



## Planning and Economic Development

Ed Anzek, AICP, Director

From: Sara Roediger, AICP  
 Date: 12/5/2014  
 Re: Fire Station Upgrades (City File #14-017 through 14-020)  
 Preliminary/Final Site Plan - Planning Review #1

The applicant, the City of Rochester Hills Fire Department, is proposing a number of improvements to four of the City's fire stations in response to the City Council's direction to provide 24 hours a day, seven days a week fire department operations. The projects were all reviewed for conformance with the City of Rochester Hills Zoning Ordinance. The comments below are minor in nature and can be incorporated into a revised site plan submittal for review to ensure compliance following action by the Planning Commission. A summary of the improvements at each station is as follows:

- Fire Station #1 (1111 Horizon Ct., west of Livernois) Interior renovations only.
- Fire Station #2 (1251 E. Auburn Rd., east of John R) Extensive interior renovations, new overhead doors, addition of 2,321 sq. ft. to the existing 4,711 sq. ft. building, resulting in a 7,032 sq. ft. building.
- Fire Station #3 (2137 Auburn Rd., west of Crooks) Extensive interior renovations, new overhead door, new patio area enclosed by a 6 ft. wall, addition of an 81 sq. ft. vestibule to the existing 5,288 sq.-ft. building, resulting in a 5,369 sq. ft. building.
- Fire Station #4 (2723 Walton Rd., east of Adams) Demolition of existing 4,086 sq. ft. building to be rebuilt on the east side of the site as a 8,345 sq. ft. building with site improvements such as landscaping, paving, etc.
- Fire Station #5 (251 E. Tienken Rd., east of Rochester Rd.) Extensive interior renovations, new overhead doors, new patio area enclosed by a 6 ft. wall, addition of an 69 sq. ft. vestibule to the existing 5,690 sq.-ft. building, resulting in a 5,759 sq. ft. building.

1. **Zoning and Use (Section 138-4.300).** The sites are all zoned either R-1 or R-4 One Family Residential District which permits municipal buildings and uses as permitted uses and are located in predominately residential areas on major roads. Refer to the table below for the zoning and existing and future land use designations for the four sites and surrounding parcels.

		Zoning	Existing Land Use	Future Land Use
Fire Station #2	Proposed Site	R-4 One Family Residential	Fire station	Residential 4
	North	R-4 One Family Residential	Single family homes	Residential 4
	South	R-3 One Family Residential	Single family homes	Residential 4
	East	R-4 One Family Residential	Single family homes	Residential 4
	West	R-4 One Family Residential	Single family homes	Residential 4
Fire Station #3	Proposed Site	R-4 One Family Residential w/ FB-1 Flexible Business Overlay	Fire station	Business/Flexible Use 1
	North	R-4 One Family Residential & B-2 General Business w/ FB-2 Flexible Business Overlay	Vacant & shopping center	Office & Business/Flexible Use 2
	South	R-4 One Family Residential w/ FB-1 Flexible Business Overlay	Single family homes	Business/Flexible Use 1
	East	R-4 One Family Residential w/ FB-1 Flexible Business Overlay	Single family homes	Business/Flexible Use 1
	West	B-2 General Business w/ FB-1 Flexible Business Overlay	Office building	Business/Flexible Use 1
Fire Station #4	Proposed Site	R-1 One Family Residential	Fire station	Residential 2.5
	North	RM-1 Multiple Family Residential	Apartments	Multiple Family
	South	R-1 One Family Residential	Single family homes	Residential 2.5
	East	R-1 One Family Residential	Single family homes	Residential 2.5
	West	R-1 One Family Residential	Meadowbrook Christian Church	Residential 2.5

		Zoning	Existing Land Use	Future Land Use
Fire Station #5	Proposed Site	R-4 One Family Residential	Fire station	Residential 3
	North	R-4 One Family Residential	Open space	Special Purpose
	South	R-4 One Family Residential	Single family homes	Residential 4
	East	R-4 One Family Residential	Open Space	Special Purpose
	West	I Industrial w/ FB-1 Flexible Business Overlay	Office	Business/Flexible Use 1.

2. **Site Layout (Section 138-5.100-101).** Refer to the table below as it relates to the area, setback, and building requirements of the R-1 and R-4 districts for these projects.

Requirement	Proposed				Staff Comments
	FS #2	FS #3	FS #4	FS #5	
<b>Min. Lot Area</b> R-1 20,000 sq. ft. (FS #4) R-4 9,600 sq. ft. (FS #2, 3 & 5)	0.72 ac.	0.66 ac.	1.49 ac.	1.65 ac.	In compliance
<b>Min. Lot Width</b> R-1 100 ft. (FS #4) R-4 80 ft. (FS #2, 3 & 5)	227 ft.	150 ft.	335 ft.	150 ft.	In compliance
<b>Max. Height</b> R-1 2 stories/35 ft. (FS #4) R-4 2 stories/30 ft. (FS #2, 3 & 5)	1 story/ 23 ft.	1 story/ 21 ft.	1 story/ 24 ft.	1 story/ 26 ft.	In compliance
<b>Min. Front Setback</b> R-1 40 ft. (FS #4) R-4 25 ft. (FS #2, 3 & 5)	40 ft.	70+ ft.	40 ft.	25 ft.	In compliance
<b>Min. Side Setback</b> R-1 15 ft./30 ft. (FS #4) R-4 10 ft./20 ft. (FS #2, 3 & 5)	25 ft./ 85+ ft.	37 ft./ 40 ft.	70 ft./ 150+ft.	29 ft./ 41 ft.	In compliance
<b>Min. Rear Setback</b> R-1 35 ft. (FS #4) R-4 35 ft. (FS #2, 3 & 5)	28 ft.	34 ft.	65 ft.	290+ ft.	In compliance, FS #2 & #3 are existing non-conforming setbacks that are not increasing the amount of nonconformity (non-issue)
<b>Max. Lot Coverage</b> R-1 25% (FS #4) R-4 30% (FS #2, 3 & 5)	22%	19%	13%	8%	In compliance

- a. In an effort to improve pedestrian access, it is staff's recommendation that a sidewalk be installed at the new fire station #4 to connect to the Walton Blvd. In addition, staff recommends the installation of a bike rack at each station to further accommodate non-motorized travel, particularly during special events and in cases of emergencies.

3. **Exterior Lighting (Section 138-10.200-204).** A photometric plan showing the location and intensity of exterior lighting has been submitted for each site; however changes are required as indicated in the table below.

Requirement	Proposed				Staff Comments
	FS #2	FS #3	FS #4	FS #5	
<b>Shielding/Glare</b> Lighting shall be fully shielded & directed downward at a 90° angle  Fixtures shall incorporate full cutoff housings, louvers, glare shields, optics, reflectors or other measures to prevent off-site glare & minimize light pollution  Only flat lenses are permitted on light fixtures; sag or protruding lenses are prohibited	12 building mounted & 3 pole mounted lights	9 building mounted & 4 pole mounted lights	10 building mounted & 8 pole mounted lights	8 building mounted & 7 pole mounted lights	Specifications for all new light fixtures including shielding measures must be provided to ensure compliance
<b>Max. Intensity</b> (measured in footcandles fc.) 10 fc. anywhere on-site, 1 fc. at ROW, & 0.5 fc. at any other property line	Multiple locations along portions of the ROW & property lines exceed requirements at each of the stations				Footcandles must be reduced to meet requirements
<b>Lamps</b> Max. wattage of 250 watts per fixture  LED or low pressure sodium for low traffic areas, LED, high pressure sodium or metal halide for parking lots	LED fixtures, 138 max. watts				In compliance
<b>Max. Height</b> 20 ft., 15 ft. when within 50 ft. of residential	Information to be provided				Heights must be provided to ensure compliance

4. **Parking and Loading** (Section 138-11.100-308). Refer to the table below as it relates to the parking and loading requirements for these projects.

Requirement	Proposed				Staff Comments
	FS #2	FS #3	FS #4	FS #5	
<b>Min. # Parking Spaces</b> Municipal building: 1 space per employee = 7 employees per station	11 spaces	10 spaces	11 spaces	18 spaces	In compliance
<b>Min. Parking Space Dimensions</b> 10 ft. x 18 ft. w/ 24 ft. aisle, width may be reduced to 9 ft. for employee parking	Existing parking spaces not being changed		10 ft. x 18 ft. w/ 24 ft. aisle	Existing parking spaces not being changed	In compliance
<b>Min. Barrier Free Spaces</b> 1 BF spaces 11 ft. in width w/ 5 ft. aisle for up to 25 parking spaces	0 BF spaces	1 BF space	1 BF space	2 BF spaces	1 BF space must be provided at FS #2 & space & aisle widths must be adjusted accordingly at FS #4

5. **Landscaping** (Section 138-12.100-308). Refer to the table below as it relates to the landscape requirements for these projects. There will be minimal disruption to the exterior site for fire stations #3 and #5, therefore existing landscaping is not being altered.

Requirement	Proposed		Staff Comments
	FS #2	FS #4	
<b>Right of Way</b> 1 deciduous per 35 ft. + 1 ornamental per 60 ft. FS #2 (Auburn Rd.: 227 ft.) = 7 deciduous + 4 ornamental FS #4 (Walton Blvd.: 335 ft.) = 10 deciduous + 6 ornamental	1 deciduous 0 ornamental	3 deciduous 3 ornamental	Existing vegetation on the sites combined with additional deciduous, evergreen & ornamental plantings provided to serve as a buffer from adjacent properties more than account for the required ROW & parking lot trees
<b>Parking Lot</b> 5% of parking lot + 1 deciduous per 150 sq. ft. landscape area FS #2 = 351 sq. ft. + 2 deciduous FS #4 = 240 sq. ft. + 2 deciduous	1 deciduous	2 deciduous	

- a. Buffer plantings are not required as the sites are all zoned residential, however the applicant has voluntarily provided additional plantings along property lines that will be affected by the proposed plans. A meeting was held with the adjacent property owners of Fire Station #4 on December 2, 2014 to discuss the plans. As a result, the applicant has agreed to place additional plantings along the 2 tiered retaining wall to provide a continuous screen along the southeastern and eastern property lines of Fire Station #4. A meetings was scheduled with the adjacent property owners of Fire Station #2 on December 4, 2014, however was cancelled as no property owners indicated their attendance.
6. **Architectural Design** (Architectural Design Standards). The proposed buildings have all been designed with a consistent theme to complement the existing buildings, match each other to establish a certain look and feel to all the fire stations, and to respect the surrounding residential neighborhoods with the use of brick and pitched roofs.



ASSESSING DEPARTMENT  
Kurt Dawson, Director

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From: Nancy McLaughlin  
To: Ed Anzek  
Date: 11/25/14  
Re: File No.: 14-019  
Project: Fire Station No. 5, Review #1  
Parcel No: 70-15-02-376-012  
Applicant: City of Rochester Hills

The legal description should read: "S 48\* 14' 49" E 108.48 feet", (instead it reads 104.48 feet).



ASSESSING DEPARTMENT  
Kurt Dawson, Director

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From: Nancy McLaughlin  
To: Ed Anzek  
Date: 12/1/14  
Re: File No.: 14-020  
Project: Fire Station No. 4 Review #1  
Parcel No: 70-15-17-128-022  
Applicant: City of Rochester Hills

No Comment.



ASSESSING DEPARTMENT  
Kurt Dawson, Director

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From: Nancy McLaughlin  
To: Ed Anzek  
Date: 11/25/14  
Re: File No.: 14-018  
Project: Fire Station No. 3, Review #1  
Parcel No: 70-15-32-227-093  
Applicant: City of Rochester Hills

No Comment.



ASSESSING DEPARTMENT  
Kurt Dawson, Director

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From: Nancy McLaughlin  
To: Ed Anzek  
Date: 12/1/14  
Re: File No.: 14-017  
Project: Fire Station No. 2 Review #1  
Parcel No: 70-15-25-380-013  
Applicant: City of Rochester Hills

The legal description "excepts the W 33' of Lot 20", which is actually an easement. The easement should be acknowledged on the site plan.



BUILDING DEPARTMENT  
Scott Cope

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From: Craig McEwen, Building Inspector/Plan Reviewer  
To: Sara, Roediger, Ed Anzek, Planning Department  
Date: December 2, 2014  
Re: Fire Station No. 5  
251 E. Tienken Rd.  
Sidwell: 15-02-376-012  
City File: 14-019

The Site Plan Review for the above reference project was based on the requirements of the Michigan Building Code – 2012 and on the following list of drawings and information. Section references listed below are to the Michigan Building Code-2012 unless noted otherwise.

Drawings: Cover Sheet, Topographical Survey, C-1, A-1, A-2, E-2

Approval recommended.

Though this review is intended for site plan review only and does not constitute a full building plan review. The following item was noted and should be addressed prior to submitting for a building permit.

1. Building Accessibility
  - a. If any areas of the building are not excluded from the accessibility requirements per Section 1103.2.16 they shall be made accessible. Please provide information on the staffing of the office.

If there are any questions, please call the Building Department at 248-656-4615. Office hours are 8 a.m. to 4:30 p.m. Monday through Friday.





From: Craig McEwen, Building Inspector/Plan Reviewer  
To: Sara, Roediger, Ed Anzek, Planning Department  
Date: December 2, 2014  
Re: Fire Station No. 4  
2723 Walton Blvd.  
Sidwell: 15-17-128-022  
City File: 14-020

The site plan review for the above reference project was based on the following drawings and information submitted:

Drawings: Cover Sheet, Topographical Survey, C-1 thru C-7, A-1, A-2, E-2

Approval recommended based on the following conditions being met prior to issuance of a Building Permit:

1. Accessible parking including parking and access aisle surface slope details:
  - a. Provide dimensions for accessible parking space. Per the City Ordinance Section 138-11.300 all accessible parking spaces shall be a Universal Barrier Free Design to allow van access in any Universal barrier free spaces shall be 11 feet in width with a 5 foot access aisle.
  - b. Indicate the proposed surfaces slopes of accessible parking spaces and their access aisles. Provide sufficient point elevations on the plan at the perimeter of such spaces to clearly verify the provisions of ICC A117.1-2009, Section 502.5 have been satisfied (1:48 max slope).
  - c. Clarify dimensions of accessibility parking sign detail 7 on sheet C-7. Lowest sign shall be a minimum of 60 inches above the grade of the parking space to the bottom of the sign. See ICC A117.1-2009 Section 502.7
  
2. Exterior accessible route including slope details-
  - a. Identify on the Site Plan with dashed lines the proposed accessible route/routes from the accessible parking spaces, public transportation stops, public streets and sidewalks to the accessible entrances.
  - b. Provide sufficient grade information on the plans along the proposed accessible route/routes to verify compliance with the requirements of ICC A117.1-2009, Section 402.
  - c. Provide details (as applicable) of the following components along the proposed accessible route/routes to verify compliance with ICC A117.1-2009:
    - i. Door maneuvering clearance and ground surface slope per Section 404.
    - ii. Ramps per Section 405.
    - iii. Curb Ramps per Section 406.

Though this review is intended for site plan review only and does not constitute a full building plan review. The following item was noted and should be addressed prior to submitting for a building permit.

1. Building Accessibility

- a. If any areas of the building are not excluded from the accessibility requirements per Section 1103.2.16 they shall be made accessible. Please provide information on the staffing of the office and dispatch rooms. Will the kitchen area also be made accessible?

If there are any questions, please call the Building Department at 248-656-4615. Office hours are 8 a.m. to 4:30 p.m. Monday through Friday.



BUILDING DEPARTMENT  
Scott Cope

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From: Craig McEwen, Building Inspector/Plan Reviewer  
To: Sara, Roediger, Ed Anzek, Planning Department  
Date: December 2, 2014  
Re: Fire Station No. 3  
2137 W. Auburn Rd.  
Sidwell: 15-32-227-93  
City File: 14-018

The Site Plan Review for the above reference project was based on the requirements of the Michigan Building Code – 2012 and on the following list of drawings and information. Section references listed below are to the Michigan Building Code-2012 unless noted otherwise.

Drawings: Cover Sheet, Topographical Survey, C-1, A-1, A-2, E-2

Approval recommended.

Though this review is intended for site plan review only and does not constitute a full building plan review. The following item was noted and should be addressed prior to submitting for a building permit.

1. Building Accessibility
  - a. If any areas of the building are not excluded from the accessibility requirements per Section 1103.2.16 they shall be made accessible. Please provide information on the staffing of the office.

If there are any questions, please call the Building Department at 248-656-4615. Office hours are 8 a.m. to 4:30 p.m. Monday through Friday.



BUILDING DEPARTMENT  
Scott Cope

From: Craig McEwen, Building Inspector/Plan Reviewer  
To: Sara, Roediger, Ed Anzek, Planning Department  
Date: December 2, 2014  
Re: Fire Station No. 2  
1251 Auburn Rd.  
Sidwell: 15-25-380-132  
City File: 14-017

The Site Plan Review for the above reference project was based on the requirements of the Michigan Building Code – 2012 and on the following list of drawings and information. Section references listed below are to the Michigan Building Code-2012 unless noted otherwise.

Drawings: Cover Sheet, Topographical Survey, C-1 thru C-4, A-1, A-2, E-2

Approval recommended based on the following conditions being met prior to issuance of a Building Permit:

1. Indicate the location and dimensions of an accessible parking space and access aisle meeting the requirements of Section 1101.2 and ICC A117.1-2009, Section 502. Per the City Ordinance Section 138-11.300 all accessible parking spaces shall use a universal design to allow van access in any accessible space. Universal design spaces shall be 11 feet in width with a 5 foot access aisle.
  - a. Provide sufficient point elevations on the plan at the perimeter of the spaces to clearly verify the maximum slope of 1:48 has not been exceeded per ICC A117.1-2009, Section 502.5.
  - b. Provide details for the required accessible parking signage per the requirements of ICC A117.1-2009, Section 502.7.
2. Identify on the Site Plan and Floor Plan all public including all accessible, restricted and service entrances per Section 1105.
  - a. Identify on the Site Plan with dashed lines the proposed accessible route/routes from the accessible parking spaces, public transportation stops, public streets and sidewalks to the accessible entrances.
  - b. Provide sufficient grade information on the plans along the proposed accessible route/routes to verify compliance with the requirements of ICC A117.1-2009, Section 402.
  - c. Provide details (as applicable) of the following components along the proposed accessible route/routes to verify compliance with ICC A117.1-2009:
    - i. Door maneuvering clearance and ground surface slope per Section 404.
    - ii. Ramps per Section 405.
    - iii. Curb Ramps per Section 406.

Though this review is intended for site plan review only and does not constitute a full building plan review. The following item was noted and should be addressed prior to submitting for a building permit.

1. Building Accessibility

- a. If any areas of the building are not excluded from the accessibility requirements per Section 1103.2.16 they shall be made accessible. Please provide information on the staffing of the office and dispatch rooms.

If there are any questions, please call the Building Department at 248-656-4615. Office hours are 8 a.m. to 4:30 p.m. Monday through Friday.



FIRE DEPARTMENT

Sean Canto  
Chief of Fire and Emergency Services

From: William Cooke, Lieutenant/Inspector  
To: Planning Department  
Date: December 4, 2014  
Re: Fire Station No. 4

SITE PLAN REVIEW

FILE NO: 14-020

REVIEW NO: 1

APPROVED \_\_\_\_\_

DISAPPROVED \_\_\_\_\_ X \_\_\_\_\_

1. Provide construction type and square footage of proposed building on sheet C-2. This information is required to determine the number and spacing of fire hydrants.
  - It appears two fire hydrants will be required on-site; one at the north side of the building, east of the apparatus apron to service the Fire Department Connection (FDC), and one at the south of the building in the landscape island just east of the apparatus bay overhead doors. These hydrants should successfully meet the number and spacing of required fire hydrants, but will be verified once the above information is added to sheet C-2.
2. Provide a fire hydrant shall be located within 100 feet of the FDC.

*FIRE PREVENTION ORDINANCE Chapter 58, Sec. 912.7*
3. Fire flow data is required to determine if the existing water service is adequate for the proposed addition and can be obtained by contacting the Rochester Hills Engineering Department at (248) 656-4640.
4. The Fire Department Connection (FDC) should be relocated so that it is more accessible from the apparatus apron. The FDC shall be located at the west end of the north exterior wall, approximately 12 to 13 feet west of its current location.
5. Exit doors shall remain free of obstructions at all times. Provide guard posts or other acceptable means of protecting exit doors opening onto drives and parking areas.

*IFC 2006 Sec. 1028.2*

  - Provide pipe bollards at the north and south exit doors from the apparatus bays to the exterior drives.
6. Remove note #1 from under heading "Fire Department Notes" on sheet C-2.

Lt. William A. Cooke  
Fire Inspector



FIRE DEPARTMENT

Sean Canto  
Chief of Fire and Emergency Services

From: William Cooke, Lieutenant/Inspector  
To: Planning Department  
Date: December 3, 2014  
Re: Fire Station No. 2

SITE PLAN REVIEW

FILE NO: 14-017

REVIEW NO: 1

APPROVED   X  

DISAPPROVED \_\_\_\_\_

The Fire Department has no objections to the proposed addition as shown on the submitted site plan contingent upon the following comments being appropriately addressed:

1. Indicate the proposed and existing construction types and square footages of the building on sheet C-2. This information is needed to determine number and spacing of fire hydrants.
2. Fire flow data is required to determine if the existing water service is adequate for the proposed addition and can be obtained by contacting the Rochester Hills Engineering Department at (248) 656-4640.
3. Provide note on sheet C-2 under heading "Fire Department Notes": "Fire lanes shall be designated by the Fire Code Official, and shall be conspicuously posted on both sides of the fire lane, with fire lane signs, spaced not more than 100 feet apart. Fire lane signs shall read "No Stopping, Standing, Parking, Fire Lane", and shall conform to the Michigan Manual of Uniform Traffic Control Devices.  
*FIRE PREVENTION ORDINANCE Chapter 58, Sec. 503"*
4. Provide note on sheet C-2 under heading "Fire Department Notes": "Construction sites shall be safeguarded in accordance with IFC 2006 Chapter 14."
5. Provide note on sheet C-2 under heading "Fire Department Notes": "Open burning is not permitted including the burning of trash, debris, or land clearing materials. Open burning for warming of sand and/or water for the preparation of mortar shall be within the City of Rochester Hills Burn Permit Guidelines.  
*FIRE PREVENTION ORDINANCE Chapter 58, Sec. 307.6.2 & 307.6.2.3"*
6. Provide note on sheet C-2 under heading "Fire Department Notes": Provide a "No Parking Fire Department Connection" sign over the Fire Department Connection.

Lt. William A. Cooke  
Fire Inspector



Parks & Forestry  
Michael A. Hartner, Director

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To: Sara Roediger  
From: Gerald Lee  
Date: December 4, 2014  
Re: Fire Station No. 5  
Review No. 1  
File No. 14-019

Forestry review pertains to right-of-way tree issues only.

No comment at this time.

GL/cf

cc: Sandi DiSipio, Planning Assistant





Parks & Forestry  
Michael A. Hartner, Director

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To: Sara Roediger  
From: Gerald Lee  
Date: November 21, 2014  
Re: Fire Station No. 3  
Review No. 1  
File No. 14-018

Forestry review pertains to right-of-way tree issues only.

No comment at this time.

GL/kd

cc: Sandi DiSipio, Planning Assistant



Parks & Forestry  
Michael A. Hartner, Director

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To: Sara Roediger  
From: Gerald Lee  
Date: December 2, 2014  
Re: Fire Station No. 2  
Review No. 1  
File No. 14-017

Forestry review pertains to right-of-way tree issues only.

**Landscape Plan, Sheet C-4:**

Forestry doesn't recommend *Picea pungens* (Colorado spruce). *Picea glauca* (white spruce) are recommended.

The three spruce shown off the northwest part of the station property are too close to the overhead wires (not shown). Please use additional *Techny arborvitae*.

GL/cf

cc: Sandi DiSipio, Planning Assistant



Parks & Forestry  
Michael A. Hartner, Director

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To: Sara Roediger  
From: Gerald Lee  
Date: December 5, 2014  
Re: Fire Station No. 4  
Review No. 1  
File No. 14.020

Forestry review pertains to right-of-way tree issues only.

Landscape Plan, Sheet C-6

The Red Jade Crabapple, closest to the pathway, needs to be shown planted at least 10'-0" from the pathway.

Forestry doesn't recommend planting Norway Maples (*Acer Platanoides*) in Rochester Hills. We suggest a *Freemania* Maple (Autumn Blaze, Celebration) or State Street Maple.

Forestry doesn't recommend planting Colorado Spruce (*Picea Pungens*) in Rochester Hills. We suggest White Spruce (*Picea Glauca*) or Concolor Fir (*Abies Concolor*).

The existing Norway Maple, east of the proposed west driveway, should be removed for better sight distance.

The proposed landscaping will require a significant amount of maintenance.

GL/cf

cc: Sandi DiSipio, Planning Assistant



DPS/Engineering  
Allan E. Schneck, P.E., Director

From: Jason Boughton *JRB*  
To: Sara Roediger  
Date: November 21, 2014  
Re: Fire Station #5, City File #14-019, Section #2  
**Site Plan Review #1**

Engineering Services has reviewed the revised site plan received by the Department of Public Services on November 17, 2014 for the above referenced project. Engineering Services recommends site plan approval once the following comments have been addressed:

**General**

1. Place the City File #14-019 in the lower right hand corner of all sheets.

**Sanitary Sewer**

1. Provide a sanitary sewer basis of design.
2. Revise the slope on the proposed sanitary lead to the minimum allowed of 1.0% or greater and provide more information.

**Water Main**

1. Provide a shutoff 5 foot off the temporary living quarters service.

The applicant may need to submit a Land Improvement Permit (LIP) application with engineer's estimate, fee and construction plans to get the construction plan review process started. This will be determined with final site plan approval.

JB/sdm

c: Allan E. Schneck, P.E.; DPS Director  
Paul Davis, P.E., Deputy Director/City Engineer; DPS  
Tracey Balint, P.E., Public Utilities Engineer; DPS  
Paul Shumejko, P.E., PTOE, Transportation Engineer; DPS

Sheryl McIsaac, Office Coordinator; DPS  
Sandi DiSipio; Planning & Development Dept.  
File

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DEC - 24 2014

PLANNING DEPT.

DPS/Engineering  
Allan E. Schneck, P.E., Director

From: Jason Boughton  
To: Sara Roediger  
Date: December 4, 2014  
Re: Fire Station #4, City File #14-020, Section #17  
Site Plan Review #1

Engineering Services has reviewed the revised site plan received by the Department of Public Services on November 21, 2014 for the above referenced project. Engineering Services does not recommend site plan approval due to the following comments:

**General**

1. Place the City File #14-020 in the lower right hand corner of all sheets.
2. The scale graphic does not represent 1 inch = 30 feet scale, revise.

**Sanitary Sewer**

1. Provide a sanitary sewer basis of design to show there is capacity in the existing sanitary sewer.
2. Revise the connection point of the sanitary sewer lead. The proposed sanitary lead can not connect directly into the existing sanitary manhole. There is an existing sanitary lead located on the existing 12 inch sanitary sewer on the south side of Walton Blvd.

**Water Main**

1. Provide a shutoff 5 foot off the proposed building with rim elevation.
2. A fire hydrant needs to be provided within 100 feet of the FDC location, revise as necessary.

**Storm Sewer**

1. The entire 1.49 acres needs to be detained without directly discharging to Walton Boulevard or to the parcel to the east. The proposed detention pond will not work with the grading located near the east property line.
2. There needs to be infiltration / recharge on site.
3. Revise the detention pond calculations, there seems to be errors within the calculations. The size of both ponds will need to be increased.
4. The time of concentration should be 15 minutes for commercial developments.
5. Provide clarification with regards to the holes proposed in the stand pipe and orifice plate are working together. The high water overflow rim seems to be restricted, revised.
6. Need to calculate for the bankfull release rate into the design.
7. Provide detail areas showing how the C factor is determined throughout

**Traffic**

1. Under Site Notes, the MDOT details referenced in item 4, 5, and 8 should be revised to most current version, i.e, R-30-G, R-29-I, and R-28-H, respectively. Other MDOT details that may be called out on plans should also be verified for most current version.
2. A note states that the "Existing Traffic Signal to Remain". Is this correct?
3. Identify Walton Boulevard as being under the jurisdiction of the Road Commission for Oakland County. A RCOC right-of-way permit is required for all work within Walton Boulevard right-of-way.
4. Illustrate how the pathway that is being removed within the old drive approach is being replaced.
5. The pathway that is going through the proposed driveway approaches shall be same thickness as approach and be jointed at maximum 8 foot panels with a minimum 1/2 inch expansion paper between the pathway and approach.
6. The traffic signal design is being reviewed as separate design drawing from OHM.

The applicant will need to submit a Land Improvement Permit (LIP) application with engineer's estimate, fee and construction plans to get the construction plan review process started.

JB/jb

c: Allan E. Schneck, P.E.; DPS Director  
Paul Davis, P.E., Deputy Director/City Engineer; DPS  
Tracey Balint, P.E., Public Utilities Engineer; DPS  
Paul Shumejko, P.E., PTOE, Transportation Engineer; DPS

Sheryl McIsaac, Office Coordinator; DPS  
Sandi DiSipio; Planning & Development Dept.  
File



DPS/Engineering  
Allan E. Schneck, P.E., Director

From: Jason Boughton *JRB*  
To: Sara Roediger  
Date: November 21, 2014  
Re: Fire Station #3, City File #14-018, Section #32  
**Site Plan Review #1**

Engineering Services has reviewed the revised site plan received by the Department of Public Services on November 17, 2014 for the above referenced project. Engineering Services recommends site plan approval once the following comments have been addressed:

**General**

1. Place the City File #14-018 in the lower right hand corner of all sheets.

**Sanitary Sewer**

1. Provide a sanitary sewer basis of design.
2. Revise the slope on the proposed sanitary lead to the minimum allowed of 1.0% or greater and provide more information.

**Water Main**

1. Provide a shutoff 5 foot off the temporary living quarters service.
2. Relocate the temporary living quarters, the proposed location is directly above the existing water main.

**Traffic**

1. The pine tree at the northwest corner of the property is a sight distance issue for pathway and should either be raised 8 feet or removed.

The applicant may need to submit a Land Improvement Permit (LIP) application with engineer's estimate, fee and construction plans to get the construction plan review process started. This will be determined with final site plan approval.

**RECEIVED**

**NOV 24 2014**

**PLANNING DEPT.**

JB/sdm

c: Allan E. Schneck, P.E.; DPS Director  
Paul Davis, P.E., Deputy Director/City Engineer; DPS  
Tracey Balint, P.E., Public Utilities Engineer; DPS  
Paul Shumejko, P.E., PTOE, Transportation Engineer; DPS

Sheryl McIsaac, Office Coordinator; DPS  
Sandi DiSipio; Planning & Development Dept.  
File





DPS/Engineering  
Allan E. Schneck, P.E., Director

From: Jason Boughton *JRB*  
To: Sara Roediger  
Date: November 21, 2014  
Re: Fire Station #2, City File #14-017, Section #25  
Site Plan Review #1

Engineering Services has reviewed the revised site plan received by the Department of Public Services on November 17, 2014 for the above referenced project. Engineering Services does not recommend site plan approval due to the following comments:

**General**

1. Place the City File #14-017 in the lower right hand corner of all sheets.

**Sanitary Sewer**

1. Provide a sanitary sewer basis of design to show there is capacity in the existing sanitary sewer.
2. Revise the slope on the proposed sanitary lead to the minimum allowed of 1.0% or greater.
3. Revise the proposed sanitary lead connection. Sanitary sewer does not exist where the proposed sanitary lead is shown.

**Water Main**

1. Provide a shutoff 5 foot off the temporary living quarters service.

**Storm Sewer**

1. The existing storm sewer is connected to the Ireland drain which is owned and maintained by the Oakland County Water Resources Commission. Plans should be submitted to this agency for their approval.
2. Provide C factor calculations to show the difference from existing conditions to the proposed additions shown.

The applicant will need to submit a Land Improvement Permit (LIP) application with engineer's estimate, fee and construction plans to get the construction plan review process started.

Enclosed: Sanitary Inspection Reports

JB/sdm

c: Allan E. Schneck, P.E.; DPS Director  
Paul Davis, P.E., Deputy Director/City Engineer; DPS  
Tracey Balint, P.E., Public Utilities Engineer; DPS  
Paul Shumejko, P.E., PTOE, Transportation Engineer; DPS

Sheryl McIsaac, Office Coordinator; DPS  
Sandi DiSipio; Planning & Development Dept.  
File

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**RECEIVED**

**NOV 24 2014**

**PLANNING DEPT.**



DPS/Engineering  
Allan E. Schneck, P.E., Director

From: Michael Taunt  
To: Sara Roediger  
Date: December 4, 2014  
Re: Fire Station #2, City File #14-017, Section #25  
Fire Station #3, City File #14-018, Section # 2  
Fire Station #4, City File #14-020, Section #17  
Fire Station #5, City File #14-019, Section # 2  
**Legal Description Review #1**

I have reviewed the revised site plans received by the Department of Public Services on November 19 & 21, 2014 for the above referenced projects. I recommend site plans approval once the following comments have been addressed:

**Fire Station #2 14-017**

- No comments.

**Fire Station #3 14-018**

- No comments.

**Fire Station #4 14-020**

- The legal description for ingress/egress easements appears to be missing the last two courses.

**Fire Station #5 17-019**

- Legal description does not close using measured courses.

Mapcheck 1: FIRE STATION #5

Closure Summary

Precision, 1 part in: 315.23' : Error distance 4.00' : Error direction: N58° 14' 11"W

Point of Beginning

Easting: 13455977.2900'

Northing: 438162.4370'

Side 1: Line

Direction: N0° 05' 02"E

Distance: 509.21'

Easting: 13455978.0356'

Northing: 438671.6465'

Side 2: Line

Direction: S74° 40' 19"E

Distance: 59.78'

Easting: 13456035.6891'

Northing: 438655.8439'

Side 3: Line

Direction: S58° 14' 49"E

Distance: 104.48'

Easting: 13456124.5309'

Northing: 438600.8603'

Side 4: Line

Direction: S0° 05' 02"W

Distance: 436.32'

Easting: 13456123.8921'

Northing: 438164.5408'

Side 5: Line

Direction: N90° 00' 00"W

Distance: 150.00'

Easting: 13455973.8921'

Northing: 438164.5408'