



## #2015-66 Casey's Gas Station – Special Use Permit Project Review for Planning and Zoning Commission

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**Meeting Date:** February 3, 2016

**Requests:**

1. Special Use Permit to allow a Gasoline Service Station and Convenience Store with a Gasoline Electronic Pricing signs.
2. Final Plat of Subdivision for 2 lots.
3. Variations from:
  - a. Article 2-400 13 c and d. Special Use Criteria for Gasoline Stations from the requirements to construct a solid fence adjacent to residential and a peaked canopy.
  - b. Article 4-200 Parking and Loading from the required on-site parking to allow 15 spaces, a variation of 2 spaces.
  - c. Article 4-1000 Signs to allow 252.05 square feet of wall signage, which is over 150 square feet of signage allowed, a variation of 102.05 square feet.
  - d. Article 5 Subdivision approving a deferral from the requirement to bury the overhead utility lines and install sidewalk along the frontage, until such time that an area wide program is established.

**Location:** 639 E. Terra Cotta Avenue (Route 176)

**Acreage:** Approximately 5 acres

**Existing Zoning:** B-2 General Commercial

**Surrounding Properties:**

North:	B-2 General Commercial
South:	R-1 Single Family
East:	B-2 General Commercial
West:	B-1 (McHenry County)

**Staff Contact:** Elizabeth Maxwell (815.356.3615)

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**Background:**

- The site is currently vacant. It was the former location of the Crystal Lake Rib House.
- The proposed development is for a Casey's gas station and convenience store featuring 16 gas filling pumps and a 4,558 square foot convenience store.

## **Development Analysis:**

### **Land Use/Zoning**

- The site is currently zoned B-2 General Commercial. This is the appropriate zoning district for a gasoline service station, which requires a Special Use Permit in this district.
- The land use map shows the area as Commerce. This is an appropriate land use designation for Gasoline Service Station and Convenience Store.
- The petitioner has submitted the Environmental Impact Statement. The Environmental Impact Statement was prepared by St. John – Mittelhauser & Associates, Inc. under contract with the City of Crystal Lake and according to our scope. The statement says, "Based on the design of the proposed station, there is no reason to expect that day to day operations of the proposed station will result in a release of sufficient magnitude to negatively impact the soil and groundwater surrounding the Site."

### **Site Layout**

- The property is being subdivided, with the west half to be developed in the future. The east half would be the Casey's gas station and convenience store. Two access points are shown, one from Route 176 and one from Terra Cotta Road.
- A new gas canopy with 16 fueling stations is illustrated in front along Route 176 with the 4,558 square-foot convenience store behind.
- Casey's offers limited convenience store grocery items as well as hot pizza and sub sandwiches. They also sell packaged beverages.
- The trash enclosure has been located behind the building.

### **Building Elevations**

- The convenience store features brick with soldier course banding all the way around the building providing architectural accents on all four sides.
- Large columns accentuate the front entry which projects from the main façade of the building.
- A light-colored EIFS with a dark colored top cap finish off the top of the building.
- New buildings are required to meet at least 6 of the architectural design criteria; this building meets 6 of the 10 criteria. Casey's has done a great job presenting a building that looks nice and meets the UDO requirements.

### **Parking**

- Parking for a convenience store and gas station is as follows: 1/350 sq. ft. of convenience store space and 1 per every 4 gas pumps. This requires a total of 17 parking spaces.
- The site has provided 15 parking spaces, requiring a variation from the two required spaces.

### **Landscape**

- The petitioner is removing trees on the site, the removal equates to 40 replacement trees. 43 new trees are being added to the site including the 11 street trees in the right-of-way.

- Foundation base landscape has been added around the building on three sides. The only side that does not have the foundation base landscape is the west side where the loading area is.
- Trees and shrubs need to be added to the landscape islands in the parking lot. A condition of approval has been added regarding this.

Signage

- A new free-standing sign is proposed at the corner of Route 176 and Terra Cotta Road. The proposed sign has a copy area of 38.49 square feet, but the overall brick structure is 117 square feet. Staff has added a condition of approval to work with staff to reduce the amount of brick around the sign.
- Sites are permitted a total of 150 sq. ft. of wall signage. For gas station properties this also includes the canopy signage. The petitioner has proposed 252.05 square feet of signage.

**Findings of fact:**

**FINAL PLAT of SUBDIVISION**

The petitioner is requesting Final Plat approval. The subdivision is a creating two lots, one for Casey's Gas Station and one to be sold to a future user. Both lots meet the requirements for the B-2 district. Two shared-access points have been planned, one from Route 176 and one from Terra Cotta Road. An access easement has been created over this shared access drive. The detention would also be shared between the two lots.

**SPECIAL USE PERMIT**

The petitioner is requesting approval of a Special Use Permit to allow a Gasoline Service Station and Convenience store and Gasoline Electronic Pricing Sign. A Special Use requires separate review because of its potential to impact surrounding properties and the orderly development of the City.

Section 2-400 B General Standards for all special uses in the Unified Ordinance establishes standards for all special uses in Crystal Lake. Briefly, the criteria are as follows:

1. The use is necessary or desirable, at the proposed location, to provide a service or facility which will further the public convenience and general welfare.  
 *Meets*                       *Does not meet*
2. The use will not be detrimental to area property values.  
 *Meets*                       *Does not meet*
3. The use will comply with the zoning districts regulations.  
 *Meets*                       *Does not meet*
4. The use will not negatively impact traffic circulation.  
 *Meets*                       *Does not meet*

5. The use will not negatively impact public utilities or municipal service delivery systems. If required, the use will contribute financially to the upgrading of public utilities and municipal service delivery systems.  
 *Meets*             *Does not meet*
6. The use will not negatively impact the environment or be unsightly.  
 *Meets*             *Does not meet*
7. The use, where possible will preserve existing mature vegetation, and provide landscaping and architecture, which is aesthetically pleasing, compatible or complementary to surrounding properties and acceptable by community standards.  
 *Meets*             *Does not meet*
8. The use will meet requirements of all regulating governmental agencies.  
 *Meets*             *Does not meet*
9. The use will conform to any conditions approved as part of the issued Special Use Permit.  
 *Meets*             *Does not meet*
10. The use will conform to the regulations established for specific special uses, where applicable.  
 *Meets*             *Does not meet*

Gasoline Stations have specific Special Use Criteria they have to meet. Gasoline stations must comply with the following standards:

1. Location: Gasoline stations are not permitted within the City's wellhead protection areas. Stations in the Crystal Lake watershed require a site specific analysis by the City's watershed consultant  
 *Meets*             *Does not meet*

*The proposed station is outside of the wellhead protection area. A map is attached.*

2. Environmental impact: No gasoline station shall commence operations unless it has first provided an environmental impact statement (EIS) from a qualified expert in the related field that the use will not negatively affect ground water resources or contaminate the soil.  
 *Meets*             *Does not meet*

*An EIS has been provided, which says that during normal operations no contamination is expected.*

3. Screening: Gasoline stations adjacent to residential properties shall provide a 6-foot tall solid screen consisting of a solid wooden fence, in accordance with the provisions of Article 4-700, Fences, Walls and Screening or opaque landscaping along the perimeters

of the property abutting the residential district or use, in accordance with the provisions of Article 4-400, Landscaping and Screening Standards.

Meets                       Does not meet

*The petitioner has designed the site that the large open detention area is adjacent to the residential property. The landscape plan illustrates trees along the north edge of the detention area. The back of the convenience store would face the residential property. The petitioner is requesting a variation from this criterion.*

4. Canopy: Flat canopies are not permitted. Canopies must have a minimum 4:12 pitch (Amended per Ord. 6970, 11-5-2013). The edge of the pump canopy shall be setback at least 15 feet from all property lines.

Meets                       Does not meet

*The petitioner is requesting a variation from this criterion. The building has been designed with a flat top parapet style roof. This flat style gas canopy has been designed to match the style of the building.*

5. Curb cuts: There shall be a maximum of 2 curb cuts per property. Corner lots shall be limited to 1 curb cut per street frontage. Curb cuts for corner lots shall be located at least 75 feet from the intersection, or as deemed appropriate by the City Engineer.

Meets                       Does not meet

*Petition meets this criterion.*

6. Vending machines: One vacuums and one air compressors shall be permitted on-site. Vending machines are treated as outside sales and display. Refer to the handout on Outdoor Sales, Service, Storage and Display available through the Planning and Economic Development Department for further clarification.

Meets                       Does not meet

*Petitioner would comply with this.*

7. Outside sales: Outside product display and sales of seasonal items are prohibited. Propane tanks stored in 1 locked metal cage are not treated as outside sales and permitted subject to the approval of the City's Fire Prevention Bureau. For any other outside display and sales, refer to the handout on Outdoor Sales, Service, Storage and Display available through the Planning and Economic Development Department for further clarification.

Meets                       Does not meet

*Petitioner would comply with this.*

8. Monitoring: Monitoring wells finished at appropriate depths and locations best suited to detect a contaminate plume are required to be designed and located by a groundwater

professional for stations within the Crystal Lake watershed or as determined by the City Engineer.

Meets                       Does not meet

*No monitoring wells are required.*

9. Electronic Pricing Signs: Electronic pricing signs must be requested as part of the Special Use Permit.

Meets                       Does not meet

*Sign has been requested as part of the Special Use Permit.*

### DESIGN CRITERIA

The UDO specifies specific design criteria for new development. There are 10 criteria groups and the site must meet a minimum of 6 of those. Staff has reviewed the proposed development against the standards listed and has made a determination that the project meets 6 of 10 of the criteria. The results are as follows:

1. Building Form

Meets                       Does not meet                       Not Applicable

2. Building Massing and Articulation

Meets                       Does not meet                       Not Applicable

*Petitioner meets all sub criteria except has not provided the 2-foot projections on the columns.*

3. Rooflines and Parapets

Meets                       Does not meet                       Not Applicable

4. Building Materials

Meets                       Does not meet                       Not Applicable

*[must meet a-f to meet this criteria]*

5. Roof Materials

Meets                       Does not meet                       Not Applicable

6. Building Colors

Meets                       Does not meet                       Not Applicable

7. Building Fenestration

Meets                       Does not meet                       Not Applicable

8. Entrance Design  
 *Meets*       *Does not meet*       *Not Applicable*
9. Canopy/Awning Design  
 *Meets*       *Does not meet*       *Not Applicable*
10. Overall Façade Design  
 *Meets*       *Does not meet*       *Not Applicable*

**Findings of Fact:**

**ZONING ORDINANCE VARIATION**

The petitioner is requesting several variations:

- a. Article 2-400 13 c and d. Special Use Criteria for Gasoline Stations from the requirement to construct a solid fence between a gas station and the peaked roof over the fueling canopy.
- b. Article 4-200 Parking and Loading from the required on-site parking to allow 15 spaces, a variation of 2 spaces.
- c. Article 4-1000 Signs to allow 252.05 square feet of wall signage, which is over 150 square feet of signage allowed, a variation of 102.05 square feet.
- d. Article 5 Subdivision approving a deferral from the requirement to bury the overhead utility lines and install sidewalk along the frontage, until such time that an area wide program is established.

The Unified Development Ordinance lists specific standards for the review and approval of a variation. The granting of a variation rests upon the applicant proving practical difficulty or hardship caused by the Ordinance requirements as they relate to the property. To be considered a zoning hardship, the specific zoning requirements; setbacks, lot width and lot area must create a unique situation on this property. It is the responsibility of the petitioner to prove hardship at the Planning and Zoning Commission public hearing.

**Standards**

When evidence in a specific case shows conclusively that literal enforcement of any provision of this Ordinance would result in a practical difficulty or particular hardship because:

- a. The plight of the property owner is due to unique circumstances, such as, unusual surroundings or conditions of the property involved, or by reason of exceptional narrowness, shallowness or shape of a zoning lot, or because of unique topography, or underground conditions.  
 *Meets*       *Does not meet*
- b. Also, that the variation, if granted, will not alter the essential character of the locality.  
 *Meets*       *Does not meet*

For the purposes of supplementing the above standards, the Commission may take into consideration the extent to which the following facts favorable to the application have been established by the evidence presented at the public hearing:

- a. That the conditions upon which the application for variation is based would not be applicable generally to other property within the same zoning classification;  
 *Meets*                       *Does not meet*
  
- b. That the alleged difficulty or hardship has not been created by any person presently having interest in the property;  
 *Meets*                       *Does not meet*
  
- c. That the granting of the variation will not be detrimental to the public welfare or injurious to other property or improvements in the neighborhood in which the property is located;  
or  
 *Meets*                       *Does not meet*
  
- d. That the proposed variation will not impair an adequate supply of light or air to adjacent property, will not unreasonably diminish or impair the property values of adjacent property, will not unreasonably increase congestion in the public streets, substantially increase the danger of fire or otherwise endanger public safety.  
 *Meets*                       *Does not meet*

Where the evidence is not found to justify such conditions, that fact shall be reported to the City Council with a recommendation that the variation be denied.

**Comprehensive Land Use Plan 2020 Vision Summary Review:**

The Comprehensive Plan designates the subject property as Commerce, which allows for existing and future business uses. The following goal is applicable to this request:

Land Use - Commerce

**Goal: Maintain a dynamic and sustainable base of commercial uses that provides a solid tax base, goods, services and jobs to the City as well as the surrounding region through coordination in the Unified Development Ordinance, Comprehensive Land Use Plan and Economic Development Strategic Plan.**

This can be accomplished with the following supporting action:

**Supporting Action:** Promote, retain and attract businesses that provide a diverse tax base.

**Success Indicator:** The number of new chain stores.

**Recommended Conditions:**

If a motion to recommend approval of the petitioner's request is made, the following conditions are recommended:



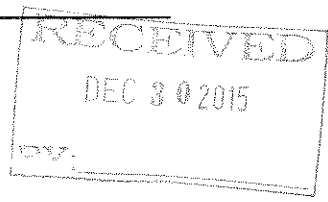
1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
  - A. Application (ARC Design, received 12/30/15)
  - B. Plat of Subdivision (ARC Design, undated, received 01/22/16)
  - C. Site Plans (ARC Design, dated 1/19/16, received 1/22/16)
  - D. Elevations (Red Leonard Associates, undated, received 12/18/15)
  - E. Signage (Persona, dated 02/27/12, received 1/21/16)
  - F. Truck Turning Plan (ARC Design, dated 08/27/15, received 01/21/16)
  - G. Stormwater Management Report (ARC Design, undated, received 12/16/15)
  - H. Environmental Impact Statement (St. John-Mittelhauser, dated 01/25/16, received 01/26/16)
2. Site and Landscape Plan
  - A. Add trees and shrubs to the landscape islands to meet the UDO requirements.
  - B. Work with staff to provide proper cross-access and site circulation between this development and the future development to the west.
3. Final Plat of Subdivision
  - A. The "County Highway" signature block needs to be amended to an IDOT signature block.
4. Provide the City with a hazard mitigation plan illustrating proper procedure in case of a spill or emergency.
5. Work with staff to reduce the size of the brick area around the free-standing sign.
6. Petitioner shall secure an IDOT permit and address any associated comments.
7. The petitioner shall address all of the review comments and requirements of the Community Development, Fire Rescue, Police, and Public Works Departments and of the City's Stormwater Consultant.

2015 66

# City of Crystal Lake Development Application

Office Use Only  
File # \_\_\_\_\_

Project Title: Casey's - Crystal Lake, IL



### Action Requested

- Annexation
- Comprehensive Plan Amendment
- Conceptual PUD Review
- Final PUD
- Final PUD Amendment
- Final Plat of Subdivision
- Preliminary PUD
- Preliminary Plat of Subdivision
- Rezoning
- Special Use Permit
- Variation
- Other

### Petitioner Information

Name: Pearl Street Commercial, LLC/ Arc Design Resources, Inc.

Address: 2519 Fielding Dr. Glenview, IL 60026  
(Arc) 5291 Zenith Parkway, Loves Park, IL 61111

Phone: 847-867-7200/ (Arc) 815-484-4300

Fax: (815) 484-4300

E-mail: stevenschwartz1@gmail.com/ryans@arcdesign.com

### Owner Information (if different)

Name: NorthSide Community Bank

Address: 800 N. Route 83  
Mundelein, IL 60060

Phone: (847) 837-8883

Fax: (847) 837-8333

E-mail: edward.egelston@nscombank.com

### Property Information

Project Description: The proposed development will consist of new construction of a Casey's General Store, eight (8) fueling pumps with canopy, parking lot, storm water detention, and other associated amenities. A

Special Use Permit is being requested due to the fuel operation.

Project Address/Location: Southeast corner of the intersection of Terra Cotta Avenue (IL 176) and Terra Cotta Road

PIN Number(s): 14-33-426-016-0000, 14-33-426-019-0000, 14-33-426-020-0000, 14-33-426-010-0000, 14-33-426-014-0000

**Development Team**

Please include address, phone, fax and e-mail

**Developer:** Pearl Street Commercial

**Architect:** TBD (By Casey's)

**Attorney:** N/A

**Engineer:** Arc Design Resources

**Landscape Architect:** Arc Design Resources

**Planner:** N/A

**Surveyor:** Arc Design Resources

**Other:**

**Signatures** Pearl Street Commercial, LLC  
 Ryan C Sims  
 Arc Design Resources  
 12-24-15

Stephen L. Schwartz - Manager, PM [Signature]  
 12/23/15

**PETITIONER: Print and Sign name (if different from owner)** **Date**

As owner of the property in question, I hereby authorize the seeking of the above requested action.

**OWNER: Print and Sign name** **Date**

NOTE: If the property is held in trust, the trust officer must sign this petition as owner. In addition, the trust officer must provide a letter that names all beneficiaries of the trust.

**Development Team**

Please include address, phone, fax and e-mail

Developer: Pearl Street Commercial

Architect: TBD (By Casey's)

Attorney: N/A

Engineer: Arc Design Resources

Landscape Architect: Arc Design Resources

Planner: N/A

Surveyor: Arc Design Resources

Other: \_\_\_\_\_

**Signatures**

PETITIONER: Print and Sign name (if different from owner)

Date

As owner of the property in question, I hereby authorize the seeking of the above requested action.

Northside Community Bank, Edward D. Egelston VP  
OWNER: Print and Sign name

Date 12/23/15

NOTE: If the property is held in trust, the trust officer must sign this petition as owner. In addition, the trust officer must provide a letter that names all beneficiaries of the trust.

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**PUBLIC NOTICE**

**BEFORE THE PLANNING AND  
ZONING COMMISSION OF THE  
CITY OF CRYSTAL LAKE,  
MCHENRY COUNTY, ILLINOIS**

**IN THE MATTER OF THE PETITION  
OF  
ARC Design Resources, Inc. and  
Pearl Street Commercial, LLC**

**LEGAL NOTICE**

Notice is hereby given in compliance with the Unified Development Ordinance (UDO) of the City of Crystal Lake, Illinois that a public hearing will be held before the Planning and Zoning Commission on the application by ARC Design Resources, Inc., on behalf of Pearl Street Commercial, LLC, representing the owner NorthSide Community Bank, seeking a Special Use Permit and Variations for a Gas Station

at 639 E. Terra Cotta Avenue, Crystal Lake, Illinois. PINs: 14-33-426-016, -019, -020, -010, -014.

This application is filed for the purpose of seeking a Special Use Permit for a Gasoline Service Station pursuant to Article 2-400 and Article 9-200 D and Variations from Article 2-400 13d Gasoline Stations from the requirement to provide a peaked canopy, Article 4-200D Parking from the required minimum parking, Article 4-1000F to allow over 150 square feet of wall/building signage and Article 51d and a deferment from the requirement to install sidewalk along the frontage and to bury the overhead utility lines, as well as any other variations as necessary to approve the plans as presented to approve this development. Plans for this project can be viewed at the Crystal Lake Community Development Department at City Hall.

A public hearing before the Planning and Zoning Commission on this request will be held at 7:30 p.m. on Wednesday, February 3, 2016, at the Crystal Lake City Hall, 100 West Woodstock Street, at which time and place any person determining to be heard may be present.

Tom Hayden, Chairperson  
Planning and Zoning Commission  
City of Crystal Lake

(Published in the Northwest Herald  
January 19, 2016) 1151046

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Dakota St

W Terra Cotta Ave

W Terra Cotta Ave

Terra Cotta Rd

Terra Cotta Rd

5219

5111

639

1119

5701

5707

731

751

Savannah Ln

Silk Oak Ln

Silk Oak Ln

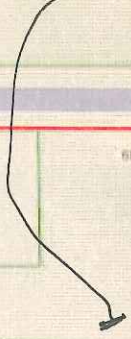
Silk Oak Ln

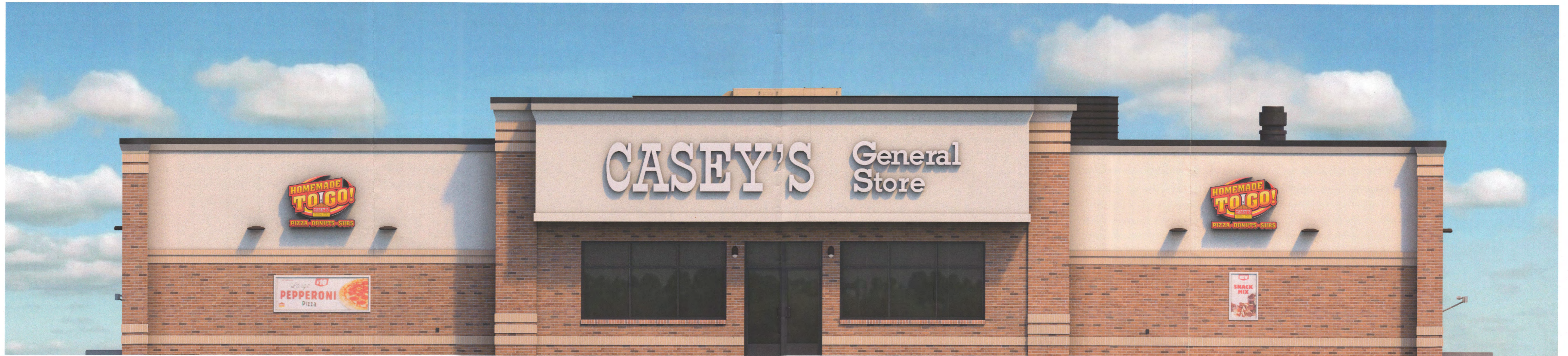
Mistwood Ln

Mistwood Ln

Colonel Palmer House

PIQ.





FRONT ELEVATION



REAR ELEVATION



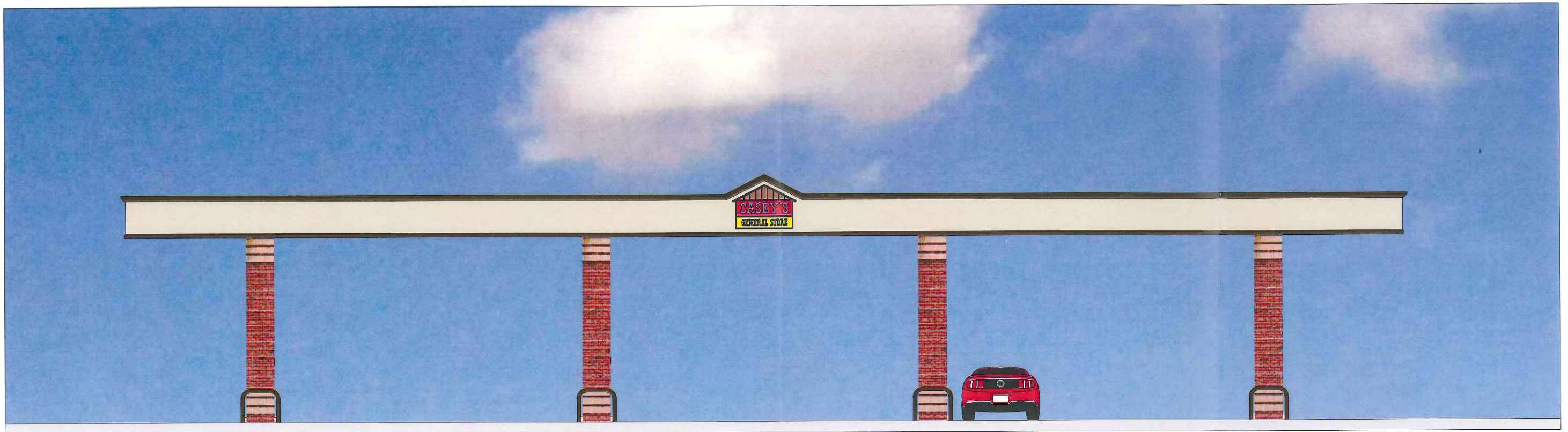
LEFT ELEVATION



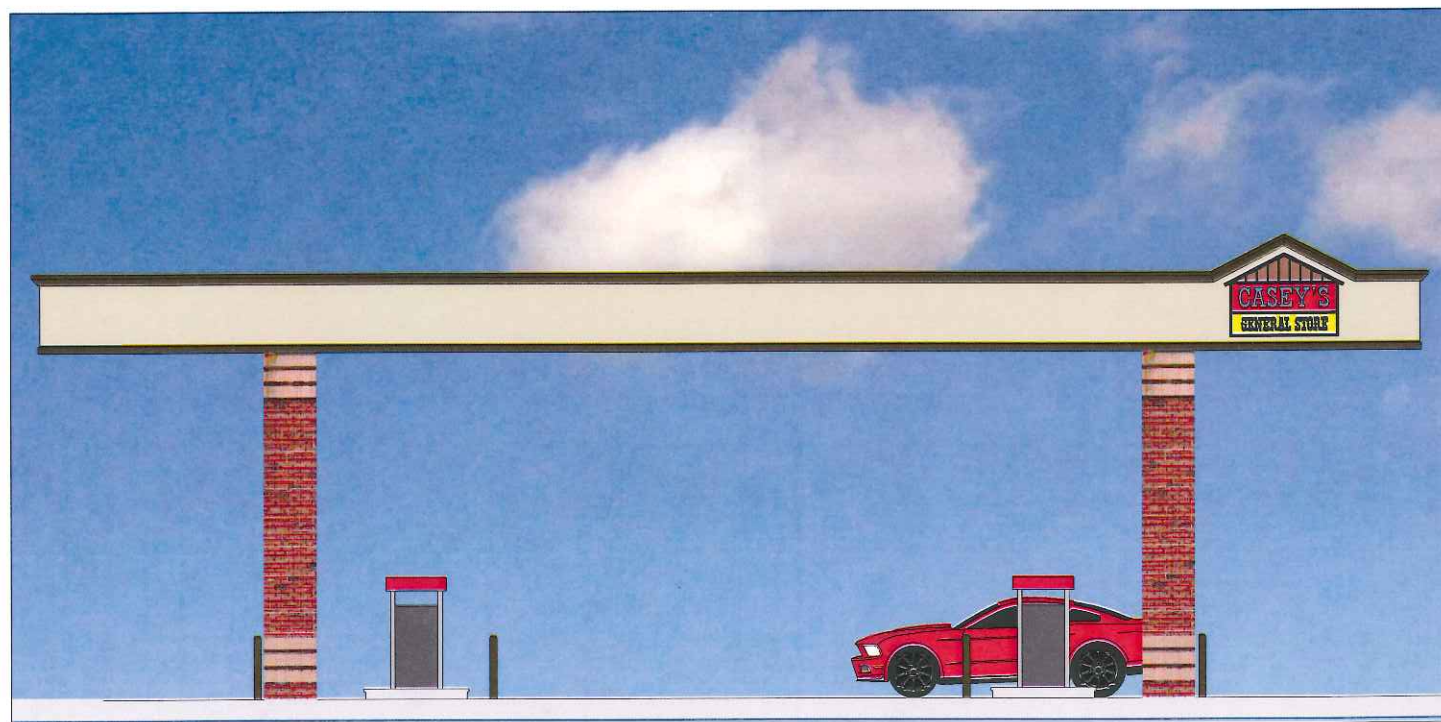
RIGHT ELEVATION



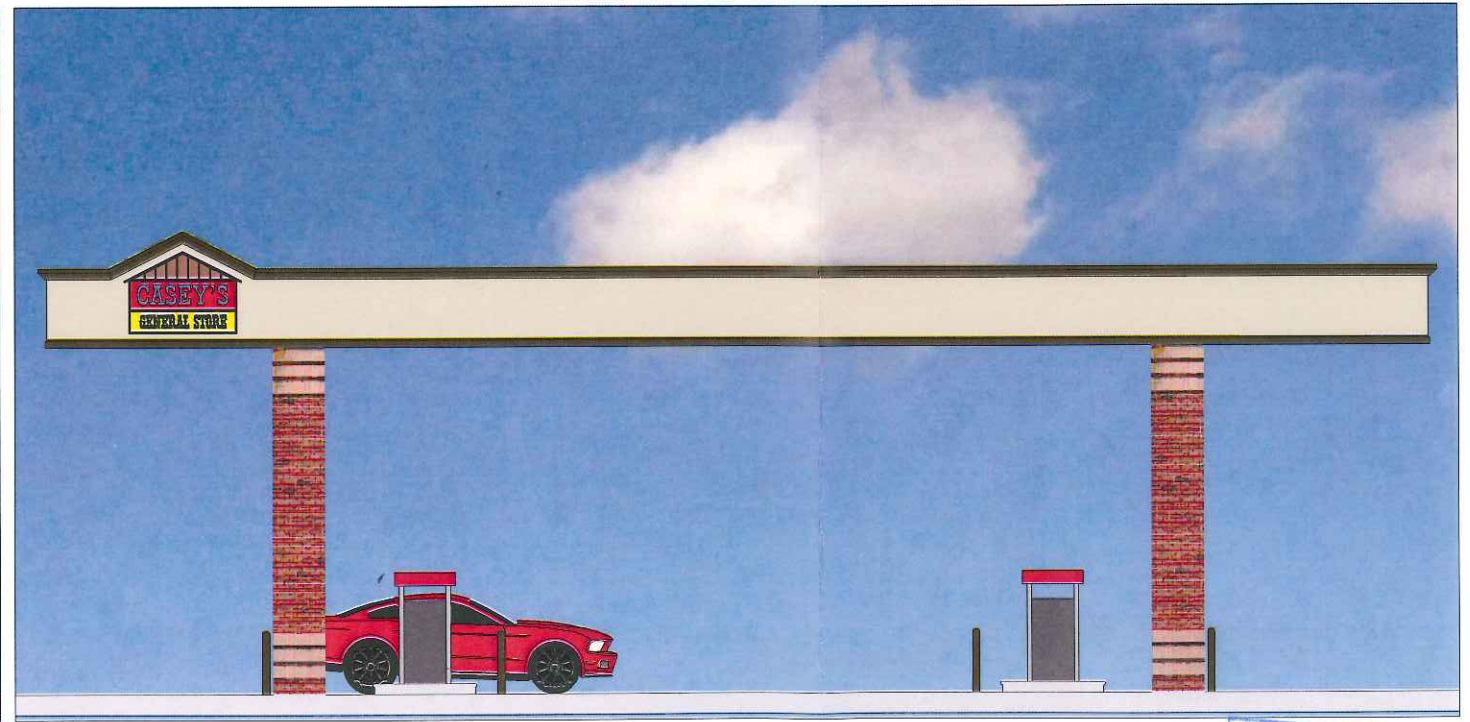
# CRYSTAL LAKE, IL



NORTH ELEVATION



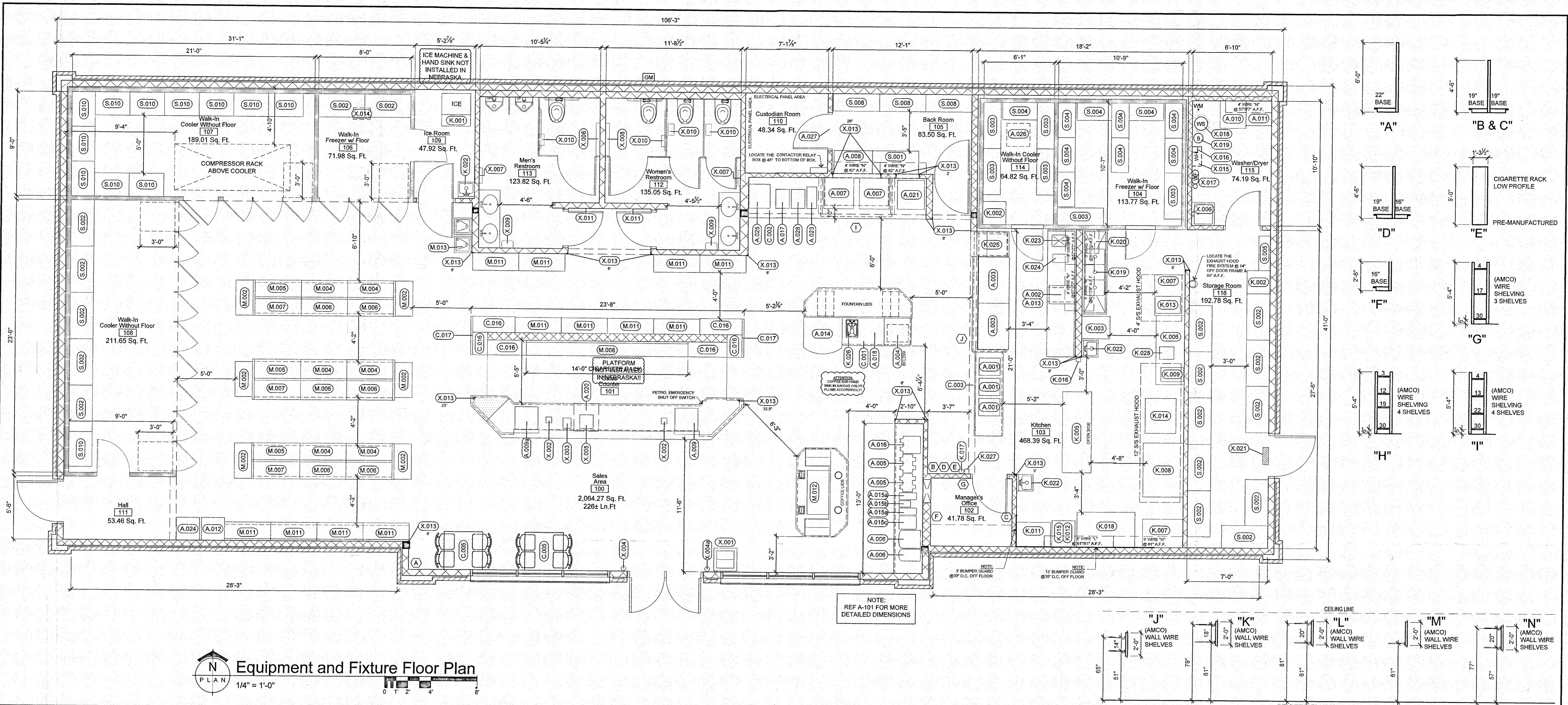
EAST ELEVATION



WEST ELEVATION

2015 66

RECEIVED  
DEC 18 2015

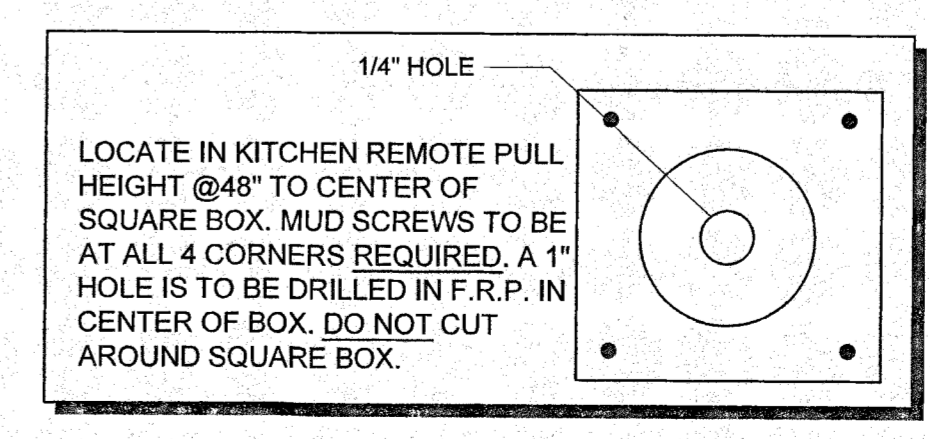


**Equipment and Fixture Floor Plan**  
 1/4" = 1'-0"

**Equipment Schedule**

A - APPLIANCE			M - MERCHANDISING			K - KITCHEN			BULLETIN BOARD			
NOTE	DESCRIPTION	DETAILS	NOTE	DESCRIPTION	DETAILS	NOTE	DESCRIPTION	DETAILS	NOTE	DESCRIPTION	DETAILS	LOCATION
A.001	SELF-SERVE SANDWICH/WICHAZ PIZZAR WARMER		M.001	MUGS		K.001	ICE MACHINE	ON LEGS	(A)	36" x 48" VERTICAL	BOTTOM = 50" A.F.F.	BACK ROOM
A.002	COUNTERTOP COOKER/WARMER		M.002	3'-0" END CAP		K.002	TRAY RACK	ON CASTERS	(B)	18" x 24" GLASS ENCLOSED	PERMIT BULLETIN BOARD, 55" TO BTM A.F.F.	SALES
A.003	DELI SANDWICHES - (2) 4'-0" PREP TABLES	WITH SNEEZE GUARDS	M.004	16-16-15 SHELVING		K.003	MIXER	ON CASTERS	(C)	18" x 24" VERTICAL	BOTTOM = 70" A.F.F.	OFFICE
A.004	MICROWAVE (BELOW COUNTERTOP)		M.005	16-15 SHELVING		K.004	8'-0" STAINLESS STEEL TABLE	96" x 24" x 31" H.	(D)	18" x 24" VERTICAL	BOTTOM = 36" A.F.F.	KITCHEN
A.005	2 SH DOCKING STATION	W/ 2 SERVERS	M.006	13 SHELVING		K.005	8'-0" STAINLESS STEEL ISLAND TABLE	OPEN SIDE TOWARD OVENS	(E)	18" x 48" VERTICAL	BOTTOM = 36" A.F.F.	SALES
A.006	CAPPUCCINO	3 & 5 HEAD (3 HEAD ON RIGHT, 5 HEAD ON LEFT)	M.007	SHELVING		K.006	6'-0" STAINLESS STEEL TABLE	72" x 30" x 36" H.	(F)	12" x 36" VERTICAL	BOTTOM = 36" A.F.F.	OFFICE
A.007	SELF-SERVE FOUNTAIN DRINK	10 DISPENSER HEADS	M.008	55" CIGARETTE RACK	168" (14'-0" L)	K.007	42" STAINLESS STEEL TABLE	42" x 30" x 31" H.	(G)	KEY RING SHELF	MOUNT ABOVE LIGHT SWITCH	OFFICE
A.008	BAG-IN-BOX W/ CARBONATOR		M.010	SHELVING		K.008	PIZZA OVENS		(H)	1.47" MONITOR	INSTALLED BY GRAPHICS CONTR.	REFRESH.CTR.
A.009	CASH REGISTER #1		M.011	16-15 SHELVING		K.009	TENDERLOIN FRYER	ON LEGS	(I)	3.47" MONITORS	INSTALLED BY GRAPHICS CONTR.	DELI CASE
A.009a	CASH REGISTER #2		M.012	SELF-SERVE DONUT CASE	SHELF @ 5", 11", 17", 23"	K.008	PIZZA OVENS					
A.010	ELECTRIC WASHER UNIT		M.013	DRINKING FOUNTAIN	HIGH/LOW TYPE	K.009	TENDERLOIN FRYER	ON LEGS				
A.011	ELECTRIC DRYER UNIT					K.010	4'-6" STAINLESS STEEL TABLE	54" x 26" x 31" H.				
A.012	ATM					K.011	2' STAINLESS STEEL TABLE	24" x 30" x 36" H.				
A.013	COMMERCIAL COMBINATION OVEN	MOUNT @ 52" A.F.F.				K.012	24" STAINLESS STEEL ROLLER TABLE	ON CASTERS				
A.014	OPEN TOP COOLER	BORGEN MODEL #DL-100				K.013	DONUT FRYER	ON LEGS				
A.015a	FLAVOR SHOTS					K.014	BREAD OVEN AND PROOFER	6" CLEARANCE REQUIRED				
A.015b	CONDIMENTS					K.015	DOUGH ROLLER	BOLT TO CART				
A.015c	FRESH CREAMER					K.016	PIZZA PHONE JACK	MOUNT 60" A.F.F.				
A.016	DUAL COFFEE BREWER	W/ 2 SERVERS				K.017	FIRE EXTINGUISHER	MOUNT 25" A.F.F. TYPE "K"				
A.017	ICE COFFEE					K.018	5'-7" STAINLESS STEEL PREP TABLE	67" x 32" x 31" H.				
A.018	CONDIMENT AREA					K.019	3 - COMPARTMENT SINK	WIDUAL DRAIN BOARDS				
A.020	UNDERCOUNTER SAFE					K.020	15" x 24" WIRE SHELVING BELOW SINK FOR TOXIC CLEANING SUPPLIES					
A.021	FROZEN CARBONATED BEVERAGE FREEZER	# C302 - MCCORMACK				K.022	STAINLESS STEEL HAND SINK	WALL HUNG W/ SPLASH GUARDS				
A.023	ICE TEA BREWER	MODEL TB3Q WITH TDD-4 DISPENSER				K.023	VEGETABLE SINK	MOLDED IN 8" STAINLESS STEEL TABLE				
A.025	SOFT SERVE ICE CREAM MACHINE					K.024	VEG-O-MATIC	SLICER				
A.026	ICE FOLLETT MACHINE	SITS ON RACK ABOVE CEILING				K.025	BREAD HOLDING CABINET	37 3/4" H x 22 3/4" W x 31 1/2" D ON CASTERS				
A.027	FOLLETT MANAGER	ON WALL ABOVE DOOR				K.026	STAINLESS STEEL HAND SINK	COUNTER MOUNTED W/ SPLASH GUARDS				
A.028	SWEET TEA URN					K.027	EMERGENCY PULL STATION	48" TO CENTER OF SQUARE BOX				
						K.028	GLOBE POWER MIXER	5 QUARTS				

**Remote Pull Detail** (K.027)



NOTE:  
 CONTRACTOR TO ASSEMBLE SHELVES G, H, I, J, K, L & M. MEASUREMENTS ARE TO THE CENTER OF THE WIRE SHELVES  
 CONTRACTOR TO ASSEMBLE SHELVES G, H, I, & J. MINIMUM 6" OF CLEARANCE FROM BOTTOM SHELF TO FINISH FLOOR.

**2 Shelving Components**  
 1/4" = 1'-0"

2015 66

RECEIVED  
 DEC 1 8 2015

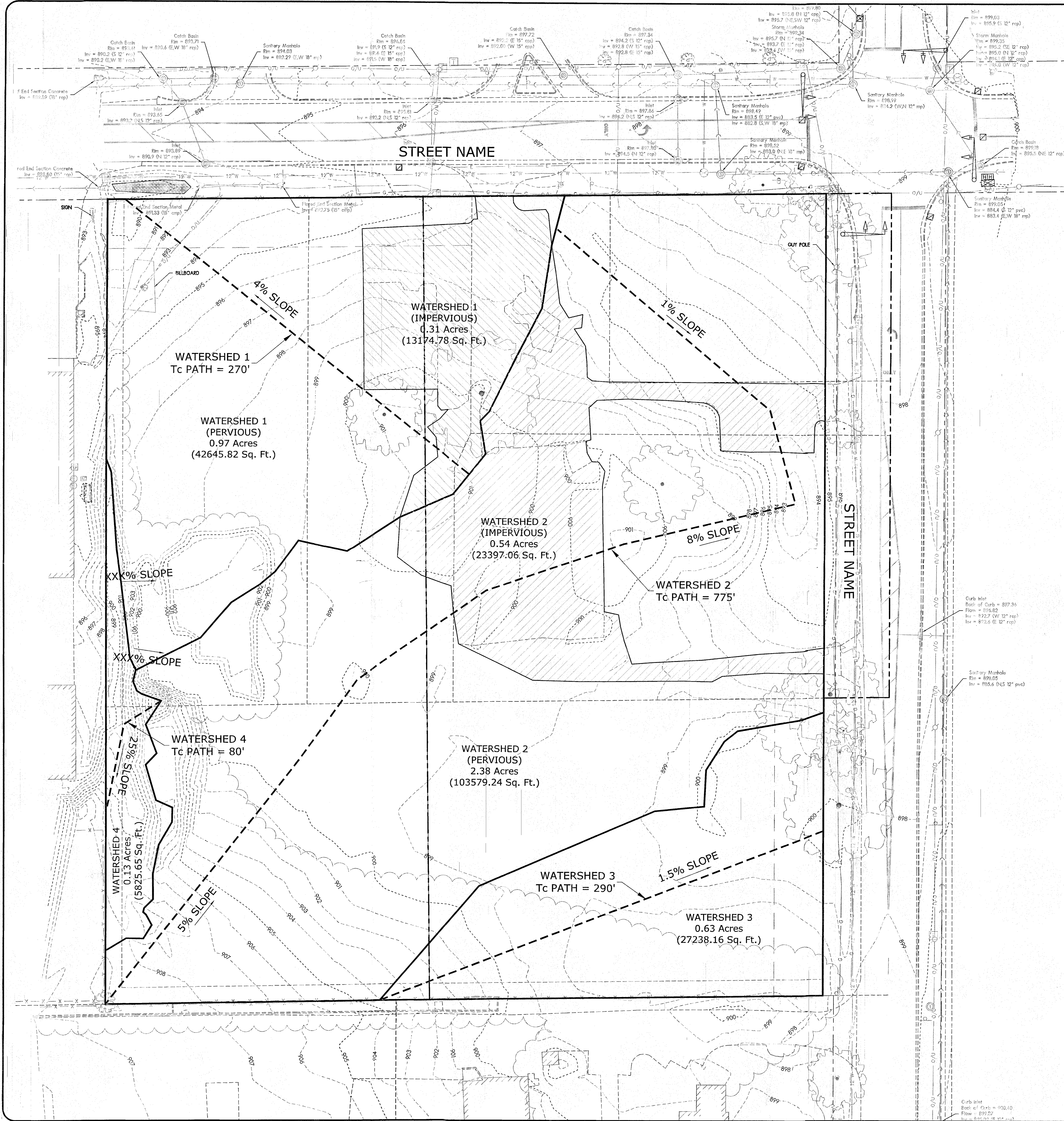
**CASEY'S General Store**

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

PROJECT: "O3" STYLE STORE FLAT ROOF  
 DATE: 9-21-15  
 REVISION: 11-02-15

EQUIPMENT PLAN  
 AQ-101

CONSTRUCTION DIVISION  
 L. BURKE



**LEGEND**

- PROPERTY LINE
- - - LOT LINE
- ===== EXISTING CONCRETE CURB AND GUTTER TO REMAIN

**AREAS TOTAL AREA = 4.96 ACRES**

**WATERSHED 1 = 1.28 ACRES**  
 PERVIOUS AREA = 0.97 ACRES  
 IMPERVIOUS AREA = 0.31 ACRES

**WATERSHED 2 = 2.92 ACRES**  
 PERVIOUS AREA = 2.38 ACRES  
 IMPERVIOUS AREA = 0.54 ACRES

**WATERSHED 3 = 0.63 ACRES**  
 PERVIOUS AREA = 0.63 ACRES  
 IMPERVIOUS AREA = 0.00 ACRES

**WATERSHED 4 = 0.13 ACRES**  
 PERVIOUS AREA = 0.13 ACRES  
 IMPERVIOUS AREA = 0.00 ACRES

**Tc**

**WATERSHED 1**  
 Tc PATH = 270'

**WATERSHED 2**  
 Tc PATH = 775'

**WATERSHED 3**  
 Tc PATH = 290'

**WATERSHED 4**  
 Tc PATH = 80'

**RUNOFF COEFFICIENT**

IMPERVIOUS AREA = 0.95  
 PERVIOUS AREA = 0.25

**WATERSHED 1**  
 RUNOFF COEFFICIENT = 0.42

**WATERSHED 2**  
 RUNOFF COEFFICIENT = 0.38

**WATERSHED 3**  
 RUNOFF COEFFICIENT = 0.25

**WATERSHED 4**  
 RUNOFF COEFFICIENT = 0.25

RUNOFF COEFFICIENTS ARE BASED ON WEIGHTED AVERAGE OF IDOT ACCEPTABLE RANGES FOR RUNOFF COEFFICIENTS AND ON AREA OF EACH GROUND TYPE. SEE ATTACHED CALCULATIONS FOR MORE INFORMATION

**EXISTING DRAINAGE PLAN NOTES**

- WATERSHED 1 AND WATERSHED 2 FLOW TO TERRA COTTA AVENUE (IL 176)
- WATERSHED 3 FLOWS TO THE CITY SYSTEM
- WATERSHED 4 FLOWS TO THE ADJACENT PROPERTY TO THE WEST

**ARC DESIGN**  
 RESOURCES INC.  
 5291 ZENITH PARKWAY  
 LOVES PARK, IL 61111  
 VOICE: (815) 484-4300  
 FAX: (815) 484-4303  
 www.arcdesign.com  
 Design Firm License No. 184-001334

**PROJECT NAME**  
 OWNER'S NAME  
**CASEY'S GENERAL STORE**  
 CRYSTAL LAKE, IL  
 E. TERRA COTTA AVE & TERRA COTTA ROAD  
 CASEY'S RETAIL COMPANY  
 ONE CONVENIENCE BLVD  
 ANKENY, IA 50021  
 JACOB CLARK  
 (515) 963-3831

**CONSULTANTS**


**ISSUED FOR**

	DATE

**REVISIONS**

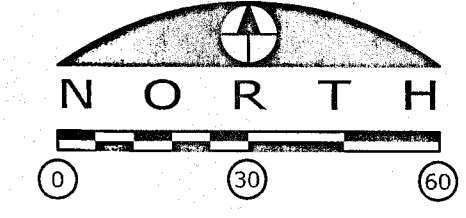
		DATE
1		
2		
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4		
5		
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7		

**SHEET TITLE**  
**EXISTING DRAINAGE PLAN**

2015 66

RECEIVED  
 DEC 16 2015  
 BY: \_\_\_\_\_

**DRAWN** DRH  
**CHECKED** RGS  
**PM** RCS



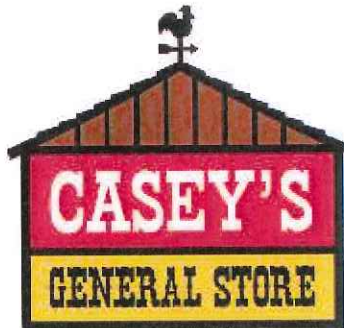
**PROJECT NUMBER**  
**SHEET NUMBER**  
 15134  
 EX 1



2015 66

## Proposed Signage

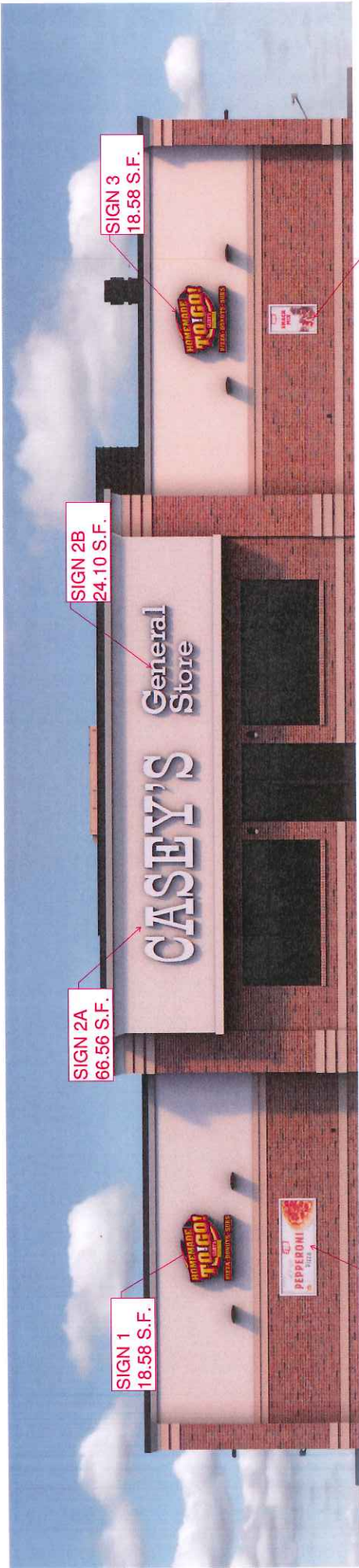
Casey's General Store



Crystal Lake, IL

January 18, 2016

Project Signage Schedule			Proposed Casey's General Store, Inc			Crystal Lake, IL	
Sign	Sign Type	Size	Mounting	illumination	Actual Area (SF)		
<b>Building and Canopy Wall Sign(s)</b>							
1	Casey's Standard Sign (Oval Sign)	See Exhibit	Bldg. Front	Internally Illuminated	18.58		
2A	Channel Letters "Casey's"	See Exhibit	Bldg. Front	Internally Illuminated	66.56		
2B	Channel Letters "General Store"	See Exhibit	Bldg. Front	Internally Illuminated	24.1		
3	Casey's Standard Sign (Oval Sign)	See Exhibit	Bldg. Front	Internally Illuminated	18.58		
4	Casey's Standard (Banner Advertising)	3' x 8'	Bldg. Front	Non Illuminated	24		
5	Casey's Standard (General Advertising)	2.4'x3.9'	Bldg. Front	Non Illuminated	9.36		
6A	Canopy Sign	Surface	a. Canopy (side)	Internally Illuminated	17.49		
6B			b. Canopy (side)		17.49		
6C			c. Canopy (front)		17.49		
7	Casey's Standard (General Advertising)	2.5'x3.84' (X 4 EACH)	Canopy Columns	Non Illuminated	38.4		
					Total Building and Canopy Signage:	252.05	
<b>Monument Sign</b>							
8	Casey's Logo	Monument	Free Standing	Internally Illuminated	17.49		
9	Fuel Price	Monument	Free Standing	Non Illuminated	21		
					Total Monument Signage:	38.49	
					Overall Brick Sign Structure:	117	



SIGN 2B  
24.10 S.F.

SIGN 2A  
66.56 S.F.

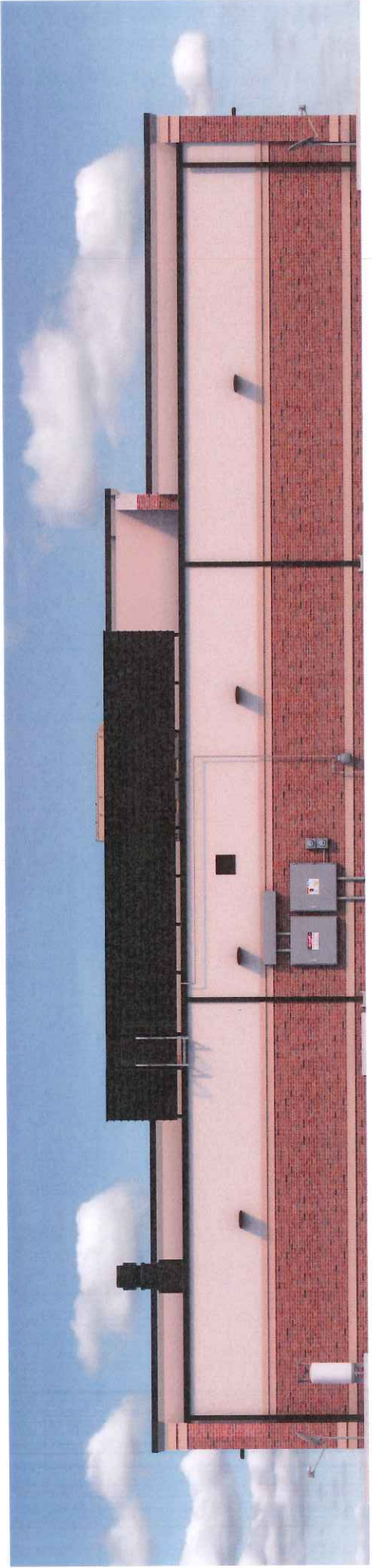
SIGN 1  
18.58 S.F.

SIGN 3  
18.58 S.F.

SIGN 4  
24 S.F.

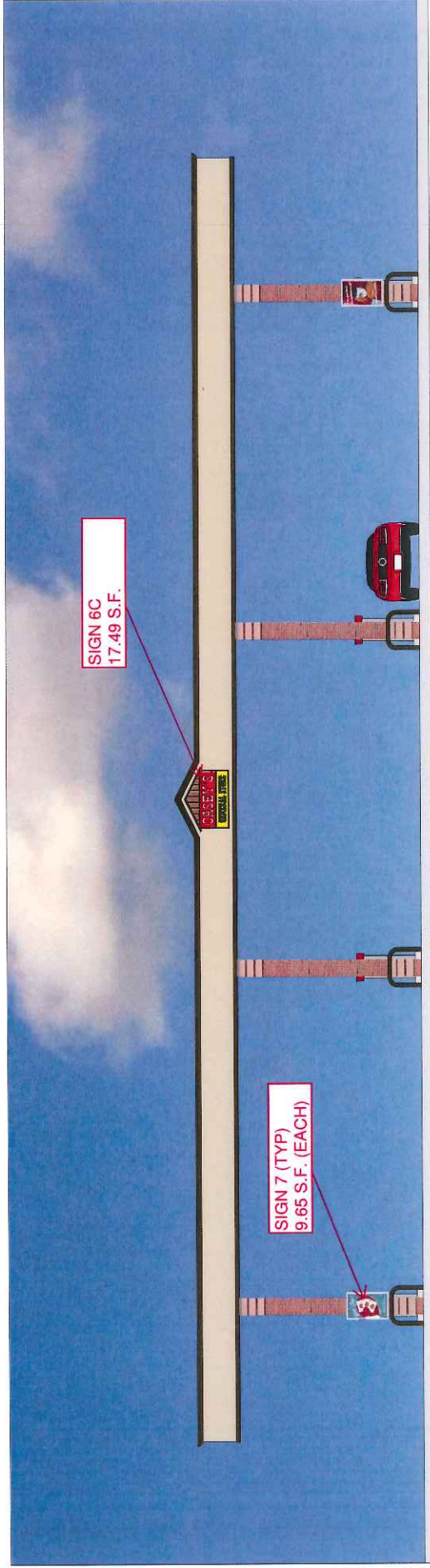
SIGN 5  
9.36 S.F.

FRONT ELEVATION

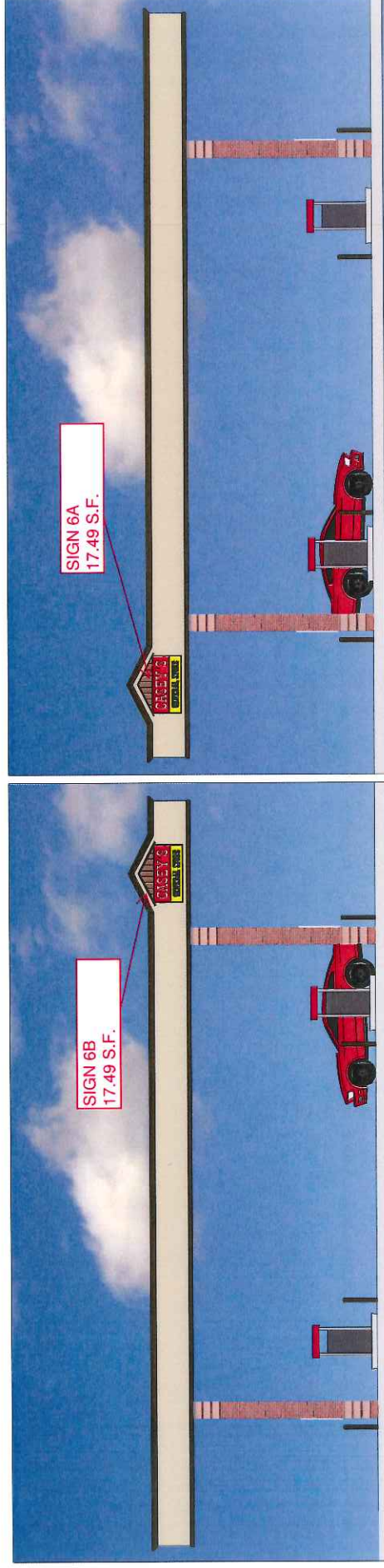


REAR ELEVATION

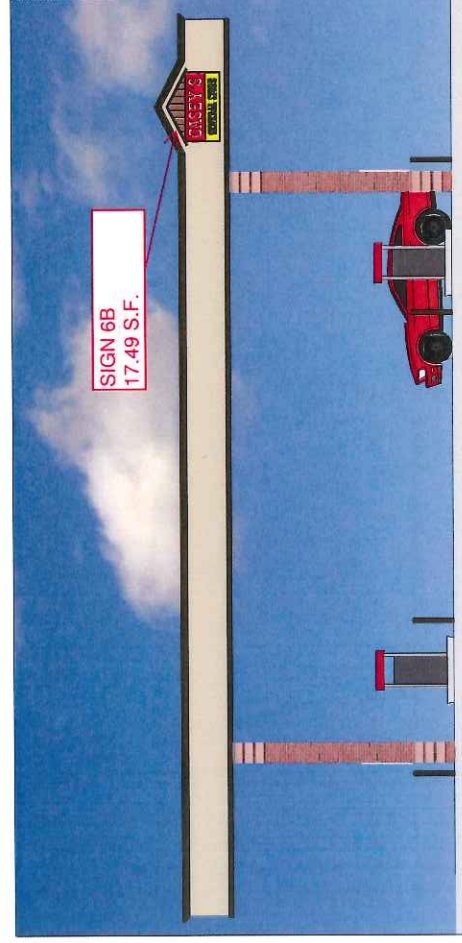
# CRYSTAL LAKE, IL



## NORTH ELEVATION



## WEST ELEVATION



## EAST ELEVATION

REVISIONS

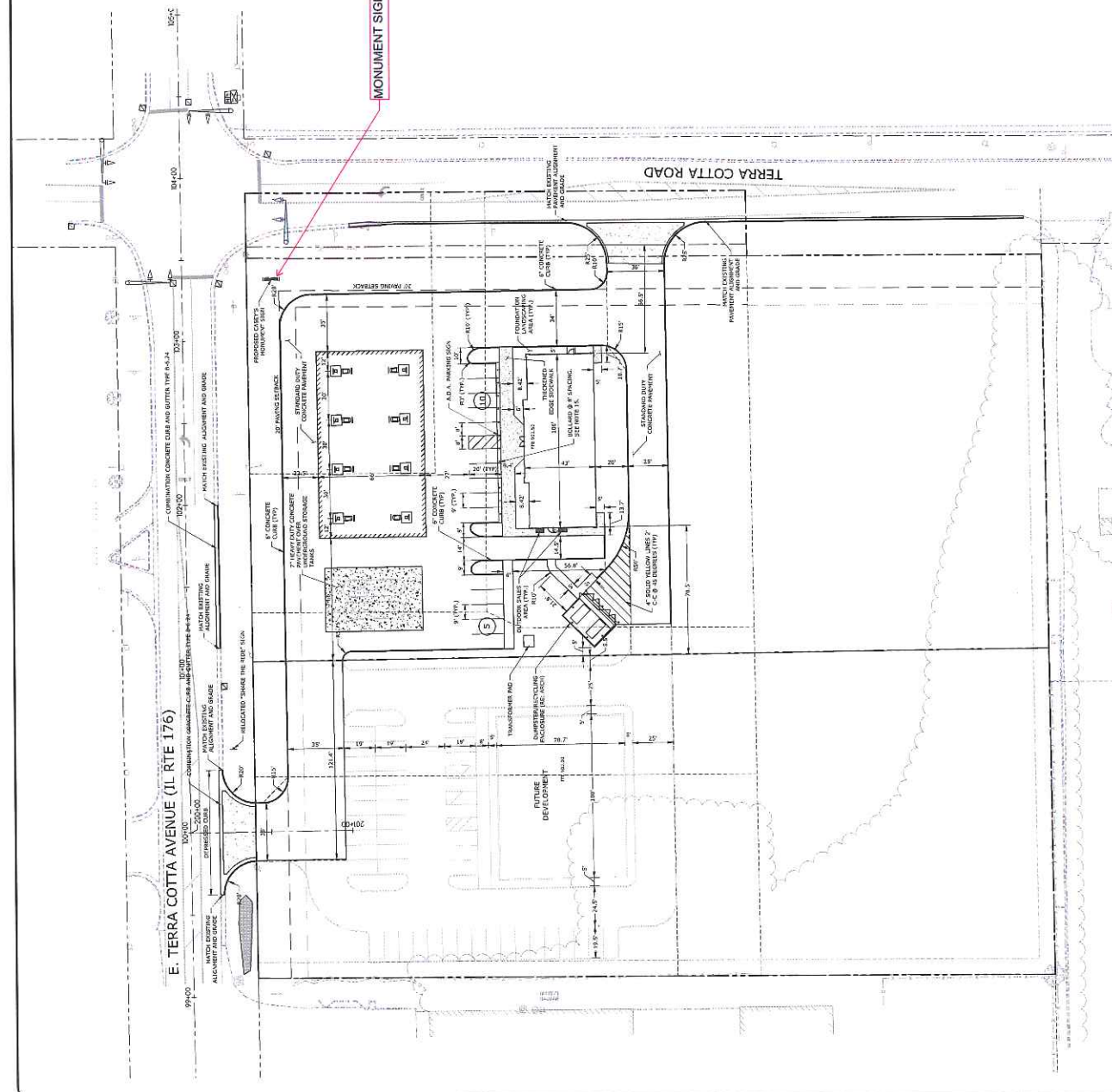
NO.	DATE	DESCRIPTION
1	08-13-09	REVISIONS
2	08-13-09	REVISIONS
3	08-13-09	REVISIONS
4	08-13-09	REVISIONS
5	08-13-09	REVISIONS
6	08-13-09	REVISIONS
7	08-13-09	REVISIONS

**LEGEND**

	PROPERTY LINE		7" HEAVY DUTY CONCRETE (WSP)
	EXISTING SIDEWALK LINE		4" HEAVY DUTY CONCRETE (SMA) (WSP)
	PROPOSED SIDEWALK LINE		4" HEAVY DUTY CONCRETE (SMA) (WSP)
	EXISTING PAVEMENT		4" HEAVY DUTY CONCRETE (SMA) (WSP)
	PROPOSED PAVEMENT		4" HEAVY DUTY CONCRETE (SMA) (WSP)
	EXISTING CONCRETE CURB		4" HEAVY DUTY CONCRETE (SMA) (WSP)
	PROPOSED CONCRETE CURB		4" HEAVY DUTY CONCRETE (SMA) (WSP)
	EXISTING UTILITY MARKERS		4" HEAVY DUTY CONCRETE (SMA) (WSP)
	PROPOSED UTILITY MARKERS		4" HEAVY DUTY CONCRETE (SMA) (WSP)
	NUMBER OF PROPOSED PARKING SPACES		4" HEAVY DUTY CONCRETE (SMA) (WSP)
	PAINTED YELLOW STRIPING		4" HEAVY DUTY CONCRETE (SMA) (WSP)
	EXISTING LIGHT POLE		4" HEAVY DUTY CONCRETE (SMA) (WSP)
	PROPOSED LIGHT POLE		4" HEAVY DUTY CONCRETE (SMA) (WSP)
	EXISTING SIGN		4" HEAVY DUTY CONCRETE (SMA) (WSP)
	PROPOSED SIGN		4" HEAVY DUTY CONCRETE (SMA) (WSP)
	EXISTING SIGNAL CONTROLLER		4" HEAVY DUTY CONCRETE (SMA) (WSP)
	PROPOSED SIGNAL CONTROLLER		4" HEAVY DUTY CONCRETE (SMA) (WSP)

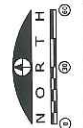
**LAYOUT NOTES**

- THE CONTRACTOR SHALL VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL ALSO VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO COMMENCING WORK.
- REFER TO ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
- SHOWERS SHALL LOCATE THE BUILDING AS SHOWN TO THE CITY SIDE OF THE BUILDING.
- SEAL CONTRACTOR SHALL VERIFY THE BUILDING DIMENSIONS SHALL CONFORM TO THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
- CONCRETE WORK WITHIN TERRA COTTA ROAD WITH THE CITY OF CRYSTAL LAKE.
- TRANSPORTATION DEPARTMENT TRAFFIC CONTROL SHALL CONDUCT A TEST CHAMBER FOR WORK WITHIN THE ROAD.
- ALL WORK IS TO BE COMPLETED TO THE BACK OF CURB.
- THE CURB IS TO BE 15" MINIMUM UNLESS NOTED OTHERWISE. REFER TO THE DETAIL NOTES.
- SOME FIELD ADJUSTMENTS MAY BE NECESSARY AT POINTS WHERE UNDESIRABLE CONDITIONS OCCUR. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO COMMENCING WORK.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF CRYSTAL LAKE SPECIFICATIONS FOR CONSTRUCTION OF WORK.
- ELECTRICAL QUANTITY TO SITE LIGHTING AND PUMP SIGN SHOWN ON ARCHITECTURAL PLANS.
- FOR ALL PAVEMENT FINISHES, THE FINISH SHALL BE IN ACCORDANCE WITH THE CITY OF CRYSTAL LAKE SPECIFICATIONS FOR PAVEMENT FINISHES. THE FINISH SHALL BE IN ACCORDANCE WITH THE CITY OF CRYSTAL LAKE SPECIFICATIONS FOR PAVEMENT FINISHES.
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**PARKING TABLE**

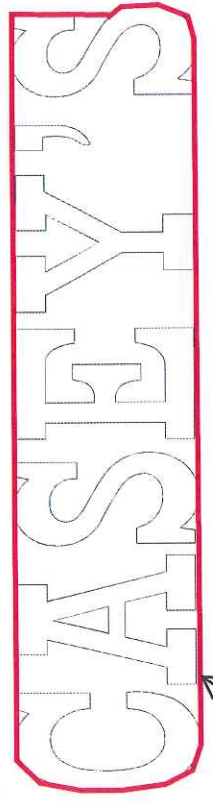
REQUIRED PARKING	17
PROPOSED PARKING	15





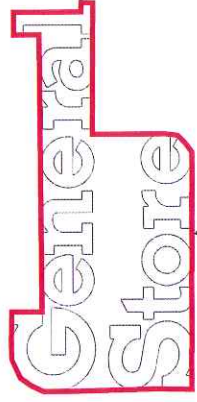
**SIGNS 2A & 2B**

28'-9 1/8"

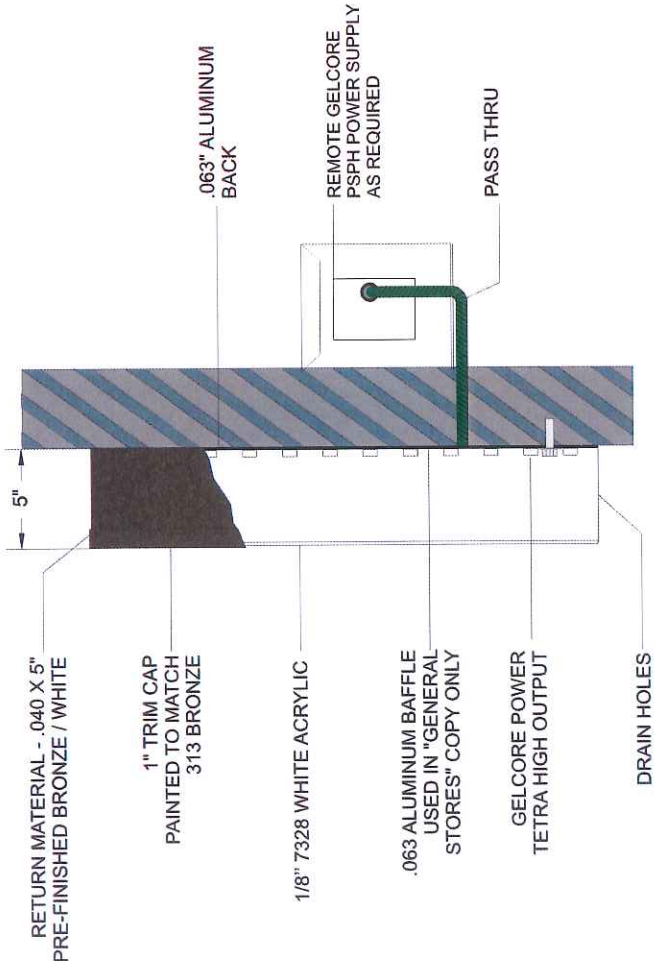


**66.56 S.F.**

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



**24.10 S.F.**



NOTES:  
 U.L. APPROVED  
 4.25 AMPS / 120 VOLTS / 510 WATTS

CASEY'S	SIGN AREA
CASEY'S GENERAL STORE	66.56 SQ. FT
	24.10 SQ. FT

NOTES:  
 U.L. APPROVED  
 5.4 AMPS / 120 VOLTS

PROFILE  
 NTS

Customer:	<b>CASEY'S</b>	Date:	<b>2-27-12</b>	Prepared By:	<b>CM/IJA/MR</b>
Location:	<b>VARIOUS</b>	File Name:	<b>4' INLINE CL</b>	Eng:	-

**PERSONA**  
 SIGN MAKERS / IMAGE BUILDERS

DISTRIBUTED BY SIGN UP COMPANY  
 700 21st Street Southwest  
 PO Box 210  
 Watcovert, SD 57201-0210  
 1 (800) 843-9888 • www.persona-inc.com

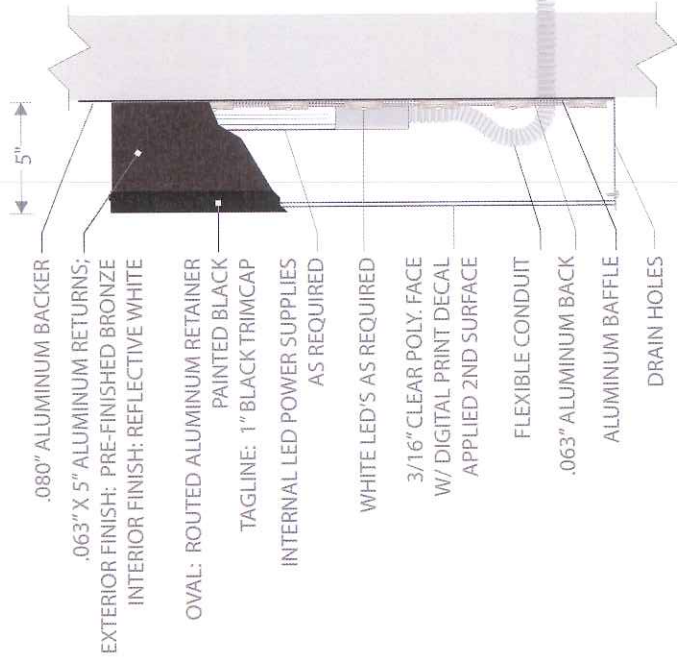
Note: Color output may not be exact when viewing or printing this drawing. All colors used are PMS or the closest CMYK equivalent. If these colors are incorrect, please provide the correct PMS match and a revision to this drawing will be made.

**SIGNS 1 & 3**

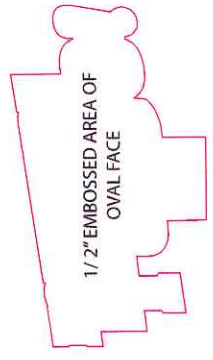


<b>43" LOGO DISPLAY</b>	<b>SIGN AREA</b>
<b>HOME MADE TO GO OVAL</b>	<b>15.08 SQ. FT</b>
<b>PIZZA, ETC. TAGLINE</b>	<b>3.50 SQ. FT</b>

**TOTAL = 18.58 SQ. FT.**



**INTERNAL LED PROFILE**  
SCALE: NTS



**GRAPHIC DETAIL**  
SCALE: 3/4" = 1'-0"

**NOTES:**  
U.L. APPROVED  
ELECTRICAL: 1.70 AMPS, 120 VOLTS  
WEATHERITE COMPONENTS INCLUDED  
OVAL & TAGLINE ARE GLUED TO BACKER PANEL  
BACKER PANEL PAINTED DURANODIC BRONZE  
NIPPLE W/ WATERPROOF SEAL EACH END OUT  
BOTTOM OF OVAL, INTO TAGLINE FOR ELECTRICAL CONNECTION

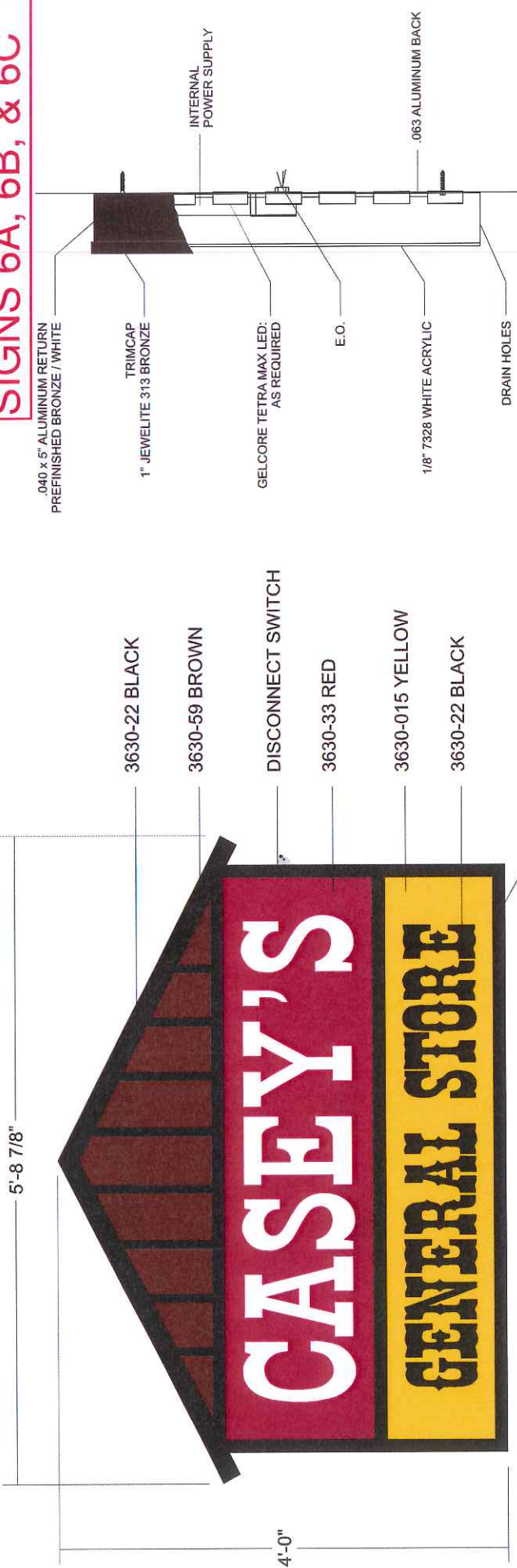
**FACE NOTES:**  
OVAL FACE IS EMBOSSED, TAGLINE FACE IS FLAT  
3/16" CLEAR POLYCARBONATE W/ 2ND SURFACE  
DIGITAL PRINT DECAL APPLIED; WHITE BACKSPRAY

<b>Customer:</b> CASEY'S GENERAL STORE	<b>Date:</b> 4/29/14	<b>Prepared By:</b> CM	<b>Eng:</b> DZ/SK
<b>Location:</b> VARIOUS	<b>File Name:</b> 24", 32", 43" HOMEMADE-TO-GO LOGO C-PRINTS - R1		

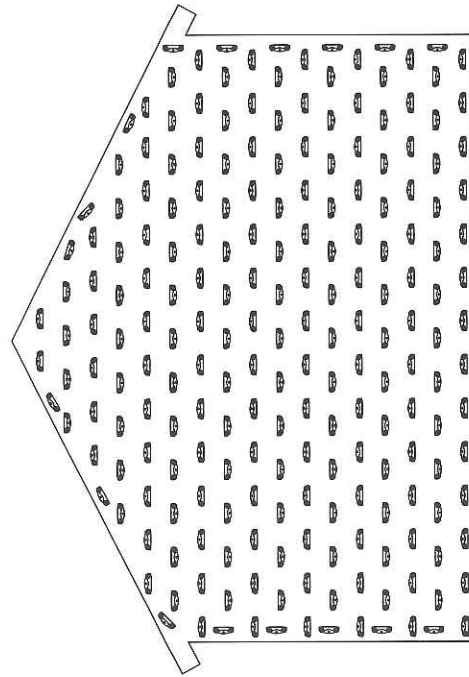
**PERSONA**  
SIGN MAKERS / IMAGE BUILDERS

DISTRIBUTED BY SIGN UP COMPANY  
700 21st Street Southwest  
PO Box 210  
Wacarrown, SD 57201-0210  
1 (800) 843-9888 • www.personasigns.com

# SIGNS 6A, 6B, & 6C

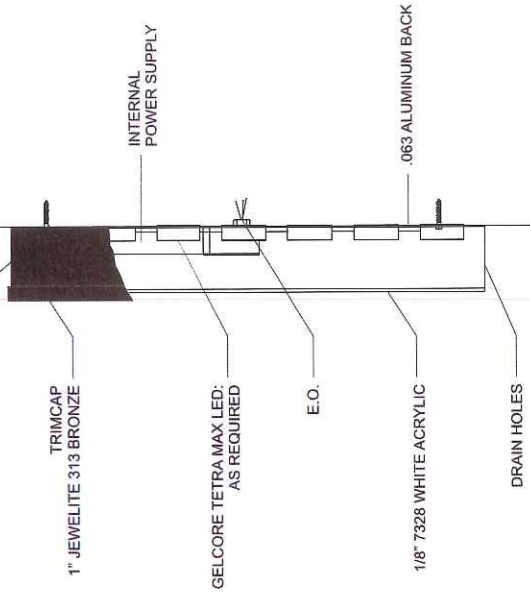


**GRAPHIC DETAIL**  
SCALE: 3/4" = 1'



**LED DETAIL**  
SCALE: NTS

**CROSS SECTION**  
SCALE: NTS



SIGN	AREA
LOGO	17.49 SQ. FT

**NOTES :**

- STAPLED RETURNS
- U.L. APPROVED
- ELECTRICAL - 0.85 AMPS, 120 VOLT / 102 WATTS
- INCLUDE WEATHERITE COMPONENTS
- EXT. FINISH - PREFINISHED BRONZE
- INT. FINISH - PREFINISHED WHITE

Note: Color output may not be exact when viewing or printing this drawing. All colors used are PMS or the closest CMYK equivalent. If these colors are incorrect, please provide the correct PMS match and a revision to this drawing will be made.

**DISTRIBUTED BY SIGN UP COMPANY**  
700 21st Street Southwest  
PO Box 210  
Waceton, SD 57201-0210  
1 (800) 843-9888 • www.persona-inc.com



Customer:	<b>CASEY'S</b>	Date:	<b>4-28-14</b>	Prepared By:	<b>TtT/MR/CM</b>
Location:	<b>VARIOUS</b>	File Name:	<b>4X5 LOGO - R1</b>	Eng:	-

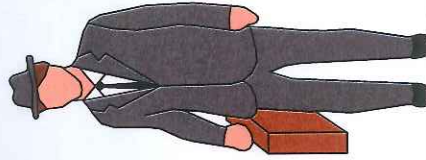
SIGN	TYPE	HEIGHT	WIDTH	TOP	BOTTOM	BOX FT <sup>2</sup>	TRUE FT <sup>2</sup>
HOUSE LOGO	SURFACE	4'-0"	5'-8 7/8"	8'-6"	4'-6"	22.97 FT <sup>2</sup>	17.49 FT <sup>2</sup>
PRICER	SURFACE	2'-9"	7'-7.5"	8'-6"	2'-0"	21 FT <sup>2</sup>	21 FT <sup>2</sup>
<b>TOTAL AREA</b>						<b>38.49 FT<sup>2</sup></b>	

**PRICER NOTES:**

- 10" AMBER AND GREEN LED
- STATIC DIESEL, GREEN LABEL - WHITE COPY, LABEL NON-INTERCHANGEABLE
- DIESEL ON THE RIGHT, BOTH SIDES
- STATIC OTHER, YELLOW LABEL - BLACK COPY, LABEL NON-INTERCHANGEABLE

**OTHER NOTES**

- CABINET IS BLACK IN COLOR
- 300' WIRELESS KEYPAD RANGE



\*PRODUCT LABELS AND PRICING SUBJECT TO CHANGE



**MONUMENT PRICE SIGN**  
**3 PRODUCT**

DRAWN BY:  
J. CLARK

DATE:  
01-13-16



Typical Pump Signage

# CASEY'S GENERAL STORE

## CRYSTAL LAKE, IL 60014

### E. TERRA COTTA AVENUE (IL ROUTE 176) AND TERRA COTTA ROAD

**ARC DESIGN**  
RESOURCES INC.

5291 ZENITH PARKWAY  
LOVES PARK, IL 60111  
VOICE: (815) 484-4300  
FAX: (815) 484-4303

www.arcdesign.com  
Design Firm License No. 184-001334

PROJECT NAME  
OWNER'S NAME

**CASEY'S GENERAL STORE**

CRYSTAL LAKE, IL  
E. TERRA COTTA AVE &  
TERRA COTTA ROAD

CASEY'S RETAIL COMPANY  
ONE CONVENIENCE BLVD  
ANKENY, IA 50021  
JACOB CLARK  
(515) 963-3831

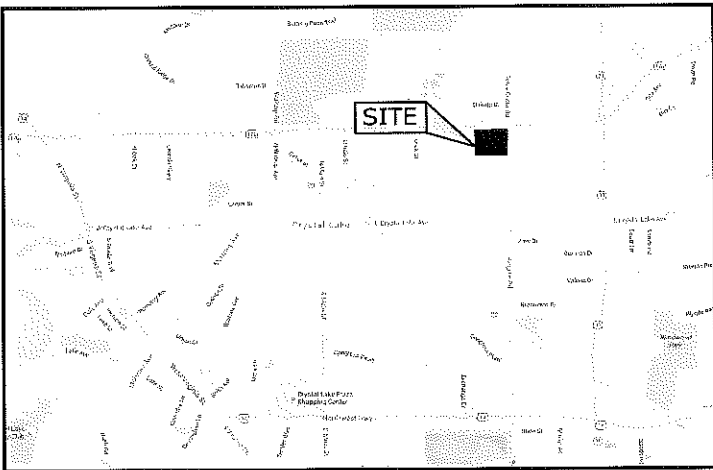
CONSULTANTS

ISSUED FOR	DATE
PRELIMINARY SPECIAL USE	12-15-2015
INITIAL IDOT REVIEW	01-15-2016
SPECIAL USE	01-19-2016
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REVISIONS	DATE
1.---	----
2.---	----
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7.---	----

#### GENERAL NOTES

- The designs represented in these plans are in accordance with established practices of civil engineering for the design functions and uses intended by the owner at this time. Neither the engineer nor its personnel can or do warrant these designs or plans as constructed except in the specific cases where the engineer inspects and controls the physical construction on a contemporary basis at the site.
- The contractor, by agreeing to perform the work, agrees to indemnify and hold harmless the owner, the engineer, the City, and all agents and assigns of those parties, from all suits and claims arising out of the performance of said work, and further agrees to defend or otherwise pay all legal fees arising out of the defense of said parties.
- In accordance with generally accepted construction practices, the contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal working hours. Any construction observation by the engineer of the contractor's performance is not intended to include review of the adequacy of the contractor's safety measures, in, or near the construction site. The contractor is responsible for maintaining adequate signs, barricades, fencing, traffic control devices and measures, and all other measures that are necessary to protect the safety of the site at all times.
- Maintain access for vehicular and pedestrian traffic as required for other construction activities. Use traffic control devices to include temporary striping, flagmen, barricades, warning signs, and warning lights shall be in accordance with current MUTCD and IDOT standards.
- All phases of the site work for this project shall meet or exceed industry standards and requirements set forth by the owner's "Description of Work", City of Crystal Lake, the State of Illinois, and this plan set.
- The City of Crystal Lake must be notified at least two (2) working days prior to the commencement or resumption of any work.
- The contractor shall coordinate all permit and inspection requirements with responsible local, state, and federal agencies. The contractor shall include the costs of this coordination and all inspection fees in the bid price.
- All work performed by the contractor shall come with a warranty against defects in workmanship and materials. This warranty period shall run concurrent with the required warranty periods the owner must provide to each local government agency, as a condition of the permit.
- The contractor will be held solely responsible for and shall take precautions necessary to avoid property damage to adjacent properties during the construction of this project.
- All structures, inlets, pipes, swales, roads and public egresses must be kept clean and free of dirt and debris at all times.
- Any field tiles encountered during construction shall be recorded showing size, location, and depth by the contractor, and either reconnected and rerouted or connected to the storm sewer system. The owner shall be notified immediately upon encountering any tile.
- The contractor shall field verify the elevations of the benchmarks prior to commencing work. The contractor shall also field verify the location and elevation of existing pipe inverts, curb or pavement where matching into existing work. The contractor shall field verify horizontal control by referencing property corners to known property lines. Notify the engineer of discrepancies in either vertical or horizontal control prior to proceeding.
- All elevations are on USGS datum.
- Parking areas designated as A.D.A. and all sidewalk shall be compliant with state and local A.D.A. requirements.
- Tactile warning plates per IDOT specifications shall be placed at all locations where sidewalk that is to be replaced intersects public roads and at locations indicated in this plan set.
- The contractor shall verify the location of all utilities in the field prior to construction. This includes sanitary sewer, water main, storm sewer, AT&T, ComEd, Nicor, and Mediacom, if any. The J.U.L.I.E. number is 1-800-892-0123.
- Property corners shall be carefully protected until they have been referenced by a Professional Land Surveyor.
- The contractor shall keep careful measurements and records of all construction and shall furnish the Engineer, the Owner and the City with record drawings in a digital format compatible with AutoCAD Release 14 upon completion of his work.
- Any excess dirt or materials shall be placed by the contractor onsite at the owner's direction or as indicated on the plans.
- Notify the owner and City of Crystal Lake of any existing wells. Obtain permit from the Illinois Bureau of Minerals and the State Water Survey. Cap and abandon wells in accordance with local, state, and federal regulations.
- Finish grade shall in all areas not specifically reserved for storm water management shall drain freely. No ponding shall occur. Tolerances to be observed will be measured to the nearest 0.04 of a foot for paved surfaces and 0.10 of a foot for unpaved areas.

#### VICINITY MAP



#### INDEX OF SHEETS

SHEET NUMBER	SHEET TITLE
C00	COVER
C01	GENERAL NOTES
C02	GENERAL NOTES
C03	SWPPP
C04	REMOVALS PLAN
C05	LAYOUT PLAN
C06	GRADING PLAN
C07	DRAINAGE PLAN
C08	UTILITY PLAN
C09	DETAILS
C10	DETAILS
C11	IDOT DETAILS
C12	IDOT DETAILS
C13	IDOT DETAILS
C14	IDOT DETAILS
C15	CRYSTAL LAKE DETAILS
C16	CRYSTAL LAKE DETAILS
C17	CRYSTAL LAKE DETAILS
L01	LANDSCAPING PLAN
L02	LANDSCAPE NOTES

APPROVAL	DATE
CITY OF CRYSTAL LAKE IDOT	PENDING PENDING

#### UTILITY OFFICIALS

<b>CITY HALL</b> CITY OF CRYSTAL LAKE 100 W. WOODSTOCK STREET CRYSTAL LAKE, IL 60014	<b>STREET DEPARTMENT</b> CITY OF CRYSTAL LAKE LARRY ZUREK STREETS DIVISION SUPT. (815) 356-3614
<b>WATER AND SEWER DEPARTMENT</b> CITY OF CRYSTAL LAKE ANDREW RESEK WATER AND SEWER SUPT. (815) 356-3614	<b>CITY ENGINEER</b> CITY OF CRYSTAL LAKE ABIGAIL WILGREEN CITY ENGINEER (815) 356-3605

<b>WASTEWATER DEPARTMENT</b> CITY OF CRYSTAL LAKE DAN LANGFOUTH WASTEWATER SUPT. (815) 459-2020 EXT. 4169	<b>ELECTRIC:</b> COMED 1(800)334-7661 P.O. BOX 805379 CHICAGO, IL 60680-5379
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Call Before You Dig  
**JULIE**  
ILLINOIS  
ONE CALL SYSTEM  
DIAL 811 OR  
(800) 892-0123

#### OWNER:

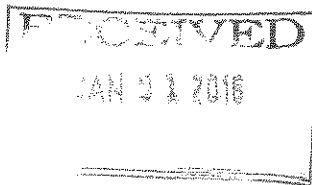


CASEY'S RETAIL COMPANY  
ONE CONVENIENCE BLVD  
ANKENY, IA 50021  
JACOB CLARK (515) 963-3831

#### ENGINEER:



5291 ZENITH PARKWAY  
LOVES PARK, IL 60111  
VOICE: (815) 484-4300  
FAX: (815) 484-4303  
www.arcdesign.com  
Design Firm License No. 184-001334



2015 66

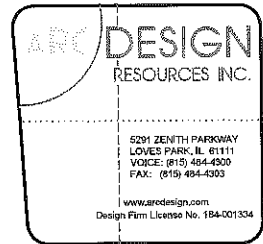
SHEET TITLE  
**COVER**

DRAWN	DRH
CHECKED	AGS
PH	RCS

PROJECT NUMBER  
SHEET NUMBER

15134

C00



PROJECT NAME  
OWNER'S NAME

**CASEY'S  
GENERAL  
STORE**

CRYSTAL LAKE, IL  
E. TERRA COTTA AVE &  
TERRA COTTA ROAD

CASEY'S RETAIL COMPANY  
ONE CONVENIENCE BLVD  
ANKENY, IA 50021  
JACOB CLARK  
(515) 963-3831

CONSULTANTS

NO.	NAME	TYPE	DATE

ISSUED FOR

NO.	DESCRIPTION	DATE
1.	PRELIMINARY SPECIAL USE	12-15-2015
2.	INITIAL IDOT REVIEW	01-15-2016
3.	SPECIAL USE	01-19-2016
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REVISIONS

NO.	DESCRIPTION	DATE
1.		
2.		
3.		
4.		
5.		
6.		
7.		

SHEET TITLE

**GENERAL NOTES**

DRAWN: LND  
CHECKED: RGS  
PH: RCS

PROJECT NUMBER  
SHEET NUMBER

**15134**  
**C01**

**GENERAL SITE WORK**

- Pre-Construction meeting shall be conducted with City Staff and all Contractors prior to commencing any grading or underground utility construction activities (schedule meeting with the Community Development Department at 915-338-3015).
- 24-hour Emergency contact numbers shall be provided to City Staff at the Pre-Construction meeting.
- Working hours shall be limited to the hours of 7:00 a.m. and 7:00 p.m. on weekdays only (except in cases of emergencies). After-emergency work on weekdays or holidays is not permitted per City Code except under written permission from the City Engineer. The owner is responsible for the City Inspector code of overtime inspection beyond the normal eight (8) hour day, including weekends and holidays.
- Public/private streets shall be kept free of dirt and debris with regular cleaning, sweeping, and scraping conducted by the Contractor. Junk and debris shall not be allowed to accumulate, blow, or scatter onto streets or adjacent properties.
- J.U.L.I.E. shall be contacted for utility locations on-site and in the adjacent rights-of-way.
- Contractor shall provide and maintain fencing, berms, traffic control signs, and other safeguarding measures during the course of all work to protect the public from the construction operation.
- Maintain access to adjacent streets during construction. No closing of streets unless approved in writing from the agency with jurisdiction (City of Crystal Lake, McHenry County Department of Transportation, Illinois Department of Transportation, etc.).
- Any damage to public right-of-way, public utilities, streets, curbs, etc. shall be repaired/replaced as soon as possible and as directed by the City Engineer.
- The contractor shall give the City of Crystal Lake, Illinois Department of Transportation, and any other governmental agency having jurisdiction, at least two (2) working days notice excluding Saturday and Sunday prior to the initiation of any plans of construction. Contractor shall immediately notify if construction has ceased and re-notify the two (2) working day notification thereafter.
- The Contractor shall be responsible for obtaining all required permits for construction prior to commencement along or across existing streets or highways. The Contractor shall make arrangements for the proper paving, storming and other protection of all roadways before construction begins.

**GRADING:**

- The grading and construction of the site improvements shall not cause ponding of storm sewer water. All areas adjacent to these improvements shall be graded to allow positive drainage.
- The proposed grading elevations shown on the plans are finished grade. A minimum of six (6) inches of topsoil is to be placed before finished grade elevations are achieved.
- Embankment material within pathway and open space areas shall be compacted to a minimum of ninety percent (90%) of maximum density in accordance with ASTM Specification D-1587 (modified proctor method), or to such other density as may be determined appropriate by the soils engineer.
- All subgrade material shall have a minimum CBR (California Bearing Ratio) of 2.0 as determined by the soils engineer, or base replacement and pavement design revisions shall be provided which are adequate to obtain equivalent pavement strength.
- Proposed pavement areas, building pads, driveways and sidewalks and yard/open space areas shall be excavated or filled to plus or minus 0.1 foot of design subgrade elevations by the Contractor.
- Any borrow pit locations shall be identified by the Contractor on a copy of the approved site plans and forwarded to the Engineering Division at least 24-hours prior to excavation. Provide backfill compaction reports from a geotechnical engineer and as-built plans to the Engineering Division for any borrow pit area.
- Backfill shall be monitored by a geotechnical engineer on-site with compaction reports forwarded to the Engineering Division for review.
- Water truck shall be on-site at all times during mass-grading operations and be available as needed for the purposes of dust control or at the request of City Staff.
- Use of City fire hydrants is not allowed unless approved (separate from this permit) by the Public Works Department and a hydrant meter and RPR is obtained from the City of Crystal Lake Water Division (915-338-9814). Only the City of Crystal Lake Water Division may operate valves and hydrants.

Revised: 1. 06/12/2015  
Drawing Name: **STANDARD NOTES AND SPECIFICATIONS**  
Drawing Number: **GE-02a**  
Date: 01/30/15  
City of Crystal Lake, ILLINOIS  
Drawn: DD  
Checked: AW

**TOPSOIL STOCKPILING:**

- Location of any on-site topsoil stockpiles shall be identified on the approved plans with silt fence installed around the perimeter of the stockpile.
- Topsoil stockpiled for future use shall be relatively free from large roots, sticks, weeds, brush, stones larger than one (1) inch diameter, or other filler and waste products including other extraneous materials not conducive to plant growth.
- Topsoil shall be stockpiled in sequence to eliminate any re-handling or double movements by the Contractor. Failure to properly sequence the stockpiling operations shall not constitute a claim for additional compensation. No material shall be stockpiled in front yards, in utility easements, or in the right-of-way lanes.
- If a stockpile is to remain in place for more than (14) calendar days, it is required that the stockpile meet the requirements as outlined in section 565 of the City Code.

**UNDERGROUND UTILITY:**

- The Contractor shall coordinate water main, water service, sanitary and storm sewer inspections and testing with the Community Development at least 24 hours in advance.
- All main (the sanitary shall be cleaned and televised (provide DVD to the City's Engineering Division).
- All manhole or valve covers shall be imprinted "City of Crystal Lake Sanitary" or "City of Crystal Lake Storm" or "City of Crystal Lake Water" as directed by the City.
- Reference the latest edition of the Standard Specifications for Water and Sewer Main Construction in Illinois.
- Existing manholes to be unclogged and booted.

**EROSION CONTROL:**

- All specified erosion control measures shall be installed and maintained per the requirements of the Crystal Lake Stormwater Ordinance in accordance with the active NPDES permit.
- All slopes 4:1 or steeper shall be sodded or blanketed immediately after mass earthwork.
- All overland flow routes to be stabilized by sod or blanket.
- Erosion control measures to be inspected and approved by City Engineering Division prior to additional work on-site.
- Continuous monitoring of erosion control measures is required. Maintain records of weekly reports per the City of Crystal Lake Stormwater Ordinance.
- The Contractor shall implement any additional erosion control measures deemed necessary by the City per the standards of the City of Crystal Lake Stormwater Ordinance.
- All storm sewer catch basins, sumps and/or retention basins provided are to be cleaned at the end of construction of the project prior to final acceptance. Cleaning may also be required during the course of the construction of the project if it is determined that the silt and debris traps are not properly functioning and their performance is impaired.
- Rip-rap material RR 2 (R) - RRM (18") shall be in accordance with Article 281 and grouted in place according to Article 601 of the IDOT Standard Specifications.
- Projects of 1 Acre or greater must obtain an NPDES permit prior to commencement of any construction activity.

Revised: 1. 06/12/2015  
Drawing Name: **STANDARD NOTES AND SPECIFICATIONS**  
Drawing Number: **GE-02b**  
Date: 01/30/15  
City of Crystal Lake, ILLINOIS  
Drawn: DD  
Checked: AW

**SANITARY SEWER:**

- Non-ferrous stainless steel couplings shall be used when connecting sewer pipes of dissimilar materials and pipes with no hub joints. When connecting to an existing sanitary sewer by means other than an existing wye or manhole, contractor shall use a Sewer-Tap and Hub-Wye or Tee-Use Jack.
- Unless an alternate method is approved, water stop gaskets shall be provided at all sanitary sewer manhole connections. Type and manufacturer to be approved by the City.
- PVC plastic sewer pipe and fittings of sizes 4-inch through 15-inch shall conform to the latest revised specification requirements of ASTM D2684 for type FPM polyvinyl chloride (PVC) sewer pipe and fittings of minimum wall thickness SDR 35.
- Joints shall be either the solvent weld type conforming to the latest revised specification requirements of ASTM D2664 and ASTM D2885, or elastomeric gasket type conforming to the latest revised specification requirements of ASTM D1699 and ASTM D2122.
- A thicker walled pipe such as SDR 26 may be specified by the engineer depending on design and/or field conditions.
- PVC plastic sewer pipe and fittings of sizes 18-inch through 36-inch shall conform to the latest revised specification requirements of ASTM F870 or polyvinyl chloride (PVC) large diameter ribbed gravity sewer pipe and fittings, with integral 90° gasketed joints and elastomeric gaskets to form a watertight seal conforming to the latest revised specification requirements of ASTM F477 or ASTM D2122.
- Pipe and fittings shall be the products of one approved manufacturer only, and there shall not be any mixing of pipe and fittings of different manufacturers between manholes.
- The handling and installation of pipe, assembly or joints, and manhole connections shall be in accordance with the manufacturer's recommendations.
- Gasket-type watertight collars consist of a neoprene collar and a stainless steel band or other approved manhole watertight shall be installed whenever the pipe passes through the manhole walls to provide a watertight joint to prohibit infiltration into the sewer system.
- PVC pipe shall be installed in accordance with the latest revised specification requirements of ASTM D2321 using either compacted class 1 or class II granular embankment materials for bedding, haunching and initial backfill of 12 inches over the top of pipe to provide the necessary support for the pipe so that the maximum deflection does not exceed five percent of the pipe's original internal diameter.
- The Contractor shall provide the necessary tools and equipment and perform the work necessary to test the deflection in the initial 1,200 feet of installed sewer and not less than ten percent (10%) of the remainder of the sewer project at random locations selected by the engineers no sooner than 30 days after backfilling has been completed. In the event that deflection exceeds the maximum limit of five percent (5%), the Contractor shall test all other new flexible pipe for deflection. Deflection shall be tested by use of either a tripod or rigid ball having a diameter equal to ninety-five percent (95%) of the inside diameter of the pipe, and the test shall be performed without using mechanical pulling devices. Whenever the deflection limitation is exceeded, the contractor shall uncover the pipe, carefully replace compacted embankment and backfill material, and retest for deflection.
- The Contractor shall install all sanitary sewers, including service lines, to an air test. Allowable infiltration shall not exceed 100 gallons per inch diameter of pipe per mile per day.
- The Contractor shall also televise all public sanitary sewers. Televising of sanitary sewers, cost for televising, and testing shall be the responsibility of the Contractor.
- Cast Iron Soil Pipe service weight cast iron soil pipe and fittings conforming C.I.S.P. Specification HS-47 with compression type rubber gasket joints conforming to ASTM specification C554, or other suitable materials approved by the City Engineer.

**WATER MAIN:**

- Water main shall be Ductile Iron or Molecularly Oriented Polyethylene (PE) (MOC).  
a) Ductile Iron water main shall be Class 52 conforming to ANSIAWWA C151/A21.51-09.  
b) Gaskets and seal (non fittings shall conform to ANSIAWWA C112A21.11 and ANSIAWWA C110A21.10 respectively.  
c) PE - See City Detail UW-12 and UW-13.
- Triangular blocks or Mega-Lug or pre-approved equal shall be installed on water mains at all bends, tees, elbows, etc. except as noted below.
- Triangular blocks not certified with 45 degree vertical bends in water main (these shall be restrained with Mega-Lug or pre-approved equal).
- When specified, ductile iron pipe shall be encased in polyethylene and shall conform with ANSIAWWA C115A21.10-10 and ASTM A674-10.
- Minimum cover from finished grade to top of water main shall be six (6) feet. Maximum cover shall be eight (8) feet.
- Water Main Taps: An Illinois licensed plumber is required for any water main tap.
- All water mains shall be subjected to a pressure test and a separate leakage test at system pressure for 24 hours by the Contractor. Hydrostatic pressure test and leakage test shall be based on 125 PSI for two (2) hours. Water mains shall be chlorinated in accordance with the Standard Specifications.
- The Underground Contractor shall consider incidental to the contract any determination and testing of existing water main whose connections to and condition of such mains is indicated on the drawing.

**PAVING:**

- All subgrades and bases shall be proof-rolled and approved by the Engineering Division prior to base or binder installation.
- Subgrade and proposed pavements shall be finished by the Excavation Contractor to within 0.1 foot plus or minus, of plan elevation.
- The Paving Contractor shall ensure that the subgrade has been properly prepared and that the finished top of subgrade elevation has been ground within the tolerances allowed in these specifications. Unless the Paving Contractor advises the owner and engineer in writing prior to base grading for base course construction, it is understood that the Contractor has approved and accepts responsibility for the subgrade.
- For the purposes of providing handicap accessibility and complying with the American Disability Act and City Standards, curbs shall be depressed at locations where public walks or pedestrian paths intersect curb lines at street intersections and other locations as directed.
- 3/4 inch thick precast fiber expansion joints with two (2) No. 4 plain round steel dowel bars shall be installed at designated intervals and at all P.C., P.T., curb returns and at the end of each pour. Alternate ends of the dowel bars shall be greased and filed with metal expansion tubes.
- 3/4 inch thick fiber expansion joints shall be used in every case where the sidewalk intersects with the curb and gutter. Contraction joints shall be saw cut at designated intervals in the curb. The cost of these joints shall be considered as incidental to the cost of the contract.
- All poured in place concrete curb and gutter shall incorporate two (2) No. 4 reinforcing bars installed wherever the curb and gutter crosses utility service lines, the cost of which shall be considered incidental to the cost of concrete curb and gutter.
- Sidewalks (where required) shall be of the thickness and dimensions as shown in the construction plans. All sidewalk concrete shall be a minimum of 6.1 bag mix (or IDOT class SF concrete) and shall develop a minimum of 3,800 psi compressive strength at fourteen (14) days. Contraction joints shall be set at five (5) foot centers, and one-half inch (1/2) inch precast fiber expansion joints at fifty (50) foot centers and where the sidewalk meets the curb or another sidewalk, or at the end of each pour. All sidewalks constructed over utility trenches and/or abutting driveway aprons shall be reinforced with three (3) No. 4 reinforcing bars (16 foot minimum length).

Revised: 1. 06/12/2015  
Drawing Name: **STANDARD NOTES AND SPECIFICATIONS**  
Drawing Number: **GE-02c**  
Date: 01/30/15  
City of Crystal Lake, ILLINOIS  
Drawn: DD  
Checked: AW

**WATER MAIN:**

- Water main shall be Ductile Iron or Molecularly Oriented Polyethylene (PE) (MOC).  
a) Ductile Iron water main shall be Class 52 conforming to ANSIAWWA C151/A21.51-09.  
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- Triangular blocks or Mega-Lug or pre-approved equal shall be installed on water mains at all bends, tees, elbows, etc. except as noted below.
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- All subgrades and bases shall be proof-rolled and approved by the Engineering Division prior to base or binder installation.
- Subgrade and proposed pavements shall be finished by the Excavation Contractor to within 0.1 foot plus or minus, of plan elevation.
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Revised: 1. 06/12/2015  
Drawing Name: **STANDARD NOTES AND SPECIFICATIONS**  
Drawing Number: **GE-02d**  
Date: 01/30/15  
City of Crystal Lake, ILLINOIS  
Drawn: DD  
Checked: AW





ISSUED FOR	DATE
PRELIMINARY SPECIAL USE	12-15-2015
INITIAL IDOT REVIEW	01-15-2016
SPECIAL USE	01-19-2016
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ITEM	DATE
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**LEGEND**

---	PROPERTY LINE	○	EXISTING WATER TO REMAIN
---	LOT LINE	○	EXISTING WATER TO BE REMOVED
---	EXISTING CONCRETE CURB AND GUTTER TO REMAIN	○	EXISTING SIGN
---	EXISTING CONCRETE CURB AND GUTTER TO BE REMOVED	○	EXISTING SIGN TO BE REMOVED
[Hatched Box]	EXISTING PAVEMENT, CONCRETE SIDEWALKS OR FOUNDATIONS TO BE REMOVED	○	GAS METER
[Hatched Box]	APPROX. LIMITS OF TREE/BRUSH REMOVAL	○	GAS METER TO BE REMOVED
---	EXISTING SANITARY SEWER TO REMAIN	○	ELECTRICAL METER
---	EXISTING SANITARY SEWER TO BE REMOVED	○	MAIL BOX
---	EXISTING STORM SEWER TO REMAIN	○	A/C UNIT
---	EXISTING STORM SEWER TO BE REMOVED	○	BOLLARD
---	EXISTING WATER TO REMAIN	○	SANITARY CLEAN OUT
---	EXISTING OVERHEAD UTILITIES	○	EXISTING LIGHT POLE TO REMAIN
---	EXISTING GAS MAIN	○	EXISTING LIGHT POLE TO BE REMOVED
---	EXISTING GAS MAIN TO BE REMOVED	○	REMOVE EXISTING TREE
X X	EXISTING FENCE TO REMAIN	○	"SALVAGE"
X X	EXISTING FENCE TO BE REMOVED	○	TYPICAL FOR ALL SIMILAR ITEMS WITHIN THE LIMIT OF DEMOLITION ACTIVITY
○	EXISTING SANITARY SEWER TO REMAIN	○	BENCHMARK
○	EXISTING SANITARY SEWER TO BE REMOVED	(SVG)	
○	EXISTING STORM SEWER TO REMAIN	(TYP)	
○	EXISTING STORM SEWER TO BE REMOVED		

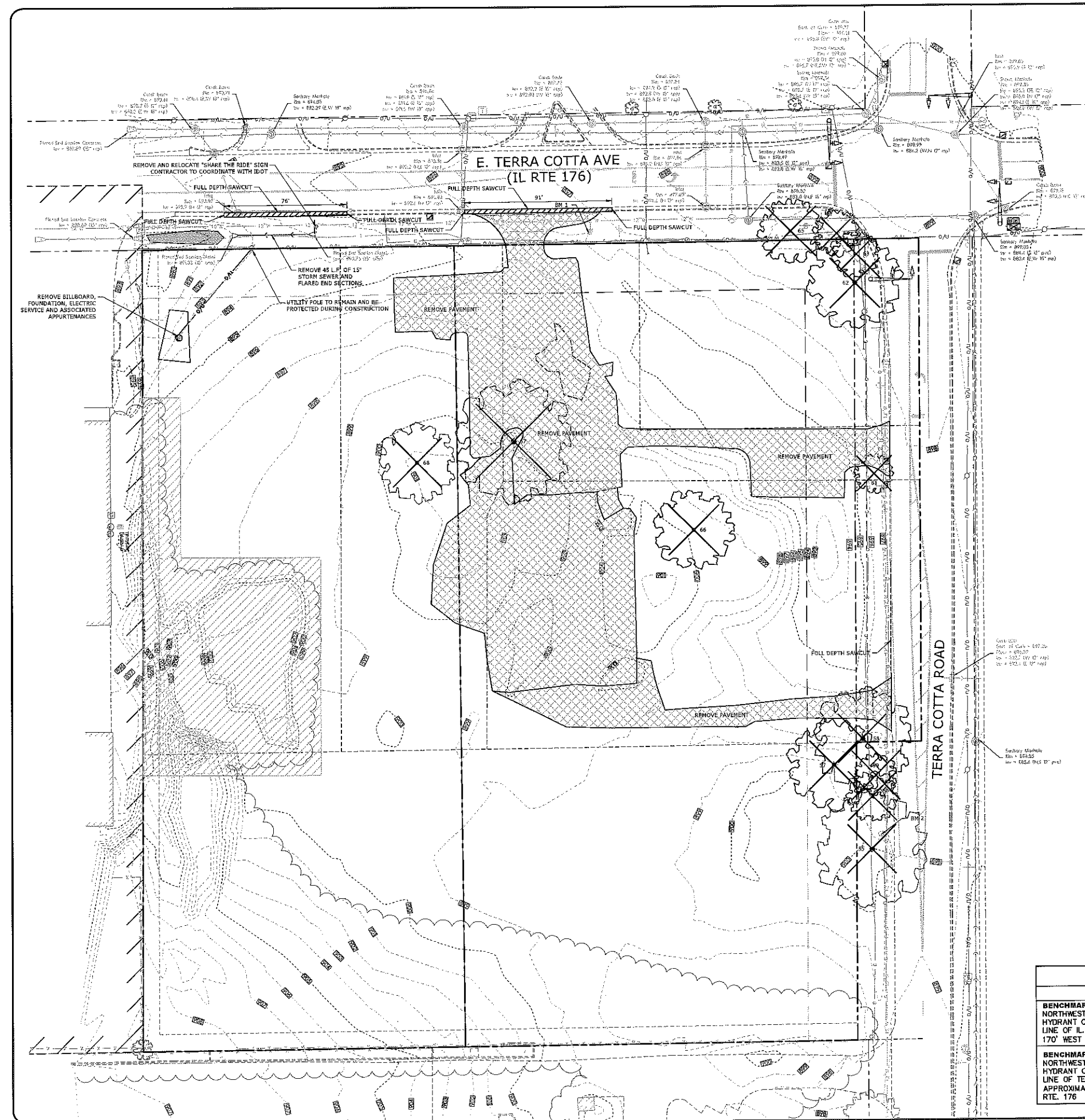
SEE ALTA SURVEY FOR EXISTING GRADES AND ADDITIONAL INFORMATION  
REFER TO DEMOLITION NOTES ON SHEET C01

**TREE LEGEND**

Tag #	Species	DBH	Rating	Group
55	Box Elder	32	4	D
56	Box Elder	25	3	D
57	Box Elder	23	4	D
58	Box Elder	28	4	D
59	Box Elder	24	4	D
61	Box Elder	17	4	D
62	Bur Oak	40	2	A
63	Bur Oak	21	2	A
64	Bur Oak	25	2	A
65	Bur Oak	33	2	A
66	Bur Oak	32	2	A
67	Bur Oak	48	2	A
68	Black willow	50	5	D

**BENCHMARKS**

DESCRIPTION	ELEVATION (USGS)
<b>BENCHMARK 1</b> NORTHWEST FLANGE BOLT ON FIRE HYDRANT ON SOUTH RIGHT-OF-WAY LINE OF IL. RTE. 176 APPROXIMATELY 170' WEST OF TERRA COTTA ROAD	898.66
<b>BENCHMARK 2</b> NORTHWEST FLANGE BOLT ON FIRE HYDRANT ON WEST RIGHT-OF-WAY LINE OF TERRA COTTA ROAD APPROXIMATELY 365' SOUTH OF IL. RTE. 176	901.18



**ARC DESIGN**  
RESOURCES INC.

5291 ZENITH PARKWAY  
LOVES PARK, IL 61111  
VOICE: (815) 464-4300  
FAX: (815) 464-4303  
www.arcdesign.com  
Design Firm License No. 184-001334

PROJECT NAME  
OWNER'S NAME

**CASEY'S GENERAL STORE**

CRYSTAL LAKE, IL  
E. TERRA COTTA AVE &  
TERRA COTTA ROAD

CASEY'S RETAIL COMPANY  
ONE CONVENIENCE BLVD  
ANKENY, IA 50021  
JACOB CLARK  
(515)963-3831

CONSULTANTS

ISSUED FOR

PRELIMINARY SPECIAL USE	DATE
INITIAL IDOT REVIEW	12-15-2015
SPECIAL USE	01-15-2016
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REVISIONS

ITEM	DATE
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SHEET TITLE

**LAYOUT PLAN**

DRAWN	END
CHECKED	RGS
PH	ACS

PROJECT NUMBER  
SHEET NUMBER

15134  
C05

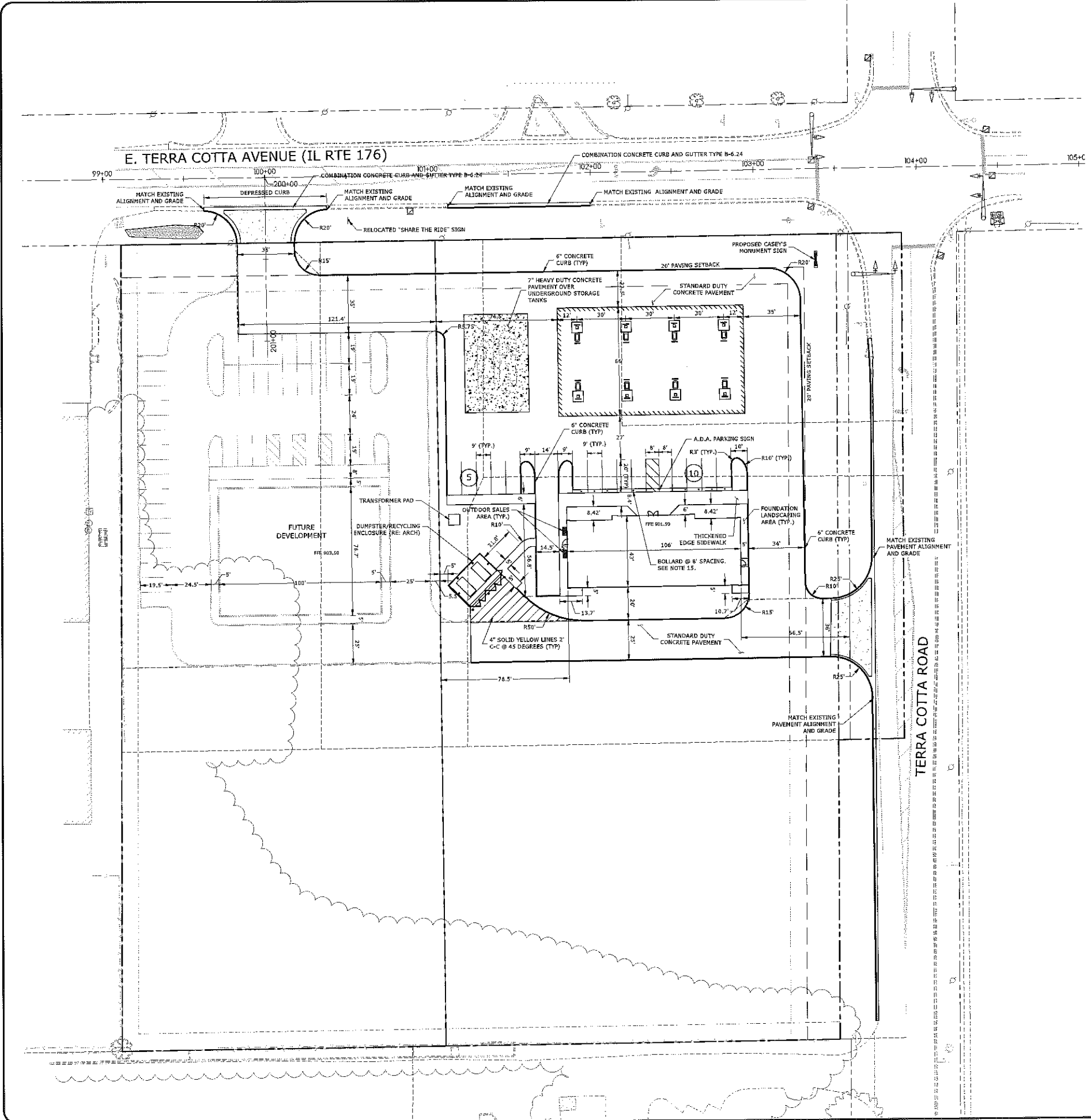
**LEGEND**

	PROPERTY LINE		CONCRETE PAVEMENT WITH INTEGRAL CURB
	EXISTING RIGHT-OF-WAY		7" HEAVY DUTY CONCRETE (UGST)
	PROPOSED SETBACK LINE		8" HEAVY DUTY CONCRETE (DRIVEWAYS)
	PROPOSED EASEMENT		HMA
	EXISTING LOT LINE		PROPOSED CONCRETE CURB
	PROPOSED FENCE		EXISTING CONCRETE CURB AND GUTTER
	EXISTING FENCE		
	SIDEWALK PAVEMENT		
	SOD TURF AREAS WITHIN PROPERTY UNLESS OTHERWISE DIRECTED BY OWNER		
	REFLECTING CURB AND GUTTER		
	NUMBER OF PROPOSED PARKING SPACES PAINTED YELLOW STRIPES		LIGHT POLE & FIXTURE
	EXISTING UTILITY POLE		BENCHMARK
	EXISTING MAILBOX		PROPOSED STRIPING
	EXISTING LIGHT POLE		EXISTING SIGNAL CONTROLLER
	PROPOSED SIGN		
	EXISTING SIGN		

- LAYOUT NOTES**
- THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATIONS OF THE BENCHMARKS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL ALSO FIELD VERIFY LOCATION AND ELEVATION OF EXISTING PIPE INVERTS, FLOOR ELEVATIONS, CURB OR PAVEMENT WHERE MATCHING INTO EXISTING WORK. THE CONTRACTOR SHALL FIELD VERIFY HORIZONTAL CONTROL BY REFERENCING SHOWN COORDINATES TO KNOWN PROPERTY LINES. NOTIFY ENGINEER OF DISCREPANCIES IN EITHER VERTICAL OR HORIZONTAL CONTROL PRIOR TO PROCEEDING WITH WORK.
  - REFER TO ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
  - DIMENSIONS THAT LOCATE THE BUILDING ARE MEASURED TO THE OUTSIDE FACE OF THE BUILDING.
  - SIGN CONSTRUCTION AND PAVEMENT MARKINGS SHALL CONFORM TO THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
  - COORDINATE WORK WITHIN TERRA COTTA ROAD WITH THE CITY OF CRYSTAL LAKE.
  - COORDINATE WORK WITHIN E. TERRA COTTA AVENUE (IL RTE 176) WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT). TRAFFIC CONTROL SHALL CONFORM TO IDOT STANDARDS FOR WORK WITHIN THE R.O.W.
  - ALL RADII ARE DIMENSIONED TO THE BACK OF CURB.
  - ALL CURB AND GUTTER IS INTEGRAL TO PAVEMENT UNLESS NOTED OTHERWISE. REFER TO THE DETAIL SHEETS FOR CURB DETAILS.
  - SOME FIELD ADJUSTMENTS MAY BE NECESSARY AT POINTS WHERE PROPOSED PAVEMENT, CURB AND SIDEWALKS MEET EXISTING PAVEMENT, CURB AND SIDEWALKS. REVIEW ANY REQUIRED CHANGES WITH ENGINEER PRIOR TO CONSTRUCTION OF WORK.
  - ELECTRICAL CIRCUITRY TO SITE LIGHTING AND PYLON SIGN SHOWN ON ARCHITECTURAL PLANS.
  - FOR REQUIRED PAVEMENT REMOVAL ADJACENT TO THE CURB AND GUTTER REMOVAL WITHIN RIGHT OF WAY, A FULL DEPTH SAWCUT SHALL BE UTILIZED AND SHALL NOT BE LESS THAN 3' IN WIDTH.
  - FOR ALL PAVEMENT PATCHING WITHIN THE RIGHT OF WAY THE BACKFILL MATERIAL USED SHALL BE CONTROLLED LOW STRENGTH MATERIAL (COMPACTED STONE) WITH A MINIMUM THICKNESS OF 10 INCHES AND SHALL MATCH UP TO THE BOTTOM OF THE PAVEMENT IF SECTION THICKNESS IS GREATER THAN MINIMUM REQUIREMENTS. THE THICKNESS OF THE HMA PAVEMENT REPLACEMENT SHALL BE A MINIMUM OF 3 INCHES AND SHALL MATCH THE EXISTING PAVEMENT SECTION IF GREATER THAN MINIMUM REQUIREMENTS. THE MIXES USED SHALL BE HMA BINDER COURSE, IL 18.0 N50, AND HMA SURFACE COURSE, MIX D N50.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARATION, COORDINATION AND OBTAINING APPROVAL OF A TRAFFIC MANAGEMENT PLAN IF CLOSURES OF LANES EXCEED THE CRITERIA ESTABLISHED IN THE BDE MANUAL.
  - EXISTING MAILBOXES LOCATED WITHIN THE PROPOSED DRIVEWAY ARE TO BE RELOCATED JUST SOUTH OF THE PROPOSED DRIVEWAY RADII. CONTRACTOR SHALL ENSURE MAIL SERVICE IS NOT INTERRUPTED DUE TO RELOCATION OF MAILBOXES. THE EXISTING ORDER OF MAILBOXES MUST BE MAINTAINED IN THE NEW LOCATION. INSTALLED MAILBOXES MUST MEET THE USPS GUIDELINES:
    - POSITION MAIL BOXES 41'-45" ABOVE EDGE OF PAVEMENT.
    - PLACE MAILBOX 6" - 8" BACK FROM THE EDGE OF PAVEMENT.
    - POST SHOULD BE BURIED NO MORE THAN 24" DEEP.
  - SEE DETAIL SHEET C09 OR CASEY'S PLAN, SHEET S-501 DETAIL 4 - FOOTING AT SIDEWALK & BOLLARD DETAIL.

**PARKING TABLE**

REQUIRED PARKING	17
PROVIDED PARKING	15



CONSULTANTS


ISSUED FOR

	DATE
PRELIMINARY SPECIAL USE	12-15-2015
INITIAL IDOT REVIEW	01-15-2016
SPECIAL USE	01-19-2016

REVISIONS

ITEM	DATE
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SHEET TITLE

**GRADING PLAN**

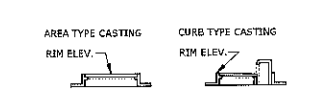
DRAWN	DRH
CHECKED	RGS
PH	RCS

PROJECT NUMBER	
SHEET NUMBER	15134
	C06

**LEGEND**

X=7400.00	TOP OF WALK ELEVATION	---	PROPOSED GRADE BREAK LINE
X=7400.00	TOP OF PAVEMENT ELEVATION	---	EXISTING MANHOLE OR CATCH BASIN
X=7400.00	FINISHED GRADE ELEVATION	---	CATCH BASIN OR MANHOLE, SEE STRUCTURE TABLE
---	EXISTING CONCRETE CURB AND GUTTER	---	CATCH BASIN OR MANHOLE, SEE STRUCTURE TABLE
---	CONCRETE CURB AND GUTTER	---	PROPOSED CLEANOUT
---	PROPOSED CONTOUR LINE	---	DIRECTION OF SHEET FLOW
---	EXISTING CONTOUR LINE	---	BENCHMARK
---		---	PROPOSED STORM SEWER
---		---	EXISTING STORM SEWER
---		---	OVERLAND FLOW ROUTE

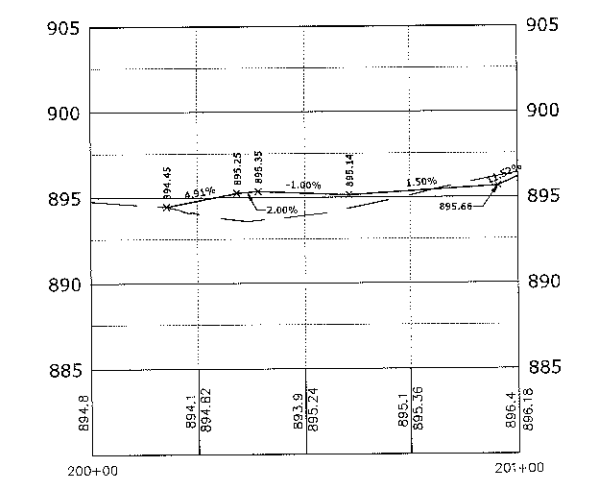
**RIM ELEV. DEFINITION**



**GRADING NOTES**

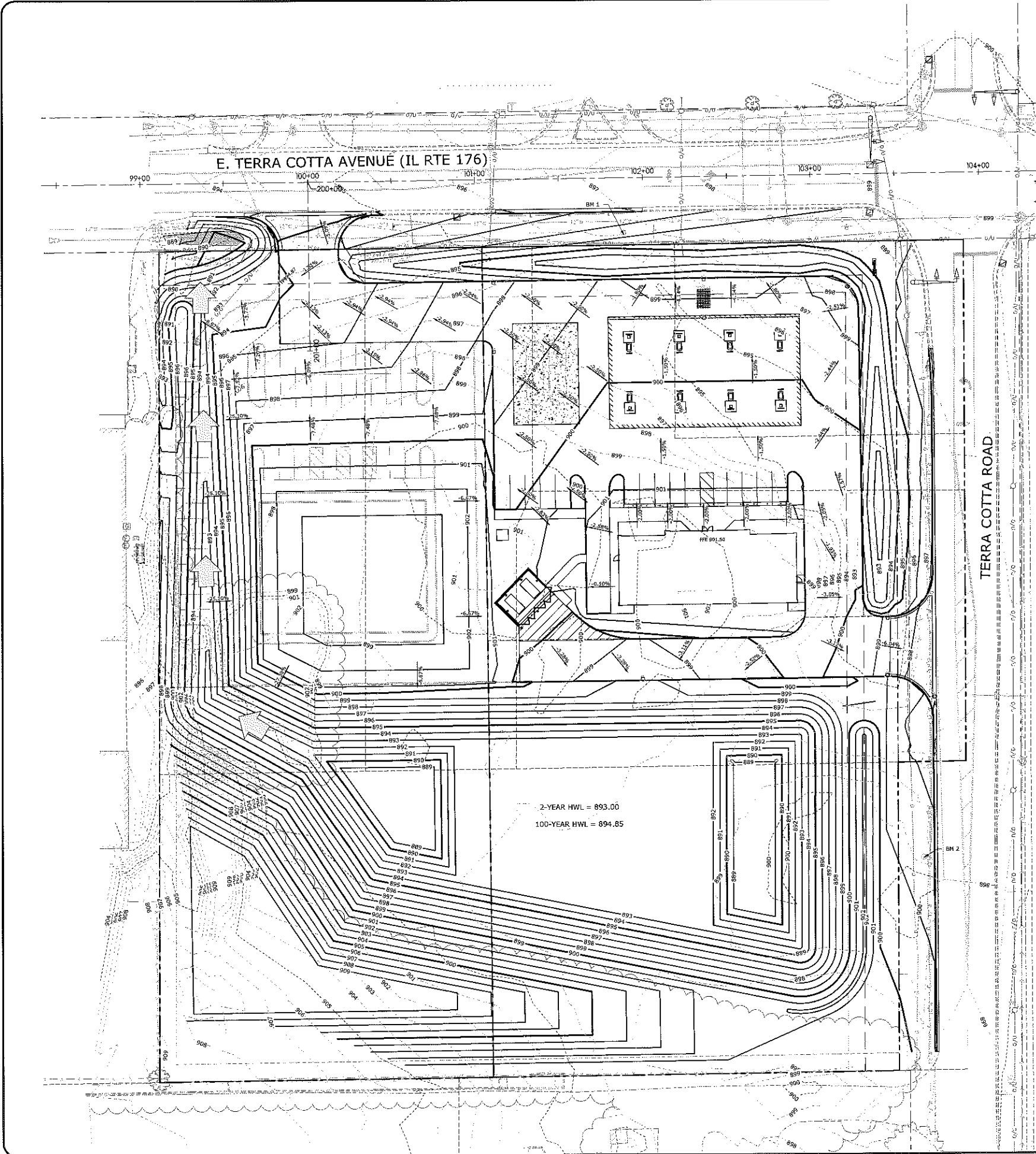
1. THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATIONS OF THE BENCHMARKS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL ALSO FIELD VERIFY LOCATION AND ELEVATION OF EXISTING PIPE INVERTS, FLOOR ELEVATIONS CURB OR PAVEMENT WHERE MATCHING INFO EXISTING WORK. THE CONTRACTOR SHALL FIELD VERIFY HORIZONTAL OR VERTICAL CONTROL POINTS PRIOR TO PROCEEDING WITH WORK.
2. ALL UNSURFACED AREAS ARE TO RECEIVE FOUR INCHES OF TOPSOIL AND SODDED (OR SEEDED WHERE NOTED) AND WATERED UNTIL A HEALTHY STAIN OF GRASS IS OBTAINED.
3. ALL STORM SEWER PIPE IS TO BE REINFORCED CONCRETE CULVERT PIPE CLASS IV UNLESS OTHERWISE NOTED. WHERE HDPE OR PVC PIPE IS LISTED AS ACCEPTABLE MATERIALS, PVC SDR 35, HDPE DOUBLE WALL (ADS N-12), OR PVC SCHEDULE 40 MAY BE USED AT THE CONTRACTOR'S DISCRETION.
4. THE MAXIMUM SLOPE RATIO ON CUT/FILL SLOPES IS 3.5 HORIZONTAL TO 1 VERTICAL.
5. PROPERTY CORNERS SHALL BE CAREFULLY PROTECTED UNTIL THEY HAVE BEEN REFERENCED BY A PROFESSIONAL LAND SURVEYOR. PROPERTY MONUMENTS DISTURBED BY THE CONTRACTOR'S OPERATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
6. CONTRACTOR SHALL SET ALL CLEANOUT, MANHOLE AND INLET CASTINGS, FIRE HYDRANTS AND VALVE BOXES TO FINISHED GRADE.
7. ALL PROPOSED PAVED AREAS SHALL BE STRIPPED OF ALL TOPSOIL AND UNSUITABLE MATERIAL AND EXCAVATED OR FILLED TO WITHIN 0.10 FEET OF DESIGN SUBGRADE.
8. THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE AT THE CONCLUSION OF EACH WORKING DAY.
9. ROOF AND CANOPY DRAIN SHALL INCORPORATE BOOT PER DETAIL. 6" PVC PIPE SHALL EXTEND TO A MAIN AS SHOWN ON THE PLAN. POSITIVE DRAINAGE SHALL BE MAINTAINED TOWARD MAIN AT 0.5% MINIMUM SLOPE. 6" PVC CONNECTION TO BE MADE WITH INSERT-A-TEE OR ENGINEER APPROVED EQUIVALENT BETWEEN DISSIMILAR MATERIALS.

**IDOT DRIVEWAY PROFILE**



**BENCHMARKS**

DESCRIPTION	ELEVATION (USGS)
<b>BENCHMARK 1</b> NORTHWEST FLANGE BOLT ON FIRE HYDRANT ON SOUTH RIGHT-OF-WAY LINE OF IL. RTE. 176 APPROXIMATELY 170' WEST OF TERRA COTTA ROAD	898.66
<b>BENCHMARK 2</b> NORTHWEST FLANGE BOLT ON FIRE HYDRANT ON WEST RIGHT-OF-WAY LINE OF TERRA COTTA ROAD APPROXIMATELY 385' SOUTH OF IL. RTE. 176	901.18



PROJECT NAME  
OWNER'S NAME

**CASEY'S  
GENERAL  
STORE**

CRYSTAL LAKE, IL  
E. TERRA COTTA AVE &  
TERRA COTTA ROAD

CASEY'S RETAIL COMPANY  
ONE CONVENIENCE BLVD  
ANKENY, IA 50021  
JACOB CLARK  
(515)963-3831

CONSULTANTS

ISSUED FOR

DATE	DATE
PRELIMINARY SPECIAL USE	12-15-2015
INITIAL IDOT REVIEW	01-15-2016
SPECIAL USE	03-19-2016
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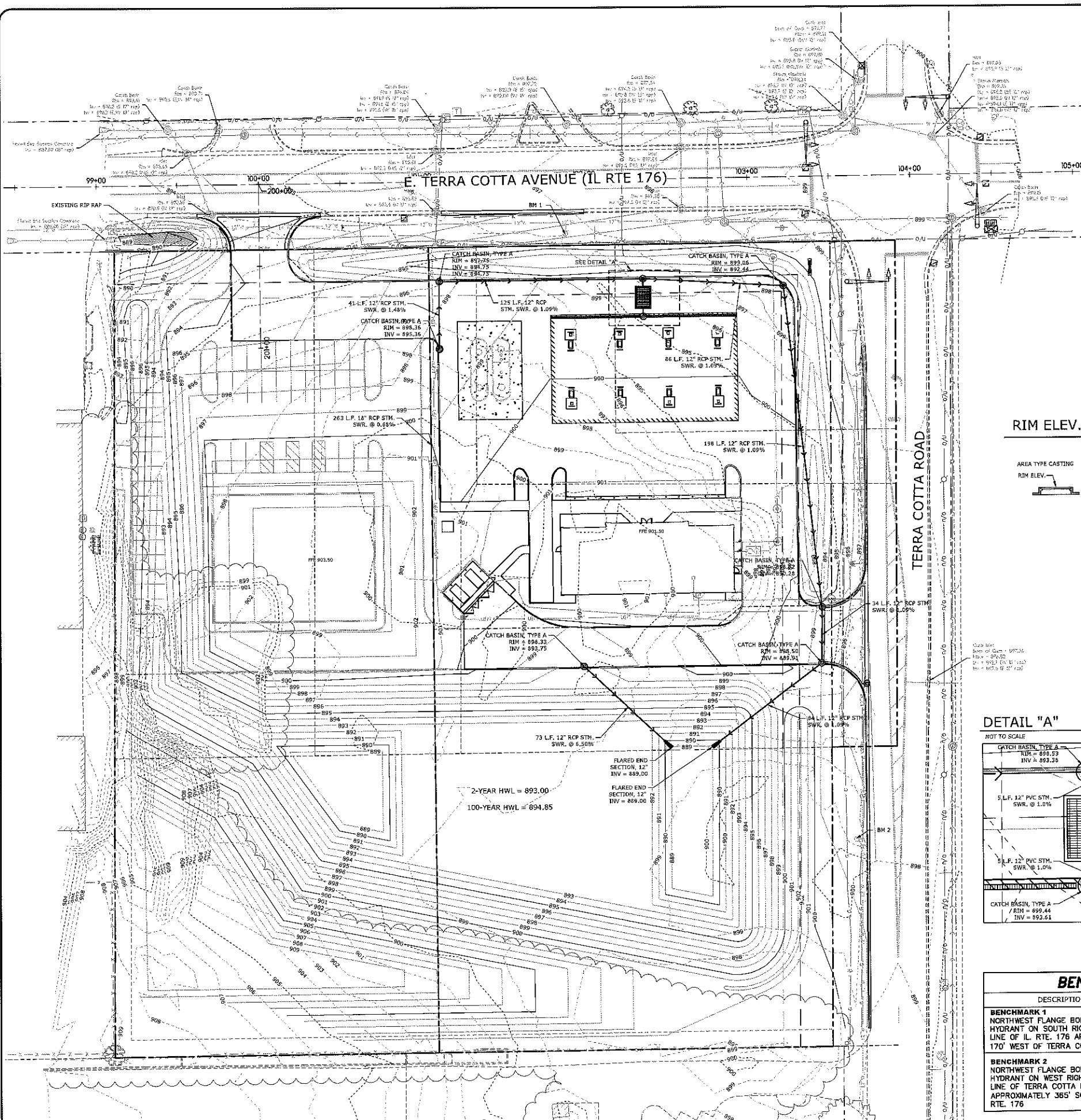
SHEET TITLE

**DRAINAGE PLAN**

DRAWN DRH  
CHECKED RGS  
PM RCS

PROJECT NUMBER  
SHEET NUMBER

**15134**  
**C07**



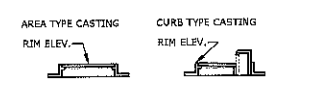
**LEGEND**

- PROPERTY LINE
- EXISTING RIGHT-OF-WAY
- PROPOSED SETBACK LINE
- PROPOSED EASEMENT
- EXISTING LOT LINE
- PROPOSED FENCE
- EXISTING FENCE
- SIDEWALK PAVEMENT
- SOD TURF AREAS WITHIN PROPERTY UNLESS OTHERWISE DIRECTED BY OWNER
- REJECTING CURB AND GUTTER
- NUMBER OF PROPOSED PARKING SPACES PAINTED YELLOW STRIPES
- EXISTING UTILITY POLE
- EXISTING MAILBOX
- EXISTING LIGHT POLE
- PROPOSED SIGN
- EXISTING SIGN
- CONCRETE PAVEMENT WITH INTEGRAL CURB
- 7" HEAVY DUTY CONCRETE (UGST)
- 8" HEAVY DUTY CONCRETE (DRIVEWAYS)
- HMA
- PROPOSED CONCRETE CURB
- EXISTING CONCRETE CURB AND GUTTER
- LIGHT POLE & FIXTURE
- BENCHMARK
- PROPOSED STRIPING
- EXISTING SIGNAL CONTROLLER

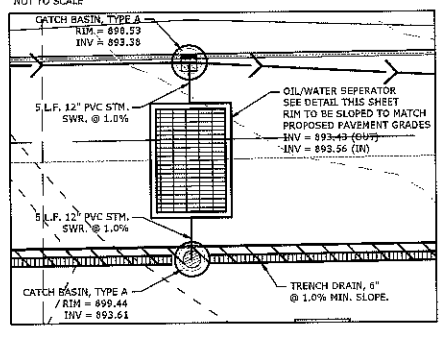
**GRADING NOTES**

- THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATIONS OF THE BENCHMARKS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL ALSO FIELD VERIFY LOCATION AND ELEVATION OF EXISTING PIPE INVERTS, FLOOR ELEVATIONS CURB OR PAVEMENT WHERE MATCHING INTO EXISTING WORK. THE CONTRACTOR SHALL FIELD VERIFY HORIZONTAL OR VERTICAL CONTROL BY REFERENCING SHOWN COORDINATES OR ELEVATIONS TO HORIZONTAL OR VERTICAL CONTROL POINTS PRIOR TO PROCEEDING WITH WORK.
- ALL UNSURFACED AREAS ARE TO RECEIVE FOUR INCHES OF TOPSOIL AND SOODED (OR SEEDED WHERE NOTED) AND WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
- ALL STORM SEWER PIPE IS TO BE REINFORCED CONCRETE CULVERT PIPE CLASS IV UNLESS OTHERWISE NOTED. WHERE HDPE OR PVC PIPE IS LISTED AS ACCEPTABLE MATERIALS, PVC SDR 35, HDPE DOUBLE WALL (ADS N-12), OR PVC SCHEDULE 40 MAY BE USED AT THE CONTRACTOR'S DISCRETION.
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- PROPERTY CORNERS SHALL BE CAREFULLY PROTECTED UNTIL THEY HAVE BEEN REFERENCED BY A PROFESSIONAL LAND SURVEYOR. PROPERTY MONUMENTS DISTURBED BY THE CONTRACTOR'S OPERATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL SET ALL CLEANOUT, MANHOLE AND INLET CASTINGS, FIRE HYDRANTS AND VALVE BOXES TO FINISHED GRADE.
- ALL PROPOSED PAVED AREAS SHALL BE STRIPPED OF ALL TOPSOIL AND UNSUITABLE MATERIAL AND EXCAVATED OR FILLED TO WITHIN 0.10 FEET OF DESIGN SUBGRADE.
- THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE AT THE CONCLUSION OF EACH WORKING DAY.
- ROOF AND CANOPY DRAIN SHALL INCORPORATE BODY PER DETAIL. 6" PVC PIPE SHALL EXTEND TO A MAIN AS SHOWN ON THE PLAN. POSITIVE DRAINAGE SHALL BE MAINTAINED TOWARD MAIN AT 0.5% MINIMUM SLOPE. 6" PVC CONNECTION TO BE MADE WITH INSERT-A-TEE OR ENGINEER APPROVED EQUIVALENT BETWEEN DISSIMILAR MATERIALS.

**RIM ELEV. DEFINITION**



**DETAIL "A"**



STATE OF ILLINOIS APPROVED  
1500 GALLON GREASE TRAP

NORWALK  
NCO TANK  
COMPANY

2121 Maple Road  
Joliet, IL 60431  
Phone: (815)726-1381  
Fax: (815) 726-2945

NORWALK 1500  
GALLON STATE  
APPROVED  
GREASE TRAP

For pricing information,  
phone, fax or email  
estimate@norwalktank.com

**BENCHMARKS**

DESCRIPTION	ELEVATION (USGS)
<b>BENCHMARK 1</b> NORTHWEST FLANGE BOLT ON FIRE HYDRANT ON SOUTH RIGHT-OF-WAY LINE OF IL RTE. 176 APPROXIMATELY 170' WEST OF TERRA COTTA ROAD	898.66
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ARC DESIGN  
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2291 ZENITH PARKWAY  
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Design Firm License No. 184-001334

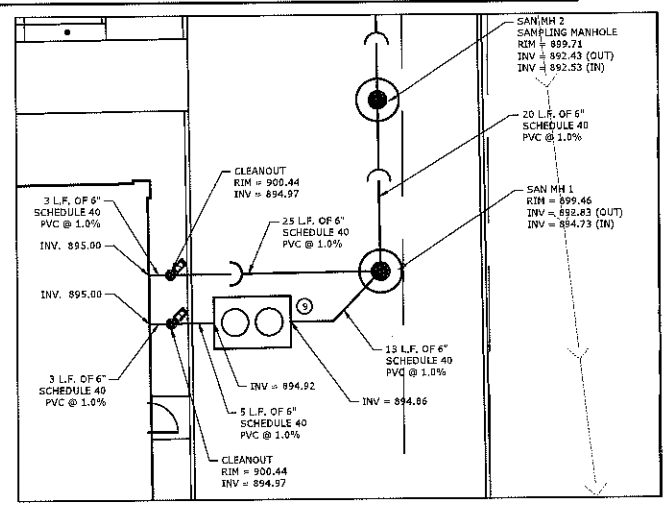
- LEGEND**
- PROPERTY LINE
  - EXISTING WATER MAIN
  - 2W --- PROPOSED WATER MAIN
  - EXISTING SANITARY SEWER
  - PROPOSED SANITARY SEWER
  - PROPOSED STORM SEWER
  - G --- EXISTING GAS MAIN
  - G --- PROPOSED GAS MAIN
  - E --- PROPOSED UNDERGROUND ELECTRIC SERVICE
  - U/T --- PROPOSED TELEPHONE SERVICE
  - O/U --- EXISTING OVERHEAD UTILITY LINES
  - [E] PROPOSED TRANSFORMER
  - [FH] EXISTING FIRE HYDRANT ASSEMBLY
  - [WV] EXISTING WATER VALVE
  - [WV] PROPOSED WATER VALVE
  - [MH] EXISTING MANHOLE OR CATCH BASIN
  - [MH] PROPOSED SANITARY MANHOLE
  - [CLO] PROPOSED SANITARY CLEANOUT
  - [MH] EXISTING SANITARY MANHOLE
  - [UTP] EXISTING UTILITY POLE
  - [LP] EXISTING LIGHT POLE
  - [LP] LIGHT POLE & FIXTURE

- UTILITY KEY LEGEND**
- 1 WATER METER AND PROPOSED 6" CTS HDPE, SD19, C5-200 PSI WATER SERVICE.
  - 2 GAS SERVICE ENTRY AND METER (RE: ARCH)
  - 3 PROPOSED 1.5" SCH. 40 STEEL PIPE GAS SERVICE (COORDINATE INSTALLATION WITH NIGCOR). 680 MBH - 680,000 Btu/hr INPUT - 618 CU FT/hr HOUSE PRESSURE 7" W.C.
  - 4 PROPOSED ELECTRIC (ELECTRIC 3 PHASE, 480 AMP 120/208 VOLTS, 4 WIRE) (CONTRACTOR TO COORDINATE CONNECTION WITH COMED)
  - 5 PROPOSED PHONE SERVICE (8 PAIR, 4 LINES)
  - 6 STORM SEWER, REFER TO GRADING PLAN
  - 7 CONNECT TO WATERMAIN WITH A 6" STAINLESS STEEL TAPPING SLEEVE (MUELLER H615 MECHANICAL JOINT TAPPING SLEEVE OR APPROVED EQUAL). 4" DIP MUST BE INSTALLED FROM EXISTING WATER MAIN TO 15' BEYOND THE 6" B-BOX. 15' BEYOND THE CURB STOP TRANSITION CAN OCCUR TO 6" PVC WATER SERVICE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPOSED WATER SERVICE CONNECTION TO THE MAIN. CONTRACTOR SHALL COORDINATE THE WATER SERVICE CONNECTION WITH COMMUNITY DEVELOPMENT. FIELD VERIFY EXISTING WATERMAIN LOCATION & SIZE.
  - 8 TRANSFORMER PAD (CONTRACTOR TO COORDINATE INSTALLATION WITH COMED)
  - 9 1000 GAL. GREASE TRAP INTERCEPTOR. RE: ARCH FOR DETAIL
  - 10 CONTRACTOR SHALL INSTALL A 4" SCH. 40 PVC CONDUIT FOR THE PROPOSED ELECTRICAL SERVICE. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF THE PROPOSED SERVICE WITH COMED.
  - 11 FIRE HYDRANT ASSEMBLY COMPLETE. CONNECT TO WATERMAIN WITH A 6" STAINLESS STEEL TAPPING SLEEVE (MUELLER H615 MECHANICAL JOINT TAPPING SLEEVE OR APPROVED EQUAL). CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPOSED CONNECTION TO THE MAIN. CONTRACTOR SHALL COORDINATE THE WATER SERVICE CONNECTION WITH COMMUNITY DEVELOPMENT. FIELD VERIFY EXISTING WATERMAIN LOCATION & SIZE.

**UTILITY NOTES**

1. THE CONTRACTOR SHALL PROVIDE PROPER SAFETY DEVICES IN ACCORDANCE WITH OSHA STANDARDS FOR ALL STAFF WORKING IN OPEN TRENCH CONDITIONS. TRENCH BOXES AND OTHER SHORING SHALL BE REQUIRED FOR ALL TRENCH WORK, IN THE VILLAGE RIGHT-OF-WAY, COUNTY OF CARROLL RIGHT-OF-WAY AND ON PRIVATE PROPERTY, WHILE THE SITE IS UNDER CONSTRUCTION.
2. EXISTING UTILITY INFORMATION IS SHOWN FROM SURVEY WORK BY OTHERS, FIELD OBSERVATIONS, AVAILABLE PUBLIC RECORDS AND AS-BUILT DRAWINGS. EXACT LOCATIONS AND ELEVATIONS OF UTILITIES SHALL BE DETERMINED PRIOR TO INSTALLING NEW WORK. EXCAVATE TEST PITS AS REQUIRED.
3. CONTACT ALL PUBLIC AND PRIVATE UTILITY COMPANIES 48 HOURS PRIOR TO ANY EXCAVATION. COST OF REPLACEMENT OR REPAIR OF EXISTING UTILITIES DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
4. THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATIONS OF THE BENCHMARKS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL ALSO FIELD VERIFY LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES, AND VERIFY FLOOR, CURB OR PAVEMENT ELEVATIONS WHERE MATCHING INTO EXISTING WORK. THE CONTRACTOR SHALL FIELD VERIFY HORIZONTAL CONTROL BY REFERENCING SHOWN COORDINATES TO KNOWN PROPERTY LINES. NOTIFY ENGINEER OF DISCREPANCIES IN EITHER VERTICAL CONTROL PRIOR TO PROCEEDING WITH WORK.
5. REFER TO BUILDING PLANS FOR EXACT LOCATIONS OF NEW UTILITY ENTRIES.
6. CONTRACTOR SHALL SET ALL CLEANOUT, CASTINGS, AND VALVE BOXES TO FINISHED GRADE.
7. CONTRACTOR SHALL COORDINATE THE WATER AND SEWER CONNECTIONS WITH THE CITY OF CRYSTAL LAKE WATER AND SEWER DEPARTMENT.
8. AFTER WATER SERVICE HAS BEEN INSPECTED AND APPROVED THE FOLLOWING TESTS ARE REQUIRED. CONTACT THE COMMUNITY DEVELOPMENT DEPARTMENT TO SCHEDULE INSPECTIONS WITH PERMIT NUMBER AND ADDRESS. MINIMUM OF 24 HOURS ADVANCE NOTICE IS REQUIRED. CITY OF CRYSTAL LAKE PERSONAL TO OPERATE ALL VALVES.
  - a. DO NOT INSTALL THE RPZ BACKFLOW DEVICES UNTIL WATER TESTING HAS BEEN COMPLETED AND APPROVED.
  - b. ILLINOIS ENVIRONMENTAL PROTECTION AGENCY OPERATING PERMIT REQUIRED BEFORE WATER CAN BE TESTED TO BUILDING, IF APPLICABLE.
  - c. FULL-BORE FLUSH OF WATER SERVICE FOR A MINIMUM OF 5 MINUTES OR UNTIL PIPE IS DETERMINED TO BE CLEAR OF FOREIGN DEBRIS.
  - d. INSTALL PERMANENT VALVES FOR THE FIRE AND DOMESTIC SERVICE. THE FIRST DOMESTIC VALVE IS REQUIRED TO BE A LOCKABLE TYPE IF THERE IS A SINGLE WATER SERVICE FOR THE FIRE AND DOMESTIC.
  - e. A HYDROSTATIC TEST OF A FIRE SERVICE FROM CITY VALVE (B-BOX, VALVE VAULT) TO THE FIRST PERMANENT VALVE OR VALVES IN BUILDING. THE TEST IS REQUIRED TO HOLD 200 PSI FOR A MINIMUM OF 2 HOURS WITH NO LOSS OF PRESSURE.
  - f. IF THE DOMESTIC WATER SERVICE IS INDEPENDENTLY FROM THE FIRE SERVICE A TEST OF 100 PSI IS REQUIRED FOR A MINIMUM OF 30 MINUTES WITH NO PRESSURE LOSS.
  - g. AFTER COMPLETION OF THE PRESSURE TESTING THE CHLORINATION CAN BE INSERTED INTO THE WATER SERVICE.
  - h. SAMPLES ARE REQUIRED AT EACH CONNECTION TO THE SERVICE AND INSIDE AT THE VALVE, AFTER 24 HOURS OF CHLORINATION IN THE SYSTEM THE FIRST DAY SAMPLE CAN BE TAKEN, THE FOLLOWING DAY THE SECOND DAY SAMPLE CAN BE TAKEN.
  - i. SUBMIT THE RESULTS FROM AN APPROVED TESTING AGENCY TO THE CRYSTAL LAKE COMMUNITY DEVELOPMENT DEPARTMENT. AFTER RECEIPT OF APPROVED RESULTS THE WATER MAY BE TURNED ON INTO THE BUILDING.

**DETAIL "A"**



**BENCHMARKS**

DESCRIPTION	ELEVATION (USGS)
BENCHMARK 1 NORTHWEST FLANGE BOLT ON FIRE HYDRANT ON SOUTH RIGHT-OF-WAY LINE OF IL. RTE. 176 APPROXIMATELY 170' WEST OF TERRA COTTA ROAD	898.66
BENCHMARK 2 NORTHWEST FLANGE BOLT ON FIRE HYDRANT ON WEST RIGHT-OF-WAY LINE OF TERRA COTTA ROAD APPROXIMATELY 365' SOUTH OF IL. RTE. 176	901.18

E. TERRA COTTA AVENUE (IL RTE 176)

TERRA COTTA ROAD

PROJECT NAME  
OWNER'S NAME

**CASEY'S GENERAL STORE**

CRYSTAL LAKE, IL  
E. TERRA COTTA AVE & TERRA COTTA ROAD

CASEY'S RETAIL COMPANY  
ONE CONVENIENCE BLVD  
AKENY, IA 50021  
JACOB CLARK  
(515)963-3831

CONSULTANTS

ISSUED FOR

PRELIMINARY SPECIAL USE	DATE
INITIAL IDOT REVIEW	12-15-2015
SPECIAL USE	01-15-2016
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REVISIONS

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SHEET TITLE

**UTILITY PLAN**

DRAWN	DRH
CHECKED	RGS
PM	RCS

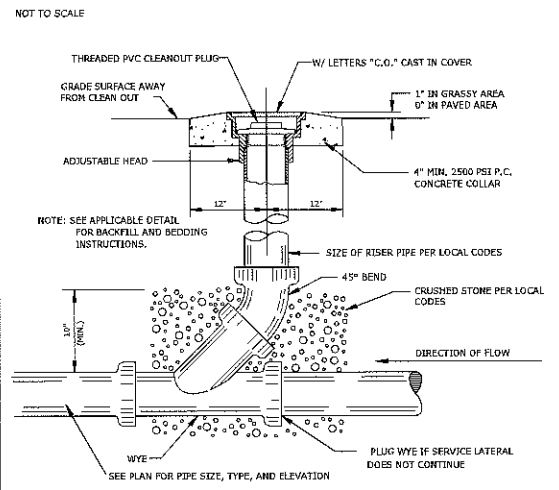
PROJECT NUMBER  
SHEET NUMBER

**15134**

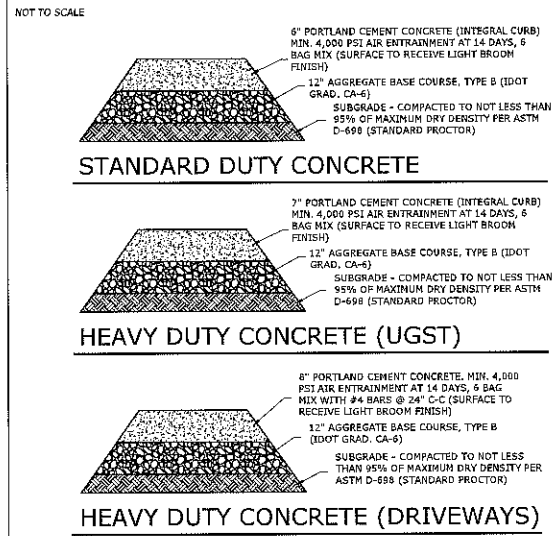
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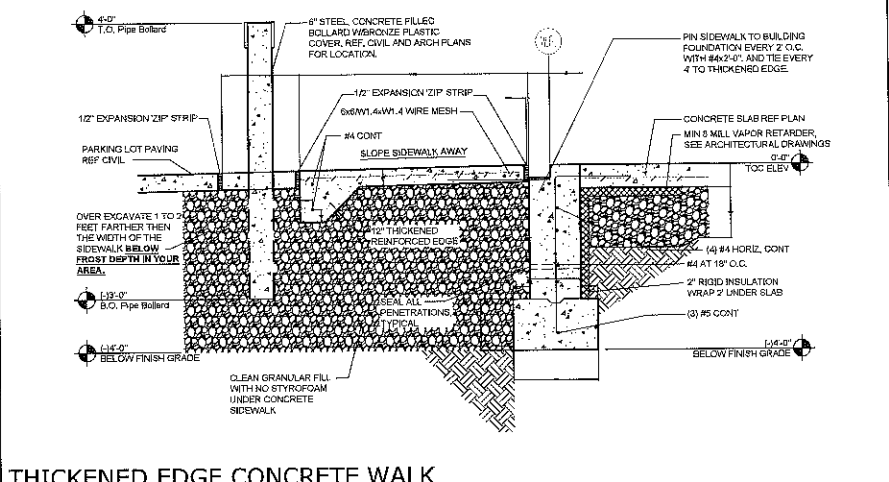
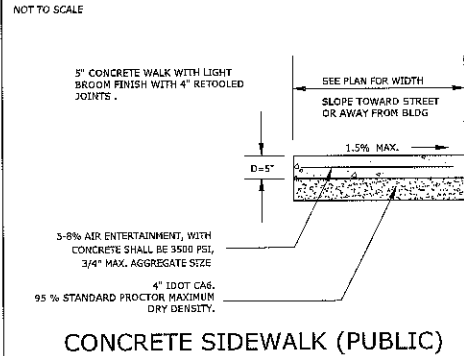
### SEWER CLEANOUT DETAIL



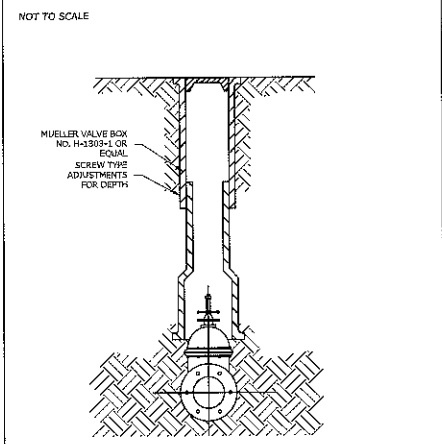
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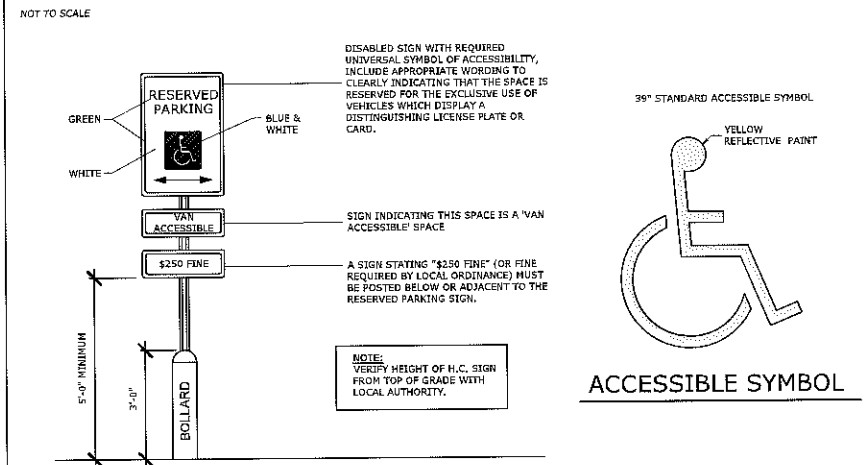
### CONCRETE PAVEMENT DETAILS



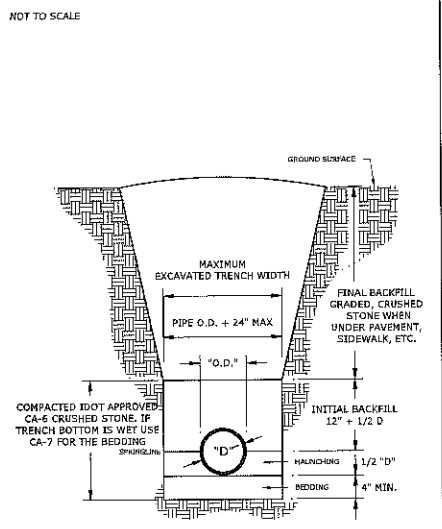
### VALVE BOX DETAIL



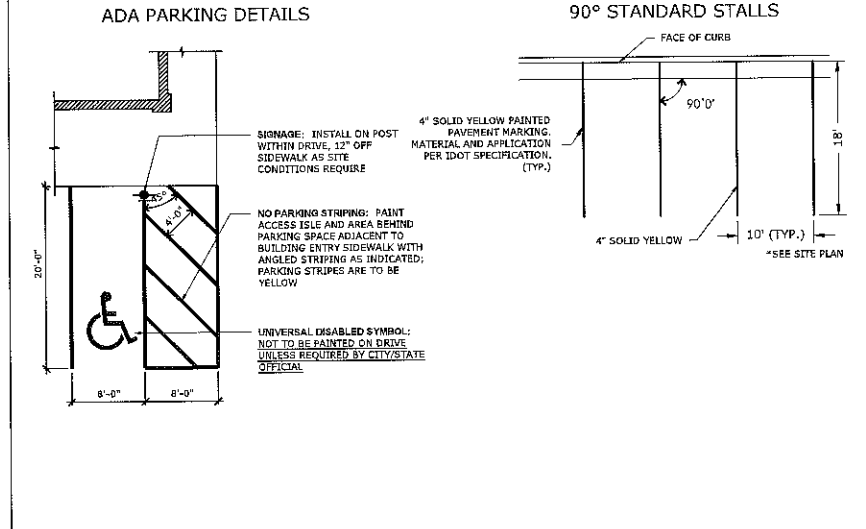
### ACCESSIBLE PARKING SIGN DETAIL



### PIPE EMBEDMENT DETAIL



### TYPICAL 90 DEGREE PARKING STRIPING DETAILS



**ARC DESIGN RESOURCES INC.**  
8291 ZENITH PARKWAY  
LOVES PARK, IL 61111  
VOICE: (815) 484-4300  
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www.arcdesign.com  
Design Firm License No. 154-001334

**PROJECT NAME OWNER'S NAME**  
**CASEY'S GENERAL STORE**  
CRYSTAL LAKE, IL  
E. TERRA COTTA AVE &  
TERRA COTTA ROAD  
CASEY'S RETAIL COMPANY  
ONE CONVENIENCE BLVD  
ANKENY, IA 50021  
JACOB CLARK  
(515) 963-3831

**CONSULTANTS**

**ISSUED FOR**

DATE	DATE
PRELIMINARY SPECIAL USE	12-15-2015
INITIAL IDOT REVIEW	01-15-2016
SPECIAL USE	01-19-2016
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**REVISIONS**

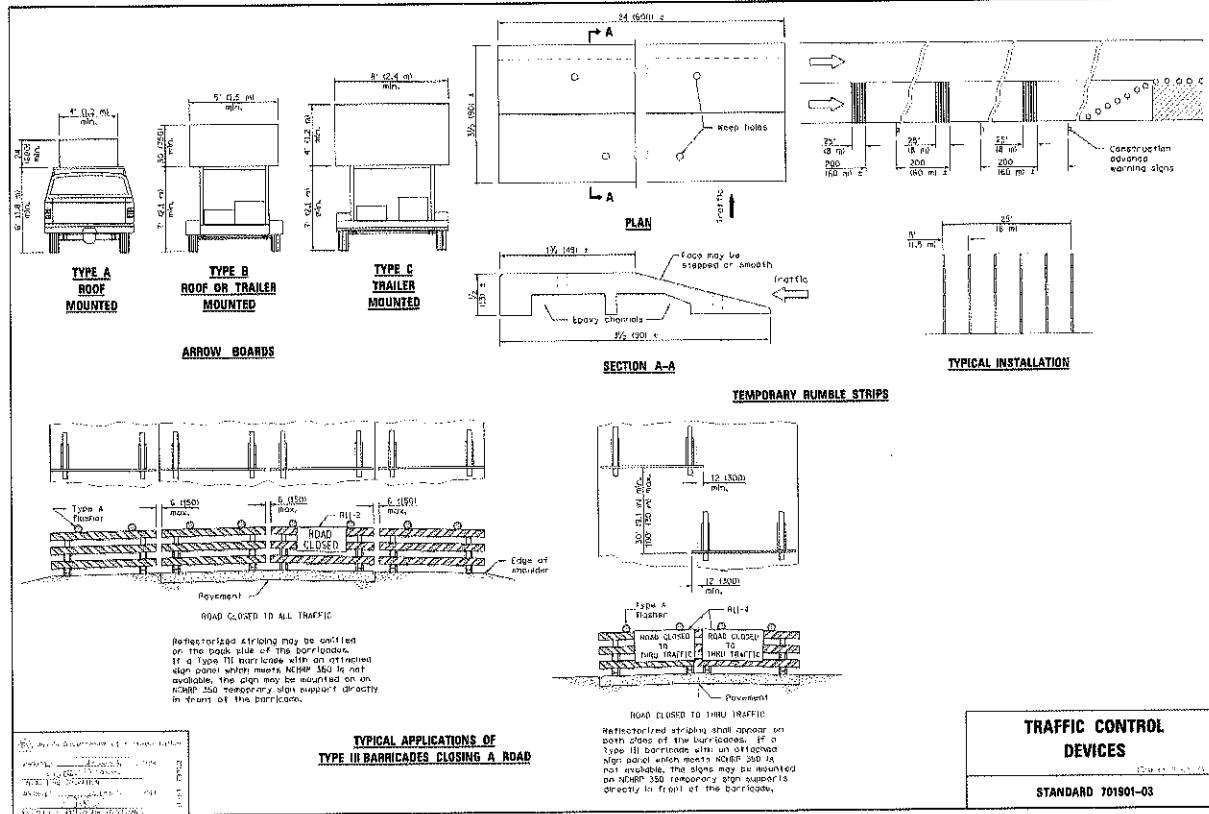
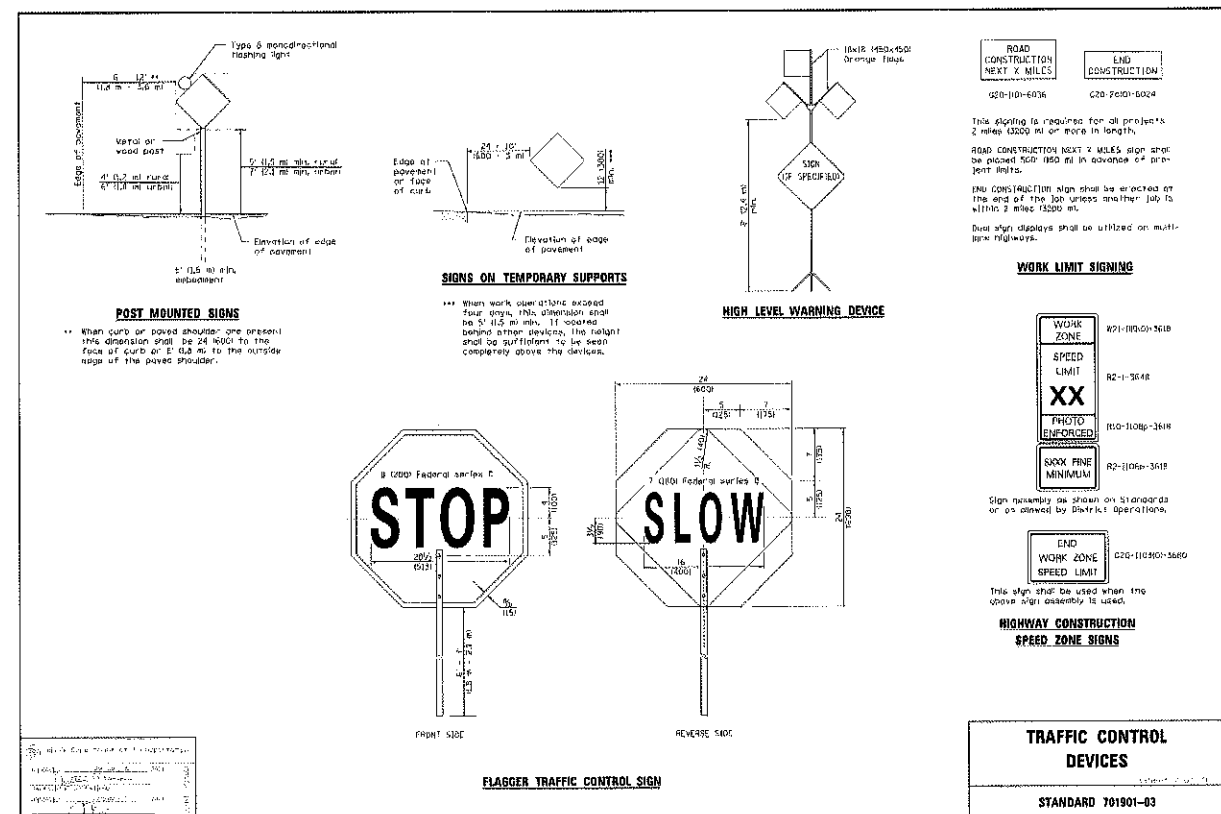
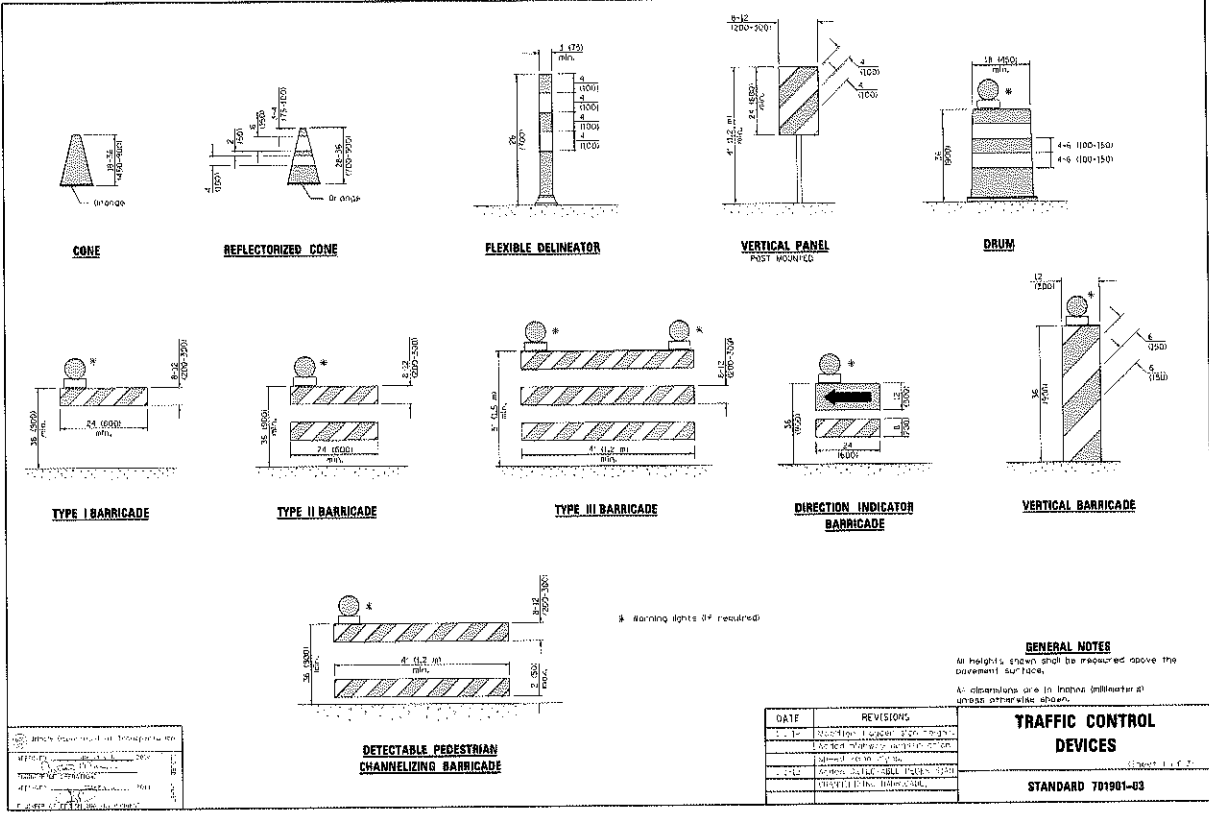
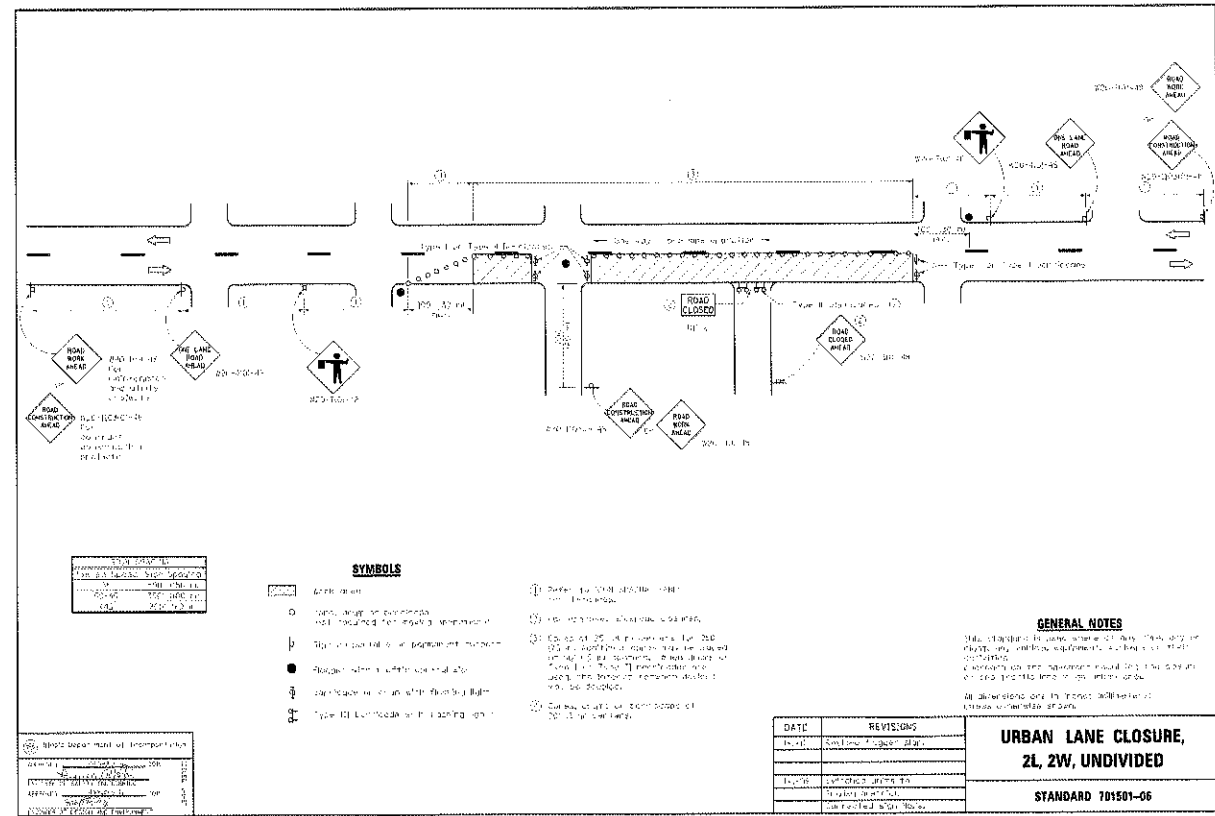
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**SHEET TITLE**  
**DETAILS**

DRAWN DRH  
CHECKED RGS  
IN RCS

**PROJECT NUMBER SHEET NUMBER**  
**15134**  
**C09**





ARC DESIGN RESOURCES INC.  
8291 25TH PARKWAY, LOVES PARK, IL 61111  
VOICE: (815) 494-4300  
FAX: (815) 484-4303  
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Design Firm License No. 184-001334

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SHEET TITLE  
**IDOT DETAILS**

DRAWN DRH  
CHECKED RGS  
PM RCS

PROJECT NUMBER  
SHEET NUMBER  
**15134**  
**C11**



PROJECT NAME  
OWNER'S NAME

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DRAWN DRH  
CHECKED AGS  
PH RCS

PROJECT NUMBER  
SHEET NUMBER

**15134  
C12**

**STEP 1**  
Silt fence fabric, Wood post or metal stake, Silt fence fabric. Place end-post (stakes) at first silt fence adjacent to end-post (stake) of second silt fence with fabric positioned as shown.

**STEP 2**  
Rotate posts (stakes) (optional) 180° clockwise and drive both posts (stakes) 18" into ground.

**ATTACHING TWO SILT FILTER FENCES**  
(Not applicable for J-hooks)

**SILT FILTER J-HOOK PLACEMENT**

**AGGREGATE DITCH CHECK**

**TRENCH METHOD SECTION A-A**

**SILT FILTER FENCE AS A PERIMETER EROSION BARRIER**

**J-HOOK**

**GENERAL NOTES**  
The installation details and dimensions shown for perimeter erosion barriers shall also apply for silt filter and pipe protection.  
All dimensions are in inches unless otherwise shown.

DATE	REVISIONS
11-1-15	Issued for IDOT review
11-15-15	Issued for SPECIAL USE
11-15-15	Final IDOT Review
11-15-15	Final IDOT Review
11-15-15	Final IDOT Review
11-15-15	Final IDOT Review
11-15-15	Final IDOT Review
11-15-15	Final IDOT Review

**TEMPORARY EROSION CONTROL SYSTEMS**  
STANDARD 280001-07  
Sheet 1 of 2

**INLET AND PIPE PROTECTION**

**SEDIMENT BASIN**

**TYPICAL CUT CROSS-SECTION**

**TYPICAL FILL CROSS-SECTION**

**TEMPORARY DITCHES FOR CUT & FILL SECTIONS**

**GENERAL NOTES**  
The performance of the basin will improve if put into a series.  
The long dimension should be parallel with the direction of the flow. Accumulated silt shall be removed before the basin becomes 75% filled.

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**TEMPORARY EROSION CONTROL SYSTEMS**  
STANDARD 280001-07  
Sheet 2 of 2

**ELEVATION - ECCENTRIC**

**ELEVATION - CONCENTRIC**

**ALTERNATE BOTTOM SLAB**

**GENERAL NOTES**  
Bottom slab shall be constructed with a minimum of 4" (102 mm) concrete. All dimensions shall be in inches unless otherwise shown.  
Bottom slab shall be constructed with a minimum of 4" (102 mm) concrete. All dimensions shall be in inches unless otherwise shown.  
See Standard 602306-03 for detailed requirements.  
All dimensions are in inches unless otherwise shown.

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11-15-15	Final IDOT Review

**INLET - TYPE B**  
STANDARD 602306-03

**ELEVATION - ECCENTRIC**

**ELEVATION - CONCENTRIC**

**ALTERNATE BOTTOM SLAB**

**GENERAL NOTES**  
Bottom slab shall be constructed with a minimum of 4" (102 mm) concrete. All dimensions shall be in inches unless otherwise shown.  
Bottom slab shall be constructed with a minimum of 4" (102 mm) concrete. All dimensions shall be in inches unless otherwise shown.  
See Standard 602401-03 for detailed requirements.  
All dimensions are in inches unless otherwise shown.

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11-15-15	Final IDOT Review

**MANHOLE TYPE A**  
STANDARD 602401-03

PROJECT NAME  
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CONSULTANTS

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INITIAL IDOT REVIEW

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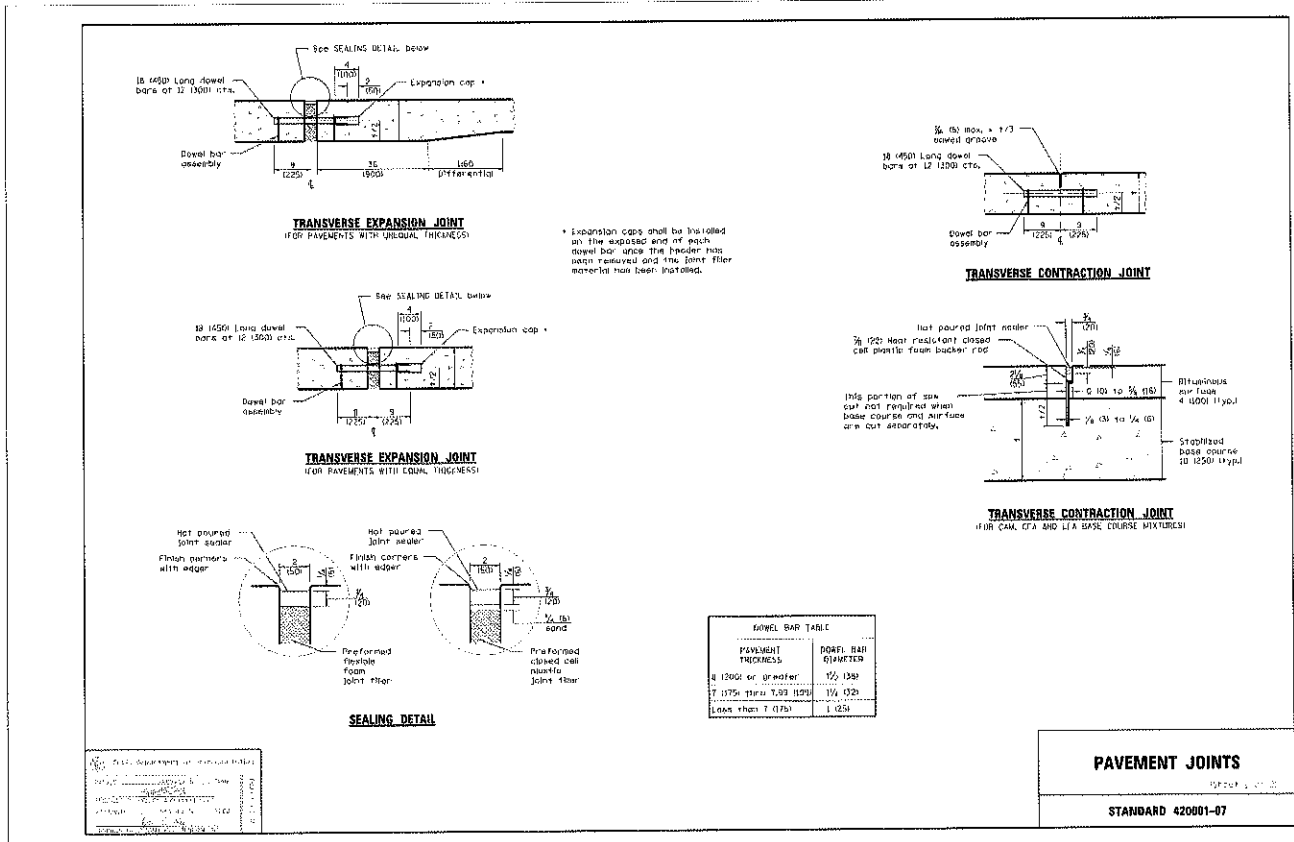
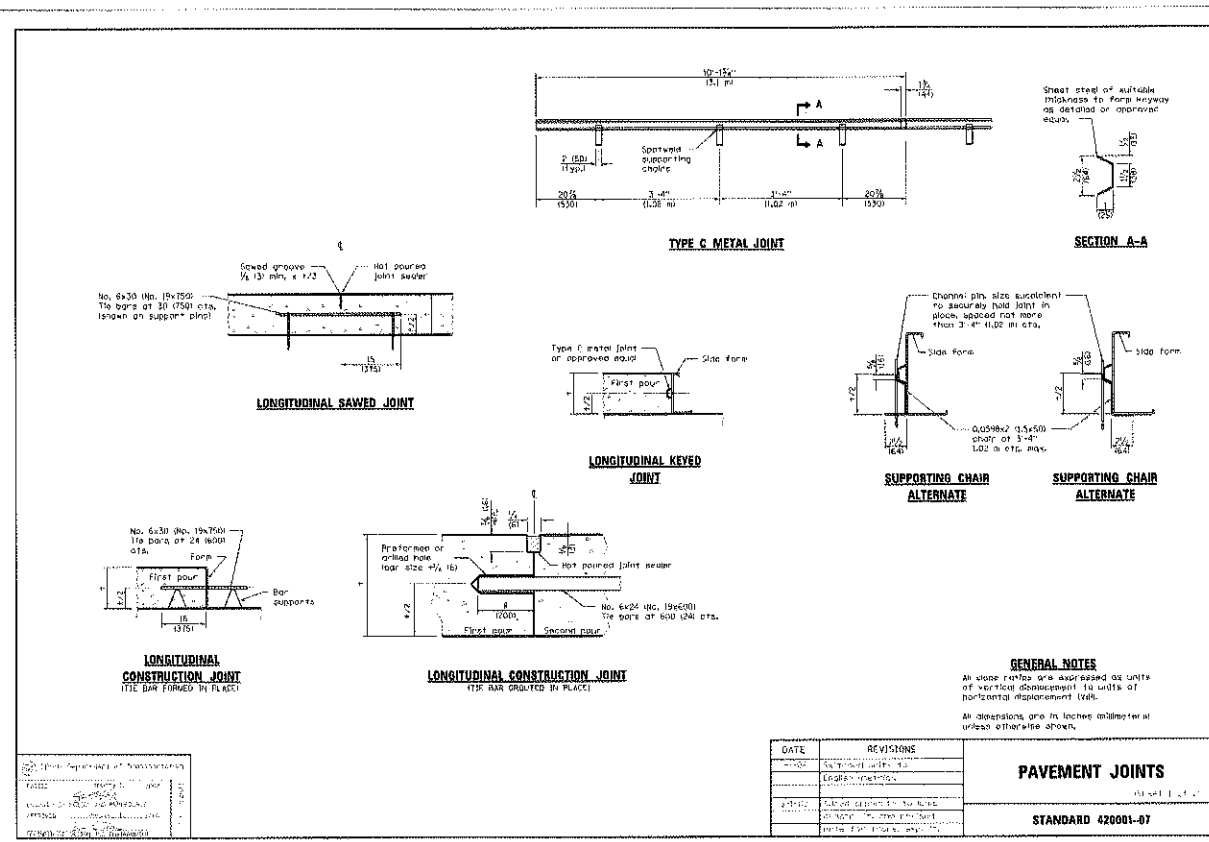
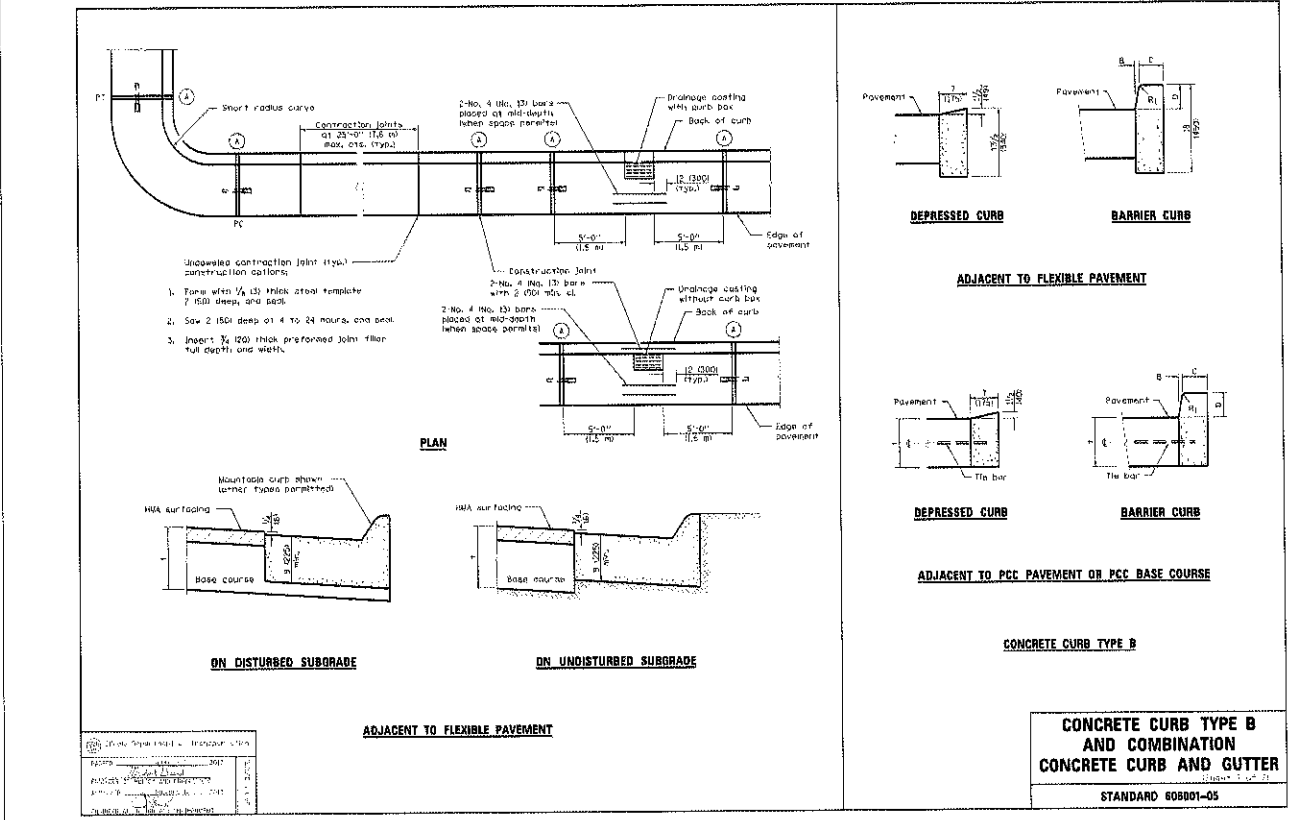
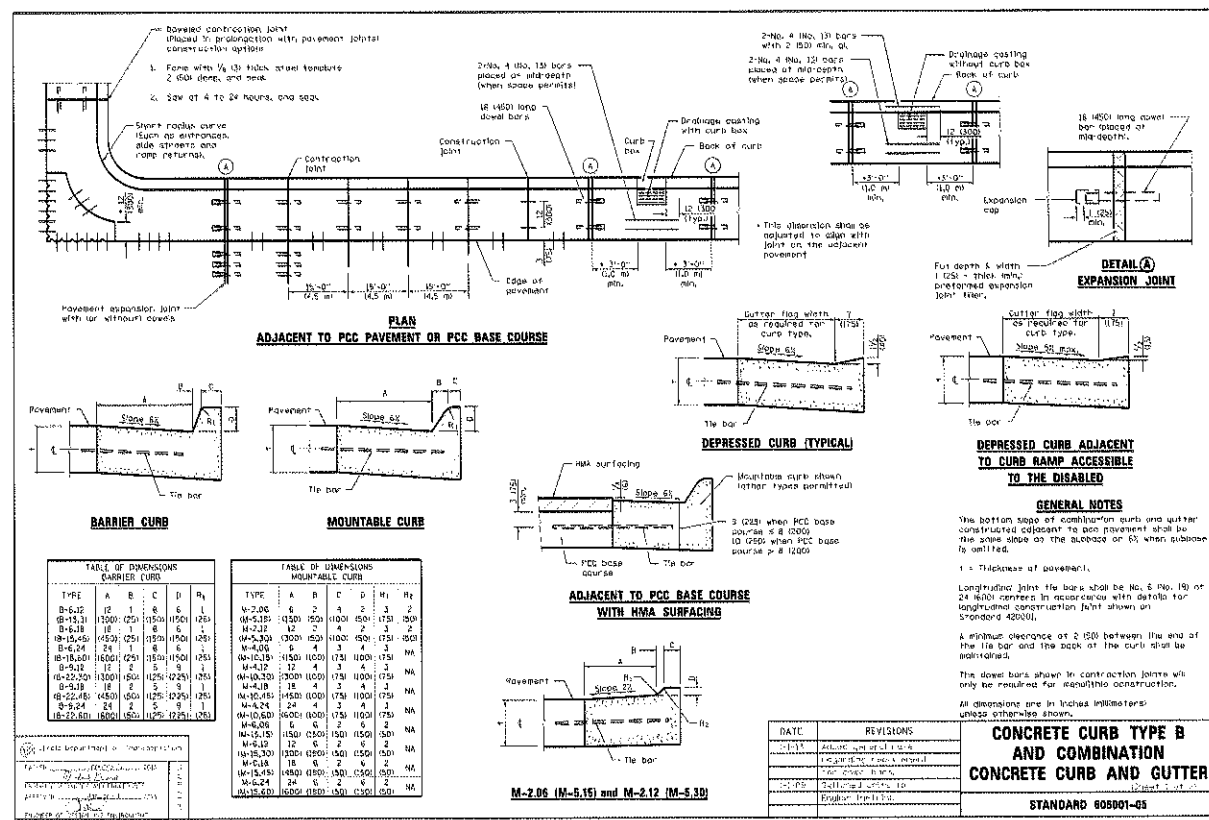
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**15134**

**C13**

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SHEET TITLE  
**IDOT DETAILS**

DRAWN: DRH  
CHECKED: RGS  
BY: RCS

PROJECT NUMBER  
SHEET NUMBER

15134

C14

**PRECAST REINFORCED  
CONCRETE FLAT SLAB TOP**

STANDARD 602601-02

DATE	REVISIONS
02/15/15	REVISED PER IDOT
02/15/15	REVISED PER IDOT
02/15/15	REVISED PER IDOT
02/15/15	REVISED PER IDOT

### HOT-MIX ASPHALT APPROACHES AND MAILBOX RETURNS

**MAILBOX TURNOUT**

**NOTE**

- TURNOUTS ARE TO BE CONSTRUCTED ON THE APPROACH SIDE OF ALL PE & CE REGARDLESS IF A MAILBOX IS PRESENT.
- ALL PE & CE ARE TO BE SURFACED TO RIGHT OF WAY LINE. AREA BEHIND RIGHT OF WAY SHALL MATCH EXISTING SURFACE.
- ALL PE & CE TO BE CONSTRUCTED WITH AN 8" AGGREGATE BASE COURSE, TYPE B AND WITH A 2" INCIDENTAL HOT-MIX ASPHALT SURFACING, UNLESS OTHERWISE NOTED.
- PE ARE TO BE AGGREGATE 10' FRONT OF WAY OR TOUCH DOWN, WHICHEVER IS GREATER.
- EXCAVATION REQUIRED FOR PLACEMENT OF AGGREGATE BASE COURSE SHALL BE INCLUDED IN THE COST OF THE AGGREGATE BASE COURSE.
- ON ENTRANCES THE CONTRACTOR HAS THE OPTION OF USING RADUS RETURNS. USE RADUS OF 20' TO 60'.

**STATE OF ILLINOIS**  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

20.1  
HOT-MIX ASPHALT APPROACHES AND MAILBOX RETURNS

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SHEET TITLE

**CRYSTAL LAKE  
DETAILS**

DRAWN **DRH**  
CHECKED **RGS**  
PN **RCS**

PROJECT NUMBER

SHEET NUMBER

**15134**

**C15**

**EC-01**

**SILT FENCE**

FASTENER: MINIMUM NO. 10 GAGE WIRE, 4 PER POST REQUIRED (TYP.)

WOVEN WIRE FENCE: OPTIONAL EXCEPT WHEN REQUIRED BY THE CITY ENGINEER TO PROTECT SENSITIVE NATURAL RESOURCES OR STORM WATER MANAGEMENT FACILITIES (MIN. 14" GAGE, MAX. 6" MESH SPACING).

WOVEN WIRE FENCE (MIN. 14" GAGE, MAX. 6" MESH SPACING) WITH FILTER FABRIC COVER

UNDISTURBED GROUND LINE

DIRECTION OF FLOW

COMPACTED BACKFILL

FABRIC ANCHOR DETAIL

**MATERIAL SPECIFICATIONS:**  
POSTS: STEEL (EITHER "T" OR "U" TYPE) OR HARDWOOD WITH A MINIMUM CROSS-SECTIONAL AREA OF 3.0 SQ. IN.  
FENCE: WOVEN WIRE (14 1/2 GAGE) WITH 6" MAX. MESH OPENING  
FILTER FABRIC: FILTER X, MIRAVAL 100X, STABILIKWA T 149N.  
FILTER CLOTH:

**NOTES:**  
1. TEMPORARY SEDIMENT FENCE SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED. THEY SHALL BE MAINTAINED AS NEEDED THROUGHOUT THE CONSTRUCTION PERIOD AND REMOVED IN CONJUNCTION WITH THE FINAL GRADING AND SITE STABILIZATION.  
2. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POST WITH TIES OR STAPLES  
3. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID-SECTION  
4. WHEN TWO (2) SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX (6) INCHES AND FOLDED  
5. MATERIAL SHALL BE REMOVED WHEN BULGES DEVELOP IN THE SILT FENCE  
6. DOUBLE ROWS OF SILT FENCE SPACED FIVE (5) FEET APART SHALL BE PLACED AROUND EXISTING STORMWATER MANAGEMENT FACILITIES OR WETLANDS AS ADDITIONAL PROTECTION WHEN REQUIRED BY CITY ENGINEER

Revised: 1. 06/12/2015  
Drawing Name: **SILT FENCE**  
Drawing Number: **EC-01**  
Date: 12/4/2012  
Drawn: DD  
Checked: AW  
City of Crystal Lake

**EC-04**

**INLET SEDIMENT CONTROL DEVICE**

DUMP STRAP

DUMP STRAP

1" REBAR FOR BAG REMOVAL FROM INLET

SEDIMENT SACK

BAG DETAIL

EXPANSION RESTRAINT (6" NYLON ROPE, 2 FLAT WASHER)

DUMP STRAPS (2 EACH)

SEDIMENT CONTROL DEVICE

**LEGEND:**  
1. TRENCH BACKFILL TO SUBGRADE AND WITHIN 2 FEET OF PROPOSED PAVEMENT, DRIVEWAY, CURBS AND GUTTER OR SIDEWALK. TRENCH BACKFILL MATERIALS SHALL BE IDOT APPROVED GRADATION CA-6, GRADE 7, 8, OR 9 COMPACTED TO 90% OF MODIFIED PROCTOR DENSITY. IN NON-STRUCTURAL AREAS BACKFILL WITH APPROVED EXCAVATED MATERIALS.  
2. INITIAL BACKFILL TO DEPTH AS INDICATED. MATERIAL SHALL BE IDOT APPROVED GRADATION CA-8, GRADE 7, 8, OR 9.  
3. PIPE BEDDING SHALL BE FRACTURED GRANULAR MATERIAL IDOT GRADATION CA-7 OR CA-11 FROM 4 INCHES BELOW BOTTOM OF PIPE TO HORIZONTAL CENTER OF PIPE.  
4. UNSUITABLE MATERIAL TO BE REMOVED WHERE DIRECTED BY THE ENGINEER AND REPLACED WITH COMPACTED SUITABLE MATERIAL.  
5. TRENCH WIDTH: PIPE O.D. + 12 INCHES MINIMUM  
PIPE I.D. + 18 INCHES MAXIMUM  
6. CONTRACTORS SHALL COMPLY WITH ALL CURRENT OSHA STANDARDS.

\*NOTE: ALL DUCTILE IRON SHALL BE SUBJECT TO POLY WRAP PER CITY ENGINEER

**SECTION A:**  
WATER MAIN DIP  
FORCE MAIN DIP

**SECTION B:**  
SANITARY SEWER MAIN & SERVICES (PVC)  
STORM SEWER (PVC)  
WATER MAIN C909 FORCE MAIN (PVC) (HOPE)

**SECTION C:**  
STORM SEWER (PCP)

Revised: 1. 06/12/2015  
Drawing Name: **INLET SEDIMENT CONTROL DEVICE**  
Drawing Number: **EC-04**  
Date: 11/2/2007  
Drawn: EM  
Checked: AW  
City of Crystal Lake

**EC-02**

**CONSTRUCTION ENTRANCE**

EXISTING GROUND

MIN. 100'

MIN. 10'

EXISTING PAVEMENT

MIN. 10'

MIN. 100'

MIN. 10'

EXISTING PAVEMENT

MIN. 100'

5:1 SLOPE

EXISTING PAVEMENT

COARSE AGGREGATE

PLAN VIEW

POSITIVE DRAINAGE TO SEDIMENT TRAPPING DEVICE

MIN. 14"

MIN. 3"

FILTER FABRIC

SECTION A-A

MIN. 6" 7"

REINFORCED CONCRETE

SECTION B-B

DRAIN SPACE

**NOTES:**  
1. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF SECTION 282 OF THE IDOT STANDARD SPECIFICATIONS AND SHALL BE PLACED OVER THE CLEARED AREA PRIOR TO THE PLACEMENT OF ROCK.  
2. ROCK OR RECLAIMED CONCRETE SHALL MEET ONE OF THE FOLLOWING IDOT COARSE AGGREGATE GRADATIONS, CA-1, CA-2, CA-3 OR CA-4.  
3. ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHALL BE CONSTRUCTED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.  
4. IF WASH RACKS ARE USED, THEY SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.

Revised: 1. 06/12/2015  
Drawing Name: **CONSTRUCTION ENTRANCE**  
Drawing Number: **EC-02**  
Date: 07/31/2012  
Drawn: DD  
Checked: AW  
City of Crystal Lake

**UG-03**

**TYPICAL TRENCH CROSS SECTION**

LEGEND:

1. TRENCH BACKFILL TO SUBGRADE AND WITHIN 2 FEET OF PROPOSED PAVEMENT, DRIVEWAY, CURBS AND GUTTER OR SIDEWALK. TRENCH BACKFILL MATERIALS SHALL BE IDOT APPROVED GRADATION CA-6, GRADE 7, 8, OR 9 COMPACTED TO 90% OF MODIFIED PROCTOR DENSITY. IN NON-STRUCTURAL AREAS BACKFILL WITH APPROVED EXCAVATED MATERIALS.  
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6. CONTRACTORS SHALL COMPLY WITH ALL CURRENT OSHA STANDARDS.

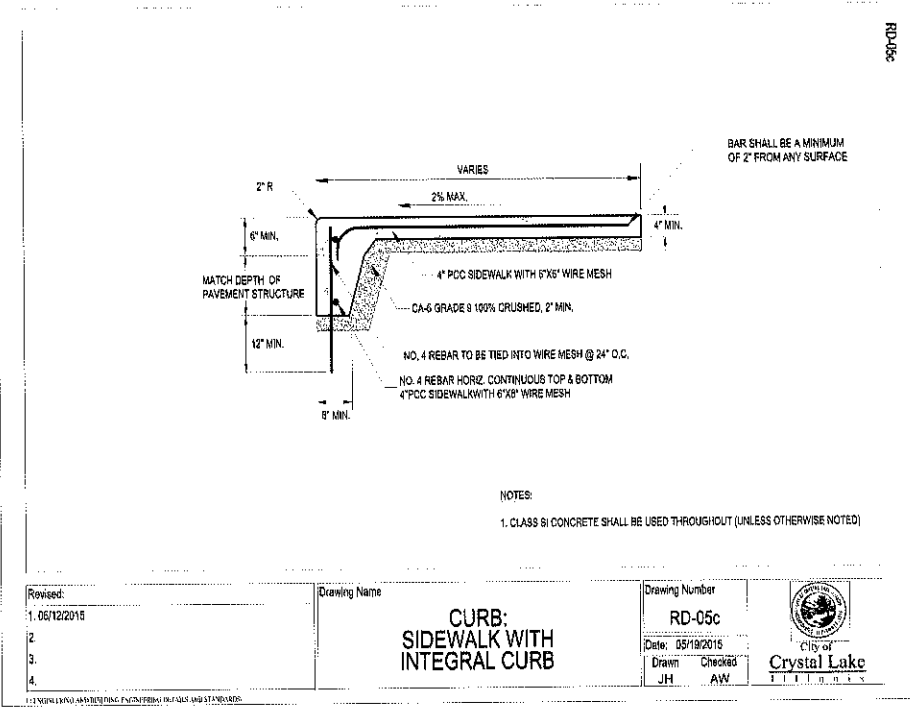
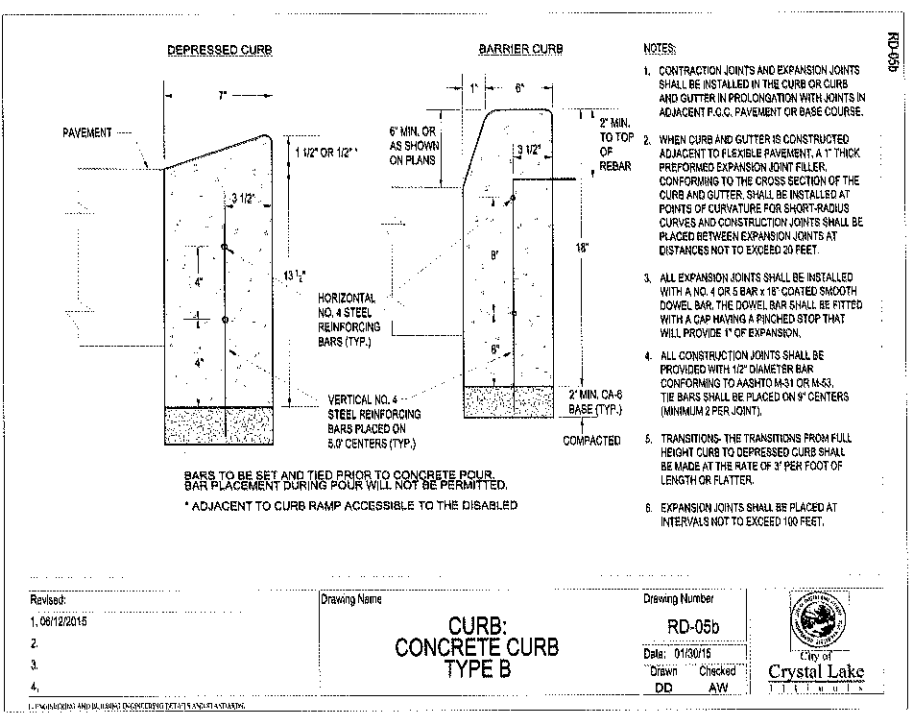
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**SECTION A:**  
WATER MAIN DIP  
FORCE MAIN DIP

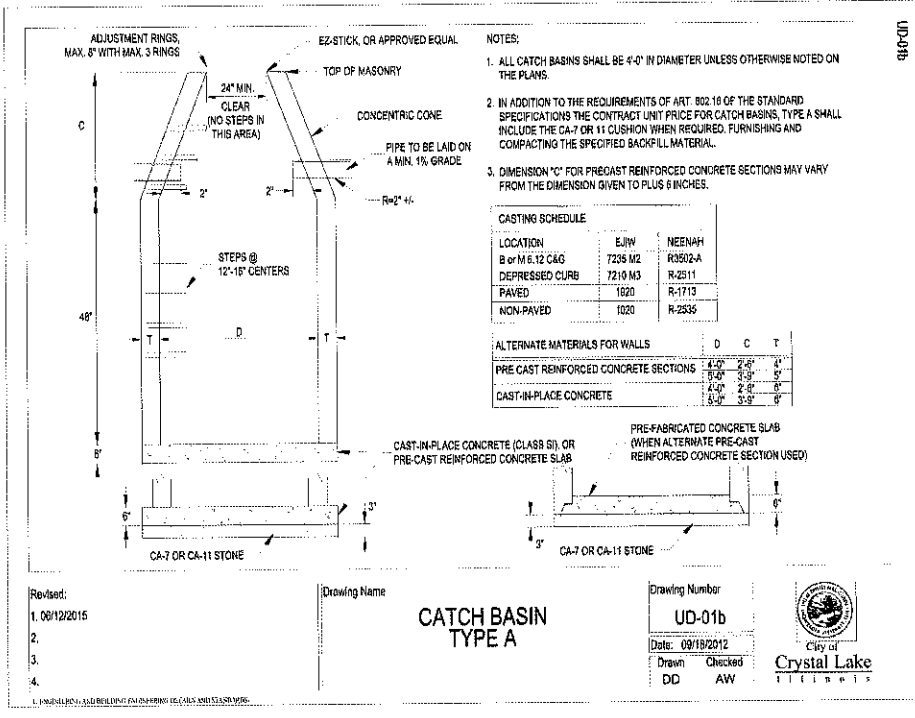
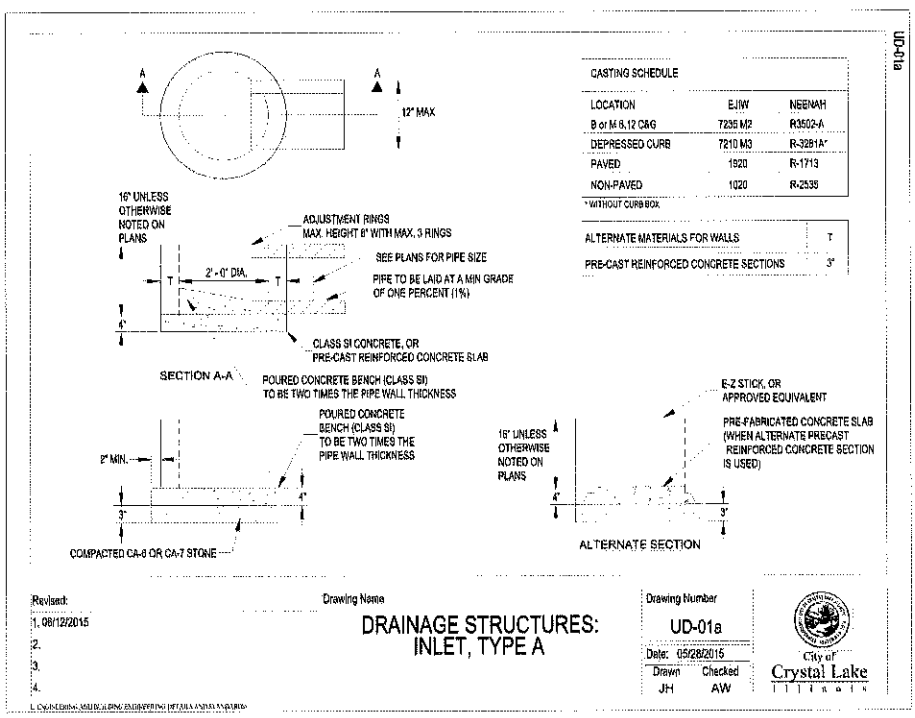
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**SECTION C:**  
STORM SEWER (PCP)

Revised: 1. 06/12/2015  
Drawing Name: **TYPICAL TRENCH CROSS SECTION**  
Drawing Number: **UG-03**  
Date: 06/29/2015  
Drawn: JH  
Checked: AW  
City of Crystal Lake



CONSULTANTS

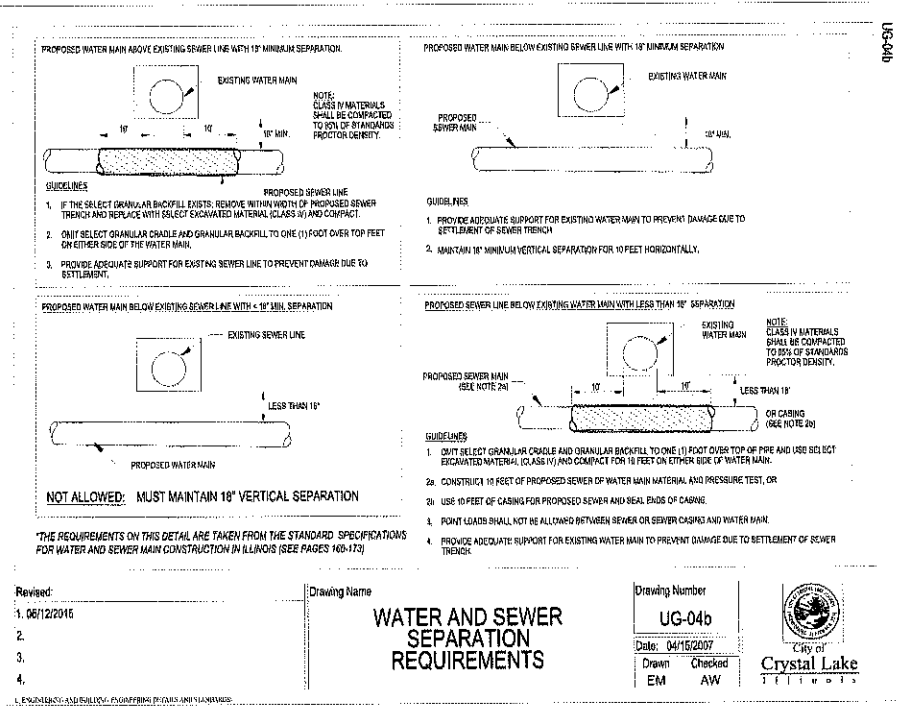
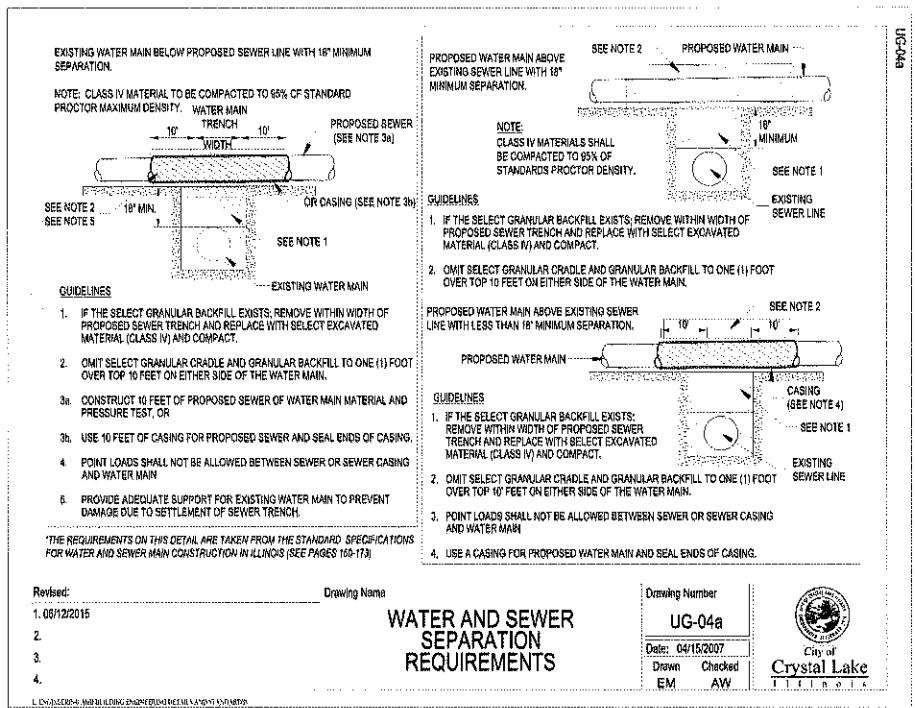
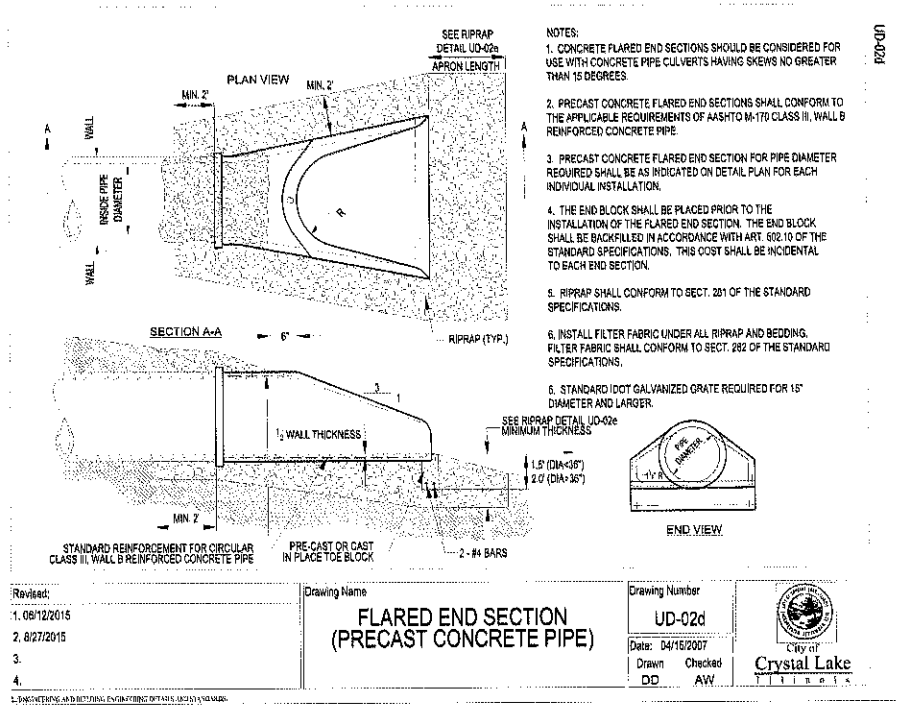
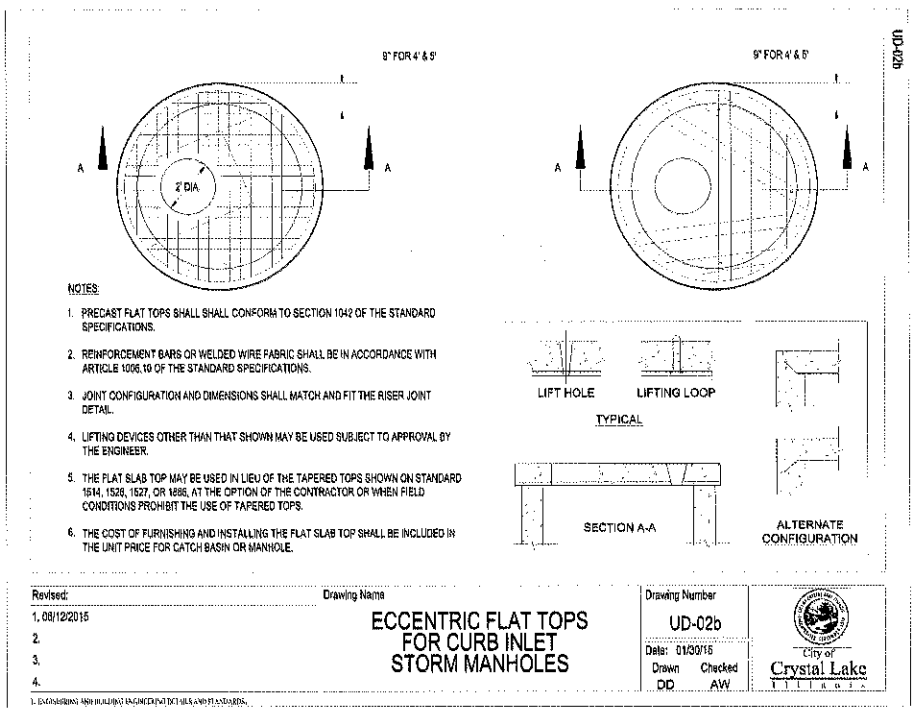


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DRAWN: DRH  
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SHEET NUMBER

**15134**

**C17**

KEY	QUAN	BOTANICAL NAME	COMMON NAME	SIZE/TYPE	SPACING
<b>DECIDUOUS SHADE TREES</b>					
AFAB	5	Acer x f. 'Autumn Blaze'	Autumn Blaze Freeman Maple	3' BB	AS SHOWN
CO	5	Celtis occidentalis	Hackberry	3' BB	AS SHOWN
GTS	3	Gleditsia l. 'Skyline'	Skyline Honeylocust	3' BB	AS SHOWN
GD	3	Gymnocladu dioicis	Kentucky Coffee Tree	3' BB	AS SHOWN
FCC	3	Fyrus c. 'Chanticleer'	Chanticleer Flowering Pear	3' BB	AS SHOWN
TAR	3	Tilia a. 'Redmond'	Redmond Linden	3' BB	AS SHOWN
UF	2	Ulmus 'Frontier'	Frontier Elm	3' BB	AS SHOWN

<b>DECIDUOUS ORNAMENTAL TREES</b>					
AAB	2	Amelancier g. 'Autumn Brilliance'	Autumn Brilliance Serviceberry	8' BB	AS SHOWN
MRJ	1	Malus 'Red Jewel'	Red Jewel Crabapple	8' BB	AS SHOWN
SR	2	Syringa r. 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	8' BB	AS SHOWN

<b>EVERGREEN TREES</b>					
PO	2	Picea omorika	Serbian Spruce	6' BB	AS SHOWN
PP	1	Picea pungens	Colorado Green Spruce	6' BB	AS SHOWN
PS	1	Pinus strobus	Eastern White Pine	6' BB	AS SHOWN
TOS	4	Thuja o. 'Smaragdd'	Emerald Green Arborvitae	6' BB	AS SHOWN
TGG	6	Thuja p. 'Green Giant'	Green Giant Arborvitae	6' BB	AS SHOWN

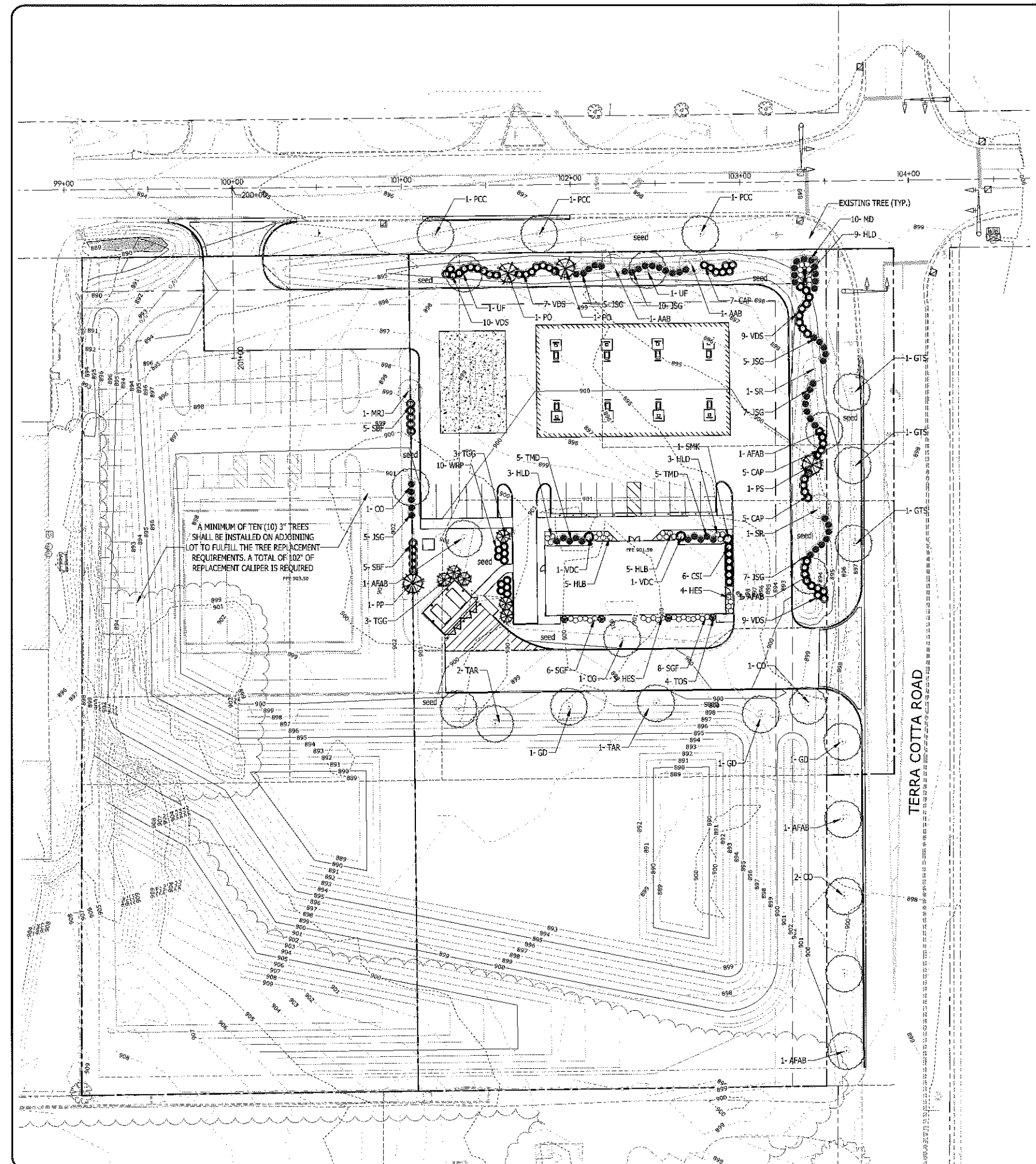
<b>DECIDUOUS SHRUBS &amp; SHRUB ROSES</b>					
CS	6	Comum s. 'Isanti'	Isanti Redtwig Dogwood	30' BB	4'-O.C.
CAP	17	Cotoneaster s. 'Peking'	Peking Cotoneaster	3' BB	4'-O.C.
HES	9	Hydrangea m. 'Bailmer'	Endless Summer Hydrangea	5 Gal.	4'-O.C.
HLD	15	Pinus strobus m. 'Robert'	Let's Dance Moonlight Hydrangea	3 Gal.	3'-O.C.
HLB	10	Hydrangea p. 'Bombshell'	Bombshell Hydrangea	3 Gal.	3'-O.C.
SGF	24	Spiraea j. 'Gold Flame'	Goldflame Sirea	5 Gal.	3'-O.C.
SMK	1	Syringa p. 'Miss Kim'	Miss Kim Lilac	3' BB	AS SHOWN
VDC	2	Viburnum d. 'Christholm'	Blue Muffin Arrowwood Viburnum	30' BB	4'-O.C.
VDS	35	Viburnum d. 'Synnestevedt'	Chicago Lustre Arrowwood Viburnum	3' BB	4'-O.C.
WRP	10	Weigela f. 'Red Prince'	Red Prince Weigela	5 Gal.	4'-O.C.

<b>EVERGREEN SHRUBS</b>					
JSG	39	Juniperus c. 'Sea Green'	Sea Green Juniper	24' (4) BB	4'-O.C.
MD	10	Microbiota decussata	Russian Arborvitae	5 Gal.	4'-O.C.
TMD	10	Taxus m. 'Deniformis'	Dense Yew	24' BB	4'-O.C.

QUAN	ITEM	DESCRIPTION
T.B.D.	SY	Kentucky Bluegrass Blend w/Perennial Rye
T.B.D.	SY	Erosion Control Blanket
T.B.D.	CY	Mulch
		North American Green S75 Straw Blanket
		Shredded Hardwood Bark

NOTE: DUE TO EXISTING TREE REMOVALS OVER THE ENTIRE SITE, 102" OF REPLACEMENT CALIPER IS REQUIRED. TWENTY-FOUR (24) TREES AT 3" CALIPER ARE PROPOSED FOR THE CASEY'S SITE FOR 72". A MINIMUM OF TEN (10) TREES AT 3" CALIPER SHALL BE INSTALLED ON THE ADJOINING SITE TO THE WEST UPON DEVELOPMENT FOR 30".

- NOTES:
- TREE SPACING SHALL BE AS SHOWN.
  - ALL TREES SHALL RECEIVE A 4' MULCH RING FOLLOWING INSTALLATION.
  - PLANT LOCATION MAY VARY PENDING FINAL GRADING AND UTILITIES.



**ART DESIGN RESOURCES INC.**  
 5291 ZENITH PARKWAY  
 LOVES PARK, IL 61111  
 VOICE: (815) 484-4300  
 FAX: (815) 484-4303  
 www.artdesign.com  
 Design Firm License No. 184-001334

PROJECT NAME  
OWNER'S NAME

**CASEY'S GENERAL STORE**  
 CRYSTAL LAKE, IL  
 E. TERRA COTTA AVE & TERRA COTTA ROAD  
 CASEY'S RETAIL COMPANY  
 ONE CONVENIENCE BLVD  
 ANKENY, IA 50021  
 JACOB CLARK  
 (515) 963-3831

CONSULTANTS

ISSUED FOR	DATE
PRELIMINARY SPECIAL USE	12-15-2013
INITIAL IDOT REVIEW	01-15-2016
SPECIAL USE	01-19-2016
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REVISIONS	DATE
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SHEET TITLE  
**LANDSCAPING PLAN**

DRAWN	DRH
CHECKED	RGS
PM	RCS

PROJECT NUMBER  
SHEET NUMBER

15134  
L01



**APC DESIGN**  
RESOURCES INC.

5201 ZENITH PARKWAY  
LOVES PARK, IL 61111  
VOICE: (815) 484-4300  
FAX: (815) 484-4303  
www.apc-design.com  
Design Firm License No. 184-001334

PROJECT NAME  
OWNER'S NAME

**CASEY'S  
GENERAL  
STORE**

CRYSTAL LAKE, IL  
E. TERRA COTTA AVE &  
TERRA COTTA ROAD

CASEY'S RETAIL COMPANY  
ONE CONVENIENCE BLVD  
ANKENY, IA 50021  
JACOB CLARK  
(515)963-3831

CONSULTANTS

ISSUED FOR	DATE
PRELIMINARY SPECIAL USE	12-15-2015
INITIAL BID REVIEW	01-15-2016
SPECIAL USE	01-19-2016
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ITEM	DATE
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SHEET TITLE

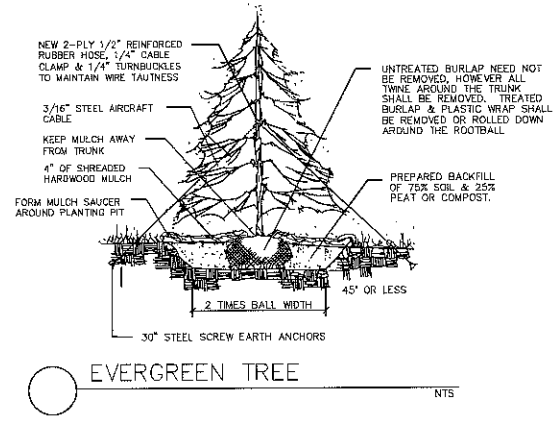
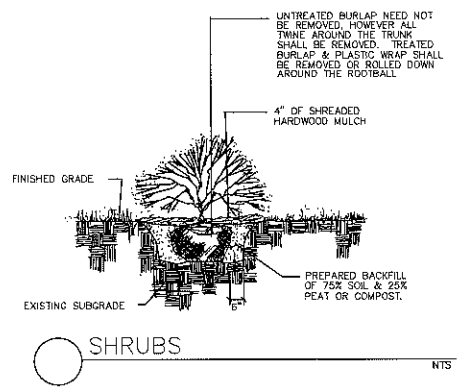
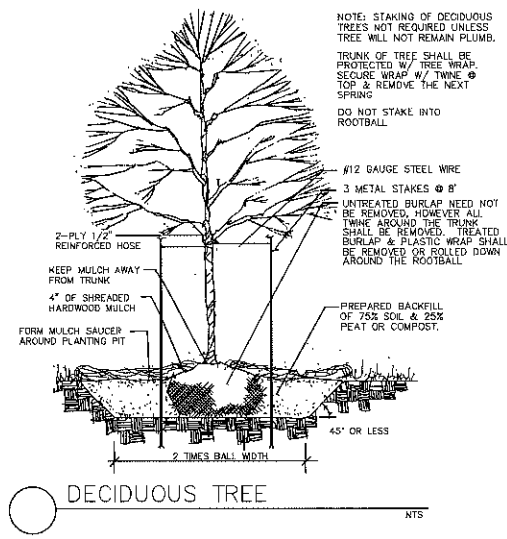
**LANDSCAPE  
NOTES**

DRAWN DRH  
CHECKED RGS  
PH RCS

PROJECT NUMBER  
SHEET NUMBER

**15134**

**L02**



**GENERAL NOTES:**

Plant material shall be nursery grown and be either balled and burlapped or container grown. Sizes and spreads on plant list represent minimum requirements.

Size 4 grading standards of plant materials shall conform to the latest addition of ANSI Z60 AMERICAN STANDARD OF NURSERY STOCK, by the American Nursery & Landscape Association.

Any materials with damaged or crooked/disfigured leaders, bark abrasion, sunscald, insect damage, etc. are not acceptable and will be rejected. Trees with multiple leaders will be rejected unless called for in the plant list as multi-stem or clump (cl).

Grading shall provide slopes which are smooth and continuous. Positive drainage shall be provided in all areas.

Quantity lists are supplied as a convenience. However, the contractor should verify all quantities. The drawings shall take precedence over the lists.

All plant species specified are subject to availability. Material shortages in the landscape industry may require substitutions. All substitutions must be approved by the Landscape Architect and/or Owner.

Contractor shall verify location of all underground utilities prior to digging. For location outside the City of Chicago call 'JULIE' (Joint Utility Location for Excavators) 1-800-892-0123.

Contractor shall report any discrepancies in the field to the Landscape Architect and/or Owner.

Plant symbols illustrated on this plan are a graphic representation of proposed plant material types and are intended to provide for visual clarity. However, the symbols do not necessarily represent actual plant spread at the time of installation.

All planting beds and tree saucers shall be mulched with a minimum of three inches (3") of shredded wood mulch with the exception of evergreen trees which shall receive one inch (1") of shredded hardwood mulch over two inches (2") of southern pine bark.

All bed lines and tree saucers shall require a hand spaded edge between lawn and mulched areas.

All areas that are disturbed by construction shall be at a minimum seeded with a Kentucky Bluegrass/Perennial Rye blend.

All On-site green spaces that are not in planting or mulch beds shall be seeded with a Kentucky Bluegrass/Perennial Rye blend.

All plant material shall be guaranteed for one (1) year from the date of acceptance.





# CASEY'S CRYSTAL LAKE SUBDIVISION

BEING A RESUBDIVISION OF LOTS 1 & 2 OF THE FINAL PLAT OF GERACI ACRES SUBDIVISION AND PART OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 33, TOWNSHIP 44 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, MCHENRY COUNTY, ILLINOIS

**LEGEND**

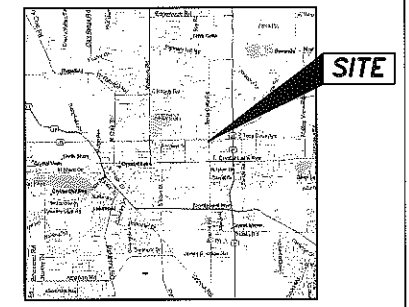
○	FOUND MONUMENT
N 45°52'36" E	MEASURED BEARING
586.78'	MEASURED DISTANCE
---	PROPOSED BUILDING SETBACK LINE
---	EXISTING BUILDING SETBACK LINE
---	PROPOSED EASEMENT LINE
---	EXISTING EASEMENT LINE
---	SECTION LINE
---	PROPOSED RIGHT-OF-WAY LINE
---	EXISTING RIGHT-OF-WAY LINE
---	EXISTING LOT LINE
---	EXTERIOR BOUNDARY LINE
1	LOT NUMBER
S.F.	SQUARE FEET

**ARC DESIGN**  
RESOURCES INC.

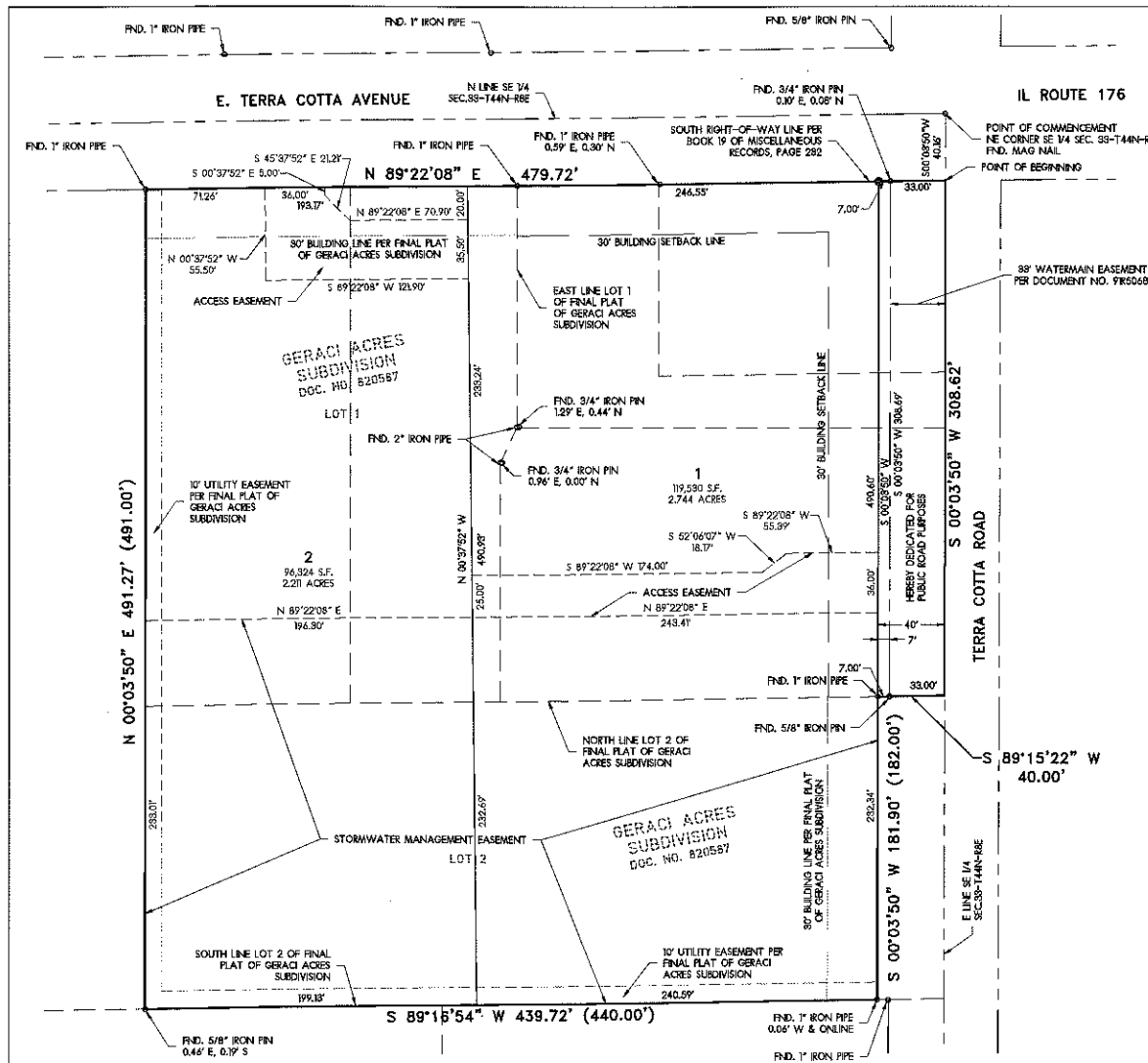
5291 ZENITH PARKWAY  
LOVES PARK, IL 61111  
VOICE: (815) 484-4300  
FAX: (815) 484-4303  
www.arcdesign.com  
Design Firm License No. 134-001334

**RECEIVED**  
JAN 22 2016  
BY:

2015 66



**OWNERS**  
CASEY'S RETAIL COMPANY  
ONE SE CONVENIENCE BOULEVARD  
ANKENY, IA 50021



COUNTY HIGHWAY CERTIFICATE

STATE OF ILLINOIS )  
COUNTY OF MCHENRY ) S.S.

This plat is hereby approved this \_\_\_\_\_ day of \_\_\_\_\_, A.D., 2016 by the County Engineer of McHenry County pursuant to Chapter 765, Act 205, Section 2 of the Illinois Compiled Statutes, as amended, as to roadway access to Illinois Route 176, also known as East Terra Cotta Avenue. Direct access to or from the County Highway shall be restricted as shown on this plat and shall be subject to the McHenry County Access Control and Right-of-Way Management Ordinance which requires, in part, that application be made and an access permit be obtained from the County Engineer of McHenry County prior to any access installation.

County Engineer \_\_\_\_\_

COUNTY CLERK CERTIFICATION

STATE OF ILLINOIS )  
COUNTY OF MCHENRY ) S.S.

I, \_\_\_\_\_, County Clerk of McHenry County in the State of Illinois, do hereby certify that there are no delinquent taxes, no unpaid forfeited taxes and no redeemable tax sales against any of the land included in the subject plat. I further certify that I have received all statutory fees in connection with the subject plat.

Given under my hand and Seal of the County Clerk, dated this \_\_\_\_\_ day of \_\_\_\_\_, A.D. 2016.

County Clerk \_\_\_\_\_

COUNTY RECORDER CERTIFICATION

STATE OF ILLINOIS )  
COUNTY OF MCHENRY ) S.S.

This instrument was filed for recording in the Recorder's Office of McHenry County, Illinois, dated this \_\_\_\_\_ day of \_\_\_\_\_, 2016 at \_\_\_\_\_ O'clock, \_\_\_\_\_ A.M., and recorded as Document No. \_\_\_\_\_.

County Recorder \_\_\_\_\_

SURVEYOR CERTIFICATION

STATE OF ILLINOIS )  
COUNTY OF WINNEBAGO ) S.S.

I HEREBY CERTIFY that at the request of the owners, I have surveyed and subdivided according to the attached Casey's Crystal Lake Subdivision, to locate the boundaries and corners thereof, that monuments were found or set as indicated hereon, and that the survey conforms to the normal standard of care of surveyors performing boundary surveys in McHenry County, Illinois. Dimensions are given in feet and decimals of a foot; distances along curves are shown as chord lengths. Iron pins 3/4 inch in diameter and 4 feet long have been set or found at all corners marked \_\_\_\_\_, and iron pins 5/8 inch in diameter and 3 feet long have been set at all other corners, unless otherwise noted.

PROPERTY DESCRIBED AS: Lots 1 and 2 in Geraci Acres Subdivision, being a subdivision of part of the Northeast Quarter of the Southeast Quarter of Section 33, Township 44 North, Range 8 East of the Third Principal Meridian, according to the Plat thereof recorded July 27, 1981 as Document No. 820587, in the Recorder's Office of McHenry County, Illinois and part of the Northeast Quarter of the Southeast Quarter of Section 33, Township 44 North, Range 8 East of the Third Principal Meridian, more particularly bounded and described as follows, to-wit:

Commencing at the Northeast corner of the Southeast Quarter of said Section 33; thence South 00°03'50" West along the East line of the Southeast Quarter of said Section 33, a distance of 40.16 feet to the Point of Beginning of the following description; thence continuing South 00°03'50" West along the East line of the Southeast Quarter of said Section 33, a distance of 305.42 feet to the North line, extended Easterly, of said Lot 2; thence South 89°15'22" West along the North line, extended Easterly, of said Lot 2, a distance of 40.00 feet to the Westerly right-of-way line of Terra Cotta Road; thence South 00°03'50" West along the Westerly right-of-way line of said Terra Cotta Road, a distance of 181.90 feet to the South line of said Lot 2; thence South 89°15'22" West along the South line of said Lot 2, a distance of 439.72 feet to the West line of said Lot 2; thence North 00°03'50" East along the West line of said Lot 2 and said Lot 1, a distance of 491.27 feet to the South right-of-way of Terra Cotta Avenue (IL Route 176); thence North 89°22'08" East along the South right-of-way of said Terra Cotta Avenue (IL Route 176), a distance of 479.72 feet to the Point of Beginning, containing 5.239 acres (228,200 square feet), more or less, all being situated in the County of McHenry and State of Illinois.

I FURTHER CERTIFY that I have made an independent search of the records for easements, encumbrances, ownership, or title evidence, or any other facts which an accurate and current title search may disclose, as part of this survey, but have relied upon the materials and representations supplied to me by the owners representative, and that a current Title Commitment was not furnished to me as part of this survey.

I FURTHER CERTIFY that reference has been made upon the accompanying plat of survey to known and permanent monuments from which future re-surveys may be made and that I have found or set survey monuments as shown thereon. Discrepancies between the plotted and measured location of monuments have been noted on the accompanying plat.

I FURTHER CERTIFY that no buildings on the adjacent property encroach on this property and that no buildings on this property encroach on the adjacent property.

I FURTHER CERTIFY that no investigation concerning environmental and subsurface conditions, or for the existence of underground or overhead containers or facilities which may affect the use or development of this property was made as part of this survey.

I FURTHER CERTIFY that the location, size and/or existence of any utility service lines to the property and subsurface improvements on and adjacent to the site are not necessarily shown.

I FURTHER CERTIFY that this plat is situated within the corporate limits of a city which has a city plan and is exercising the special powers authorized by Division 12 of Article II of the Illinois Municipal Code, as now or hereafter amended.

I FURTHER STATE that the above described property lies within an area designated as Zone X (Areas determined to be outside the 0.2% annual chance floodplain) as identified by the Federal Emergency Management Agency on Flood Insurance Rate Map No. DTIC03951, effective date November 16, 2006. This map does not necessarily show all areas subject to flooding in the community or its planimetric features outside the special flood hazard area. This does not guarantee that the surveyed property will or will not flood.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2016.



Benjamin S. Christiansen  
Illinois Professional Land Surveyor No. 035-3918  
Arc Design Resources, Inc.  
5291 Zenith Parkway  
Loves Park, IL 61111  
(815) 484-4300

I do hereby state that to the best of my knowledge and belief the drainage of surface waters will not be changed by the re-plotting of this subdivision or any part thereof, or that if such surface water drainage will be changed, reasonable provision has been made for collection and diversion of such surface waters into public areas, or drains which the subdivider has a right to use in accordance with the storm water design for the Final Plat of Casey's Crystal Lake Subdivision, as designed by Arc Design Resources, Inc., 2016.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2016 A.D.

Illinois Licensed Professional Engineer \_\_\_\_\_

CITY COUNCIL CERTIFICATION

STATE OF ILLINOIS )  
COUNTY OF MCHENRY ) S.S.

Approved by the City Council of Crystal Lake this \_\_\_\_\_ day of \_\_\_\_\_, 2016.

Mayor \_\_\_\_\_

Attest: City Clerk \_\_\_\_\_

CRYSTAL LAKE PLANNING AND ZONING COMMISSION CERTIFICATION

STATE OF ILLINOIS )  
COUNTY OF MCHENRY ) S.S.

I, \_\_\_\_\_, Chairman of the Crystal Lake Planning and Zoning Commission, do hereby certify that on this \_\_\_\_\_ day of \_\_\_\_\_, 2016 this Plat of Subdivision was duly approved by the Planning and Zoning Commission of the City of Crystal Lake.

Benjamin S. Christiansen  
Illinois Professional Land Surveyor No. 035-3918  
Arc Design Resources, Inc.  
5291 Zenith Parkway  
Loves Park, IL 61111  
(815) 484-4300

OWNER CERTIFICATION

The undersigned, \_\_\_\_\_, that have caused the property embraced within the attached "Casey's Crystal Lake Subdivision", to be surveyed and subdivided, according to the plat, into numbered lots for the convenience in selling, streets for the use of the public, and perpetual easements for storm drainage, storm water detention, park areas, and for public utilities services as indicated, and labeled thereon. All streets, alleys, walkways, parks, playgrounds, and school sites shown on this plat are hereby dedicated to the public for public purposes.

This is also to certify that to the best of my knowledge the aforementioned property is located within the boundaries of the following School Districts:

Crystal Lake Community Consolidated School District 47, Community High School District 155

Witness my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2016.

By: \_\_\_\_\_

By: \_\_\_\_\_

NOTARY PUBLIC CERTIFICATION

STATE OF ILLINOIS )  
COUNTY OF \_\_\_\_\_ ) S.S.

I, \_\_\_\_\_, a Notary Public in and for the County of \_\_\_\_\_

In the State of \_\_\_\_\_ do hereby certify that \_\_\_\_\_ personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day and acknowledged that they signed, sealed and delivered said instrument as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and Notarial Seal this \_\_\_\_\_ day of \_\_\_\_\_, 2016.

My Commission Expires \_\_\_\_\_

NOTARY PUBLIC \_\_\_\_\_

## **Environmental Impact Statement**

**Proposed Service Station  
Southwest Corner of RT 176 and Terra Cotta Street  
Crystal Lake, Illinois**

January 25, 2016  
SMA Project No. 15-15003.00-001

Prepared For:

**City of Crystal Lake**  
100 W. Woodstock Street  
Crystal Lake, Illinois 60014

Prepared By:

**St. John – Mittelhauser & Associates, Inc.**  
1401 Branding Avenue, Suite 315  
Downers Grove, Illinois 60515

## EXECUTIVE SUMMARY

The City of Crystal Lake (Crystal Lake) retained St. John – Mittelhauser & Associates, Inc., (SMA) to provide assistance in the development of an environmental impact statement (EIS) for a proposed gasoline service station at the southwest corner of Rt. 176 and Terra Cotta Street in Crystal Lake, McHenry County, Illinois (the Site).

The Site is located in an area of permeable sand and gravel within 20 feet of land surface. These coarse grained soils are well drained and are expected to convey liquids vertically with little to no lateral migration. According to the Illinois State Water Survey (ISWS), groundwater flow is to the east - southeast, towards the Fox River. The closest municipal wells (City of Crystal Lake Municipal Well Nos. 10, 11, and 14) are located approximately 2,000 feet north-northwest (upgradient) of the Site. The nearest downgradient potable water well is located approximately 400 feet east of the Site. The nearest downgradient wetland is located approximately 4,200 feet to the southeast (at the corner of East Crystal Lake Avenue and Prairie Ridge Road).

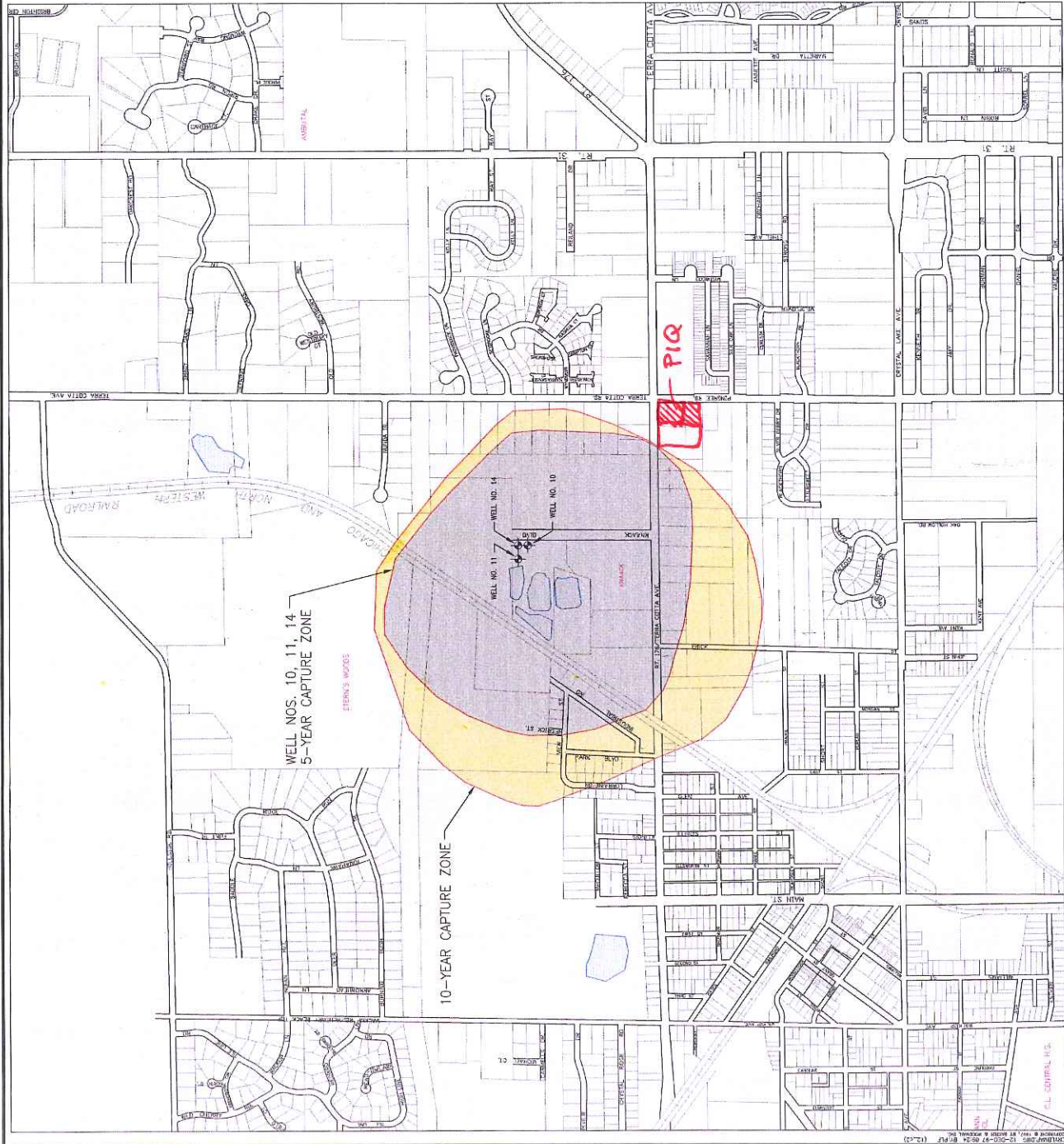
According to information provided by Arc Design Resources, Inc. (Arc Design) and Casey's General Stores (Casey's), the proposed station will utilize current technology designed to prevent a release of petroleum into the subsurface. This technology includes the use of double wall tanks, double wall piping, and containment sumps. Furthermore, electronic leak detection sensors will be placed throughout the interstitial (secondary containment) areas to monitor the UST system 24/7. In accordance with Casey's Operation and Maintenance Manual, the leak detection sensor system is inspected daily by Casey's personnel to ensure the system is functioning normally. In addition, all records are inspected by the Office of the Illinois State Fire Marshal on an annual basis. Based on the design of the proposed station, there is no reason to expect that day to day operations of the proposed station will result in a release of sufficient magnitude to negatively impact the soil and groundwater surrounding the Site.

Should a sensor indicate a release into the interstitial area, the UST and/or piping will be emptied of product, inspected, and repaired by the manufacturer. All inspections and repairs are completed under the direction of the Illinois State Fire Marshal.

Studies of petroleum plumes associated with releases from USTs indicate 75% of all containment plumes either stabilize, or are decreasing within 250 feet of the source. Additionally, this surficial sand and gravel groundwater is expected to exhibit elevated concentrations of dissolved oxygen that would significantly attenuate any released gasoline constituents. Based on this, a petroleum plume into the subsurface from the Site would likely terminate within a short distance.

# CITY OF CRYSTAL LAKE, ILLINOIS

## WELLHEAD PROTECTION PROGRAM



**Baxter & Woodman**  
 Crystal Lake, Illinois 815.455.1800  
 Burlington, Wisconsin 414.763.7834  
 Oak Forest, Illinois 708.580.7979