcc.com

UTILITY LEGEND:
- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- —SAN— SANITARY SEWER
- —ST— STORM SEWER
- —G— GAS LINE
- —W— WATER LINE
- —UE— UNDERGROUND ELECTRIC
- —OE— OVERHEAD ELECTRIC
- —T— TELEPHONE LINE
- —F/O— FIBER OPTIC
- —CATV— CABLE TV
- TELEPHONE RISER
- TELEPHONE MANHOLE
- GROUND LIGHT
- LIGHT POLE
- POWER POLE
- TRANSFORMER POLE
- ELECTRIC TRANSFORMER
- ELECTRIC METER
- CLEAN-OUT
- INTAKE
- SURFACE INTAKE
- TRAFFIC SIGNAL MANHOLE
- FIRE HYDRANT
- WATER VALVE
- GAS METER
- ⑦ DENOTES NUMBER OF PARKING STALLS

BENCH MARKS:
BENCH MARK No. 59
INTERSECTION OF 28th STREET AND UNIVERSITY AVENUE, SOUTHWEST CORNER OF INTERSECTION 41.5 FEET SOUTH OF CENTERLINE OF UNIVERSITY AVENUE, 68.5 FEET WEST OF CENTER LINE OF 28th STREET.
WEST DES MOINES DATUM ELEVATION 96.58

"X" CUT ON TOP OF CURB AT SOUTH NOSE OF CONCRETE ISLAND WEST OF ENTRANCE DRIVE AT THE NORTHWEST CORNER OF PROPERTY.
WEST DES MOINES DATUM ELEVATION 178.17

"X" CUT ON TOP OF CURB AT NORTH NOSE OF CONCRETE ISLAND WEST OF ENTRANCE DRIVE AT THE SOUTHWEST CORNER OF PROPERTY.
WEST DES MOINES DATUM ELEVATION 180.01

NOTE:
BASIS OF BEARING IS THE IOWA STATE PLAIN COORDINATE SYSTEM SOUTH ZONE AS DEFINED IN IOWA CODE.

PREPARED FOR:

HR GREEN, INC.
% MILAN DOBROSAVLJEVIC, PLS
420 NORTH FRONT STREET, SUITE 100
McHENRY, IL 60050

CHICK-FIL-A, INC.

CHICAGO TITLE INSURANCE COMPANY

CALL BEFORE YOU DIG
ONE CALL
TOLL FREE
1-800-292-8989

UTILITY NOTE:
THE LOCATION OF THE UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS AND ARE APPROXIMATE LOCATIONS. THE EXACT LOCATIONS OF ALL UTILITIES MUST BE ASCERTAINED IN THE FIELD. IT SHALL BE THE DUTY OF THE CONTRACTOR TO DETERMINE WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.
ONE CALL REQUEST/DIG NUMBER:
142200503

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

#	DATE:	BY:	DESCRIPTION:
1	10/17/14	JRR	PER COMMENTS 10/16/2014
2			
3			
4			
5			
6			
7			
8			

ALTA/ACSM
Land Title Survey
Chick-Fil-A
City of West Des Moines
Polk County, IA.

Bishop Engineering
"Planning Your Successful Development"
3501 104th Street
Des Moines, Iowa 50322-3825
Phone (515)276-0467 Fax (515)276-0217
Civil Engineering & Land Surveying Established 1959

STORE # 3526
WEST DES MOINES
IOWA
CFA SIR 11.62

SHEET TITLE

DWG EDITION SUBMITTAL
REVISION

Job No. : 86140076
Store : 3526
Date : 08/22/14
Drawn By : GA
Checked By: JRR

Sheet
1/1

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

#	DATE:	BY:	DESCRIPTION:
1	01/19/15	MRJ	ISSUED FOR PERMIT
2	01/26/15	MRJ	PER CITY COMMENTS

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STORE #3526

UNIVERSITY AVENUE

4502 University Avenue
West Des Moines, IA
50266

SHEET TITLE
EXISTING CONDITIONS PLAN

DWG EDITION V2
REVISION 01-2015

Job No. : 86140076
Store : 3526
Date : 01.19.15
Drawn By : MRJ
Checked By: JFV

Sheet
C-1.0

Plotted By: mjarosl, Plotted: Jan 26, 2015 - 3:43pm,
Xrefs: xgt-CHICK-24X36-BDR.dwg; 86140076-xV-Survey.dwg,
Images: University_Avenue_FSU#3526-Final_ALTA_Survey-011915.tif,
Comp. File: (\\HRGHNAS\Data\86140076\CAD\Dwgs\C\86140076_Existing_Conditions_Plan.dwg), Layout Tab: Exist. Cond.
Comp. File: (M:\Land Projects 2014\140318\dwg\140318-Z EXISTING.dwg), Layout Tab: ALTA SURVEY.

LEGEND

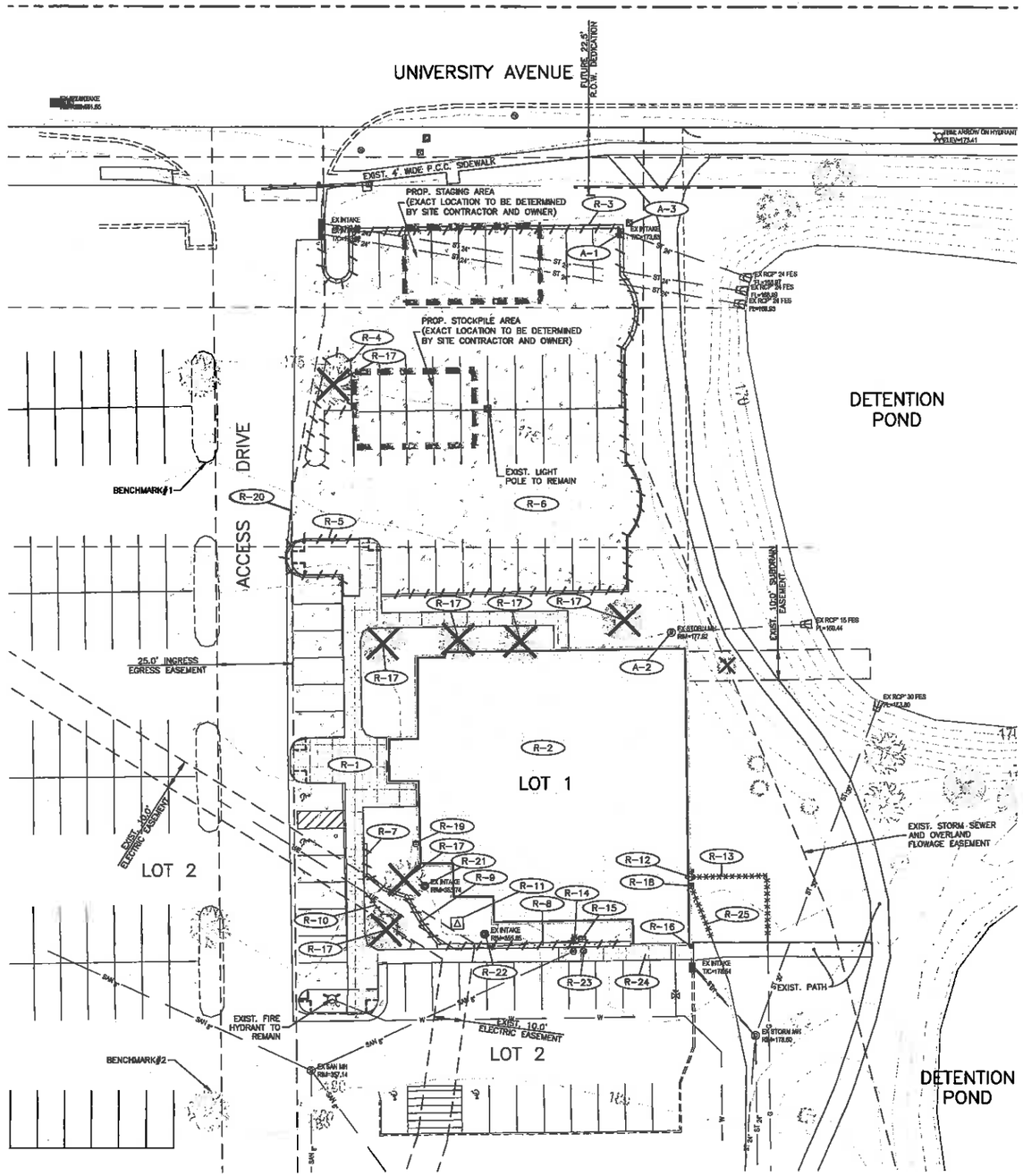
- INDICATES STAGING/STOCKPILE AREAS
- (R-#) INDICATES MISC. REMOVAL ITEMS (SEE THIS SHEET FOR SIZE AND QUANTITY)
- INDICATES CONCRETE PAVEMENT REMOVAL (FULL DEPTH)
- INDICATES SIDEWALK REMOVAL (FULL DEPTH)
- INDICATES BUILDING REMOVAL
- DENOTES EXIST. CONCRETE CURB & GUTTER AND WALL TO BE REMOVED
- XXXX DENOTES UTILITIES TO BE REMOVED
- INDICATES TREE AND BRUSH REMOVAL (SEE THIS SHEET FOR SIZE AND QUANTITY)
- INDICATES TREE AND BRUSH PROTECTION (SEE THIS SHEET FOR SIZE AND QUANTITY)

TRAFFIC CONTROL NOTES:

- REFER TO FIG. 7030.201, DETAIL 3 FOR CLASS A SIDEWALK CONSTRUCTION DETAILS.
- ALL APPLICABLE CITY PERMITS, INCLUDING BUT NOT LIMITED TO CLOSURE PERMITS, SHALL BE OBTAINED PRIOR TO ANY CONSTRUCTION WITHIN CITY ROW OR LANE CLOSURES.
- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- PERMANENT SIGNING THAT CONVEYS A MESSAGE CONTRARY TO THE MESSAGE OF TEMPORARY SIGNING AND NOT APPLICABLE TO THE WORKING CONDITIONS SHALL BE COVERED BY THE CONTRACTOR WHEN DIRECTED BY THE CITY.
- THE CONTRACTOR SHALL COORDINATE HIS TRAFFIC CONTROL WITH OTHER CONSTRUCTION PROJECTS IN THE AREA.
- SIDEWALK CLOSED SIGNS REQUIRED FOR ALL SIDEWALK CLOSURES.
- THE CONTRACTOR IS CAUTIONED NEITHER TO OBSTRUCT NOR REMOVE ANY EXISTING PAVEMENT, NOR TO DISTURB THE EXISTING TRAFFIC PATTERNS MORE THAN IS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.

PROJECT NOTES:

- NO LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES, IN ADDITION TO, NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED. (INCLUDING STORM WATER POLLUTION PREVENTION PLAN PER THE DEVELOPMENT CRITERIA.) SEE SHEET C-5.1 FOR EROSION CONTROL MEASURES)
- ALL EXISTING UTILITIES TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE AND COMPLY WITH ALL UTILITY COMPANIES INVOLVED IN PROJECT AND PAY ALL REQUIRED FEES AND COSTS.
- ALL STRUCTURES & DEBRIS SHALL BE REMOVED PRIOR TO CONSTRUCTION & DISPOSED OF OFFSITE.
- ANY EXISTING FIELD DRAIN TILES ENCOUNTERED SHALL BE RECONNECTED OR CONNECTED TO THE NEAREST STORM SEWER.
- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- CONTRACTOR TO KEEP ACCESS DRIVE OPEN AT ALL TIMES WITH MINOR CLOSINGS ALLOWED FOR PAVING ACTIVITIES.
- THE CONTRACTOR IS CAUTIONED NEITHER TO OBSTRUCT NOR REMOVE ANY EXISTING PAVEMENT, NOR TO DISTURB THE EXISTING TRAFFIC PATTERNS MORE THAN IS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.



(R-#) REMOVALS TAGS

REMOVALS / RELOCATES / ADJUSTMENTS

NUMBER	DESCRIPTION	QUANTITY	UNITS	REMARKS
A-1	STORM INTAKE	1	EACH	ADJUST TO GRADE
A-2	STORM MANHOLE	1	EACH	ADJUST TO GRADE
A-3	FIBER OPTIC RISER	1	EACH	ADJUST TO GRADE
R-1	CONCRETE SIDEWALK	224	SQ. YD.	REMOVE
R-2	BUILDING AND FOUNDATION	8	SQ.FT.	REMOVE
R-3	CONCRETE CURB AND GUTTER	334	LIN. FT.	REMOVE
R-4	CONCRETE CURB AND GUTTER	94	LIN. FT.	REMOVE
R-5	CONCRETE CURB AND GUTTER	59	LIN. FT.	REMOVE
R-6	CONCRETE PAVEMENT	1,688	SQ. YD.	REMOVE
R-7	CONCRETE WALL	11	LIN. FT.	REMOVE
R-8	CONCRETE WALL	64	LIN. FT.	REMOVE
R-9	LIMESTONE WALL	50	LIN. FT.	REMOVE
R-10	BRICK WALL	28	LIN. FT.	REMOVE
R-11	TRANSFORMER CONCRETE PAD	42	SQ. FT.	REMOVE
R-12	GAS METER	1	EACH	REMOVE
R-13	GAS SERVICE	26	LIN. FT.	REMOVE
R-14	ELECTRIC METER	1	EACH	REMOVE
R-15	ELECTRIC PANEL	1	EACH	REMOVE
R-16	BOLLARD	1	EACH	REMOVE
R-17	TREE (SEE LANDSCAPING PLANS)	6	EACH	REMOVE
R-18	TELEPHONE RISER	1	EACH	REMOVE
R-19	CLEANOUT	1	EACH	REMOVE
R-20	FULL DEPTH SAWCUT		LIN. FT.	REMOVE
R-21	STORM INTAKE	1	EACH	REMOVE
R-22	STORM INTAKE	1	EACH	REMOVE
R-23	CLEANOUT	1	EACH	REMOVE
R-24	CONCRETE SIDEWALK	1	SQ. YD.	REMOVE
R-25	TELEPHONE SERVICE	20	LIN. FT.	REMOVE

SITE BENCHMARKS:

BENCH MARK No. 69
INTERSECTION OF 28th STREET AND UNIVERSITY AVENUE. SOUTHWEST CORNER OF INTERSECTION 41.5 FEET SOUTH OF CENTERLINE OF UNIVERSITY AVENUE, 68.5 FEET WEST OF CENTER LINE OF 28th STREET.
WEST DES MOINES DATUM ELEVATION 96.58

SITE BENCHMARK #1:
"X" CUT ON TOP OF CURB AT SOUTH NOSE OF CONCRETE ISLAND WEST OF ENTRANCE DRIVE AT THE NORTHWEST CORNER OF PROPERTY.
WEST DES MOINES DATUM ELEVATION 176.17

SITE BENCHMARK #2:
"X" CUT ON TOP OF CURB AT NORTH NOSE OF CONCRETE ISLAND WEST OF ENTRANCE DRIVE AT THE SOUTHWEST CORNER OF PROPERTY.
WEST DES MOINES DATUM ELEVATION 180.01

STAGING NOTE:

(STAGING SUBJECT TO CHANGES PER SITE CONTRACTORS SCHEDULE AND METHODS OF OPERATION)

1. EROSION CONTROL MEASURES AND STOCKPILE STAGING
2. CONSTRUCTION ENTRANCES
3. PLAN REMOVALS
4. PROPOSED UNDERGROUND
5. GRADING
6. PAVING
7. STOCKPILE RESPREAD

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CALL: 1-800-292-8989
WITH THE FOLLOWING:
COUNTY Polk
CITY-TOWNSHIP West Des Moines
PARCEL ID. NO.# 4502 University Avenue
48 hours before you dig
(Excluding Sat., Sun. & Holidays)

0 5 10 20

Chick-fil-A
5200 Buffington Rd.
Atlanta Georgia,
30349-2998

REVISIONS

#	DATE:	BY:	DESCRIPTION:
1	01/19/15	HRJ	ISSUED FOR PERMIT
2	01/26/15	HRJ	PER CITY COMMENTS

HRGreen.com
HRGreen

STORE #3526
UNIVERSITY AVENUE
4502 University Avenue
West Des Moines, IA
50266

SHEET TITLE
SITE DEMOLITION PLAN

DWG EDITION V2
REVISION 01-2015

Job No. : 86140076
Store : 3526
Date : 01.19.15
Drawn By : MRJ
Checked By: JFV

Sheet
C-1.1

Plotted By:mjones, Plotted:Jan 26, 2015 - 3:19pm,
Xrefs:xgl-CHICK-24X36-BDR.dwg;86140076-xV-Survey-OV.dwg;86140076-xCs-Bldgn.dwg;86140076-xV-Aerial.dwg;86140076_xCs_Tabulations.dwg;3526- Base Building.dwg,
Images: Fig.(1)VIRGINIAS\Docs\86140076\CAD\Dwgs\C\86140076_Demo_Plan.dwg), Layout: Tab:Demo,

SITE PLAN DESIGN NOTES & KEY PLAN

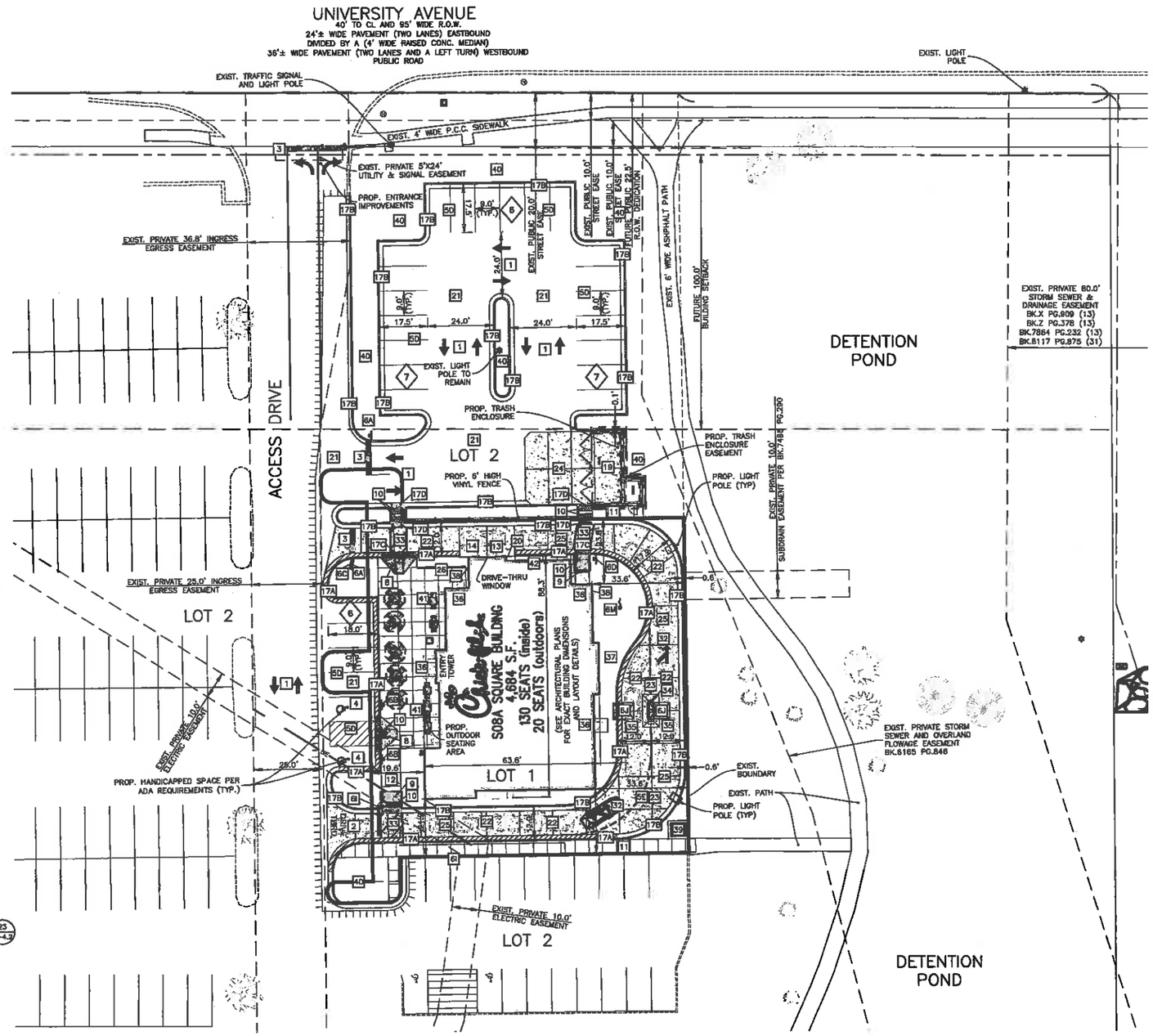
1. DIRECTIONAL ARROW (1 C-4.0)
2. DRIVE-THRU GRAPHICS (2 C-4.0)
3. STOP LINE GRAPHIC (3 C-4.0)
4. PAINTED HANDICAP PARKING SYMBOL (4 C-4.0)
5A. ~~STANDARD PARKING STALL (9'x17.5') NO CURB~~ (5 C-4.0)
5B. STANDARD PARKING STALL (9'x17.5') W/ OVERHANG
5C. 4" SOLID WHITE STRIPING
5D. 4" SOLID YELLOW STRIPING
5E. 4" SKIP DASH YELLOW STRIPING
6. DIRECTIONAL SIGNAGE (6 C-4.0)

ALL SIGNS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" BY THE U.S. DEPARTMENT OF TRANSPORTATION. (SEE SIGN LEGEND)

6A. DENOTES "STOP" R1-1, 30" X 30" (TYP.)
6B. DENOTES "HANDICAPPED PARKING" (BOLLARD MOUNTED) R7-8, 12" X 18" (TYP.) DENOTES "$250 FINE" R7-1101 6" X 12" (TYP.)
6C. DENOTES "DO NOT ENTER" R5-1, 30" X 30" (TYP.)
6D. DENOTES "PEDESTRIAN CROSSWALK" 12" X 18"
6E. ~~"NO PARKING" SIGN, SEE SIGNAGE PACKAGE~~
6F. ~~"NO PARKING" SIGN, SEE SIGNAGE PACKAGE~~
6G. ~~"NO PARKING" SIGN, SEE SIGNAGE PACKAGE~~
6H. ~~"NO PARKING" SIGN, SEE SIGNAGE PACKAGE~~
6I. CLEARANCE BAR, SEE SIGNAGE PACKAGE
6J. CANOPY ORDERING STATION, SEE SIGNAGE PACKAGE
6K. ~~PRE-SELL MENUBOARD, SEE SIGNAGE PACKAGE~~
6L. ~~MENU BOARD, SEE SIGNAGE PACKAGE~~
6M. FLAGPOLE, 40', SEE SIGNAGE PACKAGE
7. ~~SIDEWALK (ADA COMPLIANT) RAMP~~ (7 C-4.0)
8. HANDICAP RAMP w/ FLARED SIDES (IN SIDEWALK) (8 C-4.0)
8A. ~~HANDICAP RAMP w/ FLARED SIDES (GRASSED AREAS)~~ (8A C-4.0)
9. RETURNED CURB HANDICAP RAMP (9 C-4.0)
10. TRUNCATED DOMES (10 C-4.0)
11. TYPICAL CONCRETE SIDEWALK, 5' MIN. (11 C-4.0)
12. 7' WIDE SIDEWALK w/ CURB & GUTTER (12 C-4.1)
12A. ~~INTEGRAL CURB & 7' WIDE SIDEWALK~~ (12A C-4.1)
13. DRIVE THRU PLAN (13 C-4.1)
14. DRIVE-THRU ISOMETRIC (14 C-4.1)
15. ~~"CURB PAINTED WHITE" STOP~~ (15 C-4.1)
16. ~~LANDSCAPE & IRRIGATION PROTECTOR~~ (16 C-4.1)
17. 24" CONCRETE CURB & GUTTER (17 C-4.1)
    - 17A. SPILLING SECTION
    - 17B. CATCHING SECTION
    - 17C. DEPRESSED SPILLING CURB
    - 17D. DEPRESSED CATCHING CURB
18. ~~ROLLOVER/MOUNTABLE CURB~~ (18 C-4.1)
19. REFUSE ENCLOSURE FOUNDATION (19 C-4.1)
20. CONCRETE BOLLARD (20 C-4.1)
21. TYPICAL PAVEMENT SECTION (21 C-4.2)
21A. ~~HEAVY DUTY PAVEMENT SECTION~~ (21A C-4.2)
22. TRANSVERSE & LONGITUDINAL CONTRACTION JOINT (22 C-4.2)
23. TRANSVERSE & LONGITUDINAL DOWELED CONSTRUCTION JOINT (23 C-4.2)
24. CONCRETE APRON @ TRASH ENCLOSURE (24 C-4.2)
25. CONCRETE PAVING @ DRIVE THRU LANE (25 C-4.2)
26. ALUMINUM HANDRAIL (26 C-4.2)
27. ~~TYPICAL ADA RAMP AND HANDRAIL~~ (27 C-4.2)
28. CONTRACTION JOINT (28 C-4.2)
29. KEYED CONSTRUCTION JOINT (29 C-4.2)
30. LONGITUDINAL BUTT JOINT (30 C-4.2)
31. EXPANSION JOINT (31 C-4.2)

(FOR CONCRETE PAVING)

32. DRIVE-THRU DIRECTIONAL GRAPHICS (32 C-4.3)
33. CROSSWALK DETAIL (33 C-4.3)
34. DRIVE THRU ORDER POINT ISLAND CURB (34 C-4.3)
35. MENU BOARD LOOP DETECTION SYSTEM (35 C-4.3)
36. ENTRY DOOR FROST SLAB DETAIL (36 C-4.3)
37. GREASE TRAP
38. ROOF DOWNSPOUT (TO CONNECT TO SITE DRAINAGE SYSTEM)
39. TRANSFORMER
40. LANDSCAPED AREA
41. TYPICAL LOCATION FOR OUTDOOR TABLES.(SEE EQUIPMENT SCHEDULE)
42. CONCRETE STRIP BETWEEN BUILDING AND BACK OF CURB



SITE DATA:

ZONING: PUD#40

- LOT 1 SIZE: 15,079± SQ. FT. (0.346 AC.)

BUILDING AREA:

- BUILDING FOOT PRINT: (4,684 ± SQ. FT.).
- FLOOR AREA RATIO (F.A.R.) = 0.310

PARKING DATA:

- NUMBER OF REGULAR PARKING STALLS: 24
- NUMBER OF ADA STALLS: 2
- TOTAL NUMBER OF STALLS: 26
- TOTAL NUMBER OF STALLS REQUIRED: 77
  RESTAURANT = 1.5 SPACE/100 SF.
  PLUS 7 STALLS FOR OUTDOOR SEATS (20 SEATS)
- TYPICAL PARKING WIDTH: 9.0'
- TYPICAL PARKING LENGTH: 19.0'/17.5' WITH OVERHANG
- TYPICAL ISLE WIDTH: 24' & VARIES

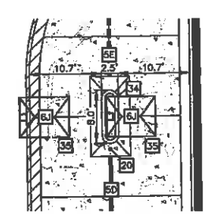
HATCH LEGEND

- DENOTES AREA TO UTILIZE TRUNCATED DOMES
- DENOTES STANDARD PAVEMENT SECTION
- DENOTES CONCRETE SECTION
- DENOTES PROP. SIDEWALK
- DENOTES AREA OF DEPRESSED SIDEWALK
- DENOTES AREA OF DEPRESSED CURB AND GUTTER WITH LENGTH NOTED ON PLANS.
- DENOTES REVERSE CURB & GUTTER

PERVIOUS AREA:

WITHIN REDEVELOPED AREA:
NEW IMPERVIOUS AREA CREATED = 3,717 SQ. FT.
NEW PERVIOUS AREA CREATED = 3,901 SQ. FT.

TOTAL INCREASE OF PERVIOUS AREA = 184 SQ. FT.



1 C-2.0 ORDER CANOPY LAYOUT DETAIL
SCALE: 1"=10'

PROJECT NOTES:

- ALL CONSTRUCTION WITHIN PUBLIC R.O.W./ EASEMENTS AND OR CONNECTION TO PUBLIC SEWERS AND STREETS SHALL COMPLY WITH THE CITY OF WEST DES MOINES STANDARD CONSTRUCTION SPECIFICATIONS FOR SUBDIVISIONS.
- ALL LIGHTING SHALL BE DOWNCAST WITH A MAX POLE HEIGHT OF 25'.
- AT LEAST ONE WEEK PRIOR TO ANY CONSTRUCTION WITHIN PUBLIC R.O.W./ EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, THE CONTRACTOR SHALL CONTACT THE WDM CONSTRUCTION DIVISION TO OBTAIN APPLICABLE CITY PERMITS.
- ALL CONNECTIONS TO PUBLIC SEWERS SHALL BE CORE DRILLED.
- CROSS ACCESS SHALL BE GRANTED THROUGH AN REA FOR THIS AREA.
- INGRESS/EGRESS WILL BE PROVIDED INTERNAL AND EXTERNAL TO THIS SITE.
- PRIVATE UTILITIES TO BE INSTALLED PER THE CITY OF WEST DES MOINES STANDARD CONSTRUCTION SPECIFICATIONS AND THE 2006 INTERNATIONAL PLUMBING CODE. CONTACT BUILDING INSPECTION (515-222-3630). A MINIMUM OF 24 HOURS IN ADVANCE FOR UTILITY INSTALLATION INSPECTIONS.
- REFER TO FIG. 7030.201, DETAIL 3 FOR CLASS A SIDEWALK CONSTRUCTION DETAILS.
- ALL CONCRETE CURB & GUTTER ON LOT 5 SHALL BE 24" UNLESS OTHERWISE NOTED ON THE PLANS.
- ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- ALL PAVEMENT RADII ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- ALL CURB ADJOINING SIDEWALKS SHALL BE DOWELED INTO THE CURB. SEE DETAIL ON SHEET C-4.0
- AN ON-SITE INSPECTION SHALL BE REQUESTED WITH THE BUILDING DIVISION AT (515) 222-3630, PRIOR TO PLACEMENT OF ANY CONCRETE RAMPS.

IOWA ONE CALL
1-800-292-8989
WWW.IOWAONECALL.COM

CALL: 1-800-292-8989
WITH THE FOLLOWING:
COUNTY Polk
CITY-TOWNSHIP West Des Moines
PARCEL ID. NO.# 4502 University Avenue
48 hours before you dig
(Excluding Sat., Sun. & Holidays)

0 5 10 20

The Chick-fil-A
5200 Buffington Rd.
Atlanta Georgia,
30349-2998

REVISIONS

#	DATE	BY	DESCRIPTION
1	01/19/15	MBJ	ISSUED FOR PERMIT
2	01/29/15	MBJ	PER CITY COMMENTS

HRGreen.com
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STORE #3526
UNIVERSITY AVENUE
4502 University Avenue
West Des Moines, IA
50266

SHEET TITLE
SITE PLAN

DWG EDITION V2
REVISION 01-2015

Job No. : 86140076
Store : 3526
Date : 01.19.15
Drawn By : MRJ
Checked By: JFV

Sheet
C-2.0

Plotted By:mjones, Plotted:Jan 28, 2015 - 3:20pm,
Xrefs:xg1-CHICK-24X36-BDR.dwg;86140076-xV-Survey-OV.dwg;86140076-xC-Dwgs.dwg;3526- Base Building.dwg,
Images:
Dwgs. File:(\\HRGWINAS\Data\86140076\CAD\Dwgs\C\86140076. Site_Plan.dwg), Layout Tab: Site,

GENERAL NOTES:

- THE MOST RECENT EDITION OF THE URBAN STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS, INCLUDING CITY OF WEST DES MOINES STANDARD SPECIFICATIONS SHALL APPLY TO ALL WORK ON THIS PROJECT UNLESS OTHERWISE NOTED.
- ACCESSIBLE PARKING, RAMPS, AND SIGNAGE SHALL COMPLY WITH ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES.
- ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS, NOTHING INDICATED ON THE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
- I WEEK PRIOR TO CONSTRUCTION WITHIN CITY ROW OR ANY CONNECTION TO PUBLIC SEWERS, CONTRACTOR SHALL NOTIFY WEST DES MOINES CONSTRUCTION DIVISION, CLINT CARPENTER, (515)222-3460.
- ALL DIMENSIONS ARE TO THE FACE OF CURB, BUILDING FACE OR PROPERTY LINE UNLESS OTHERWISE NOTED.
- CONTRACTOR TO VERIFY BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS.
- PLACE 3/4 INCH EXPANSION JOINT BETWEEN ALL P.C.C. PAVEMENT/ SIDEWALKS AND BUILDING. PLACE 1/2 INCH EXPANSION JOINT BETWEEN SIDEWALKS AND P.C.C. PAVEMENT. CUT/TRIM EXPANSION JOINTS TO BE FLUSH WITH SURFACE.
- REMOVE ALL DEBRIS SPILLED INTO ROW AT THE END OF EACH WORK DAY.
- ALL PROPERTY PINS SHALL BF PROTECTED FROM GRADING OR OTHER OPERATIONS. ANY PINS DISTURBED SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.
- DO NOT STORE CONSTRUCTION MATERIALS AND EQUIPMENT IN THE ROW.
- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL NOTIFY (48 HOUR NOTICE) THE FOLLOWING:
  - A. CITY OF WEST DES MOINES – CLINT CARPENTER,
    WDM CONSTRUCTION DIVISION, PH: 222-3480
  - B. APPROPRIATE UTILITY COMPANIES
  - C. OWNER
  - D. HR GREEN, INC.
- THE CONTRACTOR SHALL NOT DISTURB DESIRABLE GRASS AREAS AND DESIRABLE TREES OUTSIDE THE CONSTRUCTION UNITS. THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK OR SERVICE VEHICLES AND EQUIPMENT OR USE THESE AREAS FOR STORAGE OR MATERIALS. STORAGE, PARKING AND SERVICE AREAS WILL BE SUBJECT TO THE APPROVAL OF THE OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY AREAS OF PAVEMENT OR SIDEWALK NOT TO BE REMOVED THAT IS DAMAGED DUE TO OPERATING EQUIPMENT ON THE PAVEMENT OR SIDEWALK.
- THE CONTRACTOR MAY BE REQUIRED TO PLACE TEMPORARY WARNING DEVICES AND SAFETY FENCE AT CERTAIN LOCATIONS WHERE REPLACEMENT FEATURES ARE NOT INSTALLED THE SAME DAY, AS DIRECTED BY THE ENGINEER OR THE CITY.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK BETWEEN SUPPLIERS AND SUBCONTRACTORS INVOLVED IN THE PROJECT, INCLUDING STAGING OF CONSTRUCTION DETAILS.
- ALL CONSTRUCTION WITHIN PUBLIC ROW/EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, SHALL COMPLY WITH THE WEST DES MOINES CONSTRUCTION SPECIFICATIONS FOR SUBDIVISIONS AND DSM METRO DESIGN STANDARDS
- ALL CONNECTIONS TO PUBLIC SANITARY SEWERS SHALL BE CORE DRILLED.
- EXISTING PUBLIC SIDEWALK ADJACENT TO MILLS CIVIC PARKWAY SHALL BE FREE OF ALL DAMAGE PRIOR TO FINAL OCCUPANCY.

GRADING NOTES:

- PRIOR TO ANY GRADING, A COPY OF THE NPDES PERMIT SHALL BE PROVIDED TO THE CITY OF WEST DES MOINES BUILDING DIVISION.
- EROSION CONTROL MEASURES WILL BE INSTALLED AND MONITORED BY GENERAL CONTRACTOR.
- ELEVATIONS AND CONTOURS ARE CITY OF WEST DES MOINES DATUM.
- EXCAVATION SHALL BE IN ACCORDANCE WITH THE URBAN STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
- MATCH EXISTING GRADES AT PROPERTY LINES AND/OR CONSTRUCTION LIMITS.
- ALL SPOT ELEVATIONS ARE EDGE OF PAVEMENT UNLESS OTHERWISE SPECIFIED.
- BACKFILL TO TOP OF CURBS.
- SITE SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS
- ALL SIDEWALK CROSS SLOPES SHALL BE A MAXIMUM OF 2%.
- DESIGNATED HANDICAP PARKING AREAS SHALL BE GRADED To A MAXIMUM OF 2%
- SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING.
- THE CONTRACTOR SHALL CONFINE HIS GRADING OPERATIONS TO WITHIN CONSTRUCTION LIMITS AND EASEMENTS SHOWN ON THE PLANS. ANY DAMAGE TO PROPERTIES OUTSIDE THE SITE BOUNDARY SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE CONTROL TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT THE SPREAD OF DUST.

TRAFFIC CONTROL NOTES:

- REFER TO FIG. 7030.201, DETAIL 3 FOR CLASS A SIDEWALK CONSTRUCTION DETAILS.
- ALL APPLICABLE CITY PERMITS, INCLUDING BUT NOT LIMITED TO CLOSURE PERMITS, SHALL BE OBTAINED PRIOR TO ANY CONSTRUCTION WITHIN CITY ROW OR LANE CLOSURES.
- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- PERMANENT SIGNING THAT CONVEYS A MESSAGE CONTRARY TO THE MESSAGE OF TEMPORARY SIGNING AND NOT APPLICABLE TO THE WORKING CONDITIONS SHALL BE COVERED BY THE CONTRACTOR WHEN DIRECTED BY THE CITY.
- THE CONTRACTOR SHALL COORDINATE HIS TRAFFIC CONTROL WITH OTHER CONSTRUCTION PROJECTS IN THE AREA.
- SIDEWALK CLOSED SIGNS REQUIRED FOR ALL SIDWALK CLOSURES.
- THE CONTRACTOR IS CAUTIONED NEITHER TO OBSTRUCT NOR REMOVE ANY EXISTING PAVEMENT, NOR TO DISTURB THE EXISTING TRAFFIC PATTERNS MORE THAN IS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.

GRADING AND DRAINAGE NOTES:

- SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- SEE EROSION CONTROL PLAN FOR EROSION CONTROL MEASURES AND NOTES.
- ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO REMAIN, FENCING, TREES, & ETC., WITHIN CONSTRUCTION AREA SHALL BE REMOVED & DISPOSED OF OFF SITE. NO ON SITE BURNING WILL BE ALLOWED
- ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST.
- GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL CONTACT UTILITY LOCATING COMPANY AND LOCATE ALL UTILITIES PRIOR TO GRADING START.
- SPOT ELEVATIONS SHOWN ARE @ EDGE OF PAVEMENT UNLESS OTHERWISE NOTED ON PLAN.

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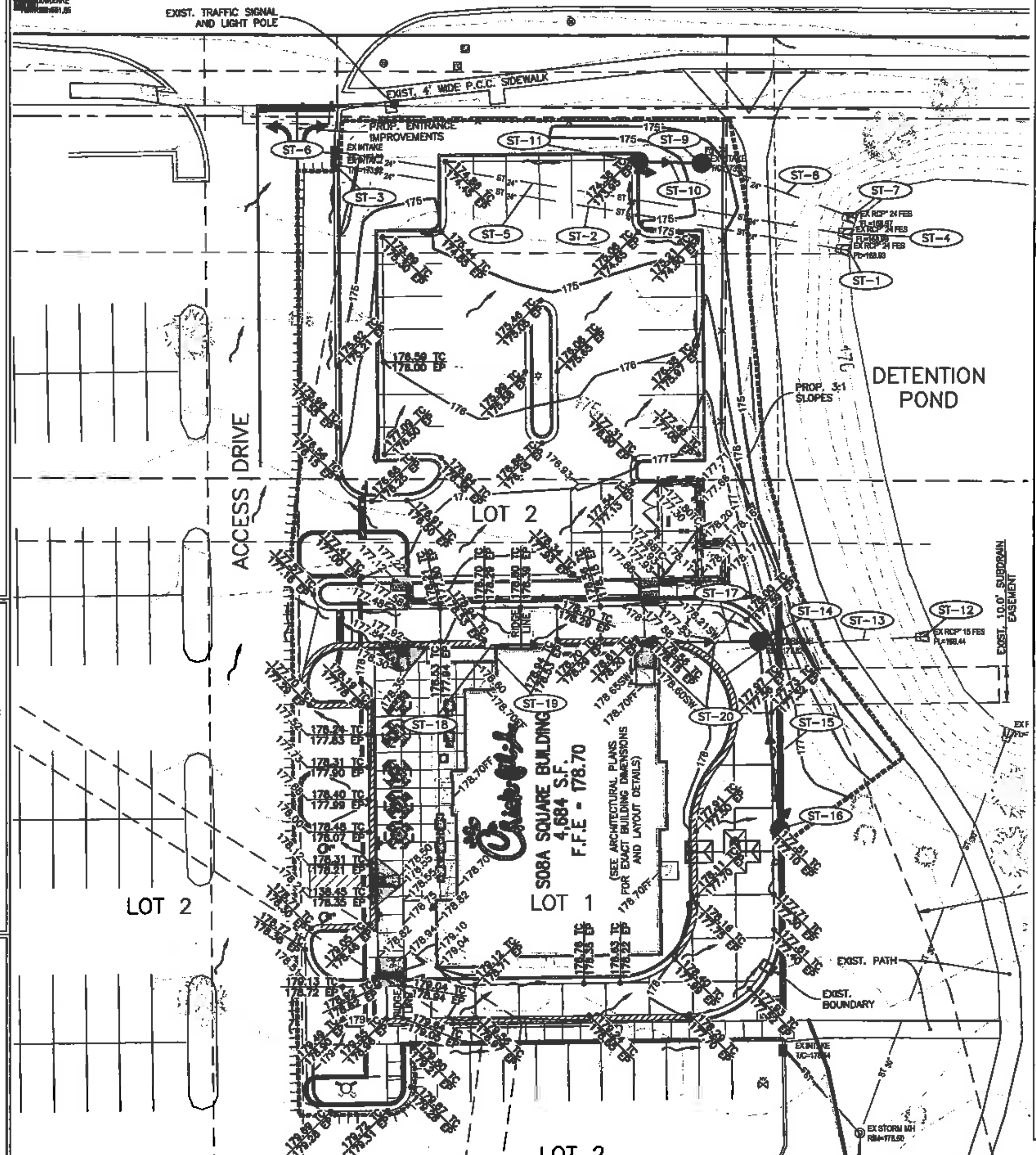
1-800-292-8989
WWW.IOWAONECALL.COM

CALL: 1-800-292-8989
WITH THE FOLLOWING:
COUNTY Polk
CITY-TOWNSHIP West Des Moines
PARCEL ID. NO.# 4502 University Avenue
48 hours before you dig
(Excluding Sat., Sun. & Holidays)

Plotted By:mjbrosl, Plotted:Jan 26, 2015 – 3:20pm,
Xrefs: xgt-CHICK-24X36-BDR.dwg; 86140076-xV-Survey-OV.dwg; 86140076-xCa-Dsgn.dwg; 3528- Base Building.dwg; 86140076_xCa_Tabulations.dwg,
Images:,
Comp. File: (\\HRGMHNAS\Data\86140076\CAD\Dwgs\C\86140076_Grading_Plan.dwg), Layout Tab: Layout1,

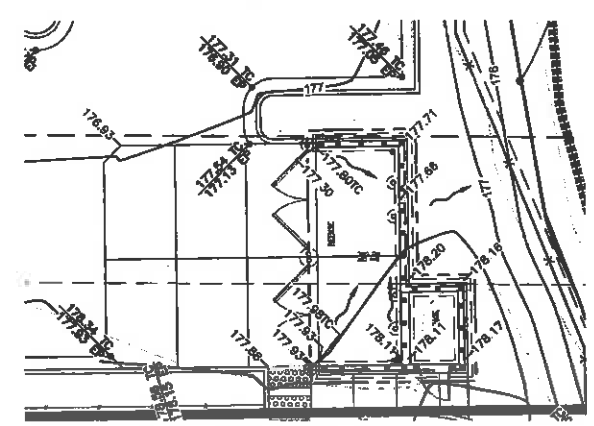


LEGEND:

(symbol)	DENOTES AREA OF DEPRESSED SIDEWALK
(symbol)	DENOTES AREA OF DEPRESSED CURB WITH LENGTH NOTED ON PLANS.
(symbol)	DENOTES AREA OF REVERSE (SPILLING) CONCRETE CURB AND GUTTER.
— XXX.XX	DENOTES SURFACE GRADE SPOT ELEVATIONS.
(symbol)	DENOTES PROPOSED DRAINAGE DIRECTION ARROW.
(symbol)	DENOTES PROPOSED OVERFLOW DIRECTION ARROW.

STORM TAGS

ST-1	EXIST. RCP FES, 24" INV = 168.93
ST-2	140 LIN FT EXIST. SS RCP, 24" @ 0.54%
ST-3	EXIST. STORM INTAKE T/C = 173.82 INV = 169.68 (E)
ST-4	EXIST. RCP FES, 24" INV = 168.99
ST-5	141 LIN FT EXIST. SS RCP, 24" @ 0.52%
ST-6	EXIST. STORM INTAKE T/C = 173.70 INV = 169.73 (E)
ST-7	EXIST. RCP FES, 24" INV = 168.97
ST-8	43 LIN FT EXIST. SS RCP, 24" @ 0.26%
ST-9	EXIST. STORM INTAKE (CONTRACTOR TO EXCHANGE GRATE FOR R-1713 LID) RIM = 175.45 INV = 169.08 (SE) (24" RCP) INV = 169.18 (W)
ST-10	16 LIN FT SS RCP, 12" @ 1.00%
ST-11	MANHOLE 4' DIA. R-3235 TY C GRATE T/C = 174.36 INV = 169.34 (E)
ST-12	EXIST. RCP FES, 15" INV = 169.44
ST-13	45 LIN FT EXIST. SS RCP, 15" @ 0.52%
ST-14	EXIST. STORM MH RIM= 177.82 INV = 171.41 (E) (15" RCP) INV = 171.61 (S) INV = 173.19 (W)
ST-15	49 LIN FT SS RCP, 12" @ 1.50%
ST-16	MANHOLE 2' DIA. R-3235 TY C GRATE T/C = 177.51 INV = 172.35 (N)
ST-17	72 LIN FT 8" PVC SDR 35 ROOF DRAIN @ 2.50%
ST-18	CLEANOUT (SEE DETAIL) RIM = 178.63 INV = 175.00
ST-19	5 LIN FT 8" PVC SDR 35 ROOF DRAIN @ 2.00%



TRASH ENCLOSURE GRADING DETAIL
SCALE: 1"=10'

GRADING & UTILITY NOTES

1. LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR IN FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE ENGINEER. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. ALL PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. ALL UTILITIES AND SERVICES INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE SHALL BE VERTICALLY AND HORIZONTALLY LOCATED. THE CONTRACTOR SHALL USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE OWNER.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH LOCAL REGULATIONS AND CODES.
4. DEFINE AND LOCATE VERTICALLY AND HORIZONTALLY ALL ACTIVE UTILITY AND/OR SERVICE SYSTEMS THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE SYSTEMS THAT ARE NOT BEING REMOVED/RELOCATED DURING SITE ACTIVITY.
5. THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AS IDENTIFIED OR REQUIRED FOR PROJECT. THE CONTRACTOR SHALL PROVIDE THE OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTION AND UTILITY COMPANY REQUIREMENTS.
6. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, GREASE TRAP REQUIREMENTS/DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE UTILITY SERVICE SIZES ARE TO BE DETERMINED BY THE ARCHITECT. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES/SERVICES WITH THE INDIVIDUAL COMPANIES, TO AVOID CONFLICTS AND ENSURE PROPER DEPTHS ARE ACHIEVED. THE JURISDICTION UTILITY REQUIREMENTS SHALL ALSO BE MET, AS WELL AS COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE CONFLICTS EXIST WITH THESE SITE PLANS, ENGINEER IS TO BE NOTIFIED PRIOR TO CONSTRUCTION TO RESOLVE SAME
7. WATER SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS SHALL BE SPECIFIED BY THE LOCAL UTILITY COMPANY. CONTRACTOR'S PRICE FOR WATER SERVICE SHALL INCLUDE ALL FEES AND APPURTENANCES REQUIRED BY THE UTILITY TO PROVIDE A COMPLETE WORKING SERVICE.
8. ALL NEW UTILITIES/SERVICES, INCLUDING ELECTRIC, TELEPHONE, CABLE TV, ETC. ARE TO BE INSTALLED UNDERGROUND. ALL NEW UTILITIES/SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE UTILITY/SERVICE PROVIDER INSTALLATION SPECIFICATIONS AND STANDARDS.
9. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED AS OUTLINED IN THE GEOTECHNICAL REPORT. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL BE SUBMITTED IN COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER OR OWNER'S REPRESENTATIVE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED AS DIRECTED BY THE GEOTECHNICAL REPORT.
10. ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION SHALL BE AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND SHALL BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS.
11. THE CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST OSHA STANDARDS AND REGULATIONS, OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES.
12. PAVEMENT SHALL BE SAW CUT IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
13. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT TOPS SHALL BE ADJUSTED, IF REQUIRED, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS.
14. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO ENSURE 0.75% MINIMUM SLOPE ALONG ALL ISLANDS, GUTTERS, AND CURBS; 1.0% ON ALL CONCRETE SURFACES; AND 1.5% MINIMUM ON ASPHALT, TO PREVENT PONDING. ANY DISCREPANCIES THAT MAY AFFECT THE PUBLIC SAFETY OR PROJECT COST MUST BE IDENTIFIED TO THE ENGINEER IN WRITING IMMEDIATELY. PROCEEDING WITH CONSTRUCTION WITHOUT NOTIFICATION IS DONE SO AT THE CONTRACTOR'S OWN RISK.
15. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6" ABOVE EXISTING LOCAL ASPHALT GRADE UNLESS OTHERWISE NOTED. FIELD ADJUST TO CREATE A MINIMUM OF 0.75% GUTTER GRADE ALONG CURB FACE. ENGINEER TO APPROVE FINAL CURBING CUT SHEETS PRIOR TO INSTALLATION.
16. IN CASE OF DISCREPANCIES BETWEEN PLANS OR RELATIVE TO OTHER PLANS, THE SITE PLAN WILL TAKE PRECEDENCE. IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICTS.
17. CONTRACTOR SHALL BE REQUIRED TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR SHALL SUPPLY A COPY OF APPROVALS TO ENGINEER AND OWNER PRIOR TO INITIATING WORK.

0 5 10 20

Chick-fil-A
5200 Buffington Rd.
Atlanta Georgia,
30349-2998

REVISIONS

#	DATE:	BY:	DESCRIPTION:
1	01/19/15	MRJ	ISSUED FOR PERMIT
2	01/28/15	MRJ	PER CITY COMMENTS

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STORE #3526
UNIVERSITY AVENUE
4502 University Avenue
West Des Moines, IA
50266

SHEET TITLE
GRADING PLAN

DWG EDITION V2
REVISION 01-2015

Job No. : 86140076
Store : 3526
Date : 01.19.15
Drawn By : MRJ
Checked By: JFV

Sheet
C-3.0

NOTES:

This plan has been prepared to comply with the provisions of the NPDES Permit Number issued by the Iowa Department of Natural Resources General Permit #2 for Stormwater Discharges from Construction Site Activities.

1. Site Description.

a. The following is a description of the construction activity which is the subject of this plan: CHICK-FIL-A, LOT 1 , OF WEST DES MOINES

The proposed development consists of construction of a 27 stall parking lot and restaurant. The construction activities for site improvements will include: site clearing, demolition, grubbing, mass, grading, pavement construction, installation of utilities including storm sewers, soil erosion and sedimentation control measures, as a minimum.

b. The following is a description of the intended sequence of major activities which will disturb soils for major portions of the construction site such as grubbing, excavation, and grading:

The sequence of the construction activities may be as follows: 1) install silt filter fence and stabilized construction entrance, 2) site clearing, demolition and grubbing. 3) mass grading. 4) underground utilities installation. 5) fine grading in pavement area, and 6) pavement construction. The soil erosion and sedimentation control items will be constructed as needed during the above construction activities.

c. The total area of the construction site is estimated to be 0.799 acres.

The total area of the site that is estimated to be disturbed by excavation, grading, or other activities, is 0.799 acres.

d. The estimated runoff coefficients of the various areas of the site after construction activities are completed area contained in the project drainage study, titled FINAL ENGINEERING DRAINAGE REPORT for CHICK-FIL-A, LOT 1 , OF WEST DES MOINES with (latest revision date) prepared by HR GREEN, INC. which is hereby incorporated by reference in this plan. Information describing the soils at the site is contained in the Geotechnical Report for the project, which is hereby incorporated by reference, or in an attachment to this plan.

2. Controls.

This section of the plan addresses the various controls that will be implemented for each of the major construction activities described in 1.b above. For each measure discussed, the contractors will be responsible for its implementation as indicated. Each such contractor has signed the required certification on forms which are attached to, and are a part of, this plan.

a. Erosion and Sediment Controls.

(i) STABILIZATION PRACTICES. Provided below is a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Except as provided in 2.a. (i) (A) and 2.b. stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portions of the site where construction activity will not occur for a period of 21 or more calendar days.

(A) Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

The following interim and permanent stabilization practices, as a minimum will be implemented to stabilize the disturbed area of the site:

1. Permanent seeding
2. Inlet protection
3. Barrier filter
4. Stabilized construction entrance

(ii) STRUCTURAL PRACTICES. Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. The installation of these devices may be subject to Section 404 of the Clean Water Act.

1. Storm sewer system
2. Permanent seeding
3. Inlet protection

b. Stormwater Management.

(i) Provided below is a description of measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

The practices selected for implantation were determined on the basis of the technical guidance contained in IDNR's Standard Specifications for Soil Erosion and Sedimentation Control, and other ordinances listed in the Specifications.

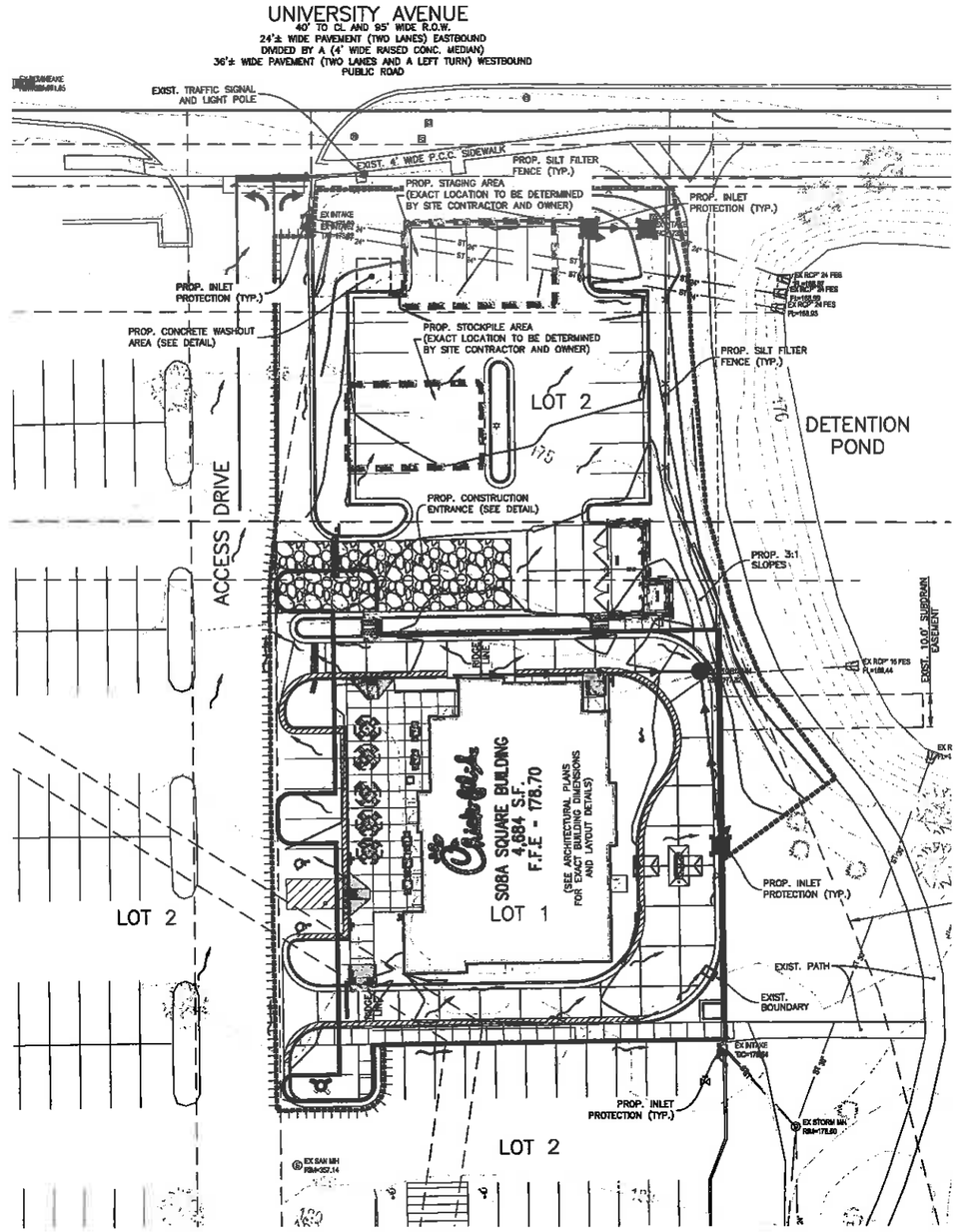
The stormwater pollutant control measures shall include:

1. Silt filter fence
2. Inlet protection Filter
3. Storm sewers

2. Other Controls.

(i) Waste Disposal. The solid waste materials including trash, construction debris, excess construction materials, machinery, tools and other items will be collected and disposed off-site by the contractor. The contractor is responsible to acquire any permit required for such disposal. Burning on the site will not be permitted. No solid materials, including building materials, shall be discharged into Waters of the State, except as authorized by a Section 404 permit.

(ii) The provisions of this plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.



LEGEND:

- DENOTES AREA OF DEPRESSED SIDEWALK
- DENOTES AREA OF DEPRESSED CURB WITH LENGTH NOTED ON PLANS.
- DENOTES AREA OF REVERSE (SPILLING) CONCRETE CURB AND GUTTER.
- DENOTES AREA TO UTILIZE EXCELSIOR BLANKET (SEE DETAIL).
- DENOTES PERIMETER EROSION BARRIER (SILT FENCE), INLET & PIPE PROTECTION AND DITCH CHECK
- DENOTES PROPOSED OVERFLOW DIRECTION ARROW.

EROSION CONTROL NOTES:

1. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
2. UTILIZE EXCELSIOR BLANKET ON ALL SLOPES OF 5:1 OR GREATER.
3. ALL STREETS AND DRIVEWAYS MUST BE KEPT CLEAN AT ALL TIMES.
4. IF ANY ADDITIONAL SOIL EROSION MEASURES ARE DEEMED NECESSARY BY THE CITY ENGINEER OR HIS REPRESENTATIVE. THESE MEASURES MUST BE IMMEDIATELY IMPLEMENTED BY THE CONTRACTOR.

EROSION CONTROL NOTES:

1. INSTALL PERIMETER SILT FENCE
2. INSTALL STABILIZED CONSTRUCTION ENTRANCE
3. TREE REMOVAL AND TRANSPLANTING, WHERE NECESSARY
4. CONTINUE GRADING, STABILIZE COMPLETED AREAS WITH PERMANENT STABILIZATION OR INACTIVE AREAS WITH TEMPORARY STABILIZATION WITHIN 14 DAYS.
5. INSTALL UTILITIES, STORM SEWER, CURB AND GUTTER, WITH INLET AND OUTLET PROTECTION.
6. APPLY STONE TO PARKING AREA
7. CONSTRUCT BUILDINGS
8. COMPLETE GRADING AND INSTALL PERMANENT SEEDING AND PLANTINGS.
9. COMPLETE FINAL PAVING.
10. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, RESEED ANY REMAINING DISTURBED AREAS.
11. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES ONCE VEGETATION REACHES 70% COVERAGE.
12. CONTRACTOR SHALL ADHERE TO ALL PROVISIONS AND REQUIREMENTS OF NOTED IN THE STORMWATER POLLUTION PREVENTION PLAN FOR THIS PROJECT
13. REMOVE ALL DEBRIS SPILLED INTO ROW AT THE END OF EACH WORK DAY.
14. ANTICIPATED CONSTRUCTION START AND COMPLETION DATES: START MAY 2015 COMPLETE SEPTEMBER 2015.

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1-800-292-8989
WWW.IOWAONECALL.COM

CALL: 1-800-292-8989
WITH THE FOLLOWING:
COUNTY Polk
CITY-TOWNSHIP West Des Moines
PARCEL ID. NO.# 4502 University Avenue
48 hours before you dig
(Excluding Sat., Sun. & Holidays)

Chick-fil-A
5200 Buffington Rd.
Atlanta Georgia,
30349-2998

REVISIONS			
#	DATE	BY	DESCRIPTION
1	01/16/15	MRJ	ISSUED FOR COMMENTS
2	01/26/15	MRJ	PER CITY COMMENTS

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STORE #3526
UNIVERSITY AVENUE
4502 University Avenue
West Des Moines, IA
50266

SHEET TITLE
EROSION CONTROL PLAN

DWG EDITION V2
REVISION 01-2015

Job No. : 86140076
Store : 3526
Date : 01.19.15
Drawn By : MRJ
Checked By: JFV

Sheet
C-3.1

Plotted By:mjrust, Plotted:Jan 26, 2015 - 3:21pm,
Xrefs:xg1-CHICK-24C3S-BSR.dwg;86140076-VC-Survey-OV.dwg;86140076-SCe-Dsgn.dwg;3526- Base Building.dwg;86140078_SCe_Tab-sections.dwg,
Images:,
Dwgs. File:C:\VIRGINIAWS\Data\86140076\CAD\Dwgs\C\86140076_Erosion_Plan.dwg, Layout Tab:Layout1,

LAYOUT NOTES

1. PAY CONNECTION FEES FOR 2" DOMESTIC WATER SERVICE AND 6" FIRE WITH METER.
2. 1.5" IRRIGATION LINE TO HAVE SEPARATE METER LOCATION ADJACENT TO DOMESTIC WATER METER INTERIOR TO THE BUILDING
3. 3/4" CW TO DUMPSTER POST HYDRANT
4. INSTALL 4" WASTEWATER SERVICE LATERAL. CONTRACTOR TO LOCATE EXISTING SERVICE PRIOR TO TRENCHING AND MAKE CONNECTION. (BY-OTHERS)
5. 4" SDR 26 WASTEWATER SERVICE LINE AT 2.0% (MIN.) SLOPE.
6. 4" CLEAN OUT (SEE DETAIL). CLEANOUT SHALL BE FLUSH w/ PAVEMENT & INSTALLED UNDER A PROTECTIVE METAL BOX COVER SIMILAR TO A METER PIT COVER WITH A TRAFFIC BEARING LID. (BY-OTHERS)
7. PRECAST 1000 GAL. CAPACITY GREASE TRAP. PLUMBING CONTRACTOR TO COORDINATE WITH BUILDING CONTRACTOR. TOP OF MANHOLE TO BE 0.2' ABOVE FINISH GRADE AND MATCH SIDEWALK GRADES WHERE REQUIRED.VERIFY GREASE TRAP MEETS CITY/COUNTY SPECIFICATIONS PRIOR TO INSTALLATION. REFER TO PLUMBING PLAN. SHEET P-1.1.
8. 4" KITCHEN WASTE LINE (INV = SEE SANITARY TAGS)
9. 3" VENT LINE. CONNECT TO GREASE INTERCEPTOR (SEE SHEET P1 FOR LOCATION).
10. 4" RESTROOM WASTE LINE (INV = SEE SANITARY TAGS)
11. 4" TWO-WAY CLEAN OUT (REFER TO PLUMBING PLANS)
12. DUMPSTER POST HYDRANT REFER TO THE FIXTURE CONNECTION SCHEDULE (P-31) DEPICTED ON THE PROJECT PLUMBING PLANS
13. DOWNSPOUT FOR ROOF DRAINAGE (REFER TO ARCHITECTURAL PLANS)
14. EX. 6" WATER SERVICE STUB
15. PROPOSED GAS SERVICE (SEE NOTE 19)
16. COORDINATE GAS METER INSTALLATION WITH GAS COMPANY.
17. 4" SCHEDULE 40 PVC IRRIGATION SLEEVE (REFER TO IRRIGATION PLANS)
18. 6" PVC DR 35 ROOF DRAIN PIPE SYSTEM) (CONNECT TO SITE STORM DRAIN)
19. UNDERGROUND PRIMARY ELECTRIC SERVICE. (SEE NOTE 21)
20. PROPOSED PAD MOUNTED TRANSFORMER PER ELECTRIC COMPANY STANDARDS. SEE SERVICE UTILITY NOTES, THIS SHEET.
21. UNDERGROUND PRIMARY TELEPHONE SERVICE. (SEE NOTE 20)
22. UNDERGROUND SECONDARY ELECTRIC SERVICE TO BUILDING. (SEE NOTE 21)
23. INSTALL TRANSFORMER PAD (SEE NOTE 21)
24. CFA SERVICE, CONNECT TO EX. WATER LINE - 6" WATER SERVICE STUB

UTILITY NOTES

1. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING PLANS FOR DUTY SERVICE SIZES AND EXACT LOCATIONS. CONTRACTOR TO CONFIRM SIZES OF ALL SERVICES PRIOR TO INSTALLATION. REFER TO ELECTRICAL PLANS FOR ELECTRIC AND TELEPHONE SERVICE CONSTRUCTION DETAILS. REFER TO MECHANICAL PLANS FOR GAS SERVICE CONSTRUCTION DETAILS.
2. FIELD VERIFY ELEVATIONS AND LOCATIONS OF ALL CONNECTIONS TO EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
3. PROVIDE TEMPORARY SUPPORT FOR EXISTING UTILITY LINES THAT ARE ENCOUNTERED DURING CONSTRUCTION UNTIL BACKFILLING IS COMPLETE.
4. MAINTAIN A MINIMUM OF 5.0' COVER OVER ALL WATER MAINS.
5. ADJUST ALL MANHOLES AND FRAMES TO FINISHED GRADES.
6. ALL SANITARY SEWER AND WATER SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF WEST DES MOINES PLUMBING CODE.
7. 12" MINIMUM VERTICAL CLEARANCE BETWEEN STORM SEWER AND SANITARY SEWER PIPES. 18" MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY/STORM SEWER AND WATER MAIN.
8. MAINTAIN A MINIMUM OF 10' HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND PUBLIC WATER MAINS.
9. WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS AND THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS. THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATIONS AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK. THE CONTRACTOR IS REQUIRED TO UTILIZE THE UTILITY ONE CALL AT 1-800-292-8989 AT LEAST 48 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT.
10. LOCATION OF SITE UTILITIES SHALL BE VERIFIED WITH PROPER UTILITY COMPANY PROVIDING SERVICE.
11. ALL WATER AND SANITARY LEADS TO BUILDING SHALL END 5' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT END.
12. SEE SITE SPECIFICATIONS "UNDERGROUND UTILITIES" FOR BACKFILLING AND COMPACTION REQUIREMENTS.
13. GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR ALL TAP AND TIE ON FEES REQUIRED, AS WELL AS COST OF UNDERGROUND SERVICE CONNECTIONS TO THE BUILDING.
14. ELECTRICAL SERVICE TO PAD MOUNTED TRANSFORMER SHALL BE RUN UNDERGROUND, FROM ROAD RIGHT-OF-WAY TO TRANSFORMER LOCATION. ASSOCIATED COST BY GENERAL CONTRACTOR.
15. ALL EXISTING UTILITIES TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
16. FOR EXACT LIGHT POLE LOCATIONS SEE PHOTOMETRICS PLAN
17. MATERIAL PERMITTED FOR USE AS SANITARY SEWER PIPES IS PVC SDR 35 FOR 6" & 4".
18. MIDAMERICAN ENERGY GAS WILL FURNISH AND INSTALL THE GAS MAINS AND GAS SERVICE UP TO AND INCLUDING THE METER. IF PAVING IS COMPLETE PRIOR TO GAS SERVICE INSTALLATION, CONTRACTOR TO PROVIDE (1) 4" SCHEDULE 40 PVC CONDUIT UNDER PAVED AREAS.
19. CONTRACTOR TO FURNISH AND INSTALL (2) 4" SCHEDULE 40 PVC CONDUITS FOR TELEPHONE SERVICE FROM CENTURYLINK MAIN TO BUILDING. CENTURYLINK TO SUPPLY, PROVIDE AND INSTALL PRIMARY TELEPHONE SERVICE.
20. CONTRACTOR TO FURNISH AND INSTALL (2) 4" SCHEDULE 40 PVC CONDUITS WITH PULL WIRE FOR PRIMARY ELECTRIC SERVICE. MIDAMERICAN ELECTRIC TO PROVIDE AND INSTALL PRIMARY ELECTRIC SERVICE. CONTRACTOR TO PROVIDE AND INSTALL TRANSFORMER PAD AND SECONDARY SERVICE IN ACCORDANCE WITH MIDAMERICAN ELECTRIC SPECIFICATIONS AND REQUIREMENTS.
21. ALL SANITARY SEWER AND WATER SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF WEST DES MOINES PLUMBING CODE.
22. ALL CONNECTIONS TO PUBLIC SANITARY SEWERS SHALL BE CORE DRILLED.
23. STORM WATER DETENTION IS PROVIDED FOR THIS SITE IN LOT 2 OF THREE FOUNTAINS.
24. CONTRACTOR TO EXTEND EXISTING CONDUITS FROM OLD TRANSFORMER LOCATION TO NEW TRANSFORMER PAD AND STUB UP PER LOCAL UTILITY REQUIREMENTS.

ONSITE WATERLINE NOTES:

- THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES, AND FIRE HYDRANTS.
- ALL FIRE HYDRANTS SHALL BE PROVIDED WITH AN APPROVED AUXILIARY GATE VALVE.
- ALL WATER MAINS SHALL BE HYDROSTATICALLY TESTED AND DISINFECTED BEFORE ACCEPTANCE. SEE SITE WORK SPECIFICATIONS.
- ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
- GENERAL CONTRACTOR SHALL HAVE APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER THIS SYSTEM PRIOR TO INSTALLATION.
- COORDINATE WITH WDM WATER WORKS PRIOR TO ABANDONING EXISTING WATER MAIN.
- WEST DES MOINES WATER WORKS COMPLETES ALL TAPS. CONTRACTOR TO SCHEDULE TAP WITH WDMWW.

Plotted By:rnjoreal, Plotted: Jan 26, 2015 – 3:22pm.
Xrefs: xgl–CHICK–24X36–BDR.dwg;86140076–xV–Survey–OV.dwg;86140076–xCs–Dsgn.dwg;3526– Base Building.dwg;86140076_xCs_Tabulations.dwg.
Images:
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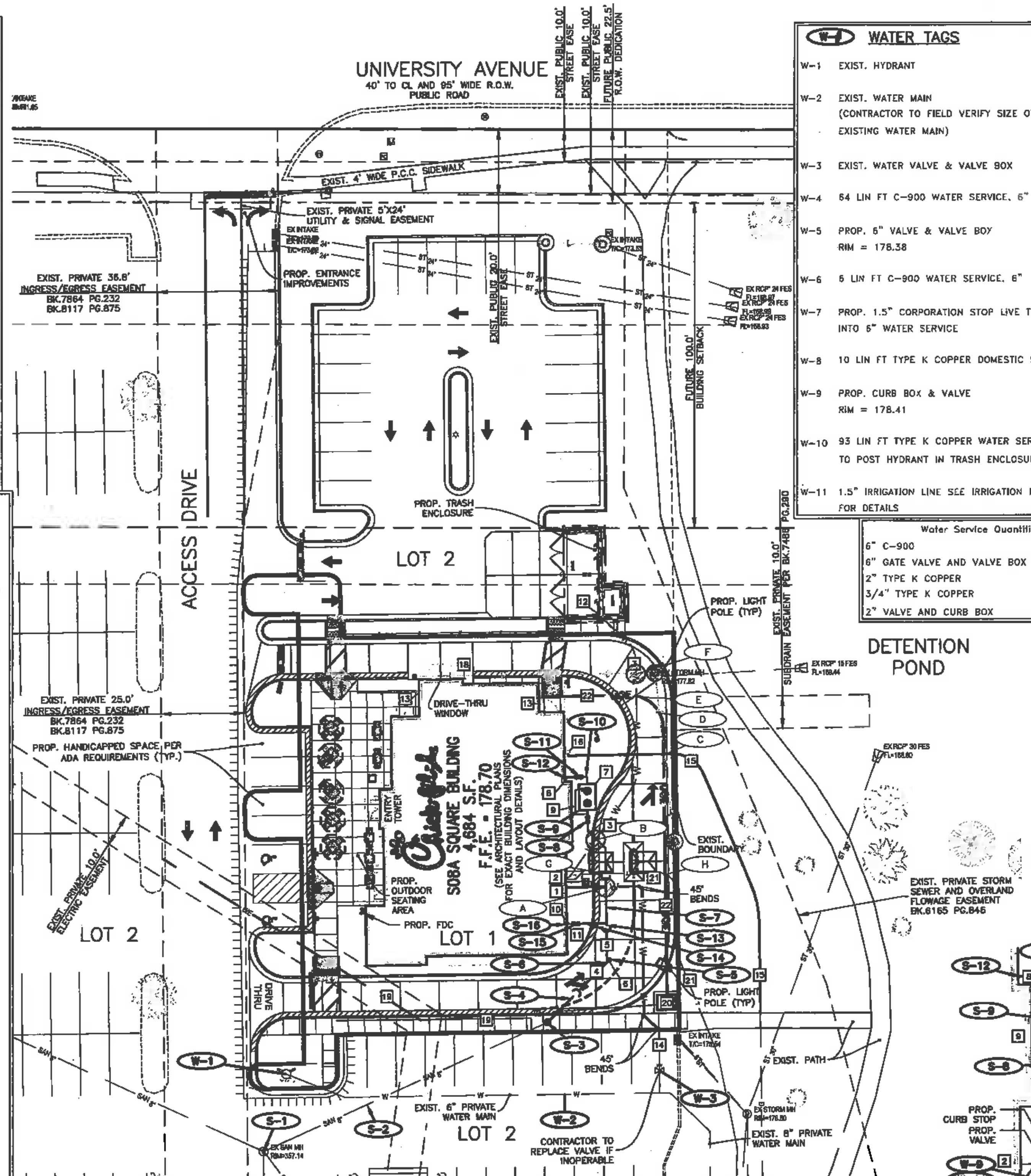


WATER TAGS

W-1	EXIST. HYDRANT
W-2	EXIST. WATER MAIN (CONTRACTOR TO FIELD VERIFY SIZE OF EXISTING WATER MAIN)
W-3	EXIST. WATER VALVE & VALVE BOX
W-4	64 LIN FT C-900 WATER SERVICE, 6"
W-5	PROP. 6" VALVE & VALVE BOX RIM = 178.38
W-6	5 LIN FT C-900 WATER SERVICE, 6"
W-7	PROP. 1.5" CORPORATION STOP LIVE TAP INTO 6" WATER SERVICE
W-8	10 LIN FT TYPE K COPPER DOMESTIC SERVICE, 2.0"
W-9	PROP. CURB BOX & VALVE RIM = 178.41
W-10	93 LIN FT TYPE K COPPER WATER SERVICE 3/4" TO POST HYDRANT IN TRASH ENCLOSURE
W-11	1.5" IRRIGATION LINE SEE IRRIGATION PLANS FOR DETAILS

Water Service Quantities

6" C-900	70 LF
6" GATE VALVE AND VALVE BOX	1 EA
2" TYPE K COPPER	10 LF
3/4" TYPE K COPPER	93 LF
2" VALVE AND CURB BOX	1 EA

CONFLICT TAGS

A	WATER SERVICE - 6" TOP = 171.90 SANITARY SEWER TAG S-7 BOP = 173.40 VERT SEP = 1.50' MIN
B	WATER SERVICE - 3/4" TOP = 172.02 SANITARY SEWER TAG S-7 BOP = 173.67 VERT SEP = 1.50' MIN
C	STORM SEWER TAG ST-15 TOP = 173.12 PROP. GAS UTILITY BOP = 173.80 VERT SEP = 0.68'
D	STORM SEWER TAG ST-15 TOP = 172.93 PROP. ELECTRIC UTILITY BOP = 173.92 VERT SEP = 0.99'
E	WATER SERVICE - 3/4" TOP = 172.13 PROP. ELECTRIC UTILITY BOP = 174.13 VERT SEP = 2.00'
F	WATER SERVICE - 3/4" TOP = 171.78 STORM SEWER TAG ST-17 BOP = 173.28 VERT SEP = 1.5' MIN
G	SANITARY SEWER TAG S-7 TOP = 173.98 PROP. TELEPHONE UTILITY BOP = 174.20 VERT SEP = 0.22'
H	PROP. ELECTRIC UTILITY TOP = 173.31 PROP. TELEPHONE UTILITY BOP = 173.81 VERT SEP = 0.50'

SANITARY SEWER TAGS

S-1	EXIST. SAN MH RIM = 179.33 INV = 171.33 (W) INV = 171.81 (NE) INV = 171.74 (SE)
S-2	92 LIN FT EXIST. SAN SEWER
S-3	SANITARY MH 4' DIA. RIM = 178.59 INV = 172.73 (SW) (CONTRACTOR TO VERIFY PRIOR TO ORDERING STRUCTURES) INV = 172.93 (NE)
S-4	25 LIN FT SAN SEWER 6" (PVC SDR 26) @ 1.04%
S-5	CLEANOUT (SEE DETAIL) RIM = 177.66 INV = 173.19
S-6	45 DEG. WYE CONNECTION 6" INV = 173.18
S-7	50 LIN FT SAN SEWER 6" (PVC SDR 26) @ 1.04%
S-8	TWO-WAY CLEANOUT (SEE DETAIL) RIM(S) = 177.92 INV = 173.67
S-9	GREASE TRAP (1,000 GAL.) SEE BUILDING PLUMBING PLAN FOR DETAILS RIM(S) = 178.24 INV = 174.00 (INLET) INV = 173.70 (OUTLET)
S-10	9 LIN FT SAN SEWER 6" (PVC SDR 26) @ 1.04%
S-11	TWO-WAY CLEANOUT (SEE DETAIL) RIM(S) = 178.57 INV = 174.05
S-12	INV @ BLDG = 174.09 (VERIFY ARCHITECT/PLANS)
S-13	45 DEG. WYE CONNECTION 6" INV = 173.30
S-14	12 LIN FT SAN SEWER 6" (PVC SDR 26) @ 1.04%
S-15	TWO-WAY CLEANOUT (SEE DETAIL) RIM(S) = 178.44 INV = 173.39
S-16	INV @ BLDG = 173.42 (VERIFY ARCHITECT/PLANS)

LEGEND

DENOTES MAINTAIN 18" VERTICAL SEPARATION PER IDNR'S REQUIREMENTS

WEST DES MOINES STANDARD NOTES

- ALL WATER WORK, PUBLIC OR PRIVATE, SHALL BE DONE IN ACCORDANCE WITH WEST DES MOINES WATER WORKS STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL NOTIFY WEST DES MOINES WATER WORKS AT LEAST ONE WEEK PRIOR TO CONSTRUCTION BUILDING CONSTRUCTION.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK OF ALL SUBCONTRACTORS INVOLVED IN THE PROJECT.
- CONTACT BUILDING INSPECTION (515-222-3630) A MINIMUM OF 24 HOURS IN ADVANCE FOR PRIVATE UTILITY INSTALLATION INSPECTIONS.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE WEST DES MOINES WATER WORKS AND CITY'S CROSS-CONNECTION CONTROL/CONTAINMENT PROVISION.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION OF AN APPROVED BACKFLOW PREVENTION ASSEMBLY(S) FOR CONTAINMENT IN ALL NEW CONSTRUCTION. BACKFLOW PREVENTION TO BE INSTALLED PER CITY ORDINANCE 1297, 5-4-1998. CONTRACTOR SHALL NOTIFY WEST DES MOINES WATER WORKS, RALPH RENTERIA, ENGINEERING TECHNICIAN (515)-222-3485) A MINIMUM OF 24 HOURS AFTER INSTALLATION AND TESTING OF ALL BACKFLOW DEVICES TO SCHEDULE FINAL INSPECTION.
- DESIGNATED BUFFERS SHALL BE LABELED AS "NO BUILD AREA."
- ALL LIGHTS ARE TO BE DOWNCAST CUTOFF VARIETY. WALL PACKS ARE PROHIBITED. THE MAXIMUM ILLUMINATION ALLOWED AT THE PROPERTY LINE IS ONE CANDLE-FOOT.

IOWA ONE CALL
1-800-292-8989
WWW.IOWAONECALL.COM

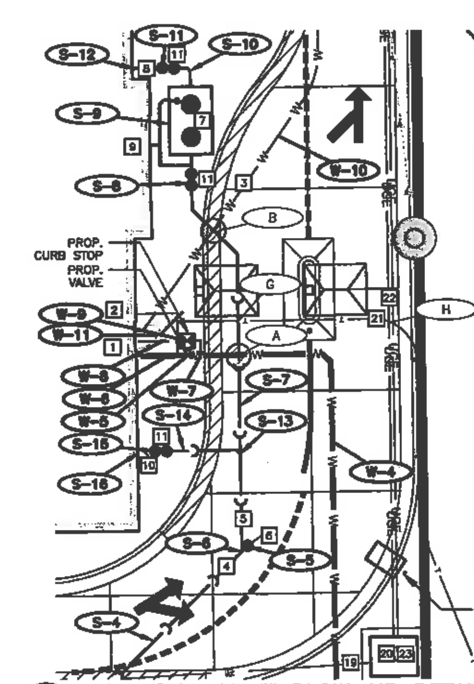
CALL: 1-800-292-8989
WITH THE FOLLOWING:
COUNTY Polk
CITY-TOWNSHIP West Des Moines
PARCEL ID. NO.# 4502 University Avenue
48 hours before you dig
(Excluding Sat., Sun. & Holidays)

SITE BENCHMARKS:

BENCH MARK No. 69
INTERSECTION OF 28th STREET AND UNIVERSITY AVENUE. SOUTHWEST CORNER OF INTERSECTION 41.5 FEET SOUTH OF CENTERLINE OF UNIVERSITY AVENUE, 68.5 FEET WEST OF CENTER LINE OF 28th STREET.
WEST DES MOINES DATUM ELEVATION 96.58

SITE BENCHMARK #1:
"X" CUT ON TOP OF CURB AT SOUTH NOSE OF CONCRETE ISLAND WEST OF ENTRANCE DRIVE AT THE NORTHWEST CORNER OF PROPERTY.
WEST DES MOINES DATUM ELEVATION 176.17

SITE BENCHMARK #2:
"X" CUT ON TOP OF CURB AT NORTH NOSE OF CONCRETE ISLAND WEST OF ENTRANCE DRIVE AT THE SOUTHWEST CORNER OF PROPERTY.
WEST DES MOINES DATUM ELEVATION 180.01



1 / PS-1.0 UTILITY LAYOUT BLOW-UP DETAIL
SCALE: 1"=10'

SITE UTILITY NOTES:

- LOCATION OF SITE UTILITIES SHALL BE VERIFIED WITH PROPER UTILITY COMPANY PROVIDING SERVICE.
- ALL WATER AND SANITARY LEADS TO BUILDING AND GREASE TRAP SHALL END 5' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT END. (BY-OTHERS)
- ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
- SEE SITE SPECIFICATIONS "SITE UTILITIES" FOR BACKFILLING AND COMPACTION REQUIREMENTS.
- GENERAL CONTRACTOR SHALL HAVE APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER THIS SYSTEM PRIOR TO INSTALLATION.
- ELECTRICAL SERVICE TO PAD MOUNTED TRANSFORMER SHALL BE RUN UNDERGROUND, FROM ROAD RIGHT-OF-WAY TO TRANSFORMER LOCATION. ASSOCIATED COST BY GENERAL CONTRACTOR.
- ALL BUILDING UTILITY SERVICE LOCATIONS TO BE VERIFIED W/ ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.
- ALL EXISTING UTILITIES TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
- FOR EXACT LIGHT POLE LOCATIONS SEE PHOTOMETRICS PLAN
- MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER AND SEWER (PER I.D.N.R. STANDARDS)
- MAINTAIN 10' HORIZONTAL SEPARATION BETWEEN WATER AND SEWER (PER I.D.N.R. STANDARDS)

0 5 10 20

Chick-fil-A
5200 Buffington Rd.
Atlanta Georgia,
30349-2998

REVISIONS

#	DATE:	BY:	DESCRIPTION:
1	01/19/15	MRJ	ISSUED FOR PERMIT
2	01/26/15	MRJ	PER CITY COMMENTS

HRGreen.com
HRGreen

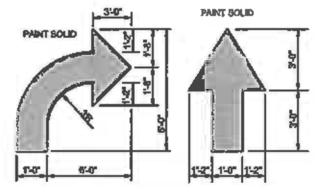
STORE #3526
UNIVERSITY AVENUE
4502 University Avenue
West Des Moines, IA
50266

SHEET TITLE
PLUMBING SITE PLAN

DWG EDITION V2
REVISION 01-2015

Job No. : 86140076
Store : 3526
Date : 01.19.15
Drawn By : MRJ
Checked By: JFV

Sheet
PS-1.0

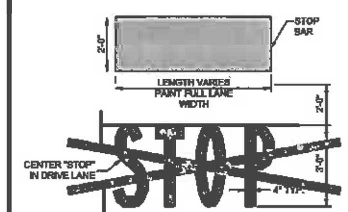


1 (C-4.0) DIRECTIONAL ARROW
NOT TO SCALE

NOTES:
1. GENERAL CONTRACTOR SHALL REFER TO CHICK-FIL-A PARKING LOT STRIPING SPECIFICATIONS, SEE DETAIL (5 / C-4.0)
2. CONTRACTOR SHALL USE WHITE REFLECTIVE PAINT ON ASPHALT & YELLOW REFLECTIVE PAINT ON CONCRETE.

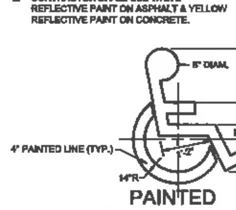
2 (C-4.0) DRIVE-THRU GRAPHICS
NOT TO SCALE

NOTES:
1. GENERAL CONTRACTOR SHALL REFER TO CHICK-FIL-A PARKING LOT STRIPING SPECIFICATIONS, SEE DETAIL (5 / C-4.0)
2. CONTRACTOR SHALL USE WHITE REFLECTIVE PAINT ON ASPHALT & YELLOW REFLECTIVE PAINT ON CONCRETE.



3 (C-4.0) STOP LINE GRAPHIC
NOT TO SCALE

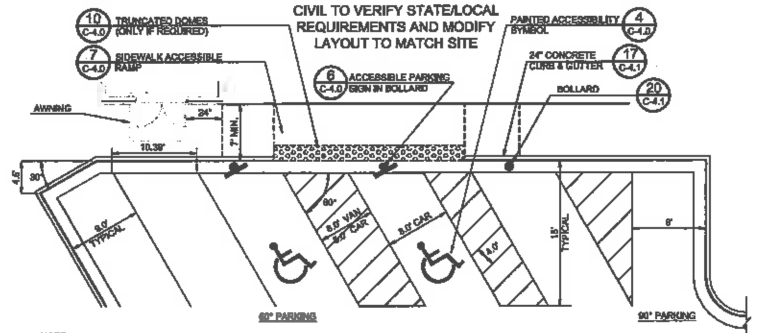
NOTES:
1. GENERAL CONTRACTOR SHALL REFER TO CHICK-FIL-A PARKING LOT STRIPING SPECIFICATIONS, SEE DETAIL (5 / C-4.0)
2. CONTRACTOR SHALL USE WHITE REFLECTIVE PAINT ON ASPHALT & YELLOW REFLECTIVE PAINT ON CONCRETE.
3. IF STOP SIGN IS PROPOSED, STOP LINE GRAPHIC IS NOT REQUIRED.



4 (C-4.0) PAINTED ACCESSIBILITY SYMBOL
NOT TO SCALE

NOTES:
1. GENERAL CONTRACTOR SHALL REFER TO CHICK-FIL-A PARKING LOT STRIPING SPECIFICATIONS, SEE DETAIL (5 / C-4.0)
2. CONTRACTOR SHALL USE WHITE REFLECTIVE PAINT ON ASPHALT & YELLOW REFLECTIVE PAINT ON CONCRETE, UNLESS UPON VERIFICATION BY THE GENERAL CONTRACTOR IT IS DETERMINED THAT LOCAL, STATE, OR ADA CODES DIFFER, IN WHICH CASE THESE CODES SHALL GOVERN.

CIVIL TO VERIFY STATE/LOCAL REQUIREMENTS AND MODIFY LAYOUT TO MATCH SITE



NOTES:
1. ACCESSIBLE PARKING AND ACCESSIBLE AISLES SHALL NOT EXCEED 1:50 IN SLOPE IN ANY DIRECTION. IF ONLY ONE ACCESS ISLE IS INSTALLED, IT IS TO BE A VAN SIZE.
2. PARKING STALL DIMENSIONING SHALL BE IN ACCORDANCE WITH APPLICABLE GOVERNING AUTHORITY'S AND ADA STANDARDS AND IF DIFFERENT THAN THIS DETAIL SHALL BE THE DIMENSIONING SHOWN ON THE SITE LAYOUT PLAN.
3. GENERAL CONTRACTOR SHALL REFER TO CHICK-FIL-A PARKING LOT STRIPING SPECIFICATIONS.
4. CONTRACTOR SHALL USE 4" WIDE WHITE REFLECTIVE PAINT FOR STRIPING ON ASPHALT PARKING LOTS.
5. CONTRACTOR SHALL USE 4" WIDE YELLOW REFLECTIVE PAINT FOR STRIPING ON CONCRETE PARKING LOTS.
6. NO WHEEL STOPS TO BE INSTALLED WHEN PARKING IS ADJACENT TO SIDEWALK.
7. ADA SIGNS IN BOLLARDS AND BOLLARDS SHALL BE INSTALLED WHEN PARKING IS ADJACENT TO FLUSH CURB OR A RAMP.

PARKING LOT STRIPING SPECIFICATIONS:

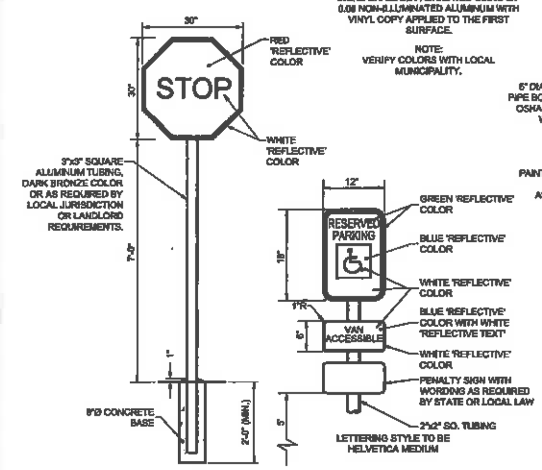
STANDARDS:
1. ALWAYS FOLLOW ALL APPLICABLE GOVERNING AUTHORITY'S STANDARDS.
2. SURFACES SHOULD BE CLEAN, DRY, AND FREE FROM LOOSE OR PEELING PAINT, REMOVE ALL OIL, DUST, GREASE, DIRT, AND OTHER FOREIGN MATERIAL TO ENSURE ADEQUATE ADHESION. DO NOT APPLY WHEN AIR OR SURFACE TEMPERATURES ARE BELOW 40°F.
3. APPLY SHERWIN-WILLIAMS SETFAST PREMIUM ALKYD ZONE MARKING PAINT A300 WHITE OR A303 YELLOW USING EITHER AIRLESS OR CONVENTIONAL LINE STRIPING EQUIPMENT. USE THE FOLLOWING SETTINGS AS A GUIDE-ACTUAL SETTINGS DEPEND ON ATMOSPHERIC CONDITIONS AT THE TIME OF APPLICATION:

AIRLESS
- PRESSURE — 1800-2700 PSI
- HOSE — ¼"-⅜" ID
- TIP — 0.015"-0.017"
- FILTER — 60 MESH
- REDUCTION — ONLY IF NECESSARY, UP TO 1PT/GAL VM&P NAPTHA R1K3

CONVENTIONAL
- GUN — BLINKS 21 (BLEEDER) OR EQUIVALENT
- FLUID NOZZLE — #66
- AIR NOZZLE — INTERNAL MIX, #709
- ATOMIZATION PRESSURE — 45-60 PSI
- FLUID PRESSURE — 40-70 PSI
- REDUCTION — ONLY IF NECESSARY, UP TO 1PT/GAL VM&P NAPTHA R1K3

- MIX PAINT THOROUGHLY BY BOXING, STIRRING, OR POWER AGITATION BEFORE USE. APPLY AT 15 MILS WET TO ACHIEVE A SPREAD RATE OF 400-500 LINEAL FEET OF STANDARD 4" STRIPE PER GALLON, APPLIED AT THIS RATE AT 70 DEGREES F AND 50% RELATIVE HUMIDITY, PAINT WILL DRY WITH NO TRAFFIC PICKUP AFTER 20 MINUTES.
- GENERAL CONTRACTOR TO RE-STRIPE THE LOT 45 DAYS AFTER OPENING.

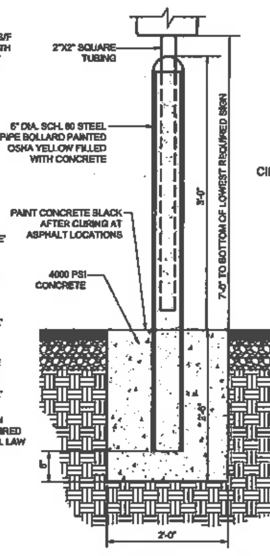
5 (C-4.0) STANDARD PARKING STALL
NOT TO SCALE



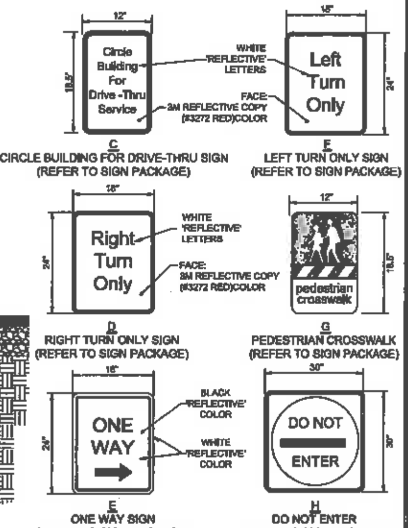
A
STOP SIGN & STANDARD MOUNTING POST (MUTCD R 1-1)

B
ACCESSIBLE PARKING SIGN (MUTCD R 7-8 AND R 7-8P5)

(CIVIL TO VERIFY SIGN PANELS AND COLORS WITH STATE/LOCAL REQUIREMENTS)



BOLLARD MOUNTED SIGN DETAIL



C
CIRCLE BUILDING FOR DRIVE-THRU SIGN (REFER TO SIGN PACKAGE)

F
LEFT TURN ONLY SIGN (REFER TO SIGN PACKAGE)

D
RIGHT TURN ONLY SIGN (REFER TO SIGN PACKAGE)

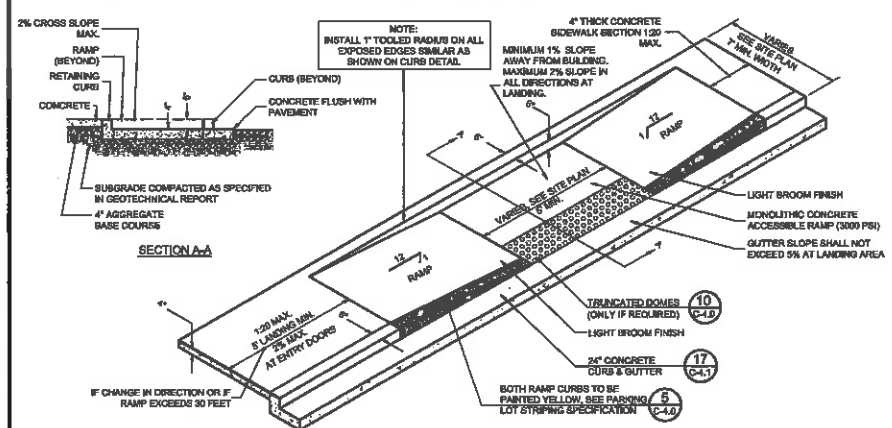
G
PEDESTRIAN CROSSWALK (REFER TO SIGN PACKAGE)

E
ONE WAY SIGN (REFER TO SIGN PACKAGE)

H
DO NOT ENTER (REFER TO SIGN PACKAGE)

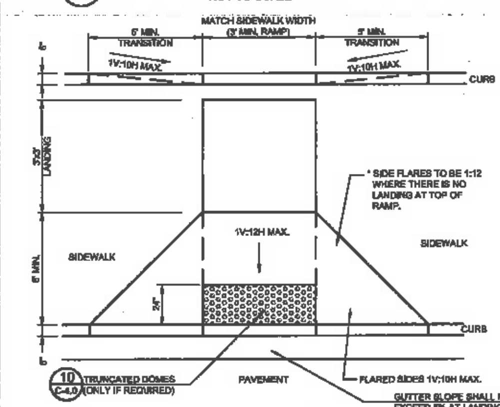
6 (C-4.0) DIRECTIONAL SIGNAGE
NOT TO SCALE

NOTE:
"SIGNS PROVIDED AND INSTALLED BY CFA SIGNAGE CONTRACTOR"

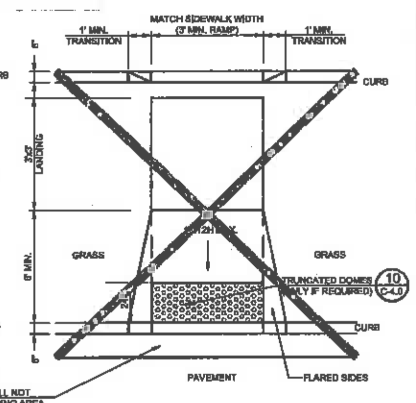


7 (C-4.0) SIDEWALK ACCESSIBLE RAMP
NOT TO SCALE

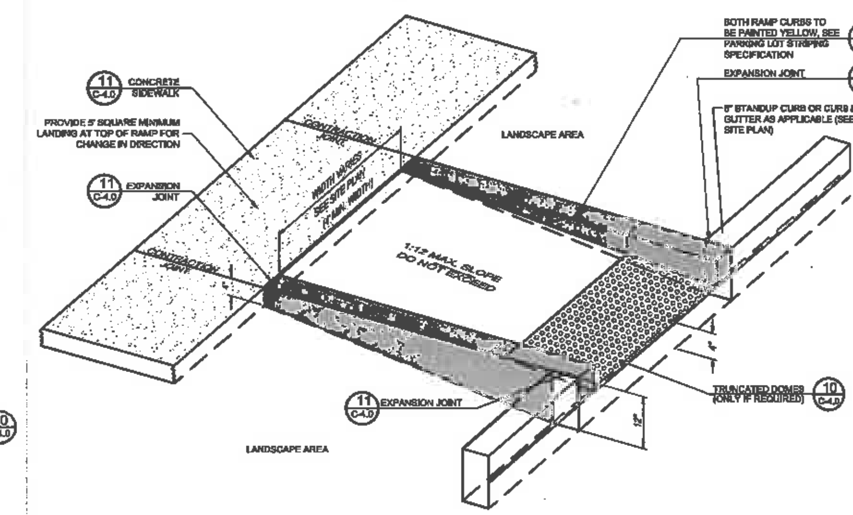
CIVIL TO VERIFY RAMP REQUIREMENTS BY STATE.



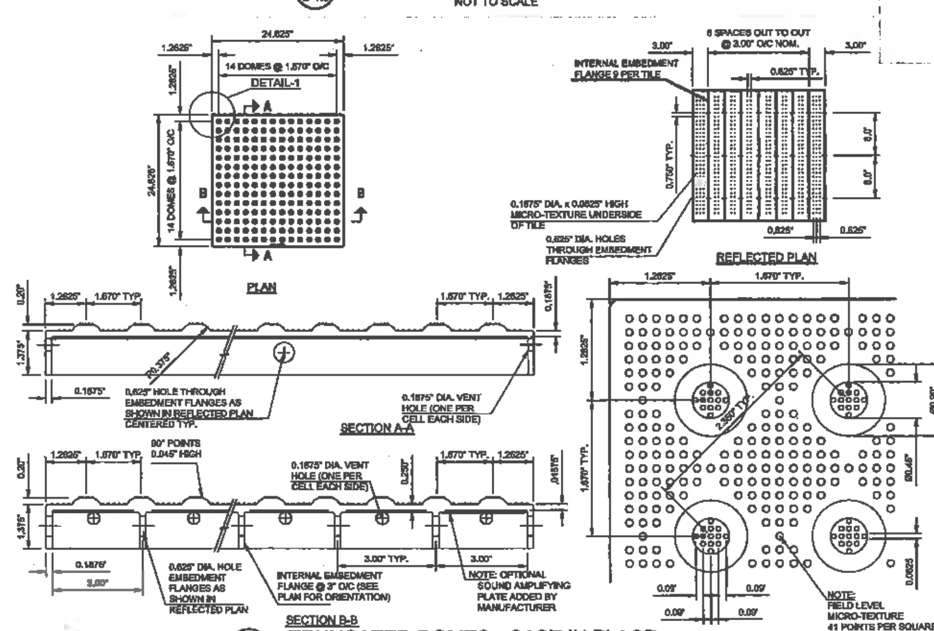
8 (C-4.0) CURB RAMP w/ FLARED SIDES
NOT TO SCALE



8A (C-4.0) CURB RAMP w/ SHORT FLARED SIDES
NOT TO SCALE



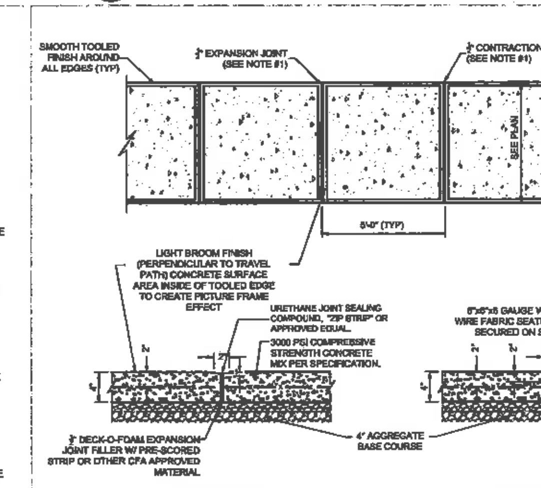
9 (C-4.0) RETURNED CURB ACCESSIBLE RAMP
NOT TO SCALE



10 (C-4.0) TRUNCATED DOMES - CAST IN PLACE
NOT TO SCALE

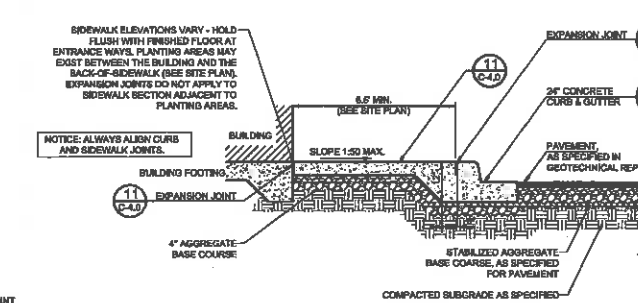
ONLY IF REQUIRED BY STATE/LOCAL ORDINANCE (CIVIL ENGINEER TO VERIFY)

NOTES:
1. CURB RAMP RUNNING SLOPES SHALL NOT BE STEEPER THAN 1:12 AND CROSS SLOPE SHALL BE 2% OR FLATTER.
2. DETECTABLE WARNING SURFACES SHALL BE CONSTRUCTED BY TEXTURING PRODUCTS CONFORMING TO PROWAG R304. TRANSITION SLOPES ARE NOT TO HAVE DETECTABLE WARNINGS. CONTRACTOR SHALL CONFIRM LOCAL CODES ARE MET.
3. WHERE A CURB RAMP IS CONSTRUCTED WITHIN AN EXISTING CURB, CURB & GUTTER AND/OR SIDEWALK, THE EXISTING CURB & GUTTER SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE CURB TRANSITIONS OR TO THE EXTENT THAT NO REMAINING SECTION OF CURB OR CURB & GUTTER IS LESS THAN 5' LONG. THE EXISTING SIDEWALK SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE TRANSITION SLOPE WALK AROUND OR TO THE EXTENT THAT NO REMAINING SECTION OF SIDEWALK IS LESS THAN 5'.
4. THE PLAN MUST PROVIDE FOR DETECTABLE WARNING SURFACE COLORS OR MATERIALS THAT PROVIDE THE NECESSARY CONTRAST, EITHER DARK-ON-LIGHT, OR LIGHT-ON-DARK. STANDARD DOME COLOR IS BRICK RED.
5. TRUNCATED DOMES TO BE INSTALLED USING ARMOR TILE CAST IN PLACE DOME TACTILE TILE. PART NUMBER ADA-2424 OR OTHER EQUIVALENT APPROVED MATERIAL. PREFERRED MANUFACTURER ARMOR TILE TACTILE SYSTEMS LANCE MITCHELL(919)622-4615 UNLESS PAVERS ARE REQUIRED. CONTRACTOR TO VERIFY THAT CURB RAMPS MEET LOCAL CODES AND ADA REQUIREMENTS.



11 (C-4.0) TYPICAL CONCRETE SIDEWALK
NOT TO SCALE

NOTES:
1. JOINTS AT 5'-0" O.C. TOOLED ½" WIDE, 1" DEEP OR MAX. ¼ DEEP WHICHEVER IS GREATER. EXPANSION JOINTS AT 20' MAX. & ALL P.C.s, UNLESS APPROVED OR INDICATED OTHERWISE ON PLAN VIEW JOINT PATTERN.



12 (C-4.0) SIDEWALK WITH CURB & GUTTER SECTION
NOT TO SCALE

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

#	DATE:	BY:	DESCRIPTION:
1	01/19/15	MRJ	ISSUED FOR PERMIT
2	01/26/15	MRJ	PER CITY COMMENTS

REVISIONS

HRGreen.com

HRGreen

STORE #3526

UNIVERSITY AVENUE

4502 University Avenue
West Des Moines, IA
50266

SHEET TITLE

STANDARD CONSTRUCTION DETAILS

DWG EDITION V2
REVISION 01-2015

Job No. : 86140076
Store : 3526
Date : 01.19.15
Drawn By : MRJ
Checked By: JFV

Sheet
C-4.0

Plotted By: mjbreal, Plotted: Jan 26, 2015 - 3:22pm,
Xrefs: xgt-CHICK-24X36-BDR.dwg,
Images: 501_SWOU_20-ft_Product_Detail.tiff: 503_SWOU_Bypass-Fab_Inlet&Outlet.tiff: 7E-25-10-2_Page_1.tiff: 7E-25-10-2_Page_2.tiff,
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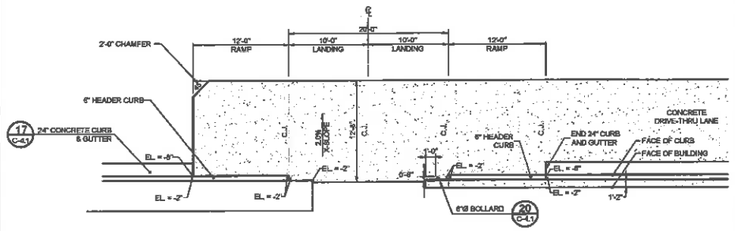
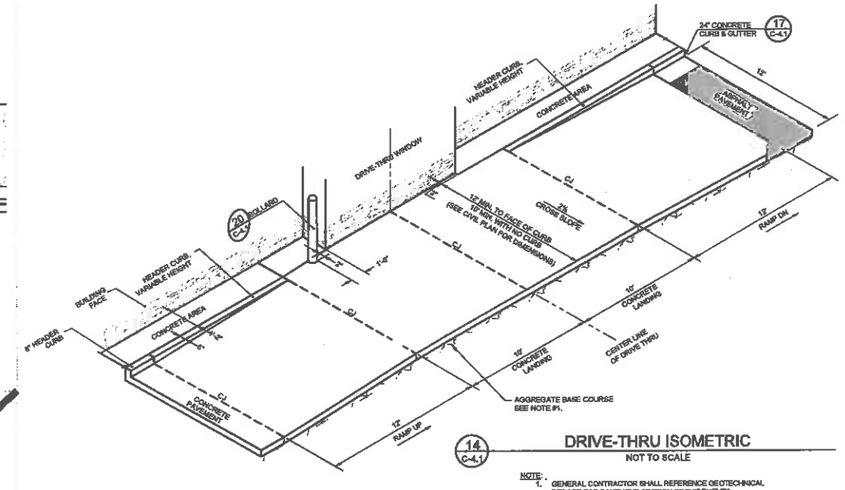


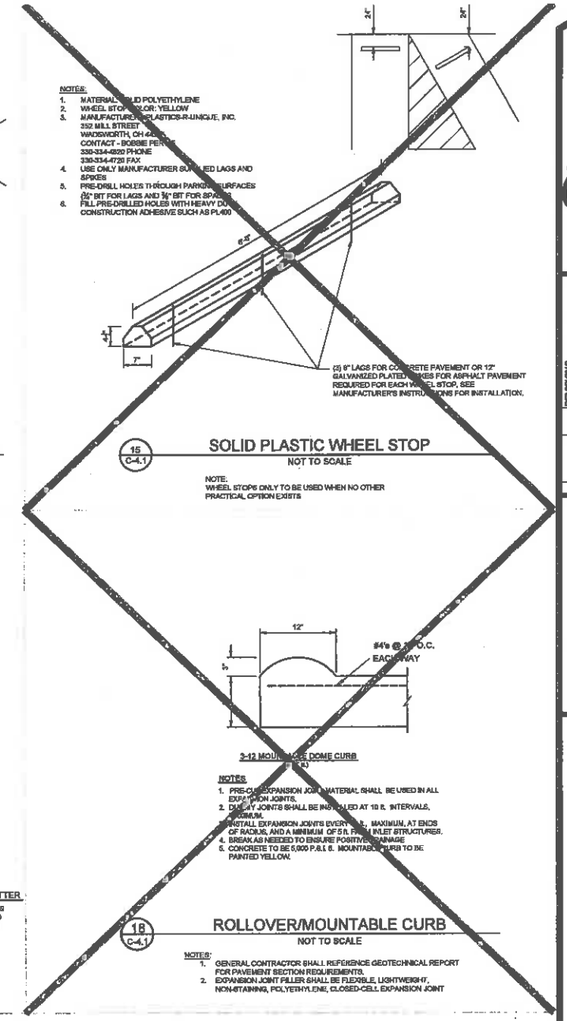
DRIVE-THRU PLAN
NOT TO SCALE

NOTE: ALL ELEVATIONS ON THIS DETAIL ARE RELATIVE TO FFE = 0'



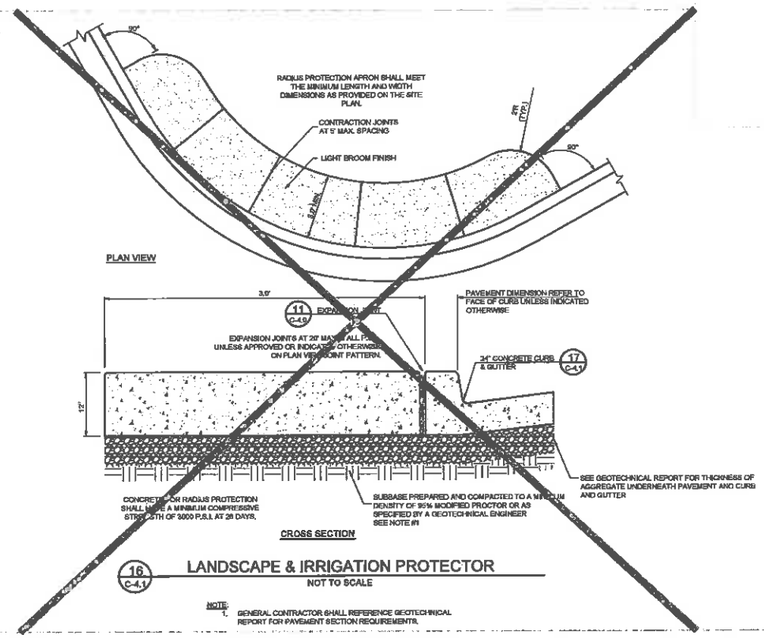
DRIVE-THRU ISOMETRIC
NOT TO SCALE

NOTE:
1. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.



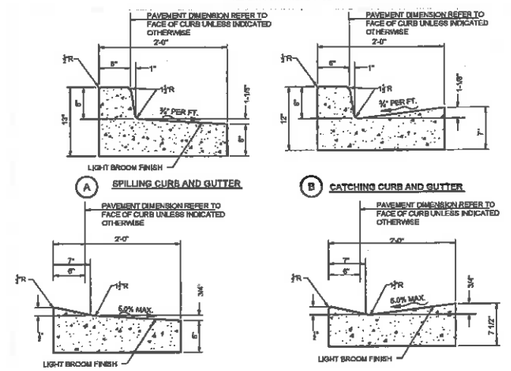
SOLID PLASTIC WHEEL STOP
NOT TO SCALE

NOTE:
WHEEL STOPS ONLY TO BE USED WHEN NO OTHER PRACTICAL OPTION EXISTS



LANDSCAPE & IRRIGATION PROTECTOR
NOT TO SCALE

NOTE:
1. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.



CONCRETE FOR CURBING SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 P.S.I. AT 28 DAYS.

CONSTRUCTION STAKING FOR CURBING INSTALLATION SHALL BE REFERENCED (CUT OR FILL) TO THE TOP OF CURB

AT CONTRACTOR'S OPTION THE GUTTER THICKNESS MAY BE INCREASED AT THE EDGE OF PAVEMENT TO MAKE BOTTOM OF GUTTER PARALLEL WITH PAVING OF BASE COURSE.

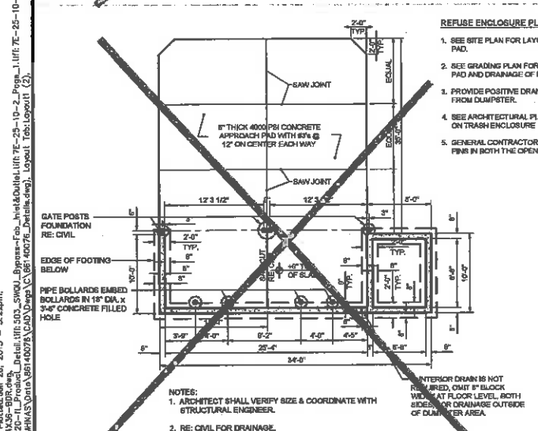
CONTRACTION JOINTS AT 10'-0" O.C. TOOLED 1/4" (±1/16"), (3) WIDE, 1" OR MAX. DIA. DEEP WHICHEVER IS GREATER. EXPANSION JOINTS AT 40' MAX. AND ALL P.C.'s, UNLESS APPROVED OR INDICATED OTHERWISE ON PLAN VIEW JOINT PATTERN.

24" CONCRETE CURB & GUTTER
NOT TO SCALE

NOTES:
1. PRE-CUT EXPANSION JOINT MATERIAL SHALL BE USED IN ALL EXPANSION JOINTS.
2. DUMMY JOINTS SHALL BE INSTALLED AT 10 ft. INTERVALS, MAXIMUM.
3. INSTALL EXPANSION JOINTS EVERY 5 ft. MAXIMUM, AT ENDS OF RADIUS, AND A MINIMUM OF 5 ft. FROM INLET STRUCTURES.
4. BREAK AS NEEDED TO ENSURE POSITIVE DRAINAGE
5. CONCRETE TO BE 5,000 P.S.I. 6. MOUNTABLE CURB TO BE PAINTED YELLOW.

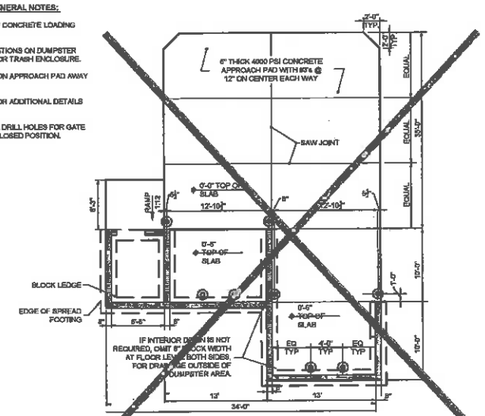
ROLLOVER/MOUNTABLE CURB
NOT TO SCALE

NOTES:
1. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.
2. EXPANSION JOINT FILLER SHALL BE FLEXIBLE, LIGHTWEIGHT, NON-STAINING, POLYETHYLENE, CLOSED-CELL EXPANSION JOINT

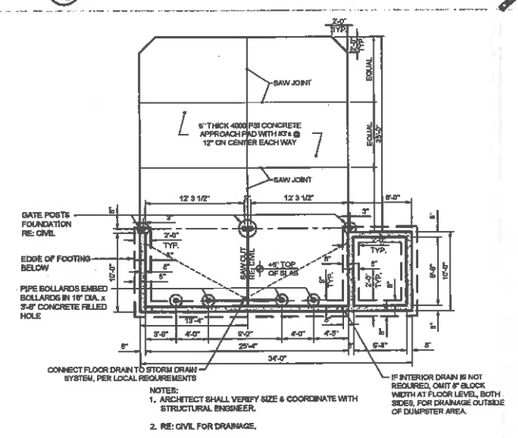


SCREENED REFUSE ENCLOSURE FOUNDATION PLAN
NOT TO SCALE

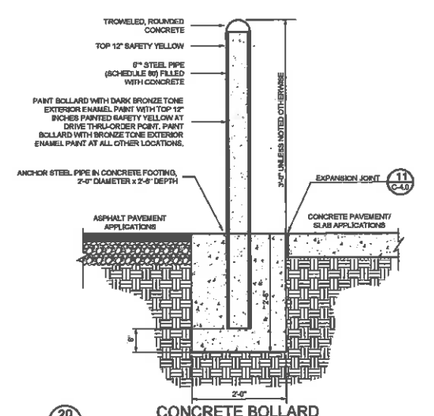
REFUSE ENCLOSURE PLAN GENERAL NOTES:
1. SEE SITE PLAN FOR LAYOUT OF CONCRETE LOADING PAD.
2. SEE GRADING PLAN FOR ELEVATIONS ON DUMPSTER PAD AND DRAINAGE OF INTERIOR TRASH ENCLOSURE.
3. PROVIDE POSITIVE DRAINAGE ON APPROACH PAD AWAY FROM DUMPSTER.
4. SEE ARCHITECTURAL PLANS FOR ADDITIONAL DETAILS ON TRASH ENCLOSURE
5. GENERAL CONTRACTOR SHALL DRILL HOLES FOR GATE PINS IN BOTH THE OPEN AND CLOSED POSITION.



REFUSE ENCLOSURE FOUNDATION PLAN (ALT)
NOT TO SCALE



REFUSE ENCLOSURE ALTERNATE DRAINAGE PLAN
NOT TO SCALE



CONCRETE BOLLARD
NOT TO SCALE

NOTE: BOLLARD HEIGHT SHALL BE 6'-0" AT DRIVE-THRU WINDOW BOLLARDS WITH BIGHIS SHALL BE PAINTED SAFETY YELLOW

Chick-fil-A
5200 Buffington Rd.
Atlanta Georgia,
30349-2998

REVISIONS

#	DATE:	BY:	DESCRIPTION:
1	01/19/15	MRJ	ISSUED FOR PERMIT
2	01/26/15	MRJ	PER CITY COMMENTS

HRGreen.com
HRGreen

STORE #3526
UNIVERSITY AVENUE
4502 University Avenue
West Des Moines, IA
50266

SHEET TITLE
STANDARD CONSTRUCTION DETAILS

DWG EDITION V2
REVISION 01-2015

Job No. : 86140076
Store : 3526
Date : 01.19.15
Drawn By : MRJ
Checked By: JFV

Sheet
C-4.1

Plotted By:mjrosal, Plotted:Jan 26, 2015 - 3:22pm,
Xrefs:xg1-CHICK-24X36-BPR.dwg,
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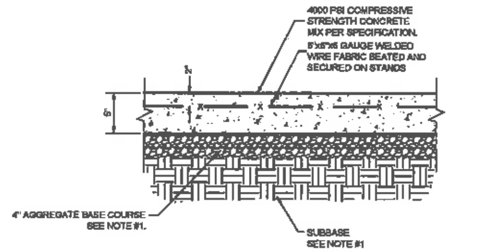
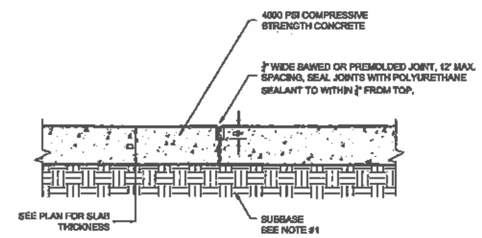


21 C-4.2 **CONCRETE PAVEMENT SECTION**

NOT TO SCALE

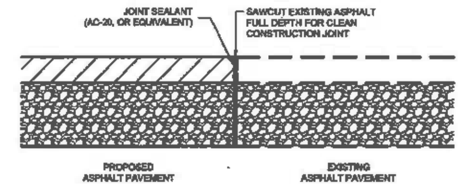
NOTE:
1. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.



22 C-4.2 **TRANSVERSE AND LONGITUDINAL CONTRACTION JOINT**

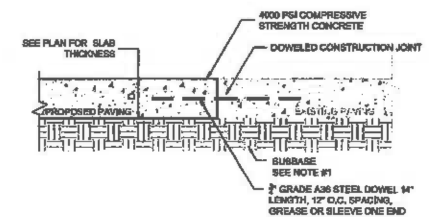
NOT TO SCALE

NOTE:
1. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.



23A C-4.2 **BUTT JOINT**

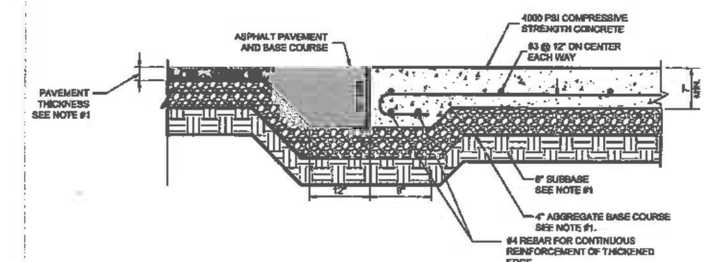
NOT TO SCALE



23 C-4.2 **TRANSVERSE AND LONGITUDINAL DOWELED CONSTRUCTION JOINT**

NOT TO SCALE

NOTE:
1. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.

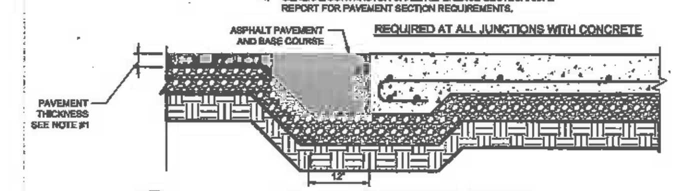


24 C-4.2 **CONCRETE APRON @ TRASH ENCLOSURE**

NOT TO SCALE

NOTE:
1. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.

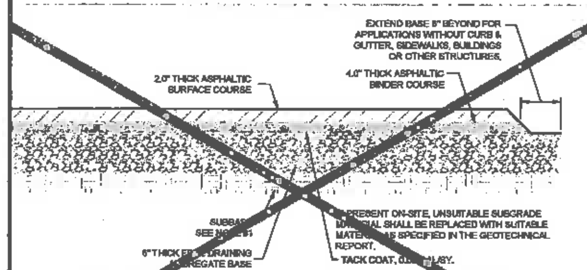
REQUIRED AT ALL JUNCTIONS WITH CONCRETE



24A C-4.2 **PAVEMENT EDGE DETAIL**

NOT TO SCALE

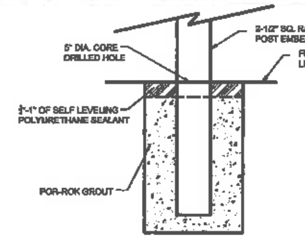
NOTE:
1. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.



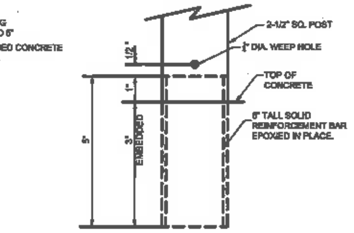
22A C-4.2 HEAVY DUTY HMA PAVEMENT SECTION

NOT TO SCALE

NOTE:
1. GENERAL CONTRACTOR SHALL REFERENCE SITE SPECIFIC GEOTECHNICAL REPORT FOR PAVEMENT, AGGREGATE, AND SUBGRADE SECTION REQUIREMENTS.
2. MINIMUM PAVEMENT THICKNESS SHOULD BE 6" GRADED AGGREGATE BASE, 4.0"ASPHALT PAVEMENT BINDER & 2.0" ASPHALT PAVEMENT SURFACE COURSE TACK COAT.



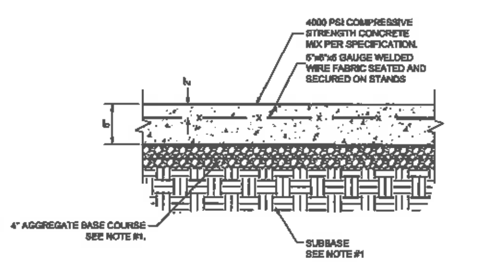
FIELD EMBEDMENT DETAIL



EMBEDDED POST DETAIL

WEEP HOLE NOTE

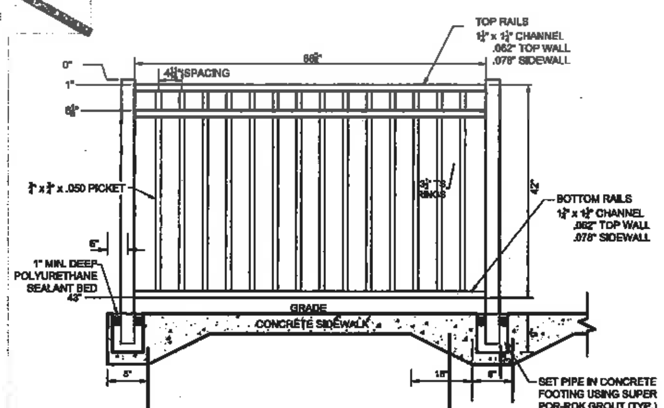
ALL POSTS GROUTED INTO CONCRETE MUST HAVE A ¼" DIAMETER WEEP HOLE LOCATED JUST ABOVE THE MOUNTING SURFACE AND ALONG THE PLANE OF THE RAIL. WEEP HOLES WILL NEED TO BE DRILLED AFTER RAILS HAVE BEEN INSTALLED.



25 C-4.2 **CONCRETE PAVING DRIVE-THRU LANE**

NOT TO SCALE

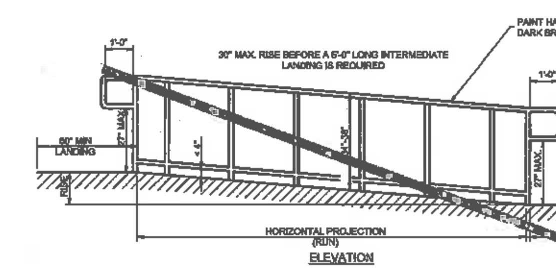
NOTE:
1. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.

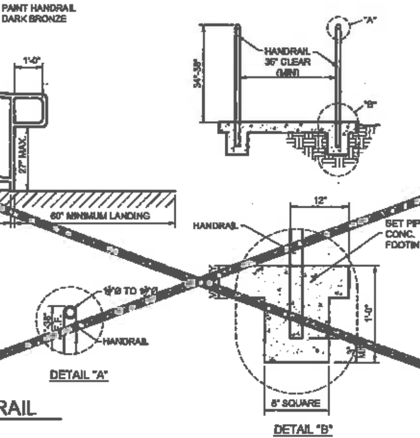


26 C-6 **ALUMINUM HANDRAIL**

NOT TO SCALE

NOTE:
1. USE ONLY COMMERCIAL GRADE ALUMINUM FENCING WITH DARK BRONZE POWDER COAT FINISH





RAMPS AND HANDRAILS TO BE IN COMPLIANCE WITH SECTION 405 & 505 OF THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.

RAMPS SECTION 405
- "ANY PART OF AN ACCESSIBLE ROUTE WITH A SLOPE GREATER THAN 1:20 SHALL BE CONSIDERED A RAMP AND SHALL COMPLY WITH 405."
- "THE LEAST POSSIBLE SLOPE SHALL BE USED FOR ANY RAMP."
- "THE MINIMUM CLEAR WIDTH OF A RAMP SHALL BE 36"."
- MAXIMUM SLOPE FOR A RAMP SHALL BE 1:12. RISE FOR ANY RAMP RUN SHALL 30" MAXIMUM.

LANDINGS SECTION 405.7
- "LEVEL LANDINGS WILL BE PROVIDED AT TOP AND BOTTOM OF EACH RAMP. LANDING LENGTH SHALL BE MIN. 60" AND BE AS WIDE AS RAMP MIN. 36".
- "IF RAMP CHANGES DIRECTION LANDING WILL BE MIN. 60"x60"
- "IF A DOORWAY IS LOCATED AT A LANDING, THEN THE AREA IN FRONT OR THE DOORWAY SHALL COMPLY WITH 404.2.4 AND 404.3.2

HANDRAILS SECTION 505
- "IF A RAMP HAS A SLOPE GREATER THAN 5% AND A RISE GREATER THAN 6" OR A HORIZONTAL PROJECTION GREATER THAN 72", THEN IT SHALL HAVE HANDRAILS ON BOTH SIDES"
- HANDRAIL WILL BE CONSTRUCTED OF WELDED STEEL PIPE - GRIND SMOOTH AND PAINT TO MATCH DARK BRONZE.

CROSS SLOPE SECTION 405.3
- "THE CROSS SLOPE OF RAMP SURFACES SHALL BE NO GREATER THAN 1:50.
- "NOWHERE SHALL THE CROSS SLOPE OF AN ACCESSIBLE ROUTE EXCEED 1:50.

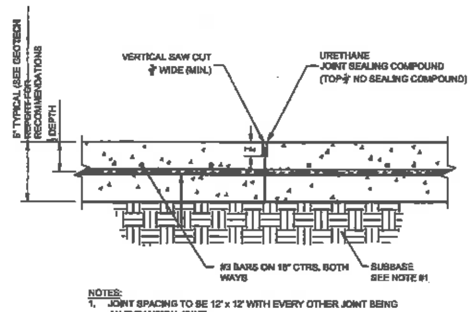
27 C-4.2 TYPICAL ADA RAMP AND HANDRAIL

NOT TO SCALE

1. USE ONLY COMMERCIAL GRADE ALUMINUM FENCING WITH DARK BRONZE POWDER COAT FINISH

NOTE: VERIFY ALL STATE AND LOCAL REQUIREMENTS FOR RAMPS AND HANDRAILS.

THESE DETAILS APPLY TO CONCRETE PAVED LOTS

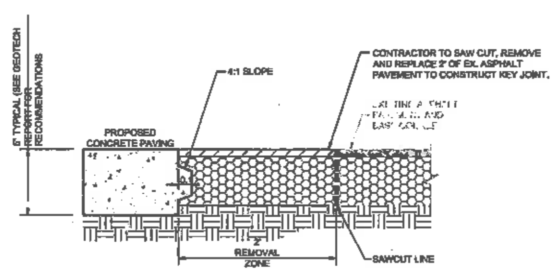


NOTES:
1. JOINT SPACING TO BE 12' x 12' WITH EVERY OTHER JOINT BEING AN EXPANSION JOINT.

28 C-4.2 **CONTRACTION JOINT**

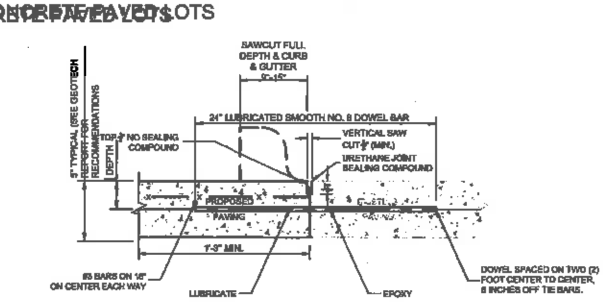
NOT TO SCALE

NOTE:
1. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.



29 C-4.2 **KEYED CONSTRUCTION JOINT**

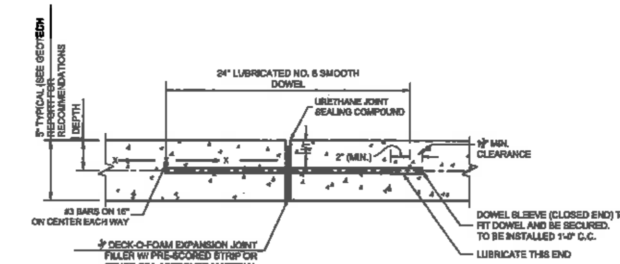
NOT TO SCALE



NOTES:
1. NO. 5 SMOOTH DOWEL BAR MAY BE USED IN 5 INCH AND 6 INCH PAVEMENT THICKNESS.
2. LONGITUDINAL BUTT CONSTRUCTION MAY BE UTILIZED IN PLACE OF LONGITUDINAL HINGED (KEYWAY) JOINT AT CONTRACTORS OPTION.
3. DOWEL BARS SHALL BE DRILLED & EPOXIED INTO PAVEMENT HORIZONTALLY BY USE OF MECHANICAL EQUIP.
4. PUSHING DOWEL BARS INTO WET CONCRETE NOT ACCEPTABLE.

30 C-4.2 **LONGITUDINAL BUTT JOINT**

NOT TO SCALE



NOTES:
1. NO. 5 SMOOTH DOWEL BAR MAY BE USED IN 5 INCH AND 6 INCH PAVEMENT THICKNESS.
2. LONGITUDINAL BUTT CONSTRUCTION MAY BE UTILIZED IN PLACE OF LONGITUDINAL HINGED (KEYWAY) JOINT AT CONTRACTORS OPTION.
3. DOWEL BARS SHALL BE DRILLED INTO PAVEMENT HORIZONTALLY BY USE OF A MECHANICAL EQUIPMENT.
4. DRILLING BY HAND IS NOT ACCEPTABLE, PUSHING DOWEL BARS INTO WET CONCRETE NOT ACCEPTABLE.
5. JOINT SPACING TO BE 24'X24' (EVERY OTHER JOINT)

31 C-4.2 **EXPANSION JOINT**

NOT TO SCALE

Chick-fil-A
5200 Buffington Rd.
Atlanta Georgia,
30349-2998

#	DATE:	BY:	DESCRIPTION:
1	01/19/15	MRJ	ISSUED FOR PERMIT
2	01/26/15	MRJ	PER CITY COMMENTS

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STORE #3526
UNIVERSITY AVENUE
4502 University Avenue
West Des Moines, IA
50266

SHEET TITLE
STANDARD CONSTRUCTION DETAILS

DWG EDITION REVISION V2 01-2015

Job No. : 86140076
Store : 3526
Date : 01.19.15
Drawn By : MRJ
Checked By: JFV

Sheet
C-4.2

Plotted By: mjorosi, Plotted: Jan 26, 2015 - 3:22pm.
Xrefs: xgt-CHICK-24X36-BDR.dwg.
Images: 501_SWQU_20-11_Product_Detail.tif: 503_SWQU_Bypass-Fab_Inlet&Outlet.tif: 7E-25-10-2_Page_1.tif: 7E-25-10-2_Page_2.tif:
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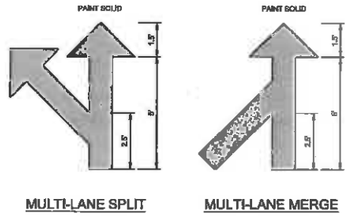
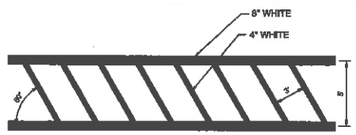


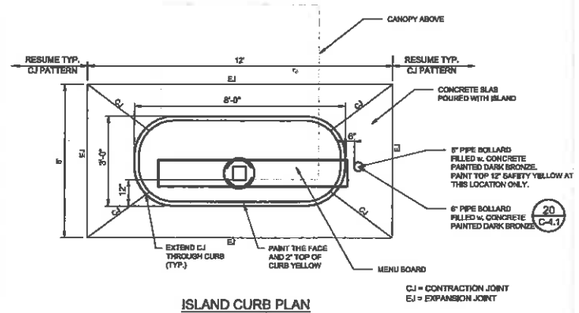
32 C-4.3 MULTI-LANE DIRECTIONAL GRAPHICS
NOT TO SCALE

NOTES:
1. GENERAL CONTRACTOR SHALL REFER TO CHICK-FIL-A PARKING LOT STRIPING SPECIFICATIONS, SEE DETAIL 5 C-4.0
2. CONTRACTOR SHALL USE WHITE REFLECTIVE PAINT ON ASPHALT & YELLOW REFLECTIVE PAINT ON CONCRETE.

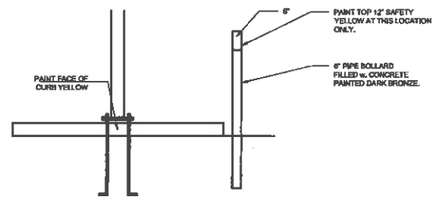


33 C-4.3 CROSSWALK DETAIL
NOT TO SCALE

NOTES:
1. REFER TO PARKING LOT STRIPING SPECIFICATION 5 C-4.0
2. CROSSWALK ALONG AN ACCESSIBLE ROUTE SHALL MAINTAIN A CROSS SLOPE OF 2% MAX AND A RUNNING SLOPE OF 5% MAX.

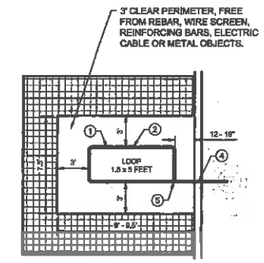


ISLAND CURB PLAN

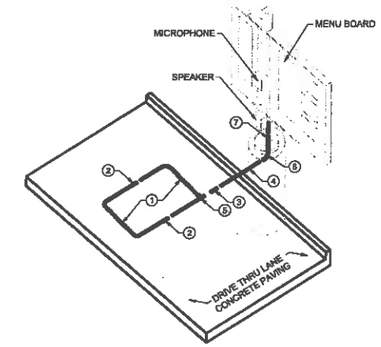


ISLAND CURB ELEVATION

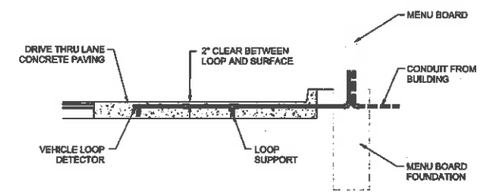
34 C-4.3 DRIVE THRU ORDER POINT ISLAND CURB
NOT TO SCALE



PLAN VIEW



ISOMETRIC VIEW

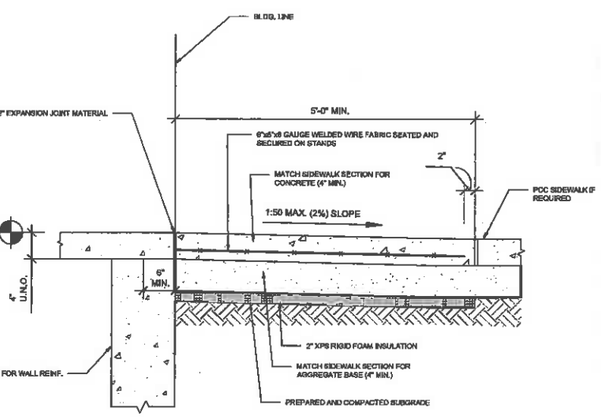


SECTION VIEW

PARTS LIST
1. PREFAB (FOLDED) LOOP (1.5' x 5')
2. 1/2" PVC COUPLING
3. 1/2" PVC SLEEVE COUPLING
4. 1/2" PVC TUBING (3' LENGTH)
5. 1/2" PVC CORNER FITTING
6. 1/2" PVC 90° ELBOW
7. 1/2" PVC TUBING (2' LENGTH)

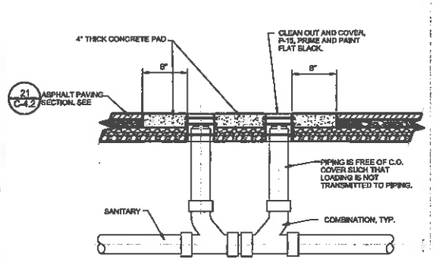
35 C-4.3 MENU BOARD LOOP DETECTION SYSTEM
NOT TO SCALE

NOTES:
1. LOOP DETECTOR IS MODEL NO. VDL100 VEHICLE DETECTION LOOP MANUFACTURED BY MH ELECTRONICS, INC.
2. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION.



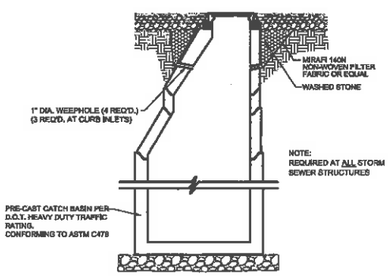
NOTE:
1. CONTRACTOR HAS THE OPTION TO DRILL, SET AND EPOXY GROUT DOWEL, IF NOT INSTALLED WHEN THE BUILDING SLAB WAS POURED.
2. REFER TO ARCHITECTURAL DRAWINGS FOR DOOR LOCATIONS. DOOR STOOP SHALL EXTEND 12" PAST EACH SIDE OF DOOR MIN.
3. USE A 10'X6' SLAB MINIMUM AT A DOUBLE DOOR ENTRY.
4. USE A 5'X6' SLAB MINIMUM AT A SINGLE DOOR ENTRY.

36 C-4.3 ENTRY DOOR FROST SLAB DETAIL
NOT TO SCALE

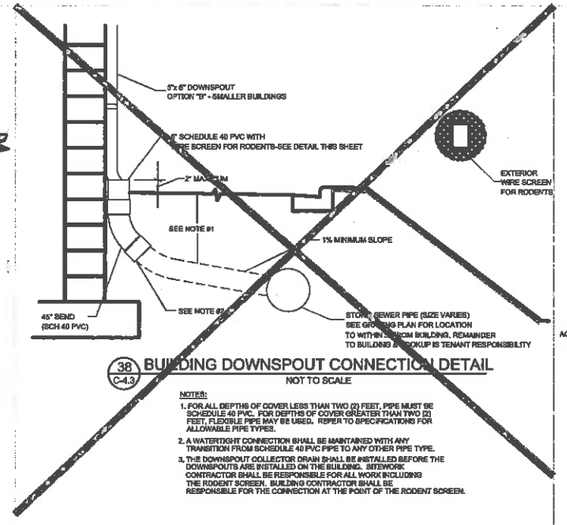


37 C-4.3 SAN. C.O. OUTSIDE BUILDING
NOT TO SCALE

NOTE: SEE PLUMBING PLANS FOR GREASE TRAP DETAIL

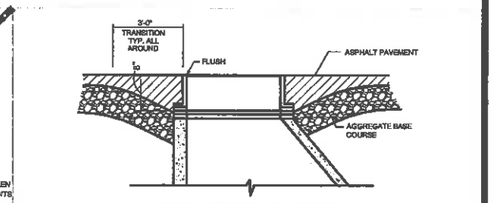


40 C-4.3 STORM WEEP HOLE DETAIL
NOT TO SCALE

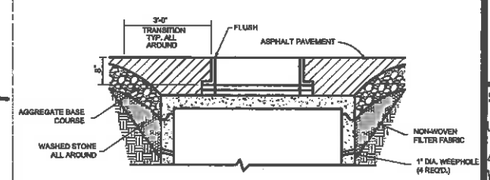


38 C-4.3 BUILDING DOWNSPOUT CONNECTION DETAIL
NOT TO SCALE

NOTES:
1. FOR ALL DEPTHS OF COVER LESS THAN TWO (2) FEET, PIPE MUST BE SCHEDULE 40 PVC. FOR DEPTHS OF COVER GREATER THAN TWO (2) FEET, FLEXIBLE PIPE MAY BE USED. REFER TO SPECIFICATIONS FOR ALLOWABLE PIPE TYPES.
2. A WATERTIGHT CONNECTION SHALL BE MAINTAINED WITH ANY TRANSITION FROM SCHEDULE 40 PVC PIPE TO ANY OTHER PIPE TYPE.
3. THE DOWNSPOUT COLLECTOR DRAIN SHALL BE INSTALLED BEFORE THE DOWNSPOUTS ARE INSTALLED ON THE BUILDING. SITEWORK CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK INCLUDING THE RODENT SCREEN. BUILDING CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONNECTION AT THE POINT OF THE RODENT SCREEN.



TYPICAL SECTION AT MANHOLE



TYPICAL SECTION AT INLET/CATCH BASIN

39 C-4.3 TYPICAL SECTION AT INLET/CATCH BASIN DETAIL
NOT TO SCALE

Chick-fil-A
5200 Buffington Rd.
Atlanta Georgia,
30349-2998

REVISIONS

#	DATE:	BY:	DESCRIPTION:
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2	01/26/15	MRJ	PER CITY COMMENTS

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4502 University Avenue
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SHEET TITLE
STANDARD CONSTRUCTION DETAILS

DWG EDITION V2
REVISION 01-2015

Job No. : 86140076
Store : 3526
Date : 01.19.15
Drawn By : MRJ
Checked By: JFV

Sheet
C-4.3

Plotted By:mjarel, Plotted:Jan 28, 2015 - 3:22pm,
Xrefs:xg1-CSHOC-2.xrd3i-BGR.dwg,
Images:Site Plan.png,
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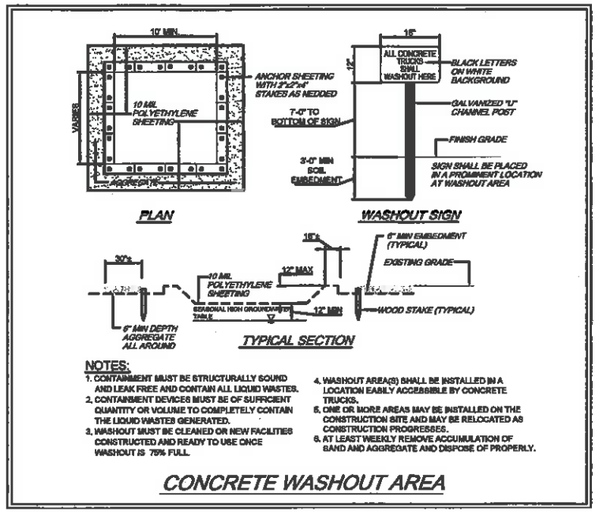
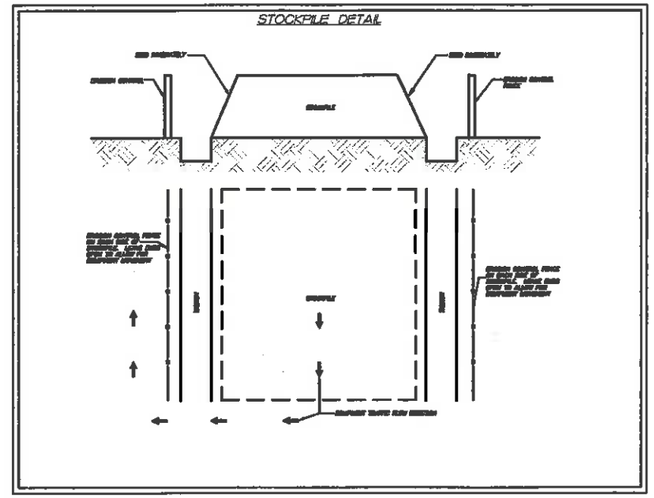


NOTES:

1. CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL LIQUID WASTES.
2. CONTAINMENT DEVICES MUST BE OF SUFFICIENT QUANTITY OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED.
3. WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FULL.
4. WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS.
5. ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
6. AT LEAST WEEKLY REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.

CONCRETE WASHOUT AREA



7E-25

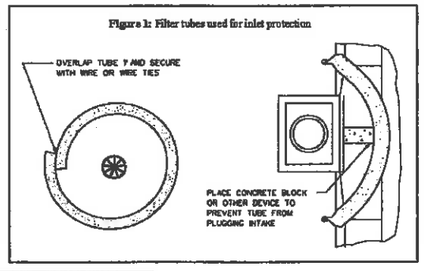
Statewide Urban Design and Specifications

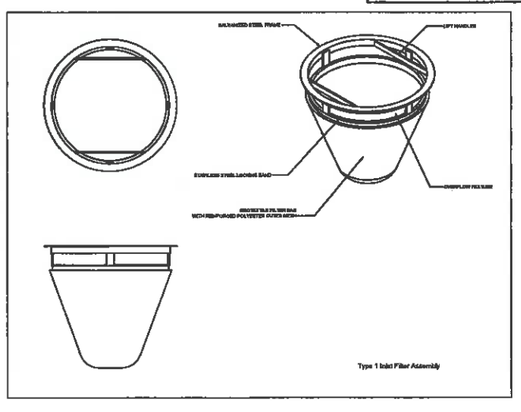
Design Manual
Chapter 7 – Erosion and Sediment Control
7E – Design Information for Erosion and Sediment Control Measures

7E-25 Inlet Protection

Source: Soil-Tek

Figure 1: Filter tubes used for inlet protection





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5200 Buffington Rd.
Atlanta Georgia,
30349-2998

REVISIONS			
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1	01/19/15	MRJ	ISSUED FOR PERMIT
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STORE #3526

UNIVERSITY AVENUE

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West Des Moines, IA
50266

SHEET TITLE

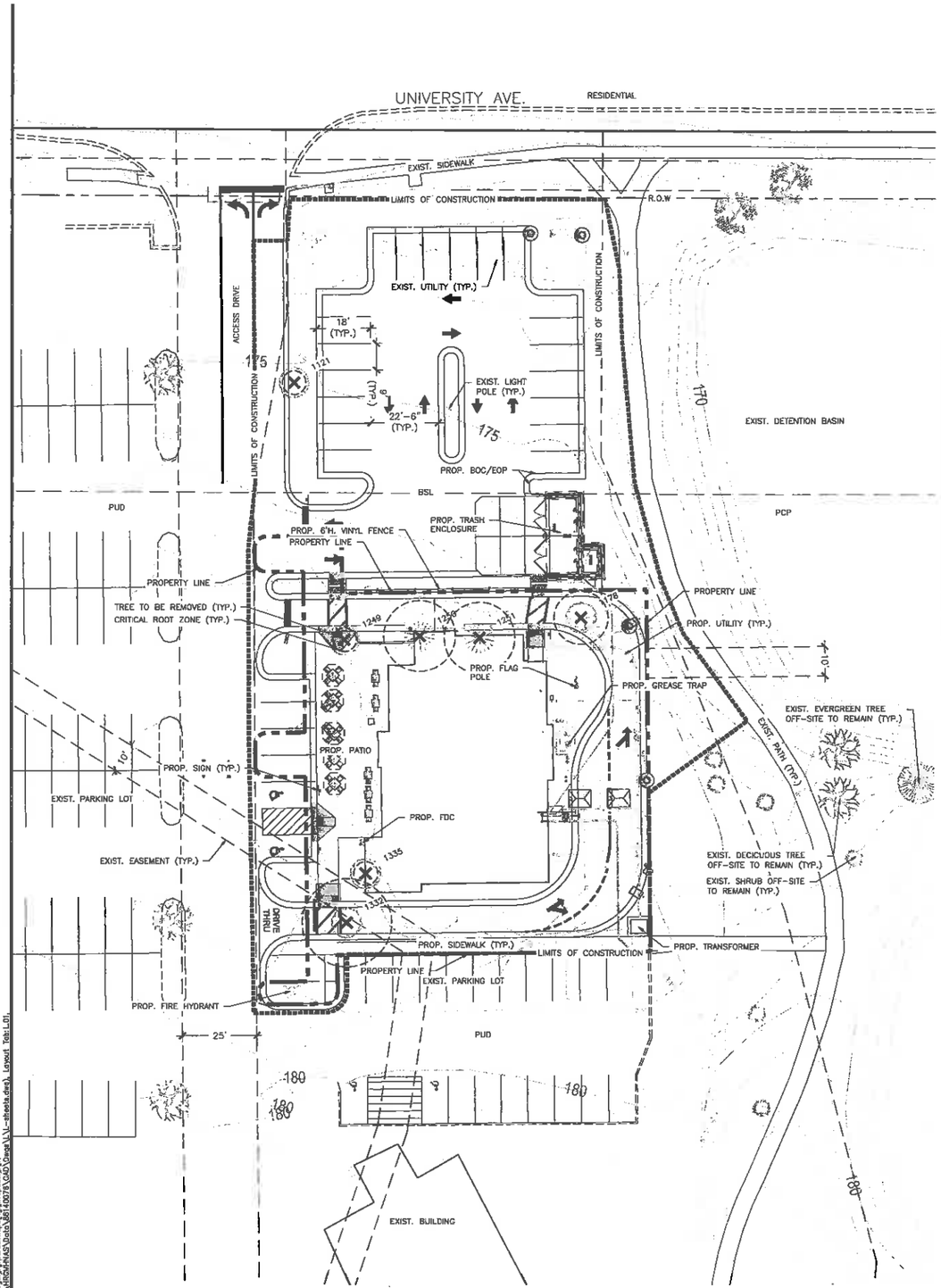
EROSION CONTROL DETAILS

DWG EDITION V2
REVISION 01-2015

Job No. : B6140076
Store : 3526
Date : 01.19.15
Drawn By : MRJ
Checked By: JFV

Sheet

C-5.0



1 TREE PRESERVATION PLAN

SCALE: 1" = 20'-0"

NORTH

0 20

SCALE: 1"=20'

TREE PROTECTION KEY

P — EXIST. TREE TO BE PRESERVED

EXIST. TREE TO BE REMOVED

CRITICAL ROOT ZONE

TOTAL QUANTITIES (IN VICINITY OF DISTURBANCE AND PROPOSED IMPROVEMENTS)

EXIST. TREES TO BE PRESERVED	0
EXIST. TREES TO BE REMOVED	7
TOTAL EXISTING TREES TAGGED	7

GENERAL NOTES

1. THE INTENT IS TO KEEP THE EXISTING TREES TO BE PRESERVED IN TACT THROUGHOUT THE DURATION OF CONSTRUCTION ON-SITE. IF THE TREES ARE DAMAGED DURING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR REPLACING PER THE MUNICIPALITY'S ORDINANCE.
2. CONTRACTOR IS RESPONSIBLE FOR THE HAUL-OFF OF ALL TREES, SHRUBS, AND OTHER LANDSCAPE TO BE REMOVED.
3. CONTRACTOR SHALL NOT DAMAGE ANY TREES OR LANDSCAPE OUTSIDE THE CONSTRUCTION LIMITS.

CHICK-FIL-A WEST DES MOINES

December 19, 2014

TREE SURVEY

TAG #	DBH (INCHES)	SCIENTIFIC NAME	COMMON NAME	AGE*	CONDITION**	ACTION	REASON
1121	4.0	*Malus*	Crabapple	S	B	Remove	Disturbance in critical root zone
1178	9.0	*Gleditsia triancathos*	Honey Locust	S	B	Remove	In pavement
1249	4.0	*Acer*	Maple	S	B	Remove	In pavement
1250	12.0	*Pinus*	Pine	S	B	Remove	On building
1251	12.0	*Pinus*	Pine	S	B	Remove	On building
1332	15.0	*Acer*	Maple	S	B	Remove	In pavement
1335	4.0	*Malus*	Crabapple	S	B	Remove	On building

KEY

* Age:

Semi-mature (young trees over 5 m high) - S

Mature (approximately 40 -50 years old) - M

Over-mature (die-back of branches, dead wood, etc.) - O

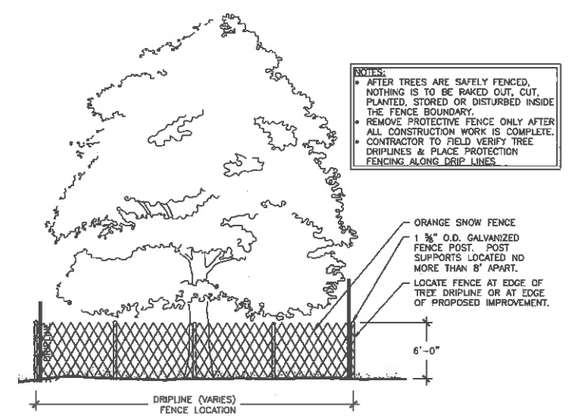
** Condition:

A - Good

B - Fair

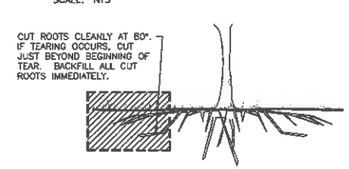
C - Poor

D - Dead



2 TYP. TREE PROTECTION SNOW FENCE DETAIL

SCALE: NTS



3 TYP. ROOT PRUNING DETAIL

SCALE: NTS

IOWA ONE CALL
1-800-292-8989
WWW.IOWAONECALL.COM

CALL: 1-800-292-8989
WITH THE FOLLOWING:
COUNTY: POLK
CITY-TOWNSHIP: WEST DES MOINES
PARCEL ID. NO.# 4502 UNIVERSITY AVE.
48 hours before you dig
(Excluding Sat., Sun. & Holidays)

BAR IS ONE INCH ON OFFICIAL DRAWINGS
0 1"
IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY

Chick-fil-A
5200 Buffington Rd.
Atlanta Georgia,
30349-2998

REVISIONS

#	DATE:	BY:	DESCRIPTION:
1	01/16/15	MRJ	ISSUED FOR PERMIT
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STORE #3526

UNIVERSITY AVENUE

4502 University Avenue
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50266

SHEET TITLE
TREE PRESERVATION PLAN

DWG EDITION V2
REVISION 01-2015

Job No. : 86140076
Store : 3526
Date : 01.19.15
Drawn By : SKD
Checked By: MAR

Sheet
L-1.0

Plotted By:jgrosl, Plotted:Jan 28, 2015 - 3:24pm,
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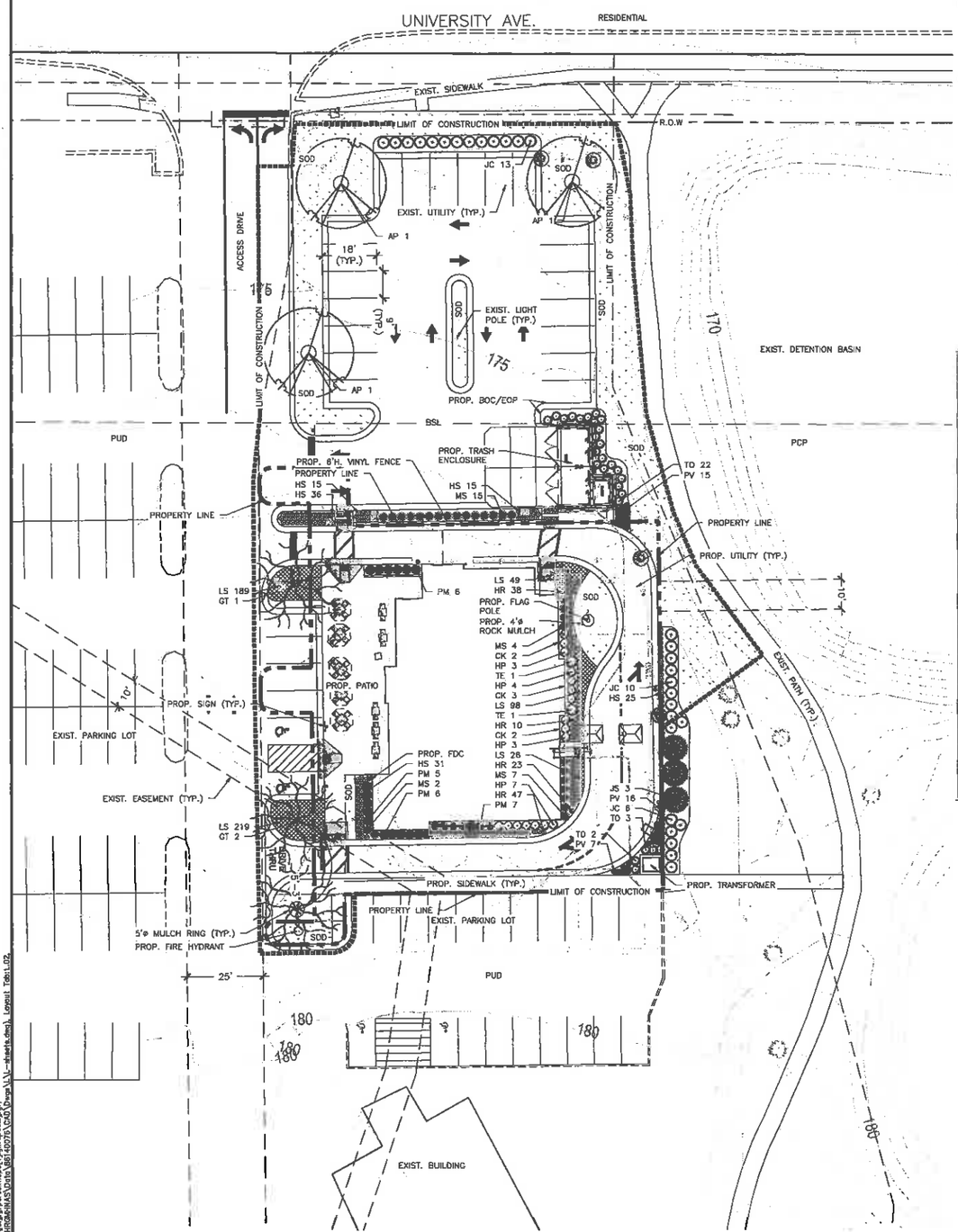

1 LANDSCAPE PLAN

SCALE: 1" = 20'-0"

SITE CALCULATIONS

ZONING: PUD40

TOTAL SITE AREA: 15,079 SF. .345 AC.

ORDINANCE LANDSCAPE REQUIREMENTS

PROFESSIONAL COMMERCE PARK DISTRICT – PERFORMANCE STANDARDS

THE TOTAL GROUND AREA DEVOTED TO OPEN SPACE FOR NATURAL LANDSCAPE AND LANDSCAPE BEAUTIFICATION SHALL BE NOT LESS THAN THIRTY FIVE PERCENT (35%) OF THE TOTAL LAND AREA WITHIN THE IMMEDIATE SITE UNDER OWNERSHIP AND CONSIDERATION.
15,079 SF. SITE AREA * .35 = 5,277.65 SF. REQUIRED OPEN SPACE
2035.4872 SF. PROVIDED

OPEN SPACE LANDSCAPING

A MINIMUM OF TWO (2) TREES AND THREE (3) SHRUBS SHALL BE REQUIRED PER THREE THOUSAND (3,000) SQUARE FEET OF REQUIRED OPEN SPACE. FIFTY PERCENT (50%) OF THE TREES MUST BE OF AN OVERSTORY OR EVERGREEN VARIETY UNLESS OTHERWISE DONE FOR DESIGN INTENT AND SPECIFICALLY APPROVED BY THE APPROPRIATE REVIEWING BODY.
5,277.65 SF./3000 SF. = 1.92 ≈ 2 WHICH EQUALS 4 REQUIRED TREES AND 6 REQUIRED SHRUBS.

MATERIAL	REQUIRED	PROVIDED
OVERSTORY/EVERGREEN TREES	4	8
SHRUBS	6	97

DIVERSITY

AT LEAST THIRTY FIVE PERCENT (35%) OF TREES REQUIRED ON SITE (SUM OF OPEN SPACE, BUFFER, PARKING LOT TREES REQUIRED) SHALL BE EVERGREEN SPECIES TO ENSURE YEAR ROUND VISUAL INTEREST AND AID IN THE EFFECTIVENESS OF SCREENING.
4 TREE REQUIRED TOTAL * .35 = 1.4 ≈ 1 EVERGREEN TREE REQUIRED

MATERIAL	REQUIRED	PROVIDED
ITEM	1	5

TREE REMOVAL/REPLACMENT.

ONE TREE REMOVED AND REPLACED IN THE PARKING LOT NORTH OF THE CHICK-FIL-A PROPERTY.

CHICK-FIL-A WEST DES MOINES
December 19, 2014
MATERIALS SCHEDULE

QTY	KEY	BOTANICAL NAME/ITEM	COMMON NAME	SIZE	COND	REMARKS	MATURE SIZE
DECIDUOUS TREES							
3	AP	ACER PLATANOIDES 'ROYAL RED'	NORWAY MAPLE	2" CAL.	B&B	CENTRAL LEADER, MATCHED	40' H. X 30' W.
3	GT	GLEDITSIA TRIACANTHOS VAR. INERMIS 'SKYCOLE'	SKYLINE THORNLESS HONEYLOCUST	2" CAL.	B&B	CENTRAL LEADER, MATCHED	45' H. X 35' W.
EVERGREEN TREES							
2	TE	THUJA OCCIDENTALIS 'EMERALD GREEN'	ARBORVITAE	6' HT.	B&B	CENTRAL LEADER, MATCHED	8'-12' H. X 3'-5' W.
3	JS	JUNIPERUS SCOPULORUM 'FAIRVIEW'	JUNIPER	6' HT.	B&B	CENTRAL LEADER, MATCHED	15' H. X 8' W.
DECIDUOUS SHRUBS							
17	HP	HYDRANGEA PANICULATA 'JANE'	LITTLE LIME HYDRANGEA	#3	CONT.	36" OC 24" HT. MIN	3-4' H. X 3'-4' W.
EVERGREEN SHRUBS							
29	JC	JUNIPERUS CHINENSIS 'KALLAY'S COMPACT'	JUNIPER	#5	CONT.	48" OC 24" HT. MIN	24"-36" H. X 4'-6' W.
24	PM	PINUS MUGO 'VALLEY CUSHION'	DWARF MUGO PINE	#3	CONT.	36" OC 24" HT. MIN	24"-36" H. X 24"-36" W.
27	TO	THUJA OCCIDENTALIS 'BAIL JOHN'	TECHNITO ARBORVITAE	#5	CONT.	36" OC 36" HT. MIN	6'-8' H. X 24"-36" W.
PERENNIALS, GRASSES, GROUNDCOVER AND VINES							
7	CK	CLEMATIS 'KILIAN DONAHUE'	CLEMATIS	#2H	CONT.	24" OC	6'-8' H. X 4'-6' W.
118	HR	HEMEROCALLIS 'ROSY RETURNS'	DAYLILY	#1	CONT.	18" OC	12"-18" H. X 12"-18" W.
122	HS	HEMEROCALLIS 'STELLA DE ORO'	DAYLILY	#1	CONT.	18" OC	12"-18" H. X 12"-18" W.
581	LS	LIRIOPE SPICATA	CREEPING LILYTURF	1 CELL	CONT.	12" OC, 1 CELL OF 12 FLAT	8"-12" H. X 8"-12" W.
28	MS	MISCANTHUS SINENSIS 'HURON SUNRISE'	MAIDEN GRASS	#3	CONT.	36" OC	4'-6' H. X 3'-4' W.
38	PV	PANICUM VIRGATUM 'CHEYENNE SKY'	SWITCH GRASS	#1	CONT.	18" OC	3'-4' H. X 18"-24" W.
MISCELLANEOUS							
725	SOD	SEE NOTE BELOW		SY			
13	ROCK	ROCK MULCH PER SPECS		SF			
31	MULCH	SHREDDED HARDWOOD MULCH PER SPECS		CY			

GENERAL NOTES:

1. PROVIDE STRONGLY ROOTED SOD, NOT LESS THAN 2 YEARS OLD AND FREE OF WEEDS AND UNDESIRABLE NATIVE GRASSES. PROVIDE ONLY SOD CAPABLE OF GROWTH AND DEVELOPMENT WHEN PLANTED (VIABLE, NOT DORMANT). PROVIDE SOD COMPOSED PRINCIPALLY OF AN APPROVED KENTUCKY BLUE GRASS BLEND CONTAINING A MINIMUM OF FOUR IMPROVED VARIETIES.

TURF LEGEND

SOD

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BAR IS ONE INCH ON OFFICIAL DRAWINGS
0 1"
IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY

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Atlanta Georgia,
30349-2998

REVISIONS			
#	DATE:	BY:	DESCRIPTION:
1	01/08/15	MAR	ISSUED FOR PERMIT
2	01/26/15	MAR	PER CITY COMMENTS

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West Des Moines, IA
50266

SHEET TITLE
LANDSCAPE PLAN

DWG EDITION V2
REVISION 01-2015

Job No. : 86140076
Store : 3526
Date : 01.19.15
Drawn By : SKD
Checked By: MAR

Sheet
L-1.1

Plotted By:mjbrand, Plotted:Jan 28, 2015 – 3:24pm,
Xrefs:sgt-chfdc-24X36-BR.dwg;86140076-xV-Survey.dwg;86140076-xV-Survey-DV.dwg;86140076-xCs-Dsgn.dwg;86140076_xJl-dsgn.dwg;3526- Base Building.dwg,
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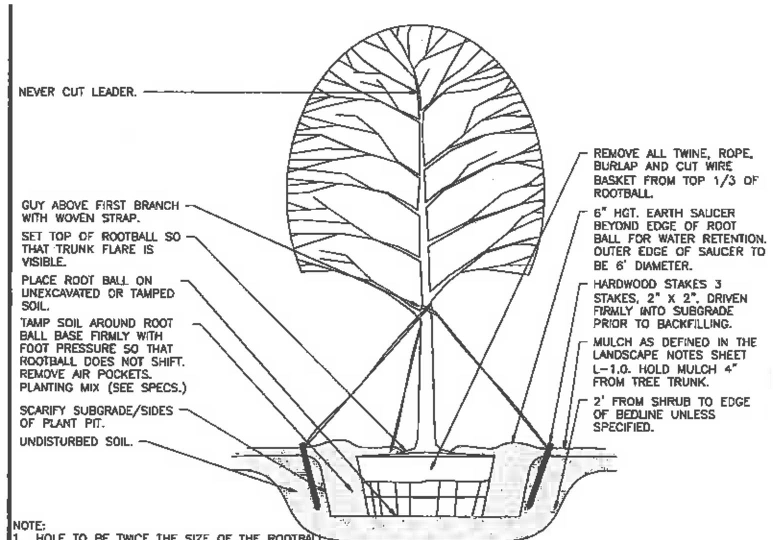
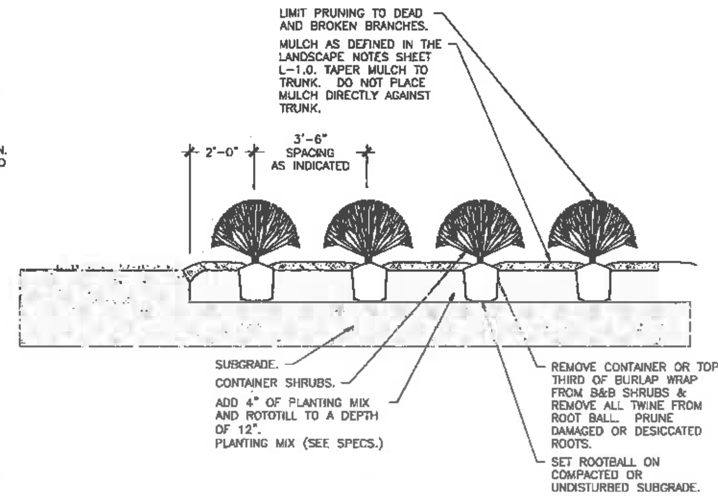


NOTE:
1. HOLE TO BE TWICE THE SIZE OF THE ROOTBALL.
2. DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS AND BROKEN OR DEAD BRANCHES; DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN. PRUNE UP TO ⅓ OF BRANCHES, RETAINING THE NATURAL SHAPE OF THE TREE.
3. EACH TREE MUST BE PLANTED SUCH THAT THE TRUNK FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. TREES WHERE THE TRUNK FLARE IS NOT VISIBLE SHALL BE REJECTED. DO NOT COVER THE TOP OF THE ROOTBALL WITH SOIL OR MULCH.

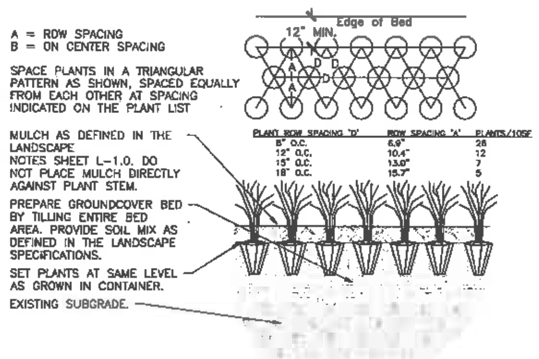
1 TREE STAKING DETAIL

SCALE: NTS



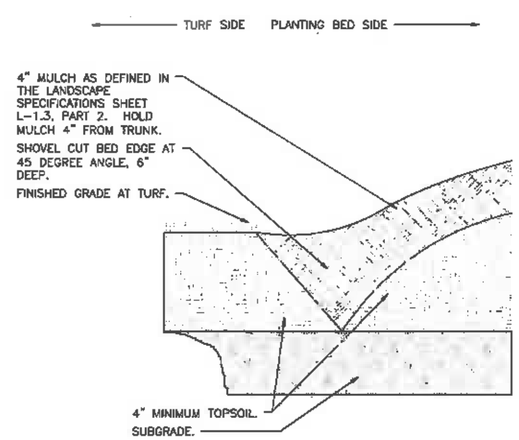
2 SHRUB BED PLANTING DETAIL

SCALE: NTS



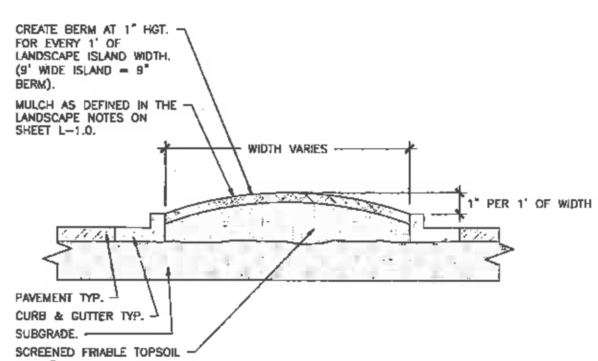
3 GROUNDCOVER PLANTING DETAIL

SCALE: NTS



4 "V" TRENCH BED EDGING

SCALE: NTS



5 PARKING ISLAND DETAIL

SCALE: NTS

GENERAL NOTES

1. BASE MAP INFORMATION IS ACCURATE AS OF THE DATE PRINTED ON THIS PACKAGE.
2. THE LANDSCAPE PLANS CONTAINED HEREIN ILLUSTRATE APPROXIMATE LOCATIONS OF ALL SITE CONDITIONS. REFER TO SURVEY, ARCHITECTURAL, CIVIL ENGINEERING, STRUCTURAL, ELECTRICAL, IRRIGATION AND ALL OTHER DRAWINGS, IF AVAILABLE, FOR ADDITIONAL DETAILED INFORMATION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BECOMING AWARE OF AND FIELD VERIFYING ALL RELATED EXISTING AND PROPOSED CONDITIONS, UTILITIES, PIPES AND STRUCTURES, ETC. PRIOR TO BIDDING AND CONSTRUCTION. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR CONTACTING IOWA ONE CALL, THE COUNTY PUBLIC WORKS DEPARTMENT, THE MUNICIPALITY AND ANY OTHER PUBLIC OR PRIVATE AGENCIES NECESSARY FOR UTILITY LOCATION PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF APPARENT CONFLICTS WITH CONSTRUCTION AND UTILITIES SO THAT ADJUSTMENTS CAN BE PLANNED PRIOR TO INSTALLATION. IF FIELD ADJUSTMENTS ARE NECESSARY DUE TO EXISTING UTILITY LOCATIONS THEY MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ANY AND ALL COSTS OR OTHER LIABILITIES INCURRED DUE TO DAMAGE OF SAID UTILITIES/STRUCTURES/ETC.
4. THE CONTRACTOR SHALL COMPLY WITH ALL CODES APPLICABLE TO THIS WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH SUBCONTRACTORS AND OTHER CONTRACTORS OF RELATED TRADES, AS REQUIRED, TO ACCOMPLISH THE PLANTING AND RELATED OPERATIONS.
6. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF ALL PLANT MATERIAL WITH THE INSTALLATION OF OTHER IMPROVEMENTS SUCH AS HARDSCAPE ELEMENTS AND RELATED STRUCTURES. ANY DAMAGE TO EXISTING IMPROVEMENTS IS THE RESPONSIBILITY OF THE CONTRACTOR.
7. THE CONTRACTOR IS RESPONSIBLE TO RESTORE ALL AREAS OF THE SITE, OR ADJACENT AREAS, WHERE DISTURBED BY OPERATIONS OF OR RELATED TO THE CONTRACTOR'S WORK.
8. ALL SURFACE DRAINAGE SHALL BE DIVERTED AWAY FROM STRUCTURES AND NOTED SITE FEATURES IN ALL AREAS AT A MINIMUM OF 2% SLOPE AS SHOWN ON THE CIVIL ENGINEERING PLANS. ALL AREAS SHALL POSITIVELY DRAIN AND ALL ISLANDS SHALL BE CROWNED 1" IN HEIGHT PER 1' IN ISLAND WIDTH.
9. THE CONTRACTOR SHALL STAKE ALL TREE LOCATIONS AND THE PERIMETER OF SHRUB/PERENNIAL BEDS PRIOR TO INSTALLATION AND CONTACT THE OWNER'S REPRESENTATIVE FOR APPROVAL. FINAL LOCATION AND STAKING OF ALL PLANT MATERIALS SHALL BE ACCEPTED BY THE OWNER'S REPRESENTATIVE IN ADVANCE OF PLANTING.
10. IF CONFLICTS ARISE BETWEEN THE SIZE OF AREAS AND PLANS, THE CONTRACTOR IS REQUIRED TO CONTACT THE OWNER'S REPRESENTATIVE FOR RESOLUTION PRIOR TO INSTALLATION.
11. WHERE PROVIDED, AREA TAKEOFFS AND PLANT QUANTITY ESTIMATES IN THE PLANT LIST ARE FOR INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE TO DO THEIR OWN QUANTITY TAKE-OFFS FOR ALL PLANT MATERIALS AND SIZES SHOWN ON PLANS. IN CASE OF ANY DISCREPANCIES, PLANS TAKE PRECEDENCE OVER CALL-OUTS AND/OR THE PLANT LIST(S).
12. PLANTS ARE TO BE TYPICAL IN SHAPE AND SIZE FOR SPECIES. PLANTS PLANTED IN ROWS OR GROUPS SHALL BE MATCHED IN FORM. PLANTS SHALL NOT BE ROOT-BOUND OR LOOSE IN THEIR CONTAINERS. HANDLE ALL PLANTS WITH CARE IN TRANSPORTING, PLANTING AND MAINTENANCE UNTIL INSPECTION AND FINAL ACCEPTANCE. FIELD COLLECTED MATERIAL SHALL NOT BE USED UNLESS APPROVED BY THE OWNER'S REPRESENTATIVE.
13. SHREDDED HARDWOOD MULCH, FERTILIZING, AS SPECIFIED, STAKING, WATERING AND ONE (1) YEAR PLANT WARRANTY FOR INSTALLED PLANT MATERIAL, SHALL BE CONSIDERED INCIDENTAL TO THE PLANT ITEMS.
14. MUSHROOM COMPOST SHALL BE FINELY SCREENED, HOMOGENOUS, DECOMPOSED ORGANIC MATERIAL SUITABLE FOR HORTICULTURAL USE AS AVAILABLE FROM MIDWEST TRADING HORTICULTURAL SUPPLIES, INC. ST. CHARLES, IL 60174 (630) 365-1990 OR APPROVED EQUAL. MIX THOROUGHLY IN PLANT BED BEFORE INSTALLING PLANTS.

LANDSCAPE NOTES

1. CONTRACTOR RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
2. CONTRACTOR RESPONSIBLE FOR PROTECTING EXISTING TREES FROM DAMAGE DURING CONSTRUCTION.
3. ALL SHRUBS BEDS (EXISTING AND NEW) TO BE MULCHED WITH A 3 INCH MINIMUM LAYER OF DOUBLE SHREDDED HARDWOOD MULCH.
4. ALL ANNUAL AND PERENNIAL BEDS TO BE TILLED TO A MINIMUM DEPTH OF 12 INCHES AND AMENDED WITH 4 INCHES OF ORGANIC MATERIAL. MULCH PLANTED ANNUAL AND PERENNIAL BEDS WITH 2 INCH DEPTH OF MINI NUGGETS.
5. PLANTING HOLES TO BE DUG A MINIMUM OF TWICE THE WIDTH OF THE SIZE OF THE ROOT BALL OF BOTH SHRUB AND TREE. BACK TO BE A MIX OF 4 PARTS TOPSOIL AND 1 PART ORGANIC SOIL CONDITIONER (IE. NATURE'S HELPER OR PRO MIX). BACKFILL AND TAMP BOTTOM OF HOLE PRIOR TO PLANTING SO TOP OF ROOT BALL DOES NOT SETTLE BELOW SURROUNDING GRADE.
6. EXISTING GRASS IN PROPOSED PLANTING AREAS TO BE KILLED AND REMOVED AND AREA TO BE HAND RAKED TO REMOVE ALL ROCKS AND DEBRIS LARGER THAN 1 INCH IN DIAMETER PRIOR TO PLANTING SHRUBS.
7. ANY EXISTING GRASS DISTURBED DURING CONSTRUCTION TO BE FULLY REMOVED, REGRADED AND REPLACED. ALL TIRE MARKS AND INDENTIONS TO BE REPAIRED.
8. SOIL TO BE TESTED TO DETERMINE FERTILIZER AND LIME REQUIREMENTS AND DISTRIBUTED PRIOR TO LAYING SOD.
9. SOD TO BE DELIVERED FRESH (CUT LESS THAN 24 HOURS PRIOR TO ARRIVING ON SITE), LAID IMMEDIATELY, ROLLED, AND WATERED THOROUGHLY IMMEDIATELY AFTER PLANTING. EDGE OF SOD IS TO BE "V" TRENCHED.
10. ALL CHANGES TO DESIGN OR PLANT SUBSTITUTIONS ARE TO BE AUTHORIZED BY THE LANDSCAPE ARCHITECT.
11. ALL LANDSCAPING SHALL BE INSTALLED IN CONFORMANCE WITH ANSI Z60.1 THE "AMERICAN STANDARD FOR NURSERY STOCK" AND THE ACCEPTED STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN.
12. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS INSTALLED FOR ONE FULL YEAR FROM DATE OF ACCEPTANCE BY THE OWNER. ALL PLANTS SHALL BE ALIVE AND AT A VIGOROUS RATE OF GROWTH AT THE END OF THE GUARANTEE PERIOD. THE LANDSCAPE CONTRACTOR SHALL NOT BE RESPONSIBLE FOR ACTS OF GOD OR VANDALISM.
13. ANY PLANT THAT IS DETERMINED DEAD, IN AN UNHEALTHY OR UNSIGHTLY CONDITION, LOST ITS SHAPE DUE TO DEAD BRANCHES OR OTHER SYMPTOMS OF POOR, NON-VIGOROUS GROWTH SHALL BE REPLACED BY THE LANDSCAPE CONTRACTOR.
14. GENERAL CONTRACTOR IS RESPONSIBLE FOR ADDING A MIN OF 4" OF CLEAN FRIABLE TOPSOIL IN ALL PLANTING BEDS AND ALL GRASSED AREAS. GRADED AREAS TO BE HELD DOWN THE APPROPRIATE ELEVATION TO ACCOUNT FOR TOPSOIL. SEE SPECIFICATIONS FOR REQUIRED TOPSOIL CHARACTERISTICS.
15. GENERAL CONTRACTOR TO MOUND ALL PARKING ISLANDS 6" - 10" W/T CLEAN FRIABLE TOPSOIL.
16. PRIOR TO BEGINNING WORK, THE LANDSCAPE CONTRACTOR SHALL INSPECT THE SUBGRADE, GENERAL SITE CONDITIONS, VERIFY ELEVATIONS, UTILITY LOCATIONS, IRRIGATION, APPROVE TOPSOIL PROVIDED BY GENERAL CONTRACTOR AND OBSERVE THE SITE CONDITIONS UNDER WHICH THE WORK IS TO BE DONE. NOTIFY GENERAL CONTRACTOR OF ANY UNSATISFACTORY CONDITIONS, AND WORK SHALL NOT PROCEED UNTIL SUCH CONDITIONS HAVE BEEN CORRECTED AND ARE ACCEPTABLE TO THE LANDSCAPE CONTRACTOR.
17. STAKE ALL EVERGREEN AND DECIDUOUS TREES AS SHOWN IN THE DETAILS THIS SHEET.
18. REMOVE ALL STAKES AND GUYING FROM ALL TREES AFTER ONE YEAR FROM PLANTING.
19. WATER THOROUGHLY TWICE IN FIRST 24 HOURS AND APPLY MULCH IMMEDIATELY.
20. SITE TO BE 100% IRRIGATED IN ALL PLANTING BEDS AND GRASS AREA BY AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM. SEE IRRIGATION PLAN L-2.0 FOR DESIGN.
21. ALL TREE PROTECTION DEVICES TO BE INSTALLED PRIOR TO THE START OF LAND DISTURBANCE, AND MAINTAINED UNTIL FINAL LANDSCAPING.
22. ALL TREE PROTECTION AREAS TO BE PROTECTED FROM SEDIMENTATION.
23. ALL TREE PROTECTION FENCING TO BE INSPECTED DAILY, AND REPAIRED OR REPLACED AS NEEDED.
24. NO PARKING, STORAGE OR OTHER CONSTRUCTION ACTIVITIES ARE TO OCCUR WITHIN TREE PROTECTION AREAS.

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CITY-TOWNSHIP WEST DES MOINES
PARCEL ID. NO.# 4502 UNIVERSITY AVE.
48 hours before you dig
(Excluding Sat., Sun. & Holidays)

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Atlanta Georgia,
30349-2998

REVISIONS

#	DATE:	BY:	DESCRIPTION:
1	01/19/15	MRJ	ISSUED FOR PERMIT
2	01/26/15	MRJ	PER CITY COMMENTS

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4502 University Avenue
West Des Moines, IA
50266

SHEET TITLE
LANDSCAPE DETAILS

DWG EDITION V2
REVISION 01-2015

Job No. : 86140076
Store : 3526
Date : 01.19.15
Drawn By : SKD
Checked By: MAR

Sheet
L-1.2

Plotted By:mjerod, Plotted:Jan 28, 2015 - 3:24pm,
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LANDSCAPE SPECIFICATIONS

PART 1 - GENERAL

DESCRIPTION

Provide trees, plants and ground covers as shown and specified. The work includes:
1. Soil preparation.
2. Trees, plants, and ground covers.
3. Planting mixes.
4. Mulch and Planting accessories.
5. Maintenance.
6. Decorative stone.

Related Work:
A. Irrigation System.

QUALITY ASSURANCE

Plant names indicated; comply with "Standardized Plant Names" as adopted by the latest edition of the American Joint Committee of Horticultural Nomenclature. Names of varieties not listed conform generally with names accepted by the nursery trade. Provide stock true to botanical name and legibly tagged.

Comply with sizing and grading standards of the latest edition of "American Standard for Nursery Stock". A plant shall be dimensioned as it stands in its natural position.

All plants shall be nursery grown under climatic conditions similar to those in the locality of the project for a minimum of 2 years.

Stock finished shall be at least the minimum size indicated. Larger stock is acceptable, at no additional cost, and providing that the larger plants will not be cut back to size indicated. Provide plants indicated by two measurements so that only a maximum of 25% are of the minimum size indicated and 75% are of the maximum size indicated.

Before submitting his bid, the Contractor shall have investigated the sources of supply and satisfied himself that he can supply the listed plants in the size, variety and quality listed and specified. Failure to take this precaution will not relieve the Contractor from his responsibility for furnishing and installing all plant materials in strict accordance with the Contract Documents without additional cost to the Owner. Landscape Architect shall approve any substitutes of plant material or changes in plant material size prior to contractor submitting a bid.

DELIVER, STORAGE AND HANDLING

Take all precautions customary in good trade practice in preparing plants for moving. Workmanship that fails to meet the highest standards will be rejected. Spray deciduous plants in foliage with an approved "Anti-Desiccant" immediately after digging to prevent dehydration. Dig, pack, transport, and handle plants with care to ensure protection against injury. Inspection certificates required by law shall accompany each shipment invoice or order to stock. Protect all plants from drying out. If plants cannot be planted immediately upon delivery, properly protect them with soil, wet peat moss, or in a manner acceptable to the Landscape Architect. Water heeled-in plantings daily. No plant shall be bound with rope or wire in a manner that could damage or break the branches. Cover plants transported on open vehicles with a protective covering to prevent windburn.

Provide dry, friable, loose topsoil for planting bed mixes. Amend with 4 parts screened topsoil and 1 part organic material (i.e. Nature's Helper, Pro-Mix). Frozen or muddy topsoil is not acceptable.

PROJECT CONDITIONS

Protect existing utilities, paving, and other facilities from damage caused by landscape operations.

A complete list of plants, including a schedule of sizes, quantities, and other requirements is shown on the drawings. In the event that quantity discrepancies or material omissions occur in the plant materials list, the planting plans shall govern.

The irrigation system will be installed prior to planting. Locate, protect and maintain the irrigation system during planting operations. Repair irrigation system components, damaged during planting operations, at the Contractor's expense.

Do not begin landscape accessory work before completion of final grading or surfacing.

WARRANTY

Warrant plant material to remain alive and be healthy, vigorous condition for a period of 1 year after completion and final acceptance of entire project.

Replace, in accordance with the drawings and specifications, all plants that are dead or, are in an unhealthy or unsightly condition, and have lost their natural shape due to dead branches, or other causes due to the Contractor's negligence. The cost of such replacement(s) is at the Contractor's expense. Warrant all replacement plants for 1 year after installation.

Warranty shall not include damage or loss of trees, plants or ground covers caused by fires, floods, freezing rains, lightning storms or winds over 75 miles per hour, winter kill caused by extreme cold and severe winter conditions not typical of planting area; acts of vandalism or negligence on a part of the Owner.

Remove and immediately replace all plants, found to be unsatisfactory during the initial planting installation.

Maintain plant material and lawns until final acceptance is made.

ACCEPTANCE

Inspection to determine of planted areas will be made by the Owner's representative.
1. Planted areas will be accepted provided all requirements, including maintenance, have been complied with and plant materials are alive and in a healthy, vigorous condition.

Upon acceptance, the Contractor shall commence the specified plant maintenance.

CODES, PERMITS AND FEES

Obtain any necessary permits for this Section of Work and pay any fees required for permits.

The entire installation shall fully comply with all local and state laws and ordinances, and with all established codes applicable thereto.

PART 2 - PRODUCTS

MATERIALS

Plants: Provide typical of their species or variety; with normal, densely developed branches and vigorous, fibrous root systems. Provide only sound, healthy, vigorous plants free from defects, disfiguring knots, sun scald injuries, frost cracks, abrasions of the bark, plant diseases, insect eggs, borers, and all forms of infestation. All plants shall have a fully developed form without voids and open spaces. Plants held on storage will be rejected if they show signs of growth during storage.

1. Dig balled and plants wrapped with burlap with firm, natural balls of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Provide ball sizes complying with the latest edition of the "American Standard for Nursery Stock". Cracked or mushroomed balls are not acceptable.
2. Container- grown stock: Grown in a container for sufficient length of time for the root system to have developed to hold its soil together, firm and whole.
   A. No plants shall be loose in the container.
   B. Container stock shall not be pot bound.
3. Provide tree species that mature at heights over 25 feet with a single main trunk. Trees that have the main trunk forming a "Y" shape are not acceptable.
4. Plants planted in rows shall be matched in form.
5. Plants larger than those specified in the plant list may be used when acceptable to the Landscape Architect.
   - If the use of larger plants is acceptable, increase the spread of roots or root ball in proportion to the size of the plant.
6. The height of the trees, measured from the crown of the roots to the top of the top branch, shall not be less than the minimum size designated in the plant list.
7. No pruning wounds shall be present with a diameter of more than 1" and such wounds must show vigorous bark on all edges.
8. Evergreen trees shall be branched to the ground or as specified in plant list.
9. Shrubs and small plants shall meet the requirements for spread and height indicated in the plant list.

- The measurements for height shall be taken from the ground level to the height of the top of the plant and not the longest branch.
- Single stemmed or thin plants will not be accepted
- Side branches shall be generous, well-twigged, and the plant as a whole well-bushed to the ground.
- Plants shall be in a moist, vigorous condition, free from dead wood, bruises, or other root or branch injuries.

ACCESSORIES

Topsoil for Planting Beds: Fertile, friable, natural topsoil of loamy character, without admixture of subsoil material, obtained from a well-drained arable site, reasonably free from clay, lumps, coarse sands, stones, roots, sticks, and other foreign materials, with acidity range of between pH 6.0 and 6.8. Topsoil to be at a minimum depth of 4".

Mulch: See plans for type of mulch to be used.
- Hardwood: 6 month old well rotted double shredded native hardwood bark mulch not larger than 4" in length and ½" in width, free of wood chips and sawdust. Install minimum depth of 3".
- Pine Straw: Pine straw to be fresh harvest, free of debris, bright in color. Bales to be wired and tightly bound. Needles to be dry. Install minimum depth of 3".
- River Rock: Rock type to be tan to yellow-brown washed river rock, 1" – 3" in size. Install in shrub beds to an even depth of 3". Stone to be used around base of flagpole and flagpole spotlight.

Guying/Staking:
1. Arbortie: Green (or white) staking and guying material to be flat, woven, polypropylene material, ¾" wide 900 lb. break strength. Arbortie shall be fastened to stakes in a manner which permits tree movement and supports the tree.

Tree Wrap: Standard waterproofed tree wrapping paper, 2-1/2" wide, made of 2 layers of crepe Draft paper weighing not less than 30 lbs. per ream, cemented together with asphalt.

Twine: Two-ply jute material.

PART 3 – EXECUTION

INSPECTION

Examine proposed planting areas and conditions of installation. Do not start planting work until unsatisfactory conditions are corrected.

PREPARATION

Planting shall be performed only by experienced workmen familiar with planting procedures under the supervision of a qualified supervisor.

Locate plants as indicated or as approved in the field after staking by the Contractor. If obstructions are encountered that are not shown on the drawings, do not proceed with planting operations until alternate plant locations have been selected.

Excavate circular plant pits with vertical sides, except for plants specifically indicated to be planted in beds. Provide shrub pits at least 12" greater than the diameter of the root system and 24" greater for trees. Depth of pit shall accommodate the root system. Provide undisturbed sub grade to hold root ball at nursery grade as shown on the drawings.

Provide pre-mixed planting mixture for use around the balls and roots of the plants consisting of 4 parts screened topsoil and 1 part organic material. Add plant fertilizer per manufacturer's recommendation for each cubic yard of mixture.

Provide pre-mixed ground cover bed planting mixture consisting of 4 parts screened topsoil to 1 part peat moss and plant fertilizer per manufacturer's recommendation for each cubic yard of mixture.

DRAINAGE TEST

Randomly select a representative number of shrub and tree plant pits in each shrub planting area and test for drainage prior to planting.

Fill each selected plant pit with water and let stand for twenty-four (24) hours.

Do not proceed with planting where drainage problems are apparent.

Report to the Owner's Representative areas that do not drain within twenty-four (24) hours.

INSTALLATION

Set plant material in the planting pit to proper grade and alignment. Set plants upright, plumb, and faced to give the best appearance or relationship to each other or adjacent structure. Set plant material 2" – 3" above the finish grade. No filling will be permitted around trunks or stems. Backfill the pit with topsoil mix and excavated material. Do not use frozen or muddy mixtures for backfilling. Form a ring of soil around the edge of each planting pit to retain water.

After balled and wrapped in burlap plants are set, muddle planting soil mixture around bases of balls and fill all voids.
1. Remove all burlap, ropes, and wires from the top 2/3 of the root ball

Space ground cover plants in accordance with indicated dimensions. Adjust spacing as necessary to evenly fill planting bed with indicated quantity of plants. Plant to within 12" of the trunks of trees and shrubs within planting bed and to within 6" of edge of bed.

Mulching:
1. Mulch tree and shrub planting pits and shrub beds with required (see landscape plan) mulching material 3" deep immediately after planting. Thoroughly water mulched areas. After watering, rake mulch to provide a uniform finished surface.

Wrapping, guying, staking:
1. Inspect trees for injury to trunks, evidence of insect infestation, and improper pruning before wrapping.
2. Wrap trunks of all trees spirally from bottom to top with specified tree wrap and secure in place.
   A. Overlap ½ the width of the tree wrap strip and cover the trunk from the ground to the height of the second branch.
   B. Secure tree wrap in place with twine wound spirally downward in the opposite direction, tied around the tree in at least 3 places in addition to the top and bottom.
3. Staking/Guying:
   - Stake/guy all trees immediately after lawn sodding operations and prior to acceptance.
   - Stake deciduous trees 3" caliper and less. Stake evergreen trees under 8'-0" tall.
   - Guy deciduous trees over 3" caliper. Guy evergreen trees 8'-0" tall and over.
4. All work shall be acceptable to the Owner.

Pruning:
- Prune deciduous trees and evergreens only to remove broken or damaged branches.

Decorative Stone: (where indicated on landscape plan)
- Install weed control barrier over sub-grade prior to installing stone. Lap 6" on all sides.
- Place stone without damaging weed barrier.
- Arrange stones for best appearance.

MAINTENANCE

The Contractor shall provide as a separate bid, maintenance for a period of 1 year after final acceptance of the project landscaping. The Contractor must be able to provide continued maintenance if requested by the Owner or provide the name of a reputable landscape contractor who can provide maintenance.

Maintenance shall include mowing, fertilizing, mulching, pruning, cultivation, weeding, watering, and application of appropriate insecticides and fungicides necessary to maintain plants and lawns free of insects and disease.
1. Re-set settled plants to proper grade and position. Restore planting saucer and adjacent material and remove dead material.
2. Tighten and repair guy wires and stakes as required. Remove all stakes and guy wires after 1 year.
3. Correct defective work as soon as possible after deficiencies become apparent and weather and season permit.
4. Water trees, plants and ground cover beds within the first 24 hours of initial planting, and not less than twice per week until final acceptance.

CLEANING

Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, soils, debris, and equipment. Repair damage resulting from planting operations. Sweep parking and walks clean of dirt and debris.

LANDSCAPE MAINTENANCE SPECIFICATIONS

STANDARDS

All landscape maintenance services shall be performed by trained personnel using current, acceptable horticultural practices.

All work shall be performed in a manner that maintains the original intent of the landscape design.

All chemical applications shall be performed in accordance with current county, state and federal laws, using EPA registered materials and methods of application. These applications shall be performed under the supervision of a Licensed Certified applicator.

APPROVALS

Any work performed in addition to that which is outlined in the contract shall only be done upon written approval by the Owner's Representative (General Manager of the restaurant).

All seasonal color selections shall be approved by the General Manager prior to ordering and installation.

SOIL TESTING

The landscape contractor shall perform soil tests as needed to identify imbalances or deficiencies causing plant material decline. The owner shall be notified of the recommendation for approval, and the necessary corrections made at an additional cost to the owner.

Acceptable Soil Test Results

	Landscape Trees and Shrubs	Turf
pH Range	5.0-7.0	6.0-7.0
Organic Matter	>1.5%	>2.0%
Magnesium (Mg)	100+lbs./acre	100+lbs./acre
Phosphorus (P2O5)	150+lbs./acre	150+lbs./acre
Potassium (K2O)	180+lbs./acre	120+lbs./acre
Soluble salts/ Conductivity	Not to exceed 500ppm/1.0 mmhos/cm in soil; not to exceed 1480 ppm/2.5 mmhos/cm in high organic mix	Not to exceed 750ppm/0.75 mmhos/cm in soil; not to exceed 2000 ppm/2.0 mmhos/cm in high organic mix

For unusual soil conditions, the following optional tests are recommended with levels not to exceed:

Boron	3 pounds per acre
Manganese	50 pounds per acre
Potassium (K2O)	450 pounds per acre
Sodium	20 pounds per acre

WORKMANSHIP

During landscape maintenance operations, all areas shall be kept neat and clean. Precautions shall be taken to avoid damage to existing structures. All work shall be performed in a safe manner to the operators, the occupants and any pedestrians.

Upon completion of maintenance operations, all debris and waste material shall be cleaned up and removed from the site, unless provisions have been granted by the owner to use on-site trash receptacles.

Any damage to the landscape, the structure, or the irrigation system caused by the landscape contractor shall be repaired by the landscape contractor without charge to the owner.

TURF

GENERAL CLEAN UP

Prior to mowing, all trash, sticks, and other unwanted debris shall be removed from lawns, plant beds, and paved areas.

MOWING

Warm season grasses (i.e. Bermuda grass) shall be maintained at a height of 1" to 2" during the growing season.

Cool season grasses, including blue grass, tall fescue, perennial ryegrass, etc., shall be maintained at a height of 2" to 3" in spring and fall. From June through September, mowing height shall be maintained at no less than 3".

The mowing operation includes trimming around all obstacles, raking excessive grass clippings and removing debris from walks, curbs, and parking areas. Caution: Weed eaters should NOT be used around trees because of potential damage to the bark.

EDGING

Edging of all sidewalks, curbs and other paved areas shall be performed once every other mowing. Debris from the edging operations shall be removed and the areas swept clean. Caution shall be used to avoid flying debris.

LIMING & FERTILIZING

A soil test shall be taken to determine whether an application of limestone in late fall is necessary. If limestone is required, the landscape contractor shall specify the rate, obtain approval from the owner and apply it at an additional cost. A unit price for liming of turf shall accompany the bid based on a rate of 50 pounds per 1000 square feet.

Lawn areas shall be fertilized as shown in Service Schedule (Appendix A).

Fertilizer shall be applied in areas based on the existing turf species.

LAWN WEED CONTROL: HERBICIDES

Pre and post-emergent (soil-applied) herbicide to be applied as per Service Schedule (Appendix A).

Selection and proper use of herbicides shall be the landscape contractor's responsibility. All chemical applications shall be performed under the supervision of a Licensed Certified Applicator. Read the label prior to applying any chemical.

INSECT & DISEASE CONTROL FOR TURF

The contractor shall be responsible for monitoring the site conditions on each visit to determine if any insect pest or disease problems exist. The contractor shall identify the insect pest or disease, as well as the host plant, and then consult the most current edition of the Cooperative Extension Service's "Commercial Insecticide Recommendation for Turf" for control. The licensed applicator shall be familiar with the label provided for the selected product prior to application.

Inspection and treatment to control insect pests shall be included in the contract price.

TREES, SHRUBS, & GROUND COVER

PRUNING

All ornamental trees, shrubs and ground cover shall be pruned when appropriate to remove dead or damaged branches, develop the natural shapes. Do not shear trees or shrubs. If previous maintenance practice has been to shear and ball, then a natural shape will be restored gradually.

Pruning Guidelines:

1. Prune those that flower before the end of June immediately after flowering. Flower buds develop during the previous growing season. Fall, winter or spring pruning would reduce the spring flowering display.
2. Prune those that flower in summer or autumn in winter or spring before new growth begins, since these plants develop flowers on new growth.
3. Delay pruning plants grown for ornamental fruits, such as cotoneasters, pyracanthas and viburnums.
4. Hollies and other evergreens may be pruned during winter in order to use their branches for seasonal decoration. However, severe pruning of evergreens should be done in early spring only.
5. Broadleaf evergreen shrubs shall be hand-pruned to maintain their natural appearance after the new growth hardens off.
6. Hedges or shrubs that require shearing to maintain a formal appearance shall be pruned as required. Dead wood shall be removed from sheared plants before the first shearing of the season.
7. Conifers shall be pruned, if required, according to their genus.
   A. Yews, junipers, hemlocks, arborvitae, and false-cypress may be pruned after new growth has hardened off in late summer. If severe pruning is necessary, it must be done in early spring.
   B. Firs and spruces may be lightly pruned in late summer, fall, or winter after completing growth. Leave side buds. Never cut central leader.
   C. Pines may be lightly pruned in early June by reducing candles.
8. Groundcover shall be edged and pruned as needed to contain it within its borders.
9. Thinning: Remove branches and water sprouts by cutting them back to their point of origin on parent stems. This method results in a more open plant, without stimulating excessive growth. Thinning is used on crepe myrtles, lilacs, viburnums, smoke bush, etc.
10. Renewal pruning: Remove oldest branches of shrub at ground, leaving the younger, more vigorous branches. Also remove weak stems. On overgrown plants, this method may be best done over a three-year period. Renewal pruning may be used on abelia, forsythia, deutzia, spireas, etc.

Plants overhanging passageways and parking areas and damaged plants shall be pruned as needed.

Shade trees that cannot be adequately pruned from the ground shall not be included in the Maintenance Contract. A certified arborist under a separate contract shall perform this type of work.

SPRING CLEANUP

Plant beds shall receive a general cleanup before fertilizing and mulching. Cleanup includes removing debris and trash from beds and cutting back herbaceous perennials left standing through winter, e.g. ornamental grasses, Sedum Autumn Joy.

FERTILIZING

For trees, the rate of fertilization depends on the tree species, tree vigor, area available for fertilization, and growth stage of the tree. Mature specimens benefit from fertilization every 3 to 4 years; younger trees shall be fertilized more often during rapid growth stages.

The current recommendation is based on the rate of 1000 square feet of area under the tree to be fertilized. For deciduous trees, 2 to 6 pounds of Nitrogen per 1000 square feet; for narrow-leaf evergreens, 1 to 4 pounds of Nitrogen per 1000 square feet; for broadleaf evergreens, 1 to 3 pounds of Nitrogen per 1000 square feet.

The current recommendation is based on the rate of 1000 square feet of area under the tree to be fertilized. For deciduous trees, 2 to 6 pounds of Nitrogen per 1000 square feet; for narrow-leaf evergreens, 1 to 4 pounds of Nitrogen per 1000 square feet; for broadleaf evergreens, 1 to 3 pounds of Nitrogen per 1000 square feet.

Shrubs and groundcover shall be top-dressed with compost 1" deep, or fertilized once in March with 10-6-4 analysis fertilizer at the rate of 3 pounds per 100 square feet of bed area. Ericaceous material shall be fertilized with an ericaceous fertilizer at the manufacturer's recommendation rate. If plants are growing poorly, a soil sample should be taken.

MULCHING

Where necessary, all tree and shrub beds will be prepared and mulched, unless already mulched with compost, to a depth of 3" – 4" annually with quality mulch. Bed preparation shall include removing all weeds, cleaning up said bed, edging and cultivating decayed mulch into the soil. Debris from edging is to be removed from beds where applicable. If deemed necessary, a pre-emergent herbicide may be applied to the soil to inhibit the growth of future weeds.

Organically maintained gardens shall not receive any pre-emergent herbicides. Mulch in excess of 4" will be removed from the bed areas. SPECIAL CARE shall be taken in the mulching operation not to over-mulch or cover the base of trees and shrubs. This can be detrimental to the health of the plants.

WEEDING

All beds shall be weeded on a continuous basis throughout the growing season to maintain a neat appearance at all times.

Pre-emergent (soil-applied) and post-emergent (foliar-applied) herbicides shall be used where and when applicable and in accordance with the product's label.

INSECT & DISEASE CONTROL: TREES, SHRUBS & GROUNDCOVER

The landscape contractor shall be responsible for monitoring the landscape site on a regular basis. The monitoring frequency shall be monthly except for growing season, which will be every other week. Trained personnel shall monitor for plant damaging insect activity, plant pathogenic diseases and potential cultural problems in the landscape. The pest or cultural problem will be identified under the supervision of the contractor.

For plant damaging insects and mites identified in the landscape, the contractor shall consult and follow the recommendations of the most current edition of the state Cooperative Service publication on insect control on landscape plant material.

Plant pathogenic disease problems identified by the contractor that can be resolved by pruning or physical removal of damaged plant parts will be performed as part of the contract. For an additional charge, plant pathogenic diseases that can be resolved through properly timed applications of fungicides shall be made when the owner authorizes it.

If the contractor notes an especially insect-or disease-prone plant species in the landscape, he/she will suggest replacement with a more pest-resistant cultivar or species that is consistent with the intent of the landscape design.

NOTE: For identification of plant-damaging insects and mites, a reference textbook that can be used is *Insects that feed on Trees and Shrubs* by Johnson and Lyon, Comstock Publishing Associates. For plant pathogenic diseases, two references are suggested: *Scouting and Controlling Woody Ornamental Diseases in Landscapes and Nurseries*, authorized by Gary Moorman, published by Penn State College of Agricultural Sciences, and *Diseases of Trees and Shrubs* by Sinclair and Lyon, published by Comstock Publishing Press.

TRASH REMOVAL

The landscape contractor shall remove trash from all shrub and groundcover beds with each visit.

LEAF REMOVAL

All fallen leaves shall be removed from the site in November and once in December. If requested by the owner, the landscape contractor at an additional cost to the owner shall perform supplemental leaf removals.

WINTER CLEAN-UP

The project shall receive a general clean-up once during each of the winter months, i.e., January, February, and March.

Clean-up includes:
- Cleaning curbs and parking areas
- Removing all trash and unwanted debris
- Turning mulch where necessary
- Inspection of grounds

SEASONAL COLOR: PERENNIALS, ANNUALS, AND BULBS

The installation of perennials, annuals, and bulbs, unless specified herein, shall be reviewed with the owner, and, if accepted, installed and billed to the owner.

SEASONAL COLOR MAINTENANCE

Perennialization of Bulbs:
1. After flowering, cut off spent flower heads.
2. Allow leaves of daffodils and hyacinths to remain for six weeks after flowers have faded. Cut off at base.
3. Allow leaves of other bulbs to yellow naturally and then cut off at base.
4. Apply fertilizer after flowering in spring, possibly again in fall. Apply 10-10-10 at the rate of 2 pounds per 1000 square feet, or top-dress with compost 1" deep. Fall fertilization with a bulb fertilizer or mulching with 1" of compost is optional.

Flower Rotation:
1. Bulbs: Remove the entire plant and bulb after flowers have faded or at the direction of the owner, and install new plants if included in contract.
2. Summer Annuals or Fall Plants:
   a. Dead heading: Pinch and remove dead flowers on annuals as necessary.
   b. Fertilizing Summer Annuals. Fertilize using one or two methods: Apply a slow-release fertilizer in May following manufacturer's recommendations. A booster such as 10-10-10 may be necessary in late summer. Or, apply liquid fertilizations of 20-20-20 water-soluble fertilizers, not to exceed 2 pounds of 20-20-20 per 100 gallons of water, monthly; or mulch with compost 1" deep.
   c. Removal: If fall plants are to be installed, summer annuals shall be left in the ground until the first killing frost and then removed, unless otherwise directed by the owner.

Perennials:

1. After initial installation, if a time-released fertilizer has been incorporated during plant installation, no more fertilizer need be applied the first growing season.
2. The following year
   a. Fertilize perennials with a slow-release fertilizer or any 50% organic fertilizer, or mulch perennials with compost 1" deep.
   b. Cut all deciduous perennials flush to the ground by March 1, if this was not done the previous fall, to allow new growth to develop freely.
   c. Mulch the perennial bed area in early spring at 1"-2" depth. If soil is bared in late fall, re-mulch lightly after ground is frozen to protect perennials.
   d. Inspect for insect or disease problems on perennials. Monitor and control slugs on hostas and ligularias. Powdery mildew on phlox, monarda, and asters can be prevented with properly timed fungicides or use of disease-resistant varieties.
   e. Weed perennial bed as specified in "WEEDING" above.
   f. Prune branching species to increase density. Cut only the flowering stems after blooming. Do not remove the foliage.
3. The following fall cut back deteriorating plant parts unless instructed to retain for winter interest, e.g. Sedum Autumn Joy and ornamental grasses.
4. Long-term Care:
   a. Divide plants that overcrowd the space provided. Divide according to the species. Some need frequent dividing, e.g. asters and yarrow every two years; other rarely, if ever, e.g. peonies, hostas, and astilbe.
   b. For detailed information regarding the care of specific perennials, refer to *All About Perennials* by Ortho; *Perennials: How to Select, Grow and Enjoy* by Pamela Harper and Frederick McGourty, Hp Books Publisher; *Herbaceous Perennial Plants, A Treatise on their Identification, Culture and Garden Attributes* by Allan Armitage, Stipes Pub LLC.

IRRIGATION MAINTENANCE

1. Fall maintenance shall include (but not limited to) draining the system by manual gravitational drains or use of compressed air. (Winterize system)
2. Spring maintenance shall include (but not limited to) the closing of all manual drain valves, inspection and realignment of all heads, operational check/test each zone for proper operation, inspection and adjustment of controller and run times.
3. Inspect irrigation system components during performance of regular maintenance items.
4. Test irrigation system once each month during the growth season by cycling and inspecting each zone.
5. Reset cycle times as necessary for seasonal changes.
6. Adjust spray at each pop-up head to ensure all planting material is irrigated, and that no over spray occurs onto pavement, building or vehicles.

SUMMARY OF MAINTENANCE

LAWN MAINTENANCE

1. Soil analysis performed annually to determine pH. If pH does not fall within specified range, adjust according to soil test recommendations.
2. Maintain proper fertility and pH levels of the soil to provide an environment conducive to turf vitality for cool season grasses.
3. Mow warm and cool season on a regular basis and as season and weather dictates. Remove no more than the top 1/3 of leaf blade. Clippings on pavement and bed areas will be removed.
4. Aerate warm season turf areas to maintain high standards of turf appearance.
5. Apply pre-emergent to turf in two applications in early February and early April to extend barrier.
6. Apply post emergent as needed to control weeds.
7. Mechanically edge curbs and walks.
8. Apply non-selective herbicide, to mulched bed areas and pavement and remove excess runners to maintain clean defined beds.

TREE, GROUNDCOVER, AND SHRUB BED MAINTENANCE

1. Prune shrubs, trees and groundcover to encourage healthy growth and create a natural appearance.
2. Mulch to be applied in February/March with a half rate in late summer to top dress.
3. Apply pre-emergent herbicides in February and April.
4. Manual weed control to maintain clean bed appearance.
5. Apply fungicides and insecticides as needed to control insects and disease.
6. Ornamental shrubs, trees and groundcovers to be fertilized three (3) times per year with a balanced material (January/February, April/May, and October/November)
7. Edge all mulched beds.
8. Remove all litter and debris.

GENERAL MAINTENANCE

1. Remove all man-made debris, blow edges.
2. Remove leaves as per Service Schedule (Appendix A).
3. Inspect grounds on a monthly basis and schedule inspection with Unit Operator.

Chick-fil-A
5200 Buffington Rd.
Atlanta Georgia,
30349-2998

REVISIONS

#	DATE:	BY:	DESCRIPTION:
1	01/19/15	MRJ	ISSUED FOR PERMIT
2	01/28/15	MRJ	PER CITY COMMENTS

HRGreen.com
HRGreen

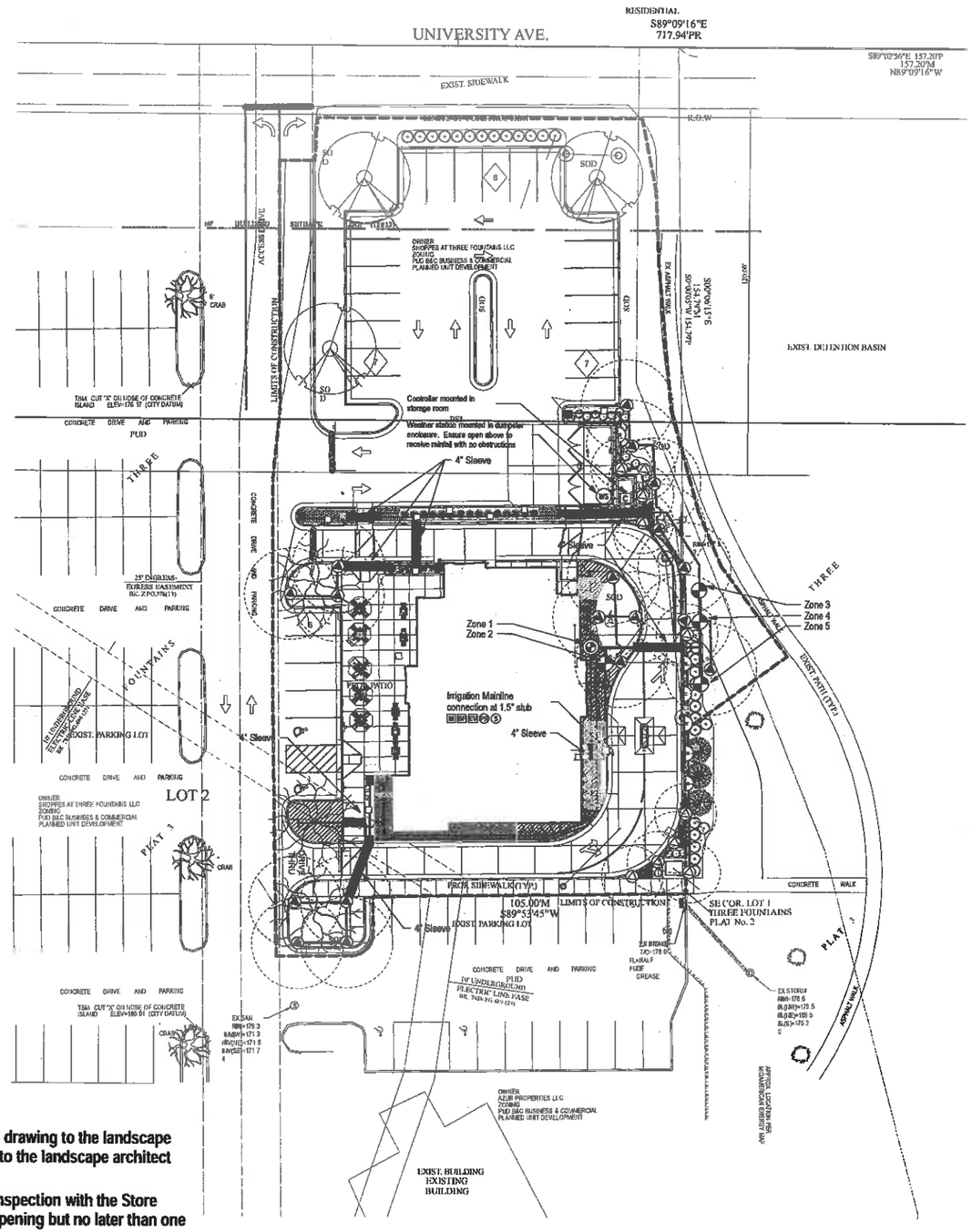
STORE #3526
UNIVERSITY AVENUE
4502 University Avenue
West Des Moines, IA
50266

SHEET TITLE
LANDSCAPE SPECIFICATIONS

DWG EDITION V2
REVISION 01–2015

Job No. : 86140076
Store : 3526
Date : 01.19.15
Drawn By : SKD
Checked By: MAR

Sheet
L–1.3



Irrigation contractor shall provide an as built drawing to the landscape architect. This drawing shall be overnighted to the landscape architect within 24 hours of completion of installation.

Irrigation Contractor to perform a walk-thru inspection with the Store Operator of the functioning system prior to opening but no later than one week after opening.

NOTE:
SEE SHEET L-2.1 FOR IRRIGATION DETAILS

IRRIGATION ZONES

SMART CONTROLLER

1.....DRIP
2.....11.65 GPM
3.....13.68 GPM
4.....12.95 GPM
5.....13.89 GPM

IRRIGATION NOTES

1. Irrigation contractor to locate and protect all underground utilities prior to digging.
2. All valves to be located in valve box with cover at grade; Locate box in grass area when possible.
3. Automatic controller and weather sensor to be located in the storage room and trash enclosure respectively; Weather Sensor to be free from obstructions and exposed to the weather.
4. 45 psi. required per rotor station, 30 psi. required per spray station, and 40 psi. required per drip station. All spray and rotor bodies to have PRS (in-stem pressure regulation) as indicated in the legend.
5. Pressure regulator required by local code if static water pressure at point of connection for site is greater than 80 psi.
6. 4"- 6" SCH 40 PVC sleeves to be located as shown on drawing. Extend sleeve 18" beyond back of curb or pavement. Sleeves to be located and exposed by the general contractor prior to start of Irrigation Installation.
7. Pop-up height of spray heads to be as follows: 4" in Turf Zones, 12" in Shrub Zones, and 12" in Seasonal/color beds. Rotor height to be 4". MPR Rotor Nozzle size is indicated on drawing for each rotor.
8. All pipes, automatic valves, backflow preventor, manual valve and meter to be located within property lines. Shown outside on drawing for clarity only.
9. Irrigation meter and backflow preventor to be provided by the general contractor.
10. All 1.5" mainlines (class 200 PVC pipe) to have a minimum of 18" cover.
11. All lateral and sub-main pipe to have a minimum of 12" and a maximum of 18" cover.
12. No rocks, boulders, or other extraneous materials to be used in backfilling trenches.
13. All pipe, valves, drip, spray heads, rotors, controllers, and weather sensors to be installed as per manufacturers specifications. For any questions on Rainbird products or installation of rainbird products call Donn Mann 520-904-1146
14. All threaded joints to be coated with Teflon Tape or Liquid Teflon.
15. All lines to be thoroughly flushed before installation of sprinkler heads.
16. Must use products specified on this drawing, unless otherwise approved by the Landscape Architect.
17. Irrigation contractor shall provide an as-built drawing to the landscape architect; this drawing shall be overnighted within 24 hours of completion of installation.
18. Irrigation Contractor to perform a walk-thru inspection with the Store Operator of the functioning system prior to opening but no later than one week after opening.
19. Irrigation is to be installed as shown, unless otherwise approved by the Landscape Architect.

IRRIGATION LEGEND

M	1" IRRIGATION METER	PROVIDED BY THE GENERAL CONTRACTOR
S	1" MANUAL SHUTOFF VALVE	(1 REQUIRED)
BF	RPZ BACKFLOW PREVENTER	AS REQUIRED BY CITY
PR	1" PRESSURE REGULATOR	AS REQUIRED
EV	1" ELECTRICAL MASTER VALVE	(1 REQUIRED)
	LANDSCAPE DRIPLINE	RAINBIRD XFD-06-18
	SIDE STRIP SPRAY HEAD	RAINBIRD 1800-PRS-15SST
	END STRIP SPRAY HEAD	RAINBIRD 1800-PRS-15EST
	180 SPRAY HEAD - 10' RADIUS	RAINBIRD 1800-PRS-U10H
	90 SPRAY HEAD - 10' RADIUS	RAINBIRD 1800-PRS-U10Q
	HIGH EFFICIENCY VARIABLE SPRAY HEAD	RAINBIRD 1800-PRS-HE-VAN-10
	HIGH EFFICIENCY VARIABLE SPRAY HEAD	RAINBIRD 1800-PRS-HE-VAN-15
	180 SPRAY HEAD - 15' RADIUS	RAINBIRD 1800-PRS-U15H
	90 SPRAY HEAD - 15' RADIUS	RAINBIRD 1800-PRS-U15Q
	1" ELECTRIC VALVE	RAINBIRD 100-PGA
	1" DRIP CONTROL ZONE VALVE	RAINBIRD XCZ-100-B-COM
C	AUTOMATIC SMART CONTROLLER	RAINBIRD ESP-SMT
WS	WEATHER SENSOR	INCLUDED W/T CONTROLLER
	CLASS 200 PVC IRRIGATION PIPE AND FITTINGS	1" pipe unless otherwise indicated on drawing; 1.5" mainline
	4" - 6" CLASS 200 PVC SLEEVE UNDER PAVEMENT	Installation of sleeves by contractor in location as shown on plan; size as indicated

N

0 20 40 FT

Chick-fil-A
5200 Buffington Rd.
Atlanta, Georgia
30349-2998

Revisions:

Mark	Date	By
△		
△		
△		

Seal

manley landdesign
landscape architecture
51 old canton street
alpharetta, ga 30009
ph: 770-442-8171
fx: 770-442-1123

STORE
University Avenue

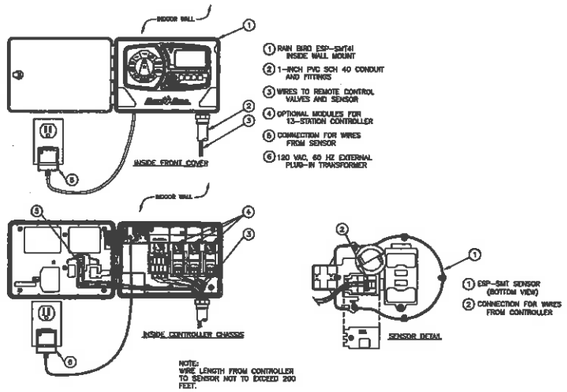
4502 University Avenue
West Des Moines, IA

SHEET TITLE
Irrigation Plan

VERSION:
ISSUE DATE:

Job No. : 2015007
Store : 3526
Date : 1.21.15
Drawn By : SLM
Checked By: SLM

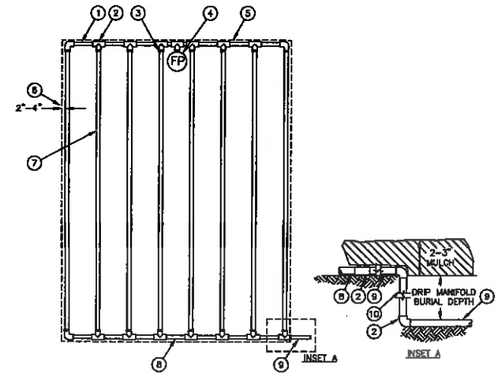
Sheet
L-2.0



1. RAIN BIRD ESP-SMTe INSIDE WALL MOUNT
2. 1-INCH PVC SCH 40 CONDUIT AND FITTINGS
3. WIRES TO REMOTE CONTROL VALVES AND SENSOR
4. OPTIONAL MODULES FOR 13-STATION CONTROLLER
5. CONNECTION FOR WIRES FROM SENSOR
6. 120 VAC, 60 HZ EXTERNAL PLUG-IN TRANSFORMER

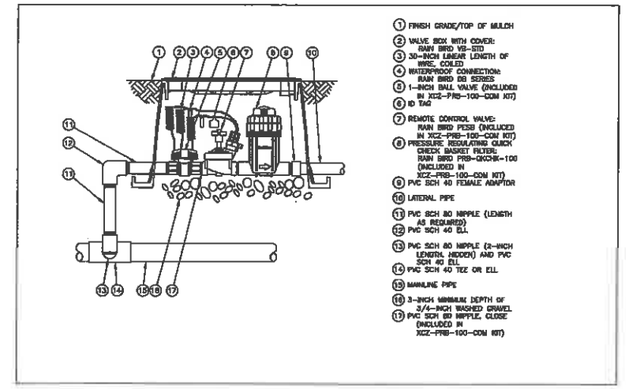
1. ESP-SMT SENSOR (BOTTOM VIEW)
2. CONNECTION FOR WIRES FROM CONTROLLER

1 WEATHER BASED SMART CONTROLLER: ESP-SMTe
SCALE:NTS



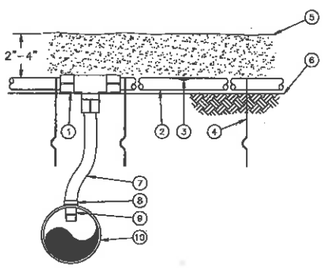
1. PVC EXHAUST HEADER
2. PVC SCH 40 TEE OR EL (TYPICAL)
3. BARB X MALE FITTING: RAIN BIRD XFD-MA FITTING (TYPICAL)
4. FLUSH POINT (TYPICAL) SEE RAIN BIRD DETAIL "XFD FLUSH POINT"
5. PERIMETER OF AREA
6. PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
7. ON-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE (TYPICAL) POTABLE: XFD DRIPLINE NON-POTABLE: XFDP DRIPLINE
8. PVC SUPPLY HEADER
9. PVC DRIP MANIFOLD FROM RAIN BIRD CONTROL ZONE VALVE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
10. PVC SCH 40 RISER PIPE

2 LANDSCAPE DRIPLINE END-FEED LAYOUT
SCALE:NTS



1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER: RAIN BIRD VB-STD
3. 30-INCH LINEAR LENGTH OF WIRE, COILED
4. WATERPROOF CONNECTION: RAIN BIRD DB SERIES
5. 1-INCH BALL VALVE (INCLUDED IN XCZ-PRB-100-COM KIT)
6. ID TAG
7. REMOTE CONTROL VALVE: RAIN BIRD PESB (INCLUDED IN XCZ-PRB-100-COM KIT)
8. PRESSURE REGULATING QUICK CHECK BASKET FILTER: RAIN BIRD PRB-QKCHK-100 (INCLUDED IN XCZ-PRB-100-COM KIT)
9. PVC SCH 40 FEMALE ADAPTOR
10. LATERAL PIPE
11. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
12. PVC SCH 40 ELL
13. PVC SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND PVC SCH 40 ELL
14. PVC SCH 40 TEE OR ELL
15. MAINLINE PIPE
16. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
17. PVC SCH 80 NIPPLE, CLOSE (INCLUDED IN XCZ-PRB-100-COM KIT)

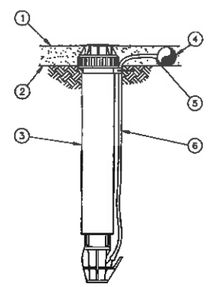
3 DRIP VALVE - XCZ-PRB-100-B-COM
SCALE:NTS



1. EASY FIT COMPRESSION TEE: RAIN BIRD MDCFTEE
2. ON-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFD DRIPLINE NON-POTABLE: XFDP DRIPLINE
3. INLINE DRIP EMITTER OUTLET
4. TIE DOWN STAKE: RAIN BIRD TDS-050 WITH BEND (TYPICAL)
5. MULCH
6. FINISH GRADE
7. ½" POLYETHYLENE TUBING: RAIN BIRD XF SERIES BLANK TUBING
8. RATCHET CLAMP (INCLUDED WITH ADAPTER)
9. INSERT ADAPTER FOR PVC PIPE: RAIN BIRD XFD-INVPC
10. PVC LATERAL PIPE MINIMUM 1" IN DIAMETER

NOTES:
1. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

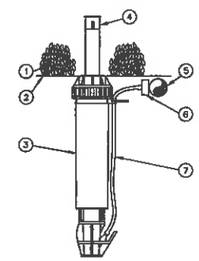
4 ON SURFACE DRIPLINE AND INSERT ADAPTER
SCALE:NTS



1. MULCH
2. FINISH GRADE
3. MICRO-SPRAY POP-UP: RAIN BIRD XERI-POP XP-800X WITH 4-VAN NOZZLE
4. ON-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFD SERIES NON-POTABLE: XFDP SERIES
5. ¼" BARB TRANSFER FITTINGS: RAIN BIRD XBF1CONN
6. ¼" DISTRIBUTION TUBING: RAIN BIRD XQ TUBING (LENGTH AS REQUIRED)

NOTE:
1. USE XERIMAN TOOL XM-TOOL TO INSERT BARB TRANSFER FITTING DIRECTLY INTO DRIPLINE TUBING.
2. VAN NOZZLE MAY BE SET TO CLOSED, OR IF IT IS DESIRED TO SEE SPRAY FROM THE NOZZLE, SET THE ARC TO ¼ PATTERN. THE FLOW FROM THE NOZZLE, 0.3 GPM, SHOULD BE ACCOUNTED FOR IN THE SYSTEM DESIGN.

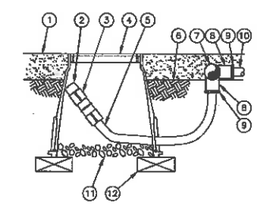
5 ON SURFACE DRIPLINE OPERATION INDICATOR
SCALE:NTS



1. PLANT MATERIAL
2. FINISH GRADE
3. MICRO-SPRAY POP-UP: RAIN BIRD XERI-POP XP-400X
4. LOW VOLUME SPRAY NOZZLE: RAIN BIRD SQ SQUARE SERIES NOZZLE (FORMERLY KNOWN AS XPCN)
5. ½" POLYETHYLENE TUBING: RAIN BIRD XF SERIES TUBING OR RAIN BIRD XT-700 XERI-TUBE OR RAIN BIRD XBS BLACK STRIPE TUBING
6. ½" SELF-PIERCING BARB CONNECTOR: RAIN BIRD SPB-025
7. ½" DISTRIBUTION TUBING: RAIN BIRD XQ TUBING (LENGTH AS REQUIRED)

NOTES:
1. USE RAIN BIRD XERIMAN TOOL XM-TOOL TO INSERT BARB CONNECTOR DIRECTLY INTO ½" POLYETHYLENE TUBING.
2. RAIN BIRD SQ SQUARE NOZZLE SERIES ARE AVAILABLE IN THE FOLLOWING MODELS:
   SQ QTR – QUARTER PATTERN – 7.4 GPM MAX
   SQ HLF – HALF PATTERN – 13.7 GPM MAX
   SQ FUL – FULL PATTERN – 27.3 GPM MAX
3. SQ NOZZLES CAN BE ADJUSTED FROM 2.5' THROW TO 4' THROW BY TURNING THE NOZZLE.

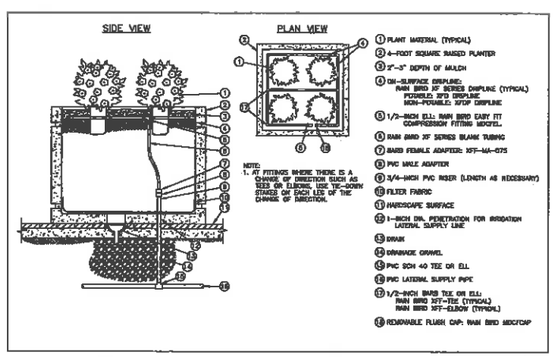
6 12" XERI-POP WITH SQUARE NOZZLE
SCALE:NTS FOR USE IN COLOR BEDS WITH DRIP SYSTEM



1. MULCH
2. FLUSH CAP FOR EASY FIT COMPRESSION FITTINGS: POTABLE: RAIN BIRD MDCFCAP NON-POTABLE: RAIN BIRD MDCFPCAP
3. EASY FIT COUPLING: RAIN BIRD MDCFCOUP
4. SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB 7XB
5. ½" POLYETHYLENE TUBING: RAIN BIRD XF BLANK TUBING
6. FINISH GRADE
7. PVC EXHAUST HEADER
8. PVC SCH 40 TEE OR EL
9. BARB X MALE FITTING: RAIN BIRD XFD-MA FITTING (TYPICAL)
10. ON-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFD DRIPLINE NON-POTABLE: XFDP DRIPLINE
11. 3-INCH MINIMUM DEPTH OF ¾" WASHED GRAVEL
12. BRICK (1 OF 2)

NOTE:
1. ALLOW A MINIMUM OF 6-INCHES OF DRIPLINE TUBING IN VALVE BOX IN ORDER TO DIRECT FLUSHED WATER OUTSIDE VALVE BOX.

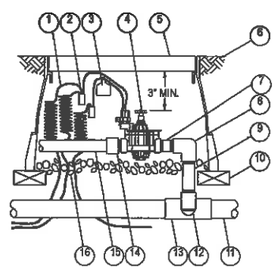
7 XFD DRIPLINE FLUSH POINT
SCALE:NTS



1. PLANT MATERIAL (TYPICAL)
2. 4-FOOT SQUARE RAISED PLANTER
3. 2"-3" DEPTH OF MULCH
4. ON-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE (TYPICAL) POTABLE: XFD DRIPLINE NON-POTABLE: XFDP DRIPLINE
5. 1/2-INCH ELL: RAIN BIRD EASY FIT COMPRESSION FITTING MDCFEL
6. RAIN BIRD XF SERIES BLANK TUBING
7. BARB FEMALE ADAPTER: XFF-MA-075
8. PVC MALE ADAPTER
9. 3/4-INCH PVC RISER (LENGTH AS NECESSARY)
10. FILTER FABRIC
11. HARDSCAPE SURFACE
12. 1-INCH DIA. PENETRATION FOR IRRIGATION LATERAL SUPPLY LINE
13. DRAIN
14. DRAINAGE GRAVEL
15. PVC SCH 40 TEE OR ELL
16. PVC LATERAL SUPPLY PIPE
17. 1/2-INCH BARB TEE OR ELL: RAIN BIRD XFT-TEE (TYPICAL) RAIN BIRD XFT-ELBOW (TYPICAL)
18. REMOVABLE FLUSH CAP: RAIN BIRD MDCFCAP

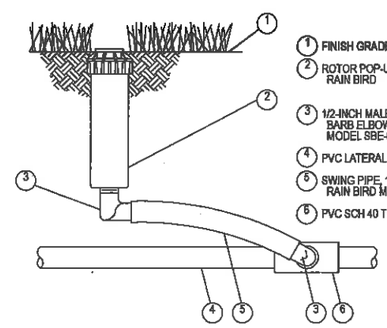
NOTE:
1. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

8 XFD PLANTER DRIPLINE
SCALE:NTS



1. 30-INCH LINEAR LENGTH OF WIRE, COILED
2. WATERPROOF CONNECTION: RAIN BIRD SPLICE-1 (1 OF 2)
3. ID TAG: RAIN BIRD VID SERIES
4. REMOTE CONTROL VALVE: RAIN BIRD PGA
5. VALVE BOX WITH COVER: RAIN BIRD VB-STD
6. FINISH GRADE/TOP OF MULCH
7. PVC SCH 80 NIPPLE (CLOSE)
8. PVC SCH 40 ELL
9. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
10. BRICK (1 OF 4)
11. PVC MAINLINE PIPE
12. SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND SCH 40 ELL
13. PVC SCH 40 TEE OR ELL
14. PVC SCH 40 MALE ADAPTER
15. PVC LATERAL PIPE
16. 3.0-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

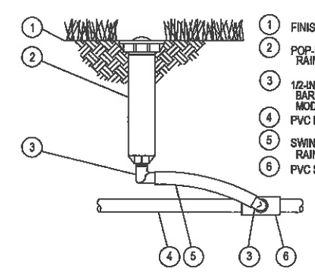
9 SPRAY/ROTOR VALVE: 100-PGA-PRS-D
SCALE:NTS



1. FINISH GRADE
2. ROTOR POP-UP SPRINKLER: RAIN BIRD
3. 1/2-INCH MALE NPT x .490 INCH BARB ELBOW: RAIN BIRD MODEL SBE-050
4. PVC LATERAL PIPE
5. SWING PIPE, 12-INCH LENGTH: RAIN BIRD MODEL SP-100
6. PVC SCH 40 TEE OR ELL

NOTE:
FOR FLOWS ABOVE 4 GPM USE A SWING JOINT INSTEAD OF SWING PIPE OR SWING ASSEMBLY.

10 ROTOR WITH SWING PIPE
SCALE:NTS



1. FINISH GRADE/TOP OF MULCH
2. POP-UP SPRAY SPRINKLER: RAIN BIRD 1804
3. 1/2-INCH MALE NPT x .490 INCH BARB ELBOW: RAIN BIRD MODEL SBE-050
4. PVC LATERAL PIPE
5. SWING PIPE, 12-INCH LENGTH: RAIN BIRD MODEL SP-100
6. PVC SCH 40 TEE OR ELL

11 1800 SERIES SPRAY WITH SWING PIPE
SCALE:NTS

Chick-fil-A
5200 Buffington Rd.
Atlanta, Georgia
30349-2998

Revisions:

Mark	Date	By
△		
△		
△		

Seal

manley landdesign
landscape architecture
51 old canton street
alpharetta, ga 30009
ph: 770-442-8171
fx: 770-442-1123

STORE
University Avenue

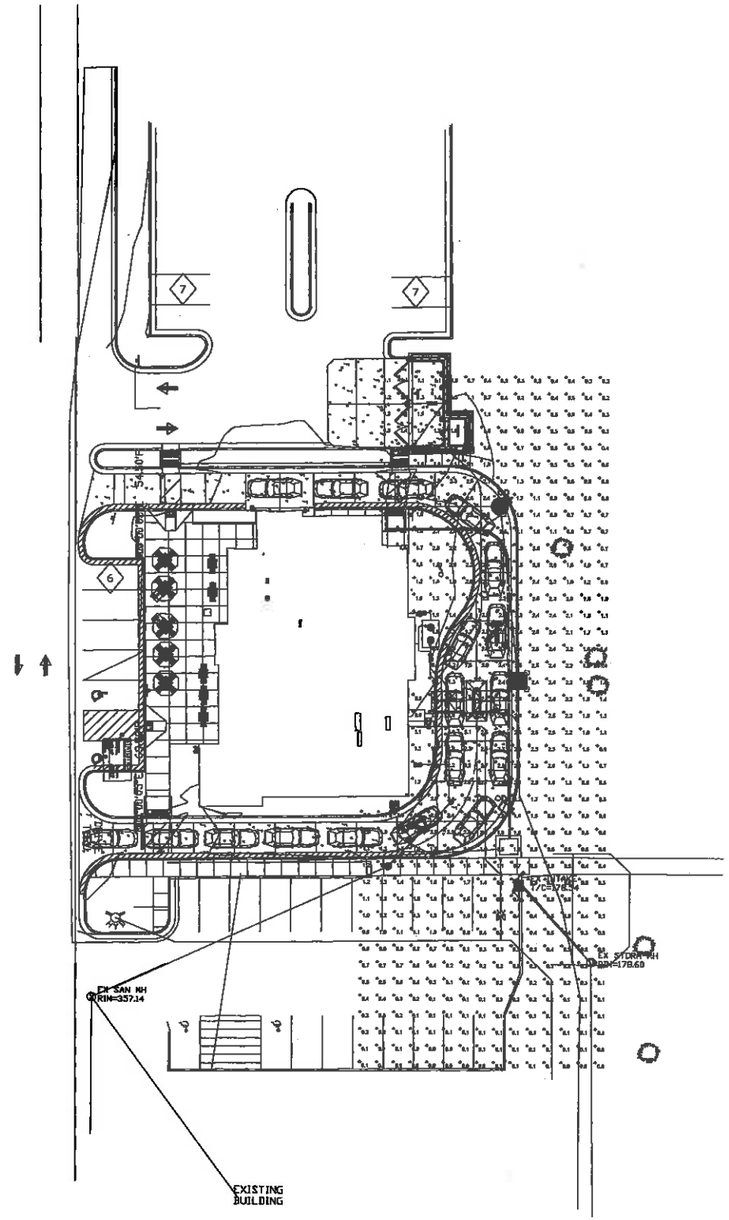
4502 University Avenue
West Des Moines, IA

SHEET TITLE
Irrigation Details

VERSION:
ISSUE DATE:

Job No. : 2015007
Store : 3526
Date : 1.21.15
Drawn By : SLM
Checked By: SLM

Sheet
L-2.1



1 ELECTRICAL PHOTOMETRIC PLAN

SCALE: 1"=20'-0"

0 10 20 30 40

N W E S

LUMINAIRE SCHEDULE

Symbol	Label	Qty	Catalog Number	Description	Lamp	POLE HEIGHT	File	Lumens	LLF	Watts
	OD	2	DSX0 LED 40C 1000 40K T2M MVOLT	DSX0 LED WITH (2) 20 LED LIGHT ENGINE, TYPE T2M OPTIC, 4000K, @ 1000mA	LED	25'-0"	DSX0_LED_40C_1000_40K_T2M_MVOLT.ies	Absolute	1.00	134

STATISTICS

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	1.3 fc	3.2 fc	0.0 fc	N/A	N/A

Chick-fil-A

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Revisions:

Mark	Date	By
△	01.23.2014 ISSUE FOR PERMIT	

Mark	Date	By
△		

Mark	Date	By
△		

Seal

I SURVEY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND SEAL TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL CODES, REGULATIONS, AND ORDINANCES ADOPTED BY THE JURISDICTION RELATING TO ARCHITECTURE AND ENGINEERING.

ChipmanDesign Architecture, Inc.
Des Moines, Iowa 50266
515.288.8300 F 515.288.7944

STORE #3526

UNIVERSITY AVENUE

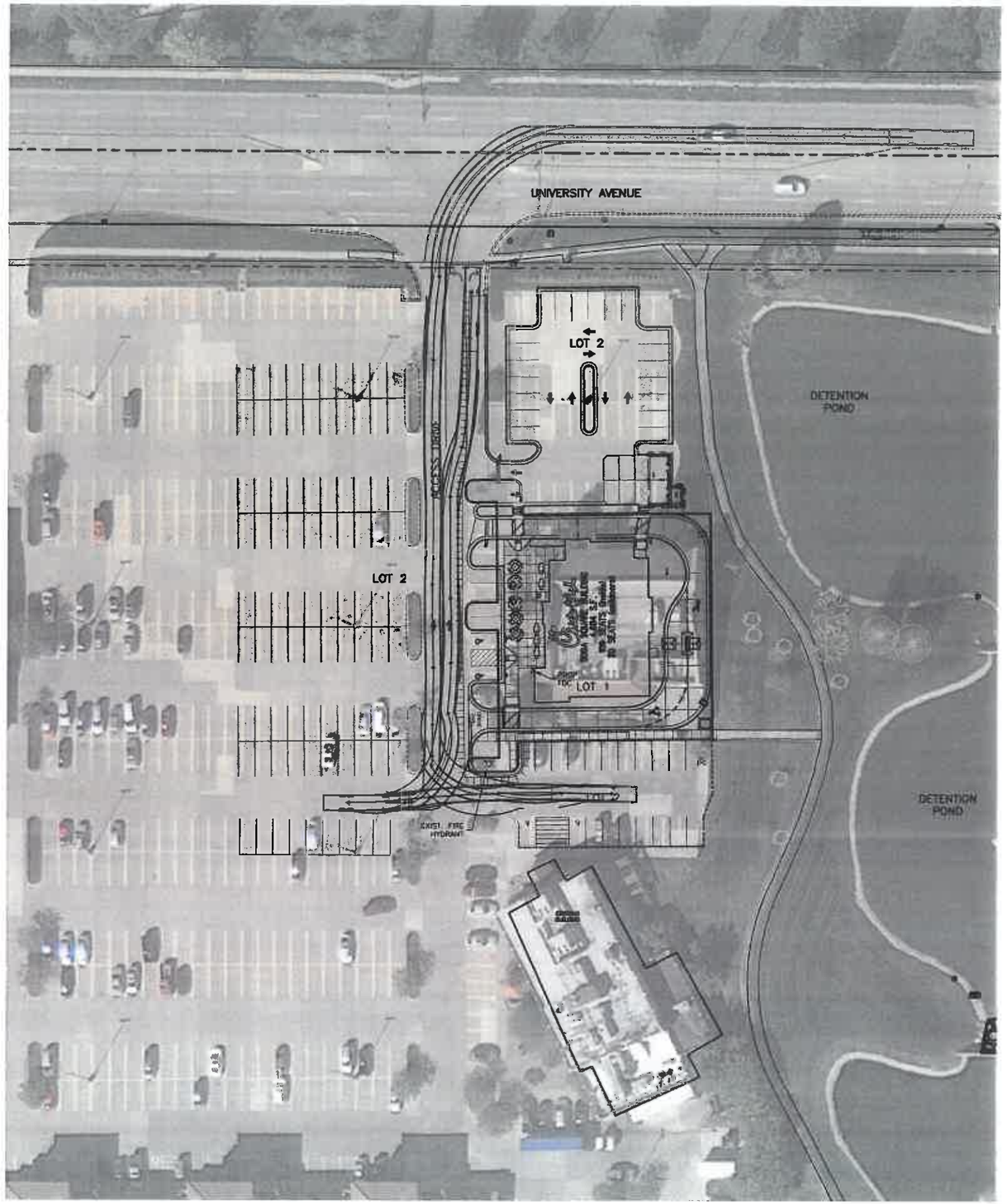
4502 University Avenue
West Des Moines, IA
50266

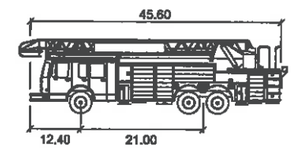
SHEET TITLE
Electrical Photometric Plan

VERSION: V2
ISSUE DATE: 01-2015

Job No. : 14-5080
Store : 3526
Date : 01.23.14
Drawn By : MN.BC.KM
Checked By: STI

Sheet
ES1.3





Fire Truck-45ft feet

Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 40.0

0 15 30

Chick-fil-A

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

REVISIONS			
#	DATE:	BY:	DESCRIPTION:
1	01/16/15	MRJ	ISSUED FOR REVIEW
2	01/28/15	MRJ	PER CITY COMMENTS

HRGreen.com

HRGreen

STORE #3526

UNIVERSITY AVENUE

4502 University Avenue
West Des Moines, IA
50266

SHEET TITLE

AUTOTURN EXHIBIT

DWG EDITION V2
REVISION 01-2015

Job No. : 86140076
Store : 3526
Date : 01.19.15
Drawn By : MRJ
Checked By: JFV

Sheet

AT-1

Plotted By:mjarvi, Plotted:Jan 28, 2015 - 3:23pm,
Xrefs:sp1-Cover, sp2-Site, sp3-Bldt, dwg:86140076-xV-Survey-OV.dwg:86140076-xCa-Dsgn.dwg:3526- Base Building.dwg:86140076-xV-Aerial.dwg,
Layout: Tab:Site, Dwg:86140076-AT-1.dwg,
Comp. File:\\HRGRAHAS\Data\86140076\CAD\Dwgs\EXHIBIT\86140076-Autoturn.dwg\, Layout: Tab:Site,

PROPOSED TRELLIS PERSPECTIVE 2
WEST DES MOINES, IA- #03526
January 14, 2015

Chick-fil-A

ChipmanDesign
Architecture Inc
2700 S River Road, Suite 40
Des Plaines, Illinois 6001
T 847.298.6900 F 847.298.694

ATTACHMENT D

PROPOSED TRELLIS PERSPECTIVE 1
WEST DES MOINES, IA- #03526
January 14, 2015

Chick-fil-A

ChipmanDesign
Architecture Inc.
2700 S. River Road, Suite 400
Des Plaines, Illinois 60018
T 847.298.6700 F 847.298.6766

SIDE ELEVATION

FRONT ELEVATION

PROPOSED TRELLIS ELEVATIONS
WEST DES MOINES, IA- #03526
January 14, 2015

Chick-fil-A

ChipmanDesign
Architecture Inc.
2700 S. River Road, Suite 606
Des Plaines, Illinois 60018
T 847.298.6900 F 847.298.6966

PVC FENCE TO CLOSELY MATCH THE RED VELOUR FIELD BRICK

PROPOSED FENCE ELEVATION
WEST DES MOINES, IA- #03526
January 12, 2015

Chick-fil-A

ChipmanDesign
Architecture Inc.
2700 S. River Road, Suite 400
Des Plaines, Illinois 60018
T 847.298.4900 F 847.298.6944

PROPOSED FENCE PERSPECTIVE
WEST DES MOINES, IA- #03526
January 12, 2015

Chick-fil-A

ChipmanDesign
Architecture Inc.
2700 S. River Road Suite 600
Des Plaines, Illinois 60018
T 847.299.6900 F 847.299.6966

PERSPECTIVE

FRONT ELEVATION

PROPOSED TRASH ENCLOSURE
WEST DES MOINES, IA- #03526
January 12, 2015

Chick-fil-A

ChipmanDesign
Architecture Inc.
2700 S. River Road, Suite 400
Des Plaines, Illinois 60018
T 847.298.6900 F 847.298.6966

EXHIBIT II

B. Portz, City of West Des Moines Development Services, P.O. Box 65320, West Des Moines, IA 50265-0320, 515-222-3620
When Recorded, Return to: City Clerk, City of West Des Moines, P. O. Box 65320, West Des Moines, IA 50265-0320

RESOLUTION

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF WEST DES MOINES, APPROVING SITE PLAN (SP-002570-2014) TO ALLOW CONSTRUCTION OF A DRIVE-THROUGH RESTAURANT.

WHEREAS, pursuant to the provisions of Title 9, Zoning, Chapter 1 et seq, of the West Des Moines Municipal Code, the applicant, Chick-fil-A, Inc., in cooperation with the property owners, Eric Siu Ng & Le Ai Pham, have requested approval of the Chick-fil-A Site Plan (SP-002570-2014) for that 0.35 acre site located at 4502 University Avenue to allow the construction of an approximately 4,684 square foot drive through restaurant with parking lot and associated site improvements;

Legal Description of Property

LOT 1, THREE FOUNTAINS PLAT NO. 2,
AN OFFICIAL PLAT IN THE CITY OF WEST DES MOINES,
POLK COUNTY, IOWA

WHEREAS, studies and investigations were made, and staff reports and recommendations were submitted which is made a part of this record and herein incorporated by reference;

WHEREAS, on February 2, 2015, the Plan and Zoning Commission did recommend to the City Council approval of the Chick-fil-A Site Plan (SP-002570-2014);

WHEREAS, on, February 9, 2015, this City Council held a duly-noticed meeting to consider the application for the Chick-fil-A Site Plan (SP-002570-2014);

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF WEST DES MOINES DOES RESOLVE AS FOLLOWS:

SECTION 1. The findings, for approval, stated in the staff report, dated February 9, 2015, or as amended orally at the City Council meeting of February 9, 2015, are adopted.

SECTION 2. SITE PLAN (SP-002570-2014) to allow construction of a 4,684 square foot drive-through restaurant with parking lot and associated site improvements is approved, subject to compliance with all the conditions in the staff report, dated February 9, 2015, including conditions added at the meeting, and attached hereto as Exhibit "A". Violation of any such conditions shall be grounds for revocation of the entitlement, as well as any other remedy which is available to the City.

PASSED AND ADOPTED on February 9, 2015.

_____
John Mickelson
Mayor Pro Tem

ATTEST:

_____
Ryan T. Jacobson
City Clerk

I HEREBY CERTIFY that the foregoing resolution was duly adopted by the City Council of the City of West Des Moines, Iowa, at a regular meeting held on February 9, 2015, by the following vote:

ATTEST:

_____
Ryan T. Jacobson
City Clerk

Exhibit A
Conditions of Approval

1. Prior to initiation of any site work, including grading, the applicant providing a copy of the Iowa DNR issued NPDES General Permit #2 to staff; and

2. Prior to issuance of an occupancy permit, including Temporary Occupancy, the applicant making necessary modifications to the retention ponds immediately to the east as outlined in the Storm Water Management Plan to comply with West Des Moines Storm Water Management Standards.