

Date June 8, 2020

RESOLUTION HOLDING HEARING ON REQUEST FROM CASEY’S MARKETING COMPANY FOR APPROVAL OF PUD FINAL DEVELOPMENT PLAN FOR “CASEY’S STORE NO. 1192” FOR PROPERTY AT 3200 SOUTHWEST 9TH STREET

WHEREAS, on May 18, 2020, by Roll Call No. 20-0821, the City Council received a communication from the City Plan and Zoning Commission advising on May 7, 2020, the City Plan and Zoning Commission voted 12-0 to APPROVE a request from Casey’s Marketing Company (lessee), represented by Marni Beck (officer), to approve the PUD Final Development Plan for “Casey’s Store No. 1192” on property located at 3200 Southwest 9th Street (“Property”) to allow redevelopment of the existing 21,664 square foot general food sales store with a 4,817 square foot limited retail sales store with pump island canopy with 14 fueling locations, subject to the following revisions:

- 1. Compliance with all administrative review requirements for the Final Development Plan in accordance with the previously approved PUD Conceptual Plan.
2. Provision of Public Pedestrian Easements in locations where the public sidewalk would encroach into the site.
3. Provision of cross access easements on the Final Development Plan to ensure share use of the southeastern driveway and parking maneuvering with the commercial center to the south.
4. Provision of a signature landscape feature at the intersection of Southwest 9th Street and Park Avenue in compliance with the requirements of the PUD Conceptual Plan.
5. Designation of seasonal merchandise display areas.
6. Modification of the lighting to ensure that it complies with maximums of 2.0 footcandles at property lines across the street or adjoining commercial use and 0.5 footcandles across from or adjoining residential use; and

WHEREAS, the Property is legally described as follows:

THE EAST 2 FEET OF LOT ONE (1); LOT TWO (2); LOT THREE (3); LOT FOUR (4); LOT FIVE (5); LOT SIX (6) AND SEVEN (7), EXCEPT BEGINNING AT THE NORTHEAST CORNER OF LOT 6, THENCE SOUTH 132 FEET TO THE NORTHEAST CORNER OF LOT 6, THENCE SOUTH 132 FEET TO THE SOUTHEAST CORNER OF LOT 7, THENCE WEST 23.5 FEET ALONG THE SOUTH LINE OF LOT 7, THENCE NORTH 10.8 FEET, THENCE NORTHWESTERLY 37.06 FEET TO A POINT ON THE NORTH LINE OF LOT 6 WHICH IS 48.5 FEET WEST OF THE NORTHEAST CORNER OF LOT 6, THENCE EAST 48.5 FEET TO THE POINT OF BEGINNING; LOT EIGHT (8), EXCEPT THE EAST 23.5 FEET THEREOF; LOT NINE (9), EXCEPT THE EAST 23.5 FEET THEREOF; ALL IN LITTLETON PLACE, AN OFFICIAL PLAT, NOW INCLUDED IN AND FORMING A PART OF THE CITY OF DES MOINES, IOWA. SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD DEED FROM BK7321 PG866; and

WHEREAS, on May 18, 2020, by Roll Call No. 20-0821, it was duly resolved by the City Council that the request for approval of the PUD Final Development Plan be set down for hearing on June 8, 2020 at 5:00 p.m., by electronic means in accordance with the Governor’s and Mayor’s Proclamations and to encourage



Roll Call Number

Agenda Item Number

61

Date June 8, 2020

and maintain social distancing to curb the spread of COVID19 in the community, with or without public access to the meeting location.; and

WHEREAS, due notice of said hearing was published in the Des Moines Register, as provided by law, setting forth the time and place for hearing on said proposed PUD Final Development Plan; and

WHEREAS, in accordance with said notice, those interested in said proposed PUD Final Development Plan, both for and against, have been given opportunity to be heard with respect thereto and have presented their views to the City Council.

NOW THEREFORE, BE IT RESOLVED, by the City Council of the City of Des Moines, Iowa, as follows:

1. Upon due consideration of the facts, and any and all statements of interested persons and arguments of counsel, any objections to the proposed PUD Final Development Plan for "Casey's Store No. 1192" are hereby overruled, and the hearing is closed.
2. The proposed PUD Final Development Plan for "Casey's Store No. 1192", as on file in the Community Development Department, is hereby found to be in conformance with PlanDSM: Creating Our Tomorrow Plan and is hereby approved, subject to revision and conditions stated above.

MOVED BY _____ TO ADOPT.

FORM APPROVED:

/s/ Glenna K. Frank
Glenna K. Frank, Assistant City Attorney

(10-2020-7.93)

CERTIFICATE

I, P. KAY CMELIK, City Clerk of said City hereby certify that at a meeting of the City Council of said City of Des Moines, held on the above date, among other proceedings the above was adopted.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal the day and year first above written.

COUNCIL ACTION	YEAS	NAYS	PASS	ABSENT
COWNIE				
BOESEN				
GATTO				
GRAY				
MANDELBAUM				
VOSS				
WESTERGAARD				
TOTAL				

MOTION CARRIED APPROVED

Mayor

City Clerk

May 12, 2020

Honorable Mayor and City Council
City of Des Moines, Iowa

Date June 8, 2020
Agenda Item 61
Roll Call # _____

Members:

Communication from the City Plan and Zoning Commission advising that at their meeting held May 5, 2020 the following action was taken regarding a request from Casey's Marketing Company (lessee) represented by Marni Beck (officer) for review and approval of a PUD Final Development Plan "Casey's Store No. 1192" for property located at 3200 Southwest 9th Street, to allow redevelopment of the existing 21,664-square foot general food sales store with a 4,817-square foot gas station/convenience store to include a pump island canopy with 14 fueling locations. The subject property is owned by Tursi, LC.

COMMISSION ACTION:

After public hearing, the members voted 12-0 as follows:

Commission Action:	Yes	Nays	Pass	Absent
Francis Boggus				X
Dory Briles				X
Abby Chungath	X			
Jacqueline Easley	X			
Jann Freed	X			
John "Jack" Hilmes	X			
Lisa Howard	X			
Carolyn Jenison	X			
Greg Jones	X			
William Page	X			
Rocky Sposato	X			
Steve Wallace	X			
Greg Wattier	X			
Emily Webb	X			

APPROVAL of the proposed PUD Final Development Plan subject to the following conditions:

1. Compliance with all administrative review requirements for the Final Development Plan in accordance with the previously approved PUD Conceptual Plan.
2. Provision of Public Pedestrian Easements in locations where the public sidewalk would encroach into the site.

3. Provision of cross access easements on the Final Development Plan to ensure share use of the southeastern driveway and parking maneuvering with the commercial center to the south.
4. Provision of a signature landscape feature at the intersection of Southwest 9th Street and Park Avenue in compliance with the requirements of the PUD Conceptual Plan.
5. Designation of seasonal merchandise display areas.
6. Modification of the lighting to ensure that it complies with maximums of 2.0 footcandles at property lines across the street or adjoining commercial use and 0.5 footcandles across from or adjoining residential use.

(10-2020-7.93)

RECOMMENDATION TO THE P&Z COMMISSION

Staff recommends approval of the proposed PUD Final Development Plan subject to the following conditions:

1. Compliance with all administrative review requirements for the Final Development Plan in accordance with the previously approved PUD Conceptual Plan.
2. Provision of Public Pedestrian Easements in locations where the public sidewalk would encroach into the site.
3. Provision of cross access easements on the Final Development Plan to ensure share use of the southeastern driveway and parking maneuvering with the commercial center to the south.
4. Provision of a signature landscape feature at the intersection of Southwest 9th Street and Park Avenue in compliance with the requirements of the PUD Conceptual Plan.
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STAFF REPORT TO THE PLANNING COMMISSION

1. **Purpose of Request:** Development of a 4,817-square foot limited retail sales store with fuel station having a pump island canopy for 14 vehicle fueling locations. The store would sell packaged wine and beer.
2. **Size of Site:** 2.12 acres.
3. **Existing Zoning (site):** Legacy "PUD" Planned Unit Development.
4. **Existing Land Use (site):** Vacant grocery store.

5. Adjacent Land Use and Zoning:

North – “MX1” & “N5”; Uses are a barber shop and single-family dwellings.

South – “MX1”; Use is the Park Avenue Plaza commercial center.

East – “MX1” & “P2”; Uses are Park Avenue Christian Church, Des Moines Vacuum, and Sellers Trustworthy Hardware Store.

West – “N3a”; Uses are single-family dwellings.

6. **General Neighborhood/Area Land Uses:** The subject site is located on the Southwest 9th Street commercial corridor at the intersection with Park Avenue. This is considered a Neighborhood Node with a grocery store, a commercial center, a church, and a public elementary school located at the intersection.

7. **Applicable Recognized Neighborhood(s):** The subject property is located in the Grays Lake Neighborhood and within 250 of the Indianola Hills and Watrous Heights Neighborhoods. The neighborhood associations were notified of the meeting by mailing of the Preliminary Agenda to all recognized neighborhood associations on April 17, 2020. Additionally, separate notifications of the hearing for this specific item were mailed on April 27, 2020 (10 days prior to the original public hearing) to the neighborhood associations and to the primary titleholder on file with the Polk County Assessor for each property within 250 feet of the site.

All agendas and notices are mailed to the primary contact(s) designated by the recognized neighborhood association to the City of Des Moines Neighborhood Development Division at the time of the mailing. The Grays Lake Neighborhood Association notices were mailed to Rick Trower, 1310 Broad Street, Des Moines, IA 50315. The Indianola Hills Neighborhood Association notices were mailed to Jeni Dooley, 712 Virginia Avenue, Des Moines, IA 50315. The Watrous Heights Neighborhood notices were mailed to David Johnston, 604 Philip Street, Des Moines, IA 50315.

8. **Relevant Zoning History:** On January 27, 2020 by Ordinance No. 15,857, the City Council rezoned the property to “PUD” Planned Unit Development to allow for development of the property for a gas station/convenience store with sales of wine and beer.

9. **PlanDSM Future Land Use Plan Designation:** Community Mixed Use within a Neighborhood Node.

10. **Applicable Regulations:** Considering the criteria set forth in Chapter 18B of the Iowa Code, and based on the provisions of Chapter 134 Section 134-2.2.9.C, all PUD Final Development Plans must be reviewed and approved by the City Council after review and recommendation by the Plan and Zoning Commission.

II. ADDITIONAL APPLICABLE INFORMATION

1. **Drainage/Grading:** The applicant has provided for a storm water management in accordance with Site Plan requirements in Section 135-8.3.2 of Chapter 135 of the City Code. Because the site would be over an acre in area, water quality detention is required as is a Storm Water Pollution Protection Plan approved by the Iowa DNR. The developer has provided this with Sheet C-401 of the submitted Final Development Plan. Development of the site must comply with the Tree Preservation and Mitigation Ordinance contained in Chapter 42, Article X, of the City Code.

Underground stormwater storage chambers are proposed on the northwest portion of the site to manage required stormwater detention (see Sheet C-201 of submitted Final Development Plan). These chambers would outlet into public storm sewer available in Park Avenue at the northwest corner of the site.

2. **Street System:** A traffic study was prepared by the developer. The City Traffic and Transportation Division has reviewed the report and has recommended that left turn movements on the eastern driveway to Park Avenue be limited to right-in, right-out only. This has been accommodated with the submitted Final Development Plan. There were no other recommendations that would require modifications to the adjoining streets or intersection. The submitted Final Development Plan indicates sidewalk that would partially encroach into the private property. Public pedestrian easements should be provided on the Final Development Plan in these locations.
3. **Parking:** The City's standard off-street parking requirement for retail uses with fuel sales is 1 parking space per 300 square feet. This would require a minimum of 17 spaces for a 4,817-square foot building. A total of 27 parking spaces are proposed. The proposed Final Development Plan does need to show the necessary cross access easements between the site to the south to allow the use of the shared southeastern driveway.
4. **Design Guidelines:** The approved PUD Conceptual Plan requires that the proposed convenience store project be developed in accordance with the City's Gas Station/Convenience Store Site Plan Design Guidelines that were contained the previous Site Plan Ordinance applicable at the time of the rezoning. The following are the guidelines as listed in former Chapter 82 of the City Code (Section 82-214.8) with staff comments as appropriate in italics.

Site Design

- A. The optimal layout of any individual site requires an in-depth understanding of local context and a thorough site analysis. The components of a gas station and convenience store to be considered in site design include, but are not limited to:
 - (i) Primary structure/retail sales building/single or multiple tenant;
 - (ii) Pump island, canopy structure, and lighting;
 - (iii) Refuse, service and storage area;
 - (iv) Circulation systems and parking;
 - (v) Service bays;
 - (vi) Ancillary uses such as car washes, drive through uses, ATMs and telephones.

Staff believes the proposal would generally meet this guideline. The submitted Final Development Plan provides for pedestrian-oriented adjoining Class "A" sidewalks, outdoor seating and bicycle racks. The site has substantial frontage towards both Southwest 9th Street and Park Avenue and has residential development to the west. The layout is in accordance with the approved Conceptual Plan, which was determined consistent with the form contemplated in the Southwest 9th Street Corridor Plan for an expansion of the existing grocery store building.

- B. Maximum size of site should not exceed two (2) acres without a rezoning to a PUD Planned Unit Development pursuant to Chapter 134, Division 13 of the Municipal Code of the City of Des Moines and site review under a Conceptual Plan approved by the Plan and Zoning Commission and City Council.

The proposal complies with this guidelines as the site measures 2.12 acres and the property was rezoned to a what is now a Legacy "PUD" District.

- C. Minimum open space should be 20% of the site or 1,000 square feet per vehicle fueling location, whichever is greater.

The site measures 92,347 square feet and would contain 14 fueling locations. A minimum of 18,470 square feet of open space is required to meet this guideline. The submitted Final Development Plan shows that the site would have at least 29,507 square feet (31.95% of site) of open space. This meets and exceeds this guideline.

- D. All development proposals should show evidence of coordination with the site plan as well as arrangement of buildings and planning elements of neighboring properties by:

- (i) Responding to local development patterns and the streetscape by use of consistent building setbacks, orientation and relationship of structures to the street and linkages to pedestrian facilities;
- (ii) Seeking shared-access with adjoining commercial uses where feasible to minimize curb cuts and enhance pedestrian and vehicular circulation;
- (iii) Minimizing cross traffic conflicts within parking areas.

Dedicated pedestrian routes are shown and provided from the both Southwest 9th Street and Park Avenue sidewalks to the building.

The site is separated from other commercial properties by streets. Therefore, shared driveways and circulation points are not necessary. Shared access would be maintained for the commercial center adjoining to the south.

- E. The site plan shall mitigate the negative impacts from site activities on adjoining uses as follows:
- (i) Service areas, storage areas and refuse enclosures should be oriented away from public view and screened from adjacent sites;
 - (ii) Drive-through windows, menu boards and associated stacking lanes should be oriented away from residential areas or screened from public view;

- (iii) Auto repair bay openings and car-wash openings should be oriented away from residential uses;
- (iv) Lighting should be non-invasive to adjoining residential use.

The proposed trash enclosure and can recycling crusher would be located at the west rear of the site and in the least visible portion of the site.

- F. The site plan shall provide identifiable pedestrian access from adjoining public pedestrian routes through the site to the primary building and from accessory functions within the site. This can be accomplished by use of special paving colors or textures and appropriately scaled lighting.

Pedestrian routes to the building are identified to the public sidewalk system on both public streets.

Architecture

- A. The following architectural guidelines encourage creative response to local and regional context and contribute to the aesthetic identity of the community.
- B. Building design should consider the unique qualities and character of the surrounding area and be consistent with the city's 2020 Character Area Plans (this is superseded by PlanDSM). Where character is not defined by 2020 Community Character Plan, building design should be of a high quality with primary use of durable materials such as masonry, block, or stone.
- C. A facility occupying a pad or portion of a building within a larger commercial center should be designed to reflect the design elements of that center.
- D. Drive-through elements should be integrated into the building rather than appear to be applied or "stuck-on" to the building.
- E. All sides of a building should express consistent architectural detail and character, with a primary use of durable materials such as brick, masonry block, or in special instances a predominant material found in the surrounding commercial area. Columns should be designed to minimize visual impact.
- F. Walls, pump island canopies and other outdoor covered areas should be compatible with the building, using similar material, color and detailing.
- G. To encourage visually interesting roofs, variations in the roof line and treatments such as extended eaves and parapet walls with cornice treatments are encouraged.
- H. Perceived height and bulk should be reduced by dividing the building mass into smaller-scaled components. Examples of treatments that could be used to avoid excessive bulk and height include:
 - (i) Low-scale planters and site walls.
 - (ii) Wainscot treatment.
 - (iii) Clearly pronounced eaves or cornices.
 - (iv) Subtle changes in material color and texture.
 - (v) Variation in roof forms.
 - (vi) Covered pedestrian frontages and recessed entries.
 - (vii) Deeply set windows with mullions.

All facades of the proposed building would be sided with brick and stone and would have an architectural panel system above the first-floor ceiling over the entrance. The

proposed building design includes wall plane variation and parapet wall height on the street facing facades.

I. Canopies:

- (i) Integration of materials on canopies that are similar or compatible to those used on the building or site walls is desirable (e.g., wrap the canopy columns with brick that matches the building). Multiple canopies or canopies that express differing masses are encouraged.

The proposed fuel pump island canopy would be sided with metal and supported by metal columns clad with brick to match the building. The canopy has a raised articulation to break up the long linear pump array that is proposed.

- (ii) Canopy height should not be less than 13'-9" as measured from the finished grade to the lowest point on the canopy fascia. The overall height of canopies should not exceed 18'.

The submitted information indicates the total canopy height would be approximately 21-feet 9-inches to accommodate the raised articulation in the center. The majority remainder of the canopy would be at 16-feet 9-inches in total height. The height of the underside clearance of the canopy would 13-feet 9-inches. The fascia are proposed to be at 3-feet in height.

- J. All display items for sale, excluding seasonal items (i.e., sand, salt, pop, firewood) should be located within the main building. All outdoor display of seasonal items shall be identified on the site plan and be located outside of any required setbacks. No display of seasonal items should exceed 5' in height.

The staff recommends that proposed seasonal outdoor display locations be established on the Final Development Plan.

Landscape Design

- A. Landscaping is integral to the overall design concept and should be carefully planned to enhance the overall appearance and function of the site.
- B. Landscape buffers with screen fencing should mask the site from adjacent residential uses. Plantings that exceed the minimum Des Moines Landscaping Standards may be required.
- C. Dense landscaping or architectural treatments should be provided to screen unattractive views and features such as storage areas, trash enclosures, utility cabinets and other similar elements.
- D. A site design for projects located at a street intersection should provide special landscape treatments, including by way of example perennial plant beds, site walls, native grasses, decorative sign foundations and housing.
- E. Proper maintenance and timely replacement of plant material is required and will be enforced based on the approved site plan.
- F. Monument signs are encouraged and are required when the site adjoins a residential district.

The submitted Final Development Plan has shown landscaping in accordance with the former "C-2" District requirements as required in the approved PUD Conceptual Plan. The submitted Final Development Plan complies with this including providing a Class A sidewalk with tree planters. City staff are working with Des Moines Water Works regarding the placement of the trees in proximity to the water main in Park Avenue. In either instance if a tree cannot be provided the planter bed would require other plant material. The Final Development Plan should show a significant landscape feature at the intersection to meet the design guideline. This could be accomplished by berming up the proposed monument sign and adding perennial beds, a concentration of shrubs, ornamental grasses or a combination of those strategies.

The Final Development Plan includes a note that states "the required landscaping shall be maintained for the life of the certificate of occupancy or certificate of zoning compliance."

The submitted Final Development Plan includes a monument style sign in conformance with this guideline.

Lighting

- A. Lighting of gas stations and convenience stores should enhance safety and provide light levels appropriate to the visual task with minimal glare, light trespass and excess site brightness. Lighting should not be a nuisance or a hazard.
- B. Direct light trespass beyond property lines is prohibited. The maximum horizontal illuminance at grade and the maximum vertical illuminance at five feet above grade measured at the property line should not exceed Illuminating Engineering Society of North America (IESNA) recommended practices for light trespass. (0.5 footcandles for residential, 2.0 footcandles for commercial). The site plan must contain illuminance models showing light levels throughout the site.
- C. Light fixtures mounted under canopies should be completely recessed into the canopy with flat lenses that are translucent and completely flush with the bottom surface (ceiling) of the canopy. Generally, lights shall not be mounted on the top or sides (fascias) of the canopy and internally illuminated/entirely translucent canopies should be prohibited. However, accent lighting on the sides (fascias) of the canopy may be permitted.
- D. Parking Lot and Site Lighting:
 - (i) All luminaries should be of full cut-off design, aimed downward and away from the property line;
 - (ii) Maximum pole heights should not exceed 20'.
- F. Building-Mounted Lighting:
 - (i) All luminaries should be a full cut-off design and aimed downward.
 - (ii) All luminaries should be recessed or shielded so the light source is not directly visible from the property line.

The approved Conceptual Plan includes a note that states "all site lighting will be in compliance with the lighting standards of City Code Section 82-214.8 to the satisfaction of the Community Development Director" and that "lighting shall consist of low-glare cut off type fixtures to reduce the glare of light pollution on surrounding area." Lighting would be reviewed in detail during the site plan phase. The submitted photometric with the Final Development Plan generally demonstrates compliance. However, it indicates a few spot

locations along Park Avenue where the readings outside the property line indicate higher than the 2.0 footcandle maximum. The proposed lighting would need to be adjusted so that the photometric model complies with this provision.

SUMMARY OF DISCUSSION

Erik Lundy presented staff report and recommendation.

Greg Broussard stated he didn't have anything to add after the staff presentation. He is open to any questions the commission may have.

Emily Webb asked if there are any staff recommendations they are not in agreement with?

Greg Broussard stated they agree with all staff recommendations.

CHAIRPERSON OPENED THE PUBLIC HEARING

Thomas Nichols, 933 Caulder Avenue stated he believes there are enough convenience stores on SW 9th Street. He would like to see another grocery store and the City should try harder to fill this space with a discount grocery store.

Mike Ludwig stated this is a review to determine whether the final development plan is consistent with the PUD zoning and conceptual plan that has already been approved by Council. The debate for the use of the property occurred several months ago during the hearing on the rezoning of the property. During the rezoning hearing, the SW 9th business group was in full support and the proposal was found to be consistent with the SW 9th Corridor plan.

Greg Broussard stated he does not have any further comments at this time.

CHAIRPERSON CLOSED THE PUBLIC HEARING

Will Page asked if there will be illuminated lighting on the fascia of the canopy?

Erik Lundy stated this project does not have illuminated lighting within the canopy fascia. That design guideline is to allow for something like a neon band across the canopy.

COMMISSION ACTION:

John "Jack" Hilmes made a motion for approval of the requested Type 2 Design Alternative to allow reuse of the building for an "Assembly, Place of Worship" while providing six (6) off-street parking stalls so long as the use contains seating for no more than 150 people and **DENIAL** of the requested Type 2 Design Alternative to allow waiver of the required curb barriers for the on-site surface parking lot. The Commission believes that concrete curb barriers should be provided in place of the proposed landscape timbers.

Motion passed: 12-0

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Michael Ludwig". The signature is stylized and cursive.

Michael Ludwig, AICP
Planning Administrator

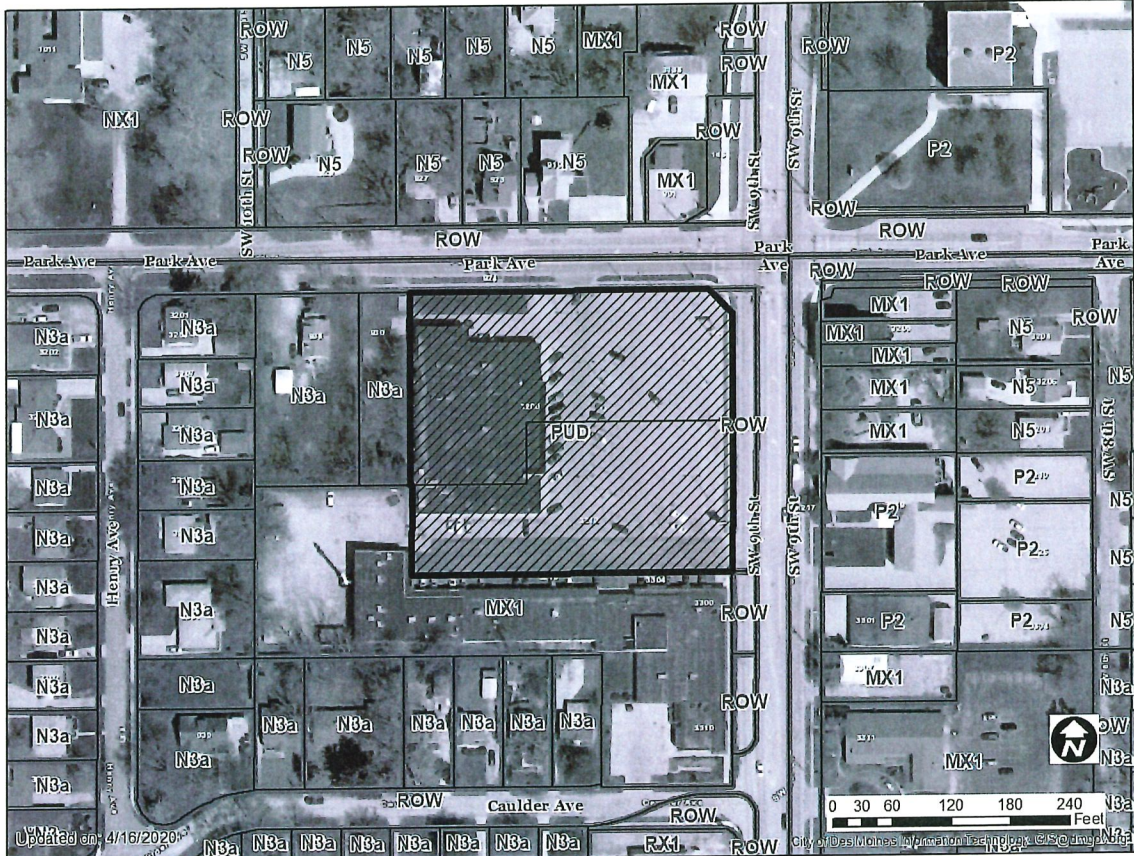
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Attachments

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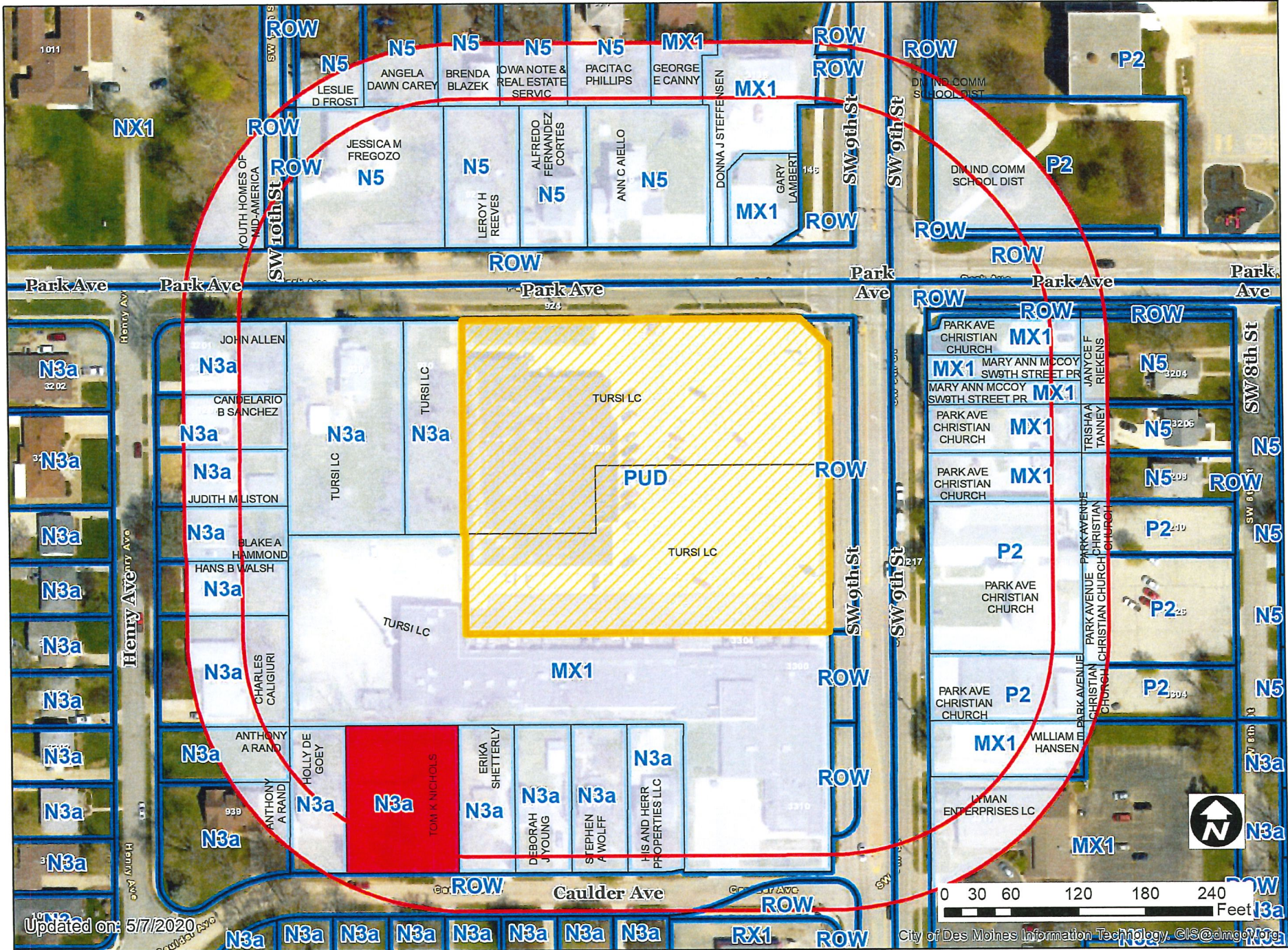
Casey's Marketing Company (lessee) represented by Marni Beck (officer) for property located at 3200 Southwest 9th Street. The subject property is owned by Tursi, LC.				File #
				10-2020-7.93
Description of Action	Review and approval of a PUD Final Development Plan "Casey's Store No. 1192", to allow redevelopment of the existing 21,664-square foot general food sales store with a 4,817-square foot gas station/convenience store to include a pump island canopy with 14 fueling locations.			
PlanDSM Future Land Use	Current: Community Mixed Use within a Neighborhood Node. Proposed: N/A.			
Mobilizing Tomorrow Transportation Plan	No planned improvements.			
Current Zoning District	Legacy "PUD" Planned Unit Development			
Proposed Zoning District	N/A.			
Consent Card Responses	In Favor	Not In Favor	Undetermined	% Opposition
Outside Area (200 feet)	0	0		
Within Subject Property				
Plan and Zoning Commission Action	Approval	X	Required 6/7 Vote of the City Council	Yes
	Denial			No
				X

Casey's Marketing Company, 3200 Southwest 9th Street

10-2020-7.93



1 inch = 114 feet



Updated on: 5/7/2020

City of Des Moines Information Technology, GIS@dmgov.org

1 inch = 114 feet

10

GOVERNING SPECIFICATIONS FOR PUBLIC IMPROVEMENTS (2020 SUDAS) AND THE CITY OF DES MOINES GENERAL SUPPLEMENTAL SPECIFICATIONS TO SUDAS EFFECTIVE AT THE TIME OF PLAN APPROVAL.

IOWA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION", SERIES 2018 AND ALL CURRENT GENERAL SUPPLEMENTAL SPECIFICATIONS AND MATERIALS INSTRUCTIONAL MEMORANDUM SHALL GOVERN AS REFERENCED.

MUTCOD 2009 AS ADOPTED BY IOWA DEPARTMENT OF TRANSPORTATION.

DATE OF SUBMITTAL
APRIL 8, 2020

APPROVAL DATES
PLANNING AND ZONING:
CITY COUNCIL:

SITE SUMMARY
PARCEL AREA: 2.44 ACRES
PUD AREA: 2.12 ACRES
ZONING: PLANNED UNIT DEVELOPMENT DISTRICT (PUD)
LAND USE: THE LAND USE SHALL CONSIST OF A GAS STATION AND AN ASSOCIATED CONVENIENCE STORE WITH 7 PUMPS AND 14 FUELING LOCATIONS.

IMPERVIOUS AREA
EXISTING: 86,684 SF
PROPOSED: 92,703 SF
NEW PAVEMENT: 57,886 SF
NEW BUILDING: 4,817 SF

OPEN SPACE
REQUIRED (20%) = 18,442 SF
PROVIDED = 29,507 SF

BUILDINGS
EXISTING: 22,231 SF
PROPOSED: 4,817 SF

BUILDING INFORMATION
OF EMPLOYEES AT MAX PER SHIFT: 4
1 STORY HEIGHT: 20' 8"

PARKING
REQUIRED 1/300SF: 17 STALLS
PROVIDED: 27 STALLS

NOTE: EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY IOWA ONE CALL, 1-800-292-8989.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D UNLESS OTHERWISE NOTED. THIS UTILITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF C/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."



PUD FINAL DEVELOPMENT PLAN APPROVAL:
 APPROVED APPROVED WITH CONDITIONS. SEE EXHIBIT "A"
IN ACCORDANCE WITH SECTION 135-9, 2019 DES MOINES MUNICIPAL CODE, AS AMENDED.
NO CHANGES TO THIS PLAN UNLESS APPROVED IN WRITING FROM THE COMMUNITY DEVELOPMENT DIRECTOR.
DATE: _____ COMMUNITY DEVELOPMENT DIRECTOR: _____

PLAN REVISIONS		
REV	ISSUED FOR	DATE

CITY OF DES MOINES

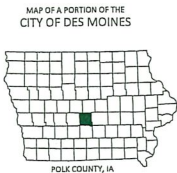
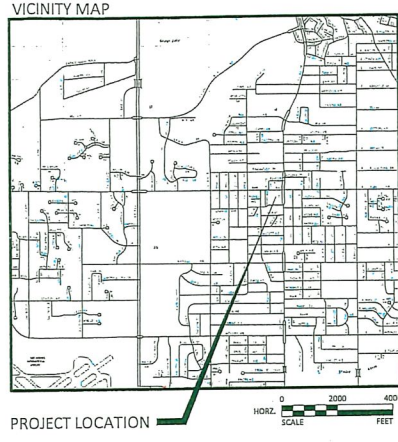
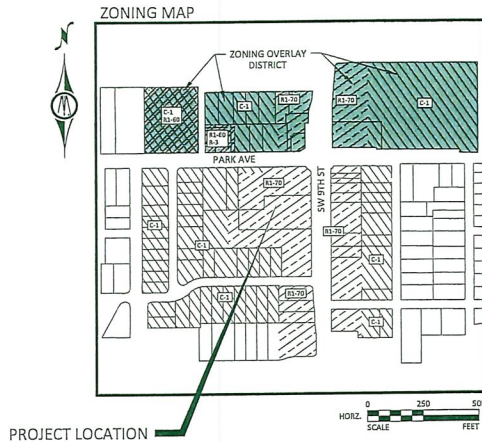
PUD FINAL DEVELOPMENT PLAN FOR

CASEY'S GENERAL STORE NO. 1192

PARK AVE & SW 9TH STREET

3200 SW 9TH STREET

APRIL, 2020



SHEET NUMBER	SHEET TITLE
C-001	COVER SHEET
C-002	GENERAL NOTES
C-003	ALTA
C-004	ALTA
C-100	EXISTING SITE/DEMOLITION PLAN
C-101	SITE PLAN LAYOUT
C-201	GRADING PLAN
C-202 - C-203	SIDEWALK SHEETS
C-301 - C-303	UTILITY PLAN
C-401	SWPPP/EROSION CONTROL
C-601 - C-602	CIVIL DETAILS SHEETS
C-701	LANDSCAPING PLAN
C-702	LANDSCAPING DETAILS
ADS 1-5	UNDERGROUND STORMWATER STORAGE PLAN

THIS PLAN SET CONTAINS 22 SHEETS.

OWNER
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URBANDALE IA 50323-2062
CHRIS TURSI
515-577-8206
CHRISTOPHERTURSI@GMAIL.COM

ENGINEER/SURVEYOR/LANDSCAPE ARCHITECT
GREG BROUSSARD, ENGINEER
GENE DREYER, SURVEYOR
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BOLTON AND MENK
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ARCHITECT
DANIEL WILLRICH, ARCHITECT
PELTS DESIGN SERVICES
2323 DIXON STREET
DES MOINES, IA 50316

PUD LEGAL DESCRIPTION
THAT PART OF LOT THREE (3); LOT FOUR (4); LOT FIVE (5); LOT SIX (6) LOT SEVEN (7); LOT EIGHT (8); AND LOT NINE (9) OF LITTLETON PLACE, AN OFFICIAL PLAT, NOW INCLUDED IN AND FORMING A PART OF THE CITY OF DES MOINES, IOWA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGINNING AT THE NORTHWEST CORNER OF SAID LOT 3; THENCE NORTH 89° 47' 26" EAST, A DISTANCE OF 300.59 FEET ALONG THE SOUTH RIGHT-OF-WAY LINE OF PARK AVENUE; THENCE SOUTH 67° 02' 54" EAST, A DISTANCE OF 18.37 FEET ALONG THE SOUTHERLY RIGHT-OF-WAY OF PARK AVENUE; THENCE SOUTH 25° 01' 22" EAST, A DISTANCE OF 19.08 FEET ALONG THE WESTERLY RIGHT-OF-WAY OF SW 9TH STREET; THENCE SOUTH 09° 01' 55" WEST, A DISTANCE OF 299.20 FEET ALONG THE WEST RIGHT-OF-WAY LINE OF SW 9TH STREET TO THE SOUTH LINE OF SAID LOT 9; THENCE SOUTH 89° 47' 26" WEST, A DISTANCE OF 325.80 FEET ALONG THE SOUTH LINE OF SAID LOT 9; THENCE NORTH 00° 12' 34" WEST, A DISTANCE OF 90.47 FEET TO THE SOUTHWEST CORNER OF SAID LOT 9; THENCE NORTH 00° 12' 34" EAST, A DISTANCE OF 193.38 FEET ALONG THE WEST LINE OF SAID LOT 9 TO THE POINT OF BEGINNING. SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD DEED FROM BK7321 P866.

I HEREBY CERTIFY THAT THE PORTION OF THIS TECHNICAL SUBMISSION DESCRIBED BELOW WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND RESPONSIBLE CHARGE. I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF IOWA.

JOSHUA L. SHIELDS
PROFESSIONAL LANDSCAPE ARCHITECT
IOWA LICENSE NO. 1574
DATE: JUNE 30, 2020
MY LICENSE RENEWAL DATE IS JUNE 30, 2022
PAGES OR SHEETS COVERED BY THIS SEAL
C-701 - C-702

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.

GREGORY A. BROUSSARD
PROFESSIONAL ENGINEER
IOWA LICENSE NO. 1574
DATE: DECEMBER 31, 2021
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2021
PAGES OR SHEETS COVERED BY THIS SEAL
C-001, C-002, C-100 - C-602

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CASEY'S GENERAL STORE
DES MOINES, IOWA
TITLE SHEET

SHEET
C-001

STANDARD CONSTRUCTION NOTES:

- 1. ALL IMPROVEMENTS ON SITE AND IN THE CITY RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE 2020 EDITION OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) AND THE CITY OF DES MOINES GENERAL SUPPLEMENTAL SPECIFICATIONS TO SUDAS EFFECTIVE AT THE TIME OF PLAN APPROVAL AND SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES. THE CONTRACTOR SHALL HAVE A COMPLETE SET OF THE CURRENT SUDAS STANDARD SPECIFICATIONS ON SITE DURING ALL CONSTRUCTION ACTIVITIES.
2. ANY DEFECTIVE WORK CONDEMNED BY THE ENGINEER/OWNER SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE IN ACCORDANCE WITH SECTION 1050, 1.08 'REMOVAL OF DEFECTIVE WORK' OF THE STANDARD SPECIFICATIONS. FAILURE TO REMOVE DEFECTIVE WORK MAY RESULT IN SUSPENSION OF OPERATIONS AND/OR WITHHOLDING OF PAYMENTS UNTIL DEFECTIVE WORK HAS BEEN REMOVED AND REPLACED.
3. THE CONTRACTOR SHALL PRESERVE ALL SURVEY CONTROL, LINE AND GRADE STAKES IN ACCORDANCE WITH SECTION 1050, 1.10 'LINE AND GRADE STAKES' OF THE STANDARD SPECIFICATIONS.
4. PRIOR TO MOBILIZING OFF OF THE JOB SITE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER/OWNER TO REQUEST A FINAL INSPECTION IN ACCORDANCE WITH SECTION 1050, 1.14 'FINAL INSPECTION AND ACCEPTANCE' OF THE STANDARD SPECIFICATIONS.
5. THE CONTRACTOR SHALL PROCURE ALL NECESSARY PERMITS AND LICENSES IN ACCORDANCE WITH SECTION 1070, 1.03 'PERMITS AND LICENSES' OF THE STANDARD SPECIFICATIONS.
6. THE CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY AND COMPLYING WITH ALL CURRENT AND FUTURE FEDERAL AND STATE OSHA REQUIREMENTS IN ACCORDANCE WITH SECTION 1070, 2.02 'CONVENIENCE AND SAFETY' OF THE STANDARD SPECIFICATIONS.
7. IN ACCORDANCE WITH SECTION 1070, 2.08 'PROTECTION OF PROPERTY' OF THE STANDARD SPECIFICATIONS, THE CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ADEQUATE PROTECTION OF ALL ITS WORK FROM DAMAGE AND SHALL PROTECT THE PROPERTY AND ADJACENT PRIVATE PROPERTY FROM INJURY OR LOSS ARISING IN CONNECTION WITH THE WORK. THE CONTRACTOR SHALL REPAIR OR RESTORE ANY SUCH DAMAGE, INJURY, OR LOSS TO PROPERTY OR ADJACENT PROPERTY. THE CONTRACTOR SHALL PROTECT TREES AND OTHER PROPERTY NOT MARKED FOR REMOVAL.
8. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SITE CLEANLINESS. UPON REQUEST BY THE ENGINEER/OWNER, THE CONTRACTOR SHALL, AT ITS EXPENSE, CLEANUP AND REMOVE ALL REFUSE AND UNUSED MATERIALS OF ANY KIND RESULTING FROM THE WORK INCLUDING CLEANING AND SWEEPING OF ADJACENT STREETS. UPON FAILURE TO DO SO WITHIN THREE WORKING DAYS AFTER SUCH REQUEST BY THE ENGINEER/OWNER, THE WORK MAY BE DONE BY THE OWNER AND THE COST THEREOF CHARGED TO THE CONTRACTOR AND DEDUCTED FROM ITS FINAL PAYMENT IN ACCORDANCE WITH SECTION 1070, 2.15 'FINISHING AND CLEANUP REQUIREMENTS' OF THE STANDARD SPECIFICATIONS.
9. THIS SITE SHALL BE MAINTAINED IN COMPLIANCE WITH ALL CITY CODE APPLICABLE WITH THE APPROVAL OF THE PUD CONCEPTUAL PLAN BY THE CITY COUNCIL ON JANUARY 27, 2020 ROLL CALL NO. 20-0187.
10. ANY NEW ROOFTOP MECHANICAL EQUIPMENT MUST BE SCREENED FROM STREET LEVEL VIEW.
11. TRANSFORMERS, JUNCTION BOXES, AIR CONDITIONERS OVER 3 FEET IN HEIGHT, OR OTHER SUCH ITEMS MAY NOT BE LOCATED IN THE REQUIRED SETBACK AREAS.
12. ANY AMENDMENTS OR CHANGES TO THE PROJECT SITE THAT DO NOT MEET WHAT IS SHOWN ON THE PUD FINAL DEVELOPMENT PLAN NEED TO BE APPROVED WITH THE PERMIT AND DEVELOPMENT CENTER PRIOR TO INSTALLATION AND CONSTRUCTION.
13. LIGHTING MUST BE LOW GLARE CUT OFF TYPE FIXTURES TO REDUCE THE GLARE OF LIGHT POLLUTION ON SURROUNDING PROPERTIES.

UTILITY COORDINATION NOTES:

- 1. THE CONTRACTOR IS REQUIRED TO UTILIZE THE UTILITY ONE-CALL SERVICE AT (800) 292-8989 TO LOCATE EXISTING UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT.
2. ANTICIPATED UTILITY CONFLICTS HAVE BEEN IDENTIFIED AND EACH RESPECTIVE UTILITY OWNER HAS BEEN INFORMED OF THE POTENTIAL CONFLICTS. THE CONTRACTOR SHALL PROTECT THE EXISTING UTILITIES TO REMAIN WITHIN THE PROJECT SITE.
3. IF A CONFLICT IS DISCOVERED BY THE CONTRACTOR, NOTIFY THE ENGINEER IMMEDIATELY AND COORDINATE WITH OWNER OF UTILITY TO RESOLVE CONFLICT.
4. PRIVATE WATER AND SEWER SERVICES MUST MEET UNIFORM PLUMBING CODE (UPC) AND ALL CITY OF DES MOINES AMENDMENTS TO UPC.
5. CONTRACTOR RESPONSIBLE FOR VERIFYING ALL PIPE MATERIAL REQUIREMENTS PRIOR TO CONSTRUCTION.

PROJECT NOTES:

- 1. ALL WORK IN THE CITY RIGHT-OF-WAY REQUIRES A RIGHT-OF-WAY PERMIT TO BE OBTAINED BY THE CONTRACTOR.
2. ALL SIDEWALK AND DRIVEWAY APPROACH WORK REQUIRES A PERMIT TO BE OBTAINED BY THE CONTRACTOR.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING CONSTRUCTION STAKING.
4. CONTRACTOR SHALL PROPERLY SECURE PROJECT SITE AT THE END OF EACH DAY.
5. CONTRACTOR OPERATIONS CREATING OBJECTIONABLE LEVELS OF NOISE SHALL NOT BEGIN PRIOR TO 7:00 AM AND SHALL END PRIOR TO 7:00 PM.
6. ALL DISTURBED AREAS SHALL BE SEEDED AND/OR MULCHED (DEPENDING ON DATE) UPON COMPLETION OF GRADING.
7. ALL UTILITY SERVICES (SANITARY, WATER, AND SUMP) SHALL BE INSTALLED BY A PLUMBER LICENSED IN THE CITY.
8. THE CONTRACTOR SHALL LIMIT THEIR ACCESS TO THE PROJECT SITE TO THE STABILIZED ENTRANCE LOCATIONS SHOWN IN THE SWPPP.
9. THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT, THE DEVELOPER, AND BOLTON & MENK, INC. ONE WEEK PRIOR TO THE START OF ANY CONSTRUCTION.
10. THE CONTRACTOR SHALL REPLACE ALL PAVEMENT MARKINGS DAMAGED DURING CONSTRUCTION.
11. CONTRACTOR SHALL INSTALL ONE (1) BIKE RACK. BIKE RACK SHALL BE BELSON MODEL NUMBER CBBR-SUR-SS.

STORM WATER POLLUTION PREVENTION PLAN NOTES:

- 1. CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS OF IDNR NPDES GENERAL PERMITS #2.
2. CONTRACTOR SHALL MINIMIZE THE AMOUNT OF SOIL EXPOSED DURING CONSTRUCTION ACTIVITY
3. STABILIZATION OF DISTURBED AREAS MUST, AT A MINIMUM, BE INITIATED IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE SITE OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. IN DROUGHT-STRIKEN AREAS AND AREAS THAT HAVE RECENTLY RECEIVED SUCH HIGH AMOUNTS OF RAIN THAT SEEDING WITH FIELD EQUIPMENT IS IMPOSSIBLE AND INITIATING VEGETATIVE STABILIZATION IMMEDIATELY IS INFASIBLE, ALTERNATIVE STABILIZATION MEASURES MUST BE EMPLOYED AS SPECIFIED BY THE DEPARTMENT. IN LIMITED CIRCUMSTANCES, STABILIZATION MAY NOT BE REQUIRED IF THE INTENDED FUNCTION OF A SPECIFIC AREA OF THE SITE NECESSITATES THAT IT REMAIN DISTURBED.
4. MINIMIZE THE EXPOSURE OF BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS PRESENT ON THE SITE TO PRECIPITATION AND STORM WATER. MINIMIZATION OF EXPOSURE IS NOT REQUIRED IN CASES WHERE THE EXPOSURE TO PRECIPITATION AND TO STORM WATER WILL NOT RESULT IN A DISCHARGE OF POLLUTANTS, OR WHERE EXPOSURE OF A SPECIFIC MATERIAL OR PRODUCT POSSES LITTLE RISK OF STORM WATER CONTAMINATION (SUCH AS FINAL PRODUCTS AND MATERIALS INTENDED FOR OUTDOOR USE).
5. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM SPILLS AND LEAKS AND IMPLEMENT CHEMICAL SPILL AND LEAK PREVENTION AND RESPONSE PROCEDURES.
6. CONCRETE WASHOUTS SHALL BE PROVIDED ON SITE.
7. QUALIFIED PERSONNEL SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN STABILIZED WITH A PERENNIAL VEGETATIVE COVER OF SUFFICIENT DENSITY TO PRECLUDE EROSION AT LEAST ONCE EVERY SEVEN CALENDAR DAYS. UNLESS EROSION IS EVIDENT OR OTHER CONDITIONS WARRANT THEM, REGULAR INSPECTIONS ARE NOT REQUIRED ON AREAS THAT HAVE BEEN STABILIZED WITH A PERENNIAL VEGETATIVE COVER OF SUFFICIENT DENSITY TO PRECLUDE EROSION.
8. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM.
9. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFFSITE SEDIMENT TRACKING.
10. BASED ON THE RESULTS OF THE INSPECTION, POLLUTION PREVENTION MEASURES IDENTIFIED IN THE PLANS SHALL BE REVISED AT THE CONSTRUCTION SITE AS APPROPRIATE AS SOON AS PRACTICABLE AFTER THE INSPECTION AND TO THE PLAN AS SOON AS PRACTICABLE AFTER THE INSPECTION BUT IN NO CASE MORE THAN 7 CALENDAR DAYS FOLLOWING THE INSPECTION. IF THE PERMITTEE DETERMINES THAT MAKING THESE CHANGES AT THE CONSTRUCTION SITE OR TO THE PLAN LESS THAN 72 HOURS AFTER THE INSPECTION IS IMPRACTICABLE, THE PERMITTEE SHALL DOCUMENT IN THE PLAN WHY IT IS IMPRACTICABLE AND INDICATE AN ESTIMATED DATE BY WHICH THE CHANGES WILL BE MADE.
11. A REPORT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN, AND ACTIONS TAKEN SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS AFTER FINAL STABILIZATION HAS BEEN ACHIEVED AND A NOTICE OF DISCONTINUATION HAS BEEN SUBMITTED TO THE DEPARTMENT.
12. EROSION CONTROL MEASURES SHOWN ON THE PLAN ARE THE MINIMUM REQUIRED TO BE INSTALLED. ADDITIONAL MEASURES MAY BE REQUIRED TO PROTECT/STABILIZE THE SITE. ADDITIONAL CONTROLS

MAY INCLUDE, BUT ARE NOT LIMITED TO SILT FENCE, COMPOST BLANKETS, FILTER SOCKS, RIPRAP, FLOW TRANSITION MAPS, ETC. ANY ADDITIONAL CONTROL MEASURE REQUIRED SHALL BE INSTALLED BY THE CONTRACTOR AT NO ADDITIONAL COSTS TO THE OWNER.

TRAFFIC CONTROL NOTES:

- 1. THE CONTRACTOR SHALL DEVELOP A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH SECTION 1070, 2.06 'TRAFFIC CONTROL' OF THE STANDARD SPECIFICATIONS. ANY TRAFFIC CONTROL DEVICES OR SAFETY EQUIPMENT NEEDED TO CONSTRUCT THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION PHASING AND TRAFFIC CONTROL PLAN WITH PLANNED DETOURS, IF APPLICABLE, TO THE ENGINEER FOR APPROVAL BEFORE THE START OF ANY CONSTRUCTION ACTIVITIES.
2. IF NECESSARY, STREETS WILL BE CLOSED IN ACCORDANCE WITH SECTION 1070, 2.06 'TRAFFIC CONTROL' OF THE STANDARD SPECIFICATIONS.
3. ALL TRAFFIC CONTROL PLANS MUST BE REVIEWED AND APPROVED BY THE CITY PRIOR TO PLACEMENT OF TRAFFIC CONTROL DEVICES AND SIGNS FOR EACH STAGE OF THE PROJECT.
4. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.
5. PORTABLE MOUNTINGS FOR WARNING SIGNS MAY BE USED FOR TEMPORARY INSTALLATIONS OF 3 DAYS OR LESS ALL OTHER TRAFFIC CONTROL SHALL BE POST MOUNTED.
6. THE PROPOSED SIGNAGE MAY BE MODIFIED TO MEET FIELD CONDITIONS, PREVENT OBSTRUCTIONS AND TO ACCOMMODATE CONSTRUCTION SCHEDULING UPON APPROVAL OF THE PROJECT ENGINEER
7. SIGNAGE MAINTENANCE SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND REQUIRED AS DIRECTED BY THE ENGINEER.
8. ALL CONSTRUCTION SIGNS SHALL BE DIAMOND GRADE FLUORESCENT ORANGE OR WHITE V.L.P. SHEETING OR EQUIVALENT, [IOWA DOT TYPE VII SHEETING].
9. THE CONTRACTOR SHALL CONTACT THE CITY TO REMOVE ALL PERMANENT STREET SIGNS CONFLICTING WITH PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL REMOVE ALL OTHER SIGNS AS DETERMINED BY THE ENGINEER AND THEY SHALL REMOVE THE PROPERTY OF THE RESPECTIVE OWNERS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO OTHER WORK.
10. AT THE TIME OF INITIAL SETUP OR AT THE TIME OF MAJOR STAGE CHANGES, 100 PERCENT OF EACH TYPE OF DEVICE (SIGNS, CONES, TUBULAR MARKERS, DRUMS, BARRICADES, VERTICAL PANELS, CHANGEABLE MESSAGE SIGNS, AND PAVEMENT MARKINGS) SHALL BE CLASSIFIED AS ACCEPTABLE BY THE REQUIREMENT OF THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA), "QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES 1992." THROUGHOUT THE DURATION OF THE PROJECT, UNACCEPTABLE DEVICES OR SITUATIONS THAT ARE FOUND ON THE JOBSITE AS DETERMINED BY BEFORE MENTIONED PUBLICATION SHALL BE REPLACED OR THE SITUATION CORRECTED WITHIN 12 HOURS OF INITIAL NOTIFICATIONS BY THE ENGINEER.
11. AT EACH SIDEWALK CLOSURE LOCATION PLACE TYPE I BARRICADES WITH "SIDEWALK CLOSED" SIGNS AT EACH CLOSURE END AND PLACE "SIDEWALK CLOSED AHEAD" SIGNS ALONG THE SIDEWALK AT NEAREST STREET INTERSECTIONS ON EACH SIDE OF THE CLOSURE LOCATION IN ACCORDANCE WITH THE MUTCD.

GRADING NOTES:

- 1. ALL GRADING OPERATIONS SHALL BE COMPLETED IN ACCORDANCE WITH DIVISION 2 OF THE SPECIFICATIONS
2. THE PROPOSED CONTOURS ARE SHOWN ARE TO FINISH GROUND/TOP OF PAVEMENT
3. CONTRACTOR SHALL GRADE ALL AREAS IN THE PAVEMENT BOX TO SUBGRADE, AND ALL OTHER AREAS TO FINISH GROUND.
4. ALL TOPSOIL STRIPPING SHALL BE RESPREAD ON LOTS, IF POSSIBLE.
5. TOPSOIL AND/OR OTHER UNSUITABLE MATERIAL WITHIN THE PAVEMENT BOX SHALL BE REMOVED.
6. THE CONTRACTOR SHALL SHAPE GRADED AREAS TO MAINTAIN SURFACE DRAINAGE AT ALL TIMES.
7. THE CONTRACTOR SHALL BACKFILL CURBS AS SOON AS POSSIBLE UPON COMPLETION OF PAVING
8. DEWATERING (IF NECESSARY) IS CONTRACTOR'S RESPONSIBILITY AND SHALL BE CONSIDERED INCIDENTAL.
9. ALL DISTURBED AREAS SHALL BE RESTORED BY SEEDING OR SODDING.

SANITARY SEWER NOTES:

- 1. SANITARY SEWER INSTALLATION SHALL BE COMPLETED IN ACCORDANCE WITH DIVISIONS 3, 4, AND 6 OF THE SPECIFICATIONS
2. SANITARY SEWER SERVICE SHALL BE 6" SCHEDULE 40 PVC.
3. SANITARY SEWER BEDDING SHALL BE CLASS F-3 BEDDING UNLESS OTHERWISE SPECIFIED.
4. CONTRACTOR SHALL TELEVIEW EXISTING MAIN AND PROVIDE VIDEO TO THE CITY FOR REVIEW AFTER SERVICE INTALLATION.

STORM SEWER NOTES:

- 1. STORM SEWER INSTALLATION SHALL BE IN ACCORDANCE WITH DIVISIONS 3, 4, AND 6 OF THE SPECIFICATIONS.
2. STORM SEWER SHALL BE BEDDING SHALL BE CLASS R-2.
3. STORM SEWER CLEANOUTS SHALL BE TYPE-A1.
4. RCP PLUGS SHALL BE CONSIDERED INCIDENTAL TO STORM SEWER CONSTRUCTION.
5. THE CONTRACTOR SHALL REPAIR ANY FIELD TILE ENCOUNTERED DURING CONSTRUCTION OF THIS PROJECT (WHETHER SHOWN ON THE PLAN OR NOT) BY SPLICING OR CONNECTING THE TILE TO THE NEW STORM SEWER SYSTEM.

WATER MAIN NOTES:

- 1. WATER SERVICE INSTALLATION SHALL BE COMPLETED IN ACCORDANCE WITH DIVISIONS 3 AND 5 OF THE SPECIFICATIONS.
2. WATER MAIN SHALL BE INSTALLED WITH 5.5 FEET COVER (MINIMUM).
3. PUBLIC WATER MAIN VALVES SHALL BE OPERATED BY CITY PERSONNEL ONLY.

LANDSCAPING NOTES:

- 1. CONTRACTOR TO CONTACT THE MUNICIPAL FORESTRY DIVISION PRIOR TO PLANTING IN THE PUBLIC RIGHT-OF-WAY AT 283-4105.
2. ALL WIRE, TWINE, AND BURLAP SHALL BE REMOVED FROM THE ROOTBALL OF STREET TREES PRIOR TO PLANTING.
3. THE REQUIRED LANDSCAPING, BOTH EXISTING AND PROPOSED, SHALL BE MAINTAINED FOR THE LIFE OF THE CERTIFICATE OF OCCUPANCY.

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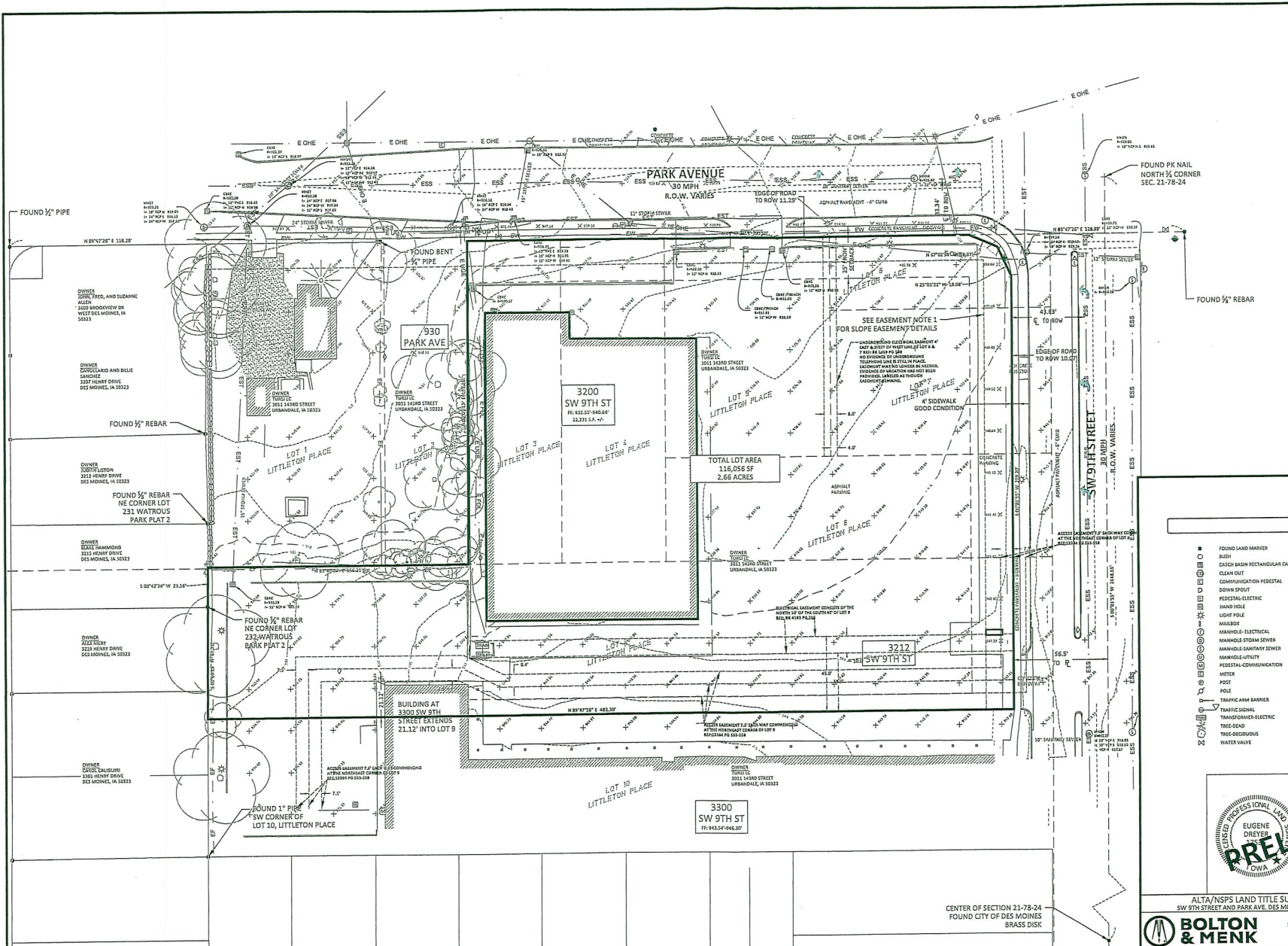
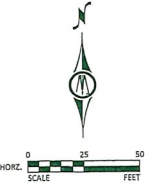
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DATE PLOTTED				
11/13/2023				

CASEY'S GENERAL STORE
DES MOINES, IOWA
GENERAL NOTES

SHEET

C-002



LEGEND

●	FOUND LAND MARKER	— C —	COMMUNICATION UNDERGROUND
○	BUSH	— E —	ELECTRIC UNDERGROUND
□	CAST IRON RECTANGULAR CASTING	— F —	FENCE
□	CLEAN OUT	— G —	GAS UNDERGROUND
□	COMMUNICATION PEDESTAL	— I —	INDEX CONTOURS
□	DOWN/DOUT	— J —	INTERMEDIATE CONTOURS
□	PEDESTAL-ELECTRIC	— K —	OVERHEAD ELECTRIC
□	HAND HOLE	— L —	RETAINING WALL
□	LIGHT POLE	— M —	SEWER SEWER
□	MANHOLE	— N —	STORM SEWER
□	MANHOLE-ELECTRICAL		
□	MANHOLE-SEWER	— P —	CONCRETE SURFACE
□	MANHOLE-SANITARY SEWER	— Q —	ASPHALT SURFACE
□	MANHOLE-UTILITY	— R —	EXISTING BUILDING
□	PEDESTAL-COMMUNICATION	— S —	GRAVEL SURFACE
□	METER		
□	POST		
□	POLE		
□	TRAFFIC ARM BARRIER		
□	TRAFFIC SIGNAL		
□	TRANSFORMER-ELECTRIC		
□	TREE DEAD		
□	TREE-DECEADUOUS		
□	WATER VALVE		

I hereby certify that this land surveying document was prepared by me and the related field work was performed by me or under my direct supervision and that I am a duly licensed land surveyor under the laws of the State of Iowa.

PRELIMINARY

EUGENE DREYER, L.S.
 REG. NO. 24413 DATE: / /
 MY LICENSE RENEWAL DATE IS 12/31/2020
 PAGES OR SHEETS COVERED BY THIS SEAL:
 ALL SHEETS

ALTA/NPS LAND TITLE SURVEY
 SW 9TH STREET AND PARK AVE, DES MOINES, IOWA

BOLTON & MENK
 1519 BALTIMORE DRIVE
 AMES, IOWA 50010
 (515) 239-4300

FOR: CASEY'S GENERAL STORE, INC

SHEET
C-003

JOB NUMBER: A13.118877 FIELD BOOK: DRAWN BY: DEM

LEGAL DESCRIPTION

THE EAST 3 FEET OF LOT ONE (L1);
 LOT TWO (L2);
 LOT THREE (L3);
 LOT FOUR (L4);
 LOT FIVE (L5);
 LOT SIX (L6) AND SEVEN (L7), EXCEPT BEGINNING AT THE NORTHEAST CORNER OF LOT 6, THENCE SOUTH 133 FEET TO THE NORTHEAST CORNER OF LOT 6, THENCE SOUTH 132 FEET TO THE SOUTHEAST CORNER OF LOT 7, THENCE WEST 23.5 FEET ALONG THE SOUTH LINE OF LOT 7, THENCE NORTH 88.8 FEET, THENCE NORTHWESTERLY 37.26 FEET TO A POINT ON THE NORTH LINE OF LOT 6, WHICH IS 46.5 FEET WEST OF THE NORTHEAST CORNER OF LOT 6, THENCE EAST 48.5 FEET TO THE POINT OF BEGINNING;
 LOT EIGHT (L8), EXCEPT THE EAST 33.5 FEET THEREOF;
 LOT NINE (L9), EXCEPT THE EAST 33.5 FEET THEREOF;
 ALL IN LITTLETON PLACE, AN OFFICIAL PLAT, NOW INCLUDED IN AND FORMING A PART OF THE CITY OF DES MOINES, IOWA.
 SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD DEED FROM 8/7/31 PG85

TITLE OPINION

GENERAL NOTES

1. WEST AND SOUTH LINES OF LITTLETON PLACE WERE SET BY COURT DECREE, UNABLE TO FIND COURT DOCUMENTS.
2. DESCRIPTION FOR RIGHT-OF-WAY ACQUIRED BY CITY OF DES MOINES AT THE NORTHEAST CORNER OF LOT 6 DOES NOT CLOSE. ADDITIONAL INFORMATION HAS BEEN REQUESTED FROM THE CITY OF DES MOINES.

GENERAL NOTES

1. THERE ARE SIDEWALKS PRESENT ON THE PROPOSED SITE ALONG THE NORTH AND EAST EDGES OF THE PROPERTY.
2. NEAREST WATER HYDRANT: 370 FEET.
3. CURRENT PROPERTY ZONING: C-3 NEIGHBORHOOD RETAIL COMMERCIAL
4. ADJACENT PROPERTY ZONING: C-1 NEIGHBORHOOD RETAIL COMMERCIAL
 R-70 ONE-FAMILY LOW-DENSITY RESIDENTIAL
5. SETBACK REQUIREMENTS:
 S.1. FRONT YARD - 25'
 S.2. SIDE YARD - 25'
 S.3. REAR YARD - 0'
6. LIGHTING REQUIREMENTS:
7. PARKING REQUIREMENTS: 1 SPACE PER 200 SQUARE FEET OF BUILDING FOR BUILDINGS OVER 4000 SQUARE FEET. FOR BUILDINGS LESS THAN 4,000 SQUARE FEET; 1 SPACE PER 300 SQUARE FEET.
8. SIGNAGE AND LANDSCAPING REQUIREMENTS: ANTICIPATED PROBLEMS: SOME OPEN GREEN SPACE REQUIREMENTS, PARKING LOT PERIMETER LANDSCAPING, AND PARKING LOT SHADING. SIGNS SHALL BE MONUMENT SIGNS MEETING CITY CODE.
9. NO WATERMAIN FIELD LOCATED, WATERMAIN SHOWN FROM MAPS FROM CITY OF DES MOINES, IOWA.
10. IOWA ONE CALL DESIGN INFORMATION REQUEST #55109313 WAS CREATED ON 2019-05-14. IOWA ONE CALL DESIGN LOCATE REQUEST #55180732 WAS CREATED ON 2019-05-21 FOR LOCATES TO BE PLACED ON THE GROUND. NO VISIBLE EVIDENCE OF ANY LOCATES ON THE GROUND WERE NOTICED DURING THIS ALTA SURVEY. UTILITY LINEWORK IN THE DRAWING WAS RECREATED FROM FOUND UTILITY STRUCTURES AND DESIGN INFORMATION MAPS FROM THE UTILITY COMPANIES.

EASEMENT

1. SEE SLOPE EASEMENT LOCATED IN BOOK 5181 PAGE 11

CHURCH PROXIMITY

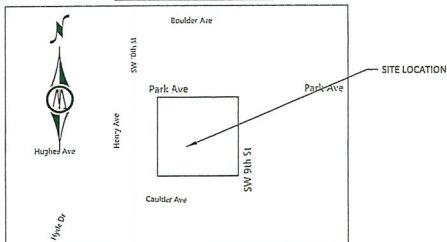
- PARK AVENUE CHRISTIAN CHURCH - 284 FT
- PARK AVENUE PRESBYTERIAN CHURCH - 350 FT
- IGLESIA PENTECOSTAL UNIDA INTL - 437 FT
- LUTHERAN CHURCH THE GOOD SHEPHERD - 1,279 FT
- LINCOLN HEIGHTS LUTHERAN CHURCH - 2,847 FT

SCHOOL PROXIMITY

- PARK AVENUE ELEMENTARY - 527 FT
- LINCOLN HIGH SCHOOL - 2,315 FT
- SOUTH UNION ELEMENTARY SCHOOL - 4,658 FT

VICINITY MAP FROM BING MAPS

CITY OF DES MOINES, IOWA

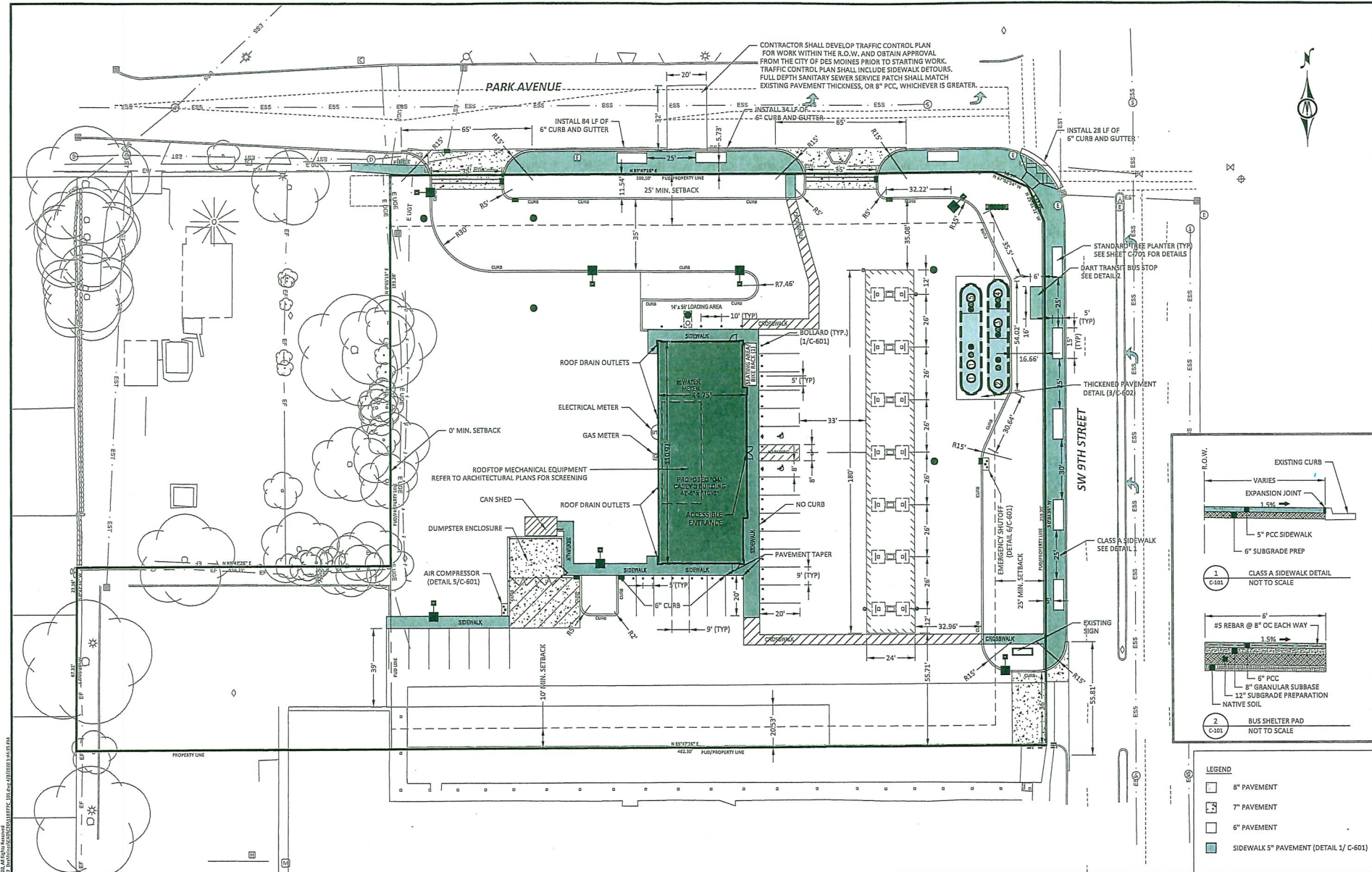


CONTROL POINTS

POINT NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
101	7475373.296	18524431.67	934.942	VFCP /SET CUT X
102	7475393.689	18524873.52	942.901	VFCP /SET CUT X
103	7475615.221	18524873.5	940.687	VFCP /SET CUT X
104	7475640.53	18524536.46	927.025	VFCP /SET CUT X

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON _____, 2019.

ALTA/NSPS LAND TITLE SURVEY SW 9TH STREET AND PARK AVE, DES MOINES, IA		1510 BALTIMORE DRIVE AMES, IOWA 50010 (515) 279-6100	FOR: CASEY'S GENERAL STORE, INC.	SHEET C-004
JOB NUMBER: A13-21877	FIELD BOOK:	DRAWN BY: DGM		



DES MOINES, IOWA 50319
 51519 BALTIMORE DRIVE
 AMES, IOWA 50010
 PHONE: (515) 233-6100
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AMES, IOWA 50010
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NO.	DESCRIPTION	DATE
1	DEM	
2	DEM	
3	GAB	
4	GAB	

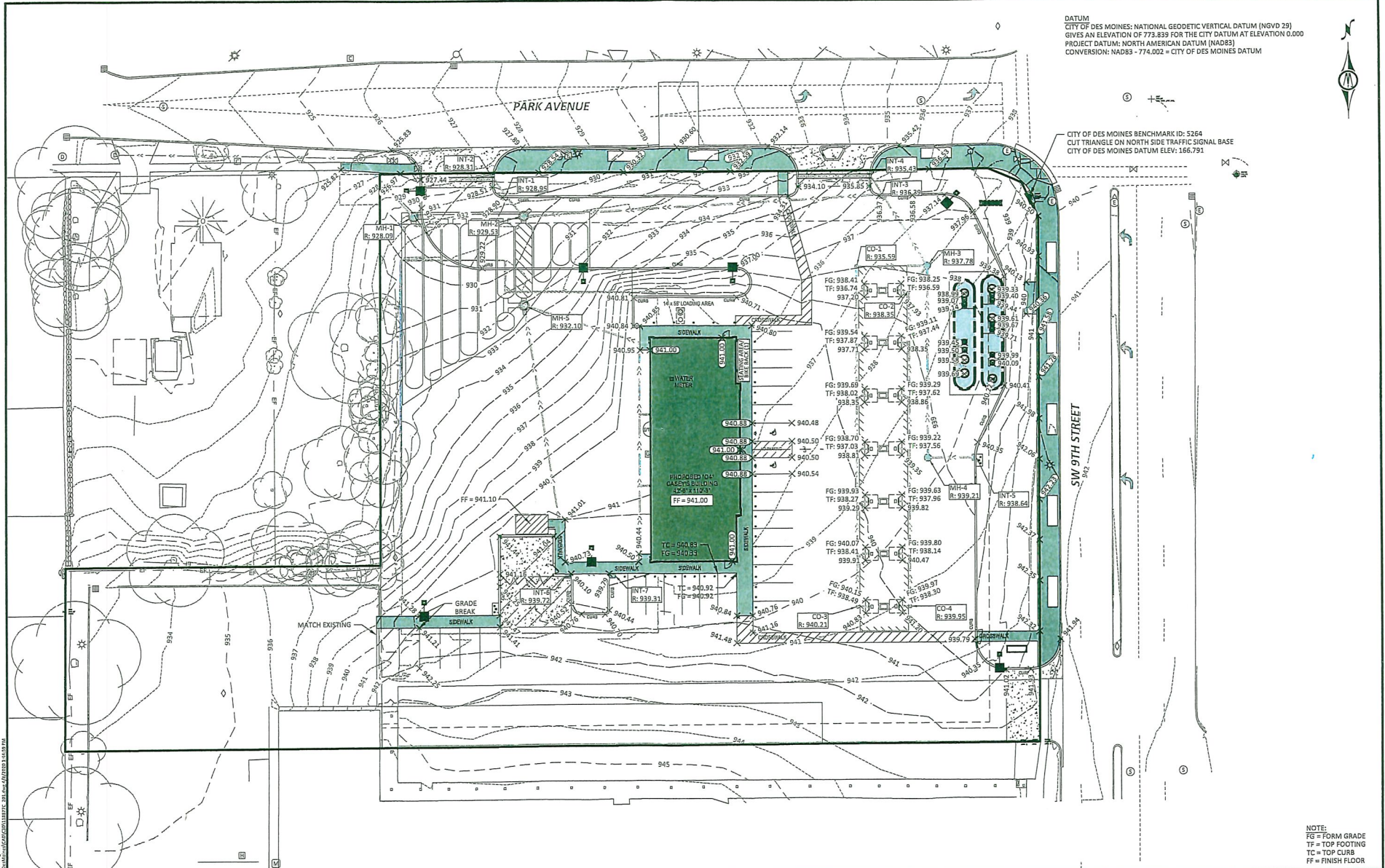
CASEY'S GENERAL STORE
DES MOINES, IOWA
SITE PLAN LAYOUT

SHEET
C-101

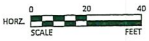
DATUM
 CITY OF DES MOINES: NATIONAL GEODETIC VERTICAL DATUM (NGVD 29)
 GIVES AN ELEVATION OF 773.839 FOR THE CITY DATUM AT ELEVATION 0.000
 PROJECT DATUM: NORTH AMERICAN DATUM (NAD83)
 CONVERSION: NAD83 - 774.002 = CITY OF DES MOINES DATUM



CITY OF DES MOINES BENCHMARK ID: 5264
 CUT TRIANGLE ON NORTH SIDE TRAFFIC SIGNAL BASE
 CITY OF DES MOINES DATUM ELEV: 166.791



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 PROJECT: 1519 BALTIMORE DRIVE, AMES, IOWA 50010
 SHEET: 1519-B-01-GRADING PLAN



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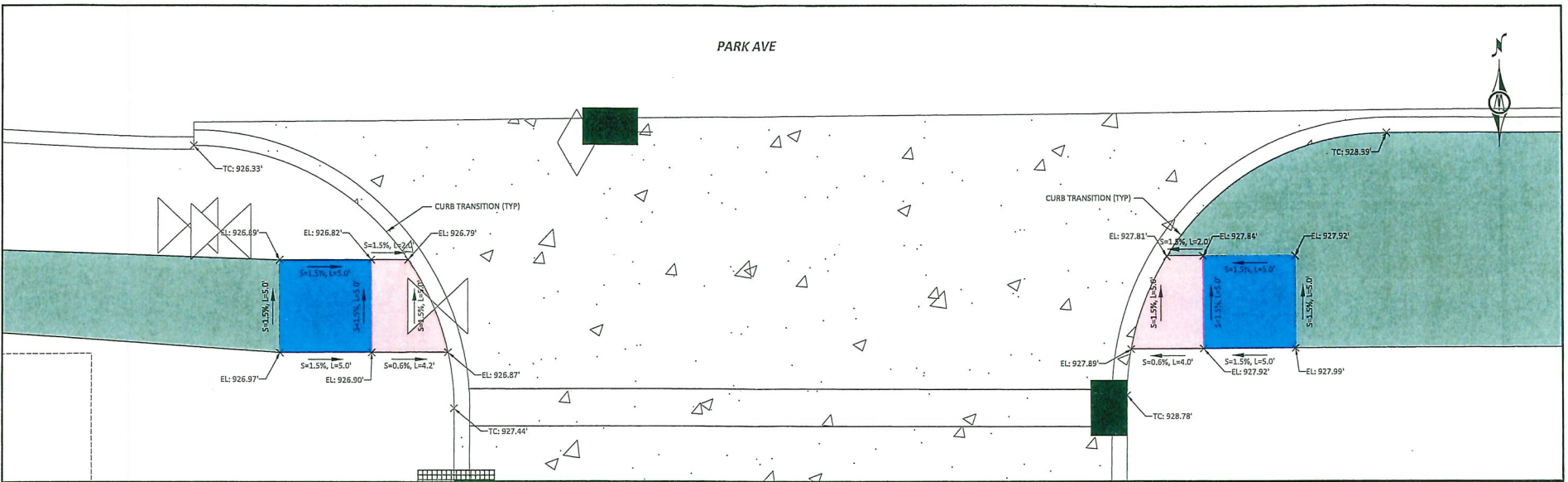
NO.	DATE	DESCRIPTION	BY	CHKD.
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CASEY'S GENERAL STORE
 DES MOINES, IOWA
 GRADING PLAN

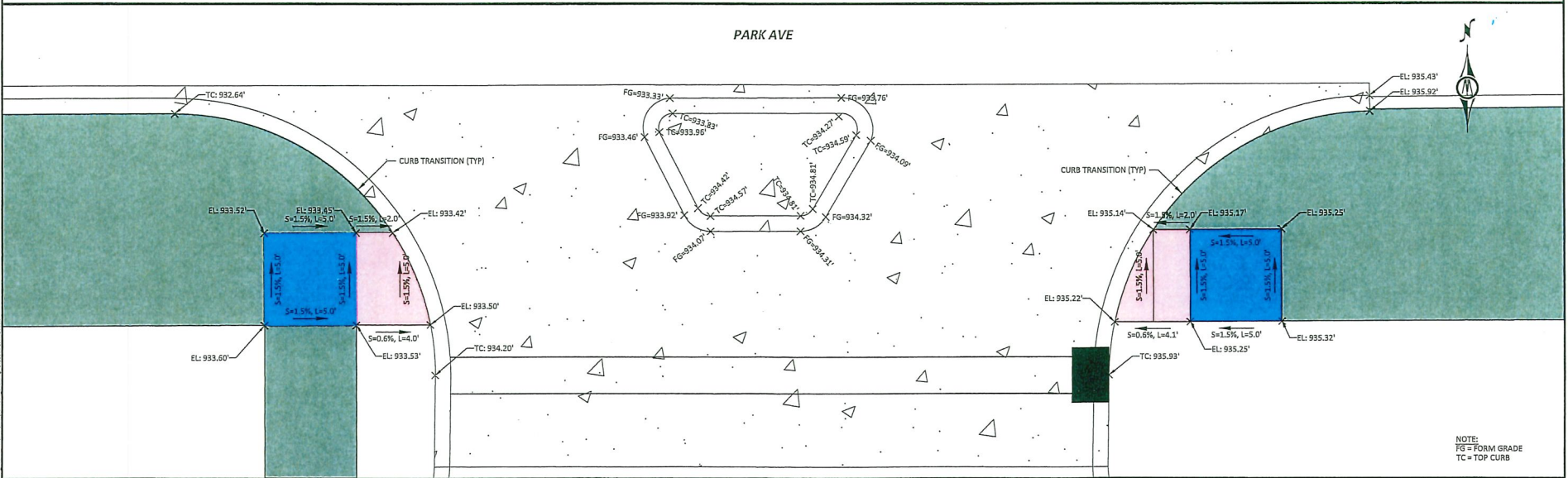
NOTE:
 FS = FORM GRADE
 TF = TOP FOOTING
 TC = TOP CURB
 FF = FINISH FLOOR

SHEET
 C-201

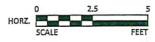
PARK AVE



PARK AVE



NOTE:
FG = FORM GRADE
TC = TOP CURB



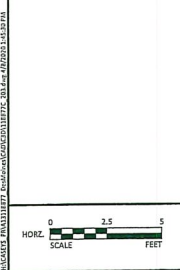
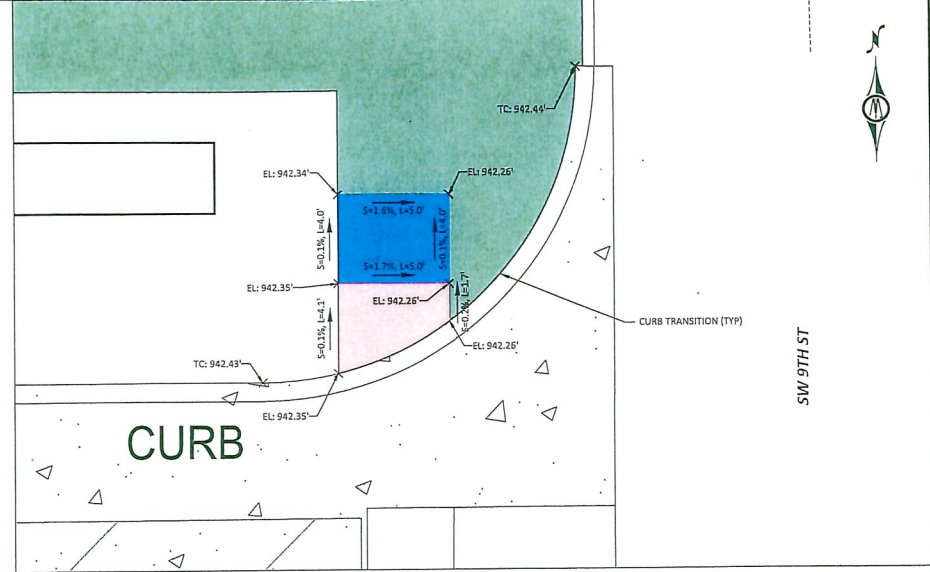
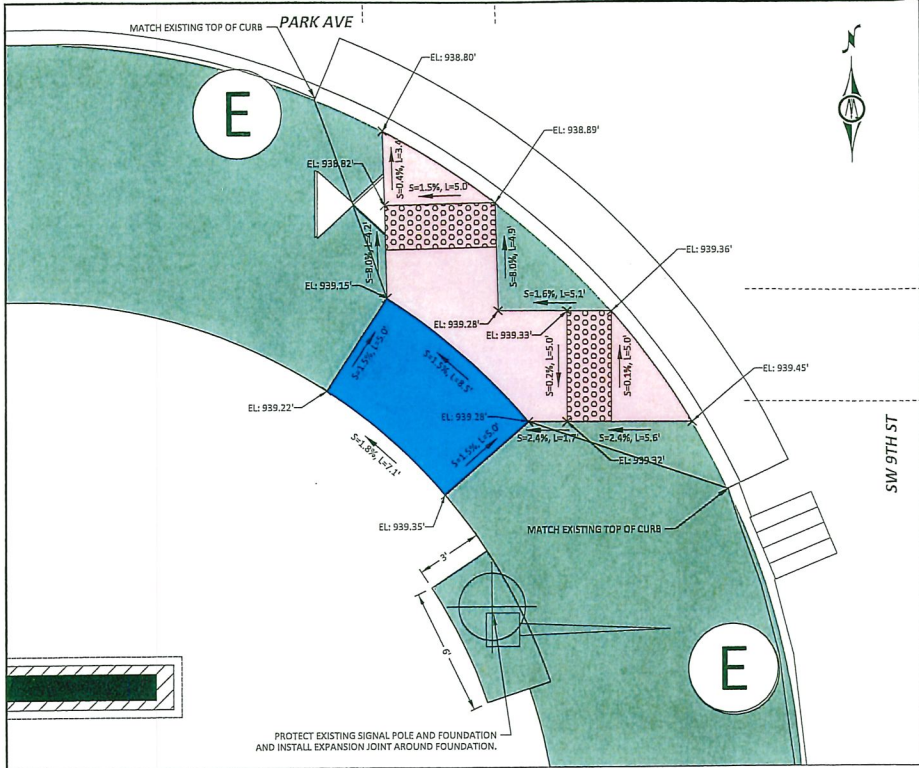
1519 BALTIMORE DRIVE
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REVISED	DATE	BY	CHKD
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DEM			
GAB			
A13.118877			

CASEY'S GENERAL STORE
DES MOINES, IOWA
SIDEWALK SHEETS

SHEET
C-202

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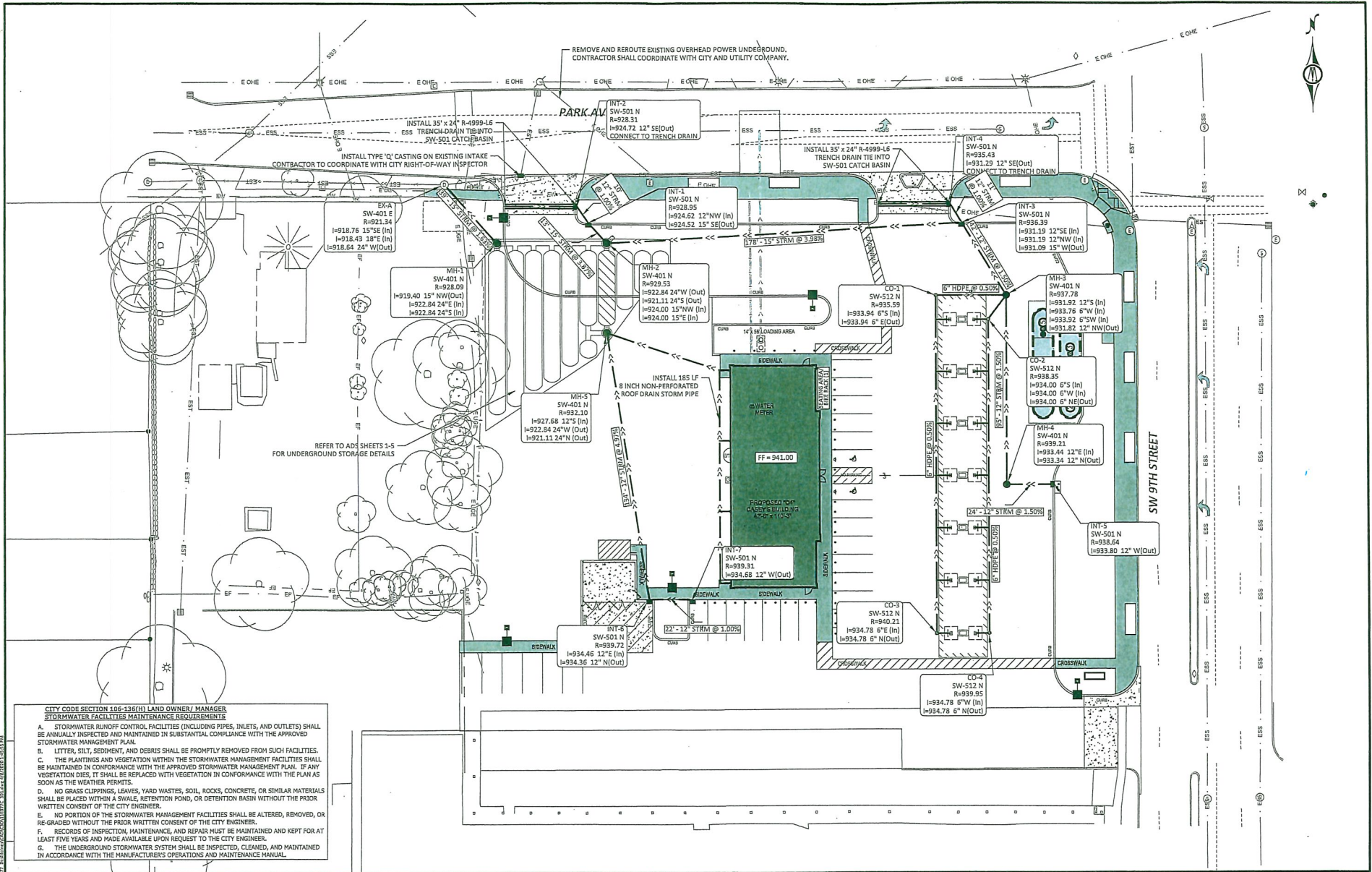
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GAB			
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CASEY'S GENERAL STORE
DES MOINES, IOWA
SIDEWALK SHEETS

SHEET
C-203

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REFER TO ADS SHEETS 1-5 FOR UNDERGROUND STORAGE DETAILS

CITY CODE SECTION 106-336(H) LAND OWNER/ MANAGER
STORMWATER FACILITIES MAINTENANCE REQUIREMENTS

- A. STORMWATER RUNOFF CONTROL FACILITIES (INCLUDING PIPES, INLETS, AND OUTLETS) SHALL BE ANNUALLY INSPECTED AND MAINTAINED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED STORMWATER MANAGEMENT PLAN.
- B. LITTER, SILT, SEDIMENT, AND DEBRIS SHALL BE PROMPTLY REMOVED FROM SUCH FACILITIES.
- C. THE PLANTINGS AND VEGETATION WITHIN THE STORMWATER MANAGEMENT FACILITIES SHALL BE MAINTAINED IN CONFORMANCE WITH THE APPROVED STORMWATER MANAGEMENT PLAN. IF ANY VEGETATION DIES, IT SHALL BE REPLACED WITH VEGETATION IN CONFORMANCE WITH THE PLAN AS SOON AS THE WEATHER PERMITS.
- D. NO GRASS CLIPPINGS, LEAVES, YARD WASTES, SOIL, ROCKS, CONCRETE, OR SIMILAR MATERIALS SHALL BE PLACED WITHIN A SWALE, RETENTION POND, OR DETENTION BASIN WITHOUT THE PRIOR WRITTEN CONSENT OF THE CITY ENGINEER.
- E. NO PORTION OF THE STORMWATER MANAGEMENT FACILITIES SHALL BE ALTERED, REMOVED, OR RE-GRADED WITHOUT THE PRIOR WRITTEN CONSENT OF THE CITY ENGINEER.
- F. RECORDS OF INSPECTION, MAINTENANCE, AND REPAIR MUST BE MAINTAINED AND KEPT FOR AT LEAST FIVE YEARS AND MADE AVAILABLE UPON REQUEST TO THE CITY ENGINEER.
- G. THE UNDERGROUND STORMWATER SYSTEM SHALL BE INSPECTED, CLEANED, AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURER'S OPERATIONS AND MAINTENANCE MANUAL.



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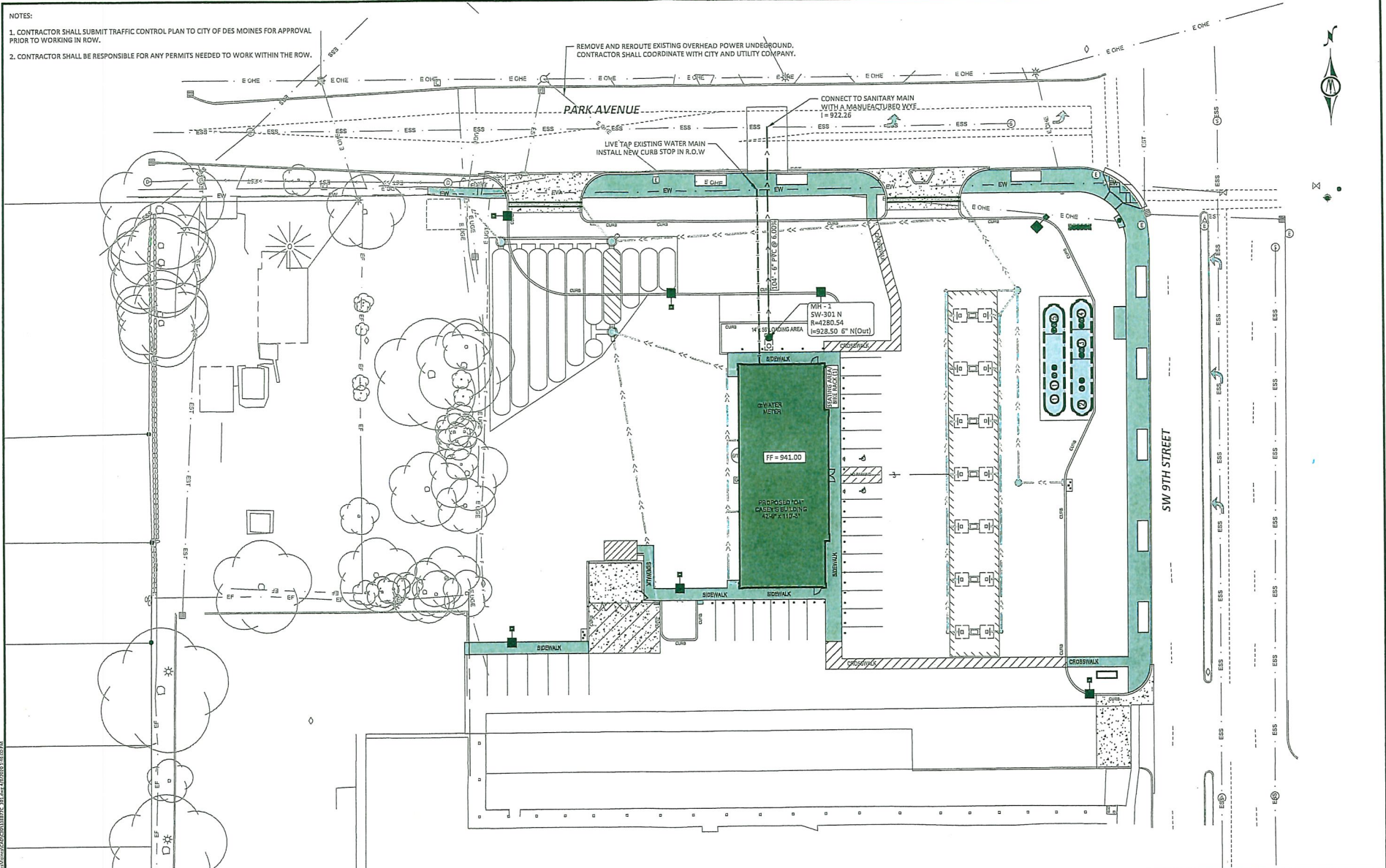
CASEY'S GENERAL STORE
 DES MOINES, IOWA
 UTILITY PLAN

SHEET
 C-301

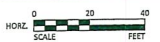
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 515.233.6100

NOTES:

1. CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLAN TO CITY OF DES MOINES FOR APPROVAL PRIOR TO WORKING IN ROW.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY PERMITS NEEDED TO WORK WITHIN THE ROW.



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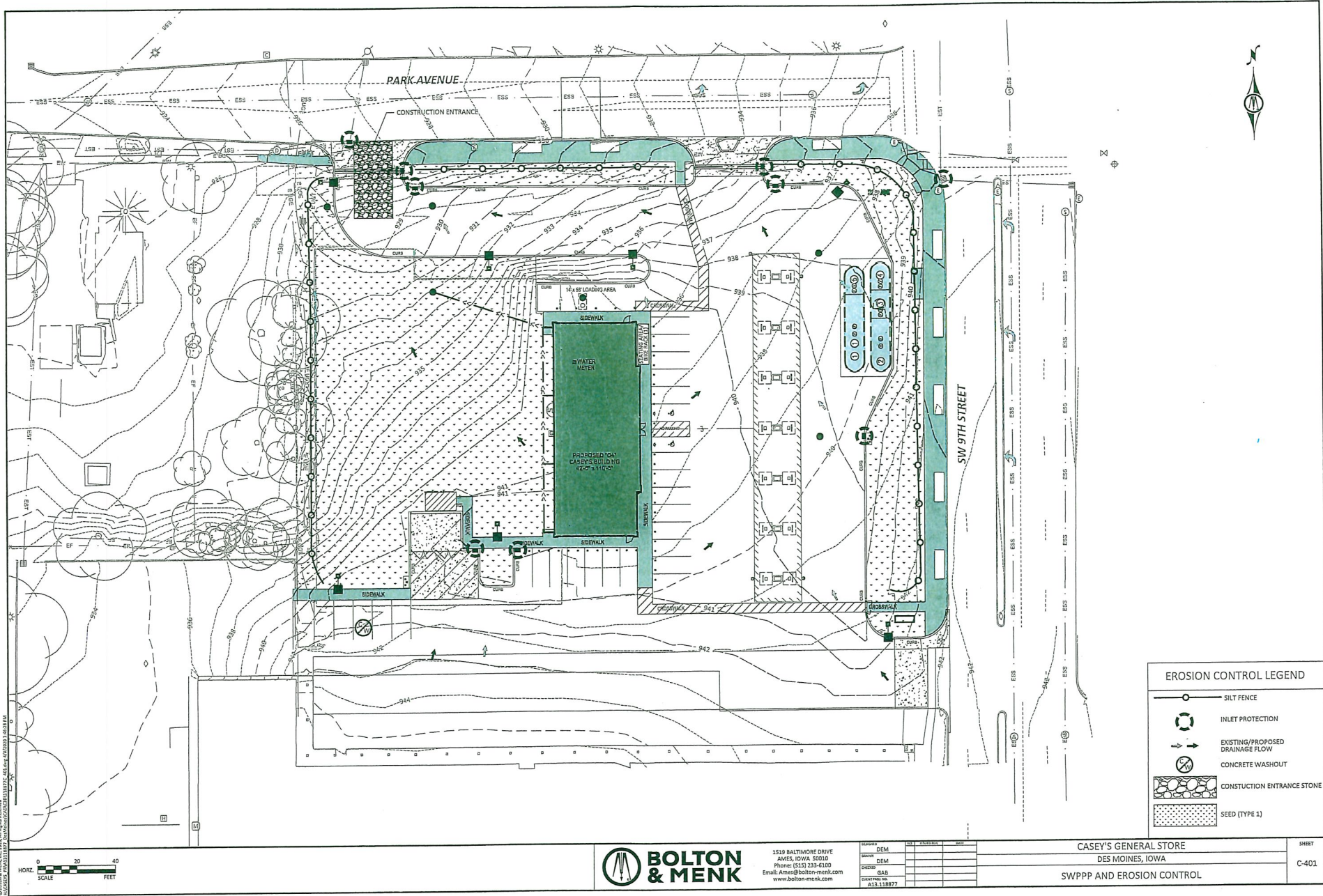


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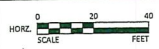
CASEY'S GENERAL STORE
DES MOINES, IOWA
UTILITY PLAN

SHEET
C-302



EROSION CONTROL LEGEND

- SILT FENCE
- INLET PROTECTION
- EXISTING/PROPOSED DRAINAGE FLOW
- CONCRETE WASHOUT
- CONSTRUCTION ENTRANCE STONE
- SEED (TYPE 1)



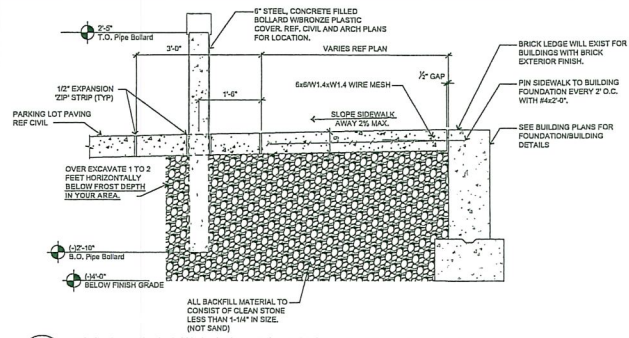
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NO.	DESCRIPTION	DATE	BY
1	DEM		
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4	GAB		
5	CONTRACTOR	ALB	11/08/77

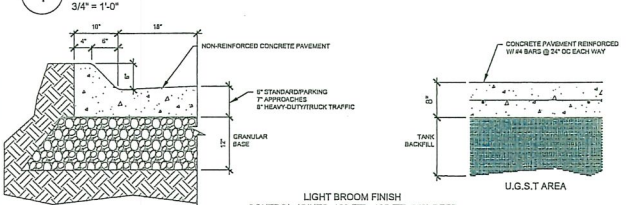
CASEY'S GENERAL STORE
DES MOINES, IOWA
SWPPP AND EROSION CONTROL

SHEET
C-401

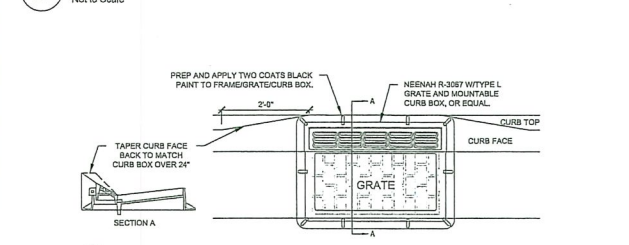
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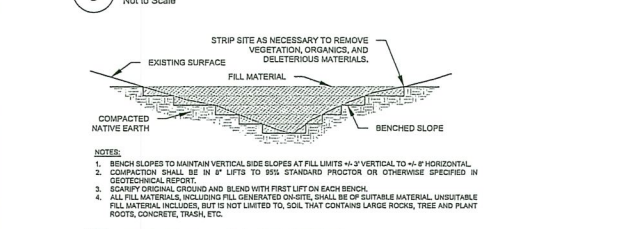
1 TYPICAL BUILDING SIDEWALK AND BOLLARD



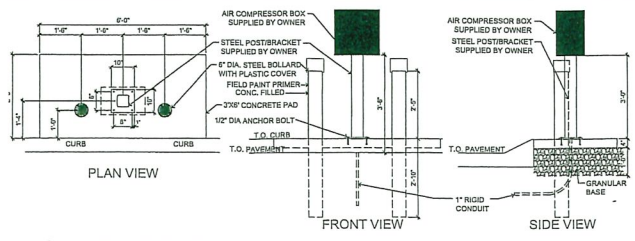
2 CONCRETE PAVING AND CURB



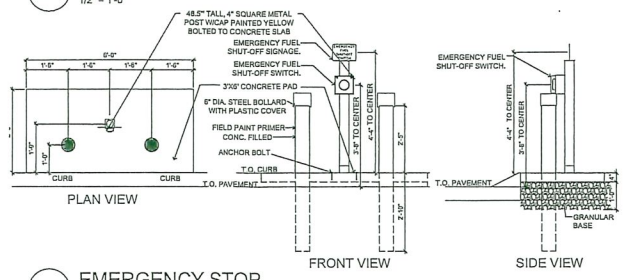
3 CURB INLET



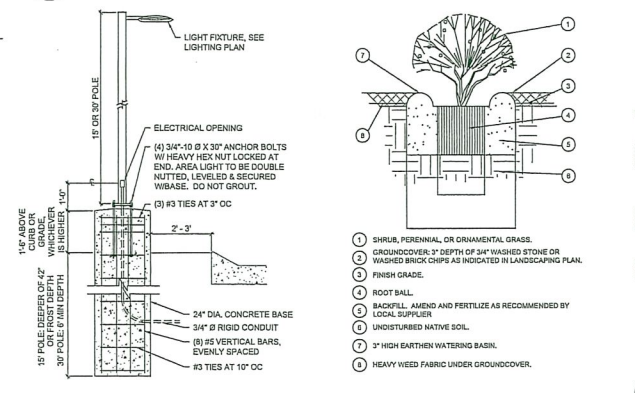
4 TYPICAL FILL SECTION



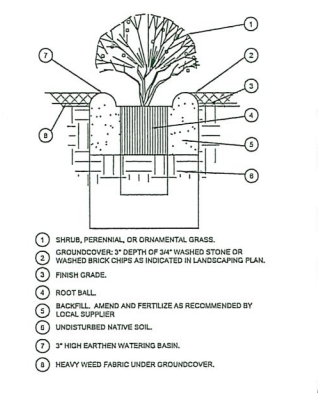
5 AIR COMPRESSOR



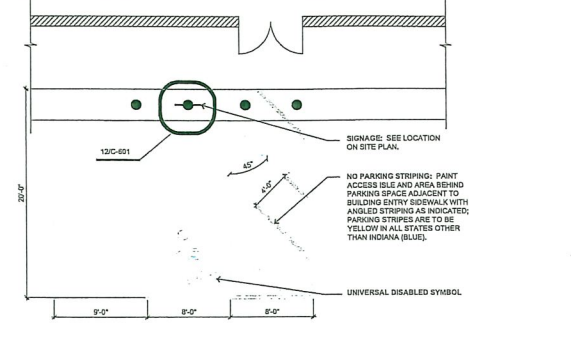
6 EMERGENCY STOP



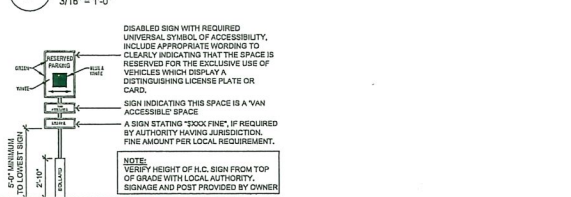
7 AREA LIGHTING



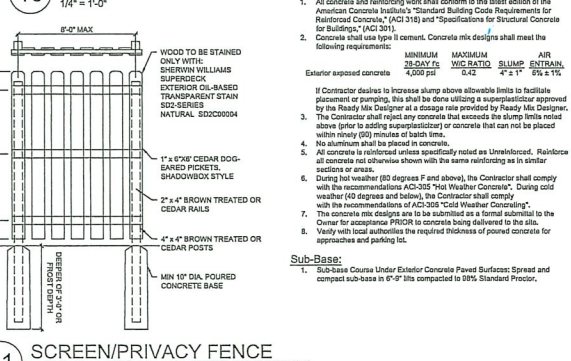
8 PLANT/SHRUB INSTALLATION



9 ADA PARKING SPACES



10 ADA PARKING SIGN



11 SCREEN/PRIVACY FENCE

GENERAL NOTES

- Concrete:
- 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).
 - Concrete shall use type II cement. Concrete mix designs shall meet the following requirements:

	MINIMUM	MAXIMUM	AIR
28-DAY f_c	4,000 PSI	5,000 PSI	5 ± 1%
W/C RATIO	0.42	0.5	0.4 ± 1%
SLUMP	4 ± 1"	6 ± 1"	5 ± 1"
ENTRAIN			
 - Exterior exposed concrete:
 - 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.
 - 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.
 - No aluminum shall be placed in concrete.
 - All concrete to be reinforced unless specifically noted as Unreinforced. Reinforce all concrete not otherwise shown with the same reinforcing as in similar sections or areas.
 - During hot weather (50 degrees F and above), the Contractor shall comply with the recommendations ACC-085 "Hot Weather Concrete". During cold weather (40 degrees and below), the Contractor shall comply with the recommendations of ACC-355 "Cold Weather Concrete".
 - 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.
 - Verify with local authorities the required thickness of poured concrete for approaches and parking lot.
 - Sub-Bases:
 - Sub-Bases Course Under Exterior Concrete Paved Surfaces: Spread and compact sub-base in 6" ± lifts compacted to 95% Standard Proctor.

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 LOCATION: 1513 BALTIMORE DRIVE AMES, IOWA 50010
 DATE: 02/11/2021 10:00 AM



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ISSUED BY			
DATE			

CASEY'S GENERAL STORE
DES MOINES, IOWA
CIVIL DETAILS SHEETS

SHEET
C-601

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER:	REX OLLENBURG 612-505-1814 REX.OLLENBURG@ADS-PIPE.COM
ADS SALES REP:	JASON MATHES 515-257-0092 JASON.MATHES@ADS-PIPE.COM
PROJECT NO:	S157690



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CASEY'S GENERAL STORE

DES MOINES, IA

MC-4500 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH MC-4500.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101.
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-4500 CHAMBER SYSTEM

- STORMTECH MC-4500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH MC-4500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
- INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
- STONE SHALL BE BROUGHT UP EVENLY AROUND CHAMBERS SO AS NOT TO DISTORT THE CHAMBER SHAPE. STONE DEPTHS SHOULD NEVER DIFFER BY MORE THAN 12" (300 mm) BETWEEN ADJACENT CHAMBER ROWS.
- STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIAL BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH MC-4500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
 - THE USE OF EQUIPMENT OVER MC-4500 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER Tired LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
 - FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.
- USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.
- CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

PROPOSED LAYOUT

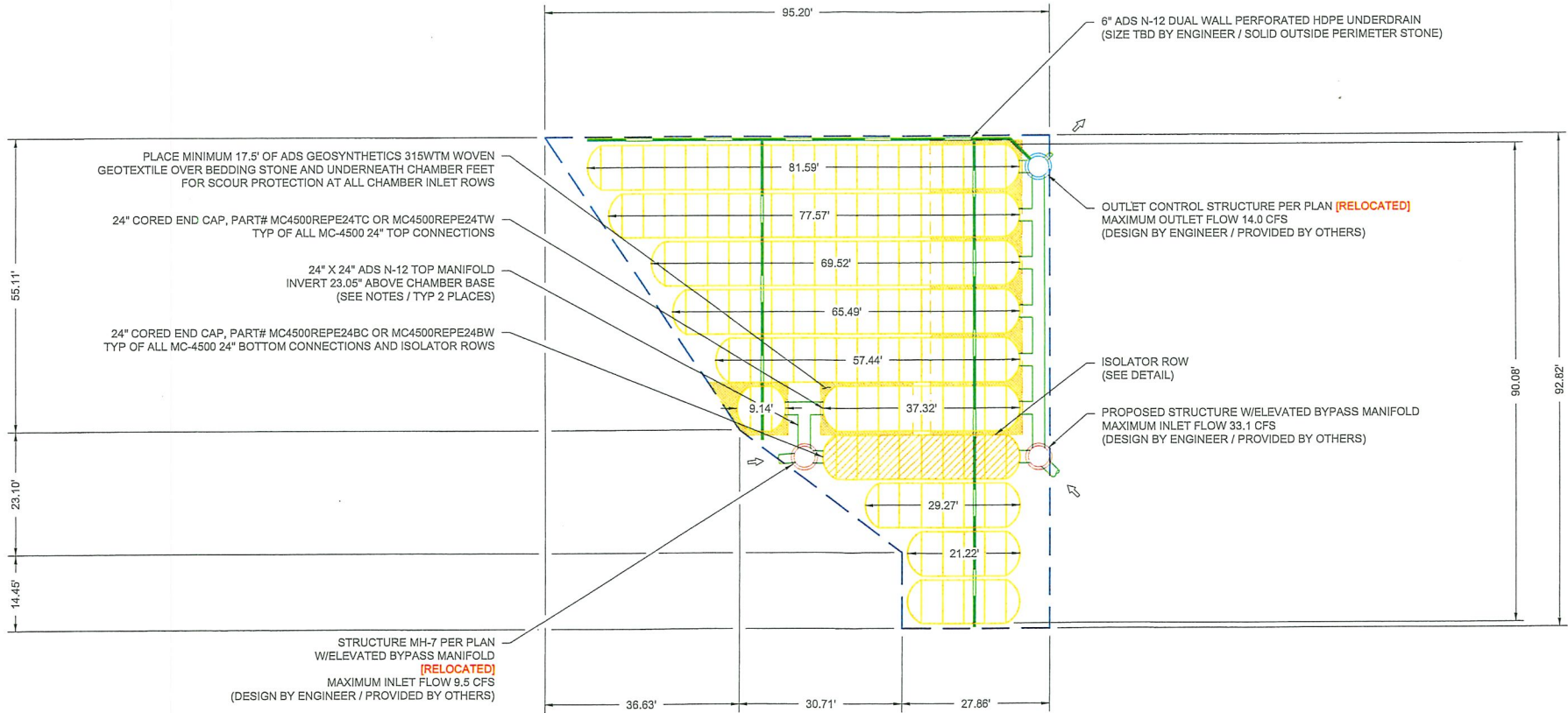
112	STORMTECH MC-4500 CHAMBERS
22	STORMTECH MC-4500 END CAPS
12	STONE ABOVE (in)
17	STONE BELOW (in)
40	% STONE VOID
24379	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)
5646	SYSTEM AREA (ft ²)
335	SYSTEM PERIMETER (ft)

PROPOSED ELEVATIONS

932.92	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
928.42	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
927.92	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
927.92	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
927.92	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
926.92	TOP OF STONE
925.92	TOP OF MC-4500 CHAMBER
922.84	24" TOP MANIFOLD INVERT
921.11	24" ISOLATOR ROW CONNECTION INVERT
920.92	BOTTOM OF MC-4500 CHAMBER
919.50	UNDERDRAIN INVERT
919.50	BOTTOM OF STONE

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.



CASEY'S GENERAL STORE	
DES MOINES, IA	
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PROJECT #: S157690	CHECKED: CTS

01/09/20	AMK	DRWN	CHKD
DATE	DESCRIPTION	REMOVED NOT FOR CONSTRUCTION	DESCRIPTION

StormTech
Greater Des Moines Water Utility
 70 INWOOD ROAD, SUITE 3 | ROCKY HILL, CT | 06067
 860-529-8188 | 888-892-2884 | WWW.STORMTECH.COM

ADS
ADVANCED DRAINAGE SYSTEMS, INC.
 4640 TRUEMAN BLVD
 HILLIARD, OH 43026

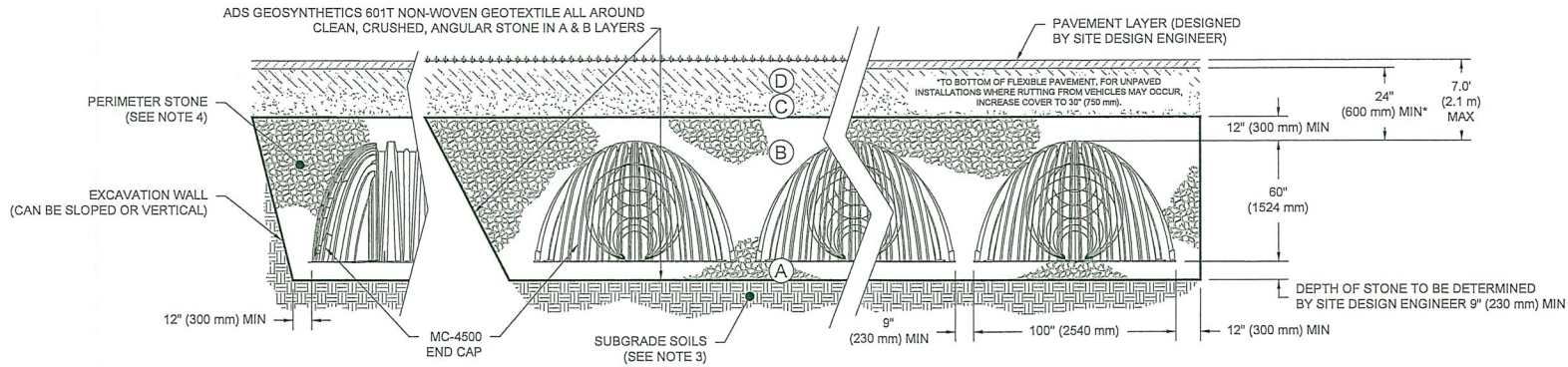
0 20' 40'

THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.

ACCEPTABLE FILL MATERIALS: STORMTECH MC-4500 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 ¹ 3, 4	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 ¹ 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
 - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
 - ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101
- MC-4500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

CASEY'S GENERAL STORE	DES MOINES, IA	DRAWN: SLV	DATE: 11/12/19	PROJECT # S1717690	CHECKED: CTS
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StormTech
CORRUGATED WALL STORMWATER COLLECTION CHAMBERS

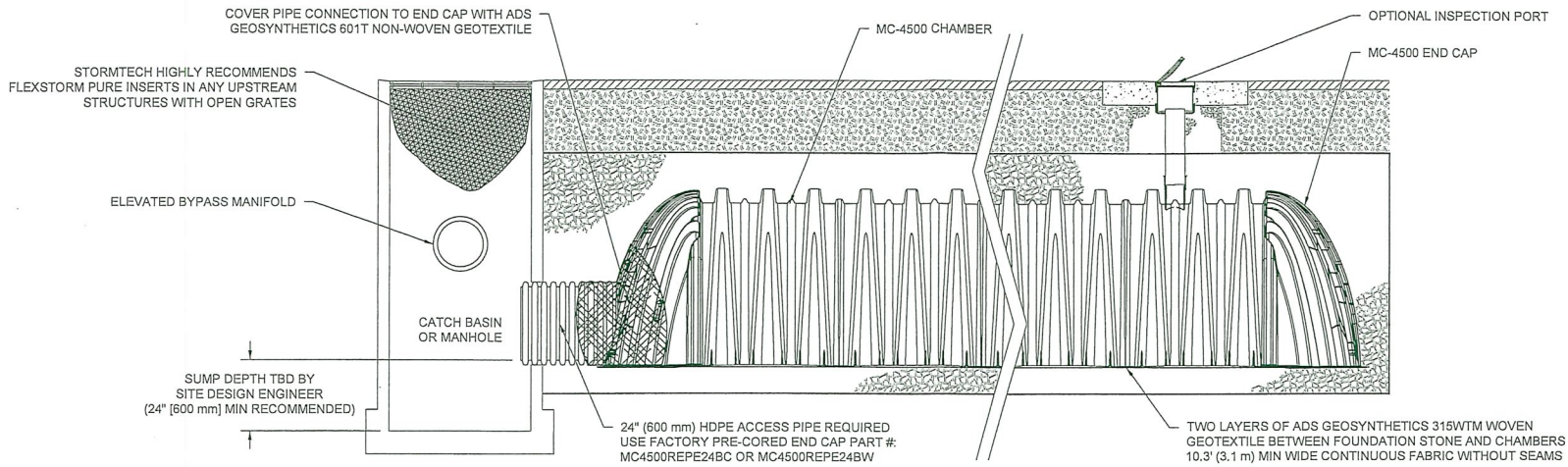
70 WINDWOOD ROAD, SUITE 5 | ROCKY HILL, CT 06067
866-528-9188 | 860-262-2204 | WWW.STORMTECH.COM

ADS
ADVANCED DRAINAGE SYSTEMS, INC.

4640 TREEMAN BLVD
HILLIARD, OH 43026

3 SHEET
OF 5

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MC-4500 ISOLATOR ROW DETAIL
NTS

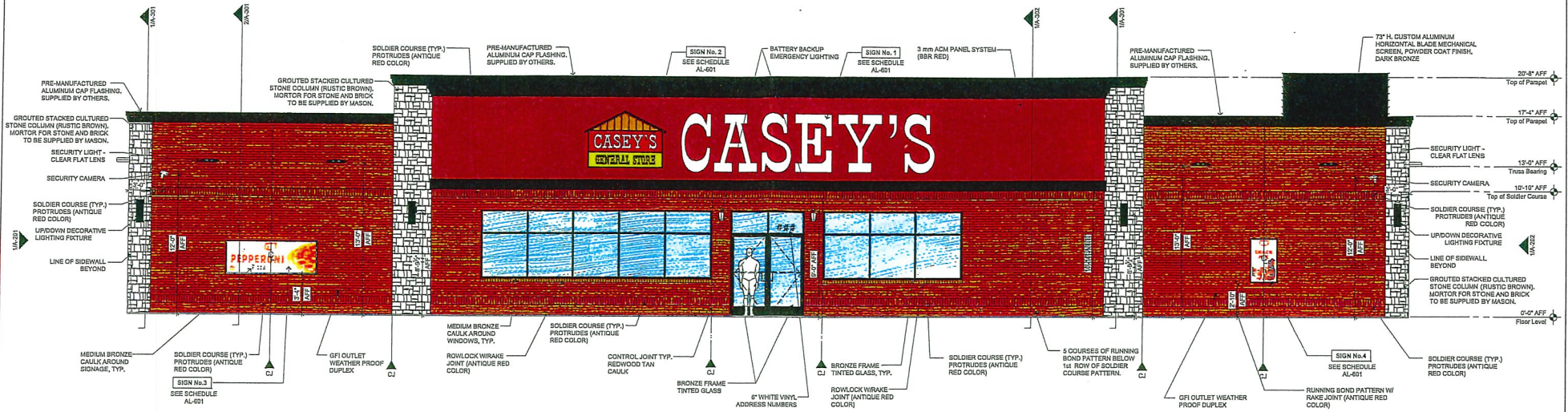
INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
 - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
 - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
 - B. ALL ISOLATOR ROWS
 - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
 - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
 - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
 - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
 - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
 - B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
 - C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

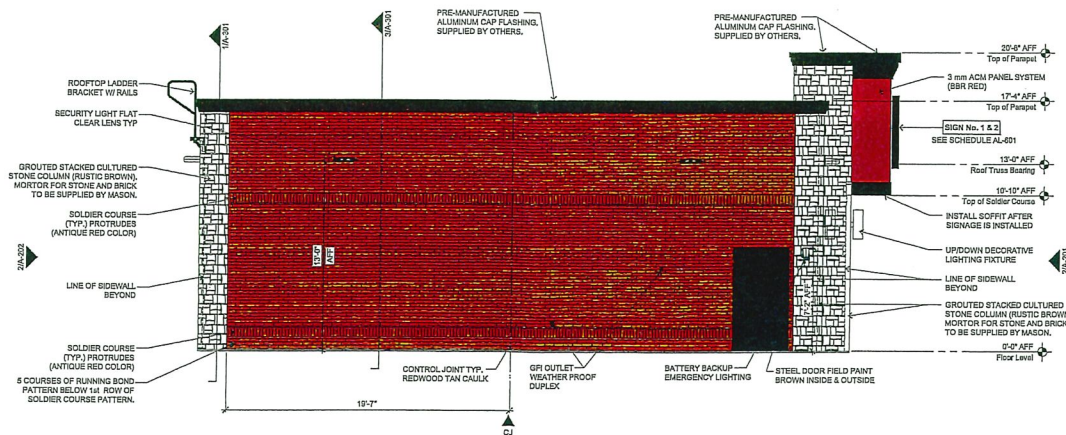
NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

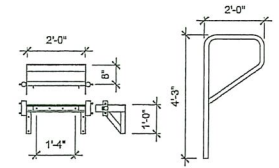
CASEY'S GENERAL STORE		DES MOINES, IA
DATE:	11/12/19	DRAWN: SLV
PROJECT #:	S157690	CHECKED: CTS
DATE	01/26/20	DATE
AWK	DRWN	CHKD
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Stormtech <small>Stormwater Management Solutions</small> 70 INWOOD ROAD, SUITE 3 ROCKY HILL, CT 06067 860-522-8158 888-882-2884 WWW.STORMTECH.COM		
ADS <small>ADVANCED DRAINAGE SYSTEMS, INC.</small>	4640 TRUEMAN BLVD HILLIARD, OH 43026	
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4	SHEET	5
OF		



2 East Elevation
1/4" = 1'-0"



1 South Elevation
1/4" = 1'-0"



3 Ladder Bracket
NTS

General Notes

- REFER TO AL-601 FOR SIGNAGE SCHEDULE INCLUDING SIZE AND AREA OF SIGNS SHOWN ON ELEVATIONS.

PELDS DESIGN SERVICES
Architecture | Engineering | Surveying

3223 Olive Street, Des Moines, Iowa 50316 | P.O. Box 41022 Des Moines, Iowa 50321 | P: 515-251-4100 F: 515-251-2820
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CASEY'S General Store

CASEY'S CONSTRUCTION DIVISION
One Convergence Blvd., P.O. Box 2901, Ankeny, IA 50021 515-925-6100

SW 9TH & PARK AVE.
DES MOINES, IA

10/18/19
REVISION

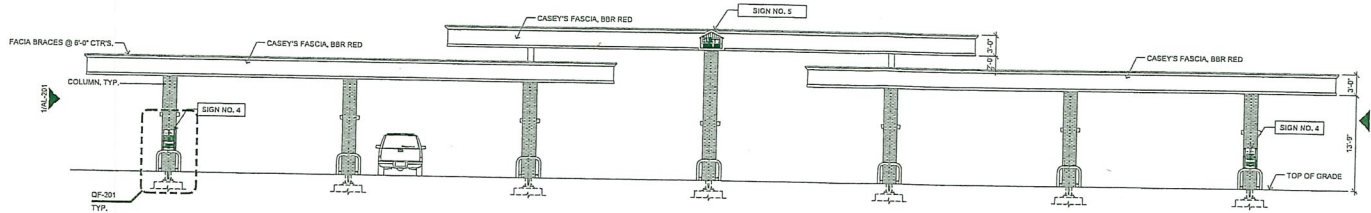
EXTERIOR ELEVATIONS

General Notes

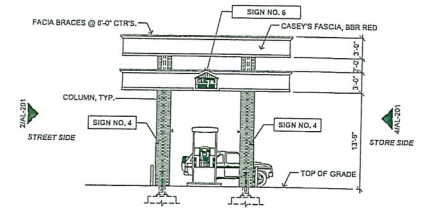
- RELATED SHEETS: FOR ADDITIONAL INFORMATION NOT DIRECTLY REFERENCED, SEE THE FOLLOWING SHEETS:
 - G-001 FOR GENERAL PROJECT NOTES
 - AL-101 FOR GENERAL SITE PLAN
 - Sign Packet FOR SIGNAGE SCHEDULE AND NOTES
 - QF-001 FOR DESIGN AND DETAILS RELATED TO FUELING FACILITY
- GASOLINE ISLAND CANOPY: REVIEW SHOP DRAWINGS PROVIDED BY CANOPY SUPPLIER AND ADVISE CASEY'S CONSTRUCTION MANAGER OF ANY DISCREPANCIES
- EMERGENCY GAS SHUT OFFS: REFER TO SHEETS A-201, AQ-101 & E-101 FOR EMERGENCY SHUT OFF LOCATIONS.

Canopy									
Sign #	Sign	Type	Location	Illumination	Dimensions				Area Ft ²
					Bottom	Top	Width	Height	
6	House Logo	Surface	Canopy Side	Internal	14'-0-5/8"	16'-5-5/8"	3'-5-5/8"	2'-5"	6.56
5	House Logo	Surface	Canopy Side	Internal	14'-0-5/8"	16'-5-5/8"	3'-5-5/8"	2'-5"	6.56
5	House Logo	Surface	Canopy Front	Internal	19'-0-9/16"	21'-5-5/8"	3'-5-5/8"	2'-5"	6.38
4	Snap Frame	Advertising	Canopy Column	N/A	3'-0"	7'-0-1/2"	2'-4"	3'-8"	8.56
4	Snap Frame	Advertising	Canopy Column	N/A	3'-0"	7'-0-1/2"	2'-4"	3'-8"	8.56
4	Snap Frame	Advertising	Canopy Column	N/A	3'-0"	7'-0-1/2"	2'-4"	3'-8"	8.56
Total									53.58

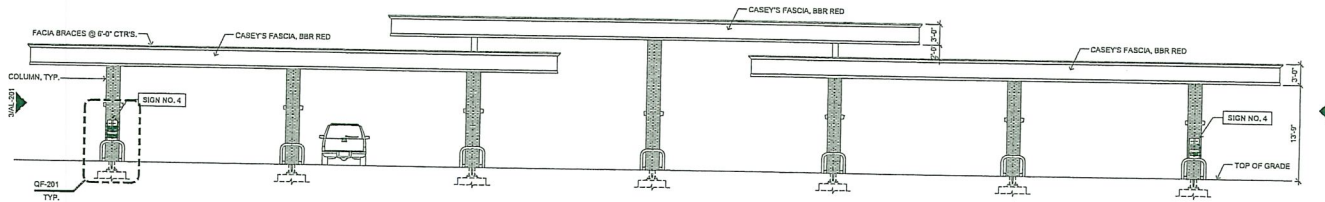
****VERIFY ALL SIGNAGE WITH SIGN PERMITS****



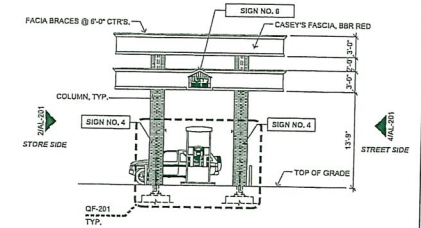
4 Pump Island Canopy - (Street Side)
1/8" = 1'-0"



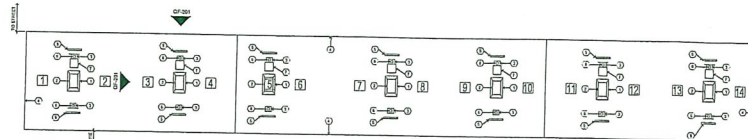
3 Pump Island Canopy - Right Side Elevation
1/8" = 1'-0"



2 Pump Island Canopy - (Store Side)
1/8" = 1'-0"



1 Pump Island Canopy - Left Side Elevation
1/8" = 1'-0"



5 Canopy Layout Plan
Not To Scale

Keyed Canopy Layout Plan Notes

- FUEL ISLANDS
- FUEL DISPENSERS: SUPPLIED BY OWNER
- CANOPY COLUMN: SUPPLIED BY CANOPY MFG.
- EDGE OF CANOPY: ABOVE
- STEEL GUARD PIPE: SET INTO CONC SLAB AS INDICATED IN DETAIL ELEVATIONS (2 PER ISLAND)
- INTERNAL DOWNSPOUTS: ROUTE THROUGH COLUMNS AND UNDERGROUND TO STORM SEWER OR RETENTION IF APPLICABLE
- TRASH CAN AND WASH BUCKETS
- PUMP LABELS: MOUNTED ON CANOPY COLUMNS

ELDS DESIGN SERVICES

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P.O. Box 202, Des Moines, IA 50319

CASEY'S CONSTRUCTION DIVISION
One Compheria Blvd., P.O. Box 20201, Ankeny, IA 50021 515-985-6100

10/18/19
07/08/20

GASOLINE ISLAND CANOPY ELEVATIONS

CONSTRUCTION DIVISION
DESIGNED BY: R. STEVENS

DATE: 07/08/20
DRAWN BY: DANIEL WILLRICH

SW 9TH & PARK AVE.
DES MOINES, IA

AL-201