	PLICATION FOR SITE PLAN REVIEW	STAFF USE ONLY
	artment of Safety and Inspections (DSI)	SPR #
375 Suite	Jackson Street	Fee \$
Sain	t Paul MN 55101-1806	City agent
651-	266-9086	
	Name	
APPLICANT (Main contact	Company	
person for project)	Address	
	City State	Zip
	PhoneEmail	·
	NameCompany	
	Address	
(If different than	Phone Email	
the applicant).		
PROJECT	Project name / description	
	Project address / Location	
	Project start date :	
	Project value (cost of construction not including cost of	of land) \$
	Site area (area of construction limits in square feet)	,
	, , , , , , , , , , , , , , , , , , ,	
Applicant's si	gnature	Date
STAFF USE O	NLY Type Site Plan Sub Work	S.F.
Folder Name		
PDF submitted:	No email drive/disk drop box web site	
Bond/letter of cr	edit/escrow \$Date	
Site plan approv	by Date	

 This form and other information about site plan review are available at www.stpaul.gov/dsi. Click on Zoning in the column on the left side of the page and then click on Site Plan Review.
 J:\zone\Handouts\Site plan handouts\1 Application for site plan review.doc
 3/9/15

# SUBMITTAL REQUIREMENTS

# Site Plan Review

# City of Saint Paul

### **APPLICATION FORM**

An "Application for Site Plan Review" must be filled out.

### FILING FEE

The fee is determined by the type and size of the project:

- Residential (1-2 units) \$200
- Residential (3 or more units), Commercial, Industrial, Institutional and all other uses
- \$500 for sites less than 10,000 square feet of land and \$200 for each additional 10,000 square feet of land (This is based on the entire parcel for most new buildings and the construction limits for additions to existing buildings).
- Additional fees of \$260 for sites on steep slopes, in the river corridor or tree preservation district; \$450 if a Traffic Demand Management Plan is required and \$300 if a public hearing at the Planning Commission is required.

Checks should be made payable to "City of Saint Paul". Payment can also be made by credit card.

## SITE PLAN

16 copies of the site plan must be submitted with the application. The plans must be drawn to scale. The sheets should be half-size or 11' x 17'. Electronic plans (in PDF) should also be submitted if available. Only 3 copies of stormwater calculations (Hydrocad and City worksheet) are required. <u>Plans should show the information listed below as needed:</u>

### **Existing Conditions**

- Existing buildings, property lines, easements, parking lots and other paved areas, sidewalks, driveways, grading, trees, catch basins, utility poles, street lights, traffic signals, parking meters, pavement markings (traffic lanes, turn arrows etc.), surrounding fire hydrants, any fire department connections for sprinklers or stand pipes
- Survey of existing conditions with the legal description of the property.
- Location map

### Site Layout

- Proposed buildings (with entrances indicated and all other openings, windows, vents, etc.), property lines, easements, parking lots (with parking stalls indicated), driveways, sidewalks and loading areas
- Dimensions and other appropriate labels
- The building footprint must be shown on a copy of the survey with dimensions for the building and setbacks
- Traffic and pedestrian control plans (if construction will block adjacent sidewalks and streets)

### Grading, Drainage, Utilities and Erosion Control

- Existing and proposed grading shown with two foot contour intervals and spot elevations at critical points
- Catch basins with rim and invert elevations
- Sanitary and storm sewers with pipe size and materials labeled, also with rim and invert elevations.
- Ponding areas for storm water detention where required. Calculations for storm water management should be shown on the City worksheet. (See Stormwater management handout.)
- Water lines, fire hydrants, fire department connections for sprinklers or stand pipes
- Erosion control measures such as silt fences, inlet protection, rock construction entrance and street cleaning
- Storm water pollution control plan (for sites that disturb one acre or more)
- Before the site plan is approved, the applicant must email the final sewer and stormwater drawings in PDF and AutoCAD format.
- The applicant must provide a Certification Statement and as-built drawings of all sewer lines in AutoCAD format within 60 days following sewer construction. See the Sewers and Stormwater Management Handout for details.

### Landscaping and other site improvements

- Existing significant vegetation identified by size and species (including trees in the boulevard)
- Proposed landscaping (trees, shrubs and ground cover) identified by size and species
- A planting list summarizing plant material used and details for planting new trees and protecting existing trees
- Fences and walls
- Site lighting and signs
- Street lights, traffic signs and signals, parking meters and changes to street pavement markings (traffic lanes etc.)

### **Building information**

- Building elevations
- Height of building, type of construction, whether sprinklers are proposed
- Roof drainage

# Submit to Tom Beach, Department of Safety and Inspections (DSI), 375 Jackson Street, Suite 220, Saint Paul, MN 55101-1806. Contact Tom Beach at 651-266-9086 or tom.beach@ci.stpaul.mn.us if you have questions.

# **REVIEW PROCESS**

# Site Plan Review

### 1. APPLICANT SUBMITS SITE PLAN.

The applicant submits the following to the Department of Safety and Inspections (DSI), 375 Jackson Street, Suite 220, Saint Paul, MN 55101-1806:

- 16 copies of the site plan (and PDF version if available)
- Completed application form
- Filing fee

### 2. CITY STAFF REVIEWS THE SITE PLAN.

The site plan is reviewed by staff in various City departments, including Sewers, Water, Traffic, Zoning, Parks, and Fire.

### 3. APPLICANT SHOULD MEET WITH THE DISTRICT COUNCIL FOR MOST PROJECTS.

A copy is sent to the District Council for the neighborhood where the project is proposed. It is recommended that applicants meet with the District Council for projects that will have an impact on the surrounding area. District Councils have an advisory role and send comments they have to City staff to be considered during the site plan review. District Councils generally meet once a month. A list of District Councils with their phone numbers is included in the site plan review handouts.

### 4. APPLICANT MEETS WITH STAFF 2 TO 3 WEEKS AFTER SITE PLAN IS SUBMITTED.

A meeting will be set up so that the applicant can meet with City staff. At this meeting, the applicant can explain the project and ask questions. Staff will ask questions and explain any revisions to the site plan that will be needed. This meeting normally lasts 30 to 60 minutes. For most projects, the review is done by staff and there is no public hearing at the Planning Commission or City Council.

### 5. STAFF EMAILS APPLICANT A SUMMARY OF THE SITE PLAN MEETING.

Staff will send an email to the applicant summarizing the comments from their meeting. Comments typically deal with zoning, parking, traffic, landscaping, utilities and storm water drainage. If there are issues raised by the District Council that need to be addressed, these will be included in the email too.

To ensure that all the improvements shown on the site plan are done, the City may in some cases require a security agreement in the form of a letter of credit, a performance bond or a cash escrow.

### 6. APPLICANT SUBMITS REVISED SITE PLAN.

If revisions to the site plan are needed, the applicant must submit 9 sets of revised plans to City staff. The revised plans will be reviewed against the comments staff had at the site plan meeting. This review takes about one week. Another meeting with staff is not usually needed.

### 7. STAFF VERIFIES CONDITIONS FROM THE APPROVAL ARE MET ON REVISED PLAN.

If the plan meets all City requirements staff will issue a letter approving the site plan. If further revisions to the plan are still needed, staff will notify the applicant.

### 8. APPLICANT APPLIES FOR BUILDING PERMITS.

It is sometimes possible to have Plan Review conducted of building plans at the same time the site plan review is going on. However, Plan Review will not issue permits until the site plan has been approved.

This information is available online at www.stpaul.gov/dsi.

Please call Tom Beach at 651-266-9086 if you have questions about site plan review.

# PARKING LOTS

# Site Plan Review

# City of Saint Paul

# PARKING LOT DIMENSIONS

The Zoning Code sets these minimum dimensions for these parking spaces and drive lanes:

### 90 Degree Parking

- Accommodates two-way traffic.
- Most efficient use of space (most parking spaces per square foot of parking lot).
- An aisle of 24 feet is preferable to the minimum 20 feet, if space permits.

### Angle Parking

- One-way traffic
- Can be used where the width of parking area is limited.
- It is recommended that drive lanes be 2-3 feet wider than minimum requirements where space permits.





### Parallel parking

## **COMPACT SPACES**

Up to 50 percent of the spaces may be designated for compact cars only. The minimum dimension for compact spaces is 8' x 16'. Compact spaces must be designated by a sign.

# ACCESSIBLE SPACES

Handicapped accessible parking must comply with the standards of the Americans with Disabilities Act.

Tot	tal Pa	arking	Accessible Spaces Required		
	5	Jaces	Spaces Required	JICK	3" MIN.
1	to	25	1	7/2////////////////////////////////////	TTTT
26	to	50	2		and a standard to the standard
51	to	75	3		1 1
76	to	100	4		
101	to	150	5		1 1
151	to	200	6		
201	to	300	7		
301	to	400	8		1 1
401	to	500	9		
501	to	1000	2%	8 8 8 8 8 8 8 8 8 8 8 8 8	
1001	and	over	20+1% over 1000	build and when build and and and	

Accessible parking spaces must be 8' wide with an access aisle next to it. The access aisle must be 8' wide. Accessible spaces must be located as close to accessible building entrances as possible. All accessible parking spaces must be designated with signs displaying the international handicapped symbol.

# PARKING LOT DESIGN

Paving All off-street parking facilities must be paved with asphalt or concrete. Gravel or crushed rock is not permitted. Parking spaces must be striped.

Curbs, wheel stops, berms or similar devices must be used to prevent vehicles from overhanging adjacent property or Curbs the public right-of-way. Concrete curbs are preferable but wheel stops and bituminous curbs are permitted.

Drainage Storm water drainage must be controlled. For further information see the "Stormwater Management" handout.

Screening and landscaping A visual screen is required for parking lots that are adjacent to a residential use or residentially zoned area. Ornamental fence, hedge and trees are required along street frontage for parking lots serving non-industrial uses. Parking lots with more than 20 spaces must provide interior landscaping equal to 15% of the paved surface.

Bike racks Parking lots with 12 or more spaces must provide bicycle parking/racks. (One bicycle space per 20 parking spaces.)

Travel Demand Management Plan Parking lots with over 100 spaces and significant expansion of existing large parking lots will require a Traffic Demand Management Plan.

# PARKING REQUIREMENTS

#### RESIDENTIAL

Single-family and duplex Multiple family

Housing for elderly Assisted living, nursing home Community residential Facility Dormitory, fraternity/sorority Bed and breakfast

#### RECREATIONAL

Theater, auditorium Dance hall, bingo hall, electronic game room, reception hall, exhibition hall, assembly hall without fixed seating, Health/sports club, martial arts club, dance studio, swimming club

### INSTITUTIONAL

place of worship Day care, elementary school junior high school Senior high school

University, college, seminary, technical college trade school, school, dance school

#### MEDICAL

Medical/dental/vet clinic Hospital

#### OFFICE

Offices and photo studio

#### **INDUSTRIAL**

Industrial manufacturing, limited production and processing

Warehousing, storage Wholesaling Testing lab, research Sheltered workshop

1.5 spaces per dwelling unit 1.0 space for efficiency and 1 bedroom units 1.5 spaces for 2 and 3 bedroom units 2.0 spaces for 4 or more bedroom unit 0.33 spaces per unit 1 space per 3 residents 1 space per every 2 beds 1 space per every 3 residents 1 space per dwelling unit and 0.5 spaces per guest room

1 space per 4 seats 1 space per 200 sq. ft. GFA

1 space per 400 sq. ft. GFA

Church, synagogue, mosque, 1 space per 250 sq. ft. GFA in the main unit of worship 1 space per employee

> 1 space per employee and1 space per 10 students

1 space per every 2 employees and 1 per every 3 full-time students not on campus or 1 for every 3 part-time students, which ever is greater plus required parking for other uses

1 space per 400 sq. ft. GFA 0.5 spaces per bed

1 space per 400 sq. ft. GFA

1 space per 1,000 sq. ft. GFA or and 1space per 2,000 sq. ft. GFA if more than 50% of production floor space is occupied by automated machinery 1 space per 5,000 sq. ft. GFA 1 space per 1,500 sq. ft. GFA 1 space per 575 sq. ft. GFA 1 space per employee plus 1 for each 25 program participants

### RETAIL SALES AND SERVICES

n	General retail and service, bank, building materials center, convenience market, currency exchang	1 space per 400 sq. ft. GFA up to 30,000 GFA plus 1 space for each additional 800 sq ft GFA over 30,000 sq e GFA
S	drug store, dry cleaning food shelf, furniture/appliance store liquor store, lumber yard, massage center, pawn sh photocopying, repair shop self-service laundromat, supermarket, tattoo shop, tobacco shop	op ,
	Green house, garden center	1 space per 400 sq ft GFA plus 1 space per 1,000 sq ft outdoor sales/display area
	Mortuary, funteral home Package delivery service Service business with Showroom or workshop	1 space per 150 sq ft GFA 1 space per 500 sq ft GFA 1 space per 900 sq. ft. GFA
	AUTOMOTIVE USES	
	Auto convenience market Auto sales and rental	1 space per 400 sq. ft. GFA 1 space per 400 sq. ft. GFA of area for sales and office, plus 1 space per 5,000 sq. ft. of outdoor sales
	Auto repair accessory to auto sales	1 space per auto service stall
	Auto repair station, body shop, service, station, specialty store	space per 400 sq. ft. GFA plus 1 space per auto service stall
	Car wash	1 space per 2 employees
	<b>RESTAURANTS</b>	
	Restaurant, coffee shop, tea house, deli fast food, coffee shop)	1 space per 400 sq ft GFA
	Establishment with entertainment license class C	1 space per 75 sq ft GFA
	Bar (An establishment that serves beer, wine, or intoxicating liquor for consumption on the prem	1 space per 150 sq ft GFA ises
	any time between midnigh	nt

"Space" means off-street parking space. On-street spaces are not counted toward meeting parking requirements. Parking is not required downtown (in theB-4 and B-5 zoning districts).

For more information or to determine parking requirements for uses not listed here call 651-266-9008. For more information about site plan review go to www.stpaul.gov/dsi, click on zoning, click on site plan review, click on Handouts and Forms and Click on Parking.

and 2:00 a.m.)

# SANITARY SEWER AND STORMWATER MANAGEMENT

## Site Plan Review

# **City of Saint Paul**

## SEWER AND STORMWATER MANAGEMENT PLANS

Sanitary sewer and stormwater management information must be included in the site plan. Depending on the type and size of the project, this may include:

- Sanitary and Storm Sewers: Existing and proposed pipes with sizes, inverts, lengths and materials labeled.
- *Catch Basins*: Existing and proposed catch basins with rim elevations, invert elevations, and catch basin types labeled.
- Ponding Areas: Existing and proposed ponding locations with sizes in acres labeled.
- Stormwater Calculations: Shown on the City worksheet provided with this handout.

### AutoCAD and PDF Files

An AutoCAD file titled "City of Saint Paul Sanitary and Stormwater Site Plan Map.dwg" is located at <u>http://www.stpaul.gov/spr</u>. The applicant is required to use this AutoCAD file along with its associated sanitary and storm layers when submitting the site plan for final sanitary and stormwater management approval. The finalized AutoCAD file and a PDF version of the site plan should be sent to Anca Sima at <u>anca.sima@ci.stpaul.mn.us</u>. AutoCAD drawings with external references will not be accepted.

### **Construction Record Drawings**

For as-built records, the applicant must add all installed, modified or removed sanitary and storm structures to the AutoCAD file that was submitted to the City for final approval during the permitting process. If storm sewers were not installed, then provide as-built grading instead along with any new sanitary sewers. The plan and profile views of all new public sanitary and storm sewer lines and plan views of all private sewer lines must be included in the AutoCAD file. Every drawing in the AutoCAD file shall be identified as "Construction As-built Drawing" in the title block and shall bear the signature and seal of a professional engineer. The AutoCAD file must be submitted to the City's representative, Anca Sima at anca.sima@ci.stpaul.mn.us no later than 60 days following installation of the sewer structures. If the as-built plans confirm that the site reduces the peak runoff rate to no more than 1.64 cfs per acre, up to a 25% credit may be applied to the property's Storm Sewer System Charge.

### STORMWATER MANAGEMENT REQUIREMENTS

A stormwater management plan must be submitted as part of the site plan package for review by the Department of Public Works. The purpose of the plan is to show how stormwater will be handled on the site: where it will drain to, at what rate, and steps that will be taken to protect water quality.

### Sites Smaller Than 1/4 Acre

For sites less than one quarter of an acre, it may be possible to meet the requirements for stormwater management by grading the site so that stormwater flows to a street or public alley. Stormwater drainage must be shown on the plan by grades and/or drainage arrows. Stormwater may not drain across a public sidewalk at any point except at a driveway.

### Sites 1/4 Acre or Larger

For sites equal to or greater than one quarter of an acre, the rate of stormwater runoff for the site may not exceed 1.64 cubic feet per second per acre. Stormwater must normally be directed to on-site stormwater detention ponds and catch basins connected to the City storm sewer system in order to control the rate of stormwater runoff from the site. If the development will be done in phases, the stormwater management plan should be presented at the first phase, for the whole area.

### The following information must be submitted:

Grading

- Grades or contours to define the routing of stormwater and stormwater detention areas.
- Provide a minimum of 1ft freeboard between the 1<sup>st</sup> floor elevation and the emergency overflow (EOF). Show the amount of freeboard on the plan.

### **Drainage Areas**

- Outline of each separate drainage area within the site property lines or improvement limits. Include roofs and all other surface areas.
- Area in acres of each drainage area.
- Separate pervious and impervious curve numbers along with drainage area descriptions.
  - Time of concentration in minutes of each drainage areas. (Continued on next page.)

### **On-site Detention**

- Outline of each separate on-site detention area. Ponding may be provided in parking lots, green areas, roof tops or underground storage.
- Depth in feet of on-site detention.
- Area in acres of on-site detention.
- Volume in acre-ft of on-site detention.
- Emergency overflow route of on-site detention.
- Provide a maintenance plan for Best Management Practices.

### Structures

• Location and details of all structures used to control the rate of discharge of storm water from the site. These include catch basins, manholes, pipes, weirs, curb openings and control flow roof drains. Rim and invert elevations in feet must be provided.

### **Connections to City Sewer**

- Connections are not permitted to City catch basins.
- Minimum pipe size is a 4 inch diameter pipe.
- The plan must include a note stating that "Connections to public sewers must be done by a Licensed House Sewer Contractor under a permit from Saint Paul Department of Public Works."
- Set the tailwater elevation equals to the invert elevation of the connecting point of the City sewer. If the peak discharge time of the private connecting pipe coincides with that of the City sewer, the City may require that the tailwater effects on the proposed on-site storage be investigated.

### Infiltration

- Soil analysis must show soil is not contaminated.
- No infiltration within 10 feet of the building foundation.

### Calculations

- The standard used to check for conformance with stormwater management requirements is HydroCAD version 7.10 or newer.
- Use the SCS TR-20 Runoff Method.
- Use 5.9 inches for the Type II 24-hr 100 year storm in the City of Saint Paul.
- Use a maximum rate control rate of 1.64 cubic feet per second per acre.
- Complete the following tables provided with this handout:
  - Table 1 (Drainage area information)
  - Table 2 (Drainage area peak runoff for 100 year storm)
  - Table 3 (On-site detention information)
  - Table 4 (On-site peak detention for 100 year storm)
  - Table 5 (On-site detention outlet control for 100 year storm)
  - Table 6 (Connection pipe to City sewer)
- Submit an electronic copy of HydroCAD files used to populate above tables.

### Sites One Acre or Larger

In addition to meeting the City's standards for rate control listed above, applicants of projects that disturb an acre or more must also meet the following requirements:

- Submit a Stormwater Pollution Prevention Plan to the MPCA and also obtain a General Stormwater Permit from them. (<u>http://www.pca.state.mn.us/water/stormwater/stormwater-c.html</u> or call 651-296-7219).
- Submit the site plan to the appropriate Watershed District for approval. A rough breakdown of the Watershed Districts in Saint Paul is as follows:
  - East third of the City: Ramsey Washington Watershed. (<u>http://www.rwmwd.org/</u> or call 651-792-7950)
  - West two thirds of the City: Capitol Region Watershed. (<u>http://www.capitolregionwd.org/</u> or call 651-644-8888)
  - Westside of the City: No Watershed permit required.

For more information regarding stormwater management, please call Anca Sima of Pubic Works at 651-266-6237 or visit the City's Zoning website at <u>http://www.stpaul.gov/dsi</u> (click on **Zoning** and then click on **Site Plan Review**).

## Table 1. Drainage Area information

Drainage Area Name	Area (acres)	Curve Number	Description of Area	Time of Concentration (minutes)
Total				

### Table 2. Drainage Area Peak Runoff for 100 year storm

Drainage Area Name	Runoff (cfs)	Volume (acre-ft.)
Total		

### Table 3. On-site Detention information

Name of On-Site Detention Structure					
Elevation (ft)	Surface Area (acres)	Incremental Storage (acre-ft.)	Cumulative Storage (acre-ft.)		

### Table 4. Peak On-site Detention for 100 year storm

Name of On-site Detention Structure:				
Peak Elevation (ft)	Time (Hours)	Required Storage for 1.64 cfs Rate Control to City Sewer (acre-ft.)	Available Storage for 1.64 cfs Rate Control to City Sewer (acre-ft.)	

## Table 5. On-site Detention Outlet Control for 100 year storm

Name of On-site Detention Outlet Structure:				
Outlet Type	Maximum Discharge (cfs)	Tailwater Elevation (ft.)		

## Table 6. Connection pipe to City Sewer

Name of Connection Pipe:								
Pipe Length (ft)	Pipe Diameter (inches)	Ріре Туре	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Maxin Discha (cf	num arge s)	Downstream Water Elevation (ft)	Invert of City Storm sewer (ft)

# SAMPLE SANITARY & STORMWATER SITE PLAN



# STORMWATER LANDSCAPING IN PARKING LOTS

# Site Plan Review

City of Saint Paul

## What is stormwater landscaping?

Stormwater Landscaping is landscaping in or near a parking lot that allows stormwater to infiltrate into the ground so it does not go into the sewer system or helps clean stormwater before it enters the sewer system. It includes:

- Rain gardens and similar recessed/sunken landscaped areas where stormwater can collect and infiltrate into the ground
- Swales and similar landscaped areas that filter stormwater runoff as it drains through them.
- o Ponds and similar landscaped areas that provide temporary ponding after storms

## When is stormwater landscaping required?

Stormwater Landscaping is required for parking lots that cover more than 0.25 acres and have 5 or more parking spaces over the minimum number of parking spaces required by zoning. This requirement does not apply to parking ramps. (See Section 63.319.b of the Saint Paul Legislative Code)

Parking lots that meet this threshold must provide 30 square feet of stormwater landscaping for every parking space over the minimum number of required spaces. Stormwater Landscaping can be counted to meet the overall landscaping requirement for the site.

The Stormwater Landscaping must be located where there are soils that can infiltrate water effectively (hydrologic soil type A or B) or with an under drain system in hydrologic soil type C.

Stormwater landscaping is <u>not</u> required in areas with poorly draining soils (type D); or where there is groundwater or bedrock within 3 feet of the surface; or there are nearby wells or utilities.

In addition to the Stormwater Landscaping requirement, sites must also comply with other state and local requirements including the City's rate control standard.

## **Examples of Stormwater Landscaping**

The layout of the stormwater landscaping practice will vary according to individual sites and to specific site conditions such as underlying soils, drainage, existing vegetation and location of utilities. The following illustrations are shown to provide ideas on alternative design options. They are not meant to be specific designs or specifications:

**Rain gardens** are shallow depressions with plants that infiltrate and improve water quality. Uncompacted soil in the rain garden allows water to infiltrate and plant roots absorb stormwater.





**Depressed landscape strips** Rain gardens and swales can be designed as long strips so they handle stormwater without losing parking spaces.



# More information on Stormwater Landscaping

Stormwater landscaping should be designed and constructed in accordance with the Minnesota Stormwater Manual - Version 2 (Jan. 2008), including but not limited to Chapter 12-6 (page 371-400) http://www.pca.state.mn.us/index.php/water/water-types-and-programs/stormwater/stormwatermanagement/minnesota-s-stormwater-manual.html

Other helpful resources on stormwater landscaping design and planting include: San Mateo County Sustainable Green Streets and Parking Lots Design Guidebook, 1<sup>st</sup> Edition <u>http://www.flowstobay.org/ms\_sustainable\_streets.php</u>

Metropolitan Council Urban Small Sites Best Management Practice Manual – Parking Lot Design Guide <u>http://www.metrocouncil.org/environment/Watershed/BMP/CH3\_RPPImpParking.pdf</u>

Please call Tom Beach at 651-266-9086 if you have questions about Stormwater Landscaping.

# SEDIMENT CONTROL

# Site Plan Review

# **City of Saint Paul**

Sediment control measures are used to protect water quality by keeping dirt and sediment from washing off construction sites and into streets, sewers, wetlands etc.

Sediment control measures must be shown on the site plan, including the location and details of how they will be constructed/installed.

The main measures include:

- Silt fences
- Inlet protection for catch basins and sewers
- Rock construction entrances
- Street sweeping

These measures need to be installed <u>before</u> grading, clearing and construction begins and must be maintained in good condition until the construction site is stabilized. For large projects, sediment control measure may have to be staged to provide appropriate protection as the project progresses or site conditions change.

### SILT FENCE

Silt fence is the most common sediment control measure. Silt fence must be properly installed and maintained to be effective. If it is not, dirt and sediment can get underneath the silt fence or knock it over.



Detail for installing silt fence.



Properly installed silt fence



Silt fence that was not maintained

# **INLET PROTECTION**

Catch basins must be protected from dirt and sediment by installing sediment control measures. These must be used on all catch basins that could get sediment from construction – ones on the site and also ones in nearby streets. Two types of inlet protection systems are shown here.





# **ROCK CONSTRUCTION ENTRANCE**

A temporary construction entrance is a stone pad located where vehicles leave a construction site. The purpose of the stone pad is to provide an area where mud can be removed from tires before a vehicle leaves the site. The stone pad consists of clean rock designed in such a way that vehicle tires will sink in slightly. This helps remove mud from the tires as the vehicle passes over the pad and provides an area where vehicle tires can be washed.

Installation of a rock construction entrance:

- The rock used for gravel pads should be a minimum 1- to 3-inch size, The aggregate should be placed in a layer at least 6 inches thick. Generally, the larger the aggregate, the better.
- The rock entrance should be at least 50 ft long.
- Geotextile fabric may be needed under the rock to prevent migration of mud from the underlying soil into the stone.
- If tires are cleaned with water, the wash water should be directed to a suitable settling area.



# STREET SWEEPING

The contractor must monitor conditions. If sediment reaches adjacent streets or alleys they must be swept until they are clean.

Please call 651-266-9086 if you have questions about sediment control.

# STORMWATER POLLUTION CONTROL PLAN

# Site Plan Review

# City of Saint Paul

A Stormwater Pollution Control Plan is required to ensure that Best Management Practices are used during construction and over the life of a project to minimize soil erosion and sedimentation that could result in storm water pollution.

### When is a Storm Water Pollution Control Plan required?

A Stormwater Pollution Control Plan must be submitted for projects where construction will disturb one acre or more.

### What information must be shown on a Storm Water Pollution Control Plan?

The name, address and telephone number of the following individuals:

- Property owner
- Applicant
- Person responsible for the preparation of the Storm Water Pollution Control Plan
- On-site person responsible for implementation, inspection and maintenance of the requirements of the Storm Water Pollution Control Plan
- Person responsible for the long term operation and maintenance of the permanent storm water management system

### A project description

*A map* of the existing site conditions that includes existing topography, existing drainage patterns, type of soils, vegetative cover, any wetlands, waterways or one hundred (100) year flood plain boundaries.

A site construction plan that includes the location of the proposed construction activity and the plan for the maintenance and inspection of the storm water pollution control measures.

Temporary storm water pollution control measures:

- Location
- Standard plates and/or specifications
- A plan to stabilize utility construction areas as soon as possible.
- A plan for removal of temporary erosion and sediment control measures at the end of the project.

Permanent storm water pollution control measures including:

- How the site will be stabilized after construction is completed
- Calculations that were made for the design of sediment basins, wet detention basins, diversions, infiltration zones, rate contol and other applicable practices.

Construction phasing that includes schedules for the project's erosion and sediment control practices

### Inspection and Maintenance of the Storm Water Pollution Control Plan's Measures

The applicant must routinely inspect the construction site once every 7 days during active construction and within 24 hours after a storm event greater than 0.25 inches in 24 hours.

The City's inspection staff is authorized to perform inspections to ensure that erosion and sediment control measures are properly installed and maintained. If the applicant fails to maintain proper erosion control measures, the inspector may take such enforcement action as may be required to achieve compliance. Enforcement may be, but is not limited to, stopping all construction work at the site until necessary remedial actions have been completed and erosion and sediment controls are in compliance with the approved plans.

### Bond, letter of credit or cash escrow

The City may require financial security, in the form of either bond, letter of credit or cash escrow to recover any costs it incurs in the event that it must take emergency action to install or repair storm water pollution control measures. This security must be available prior to commencing the project.

### **Temporary Storm Water Pollution Control Measures during Construction**

For more information on these and other measures see "Protecting Water Quality in Urban Areas" published by the Minnesota Pollution Control Agency on-line at <a href="http://www.pca.state.mn.us/water/pubs/sw-bmpmanual.html">http://www.pca.state.mn.us/water/pubs/sw-bmpmanual.html</a>

- Silt fence is required to hold all sheet flow runoff.
- All storm drain inlets must be protected during construction with either silt fence or an equivalent.
- Temporary rock construction entrances are required wherever vehicles enter and exit a site.
- Streets must be cleaned and swept whenever tracking of sediments occurs and before sites are left idle for weekends and holidays. A regular sweeping schedule shall be established.
- Temporary soil stockpiles must have silt fence or other effective sediment controls, and cannot be placed in surface waters, including storm water conveyances such as curb and gutter systems, or conduits and ditches.
- Sediment control measures must be properly installed by the builder before the construction activity begins and maintained in good condition until the site has been stabilized.
- Schedule the site's activities to lessen their impact on erosion and sediment creation and minimize the amount of exposed soil.
- All exposed soil areas with a continuous positive slope within 200 lineal feet of a surface water, must have temporary erosion protection or permanent cover for the exposed soil areas, according to the following table of slopes and time frames:

Type of Slope	Maximum time an area can remain open
Steeper than 3:1	7 days
10:1 to 3:1	14 days
Flatter than 10:1	21 days

- These areas include pond side slopes, and any exposed soil areas with a positive slope to a storm water conveyance system, such as a curb and gutter system, storm sewer inlet, temporary or permanent drainage ditch or other natural or man made systems that discharge to a surface water.
- All temporary Storm Water Pollution Control Measures must be regularly inspected and maintained.

*Temporary Sediment Basins* For common drainage locations that serve an area with 10 or more acres disturbed at one time, a temporary (or permanent) sediment basin must be provided prior to the runoff leaving the construction site or entering surface waters. In addition to this requirement, the applicant is encouraged to install temporary sediment basins where appropriate in areas with steep slopes or highly erodible soils even if less than 10 acres drains to one area. The basins must be designed and constructed in accordance with the current version of the MPCA's General Permit to Discharge Storm Water Associated with Construction Activity under the NPDES.

### Permanent Storm Water Pollution Controls

Where a project's development replaces vegetation and/or other pervious surfaces with 1 or more acres of cumulative impervious surface, a water quality volume of 2 inch of runoff from the new impervious surfaces created by the project must be treated in one of these ways prior to the runoff leaving the site or entering surface waters:

- Wet sedimentation basin
- Infiltration/filtration
- Regional ponds
- A combination of practices
- Alternate methods approved by the current version of the MPCA's General Permit to Discharge Storm Water Associated with Construction Activity

Permanent storm water pollution controls designed by a professional engineer licensed in the State of Minnesota.

At a minimum these facilities must conform to the most current technology as reflected in the current version of the MPCA's publication "Protecting Water Quality in Urban Areas"

Storm water runoff rate control is required for sites larger than one quarter of an acre which go through the City's Site Plan Review process. Storm water discharge into public storm sewers shall be controlled, in accordance with the Department of Public Works Policy

For sites that require permanent storm water pollution controls, a certification letter shall be submitted after the facilities have been installed to affirm that construction has been completed in accordance with the approved Storm Water Pollution Control Plan. At a minimum, certification shall include a set of as-built drawings comparing the approved storm water management plan with what was constructed. Other information shall be submitted as required by the approving agency.

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# LANDSCAPING

# Site Plan Review

# City of Saint Paul

# LANDSCAPE PLAN

A landscape architect or nurseryman must prepare the landscape plan. The plan must show:

- New landscaping (Trees, shrubs, grass and other ground covers)
- The location of each new plant with the species and size labeled
- A planting list for the entire site summarizing the plant material used
- Planting details for planting trees and shrubs
- Areas to be seeded or sodded (Gravel or landscape rock does not, by itself, constitute landscaping.) **Existing vegetation**
- All existing trees larger than 6" in diameter (identified by species and size)
- Any trees that will be removed
- Any trees that will be relocated. Show the existing and new location.
- Tree protection measures for trees in the area of construction that will be saved
- Any other significant existing vegetation
- Other landscape elements
- Fences and walls
- Berms
- Lighting

## TREES

### Size

New shade trees must be a minimum of 2.5" in diameter at the time of planting. Evergreen trees must be at least 6' high. The roots of new trees must be balled and burlapped.

### Species

A landscape architect can choose species that are suited for the conditions on your site.

### **Boulevard trees**

Boulevard trees must be planted at the time of construction if they are not there now. The cost is the responsibility of the property owner or developer. The species of the trees is determined by the City Forester. A permit from the City Forester (651-632-5129) is required to plant or remove trees in the boulevard. There is no charge for this permit.

### Preserving existing trees

Buildings and paved areas should be located to avoid affecting existing trees whenever possible. Trees should also be considered when designing the grading plan: raising or lowering the existing grade as little as 6" within the drip line of a tree can damage or kill it. Trees must be protected with snow fence at the drip line Where grading or construction activities will be occurring near a significant existing tree. Specific requirements for saving and replacing trees apply to sites in the City's Tree Preservation District and on steep slopes. Refer to the City's Tree Preservation handout.

## SHRUBS

Shrubs must be at least 18" tall when planted. The roots may be potted or balled and burlapped.

## **GRASS AND GROUNDCOVER**

All areas of the site that are not otherwise landscaped or do not have existing vegetation must be covered with grass (sodded or seeded) or other groundcover.

## **SCREENING**

Some land uses must be visually screened from adjacent property. These uses include:

- Off-street parking adjacent to residential areas
- Loading/delivery areas
- Outdoor storage
- Trash dumpsters

Visual screensmay consist of a wall or fence, earth berm, plant materials or combination of these. The screen must be at least 80% opaque. Chain link fences with slats are not acceptable as visual screens.

# LANDSCAPING FOR PARKING LOTS

### **Perimeter landscaping**

Parking lots must be set back from the property line and this setback area must be landscaped. Where cars park so that the bumper faces a public sidewalk, a setback of at least 7' must be provided. In other cases, the setback must be at least 4'

The landscaped setback must include a visual screen where it faces a public street (except for parking lots in industrial areas). This screen can be either a masonry wall or a decorative fence (not chain link) at least 3.5' high. Decorative fences must be supplemented with a hedge that is at least 50% opaque to form a visual screen.

At least one shade tree must be planted every 30' in the perimeter landscaped area.

### Interior landscaping

In addition to perimeter landscaping, parking lots with more than 20 spaces or 6,000 square feet of pavement must have interior landscaping or islands. The area of interior landscaping must equal at least 15% of the paved area of the parking lot and must include shade trees. Interior landscaping cannot substitute for perimeter landscaping, but may join perimeter landscaping as long as it extends at least 4 feet into the parking area from the perimeter landscape line. These examples show what can count as interior landscaping:

### Trees

At least one shade tree must be planted for every five parking spaces.

### Stormwater landscaping

When more parking spaces are provided than the minimum number required by the zoning code, 30 square feet of stormwater landscaping must be provided for every parking space above the minimum. This applies to surface parking lots larger than ¼ acre where the number of parking spaces provided exceeds the City's minimum requirement by more than 4 spaces. This does not apply not to parking ramps or underground parking structures.

# **DESIGN STANDARDS**

# Site Plan Review

# City of Saint Paul

### **CITYWIDE DESIGN STANDARDS FOR BUILDINGS**

The following is a summary of design standards that apply to new construction and building additions. The complete text of the standards can be found in Section 63.110 of the Saint Paul Legislative Code.

### **Building entrances**

- A primary entrance of principal structures shall be located within the front third of the structure. It must be delineated with elements such as roof overhangs, recessed entries, landscaping, or similar design features. It must have a direct pedestrian connection to the street.
- In addition, for one- and two-family dwellings, a primary entrance shall either
  - Face an improved abutting street or
  - Be located off of a front porch, foyer, courtyard, or similar architectural feature and set back at least 8 feet from the side lot line.

### Windows

- For principal buildings, except industrial, production, processing, storage, public service and utility buildings, above grade window and door openings shall comprise at least fifteen (15) percent of the total area of exterior walls facing a public street or sidewalk.
- In addition, for new principal residential buildings, above grade window and door openings shall comprise at least ten (10) percent of the total area of all exterior walls. Windows in garage doors shall count as openings; the area of garage doors themselves shall not count as openings. For residential buildings, windows shall be clear or translucent. For nonresidential buildings, windows may be clear, translucent, or opaque.

### Holding the corner

In pedestrian-oriented commercial districts (characterized by storefront commercial buildings built up to the public sidewalk), new principal structures shall have a maximum setback of 15 feet from a commercial front lot line. At intersections, buildings shall "hold the corner," that is, have street facades within 15 feet of the lot line along both streets, or the site plan shall have vertical structural elements that "hold the corner." A primary entrance shall face a primary abutting public street.

### **Building Materials**

Building materials and architectural treatments used on sides of buildings facing an abutting public street should be similar to those used on principal facades.

### **Rooftop Equipment**

The visibility of rooftop mechanical equipment shall be reduced through such means as location, screening, or integration into the roof design. Screening shall be of durable, permanent materials that are compatible with the primary building materials. Exterior mechanical equipment such as ductwork shall not be located on primary building facades.

### **Historic buildings**

For properties with local historic designation (either as an individual site or as part of a district), compliance with applicable historic guidelines is sufficient to meet these Citywide design standards.

### **OTHER DESIGN STANDARDS**

### **Traditional Neighborhood Districts**

Additional design standards apply to property that is zoned T1, T2, T3 or T4 (traditional neighborhood districts). These standards are found in Section 66.343 of the Saint Paul Legislative Code.

### **Overlay Districts**

The City has a number of overlay zoning districts that may have additional design standards. Contact Zoning Staff at 651-266-9008 if you have questions.

# STAFF

# Site Plan Review

## Zoning Site Plan Review

Tom Beach Department of Safety and Inspections 375 Jackson Street, Suite 220 Saint Paul, MN 55101 651-266-9086 tom.beach@ci.stpaul.mn.us

or Larry Soderholm 651-266-9014 larry.soderholm@ci.stpaul.mn.us

### **Zoning Variances**

Yaya Diatta Department of Safety and Inspections 375 Jackson Street, Suite 220 Saint Paul, MN 55101 651-266-9080 yaya.diatta@ci.stpaul.mn.us

### Signs

Yaya Diatta Department of Safety and Inspections 375 Jackson Street, Suite 220 Saint Paul, MN 55101 651-266-9080 yaya.diatta@ci.stpaul.mn.us

### **Building Plan Review**

Jim Williamette Department of Safety and Inspections 375 Jackson Street, Suite 220 Saint Paul, MN 55101 651-266-9077 jim.wiliamette@ci.stpaul.mn.us

Fire Safety Angie Wiese Department of Safety and Inspections 375 Jackson Street, Suite 220 Saint Paul, MN 55101 651-266-8953 angie.wiese@ci.stpaul.mn.us

### **Traffic Engineering**

David Kuebler/ Coleen Paavola Public Works 25 4th Street W, 1000 City Hall Annex Saint Paul, MN 55102 651-266-6217 david.kuebler@ci.stpaul.mn.us colleen.paavola@ci.stpaul.mn.us

### Sidewalks

Al Czaia Public Works 25 4th Street W, 900 City Hall Annex Saint Paul, MN 55102 651-266-6108 <u>al.czaia@ci.stpaul.mn.us</u>

### Sewers

Anca Sima Public Works 25 4th Street W, 700 City Hall Annex Saint Paul, MN 55102 651-266-6237 anca.sima@ci.stpaul.mn.us

### Water Resources

Wes Saunders-Pearce Department of Safety and Inspections 375 Jackson Street, Suite 220 Saint Paul, MN 55101 651-266-9112 wes.saunders-pearce@ci.stpaul.mn.us

### Water Service

Ramsey Coronado/Dave Marruffo Saint Paul Regional Water Services 1900 Rice Street Saint Paul, MN 55113 651-266-6294 ramsey.coronado@ci.stpaul.mn.us

### **Technical Services**

Terri Vasquez Public Works 25 4th Street W,1000 City Hall Annex Saint Paul, MN 55102 651-266-6128 terri.vasquez@ci.stpaul.mn.us

### **Right of Way**

Don Stein Public Works 899 Dale Street North Saint Paul MN 55103 651-266-9808 don.stein@ci.stpaul.mn.us

### **Street Engineering**

Scott Brimer Public Works 25 4th Street W, 900 City Hall Annex Saint Paul, MN 55102 651-266-6225 scott.brimer@ci.stpaul.mn.us

### **Street Vacations**

Bruce Engelbrekt Real Estate Division 25 4<sup>th</sup> Street W, 1000 City Hall Annex Saint Paul, MN 55102 651-266-8854 <u>bruce.engelbrekt@ci.stpaul.us</u>

Traffic Lights and Signals Sonja Piper Public Works Traffic Operations 25 W 4<sup>th</sup> Street, 800 City Hall Annex Saint Paul, MN 55103 266-6256 sonja.piper@ci.stpaul.mn.us

# City of Saint Paul

### Parks

David Ronzani 500 City Hall Annex 25 West 4th Street Saint Paul, MN 55102 651-266-6410 david.ronzani@ci.stpaul.mn.us

#### **City Forester**

Zach Jorgensen Parks and Recreation 1120 Hamline Avenue North Saint Paul, MN 55108 651-632-2437 zach.jorgensen@ci.stpaul.mn.us

#### **Planning and Economic Dev**

Bill Dermody 1400 City Hall Annex 25 West 4th Street Saint Paul, MN 55102 651-266-6617 bill.dermody@ci.stpaul.mn.us

### Saint Paul on the Mississippi

Design Center (advisory role) Tracey Kinney Saint Paul River Front Corp 25 West 6th Street Saint Paul, MN 55102 651-293-6864 kinney@riverfrontcorporation.com

### Crime Prevention Through

Environmental Design (ČPTED) Mike Polski / Police Department 722 Payne Avenue Saint Paul, MN 55106 651-266-5936 mike.polski@ci.stpaul.mn.us

#### Ramsey Washington Metro Watershed Paige Ahlborg 2665 Noel Drive Little Canada, MN 55117 651-792-7964 paige.ahlborg@rwmwd.org

### **Capitol Region Watershed**

Forrest Kelley 1410 Energy Park Drive Suite 4 St. Paul, MN 55108 651-644-8888 forrest@capitolregionwd.org

### MN Department of Transportation Tod Sherman 1500 W County Road B2, MS 050 Roseville MN 55113 651-234-7794

tod.sherman@state.mn.us