EXHIBIT 3
PAGE 1 OF 4

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CITY OF WOODINVILLE
DEVELOPMENT SERVICES

BEFORE THE HEARING EXAMINER
FOR THE CITY OF WOODINVILLE

In the Matter of the appeal of	)	No. HEA-09-01
	)	
Woodinville Medical Center General Partnership	)	**Skony Medical Building**
	)	
Of an Administrative Decision Relating To Building Permits BLD08116, BLD08118, SDL08020, PROJ08077 and DEV08005	)	WOODINVILLE MEDICAL CENTER'S WITNESS LIST, DOCUMENT LIST, DOCUMENTS, AND STATEMENT OF MEDIATION STATUS

Pursuant to the Pre-Hearing Order, Woodinville Medical Center submits the following:

1. Witness List

   a. Mark J. Jacobs, PE, PTOE
   President JTE – Jake Traffic Engineering, Inc.
   7731 8th Ave SW
   Seattle, WA 98106
   Tel: (206) 762-1978 / Cell: (206) 799-5692

   Mark Jacobs is a licensed Professional Engineer in the State of Washington and is a certified Professional Traffic Operations Engineer by the Transportation Professional Certification Board, Inc. He has worked more than 1,000 traffic engineering projects and has expertise in the preparation and review of traffic studies and associated traffic mitigation requirements. This expertise extends to intersection operational/safety analysis, site feasibility review, identifying appropriate traffic mitigation, site access analysis, the preparation of technical variance/deviation requests, and traffic channelization and signing plans.

LAW OFFICES OF
KELLER ROHRBACK L.L.P.
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b. Daniel Gerbitz
Senior Vice President/General Manager
Pioneer Management Company
11747 NE First Street, Suite 220
Bellevue, WA 98005
Tel: (425) 455-1331

Daniel Gerbitz is the agent for the Woodinville Medical Center General Partnership ("WMC") and will testify about the impact of the proposed design on WMC.

2. Document List

a. Table 9-2. Functional Classification System Road/Street Segments.

b. Table "Minimum Driveway Spacing". City of Woodinville, Transportation Infrastructure Standards and Specifications, 1999 (Page 1.42); and City of Woodinville, Infrastructure and Design Standards and Specifications, 2007 (Page 1.51 – 1.52).

c. Woodinville Medical Center Site Access Review letter from Jake Traffic Engineering, June 18, 2009 which includes the Transportation Impact Analysis, prepared by transpoGroup, January 2000, page 9.

d. City of Woodinville, Transportation Infrastructure Standards and Specifications, 1999 (Page 1.40); and City of Woodinville, Infrastructure and Design Standards and Specifications, 2007 (Page 1.51).

e. Maps of the Parcels.

f. Copies of all sections in the City of Woodinville Public Infrastructure Standards and Specifications on which the Appellant relies on its appeal.

3. Copies of the Documents: See attached Exhibits for Documents.

4. Statements as to the Status of any mediation entered into by the parties: The parties are currently negotiating an attempted settlement.

5. Copy of all sections in the City of Woodinville Public Infrastructure Standards and Specifications on which the Appellant relies on its appeal. Please note: that the appeal cites the 1999 standards and that there are 2007 standards. However, the substance of these sections is the same. We have enclosed copies of the relevant 1999 section and the 2007 section.

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PAGE 3 OF 4

DATED this 23rd day of September, 2009.

KELLER ROHRBACK L.L.P.

By _____
Benjamin J. Lantz, WSBA #25057
Amy E. Hughes, WSBA #39552
Attorneys for Woodinville Medical Center

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EXHIBIT 3
PAGE 4 OF 4

CERTIFICATE OF SERVICE

The undersigned certifies under penalty of perjury under the laws of the State of Washington that on the below date, I caused to be served via US mail, postage prepaid, a true and correct copy of this document to:

Ms. Sandy Guinn
o/b/o Theodore Paul Hunter, Hearing Examiner
Woodinville City Hall
17301 – 133rd Avenue NE
Woodinville, WA 98072-8534

Mr. Hal Hart
Director Development Services
City of Woodinville
17301 – 133rd Avenue NE
Woodinville, WA 98072-8534

Mr. Donald E. Marcy
Attorney for Applicant Skony Resources, Inc.
Cairncross & Hempelmann, P.S.
524 Second Avenue, Suite 500
Seattle, Washington 98104-2323

DATED at Seattle, Washington this 23rd day of September, 2009.

Megan Johnston

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A

FUNCTIONAL CLASSIFICATION SYSTEM ROAD/STREET SEGMENTS

EXHIBIT 3A
PAGE 2 OF 5

140TH AVENUE NE IS A PRINCIPAL ARTERIAL STREET

Table 9-2. Functional Classification System Road/Street Segments	Adopted Functional Classification
140th Ave NE: From NE 195th to southern City limits	5 Lane Principal Arterial
. . .	
NE 171st St, 146th Pl NE, NE 173rd St, 155th Pl NE, NE 175th St, 164th Ave NE, NE 180th Pl, 167th Ave NE: From 140th Ave NE to NE Woodinville-Duvall Rd	Collector
. . .	
131st Ave NE, NE 171st St: From SR 522 to 140th Ave NE	5 Lane Principal Arterial

(City of Woodinville Comprehensive Plan, Chapter 9 pages 21-22)

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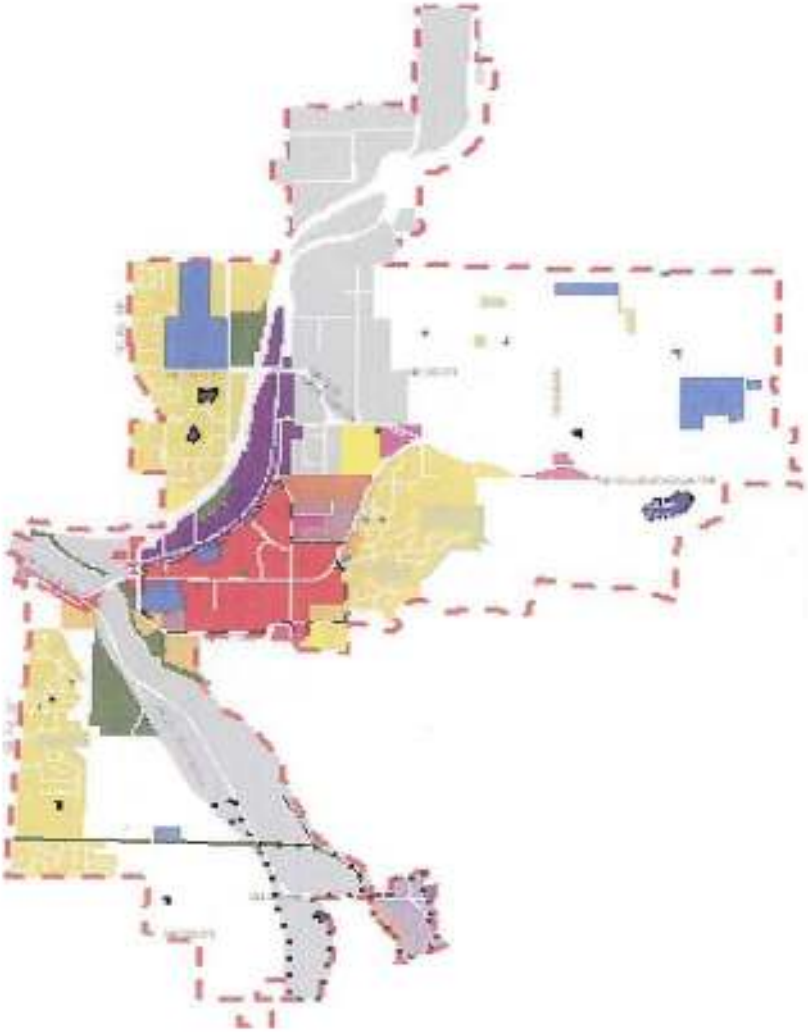
PAGE 3 OF 5

COMPREHENSIVE PLAN



"Citizens, business, and local government; a community commitment to our future."

Amended December 2008

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9.3.2.4 Transportation System Management Plan

Transportation System Management has the objective of increasing the vehicular and person trip capacities of the existing street and highway system. It is closely integrated with the Transit/High-occupancy vehicle/Rideshare and the Transportation Demand Management plans and programs, as well as the Road System Facilities Plan. It includes all traditional traffic engineering measures along with improvements and measures of the other plan elements above. Spot and low-cost improvements are sometimes included under Transportation System Management, although such projects of more than minor cost have herein been included in the Road System Facilities Plan. Two programs, safety management, and intersection control management are included in the monitoring section (9.5) and identify processes for annually setting priorities and identifying these types of improvements.

Functional Classification

The functional classification of Woodinville's streets is a Transportation System Management and capital planning element and is a tool to guide, unify, and prioritize improvements to the street system as well as address their transportation service needs, design features, access management, and operational performance characteristics.

Figure 9-4 shows the existing functional classification of principal arterials, minor arterials, and collector streets. Recommended revisions to the arterial system classification are presented in Table 9-2. The recommended revisions are based on the various functional classification criteria, such as current and forecasted traffic volumes, speeds, truck, and transit usage, and associated trip/traffic geography such as the importance of local and sub-regional destinations and linkages served, trip length, and through traffic levels.

Table 9-2. Functional Classification System

	Road/Street Segments	Adopted Functional Classification
1.	140th Ave NE: From NE 195th to southern City limits	5 Lane Principal Arterial
2.	Wood-Snoh Rd: From NE 195th to northern City limits	3 Lane Principal Arterial
3.	Woodinville-Redmond Rd NE (SR 202): From the southern City limits to 127th Pl NE	3 Lane Principal Arterial
4.	NE 195th St, NE North Woodinville Way, NE Woodinville-Duval Rd: From 136th Ave NE to 156th Ave NE	5 Lane Principal Arterial
5.	NE 143rd St, 137th Pl NE: From 132nd Ave NE to SR 202	Minor Arterial
6.	156th Ave NE: From northern City limits to NE Woodinville-Duvall Rd	Collector
7.	NE 171st St, 146th Pl NE, NE 173rd St, 155th Pl NE, NE 175th St, 164th Ave NE, NE 180th Pl, 167th Ave NE: From 140th Ave NE to NE Woodinville-Duvall Rd	Collector
8.	SR 202: From Woodinville-Redmond Road (SR 202) to 131st Avenue NE	5 Lane Principal Arterial
9.	131st Ave NE, NE 171st St: From SR 522 to 140th Ave NE	5 Lane Principal Arterial
10.	NE 175th St, NE Woodinville Duvall Rd: From 131st Ave NE to NE North Woodinville Way	3 Lane Principal
11.	NE Woodinville-Duvall Rd: From 156th Ave NE to east city limits	3 Lane Principal
12.	NE 173rd Pl: From 124th Ave NE to 127th Pl NE	3 Lane Principal
13.	148th Ave NE: From SR 202 to NE 147th Pl	3 Lane Principal
14.	NE 173rd · From western City limits to SR 202	Minor Arterial

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15. NE 176th (Mill Pl): From Little Bear Creek Pkwy to 140th Ave NE	Minor Arterial
16. 130th Ave NE, 132nd Ave NE: From SR 522 to north city limits	Collector
17. Woodinville-Snohomish Rd NE, 132nd Ave: From NE 175th St to 140th Ave NE	Collector
18. NE 195th St: From western City limits to 136th Ave NE	Collector
19. 205th St.: from 130th Ave NE to Wood-Sno Rd	Collector
20. 124th Ave NE: from NE 145th PL to NE 173rd Pl	Arterial

Source: City of Woodinville, 1996.

The existing routing of SR 202, via the Woodinville-Redmond Road segment northwest of the NE 145th Street/148th Avenue NE intersection, does not coincide with the City's Land Use Goals and Policies. Several alternative routes are possible:

1. Shift the route to 140th Place NE - 148th Avenue NE to the NE 171st Street South Bypass, and along the latter and 131st Avenue NE to the SR 522/132nd Avenue NE Interchange,

2. Shift the route to 140th Place NE, then to Woodinville-Snohomish Road to either SR 522 at the NE 195th Street interchange or at the SR 9 interchange,

3. "Split the SR 202 route" and assign it to both (1) and (2) above,

4. Provide an overpass over SR 522. Shift the SR 202 segment between SR 202/127th PL NE and SR 202/SR 522 Interchange to the new overpass, and

5. Abandon as a SR altogether.

These measures meet land use objectives for the Tourist District. Furthermore, potential costly and difficult widening of the existing SR 202 routing to four or five lanes by the Washington State Department of Transportation can be avoided, with some of the savings shifted to improvements recommended herein for the alternative routes.

Access Management

Access management is an ongoing Transportation System Management activity for the City's arterial system that includes these measures:

1. Regulating minimum spacing of driveway and local street intersections,

2. Encouraging consolidated access for adjacent properties, with good internal connections within the properties,

3. Controlling turning movements at driveways, with turn prohibitions via traffic control devices or raised medians and other channelization measures, and

4. Developing access classifications within the functional classification system that promote the function and set desirable access limits for driveways, turn prohibitions and intersection spacing.

Routes identified for further review of access management include:

1. SR 202, Woodinville-Redmond Road,

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B

MINIMUM DRIVEWAY SPACING

EXHIBIT 3B
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Minimum Driveway Spacing as a Multiple of Posted Speed (in feet)			
Street Functional Classification	**Minimum Use[1]**	**Minor Generator[2]**	**Major Generator[3]**
Principal Arterial	4–5	7–8	9–10
Minor Arterial	3–4	5–6	7–8
Commercial Collector	2–3	4–5	5–6

1. Fewer than 50 vehicle trips per day or 5 trips in the peak hour (two-way total).
2. About 51 to 5,000 vehicle trips per day or fewer than 500 trips in the peak hour (two-way total).
3. Over 5,000 vehicle trips per day or over 500 trips in the peak hour (two-way total).

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(City of Woodinville, Transportation Infrastructure Standards and Specifications, 1999 (Page 1.42; and City of Woodinville, Infrastructure and Design Standards and Specifications, 2007 (Page 1.51 – 1.52)

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PAGE 3 OF 6

CITY OF WOODINVILLE

TRANSPORTATION INFRASTRUCTURE STANDARDS AND SPECIFICATIONS

1999 Edition

Distributed By:

Public Works Department
13203 NE 175th Street
Woodinville, WA 98072

EXHIBIT 38
PAGE 4 OF 6

Street Functional Classification	Minimum Driveway Spacing as a Multiple of Posted Speed (in feet) Minimum Use[1]	Minor Generator[2]	Major Generator[3]
Principal Arterial	4–5	7–8	9–10
Minor Arterial	3–4	5–6	7–8
Commercial Collector	2–3	4–5	5–6

1. Fewer than 50 vehicle trips per day or 5 trips in the peak hour (two-way total).
2. About 51 to 5,000 vehicle trips per day or fewer than 500 trips in the peak hour (two-way total).
3. Over 5,000 vehicle trips per day or over 500 trips in the peak hour (two-way total).

1-4.6.4 Driveways Within Areas of Limited Street Improvements

1. Where standard gutters and curbs have not been installed, the apron length shall be measured along the property line and there shall be not less than 20 feet of frontage between driveway approaches serving any one property. Permits shall not be issued for any surface improvement or paving on the street right-of-way between driveway approaches unless a concrete curb or other physical obstruction of a design satisfactory to the Public Works Director is constructed and maintained by the applicant along his property line so that the entrance and exit of vehicles to and from applicant's property will be restricted to the established driveway approaches. Pursuant to the permit conditions, the applicant may surface the driveway approaches or other areas within the right-of-way, extending the same type of paving used on the applicant's premises so that it merges with the street pavement; provided the applicant's paving is adequate and suitable for the traffic to be carried. Such extended paving between the property line and the street pavement shall be to established grade or other slope as designed by the Project Engineer and approved by the Public Works Director to provide for proper runoff.

2. Such paving between the property line and the street pavement may meet the street pavement at a point ahead of the curb opening in order to provide for safe deceleration of vehicles turning into the applicant's premises. If applicant's paving is extended beyond the property line into a street right-of-way at an intersection or crossroad, the Public Works Director may require the applicant to construct a suitable traffic island or curb to provide for the protection of such municipal facilities as may be necessary.

1-4.6.5 City-Required Reconstruction of Approaches

1. Reconstruction. All driveway approaches heretofore constructed or installed and now in use, which are deemed by the City Council as exceeding the allowable width per

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WOODINVILLE INFRASTRUCTURE DESIGN STANDARDS AND SPECIFICATIONS

2007 Edition

Prepared by

City of Woodinville
17301 133rd Avenue NE
Woodinville, WA 98072

EXHIBIT 3B
PAGE 6 OF 6

Street Functional Classification	Minimum Driveway Spacing as a Multiple of Posted Speed (in feet) Minimum Use[1]	Minor Generator[2]	Major Generator[3]
Principal Arterial	4–5	7–8	9–10
Minor Arterial	3–4	5–6	7–8
Commercial Collector	2–3	4–5	5–6

1. Fewer than 50 vehicle trips per day or 5 trips in the peak hour (two-way total).
2. About 51 to 5,000 vehicle trips per day or fewer than 500 trips in the peak hour (two-way total).
3. Over 5,000 vehicle trips per day or over 500 trips in the peak hour (two-way total).

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1) Where standard gutters and curbs have not been installed, the apron length shall be measured along the property line and there shall be not less than 20-feet of frontage between driveway approaches serving any one property. Permits shall not be issued for any surface improvement or paving on the street right-of-way between driveway approaches unless a concrete curb or other physical obstruction of a design satisfactory to the Public Works Director is constructed and maintained by the applicant along his property line.

2) The entrance and exit of vehicles to and from applicant's property will be restricted to the established driveway approaches. Pursuant to the permit conditions, the applicant may surface the driveway approaches or other areas within the right-of-way, extending the same type of paving used on the applicant's premises so that it merges with the street pavement, provided the applicant's paving is adequate and suitable for the traffic to be carried. Such extended paving between the property line and the street pavement shall be to established grade or other slope as designed by the Project Engineer and approved by the Public Works Director to provide for proper runoff.

3) Such paving between the property line and the street pavement may meet the street pavement at a point ahead of the curb opening in order to provide for safe deceleration of vehicles turning into the applicant's premises. If applicant's paving is extended beyond the property line into a street right-of-way at an intersection or crossroad, the Public Works Director may require the applicant to construct a suitable traffic island or curb to provide for the protection of such municipal facilities as may be necessary.

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C

WOODINVILLE MEDICAL CENTER SITE ACCESS REVIEW LETTER FROM JAKE TRAFFIC ENGINEERING

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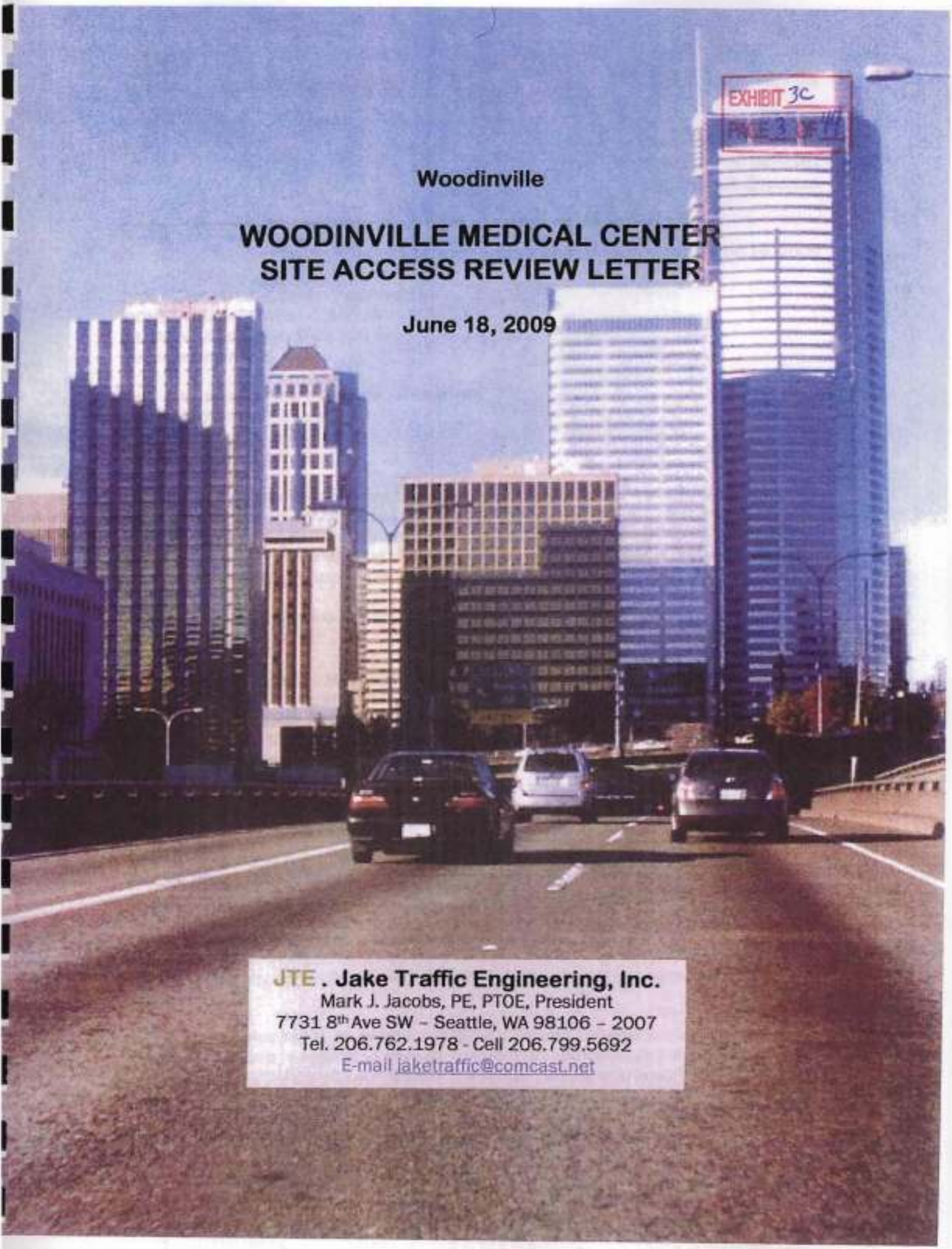

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Woodinville

WOODINVILLE MEDICAL CENTER SITE ACCESS REVIEW LETTER

June 18, 2009

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Mark J. Jacobs, PE, PTOE, President
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Tel. 206.762.1978 - Cell 206.799.5692
E-mail jaketraffic@comcast.net

JTE . Jake Traffic Engineering, Inc. .

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PAGE 4 OF 44

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President
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Tel. 206.762.1978 - Cell 206.799.5692
E-mail jaketraffic@comcast.net

June 18, 2009

Daniel Gerbitz, CSM, Senior Vice President
PIONEER MANAGEMENT COMPANY
11747 NE First Street, Suite 220
Bellevue, WA 98005

Re: Woodinville Medical Center - Woodinville
Site Access Review Letter

Dear Mr. Gerbitz;

I have prepared this letter reviewing the Woodinville Medical Center's site driveways. In particular the potential for conflict at the existing Woodinville Medical Center's access on 140th Ave. SE with a proposed driveway by the Skony Medical Building (referenced as the Woodinville Medical Office Building in the Transportation Impact Analysis prepared by Transpo Group dated January 2009).

Items conducted for this analysis include:

- Site review
- Review of Woodinville Medical Office Building Transportation Impact Analysis dated January 2009 prepared by the Transpo Group
- A May 13, 2009 Transpo Group Memorandum from Mike Swenson/Jesse Birchman to Tom Hanson, City of Woodinville.
- Review City access spacing/sight lines criteria.
- Traffic Operational Review

Referencing in this letter identifies your site (the existing facility) as the Woodinville Medical Center and the proposed medical facility to the south as the Skony Medical Building. The Transpo Group traffic report had identified the Skony Medical Building as the Woodinville Medical Office Building. Thus to avoid confusion I will refer to your site as the Woodinville Medical Center and the site to the south as the Skony Medical Building.

Project Information

Figure 1 is a vicinity map which shows the location of the site and the surrounding street system.

The Woodinville Medical Center has 34,243 gsf of space (as provided to me) and has 162 on-site parking stalls. Access to this facility is via two full access driveways with one on NE 171st St. and the other on NE 140th Street. The on-site parking ratio is 4.73 stalls per 1,000 gsf.

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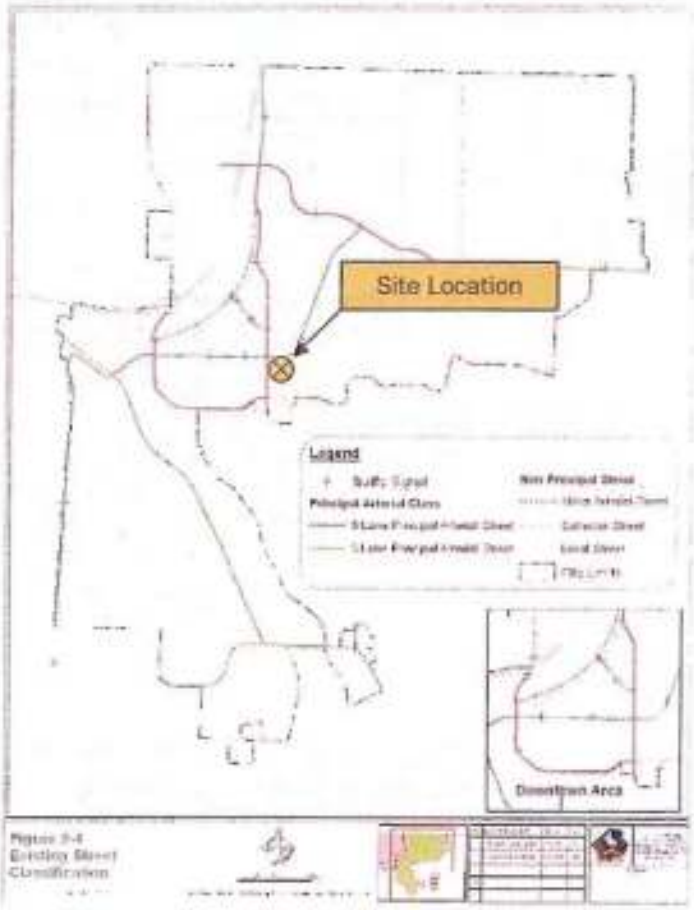
JTE, Inc.

The Skony Medical Building is about 23,400 gsf (per the Transpo Group report) and has 95 parking stalls (per the Woodinville Design Review plan, April 22, 2009; copy in appendix). Review of the site plan indicates a proposed full access driveway on 140th Avenue Northeast. The parking ratio is 4.06 stalls/1,000 gsf.

An aerial image obtained from King County IMap showing the two sites is depicted to the right.

Street Classification

City access criteria is based on the street classification (the Transpo Group report inadvertently referenced a roadway network in their report; Woodinville is a City thus the correct terminology is street network). The incorrect terminology is moot from an analysis perspective; the streets analyzed were correctly classified. Northeast 171st St. and 140th Ave. NE are both 5-lane Principal Arterials. The City's street classifications map obtained from the City of Woodinville Comprehensive Plan December 2007, Amended 2008 is shown to the right.



The noted speed limit on NE 171st St. is 35 MPH and on NE 140th St it was 25 MPH. The County speed limit on NE 140th St. south of the City is 45 MPH and is 2-lanes! It is very clear that the 25 MPH limit is without technical justification (City staff are aware of this and are working on correcting this obvious error. The typical speed limits on 5-lane Principal Arterials are 35 to 45 MPH. The limit on NE 171st street is 35 MPH; thus for analysis purposes we will use 35 MPH which is more in line with Professional Traffic Engineering criteria and better ensures Public Safety.

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City Access Criteria

The Skony Medical Building proposes a full access driveway on 140th Avenue Northeast. This proposed access is located about 65' south (centerline to centerline) of the existing Woodinville Medical Center driveway. The City of Woodinville Ordinance #232 has adopted the Transportation Infrastructure Standards and Specifications 1999 Edition. Section 1-4.6.3 Commercial Driveways Subsection 4) notes the following:

4. Spacing:
The minimum spacing for commercial driveways is as shown below. Deviations from the minimum spacing requirements must be approved in writing by the Public Works Director. When allowed, commercial driveways located closer than 100 feet from the approach to a principal or minor arterial intersection shall be signed and marked "Right Turn Only" unless otherwise approved by the Public Works Director.

Minimum Driveway Spacing as a Multiple of Posted Speed (in feet)

Street Functional Classification	Minimum Use[1]	Minor Generator[2]	Major Generator[3]
Principal Arterial	4–5	7–8	9–10
Minor Arterial	3–4	5–6	7–8
Commercial Collector	2–3	4–5	5–6

1. Fewer than 50 vehicle trips per day or 5 trips in the peak hour (two-way total).
2. About 51 to 5,000 vehicle trips per day or fewer than 500 trips in the peak hour (two-way total).
3. Over 5,000 vehicle trips per day or over 500 trips in the peak hour (two-way total).

Traffic generated by the Skony Medical Building is projected at 846 vpd; reference the Transpo Group Transportation Impact Analysis. The Skony Medical Building is considered a Minor Generator and 140th Avenue NE is classified by the City as a Principal Arterial. Thus the minimum driveway spacing is 245' (presuming a more appropriate speed limit of 35 MPH; the minimum spacing using the erroneous 25 MPH limit is 175'). Thus the proposed Skony Medical Center driveway clearly does not meet City criteria and needs to be relocated or obtain a Approved Deviation in writing from the Public Works Director (I have not seen an Approved Deviation)

Sight Lines

The City requires that appropriate sight visibility be provided at driveways. Per section 1-4.2.6 Sight Distance of the Transportation Infrastructure Standards and Specifications and are noted below.

1-4.2.6 Sight Distance

Providing adequate sight distance from a street or driveway is of utmost importance for ensuring safe street and driveway operation. Intersection sight distances shall be evaluated based upon the most current adopted edition of the AASHTO *Policy on the Geometric Design of Highways and Streets*. Sight distance requirements for each approach shall be based upon

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JTE, Inc.

the criteria for stopping site distance for the 85 percentile speed. The posted speed limit plus 8 miles per hour (mph) may be used if actual speed data is not available.

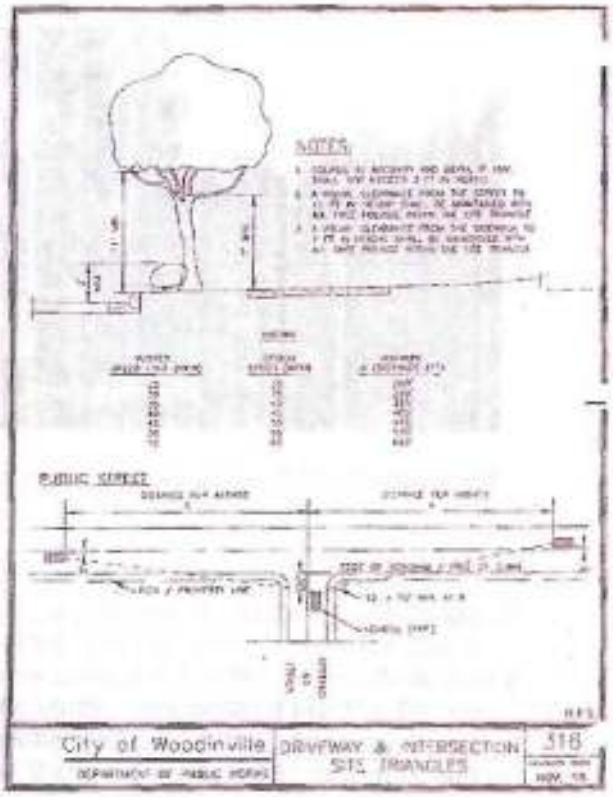
Standard Detail 316 shows the sight distance triangle. The area within this triangle shall be subject to restrictions necessary to maintain a clear view on the intersection approaches. Driveways shall also observe the sight triangle restrictions, including landscaping and placement of view obstructions.

Other factors such as vertical and horizontal curves and roadway grades also shall be taken into account. Such factors may allow necessary modification to the intersection sight distance requirements.

Sight distance shall be measured using the methods described in the AASHTO "Policy Manual" from a point on the minor road pavement (or nearest traffic lane if parking is permitted) and measured from a height of eye at 3.50 feet on the minor road to height of object .50 feet on the major road.

The vertical clearance area within the sight distance triangle shall be free from obstructions to a motor vehicle operator's view between a height of 3 feet and 10 feet above the existing surface of the street (WMC 21.12.200).

Standard Detail No. 316 is shown to the right. An 8.5 x 11" copy of this detail is attached in the appendix to this letter. This detail identifies that the required sight distance is 325' based on a 35 MPH limit that correlates into a 40 MPH design speed. Using the City's erroneous 25 MPH limit is clearly inappropriate and could create an adverse safety issue.



The Transpo Group's May 13, 2009 Memorandum identifies that the proposed Skony Medical Center access would have approximately 350' of sight line to the south. Looking north ample sight line visibility exists. These distances presume appropriate vegetation is pruned and or removed.

Field review of the Woodinville Medical Center's access driveway on 140th Ave. NE showed vegetation in the sight line to the north and south. This vegetation needs to be pruned and/or removed. See the photos on the next page:

Woodinville Medical Center 140th Ave. NE Access Driveway:

As is apparent in the above photographs the sight lines for motorists leaving the Woodinville Medical Center are impaired. Removing and/or pruning vegetation in the sight line is recommended (and I understand that the appropriate pruning/vegetation removal is completed). The attached (in the appendix) City Standard Drawing #316 provides guidance to the appropriate driveway sight triangle to be provided. The City's 20' vehicle set back from the traveled way is excessive; a minimum 10' set back is recommended.

Woodinville Medical Center NE 171st St. Access Driveway:

The sight lines at the Woodinville Medical Center Access Driveway on NE 171st St. are good.

Traffic Operational Review

The Skony Medical Building driveway on 140th Ave. NE is proposed to be located 65' south of the existing Woodinville Medical Center's driveway. This spacing does not meet the City's criteria. I have conducted a cursory operational review using the Synchro Traffic Model using the traffic data contained in the Transpo Group traffic study. I understand that the Transpo Group conducted actual traffic counts at the Woodinville Medical Center's driveway; these volumes were requested via June 4th, 2009 e-mail to Michael Swenson, PE; copy attached in the appendix. For my analysis I simply used the projected traffic identified by the Transpo Group for the Skony Medical Building driveway at both driveways. The Woodinville Medical

Center is larger and some of the traffic uses the other site driveway. Thus for this cursory review the data used suffices.

The driveway spacing is less than 100' which generates a warning from the Synchro Traffic Model that short links may have problems. Review of the Synchro simulation indicates a potential for traffic operational issues due to the close proximity of the existing and proposed driveway. The City's spacing criteria requires 245' of spacing. Conducting a Synchro simulation with 245' of spacing shows a marked improvement in traffic operations.

Parking

The recommended parking ratio for MOB's is 4.5 stalls/1,000 gsf based on an August 2007 Institute of Transportation Engineers Journal; copy attached. The existing Woodinville Medical Center provides 4.73 stalls/1,000 gsf on site that meets this criterion. I understand that on-site parking can be difficult to find during some time periods.

Parking proposed for the Skony Medical Building is 4.06 stalls/1,000 gsf that may not be sufficient; especially given the fact parking for existing Woodinville Medical Center that has is markedly higher supply per 1,000 gsf is sometimes fully consumed on-site.

Summary and Conclusions

I have conducted a review of the Woodinville Medical Center accesses and reviewed the proposed Skony Medical Building traffic report and access. The Skony Medical Building access on 140th Ave. NE is proposed to be located about 65' south of the existing Woodinville Medical Center access driveway. The 65' does not meet the City standard of 245' based on a 35 MPH speed (even using the clearly erroneous speed limit of 25 MPH the spacing needed is 175'; that is also not met) and could cause traffic operational problems due to its proximity to the existing driveway serving the Woodinville Medical Center. My Synchro traffic operational review indicates that the 65' spacing in not adequate and could cause traffic operational conflicts. The proposed Skony Medical Building driveway either requires an Approved Deviation in writing from the Public Works Director (I have not seen this document) or must be re-located to the south. Another item that should be further reviewed is the number of parking stalls proposed by the Skony Medical Building project may not be adequate.

If you have any questions you can contact me at 206.762.1978 or email me at jaketraffic@comcast.com.

MARK J. JACOBS
STATE OF WASHINGTON
28744
REGISTERED
PROFESSIONAL ENGINEER
EXPIRES 4/3/2010

Very truly yours,

Mark J. Jacobs, PE, PTOE, President
JAKE TRAFFIC ENGINEERING, INC.

06.18.2009

MJJ: mjj

EXHIBIT 3C
PAGE 10 OF 44

Project: Woodinville Medical Center - Woodinville
Location: SE corner 140th Ave. NE/NE 171st Street

NORTH

JTE, Inc.
FIGURE 1

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WOODINVILLE MEDICAL CENTER - WOODINVILLE
SITE ACCESS REVIEW LETTER

VICINITY MAP

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APPENDIX

Sermone pages

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PAGE 13 OF 44

Transportation Impact Analysis

WOODINVILLE MEDICAL OFFICE BUILDING

MICHAEL J. SWENSON
STATE OF WASHINGTON
38930
REGISTERED
PROFESSIONAL ENGINEER

1/15/09

Prepared for:
Specialty Contracting, LLC.

January 2009

Prepared by:

transpoGROUP

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Phone: 425-821-3665
Fax: 425-825-8434
www.transpogroup.com

08277.00

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EXHIBIT 3C
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Introduction

The purpose of this transportation impact analysis (TIA) is to identify potential traffic-related impacts associated with the proposed Woodinville Medical Office Building. As necessary, mitigation measures are identified that would offset or reduce significant impacts. This report follows the TIA guidelines provided by the City of Woodinville.[1]

Project Description

The proposed project is located in the City of Woodinville and would include the construction of a medical office building totaling approximately 23,400 gross square feet (gsf). The project site is located at 16916 140th Avenue NE and is currently occupied by a vacant single family home. Access is proposed via a single driveway onto 140th Avenue NE. A curb cut onto 140th Court NE will provide garbage truck access to refuse containers for site tenants. General purpose traffic to and from the site will be restricted to the 140th Avenue NE access only. On-site parking would supply a total of 99 parking stalls. The project would be constructed and occupied by the beginning of 2010. 95 stalls per the April 22 Design Review plan

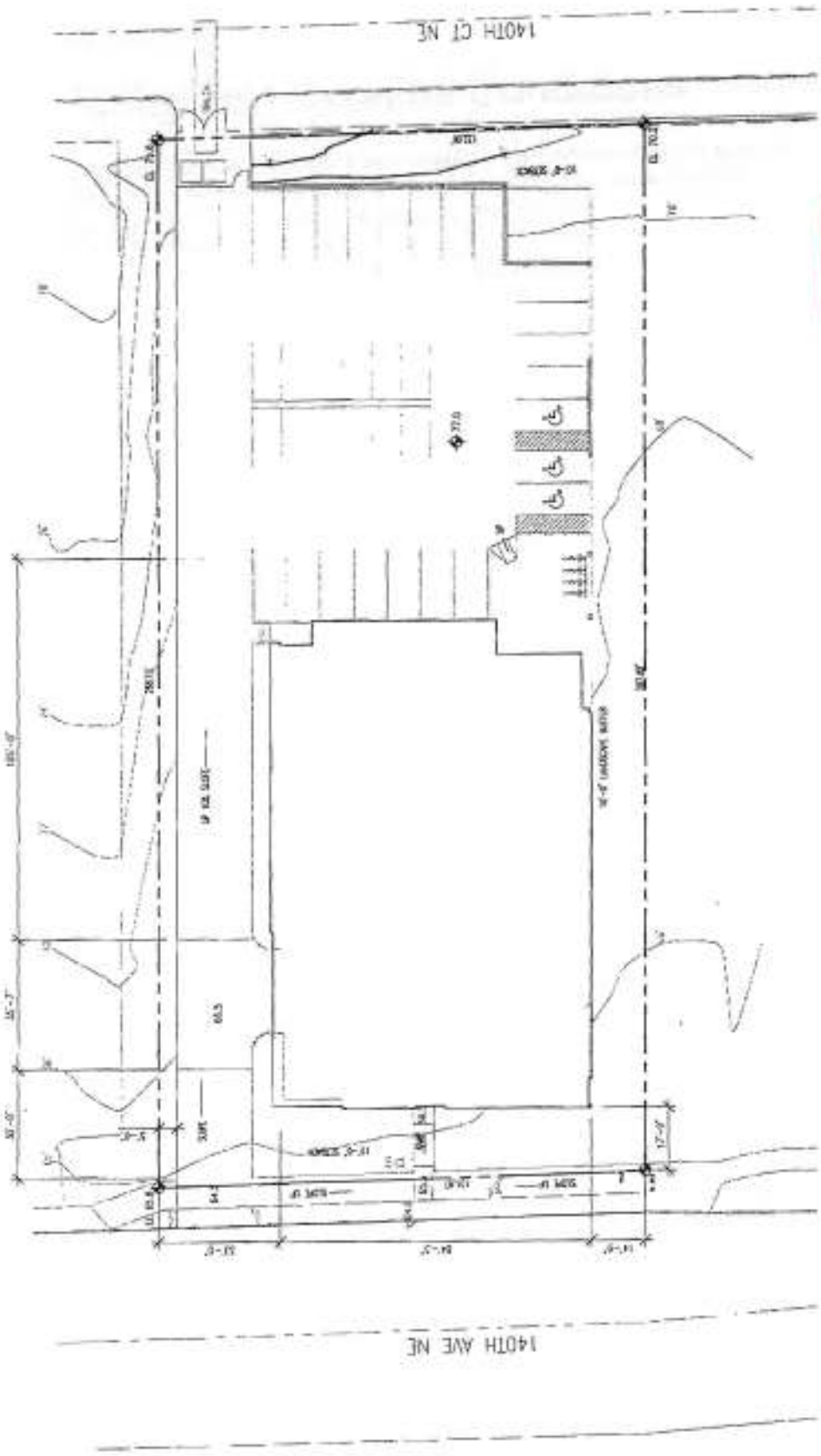
The project vicinity is shown in Figure 1 and a preliminary site plan is shown in Figure 2.

Study Scope

The scope of the analysis is based on discussions with City staff and review of City of Woodinville requirements.[1] Three off-site intersections are included within the study area as shown in Figure 1. The study focused on the weekday PM peak hour since these time periods typically exhibit the worst traffic congestion for area intersections. Conditions in the vicinity of the project site are described, including the roadway network, existing and future peak hour traffic volumes, traffic operations, traffic safety, non-motorized facilities, and transit service. Future traffic volumes were estimated by applying an annual growth rate of 1-percent to background traffic to estimate traffic volumes for buildout year conditions. Future with-project conditions were then estimated by adding project generated trips to the forecast traffic volumes.

2

[1] City of Woodinville Design Requirements 1-2.1.2, January 18, 2007.



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Preliminary Site Plan

(3) also see appendix pages 28-30

Woodinville Medical Office Building

M:\06\06277 Woodinville MOB\Graphics\CAD\Graphic01 <B> mellindap 10/30/06 08:48

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FIGURE
2

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Existing and Baseline Conditions

This section describes both existing conditions and baseline conditions within the identified study area. Study area characteristics are provided for the roadway network, planned improvements, existing and forecasted baseline volumes, traffic operations, traffic safety, and transit and non-motorized facilities.

Street (correct reference)

Roadway Network

The existing roadway network is discussed below, along with planned improvements that would likely be installed before the proposed project buildout year.

Existing Inventory

The existing roadway characteristics in the proposed project vicinity are described in detail below for relevant facilities. Roadway classification is based on the *Existing Street Classification* map shown in the City's Comprehensive Plan.[2]

NE 175th Street is a three lane principal arterial with a 25 mph posted speed limit within the project vicinity. This roadway provides access to downtown Woodinville. Sidewalks exist along both sides of the roadway.

NE 171st Street is a five lane principal arterial with a 35 mph posted speed limit within the project vicinity. Sidewalks exist along both sides of the roadway.

140th Avenue NE is a five lane principal arterial with a 25 mph posted speed limit* within the project vicinity and along the project frontage. South of the project the roadway leaves Woodinville City limits and narrows to two travel lanes and the speed limit increases to 45 mph. Sidewalks exist along both sides of the roadway within City limits.

* 25 mph is clearly inconsistent with recognized Traffic Engineering standards

Planned Improvements

Within the study area, the Bottleneck Relief Project (BNRP) at the SR 202/NE 175th Street/131st Avenue NE intersection is anticipated to be completed before the proposed project would be constructed. This project, which is currently under construction, will provide a second southbound left-turn lane and receiving lane on the eastern leg of the intersection. This project is intended to address the congested conditions that typically occur at this location.

No other roadway or intersection improvements were identified.

Traffic Volumes

The existing roadway volumes are presented along with volume forecasts for the study horizon years. Existing volumes are based on recent traffic counts conducted in October 2008. Future baseline volumes were estimated by applying an annual growth rate of 1-percent to existing volumes based upon forecast traffic volumes for downtown Woodinville.[3] Existing and forecast 2010 traffic volumes rounded to the nearest five vehicles are shown in Figure 3 and Figure 4, respectively.

[2] Figure 9-4 Existing Street Classification, *City of Woodinville Comprehensive Plan* (Amended December 2007).
[3] Based upon the Puget Sound Regional Council (PSRC) regional planning model for 2010 conditions.

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Project Impacts

This section of the analysis documents project-generated impacts on the surrounding roadway network and at study intersections. First, peak hour traffic volumes are estimated, distributed, and assigned to adjacent roadways and intersection within the study area. Next, 2010 volumes are projected and potential impact to traffic volumes, traffic operations, safety, non-motorized facilities, and transit are identified.

Trip Generation

Trip generation estimates for the project were derived from ITE *Trip Generation* (7th Edition). The projects proposed land use is consistent with ITE's Land Use #720 "Medical-Dental Office Building." Based upon the procedures outlined in *Trip Generation*, the regression equation was used to estimate the number of weekday PM peak hour project trips. Traffic volumes collected at the adjacent medical office building[6] showed trip rates less than those identified in *Trip Generation*. Thus the use of the ITE regression equation is appropriate and conservative. Of the total weekday PM peak hour trips generated, approximately 27-percent would be inbound to the site.

Table 3. Weekday PM Peak Hour Trip Generation Estimate[1] – Woodinville Medical Office Building

Time Period	Size	Trip Generation		
		In	Out	Total
Medical-Dental Office Building (LU #720)	23,400 gsf			
Weekday PM Peak Hour[2]		22	60	82
Weekday Daily[3]		423	423	846

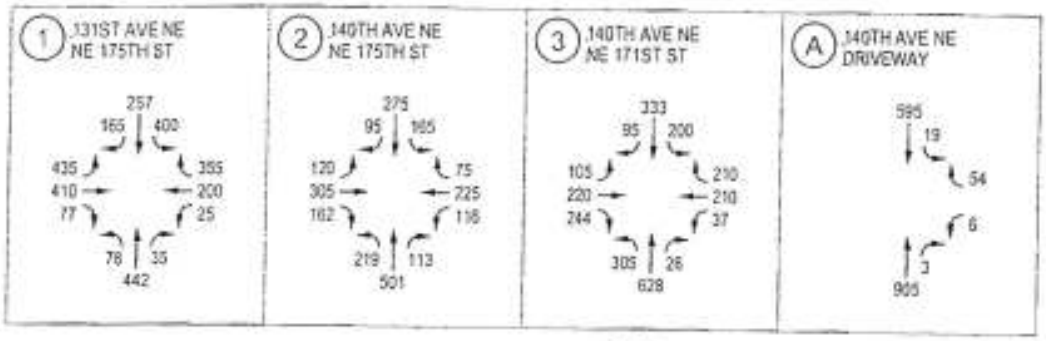
1. Trip generation estimate is based upon data provided in *Trip Generation* (7th Edition) published by ITE.
2. Based upon procedures outlined in *Trip Generation*, the regression equation was used to estimate weekday PM peak hour project trips (No. Trips = Exp[0.93 x LN[x] + 1.47], 27-percent inbound). This equates to an equivalent trip rate of 3.53 trips per 1,000 gsf.
3. Based upon procedures outlined in *Trip Generation*, the average trip rate was used to estimate weekday daily trips (No. Trips = 36.13 per 1,000 gsf).

As shown in Table 3, the project is estimated to generate 75 weekday PM peak hour trips (20 inbound and 55 outbound) and 776 total weekday daily trips (388 inbound and outbound).

Trip Distribution and Assignment

Trip distribution patterns for the project were based upon observed travel patterns at the existing medical office building located immediately adjacent to and north of the project site.[7] The project trip distribution beyond NE 171st Street/140th Avenue NE was based upon turning movement counts that were collected at the remaining offsite study intersections. The project distribution and assignment of project trips to the roadway network is shown in Figure 5. Trip distribution assumptions were reviewed and approved by City staff during the scoping process.

[6] Woodinville Medical Center (17000 140th Avenue NE) on October 2, 2008. Observed weekday PM peak hour trip generation rate of 3.31 trips per 1,000 gsf.
[7] Travel patterns to/from the Woodinville Medical Center (17000 140th Avenue NE) were observed on October 2, 2008.



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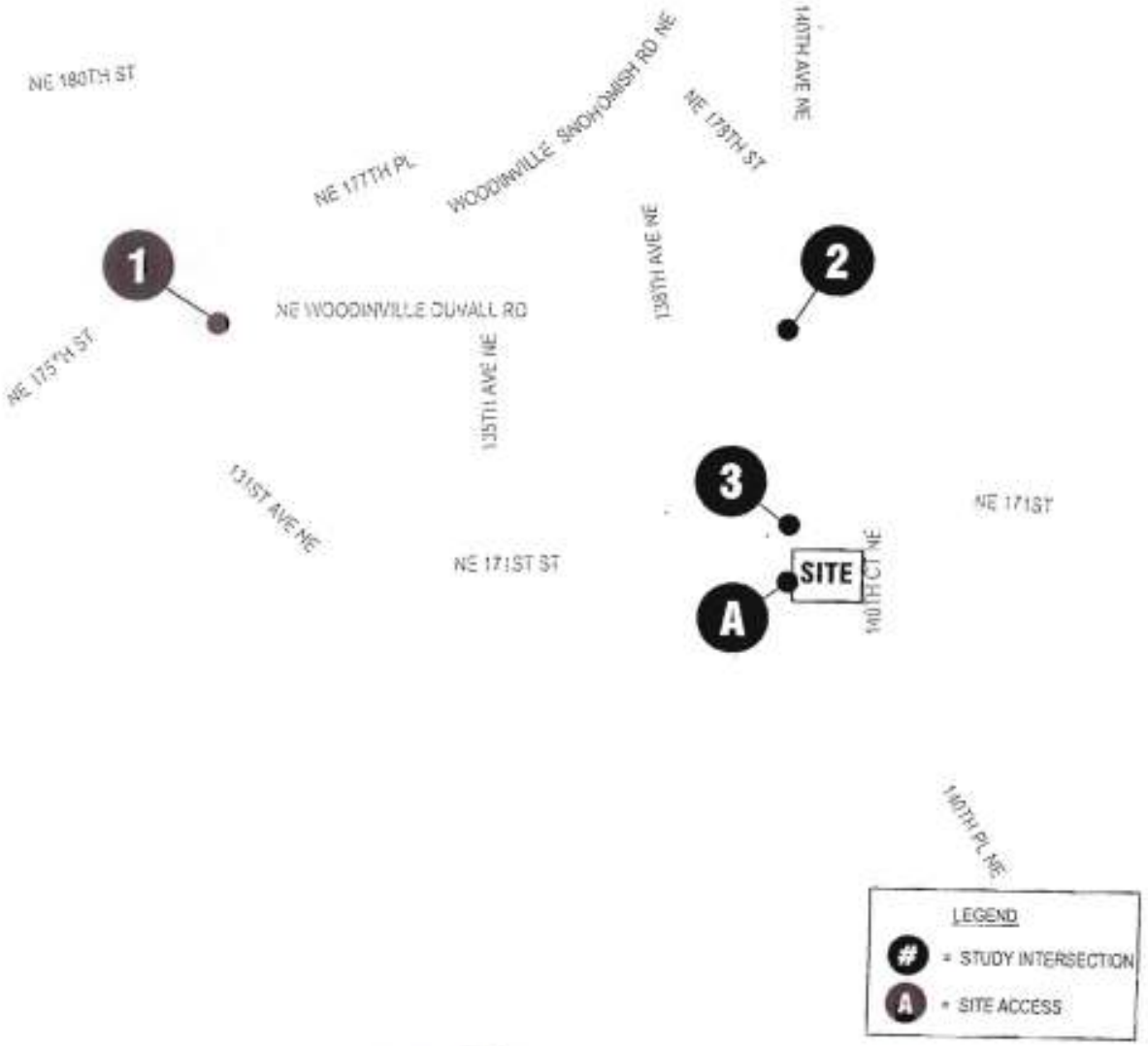

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With-Project (2010) Weekday PM Peak Hour Traffic Volumes

Woodinville Medical Office Building

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FIGURE
6

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Site Access

As shown in Figure 2, access to the proposed project would be provided from 140th Avenue NE. Site access operations were analyzed for 2010 weekday PM peak hour conditions using the same methodology as described for the off-site study intersection analysis. It is anticipated that the westbound approach of the site access driveway would operate at LOS B during the weekday PM peak hour. The LOS worksheets for the site access analysis are included in Appendix B.

In addition, sight-distance at the driveway was analyzed based upon City requirements.[a] Based upon these criteria, a sight-distance of 280 feet is available along 140th Avenue NE and the clear-zone shown in Figure 7 should be maintained.

Traffic Safety Impacts

Traffic generated by the proposed project would likely result in a proportionate increase in the probability of collisions. However, it is not anticipated that the addition of project traffic would create a safety hazard or significantly increase the number of reported collisions.

Transit and Non-Motorized Impacts

Although a detailed demand study was not conducted for this project, transit service currently operating in the area is anticipated to accommodate any anticipated increase in ridership demand due to the proposed project. The existing transit stops and route (Route 236) in the immediate area should provide adequate transit access for patrons of the project site.

Pedestrians and bicyclists may account for some trips generated by the proposed project. However, to present a conservative analysis of project impacts at study intersections, it was assumed that no peak hour trips would be attributable to pedestrians or bicyclists. Nevertheless, any increase in pedestrian or bicycle travel would: (1) not adversely impact existing non-motorized facilities; and (2) be a positive impact, reducing traffic volumes, impacts to operations, and safety impacts.

Parking

This section describes parking impacts associated with the project, including an evaluation of the proposed supply compared to the anticipated demand, parking code compliance, and impacts associated with the displacement of existing public parking from the site.

Proposed Parking Supply

On-site parking for approximately 99 vehicles is proposed on the ground floor. Of these, 63 within a garage structure while the remaining 36 would be provided as surface parking.

use drawing 316 (essentially the same) and 40 mph design speed 325' require

[a] Using:

- Standard Drawing 325
- Posted speed limit plus 8 miles per hour (140th Avenue NE design speed = 38 mph)
- Distance per AASHTO *Policy on Geometric Design of Highway and Streets* eqn. 3-2

7

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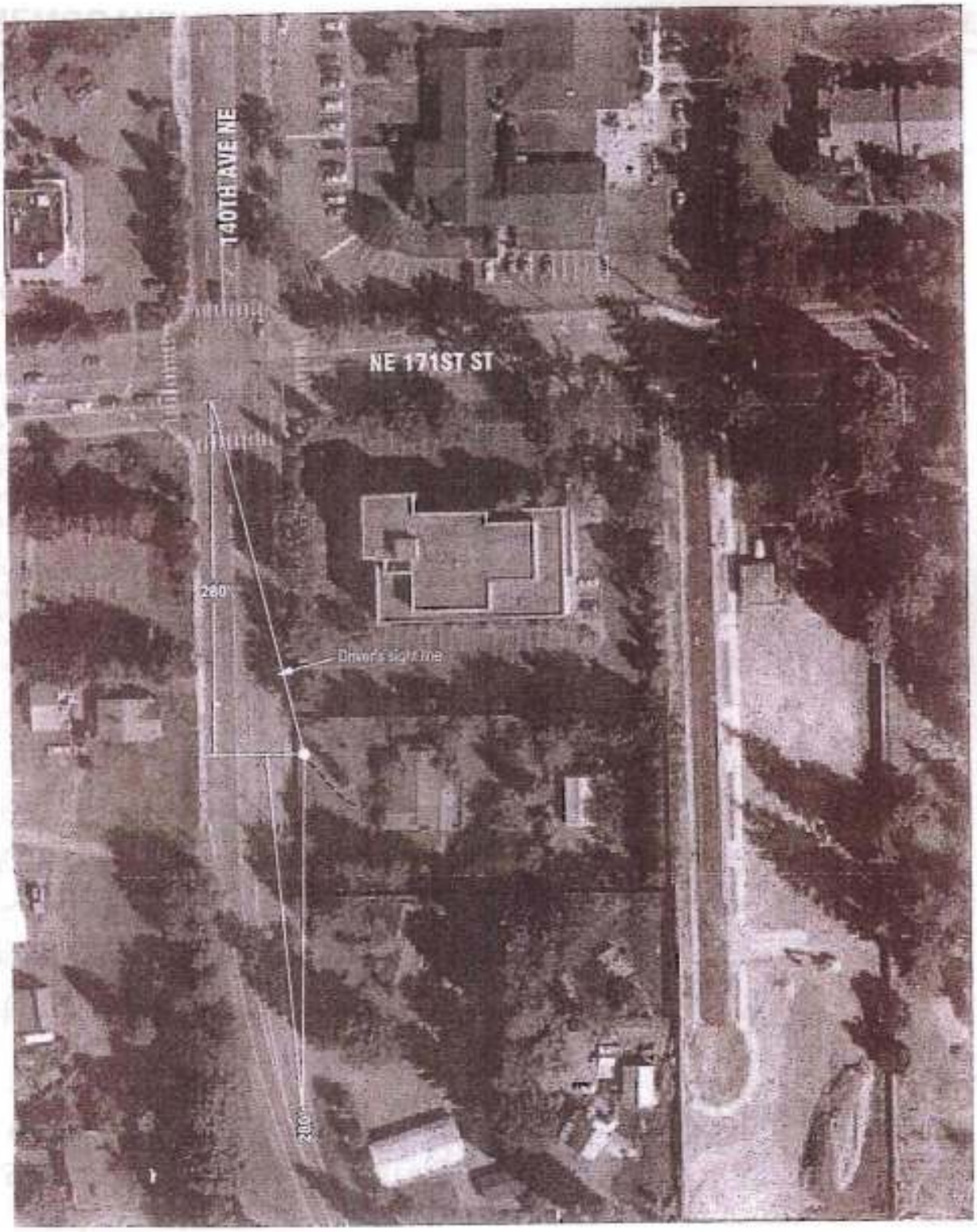

Sight-Distance at Site Access Driveway

FIGURE 7

Woodinville Medical Office Building

8

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WHAT TRANSPORTATION CAN DO

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MEMORANDUM

Date:	May 13, 2009	**TG:**	08277.00
To:	Tom Hansen, City of Woodinville		
From:	Mike Swenson Jesse Birchman		
cc:	Stephen Skony – Skony Resources, Inc. Darren Simpson – DCI Engineers		
Subject:	Woodinville Medical Office Building – Site Access Sight Distance		

This memorandum summarizes the results of our site visit conducted on May 7, 2009. The purpose of this site visit was to review the intersection sight distance that will be available after the development of the site. Specifically, concerns were raised by individuals regarding the intersection sight distance, looking to the south. Observations were made with City staff and ultimately measured by Transpo staff. Original calculations as noted in the TIA were based on a posted speed of 30 mph and a design speed of 38 mph. The posted speed has recently been changed along the frontage from 30 mph back to the original 25 mph.*

The observations made in the field showed that to the south, approximately 350 feet of intersection sight distance is available based on AASHTO prescribed methodology. This corresponds to a design speed of 42 mph.[1] Given the posted speed is 25 mph and sight distance is available for a design speed of 42 mph, it is our opinion that adequate sight distance is provided.

If additional information is required, please do not hesitate to call.

M:\08\08277 Woodinville MOB\Documents\Memos\Sight-Distance Memo 2009-05-07.doc

The 25 mph limit is clearly technically erroneous and therefore should not be used for sight line analysis. Per Standard Drawing 316 325' sight line needed based on a more typical 35 mph limit for 5-lane City Principal Arterials and a 40 mph design

MICHAEL J. SWENSON
STATE OF WASHINGTON
38930
REGISTERED
PROFESSIONAL ENGINEER
Michael Swenson 5/13/09

APPROVED
DEB
5/14/09

[1] Interpolated between 40 mph 45 mph shown in Woodinville Standard Drawing 325.

Transpo Group 11730 118th Avenue N.E., Suite 600 Kirkland, WA 98034 425-821-3665 Fax: 425-825-8434

T. Hanson | 5/14/09

EXHIBIT 3c
PAGE 22 OF 44

SKONEY SIGHT DISTANCE

FROM 2004 AASHTO GREEN BOOK P. 112
~~[illegible]~~ EXHIBIT 3-1 · STOPPING SIGHT DISTANCE

SSD	40 MPH	305'	REQ
	45 MPH	360	REQ
	50 MPH	425	REQ
	35 MPH	250	REQ.

PER 1-4.2.6

SIGHT DISTANCE REQ IS ~~[illegible]~~ SIGHT OF 85% ~~[illegible]~~ PERCENTILE SPEED OF CARS WHICH IS POSTED SPEED LIMIT, 40 MPH

→ SIGHT DISTANCE REQUIRED ~~[illegible]~~ AT DRIVEWAY IS EQUAL TO SIGHT DISTANCE OF 40 MPH = 305 FT ← (Meet)

SIGHT DISTANCE AVAILABLE AS MEASURED PER TRANSPO MEMO = 350 FT
CK IN FIELD BY STAFF → CONFIRMED

350 FT IS ~~[illegible]~~ GREATER THAN 305 FT REQUIRED

SIGHT DISTANCE OK ! MEETS REQUIREMENTS

DEF 5/14/09

SUBJECT TO FIR TREE @ SOUTH EDGE OF PROPERTY BEING LIMB TO PROVIDE SIGHT DISTANCE OPENING UP TO 10' HIGH

(10)

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PAGE 23 OF 44

From: Thomas Hansen [mailto:tomh@ci.woodinville.wa.us]
Sent: Wednesday, June 10, 2009 12:40 PM
To: Mark J. Jacobs, PE, PTOE
Subject: RE: 2009.015 - woodinville medical center

Mark –

140th Ave SE. is within City right of way until the south edge of the Skony property, at that point, the road crosses the corporate boundaries and becomes a county road. The Skony property frontage and the Medical Center frontage on 140th is entirely within the City of Woodinville.

The criteria used for sight distance evaluation and driveway spacing can be found in Section 1-4.6 and 1-4.2.6 of the City's 1999 Design standards. These standards are the most recent adopted standards.

Tom

From: Mark J. Jacobs, PE, PTOE [mailto:JakeTraffic@comcast.net]
Sent: Wednesday, June 10, 2009 12:22 PM
To: Thomas Hansen
Cc: Daniel Gerbitz; 'Mike Swenson'
Subject: 2009.015 - woodinville medical center

Tom

I have been retained to review the accesses of the existing Woodinville Medical Center access driveways. In particular the potential for conflict at the existing Woodinville Medical Center's access on 140th Ave. SE with a proposed driveway by the Skony Medical Building (referenced as the Woodinville Medical Office Building in the Transportation Impact Analysis prepared by Transpo Group dated January 2009).

The Woodinville Medical Center is located in the SE corner of the 140th Ave, NE/NE 171st St. I/S and the Skony Medical Building is the adjacent parcel to the south. I have a copy of the Transpo Group TIA and Memorandum and have requested they provide me the traffic count they conducted at my project site's driveway. Also, I requested sight lines information for the Skony site for an access located near the SPL in lieu of the NPL (that is a concern for my Client due to its proximity to the existing Woodinville Medical Center access). I am waiting on Mike to provide me the requested data.

In looking at the aerial it appears that 140th Ave. NE is a County road adjacent to each of the site. Is this correct? The County speed limit is 45 MPH that looks to be consistent with nationally recognized traffic engineering criteria. The City speed limit for the corridor of 25 MPH is clearly erroneous (35 to 40 MPH is obviously more appropriate), has zero technical justification and simply results in driver disrespect for traffic control. (Note: I understand you are aware of this and are working to correct this visibly flawed situation). Two items:

- please clarify ownership of the 140th Ave. NE ROW s/o NE 171st St.

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- and please point me to the City's driveway spacing criteria.

My Client has already corrected the incorrect on site striping to the correct yellow from the incorrect white that was used to separate bi-directional site circulation. He is also cognizant of vegetation in the sight lines at the 140th Ave. NE driveway and will be pruning vegetation accordingly.

I have requested traffic data from Mike Swenson in particular the sight lines for an access near the SPL that are needed to properly evaluate the best location for the access.

I look forward to receiving the requested data from the Transpo Group and your clarification of ownership of 140th Ave. NE and the City access spacing criteria.

Contact me with any questions.

Mark
206.762.1978
206.799.5692 cell

Sermone pages

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PAGE 25 OF 44

CITY OF WOODINVILLE

TRANSPORTATION INFRASTRUCTURE STANDARDS AND SPECIFICATIONS

1999 Edition

Distributed By:

Public Works Department
13203 NE 175th Street
Woodinville, WA 98072

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City of Woodinville
Transportation Infrastructure Standards and Specifications

PART 1
DESIGN REQUIREMENTS

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where the lots abut a major arterial or collector street, a drainage course, a railroad right-of-way or a single row of lots in an abutting subdivision of record.

3. Where blocks are longer than 660 feet long, and where access to school, park, or shopping is considered necessary, a pedestrian walk with a wheelchair ramp approximately mid-block, with a minimum right-of-way width of 10 feet, may be required by the Public Works Director with surfacing, fencing, and barriers.

4. Cross-connecting pedestrian and or bicycle paths shall be required between cul-de-sacs and adjacent streets to provide pedestrian connectivity, as determined by the Public Works and Parks and Planning Departments.

1-4.2.4 Horizontal and Vertical Street Alignment

Alignment of streets within the City shall be in conformance with the guidelines of the American Association of State Highway and Transportation Officials (AASHTO) *Policy on Geometric Design of Highways and Streets* and the Washington State Department of Transportation *Design Manual*. The Public Works Director shall approve final project geometric requirements.

1-4.2.5 Street Grades

Street grades shall conform to the AASHTO Policy on Geometric Design of Highways and Streets. Street grades shall be as level as is consistent with the surrounding terrain. Minimum tangent street grades shall be one-half (0.5) percent along the crown line and curb. Maximum street grades shall be as follows:

Type of Street	Maximum Grade
Private Street	
Residential	15
Commercial	10
Residential Street	15
Collector	
Residential	12
Commercial	10
Minor Arterial	10
Principal Arterial	10

1-4.2.6 Sight Distance

Providing adequate sight distance from a street or driveway is of utmost importance for ensuring safe street and driveway operation. Intersection sight distances shall be evaluated based upon the most current adopted edition of the AASHTO *Policy on the Geometric Design of Highways and Streets*. Sight distance requirements for each approach shall be based upon

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the criteria for stopping site distance for the 85 percentile speed. The posted speed limit plus 8 miles per hour (mph) may be used if actual speed data is not available.

Standard Detail 316 shows the sight distance triangle. The area within this triangle shall be subject to restrictions necessary to maintain a clear view on the intersection approaches. Driveways shall also observe the sight triangle restrictions, including landscaping and placement of view obstructions.

Other factors such as vertical and horizontal curves and roadway grades also shall be taken into account. Such factors may allow necessary modification to the intersection sight distance requirements.

Sight distance shall be measured using the methods described in the AASHTO "Policy Manual" from a point on the minor road pavement (or nearest traffic lane if parking is permitted) and measured from a height of eye at 3.50 feet on the minor road to height of object .50 feet on the major road.

The vertical clearance area within the sight distance triangle shall be free from obstructions to a motor vehicle operator's view between a height of 3 feet and 10 feet above the existing surface of the street (WMC 21.12.200).

1-4.2.7 Intersections

Every intersection shall be designed to accommodate the design vehicle appropriate for the highest classified street forming the intersection. All elements of the intersection, including turning lanes and channelizing islands, shall be designed so that a design vehicle will not encroach onto curbs, sidewalks, traffic control devices, channelizing islands, center divisional medians, or into the travel lanes of opposing flow traffic.

1-4.2.8 Curb Return Radii

For the intersection of two local streets, the minimum allowable curb radius shall be 25 feet, which is to be measured from the radius point to the face of curb. For the intersection of a local street with any collector or arterial, the minimum radius shall be 30 feet.

On streets with bus and truck flows, radii of 40 feet or more shall be provided. Radii of 40 feet or more should be designed to fit the paths of appropriate design vehicles.

On all other street intersections, the minimum allowable radii shall be 30 feet.

Larger radii may also be required where speed reductions would cause delays to emergency response vehicles.

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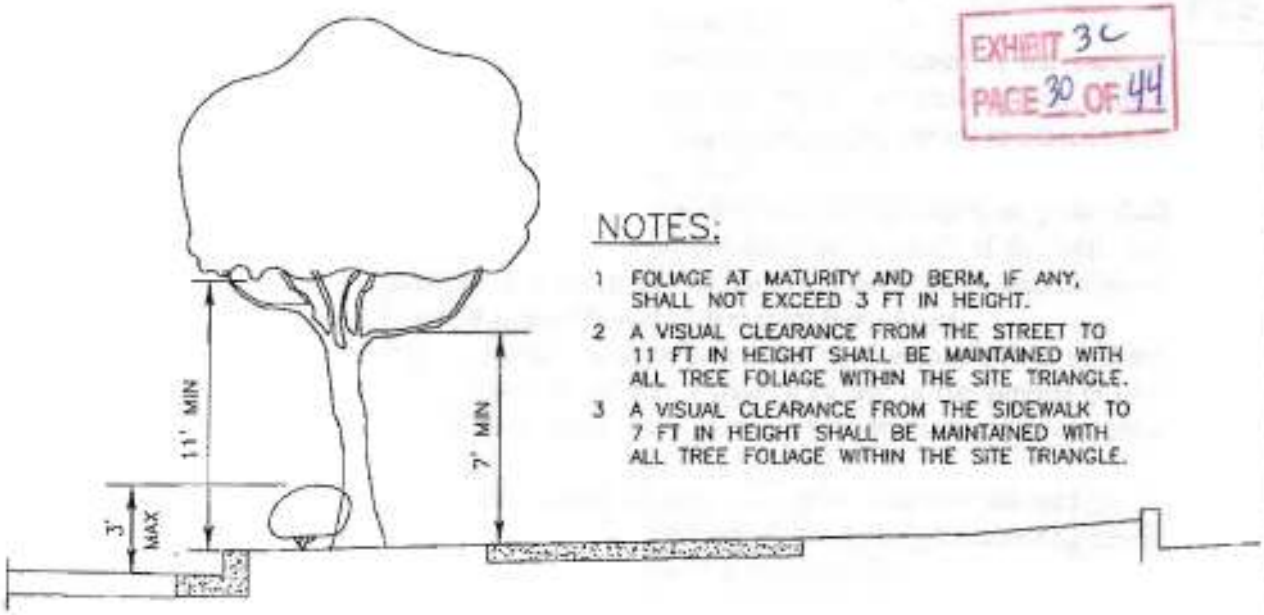


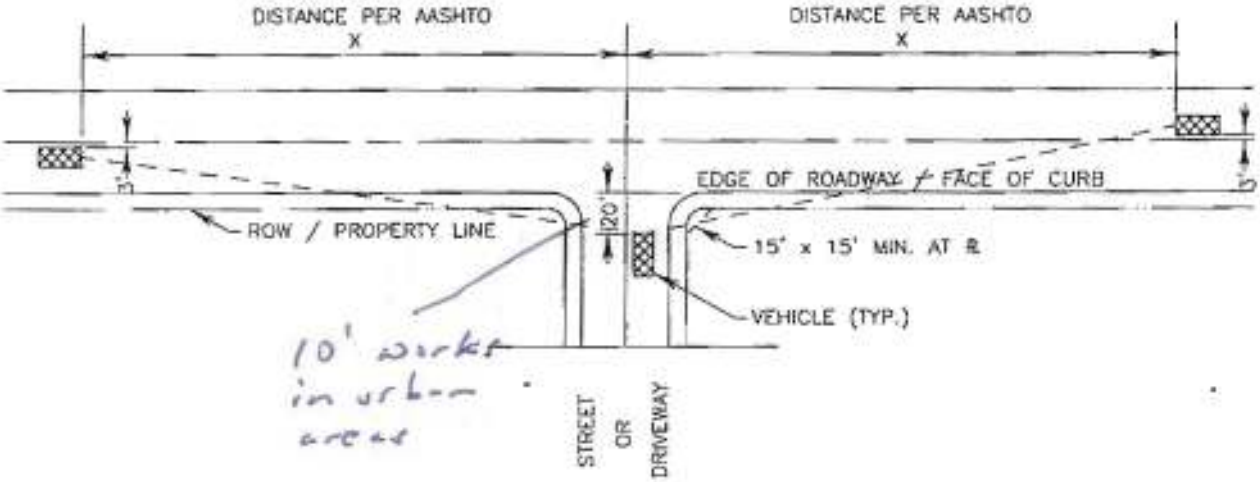
NOTES:

1. FOLIAGE AT MATURITY AND BERM, IF ANY, SHALL NOT EXCEED 3 FT IN HEIGHT.
2. A VISUAL CLEARANCE FROM THE STREET TO 11 FT IN HEIGHT SHALL BE MAINTAINED WITH ALL TREE FOLIAGE WITHIN THE SITE TRIANGLE.
3. A VISUAL CLEARANCE FROM THE SIDEWALK TO 7 FT IN HEIGHT SHALL BE MAINTAINED WITH ALL TREE FOLIAGE WITHIN THE SITE TRIANGLE.

AASHTO

POSTED SPEED LIMIT (MPH)	DESIGN SPEED (MPH)	MINIMUM X (DISTANCE (FT)
25	30	200'
30	35	250'
35	40	325'
40	45	400'
45	50	475'
50	55	550'
55	60	650'

PUBLIC STREET



N.T.S.

City of Woodinville DEPARTMENT OF PUBLIC WORKS	DRIVEWAY & INTERSECTION SITE TRIANGLES	316 revision date NOV. 98

EXHIBIT 3C
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a. Utility poles or other obstacles placed within the right-of-way shall be as far back from the traveled way or auxiliary lane as practicable.
   1. On shoulder type roads, poles or obstacles shall be located at the back of ditches and a minimum of 10 feet from the edge of the traveled way, unless protected by concrete barrier, suitable impact attenuating device or placed more than 3-1/2 feet behind the face of a guardrail.
   2. On vertical curb type roads with a speed limit of 40 miles per hour, poles shall be placed clear of sidewalks and at least 2 feet from the face of the curb. On roads with a speed limit of 40 miles per hour or greater, poles and obstacles shall be placed clear of sidewalks and 10 feet from face of curb.

b. Notwithstanding the other provisions regarding pole locations described in these standards, no poles shall be located so that it poses a hazard to the general public. Utilities shall place and replace poles with primary consideration given to public safety.

c. Deviations from these pole and obstacle clearance criteria may be allowed by an approved variance when justified by a suitable engineering study considering traffic safety. Only the utility owner may request a variance from pole and obstacle clearance criteria. Up to three contiguous damaged or weakened poles may be replaced at existing locations under permit in accordance with emergency procedures. Sequential permits resulting in continuous replacement of a pole line shall not be allowed. A pole or other obstacle which incurs repeated damage from errant vehicles shall be relocated or protected.

d. Locations of poles shall also be compatible with driveways, intersections, and other road features (i.e., they shall not interfere with sight distances, road signing, traffic signals, culverts, etc.). To the extent possible, utilities shall share facilities so that a minimum number of poles is needed.

e. Notwithstanding other provisions, underground systems shall be located at least 5 feet away from road centerline and where they will not otherwise disturb existing survey monumentation.

1-4.6 Driveways

1-4.6.1 General

1. Encroachments on public property are prohibited. City street rights-of-way may not be used for private residential or commercial purposes. A permit for the construction of driveway approaches shall not be issued unless vehicles to be served or serviced can be parked entirely within the private property lines.

2. The Public Works Director shall have the authority to restrict the number, size, and location of access driveways.

EXHIBIT 3C
PAGE 32 OF 44

3. In areas where the volume of on-street parking is critical to the City, additional off-street parking space(s) will be required to replace all on-street spaces eliminated by any driveway(s).

4. No driveway approach shall be permitted to encompass any municipal facility (fire hydrant, signal pole, signal cabinet, etc.). Permit conditions may require the applicant to relocate such municipal facilities, including any within the limits of a curb return.

5. The Public Works Director may require joint use of driveways by more than one property.

6. Driveways directly giving access onto arterials may be denied if alternate access is available.

7. Permits for new driveways shall require all abandoned driveway areas on the same frontage shall be removed and the curbing and sidewalk, or shoulder and ditch section, shall be properly restored.

8. Maintenance of driveway approaches shall be the responsibility of the owner whose property they serve.

9. For driveways crossing an open ditch section, culverts shall be adequately sized to carry anticipated stormwater flows and in no case be less than 12 inches in diameter. The property owner making the installation shall be responsible for determining proper pipe size. The City may require the owner to verify the adequacy of pipe size by preparing a drainage study and report.

10. For design speeds less than 35 mph, driveways must be a minimum of 125 feet away from an adjacent intersection. For design speeds between 36 to 45 mph, driveways must be a minimum of 250 feet away from an adjacent intersection.

1-4.6.2 Residential Driveways

1. General
   a. A single driveway can serve:
      1. a maximum of two lots with one dwelling unit on each lot; or
      2. a maximum of two dwelling units, as defined in the UBC, on a single lot.

2. Width:
   a. Each single ownership shall be entitled to one 14-foot wide driveway approach.
   b. Where a driveway approach in excess of 14 feet is requested for a single ownership, the maximum approach width which the Public Works Director may approve are as follows:

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Maximum Width of Residential Driveways		
Frontage	**One Driveway Approach**	**Two Driveway Approaches**
Under 30 feet	50% of frontage	Not allowed
30 to 60 feet	20 feet	Not allowed
60 to 80 feet	30 feet	22 feet
Over 80 feet	35 feet	30 feet

c. There must be at least 20 feet between driveways serving any one property frontage.
d. No driveway approach, including end slopes, shall be allowed within 5 feet of the side property line, unless a written request is made to and approved by the Public Works Director, and the owner of the adjacent property is a co-signer of the driveway permit.
e. In cases where driveway approaches are constructed on corner lots, no driveway approach, including side slopes, shall be constructed closer than 4 feet from the end of any curb return at the curb line.

3. Grade:
   a. The maximum allowable grade for a residential driveway is 10 percent.
   b. Grades up to 15 percent may be allowed subject to advance administrative approval of the Fire Marshal and Public Works Director. Grade changes that exceed 8 percent shall require vertical curves to connect tangents.

1-4.6.3 Commercial Driveways

1. General
   a. Each lot shall be entitled to one access point.

   b. Access driveways for parking areas shall be located so as to cause the least possible conflict with vehicular and pedestrian traffic on public rights-of-way.

   c. For commercial or industrial driveways with heavy traffic volumes or significant numbers of trucks, the City may require construction of the access as a private road intersection. This requirement will be based on traffic engineering analysis submitted by the applicant that considers, among other factors, intersection spacing, sight distance, and traffic volumes.

   d. Private road intersection type driveway openings requested by the applicant will be considered in lieu of conventional driveways in commercial areas when criteria 1 through 4 below are met. Meeting the criteria is not a guarantee that an intersection type driveway will be allowed.
      1. Projected driveway usage is greater than 1,000 vehicles per day;

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2. The opening is at least 160 feet from any other street intersection;
3. The opening is at least 160 feet from any other driveway on the property frontage under control of the applicant;
4. A minimum 100 feet storage area is provided between the curb line on the street and any turning or parking maneuvers within the development;
5. Where driveways intersect with state route right-of-way, the applicant shall also obtain approval from the WSDOT Access Management Department.

2. Width:
   a. The minimum width of a commercial driveway shall be 20 feet.
   b. Where a driveway approach in excess of 20 feet is requested, the maximum approach widths which the Public Works Director may approve are as follows:

Maximum Width of Commercial Driveways	
Street Posted Speed (mph)	**Driveway Maximum Width**[a] (feet)
25	30
26-45	35
Over 45	40

a. Dimension (1) on Standard Details 322, 323, and 324.

3. Grade:
   a. The maximum grade for a commercial driveway is 8 percent.

   b. Grades up to 15 percent may be allowed subject to the approval of the Fire Marshal and Public Works Director.

   c. Vertical curves shall be used for smooth transitions at grade changes that exceed 6 percent, excluding the tie to the roadway.

4. Spacing:

The minimum spacing for commercial driveways is as shown below. Deviations from the minimum spacing requirements must be approved in writing by the Public Works Director. When allowed, commercial driveways located closer than 100 feet from the approach to a principal or minor arterial intersection shall be signed and marked "Right Turn Only" unless otherwise approved by the Public Works Director.

EXHIBIT 3C
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Street Functional Classification	Minimum Driveway Spacing as a Multiple of Posted Speed (in feet) Minimum Use[1]	Minor Generator[2]	Major Generator[3]
Principal Arterial	4–5	7–8	9–10
Minor Arterial	3–4	5–6	7–8
Commercial Collector	2–3	4–5	5–6

1. Fewer than 50 vehicle trips per day or 5 trips in the peak hour (two-way total).
2. About 51 to 5,000 vehicle trips per day or fewer than 500 trips in the peak hour (two-way total).
3. Over 5,000 vehicle trips per day or over 500 trips in the peak hour (two-way total).

1-4.6.4 Driveways Within Areas of Limited Street Improvements

1. Where standard gutters and curbs have not been installed, the apron length shall be measured along the property line and there shall be not less than 20 feet of frontage between driveway approaches serving any one property. Permits shall not be issued for any surface improvement or paving on the street right-of-way between driveway approaches unless a concrete curb or other physical obstruction of a design satisfactory to the Public Works Director is constructed and maintained by the applicant along his property line so that the entrance and exit of vehicles to and from applicant's property will be restricted to the established driveway approaches. Pursuant to the permit conditions, the applicant may surface the driveway approaches or other areas within the right-of-way, extending the same type of paving used on the applicant's premises so that it merges with the street pavement; provided the applicant's paving is adequate and suitable for the traffic to be carried. Such extended paving between the property line and the street pavement shall be to established grade or other slope as designed by the Project Engineer and approved by the Public Works Director to provide for proper runoff.

2. Such paving between the property line and the street pavement may meet the street pavement at a point ahead of the curb opening in order to provide for safe deceleration of vehicles turning into the applicant's premises. If applicant's paving is extended beyond the property line into a street right-of-way at an intersection or crossroad, the Public Works Director may require the applicant to construct a suitable traffic island or curb to provide for the protection of such municipal facilities as may be necessary.

1-4.6.5 City-Required Reconstruction of Approaches

1. Reconstruction. All driveway approaches heretofore constructed or installed and now in use, which are deemed by the City Council as exceeding the allowable width per

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Parking Requirements for Medical Office Buildings

RESEARCH WAS CONDUCTED WITH THE FOLLOWING KEY OBJECTIVES: COLLECT PRIMARY AND SECONDARY DATA DESCRIBING MEDICAL OFFICE BUILDING PARKING NEEDS; IDENTIFY MUNICIPAL CODE REQUIREMENTS FOR THOSE BUILDINGS SURVEYED; AND SUMMARIZE FINDINGS BY MEAN AND 85TH-PERCENTILE VALUES. PROVIDING 4.5 SPACES PER 1,000 GROSS SQUARE FEET OF BUILDING SPACE IS GENERALLY SUFFICIENT TO MEET MEDICAL OFFICE BUILDING PEAK-HOUR NEEDS.

BY JOHN W. DORSETT, AICP AND MARK J. LUKASICK

FIFTY MEDICAL OFFICE BUILDINGS (MOBs) located throughout the United States were studied to determine their parking requirements. Following is a summary of key findings and conclusions:

- A total of 4.5 parking spaces per 1,000 gross square feet (GSF) of building area should be provided for MOBs. This recommendation includes an effective supply cushion of spaces: this cushion is equal to about 10 percent of the supply and is necessary for a number of reasons, including but not limited to user convenience and to compensate for the temporary loss of spaces due to construction, maintenance and snow removal.
- The number of cars parked at MOBs during the 11 a.m. peak hour typically falls short of both the parking supplies and the number of parking spaces required by zoning ordinances.
  - This suggests that most zoning ordinances require more parking spaces than most MOBs need.
  - Ninety-two percent of this study's MOBs are legally required to provide more parking spaces than were occupied during the peak hour.
  - Sixty percent of this study's MOBs must comply with zoning ordinances that exceed this study's recommended parking capacity.
- The observed mean peak-hour parking accumulation rate for 50 MOBs is 3.23 spaces per 1,000 GSF of occupied building area. This is lower than the 3.53 spaces reported in the Institute of Transportation Engineers' (ITE) *Parking Generation, 3rd Edition* and the 4.11 spaces reported in ITE's *Parking Generation, 2nd Edition*.[1,2]
- The observed 85th-percentile peak-hour parking accumulation rate for 50 MOBs is 4.21 parked cars per 1,000 GSF of occupied building area.

STUDY PURPOSE

The development of MOBs continues in response to the aging population and consequent increases in demands for health care. One particular challenge for planners is to properly determine the number of parking spaces needed for MOBs. In response to this challenge, a study was conducted to document the parking requirements of MOBs. A major component of this study included new primary research.

Most municipal zoning ordinances base MOB parking requirements on the amount of GSF rather than the number of physicians, employees, or patients/visitors. This study gathers data from various MOBs, calculates parking demand ratios per 1,000 GSF and provides a database that can be used for project planning purposes. This research project had the following objectives:

- To identify and reference historical MOB peak-hour parking demand ratios;
- To create a database of MOB peak-hour parking demand ratios that employ the number of parking spaces needed per 1,000 GSF, the variable most commonly referenced by municipal codes;
- To compile a comparative list of municipal code requirements for those MOBs surveyed; and
- To summarize findings by mean and 85th-percentile values.

Meeting these objectives provides information useful to planners who project MOB parking demand.

METHODOLOGY

Prior to beginning primary research, secondary sources of data were researched. The second and third editions of *Parking Generation* contained a summary of several MOB parking demand studies. To complete the primary research, the following steps were performed:

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- A sample of 50 stand-alone MOBs located throughout the United States was selected.
- The following variables were researched for each MOB:
  - city and state;
  - number of floors;
  - building GSF;
  - building occupancy rate;
  - number of suites;
  - municipal code parking requirements (number of spaces per 1,000 GSF); and
  - parking space supply.
- The number of parking spaces required by zoning ordinance was calculated.
- The supply of parking spaces was inventoried and the number of spaces provided per 1,000 GSF was calculated.
- The number of parked vehicles during the peak time of the day was counted.
- The number of spaces per 1,000 GSF was determined based on the occupied building GSF and the numbers of vehicles counted at the peak accumulation or occupancy.
- The mean and 85th percentile, by spaces per 1,000 GSF of occupied building space, were summarized for the following:
  - code requirements;
  - parking space supply; and
  - observed peak-hour parking occupancy.

ITE PARKING GENERATION RATES

ITE updated its *Parking Generation* publication in 2004. Table 1 provides a comparison between these published data and the primary data collected for this study.

DATA COLLECTION RESULTS

Number of Buildings by State

Fifty free-standing MBOs were surveyed on Mondays and Wednesdays from March through August, during what was believed to represent typical activity levels for MOBs. Suburban locations were selected to allow a clean computation of the parking demand ratio, without the influence of adjacent land uses present in an urban environment and without the influence of mass transit.

A convenience sample was drawn based on geographic proximity of individuals collecting the data to the MOBs. Twenty of the MOBs surveyed were located in Illinois. The remaining 30 properties surveyed were located in the following states: California (6), Florida (3), Georgia (3), Indiana (9), Massachusetts (3), Minnesota (3) and Pennsylvania (3).

The average number of parking spaces per 1,000 GSF ranged from 2.78 for the three Georgia MOBs studied to 5.60 for the three Pennsylvania MOBs surveyed. Following is the supply of parking spaces per 1,000 GSF, by state:

- Illinois: 4.47
- Florida: 5.24
- Indiana: 5.36
- Minnesota: 4.39
- California: 3.20
- Pennsylvania: 5.60
- Georgia: 2.78
- Massachusetts: 4.69

Number of Buildings by Size

The MOBs identified then were compared on the basis of occupied GSF. As shown in Figure 1, about three-fourths of the buildings surveyed were 70,000 GSF or less.

Municipal Code Requirements

Thirty-one locations, or 62 percent of those MOBs surveyed were required by code to provide 4.01 or more parking spaces per 1,000 GSF. Table 2 illustrates the number of parking spaces required by municipal zoning ordinances.

Parking Supply

Each individual MOB's parking supply was inventoried. Out of the 50 MOBs surveyed, 27 facilities, or approximately 54 percent, supplied 4.01 or more parking spaces (rounded to nearest whole number) per 1,000 GSF.

Figure 2 illustrates the number of parking spaces supplied per 1,000 GSF. Most of the facilities surveyed provided or nearly provided the number of code-required spaces. In some cases, the parking space supply fell short of the code requirement.

Table 1. Parking ratio comparison.

	Walker data collection	ITE *Parking Generation*, 3rd Edition
Peak period	10:00 a.m.–12:00 p.m.	10:00 a.m.–12:00 p.m. 2:00 p.m.–5:00 p.m.
Number of study sites	50	16
Average size of study sites (GFA)	62,427	43,000
Average peak-period parking demand	3.23 spaces per 1,000 sf	3.53 spaces per 1,000 sf
85th-percentile parking demand	4.21 spaces per 1,000 sf	4.30 spaces per 1,000 sf
Range of rates	1.38–8.90 spaces per 1,000 sf	2.34–5.45 spaces per 1,000 sf

Note: Peak occurred mid-week.

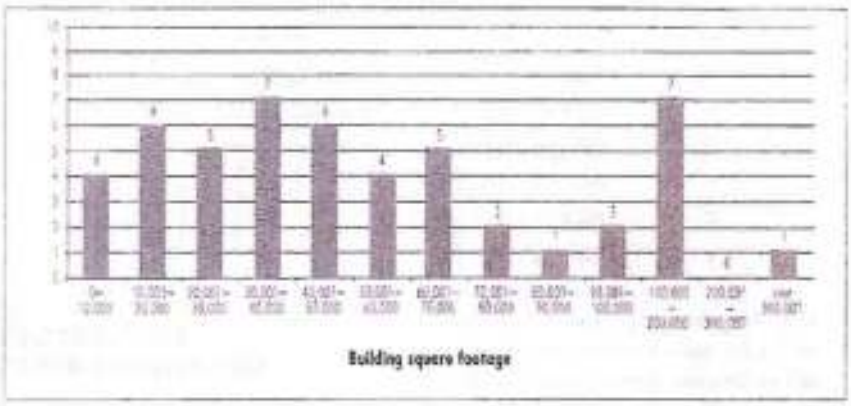

Figure 1. Number of MOBs by size.

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Parking Demand

Parking occupancy counts were taken for the MOB parking spaces to determine parking utilization during the 11 a.m. peak hour. These counts were compared to the occupied GSF of the building. The peak hour was determined based on the consultants' experience with hundreds of studies over the last 30 years. A majority of the facilities surveyed had peak-hour parking occupancies of 4.0 or fewer spaces per 1,000 GSF. This statistic fell significantly below both the legally required number of parking spaces and the observed parking supplies.

Table 2. Municipal code requirements for MOBs.

Number of parking spaces required by code	Number of facilities	
1.00 to 2.00 / 1,000 sf	1	2 percent
2.01 to 3.00 / 1,000 sf	6	12 percent
3.01 to 4.00 / 1,000 sf	12	24 percent
4.01 to 5.00 / 1,000 sf	20	40 percent
5.01 to 6.00 / 1,000 sf	6	12 percent
6.01 to 7.00 / 1,000 sf	1	2 percent
7.01 to 8.00 / 1,000 sf	2	4 percent
8.01 to 9.00 / 1,000 sf	1	2 percent
9.01 to 10.00 / 1,000 sf	1	2 percent
	50	100 percent

Figure 2. Parking supply provided by MOBs.

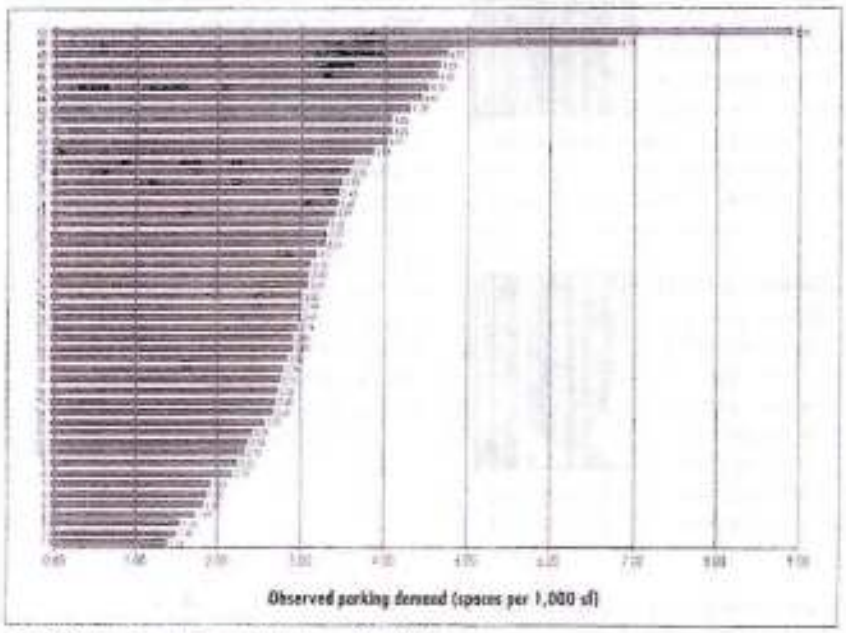

Figure 3. Observed peak-hour parking demand by MOB.

The following shows the total number of parking facilities surveyed (at the peak hour) by range of occupied parking spaces per 1,000 GSF:

Spaces per 1,000 GSF	Number of Facilities
1.00 to 2.00	7
2.01 to 3.00	18
3.01 to 4.00	14
4.01 to 5.00	9
5.01 to 6.00	0
6.01 to 7.00	1
7.01 to 8.00	0
8.01 to 9.00	1

Figure 3 shows each parking facility's parking demand in descending order. Observed peak-hour parking demand for the sample ranged from 1.38 to 8.90 spaces per 1,000 GSF. The observed mean and median peak-hour parking demand rates were 3.23 and 3.03, respectively. The 85th-percentile rate was 4.21 spaces per 1,000 GSF.

CONCLUSIONS

Fifty MOBs were surveyed as part of this research. Following is a summary of findings:

- The most common code requirement for the MOBs surveyed was 5.0 parking spaces per 1,000 GSF. Nineteen MOBs, or 38 percent of the sample, were required to provide 5.0 parking spaces per 1,000 GSF.
- The mean and median number of parking spaces provided per 1,000 GSF was 4.50 and 4.39, respectively.
- ITE calculated a mean demand of 3.53 parking spaces per 1,000 GSF (*Parking Generation, 3rd Edition*) compared to 3.23 parking spaces per 1,000 GSF found in this study.
- ITE's 85th-percentile demand of 4.30 parking spaces per 1,000 GSF (*Parking Generation, 3rd Edition*) is comparable to the 85th-percentile peak-hour

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MEDICAL OFFICE				
Peak-hour parking spaces occupied vs. 1,000 GSF				
Occupied building area on a weekday between 10 a.m. and 12 noon				
PARKING GENERATION RATES				
Average rate	**Range of rates**	**Standard deviation**	**Number of studies**	**Average 1,000 GSF occupied building area**
3.23	1.39–8.90	1.27	50	62,427

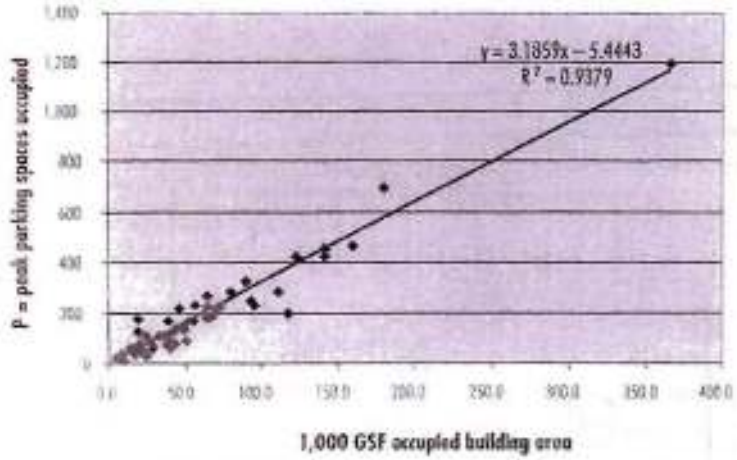


Figure 4. Data plot and statistical summary.

observation of 4.21 parking spaces per 1,000 GSF found in this study.

* Based on these findings, designing parking facilities to accommodate 4.5 spaces per 1,000 GSF of building space should be sufficient to meet the peak-hour parking demands of most medical office buildings. This recommendation is an 85th-percentile recommendation, which is consistent with other recognized and published industry standards, including the landmark November 2005 *Shared Parking* publication issued by the Urban Land Institute and the International Council of Shopping Centers. Sixty percent, or 30 of the 50 MOBs, are located in municipalities that now require more parking than the recommended 4.5 spaces per 1,000 GSF. ■

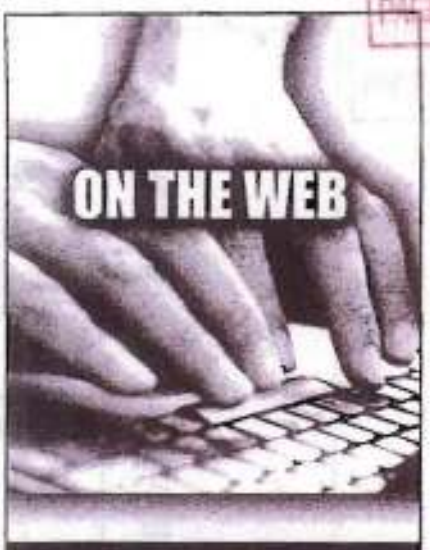
References

1. *Parking Generation, 3rd Edition*. Washington, DC, USA: Institute of Transportation Engineers (ITE), 2004.
2. *Parking Generation, 2nd Edition*. Washington, DC: ITE, 1987.

JOHN W. DORSETT, *AICP, is a senior vice president and shareholder of Walker Parking Consultants. He directs the firm's Consulting Resources Group, which specializes in parking-related engagements including access and revenue control systems, airport landside planning, financial, functional design planning, operations and traffic engineering.*

MARK J. LUKASICK *is a parking consultant with Walker Parking Consultants. He has more than 20 years of experience in hands-on parking operations and parking consulting. He may be contacted at mark.lukasick@walkerparking.com with any questions pertaining to this article.*

** Note: Opinions expressed herein are those of the authors and do not reflect official* ITE Journal *policy unless so stated.*



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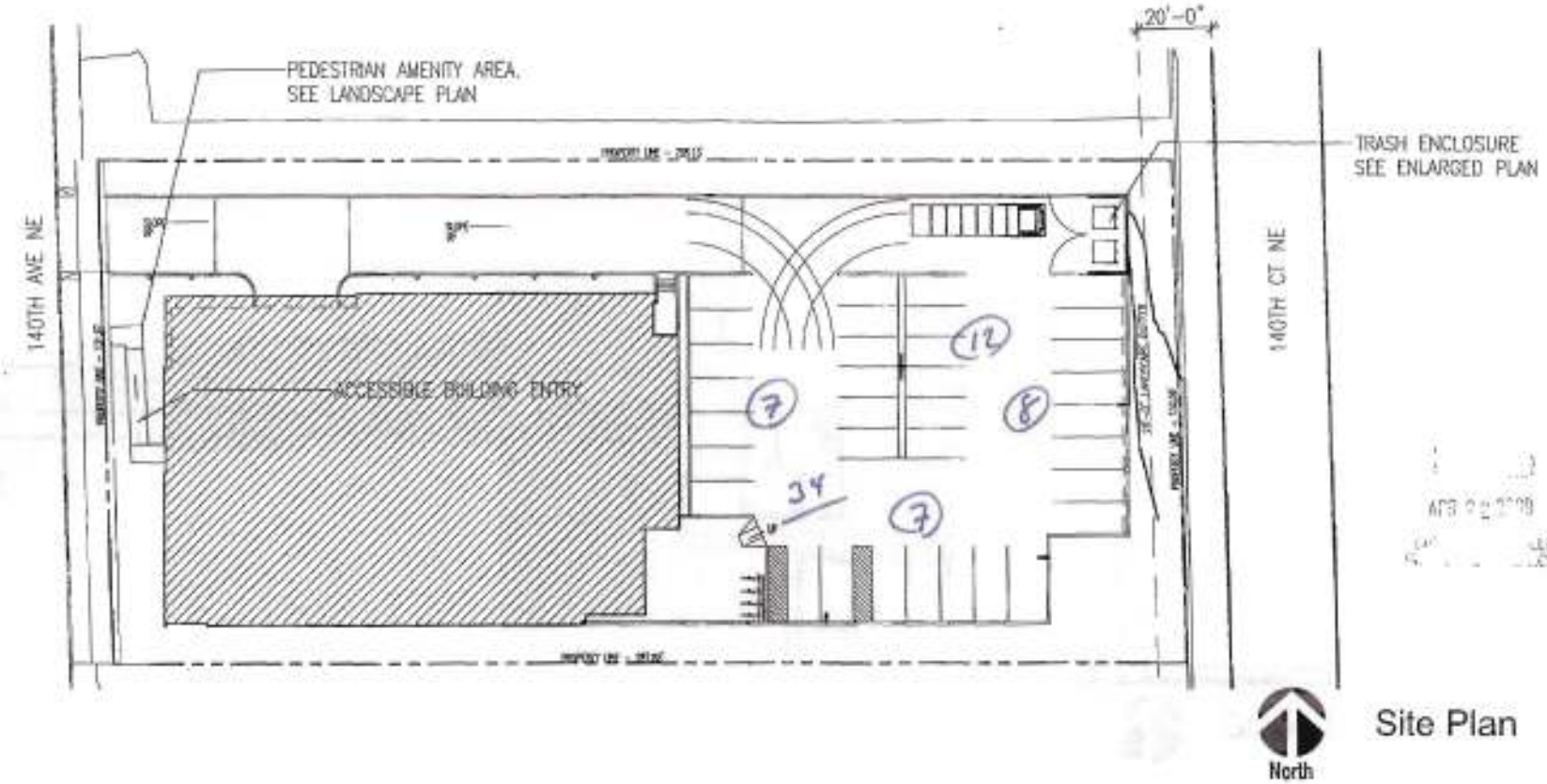

Site Plan

28

WOERMAN COLLINS

Skony Resources MOB

16916 140th Ave NE

Woodinville WA 98702

Woodinville Design Review

April 22 2009

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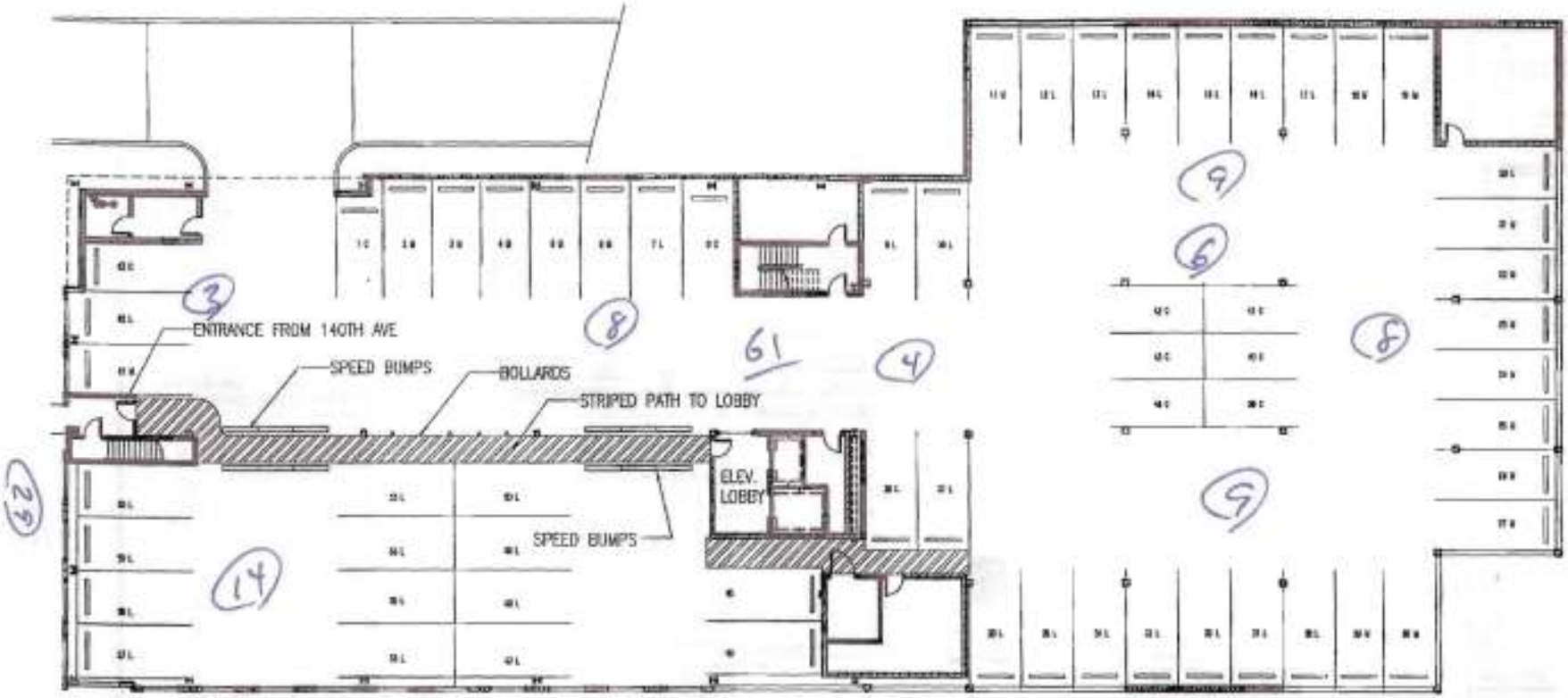

North

Garage Level Plan

COLLINS WOERMAN

Skony Resources MOB

16916 140th Ave NE

Woodinville WA 98702

Woodinville Design Review

APR 22 2009

April 22nd 2009

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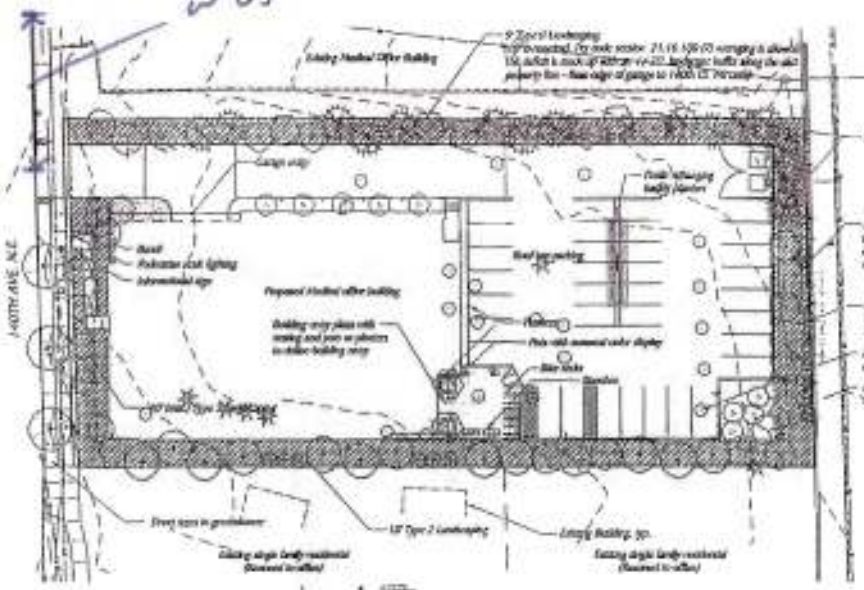
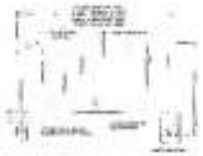
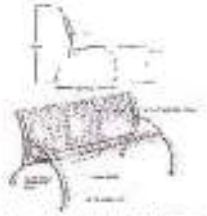


PEDESTRIAN SCALE LIGHTING

INFORMATIONAL SIGN



BIKE RACK



BENCH

Tree Retention/Replacement Notes

Notes

Plant List

Plant Spacing Notes

RECEIVED

TRIAD

PRELIMINARY PLANTING PLAN

SKONY RESOURCES MOB

CITY OF WOODINVILLE

08-141

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Mark J. Jacobs, PE, PTOE

From: Mark J. Jacobs, PE, PTOE [JakeTraffic@comcast.net]
Sent: Monday, June 08, 2009 9:54 AM
To: 'Mike Swenson'
Subject: RE: 2009.015 - Woodinville MOB

Mike

I hope to get the information this week; the TMC by Wednesday AM if possible and the sight lines by the end of the week.

See you Tuesday

Mark

From: Mike Swenson [mailto:Mike.Swenson@transpogroup.com]
Sent: Friday, June 05, 2009 11:51 AM
To: Mark J. Jacobs, PE, PTOE
Subject: RE: 2009.015 - Woodinville MOB

Mark,

I have forwarded your request to my client and will let you know when I hear something back. Thanks for the heads up on the review

From: Mark J. Jacobs, PE, PTOE [mailto:JakeTraffic@comcast.net]
Sent: Thursday, June 04, 2009 3:52 PM
To: Mike Swenson
Subject: 2009.015 - Woodinville MOB

Mike

It was nice chatting with you earlier. As I indicated I have been retained by the adjacent (to the north MOB) to review your TIA. Please provide the following:

- the TMC conducted at the existing MOB driveway on 140th Ave. NE (and the TMC at the driveway on NE 171st St. if conducted)
- sight lines (SSD and ESD) at the proposed access and near the sites south property line.

Contact me if you have any questions.

Mark
206.762.1978
206.799.5692 cell

SKONY MEDICAL CENTER ESTIMATED TRIPS GENERATED

Table 3. Weekday PM Peak Hour Trip Generation Estimate[1] – Woodinville Medical Office Building

Time Period	Size	Trip Generation In	Trip Generation Out	Trip Generation Total
Medical-Dental Office Building (LU #720)	23,400 gsf			
Weekday PM Peak Hour[2]		22	60	82
Weekday Daily[3]		423	423	846

1. Trip generation estimate is based upon data provided in *Trip Generation* (7th Edition) published by ITE.
2. Based upon procedures outlined in *Trip Generation*, the regression equation was used to estimate weekday PM peak hour project trips (No. Trips = Exp[0.93 x LN[x] + 1.47], 27-percent inbound). This equates to an equivalent trip rate of 3.53 trips per 1,000 gsf.
3. Based upon procedures outlined in *Trip Generation*, the average trip rate was used to estimate weekday daily trips (No. Trips = 36.13 per 1,000 gsf).

Transportation Impact Analysis, Woodinville Medical Office Building, prepared by transpoGroup, January 2000, page 9.

(Transportation Impact Analysis, prepared January 2009 by transpoGROUP, page 9.)

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EXHIBIT 3D
PAGE 1 OF 6

D

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CITY OF WOODINVILLE
DEVELOPMENT SERVICES

1 DESIGN REQUIREMENTS

1-4.6.3 Commercial Driveways

1. General

. . .

b. Access driveways for parking areas shall be located so as to cause the least possible conflict with vehicular and pedestrian traffic on public rights-of-way.

(City of Woodinville, Transportation Infrastructure Standards and Specifications, 1999 (Page 1.40; and City of Woodinville, Infrastructure and Design Standards and Specifications, 2007 (Page 1.51)

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PAGE 3 OF 6

CITY OF WOODINVILLE

TRANSPORTATION INFRASTRUCTURE STANDARDS AND SPECIFICATIONS

1999 Edition

Distributed By:

Public Works Department
13203 NE 175th Street
Woodinville, WA 98072

EXHIBIT 3d
PAGE 4 OF 6
City of Woodinville 1 - Design Requirements

Maximum Width of Residential Driveways		
Frontage	One Driveway Approach	Two Driveway Approaches
Under 30 feet	50% of frontage	Not allowed
30 to 60 feet	20 feet	Not allowed
60 to 80 feet	30 feet	22 feet
Over 80 feet	35 feet	30 feet

c. There must be at least 20 feet between driveways serving any one property frontage.
d. No driveway approach, including end slopes, shall be allowed within 5 feet of the side property line, unless a written request is made to and approved by the Public Works Director, and the owner of the adjacent property is a co-signer of the driveway permit.
e. In cases where driveway approaches are constructed on corner lots, no driveway approach, including side slopes, shall be constructed closer than 4 feet from the end of any curb return at the curb line.

3. Grade:
   a. The maximum allowable grade for a residential driveway is 10 percent.
   b. Grades up to 15 percent may be allowed subject to advance administrative approval of the Fire Marshal and Public Works Director. Grade changes that exceed 8 percent shall require vertical curves to connect tangents.

1-4.6.3 Commercial Driveways

1. General
   a. Each lot shall be entitled to one access point.

   b. Access driveways for parking areas shall be located so as to cause the least possible conflict with vehicular and pedestrian traffic on public rights-of-way.

   c. For commercial or industrial driveways with heavy traffic volumes or significant numbers of trucks, the City may require construction of the access as a private road intersection. This requirement will be based on traffic engineering analysis submitted by the applicant that considers, among other factors, intersection spacing, sight distance, and traffic volumes.

   d. Private road intersection type driveway openings requested by the applicant will be considered in lieu of conventional driveways in commercial areas when criteria 1 through 4 below are met. Meeting the criteria is not a guarantee that an intersection type driveway will be allowed.
      1. Projected driveway usage is greater than 1,000 vehicles per day;

EXHIBIT 3d
PAGE 5 OF 6

WOODINVILLE INFRASTRUCTURE DESIGN STANDARDS AND SPECIFICATIONS

2007 Edition

Prepared by

City of Woodinville
17301 133rd Avenue NE
Woodinville, WA 98072

EXHIBIT 3d
PAGE 6 OF 6

c) There must be at least 20-feet between driveways serving any one property frontage.
d) No driveway approach, including end slopes, shall be allowed within 5-feet of the side property line, unless a written request is made to and approved by the Public Works Director, and the owner of the adjacent property is a co-signer of the driveway permit.
e) In cases where driveway approaches are constructed on corner lots, no driveway approach, including side slopes, shall be constructed closer than 15-feet from the end of any curb return at the curb line.

3) Grade:
a) The maximum allowable grade for a residential driveway is 10%.
b) Grades up to 15% may be allowed subject to advance administrative approval of the Fire Marshal and Public Works Director. Grade changes that exceed 8% shall require vertical curves to connect tangents. Grades greater than 15% shall be subject to the guidelines of the Fire Marshal's Office for fire sprinkler requirements.

1-4.6.3 Commercial Driveways

1) General
a) Each lot shall be entitled to one access point.

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d) Private road intersection type driveway openings requested by the applicant will be considered in lieu of conventional driveways in commercial areas when criteria 1 through 4 below are met. Meeting the criteria is not a guarantee that an intersection type driveway will be allowed.
i) Projected driveway usage is greater than 1,000 vehicles per day;
ii) The opening is at least 160-feet from any other street intersection;
iii) The opening is at least 160-feet from any other driveway on the property frontage under control of the applicant;
iv) A minimum 100-feet storage area is provided between the curb line on the street and any turning or parking maneuvers within the development;
v) Where driveways intersect with state route rights-of-way, the applicant shall also obtain approval from the WSDOT Access Management Department.

EXHIBIT 3e
PAGE 1 OF 2

E

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DEVELOPMENT SERVICES

KING COUNTY GOVERNMENT iMAPS

(Driveway Spacing as proposed.)

(Driveway spacing relocated.)

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EXHIBIT 3f
PAGE 1 OF 13

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SECTIONS OF THE CITY OF WOODINVILLE PUBLIC INFRASTRUCTURE STANDARDS AND SPECIFICATION ON WHICH THE APPELLANT RELIES FOR ITS APPEAL.

EXHIBIT 3-F
PAGE 2 OF 13

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EXHIBIT 3F
PAGE 3 OF 13

ORDINANCE NO. 232

AN ORDINANCE OF THE CITY OF WOODINVILLE, WASHINGTON, AMENDING CHAPTER 12.09 OF THE WOODINVILLE MUNICIPAL CODE TO ADOPT NEW STREET AND CONSTRUCTION STANDARDS, AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, the City of Woodinville is one of the fastest-growing cities in western Washington, a fact which underscores the critical nature of the challenge facing the City's public facilities, including streets and intersections; and

WHEREAS, travel through Woodinville is heavily dependent on the automobile. However, much of the City's current transportation system can be characterized as a limited arterial system and limit transit system; and

WHEREAS, the Transportation Citizen Advisory Panel was established in January 1997, and developed new standards to guide the development of the City's infrastructure system; and

WHEREAS, the City of Woodinville Council wishes to update its standards to ensure that the City's infrastructure and its management meet the needs of the City's future populace and economy; and

WHEREAS, the City of Woodinville Council desires to amend Chapter 12.09 of the Woodinville Municipal Code to adopt said standards; NOW, THEREFORE,

THE CITY COUNCIL OF THE CITY OF WOODINVILLE, WASHINGTON, DO ORDAIN AS FOLLOWS:

Section 1. Standards Adopted Section 12.09.010 of the Woodinville Municipal Code is hereby amended to read as follows:

EXHIBIT 3f
PAGE 4 OF 13

Section 12.09.010 Standards Adopted.

The City of Woodinville hereby adopts by reference Exhibit A, entitled "City of Woodinville Public Infrastructure Standards and Specifications, 1998 Edition". A copy of Exhibit A is attached hereto and incorporated by reference as if set forth in full.

Section 2. Repealer. Section 12.09.020 of the Woodinville Municipal Code is hereby repealed.

Section 3. Savings The amendments to Chapter 12.09 of the Woodinville Municipal Code by this ordinance shall not affect the validity and enforcement of said chapter prior to the effective date of this ordinance.

Section 4. Severability. If any section, sentence, clause or phrase of this ordinance should be held to be invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other section, sentence, clause or phrase of this ordinance.

Section 27. Effective Date. This ordinance or a summary thereof consisting of the title shall be published in the official newspaper of the City of Woodinville, and shall take effect and be in full force five (5) days after publication.

CITY OF WOODINVILLE

MAYOR, DONALD BROCHA

ATTEST/AUTHENTICATED:

CITY CLERK, SANDRA STEFFLER

APPROVED AS TO FORM:

EXHIBIT 3f
PAGE 5 OF 13

OFFICE OF THE CITY OF WOODINVILLE ATTORNEY:

BY _____

FILED WITH THE CITY OF WOODINVILLE CLERK: 4·12·99
PASSED BY THE WOODINVILLE COUNCIL: 4·12·99
PUBLISHED: 4·19·99
EFFECTIVE DATE: 4·24·99
ORDINANCE NO. 232

EXHIBIT 3f
PAGE 6 OF 13

CITY OF WOODINVILLE

TRANSPORTATION INFRASTRUCTURE STANDARDS AND SPECIFICATIONS

1999 Edition

The city of WOODINVILLE

Distributed By:

Public Works Department
13203 NE 175th Street
Woodinville, WA 98072

EXHIBIT 3f
PAGE 7 OF 13

Maximum Width of Residential Driveways		
Frontage	**One Driveway Approach**	**Two Driveway Approaches**
Under 30 feet	50% of frontage	Not allowed
30 to 60 feet	20 feet	Not allowed
60 to 80 feet	30 feet	22 feet
Over 80 feet	35 feet	30 feet

c. There must be at least 20 feet between driveways serving any one property frontage.
d. No driveway approach, including end slopes, shall be allowed within 5 feet of the side property line, unless a written request is made to and approved by the Public Works Director, and the owner of the adjacent property is a co-signer of the driveway permit.
e. In cases where driveway approaches are constructed on corner lots, no driveway approach, including side slopes, shall be constructed closer than 4 feet from the end of any curb return at the curb line.

3. Grade:
   a. The maximum allowable grade for a residential driveway is 10 percent.
   b. Grades up to 15 percent may be allowed subject to advance administrative approval of the Fire Marshal and Public Works Director. Grade changes that exceed 8 percent shall require vertical curves to connect tangents.

1-4.6.3 Commercial Driveways

1. General
   a. Each lot shall be entitled to one access point.

   b. Access driveways for parking areas shall be located so as to cause the least possible conflict with vehicular and pedestrian traffic on public rights-of-way.

   c. For commercial or industrial driveways with heavy traffic volumes or significant numbers of trucks, the City may require construction of the access as a private road intersection. This requirement will be based on traffic engineering analysis submitted by the applicant that considers, among other factors, intersection spacing, sight distance, and traffic volumes.

   d. Private road intersection type driveway openings requested by the applicant will be considered in lieu of conventional driveways in commercial areas when criteria 1 through 4 below are met. Meeting the criteria is not a guarantee that an intersection type driveway will be allowed.
      1. Projected driveway usage is greater than 1,000 vehicles per day;

EXHIBIT 3F
PAGE 8 OF 13

2. The opening is at least 160 feet from any other street intersection;
3. The opening is at least 160 feet from any other driveway on the property frontage under control of the applicant;
4. A minimum 100 feet storage area is provided between the curb line on the street and any turning or parking maneuvers within the development;
5. Where driveways intersect with state route right-of-way, the applicant shall also obtain approval from the WSDOT Access Management Department.

2. Width:
   a. The minimum width of a commercial driveway shall be 20 feet.
   b. Where a driveway approach in excess of 20 feet is requested, the maximum approach widths which the Public Works Director may approve are as follows:

Maximum Width of Commercial Driveways	
Street Posted Speed (mph)	**Driveway Maximum Width**[a] (feet)
25	30
26-45	35
Over 45	40

a. Dimension (1) on Standard Details 322, 323, and 324.

3. Grade:
   a. The maximum grade for a commercial driveway is 8 percent.
   b. Grades up to 15 percent may be allowed subject to the approval of the Fire Marshal and Public Works Director.
   c. Vertical curves shall be used for smooth transitions at grade changes that exceed 6 percent, excluding the tie to the roadway.

4. Spacing:

The minimum spacing for commercial driveways is as shown below. Deviations from the minimum spacing requirements must be approved in writing by the Public Works Director. When allowed, commercial driveways located closer than 100 feet from the approach to a principal or minor arterial intersection shall be signed and marked "Right Turn Only" unless otherwise approved by the Public Works Director.

EXHIBIT 3F
PAGE 9 OF 13

Street Functional Classification	Minimum Driveway Spacing as a Multiple of Posted Speed (in feet) Minimum Use[1]	Minor Generator[2]	Major Generator[3]
Principal Arterial	4–5	7–8	9–10
Minor Arterial	3–4	5–6	7–8
Commercial Collector	2–3	4–5	5–6

1. Fewer than 50 vehicle trips per day or 5 trips in the peak hour (two-way total).
2. About 51 to 5,000 vehicle trips per day or fewer than 500 trips in the peak hour (two-way total).
3. Over 5,000 vehicle trips per day or over 500 trips in the peak hour (two-way total).

1-4.6.4 Driveways Within Areas of Limited Street Improvements

1. Where standard gutters and curbs have not been installed, the apron length shall be measured along the property line and there shall be not less than 20 feet of frontage between driveway approaches serving any one property. Permits shall not be issued for any surface improvement or paving on the street right-of-way between driveway approaches unless a concrete curb or other physical obstruction of a design satisfactory to the Public Works Director is constructed and maintained by the applicant along his property line so that the entrance and exit of vehicles to and from applicant's property will be restricted to the established driveway approaches. Pursuant to the permit conditions, the applicant may surface the driveway approaches or other areas within the right-of-way, extending the same type of paving used on the applicant's premises so that it merges with the street pavement; provided the applicant's paving is adequate and suitable for the traffic to be carried. Such extended paving between the property line and the street pavement shall be to established grade or other slope as designed by the Project Engineer and approved by the Public Works Director to provide for proper runoff.

2. Such paving between the property line and the street pavement may meet the street pavement at a point ahead of the curb opening in order to provide for safe deceleration of vehicles turning into the applicant's premises. If applicant's paving is extended beyond the property line into a street right-of-way at an intersection or crossroad, the Public Works Director may require the applicant to construct a suitable traffic island or curb to provide for the protection of such municipal facilities as may be necessary.

1-4.6.5 City-Required Reconstruction of Approaches

I. Reconstruction. All driveway approaches heretofore constructed or installed and now in use, which are deemed by the City Council as exceeding the allowable width per

EXHIBIT 3f
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WOODINVILLE INFRASTRUCTURE DESIGN STANDARDS AND SPECIFICATIONS

2007 Edition

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City of Woodinville
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EXHIBIT 3F
PAGE 11 OF 13

c) There must be at least 20-feet between driveways serving any one property frontage.
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EXHIBIT 3F
PAGE 12 OF 13

2) Width:
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Maximum Width of Commercial Driveways	
Street Posted Speed (mph)	**Driveway Maximum Width**[a] (feet)
25	30
26-45	35
Over 45	40

a. Dimension (1) on Standard Details 351, 352, and 353.

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4) Spacing:
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EXHIBIT 3f
PAGE 13 OF 13

Minimum Driveway Spacing as a Multiple of Posted Speed (in feet)			
Street Functional Classification	**Minimum Use[1]**	**Minor Generator[2]**	**Major Generator[3]**
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2) The entrance and exit of vehicles to and from applicant's property will be restricted to the established driveway approaches. Pursuant to the permit conditions, the applicant may surface the driveway approaches or other areas within the right-of-way, extending the same type of paving used on the applicant's premises so that it merges with the street pavement, provided the applicant's paving is adequate and suitable for the traffic to be carried. Such extended paving between the property line and the street pavement shall be to established grade or other slope as designed by the Project Engineer and approved by the Public Works Director to provide for proper runoff.

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