

AGENDA
Cascade Charter Township Planning Commission
Monday, January 19, 2015
7:00 pm
Cascade Library Wisner Center
2870 Jacksmith Ave. SE

- ARTICLE 1. Call the meeting to order
Record the attendance**
- ARTICLE 2. Pledge of Allegiance to the flag**
- ARTICLE 3. Approve the current Agenda**
- ARTICLE 4. Approve the Minutes of the December 1, 2014 meeting**
- ARTICLE 5. Acknowledge visitors and those wishing to speak to non-agenda items.
(Comments are limited to five minutes per speaker.)**
- ARTICLE 6. Case # 14-3225 Vaneck Enterprises
Public Hearing
Property Address: 5630 28th Street & 2828 Kraft SE
Requested Action: The Applicant is requesting to rezone property to Planned
Unit Development for new 4,500 sq. ft. restaurant and make minor
modifications to 2828 Kraft Avenue.**
- ARTICLE 7. Proposed Work Plan for 2015**
- ARTICLE 8. Planning Department 2014 Annual Report**
- ARTICLE 9. Election of Officers**
- ARTICLE 10. Any other business**
- ARTICLE 11. Adjournment**

Meeting format

- | | |
|---|---|
| 1. Staff Presentation | <i>Staff report and recommendation</i> |
| 2. Project presentation- | <i>Applicant presentation and explanation of project</i> |
| a. PUBLIC HEARINGS | |
| i. <i>Open Public Hearing.</i> | <i>Comments are limited to five minutes per speaker; exception
may be granted by the chair for representative speakers and applicants</i> |
| ii. <i>Close public hearing</i> | |
| 3. Commission discussion – | <i>May ask for clarification from applicant, staff or public</i> |
| 4. Commission decision - Options | |
| a. <i>Table the decision</i> | <i>d. Approve with conditions</i> |
| b. <i>Deny</i> | <i>e. Recommendation to Township Board</i> |
| c. <i>Approve</i> | |

MINUTES

Cascade Charter Township Planning Commission

Monday, December 1, 2014

7:00 P.M.

ARTICLE 1. Chairman Pennington called the meeting to order at 7:00 PM.
Members Present: Lewis, Mead, Pennington, Rissi, Robinson, Sperla, Waalkes, Williams
Members Absent: Hammond (Excused)
Others Present: Community Development Director Steve Peterson and others listed on the sign in sheet.

ARTICLE 2. Pledge of Allegiance to the flag.

ARTICLE 3. Approve the current Agenda.

Motion by Member Lewis to approve the Agenda. Support by Member Mead. Motion carried 8-0.

ARTICLE 4. Approve the Minutes of the November 17, 2014 meeting.

Motion by Member Mead to approve the minutes of the November 17, 2014 meeting with corrections. Support by Member Waalkes. Motion carried 8-0.

ARTICLE 5. Acknowledge visitors and those wishing to speak to non-agenda items (Comments are limited to five minutes per speaker.)

No one came forward.

ARTICLE 6. Case #14-3225 Vaneck Enterprises

Property Address: 6868 Cascade Road

Requested Action: The applicant is requesting a Basic Plan Review to rezone the property to Planned Unit Development for new 4,500 sq. ft. restaurant and make minor modifications to 2828 Kraft Avenue.

Director Peterson presented the case. This is the introductory level to give the applicant feedback if there's something that's missing before the Public Hearing. A Public Hearing is not set until all the information we request is provided. This is the SE corner of 28th and Kraft. This is the location of the Old Centennial Park sign. The Centennial Park Study identified this area as prime for in-fill development. As part of the study we created the Centennial Park Overlay Zoning District. This property is within this zoning district. The building being proposed is a Panera Bread stand-alone restaurant. It would take the place of one further down the street in the Wendy's plaza. The proposed building is

about 4,500 sq. ft. and has a pick-up window. The current restaurant doesn't have a pick-up window. A pick-up window use is permitted in the Centennial Park Overlay Zoning District but requires a Special Use Permit. The applicant is choosing the PUD Zoning Process for procedure and there are a couple variances that will be required on this site. The clear vision corner requirement will require set back adjustments for parking to the property line. The buffer yard is narrower than what we allow and the driveway spacing will require an exception. They're using the PUD process to go through all of this at once. Other than the items mentioned they'll have to comply with requirements of the Centennial Park Overlay Zoning District. They've submitted their plans to the Centennial Park Review Board. This Board is made up of representatives of the parks association and township representatives to look at the aesthetics from the Overlay Zoning Districts. The applicant was able to meet their requests. The site will be using underground detention so you will not see retention ponds. They're working with the Township Engineer and will provide a letter of approval before it is scheduled for public hearing. The two requirements that I have are: 1) the review comments from the Township Engineer, and 2) labeling the property location of the monument sign.

Member Lewis asked if the current sign would remain. Director Peterson stated the current sign would be removed. A traditional pylon sign would be used. There's an easement if the Association would ever want a sign at the park in the future.

Member Mead asked if on the south side of the property there will be a reciprocating agreement between the properties. Director Peterson stated the owner of the property owns both parcels. We would write "cross access" into the Ordinance.

Chairman Pennington requested the applicant come forward with comments.

Justin Spackman, Jeffrey Parker Architects, answered questions on behalf of the applicant.

Chairman Pennington asked if he had any information on the Storm Water Plan. The applicant stated it was currently being studied by their Civil Engineer.

Member Lewis asked if the current building was larger than the one proposed. The applicant stated that locations inside strip malls are typically around 3,300 sq. ft. The 4,500 sq. ft. building is the new standard size for a Panera.

Member Williams asked if all new Panera's had drive-thru's. The applicant stated all new Panera's have drive-thru's. Member William's asked how the

drive-thru works as Panera is not a typical fast food restaurant. The applicant stated there's an abbreviated menu offered in the drive-thru to maximize time and production. Typically they allow 40 seconds per order or provide pull through service.

Chairman Pennington instructed the applicant to provide the information requested by staff in order to schedule a Public Hearing.

ARTICLE 7. Any other business

There was no new business.

ARTICLE 8. Adjournment

Motion by Member Mead. Support by Member Williams. Motion carried 8-0. Meeting adjourned at 7:29 PM.

Respectfully submitted,
Aaron Mead, Secretary

Ann Seykora/Debra Groendyk
Planning Administrative Assistant

STAFF REPORT

TO: Cascade Charter Township Planning Commission
FROM: Steve Peterson, Community Development Director
REPORT DATE: January 9, 2015
MEETING DATE: January 19, 2015
CASE: #14-3225 / Panera Bread

GENERAL INFORMATION

- A. **Applicant:** Vaneck Enterprises
1769 Laraway Lake Dr
Grand Rapids MI 49504

- B. **Status of Applicant:** Owner

- C. **General Location:** SE corner of Kraft and 28th St

- D. **Requested Action:** Rezone property to Planned Unit Development for new 4,500 sq ft restaurant and make minor modifications to 2828 Kraft Ave.

- E. **Existing Zoning on Subject Parcels:** Centennial Park Overlay Zoning District

- F. **Zoning on Adjoining Parcels:**

N – B2
S – Centennial Park Overlay
E – Centennial Park Overlay
W – ES

- G. **Parcel Size:** Approximately 1 acre

- H. **Existing Land Use on Subject Parcel:** Vacant

- I. **Adjacent Area Land Uses:**
North - Bank
East - Hotel
South - Office
West - Restaurant

STAFF ANALYSIS

- A. The applicant is requesting Preliminary approval in order to develop SE corner of Kraft and 28th St (5630 28th St) for a standalone Panera Bread restaurant with drive thru service.
- B. The project consists of a new 4,500 sq ft building and adjustments to property lines and additional parking at 2828 Kraft.
- C. The property owner of 2828 Kraft Ave also own the property at 5630 28th St. The corner is occupied by the large sign for the 2828 Kraft Ave building.
- D. The property is currently zoned as a part of the Centennial Park Overlay Zone. This district was created in 2010 to deal with the lack of any standards in the original Centennial Park PUD Ordinance from 1973.
- E. The new project is attempting to comply with all of the new standards in the overlay zoning district. They are asking for PUD approval for a couple of reasons. They do need a couple of variances for driveway spacing and bufferyards as well as process since it would require a specials Use with the drive through. We can do it all together as a PUD.
- F. The exception to the ordinances are as follows:

	Standards	Request	Comment
Bufferyard	25 feet	1.Reduction of bufferyard along 28 th St/Kraft clear vision corner. 2. reduction of bufferyard along south property line	1.Similar to what we have done at the NW corner of Kraft and 28 th . 2.a reduction of about 7 feet will still allow for plantings between the properties.
Driveway spacing	85 feet	Have a separate drive for the Panera store that is 80 feet from the 2828 Kraft drive	This is a reduction of about 15 feet. The KCRC would prefer the separate drive and so would the applicant. On a busier road I would not be in support .

- G. The project has been reviewed by the Centennial Park Review Board. The review board has offered several comments. Those comments have been addressed by the applicant. There was some confusion about the amount of signage but that has been addressed with the current set of plans.
- H. The applicant has submitted a lighting plan that meets our regulations. The applicant has indicated that they are meeting the design of the DDA lights on Foremost and 28th St.
- I. The applicant has designed an underground storage storm sewer system. This has been reviewed and approved by the township engineer. the storm water maintenance agreement will be required before construction.

- J. The current Master Plan designation for this property is mixed use. This designation allows for a commercial project. This designation was intended to encourage a mix of residential, commercial and office.
- K. The plan does include a pedestrian path link into the site and between the two site. It also permits for vehicular access between the two site. The developer has already submitted a cross access agreement.

Standards

Section 16.03 of the Zoning Ordinance requires that a proposed Planned Unit Development must demonstrate that:

Standard	Staff Comment
Granting of the Planned Unit Development rezoning will result in a recognizable and substantial benefit to the ultimate users of the project and to the community, where such benefit would otherwise be unfeasible or unlikely to be achieved.	Granting the PUD rezoning allows for the project to reviewed at one time rather than have to go through the variance process.
In relation to underlying zoning, the proposed type and density of use shall not result in a material increase in the need for public services, facilities and utilities, and shall not place a material burden upon the subject or surrounding land or property owners and occupants or the natural environment	Both the underlying zone and the overlay zone allow for commercial uses along 28 th and Kraft. This development is complaint with that.
The proposed development shall be compatible with the General Development Plan of the Township, and shall be consistent with the intent and spirit of this Chapter	The project is consistent with the master plan
In relation to underlying zoning, the proposed development shall not result in an unreasonable negative economic impact upon surrounding properties	Since the project complies with zoning use and the master plan it would not result in an unreasonable negative economic impact
The proposed development shall contain at least as much green area and usable open space as would otherwise be required by this Ordinance with respect to the most dominant use in the development	As much green space is probably being maintained as a PUD rather than by right zoning due to the grades.
The proposed development shall be under single ownership or control such that there is a single person or entity having responsibility for completing the project in conformity with this Ordinance. This provision shall not prohibit a transfer of	met

ownership or control, upon due notice to the Planning Director of the Township	
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Staff Recommendation

Staff recommends approval of the preliminary plan with the following condition:

1. Sign the storm water maintenance agreement.
2. Execute an easement to allow for Centennial Park to place a sign at the corner of Foremost and 28th st.

This approval would also allow for the couple of administrative changes to 2828 Kraft Ave property. If approved, staff can begin to write a draft PUD ordinance for your review. This would also allow for any final details to be addressed prior to the Planning Commission recommendation to the Township Board. Once the PUD Ordinance is reviewed by the applicant you would be asked to make a recommendation to the Township Board.

ATTACHMENTS:

- APPLICATION
- SITE PLAN
- LOCATION MAP
- TOWNSHIP ENGINEER REPORT



January 14, 2015
Project No. G080322

Mr. Steve Peterson
Cascade Charter Township
2865 Thornhills Avenue, SE
Grand Rapids, MI 49546-7192

Re: Panera Bread Restaurant
Site Plan Review

Dear Steve:

We have reviewed the site plan for the Panera Bread restaurant, located at 5630 28th Street, prepared by Jeffrey Parker Architects and Roosien and Associates. The current site plan and the basis of this review are dated January 5, 2015 (Sheet A4.0) and January 8, 2015 (Sheet A5.0).

The proposed project is a new Panera Bread restaurant. The project site consists of two parcels; Parcel A (41-19-17-101-012) and Parcel B (41-19-17-101-013). The Panera Bread restaurant is proposed for Parcel A, located at the southeast corner of the intersection between 28th Street and Kraft Avenue. Parcel A is currently undeveloped, but contains a property sign for the business located on Parcel B. Parcel B contains an existing commercial business with the address 2828 Kraft Avenue. Proposed improvements for Parcel B include an additional asphalt parking lot and a new drive entrance off of Coach Road.

It is our understanding the site plan will be reviewed at the Planning Commission meeting public hearing stage on January 19, 2015.

Stormwater and Drainage

Flood Control

The proposed project is a new development, so all improvements shall comply with the requirements of the Cascade Charter Township (Township) Stormwater Ordinance (SWO). The site is located in Stormwater Management Zone B, which requires detention of the 25-year storm event. The SWO also requires the first 0.5 inch of stormwater runoff be detained and released over a 24-hour period.

Stormwater runoff from the site will discharge to two underground storage units sized to detain the 25-year storm event. One underground storage unit is located in Parcel A and the other in Parcel B. Stormwater runoff from all impervious areas of the site will discharge to the storage units. The storage units will discharge to an existing 18-inch storm sewer owned by the Kent County Road Commission (KCRC). The existing storm sewer traverses the north side of the site from east to west, crosses through Kraft Avenue, and continues to the west. The existing storm sewer system is located in the Cascade West drainage district, tributary to Plaster Creek.

A permit from the KCRC will be required prior to discharging to the storm sewer system. The proposed design meets the requirements of the SWO.



Water Quality Control

The SWO requires the first 0.5 inch of stormwater runoff be detained and infiltrated where conditions permit, or released over a 24-hour period. The proposed plan is to detain and release over a 24-hour period.

The proposed underground storage facility is a StormTech system. This particular design includes an Isolator Row designed to provide for settling and filtration of sediment as stormwater rises in the Isolator Row and ultimately passes through the perforated sidewalls of the chamber. Sediments are captured in the Isolator Row, protecting the storage areas of the adjacent stone and chambers from sediment accumulation. The Isolator Row is designed to capture the "first flush" and other small storm events. The final design should ensure adequate maintenance access to the Isolator Row through the adjacent manhole for removal of accumulated sediment.

The proposed design meets the requirements of the SWO.

Stormwater Runoff

The applicant provided stormwater calculations to size the underground storage facilities. All stormwater runoff from the impervious areas of the site will be captured by the basins. Therefore, the site will not see an increase in peak flow rate of stormwater leaving the site.

Drainage Plan

The applicant has submitted plans, calculations, and additional documentation as required in the SWO Section 2.03, Drainage Plan. Please refer to the included checklist for items and comments on each item. Please note a maintenance agreement is required before construction begins. The agreement should be submitted to the Township for review. The maintenance agreement and plan should include at a minimum, cleaning of the Isolator Row, catch basin sumps, and outlet control structure orifices at a frequency sufficient to keep the system operating as it was designed.

Utilities

Water Main

The Panera Bread restaurant will require a new 2-inch domestic water service and a 4-inch fire protection service. The proposed utility plan shows these services coming off of an existing 8-inch water main in Foremost Drive, located along the east side of the site. City permits will be required for the water service prior to construction taking place.

Sanitary Sewer

The Panera Bread restaurant will require a new sanitary sewer service. The proposed utility plan shows this service coming off of an existing sanitary sewer main in Foremost Drive, located along the east side of the site. City permits will be required for the sanitary sewer service prior to construction taking place.

Soil Erosion and Sedimentation Control

Soil Erosion and Sedimentation Control (SESC) measures are provided on the plan drawings. The applicant has included silt fence around most of the site, silt sacks in catch basins, and erosion control blankets on the steeper slopes. The applicant will need to apply for and obtain an SESC permit from the KCRC prior to beginning any work.

Mr. Steve Peterson
Page 3
January 14, 2015



Summary

The proposed stormwater design meets the Township SWO requirements for new developments. The applicant will need to apply for and obtain a number of permits (SESC, water, and sanitary sewer from the City) prior to beginning construction. We recommend approval of the site plan from an engineering standpoint.

If you have any questions or require additional information, please contact me at 616.464.3786 or ntorrey@fitch.com.

Sincerely,

FISHBECK, THOMPSON, CARR & HUBER, INC.

A handwritten signature in black ink, appearing to read "N. Torrey".

Nathan R. Torrey, PE, CFM

A handwritten signature in black ink, appearing to read "Michael L. Berrevoets".

Michael L. Berrevoets, PE

lkb
Attachment
By email



Cascade Charter Township

Storm Water Ordinance, Ordinance 7 of 2002, as amended by Ordinance No. 2 of 2008, May 14, 2008

Reviewing Engineer Comments are Italicized

OK - Received and Acceptable

NA - Not Applicable

NR - Not Received, Needs Follow-up, See Comments

Panera Bread Restaurant

Drainage Plan Checklist

- OK (1) Location of the development site and water bodies that will receive stormwater runoff
All stormwater runoff from the site discharges to an existing 18-inch storm sewer in 28th Street. The existing storm sewer traverses the north side of the site from east to west, crosses through Kraft Avenue, and continues to the west. The existing storm sewer system is located in the Cascade West drainage district, tributary to Plaster Creek.
- The storm sewer plan is shown on Sheets A4.0 and A5.0, dated 1-5-2015 and 1-8-2015, respectively.*
- OK (2) Existing and proposed topography of the development site, including the alignment and boundary of the natural drainage courses, with contours having a maximum interval of one foot (using USGS datum). The information shall be superimposed on the pertinent Kent County soil map.
Existing and proposed contours are shown on Sheets A4.0 and A5.0, dated January 5 and 8, 2015, respectively. Soil map information is not required for this project.
- OK (3) Development tributary area to each point of discharge from the development
The stormwater calculations submitted by the applicant included total tributary areas for each of the storage facilities.
- OK (4) Calculations for the final peak discharge rates
The applicant provided peak discharge rates for the underground storage units' outlet structures that will ultimately discharge to the existing storm sewer system.
- OK (5) Calculations for any facility or structure size and configuration
The applicant provided calculations for the underground storage facility and outlet control structure. The calculations were reviewed and found to be reasonable.
- OK (6) Drawing showing all proposed storm water runoff facilities with existing and final grades
Stormwater runoff facilities are shown on the storm sewer plan, Sheets A4.0 and A5.0, dated January 5 and 8, 2015, respectively.
- OK (7) The sizes and locations of upstream and downstream culverts serving the major drainage routes flowing into and out of the development site. Any significant offsite and onsite drainage outlet restrictions other than culverts should be noted on the drainage map.
There are no culverts or offsite flow entering or exiting the site.



- OK (8) An implementation plan for construction and inspection of all stormwater runoff facilities necessary to the overall drainage plan, including a schedule of the estimated dates of completing construction of the stormwater runoff facilities shown on the plan and an identification of the proposed inspection procedures to ensure the stormwater runoff facilities are constructed in accordance with the approved drainage plan.
A construction schedule was provided by the applicant.
- OK (9) Plan to ensure the effective control of construction site stormwater runoff and sediment track-out onto roadways
Sheets A4.0 and A5.0 show the proposed SESC measures. SESC falls under the review and approval of the KCRC, and a permit is needed before construction can begin. The SESC measures shown on the plan appear appropriate given the expected work.
- OK (10) Drawings, profiles, and specifications for the construction of the stormwater runoff facilities reasonably necessary to ensure stormwater runoff will be drained, stored, or otherwise controlled in accordance with this ordinance
Sheets A4.0 and A5.0 include the details related to the storm sewer system.
- NR (11) Maintenance agreement, in form and substance acceptable to the Township, for ensuring maintenance of any privately owned stormwater runoff facilities. The maintenance agreement shall include the developer's written commitment to provide routine, emergency, and long-term maintenance of the facilities and, in the event the facilities are not maintained in accordance with the approved drainage plan, the agreement shall authorize the Township to maintain any onsite stormwater runoff facility as reasonably necessary, at the developer's expense
Maintenance agreement was not provided and is required.
- OK (12) Name of the engineering firm and the registered professional engineer who designed the drainage plan and will inspect final construction of the stormwater runoff facilities
- NA (13) All design information must be compatible for conversion to Grand Valley Regional Geographic Information System (REGIS)
This is a privately owned system and will not be uploaded to REGIS.
- OK (14) Other information necessary for the Township to verify the drainage plan complies with the Township's design and performance standards for drains and stormwater management systems

• Residential • Commercial • Governmental • D.O.T.

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K KEYSTONE
RETAINING WALL SYSTEMS

Classic Keystone, Natural Appeal.

KEYSTONE[®] COMPAC

Tri-plane



Straightface



Keystone Compac Unit*

8" h x 18" w x 12" d
(200 x 450 x 300 mm)
*85 lbs • (39 kg)



KEYSTONE[®] STANDARD

Tri-plane



Straightface



Keystone Standard Unit*

8" h x 18" w x 18" d
(200 x 450 x 450 mm)
*100 lbs • (39 kg)

8" 90° Corner Unit*

8" h x 15" w x 6" d
(200 x 380 x 150 mm)
50 lbs • (25 kg)



Keystone Standard & Compac units are made of high-strength, low absorption concrete for long lasting structures. All structural units are interconnected using high strength fiberglass pins for strong shear connection. The connecting pins allow for ease of unit alignment and a secure positive mechanical connection with soil reinforcement materials. Keystone's patented pin system is the critical difference providing the safety and security of a structural retaining wall solution.

Standard & Compac Specifications

COMPRESSIVE STRENGTH:	Minimum 3000 psi (21 MPa)
ABSORPTION:	8%
REFERENCE STANDARDS:	ASTM C-1372

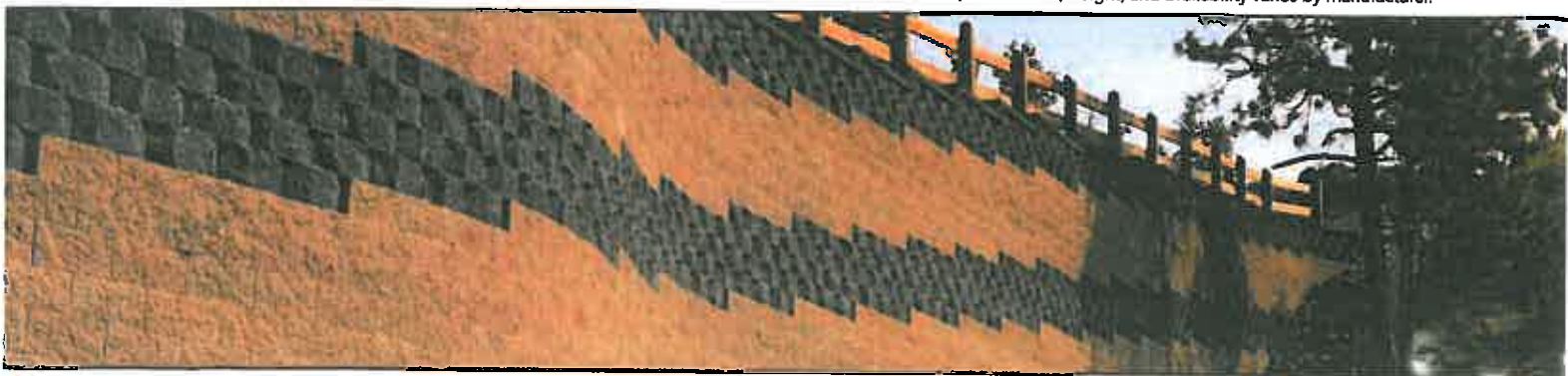
Fiberglass Pin Specifications

FLEXURAL STRENGTH:	Minimum 128,000 psi (885 MPa)
SHORT BEAM SHEAR STRENGTH:	Minimum 6400 psi (44 MPa)
REFERENCE STANDARDS:	ASTM D-4476, ASTM D-4475



Keystone Fiberglass Pins

*Note: Unit colors, dimensions, weight, and availability varies by manufacturer.



BUILDING SHELL FOR: PANERA BREAD

SITE MAP:



5630 28TH ST SE, GRAND RAPIDS, MICHIGAN

Sheet Index

- | | | | |
|--------|---------------------------|---------|---------------------|
| T1.0 | TITLE SHEET | 1 OF 1 | SITE LIGHTING PLAN |
| A1.0 | PRELIMINARY PUD SITE PLAN | Y-243-A | EXTERIOR ELEVATIONS |
| A2.0 | LAYOUT & DIMENSIONAL PLAN | Y-243-B | EXTERIOR ELEVATIONS |
| A3.0 | LAYOUT & DIMENSIONAL PLAN | Y-243-C | EXTERIOR ELEVATIONS |
| A4.0 | GRADING & STORM PLAN | Y-243-D | EXTERIOR ELEVATIONS |
| A5.0 | GRADING & STORM PLAN | Y-243-E | SIGN SITE PLAN |
| A6.0 | SITE UTILITIES PLAN | Y-243-F | AWNING DETAIL |
| A7.0 | BOUNDARY/TOPO SURVEY | Y-243-G | SIGN DETAIL |
| A8.0 | DIMENSIONAL FLOOR PLAN | Y-243-H | SIGN DETAIL |
| | | Y-243-I | SIGN DETAIL |
| | | Y-243-J | SIGN DETAIL |
| | | Y-243-K | SIGN DETAIL |
| 1 OF 1 | LANDSCAPE PLAN | | |

Architect
Jeffrey Parker Architects
855 28th Street Grand Rapids MI 49508
Ph 616-241.0090 Fax 616-241-0098

Civil Engineering
Roosien & Assoc.
5055 Plainfield Ave. NE
Grand Rapids, MI 49525
Ph 616-361-7220
Paul Henderson, PE

Landscape Architect
Cornelisse Design Associates, Inc.
818 Sarasota Avenue SE
Grand Rapids, MI 49546
Ph 616-949-8893 Fax 616-949-8166
Patricia S. Cornelisse

Electrical Engineering
WPF Engineering
1671 House ST NE
Belmont MI 49306
616-340-9627 (Lynn)
616-0485-2222 (Amy)
Lynn Surdock PE/ Amy Zeboer PE

Sign Designer
Mandeville Sign
676 George Washington Highway
Lincoln, RI 02868
Ph 401-334-9100 Fax 401-334-7799
Jim Mandeville

Mark	Description	Date
FOR SITE PLAN SUBMITAL		11/14/14

Building Design & Documentation © 2012-2010 Jeffrey Parker Architects



ARCHITECTURE PLANNING ENGINEERING
855 28th Street SE
Grand Rapids MI 49508
Phone: 616-241-0090
Fax: 616-241-0098



Title Sheet	
Issued 11-14-14	Drawing No. T1.0
Project No. 13012	

811 - CALL BEFORE YOU DIG

BENCHMARK ELEV. = 764.46
SSW BOLT FLANGE ON HYDRANT

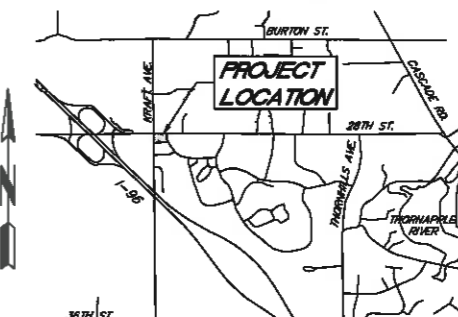
PROPERTY LEGAL DESCRIPTIONS:
PARCEL A (41-19-17-101-012):
LOT 20 OF FOREMOST CENTENNIAL PARK NO. 2, CASCADE TOWNSHIP, KENT COUNTY, MICHIGAN, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN LIBER 76 OF PLATS, ON PAGE 13,
AND

PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 17, TOWN 6 NORTH, RANGE 10 WEST, CASCADE TOWNSHIP, KENT COUNTY, MICHIGAN, DESCRIBED AS COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 17; THENCE S01°45'05"E 259.32 FEET ALONG THE WEST LINE OF SAID SECTION; THENCE N88°14'15"E 60.00 FEET TO THE PLACE OF BEGINNING ON THE EAST LINE OF KRAFT AVENUE; THENCE CONTINUING N88°14'15"E 305.63 FEET; THENCE SOUTHEASTERLY ALONG THE WEST LINE OF FOREMOST DRIVE 58.19 FEET ON A 374.06 FOOT RADIUS CURVE TO THE LEFT, THE LONG CHORD OF WHICH BEARS S29°59'20"E 58.14 FEET; THENCE S87°20'42"W 333.23 FEET; THENCE N01°45'05"W 58.42 FEET ALONG THE EAST LINE OF KRAFT AVENUE TO THE PLACE OF BEGINNING.

PARCEL B (41-19-17-101-013):
PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 17, TOWN 6 NORTH, RANGE 10 WEST, CASCADE TOWNSHIP, KENT COUNTY, MICHIGAN, DESCRIBED AS COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 17; THENCE S01°45'05"E 259.32 FEET ALONG THE WEST LINE OF SAID SECTION; THENCE N88°14'15"E 60.00 FEET TO THE EAST LINE OF KRAFT AVENUE; THENCE S01°45'05"E 58.42 FEET ALONG SAID KRAFT AVENUE TO THE PLACE OF BEGINNING; THENCE N87°20'42"E 333.23 FEET; THENCE S34°26'45"E 259.32 FEET ALONG THE WESTERLY LINE OF FOREMOST DRIVE; THENCE WESTERLY ALONG THE NORTHERLY LINE OF COACH ROAD, THE FOLLOWING 3 COURSES: S51°56'45"W 17.98 FEET, SOUTHWESTERLY 171.65 FEET ALONG A 271.00 FOOT RADIUS CURVE TO THE RIGHT, THE LONG CHORD OF WHICH BEARS S70°05'30"W 168.80 FEET AND S88°14'15"W 298.37 FEET; THENCE N01°45'05"W 278.28 FEET ALONG THE EAST LINE OF SAID KRAFT AVENUE TO THE PLACE OF BEGINNING.

SITE PLAN NOTES:

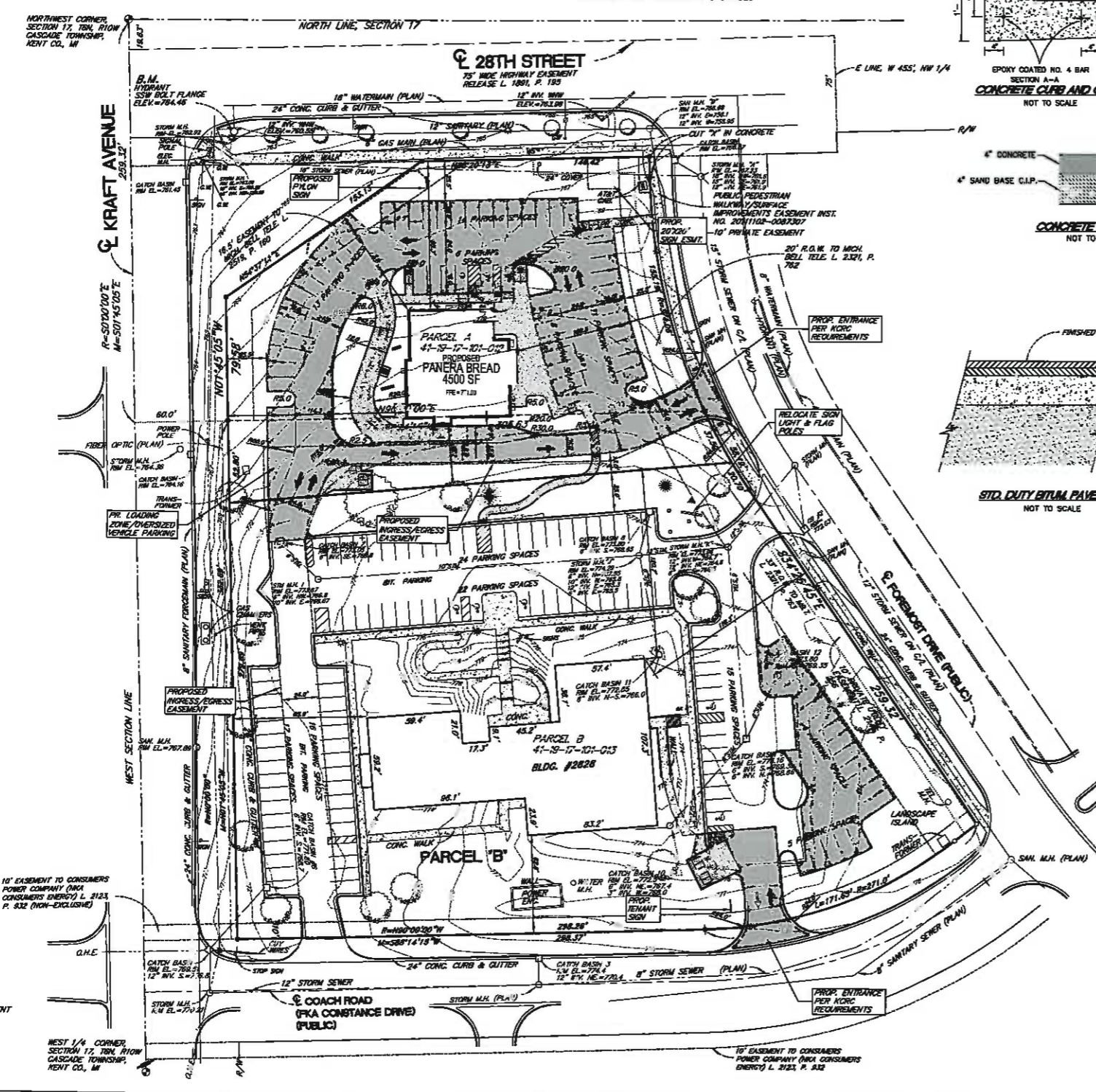
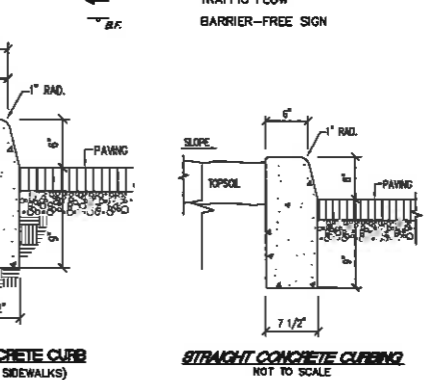
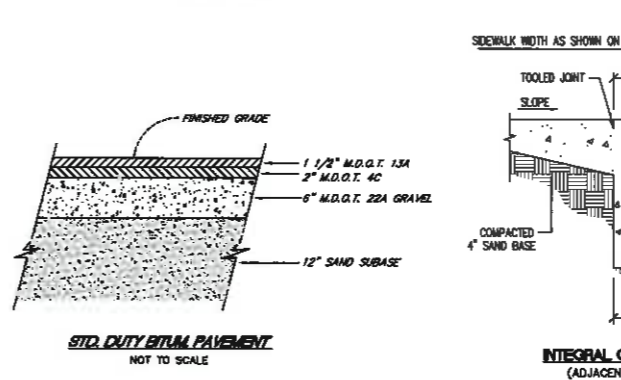
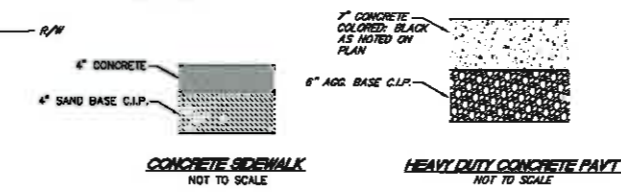
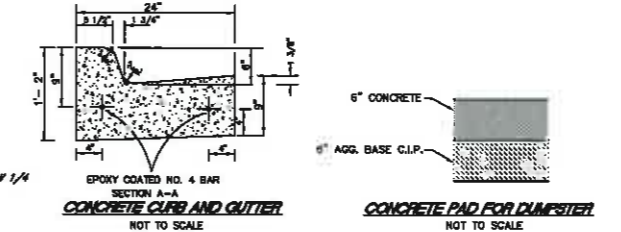
- APPLICANT: JEFFREY PARKER ARCHITECTS, 855 28TH STREET, SE, GRAND RAPIDS, MICHIGAN 49508
- SITE ADDRESS: 5630 28TH STREET, SE
- PARCEL ID: PARCEL A 41-19-17-101-012, PARCEL B 41-19-17-101-013
- LOT SIZE (EXCL. PUBLIC RIGHT-OF-WAY): PARCEL A EXISTING 41,169 S.F., PROPOSED 130,716 S.F.; PARCEL B EXISTING 54,791 S.F., PROPOSED 117,093 S.F.
- EXISTING USE: VACANT
- PROPOSED USE: RESTAURANT WITH DRIVE THROUGH SERVICE - 4,500 S.F. (BY SPECIAL USE APPROVAL)
- CURRENT ZONING: PUD - LOT 20 - FOREMOST CENTENNIAL PARK NO. 2 (CENTENNIAL PARK OVERLY ZONE DISTRICT)
MINIMUM LOT AREA = 50,000 S.F. - PROPOSED: 58,370 S.F.
MAXIMUM BUILDING HEIGHT = 48 FT. - PROPOSED: 26 FT.
MINIMUM FRONT SETBACK = 40 FT.
MINIMUM SIDE AND REAR SETBACK = 25 FT.
PARKING REQUIREMENTS (SET FORTH BY ZONING ORDINANCE):
REQUIRED PARKING = (10 SPACES/1,000 S.F.) x (4,500) = 45 SPACES (INCLUDING BARRIER-FREE SPACES)
PARKING PROVIDED = 52 SPACES
BARRIER-FREE REQUIRED = 3 SPACES
BARRIER-FREE PROVIDED = 3 SPACES
- DRIVE-THROUGH LANE QUEUE PROPOSED = SEVEN (7) STANDING SPACES (PROPOSED SPACES BASED ON "PANERA BREAD PARKING STUDY UPDATE" BY DEBORAH MCAVOY, P.E., PH.D., PTOE, DATED: AUGUST 10, 2011.)
- SURFACE WATER DRAINAGE: THE STORM WATER RUN-OFF WILL BE COLLECTED IN THE STORM SEWER SYSTEM AND DETAINED IN ACCORDANCE WITH THE CASCADE TOWNSHIP STORM WATER ORDINANCE.
- DUMPSTER ENCLOSURE: PROPOSED DUMPSTER PAD AND ENCLOSURE WILL BE IN ACCORDANCE WITH THE CENTENNIAL PARK OVERLY ZONE DISTRICT.
- SITE LIGHTING: ALL PROPOSED LIGHT WILL BE IN ACCORDANCE WITH THE CENTENNIAL PARK OVERLY ZONE DISTRICT.
- SIGNAGE: PROPOSED MONUMENT SIGN WILL BE IN ACCORDANCE WITH THE CENTENNIAL PARK OVERLY ZONE DISTRICT.
- LANDSCAPING: SEE LANDSCAPE PLAN - BY OTHER.
- UTILITIES: SERVED BY PUBLIC SEWER AND WATER MAIN AS SHOWN (SEE SHEET A6.0)
- PARKING SUMMARY FOR EXISTING OFFICE BUILDING #2828: EXISTING PARKING = 110 SPACES, PROPOSED PARKING = 113 SPACES, NET INCREASE IN PARKING = 3 SPACES



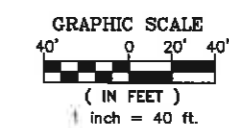
LOCATION MAP NOT TO SCALE

LEGEND

- 75' - EXISTING CONTOUR LINE
- EXISTING STORM SEWER
- PROP. STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
- EXISTING CONCRETE
- EXISTING BIT. PAVEMENT
- PROPOSED CONCRETE
- PROPOSED BIT PAVEMENT
- ★ EXISTING LIGHT POLE
- ← TRAFFIC FLOW
- BARRIER-FREE SIGN



- LEGEND
- - IRON STAKE - SET
 - - IRON FOUND
 - - WOOD STAKE
 - P - RECORDED DIMENSION
 - D - DEED DIMENSION
 - M - MEASURED DIMENSION
 - CL - CENTER LINE
 - CC - CORNER ON CONCRETE
 - ED - EDGE OF BITUMINOUS
 - EC - EDGE OF CONCRETE
 - EG - EDGE OF GRAVEL
 - G - GROUND ELEVATION
 - GTH - FLOW LINE OF GUTTER
 - ONE - OVERHEAD ELEC. LINE
 - LP - LIGHT POLE
 - EX - EX. CONTOUR LINE
 - XX - FENCE LINE
 - CONC. - CONCRETE
 - BIT. - BITUMINOUS PAVEMENT
 - ENCR - PROPERTY LINE ENCROACHMENT
 - UTIL - UTILITY
 - ELEC. - ELECTRIC
 - RET. - RETAINING WALL
 - P/L - PROPERTY LINE
 - PAVMT. - PAVEMENT
 - M.S. - WATER SERVICE LATERAL
 - BM - BENCHMARK
 - W.V. - WATER VALVE
 - HYD. - FIRE HYDRANT



Mark	Description	Date
SEE PLAN SHEET		11/14/14

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New Building For: **Panera BREAD**
5630 28th St. SE, Grand Rapids, MI 49512

Preliminary PUD Site Plan
Issued 11/14/14 Drawing No. A1.0
Project No. 13012

NORTHWEST CORNER,
SECTION 17, T6N, R10W
CASCADE TOWNSHIP,
KENT CO., MI

NORTH LINE, SECTION 17

28TH STREET
75' WIDE HIGHWAY EASEMENT
RELEASE L. 1891, P. 195

811 - CALL BEFORE YOU DIG
BENCHMARK ELEV. = 764.46
SSW BOLT FLANGE ON HYDRANT

B.M.
HYDRANT
SSW BOLT FLANGE
ELEV. = 764.46

LEGEND

- 75.0- EXISTING CONTOUR LINE
- - - EXISTING STORM SEWER
- - - PROP. STORM SEWER
- - - EXISTING SANITARY SEWER
- - - EXISTING WATERMAIN
- [Pattern] EXISTING CONCRETE
- [Pattern] EXISTING BIT. PAVEMENT
- [Pattern] PROPOSED CONCRETE
- [Pattern] PROPOSED BIT PAVEMENT
- * EXISTING LIGHT POLE
- ← TRAFFIC FLOW
- ← B.F. BARRIER-FREE SIGN

KRAFT AVENUE
259.32'

R=5000'00"E
M=S01'45'05"W

FIBER OPTIC (PLAN)

STORM M.H.
RIM EL. = 764.36

CATCH BASIN
RIM EL. = 764.16

TRANSFORMER

POWER POLE

PR. LOADING ZONE/OVERSIZED VEHICLE PARKING

PR. RETAINING WALL

PR. DRIVE YARD LANE H.D. CONC. COLORED BLACK

PR. DRIVE YARD LANE H.D. CONC. COLORED BLACK

PR. DRIVE YARD LANE H.D. CONC. COLORED BLACK

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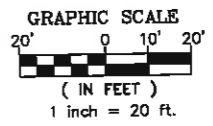
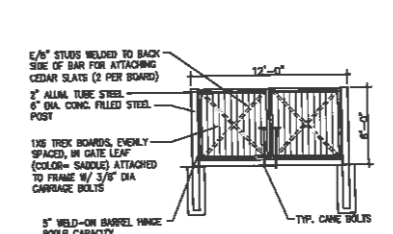
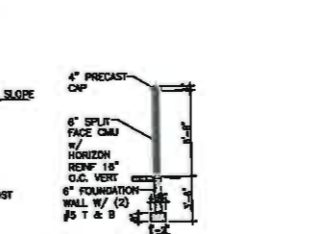
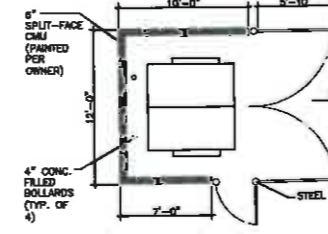
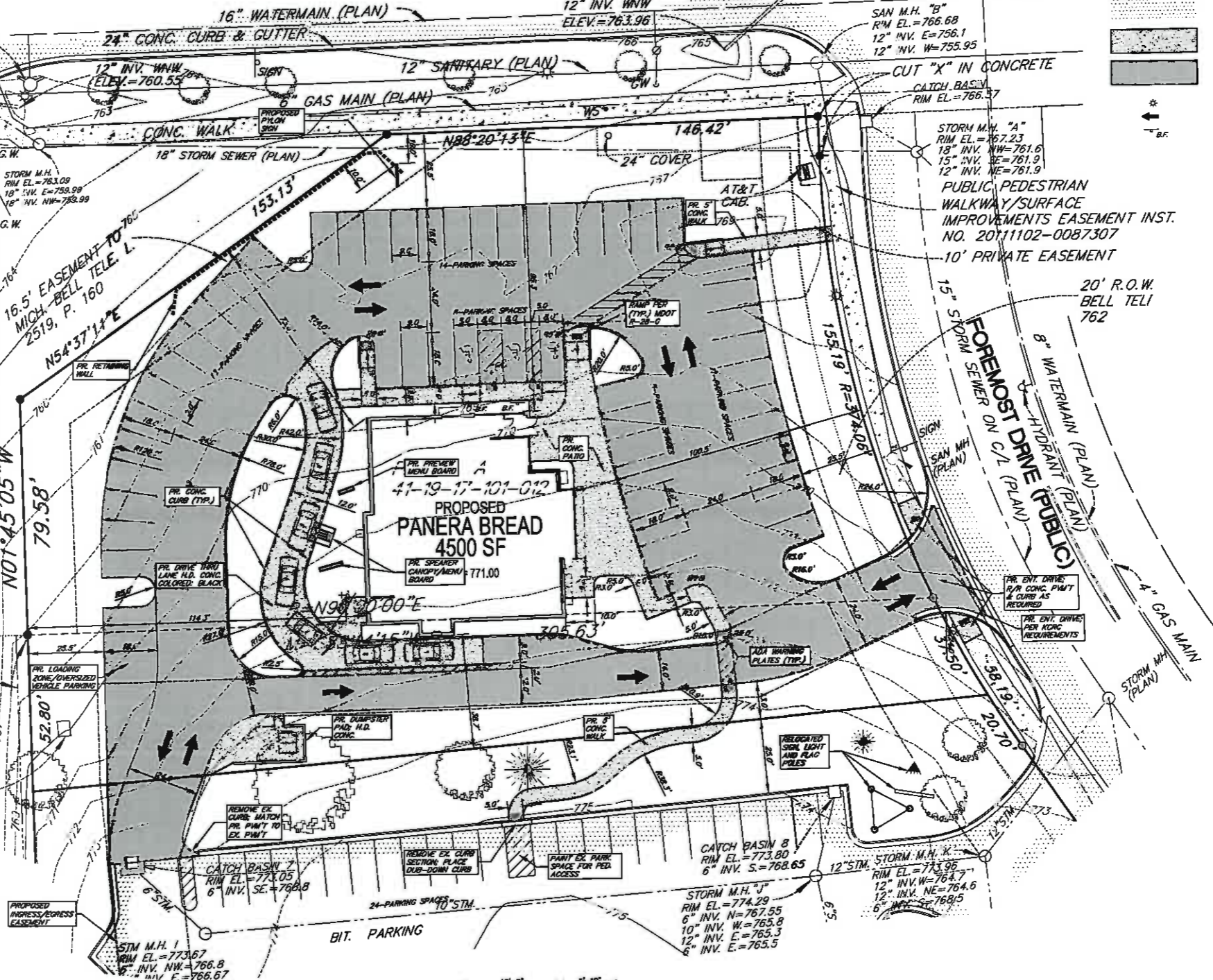
PR. DRIVE YARD LANE H.D. CONC. COLORED BLACK

PR. DRIVE YARD LANE H.D. CONC. COLORED BLACK

PR. DRIVE YARD LANE H.D. CONC. COLORED BLACK

PR. DRIVE YARD LANE H.D. CONC. COLORED BLACK

PR. DRIVE YARD LANE H.D. CONC. COLORED BLACK



Mark	Description	Date

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Layout & Dimensional Plan

Issued: 1/14/14
Project No.: 13012
Drawing No.: A2.0

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BENCHMARK ELEV. = 764.46
SSW BOLT FLANGE ON HYDRANT

PROPOSED STORM WATER MANAGEMENT DESIGN NOTES

1) DESIGN TRIBUTARY AREA SUMMARY
PROPOSED IMPERVIOUS AREA = 0.84 AC.
DESIGN RUN-OFF COEFFICIENT = 0.90
PROPOSED PERVIOUS AREA = 0.50 AC.
DESIGN RUN-OFF COEFFICIENT = 0.20
TOTAL TRIBUTARY AREA = 1.34 AC.
CALCULATED RUN-OFF COEFFICIENT = 0.64
DESIGN RUN-OFF COEFFICIENT = 0.65

2) REQUIRED DETENTION
A. PER TABLE #5 OF THE KENT COUNTY DRAIN COMMISSIONER'S DEVELOPMENT DRAINAGE RULES.

REQUIRED STORAGE
25 - YEAR RAINFALL EVENT
C = 0.65
REQUIRED STORAGE RATE = 5,270 G.F. / AC.
REQUIRED STORAGE VOLUME = 7,062 C.F.

B. REQUIRED FLOOD CONTROL

OUTLET CONTROL
TOTAL TRIBUTARY AREA = 1.34 AC.
FLOOD CONTROL VOLUME ELEVATION = 766.60
MAX. REL. RATE (0.13 CFS/AC) = 0.17 C.F.S.
H = 4.33 FT.
AREA = $(0.0.64(2gh)^{0.5}) = 0.00545 S.F.$
NUMBER OF HOLES = 2.7
(DOUBLE NUMBER OF HOLES FOR CLOGGING
USE 5 HOLES)
DIAMETER OF HOLES = 1.0 IN.
DISCHARGE RATE $Q_0 = 0.15 C.F.S.$

C. STORM WATER QUALITY STORE RUN-OFF FROM A 1/2" RAINFALL FOR 24 HOURS

REQUIRED STORAGE
TOTAL TRIBUTARY AREA = 1.34 AC
PRECIPITATION = 0.5 IN.
RUNOFF VOLUME = 2,432 C.F.

OUTLET CONTROL
WATER QUALITY VOLUME ELEVATION = 762.27
MAX. REL. RATE (24 HR. RELEASE) = 0.03 C.F.S.
H = 1.67 FT.
AREA = $(0.0.64(2gh)^{0.5}) = 0.00307 FT.$
DIAMETER = 0.75 IN.
NUMBER OF HOLES = 1.5
(DOUBLE NUMBER OF HOLES FOR CLOGGING
USE 3 HOLES)
DIAMETER OF HOLES = 0.75 IN.
DISCHARGE RATE $Q_0 = 0.02 C.F.S.$

D. UNDERGROUND DETENTION SYSTEM

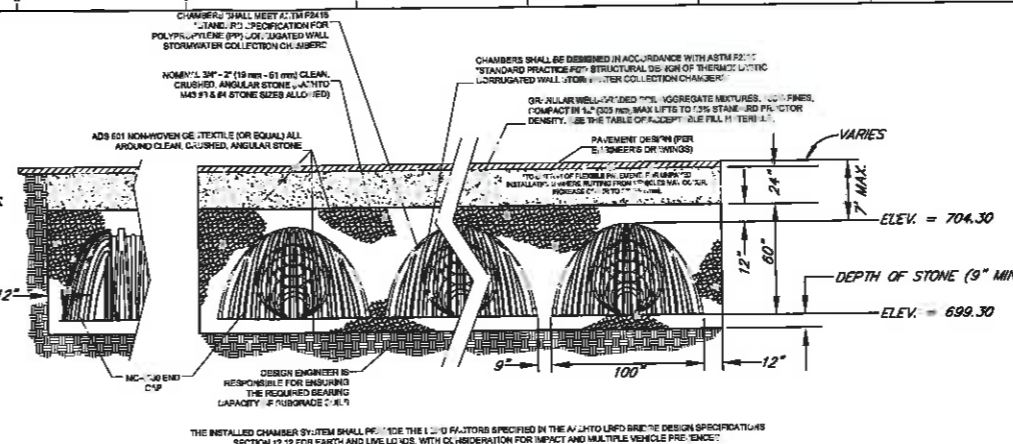
REQUIRED STORAGE VOLUME = 7,062 C.F.
PROPOSED STORAGE VOLUME = 7,297 C.F.
STORMTECH MC-4500 CHAMBERS
TOP OF CHAMBERS EL. = 763.60
BOTTOM OF CHAMBERS EL. = 760.60

28TH STREET

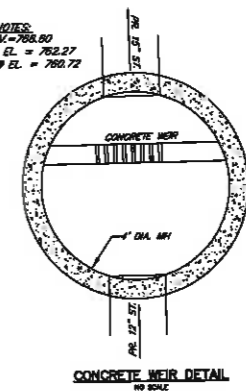
75' WIDE HIGHWAY EASEMENT
RELEASE L. 1891, P. 195

LEGEND

- EXISTING CONTOUR LINE
- EXISTING STORM SEWER
- PROP. STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
- EXISTING CONCRETE
- EXISTING BIT. PAVEMENT
- PROPOSED CONCRETE
- PROPOSED BIT PAVEMENT
- EXISTING SPOT ELEVATION
- SPOT ELEVATION
- SURFACE DRAINAGE



CONCRETE WEIR NOTES:
TOP OF WEIR ELEV. = 766.60
5 - 1.0" ORF. @ EL. = 762.27
3 - 3/4" ORF. @ EL. = 760.72



SOIL EROSION CONTROL KEY

- PERMANENT/TEMPORARY SEEDING
- GEOTEXTILE SILT FENCE
- INLET PROTECTION WITH GEOTEXTILE AND STONE
- SOIL EROSION CONTROL BLANKET (N.A.G. 5-150 OR EQUAL)

STORM SEWER STRUCTURE TABLE

STRUCTURE	RIM EL.	INVERT EL.
MH-1, 4' DIA. E.J.W. GRATE #1120	766.02	EX. 18" I.E. = 760.65 18" S. I.E. = 760.68
CS-2, 4' DIA. E.J.W. GRATE #1120	766.32	15" E. I.E. = 760.72 15" S. I.E. = 760.72
MH-3, 4' DIA. E.J.W. GRATE #1120	768.85	15" S. I.E. = 764.10 18" N. I.E. = 762.25 15" W. I.E. = 760.72
CS-4, 4' DIA. E.J.W. GRATE #5105	769.20	15" N. I.E. = 764.13 12" W. I.E. = 764.13 12" SE. I.E. = 764.97
INL-5, 2' DIA. E.J.W. GRATE #5105	768.00	12" E. I.E. = 764.50
INL-6, 2' DIA. E.J.W. GRATE #5105	768.90	12" N. I.E. = 765.40

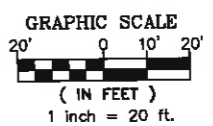
Mark	Description	Date
SEE PLAN SHEETS		11/11/14

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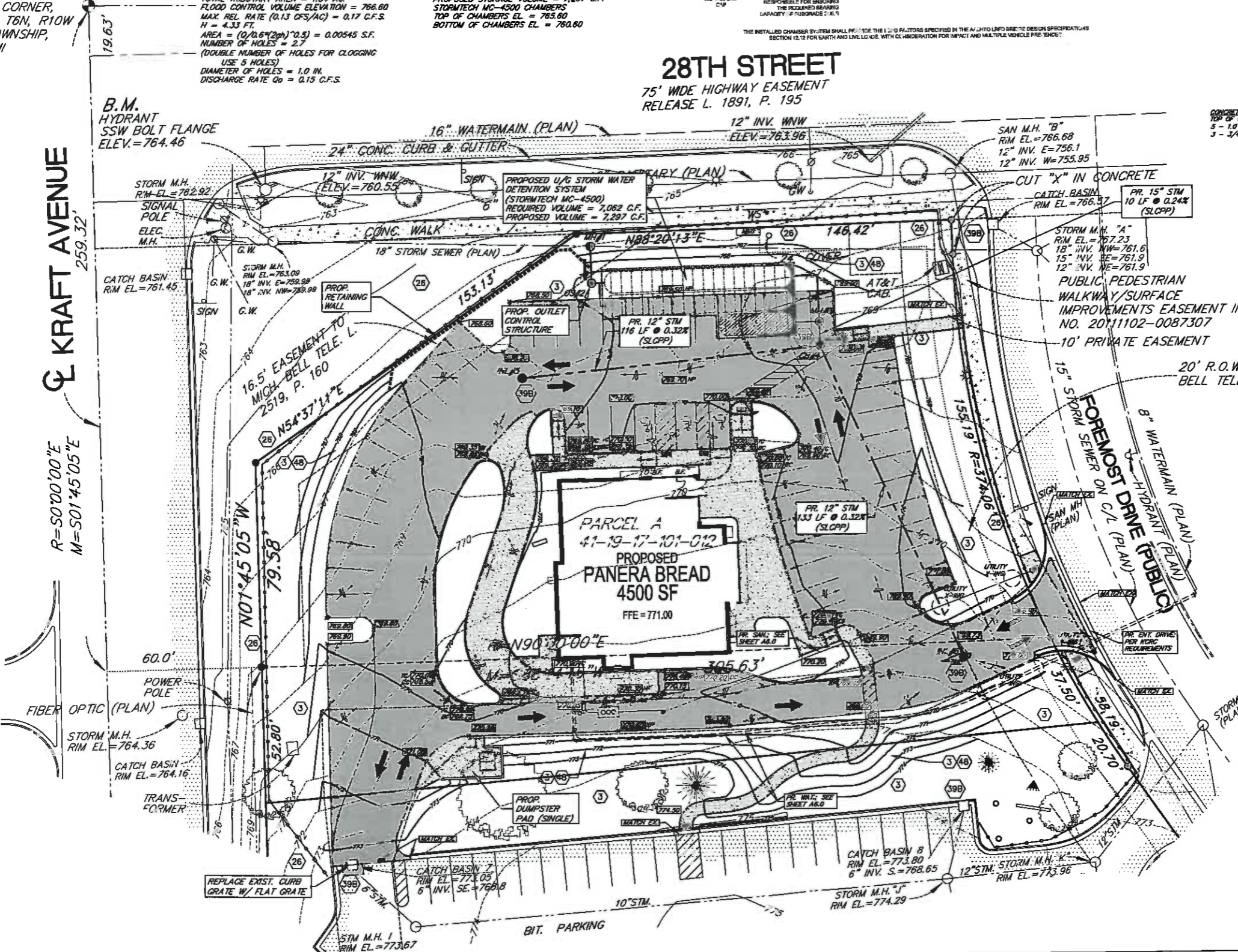
New Building For:
Panera Bread
5830 28th St SE, Grand Rapids, MI 49512

Grading & Storm Plan
Issued 11/11/14
Project No. 13012
Date: 11/11/14
Drawing No. **A4.0**

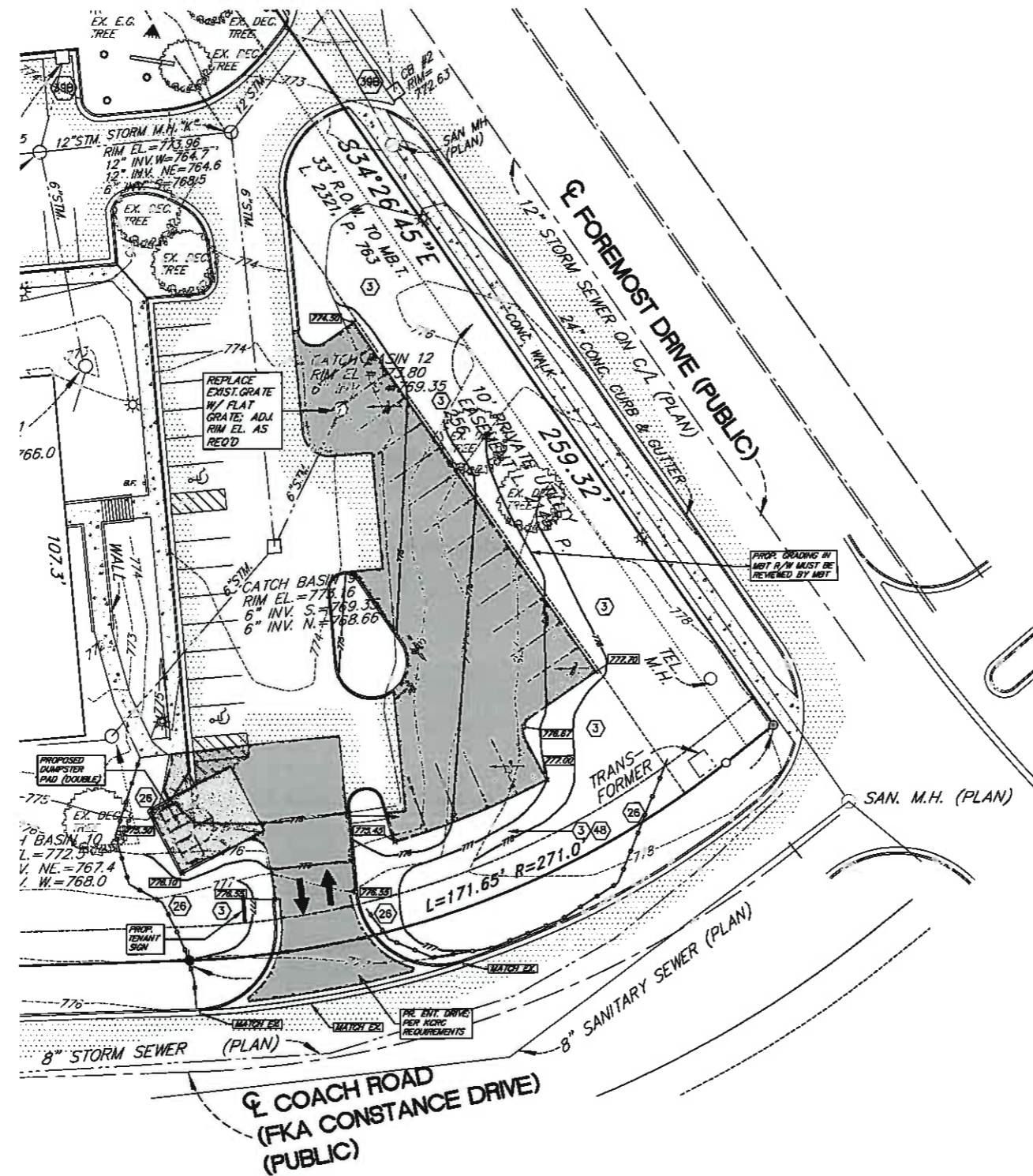


NORTHWEST CORNER,
SECTION 17, T6N, R10W
CASCADE TOWNSHIP,
KENT CO., MI

KRAFT AVENUE
R=50'00"00"E
M=501'45'05"E



811 - CALL BEFORE YOU DIG
 BENCHMARK ELEV. = 764.46
 SSW BOLT FLANGE ON HYDRANT



- LEGEND**
- EXISTING CONTOUR LINE
 - EXISTING STORM SEWER
 - PROP. STORM SEWER
 - EXISTING SANITARY SEWER
 - EXISTING WATERMAIN
 - EXISTING CONCRETE
 - EXISTING BIT. PAVEMENT
 - PROPOSED CONCRETE
 - PROPOSED BIT PAVEMENT
 - EXISTING SPOT ELEVATION
 - SPOT ELEVATION
 - SPOT ELEVATION
 - SURFACE DRAINAGE

SOIL EROSION CONTROL KEY

- PERMANENT/TEMPORARY SEEDING
- GEOTEXTILE SILT FENCE
- INLET PROTECTION WITH GEOTEXTILE AND STONE
- SOIL EROSION CONTROL BLANKET (N.A.G. S-150 OR EQUAL)

HARD SURFACE SUMMARY:
 EXISTING PAVEMENT TO BE REMOVED = 1,502 S.F.
 PROPOSED PAVEMENT = 7,728 S.F.
 NET INCREASE PAVEMENT = 6,226 S.F.

Item	Description	Date
	SEE PLAN SUMMARY	8/24/14

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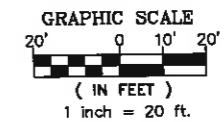
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5630 28th St SE, Grand Rapids, MI 49512

Grading & Storm Plan

Issued 11/11/14	Drawing No. A5.0
Project No. 13012	



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BENCHMARK ELEV. = 764.46
SSW BOLT FLANGE ON HYDRANT

NORTHWEST CORNER,
SECTION 17, T6N, R10W
CASCADE TOWNSHIP,
KENT CO., MI

KRAFT AVENUE

R=50'00"00"E
M=501'45"05"E

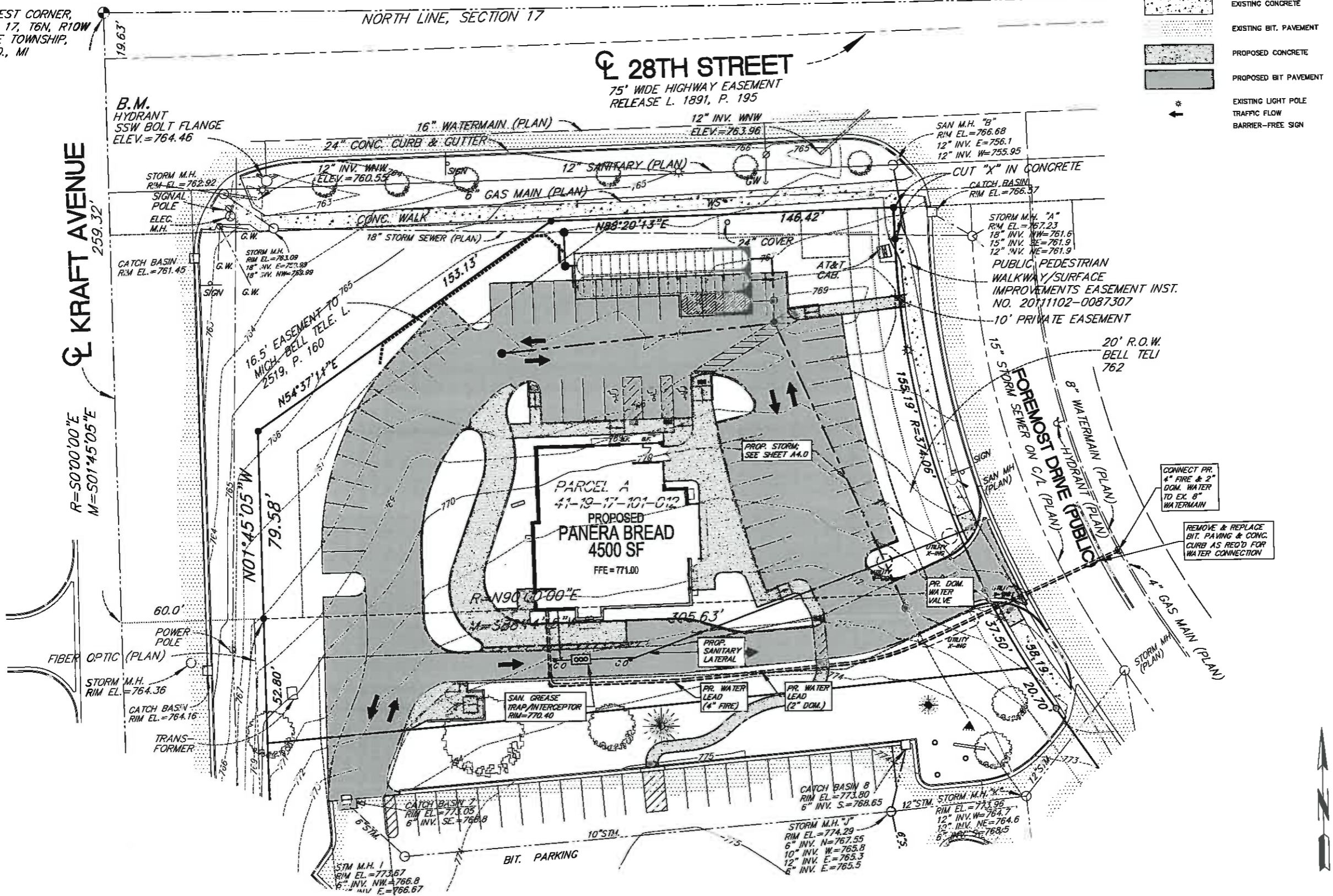
NORTH LINE, SECTION 17

28TH STREET

75' WIDE HIGHWAY EASEMENT
RELEASE L. 1891, P. 195

LEGEND

- EXISTING CONTOUR LINE
- EXISTING STORM SEWER
- PROP. STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
- EXISTING CONCRETE
- EXISTING BIT. PAVEMENT
- PROPOSED CONCRETE
- PROPOSED BIT PAVEMENT
- EXISTING LIGHT POLE
- TRAFFIC FLOW
- BARRIER-FREE SIGN



Mark	Description	Date

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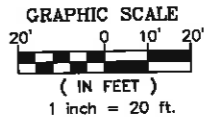
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655 28th Street SE
Grand Rapids MI 49506 Phone 616-241-0090
Fax 616-341-0098



5830 28th St SE, Grand Rapids, MI 49512

Site Utilities Plan

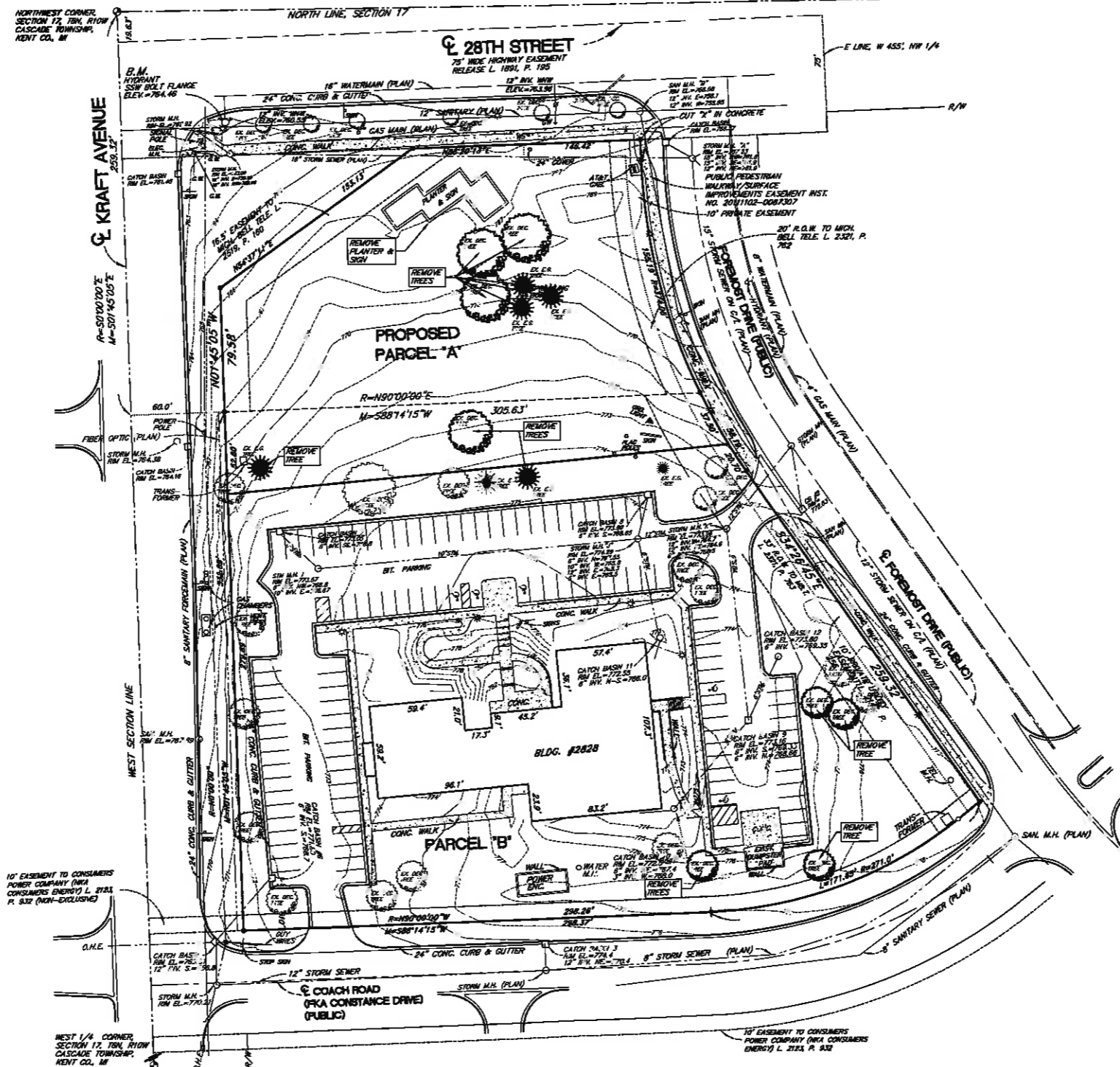
Issued 11/14/14	Drawn By
Project No. 13012	
A6.0	



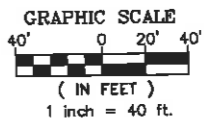
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BENCHMARK ELEV. = 764.46
SSW BOLT FLANGE ON HYDRANT

PROPERTY LEGAL DESCRIPTIONS:
PARCEL A (41-19-17-101-012):
LOT 20 OF FOREMOST CENTENNIAL PARK NO. 2, CASCADE TOWNSHIP, KENT COUNTY, MICHIGAN,
ACCORDING TO THE PLAT THEREOF, AS RECORDED IN LIBER 76 OF PLATS, ON PAGE 13.
AND
PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 17, TOWN 8 NORTH, RANGE 10
WEST, CASCADE TOWNSHIP, KENT COUNTY, MICHIGAN, DESCRIBED AS COMMENCING AT THE NORTHWEST
CORNER OF SAID SECTION 17; THENCE S01°45'05"E 259.32 FEET ALONG THE WEST LINE OF SAID
SECTION; THENCE N86°14'15"E 60.00 FEET TO THE PLACE OF BEGINNING ON THE EAST LINE OF KRAFT
AVENUE; THENCE CONTINUING N86°14'15"E 305.63 FEET; THENCE SOUTHEASTERLY ALONG THE WEST
LINE OF FOREMOST DRIVE 58.19 FEET ON A 374.08 FOOT RADIUS CURVE TO THE LEFT, THE LONG
CHORD OF WHICH BEARS S29°59'20"E 58.14 FEET; THENCE S87°20'42"W 333.23 FEET; THENCE
N01°45'05"W 56.42 FEET ALONG THE EAST LINE OF KRAFT AVENUE TO THE PLACE OF BEGINNING.



- LEGEND**
- - IRON STAKE - SET
 - - IRON FOUND
 - - WOOD STAKE
 - P - RECORDED DIMENSION
 - D - DEED DIMENSION
 - M - MEASURED DIMENSION
 - CL - CENTER LINE
 - CC - CORNER ON CONCRETE
 - ED - EDGE OF BITUMINOUS
 - EC - EDGE OF CONCRETE
 - EG - EDGE OF GRAVEL
 - G - GROUND ELEVATION
 - GTY - FLOW LINE OF GUTTER
 - ONE - OVERHEAD ELEC. LINE
 - ★ - LIGHT POLE
 - - EX. CONTOUR LINE
 - - FENCE LINE
 - - CONCRETE
 - BIT - BITUMINOUS PAVEMENT
 - ENCR - PROPERTY LINE ENCRAGEMENT
 - UTL - UTILITY
 - ELEC - ELECTRIC
 - RET - RETAINING WALL
 - PLA - PROPERTY LINE
 - PAV - PAVEMENT
 - W.S. - WATER SERVICE LATERAL
 - B.M. - BENCHMARK
 - W.V. - WATER VALVE
 - HYD - FIRE HYDRANT



Mark	Description	Date
SEE PLAN SHEET		R/M/H

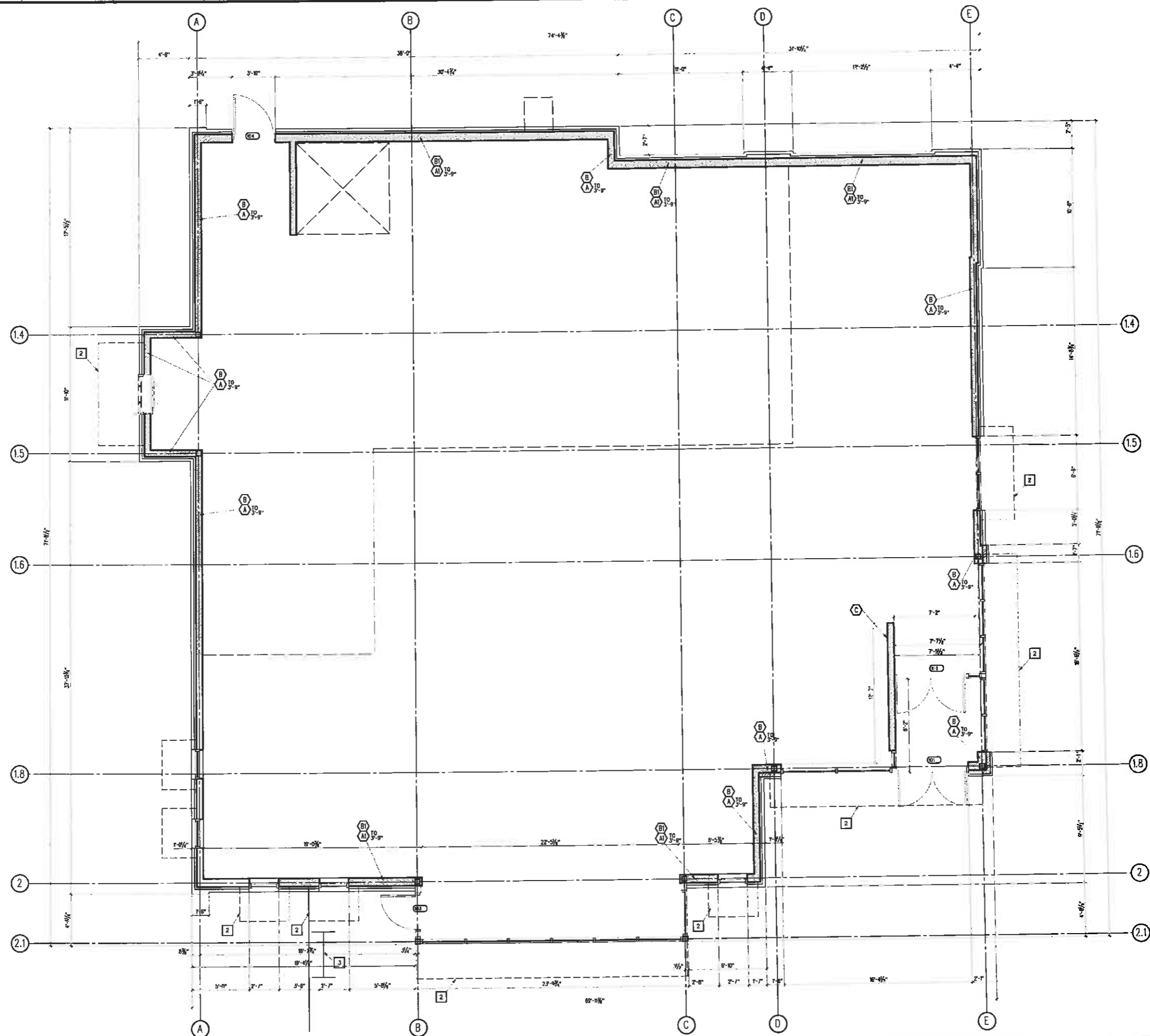
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Boundary/Topo Survey	
Issued 11/11/11	Drawng No. A7.0
Project No. 13012	



Main Floor Plan
Scale: 1/4" = 1'-0"

GENERAL NOTES

1. ALL DIMENSIONS ARE TO FACE OF FINISHED SURFACE UNLESS NOTED OTHERWISE.
2. COORD. W/ MECH. & ELEC. DRAWINGS FOR ALL ROOF/FLOOR PENETRATIONS NOT SHOWN ON ARCHITECTURAL PLANS, COORDINATE WITH G.C.
3. FIELD PAINT ALL MECHANICAL GRILLES & CABINETS TO MATCH ADJACENT SURFACES.
4. SITE DATUM: MAN. LEVEL FINISH FLOOR ASSUMED: 100'-0" ACTUAL: 98'-0"

KEY NOTES

1. CANOPY ABOVE
2. FINISH ABOVE
3. BINE RACK - "DELSON OUTDOORS" BR20-B SPACE SAVING BINE RACK OR EQUAL 1/4" O.D. ST. TYPING W/ 3/4" O.D. BUSHES VERTICAL SPACERS, POWER CRATE SLICK, PROVIDE CONCRETE ANCHOR RT.

WALL TYPES

- (A)** 5/8" GYPSUM WALLBOARD
2" METAL STUDS @ 24" O.C. w/
BATT INSULATION
3/8" EXTERIOR GRADE PLYWOOD
1" AIR SPACE
4" BRICK VENEER
18" STUDS @ AD
- (B)** 5/8" GYPSUM WALLBOARD
2" METAL STUDS @ 24" O.C. w/
BATT INSULATION
3/8" EXTERIOR GRADE PLYWOOD
2" EPS (WHERE NOTED)
18" STUDS @ BI
- (C)** 5/8" GYPSUM WALLBOARD
2" METAL STUDS @ 24" O.C. w/
BATT INSULATION
5/8" GYPSUM WALLBOARD

- NOTES:**
1. REFER TO STRUCTURAL DRAWINGS FOR CROSS BRACING LOCATIONS
 2. GYPSUM WALLBOARD TO EXTEND DECK ABOVE CEILING UNLESS NOTED OTHERWISE
 3. ALL WALLS TO BE EXTENDED TIGHT TO STRUCTURE ABOVE U.L.D.
 4. INTERIOR DRYWALL TO BE SUPPLIED BY TENANT

CODE NOTES

SEE SCHEDULE
CONSTRUCTION TYPE IS
TYPE II
FLOORING IS FLOORING
TYPE II
FLOORING IS FLOORING
TYPE II

Mark	Description	Date
FOR PLE PLAN SUBMITAL		10/14/14

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585 28th Street SE
Grand Rapids, MI 49508

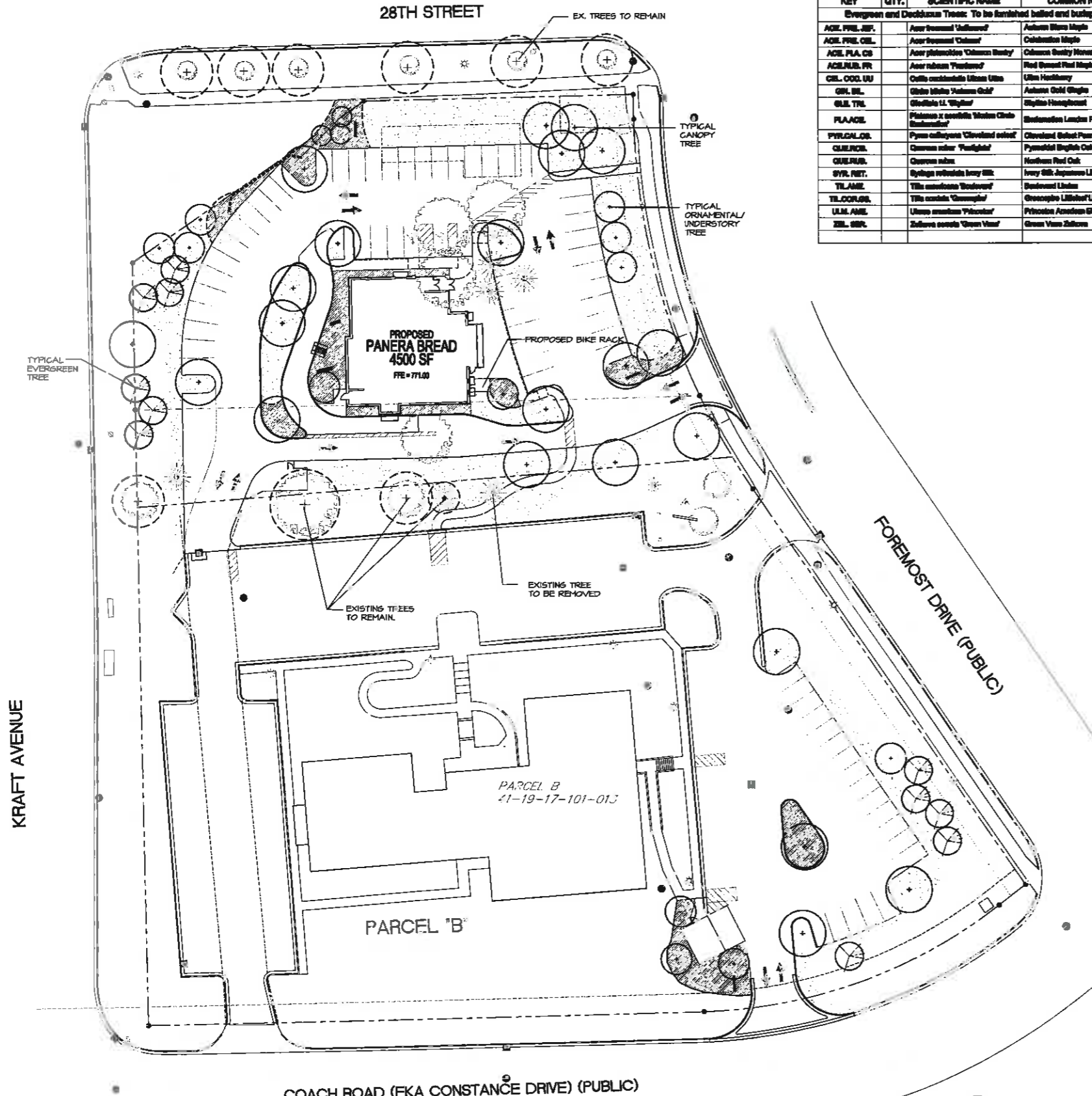
Phone: 616-731-0090
Fax: 616-241-0078

New Building For:

Panera Bread

5830 28th St SE, Grand Rapids, MI 49512

Floor Plan	
Issued 10-14-14	Drawing No. A8.0
Project No. 13012	



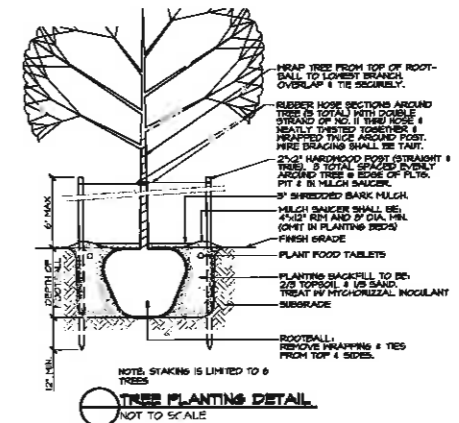
TYPICAL PLANT MATERIAL LIST				
KEY	QTY.	SCIENTIFIC NAME	COMMON NAME	SIZE
Evergreen and Deciduous Trees: To be furnished balled and burlapped or spade dug.				
ACR. FWL. SP.		<i>Acrostichum Villosum?</i>	Autumn Blue Maple	2 1/2" cal.
ACR. FWL. OIL.		<i>Acrostichum 'Oleum'</i>	Osage Yellow Maple	2 1/2" cal.
ACE. PLA. CB		<i>Acers phoeniceus 'Chateau Beauty'</i>	Chateau Beauty Norway Maple	2 1/2" cal.
ACIL. NUB. FR.		<i>Acers rubrum 'Flamingo'</i>	Red Summit Red Maple	2 1/2" cal.
CEL. OOL. UU		<i>Celtis occidentalis Ulmus Ulmus</i>	Ulmus Hybridum	2 1/2" cal.
GR. BL.		<i>Gleditsia triacanthos 'Autumn Gold'</i>	Autumn Gold Gleditsia	2 1/2" cal.
GL. TR.		<i>Gleditsia LL 'Wright'</i>	Wrighta Honeylocust	2 1/2" cal.
PLA. GE.		<i>Platanus x acerifolia 'Waterloo Globe'</i>	Waterloo Globe Platanus	2 1/2" cal.
PYR. GAL. OS.		<i>Pyrus calleryana 'Chiselwood select'</i>	Chiselwood Select Pear	2 1/2" cal.
QU. ER. OS.		<i>Quercus rubra 'Fastlight'</i>	Pyramidal English Oak	2 1/2" cal.
QU. ER. OS.		<i>Quercus rubra</i>	Red Oak	2 1/2" cal.
SYR. RET.		<i>Syringa reticulata 'Long Blue'</i>	Long Blue Japanese Lilac Tree	2 1/2" cal.
TIL. AME.		<i>Tilia cordata 'Woodward'</i>	Woodward Lilac	2 1/2" cal.
TIL. CO. OS.		<i>Tilia cordata 'Woodward'</i>	Woodward Lilac	2 1/2" cal.
ULM. AME.		<i>Ulmus americana 'Pinnacle'</i>	Pinnacle American Elm	2 1/2" cal.
ZEL. SER.		<i>Zelkova serotina 'Green View'</i>	Green View Zelkova	2 1/2" cal.

LEGEND

- EXISTING TREES TO REMAIN
- PROPOSED TREES
- PROPOSED PLANTING AREAS
- EDGING
- PROPOSED TURF AREAS

LANDSCAPE NOTES:

1. PLANTING SOIL FOR ALL TREES SHALL BE AS PER APPROPRIATE DETAIL AND SPECIFICATIONS.
2. ADD 6" NEW PLANTING SOIL AND MINIMUM 3" SHREDDED HARDWOOD BARK MULCH TO ALL SHRUB BEDS. ALL TURF AREAS ARE TO HAVE 4" OF TOP SOIL MIX.
3. LAWN TREES ARE TO BE MULCHED WITH A MINIMUM OF 6" DIAMETER BY 4" DEEP SHREDDED BARK SAUCERS.
4. LANDSCAPE CONTRACTOR SHALL VERIFY LOCATION OF ALL NEW AND EXISTING UTILITIES PRIOR TO ANY GRADING OR PLANTING WORK.
5. CONTRACTOR SHALL APPLY A MYCORRHIZAL INOCULANT INTO PLANTING SOIL OF ALL TREES, SHRUBS AND PERENNIALS AS PER MANUFACTURER'S RECOMMENDATIONS.
6. CONTRACTOR SHALL SUPPLY SAMPLES OF INOCULANT, FERTILIZER, TABLETS, MULCH TOPSOIL TO LANDSCAPE ARCHITECT.
7. ELEVATE TREE PLANTINGS SLIGHTLY (2-3") WHERE HEAVY CLAY OR HARDPAN SUBSURFACE CONDITIONS EXIST UNDER ROOTBALL TO MINIMIZE POOR DRAINAGE AROUND THE TREE ROOT AREA.
8. ALL AREAS DISTURBED BY GRADING AND CONSTRUCTION ARE TO BE RESTORED TO THE ORIGINAL CONDITION.
9. THE OWNER SHALL BE RESPONSIBLE FOR PROVIDING, PROTECTING AND MAINTAINING ALL LANDSCAPING IN A HEALTHY GROWING CONDITION, REPLACING IT WHEN NECESSARY, AND IN CONFORMANCE WITH ORIGINAL APPROVALS.
10. OWNER SHALL INSTALL AND MAINTAIN AN UNDERGROUND IRRIGATION SYSTEM AS REQUIRED BY TOWNSHIP ZONING.



Mark	Description	Date
	FOR SITE PLAN SUBMIT	9-22-14

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ARCHITECTURE PLANNING ENGINEERING
 855 28th Street SE
 Grand Rapids MI 49508
 Phone: 616-541-0200
 Fax: 616-541-0214

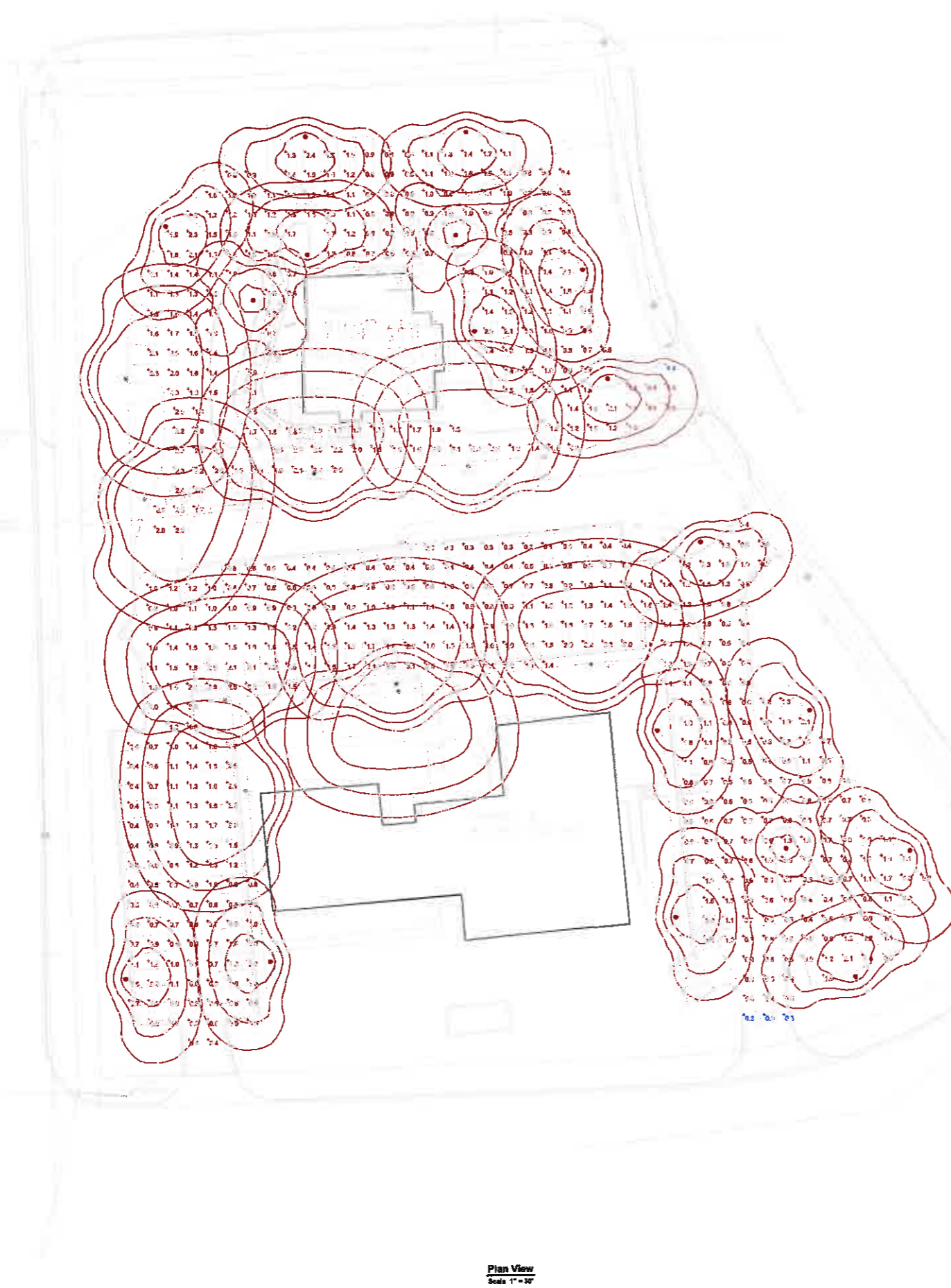


5630 28th St SE, Grand Rapids, MI 49512
LANDSCAPE PLAN
 Issued: 9-22-14
 Drawing No.: **L1.0**
 Project No.: 201420

SITE LANDSCAPE PLAN
 SCALE: 1" = 30'

Cornelisse Design Associates, Inc.
 LANDSCAPE ARCHITECTURE
 818 Saratoga SW
 Grand Rapids, MI 49503
 Tel: 616-955-8569 / Fax: 616-955-8166 / Website: www.cornelisse.com

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 3 full working days before
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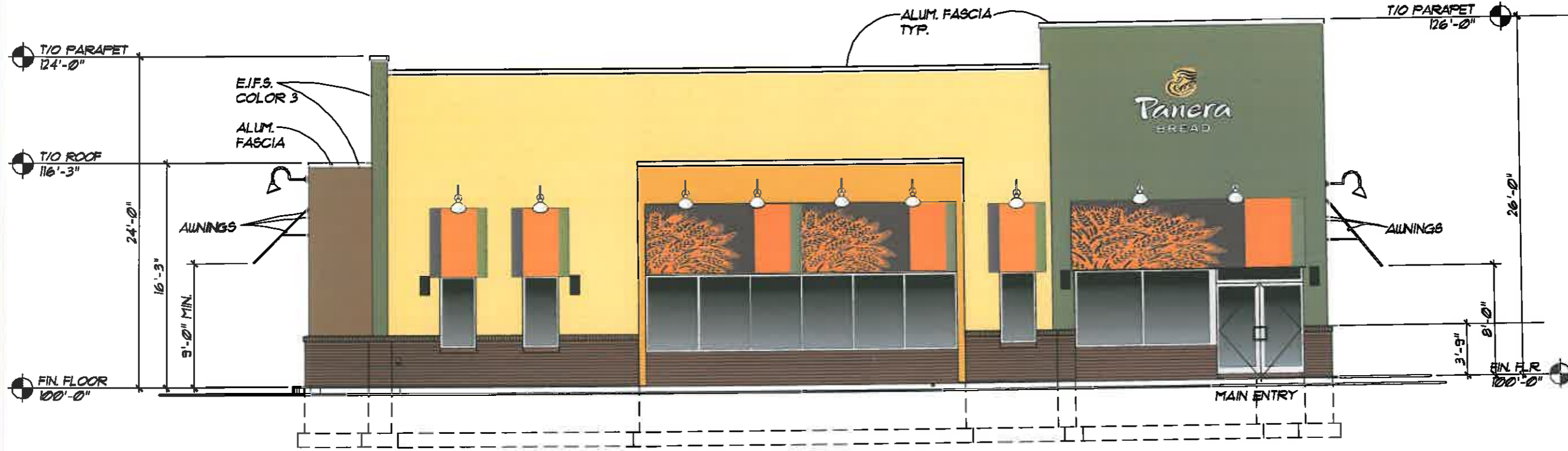
Plan View
Scale 1"=20'

LUMINAIRE SCHEDULE							
Symbol	Label	Qty	Catalog Number	Description	Lamp	FBs	Lumens LLF Watts
●	SAG3	15	UCM-T3-60LED-WW	UNIVERSE MEDIUM LED DIE-CAST ALUMINUM BALLAST HOUSING AND LENS FRAME. SPUN ALUMINUM HOOD, SAG GLASS LENS, EMITTER DECK CONSISTING OF LEDS, REFLECTORS AND HEATSINKS.	60 183BT DIDDIES, 3000K	UCM-T3-60LED-WW.IES	Absolute 1.00 84.4
●	SAG5	3	UCM-T5-60LED-WW	UNIVERSE MEDIUM LED DIE-CAST ALUMINUM BALLAST HOUSING AND LENS FRAME. SPUN ALUMINUM HOOD, SAG GLASS LENS, EMITTER DECK CONSISTING OF LEDS, REFLECTORS AND HEATSINKS.	60 183BT DIDDIES, 3000K	UCM-T5-60LED-WW.IES	Absolute 1.00 64.7
■	SL44	3	LDRV-T4-B04-E	RIDGEVIEW LED AREA/BITE LUMINAIRE (4) LIGHTBARS WITH ADJUSTED OPTICS - TYPE 4 ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONIOPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET		LDRV-T4-B04-E.IES	Absolute 1.00 95

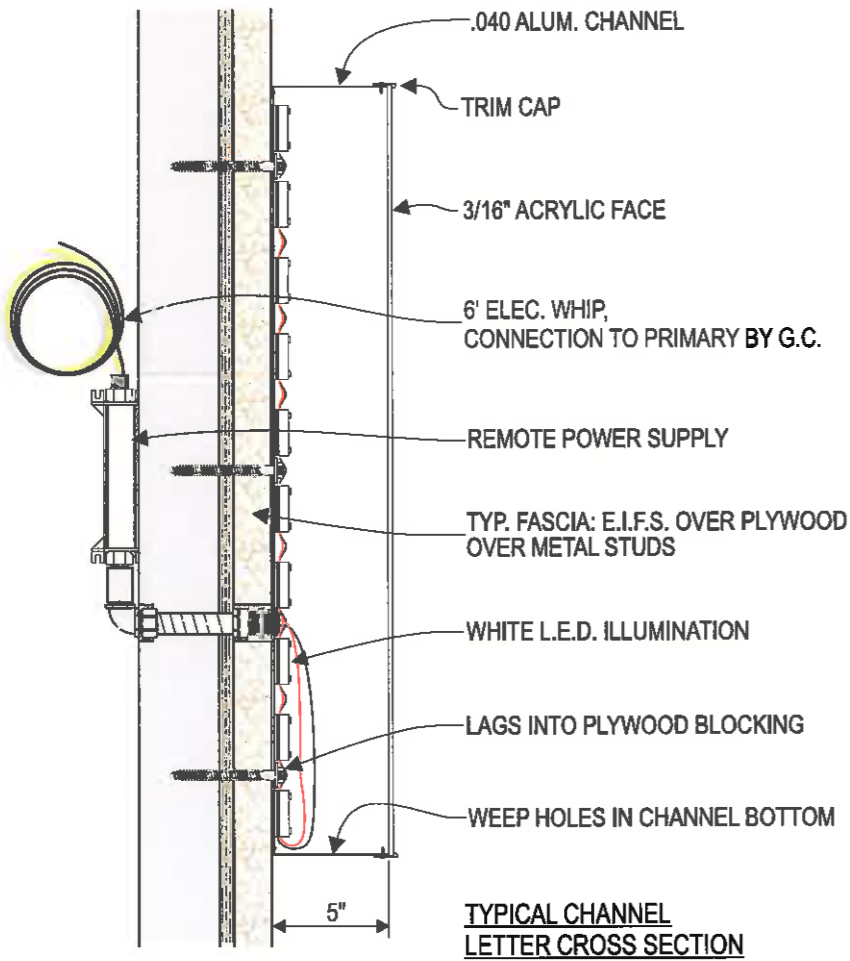
STATISTICS						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Overall Average	○	1.7 fc	2.4 fc	0.4 fc	6.0:1	4.3:1
Panel A lighting	+	1.2 fc	2.4 fc	0.4 fc	6.0:1	3.0:1
Panel B lighting	⊗	1.0 fc	3.1 fc	0.3 fc	10.3:1	3.3:1

PANERA CASCADE
FIXTURES AT 20'-0" DECO
FIXTURES AT 22.5'-0" KAD

Designer
L. SURDOCK
Date
NOV 10, 2014
Scale
Drawing No.



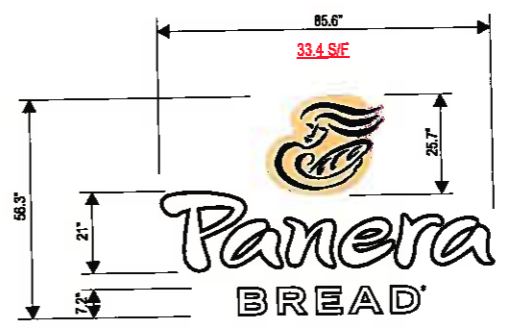
EAST ELEVATION:
SCALE: 1/8"=1'-0"



TYPICAL CHANNEL
LETTER CROSS SECTION

**INTERNALLY ILLUMINATED CHANNEL LETTERS
& MOTHER BREAD LOGO**

- LETTERS:
 • (#2447 WHITE) 3/16" ACRYLIC FACES WITH (230-22 MATTE BLACK) VINYL BORDERS
 MOTHER BREAD LOGO:
 • (CLEAR) 3/16" ACRYLIC FACE BACKSPRAYED PMS 1355u
 • (BLACK 230-22) VINYL LOGO DETAIL
 ALL:
 • (BLACK) 1" TRIM CAP
 • (BLACK) .040 ALUM. RETURNS, 5" DEEP
 • .040 ALUM. LETTER BACKS
 • (WHITE) L.E.D. ILLUMINATION
 • LOW VOLTAGE POWER SUPPLIES
 • U.L. AND MFG. LABELS
 • WEEP HOLES REQUIRED



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APPROVALS
Signatures Required Before Release to Production


Engineering	BY	DATE
Sales	BY	DATE
Estimating	BY	DATE
Production	BY	DATE
Quality Control	BY	DATE

VM PRODUCT NUMBER(S)

REVISIONS			
NO.	BY	DESCRIPTION	DATE
1	JM	increased sign size	10/30/14
2	WJ	reduced sign size, updated to show awnings, changed building color	11/05/14
3	JM	added brick wainscot under windows	11/06/14
4			
5			
6			
7			
8			
9			
10			
11			

DO NOT SCALE DRAWING

CLIENT



STORE NUMBER

5530 28th St. SE
 Cascade Township, MI

LOCATION

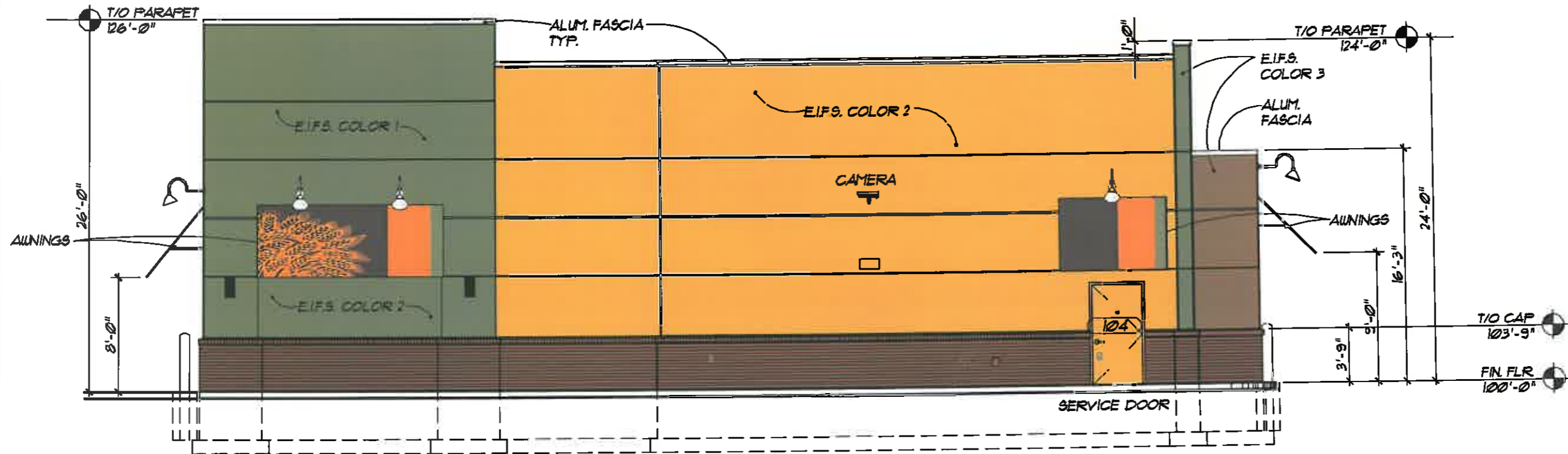
WORK ORDER NUMBER(S)

PROJECT MANAGER JIM M.

CHECKED BY DATE JM 09/19/14
 ARTIST DATE

DRAWING NAME

Y-234-av3



WEST ELEVATION:
SCALE: 1/8"=1'-0"

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APPROVALS
Signatures Required Before Release to Production

Engineering	BY	DATE
Sales	BY	DATE
Estimating	BY	DATE
Production	BY	DATE
Quality Control	BY	DATE

VM PRODUCT NUMBER(S)

REVISIONS

NO.	BY	DESCRIPTION	DATE
1	JM	revised to wheat awnings, changed building color	11/05/14
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			

DO NOT SCALE DRAWING

CLIENT



STORE NUMBER

5630 28th St. SE
Cascade Township, MI

LOCATION

WORK ORDER NUMBER(S)

PROJECT MANAGER **JIM M.**

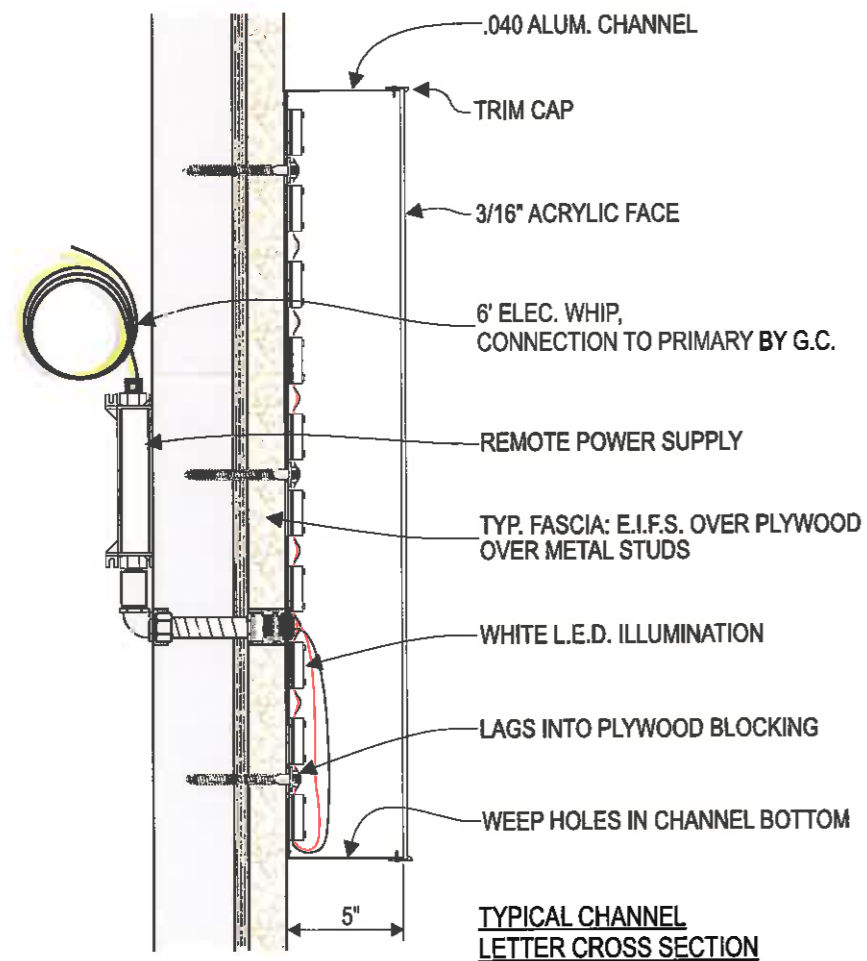
CHECKED BY **JM** DATE **09/13/14**
DATE ARTIST DATE

Y-234-bv3

DRAWING NAME



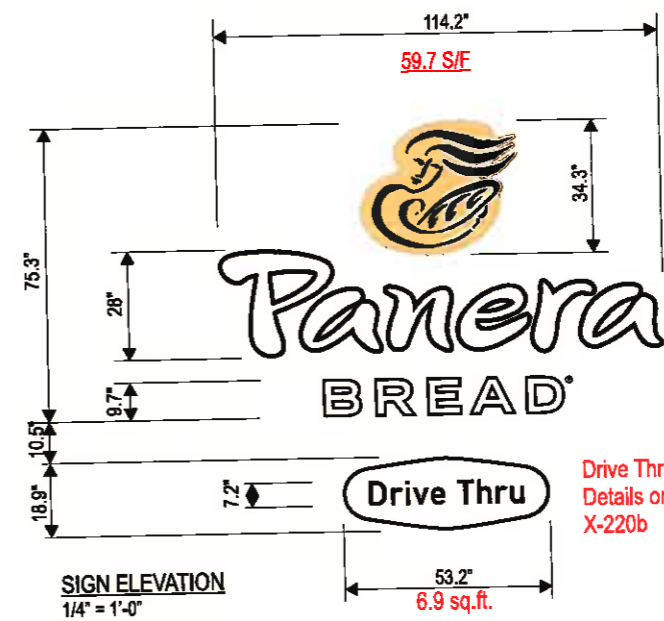
NORTH ELEVATION SCALE: 1/8"=1'-0"
 EAST ELEVATION SCALE: 1/8"=1'-0"



TYPICAL CHANNEL LETTER CROSS SECTION

INTERNALLY ILLUMINATED CHANNEL LETTERS & MOTHER BREAD LOGO

- LETTERS:
- (#2447 WHITE) 3/16" ACRYLIC FACES WITH (230-22 MATTE BLACK) VINYL BORDERS
- MOTHER BREAD LOGO:
- (CLEAR) 3/16" ACRYLIC FACE BACKSPRAYED PMS 1355u
 - (BLACK 230-22) VINYL LOGO DETAIL
- ALL:
- (BLACK) 1" TRIM CAP
 - (BLACK) .040 ALUM. RETURNS, 5" DEEP
 - .040 ALUM. LETTER BACKS
 - (WHITE) L.E.D. ILLUMINATION
 - LOW VOLTAGE POWER SUPPLIES
 - U.L. AND MFG. LABELS
 - WEEP HOLES REQUIRED



Drive Thru Sign
 Details on sheet:
 X-220b

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APPROVALS
 Signatures Required Before Release to Production

Engineering	BY	DATE
Sales	BY	DATE
Estimating	BY	DATE
Production	BY	DATE
Quality Control	BY	DATE

VM PRODUCT NUMBER(S)

REVISIONS

NO.	BY	DESCRIPTION	DATE
1	JM	removed sign	10/30/14
2	JM	updated sign size, updated to wheat awnings, changed building color	11/05/14
3	JM	added brick wainscot under windows	11/08/14
4			
5			
6			
7			
8			
9			
10			
11			

DO NOT SCALE DRAWING

CLIENT

Panera BREAD

STORE NUMBER

**5630 28th St. SE
 Cascade Township, MI**

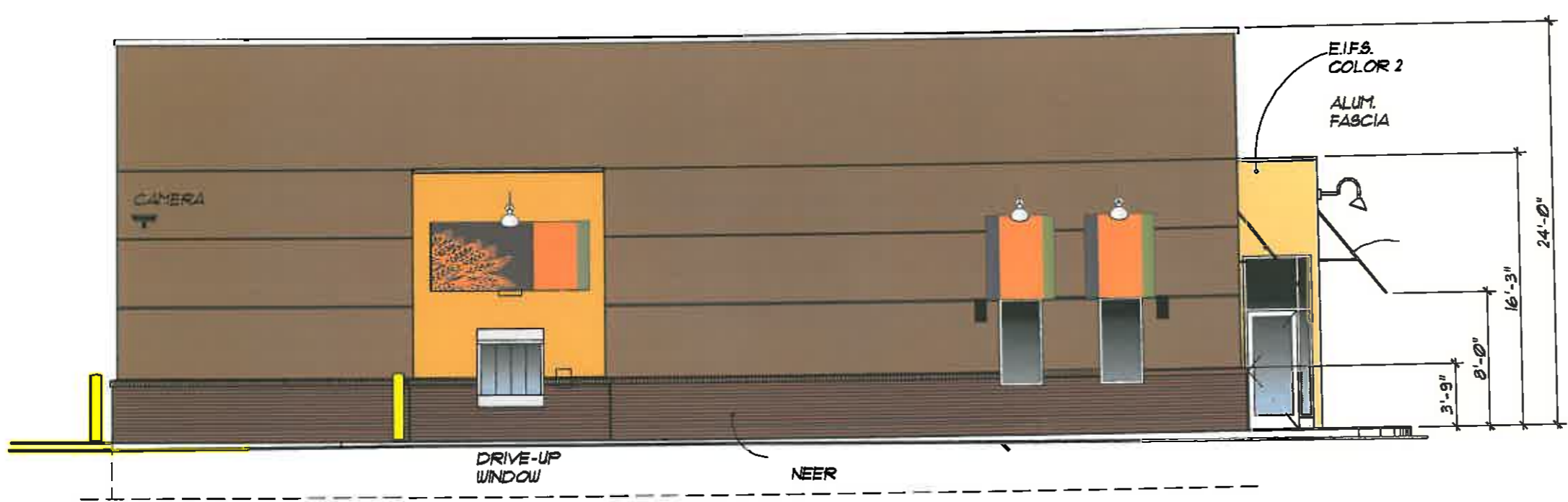
LOCATION

WORK ORDER NUMBER(S)

PROJECT MANAGER **JIM M.**

CHECKED BY **JM** DATE **03/19/14**

DESIGN NAME **Y-234-cv3**



SOUTH ELEVATION:
SCALE: 1/8"=1'-0"

PARAPET
24'-0"

O ROOF
116'-3"

T/O CAP
103

FIN. FLR
100'-0"

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APPROVALS
Signatures Required Before Release to Production

Engineering	BY	DATE
Sales	BY	DATE
Estimating	BY	DATE
Production	BY	DATE
Quality Control	BY	DATE

VM PRODUCT NUMBER(S)

REVISIONS

NO.	BY	DESCRIPTION	DATE
1	JM	added (2) awnings and windows	10/20/14
2	JM	updates to what markings	11/05/14
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

DO NOT SCALE DRAWING

CLIENT

STORE NUMBER

5630 28th St. SE
Cascade Township, MI

LOCATION

WORK ORDER NUMBER(S)

PROJECT MANAGER JM M.

CHECKED BY	DATE	JM ARTIST	03/19/14	DATE
------------	------	-----------	----------	------

Y-234-dv3

DRAWING NAME



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APPROVALS
 Signatures Required Before Release to Production

Engineering	BY	DATE
Sales	BY	DATE
Estimating	BY	DATE
Production	BY	DATE
Quality Control	BY	DATE

VM PRODUCT NUMBER(S)

REVISIONS

NO.	BY	DESCRIPTION	DATE
1	JM	added rapid pick up signs	05-07-14
2	JM	added reflective directional sign at Clark street entrance	09-07-14
3	JM	revised (1) directional sign	10/10/14
4			
5			
6			
7			
8			
9			
10			
11			

DO NOT SCALE DRAWING

CLIENT



STORE NUMBER

5630 28th St. SE
Cascade Township, MI

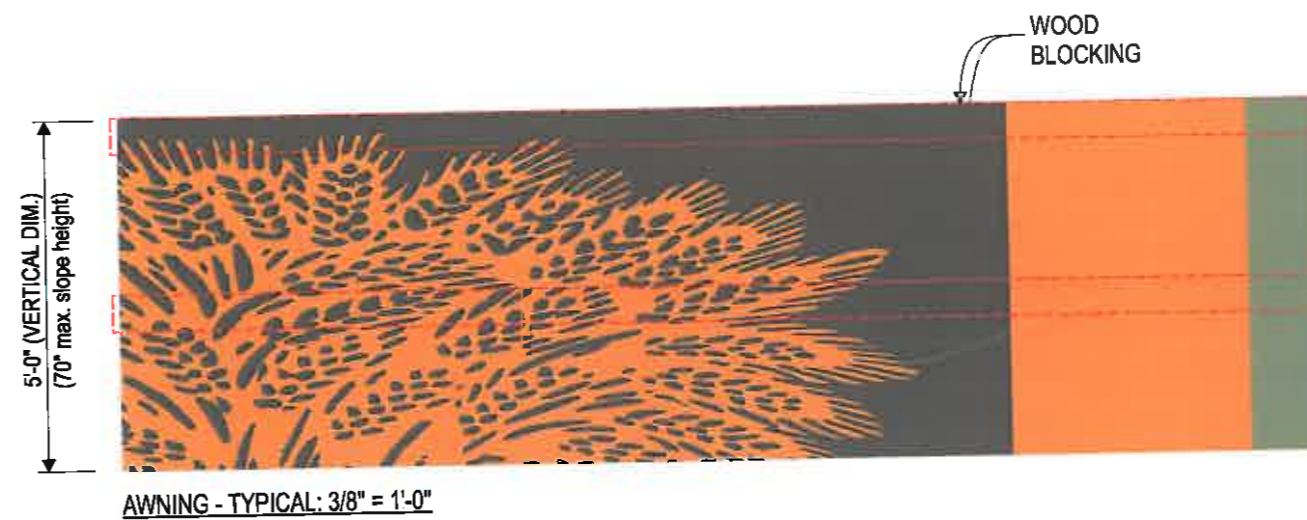
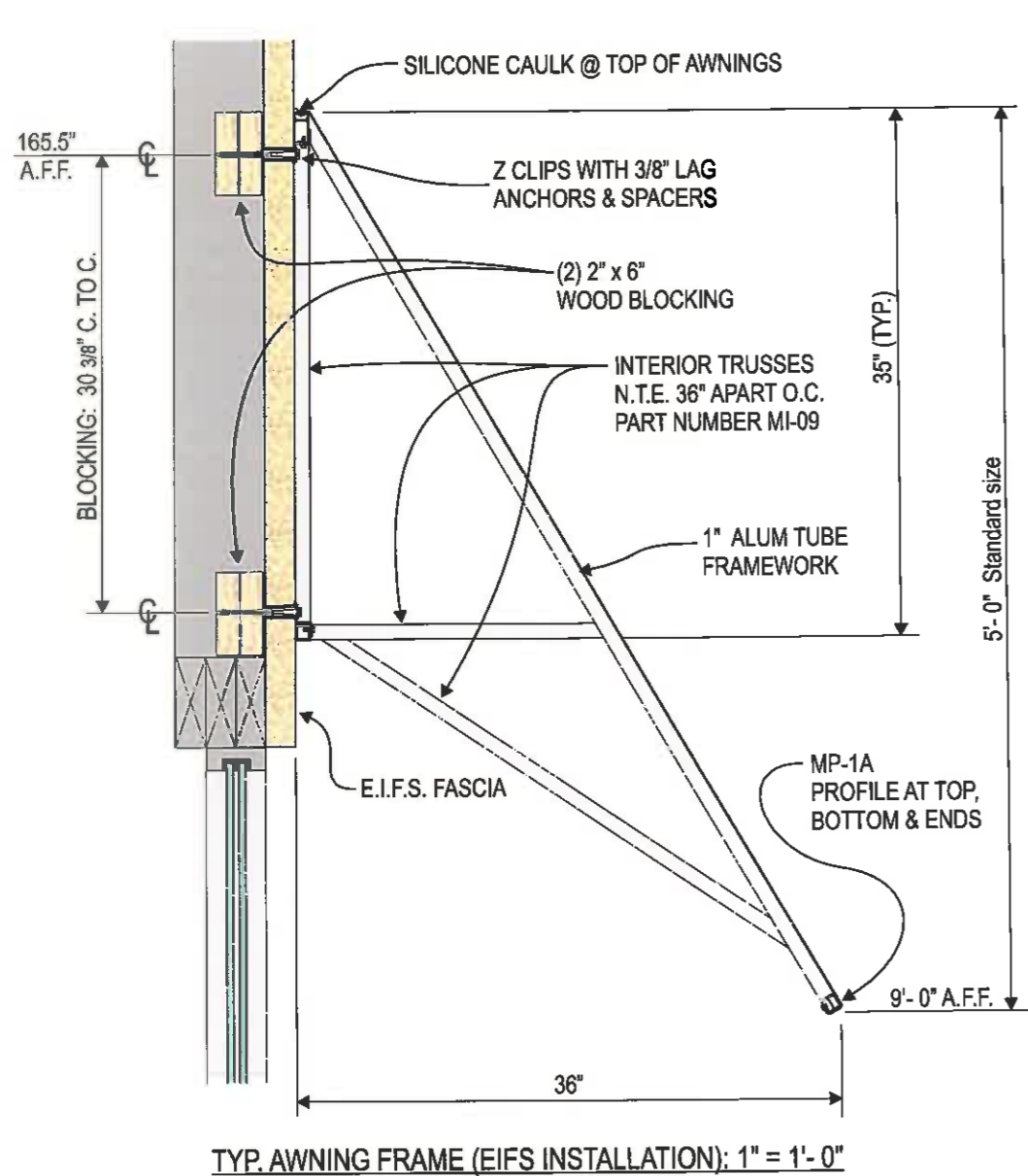
LOCATION

WORK ORDER NUMBER(S)

PROJECT MANAGER **JIM M.**

CHECKED BY **JM** DATE **09/19/14**

DRAWING NAME **Y-234-e**



EXTERNALLY ILLUMINATED G-2 AWNINGS:

- 1" SQ. ALUMINUM EXTRUSION WELDED FRAME
- FRAME POWDER COATED SEIBERT SILVER #189110
- TRUSS SPACING N.T.E. 36" APART O.C.
- SIGN G2 WHEAT GRAPHICS
- GRAY PVC TRIM STAPLE COVER
- MOUNTED USING Z-CLIPS & APPROPRIATE ANCHORS
- G.C. TO PROVIDE WOOD BLOCKING AS NECESSARY

Note:
 AWNING FRAMES LESS THAN 7'-6" LONG DO NOT HAVE A WHEAT IMAGE ON THE PLUM.
 AWNING FRAMES BETWEEN 15' & 17' LONG HAVE EXTRA YELLOW PANEL ON RIGHT SIDE.
 AWNING FRAMES OVER 17' LONG HAVE MULTIPLE EQUAL GRAPHIC PATTERN IMAGES.

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APPROVALS
Signatures Required Before Release to Production

Engineering	BY	DATE
Sales	BY	DATE
Estimating	BY	DATE
Production	BY	DATE
Quality Control	BY	DATE

VM PRODUCT NUMBER(S)

REVISIONS

NO	BY	DESCRIPTION	DATE
1	JM	revised to wheat awnings	11/05/14
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

DO NOT SCALE DRAWING

CLIENT

STORE NUMBER

5630 28th St. SE
 Cascade Township, MI

LOCATION

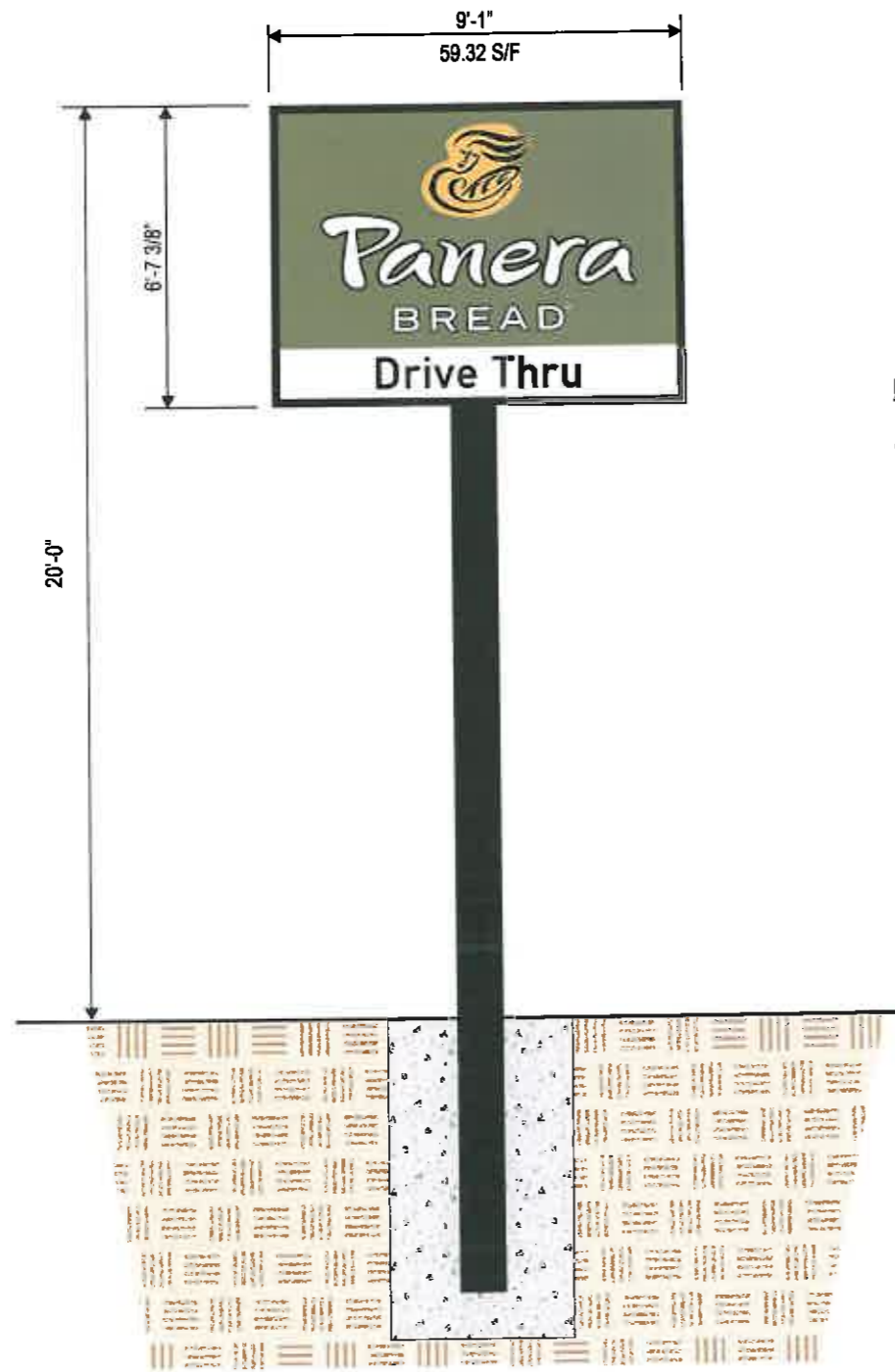
WORK ORDER NUMBER(S)

PROJECT MANAGER JIM M

CHECKED BY	DATE	ARTST	DATE
JM	09/19/14		

Y-234-f

DRAWING NAME



NEW D/F ILLUMINATED SIGN:

- (BLACK) PAINTED ALUMINUM FABRICATED SIGN CABINET & RETAINERS
- FLEX FACES w/ PRINTED COPY/CLEAR OVERLAMINATE
- FACE BACKGROUND COLOR: MATCH PMS-575u GREEN (OPAQUE)
- (WHITE) "PANERA BREAD" WITH (BLACK) OUTLINES
- (PMS-1355u PEACH) MOTHER BREAD w/ (BLACK) LOGO DETAILS
- (WHITE) "®" REGISTERED SYMBOL
- (BLACK) "DRIVE-THRU" LETTERS ON (WHITE) BACKGROUND
- WHITE LED ILLUMINATION
- CONCRETE D FOOTING BY MSI, DETAILS T.B.D.

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

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APPROVALS
Signatures Required Before Release to Production

Engineering	BY	DATE
Sales	BY	DATE
Estimating	BY	DATE
Production	BY	DATE
Quality Control	BY	DATE

VW PRODUCT NUMBER(S)

REVISIONS

NO	BY	DESCRIPTION	DATE
1	JM	reduced sign to 100 S/F per code	10/10/14
2	JM	reduced sign to 60 S/F per code	10/10/14
3	JM	revised pylon sign to 20'	11/04/14
4			
5			
6			
7			
8			
9			
10			
11			
12			

DO NOT SCALE DRAWING

CLIENT

Panera BREAD

STORE NUMBER

**5630 28th St. SE
Cascade Township, MI**

LOCATION

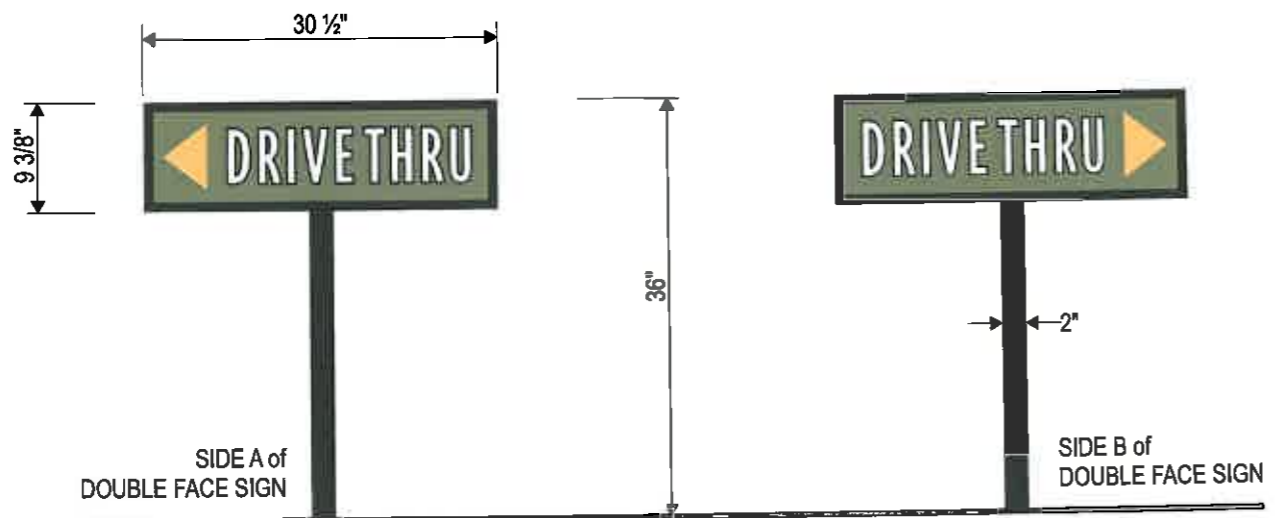
WORK ORDER NUMBER(S)

PROJECT MANAGER **JIM M.**

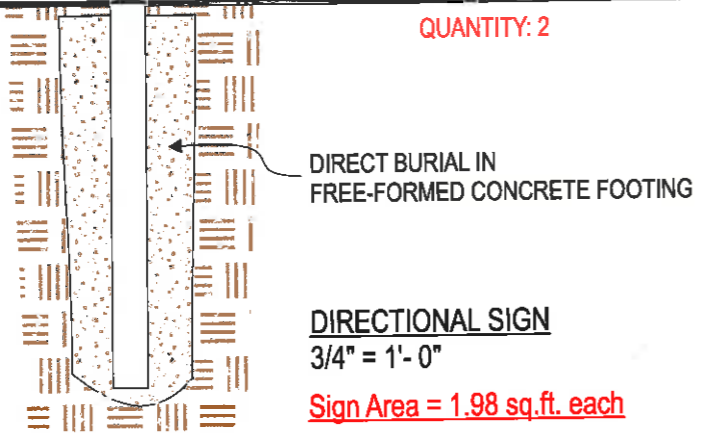
CHECKED BY	DATE	JM	ARTIST	09/19/14	DATE
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Y-234-g

DRAWING NAME



QUANTITY: 2

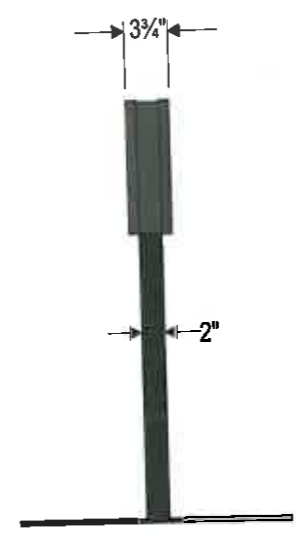


DIRECTIONAL SIGN
3/4" = 1'-0"

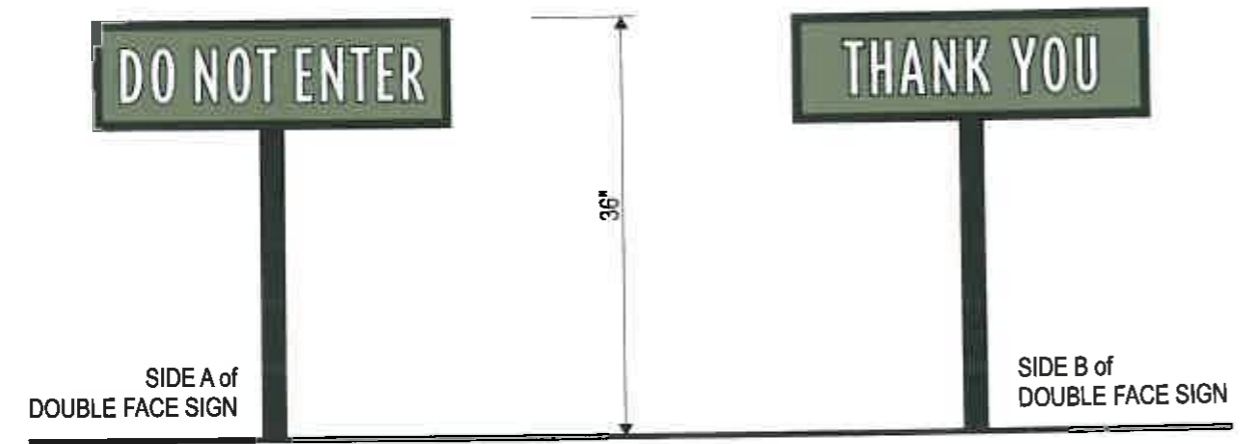
Sign Area = 1.98 sq.ft. each

NON ILLUMINATED DIRECTIONAL SIGNS:

- 2" DEEP ALUM. PANEL CONSTRUCTION PAINTED BLACK
- .090 ALUMINUM FACES
- PMS 5753C OPAQUE GREEN FIELD/BACKGROUND
- DIGITALLY PRINTED GRAPHICS ON REFLECTIVE PSV (VINYL)
- COLORS AS SHOWN: BLACK, WHITE & PMS 1355U PEACH IF REQUIRED.
- BACKS OF SINGLE FACED SIGNS PAINTED BLACK
- BLACK 2" x 2" x 1/4" WALL ALUM. SQ. TUBE POSTS
- DIRECT BURIAL IN FREE-FORMED CONCRETE FOOTING



DIRECTIONAL SIGN
END VIEW
3/4" = 1'-0"



QUANTITY: 1

DIRECTIONAL SIGN
3/4" = 1'-0"

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APPROVALS
Signatures Required Before Release to Production

Engineering	BY	DATE
Sales	BY	DATE
Estimating	BY	DATE
Production	BY	DATE
Quality Control	BY	DATE

VM PRODUCT NUMBER(S)

REVISIONS

NO	BY	DESCRIPTION	DATE
1	JM	mkc 2 all per code	10/10/14
2	JM	added (1) directional sign	10/30/14
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

DO NOT SCALE DRAWING

CLIENT

Panera
BREAD

STORE NUMBER

5630 28th St. SE
Cascade Township, MI

LOCATION

WORK ORDER NUMBER(S)

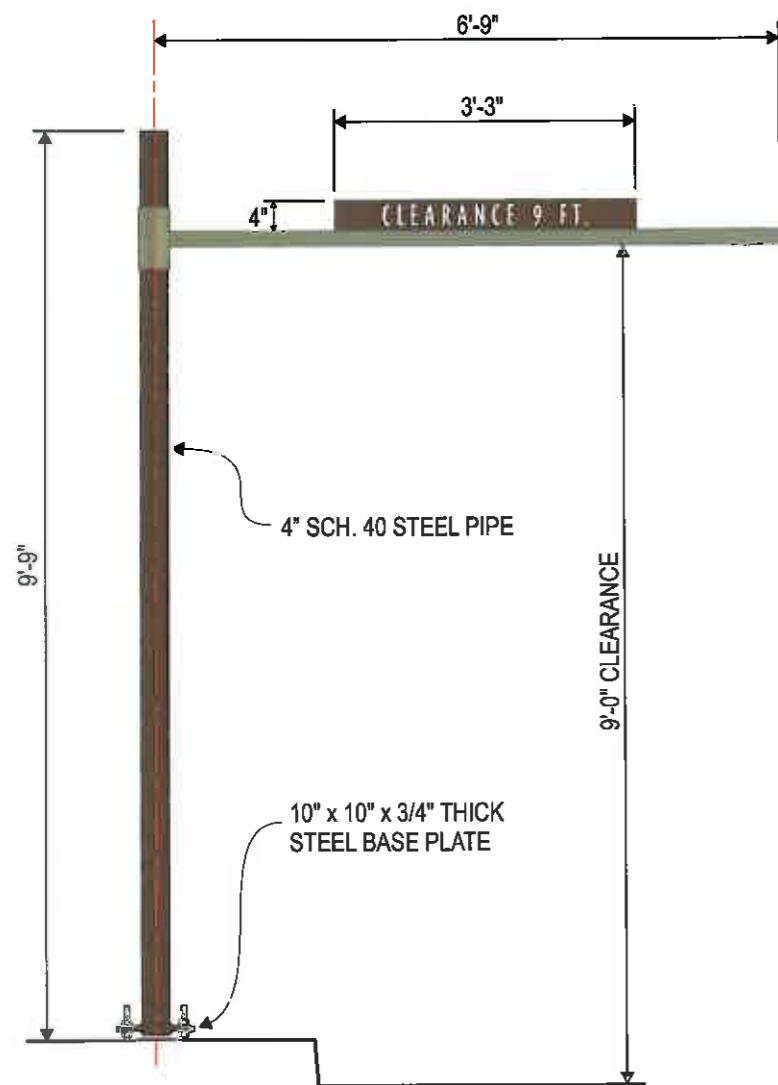
PROJECT MANAGER JIM M.

CHECKED BY DATE ARTIST DATE

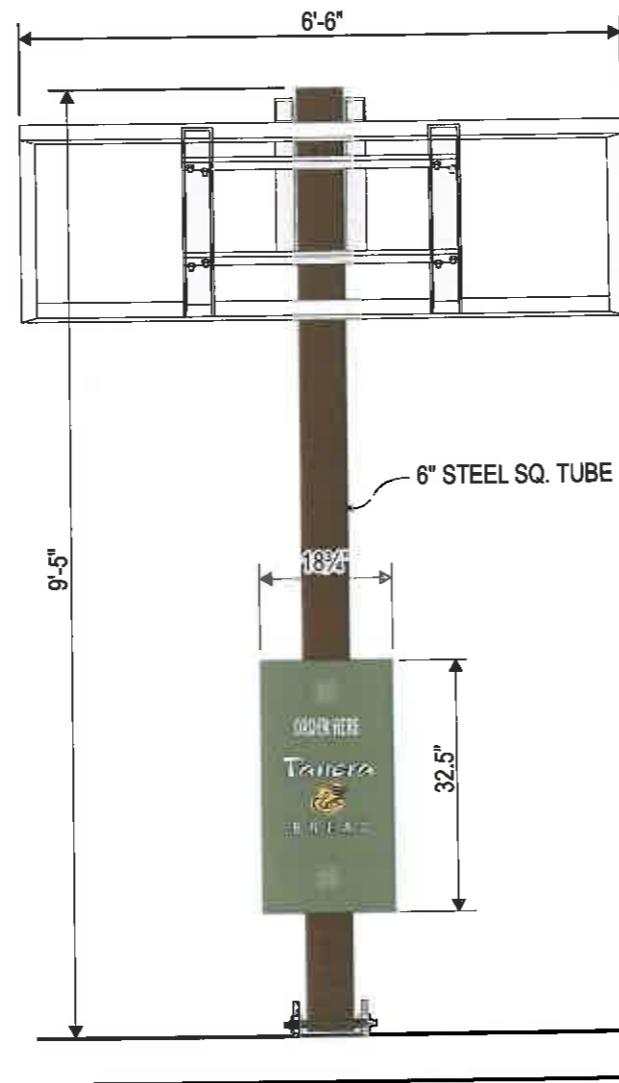
JM 09/19/14

DRAWING NAME

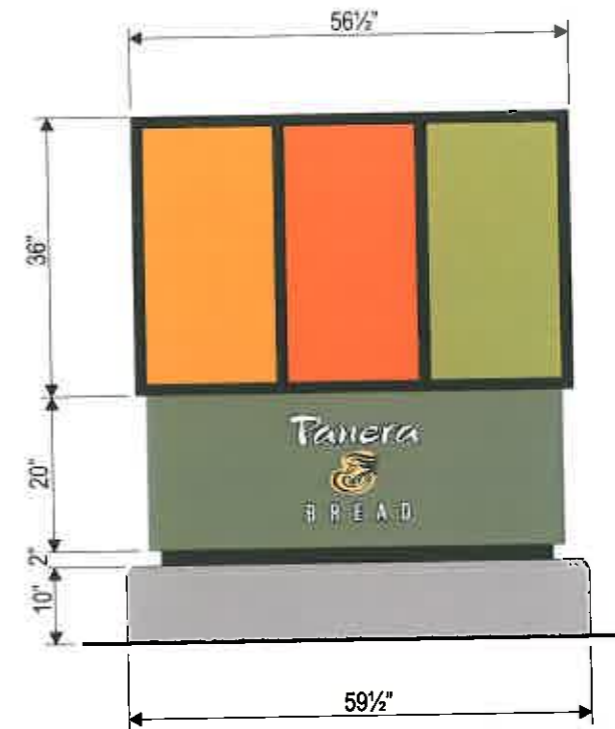
Y-234-h



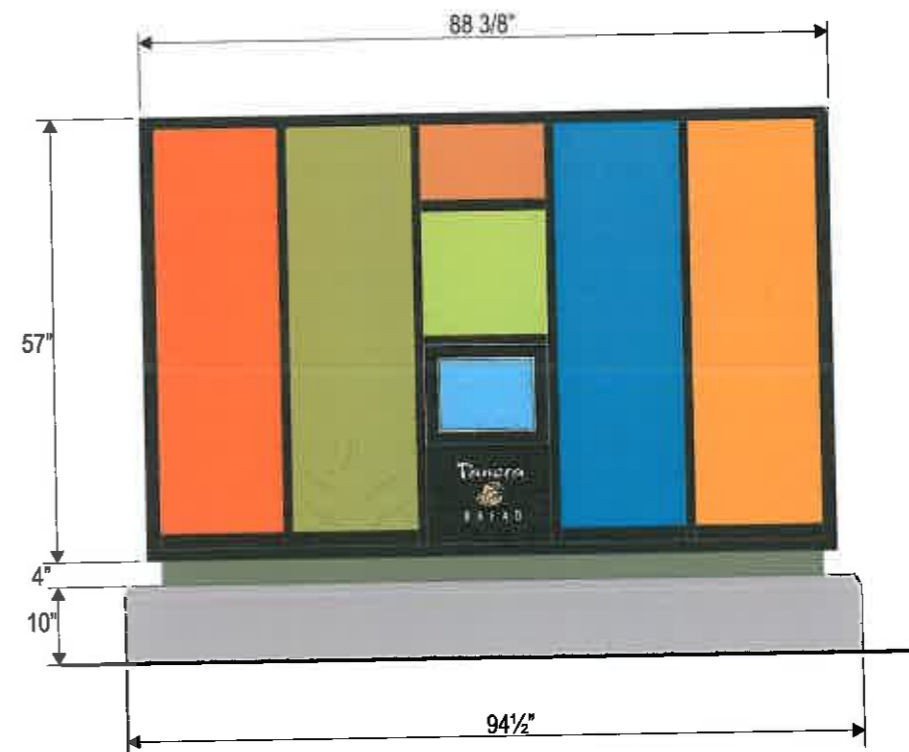
D/T HEIGHT CLEARANCE BAR
1/2" = 1'-0"



D/T CANOPY ELEVATION
1/2" = 1'-0"



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Engineering	BY	DATE
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Estimating	BY	DATE
Production	BY	DATE
Quality Control	BY	DATE

WORK PRODUCT NUMBER(S)

REVISIONS

NO.	BY	DESCRIPTION	DATE
1	XX	XXXXXXXXXX	00/00/00
2			
3			
4			
5			
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11			
12			

CLIENT

Panera
BREAD

STORE NUMBER

5630 28th St. SE
Cascade Township, MI

LOCATION

WORK ORDER NUMBER(S)

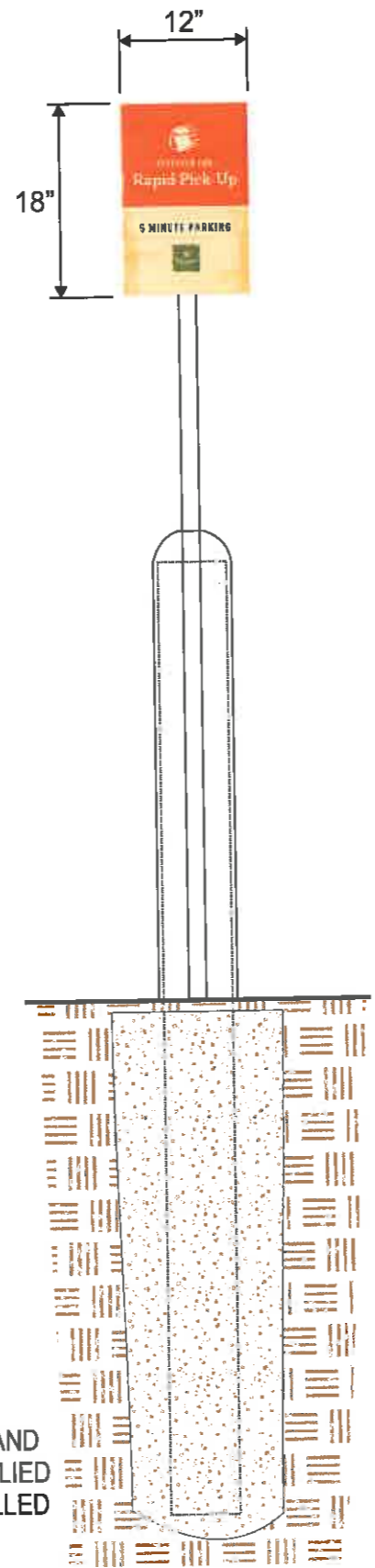
PROJECT MANAGER

CHECKED BY DATE ARTIST DATE

JM 09/19/14

DRAWING NAME

Y-234-i



BOLLARD AND POST SUPPLIED AND INSTALLED BY GC

SCALE (TYP. of 3): 3/4"=1'-0"



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

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Engineering	BY	DATE
Sales	BY	DATE
Estimating	BY	DATE
Production	BY	DATE
Quality Control	BY	DATE

VM PRODUCT NUMBER(S)

REVISIONS

NO.	BY	DESCRIPTION	DATE
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CLIENT

Panera BREAD

STORE NUMBER

5630 28th St. SE
Cascade Township, MI

LOCATION

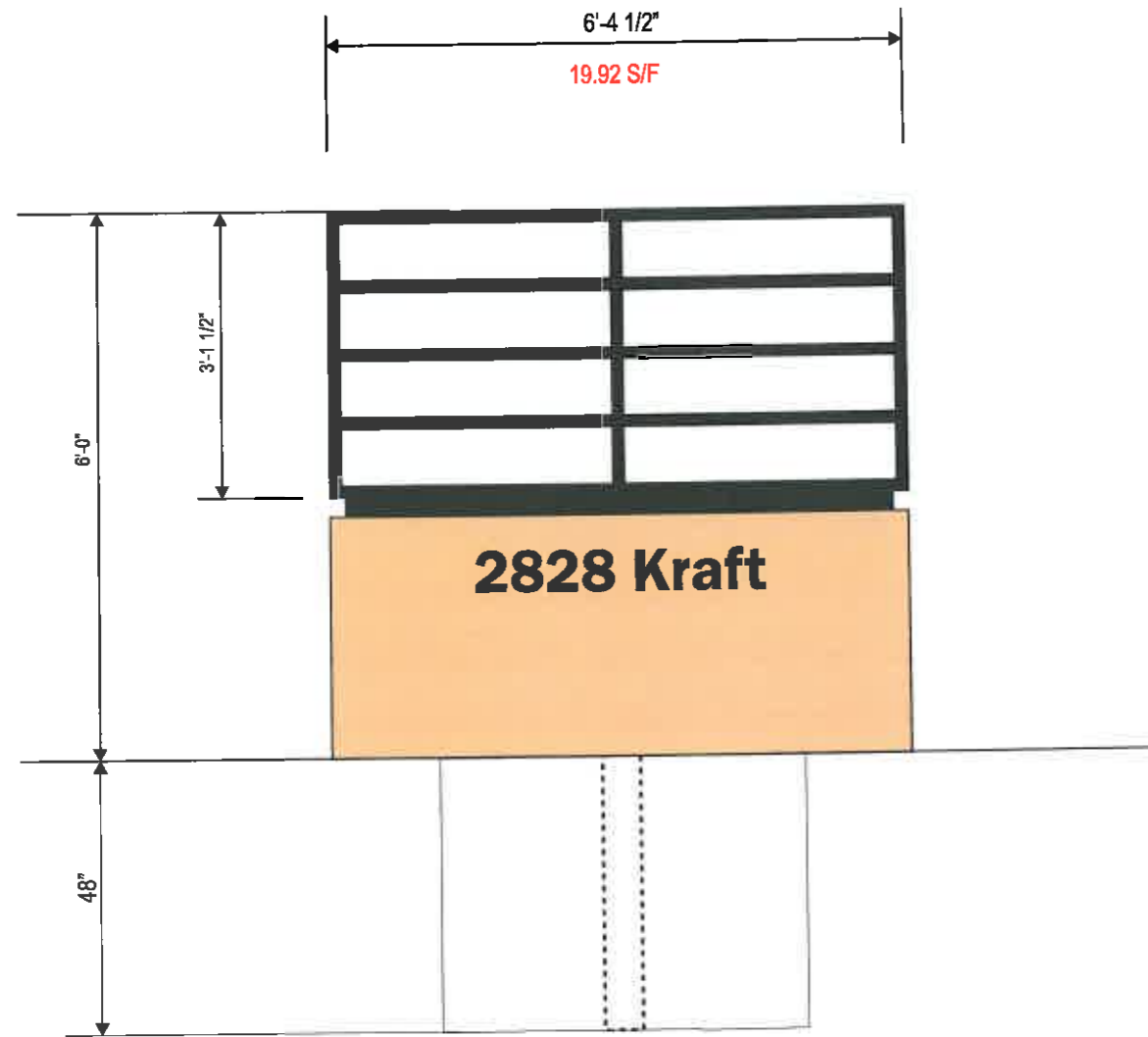
WORK ORDER NUMBER(S)

PROJECT MANAGER

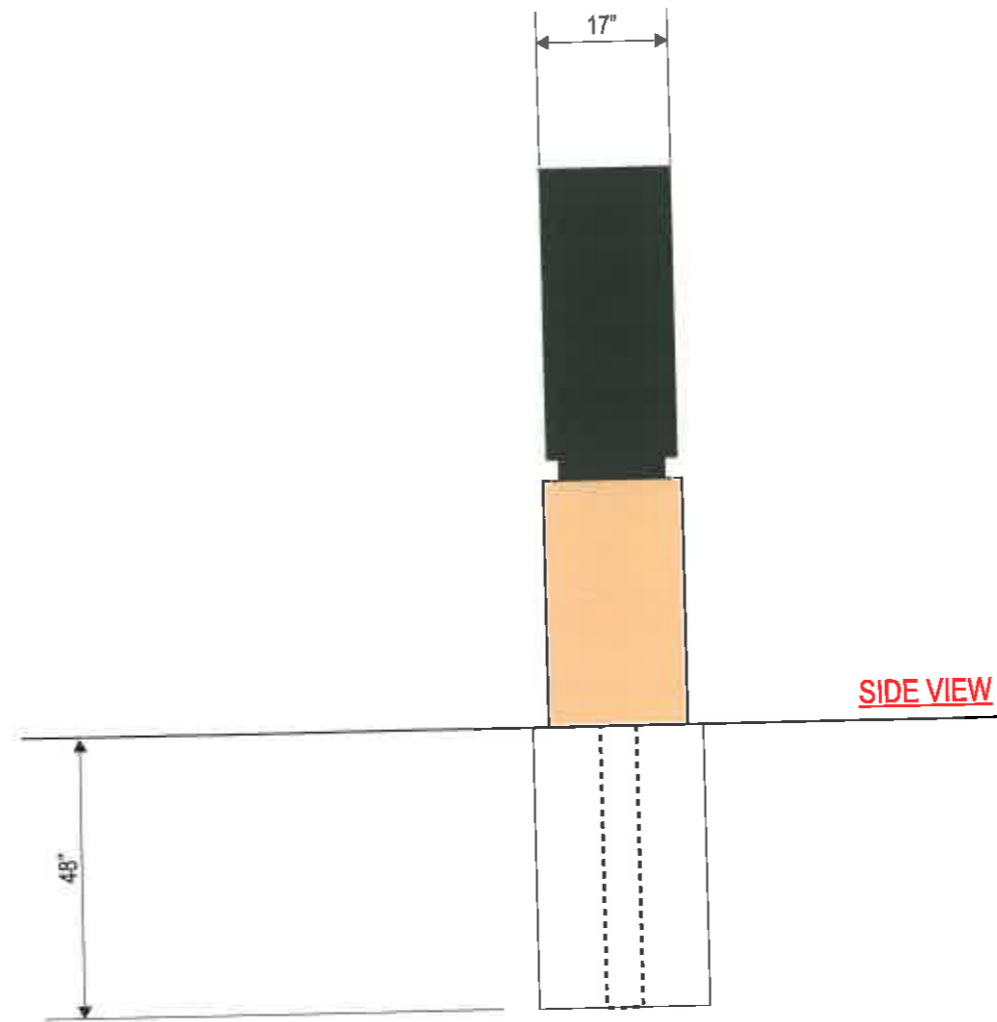
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		JM	09/19/14

Y-234-j

DRAWING NAME



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TENANT DIRECTORY SIGN

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APPROVALS
Signatures Required Before Release to Production

Engineering	BY	DATE
Sales	BY	DATE
Estimating	BY	DATE
Production	BY	DATE
Quality Control	BY	DATE
	AT	DATE

WORK PRODUCT NUMBER(S)

REVISIONS

NO.	BY	DESCRIPTION	DATE
1	JM	updated monument sign	11/03/14
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8			
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12			

CLIENT



Panera BREAD

STORE NUMBER

5630 28th St. SE
 Cascade Township, MI

LOCATION

WORK ORDER NUMBER(S)

PROJECT MANAGER

CHECKED BY	DATE	JM	03/19/14
		ARTIST	DATE

Y-234-k

DRAWING NAME

STAFF REPORT

TO: Cascade Charter Township Planning Commission
FROM: Steve Peterson, Community Development Director
MEETING DATE: January 14, 2015
CASE: 2015 Work Plan

The following is a table of a proposed work plan for 2015.

Item
1) Study the NW corner of 60 th and M-37 for possible rezoning.
2) Joint meeting with DDA to discuss items such as vision and current issues.
3) Investigate/develop economic development strategies a) Food truck regulations. b) Help initiate the Community Redevelopment Ready process
4) Continue to investigate options for Transit.

PLANNING DEPARTMENT

2014

Annual Report

CASCADE CHARTER TOWNSHIP

CASCADE CHARTER TOWNSHIP - 2014

TOWNSHIP BOARD

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Ronald Goodyke, Clerk
Ken Peirce, Treasurer
Tom McDonald
Jim Koessel
Fred Goldberg
Jack Lewis

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John Sperla
Jack Lewis, Trustee
Scott Rissi
Aaron Mead, Sec.
Jeff Hammond
Al Pennington, Chair
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Lou Berra
Jeff Hammond/Planning Commission Rep.
Tom McDonald, Trustee
Bill Cousins, Vice Chair, Sec.
Jack Neal, Alternate

PLANNING STAFF

Steve Peterson, AICP, Planning Director
Stephanie Fast, Community Standards Officer

BUILDING AND GROUNDS

Jim McDonald, Supervisor
Heather Jahr, Gardener
Brian Poppema, Mechanic/Maintenance
Josh Higgins, Maintenance

January 3, 2015

The Cascade Charter Township Planning Department is pleased to present our annual year in review in the form of the **2014 Annual Report**. The following report summarizes each type of development request reviewed by the Planning Department, Planning Commission, Zoning Board of Appeals, and Township Board in 2014.

The Planning Department was merged into the Community Development Department in late 2014. This is an attempt to align resources with personnel. The Community Development Department now consists of the Planning, Code Enforcement and the Buildings and Grounds departments. In addition we will continue to work closely on economic development initiatives with the new Economic Development and DDA Director, Sandra Korhorn.

In addition to the information contained in this report, the Planning Department also performs many important duties on a daily basis that are not normally recognized.

Based on the number of inquiries about new projects it appears that 2015 will be an equally if not more challenging year for the new Community Development Department than the last couple years. Should you have any questions or comments relating to this report or the Planning Department, do not hesitate to call us at 949-0224.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Peterson", with a horizontal line extending to the right.

Steve Peterson, AICP
Community Development Director

**Cascade Township
Planning Department
2014 Annual Report**

I. ACCOMPLISHMENTS

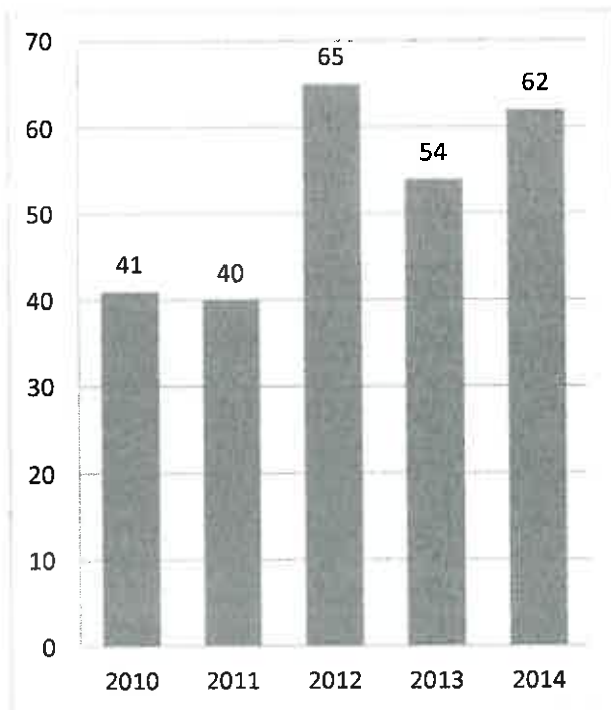
Development Reviews

In 2013, the Planning Department reviewed a total of 54 development requests. Several of the 2013 requests were also carried over into 2014 and consumed additional staff time. Similarly, many of the projects initiated in 2014 will still be active in 2015. These reviews include those which required action by the Township Board, Planning Commission, Zoning Board of Appeals, and Planning Department, with several requiring action by more than one body. The following tables summarize the project review activities of the Planning Department over the past five (5) years:

**DEVELOPMENT ACTIVITIES
2010 - 2014**

Activity/Year	2010	2011	2012	2013	2014
Planning Commission					
Planned Unit Developments	2	3	2	4	7
Rezoning	3	0	1	1	0
Site Plan Reviews	3	3	8	5	4
Administrative Site Plan Reviews	2	4	11	13	7
Special Use Permits	11	4	15	6	9
Plat Reviews	0	0	0	0	0
Other Activities	5	8	2	2	5
Subtotals	26	22	39	31	32
Zoning Board of Appeals					
Variations and other requests	8	12	12	5	11
All Board and Commissions					
Other Requests	0	1	5	3	0
Planning Department					
Lot Split (Cases)	7	5	9	15	19
TOTALS	41	40	65	54	62

**DEVELOPMENT ACTIVITY TOTALS
2010- 2014**



In addition to reviewing all of the development proposals submitted to the township, the Planning Department's days are filled with numerous other activities. These activities are summarized below.

Regional Planning

Staff continued its involvement with regional planning issues in 2013. We participated in monthly transportation meetings regarding technical and policy issues.

Staff also participated on several subcommittees of the transportation group with additional work on the non-motorized and rail transportation issues.

Storm water

More and more staff time is being dedicated to storm water related issues. In 2014 the Planning

Department led the coordinated effort for the State review and approval of our stormwater permit. Significant time was also spent collaborating on a regional storm water ordinance update. This effort will also continue into 2015.

Master Plan

In 2014 the Planning department completed the 5 year review of the master plan with the adoption of the complete streets plan (attached). We also continue to investigate transit options for the township. It appears that some momentum is in place as several commercial and industrial businesses have expressed interest in line haul service.

Several amendments were made to the zoning ordinance to allow brew pubs, microbrews, taverns to the township. This was done in conjunction with general ordinance changes for our liquor ordinance. The effort was done to hopefully encourage those types of uses to locating in Cascade.

Department Reorganization

Maybe the biggest change was the reorganization effort that impacted the Planning Department. The Planning Department is now part of the larger Community Development department. This will be a challenge moving forward and an opportunity to assist the Township Manger in allocating the proper resources to assist in achieving the goals of our many plans.

Community standards officer

Along with the reorganization the township also hired a part time code enforcement person. This person will be instrumental to the success of the department.

Grant

The Planning Department submitted a MDNRTF grant for improvements to the recreation park. These improvements included a dog park, basketball courts , universal access playground and parking and trail improvements. Although the grant was not selected by the state, the plan will provide a framework for future improvements.

Complete Streets

The Township Board adopted the Complete Streets plan for the village area of the township in March of 2014. This was a joint project between the DDA and the Planning Commission. This project also served as the review and an update to the 2009 Master plan. As a result of this plan several projects are planned for 2015 to make the village area more pedestrian friendly and less auto dependent. (A copy of the plan is attached)

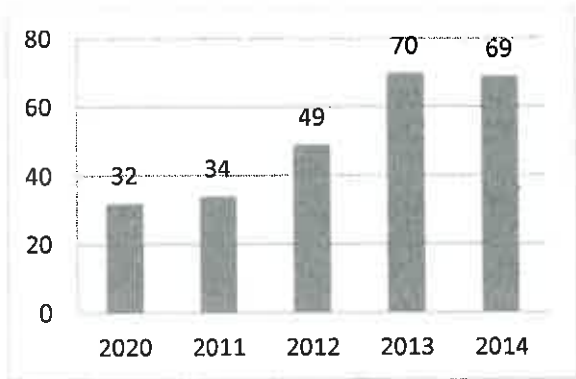
Regional Geographic Information System (REGIS)

In addition to the usual support provided for the REGIS effort the Planning Department did build a significant project this year to keep a geographic map of the annual report for tracking purposes. This has become a very valuable tool to graphically see the different actions taken by the Planning Department. The public has access to REGIS through staff as well as the internet. <http://ims.gvmc-regis.org:1052/website/public/>

Building permits

Below is a chart showing the number of new residential building permits

for the last 5 years. The Planning Department is responsible to check to make sure that every building permit complies with zoning regulation. While the graph only shows new residential construction it does indicate trends for all permits.



Applicant Billing

The Planning Department will continue to actively pursue the recovery of review costs associated with development proposals. In 2014, we were reimbursed approximately \$15,000 in engineering, planning and legal review fees spent on various development projects. Accurate records are kept so the appropriate applicant is billed for their respective fees incurred.

Case Summaries

The following pages provide a brief synopsis for each type of development request that was reviewed in 2014.

Case	Applicant	Request	Location	ZBA/PC Action	TB Action
Other					
14-3178	John Ekkins	Private road exception	5666 Whitneyville Ave	recommend approval	Approved
14-3199	Cascade Township	Brewpub regulation			Approved
53-2014	Cascade Township	Schoolhouse creek study			approved engineering study 7/9/14
14-3201	Cascade Township	Sign Permit fee changes			Approved
24-2014	Cascade Township	Village Area Complete Streets Plan			Adopted 3/26/14
Zoning Board of Appeals					
Case	Applicant	Location	Zoning	Request	ZBA Action
14-3176	Scott McCallum	8810 Summerset Woods	PUD 70	sideyard accessory setback	Denied
14-3177	Art Van	5925 28th St	B2	Signage	Denied
14-3186	Ron Goodyke	1945 Forest Shores Dr	R1	Sideyard setback garage addition	approved
14-3200	Matt Decamp	1910 Laraway Lake Dr	R1	front yard accessory building	approved
14-3205	Consumers Credit Union	5575 28th St	PUD 69	multiple wall signs	approved
14-3209	John Shipley	7373 Biscayne Way	R1	number of accessory buildings	approved in part
14-3212	Lance Korhorn	3480 Buttrick Ave	ARC	number of accessory buildings	Denied
14-3215	Jeremy Penninga	4932 Streamside Pointe	ARC	accessory building in front yard	Approved
14-3218	Redwood Living	6080 28th St	PUD 91	temporary sales office	Withdrawn by applicant
14-3223	Darlee	5380 52nd St	TI	driveway spacing	Approved
14-3224	Lakeland Pallett (Miedema)	3801 Kraft Ave	I	Bufferyard	Tabled
Lot Splits					
Case	Applicant	Parcel No(s)	Address	Number of Parcels Created	Action
14-3169	Meslane and Bowie	41-19-08-451-045, 044, 021, 027	6097 28th St	reconfigure	Approved
14-3170	Meslane and Bowie	41-19-08-451-045, 044, 021, 027	6120 Charlevoix Woods Ct	reconfigure	Approved
14-3173	Shawn Eshtagh	41-19-13-400-016	9161 36th St	3	Approved
14-3174	Anna Thompson	41-19-03-176-007	1425 Briarcliff	1	Approved
14-3175	Smit/Huyser	41-19-24-400-001, 002	9371 Cascade rd	1	Approved
14-3178	John Ekkins	41-19-35-426-004	Whitneyville Ave	3	Approved
14-3181	Barbara Novak	41-19-10-348-013, 012	2601 Casta View	reconfigure	Approved
14-3182	Jeffrey Shull	41-19-03-101-033, 034	7560 Buttrick Park	reconfigure	Approved
14-3187	Tim Doezema	41-19-15-226-019	2901 Buttrick Ave	1	Approved
14-3189	Kathleen Casey	41-19-26-126-004	8300 Cascade Rd	3	Approved
14-3192	Bruce Cautkins	41-19-33-400-025, 026, 014	7150 Thornyew Dr	1	Approved
14-3196	Lillian West	41-19-35-451-003	8485 60th St	1	Approved
14-3198	Tim Noordhoek	41-19-15-156-006	3190 Hayward Dr	1	Approved
14-3203	Cascade Development	41-19-05-201-019	1300 Marman Ave	1	Approved
14-3211	Jennifer Bauer	41-19-34-130-003, 004	5401 5407 Buttrick Ave	reconfigure	Approved
14-3213	Joe Doody	41-19-33-400-041, 043	7125 Thornapple River Dr	reconfigure	Approved
14-3221	Michael Mancini	41-19-16-126-009, 010	7160 Cascade Rd	reconfigure	Approved
14-3226	Meadowbrooke Business Park	41-19-31-325-004, 400-019	5794 Broadmoor Ave	1	Approved
14-3227	Concierge Marketing	41-19-12-400-006	9425 28th St	1	Approved

2014

Planned Unit Developments

Case	Applicant	Request	Location	Preliminary	Final
14-3171	Sable Development	Rezone for new SE YMCA	1790 Buttrick Ave	2/18/14	3/26/14
14-3180	YMCA	Rezone Master Plan for Phase II	5298 Burton St	6/16/14	7/23/14
14-3207	Meadowbrooke	Rezone for 6 unit residential project	5794 Broadmoor	10/6/14	11/5/14
14-3208	Thornapple Hill	Rezone for 7 story hotel	6868 Cascade Rd	11/17/14	
14-3210	Drury Hotel	Rezone for 29 unit residential subdivision	5189 28th St	11/17/14	12/10/14
14-3219	Cascade One	rezone to allow for stand alone panera bread	1701 Spaulding Ave		
14-3225	Varneck (Panera Bread)		5630 28th St		

Case	Applicant	Proposed Land Use	Location	Planning Commission Action
14-3188	MedBio	19,000 sq ft addition	5346 36th St	Approved w/conditions
14-3191	JT's Pizza	2,800 sq ft addition	6716 Old 28th St	Approved w/conditions
14-3202	International Beverage	1,140 sq ft addition	6859 Cascade Rd	Approved w/conditions
14-3217	Darbee	addition and New building	5380 5390 52nd St	Approved w/conditions

Case	Applicant	Request	Location	Zoning	Action
14-3179	Pit Stop Catering	outdoor cooking	6479 28th St	PUD 22	Approved by PC
14-3183	VanderWeide Properties	outdoor volleyball training	5449 28th St Cr	PUD 26	Approved by PC
14-3184	Jon DeGraft	Accessory Building	6960 Thornview	R1	Approved by PC
14-3185	James Hackett	Accessory Building addition	1547 Bratcliff Dr	R1	Approved by PC
14-3190	Aaron Schaap	Accessory Building	1910 Laraway Lake Dr	R1	Approved by PC
14-3195	Joel Harner	taller fence in front yard	7303 Grachten Dr	R2	Approved by PC
14-3197	John Shipley	new accessory building	7373 Bissayne Way	R1	Approved by PC
14-3216	Gary Jehnke	Accessory Building	5766 Buttrick Ave	ARC	Approved by PC
14-3220	Fire House Subs	add dirty thru	5557 28th St	PUD 69	Approved by PC

Administrative Site Plan Review

Case	Applicant	Proposed Land Use	Location	Action
14-3172	Consumers Credit Union	minor site plan modifications	5575 28th St	Approved
14-3193	Cascade Paper Converter	Small addition	4935 Starr St	Approved
14-3194	DJ's Landscape	minor site plan modifications	5255 52nd St	Approved
14-3204	Dunkin Donuts	site changes	6539 28th St	Approved
14-3206	Burwood	minor changes to lot 17 location	2940 Burwood Hills Ct	Approved
14-3214	Snow Ave Greenhouse	Small addition	3295 Snow Ave	Approved
14-3222	DMR Transportation	parking lot addition	5380 36th St	Approved

Case	Applicant	Plat Name	Location	Tentative Preliminary Plat	Final Preliminary Plat	Final Plat

Case	Applicant	From/To	Acres	Location	PC Action	TB Action

Case	Applicant	From/To	Acres	Location	PC Action	TB Action



Cascade Township

Village Area Complete Streets Plan

February 2014



progressive | 



Cascade Township Village Complete Streets Plan

Acknowledgements

Cascade Village Steering Committee:

- Cascade Charter Township
- Cascade Township DDA

Kent County Road Commission staff

Other Stakeholders and Area Residents

Project Consultant Team:

- Progressive AE
- LSL Planning

The Township would like to thank the many interested residents, business owners, public officials and agency staff that provided input at the public open house and committee meetings.

February 2014

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Implementation	15
Funding Sources	15
Suggested Action Items	17

Cascade Charter Township
Kent County Michigan
Complete Street Resolution
Resolution 12 of 2014

WHEREAS, "Complete Streets" are defined as a design framework that enables safe and convenient access for all users, including pedestrians, bicyclists, transit riders, and drivers of all ages and abilities; and

WHEREAS, "Complete Streets" are achieved through planning, design, construction and maintenance of a transportation system that improves travel conditions for bicyclists, pedestrians, transit, and freight in a manner that preserves local character; and

WHEREAS, a transportation system that supports safe, active, and ample space for vehicles, pedestrians, and bicycles are more conducive to the public life and efficient movement of people than streets designed primarily to move automobiles; and

WHEREAS, increasing active transportation (e.g., walking, bicycling and use public transportation) offers the potential for improved public health, economic development, a cleaner environment, enhanced community connections, and more livable communities; and

WHEREAS, The Township has adopted a Complete Streets Plan for the Township, in part to comply with the elements required under Public Act 134 of 2010 Section 33(b)(i) and to prepare a document that will help the Township plan for projects that will improve the travel environment for all users.

NOW, THEREFORE, THE TOWNSHIP OF CASCADE RESOLVES, The Cascade Township Board of Trustees hereby declares its support of "Complete Streets" policies, as generally suggested in the Cascade Township Complete Streets Plan; and

BE IT FURTHER RESOLVED, It is the intent of the Township to work cooperatively with any agency that can assist with or whose approval is necessary to implement this policy, including but not limited to the State of Michigan Department of Transportation, and the Kent County Road Commission.

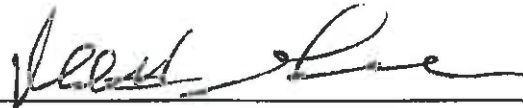
The foregoing Resolution was offered by Board Member Goldberg, supported by Board Member Goodyke. The roll call vote being as follows:

YEAS: Koessel, Lewis, Peirce, Beahan, Goodyke, McDonald, Goldberg

NAYS: None

ABSENT: None

RESOLUTION DECLARED ADOPTED.



Ronald H. Goodyke
Township Clerk

CERTIFICATION

I hereby certify the above to a true copy of a resolution adopted by the Cascade Charter Township Board at a regular meeting held at the Cascade Library Wisner Center on the 26th day of March, 2014, at 7:00 p.m., pursuant to the required statutory procedures.

Dated: March 26, 2014



Ronald H. Goodyke
Township Clerk

Introduction

The Village area of Cascade Charter Township has developed and constructed numerous improvements over the years to provide a more vibrant environment for the various businesses and the public in general. Streetscape and pedestrian-related projects made along Cascade Road, 28th Street, and Old 28th Street have significantly improved the overall aesthetic nature of this subarea. However, the regional nature of roadways such as 28th Street and Cascade Road have constrained efforts to provide better non-motorized connectivity between the various sections of the village area and truly provide a more complete, accessible, and safe environment for all of its users.

The primary goal of this village area complete streets plan is to blend the ideas and input obtained from the community stakeholders with “best practices” utilized nationally and even internationally. This helps ensure that the plan meets required design standards, considers safety, is innovative, and perhaps most importantly, can be implemented. A number of factors currently present challenges to a fully functioning multi-modal transportation network that works equitably for all modes of transportation. Included in these is the presence of the two regional roadways, Cascade Road and 28th Street which



intersect within the confines of the village area. These roadways primarily serve motorized transportation, and are less conducive to non-motorized travel. In effect they divide the Village into different segments, each with little cohesion, especially in the case of Cascade Road. Shifting the focus from motorized travel to one that considers travelers of all types, ages and abilities through a complete streets approach will inherently help address these roadway crossing issues and slow travel speeds.

This plan provides a framework for moving all modes of transportation safely throughout the village; whether in vehicles, by foot, on bike or on public transportation. In addition, the plan addresses priorities for implementation, with related rough costs and potential funding sources identified.

The following chapters outline the underlying of complete streets, the process of the plan development, and the final recommended plan elements.

Complete Streets - What is it?

Historically, transportation decisions were made primarily to improve traffic flow and reduce vehicle crashes. While such efforts have resulted in improved safety on Michigan roads, they often overlooked the needs of pedestrians, bicyclists and transit riders. Current approaches now recognize that roads are more than just places for cars to travel; they represent important connections within a community, provide routes for travel and commerce, and influence the first impression that helps shape the community's image. This approach, often called Complete Streets, acknowledges that roads should still be preserved for their intended function, but they should also be designed to accommodate everyone who might use road rights-of-ways, such as bicyclists, pedestrians, transit riders, and as well as those with a variety of ability - from children, to the elderly, to the disabled - all need safe and varied routes to accommodate their individual travel needs.

Different people have different travel needs and desires. Some people walk faster than others, some are comfortable using bike lanes, while others prefer separated paths. Most pedestrian needs are similar in nature, meaning most that travel on foot are moving at similar rates of speed and typically require the same amount of space to be comfortable. In other words, a sidewalk that feels comfortable to one pedestrian is likely to feel comfortable to most others. On the other hand, not all bicyclists are comfortable using all types of facilities. Therefore, the transportation system needs to provide travel options for a wide range of people of various ages, of various skill and confidence levels, at a variety of travel speeds, including those with temporary and long-term physical and cognitive abilities, or those using mobility assistance devices (scooters, segways, etc.) or pushing strollers and wheelchairs.

Revisions to Act 33 (Michigan Planning Act) that were effective by August 2010 provided better impetus for communities to address complete streets needs within their planning processes. The revised act:

- Provides an expanded definition of "streets" to include all legal users;

WHAT IS COMPLETE STREETS?

Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from train stations.

Creating Complete Streets means transportation agencies must change their approach to community roads. This means that every transportation project will make the street network better and safer for drivers, transit users, pedestrians, and bicyclists - making the community a better place to live.



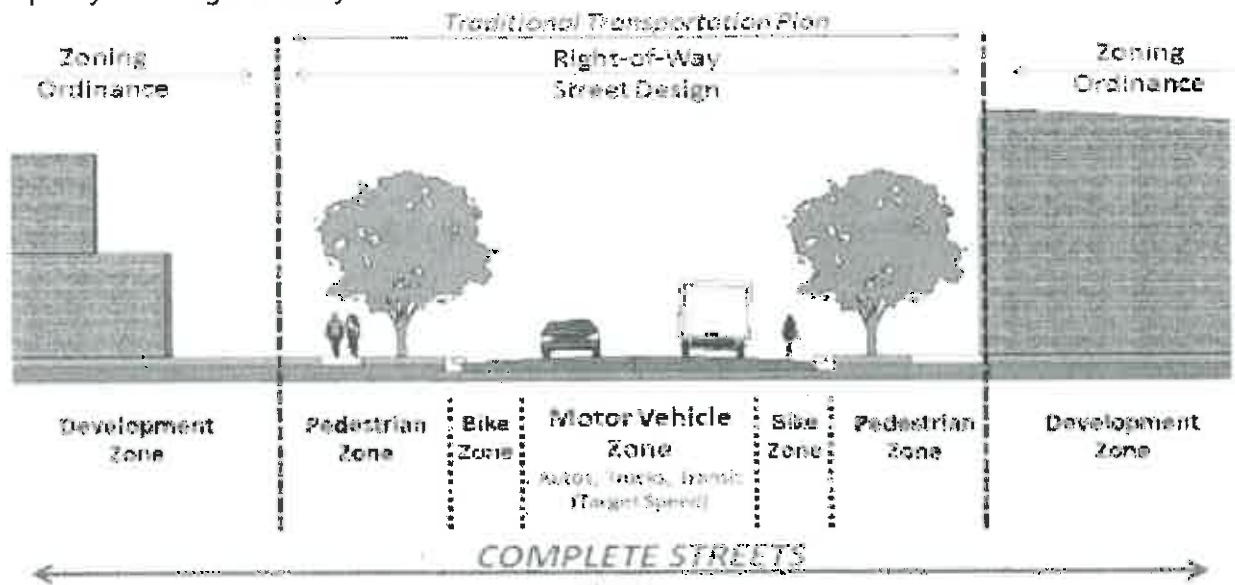
- Expands elements that may be included in a master plan to include all forms of transportation;
- Specifies that transportation improvements be appropriate to their context; and
- Specifies cooperation with road commissions and/or MDOT as applicable

COMPLETE STREETS IMPACTS

The following is a brief discussion about how road design can impact downtown character as well as mobility and safety for all users.

- ▶ **Roadway and Lane Width.** Road design influences traffic flow and speed. Wider roads generally carry more traffic at higher speeds. Narrower roads are often easier to cross, often encourage traffic calming and create more intimate settings. In fact, the design of roads has been shown to be more effective at changing driver speeds than posting slower speed limit signs. Design elements like medians, curb bump-outs changes in pavement materials or markings at intersections, and other “traffic calming” techniques can help slow vehicles to speeds more appropriate for areas with pedestrian or bicycle activity.

Lane width may have similar influences. Lanes that are eleven feet wide may result in slightly lower speeds than lanes that are twelve feet or wider without any measurable loss of capacity or change in safety.

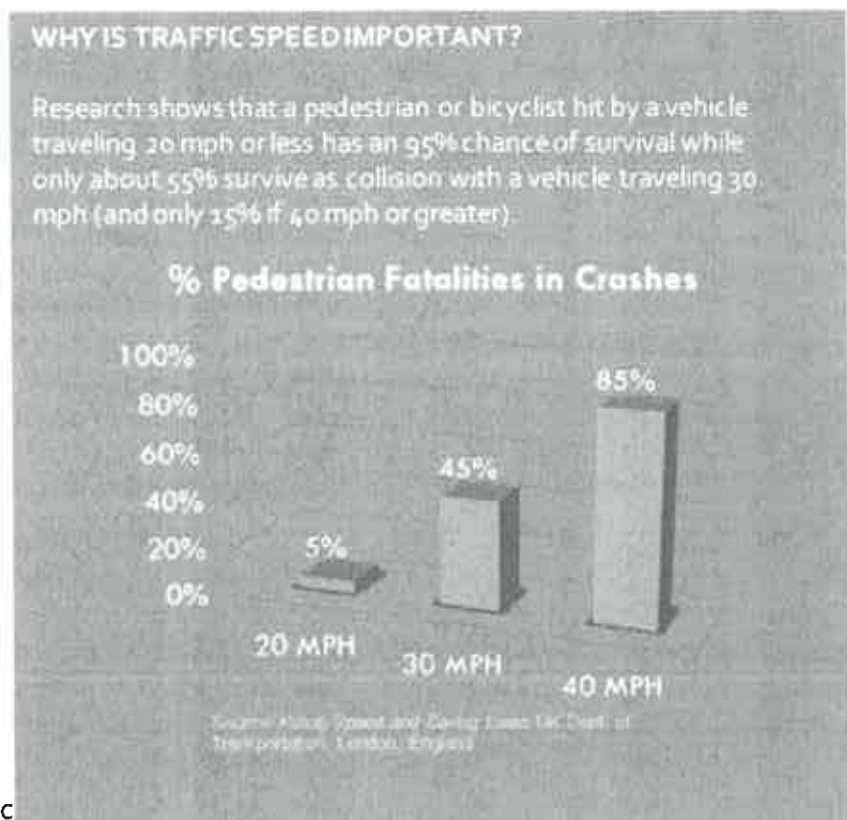


- ▶ **Intersections.** Intersection design, and their connection (or lack of) to local businesses by way of a continuous well maintained sidewalk, will also determine how easy or difficult it will be for pedestrians or those with disabilities to cross and access areas along the corridor. Currently, there are some gaps in the sidewalk system and relatively long distances between crossings along Cascade Road, 28th Street and Old 28th Street.

- ▶ **Land Use.** The design of roads, in combination with the character of buildings and sites shapes the resulting activity that takes place along Cascade Road. Existing development is more suburban in nature, with front yard parking lots and larger front setbacks. Traffic volumes along Cascade Road have also influenced the types of land use and businesses that desire to locate there. Implementing complete streets considerations will help better match land use policies to transportation policies so they collectively and consistently contribute to the desired community character.

- ▶ **Stormwater.** Road surfaces contribute runoff to stormwater collection and treatment systems. Road design can include low impact drainage techniques that focus on applications modeled after nature, rather than costly infrastructure and water quality restoration systems. In addition, the width of roads will determine the amount of runoff that must be collected or treated, so narrower roads can help minimize impacts.

- ▶ **Non-Motorized.** Non-motorized facilities are an important component of the transportation system. If a road includes sidewalks and amenities for non-motorized users, they can reduce crash potential, provide alternative travel routes, and provide important connections between neighborhoods, schools, parks, offices, and retail destinations. Recognizing the various needs of the different users, local streets should be designed to accommodate the types of users that are expected. Pedestrians usually prefer a separated sidewalk or pathway, and bicyclists prefer a separated path for comfort and experience. Typically, bikers fall within one of three comfort levels: 1) advanced bikers will usually use in-street bike lanes that allow them to bypass pedestrians and travel at a faster speed; 2) the more common biker is more conservative, and will ride in bike lanes only when they feel it is safe and convenient; and 3) the cautious biker is not likely to use in-street facilities at all and will opt to ride alongside the roadway, even if separate facilities do not exist.

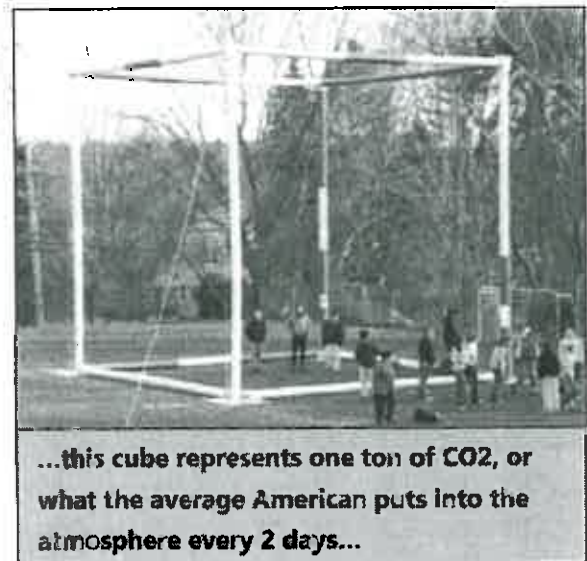


KEY ELEMENTS OF COMPLETE STREETS

- ▶ **Sidewalks.** Sidewalks are the most commonly used facility for pedestrians and less experienced bicyclists. Studies show that more bicycle accidents occur when bicyclists use a sidewalk because they are less visible to motorists when they are separated from traffic, so other facilities should be considered for bicyclists. For pedestrian use, sidewalks are typically five feet in width, and paved with a hard surface like concrete or asphalt.
- ▶ **Separated Pathways.** Pathways, including 8- to 10-foot wide pathways along a street sometimes intended to be shared by pedestrians and bicyclists, trails or greenways, are off-road, multi-use transportation networks.
- ▶ **Mid-block Crossings.** Sometimes an enhanced pedestrian crossing can facilitate access across the street at unsignalized locations. Elements like pedestrian refuge medians within the roadway, pedestrian-activated traffic signals or flashers, pavement striping and signage can be used to improve safety and comfort for all users.
- ▶ **Bike Lanes.** Striping is the most common method of identifying bike facilities. Often implemented as part of a road diet, bike lanes are narrow lanes within the paved portion of the roadway that are striped and marked or colored to indicate their separation from vehicular travel lanes.
- ▶ **Road Agency Coordination.** While this plan sets forth the ideas, vision and recommendations for the Township, many of the changes discussed cannot be completed without support from other road agencies. Cascade Road, as with most local roads, falls under the jurisdiction of the Kent County Road Commission (KCRC). Therefore, the Road Commission will play a large role in the success of this plan. As part of the Michigan Planning Enabling Act, communities planning for public streets must coordinate with other road agencies.

In summary, the underlying benefits of a complete street include:

- ▶ Improved safety for pedestrians and cyclists
 - Sensitive design results in fewer and less severe crashes
- ▶ Encourages walking and cycling for health
 - More active lifestyles and increased mobility
- ▶ Environmental improvements
 - Reduced greenhouse gas emissions
 - Reduced carbon footprint
- ▶ Lower long-term transportation costs
- ▶ Quality of life



- More attractive streets and places translates into more business
- Supports economic competitiveness, growth, and business investment opportunities
- Fosters a stronger community
- Can improve property values

Project Process and Existing Conditions

The process for developing this Village area complete streets plan was predicated on generally accepted planning practices and in reflection of past master planning and other planning efforts completed by the Township. Although the Plan resulted in development of a wide variety of recommendations, the primary goal as stated by the Township and stakeholder groups was to make non-motorized crossing of Cascade Road more accessible, convenient and safe.

The process included the following basic tasks:

1. Identify the primary goal(s) and vision
2. Identify opportunities and needs
3. Analyze the current conditions to add to and/or confirm issues and constraints
4. Develop alternatives
5. Define an action plan/set of priorities

As identified early in the process, the vision for this complete streets plan was to develop a collaborative set of elements based upon the following:

- A "Complete Streets" philosophy that considers the needs of all users: residents, seasonal residents, fitness enthusiasts, bicyclists and pedestrians of all ages and abilities. However, those needs still have to be balanced with the need for a safe and convenient system for cars and trucks too.
- A transportation system that complements and reinforces the character of the Village area, its quality of life, and the economic environment.
- Road design that results in reduced speeds on Cascade Road within the Village subarea.
- Coordination with the Township, DDA, the Kent County Road Commission (KCRC) staff and other organizations in the area that have data or information to share and/or whose support and buy-in will be critical to the success of the plan.
- An implementation program with priorities and phasing along with a menu of potential funding sources.
- A focused effort that included a series of meetings and a workshop.



Critical Tasks

There are many critical subtasks that were completed as part of the plan development process including data collection, review of past documentation, Village area reconnaissance, and development of initial/preliminary complete street recommendations. However, the most important process element carried throughout the plan process was engaging the numerous private and public stakeholders for input and feedback. Without such input the plan would not truly reflect the needs of those who experience the village area on a daily basis.

To that end, meetings were held as follows during the plan development process:

- Kick-off/brainstorming session with Township staff and DDA members
- Initial meeting with KCRC staff to discuss general viability of complete streets tenets and initial ideas, particularly regarding Cascade Road
- Township/steering committee review of preliminary plan
- Community public open house presentation
- Follow up meeting with the KCRC

Of special note was the need for early and "mid-term" input from the Kent County Road Commission (KCRC) given their jurisdiction of the study area roads. Their input was key to identifying constraints along the corridor and opportunities they are willing to explore and accept. For example, through KCRC's input, it was determined at the outset that a desired conversion of Cascade Road to a three-lane cross section (thereby providing for slower vehicle speeds and room for bike lanes) was not possible due to the existing and projected high traffic volumes on Cascade, a determination easily supported by national criteria. Also, it was established that bike lanes on Cascade within the existing curb lines are not feasible due mostly to the current overall width and ongoing need for a center left-turn lane. However, other elements like one or more mid-block crossings were determined to be a feasible element of the plan. These initial findings and input provided throughout the process, helped to narrow the range of possibilities and focus the plan on the key, implementable ideas.

Existing Conditions

Existing Street/Pathway Network

The Village area currently encompasses a variety of street types and functions, dominated by regional roadways such as Cascade Road, 28th Street, and Thornapple River Drive. Other streets



such as Old 28th Street, and to a lesser extent, Orange Avenue and Hurley Street, provide vehicular access and circulation to local businesses and residents. All of the public roads within the study area fall under the jurisdiction of the KCRC.

Their (KCRC) input was key to identifying constraints along the corridor and opportunities they are willing to explore and accept.

Cascade Road. Cascade Road is a county primary and regional arterial within the greater Grand Rapids metropolitan area. Within the Village area it carries approximately 20,000-25,000 vehicles on a weekday and has a 40 mile-per-hour speed limit on its predominantly five-lane cross section. Defined pedestrian crossings are currently limited to its two, signal-controlled intersections with 28th Street and Thornapple River Drive. Five to six-foot wide sidewalks are provided on both sides within the central part of the Village area but are limited north of 28th Street and south of the river (east side sidewalk transitions to bike path north of 28th Street).

Thornapple River Drive. Thornapple River Drive is also a county primary roadway servicing the township and others to the northeast and southwest of the Village area. It has a two-lane cross section for the most part although it widens to three lanes at/near Cascade Road. Thornapple River Drive carries approximately 8,500-9,000 vehicles per day east of Cascade Road and about 5,000-5,500 west of Cascade Road. It has a 30-35 mile-per-hour speed limit within the Village area, and currently has very limited sidewalks/paths.

28th Street. 28th Street within the Village area is the eastern/last section of this regional arterial and has a boulevarded 4+ lane cross section within the area. It carries approximately 16,000-20,000 vehicles on a weekday at this eastern end and has a 45 mile-per-hour speed limit. Sidewalks are provided on both sides of 28th Street.

Old 28th Street. This short county primary collector street has a three-lane cross section and largely serves the adjacent commercial/service businesses. Direct left turns from Old 28th to either 28th Street or Cascade Road are not allowed (via signage and boulevard geometry). Old 28th Street carries approximately 4,000-5,000 vehicles per day, and has a 25 mph speed limit. A sidewalk is provided along the south side only.



There is currently no fixed route bus service provided by The Rapid within or near the village area.

Complete Streets Plan

Based upon the existing street and non-motorized network, review of current local and national complete streets elements, and input/feedback received from the community stakeholders and the KCRC, the Village complete streets plan was developed. Although many needs were identified and discussed during the process, the primary goals were refined to the following:

- Provide improved pedestrian/bicycle crossing alternatives across Cascade Road;
- Provide improved driver recognition of the Village area as a multi-modal zone; and
- Expand upon the existing non-motorized system within the Village area.

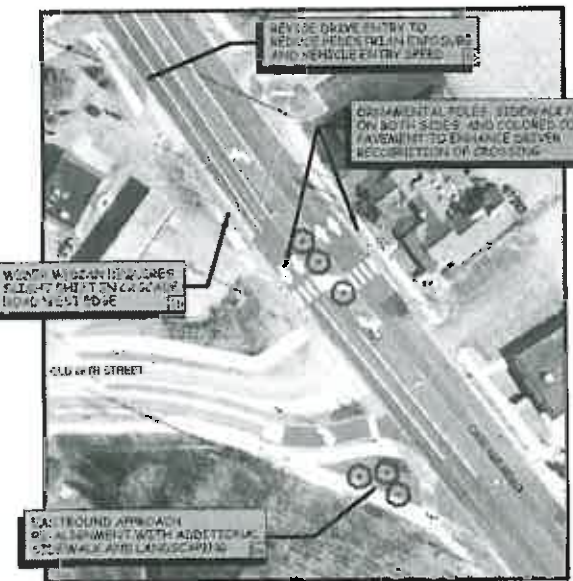
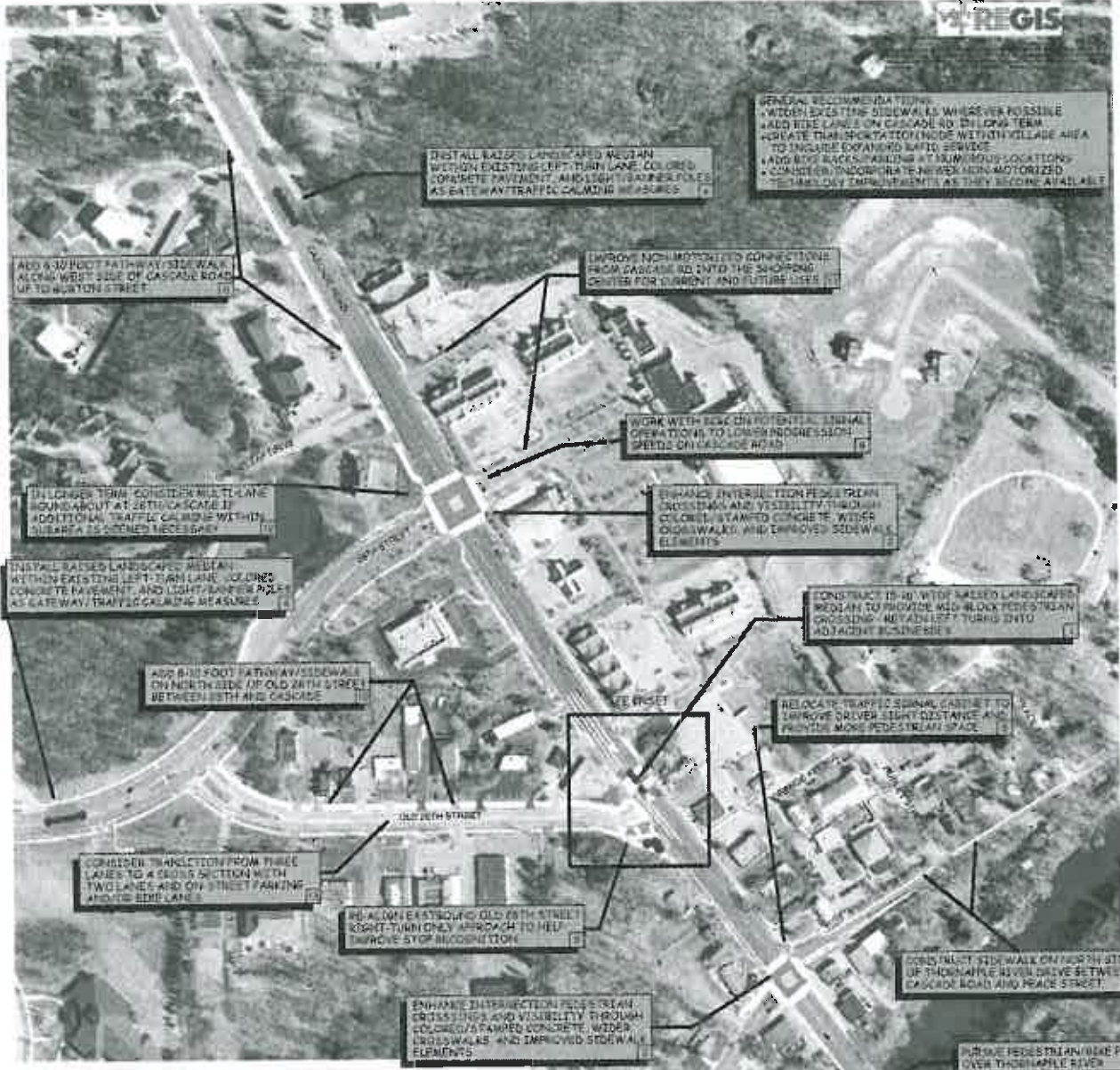
The overall plan shown on the following page incorporates many elements of a desired complete streets program in addition to some system revisions that will allow the corridor to function more safely and efficiently. As shown, the recommended plan elements are numbered to provide a suggested priority for implementation. The elements have been generally categorized as short and long term in the sections below, with very rough initial cost estimates included for the short term elements. These cost estimates are general in nature, and are intended to give an understanding of the scope of work that may be needed to achieve each project. Actual costs will vary based on detailed plans and engineering that may be developed at a later date.

Short Term Recommendations

1. *Mid-Block Pedestrian Crossing on Cascade.* Seen as the key element to improving non-motorized connectivity between either side of Cascade Road, this improvement will provide a safer crossing at the current Cascade/Old 28th intersection. Its specific location was designed to include:

- A crossing location closest to the Old 28th alignment to provide the best use by/for crossing pedestrians/cyclists, particularly from those going to/from uses on Old 28th or those just south of the intersection on Cascade;
- A15+ foot wide raised median island to provide for safe and adequate storage for pedestrians and cyclists;
- Retention of good access/egress to the adjacent businesses;
- Vertical landscaping elements (without affecting sight distance) to increase the median's visibility and recognition by approaching drivers on Cascade Road;
- Local widening of Cascade Road on its west side to incorporate the island's width



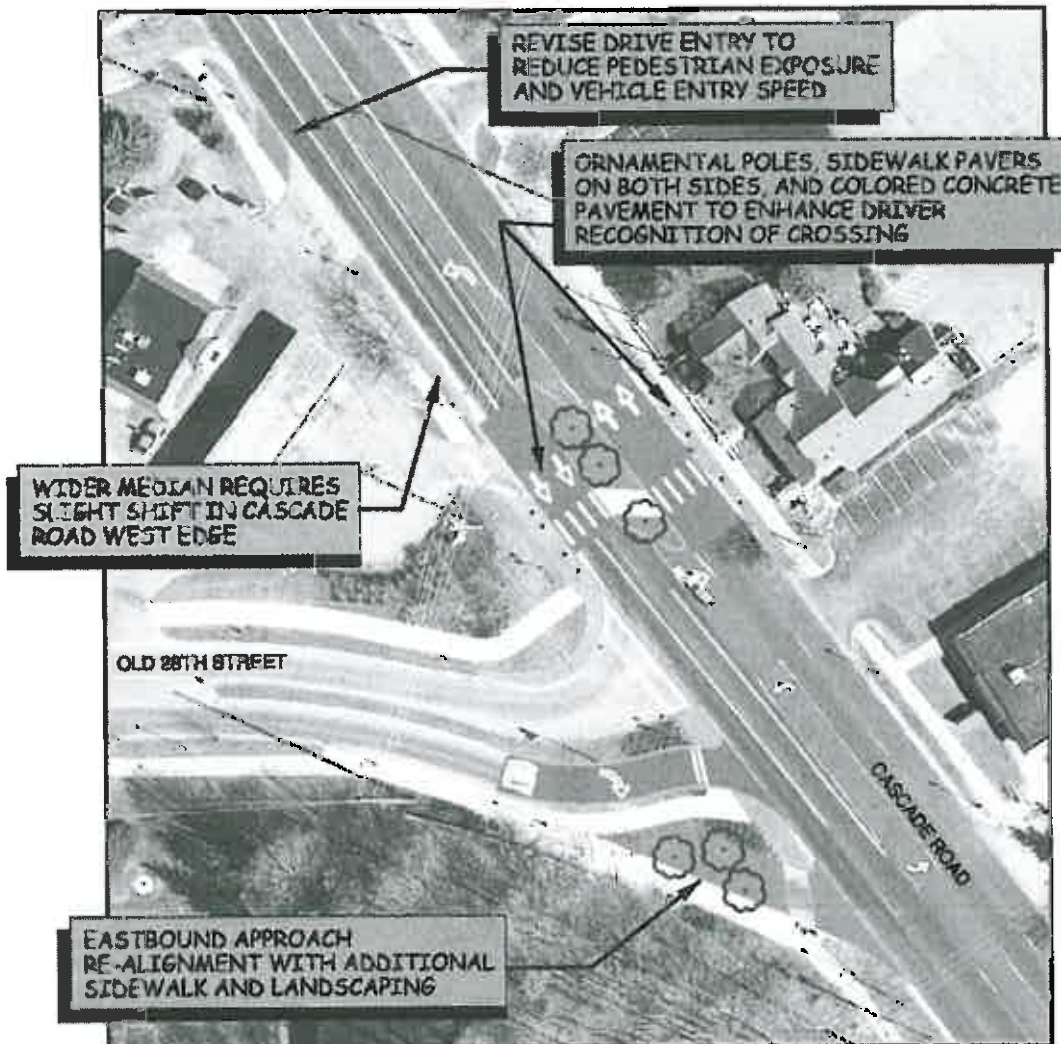


NO SCALE

COMPLETE STREETS PLAN
CASCADE TOWNSHIP VILLAGE AREA

- Additional vertical measures such as banner poles on each side of Cascade Road;
- Use of colored/stamped pavement adjacent to the median island to further increase recognition as a special zone; and
- Adjustments to adjacent access point(s) as needed to reduce pedestrian exposure, slow entering speeds.

Rough Cost: \$121,000



Some suggest the recommended raised crossing island location will adversely affect the adjacent gas station business by reducing access/egress options. However, regardless of the island, that site will still retain three driveways, two of which will continue to allow all turning movements. In most cases, that would be seen as very good access. However, if the island location is determined by the township to be inappropriate, it may be possible to shift it further north if needed, with the understanding that it may have a negative effect on the crossing's use by pedestrians and cyclists.

2. *Intersection Enhancements.* At both the Cascade/Thornapple River Drive and Cascade/28th Street intersections the recommendations include replacing the pavement within the intersection to a colored and stamped pavement to help define a special zone. Improvements would also incorporate wider crosswalks using more predominant crosswalk markings, upgraded sidewalk ramps and connections, and potentially a different pavement color or icon in the middle of the intersection. *Rough Cost: \$95,000/\$180,000*

3. *Sidewalk on Thornapple River Drive (TRD).* Discussions regarding this sidewalk extension were already in the works at the outset of this plan process. This improvement along the north side of TRD for two blocks east of Cascade Road will provide better/safer environment for pedestrians/cyclists within this short village area to/from the businesses near the Cascade/TRD intersection and connections to the north and south. *Rough Cost: \$ 100,000*

4. *Gateway Raised Median Sections.* Raised landscaped median sections are recommended for three "gateway" locations at the edges of the village area. Two are located at the north and south entry areas on Cascade Road, with the third located on 28th Street just west of Old 28th. The primary goal of these is to help with traffic calming (potentially slower speeds) and to enhance recognition by drivers that they are entering an area of focused non-motorized activity. All three of these were located/designed based upon available left turn lane space as there are significant constraints created by the need for left turns into adjacent land uses or public streets. To further enhance the driver recognition, these elements also include the replacement of adjacent pavement sections with colored/stamped pavement. *Rough Cost: \$ 125,000 (total for three)*



5. *Re-aligned Old 28th Approach to Cascade Rd.* This improvement's primary focus is to reduce the speeds at which eastbound drivers are approaching and entering southbound Cascade Road, often without stopping (or even slowing much). This creates a safety concern for both motorized and non-motorized users. The recommendation is to slightly adjust the approach angle to be closer to a 90-degree turn, although still angled to some degree to help confirm its right-turn-only function. Additional landscaping and sidewalks/paths would be included in place of the pavement removed due to the new alignment. *Rough Cost: \$45,000*

6. *Expanded Sidewalk – Cascade Road north of 28th Street.* To help improve connectivity to/from the commercial and residential uses on the east side of Cascade north of 28th Street, the sidewalk system should be extended to the extent possible in the short term, and even

further (to Burton Street) in the longer term. New sections should be 8-10 feet wide where possible. *Rough Cost: \$ 108,000*

Longer Term Recommendations

7. *Walkway/Path over the Thornapple River.* The sidewalks that are part of the existing bridge on each side are narrow and force cyclists and pedestrians close to the adjacent through lane. These walks are fairly well used indicating a real demand to provide better connectivity to the residential areas to the south and east. It is recommended that the Township (in coordination with the KCRC) pursue a wider or preferably a separate sidewalk/pathway on one or both sides of the bridge. Further study will need to be done to define just what alternative is most applicable to this location.

8/9. *Existing Traffic Signal System Modifications.* Several traffic signal improvements were identified that could result in a better non-motorized environment without unduly affecting the efficiency of Cascade Road from a traffic perspective. Those include operational adjustments to reduce vehicle progression speeds within the village area, and physical improvements (like equipment relocation) that provide more room or better visibility for non-motorized users.

10. *Expanded Sidewalk – North side of Old 28th.* Although several of the businesses along this section of Old 28th are not pedestrian oriented, it is still important to expand the system to provide better connectivity between 28th Street and Cascade Road, especially given the location of the mid-block crossing on Cascade. Businesses should be encouraged to transition to those more pedestrian-related. Any new sidewalks should be at least 8-10 feet wide.

11. *Commercial/Retail Center Connections.* In addition to expanded systems parallel to the public streets, a key element for this plan is to consider improved non-motorized connections into the commercial center located on the east side of the Cascade/28th St. intersection. Sidewalks and/or pathways adjacent to one or more of the existing site driveways will create a more accessible and viable center for its many uses.

12. *Multi-lane Roundabout at Cascade/28th St.* Although roundabouts can be deemed as an unpopular alternative initially, the fact remains that roundabouts are becoming more and more recognized and utilized nationally as a sound way to improve safety and slow traffic speeds in many applications. This is clearly a longer term alternative given the feedback received, but should nonetheless be considered. The Township and DDA underwent a feasibility study several



years ago that indicated a multi-lane roundabout would function well, but there remains understandable concerns, especially from a pedestrian/cyclist viewpoint. Comments during the stakeholder input stages of this plan and past comments indicated a significant concern regarding the ability of pedestrians and cyclists to safely cross a high volume, multi-lane roundabout.

13/Other. There are numerous other elements that should also be considered to develop a more complete streets environment within the Village area. Those include:

- Potential conversion of Old 28th Street to two lanes with bike lanes or on-street parking to slow traffic speeds and/or reduce cut-through traffic – may be tied to redevelopment of this short corridor;
- Widen existing 5-6 foot sidewalks along Cascade Road wherever feasible to allow more room for pedestrians and bikes, hopefully without the need for removal of the existing very aesthetic trees;
- Create/pursue a transportation node, likely within the above noted commercial center, that can also incorporate an extension of The Rapid system;
- Add bike racks/bike parking facilities throughout the village area;

In addition to the above recommendations, it is recommended that the Township continue to monitor other non-motorized/complete streets related elements (operational and/or physical) that may be applicable in the short or long term for the Village area that become accepted U.S. practice within the next few years.

Implementation

Funding Sources

Complete Streets policies make sense, both for improving transportation safety and comfort, but also for the community as a whole. However, achieving more complete streets can sometimes require more costly projects than some communities can afford. The following are some of the key funding sources that are most often used. Because the State of Michigan has led this initiative and encouraged communities to follow suit, it is expected that additional implementation resources and opportunities may arise as support continues to grow.

- ▶ **Congestion Mitigation and Air Quality (CMAQ) Improvement Grants.** The purpose of the Congestion Mitigation and Air Quality Improvement Program (CMAQ) is to fund transportation projects or programs that reduce transportation related emissions and contribute to attainment or maintenance of the national ambient air quality standards (NAAQS) for ozone, carbon monoxide and small particulate matter. CMAQ Grants can be used to fund:
 - ▶ Transportation activities in approved State Implementation Plans (SIP's) and maintenance plans are likely to be eligible.
 - ▶ Transportation control measures.

- ▶ Traffic flow improvements including traffic signal modernization, coordination, or synchronization projects designed to improve traffic flow within a corridor or throughout an area, Intelligent Transportation Systems (ITS), traffic management and traveler information systems
 - ▶ Transit projects
 - ▶ Bicycle and pedestrian facilities and programs
 - ▶ Travel demand management
 - ▶ Outreach and rideshare activities
 - ▶ Fare/fee subsidy programs to encourage greater use of alternative travel modes (e.g., carpool, vanpool, transit, bicycling and walking)
 - ▶ Establishment or operation of advanced truck stop electrification systems
 - ▶ Improved transportation systems management and operations that mitigate congestion and improved air quality
 - ▶ Purchase of integrated, interoperable emergency communications equipment
 - ▶ Purchase of diesel retrofits that are for motor vehicles or non-road vehicles and non-road engines used in construction projects located in ozone or particulate matter non-attainment or maintenance areas and funded under 23 USC
 - ▶ Outreach activities that provide assistance to diesel equipment and vehicle owners and operators regarding the purchase and installation of diesel retrofits
- ▶ **Special Assessment Districts (SAD).** Special assessments are compulsory contributions collected from the owners of property benefited by specific public improvements to defray the costs of such improvements. Special assessments could be used to assess properties receiving special benefits from roadway improvements. A special assessment district could be established by the Township Board.
- ▶ **Tax Increment Financing (TIF).** The Village area is incorporated into the Downtown Development Authority district, where a portion of tax revenues are captured and re-invested in the district to help maintain economic vitality in the downtown. Many, including the State of Michigan, believe this is an effective way to revitalize a district or corridor. Since businesses in the DDA would be the primary benefactors of increased pedestrian and bicycle activity, DDA funding may be a reasonable tool to use to help fund improvements. Their participation in projects is voluntary, but the very purpose of the DDA is to invest captured taxes and funnel them toward improvements within the downtown district.
- ▶ **Transportation Alternatives Program (TAP) FUND.** The MDOT Transportation Alternatives Program (TAP) is a competitive grant program that funds projects such as non-motorized paths, streetscapes, low impact development, and stormwater improvements that enhance Michigan's intermodal transportation system and provide safe alternative transportation options. These investments support place-based economic development by offering transportation choices, promoting walkability, and improving the quality of life. The program uses Federal Transportation Funds designated by Congress for these types of activities.

Suggested Action Items

Cascade Township can begin to improve the transportation system through projects of various cost and scope as defined in the prior short and longer term sections of this summary. Larger implementation projects may require additional funding discussed above, but some can be achieved through changes in policy, cooperative initiatives, and preparation. The following are specific ideas that can help promote complete streets in Cascade Township:

1. Consider expanding the role of the Village Design Review Committee to include work with the KCRC on long term planning issues as well as reviewing potential shared or cooperative projects between adjoining businesses.
2. Adopt a Complete Streets Resolution (see example in the Appendix)
3. Incorporate recommended design elements in any private road standards
4. Require sidewalks along the frontage of property where connections can be made or are planned for greater pedestrian connectivity in the area.
5. When a traffic impact study is done require that the analysis include level of service and improvements to address impacts for all users of the roadway , not just motorized vehicles.
6. Continue to review and modify the zoning ordinance where necessary to look for ways to improve pedestrian activity and presence. This may include allowance for outdoor venues, pedestrian connectivity between buildings, reduction of required off-street parking, credit for public spaces with private developments.
7. Modify the DDA where appropriate to address planned improvements.

APPENDIX

Village Area Complete Streets Plan Cascade Township, Michigan

**Progressive AE #60846001
February 2014**

Cascade Charter Township
Kent County Michigan
Complete Street Resolution
Resolution __ of 2014

WHEREAS, "Complete Streets" are defined as a design framework that enables safe and convenient access for all users, including pedestrians, bicyclists, transit riders, and drivers of all ages and abilities; and

WHEREAS, "Complete Streets" are achieved through planning, design, construction and maintenance of a transportation system that improves travel conditions for bicyclists, pedestrians, transit, and freight in a manner that preserves local character; and

WHEREAS, a transportation system that supports safe, active, and ample space for vehicles, pedestrians, and bicycles are more conducive to the public life and efficient movement of people than streets designed primarily to move automobiles; and

WHEREAS, increasing active transportation (e.g., walking, bicycling and use public transportation) offers the potential for improved public health, economic development, a cleaner environment, enhanced community connections, and more livable communities; and

WHEREAS, The Township has adopted a Complete Streets Plan for the Township, in part to comply with the elements required under Public Act 134 of 2010 Section 33(b)(i) and to prepare a document that will help the Township plan for projects that will improve the travel environment for all users.

NOW, THEREFORE, THE TOWNSHIP OF CASCADE RESOLVES, The Cascade Township Board of Trustees hereby declares its support of "Complete Streets" policies, as generally suggested in the Cascade Township Complete Streets Plan; and

BE IT FURTHER RESOLVED, It is the intent of the Township to work cooperatively with any agency that can assist with or whose approval is necessary to implement this policy, including but not limited to the State of Michigan Department of Transportation, and the Kent County Road Commission.

The foregoing Resolution was offered by Board Member _____, supported by Board Member _____. The roll call vote being as follows:

YEAS:

NAYS:

ABSENT:

RESOLUTION DECLARED ADOPTED.

Ron G
Township Clerk

CERTIFICATION

I hereby certify the above to a true copy of a resolution adopted by the Cascade Charter Township Board at a regular meeting held at the _____ pursuant to the required statutory procedures.

Dated: _____

Ron G
Township Clerk

ADDITIONAL LANGUAGE TO USE IF HELPFUL

- ▶ **Low Impact Development.** Where a business expansion requires a driveway closure, use of porous pavement materials, penetrable curb, rain gardens, bio swales, and native street tree planters in place of paved areas can provide the same storm water management functions as a hardscape detention system, at less cost to the developer. These techniques, called low impact design, can also be implemented where sidewalk pavers are proposed or where development proposals impact land within the road right-of-way. At the same time these techniques increase development potential and reduce cost, they also improve the quality of water that eventually flows into drainage collection systems.

The Cascade Township Master Plan places a large focus on the intersection of 28th Street and Cascade Road as it's village center. Township planners have observed changing characteristics along these two corridors that threaten the village center character. The Plan proposes access management, mixed use, public park improvements, and a lower volume mix of uses for the downtown.

Public Roads

Featuring developments in Federal highway policies, programs, and research and technology.

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July/August 2010
Vol. 74 - No. 1

Publication
Number:
FHWA-HRT
-10-004

Street Design: Part 1—Complete Streets

by Robin Smith, Sharlene Reed, and Shana Baker

From policy statements to programs and planning, opportunities abound for improving the accessibility of the transportation system for all users.



This intersection in Charlotte, NC, safely accommodates all road users, including motorists, transit riders, bicyclists, and pedestrians.

For decades, the purpose and goal of street design in the United States was to move as much motorized traffic as expeditiously as possible from point A to point B, regardless of whether the traffic was moving along a major freeway or commercial arterial, or through a city center, village main street, or even a residential neighborhood. Applied speed limits and street design standards would vary from route to route, but in general street design and traffic engineering were all about moving cars and trucks from their origins to their destinations. Even as early as the beginning of the 20th century, officials in New York City mandated the narrowing of sidewalks to create more numerous and wider lanes to accommodate motorized traffic. Pedestrians, planners thought, did not need much room to maneuver.

However, developing a transportation system primarily for motorized vehicular traffic has failed to meet the travel needs and preferences of large segments of the country's population. Among the many factors influencing the planning, design, and operation of today's streets are concerns about accommodating the needs of an aging population, improving public health and fitness, reducing dependence upon foreign oil, minimizing transportation costs, creating and maintaining vibrant neighborhoods, reducing the fossil fuel emissions that contribute to climate change, and adopting greener and more sustainable lifestyles. Ensuring that roads provide safe mobility for all travelers, not just motor vehicles, is at the heart of a new approach to envisioning and building surface transportation facilities known as "complete streets."

According to the National Complete Streets Coalition, established in 2005, complete streets are those designed and operated to enable safe access and travel for all users. Pedestrians, bicyclists, motorists, transit users, and travelers of all ages and abilities will be able to move along the street network safely.

"Complete streets policies help communities make a clear commitment to planning all future transportation projects to provide for the safe travel of everyone using the road," says Barbara McCann, director of the National Complete Streets Coalition. "Once that commitment is made, planners and engineers have a clear direction to develop new processes, design manuals, and on-the-ground solutions that welcome everyone."

Although the Federal Highway Administration (FHWA) does not have an official complete streets policy, the concept is closely associated with the principles promoted by the Interagency Partnership for Sustainable Communities, a joint endeavor involving the U.S. Department of Transportation (USDOT), U.S. Department of Housing and Urban Development (HUD), and U.S. Environmental Protection Agency (EPA). The partnership aims to provide more transportation choices; support existing communities through transit-oriented, mixed-use development and land recycling (that is, reuse of abandoned, vacant, or underused properties for redevelopment); and value communities by investing in healthy, safe, and walkable neighborhoods.

As stated by Transportation Secretary Ray LaHood, "President Obama has challenged us to transform the way transportation serves the American people by creating more choices and encouraging less carbon-intensive transportation, and we are working hard on that challenge...It turns out that a complete streets approach offers the perfect intersection of my twin guideposts: safety and livable communities."

In the first of a two-part series on street design, this article looks at how complete streets policies can help make the transportation system more accessible to all travelers. An upcoming article will focus on concepts and practices for designing streets to be more environmentally responsive and sustainable. Combining these two perspectives using a multidisciplinary approach will help maximize the effectiveness and sustainability of the Nation's transportation network.

Defining Complete Streets

Although the guiding principle for complete streets is to create roadways and related infrastructure that provide safe travel for all users, each complete street has to be customized to the characteristics of the area the street serves. A complete street also has to accommodate the needs and expectations of the travelers who want to access or pass through the surrounding neighborhood, community, or region.

According to the National Complete Streets Coalition, typical elements that make up a complete street include sidewalks, bicycle lanes (or wide, paved shoulders), shared-use paths, designated bus lanes, safe and accessible transit stops, and frequent and safe crossings for pedestrians, including median islands, accessible pedestrian signals, and curb extensions. Certainly, a design for a complete street in a rural area will look quite different from one in an urban or suburban area. For example, a complete street in a rural area could involve providing wide shoulders or a separate multiuse path instead of

sidewalks. The common denominator, however, is balancing safety and convenience for everyone using the road.

Transit, including bus and fixed-rail services, can become a more attractive option when access points that comply with the requirements of the Americans with Disabilities Act are integrated into roads, sidewalks, and parking areas to allow easier, safer access for all users.

In addition to the new USDOT-HUD-EPA partnership, many other programs at the Federal, State, metropolitan, and local levels already embrace the complete streets approach—or provide the framework to do so—and can help foster more livable communities. Below are a few examples.



This construction project in a rural area will widen the shoulder to accommodate nonmotorized traffic.

United States Code

Several Federal laws and FHWA regulations pertaining to transportation planning and project development support the concept of complete streets. A current Federal statute, United States Code, Title 23, Chapter 2, Section 217 (23 USC 217), mandates that "bicycle transportation facilities and pedestrian walkways shall be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation facilities, except where bicycle and pedestrian use are not permitted." To elaborate on that requirement, FHWA developed bicycle and pedestrian guidance (available at

According to Robin Schepper, a parent volunteer at Murch Elementary, getting support from children and their parents, as well as expanding into the community, is critical to creating an environment and infrastructure that makes it safer for young people to walk and bicycle to school. Also, she says, "we reached out to senior centers in our neighborhood because they face the same barriers as students do walking in our neighborhood—speeding traffic, pedestrian lights that change too quickly, and the lack of traffic lights on high-volume streets."

In October 2009, U.S. Congressman James L. Oberstar, chairman of the House Transportation and Infrastructure Committee, recognized the school with the 2009 James L. Oberstar Safe Routes to School Award for outstanding achievement. The award acknowledges the school's success in building partnerships within the school and with the surrounding community and the District Department of Transportation (DDOT).



As part of the Safe Routes to School program, DDOT constructed segments of new sidewalk, such as this one, near Murch Elementary in Washington, DC.

Context Sensitive Solutions

Another FHWA-backed approach is applying context sensitive solutions (CSS) to help ensure that streets are indeed "complete" in the sense of being appropriate for the area in which a project is implemented. As defined by FHWA and the American Association of State Highway and Transportation Officials, CSS is a collaborative, interdisciplinary

approach that involves all stakeholders in providing a transportation facility that fits its setting. CSS leads to preserving and enhancing scenic, aesthetic, historic, community, and environmental resources, while improving or maintaining safety, mobility, and infrastructure conditions.

Transportation officials can apply CSS early in the planning process and throughout project development and delivery. Some of the major elements of CSS include the following:

- Early and frequent consultation and collaboration with stakeholders and the community during planning and design, and using communications tools, such as design visualization, that help citizens better understand project proposals.
- Use of an interdisciplinary team to oversee and manage project development.
- Emphasis on enhancing and retaining the sense of place or uniqueness of an area and its valued resources and features.
- Consideration of multiple alternatives with the goal of building consensus on a final project, which might include elements of the various alternatives.
- Minimization of disruptive impacts on the community.

For example, the small community of Bingen, WA, and the Washington State Department of Transportation collaborated to apply a context sensitive solution to improve SR-14 through downtown Bingen. Located along the Columbia River in southern Washington State, Bingen is home to about 680 residents. One of the town's goals was to revitalize its main street while reducing traffic congestion and improving safety along that section of SR-14. Through community outreach, the town enlisted support from residents and other stakeholders to improve the accessibility and appeal of the revamped facility.

Completed in 2004, the project incorporates wider-than-standard sidewalks with bulbouts and other streetscape improvements such as trees and street furniture to attract more people to stop and stroll through the downtown. The designers added features such as left-turn lanes and right-turn pockets to facilitate traffic movement through town and to address the broader safety and congestion concerns. By combining transportation funds with economic revitalization grants, the project sponsors were able to improve the corridor for motorists, pedestrians, and other users.

"At first, some businesses and community residents were skeptical about the street improvements, especially proposals to spend a sizeable sum on sidewalks and trees," says Bingen City Administrator Jan Brending. "But once the project was completed, they were amazed at the difference it made. Downtown Bingen is now much more pedestrian friendly and livable, which has attracted businesses and revitalized the area."



Kenneth Hash, Washington State DOT

Where SR-14 passes through the town of Bingen, the Washington State DOT worked with local officials to improve accessibility and enhance the appeal of the revamped facility in the downtown area. Improvements included wider sidewalks and these landscaped bulbouts planted with trees and flowers.

The Role of State DOTs

Under Federal statute 23 USC 217, State DOTs are required to use a portion of certain Federal funds to hire a State bicycle and pedestrian coordinator. This position is responsible "for promoting and facilitating the increased use of nonmotorized modes of transportation." In addition, in accordance with the *Code of Federal Regulations* (23 CFR 450.214), each State DOT, in cooperation with metropolitan planning organizations (MPOs), is required to develop a multimodal plan that includes nonmotorized and public transportation.

The roles of DOTs and other State agencies in supporting transit programs vary significantly among the States. State laws, programs, institutional arrangements, and other factors influence how a State defines and meets its obligations. Regardless, State DOTs can work with transit operators to help ensure that, through road design standards, transit users can access transit services safely and conveniently along State-maintained routes in urban and rural areas.

Several States have adopted complete streets practices through a variety of mechanisms, including policy statements and revisions to project development and design guidelines. For example, in 2001, the California Department of Transportation (Caltrans) issued a director's policy on context sensitive solutions that describes the responsibilities of key officials and their respective offices or divisions to define and apply CSS throughout all aspects of transportation planning and project development, design, and implementation. As part of that effort, Caltrans also issued a deputy directive titled "Complete Streets—Integrating the Transportation System," which defines a complete street as a "transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit riders, and motorists appropriate to the function and context of the facility." The directive states that Caltrans will facilitate creation of complete streets, "beginning early in system planning and continuing through project delivery and maintenance and operations."

On the other side of the country, Massachusetts significantly revised its guidebook for street and highway design standards to allow greater flexibility and to foster a broader view of the role street and highway design plays in maintaining and enhancing community values and amenities. In fact, multimodal consideration is one of three guiding principles in the updated guidebook: *Massachusetts Highway Department: Project Development and Design Guide*. Specifically, the guide states that the multimodal focus is "to ensure that the safety and mobility of all users of the transportation system (pedestrians, bicyclists, and drivers) are considered equally through all phases of a project so that even the most vulnerable (for example, children and the elderly) can feel and be safe within the public right of way."

The Role of MPOs

In metropolitan areas with populations greater than 50,000, the responsibility for transportation planning lies with designated MPOs. Given their local and municipal focus, MPOs hold the greatest responsibility for adopting livability goals and promoting concepts such as complete streets in an urban region. The metropolitan planning process requires the development of integrated, multimodal transportation plans that address not only roadways, but also transit services and facilities, intermodal connections, pedestrian walkways, bicycle facilities, and other supportive programs and activities.

Transportation planning by MPOs can foster implementation of complete streets principles through various activities:

- Developing land use, economic development, and transportation (or other infrastructure) plans in a coordinated manner, with all elements supporting a common vision.
- Facilitating alternative transportation modes through land use goals and design standards.
- Connecting transportation projects and programs to public and private investments so they complement each other and support broader community goals.
- Accommodating the flow of freight while avoiding or minimizing negative impacts on residential areas, city centers, and other users of the transportation system.
- Considering a range of strategies, tools, and modal options to support complete streets and similar livability goals and activities.

Although not all facilities within a metropolitan region are significant enough to include in a metropolitan transportation plan or receive Federal funding through that plan, an MPO can ensure that member local governments, the relevant State DOT, and transit agencies consider the needs of all residents and visitors in that region. For example, an MPO can set appropriate regional goals and funding priorities, ensuring that a robust public involvement process includes key stakeholders, interest groups, and the public. The MPO also can coordinate regional planning with local transportation and comprehensive plans to include not only roadways but also facilities and systems related to transit and nonmotorized traffic.

For example, the Cheyenne MPO in Wyoming has taken an active role in implementing elements of its award-winning, integrated city-county comprehensive transportation plan known as PlanCheyenne. With the MPO's assistance, the Cheyenne Planning Department is putting the plan recommendations into law. Cheyenne had three separate code documents covering subdivisions, zoning, and street and site design standards, which were not necessarily compatible with each other. Now, however, the city is adopting a unified development code that will reflect the complete streets ideas presented in PlanCheyenne. The intent is to develop a balanced design for regional and local routes that safely accommodates all potential users of the streets and rights-of-way. In addition, the city expects to limit block sizes to enhance neighborhood connectivity and circulation for all modes. The Cheyenne MPO also approaches all corridor planning activities with the intention of creating complete streets.

Although street design standards usually are the purview of the State DOT and local governments, an MPO can assist those agencies through education and technical assistance to incorporate design elements that accommodate all users. An MPO can take a leadership role to establish regional policies that encourage complete streets design through a variety of programs and processes, and give funding preference to projects that reflect complete streets principles. Each MPO needs to decide if and how it will promote complete streets within its region, but its approaches can be creative and tailored to local circumstances.

As another example, in January 2009, the Bloomington/Monroe County MPO in Indiana took the lead in its region when it adopted a complete streets policy that applies to all local roadway projects where the MPO has programming authority to allocate Federal funding. The initial impetus behind the complete streets policy came from the MPO's citizens advisory committee. From there, the MPO facilitated regional collaboration and consensus building among key transportation stakeholders to craft a regional policy. "It was a challenging process to develop the policy, but we believe it was worth the effort," says Josh Desmond, director of the Bloomington/Monroe County MPO. "The policy will foster consideration of the needs of all road users in transportation plan and project development. No user will be left behind."

Local Governments and Transit Operators

In many cases, local governments are the organizations that ultimately decide how to implement a complete streets policy or ordinance within their respective jurisdictions, particularly on facilities owned and operated by those local entities. According to the National Complete Streets Coalition, by early 2010, 124 jurisdictions had adopted or

committed to adopt complete streets policies. In addition, either with the State DOT or in concert with other members of the regional MPO, local governments can support efforts to apply complete streets concepts across jurisdictional boundaries and to all roads within their respective jurisdictions, regardless of which government agency "owns" them.

The city of Charlotte, NC, is one example of a local government that has implemented a complete streets policy. In October 2007, Charlotte's city council adopted its Urban Street Design Guidelines to help the city shape its development patterns and provide residents and visitors with viable choices for how they move about the city. The guidelines include recommending block lengths for new developments that foster a denser, well-connected network of streets that in turn promotes more compact building design. The city also encourages wide planting strips to allow large, mature trees to continue growing, enhancing Charlotte's tree canopy and making the streets more pleasant for pedestrians and motorists alike. In addition, Charlotte is making pedestrian crossings more visible and changed traffic signal timing to better accommodate pedestrians. In recognition of these successes, EPA awarded Charlotte the 2009 National Award for Smart Growth Achievement in Policies and Regulations.

Transit operators too can encourage or require transportation plans and project design elements to accommodate all riders, including pedestrians, bicyclists, and disabled individuals who use transit as part of their travels. Through institutional and working relationships with government agencies and the private sector, transit providers have a say in or bear responsibility for developing and designing transit stops, stations, and transfer/intermodal centers. Close coordination with local governments, MPOs, State DOTs, and even private developers who have ownership of streets and other properties adjacent to transit access points can help ensure that riders have convenient and safe access to transit services.

For example, in 2004 the Alameda-Contra Costa Transit District (AC Transit) in California published *Designing With Transit: Making Transit Integral to East Bay Communities*, a guidebook targeting elected officials, local staff, and community builders. The document serves as a toolbox for community agencies working to make their main streets more vital and pedestrian friendly, and aims to help integrate transit more effectively into the local and regional planning processes. According to Nathan Landau, a senior transportation planner with AC Transit who helped develop the manual, Alameda has retrofitted a major arterial with streetscape improvements and customized bus stops consistent with the principles and goals of *Designing With Transit*. At least one member jurisdiction is considering incorporating portions of the manual into its comprehensive plan. In the next update to the guidebook, Landau adds, "complete streets principles will be clearly referenced, now that member jurisdictions are more familiar with the term."



The effect of applying Charlotte's *Urban Street Design Guidelines* is apparent on Elizabeth Avenue, shown here, where pedestrians, cars, and buses coexist, and landscaping creates an aesthetically pleasing environment.

Thinking Beyond the Car

Transportation agencies and their partners already have the ability—through legislation, Federal programs, policy statements, design guidelines, and planning—to provide more complete streets to all travelers by taking advantage of the many opportunities to go beyond traditional approaches.

As Secretary LaHood said in a recent posting on "Fast Lane," the Secretary's official blog, "We need roadways designed to account for the needs of everyone who uses them, whether driving, walking, or riding in a wheelchair or on a bicycle."

All transportation professionals, regardless of their respective disciplines, have the power to help create a transportation network that rises to the challenge of meeting the mobility requirements of the 21st century. Getting there requires a shift in mindset from designing an auto-focused highway system to operating a transportation network that accommodates all users and modes safely and conveniently.

Project: Cascade Township – Village Complete Streets Plan
Initial Meeting with Kent County Road Commission

Date: July 15, 2013

File No: 60846001/002

Present: Cascade Township – Sandra Korhorn, Steve Peterson
Kent County Road Commission – Tim Haagsma, Wayne Harrall
Progressive AE – Pete LaMourie

Copy: Those in Attendance
LSL Planning – Brad Strader
Progressive AE – Bob Petko

ITEMS DISCUSSED

This meeting was held with Kent County Road Commission (KCRC) staff to discuss potential complete streets opportunities and constraints and a few initial ideas, largely related to the Cascade Road corridor within the village/study area. Discussions started with a general overview of the plans primary goals and objectives and the projected plan process that will occur over the next three to four months. Discussion items included the following in no particular order.

1. Key goal of the complete streets plan is to provide better non-motorized and pedestrian connectivity across Cascade Road.
2. A brief discussion of the past multi-lane roundabout concept at Cascade/28th was discussed. It is seen as more of a longer term alternative (given apparent current resident unfamiliarity/concerns) if other shorter term improvements are not as successful as expected.
3. Although traffic volume data on GVMC/KCRC website varies, it is understood that current weekday traffic volumes on Cascade Road within the study area are in the 20,000+ vehicle range, essentially eliminating the potential concept of a reduction to a three-lane cross section.
4. There is a storm sewer line running under the middle of Cascade Road that will need to be kept in mind if any improvements are pursued in that area.
5. The subject of 3 or 4 intermittent raised medians on Cascade Road within the current center left turn lane was discussed as a way to calm traffic and for potential mid-block crossing(s). It is recognized that existing full movement commercial driveways along Cascade Road make placement of such raised medians difficult. KCRC staff were open to the concept of such intermittent raised medians if resulting turn restriction issues can be resolved with business owners. At this point raised medians were discussed for locations at a midpoint (near the end of old 28th) and at either end of the study area (600+ feet north of the Cascade/28th intersection and just south of the bridge over Thornapple River). Design aspects include a need for vertical elements: canopy/columnar trees within such medians, potential (if room and applicable) for bio detention as used in several recent Grand Rapids projects (Plainfield Avenue noted), and potential need to widen Cascade Road slightly at one or more median locations to provide a wider median for better landscape environment and pedestrian/bike storage.

Minutes of Meeting

6. It is believed that Cascade Road has approximately 100 feet of right-of-way within the study area.
7. Bike lanes on Cascade Road likely not an option given the current +/- 55-foot cross section unless more extensive widening is completed. Focus should be on improving/enhancing/expanding the current off-street bike path system within the area.
8. Complete streets improvements at the Cascade/Thornapple Drive intersection were discussed. KCRC staff were agreeable to enhanced pedestrian crosswalk markings and/or stamped concrete for the crossings (or for the entire intersection for additional calming/aesthetic benefits). A raised full intersection table-top concept was discussed but was deemed unacceptable.
9. There are already current/ongoing discussions/plans for adding sidewalks along the north side of Thornapple Drive just east of Cascade Road — could be accomplished by shifting north edge curb to south slightly and re-striping Thornapple. Potential for doing like changes on other sections of Thornapple on west side of Cascade was discussed briefly, with recognition of grade and other issues.
10. It was noted that the existing traffic signal control cabinet on the northeast quadrant of the Cascade/Thornapple intersection creates sight line issues for drivers. KCRC and township staff appear open to the idea of shifting this controller slightly to east (cost likely \$10,000 to \$15,000).
11. Alternatives regarding improvements to the bridge area were discussed. Raised medians (even for low growing plants/shallow depth) was not seen as feasible by KCRC staff due to issues with tying median curb structure into bridge deck/structure. Even just restriping to provide bike lanes not likely feasible as long transitions would use up much of the space, and peak-hour left-turn queues (especially southbound) can be extensive.
12. Potential for revising the eastbound approach of Old 28th Street to Cascade was discussed. Concern is that many drivers do not fully stop for that right turn given the significant angle of that channelized approach and thereby creating crash concerns. KCRC staff appeared open to the idea of reconfiguring that approach to something closer to a more standard 90-degree angle (while still retaining right-turn only channelization).
13. Agreed in general that adding sidewalks/paths on the west side of Cascade Road north of 28th Street and on the north side of Old 28th would be applicable improvement measures.

The meeting wrapped up with brief discussion regarding upcoming public input and concept design tasks and eventual need to set up a follow up meeting with KCRC staff.

The above constitutes my understanding of items discussed and/or decisions reached. If there are any additions and/or corrections, please contact me within 7 days.

Peter C. LaMourie, P.E. PTOE

Complete Streets Plan

You Are Invited...

The Cascade Township Planning Commission and the Township DDA invite you to a public meeting to discuss a complete streets plan for the Village area. This workshop will be facilitated by our consultant experts and will highlight a few of the ideas that have been developed so far including raised median sections on Cascade Road, an expanded sidewalk/pathway system, and improvements to the Cascade Rd./Thornapple Drive intersection

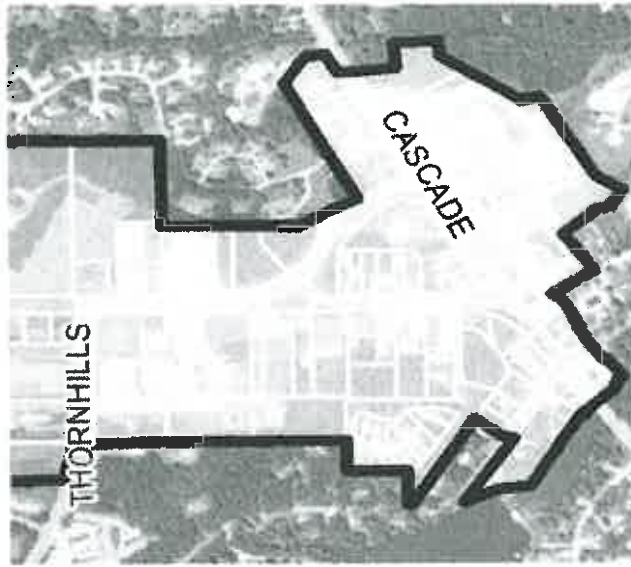
Complete Streets is a policy that directs planners and engineers to design and operate the entire right of way to enable safe access for all users, regardless of age, ability, or mode of transportation. This means that every transportation project will make the street network better and safer for drivers, transit users, pedestrians, and bicyclists.

We want to hear what you think, what other ideas you have, and which complete streets elements should have the highest priority.

When: Wednesday, October 9, 2013

Where: Cascade Library Wisner Center, 2870 Jacksmith Dr. SE

Time: 4:00 p.m. – 6:00 p.m.



Open House Attendees Sign-in

Date: October 9, 2013

Project: Cascade Village Area Complete Streets Plan

Name (Please Print)	Company Name or Resident Address	Phone	Email
JAMES SINGER	Greenview (uninc)	2058844	
DAN ROBERTSON	LITTLE HARBOUR DR SE	425-5770	dlee@TARONETWORKS.COM
Doug Lee	JAM'n Beans	432-6683	
DAVID HUTH	2946 O'LOK SW	974-6601	
James Herman	Grancife Woods	313-3878958	jamesdherman@hotmail.com
RICHARD ROBBINS	GLEN ELEFTE WOODS	907-315-9089	RDRROBBINS@comcast.NET
Tom Wood	Cascad. Christ in Church	446-1483	alpha.wood@comcast.net
CINDY JANES	CASCADE TWP.	914-6901	cPJANES1@gmail.com
ROB BEAHAN	" "	446-6529	ROBE-BEAHAN.ORG
Barbara Schmid	1949 Beard Dr SE	581-1241	bboschmid1@aol.com
Sue Williams	3706 Buttrick St	676-3431	swilly@aol.com
Joel Beaman	3220 Pacific Dr SE	888-8884	jbeaman@comcast.net

Open House Attendees Sign-in

Date: October 9, 2013

Project: Cascade Village Area Complete Streets Plan

Name (Please Print)	Company Name or Resident Address	Phone	Email
Vince Kleyla	2503 Riveredge Dr	283-9445	vk3ed@att.net
Paula Duda	3519 Fairview Dr	234-9624	emrpk@charter.net
Laurie Scott	Harvest Health	975-7551	hhealth@cascadehealth.net
Tom McDonald	DDA	251-4065	Tmcdonald@mkassoc.com
Roger Buys	CASCADE CAR WASH	942-5361	ROGERBUYS@GMAIL.COM
Al Pennington	Cascade Planning Cons	363-7801	apennington@mbcc.com
John Sperry	Cascade Planning Cons 6910 Oakbrook St SE Issaquah, WA 98027	work 632-8052 cell 481-0860	jsperry@mbcc.com

Village of Cascade Complete Streets Plan

Preliminary Plan Public Open House
October 9, 2013



Open House Program

- This presentation on "complete streets" background and preliminary ideas for village area
- Break up to review presentation boards and have one-on-one discussions
- Very informal
- Sticky notes or comment cards to provide us with your input

What is Complete Streets?

A **system of streets**... planned, designed, operated and maintained so all users may safely, comfortably & conveniently move along & across streets

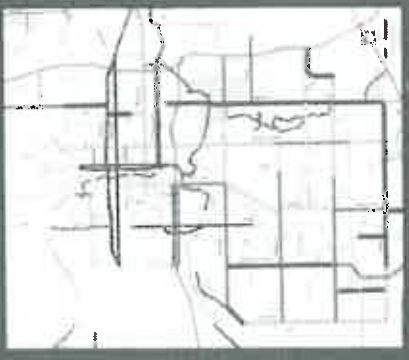


- All users include:
- Pedestrians
 - Bicyclists
 - Transit users
 - Microplata
 - Trucks
 - Children
 - Elderly
 - People of various abilities

Complete Streets Planning Process

1. Complete Streets Vision
2. Identify Opportunities and Needs
3. Analysis
4. Alternatives
5. Action Plan
6. Monitoring and Implementation

Public Input Is Key
Part of Process



Changes in Michigan Policy

Act 51 (MI Transportation Fund) Revisions

- Requires inter-jurisdictional consultation on non-motorized projects
- Use of established best practices
- Established an Advisory Council to
 - Adopt “S” policy for MDTOT
 - Develop model policies for locals
 - Advise MDTOT and locals on implementation issues
- MDTOT may provide technical assistance and required to share expertise
- Enables inter-jurisdictional agreements for maintenance

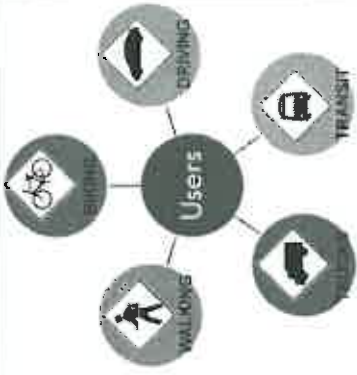
- ### Act 33 (Planning Act) Revisions
- Definition of “streets” expanded to include all legal users
 - Expands elements that may be included in a master plan to include all forms of transportation
 - Specifies that transportation improvement be appropriate to their context
 - Specifies cooperation with road commission and MDTOT

8th Effective Aug 2010

Village of Coltsville Complete Streets Plan

Who are we planning for?

- Motor vehicles
- Pedestrians
- Bicyclists
- Transit users
- Special groups
- Other



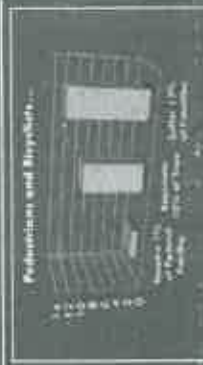
Complete Streets

Leveling the playing field

Village of Coltsville Complete Streets Plan

Benefits of Complete Streets

- **Environmental:**
 - Reduced greenhouse gas emissions
 - Reduced carbon footprint
 - Less oil dependency
- **Public Health:**
 - More active lifestyles
 - Increased mobility
- **Safety:** sensitive design results in fewer & less severe crashes
- **Quality of Life:** More attractive streets & places translates into more business



Village of Coltsville Complete Streets Plan

Complete Streets Principles

- **Interconnected networks** (destinations linked by roads, sidewalks, trails & transit)
- **Convenience** (linked destinations within walking distance)
- **Full array of facilities** (on-street bike lanes, side-walks, pathways, trails, etc.)
- **Facilitate safe movement along & across streets** (crosswalks, access management, traffic signals, etc.)
- **Proper planning** (appropriate transit population & employment densities)
- **Match street design to user needs & context**



Village of Coltsville Complete Streets Plan

Multi-Modal Quality of Service

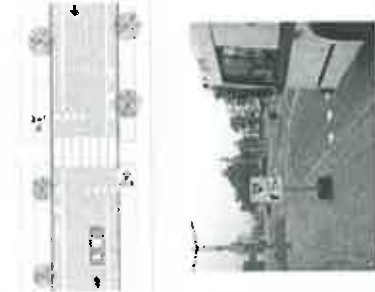
Priorities are not the same on every street

<ul style="list-style-type: none"> • Delay (at intersections) • Volume / capacity ratios 	<ul style="list-style-type: none"> • Frequency/hours • Amenities • Ped connectivity • Supportive land use density/design 	<ul style="list-style-type: none"> • Pavement condition • Connected system • Vary by user type 	<ul style="list-style-type: none"> • Sidewalk condition/gaps • Crossing ease
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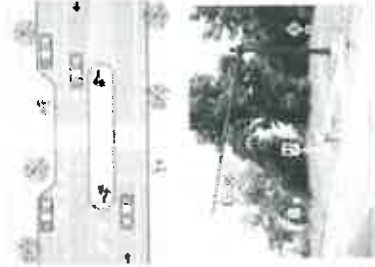
Village of Cascade Complete Streets Plan

Crossing Alternatives

Basic Mid-Block Crosswalk



Crossing Islands



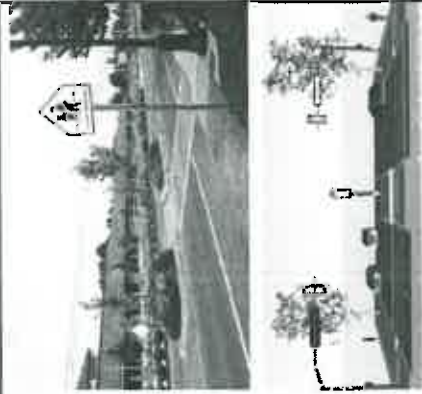
Curb Extensions



Village of Cascade Complete Streets Plan

Crossing Alternative

- Intersection design
- Mid-block crossings
- "PELICAN" signals
 - Design varies; generally stops traffic when activated
 - High-volume crossings away from other signals
 - Schools, universities, hospitals, other institutions, at main transit stops



Village of Cascade Complete Streets Plan

Intersection Alternative: Roundabout

- Keep a buffer between sidewalk and circular
- Use zig-zag crossing islands
- Place crosswalks such that existing and entering vehicles have a place to stop outside roundabout
- For entrance and exist lanes with multiple lanes consider:
 - Hybrid and audible pedestrian signals
 - Raised crosswalks



Village of Cascade Complete Streets Plan

Green/Sustainable Streets

- Permeable pavement for on-street parking and bike lanes
- Curb extensions that incorporate "rain gardens"
- Sidewalks buffered by street trees



Need to keep vegetation low enough and trees far back enough not to obstruct views.



Village of Cascade Complete Streets Plan

Village Area Complete Street Goals

- Improve pedestrian/bicycle crossing opportunities across Cascade Road
- Slow Cascade Road speeds
- Expand parallel pathways/sidewalks
- Improve connectivity throughout village area
- Retain/expand current aesthetic treatments



Village of Cascade Complete Streets Plan

C.S. Elements Considered to Date

- Road diet/conversion
- Mid-block crossing on Cascade Rd
- Gateway measures
- Expanded sidewalk system
- Improved crossing/intersection recognition
- Roundabouts

KCRC input obtained as part of preliminary process



Village of Cascade Complete Streets Plan

Preliminary Plan includes...

- Raised median mid-block crossing of Cascade Street
- "Gateway" raised medians at Cascade Rd entry points
- Pavement treatments, improved crosswalks, etc at Cascade/Thornapple
- Re-aligned Old 28th approach to Cascade Road
- Pathway across river
- Extended/expanded sidewalks



Village of Cascade Complete Streets Plan

Cascade Road mid-block crossing



Village of Cascade Complete Street Plan

Mid-block crossing location - before



Village of Cascade Complete Street Plan

Mid-block crossing location - after



Village of Cascade Complete Street Plan

Cascade/Thornapple - before



Village of Cascade Complete Street Plan

Cascade/Thornapple - after



Village of Cascade Complete Streets Plan

North Gateway Median -- before



Village of Cascade Complete Streets Plan

North Gateway Median -- after



Village of Cascade Complete Streets Plan

Next Steps

- Revise preliminary plan per public input
- Discuss revised plan with steering committee
- Second meeting with KCRC to discuss Plan
- Complete Final Plan and Report
- Present Final plan to Township Planning Commission, Board, and public



Village of Cascade Complete Streets Plan

Questions for You....

- What do you see as the primary complete street issue in the village area?
- Do you like the idea of a mid-block crossing on Cascade at Old 28th?
- What would you like to see at the Cascade/Thornapple intersection to improve ped/bike travel?
- What one change would get you or your family to walk or bike more in the village area?



CASCADE CHARTER TOWNSHIP

REQUEST FOR PROPOSAL

Complete Streets Planning Services for the Village of Cascade

**CASCADE CHARTER TOWNSHIP
2865 THORNHILLS AVENUE SE
GRAND RAPIDS, MICHIGAN 49546**

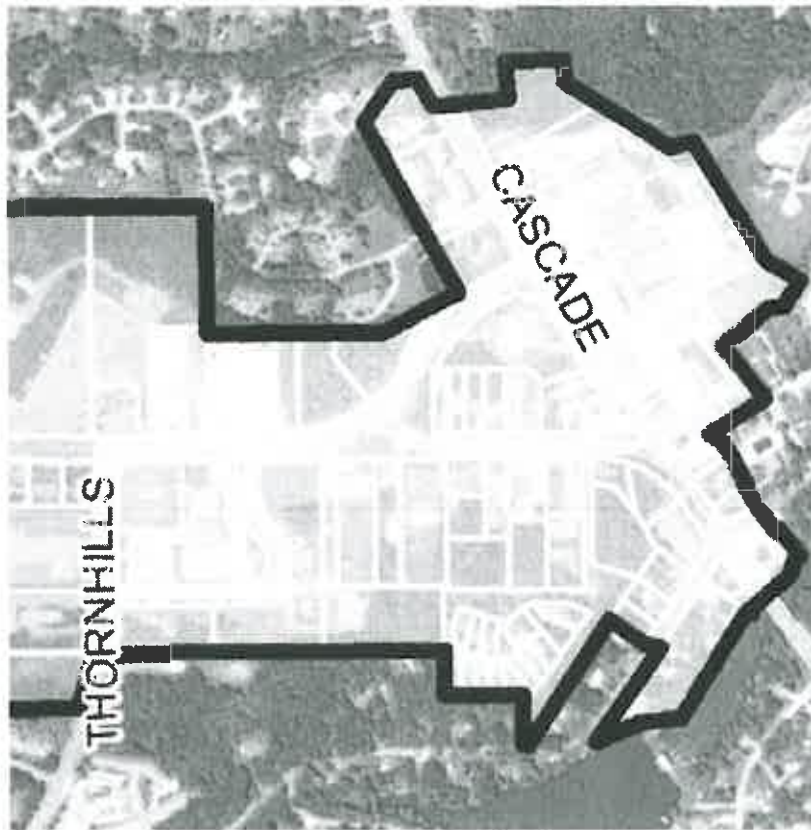
TELEPHONE: (616)949-1500

A. Background:

Cascade Township is located in the southeastern section of Kent County, immediately adjacent to the expanding metropolitan area of Grand Rapids. The Townships of Ada, Lowell and Caledonia border Cascade Township to the north, east and south, while the growing City of Kentwood forms a western border with the Township. Cascade Township has had a DDA since 1993.

Cascade Charter Township is soliciting proposals from an experienced consultant or consultant team to develop a Complete Streets policy and produce conceptual plans for the village area in Cascade Township.

"Cascade Village"



The "Cascade Village" is generally known as the "downtown" of Cascade Township and is included in the Township DDA. This geographic area is about 100 acres and is located from Thornhills Ave. to just east of Cascade Rd. on 28th St. and from the Thornapple River to just South of Burton St. on Cascade Rd.

The Village Area is the location of the original commercial development in Cascade. Development in the Village area is more oriented to the resident-customer in the surrounding residential areas of the community. The individual or family that needs a prescription, dry cleaning services or minor automobile repair can receive this service from a small, operator - owned business.

The development pattern in the Village area was designed in a manner to orient itself toward the automobile. The buildings are placed more toward the front of their respective property, with convenient access a high priority. Architecture is more utilitarian in nature. There are some older wood frame commercial structures which give the Village area its quaintness.

The area is bisected by two multi-lane roads (28th St. and Cascade Rd.) which provide no on-street parking. These roads make it extremely difficult to have any kind of pedestrian friendly design. Furthermore, the speed limits through the area are excessively high (mostly 45) making it even less pedestrian friendly. Unfortunately, Cascade Rd. poses a real barrier to integrating the entire area for the non-motorized traveler. There are nice bike paths and sidewalks through the Cascade Village area offering opportunities for connections to the surrounding areas.

One of the biggest challenges for Cascade Township is the fact that they do not control the public streets. In this case the Kent County Road Commission (KCRC) controls them. Historically, the roads in this area have been widened with the belief that this allows traffic to move quicker and more efficiently. However, this is in direct conflict of what the residents and property owners have indicated they desire. They have indicated a desire to see slower streets (specifically Cascade Rd. as it cuts through the village). It may be possible to provide for pedestrian connections linking the village for the non-motorized traveler.

Cascade Township has constructed sidewalks, street trees and decorative lighting in the area to try and make it more friendly and lively. This has helped in providing a pedestrian feel and will help with an effect of narrowing the wide streets with the landscaping. They have also constructed pathways in this area that provide for connections out of the village. 28th St. has had landscape medians installed to help provide a visual relief, as well as pedestrian relief for crossing the road. The area is walkable but the wide and fast roads are still intimidating to the non-motorized traveler. Due to the fact that Cascade Rd. is wide and fast, the walkability of the area is severely impacted. The exceptions to this are Peace St, Hurley St, Orange Ave. and Tassell Park.

The Cascade DDA evaluated the intersection of Cascade and 28th St for a roundabout in 2009. When concluded, the study showed that a roundabout

could work at this intersection and would help reduce crashes and slow speeds in the area. However, the DDA has yet to make any formal decision on the matter as the subject has been too controversial for some.

Plan Priorities:

Cascade Road:

Cascade Road is a major arterial running east and west (southeast/northwest). It is comprised of 4 travel lanes, two in each direction with a center turn lane. Posted speed limit is 40 mph through the Village.

Cascade Road/Thornapple River Drive intersection

This intersection is an important gateway to the Village.

28th Street

28th Street is a major arterial running east and west. It is comprised of 4 travel lanes, two in each direction with a center turn lane. Posted speed limit is 45 mph along 28th Street.

Old 28th St

This street is comprised of 3 travel lanes, one in each direction with a center turn lane. Posted speed limit is 25 mph. Old 28th Street connects Cascade Road to 28th Street.

B. Work Statement/Objectives:

1. To develop an overall Complete Streets plan for the Village area that takes into consideration safety, mobility and accessibility needs of users of all ages and abilities.
2. To strengthen the ability of the Township officials to provide guidance to County and/or State agencies on future road designs/projects.
3. To develop a plan which strengthens the image of the area, improves quality of life and support continued economic growth in the Township through improved accessibility and mobility.

C. Materials/Resources Available from Cascade Charter Township:

1. Existing plans and studies, such as the Roundabout Study, DDA TIF Plan, Village Design and Land Use Evaluation
2. Access to the REGIS System.
3. Zoning Ordinance/Map

D. Proposed Schedule for Consultant Selection

Selection of a consultant will be made at the complete discretion of the Township Board, which reserves the right to accept or reject any and all proposals. All submissions or parts thereof become the property of Cascade Charter Township and are subject to Freedom of Information Act release.

Proposals will be reviewed by a Committee consisting of members of the Cascade Township Downtown Development Authority, Planning Commission and Township Board to determine which consultants will be invited to participate in an interview. It is the intent of Cascade Charter Township to select a consultant in accordance with the following schedule:

April 1, 2013	Request for Proposals distributed
April 26, 2013	Proposals are due
May 1, 2013	Interviews scheduled with selected consultants.
May 6-8, 2013	Interviews Conducted
May 21, 2013	DDA Board of Directors considers Committee recommendation and makes a recommendation to the Township Board.
May 22, 2013	Township Board considers recommendation and awards contract.

E. Minimum Scope of Work

Contained below is an outline for items to be considered within the scope of work. In the proposal, consultants are encouraged to add additional steps or better define the steps they feel are necessary to accomplish updates to the plans.

- Budget projection, including a per meeting* breakdown
- Probability of success
- Capital improvement projects itemization, schedule and projections (all possible projects available)
- Sketches, drawings, concepts

*Meetings may consist of:

1. Public
2. Business Owners
3. DDA/Planning Commission/Township Board

F. Selection Process

The selection of a consultant will be based on qualifications and the content of the proposal submitted. At a minimum, proposals should contain the following information:

- Experience on developing Complete Streets Plans, with emphasis on projects in Townships and municipalities of similar size and character to Cascade Township
- References for each of the prior projects
- Personnel to be assigned to the project and their experience
- Detailed scope of work and timeline for completion
- Compensation, including reimbursable expenses that the DDA/Planning Commission could anticipate, along with the manner of compensation

G. Proposal Requirements:

The proposal shall be written in 8 ½" x 11" format. Upon completion of the plan, the consultant shall provide one unbound original copy of the Plan and 10 bound copies. In addition, the consultant shall provide electronic copies of all text, maps and graphics incorporated in the final Plan (in PDF format) to the Township. All or parts of the electronic files may be used by the Township on their website, newsletter or other publications at their discretion.

A total of ten (10) copies must be received no later than Friday, April 26, 2013. Proposal received after this deadline shall not be considered. All costs incurred for proposal preparations, presentation or contract negotiation shall be the responsibility of the consultant. Questions regarding specifications or handling of proposals shall be directed to the Township Manager at (616)949-1500.

Proposals shall be delivered in a sealed envelope to the Assistant to the Manager at the following address:

Sandra Korhorn, Assistant to the Manager
Cascade Charter Township
2865 Thornhills Avenue SE
Grand Rapids, Michigan 49546

H. Proposal Format:

Proposals shall include the following information:

1. **Cover Letter.** The cover letter shall be signed by a member of the consulting firm empowered to commit the firm to a contractual arrangement with the Township. The cover letter shall also identify the person who is responsible for regular communications with the Township, including meeting attendance.
2. **Corporate Background.** Provide information on the firm's background, including:
 - a. Organization, size and Michigan office locations.
 - b. The office location where work associated with the project would be performed.
 - c. A description of the range of services provided by your firm. Specify any area of expertise the firm has, or members of the firm that have special qualifications to handle the services desired by the Township.
3. **Professional Staff.** Identify the individual or individuals who would be providing services to the Township. List their experience in providing these services to municipalities similar in size and character.
4. **Experience and References.** Provide descriptions of recent prior experience with similar communities undertaken in the last five (5) years. For each project, include the name, title and telephone number of a representative that the Township may contact to discuss your experience.
5. **Samples.** Include representative samples, prepared by the individual who would be assigned to work with the Township.
6. **Fees.** In addition to total project cost, include any billing options for all expected services. Include a fee schedule for all personnel likely to work on this project in case additional work or meetings are requested.
7. **Timeframe.** Provide a timeline as to when you would expect to complete specific work tasks for the Plan and Plan completion. The timeline can be general. It can provide the number of weeks or man hours to complete the task (or tasks) rather than specific calendar dates. It is anticipated that this job can be performed in 6 months.
8. **Budget.** The Township budgeted approximately \$25,000 for this study; with some flexibility should the plan require it.

9. **Insurance.** Provide evidence of general liability, automotive liability and professional liability in an amount of at least \$1,000,000 combined single limit as well as Workers Compensation Insurance with the statutory overages.
10. **Disclosure.** Cascade Charter Township expects each potential consultant to identify any potential conflicts of interest and the plan for handling these matters.
11. **Omission of Services.** If a respondent believes that some of the services being requested are not necessary, please identify those services and reasons for their omission.

For additional information, please contact Sandra Korhorn, Assistant to the Manager at (616) 949-1500 or by email at sandra@cascadetwp.com.