AGENDA

REGULAR MEETING OF THE
WINDSOR HEIGHTS CITY COUNCIL
Monday, March 4, 2024 - 6:00 PM
WINDSOR HEIGHTS COUNCIL CHAMBERS - 1133 66th ST
ZOOM: https://us02web.zoom.us/j/7832856334
Meeting ID: 783 285 6334

Notice to the Public: If you would like the supporting documents and information, please call City Hall by noon the day of the meeting. Copies of City Council Agendas are free to the public. In consideration of all, if you have a cell phone, please turn it off or put it on silent ring. The use of obscene and vulgar language, hate speech, racial slurs, slanderous comments, and any other disruptive behavior during the Council meeting will not be tolerated and the offender may be barred by the presiding officer from further comment before the Council during the meeting and/or removed from the meeting.

1. **Call to Order/Roll Call/Pledge of Allegiance**

2. **Approval of the Agenda**

3. **Public Hearing:**

   A. Public Hearing on the 2025 - 2035 Capital Improvement Plan
   B. Consideration of Resolution No. 2024-15 - A Resolution Adopting the Fiscal Year 2025 - 2035 Capital Improvement Plan (CIP)

4. **Public Forum:** This is time set aside for comments from the public on topics of City business other than those listed on the agenda. No action may be taken. Please come to the podium, state your name and address for the record and keep your comments to no more than 5 minutes.

5. **Consent Agenda:** Any item on the Consent Agenda may be removed for separate consideration.

   A. Approve Minutes of the Regular Council Meeting on February 19, 2024
   B. Approve Minutes of the Council Work Session on February 19, 2024
   C. Approve Finance Reports
   D. Approve Liquor License - Hy-Vee Food & Drugstore - 7101 University Ave
   E. Approve IMPACT General Services Agreement
   F. Approve Resolution No. 2024-17 - A Resolution Setting Time and Place for a Public Hearing for the Purpose of Considering the Proposed Property Tax Levy for the City's Proposed FY 2024-2025 Budget and the Proposed Tax Rate Levy to be Included in the Turth-in-Taxation Statement
   G. Approve Resolution No. 2024-18 - A Resolution setting the date for public hearing and additional action on proposal to enter into a General Obligation Corporate Purpose Loan Agreement and to borrow money thereunder in a principal amount not to exceed $10,000,000
   H. Approve Resolution No. 2024-19 - A Resolution setting the date for public hearing and additional action on proposal to enter into General Obligation Park Improvement Loan Agreement and to borrow money thereunder in a principal amount not to exceed

The agenda was posted on the official bulletin boards, posted to www.windsorheights.org, and city social media platforms in compliance with the requirements of city ordinances and the open meetings law.

$1,300,000

I. Approve University Avenue Improvements Project Change Order 25

J. Approve University Avenue Improvements Project Pay Request 18

K. Approve University Avenue Improvements Project Statement of Completion and Final Acceptance of Work

6. **Action Items:**

A. Consideration of Resolution No. 2024-16 - A Resolution Approving the Site Plan for Casey's General Stores at 6961 University Avenue

B. Consideration of the 1st Reading of Ordinance No. 2024-01 - An Ordinance Amending Chapter 156, Adding Subsection 102.11.23 to Section 156.04, of the Code of Ordinances for the City of Windsor Heights, with Regard to Enforcement Procedures for Rental Housing

C. Consideration of South 68th Street Design Contract

D. Consideration of Sister City Funding for $7,600

E. Discussion on 73rd Street Reconstruction

7. **Reports:**

A. Mayor, Council Reports and Committee Updates, and Administration Reports

i Mayor's Report

8. **Closed Session** Closed Session pursuant to Iowa Code section 20.17(3), Negotiating sessions, strategy meetings of public employers, mediation, and the deliberative process of arbitrators shall be exempt from the provisions of chapter 21.

9. **Closed Session** City Council will convene into closed session pursuant to Iowa Code 21.5(i) to evaluate the professional competency of an individual whose appointment, hiring, performance, or discharge is being considered when necessary to prevent needless and irreparable injury to that individual’s reputation and that individual requests a closed session.

10. **Adjourn**

The agenda was posted on the official bulletin boards, posted to www.windsorheights.org, and city social media platforms in compliance with the requirements of city ordinances and the open meetings law.

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM: Adam Strait, City Clerk

SUBJECT: Public Hearing on the 2025 - 2035 Capital Improvement Plan

GENERAL INFORMATION

SUMMARY

ATTACHMENTS
None

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM: Adam Strait, City Clerk

SUBJECT: Consideration of Resolution No. 2024-15 - A Resolution Adopting the Fiscal Year 2025 - 2035 Capital Improvement Plan (CIP)

GENERAL INFORMATION

Staff Report

To: Mayor and City Council
From: Adam Plagge, City Administrator
Date: March 4th, 2024
Subject: Capital Improvement Plan

GENERAL INFORMATION

Attached is the proposed Fiscal Year 2025-2035 Capital Improvement Plan. The only change from the last CIP iteration the discussed revision of the 68th St. south funding source from primarily General Obligation Debt to primarily TIF paid debt. As a result of this change, 74th St. reconstruction was shifted from a cash project to GO debt.

SUMMARY

ATTACHMENTS

1. Resolution No. 2024-15 A Resolution Adopting CIP
2. FY 25 CIP Summary Final

RESOLUTION NO. 2024-15

A RESOLUTION ADOPTING THE FISCAL YEAR 2025-2035 CAPITAL IMPROVEMENT PLAN (CIP)

WHEREAS, the statutes of the State of Iowa provide that the Capital Improvement Plan (CIP) shall be adopted by the Corporate Authorities of the City of Windsor Heights; and

WHEREAS, the City Council of the City of Windsor Heights has held a necessary hearing after having caused to be made the publication and notice required by law; and

WHEREAS, the City Council of the City of Windsor Heights has reviewed the Capital Improvement Plan for Fiscal Year 2025-2035 as presented by the city staff and to be in the best interest of the City of Windsor Heights; and

NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE CITY COUNCIL OF THE CITY OF WINDSOR HEIGHTS, POLK COUNTY, IOWA, that the Fiscal Year 2025-2035 Capital Improvement Plan for the city of Windsor Heights, Iowa, on file in the City Clerk's Office is hereby adopted and approved.

Passed and approved this 4th day of March, 2024.

_____
Mike Jones, Mayor

ATTEST:

_____
Adam Strait, City Clerk

Type of Project	Project Name	PCI Rating
Reconstruction Projects	73rd Street North - Phase 1	
	68th Street South	38
	74th Street	40
	67th Street	33
	64th Street	30.5-43
	76th Street and Marilyn Drive.	44
	Wilshire Blvd	43
	Washington Ave. 70th-73rd St.	31
	Carpenter Avenue	44

	73rd Street South - Phase 2	
	Elmcrest Dr - Phase 1	42
	Elmcrest Dr - Phase 2	45
	Elmcrest Dr - Phase 3	41
	Timmons Ave	32
	79th St.	45

Overlay / Mill & Overlay	Forest Court Mill and Overlay	
	Mott Ave Mill and Overlay	
	77th St. Overlay	
	64th St Mill and Overlay	
	Luin Lane Overlay	
	75th St. Overlay	
	Colby Ave Mill and Overlay	
	Plaza Circle South Overlay	
	78th St, 79th St, and 80th St. Overlay	

Pavement Preservation	University Ave 66th and Colby Ave. Colby Ave 66th Street Wilshire Blvd 70th St.
Stormwater Standalone Projects	Wilshire Blvd Storm Sewer Washington Ave, 70th St, and Northwest Drive Storm Sewer Improvements Colby Avenue and Forest Court Storm Sewer Improvements
Streambank Stabilization	North Walnut Creek Streambank Stabilization - Phase 1 North Walnut Creek Streambank Stabilization - Phase 2 North Walnut Creek Streambank Stabilization - Phase 3 North Walnut Creek Streambank Stabilization - Phase 4

Flood Reduction and Resiliency	Property buy-outs Levee construction Creek channel clear and grub
Facilities	Space Use Analysis
Economic Development	University Ave. Redevelopment
Park and Trails	Current Phase Park Plan Trail Reconstruction adjacent to Colby Park Tennis Court Park Plan Sherwood Forest Path Connection Community Garden Colby Park Food Truck Plaza Tennis Court Phase Lion's Park Refresh and Reconfigure

	Trail Connection over Walnut Creek south of I-235
	Water Trails Access Point in Colby Park

Total Infrastructure Need

Project Description

Hickman to University. Includes full depth roadway removal and replacement, pedestrian crossing improvements at CLA, point sanitary sewer repairs, stormwater improvements, and water main improvements as needed.

School St to University Ave. Storm sewer installation, sanitary spot repairs, pedestrian connection to School St and Colby Park.

74th St Wishire to College. Full depth removal and replacement of the road, replacement of some storm sewer and subdrains, sanitary sewer spot repairs.

School St to University Ave. Storm sewer installation, sanitary spot repairs, pedestrian connection to School St and Colby Park.

Forest Ct. to Sunset Includes sanitary sewer spot repairs, installation of storm sewer and connections into nearest available structures, and water main replacement.

76th St. and Marilyn from College to 80th St. Includes sanitary sewer spot repairs, watermain replcament and replacement of storm water and sub drains.

73rd St to 75th St dead end. Sanitary sewer spot repairs.

Reconstruction of Washington Ave between 73rd and 70th. Installation of sidewalk and storm sewer to 70th.

64th Street to 65th Street. Full depth removal and replacement of the road, installation of some storm sewer and subdrains, sanitary sewer spot repairs.

University to Center Street. Includes potential reallignment of 73rd St to accommodate pedestrian facilities between Buffalo Road and Center Street, storm sewer improvements, sanitary sewer point repairs.

64th Street to 65th Street. Full depth removal and replacement of the road, installation of some storm sewer and subdrains, sanitary sewer spot repairs.

66th St to 68th St. Full depth removal and replacement of the road, installation of some storm sewer and subdrains, sanitary sewer spot repairs.

66th Street east to the dead end. Full depth removal and replacement of the road and sanitary sewer spot repairs.

66th St to 68th St

79th St Between College Drive and Marilyn Drive

From 64th St to 66th St. Mill off the existing road surface and overlay with a 2" asphalt cap. Full depth patches would be completed as needed.

64th to 65th Street. Mill off the existing road surface and overlay with a 2" asphalt cap. Full depth patches would be completed as needed.

77th Street from Marilyn Drive to College Drive. Mill and overlay the roadway.

South of University Ave. Mill off the existing road surface and overlay with a 2" asphalt cap. Full depth patches would be completed as needed.

Entirety of Luin Lane between both ends of College Drive. Mill and overlay the roadway.

75th St from Wilshire Blvd to College Drive. Mill and overlay the roadway.

70th to 73rd St. Mill off the existing road surface and overlay with a 2" asphalt cap. Full depth patches would be completed as needed.

Plaza Circle south of College Drive to the dead end. Mill and overlay the roadway.

78th St, 79th St, and 80th St between College Drive and Marilyn Drive. 80th Circle north of College Drive. Mill and overlay the roadway. 78th St and 79th St do not require milling, just overlay.

Crack sealing along asphalted portions of University Ave to extend life of road

PCC patching and reconstruction of the intersection to the end of the return radius on each side.

66th St to 68th St.Mill out half the depth of existing pavement at failed joints and replace. Similar to work done on 70th Street south of Hickman in 2018.

Joint sealing of 66th Street from Forest Court to Del Matro.

Crack sealing west of 70th to dead-end

Crack sealing along entire duration of 70th St.

Replace the storm sewer on private property between Wilshire and Sunrise. Abandon the pipe on private property and install new sewer on Wilshire to connect to 73rd St.
Installation of storm sewer along Northwest Drive, 69th St, Washington Ave, and 70th Street in order to increase carrying capacity. Can be split into two phases as needed.
Increase size and install new storm sewer on Forest Court from 68th Street to 73rd Street. Install storm sewer at the intersection of 70th Street and Colby Avenue.

Protect public infrastructure and private structures that are at risk of being damaged by continued erosion of the streambank on North Walnut Creek. Recommendations for projects will come from a study that is currently in the proposal stage.
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possible result of a study that is in the proposal stage.

possible result of a study that is in the proposal stage.

possible result of a study that is in the proposal stage.

Study necessary repairs, improvements, expansion or construction to existing facilities and possible construciton of a 'Civic Center' for City facilities

Purchase of single family residential properties along University Ave as they come to market to faciliate redevelopment of the corridor as mixed use per Comprehensive Plan

Includes the following: Remove traffic circle and existing playground; Grade phase 2 areas; Install playground equipment, surfacing and surrounding amenities; Construct splashpad and amenities. Includes ADA Improvements.

Replace 2,500' of deteriorated asphalt trail with concrete trail to WalMart Parking lot. Areas north of these will be impacted and replaced by WRA project.

Includes the following: Gradings; construct new tennis courts; Construct pickle ball courts; Construct new parking stalls on east side of site. Includes ADA improvements.

Replacement of grass path to Sherwood Forest.

Install a community garden.

Includes the following: Food truck plaza (remove existing walks, pour new plaza, ADA improvements, and portable restroom enclosure)

Includes the following: Add north amenity event space, construct fitness circuit and install equipment, construct new tennis and pickleball courts, construct new parking stalls on School Street and Public Works entry drive, and ADA improvements

No specific plans have been developed. Public Works proposing minor improvements 2024-2025

Connect the trail systems between WDM, DSM, and Windsor Heights. This is currently in the feasiblity study stage.

Construct an interactive and immersive feature along Walnut Creek in Colby Park as part of the Greater Des Moines Water Trails projects.

FINAL WINDSOR HEIGHTS 1(

Project Reasoning

Poor Pavement Conditions as noted on the PCI. Incorporate recommendations of the Stormwater Management Plan -> Figures #5, #8, #9, and parts of #11.

DMWW priority due to main breaks and need to upsize watermain. Need sidewalk to Colby Park. Poor Pavement Conditions as noted on the PCI. Incorporate recommendations of the Stormwater Management Plan -> portions of Figure #12.

DMWW high priority due to main breaks and need to upgrade main size. Several storm intakes in need of reconstruciton and causing undermining to road. Open stormwater culvert. Change from overlay due to infrastructure condition.

DMWW upgrade main from 6" to8". Poor Pavement Conditions as noted on the PCI. Incorporate recommendations of the Stormwater Management Plan -> portions of Figure #12.

Poor pavement conditions, lack of storm sewer, resident and council request. North of Unieversity Ave 64th St reconstruction to be broken up into phases and shall be coordinated with school schedule.

Poor pavement conditions as noted on the PCI. Several storm intakes are undermining road.

Poor pavement conditions as noted on the PCI.

Poor pavement conditions noted in PCI. Storm sewer system failures.

Pavement conditions as noted on the PCI, shorter section of street that may be able to get completed sooner as funding allows. If paired with Elmcrest Ave, may get more favorable bids.

Poor Pavement Conditions as noted on the PCI. Improve walkability through the corridor.

Pavement conditions as noted on the PCI, shorter section of street that may be able to get completed sooner as funding allows. If paired with Carpenter Ave, may get more favorable bids.

Pavement conditions as noted on the PCI, shorter section of street that may be able to get completed sooner as funding allows.

Pavement conditions as noted on the PCI, shorter section of street that may be able to get completed sooner as funding allows. Roads be rerevaluated for full reconstruction as construction date approaches.

Pavement preservation

Repair panels of concrete that are in poor condition but that are on a street that otherwise is in good condition. Investing a couple hundred thousand dollars every year into full depth patching will ensure that we don't fall behind on maintenance again.

Pavement preservation

Stormwater Management Plan

Stormwater Management Plan, Figure #2

Stormwater Management Plan, Figure #11

Protect public infrastructure and private structures that are at risk of being damaged by continued erosion of the streambank on North Walnut Creek. Recommendations for projects will come from a study that is currently in the proposal stage.

Protect public infrastructure and private structures that are at risk of being damaged by continued erosion of the streambank on North Walnut Creek. Recommendations for projects will come from a study that is currently in the proposal stage.
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Need to catch up on derred maintainance, better utilize existing space and/or identify an improved consolidated space.

Increase tax base and density along University Ave.

Park Master Plan: Project under construction

Grant Opportunity - Project subject to grant

Park Master Plan

Subject to Development Agreement on Sherwood Forest

Council Input

Park Master Plan

Park Master Plan

Park Master Plan

Park Master Plan

Adopted 3/4/25

0 YEAR CIP (FY25-35)

	Funding Sourc		
Anticipated/Planned Construction Year (FY)	**Stormwater Funding Source**	**Stormwater**	**Water Funding Source**
2024 (Already budgeted)	**City Debt/Stormwater 50/50**	$685,000	**DMWW & City Debt 50/50**
2024-2025 (No Change)	Stormwater	$407,571	DMWW
2026 (Accelerated from 2028)	Stormwater	$630,400	DMWW
2028 (No change)	Stormwater	$452,000	DMWW
2029 (Previously unscheduled)	Stormwater	$307,100	DMWW
2030 (Change from Overlay)	Stormwater	$354,500	DMWW
2032 (New project)	Stormwater	$0	DMWW
2033 (No change)	Stormwater	$275,900	DMWW
2034 (No change)	Stormwater	$117,214	DMWW

Unscheduled Priority RAISE Grant Dependant	Stormwater	$1,978,630	DMWW
Unscheduled	Stormwater	$117,214	DMWW
Unscheduled	Stormwater	$62,521	DMWW
Unscheduled	Stormwater	$0	DMWW
Unscheduled	Stormwater	$53,100	DMWW
Unscheduled	Stormwater	$217,300	DMWW

2025-2026			
2028-2029			
2029-2030			
2032-2033			
2034-2035			
Unscheduled			
Unscheduled			
Unscheduled			
Unscheduled			

2025		
2025-2026		
2027		
2027		
2028		
2028		
2026	Stormwater Fund	$640,000
2027	Stormwater Fund	$1,500,000
2030	Stormwater Fund	$1,650,000
Unscheduled	Stormwater Fund	$500,000
Unscheduled	Stormwater Fund	$500,000
Unscheduled	Stormwater Fund	$500,000
Unscheduled	Stormwater Fund	$500,000

Unscheduled

Unscheduled

Unscheduled

2025

As Opportunities Arrise

2024-2025

Unscheduled

Unscheduled

Unscheduled

Unscheduled

Unscheduled

Unscheduled

Unscheduled

Unscheduled

Unscheduled

e Estimates

Water	City (GF, TIF, RUT)	General Funding Source	Total Estimated Cost
$650,000	$5,282,700	2024 Bond (TIF)	$9,000,000
$420,300	$2,932,129	2024 Bond (TIF)	$3,760,000
$284,700	$2,919,600	2025 Bond (G.O.)	$3,550,000
$420,300	$2,847,700	Cash	$3,720,000
$227,200	$1,815,700	2029 Bond	$2,350,000
$381,800	$2,873,700	2029 Bond	$3,610,000
$10,712	$723,678	TBD	$734,390
$266,900	$2,207,200	TBD	$2,750,000
$16,068	$863,629	TBD	$996,911

$0	$16,890,712	Future Bond (TIF)	$18,869,342
$16,068	$863,629	TBD	$996,911
$10,712	$971,547	TBD	$1,044,780
$16,068	$620,678	TBD	$636,746
$95,500	$721,400	TBD	$870,000
$221,700	$1,751,000	TBD	$2,190,000

	$607,700	Cash/LOSST	$607,700
	$247,200	Cash/LOSST	$247,200
	$185,400	Cash/LOSST	$185,400
	$988,800	Cash/LOSST	$988,800
	$175,100	Cash/LOSST	$175,100
	$288,400	Cash/LOSST	$288,400
	$741,600	Cash/LOSST	$741,600
	$103,000	Cash/LOSST	$103,000
	$1,545,000	Cash/LOSST	$1,545,000

	$60,000	Cash/LOSST	$60,000
	$154,500	Cash/LOSST	$154,500
	$123,600	Cash/LOSST	$123,600
	$61,800	Cash/LOSST	$61,800
	$150,000	Cash/LOSST	$150,000
	80,000	Cash/LOSST	$80,000

	$	640,000
	$	1,500,000
	$	1,650,000

	$	500,000
	$	500,000
	$	500,000
	$	500,000

TBD	$	4,635,000
TBD	$	6,798,000
TBD	$	11,330,000

$30,000	$	30,000

TBD	TBD

TBD	$	2,850,000
$110,000	$	220,000
$978,000	$	270,000
$108,000	$	108,000
TBD	$	20,000
$270,000	$	270,000
$2,200,000	$	2,200,000
TBD	TBD	

TBD		TBD
TBD		TBD
		$ 95,112,180

External Funding Sources

FFY24 STBG: $1,000,000
FFY25 STBG: $500,000
FFY26 STBG: $750,000
WDMCS: $132,300

RAISE Grant Applied for

TAP Grant Applied For

Grant Applied For

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM: Adam Strait, City Clerk

SUBJECT: Approve Minutes of the Regular Council Meeting on February 19, 2024

GENERAL INFORMATION

SUMMARY

ATTACHMENTS

1. 2.19.24 Regular Council Meeting Minutes

City of Windsor Heights Regular Business Meeting Minutes
Monday, February 19, 2024 - 6:00 PM
WINDSOR HEIGHTS COUNCIL CHAMBERS - 1133 66th ST

1. **Call to Order/Roll Call/Pledge of Allegiance**

   Mayor Jones called the meeting to order at 6:00 PM. Council members present: Susan Skeries, Michael Libbie, Lauren Campbell, Threase Harms, and Joseph Jones. Staff present: City Administrator Adam Plagge, City Clerk Adam Strait, City Attorney Erin Clanton, Public Works Director Jason Roberts, Public Works Supervisor Andy Larson, Police Chief Pete Roth, and Finance Director Rachelle Swisher

2. **Approval of the Agenda**

   Motion by Threase Harms to APPROVE. Seconded by Joseph Jones . Motion passed 5-0.

3. **Presentations**

   A. Des Moines Children's Museum

   Jules Burtnette and Ashlen Sheaffer of the Children's Museum spoke about their organization and it's involvement with the community.

   B. IMPACT Community Action Partnership

   Brandon Pollard from IMPACT spoke about his organization and it's impact on the community.

4. **Public Forum:** This is time set aside for comments from the public on topics of City business other than those listed on the agenda. No action may be taken. Please come to the podium, state your name and address for the record and keep your comments to no more than 5 minutes.

   No Comment given.

5. **Consent Agenda:** Any item on the Consent Agenda may be removed for separate consideration.

   Motion by Threase Harms to APPROVE. Seconded by Michael Libbie. Motion passed 5-0.

   A. Approve Minutes of the Regular Council Meeting on February 5, 2024

   B. Approve Financial Reports

   C. Approve Liquor License - Ridgemont - 7400-7460 Hickman Road

   D. Approve Colby Park Construction Administration Amendment

   E. Approve Resolution No. 2024-11 - A Resolution to Set a Public Hearing on FY 2025-2035 CIP

   F. Approve Dog Park Equipment Purchase of The Best In Show Dog Park Kit (7 Pieces) From ParkWarehouse for $7,925.08

G. Approve Resolution No. 2024-14 - A Resolution Authorizing the City to Submit to the Prairie Meadows Youth Sports & Recreational Grant Application

6. **Non-Consent Agenda:**

A. Consider Motion to Approve Acquisition and Installation of Two Dell Servers

Adam Plagge spoke towards the City's need for new servers as well as bringing former IT Director Derek Meyer back on to consult on the project. Motion by Threase Harms to APPROVE. Seconded by Joseph Jones. Motion passed 5-0.

B. Consideration of Resolution No. 2024-12 - A Resolution Authorizing the City to Submit to the US Department of Transportation a Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant Application

Madison Burke, Nate Weitl, and Justin Ernst from Bolton and Menk, the City's engineering firm, were in attendance to speak about the grant application and answer questions. Adam Plagge spoke towards the goal of submitting the second application for a RAISE grant and the LOS received from businesses along 73rd Street as well as important dates in the application process. If successful, the expected start date would be either 2028 or 2029. Motion by Joseph Jones to APPROVE. Seconded by Threase Harms. Motion passed 5-0.

C. Consideration of Resolution No. 2024-13 - A Resolution Authorizing the City to Submit to the Prairie Meadows Community Betterment Grant Application

Madison Burke, Nate Weitl, and Justin Ernst from Bolton and Menk, the City's engineering firm, were in attendance to speak about the grant application and answer questions. Adam Plagge spoke towards the goal of the application and the goal to construct the food truck plaza at Colby Park this year to accomplish the majority of the park updates. There is a goal to update the City's Urban Renewal Plan to help pay for the plaza and the grant will assist in paying for the electrical and lighting work needed for the plaza. The park committee will meet soon to continue design discussions. Motion by Michael Libbie to APPROVE. Seconded by Threase Harms. Motion passed 5-0.

7. **Reports:**

A. Mayor, Council Reports and Committee Updates, and Administration Reports

Threase Harms - MAC met Tuesday, Provided a legislative update including the League of Cities sends out a weekly e-newsletter, the first funnel of the year was the previous Friday, there is no property tax bills, there is a ban on ATE bill, and SF 455, a storm water bill, is alive which would affect Windsor Heights directly, Windsor Elementary is doing a Read Across American program, Reach out if you are interested in volunteering

Lauren Campbell - Gave a Special Events update, They met for park construction updates and the impact on events, WHAMM registration will be open March 1, If you're interested in volunteering for special events reach out to Lauren or Susan

Michael Libbie - Gave a MAC update including a legislative overview and that there have been broad discussions from open records to weapons

Joseph Jones - Gave a DART executive meeting update, They are still talking through the future, There is a new Homeless Council chair and vice chair

Susan Skeries - Attended the Metro Waste executive meeting, Yard waste pick up will begin April 1, Had a long special event meeting the past Friday, Tiffany from the Chamber provided a TRC update which is selling sponsorship opportunities for City special events, The end of the TRC is March 31 and will know end results at that time, Met with Lauren to start planning for Fall Fest, Having contracts sent to and from vendors, Met with someone who is willing to help with WHAMM, The goal is 75 entries this year, Earth Day is being planned and moving along, There are 5 volunteers for steam clean up and still need volunteers for other areas, Thank you to Adam S. for help on Social Media and the website, Metro Waste meeting this upcoming Wednesday, Chat with Officials is this Saturday through Zoom or in person but registration is required, Windsor schools book drive is on March 4

i Police Report

ii Fire Report

8. **Adjourn to Council Work Session Immediately Following the Regular Council Meeting**

Motion by Threase Harms to adjourn at 6:54 PM. Seconded by Susan Skeries. Motion passed 5-0

_____

Mike Jones, Mayor

_____

Adam Strait, City Clerk

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM: Adam Strait, City Clerk

SUBJECT: Approve Minutes of the Council Work Session on February 19, 2024

GENERAL INFORMATION

SUMMARY

ATTACHMENTS

1. 2.19.24 Council Work Session Minutes

City of Windsor Heights Regular Business Meeting Minutes
Monday, February 19, 2024 - 6:00 PM
WINDSOR HEIGHTS COUNCIL CHAMBERS - 1133 66th ST

1. **Call to Order/Roll Call**

   Mayor Jones called the meeting to order at 7:03 PM. Council members present: Susan Skeries, Michael Libbie, Lauren Campbell, Threase Harms, and Joseph Jones. Staff present: City Administrator Adam Plagge, City Clerk Adam Strait, City Attorney Erin Clanton, Public Works Director Jason Roberts, Public Works Supervisor Andy Larson, Police Chief Pete Roth, and Finance Director Rachelle Swisher

2. **FY25 Budget Discussion**

   Finance Director Rachelle Swisher guided discussion of the FY25 budget including funding requests from outside organizations and provided an updated ERP to council.

   A. Outside Organization Funding Requests

   B. Equipment Replacement Plan

3. **Adjourn**

   Motion by Threase Harms to adjourn at 7:57 PM. Seconded by Susan Skeries. Motion passed 5-0

_____

Mike Jones, Mayor

_____

Adam Strait, City Clerk

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM: Rachelle Swisher, Finance Director

SUBJECT: Approve Finance Reports

GENERAL INFORMATION

SUMMARY

ATTACHMENTS
1. CLAIMS REPORT

VENDOR NAME	REFERENCE	AMOUNT	VENDOR TOTAL	CHECK#	CHECK DATE
A KING'S THRONE	PORTABLE RESTROOMS		1,000.00	56531	2/22/24
AIR FILTER SALES & SERVICES	AIR FILTERS		179.40	56471	2/20/24
AMERITAS LIFE INS. CORP.	DENTAL	3,225.20		4737	2/20/24
AMERITAS LIFE INS. CORP.	VISION	307.08	3,532.28	4738	2/20/24
ASSURITY	BENEFITS	11.76		4736	2/20/24
ASSURITY	BENEFITS	42.43	54.19	4748	2/27/24
BAKER ELECTRIC INC.	CONTROLLER BOX HYVEE STOPLIGHT		7,885.97	56472	2/20/24
BANKERS TRUST COMPANY	CC FEES	147.54		4739	2/20/24
BANKERS TRUST COMPANY	See Vendor Activity Report	7,165.42	7,312.96	56534	2/22/24
BOLTON & MENK	PLANNING SERVICES OCT & NOV		126,070.21	56473	2/20/24
BOOT BARN INC	CLOTHING ALLOWANCE		195.49	56474	2/20/24
BOUND TREE MEDICAL LLC	MEDICAL SUPPLIES		650.23	56475	2/20/24
BREESE, TAMMY	FEB CELL PHONE		50.00	56476	2/20/24
BRICK GENTRY PC	JAN LEGAL FEES		3,982.50	56477	2/20/24
CAPITAL ONE TRADE CREDIT	SUPPLIES		185.96	56478	2/20/24
CHARLES GABUS FORD	CAR 25 REPAIRS		89.95	56479	2/20/24
CITY OF URBANDALE	TRAINING TOWER FEES		609.78	56480	2/20/24
CITY OF WEST DES MOINES	WESTCOMM		23,331.98	56481	2/20/24
CLIVE POWER EQUIP.	SUPPLIES		41.98	56535	2/22/24
DES MOINES REGISTER	NEWSPAPER		66.00	56482	2/20/24
DES MOINES WATER WORKS	6900 SCHOOL ST		49.29	56483	2/20/24
DIAMOND OIL CO.	FUEL		2,018.18	56484	2/20/24
EMPLOYEE BENEFIT SYSTEMS	HEALTH INS	21,380.42		4740	2/20/24
EMPLOYEE BENEFIT SYSTEMS	HEALTH INS	22,755.02		4741	2/20/24
EMPLOYEE BENEFIT SYSTEMS	HEALTH INS	21,380.42	65,515.86	4742	2/20/24
FEDERAL TAX DEPOSIT	FED/FICA TAX		889.35	4747	2/21/24
FIRE SERVICE TRAINING BUREAU	FIRE SCHOOL		500.00	56485	2/20/24
GALLS INC	CLOTHING ALLOWANCE		50.62	56486	2/20/24
GOODRICH, WILLIAM	FEB CELL PHONE		50.00	56487	2/20/24
GRIMES ASPHALT & PAVING	STREET MAINTENANCE SUPPLIES		573.00	56488	2/20/24
HY-VEE ACCOUNTS RECEIVABLE	SUPPLIES		30.24	56489	2/20/24
ICMA RETIREMENT TRUST	ICMA		1,332.82	4743	2/20/24
IOWA DEPT OF PUBLIC SAFETY	IOWA/NCIC SYSTEM		351.00	56490	2/20/24
IOWA DES MOINES SUPPLY	SUPPLIES	576.38		56491	2/20/24
IOWA DES MOINES SUPPLY	CHANGING STATION REPLACEMENT	485.51	1,061.89	56536	2/22/24
IOWA FIRE EQUIPMENT	CEC ANNUAL INSPECTION		140.00	56492	2/20/24
DEPT OF HUMAN SERVICES	FEB 2024 STATE SHARE		8,253.48	56493	2/20/24
IOWA ONE CALL	LINE LOCATES		67.00	56494	2/20/24
IPERS	IPERS		629.20	4745	2/21/24
IRLBECK, MICHAEL	FEB CELL PHONE		50.00	56495	2/20/24
JOHNSON, KYLE	FEB CELL PHONE		50.00	56496	2/20/24
LARSON, ANDY	FEB CELL PHONE		50.00	56497	2/20/24
LEUTHOLD, NATE	FEB CELL PHONE		61.66	56498	2/20/24
MEASE, JIM	FEB CELL PHONE		50.00	56499	2/20/24
MENARDS	O-RINGS		4.74	56500	2/20/24
MERCY ONE CLIVE PHARMACY	MEDICAL SUPPLES		31.51	56501	2/20/24
MIDAMERICAN ENERGY	801 73RD ST		28.19	4744	2/20/24
MOBILE SPOT	IPAD REPAIR		149.79	56502	2/20/24
NORRIS, CHAD	FEB CELL PHONE		50.00	56503	2/20/24
O'REILLY AUTO PARTS	TRUCK 4		21.98	56504	2/20/24
OPTIMAL IMAGING SUPPLIES	PRINTER INK		480.00	56505	2/20/24
PARK WAREHOUSE	DOG PARK EQUIPMENT		7,925.08	56537	2/22/24
PLAGGE, ADAM	FEB CELL PHONE		50.00	56506	2/20/24
POLK CO AUDITOR	2023 CITY/SCHOOL ELECTION		1,503.22	56507	2/20/24

VENDOR NAME	REFERENCE	AMOUNT	VENDOR TOTAL	CHECK#	CHECK DATE
PREMIER AUTOMOTIVE	7223 REPAIRS		547.42	56508	2/20/24
QPS EMPLYMENT GROUP	2/3/24 DOUGLAS, LOUIS		993.24	56509	2/20/24
QUALITY PEST CONTROL, INC	PEST CONTROL		35.00	56510	2/20/24
GANNETT IOWA LOCALIQ	PUBLICATIONS		305.85	56511	2/20/24
RELIASTAR LIFE INS CO	NISSEN		75.00	56512	2/20/24
ROBERTS, JASON	FEB CELL PHONE		50.00	56513	2/20/24
ROE CONSULTING LLC	MEDICARE COST REPORT		875.00	56514	2/20/24
ROTH, PETE	FEB CELL PHONE		50.00	56515	2/20/24
SAFE BUILDING COMPLIANCE	JAN RENTAL INSPECTIONS		1,000.00	56516	2/20/24
SECTOR	VEHICLE MODEM MAINT AGREEMENT		2,437.50	56538	2/22/24
SERVICEMASTER COMM CLEAN	CARPET CLEANING		209.00	56517	2/20/24
SPRAYER SPECIALTIES INC.	CALCIUM PUMP REPAIRS		377.47	56518	2/20/24
STANDARD INSURANCE COMPANY	LIFE/LTD/STD		1,882.50	56519	2/20/24
STRAIT, ADAM	FEB CELL PHONE		50.00	56520	2/20/24
SWISHER, RACHELLE	FEB CELL PHONE		50.00	56521	2/20/24
THE UPS STORE	PULSE OX REPAIR SHIPPING		37.92	56522	2/20/24
TREASURER STATE OF IOWA	STATE TAX		134.41	4746	2/21/24
UNITYPOINT OCC MED SIOUX CITY	DOT DRUG TEST		42.00	56523	2/20/24
UPHDM OCCUPATIONAL MED	PRE-EMPLOYMENT PHYSICAL		557.54	56524	2/20/24
VENDNOVATION LLC	MEDICATION MACHINE SOFTWARE		1,200.00	56525	2/20/24
WEST DES MOINES TRUE VALUE	SUPPLIES		32.02	56526	2/20/24
WEX FLEET UNIVERSAL	FUEL		3,087.82	56527	2/20/24
WRIGHT OUTDOOR SOLUTIONS	EXTERIOR LIGHT REMOVAL		570.00	56528	2/20/24
WYCKOFF HEATING & COOLING	CEC REPAIRS		195.00	56529	2/20/24
ZWC CONDOMINIUM ASSOC	TAXES		459.93	56530	2/20/24
	Accounts Payable Total		282,511.60		

Payroll Checks

001	GENERAL		64,818.36
110	ROAD USE TAX		8,351.13
740	STORM WATER		2,013.12
	Total Paid On: 2/16/24		75,182.61
001	GENERAL		3,030.64
	Total Paid On: 2/21/24		3,030.64
	Total Payroll Paid		78,213.25
	Report Total		360,724.85

FUND	NAME	AMOUNT
001	GENERAL	163,749.52
110	ROAD USE TAX	21,793.27
112	EMPLOYEE BENEFITS	72,434.65
303	COLBY PARK	17,676.21
314	UNIVERSITY AVE ST PROJECT	3,863.00
319	2020 STREET PROJECTS	8,148.00
322	73RD STREET PROJECT	38,153.50
323	68TH ST	24,055.50
324	2023 HMA OVERLAY PROJECT	216.00
333	DOG PARK UPDATES	7,925.08
610	SEWER	33.50
740	STORM WATER	2,676.62
	TOTAL FUNDS	360,724.85

ACCOUNTS PAYABLE VENDOR ACTIVITY

INVOICE NO	LN	DATE	PO NO	REFERENCE	TRACK CD	GL ACCOUNT	1099	NET	CHECK	PD DATE
				58 BANKERS TRUST COMPANY						
02202022	1	2/20/24		CC FEES		001-620-6405		147.54	4739	2/20/24 E
02222024 3526	1	2/22/24		STORAGE UNIT		001-470-6499		25.99	56534	2/22/24
02222024 3526	2	2/22/24		MUNICIPAL INST - NATE		001-620-6230		240.00	56534	2/22/24
02222024 3526	3	2/22/24		BUSINESS MEMBERSHIP		001-620-6210		124.75	56534	2/22/24
02222024 3526	4	2/22/24		BUSINESS MEMBERSHIP		001-110-6120		124.75	56534	2/22/24
02222024 3526	5	2/22/24		BUSINESS MEMBERSHIP		001-150-6210		124.75	56534	2/22/24
02222024 3526	6	2/22/24		BUSINESS MEMBERSHIP		110-210-6507		124.75	56534	2/22/24
02222024 3526	7	2/22/24		LASERFICHE CONF - A STRAIT		001-620-6240		1750.00	56534	2/22/24
02222024 3526	8	2/22/24		ZOOM		001-610-6507		31.98	56534	2/22/24
02222024 3526	9	2/22/24		ADOBE SUBSCRIPTION		001-615-6507		251.91	56534	2/22/24
02222024 3534	1	2/22/24		CONSTANT CONTACT		001-620-6373		81.00	56534	2/22/24
02222024 3534	2	2/22/24		LOCAL LEADERS DAY - ADAM S		001-620-6240		50.00	56534	2/22/24
02222024 3534	3	2/22/24		LASERFICHE CONF - ADAM S		001-620-6240		212.00	56534	2/22/24
02222024 3534	4	2/22/24		RAISE GRANT DOMAIN NAME		322-210-6761		12.00	56534	2/22/24
02222024 3534	5	2/22/24		SURVEY MONKEY		001-620-6373		279.84	56534	2/22/24
02222024 8417	1	2/22/24		SUPPLIES		001-110-6507		239.88	56534	2/22/24
02222024 8417	2	2/22/24		SUPPLIES		001-110-6506		179.99	56534	2/22/24
02222024 8417	3	2/22/24		IACP MEMBERSHIP		001-110-6120		190.00	56534	2/22/24
02222024 8425	1	2/22/24		CHIEF LUNCHEON		001-150-6599		19.52	56534	2/22/24
02222024 8425	2	2/22/24		RETURN OF AIR VALVE		001-150-6332		97.78-	56534	2/22/24
02222024 8425	3	2/22/24		PRINTER INK		001-150-6507		147.65	56534	2/22/24
02222024 8433	1	2/22/24		IDALS PESTICIDE LICENSE		001-430-6230		25.00	56534	2/22/24
02222024 8433	2	2/22/24		IDALS PESTICIDE LICENSE		001-430-6230		25.00	56534	2/22/24
02222024 8433	3	2/22/24		ESRI		110-210-6504		247.50	56534	2/22/24
02222024 8433	4	2/22/24		ESRI		740-865-6507		247.50	56534	2/22/24
02222024 8433	5	2/22/24		ESRI		110-210-6504		382.50	56534	2/22/24
02222024 8433	6	2/22/24		ESRI		740-865-6507		382.50	56534	2/22/24
02222024 8433	7	2/22/24		SUPPLIES		110-210-6507		64.45	56534	2/22/24
02222024 8433	8	2/22/24		SUPPLIES		110-210-6332		22.99	56534	2/22/24
02222024 9985	1	2/22/24		INOA CONF - NISSEN		001-110-6230		300.00	56534	2/22/24
02222024 9985	2	2/22/24		NOTARY		001-110-6120		30.00	56534	2/22/24
02222024 9985	3	2/22/24		INOA MEMBERSHIP - NISSEN		001-110-6230		25.00	56534	2/22/24
02222024 9985	4	2/22/24		CSI TRNG - ROETMAN		001-110-6230		650.00	56534	2/22/24
02222024 9985	5	2/22/24		CSI TRNG - DAVISON		001-110-6230		650.00	56534	2/22/24

				BANKERS TRUST COMPANY				7312.96		

				***** REPORT TOTAL *****				7312.96		

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM: Adam Strait, City Clerk

SUBJECT: Approve Liquor License - Hy-Vee Food & Drugstore - 7101 University Ave

GENERAL INFORMATION

SUMMARY

ATTACHMENTS
None

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM: Adam Strait, City Clerk

SUBJECT: Approve IMPACT General Services Agreement

GENERAL INFORMATION

SUMMARY

ATTACHMENTS

1. Windsor Heights - IMPACT General Services Agreement

General Services Agreement

THIS AGREEMENT entered into on the 4th day of March, 2024, between the City of Windsor Heights, 1145 66th Street Suite 1, Windsor Heights, IA 50324 (Funder) and Impact Community Action Partnership, Inc. an Iowa not-for-profit corporation located at 3226 University Avenue, Des Moines, Iowa 50311 ("Contractor").

WHEREAS, Funder supports Contractor's efforts in reducing the barriers and burdens that its residents in poverty experience; and

WHEREAS, Funder is interested in providing financial support to this work to ensure resources are available; and

WHEREAS, Contractor is the designated Community Action Agency for the Funder's area tasked with providing said services.

NOW, THEREFORE, BE IT AGREED:

1. The Contractor shall provide the following services to Funder in Contractor's facilities for a period extending from July 1, 2024, through the end of the month June, 2024:

A. Poverty related services including but not limited to, Energy Assistance, Food and/or Personal Pantry services, Housing supports and other localized services based on Contractor's regular Community Needs Assessments.
B. Contractor will report on the status of services at least annually with a summary of households receiving assistance.

2. The Contractor shall be paid for the above described services as follows: $2,500 to be invoiced to the Funder on July 1.

3. This contract may be terminated for the following reasons with only a time-based prorate portion deemed due and payable to Contractor:

B. Unsatisfactory performance by the Contractor; or
C. Without cause by written notification from one party to the other party with 30-day notice.

4. The Contractor shall indemnify, defend, save and hold the Funder, its officers, employees and agents, harmless from any claim or lawsuit occurring in the course of the Contractor's provision of services under this Agreement. Funder shall indemnify, defend, save and hold the Contractor, its officers, employees and agents, harmless from any claim or lawsuit arising out of or associated with Funder's actions related to this Agreement.

5. This Agreement contains the whole agreement of the parties and any modification thereof shall be in writing signed by the parties hereto. This agreement shall be in full force and effect upon being executed by the parties hereto.

6. The parties shall be and act as independent contractors, and under no circumstances shall this Agreement be construed as one of agency, partnership or joint venture between Funder and

Contractor.

7. Contractor, at its sole expense, shall comply with all local, State and Federal laws and shall at its sole expense, obtain all licenses or permits which may be required for the conduct of its business within the terms of this Agreement. Contractor agrees to comply with all applicable federal, state, and local civil rights laws, specifically free from discrimination on the basis of age, race, religion, creed, color, sex, national origin, ancestry, sexual orientation, disability, familial status, or gender identity.

8. Notices required under this Agreement may be delivered by regular U.S. Mail or by certified mail, return receipt requested, delivered to the addresses below or via email.

In Witness Whereof, the parties hereto have caused this Agreement to be executed.

FUNDER	CONTRACTOR
_____	_____
	Anne Bacon, CEO IMPACT Community Action Partnership, Inc 3226 University Ave. Des Moines, IA 50311

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM:

SUBJECT: Approve Resolution No. 2024-17 - A Resolution Setting Time and Place for a Public Hearing for the Purpose of Considering the Proposed Property Tax Levy for the City's Proposed FY 2024-2025 Budget and the Proposed Tax Rate Levy to be Included in the Turth-in-Taxation Statement

GENERAL INFORMATION

SUMMARY

ATTACHMENTS

1. Resolution No. 2024-17 - A Resolution Setting Date for Public Hearing to consider the FY25 Property Tax Levy
2. PROPOSED PROPERTY TAX LEVY
3. DOM New Property Tax Form Explanation
4. DOM Example Proposed Levy Notice

RESOLUTION NO. 2024-17

A RESOLUTION SETTING TIME AND PLACE FOR A PUBLIC HEARING FOR THE PURPOSE OF CONSIDERING THE PROPOSED PROPERTY TAX LEVY FOR THE CITY'S PROPOSED FISCAL YEAR 2024-2025 BUDGET AND THE PROPOSED TAX RATE LEVY TO BE INCLUDED IN THE TRUTH-IN-TAXATION STATEMENT

WHEREAS, the City Council of the City of Windsor Heights is preparing the annual budget for the Fiscal Year 2024-2025; and

WHEREAS, a public hearing shall be held on the proposed Property Tax Levy, where any resident or taxpayer of the City may present to the City Council objections or arguments in favor of the tax dollars before the budget is adopted and certified to the County Auditor; and

WHEREAS, the City Council must include a Proposed Tax Rate Levy amount for the Truth-in-Taxation Statements to be mailed to city residents by the Polk County Auditor on or before March 20, 2024. The amount of the Proposed Tax Rate Levy that shall be included is $14.23846; and

WHEREAS, interested residents or taxpayers having comments for or against the proposed Property Tax Levy may appear and be heard at the public hearing at the City Council Meeting on April 1, 2024, at 6:00 p.m. at 1133 66th Street, Windsor Heights, IA 50324 or on Zoom:
https://us02web.zoom.us/j/7832856334
Meeting ID: 783 285 6334

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Windsor Heights, Iowa, that this confirms that the City Council orders the publication of a notice of public hearing pertaining to the Proposed Property Tax Levy. They also authorize the Finance Director to inform the Polk County Auditor that the Proposed Tax Rate Levy of $14.23846 should be included in Truth-in-Taxation Statement.

The City Clerk shall post notice of said hearing, which posting shall be at the three public places in said City which have been permanently designated by ordinance, such notice being in the form attached to this resolution, and such posting shall not be less than ten (10) days nor more than twenty (20) days prior to the date set for the hearing. A notice shall also be posted on the city website and social media accounts.

Passed and approved this 4th day of March, 2024.

_____
Mike Jones, Mayor

ATTEST:

_____
Adam Strait, City Clerk

CITY NAME: WINDSOR HEIGHTS

NOTICE OF PUBLIC HEARING - CITY OF WINDSOR HEIGHTS - PROPOSED PROPERTY TAX LEVY
Fiscal Year July 1, 2024 - June 30, 2025

CITY #: 77-728

The City Council will conduct a public hearing on the proposed Fiscal Year City property tax levy as follows:
Meeting Date: 4/1/2024 Meeting Time: 06:00 PM Meeting Location: 1133 66th Street, Windsor Heights, IA 50324
At the public hearing any resident or taxpayer may present objections to, or arguments in favor of the proposed tax levy. After the hearing of the proposed tax levy, the City Council will publish notice and hold a hearing on the proposed city budget.

City Website (if available)
www.windsorheights.org

City Telephone Number
(515) 279-3662

Iowa Department of Management	Current Year Certified Property Tax 2023 - 2024	Budget Year Effective Property Tax 2024 - 2025	Budget Year Proposed Property Tax 2024 - 2025
Taxable Valuations for Non-Debt Service	250,204,096	258,423,837	258,423,837
Consolidated General Fund	2,121,000	2,121,000	2,147,724
Operation & Maintenance of Public Transit	0	0	0
Aviation Authority	0	0	0
Liability, Property & Self Insurance	117,701	117,701	173,632
Support of Local Emergency Mgmt. Comm.	0	0	9,425
Unified Law Enforcement	0	0	0
Police & Fire Retirement	0	0	0
FICA & IPERS (If at General Fund Limit)	325,583	325,583	277,813
Other Employee Benefits	201,209	201,209	198,438
Capital Projects (Capital Improv. Reserve)	0	0	0
Taxable Value for Debt Service	307,716,441	327,656,503	327,656,503
Debt Service	834,669	834,669	1,106,276
CITY REGULAR TOTAL PROPERTY TAX	3,600,162	3,600,162	3,913,308
CITY REGULAR TAX RATE	13.76541	13.24878	14.23846
Taxable Value for City Ag Land	0	0	0
Ag Land	0	0	0
CITY AG LAND TAX RATE	0.00000	0.00000	0.00000
Tax Rate Comparison-Current VS. Proposed			
Residential property with an Actual/Assessed Value of $100,000	**Current Year Certified 2023/2024**	**Budget Year Proposed 2024/2025**	**Percent Change**
City Regular Resident	752	660	-12.23
Commercial property with an Actual/Assessed Value of $100,000	**Current Year Certified 2023/2024**	**Budget Year Proposed 2024/2025**	**Percent Change**
City Regular Commercial	752	660	-12.23

Note: Actual/Assessed Valuation is multiplied by a Rollback Percentage to get to the Taxable Valuation to calculate Property Taxes. Residential and Commercial properties have the same Rollback Percentage at $100,000 Actual/Assessed Valuation.

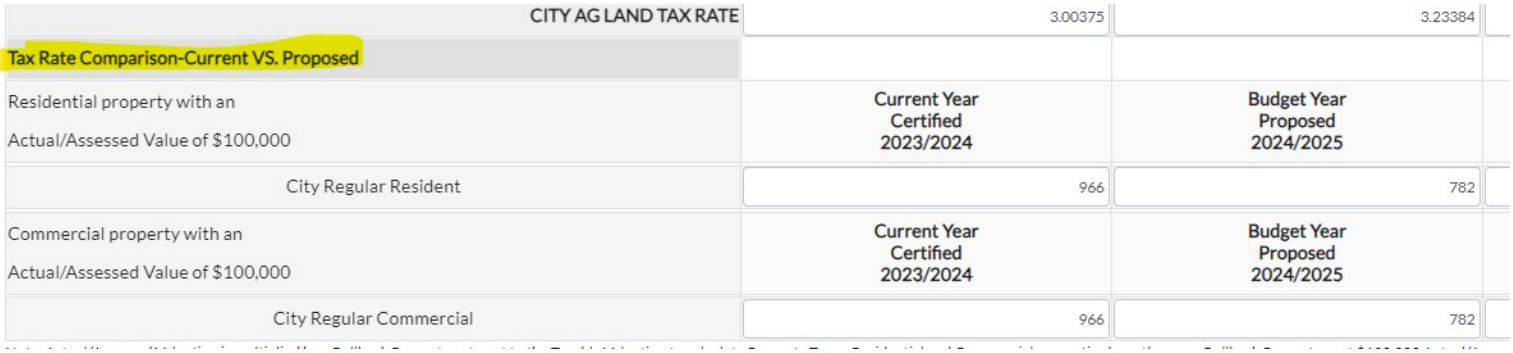
Reasons for tax increase if proposed exceeds the current:
The Debt Service Levy will be increased to pay for infrastructure projects.

Rachelle Swisher

From: Rachelle Swisher
Sent: Thursday, February 29, 2024 9:32 AM
To: Rachelle Swisher
Subject: FW: Explanation of Examples - Proposed Tax Hearing Notice
Attachments: Example_Proposed_Levy_Notice.pdf

Good Afternoon -

I have had several cities reach out to me about the percentages showing at the bottom of the Property Tax Hearing Notice on the Proposed Tax Notice page of the budget forms:



CITY AG LAND TAX RATE	3.00375	3.23384
Tax Rate Comparison-Current VS. Proposed		
Residential property with an Actual/Assessed Value of $100,000	Current Year Certified 2023/2024	Budget Year Proposed 2024/2025
City Regular Resident	966	782
Commercial property with an Actual/Assessed Value of $100,000	Current Year Certified 2023/2024	Budget Year Proposed 2024/2025
City Regular Commercial	966	782

Many people have been thinking that the circled percentages are meant to show the growth/reduction of the citywide property tax total from FY24 to FY25. This is not the case. These examples, required under Code of Iowa 24.2A(2), are meant to show an estimate of the change in budgeted taxes to be paid to the city during FY25 on a home or business with an assessed/actual value of 100,000 by applying the actual FY24 and budgeted FY25 city total tax rate. In the example above, the homeowner was estimated to pay the city $966 during FY24 and is budgeted to pay $782 in FY25, which would be a 19.05% decrease. The large decrease percentages that will likely appear in these examples this year are due to the significant drop in residential rollback without a growth in value. The value to be used in each year of the example is statutorily required to remain at 100,000, rather than showing growth from one year to the next. Without showing a growth in assessed/actual value from one year to the next, the large decrease in rollback makes it look as though the taxpayer will see a large decrease in taxes. This amount of decrease will not likely be what actually occurs, as the value of actual property usually increases from year-to-year.

An example of how to calculate your total citywide property tax growth is attached. Many cities will show examples with negative growth while calculating a growth in citywide property tax revenues.

Please let me know if you have further questions.

Ted Nellesen
Fiscal & Policy Analyst Senior
State and Local Budgets Division
Department of Management
1007 E. Grand Ave, G13, Des Moines, IA 50319
515-281-3705
ted.nellesen@iowa.gov
dom.iowa.gov

IOWA | Department of Management

CITY NAME: **NOTICE OF PUBLIC HEARING - CITY OF** **- PROPOSED PROPERTY TAX LEVY** **CITY #:**

Fiscal Year July 1, 2024 - June 30, 2025

The City Council will conduct a public hearing on the proposed Fiscal Year City property tax levy as follows:

Meeting Date: **Meeting Time:** **Meeting Location:**

At the public hearing any resident or taxpayer may present objections to, or arguments in favor of the proposed tax levy. After the hearing of the proposed tax levy, the City Council will publish notice and hold a hearing on the proposed city budget.

City Website (if available)
newhartfordia.org

City Telephone Number

Iowa Department of Management	Current Year Certified Property Tax 2023 - 2024	Budget Year Effective Property Tax 2024 - 2025	Budget Year Proposed Property Tax 2024 - 2025
Taxable Valuations for Non-Debt Service	12,435,729	13,266,203	13,266,203
Consolidated General Fund	104,087	104,087	107,805
Operation & Maintenance of Public Transit	0	0	0
Aviation Authority	0	0	0
Liability, Property & Self Insurance	43,120	43,120	43,256
Support of Local Emergency Mgmt. Comm.	0	0	0
Unified Law Enforcement	0	0	0
Police & Fire Retirement	0	0	0
FICA & IPERS (If at General Fund Limit)	14,893	14,893	14,549
Other Employee Benefits	22,785	22,785	23,962
Capital Projects (Capital Improv. Reserve)	0	0	0
Taxable Value for Debt Service	12,435,729	13,266,203	13,266,203
Debt Service	35,037	35,037	34,345
CITY REGULAR TOTAL PROPERTY TAX	219,922	219,922	223,917
CITY REGULAR TAX RATE	17.68466	16.57761	16.87870
Taxable Value for City Ag Land	135,936	126,475	126,475
Ag Land	409	409	380
CITY AG LAND TAX RATE	3.00375	3.23384	3.00375
Tax Rate Comparison-Current VS. Proposed			
Residential property with an Actual/Assessed Value of $100,000	**Current Year Certified 2023/2024**	**Budget Year Proposed 2024/2025**	**Percent Change**
City Regular Resident	966	782	-19.05
Commercial property with an Actual/Assessed Value of $100,000	**Current Year Certified 2023/2024**	**Budget Year Proposed 2024/2025**	**Percent Change**
City Regular Commercial	966	782	-19.05

Note: Actual/Assessed Valuation is multiplied by a Rollback Percentage to get to the Taxable Valuation to calculate Property Taxes. Residential and Commercial properties have the same Rollback Percentage at $100,000 Actual/Assessed Valuation.

Reasons for tax increase if proposed exceeds the current:
explanationOfSignificantIncreasesInTheBudget
-

(FY25 Tax - FY24 Tax) / FY24 Tax x 100

($223,917 - $219,922) / $219,922 =
$3995 / $219,922 =
0.0181655 *100 = 1.82% Growth

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM: Adam Strait, City Clerk

SUBJECT: Approve Resolution No. 2024-18 - A Resolution setting the date for public hearing and additional action on proposal to enter into a General Obligation Corporate Purpose Loan Agreement and to borrow money thereunder in a principal amount not to exceed $10,000,000

GENERAL INFORMATION

SUMMARY

ATTACHMENTS

1. Resolution No. 2024-18 Resolution setting the date for public hearing and additional action on proposal to enter into a General Obligation Corporate P

RESOLUTION NO. 2024-18

Resolution setting the date for public hearing and additional action on proposal to enter into a General Obligation Corporate Purpose Loan Agreement and to borrow money thereunder in a principal amount not to exceed $10,000,000

WHEREAS, the City of Windsor Heights (the "City"), in Polk County, State of Iowa, proposes to enter into a General Obligation Corporate Purpose Loan Agreement (the "Loan Agreement") and to borrow money thereunder in a principal amount not to exceed $10,000,000, pursuant to the provisions of Section 384.24A of the Code of Iowa, for the purpose of paying the cost, to that extent, of (a) constructing street, stormwater drainage, sanitary sewer system, sidewalk and water system improvements; and (b) acquiring and installing street lighting signage and signalization improvements, and it is necessary to fix a date of meeting of the City Council at which it is proposed to take action to enter into the Loan Agreement and to give notice thereof as required by such law;

NOW, THEREFORE, Be It Resolved by the City Council of the City of Windsor Heights, Iowa, as follows:

Section 1. This City Council shall meet on March 18, 2024, at the City Council Chambers at 1133 66th Street, Windsor Heights, Iowa, at 6 o'clock p.m., at which time and place a hearing will be held and proceedings will be instituted and action taken to enter into the Loan Agreement described in the preamble hereof.

Section 2. The City Clerk is hereby directed to give notice of the proposed action on the Loan Agreement setting forth the amount and purpose thereof, the time when and place where the said meeting will be held by publication at least once, not less than four (4) and not more than twenty (20) days before the date of said meeting, in a legal newspaper which has a general circulation in the City. The notice shall be in substantially the following form:

NOTICE OF PROPOSED ACTION TO INSTITUTE PROCEEDINGS TO ENTER INTO A LOAN AGREEMENT AND TO BORROW MONEY THEREUNDER IN A PRINCIPAL AMOUNT NOT TO EXCEED $10,000,000

(GENERAL OBLIGATION)

The City Council of the City of Windsor Heights, Iowa (the "City"), will meet on March 18, 2024, at the City Council Chamber at 1133 66th St, Windsor Heights, Iowa, at 6 o'clock p.m., for the purpose of instituting proceedings and taking action on a proposal to enter into a loan agreement (the "Loan Agreement") and to borrow money thereunder in a principal amount not to exceed $10,000,000 for the purpose of paying the costs, to that extent, of (a) constructing street, stormwater drainage, sanitary sewer system, sidewalk and water system improvements; and (b) acquiring and installing street lighting signage and signalization improvements.

The Loan Agreement is proposed to be entered into pursuant to authority contained in Section 384.24A of the Code of Iowa and will constitute a general obligation of the City.

At that time and place, oral or written objections may be filed or made to the proposal to enter into the Loan Agreement. After receiving objections, the City may determine to enter into the Loan Agreement, in which case, the decision will be final unless appealed to the District Court within fifteen (15) days thereafter.

By order of the City Council of the City of Windsor Heights, Iowa.

Adam Strait
City Clerk

Section 3. Pursuant to Section 1.150-2 of the Income Tax Regulations (the "Regulations") of the Internal Revenue Service, the City declares (a) that it intends to undertake the Projects which are reasonably estimated to cost approximately $10,000,000, (b) that other than (i) expenditures to be paid or reimbursed from sources other than the issuance of bonds, notes or other obligations (the "Bonds"), or (ii) expenditures made not earlier than 60 days prior to the date of this Resolution or a previous intent resolution of the City, or (iii) expenditures amounting to the lesser of $100,000 or 5% of the proceeds of the Bonds, or (iv) expenditures constituting preliminary expenditures as defined in Section 1.150-2(f)(2) of the Regulations, no expenditures for the Projects have heretofore been made by the City and no expenditures will be made by the City until after the date of this Resolution or a prior intent resolution of the City, and (c) that the City reasonably expects to reimburse the expenditures made for costs of the City out of the proceeds of the Bonds. This declaration is a declaration of official intent adopted pursuant to Section 1.150-2 of the Regulations.

Section 4. All resolutions or parts of resolutions in conflict herewith are hereby repealed to the extent of such conflict.

Section 5. This resolution shall be in full force and effect immediately upon its adoption and approval, as provided by law.

Passed and approved March 4, 2024.

_____
Mayor

Attest:

_____
City Clerk

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM: Adam Strait, City Clerk

SUBJECT: Approve Resolution No. 2024-19 - A Resolution setting the date for public hearing and additional action on proposal to enter into General Obligation Park Improvement Loan Agreement and to borrow money thereunder in a principal amount not to exceed $1,300,000

GENERAL INFORMATION

SUMMARY

ATTACHMENTS

1. Resolution No. 2024-19 Resolution setting the date for public hearing and additional action on proposal to enter into General Obligation Park Improvem

RESOLUTION NO. 2024-19

Resolution setting the date for public hearing and additional action on proposal to enter into General Obligation Park Improvement Loan Agreement and to borrow money thereunder in a principal amount not to exceed $1,300,000

WHEREAS, the City of Windsor Heights (the "City"), in Polk County, State of Iowa, pursuant to the provisions of Section 384.24A of the Code of Iowa, proposes to enter into a General Obligation Park Improvement Loan Agreement (the "Loan Agreement") and to borrow money thereunder in a principal amount not to exceed $1,300,000 for the purpose of paying the costs, to that extent, of undertaking improvements to Colby Park (the "Project"), and it is necessary to fix a date of meeting of the City Council at which it is proposed to take action to enter into the Loan Agreement and to give notice thereof as required by such law; and

WHEREAS, following additional action on the Loan Agreement, the City intends to use its borrowing authority thereunder to repurpose unspent proceeds from its prior General Obligation Urban Renewal Bonds, Series 2020B for the funding of the Project;

NOW, THEREFORE, Be It Resolved by the City Council of the City of Windsor Heights, Iowa, as follows:

Section 1. This City Council shall meet on March 18, 2024, at the City Council Chambers at 1133 66th Street, Windsor Heights, Iowa, at 6 o'clock p.m., at which time and place a hearing will be held and proceedings will be instituted and action taken to enter into the Loan Agreement described in the preamble hereof.

Section 2. The City Clerk is hereby directed to give notice of the proposed action on the Loan Agreement setting forth the amount and purpose thereof, the time when and place where the said meeting will be held by publication at least once, not less than four (4) and not more than twenty (20) days before the date of said meeting, in a legal newspaper which has a general circulation in the City. The notice shall be in substantially the following form:

NOTICE OF PROPOSED ACTION TO INSTITUTE PROCEEDINGS TO ENTER INTO A LOAN AGREEMENT AND TO BORROW MONEY THEREUNDER IN A PRINCIPAL AMOUNT NOT TO EXCEED $1,300,000

(GENERAL OBLIGATION)

The City Council of the City of Windsor Heights, Iowa (the "City"), will meet on March 18, 2024, at the City Council Chamber at 1133 66th St, Windsor Heights, Iowa, at 6 o'clock p.m., for the purpose of instituting proceedings and taking action on a proposal to enter into a loan agreement (the "Loan Agreement") and to borrow money thereunder in a principal amount not to exceed $1,300,000 for the purpose of paying the costs, to that extent, of undertaking improvements to Colby Park.

The Loan Agreement is proposed to be entered into pursuant to authority contained in Section 384.24A of the Code of Iowa and will constitute a general obligation of the City.

At that time and place, oral or written objections may be filed or made to the proposal to enter into the Loan Agreement. After receiving objections, the City may determine to enter into the Loan Agreement, in which case, the decision will be final unless appealed to the District Court within fifteen (15) days thereafter.

By order of the City Council of the City of Windsor Heights, Iowa.

Adam Strait
City Clerk

Section 3. Pursuant to Section 1.150-2 of the Income Tax Regulations (the "Regulations") of the Internal Revenue Service, the City declares (a) that it intends to undertake the Project which is reasonably estimated to cost approximately $1,300,000, (b) that other than (i) expenditures to be paid or reimbursed from sources other than the issuance of bonds, notes or other obligations (the "Bonds"), or (ii) expenditures made no earlier than 60 days prior to the date of this Resolution or a previous intent resolution of the City, or (iii) expenditures amounting to the lesser of $100,000 or 5% of the proceeds of the Bonds, or (iv) expenditures constituting preliminary expenditures as defined in Section 1.150-2(f)(2) of the Regulations, no expenditures for the Project has heretofore been made by the City and no expenditures will be made by the City until after the date of this Resolution or a prior intent resolution of the City, and (c) that the City reasonably expects to reimburse the expenditures made for costs of the City out of the proceeds of the Bonds. This declaration is a declaration of official intent adopted pursuant to Section 1.150-2 of the Regulations.

Section 4. All resolutions or parts of resolutions in conflict herewith are hereby repealed to the extent of such conflict.

Section 5. This resolution shall be in full force and effect immediately upon its adoption and approval, as provided by law.

Passed and approved March 4, 2024.

_____
Mayor

Attest:

_____
City Clerk

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM: Justin Ernst, City Engineer

SUBJECT: Approve University Avenue Improvements Project Change Order 25

GENERAL INFORMATION

SUMMARY

ATTACHMENTS

1. LTR-University-CO 25
2. A13.114724 Change Order No.25 - Signed

BOLTON & MENK
Real People. Real Solutions.

430 E Grand Avenue
Suite 101
Des Moines, IA 50309

Ph: (515) 259-9190
Fax: (515) 233-4430
Bolton-Menk.com

February 29, 2024

Adam Plagge
City Administrator
1145 66th Street, Suite 1
Windsor Heights, Iowa 50324

RE: University Avenue Improvements Project
Change Order 25 - Final

Dear Mr. Plagge

Submitted for your approval is Change Order 25 for the above-mentioned project. Change Order 25 includes the final construction quantity adjustment required for contract closeout. The change order finalizes the total contract amount for the project. The approved contract value of $6,991,370.99 will be decreased by $757,714.39 for a total final contract value of $6,233,656.60. Please see Change Order 25 for a full summary of the change items.

Bolton & Menk, Inc. recommends the approval of Change Order 25. Upon approval of Change Order 25, please sign 3 copies in the space provided. Return one executed copy of the change order to our office and one executed copy of the change order to Elder Corporation.

Sincerely,

Bolton & Menk, Inc.

Justin Ernst, P.E.
Project Manager

Enclosure

Bolton & Menk is an equal opportunity employer.

CHANGE ORDER FORM

NO.: 025

Owner:	City of Windsor Heights	Owner's Project No.:	
Engineer:	Bolton & Menk, Inc.	Engineer's Project No.:	A13.114724
Contractor:	Elder Corporation	Contractor's Project No.:	
Project:	PCC Pavement – Replace in the City of Windsor Heights, on University Avenue: From 73rd Street to 63rd Street		
Contract Name:	PCC Pavement – Replace in the City of Windsor Heights, on University Avenue: From 73rd Street to 63rd Street		
Date Issued:	February 26, 2024	Effective Date of Change Order:	February 28, 2024

The Contract is modified as follows upon execution of this Change Order:

Description:

Adjusting project quantities due to project being finalized

Attachments:

Quantity adjustment

Change in Contract Price	**Change in Contract Times**
Original Contract Price: $ 6,743,000.00	Original Contract Times: Substantial Completion: _____ Ready for final payment: _____
Increase from previously approved Change Orders No. 0 to No. 24 $ 248,370.99	_____ _____
Contract Price prior to this Change Order: $ 6,991,370.99	Contract Times prior to this Change Order: Substantial Completion: _____ Ready for final payment: _____
Decrease this Change Order: $ 757,714.39	**Increase** this Change Order: Substantial Completion: _____ Ready for final payment: _____
Contract Price incorporating this Change Order: $ 6,233,656.60	Contract Times with all approved Change Orders: Substantial Completion: _____ Ready for final payment: _____

	Recommended by Engineer (if required)	Accepted by Contractor
By:	Justin Conat	Jeffrey A Chapman
Title:	Principal Engineer	EVP
Date:	2/29/2024	2/28/24

	Authorized by Owner	Approved by Funding Agency (if applicable)
By:		
Title:		
Date:		

Bid Item No	Description	Amount Diff	Unit Price	Cost Difference
2	EXCAVATION, CLASS 10, ROADWAY AND BORROW	88.80	$ 52.00	$ 4,617.60
4	SPECIAL COMPACTION OF SUBGRADE	-10.66	$ 6,100.00	$ (65,026.00)
5	MODIFIED SUBBASE	-25.10	$ 54.00	$ (1,355.40)
6	SHOULDER FINISHING, EARTH	-1.21	$ 600.00	$ (726.00)
7	PATCHES, FULL-DEPTH REPAIR	-1,384.90	$ 118.00	$ (163,418.20)
8	PATCHES BY COUNT (REPAIR)	-5.00	$ 270.00	$ (1,350.00)
9	REMOVAL OF CURB	0.30	$ 3,200.00	$ 960.00
11	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C, CLASS 3I DURABILITY, 8 IN.	-544.10	$ 73.00	$ (39,719.30)
13	PORTLAND CEMENT CONCRETE PAVEMENT SAMPLES	-0.38	$ 7,900.00	$ (2,999.99)
14	HOT MIX ASPHALT STANDARD TRAFFIC, SURFACE COURSE, 1/2 IN. MIX, FRICTION L-3	3.06	$ 58.00	$ 177.47
15	ASPHALT BINDER, PG 64-22S, STANDARD TRAFFIC	-26.15	$ 510.00	$ (13,336.50)
16	TEMPORARY PAVEMENT	69.70	$ 90.00	$ 6,272.99
17	REMOVAL OF CONCRETE FOOTINGS OF LIGHT POLES	-19.00	$ 214.00	$ (4,066.00)
18	REMOVAL OF LIGHT POLES	3.00	$ 720.00	$ 2,160.00
20	MANHOLE, STORM SEWER, SW-401, 48 IN	-3.00	$ 2,700.00	$ (8,100.00)
21	MANHOLE, STORM SEWER, SW-401, 60 IN	-1.00	$ 4,200.00	$ (4,200.00)
25	INTAKE, SW-505	-1.00	$ 3,900.00	$ (3,900.00)
27	MANHOLE ADJUSTMENT, MINOR	-14.00	$ 1,100.00	$ (15,400.00)
28	MANHOLE ADJUSTMENT, MAJOR	15.00	$ 3,100.00	$ 46,500.00
29	CONNECTION TO EXISTING MANHOLE	5.00	$ 1,900.00	$ 9,500.00
30	CONNECTION TO EXISTING INTAKE	6.00	$ 1,900.00	$ 11,400.00
31	SUBDRAIN, PERFORATED PLASTIC PIPE, 4 IN. DIA.	-893.00	$ 16.50	$ (14,734.50)
32	SUBDRAIN, PERFORATED PLASTIC PIPE, 6 IN. DIA.	-14.00	$ 52.00	$ (728.00)
33	SUBDRAIN, PVC, STANDARD, NON-PERFORATED, 6 IN	28.00	$ 48.00	$ 1,344.00
35	SUBDRAIN OUTLET, DR-303	6.00	$ 440.00	$ 2,640.00
37	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 12 IN	-125.00	$ 79.00	$ (9,875.00)
38	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 15 IN	-644.00	$ 81.00	$ (52,164.00)
39	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 18 IN	-151.00	$ 92.00	$ (13,892.00)
40	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 21 IN	-22.00	$ 78.00	$ (1,716.00)
41	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 24 IN	-57.40	$ 87.00	$ (4,993.80)
42	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 30 IN	-52.00	$ 119.00	$ (6,188.00)
43	REMOVE STORM SEWER PIPE LESS THAN OR EQUAL TO 36 IN.	-358.00	$ 29.00	$ (10,382.00)
44	STORM, SEWER ABANDONMENT, FILL AND PLUG, LESS THAN OR EQUAL TO 36 IN. DIA.	-340.00	$ 26.50	$ (9,010.00)
45	EROSION OF STONE	0.05	$ 83.00	$ 4.14
46	REMOVAL OF PAVEMENT	50.10	$ 10.75	$ 538.57
47	REMOVAL OF INTAKES AND UTILITY ACCESSES	-12.00	$ 920.00	$ (11,040.00)

48	REMOVAL OF SIDEWALK	-52.13	$	8.00	$ (417.04)
49	SIDEWALK, P.C. CONCRETE, 4 IN	-141.20	$	45.00	$ (6,354.00)
50	SIDEWALK, P.C. CONCRETE, 6 IN	-97.70	$	43.00	$ (4,201.10)
53	CURB AND GUTTER, P.C. CONCRETE, 2.0 FT	59.67	$	36.00	$ 2,148.00
54	DRIVEWAY, P.C. CONCRETE, 6 IN	112.40	$	25.50	$ 2,866.20
55	REMOVAL OF PAVED DRIVEWAY	20.00	$	18.50	$ 370.00
56	LIGHTING POLES	2.00	$	7,900.00	$ 15,800.00
57	REMOVE AND REINSTALL SIGN AS PER PLAN	-9.00	$	158.00	$ (1,422.00)
58	REMOVAL OF TYPE A SIGN ASSEMBLY	-6.00	$	105.00	$ (630.00)
59	PERFORATED SQUARE STEEL TUBE POSTS	30.00	$	16.00	$ 480.00
60	PERFORATED SQUARE STEEL TUBE POST ANCHOR, BREAK-AWAY SOIL INSTALLATION	3.00	$	53.00	$ 159.00
61	TYPE A SIGNS, SHEET ALUMINUM	10.50	$	10.50	$ 110.25
63	PAINTED PAVEMENT MARKINGS, DURABLE	84.71	$	142.00	$ 12,028.82
64	PAINTED SYMBOLS AND LEGENDS, DURABLE	2.00	$	147.00	$ 294.00
66	TEMPORARY LANE SEPARATOR SYSTEM	-3,375.00	$	10.50	$ (35,437.50)
67	PORTABLE DYNAMIC MESSAGE SIGN (PDMS)	21.00	$	84.00	$ 1,764.00
69	REPLACEMENT OF UNSUITABLE BACKFILL MATERIAL	-94.29	$	35.00	$ (3,300.00)
70	WATER SERVICE CURB STOP AND BOX, WATER SERVICE CURB STOP AND BOX	-13.00	$	2,800.00	$ (36,400.00)
73	('CUBIC YARDS' ITEM) STRUCTURAL SOIL MIX	-24.00	$	260.00	$ (6,240.00)
75	('EACH' ITEM) 10 INCH WATERMAIN ALTERATION- BUS SHELTER	-1.00	$	7,300.00	$ (7,300.00)
77	('EACH' ITEM) BIKE RACK	-2.00	$	1,100.00	$ (2,200.00)
82	('EACH' ITEM) GFCI (INCL. PEDESTAL AND ENCLOSURE)	-10.00	$	600.00	$ (6,000.00)
83	('EACH' ITEM) HH-1	2.00	$	740.00	$ 1,480.00
87	('EACH' ITEM) PERENNIAL GROUND COVER (1 GALLON)	-52.00	$	9.50	$ (494.00)
88	('EACH' ITEM) POLE BASE FOOTING (TYPES S1 S2 S3 & S4 FIXTURES	2.00	$	3,500.00	$ 7,000.00
92	('EACH' ITEM) RELOCATE HYDRANT ASSEMBLY	-1.00	$	4,100.00	$ (4,100.00)
95	('EACH' ITEM) SINGLE HEAD RDWY LIGHT (TYPE S6 FIXTURE)	-8.00	$	620.00	$ (4,960.00)
98	('EACH' ITEM) TREE GRATE AND FRAME	-8.00	$	3,200.00	$ (25,600.00)
99	('EACH' ITEM) TYPE 1 WATERMAIN ALTERATION	-4.00	$	6,100.00	$ (24,400.00)
101	('EACH' ITEM) WATER SERVICE CURB STOP & BOX ADJUSTMENT	-19.00	$	2,800.00	$ (53,200.00)
103	('LINEAR FEET' ITEM) #10 AWG CU	-454.00	$	2.50	$ (1,135.00)
104	('LINEAR FEET ITEM') #2 AWG CU	-4,005.00	$	5.25	$ (21,026.25)
106	('LINEAR FEET' ITEM) #4 AWG CU	-159.00	$	4.75	$ (755.25)
107	('LINEAR FEET' ITEM) #6 AWG CU	-171.00	$	4.25	$ (726.75)
108	('LINEAR FEET' ITEM) #8 AWG CU	-5,205.00	$	4.00	$ (20,820.00)
109	('LINEAR FEET' ITEM) CONCRETE BAND 8 INCH WIDTH	41.50	$	87.00	$ 3,610.50
110	('LINEAR FEET' ITEM) LIMESTONE EDGER	-26.40	$	26.50	$ (699.59)
111	('LINEAR FEET' ITEM) TRENCHING CONDUIT	-9,207.00	$	12.25	$ (112,785.75)

112	('SQUARE YARDS' ITEM) CONCRETE UNIT PAVERS	-13.50	$	247.00	$ (3,334.50)
113	('TONS' ITEM) FOUNDATION ROCK	-10.00	$	77.00	$ (770.00)
114	('TONS' ITEM) NO. 57 STONE (AGGREGATE CHAMBER)	1.83	$	90.00	$ 164.70
115	('TONS' ITEM) NO. 8 STONE (CHOCKER LAYER)	1.11	$	77.00	$ 85.47
118	SLOPE PROTECTION, WOOD EXCELSIOR MAT	-107.29	$	9.50	$ (1,019.25)
119	STABILIZED CONSTRUCTION ENTRANCE, EC-303	-130.00	$	76.00	$ (9,880.00)
120	PERIMETER AND SLOP SEDIMENT CONTROL DEVICE, 9 IN. DIA.	-4,010.00	$	2.00	$ (8,020.00)
121	REMOVAL OF PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE	-4,010.00	$	0.50	$ (2,005.00)
122	OPEN-THROAT CURB INTAKE SEDIMENT FILTER, EC-602	-8.00	$	10.50	$ (84.00)
123	MAINTENANCE OF OPEN-THROAT CURB INTAKE SEDIMENT FILTER	-4.00	$	26.50	$ (106.00)
124	REMOVAL OF OPEN-THROAT CURB INTAKE SEDIMENT FILTER	-4.00	$	26.50	$ (106.00)
125	GRATE INTAKE SEDIMENT FILTER BAG	-9.00	$	205.00	$ (1,845.00)
126	MAINTENANCE OF GRATE INTAKE SEDIMENT FILTER BAG	-9.00	$	26.50	$ (238.50)
127	REMOVAL OF GRATE INTAKE SEDIMENT FILTER BAG	-43.00	$	10.50	$ (451.50)
129	MOBILIZATION, EMERGENCY EROSIONS CONTROL	-1.00	$	1,000.00	$ (1,000.00)
131	TREES	-5.00	$	470.00	$ (2,350.00)
132	MODIFIED SUBBASE	67.30	$	60.00	$ 4,038.00
133	RECREATIONAL TRAIL, PORTLAND CEMENT CONCRETE, 6 IN	-181.20	$	51.00	$ (9,241.19)
8001	SUBGRADE STABILIZATION MATERIAL, POLYMER GIRD	1,068.90	$	3.85	$ 4,115.26
8002	PAINTED PAVEMENT MARKINGS, WATERBORNE OR SOLVENT-BASED	36.60	$	75.00	$ 2,745.00
8003	SAW PAVEMENT (FULL DEPTH)	436.00	$	4.05	$ 1,765.80
8006	TEMPORARY TRAFFIC CONTROL WINTER MAINTENANCE	-3.00	$	385.00	$ (1,155.00)
8011	PATCHES, PARTIAL-DEPTH P.C.C. FINISH	-1.00	$	26.70	$ (26.70)
8012	PARTIAL DEPTH PCC JOINT AND CRACK REPAIR PATCHES	271.00	$	26.70	$ 7,235.70
8013	GROOVES CUT FOR PAVEMENT MARKINGS	-58.12	$	27.50	$ (1,598.30)
8014	GROOVES CUT FOR SYMBOLS AND LEGENDS	24.00	$	99.00	$ 2,376.00
8999	STOCKPILED MATERIAL	-1.00	$	32,310.00	$ (32,310.00)
			Total		**$ (757,714.39)**

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM: Justin Ernst, City Engineer

SUBJECT: Approve University Avenue Improvements Project Pay Request 18

GENERAL INFORMATION

SUMMARY

ATTACHMENTS

1. LTR-University-Pay App 18-Final
2. University Avenue_Pay Request 18 - Signed

BOLTON & MENK
Real People. Real Solutions.

430 E Grand Avenue
Suite 101
Des Moines, IA 50309

Ph: (515) 259-9190
Fax: (515) 233-4430
Bolton-Menk.com

February 29, 2024

Adam Plagge
City Administrator
1145 66th Street, Suite 1
Windsor Heights, Iowa 50324

RE: University Avenue Improvements Project
Pay Request 18 -Final

Dear Mr. Plagge

Submitted for your approval is Pay Request 18 for the above-mentioned project. Pay Request 18 is for a total payment of $30,000.00. The final total value completed is $6,233,656.60. This pay request releases all retainage. The project has been completed and has been accepted by the City. Please see Pay Request 18 for a full summary of the items completed that are included in this payment.

Bolton & Menk, Inc. recommends the approval of Pay Request 18. Upon approval of Pay Request 18, please sign 3 copies in the space provided. Return one executed copy of the pay request to our office and one executed copy of the pay request to Elder Corporation with payment per Iowa Code Chapter 573.

Please let me know if you have any questions.

Sincerely,

Bolton & Menk, Inc.

Justin Ernst, P.E.
Project Manager

Enclosure

H:\WAUKEE_CI_IA\0A1124531\7_Construction\D_Pay Applications

Bolton & Menk is an equal opportunity employer.

CONTRACTOR'S PAY REQUEST		DISTRIBUTION:
University Avenue		CONTRACTOR (1)
City of Windsor Heights, Iowa		OWNER (1)
Windsor Heights, Iowa		ENGINEER (1)
BMI PROJECT NO.A13.114724	WORK COMPLETED THROUGH NOVEMBER 13, 2023	BONDING CO. (1)
AMOUNT BID PLUS APPROVED CHANGE ORDERS		$6,233,656.60
TOTAL, COMPLETED WORK TO DATE		$6,233,656.60
RETAINED PERCENTAGE (	0%)	$0.00
TOTAL AMOUNT OF OTHER PAYMENTS OR (DEDUCTIONS)		$0.00
NET AMOUNT DUE TO CONTRACTOR TO DATE		$6,233,656.60
TOTAL AMOUNT PAID ON PREVIOUS ESTIMATES		$6,203,656.60
PAY CONTRACTOR AS ESTIMATE NO.	18 -FINAL	$30,000.00

Certificate for Final Payment

I hereby certify that, to the best of my knowledge and belief, all items quantities and prices of work and material shown on this Estimate are correct and that all work has been performed in full accordance with the terms and conditions of the Contract for this project between the Owner and the undersigned Contractor, and as amended by any authorized changes, and that the foregoing is a true and correct statement of the amount for the Final Estimate, that applicable provisions of the Iowa Adminstrative Code have been complied with and that all claims against me by reason of the Contract have been paid or satisfactorily secured.

Contractor: Elder Corporation
5088 E University Avenue
Pleasant Hill, IA 50327

By _____ EVP
Name Title

Date 2/28/24

CHECKED AND APPROVED AS TO QUANTITIES AND AMOUNT:
ENGINEER: BOLTON & MENK, INC., 430 E Grand Avenue, Ste 101, Des Moines, IA 50309

By _____, PROJECT ENGINEER

Date 2/29/2024

APPROVED FOR PAYMENT:
OWNER:

By _____
Name Title

And _____
Name Title

Partial Pay Estimate No.: *18 - FINAL*

University Avenue

City of Windsor Heights, Iowa

Windsor Heights, Iowa

BMI PROJECT NO.A13.114724 WORK COMPLETED THROUGH DATE NOVEMBER 13, 2023

ITEM NO.	SUDAS REF NO.	ITEM	UNIT PRICE	AS BID			PREVIOUS ESTIMATE			COMPLETED TO DATE		
				ESTIMATED QUANTITY		ESTIMATED AMOUNT	ESTIMATED QUANTITY		ESTIMATED AMOUNT	ESTIMATED QUANTITY		ESTIMATED AMOUNT
1	0	CLEARING AND GRUBBING	$172.00	29	UNIT	$4,988.00	29.00	UNIT	$4,988.00	29.00	UNIT	$4,988.00
2	0	EXCAVATION, CLASS 10, ROADWAY AND BORROW	$52.00	3037.8	CY	$157,965.60	3037.80	CY	$157,965.60	3,037.80	CY	$157,965.60
3	0	TOPSOIL, FURNISH AND SPREAD	$37.00	1300	CY	$48,100.00	1300.00	CY	$48,100.00	1,300.00	CY	$48,100.00
4	0	SPECIAL COMPACTION OF SUBGRADE	$6,100.00	5.56	STA	$33,916.00	5.56	STA	$33,916.00	5.56	STA	$33,916.00
5	0	MODIFIED SUBBASE	$54.00	2174.9	CY	$117,444.60	2174.90	CY	$117,444.60	2,174.90	CY	$117,444.60
6	0	SHOULDER FINISHING, EARTH	$600.00	31.29	STA	$18,774.00	31.29	STA	$18,774.00	31.29	STA	$18,774.00
7	0	PATCHES, FULL-DEPTH REPAIR	$118.00	2004.9	SY	$236,578.20	2004.90	SY	$236,578.20	2,004.90	SY	$236,578.20
8	0	PATCHES BY COUNT (REPAIR)	$270.00	24	EACH	$6,480.00	24.00	EACH	$6,480.00	24.00	EACH	$6,480.00
9	0	REMOVAL OF CURB	$3,200.00	1.2	STA	$3,840.00	1.20	STA	$3,840.00	1.20	STA	$3,840.00
10	0	PAVEMENT SCARIFICATION	$6.50	1873.3	SY	$12,176.45	1873.30	SY	$12,176.45	1,873.30	SY	$12,176.45
11	0	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS	$73.00	11178	SY	$816,001.30	11178.10	SY	$816,001.30	11,178.10	SY	$816,001.30
12	0	MEDIAN, P.C. CONCRETE, 6 IN	$129.00	13	SY	$1,677.00	13.00	SY	$1,677.00	13.00	SY	$1,677.00
13	0	PORTLAND CEMENT CONCRETE PAVEMENT SAMPLES	$7,900.00	0.6203	LS	$4,900.00	0.62	LS	$4,900.00	0.62	LS	$4,900.00
14	0	HOT MIX ASPHALT STANDARD TRAFFIC, SURFACE COURSE, 1/2 IN. MIX, FRICT	$58.00	1395.3	TON	$80,925.08	1395.26	TON	$80,925.08	1,395.26	TON	$80,925.08
15	0	ASPHALT BINDER, PG 64-22S, STANDARD TRAFFIC	$510.00	57.85	TON	$29,503.50	57.85	TON	$29,503.50	57.85	TON	$29,503.50
16	0	TEMPORARY PAVEMENT	$90.00	569.7	SY	$51,273.00	569.70	SY	$51,273.00	569.70	SY	$51,273.00
17	0	REMOVAL OF CONCRETE FOOTINGS OF LIGHT POLES	$214.00	49	EACH	$10,486.00	49.00	EACH	$10,486.00	49.00	EACH	$10,486.00
18	0	REMOVAL OF LIGHT POLES	$720.00	49	EACH	$35,280.00	49.00	EACH	$35,280.00	49.00	EACH	$35,280.00
19	0	MODULAR BLOCK RETAINING WALL	$84.00	150	SF	$12,600.00	150.00	SF	$12,600.00	150.00	SF	$12,600.00
20	0	MANHOLE, STORM SEWER, SW-401, 48 IN	$2,700.00	7	EACH	$18,900.00	7.00	EACH	$18,900.00	7.00	EACH	$18,900.00
21	0	MANHOLE, STORM SEWER, SW-401, 60 IN	$4,200.00	6	EACH	$25,200.00	6.00	EACH	$25,200.00	6.00	EACH	$25,200.00
22	0	MANHOLE, STORM SEWER, SW-401, 72 IN	$5,400.00	1	EACH	$5,400.00	1.00	EACH	$5,400.00	1.00	EACH	$5,400.00
23	0	INTAKE, SW-501	$2,500.00	3	EACH	$7,500.00	3.00	EACH	$7,500.00	3.00	EACH	$7,500.00
24	0	INTAKE, SW-503	$4,000.00	2	EACH	$8,000.00	2.00	EACH	$8,000.00	2.00	EACH	$8,000.00
25	0	INTAKE, SW-505	$3,900.00	15	EACH	$58,500.00	15.00	EACH	$58,500.00	15.00	EACH	$58,500.00
26	0	INTAKE, SW-506	$7,800.00	3	EACH	$23,400.00	3.00	EACH	$23,400.00	3.00	EACH	$23,400.00
27	0	MANHOLE ADJUSTMENT, MINOR	$1,100.00	43	EACH	$47,300.00	43.00	EACH	$47,300.00	43.00	EACH	$47,300.00
28	0	MANHOLE ADJUSTMENT, MAJOR	$3,100.00	22	EACH	$68,200.00	22.00	EACH	$68,200.00	22.00	EACH	$68,200.00
29	0	CONNECTION TO EXISTING MANHOLE	$1,900.00	7	EACH	$13,300.00	7.00	EACH	$13,300.00	7.00	EACH	$13,300.00
30	0	CONNECTION TO EXISTING INTAKE	$1,900.00	7	EACH	$13,300.00	7.00	EACH	$13,300.00	7.00	EACH	$13,300.00
31	0	SUBDRAIN, PERFORATED PLASTIC PIPE, 4 IN. DIA.	$16.50	2590	LF	$42,735.00	2590.00	LF	$42,735.00	2,590.00	LF	$42,735.00
32	0	SUBDRAIN, PERFORATED PLASTIC PIPE, 6 IN. DIA.	$52.00	24	LF	$1,248.00	24.00	LF	$1,248.00	24.00	LF	$1,248.00
33	0	SUBDRAIN, PVC, STANDARD, NON-PERFORATED, 6 IN	$48.00	45	LF	$2,160.00	45.00	LF	$2,160.00	45.00	LF	$2,160.00
34	0	SUBDRAIN RISER, 6 IN., AS PER PLAN	$670.00	13	EACH	$8,710.00	13.00	EACH	$8,710.00	13.00	EACH	$8,710.00
35	0	SUBDRAIN OUTLET, DR-303	$440.00	19	EACH	$8,360.00	19.00	EACH	$8,360.00	19.00	EACH	$8,360.00
36	0	STORM SEWER GRAVITY MAIN, TRENCHED, POLYVINYL CHLORIDE PIPE (PVC),	$45.00	16	LF	$720.00	16.00	LF	$720.00	16.00	LF	$720.00
37	0	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RC	$79.00	30	LF	$2,370.00	30.00	LF	$2,370.00	30.00	LF	$2,370.00
38	0	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RC	$81.00	359	LF	$29,079.00	359.00	LF	$29,079.00	359.00	LF	$29,079.00
39	0	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RC	$92.00	216	LF	$19,872.00	216.00	LF	$19,872.00	216.00	LF	$19,872.00
40	0	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RC	$78.00	10	LF	$780.00	10.00	LF	$780.00	10.00	LF	$780.00
41	0	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RC	$87.00	272.6	LF	$23,716.20	272.60	LF	$23,716.20	272.60	LF	$23,716.20
42	0	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RC	$119.00	282	LF	$33,558.00	282.00	LF	$33,558.00	282.00	LF	$33,558.00
43	0	REMOVE STORM SEWER PIPE LESS THAN OR EQUAL TO 36 IN.	$29.00	1356	LF	$39,324.00	1356.00	LF	$39,324.00	1,356.00	LF	$39,324.00
44	0	STORM, SEWER ABANDONMENT, FILL AND PLUG, LESS THAN OR EQUAL TO 3	$26.50	63	LF	$1,669.50	63.00	LF	$1,669.50	63.00	LF	$1,669.50
45	0	EROSION OF STONE	$83.00	6.05	TON	$502.15	6.05	TON	$502.15	6.05	TON	$502.15
46	0	REMOVAL OF PAVEMENT	$10.75	14201	SY	$152,661.83	14201.10	SY	$152,661.83	14,201.10	SY	$152,661.83
47	0	REMOVAL OF INTAKES AND UTILITY ACCESSES	$920.00	32	EACH	$29,440.00	32.00	EACH	$29,440.00	32.00	EACH	$29,440.00

Partial Pay Estimate No.: *18 - FINAL*

University Avenue

City of Windsor Heights, Iowa

Windsor Heights, Iowa

BMI PROJECT NO.A13.114724 WORK COMPLETED THROUGH DATE NOVEMBER 13, 2023

ITEM NO.	SUDAS REF NO.	ITEM	UNIT PRICE	AS BID		PREVIOUS ESTIMATE		COMPLETED TO DATE	
				ESTIMATED QUANTITY	ESTIMATED AMOUNT	ESTIMATED QUANTITY	ESTIMATED AMOUNT	ESTIMATED QUANTITY	ESTIMATED AMOUNT
48	0	REMOVAL OF SIDEWALK	$8.00	3149.2 SY	$25,193.36	3149.17 SY	$25,193.36	3,149.17 SY	$25,193.36
49	0	SIDEWALK, P.C. CONCRETE, 4 IN	$45.00	1402.5 SY	$63,112.50	1402.50 SY	$63,112.50	1,402.50 SY	$63,112.50
50	0	SIDEWALK, P.C. CONCRETE, 6 IN	$43.00	288.6 SY	$12,409.80	288.60 SY	$12,409.80	288.60 SY	$12,409.80
51	0	SIDEWALK, REINFORCED P.C. CONCRETE, 6 IN	$64.00	38 SY	$2,432.00	38.00 SY	$2,432.00	38.00 SY	$2,432.00
52	0	DETECTABLE WARNINGS	$86.00	855 SF	$73,530.00	855.00 SF	$73,530.00	855.00 SF	$73,530.00
53	0	CURB AND GUTTER, P.C. CONCRETE, 2.0 FT	$36.00	4681.1 LF	$168,518.40	4681.07 LF	$168,518.40	4,681.07 LF	$168,518.40
54	0	DRIVEWAY, P.C. CONCRETE, 6 IN	$25.50	856.1 SY	$21,830.55	856.10 SY	$21,830.55	856.10 SY	$21,830.55
55	0	REMOVAL OF PAVED DRIVEWAY	$18.50	550.3 SY	$10,180.55	550.30 SY	$10,180.55	550.30 SY	$10,180.55
56	0	LIGHTING POLES	$7,900.00	38 EACH	$300,200.00	38.00 EACH	$300,200.00	38.00 EACH	$300,200.00
57	0	REMOVE AND REINSTALL SIGN AS PER PLAN	$158.00	18 EACH	$2,844.00	18.00 EACH	$2,844.00	18.00 EACH	$2,844.00
58	0	REMOVAL OF TYPE A SIGN ASSEMBLY	$105.00	27 EACH	$2,835.00	27.00 EACH	$2,835.00	27.00 EACH	$2,835.00
59	0	PERFORATED SQUARE STEEL TUBE POSTS	$16.00	290 LF	$4,640.00	290.00 LF	$4,640.00	290.00 LF	$4,640.00
60	0	PERFORATED SQUARE STEEL TUBE POST ANCHOR, BREAK-AWAY SOIL INSTAL	$53.00	29 EACH	$1,537.00	29.00 EACH	$1,537.00	29.00 EACH	$1,537.00
61	0	TYPE A SIGNS, SHEET ALUMINUM	$10.50	251.5 SF	$2,640.75	251.50 SF	$2,640.75	251.50 SF	$2,640.75
62	0	TRAFFIC SIGNALIZATION	$572,762.64	1 LS	$572,762.64	1.00 LS	$572,762.64	1.00 LS	$572,762.64
63	0	PAINTED PAVEMENT MARKINGS, DURABLE	$142.00	321.01 STA	$45,583.42	321.01 STA	$45,583.42	321.01 STA	$45,583.42
64	0	PAINTED SYMBOLS AND LEGENDS, DURABLE	$147.00	63 EACH	$9,261.00	63.00 EACH	$9,261.00	63.00 EACH	$9,261.00
65	0	TRAFFIC CONTROL	$55,844.24	1 LS	$55,844.24	1.00 LS	$55,844.24	1.00 LS	$55,844.24
66	0	TEMPORARY LANE SEPARATOR SYSTEM	$10.50	520 LF	$5,460.00	520.00 LF	$5,460.00	520.00 LF	$5,460.00
67	0	PORTABLE DYNAMIC MESSAGE SIGN (PDMS)	$84.00	221 CDAY	$18,564.00	221.00 CDAY	$18,564.00	221.00 CDAY	$18,564.00
68	0	MOBILIZATION	$698,788.15	1 LS	$698,788.15	1.00 LS	$698,788.15	1.00 LS	$698,788.15
69	0	REPLACEMENT OF UNSUITABLE BACKFILL MATERIAL	$35.00	205.71 CY	$7,200.00	205.71 CY	$7,200.00	205.71 CY	$7,200.00
70	0	WATER SERVICE CURB STOP AND BOX, WATER SERVICE CURB STOP AND BOX	$2,800.00	7 EACH	$19,600.00	7.00 EACH	$19,600.00	7.00 EACH	$19,600.00
71	0	VALVE BOX EXTENSION OR ADJUSTMENT	$480.00	40 EACH	$19,200.00	40.00 EACH	$19,200.00	40.00 EACH	$19,200.00
72	0	('CUBIC YARDS' ITEM) ENGINEERED SOIL MIX (BIOCELLS)	$70.00	25 CY	$1,750.00	25.00 CY	$1,750.00	25.00 CY	$1,750.00
73	0	('CUBIC YARDS' ITEM) STRUCTURAL SOIL MIX	$260.00	291 CY	$75,660.00	291.00 CY	$75,660.00	291.00 CY	$75,660.00
74	0	('CUBIC YARDS' ITEM) TOPSOIL COMPOST AMENDED (PLANTING BEDS)	$61.00	500 CY	$30,500.00	500.00 CY	$30,500.00	500.00 CY	$30,500.00
75	0	('EACH' ITEM) 10 INCH WATERMAIN ALTERATION- BUS SHELTER	$7,300.00	0 EACH	$0.00	0.00 EACH	$0.00	0.00 EACH	$0.00
76	0	('EACH' ITEM) 6 FOOT BENCH	$2,600.00	8 EACH	$20,800.00	8.00 EACH	$20,800.00	8.00 EACH	$20,800.00
77	0	('EACH' ITEM) BIKE RACK	$1,100.00	10 EACH	$11,000.00	10.00 EACH	$11,000.00	10.00 EACH	$11,000.00
78	0	('EACH' ITEM) BULBS	$2.00	1334 EACH	$2,668.00	1334.00 EACH	$2,668.00	1,334.00 EACH	$2,668.00
79	0	('EACH' ITEM) CHARGING STATION	$2,700.00	3 EACH	$8,100.00	3.00 EACH	$8,100.00	3.00 EACH	$8,100.00
80	0	('EACH' ITEM) COLUMN MONUMENT	$34,000.00	2 EACH	$68,000.00	2.00 EACH	$68,000.00	2.00 EACH	$68,000.00
81	0	('EACH' ITEM) ENTRY MONUMENT	$45,000.00	2 EACH	$90,000.00	2.00 EACH	$90,000.00	2.00 EACH	$90,000.00
82	0	('EACH' ITEM) GFCI (INCL. PEDESTAL AND ENCLOSURE)	$600.00	9 EACH	$5,400.00	9.00 EACH	$5,400.00	9.00 EACH	$5,400.00
83	0	('EACH' ITEM) HH-1	$740.00	7 EACH	$5,180.00	7.00 EACH	$5,180.00	7.00 EACH	$5,180.00
84	0	('EACH' ITEM) HH-2	$710.00	10 EACH	$7,100.00	10.00 EACH	$7,100.00	10.00 EACH	$7,100.00
85	0	('EACH' ITEM) LITTER RECEPTACLE	$2,100.00	7 EACH	$14,700.00	7.00 EACH	$14,700.00	7.00 EACH	$14,700.00
86	0	('EACH' ITEM) NYLOPLAST DRAIN BASIN 12 INCH (BIOCELLS)	$1,400.00	2 EACH	$2,800.00	2.00 EACH	$2,800.00	2.00 EACH	$2,800.00
87	0	('EACH' ITEM) PERENNIAL GROUND COVER (1 GALLON)	$9.50	1712 EACH	$16,264.00	1712.00 EACH	$16,264.00	1,712.00 EACH	$16,264.00
88	0	('EACH' ITEM) POLE BASE FOOTING (TYPES S1 S2 S3 & S4 FIXTURES	$3,500.00	38 EACH	$133,000.00	38.00 EACH	$133,000.00	38.00 EACH	$133,000.00
89	0	('EACH' ITEM) RECYCLING RECEPTACLE	$2,400.00	7 EACH	$16,800.00	7.00 EACH	$16,800.00	7.00 EACH	$16,800.00
90	0	('EACH' ITEM) REFINISH EXISTING TRAFFIC SIGNAL POLES & ARMS	$13,000.00	4 EACH	$52,000.00	4.00 EACH	$52,000.00	4.00 EACH	$52,000.00
91	0	('EACH' ITEM) REINFORCED MONOLITHIC CONCRETE FOREBAY (BIOCELLS)	$6,300.00	2 EACH	$12,600.00	2.00 EACH	$12,600.00	2.00 EACH	$12,600.00
92	0	('EACH' ITEM) RELOCATE HYDRANT ASSEMBLY	$4,100.00	3 EACH	$12,300.00	3.00 EACH	$12,300.00	3.00 EACH	$12,300.00
93	0	('EACH' ITEM) REMOVE AND REPLACE HYDRANT ASSEMBLY	$8,400.00	2 EACH	$16,800.00	2.00 EACH	$16,800.00	2.00 EACH	$16,800.00
94	0	('EACH' ITEM) SIGN UPLIGHTS (TYPE S5 FIXTURE)	$1,400.00	8 EACH	$11,200.00	8.00 EACH	$11,200.00	8.00 EACH	$11,200.00
95	0	('EACH' ITEM) SINGLE HEAD RDWY LIGHT (TYPE S6 FIXTURE)	$620.00	4 EACH	$2,480.00	4.00 EACH	$2,480.00	4.00 EACH	$2,480.00

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University Avenue

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				ESTIMATED QUANTITY	ESTIMATED AMOUNT	ESTIMATED QUANTITY	ESTIMATED AMOUNT	ESTIMATED QUANTITY	ESTIMATED AMOUNT
96	0	('EACH' ITEM) STONE BLOCK BENCH	$1,800.00	19 EACH	$34,200.00	19.00 EACH	$34,200.00	19.00 EACH	$34,200.00
97	0	('EACH' ITEM) STONE BLOCK CUBE	$1,100.00	27 EACH	$29,700.00	27.00 EACH	$29,700.00	27.00 EACH	$29,700.00
98	0	('EACH' ITEM) TREE GRATE AND FRAME	$3,200.00	7 EACH	$22,400.00	7.00 EACH	$22,400.00	7.00 EACH	$22,400.00
99	0	('EACH' ITEM) TYPE 1 WATERMAIN ALTERATION	$6,100.00	0 EACH	$0.00	0.00 EACH	$0.00	0.00 EACH	$0.00
100	0	('EACH' ITEM) TYPE 3 WATERMAIN ALTERATION	$7,300.00	1 EACH	$7,300.00	1.00 EACH	$7,300.00	1.00 EACH	$7,300.00
101	0	('EACH' ITEM) WATER SERVICE CURB STOP & BOX ADJUSTMENT	$2,800.00	1 EACH	$2,800.00	1.00 EACH	$2,800.00	1.00 EACH	$2,800.00
102	0	('EACH' ITEM) WAYFINDING SIGN KIOSK	$11,000.00	3 EACH	$33,000.00	3.00 EACH	$33,000.00	3.00 EACH	$33,000.00
103	0	('LINEAR FEET' ITEM) #10 AWG CU	$2.50	1175 LF	$2,937.50	1175.00 LF	$2,937.50	1,175.00 LF	$2,937.50
104	0	('LINEAR FEET ITEM') #2 AWG CU	$5.25	0 LF	$0.00	0.00 LF	$0.00	0.00 LF	$0.00
105	0	('LINEAR FEET' ITEM) #3 AWG CU	$4.75	3360 LF	$15,960.00	3360.00 LF	$15,960.00	3,360.00 LF	$15,960.00
106	0	('LINEAR FEET' ITEM) #4 AWG CU	$4.75	7440 LF	$35,340.00	7440.00 LF	$35,340.00	7,440.00 LF	$35,340.00
107	0	('LINEAR FEET' ITEM) #6 AWG CU	$4.25	8935 LF	$37,973.75	8935.00 LF	$37,973.75	8,935.00 LF	$37,973.75
108	0	('LINEAR FEET' ITEM) #8 AWG CU	$4.00	21375 LF	$85,500.00	21375.00 LF	$85,500.00	21,375.00 LF	$85,500.00
109	0	('LINEAR FEET' ITEM) CONCRETE BAND 8 INCH WIDTH	$87.00	401.5 LF	$34,930.50	401.50 LF	$34,930.50	401.50 LF	$34,930.50
110	0	('LINEAR FEET' ITEM) LIMESTONE EDGER	$26.50	573.6 LF	$15,200.40	573.60 LF	$15,200.40	573.60 LF	$15,200.40
111	0	('LINEAR FEET' ITEM) TRENCHING CONDUIT	$12.25	10346 LF	$126,738.50	10346.00 LF	$126,738.50	10,346.00 LF	$126,738.50
112	0	('SQUARE YARDS' ITEM) CONCRETE UNIT PAVERS	$247.00	311.5 SY	$76,940.50	311.50 SY	$76,940.50	311.50 SY	$76,940.50
113	0	('TONS' ITEM) FOUNDATION ROCK	$77.00	0 TON	$0.00	0.00 TON	$0.00	0.00 TON	$0.00
114	0	('TONS' ITEM) NO. 57 STONE (AGGREGATE CHAMBER)	$90.00	17.83 TON	$1,604.70	17.83 TON	$1,604.70	17.83 TON	$1,604.70
115	0	('TONS' ITEM) NO. 8 STONE (CHOCKER LAYER)	$77.00	4.11 TON	$316.47	4.11 TON	$316.47	4.11 TON	$316.47
116	0	MULCHING	$2,100.00	1.6 ACRE	$3,360.00	1.60 ACRE	$3,360.00	1.60 ACRE	$3,360.00
117	0	SEEDING AND FERTILIZING (URBAN)	$1,000.00	1.6 ACRE	$1,600.00	1.60 ACRE	$1,600.00	1.60 ACRE	$1,600.00
118	0	SLOPE PROTECTION, WOOD EXCELSIOR MAT	$9.50	7.71 SQ	$73.24	7.71 SQ	$73.24	7.71 SQ	$73.25
119	0	STABILIZED CONSTRUCTION ENTRANCE, EC-303	$76.00	170 LF	$12,920.00	170.00 LF	$12,920.00	170.00 LF	$12,920.00
120	0	PERIMETER AND SLOP SEDIMENT CONTROL DEVICE, 9 IN. DIA.	$2.00	1530 LF	$3,060.00	1530.00 LF	$3,060.00	1,530.00 LF	$3,060.00
121	0	REMOVAL OF PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE	$0.50	1530 LF	$765.00	1530.00 LF	$765.00	1,530.00 LF	$765.00
122	0	OPEN-THROAT CURB INTAKE SEDIMENT FILTER, EC-602	$10.50	12 LF	$126.00	12.00 LF	$126.00	12.00 LF	$126.00
123	0	MAINTENANCE OF OPEN-THROAT CURB INTAKE SEDIMENT FILTER	$26.50	0 EACH	$0.00	0.00 EACH	$0.00	0.00 EACH	$0.00
124	0	REMOVAL OF OPEN-THROAT CURB INTAKE SEDIMENT FILTER	$26.50	0 EACH	$0.00	0.00 EACH	$0.00	0.00 EACH	$0.00
125	0	GRATE INTAKE SEDIMENT FILTER BAG	$205.00	34 EACH	$6,970.00	34.00 EACH	$6,970.00	34.00 EACH	$6,970.00
126	0	MAINTENANCE OF GRATE INTAKE SEDIMENT FILTER BAG	$26.50	34 EACH	$901.00	34.00 EACH	$901.00	34.00 EACH	$901.00
127	0	REMOVAL OF GRATE INTAKE SEDIMENT FILTER BAG	$10.50	0 EACH	$0.00	0.00 EACH	$0.00	0.00 EACH	$0.00
128	0	MOBILIZATION, EROSION CONTROL	$500.00	10 EACH	$5,000.00	10.00 EACH	$5,000.00	10.00 EACH	$5,000.00
129	0	MOBILIZATION, EMERGENCY EROSIONS CONTROL	$1,000.00	0 EACH	$0.00	0.00 EACH	$0.00	0.00 EACH	$0.00
130	0	SHRUBS	$48.00	53 EACH	$2,544.00	53.00 EACH	$2,544.00	53.00 EACH	$2,544.00
131	0	TREES	$470.00	43 EACH	$20,210.00	43.00 EACH	$20,210.00	43.00 EACH	$20,210.00
132	0	MODIFIED SUBBASE	$60.00	697.3 CY	$41,838.00	697.30 CY	$41,838.00	697.30 CY	$41,838.00
133	0	RECREATIONAL TRAIL, PORTLAND CEMENT CONCRETE, 6 IN	$51.00	4343.9 SY	$221,538.90	4343.90 SY	$221,538.90	4,343.90 SY	$221,538.90
8001	0	SUBGRADE STABILIZATION MATERIAL, POLYMER GIRD	$3.85	1790.9 SY	$6,894.97	1790.90 SY	$6,894.97	1,790.90 SY	$6,894.97
8002	0	PAINTED PAVEMENT MARKINGS, WATERBORNE OR SOLVENT-BASED	$75.00	64.42 STA	$4,831.50	64.42 STA	$4,831.50	64.42 STA	$4,831.50
8003	0	SAW PAVEMENT (FULL DEPTH)	$4.05	1236 LF	$5,005.80	1236.00 LF	$5,005.80	1,236.00 LF	$5,005.80
8004	0	LOCATE TRAFFIC SIGNALS	$836.00	1 LS	$836.00	1.00 LS	$836.00	1.00 LS	$836.00
8005	0	TEMPORARY TRAFFIC CONTROL FOR WINTER SHUTDOWN	$5,390.00	1 LS	$5,390.00	1.00 LS	$5,390.00	1.00 LS	$5,390.00
8006	0	TEMPORARY TRAFFIC CONTROL WINTER MAINTENANCE	$385.00	0 EACH	$0.00	0.00 EACH	$0.00	0.00 EACH	$0.00
8007	0	PAVEMENT MARKINGS REMOVED	$800.00	0.5 STA	$400.00	0.50 STA	$400.00	0.50 STA	$400.00
8008	0	TRAFFIC SIGNAL INTERCONNECTION	$60,767.30	1 LS	$60,767.30	1.00 LS	$60,767.30	1.00 LS	$60,767.30
8009	0	HYDRANT AND TEE REMOVAL	$5,900.00	1 LS	$5,900.00	1.00 LS	$5,900.00	1.00 LS	$5,900.00
8010	0	PAVEMENT MARKING REMOVAL	$1,430.00	1 LS	$1,430.00	1.00 LS	$1,430.00	1.00 LS	$1,430.00

Partial Pay Estimate No.: *18 - FINAL*

University Avenue

City of Windsor Heights, Iowa

Windsor Heights, Iowa

BMI PROJECT NO.A13.114724 WORK COMPLETED THROUGH DATE NOVEMBER 13, 2023

ITEM NO.	SUDAS REF NO.	ITEM	UNIT PRICE	AS BID		PREVIOUS ESTIMATE		COMPLETED TO DATE	
				ESTIMATED QUANTITY	ESTIMATED AMOUNT	ESTIMATED QUANTITY	ESTIMATED AMOUNT	ESTIMATED QUANTITY	ESTIMATED AMOUNT
8011	0	PATCHES, PARTIAL-DEPTH P.C.C. FINISH	$26.70	0 SF	$0.00	0.00 SF	$0.00	0.00 SF	$0.00
8012	0	PARTIAL DEPTH PCC JOINT AND CRACK REPAIR PATCHES	$26.70	1471 LF	$39,275.70	1471.00 LF	$39,275.70	1,471.00 LF	$39,275.70
8013	0	GROOVES CUT FOR PAVEMENT MARKINGS	$27.50	91.88 STA	$2,526.70	91.88 STA	$2,526.70	91.88 STA	$2,526.70
8014	0	GROOVES CUT FOR SYMBOLS AND LEGENDS	$99.00	60 EACH	$5,940.00	60.00 EACH	$5,940.00	60.00 EACH	$5,940.00
8015	0	REMOVE AND REPLACE VALVE VAULT TOP	$41,150.00	1 LS	$41,150.00	1.00 LS	$41,150.00	1.00 LS	$41,150.00
8016	0	STORM SEWER, PIPE CONNECTIONS	$2,221.00	1 LS	$2,221.00	1.00 LS	$2,221.00	1.00 LS	$2,221.00
8017	0	STORM SEWER, UNUSED STRUCTURES	$4,768.00	1 LS	$4,768.00	1.00 LS	$4,768.00	1.00 LS	$4,768.00
8018	0	STORM SEWER, TEMPORARY CONNECTION	$22,894.00	1 LS	$22,894.00	1.00 LS	$22,894.00	1.00 LS	$22,894.00
8019	0	TREE GRATE AND FRAME, UNUSED RESTOCKING	$6,512.44	1 LS	$6,512.44	1.00 LS	$6,512.44	1.00 LS	$6,512.44
8020	0	COLD PATCH, HMA	$3,080.97	1 LS	$3,080.97	1.00 LS	$3,080.97	1.00 LS	$3,080.97
8999	0	STOCKPILED MATERIAL	$32,310.00	0 LS	$0.00	0.00 LS	$0.00	0.00 LS	$0.00
		TOTAL AMOUNT:			$6,233,656.60		$6,233,656.60		**$6,233,656.60**

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM:

SUBJECT: Approve University Avenue Improvements Project Statement of Completion and Final Acceptance of Work

GENERAL INFORMATION

SUMMARY

ATTACHMENTS

1. 830435-Statement-of-Completion-and-Final-Acceptance

Form 830435
05-18

IOWA DOT
SMARTER I SIMPLER I CUSTOMER DRIVEN

STATEMENT OF COMPLETION AND FINAL ACCEPTANCE OF WORK

Contractor: Elder Corportation
Letting Date: 2/18/2020
Work Type: PCC Pavement - Replace
Contract ID: 77-8477-614
Accounting ID(s): 36634
Project Number(s): STBG-SWAP-8477(614)--SG-77
Additional Comments:

Type of Contract

- [ ] Specified Start Date
- [ ] Approximate Start Date
- [x] Late Start Date: 04/06/2020
- [ ] Completion Date Contract

Actual Start Date: 4/14/2020
Field Completion Date: 11/9/2021

Site No.(s)	00					
Working Days Specified:	270					
Working Days Charged:	263.5					
Closure Days Specified:						
Closure Days Charged:						

Recommended for Acceptance	Iowa DOT Contract Acceptance
Signature: Justin Ernst Project Engineer Date: 2/29/2024	Signature: District Construction Engineer Date:

Approved and Work Accepted on Behalf of the City Council of

City of Windsor Heights County this 4 Day of March , 2024
Year

Signature:

For Central Office Use Only

☐ Recorded Finance ☐ Recorded Construction & Materials

NOTE: On county administered projects, the County Engineer is required to sign "Recommended for Acceptance" and "Approved and Work Accepted on Behalf of the Board of Supervisors".

Project Engineer – Send original to District **District –** Forward original to Office of Construction & Materials and copy to Project Engineer.

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM:

SUBJECT: Consideration of Resolution No. 2024-16 - A Resolution Approving the Site Plan for Casey's General Stores at 6961 University Avenue

GENERAL INFORMATION

SUMMARY

ATTACHMENTS

1. Casey's Site Plan
2. Casey's Elevations
3. Casey's Photometric Plans
4. Casey's Staff Report
5. Staff Presentation
6. Casey's Engineer PELDS Traffic Impact Study
7. Trip Generation Table
8. City Engineer Traffic Memo
9. City Engineer Traffic Presentation
10. Resolution No. 2024-16 6961 University Site Plan
11. Zoning Map
12. 11.1.23 Planning and Zoning Commission Meeting Minutes
13. Casey's Cond Use Permit BOA Application Supplement Info
14. 22-201 - Response Letter

SITE IMPROVEMENTS
FOR
CASEY'S STORE #4372
6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA

SITE ADDRESS
6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA 50324

SITE AREA
1.29 ACRES (56,374 SQ.FT.)

ZONING
EXISTING: UC
ADJACENT ZONING:
N: R1 E: UC S: UC W: UC

SETBACKS
FRONT SETBACK: 25
STREET SIDE SETBACK: 25
INTERIOR SIDE SETBACK: 0
REAR SETBACK: 10

BUILDINGS
EXISTING: 9,926 SQ. FT.
PROPOSED: ~ 42'-10" x 100'-10" - 4,569 SQ.FT.

BUILDING USES
RETAIL STORE

BUILDING HEIGHT
MAX BUILDING HEIGHT: 45'
PROPOSED HEIGHT: 25

MAX FLOOR AREA RATIO
1.00

PAVING
APPROACHES: 8" THICK NON REINFORCED P.C.C. WITH MINIMUM 6" CRUSHED ROCK SUBBASE***
PARKING LOT: 6" THICK NON REINFORCED P.C.C. WITH MINIMUM 6" CRUSHED ROCK SUBBASE**
CURB: 6" TALL STANDARD CURB
SIDEWALK 6" THICK P.C.C
UGST: 8" THICK REINFORCED P.C.C. WITH MINIMUM 6" CRUSHED ROCK SUBBASE***

***6" CRUSHED ROCK SUBBASE THAT COMPLIES WITH AASHTO M147 GRADE C OR GRADE D AND SUBGRADE THAT IS COMPACTED TO 95% STANDARD PROCTOR DENSITY. VERIFY SUBBASE DEPTH WITH ENGINEER PRIOR TO CONSTRUCTION.

MAXIMUM JOINT SPACING = PAVEMENT THICKNESS * 1.5 = 6 * 1.5 = 9 FT

OPEN SPACE
EXISTING: 24% (13,3 SQ.FT.)
PROPOSED: 30% (17,133 SQ.FT.)
REQUIRED: 20% (11,275 SQ. FT.)

IMPERVIOUS SPACE
EXISTING: 76% (42,844 SQ.FT.)
PROPOSED: 70% (39,241 SQ.FT.)

PARKING
REQUIRED:
10 SPACES (4,569 SQ.FT. BLDG. => 4,569 / 500 = 10)

PROPOSED:
15 SPACES (INCLUDING 1 HANDICAP PARKING STALL)
1 LOADING SPACE (12'X52')

SIGNS
PROPOSED CASEY'S 2-PRODUCT PYLON - NORTH OF WEST ENTRANCE
PROPOSED CASEY'S 2-PRODUCT PYLON - WEST OF SOUTH ENTRANCE

DISTURBED AREAS
ESTIMATED: 60,612 SQ.FT.
ALL DISTURBED AREAS SHALL BE SEEDED OR SODDED.
THE DISTURBED AREA FOR THIS SITE IS MORE THAN 1 ACRE, THEREFORE A NPDES PERMIT IS REQUIRED.

GEOTECHNICAL REPORT
REFERENCE REPORT #232040CWH COMPLETED 4/18/2023 BY CONSTRUCTION MATERIALS TESTING (CMT)

LEAKING UNDERGROUND STORAGE TANKS
THIS SITE IS NOT A LUST SITE

FLOODPLAIN
PER FEMA MAP #19153C0327F, THE SITE IS LOCATED IN ZONE X, AREA OF MINIMAL HAZARD

FAA
PER FAA NOTICE CRITERIA TOOL, SITE DOES NOT EXCEED NOTICE CRITERIA UP TO 100 FT HEIGHT (FOR POSSIBLE CRANE HEIGHT) AND THEREFORE FILING WITH THE FAA IS NOT REQUIRED

VICINITY MAP



SHEET INDEX

C-001 - COVER SHEET
C-002 - NOTE SHEET
C-003 - TOPO SHEET
C-100 - DEMO SHEET
C-101 - LAYOUT SHEET
C-103 - DIMENSION SHEET
C-201 - GRADING SHEET
C-301 - UTILITY SHEET
C-401 - EROSION CONTROL SHEET
C-501 - TRAFFIC CONTROL SHEET
C-601 - DETAIL SHEET
C-602 - DETAIL SHEET
C-603 - DETAIL SHEET
C-604 - DETAIL SHEET
C-701 - LANDSCAPING SHEET

LEGAL DESCRIPTION:
LOTS 40, 41, AND 42 OF MOTTS PLACE, AN OFFICAL PLAT, NOW INCLUDED IN AND FORMING A PART OF THE CITY OF WINDSOR HEIGHTS, POLK COUNTY, IOWA, EXCEPT THAT PART DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF LOT 41 OF SAID MOTT PLACE; THENCE ALONG THE SOUTH LINE OF SAID LOTS 41 AND 41 HAVING AN ASSUMED BEARING OF NORTH 90°00'00" WEST, A DISTANCE OF ONE HUNDRED NINETY FOUR AND NINETY FIVE HUNDRETHS (194.95) FEET; THENCE NORTH 00°13'53" WEST, A DISTANCE OF TWENTY (20.00) FEET; THENCE NORTH 90°00'00" WEST A DISTANCE OF FIVE (5.00) FEET TO A POINT ON THE WEST LINE OF SAID LOT 40; THENCE NORHT 00°13'53" WEST, A DISTANCE OF TWO HUNDRED SIXTY NINE AND FORTY FOUR HUNDRETHS (269.44) FEET; THENCE NORTH 90°00'00" EAST, A DISTANCE OF TEN (10.00) FEET; THENCE SOUTH 00°13'53" EAST, A DISTANCE OF TWENTY (20.00) FEET; THENCE NORTH 90°00'00" EAST, A DISTANCE OF ONE HUNDRED EIGHTY FIVE AND NENTY FOUR (185.94) FEET TO A POINT ON THE EAST LINE OF SAID LOT 41; THENCE SOUTH 00°13'53" EAST, A DISTANCE OF TEN (10.00) FEET TO THE POINT OF BEGINNING.

ITEM	QUANTITY INFORMATION*	UNITS
6" CONCRETE PAVEMENT	ON-SITE: 27,163 - OFF-SITE: NONE	SQ. FT.
8" REINFORCED CONCRETE PAVEMENT	1,353	SQ. FT.
8" CONCRETE PAVEMENT	ON-SITE/APPROACHES: 4,553 - OFF-SITE: NONE	SQ. FT.
CONCRETE CURB	912	LIN. FT.
SIDEWALK, NOT ADJACENT TO STORE	1,747	SQ. FT.
DETENTION SYSTEM	ADS UNDERGROUND - 13,438	CU. FT.
SEWER SERVICE	DIRECT BURY: 120 - BORE: NONE	LIN. FT.
WATER SERVICE	DIRECT BURY: 56 - BORE:NONE	LIN. FT.
8" HDPE STORM SERVICE	195	LIN. FT.
10" HDPE STORM SERVICE	157	LIN. FT.
12" HDPE STORM SERVICE	65	LIN. FT.
15" RCP STORM SERVICE	26	LIN. FT.
STRUCTURES - SW-512	1	EACH
STRUCTURES - NYLOPLAST BASIN WITH INTAKE	1	EACH
STRUCTURES - NYLOPLAST BASIN	1	EACH
STRUCTURES - STORM CLEANOUT	3	EACH
STRUCTURES - SANITARY CLEANOUT	1	EACH
STRUCTURES - WATER VALVE	1	EACH
EARTHWORK CUT & HAUL	1,077	CU. YD.
EARTHWORK CUT & RESPREAD	174	CU. YD.
TOPSOIL REQUIRED	327	CU. YD.
FENCING	180 - 6' OPAQUE	LIN. FT.
SOD AREA	17, 702	SQ. FT.
ASPHALT PAVEMENT DEMOLITION	29,577	SQ. FT.
CONCRETE PAVEMENT DEMOLITION	4,019	SQ. FT.
BUILDING DEMOLITION	DEMO BY PREVIOUS OWNER	SQ. FT.
TREE DEMOLITION	4	EACH
RETAINING WALL	270	VERT. SQ. FT

IN THE EVENT OF A DISCREPANCY BETWEEN THE QUANTITY ESTIMATES AND THE DETAILED PLANS, THE DETAILED PLANS SHALL GOVERN
CONTRACTOR TO PROVIDE A COMPLETE PROJECT PER THE CONSTRUCTION DOCUMENTS, QUANTITIES PROVIDED AS PART OF THIS SUMMARY ARE FOR REFERENCE PURPOSES ONLY AND ARE NOT A BASIS FOR CHANGE ORDER IF ADDITIONAL QUANTITY IS INSTALLED AS PART OF THE ORIGINAL BID DOCUMENTS

CASEY'S SDM
CASEYS MARKETING COMPANY
ONE SE CONVENIENCE BLVD
ANKENY, IOWA 50021
PROJECT CONTACT: ERIK NIKKEL
PHONE: (515) 381-5722
EMAIL: ERIK.NIKKEL@CASEYS.COM

SITE OWNER
CHARLES I & RUBY COLBY NATL DEV TRUST
6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IOWA 50324

CITY ENGINEER
BOLTON & MENK, INC.
430 E GRAND AVE, STE 101
DES MOINES, IOWA 50309
CITY ENGINEER: JUSTIN ERNST
PROJECT CONTACT: TREY ROUSE
PHONE: (515) 259-9190
EMAIL: TREY.ROUSE@BOLTON-MENK.COM

CITY CONTACT
CITY OF WINDSOR HEIGHTS
1145 66TH ST SUITE 1
WINDSOR HEIGHTS, IOWA 50324
PROJECT CONTACT: TRAVIS COOKE
PHONE: 515-645-6810
EMAIL: TCOOKE@WINDSORHEIGHTS.ORG

ENGINEER/ LAND SURVEYOR
PELDS DESIGN SERVICES
2323 DIXON ST
DES MOINES, IOWA 50316
PROJECT CONTACT: ELARA JONDLE
PHONE: (515) 265-8196
EMAIL: ELARA@PELDS.COM

ARCHITECT
PELDS DESIGN SERVICES
2323 DIXON ST
DES MOINES, IOWA 50316
PROJECT CONTACT: DANIEL WILLRICH
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EMAIL: DANIEL@PELDS.COM

IOWA ONECALL CONTACT LIST:

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(CTLIA01) CENTURYLINK
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Contact Email: sadie.hull@lumen.com

(DWW) DES MOINES WATER WORKS
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Contact Email: onecallmaps@dmww.com

(ENV) CONSOLIDATED COMMUNICATIONS
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Contact Email: Justin.grev@consolidated.com

(ICN) IOWA COMMUNICATIONS NETWORK
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Contact Phone: 8005723940
Contact Email: icnoutsideplantiowaonecall@iowa.gov

(INS) AUREON NETWORK SERVICES
Contact Name: Jeff Klocko
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Contact Email: jeff.klocko@aureon.com

(M52E) MIDAMER-ELEC
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Contact Email: MECDSMDesignLocates@midamerican.com

(MC1) VERIZON
Contact Name: John Bachelder
Contact Phone: 9727297000
Contact Email: asg.investigationsteam@asginc.us

(POLKIA1) MEDIACOM
Contact Name: KEVIN COLLINS
Contact Phone: 5152466668
Contact Email: KCOLLINS1@MEDIACOMCC.COM

(UPN) UNITE PRIVATE NETWORKS, LLC
Contact Name: Joe Kilzer
Contact Phone: 8164253556
Contact Email: upngis@upnfiber.com

(VER01) VERIZON WIRELESS
Contact Name: Ryan Schaffer
Contact Phone: 5152015382
Contact Email: ryan.schaffer@verizonwireless.com

(WHC) WINDSOR HEIGHTS, CITY OF
Contact Name: Dalton Jacobus
Contact Phone: 5156456825
Contact Email: djacobus@windsorheights.org

(WINIA) WINDSTREAM COMMUNICATIONS
Contact Name: Locate Desk
Contact Phone: 8002891901
Contact Email: LOCATE.DESK@WINDSTREAM.COM

(ZAY) ZAYO GROUP LLC
Contact Name: John Ferraresi
Contact Phone: 3122160450
Contact Email: john.ferraresi@zayo.com

(CLV) CLIVE, CITY OF
Contact Name: Jared Acheson
Contact Phone: 5152236231
Contact Email: rowpermits@cityofclive.com

(MET) METRO FIBERNET, LLC
Contact Name: Korie Nellis
Contact Phone: 8122131050
Contact Email: 811design@metronet.com

LEGEND:

F.F.	FINISHED FLOOR	△	CALCULATED SECTION CORNER	Ⓔ	ELEC. MANHOLE	▤	SINGLE INTAKE
+/-	MORE OR LESS	▲	FOUND SECTION CORNER	EV	ELEC. VAULT	◉	AREA INTAKE
123.45G	GUTTER ELEVATION	▷	PARKING SPACE	↓	GUY ANCHOR	▣	THROAT INTAKE
123.45TC	TOP OF CURB ELEVATION	○	SIGN	⊠	UTILITY PEDESTAL	◁	FLARED END SECTION
123.45/ 123.45	EXISTING/ PROPOSED ELEVATION	⊘	STREET LIGHT	TV	CABLE TV JUNCTION BOX	⊘	VALVE
FL	FLOWLINE ELEVATION	⌀	POWER POLE	⋈	GAS VALVE	⋈	FIRE HYDRANT
◔	CONTROL POINT	■	LIGHT POLE	GM	GAS METER	WM	WATER METER
○	CALCULATED CORNER	⊠	AREA LIGHT	Ⓢ	SANITARY SEWER MANHOLE	⋈	WATER VALVE
●	FOUND CORNER	ET	ELEC. TRANSFORMER	Ⓢ	STORM SEWER MANHOLE	⋈	WATER TEE
		EM	ELEC. METER	⬭	CLEANOUT	P XX	PROPOSED UTILITY LINE
		EB	ELEC. BOX	D	DOWNSPOUT	E XX	EXISTING UTILITY LINE

CATV	CABLE TELEVISION		
FO	FIBER OPTIC		
G	GAS LINE		
OHE	OVERHEAD ELEC.		
OHT	OVERHEAD TEL.		
SAN	SANITARY SEWER		
ST	STORM SEWER		
UGE	UNDERGROUND ELEC.		
UGT	UNDERGROUND TEL.		
W	WATER		
	FENCE LINE		

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.

VOLDEMARS L. PELDS, P.E. IA. LIC. NO. 18842 DATE

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2025

ADDITIONAL PAGES OR SHEETS COVERED BY THIS SEAL (NONE UNLESS INDICATED HERE): C-001 - C-701

PELDS DESIGN SERVICES
Architecture | Engineering | Surveying
2323 Dixon Street, Des Moines, Iowa 50316 | PO Box 4626, Des Moines, Iowa 50305 | Ph: 515 265 8196

TITLE:
CASEY'S STORE #4372
6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA

BENCHMARK:
REVISIONS: PRELIMINARY

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FILE PATH: J:\2022 Projects\22-201 CGS Windsor Height\Engineering\Sheet Set
C-001 - COVER SHEET

CIVIL ENGINEERING NOTES
FOR
CASEY'S STORE #4372
6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA

GENERAL NOTES

1. THE CITY OF WINDSOR HEIGHTS MUST BE NOTIFIED BY ALL CONTRACTORS 48 HOURS PRIOR TO COMMENCING WORK.
2. ALL PROPOSED MATERIALS AND STRUCTURES SHALL BE APPROVED BY THE CITY OF WINDSOR HEIGHTS AND BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS
3. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT O.S.H.A. CODES AND STANDARDS. NOTHING INDICATED ON THESE PLANS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE APPROPRIATE SAFETY REGULATIONS.
4. ALL NECESSARY CONSTRUCTION SIGNS, BARRICADES AND OTHER TRAFFIC CONTROL DEVICES REQUIRED DURING CONSTRUCTION WILL BE FURNISHED BY THE CONTRACTOR. SIGNS, BARRICADES, AND OTHER TRAFFIC CONTROL DEVICES MUST BE IN CONFORMANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS."
5. PELDS DESIGN SERVICES SHALL NOT BE LIABLE FOR ANY INJURIES THAT HAPPEN ON SITE. THIS SHALL INCLUDE BUT NOT BE LIMITED TO TRENCH COLLAPSES FROM VARYING SOIL CONDITIONS OR INJURIES CAUSED BY UNDERGROUND UTILITIES INCLUDING UTILITIES THAT ARE NOT SHOWN ON PLAN.
6. THE CONTRACTOR IS LIABLE FOR ALL DAMAGES TO PUBLIC OR PRIVATE PROPERTY CAUSED BY THEIR ACTION OR INACTION IN PROVIDING FOR STORM WATER FLOW DURING CONSTRUCTION. DO NOT RESTRICT FLOWS IN EXISTING DRAINAGE CHANNELS, STORM SEWER, OR FACILITIES.
7. IF A PRE-CONSTRUCTION MEETING IS REQUIRED PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THIS MEETING.
8. LABORATORY TESTS SHALL BE PERFORMED BY THE OWNER UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PROVIDE SAMPLES OF MATERIAL REQUIRED FOR LABORATORY TESTS AND TESTING IN ACCORDANCE WITH THE URBAN STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
9. THE CONTRACTOR SHALL PROTECT ALL STRUCTURES NOT SHOWN AS REMOVALS ON THE PLANS.
10. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS PRIOR TO ANY CONSTRUCTION. CONTRACTOR SHALL WORK WITH OWNER OR OWNER'S REPRESENTATIVE ON ALL REQUIRED STORM WATER DISCHARGE PERMITS FROM THE IOWA DEPARTMENT OF NATURAL RESOURCES AND THE CITY OF WINDSOR HEIGHTS.
11. THE CONTRACTOR SHALL PICK UP ANY DEBRIS SPILLED ONTO THE ADJACENT RIGHT OF WAY OR ABUTTING PROPERTIES AS THE RESULT OF CONSTRUCTION, AT THE END OF EACH WORK DAY.
12. THE CONTRACTOR IS RESPONSIBLE FOR THE PROMPT REMOVAL OF ALL MUD THAT HAS BEEN TRACKED OR WASHED UNTO ADJACENT PROPERTY OR RIGHT OF WAY UNTIL SUCH TIME THAT PERMANENT VEGETATION HAS BEEN ESTABLISHED.
13. DISPOSE OF ALL EXCESS MATERIALS AND TRASH IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS. PROVIDE WASTE AREAS OR DISPOSAL SITES OR EXCESS MATERIALS NOT DESIRABLE FOR INCORPORATION INTO THE PROJECT.
14. ALL CONSTRUCTION WITHIN THE PUBLIC R.O.W/EASEMENTS, AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS SHALL COMPLY WITH THE CITY OF WINDSOR HEIGHTS.
15. THE CONTRACTOR SHALL CONTACT THE CITY OF WINDSOR HEIGHTS TO SCHEDULE ANY REQUIRED INSPECTIONS AT LEAST ONE WEEK PRIOR TO ANY CONSTRUCTION WITHIN PUBLIC R.O.W/EASEMENTS, AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS
16. IN THE EVENT OF ANY CONFLICTING NOTES BETWEEN THE COVER SHEET AND ALL OTHER SHEETS, THE NOTES ON THE COVER SHEET SHALL SUPERCEDE ALL OTHERS
17. IN THE EVENT OF ANY CONFLICTING INFORMATION BETWEEN THE LABEL, ELECTRONIC CAD FILE, AND THE ELECTRONIC SURFACE, THE DESIGN ENGINEER SHALL BE CONTACTED FOR CLARIFICATION
18. THE CITY OF WINDSOR HEIGHTS HAS NO SPECIFIC REQUIREMENTS FOR TANK BALLAST WATER

SURVEY NOTES

1. SURVEY WORK WAS COMPLETED BY PELDS DESIGN SERVICES IN NOVEMBER 2022. SEE SITE SURVEY PROVIDED AS PART OF THIS SET OF PLANS FOR EXISTING SITE CONDITIONS AND BOUNDARY INFORMATION.

STAKING NOTES

1. IT IS RECOMMENDED FOR THE CONTRACTOR TO HAVE ALL STAKING DONE UNDER THE SUPERVISION OF A LICENSED LAND SURVEYOR AND IN COORDINATION WITH THE PROJECT ENGINEER.
2. IT IS RECOMMENDED FOR THE CONTRACTOR TO HAVE ALL STAKING DONE DIRECTLY UNDER THE GENERAL CONTRACTOR BY A SINGLE COMPANY.
3. STAKING DOES NOT RELIEVE CONTRACTOR OF ULTIMATE RESPONSIBILITY TO CONSTRUCT THE PROJECT PER PLAN.

DEMO NOTES

1. SAWCUT & REMOVE ALL PAVEMENT TO FULL DEPTH OF SLAB.
2. PROTECT ALL TREES NOT CALLED OUT FOR REMOVAL WITH ORANGE CONSTRUCTION FENCE AT THE DRIP LINE.
3. PAVEMENT STRIPING CALLED OUT FOR REMOVAL SHALL BE SANDBLASTED. NO GRINDING WILL BE ALLOWED.
4. PROPERLY DISCONNECT ALL PUBLIC AND PRIVATE UTILITIES, AS NECESSARY.
5. COMPLY WITH LOCAL, STATE, AND FEDERAL REGULATIONS TO REMOVE AND PROPERLY DISPOSE OF SIDEWALKS, STEPS, DRIVEWAYS, AND STRUCTURES (INCLUDING BOTH ABOVE GROUND AND BELOW GROUND ELEMENTS).
6. COMPLY WITH LOCAL, STATE, AND FEDERAL REGULATIONS TO REMOVE FUEL TANKS, SEPTIC TANKS, CISTERNS, AND ANY OTHER UNDERGROUND FACILITIES; AND TO PROPERLY DISPOSE OF ANY LIQUIDS OR PRODUCTS CONTAINED WITHIN THESE ITEMS.
7. PLACE BACKFILL MATERIAL IN HOLES AND DEPRESSIONS, GRADE THE SITE, AND ESTABLISH GROUND COVER.
8. PROTECT EXISTING FIRE HYDRANTS, STREET LIGHTS, TRAFFIC SIGNALS, UTILITY POLES, FIRE ALARM BOXES, WIRE CABLES, UNDERGROUND UTILITIES, AND OTHER APPURTENANCES IN THE VICINITY OF THE DEMOLITION SITE
9. COMPLY WITH NOISE POLLUTION REQUIREMENTS AND ANY WORKING HOUR RESTRICTIONS OF THE JURISDICTION.
10. MAINTAIN OR RE-ESTABLISH ALL TILES, ROADWAY SUBDRAINS, CULVERTS, OR OTHER DRAINAGE FACILITIES NOT IDENTIFIED IN THE CONTRACT DOCUMENTS FOR REMOVAL.
11. IMPLEMENT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN FOR EACH SITE PRIOR TO INITIATING DEMOLITION BY PLACING ALL REQUIRED DEVICES; INCLUDE MEASURES TO PREVENT TRACKING OF MUD ONTO ADJACENT STREETS OR ALLEYS.
12. COMPLY WITH ALL APPLICABLE AIR POLLUTION REQUIREMENTS OF THE JURISDICTION. USE WATER OR APPROPRIATE CHEMICALS FOR CONTROL OF DUST IN THE DEMOLITION AREA, ON HAULING EQUIPMENT, ON ADJACENT ROADWAYS, AND WHEN GRADING THE SITE.
13. TAKE STEPS TO PREVENT THE GENERATION OF LITTER DURING DEMOLITION AND COLLECT ALL LITTER FROM THE DEMOLITION AREA AT THE END OF EACH WORKING DAY. LOAD TRUCKS TO PREVENT LEAKAGE OR BLOWING OF DEBRIS.
14. REMOVE ALL CONCRETE, ASPHALT, OR MASONRY SLABS AND APPURTENANCES.
15. REMOVE AND DISPOSE OF ALL BRUSH, SHRUBS, TREES, LOGS, DOWNED TIMBER, AND OTHER YARD WASTE ON THE SITE UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS. DO NOT MIX WITH DEMOLITION MATERIAL. REMOVE STUMPS TO A MINIMUM OF 2 FEET BELOW FINISH GRADE. PROTECT ANY TREES OR OTHER VEGETATION NOT DESIGNATED FOR REMOVAL BY PLACING A FENCE AT THE DRIP LINE ENCOMPASSING THE ENTIRE TREE AND KEEPING ALL OPERATIONS OUTSIDE OF THE FENCED IN AREA, INCLUDING STORAGE OF EQUIPMENT OR MATERIALS. AT NO ADDITIONAL COST TO THE CONTRACTING AUTHORITY, REPLACE ANY TREES THAT ARE DESIGNATED FOR PROTECTION BUT ARE DAMAGED BEYOND TREATMENT. THE ENGINEER WILL DETERMINE SIZE AND SPECIES OF THE REPLACEMENT TREE.
16. SAW-CUT ALL HARD SURFACING AT LOCATION OF REMOVAL LIMITS.
17. WHERE SELECTIVE DEMOLITION IS SHOWN AT PAVED AREAS, DEMOLISH THE EXISTING PAVING BACK TO AN EXISTING CONTROL JOINT NEAR THE LOCATION SHOWN.

WETLAND NOTES

1. PELDS DESIGN SERVICES DOES NOT PERFORM WETLAND STUDIES OR WETLAND MITIGATION. IT IS THE OWNER'S RESPONSIBILITY TO DETERMINE IF ANY WETLANDS ARE LOCATED ON THE PROJECT SITE AND PERFORM ANY NECESSARY MITIGATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

DISCLAIMER

1. THIS DRAWING IS BEING MADE AVAILABLE BY PELDS DESIGN SERVICES (P.D.S.) FOR USE ON THIS PROJECT IN ACCORDANCE WITH P.D.S.'S AGREEMENT FOR PROFESSIONAL SERVICES. P.D.S. ASSUMES NO RESPONSIBILITY OR LIABILITY (CONSEQUENTIAL OR OTHERWISE) FOR ANY USE OF THESE DRAWINGS (OR ANY PART THEREOF) EXCEPT IN ACCORDANCE WITH THE TERMS OF SAID AGREEMENT.
2. P.D.S DISCLAIMS ANY AND ALL LIABILITY OR RESPONSIBILITY FOR INFORMATION THAT DOES NOT BEAR THE ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL IN CHARGE.

UTILITY NOTES

1. QUANTITY CALLOUTS ON PIPE LENGTHS ARE APPROXIMATE AND SHOULD BE USED FOR REFERENCE ONLY.
2. PIPE LENGTHS CALLED OUT ON PLANS DO NOT INCLUDE FLARED END SECTION, WHERE APPLICABLE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL UTILITIES. ANY DAMAGE TO SAID UTILITIES SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTORS EXPENSE.
4. THE CONTRACTOR SHALL RELOCATE EXISTING UTILITIES AS NECESSARY, SHOWN OR NOT SHOWN.
5. THE CONTRACTOR SHALL COORDINATE WITH THE CITY ON ALL SIZE, DEPTHS, AND MATERIALS OF ALL PROPOSED UTILITIES.
6. THE CONTRACTOR MUST PROVIDE AS-BUILTS OF ALL UTILITIES, INCLUDING DEPTH AND LOCATION OF ALL SERVICES IF REQUIRED BY CITY.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE APPROPRIATE UTILITY COMPANIES PRIOR TO CONNECTION OR DISCONNECTION OF A SERVICE LINE.
8. CONTRACTOR IS TO COMPLY WITH THE LATEST SUDAS SPECIFICATIONS FOR MAINTENANCE, INSTALLATION, AND TESTING FOR CONSTRUCTION.
9. THE CONTRACTOR SHALL COORDINATE THE ADJUSTMENT OF ANY AND ALL EXISTING AND PROPOSED UTILITIES TO PROPOSED GRADES. EXISTING UTILITIES SHALL BE RAISED OR LOWERED IN ACCORDANCE WITH THE UTILITY OWNER REQUIREMENTS. ANY NECESSARY ADJUSTMENTS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
10. ACTIVE EXISTING FIELD TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE REPAIRED, REROUTED, OR CONNECTED TO PUBLIC OR PRIVATE STORM SEWER TO REMAIN IN SERVICE. THE TILE SHOULD BE DIRECTED TO PUBLIC STORM SEWER IF POSSIBLE. THE CONTRACTOR SHALL RECORD THE ELEVATION AND LOCATION OF ALL TILES.
11. ALL RIP RAP CALLED OUT ON PLANS SHALL BE UNDERLAIN WITH ENGINEERING FABRIC.
12. ALL STRUCTURE SIZES CALLED OUT ON PLANS ARE MINIMUM INSIDE WALL DIMENSIONS.
13. ALL PROPOSED UTILITIES SHALL BE PRIVATE, UNLESS NOTED OTHERWISE.
14. ALL STRUCTURES CALLED OUT AS "MODIFIED" OR "SPECIAL" SHALL BE ENGINEERED BY THE PRECASTER TO ENSURE STRUCTURE STABILITY. MODIFICATIONS INCLUDE ADDITIONAL WALL LENGTH TO ACCOUNT FOR LARGE PIPE DIAMETERS AND ADDITIONAL WALL WIDTH & BASE DEPTH TO ACCOUNT FOR DEEPER STRUCTURES. ANY AND ALL MODIFICATIONS TO STANDARD STRUCTURES SHALL BE CONSIDERED INCIDENTAL TO BID

ELECTRICAL SERVICE NOTES

15. ALL SITE LIGHTING SHALL NOT SPILL ONTO ADJACENT PROPERTIES OR RIGHT-OF-WAYS
16. TRANSFORMER PAD IS SHOWN FOR REFERENCE ONLY AND MAY NOT BE DRAWN TO ACTUAL SIZE. PAD SHALL CONFORM TO ALL UTILITY COMPANY DESIGN STANDARDS AND SPECIFICATIONS.

SANITARY SERVICE NOTES

17. SANITARY SEWER SERVICE CONNECTIONS SHALL BE PLACED AT A SLOPE OF NO LESS THAN 2% FOR A 4" PIPE AND 1% FOR A 6" PIPE. SERVICES SHALL MAINTAIN 18" OF VERTICAL SEPARATION FROM THE WATER MAIN WITH 18" OF COMPACTED LOW PERMEABILITY SOIL BETWEEN THE UTILITIES WITHIN 10' OF THE CROSSING.

STORM WATER SERVICE NOTES

18. ALL STORM SEWER IN THE ROW SHALL BE RCP (CLASS III RCP), UNLESS OTHERWISE SPECIFIED.
19. ALL PROPOSED RCP STORM SEWER PIPE JOINTS SHALL BE FABRIC WRAPPED AND THE LAST 3 PIPE SECTIONS ON THE APRON SHALL BE TIED WITH RF-14 TYPE II CONNECTORS. ALL APRONS SHALL HAVE A STANDARD FOOTING AND TRASH GUARD.
20. ALL SUMP SERVICE LINES SHALL HAVE TRACE WIRE

WATER SERVICE NOTES

21. WATER SERVICE SHALL BE TYPE K COPPER, DIP OR HDPE, DEPENDING ON SIZE AND JURISDICTIONAL REQUIREMENTS. IF CONTAMINATED OR "HOT" SOILS, ENSURE APPROPRIATE PIPE IS BEING UTILIZED. SIZE OF WATER MAIN AS SHOWN ON PLANS.
22. TRACER WIRE SHALL BE ADDED TO ALL WATER MAIN, AND BROUGHT TO THE SURFACE AT EVERY HYDRANT.
23. THRUST BLOCKS SHALL BE INSTALLED AS REQUIRED AND SHALL BE CONSIDERED INCIDENTAL TO WATER MAIN CONSTRUCTION.
24. ANY AND ALL HYDRANT AND VALVE EXTENSIONS, TOGETHER WITH VERTICAL BENDS, SHALL BE CONSIDERED INCIDENTAL TO WATER MAIN CONSTRUCTION. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR INCIDENTAL ITEMS.
25. ALL WATER LINES SHALL HAVE A MINIMUM OF 5.5 FEET OF COVER UNLESS NOTED OTHERWISE.

EXISTING UTILITIES NOTE

1. THE LOCATIONS OF THE EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE. THEY HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND/OR RECORDS. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ANY EXISTING UTILITIES (SHOWN OR NOT SHOWN) ARE NOT DAMAGED DURING CONSTRUCTION: IOWA ONE-CALL (1-800-292-8989).

UTILITY CONFLICT NOTES

1. UTILITY CONFLICTS MAY EXIST ACROSS THE SITE WITH NEW UTILITIES, GRADING, PAVING ETC. MOST UTILITY CONFLICTS HAVE BEEN CALLED OUT FOR CONTRACTOR CONVENIENCE.
2. CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY CONFLICTS BETWEEN AN EXISTING UTILITY AND PROPOSED CONSTRUCTION THAT ARE EITHER CALLED OUT ON THE PLANS OR NOT CALLED OUT.
3. CONTRACTOR SHALL COMPLY WITH ALL DNR REQUIREMENTS FOR PIPE MATERIAL, PIPE JOINTS, AND ANY OTHER APPLICABLE REQUIREMENTS ANY TIME A STORM SEWER OR SANITARY SEWER CROSSES OVER OR LESS THAN 18" BELOW A WATER MAIN.
4. FOR ALL CRITICAL CROSSINGS WITH EXISTING UTILITIES, THE ELEVATION OF THE EXISTING UTILITY SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. NOTIFY PELDS DESIGN SERVICES PRIOR TO CONSTRUCTION IF A CONFLICT EXISTS.

SPECIFICATIONS NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST VERSION OF THE URBAN STANDARDS SPECIFICATIONS FOR PUBLIC IMPROVEMENTS ON THE DATE OF APPROVAL AND THE CITY OF WINDSOR HEIGHTS SUPPLEMENTAL SPECIFICATIONS.
2. IN THE EVENT OF A DISCREPANCY BETWEEN THE PROJECT SPECIFICATIONS AND THE CITY OF WINDSOR HEIGHTS REQUIREMENTS AND SPECIFICATIONS, PLUMBING CODE, AND URBAN STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENT, THE CITY OF WINDSOR HEIGHTS STANDARD SPECIFICATIONS SHALL GOVERN.
3. FOR ALL SPECIFICATION DISCREPANCIES, THE PROJECT ENGINEER SHALL BE CONTACTED PRIOR TO PROCEEDING WITH CONSTRUCTION. IF THE ENGINEER IS NOT CONTACTED, CONTRACTOR SHALL BE RESPONSIBLE FOR ANY PROBLEMS THAT RESULT FROM SAID DISCREPANCIES.

REQUIRED AS-BUILT NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COST OF AS-BUILT TOPO, IF REQUIRED BY CITY.
2. CONTRACTOR SHALL CONTACT PELDS DESIGN SERVICES TO PERFORM SAID AS-BUILT SURVEYS.
3. IF ANYTHING HAS BEEN CONSTRUCTED INCORRECTLY, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SUBSEQUENT AS-BUILT SURVEYS UNTIL ISSUES HAVE BEEN RECTIFIED.

PAVING NOTES

1. THE PAVING/ GRADING CONTRACTOR SHALL BACKFILL THE PAVING SLAB AND FINE GRADE THE RIGHT OF WAY AS SOON AFTER THE PAVING AS POSSIBLE. ALL AREAS SHALL BE SODDED IN ACCORDANCE WITH CITY OF WINDSOR HEIGHTS SPECIFICATIONS AND THE LATEST VERSION OF SUDAS.
2. SEE DETAILS FOR ALL PAVEMENT THICKNESS.
3. DETECTABLE WARNING PANEL(S) CALLED OUT ON PLANS SHALL BE PER A.D.A. REGULATIONS. PANEL TYPE & COLOR SHALL BE PER CITY STANDARD.
4. SIDEWALKS SHALL HAVE EXPANSION JOINTS AT 100 FOOT INTERVALS AS REQUIRED BY CITY CODE
5. ALL WALKS, PARKING LOTS, HANDICAP PARKING, RAMPS, ETC. SHALL COMPLY WITH ALL A.D.A. AND CITY CODES. HANDICAP PARKING SIGNAGE IS REQUIRED FOR ALL HANDICAP STALLS AND SHALL BE CONSIDERED INCIDENTAL. IN EVENT OF A DISCREPANCY BETWEEN THE PLANS AND THE A.D.A./CITY CODES THE A.D.A./CITY CODES SHALL GOVERN. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING A.D.A. CODES ARE MET.

PAVEMENT SAWCUT NOTES

1. CONTRACTOR TO PROVIDE SAWCUT JOINTING PLAN PRIOR TO ANY CONCRETE PAVEMENT INSTALLATION.
2. PAVEMENT MAY BE REQUIRED TO BE REMOVED AND REPLACED IF PLACED WITHOUT AN APPROVED PLAN.
3. LONGITUDINAL JOINTS IN DRIVE LANES & THE OUTER MOST JOINT OF ALL PARKING AREAS SHALL BE SUDAS TYPE 'L-1' OR 'L-2' JOINTS AND HAVE STEEL. INTERIOR PARKING LOT JOINTS, OTHER THAN THE OUTER MOST JOINT, DO NOT NEED STEEL AND SHALL BE SUDAS TYPE 'B' OR TYPE 'K' JOINTS. ALL TRANSVERSE JOINTS SHALL BE SUDAS TYPE 'C' OR TYPE 'DW' JOINTS WITH STEEL IN THE CASE OF A DAY'S WORK JOINT.

SOIL NOTES

1. STRIP AND STOCKPILE THE TOP 8 INCHES OF SOIL ON ALL DISTURBED AREAS. GRADING CONTRACTOR SHALL STOCKPILE TOPSOIL FOR SHOULDERING.
2. SOD REQUIREMENT PER SUDAS: IN AREAS WHERE TOPSOIL HAS BEEN STRIPPED, A SODBED SHOULD BE CONSTRUCTED BY SPREADING A MINIMUM OF 6 INCHES OF TOPSOIL PRIOR TO SODDING. DEEPER TOPSOIL DEPTHS (8 TO12 INCHES OR GREATER) ARE DESIRABLE AS THEY INCREASE THE ORGANIC MATTER AVAILABLE FOR USE BY THE PLANTS, ALLOW FOR DEEPER ROOT PENETRATION AND INCREASE THE MOISTURE HOLDING ABILITY OF THE SOIL.
3. PERMANENT SEED REQUIREMENT PER SUDAS: IN ORDER TO PROVIDE AN ADEQUATE GROWING MEDIUM, A MINIMUM OF 8 INCHES OF TOPSOIL SHOULD BE PLACED OVER THE DISTURBED AREA PRIOR TO SEEDING. DEEPER TOPSOIL DEPTHS (8-12 INCHES OR GREATER) ARE DESIRABLE AS THEY INCREASE THE ORGANIC MATTER AVAILABLE FOR USE BY THE PLANTS, ALLOW FOR DEEPER ROOT PENETRATION AND INCREASE THE MOISTURE HOLDING ABILITY OF THE SOIL.
4. TOPSOIL SHALL BE FREE OF ALL ROCK AND DEBRIS LARGER THAN 3/4" IN SIZE.
5. TOPSOIL IS DEFINED AS: FERTILE, FRIABLE LOAM, CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH, FROM WELL DRAINED SITE FREE FROM FLOODING, NOT IN FROZEN OR MUDDY CONDITIONS; REASONABLE FREE FROM SUBSOIL, CLAY LUMPS, ROOTS, GRASS, WEEDS, STONES LARGER THAN 3/4 INCH IN DIAMETER, AND FOREIGN MATTER; ACIDITY RANGE (PH) OF 5.5 TO 7.5; CONTAINING MINIMUM 4 PERCENT AND MAXIMUM 20 PERCENT ORGANIC MATTER.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL TOPSOIL REQUIREMENTS OF NPDES GENERAL PERMIT NO. 2 ARE MET.
7. REFERENCE GEOTECHNICAL REPORT FOR ADDITIONAL SOILS INFORMATION INCLUDING BUT NOT LIMITED TO SUBGRADE INFORMATION, FOOTING DESIGN, AND ANY POSSIBLE OVER EXCAVATION DUE TO POOR SOILS. PAVEMENT SECTIONS ON THE PLANS GOVERN OVER PAVEMENT THICKNESS IN THE SOILS REPORT.

GRADING NOTES

1. AREAS TO RECEIVE STRUCTURAL FILL SHALL BE BENCHED. STRUCTURAL FILL SHALL BE COMPACTED TO A DENSITY THAT IS NOT LESS THAN 95% STANDARD PROCTOR.
2. PREPARE BOTTOM OF BENCH FOR FILL BY DISKING TO A DEPTH OF 12 INCHES AND COMPACT. ANY LOCALIZED AREAS WHICH CANNOT BE SATISFACTORILY COMPACTED OR WHICH SHOW EVIDENCE OF PUMPING ACTION SHALL BE UNDERCUT AND RE-COMPACTED WITH ON-SITE FILL MATERIALS.
3. ALL AREAS WHICH ARE TO RECEIVE PAVING SHALL HAVE THE TOP 12 INCHES DISKED AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
4. MAINTAIN ALL CUT AND FILL AREAS TO ACCOMMODATE SURFACE DRAINAGE.
5. FINISH GRADE ON ALL NON-PAVED AREAS SHALL BE WITHIN 0.20 FT, AND PAVED AREAS SHALL BE WITHIN 0.10 FT OF THE PROPOSED GRADES SHOWN ON THE PLAN
6. MAXIMUM ALLOWABLE GRADE ON ALL PROPOSED SLOPES IS 3:1.
7. THE MOISTURE CONTENT SHALL NOT DEVIATE FROM THE OPTIMUM BY MORE THAN 2% IN STRUCTURAL FILL.
8. MAXIMUM 2% CROSS-SLOPE ON ALL SIDEWALKS.
9. GRADING AND EROSION CONTROL SHALL BE DONE IN ACCORDANCE WITH THE APPROVED GRADING PLAN, SWPPP, NPDES DOCUMENTS, AND IOWA DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS.

LANDSCAPING NOTES

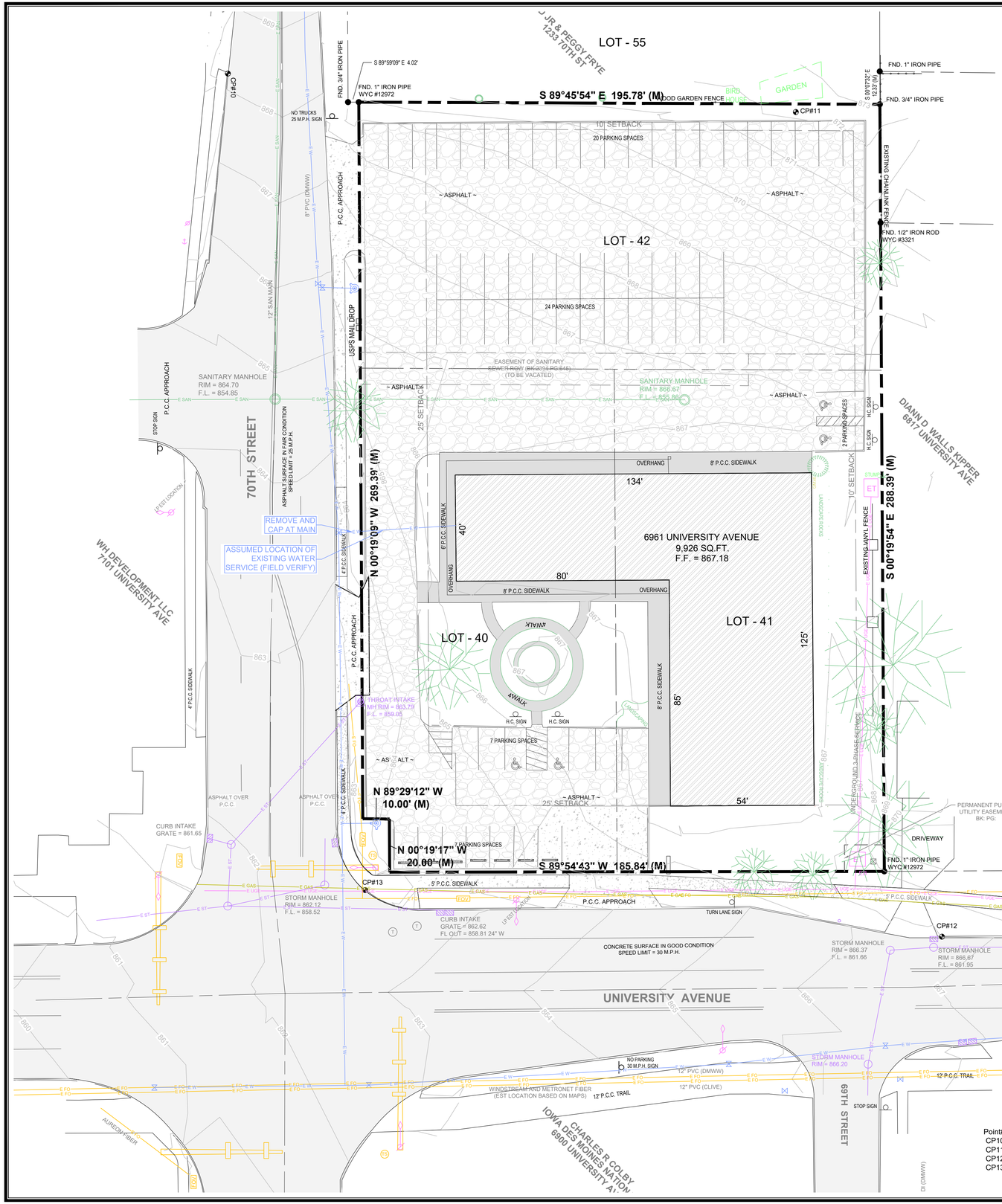
1. ALL SODDING & LANDSCAPE PLANTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE URBAN STANDARD SPECIFICATIONS, UNLESS SPECIFIED OTHERWISE.
2. SEED OR SOD ALL DISTURBED AREAS WITHIN THE CONTRACT LIMITS, UNLESS NOTED OTHERWISE. SOD LIMITS SHOWN ON PLAN ARE FOR REFERENCE ONLY. FINAL LIMITS MAY CHANGE BASED ON CONSTRUCTION ACTIVITIES. SEED ALL DISTURBED AREAS OFF-SITE
3. STAKE SOD ON ALL SLOPES 4:1 OR GREATER.
4. PLANT QUANTITIES ARE FOR CONTRACTORS CONVENIENCE, THE DRAWING SHALL PREVAIL IF A CONFLICT OCCURS.
5. ALL PLANT MATERIAL SHALL CONFORM TO THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1).
6. CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE.
7. CONTRACTOR SHALL PLACE SHREDDED HARDWOOD MULCH OR BRICK CHIPS OR WASHED STONE AROUND ALL TREES, SHRUBS AND GROUND COVER BEDS TO A DEPTH OF 4 INCHES, UNLESS NOTED.
8. PROVIDE 6MIL MINIMUM PLASTIC BELOW ROCK/BRICK.
9. THE LANDSCAPING CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED BEFORE STARTING ANY SITE WORK OR PLANTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES.
10. CONTRACTOR SHALL BE RESPONSIBLE MAINTAINING APPROPRIATE LEVEL OF WATERING FOR ALL NEW PLANTS FOR A PERIOD OF 30 DAYS.
11. CONTRACTOR SHALL DESIGN AND PROVIDE IRRIGATION SYSTEM. COORDINATION WITH ARCHITECT REQUIRED.
12. ALL BEDS TO RECEIVE GRANULAR PRE-EMERGENT WEED CONTROL BEFORE AND AFTER MULCH IS INSTALLED.

PELDS DESIGN SERVICES
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C-002 - NOTE SHEET



Point#	North	East	Elevation	Description
CP10:	583503.565	1582130.005	868.533	CUT-X
CP11:	583489.079	1582343.416	872.326	CONTROL CAP
CP12:	583179.092	1582398.289	867.109	CUT-X
CP13:	583196.586	1582181.659	862.831	CUT-X

LEGEND:

+/-	MORE OR LESS	E	ELEC. MANHOLE
F.F.	FINISHED FLOOR	S	SANITARY SEWER MANHOLE
123.45G	GUTTER ELEVATION	ST	STORM SEWER MANHOLE
123.45TC	TOP OF CURB ELEVATION	T	TRAFFIC MANHOLE
123.45/ 123.45	EXISTING/ PROPOSED ELEVATION	C	CLEANOUT
FL	FLOWLINE ELEVATION	D	DOWNSPOUT
	CONTROL POINT		AREA INTAKE
	CALCULATED CORNER		SINGLE INTAKE
	FOUND CORNER		THROAT INTAKE
	CALCULATED SECTION CORNER		FLARED END SECTION
	FOUND SECTION CORNER		GAS VALVE
	PARKING SPACE		FIRE HYDRANT
	SIGN		WATER VALVE
	STREET LIGHT	P XX	PROPOSED UTILITY LINE
	POWER POLE	E XX	EXISTING UTILITY LINE
	LIGHT POLE	CATV	CABLE TELEVISION
	AREA LIGHT	FO	FIBER OPTIC
	GUY ANCHOR	GAS	GAS LINE
	UTILITY PEDESTAL	OHE	OVERHEAD ELEC.
ET	ELEC. TRANSFORMER	OHT	OVERHEAD TEL.
EM	ELEC. METER	SS	SANITARY SEWER
EB	ELEC. BOX	ST	STORM SEWER
EV	ELEC. VAULT	UGE	UNDERGROUND ELEC.
FOV	FIBER OPTIC VAULT	UGT	UNDERGROUND TEL.
GM	GAS METER	W	WATER
TV	CABLE TV JUNCTION BOX		FENCE LINE
WM	WATER METER		

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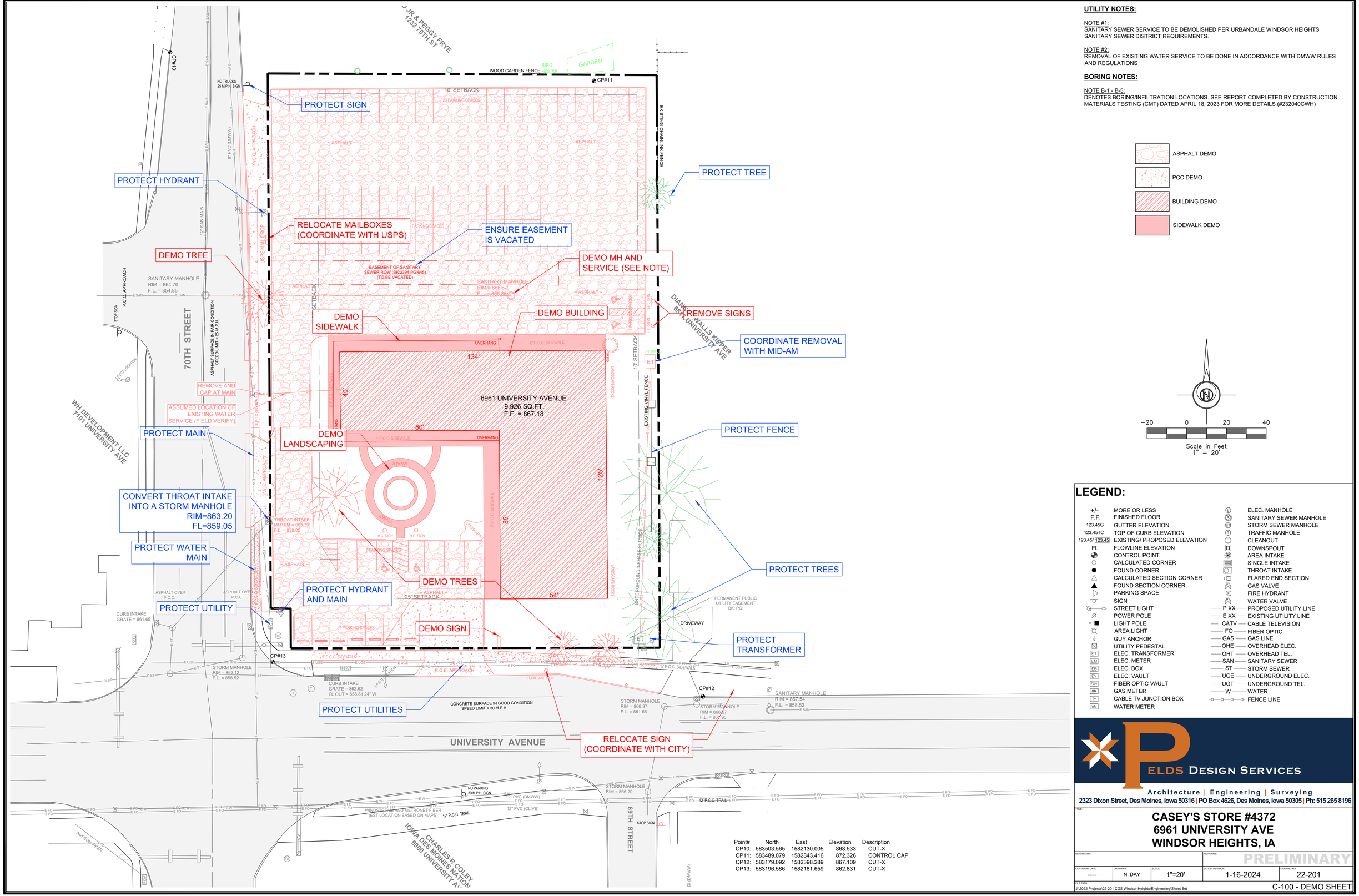
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C-003 - TOPO SHEET



UTILITY NOTES:

NOTE #1:
SANITARY SEWER SERVICE TO BE DEMOLISHED PER URBANDALE WINDSOR HEIGHTS SANITARY SEWER DISTRICT REQUIREMENTS.

NOTE #2:
REMOVAL OF EXISTING WATER SERVICE TO BE DONE IN ACCORDANCE WITH DMWW RULES AND REGULATIONS

BORING NOTES:

NOTE B-1 - B-5:
DENOTES BORING/INFILTRATION LOCATIONS. SEE REPORT COMPLETED BY CONSTRUCTION MATERIALS TESTING (CMT) DATED APRIL 18, 2023 FOR MORE DETAILS (#232040CWH)

- ASPHALT DEMO
- PCC DEMO
- BUILDING DEMO
- SIDEWALK DEMO

N

−20 0 20 40

Scale in Feet
1" = 20'

Point#	North	East	Elevation	Description
CP10:	583503.565	1582130.005	868.533	CUT-X
CP11:	583489.079	1582343.416	872.326	CONTROL CAP
CP12:	583179.092	1582398.289	867.109	CUT-X
CP13:	583196.586	1582181.659	862.831	CUT-X

LEGEND:

+/-	MORE OR LESS	E	ELEC. MANHOLE
F.F.	FINISHED FLOOR	S	SANITARY SEWER MANHOLE
123.45G	GUTTER ELEVATION	ST	STORM SEWER MANHOLE
123.45TC	TOP OF CURB ELEVATION	T	TRAFFIC MANHOLE
123.45/123.45	EXISTING/ PROPOSED ELEVATION		CLEANOUT
FL	FLOWLINE ELEVATION	D	DOWNSPOUT
	CONTROL POINT		AREA INTAKE
	CALCULATED CORNER		SINGLE INTAKE
	FOUND CORNER		THROAT INTAKE
	CALCULATED SECTION CORNER		FLARED END SECTION
	FOUND SECTION CORNER		GAS VALVE
	PARKING SPACE		FIRE HYDRANT
	SIGN		WATER VALVE
	STREET LIGHT	P XX	PROPOSED UTILITY LINE
	POWER POLE	E XX	EXISTING UTILITY LINE
	LIGHT POLE	CATV	CABLE TELEVISION
	AREA LIGHT	FO	FIBER OPTIC
	GUY ANCHOR	GAS	GAS LINE
	UTILITY PEDESTAL	OHE	OVERHEAD ELEC.
ET	ELEC. TRANSFORMER	OHT	OVERHEAD TEL.
EM	ELEC. METER	SAN	SANITARY SEWER
EB	ELEC. BOX	ST	STORM SEWER
EV	ELEC. VAULT	UGE	UNDERGROUND ELEC.
FOV	FIBER OPTIC VAULT	UGT	UNDERGROUND TEL.
GM	GAS METER	W	WATER
TV	CABLE TV JUNCTION BOX		FENCE LINE
WM	WATER METER		

ELDS DESIGN SERVICES
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TITLE:

CASEY'S STORE #4372
6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA

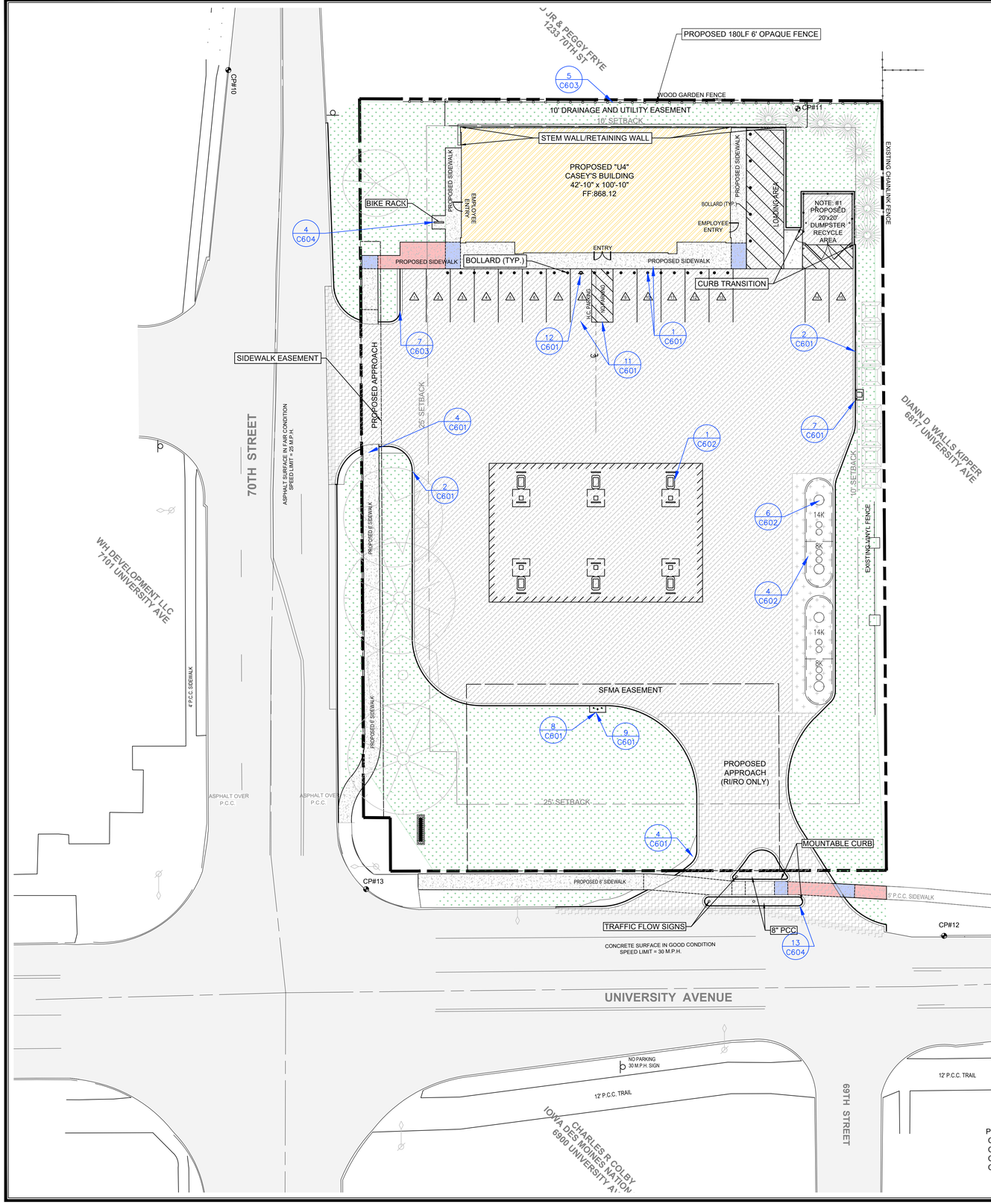
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C-100 - DEMO SHEET



Point#	North	East	Elevation	Description
CP10:	583503.565	1582130.005	868.533	CUT-X
CP11:	583489.079	1582343.416	872.326	CONTROL CAP
CP12:	583179.092	1582398.289	867.109	CUT-X
CP13:	583196.586	1582181.659	862.831	CUT-X

NOTES:

ALL WORK IN/ON THE R.O.W. AREA IS SUBJECT TO THE CITY OF WINDSOR HEIGHTS APPROVAL AND SPECIFICATIONS

CONTRACTOR IS RESPONSIBLE FOR DESIGN AND INSTALL OF IRRIGATION SYSTEM

PROPOSED SIDEWALK
8" P.C.C.
8" REINFORCED P.C.C.
6" P.C.C.
PROPOSED BUILDING
EXISTING PAVEMENT
SOD & IRRIGATION LIMITS

SIDEWALK LANDING
SIDEWALK RAMP

−20 0 20 40
Scale in Feet
1" = 20'

LEGEND:

+/-	MORE OR LESS	E	ELEC. MANHOLE
F.F.	FINISHED FLOOR	S	SANITARY SEWER MANHOLE
123.45G	GUTTER ELEVATION	S	STORM SEWER MANHOLE
123.45TC	TOP OF CURB ELEVATION	T	TRAFFIC MANHOLE
123.45/123.45	EXISTING/ PROPOSED ELEVATION		CLEANOUT
FL	FLOWLINE ELEVATION	D	DOWNSPOUT
	CONTROL POINT		AREA INTAKE
	CALCULATED CORNER		SINGLE INTAKE
	FOUND CORNER		THROAT INTAKE
	CALCULATED SECTION CORNER		FLARED END SECTION
	FOUND SECTION CORNER		GAS VALVE
	PARKING SPACE		FIRE HYDRANT
	SIGN		WATER VALVE
	STREET LIGHT	P XX	PROPOSED UTILITY LINE
	POWER POLE	E XX	EXISTING UTILITY LINE
	LIGHT POLE	CATV	CABLE TELEVISION
	AREA LIGHT	FO	FIBER OPTIC
	GUY ANCHOR	GAS	GAS LINE
	UTILITY PEDESTAL	OHE	OVERHEAD ELEC.
ET	ELEC. TRANSFORMER	OHT	OVERHEAD TEL.
EM	ELEC. METER	SAN	SANITARY SEWER
EB	ELEC. BOX	ST	STORM SEWER
EV	ELEC. VAULT	UGE	UNDERGROUND ELEC.
FOV	FIBER OPTIC VAULT	UGT	UNDERGROUND TEL.
GM	GAS METER	W	WATER
TV	CABLE TV JUNCTION BOX		FENCE LINE
WM	WATER METER		

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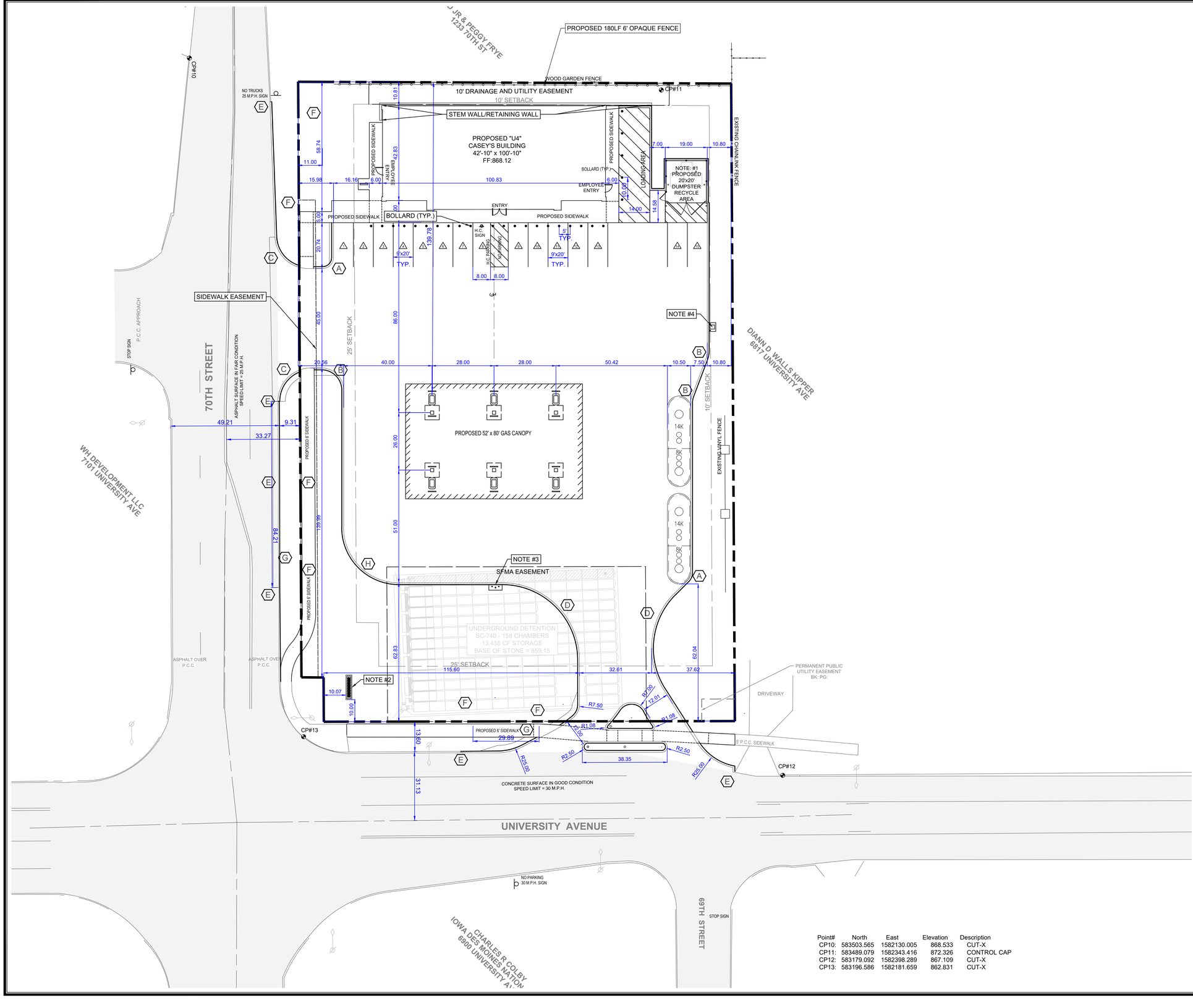
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6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA

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C-101 - LAYOUT SHEET



Point#	North	East	Elevation	Description
CP10:	583503.565	1582130.005	868.533	CUT-X
CP11:	583489.079	1582343.416	872.326	CONTROL CAP
CP12:	583179.092	1582398.289	867.109	CUT-X
CP13:	583196.586	1582181.659	862.831	CUT-X

General Notes

Note #1:
BRICK DUMPSTER ENCLOSURE 6' HEIGHT W/ METAL GATES
2-9' GATES AND 4' SERVICE GATE

Note #2
2 PRODUCT MONUMENT PRICE SIGN - REFER TO SIGN PACKET

Note #3
ALL FUEL DISPENSERS FALL WITHIN A 100 FOOT RADIUS OF THE EMERGENCY SHUT-OFF SWITCH LOCATED INSIDE AT THE SALES COUNTER FOR THE CONVENIENCE STAFF. A SECONDARY SHUTOFF SHALL BE INSTALLED ON A POST AT THE CURB IF ALL FUEL DISPENSERS **DO NOT** FALL WITHIN A 100 RADIUS.

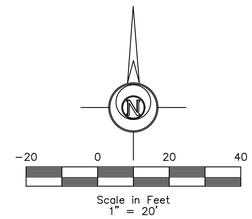
Note #4
AIR COMPRESSOR BOX, SEE SHEET C-601 SITE DETAILS.
110 VOLT-60HZ-5.5 AMP. #12 WIRE (20 AMP, SINGLE PHASE) WITH GROUND.

Note #5
ALL WORK IN/ON THE R.O.W. AREA IS SUBJECT TO THE CITY OF WINDSOR HEIGHTS APPROVAL AND SPECIFICATIONS

Keyed Construction Notes

- (A) PROPOSED 5' RADIUS
- (B) PROPOSED 10' RADIUS
- (C) PROPOSED 15' RADIUS
- (D) PROPOSED 35' RADIUS
- (E) TIE INTO AND MATCH EXISTING CURB & FLOW LINE.
- (F) REMOVE EXISTING APPROACH
- (G) REPLACE EXISTING SIDEWALK
- (H) PROPOSED 25' RADIUS

EXISTING PAVEMENT



LEGEND:

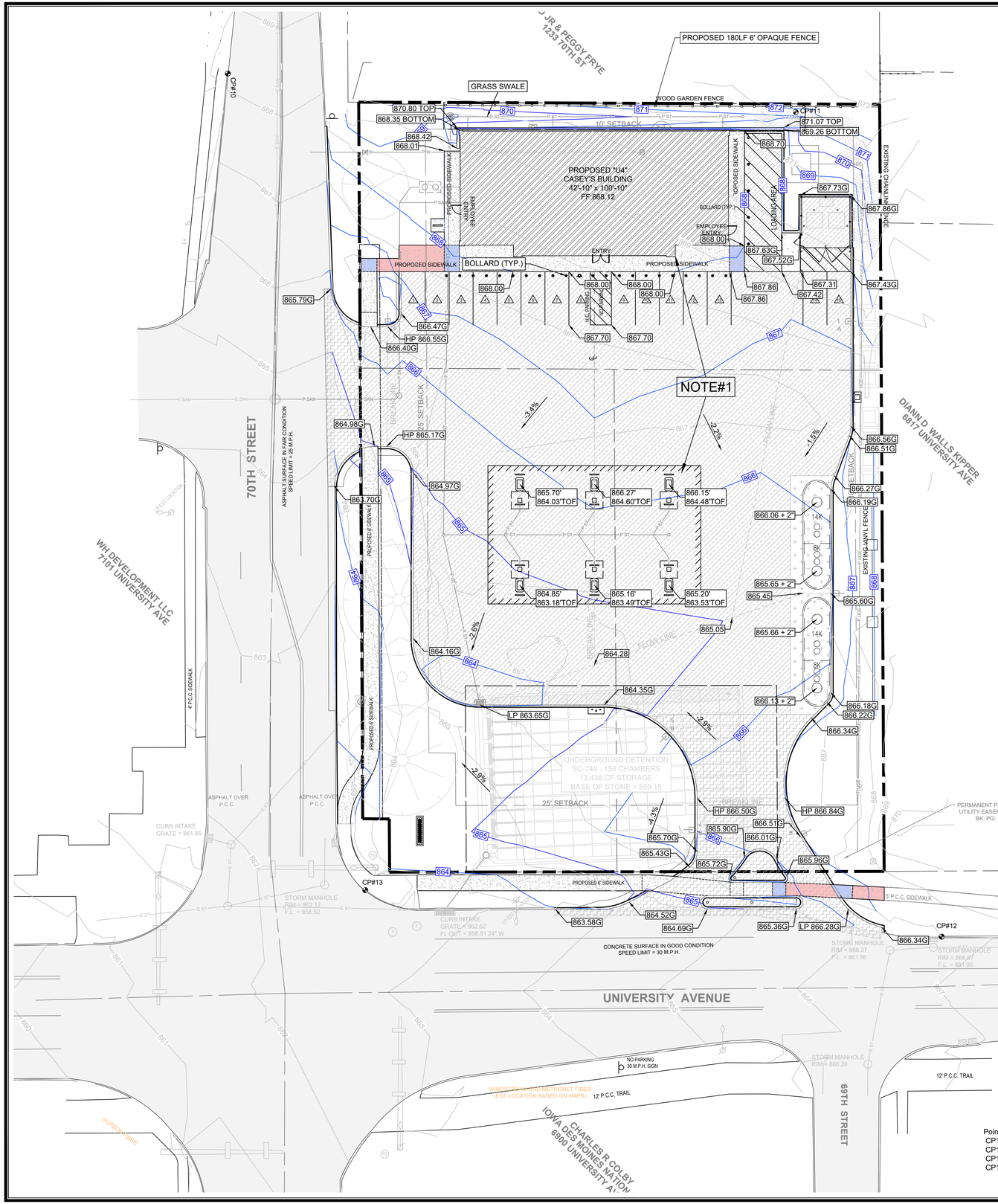
+/-	MORE OR LESS	(E)	ELEC. MANHOLE
F.F.	FINISHED FLOOR	(S)	SANITARY SEWER MANHOLE
123.45G	GUTTER ELEVATION	(ST)	STORM SEWER MANHOLE
123.45TC	TOP OF CURB ELEVATION	(T)	TRAFFIC MANHOLE
123.45/123.45	EXISTING/ PROPOSED ELEVATION	(C)	CLEANOUT
FL	FLOWLINE ELEVATION	D	DOWNSPOUT
	CONTROL POINT		AREA INTAKE
	CALCULATED CORNER		SINGLE INTAKE
	FOUND CORNER		THROAT INTAKE
	CALCULATED SECTION CORNER		FLARED END SECTION
	FOUND SECTION CORNER		GAS VALVE
	PARKING SPACE		FIRE HYDRANT
	SIGN		WATER VALVE
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	POWER POLE	E XX	EXISTING UTILITY LINE
	LIGHT POLE	CATV	CABLE TELEVISION
	AREA LIGHT	FO	FIBER OPTIC
	GUY ANCHOR	GAS	GAS LINE
	TEL. JUNCTION BOX	OHE	OVERHEAD ELEC.
ET	ELEC. TRANSFORMER	OHT	OVERHEAD TEL.
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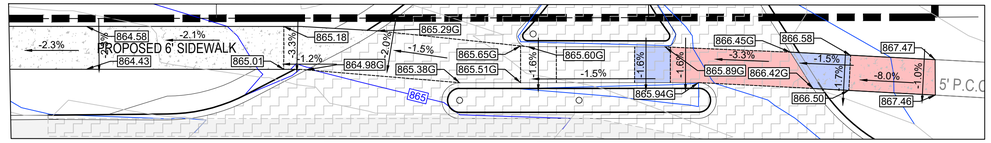
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C-103 - DIMENSION SHEET

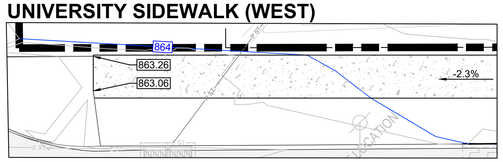


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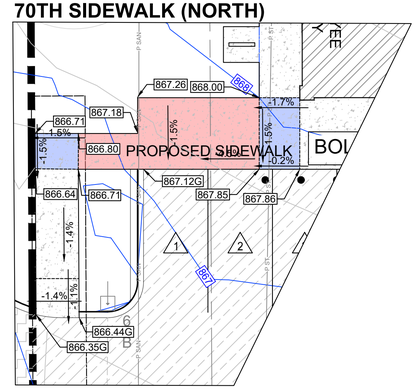
UNIVERSITY SIDEWALK (EAST)



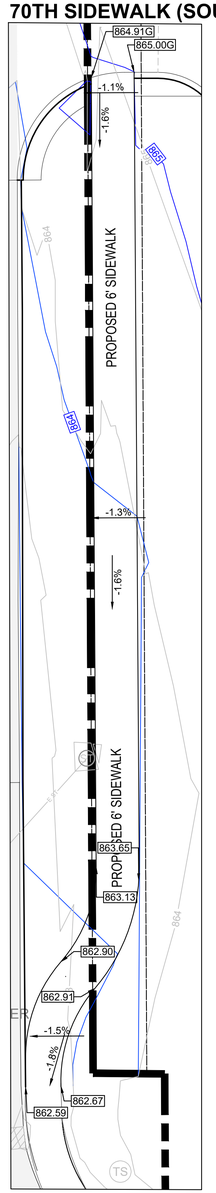
UNIVERSITY SIDEWALK (WEST)



70TH SIDEWALK (NORTH)

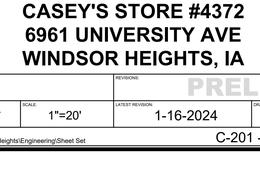


70TH SIDEWALK (SOUTH)



NOTES:

#1: MAINTAIN A MINIMUM 2' SEPARATION BETWEEN BOTTOM OF FOOTINGS AND EXPANSIVE SOILS



LEGEND:

+/-	MORE OR LESS	ⓔ	ELEC. MANHOLE
F.F.	FINISHED FLOOR	Ⓢ	SANITARY SEWER MANHOLE
123.45G	GUTTER ELEVATION	Ⓢ	STORM SEWER MANHOLE
123.45TC	TOP OF CURB ELEVATION	Ⓣ	TRAFFIC MANHOLE
123.45/ 123.45	EXISTING/ PROPOSED ELEVATION		CLEANOUT
FL	FLOWLINE ELEVATION	D	DOWNSPOUT
	CONTROL POINT		AREA INTAKE
○	CALCULATED CORNER		SINGLE INTAKE
●	FOUND CORNER		THROAT INTAKE
△	CALCULATED SECTION CORNER		FLARED END SECTION
▲	FOUND SECTION CORNER		GAS VALVE
▷	PARKING SPACE		FIRE HYDRANT
	SIGN		WATER VALVE
	STREET LIGHT	P XX	PROPOSED UTILITY LINE
	POWER POLE	E XX	EXISTING UTILITY LINE
	LIGHT POLE	CATV	CABLE TELEVISION
	AREA LIGHT	FO	FIBER OPTIC
	GUY ANCHOR	GAS	GAS LINE
	UTILITY PEDESTAL	OHE	OVERHEAD ELEC.
ET	ELEC. TRANSFORMER	OHT	OVERHEAD TEL.
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EB	ELEC. BOX	ST	STORM SEWER
EV	ELEC. VAULT	UGE	UNDERGROUND ELEC.
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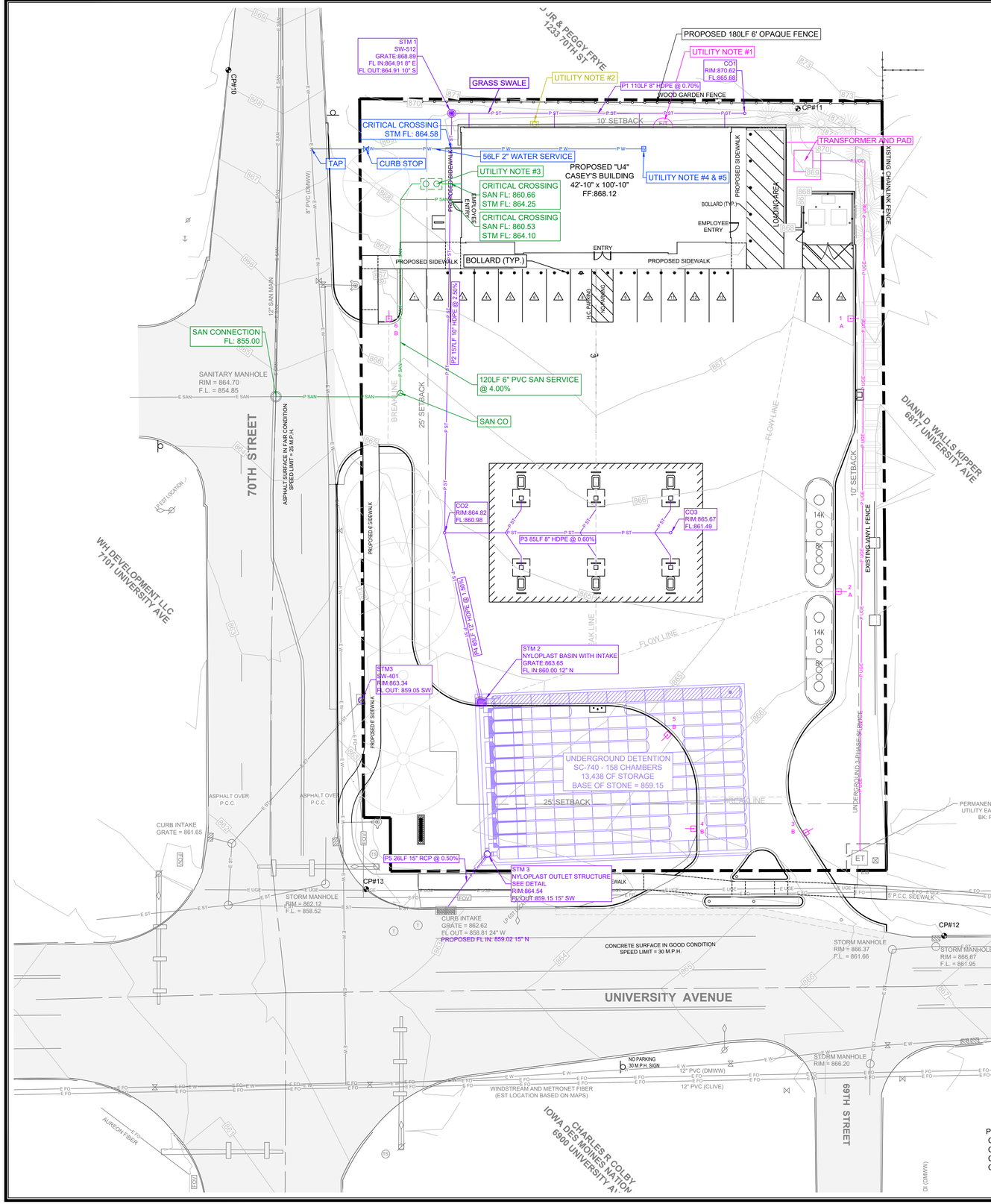
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WINDSOR HEIGHTS, IA

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C-201 - GRADING SHEET



Utility Notes

UTILITY NOTE #1: ELECTRICAL (C-STORE): ELECTRICAL SERVICE ENTRANCE.
-ELECTRIC 3 PHASE, 800 AMP., [illegible] VOLTS, 4 WIRE
-TELEPHONE 20 PAIR, 8 LINES

UTILITY NOTE #2: GAS (C-STORE): SERVICE ENTRANCE.
BLACK SCHEDULE 40 SCREWED PIPE (SIZED BY SERVICE PROVIDER)
CONNECTION LOAD IS 985 MBH. TOTAL CONNECTED LOAD IS 985,000 BTU
985 CU/FT. HR.

UTILITY NOTE #3: SANITARY SEWER (C-STORE): 6" SCHEDULE 40 PVC SANITARY SEWER CONNECTION.
1,000 GALLON BELOW GRADE GREASE INTERCEPTOR WITH 2 MANHOLES

UTILITY NOTE #4: WATER (C-STORE): 2" CTS, HDPE, SDR9 C5--200 PSI WATER SERVICE CONNECTION

UTILITY NOTE #5: IRRIGATION (C-STORE): IRRIGATION DESIGNED AND PROVIDED BY DEVELOPER

UTILITY NOTE #6 ANY EXISTING SERVICES AND/OR STUBS WILL NEED TO BE REMOVED AT THE MAIN

UTILITY NOTE #7 ALL NEWLY-INSTALLED CABLE, TRANSMISSION, OR OTHER UTILITY SYSTEMS WILL BE INSTALLED UNDERGROUND

UTILITY NOTE #8 MAINTAIN A MINIMUM HORIZONTAL DISTANCE OF 10' BETWEEN SANITARY AND WATER SERVICES

EXISTING PAVEMENT

N

−20 0 20 40

Scale in Feet
1" = 20'

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LEGEND:

+/-	MORE OR LESS	E	ELEC. MANHOLE
F.F.	FINISHED FLOOR	S	SANITARY SEWER MANHOLE
123.45G	GUTTER ELEVATION	ST	STORM SEWER MANHOLE
123.45TC	TOP OF CURB ELEVATION	T	TRAFFIC MANHOLE
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FL	FLOWLINE ELEVATION	D	DOWNSPOUT
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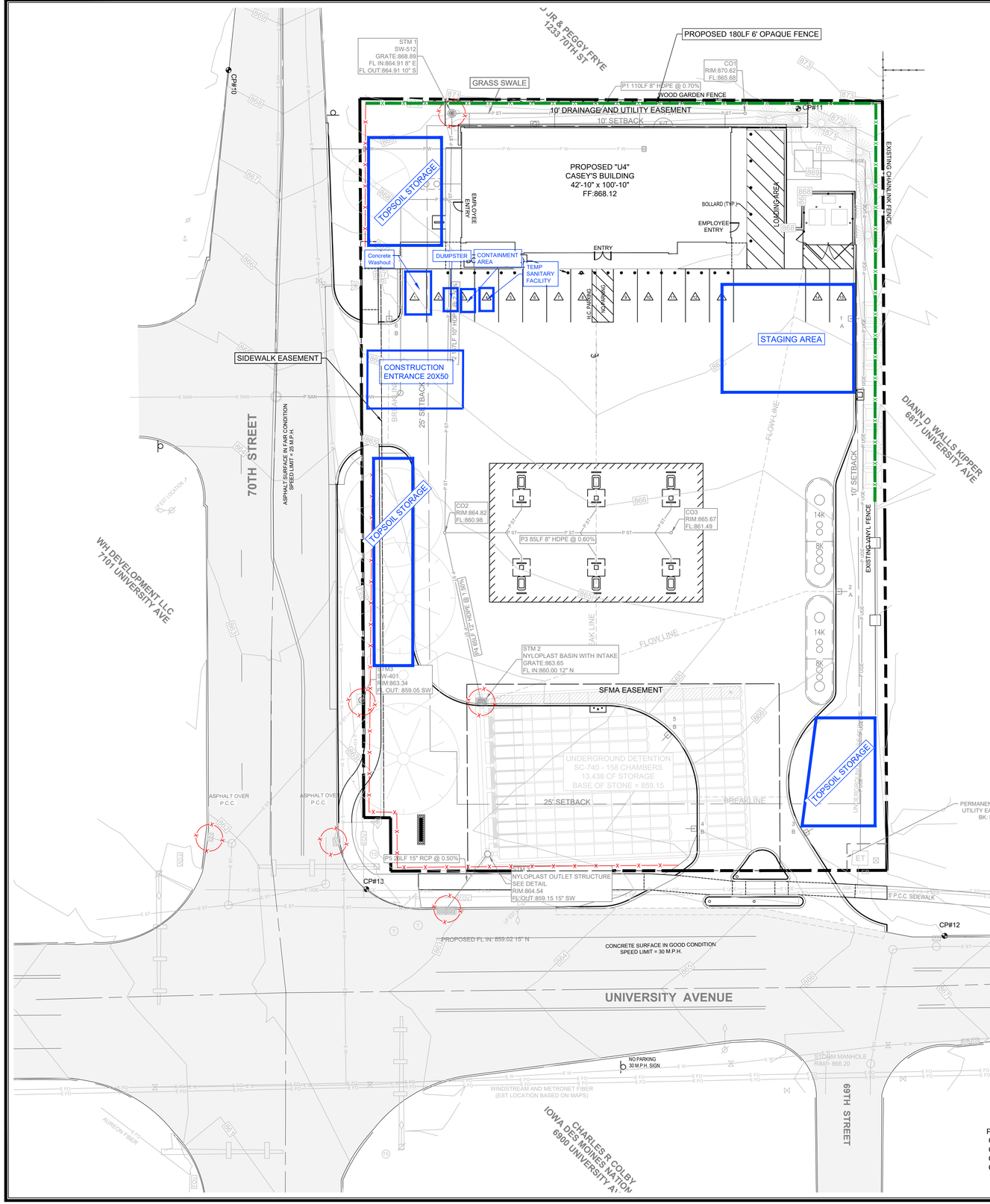
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C-301 - UTILITY SHEET



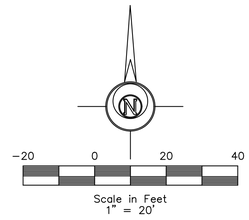
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CP13:	583196.586	1582181.659	862.831	CUT-X

SWPPP NOTES:

1. LOCATION OF STAGING AREAS TO CONTAIN: JOB TRAILERS, FUELING LOCATION, TEMPORARY SANITARY FACILITIES, MATERIALS STORAGE, CONCRETE WASHOUT AREA. CONTROL RUNOFF WITH DIVERSION BERMS OR SILT FENCE AND DIRECT TO SEDIMENT BASIN WHERE POSSIBLE.
2. ALL INTERIOR & PERIMETER SILT FENCE NOT SHOWN. SEE EROSION CONTROL PLAN.
3. MULCH OR SOD ALL DISTURBED AREAS NOT PAVED OR DEVELOPED.
4. ADDITIONAL CONTROLS MAY BE REQUIRED DEPENDING ON PHASING & SITE CONDITIONS. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING, NOTING & IMPLEMENTING.
5. A MINIMUM 6" LAYER OF TOPSOIL SHALL BE RESPREAD FROM THE STOCKPILE ONSITE TO SODDED PERVIOUS SURFACES THAT WERE DISTURBED DURING CONSTRUCTION. SEEDED AREAS TO RECEIVE A MINIMUM 8" OF TOPSOIL
6. ALL BARE AREAS THAT WILL REMAIN INACTIVE FOR 14 DAYS OR MORE REQUIRE IMMEDIATE STABILIZATION MEASURES (TEMPORARY SEEDING OR MULCHING)
7. ALL SLOPES 4:1 OR GREATER REQUIRE SEEDING AND MATTING

FILTER SOCK

CONSTRUCTION FENCE



LEGEND:

+/-	MORE OR LESS	E	ELEC. MANHOLE
F.F.	FINISHED FLOOR	S	SANITARY SEWER MANHOLE
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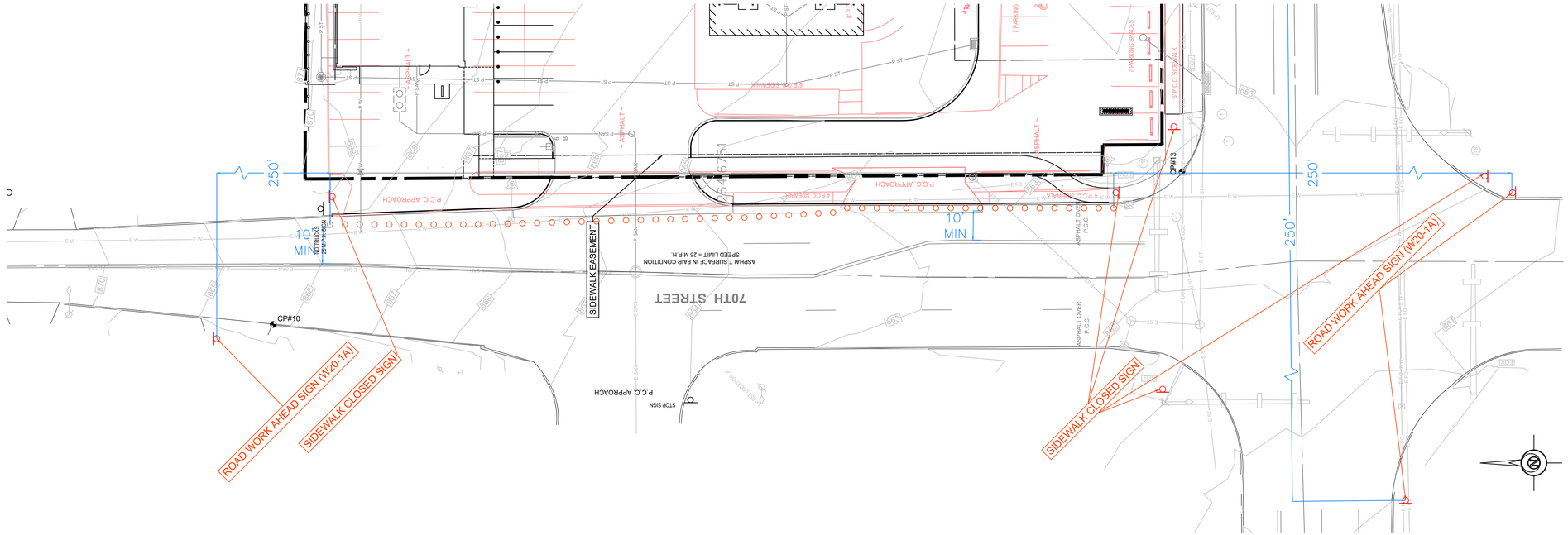
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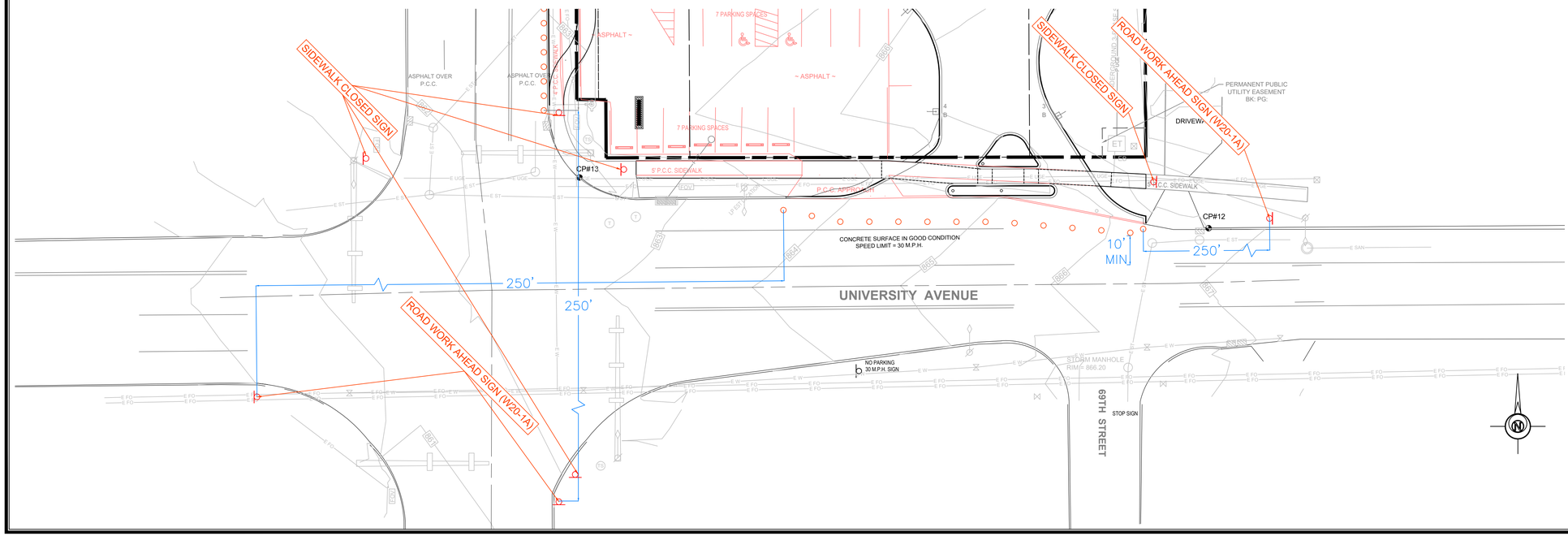
CASEY'S STORE #4372
6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA

BENCHMARK:			REVISIONS: PRELIMINARY	
COPYRIGHT DATE: ----	DRAWN BY: N. DAY	SCALE: 1"=20'	LATEST REVISION: 1-16-2024	DRAWING NO: 22-201

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C-401 - EROSION CONTROL SHEET





−20 0 20 40

Scale in Feet
1" = 20'

LEGEND:

+/-	MORE OR LESS	E	ELEC. MANHOLE
F.F.	FINISHED FLOOR	S	SANITARY SEWER MANHOLE
123.45G	GUTTER ELEVATION	ST	STORM SEWER MANHOLE
123.45TC	TOP OF CURB ELEVATION	T	TRAFFIC MANHOLE
123.45/123.45	EXISTING/ PROPOSED ELEVATION	C	CLEANOUT
FL	FLOWLINE ELEVATION	D	DOWNSPOUT
	CONTROL POINT		AREA INTAKE
	CALCULATED CORNER		SINGLE INTAKE
	FOUND CORNER		THROAT INTAKE
	CALCULATED SECTION CORNER		FLARED END SECTION
	FOUND SECTION CORNER		GAS VALVE
	PARKING SPACE		FIRE HYDRANT
	SIGN		WATER VALVE
	STREET LIGHT	P XX	PROPOSED UTILITY LINE
	POWER POLE	E XX	EXISTING UTILITY LINE
	LIGHT POLE	CATV	CABLE TELEVISION
	AREA LIGHT	FO	FIBER OPTIC
	GUY ANCHOR	GAS	GAS LINE
	UTILITY PEDESTAL	OHE	OVERHEAD ELEC.
ET	ELEC. TRANSFORMER	OHT	OVERHEAD TEL.
EM	ELEC. METER	SAN	SANITARY SEWER
EB	ELEC. BOX	ST	STORM SEWER
EV	ELEC. VAULT	UGE	UNDERGROUND ELEC.
FOV	FIBER OPTIC VAULT	UGT	UNDERGROUND TEL.
GM	GAS METER	W	WATER
TV	CABLE TV JUNCTION BOX		FENCE LINE
WM	WATER METER		

PELDS DESIGN SERVICES
Architecture | Engineering | Surveying
2323 Dixon Street, Des Moines, Iowa 50316 | PO Box 4626, Des Moines, Iowa 50305 | Ph: 515 265 8196

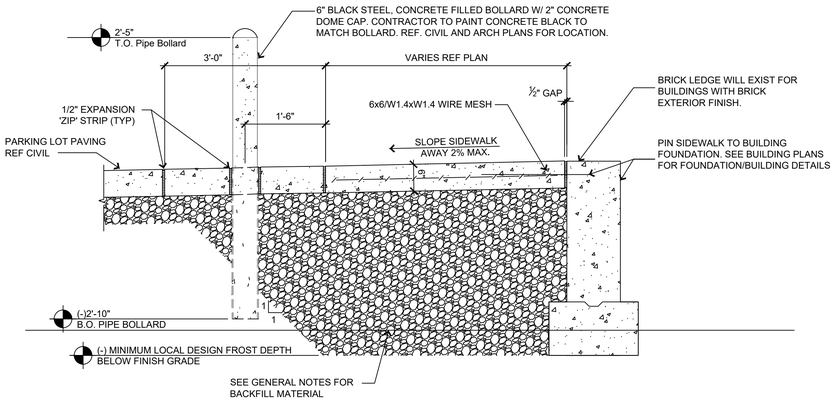
TITLE:

CASEY'S STORE #4372
6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA

BENCHMARK:			REVISIONS: PRELIMINARY	
COPYRIGHT DATE:	DRAWN BY:	SCALE:	LATEST REVISION:	DRAWING NO:
----	N. DAY	1"=20'	1-16-2024	22-201

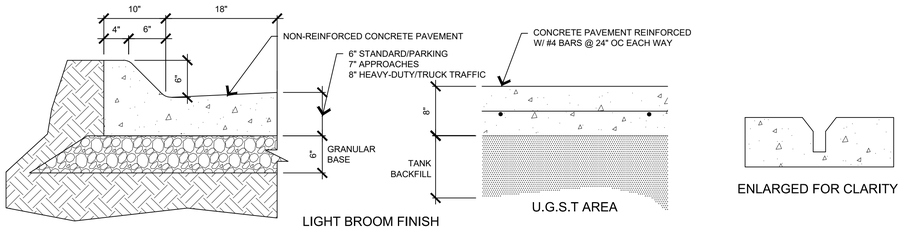
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C-501 - TRAFFIC CONTROL SHEET



1 TYPICAL BUILDING SIDEWALK AND BOLLARD

3/4" = 1'-0"

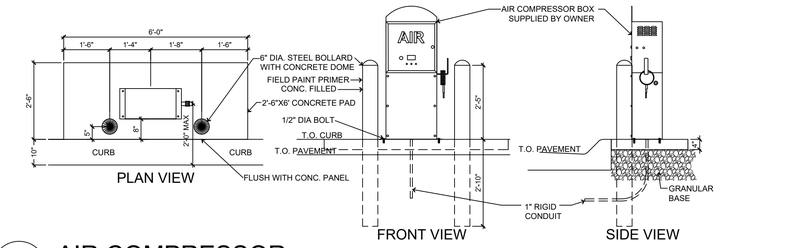


2 CONCRETE PAVING AND CURB

Not to Scale

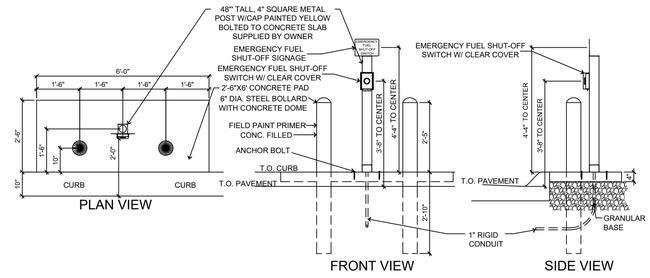
3 PAVING SAW-CUT

Not to Scale



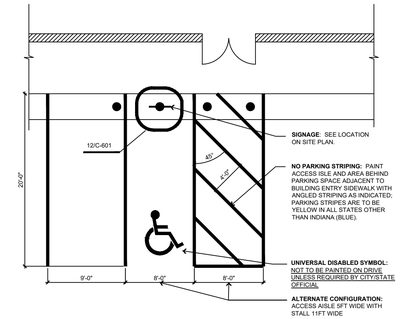
7 AIR COMPRESSOR

1/2" = 1'-0"



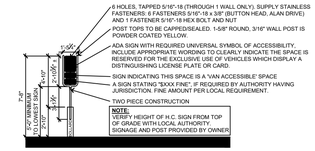
8 EMERGENCY STOP

1/2" = 1'-0"



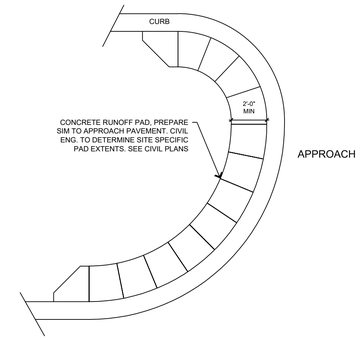
11 ADA PARKING SPACES

3/16" = 1'-0"



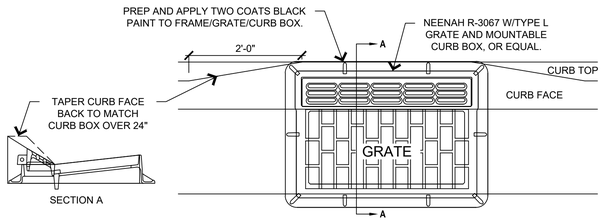
12 ADA PARKING SIGN

1/4" = 1'-0"



4 LANDSCAPE PROTECTOR

Not to Scale



6 CURB INLET

Not to Scale

General Notes

Concrete:

1. All concrete and reinforcing work shall conform to the latest edition of the American Concrete Institute's "Standard Building Code Requirements for Reinforced Concrete," (ACI 318) and "Specifications for Structural Concrete for Buildings," (ACI 301).
2. Concrete shall use type II cement. Concrete mix designs shall meet the following requirements:

	MINIMUM 28-DAY f'c	MAXIMUM W/C RATIO	SLUMP	AIR ENTRAIN.
Exterior exposed concrete	4,000 psi	0.42	4" ± 1"	6% ± 1%

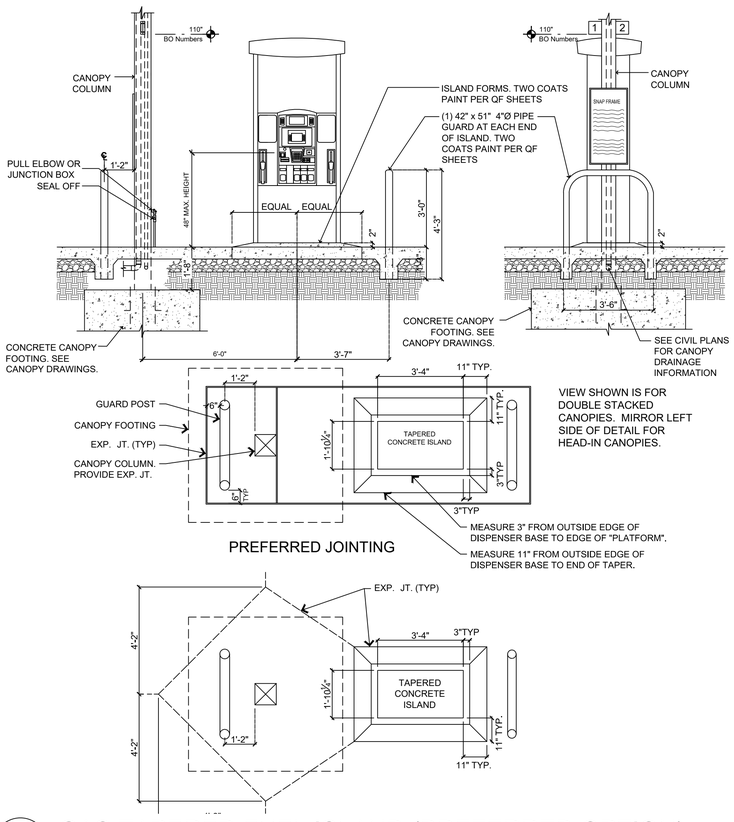
   If Contractor desires to increase slump above allowable limits to facilitate placement or pumping, this shall be done utilizing a superplasticizer approved by the Ready Mix Designer at a dosage rate provided by Ready Mix Designer.
3. The Contractor shall reject any concrete that exceeds the slump limits noted above (prior to adding superplasticizer) or concrete that can not be placed within ninety (90) minutes of batch time.
4. No aluminum shall be placed in concrete.
5. All concrete is reinforced unless specifically noted as Unreinforced. Reinforce all concrete not otherwise shown with the same reinforcing as in similar sections or areas.
6. During hot weather (80 degrees F and above), the Contractor shall comply with the recommendations ACI-305 "Hot Weather Concrete". During cold weather (40 degrees and below), the Contractor shall comply with the recommendations of ACI-306 "Cold Weather Concreting".
7. The concrete mix designs are to be submitted as a formal submittal to the Owner for acceptance PRIOR to concrete being delivered to the site.
8. Verify with local authorities the required thickness of poured concrete for approaches and parking lot.

Sub-Base:

1. Sub-base Course Under Exterior Concrete Paved Surfaces: Spread and compact sub-base in 6"-9" lifts compacted to 98% Standard Proctor.

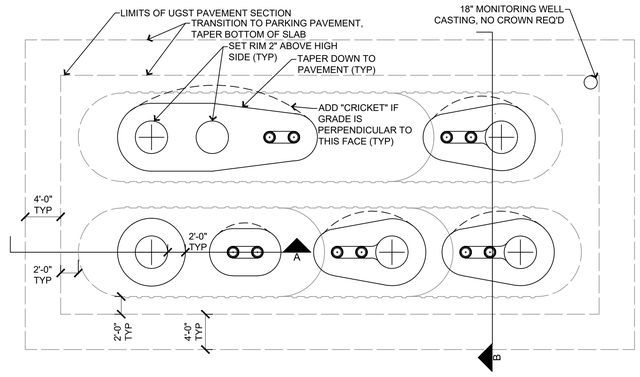
CASEY'S CONSTRUCTION DIVISION
One Convenience Blvd., Ankeny, IA. 50021 515-965-6100

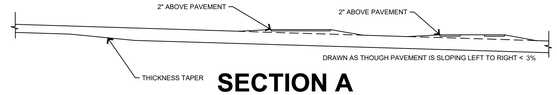
PROJECT:	PUBLISHED:	DRAWING INFORMATION:
2023 Civil Details	01/10/23	CIVIL DETAILS
	1 03/08/23	
DRAWING INFORMATION: CONSTRUCTION DIVISION		C-601
DRAWN BY: ARLON GOFORTH III	CHECKED BY:	



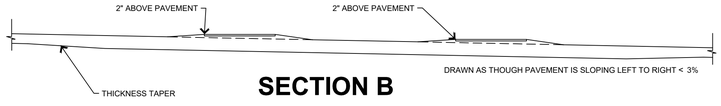
1 GAS TAPERED FUEL ISLAND (PREFERRED OPTION)

Not to Scale





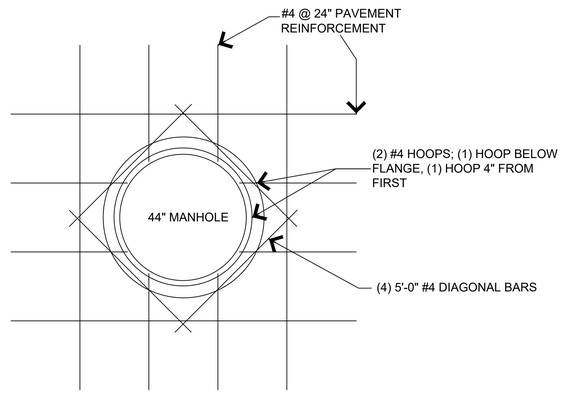
SECTION A



SECTION B

4 UGST PAVING FOR PAVEMENT SLOPE <3%

Not to Scale



General Notes:

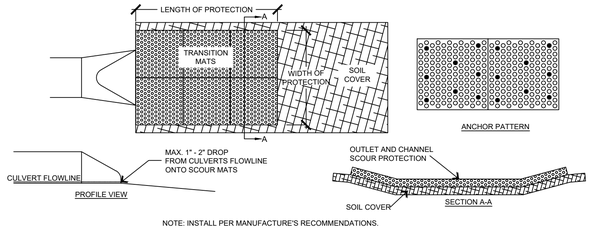
1 ALL REINFORCING IS CENTER OF SLAB.

6 UGST Manhole Detail

1/2" = 1'-0"

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One Convenience Blvd., Ankeny, IA. 50021 515-965-6100

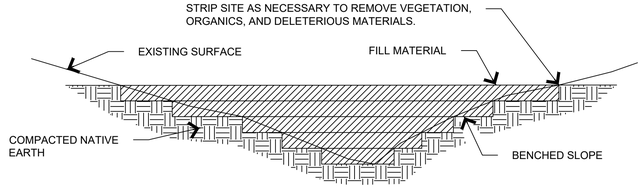
PROJECT: 2023 Civil Details
PUBLISHED: 01/10/23
REVISED: 1 03/08/23
DRAWING INFORMATION: CONSTRUCTION DIVISION
DRAWN BY: ARLON GOFORTH III
CHECKED BY:
DRAWING INFORMATION: CIVIL DETAILS
C-602



NOTE: INSTALL PER MANUFACTURE'S RECOMMENDATIONS.

1 SCOUR STOP EROSION CONTROL

Not to Scale

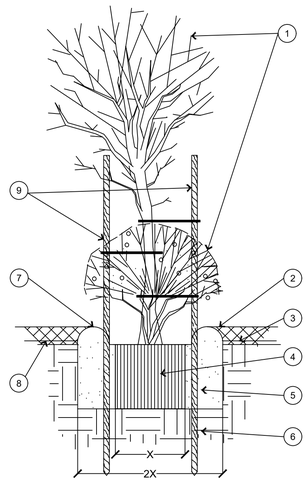


NOTES:

1. BENCH SLOPES TO MAINTAIN VERTICAL SIDE SLOPES AT FILL LIMITS +/- 3' VERTICAL TO +/- 8' HORIZONTAL.
2. COMPACTION SHALL BE IN 8" LIFTS TO 95% STANDARD PROCTOR OR OTHERWISE SPECIFIED IN GEOTECHNICAL REPORT.
3. SCARIFY ORIGINAL GROUND AND BLEND WITH FIRST LIFT ON EACH BENCH.
4. ALL FILL MATERIALS, INCLUDING FILL GENERATED ON-SITE, SHALL BE OF SUITABLE MATERIAL. UNSUITABLE FILL MATERIAL INCLUDES, BUT IS NOT LIMITED TO, SOIL THAT CONTAINS LARGE ROCKS, TREE AND PLANT ROOTS, CONCRETE, TRASH, ETC.

2 TYPICAL FILL SECTION

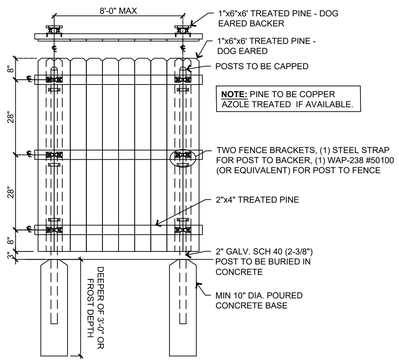
Not to Scale



1. TREE/SHRUB, PERENNIAL, OR ORNAMENTAL GRASS.
2. GROUNDCOVER: 3" DEPTH OF 3/4" WASHED STONE OR WASHED BRICK CHIPS AS INDICATED IN LANDSCAPING PLAN.
3. FINISH GRADE.
4. ROOT BALL.
5. BACKFILL. AMEND AND FERTILIZE AS RECOMMENDED BY LOCAL SUPPLIER
6. UNDISTURBED NATIVE SOIL.
7. 3" HIGH EARTHEN WATERING BASIN.
8. HEAVY WEED FABRIC UNDER GROUNDCOVER.
9. FOR TREES, 2 STAKES/GUIDEPOSTS MIN; 3 REQ ON SLOPES WITH TIES

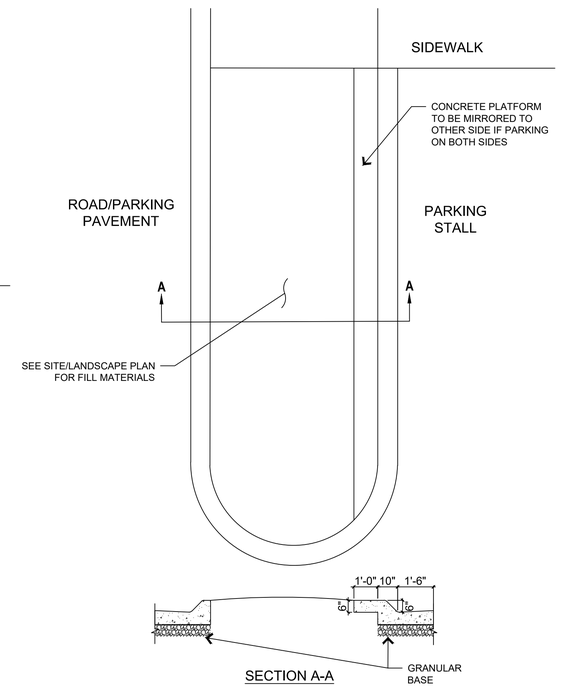
4 PLANT/TREE INSTALLATION

Not to Scale



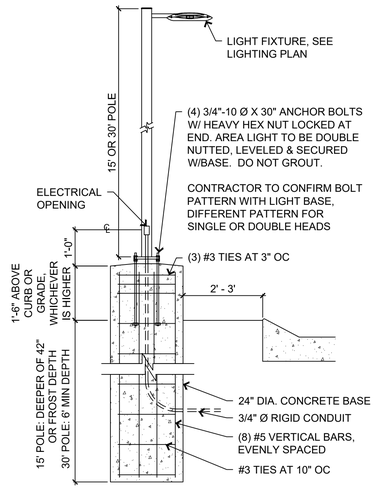
5 SCREEN/PRIVACY FENCE

Not to Scale



7 PARKING LANDSCAPE ISLAND DETAIL

3/8" = 1'-0"



8 AREA LIGHTING

1/2" = 1'-0"

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PROJECT:
2023 Civil Details

PUBLISHED: 01/10/23
REVISED: 03/08/23 (1)

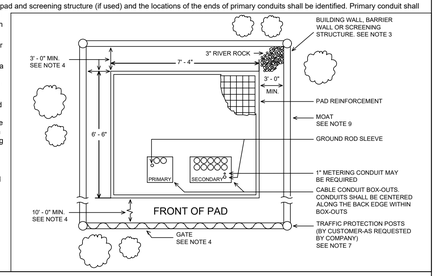
DRAWING INFORMATION: CIVIL DETAILS

DRAWING INFORMATION: CONSTRUCTION DIVISION
DRAWN BY: ARLON GOFORTH III
CHECKED BY:

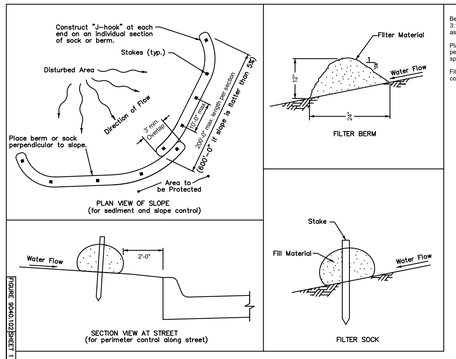
C-603

Three-phase transformer pads must be:

1. Installed by the customer at the customer's expense. Ongoing maintenance and repair to the pad are the responsibility of the customer.
2. Constructed in a manner satisfactory to the Company, in a mutually agreed upon location with hard surface access and unobstructed work space for large vehicles.
3. The installation of a screening or barrier structure may be required by your local governing authority. It is the customer's responsibility to determine if a barrier structure is required. If screening or a barrier structure is required, or installed as an optional feature, the clearance limitations of notes 2 and 3 must be maintained.
4. A 3'-0" minimum clearance is to be maintained from pad sides and back, to the nearest structure or plantings. A level graded, 10'-0" minimum clearance is to be maintained from the front of pad, to the nearest fixed structure or plantings. If a full length gate is installed, it shall be hinged and no closer than 3'-0" from pad front. Local government, fire protection, and building codes may require greater clearances. Customer will avoid plantings or construction that interferes with Company's required maintenance access to its equipment. If a fence or barrier is to be installed, it must be coordinated with the Company.
5. All conduits shall extend 5'-0" beyond the pad and screening structure (if used) and the locations of the ends of primary conduits shall be identified. Primary conduit shall be installed between 42" and 48" below final grade. Secondary conduit shall be installed between 30" and 42" below final grade.
6. When metallic conduit is utilized, customer shall install grounding bushings.
7. When necessary for traffic protection, set a 4" diameter concrete-filled galvanized steel post 3'-0" from pad Post shall be 8' long with a 4' concrete embedment.
8. All Company transformers shall be located in mutually agreed upon location with hard surface access and unobstructed work space for large vehicles. If special equipment, such as a crane, is required for setting or replacing the transformer, the customer shall pay all expenses.
9. A trench 2'-0" deep and 3'-0" wide will be dug on all four sides. The trench will be lined with silt fence fabric and filled with 3" screened river rock to final grate. Contact local engineering representative if design needs modification.



1. TRANSFORMER PAD



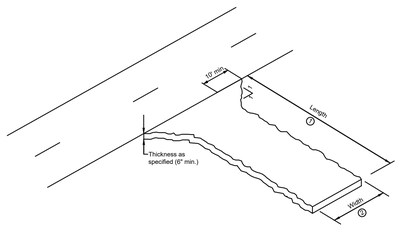
Berm shown is typical for slopes flatter than 3:1. For steeper slopes, increase berm size as directed by the Engineer.

Place berm in uncompacted windrow perpendicular to the slope at locations specified in the contract documents.

Filter sock diameter as specified in the contract documents.

TYPICAL PLACEMENT OF BERM OR SOCK

2. 9040-102 FILTER BERM AND FILTER SOCK



1. Remove vegetation and excavate soft soils from entrance area. Thoroughly compact subgrade prior to placing stone.
2. Install culvert under entrance if necessary to maintain drainage.
3. Grade entrance to prevent runoff from flowing onto street. Direct all runoff from entrance to a sediment retention device.
4. When specified, install subgrade stabilization fabric prior to placing crushed stone.
5. Install layer of crushed stone to the thickness (6 in. min.) and dimensions specified.

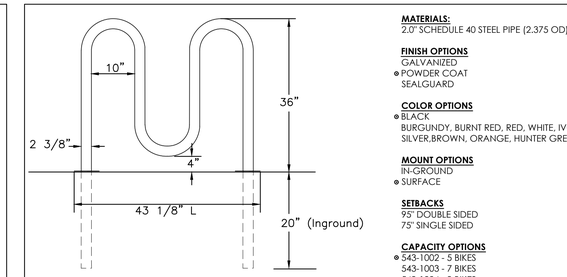
① Entrance length: 50 ft. minimum (30 ft. for single family residential), or as specified. Length of entrance may be increased if sediment track-out occurs.

② Entrance width: 20 ft. minimum.

SUDAS	REVISION NO.
	REVISION DATE 10/17/06
FIGURE: 9040.120	SHEET 1 OF 1

STABILIZED CONSTRUCTION ENTRANCE

3. STABILIZED CONSTRUCTION ENTRANCE



MODEL # 543-1002

thepark LAND AND FACILITIES CATALOG

MATERIALS:
2.0" SCHEDULE 40 STEEL PIPE (2.375 OD)

FINISH OPTIONS
GALVANIZED
⊙ POWDER COAT SEALGUARD

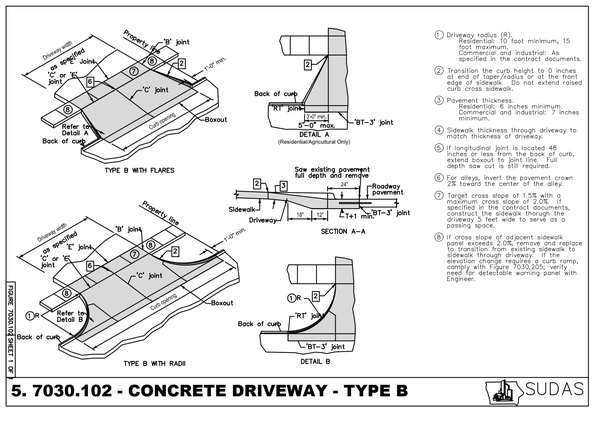
COLOR OPTIONS
⊙ BLACK
BURGUNDY, BURNT RED, RED, WHITE, IVORY, SILVER,BROWN, ORANGE, HUNTER GREEN

MOUNT OPTIONS
IN-GROUND
⊙ SURFACE

SETBACKS
9.5" DOUBLE SIDED
7.5" SINGLE SIDED

CAPACITY OPTIONS
⊙ 543-1002 - 5 BIKES
543-1003 - 7 BIKES
543-1004 - 9 BIKES
543-1005 - 11 BIKES
543-1006 - 13 BIKES
543-1007 - 15 BIKES

4. BIKE RACK - WAVE STYLE



① Driveway radius (R):
Residential: 10 foot minimum, 15 foot maximum.
Commercial and Industrial: As specified in the contract documents.

② Transition the curb height to 0 inches at end of taper/radius or at the front edge of sidewalk. Do not extend raised curb cross sidewalk.

③ Pavement thickness:
Residential: 6 inches minimum.
Commercial and Industrial: 7 inches minimum.

④ Sidewalk thickness through driveway to match thickness of driveway.

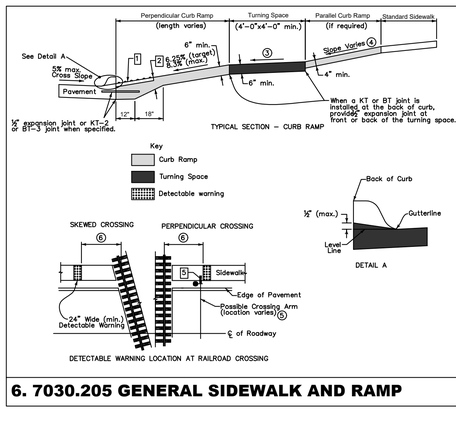
⑤ If longitudinal joint is located 48 inches or less from the back of curb, extend boxout to joint line. Full depth saw cut is still required.

⑥ For alleys, invert the pavement crown 2% toward the center of the alley.

⑦ Target cross slope of 1.5% with a maximum cross slope of 2.0%, or as specified in the contract documents, construct the sidewalk through the driveway 5 feet wide to serve as a passing space.

⑧ If cross slope of adjacent sidewalk exceeds 2.0%, construct a 5 foot landing space to transition from existing sidewalk to sidewalk through driveway. If the elevation change requires a curb ramp, comply with Figure 7030.205, verify need for detectable warning panel with Engineer.

5. 7030.102 - CONCRETE DRIVEWAY - TYPE B



① Provide a minimum 2 foot width of detectable warning surfaces in the direction of travel that extends across the full width of the curb ramp and turning space, exclusive of curbs or flares.

② Provide a minimum of 6 inches of concrete below the detectable warning panel.

③ Minimum 4 feet by 4 feet. Target cross slope of 2.0% with a maximum cross slope of 2.5%.

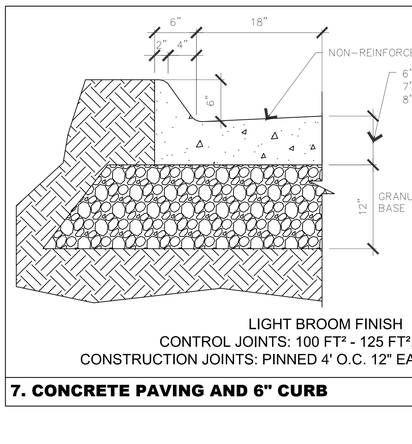
④ If normal sidewalk elevation cannot be achieved with the perpendicular ramp between the street and landing due to limited ramp length, provide a parallel ramp to make up the elevation difference between the landing and the standard sidewalk.

The length of the parallel ramp is not required to exceed 15 feet, regardless of the ramp's slope. Do not exceed 8.3% slope for parallel ramps shorter than 15 feet.

⑤ If crossing gate conflicts with detectable warning panel location or if pedestrian crossing gate is provided, place detectable warning panel in advance of the crossing gate.

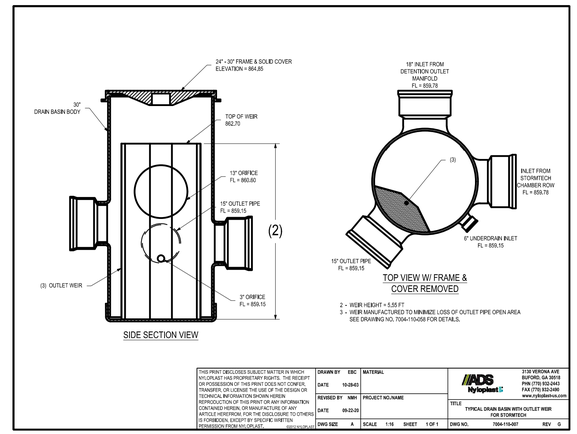
⑥ Locate front edge of detectable warning panel 12 to 15 feet from centerline of nearest rail. Orient truncated domes parallel to the direction of pedestrian travel.

6. 7030.205 GENERAL SIDEWALK AND RAMP



LIGHT BROOM FINISH
CONTROL JOINTS: 100 FT² - 125 FT², 25% DEEP
CONSTRUCTION JOINTS: PINNED 4' O.C. 12" EACH WAY W/ #4 REBAR

7. CONCRETE PAVING AND 6" CURB

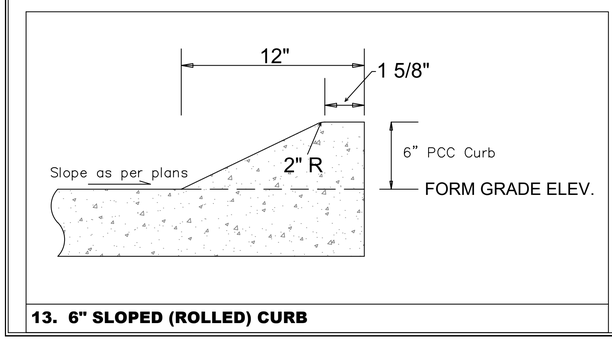


2 - WEIR HEIGHT = 5.55 FT
3 - WEIR MANUFACTURED TO MINIMIZE LOSS OF OUTLET PIPE OPEN AREA SEE DRAWING NO. 7004-110-056 FOR DETAILS.

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DRAWN BY	EBC	MATERIAL	ADS HydroNext® 3126 VERONA AVE BUFORD, GA 30518 PH: (770) 932-2409 FAX (770) 932-2490 www.hydronext.com
DATE	10-28-03		
REVISED BY	NMH	PROJECT NO./NAME	TITLE: TYPICAL DRAIN BASIN WITH OUTLET WEIR FOR STORMTECH
DATE	09-22-20		
DWG SIZE	A	SCALE 1:16 SHEET 1 OF 1	DWG NO. 7004-110-057 REV G

4. BIKE RACK - WAVE STYLE



13. 6" SLOPED (ROLLED) CURB

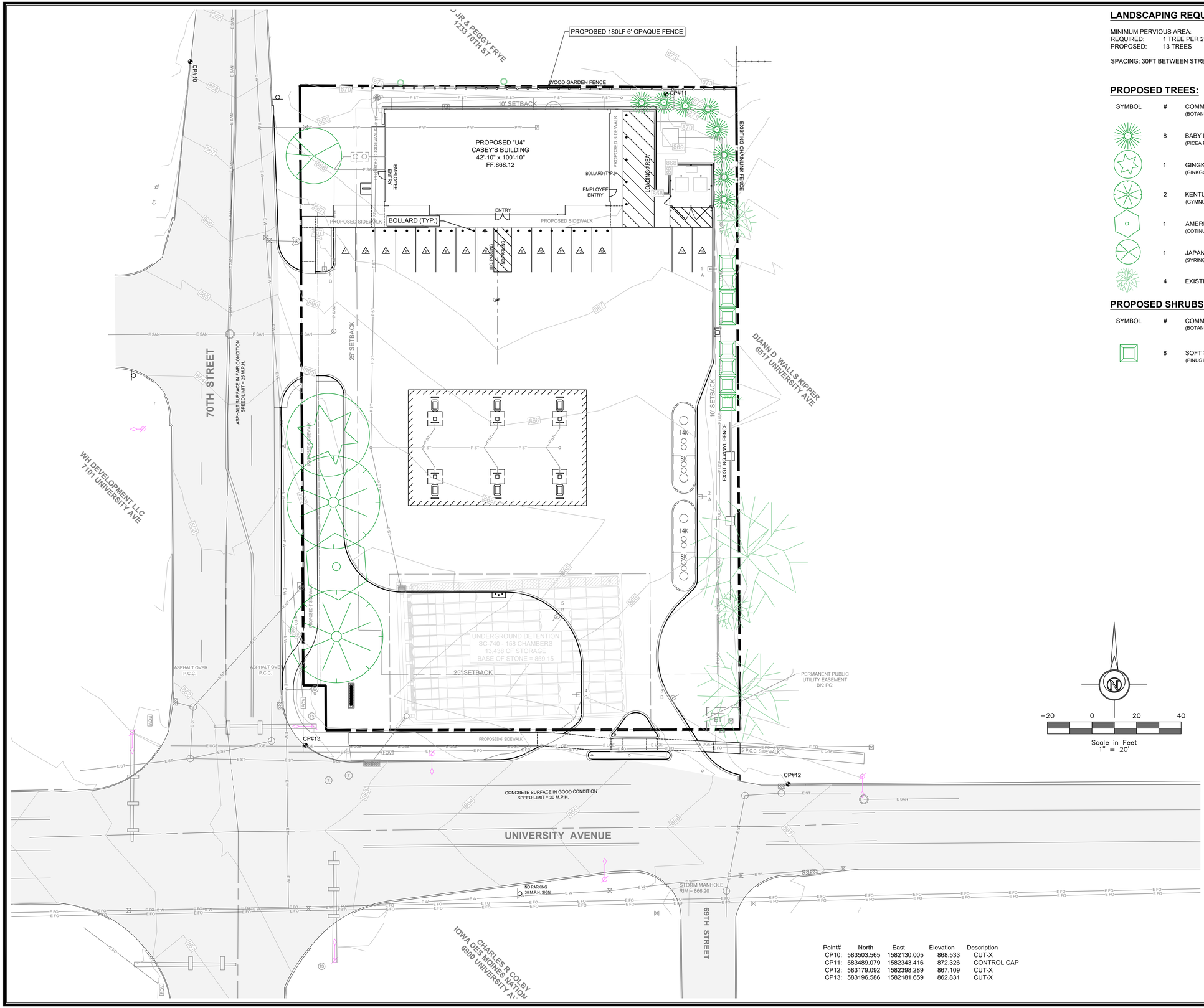
PELDS DESIGN SERVICES
Architecture | Engineering | Surveying
2323 Dixon Street, Des Moines, Iowa 50316 | PO Box 4626, Des Moines, Iowa 50305 | Ph: 515 265 8196

TITLE:
CASEY'S STORE #4372
6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA

BENCHMARK:
REVISIONS:
PRELIMINARY

COPYRIGHT DATE:	DRAWN BY:	SCALE:	LATEST REVISION:	DRAWING NO:
----	N. DAY		1-16-2024	22-201

FILE PATH: J:\2022 Projects\22-201 CGS Windsor Heights\Engineering\Sheet Set
C-604 - DETAIL SHEET



Point#	North	East	Elevation	Description
CP10:	583503.565	1582130.005	868.533	CUT-X
CP11:	583489.079	1582343.416	872.326	CONTROL CAP
CP12:	583179.092	1582398.289	867.109	CUT-X
CP13:	583196.586	1582181.659	862.831	CUT-X

LANDSCAPING REQUIREMENTS:

MINIMUM PERVIOUS AREA:
REQUIRED: 1 TREE PER 2,000 SQ.FT. PERVIOUS AREA - 19,711 SQ.FT. PERVIOUS AREA - 10 TREES
PROPOSED: 13 TREES

SPACING: 30FT BETWEEN STREET TREES

PROPOSED TREES:

SYMBOL	#	COMMON NAME (BOTANICAL NAME)	PLANTING SIZE	MATURE SIZE (HEIGHT & SPREAD)
	8	BABY BLUE SPRUCE (PICEA PUNGENS 'BABY BLUE')	6' TALL	20' & 15'
	1	GINGKO (MALE ONLY) (GINKGO BILOBA 'AUTUMN GOLD')	2" CALIPER B&B	50' & 35'
	2	KENTUCKY COFFEETREE (GYMNOCLADUS DIOICA 'ESPRESSO')	2" CALIPER B&B	75' & 50'
	1	AMERICAN SMOKE TREE (COTINUS OBOVATUS)	2" CALIPER B&B	30' & 30'
	1	JAPANESE TREE LILAC (SYRINGA RETICULATA 'IVORY SILK')	2" CALIPER B&B	20' & 15'
	4	EXISTING TREES		

PROPOSED SHRUBS:

SYMBOL	#	COMMON NAME (BOTANICAL NAME)	PLANTING SIZE	MATURE SIZE (HEIGHT & SPREAD)
	8	SOFT SERVE FALSE CYPRESS (PINUS MUGO 'CARSTENS')	2 GALLON	6'-10' & 5'-6'

LEGEND:

+/-	MORE OR LESS	E	ELEC. MANHOLE
F.F.	FINISHED FLOOR	S	SANITARY SEWER MANHOLE
123.45G	GUTTER ELEVATION	S	STORM SEWER MANHOLE
123.45TC	TOP OF CURB ELEVATION	T	TRAFFIC MANHOLE
123.45/ 123.45	EXISTING/ PROPOSED ELEVATION		CLEANOUT
FL	FLOWLINE ELEVATION	D	DOWNSPOUT
	CONTROL POINT		AREA INTAKE
	CALCULATED CORNER		SINGLE INTAKE
	FOUND CORNER		THROAT INTAKE
	CALCULATED SECTION CORNER		FLARED END SECTION
	FOUND SECTION CORNER		GAS VALVE
	PARKING SPACE		FIRE HYDRANT
	SIGN		WATER VALVE
	STREET LIGHT	P XX	PROPOSED UTILITY LINE
	POWER POLE	E XX	EXISTING UTILITY LINE
	LIGHT POLE	CATV	CABLE TELEVISION
	AREA LIGHT	FO	FIBER OPTIC
	GUY ANCHOR	GAS	GAS LINE
	UTILITY PEDESTAL	OHE	OVERHEAD ELEC.
ET	ELEC. TRANSFORMER	OHT	OVERHEAD TEL.
EM	ELEC. METER	SAN	SANITARY SEWER
EB	ELEC. BOX	ST	STORM SEWER
EV	ELEC. VAULT	UGE	UNDERGROUND ELEC.
FOV	FIBER OPTIC VAULT	UGT	UNDERGROUND TEL.
GM	GAS METER	W	WATER
TV	CABLE TV JUNCTION BOX		FENCE LINE
WM	WATER METER		

PELDS DESIGN SERVICES
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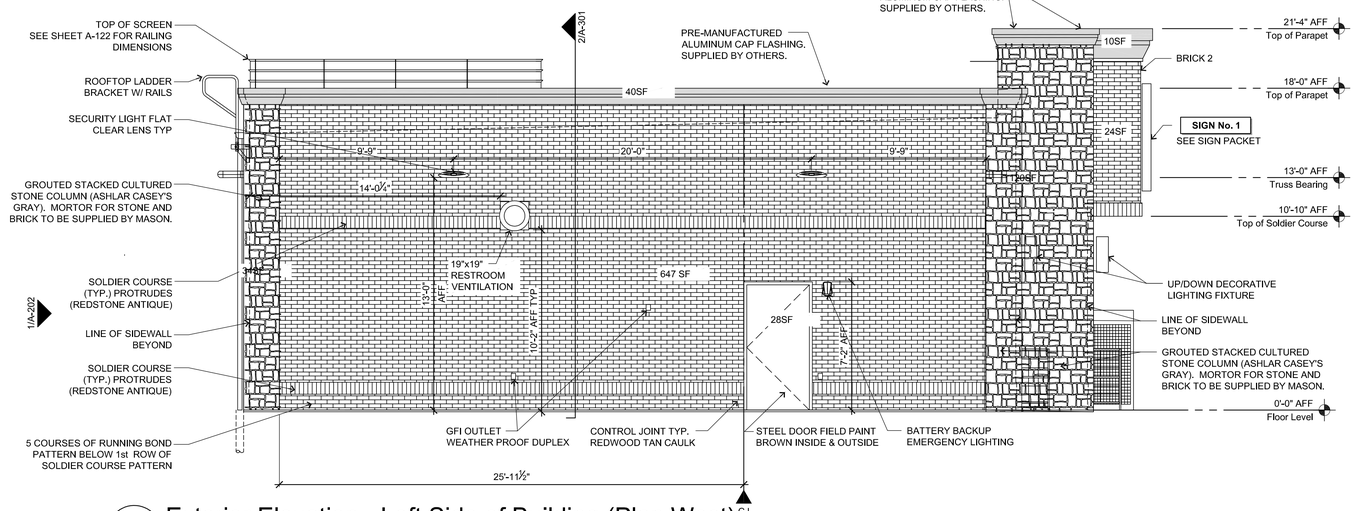
TITLE:

CASEY'S STORE #4372
6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA

BENCHMARK:			REVISIONS: PRELIMINARY	
COPYRIGHT DATE: -----	DRAWN BY: N. DAY	SCALE: 1"=20'	LATEST REVISION: 1-16-2024	DRAWING NO: 22-201

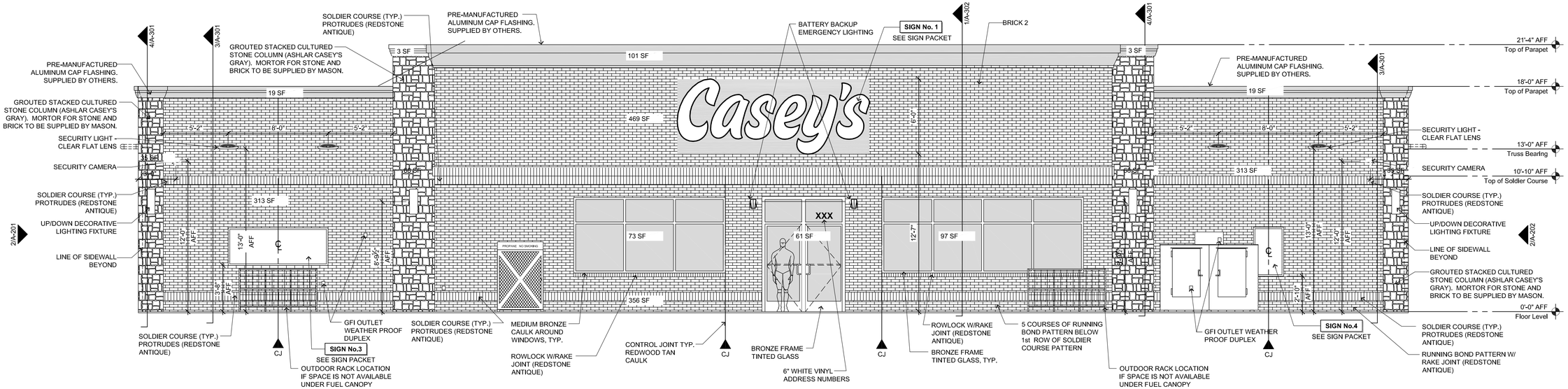
FILE PATH: J:\2022 Projects\22-201 CGS Windsor Heights\Engineering\Sheet Set

C-701 - LANDSCAPING SHEET



2 Exterior Elevation - Left Side of Building (Plan West)

1/4"=1'-0"



1 Exterior Elevation - Front of Building (Plan South)

1/4"=1'-0"

PRIMARY MATERIALS	FRONT		BACK		RIGHT		LEFT	
GLASS	231 SF							
STONE	206 SF	12%	44 SF	3%	154 SF	18%	154 SF	18%
BRICK 1	982 SF	54%	1098 SF	69%	647 SF	74%	647 SF	74%
BRICK 2 (THIN SET)	469 SF	26%			24 SF	3%	24 SF	3%
SECONDARY MATERIALS								
CONCRETE			379 SF	24%				
METAL FLASHING	145 SF	8%	60 SF	4%	50 SF	6%	50 SF	6%
ACM PANELS								
TOTAL AREA OF ELEVATION	2,033 SF		60 SF		50 SF		50 SF	
PERCENT TOTAL OF PRIMARY MATERIALS (EXCLUSIVE OF GLASS)	91.95%		95.64%		88.70%		88.70%	
PERCENT TOTAL OF SECONDARY MATERIALS (EXCLUSIVE OF GLASS)	8.05%		4.36%		11.30%		11.30%	

General Notes

1. REVIEW AND COORDINATE WITH ALL DETAIL PAGES REFERENCED ON THIS PLAN, NOTIFY ARCHITECT AND OWNER OF DISCREPANCIES
2. **RELATED DRAWING SHEETS**: REFER TO THE FOLLOWING:
   AL-101: FOR BUILDING LOCATION ON SITE
   AL-601: FOR INFORMATION RELATING TO SIGNAGE
   A-101: PRIMARY FLOOR PLAN FOR CONSTRUCTION LAYOUT
   A-121: ROOF PLAN/ROOF TOP EQUIPMENT
   A-601: DOOR & WINDOW SCHEDULES AND NOTES
   S-101: FOOTINGS AND FOUNDATIONS
   S-102: ROOF TRUSSES
3. **WORKING POINT**: THE WORKING POINT (***WP***) INDICATED ON THE DRAWINGS IS RELATIVE TO THE FACE OF SHEATHING ON THE EXTERIOR WALL AND IS A COMMON POINT OF REFERENCE WHERE EVER USED IN THESE DRAWINGS
4. ALL VENT PENETRATIONS ON BACK OF BACKSIDE OF ROOF.

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Architecture | Engineering | Surveying
2323 Dixon Street, Des Moines, Iowa 50316 | P.O. Box 4626 Des Moines, Iowa 50305 | P: 515-265-8196 F: 515-266-2259
PELDS JOB NO. 22-201

CASEY'S CONSTRUCTION DIVISION
One Convenience Blvd., P.O. Box 3001, Ankeny, Ia. 50021 515-965-6100

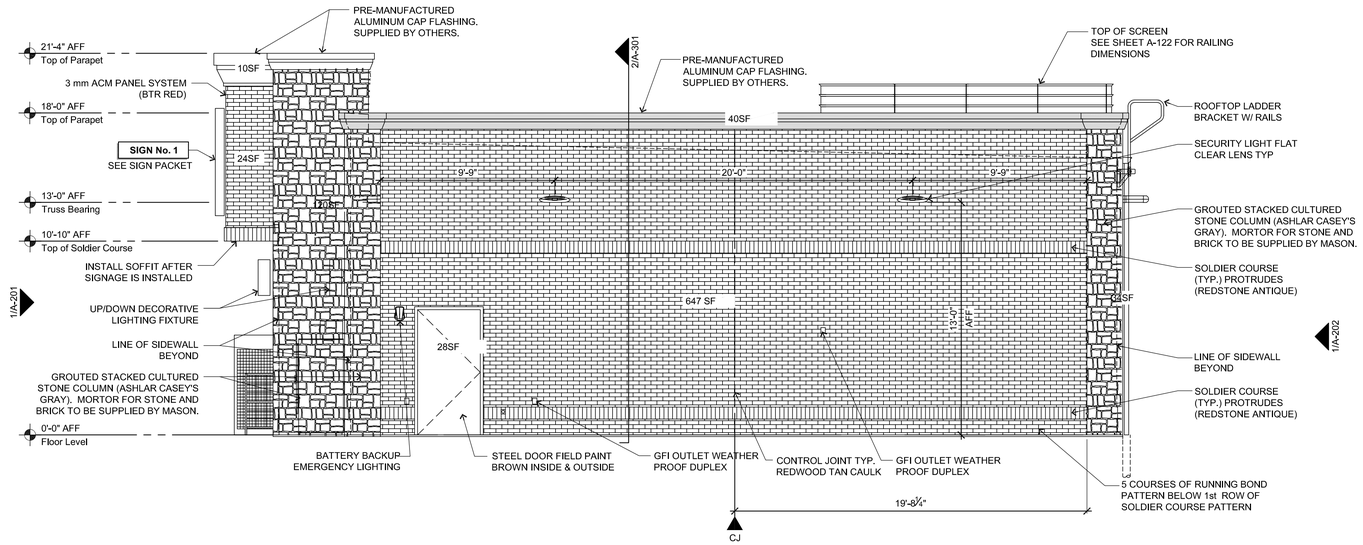
PROJECT:
UNIVERSITY AVE. & 70TH ST.
WINDSOR HEIGHTS, IA

PUBLISHED: 03/15/23
REVISED: 09/15/23

DRAWING INFORMATION:
EXTERIOR ELEVATIONS

A-201

PROTOTYPE AND VERSION: 2023 - U4 - V.01
DRAWN BY: Arlon Goforth III
CHECKED BY: D. WILLRICH

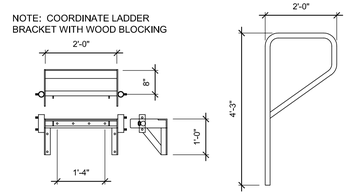


2 Exterior Elevation - Right Side of Building (Plan East)

1/4"=1'-0"

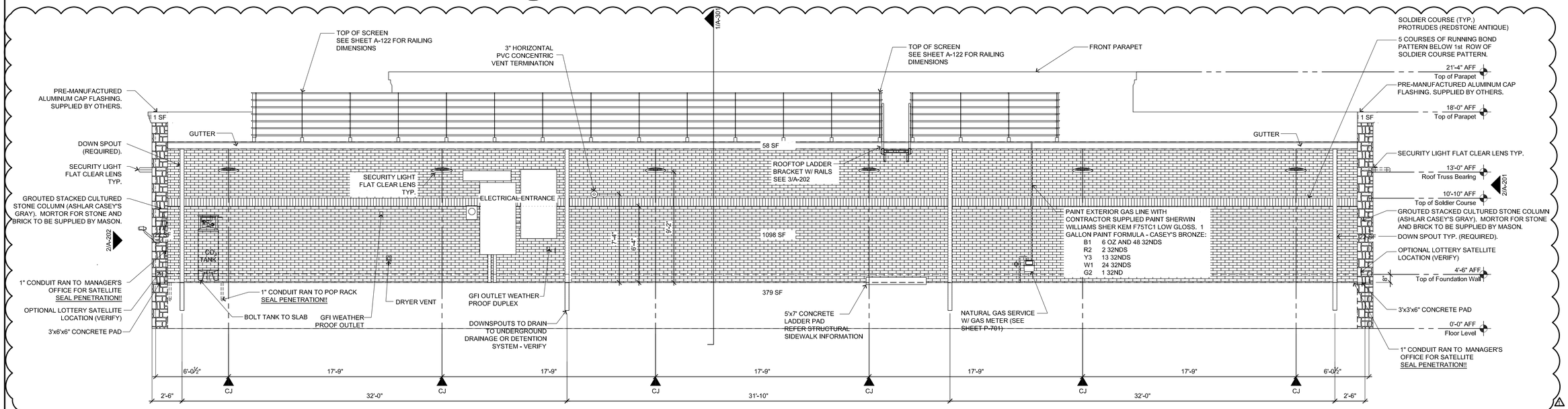
General Notes

1. REVIEW AND COORDINATE WITH ALL DETAIL PAGES REFERENCED ON THIS PLAN, NOTIFY ARCHITECT AND OWNER OF DISCREPANCIES
2. **RELATED DRAWING SHEETS**: REFER TO THE FOLLOWING:
   AL-101: FOR BUILDING LOCATION ON SITE
   AL-601: FOR INFORMATION RELATING TO SIGNAGE
   A-101: PRIMARY FLOOR PLAN FOR CONSTRUCTION LAYOUT
   A-121: ROOF PLAN/ROOF TOP EQUIPMENT
   A-601: DOOR & WINDOW SCHEDULES AND NOTES
   S-101: FOOTINGS AND FOUNDATIONS
   S-102: ROOF TRUSSES
3. **WORKING POINT**: THE WORKING POINT (***WP***) INDICATED ON THE DRAWINGS IS RELATIVE TO THE FACE OF SHEATHING ON THE EXTERIOR WALL AND IS A COMMON POINT OF REFERENCE WHERE EVER USED IN THESE DRAWINGS
4. ALL VENT PENETRATIONS ON BACK OF BACKSIDE OF ROOF.



3 Ladder Bracket

1/2"=1'-0"



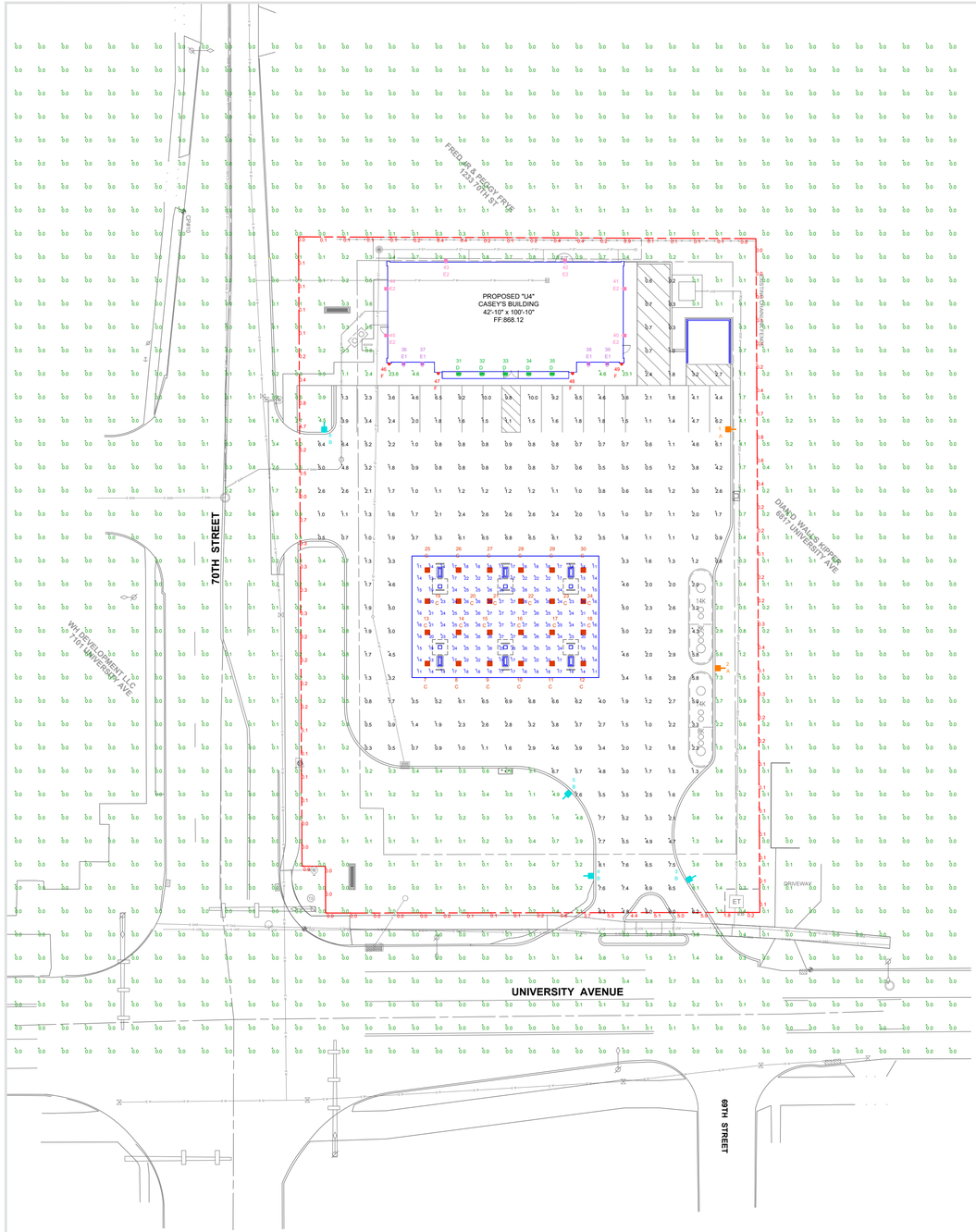
1 Exterior Elevation - Back of Building (Plan North)

1/4"=1'-0"

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PELDS JOB NO. 22-201

CASEY'S CONSTRUCTION DIVISION
One Convenience Blvd., P.O. Box 3001, Ankeny, Ia. 50021 515-965-6100

PROJECT:	PUBLISHED:	DRAWING INFORMATION:
UNIVERSITY AVE. & 70TH ST. WINDSOR HEIGHTS, IA	03/15/23	EXTERIOR ELEVATIONS
	REVISED: 09/15/23	
PROTOTYPE AND VERSION: 2023 - U4 - V.01		A-202
DRAWN BY: Arlon Goforth III	CHECKED BY: D. WILLRICH	



HORIZONTAL CALC POINTS AT PROPERTY LINE

LUMINAIRE LOCATION SUMMARY		
LUM NO.	LABEL	MTG. HT.
1	A	17
2	A	17
3	B	17
4	B	17
5	B	17
6	B	17
7	C	16.5
8	C	16.5
9	C	16.5
10	C	16.5
11	C	16.5
12	C	16.5
13	C	16.5
14	C	16.5
15	C	16.5
16	C	16.5
17	C	16.5
18	C	16.5
19	C	16.5
20	C	16.5
21	C	16.5
22	C	16.5
23	C	16.5
24	C	16.5
25	C	16.5
26	C	16.5
27	C	16.5
28	C	16.5
29	C	16.5
30	C	16.5
31	D	10
32	D	10
33	D	10
34	D	10
35	D	10
36	E1	13
37	E1	13
38	E1	13
39	E1	13
40	E2	13
41	E2	13
42	E2	13
43	E2	13
44	E2	13
45	E2	13
46	F	8.75
47	F	8.75
48	F	8.75
49	F	8.75

NOTES:
- ALL AREA LIGHTS ARE ON NEW 17 FT. POLES MOUNTED ON 2 FT. CONCRETE BASES.

- THIS SITE IS LOCATED IN A REGION WHERE LIGHTING IS REGULATED BY LOCAL ORDINANCES.

FOOTCANDLE LEVELS CALCULATED AT GRADE USING INITIAL LUMEN VALUES					
LABEL	AVG	MAX	MIN	AVG/MIN	MAX/MIN
01_UNDER CANOPY	20.84	27	11	1.89	2.45
02_PAVED AREA	2.98	10.0	0.2	14.90	50.00
03_PROPERTY LINE - HORIZ	0.66	5.9	0.0	N.A.	N.A.
04_UNDEFINED AREA	0.20	23.6	0.0	N.A.	N.A.

LUMINAIRE SCHEDULE										
SYMBOL	QTY	LABEL	ARRANGEMENT	LUMENS	LLF	BUG RATING	WATTS/LUMINAIRE	TOTAL WATTS	MANUFACTURER	CATALOG LOGIC
	2	A	SINGLE	8900	1.020	B2-U0-G2	84	168	CREE, INC.	OSQ-ML-C-DA-XX + OSQM-C-16L-30K7-3B-UL-NM-XX-Q6
	4	B	SINGLE	9225	1.020	B2-U0-G2	97	388	CREE, INC.	OSQ-ML-C-DA-XX + OSQM-C-16L-30K7-4B-UL-NM-XX-Q9
	24	C	SINGLE	4920	1.020	B2-U2-G1	33	792	CREE, INC.	CP5-8L-30K8-DF-UL-RC-XX-Q3 + CP5-BZ-SP-XX
	5	D	SINGLE	3058	1.030	B2-U0-G0	34	170	CREE, INC.	SFT-228-PS-RM-03-E-12-XX-350-30K (SPECIAL ORDER)
	4	E1	SINGLE	2790	1.030	B1-U0-G1	37	148	CREE, INC.	SEC-EDG-3M-WM-02-E-UL-XX-525-30K
	6	E2	SINGLE	1560	1.030	B0-U0-G1	25	150	CREE, INC.	SEC-EDG-2MB-WM-02-E-UL-XX-350-30K-DIM (BXSE9291&) 180 DEGREE OPTICS
	4	F	SINGLE	1456	1.000	B2-U0-G0	53	212	FC LIGHTING, INC.	FCC600-18-WM-UNV-930-15L-XXX-15-LD

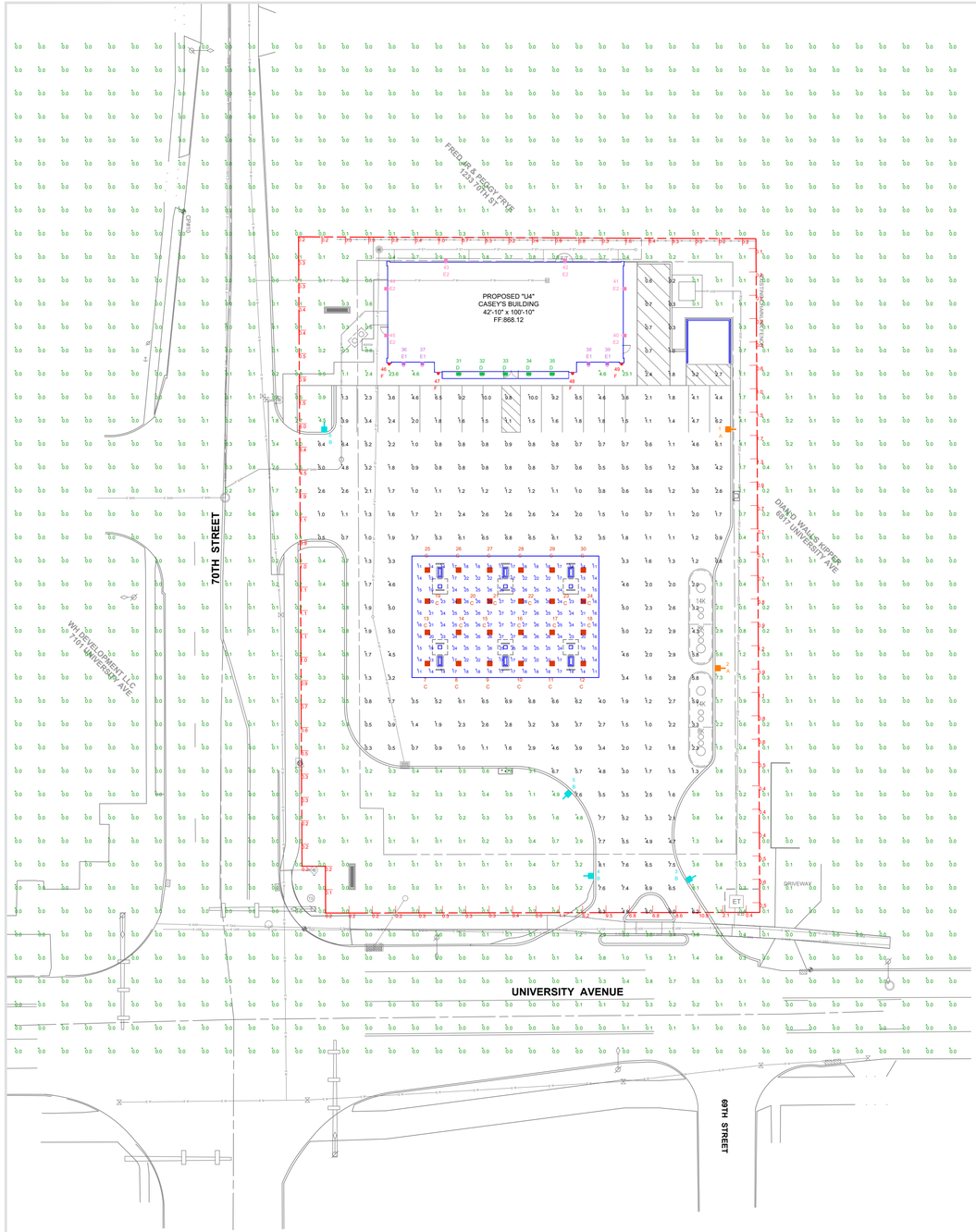
REDLEONARD ASSOCIATES
1340 Kemper Meadow Dr, Forest Park, OH 45240
513-574-9500 | redleonard.com

REV.	BY	DATE	DESCRIPTION
R1	RCF	12/20/2023	REVISED TO MEET CITY REQUIREMENTS.
R2	RCF	01/16/2023	REVISED TO MEET CITY REQUIREMENTS (CALCULATIONS).

DISCLAIMER
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SCALE: 1" = 30'
LAYOUT BY: RCF
DWG SIZE: D
DATE: 10/04/2023

PROJECT NAME:
CASEY'S
WINDSOR HEIGHTS, IA
DRAWING NUMBER:
RL-9171-S1-R2



VERTICAL CALC POINTS AT PROPERTY LINE

LUMINAIRE LOCATION SUMMARY		
LUM NO.	LABEL	MTG. HT.
1	A	17
2	A	17
3	B	17
4	B	17
5	B	17
6	B	17
7	C	16.5
8	C	16.5
9	C	16.5
10	C	16.5
11	C	16.5
12	C	16.5
13	C	16.5
14	C	16.5
15	C	16.5
16	C	16.5
17	C	16.5
18	C	16.5
19	C	16.5
20	C	16.5
21	C	16.5
22	C	16.5
23	C	16.5
24	C	16.5
25	C	16.5
26	C	16.5
27	C	16.5
28	C	16.5
29	C	16.5
30	C	16.5
31	D	10
32	D	10
33	D	10
34	D	10
35	D	10
36	E1	13
37	E1	13
38	E1	13
39	E1	13
40	E2	13
41	E2	13
42	E2	13
43	E2	13
44	E2	13
45	E2	13
46	F	8.75
47	F	8.75
48	F	8.75
49	F	8.75

NOTES:
- ALL AREA LIGHTS ARE ON NEW 17 FT. POLES MOUNTED ON 2 FT. CONCRETE BASES.

- THIS SITE IS LOCATED IN A REGION WHERE LIGHTING IS REGULATED BY LOCAL ORDINANCES.

FOOTCANDLE LEVELS CALCULATED AT GRADE USING INITIAL LUMEN VALUES					
LABEL	AVG	MAX	MIN	AVG/MIN	MAX/MIN
01_UNDER CANOPY	20.84	27	11	1.89	2.45
02_PAVED AREA	2.98	10.0	0.2	14.90	50.00
03_PROPERTY LINE @ 5FT	1.27	10.9	0.1	12.70	109.00
04_UNDEFINED AREA	0.20	23.6	0.0	N.A.	N.A.

LUMINAIRE SCHEDULE										
SYMBOL	QTY	LABEL	ARRANGEMENT	LUMENS	LLF	BUG RATING	WATTS/LUMINAIRE	TOTAL WATTS	MANUFACTURER	CATALOG LOGIC
	2	A	SINGLE	8900	1.020	B2-U0-G2	84	168	CREE, INC.	OSQ-ML-C-DA-XX + OSQM-C-16L-30K7-3B-UL-NM-XX-Q6
	4	B	SINGLE	9225	1.020	B2-U0-G2	97	388	CREE, INC.	OSQ-ML-C-DA-XX + OSQM-C-16L-30K7-4B-UL-NM-XX-Q9
	24	C	SINGLE	4920	1.020	B2-U2-G1	33	792	CREE, INC.	CP5-8L-30K8-DF-UL-RC-XX-Q3 + CP5-BZ-SP-XX
	5	D	SINGLE	3058	1.030	B2-U0-G0	34	170	CREE, INC.	SFT-228-PS-RM-03-E-12-XX-350-30K (SPECIAL ORDER)
	4	E1	SINGLE	2790	1.030	B1-U0-G1	37	148	CREE, INC.	SEC-EDG-3M-WM-02-E-UL-XX-525-30K
	6	E2	SINGLE	1560	1.030	B0-U0-G1	25	150	CREE, INC.	SEC-EDG-2MB-WM-02-E-UL-XX-350-30K-DIM (BXSE9291&) 180 DEGREE OPTICS
	4	F	SINGLE	1456	1.000	B2-U0-G0	53	212	FC LIGHTING, INC.	FCC600-18-WM-UNV-930-15L-XXX-15-LD

REDLEONARD ASSOCIATES
1340 Kemper Meadow Dr, Forest Park, OH 45240
513-574-9500 | redleonard.com

REV.	BY	DATE	DESCRIPTION
R1	RCF	12/20/2023	REVISED TO MEET CITY REQUIREMENTS.
R2	RCF	01/16/2024	REVISED TO MEET CITY REQUIREMENTS (CALCULATIONS).

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SCALE: 1" = 30'
LAYOUT BY: RCF
DWG SIZE: D
DATE: 10/04/2023

PROJECT NAME:
CASEY'S
WINDSOR HEIGHTS, IA
DRAWING NUMBER:
RL-9171-S1-R2

	QTY	LABEL	DESCRIPTION
AREA	2	A	OSQ-ML-C-DA-XX + OSQM-C-16L-30K7-3B-UL-NM-XX-Q6
	4	B	OSQ-ML-C-DA-XX + OSQM-C-16L-30K7-4B-UL-NM-XX-Q9

	QTY	LABEL	DESCRIPTION
CANOPY	24	C	CP5-8L-30K8-DF-UL-RC-XX-Q3 + CP5-BZ-SP-XX

	QTY	LABEL	DESCRIPTION
SOFFIT	5	D	SFT-228-PS-RM-03-E-12-XX-350-30K (SPECIAL ORDER)

	QTY	LABEL	DESCRIPTION
WALL MOUNTED	4	E1	SEC-EDG-3M-WM-02-E-UL-XX-525-30K
	6	E2	SEC-EDG-2MB-WM-02-E-UL-XX-350-30K-DIM (BXSE92918) 180 DEGREE OPTICS

	QTY	LABEL	DESCRIPTION
WALL MOUNTED	4	F	FCC600-18-WM-UNV-930-15L-XXX-15-LD

ADDITIONAL FIXTURE INFO

OSQ Series

OSQ™ LED Area/Flood Luminaire featuring Patented NanoComfort™ Technology – Version C

Rev. Date: V3 04/17/2023

Product Description

The OSQ™ Area/Flood luminaire blends extreme optical control, advanced thermal management and modern, clean aesthetics. Built to last, the housing is rugged cast aluminum with an integral, weathertight LED driver compartment. Versatile mounting configurations offer simple installation. Its slim, low-profile design minimizes wind load requirements and blends seamlessly into the site. Complete with a durable, high-performance finish. Medium is suitable upgrade for HID applications up to 400 Watts. Large is suitable upgrade for HID applications up to 1000 Watts. Extra Large is suitable upgrade for HID applications up to multiple 1000 Watts.

Applications: Parking lots, walkways, campuses, car dealerships, office complexes, high-mast and internal roadways.

Performance Summary

Utilizes Patented NanoComfort™ Technology

Utilizes Cree TrueWhite® Technology on 5000K Luminaires

Assembled in the USA by Cree Lighting from US and imported parts

Initial Delivered Lumens: 4,000 - 75,000

Efficacy: Up to 171 LPW

CRI: Minimum 70 CRI (3000K, 4000K & 5700K); 90 CRI (5000K)

CCT: 3000K, 4000K, 5000K, 5700K

Limited Warranty*: 10 years for luminaire; 10 years for ColorTast DeltaGuard® finish, 5 years for BML sensor; up to 5 years for Synapse® accessories; 1 year for luminaire accessories

* See http://creelighting.com/warranty for warranty terms. For Synapse accessories, consult Synapse spec sheets for details on warranty terms.

Ordering Information

Fully assembled luminaire is composed of two components that must be ordered separately:

Example: **Mount.** OSQ-ML-C-DA-BK + **Luminaire.** OSQM-C-GL-30K7-2M-UL-NM-BK

Mount Luminaire must be ordered separately!*

OSQ-					
Mounting Options		**Extra Large Mounts**		**Color Options**	
OSQ-ML-C-AA Adjustable Arm **OSQ-ML-C-DA** Direct Arm **OSQ-ML-C-SQ** Square Mount		**OSQ-EL-C-AA** Adjustable Arm **OSQ-EL-C-DA** Direct Arm		**SV** Silver **BK** Black	**BZ** Bronze **WH** White

* Mounting Kit options 3TR, and anti-vandal screw availability data beginning on page 14.

Luminaire (Mount must be ordered separately)

OSQ		C									
Family	**Size**	**Series**	**Lumen Package***	**EZ1/ CR**	**Optic**	**Voltage**	**Mount**	**Color Options**	**Controls***	**Options**	
OSQ	M Medium L Large X Extra Large	C	**P4000** 4L 4,000 Lumens **P6000** 6L 6,000 Lumens **P8000** 8L 8,000 Lumens **P10000** 10L 10,000 Lumens **P11200** 11,200 Lumens **P14000** 14,000 Lumens **P16000** 16,000 Lumens **P20000** 20,000 Lumens **P22500** 22,500 Lumens **P25000** 25,000 Lumens **P30000** 30,000 Lumens **P33000** 33,000 Lumens **P40000** 40,000 Lumens **P45000** 45,000 Lumens **P50000** 50,000 Lumens **P60000** 60,000 Lumens **P70000** 70,000 Lumens **P75000** 75,000 Lumens	**EZ1** Emergency battery backup **CR** Constant 1% Dimming	**AUTOMATICS** **GZ** Gen 5 Mid w/ Factory-Installed Daylight Dimmer **G2** Gen 2 Mid w/ Factory-Installed Daylight Dimmer **GM** Gen 5 Mid w/ Factory-Installed Motion/Daylight Dimmer **G2M** Gen 2 Mid w/ Factory-Installed Motion/Daylight Dimmer **Synapse Wireless Control Accessories** **Twist-Lock Configuration** TL7-B2 • Suitable for 120-277V (HZ) voltage only • Requires NEMA/ANSI C136.41 7-Pin Dimming Receptacle • Includes (2) 2-pin locking cables • Provides 0-10V switching, power metering, digital sensor input, and status monitoring of luminaire • Refer to TL7-B2 spec sheet for details **Synapse Wireless Lighting Controller** TL7-B4 • Suitable for 120-480V (U), UE and UHO voltages • Requires NEMA/ANSI C136.41 7-Pin Dimming Receptacle • Not for use with DML or D-options • Provides 0-10V switching, power metering, digital sensor input, and status monitoring of luminaire • Refer to B4 Control spec sheet for details **Synapse Wireless Bridge & Base Station** CBYUM-450-ISO • Includes On-Site Controller (SSJOD-002) and 5-button switch • Refer to CBYUM-450 spec sheet for details	**Synapse Wireless Sensor** WDN-STM • Requires BLE light sensor • Control multiple zones • Refer to WDN-STM spec sheet for details **Single-Unit Plug-n-Play Sensor** SMQ-ORD-002 • Versacon™ LTE-enabled • Designed for indoor applications • Refer to SMQ-ORD spec sheet for details **Synapse Wireless Control Equipment (SWC Gateway)** SWC-ORD-002 • Required for BACnet integration • Refer to SWC-ORD spec sheet for details **Outdoor Antennas** **Optional, for increased range, 868 gen2** ANT-ANTA-3 • Kit includes antenna, 20' cable and bracket ANT-ANTA-3D • Kit includes antenna, 30' cable and bracket ANT-ANTA-3M • Kit includes antenna, 50' cable and bracket • Refer to outdoor antenna spec sheet for details	**Electrical Data*** **Lumen Package*** / **Total System Watts (±10%)** **P4000** 4L: 30W **P6000** 6L: 40W **P8000** 8L: 55W **P10000** 10L: 70W **P11200** 11L: 80W **P14000** 14L: 100W **P16000** 16L: 110W **P20000** 20L: 140W **P22500** 22L: 155W **P25000** 25L: 175W **P30000** 30L: 210W **P33000** 33L: 230W **P40000** 40L: 280W **P45000** 45L: 315W **P50000** 50L: 350W **P60000** 60L: 420W **P70000** 70L: 490W **P75000** 75L: 525W	**Voltage**	**Mount**	**Color Options**	**Controls***	**Options**
						U Universal 120-277V **UE** Universal 347-480V **UHO** 347-480V **HZ** 50Hz **T** Tenon Mount **WM** Wall Mount **SM** Square Mount **RM** Round Mount **SF** Surface Mount **WM** White	**BK** Black **SV** Silver **BZ** Bronze **WH** White	**DML** Bluetooth® Technology Enabled Multi-Level Sensor • Requires standard 10kV/5kA surge protection • Includes integrated occupancy sensor • Refer to DML spec sheet for details **DMLO** Bluetooth® On-Site Control Multi-Level Sensor • Versacon™ LTE-enabled • Designed for indoor applications • Refer to DMLO spec sheet for details **DMG** Bluetooth® Technology Enabled Multi-Level Sensor • Requires standard 10kV/5kA surge protection • Includes integrated occupancy sensor • Refer to DMG spec sheet for details **DCR** Dusk-to-Dawn Photocell • Compatible with 120, 277V or 347V (phase to neutral) • Consult factory if fusing is required for 208V, 240V or 480V (phase to phase) • When side dusk fusing, use time delay fuse **Utility-Label and NOM47* Lot & Unit T-Pin Pinlocast Receptacle** • External cable label per ANSI C136.10-2020 • Includes unique, scannable identification • Available only with OSQM & OSQL luminaires **DYCRSD Photocell Programmable Receptacle** • Includes programmable photocell • Must select UH, SR, SU, HI, OL, SL, or WL voltage • Offers full range adjustability • Refer to pages 15-16 for power and lumen values • Not available with DML or D-options or Synapse TL7-B2 or TL7-B4 control options **ULS/ULS5/ULS7/ULS10 Locked Lumen Output** • Available with UL, CL, HL, SL, WL, UL voltages • Not available with DML or D-options • Refer to pages 15-16 for power and lumen values **Rotate-Right** • Luminaire will be rotated to the right. • Refer to ROTR, configuration diagram on page 2a for optic directionality. • Not for use with symmetric optics **Rotate-Right** • Luminaire will be rotated to the right. • Refer to ROTR, configuration diagram on page 2a for optic directionality. • Not for use with symmetric optics	**DMW** 10kV/10kA Surge Suppression Protection • Replaces standard 10kV/5kA surge protection • Compatible with 120, 277V or 347V (phase to neutral) • Consult factory if fusing is required for 208V, 240V or 480V (phase to phase) • When side dusk fusing, use time delay fuse **DSXBy-Label and NOM47* Lot & Unit T-Pin Pinlocast Receptacle** • External cable label per ANSI C136.10-2020 • Includes unique, scannable identification • Available only with OSQM & OSQL luminaires **DYCRSDM Photocell Programmable Receptacle with Motion Sensor** • Includes programmable photocell with motion sensor • Must select UH, SR, SU, HI, OL, SL, or WL voltage • Offers full range adjustability • Refer to pages 15-16 for power and lumen values • Not available with DML or D-options or Synapse TL7-B2 or TL7-B4 control options **DSXBy-Label and NOM47* Lot & Unit T-Pin Pinlocast Receptacle with Motion Sensor** • Includes programmable photocell with motion sensor • Must select UH, SR, SU, HI, OL, SL, or WL voltage • Offers full range adjustability • Refer to pages 15-16 for power and lumen values • Not available with DML or D-options or Synapse TL7-B2 or TL7-B4 control options

* Luminaire Package codes identify approximate light output only. Actual lumen output levels vary by CCT and optic selection. Refer to Initial Delivered Lumen tables for specific lumen values.

** Luminaire comes standard with 0-10V dimming.

CREE LIGHTING

OSQM • LED Area/Flood Luminaire featuring Patented NanoComfort™ Technology – Version C

Product Specifications

CREE LIGHTING NANOCOMFORT™ TECHNOLOGY
Cree Lighting's NanoComfort™ Technology ends the trade-offs in outdoor lighting by providing superior glare reduction and visual comfort. Only Cree's NanoComfort™ Technology incorporates a micro-lens array on the inside surface of the frosted bulb of Cree TrueWhite® Technology in a complete 3rd array of LEDs. Each of the 16 LEDs in a module is in contact with its own micro-lens, which is designed to control the light from that LED. The micro-lens array on the inside of the acrylic optics are cut and sculpted into facets that relieve the glare and harshness while improving visual comfort – all while retaining superb efficacy and control.

CREE TRUEWHITE® TECHNOLOGY
Cree TrueWhite® Technology delivers high-quality white light. Cree TrueWhite® Technology is engineered and tested to provide the ideal combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy – a true no-compromise solution.

CONSTRUCTION & MATERIALS

- Slim, low-profile design minimizes wind load requirements
- Luminaire housing is rugged die cast aluminum with an integral, weathertight LED driver compartment and high-performance heat sink
- Acrylic optic w/ tolerant tempered glass lens
- Luminaire can also be direct mounted to a wall and surface wired
- Optional tool-less entry for 2" (51mm) tenon (4" (102mm) tenon adapter also available) and mounting arm (sold separately)
- Adjustable arm mount adapters are rugged die cast aluminum
- Arm mount is adjustable in 5° increments from 0° (horizontal) to 45° (vertical) and can be adjusted 180° in 2.5° increments
- OSQ-A-C-AA mounts to a horizontal or vertical 2" (51mm) IP, 2.375" (60mm) O.D. tenon and can be adjusted 180° in 2.5° increments. **NOTE: Tenon length must be a minimum of 3.75" (95mm), and tenon must be sized**
- Trunnion mount is constructed of 6000 and 6/7011 steel and is rotatable from 0° (flat) to 15°, degree increments. Trunnion mount secures to surface with (3) 3/8" bolt or (2) 1/2" or 3/8" bolts
- Luminaire includes 15" (381mm) 16/3 cord exiting the luminaire
- Designed for sunlight and downlight applications. Uplight orientation not suitable for use with N or R optics
- Exclusive ColorTast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Colors, bronze, black, and white are available.

Weight

Mount	Housing Size			
	Medium	Large	Extra Large	
Direct Arm	19.1 (ks. 18.9kg)	26.8 (ks. 113.1kg)	43.8 (ks. 120.9kg)	
Adjustable Arm	19.2 (ks. 18.9kg)	28.4 (ks. 112.9kg)	48.4 (ks. 122.0kg)	
Trunnion	23.2 (ks. 115.7kg)	32.3 (ks. 174.7kg)	N/A	

For EML sensor add 0.1 lbs. (45g), and for NEMA receptacle, add 0.3 lbs. (136g).

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Integral 10kV/5kA surge suppression protection standard, 20kV/10kA surge suppression protection optional.
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- Designed with 0-10V dimming capabilities. Controls by others
- Refer to Dimming spec sheet for details
- **Maximum 10V Source Current:** 1.8mA
- **Operating Temperature Range:** -40°C - +40°C (-40°F - +104°F)

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed (UL 1598)
- Suitable for wet locations
- Meets NOM/CE/IT standards
- Drivers and LEDs are UL certified in accordance with UL8750
- Certified to ANSI C136.31 2010, 3G vibration level (3 ANSI when ordered without N or R options
- Certified to ANSI C136.31 2014, 5G for elevated temperature ambient operation elevator standards
- ANSI C136.2 10kV/5kA (standard) and 20kV/10kA (optional) surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Assembled in the USA by Cree Lighting from US and imported parts
- Meets Buy American requirements within ARRA
- RoHS compliant. Consult factory for additional details
- Dark Sky Friendly, IDA Approved when ordered with 30K CCT and direct arm mount only. Please refer to https://www.darksky.org/our-work/lighting/lighting-for-industry/fsa/fsa-products/ for most current information/wording
- ⚠ **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

Product Specifications

SYNAPSE® SIMPLYSNAP® INTELLIGENT CONTROL
The Synapse SimplySnap® platform is a highly-reserve connected lighting solution featuring zone dimming, motion sensing, and daylight harvesting with utility-grade power monitoring and support of up to 1000 nodes per gateway. The system features a reliable and robust self-healing mesh network with a browser-based commissioning tool and comprehensive open API. Refer to SMQ-ORD-002 spec sheet for details. (1 of TL7-HWD and Site Controller (SSJOD-002) (see the OSQ Series) is a new performance plateau, providing secure energy productivity, code compliance and a better light experience.

Synapse Wireless Control Accessories
Twist-Lock Configuration
TL7-B2
• Suitable for 120-277V (HZ) voltage only
• Requires NEMA/ANSI C136.41 7-Pin Dimming Receptacle
• Includes (2) 2-pin locking cables
• Provides 0-10V switching, power metering, digital sensor input, and status monitoring of luminaire
• Refer to TL7-B2 spec sheet for details
Synapse Wireless Lighting Controller
TL7-B4
• Suitable for 120-480V (U), UE and UHO voltages
• Requires NEMA/ANSI C136.41 7-Pin Dimming Receptacle
• Not for use with DML or D-options
• Provides 0-10V switching, power metering, digital sensor input, and status monitoring of luminaire
• Refer to B4 Control spec sheet for details
Synapse Wireless Bridge & Base Station
CBYUM-450-ISO
• Includes On-Site Controller (SSJOD-002) and 5-button switch
• Refer to CBYUM-450 border related
• Refer to CBYUM-450-ISO spec sheet for details

Electrical Data*

Lumen Package	System Watts (±10%)	Utility Watts (Multiply)	Total Current (A)				
			120V	208V	240V	277V	347V	480V
4L**	34	30	0.21	0.12	0.11	0.09	N/A	N/A
6L	51	45	0.31	0.18	0.15	0.13	0.11	0.08
8L	55	48	0.44	0.27	0.23	0.20	0.16	0.12
11L	68	70	0.57	0.33	0.28	0.25	0.20	0.14
14L	97	100	0.81	0.47	0.40	0.35	0.28	0.20
22L	131	130	1.09	0.63	0.55	0.47	0.38	0.27
30L	175	180	1.46	0.84	0.73	0.63	0.50	0.36
40L	226	240	1.96	1.13	0.98	0.85	0.68	0.47
50L	297	N/A	2.48	1.43	1.24	1.07	0.86	0.62
60L	384	N/A	3.20	1.85	1.60	1.39	1.11	0.80
75L	447	N/A	3.73	2.15	1.86	1.61	1.29	0.93

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V (+/-10%) or 347-480V (+/-10%).

OSQ-C Series Ambient Adjusted Lumen Maintenance†

Ambient	Initial LMF	25K hr Reported* LMF	50K hr Reported* LMF	75K hr Estimated* LMF	100K hr Estimated* LMF
5°C (41°F)	1.02	0.99	0.93	0.88	0.83
10°C (50°F)	1.02	0.98	0.93	0.87	0.82
15°C (59°F)	1.01	0.98	0.92	0.87	0.82
20°C (68°F)	1.01	0.97	0.92	0.86	0.81
25°C (77°F)	1.00	0.97	0.91	0.86	0.81

† Luminaire maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the Temperature Data Reference Document for outdoor average nighttime ambient temperatures.

** In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to or equal to the tested duration in the IES LM-80 report for the LED.

Accessories

Field-Installed

Backlight Shield	Shorting Cap
BLS-OSQ (Small/Medium) OSQ-L-C-BLSFP (Large) OSQ-X-C-BLSF (Extra Large) • Not for use with rotated optics **Visor** OSQ-M-C-BRDSVM OSQ-L-C-BRDSVL OSQ-X-C-BRDSVX	XA-XSLSHRT

CREE LIGHTING

CPY500™ Series

CPY500™ LED Recessed Canopy, Car Wash, Hook & Cord or Pendant Mount Luminaire

Rev. Date: V5 05/02/2023

Product Description

The CPY500™ Series LED luminaire features a large 11" X 11" glass optic that delivers the best in visual comfort and performance. Diffused optics minimize glare and increase visual comfort while delivering top-of-category 73% LPW efficiency and high-performance light distribution. Its sleek and low-profile form blends into the canopy while still being easily serviceable from below. Additional car wash, hook & cord and pendant mounts provide a consistent aesthetic for different applications within a site.
Applications: Petroleum canopies, CNG fueling stations, convenience stores, drive-thru banks and restaurants, retail and grocery

Performance Summary

Assembled in the USA by Cree Lighting from US and imported parts

Initial Delivered Lumens: Up to 20,900

Efficacy: Up to 171 LPW

CRI: Minimum 70 CRI (40K, 50K, 57K); 80 CRI (30K); 90 CRI (40K, 50K)

CCT: 3000K, 4000K, 5000K, 5700K

Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish/up to 5 years for Synapse® accessories/1 year on field-installed accessories

IP66 optics/IP66 driver housing

Class I, Division 2 Hazardous Location for select models

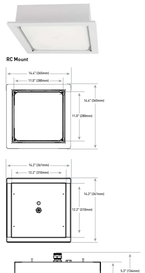
* See http://creelighting.com/warranty for warranty terms.

Accessories

Field-Installed Accessories

Synapse® SimplySnap 10V Interface
CPWTD-22SF
CPWTD-22SW
• Requires other Synapse components to complete system
• Refer to CPWTD-22SF spec sheet for details
Pendant Mount Kits (for use with P7 Mount)
• Includes 10' (3048mm) cord and strain relief
MA-PTCMKT* - 1' (305mm) pendant
MA-PTCMKT*-10 - 10' (3048mm) pendant
• Includes two conduit fittings and (4) ¼-NPT pipe threaded on two ends.

RC Mount



Lumen Package

Lumen Package	Weight
7L, 9L, 11L	13.0 lbs. (5.7kg)
14L, 16L	14.3 lbs. (6.5kg)
20L	15.6 lbs. (7.2kg)

Refer to page 6 for line drawings of 14L, 16L and 20L mounts.

* Must specify color. BK (Black), BZ (Bronze), SV (Silver) or WH (White).

Ordering Information

Example: CPS-13L-57K7-DF-UL-RC-WH-10V

CPS							
Product	**Lumen Package***	**CCT/CRI**	**Optic**	**Voltage**	**Mounting****	**Color Options**	**Controls (specify one)**	**Options**
CPS	7L 7,000 Lumens 9L 9,000 Lumens 11L 11,000 Lumens 14L 14,000 Lumens 16L 16,000 Lumens 20L 20,000 Lumens	**30K8** 3000K, 80 CRI **40K9** 4000K, 90 CRI **50K7** 5000K, 70 CRI **50K9** 5000K, 90 CRI **57K7** 5700K, 70 CRI	**DF** Diffuse **LB** Lambertian	**UL** Universal 120-277V **HZ** 50Hz **UE** Universal 347-480V **UHO** 347-480V	**RC** Car Wash **HC** Hook & Cord **PD** Pendant **RM** Recessed Canopy	**BK** Black **BZ** Bronze **SV** Silver **WH** White	**DK** 0-10V Dimming to 10% • Not available with dusk-to-dawn photocell **DMG** Bluetooth® Technology Enabled 0-10V Dimming • Offers full range adjustability • Refer to page 5 for power and lumen values • Not available with 10V options or DF option • Includes 10V dimming as standard • Not available with other controls	**10KV** 10kV/5kA Surge Suppression Protection • Replaces standard 6kV/3kA surge protection **HS** Hinged Sensor Mount • Requires BLE light sensor • Control multiple zones • Refer to WDN-STM spec sheet for details **SMQ** Single-Unit Plug-n-Play Sensor • Versacon™ LTE-enabled • Designed for indoor applications • Refer to SMQ-ORD spec sheet for details **SWC** Synapse Wireless Control Equipment (SWC Gateway) SWC-ORD-002 • Required for BACnet integration • Refer to SWC-ORD spec sheet for details

* 1 Lumen Package codes identify approximate light output only. Actual lumen output levels vary by CCT and optic selection. Refer to Delivered Lumens tables for specific lumen values.

** Direct and recessed soffit mounts are also available. Refer to https://www.creelighting.com/products/canopy-and-soffits for spec sheets for these additional mounts.

Electrical Data*

Lumen Package	CCT/CRI	System Watts (±10%)	System Watts w/ 3rd LMF	Total Current (A)				
				120V	208V	240V	277V	347V	480V
7L	30K8 40K9 50K7 50K9 57K7	71	N/A	0.71	0.4	0.36	0.31	N/A	N/A
		73	N/A	0.74	0.44	0.38	0.37	0.26	N/A
9L	All	95	111	0.91	0.53	0.46	0.41	0.33	0.23
11L	All	120	140	1.15	0.67	0.58	0.51	0.41	0.29
14L	All	147	171	1.41	0.82	0.71	0.62	0.50	0.35
16L	All	181	211	1.73	1.01	0.87	0.76	0.61	0.43
20L	All	227	265	2.17	1.26	1.09	0.95	0.76	0.54

* 20L mounted directly to plywood is suitable through 40°C only.

† Luminaire maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the Temperature Data Reference Document for outdoor average nighttime ambient temperatures.

†† In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to or equal to the tested duration in the IES LM-80 report for the LED.

Operating Temperature Range

Lumen Package	Direct Mount to Plywood	Direct Mount to Steel Metal	Class 1, Division 2 Hazardous Location (IRC Mount only)
	Direct Mount to Plywood	Direct Mount to Sheet Metal	
7L - 11L	-40°C to +50°C	-40°C to +50°C	-40°C to +40°C
14L - 20L	-40°C to +40°C	-40°C to +40°C	

NOTE: Luminaire is UL rated at 40°C, but will operate in the ambients listed above.
WARNING: Exceeding maximum operating temperature may result in thermal foldback

CREE LIGHTING

228 Series™

LED Soffit Luminaire – Non-IC Rated

Rev. Date: V4 04/24/2020

Product Description

High-performance energy-efficient LED down light for new construction and remodel soffit applications. The recessed mount is for use in drywall, plywood or hard lid ceilings with 14" (460mm) to 24" (610mm) on center building construction. Heavy gauge steel recessed mounting frame features 1.5" (38mm) deep aperture throat to accommodate most standard ceiling thicknesses, and a universal mounting bracket that accepts 0.5" (13mm) EMT conduit, or a universal knockout bracket on flat bar hangers with 1" (127mm) vertical adjustment from either above or below the ceiling.
Applications: Petroleum stations, convenience stores, drive-thru banks and restaurants, retail and grocery

Performance Summary

Patented NanoOptic® Product Technology

Assembled in the U.S.A. of U.S. and imported parts

CRI: Minimum 70 CRI

CCT: 4,000K (+/- 300K) 5700K (+/- 500K) standard

Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

* See http://creelighting.com/warranty for warranty terms.

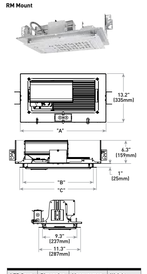
Accessories

Field-Installed

RM Mount Accessories
Mounting C-Channel
RA-MCH
- Pair of 14" (356mm) rigid 3/4" x 1/2" (19mm x 13mm) galvanized C-Channel bars
Mounting C-Channel Remodel
RA-MCHR
- Pair of 28" (762mm) rigid 3/4" x 1/2" (19mm x 13mm) galvanized C-Channel bars

Hanger Bar
Mounting Brackets
RA-MBBL
- Kit contains 4

RM Mount



LED Count (±10)	Dimension	Measurement	Weight
03	A	20.2" (513mm)	28.8 lbs. (13.1kg)
	B	14.4" (366mm)	
	C	14.3" (414mm)	
04	A	23.2" (589mm)	34.4 lbs. (15.7kg)
	B	19.1" (485mm)	
	C	20.8" (528mm)	

RR Mount – see page 4 for weight & dimensions

Ordering Information

Example: SFT-228-PS-RM-03-E-12-WH-350

SFT-228								
Product	**Optic**	**Mounting**	**LED Count (±10)**	**Series**	**Voltage**	**Color Options**	**Drive Current***	**Options**
SFT-228	**SL** Sparkle Petroleum **PS** Petroleum Symmetric	**RM** Recessed **RR** Recessed Remodel	**03** **04**	**E**	**12** 120V **24** 277V	**BK** Black **BZ** Bronze **WH** White	**350** 350mA **525** 525mA	**DIM** 0-10V Dimming • Dimming by others • Refer to Dimming spec sheet for details **4DK** 4000K Color Temperature • Color temperature per luminaire • Minimum 70 CRI

* Requires marked spacing of 4' x 24" x 0.5" (1.2192mm x 610mm x 13mm), 48" (1.21.9mm) center-to-center of adjacent luminaires, 24" &/10mm) luminaire center to side building member, 0.5" (13mm) top of luminaire to overhead building member

Electrical Data*

LED Count (±10)	System Watts (±10%)	Total Current (A)			
		120V	208V	240V	277V
350mA					
03	34	0.30	0.19	0.18	0.20
04	48	0.54	0.34	0.30	0.27
525mA					
03	54	0.45	0.28	0.25	0.23
04	99	0.83	0.48	0.42	0.38

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or +/- 10%

228 Series™ Ambient Adjusted Lumen Maintenance†

Ambient	Initial LMF	25K hr Reported* LMF	50K hr Reported* LMF	75K hr Estimated* LMF	100K hr Estimated* LMF
5°C (41°F)	1.04	1.01	0.99	0.98	0.96
10°C (50°F)	1.03	1.00	0.98	0.97	0.95
15°C (59°F)	1.02	0.99	0.97	0.93	0.94
0 hr.	1.01	0.98	0.96	0.95	0.93
25°C (77°F)	1.00	0.97	0.95	0.94	0.92

† Luminaire maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the Temperature Data Reference Document for outdoor average nighttime ambient temperatures.

* In accordance with IESNA TM-21-11, Reported values represent interpolated values based on time durations that are up to or equal to the tested duration in the IES LM-80 report for the LED.

** In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to or equal to the tested duration in the IES LM-80 report for the LED.

Operating Temperature Range

Lumen Package	Direct Mount to Plywood	Direct Mount to Steel Metal	Class 1, Division 2 Hazardous Location (IRC Mount only)
	Direct Mount to Plywood	Direct Mount to Sheet Metal	
2L - 13L	-40°C to +50°C	-40°C to +50°C	-40°C to +40°C
20L	-40°C to +40°C	-40°C to +40°C	

NOTE: Luminaire is UL rated at 40°C, but will operate in the ambients listed above.
WARNING: Exceeding maximum operating temperature may result in thermal foldback

CREE LIGHTING

THE EDGE® LED Security Wall Pack Luminaire

Product Specifications

CONSTRUCTION & MATERIALS

- Slim, low profile design
- Luminaire sides are rugged die cast aluminum with integral, weathertight LED driver compartment and high performance aluminum heat sinks specifically designed for LED applications
- Furnished with low copper, light weight mounting box designed for installation on standard and mud ring single gang J-Boxes
- Luminaire can also be direct mounted to a wall and surface wired
- Secures to wall with four 3/16" (5mm) screws by others)
- Conduit entry from top, bottom, sides, and rear
- Allows mounting for uplight or downlight
- Designed and approved for easy through-wiring
- Includes stainless guard
- Exclusive ColorTast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver and white are available.
- **Weight:** See Dimensions and Weight Chart on page 1

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Integral weathertight J-Box with leads (wire nuts) for easy power hook up
- Integral 10kV surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- **Maximum 10V Source Current:** 20 LED (350mA): 10mA; 20LED (525 & 700 mA) and 40

AREA



CANOPY



SOFFIT

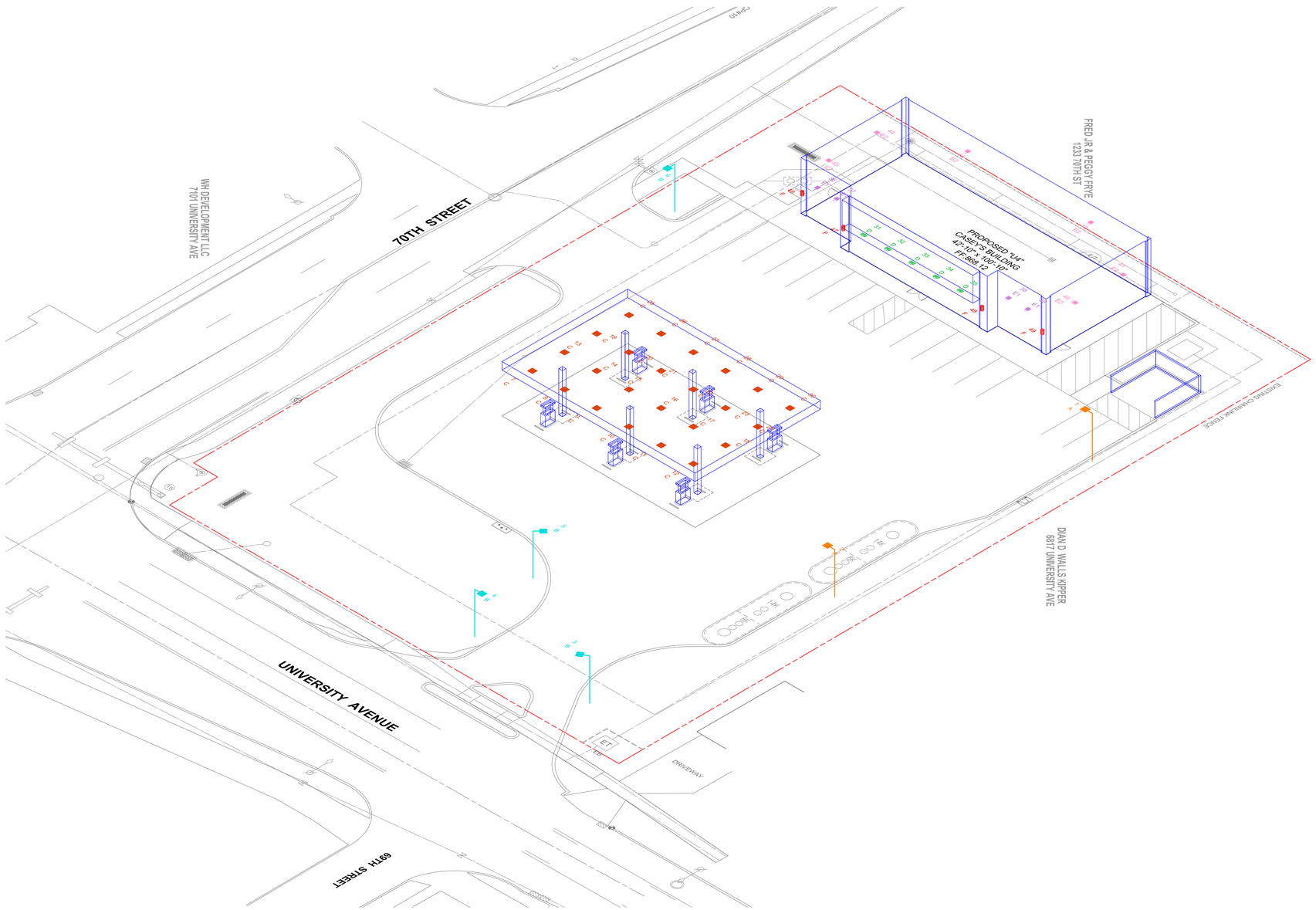


WALL MOUNTED



WALL MOUNTED

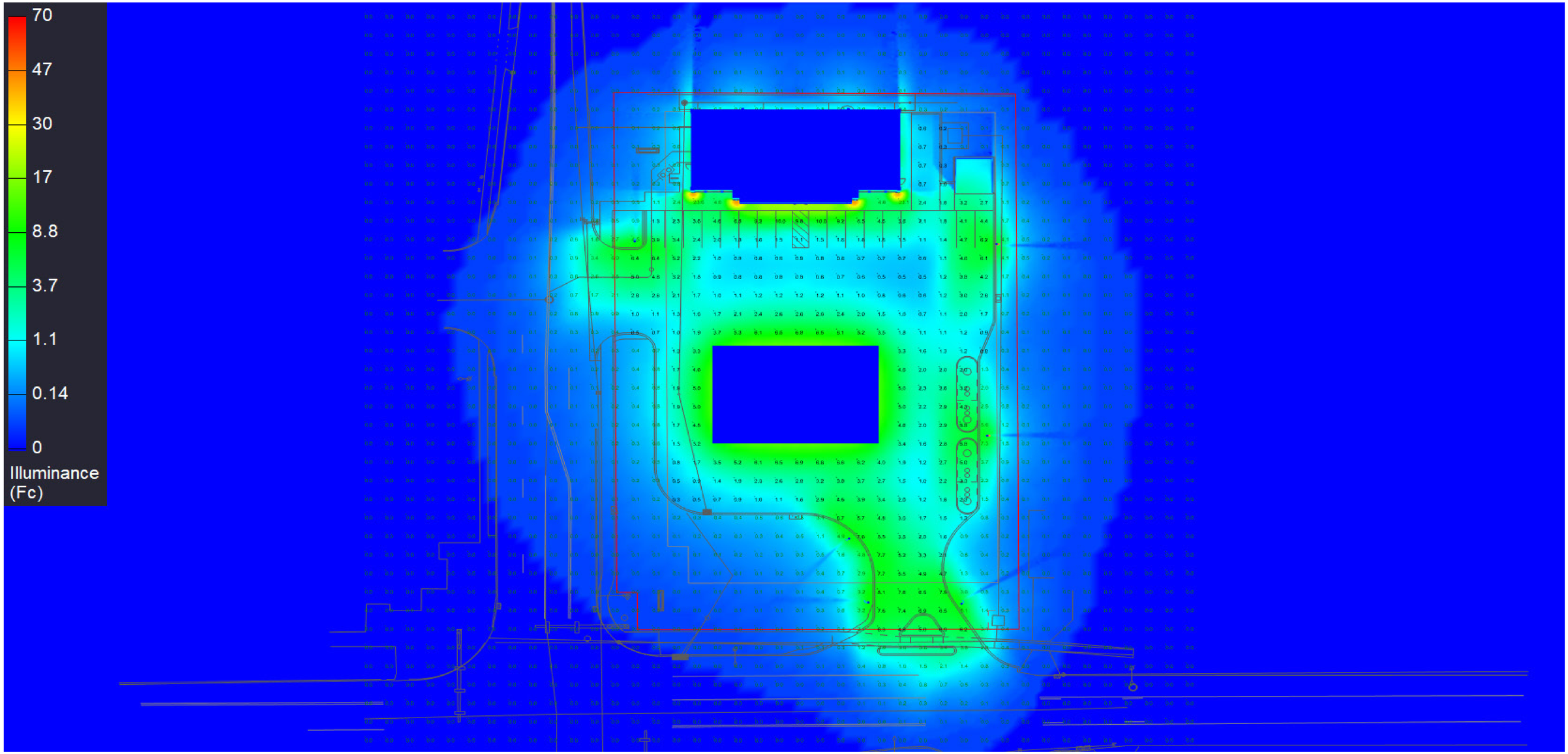




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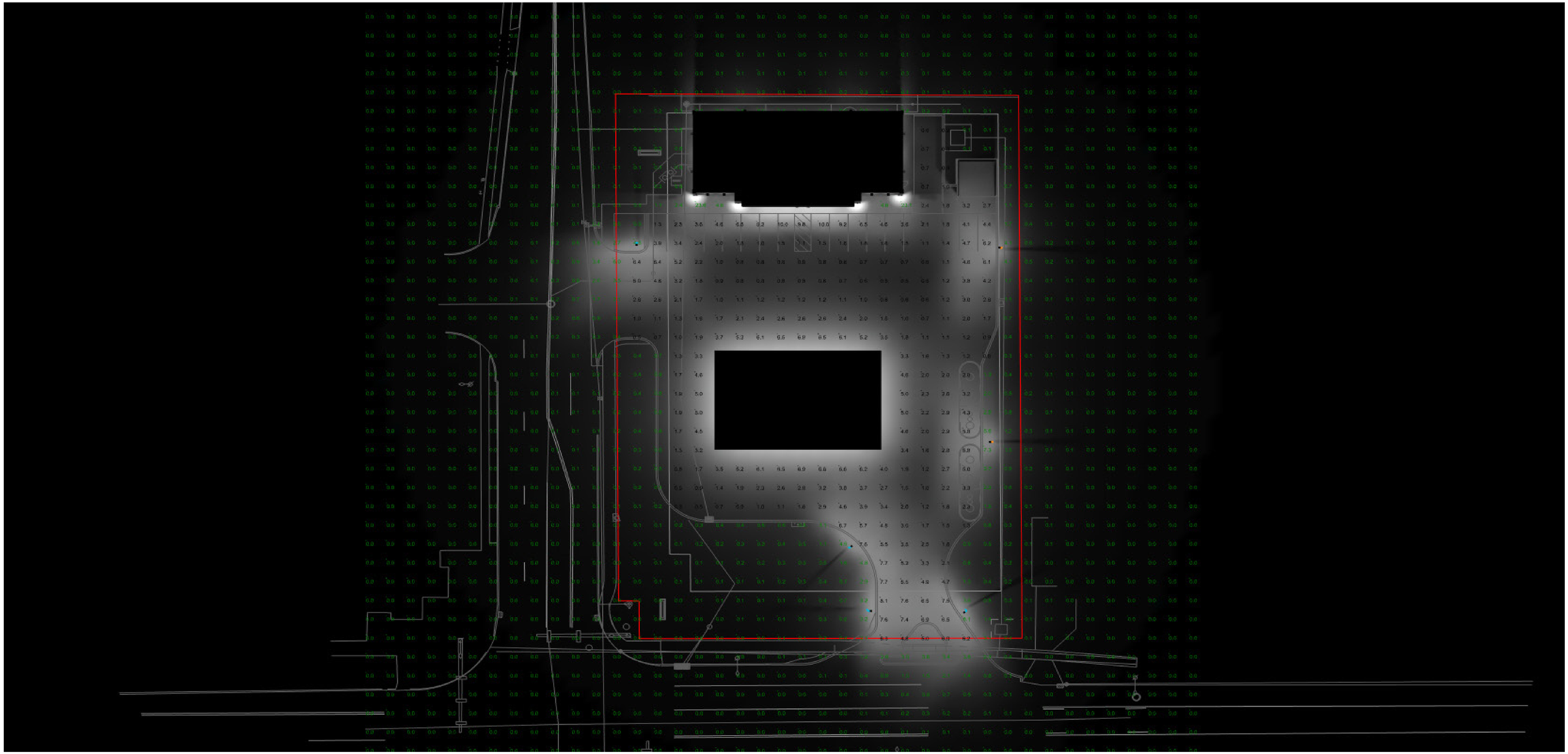
PROJECT NAME:
CASEY'S
WINDSOR HEIGHTS, IA
DRAWING NUMBER:
RL-9171-S1-R2



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PROJECT NAME:
CASEY'S
WINDSOR HEIGHTS, IA

DRAWING NUMBER:
RL-9171-S1-R2

BOLTON & MENK
Real People. Real Solutions.

430 E Grand Avenue
Suite 101
Des Moines, IA 50309

Ph: (515) 259-9190
Fax: (515) 233-4430
Bolton-Menk.com

STAFF REPORT

Date:	March 4, 2024
To:	Windsor Heights City Council
From:	Trey Rouse
Subject:	Site Plan: 6961 University Avenue (Casey's)

General Information

Applicant:	Casey's Marketing Company
	One SE Convenience Boulevard
	Ankeny, IA 50021
Property Owner:	Charles I & Ruth Colby National Development Trust
Proposed Use:	Auto Services (Gas Station)
Zoning:	UC (Urban Center District)
Location:	6961 University Avenue

Summary

The applicant, Casey's Marketing Company, is requesting to develop a Casey's Gas Station in the UC District (Urban Center District) for the use of the property listed at 6961 University Avenue. The UC District (Urban Center District) allows for the Auto Services use to be approved conditionally. Staff has recognized that the applicant has gone through the Conditional Use Permit application and review procedure and has obtained a Conditional Use Permit to allow for an Auto Services use to be approved on the property by the Zoning Board of Adjustments.

Description of Property Use from Applicant

Demolition of underperforming office infrastructure and construction of 4,238 sq. ft. Casey's Convenience Store and Gas Station. The redevelopment effort constitutes $3-$5 million in building and development costs and will produce significant property tax benefits to the city. The sale of motor fuel, prepared foods, and other goods will generate significant local options sales tax benefits. Between 25 & 35 full & part-time jobs are created with construction of the each new Casey's store.

Existing Conditions

The 1.29-acre lot is in the UC – Urban Center Zoning District. The lot currently has a 16,700 sq. ft. retail and office space building as the primary structure with two parking lots located on the south and north sides of the building connected through the east side of the property. This property has three access points through driveways located on University Avenue and two access driveways located along 70th Street. Currently the property



Legal Description

EX BEG SE COR LT 41 W 199.95F N 299.46F E 4F S 269.44F E 10F S 20F E 185.94F S 10F TO POB- LTS 40, 41 & 42 MOTT PLACE

Site Plan for Development



Background of Parcel/Lot

This parcel has been commercial space for the past 3 decades on record with the Polk County Assessor and Recorder. This multi-office and space building has been the location for several different types of businesses such as hair salons, social work business, insurance agencies, marketing agencies, and much more. These businesses, however, have had a high amount of turnover and change within the building and as of late most of the building spaces are vacant.

Adjacent Land Use

Direction	Zoning	Use
North	Single Family Residential District – Low Density (R-1)	Single Family Residential

South	Urban Center District (UC)	Commercial
East	Urban Center District (UC)	Single Family Residential
West	Urban Center District (UC)	Commercial

Zoning Bulk Regulations

Category	**UC**
Lot Area	5,000 sq.ft.
Lot Width	25 ft
Front Yard Setback	0 ft
Side Yard Setback	0 ft
Rear Yard Setback	10 ft (When abutting Residential Zoning District, must have fully landscaped or visual buffer)

Traffic Study

At the request of the City, the applicant completed a traffic study on the University Avenue and 70th Street corridor and determined the project's contribution to the current traffic in the corridor. The traffic study was completed in December 2023 and reviewed by City Staff. The traffic study shows that the traffic created by the Casey's project would not create further issues with the current congestion noticed by the University Avenue and 70th Street corridor.

Comprehensive Plan Review

The Windsor Heights Comprehensive Plan has been reviewed by City Staff to make sure that this project aligns with the goals and ideals of the Comprehensive Plan. The proposed Casey's project meets several of the goals identified and outlined within the Comprehensive Plan and addresses the following goals as determined by the City Staff. The Comprehensive Plan supports the proposed project as it is presented.

Economic Development Goals:

1. Attract new businesses to Windsor Heights.
2. Support strategic redevelopment along key corridors, including University Avenue, Hickman Road, 73rd Street, and 63rd Street.

Transportation Goal:

1. Create a connected sidewalk network, especially along arterial roads, schools, parks, trails, and retail.

Future Land Use Map

The future land use map should be used as guidance for areas throughout the City. The map identifies this location as mixed use, which is defined on page 40 of the 2017 Comprehensive Plan. "Commercial. Commercial and office uses that are typically more auto oriented."

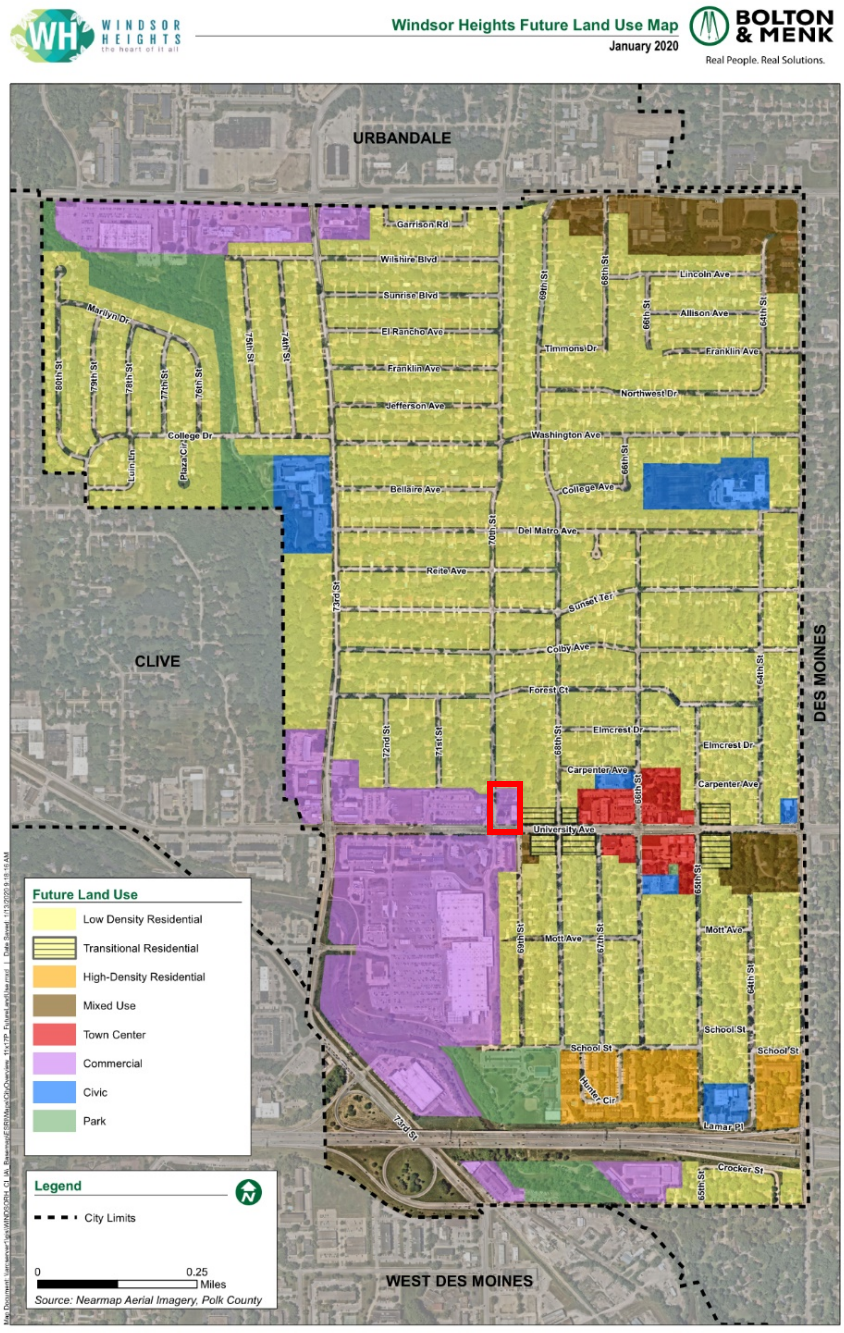


Figure 1: Current Future Land Use Map



Figure 2: Windsor Heights' 2017 Comprehensive Plan's
Future Land Use Map

Zoning Map

The parcels are currently zoned for Urban Center District which is defined in Table 168-1 Purposes of Zoning Districts as "This district recognizes the mixed-use character primarily along the University Avenue corridor, which is the principal route through central Windsor Heights. This district contains a combination of residential, commercial, and office uses and is known for its walkability and main street feel."

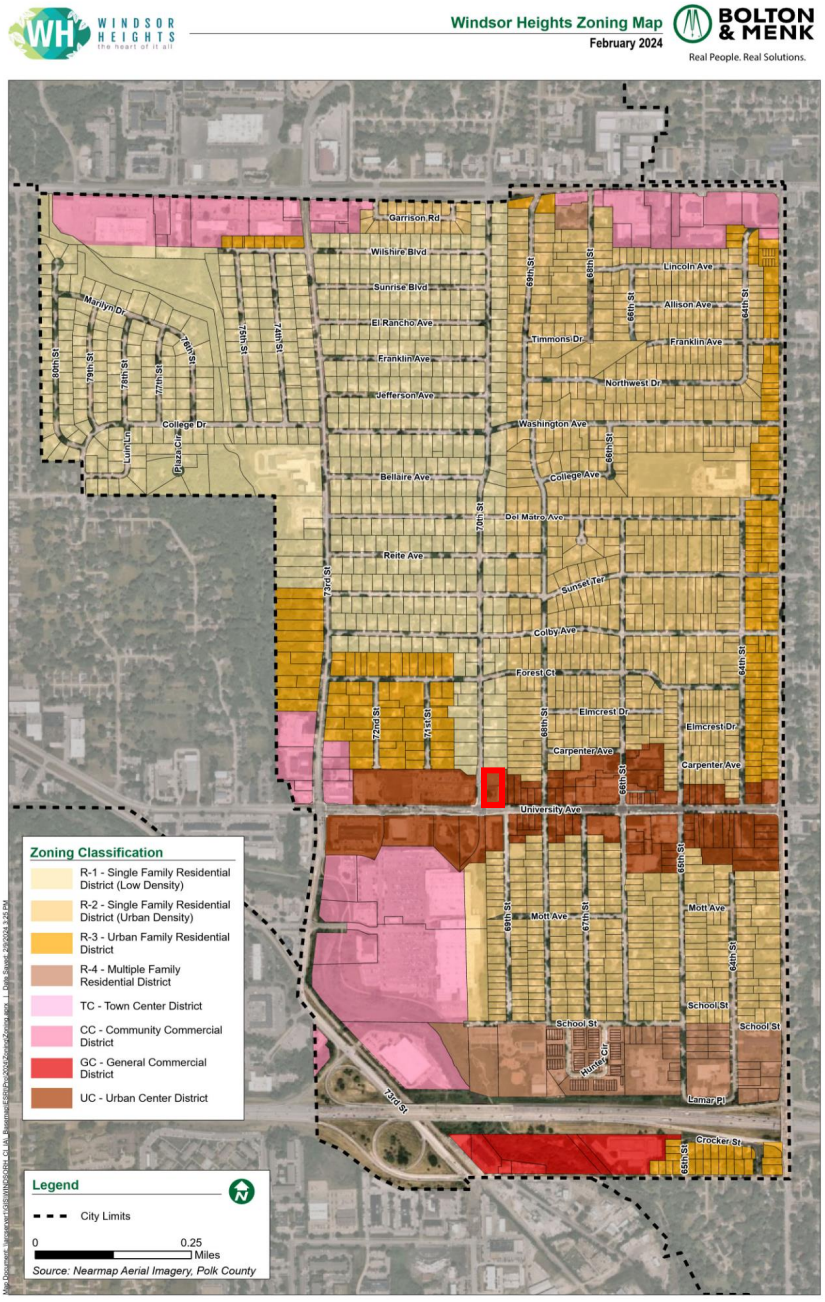


Figure 3: Current Zoning Map

Public Comments Received

The City of Windsor Heights received public numerous comments on the proposed project of the Casey's (Gas Station) at this property. City Staff received several phone calls and electronic comments that expressed concerns over the proposed project for several reasons. These comments were received throughout the course of the planning review process and Conditional Use Permit process. The comments received pertained to a wide array of topics but were mainly focused on the following:

1. Traffic congestion and the creation or more traffic issues at the corridor of University Avenue and 70th Street
2. The lack of need for a Convenience Store/Gas Station in Windsor Heights based upon already existing stores.
3. The walkability and downtown feel that the Urban Center District should have and the proposed project not meeting that vision.
4. The health and safety of surrounding neighborhoods and residential properties that abut the proposed site of the proposed project.

These comments were read and documented by City Staff and were either provided within the documents to the appropriate Board/Commission or read aloud during the Public Hearing portion of their respective meetings.

Of total comments received, 36 individuals opposed the Casey's. These are **unique** individuals—people who commented at more than one meeting were only counted once. 10 individuals commented in support of Casey's.

Zoning Board of Adjustments

The Zoning Board of Adjustments met on January 17th and held a public hearing for the proposed Casey's project. After discussion and the public hearing, the topics of traffic congestion along the corridor, lack of need for this use in the area, and health and safety of the public and surrounding properties were discussed.

After the discussion the Zoning Board of Adjustments approved the Conditional Use Permit for the requested Auto Services use on the property with a vote of 5-0.

Planning and Zoning Commission

The Planning and Zoning Commission met on February 28th and held a public hearing for the proposed Casey's project. During the discussion and public hearing, the Planning and Zoning Commission discussed the zoning requirements for the property and impacts based upon the adjacent properties' zoning district. The owner of the property discussed their intent to redevelop the property and wanting to make sure a positive decision was made for the City on what would be placed there. He confirmed that the property would be redeveloped and believes that the

proposed Casey's is one of the best options. Discussion was also had about the vitality of other businesses that could be impacted by the addition of the Casey's within Windsor Heights and if the market could support the new business. Discussion continued about the site design for traffic flow, traffic congestion, safety, and limiting of nuisances on the property. A presentation was given by consultant Traffic Engineer, Jen McCoy, to talk about the addition or lack of change to congestion on University Avenue and 70th Street with the addition of the proposed Casey's to the site. The discussion then turned to the Comprehensive Plan and how this project would fit into the Comprehensive Plan's focus on the University Corridor, Complete Streets and quality redevelopment as well as the Future Land Use map's vision for the corridor.

Several Commission members shared a concern that the Casey's site plan did not match the Urban Center District's focus on pedestrian safety and walkability. There was additional Commission member discussion focused on whether the site plan and project was in the health, safety and welfare of Windsor Heights residents. Several members of the public voiced their opinions and all opinions expressed were against the proposed Casey's project based on need, walkability and site design. After full consideration of the public comments, the information provided, and the Site Plan with thorough discussion, the Planning and Zoning Commission made their recommendation.

The Planning and Zoning Commission considered a motion to recommend approval. The motion failed with one in favor and five against. The result is a Commission recommendation to deny approval of the site plan.

Staff Recommendation

All proposed lots meet the minimum requirements of the zoning ordinance. **The staff recommends approval of the site plan with the following conditions.**

Conditions:

1. All of the following conditions will be met, reviewed by the city department assigned, and deemed complete before approval of the site plan and before any development can take place.
    a. General
        i. Signature of Engineer and Surveyor on Final Plans.
        ii. All comments listed below are addressed.
        iii. Concurrent approval of the Board of Adjustments approved conditional use permit.
        iv. Approval of signs and utility from Safe Building.
        v. Approval of streets and access from IDOT.
        vi. Revision of site plan application in accordance with the comment letter.
        vii. City Council approval of site plan.
    b. Engineering Department
        i. General Engineering Comments

1. Obtain Windsor Heights work within the Right-of-way Permit.
2. Obtain a Construction Site Erosion & Sediment Control Ordinance Permit or COSESCO Permit from City.
3. Provide Drainage and Utility Easement along the north property line that covers the entire drainage swale and Sidewalk Easements along 70th Street for approval prior to recording.
4. Complete Stormwater Maintenance Agreement and submit per instructions.
5. Sheet C-201: Cross slopes on the sidewalk along University Avenue appear to be over 2.0%. Target 1.5% cross slope for these sidewalks.
6. Sheet C-201: The running slope on the far east sidewalk along University Avenue is at 8.0%. Remove more sidewalk to the east to get that under 5.0%.

ii. Stormwater Comments

1. Please report the orifice diameter as 3 inches in Table 10 and match the reported 1-year proposed release rate to match the model output. If it is above allowable, include a statement that the minimum orifice diameter recommended by ISWMM is the reason for exceeding the allowable release rate. Provide updated report.

c. Planning Department

i. Obtain Conditional Use Permit for Auto Services Use within the Urban Center District from the Windsor Heights Zoning Board of Adjustments.

d. Des Moines Water Works

i. Copper Water Service will be required as it falls within a DNR

Attachments

1. Application Materials (as submitted)

Casey's: 6961 University Avenue

City Council
March 4, 2024

WINDSOR HEIGHTS
the heart of it all

General Information

Applicant:	Casey's Marketing Company
	One SE Convenience Boulevard
	Ankeny, IA 50021
Property Owner:	Charles I & Ruth Colby National Development Trust
Previous Use(s):	Commercial Retail
Current Use:	Commercial Retail
Proposed Use:	Auto Services
Zoning:	UC (Urban Center District)

Existing Conditions

Existing Conditions:

- 1.29-acre lot
- 16,700 sq. ft. building that accommodates retail and office spaces
    - Constructed and completed in 1972, the structure has maintained the same footprint since the original construction.
- Dual parking lots on north and south side of Primary Building and Structure
    - Both parking lots were repaved within the last 5-years
- Conditional Use Permit acquired for the parcel to allow for Auto Services Use on the property



Existing Conditions

Background:

This parcel has been commercial space since the construction of the building in 1972 and is on record with the Polk County Assessor and Recorder. This multi-office building has been the location for several different types of businesses such as hair salons, social work business, insurance agencies, marketing agencies, and much more. However, the building as it stands now is only at a 45% occupancy rate.



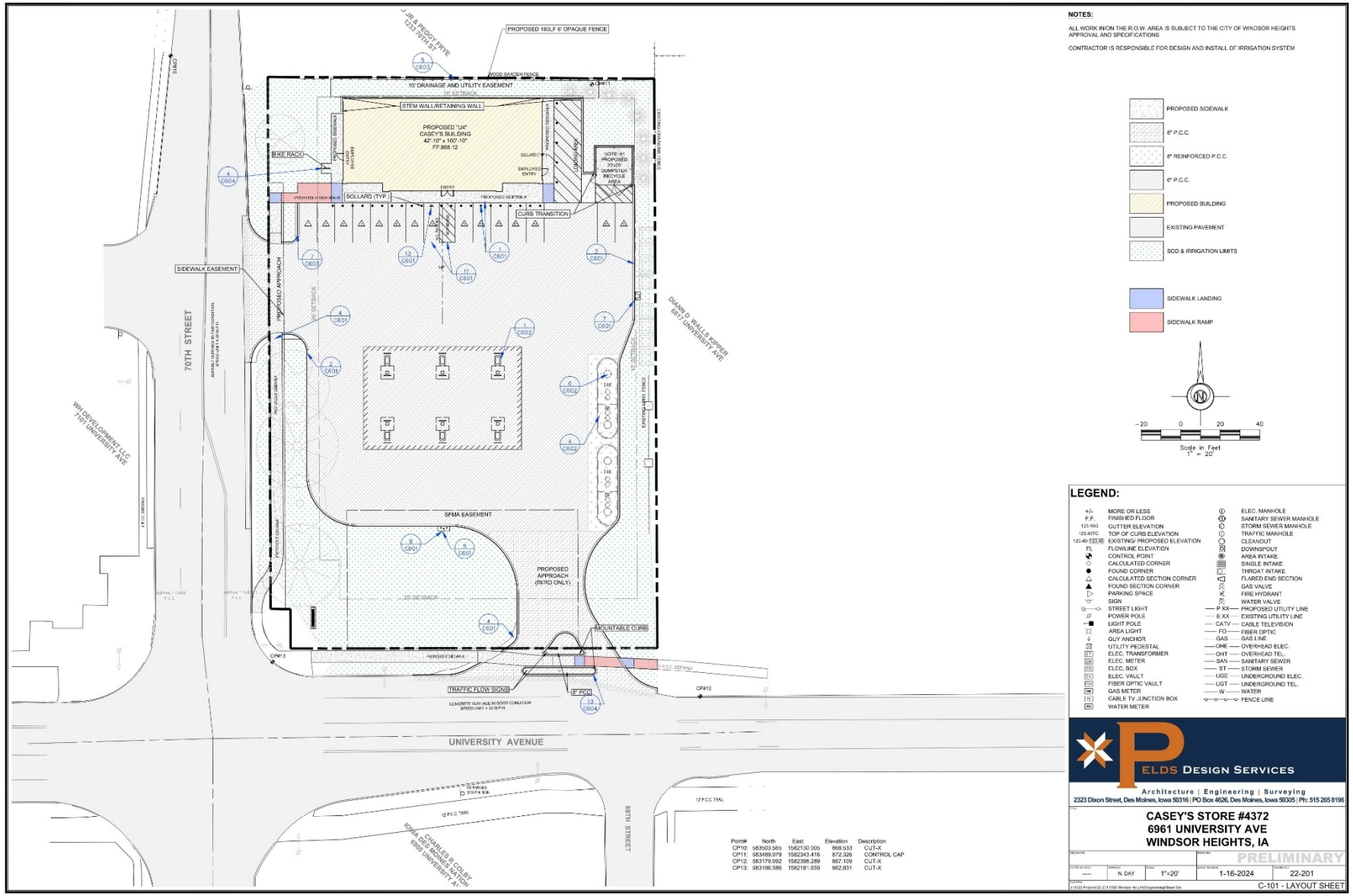
Summary of Proposal

Summary:

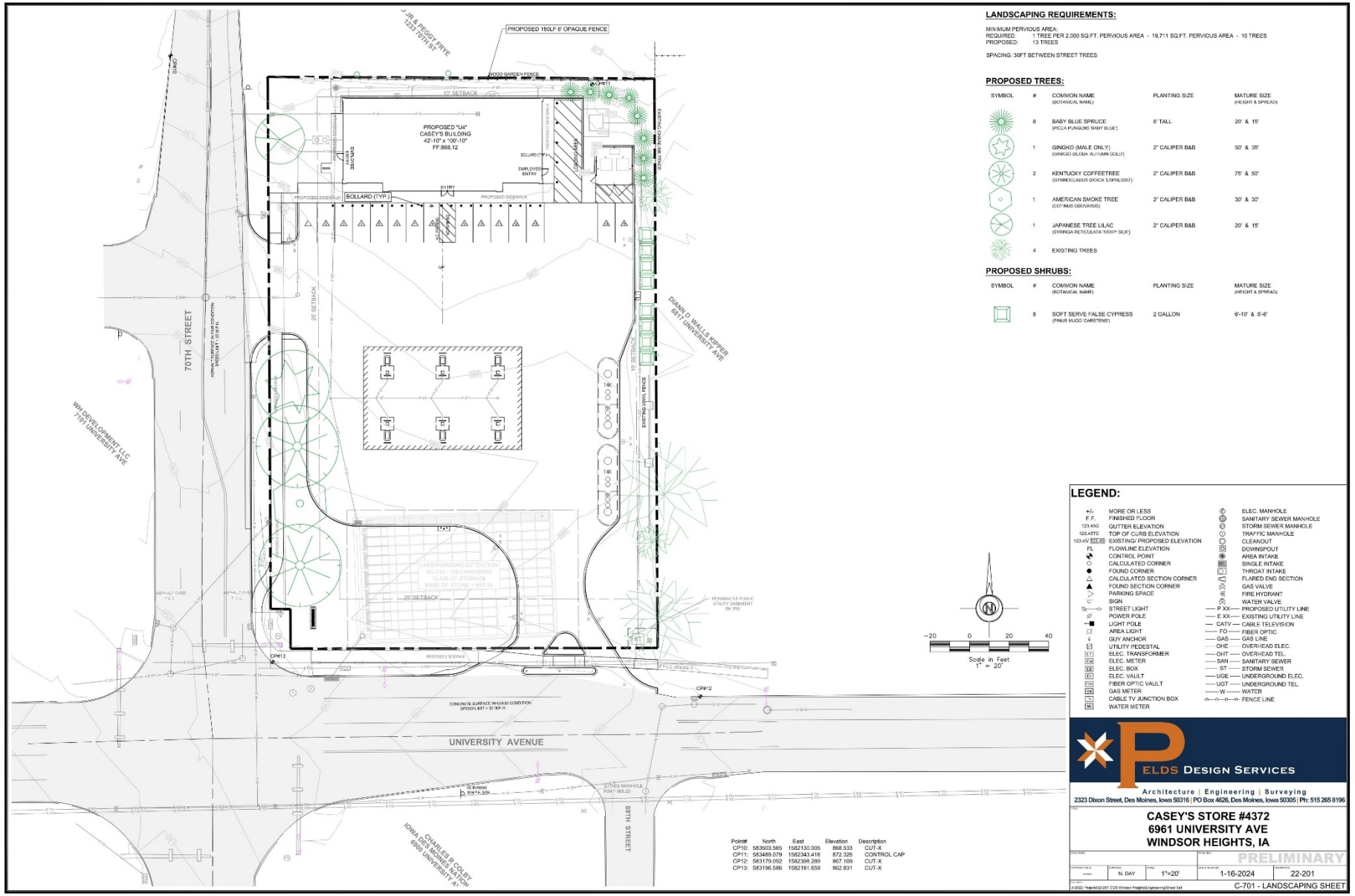
- Proposed Use: Auto Services
  - Casey's Convenience Store
- Proposed 4,238 Sq. Ft. Building
- Proposed 25 Parking Spots for Service
  - Parking spots include fuel pumping stations
- Driveway Access (right in and right out) onto University Avenue
- Full Driveway Access onto 70th Street
- North on site Landscaping and Fence buffer
- East on site fence and landscaping



Proposed Site plan – Layout Plan Sheet



Proposed Site plan – Landscaping Plan Sheet



LANDSCAPING REQUIREMENTS:

MINIMUM PERVIOUS AREA:
REQUIRED: 1 TREE PER 2,000 SQ.FT. PERVIOUS AREA - 19,711 SQ.FT. PERVIOUS AREA - 10 TREES
PROPOSED: 13 TREES

SPACING: 30FT BETWEEN STREET TREES

PROPOSED TREES:

SYMBOL	#	COMMON NAME (BOTANICAL NAME)	PLANTING SIZE	MATURE SIZE (HEIGHT & SPREAD)
	8	BABY BLUE SPRUCE (PICEA PUNGENS 'BABY BLUE')	6' TALL	20' & 15'
	1	GINGKO (MALE ONLY) (GINKGO BILOBA 'AUTUMN GOLD')	2" CALIPER B&B	50' & 35'
	2	KENTUCKY COFFEETREE (GYMNOCLADUS DIOICA 'ESPRESSO')	2" CALIPER B&B	75' & 50'
	1	AMERICAN SMOKE TREE (COTINUS OBOVATUS)	2" CALIPER B&B	30' & 30'
	1	JAPANESE TREE LILAC (SYRINGA RETICULATA 'IVORY SILK')	2" CALIPER B&B	20' & 15'
	4	EXISTING TREES		

PROPOSED SHRUBS:

SYMBOL	#	COMMON NAME (BOTANICAL NAME)	PLANTING SIZE	MATURE SIZE (HEIGHT & SPREAD)
	8	SOFT SERVE FALSE CYPRESS (PINUS MUGO 'CARSTENS')	2 GALLON	6'-10' & 5'-6'

LEGEND:

+/- MORE OR LESS
F.F. FINISHED FLOOR
123.45G GUTTER ELEVATION
123.45TC TOP OF CURB ELEVATION
123.45 / 122.45 EXISTING/ PROPOSED ELEVATION
FL FLOWLINE ELEVATION
CONTROL POINT
CALCULATED CORNER
FOUND CORNER
CALCULATED SECTION CORNER
FOUND SECTION CORNER
PARKING SPACE
SIGN
STREET LIGHT
POWER POLE
LIGHT POLE
AREA LIGHT
GUY ANCHOR
UTILITY PEDESTAL
ELEC. TRANSFORMER
ELEC. METER
ELEC. BOX
ELEC. VAULT
FIBER OPTIC VAULT
GAS METER
CABLE TV JUNCTION BOX
WATER METER
ELEC. MANHOLE
SANITARY SEWER MANHOLE
STORM SEWER MANHOLE
TRAFFIC MANHOLE
CLEANOUT
DOWNSPOUT
AREA INTAKE
SINGLE INTAKE
THROAT INTAKE
FLARED END SECTION
GAS VALVE
FIRE HYDRANT
WATER VALVE
P XX PROPOSED UTILITY LINE
E XX EXISTING UTILITY LINE
CATV CABLE TELEVISION
FO FIBER OPTIC
GAS GAS LINE
OHE OVERHEAD ELEC.
OHT OVERHEAD TEL.
SAN SANITARY SEWER
ST STORM SEWER
UGE UNDERGROUND ELEC.
UGT UNDERGROUND TEL.
W WATER
FENCE LINE

PELDS DESIGN SERVICES
Architecture | Engineering | Surveying
2323 Dixon Street, Des Moines, Iowa 50316 | PO Box 4626, Des Moines, Iowa 50305 | Ph: 515 265 8196

CASEY'S STORE #4372
6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA

PRELIMINARY

	N. DAY	1"=20'	1-16-2024	22-201

C-701 - LANDSCAPING SHEET

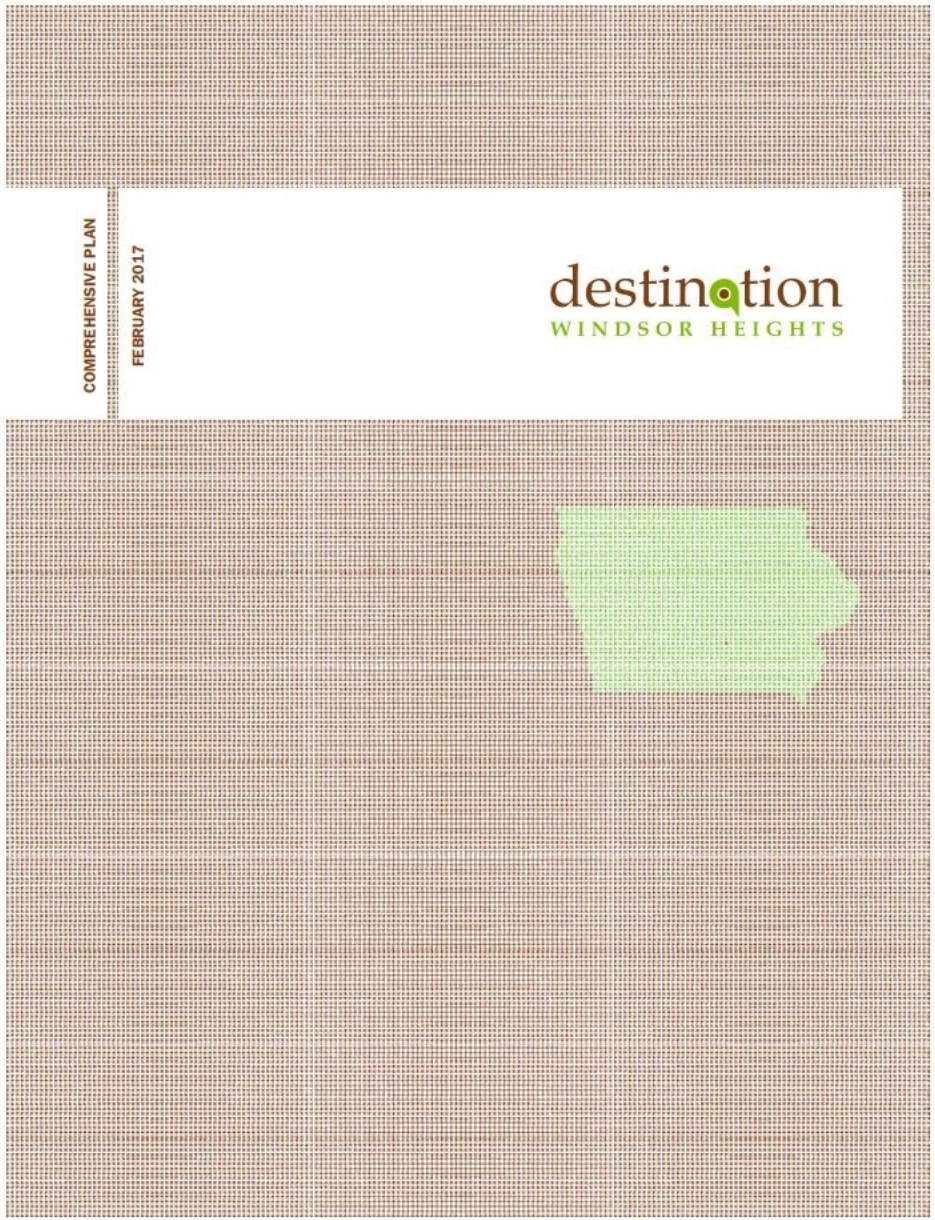
Land Use Compatibility and Zoning Requirements

Direction	Zoning	Use
North	Single Family Residential District – Low Density (R-1)	Single Family Residential
South	Urban Center District (UC)	Commercial
East	Urban Center District (UC)	Single Family Residential
West	Urban Center District (UC)	Commercial

Category	UC
Lot Area	5,000 sq.ft.
Lot Width	25 ft
Front Yard Setback	0 ft
Side Yard Setback	0 ft
Rear Yard Setback	10 ft (When abutting Residential Zoning District, must have fully landscaped or visual buffer)

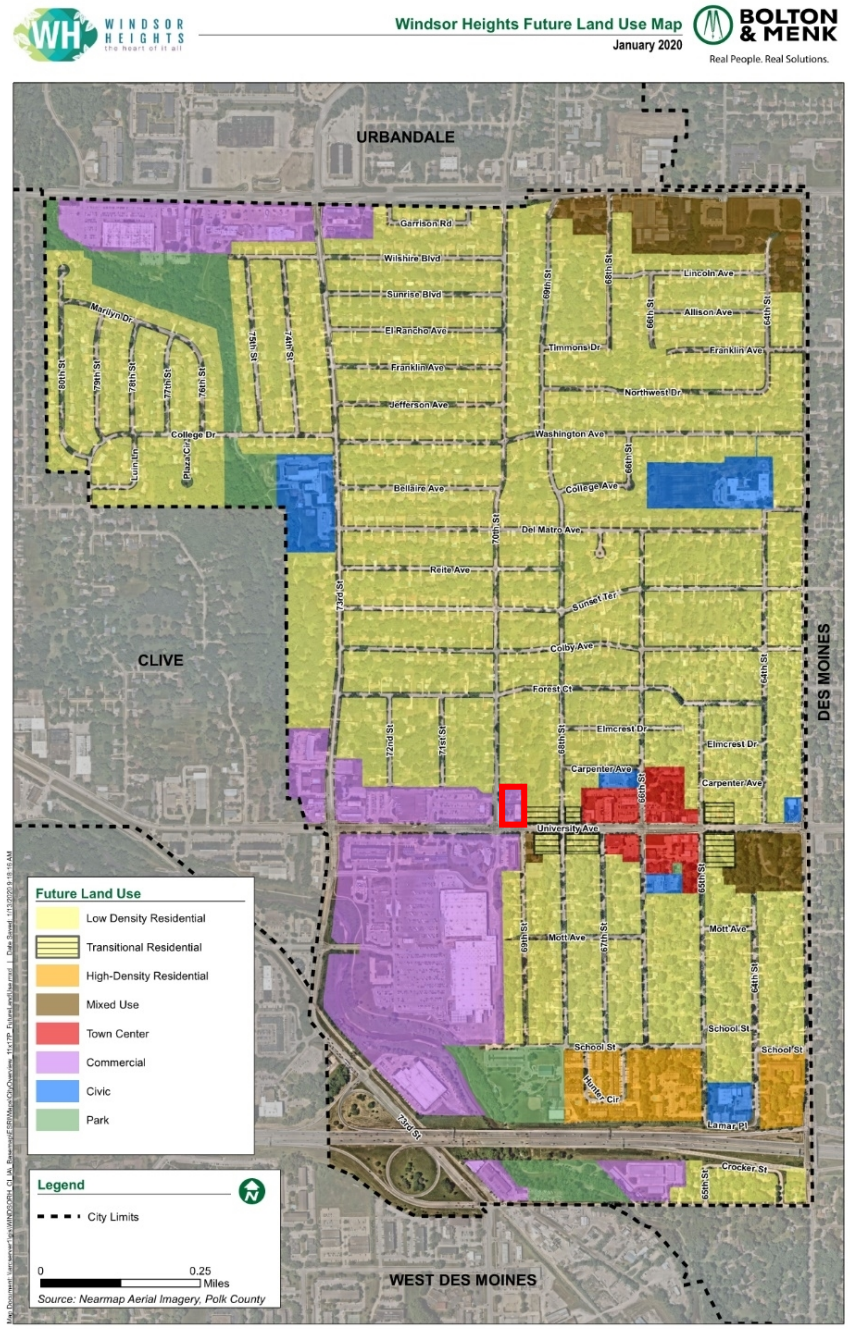
Comprehensive Plan

The Comprehensive Plan has the future land use of the area the proposed use is placed in as Commercial. The 2017 Comprehensive Plan also identifies this area as commercial use being “Commercial and office uses that are typically more auto-oriented.”



Future Land Use Map

The Future Land Use of the area the proposed use is placed in as Commercial. This proposed use fits within the Commercial Future Land Use category with the Auto Services use that is proposed.



Zoning

The zoning district that this proposed use resides in is the UC – Urban Center District. This district is defined as:

“This district recognizes the mixed-use character primarily along the University Avenue corridor, which is the principal route through central Windsor Heights. This district contains a combination of residential, commercial, and office uses and is known for its walkability and main street feel.”

This use is a Conditional Use within this district, the applicant has gone through the process to obtain the proper permit.



Process Thus Far

Zoning Board of Adjustments:

- The applicant met with the Zoning Board of Adjustments on January 17th and February 21st of this year to hold a public hearing and obtain a Conditional Use Permit for Auto Services on the property located at 6961 University Avenue.

Result:

- The applicant obtained a Conditional Use Permit for Auto Services at the property identified as 6961 University Avenue with additional conditions of approval.

Planning and Zoning Commission:

- The applicant met with the Planning and Zoning Commission on February 28th of this year to hold a public hearing and be recommended for approval (with or without conditions) for the proposed Casey's Convenience Store Site Plan at the site addressed 6961 University Avenue.

Result:

- The Planning and Zoning Commission recommended denial of the Site Plan to the City Council after discussion, presentations, and the Public Hearing.

Conclusion and Recommendation

Conclusion:

- The proposed use at this location is permitted by conditional use permit by the current zoning district, said permit has been acquired, follows all zoning district requirements, and is in compliance with the Future Land Use Map and Comprehensive Plan of Windsor Heights, IA.

Recommendation from City Staff:

- The Staff, after review of all documentation, recommends that the City Council approve with conditions on the site plan recommended by Staff.

Comments and Conditions of Approval

General:

- Signature of Engineer and Surveyor on Final Plans.
- All comments listed below are addressed.
- Concurrent approval of the Board of Adjustments approved conditional use permit.
- Approval of signs and utility from Safe Building.
- Approval of streets and access from IDOT.
- Revision of site plan application in accordance with the comment letter.
- City Council approval of site plan.

Comments and Conditions of Approval

Engineering Department:

1. Obtain Windsor Heights work within the Right-of-way Permit.

2. Obtain a Construction Site Erosion & Sediment Control Ordinance Permit or COSESCO Permit from City.

3. Provide Drainage and Utility Easement along the north property line that covers the entire drainage swale and Sidewalk Easements along 70th Street for approval prior to recording.

4. Complete Stormwater Maintenance Agreement and submit per instructions.

5. Sheet C-201: Cross slopes on the sidewalk along University Avenue appear to be over 2.0%. Target 1.5% cross slope for these sidewalks.

6. Sheet C-201: The running slope on the far east sidewalk along University Avenue is at 8.0%. Remove more sidewalk to the east to get that under 5.0%.

7. Please report the orifice diameter as 3 inches in Table 10 and match the reported 1-year proposed release rate to match the model output. If it is above allowable, include a statement that the minimum orifice diameter recommended by ISWMM is the reason for exceeding the allowable release rate. Provide updated report.

Trey Rouse
Community Planner, Bolton & Menk, Inc.
Trey.Rouse@bolton-menk.com

BOLTON & MENK

Real People. Real Solutions.

Bolton-Menk.com

TRAFFIC IMPACT STUDY

FOR

Casey's General Store
6961 University Avenue
Windsor Heights, IA 50324

By:
Pelds Design Services
Elara Jondle, PE
2323 Dixon Street
Des Moines, IA 50316

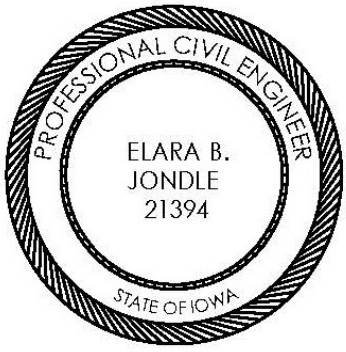
Submitted to:
Bolton & Menk, Inc – Attn: Jennifer McCoy, PE, PTOE
430 E Grand Avenue, Suite 101
Des Moines, IA 50309

December 8, 2023

Pelds Project No. 22-201

PELDS DESIGN SERVICES
Architecture | Engineering | Surveying

Certification Page



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.

_____

ELARA B JONDLE, P.E. IA. LIC. NO. 21394 DATE

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2023

ADDITIONAL PAGES OR SHEETS COVERED BY THIS SEAL (NONE UNLESS INDICATED HERE): Report

Executive Summary

Proposed Development

Casey's General Stores plans to redevelop 6961 University Avenue in Windsor Heights, Iowa. The existing site is currently a multi-tenant office building property. The proposed site will have a new 4,319 SF building and gas canopy covering 5 fuel dispensers (10 pumps/fueling stations).

Site Location

The site is located at the northeast corner of the intersection of University Avenue and 70th Street in Windsor Heights. The study area includes the intersection of University Avenue and 70th Street, as well as the intersection of Hy-Vee and 70th Street.

Purpose of Analysis

The purpose of this traffic study is to determine the existing and anticipated traffic operations at the intersection of the study area associated with the proposed Casey's General Store development.

Principle Findings

The 2023 traffic data revealed that all left turning movements are currently experiencing delays ranging from regular to excessive in the AM and PM peak hours. Most through and right turning movements operate at acceptable levels of service during the AM and PM peak hours.

The 2023 Build analysis revealed that all left turning movements at University Avenue and 70th Street will continue to experience delays ranging from regular to excessive in the AM and PM peak hours. Most through and right turning movements will continue operating at acceptable levels of service during the AM and PM peak hours. Turning movements at Casey's/Hy-Vee and 70th Street as well as Casey's and University Avenue are expected to operate at acceptable levels during the AM and PM peak hours.

Conclusions and Recommendations

We would recommend that the areas' traffic levels be monitored for growth or a significant development. If either occurs in the area, an impact study would be warranted.

Introduction

This Traffic Impact Study (TIS) has been prepared for Casey's General Stores by Pelds Design Services (PDS) for a redevelopment project located at 6961 University Avenue in Windsor Heights, Iowa, hereon referred to as site. The site is located at the northeast corner of the intersection of University Avenue and 70th Street.

The existing site is currently a multi-tenant office building property. The proposed site will have a new 4,319 SF building and gas canopy covering 5 fuel dispensers (10 pumps/fueling stations). The site development includes paving for vehicle maneuvering and a stormwater management system.

The purpose of this traffic study is to determine the existing and anticipated traffic operations at the intersection of the study area associated with the proposed Casey's General Store development.

Existing Conditions

Existing Traffic Volumes 2023

The study area includes the intersection of University Avenue and 70th Street. The site is bounded by University Avenue along the south and 70th Street along the west and single family residential along the north and east. The study area is shown in **Figure 1**.

Anticipated traffic operations with the proposed development have been evaluated at the following intersections:

University Avenue and 70th Street
Hy-Vee Entrance and 70th Street

University Avenue is a two-lane roadway with a two way left turn lane. Construction of this 3-lane project was completed by November 3, 2021. The posted speed limit in the area is 35 mph. At the intersection of 70th Street, there are right and left turn lanes along University Avenue. The westbound left-turn bay along University Avenue is 125 ft. The intersection is signal controlled.

70th Street is a two-lane roadway with designated left-turn lanes at University Avenue. The posted speed limit in the area is 25 mph. There is also a designated left-turn lane along 70th Street at the Hy-Vee Entrance and at University Avenue. The southbound left-turn bay is 80 ft.

Hy-Vee Entrance is one of two entrances to the customer parking lot. The staff parking, loading docks and drive-up orders are handled through other access onto University Avenue. The main entrance into Hy-Vee is located along University Avenue.

This analysis evaluates the following time periods:

- Existing 2023 AM and PM Peak hours
- Initial development opening year 2023 for the AM and PM Peak hours

Crash History

Crash data was provided by the Iowa Crash Analysis Tool (ICAT) website. Since November 3, 2021, there have been no crashes documented near the intersection of 70th Street and Hy-Vee Entrance. Eight crashes have been documented near the intersection of University Avenue and 70th Street. The crash severity was mostly property damage only with one possible/unknown injury. Causes include, ran traffic signal, failure to yield the right-of-way, followed too close and improper or erratic lane changing. The ICAT Quick Report can be found in Appendix D.

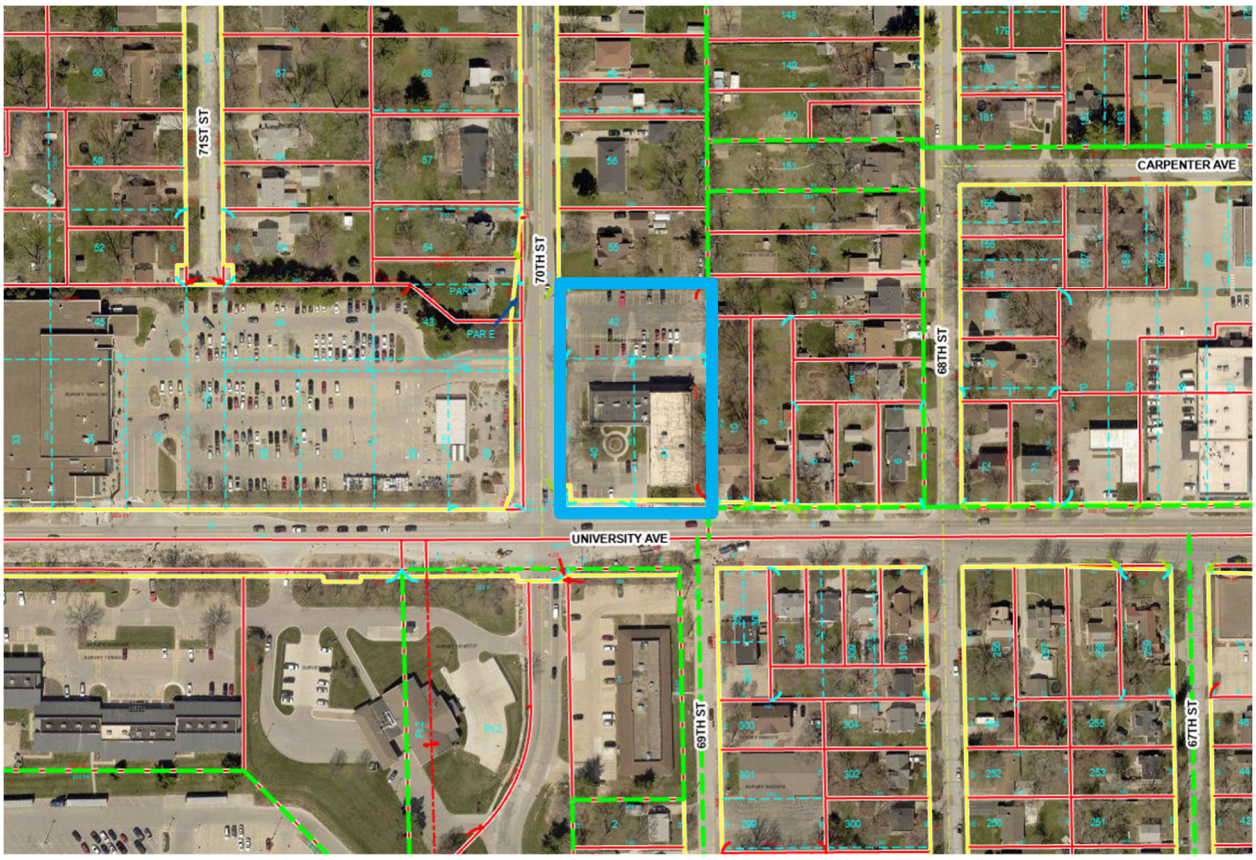


Figure 1. Vicinity Map

Turning movement counts for the intersections were obtained from manual traffic counts. PDS collected traffic data from 6 am – 7 pm on April 25th and 27th, 2023. The AM and PM Peak Hours and total entering volumes are shown below.

Table 1. Peak Hour Volumes

University & 70th	AM Peak Hour	7:30 am – 8:30 am	930
	PM Peak Hour	4:30 pm – 5:30 pm	1595
Hy-Vee & 70th	AM Peak Hour	8:00 am – 9:00 am	319
	PM Peak Hour	4:15 pm – 5:15 pm	696

Average Annual Daily Traffic (AADT) maps from the Iowa Department of Transportation (IDOT) were also reviewed. The AADT shows no clear trend in traffic counts. The Des Moines MPO projected little to no increase in traffic in the area, but Bolton & Menk assumed a 0.5% growth rate as a conservative estimate, based on AADT maps of other intersections in the corridor. For evaluation purposes, the same growth rate was used for this analysis. However, the traffic data available shows there is no net growth at this intersection in the past 20 years. This suggests that the neighborhood traffic growth has stabilized within this corridor. There is no known or proposed larger employer looking to relocate in the area. No other significant trip generator projects are proposed to impact the traffic counts.

Table 2. AADT Volumes of University Avenue & 70th Street

Year	North	East	South	West
2016	4840	-	-	10600
2012	6600	-	-	13200
2008	5800	19400	-	-
2000	5500	-	-	14600

The full Traffic Count Data can be found in Appendix A.

Capacity Analysis of Existing Conditions

Traffic operations were analyzed for the study intersections using SimTraffic 11 traffic simulation software.

A level of service (LOS) rating of the traffic operational condition was obtained from the analyses. Level of service is a qualitative assessment of traffic operational conditions within a traffic stream in terms of the average control delay per vehicle at a controlled intersection. Levels of service are described by a letter designation of either A, B, C, D, E or F, with LOS A representing free flow, and LOS F representing a complete breakdown of traffic flow with excessive congestion and delay. Unsignalized, or stop sign controlled, intersection capacity analyses produce LOS results for each movement which must yield to conflicting traffic at the intersection.

Table 3 summarizes LOS criteria for signalized and unsignalized intersections.

Tables 4 and 5 show existing conditions for the intersections, including delay per vehicle, level of service and 95th percentile queue. The SimTraffic 11 simulation reports for 2023 existing traffic conditions are included in Appendix B.

Table 3. LOS Criteria

Level of Service	Average Control Delay per Vehicle (sec/veh)		General Description
	Signalized Intersections	Stop Sign Controlled Intersections	
A	≤ 10	≤ 10	Free flow. Insignificant delays.
B	> 10 to 20	> 10 to 15	Stable flow. Slight delays.
C	>20 to 35	>15 to 25	Stable flow. Acceptable delays.
D	>35 to 55	>25 to 35	Approaching unstable flow. Regular delay. Occasionally waiting through more than one signal cycle before proceeding.
E	>55 to 80	>35 to 50	Unstable flow. Maximum capacity, extended delays. Volumes at or near capacity. Long queues form upstream from intersection.
F	> 80	> 50	Forced flow. Excessive delays. Represents jammed conditions. Intersection operates below capacity with low volumes. Queues may block upstream intersections.

Table information from HCM 2010, Exhibit 18-4 and 19-1

Table 4. 2023 Existing – AM Peak Level of Service

	Movement	Eastbound Left	Eastbound Through	Eastbound Right	Westbound Left	Westbound Through	Westbound Right	Northbound Left	Northbound Through	Northbound Right	Southbound Left	Southbound Through	Southbound Right	Intersection Delay
University & 70th	**LOS**	D	C	C	D	C	C	D	C	A	F	B	A	C
	Delay	54.2	29.6	24.4	48.2	34.0	23.8	45.0	20.4	-	92.1	14.3	-	34.5
	95th Queue	55	232	-	72	136	86	-	40	40	80	60	59	
Hy-Vee & 70th	**LOS**	B	A	A	B	A	A	A	A	A	A	A	A	A
	Delay	11.0	9.3	9.3	11.1	8.6	8.6	7.7	0.0	0.0	0.1	0.1	0.1	1.9
	95th Queue	28	41	41	-	14	14	21	-	-	-	-	-	

Table 5. 2023 Existing – PM Peak Level of Service

	Movement	Eastbound Left	Eastbound Through	Eastbound Right	Westbound Left	Westbound Through	Westbound Right	Northbound Left	Northbound Through	Northbound Right	Southbound Left	Southbound Through	Southbound Right	Intersection Delay
University & 70th	**LOS**	F	C	B	F	C	B	E	D	A	F	C	A	F
	Delay	211	29.7	16.4	93.9	24.6	17.5	62.2	45.3	-	529	25.5	-	80.2
	95th Queue	188	248	63	99	134	98	32	148	148	117	193	98	
Hy-Vee & 70th	**LOS**	C	B	B	C	A	A	A	A	A	A	A	A	A
	Delay	15.1	10.1	10.1	16.0	9.1	9.1	7.9	0.0	0.0	0.1	0.1	0.1	4.4
	95th Queue	54	81	81	26	28	28	33	30	30	117	117	117	

The 2023 traffic data processed by SimTraffic 11 revealed that all left turning movements are currently experiencing delays ranging from regular to excessive in the AM and PM peak hours. Most through and right turning movements are operating at acceptable levels of service during the AM and PM peak hours.

The SimTraffic analysis also shows that southbound traffic along 70th Street currently experiences blocking as the left queue length exceeds the existing turning bay length. The 70th Street southbound right and through queues currently extend through the Hy-Vee approach. Westbound through and right queues on University Avenue extend beyond the existing site access.

Crash History

Crash data was provided by the Iowa Crash Analysis Tool (ICAT) website. Since November 3, 2021, there have been no crashes documented near the intersection of 70th Street and Hy-Vee Entrance. Eight crashes have been documented near the intersection of University Avenue and 70th Street. The crash severity was mostly property damage only with one possible/unknown injury. Causes include, ran traffic signal, failure to yield the right-of-way, followed too close and improper or erratic lane changing. The ICAT Quick Report can be found in Appendix D.

Proposed Development

Casey's is proposing to develop the site with a new 4,319 SF building and gas canopy covering 5 fuel dispensers (10 pumps/fueling stations). Access to the site will be provided by one right-in-right-out (RIRO) access and one full access.

A 35' wide RIRO access is located along University Avenue. The access will be located 148 feet east of 70th Street. The current access, which sits 87 feet from 70th Street, will be removed.

A full access is also proposed along 70th Street. The two existing access along 70th Street, located 80 ft and 248 ft from University Avenue, will be removed. A 35 ft wide access will be located 240 feet north of University Avenue and align with the existing Hy-Vee access.

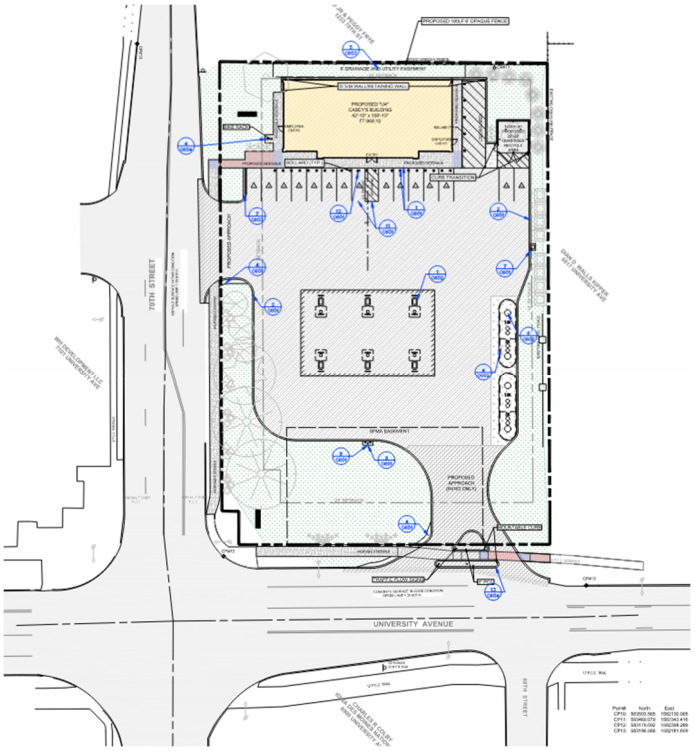


Figure 2. Site Plan

Future Conditions

Trip Generation

Trip generation was performed for this development based on ITE Trip Generation Manual 11th Edition. Land Use 945 (GFA 4-5.5k) was used, which determines trips based on vehicle fueling positions. There are 10 vehicle fueling positions and 4.319 thousand square feet. Both new trips and pass-by trips were estimated. The ITE Trip Generation Manual Appendices 2021, estimates 76% of the AM trips are pass-by and 75% of the PM trips are pass-by.

Table 4. Trip Generation

Time Period	**Total Trips**	**Entering**	**Pass-By**	**New**	**Exiting**
Weekday, AM Peak Hour	165	82	62	20	83
Weekday, PM Peak Hour	191	96	72	24	95

Trip Distribution

Trip distribution and assignment was performed based on the distribution of existing traffic through the intersection of University Avenue and 70th Street. The trips were distributed proportionally based on the existing traffic flows entering the intersection of University Avenue and 70th Street.

- 18% from the north, 48% from the east, 4% from the south and 30% from the west in the AM
- 13% from the north, 36% from the east, 9% from the south and 41% from the west in the PM

Assumptions made during trip generation:

- All northbound traffic generated by Casey's will continue straight on 70th Street through University Avenue and turn right into Casey's.
- All eastbound traffic generated by Casey's along University Avenue will turn left onto 70th Street before turning right into Casey's.
- 75% of the westbound traffic generated by Casey's will enter Casey's through the RIRO on University Avenue. The remaining 25% would continue west and turn right onto 70th Street before turning right into Casey's.
- All southbound traffic generated by Casey's will enter Casey's by turning left off of 70th Street.
- 75% of Casey's exiting traffic will leave Casey's through the full access onto 70th Street. The remaining 25% will exit through the RIRO onto University Avenue.

2023 Build Traffic Volumes

It is anticipated that Casey's development will be completed by the end of 2023. The trips generated by the site were added to the existing traffic volumes to develop the 2023 Build Traffic Volumes. Pass-by trips were routed through the site and subtracted from the through-movements adjacent to the entrances. Non-pass-by-trips were added to the accesses and routed through the adjacent intersections. **Tables 7 and 8** illustrate the anticipated LOS, Delay and 95th percentile Queue lengths at the study intersections.

The SimTraffic analysis revealed that all left turning movements at University Avenue and 70th Street will continue to experience delays ranging from regular to excessive in the AM and PM peak hours. Most through and right turning movements will continue operating at acceptable levels of service during the AM and PM peak hours. Turning movements at Casey's/Hy-Vee and 70th Street as well as Casey's and University Avenue are expected to operate at acceptable levels during the AM and PM peak hours.

The SimTraffic analysis revealed that queuing distances will increase slightly for the southbound left turning movements along 70th Street and the westbound left turning movements along University Avenue. Similarly, queuing lengths increase one additional car length for southbound and westbound through and right turning movements.

The southbound traffic along 70th Street will continue to experience blocking as the left 95th queue length exceeds the existing turning bay length. The 70th Street southbound right and through 95th queue length will continue to extend through the Hy-Vee approach. Westbound through and right 95th queue length on University Avenue extend beyond the Casey's RIRO access.

Table 7. 2023 Build – AM Peak Level of Service

	Movement	Eastbound Left	Eastbound Through	Eastbound Right	Westbound Left	Westbound Through	Westbound Right	Northbound Left	Northbound Through	Northbound Right	Southbound Left	Southbound Through	Southbound Right	Intersection Delay
University & 70th	**LOS**	E	C	C	D	C	C	D	C	C	F	B	B	E
	Delay	55.2	25.8	21.6	48.2	33.8	22.8	45.0	28.5	28.5	285	16.7	16.7	56.3
	95th Queue	60	225	-	66	165	116	17	42	42	105	106	59	
Casey's/ Hy-Vee & 70th	**LOS**	B	A	A	B	A	A	A	A	A	A	A	A	A
	Delay	11.4	9.3	9.3	12.7	8.7	8.7	7.7	0.0	0.0	0.7	0.7	0.7	3.7
	95th Queue	34	40	40	57	32	32	21	-	-	15	15	15	

Casey's & University	**LOS**	-	A	-	-	A	A	-	-	-	-	-	B	A
	Delay	-	0.1	-	-	0.0	0.0	-	-	-	-	-	11.6	0.4
	95th Queue	-	-	-	-	189	189	-	-	-	-	-	58	

Table 8. 2023 Build – PM Peak Level of Service

	Movement	Eastbound Left	Eastbound Through	Eastbound Right	Westbound Left	Westbound Through	Westbound Right	Northbound Left	Northbound Through	Northbound Right	Southbound Left	Southbound Through	Southbound Right	Intersection Delay
University & 70th	**LOS**	F	C	B	F	C	B	E	D	A	F	C	A	F
	Delay	448	29.6	16.3	93.9	24.3	17.4	62.2	47.5	-	820	25.8	-	138
	95th Queue	234	376	48	105	155	118	36	156	156	113	223	105	
Casey's/ Hy-Vee & 70th	**LOS**	C	B	B	C	A	A	A	A	A	A	A	A	A
	Delay	16.1	10.1	10.1	22.3	9.2	9.2	7.9	0.0	0.0	0.6	0.6	0.6	6.2
	95th Queue	85	140	140	141	59	59	39	-	-	183	183	183	
Casey's & University	**LOS**	-	A	-	-	A	A	-	-	-	-	-	B	A
	Delay	-	0.0	-	-	0.0	0.0	-	-	-	-	-	13.2	0.2
	95th Queue	-	-	-	-	236	236	-	-	-	-	-	52	

Turn Lane Warrants

A turn lane warrant analysis was not performed at the intersection of University Avenue and 70th Street. This is an established intersection with existing left- and right-turn lanes.

Traffic Signal Warrant Study

A traffic signal warrant analysis was not performed at the intersection of University Avenue and 70th Street. This intersection has existing traffic signals and timings that were used in the study. Traffic signal timings were provided by the City's consultant.

2043 Future Traffic Volumes

Future traffic volumes were not analyzed at this time due to the existing conditions.

Conclusions and Recommendations

Conclusions

The purpose of this traffic study is to determine the existing and anticipated traffic operations at the intersection of the study area associated with the proposed Casey's

General Store development. Based on the results of this analysis, the following summarizes the key findings and recommendations of this study.

- The existing traffic data revealed that all left turning movements are currently experiencing delays ranging from regular to excessive in the AM and PM peak hours. Most through and right turning movements are operating at acceptable levels of service during the AM and PM peak hours.

- The analysis revealed that all left turning movements at University Avenue and 70th Street will continue to experience delays ranging from regular to excessive in the AM and PM peak hours. Most through and right turning movements will continue operating at acceptable levels of service during the AM and PM peak hours. Turning movements at Casey's/Hy-Vee and 70th Street as well as Casey's and University Avenue are expected to operate at acceptable levels during the AM and PM peak hours.

- The analysis revealed that queuing distances will increase slightly for the southbound left turning movements along 70th Street and the westbound left turning movements along University Avenue. Similarly, queuing lengths increase one additional car length for southbound and westbound through and right turning movements.

Recommendations

- We would recommend that the areas' traffic levels be monitored for growth or a significant development. If either occurs in the area, an impact study would be warranted. At that time, we would also recommend consideration of re-timing of the signals along the corridor as the area develops.

Appendix A – Traffic Count Data

PELDS DESIGN SERVICES
2323 Dixon Street
Des Moines, IA 50316

22-201
Intersecion of:
University & 70th
Counted 04-25-2023 by AB

File Name : alex b 4-25-23
Site Code : 00000001
Start Date : 4/25/2023
Page No : 1

Groups Printed- Vehicles

	From North					From East					From South					From West					
Start Time	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Int. Total
07:00 AM	15	7	11	0	33	15	63	5	0	83	2	3	1	0	6	0	31	5	4	40	162
07:15 AM	21	5	11	0	37	11	51	3	3	68	4	3	0	2	9	1	42	2	2	47	161
07:30 AM	19	5	10	0	34	8	66	7	1	82	4	2	0	0	6	0	48	4	1	53	175
07:45 AM	18	7	9	0	34	14	93	8	2	117	2	0	0	1	3	0	49	10	2	61	215
Total	73	24	41	0	138	48	273	23	6	350	12	8	1	3	24	1	170	21	9	201	713
08:00 AM	9	9	18	1	37	12	70	8	2	92	2	2	1	0	5	0	61	9	2	72	206
08:15 AM	9	5	18	0	32	9	73	7	2	91	5	1	0	1	7	1	40	12	2	55	185
08:30 AM	10	8	14	0	32	8	61	15	2	86	11	3	1	0	15	0	47	4	2	53	186
08:45 AM	6	6	17	0	29	14	67	12	2	95	7	3	0	0	10	1	51	6	4	62	196
Total	34	28	67	1	130	43	271	42	8	364	25	9	2	1	37	2	199	31	10	242	773
09:00 AM	6	7	7	0	20	14	70	15	3	102	6	0	4	1	11	1	70	5	5	81	214
09:15 AM	5	7	19	0	31	8	64	14	5	91	11	4	2	0	17	1	61	7	2	71	210
09:30 AM	12	10	10	0	32	17	62	7	4	90	6	2	0	1	9	1	45	6	2	54	185
09:45 AM	10	17	17	0	44	15	63	22	0	100	12	3	1	0	16	0	59	8	2	69	229
Total	33	41	53	0	127	54	259	58	12	383	35	9	7	2	53	3	235	26	11	275	838
10:00 AM	10	7	21	0	38	15	59	28	2	104	13	5	4	0	22	3	58	13	3	77	241
10:15 AM	10	10	12	0	32	11	62	18	5	96	10	5	1	0	16	2	63	12	3	80	224
10:30 AM	16	10	11	0	37	15	75	23	0	113	18	5	7	0	30	0	71	16	1	88	268
10:45 AM	10	10	13	0	33	17	68	15	0	100	18	7	0	0	25	4	80	10	4	98	256
Total	46	37	57	0	140	58	264	84	7	413	59	22	12	0	93	9	272	51	11	343	989
11:00 AM	10	12	18	0	40	21	76	17	1	115	14	3	0	2	19	0	81	10	3	94	268
11:15 AM	12	10	16	0	38	11	67	8	4	90	11	5	1	0	17	2	86	11	1	100	245
11:30 AM	8	13	18	0	39	18	81	17	0	116	10	6	1	1	18	3	93	6	1	103	276
11:45 AM	10	11	14	0	35	22	62	23	1	108	11	7	3	0	21	1	70	12	2	85	249
Total	40	46	66	0	152	72	286	65	6	429	46	21	5	3	75	6	330	39	7	382	1038
12:00 PM	18	4	19	0	41	18	50	22	1	91	17	7	3	0	27	1	90	13	1	105	264
12:15 PM	11	7	21	0	39	19	58	18	3	98	16	7	1	0	24	0	80	5	1	86	247
12:30 PM	12	9	28	0	49	17	65	12	2	96	12	11	2	0	25	0	110	11	2	123	293
12:45 PM	11	17	17	1	46	21	72	11	0	104	11	8	1	0	20	0	77	15	2	94	264
Total	52	37	85	1	175	75	245	63	6	389	56	33	7	0	96	1	357	44	6	408	1068
*** BREAK ***																					
02:30 PM	16	11	24	1	52	22	80	18	0	120	12	7	1	0	20	3	76	7	2	88	280
02:45 PM	11	5	23	0	39	27	75	18	2	122	9	7	2	1	19	2	105	11	1	119	299
Total	27	16	47	1	91	49	155	36	2	242	21	14	3	1	39	5	181	18	3	207	579
03:00 PM	12	13	16	0	41	23	86	20	3	132	15	11	1	0	27	1	92	13	3	109	309
03:15 PM	16	15	23	0	54	26	73	20	2	121	19	12	4	0	35	2	116	21	2	141	351
03:30 PM	18	11	29	0	58	21	94	22	1	138	11	8	0	0	19	5	97	30	2	134	349
03:45 PM	16	5	23	1	45	34	87	22	5	148	19	7	1	0	27	1	100	15	1	117	337
Total	62	44	91	1	198	104	340	84	11	539	64	38	6	0	108	9	405	79	8	501	1346
04:00 PM	25	9	32	0	66	30	97	19	4	150	13	7	2	0	22	0	113	19	0	132	370
04:15 PM	21	10	26	0	57	19	68	10	3	100	22	7	3	0	32	0	97	22	2	121	310
04:30 PM	17	11	37	0	65	22	78	27	4	131	22	9	4	0	35	2	110	20	1	133	364
04:45 PM	17	13	32	0	62	26	71	17	0	114	12	9	3	0	24	2	88	25	1	116	316
Total	80	43	127	0	250	97	314	73	11	495	69	32	12	0	113	4	408	86	4	502	1360
05:00 PM	14	6	37	0	57	27	76	14	0	117	17	8	2	0	27	1	108	23	2	134	335
05:15 PM	18	7	34	0	59	29	94	14	2	139	29	13	1	0	43	1	139	17	0	157	398
05:30 PM	16	3	27	0	46	21	85	11	0	117	12	9	0	0	21	1	99	14	2	116	300
05:45 PM	18	11	31	0	60	14	64	25	1	104	10	7	2	0	19	0	86	7	1	94	277
Total	66	27	129	0	222	91	319	64	3	477	68	37	5	0	110	3	432	61	5	501	1310

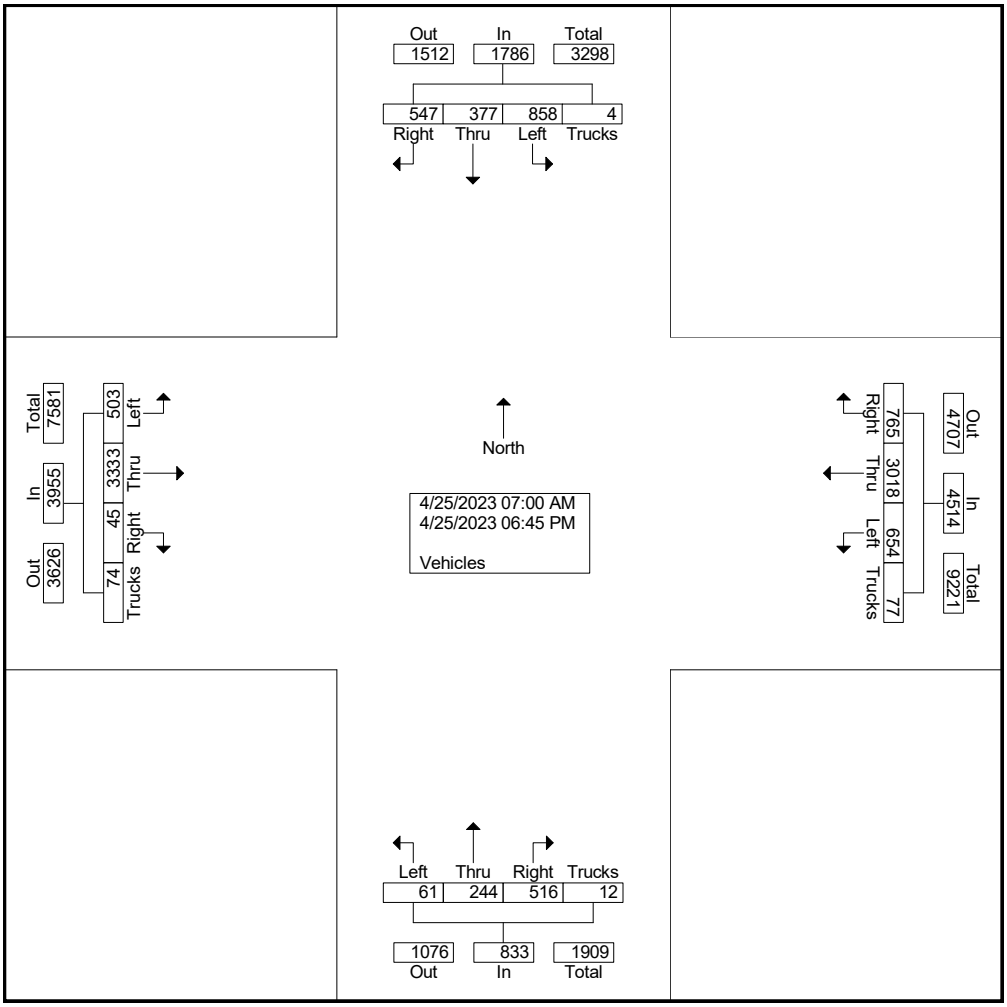
PELDS DESIGN SERVICES
2323 Dixon Street
Des Moines, IA 50316

22-201
Intersecion of:
University & 70th
Counted 04-25-2023 by AB

File Name : alex b 4-25-23
Site Code : 00000001
Start Date : 4/25/2023

Groups Printed- Vehicles

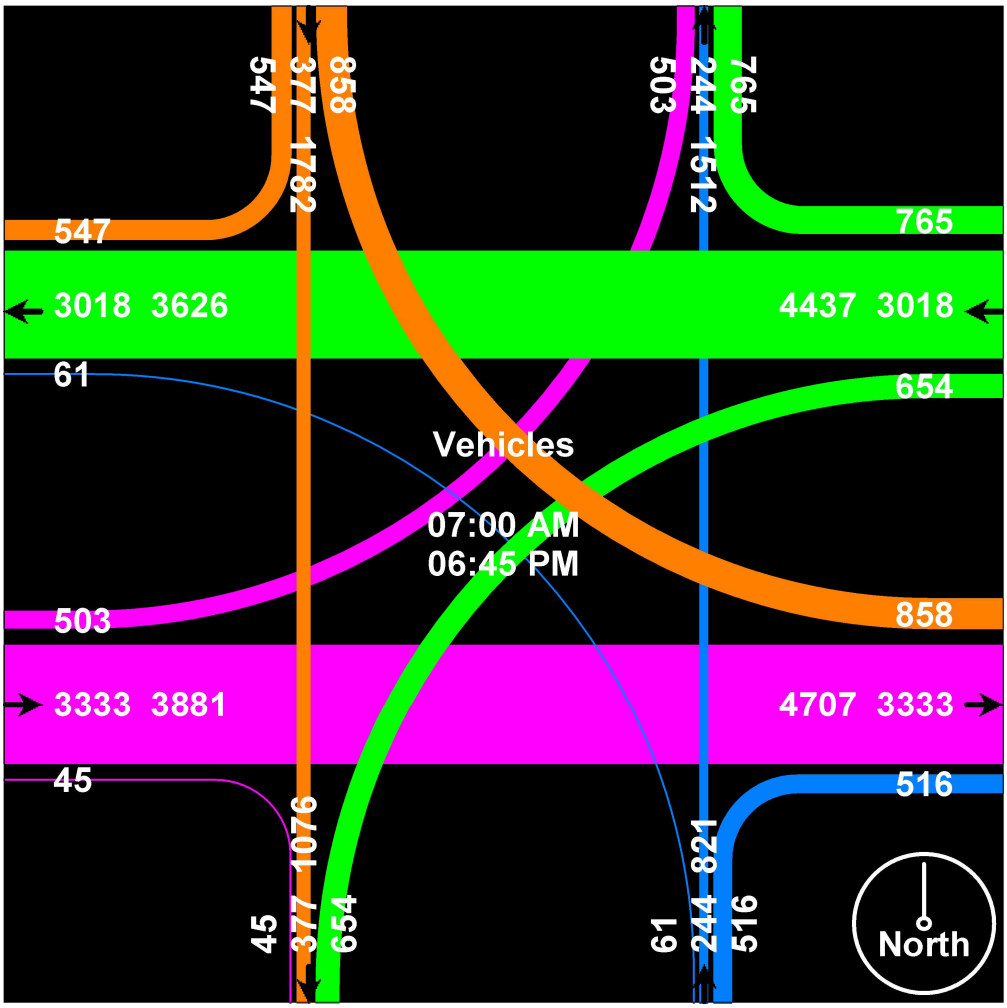
	From North					From East					From South					From West					
Start Time	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Int. Total
06:00 PM	10	15	20	0	45	17	83	27	2	129	13	3	1	0	17	0	87	10	0	97	288
06:15 PM	10	5	28	0	43	19	63	14	2	98	17	5	0	1	23	2	93	18	0	113	277
06:30 PM	7	9	22	0	38	16	68	9	1	94	18	8	0	0	26	0	64	10	0	74	232
06:45 PM	7	5	25	0	37	22	78	12	0	112	13	5	0	1	19	0	100	9	0	109	277
Total	34	34	95	0	163	74	292	62	5	433	61	21	1	2	85	2	344	47	0	393	1074
Grand Total	547	377	858	4	1786	765	3018	654	77	4514	516	244	61	12	833	45	3333	503	74	3955	11088
Apprch %	30.6	21.1	48	0.2		16.9	66.9	14.5	1.7		61.9	29.3	7.3	1.4		1.1	84.3	12.7	1.9		
Total %	4.9	3.4	7.7	0	16.1	6.9	27.2	5.9	0.7	40.7	4.7	2.2	0.6	0.1	7.5	0.4	30.1	4.5	0.7	35.7	



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PELDS DESIGN SERVICES
2323 Dixon Street
Des Moines, IA 50316

22-201
Intersecion of:
University & 70th
Counted 04-27-2023 by AB

File Name : Alex B 4-27-23
Site Code : 00000000
Start Date : 4/27/2023

Groups Printed- Vehicles

	From North					From East					From South					From West					
Start Time	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Int. Total
06:00 AM	3	1	3	0	7	4	25	2	0	31	2	0	0	0	2	0	13	2	2	17	57
06:15 AM	8	2	5	0	15	5	24	2	1	32	1	0	0	2	3	0	14	2	1	17	67
06:30 AM	3	3	4	0	10	2	33	6	2	43	0	1	2	1	4	0	20	2	1	23	80
06:45 AM	11	6	8	0	25	8	42	3	0	53	1	1	1	0	3	0	20	1	1	22	103
Total	25	12	20	0	57	19	124	13	3	159	4	2	3	3	12	0	67	7	5	79	307
07:00 AM	10	5	7	0	22	8	58	5	4	75	2	3	0	0	5	1	27	4	1	33	135
07:15 AM	20	0	3	0	23	14	67	2	1	84	2	2	1	0	5	0	35	6	2	43	155
07:30 AM	15	6	19	0	40	13	85	7	3	108	6	4	1	0	11	0	51	7	1	59	218
07:45 AM	27	10	11	0	48	11	84	13	1	109	7	2	0	0	9	0	64	11	1	76	242
Total	72	21	40	0	133	46	294	27	9	376	17	11	2	0	30	1	177	28	5	211	750
08:00 AM	25	11	12	1	49	19	96	11	2	128	6	1	0	0	7	1	68	3	2	74	258
08:15 AM	7	8	18	0	33	13	76	8	2	99	8	3	1	0	12	0	60	6	2	68	212
08:30 AM	8	9	24	0	41	11	52	8	1	72	9	3	0	0	12	0	48	6	1	55	180
08:45 AM	13	7	14	0	34	19	65	12	2	98	4	3	0	0	7	0	44	7	3	54	193
Total	53	35	68	1	157	62	289	39	7	397	27	10	1	0	38	1	220	22	8	251	843
09:00 AM	1	0	2	0	3	2	15	3	0	20	1	0	0	0	1	0	4	0	0	4	28
09:15 AM	9	7	13	0	29	16	64	6	1	87	11	5	1	1	18	1	65	4	0	70	204
09:30 AM	15	10	13	0	38	11	72	14	4	101	3	7	0	0	10	1	61	8	1	71	220
09:45 AM	18	10	12	1	41	12	90	18	1	121	11	3	1	1	16	4	79	3	1	87	265
Total	43	27	40	1	111	41	241	41	6	329	26	15	2	2	45	6	209	15	2	232	717
10:00 AM	4	8	15	1	28	15	68	21	1	105	10	3	0	1	14	0	59	10	3	72	219
10:15 AM	11	8	19	0	38	14	48	20	1	83	15	4	1	2	22	2	70	10	2	84	227
10:30 AM	11	8	14	0	33	15	74	20	3	112	19	5	3	1	28	2	74	14	0	90	263
10:45 AM	15	14	15	0	44	17	83	22	1	123	13	4	3	0	20	0	101	12	1	114	301
Total	41	38	63	1	143	61	273	83	6	423	57	16	7	4	84	4	304	46	6	360	1010
11:00 AM	9	11	15	0	35	16	60	16	1	93	15	10	1	0	26	1	70	15	3	89	243
11:15 AM	6	13	18	1	38	15	76	13	4	108	10	3	1	0	14	2	83	11	2	98	258
11:30 AM	13	13	24	0	50	15	85	17	3	120	14	9	1	0	24	1	92	8	3	104	298
11:45 AM	17	6	18	0	41	24	100	18	1	143	16	4	6	1	27	0	120	15	2	137	348
Total	45	43	75	1	164	70	321	64	9	464	55	26	9	1	91	4	365	49	10	428	1147
12:00 PM	17	15	25	1	58	22	60	25	1	108	12	6	0	1	19	1	82	12	1	96	281
12:15 PM	11	16	28	1	56	14	75	23	1	113	13	10	4	0	27	2	93	5	0	100	296
12:30 PM	14	11	20	0	45	14	93	11	0	118	13	14	3	0	30	2	91	21	0	114	307
12:45 PM	13	14	19	0	46	22	93	14	0	129	19	10	6	0	35	3	85	7	1	96	306
Total	55	56	92	2	205	72	321	73	2	468	57	40	13	1	111	8	351	45	2	406	1190
01:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
01:15 PM	5	6	3	0	14	6	21	7	0	34	4	3	1	0	8	1	21	2	1	25	81
01:30 PM	14	12	24	0	50	18	60	13	0	91	7	11	2	0	20	2	79	13	1	95	256
01:45 PM	13	12	20	0	45	16	101	25	2	144	12	8	3	0	23	0	90	16	2	108	320
Total	32	30	47	0	109	40	183	45	2	270	23	22	6	0	51	3	191	31	4	229	659
02:00 PM	17	16	19	0	52	20	97	13	1	131	19	11	2	1	33	3	130	19	2	154	370
02:15 PM	4	14	29	0	47	18	88	12	1	119	15	9	2	0	26	3	102	10	2	117	309
02:30 PM	11	11	30	0	52	25	78	11	1	115	23	14	5	0	42	1	97	8	1	107	316
02:45 PM	13	13	19	1	46	34	103	20	1	158	19	6	2	0	27	3	107	17	1	128	359
Total	45	54	97	1	197	97	366	56	4	523	76	40	11	1	128	10	436	54	6	506	1354
03:00 PM	4	13	28	0	45	23	87	9	2	121	18	7	2	0	27	1	101	13	0	115	308
03:15 PM	12	7	23	1	43	28	90	15	3	136	16	7	1	0	24	0	85	23	0	108	311
*** BREAK ***																					
03:45 PM	12	11	19	0	42	28	103	19	2	152	32	7	5	0	44	2	122	9	1	134	372
Total	28	31	70	1	130	79	280	43	7	409	66	21	8	0	95	3	308	45	1	357	991

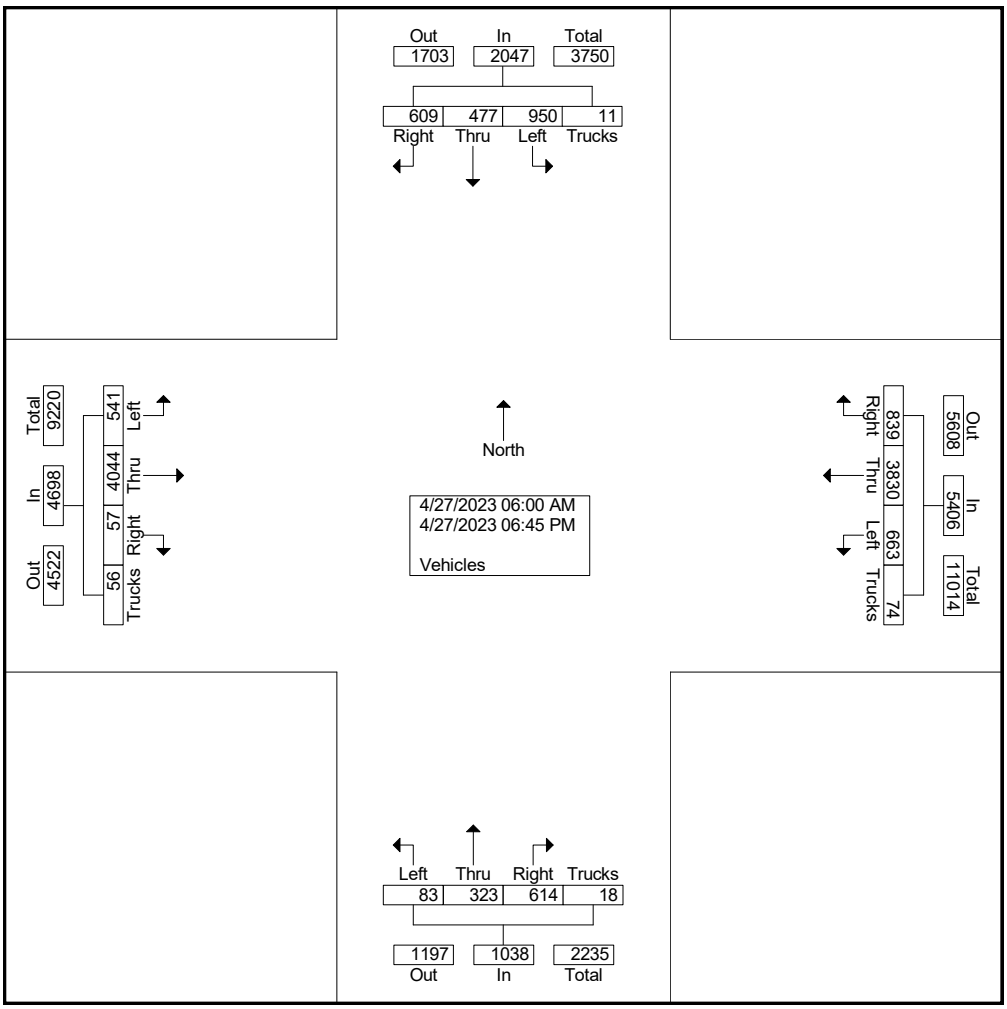
PELDS DESIGN SERVICES
2323 Dixon Street
Des Moines, IA 50316

22-201
Intersecion of:
University & 70th
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File Name : Alex B 4-27-23
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Start Date : 4/27/2023

Groups Printed- Vehicles

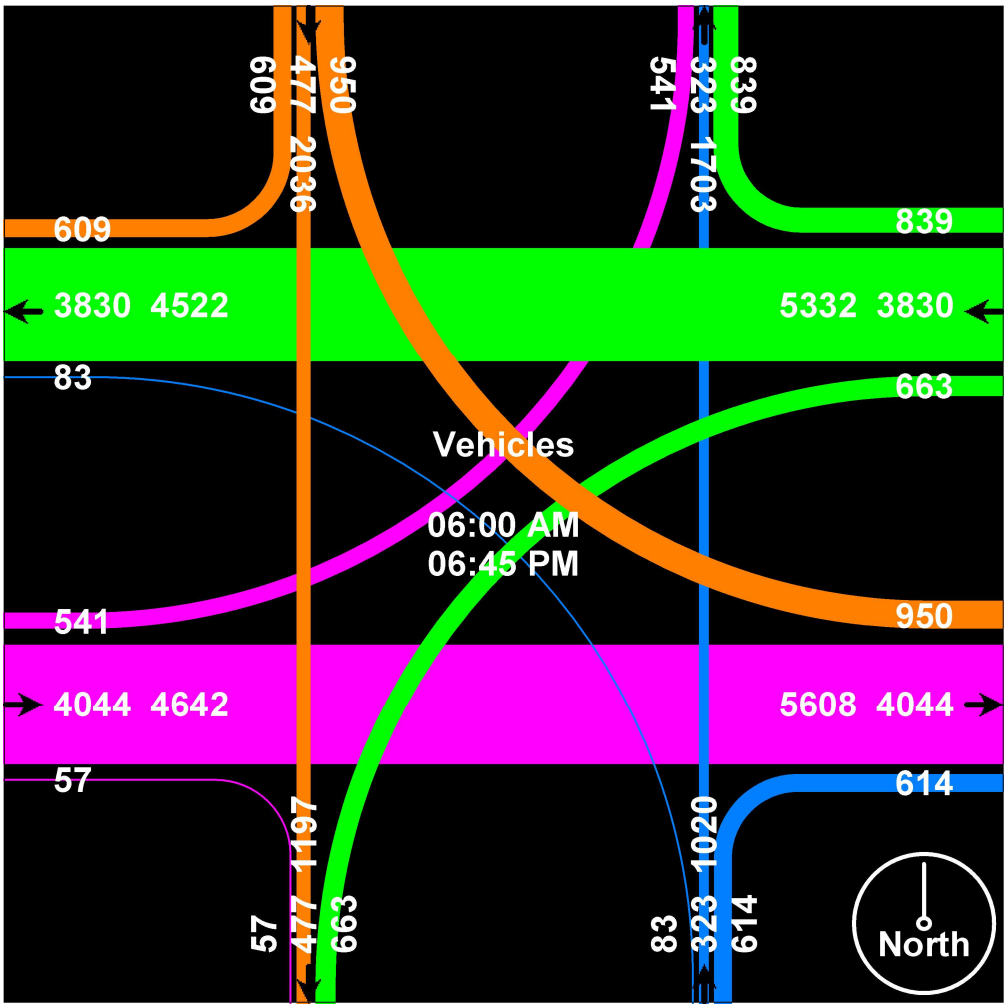
	From North					From East					From South					From West					
Start Time	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Int. Total
04:00 PM	23	15	39	1	78	33	104	18	3	158	19	8	1	0	28	0	135	20	1	156	420
04:15 PM	19	13	40	0	72	26	92	15	3	136	26	9	0	2	37	4	105	35	1	145	390
04:30 PM	30	13	26	0	69	24	97	14	2	137	16	14	3	1	34	1	121	23	1	146	386
04:45 PM	9	14	24	0	47	14	96	16	1	127	21	7	3	0	31	5	143	21	1	170	375
Total	81	55	129	1	266	97	389	63	9	558	82	38	7	3	130	10	504	99	4	617	1571
05:00 PM	12	8	22	0	42	17	100	9	4	130	24	16	3	1	44	0	135	20	0	155	371
05:15 PM	8	11	24	0	43	24	150	16	1	191	19	16	1	0	36	1	175	17	0	193	463
05:30 PM	20	13	28	0	61	23	72	9	0	104	9	12	3	0	24	0	115	10	1	126	315
05:45 PM	13	13	34	0	60	22	79	14	1	116	22	8	2	0	32	1	108	13	1	123	331
Total	53	45	108	0	206	86	401	48	6	541	74	52	9	1	136	2	533	60	2	597	1480
06:00 PM	4	6	27	1	38	14	79	14	1	108	7	8	0	1	16	1	99	6	0	106	268
06:15 PM	9	8	25	0	42	22	96	9	1	128	13	8	1	1	23	2	111	12	0	125	318
06:30 PM	11	7	23	0	41	15	73	24	1	113	16	8	2	0	26	0	81	11	1	93	273
06:45 PM	12	9	26	1	48	18	100	21	1	140	14	6	2	0	22	2	88	11	0	101	311
Total	36	30	101	2	169	69	348	68	4	489	50	30	5	2	87	5	379	40	1	425	1170
Grand Total	609	477	950	11	2047	839	3830	663	74	5406	614	323	83	18	1038	57	4044	541	56	4698	13189
Apprch %	29.8	23.3	46.4	0.5		15.5	70.8	12.3	1.4		59.2	31.1	8	1.7		1.2	86.1	11.5	1.2		
Total %	4.6	3.6	7.2	0.1	15.5	6.4	29	5	0.6	41	4.7	2.4	0.6	0.1	7.9	0.4	30.7	4.1	0.4	35.6	



PELDS DESIGN SERVICES
2323 Dixon Street
Des Moines, IA 50316

22-201
Intersecion of:
University & 70th
Counted 04-27-2023 by AB

File Name : Alex B 4-27-23
Site Code : 00000000
Start Date : 4/27/2023
Page No : 3



PELDS DESIGN SERVICES
2323 Dixon Street
Des Moines, IA 50316

22-201
Intersecion of:
HyVee & 70th St
Counted 04-25-23 by AP

File Name : Aleks P 4-25-23
Site Code : 00001001
Start Date : 4/25/2023
Page No : 1

Groups Printed- Vehicles

	From North					From East					From South					From West					
Start Time	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Int. Total
06:45 AM	0	12	0	0	12	0	0	1	0	1	0	10	2	0	12	2	0	0	0	2	27
Total	0	12	0	0	12	0	0	1	0	1	0	10	2	0	12	2	0	0	0	2	27
07:00 AM	2	10	0	0	12	0	0	0	0	0	0	3	2	0	5	2	0	1	0	3	20
07:15 AM	5	14	0	0	19	0	0	0	0	0	0	5	4	0	9	3	1	2	0	6	34
07:30 AM	0	27	0	0	27	0	0	1	0	1	0	11	13	0	24	7	0	0	0	7	59
07:45 AM	2	36	0	0	38	0	0	0	0	0	0	12	4	0	16	3	0	1	0	4	58
Total	9	87	0	0	96	0	0	1	0	1	0	31	23	0	54	15	1	4	0	20	171
08:00 AM	2	37	0	0	39	0	0	0	0	0	0	12	3	0	15	5	0	5	0	10	64
08:15 AM	3	39	0	0	42	0	0	0	0	0	0	15	9	0	24	1	0	1	0	2	68
08:30 AM	3	27	1	0	31	0	0	1	0	1	0	17	9	0	26	9	0	5	0	14	72
08:45 AM	7	26	1	0	34	0	0	0	0	0	0	19	6	0	25	9	0	3	0	12	71
Total	15	129	2	0	146	0	0	1	0	1	0	63	27	0	90	24	0	14	0	38	275
09:00 AM	7	27	0	0	34	0	0	0	0	0	0	11	7	0	18	10	0	6	0	16	68
09:15 AM	5	24	0	0	29	0	0	2	0	2	0	18	10	0	28	13	0	5	0	18	77
09:30 AM	8	20	0	0	28	0	0	0	0	0	0	14	7	0	21	10	0	4	0	14	63
09:45 AM	10	14	0	0	24	1	0	0	0	1	0	17	9	0	26	4	0	7	0	11	62
Total	30	85	0	0	115	1	0	2	0	3	0	60	33	0	93	37	0	22	0	59	270
10:00 AM	3	22	3	0	28	1	0	1	0	2	0	5	2	0	7	5	0	9	0	14	51
10:15 AM	10	28	0	0	38	1	0	3	0	4	1	19	12	0	32	2	0	4	0	6	80
10:30 AM	10	18	2	0	30	0	0	0	0	0	1	22	8	0	31	10	0	8	0	18	79
10:45 AM	6	22	0	0	28	0	0	0	0	0	0	18	8	0	26	14	0	9	0	23	77
Total	29	90	5	0	124	2	0	4	0	6	2	64	30	0	96	31	0	30	0	61	287
11:00 AM	6	25	0	0	31	0	0	1	0	1	0	15	8	0	23	10	0	6	0	16	71
11:15 AM	7	25	0	0	32	0	0	1	0	1	0	23	14	0	37	13	1	4	0	18	88
11:30 AM	5	30	0	0	35	1	0	1	0	2	0	19	12	0	31	13	1	10	0	24	92
11:45 AM	7	29	0	0	36	0	0	0	0	0	0	20	10	0	30	14	0	8	0	22	88
Total	25	109	0	0	134	1	0	3	0	4	0	77	44	0	121	50	2	28	0	80	339
12:00 PM	7	18	1	0	26	0	0	2	0	2	0	21	13	0	34	16	0	11	0	27	89
12:15 PM	15	22	2	0	39	0	0	1	0	1	1	31	20	0	52	15	0	13	0	28	120
12:30 PM	6	24	1	0	31	0	0	2	0	2	0	35	13	0	48	18	0	10	0	28	109
12:45 PM	10	28	0	0	38	0	0	1	0	1	0	23	19	0	42	15	0	15	0	30	111
Total	38	92	4	0	134	0	0	6	0	6	1	110	65	0	176	64	0	49	0	113	429
01:00 PM	8	23	2	0	33	0	0	0	0	0	0	31	14	0	45	29	0	17	0	46	124
01:15 PM	6	30	2	0	38	2	0	2	0	4	2	28	17	0	47	15	0	12	0	27	116
01:30 PM	9	26	3	0	38	2	0	2	0	4	0	29	10	0	39	13	0	16	0	29	110
01:45 PM	13	30	0	0	43	2	0	3	0	5	2	23	10	0	35	19	0	13	0	32	115
Total	36	109	7	0	152	6	0	7	0	13	4	111	51	0	166	76	0	58	0	134	465
02:00 PM	8	40	1	0	49	2	0	0	0	2	0	27	16	0	43	18	0	9	0	27	121
02:15 PM	8	23	1	0	32	0	0	1	0	1	1	18	11	0	30	12	0	6	0	18	81
*** BREAK ***																					
02:45 PM	6	16	0	0	22	0	0	0	0	0	0	23	10	0	33	16	0	7	0	23	78
Total	22	79	2	0	103	2	0	1	0	3	1	68	37	0	106	46	0	22	0	68	280
03:00 PM	2	28	0	0	30	0	0	2	0	2	0	16	20	0	36	24	0	15	0	39	107
03:15 PM	8	24	0	0	32	1	0	1	0	2	0	33	15	0	48	18	0	15	0	33	115
03:30 PM	8	31	1	0	40	0	0	2	0	2	0	43	6	0	49	11	0	12	0	23	114
03:45 PM	4	52	0	0	56	1	0	3	0	4	0	50	17	0	67	18	0	15	0	33	160
Total	22	135	1	0	158	2	0	8	0	10	0	142	58	0	200	71	0	57	0	128	496
04:00 PM	14	46	0	0	60	1	0	1	0	2	2	48	12	0	62	22	0	21	0	43	167
04:15 PM	13	30	0	0	43	0	0	3	0	3	0	39	20	0	59	16	0	15	0	31	136
04:30 PM	10	39	0	0	49	0	1	2	0	3	0	42	24	0	66	29	0	17	0	46	164

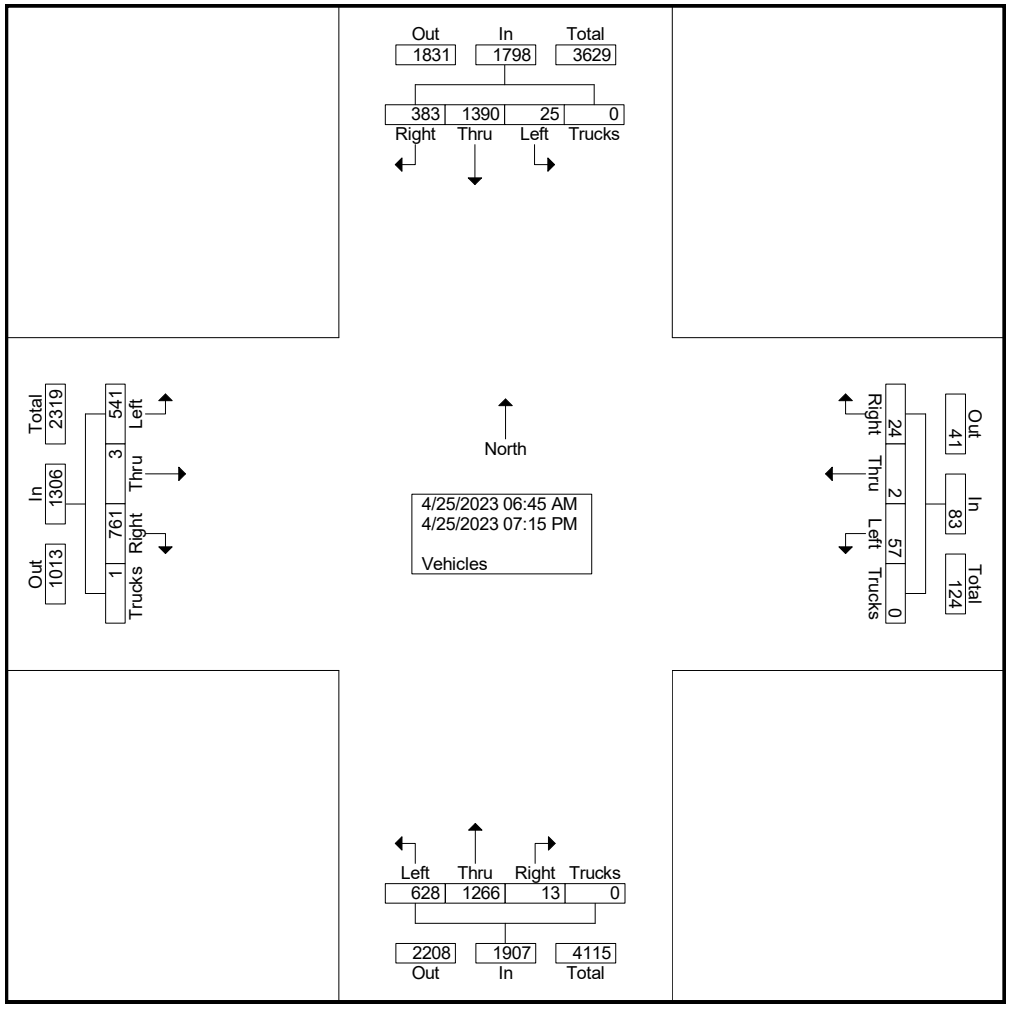
PELDS DESIGN SERVICES
2323 Dixon Street
Des Moines, IA 50316

22-201
Intersecion of:
HyVee & 70th St
Counted 04-25-23 by AP

File Name : Aleks P 4-25-23
Site Code : 00001001
Start Date : 4/25/2023
Page No : 2

Groups Printed- Vehicles

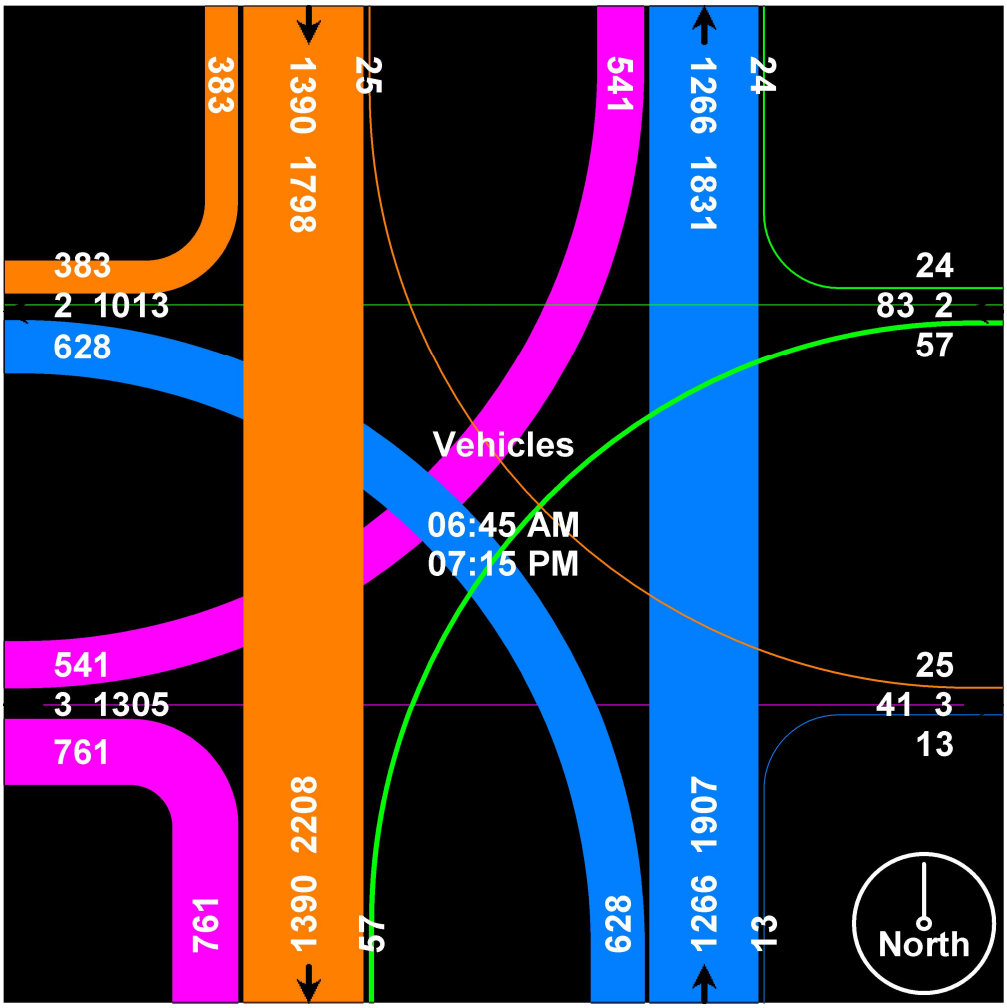
	From North					From East					From South					From West					
Start Time	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Int. Total
04:45 PM	15	38	1	0	54	0	1	4	0	5	0	42	21	0	63	29	0	22	0	51	173
Total	52	153	1	0	206	1	2	10	0	13	2	171	77	0	250	96	0	75	0	171	640
05:00 PM	12	35	0	0	47	0	0	1	0	1	0	46	20	0	66	37	0	21	0	58	172
05:15 PM	18	40	0	0	58	2	0	4	0	6	1	49	22	0	72	26	0	12	1	39	175
05:30 PM	18	39	1	0	58	2	0	3	0	5	2	38	21	0	61	31	0	29	0	60	184
05:45 PM	11	26	0	0	37	0	0	1	0	1	0	41	22	0	63	31	0	25	0	56	157
Total	59	140	1	0	200	4	0	9	0	13	3	174	85	0	262	125	0	87	1	213	688
06:00 PM	9	35	1	0	45	2	0	1	0	3	0	43	17	0	60	22	0	18	0	40	148
06:15 PM	5	35	0	0	40	0	0	0	0	0	0	23	17	0	40	26	0	14	0	40	120
06:30 PM	8	35	1	0	44	2	0	1	0	3	0	25	16	0	41	17	0	17	0	34	122
06:45 PM	11	26	0	0	37	1	0	1	0	2	0	38	22	0	60	24	0	15	0	39	138
Total	33	131	2	0	166	5	0	3	0	8	0	129	72	0	201	89	0	64	0	153	528
07:00 PM	6	16	0	0	22	0	0	0	0	0	0	31	11	0	42	24	0	17	0	41	105
07:15 PM	7	23	0	0	30	0	0	1	0	1	0	25	13	0	38	11	0	14	0	25	94
Grand Total	383	1390	25	0	1798	24	2	57	0	83	13	1266	628	0	1907	761	3	541	1	1306	5094
Apprch %	21.3	77.3	1.4	0		28.9	2.4	68.7	0		0.7	66.4	32.9	0		58.3	0.2	41.4	0.1		
Total %	7.5	27.3	0.5	0	35.3	0.5	0	1.1	0	1.6	0.3	24.9	12.3	0	37.4	14.9	0.1	10.6	0	25.6	



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22-201
Intersecion of:
HyVee & 70th St
Counted 04-25-23 by AP

File Name : Aleks P 4-25-23
Site Code : 00001001
Start Date : 4/25/2023
Page No : 3



PELDS DESIGN SERVICES
2323 Dixon Street
Des Moines, IA 50316

22-201
Intersecion of:
Hy-Vee & 70th St
Counted 04-27-23 by AP

File Name : Aleks P 4-27-23
Site Code : 00001002
Start Date : 4/27/2023
Page No : 1

Groups Printed- Vehicles

	From North					From East					From South					From West					
Start Time	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Int. Total
06:30 AM	0	9	0	0	9	0	0	0	0	0	0	3	2	0	5	0	0	0	0	0	14
06:45 AM	1	12	0	0	13	0	0	0	0	0	0	5	2	0	7	2	0	2	0	4	24
Total	1	21	0	0	22	0	0	0	0	0	0	8	4	0	12	2	0	2	0	4	38
07:00 AM	3	9	0	0	12	0	0	0	0	0	0	5	0	0	5	4	0	1	0	5	22
07:15 AM	4	24	0	0	28	0	0	0	0	0	0	4	7	0	11	1	1	0	0	2	41
07:30 AM	3	17	0	0	20	0	0	1	0	1	0	9	4	0	13	3	0	1	0	4	38
07:45 AM	4	23	0	0	27	1	0	0	0	1	0	13	12	0	25	1	0	2	0	3	56
Total	14	73	0	0	87	1	0	1	0	2	0	31	23	0	54	9	1	4	0	14	157
08:00 AM	2	38	0	0	40	1	0	0	0	1	0	20	6	0	26	8	0	5	0	13	80
08:15 AM	5	47	1	0	53	0	0	1	0	1	0	19	5	0	24	3	0	1	0	4	82
08:30 AM	4	44	0	0	48	0	0	0	0	0	0	14	10	0	24	3	0	5	0	8	80
08:45 AM	11	31	1	0	43	1	0	0	0	1	1	14	9	0	24	5	0	4	0	9	77
Total	22	160	2	0	184	2	0	1	0	3	1	67	30	0	98	19	0	15	0	34	319
09:00 AM	8	26	0	0	34	0	0	1	0	1	0	19	7	0	26	9	0	3	0	12	73
09:15 AM	10	31	0	0	41	1	0	1	0	2	0	15	16	0	31	4	0	6	0	10	84
09:30 AM	8	26	2	0	36	1	0	0	0	1	2	17	7	0	26	6	0	8	0	14	77
09:45 AM	3	30	0	0	33	0	0	1	0	1	0	14	12	0	26	8	0	9	0	17	77
Total	29	113	2	0	144	2	0	3	0	5	2	65	42	0	109	27	0	26	0	53	311
10:00 AM	9	24	1	0	34	2	1	1	0	4	0	16	14	0	30	10	0	7	0	17	85
10:15 AM	5	24	1	0	30	1	0	1	0	2	0	12	8	0	20	13	1	8	0	22	74
10:30 AM	7	28	0	0	35	1	0	3	0	4	0	19	12	0	31	8	1	8	0	17	87
10:45 AM	7	31	0	0	38	1	0	2	0	3	1	21	10	0	32	9	0	7	0	16	89
Total	28	107	2	0	137	5	1	7	0	13	1	68	44	0	113	40	2	30	0	72	335
11:00 AM	8	20	0	0	28	1	0	1	0	2	0	29	7	0	36	11	0	11	0	22	88
11:15 AM	1	9	0	0	10	3	0	0	0	3	0	4	3	0	7	7	0	3	0	10	30
11:30 AM	7	25	0	0	32	1	0	0	0	1	2	26	15	0	43	12	0	13	0	25	101
11:45 AM	5	29	0	0	34	2	0	3	0	5	0	18	14	0	32	12	0	9	0	21	92
Total	21	83	0	0	104	7	0	4	0	11	2	77	39	0	118	42	0	36	0	78	311
12:00 PM	11	30	0	0	41	2	0	0	0	2	1	31	8	0	40	22	0	9	0	31	114
12:15 PM	12	33	1	0	46	0	0	0	0	0	0	24	20	0	44	17	0	18	0	35	125
12:30 PM	5	39	1	0	45	0	0	0	0	0	0	35	17	0	52	26	0	20	0	46	143
12:45 PM	6	33	0	0	39	2	0	2	0	4	0	27	8	0	35	17	0	9	0	26	104
Total	34	135	2	0	171	4	0	2	0	6	1	117	53	0	171	82	0	56	0	138	486
01:00 PM	7	31	0	0	38	0	0	1	0	1	0	37	19	0	56	10	0	12	0	22	117
01:15 PM	4	34	0	0	38	2	0	1	0	3	0	26	15	0	41	20	0	11	0	31	113
01:30 PM	13	29	1	0	43	0	1	0	0	1	0	24	11	0	35	11	0	10	0	21	100
01:45 PM	8	30	2	0	40	0	0	1	0	1	0	34	16	0	50	16	0	12	0	28	119
Total	32	124	3	0	159	2	1	3	0	6	0	121	61	0	182	57	0	45	0	102	449
02:00 PM	8	39	1	0	48	2	0	3	0	5	1	35	12	0	48	15	0	11	0	26	127
02:15 PM	9	25	0	0	34	0	0	0	0	0	0	26	20	0	46	16	0	16	0	32	112
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	2
02:45 PM	0	28	15	0	43	24	0	7	0	31	8	24	0	0	32	1	1	3	0	5	111
Total	17	92	16	0	125	26	0	10	0	36	9	85	32	0	126	33	1	31	0	65	352
03:00 PM	1	29	13	0	43	18	0	11	0	29	7	28	1	0	36	2	0	4	0	6	114
03:15 PM	4	27	0	0	31	0	0	2	0	2	0	30	28	0	58	19	0	17	0	36	127
03:30 PM	5	29	1	0	35	2	0	4	0	6	0	32	11	0	43	20	0	8	0	28	112
03:45 PM	12	32	2	0	46	3	0	2	0	5	1	46	20	0	67	18	0	18	0	36	154
Total	22	117	16	0	155	23	0	19	0	42	8	136	60	0	204	59	0	47	0	106	507
04:00 PM	11	33	1	0	45	0	0	4	0	4	0	45	14	0	59	16	0	15	0	31	139
04:15 PM	7	40	0	0	47	2	0	3	0	5	0	41	18	0	59	13	0	16	0	29	140

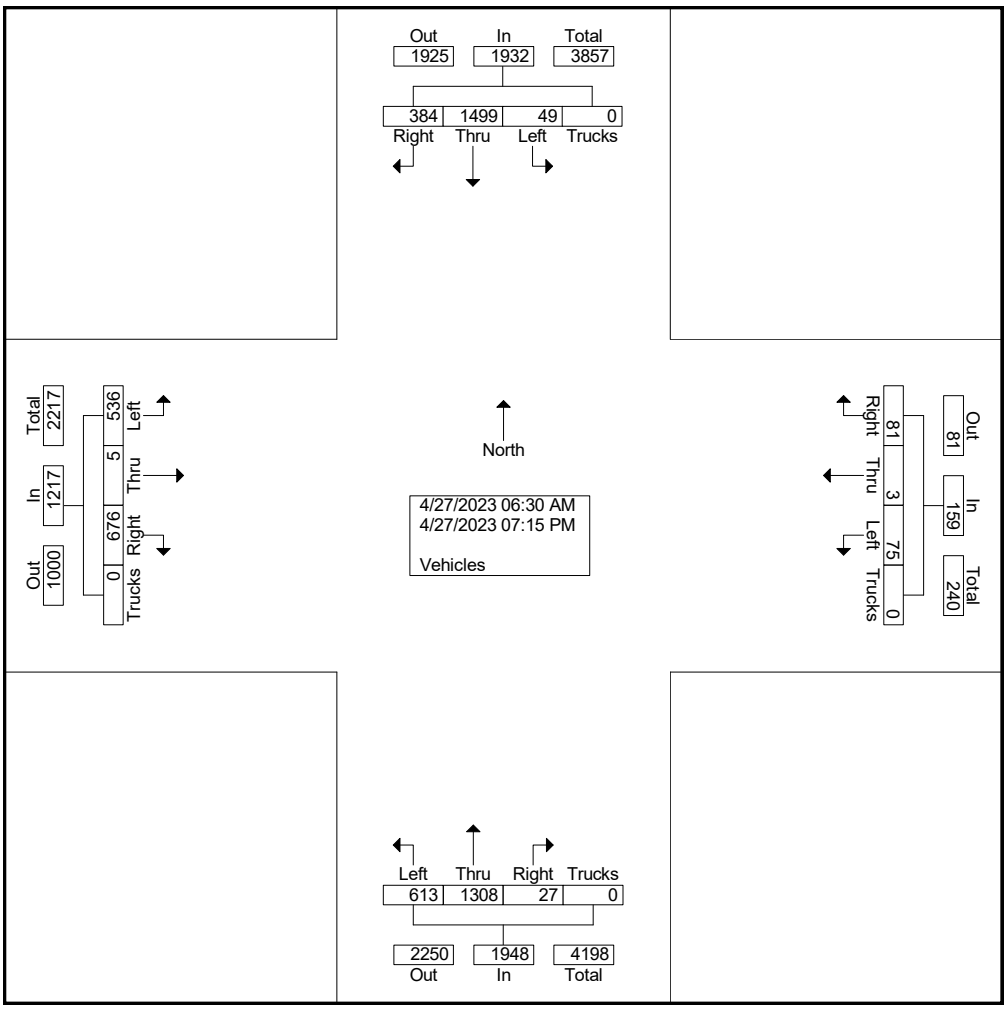
PELDS DESIGN SERVICES
2323 Dixon Street
Des Moines, IA 50316

22-201
Intersecion of:
Hy-Vee & 70th St
Counted 04-27-23 by AP

File Name : Aleks P 4-27-23
Site Code : 00001002
Start Date : 4/27/2023
Page No : 2

Groups Printed- Vehicles

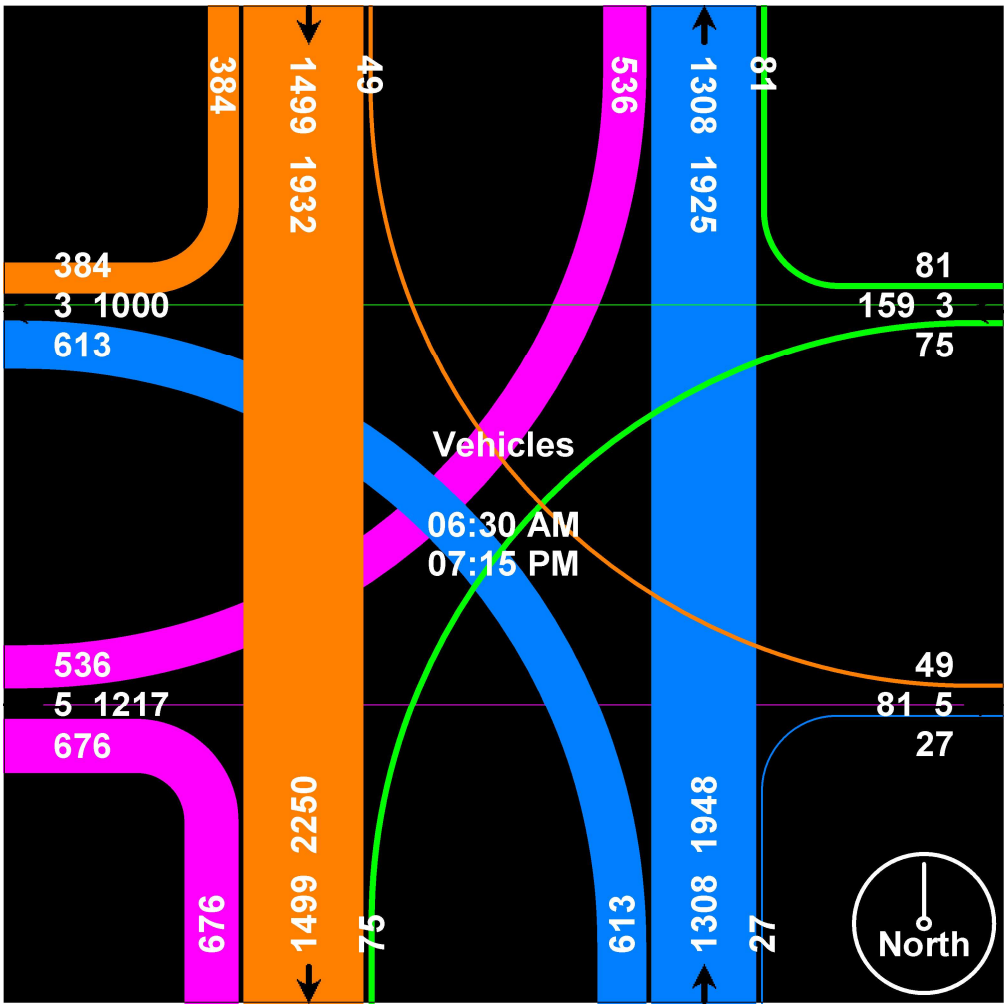
	From North					From East					From South					From West					
Start Time	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Right	Thru	Left	Trucks	App. Total	Int. Total
04:30 PM	23	51	2	0	76	0	0	3	0	3	1	53	23	0	77	26	0	18	0	44	200
04:45 PM	12	45	0	0	57	1	0	1	0	2	0	49	23	0	72	32	0	20	0	52	183
Total	53	169	3	0	225	3	0	11	0	14	1	188	78	0	267	87	0	69	0	156	662
05:00 PM	12	45	1	0	58	2	0	1	0	3	0	54	12	0	66	22	0	24	0	46	173
05:15 PM	14	24	0	0	38	1	1	1	0	3	0	40	12	0	52	22	0	20	0	42	135
05:30 PM	11	34	0	0	45	0	0	1	0	1	0	40	14	0	54	18	0	15	0	33	133
05:45 PM	16	34	0	0	50	1	0	1	0	2	0	45	24	0	69	21	0	24	0	45	166
Total	53	137	1	0	191	4	1	4	0	9	0	179	62	0	241	83	0	83	0	166	607
06:00 PM	8	43	1	0	52	0	0	3	0	3	0	43	11	0	54	26	0	16	0	42	151
06:15 PM	11	29	0	0	40	1	0	0	0	1	1	31	18	0	50	21	1	19	0	41	132
06:30 PM	9	28	0	0	37	0	0	1	0	1	0	24	13	0	37	23	0	18	0	41	116
06:45 PM	9	27	1	0	37	0	0	2	0	2	0	23	20	0	43	21	0	16	0	37	119
Total	37	127	2	0	166	1	0	6	0	7	1	121	62	0	184	91	1	69	0	161	518
07:00 PM	12	17	0	0	29	0	0	3	0	3	0	23	7	0	30	20	0	15	0	35	97
07:15 PM	9	24	0	0	33	1	0	1	0	2	1	22	16	0	39	25	0	8	0	33	107
Grand Total	384	1499	49	0	1932	81	3	75	0	159	27	1308	613	0	1948	676	5	536	0	1217	5256
Apprch %	19.9	77.6	2.5	0		50.9	1.9	47.2	0		1.4	67.1	31.5	0		55.5	0.4	44	0		
Total %	7.3	28.5	0.9	0	36.8	1.5	0.1	1.4	0	3	0.5	24.9	11.7	0	37.1	12.9	0.1	10.2	0	23.2	



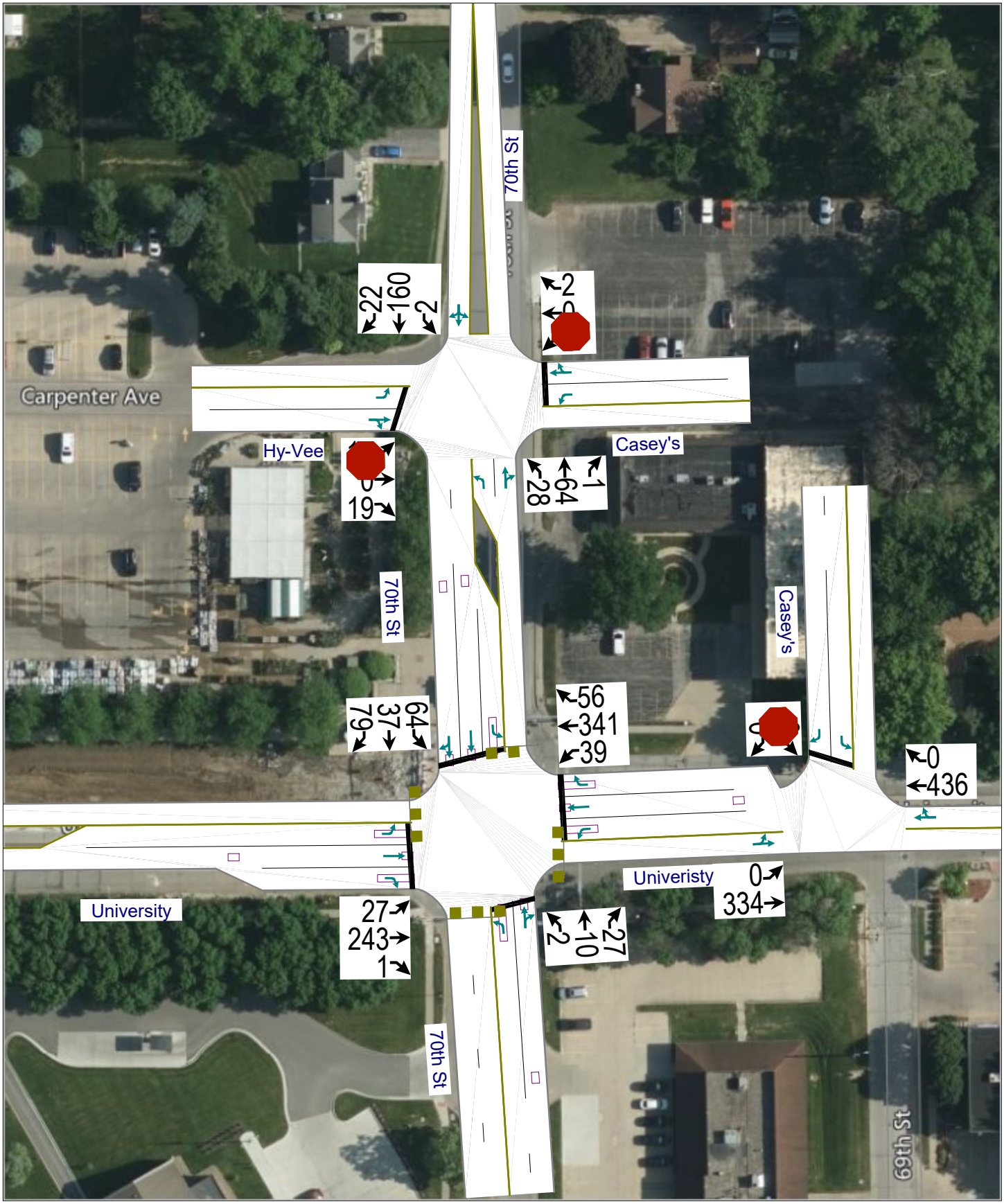
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2323 Dixon Street
Des Moines, IA 50316

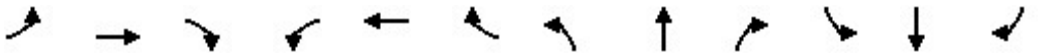
22-201
Intersecion of:
Hy-Vee & 70th St
Counted 04-27-23 by AP

File Name : Aleks P 4-27-23
Site Code : 00001002
Start Date : 4/27/2023
Page No : 3



Appendix B – Syncro Report and Maps

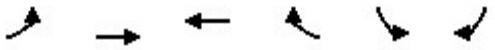

70th St
22
160
2
2
Carpenter Ave
Hy-Vee
19
Casey's
1
64
28
70th St
Casey's
64
37
79
56
341
39
0
436
University
27
243
1
Univeristy
0
334
27
10
2
70th St
69th St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	243	1	39	341	56	2	10	27	64	37	79
Future Volume (vph)	27	243	1	39	341	56	2	10	27	64	37	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0	6.0	4.5	6.0	6.0	4.5	6.0		4.5	6.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.89		1.00	0.90	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1660		1770	3177	
Flt Permitted	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.35	1.00	
Satd. Flow (perm)	1863	1863	1583	1863	1863	1583	1863	1660		648	3177	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	264	1	42	371	61	2	11	29	70	40	86
RTOR Reduction (vph)	0	0	1	0	0	44	0	19	0	0	48	0
Lane Group Flow (vph)	29	264	0	42	371	17	2	21	0	70	78	0
Turn Type	custom	NA	Perm	custom	NA	Perm	custom	NA		custom	NA	
Protected Phases		4			8			2			6	
Permitted Phases	7		4	3		8	5			1		
Actuated Green, G (s)	2.6	23.7	23.7	3.9	25.0	25.0	1.3	29.9		11.5	40.1	
Effective Green, g (s)	2.6	23.7	23.7	3.9	25.0	25.0	1.3	29.9		11.5	40.1	
Actuated g/C Ratio	0.03	0.26	0.26	0.04	0.28	0.28	0.01	0.33		0.13	0.45	
Clearance Time (s)	4.5	6.0	6.0	4.5	6.0	6.0	4.5	6.0		4.5	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	53	490	416	80	517	439	26	551		82	1415	
v/s Ratio Prot		0.14			c0.20			0.01			c0.02	
v/s Ratio Perm	0.02		0.00	c0.02		0.01	0.00			c0.11		
v/c Ratio	0.55	0.54	0.00	0.53	0.72	0.04	0.08	0.04		0.85	0.06	
Uniform Delay, d1	43.1	28.5	24.4	42.1	29.3	23.7	43.8	20.3		38.4	14.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	11.1	1.1	0.0	6.1	4.7	0.0	1.3	0.1		53.6	0.1	
Delay (s)	54.2	29.6	24.4	48.2	34.0	23.8	45.0	20.4		92.1	14.3	
Level of Service	D	C	C	D	C	C	D	C		F	B	
Approach Delay (s)		32.0			34.0			21.6			42.0	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay	34.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		

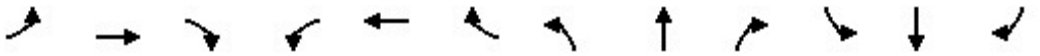
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	334	436	0	0	0
Future Volume (Veh/h)	0	334	436	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	363	474	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		188				
pX, platoon unblocked					0.85	
vC, conflicting volume	474				837	474
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	474				722	474
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1088				335	590

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	363	474	0	0
Volume Left	0	0	0	0
Volume Right	0	0	0	0
cSH	1088	1700	1700	1700
Volume to Capacity	0.00	0.28	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS			A	A
Approach Delay (s)	0.0	0.0	0.0	
Approach LOS			A	

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	26.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	19	1	0	2	28	64	1	2	160	22
Future Volume (Veh/h)	15	0	19	1	0	2	28	64	1	2	160	22
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	16	0	21	1	0	2	30	70	1	2	174	24
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								236				
pX, platoon unblocked												
vC, conflicting volume	322	321	186	342	332	70	198			71		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	322	321	186	342	332	70	198			71		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	100	98	100	100	100	98			100		
cM capacity (veh/h)	619	582	856	587	574	992	1375			1529		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total	16	21	1	2	30	71	200
Volume Left	16	0	1	0	30	0	2
Volume Right	0	21	0	2	0	1	24
cSH	619	856	587	992	1375	1700	1529
Volume to Capacity	0.03	0.02	0.00	0.00	0.02	0.04	0.00
Queue Length 95th (ft)	2	2	0	0	2	0	0
Control Delay (s)	11.0	9.3	11.1	8.6	7.7	0.0	0.1
Lane LOS	B	A	B	A	A		A
Approach Delay (s)	10.0		9.5		2.3		0.1
Approach LOS	B		A				

Intersection Summary				
Average Delay	1.9			
Intersection Capacity Utilization	30.8%	ICU Level of Service		A
Analysis Period (min)	15			

Summary of All Intervals

Start Time	7:20
End Time	8:30
Total Time (min)	70
Time Recorded (min)	60
# of Intervals	2
# of Recorded Intervals	1
Vehs Entered	1004
Vehs Exited	1007
Starting Vehs	11
Ending Vehs	8
Travel Distance (mi)	135
Travel Time (hr)	12.9
Total Delay (hr)	7.4
Total Stops	742
Fuel Used (gal)	8.2

Interval #0 Information Seeding

Start Time	7:20
End Time	7:30
Total Time (min)	10

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:30
End Time	8:30
Total Time (min)	60

Volumes adjusted by Growth Factors.

Vehs Entered	1004
Vehs Exited	1007
Starting Vehs	11
Ending Vehs	8
Travel Distance (mi)	135
Travel Time (hr)	12.9
Total Delay (hr)	7.4
Total Stops	742
Fuel Used (gal)	8.2

1: 70th St & University/Univeristy Performance by movement

2: Univeristy/University & Casey's Performance by movement

6: 70th St & Hy-Vee/Casey's Performance by movement

Total Network Performance

Intersection: 1: 70th St & University/Univeristy

Movement	EB	EB	WB	WB	WB	NB	SB	SB	SB
Directions Served	L	T	L	T	R	TR	L	T	TR
Maximum Queue (ft)	72	226	74	139	119	48	95	133	113
Average Queue (ft)	27	140	36	119	28	16	42	19	20
95th Queue (ft)	55	232	72	136	86	40	80	60	59
Link Distance (ft)		302	119	119		151		155	155
Upstream Blk Time (%)				21	0				
Queuing Penalty (veh)				45	0				
Storage Bay Dist (ft)	175				120		75		
Storage Blk Time (%)		20		21	0		3		
Queuing Penalty (veh)		6		11	0		1		

Intersection: 2: Univeristy/University & Casey's

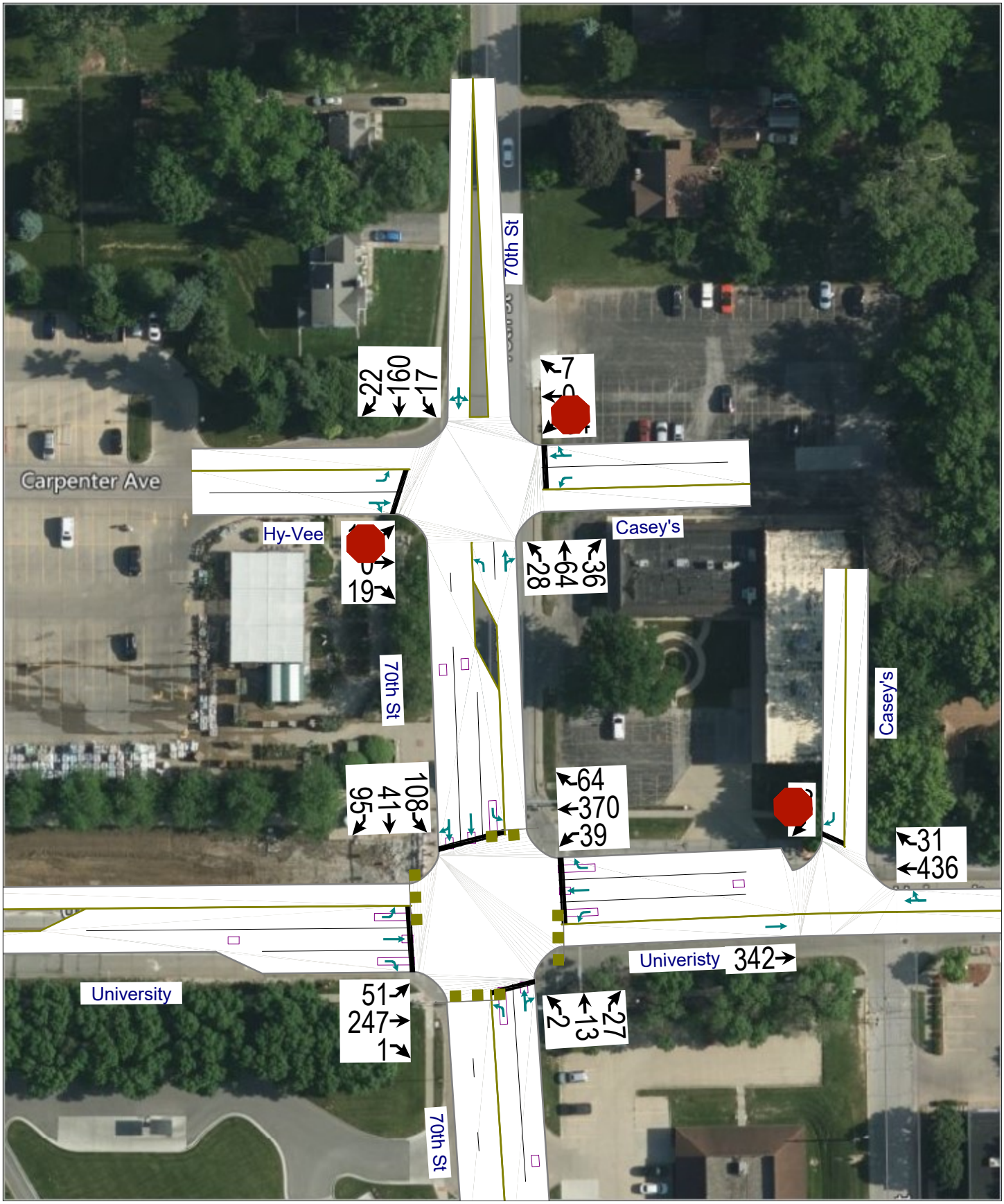
Movement	WB
Directions Served	TR
Maximum Queue (ft)	195
Average Queue (ft)	93
95th Queue (ft)	193
Link Distance (ft)	161
Upstream Blk Time (%)	4
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

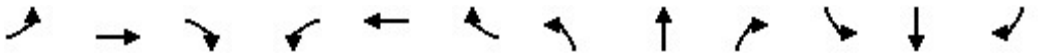
Intersection: 6: 70th St & Hy-Vee/Casey's

Movement	EB	EB	WB	NB
Directions Served	L	TR	TR	L
Maximum Queue (ft)	25	29	30	31
Average Queue (ft)	9	18	2	4
95th Queue (ft)	28	41	14	21
Link Distance (ft)	109	109	111	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				20
Storage Blk Time (%)				0
Queuing Penalty (veh)				0

Network Summary

Network wide Queuing Penalty: 63

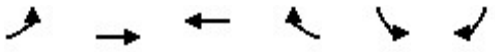

70th St
Carpenter Ave
Hy-Vee
Casey's
70th St
Casey's
Univeristy
342
University
70th St
22
160
17
7
19
36
64
28
108
41
95
64
370
39
31
436
51
247
1
27
13
2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	247	1	39	370	64	2	13	27	108	41	95
Future Volume (vph)	51	247	1	39	370	64	2	13	27	108	41	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0	6.0	4.5	6.0	6.0	4.5	6.0		4.5	6.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.90		1.00	0.90	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1674		1770	3170	
Flt Permitted	0.77	1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.22	1.00	
Satd. Flow (perm)	1433	1863	1583	1863	1863	1583	1863	1674		409	3170	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	55	268	1	42	402	70	2	14	29	117	45	103
RTOR Reduction (vph)	0	0	1	0	0	49	0	23	0	0	62	0
Lane Group Flow (vph)	55	268	0	42	402	21	2	20	0	117	86	0
Turn Type	custom	NA	Perm	custom	NA	Perm	custom	NA		custom	NA	
Protected Phases		4			8			2			6	
Permitted Phases	7		4	3		8	5			1		
Actuated Green, G (s)	5.2	27.7	27.7	3.9	26.4	26.4	1.3	19.2		18.2	36.1	
Effective Green, g (s)	5.2	27.7	27.7	3.9	26.4	26.4	1.3	19.2		18.2	36.1	
Actuated g/C Ratio	0.06	0.31	0.31	0.04	0.29	0.29	0.01	0.21		0.20	0.40	
Clearance Time (s)	4.5	6.0	6.0	4.5	6.0	6.0	4.5	6.0		4.5	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	82	573	487	80	546	464	26	357		82	1271	
v/s Ratio Prot		0.14			c0.22			0.01			c0.03	
v/s Ratio Perm	c0.04		0.00	0.02		0.01	0.00			c0.29		
v/c Ratio	0.67	0.47	0.00	0.53	0.74	0.04	0.08	0.06		1.43	0.07	
Uniform Delay, d1	41.6	25.2	21.6	42.1	28.7	22.8	43.8	28.2		35.9	16.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	19.4	0.6	0.0	6.1	5.1	0.0	1.3	0.3		248.7	0.1	
Delay (s)	61.0	25.8	21.6	48.2	33.8	22.8	45.0	28.5		284.6	16.7	
Level of Service	E	C	C	D	C	C	D	C		F	B	
Approach Delay (s)		31.8			33.5			29.2			135.0	
Approach LOS		C			C			C			F	

Intersection Summary			
HCM 2000 Control Delay	56.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	50.9%	ICU Level of Service	A
Analysis Period (min)	15		

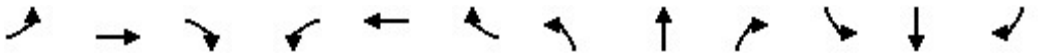
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	342	436	31	0	29
Future Volume (Veh/h)	0	342	436	31	0	29
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	372	474	34	0	32
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		188				
pX, platoon unblocked					0.85	
vC, conflicting volume	508				863	491
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	508				746	491
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	94
cM capacity (veh/h)	1057				322	578

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	372	508	32
Volume Left	0	0	0
Volume Right	0	34	32
cSH	1700	1700	578
Volume to Capacity	0.22	0.30	0.06
Queue Length 95th (ft)	0	0	4
Control Delay (s)	0.0	0.0	11.6
Lane LOS			B
Approach Delay (s)	0.0	0.0	11.6
Approach LOS			B

Intersection Summary			
Average Delay		0.4	
Intersection Capacity Utilization		34.8%	ICU Level of Service A
Analysis Period (min)		15	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	19	64	0	7	28	64	36	17	160	22
Future Volume (Veh/h)	15	0	19	64	0	7	28	64	36	17	160	22
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	16	0	21	70	0	8	30	70	39	18	174	24
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								236				
pX, platoon unblocked												
vC, conflicting volume	360	391	186	392	384	90	198			109		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	360	391	186	392	384	90	198			109		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	100	98	87	100	99	98			99		
cM capacity (veh/h)	575	526	856	539	531	968	1375			1481		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total	16	21	70	8	30	109	216
Volume Left	16	0	70	0	30	0	18
Volume Right	0	21	0	8	0	39	24
cSH	575	856	539	968	1375	1700	1481
Volume to Capacity	0.03	0.02	0.13	0.01	0.02	0.06	0.01
Queue Length 95th (ft)	2	2	11	1	2	0	1
Control Delay (s)	11.4	9.3	12.7	8.7	7.7	0.0	0.7
Lane LOS	B	A	B	A	A		A
Approach Delay (s)	10.2		12.3		1.7		0.7
Approach LOS	B		B				

Intersection Summary				
Average Delay	3.7			
Intersection Capacity Utilization	34.2%	ICU Level of Service		A
Analysis Period (min)	15			

Summary of All Intervals

Start Time	7:20
End Time	8:30
Total Time (min)	70
Time Recorded (min)	60
# of Intervals	2
# of Recorded Intervals	1
Vehs Entered	1176
Vehs Exited	1176
Starting Vehs	13
Ending Vehs	13
Travel Distance (mi)	151
Travel Time (hr)	14.9
Total Delay (hr)	8.5
Total Stops	926
Fuel Used (gal)	9.3

Interval #0 Information Seeding

Start Time	7:20
End Time	7:30
Total Time (min)	10

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:30
End Time	8:30
Total Time (min)	60

Volumes adjusted by Growth Factors.

Vehs Entered	1176
Vehs Exited	1176
Starting Vehs	13
Ending Vehs	13
Travel Distance (mi)	151
Travel Time (hr)	14.9
Total Delay (hr)	8.5
Total Stops	926
Fuel Used (gal)	9.3

1: 70th St & University/Univeristy Performance by movement

2: Univeristy/University & Casey's Performance by movement

6: 70th St & Hy-Vee/Casey's Performance by movement

Total Network Performance

Intersection: 1: 70th St & University/Univeristy

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	L	T	R	L	TR	L	T	TR
Maximum Queue (ft)	52	302	74	142	125	45	64	99	163	65
Average Queue (ft)	28	118	31	128	41	2	16	74	27	27
95th Queue (ft)	60	225	66	165	116	17	42	105	106	56
Link Distance (ft)		302	126	126		151	151		155	155
Upstream Blk Time (%)		0		19	0				1	
Queuing Penalty (veh)		0		44	0				1	
Storage Bay Dist (ft)	175				120			75		
Storage Blk Time (%)		18		22	0			14	0	
Queuing Penalty (veh)		9		14	1			3	0	

Intersection: 2: Univeristy/University & Casey's

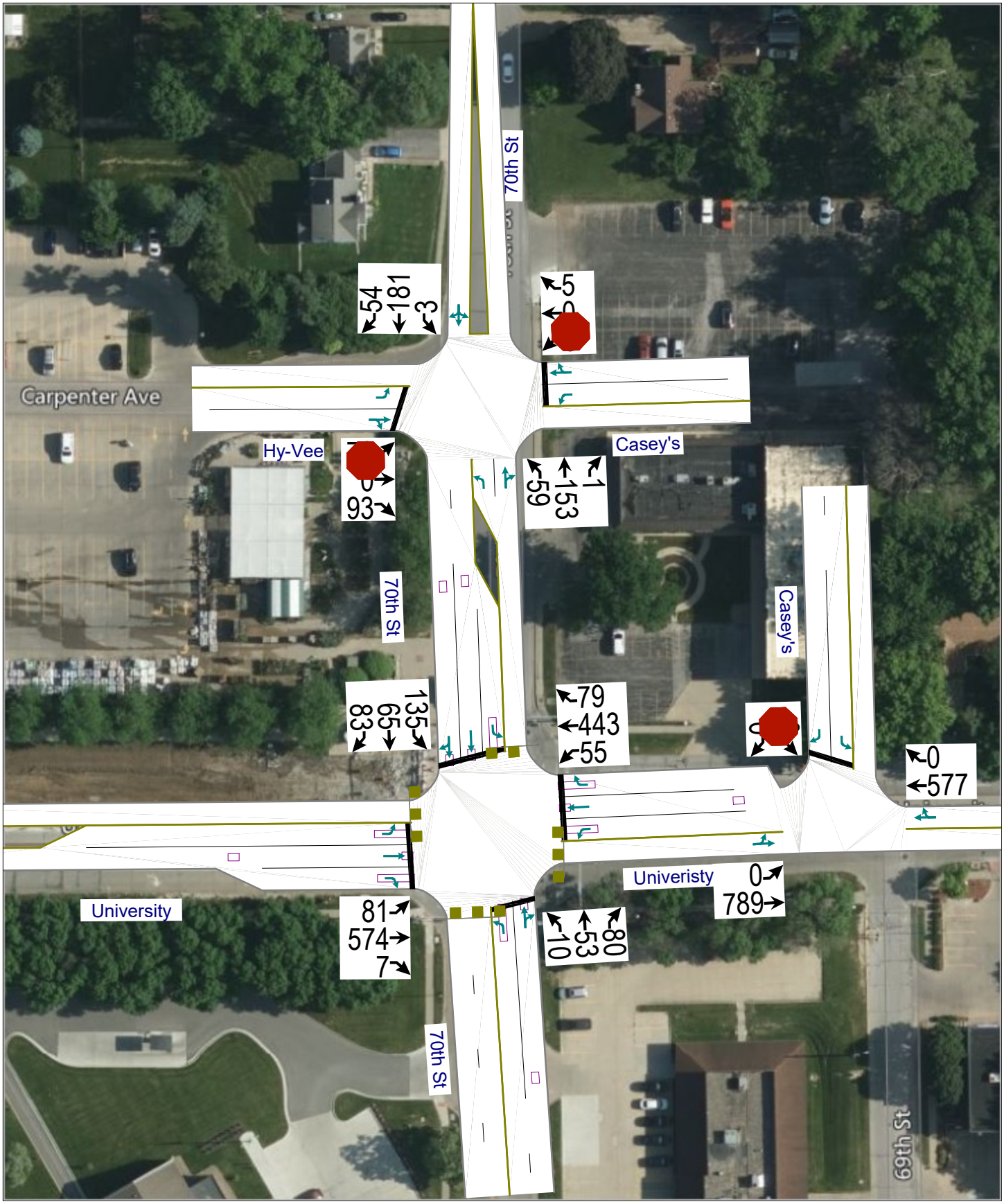
Movement	WB	SB
Directions Served	TR	R
Maximum Queue (ft)	182	72
Average Queue (ft)	85	26
95th Queue (ft)	189	59
Link Distance (ft)	166	145
Upstream Blk Time (%)	3	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

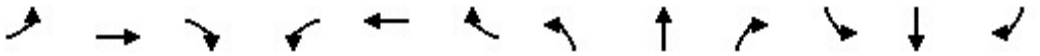
Intersection: 6: 70th St & Hy-Vee/Casey's

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	L	LTR
Maximum Queue (ft)	45	29	76	30	30	31
Average Queue (ft)	11	17	35	9	4	2
95th Queue (ft)	34	40	57	32	21	15
Link Distance (ft)	109	109	111	111		183
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)					20	
Storage Blk Time (%)					0	
Queuing Penalty (veh)					0	

Network Summary

Network wide Queuing Penalty: 72

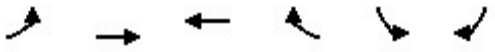

70th St
54
181
3
5
Carpenter Ave
Hy-Vee
93
Casey's
1
153
59
70th St
Casey's
135
65
83
79
443
55
0
577
University
Univeristy
0
789
81
574
7
80
53
10
70th St
69th St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	574	7	55	443	79	10	53	80	135	65	83
Future Volume (vph)	81	574	7	55	443	79	10	53	80	135	65	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0	6.0	4.5	6.0	6.0	4.5	6.0		4.5	6.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.91		1.00	0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1695		1770	3242	
Flt Permitted	0.66	1.00	1.00	0.82	1.00	1.00	1.00	1.00		0.22	1.00	
Satd. Flow (perm)	1221	1863	1583	1521	1863	1583	1863	1695		409	3242	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	88	624	8	60	482	86	11	58	87	147	71	90
RTOR Reduction (vph)	0	0	5	0	0	50	0	55	0	0	63	0
Lane Group Flow (vph)	88	624	3	60	482	36	11	90	0	147	98	0
Turn Type	custom	NA	Perm	custom	NA	Perm	custom	NA		custom	NA	
Protected Phases		4			8			2			6	
Permitted Phases	7		4	3		8	5			1		
Actuated Green, G (s)	6.1	42.8	42.8	4.9	41.6	41.6	1.3	13.1		18.2	30.0	
Effective Green, g (s)	6.1	42.8	42.8	4.9	41.6	41.6	1.3	13.1		18.2	30.0	
Actuated g/C Ratio	0.06	0.43	0.43	0.05	0.42	0.42	0.01	0.13		0.18	0.30	
Clearance Time (s)	4.5	6.0	6.0	4.5	6.0	6.0	4.5	6.0		4.5	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	74	797	677	74	775	658	24	222		74	972	
v/s Ratio Prot		c0.33			0.26			c0.05			0.03	
v/s Ratio Perm	c0.07		0.00	0.04		0.02	0.01			c0.36		
v/c Ratio	1.19	0.78	0.01	0.81	0.62	0.05	0.46	0.41		1.99	0.10	
Uniform Delay, d1	47.0	24.6	16.4	47.1	23.0	17.4	49.0	39.9		40.9	25.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	164.3	5.1	0.0	46.8	1.6	0.0	13.2	5.4		488.4	0.2	
Delay (s)	211.3	29.7	16.4	93.9	24.6	17.5	62.2	45.3		529.3	25.5	
Level of Service	F	C	B	F	C	B	E	D		F	C	
Approach Delay (s)		51.7			30.2			46.5			266.0	
Approach LOS		D			C			D			F	

Intersection Summary			
HCM 2000 Control Delay	80.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	70.2%	ICU Level of Service	C
Analysis Period (min)	15		

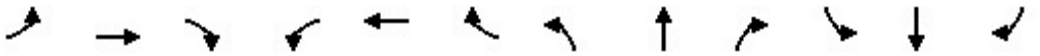
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	789	577	0	0	0
Future Volume (Veh/h)	0	789	577	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	858	627	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		188				
pX, platoon unblocked					0.63	
vC, conflicting volume	627				1485	627
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	627				1476	627
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	955				88	484

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	858	627	0	0
Volume Left	0	0	0	0
Volume Right	0	0	0	0
cSH	955	1700	1700	1700
Volume to Capacity	0.00	0.37	0.01	0.06
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS			A	A
Approach Delay (s)	0.0	0.0	0.0	
Approach LOS			A	

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	44.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	0	93	8	0	5	59	153	1	3	181	54
Future Volume (Veh/h)	78	0	93	8	0	5	59	153	1	3	181	54
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	85	0	101	9	0	5	64	166	1	3	197	59
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								236				
pX, platoon unblocked	0.98	0.98		0.98	0.98	0.98				0.98		
vC, conflicting volume	532	528	226	628	556	166	256			167		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	515	511	226	613	540	144	256			144		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	81	100	88	97	100	99	95			100		
cM capacity (veh/h)	442	435	813	335	418	889	1309			1414		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total	85	101	9	5	64	167	259
Volume Left	85	0	9	0	64	0	3
Volume Right	0	101	0	5	0	1	59
cSH	442	813	335	889	1309	1700	1414
Volume to Capacity	0.19	0.12	0.03	0.01	0.05	0.10	0.00
Queue Length 95th (ft)	18	11	2	0	4	0	0
Control Delay (s)	15.1	10.1	16.0	9.1	7.9	0.0	0.1
Lane LOS	C	B	C	A	A		A
Approach Delay (s)	12.4		13.6		2.2		0.1
Approach LOS	B		B				

Intersection Summary				
Average Delay	4.4			
Intersection Capacity Utilization	42.1%	ICU Level of Service	A	
Analysis Period (min)	15			

Summary of All Intervals

Start Time	4:20
End Time	5:30
Total Time (min)	70
Time Recorded (min)	60
# of Intervals	2
# of Recorded Intervals	1
Vehs Entered	1880
Vehs Exited	1888
Starting Vehs	35
Ending Vehs	27
Travel Distance (mi)	245
Travel Time (hr)	26.6
Total Delay (hr)	16.2
Total Stops	1429
Fuel Used (gal)	15.8

Interval #0 Information Seeding

Start Time	4:20
End Time	4:30
Total Time (min)	10

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	4:30
End Time	5:30
Total Time (min)	60

Volumes adjusted by Growth Factors.

Vehs Entered	1880
Vehs Exited	1888
Starting Vehs	35
Ending Vehs	27
Travel Distance (mi)	245
Travel Time (hr)	26.6
Total Delay (hr)	16.2
Total Stops	1429
Fuel Used (gal)	15.8

1: 70th St & University/Univeristy Performance by movement

2: Univeristy/University & Casey's Performance by movement

6: 70th St & Hy-Vee/Casey's Performance by movement

Total Network Performance

Intersection: 1: 70th St & University/Univeristy

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	TR	L	T	TR
Maximum Queue (ft)	200	317	105	118	135	118	45	166	100	177	131
Average Queue (ft)	75	253	13	51	118	34	8	68	90	76	44
95th Queue (ft)	188	348	63	99	134	98	32	148	117	193	98
Link Distance (ft)		302		119	119		151	151		155	155
Upstream Blk Time (%)		6		1	19	0		2		10	
Queuing Penalty (veh)		0		3	56	0		0		15	
Storage Bay Dist (ft)	175		80			120			75		
Storage Blk Time (%)		39	0		19	0			45		
Queuing Penalty (veh)		35	0		15	1			14		

Intersection: 2: Univeristy/University & Casey's

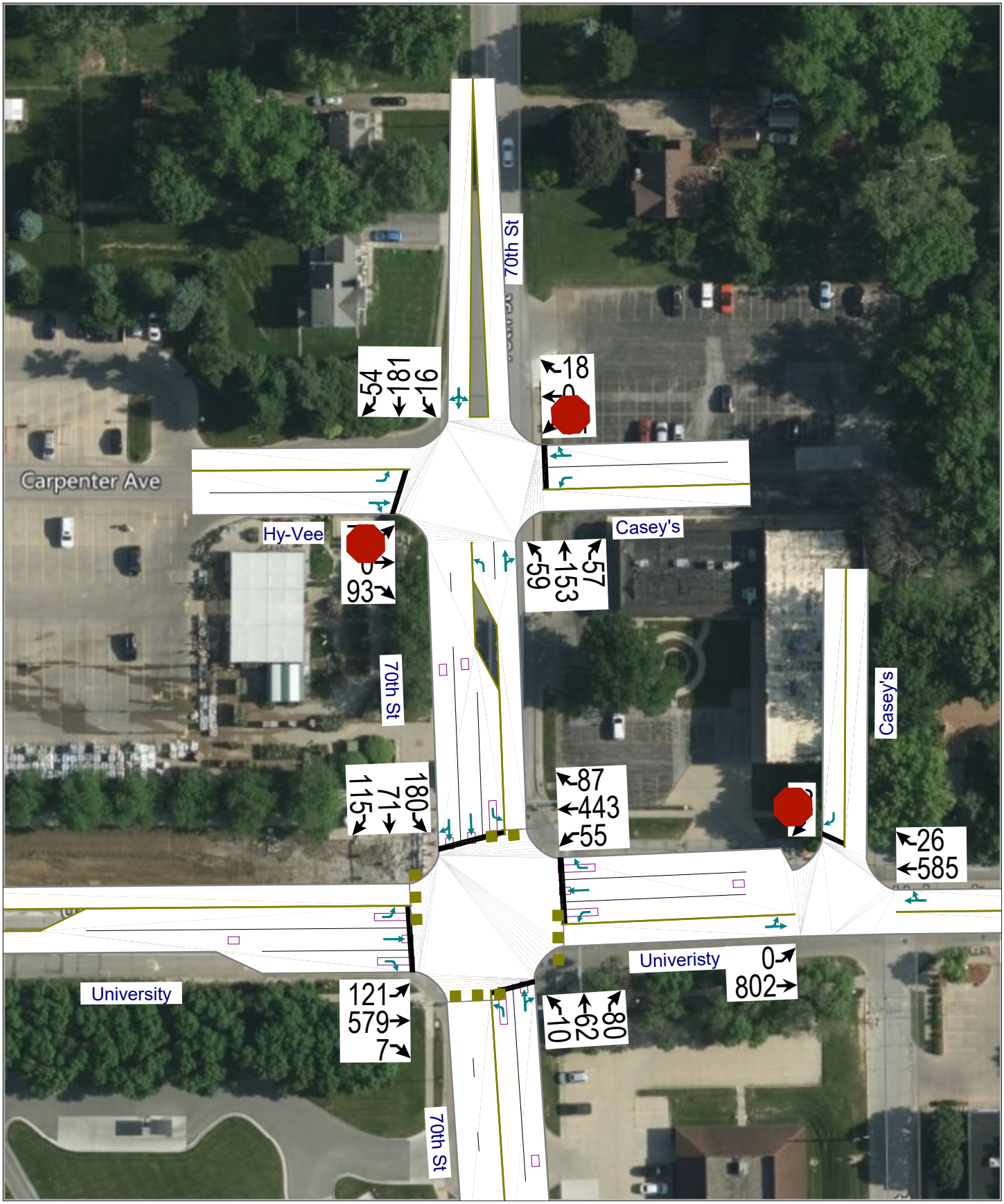
Movement	WB
Directions Served	TR
Maximum Queue (ft)	176
Average Queue (ft)	123
95th Queue (ft)	224
Link Distance (ft)	161
Upstream Blk Time (%)	8
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

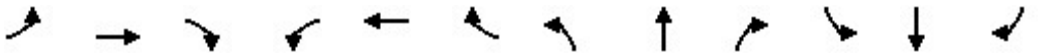
Intersection: 6: 70th St & Hy-Vee/Casey's

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	L	TR	L	TR	L	TR	LTR
Maximum Queue (ft)	50	117	30	30	44	71	198
Average Queue (ft)	30	43	7	7	9	4	24
95th Queue (ft)	54	81	26	28	33	30	117
Link Distance (ft)	109	109	111	111		155	183
Upstream Blk Time (%)		0					1
Queuing Penalty (veh)		0					0
Storage Bay Dist (ft)					20		
Storage Blk Time (%)					1		
Queuing Penalty (veh)					2		

Network Summary

Network wide Queuing Penalty: 141

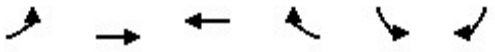

70th St
54
181
16
18
Carpenter Ave
Hy-Vee
93
Casey's
57
153
59
70th St
Casey's
180
71
115
87
443
55
26
585
Univeristy
0
802
University
121
579
7
80
62
10
70th St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	579	7	55	443	87	10	62	80	180	71	115
Future Volume (vph)	121	579	7	55	443	87	10	62	80	180	71	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0	6.0	4.5	6.0	6.0	4.5	6.0		4.5	6.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.92		1.00	0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1705		1770	3211	
Flt Permitted	0.66	1.00	1.00	0.82	1.00	1.00	1.00	1.00		0.22	1.00	
Satd. Flow (perm)	1221	1863	1583	1521	1863	1583	1863	1705		414	3211	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	132	629	8	60	482	95	11	67	87	196	77	125
RTOR Reduction (vph)	0	0	5	0	0	55	0	47	0	0	88	0
Lane Group Flow (vph)	132	629	3	60	482	40	11	107	0	196	114	0
Turn Type	custom	NA	Perm	custom	NA	Perm	custom	NA		custom	NA	
Protected Phases		4			8			2			6	
Permitted Phases	7		4	3		8	5			1		
Actuated Green, G (s)	6.1	43.0	43.0	4.9	41.8	41.8	1.3	13.1		18.0	29.8	
Effective Green, g (s)	6.1	43.0	43.0	4.9	41.8	41.8	1.3	13.1		18.0	29.8	
Actuated g/C Ratio	0.06	0.43	0.43	0.05	0.42	0.42	0.01	0.13		0.18	0.30	
Clearance Time (s)	4.5	6.0	6.0	4.5	6.0	6.0	4.5	6.0		4.5	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	74	801	680	74	778	661	24	223		74	956	
v/s Ratio Prot		c0.34			0.26			c0.06			0.04	
v/s Ratio Perm	c0.11		0.00	0.04		0.03	0.01			c0.47		
v/c Ratio	1.78	0.79	0.01	0.81	0.62	0.06	0.46	0.48		2.65	0.12	
Uniform Delay, d1	47.0	24.5	16.3	47.1	22.9	17.4	49.0	40.3		41.0	25.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	401.4	5.1	0.0	46.8	1.5	0.0	13.2	7.2		779.1	0.3	
Delay (s)	448.3	29.6	16.3	93.9	24.3	17.4	62.2	47.5		820.1	25.8	
Level of Service	F	C	B	F	C	B	E	D		F	C	
Approach Delay (s)		101.3			29.9			48.5			417.0	
Approach LOS		F			C			D			F	

Intersection Summary			
HCM 2000 Control Delay	137.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		

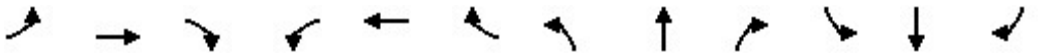
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	802	585	26	0	26
Future Volume (Veh/h)	0	802	585	26	0	26
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	872	636	28	0	28
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		188				
pX, platoon unblocked					0.61	
vC, conflicting volume	664				1522	650
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	664				1536	650
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	94
cM capacity (veh/h)	925				78	469

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	872	664	28
Volume Left	0	0	0
Volume Right	0	28	28
cSH	925	1700	469
Volume to Capacity	0.00	0.39	0.06
Queue Length 95th (ft)	0	0	5
Control Delay (s)	0.0	0.0	13.2
Lane LOS			B
Approach Delay (s)	0.0	0.0	13.2
Approach LOS			B

Intersection Summary			
Average Delay		0.2	
Intersection Capacity Utilization		45.5%	ICU Level of Service A
Analysis Period (min)		15	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	0	93	91	0	18	59	153	57	16	181	54
Future Volume (Veh/h)	78	0	93	91	0	18	59	153	57	16	181	54
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	85	0	101	99	0	20	64	166	62	17	197	59
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								236				
pX, platoon unblocked	0.95	0.95		0.95	0.95	0.95				0.95		
vC, conflicting volume	574	616	226	686	615	197	256			228		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	525	570	226	643	568	128	256			160		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	79	100	88	68	100	98	95			99		
cM capacity (veh/h)	410	385	813	306	386	876	1309			1347		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total	85	101	99	20	64	228	273
Volume Left	85	0	99	0	64	0	17
Volume Right	0	101	0	20	0	62	59
cSH	410	813	306	876	1309	1700	1347
Volume to Capacity	0.21	0.12	0.32	0.02	0.05	0.13	0.01
Queue Length 95th (ft)	19	11	34	2	4	0	1
Control Delay (s)	16.1	10.1	22.3	9.2	7.9	0.0	0.6
Lane LOS	C	B	C	A	A		A
Approach Delay (s)	12.8		20.1		1.7		0.6
Approach LOS	B		C				

Intersection Summary				
Average Delay	6.2			
Intersection Capacity Utilization	44.7%	ICU Level of Service		A
Analysis Period (min)	15			

Summary of All Intervals

Start Time	4:20
End Time	5:30
Total Time (min)	70
Time Recorded (min)	60
# of Intervals	2
# of Recorded Intervals	1
Vehs Entered	2143
Vehs Exited	2141
Starting Vehs	45
Ending Vehs	47
Travel Distance (mi)	269
Travel Time (hr)	63.8
Total Delay (hr)	52.1
Total Stops	1750
Fuel Used (gal)	25.5

Interval #0 Information Seeding

Start Time	4:20
End Time	4:30
Total Time (min)	10

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	4:30
End Time	5:30
Total Time (min)	60

Volumes adjusted by Growth Factors.

Vehs Entered	2143
Vehs Exited	2141
Starting Vehs	45
Ending Vehs	47
Travel Distance (mi)	269
Travel Time (hr)	63.8
Total Delay (hr)	52.1
Total Stops	1750
Fuel Used (gal)	25.5

1: 70th St & University/Univeristy Performance by movement

2: Univeristy/University & Casey's Performance by movement

6: 70th St & Hy-Vee/Casey's Performance by movement

Total Network Performance

Intersection: 1: 70th St & University/Univeristy

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	TR	L	T	TR
Maximum Queue (ft)	200	341	101	132	144	125	47	166	100	178	152
Average Queue (ft)	178	298	7	46	136	42	11	89	94	141	54
95th Queue (ft)	234	376	48	105	155	118	36	156	113	223	105
Link Distance (ft)		302		126	126		151	151		155	155
Upstream Blk Time (%)		49		1	24	0		3		45	0
Queuing Penalty (veh)		0		3	72	0		0		83	0
Storage Bay Dist (ft)	175		80			120			75		
Storage Blk Time (%)	37	40	0		27	0			72	0	
Queuing Penalty (veh)	217	52	0		23	1			25	0	

Intersection: 2: Univeristy/University & Casey's

Movement	WB	SB
Directions Served	TR	R
Maximum Queue (ft)	201	52
Average Queue (ft)	132	23
95th Queue (ft)	236	52
Link Distance (ft)	166	145
Upstream Blk Time (%)	9	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: 70th St & Hy-Vee/Casey's

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	L	LTR
Maximum Queue (ft)	124	124	145	126	31	180
Average Queue (ft)	42	74	70	16	14	50
95th Queue (ft)	85	140	141	59	39	129
Link Distance (ft)	109	109	111	111		183
Upstream Blk Time (%)	0	25	20	1		0
Queuing Penalty (veh)	0	0	0	0		0
Storage Bay Dist (ft)					20	
Storage Blk Time (%)					2	
Queuing Penalty (veh)					3	

Network Summary

Network wide Queuing Penalty: 480

Appendix C – Iowa Crash Analysis Tool

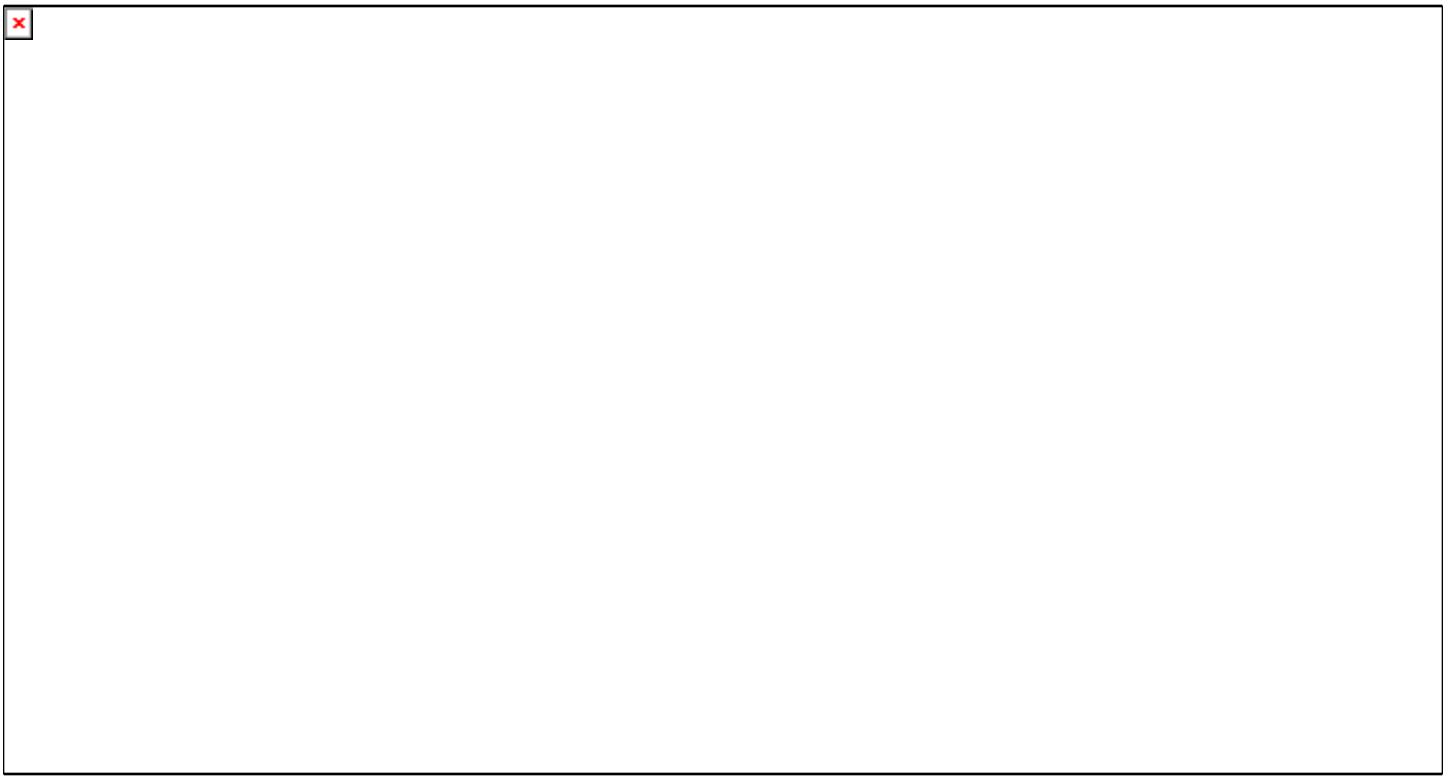
Iowa Crash Analysis Tool
Quick Report
11/03/2021 - 12/04/2023

Crash Severity	8
Fatal Crash	0
Suspected Serious Injury Crash	0
Suspected Minor Injury Crash	0
Possible/Unknown Injury Crash	1
Property Damage Only	7

Injury Status Summary	1
Fatalities	0
Suspected serious/incapacitating	0
Suspected minor/non-incapacitating	0
Possible (complaint of pain/injury)	1
Uninjured	0
Unknown	0
Not Reported	0

Property/Vehicles/Occupants	
Property Damage Total (dollars):	47,200.00
Average (per crash dollars):	5,900.00
Total Vehicles:	17.00
Average (per crash):	2.13
Total Occupants:	21.00
Average (per crash):	2.63

Average Severity	
Fatalities/Fatal Crash:	0.00
Fatalities/Crash:	0.00
Injuries/Crash:	0.13
Major Injuries/Crash:	0.00
Minor Injuries/Crash:	0.00
Possible/Unknown Injuries/Crash:	0.13



Major Cause			8
Animal	0	Ran traffic signal	2
Ran stop sign	0	Failed to yield to emergency vehicle	0
FTYROW: At uncontrolled intersection	0	FTYROW: Making right turn on red signal	1
FTYROW: From stop sign	1	FTYROW: From yield sign	0
FTYROW: Making left turn	0	FTYROW: From driveway	0
FTYROW: From parked position	0	FTYROW: To pedestrian	0
FTYROW: Other	0	Drove around RR grade crossing gates	0
Disregarded RR Signal	0	Crossed centerline (undivided)	0
Crossed median (divided)	0	Traveling wrong way or on wrong side of road	0
Aggressive driving/road rage	0	Driving too fast for conditions	0
Exceeded authorized speed	0	Improper or erratic lane changing	1
Operating vehicle in an reckless, erratic, ca...	0	Followed too close	1
Passing: On wrong side	0	Passing: Where prohibited by signs/markings	0
Passing: With insufficient distance/inadequa...	0	Passing: Through/around barrier	0
Passing: Other passing	0	Made improper turn	0
Driver Distraction: Manual operation of an e...	0	Driver Distraction: Talking on a hand-held d...	0
Driver Distraction: Talking on a hands free ...	0	Driver Distraction: Adjusting devices (radio...	0
Driver Distraction: Other electronic device ...	0	Driver Distraction: Passenger	0
Driver Distraction: Unrestrained animal	0	Driver Distraction: Reaching for object(s)/f...	0
Driver Distraction: Inattentive/lost in thou...	0	Driver Distraction: Other interior distracti...	0
Driver Distraction: Exterior distraction	0	Ran off road - right	0
Ran off road - straight	0	Ran off road - left	0
Lost control	0	Swerving/Evasive Action	0
Over correcting/over steering	0	Failed to keep in proper lane	1
Failure to signal intentions	0	Traveling on prohibited traffic way	0
Vehicle stopped on railroad tracks	0	Other: Vision obstructed	0
Other: Improper operation	0	Other: Disregarded warning sign	0
Other: Disregarded signs/road markings	0	Other: Illegal off-road driving	0
Downhill runaway	0	Separation of units	0
Towing improperly	0	Cargo/equipment loss or shift	0
Equipment failure	0	Oversized load/vehicle	0
Other: Getting off/out of vehicle	0	Failure to dim lights/have lights on	0
Improper backing	0	Improper starting	0
Illegally parked/unattended	0	Driving less than the posted speed limit	0
Operator inexperience	0	Other	1
Unknown	0	Not reported	0
Other: No improper action	0		

Time of Day/Day of Week

Day of Week	12 AM to 2 AM	2 AM to 4 AM	4 AM to 6 AM	6 AM to 8 AM	8 AM to 10 AM	10 AM to Noon	Noon to 2 PM	2 PM to 4 PM	4 PM to 6 PM	6 PM to 8 PM	8 PM to 10 PM	10 PM to 12 AM	Not reported	Total
Sunday	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Monday	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Tuesday	0	0	0	0	0	1	0	1	0	0	0	0	0	2
Wednesday	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Thursday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Friday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saturday	0	0	0	0	0	1	1	0	1	0	0	0	0	3
Total	0	0	0	0	0	3	1	2	2	0	0	0	0	8

Manner of Crash Collision	8
Non-collision (single vehicle)	0
Head-on (front to front)	0
Rear-end (front to rear)	2
Angle, oncoming left turn	0
Broadside (front to side)	2
Sideswipe, same direction	4
Sideswipe, opposite direction	0
Rear to rear	0
Rear to side	0
Not reported	0
Other	0
Unknown	0

Surface Conditions	8
Dry	7
Wet	1
Ice/frost	0
Snow	0
Slush	0
Mud, dirt	0
Water (standing or moving)	0
Sand	0
Oil	0
Gravel	0
Not reported	0
Other	0
Unknown	0

Fixed Object Struck			17
Bridge overhead structure	0	Bridge pier or support	0
Bridge/bridge rail parapet	0	Curb/island/raised median	0
Ditch	0	Embankment	0
Ground	0	Culvert/pipe opening	0
Guardrail - face	0	Guardrail - end	0
Concrete traffic barrier (median or right sid...	0	Other traffic barrier	0
Cable barrier	0	Impact attenuator/crash cushion	0
Utility pole/light support	0	Traffic sign support	0
Traffic signal support	0	Other post/pole/support	0
Fire hydrant	0	Mailbox	0
Tree	0	Landscape/shrubbery	0
Snow bank	0	Fence	0
Wall	0	Building	0
Other fixed object	0	None (no fixed object struck)	17

Driver Age/Driver Gender					
Driver Age - 5 year Bins	Female	Male	Not reported	Unknown	**Total**
< 14	0	0	0	0	0
= 14	0	0	0	0	0
= 15	1	0	0	0	1
= 16	1	0	0	0	1
= 17	0	0	0	0	0
= 18	1	0	0	0	1
= 19	0	0	0	0	0
= 20	0	0	0	0	0
>= 21 and <= 24	0	0	0	0	0
>= 25 and <= 29	0	0	0	0	0
>= 30 and <= 34	0	1	0	0	1
>= 35 and <= 39	0	0	0	0	0
>= 40 and <= 44	1	1	0	0	2
>= 45 and <= 49	0	1	0	0	1
>= 50 and <= 54	0	1	0	0	1
>= 55 and <= 59	2	2	0	0	4
>= 60 and <= 64	2	0	0	0	2
>= 65 and <= 69	0	0	0	0	0
>= 70 and <= 74	1	0	0	0	1
>= 75 and <= 79	0	1	0	0	1
>= 80 and <= 84	0	1	0	0	1
>= 85 and <= 89	0	0	0	0	0
>= 90 and <= 94	0	0	0	0	0
>= 95	0	0	0	0	0
Not reported	0	0	0	0	0
Unknown	0	0	0	0	0
Total	9	8	0	0	17

Drug/Alcohol Related	**8**
Drug	0
Alcohol (< Statutory)	0
Alcohol (Statutory)	0
Drug and Alcohol (< Statutory)	0
Drug and Alcohol (Statutory)	0
Refused	0
Under Influence of Alcohol/Drugs/Medications	0
None Indicated	8

Alcohol Test Given	**17**
None	17
Blood	0
Urine	0
Breath	0
Vitreous	0
Refused	0
Not reported	0

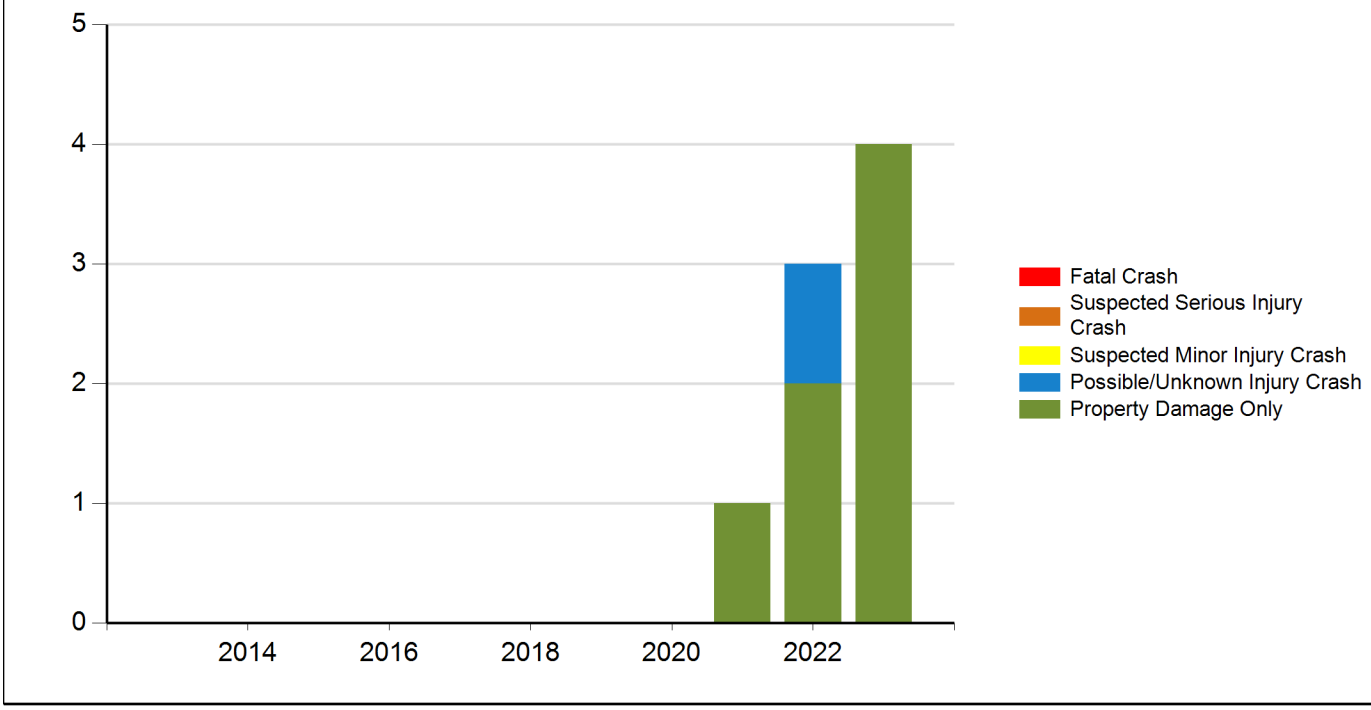
Drug Test Given	**17**
None	17
Blood	0
Urine	0
Breath	0
Vitreous	0
Refused	0
Not reported	0

Drug Test Result	**17**
Negative	0
Cannabis	0
Central Nervous System depressants	0
Central Nervous System stimulants	0
Hallucinogens	0
Inhalants	0
Narcotic Analgesics	0
Dissociative Anesthetic (PCP)	0
Prescription Drug	0
Not reported	17
Other	0

Crash Severity - Annual

Crash Year	Fatal Crash	Suspected Serious Injury Crash	Suspected Minor Injury Crash	Possible/Unknown Injury Crash	Property Damage Only	**Total**
2013	0	0	0	0	0	0
2014	0	0	0	0	0	0
2015	0	0	0	0	0	0
2016	0	0	0	0	0	0
2017	0	0	0	0	0	0
2018	0	0	0	0	0	0
2019	0	0	0	0	0	0
2020	0	0	0	0	0	0
2021	0	0	0	0	1	1
2022	0	0	0	1	2	3
2023	0	0	0	0	4	4
Total	0	0	0	1	7	8

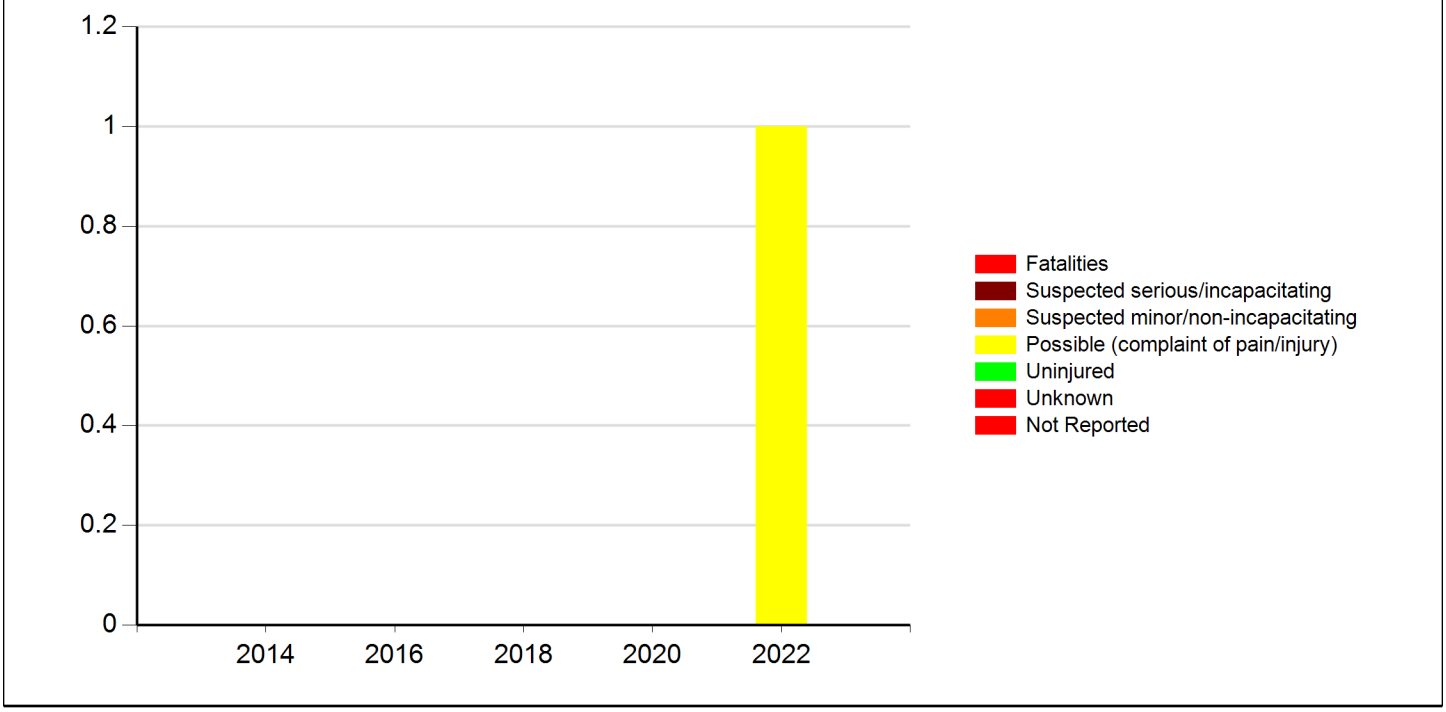
Severity/Year



Injury Status - Annual

Crash Year	Fatalities	Suspected serious/incapacitating	Suspected minor/non-incapacitating	Possible (complaint of pain/injury)	Uninjured	Unknown	Not Reported	**Total**
2013	0	0	0	0	0	0	0	0
2014	0	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0
2022	0	0	0	1	0	0	0	1
2023	0	0	0	0	0	0	0	0
Total	0	0	0	1	0	0	0	1

Injury Status/Year



Meeting the following criteria

Jurisdiction: Statewide
Year: 2021, 2022, 2023
Map Selection: Yes
Filter: Date (11/03/2021 - 12/04/2023)

Analyst Information

Trip Generation: Below is a table indicating the amount of traffic that will be added to the surrounding road network based on proposed uses of the property. The numbers are estimated using trip generation data formulated by the Institute of Transportation Engineers (ITE) Trip Generation Manual. University Avenue is an arterial roadway carrying between 10,600 and 12,600 annual average daily trips through Windsor Heights. A convenience store at the subject property is expected to experience 82 vehicles entering the site during AM peak hour. Of those 82 trips, 62 trips are generated by pass-by traffic, or traffic that is already on the road network enroute to another destination, and 20 trips are new users added to the road network. The PM peak hour sees similar numbers with 96 vehicles entering the site, 72 of which are generated by pass-by traffic and 24 being new users added to the road network. New users during AM and PM peak hours are highlighted in the table below. The number of new users generated by a convenience store can be compared and contrasted with other potential land uses allowed in the UC district. The column at far left lists uses permitted both by-right and those allowed by conditional use permit. The table shows a convenience store use will add less traffic to the surrounding road network than nearly all other uses shown in the table.

Use	AM/PM	Total Trips	Entering	Pass-by	New	Exiting
Drinking Place (p) (3,000 s.f.)	AM	0	0	0	0	0
	PM	62	42	25	17	20
Vet Clinic (p) (3,000 s.f.)	AM	11	6	0	6	5
	PM	11	6	0	6	5
Liquor Store (p) (6,000 s.f.)	AM	31	16	7	9	15
	PM	106	53	24	29	53
C-Store (c) (From Traffic Study)	AM	165	82	62	20	83
	PM	191	96	72	24	95
Stip Retail (p) (16,000 s.f. Current Cond)	AM	122	61	37	24	61
	PM	212	114	68	46	98
Restaurant (p) (5,000 s.f.)	AM	82	47	20	27	35
	PM	98	50	22	28	48
Daycare (p) (4,000 s.f.)	AM	59	31	0	31	28
	PM	59	28	0	28	31
Gen Office (p) (10,000 s.f.)	AM	36	32	0	32	4
	PM	38	6	0	38	32
Fast Food W/D Thru (c) (3,000 s.f.)	AM	152	79	40	39	73
	PM	153	78	39	39	75
Discount Store (p) (10,000 s.f.)	AM	96	49	10	39	47
	PM	111	56	11	45	55

*C - Conditional Use

*P - Permitted by-right

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Des Moines, IA 50309

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Fax: (515) 233-4430
Bolton-Menk.com

MEMORANDUM

Date: February 27, 2024

To: Adam Plagge
City Manager, City of Windsor Heights, IA

From: Jennifer McCoy, PE, PTOE

Subject: Caseys 70th & University Traffic Impact Study Review
Windsor Heights, IA

Introduction

The Traffic Impact Study for the new Casey's General Store at 6961 University dated December 8, 2023, prepared by Pelds Design Services was reviewed to determine how this development impacts the traveling public. Overall, the study assumptions and calculations seem reasonable.

Trip Generation

The study assumed that construction of a 4,319 SF building and gas canopy covering 5 fuel pumps with 10 fueling positions on the northeast corner of the University Avenue and 70th Street signal. ITE Land Use Code 945 was utilized for 10 vehicle fueling positions. A 76% reduction for AM pass-by trips and a 75% reduction for PM pass-by trips was used. This equates to 24%-25% of the trips generated being new to the area. These percentages were based on the ITE Trip Generation Manual 11th Edition average pass-by rates for a gas station with 10 fueling positions. This approach seems clear and reasonable.

Driveway Access

The new Casey's would access 70th Street north of University Avenue utilizing a full access driveway. Another driveway on University Avenue, east of 70th Street, will be right-in, right-out for traffic coming from the east and continuing westbound.

The Hy-Vee access drive on 70th Street is 175' from University Avenue. A review of the City Code shows that specific driveway spacing requirements are not provided, therefore, the Statewide Urban Design and Specifications (SUDAS) Road Design Manual was reviewed as a resource for preferred driveway spacing. Per the Iowa DOT the functional classification for 70th Street is Major Collector and University Avenue is a Minor Arterial. SUDAS Chapter 5 provides access location and spacing guidance for distances between driveways and intersecting streets. The minimum distance in SUDAS for a full access driveway to a city street is 100' for a collector roadway like 70th Street. The location of the Hy-Vee access on 70th Street, which the new Casey's driveway will align with, meets and exceeds this minimum driveway spacing.

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The minimum distance in SUDAS for a full access driveway to a city street is 170' for an arterial roadway like University Avenue. The proposed right-in, right-out driveway on University Avenue is 100' from 70th Street. This does not meet the minimum driveway spacing for a full access driveway, therefore, this driveway is proposed as a limited access driveway which would be right-in, right-out. Limiting the driveway access to partial access helps to address any concerns related to the close spacing of this driveway to the existing 70th Street intersection.

Operations and Queuing

The report prepared by Pelds Design Services focused on 95th percentile queues at the study intersections.

- *Per the Highway Capacity Manual Guide "The 95th-percentile queue is defined to be the queue length that has only a 5-percent probability of being exceeded in the analysis time period. It is a useful parameter for determining the appropriate length of turn pockets, but it is not typical of what an average driver would experience."*

<u>70th/Hy-Vee/New Caseys Driveway</u>

95th percentile queues will increase for Southbound 70th Street and Westbound University Avenue by one car length and eastbound queues will increase by 4 car lengths in the PM peak with the Casey's. The 95th percentile queue in the PM peak will be up to 225' for the southbound approach on 70th Street (today it's 200').

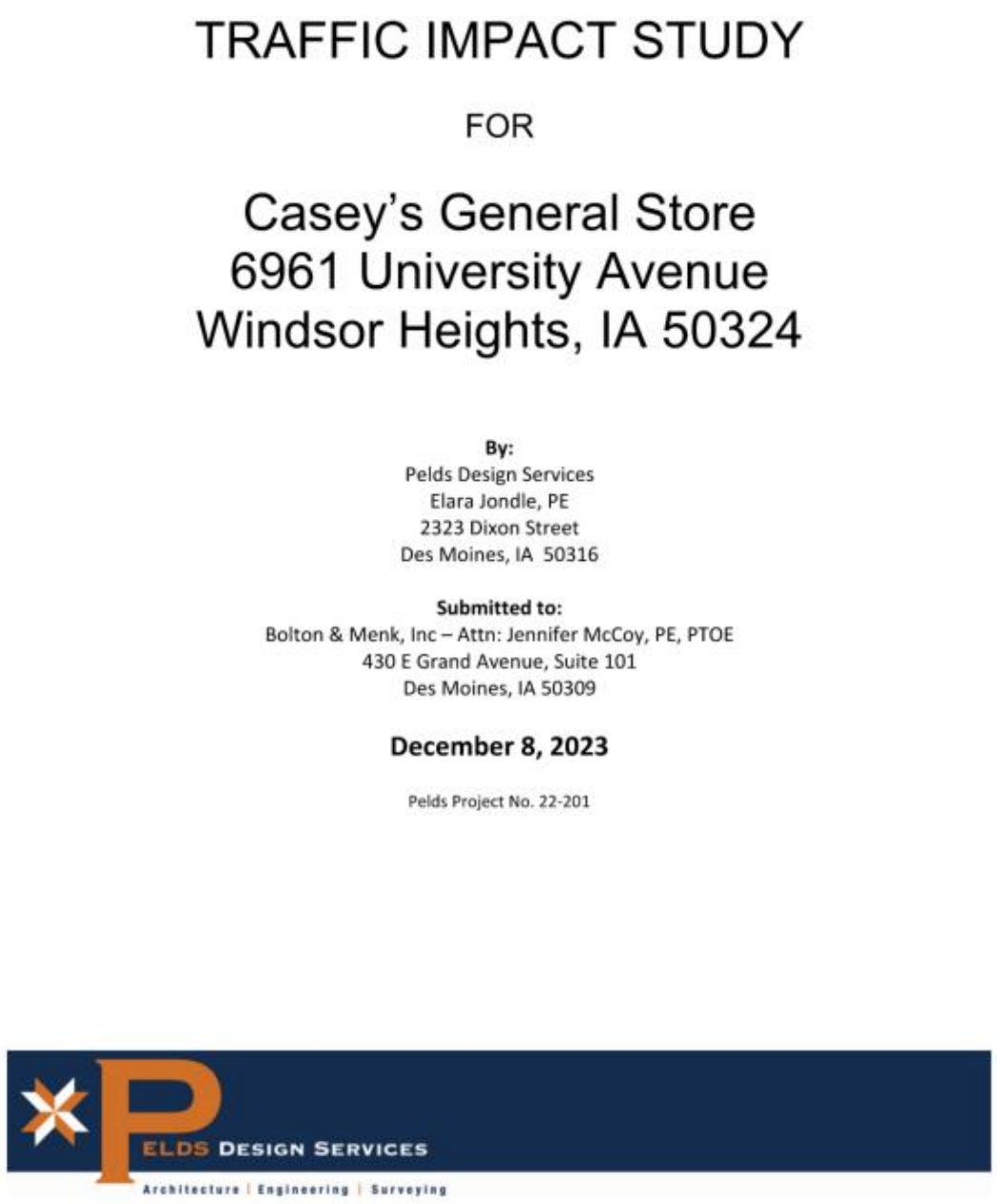
The Hy-Vee access drive is 175' from University Avenue. Southbound queues could extend back and block the Hy-Vee access driveway on 70th Street at some times in the PM peak. On average, the queues are 75-140' for the southbound movements. The study report stated that the intersection of 70th/Hy-Vee/Casey's is operating well, which shows that vehicles are still able to exit the driveways onto 70th Street in the PM peak, even with the southbound queuing occurring at the University Avenue intersection.

<u>70th/University</u>

The queueing analysis in the study report states that the westbound queue on University Avenue will extend beyond the Casey's new right-in, right-out access in the AM and PM peaks by one to two car lengths.

Operations at 70th and University are failing today in the PM peak, the addition of the Casey's creates additional delay at this intersection, however per the report, 95th percentile queues are not expected to extend back and block the Hy-Vee signal on University Avenue.

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TRAFFIC IMPACT STUDY

FOR

Casey's General Store
6961 University Avenue
Windsor Heights, IA 50324

By:
Pelds Design Services
Elara Jondle, PE
2323 Dixon Street
Des Moines, IA 50316

Submitted to:
Bolton & Menk, Inc – Attn: Jennifer McCoy, PE, PTOE
430 E Grand Avenue, Suite 101
Des Moines, IA 50309

December 8, 2023

Pelds Project No. 22-201

PELDS DESIGN SERVICES
Architecture | Engineering | Surveying

Casey's General Store 6961 University Ave Report Summary

Windsor Heights, IA

February 28, 2024

Jennifer McCoy, P.E., PTOE

BOLTON & MENK

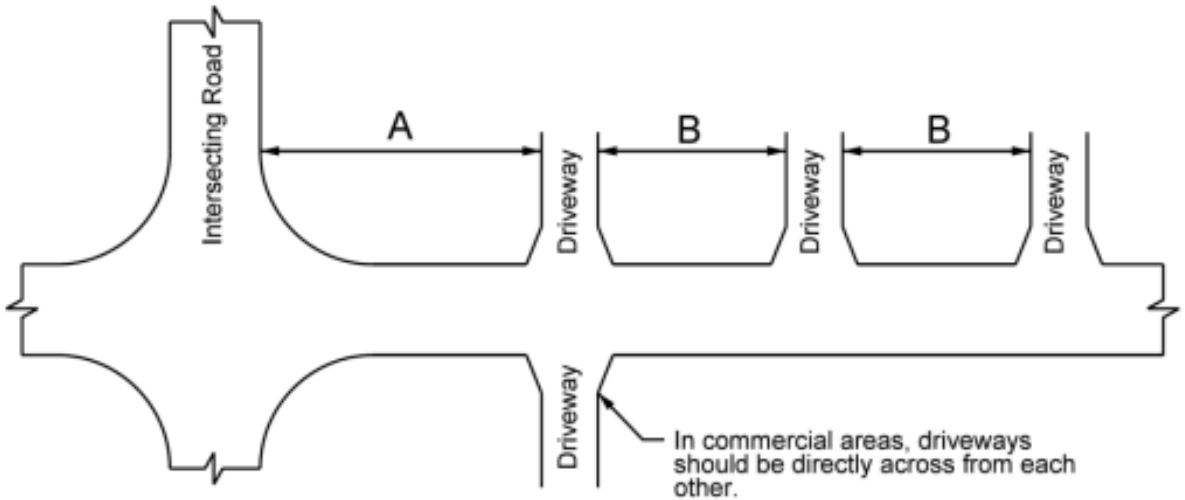
Real People. Real Solutions.


LOCATION
Des Moines Cleaning
Carpenter Ave
68th St
70th St
Hy-Vee Grocery Store
Stop By Your Local Hy-Vee
Hy-Vee Floral
Flower Delivery & Pickup
Midwest Heritage
70th and University
STOP
Mr. Executive
Midwest Comfo
Heating & Cooli
University Ave
University Ave
University Ave
69th St
STOP
Iowa Banking Magazine
Work of Ink
Tattoo shop
Dairy Queen (Treat)
Takeout · Delivery
Liberty Tax
Remote Tax Prep
ALDI
Bankers Trust
Windsor Heights
Goldfinch Counseling
Des Moines
Couples Counseling
Layers
Google


DAILY TRAFFIC VOLUMES
4,840 vpd
70th St
70th and University
10,600 vpd
University Ave
University Ave
University Ave
STOP
STOP
Carpenter Ave
68th St
68th St
68th St
69th St
Hy-Vee Grocery Store
Stop By Your Local Hy-Vee
Hy-Vee Floral
Flower Delivery & Pickup
Midwest Heritage
Mr. Executive
Midwest Comfo
Heating & Cooli
Iowa Banking Magazine
Work of Ink
Tattoo shop
Dairy Queen (Treat)
Takeout · Delivery
Liberty Tax
Remote Tax Prep
ALDI
Bankers Trust
Windsor Heights
Goldfinch Counseling
Des Moines
Couples Counseling
Layers
Google

SUDAS CHAPTER 5 ROADWAY DESIGN

Table 5L-3.05: Minimum Distance between Driveways or from Intersecting Streets



	Minor Arterial			Collector			Local		
	Res. Area	*C/I Area*	*Ag Area*	*Res. Area*[3]	*C/I Area*	*Ag Area*	*Res. Area*[3]	*C/I Area*	*Ag Area*
A. Minimum intersection clearance[1]	145’	170’	300’	100’	100’	300’	75’	75’	150’
B. Minimum driveway spacing[2]	100’	200’	300’	75’	100’	300’	---[4]	---[4]	150’

Res = Residential, C/I = Commercial/Industrial

[1] Values are measured from the back of the curb, intersecting road to the adjacent driveway near edge. Distance may be adjusted due to lot dimension or zoning code.

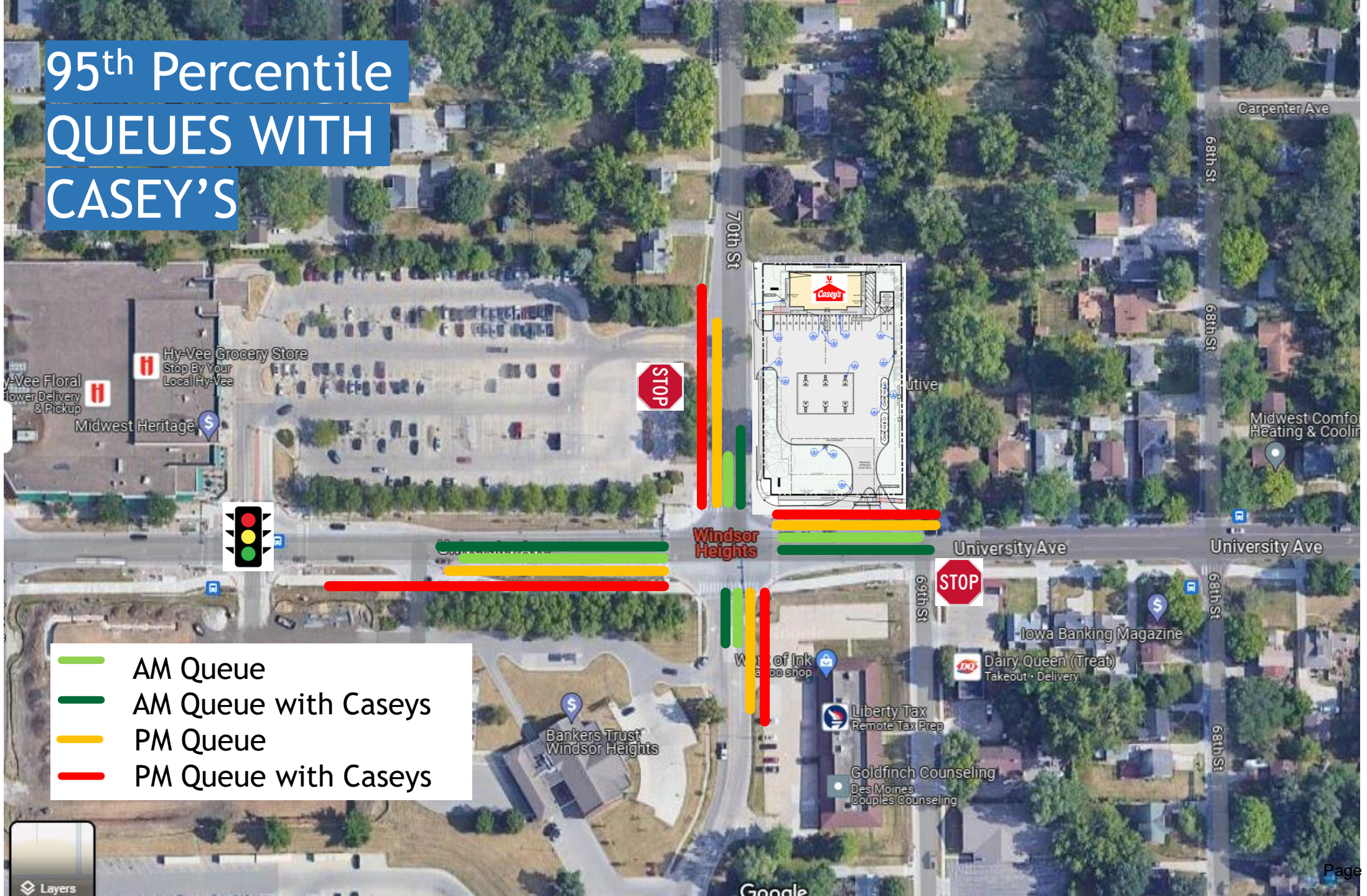
[2] Values are measured between driveway edges.

[3] One access drive allowed per lot. Depending on lot size, an additional drive may be allowed upon approval of the Jurisdiction.

[4] See Jurisdictional Engineer for local requirements.


ACCESS SPACING WITH CASEY'S
175'
110'
70th St
68th St
Carpenter Ave
University Ave
Windsor Heights
STOP
Hy-Vee Grocery Store
Stop By Your Local Hy-Vee
Midwest Heritage
ALDI
Bankers Trust Windsor Heights
Work of Ink Tattoo shop
Liberty Tax Remote Tax Prep
Goldfinch Counseling Des Moines Couples Counseling
Iowa Banking Magazine
Dairy Queen (Treat) Takeout · Delivery
Layers
Google


EXISTING 95th Percentile QUEUES
AM Queue
PM Queue
70th St
68th St
Carpenter Ave
University Ave
Windsor Heights
STOP
Hy-Vee Grocery Store
Stop By Your Local Hy-Vee
Midwest Heritage
Mr. Executive
Midwest Comfo Heating & Cooli
Iowa Banking Magazine
Dairy Queen (Treat)
Takeout · Delivery
Liberty Tax
Remote Tax Prep
Goldfinch Counseling
Des Moines Couples Counseling
Bankers Trust Windsor Heights
ALDI
Layers
Google


95th Percentile
QUEUES WITH
CASEY'S
AM Queue
AM Queue with Caseys
PM Queue
PM Queue with Caseys
70th St
68th St
Carpenter Ave
University Ave
Windsor Heights
STOP
Hy-Vee Grocery Store
Stop By Your Local Hy-Vee
Midwest Heritage
Iowa Banking Magazine
Dairy Queen (Treat)
Takeout · Delivery
Liberty Tax
Remote Tax Prep
Goldfinch Counseling
Des Moines Couples Counseling
Bankers Trust
Windsor Heights
Layers
Google

Summary

- Per the report, queues will increase for Southbound 70th Street and Westbound University by one car length and Eastbound queues will increase by 4 car lengths in the PM peak.

- The 95th percentile queue in the PM peak will be up to 225' for the southbound approach on 70th Street (today its 200'). The Hy-Vee access drive is 175' from University.

- Queues could extend back and block the Hy-Vee access driveway on 70th Street at some times in the PM peak. On average the queues are 75-140' for the southbound approach.

- The report shows that the intersection of 70th/Hy-Vee/Casey's is operating well, so the analysis shows that vehicles are still able to exit the driveways onto 70th Street in the PM peak, even with the queueing occurring at the University Avenue intersection.

- The queuing analysis in the report shows that the queue on westbound on University will extend beyond the Casey's new Ri-Ro access in the AM and PM peaks by one to two car lengths.

- Operations at 70th and University are failing today in the PM peak, the addition of the Casey's creates additional delay at this intersection, however per the report, queues are not expected to extend back and block the Hy-Vee signal on University

Questions/Discussion

BOLTON & MENK

Real People. Real Solutions.

RESOLUTION 2024-16

A RESOLUTION APPROVING THE SITE PLAN FOR CASEY'S GENERAL STORES AT 6961 UNIVERSITY AVENUE

WHEREAS, on February 28, 2024, upon proper publication of notice, the Planning and Zoning Commission held a public hearing, notice of which was given to property owners within 200 feet; and

WHEREAS, the Planning & Zoning Commission has reviewed this request during its regular meeting on February 28,2024, and forwarded to City Council with a recommendation of denial; and,

WHEREAS, the City Engineer has reviewed the Site Plan and recommends approval with the noted conditions; and

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WINDSOR HEIGHTS, IOWA, that the Site Plan for Casey's General Store located at 6961 University Avenue is hereby approved subject to the following conditions:

1. All of the following conditions will be met, reviewed by the city department assigned, and deemed complete before approval of the site plan and before any development can take place.
    a. General
        i. Signature of Engineer and Surveyor on Final Plans.
        ii. All comments listed below are addressed.
        iii. Concurrent approval of the Board of Adjustments approved conditional
        use permit.
        iv. Approval of signs and utility from Safe Building.
        v. Approval of streets and access from IDOT.
        vi. Revision of site plan application in accordance with the comment letter.
        vii. City Council approval of site plan.
    b. Engineering Department
        i. General Engineering Comments
            1. Obtain Windsor Heights work within the Right-of-way Permit.
            2. Obtain a Construction Site Erosion & Sediment Control Ordinance
            Permit or COSESCO Permit from City.

3. Provide Drainage and Utility Easement along the north property

line that covers the entire drainage swale and Sidewalk Easements

along 70th Street for approval prior to recording.

4. Complete Stormwater Maintenance Agreement and submit per

instructions.

5. Sheet C-201: Cross slopes on the sidewalk along University

Avenue appear to be over 2.0%. Target 1.5% cross slope for these

sidewalks.

9

6. Sheet C-201: The running slope on the far east sidewalk along

University Avenue is at 8.0%. Remove more sidewalk to the east

to get that under 5.0%.

ii. Stormwater Comments

1. Please report the orifice diameter as 3 inches in Table 10 and

match the reported 1-year proposed release rate to match the model

output. If it is above allowable, include a statement that the

minimum orifice diameter recommended by ISWMM is the reason

for exceeding the allowable release rate. Provide updated report.

c. Planning Department

i. Obtain Conditional Use Permit for Auto Services Use within the Urban

Center District from the Windsor Heights Zoning Board of Adjustments.

d. Des Moines Water Works

i. Copper Water Service will be required as it falls within a DNR

PASSED AND APPROVED this 4th day of March, 2024.

_____

MIKE JONES, MAYOR

_____

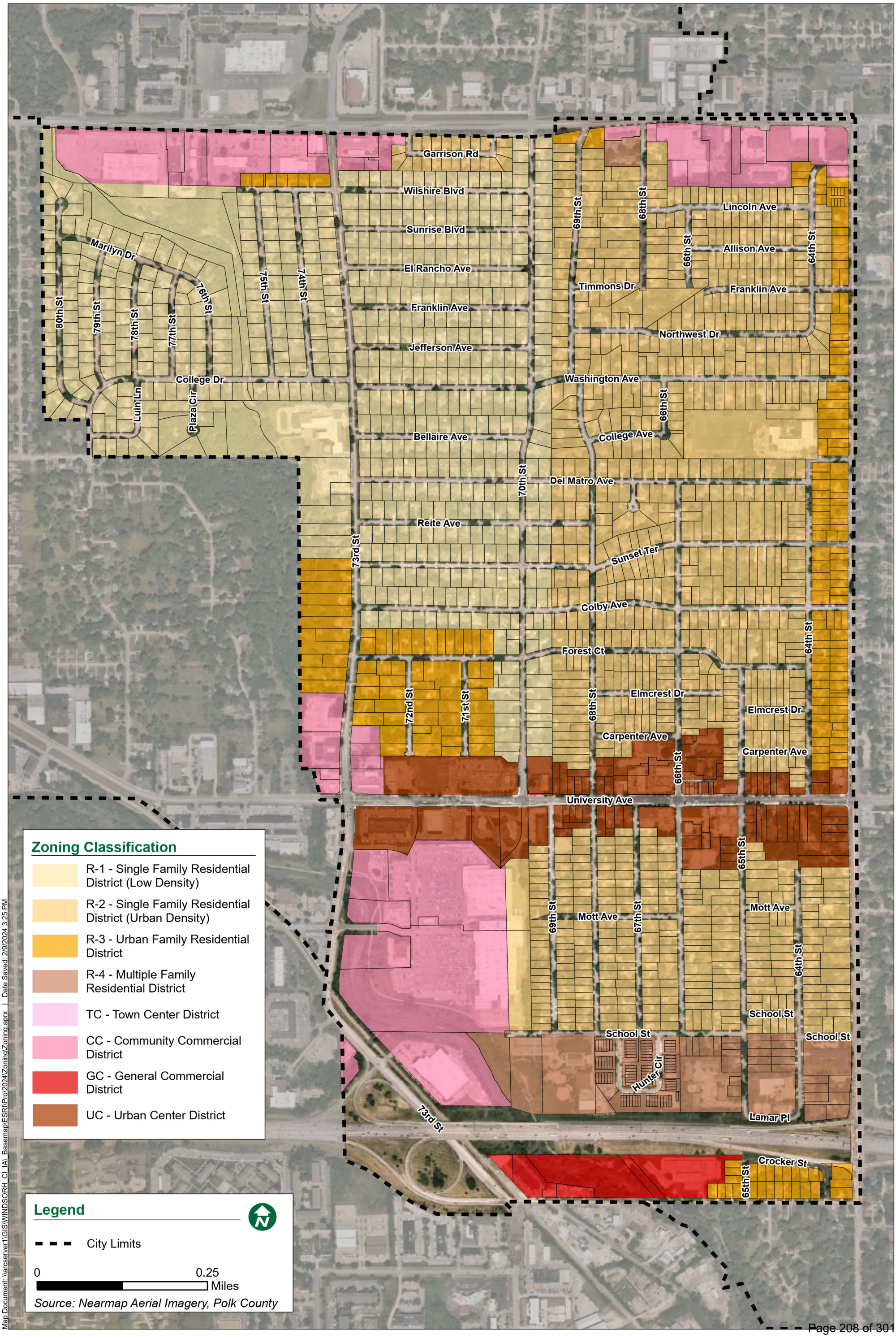
ADAM STRAIT, CITY CLERK

WINDSOR HEIGHTS
the heart of it all

Windsor Heights Zoning Map

February 2024

BOLTON & MENK
Real People. Real Solutions.



Map Document: \\arcserver1\GIS\WINDSORH_CI_IA_Basemap\ESRIPro\2024\Zoning\Zoning.aprx | Date Saved: 2/9/2024 3:25 PM

City of Windsor Heights Planning and Zoning Commission Meeting Minutes
Wednesday, November 1, 2023 - 5:30 PM
WINDSOR HEIGHTS COUNCIL CHAMBERS - 1133 66th ST

1. **Call to Order/Roll Call**

   Chair Geoffrey Wood called the meeting to order at 5:30 PM. Present: Bob Bishop, David Ferree, Geoffrey Wood, Georgie Libbie, Donna Mueller, Diane Foss, and Tyler Holtorf. Staff present: City Clerk Adam Strait, Deputy City Clerk Nate Leuthold, City Planner Trey Rouse from Bolton & Menk, and City Planner Jane Kansier from Bolton & Menk

2. **Approval of Agenda**

   Motion by Georgie Libbie to approve. Seconded by Donna Mueller. Motion passed 7-0.

3. **Approval of the Minutes:**

   Motion by Diane Foss to approve. Seconded by Dave Ferree. Motion passed 7-0.

   A. Consideration of the Planning and Zoning Commission Meeting Minutes on October 25, 2023

4. **Public Hearing for a Zoning Ordinance Amendment for Chapters 165-177**

   Motion by Donna Mueller to open the Public Hearing at 5:32 PM. Seconded by Diane Foss. Motion passed 7-0. Jane Kansier presented the staff report on proposed updates made after the Planning and Zoning workshop at the October 25th meeting. Trey Rouse also presented. Topics included architectural materials, parkland dedication, UC district buffers and lot width, and parking standards. Matt Haugie with the Polk County Housing Trust Fund spoke regarding accessory dwelling units (ADUs). Motion by Diane Foss to close the Public Hearing at 6:23 PM. Seconded by Tyler Holtorf. Motion passed 7-0.

   A. Staff Presentation

   B. Redlined Draft of Code Chapters 165-177

5. **Consideration of Zoning Ordinance Amendment for Chapters 165-177**

   Motion by Diane Foss to approve architectural materials changes presented tonight. Seconded by Bob Bishop. Motion passed 7-0. Motion by Diane Foss to approve parkland dedication option 2 as presented tonight. Seconded by Tyler Holtorf. Passed 7-0. Motion by Bob Bishop to approve the changes to parking regulations presented tonight. Seconded by Diane Foss. Passed 7-0. Motion by Bob Bishop to approve setbacks with Council's changes (10-foot front yard setbacks). Seconded by Donna Mueller. Motion failed 0-6, with Bob Bishop abstaining. Motion by Tyler Holtorf to approve original setback policy (0-foot front yard setbacks). Seconded by Diane Foss. Roll call vote: aye - Geoffrey Wood, David Ferree, Diane Foss, Georgie Libbie, Tyler Holtorf, Donna Mueller; nay - Bob Bishop. Motion passed 6-1. Motion by Dave Ferree to submit the recommendations to the City Council. Seconded by Donna Mueller. Approved 7-0.

6. **Adjourn**

   Motion by Diane Foss to adjourn at 6:50 PM. Seconded by Georgie Libbie. Approved 7-0.

February 15, 2024

To: City Staff and Board of Adjustment

From: Aaron Wolfe, AICP, Sr. Site Development Manager Casey's General Stores

Re: Request for conditional use permit to construct a convenience store and gas station at 6961 University Avenue in Windsor Heights.

Casey's proposes to construct a 4,283 s.f. convenience store with six fuel pumps at the NE corner of University Avenue and 70th Street. The property is located directly east of HY-VEE on the opposite side of 70th Street and is currently occupied by an office building constructed in 1973. The property is zoned Urban center district which does allow for the proposed use by issuance of a conditional use permit provided certain standards are met as outlined in Chapter 180.06 of the City of Windsor Heights Code of Ordinances.

Redevelopment of the subject property will demolish a blighted and underperforming office complex, generate an estimated $45-$55,000 in property tax annually for the City of Windsor Heights, rectify several existing access issues of the current development to help with traffic safety, provide a buffer between commercial and adjacent residential uses that doesn't currently exist, and reduce impervious area and provide stormwater management controls on a property where none are currently present.

At Casey's, our purpose is "To make life better for communities and guests every day". Between 2019-2022 we donated $15M in the communities we serve. Casey's gives back to our communities because we *are* our communities. We are your neighbors, your friends, and your family. We take pride in supporting efforts that strengthen our communities because our families also live and work in your community. We're proud to be **#HereForGood!** and we want to be "Here For Good" in Windsor Heights. Among the various attachments to this letter, please find our 2023 Community Impact Report for further information about how we positively impact the communities we serve.

This supplement to our earlier application is intended to provide additional data and resources to help address any questions and comments from the January 17th Board of Adjustment meeting. Attached are the ordinance criteria outlined in Chapter 180.06 and an accompanying narrative to address each of those criteria. Also attached are a number of reference documents as listed on the following page.

Thank you for your consideration. I look forward to presenting our case to the Board of Adjustment at the February 21, 2024 meeting.

Sincerely,

Aaron Wolfe
Sr. Site Development Manager

List of Attachments

- Chapter 180.06
- Detailed narrative addressing standards for approval outlined in Chapter 180.06
- Allowed Uses Table 168-2
- Architectural Rendering
- Site plan
- Building elevation drawings
- Canopy renderings
- Site lighting plan/photometric layout
- Proposed Signage
- Emergency Fuel Spill Response
- Overview of Fuel System and Safety Features
- Summary of 2023 crime stats for Convenience Stores in Windsor Heights from WHPD
- 2023 Casey's Community Impact Report

Chapter 180.06 of the City of Windsor Heights Code of Ordinances outlines "Standards for Approval" the Board of Adjustment is required to consider when granting a Conditional Use Permit. Chapter 180.06 is listed below in its entirety and the following pages offer a detailed narrative to address each of the standards.

180.06 STANDARDS FOR APPROVAL.

1) **The Board of Adjustment shall review the proposed development for conformance to the following Standards of Approval:**

   A. Compatibility. The proposed buildings or use shall be constructed, arranged and operated so as to be compatible with the character of the zoning district and immediate vicinity, and not to interfere with the development and use of adjacent property in accordance with the applicable district regulations. The proposed development shall not be unsightly, obnoxious or offensive in appearance to abutting or nearby properties.
   B. Transition. The development shall provide for a suitable transition, and if necessary, buffer between the proposed buildings or use and surrounding properties.
   C. Traffic. The development shall provide for adequate ingress and egress, with particular attention to vehicular and pedestrian safety and convenience, traffic flow and control, and emergency access.
   D. Parking and Loading. The development shall provide all off-street parking and loading areas as required by this ordinance, and adequate service entrances and areas. Appropriate screening shall be provided around parking and service areas to minimize visual impacts, glare from headlights, noise, fumes or other detrimental impacts.
   E. Signs and Lighting. Permitted signage shall be in accordance with the applicable district regulations and shall be compatible with the immediate vicinity. Exterior lighting, if provided, shall be with consideration given to glare, traffic safety and compatibility with property in the immediate vicinity.
   F. Environmental Protection. The development shall be planned and operated in such a manner that will safeguard environmental and visual resources. The development shall not generate excessive noise, vibration, dust, smoke, fumes, odor, glare, groundwater pollution or other undesirable, hazardous or nuisance conditions, including weeds.

2) **The request shall be approved if the Board of Adjustment finds that the proposed development meets all Standards of Approval.**

3) **The request shall be denied if the Board of Adjustment finds a strong probability that any of the following with regards to the proposed development:**

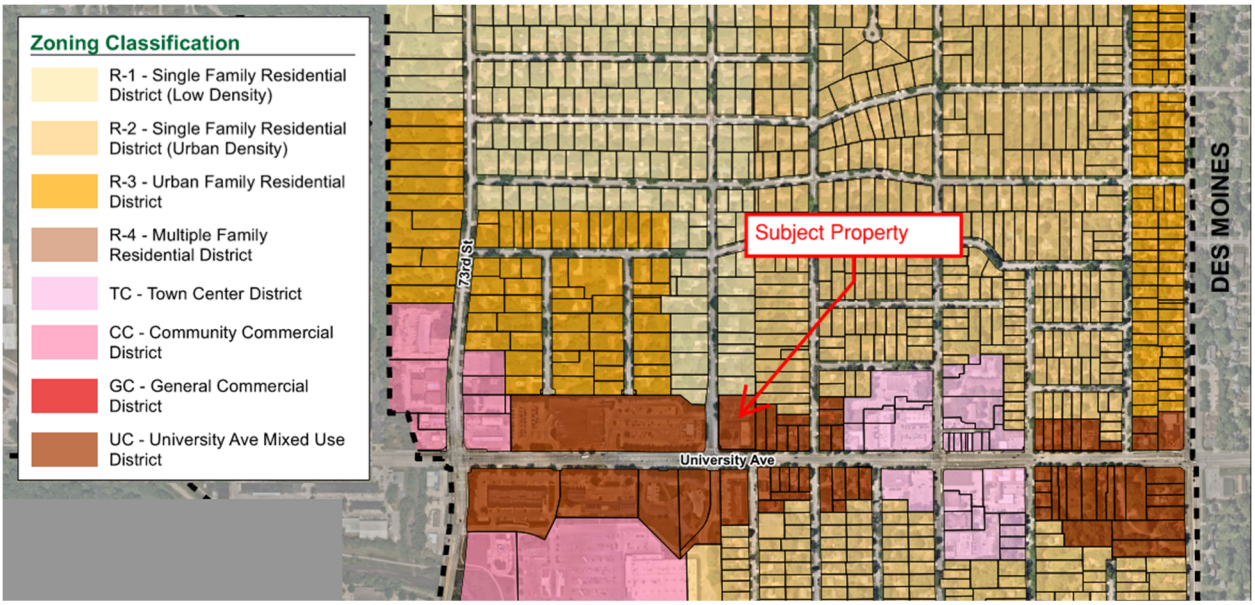
   A. Not adequately safeguard the health, safety and general welfare of persons residing or working in adjoining or surrounding property, or
   B. Impair an adequate supply (including quality) of light and air to surrounding property, or
   C. Unduly increase congestion in the roads, or the hazard from fire, flood or similar dangers, or
   D. Diminish or impair established property values on adjoining or surrounding property,or
   E. Not be in accord with the intent, purpose and spirit of the zoning ordinance or comprehensive plan.

A. Compatibility. The proposed buildings or use shall be constructed, arranged and operated so as to be compatible with the character of the zoning district and immediate vicinity, and not to interfere with the development and use of adjacent property in accordance with the applicable district regulations. The proposed development shall not be unsightly, obnoxious or offensive in appearance to abutting or nearby properties.

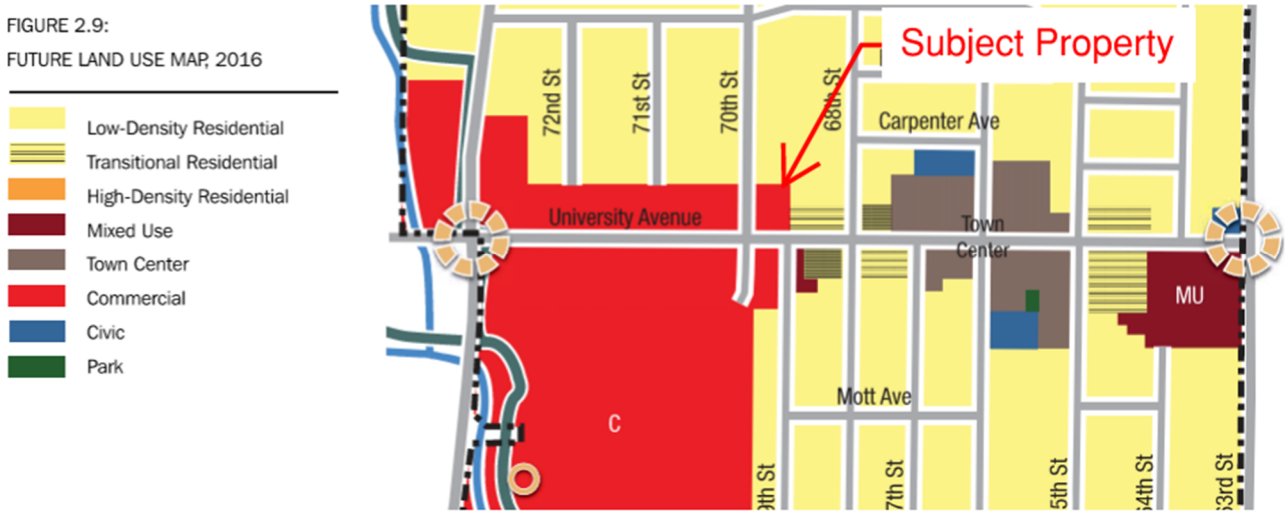
Compatibility with character of the district:

University Avenue is classified as an arterial roadway on the Federal Functional Classification system and the Iowa Department of Transportation estimates the portion of University Avenue passing through Windsor Heights averages between 10,600 and 12,600 annual average daily trips. Prudent land use planning dictates commercial uses be located adjacent to arterial roadways. Both the Windsor Heights Zoning Map and Comprehensive Plan recognize this fact and excerpts are shown below.

The subject property is zoned UC, University Avenue Mixed Use District on the City's Zoning Map. Permitted uses of the UC district are listed in Chapter 168.08 of the City of Windsor Heights Code of Ordinances (table 168-2 attached). "Auto Services" are allowed in the district by issuance of a conditional use permit. Auto Services is rather broadly defined by Chapter 166.03.15 of the City of Windsor Heights Code of Ordinances and includes Gas Station/Convenience stores.



Likewise, the subject property is shown as "Commercial" on the Windsor Heights Comprehensive Plan Future Land Use Map shown below. The Comprehensive Plan defines “Commercial” land use category as “Commercial and office uses that are typically more auto-oriented”.



Compatibility with immediate vicinity:

Through the site design process we have taken care to insure our use will not be unsightly, obnoxious or offensive in appearance to abutting or nearby properties.

Under the current use there is no buffer between the office building and associated parking lot and the surrounding residential uses. The Casey’s site plan indicates use of a buffer with 6’ solid privacy fence between the subject property and north-adjacent single-family residential district. While the east-adjacent property is currently occupied residentially, the property is zoned University Avenue Mixed Use District and is shown on the Comprehensive Plan Land Use Map as “Transitional Residential”. Both the current zoning and city’s future land use map recognize the property may redevelop in the future to a more intense use; however, our site plan shows use of shrubs and evergreens to help buffer the current residential use of the property (see following section “’B’. Transition”0. Re-alignment of the 70th street access moves customer traffic further away from the adjacent residential uses. The building itself sits between active portions of the site and north-adjacent property, the building’s solid walls further helping to buffer lighting and noise.

Dumpsters and Pest Control: Questions were raised at the January 17th Board of Adjustment meeting regarding trash collection and pest control. Dumpsters are emptied at least two times each week, and more often on an as-needed basis. Casey’s also enters into a pest control contract for every store with a professional pest elimination service. The pest control contractor employs a comprehensive service approach which includes inspection, pest monitoring, sanitation and structural recommendations, mechanical trapping, and biological and targeted product applications. The service contract entails monthly visits by a pest control specialist. However, if an issue is discovered staff call a service hotline and pest control will visit the site and return as many times as needed to get rid of the nuisance.

Crime: At least one resident provided public comment asserting the proposed use would be a significant generator of crime. Casey's reached out to the Windsor Heights Police Department for crime statistics relevant to convenience stores to determine if the data supports the assertion that convenience stores are a disproportionate driver of crime in the city. The 2023 arrest data specific to two existing gas station/convenience stores in Windsor Heights appears below:

Kum & Go at University and 73rd – Four total arrests (one of which was for a crime that did not occur on the property - OWI where driver pulled into parking lot):

- 23-00421: Public Intoxication and warrant arrest
- 23-00323: Upset customer charged with assault; threw an item at the clerk
- 23-00272: OWI charge; customer called in a drunk driver who had pulled into the parking lot
- 23-00227: Arrest for theft of alcohol

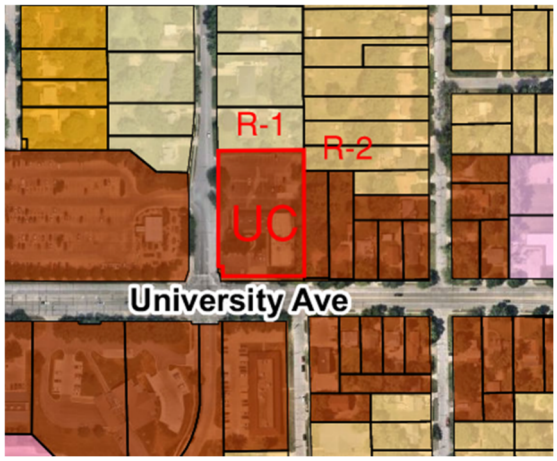
Hy-Vee Fast and Fresh on Hickman Road and 73rd - Two arrests total (one of which was for a crime that did not occur on the property - traffic arrest where driver pulled into property):

- 23-00635: Traffic-related arrest. The vehicle pulled into this location.
- 23-00355: Trespass Violation. Call for a welfare check call for service; an uncooperative person that had already been trespassed from this location.

The Windsor Heights Police Department further reported all arrests in 2023 totaled 293 (but also acknowledged a change in method of recordkeeping that may mean the total number of arrests city-wide is actually a larger number). These statistics suggest the two reported existing convenience store/gas stations are responsible for .02% or less of total arrests in Windsor Heights in 2023.

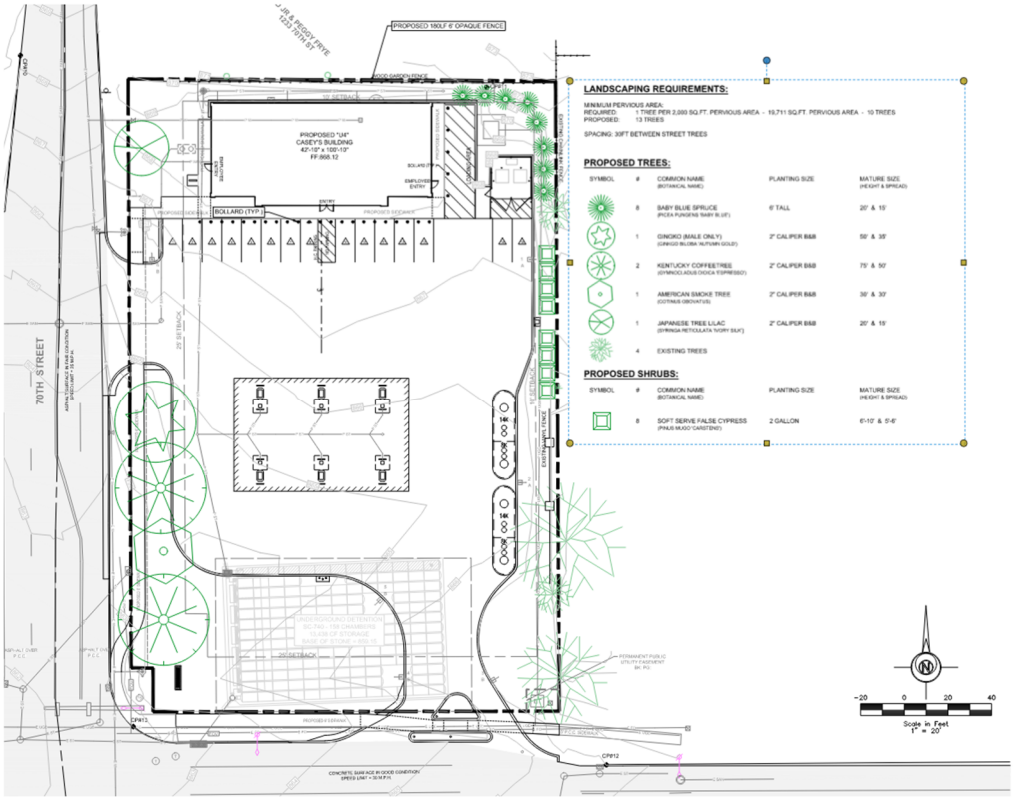
B. Transition. The development shall provide for a suitable transition, and if necessary, buffer between the proposed buildings or use and surrounding properties.

North-adjacent R-1: Chapter 173.05 of the Windsor Heights Code of Ordinances governs buffer requirements between differing zoning districts. Said chapter requires a 10' screened buffer between properties zoned UC and R-1/R-2/R-3. In addition, Chapter 173.06 requires a 6' opaque screening barrier consisting of a solid fence or landscaped screen that utilizes 50% evergreen plant material. The proposed site plan shows use of a 180' fence 6' in height to meet the screening requirements along the north property boundary adjacent to property zoned R-1.



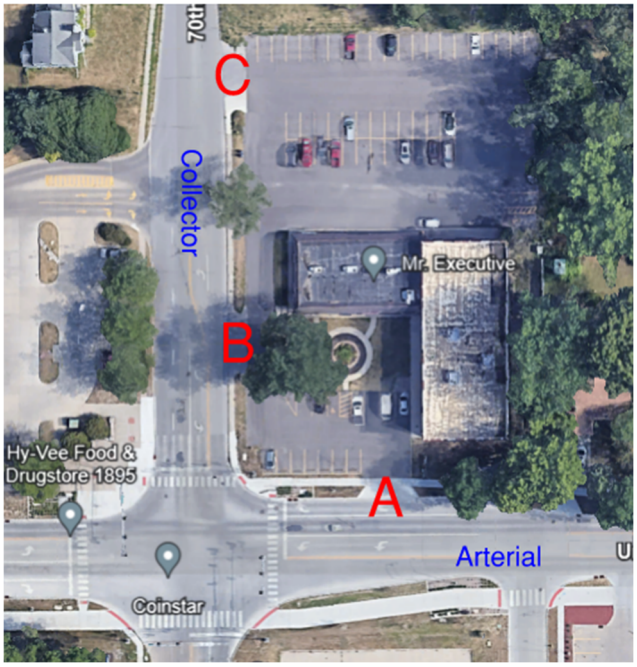
East-adjacent R-2: Approximately 50' of the NE corner of the subject property abuts property zoned R-2 to the east. The site plans indicate use of five, 6' Baby Blue Spruce to meet the screening requirements of code required adjacent to the R-2 district.

East/West/South-adjacent UC: There is no code-required buffer between any of the other adjacent properties because they share the same zoning classification as the subject property; however, in recognition of the east-adjacent lawful non-conforming residential use, the site plans show installation of eight False Cypress trees, and retention of an existing vinyl fence and multiple existing trees to provide screening between the two uses.

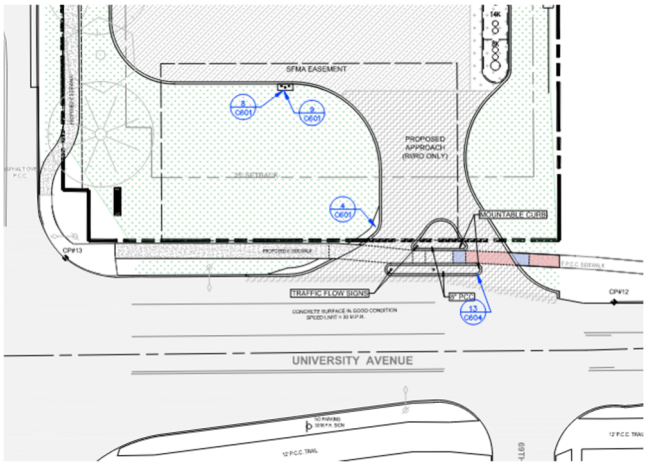


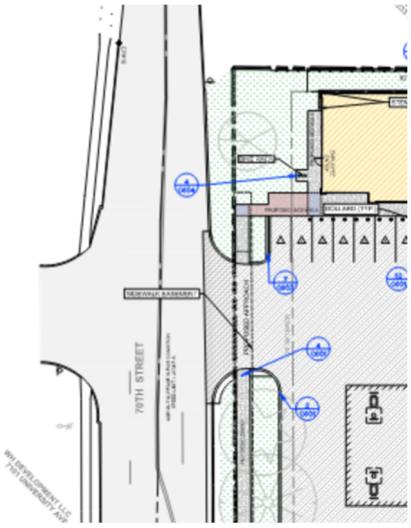
C. Traffic. The development shall provide for adequate ingress and egress, with particular attention to vehicular and pedestrian safety and convenience, traffic flow and control, and emergency access.

Existing Condition: The existing site currently has three full access locations: one on University Avenue ('A' in pic at right) and two on 70th Street ('B' and 'C' at right). None of the existing access locations meet code requirements for separation of entrance from intersection or separation from access locations on opposite side of street. In addition, neither access 'A' nor 'B' would be allowed to function as a full access under today's code requirements.



Proposed Redevelopment: The University Avenue access ('A' above) will be restricted to a right-in, right-out access (depicted below), eliminating possibility of a dangerous eastbound left turn movement across traffic. The access will also be moved further east to increase distance of the entrance to intersection. Access 'B' will be removed altogether. Access 'C' will shift south to align with the Hy-Vee access on the opposite side of the street. Such an alignment moves customer traffic further away from the adjacent residential properties but also eliminates the possibility of conflicting traffic movements. By placing access connections directly across from each other crossing maneuvers can be made directly from one connection to the other. And, left-turn-in maneuvers from opposing directions do not involve a conflict, nor do left-turns out from the opposing access connections (below).





Trip Generation: Below is a table indicating the amount of traffic that will be added to the surrounding road network based on proposed uses of the property. The numbers are estimated using trip generation data formulated by the Institute of Transportation Engineers (ITE) Trip Generation Manual. University Avenue is an arterial roadway carrying between 10,600 and 12,600 annual average daily trips through Windsor Heights. A convenience store at the subject property is expected to experience 82 vehicles entering the site during AM peak hour. Of those 82 trips, 62 trips are generated by pass-by traffic, or traffic that is already on the road network enroute to another destination, and 20 trips are new users added to the road network. The PM peak hour sees similar numbers with 96 vehicles entering the site, 72 of which are generated by pass-by traffic and 24 being new users added to the road network. New users during AM and PM peak hours are highlighted in the table below. The number of new users generated by a convenience store can be compared and contrasted with other potential land uses allowed in the UC district. The column at far left lists uses permitted both by-right and those allowed by conditional use permit. The table shows a convenience store use will add less traffic to the surrounding road network than nearly all other uses shown in the table.

Use	AM/PM	Total Trips	Entering	Pass-by	New	Exiting
Drinking Place (p)	AM	0	0	0	0	0
	PM	62	42	25	17	20
Vet Clinic (p)	AM	11	6	0	6	5
	PM	11	6	0	6	5
Liquor Store (p)	AM	31	16	7	9	15
	PM	106	53	24	29	53
C-Store (c)	AM	165	82	62	20	83
	PM	191	96	72	24	95
Stip Retail (p)	AM	122	61	37	24	61
	PM	212	114	68	46	98
Restaurant (p)	AM	82	47	20	27	35
	PM	98	50	22	28	48
Daycare (p)	AM	59	31	0	31	28
	PM	59	28	0	28	31
Gen Office (p)	AM	36	32	0	32	4
	PM	38	6	0	38	32
Fast Food W/D Thru (c)	AM	152	79	40	39	73
	PM	153	78	39	39	75
Discount Store (p)	AM	96	49	10	39	47
	PM	111	56	11	45	55
Multi-Fam Hsg (p)	AM	109	26	0	26	83
	PM	132	82	0	82	50
USPS (p)	AM	322	158	71	87	164
	PM	393	200	90	110	193

*C - Conditional Use

*P - Permitted by-right

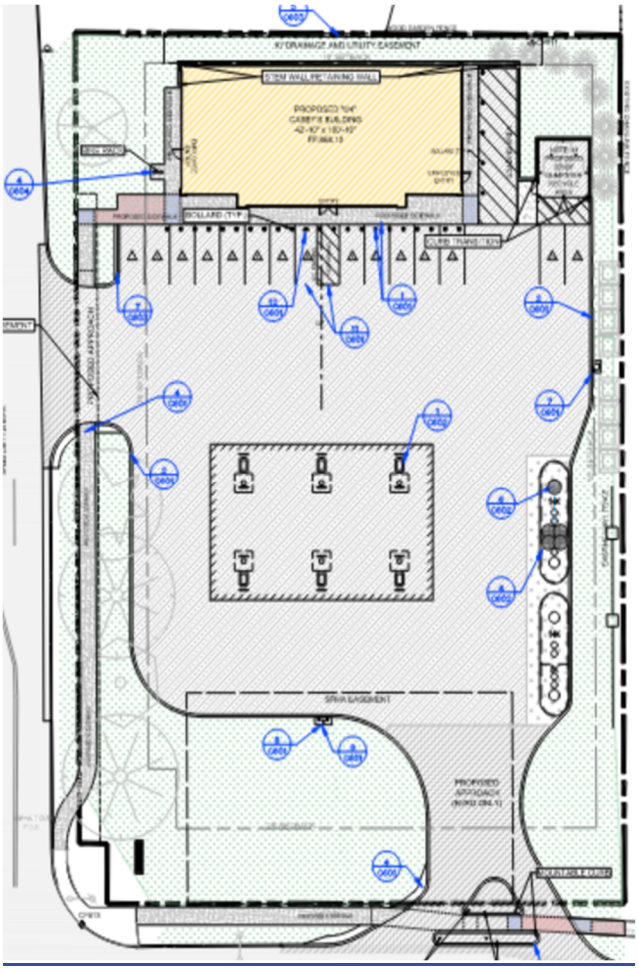
Walkability: Sidewalk on 70th Street is currently located immediately at back of curb. Pedestrians avoid using the sidewalk because it does not feel safe to be in such close proximity to moving traffic.



Pedestrians also avoid using this sidewalk in the winter because it is difficult to keep it cleared of snow and ice as every pass with a plow loads the sidewalk with mounds of snow.

The sidewalk adjacent to 70th Street will be moved to the east onto private property with a sidewalk easement granted to the city (see below). Moving the sidewalk creates distance between traffic and pedestrian and makes a safer and more inviting walking path and also creates storage for plowed snow, keeping the sidewalk clear in the winter.

A direct path from the sidewalk to the storefront is provided at the southwest corner of the building to insure pedestrians have a safe path of travel and do not have to walk across the parking lot. Street trees are provided along 70th Street to shade the sidewalk and provide a more inviting and comfortable walking path in the hot summer months. Sidewalk along University Avenue will be widened to 6' to meet recently adopted code requirements.



D. Parking and Loading. The development shall provide all off-street parking and loading areas as required by this ordinance, and adequate service entrances and areas. Appropriate screening shall be provided around parking and service areas to minimize visual impacts, glare from headlights, noise, fumes or other detrimental impacts.

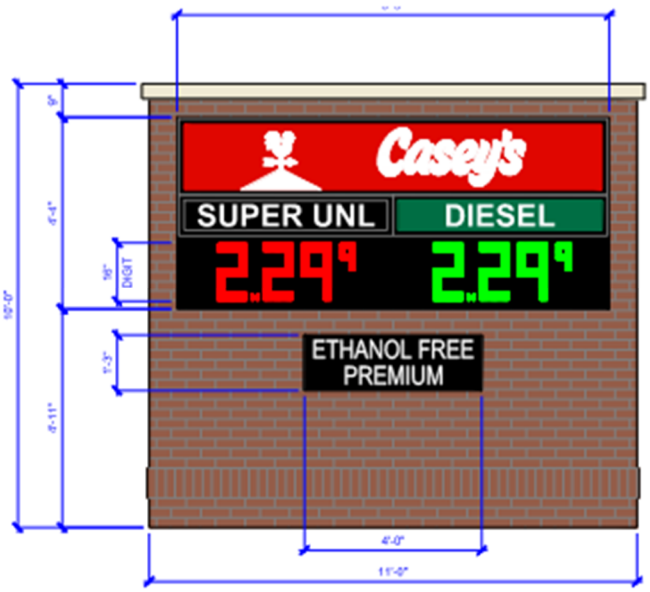
Parking: Chapter 174.04 of the City of Windsor Heights Code of Ordinances stipulates the number of parking spaces required based on the use of the property. Auto Service uses require 1 space per 500 s.f.. The proposed building is 4,283 s.f. which lends a parking requirement of 9 stalls. The Casey's site plan indicates 15 parking stalls in satisfaction of ordinance requirements. All ADA parking requirements have been met.

Screening: The site plans is designed with a 6' privacy fence at the north property line to intercept and screen headlight glare from the north-adjacent property and landscape plantings to intercept and screen headlight glare from the east-adjacent property. See narrative above at lettered item 'B' regarding transition between surrounding properties.

E. Signs and Lighting. Permitted signage shall be in accordance with the applicable district regulations and shall be compatible with the immediate vicinity. Exterior lighting, if provided, shall be with consideration given to glare, traffic safety and compatibility with property in the immediate vicinity.

SIGNS: Chapter 175.09-04 of the City of Windsor Heights Code of Ordinances allows for both attached and ***detached*** signs totaling 150 s.f. total in the UC Zoning District. Of the aforementioned 150 s.f., up to 90 s.f. may be utilized for detached signage and detached signs may not exceed 10' in height. The proposed Casey's site plan shows one detached monument sign at the SE corner of University Avenue and 70th Street. Said sign is 47.25 s.f. and 10' in height in satisfaction of the above-listed code requirements. The monument sign will be internally lit and will also exhibit electronic changeable copy as allowed by Chapter 175.09-02 of code but will not utilize flashing moving or rotating images or symbols. The proposed monument sign is shown at right.

Monument sign totaling 47.25 s.f.



The balance of the 150 s.f. total sign allowance in the UC district will be utilized for "Attached" signs. Casey's proposes signage on the south and west sides of the convenience store totaling 71.15 s.f. and the north/south/east sides of the fuel pump canopy totaling 18.42 s.f.. Attached signage will be internally lit as allowed by code. The cumulative total of all attached and detached signage proposed is 136.82 s.f. in satisfaction of code requirements. All sign lighting is extinguished outside of business hours.

Attached signage totaling 71.15 s.f.:

1



SOUTH

2



WEST

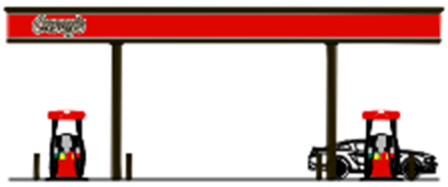
Attached canopy signage totaling 18.42 s.f.:

3

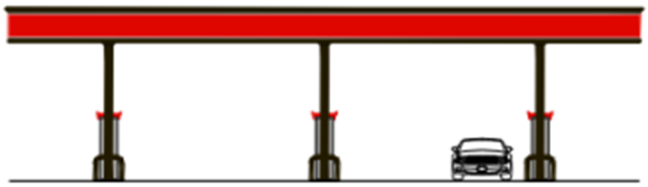


SOUTH

3



EAST



WEST

3



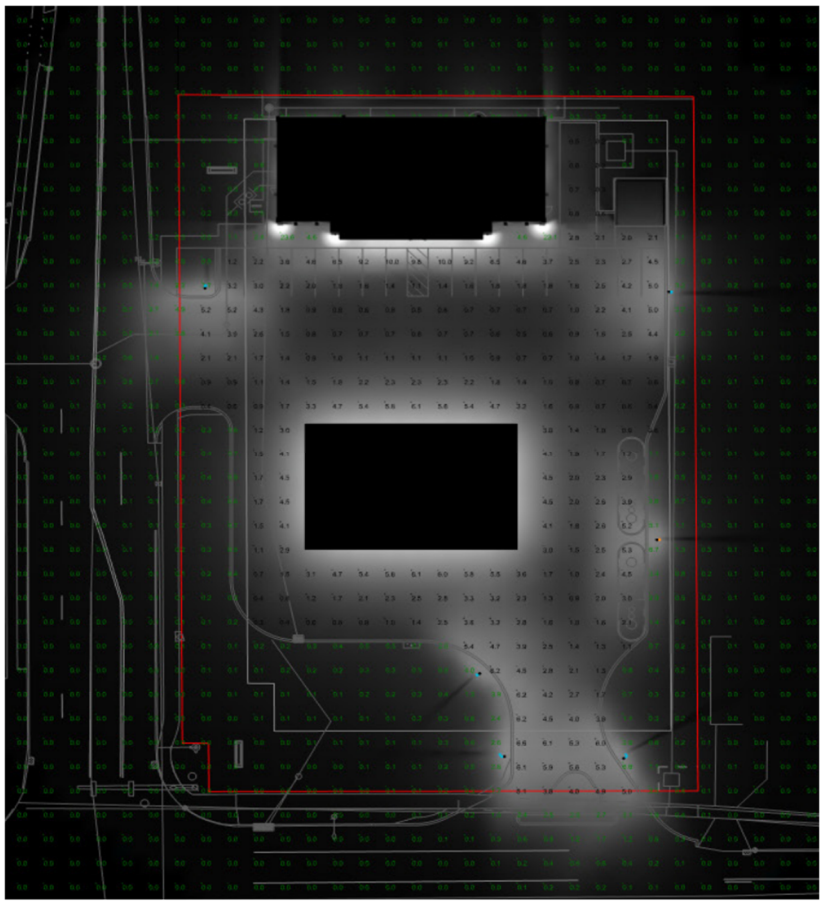
NORTH

Exterior Lighting: The City of Windsor Heights has strict outdoor lighting requirements governed by Chapter 172.13 of the City of Windsor Heights Code of Ordinances. Said code chapter requires site lighting to automatically extinguish during daylight hours and to be reduced by at least 30% by 12:00 AM. There are also ordinance requirements for limiting total site lumens and backlight, uplight and glare (BUG) at Chapter 172.13.5. The site lighting plan proposed for the subject property meets all ordinance requirements. A full site lighting design package is included as an attachment.

Total Lumens: Per said ordinance requirements the max total lumens allowed for the site is 5 lumens per s.f. of impervious area, or 196,205 lumens. The site is in compliance with 192,634 total lumens.

The photometric layout included in the site lighting design package indicates Light levels that traverse the north and east property lines are limited to .1 to .3 lumens (one lumen is roughly the light of one candle shining on a one-foot square from one foot away). Light levels on the west and south property lines will be at 0.0 before the opposite side of the right-of-way. These lumen levels do not take into account screening methods described above in the section on buffering and transitions; therefore, the lumen levels will be even less than what is shown on the photometric layout.

3D illumination mapping of the site is available at the following link: https://rlasiteplans.com/caseys/rl-9171/s1-r3/terheeheht/



F. Environmental Protection. The development shall be planned and operated in such a manner that will safeguard environmental and visual resources. The development shall not generate excessive noise, vibration, dust, smoke, fumes, odor, glare, groundwater pollution or other undesirable, hazardous or nuisance conditions, including weeds.

Flooding and Stormwater Runoff: Chapter 5 of the 2017 Destination Windsor Heights Comprehensive Plan addresses the natural environment and is entitled "Improving Amenities". A stated goal of the plan is to enhance Walnut Creek for improved water quality/quantity outcomes, and enhance streambank protection.

Page 78 of said plan states annual streamflow in Walnut Creek has increased 37% since 1981 and flood events have impacted residences and businesses located along Walnut Creek. To address flooding the city has adopted design criteria established by the Iowa Stormwater Management Manual (ISWMM) to address both water quality and quantity.

Page 79 of said document states "Nearly 30,000 tons of sediment each year is washed through Walnut Creek to the Raccoon River. The three largest sources of this sediment are believed to be streambank erosion, gully erosion and construction site runoff".

In its current condition the subject property exhibits 76% impervious area that is undetained. Stormwater runs freely off the site without restriction to the city's stormsewer system. The Casey's site plan not only reduces impervious area to 70% but is designed to comply with the City's strenuous stormwater management requirements. A system of underground detention cells is shown near the SW corner of the lot. Said detention cells detain water quality volume to the requirements of city code, encourage stormwater infiltration, and releases stormwater slowly to the city's stormsewer system. These practices allow suspended sediments to settle out of the water column before it enters Walnut Creek and helps to eliminate flooding and streambank erosion.

Construction Site Runoff: All new construction projects in the city are required to develop a stormwater pollution prevention plan and obtain a Construction Site Erosion and Sediment Control Ordinance Permit (COSESCO) to insure construction site runoff does not enter the city's stormsewer system and the proposed Casey's project is not immune from said requirement. All construction activities will be performed under the watchful eyes of the city inspectors who will insure strict adherence to COSESCO requirements during construction.

Fuel Leaks, Spills and Vapors: Primary environmental concerns voiced at the January 17th Board of Adjustment meeting were centered around ***fuel leaks*** from underground storage tanks/piping/dispensers, ***fuel spills*** and ***airborne fuel vapors***. As a matter of course Casey's implements the following measures for every store to safeguard the aforementioned environmental concerns:

Fuel Leaks

The United States Environmental Protection Agency (EPA) has primary authority over Underground Storage Tank (UST) regulations which can be found at Chapter 40 of the Code of Federal Regulations parts 80 and 81. Said regulations require that the UST have a secondary containment system in case of a leak and be equipped with a system to detect a release from any portion of the tank and/or the connected underground piping. The regulations also require an

annual test of the system to insure continued reliability and function. Casey's complies with or exceeds all federal and state regulations applicable to the location of every UST owned or operated by Casey's. Please refer to the ***attached Fuel System Overview*** for a detailed explanation of the methods utilized to protect against and monitor fuel leaks (also summarized below):

- ***Underground Storage Tank (UST).*** The UST's are made of corrosion-resistant fiberglass. Tanks are constructed with a secondary containment around the full circumference of the tank (double walled tank). If there is ever an issue with the primary tank, the outer tank both contains the leak and while a leak detection alarm is generated to the operator.
- ***Piping.*** All piping is a multiple layer pipe system that also has secondary containment (double walled piping). If there is ever an issue with the primary pipe, the outer pipe contains the leak while a leak detection alarm is generated to the operator.
- ***Sumps.*** Tank sumps and dispenser sumps are used for secondary containment of piping connections. The sumps contain potential drips or leaks from the dispenser or submersible pump and allows for any leak to be detected.
- ***Automatic Tank Guage (ATG).*** An automatic tank gauge continuously monitors the fuel system for changes in pressure or volume to detect leaks. If there are any issues the ATG will sound an alarm and/or shut down the fuel system (see Casey's Alarm Response below).
- ***Line Leak Detection***. The ATG compares the pressure at the submersible pump to the pressure in the piping to determine whether the pipe is leaking. If a leak is detected the submersible pump will shut down and the ATG alarms (see Casey's Alarm Response below).

Fuel Spills:

While fuel spills are infrequent, the aforementioned federal EPA regulations also mandate operator training, including training for store employees, on how to respond to alarms and spills. The ***Casey's fuel spill response protocols are included as an attachment*** and summarized below:

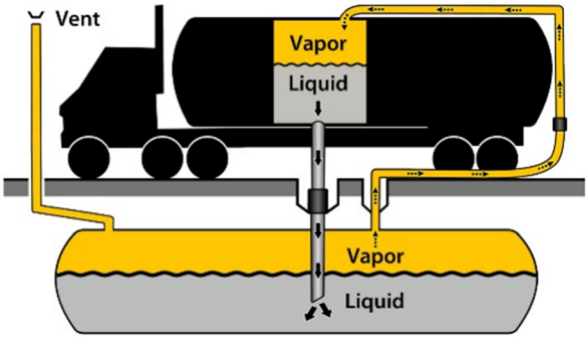
- ***Dispenser.*** Piping to the dispenser utilizes an emergency valve that provides protection against fire or collision with the dispenser. If either occur, the emergency valve will close and stop the flow of fuel below the dispenser. Each hose also has an emergency breakaway. If a nozzle is left in the vehicle when it drives away, the breakaway will protect against damage to the hose and dispenser. Fuel flow is also stopped when the breakaway is activated.
- ***Emergency Stop.*** In the event of a spill, fire or other emergency, an emergency stop will shut off power to the entire fuel system and canopy area.
- ***Fill Spill Container.*** During fuel tanker drops there is the potential to spill small amounts of fuel. The spill container will contain up to 5 gallons of fuel that would otherwise be released.
- ***Overfill Prevention.*** The overfill prevention valve closes when the tank is 95% full to prevent the tank from being overfilled and potentially releasing fuel.
- ***Product Probe.*** The probe continuously monitors the volume of the tank and the ATG alarms if the level changes unexpectedly (see Casey's Alarm Response below).
- ***Liquid Sensor.*** Sensors in the tank sumps and dispenser sumps detect liquid in the sump that may be from leaking equipment. When liquid is detected the ATG will sound an alarms (see Casey's Alarm Response below).

Casey's Alarm Response: Casey's operates over 2,000 UST locations and has a team of professionals dedicated to designing, installing, and monitoring our UST systems. Automatic Tank Gauge Alarms are connected to the store managers work station and readings are sent to the Environmental Compliance director at Casey's corporate office. Casey's has a 24/7 service dispatch team that can be dispatched by a store employee or by the corporate office. Both store employees and Casey's tanker drivers have spill kits for containing a surface release and have been trained on using them. Casey's training includes how to respond to an alarm, how to respond to a surface release, and requires that any release, regardless of amount, be reported.

Airborne Fuel Vapors:

Fuel vapors are present in the UST's and within the gas tank of automotive vehicles. Vapors can be forced from both the UST's and a vehicles gas tank when fuel is added. Exposure to those vapors is controlled in two fashions:

Stage 1 Vapor Recovery. The United States EPA requires Stage I Vapor Recovery during the refueling of fuel tanks to reduce hydrocarbon emissions. Vapors in the tank, which are displaced by the incoming fuel, are routed through a hose into the cargo tanker, instead of being vented to the atmosphere. Vent caps seal vapors in the tank when pressure is equalized.



Onboard refueling vapor recovery system (ORVR). An ORVR is a vehicle fuel vapor emission control system that captures volatile organic compounds during refueling. An ORVR carbon-filled canister (installed on modern vehicles) is designed to capture fuel vapors displaced while refueling, and then to inject them into the intake manifold later on, so that they are burned along with the regular fuel during normal engine operation. In the United States, ORVR has been mandated on all passenger cars since the year 2000 and light trucks up to 10,000 lbs gross vehicle weight rating since 2006.

Table 168-2 – Permitted Uses by Zoning District

Use Types	R-1	R-2	R-3	MH	CC	UC	LI
Administration	C	C	C	C	P	P	P
Adult Entertainment							C
Agricultural Sales/Service					C		P
Alternative Energy Production Devices	C	C	C	C	C		P
Amateur Radio Tower	P	P	P	P	P	P	P
Animal Production							C
Auto Rental/Sales					P		P
Auto Services					P	C	P
Bars					P	P	P
Bed and Breakfast	C	C	C		P	P	
Body Repair					C		P
Broadcasting Tower					C		C
Business Support					P	P	P
Business/Trade School					P	P	P
Cemetery	C	C	C				
Civic Organizations	C	C	C	C	P	P	
College/University	C	C	C	C	P	C	
Commercial Breeders							P
Commercial Recreation (General)					C	C	P
Commercial Recreation (Limited)					P	P	P
Communications Services					P	P	P
Construction Batch Plant							P
Construction Sales/Service					P		P
Construction Yards							C
Consumer Services					P	P	P
In-Patient Services	C	C	C	C	P	C	
Convenience Storage					C		P
Crop Production							
Cultural Services	C	C	P	P	P	P	P
Custom Manufacturing					C	C	P
Day Care (General)	C	C	P	C	P	P	C
Day Care (Limited)	P	P	P	P	P	P	C

DRAFT

Use Types	R-1	R-2	R-3	MH	CC	UC	LI
Pawn Shop							C
Detention Facilities							C
Emergency Residential	C	C	C	C	P	P	C
Equipment Rental/Sales							P
Equipment Repair							P
Family Home	C	C	P	C		P	
Financial Services			C		P	P	P
Firework Sales							P
Food Sales (Convenience)					P	C	
Food Sales (General)					P	C	
Food Sales (Limited)					P	P	
Funeral Services		C	C		P	P	
Gaming Facility					C	C	
General Industry							C
General Offices			C		P	P	P
General Retail (Large-Scale)					P	C	
General Retail (Small-Scale)					P	P	
Group Care Facility	C	C	P	C	P	P	C
Group Home	C	C	P	P	P	P	
Guidance Services			C		P	P	P
Health Care (Large-Scale)			C		C	C	C
Health Care (Small-Scale)		C	C		P	P	P
Heavy Industry							C
Horticulture					C		
Landfill (Putrescible)							C
Landfill (Non-Putrescible)							C
Laundry Services					P	C	P
Liquor Sales					P	P	
Light Industry							P
Lodging					P	P	
Maintenance Facility							P
Manufactured Housing Residential	P	P	P	P			

DRAFT

Use Types	R-1	R-2	R-3	MH	CC	UC	LI
Medical Offices			C		P	P	P
Mobile Home Park				C			
Off-Street Parking					C	C	P
Parking Structure					C	P	P
Parks/Recreation	P	P	P	P	P	P	P
Pet Services					P	C	P
Postal Facilities					P	P	P
Primary Education	P	P	P	P	P	P	
Public Assembly	P	P	P	P	P	P	
Railroad Facilities							P
Recycling Collection					C		P
Recycling Processing							C
Repair Services							P
Research Services					P	P	P
Residential, Accessory Dwelling Unit	C	P	P				
Residential, Downtown						P	
Residential, Duplex	C	P	P			P	
Residential, Multi-Family		C	P		C	P	
Residential, Single-Family Detached	P	P	P	P		P	
Residential, Townhouse		C	P		C	P	
Resource Extraction							C
Restaurants (Drive-In)					P	C	P
Restaurants (General)					P	P	C
Retirement Residential	C	C	P	C		C	
Safety Services	C	C	P	P	P	P	P
Salvage Services							C
Secondary Education	C	C	C	C	P	P	
Surplus Sales					C	C	P
STVR (Short Term Vacation Rental)	P	P	P	P	P	P	
Trade Services					P	C	P
Transportation Terminal					P	C	P
Truck Terminal							C

DRAFT

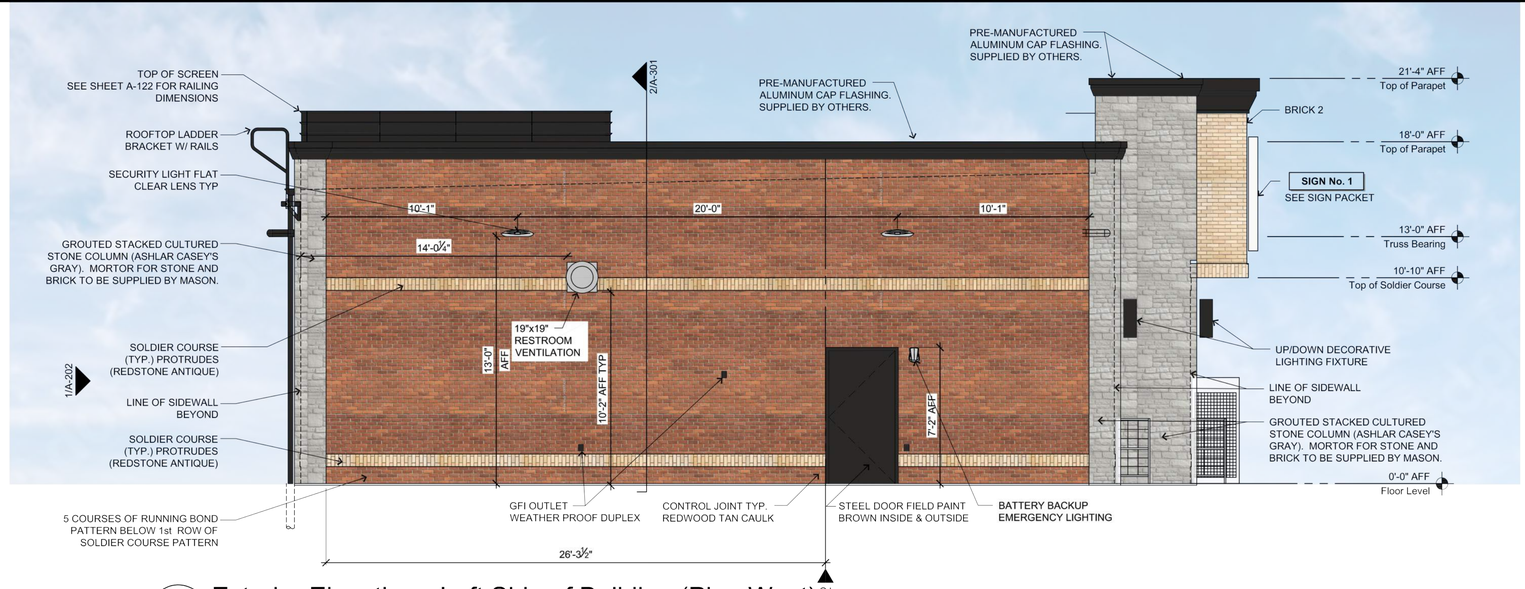
Use Types	R-1	R-2	R-3	MH	CC	UC	LI
Utilities	C	C	C	C	P	P	P
Vehicle Storage (Short-term)							P
Vehicle Storage (Long-term)							C
Veterinary Services					P	P	P
Warehousing							C

Note:

P = Uses Permitted by Right

C = Uses Permitted by Conditional Use permit approval according to Sec. 177.03.

Blank = Use Not Permitted



2 Exterior Elevation - Left Side of Building (Plan West)

1/4"=1'-0"



1 Exterior Elevation - Front of Building (Plan South)

1/4"=1'-0"

PRIMARY MATERIALS	FRONT	BACK	RIGHT	LEFT
GLASS	231 SF			
STONE	206 SF	44 SF	142 SF	142 SF
BRICK 1	982 SF	1098 SF	659 SF	659 SF
BRICK 2 (THIN SET)	469 SF		24 SF	24 SF
SECONDARY MATERIALS				
CONCRETE		379 SF		
METAL FLASHING	145 SF	60 SF	50 SF	50 SF
ACM PANELS				
TOTAL AREA OF ELEVATION	2,033 SF	1194 SF	902 SF	902 SF
PERCENT TOTAL OF BRICK (EXCLUSIVE OF GLASS)	80.52%	95.64%	75.72%	75.72%
PERCENT TOTAL OF REMAINING MATERIALS (EXCLUSIVE OF GLASS)	19.48%	4.36%	24.28%	24.28%

General Notes

1. REVIEW AND COORDINATE WITH ALL DETAIL PAGES REFERENCED ON THIS PLAN, NOTIFY ARCHITECT AND OWNER OF DISCREPANCIES
2. **RELATED DRAWING SHEETS**: REFER TO THE FOLLOWING:
   AL-101: FOR BUILDING LOCATION ON SITE
   AL-601: FOR INFORMATION RELATING TO SIGNAGE
   A-101: PRIMARY FLOOR PLAN FOR CONSTRUCTION LAYOUT
   A-121: ROOF PLAN/ROOF TOP EQUIPMENT
   A-601: DOOR & WINDOW SCHEDULES AND NOTES
   S-101: FOOTINGS AND FOUNDATIONS
   S-102: ROOF TRUSSES
3. **WORKING POINT**: THE WORKING POINT (***WP***) INDICATED ON THE DRAWINGS IS RELATIVE TO THE FACE OF SHEATHING ON THE EXTERIOR WALL AND IS A COMMON POINT OF REFERENCE WHERE EVER USED IN THESE DRAWINGS
4. ALL VENT PENETRATIONS ON BACK OF BACKSIDE OF ROOF.

OPTION 2

PELDS DESIGN SERVICES
Architecture | Engineering | Surveying
2323 Dixon Street, Des Moines, Iowa 50316 | P.O. Box 4626 Des Moines, Iowa 50305 | P: 515-265-8196 F: 515-266-2259
PELDS JOB NO. 22-201

Casey's

CASEY'S CONSTRUCTION DIVISION
One Convenience Blvd., P.O. Box 3001, Ankeny, Ia. 50021 515-965-6100

PROJECT: UNIVERSITY AVE. & 70TH ST. WINDSOR HEIGHTS, IA

PUBLISHED: 03/15/23
REVISED ON: 09/15/23

DRAWING INFORMATION: EXTERIOR ELEVATIONS

PROTOTYPE AND VERSION: 2023 - U4 - V.01
DRAWN BY: Arlon Goforth III
CHECKED BY: D. WILLRICH

A-201

SITE IMPROVEMENTS
FOR
CASEY'S STORE #4372
6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA

SITE ADDRESS
6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA 50324

SITE AREA
1.29 ACRES (56,374 SQ.FT.)

ZONING
EXISTING: UC
ADJACENT ZONING:
N: R1 E: UC S: UC W: UC

SETBACKS
FRONT SETBACK: 25
STREET SIDE SETBACK: 25
INTERIOR SIDE SETBACK: 0
REAR SETBACK: 10

BUILDINGS
EXISTING: 9,926 SQ. FT.
PROPOSED: ~ 42'-10" x 100'-10" - 4,569 SQ.FT.

BUILDING USES
RETAIL STORE

BUILDING HEIGHT
MAX BUILDING HEIGHT: 45'
PROPOSED HEIGHT: 25

MAX FLOOR AREA RATIO
1.00

PAVING
APPROACHES: 8" THICK NON REINFORCED P.C.C. WITH MINIMUM 6" CRUSHED ROCK SUBBASE***
PARKING LOT: 6" THICK NON REINFORCED P.C.C. WITH MINIMUM 6" CRUSHED ROCK SUBBASE**
CURB: 6" TALL STANDARD CURB
SIDEWALK 6" THICK P.C.C
UGST: 8" THICK REINFORCED P.C.C. WITH MINIMUM 6" CRUSHED ROCK SUBBASE***

***6" CRUSHED ROCK SUBBASE THAT COMPLIES WITH AASHTO M147 GRADE C OR GRADE D AND SUBGRADE THAT IS COMPACTED TO 95% STANDARD PROCTOR DENSITY. VERIFY SUBBASE DEPTH WITH ENGINEER PRIOR TO CONSTRUCTION.

MAXIMUM JOINT SPACING = PAVEMENT THICKNESS * 1.5 = 6 * 1.5 = 9 FT

OPEN SPACE
EXISTING: 24% (13,3 SQ.FT.)
PROPOSED: 30% (17,133 SQ.FT.)
REQUIRED: 20% (11,275 SQ. FT.)

IMPERVIOUS SPACE
EXISTING: 76% (42,844 SQ.FT.)
PROPOSED: 70% (39,241 SQ.FT.)

PARKING
REQUIRED:
10 SPACES (4,569 SQ.FT. BLDG. => 4,569 / 500 = 10)

PROPOSED:
15 SPACES (INCLUDING 1 HANDICAP PARKING STALL)
1 LOADING SPACE (12'X52')

SIGNS
PROPOSED CASEY'S 2-PRODUCT PYLON - NORTH OF WEST ENTRANCE
PROPOSED CASEY'S 2-PRODUCT PYLON - WEST OF SOUTH ENTRANCE

DISTURBED AREAS
ESTIMATED: 60,612 SQ.FT.
ALL DISTURBED AREAS SHALL BE SEEDED OR SODDED.
THE DISTURBED AREA FOR THIS SITE IS MORE THAN 1 ACRE, THEREFORE A NPDES PERMIT IS REQUIRED.

GEOTECHNICAL REPORT
REFERENCE REPORT #232040CWH COMPLETED 4/18/2023 BY CONSTRUCTION MATERIALS TESTING (CMT)

LEAKING UNDERGROUND STORAGE TANKS
THIS SITE IS NOT A LUST SITE

FLOODPLAIN
PER FEMA MAP #19153C0327F, THE SITE IS LOCATED IN ZONE X, AREA OF MINIMAL HAZARD

FAA
PER FAA NOTICE CRITERIA TOOL, SITE DOES NOT EXCEED NOTICE CRITERIA UP TO 100 FT HEIGHT (FOR POSSIBLE CRANE HEIGHT) AND THEREFORE FILING WITH THE FAA IS NOT REQUIRED

VICINITY MAP



SHEET INDEX

C-001 - COVER SHEET
C-002 - NOTE SHEET
C-003 - TOPO SHEET
C-100 - DEMO SHEET
C-101 - LAYOUT SHEET
C-103 - DIMENSION SHEET
C-201 - GRADING SHEET
C-301 - UTILITY SHEET
C-401 - EROSION CONTROL SHEET
C-501 - TRAFFIC CONTROL SHEET
C-601 - DETAIL SHEET
C-602 - DETAIL SHEET
C-603 - DETAIL SHEET
C-604 - DETAIL SHEET
C-701 - LANDSCAPING SHEET

LEGAL DESCRIPTION:
LOTS 40, 41, AND 42 OF MOTTS PLACE, AN OFFICAL PLAT, NOW INCLUDED IN AND FORMING A PART OF THE CITY OF WINDSOR HEIGHTS, POLK COUNTY, IOWA, EXCEPT THAT PART DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF LOT 41 OF SAID MOTT PLACE; THENCE ALONG THE SOUTH LINE OF SAID LOTS 41 AND 41 HAVING AN ASSUMED BEARING OF NORTH 90°00'00" WEST, A DISTANCE OF ONE HUNDRED NINETY FOUR AND NINETY FIVE HUNDRETHS (194.95) FEET; THENCE NORTH 00°13'53" WEST, A DISTANCE OF TWENTY (20.00) FEET; THENCE NORTH 90°00'00" WEST A DISTANCE OF FIVE (5.00) FEET TO A POINT ON THE WEST LINE OF SAID LOT 40; THENCE NORHT 00°13'53" WEST, A DISTANCE OF TWO HUNDRED SIXTY NINE AND FORTY FOUR HUNDRETHS (269.44) FEET; THENCE NORTH 90°00'00" EAST, A DISTANCE OF TEN (10.00) FEET; THENCE SOUTH 00°13'53" EAST, A DISTANCE OF TWENTY (20.00) FEET; THENCE NORTH 90°00'00" EAST, A DISTANCE OF ONE HUNDRED EIGHTY FIVE AND NENTY FOUR (185.94) FEET TO A POINT ON THE EAST LINE OF SAID LOT 41; THENCE SOUTH 00°13'53" EAST, A DISTANCE OF TEN (10.00) FEET TO THE POINT OF BEGINNING.

ITEM	QUANTITY INFORMATION*	UNITS
6" CONCRETE PAVEMENT	ON-SITE: 27,163 - OFF-SITE: NONE	SQ. FT.
8" REINFORCED CONCRETE PAVEMENT	1,353	SQ. FT.
8" CONCRETE PAVEMENT	ON-SITE/APPROACHES: 4,553 - OFF-SITE: NONE	SQ. FT.
CONCRETE CURB	912	LIN. FT.
SIDEWALK, NOT ADJACENT TO STORE	1,747	SQ. FT.
DETENTION SYSTEM	ADS UNDERGROUND - 13,438	CU. FT.
SEWER SERVICE	DIRECT BURY: 120 - BORE: NONE	LIN. FT.
WATER SERVICE	DIRECT BURY: 56 - BORE:NONE	LIN. FT.
8" HDPE STORM SERVICE	195	LIN. FT.
10" HDPE STORM SERVICE	157	LIN. FT.
12" HDPE STORM SERVICE	65	LIN. FT.
15" RCP STORM SERVICE	26	LIN. FT.
STRUCTURES - SW-512	1	EACH
STRUCTURES - NYLOPLAST BASIN WITH INTAKE	1	EACH
STRUCTURES - NYLOPLAST BASIN	1	EACH
STRUCTURES - STORM CLEANOUT	3	EACH
STRUCTURES - SANITARY CLEANOUT	1	EACH
STRUCTURES - WATER VALVE	1	EACH
EARTHWORK CUT & HAUL	1,077	CU. YD.
EARTHWORK CUT & RESPREAD	174	CU. YD.
TOPSOIL REQUIRED	327	CU. YD.
FENCING	180 - 6' OPAQUE	LIN. FT.
SOD AREA	17, 702	SQ. FT.
ASPHALT PAVEMENT DEMOLITION	29,577	SQ. FT.
CONCRETE PAVEMENT DEMOLITION	4,019	SQ. FT.
BUILDING DEMOLITION	DEMO BY PREVIOUS OWNER	SQ. FT.
TREE DEMOLITION	4	EACH
RETAINING WALL	270	VERT. SQ. FT

IN THE EVENT OF A DISCREPANCY BETWEEN THE QUANTITY ESTIMATES AND THE DETAILED PLANS, THE DETAILED PLANS SHALL GOVERN
CONTRACTOR TO PROVIDE A COMPLETE PROJECT PER THE CONSTRUCTION DOCUMENTS, QUANTITIES PROVIDED AS PART OF THIS SUMMARY ARE FOR REFERENCE PURPOSES ONLY AND ARE NOT A BASIS FOR CHANGE ORDER IF ADDITIONAL QUANTITY IS INSTALLED AS PART OF THE ORIGINAL BID DOCUMENTS

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WINDSOR HEIGHTS, IOWA 50324

CITY ENGINEER
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DES MOINES, IOWA 50309
CITY ENGINEER: JUSTIN ERNST
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CITY CONTACT
CITY OF WINDSOR HEIGHTS
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WINDSOR HEIGHTS, IOWA 50324
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(MET) METRO FIBERNET, LLC
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LEGEND:

F.F.	FINISHED FLOOR	△	CALCULATED SECTION CORNER	Ⓔ	ELEC. MANHOLE	▤	SINGLE INTAKE
+/-	MORE OR LESS	▲	FOUND SECTION CORNER	EV	ELEC. VAULT	◉	AREA INTAKE
123.45G	GUTTER ELEVATION	▷	PARKING SPACE	↓	GUY ANCHOR	▣	THROAT INTAKE
123.45TC	TOP OF CURB ELEVATION	○	SIGN	⊠	UTILITY PEDESTAL	◁	FLARED END SECTION
123.45/ 123.45	EXISTING/ PROPOSED ELEVATION	⊘	STREET LIGHT	TV	CABLE TV JUNCTION BOX	⊘	VALVE
FL	FLOWLINE ELEVATION	⌀	POWER POLE	⋈	GAS VALVE	⋈	FIRE HYDRANT
◔	CONTROL POINT	■	LIGHT POLE	GM	GAS METER	WM	WATER METER
○	CALCULATED CORNER	⊠	AREA LIGHT	Ⓢ	SANITARY SEWER MANHOLE	⋈	WATER VALVE
●	FOUND CORNER	ET	ELEC. TRANSFORMER	Ⓢ	STORM SEWER MANHOLE	⋈	WATER TEE
		EM	ELEC. METER	⬭	CLEANOUT	P XX	PROPOSED UTILITY LINE
		EB	ELEC. BOX	D	DOWNSPOUT	E XX	EXISTING UTILITY LINE

CATV	CABLE TELEVISION		
FO	FIBER OPTIC		
G	GAS LINE		
OHE	OVERHEAD ELEC.		
OHT	OVERHEAD TEL.		
SAN	SANITARY SEWER		
ST	STORM SEWER		
UGE	UNDERGROUND ELEC.		
UGT	UNDERGROUND TEL.		
W	WATER		
	FENCE LINE		

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.

VOLDEMARS L. PELDS, P.E. IA. LIC. NO. 18842 DATE

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2025

ADDITIONAL PAGES OR SHEETS COVERED BY THIS SEAL (NONE UNLESS INDICATED HERE): C-001 - C-701

PELDS DESIGN SERVICES
Architecture | Engineering | Surveying
2323 Dixon Street, Des Moines, Iowa 50316 | PO Box 4626, Des Moines, Iowa 50305 | Ph: 515 265 8196

TITLE:
CASEY'S STORE #4372
6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA

BENCHMARK:
REVISIONS: PRELIMINARY

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C-001 - COVER SHEET

CIVIL ENGINEERING NOTES
FOR
CASEY'S STORE #4372
6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA

GENERAL NOTES

1. THE CITY OF WINDSOR HEIGHTS MUST BE NOTIFIED BY ALL CONTRACTORS 48 HOURS PRIOR TO COMMENCING WORK.
2. ALL PROPOSED MATERIALS AND STRUCTURES SHALL BE APPROVED BY THE CITY OF WINDSOR HEIGHTS AND BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS
3. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT O.S.H.A. CODES AND STANDARDS. NOTHING INDICATED ON THESE PLANS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE APPROPRIATE SAFETY REGULATIONS.
4. ALL NECESSARY CONSTRUCTION SIGNS, BARRICADES AND OTHER TRAFFIC CONTROL DEVICES REQUIRED DURING CONSTRUCTION WILL BE FURNISHED BY THE CONTRACTOR. SIGNS, BARRICADES, AND OTHER TRAFFIC CONTROL DEVICES MUST BE IN CONFORMANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS."
5. PELDS DESIGN SERVICES SHALL NOT BE LIABLE FOR ANY INJURIES THAT HAPPEN ON SITE. THIS SHALL INCLUDE BUT NOT BE LIMITED TO TRENCH COLLAPSES FROM VARYING SOIL CONDITIONS OR INJURIES CAUSED BY UNDERGROUND UTILITIES INCLUDING UTILITIES THAT ARE NOT SHOWN ON PLAN.
6. THE CONTRACTOR IS LIABLE FOR ALL DAMAGES TO PUBLIC OR PRIVATE PROPERTY CAUSED BY THEIR ACTION OR INACTION IN PROVIDING FOR STORM WATER FLOW DURING CONSTRUCTION. DO NOT RESTRICT FLOWS IN EXISTING DRAINAGE CHANNELS, STORM SEWER, OR FACILITIES.
7. IF A PRE-CONSTRUCTION MEETING IS REQUIRED PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THIS MEETING.
8. LABORATORY TESTS SHALL BE PERFORMED BY THE OWNER UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PROVIDE SAMPLES OF MATERIAL REQUIRED FOR LABORATORY TESTS AND TESTING IN ACCORDANCE WITH THE URBAN STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
9. THE CONTRACTOR SHALL PROTECT ALL STRUCTURES NOT SHOWN AS REMOVALS ON THE PLANS.
10. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS PRIOR TO ANY CONSTRUCTION. CONTRACTOR SHALL WORK WITH OWNER OR OWNER'S REPRESENTATIVE ON ALL REQUIRED STORM WATER DISCHARGE PERMITS FROM THE IOWA DEPARTMENT OF NATURAL RESOURCES AND THE CITY OF WINDSOR HEIGHTS.
11. THE CONTRACTOR SHALL PICK UP ANY DEBRIS SPILLED ONTO THE ADJACENT RIGHT OF WAY OR ABUTTING PROPERTIES AS THE RESULT OF CONSTRUCTION, AT THE END OF EACH WORK DAY.
12. THE CONTRACTOR IS RESPONSIBLE FOR THE PROMPT REMOVAL OF ALL MUD THAT HAS BEEN TRACKED OR WASHED UNTO ADJACENT PROPERTY OR RIGHT OF WAY UNTIL SUCH TIME THAT PERMANENT VEGETATION HAS BEEN ESTABLISHED.
13. DISPOSE OF ALL EXCESS MATERIALS AND TRASH IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS. PROVIDE WASTE AREAS OR DISPOSAL SITES OR EXCESS MATERIALS NOT DESIRABLE FOR INCORPORATION INTO THE PROJECT.
14. ALL CONSTRUCTION WITHIN THE PUBLIC R.O.W/EASEMENTS, AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS SHALL COMPLY WITH THE CITY OF WINDSOR HEIGHTS.
15. THE CONTRACTOR SHALL CONTACT THE CITY OF WINDSOR HEIGHTS TO SCHEDULE ANY REQUIRED INSPECTIONS AT LEAST ONE WEEK PRIOR TO ANY CONSTRUCTION WITHIN PUBLIC R.O.W/EASEMENTS, AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS
16. IN THE EVENT OF ANY CONFLICTING NOTES BETWEEN THE COVER SHEET AND ALL OTHER SHEETS, THE NOTES ON THE COVER SHEET SHALL SUPERCEDE ALL OTHERS
17. IN THE EVENT OF ANY CONFLICTING INFORMATION BETWEEN THE LABEL, ELECTRONIC CAD FILE, AND THE ELECTRONIC SURFACE, THE DESIGN ENGINEER SHALL BE CONTACTED FOR CLARIFICATION
18. THE CITY OF WINDSOR HEIGHTS HAS NO SPECIFIC REQUIREMENTS FOR TANK BALLAST WATER

SURVEY NOTES

1. SURVEY WORK WAS COMPLETED BY PELDS DESIGN SERVICES IN NOVEMBER 2022. SEE SITE SURVEY PROVIDED AS PART OF THIS SET OF PLANS FOR EXISTING SITE CONDITIONS AND BOUNDARY INFORMATION.

STAKING NOTES

1. IT IS RECOMMENDED FOR THE CONTRACTOR TO HAVE ALL STAKING DONE UNDER THE SUPERVISION OF A LICENSED LAND SURVEYOR AND IN COORDINATION WITH THE PROJECT ENGINEER.
2. IT IS RECOMMENDED FOR THE CONTRACTOR TO HAVE ALL STAKING DONE DIRECTLY UNDER THE GENERAL CONTRACTOR BY A SINGLE COMPANY.
3. STAKING DOES NOT RELIEVE CONTRACTOR OF ULTIMATE RESPONSIBILITY TO CONSTRUCT THE PROJECT PER PLAN.

DEMO NOTES

1. SAWCUT & REMOVE ALL PAVEMENT TO FULL DEPTH OF SLAB.
2. PROTECT ALL TREES NOT CALLED OUT FOR REMOVAL WITH ORANGE CONSTRUCTION FENCE AT THE DRIP LINE.
3. PAVEMENT STRIPING CALLED OUT FOR REMOVAL SHALL BE SANDBLASTED. NO GRINDING WILL BE ALLOWED.
4. PROPERLY DISCONNECT ALL PUBLIC AND PRIVATE UTILITIES, AS NECESSARY.
5. COMPLY WITH LOCAL, STATE, AND FEDERAL REGULATIONS TO REMOVE AND PROPERLY DISPOSE OF SIDEWALKS, STEPS, DRIVEWAYS, AND STRUCTURES (INCLUDING BOTH ABOVE GROUND AND BELOW GROUND ELEMENTS).
6. COMPLY WITH LOCAL, STATE, AND FEDERAL REGULATIONS TO REMOVE FUEL TANKS, SEPTIC TANKS, CISTERNS, AND ANY OTHER UNDERGROUND FACILITIES; AND TO PROPERLY DISPOSE OF ANY LIQUIDS OR PRODUCTS CONTAINED WITHIN THESE ITEMS.
7. PLACE BACKFILL MATERIAL IN HOLES AND DEPRESSIONS, GRADE THE SITE, AND ESTABLISH GROUND COVER.
8. PROTECT EXISTING FIRE HYDRANTS, STREET LIGHTS, TRAFFIC SIGNALS, UTILITY POLES, FIRE ALARM BOXES, WIRE CABLES, UNDERGROUND UTILITIES, AND OTHER APPURTENANCES IN THE VICINITY OF THE DEMOLITION SITE
9. COMPLY WITH NOISE POLLUTION REQUIREMENTS AND ANY WORKING HOUR RESTRICTIONS OF THE JURISDICTION.
10. MAINTAIN OR RE-ESTABLISH ALL TILES, ROADWAY SUBDRAINS, CULVERTS, OR OTHER DRAINAGE FACILITIES NOT IDENTIFIED IN THE CONTRACT DOCUMENTS FOR REMOVAL.
11. IMPLEMENT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN FOR EACH SITE PRIOR TO INITIATING DEMOLITION BY PLACING ALL REQUIRED DEVICES; INCLUDE MEASURES TO PREVENT TRACKING OF MUD ONTO ADJACENT STREETS OR ALLEYS.
12. COMPLY WITH ALL APPLICABLE AIR POLLUTION REQUIREMENTS OF THE JURISDICTION. USE WATER OR APPROPRIATE CHEMICALS FOR CONTROL OF DUST IN THE DEMOLITION AREA, ON HAULING EQUIPMENT, ON ADJACENT ROADWAYS, AND WHEN GRADING THE SITE.
13. TAKE STEPS TO PREVENT THE GENERATION OF LITTER DURING DEMOLITION AND COLLECT ALL LITTER FROM THE DEMOLITION AREA AT THE END OF EACH WORKING DAY. LOAD TRUCKS TO PREVENT LEAKAGE OR BLOWING OF DEBRIS.
14. REMOVE ALL CONCRETE, ASPHALT, OR MASONRY SLABS AND APPURTENANCES.
15. REMOVE AND DISPOSE OF ALL BRUSH, SHRUBS, TREES, LOGS, DOWNED TIMBER, AND OTHER YARD WASTE ON THE SITE UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS. DO NOT MIX WITH DEMOLITION MATERIAL. REMOVE STUMPS TO A MINIMUM OF 2 FEET BELOW FINISH GRADE. PROTECT ANY TREES OR OTHER VEGETATION NOT DESIGNATED FOR REMOVAL BY PLACING A FENCE AT THE DRIP LINE ENCOMPASSING THE ENTIRE TREE AND KEEPING ALL OPERATIONS OUTSIDE OF THE FENCED IN AREA, INCLUDING STORAGE OF EQUIPMENT OR MATERIALS. AT NO ADDITIONAL COST TO THE CONTRACTING AUTHORITY, REPLACE ANY TREES THAT ARE DESIGNATED FOR PROTECTION BUT ARE DAMAGED BEYOND TREATMENT. THE ENGINEER WILL DETERMINE SIZE AND SPECIES OF THE REPLACEMENT TREE.
16. SAW-CUT ALL HARD SURFACING AT LOCATION OF REMOVAL LIMITS.
17. WHERE SELECTIVE DEMOLITION IS SHOWN AT PAVED AREAS, DEMOLISH THE EXISTING PAVING BACK TO AN EXISTING CONTROL JOINT NEAR THE LOCATION SHOWN.

WETLAND NOTES

1. PELDS DESIGN SERVICES DOES NOT PERFORM WETLAND STUDIES OR WETLAND MITIGATION. IT IS THE OWNER'S RESPONSIBILITY TO DETERMINE IF ANY WETLANDS ARE LOCATED ON THE PROJECT SITE AND PERFORM ANY NECESSARY MITIGATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

DISCLAIMER

1. THIS DRAWING IS BEING MADE AVAILABLE BY PELDS DESIGN SERVICES (P.D.S.) FOR USE ON THIS PROJECT IN ACCORDANCE WITH P.D.S.'S AGREEMENT FOR PROFESSIONAL SERVICES. P.D.S. ASSUMES NO RESPONSIBILITY OR LIABILITY (CONSEQUENTIAL OR OTHERWISE) FOR ANY USE OF THESE DRAWINGS (OR ANY PART THEREOF) EXCEPT IN ACCORDANCE WITH THE TERMS OF SAID AGREEMENT.
2. P.D.S DISCLAIMS ANY AND ALL LIABILITY OR RESPONSIBILITY FOR INFORMATION THAT DOES NOT BEAR THE ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL IN CHARGE.

UTILITY NOTES

1. QUANTITY CALLOUTS ON PIPE LENGTHS ARE APPROXIMATE AND SHOULD BE USED FOR REFERENCE ONLY.
2. PIPE LENGTHS CALLED OUT ON PLANS DO NOT INCLUDE FLARED END SECTION, WHERE APPLICABLE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL UTILITIES. ANY DAMAGE TO SAID UTILITIES SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTORS EXPENSE.
4. THE CONTRACTOR SHALL RELOCATE EXISTING UTILITIES AS NECESSARY, SHOWN OR NOT SHOWN.
5. THE CONTRACTOR SHALL COORDINATE WITH THE CITY ON ALL SIZE, DEPTHS, AND MATERIALS OF ALL PROPOSED UTILITIES.
6. THE CONTRACTOR MUST PROVIDE AS-BUILTS OF ALL UTILITIES, INCLUDING DEPTH AND LOCATION OF ALL SERVICES IF REQUIRED BY CITY.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE APPROPRIATE UTILITY COMPANIES PRIOR TO CONNECTION OR DISCONNECTION OF A SERVICE LINE.
8. CONTRACTOR IS TO COMPLY WITH THE LATEST SUDAS SPECIFICATIONS FOR MAINTENANCE, INSTALLATION, AND TESTING FOR CONSTRUCTION.
9. THE CONTRACTOR SHALL COORDINATE THE ADJUSTMENT OF ANY AND ALL EXISTING AND PROPOSED UTILITIES TO PROPOSED GRADES. EXISTING UTILITIES SHALL BE RAISED OR LOWERED IN ACCORDANCE WITH THE UTILITY OWNER REQUIREMENTS. ANY NECESSARY ADJUSTMENTS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
10. ACTIVE EXISTING FIELD TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE REPAIRED, REROUTED, OR CONNECTED TO PUBLIC OR PRIVATE STORM SEWER TO REMAIN IN SERVICE. THE TILE SHOULD BE DIRECTED TO PUBLIC STORM SEWER IF POSSIBLE. THE CONTRACTOR SHALL RECORD THE ELEVATION AND LOCATION OF ALL TILES.
11. ALL RIP RAP CALLED OUT ON PLANS SHALL BE UNDERLAIN WITH ENGINEERING FABRIC.
12. ALL STRUCTURE SIZES CALLED OUT ON PLANS ARE MINIMUM INSIDE WALL DIMENSIONS.
13. ALL PROPOSED UTILITIES SHALL BE PRIVATE, UNLESS NOTED OTHERWISE.
14. ALL STRUCTURES CALLED OUT AS "MODIFIED" OR "SPECIAL" SHALL BE ENGINEERED BY THE PRECASTER TO ENSURE STRUCTURE STABILITY. MODIFICATIONS INCLUDE ADDITIONAL WALL LENGTH TO ACCOUNT FOR LARGE PIPE DIAMETERS AND ADDITIONAL WALL WIDTH & BASE DEPTH TO ACCOUNT FOR DEEPER STRUCTURES. ANY AND ALL MODIFICATIONS TO STANDARD STRUCTURES SHALL BE CONSIDERED INCIDENTAL TO BID

ELECTRICAL SERVICE NOTES

15. ALL SITE LIGHTING SHALL NOT SPILL ONTO ADJACENT PROPERTIES OR RIGHT-OF-WAYS
16. TRANSFORMER PAD IS SHOWN FOR REFERENCE ONLY AND MAY NOT BE DRAWN TO ACTUAL SIZE. PAD SHALL CONFORM TO ALL UTILITY COMPANY DESIGN STANDARDS AND SPECIFICATIONS.

SANITARY SERVICE NOTES

17. SANITARY SEWER SERVICE CONNECTIONS SHALL BE PLACED AT A SLOPE OF NO LESS THAN 2% FOR A 4" PIPE AND 1% FOR A 6" PIPE. SERVICES SHALL MAINTAIN 18" OF VERTICAL SEPARATION FROM THE WATER MAIN WITH 18" OF COMPACTED LOW PERMEABILITY SOIL BETWEEN THE UTILITIES WITHIN 10' OF THE CROSSING.

STORM WATER SERVICE NOTES

18. ALL STORM SEWER IN THE ROW SHALL BE RCP (CLASS III RCP), UNLESS OTHERWISE SPECIFIED.
19. ALL PROPOSED RCP STORM SEWER PIPE JOINTS SHALL BE FABRIC WRAPPED AND THE LAST 3 PIPE SECTIONS ON THE APRON SHALL BE TIED WITH RF-14 TYPE II CONNECTORS. ALL APRONS SHALL HAVE A STANDARD FOOTING AND TRASH GUARD.
20. ALL SUMP SERVICE LINES SHALL HAVE TRACE WIRE

WATER SERVICE NOTES

21. WATER SERVICE SHALL BE TYPE K COPPER, DIP OR HDPE, DEPENDING ON SIZE AND JURISDICTIONAL REQUIREMENTS. IF CONTAMINATED OR "HOT" SOILS, ENSURE APPROPRIATE PIPE IS BEING UTILIZED. SIZE OF WATER MAIN AS SHOWN ON PLANS.
22. TRACER WIRE SHALL BE ADDED TO ALL WATER MAIN, AND BROUGHT TO THE SURFACE AT EVERY HYDRANT.
23. THRUST BLOCKS SHALL BE INSTALLED AS REQUIRED AND SHALL BE CONSIDERED INCIDENTAL TO WATER MAIN CONSTRUCTION.
24. ANY AND ALL HYDRANT AND VALVE EXTENSIONS, TOGETHER WITH VERTICAL BENDS, SHALL BE CONSIDERED INCIDENTAL TO WATER MAIN CONSTRUCTION. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR INCIDENTAL ITEMS.
25. ALL WATER LINES SHALL HAVE A MINIMUM OF 5.5 FEET OF COVER UNLESS NOTED OTHERWISE.

EXISTING UTILITIES NOTE

1. THE LOCATIONS OF THE EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE. THEY HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND/OR RECORDS. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ANY EXISTING UTILITIES (SHOWN OR NOT SHOWN) ARE NOT DAMAGED DURING CONSTRUCTION: IOWA ONE-CALL (1-800-292-8989).

UTILITY CONFLICT NOTES

1. UTILITY CONFLICTS MAY EXIST ACROSS THE SITE WITH NEW UTILITIES, GRADING, PAVING ETC. MOST UTILITY CONFLICTS HAVE BEEN CALLED OUT FOR CONTRACTOR CONVENIENCE.
2. CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY CONFLICTS BETWEEN AN EXISTING UTILITY AND PROPOSED CONSTRUCTION THAT ARE EITHER CALLED OUT ON THE PLANS OR NOT CALLED OUT.
3. CONTRACTOR SHALL COMPLY WITH ALL DNR REQUIREMENTS FOR PIPE MATERIAL, PIPE JOINTS, AND ANY OTHER APPLICABLE REQUIREMENTS ANY TIME A STORM SEWER OR SANITARY SEWER CROSSES OVER OR LESS THAN 18" BELOW A WATER MAIN.
4. FOR ALL CRITICAL CROSSINGS WITH EXISTING UTILITIES, THE ELEVATION OF THE EXISTING UTILITY SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. NOTIFY PELDS DESIGN SERVICES PRIOR TO CONSTRUCTION IF A CONFLICT EXISTS.

SPECIFICATIONS NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST VERSION OF THE URBAN STANDARDS SPECIFICATIONS FOR PUBLIC IMPROVEMENTS ON THE DATE OF APPROVAL AND THE CITY OF WINDSOR HEIGHTS SUPPLEMENTAL SPECIFICATIONS.
2. IN THE EVENT OF A DISCREPANCY BETWEEN THE PROJECT SPECIFICATIONS AND THE CITY OF WINDSOR HEIGHTS REQUIREMENTS AND SPECIFICATIONS, PLUMBING CODE, AND URBAN STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENT, THE CITY OF WINDSOR HEIGHTS STANDARD SPECIFICATIONS SHALL GOVERN.
3. FOR ALL SPECIFICATION DISCREPANCIES, THE PROJECT ENGINEER SHALL BE CONTACTED PRIOR TO PROCEEDING WITH CONSTRUCTION. IF THE ENGINEER IS NOT CONTACTED, CONTRACTOR SHALL BE RESPONSIBLE FOR ANY PROBLEMS THAT RESULT FROM SAID DISCREPANCIES.

REQUIRED AS-BUILT NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COST OF AS-BUILT TOPO, IF REQUIRED BY CITY.
2. CONTRACTOR SHALL CONTACT PELDS DESIGN SERVICES TO PERFORM SAID AS-BUILT SURVEYS.
3. IF ANYTHING HAS BEEN CONSTRUCTED INCORRECTLY, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SUBSEQUENT AS-BUILT SURVEYS UNTIL ISSUES HAVE BEEN RECTIFIED.

PAVING NOTES

1. THE PAVING/ GRADING CONTRACTOR SHALL BACKFILL THE PAVING SLAB AND FINE GRADE THE RIGHT OF WAY AS SOON AFTER THE PAVING AS POSSIBLE. ALL AREAS SHALL BE SODDED IN ACCORDANCE WITH CITY OF WINDSOR HEIGHTS SPECIFICATIONS AND THE LATEST VERSION OF SUDAS.
2. SEE DETAILS FOR ALL PAVEMENT THICKNESS.
3. DETECTABLE WARNING PANEL(S) CALLED OUT ON PLANS SHALL BE PER A.D.A. REGULATIONS. PANEL TYPE & COLOR SHALL BE PER CITY STANDARD.
4. SIDEWALKS SHALL HAVE EXPANSION JOINTS AT 100 FOOT INTERVALS AS REQUIRED BY CITY CODE
5. ALL WALKS, PARKING LOTS, HANDICAP PARKING, RAMPS, ETC. SHALL COMPLY WITH ALL A.D.A. AND CITY CODES. HANDICAP PARKING SIGNAGE IS REQUIRED FOR ALL HANDICAP STALLS AND SHALL BE CONSIDERED INCIDENTAL. IN EVENT OF A DISCREPANCY BETWEEN THE PLANS AND THE A.D.A./CITY CODES THE A.D.A./CITY CODES SHALL GOVERN. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING A.D.A. CODES ARE MET.

PAVEMENT SAWCUT NOTES

1. CONTRACTOR TO PROVIDE SAWCUT JOINTING PLAN PRIOR TO ANY CONCRETE PAVEMENT INSTALLATION.
2. PAVEMENT MAY BE REQUIRED TO BE REMOVED AND REPLACED IF PLACED WITHOUT AN APPROVED PLAN.
3. LONGITUDINAL JOINTS IN DRIVE LANES & THE OUTER MOST JOINT OF ALL PARKING AREAS SHALL BE SUDAS TYPE 'L-1' OR 'L-2' JOINTS AND HAVE STEEL. INTERIOR PARKING LOT JOINTS, OTHER THAN THE OUTER MOST JOINT, DO NOT NEED STEEL AND SHALL BE SUDAS TYPE 'B' OR TYPE 'K' JOINTS. ALL TRANSVERSE JOINTS SHALL BE SUDAS TYPE 'C' OR TYPE 'DW' JOINTS WITH STEEL IN THE CASE OF A DAY'S WORK JOINT.

SOIL NOTES

1. STRIP AND STOCKPILE THE TOP 8 INCHES OF SOIL ON ALL DISTURBED AREAS. GRADING CONTRACTOR SHALL STOCKPILE TOPSOIL FOR SHOULDERING.
2. SOD REQUIREMENT PER SUDAS: IN AREAS WHERE TOPSOIL HAS BEEN STRIPPED, A SODBED SHOULD BE CONSTRUCTED BY SPREADING A MINIMUM OF 6 INCHES OF TOPSOIL PRIOR TO SODDING. DEEPER TOPSOIL DEPTHS (8 TO12 INCHES OR GREATER) ARE DESIRABLE AS THEY INCREASE THE ORGANIC MATTER AVAILABLE FOR USE BY THE PLANTS, ALLOW FOR DEEPER ROOT PENETRATION AND INCREASE THE MOISTURE HOLDING ABILITY OF THE SOIL.
3. PERMANENT SEED REQUIREMENT PER SUDAS: IN ORDER TO PROVIDE AN ADEQUATE GROWING MEDIUM, A MINIMUM OF 8 INCHES OF TOPSOIL SHOULD BE PLACED OVER THE DISTURBED AREA PRIOR TO SEEDING. DEEPER TOPSOIL DEPTHS (8-12 INCHES OR GREATER) ARE DESIRABLE AS THEY INCREASE THE ORGANIC MATTER AVAILABLE FOR USE BY THE PLANTS, ALLOW FOR DEEPER ROOT PENETRATION AND INCREASE THE MOISTURE HOLDING ABILITY OF THE SOIL.
4. TOPSOIL SHALL BE FREE OF ALL ROCK AND DEBRIS LARGER THAN 3/4" IN SIZE.
5. TOPSOIL IS DEFINED AS: FERTILE, FRIABLE LOAM, CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH, FROM WELL DRAINED SITE FREE FROM FLOODING, NOT IN FROZEN OR MUDDY CONDITIONS; REASONABLE FREE FROM SUBSOIL, CLAY LUMPS, ROOTS, GRASS, WEEDS, STONES LARGER THAN 3/4 INCH IN DIAMETER, AND FOREIGN MATTER; ACIDITY RANGE (PH) OF 5.5 TO 7.5; CONTAINING MINIMUM 4 PERCENT AND MAXIMUM 20 PERCENT ORGANIC MATTER.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL TOPSOIL REQUIREMENTS OF NPDES GENERAL PERMIT NO. 2 ARE MET.
7. REFERENCE GEOTECHNICAL REPORT FOR ADDITIONAL SOILS INFORMATION INCLUDING BUT NOT LIMITED TO SUBGRADE INFORMATION, FOOTING DESIGN, AND ANY POSSIBLE OVER EXCAVATION DUE TO POOR SOILS. PAVEMENT SECTIONS ON THE PLANS GOVERN OVER PAVEMENT THICKNESS IN THE SOILS REPORT.

GRADING NOTES

1. AREAS TO RECEIVE STRUCTURAL FILL SHALL BE BENCHED. STRUCTURAL FILL SHALL BE COMPACTED TO A DENSITY THAT IS NOT LESS THAN 95% STANDARD PROCTOR.
2. PREPARE BOTTOM OF BENCH FOR FILL BY DISKING TO A DEPTH OF 12 INCHES AND COMPACT. ANY LOCALIZED AREAS WHICH CANNOT BE SATISFACTORILY COMPACTED OR WHICH SHOW EVIDENCE OF PUMPING ACTION SHALL BE UNDERCUT AND RE-COMPACTED WITH ON-SITE FILL MATERIALS.
3. ALL AREAS WHICH ARE TO RECEIVE PAVING SHALL HAVE THE TOP 12 INCHES DISKED AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
4. MAINTAIN ALL CUT AND FILL AREAS TO ACCOMMODATE SURFACE DRAINAGE.
5. FINISH GRADE ON ALL NON-PAVED AREAS SHALL BE WITHIN 0.20 FT, AND PAVED AREAS SHALL BE WITHIN 0.10 FT OF THE PROPOSED GRADES SHOWN ON THE PLAN
6. MAXIMUM ALLOWABLE GRADE ON ALL PROPOSED SLOPES IS 3:1.
7. THE MOISTURE CONTENT SHALL NOT DEVIATE FROM THE OPTIMUM BY MORE THAN 2% IN STRUCTURAL FILL.
8. MAXIMUM 2% CROSS-SLOPE ON ALL SIDEWALKS.
9. GRADING AND EROSION CONTROL SHALL BE DONE IN ACCORDANCE WITH THE APPROVED GRADING PLAN, SWPPP, NPDES DOCUMENTS, AND IOWA DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS.

LANDSCAPING NOTES

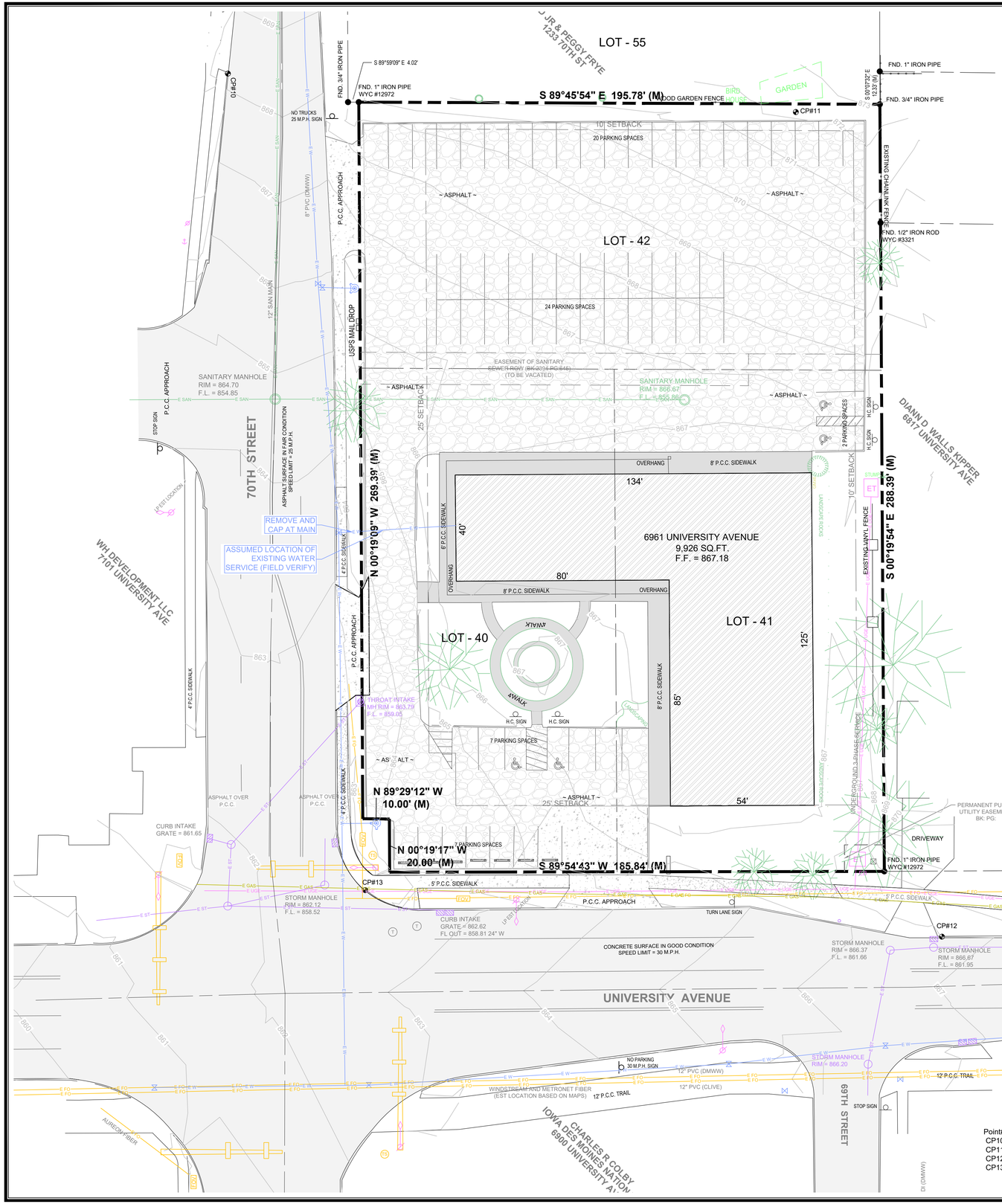
1. ALL SODDING & LANDSCAPE PLANTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE URBAN STANDARD SPECIFICATIONS, UNLESS SPECIFIED OTHERWISE.
2. SEED OR SOD ALL DISTURBED AREAS WITHIN THE CONTRACT LIMITS, UNLESS NOTED OTHERWISE. SOD LIMITS SHOWN ON PLAN ARE FOR REFERENCE ONLY. FINAL LIMITS MAY CHANGE BASED ON CONSTRUCTION ACTIVITIES. SEED ALL DISTURBED AREAS OFF-SITE
3. STAKE SOD ON ALL SLOPES 4:1 OR GREATER.
4. PLANT QUANTITIES ARE FOR CONTRACTORS CONVENIENCE, THE DRAWING SHALL PREVAIL IF A CONFLICT OCCURS.
5. ALL PLANT MATERIAL SHALL CONFORM TO THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1).
6. CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE.
7. CONTRACTOR SHALL PLACE SHREDDED HARDWOOD MULCH OR BRICK CHIPS OR WASHED STONE AROUND ALL TREES, SHRUBS AND GROUND COVER BEDS TO A DEPTH OF 4 INCHES, UNLESS NOTED.
8. PROVIDE 6MIL MINIMUM PLASTIC BELOW ROCK/BRICK.
9. THE LANDSCAPING CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED BEFORE STARTING ANY SITE WORK OR PLANTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES.
10. CONTRACTOR SHALL BE RESPONSIBLE MAINTAINING APPROPRIATE LEVEL OF WATERING FOR ALL NEW PLANTS FOR A PERIOD OF 30 DAYS.
11. CONTRACTOR SHALL DESIGN AND PROVIDE IRRIGATION SYSTEM. COORDINATION WITH ARCHITECT REQUIRED.
12. ALL BEDS TO RECEIVE GRANULAR PRE-EMERGENT WEED CONTROL BEFORE AND AFTER MULCH IS INSTALLED.

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6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA

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C-002 - NOTE SHEET



Point#	North	East	Elevation	Description
CP10:	583503.565	1582130.005	868.533	CUT-X
CP11:	583489.079	1582343.416	872.326	CONTROL CAP
CP12:	583179.092	1582398.289	867.109	CUT-X
CP13:	583196.586	1582181.659	862.831	CUT-X

EXISTING PAVEMENT
ASPHALT
PCC
BUILDING
SIDEWALK

−20 0 20 40
Scale in Feet
1" = 20'

LEGEND:

+/-	MORE OR LESS	E	ELEC. MANHOLE
F.F.	FINISHED FLOOR	S	SANITARY SEWER MANHOLE
123.45G	GUTTER ELEVATION	ST	STORM SEWER MANHOLE
123.45TC	TOP OF CURB ELEVATION	T	TRAFFIC MANHOLE
123.45/ 123.45	EXISTING/ PROPOSED ELEVATION	C	CLEANOUT
FL	FLOWLINE ELEVATION	D	DOWNSPOUT
	CONTROL POINT		AREA INTAKE
	CALCULATED CORNER		SINGLE INTAKE
	FOUND CORNER		THROAT INTAKE
	CALCULATED SECTION CORNER		FLARED END SECTION
	FOUND SECTION CORNER		GAS VALVE
	PARKING SPACE		FIRE HYDRANT
	SIGN		WATER VALVE
	STREET LIGHT	P XX	PROPOSED UTILITY LINE
	POWER POLE	E XX	EXISTING UTILITY LINE
	LIGHT POLE	CATV	CABLE TELEVISION
	AREA LIGHT	FO	FIBER OPTIC
	GUY ANCHOR	GAS	GAS LINE
	UTILITY PEDESTAL	OHE	OVERHEAD ELEC.
ET	ELEC. TRANSFORMER	OHT	OVERHEAD TEL.
EM	ELEC. METER	SS	SANITARY SEWER
EB	ELEC. BOX	ST	STORM SEWER
EV	ELEC. VAULT	UGE	UNDERGROUND ELEC.
FOV	FIBER OPTIC VAULT	UGT	UNDERGROUND TEL.
GM	GAS METER	W	WATER
TV	CABLE TV JUNCTION BOX		FENCE LINE
WM	WATER METER		

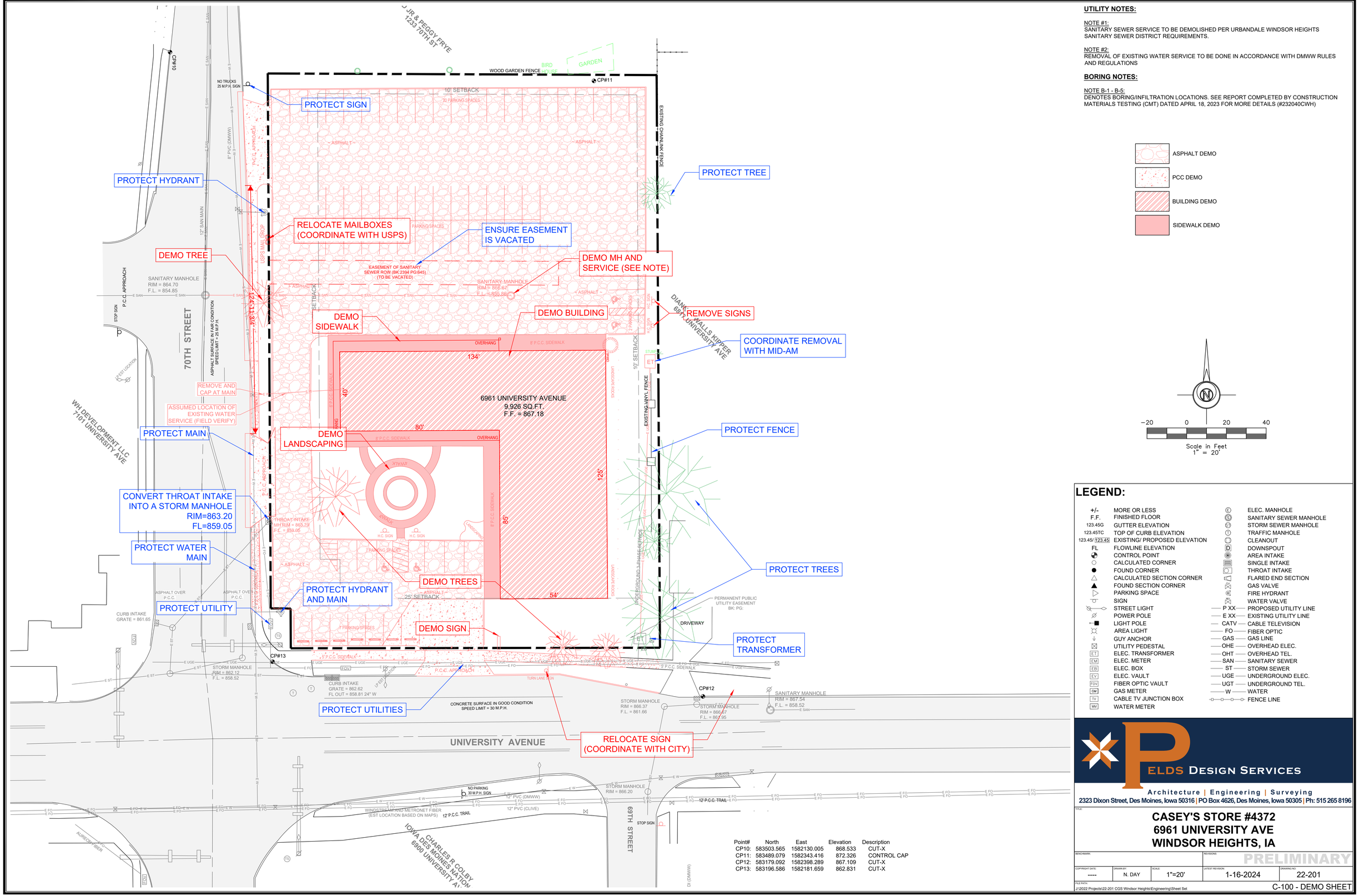
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C-003 - TOPO SHEET



UTILITY NOTES:

NOTE #1:
SANITARY SEWER SERVICE TO BE DEMOLISHED PER URBANDALE WINDSOR HEIGHTS SANITARY SEWER DISTRICT REQUIREMENTS.

NOTE #2:
REMOVAL OF EXISTING WATER SERVICE TO BE DONE IN ACCORDANCE WITH DMWW RULES AND REGULATIONS

BORING NOTES:

NOTE B-1 - B-5:
DENOTES BORING/INFILTRATION LOCATIONS. SEE REPORT COMPLETED BY CONSTRUCTION MATERIALS TESTING (CMT) DATED APRIL 18, 2023 FOR MORE DETAILS (#232040CWH)

- ASPHALT DEMO
- PCC DEMO
- BUILDING DEMO
- SIDEWALK DEMO

−20 0 20 40
Scale in Feet
1" = 20'

LEGEND:

+/-	MORE OR LESS	E	ELEC. MANHOLE
F.F.	FINISHED FLOOR	S	SANITARY SEWER MANHOLE
123.45G	GUTTER ELEVATION	ST	STORM SEWER MANHOLE
123.45TC	TOP OF CURB ELEVATION	T	TRAFFIC MANHOLE
123.45/123.45	EXISTING/ PROPOSED ELEVATION		CLEANOUT
FL	FLOWLINE ELEVATION	D	DOWNSPOUT
	CONTROL POINT		AREA INTAKE
	CALCULATED CORNER		SINGLE INTAKE
	FOUND CORNER		THROAT INTAKE
	CALCULATED SECTION CORNER		FLARED END SECTION
	FOUND SECTION CORNER		GAS VALVE
	PARKING SPACE		FIRE HYDRANT
	SIGN		WATER VALVE
	STREET LIGHT	P XX	PROPOSED UTILITY LINE
	POWER POLE	E XX	EXISTING UTILITY LINE
	LIGHT POLE	CATV	CABLE TELEVISION
	AREA LIGHT	FO	FIBER OPTIC
	GUY ANCHOR	GAS	GAS LINE
	UTILITY PEDESTAL	OHE	OVERHEAD ELEC.
ET	ELEC. TRANSFORMER	OHT	OVERHEAD TEL.
EM	ELEC. METER	SAN	SANITARY SEWER
EB	ELEC. BOX	ST	STORM SEWER
EV	ELEC. VAULT	UGE	UNDERGROUND ELEC.
FOV	FIBER OPTIC VAULT	UGT	UNDERGROUND TEL.
GM	GAS METER	W	WATER
TV	CABLE TV JUNCTION BOX		FENCE LINE
WM	WATER METER		

Point#	North	East	Elevation	Description
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CP11:	583489.079	1582343.416	872.326	CONTROL CAP
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CP13:	583196.586	1582181.659	862.831	CUT-X

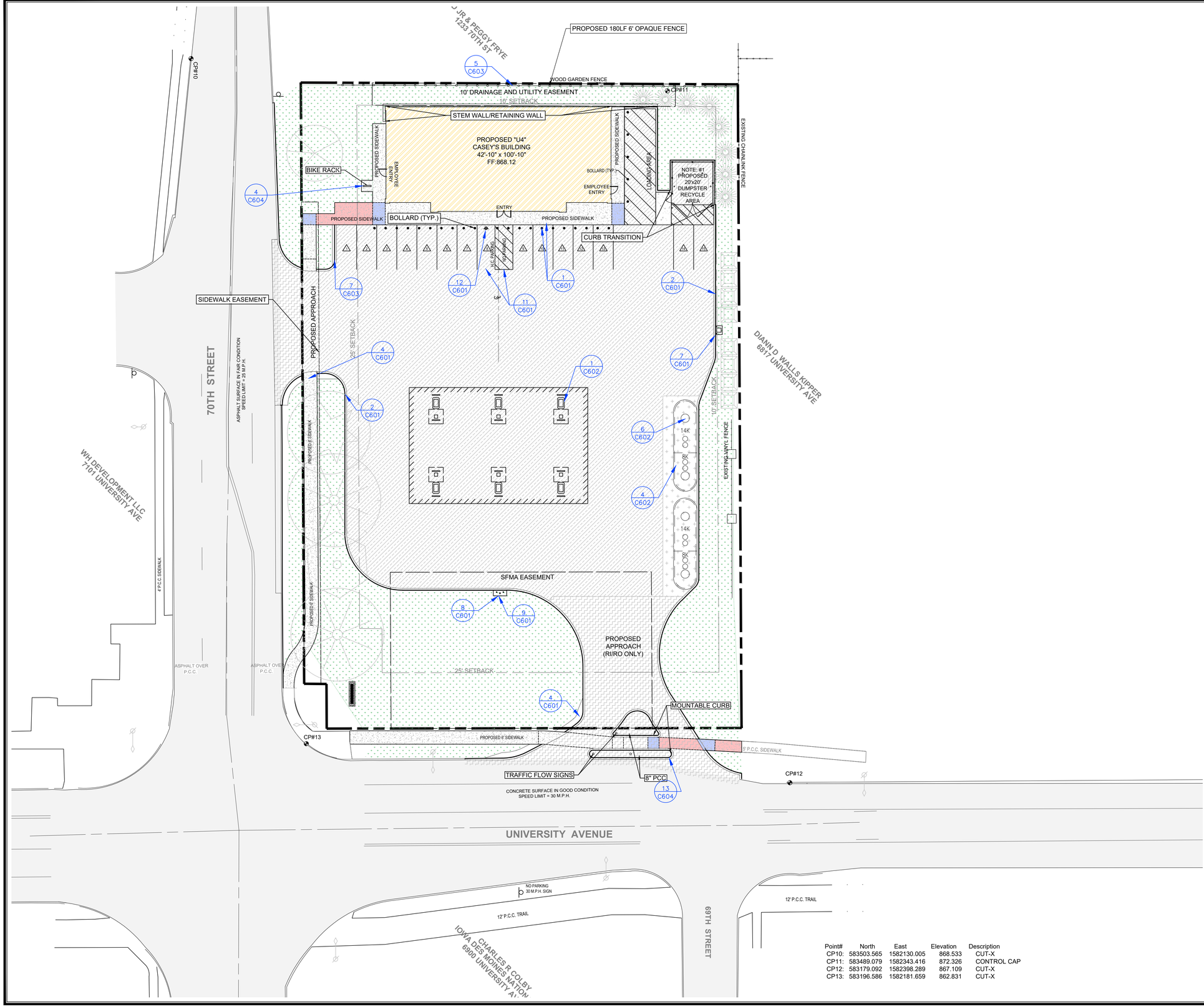
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C-100 - DEMO SHEET



Point#	North	East	Elevation	Description
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CP11:	583489.079	1582343.416	872.326	CONTROL CAP
CP12:	583179.092	1582398.289	867.109	CUT-X
CP13:	583196.586	1582181.659	862.831	CUT-X

NOTES:

ALL WORK IN/ON THE R.O.W. AREA IS SUBJECT TO THE CITY OF WINDSOR HEIGHTS APPROVAL AND SPECIFICATIONS

CONTRACTOR IS RESPONSIBLE FOR DESIGN AND INSTALL OF IRRIGATION SYSTEM

PROPOSED SIDEWALK
8" P.C.C.
8" REINFORCED P.C.C.
6" P.C.C.
PROPOSED BUILDING
EXISTING PAVEMENT
SOD & IRRIGATION LIMITS

SIDEWALK LANDING
SIDEWALK RAMP

−20 0 20 40
Scale in Feet
1" = 20'

LEGEND:

+/-	MORE OR LESS	E	ELEC. MANHOLE
F.F.	FINISHED FLOOR	S	SANITARY SEWER MANHOLE
123.45G	GUTTER ELEVATION	S	STORM SEWER MANHOLE
123.45TC	TOP OF CURB ELEVATION	T	TRAFFIC MANHOLE
123.45/123.45	EXISTING/ PROPOSED ELEVATION		CLEANOUT
FL	FLOWLINE ELEVATION	D	DOWNSPOUT
	CONTROL POINT		AREA INTAKE
	CALCULATED CORNER		SINGLE INTAKE
	FOUND CORNER		THROAT INTAKE
	CALCULATED SECTION CORNER		FLARED END SECTION
	FOUND SECTION CORNER		GAS VALVE
	PARKING SPACE		FIRE HYDRANT
	SIGN		WATER VALVE
	STREET LIGHT	P XX	PROPOSED UTILITY LINE
	POWER POLE	E XX	EXISTING UTILITY LINE
	LIGHT POLE	CATV	CABLE TELEVISION
	AREA LIGHT	FO	FIBER OPTIC
	GUY ANCHOR	GAS	GAS LINE
	UTILITY PEDESTAL	OHE	OVERHEAD ELEC.
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GM	GAS METER	W	WATER
TV	CABLE TV JUNCTION BOX		FENCE LINE
WM	WATER METER		

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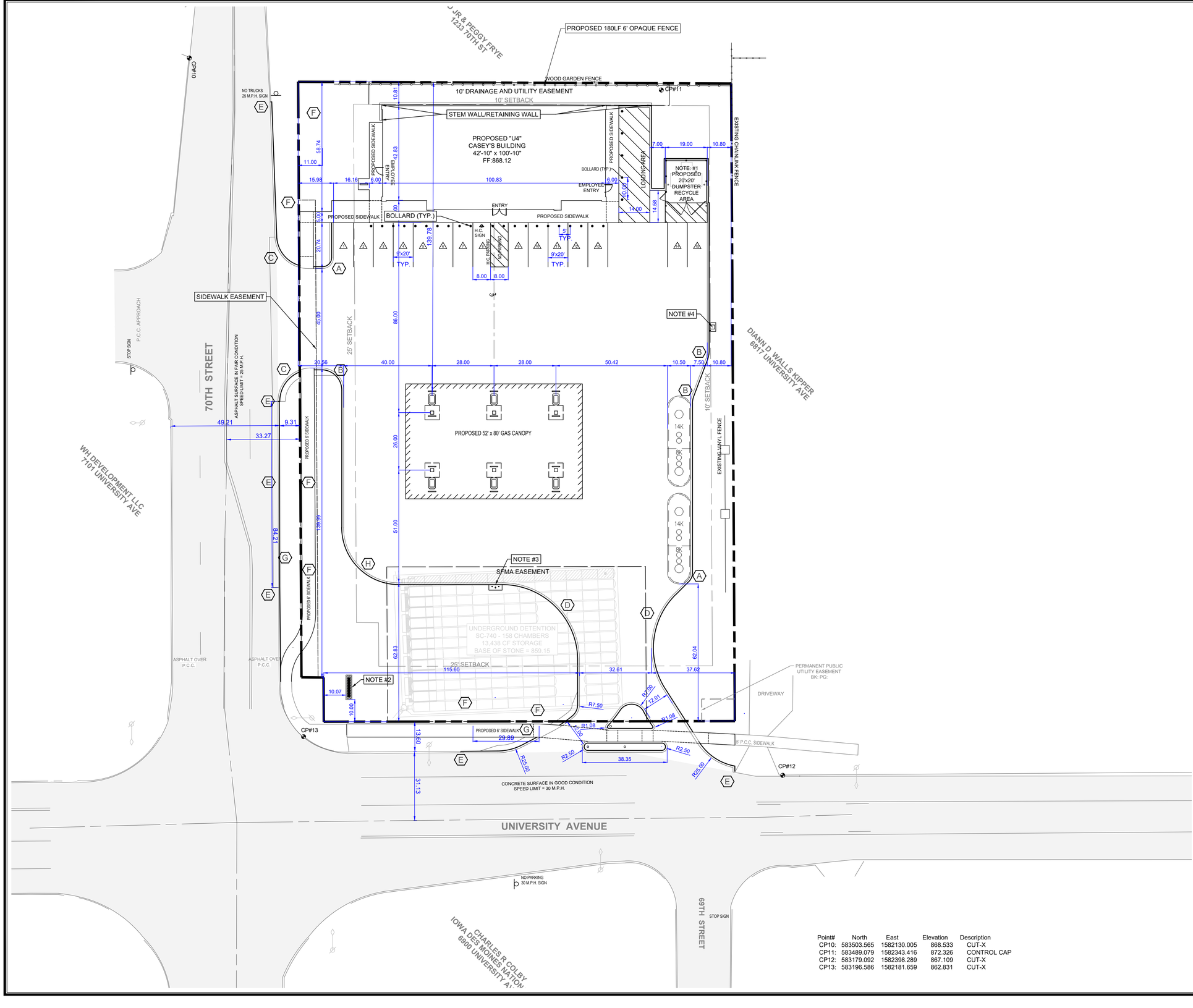
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C-101 - LAYOUT SHEET



Point#	North	East	Elevation	Description
CP10:	583503.565	1582130.005	868.533	CUT-X
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CP12:	583179.092	1582398.289	867.109	CUT-X
CP13:	583196.586	1582181.659	862.831	CUT-X

General Notes

Note #1:
BRICK DUMPSTER ENCLOSURE 6' HEIGHT W/ METAL GATES
2-9' GATES AND 4' SERVICE GATE

Note #2
2 PRODUCT MONUMENT PRICE SIGN - REFER TO SIGN PACKET

Note #3
ALL FUEL DISPENSERS FALL WITHIN A 100 FOOT RADIUS OF THE EMERGENCY SHUT-OFF SWITCH LOCATED INSIDE AT THE SALES COUNTER FOR THE CONVENIENCE STAFF. A SECONDARY SHUTOFF SHALL BE INSTALLED ON A POST AT THE CURB IF ALL FUEL DISPENSERS **DO NOT** FALL WITHIN A 100 RADIUS.

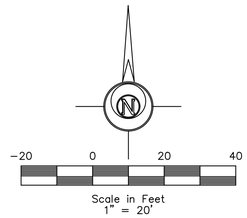
Note #4
AIR COMPRESSOR BOX, SEE SHEET C-601 SITE DETAILS.
110 VOLT-60HZ-5.5 AMP. #12 WIRE (20 AMP, SINGLE PHASE) WITH GROUND.

Note #5
ALL WORK IN/ON THE R.O.W. AREA IS SUBJECT TO THE CITY OF WINDSOR HEIGHTS APPROVAL AND SPECIFICATIONS

Keyed Construction Notes

- (A) PROPOSED 5' RADIUS
- (B) PROPOSED 10' RADIUS
- (C) PROPOSED 15' RADIUS
- (D) PROPOSED 35' RADIUS
- (E) TIE INTO AND MATCH EXISTING CURB & FLOW LINE.
- (F) REMOVE EXISTING APPROACH
- (G) REPLACE EXISTING SIDEWALK
- (H) PROPOSED 25' RADIUS

EXISTING PAVEMENT



LEGEND:

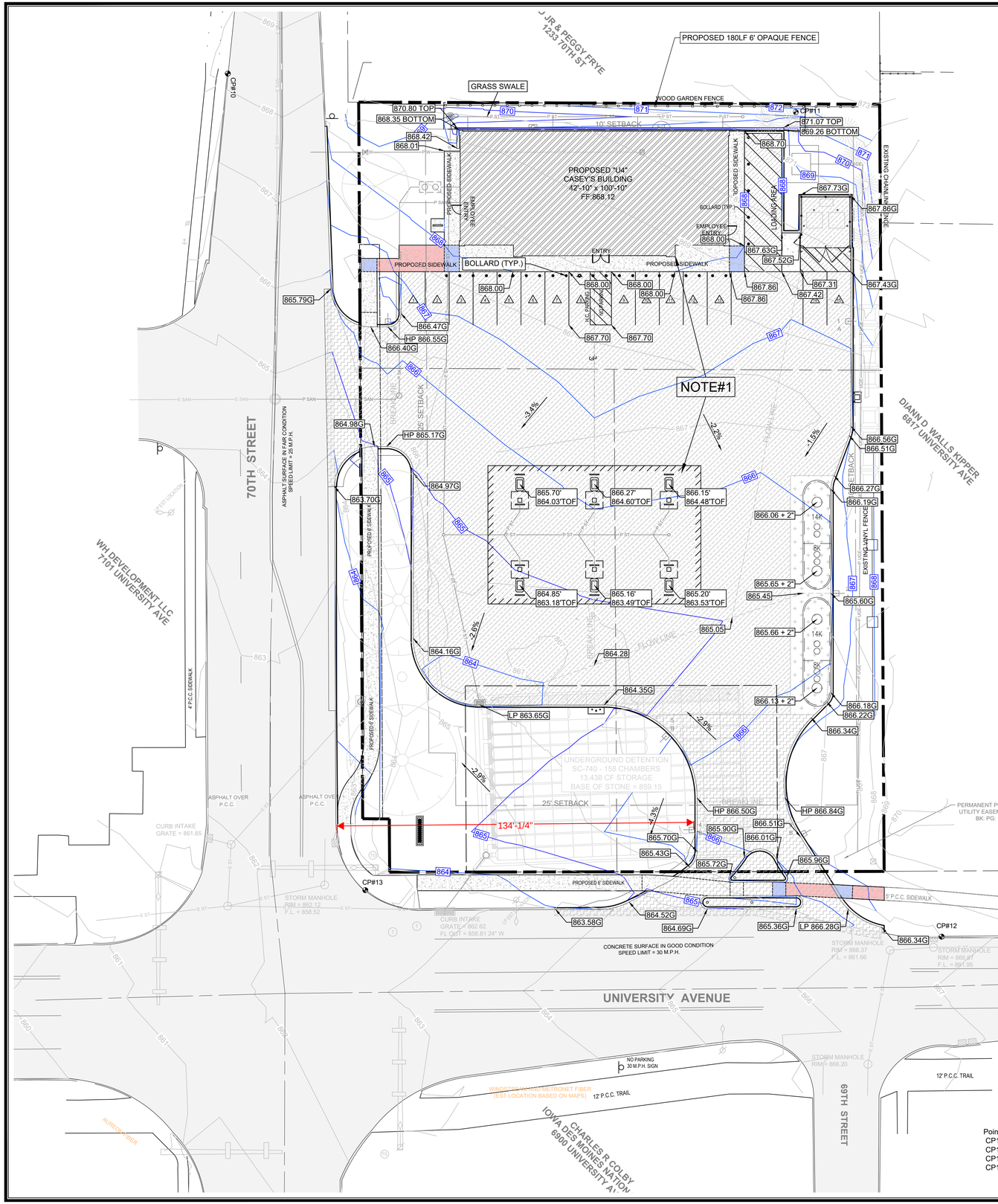
+/-	MORE OR LESS	(E)	ELEC. MANHOLE
F.F.	FINISHED FLOOR	(S)	SANITARY SEWER MANHOLE
123.45G	GUTTER ELEVATION	(ST)	STORM SEWER MANHOLE
123.45TC	TOP OF CURB ELEVATION	(T)	TRAFFIC MANHOLE
123.45/123.45	EXISTING/ PROPOSED ELEVATION		CLEANOUT
FL	FLOWLINE ELEVATION	D	DOWNSPOUT
	CONTROL POINT		AREA INTAKE
	CALCULATED CORNER		SINGLE INTAKE
	FOUND CORNER		THROAT INTAKE
	CALCULATED SECTION CORNER		FLARED END SECTION
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	LIGHT POLE	CATV	CABLE TELEVISION
	AREA LIGHT	FO	FIBER OPTIC
	GUY ANCHOR	GAS	GAS LINE
	TEL. JUNCTION BOX	OHE	OVERHEAD ELEC.
ET	ELEC. TRANSFORMER	OHT	OVERHEAD TEL.
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GM	GAS METER	W	WATER
TV	CABLE TV JUNCTION BOX		FENCE LINE
WM	WATER METER		

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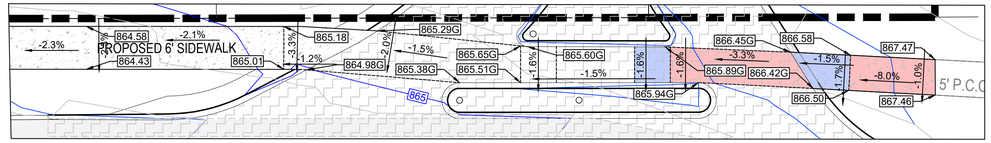
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C-103 - DIMENSION SHEET

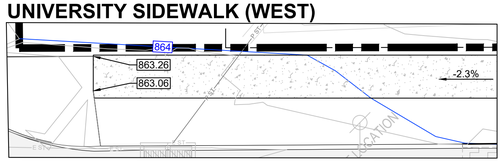


Point#	North	East	Elevation	Description
CP10:	583503.565	1582130.005	868.533	CUT-X
CP11:	583489.079	1582343.416	872.326	CONTROL CAP
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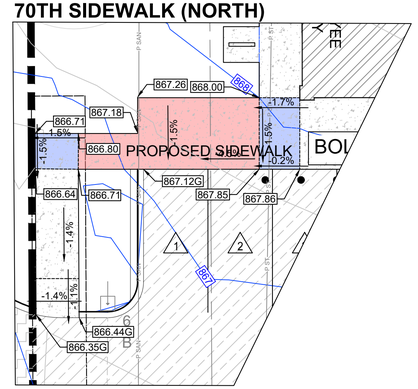
UNIVERSITY SIDEWALK (EAST)



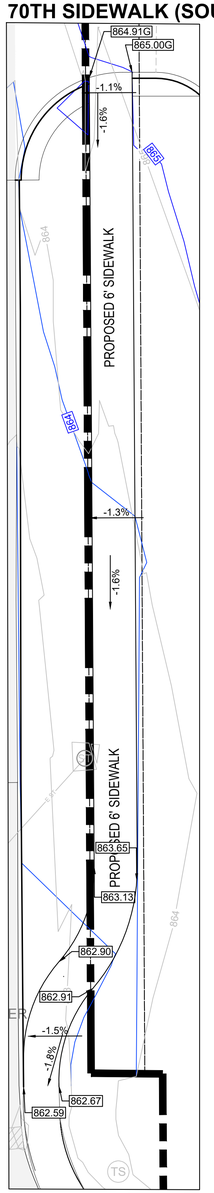
UNIVERSITY SIDEWALK (WEST)



70TH SIDEWALK (NORTH)



70TH SIDEWALK (SOUTH)



NOTES:

#1: MAINTAIN A MINIMUM 2' SEPARATION BETWEEN BOTTOM OF FOOTINGS AND EXPANSIVE SOILS

PROPOSED SIDEWALK
8" P.C.C.
8" REINFORCED P.C.C.
6" P.C.C.
PROPOSED BUILDING
EXISTING PAVEMENT
SIDEWALK LANDING
SIDEWALK RAMP

Scale in Feet
1" = 20'

LEGEND:

+/-	MORE OR LESS	ⓔ	ELEC. MANHOLE
F.F.	FINISHED FLOOR	Ⓢ	SANITARY SEWER MANHOLE
123.45G	GUTTER ELEVATION	Ⓢ	STORM SEWER MANHOLE
123.45TC	TOP OF CURB ELEVATION	Ⓣ	TRAFFIC MANHOLE
123.45/ 123.45	EXISTING/ PROPOSED ELEVATION		CLEANOUT
FL	FLOWLINE ELEVATION	D	DOWNSPOUT
	CONTROL POINT		AREA INTAKE
	CALCULATED CORNER		SINGLE INTAKE
	FOUND CORNER		THROAT INTAKE
	CALCULATED SECTION CORNER		FLARED END SECTION
	FOUND SECTION CORNER		GAS VALVE
	PARKING SPACE		FIRE HYDRANT
	SIGN		WATER VALVE
	STREET LIGHT	P XX	PROPOSED UTILITY LINE
	POWER POLE	E XX	EXISTING UTILITY LINE
	LIGHT POLE	CATV	CABLE TELEVISION
	AREA LIGHT	FO	FIBER OPTIC
	GUY ANCHOR	GAS	GAS LINE
	UTILITY PEDESTAL	OHE	OVERHEAD ELEC.
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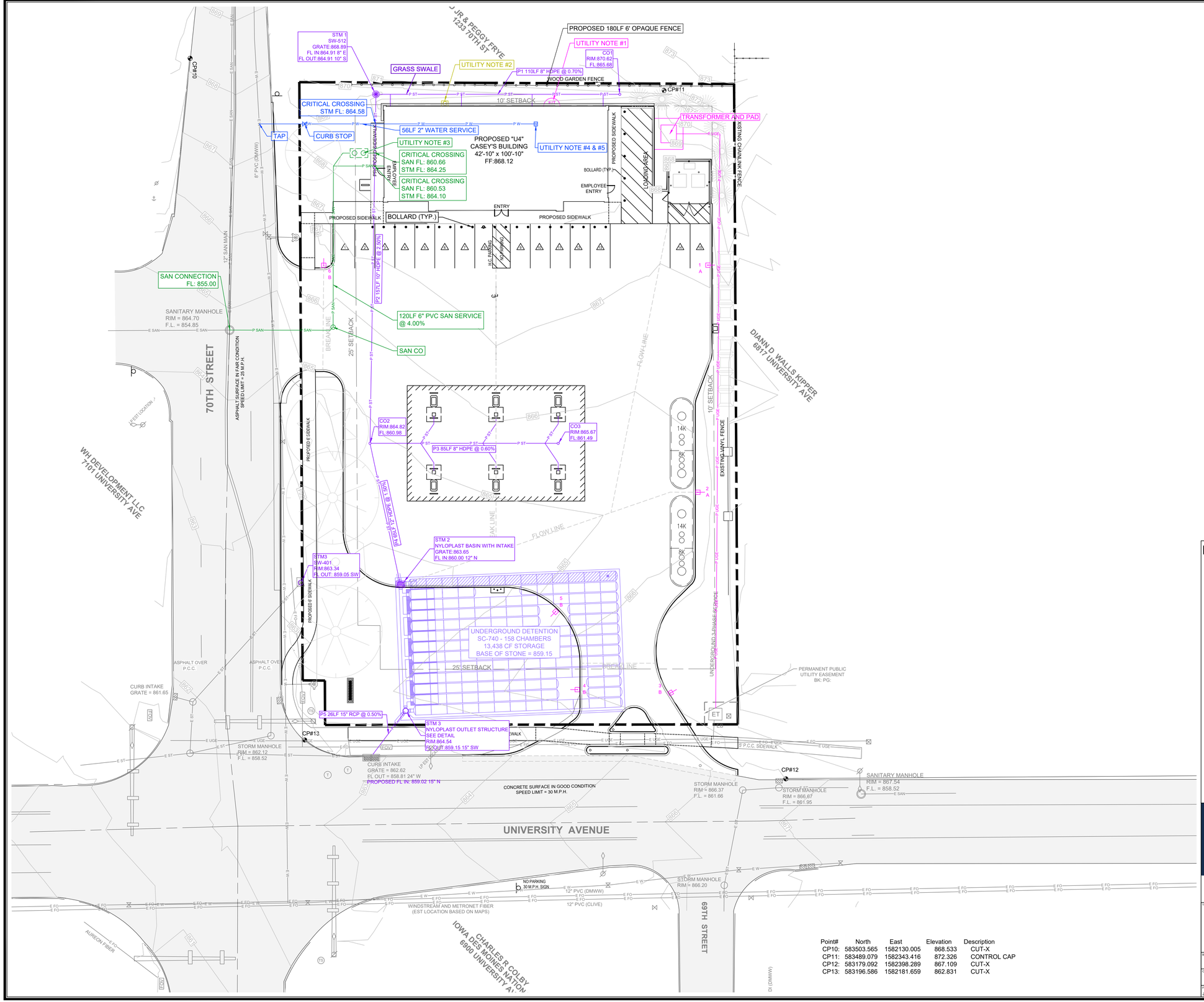
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C-201 - GRADING SHEET



Utility Notes

UTILITY NOTE #1: ELECTRICAL (C-STORE): ELECTRICAL SERVICE ENTRANCE.
-ELECTRIC 3 PHASE, 800 AMP., [illegible] VOLTS, 4 WIRE
-TELEPHONE 20 PAIR, 8 LINES

UTILITY NOTE #2: GAS (C-STORE): SERVICE ENTRANCE.
BLACK SCHEDULE 40 SCREWED PIPE (SIZED BY SERVICE PROVIDER)
CONNECTION LOAD IS 985 MBH. TOTAL CONNECTED LOAD IS 985,000 BTU
985 CU/FT. HR.

UTILITY NOTE #3: SANITARY SEWER (C-STORE): 6" SCHEDULE 40 PVC SANITARY SEWER CONNECTION.
1,000 GALLON BELOW GRADE GREASE INTERCEPTOR WITH 2 MANHOLES

UTILITY NOTE #4: WATER (C-STORE): 2" CTS, HDPE, SDR9 C5--200 PSI WATER SERVICE CONNECTION

UTILITY NOTE #5: IRRIGATION (C-STORE): IRRIGATION DESIGNED AND PROVIDED BY DEVELOPER

UTILITY NOTE #6 ANY EXISTING SERVICES AND/OR STUBS WILL NEED TO BE REMOVED AT THE MAIN

UTILITY NOTE #7 ALL NEWLY-INSTALLED CABLE, TRANSMISSION, OR OTHER UTILITY SYSTEMS WILL BE INSTALLED UNDERGROUND

UTILITY NOTE #8 MAINTAIN A MINIMUM HORIZONTAL DISTANCE OF 10' BETWEEN SANITARY AND WATER SERVICES

EXISTING PAVEMENT

N

−20 0 20 40

Scale in Feet
1" = 20'

Point#	North	East	Elevation	Description
CP10:	583503.565	1582130.005	868.533	CUT-X
CP11:	583489.079	1582343.416	872.326	CONTROL CAP
CP12:	583179.092	1582398.289	867.109	CUT-X
CP13:	583196.586	1582181.659	862.831	CUT-X

LEGEND:

+/-	MORE OR LESS	E	ELEC. MANHOLE
F.F.	FINISHED FLOOR	S	SANITARY SEWER MANHOLE
123.45G	GUTTER ELEVATION	ST	STORM SEWER MANHOLE
123.45TC	TOP OF CURB ELEVATION	T	TRAFFIC MANHOLE
123.45/ 123.45	EXISTING/ PROPOSED ELEVATION		CLEANOUT
FL	FLOWLINE ELEVATION	D	DOWNSPOUT
	CONTROL POINT		AREA INTAKE
	CALCULATED CORNER		SINGLE INTAKE
	FOUND CORNER		THROAT INTAKE
	CALCULATED SECTION CORNER		FLARED END SECTION
	FOUND SECTION CORNER		GAS VALVE
	PARKING SPACE		FIRE HYDRANT
	SIGN		WATER VALVE
	STREET LIGHT	P XX	PROPOSED UTILITY LINE
	POWER POLE	E XX	EXISTING UTILITY LINE
	LIGHT POLE	CATV	CABLE TELEVISION
	AREA LIGHT	FO	FIBER OPTIC
	GUY ANCHOR	GAS	GAS LINE
	UTILITY PEDESTAL	OHE	OVERHEAD ELEC.
ET	ELEC. TRANSFORMER	OHT	OVERHEAD TEL.
EM	ELEC. METER	SAN	SANITARY SEWER
EB	ELEC. BOX	ST	STORM SEWER
EV	ELEC. VAULT	UGE	UNDERGROUND ELEC.
FOV	FIBER OPTIC VAULT	UGT	UNDERGROUND TEL.
GM	GAS METER	W	WATER
TV	CABLE TV JUNCTION BOX		FENCE LINE
WM	WATER METER		

PELDS DESIGN SERVICES
Architecture | Engineering | Surveying
2323 Dixon Street, Des Moines, Iowa 50316 | PO Box 4626, Des Moines, Iowa 50305 | Ph: 515 265 8196

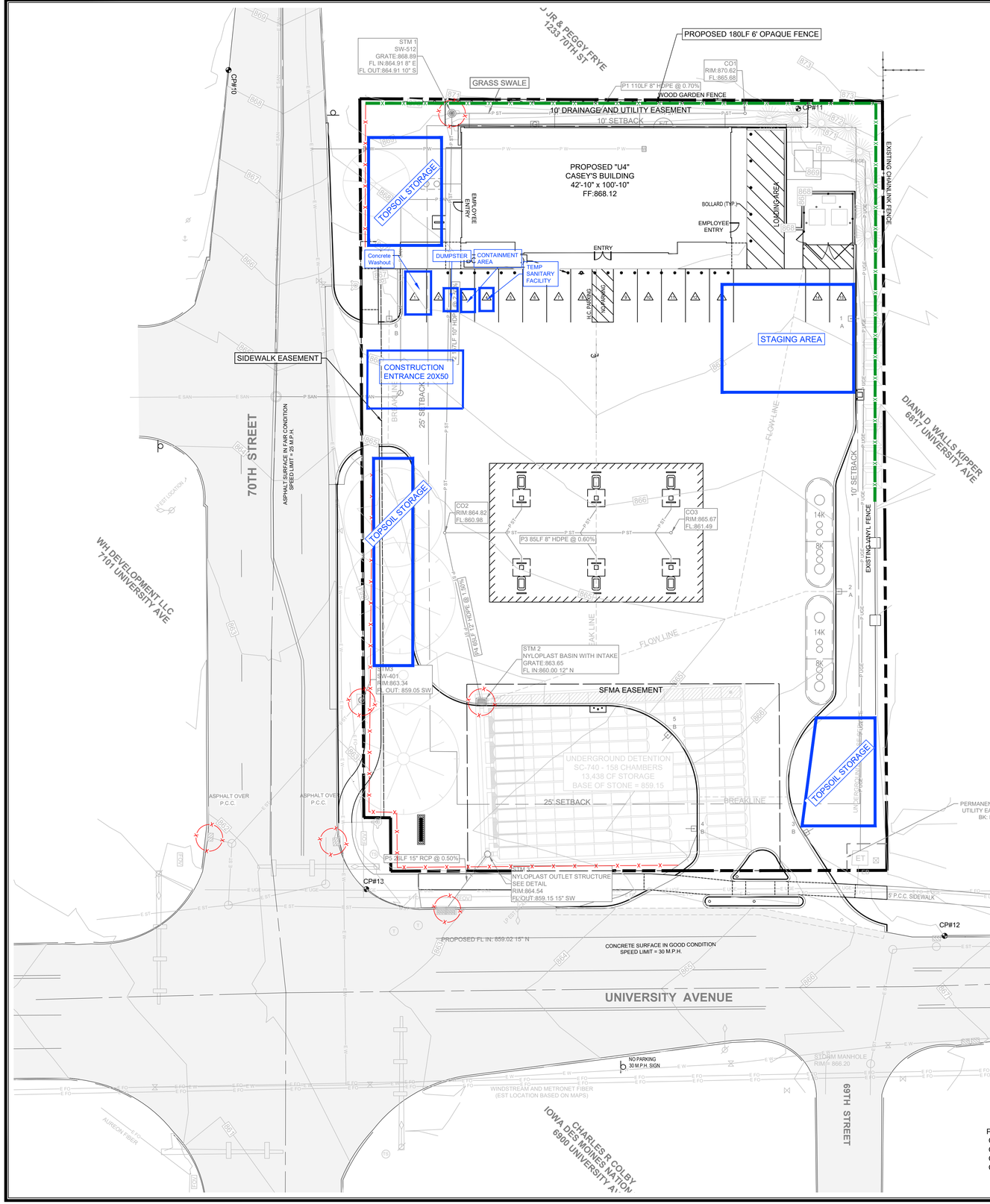
TITLE:

CASEY'S STORE #4372
6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA

BENCHMARK:		REVISIONS:	PRELIMINARY	
COPYRIGHT DATE: ----	DRAWN BY: N. DAY	SCALE: 1"=20'	LATEST REVISION: 1-16-2024	DRAWING NO: 22-201

FILE PATH: J:\2022 Projects\22-201 CGS Windsor Heights\Engineering\Sheet Set

C-301 - UTILITY SHEET



Point#	North	East	Elevation	Description
CP10:	583503.565	1582130.005	868.533	CUT-X
CP11:	583489.079	1582343.416	872.326	CONTROL CAP
CP12:	583179.092	1582398.289	867.109	CUT-X
CP13:	583196.586	1582181.659	862.831	CUT-X

SWPPP NOTES:

1. LOCATION OF STAGING AREAS TO CONTAIN: JOB TRAILERS, FUELING LOCATION, TEMPORARY SANITARY FACILITIES, MATERIALS STORAGE, CONCRETE WASHOUT AREA. CONTROL RUNOFF WITH DIVERSION BERMS OR SILT FENCE AND DIRECT TO SEDIMENT BASIN WHERE POSSIBLE.
2. ALL INTERIOR & PERIMETER SILT FENCE NOT SHOWN. SEE EROSION CONTROL PLAN.
3. MULCH OR SOD ALL DISTURBED AREAS NOT PAVED OR DEVELOPED.
4. ADDITIONAL CONTROLS MAY BE REQUIRED DEPENDING ON PHASING & SITE CONDITIONS. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING, NOTING & IMPLEMENTING.
5. A MINIMUM 6" LAYER OF TOPSOIL SHALL BE RESPREAD FROM THE STOCKPILE ONSITE TO SODDED PERVIOUS SURFACES THAT WERE DISTURBED DURING CONSTRUCTION. SEEDED AREAS TO RECEIVE A MINIMUM 8" OF TOPSOIL
6. ALL BARE AREAS THAT WILL REMAIN INACTIVE FOR 14 DAYS OR MORE REQUIRE IMMEDIATE STABILIZATION MEASURES (TEMPORARY SEEDING OR MULCHING)
7. ALL SLOPES 4:1 OR GREATER REQUIRE SEEDING AND MATTING

FILTER SOCK

CONSTRUCTION FENCE

N

−20 0 20 40

Scale in Feet
1" = 20'

LEGEND:

+/-	MORE OR LESS	E	ELEC. MANHOLE
F.F.	FINISHED FLOOR	S	SANITARY SEWER MANHOLE
123.45G	GUTTER ELEVATION	ST	STORM SEWER MANHOLE
123.45TC	TOP OF CURB ELEVATION	T	TRAFFIC MANHOLE
123.45/ 123.45	EXISTING/ PROPOSED ELEVATION		CLEANOUT
FL	FLOWLINE ELEVATION	D	DOWNSPOUT
	CONTROL POINT		AREA INTAKE
	CALCULATED CORNER		SINGLE INTAKE
	FOUND CORNER		THROAT INTAKE
	CALCULATED SECTION CORNER		FLARED END SECTION
	FOUND SECTION CORNER		GAS VALVE
	PARKING SPACE		FIRE HYDRANT
	SIGN		WATER VALVE
	STREET LIGHT	P XX	PROPOSED UTILITY LINE
	POWER POLE	E XX	EXISTING UTILITY LINE
	LIGHT POLE	CATV	CABLE TELEVISION
	AREA LIGHT	FO	FIBER OPTIC
	GUY ANCHOR	GAS	GAS LINE
	UTILITY PEDESTAL	OHE	OVERHEAD ELEC.
ET	ELEC. TRANSFORMER	OHT	OVERHEAD TEL.
EM	ELEC. METER	SAN	SANITARY SEWER
EB	ELEC. BOX	ST	STORM SEWER
EV	ELEC. VAULT	UGE	UNDERGROUND ELEC.
FOV	FIBER OPTIC VAULT	UGT	UNDERGROUND TEL.
GM	GAS METER	W	WATER
TV	CABLE TV JUNCTION BOX		FENCE LINE
WM	WATER METER		

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2323 Dixon Street, Des Moines, Iowa 50316 | PO Box 4626, Des Moines, Iowa 50305 | Ph: 515 265 8196

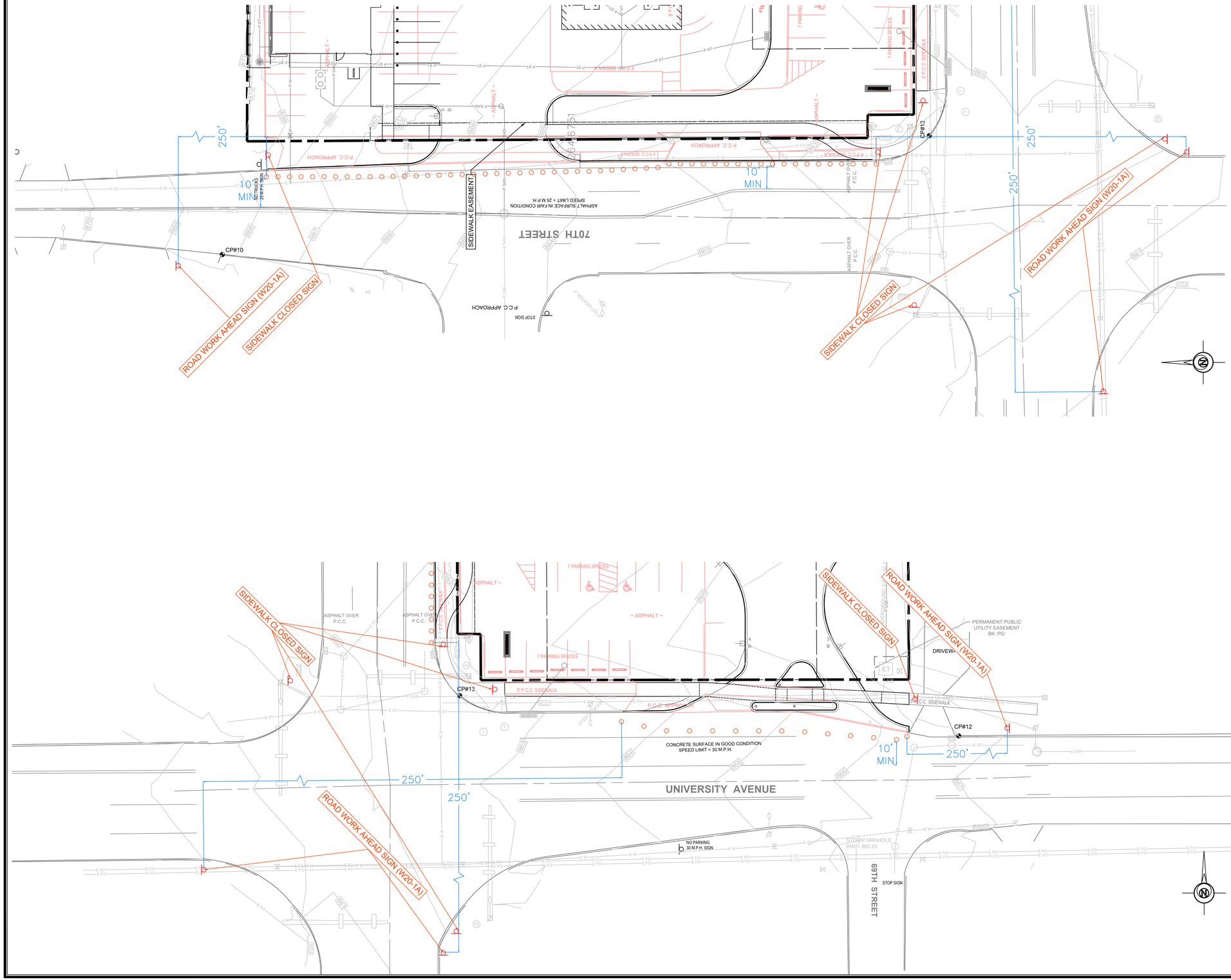
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CASEY'S STORE #4372
6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA

BENCHMARK:		REVISIONS:	PRELIMINARY	
COPYRIGHT DATE: ----	DRAWN BY: N. DAY	SCALE: 1"=20'	LATEST REVISION: 1-16-2024	DRAWING NO: 22-201

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C-401 - EROSION CONTROL SHEET



−20 0 20 40

Scale in Feet
1" = 20'

LEGEND:

+/-	MORE OR LESS	E	ELEC. MANHOLE
F.F.	FINISHED FLOOR	S	SANITARY SEWER MANHOLE
123.45G	GUTTER ELEVATION	ST	STORM SEWER MANHOLE
123.45TC	TOP OF CURB ELEVATION	T	TRAFFIC MANHOLE
123.45/123.45	EXISTING/ PROPOSED ELEVATION	C	CLEANOUT
FL	FLOWLINE ELEVATION	D	DOWNSPOUT
	CONTROL POINT		AREA INTAKE
	CALCULATED CORNER		SINGLE INTAKE
	FOUND CORNER		THROAT INTAKE
	CALCULATED SECTION CORNER		FLARED END SECTION
	FOUND SECTION CORNER		GAS VALVE
	PARKING SPACE		FIRE HYDRANT
	SIGN		WATER VALVE
	STREET LIGHT	P XX	PROPOSED UTILITY LINE
	POWER POLE	E XX	EXISTING UTILITY LINE
	LIGHT POLE	CATV	CABLE TELEVISION
	AREA LIGHT	FO	FIBER OPTIC
	GUY ANCHOR	GAS	GAS LINE
	UTILITY PEDESTAL	OHE	OVERHEAD ELEC.
ET	ELEC. TRANSFORMER	OHT	OVERHEAD TEL.
EM	ELEC. METER	SAN	SANITARY SEWER
EB	ELEC. BOX	ST	STORM SEWER
EV	ELEC. VAULT	UGE	UNDERGROUND ELEC.
FOV	FIBER OPTIC VAULT	UGT	UNDERGROUND TEL.
GM	GAS METER	W	WATER
TV	CABLE TV JUNCTION BOX		FENCE LINE
WM	WATER METER		

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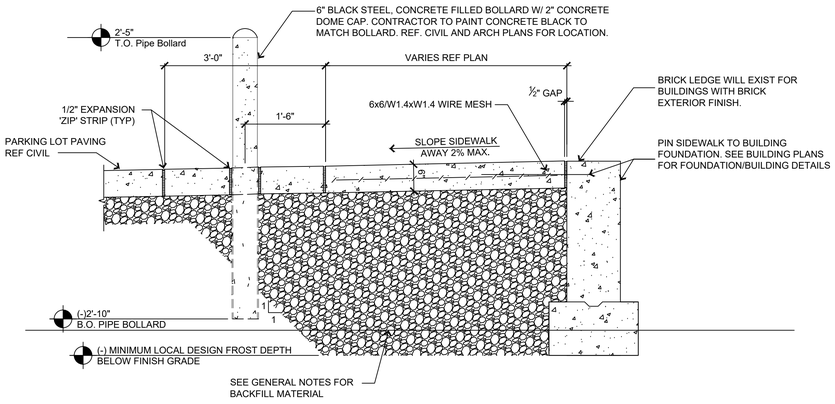
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6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA

BENCHMARK:			REVISIONS: PRELIMINARY	
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----	N. DAY	1"=20'	1-16-2024	22-201

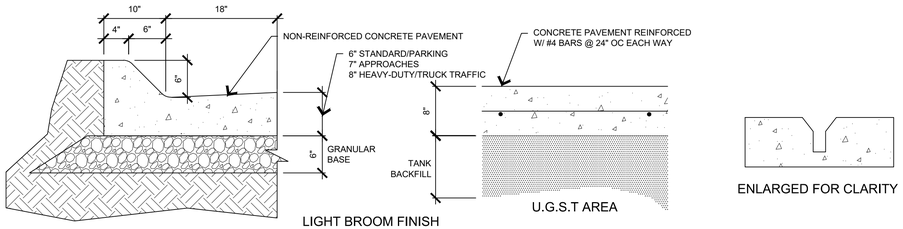
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C-501 - TRAFFIC CONTROL SHEET



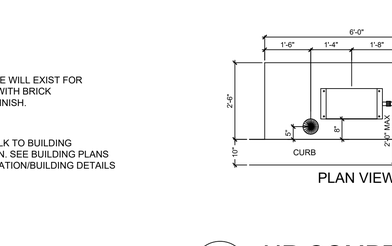
1 TYPICAL BUILDING SIDEWALK AND BOLLARD

3/4" = 1'-0"



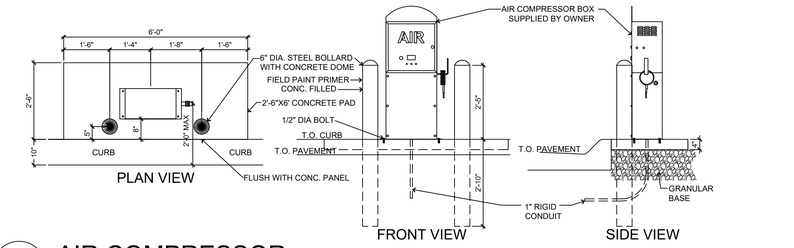
2 CONCRETE PAVING AND CURB

Not to Scale



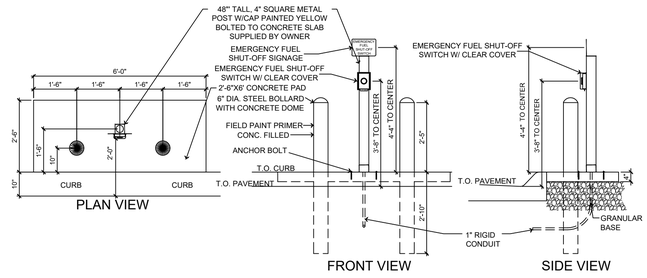
3 PAVING SAW-CUT

Not to Scale



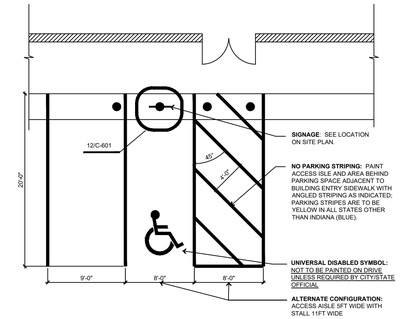
7 AIR COMPRESSOR

1/2" = 1'-0"



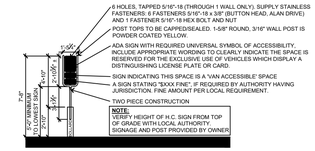
8 EMERGENCY STOP

1/2" = 1'-0"



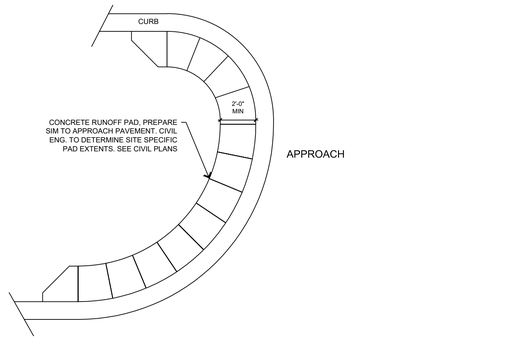
11 ADA PARKING SPACES

3/16" = 1'-0"



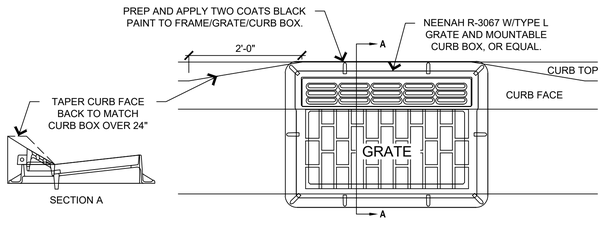
12 ADA PARKING SIGN

1/4" = 1'-0"



4 LANDSCAPE PROTECTOR

Not to Scale



6 CURB INLET

Not to Scale

General Notes

Concrete:

1. All concrete and reinforcing work shall conform to the latest edition of the American Concrete Institute's "Standard Building Code Requirements for Reinforced Concrete," (ACI 318) and "Specifications for Structural Concrete for Buildings," (ACI 301).
2. Concrete shall use type II cement. Concrete mix designs shall meet the following requirements:

	MINIMUM 28-DAY f'c	MAXIMUM W/C RATIO	SLUMP	AIR ENTRAIN.
Exterior exposed concrete	4,000 psi	0.42	4" ± 1"	6% ± 1%

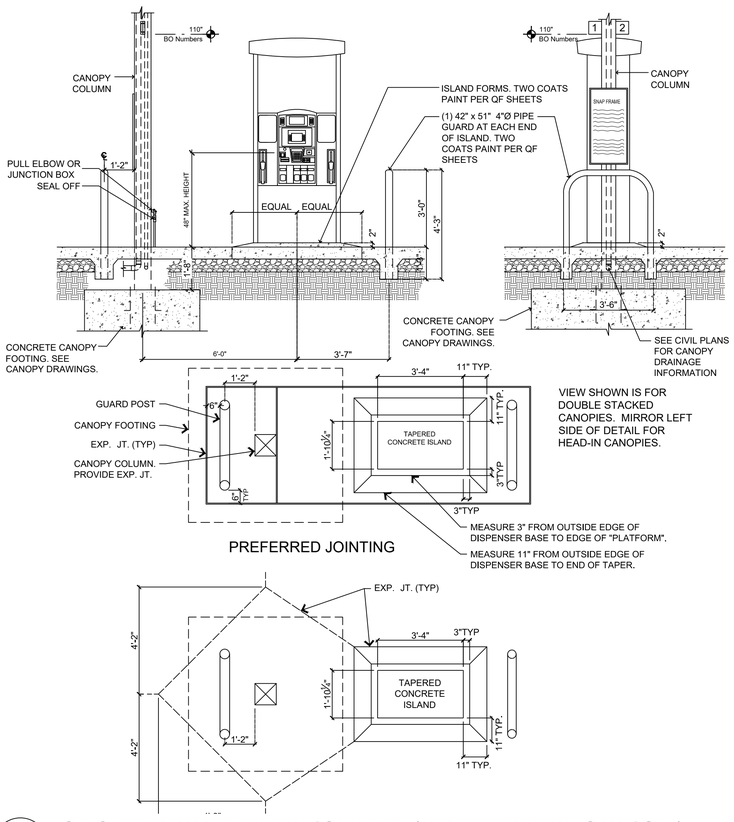
   If Contractor desires to increase slump above allowable limits to facilitate placement or pumping, this shall be done utilizing a superplasticizer approved by the Ready Mix Designer at a dosage rate provided by Ready Mix Designer.
3. The Contractor shall reject any concrete that exceeds the slump limits noted above (prior to adding superplasticizer) or concrete that can not be placed within ninety (90) minutes of batch time.
4. No aluminum shall be placed in concrete.
5. All concrete is reinforced unless specifically noted as Unreinforced. Reinforce all concrete not otherwise shown with the same reinforcing as in similar sections or areas.
6. During hot weather (80 degrees F and above), the Contractor shall comply with the recommendations ACI-305 "Hot Weather Concrete". During cold weather (40 degrees and below), the Contractor shall comply with the recommendations of ACI-306 "Cold Weather Concreting".
7. The concrete mix designs are to be submitted as a formal submittal to the Owner for acceptance PRIOR to concrete being delivered to the site.
8. Verify with local authorities the required thickness of poured concrete for approaches and parking lot.

Sub-Base:

1. Sub-base Course Under Exterior Concrete Paved Surfaces: Spread and compact sub-base in 6"-9" lifts compacted to 98% Standard Proctor.

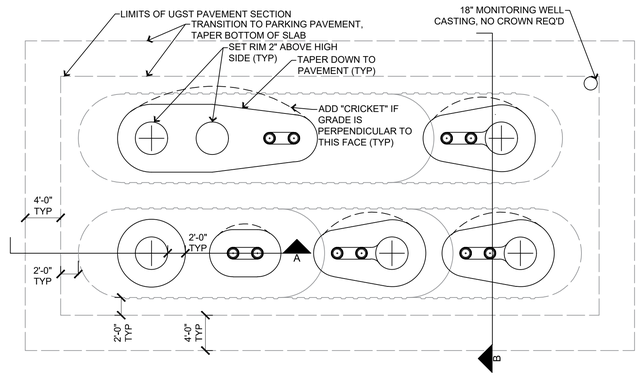
CASEY'S CONSTRUCTION DIVISION
One Convenience Blvd., Ankeny, IA. 50021 515-965-6100

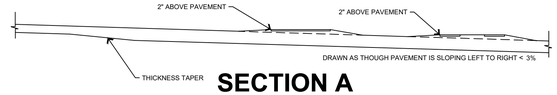
PROJECT:	PUBLISHED:	DRAWING INFORMATION:
2023 Civil Details	01/10/23	CIVIL DETAILS
	1 03/08/23	
DRAWING INFORMATION: CONSTRUCTION DIVISION		C-601
DRAWN BY: ARLON GOFORTH III	CHECKED BY:	



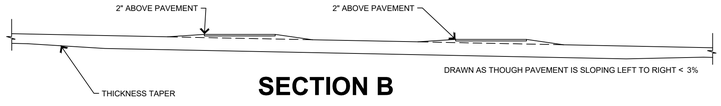
1 GAS TAPERED FUEL ISLAND (PREFERRED OPTION)

Not to Scale





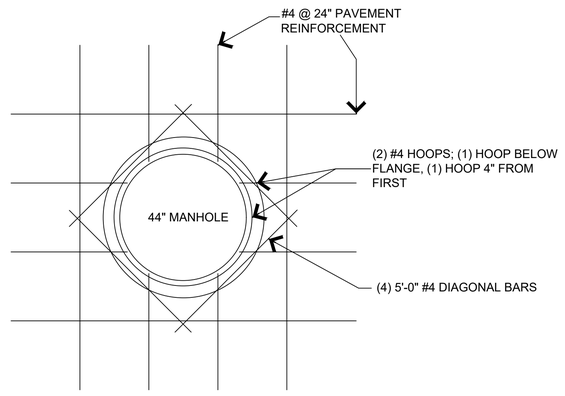
SECTION A



SECTION B

4 UGST PAVING FOR PAVEMENT SLOPE <3%

Not to Scale



General Notes:

1 ALL REINFORCING IS CENTER OF SLAB.

6 UGST Manhole Detail

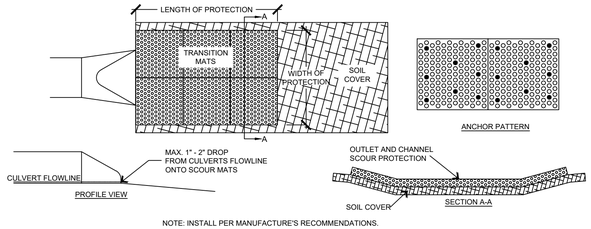
1/2" = 1'-0"

CASEY'S CONSTRUCTION DIVISION
One Convenience Blvd., Ankeny, IA. 50021 515-965-6100

PROJECT: 2023 Civil Details
PUBLISHED: 01/10/23
REVISED: 1 03/08/23
DRAWING INFORMATION: CONSTRUCTION DIVISION
DRAWN BY: ARLON GOFORTH III
CHECKED BY:

DRAWING INFORMATION: CIVIL DETAILS

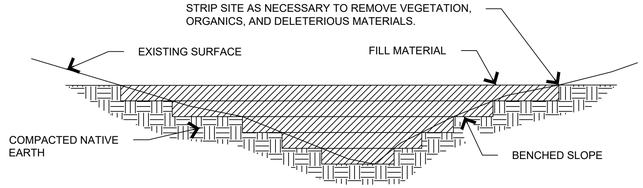
C-602



NOTE: INSTALL PER MANUFACTURE'S RECOMMENDATIONS.

1 SCOUR STOP EROSION CONTROL

Not to Scale

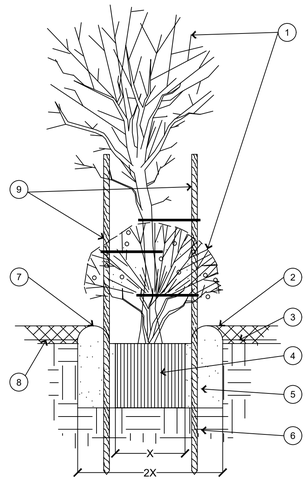


NOTES:

1. BENCH SLOPES TO MAINTAIN VERTICAL SIDE SLOPES AT FILL LIMITS +/- 3' VERTICAL TO +/- 8' HORIZONTAL.
2. COMPACTION SHALL BE IN 8" LIFTS TO 95% STANDARD PROCTOR OR OTHERWISE SPECIFIED IN GEOTECHNICAL REPORT.
3. SCARIFY ORIGINAL GROUND AND BLEND WITH FIRST LIFT ON EACH BENCH.
4. ALL FILL MATERIALS, INCLUDING FILL GENERATED ON-SITE, SHALL BE OF SUITABLE MATERIAL. UNSUITABLE FILL MATERIAL INCLUDES, BUT IS NOT LIMITED TO, SOIL THAT CONTAINS LARGE ROCKS, TREE AND PLANT ROOTS, CONCRETE, TRASH, ETC.

2 TYPICAL FILL SECTION

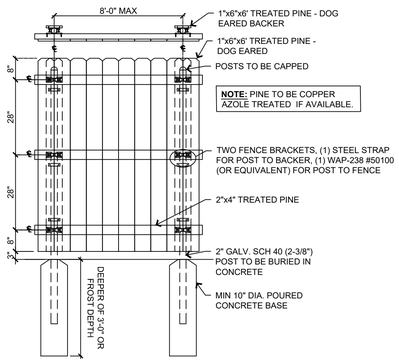
Not to Scale



1. TREE/SHRUB, PERENNIAL, OR ORNAMENTAL GRASS.
2. GROUNDCOVER: 3" DEPTH OF 3/4" WASHED STONE OR WASHED BRICK CHIPS AS INDICATED IN LANDSCAPING PLAN.
3. FINISH GRADE.
4. ROOT BALL.
5. BACKFILL. AMEND AND FERTILIZE AS RECOMMENDED BY LOCAL SUPPLIER
6. UNDISTURBED NATIVE SOIL.
7. 3" HIGH EARTHEN WATERING BASIN.
8. HEAVY WEED FABRIC UNDER GROUNDCOVER.
9. FOR TREES, 2 STAKES/GUIDEPOSTS MIN; 3 REQ ON SLOPES WITH TIES

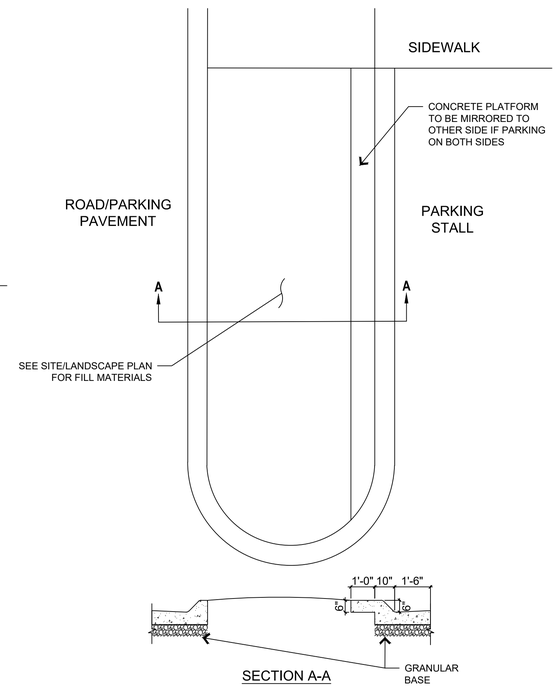
4 PLANT/TREE INSTALLATION

Not to Scale



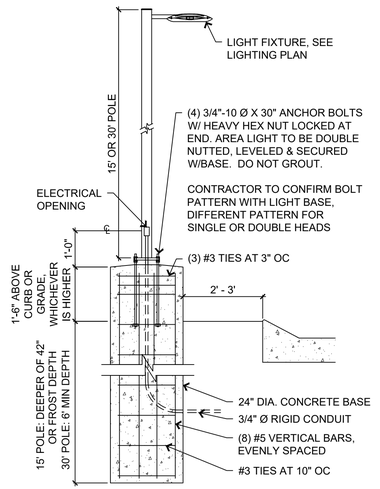
5 SCREEN/PRIVACY FENCE

Not to Scale



7 PARKING LANDSCAPE ISLAND DETAIL

3/8" = 1'-0"



8 AREA LIGHTING

1/2" = 1'-0"

CASEY'S CONSTRUCTION DIVISION
One Convenience Blvd., Ankeny, IA. 50021 515-965-6100

PROJECT:
2023 Civil Details

PUBLISHED: 01/10/23
REVISED: 03/08/23 (1)

DRAWING INFORMATION:
CIVIL DETAILS

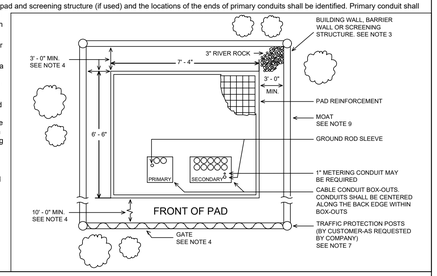
DRAWING INFORMATION:
CONSTRUCTION DIVISION

DRAWN BY: ARLON GOFORTH III
CHECKED BY:

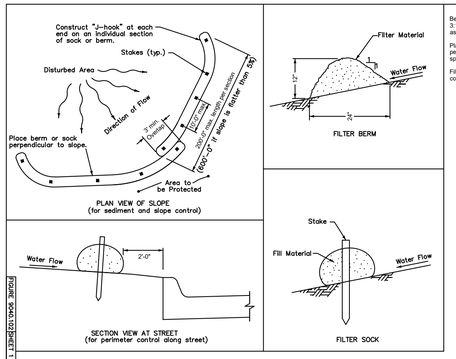
C-603

Three-phase transformer pads must be:

1. Installed by the customer at the customer's expense. Ongoing maintenance and repair to the pad are the responsibility of the customer.
2. Constructed in a manner satisfactory to the Company, in a mutually agreed upon location with hard surface access and unobstructed work space for large vehicles.
3. The installation of a screening or barrier structure may be required by your local governing authority. It is the customer's responsibility to determine if a barrier structure is required. If screening or a barrier structure is required, or installed as an optional feature, the clearance limitations of notes 2 and 3 must be maintained.
4. A 3'-0" minimum clearance is to be maintained from pad sides and back, to the nearest structure or plantings. A level graded, 10'-0" minimum clearance is to be maintained from the front of pad, to the nearest fixed structure or plantings. If a full length gate is installed, it shall be hinged and no closer than 3'-0" from pad front. Local government, fire protection, and building codes may require greater clearances. Customer will avoid plantings or construction that interferes with Company's required maintenance access to its equipment. If a fence or barrier is to be installed, it must be coordinated with the Company.
5. All conduits shall extend 5'-0" beyond the pad and screening structure (if used) and the locations of the ends of primary conduits shall be identified. Primary conduit shall be installed between 42" and 48" below final grade. Secondary conduit shall be installed between 30" and 42" below final grade.
6. When metallic conduit is utilized, customer shall install grounding bushings.
7. When necessary for traffic protection, set a 4" diameter concrete-filled galvanized steel post 3'-0" from pad Post shall be 8' long with a 4' concrete embedment.
8. All Company transformers shall be located in mutually agreed upon location with hard surface access and unobstructed work space for large vehicles. If special equipment, such as a crane, is required for setting or replacing the transformer, the customer shall pay all expenses.
9. A trench 2'-0" deep and 3'-0" wide will be dug on all four sides. The trench will be lined with silt fence fabric and filled with 3" screened river rock to final grate. Contact local engineering representative if design needs modification.



1. TRANSFORMER PAD



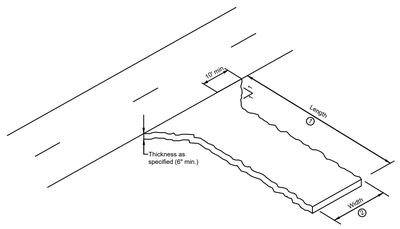
Berm shown is typical for slopes flatter than 3:1. For steeper slopes, increase berm size as directed by the Engineer.

Place berm in uncompacted windrow perpendicular to the slope at locations specified in the contract documents.

Filter sock diameter as specified in the contract documents.

TYPICAL PLACEMENT OF BERM OR SOCK

2. 9040-102 FILTER BERM AND FILTER SOCK



1. Remove vegetation and excavate soft soils from entrance area. Thoroughly compact subgrade prior to placing stone.
2. Install culvert under entrance if necessary to maintain drainage.
3. Grade entrance to prevent runoff from flowing onto street. Direct all runoff from entrance to a sediment retention device.
4. When specified, install subgrade stabilization fabric prior to placing crushed stone.
5. Install layer of crushed stone to the thickness (6 in. min.) and dimensions specified.

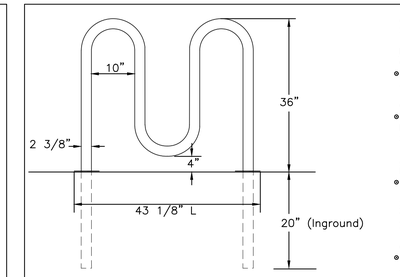
① Entrance length: 50 ft. minimum (30 ft. for single family residential), or as specified. Length of entrance may be increased if sediment track-out occurs.

② Entrance width: 20 ft. minimum.

SUDAS	REVISION NO.
	REVISION DATE 10/17/06
FIGURE: 9040.120	SHEET 1 OF 1

STABILIZED CONSTRUCTION ENTRANCE

3. STABILIZED CONSTRUCTION ENTRANCE



MODEL # 543-1002

thepark LAND AND FACILITIES CATALOG

MATERIALS:
2.0" SCHEDULE 40 STEEL PIPE (2.375 OD)

FINISH OPTIONS
GALVANIZED
⊙ POWDER COAT SEALGUARD

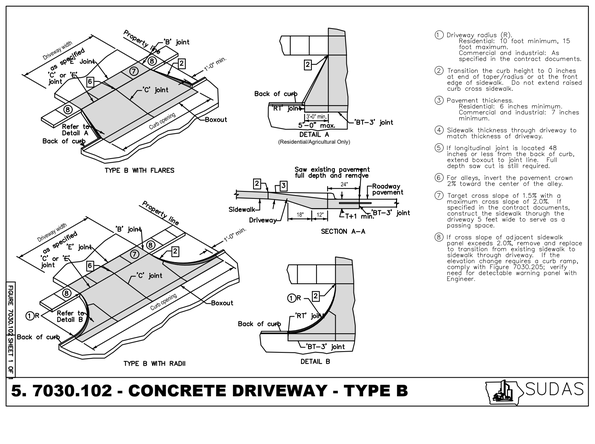
COLOR OPTIONS
⊙ BLACK
BURGUNDY, BURNT RED, RED, WHITE, IVORY, SILVER,BROWN, ORANGE, HUNTER GREEN

MOUNT OPTIONS
IN-GROUND
⊙ SURFACE

SETBACKS
9.5" DOUBLE SIDED
7.5" SINGLE SIDED

CAPACITY OPTIONS
⊙ 543-1002 - 5 BIKES
543-1003 - 7 BIKES
543-1004 - 9 BIKES
543-1005 - 11 BIKES
543-1006 - 13 BIKES
543-1007 - 15 BIKES

4. BIKE RACK - WAVE STYLE



① Driveway radius (R): Residential: 10 foot minimum, 15 foot maximum. Commercial and Industrial: As specified in the contract documents.

② Transition the curb height to 0 inches at end of taper/radius or at the front edge of sidewalk. Do not extend raised curb cross sidewalk.

③ Pavement thickness: Residential: 6 inches minimum. Commercial and Industrial: 7 inches minimum.

④ Sidewalk thickness through driveway to match thickness of driveway.

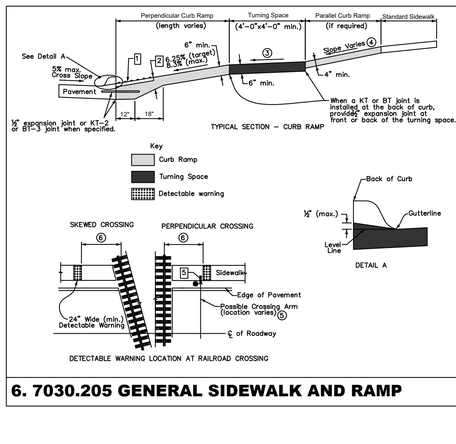
⑤ If longitudinal joint is located 48 inches or less from the back of curb, extend boxout to joint line. Full depth saw cut is still required.

⑥ For alleys, invert the pavement crown 2% toward the center of the alley.

⑦ Target cross slope of 1.5% with a maximum cross slope of 2.0%, or as specified in the contract documents, construct the sidewalk through the driveway 5 feet wide to serve as a passing space.

⑧ If cross slope of adjacent sidewalk exceeds 2.0%, construct a 5 foot landing space to transition from existing sidewalk to sidewalk through driveway. If the elevation change requires a curb ramp, comply with Figure 7030.205, verify need for detectable warning panel with Engineer.

5. 7030.102 - CONCRETE DRIVEWAY - TYPE B



① Provide a minimum 2 foot width of detectable warning surfaces in the direction of travel that extends across the full width of the curb ramp and turning space, exclusive of curbs or flares.

② Provide a minimum of 6 inches of concrete below the detectable warning panel.

③ Minimum 4 feet by 4 feet. Target cross slope of 2.5% with a maximum cross slope of 2.0%.

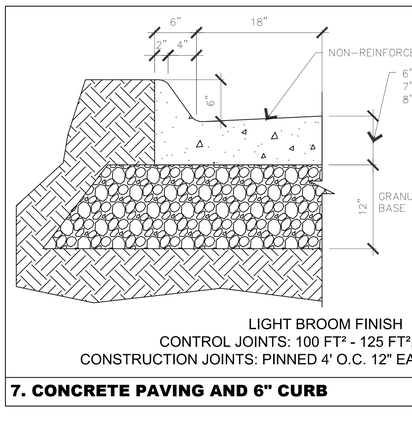
④ If normal sidewalk elevation cannot be achieved with the perpendicular ramp between the street and landing due to limited ramp length, provide a parallel ramp to make up the elevation difference between the landing and the standard sidewalk.

The length of the parallel ramp is not required to exceed 15 feet, regardless of the ramp's slope. Do not exceed 8.3% slope for parallel ramps shorter than 15 feet.

⑤ If crossing gate conflicts with detectable warning panel location or if pedestrian crossing gate is provided, place detectable warning panel in advance of the crossing gate.

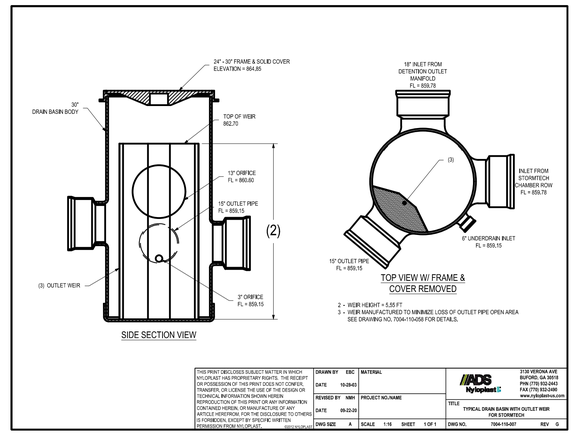
⑥ Locate front edge of detectable warning panel 12 to 15 feet from centerline of nearest rail. Orient truncated domes parallel to the direction of pedestrian travel.

6. 7030.205 GENERAL SIDEWALK AND RAMP



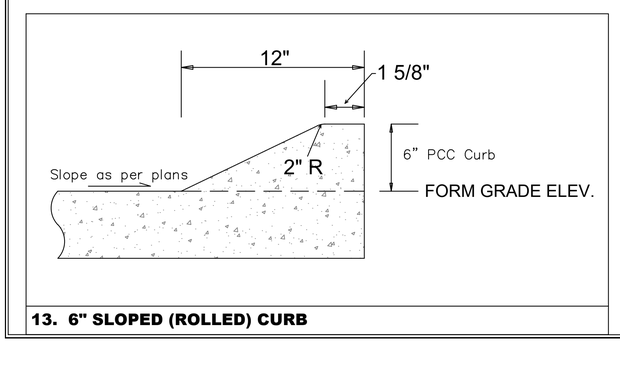
LIGHT BROOM FINISH
CONTROL JOINTS: 100 FT² - 125 FT², 25% DEEP
CONSTRUCTION JOINTS: PINNED 4' O.C. 12" EACH WAY W/ #4 REBAR

7. CONCRETE PAVING AND 6" CURB



2 - WEIR HEIGHT = 5.55 FT
3 - WEIR MANUFACTURED TO MINIMIZE LOSS OF OUTLET PIPE OPEN AREA SEE DRAWING NO. 7004-110-056 FOR DETAILS.

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	DATE	10-28-03			
	REVISED BY	NMH	PROJECT NO./NAME		TITLE TYPICAL DRAIN BASIN WITH OUTLET WEIR FOR STORMTECH
	DATE	09-22-20			
	DWG SIZE	A	SCALE 1:16	SHEET 1 OF 1	DWG NO. 7004-110-057 REV G



13. 6" SLOPED (ROLLED) CURB

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TITLE:
CASEY'S STORE #4372
6961 UNIVERSITY AVE
WINDSOR HEIGHTS, IA

BENCHMARK:			REVISIONS: PRELIMINARY	
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FILE PATH: J:\2022 Projects\22-201 CGS Windsor Heights\Engineering\Sheet Set

C-604 - DETAIL SHEET

PROPOSED 180LF 6' OPAQUE FENCE

J JR & PEGGY FRYE
1233 70TH ST

WOOD GARDEN FENCE

CP#10

CP#11

10' SETBACK

PROPOSED "U4"
CASEY'S BUILDING
42'-10" x 100'-10"
FF:868.12

PROPOSED SIDEWALK

EMPLOYEE ENTRY

BOLLARD (TYP.)

ENTRY

LOADING AREA

EXISTING CHAIN LINK FENCE

PROPOSED SIDEWALK

BOLLARD (TYP.)

PROPOSED SIDEWALK

ENTRY

EMPLOYEE ENTRY

PROPOSED SIDEWALK

25' SETBACK

10' SETBACK

70TH STREET

ASPHALT SURFACE IN FAIR CONDITION
SPEED LIMIT - 30 M.P.H.

EXISTING UNKN. FENCE

14K

8K

UNDERGROUND DETENTION
SC-740 - 158 CHAMBERS
13,438 CF STORAGE
BASE OF STONE = 859.15

25' SETBACK

PERMANENT PUBLIC
UTILITY EASEMENT
BK: PG:

ASPHALT OVER
P.C.C.

ASPHALT OVER
P.C.C.

CP#13

PROPOSED 6' SIDEWALK

5' P.C.C. SIDEWALK

CP#12

CONCRETE SURFACE IN GOOD CONDITION
SPEED LIMIT = 30 M.P.H.

UNIVERSITY AVENUE

NO PARKING
30 M.P.H. SIGN

STORM MANHOLE
RIM = 866.20

69TH STREET

WH DEVELOPMENT LLC
7101 UNIVERSITY AVE

CHARLES R COLBY
IOWA DES MOINES NATION
6900 UNIVERSITY AV

LANDSCAPING REQUIREMENTS:

MINIMUM PERVIOUS AREA:
REQUIRED: 1 TREE PER 2,000 SQ.FT. PERVIOUS AREA - 19,711 SQ.FT. PERVIOUS AREA - 10 TREES
PROPOSED: 13 TREES

SPACING: 30FT BETWEEN STREET TREES

PROPOSED TREES:

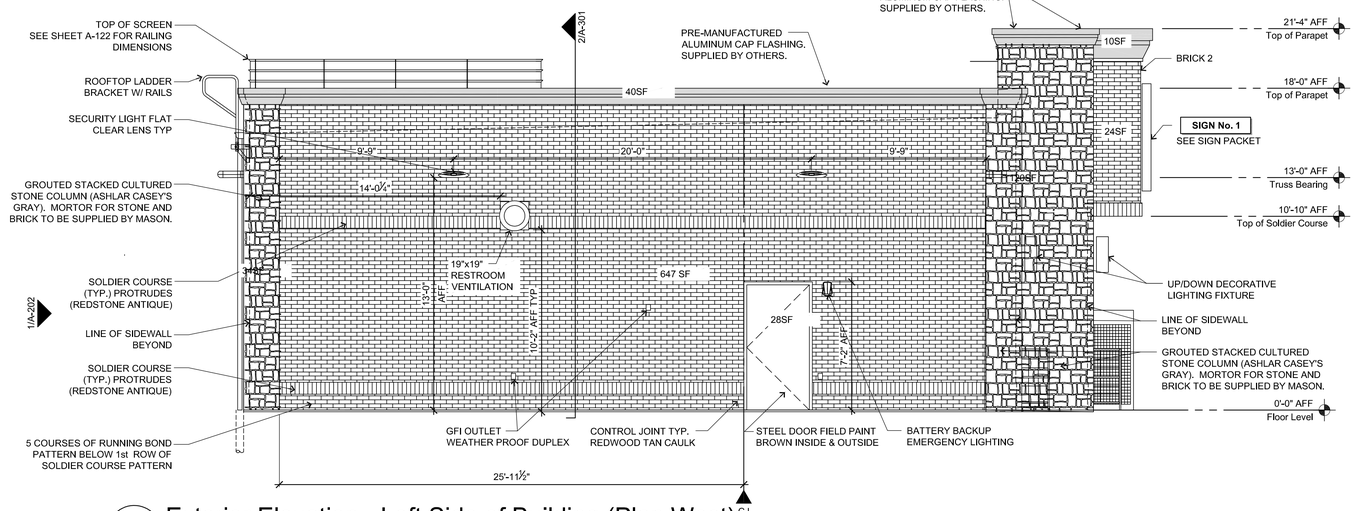
SYMBOL	#	COMMON NAME (BOTANICAL NAME)	PLANTING SIZE	MATURE SIZE (HEIGHT & SPREAD)
	8	BABY BLUE SPRUCE (PICEA PUNGENS 'BABY BLUE')	6' TALL	20' & 15'
	1	GINGKO (MALE ONLY) (GINKGO BILOBA 'AUTUMN GOLD')	2" CALIPER B&B	50' & 35'
	2	KENTUCKY COFFEETREE (GYMNOCLADUS DIOICA 'ESPRESSO')	2" CALIPER B&B	75' & 50'
	1	AMERICAN SMOKE TREE (COTINUS OBOVATUS)	2" CALIPER B&B	30' & 30'
	1	JAPANESE TREE LILAC (SYRINGA RETICULATA 'IVORY SILK')	2" CALIPER B&B	20' & 15'
	4	EXISTING TREES		

PROPOSED SHRUBS:

SYMBOL	#	COMMON NAME (BOTANICAL NAME)	PLANTING SIZE	MATURE SIZE (HEIGHT & SPREAD)
	8	SOFT SERVE FALSE CYPRESS (PINUS MUGO 'CARSTENS')	2 GALLON	6'-10" & 5'-6"

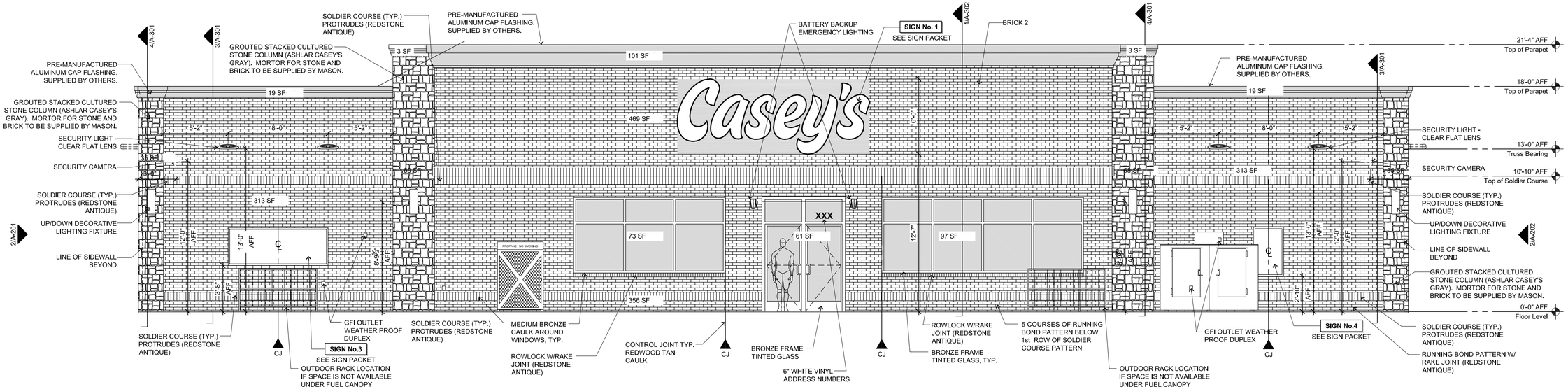
Scale in Feet
1" = 20'

Point#	North	East	Elevation	Description
CP10:	583503.565	1582130.005	868.533	CUT-X
CP11:	583489.079	1582343.416	872.326	CONTROL CAP
CP12:	583179.092	1582398.289	867.109	CUT-X
CP13:	583196.586	1582181.659	862.831	CUT-X



2 Exterior Elevation - Left Side of Building (Plan West)

1/4"=1'-0"



1 Exterior Elevation - Front of Building (Plan South)

1/4"=1'-0"

PRIMARY MATERIALS	FRONT		BACK		RIGHT		LEFT	
GLASS	231 SF							
STONE	206 SF	12%	44 SF	3%	154 SF	18%	154 SF	18%
BRICK 1	982 SF	54%	1098 SF	69%	647 SF	74%	647 SF	74%
BRICK 2 (THIN SET)	469 SF	26%			24 SF	3%	24 SF	3%
SECONDARY MATERIALS								
CONCRETE			379 SF	24%				
METAL FLASHING	145 SF	8%	60 SF	4%	50 SF	6%	50 SF	6%
ACM PANELS								
TOTAL AREA OF ELEVATION	2,033 SF		60 SF		50 SF		50 SF	
PERCENT TOTAL OF PRIMARY MATERIALS (EXCLUSIVE OF GLASS)	91.95%		95.64%		88.70%		88.70%	
PERCENT TOTAL OF SECONDARY MATERIALS (EXCLUSIVE OF GLASS)	8.05%		4.36%		11.30%		11.30%	

General Notes

1. REVIEW AND COORDINATE WITH ALL DETAIL PAGES REFERENCED ON THIS PLAN, NOTIFY ARCHITECT AND OWNER OF DISCREPANCIES
2. **RELATED DRAWING SHEETS**: REFER TO THE FOLLOWING:
   AL-101: FOR BUILDING LOCATION ON SITE
   AL-601: FOR INFORMATION RELATING TO SIGNAGE
   A-101: PRIMARY FLOOR PLAN FOR CONSTRUCTION LAYOUT
   A-121: ROOF PLAN/ROOF TOP EQUIPMENT
   A-601: DOOR & WINDOW SCHEDULES AND NOTES
   S-101: FOOTINGS AND FOUNDATIONS
   S-102: ROOF TRUSSES
3. **WORKING POINT**: THE WORKING POINT (***WP***) INDICATED ON THE DRAWINGS IS RELATIVE TO THE FACE OF SHEATHING ON THE EXTERIOR WALL AND IS A COMMON POINT OF REFERENCE WHERE EVER USED IN THESE DRAWINGS
4. ALL VENT PENETRATIONS ON BACK OF BACKSIDE OF ROOF.

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CASEY'S CONSTRUCTION DIVISION
One Convenience Blvd., P.O. Box 3001, Ankeny, Ia. 50021 515-965-6100

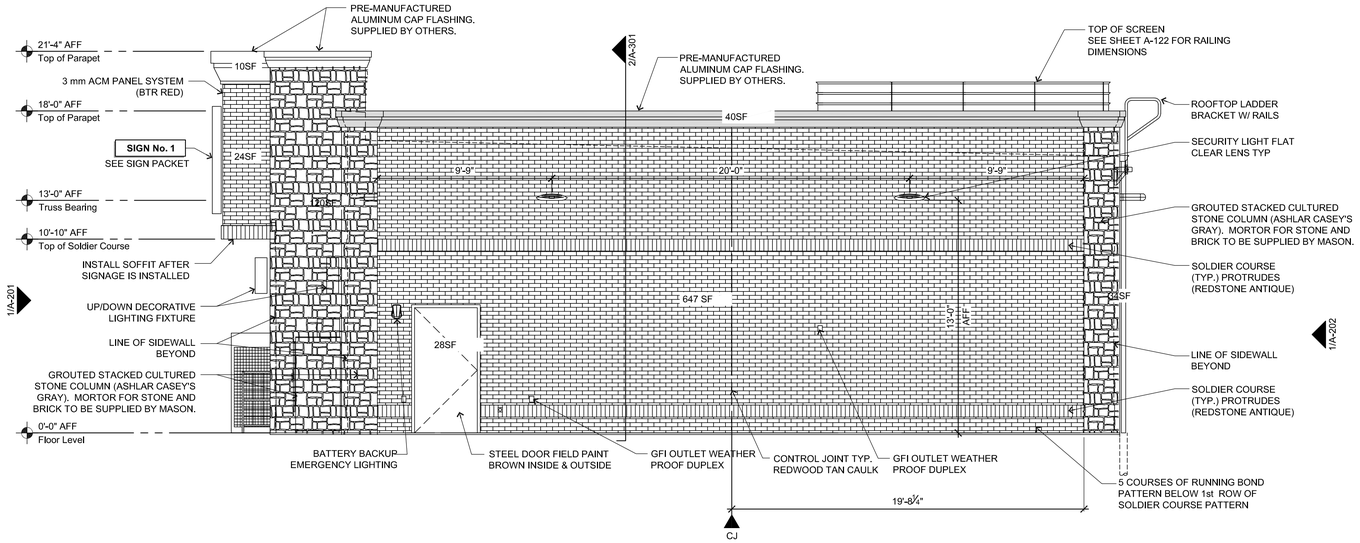
PROJECT:
UNIVERSITY AVE. & 70TH ST.
WINDSOR HEIGHTS, IA

PUBLISHED: 03/15/23
REVISED: 09/15/23

DRAWING INFORMATION:
EXTERIOR ELEVATIONS

A-201

PROTOTYPE AND VERSION: 2023 - U4 - V.01
DRAWN BY: Arlon Goforth III
CHECKED BY: D. WILLRICH

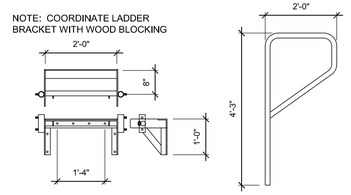


2 Exterior Elevation - Right Side of Building (Plan East)

1/4"=1'-0"

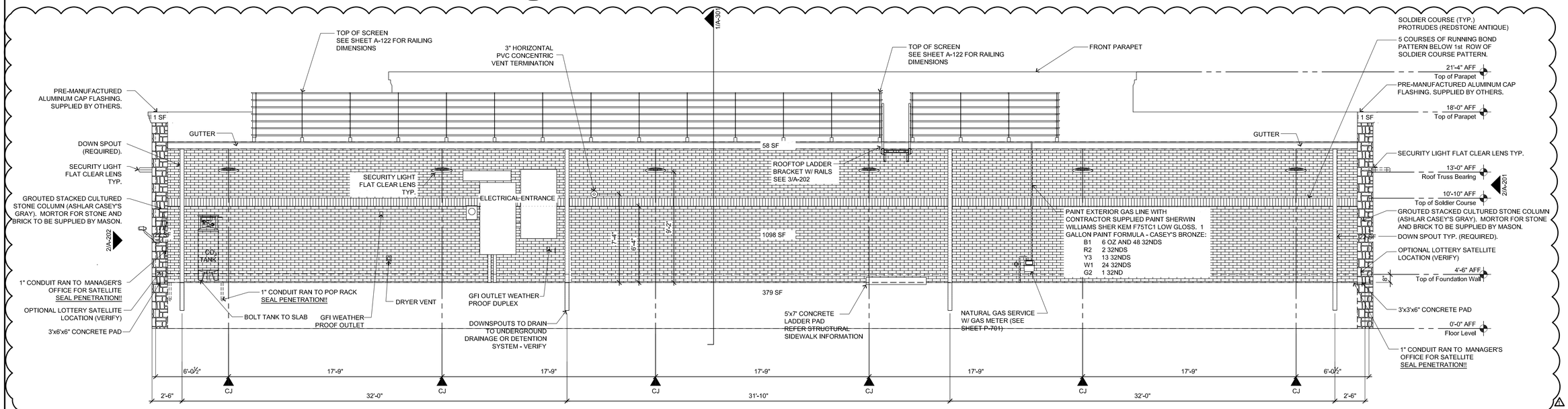
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4. ALL VENT PENETRATIONS ON BACK OF BACKSIDE OF ROOF.



3 Ladder Bracket

1/2"=1'-0"



1 Exterior Elevation - Back of Building (Plan North)

1/4"=1'-0"

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Casey's

CASEY'S CONSTRUCTION DIVISION
One Convenience Blvd., P.O. Box 3001, Ankeny, Ia. 50021 515-965-6100

PROJECT: UNIVERSITY AVE. & 70TH ST. WINDSOR HEIGHTS, IA	PUBLISHED: 03/15/23	DRAWING INFORMATION: EXTERIOR ELEVATIONS
	REVISED: 09/15/23	
PROTOTYPE AND VERSION: 2023 - U4 - V.01		A-202
DRAWN BY: Arlon Goforth III	CHECKED BY: D. WILLRICH	



FRONT

Casey's Canopy
6 in Row Brick

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BACK

Casey's Canopy
6 in Row Brick

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FRONT ELEVATION



RIGHT ELEVATION

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BACK ELEVATION



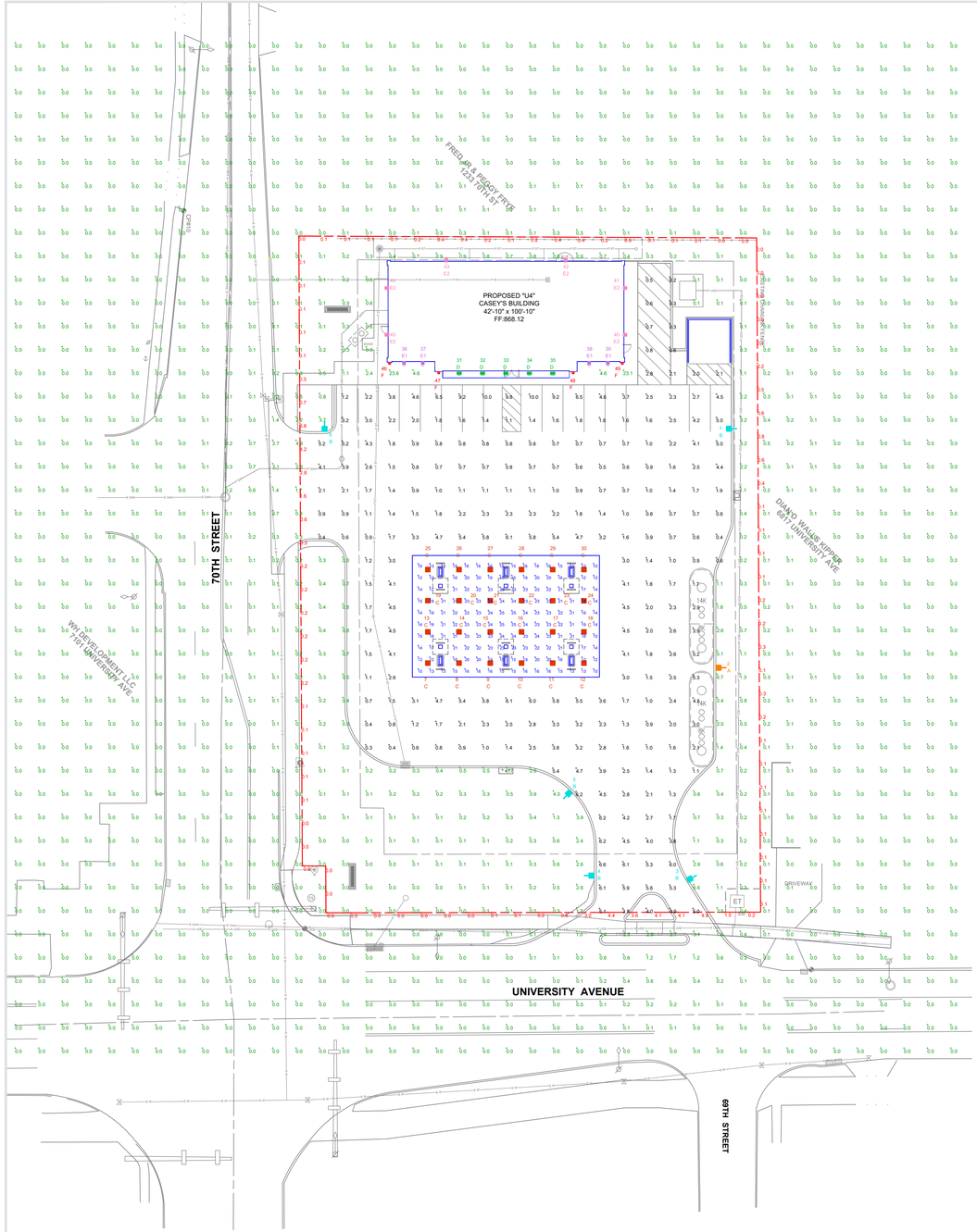
LEFT ELEVATION

Casey's Canopy
6 in Row Brick

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HORIZONTAL CALC POINTS AT PROPERTY LINE

LUMINAIRE LOCATION SUMMARY		
LUM NO.	LABEL	MTG. HT.
1	B	17
2	A	17
3	B	17
4	B	17
5	B	17
6	B	17
7	C	16.5
8	C	16.5
9	C	16.5
10	C	16.5
11	C	16.5
12	C	16.5
13	C	16.5
14	C	16.5
15	C	16.5
16	C	16.5
17	C	16.5
18	C	16.5
19	C	16.5
20	C	16.5
21	C	16.5
22	C	16.5
23	C	16.5
24	C	16.5
25	C	16.5
26	C	16.5
27	C	16.5
28	C	16.5
29	C	16.5
30	C	16.5
31	D	10
32	D	10
33	D	10
34	D	10
35	D	10
36	E1	13
37	E1	13
38	E1	13
39	E1	13
40	E2	13
41	E2	13
42	E2	13
43	E2	13
44	E2	13
45	E2	13
46	F	8.75
47	F	8.75
48	F	8.75
49	F	8.75

NOTES:
- ALL AREA LIGHTS ARE ON NEW 17 FT. POLES MOUNTED ON 2 FT. CONCRETE BASES.

- THIS SITE IS LOCATED IN A REGION WHERE LIGHTING IS REGULATED BY LOCAL ORDINANCES.

FOOTCANDLE LEVELS CALCULATED AT GRADE USING INITIAL LUMEN VALUES					
LABEL	AVG	MAX	MIN	AVG/MIN	MAX/MIN
01_UNDER CANOPY	18.65	25	10	1.87	2.50
02_PAVED AREA	2.63	10.0	0.2	13.15	50.00
03_PROPERTY LINE - HORIZONTAL	0.55	4.8	0.0	N.A.	N.A.
04_UNDEFINED AREA	0.18	23.6	0.0	N.A.	N.A.

LUMINAIRE SCHEDULE										
SYMBOL	QTY	LABEL	ARRANGEMENT	LUMENS	LLF	BUG RATING	WATTS/LUMINAIRE	TOTAL WATTS	MANUFACTURER	CATALOG LOGIC
	1	A	SINGLE	8150	1.020	B1-U0-G2	76	76	CREE, INC.	OSQ-ML-C-DA-XX + OSQM-C-16L-30K7-3B-UL-NM-XX-Q5
	5	B	SINGLE	7450	1.020	B1-U0-G1	76	380	CREE, INC.	OSQ-ML-C-DA-XX + OSQM-C-16L-30K7-4B-UL-NM-XX-Q5
	24	C	SINGLE	4400	1.020	B2-U2-G1	29	696	CREE, INC.	CP5-8L-30K8-DF-UL-RC-XX-Q2 + CP5-BZ-SP-XX
	5	D	SINGLE	3058	1.030	B2-U0-G0	34	170	CREE, INC.	SFT-228-PS-RM-03-E-12-XX-350-30K (SPECIAL ORDER)
	4	E1	SINGLE	2790	1.030	B1-U0-G1	37	148	CREE, INC.	SEC-EDG-3M-WM-02-E-UL-XX-525-30K
	6	E2	SINGLE	1560	1.030	B0-U0-G1	25	150	CREE, INC.	SEC-EDG-2MB-WM-02-E-UL-XX-350-30K-DIM (BXSE9291&) 180 DEGREE OPTICS
	4	F	SINGLE	1456	1.000	B2-U0-G0	53	212	FC LIGHTING, INC.	FCC600-18-WM-UNV-930-15L-XXX-15-LD

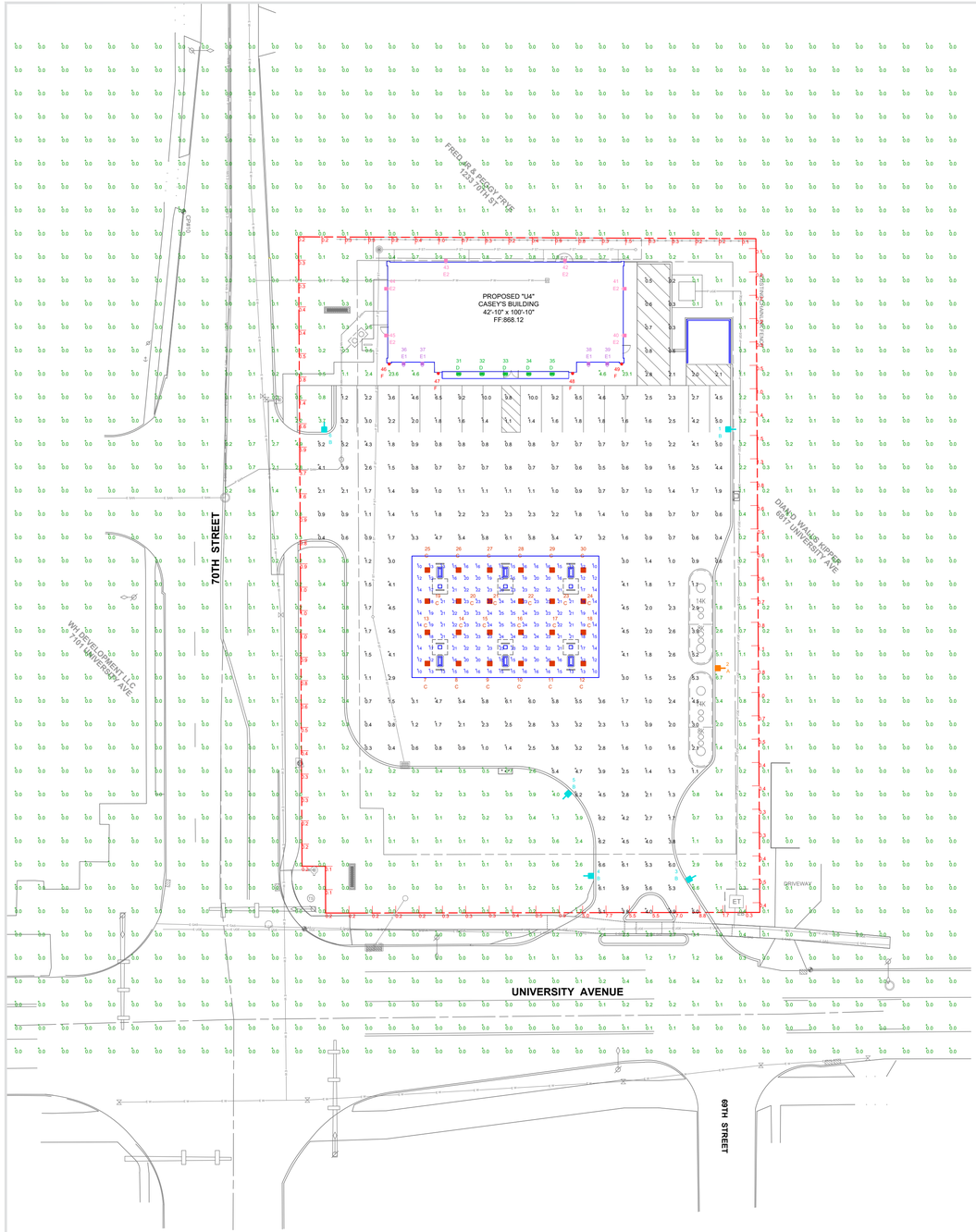
REDLEONARD ASSOCIATES
1340 Kemper Meadow Dr, Forest Park, OH 45240
513-574-9500 | redleonard.com

REV.	BY	DATE	DESCRIPTION
R1	RCF	12/20/2023	REVISED TO MEET CITY REQUIREMENTS.
R2	RCF	01/16/2023	REVISED TO MEET CITY REQUIREMENTS (CALCULATIONS).
R3	RCF	02/08/2024	REVISED TO MEET THE MAX LUMEN REQUIREMENT OF 196,205 LUMENS (OR LESS). (5 LUMENS PER S.F. OF HARDSCAPE x 39,241 S.F. OF IMPERVIOUS AREA.)

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SCALE: 1" = 30'
LAYOUT BY: RCF
DWG SIZE: D
DATE: 10/04/2023

PROJECT NAME:
CASEY'S
WINDSOR HEIGHTS, IA
DRAWING NUMBER:
RL-9171-S1-R3



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SECURITY AND SAFETY REASONS

VERTICAL CALC POINTS AT PROPERTY LINE

LUMINAIRE LOCATION SUMMARY		
LUM NO.	LABEL	MTG. HT.
1	B	17
2	A	17
3	B	17
4	B	17
5	B	17
6	B	17
7	C	16.5
8	C	16.5
9	C	16.5
10	C	16.5
11	C	16.5
12	C	16.5
13	C	16.5
14	C	16.5
15	C	16.5
16	C	16.5
17	C	16.5
18	C	16.5
19	C	16.5
20	C	16.5
21	C	16.5
22	C	16.5
23	C	16.5
24	C	16.5
25	C	16.5
26	C	16.5
27	C	16.5
28	C	16.5
29	C	16.5
30	C	16.5
31	D	10
32	D	10
33	D	10
34	D	10
35	D	10
36	E1	13
37	E1	13
38	E1	13
39	E1	13
40	E2	13
41	E2	13
42	E2	13
43	E2	13
44	E2	13
45	E2	13
46	F	8.75
47	F	8.75
48	F	8.75
49	F	8.75

NOTES:
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FOOTCANDLE LEVELS CALCULATED AT GRADE USING INITIAL LUMEN VALUES					
LABEL	AVG	MAX	MIN	AVG/MIN	MAX/MIN
01_UNDER CANOPY	18.65	25	10	1.87	2.50
02_PAVED AREA	2.63	10.0	0.2	13.15	50.00
03_PROPERTY LINE - VERTICAL @ 5FT	1.08	8.8	0.1	10.80	88.00
04_UNDEFINED AREA	0.18	23.6	0.0	N.A.	N.A.

LUMINAIRE SCHEDULE										
SYMBOL	QTY	LABEL	ARRANGEMENT	LUMENS	LLF	BUG RATING	WATTS/LUMINAIRE	TOTAL WATTS	MANUFACTURER	CATALOG LOGIC
	1	A	SINGLE	8150	1.020	B1-U0-G2	76	76	CREE, INC.	OSQ-ML-C-DA-XX + OSQM-C-16L-30K7-3B-UL-NM-XX-Q5
	5	B	SINGLE	7450	1.020	B1-U0-G1	76	380	CREE, INC.	OSQ-ML-C-DA-XX + OSQM-C-16L-30K7-4B-UL-NM-XX-Q5
	24	C	SINGLE	4400	1.020	B2-U2-G1	29	696	CREE, INC.	CP5-8L-30K8-DF-UL-RC-XX-Q2 + CP5-BZ-SP-XX
	5	D	SINGLE	3058	1.030	B2-U0-G0	34	170	CREE, INC.	SFT-228-PS-RM-03-E-12-XX-350-30K (SPECIAL ORDER)
	4	E1	SINGLE	2790	1.030	B1-U0-G1	37	148	CREE, INC.	SEC-EDG-3M-WM-02-E-UL-XX-525-30K
	6	E2	SINGLE	1560	1.030	B0-U0-G1	25	150	CREE, INC.	SEC-EDG-2MB-WM-02-E-UL-XX-350-30K-DIM (BXSE9291&) 180 DEGREE OPTICS
	4	F	SINGLE	1456	1.000	B2-U0-G0	53	212	FC LIGHTING, INC.	FCC600-18-WM-UNV-930-15L-XXX-15-LD

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REV.	BY	DATE	DESCRIPTION
R1	RCF	12/20/2023	REVISED TO MEET CITY REQUIREMENTS.
R2	RCF	01/16/2023	REVISED TO MEET CITY REQUIREMENTS (CALCULATIONS).
R3	RCF	02/08/2024	REVISED TO MEET THE MAX LUMEN REQUIREMENT OF 196,205 LUMENS (OR LESS). (5 LUMENS PER S.F. OF HARDSCAPE x 39,241 S.F. OF IMPERVIOUS AREA.)

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SCALE: 1" = 30'
LAYOUT BY: RCF
DWG SIZE: D
DATE: 10/04/2023

PROJECT NAME:
CASEY'S
WINDSOR HEIGHTS, IA
DRAWING NUMBER:
RL-9171-S1-R3

	QTY	LABEL	DESCRIPTION
AREA	1	A	OSQ-ML-C-DA-XX + OSQM-C-16L-30K7-3B-UL-NM-XX-Q5
	5	B	OSQ-ML-C-DA-XX + OSQM-C-16L-30K7-4B-UL-NM-XX-Q5

	QTY	LABEL	DESCRIPTION
CANOPY	24	C	CP5-8L-30K8-DF-UL-RC-XX-Q2 + CP5-BZ-SP-XX

	QTY	LABEL	DESCRIPTION
SOFFIT	5	D	SFT-228-PS-RM-03-E-12-XX-350-30K (SPECIAL ORDER)

	QTY	LABEL	DESCRIPTION
WALL MOUNTED	4	E1	SEC-EDG-3M-WM-02-E-UL-XX-525-30K
	6	E2	SEC-EDG-2MB-WM-02-E-UL-XX-350-30K-DIM (BXSE92918) 180 DEGREE OPTICS

	QTY	LABEL	DESCRIPTION
WALL MOUNTED	4	F	FCC600-18-WM-UNV-930-15L-XXX-15-LD

ADDITIONAL FIXTURE INFO

OSQ Series

OSQ™ LED Area/Flood Luminaire featuring Patented NanoComfort™ Technology – Version C

Rev. Date: V3 04/17/2023

Product Description

The OSQ™ Area/Flood luminaire blends extreme optical control, advanced thermal management and modern, clean aesthetics. Built to last, the housing is rugged cast aluminum with an integral, weathertight LED driver compartment. Versatile mounting configurations offer simple installations. Its slim, low-profile design minimizes wind load requirements and blends seamlessly into the site. Complete with a dark-sky compliant, full cutoff distribution. Medium is suitable upgrade for HID applications up to 400 Watts. Large is suitable upgrade for HID applications up to 1000 Watts. Extra Large is suitable upgrade for HID applications up to multiple 1000 Watts.
Applications: Parking lots, walkways, campuses, car dealerships, office complexes, high-mast and internal roadways.

Performance Summary

Utilizes Patented NanoComfort™ Technology

Utilizes Cree TrueWhite® Technology on 5000K Luminaires

Assembled in the USA by Cree Lighting from US and imported parts

Initial Delivered Lumens: 4,000 - 75,000

Efficacy: Up to 171 LPW

CRI: Minimum 70 CRI (3000K, 4000K & 5700K); 90 CRI (5000K)

CCT: 3000K, 4000K, 5000K, 5700K

Limited Warranty*: 10 years for luminaire; 10 years for ColorFast DeltaGuard® finish; 5 years for BML sensor; up to 5 years for Synapse® accessories; 1 year for luminaire accessories

* See http://creelighting.com/warranty for warranty terms. For Synapse accessories, consult Synapse spec sheets for details on warranty terms.

Ordering Information

Fully assembled luminaire is composed of two components that must be ordered separately:
Example: **Mount.** OSQ-ML-C-DA-BK + **Luminaire.** OSQM-C-GL-30K7-2M-UL-NM-BK

Mount Luminaire must be ordered separately!*

OSQ-					
Medium/Large Mounts		**Extra Large Mounts**		**Color Options**	
OSQ-ML-C-AA Adjustable Arm		**OSQ-EL-C-AA** Adjustable Arm		**SV** Silver	**BZ** Bronze
OSQ-ML-C-DA Direct Arm		**OSQ-EL-C-DA** Direct Arm		**BK** Black	**WH** White
OSQ-ML-C-TA Trunnion Mount					

* Mounting Kit MU pattern, DTA, and pole / octagonal adaptability data beginning on page 14.

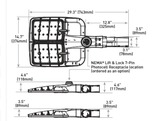
Luminaire (Mount must be ordered separately)

OSQ	C										
Family	**Size**	**Series**	**Lumen Package***	**ASSY CRI**	**Optic**	**Voltage**	**Mount**	**Color Options**	**Controls***	**Options**	
OSQ	M Medium L Large X Extra Large	C	**P6LED** 4L 4,000 Lumens 6L 6,000 Lumens 8L 8,000 Lumens 11L 11,200 Lumens 14L 14,000 Lumens 16L 16,000 Lumens **LG3M** LG3M 22,000 Lumens **LG4M** LG4M 30,000 Lumens **LG5M** LG5M 40,000 Lumens **LG6M** LG6M 50,000 Lumens **LG7M** LG7M 60,000 Lumens	**AMBIENTIX®** **5000K** **5K7** Tips 5 Mid w/ Factory-Installed Daylight Shield **5M** Tips 5 Mid **5T** Tips 5 Mid w/ Factory-Installed Daylight Shield **SUPERNOVA** **3000K** **3K7** Tips 3 Mid **3M** Tips 3 Mid **3T** Tips 3 Mid w/ Factory-Installed Daylight Shield **5000K/3K7** Tips 5 Mid **3K** Tips 3 Mid **5K** Tips 5 Mid **5000K/3K7** Tips 5 Mid **3K** Tips 3 Mid **5K** Tips 5 Mid	**UL** Universal 120-277V **UH** Universal 347-480V Not available with 4L, 6L, 8L, 11L, 14L, 16L, 22L, 30L, 40L, 50L, 60L packages **HT** Universal 347-480V with Factory-Installed Daylight Shield Not available with 4L, 6L, 8L, 11L, 14L, 16L, 22L, 30L, 40L, 50L, 60L packages	**M** Medium Mount **L** Large Mount **X** Extra Large Mount **MW** Wall Mount	**BK** Black **SV** Silver **WH** White	**DML** **Bluetooth® Technology Enabled Multi-Level Sensor** - Integrated motion/daylight sensor. Refer to DML spec sheet for details. 20-40' sensor lens installed as standard. Refer to lens options and pole-thread included for downlight applications. - Not available with 3 or 4 options. - Not available with 2 or 7 HVG options. **DMLW** **Bluetooth® Technology Enabled Multi-Level Sensor** - Integrated motion/daylight sensor. Refer to DML spec sheet for details. 20-40' sensor lens installed as standard. Refer to lens options and pole-thread included for downlight applications. - Not available with 3 or 4 options. - Not available with 2 or 7 HVG options. **DCR** **Dimming Controller Receptacle** - Factory-installed receptacle for wireless dimming controller. Controls by others. - Refer to Dimming spec sheet for details. **Maximum 10V Source Current:** 1.8mA **Operating Temperature Range:** -40° C - +40° C (-40° F - +104° F)	**ZHV** **20kV/10kA Surge Suppression** - Replaces standard 10kV/5kA surge protection. **F** **Fusing** - Compatible with 120, 277 or 347V (prior to re-install) - Consult factory if fusing is required for 208, 240V or 480V (prior to re-install) - When side-mounting, use Wire Guard. **N** **Utility Label and NEMA® Lid & Cord T-Pin Photocell Receptacle** - External utility label per ANSI C136.15-2020 - Includes NEMA® photocell receptacle - Available only with OSQM-A, OSQL luminaires **R** **Rotatable Photocell Receptacle** - 7-pin rotatable photocell receptacle - Intended for downlight applications with maximum 45° tilt - Not available with DML or DMLW - Requires photocell or shorting cap by others. - Refer to page 7 for compatible Synapse control offerings. **RL** **Rotate Right** - Luminaire can be rotated to the right. - Refer to RORL in configurator drop-down on page 2a for optic directionality. - Not for use with symmetric optics. **RR** **Rotate Right** - Luminaire can be rotated to the right. - Refer to RORR in configurator drop-down on page 2a for optic directionality. - Not for use with symmetric optics.	

* Luminaire Package codes identify approximate light output only. Actual lumen output levels vary by CCT and optic selection. Refer to Initial Delivered Lumen tables for specific lumen values.
** Luminaire ordered without HVG dimming.

OSQM - AA Mount





Luminaire	Weight
OSQM	19.3 lbs. (8.8kg)

Note: For OSL, OSX and additional mounts, refer to drawings beginning on page 2a.

Electrical Data*

Lumen Package	System Watts 120-480V	Utility Watts (Multiply=)	Total Current (A) 120V	208V	240V	277V	347V	480V
4L**	34	30	0.21	0.12	0.11	0.09	N/A	N/A
6L	51	45	0.33	0.18	0.15	0.13	0.11	0.08
8L	55	48	0.44	0.27	0.23	0.20	0.16	0.12
11L	68	70	0.57	0.33	0.28	0.25	0.20	0.14
14L	97	100	0.81	0.47	0.40	0.35	0.28	0.20
22L	131	130	1.09	0.63	0.55	0.47	0.38	0.27
30L	175	180	1.44	0.86	0.73	0.63	0.50	0.36
40L	226	240	1.96	1.13	0.96	0.85	0.68	0.47
50L	297	N/A	2.48	1.43	1.24	1.07	0.86	0.62
60L	384	N/A	3.20	1.85	1.60	1.39	1.11	0.80
7PL	447	N/A	3.73	2.15	1.86	1.61	1.29	0.93

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V (+/- 10%) or 347-480V (+/- 10%).
** Available with UL voltage only.

OSQ-C Series Ambient Adjusted Lumen Maintenance[1]

Ambient	Initial LMF	25K hr Reported[2] LMF	50K hr Reported[2] LMF	75K hr Estimated[3] LMF	100K hr Estimated[3] LMF
5°C (41°F)	1.02	0.99	0.93	0.88	0.83
10°C (50°F)	1.02	0.98	0.93	0.87	0.82
15°C (59°F)	1.01	0.98	0.92	0.87	0.82
20°C (68°F)	1.01	0.97	0.92	0.86	0.81
25°C (77°F)	1.00	0.97	0.91	0.86	0.81

[1] Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the Temperature Data Reference Document for outdoor average nighttime ambient temperatures.
[2] In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to but not to exceed the duration in the IES LM-80 report for the LED.

Accessories

Field-Installed

Backlight Shield	Shorting Cap
OSQ-BLS (Black/Medium)	XA-XSLSHRT
OSQ-L-C-BLSFP (Large)	
OSQ-X-C-BLSFP (Extra Large)	
- Not for use with rotated optics	
Pole Adapters	
OSQ-MA-SMDPUK	
OSQ-L-C-BRDSPUK	
OSQ-X-C-BRDSPUK	

CA RESIDENTS WARNING: Cancer and Reproductive Harm – www.p65warnings.ca.gov

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CREE LIGHTING

CPY500™ Series

CPY500™ LED Recessed Canopy, Car Wash, Hook & Cord or Pendant Mount Luminaire

Rev. Date: V5 05/02/2023

Product Description

The CPY500™ Series LED luminaire features a large 11" X 11" glass optic that delivers the best in visual comfort and performance. Diffused optics minimize glare and increase visual comfort while delivering top-of-category 175 LPW efficiency and high-performance light distribution. Its sleek and low-profile form blends into the canopy while still being easily serviceable from below. Additional car wash, hook & cord and pendant mounts provide a consistent aesthetic for different applications within a site.
Applications: Petroleum canopies, CNG fueling stations, convenience stores, drive-thru banks and restaurants, retail and grocery

Performance Summary

Assembled in the USA by Cree Lighting from US and imported parts

Initial Delivered Lumens: Up to 20,900

Efficacy: Up to 175 LPW

CRI: Minimum 70 CRI (40K, 50K, 57K); 80 CRI (30K); 90 CRI (40K, 50K)

CCT: 3000K, 4000K, 5000K, 5700K

Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish/up to 5 years for Synapse® accessories/1 year on field-installed accessories

IP66 optics/IP64 driver housing

Class 1, Division 2 Hazardous Location for select models

* See http://creelighting.com/warranty for warranty terms.

Accessories

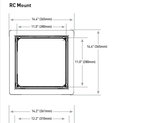
Field-Installed Accessories

Surepoint Wireless VW Interface
(SWIS-220)
- Includes SWI
- Requires other Synapse components to complete system
- Refer to SWIS-220 spec sheet for details

Pendant Mount Kits (for use with P3 Mount)
KA-P3CPY-1 – 1' (305mm) pendant
KA-P3CPY-2 – 2' (610mm) pendant
KA-P3CPY-3 – 3' (915mm) pendant
- Includes two conduit fittings and (4) ¼-NPT pipe threaded on two ends.



RC Mount



Lumen Package	Weight
7L, 9L, 11L, 14L, 16L, 19L, 21L	14.3 lbs. (6.7kg)
13L	14.3 lbs. (6.5kg)
17L	15.6 lbs. (7.2kg)

Refer to page 6 for line drawings of 14L, 16L and 17L mounts.

* Mount specify color: BK (Black), BZ (Bronze), SV (Silver) or WH (White).

Ordering Information

Example: CPY-13L-57K7-DF-UL-RM-03-E-12-WH-350

CPY									
Product	**Lumen Package***	**CCT/CRI**	**Optic**	**Voltage**	**Mounting****	**Color Options**	**Controls (specify one)**	**Options**	
CPY	7L 2,800 Lumens 9L 3,900 Lumens 11L 5,000 Lumens 13L 6,000 Lumens 14L 7,000 Lumens 16L 8,000 Lumens 17L 8,900 Lumens 19L 10,000 Lumens 21L 20,900 Lumens	**30K8** 3000K, 80 CRI **40K7** 4000K, 70 CRI **40K8** 4000K, 80 CRI **50K7** 5000K, 70 CRI **50K8** 5000K, 80 CRI **57K7** 5700K, 70 CRI	**DF** Diffuse Lumiberline **LB** Lumiberlean	**UL** Universal 120-277V **HT** Universal 347-480V - Available with 7L, 9L, 11L, 13L, 14L, 16L, 17L, 19L, 21L packages.	**RM** Rec Mount **CH** Car Wash, Hook & Cord **PD** Pendant - Recessed Canopy	**BK** Black **BZ** Bronze **SV** Silver **WH** White	**03** 3 Sensor **04** 4 Sensor **12** 12 Sensor	**DIM 0-10V Dimming** - Controls by others. - Refer to Dimming spec sheet for details **ADK 4000K Color Temperature** - Color temperature per luminaire - Minimum 70 CRI **5DK 5000K Color Temperature** - Color temperature per luminaire - Minimum 70 CRI **7BL Amber Turtle Friendly LEDs** - Available only with 350mA - Not available with downlight - Additional shielding (by others) may be required for Florida Fish and Wildlife Conservation Commission compliance.	

* Lumen Package codes identify approximate light output only. Actual lumen output levels vary by CCT and optic selection. Refer to Initial Delivered Lumen tables for specific lumen values.
** Direct and recessed soffit mounts are also available. Refer to https://www.creelighting.com/products/canopy-and-soffits for spec sheets for these additional mounts.

Electrical Data*

Lumen Package	System Watts 120-277V	System Watts 347-480V	Total Current (A) 120V	208V	240V	277V	347V	480V
7L, 9L, 11L, 13L, 14L, 16L, 17L, 19L, 21L	175	180	1.46	0.84	0.73	0.63	0.50	0.36

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V (+/- 10%) or 347-480V (+/- 10%).

CPY500™ Series Ambient Adjusted Lumen Maintenance[1]

Ambient	Luminaire Mounting Type	Initial LMF	25K hr Reported[2] LMF	50K hr Reported[2] LMF	75K hr Estimated[3] LMF	100K hr Reported[2] LMF
5°C (41°F)	2L-13L, Plywood[4]	1.02	0.99	0.96	0.94	0.91
	2L-20L, Metal	1.02	0.98	0.96	0.93	0.91
10°C (50°F)	2L-13L, Plywood[4]	1.02	0.98	0.96	0.93	0.91
	2L-20L, Metal	1.02	0.98	0.96	0.93	0.91
15°C (59°F)	2L-13L, Plywood[4]	1.02	0.98	0.96	0.91	0.90
	2L-20L, Metal	1.02	0.98	0.95	0.93	0.90
20°C (68°F)	2L-13L, Plywood[4]	1.01	0.97	0.95	0.90	0.87
	2L-20L, Metal	1.01	0.97	0.93	0.90	0.87
25°C (77°F)	2L-13L, Plywood[4]	1.00	0.97	0.94	0.90	0.89
	2L-20L, Metal	1.00	0.96	0.93	0.90	0.87
30°C (86°F)	2L-13L, Plywood[4]	0.99	0.96	0.93	0.89	0.86
	2L-20L, Metal	0.99	0.95	0.93	0.89	0.86
35°C (95°F)	2L-13L, Plywood[4]	0.99	0.95	0.93	0.88	0.85
	2L-20L, Metal	0.99	0.95	0.92	0.88	0.85
40°C (104°F)	2L-13L, Plywood[4]	0.98	0.95	0.92	0.87	0.84
	2L-20L, Metal	0.98	0.94	0.92	0.87	0.84
45°C (113°F)	2L-13L, Plywood[4]	0.98	0.94	0.91	0.86	0.83
	2L-20L, Metal	0.98	0.94	0.90	0.86	0.83
50°C (122°F)	2L-13L, Plywood[4]	0.97	0.93	0.90	0.85	0.82
	2L-20L, Metal	0.97	0.92	0.88	0.85	0.81

* 2DL mounted directly to plywood is suitable through 40°C only.

[1] Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the Temperature Data Reference Document for outdoor average nighttime ambient temperatures.
[2] In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to but not to exceed the duration in the IES LM-80 report for the LED.
[3] Estimated values are calculated and represent time durations that exceed the in-test duration of the LED.

Operating Temperature Range

Lumen Package	Direct Mount to Plywood	Direct Mount to Sheet Metal	Class 1, Division 2 Hazardous Location (RC Mount only)
			Direct Mount to Plywood | Direct Mount to Sheet Metal
7L - 13L	-40°C to +50°C	-40°C to +50°C	-40°C to +40°C
17L	-40°C to +40°C	-40°C to +40°C	

NOTE: Luminaire is UL rated at 40°C, but will operate in the ambients listed above.
WARNING: Exceeding maximum operating temperature may result in thermal foldback

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Canada: creelighting-canada.com 1(800) 473-1234

CREE LIGHTING

228 Series™

LED Soffit Luminaire – Non-IC Rated

Rev. Date: V4 04/24/2020

Product Description

High-performance energy-efficient LED down light for new construction and remodel soffit applications. The recessed mount is for use in drywall, plywood or hard lid ceilings with 14" (460mm) to 24" (610mm) on center building construction. Heavy gauge steel recessed mounting frame features 1.5" (38mm) deep aperture throat to accommodate most standard ceiling thicknesses, and a universal mounting bracket that accepts 0.5" (13mm) EMT conduit, or non-metallic sheathed cable. Knockouts on top of housing for 1/2" (13mm) and 3/4" (19mm) conduit or cable. Knockouts on top of housing for eight #12 AWG feed through wires. The recessed remodel mount is entirely supported by the ceiling material and is designed to accept ceiling thickness from 0.375" (10mm) to 2.25" (57mm) and is an ideal replacement for recessed HID luminaires.
Applications: Petroleum stations, convenience stores, drive-thru banks and restaurants, retail and grocery

Performance Summary

Patented NanoOptic® Product Technology

Assembled in the U.S.A. of U.S. and imported parts

CRI: Minimum 70 CRI

CCT: 4,000K (+/- 300K) 5700K (+/- 500K) standard

Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

* See http://creelighting.com/warranty for warranty terms.

Accessories

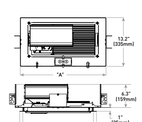
Field-Installed

EM Mount Accessories
Mounting C-Channel
EA-MC12
- Pair of 14" (356mm) rigid 3/4" x 1/2" (19mm x 13mm) galvanized C-Channel bars
EA-MC24
- Pair of 26" (660mm) rigid 3/4" x 1/2" (19mm x 13mm) galvanized C-Channel bars

Hanger Bar
Mounting Brackets
EA-MBA
- Kit contains 4



RM Mount



LED Count (±10)	Dimension	Measurement	Weight
03	A	20.2" (513mm)	26.8 lbs. (13.1kg)
	B	14.4" (366mm)	
	C	14.3" (414mm)	
04	A	23.2" (589mm)	34.4 lbs. (15.7kg)
	B	19.1" (485mm)	
	C	20.8" (528mm)	

RR Mount – see page 4 for weight & dimensions

Ordering Information

Example: SFT-228-PS-RM-03-E-12-WH-350

SFT-228									
Product	**Optic**	**Mounting**	**LED Count (±10)**	**Series**	**Voltage**	**Color Options**	**Drive Current***	**Options**	
SFT-228	**SL** Sparkle Petroleum **PS** Petroleum Symmetric	**RM** Recessed **RR** Recessed Remodel	**03** **04**	**E**	**12** 120-277V **HT** 347-480V	**BK** Black **BZ** Bronze **WH** White	**350** 350mA **525** 525mA	**DIM 0-10V Dimming** - Controls by others. - Refer to Dimming spec sheet for details **40K 4000K Color Temperature** - Color temperature per luminaire - Minimum 70 CRI	

* Requires marked spacing 48" x 24" x 6.5" (1.2'm x 610mm x 610mm x 165mm), 48" (1.2'm) from center to center of adjacent luminaires, 24" (610mm) luminaire center to side building member, 0.5" (13mm) top of luminaire to overhead building member

Electrical Data*

LED Count (±10)	System Watts 120-277V	Total Current (A) 120V	208V	240V	277V
350mA					
03	34	0.30	0.19	0.18	0.20
04	48	0.54	0.34	0.30	0.27
525mA					
03	54	0.45	0.28	0.25	0.23
04	99	0.83	0.48	0.42	0.38

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V (+/- 10%).

228 Series™ Ambient Adjusted Lumen Maintenance[1]

Ambient	Initial LMF	25K hr Reported[2] LMF	50K hr Reported[2] LMF	75K hr Estimated[3] LMF	100K hr Estimated[3] LMF
5°C (41°F)	1.04	1.01	0.99	0.98	0.96
10°C (50°F)	1.03	1.00	0.98	0.97	0.95
15°C (59°F)	1.02	0.99	0.97	0.93	0.94
0 hr.	1.01	0.98	0.96	0.95	0.93
25°C (77°F)	1.00	0.97	0.95	0.94	0.92

[1] Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the Temperature Data Reference Document for outdoor average nighttime ambient temperatures.
In accordance with ECAD TM-21-11, Projected Values represent interpolated values based on time durations that are up to but not to exceed the duration in the IES LM-80 report for the LED. Projected values represent time durations that are up to six times the actual in-test duration of the LED.
[2] In accordance with ECAD TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (or hours) for the device under testing (DUT) i.e. the packaged LED chip(s).

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CREE LIGHTING

THE EDGE® LED Security Wall Pack Luminaire

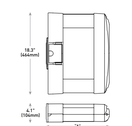
Product Specifications

CONSTRUCTION & MATERIALS
- Slim, low profile design
- Luminaire sides are rugged die cast aluminum with integral, weathertight LED driver compartment and high performance aluminum heat sinks specifically designed for LED applications
- Furnished with low copper, light weight mounting box designed for installation of standard and mud ring single gang J-Boxes
- Luminaire can also be direct mounted to a wall and surface wired
- Secures to wall with four 3/16" (5mm) screws by others)
- Conduit entry from top, bottom, sides, and rear
- Allows mounting for uplight or downlight
- Designed and approved for easy through-wiring
- Includes durable gasket
- Exclusive ColorLock DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver and white are standard
- **Weight:** See Dimensions and Weight Chart on page 1

ELECTRICAL SYSTEM
- **Input Voltage:** 120-277V or 347-480V; 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Integral 10kV/5kA surge suppression protection standard, 20kV/10kA surge suppression protection optional.
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- Designed with 0-10V dimming capabilities. Controls by others
- Refer to Dimming spec sheet for details
- **Maximum 10V Source Current:** 1.8mA
- **Operating Temperature Range:** -40° C - +40° C (-40° F - +104° F)

REGULATORY & VOLUNTARY QUALIFICATIONS
- cULus Listed (UL 1598)
- Suitable for wet locations
- Meets NOM-031-ZT standards
- Drivers and LEDs are UL certified in accordance with UL8750
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Certified to ANSI C136.31-2014, 3G rated for normal vibration or elevated bridge standards
- ANSI C136.2 10kV/5kA (standard) and 20kV/10kA (optional) surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Assembled in the USA by Cree Lighting from US and imported parts
- Meets Buy American requirements within ARRA
- RoHS compliant. Consult factory for additional details
- Dark Sky Friendly, IDA Approved when ordered with 30K CCT and direct arm mount only. Please refer to https://www.darksky.org/our-work/lighting/lighting-for-industry/fsa/fsa-products/ for most current information.
- **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov





LED Count (±10)	Dim. "A"	Weight
02	9.9" (251mm)	20 lbs. (9.1kg)
04	11.9" (303mm)	22 lbs. (10.0kg)
06	13.9" (353mm)	25 lbs. (11.3kg)
08	15.9" (404mm)	27 lbs. (12.2kg)
10	17.9" (455mm)	31 lbs. (14.1kg)
12	19.9" (505mm)	32 lbs. (14.5kg)

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347-480V (+/- 10%).

Ordering Information

Example: SEC-EDG-2M-WM-SL-E-UL-SV-700

SEC-EDG-		WM		E				
Product	**Optic**	**Mounting**	**LED Count (±10)**	**Series**	**Voltage**	**Color Options**	**Drive Current**	**Options**
SEC-EDG	**2M** Type II Medium **3M** Type III Medium w/BLS **2S** Type II Short **2SB** Type II Short w/BLS **2H** Type III Medium **3H** Type III Medium w/BLS **4M** Type IV Medium **4MB** Type IV Medium w/BLS	**WM** Wall Mount	**02** **04** **06** **08** **12**	**E**	**UL** Universal 120-277V **UH** Universal 347-480V **3K** 3000K	**BK** Black **BZ** Bronze **SV** Silver **WH** White	**350** 350mA - Available with 20-80 LEDs **700** 700mA - Available with 20-40 LEDs	**DIM 0-10V Dimming** - Controls by others. - Refer to Dimming spec sheet for details **PML Programmable Multi-Level** - Refer to PML spec sheet for details - Not available with downlight applications with 0° tilt **30K 3000K Color Temperature** - Minimum 80 CRI **40K Color Temperature** - Color temperature per luminaire - Minimum 70 CRI **50K 5000K Color Temperature** - Color temperature per luminaire - Minimum 70 CRI **7BL Amber Turtle Friendly LEDs** - Available only with 350mA - Not available with downlight - Additional shielding (by others) may be required for Florida Fish and Wildlife Conservation Commission compliance.	

THE EDGE® Series Ambient Adjusted Lumen Maintenance[1]

Ambient	CCT	Initial LMF	25K hr Reported[2] LMF	50K hr Reported[2] LMF	75K hr Estimated[3] LMF	100K hr Estimated[3] LMF
5°C (41°F)	350mA/530mA/700mA	1.06	1.04	1.03	1.03	1.02
	TRL	1.04	1.04	1.03	1.03[4]	1.02
10°C (50°F)	350mA/530mA/700mA	1.03	1.02	1.02	1.02[4]	1.02
	TRL	1.04	1.04	1.04	1.04[4]	1.04
15°C (59°F)	350mA/530mA/700mA	1.02	1.01	1.01	1.01[4]	1.01
	TRL	1.03	1.03	1.03	1.03[4]	1.03
25°C (68°F)	350mA/530mA/700mA	1.01	0.99	0.99	0.99[4]	0.99
	TRL	1.01	1.01	1.01	1.01[4]	1.01
25°C (77°F)	350mA/530mA/700mA	1.00	0.98	0.98	0.98[4]	0.98
	TRL	1.00	1.00	1.00	1.00[4]	1.00

[1] Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the Temperature Data Reference Document for outdoor average nighttime ambient temperatures.
[2] In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to but not to exceed the duration in the IES LM-80 report for the LED.
[3] Estimated values are calculated and represent time durations that exceed the in-test duration of the LED.

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CREE LIGHTING

Due to continuous development and improvements, specifications are subject to change without notice. FC Lighting, Inc. reserves the right to change/ads text details or specifications without notice. Product use verifies agreement to FC Lighting, Inc. terms and conditions. All stated specifications have a tolerance of +/- 7%.
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US Commercial Lighting Manufacturer Since 1982
JO-DM-010523

FC OUTDOOR LIGHTING

Date: Approved:
Type:
Fixture:
Project:

FCC600 Down Only, Standard Drivers without Battery Backup

6" Round wall, pendant or surface mount down cylinder outdoor





Made in USA with domestic & globally sourced components

FEATURES
- Up to 5000 lm, Up to 100 LPW

AREA



CANOPY



SOFFIT

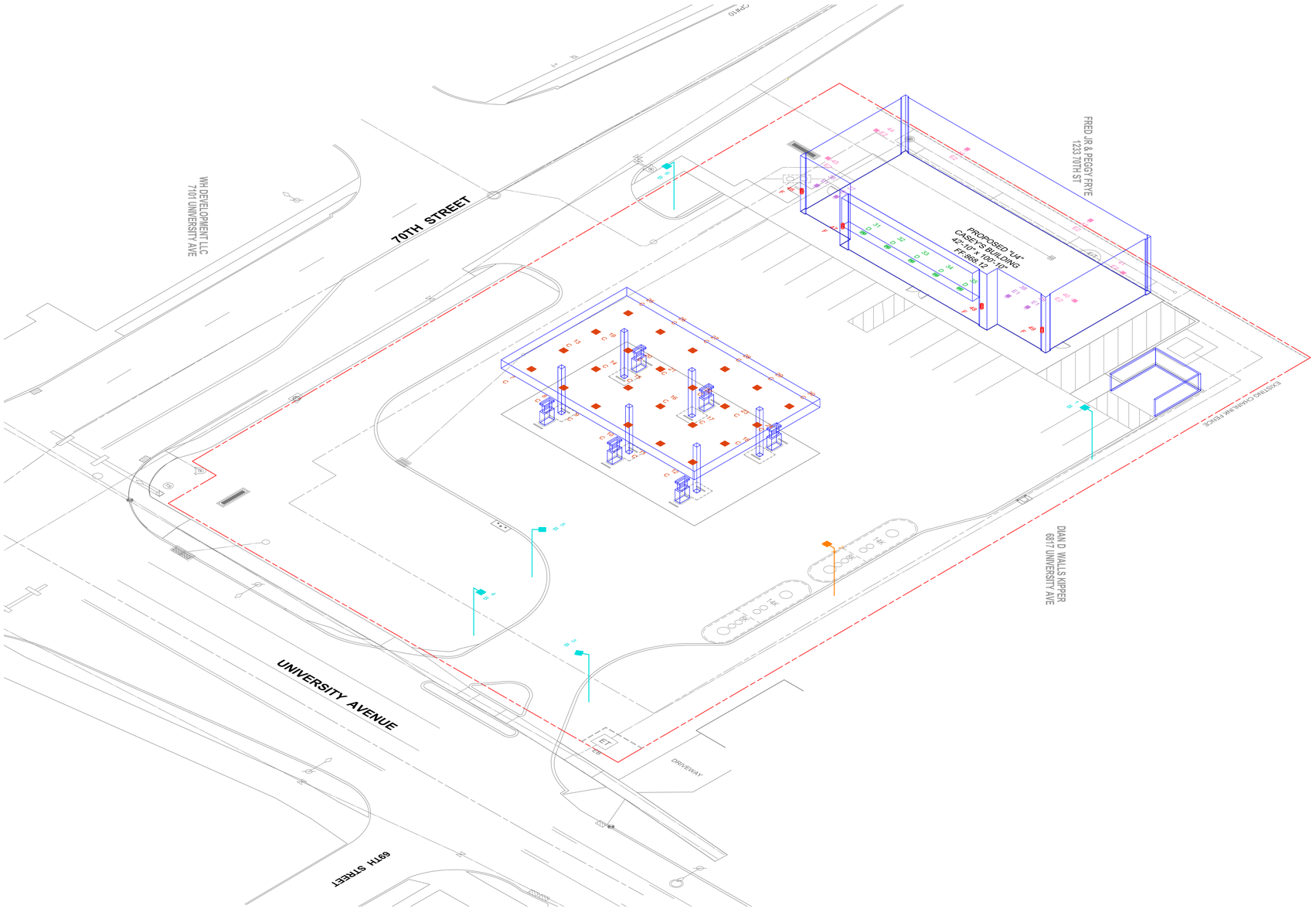


WALL MOUNTED



WALL MOUNTED

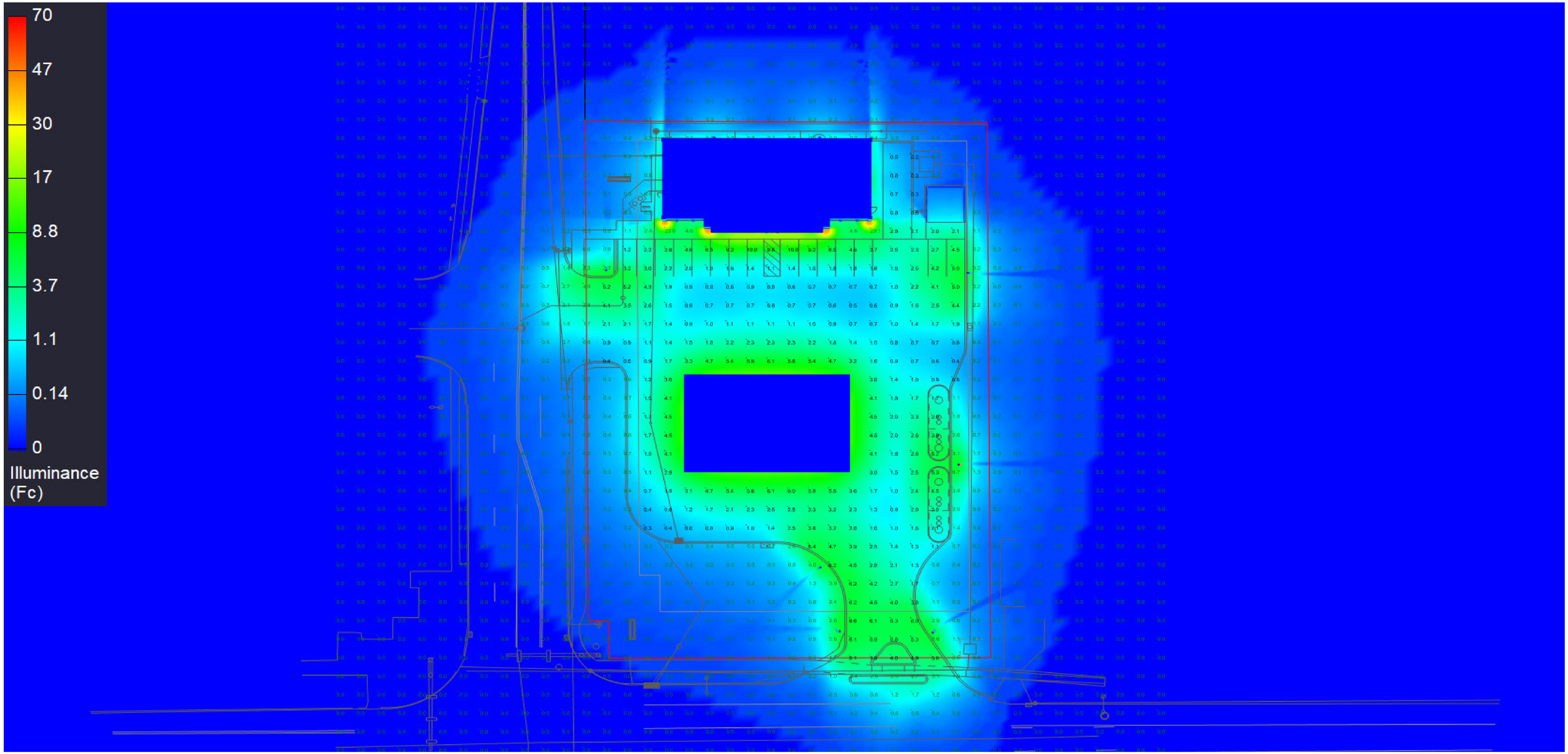




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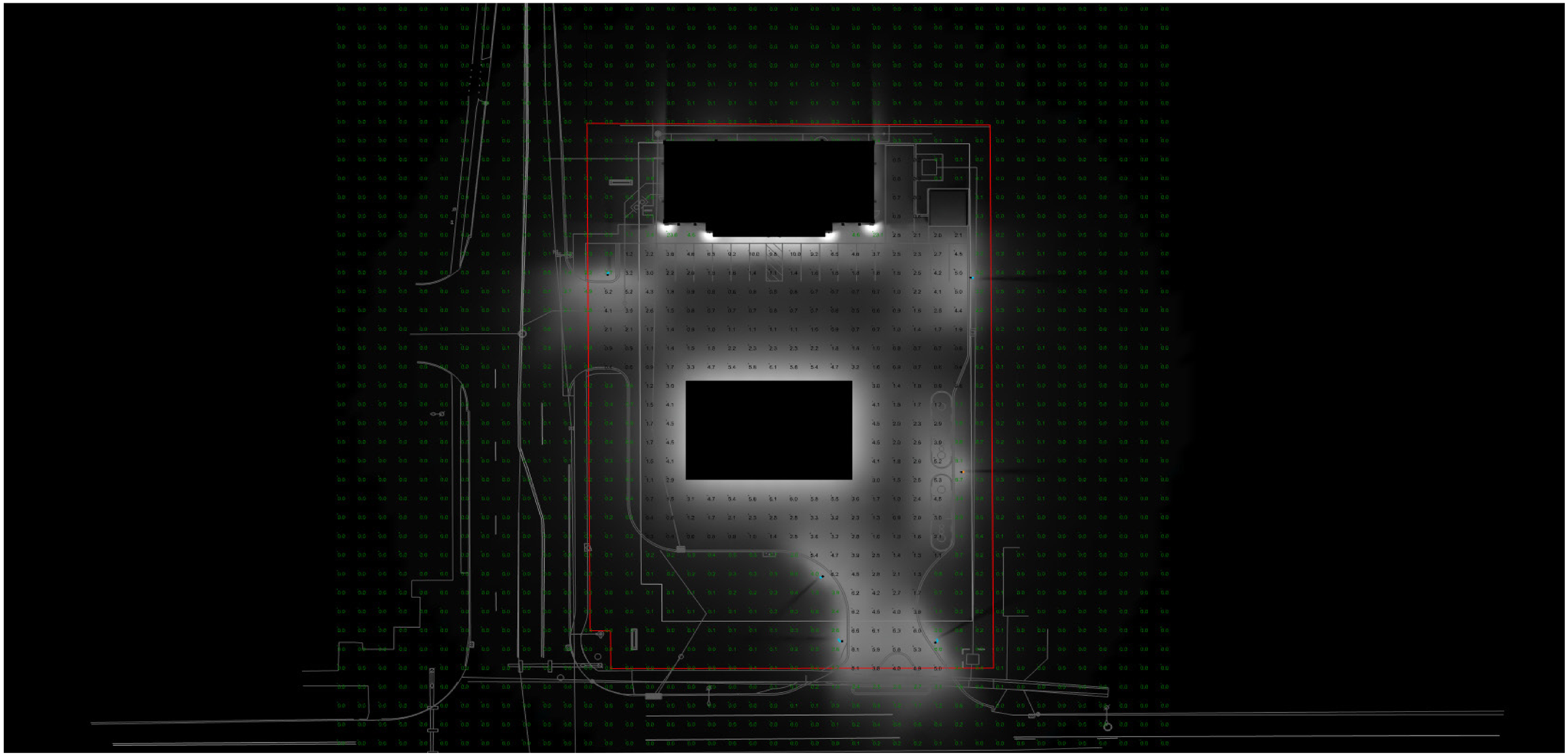
PROJECT NAME:
CASEY'S
WINDSOR HEIGHTS, IA
DRAWING NUMBER:
RL-9171-S1-R3



REDLEONARD ASSOCIATES
1340 Kemper Meadow Dr, Forest Park, OH 45240
513-574-9500 | redleonard.com

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PROJECT NAME:
CASEY'S
WINDSOR HEIGHTS, IA

DRAWING NUMBER:
RL-9171-S1-R3

Casey's SIGN PACKET

JACOB CLARK
jacob.clark@caseys.com

Windsor Heights, IA #4372

University & 70th

New Store

10-21-23

Building & Wall Signs (U4 Flat Roof)

Sign #	Sign	Type	Location	Illumination	Dimensions				
					Height	Width	Bottom	Top	Area Ft²
1	"Casey's"	Surface	Building Front	Internal	6'-0"	15' 4-1/4"	12' 7"	18' 7"	37.85
2	House Logo	Surface	Building Side	Internal	5' 0"	9' 2-11/16"	8' 8"	13' 8"	33.3
								Total	71.15

Canopy

Sign #	Sign	Type	Location	Illumination	Dimensions				
					Height	Width	Bottom	Top	Area Ft²
3	"Casey's"	Surface	Canopy Front	Internal	2' 5"	6' 2-3/16"	17' 3"	19' 8"	6.14
3	"Casey's"	Surface	Canopy Side	Internal	2' 5"	6' 2-3/16"	17' 3"	19' 8"	6.14
3	"Casey's"	Surface	Canopy Side	Internal	2' 5"	6' 2-3/16"	17' 3"	19' 8"	6.14
								Total	18.42

Brick Monument Sign (10' OAH)

Sign #	Sign	Type	Location	Illumination	Dimensions				
					Height	Width	Bottom	Top	Area Ft²
4	Price Sign	Freestanding	Street	Internal	4' 4"	9' 9"	0' 11"	5' 3"	42.25
	Product Tag	Freestanding	Street	N/A	2' 0"	4' 0"	3' 1"	4' 4"	5
								Total	47.25

Max Allowed Site Signage = 150 Ft²	Total	136.82

1



SOUTH

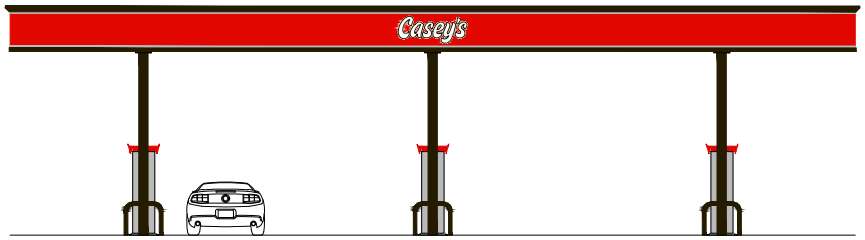
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WEST

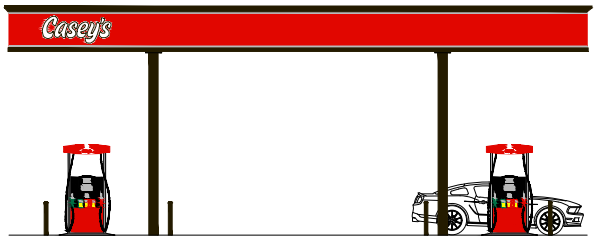
SIGN 3

3

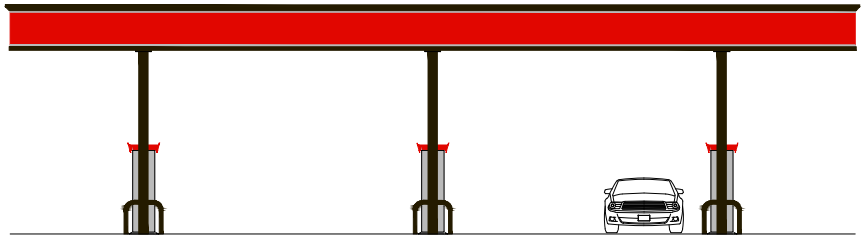


SOUTH

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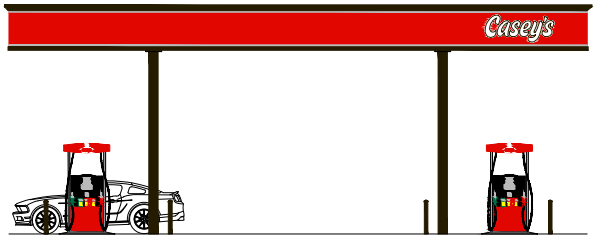


EAST



WEST

3



NORTH

GAS CANOPY

6 DOUBLE STACK HEAD-IN

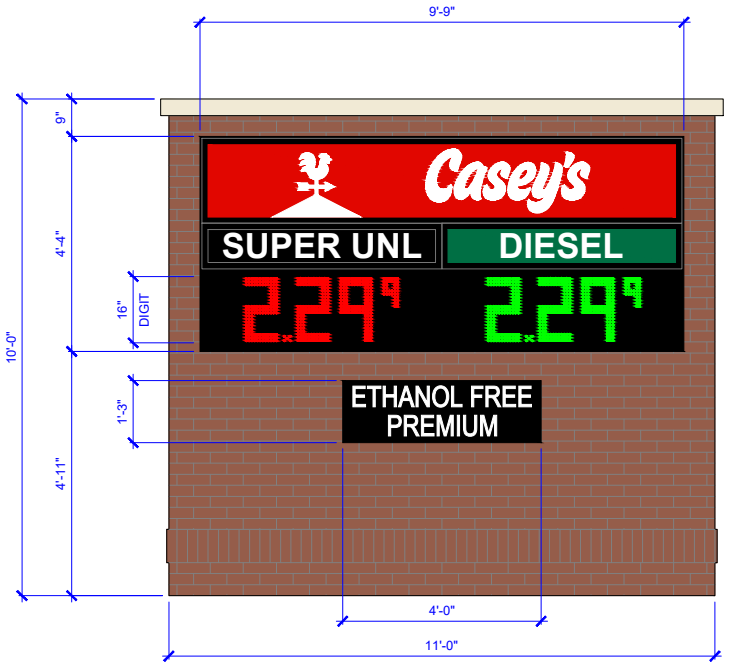
DRAWN BY: J. CLARK

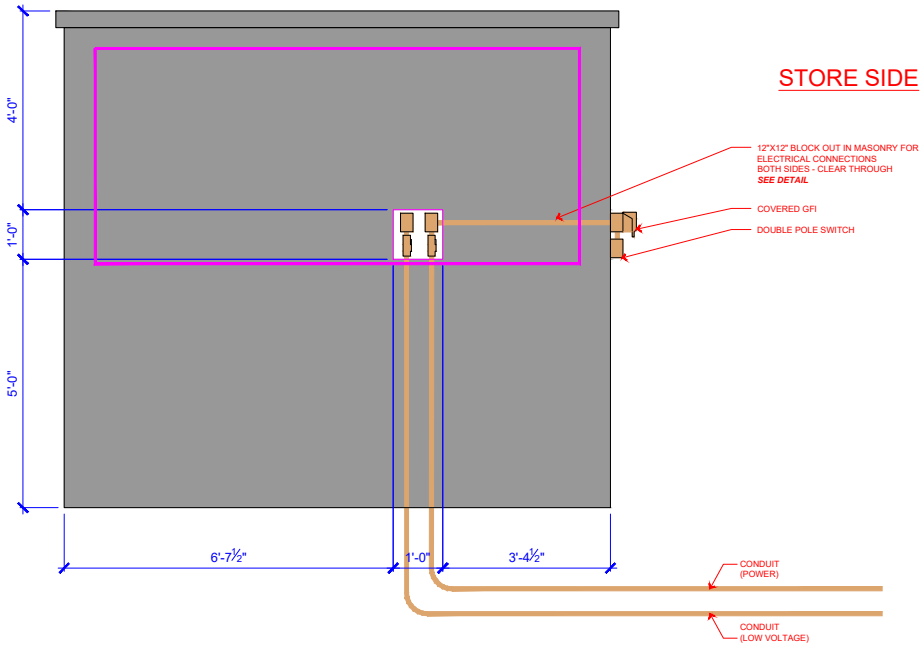
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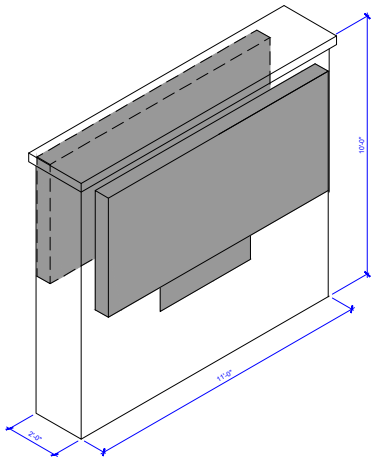
Brick Monument Sign (10' OAH)

SIGN 4

Sign #	Sign	Type	Location	Illumination	Dimensions				
					Height	Width	Bottom	Top	Area Ft²
6	Price Sign	Freestanding	Street	Internal	4' 4"	9' 9"	0' 11"	5' 3"	42.25
	Product Tag	Freestanding	Street	N/A	2' 0"	4' 0"	3' 1"	4' 4"	5
								Total	47.25







PRICER NOTES:

- 13" RED AND GREEN LED DIGITS
- STATIC LABELS, NON-INTERCHANGEABLE
- DIESEL ON THE RIGHT, BOTH SIDES

OTHER NOTES

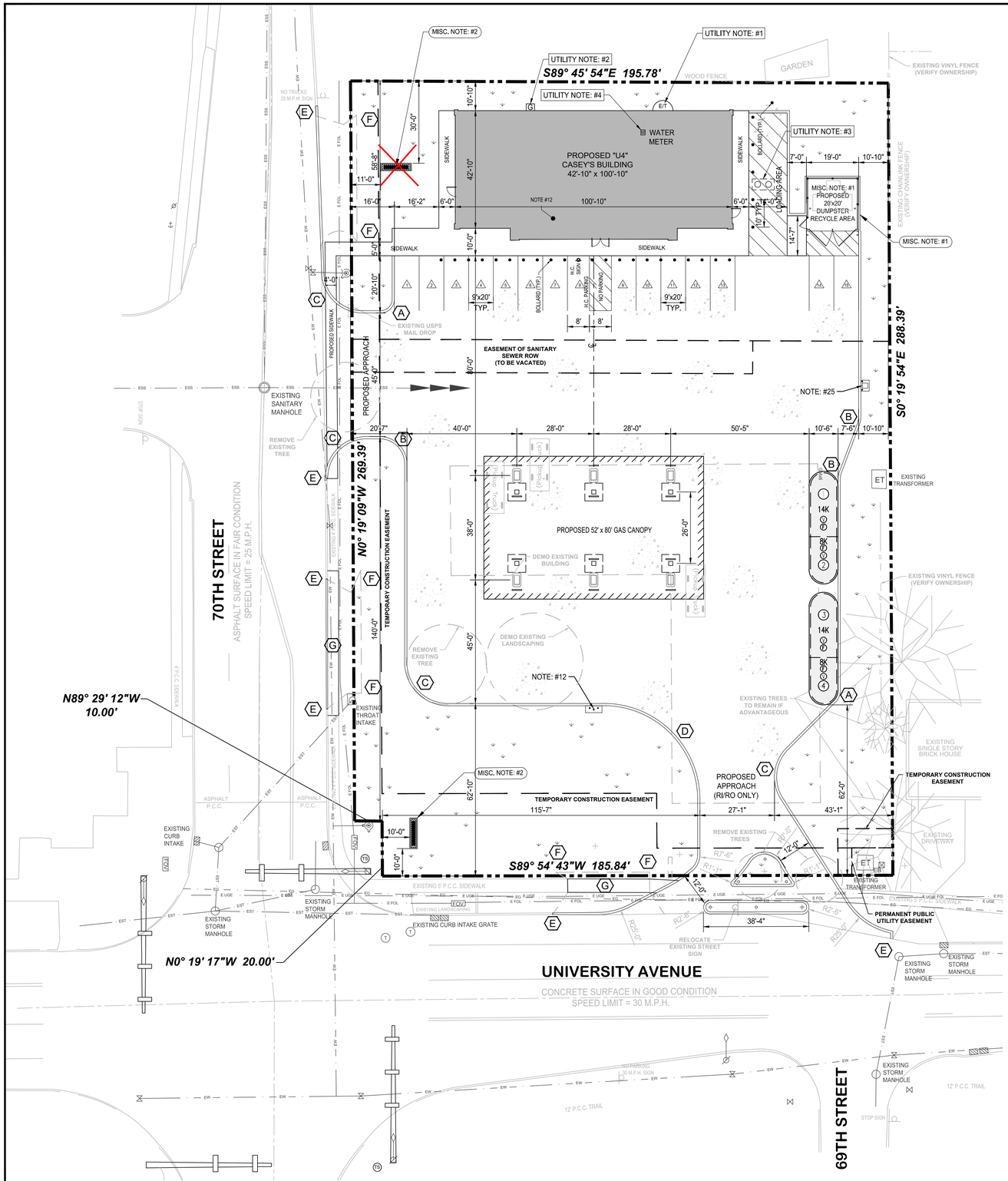
- PRODUCT "TAG" IS NON-ILLUMINATED
- CABINET IS BLACK IN COLOR
- 300' WIRELESS KEYPAD RANGE

BRICK MONUMENT SIGN

10' OAH - 2 PRODUCT

DRAWN BY: J. CLARK

DATE: 07-20-22



TRUE PLAN NORTH NORTH

A1 Site Layout Plan

1" = 20'

NOTE:

SYMBOL INDICATES EXISTING UTILITY TO EXISTING STRUCTURE TO BE REMOVED OR DISCONNECTED BY APPROPRIATE CONTRACTOR. VERIFY WITH UTILITY COMPANY REPRESENTATIVE.

Legal Description

LOTS 40, 41 AND 42 OF MOTTS PLACE, AN OFFICIAL PLAT, NOW INCLUDED IN AND FORMING A PART OF THE CITY OF WINDSOR HEIGHTS, POLK COUNT Y, IOWA, EXCEPT THAT PART DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF LOT 41 OF SAID MOTT PLACE; THENCE ALONG THE SOUTH LINE OF SAID LOTS 41 AND 40 HAVING AN ASSUMED BEARING OF NORTH 90°00'00" WEST, A DISTANCE OF ONE HUNDRED NINETY FOUR AND NINETY FIVE HUNDREDTHS (194.95) FEET; THENCE NORTH 00°13'53" WEST, A DISTANCE OF TWENTY (20.00) FEET; THENCE NORTH 90°00'00" WEST A DISTANCE OF FIVE (5.00) FEET TO A POINT ON THE WEST LINE OF SAID LOT 40; THENCE NORTH 00°13'53" WEST, A DISTANCE OF TWO HUNDRED SIXTY NINE AND FORTY FOUR HUNDREDTHS (269.44) FEET; THENCE NORTH 90°00'00" EAST, A DISTANCE OF TEN (10.00) FEET; THENCE SOUTH 00°13'53" EAST, A DISTANCE OF TWENTY (20.00) FEET; THENCE NORTH 90°00'00" EAST, A DISTANCE OF ONE HUNDRED EIGHTY FIVE AND NINETY FOUR (185.94) FEET TO A POINT ON THE EAST LINE OF SAID LOT 41; THENCE SOUTH 00°13'53" EAST, A DISTANCE OF TEN (10.00) FEET TO THE POINT OF BEGINNING.

Zoning Information

(UC University Avenue Corridor Mixed Use District)

Building Setbacks:

Front:	25'
Side:	25' (street), 0' (inferior)
Rear:	10'
Max. Building Height:	45'
Required Green Space:	20% of lot area. Landscaping plan required.
Parking Required:	One space / 200 SF of building area. (4,206/200=21.03) = 22 Spaces Required Min. size: 9'x18'. ADA space per 25 spaces. 27 Spaces Provided (15 shown, 12 at the pumps, 1 ADA space.)

Utility Notes

UTILITY NOTE #1: ELECTRICAL SERVICE ENTRANCE. REFER TO ARCH & CIVIL PLANS FOR SIZING AND LOCATION.

UTILITY NOTE #2: GAS SERVICE ENTRANCE.. REFER TO ARCH & CIVIL PLANS FOR SIZING AND LOCATION.

UTILITY NOTE #3: GREASE TRAP TO BE PROCURED AND INSTALLED BY CONTRACTOR. GREASE TRAP TO BE PROCURED FROM SCHIER PRODUCTS. UTILIZE THE FOLLOWING URL: https://schierproducts.com/stocking-dealers. CONTACT SCHIER PRODUCTS WITH ANY QUESTIONS OR CASEY'S TEAM MEMBER IF THERE IS AN ISSUE.

UTILITY NOTE #4: WATER SERVICE ENTRANCE. REFER TO ARCH & CIVIL PLANS FOR SIZING AND LOCATION.

Misc. Notes

Misc. #1:
BRICK DUMPSTER ENCLOSURE 6' HEIGHT W/ METAL GATES
2-9' GATES AND 4' SERVICE GATE

Misc. #2
2 PRODUCT MONUMENT PRICE SIGN - REFER TO SIGN PACKET

Keyed Construction Notes

NOTICE: ALL WORK IN/ON THE R.O.W. AREA IS SUBJECT TO THE CITY OF WINDSOR HEIGHTS APPROVAL AND SPECIFICATIONS.

- (A) PROPOSED 5' RADIUS
- (B) PROPOSED 10' RADIUS
- (C) PROPOSED 15' RADIUS
- (D) PROPOSED 35' RADIUS
- (E) TIE INTO AND MATCH EXISTING CURB & FLOW LINE.
- (F) REMOVE EXISTING APPROACH
- (G) REPLACE EXISTING SIDEWALK

Legend

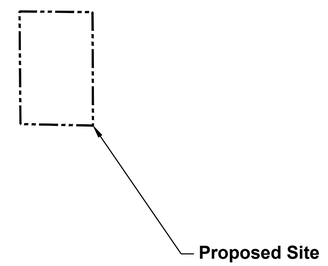
- MARKED PARKING SPACES (PAINT LINES AS INDICATED)
- TYP. CONCRETE PAVING OR SIDEWALKS (35,033 SQ. FT.)
- AREA TO BE SOD
- AREA LIGHTS (0 SHOWN) REFER TO LIGHTING PLAN RL-?-S1 DONE BY RED LEONARD

General Notes

1. **RELATED SHEETS**. FOR ADDITIONAL INFORMATION NOT DIRECTLY REFERENCED, SEE CIVIL PLANS DONE BY PELDS DESIGN & ENGINEERING:

Vicinity Map

NTS



General Construction Notes

PETROLEUM:

1.) DISPENSED PRODUCTS:
BIODIESEL, 87E15, 87C, 89C, 91C
2.) TANK SETTING DETAILS PAGE QF-301
3.) FILL PIPE AND MANHOLE DETAIL PAGE QF-301
4.) GILBARCO WIRING PAGE QF-601
5.) GAS ISLAND SIZE - 3' x 5' W/DUAL GUARD PIPE
6.) 6 - GAS GILBARCO 700 S DISPENSERS (BLENDED)
4 = NL1 4 NOZZLES & 6 METERS EACH
2 = NL3 6 NOZZLES & 8 METERS EACH
7.) ISLAND DETAILS PAGE AL-501
8.) ISLAND CONDUIT DETAIL PAGE E-602
9.) DO NOT PLACE PRODUCT PIPING UNDER ISLAND
10.) 18" MIN. FROM TANK PIPING TO FINISH SURFACE
11.) RUN VENT LINES UP SEPARATE CANOPY COLUMN, VERIFY
12.) ALL FUEL DISPENSERS FALL WITHIN A 100 FOOT RADIUS OF THE EMERGENCY SHUT-OFF SWITCH LOCATED INSIDE AT THE SALES COUNTER FOR THE CONVENIENCE STAFF. A SECONDARY SHUTOFF SHALL BE INSTALLED ON A POST AT THE CURB IF ALL FUEL DISPENSERS **DO NOT** FALL WITHIN A 100 RADIUS.

APPROACHES/CONCRETE:

13.) DRIVEWAY JOINTS TO BE PACKED & CAULKED
14.) CONCRETE DRIVE TROWELED WITH LIGHT BROOM FINISH
15.) CONTROL JOINTS - MIN. 100 sq.ft. - MAX. 125 sq.ft. - 25% DEEP
16.) CONSTRUCTION JOINTS - PINNED 4' O.C. 12" EACH WAY WITH 1/2" REBAR #4
17.) APPROACHES TO BE 7" NON-REINFORCED OR AS PER STATE/CITY SPEC.
18.) SLOPE MAX. 2% FOR BUILDING SIDEWALK, H.C PARKING 1:50 ALL DIRECTIONS
ALL ACCESS ISLE STRIPING AT 45 DEGREE ANGLE BEING MAX. 4' SEPARATION
19.) 2% MAX. CROSS-SLOPE IN APPROACH/SIDEWALK AREA
20.) 10" ROLL-OVER CURB TYP. - SEE STANDARD CIVIL DETAILS
21.) CANOPY FOOTING: SIZE 6'-3" LENGTH x 6'-3" WIDTH x 3'-0" DEPTH.
CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF F'C-3000 p.s.i.
CONCRETE REINFORCING: ASTM A-615 GRADE 60,
REBAR CAGE: (8) #6 HORIZONTAL TIES LENGTH WISE TOP AND BOTTOM 12" MAXIMUM SPACING.
22.) SIGN BASE AND DETAILS PAGE AL-601

SITE ITEMS:

23.) VERIFY ALL UTILITY LOCATIONS AND DIMENSIONS.
24.) IRRIGATION REQUIRED WITH RAIN SENSOR MOUNTED ON BACK RAILING OF ROOF.
25.) AIR COMPRESSOR BOX, SEE SHEET C-601 SITE DETAILS.
110 VOLT-60HZ-5.5 AMP. #12 WIRE (20 AMP, SINGLE PHASE) WITH GROUND.
26.) SPECIAL TRUCK TYPE AIR COMPRESSOR. SEE SHEET C-601 SITE DETAILS, 7.5 HP COMPRESSOR AND ENCLOSURE. AIR REELS MOUNTED TO CANOPY COLUMNS ON ENTRANCE SIDE, HDPE PIPING FROM COMPRESSOR TO REELS. SEE SHEET QF-401 FOR DETAILS.
27.) JUNGE BIO BLENDING CONTROL PANEL INSTALLED ON 4' x 6' CONCRETE PAD.

U.G.S.T. Notes

2 - 22,000 GALLON DOUBLE WALL FIBERGLASS TANKS
TANK 1 - 14,000 GALLON (87E15)
TANK 2 - 14,000 GALLON (BIODIESEL)
TANK 3 - 8,000 GALLON (87C)
TANK 4 - 8,000 GALLON (91C)

(F) FILL W/SPILL CONTAINMENT & OVERFILL PROTECTION (TYP.)

(1)(2)(3)(4) TURBINE ENCLOSURE TYP. CONTAINS; SUB-PUMB W/LINE LEAK DETECTION, TANK PROBE FOR FUEL MONITORING, INTERSTITIAL SENSOR AND TANK SUMP SENSOR - REFER TO QF-301 FOR NUMBER OF SUMPS

(V) VENT W/SPILL CONTAINMENT & EXTRACTOR

SUMP SENSOR @ EACH DISPENSER.

SPECIAL REQUIREMENTS:
LANDSCAPING BUFFER/SCREENING REQUIRED
KNOX BOX REQUIRED
ROOFTOP EQUIPMENT SCREENING REQUIRED
ONSITE STORMWATER DETENTION REQUIRED
(2) BRICK MONUMENT SIGNS REQUIRED

Casey's

CASEY'S CONSTRUCTION DIVISION
One Convenience Blvd., P.O. Box 3001, Ankeny, IA 50021 515-965-6100

PROJECT:
#4372 Windsor Heights, IA #2
University Ave. & 70th Street
"U4" - STYLE STORE

DRAWING INFORMATION:
CONSTRUCTION DIVISION

DRAWN BY: Kevin McFarland
CHECKED BY:

PUBLISHED:	DRAWING INFORMATION:
02.17.23	SITE PLAN
REVISIONS:	
03.03.23	
05.05.23	
07.12.23	

AL-101

Emergency Fuel Spill Response

Use the following guide in the event of a fuel spill.

Note: All on-site personnel must be aware of how to respond to a fuel spill.

Large Fuel Spill (Greater Than 5 Gallons)

Step	Task	
1	Immediately press the emergency stop button if: • The fuel spill has not stopped OR • A Guest or Team Member is in danger.	
2	Call 911 if the fuel spill is too large to be properly contained with the equipment in the fuel spill kit.	
3	Get the Absorbent Boom from the Emergency Fuel Spill Kit. Place the boom in front of any fuel flowing towards a storm drain, soil, or property line.	
4	Use the Absorbent Material from the Emergency Fuel Spill Kit to contain the spill by: • Building a berm around the spill to prevent it from spreading further, • Sprinkling the absorbent material over the spill to help absorb the fuel. ⚠ If the spill cannot be safely contained, wait for emergency responders.	
5	Bag off the pump where the spill occurred. ⚠ Instruct guests to stay clear of the area.	

Step	Task
6	Call Casey's EPA team through Service Dispatch and report the spill. • (888)-Caseys-0, Option 2, Option 1, Option 2 • Dispatch will call ON-CALL EPA ⚠ Report all spills to Casey's EPA regardless of time of day or size of spill.
7	The EPA team will gather information on the spill and provide instructions on how to clean up any used absorbent material.

Small Fuel Spill (Less Than 5 Gallons)

Step	Task	
1	Immediately press the emergency stop button if: • The fuel spill has not stopped OR • A Guest or Team Member is in danger.	
2	Call 911 if the fuel spill is too large to be properly contained with the equipment in the fuel spill kit.	
3	Use the Absorbent Material from the Emergency Fuel Spill Kit to contain the spill by: • Building a berm around the spill to prevent it from spreading further, • Sprinkling the absorbent material over the spill to help absorb the fuel. ⚠ If the spill cannot be safely contained, wait for emergency responders.	
4	Call Casey's EPA team through Service Dispatch and report the spill. • (888)-Caseys-0, Option 2, Option 1, Option 2 • Dispatch will call ON-CALL EPA ⚠ Report all spills to Casey's EPA regardless of time of day or size of spill.	
5	The EPA team will gather information on the spill and provide instructions on if and how to clean up any used oil dry.	

Casey's General Stores
Overview of Fuel System and Safety Features



Fuel System Overview
Casey's General Stores utilizes several different materials, methods of monitoring and leak detection to ensure that any potential fuel system issues can be prevented or identified as quickly as possible. Casey's employees are trained on how to respond to any issue involving the underground storage tanks or fuel spills. The regulations governing fuel systems, the safety and redundancy components of the fuel system, and Casey's procedures are outlined below.

Fuel System Regulations
The fuel system is designed to comply with applicable regulations and codes. The Environmental Protection Agency has primary authority over the Underground Storage Tank (UST) regulations. States have the option of adopting their own more restrictive versions of the regulations. Applicable federal regulations can be found at 40 CFR 80 and 40 CFR 81.

The federal regulations require that the UST:

- Have a secondary containment system (in case of a leak)
- Can detect a release from any portion of the tank and the connected underground piping that contains product;

Applicable regulations also require that at least annually, a test of the system must be performed which covers the following components:

- Automatic tank gauge and other controllers: test alarm; verify system configuration; test battery backup;
- Probes and sensors: inspect for residual buildup; ensure floats move freely; ensure shaft is not damaged; ensure cables are free of kinks and breaks; test alarm operability and communication with controller;
- Automatic line leak detector: test operation to meet criteria in §280.44(a) by simulating a leak;
- Vacuum pumps and pressure gauges: ensure proper communication with sensors and controller; and

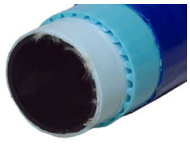
In addition, the federal EPA regulations mandate operator training, including training for store employees on how to respond to alarms and spills. Casey's complies with or exceeds all federal and state regulations applicable to the location of every UST owned or operated by Casey's.

(A) Underground Storage Tank (UST)
The largest component of the fuel system is the USTs. The tanks are made of corrosion-resistant fiberglass. Tanks are constructed with a secondary containment around the full circumference of the tank (double walled tank). If there is ever an issue with the primary tank, the outer tank both contains the leak and while a leak detection alarm is generated to the operator.



(B) Piping
Flexible piping is used for the Casey's fuel system. The piping is a multiple layer pipe system that also has secondary containment (double walled piping). If there is ever an issue with the primary pipe, the outer pipe contains the leak while a leak detection alarm is generated to the operator.





(C) Sumps
Tank sumps and dispenser sumps are used for secondary containment of piping connections. The sumps contain potential drips or leaks from the dispenser or submersible pump and allows for any leak to be detected.





(D) Dispenser

Fuel dispensers are used at the fuel island to dispense duel into a consumer's vehicle. The piping to the dispenser utilizes an emergency valve. The emergency valve provides protection against fire or collision with the dispenser. If either occur, the emergency valve will close and stop the flow of fuel below the dispenser. Each hose also has an emergency breakaway. If a nozzle is left in the vehicle when it drives away, the breakaway will protect against damage to the hose and dispenser. Fuel flow is also stopped when the breakaway is activated.









(E) Automatic Tank Gauge (ATG)

An automatic tank gauge continuously monitors the fuel system for changes in pressure or volume to detect leaks. If there are any issues the ATG will sound an alarm and/or shut down the fuel system (see Casey's Alarm Response below).



(F) Line Leak Detection

The ATG compares the pressure at the submersible pump to the pressure in the piping to determine whether the pipe is leaking. If a leak is detected the submersible pump will shut down and the ATG alarms (see Casey's Alarm Response below).

(G) Fill Spill Container

During fuel tanker drops there is the potential to spill small amounts of fuel. The spill container will contain up to 5 gallons of fuel that would otherwise be released.

(H) Overfill Prevention

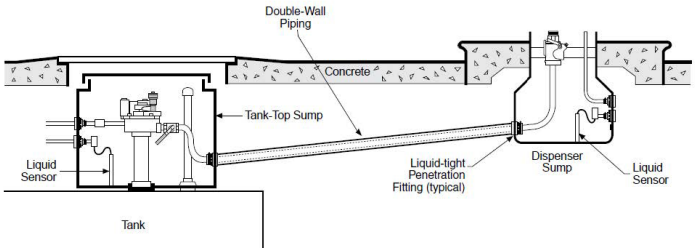
The overfill prevention valve closes when the tank is 95% full to prevent the tank from being overfilled and potentially releasing fuel.

(I) Product Probe

The probe continuously monitors the volume of the tank and the ATG alarms if the level changes unexpectedly (see Casey's Alarm Response below). The probe is also able to detect water in the tank.

(J) Liquid Sensor

Sensors in the tank sumps and dispenser sumps detect liquid in the sump that may be from leaking equipment. When liquid is detected the ATG alarms (see Casey's Alarm Response below).

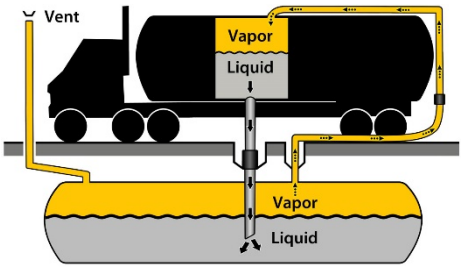


Double Wall Containment

Tanks and piping are constructed so that if the primary containment fails, there is a secondary layer of containment. Any single wall pipe fittings at the tanks or dispensers are secondarily contained within a sump, preventing a release into the ground.

(K) Stage 1 Vapor Recovery

Stage I Vapor Recovery is used during the refueling of fuel tanks to reduce hydrocarbon emissions. Vapors in the tank, which are displaced by the incoming fuel, are routed through a hose into the cargo tanker, instead of being vented to the atmosphere. Vent caps seal vapors in the tank when pressure is equalized.



Emergency Stop

In the event of a spill, fire or other emergency, the emergency stop will shut off power to the entire fuel system and canopy area.



Casey's Alarm Response: Casey's operates over 2,000 UST locations and has a team of professionals dedicated to designing, installing, and monitoring our UST systems. Automatic Tank Gauge Alarms are connected to the store managers work station and readings are sent to the Environmental Compliance director at Casey's corporate office. Casey's has a 24/7 service dispatch team that can be dispatched by a store employee or by the corporate office. Both store employees and Casey's tanker drivers have spill kits for containing a surface release and have been trained on using them. Casey's training includes how to respond to an alarm, how to respond to a surface release, and requires that any release, regardless of amount, be reported.

Kum & Go Arrest Reports for 2023 (four for 2023)
Calls for service 76 total in 2023 – some of the incidents would be traffic stops where the vehicle pulls into the lot.

23-00642: Theft from Sam's Club; subject located at Kum & Go (not affiliated with the business)

23-00580: OWI charge stemming from a traffic stop that started on 73rd Street (traffic stop – not affiliated with the business)

23-00421: Public Intoxication and warrant arrest

23-00323: Upset customer charged with assault; threw an item at the clerk

23-00272: OWI charge; customer called in a drunk driver who had pulled into the parking lot

23-00227: Arrest for theft of alcohol

23-00345 Robbery incident (two charges – not affiliated with the business, theft of sneakers from an individual using the parking lot to sell them)

Four total arrests can be attributed to the business. The others ended up in the parking lot.

*Note: Case 23-00345 was a robbery that occurred at this location. This case had two arrests in it, but both arrests were at different locations, so therefore the arrest report does not show for this address.

Hy-Vee Fast & Fresh Arrest Reports for 2023 (one for 2023)
Calls for service 79 total 2023 – some of these would include traffic stops that the vehicle pulls into the parking lot.

2 arrest reports showing the address of 7220 Hickman Road

23-00635: Traffic-related arrest. The vehicle pulled into this location.

23-00355: Trespass Violation. Call for a welfare check call for service; an uncooperative person that had already been trespassed from this location.

HERE FOR GOOD

Community Impact

May 2023







$5.3 MILLION

donated with support from our guests, partners and team members

- Hunger
- Education
- Community Servants
- Community Spaces/Events
- Youth Activities/Other



HERE TO FIGHT HUNGER

FEEDING AMERICA®

> *"We appreciate dedicated partners like Casey's and their commitment to giving back to the communities they serve, because we know that working together will always achieve greater results. Families, children and individuals across the country continue to feel the impact of inflation."*

Lauren Biedron, Vice President of Corporate Partnerships at Feeding America®



Casey's and their generous guests contributed over

10 million meals

to support food hunger and food availability.

SERVED 53 FOOD BANKS

Arkansas
Arkansas Foodbank
Food Bank of Northeast Arkansas
Northwest Arkansas Food Bank
River Valley Regional Food Bank

Iowa
Food Bank of Iowa
HACAP Food Reservoir
Northeast Iowa Food Bank
River Bend Food Bank

Illinois
Central Illinois Foodbank
Eastern Illinois Foodbank
Greater Chicago Food Depository
Northern Illinois Food Bank

Indiana
Community Harvest Food Bank of Northeast Indiana, Inc.
Food Bank of Northern Indiana
Food Bank of Northwest Indiana
Food Finders Food Bank
Gleaners Food Bank of Indiana, Inc.
Hoosier Hills Food Bank
Second Harvest Food Bank of East Central

Indiana
Terre Haute Catholic Charities Foodbank
Tri-State Food Bank, Inc.

Kansas
Kansas Food Bank

Kentucky
Dare to Care Food Bank
Feeding America, Kentucky's Heartland
God's Pantry Food Bank, Inc.

Michigan
Feeding America West Michigan

Minnesota
Channel One Regional Food Bank
North Country Food Bank, Inc.
Second Harvest Heartland
Second Harvest North Central Food Bank

Missouri
Harvesters - The Community Food Network
Ozarks Food Harvest
Second Harvest Community Food Bank
Southeast Missouri Food Bank
St. Louis Area Foodbank
The Food Bank for Central & Northeast Missouri

North Dakota
Great Plains Food Bank

Nebraska
Food Bank for the Heartland
Food Bank of Lincoln

Ohio
Freestore Foodbank
Mid-Ohio FoodBank
Second Harvest Food Bank of Clark, Champaign & Logan Counties
Shared Harvest Foodbank
The Foodbank, Inc.
West Ohio Food Bank

Oklahoma
Community Food Bank of Eastern Oklahoma
Regional Food Bank of Oklahoma

South Dakota
Feeding South Dakota

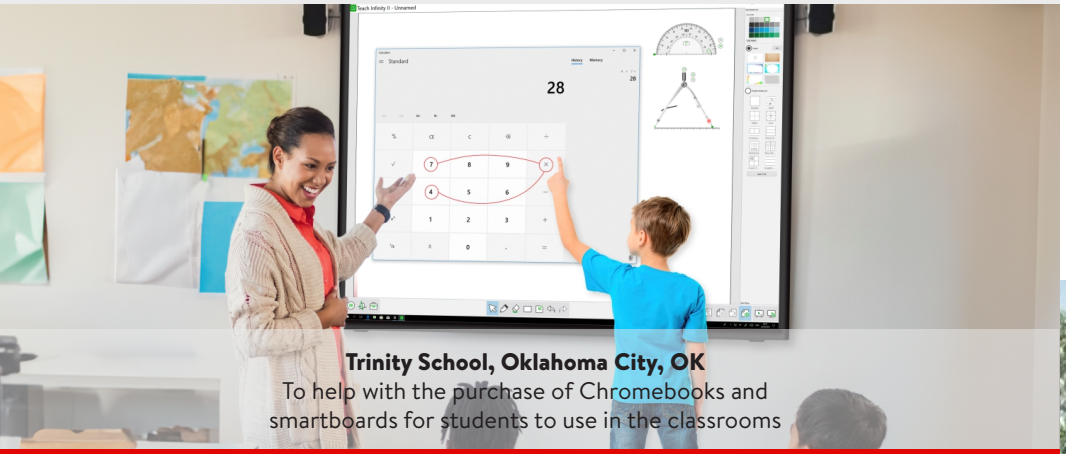
Tennessee
Mid-South Food Bank
Second Harvest Food Bank of East Tennessee
Second Harvest Food Bank of Middle Tennessee

Wisconsin
Feeding America Eastern Wisconsin
Second Harvest Foodbank of Southern Wisconsin

HERE FOR SCHOOLS

Together, Casey's and its dedicated team members and generous guests donated over $1 million to schools in 2023. Our funding helped provide new technology, build playgrounds, purchase books, and security equipment.

$1 million awarded in Cash for Classroom grants



Trinity School, Oklahoma City, OK
To help with the purchase of Chromebooks and smartboards for students to use in the classrooms

United Way
United Way of Central Iowa

Casey's United Way campaign led to **663 students** getting access and support for food while at school.



Clinton Intermediate School, Clinton, MO
The Cash for Classroom grant will help Clinton Intermediate schools build a walk climbing wall for students to work on their upper body strength.

Casey's REWARDS

Rewards Members donated nearly $140,000 through Rewards points to K-12 Schools in FY 2023



Corning Community School District, Corning, IA
Donated $10,000 to help the school purchase a new scoreboard for their football stadium

HERE FOR COMMUNITY SERVANTS

> *Support from Fallen Patriots has offered unexpected hope. Growing up, I knew that seeking a quality education would be a tangible way to honor my father's sacrifice. I knew patriots like you were inspired by his valor and wanted to help. Your educational support has made me more resilient. You are honoring my father's life by helping me achieve the bright future he wanted for me. And being on the receiving end of your support encourages me to boldly follow in his legacy. Though he isn't with us, my siblings and I feel his presence through care from our community and from inspiring patriots like all of you.*

Isabella Gilbert Ravella, Daughter of Maj (USAF) Troy Gilbert, KIA, Iraq 2006

20 STUDENT SCHOLARSHIPS

provided to military children who've lost a parent in the line of duty.

FALLEN PATRIOTS®
COLLEGE FOR THEIR CHILDREN

HOPE For The WARRIORS®

630

military service members and their families were provided resources and personalized support for critical needs such as housing, food, and utilities.

MAKING AN IMPACT



Wanatah, IN - Cass-Clinton Volunteer Fire Department

We helped the fire department upgrade their portable radios and communication equipment. The equipment is vital in helping the department communicate during high-stress situations and can lead to faster recovery times when trying to save lives.



Shawnee, OK - Water Donation

After deadly tornadoes struck the Shawnee, OK area, Casey's and it's team members rose to the occasion and delivered trucks full of water to help those in the town.



Dawson Springs, KY - Tornado Relief/Rebuild Little League Fields

After an EF-4 tornado ripped apart the town of Dawson Springs, KY, our team members played a central role in the emergency response. To help with the ongoing efforts to rebuild Dawson Springs, Casey's partnered with Gatorade to donate $100,000 to support the Dawson Springs Community.

Casey's and their generous guests awarded **over $1.3 million** to veterans and first responders this past year.

PELDS DESIGN SERVICES
Architecture | Engineering | Surveying

1/16/2024

City of Windsor Heights – Bolten & Menk
Attn: Trey Rouse
430 Grand Ave Ste 101
Des Moines, IA 50309

RE: Casey's (70th St and University Ave) 4th Comment Letter

Dear Trey:

We are pleased to submit a revised site plan for the Windsor Heights Caseys Project. Below are the responses to the comments provided on 12/22/2023:

General Comments
1. All permits related to the project will be held and released concurrently at the approval of the following:
   a. Approval of signs and utility from Safe Building.
   b. Revision of site plan application in accordance with the comment letter and all corresponding comments from each City Department.
   c. Professional Signatures on Final Site Plan.
   d. City Council approval of site plan.
   Acknowledged

Storm Water Comments
1. Provide performance security or bond per 161.11 of the City's Code.
2. Provide maintenance performance security or bond per 161.12 of the City's Code
3. Provide Maintenance and Repair Easement per 161.14 of the City's Code.
These shall be provided prior to construction.
4. Please report the orifice diameter as 3 inches in Table 10 and match the reported 1-year proposed release rate to match the model output. If it is above allowable, include a statement that the minimum orifice diameter recommended by ISWMM is the reason for exceeding the allowable release rate.
Page 7 has been updated to reflect these changes.

Police Comments
1. No comments received.

Fire Comments
1. No further comments.

P: 515 | 265 | 8196
info@pelds.com
2323 Dixon Street, Des Moines, Iowa 50316

Des Moines Water Works Comments
1. Hydrant to be relocated will require a new hydrant.
The hydrant is no longer being relocated.
2. Hydrant to maintain a minimum of 3' separation from curb line.
Acknowledged
3. Large Tap Application to be submitted for review & approval.
This will be submitted once a contractor has been selected and prior to construction.
4. Any service associated with this property will need to be cut at the main.
This note has been revised on the demo sheet

Urbandale Windsor Heights Sanitary District Comments
1. No further comments.
Des Moines Metropolitan Wastewater Reclamation Authority Comments
1. No comments received.
Building Comments
1. No further comments.
Traffic Comments
1. No further comments.

Engineering Comments
1. Obtain Windsor Heights work within the Right-of-way Permit.
This will be submitted prior to construction.
2. Obtain a Construction Site Erosion & Sediment Control Ordinance Permit or COSESCO Permit from City.
This will be submitted prior to construction.
3. Sheet C-100. Where is the water service? Show on plans.
Location of service is now shown.
4. Sheet C-100. Note #1, it's in the Urbandale Windsor Heights Sanitary Sewer District, not City of Urbandale/Windsor Heights Sanitary Sewer District.
This has been corrected.
5. Sheet C-301: Sanitary sewer service to be straight within the ROW, no bends.
This has been straightened and now enters at the manhole like the existing service.
6. Sheet C-301: Show the new location of the hydrant on 70th Street.
we are moving the sidewalk instead and not touching the hydrant anymore as agreed upon with DMWW. An easement for the sidewalk is shown on the plans and an exhibit will be provided prior to construction
7. Sheet C-301: Show location of water curb stop.
Curb Stop now shown on the plans.
8. Sheet C-301: Cannot see pipe information at swale location.
Moved label.
9. Sheet C-501: Scale doesn't seem accurate.
this has been corrected.
10. Sheet C-501: Cannot read leader notes.
These are not legible.
11. Provide more sidewalk information within the ROW. Include slopes and distances for landing and ramp conditions at a smaller scale.
These are now shown in detail at 10' scale on the grading sheet.

12. Provide lighting sheet and requirements per City Code.
A revised lighting plan is included in resubmittal.
13. Prepare a Drainage and Utility Easement along the north property line that covers the entire drainage swale.
The easement now extends to fully include the entire swale. This will be included in the SFMA and submitted prior to construction.

Planning Comments
1. Obtain Conditional Use Permit for Auto Services Use within the Urban Center District from the Windsor Heights Zoning Board of Adjustments.
This was submitted by Casey's on 1/2/24.
2. Note - The required landscape buffer between the Zoning District this development belongs to and the Residential District that is located north of the development property is only met per the updated (and not currently incorporated) code at a minimum 10-foot landscaped buffer, while the current code has a minimum 20-foot landscaped buffer.
Acknowledged
3. Lighting
    a. The maximum average-maintained foot- candles for a parking lot within Windsor Heights should be 3 foot-candles. The Lighting Plan shows it at 3.31 foot-candles, please reduce this.
    b. On the north side of the property line, there is an area that surpasses two (2) foot-candles while adjacent to a residential property. Please address and adjust to accommodate the 2-foot-candle maximum.
4. Landscaping
    a. Minimum Spacing of Plant Materials: Minimum of one tree per 50 feet of perimeter along streets. Please address.
    We are showing landscaping in excess of the updated code requirements.

If you have any questions, please e-mail or call.

Sincerely,
Pelds Design Services

Nick Day

P: 515 | 265 | 8196
info@pelds.com
2323 Dixon Street, Des Moines, Iowa 50316

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM: Adam Plagge, City Administrator

SUBJECT: Consideration of the 1st Reading of Ordinance No. 2024-01 - An Ordinance Amending Chapter 156, Adding Subsection 102.11.23 to Section 156.04, of the Code of Ordinances for the City of Windsor Heights, with Regard to Enforcement Procedures for Rental Housing

GENERAL INFORMATION

SUMMARY

ATTACHMENTS

1. 24.01 Ordinance-Rental Housing

ORDINANCE NO. 2024-01

AN ORDINANCE AMENDING CHAPTER 156, ADDING SUBSECTION 102.11.23 TO SECTION 156.04, OF THE CODE OF ORDINANCES FOR THE CITY OF WINDSOR HEIGHTS, WITH REGARD TO ENFORCEMENT PROCEDURES FOR RENTAL HOUSING

WHEREAS, the City Council of the City of Windsor Heights previously adopted Chapter 156, the City's Property Maintenance and Rental Housing Code; and

WHEREAS, the City has adopted the International Property Maintenance Code, subject to the amendments, modifications, additions and deletions set forth in Section 156.04; and

WHEREAS, Iowa Code §364.17(3) allows the City to adopt enforcement procedures, which have been included in Chapter 156; and

WHEREAS, the City wishes to add enforcement procedures as set forth in Iowa Code §364.17(3)(a)(8).

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WINDSOR HEIGHTS, POLK COUNTY, IOWA:

SECTION 1. Purpose. The purpose of this ordinance is to amend Chapter 156, Section 156.04, by adding Subsection 102.11.23 to the City Code to add additional enforcement procedures for rental housing.

SECTION 2. Added. Adding Subsection 102.11.23 (Rent Abatement) to Section 156.04, Chapter 156 (Property Maintenance and Rental Housing Code), as follows:

102.11.23 Rent Abatement. The City may order rent abated when the building official or its designee determines the owner has, after issuance of a notice of violation of this Chapter: (1) failed to provide an essential service (water, sewer, electricity, heat); (2) failed to remedy a condition that poses a substantial risk to the safety of the tenant; or (3) rented a dwelling unit without a rental certificate. Rent abatement means no rent shall be recoverable by the owner or lessee of the dwelling from the tenant. Rent shall be abated until the condition for which rent abatement was ordered has been remedied. The building official or its designee shall provide a copy of the rent abatement order to the owner at the address on the rental certificate and to the tenant by U.S. mail and by posting the order on the entrance door to the dwelling unit. Notice of termination of the rent abatement order will be given in the same manner.

SECTION 3. Repealer. All ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

SECTION 4. Severability. If any section, provision or part of this ordinance shall be adjudged invalid or unconstitutional, such adjudication shall not affect the validity of the ordinance as a whole or any section, provision or part thereof not adjudged invalid or unconstitutional.

SECTION 5. Effective Date. This ordinance shall be effective after the final passage, approval and publication as provided by law.

Passed and Approved this ___ Day of _____, 2024.

1st Reading: _____

2nd Reading: _____

3rd Reading: _____

Publish Date: _____

_____
Mike Jones, Mayor

(SEAL)

ATTEST:

_____
Adam Strait, City Clerk

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM: Adam Plagge, City Administrator

SUBJECT: Consideration of South 68th Street Design Contract

GENERAL INFORMATION

SUMMARY

ATTACHMENTS

1. 68th Street Recon Scope and Fee

PROFESSIONAL SERVICES AGREEMENT

Bolton & Menk, Inc.

Date of Agreement: 3/4/2024

430 E Grand Ave, Suite 101
Des Moines, IA 50309
Ph. (515) 259-9190

Bolton & Menk Project No: 0A1133739
Project Manager (PM): Justin Ernst
PM Phone No. or Ext.: 515-318-8082

(Hereinafter referred to as "BMI")

Client Name: **City of Windsor Heights** Phone No: **515-279-3662**
Client Address: **1445 66th Street** Other Phone:
Client Address: **Suite 1** Email Contact: **aplagge@windsorheights.org**
City: **Windsor Heights** State: Iowa Zip: 50324

(Hereinafter referred to as "Client")

☐ Client is Property Owner ☐ Client is Agent or Other (Not Property Owner)

Billing Name: Phone No:
Billing Address: Other Phone:
Billing Address: Email Contact:
City: State: Zip:

(Insert Billing Address if Different)

Property Owner Name:
Property Owner Address:
Legal Description (or attach):
Scope of Services (or attach): See attached scope of services (Exhibit I) for 68th Street Improvements
Fee Arrangement: Hourly, Not-to-Exceed; $248,000
Special Conditions: The services described in this Work Order will be consistent with the terms and conditions described in the Agreement for Professional Services between Bolton & Menk and the City of Windsor Heights dated February 6, 2017 and approved by the Windsor Heights City Council on February 6, 2017 unless modified by this Work Order.

☐ Payment Due Prior to Release of Deliverables ☐ Retainer & Amount $

BMI and CLIENT agree to the Terms and Conditions as stated above and on the reverse side of this Agreement, including Limitation of Liability. The undersigned represents that it is the CLIENT and authorized to accept this Agreement. The undersigned accepts full financial responsibility for all services and costs of collection incurred by BMI, including reasonable attorney fees, in the event of CLIENT'S default, unless "Additional Guarantee of Payment" is also executed by a person(s) or firm guaranteeing payment.

CLIENT acknowledges that it is the owner of the property described above or is a legally authorized representative of the property owner with sufficient interest and authority to enter into this agreement for the purposes of making improvements to and upon the property.

OFFERED by Bolton & Menk, Inc.

Justin Ernst, PE, Principal Engineer

Print Name/Title

Justin Ernst 2/29/2024

Signature and Date

ACCEPTED by CLIENT:

Print Name/Title

Signature and Date

ADDITIONAL GUARANTEE OF PAYMENT: I/We accept the Terms and Conditions as stated above and on the reverse side of this Agreement and personally guarantee payment of all obligations for services to be provided by BMI under this Agreement. I/We further agree to pay all costs of collection incurred by BMI, including reasonable attorney's fees.

Print Name/Title

Signature and Date

Terms and Conditions

Bolton & Menk (BMI) shall perform the services outlined in this agreement for the stated fee arrangement.

Billings and Payments: Invoices for BMI's services shall be submitted, at BMI's option, either upon completion of such services or on a monthly basis. Unless credit to Client is approved, payment is due upon receipt of services and prior to release of deliverables. If, at sole discretion of BMI, credit is advanced to Client, invoices shall be due and payable within 30 days after the invoice date. If the invoice is not paid within 30 days, BMI may, without waiving any claim or right against the Client, and without liability whatsoever to the Client, terminate the performance of its services. BMI reserves the right to withhold any deliverables until all unpaid fees are paid in full. Amount of retainer (if applicable) will be applied to amount owed on final invoice. To pay be credit card, please contact us for project number and/or invoice number and enter into our credit card link at: https://www.e-billexpress.com/ebpp/BoltonMenk/

Late Payments: Accounts unpaid 30 days after the invoice date will be subject to a monthly service charge of 1.5% on the unpaid balance. If any portion or all of an account remains unpaid 60 days after billing, the Client shall pay all costs of collection, including reasonable attorney fees.

Access to Site: Unless otherwise stated, Client agrees to provide BMI with access to the site, including adjoining properties, for activities necessary for the performance of services. It is understood that in the normal course of work, unavoidable property damage may occur due to excavations, tree and brush trimming, marking lines, etc. BMI will take reasonable precautions to minimize damage due to its activities. The cost to correct resulting damage has not been included in the fee and the Client agrees to reimburse BMI for any costs associated with required restoration work.

Information from Client: Except as otherwise noted, Client agrees to provide BMI with all site information necessary to complete its services. This information should include current site property descriptions (from abstract, title opinion or title commitment); other legal documents affecting the site; copies of previous surveys, maps, engineering studies and plans; existing or required geotechnical reports; governmental, regulatory and utility reviews and determinations; and all other pertinent information. Client shall promptly inform BMI of any alleged defects in services provided on the project.

Ownership of Documents: All documents or electronic media prepared or furnished by BMI under this agreement shall remain the property of BMI. The Client may make and retain copies for its use in connection with this project. However, such documents may not be reused by the Client for any other project or use by others without the written consent of BMI.

Standard of Care: Professional services provided under this Agreement will be conducted in a manner consistent with that level of care and skill ordinarily exercised by members of BMI's profession currently practicing under similar conditions. **BMI makes no warranties, expressed or implied, or otherwise with respect to any services performed or furnished.**

Project Approvals: Due to site limitations, code interpretations, regulatory reviews, political considerations and Client directed design and improvements; BMI makes no representations as to acceptability or approvability of the project, or, zoning requests, permit applications, site and development plans, plats and similar documents. Payment of fees to BMI is not contingent upon project approval.

Certifications: Any certification provided by BMI is a professional opinion based upon knowledge, information and beliefs available to BMI at the time. Such certifications are not intended and shall not be construed as a guarantee or warranty. BMI shall not be required to certify the existence of conditions whose existence BMI cannot ascertain.

Waiver: To the fullest extent permitted by law, Client and BMI waive against each other, and the other's employees, partners, officers, agents, insurers and subcontractors, any and all claims for or entitlement to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to this Agreement, from any cause or causes.

LIMITATION OF LIABILITY: In recognition of the relative risks, rewards and benefits of the project to both the Client and BMI, the risks have been allocated such that the Client agrees that BMI's total liability to the Client for any and all injuries, claims, losses, expenses, damages or claimed expenses arising out of the performance of this agreement from any cause or causes, shall not exceed total compensation paid to BMI. Such claims include, but are not limited to, BMI's negligence, errors, omissions, strict liability, breach of contract, or breach of warranty.

LIEN RIGHTS - IA: Pursuant to the representations by the CLIENT and to the extent permitted by Iowa Law for the improvements to be made to the project property, BMI reserves the right to file a lien against the project property in the event of delinquent or non-payment of monies owed to BMI by the CLIENT.

Termination of Services: This agreement may be terminated by the Client or BMI should the other fail to perform its obligations hereunder. In the event of termination, the Client shall pay BMI for all services rendered to the date of termination, all reimbursable expenses, and reimbursable termination expenses.

Dispute Resolution: Any claims or disputes made during or after the performance of services between BMI and the Client, with the exception of claims by BMI for non-payment of services rendered, shall first be submitted to mediation for resolution prior to initiating any other legal proceedings.

EXHIBIT I
SCOPE OF SERVICES BY CONSULTANT
68TH STREET IMPROVEMENTS PROJECT
CITY OF WINDSOR HEIGHTS, IOWA

I. SCOPE OF SERVICES

Bolton & Menk, Inc., hereafter known as CONSULTANT, agrees to provide professional services required for the engineering design of 68th Street between University Avenue and School Street. The scope is broke into one task, Design Phase Services, and the work included is as follows:

TASK I – DESIGN PHASE SERVICES

For purposes of this specific project, Design Phase Services to be provided by CONSULTANT are as follows:

Subtask A – Project Initiation and Project Management

1. CONSULTANT will facilitate a project kick-off meeting with CLIENT staff to accomplish the following:
    a. Review and confirm the scope of the project.
    b. Review available information relative to the project.
    c. Review and discuss specific infrastructure issues and CLIENT'S current design standards as they relate to the proposed improvements on this project.
    d. Review and verify project schedules.
    e. Conduct a field review of project area by CONSULTANT and CLIENT representatives.

2. CONSULANT will coordinate progress with CLIENT after the initial kickoff meeting. These meetings will discuss findings, issues, schedule, and needs to keep the project progressing.

3. CONSULTANT will provide project and contract administration services throughout the duration of the project.

4. CONSULTANT will facilitate project communication throughout the duration of the project. (Including distributing meeting minutes in a timely manner).

5. CONSULTANT will coordinate with Des Moines Water Works as needed to complete the design of the project.

6. CONSULTANT will identify private utility conflicts and required relocation during design. It is understood that existing utility locations will be taken from as constructed information or as marked in the field.
    a. During the field data collection phase, CONSULTANT will complete an Iowa One Call to identify the utilities within the project corridor. CONSULTANT will attend up to two (2) in-person utility coordination meetings with affected utilities to review the proposed construction and identify conflicts and required relocation. Utility coordination will be discussed again at the preconstruction meeting.
    b. CONSULTANT will prepare an existing conditions mapping, and project public utility removal plans for inclusion in the construction documents.

Subtask B – Public Involvement

1. CONSULTANT will organize and conduct a public informational meeting. This meeting will inform the community on the general design direction for the project. The time and location of the meeting will be coordinated with the CLIENT.

2. CONSULTANT will organize and conduct a public informational meeting at 60% design stage. This meeting will inform the community on the general design direction for the project. The time and location of the meeting will be coordinated with the CLIENT.

Subtask C – Data Collection

1. CONSULTANT will collect topographic survey of the 68th Street corridor public right-of-way which will include:
    a. Horizontal and vertical location of existing surface improvements
    b. Horizontal and vertical location of CLIENT utilities – sanitary sewer, watermain and storm sewer
    c. Locate private utilities (natural gas, telephone, CATV, electric, watermain, etc.) based on field marking or other information from utility owners.
    d. Identify property corners to determine ROW limits.
    e. Survey existing ground to create surface model and contours for the site.
    f. CAD drafting to create project mapping of the project area.

2. CONSULTANT will identify any necessary temporary and permanent easements and/or acquisitions throughout the project during the design process. The CONSULTANT will report the necessary acquisitions to the CLIENT. Additional services will need to agreed upon for further assistance.

Deliverables:
Base map in PDF and CAD format

Subconsultant Task: Geotechnical Investigation and Analysis

1. CONSULTANT will subcontract a Geotechnical subconsultant to perform geotechnical exploration program including field investigations and laboratory testing. The geotechnical services for this task shall consist of:
    a. Soil and pavement boring location and depths with testing requirements.
    b. Evaluation of subgrade stabilization alternatives as needed.
    c. Vehicular pavement section design using SUDAS guidance (assumes no pervious pavement design).
    d. Preparation of Geotechnical Report. SUBCONSULTANT will prepare a draft geotechnical report summarizing results of field exploration and laboratory testing programs, boring logs, lab test data, subgrade evaluations, pavement section design and soil infiltration rates. This task will include an effort to incorporate geotechnical analysis and recommendations into roadway, drainage, water main and sanitary sewer design elements.

Deliverables:
Final Geotechnical Report: submitted electronically in PDF format.

Subtask D – Construction Drawings

1. CONSULTANT will perform aspects of design needed for the construction of 68th Street. 60% (Preliminary) and 90% (Final) plans and specifications will be provided to the City for review and approval. CONSULTANT will also submit plans as required by Des Moines Water Works. The plan elements include:

a. **Title and General Information Sheets (A Sheets).** The title sheets will include the following: index of sheets, revisions, legend, location map, project number, design traffic data.
b. **Typical Cross Sections (B Sheets).** The typical Cross Sections will include but not be limited to typical sections for the proposed grading, drainage and paving improvements. The Typical Cross Sections will be used for the proposed improvements as well as determination of the limits that each section will apply.
c. **Estimate of Quantities (C Sheets).** This includes determination of the bid items to be included in the project, along with an estimate of quantities for each item. Estimate Reference Notes (ERN) will be developed to assist the contractor in bidding on the project. Erosion Control and Restoration sheets will be included in the C sheets. Sheets include the design of erosion control measures and surface restoration to be provided on the Project.
d. **Plan and Profiles (D Sheets).** Plan and profile sheets will show the existing and proposed horizontal and vertical roadway alignment of the corridor. Proposed Right-of-Way and Construction Easement limits based on the catch point lines will be shown. The scale of these sheets will be 1"=20'.
e. **Removal Plans (F Sheets).** This includes the design and drafting of the removal limits of the existing infrastructure inside of the project area. The plan includes the removals of pavement and underground utilities.
f. **Survey Plans (G Sheets).** This includes the drafting of the survey information for the project. The plan includes the bench marks, control points main centerline data, alignment data table and control point data table
g. **Traffic Control and Staging (J Sheets).** Plan includes anticipated construction scheduling and staging of the Project, highlighting traffic control measures to be implemented during construction. Staging plan shall include provisions for maintaining access to adjacent properties during construction. The traffic control devices, procedures, and layouts shall be as per the Manual of Uniform Traffic Control Devices (MUTCD).
h. **Geometrics and Jointing Sheets (L Sheets)** Plans will refine intersection geometric layouts and provide additional horizontal and vertical survey information needed to construct the intersections. The scale of these plan sheets will be 1"=20'.
i. **Underground Utilities (M Sheets).** Plans include storm sewer, sanitary sewer, and water main design. These drawings will show identified locations of franchise utilities and critical crossings. Sheets may be combined depending on clarity of the plans.
    i. **Storm Sewer Sheets (M1 Sheets).** Storm sewer layout and sizing based on proposed improvements and existing drainage patterns utilizing Chapter 2 of the SUDAS Design Manual. Plans show storm sewer horizontal and vertical profiles, unless shown on applicable D sheets, that will show the existing topography, proposed improvements, storm sewer profile, and structure locations. Structure tables and storm sewer cross will be included. The scale of these plan sheets will be 1"=20'.
    ii. **Sanitary Sewer Design (M2 Sheets).** Plans show sanitary plan and profile sheets that will show the existing topography, proposed improvements, sanitary sewer profile, and manhole locations. Plans include sanitary sewer structure tables. The scale of these plan sheets will be 1"=20'.
    iii. **Water Main Design (M3. Sheets).** Des Moines Water Works will be providing the design of the water main and providing plans to the CONSULTANT to incorporate into the plan set.
j. **Erosion and Sediment Sheets (R Sheets).** This task consists of design and drafting associated with erosion and sediment control.
k. **Curb Ramp Design (S Sheets).** Curb ramp layout will be in accordance with Chapter 12 of Iowa SUDAS Design Manual. Design ramp geometric configurations alternatives,

identify surface requirements, review general horizontal curb opening, cross slopes, running slope, and identify sidewalk width and passing space within the corridor.

l. **Detailed Cross Sections (W & X Sheets).** This task consists of design and drafting associated with the assembly of detailed cross sections (25' increments) to illustrate typical conditions, drainage designs, and non-typical conditions as needed for guidance during design, review, and quantity estimating purposes.

2. Project Manual: CONSULTANT will prepare a project manual for the project in accordance with Iowa SUDAS and City of Windsor Heights standards. Project Manual will be provided at the 90% design phase. Des Moines Water works will be creating and providing water main related specifications that will be incorporated into the project manual.

3. Engineer's Estimate: CONSULTANT will prepare an Opinion of Probable Cost (OPC) with breakdowns provided for the various construction elements. An OPC will be provided at the 60% and 90% Design phases.

4. CLIENT Review: Plans will be reviewed with CLIENT at the 60%, and 90% complete stages. The project manual will be reviewed with CLIENT at the 90% complete stage. If required, changes will be made to the contract documents based on CLIENT's review and comments. The final contract documents will be presented to the CLIENT for approval.

Subtask E – Bidding Phase

CONSUTLANT will provide the following bidding assistance for one bidding of the project:

A. Assist CLIENT in the preparation of advertisement for bids and submittal to the local newspaper and other required publications, secure affidavits of publication.
B. Post advertisement for bids on CONSULTANT's website.
C. Upon request by prospective bidders, subcontractors or suppliers, CONSULTANT will distribute copies of the contract/bidding documents – hard copy or electronic documents, or both. A nominal refundable fee may be charged for bidding documents.
D. Maintain and update plan holders list throughout bidding period.
E. Address questions from prospective bidders, subcontractors and suppliers, and prepare and issue addenda as required.
F. Assist CLIENT with the public opening and reading of the bids.
G. Review bids and prepare bid tabulation and abstract of all bid items.
H. Conduct pre-award review of the low bidder and significant subcontractors and perform other research to investigate capabilities and qualifications of the low bidder.
I. Assist CLIENT in preparing recommendation for CLIENT Council regarding the award of the bid. CONSULTANT will attend CLIENT Council meeting to answer any questions regarding the recommendation.

II. ADDITIONAL SERVICES

Additional Services not included as part of this Scope. If authorized, under a supplemental agreement, the Consultant shall furnish or obtain from others the following services:

1. Subsurface utility investigation
2. Real estate acquisition services
3. Streetscape design
4. Water main design
5. Construction Administration

III. PROPOSED SCHEDULE

The anticipated project schedule is as follows, with additional dates inserted to accommodate CLIENT review:

- Topographic Survey: March 2024
- Geotechnical Investigation: March/April 2024
- Public Informational Meeting: May 2024
- 60% Design Review: June 2024
- Public Informational Meeting: July 2024
- 90% Design Review: August 2024
- Bidding Phase: October/November 2024
- Construction Award: December/January 2024
- Construction Start: April/May 2025

IV. ESTIMATED FEES:

The fees for the completion of the above scope are:

Task I – Design Phase Services:	$248,000.00
Total	$248,000.00

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM: Adam Strait, City Clerk

SUBJECT: Consideration of Sister City Funding for $7,600

GENERAL INFORMATION

SUMMARY

ATTACHMENTS

1. Budget Request
2. Approved Windsor Heights travel amount Mar 2023

Travel budget approval request

Mayor Jones and City Council,

I am seeking a Sister Cities travel budget for 2024 of $7,600. The Greater Des Moines Sister Cities Commission has a travel budget for those appointed from Des Moines. It is possible Mayor Connie Bosen, will visit one of our sister cities in 2024. The Mayor of Kofu, Japan, visited in 2023, and it is our longest-running sister city.

It is likely Mayor Bosen will reciprocally go to Kofu in 2024. If this happens, I would like to have the budget preapproved so travel arrangements can be made at the same time as Des Moines. I am asking for $7,600 to cover Mayor Jones, me, or another city council member if they choose to go on the sister city trip.

I am basing the requested amount on what was approved in 2023. However, I am using Kofu, Japan, as an example of a trip but it could be to any of the sister cities. The actual cost will be variable based on the location.

Thank you,
Ricki King
Commissioner, Kofu City, Japan Committee Chairperson
Greater Des Moines Sister Cities Commission (GDMSCC)
Cell: (515) 779-4394
Email: ricki@rootstobranchesgenealogy.com

#DSMwithKOFU #KOFUwithDSM

On Monday, Council approved up to $3,800 in reimbursement for your Sister Cities Trip to Japan. This number was based on the following:
Median cost of flight to Tokyo from Des Moines during August: $2,075
Average lodging rate from USGSA for Japan: $152 x 6 nights = $912
Average per diem rate from USGSA for Japan: $100 x 7 days = $700
Transportation to Kofu from Tokyo: $100
Total: $3,787

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM:

SUBJECT: Discussion on 73rd Street Reconstruction

GENERAL INFORMATION
Staff Report

To: *Mayor and City Council*
From: *Adam Plagge, City Administrator*
Date: *March 4th, 2024*
Subject: *73rd St. North Reconstruction Information*

GENERAL INFORMATION
Below is information on the planned 73rd St. north reconstruction project for Council feedback.

Upcoming Communication

The City Council will consider bids for 73rd St. Hickman to University Ave. reconstruction April 1st. This consideration date is later than initially planned due to delays in state agency reviews of construction plan sets. As a result, there is a narrow window of time between the consideration of bids and the contractor's required construction initiation date which is on or before May 6th. City staff and engineering will meet with the selected contractor the week of April 1st to discuss the project including whether construction will start at Hickman or at University Ave. After this discussion, neighborhood meetings for residents and businesses on 73rd will take place during the week of April 15th.
An initial letter is planned to be mailed to property owners on 73rd St. this week alerting them to the upcoming bid consideration and construction timeline. Public Works plans to place physical signs alerting drivers to the upcoming construction and providing a link to more information on the 73rd St. Project at Hickman and University and 73rd later this week or early next.

Construction updates will be available at www.wh73rd.com Staff plans to reuse the website

when 73rd St. Phase II occurs.

73rd Access

Thru traffic will be detoured to 63rd St. for the duration of the construction. For the winter of 2024, when construction is not active, 73rd St. will be open to all traffic. The construction will be completed in six phases with Stage four coordinated to correspond with the school summer break. The contractor will have 300 working days to complete the entire project. Local traffic will be able to access the portions of 73rd St. not actively under construction.

See attached graphic for detour route and phasing.

Impacted Property Owner Parking

Public Works will ensure there are adequate No Parking signs on the south side of all adjoining east-west roads adjoining 73rd St.. 73rd St. residents impacted by construction will be able to park on the north side of the street of their adjoining east-west road. For any impacted residents with mobility issues, handicap parking signage will be placed on the adjoining east-west road adjacent to 73rd for the duration of their phase of construction.

Trail Closure

During construction stages 1 and 2, the trail along 73rd will be closed. There is not a clear alternative trail route. Staff is considering requiring the contractor to place a sign of the area trail system south of University Ave. and at School St. indicating the trail closure. Alternatively, the city could provide a trail detour, but it would likely need to include use of sidewalks and potentially the street.

Impacted Business Access Plan



Most businesses on 73rd St. have two access drives and one will remain open at all times during the construction project. Staff is recommending a change order to the contract requiring the contractor to add signage indicating businesses on 73rd are open during the reconstruction project. For businesses with a single driveway, access will be maintained to the business with a gravel access except during any active construction work directly in front of the driveway. This construction work would typically be scheduled for a weekend during off-peak business hours.

SUMMARY

ATTACHMENTS

1. 73rd Street Flyer_26FEB24
2. Windsor Heights 73rd Detour Map
3. Windsor Heights 73rd Staging Map

73rd Street Corridor Improvements - Staging Information

The 73rd Street Corridor Improvements Project includes full reconstruction of the existing roadway surface along with water main improvements, storm sewer improvements, sidewalk improvements and pedestrian improvements.

Staging Map



Staging Details

In each stage, the existing pavement will be removed, new utilities will be installed, and pavement will be replaced. Sidewalks and trails will remain open as long as possible to maintain pedestrian access. Residents will be notified seven days prior to access change.

Below are anticipated conditions for each stage:

STAGE 1A: Detour route with two-way traffic for local traffic

STAGE 1B: Detour route with two-way traffic or local traffic

STAGE 2: Detour route

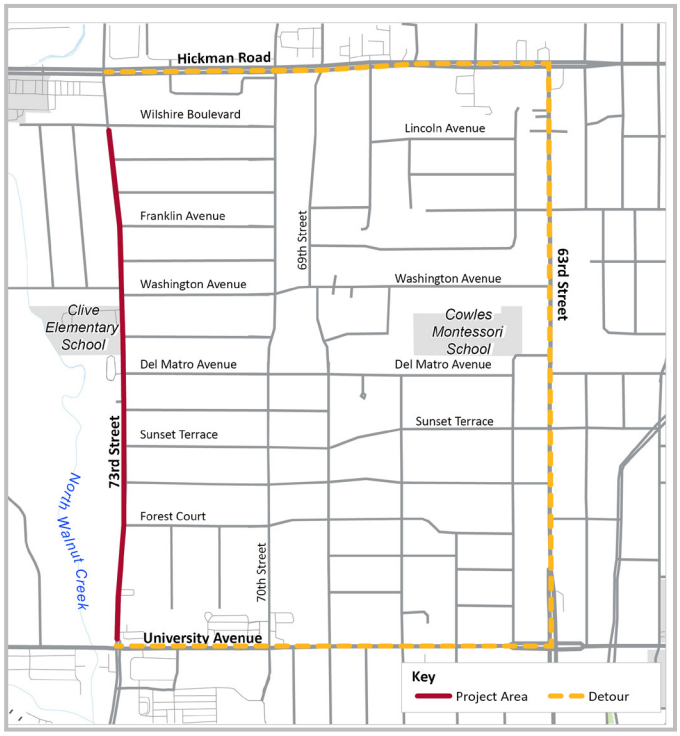
STAGE 3: Detour route, driveway to school parking lot will be closed between June 15 and August 15

STAGE 4: Detour route, driveway to school parking lot and road between Stage 4 and Washington Avenue will be closed between June 15 and August 15

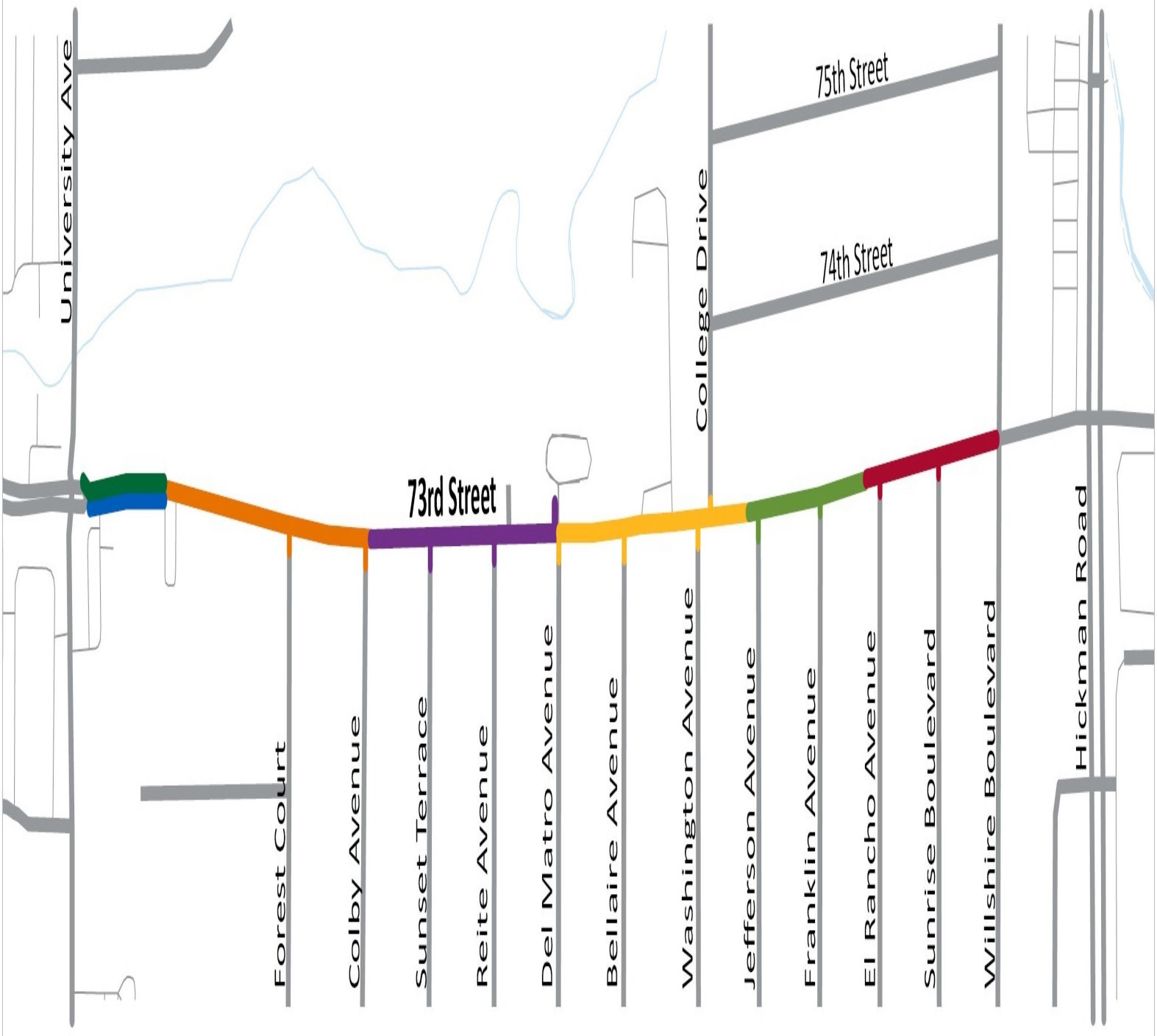
STAGE 5: Detour route

STAGE 6: Detour route

Detour Map




Hickman Road
Wilshire Boulevard
Lincoln Avenue
Franklin Avenue
69th Street
63rd Street
Washington Avenue
Washington Avenue
Clive Elementary School
Cowles Montessori School
Del Matro Avenue
Del Matro Avenue
73rd Street
Sunset Terrace
Sunset Terrace
North Walnut Creek
Forest Court
70th Street
University Avenue
Key
Project Area
Detour


University Ave
75th Street
74th Street
College Drive
73rd Street
Forest Court
Colby Avenue
Sunset Terrace
Reite Avenue
Del Matro Avenue
Bellaire Avenue
Washington Avenue
Jefferson Avenue
Franklin Avenue
El Rancho Avenue
Sunrise Boulevard
Willshire Boulevard
Hickman Road
Key
Stage 1A
Stage 1B
Stage 2
Stage 3
Stage 4
Stage 5
Stage 6

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM:

SUBJECT: Mayor, Council Reports and Committee Updates, and Administration Reports

GENERAL INFORMATION

SUMMARY

ATTACHMENTS
None

STAFF REPORT
CITY COUNCIL
March 4, 2024

TO: CITY COUNCIL

FROM:

SUBJECT: Mayor's Report

GENERAL INFORMATION

SUMMARY

ATTACHMENTS
1. Mayor's Report 2-28-2024

WINDSOR HEIGHTS
the heart of it all

MAYOR'S REPORT

Report Covers February 1st, 2024 – February 28th, 2024

- On February 2nd, Councilor Skeries and I met with Colby Interests and representatives from Casey's to discuss concerns surrounding the proposed Casey's project.
- AJ and I continue to exchange emails ideas on implementation of the City's 24/7 clean energy resolution.
- I attended the UpLift funder meeting on February 9th. Majority of the meeting was dedicated to discussing HF 2319, "A bill for an act prohibiting counties and cities from providing guaranteed income programs, and including effective date provisions." As of me writing this, this bill is scheduled to be debated today (February 28th) in the House. There is no companion Senate bill at this time.
- On February 13th, I attended the MAC meeting at Polk County Emergency Management and Councilors Harms and Libbie joined via Zoom. We received a legislative update from Daniel Stalder from the Iowa League of Cities. As always, you can sign up for the League of Cities Legislative Link to get information about what's happening at the Capitol: https://iowaleague.org/resource/legislative-link/. Later, I attended the WMA meeting virtually.
- I previously informed Council of this but for the public's information, the Des Moines Metropolitan Planning Organization (MPO) will be awarding approximately $16 million in federal funds for street projects. Windsor Heights applied for some of those funds for Phase 2 of 73rd Street. The remainder of the applicants are below and final awards will be announced in May.

FFY 2028 Surface Transportation Block Grant Applications

FFY 2028 STBG - Summary of Submitted Applications

Primary Sponsor	Category	Project Title	Total Cost	Request
Altoona	Major Reconstruction/Replacement	Adventureland Drive NW PCC Pavement Reconstruction and Widening	$9,807,500	$5,522,800
Altoona	Planning Study	Eastern Polk County I-80 Interchange Planning & Environmental Linkages Study	$625,000	$500,000
Ankeny	System Capacity	NE 18th Street Bridge Over Interstate 35	$16,850,000	$2,000,000
Bondurant	Major Reconstruction/Replacement	Grant Street South Realignment	$15,986,000	$1,000,000
Clive	Major Reconstruction/Replacement	NE Alice's Road - Phase 3	$9,700,000	$1,000,000
DART	Transit	DART Bus Replacements and BCycle Station Replacements	$8,027,000	$2,000,000
Des Moines	Major Reconstruction/Replacement	East Army Post Improvements	$12,000,000	$2,600,000
Des Moines	System Optimization	Intelligent Transportation Systems Upgrade - Phase 8	$12,500,000	$1,000,000
Des Moines	Bridge	Fleur Drive Bridge Rehabilitation	$8,000,000	$2,100,000
Johnston	Major Reconstruction/Replacement	IA 141 and Towner Dr Interchange	$16,500,000	$2,000,000
Pleasant Hill	System Optimization	University and Shadyview Blvd Improvements	$1,777,000	$1,421,600
Polk City	Major Reconstruction/Replacement	WhiteTail Parkway Construction	$2,203,000	$1,762,400
Polk County	Bridge	RCB Culvert New - Triple Box	$900,000	$700,000
Urbandale	Major Reconstruction/Replacement	128th Street Preservation	$1,900,000	$1,000,000
West Des Moines	Major Reconstruction/Replacement	Ashworth Road Reconstruction and Reconfiguration	$10,000,000	$2,000,000
Windsor Heights	Major Reconstruction/Replacement	73rd Street Reconstruction – Phase 2	$17,685,700	$2,000,000
			$144,461,200	**$28,606,800**

- On February 14th, I met with Stephanie Oppel of ICON. We discussed what ICON had been doing and she shared that more than 250,000 users visited active ICON sites between April and October of 2022 and the total economic output associated with those visits was $20 million.
- On February 15th I spent most of the day at the Botanical Center assisting with the MPO Executive Director search. There were two excellent candidates and the Policy Committee ultimately selected Dylan Mullenix, who was previously serving as intern director. Dylan has been with the MPO since 2006 and will do an excellent job as their Executive Director. The decision of the Policy Committee was unanimous.
- Special Events and Personnel and Finance met in person on February 16th. Majority of the meeting at Special Events was dedicated to the effects that the construction will have on events in 2024. The recommendations made at the Personnel and Finance Committee meetings were all incorporated into the budget changes made at the Council meeting on February 19th. I will still put together some notes to distribute to Council.
- On February 20th, the Polk County Conference Board met in the Board of Supervisors' Meeting Room, at the Polk County Administrative Office Building. Polk County Assessor Ripperger presented highlights on the proposed budget for the Assessor's Office and a public hearing was scheduled on the budget for March 18th, 2024 at 4:00 PM.
- On February 21st, Polk County Emergency Management had its annual meeting. I attended, along with Chief Roth. The EMA budget was approved in a timely manner.
- On February 24th, I attended the Saturday morning talk with officials along with Supervisor McCoy, Senator Celsi and Representative Konfrst.
- Obviously, over the past number of weeks I have fielded a number of questions and received countless emails regarding the Casey's project, the supermajority of which are opposed to the project. I have passed those onto the appropriate boards and encouraged staff to do their best to keep the public informed about public meetings so that the public will continue to have an opportunity to weigh in, as I never want anyone to say that this project was some sort of "surprise" or was attempted to be "rushed" through.
- Axios published an article highlighting phase 2 of 73rd Street https://www.axios.com/local/des-moines/2024/02/28/windsor-heights-73rd-street-pedestrian-highway-redevelopment. Since then, KCCI and the Des Moines Register have taken an interest in the project. Axios is one of the few (or only) outlets to take an interest in positive local stories so I would encourage you to become a member if you aren't, already.