CITY OF GROSSE POINTE WOODS, MICHIGAN
20025 Mack Plaza Dr.
Planning Commission Meeting Agenda
October 23, 2012
7:30 p.m.

1. **CALL TO ORDER**
2. **ROLL CALL**
3. **PLEDGE OF ALLEGIANCE**
4. **ACCEPTANCE OF AGENDA**
5. **RECOGNITION OF COUNCIL REPRESENTATIVE/S**

6. **APPROVAL OF MINUTES**:
   Planning Commission – 09/25/12

7. **PUBLIC HEARING: UNDER THE PROVISIONS OF MICHIGAN STATUTES, SECTION 125.584, et al, AND SECTION 5.2934, et al, AND CHAPTER 50, ZONING, ARTICLE II, ADMINISTRATION & ENFORCEMENT, SECTION 50-32(5), SPECIAL LAND USE APPROVAL, OF THE 2007 GROSSE POINTE WOODS CITY CODE, FOR ST. JOHN HOSPITAL & MEDICAL CENTER, 19231/19233 MACK AVENUE, TO INSTALL A TEMPORARY HELIPORT IN THE NORTH PARKING LOT**
   A. PC Excerpt 09/25/12
   B. Memo – 10/18/12 – Director of Public Safety (A. Pazuchowski)
   C. Memo – 10/18/12 – Building Official (G. Tutag)
      (1) 2009 Michigan Residential Code, Section 412.7 Heliports and helistops
      (2) Site Plan Review Meeting Checklist – 19231/19233 Mack
      (3) Fly Neighborly Guide
   D. Letter of Request – 09/10/12 - SJH&MC Eng & Mntc Administrator (J. Wild)
      (1) Application for Temporary Heliport - 09/10/12
      (2) Letter to Detroit Planning & Development Division – 09/28/12 – SJH&MC (R. White, Architect)
      (3) Letter to SJH&MC – 07/25/12 – Wayne County Dept of Public Services (A. Aljawad & S. Khaldi)
      (4) Letter to Detroit Planning & Development Division – 07/20/12 – State of Michigan, Department of Transportation (J. Zapata)
      (5) SJH&MC Policy/Procedure Manual #71 – Helistop Operations Policy – 07/10/12
      (6) E-mail (Sound Levels) – 10/02/12 – SJH&MC Eng & Mntc Administrator (J. Wild)
      (7) Eurocopter Noise Level and Comparison Charts
      (8) Temporary Helistop - Pg. 1 Cover Sheet - 10/02/12
      (9) Overall Site Plan – 10/02/12
      (10) Site Demolition Plan
      (11) Construction Plan
      (12) Painting Plan
   E. Notice of Public Hearing – GP News
   F. Affidavit of Property Owners Notified – 10/04/12

8. **DISCUSSION: LAND USES & ZONING ON MACK AVENUE**
   Memo – 10/19/12 – Building Official (Tutag)

9. **SCHEDULE A PUBLIC HEARING: SOLAR ENERGY ORDINANCE**
   COW Excerpt – 10/01/12

10. **BUILDING OFFICIAL'S MONTHLY REPORT:**
    Building Department Report – September 2012

11. **COUNCIL REPORT:**
    October - Gilezan

12. **INFORMATION ONLY – COUNCIL REPRESENTATIVE FOR NEXT MEETING:**
    November - Hamborsky

13. **NEW BUSINESS:**
    Sub-Committee Reports:
    2020 Plan (Hamborsky/Vitale/Fuller/Gilezan)
    Special Sign (Vaughn/Evola/Fuller/Richardson)

14. **PUBLIC COMMENT:**

15. **ADJOURNMENT:**

Submitted by: Gene Tutag, Building Official 313-343-2426

IN ACCORDANCE WITH PUBLIC ACT 267 (OPEN MEETINGS ACT) POSTED AND COPIES GIVEN TO NEWSPAPERS

Notice: The City of Grosse Pointe Woods will provide necessary, reasonable auxiliary aids and services, such as signers for the hearing impaired, or audio tapes of printed materials being considered at the meeting to individuals with disabilities. All such requests must be made at least five days prior to said meeting. Individuals with disabilities requiring auxiliary aids or services should contact the City of Grosse Pointe Woods by writing or calling the A.D.A. Coordinator or the City Clerk's office, 20025 Mack Plaza, Grosse Pointe Woods, MI 48236 (313) 343-2445; or Telecommunications Device for the Deaf (TDD) (313) 343-9249.

NOTE TO PETITIONERS:
Please make every effort to be present at the meeting so that public officials may get the benefit of your input on the matter before them.

PLANNING COMMISSION
09/25/12 – 026

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MINUTES OF THE PLANNING COMMISSION OF THE CITY OF GROSSE POINTE WOODS HELD ON TUESDAY, SEPTEMBER 25, 2012, IN THE COUNCIL-COURT ROOM OF THE MUNICIPAL BUILDING, 20025 MACK AVENUE, GROSSE POINTE WOODS, MICHIGAN.

The meeting was called to order at 7:36 p.m. by Chair Gilezan.

Roll Call:	Chair Gilezan Evola, Fuller, Hamborsky, Rozycki, Richardson, Vaughn, Vitale
Absent:	Stapleton
Also Present:	Building Official Tutag City Attorney C. Berschback Recording Secretary Babij Ryska

Motion by Fuller, seconded by Evola, that Planning Commission Member Stapleton be excused from tonight's meeting.

MOTION CARRIED by the following vote:
YES: Evola, Fuller, Gilezan, Hamborsky, Rozycki, Richardson, Vaughn, Vitale
NO: None
ABSENT: Stapleton

Motion by Rozycki, seconded by Vaughn, that all items on tonight's agenda be received, placed on file, and taken in order of appearance.

MOTION CARRIED by the following vote:
YES: Evola, Fuller, Gilezan, Hamborsky, Rozycki, Richardson, Vaughn, Vitale
NO: None
ABSENT: Stapleton

Chair Gilezan welcomed Council Member Ketels, as Planning Commission Representative, for being in attendance at tonight's meeting.

Motion by Richardson, seconded by Vaughn, regarding **Approval of Minutes**, that the Planning Commission Regular Meeting minutes dated August 28, 2012 be approved.

MOTION CARRIED by the following vote:
YES: Evola, Fuller, Gilezan, Hamborsky, Rozycki, Richardson, Vaughn, Vitale
NO: None
ABSENT: Stapleton

The next item on the agenda was **Continued Discussion: Land Uses & Zoning on Mack Avenue**. City Attorney Berschback introduced a draft ordinance that defines "fast food" and provides language to restrict drive-thru food establishments to the C-2 district. Discussion ensued regarding some of the definitions. The City Attorney and Building Official will continue to work on the draft ordinance and then discuss it with John Jackson of McKenna Associates, Inc. An updated draft will be provided at the October meeting.

The next item on the agenda was regarding **Schedule a Public Hearing: St. John Hospital & Medical Center 19231/19233 Mack Avenue. To install a temporary heliport in the north parking lot**. Building Official Tutag gave an overview of the proposed project and the Commission discussed notification requirements.

Motion by Vitale, seconded by Rozycki, that the Planning Commission schedule a **Public Hearing** at a regular meeting on **October 23, 2012** for the purpose of hearing the proposed plan to install a **temporary heliport** at St. John Hospital & Medical Center 19231/19233 Mack Avenue, in the north parking lot.

MOTION CARRIED by the following vote:
YES: Evola, Fuller, Gilezan, Hamborsky, Rozycki, Richardson, Vaughn, Vitale
NO: None
ABSENT: Stapleton

Motion by Richardson, seconded by Fuller, that the Planning Commission immediately certify the previous motion.

MOTION CARRIED by the following vote:
YES: Evola, Fuller, Gilezan, Hamborsky, Rozycki, Richardson, Vaughn, Vitale
NO: None
ABSENT: Stapleton

The next item on the agenda was the **Building Official's Monthly Report.** Mr. Tutag reported the following:

- The Rivers project is coming along. All cottage units are sold and there is a waiting list for the independent living apartments. Curb cuts are complete. Excavation begun for the basement of the main building. Footing will be done by the end of November.
- Viviano Flowers bought out Secret Garden and will open a new shop at 20087 Mack.
- Verizon is moving locations within the City. Businesses are shopping around for cheaper rent and they are getting good deals with long term leases.
- Current vacancy rate is about 7%.
- Mack Avenue Grille has reopened.

Commission Member Fuller gave the **September 2012 Council Reports**:

- September 10th meeting: No one was able to attend.
- September 17th meeting: Council provided notice that The Rivers project is applying for $30 million in bonds through the Economic Development Corporation of Wayne County. There are no tax ramifications for this financing.

Commission Member Fuller will attend the October 1st Council Meeting and Chair Gilezan will attend the October 15th meeting.

The following **Sub-Committee Reports** were provided:

2020 Plan – Commission Member Hamborsky reported that the sub-committee met in a three hour session last Saturday and is requesting a Workshop meeting in October for the purpose of making a presentation to the rest of the Commission.

Chair Gilezan scheduled a **Workshop meeting** on **October 23, 2012 at 6:30 p.m.**

Special Sign Ordinance – Nothing to report.

Hearing no objections, the following items were heard under **New Business**:

- Chair Vaughn recommended that the Commission Members read two articles in the latest edition of Planning and Zoning News that was distributed by the Building Department.

Motion by Evola, seconded by Fuller, to adjourn the Planning Commission meeting at 8:46 p.m. Passed unanimously.

PLANNING COMMISSION
09/25/12 – EXCERPT

The next item on the agenda was regarding **Schedule a Public Hearing: St. John Hospital & Medical Center 19231/19233 Mack Avenue. To install a temporary heliport in the north parking lot.** Building Official Tutag gave an overview of the proposed project and the Commission discussed notification requirements.

Motion by Vitale, seconded by Rozycki, that the Planning Commission schedule a **Public Hearing** at a regular meeting on **October 23, 2012** for the purpose of hearing the proposed plan to install a **temporary heliport** at St. John Hospital & Medical Center 19231/19233 Mack Avenue, in the north parking lot.

MOTION CARRIED by the following vote:
YES: Evola, Fuller, Gilezan, Hamborsky, Rozycki, Richardson, Vaughn, Vitale
NO: None
ABSENT: Stapleton

Motion by Richardson, seconded by Fuller, that the Planning Commission immediately certify the previous motion.

MOTION CARRIED by the following vote:
YES: Evola, Fuller, Gilezan, Hamborsky, Rozycki, Richardson, Vaughn, Vitale
NO: None
ABSENT: Stapleton

7B

CITY OF GROSSE POINTE WOODS
DEPARTMENT OF PUBLIC SAFETY

Date: October 18, 2012

To: Gene Tutag, Building Official

From: Andrew L. Pazuchowski, Director of Public Safety

Subject: St. John Hospital & Medical Center – Temporary Heliport

After reviewing the plans and documents submitted by St. John Hospital, it appears that their proposal meets all federal, state, and local laws pertaining to their projected heliport. Moreover, the plan addresses pedestrian safety prior to landing and takeoff from the heliport.

As outlined in the plan, St. John will evacuate a 200-foot radius to ensure the safety of pedestrians whenever the heliport is initiated. As an additional safety measure, I recommend expanding this radius by preventing ingress of vehicles into the parking lot during any takeoff or landing. This would reduce the risk of pedestrians exiting their vehicles and approaching the heliport area.

If approved, our Department would prepare a strategic plan for response to an emergency incident, which will then be disseminated to our mutual aid departments for training and preparedness.

Please feel free to contact me if you have any questions or concerns.

7C

CITY OF GROSSE POINTE WOODS
BUILDING DEPARTMENT
MEMORANDUM

TO: Planning Commission

FROM: Gene Tutag, Building Official GT

DATE: October 18, 2012

SUBJECT: Request for consideration of a Special Land Use/Site Plan Approval for a temporary helistop in the St. John Hospital & Medical Center's north parking lot located at 19231 Mack Avenue, Grosse Pointe Woods

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The proposed helistop will be located within the City of Grosse Pointe Woods in the St. John Hospital and Medical Center (SJH&MC) campus. The property is zoned C-2, High Intensity City Center. Hospitals and uses accessory thereto are permitted uses in the district as a special land use according to section 50-420(4).

The project provides for the addition of a helistop to be located on the SJH&MC north parking lot, north of the north tower. SJH&MC property is approximately 30-acres. The campus is generally bounded by: Moross on the south, Mack Ave to the east, Bournemouth to the north and Raymond to the west. The helistop will be located 272 feet from the north property line and 168 feet from the west property line of the SJH&MC. See Attachment #7D(8) to view the aerial photograph project location map. The existing land uses surrounding the campus are primarily residential.

The creation of the helistop will involve fencing a 90 x 90 square foot area of the north parking lot, identifying the landing area by painting the pavement, installation of a wind sock, navigation lights, and fire extinguishers as indicated on the attached site plan. No changes to existing structures are anticipated. There will be no helicopter storage, refueling, maintenance, or repairs at the site. The plans submitted comply with Section 412.7 Heliports and helistops of the 2009 Michigan Building Code (copy attached).

A Eurocopter EC135 will be the equipment servicing the helistop.

According to SJH&MC administration the helistop will serve a specific need for stroke patients living primarily in the thumb region of the State. Approximately 40 flights per year are anticipated. No other emergency or non-emergency use of the site is being requested.

SJH&MC is currently working with the City of Detroit for a permanent location for the helistop.

This has been verified by the attached correspondence between the City of Detroit and SJH&MC. We have also exchanged information with the City of Detroit Planning & Development Division.

The helistop will be decommissioned at the end of the permit term and the area restored to its former condition. However, if approval for the permanent site is granted by Detroit prior to expiration of the temporary site permit, the project will end at that time and the temporary site vacated.

A pre-application meeting was held with the applicant as required by Section #50-36. The complexity of the project is such that it has been determined to be a minor project.

This accessory use to the hospital as stated above is a permitted use subject to the special land use/site plan review requirements of Sections 50-421, 50-34, and 50-42 of the City's Zoning Ordinance.

The site plan and attachments submitted have been reviewed and do comply with the referenced sections.

Due to the nature of the proposed project usage it is impossible to say that all flights will follow the exact same flight path, however the proposed flight path is designed to overfly the Moross corridor to the south, northerly over Mack Ave, then westerly into the hospital campus. The pilots will be required to use noise abatement flight procedures referred to as "Fly Neighborly". The flight procedures were developed by the helicopter manufacturers to be consistent with specific aircraft capabilities and safety of flight (copy attached).

Approximately 20 parking spaces will be unavailable during the period the helistop is permitted. This will have no impact on existing parking requirements as the campus currently has an excess capacity of 383 parking spaces (Parking Tabulation attached).

Noise levels measured at the hospital walkway 162 feet from landing site are provided in the attached correspondence and indicate they are below the maximum 85 decibels allowed in Section 28-349 of the City code. The closest residential property is 168' away. A second demo flight is scheduled for Monday, October 22, 2012 at 6:30 p.m. City staff will be measuring sound levels during the take-off and landing at various locations in the adjoining neighborhoods. Results will be provided at the public hearing.

(b) *Prohibited noise.* It shall be unlawful for any person, owner or occupant of any premises within the city to cause or permit any noise to be emitted from any equipment, including radios, phonographs, musical instruments, television sets, electric motors, gasoline engines or other mechanical equipment owned by such person, under the control of such person or located upon the premises owned or under the control of such person, which noise exceeds a sound level of 85 decibels in combination with and including ambient noise measured on a sound meter set out on the fast setting of the "A" scale.

(c) *Measurement of noise levels.* Noise levels shall be measured at a distance of a minimum of 20 feet from the noise source located within any public right-of-way. If the noise source is located on private property or public property other than the public right-of-way, then the measurement shall be made at a distance of not less than 15 feet from the property line of the property on which the noise source is located.

Recommendation

The approval requirements of a special land use in the C-2 district according to section 50-421 are as follows:

Sec. 50-421. - Standards for approval of special land uses.

Special land uses in the C-2 district shall be approved pursuant to requirements set forth in section 50-32 only upon a finding by the city council that:

(1) The site plan for the proposed special land use conforms to all the requirements of this chapter, including the site plan standards set forth in sections 50-34—50-42; and

(2) The proposed special land use will be part of an overall project which includes substantial retail business or office development, and which conforms to the statement of purpose set forth in section 50-418. A necessary but not sufficient condition for a finding of conformity with the statement of purpose shall be a city council determination, based on facts presented by the applicant, that the applicant's proposed special land use will not result in or be likely to result in more than 15 percent of the replacement value of all nonmunicipal improvements in the C-2 district being exempt from property taxes. In making such a determination, the city council shall consider existing improvements and proposed improvements, which, in the judgment of the council, have a high possibility of being completed.

The submitted site plan and associated correspondence conform to the standards of Sections 50-34 and 50-42 and with the statement of purpose found in section 50-418 regarding special land uses and site plan approval.

It is recommended that a resolution be adopted and sent to the city council indicating the special land use and attached site plan be approved for a time period not to exceed one year from the date the city council adoption with the following conditions:

1. The City Administrator has the right and authority to cancel such approval and prohibit the use of such helistop upon noncompliance with the provisions of this approval, or for any other reasonable cause or ground, based upon the protection of the public safety, health or welfare.

2. Only Eurocopter EC135 helicopters with four-bladed rotors shall be permitted to land at the SJH&MC helistop.

3. Landings at the helistop shall be limited to stroke patients from the thumb region of the state. No other landings will be permitted.

4. The attached hospital policy/procedure #71, page 1, be amended to reflect the use of the helistop exclusively to stroke patients from the thumb region of the state.

5. If approval and construction of the permanent helistop in Detroit is permitted within the one year time limit of this approval, the temporary helistop in Grosse Pointe Woods shall be decommissioned.

6. SJH&MC will submit a monthly report to the City of landings and take-offs at the site.

7. Pilots follow "Fly Neighborly" procedures.

8. SJH&MC agrees to indemnify, hold harmless, and defend the City, it's officers, agents, and employees from any and all liability or claims that may be brought against the City arising out of its approval of the special land use/site plan.

7C(1)

less than the maximum allowable quantities per *control area* in Table 307.1(1). Spray equipment cleaning operations shall be conducted in a liquid use, dispensing and mixing room.

[F] 412.6.4 Storage. Storage of flammable liquids shall be in a liquid storage room.

[F] 412.6.5 Fire suppression. Aircraft paint hangars shall be provided with fire suppression as required by NFPA 409.

412.6.6 Ventilation. Aircraft paint hangars shall be provided with ventilation as required in the *International Mechanical Code*.

412.7 Heliports and helistops. Heliports and helistops shall be permitted to be erected on buildings or other locations where they are constructed in accordance with Sections 412.7.1 through 412.7.4.

412.7.1 Size. The landing area for helicopters less than 3,500 pounds (1588 kg) shall be a minimum of 20 feet (6096 mm) in length and width. The landing area shall be surrounded on all sides by a clear area having a minimum average width at roof level of 15 feet (4572 mm) but with no width less than 5 feet (1524 mm).

412.7.2 Design. Helicopter landing areas and the supports thereof on the roof of a building shall be noncombustible construction. Landing areas shall be designed to confine any flammable liquid spillage to the landing area itself and provisions shall be made to drain such spillage away from any *exit* or *stairway* serving the helicopter landing area or from a structure housing such *exit* or *stairway*. For structural design requirements, see Section 1605.4.

412.7.3 Means of egress. The *means of egress* from heliports and helistops shall comply with the provisions of Chapter 10. Landing areas located on buildings or structures shall have two or more *means of egress*. For landing areas less than 60 feet (18 288 mm) in length or less than 2,000 square feet (186 m^2) in area, the second *means of egress* is permitted to be a fire escape, *alternating tread device* or ladder leading to the floor below.

412.7.4 Rooftop heliports and helistops. Rooftop heliports and helistops shall comply with NFPA 418.

SECTION 413
COMBUSTIBLE STORAGE

413.1 General. High-piled stock or rack storage in any occupancy group shall comply with the *International Fire Code*.

413.2 Attic, under-floor and concealed spaces. *Attic*, under-floor and concealed spaces used for storage of combustible materials shall be protected on the storage side as required for 1-hour fire-resistance-rated construction. Openings shall be protected by assemblies that are self-closing and are of noncombustible construction or solid wood core not less than $1^3/_4$ inch (45 mm) in thickness.

Exceptions:

1. Areas protected by *approved automatic sprinkler systems*.
2. Group R-3 and U occupancies.

SECTION 414
HAZARDOUS MATERIALS

[F] 414.1 General. The provisions of Sections 414.1 through 414.7 shall apply to buildings and structures occupied for the manufacturing, processing, dispensing, use or storage of hazardous materials.

[F] 414.1.1 Other provisions. Buildings and structures with an occupancy in Group H shall also comply with the applicable provisions of Section 415 and the *International Fire Code*.

[F] 414.1.2 Materials. The safe design of hazardous material occupancies is material dependent. Individual material requirements are also found in Sections 307 and 415, and in the *International Mechanical Code* and the *International Fire Code*.

[F] 414.1.2.1 Aerosols. Level 2 and 3 aerosol products shall be stored and displayed in accordance with the *International Fire Code*. See Section 311.2 and the *International Fire Code* for occupancy group requirements.

[F] 414.1.3 Information required. A report shall be submitted to the *building official* identifying the maximum expected quantities of hazardous materials to be stored, used in a closed system and used in an *open system*, and subdivided to separately address hazardous material classification categories based on Tables 307.1(1) and 307.1(2). The methods of protection from such hazards, including but not limited to *control areas*, fire protection systems and Group H occupancies shall be indicated in the report and on the *construction documents*. The opinion and report shall be prepared by a qualified person, firm or corporation *approved* by the *building official* and provided without charge to the enforcing agency.

For buildings and structures with an occupancy in Group H, separate floor plans shall be submitted identifying the locations of anticipated contents and processes so as to reflect the nature of each occupied portion of every building and structure.

[F] 414.2 Control areas. *Control areas* shall comply with Sections 414.2.1 through 414.2.5 and the *International Fire Code*.

414.2.1 Construction requirements. *Control areas* shall be separated from each other by *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 712, or both.

[F] 414.2.2 Percentage of maximum allowable quantities. The percentage of maximum allowable quantities of hazardous materials per *control area* permitted at each floor level within a building shall be in accordance with Table 414.2.2.

[F] 414.2.3 Number. The maximum number of *control areas* within a building shall be in accordance with Table 414.2.2.

Address: 19231/19233 MACK

Major ☐ Minor ☑

SITE PLAN REVIEW MEETING CHECKLIST

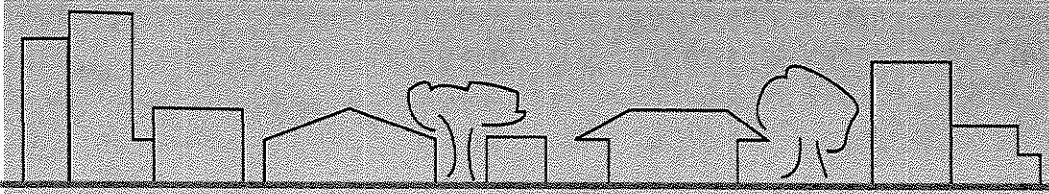
INFORMATION	REQUIRED	RECEIVED	COMMENTS
SEAL of Registered Architect or Professional Engineer	X	X	
LEGAL DESCRIPTION, Address & Zoning Information	X	X	
TITLE BLOCK (Applicant's name, project name, preparer's name, drawing scdale and date of original drawing and any revisions)	X	X	
SCALE: Drawn to a minimum of: 1" = 10' sites < 5 acres, 1" = 100' sites > 5 acres Provide a General Location Map at a scale of: 4" = 1 mile, giving the site location.	X	X	
EXISTING & PROPOSED TOPOGRAPHY drawn to at least 2' contour intervals shall be shown for sites of 1 acre or more. Topography on the site plan and within 100' of the site shall be included, referenced to a USGS benchmark.	N/A		
EXISTING AND PROPOSED VEGETATION: Trees & shrubs shall be used on the site plan where the trees and shrubs exist or where such vegetation will be planted. All such trees and shrubs shall be labeled as to size and whether existing or proposed.	N/A		
MATERIAL SAMPLES: List of primary exterior materials (i.e. brick, stone, roofing, paint chips). *Bring samples to the Planning Commission Meeting.*	N/A		

Non-Refundable Application Fee - $350

7/12

INFORMATION	REQUIRED	RECEIVED	COMMENTS
12) Location of front, side and rear setbacks, height restriction and yard dimensions.	X		
13) Dimensioned parking spaces and parking coverage, preliminary drainage plan, drives and method of paving, and cross sections and details of all curbs and ramps.	N/A		
14) Location of lawns and landmark trees, hardscape and landscape areas, including specific plant material proposed. *(A landmark tree is any tree that has a trunk over 12" in diameter as measured from 4.5' from the average ground level.)*	N/A		
15) Greenbelt, wall or berm locations and cross sections.	N/A		
16) All existing and proposed easements.	N/A		
17) Designation of fire lanes and fire hydrant locations.	X	X	
18) Building elevations including location, height and outside dimensions of all proposed buildings and structures, including color renderings.	N/A		
19) Location, size, height and lighting of all proposed signs.	X	X	
20) Swimming pool fencing details, including height and type of fence, if applicable.	N/A		

7C(3)



Fly Neighborly Guide

produced by the **Helicopter Association International** Fly Neighborly Committee

Preface

This is the third edition of the Helicopter Association International (HAI) *Fly Neighborly Guide*. The initial guide was issued in 1981 and again with a change to the title page in 1983. A second edition was issued in 1993. This guide is based on the second edition and was edited and revised by Charles Cox and Dr. John Leverton on behalf of the HAI Fly Neighborly Committee.

The Fly Neighborly Program is a voluntary noise abatement program developed by the HAI Fly Neighborly Committee. The program is designed to be implemented world-wide by large and small individual helicopter operators. This program applies to all types of civil, military and governmental helicopter operations.

Fly Neighborly Noise Abatement procedures for specific helicopter models are available on the HAI Web site www.rotor.com.

Additional pilot training information, discussion of helicopter noise sources, noise propagation and general information on how to operate helicopters to minimize the noise impact is also available on an associated interactive Noise Abatement Training CD developed for pilots by the HAI Manufacturers Committee. Copies of this CD can be obtained from HAI .

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Foreword

In the late 1970s, concern was being expressed about helicopter noise by the general public and national authorities in a number of nations, including the USA. As a result, a number of Helicopter Association International (HAI) committees, including the Heliport and Airways Committee (now known as the Heliports Committee), started to research how this concern should be addressed. At the same time, the International Civil Aviation Organization (ICAO), with active support of the United States Federal Aviation Administration (FAA) and most European nations, established a working group to develop helicopter noise certification standards. In addition, the FAA issued a Notice of Proposed Rulemaking (NPRM) outlining proposed noise certification procedures and limits.

The industry, and HAI in particular, felt that a better approach would be for the industry to develop voluntary guidelines to control the noise impact by operational means. After a number of FAA/industry meetings, the FAA, in the fall of 1981, agreed to withdraw its initial NPRM related to helicopter noise certification while additional technical data were acquired. This was done with the understanding that the helicopter industry would develop new technology - creating quieter, more advanced equipment, and implement a voluntary noise abatement program. This resulted in the establishment of the HAI Fly Neighborly Program based on an earlier program developed by Bell Helicopter Textron.

ICAO initially issued international noise standards in 1981, as a part of the International Standards and Recommended Practices, "Environmental Protection," Annex 16 to the Convention on International Civil Aviation. These were not adopted by many nations before they were relaxed in 1985. Since that time, the standards have been amended a number of times. The FAA subsequently issued helicopter noise certification standards in 1988. These have been revised over the years. They are defined in 14 CFR Part 36. The Fly Neighborly Program offers the technical information necessary for helicopter operators to fly both current and new advanced helicopters as quietly as practical, and to make helicopter operations compatible with nearly all land uses. The program also discusses how to communicate to the public the gains from using such procedures. In addition, the program provides general information related to helicopter noise and public acceptance.

1 General Information

1.1 Background

HAI's Heliports and Airways Committee (HAC) originally organized the Fly Neighborly Program through its Fly Neighborly Steering Committee. This committee was composed of members of HAI and governmental representatives, including the FAA, members of the military and other associations. Officially launched by HAI in February 1982, the program gained U.S. and international acceptance. Subsequently, the work related to the Fly Neighborly Program was considered sufficiently important by HAI that a separate Fly Neighborly Committee was formed to promote the program and ensure that the *Fly Neighborly Guide* and associated material are updated as appropriate.

In the U.S., the program has gained the full support of helicopter operators, regional associations, manufacturers, pilots and communities throughout the country. Federal, state and local government agencies have embraced the program, and taken an active part in sponsoring Fly Neighborly presentations in conjunction with safety seminars and other activities. Worldwide, the helicopter industry and its related communities are kept informed on the Fly Neighborly Program. Companion programs have been developed in a number of countries including Germany, France, and the United Kingdom.

1.2 Objectives

The Fly Neighborly Program addresses noise abatement and public acceptance objectives with guidelines in the following areas:

- pilot and operator awareness
- pilot training and education
- flight operations planning
- public acceptance and safety
- sensitivity to the concerns of the community

1.3 About This Guide

The *Fly Neighborly Guide* is published under the auspices of HAI to promote helicopter noise abatement operations. It addresses general issues only and is, by no means, comprehensive.

1.4 Purpose

These guidelines are intended to assist pilots, operators, managers, and designated Fly Neighborly officers to establish an effective Fly Neighborly Program. The concepts and flight operations outlined, herein, must be further tailored to suit local needs, and to ensure local or regional organizations cooperate to develop a strong, well-organized and disciplined approach to achieving Fly Neighborly objectives.

1.5 Organization

This guide is divided into seven main sections. Section One covers general information. Section Two addresses helicopter sound generation. Section Three gives guidance for noise abatement operations. Section Four discusses how to operate helicopters quietly. Section Five covers pilot training. Section Six describes the operator program which provides a broad outline of the possible actions helicopter operators can take, including

flight operations planning. Section Seven deals with community concerns and issues of public acceptance and Section Eight answers the question of what the Fly Neighborly Program can achieve. Three appendices present a comparison of sounds, the Advisory Circular (AC) 91.36D, and an example of a public heliport noise abatement program. In addition, a glossary is provided to help define the acronyms used or referred to in this Guide.

1.6 Administration

HAI solicits new ideas, comments, and recommendations to improve the program. HAI's Fly Neighborly, Safety and Heliport Committees are focal points for the development of new technical material in their respective areas. Additional guides can be obtained from HAI.

The Fly Neighborly Committee monitors the Fly Neighborly Program, and distributes new information to participants. Individuals, operators, or agencies desiring additional information should contact the HAI Fly Neighborly Program staff liaison at:

Helicopter Association International
1635 Prince Street
Alexandria, VA 22314 USA

Phone: (703) 683-4646
Fax: (703) 683-4745
Web site: www.rotor.com
Email address: flyneighborly@rotor.com

2 Helicopter Sound Generation

2.1 The Source of the Sound

The external sound produced by a helicopter is made up of acoustical sources from the main rotor, the anti-torque system (tail rotor), the engine(s), and drive systems. For turbine-powered helicopters, the main rotor and anti-torque system dominate the acoustical signature. Engine and gearing noise are generally of significance only when up close to the helicopter. The same is true for piston-powered helicopters, although muffling of the engine is usually necessary.

The most noticeable acoustical characteristic of all helicopters is the modulation of sound by the relatively slow-turning main rotor. This modulation attracts attention, much as a flashing light is more conspicuous than a steady one. The resulting modulated sound can become impulsive in character and is referred to as BVI (Blade Vortex Interaction Noise), *blade slap*, or more generally, as *impulsive noise*. In some flight conditions, the main rotor noise can become quite impulsive in character (*blade slap*, or more generally *impulsive noise*), which can increase the annoyance of the helicopter to people on the ground.

Impulsive noise occurs during high-speed forward flight as a result of blade thickness and compressible-flow on the advancing blade. This latter source causes the blade's airloads to fluctuate rapidly. These fluctuations result in impulsive noise with shock waves that can propagate forward. High tip-speed rotor designs flown at high airspeeds are the worst offenders.

At lower airspeeds, and typically during a descent, rotor impulsive noise can occur when a blade intersects its own vortex system or that of another blade. This type of noise is referred to as Blade Slap or (BVI) noise. When this happens, the blade experiences locally high velocities and rapid angle-of-attack changes. This tends to produce a sound that is loud and very annoying in character.

There are three basic types of anti-torque systems used in current helicopters: the conventional open tail rotor, the ducted tail rotor/fan (e.g., the Fenestron), and the Coanda-effect/ blown-air system (e.g., the NOTAR). Each system has its own unique acoustical characteristics. The conventional open tail rotor generates a fluctuating low pitch whine or drone. The ducted tail rotor/fan produces a high pitch, sometimes fluctuating shrill. The blown-air, directional-vane system generates a broadband, 'compressed-air' hissing.

The noise of both the open tail rotor and the ducted tail rotor/fan increases with airspeed and in high-rate climbs and turns. Interaction between the main rotor and either type of anti-torque system can, and often, exacerbates the anti-torque system's sound output. In addition, the proximity of the vertical fin and tail boom influences the sound output of an open tail rotor. Somewhat similarly, the presence of vanes/stators and support struts, plus inflow/outflow turbulence, exacerbate the sound output of ducted tail rotor/fan systems. Turbulent flows off the pylon and fuselage also tend to increase the level and the sound fluctuations of both these types of anti-torque systems.

The Fenestron has some advantages over an open rotor at distance since it generates a higher frequency sound, which is more easily attenuated by the atmosphere. On many helicopters, the main source of noise heard at distance, particularly if a high tip-speed tail rotor is used, is associated with the tail rotor blade thickness. 'Quiet open tail rotors' tend, therefore, to use lower tip speeds, thinner blade sections and, to provide adequate thrust, an increase in the number of blades.

With regard to the noise generated, the NOTAR has advantages in many respects because it is independent of the increase associated with the other two types of anti-torque systems. The NOTAR is, however, only available at the current time on designs manufactured by one company.

The general relationship between sound level and helicopter weight, and a comparison of the sound generated by a helicopter and other common noise sources are given in Appendix 1.

2.2 Impact of Operations

For a typical small/light helicopter, the most annoying noise mechanism impulsive noise (BVI) occurs during partial power descents and in sharp/high-rate turns. For a typical medium or large/heavy helicopter, they can occur in low-speed level flight, during partial power descents, and in sharp/high-rate turns. Figures 1, 2 and 3 show the flight conditions under which you can expect main rotor impulsive noise to occur.

The impulsive noise boundary for your particular helicopter may be somewhat larger than that shown in Figures 1 and 2 because the main rotor may generate impulsiveness intermittently when it encounters wind gusts, or during a rapid transition from one flight condition to another. Although the sound produced at these descent rates is not extremely loud to crewmembers inside the helicopter, they can, in most cases, recognize it and, thereby, define the impulsive noise boundaries for their particular helicopter. However, in some cases, the impulsive BVI noise cannot be detected in the cockpit. Of course, people on the ground hear impulsive noise grow more intense as the helicopter descends.

Figure 1
High-Noise Flight Operations – Small/ Light Helicopter

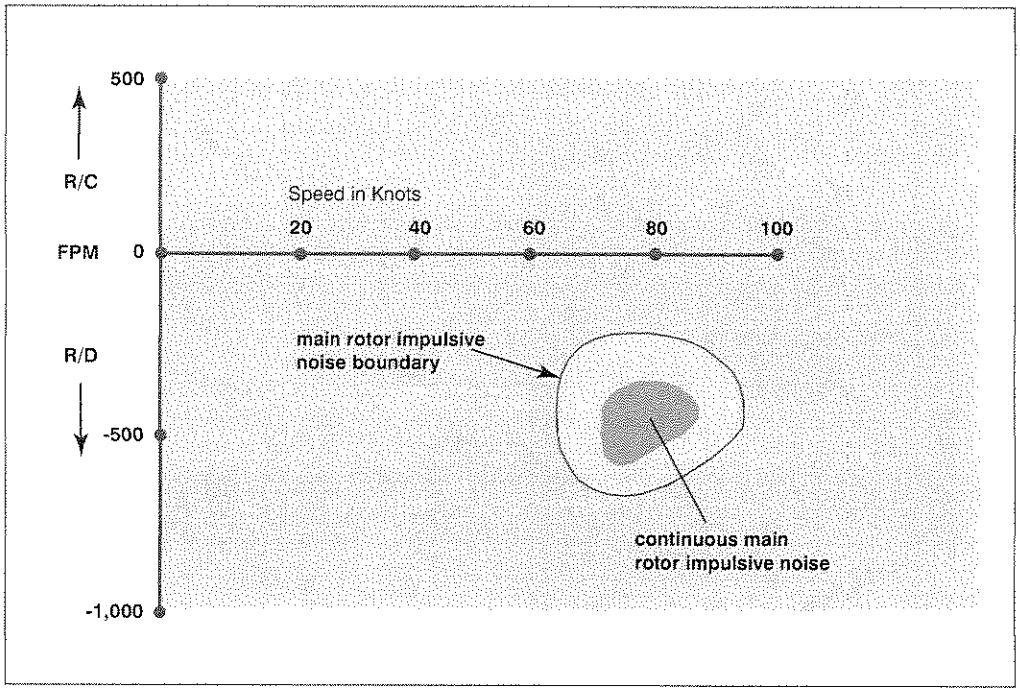
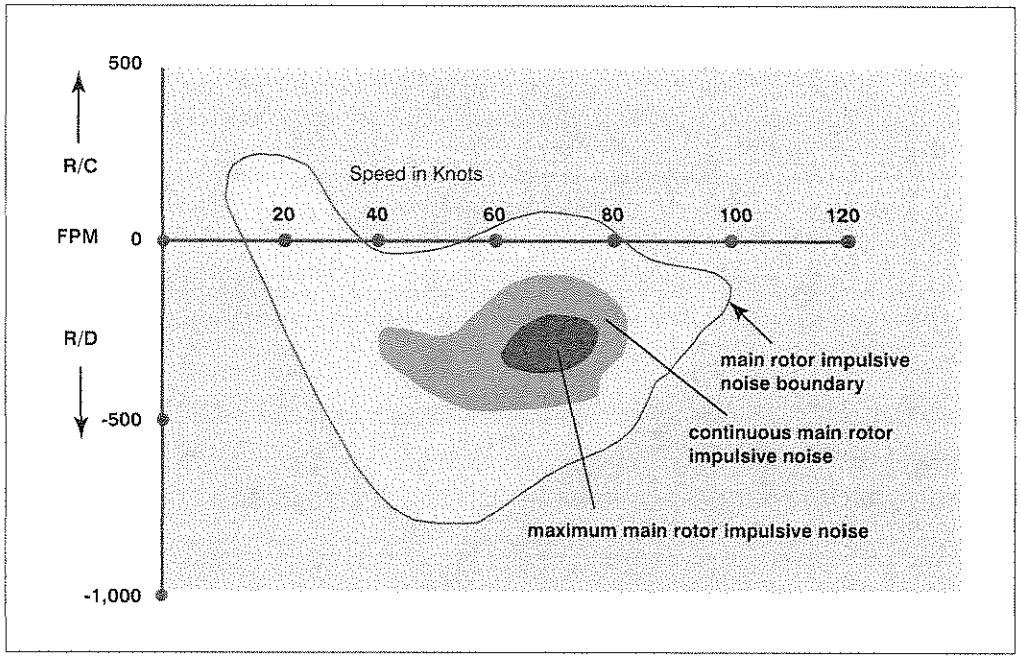


Figure 2
High-Noise Flight Operations – Medium/ Heavy Helicopters

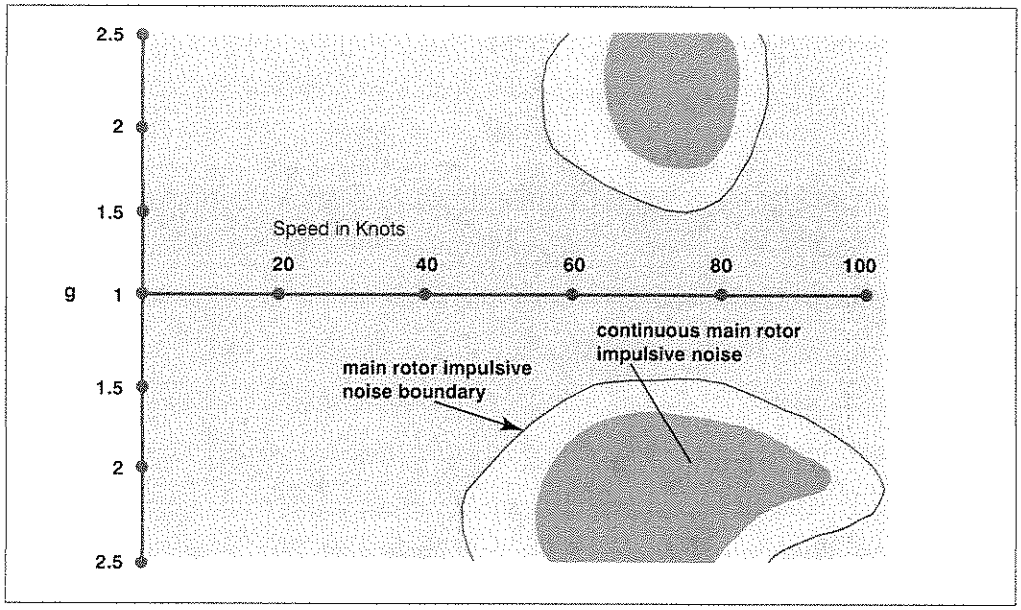


Main rotor impulsive noise also occurs during maneuvers (i.e. in constant speed turns, if turn rates are too high. Here, the main rotor blade and wake interact in much the same manner as in partial power descents. As Figure 3 shows, for a medium helicopter with

a two-bladed main rotor, main rotor impulsive noise occurs in turns that exceed 1.5g, with airspeeds between 50 and 90 knots in a left turn, and between 40 and 100 knots in a right turn. There is little difference in the intensity of the noise in right or left turns once the 'critical g' is reached. The crew can normally hear this impulsiveness. These characteristics also generally apply to other helicopters. Unfortunately, specific information on the increase in the level of impulsive noise, in terms of 'g' or bank angle, is not generally available.

Figure 3

High-Noise Maneuvers – Medium Helicopters



In addition to the general characteristics discussed above, it should be noted that the various sound sources exhibit specific directivity characteristics. These are not discussed in detail in this document, but it is worth noting that, in general, the main rotor sound is focused towards the front and on the advancing blade side of the helicopter. The tail rotor noise is similarly focused forward and it is also radiated downward under the helicopter. As a result, the sound – in particular from the main rotor impulsive sources - is generally detected well in advance of the helicopter flying over. Fortunately, these aspects are normally taken into account when noise abatement procedures are developed by the manufacturer. Even so, they should not be ignored when planning flight operations.

3 General Guidelines for Noise Abatement Operations

This section offers a number of noise abatement techniques for use in daily operations. A few general guidelines are given below.

- Avoid noise-sensitive areas altogether, when possible. Follow:
  - high ambient noise routes such as highways, or
  - unpopulated routes such as waterways.

If it is necessary to fly near noise-sensitive areas:

- maintain an altitude as high as possible in line with the HAI *Fly Higher Chart* (Fig. 4)
- fly normal cruising speed or slower
- observe low-noise speed and descent recommendations
- avoid sharp maneuvers
- use steep takeoff and descent profiles, and
- vary the route, since repetition contributes to annoyance

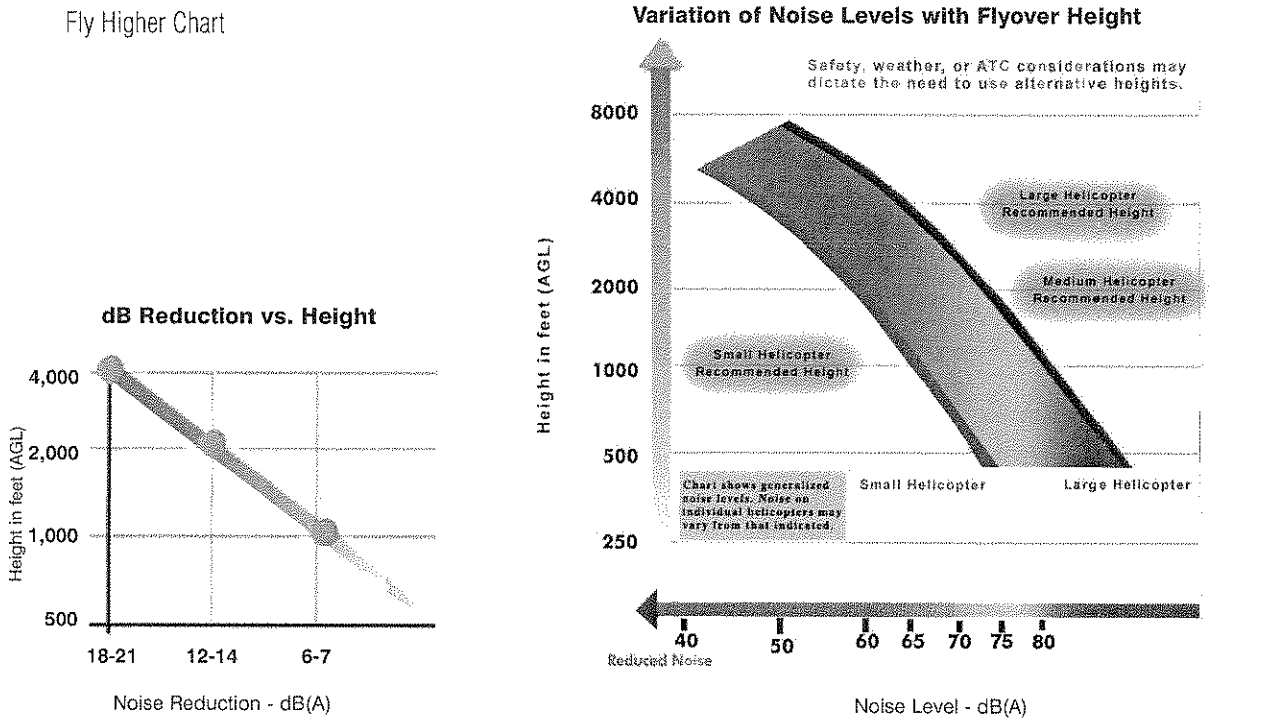
Flights conducted over roads (particularly interstates), railways and rivers in noise-sensitive areas are less likely to generate complaints than routes that acoustically and visually intrude on peoples' privacy, such as those that cross, or can be heard from, residential backyards.

3.1 Flyover Height

Maintaining an altitude as high as possible above the ground and flying at airspeeds consistent with minimum noise output, flight safety and ATC constraints is essential. Height and distance have a major impact on the noise level observed under the helicopter, as illustrated in the HAI *Fly Higher Chart*, shown in Figure 4. It shows the relationship of flyover height and noise exposure at ground level for different-sized helicopters. A doubling of height or distance reduces the level by six to seven dB(A). If the height/distance is increased by a factor of three, the maximum level is decreased by approximately 10 dB(A), which is equivalent to reducing the loudness by half. The chart can be used to decide what height should be flown so that the helicopter's noise output is compatible with community noise exposure criteria. For example, to be compatible with the generally accepted criterion of 65 dB(A) max for flyover of noise-sensitive areas, light/small helicopters should fly at altitudes no less than 1,000 feet AGL. For medium helicopters, the recommended height is 2,000 feet AGL, and, for heavy/large helicopters, 4,000 ft AGL.

Figure 4

Fly Higher Chart



3.2 FAA Guidance - VFR Flight Near Noise Sensitive Areas

The FAA has published guidance when flying near noise-sensitive areas for a number of years. It was updated in 2004 and issued as Advisory Circular AC91.36D. A copy of this document is reproduced in Appendix 2. This voluntary practice recommends:

- the avoidance of flights over noise sensitive areas, if practical.
- When not possible, pilots flying VFR flights over noise-sensitive areas should make every effort to fly at not less than 2,000 feet above the surface, weather permitting, even though flight at a lower level may be consistent with the provisions of FAR 91.79, Minimum Safe Altitudes.

Typical of noise-sensitive areas in this Advisory Circular are defined as: outdoor assemblies of persons, churches, hospitals, schools, nursing homes, residential areas designated as noise-sensitive by airports or by an airport noise compatibility plan or program, and National Park Areas (including Parks, Forest, Primitive Areas, Wilderness Areas, Recreation Areas, National Seashores, National Monuments, National Lakeshores, and National Wildlife Refuge and Range Areas). It is also recommended that, during departure from, or arrival at an airport, climb after takeoff and descent for landing should be made so as to avoid prolonged flight at low altitudes near noise sensitive areas. It should be mentioned, however, that such procedures should not apply where it would conflict with ATC clearances or instructions, or where an altitude of less than 2,000 feet is considered necessary by a pilot in order to adequately exercise his or her primary responsibility for safe flight.

It should be noted that FAA guidance recommends a height of 2,000 ft AGL be used for general over flight of noise-sensitive areas. This is somewhat different than the guidance developed by HAI's Fly Neighborly Committee, discussed previously and illustrated in Figure 4, which recommends 1,000 ft for small helicopters. For medium helicopters, HAI recommends 2,000 ft, the same as the FAA, but for large helicopters, HAI recommends 4,000 ft. Although FAA guidance should be followed when practical, HAI considers use of the heights in Figure 4 will ensure acceptable noise disturbance to persons on the ground.

3.3 Flyover Speed

The airspeed of the helicopter has an important effect on both noise exposure impact and the impulsive character of your helicopter. Generally, it is best to fly at, or somewhat below, normal cruise speeds when over-flying noise-sensitive areas. Airspeeds above normal cruise can dramatically increase your helicopter's noise levels and the impulsive character to the extent that, even if you maintain the suggested minimum flight altitudes, your over-flight is no longer compatible with generally accepted noise exposure criteria.

4 How to Operate Helicopters Quietly

In this section, general information is presented on how to fly a helicopter more quietly. Such information applies to the operation of all helicopters. The flight techniques given in this section are also general in nature and vary somewhat according to the actual helicopter being flown. Manufacturers have developed recommended noise abatement procedures for specific models and, when available, these should be followed. The information on HAI's Web site, www.rotor.com, represents data currently available from the manufacturers. As new data becomes available, HAI will periodically update the Web site. In some cases, the noise abatement information is also available in the specific *Rotorcraft Flight Manual*. When noise abatement information is not available for a specific helicopter model, the flight techniques in the following sections should be followed. This information is also helpful to supplement the information supplied by a manufacturer.

4.1 General

Increasing the distance/separation from noise-sensitive areas is the most effective means of noise abatement.

4.2 Ground Operations

Although startup and shutdown procedures are relatively quiet and are usually shielded from noise-sensitive areas, it is good practice to reduce the amount of time spent on the ground with the rotor turning. This reduces the noise exposure to ground handling crews and heliport/airport personnel.

Minimize the duration of warm-up or cool-down periods (typically two to three minutes, although, on some engines it can be as short as 30 seconds). Do not idle at the heliport for extended periods of time.

When feasible, park with the rotors running with the nose of the helicopter directed into the wind to minimize noise. If the wind speed is above 5 knots, avoid parking with the nose 15 degrees or more from the approaching wind. This will minimize tail rotor noise.

4.3 Hover / Hover Taxi /Ground Taxi

When hover turning, make the turn in the direction of the main rotor rotation. This minimizes the anti-torque thrust required and, therefore, minimizes the level of noise generated by the anti-torque system. Keep the turn rate to as low as practical.

4.4 Takeoff and Climb (Departure)

Takeoffs are reasonably quiet operations, but you can limit the total ground area exposed to helicopter sound by using a high rate-of-climb and making a smooth transition to forward flight. The departure route should be over areas that are least sensitive to noise.

4.5 Enroute and Cruise Flyover

- Fly at least at the heights recommended in the *Fly Higher Chart* (Figure 4).
- Fly at the highest practical altitude when approaching metropolitan areas.

- Select a route into the landing area over the least populated area.
- Follow major thoroughfares or railway tracks.
- Avoid flying low over residential and other densely populated areas.
- If flight over noise-sensitive areas is necessary, maintain a low to moderate airspeed.
- Select the final approach route with due regard to the type of neighborhood surrounding the landing area, and the neighborhood's sensitivity to noise. Assess this sensitivity beforehand for each landing area. Some guidelines are:
  - Keep the landing area between the helicopter and the most noise-sensitive building or area on approach.
  - If the landing area is surrounded by noise-sensitive areas, approach using the recommended noise abatement approach procedure or at the steepest practical glideslope.
  - Avoid flying directly over hospitals, nursing homes, schools, and other highly noise-sensitive facilities.

4.6 Turns (Maneuvers)

As a general rule, avoid rapid, 'high g'/high bank angle turns. When the flight operation requires turns, perform control movements smoothly.

4.7 Descent/Approach and Landing

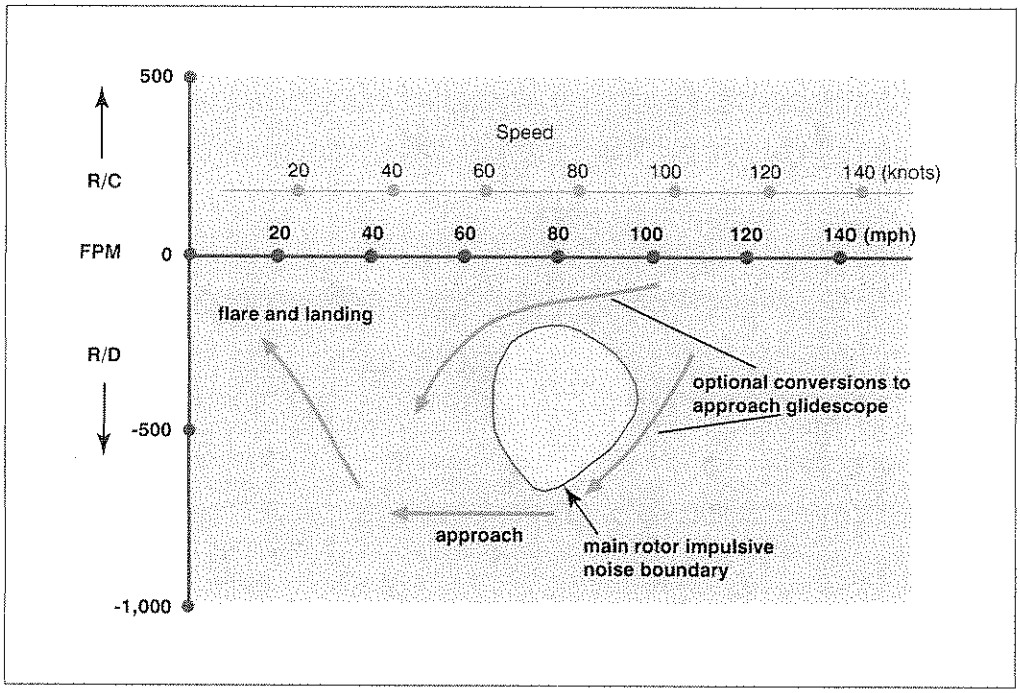
The approach techniques presented below are designed to avoid the impulsive (BVI) noise generated by the main rotor. These techniques typically use a glideslope that is a few degrees steeper than a normal approach. In addition to avoiding high BVI regimes, steep approaches ensure a greater height over the noise-sensitive area. Once the transition from cruise to the approach glideslope has been made, the airspeed and rate of descent can be 'tailored' to fit local conditions, avoid unsafe regimes, and still guarantee minimum noise.

4.7.1 Small/light helicopters

Follow one of the noise abatement flight techniques given below and illustrated in Figure 5.

- When commencing approach, first establish a rate-of-descent of at least 500 fpm, then reduce airspeed while increasing the rate-of-descent to 700-800 fpm.
  - Hold the rate-of-descent to less than 200 fpm while reducing airspeed to 50-60 knots/60-70 mph, then increase the rate-of-descent to 700-800 fpm.
- At a convenient airspeed between 45 and 60 knots/50-70 mph, set up an approach glideslope while maintaining the 700-800 fpm or greater rate-of-descent.
- Increase the rate-of-descent if main rotor BVI noise is heard, or if a steeper glideslope is required.
- Just prior to the 'flare,' reduce the airspeed below 50 knots/60 mph before decreasing the rate-of descent.
- Execute a normal flare and landing, decreasing the rate-of-descent and airspeed appropriately.

Figure 5
Noise Abatement Approach Techniques for Small/Light Helicopters



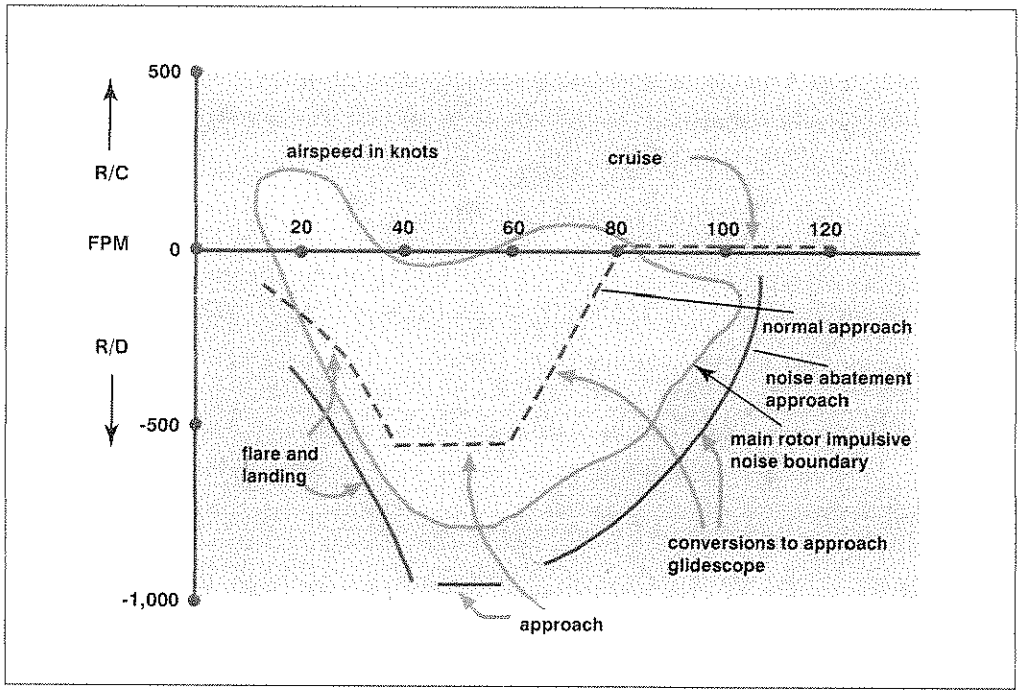
4.7.2 Medium and heavy helicopters.

Follow the noise abatement flight technique given below and illustrated in Figure 6.

- When commencing approach, begin descent at a rate of at least 200 fpm before reducing airspeed, then reduce airspeed while increasing the rate of descent to 800-1000 fpm.
- At a convenient airspeed between 50 and 80 knots, set up an approach glideslope while maintaining the 800-1000 fpm rate of descent.
- Increase the rate-of-descent if main rotor BVI noise is heard, or a steeper glideslope is required.
- Just prior to the approach to the 'flare,' reduce the airspeed to below 50 knots before decreasing the rate-of-descent.
- Execute a normal flare and landing, decreasing the rate of descent and airspeed appropriately.

Figure 6

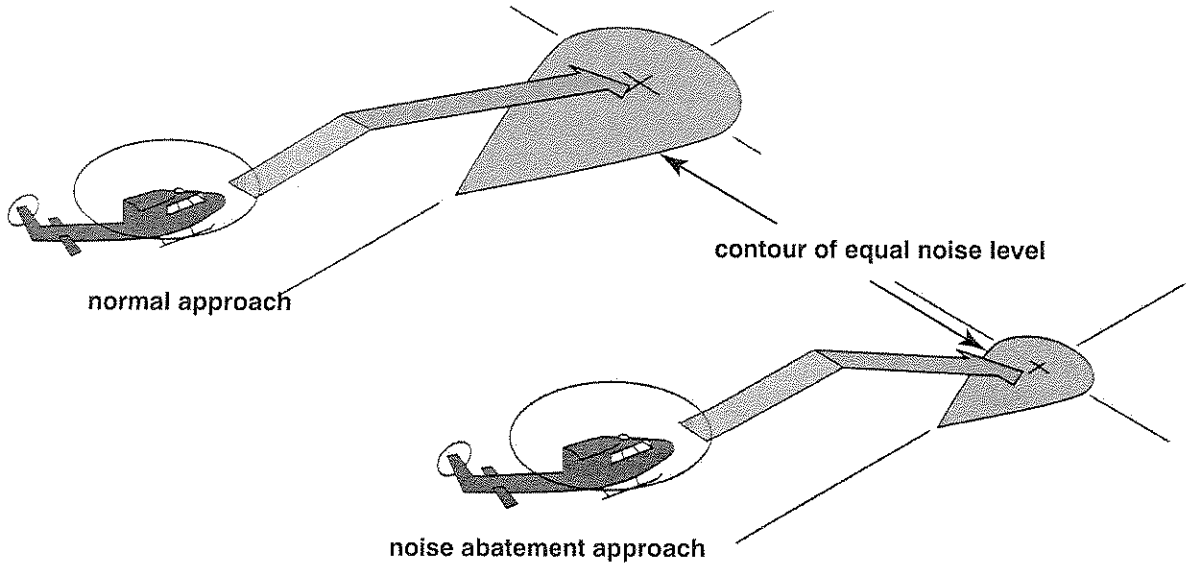
Noise Abatement Approach Technique for Medium and Heavy Helicopters



The noise abatement flight techniques discussed above for small/light and medium helicopters reduce the ground area exposed to a given noise level by as much as 80 percent. Figure 7 illustrates the potential noise benefits when compared to a normal approach.

Figure 7

Ground Noise Exposure Footprint



4.8 Other Factors to be Considered

It is important to mention that the sound environment on the ground and weather have much to do with how offensive helicopter sound is judged. The background noise of residential areas reaches its lowest level between late evening and early morning. In warm weather, people are apt to be relaxing outdoors in the evening and on weekends. At these times, they are most conscious and resentful of noise intrusion. Therefore, flight over or near residential areas should be avoided, if possible.

Although the weather cannot be controlled, it may be possible to adapt the planned flight schedule to take advantage of meteorological conditions to help minimize noise. The two weather factors most useful in this respect are wind and temperature. They are helpful because they affect the propagation of sound, and vary throughout the day, in a more or less predictable manner.

Wind carries sound in the direction towards which it is blowing, and it makes a background noise of its own that, in high winds, tends to reduce the intrusion of helicopter sound. In inland areas, surface winds are generally stronger during the day, reaching a maximum in mid-afternoon and weaker at night. In coastal regions, land and sea breezes give a different diurnal pattern, beginning to blow shortly after sunrise (sea breeze) and sunset (land breeze). These winds can be used to increase the acceptability of the helicopter by flying downwind of densely populated areas and by scheduling the majority of flights after noon near especially noise-sensitive areas.

Temperature has two effects upon sound. One is the tendency of warm air to be more turbulent than cold air, and, therefore, to disperse sound and decrease its nuisance effect. The other is temperature gradient - the change in temperature with altitude. The normal gradient is negative: temperature decreases with altitude. A negative gradient reaches a maximum in the late morning or just after noon, and is more intense during summer months. This means that it is of some value to schedule flights to and from noise-sensitive areas during the warmer parts of the day. Also, lower temperatures lead to higher advancing main rotor and tail rotor tip speeds which increase the magnitude of the impulsive noise.

At certain times, however, there may be an inversion in the atmosphere - a layer of air from a few hundred to a few thousand feet thick in which the temperature increases with altitude. The inversion reverses the normal curvature of sound propagation, turning an abnormally high portion of the sound energy back toward the ground. The most severe inversions usually occur at night and in the early morning. These, then, are times when the sound of the helicopter will have the most adverse effect upon people on the ground.

In terms of helicopter noise, the worst possible combination of atmospheric conditions is a windless, cold, overcast morning. At such times, it is important that even more emphasis is placed on using noise abatement procedures.

NOTE: *The noise abatement flight techniques described above and detailed on the HAI Web site permit flight crews to fly helicopters in the quietest manner possible. They are to be construed as advisory guidelines only. If flying according to these noise abatement flight techniques conflicts with operating the aircraft in a safe manner, then all safety-related procedures take precedence.*

5 Pilot Training

The basic scope of the recommended pilot training program and an outline of the requirements for such a program are outlined in this section. The information embodied in other sections of the Guide is also relevant. In addition, HAI has issued an interactive Noise Abatement Training CD for Pilots which covers all the aspects a pilot should be aware of. This CD, developed by the HAI Manufacturers Committee, and initially issued in 2006, is available from HAI. It is recommended that this CD be used as a part of any pilot noise abatement training program.

5.1 Scope

The scope of a pilot training program should include:

- initial and recurrent flight training for pilots
- preparing and distributing recommended noise abatement procedures
- organizing and holding operator and manufacturer seminars
- providing environmental and supervisory personnel training courses.

5.2 Basic Guidelines for Pilot Training

Public acceptance for helicopter operations can be obtained in several ways. One is noise abatement. Crew training to ensure that pilots are fully familiar with the noise abatement procedures is, therefore, vital. The following guidelines for noise abatement training are suggested:

- Select training teams for ground and flight training, usually two or three people who have extensive metropolitan operations experience.
- Standardize presentations.
- Maintain complete files of all persons trained.
- Circulate comment sheets at all meetings or training sessions, and stress that all suggestions, ideas and comments will be taken into consideration.
- Make the necessary changes in training and publications that result from the feedback.
- Maintain an open-door policy to all participants, flight crews and the public.
- Determine the effect of this training on the public. Has it been positive or negative?
- Record all complaints and include all relevant details, such as the time, date, location, altitude, and weather.
- Follow up with proficiency training every six months. Emphasize the importance of public contacts, and the necessity of good community relations.
- Expand the guidelines given in this document to cover local needs.

6 Operator Program

When operating a helicopter in a new area, a new spectrum of sound is added to the usual noise environment. If that area is a municipality, thousands of people will hear the new sounds and know a helicopter is operating. How they react depends not only on the noise you generate but upon physical, economic, and psychological factors. One thing is certain: they will react strongly, adversely, and actively if the sound is too irritating, if it represents something that seems to threaten their safety and well-being, or if they cannot see how the noisemaker (the helicopter) benefits them. Although it is up to operators to educate the public about the safety and usefulness of the helicopter, pilots can make the public less hostile to the helicopter (and to the operator's arguments about its safety and community service) by flying in such a way as to make the sound of the aircraft as non-intrusive as possible.

6.1 Introduction

The Fly Neighborly Program attacks the problem of helicopter noise on three fronts: pilot training, flight operations planning, and public education and acceptance. These three areas are interrelated. Planning flight operations with an eye to noise abatement can have a major positive impact on both the pilot training program and public acceptance.

The information presented in this section provides only a broad outline of the possible actions helicopter operators can take. Operators are encouraged to expand this outline by applying knowledge of their own geographical area of operations, the nature of their businesses, and the local climate of opinion with regard to helicopter operations.

6.2 Company Policy

Implement a company policy aimed at reducing the sound levels produced by the operation of your aircraft or other equipment. As part of this policy, implement a broad-based complaint prevention program. Such a voluntary program is necessary to preclude the eventual implementation of restrictive and mandatory federal, state or local laws, regulations, or ordinances.

To formulate this policy, identify and evaluate current and anticipated problems. To assure its acceptance and success, make your commitment to your policy clear, in order to generate such change as may be necessary in the attitudes of pilots and other personnel. In order for company policy to have any meaning, companies should formulate and implement specific guidelines.

6.2.1 Formulate Guidelines

Guidelines are intended to assist flight crews and flight operations personnel to formulate responsible mission profiles without infringing on operational reality. They are not, however, provided as a substitute for good judgment on the part of the pilot. They must also not conflict with federal aviation regulations, air traffic control instructions, or aircraft operating limitations. The noise abatement procedures outlined by these guide-

lines should be used when consistent with prudent and necessary mission requirements. The safe conduct of flight and ground operations remains the primary responsibility.

- Enroute operations:
  - Maintain a height above the ground consistent with the HAI *Fly Higher Chart* (see Figure 4), or higher, when possible. Complaints are significantly reduced when operating above these altitudes. The reverse is also true.
  - Vary routes in order to disperse the aircraft sound.
- Heliport (Terminal) operations:
  - Restrict hours or frequency of operations as appropriate. Minimize early or late flights, especially on holidays and weekends.
  - Limit ground idling in noise-sensitive areas.
  - Minimize flashing landing lights in residential areas at night.
- Establish procedures for each sensitive route or terminal.
- Provide flight crews with noise abatement procedures for each model of aircraft.

6.2.2 Implement Guidelines

- Publish all guidelines and procedures in a flight operations manual or similar document.
- Train flight crews and flight operations personnel as appropriate:
  - Educate regarding basic attitudes in ground school.
  - Train in noise abatement procedures for each model of aircraft to be flown.
  - Emphasize awareness and recognition of sensitive routes and terminals.
  - Establish a requirement that noise abatement procedures must be considered in recurrent company flight checks.
- Assign responsibility and authority for the company program to an appropriate person.

6.2.3 Review and Revise

- Establish periodic reviews of company policy and programs to respond to changes in the regulatory climate or operational conditions.
- Revise your policy and programs as necessary.

7 Managing Public Acceptance

7.1 Scope

The scope of the public acceptance program includes:

- engendering media support
- promoting positive public relations
- enacting a program to prevent or resolve complaints from the public

7.2 Media Support

The purposes of engendering media support are to:

- develop favorable and active helicopter-related media coverage
- provide valid information concerning helicopter operations as necessary

Media sometimes concerned with news of helicopter-related activities include general circulation newspapers, television and radio news, trade journals, and the magazines or newsletters of international, national, state, and regional helicopter associations.

To engender awareness and support in these media, a number of actions can be taken:

- Provide press releases to trade journals and local newspaper, radio, and television news editors concerning any Fly Neighborly seminars that may be sponsored by the local helicopter operator association.
- Support a continuing campaign with the trade journals to keep the rotary-wing community aware of the Fly Neighborly Program.
- Support a continuing campaign with the general press to make the public aware of the Fly Neighborly Program, and the benefits of helicopter transport.
- Stage demonstrations and press conferences addressing specific local issues such as heliports, high-rise evacuation, police services, search and rescue services, emergency medical evacuation, fire-fighting, and the benefits of helicopter transportation to the general public.

7.3 Public Relations

The purposes of engaging in public relations activities are to:

- Develop awareness in the community of the benefits of helicopter transportation
- Develop awareness of the Fly Neighborly Program
- Develop support for the voluntary Fly Neighborly Program, as administered by the helicopter community, in lieu of governmental regulation

In order of their general importance and effectiveness, public relations activities can be undertaken in conjunction with:

- governmental agencies concerned with aviation such as federal, state, or local agencies, the FAA, or state aeronautics commissions
- other governmental agencies not particularly concerned with aviation, such as regional planning commissions, economic development commissions, the National League of Cities, or the U.S. Council of Mayors

- local civic and professional organizations such as Rotary or Kiwanis Clubs, the National Association of Aviation Officials, the Airport Operators Council International, or the National Fire Protection Association. Provide speakers for their local meetings. Solicit their sponsorship of heliports based on the Fly Neighborly Program as a civic project to promote public service.
- nongovernmental economic development agencies such as chambers of commerce, regional economic development councils, or merchant associations. Demonstrate to economic development agencies how helicopter transportation benefits the community, and present data to show the economic viability of helicopter transportation.
- direct public contact
- environmental organizations such as Greenpeace, the Sierra Club, or federal or state environmental protection agencies. Provide information. Do not immediately assume they are hostile to the planned operations. Instead, emphasize the positive environmental aspects of helicopter operations, such as the fact that they are involved in search and rescue operations for hikers or workers injured in remote areas, and that they provide access to such areas without the need to pave over ground for landing strips.

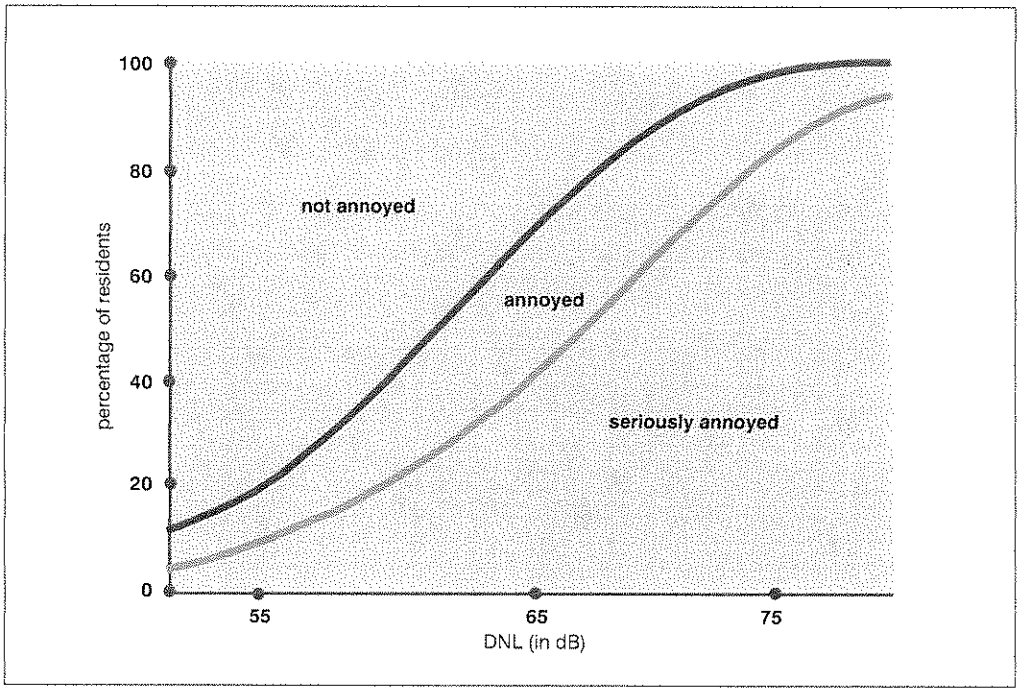
Public relations can be improved by influencing government agencies concerned with aviation in the following ways:

- Participate in public hearings
- Provide professional testimony as appropriate
- Conduct flight demonstrations
- Conduct one-on-one campaigns
- Submit petitions and letters

7.4 Preventing and Responding to Complaints

Helicopter operations are undeniably noisy, and this guide is concerned with a program designed to minimize the problem. Figure 8 shows the relationship between the amount of noise people are exposed to, and how annoyed they are likely to get. In the figure, the amount of noise exposure is expressed as DNL (day-night sound level).

Figure 8
Relationship between Noise Exposure and Annoyance



7.4.1 Complaint Prevention

A significant number of noise-related complaints can be prevented in the first place, given a certain degree of sensitivity, foresight, and commitment. Prevent complaints by assessing the environmental compatibility of potential landing facilities. Select those most suitable from a safety, operational, and environmental point of view.

Implement a public acceptance program.

- When contemplating site licensing, identify, contact, and try to influence potential sources of opposition before the hearing.
- Initiate or support presentations, seminars, or displays to educate the public about the value of helicopter transport.

Educate customers about noise abatement procedures, in order to prevent or minimize conflicts between their expectations and company policy.

Coordinate operations personnel and flight crews, so that flights that would unnecessarily violate company policy are not assigned.

7.4.2 Handling Noise Complaints

Although earlier sections of this guide offer information concerning noise abatement techniques, it is unlikely all noise complaints can be avoided. Since some complaints are inevitable, how they are handled is also important to the success of the Fly Neighborly Program.

The resulting problem is not simple. A helicopter can annoy people simply by being over, or too near, certain noise-sensitive areas. If someone calls the FAA, or a state agency, and offers routine information such as the aircraft registration number, colors,

or type, it is likely that he or she will be told the aircraft was not in violation of any regulation, and that, therefore, nothing can be done. The result can be an angry, frustrated member of the community who will probably not be particularly supportive of any current or future helicopter or heliport related issue.

The helicopter user community has a real interest in assuring all complaints are appropriately addressed. Conventional channels for complaints are demonstrably insufficient. Therefore, a number of regional helicopter associations have started to operate their own complaint lines. These lines offer state, federal and local agencies another option when they receive complaint calls about legal and proper operations. The agencies can pass the complaint along to the regional association, or provide the complainant with the telephone number of the complaint line.

Such programs offer a number of benefits:

- Regional associations can often identify an aircraft with much less information than other agencies require.
- Associations can ensure that each issue is addressed and, when possible, satisfy the complainant.

When a complaint is received, how should it be addressed?

- The most effective way to deal with the complaint is to contact the complaining party personally. When you do, avoid being defensive, argumentative, or opinionated. Sincerely try to understand the other person's point of view, and avoid hostile confrontations. Sometimes merely listening politely can improve the situation.
- Furthermore, evaluate the problem thoroughly, and follow through. Was the pilot aware of the problem? Was there something the pilot could have done to avoid it? Is it likely to recur? Contact the pilot or the operator to determine the facts. Consult this guide, and other sources of noise abatement information, to determine how to improve the situation.
- Finally, respond to the caller. Tell him or her what has been learned, and what is being done to prevent the situation from recurring.

Of course, the best way to handle complaints is to avoid them in the first place. If a problem with a certain operation can be anticipated, contact the likely complainant, or members of the public to be impacted, before the operation begins. Explain to him or her, the purpose, timing, and duration of the operation, and its likely impact upon the area. People like to feel they have some control over their lives. Often, just a simple courtesy call in the beginning can save hours of trouble and nuisance later.

An example is given in Appendix 3 of a noise abatement program established at a heliport in a downtown area. The noise abatement program that was put into effect to solve the situation is described.

8 Fly Neighborly Program– What Can be Achieved?

The Fly Neighborly Program outlined in this guide, together with the information on HAI's Noise Abatement Training CD for Pilots, and use of the noise abatement procedures which are available on HAI's Web site, provide the basis for lowering the noise generated by helicopters in day-to-day operations. In addition, the noise abatement procedures offer a way of reducing the impulsive noise characteristic of helicopters which occur during normal operations and often cause complaints. By adopting and following the Fly Neighborly Program, a high level of public acceptance can be obtained.

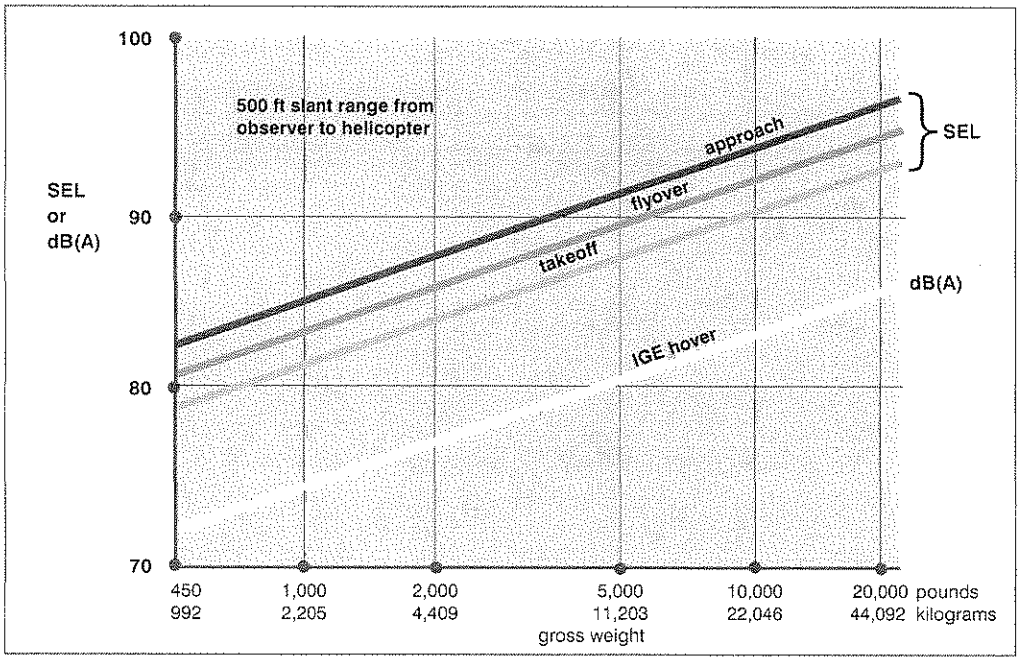
It should also be noted that current public acceptance of helicopters is, in general, poor and, unless the program outlined in this guide is adopted, further international, national, and local regulations will be enacted to limit helicopter operations. Therefore, HAI strongly recommends that its members introduce a Fly Neighborly Program as outlined in this guide.

If the procedures given in this guide are followed, public acceptance will be improved and the rotorcraft segment of the aviation industry will be able to flourish and grow, without being restricted by the burden of new noise regulations and operational restrictions.

Sound Comparisons

The general relationship between sound level and helicopter weight is shown in Figure A1 reproduced from the HAI Helicopter Noise Prediction Method. Smaller helicopters are generally quieter than larger ones and sound levels tend to increase approximately three decibels per doubling of helicopter weight.

Figure A1
Relationship between Sound Level and Helicopter Weight



What do these sound levels mean? Table A1 provides sound levels for illustrative noise sources heard both outdoors and indoors. Human judgment of the relative loudness (relative to a reference level of 70 dB(A) of different sound levels is also given.

Table A1

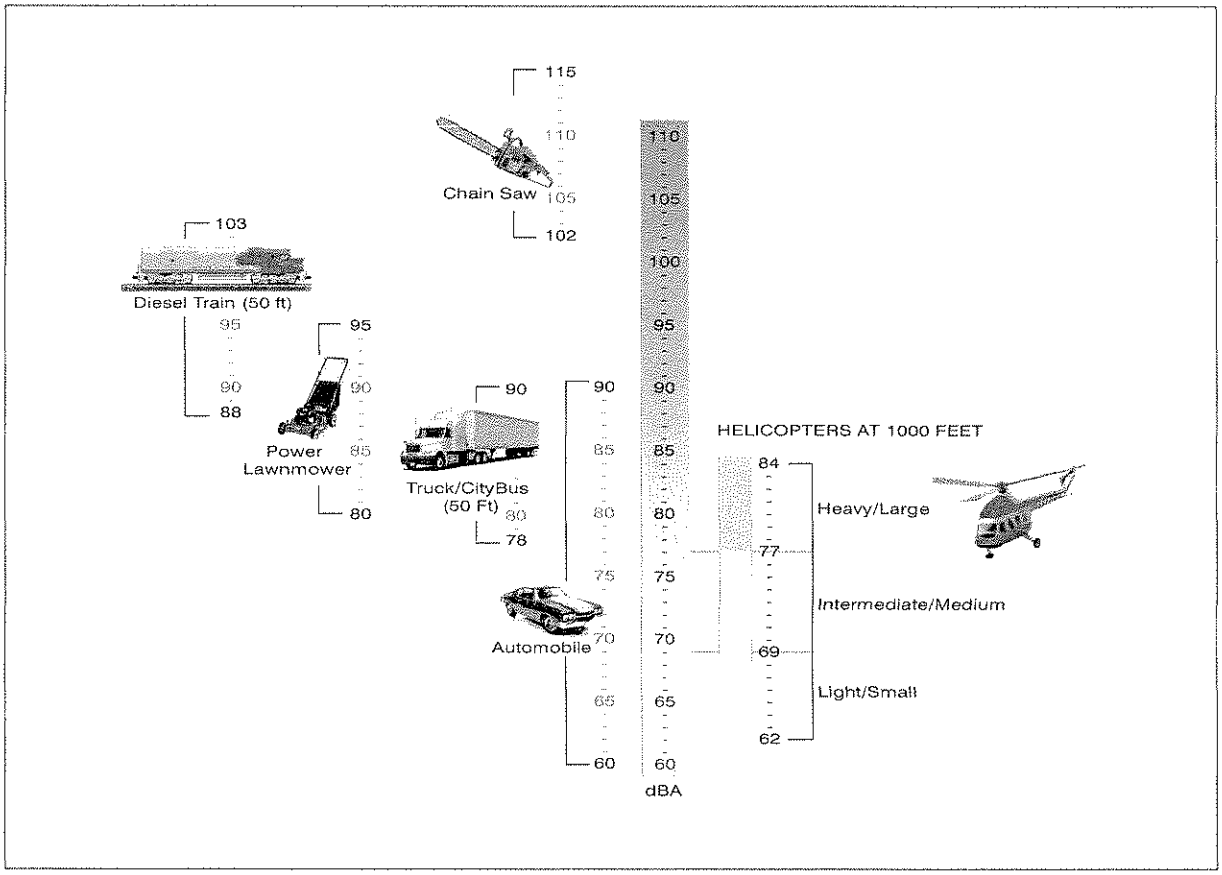
Illustrative Noises

dB(A)	Overall Level	Community (Outdoors)	Home or Industry (Indoors)	Human Judgment of Loudness
130	uncomfortably loud	military jet takeoff from aircraft carrier at 50ft (130)		
120			Oxygen Torch (121)	120dB(A) 32 times as loud
110	very loud	turbofan aircraft takeoff at 200ft (118)	riveting machine (110) rock-and-roll band (108-114)	110 dB(A) 16 times as loud
100		Jet flyover at 1,000 ft (103)		100dB(A) 8 times as loud
90		Power mower (95)	newspaper press (97)	90dB(A) 4 times as loud
80	moderately loud	car wash at 20 ft (89) diesel truck at 40mph at 50ft (84) high urban ambient sound (80)	food blender (88) milling machine (85) garbage disposal (80)	80dB(A) twice as loud
70		car at 65mph at 25ft (77)	living room music (76) TV audio, vacuum cleaner (70)	70dB(A)[reference]
60		A/C unit at 100ft (60)	electric typewriter at 10ft (64) dishwasher (rinse) at 10ft (60) conversation (60)	60dB(A) half as loud
50	quiet	large transformer at 100ft (50)		50 dB(A) 1/4 as loud
40		bird calls (44) lower limit of urban ambient sound (40)		40dB(A) 1/8 as loud
10	just audible			
0	threshold of hearing			

Figure A2 provides some basis for comparing helicopter sound levels to other familiar sounds. Comparisons are made at representative distances from each sound source.

Figure A2

Comparison of Sounds



The sound level is, however, only one of the aspects to be considered since the character of the sound - or the impulsive character of the sound - can be equally important. Fortunately, the impulsive character of the sound, as well as the actual level, can be controlled by using noise abatement procedures.

FAA Advisory Circular AC 91.36D

Date: September 17, 2004 AC No: 91-36D

Subject: VISUAL FLIGHT RULES (VFR) FLIGHT NEAR NOISE-SENSITIVE AREAS Initiated by: ATO-R

1. PURPOSE. This Advisory Circular (AC) encourages pilots making VFR flights near noisesensitive areas to fly at altitudes higher than the minimum permitted by regulation and on flight paths that will reduce aircraft noise in such areas.

2. EFFECTIVE DATE. This advisory circular is effective on September 17, 2004.

3. CANCELLATION. Advisory Circular 91-36C, Visual Flight Rules (VFR) Flight Near Noise Sensitive Areas, dated October 19, 1984, is cancelled.

4. AUTHORITY. The FAA has authority to formulate policy regarding use of the navigable airspace (Title 49 United States Code, Section 40103).

5. EXPLANATION OF CHANGES. This AC has been updated to include a definition of "noisesensitive" area and add references to Public Law 100-91; the FAA Noise Policy for Management of Airspace Over Federally Managed Lands, dated November 1996; and the National Parks Air Tour Management Act of 2000, with other minor wording changes.

6. BACKGROUND.

a. Excessive aircraft noise can result in annoyance, inconvenience, or interference with the uses and enjoyment of property, and can adversely affect wildlife. It is particularly undesirable in areas where it interferes with normal activities associated with the area's use, including residential, educational, health, and religious structures and sites, and parks, recreational areas (including areas with wilderness characteristics), wildlife refuges, and cultural and historical sites where a quiet setting is a generally recognized feature or attribute. Moreover, the FAA recognizes that there are locations in National Parks and other federally managed areas that have unique noise-sensitive values. The Noise Policy for Management of Airspace Over Federally Managed Areas, issued November 8, 1996, states that it is the policy of the FAA in its management of the navigable airspace over these locations to exercise leadership in achieving an appropriate balance between efficiency, technological practicability, and environmental concerns, while maintaining the highest level of safety.

b. The Federal Aviation Administration (FAA) receives complaints concerning low flying aircraft over noise sensitive areas such as National Parks, National Wildlife Refuges, Waterfowl Production Areas and Wilderness Areas. Congress addressed aircraft flights over Grand Canyon National Park in Public Law 100-91 and commercial air tour operations over other units of the National Park System (and tribal lands within or abutting such units) in the National Parks Air Tour Management Act of 2000.

c. Increased emphasis on improving the quality of the environment requires a continuing effort to provide relief and protection from low flying aircraft noise.

d. Potential noise impacts to noise-sensitive areas from low altitude aircraft flights can also be addressed through application of the voluntary practices set forth in this AC. Adherence to these practices is a practical indication of pilot concern for the environment, which will build support for aviation and alleviate the need for any additional statutory or regulatory actions.

7. DEFINITION. For the purposes of this AC, an area is "noise-sensitive" if noise interferes with normal activities associated with the area's use. Examples of noise-sensitive areas include residential, educational, health, and religious structures and sites, and parks, recreational areas (including areas with wilderness characteristics), wildlife refuges, and cultural and historical sites where a quiet setting is a generally recognized feature or attribute.

8. VOLUNTARY PRACTICES.

a. Avoidance of noise-sensitive areas, if practical, is preferable to overflight at relatively low altitudes.

b. Pilots operating noise producing aircraft (fixed-wing, rotary-wing and hot air balloons) over noisesensitive areas should make every effort to fly not less than 2,000 feet above ground level (AGL), weather permitting. For the purpose of this AC, the ground level of noise-sensitive areas is defined to include the highest terrain within 2,000 feet AGL laterally of the route of flight, or the uppermost rim of a canyon or valley. The intent of the 2,000 feet AGL recommendation is to reduce potential interference with wildlife and complaints of noise disturbances caused by low flying aircraft over noise-sensitive areas.

c. Departure from or arrival to an airport, climb after take-off, and descent for landing should be made so as to avoid prolonged flight at low altitudes near noise-sensitive areas.

d. This advisory does not apply where it would conflict with Federal Aviation Regulations, air traffic control clearances or instructions, or where an altitude of less than 2,000 feet AGL is considered necessary by a pilot to operate safely.

9. COOPERATIVE ACTIONS. Aircraft operators, aviation associations, airport managers, and others are asked to assist in voluntary compliance with this AC by publicizing it and distributing information regarding known noise-sensitive areas.

Signed

Sabra W. Kaulia

The Portland Public Heliport Noise Abatement Program

In 1989, the city of Portland, Oregon and the Northwest Rotorcraft Association decided to build a heliport to provide direct air access to downtown Portland. During hearings to approve the facility, concern was expressed about the resulting noise increase in the area surrounding the heliport. In response to this concern, the following noise abatement program was put into effect:

Noise Abatement

Pilots are requested to utilize the following noise abatement procedures, whenever possible. Of course, it is the pilot's responsibility on each flight to determine the actual piloting techniques necessary to maintain safe flight operations.

1. *Flight Paths:* Maintain approach and departure paths over rivers and freeways. Avoid residential neighborhoods, the McCormick Pier Apartments, the convention center towers, and the piers for the Steel Bridge. Approach and depart over the Morrison, Broadway, and Grand Avenue bridges. [A map is provided with those features marked.]
2. *Steep Departure:* Depart at Vy (best rate of climb) when possible.
3. *Steep Approach:* Use steep approach angle when possible (PLASI is set for a 10º approach).
4. *Night Operations:* Avoid night approach from the north, as it passes near the McCormick Pier Apartments.
5. *Minimize Ground Operations:* Minimize the duration of warm-up or cool-down periods (typically two to three minutes). Do not idle at the heliport for prolonged periods.
6. *Avoid High Noise Regime:* Most helicopters have a high noise regime near a descent profile of 70 knots at 300 fpm. Pilots can avoid descending through this area by initiating the descent at a higher speed than normal.
7. *Gradual and Smooth Control Inputs:* Gradual and smooth control inputs result in reduced noise impact.
8. *Avoid Steep Turns:* Avoidance of steep turns result in reduced noise impact.
9. *Enroute Altitude:* Whenever possible, maintain 2,000 feet above ground level over residential neighborhoods and other noise-sensitive properties, as per FAA AC 91-36 "VFR Flight Near Noise-Sensitive Areas."
10. *Fly Neighborly:* Refer to the HAI Fly Neighborly Program for additional information on how to minimize helicopter noise impact.

Citizen concerns about helicopter noise emanating from the Portland Heliport should be brought to the attention of the Northwest Rotorcraft Association by calling 503-286-0927. All noise complaint calls will be logged. If the caller can identify the helicopter involved, follow-up calls will be made to the involved helicopter pilot and then back to the concerned citizen.

The Bureau of General Services maintains a Portland Heliport Noise Abatement Committee. When noise issues at the heliport cannot be easily resolved, the committee will be convened to assist in the resolution process, and the logs reviewed for pertinent information.

As concerns noise abatement of helicopter traffic in other parts of the city, it is noted that the Port of Portland has developed a plan of preferred helicopter flight routes for use in the greater Portland metropolitan area, especially as concerns helicopter traffic to and from Portland International Airport and Portland Hillsboro Airport. This program has been very successful and the heliport is still operating today.

ST. JOHN HOSPITAL & MEDICAL CENTER

7D

22101 Moross Road
Detroit MI 48236-2172

September 10, 2012

Mr. Gene Tutag
Building Official
Safety Inspection Division
City of Grosse Pointe Woods
20025 Mack Plaza Drive
Grosse Pointe Woods, MI 48236-2397

Subject: St. John Hospital and Medical Center
North Parking Lot Helistop Project

Dear Gene:

Thank you for your assistance in determining the necessary steps to apply for the helipad special land use in the St. John Hospital North Parking Lot, at 19231 and 19233 Mack Avenue, Grosse Pointe Woods, Michigan.

As such, please accept this letter as the Hospital's Special Land Use Application.

Per your correspondence of August 21, 2012, attached please find check number 1414253 in the amount of $850.00. This is intended to cover the cost of the Building Official and Planning Commission site plan review, Planning Commission public hearing and City Council public hearing.

The requested drawings and site plan review checklist will be arriving separately in the next few days.

Thank you again for your assistance.

Sincerely,

Jim Wild, P.E.
Administrator, Engineering and Maintenance
St. John Hospital and Medical Center
313-343-3881

7.D. (1)

RECEIVED - 12:00

SEP 11 2012 pndg plans

CITY OF GROSSE PTE. WOODS
BUILDING DEPT.

CITY OF GROSSE POINTE WOODS

Building Department
20025 Mack Plaza, Grosse Pointe Woods, MI 48236
(313) 343-2426

BUILDING PERMIT APPLICATION
ZONING COMPLIANCE AND PLAN REVIEW

COMMERCIAL AND RESIDENTIAL

ZONING COMPLIANCE INCLUDES:
Drives – Fences – Accessory Structures/Sheds (less than 200 sq ft) – Awnings – Garage Floors – Patios (non-elevated) – Play Structures

Property Owner Name: St. John Hospital and Medical Center **Date:** September 10, 2012

Property Owner Address: 19231/19233 Mack Avenue, GPW **e-mail:** Jim.Wild@stjohn.org

Work#: 313-343-3881 **~~Home~~/Cell#:** 313-319-0705

~~Contractor~~/Applicant Name: Jim Wild (Administrator, St. John Hospital and Medical Center)

Telephone # 313-343-3881 **Fax #** 313-343-7656 **Mobile/Cell #** 313-319-0705

Contractor Address: 22101 Moross Road, Detroit, MI 48236

MI Builder's License # : Not applicable **MI Driver's License # :** W430367866729

e-mail address: Jim.Wild@stjohn.org

SPECIFY NATURE OF PROPOSED WORK:

Install temporary heliport in north parking lot including painting, removal/relocation of fence and obstruction lighting.

Value of Construction $ $35,000

Section 23a of State Construction Code Act of 1972, No. 230 of the Public Acts of 1972, being Section 125.1523a of the Michigan Compiled Laws, prohibits a person from conspiring to circumvent the licensing requirements of the State relating to persons who are to perform work on a residential building or a residential structure. Violations of Section 23a are subject to civil fines.

Applicant Signature: Jim Wild, P.E., Administrator, Engineering and Maintenance, St. John Hospital and Medical Center

I hereby certify that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and we agree to conform to all applicable laws of this jurisdiction.

FOR OFFICE USE ONLY

Approved: Denied: Zoning Board of Approval Required # (5250)

Inspector: Date:

12/10

7.D.
(2)

ST JOHN PROVIDENCE HEALTH SYSTEM

Design & Construction Services

September 28, 2012

Jean Paul Harang
Planning & Development Division
65 Cadillac Square
Suite 1300
Detroit, MI 48226

RE: St. John Hospital & Medical Center
Helipad Installation
Tag #03401

Dear Mr. Harang,

Enclosed are additional documents requested by your office concerning the Helipad Installation site plan. I have also enclosed an additional copy of the previously submitted site plan drawings for your convience.

I would at this time also like to request a meeting with your office and representatives from St. John Hospital to review the project and discuss the next steps for approval. I will have my administrative assistant contact your office to schedule this meeting. Thanks for your assistance on this project.

Sincerely,

Robert White
Architect

Enclosures:
Wayne County Plan Review
MDOT Plan Review
Hospital Security Helipad Operations Policy
Helipad Installation Site Plan

St. John Providence Health System – Design & Construction Services
22255 Greenfield Rd. Suite 200 Southfield, MI 48075
Phone: 248.849.5753 Fax: 248.849.2570

7.D.
(3)

Robert A. Ficano
County Executive

July 25, 2012

Jim Wild
St. John Hospital & Medical Center
22101 Moross Road
Detroit, MI 48236

RE: St. John Hospital and Medical Center Heliport
22101 Moross Road
City of Detroit
Wayne County Plan Review: R 12-201

After an initial review, the Permit Office has determined that the County of Wayne has no jurisdiction over the above referenced project located at 22101 Moross Road in the City of Detroit. Therefore, a permit is not required from this office. You may need to contact the City of Detroit for a permit.

However, if you plan to perform any work within Moross Road right-of-way, you must submit detailed plans to the Wayne County Permit Office for a full review.

The check # 0001399493 in the amount of $250.00 that was made for review costs associated with this project is hereby attached.

If you have any further questions regarding this project, contact **Mr. Ali Aljawad, P.E. at (734) 595-6504 ext. 2079**. To help avoid unnecessary delays, refer to **Plan Review Number: R 12-201** when calling or sending correspondence.

Sincerely,
Wayne County Department of Public Services

Ali Aljawad, P.E.
Assistant Division Permit Engineer

Sami H. Khaldi, P.E.
Division Permit Engineer

C: File
Attachment: Check # 0001399493 in the amount of $250.00.

7.D.
(4)

RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF TRANSPORTATION
LANSING

KIRK T. STEUDLE
DIRECTOR

July 20, 2012

Jean Paul Harang
Planning & Development division
City of Detroit
65 Cadillac Square Suite 1300
Detroit, MI 48226

Dear Mr. Harang:

Subject: St. John Hospital & Medical Center Helistop

I was asked by Robert White, architect with St. John Providence Health system, to write to you with a letter of site acceptance. The plans submitted by Mr. White appear to meet the licensing requirements for a hospital helistop license. Attached is a copy of a blank application for a hospital heliport/helistop license for your reference. We will not be able to issue a license until the hospital submits an application and the facility is visually inspected

If you have any questions please feel free to contact me by phone at 517-335-9679 or by e-mail at zapataj@michigan.gov. Thanks for your help.

Sincerely,

Juan C. Zapata, Aviation Specialist
Office of Aeronautics
Michigan Department of Transportation

Enclosure

7.D.
(5)

ST. JOHN HOSPITAL AND MEDICAL CENTER
POLICY/PROCEDURE MANUAL

DEPARTMENT: **SECURITY-POLICE DEPARTMENT**

POLICY NO. **#71**

POLICY TITLE: **Helistop Operations Policy**

OBJECTIVE: **The objective of this policy is to establish safe guidelines for the landing and take off of helicopter transports on the campus of SJH&MC.**

POLICY/PROCEDURE

PURPOSE

The purpose of this policy is to establish guidelines and protocols for the operation of the SJH&MC Helistop under the direction of the Security Department Director.

The Security Department is responsible for site preparation during helicopter arrivals and departures. The preparation includes securing the perimeter for landing and take off as well as the safety of the aircraft while the flight crew is away from the immediate area.

It shall be the Security Department's responsibility to secure the perimeter and make sure the patient transport vehicle (ambulance) can get to the helistop unimpeded. Any other requested medical equipment necessary will be brought by the Emergency Center nursing personnel.

The Helistop landing pad is to be used for emergency medical transports and organ procurement/transplant transport only. Any other usage requires prior authorization from the Security Department Director. In his absence, the Manager, Security Operations can give authorization.

PROCEDURE

All helicopters with intent to land on the SJH&MC Helistop must notify the SJH&MC, Emergency Center, referral desk via radio. The referral desk will notify the SJH&MC Security Department, dispatcher at (313)343-3860, of the estimated time of arrival.

Notice of estimated time of arrival, should be at least thirty minutes prior to arrival. Helicopter pilots must also give a second call to the SJH&MC Emergency Center, referral desk when they are fifteen minutes out.

The SJH&MC Dispatcher shall notify the security mobile units in the field of the estimated time of arrival and to begin preparation for the helicopter landing.

PREPARATION

Mobile units shall respond to the Helistop pad, located at the SW corner of the North Parking Lot.

The mobile units are responsible for placing the landing lights onto the Helistop Pad.

The mobile units shall get into position to bring all vehicular traffic to a stop at least five minutes prior to arrival.

The mobile units shall keep all vehicle traffic and pedestrian at least two hundred feet away from the Helistop landing pad.

The mobile units shall direct the patient transport vehicle (ambulance) to the Helistop Pad. The transport vehicle (ambulance) shall not get close to the aircraft until the helicopter rotor blades come to a stop.

Mobile units are to provide security for the aircraft at all times.

HELISTOP MISHAP PROCEDURES

In the event of a helicopter mishap, the following procedure should be initiated by Security:

- Assist if possible, (do not put yourself in danger) in the rescue of persons from the helicopter.
- Contact the Security Control Center via radio and request the Detroit Fire Department to respond. Security should escort the Fire Apparatus to the scene.
- If there is a small fire, use a fire extinguisher and attempt to extinguish or control the fire.
- Security officers at the scene are responsible for writing out an incident report in the event of a fire or other accident which may include slip and falls, etc.

LOADING AND UNLOADING PATIENT

Security and Emergency Center personnel shall assist flight crew as needed.

Emergency Center personnel shall provide stretcher if needed.

No one is permitted near the tail of the helicopter.

The flight crew is responsible for loading and unloading equipment and patients.

SAFETY PRECAUTIONS

Landing area must be clear of all debris, snow, ice, dirt, and sand which can damage nearby cars; windows and sand can damage the aircraft engines and be blown into the tail rotor system, and cause injury to bystanders. Remember the large rotor blades make approximately 80-100 mph. winds. This can blow over sawhorses, orange cones, flares, and loose debris from construction areas as large as pieces of plywood could become airborne.

Keep all spectators at lest 200 feet from landing area.

All "authorized" personnel should stay at least 100 feet from the landing area, and are responsible for wearing protective eyewear to prevent foreign objects from possibly causing injury.

Do not approach the helicopter until the blades come to a complete stop.

Do not let people walk near or around the helicopter on sidewalks while the blades are still turning or approach the helicopter at any time unless authorized by the Medical Crew.

It shall be Security's responsibility to document all landings and take-offs.

Created: 7/10/12

Sue Stewart

P.B. (6)

From: Wild, James [Jim.Wild@stjohn.org]
Sent: Tuesday, October 02, 2012 6:32 PM
To: Sue Stewart
Cc: Condino, Debbie; White, Robert; Gene Tutag
Subject: Heliport Request
Attachments: Noise.pdf

Sue,

Per our discussion, I've attached the helicopter manufacturer's sound comparison for the EC135 helicopter that would service St. John Hospital. It notes a 65 dB level while in the air.

During the test flight, the noise levels were 80 dB to 85 dB as measured from the walkway to the landing site, a direct distance of 162'. I've estimated the noise levels with the reductions due to the brick wall and distance in the following table.

As you'll see, we will be well below the Grosse Pointe Woods ordinance level for the first row of houses, 90% of which are hospital property. Those houses in the second and subsequent layers are not expected to even notice the activity.

Sound levels
dB(A) scale
Bruel & Kjaer Type 2232 Precision Sound Level Meter

			Sound Level (GPW Ordinance - 85 dB)				
			Actual dB, max.		Estimated dB*		
From	To	Distance (feet)	Min	Max	Min	Max	
Demo landing site	Parking lot walkway	162	80	85			
Proposed landing site	Hospital brick wall along Bournemouth, closest point	318			74	69	At property line
Proposed landing site	Closest residence on Bournemouth	381			68	63	At house
Proposed landing site	Hospital brick wall along Raymond, closest point	162			80	75	At property line
Proposed landing site	Closest residence on Raymond	231			72	67	At house

* Brick wall noise barrier estimated reduction of 5 dB (10 dB is a 50% reduction). Distance reduction based on 1/r logarithmic ratio.

Other reference noise levels are as follows:

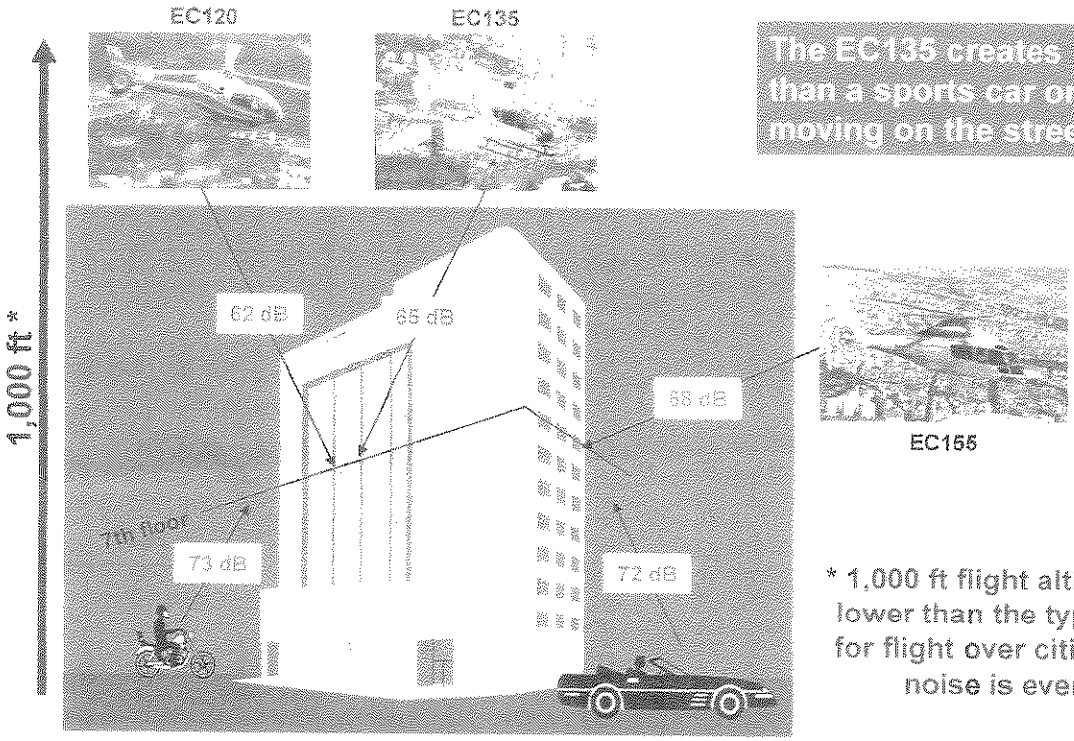
Reference sound levels	dB
Grosse Pointe Woods maximum noise level per Ordinance Section 28-349(b)	85
City traffic (inside car)	80
MIOSHA and OSHA continuous permissible noise level for an 8-hour day	90
Normal conversation at 3 feet	60-65
Normal piano practice	70
OSHA permissible noise level for 1 hour	105

We are also scheduled to meet with the City of Detroit Planning Division at 10 am on October 10, 2012. This meeting is intended to identify the required variances to establish the heliport on the south side of the hospital campus along Moross Road. Shortly afterwards I should be able to provide a better timetable for the Detroit site approvals.

Thank you.

Jim Wild
Administrator, Engineering and Maintenance
St. John Providence Health System
313-343-3881

Eurocopter: Neighbor Friendly

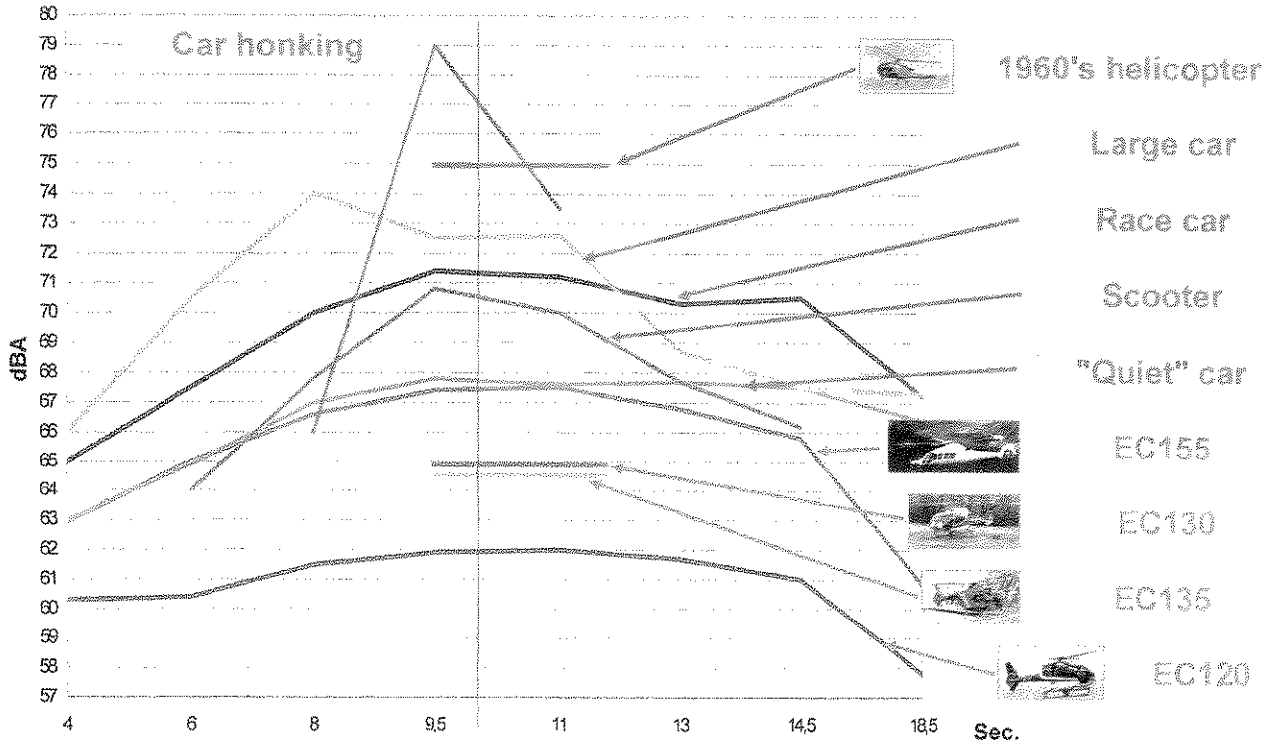


The EC135 creates less noise than a sports car or truck moving on the street!

* 1,000 ft flight altitude is much lower than the typical altitude for flight over cities, so actual noise is even lower!

Noise measured at 5th floor level, with the helicopters flying at 1,000 ft and 108 kt

Noise Comparison



Noise measured at 5th floor level, with the helicopters flying at 1,000 ft and 108 kt

EUROCOPTER

7E

City of Grosse Pointe Woods, Michigan

NOTICE IS HEREBY GIVEN that the Planning Commission, under the provisions of Michigan Statutes, Section 125.584, et al, and Section 5.2934, et al, and Chapter 50, Zoning, Article II, Administration & Enforcement, Section 50-32(5), Special Land Use Approval, of the 2007 Grosse Pointe Woods City Code, will meet in the Council-Court Room of the Municipal Building, 20025 Mack Plaza, on Tuesday, October 23, 2012, at 7:30 p.m. to hear the petition of St. John Hospital & Medical Center, 19231/19233 Mack Avenue, Grosse Pointe Woods, MI, which seeks approval to construct a temporary heliport in the north parking lot of the St. John Hospital property, which property is the subject of a special land use request and in accordance with the City Code requires a public hearing. As specified in Section 50-420(4), Permitted Special Land Uses, hospitals and accessory uses located in the C-2 High Intensity City Center Zoning District are subject to the standards set forth in Section 50-421 and 50-422 of the City Code. The subject file is open for public review. Written comments may be submitted prior to the meeting to the City Clerk at 20025 Mack Plaza, Grosse Pointe Woods. All interested persons are invited to attend.

Lisa Kay Hathaway
City Clerk

H. Commercial / St John Heliport 10-23

AFFIDAVIT OF PROPERTY OWNERS NOTIFIED

Re: 19231 Mack – St. John Heliport

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State of Michigan)
) ss.
County of Wayne)

I HEREBY CERTIFY that the notice of Hearing was duly mailed First Class Mail on October 4, 2012 to the following property owners within a 300 foot radius of the above property in accordance with the provisions of the 2007 City Code of Grosse Pointe Woods. A Hearing fee of $250.00 has been received and acknowledged with check # 0001414253.

Lisa Kay Hathaway

City Clerk

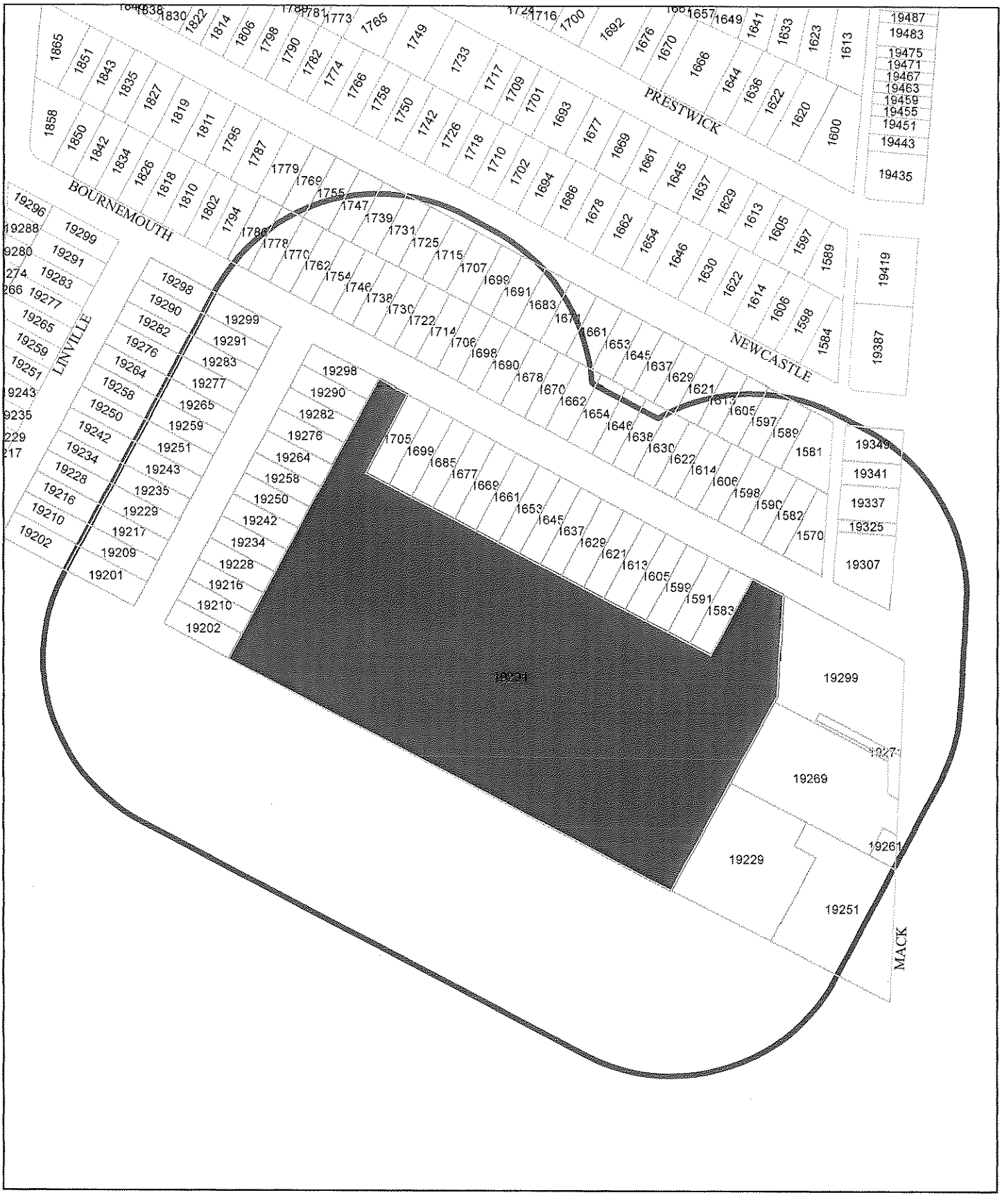
See attached document for complete list.

ownersname	ownersna_1	ownerstree	ownercity	state	zip
REILLY MAUREEN E		1570 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
BODDY MATTHEW W & GABRIELA L		1581 NEWCASTLE RD	GROSSE POINTE WOODS	MI	48236
MURRAY, RONALD & DAWN		1582 BOURNEMOUTH	GROSSE POINTE WOODS	MI	48236
OCCUPANT		1583 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		1589 NEWCASTLE RD	GROSSE POINTE WOODS	MI	48236
MCINTYRE ROB AND LESLIE		1590 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		1591 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
REITER, ERIC J. AND REBECCA L.		1597 NEWCASTLE	GROSSE POINTE WOODS	MI	48236
WRIGHT, KENNETH		1598 BOURNEMOUTH	GROSSE POINTE WOODS	MI	48236
OCCUPANT		1599 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		1605 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
STAPLETON WAYNE ET AL		1605 NEWCASTLE	GROSSE POINTE WOODS	MI	48236
VANTASSELL, ALICE		1606 BOURNEMOUTH	GROSSE POINTE WOODS	MI	48236
RABEE PAUL & SHAPERA MARIAM		1613 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
MINNEY LLOYD C & COLLEEN K		1613 NEWCASTLE RD	GROSSE POINTE WOODS	MI	48236
JANKIEWICZ PAMELA		1614 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
GEHA EDWARD		1621 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
DUPUIS JAMES E		1621 NEWCASTLE RD	GROSSE POINTE WOODS	MI	48236
LOWE RALUCA		1622 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		1629 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
SCOTT THAD JEFFREY & NICOLE MARIE		1629 NEWCASTLE RD	GROSSE POINTE WOODS	MI	48236
MORAN JOHN E		1630 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		1637 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
SHOFFNER LAWRENCE R		1637 NEWCASTLE RD	GROSSE POINTE WOODS	MI	48236
CHAMPAGNE ANDREA		1638 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		1645 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
BELOTE STEVEN & JULIA		1645 NEWCASTLE RD	GROSSE POINTE WOODS	MI	48236
LANGLOIS MARK B		1646 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		1653 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
SEMACK, GREGORY & CARLY		1653 NEWCASTLE RD	GROSSE POINTE WOODS	MI	48236
KEITH DONALD J		1654 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		1661 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
KEARNEY IRENE M		1661 NEWCASTLE RD	GROSSE POINTE WOODS	MI	48236
LOWMAN MICHAEL & BLAKE		1662 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
NAYAK BIJAY K & GASKIN LAURA E		1669 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
BURKARD MEREDITH		1670 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
BOYLE DENINE		1671 NEWCASTLE RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		1677 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
MATECKI, BRIGET PAULSEN		1678 BOURNEMOUTH	GROSSE POINTE WOODS	MI	48236
ROSE, MARILYN KAVALKO		1683 NEWCASTLE	GROSSE POINTE WOODS	MI	48236
OCCUPANT		1685 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
CROWE JOHN C		1690 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
HELM DAVID G		1691 NEWCASTLE RD	GROSSE POINTE WOODS	MI	48236

ownersname	ownersna_1	ownerstree	ownercity	state	zip
BAWOL THOMAS J		1698 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		1699 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		1699 NEWCASTLE RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		1705 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
SHERRY ROBERT F & ELIZABETH		1706 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
LAI TITO ANTONIO & YUKIKO S		1707 NEWCASTLE RD	GROSSE POINTE WOODS	MI	48236
WENZEL SARA & NOVAK ADAM		1714 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
ARGEL LUCIANO J & CONSUELO		1715 NEWCASTLE RD	GROSSE POINTE WOODS	MI	48236
MUELLER, L		1722 BOURNEMOUTH	GROSSE POINTE WOODS	MI	48236
ROHR HEATHA		1725 NEWCASTLE RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		1730 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
DELAS RONALD M & ROBIN R		1731 NEWCASTLE RD	GROSSE POINTE WOODS	MI	48236
GAWEL MARK A		1738 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
ALTON KAREN		1739 NEWCASTLE RD	GROSSE POINTE WOODS	MI	48236
PRYBYSZ, MATTHEW L PRZYBYSZ CA		1746 BOURNEMOUTH	GROSSE POINTE WOODS	MI	48236
RANCOURT, ROBERT C.	RANCOURT, JOYCE A.	1747 NEWCASTLE	GROSSE POINTE WOODS	MI	48236
PILLSBURY NANCY A		1754 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
CRONIN ANDREA M TRUST	ANDREA M CRONIN TRUSTEE	1755 NEWCASTLE RD	GROSSE POINTE WOODS	MI	48236
FINE CHARLES E		1762 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
VROOM LORNA M LIVING TRUST		1769 NEWCASTLE	GROSSE POINTE WOODS	MI	48236
MACCONNACHIE DANIEL		1770 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
BARGLIND LOIS A		1778 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
REID KEVIN		1786 BOURNEMOUTH RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19201 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19202 LINVILLE AVE	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19202 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
MICHAEL JAMES & MONTANBEAU MICHAEL		19209 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
HAMANN THOMAS		19210 LINVILLE AVE	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19210 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
THOMPSON, ROBERT E, AND KELLY L.		19216 LINVILLE	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19216 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
JOHNSON SCOTT		19217 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
PANTANO LYNN THERESA		19228 LINVILLE AVE	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19228 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19229 MACK AVE	GROSSE POINTE WOODS	MI	48236
LLOYD JARELL W		19229 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
VAN ELSLANDER CANCER CENTER	BERNADINE SHERWOOD	19229 MACK AVE 10 / 36	GROSSE POINTE WOODS	MI	48236
GREAT LAKES CANCER MGMT SPECIALISTS		19229 MACK AVE STE 24	GROSSE POINTE WOODS	MI	48236
LYMPHOMA CLINIC OF MICHIGAN		19229 MACK AVE STE 34	GROSSE POINTE WOODS	MI	48236
NORMAN BOLZ, M.D.		19229 MACK AVE STE 34	GROSSE POINTE WOODS	MI	48236
ST. CLAIR SURGICAL SPECIALISTS, PC		19229 MACK AVE STE 38	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19231 MACK AVE	GROSSE POINTE WOODS	MI	48236
CROSBY VENUS		19234 LINVILLE AVE	GROSSE POINTE WOODS	MI	48236

ownersname	ownersna_1	ownerstree	ownercity	state	zip
OCCUPANT		19234 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19235 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19242 LINVILLE AVE	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19242 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
CARSON SUSAN A		19243 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
ROYBAL, PATRICK		19250 LINVILLE	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19250 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19251 MACK AVE	GROSSE POINTE WOODS	MI	48236
REID STEVEN D		19251 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
ST. JOHN - OCCUPATIONAL HEALTH		19251 MACK AVE 100	GROSSE POINTE WOODS	MI	48236
ST. JOHN - FOUNDATION		19251 MACK AVE 102	GROSSE POINTE WOODS	MI	48236
TRAVELWORLD, INC.		19251 MACK AVE 145	GROSSE POINTE WOODS	MI	48236
CHILDTIME CHILDCARE INC.		19251 MACK AVE 150/170	GROSSE POINTE WOODS	MI	48236
PHARMOR PHARMACY-MACK-MOROSS		19251 MACK AVE 155	GROSSE POINTE WOODS	MI	48236
ST. JOHN - INFECTION CONTROL		19251 MACK AVE 190	GROSSE POINTE WOODS	MI	48236
SOCIAL SECURITY ADMINISTRATION		19251 MACK AVE 200	GROSSE POINTE WOODS	MI	48236
TOOTHWORKS #220 PED. DENTISTRY		19251 MACK AVE 220	GROSSE POINTE WOODS	MI	48236
ST. JOHN - IT & DESKTOP SUPPORT		19251 MACK AVE 300,400	GROSSE POINTE WOODS	MI	48236
ST. JOHN - INTERNAL MEDICINE		19251 MACK AVE 333	GROSSE POINTE WOODS	MI	48236
ST. JOHN - MEDICAL EDUCATION		19251 MACK AVE 340/390	GROSSE POINTE WOODS	MI	48236
ST. JOHN - FINANCE & ONCOLOGY RESEARCH		19251 MACK AVE 405	GROSSE POINTE WOODS	MI	48236
ST. JOHN - BUSINESS SERVICES		19251 MACK AVE 420	GROSSE POINTE WOODS	MI	48236
ST. JOHN - TRANSPORTATION		19251 MACK AVE 430	GROSSE POINTE WOODS	MI	48236
MAZZARA LAW FIRM, PLLC	JACK J. MAZZARA	19251 MACK AVE 500	GROSSE POINTE WOODS	MI	48236
MICHIGAN REHABILITATION SERVICES		19251 MACK AVE 525	GROSSE POINTE WOODS	MI	48236
ST. JOHN - CLINICAL PATHOLOGY LABORATORIES		19251 MACK AVE 60 - 80	GROSSE POINTE WOODS	MI	48236
POINTE PLAZA-SCHOSTAK BROTHERS		19251 MACK AVE 90	GROSSE POINTE WOODS	MI	48236
HC DDS PC #95	AESTHETIC & FAMILY DENTISTRY	19251 MACK AVE 95	GROSSE POINTE WOODS	MI	48236
REAVES, BRENDA		19258 LINVILLE	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19258 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
MACINTOSH, PATRICIA M		19259 RAYMOND	GROSSE POINTE WOODS	MI	48236
LAZARE'S OF GROSSE POINTE		19261 MACK AVE	GROSSE POINTE WOODS	MI	48236
NICHOLL, PATRICIA		19264 LINVILLE	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19264 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
TROMBLEY, BRANDI		19265 RAYMOND	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19269 MACK AVE	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19271 MACK AVE	GROSSE POINTE WOODS	MI	48236
MICKS, LOUIS J & TINA		19276 LINVILLE	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19276 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
RAJT, JOHN M.		19277 RAYMOND	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19282 LINVILLE AVE	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19282 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
HESS GEORGE J II		19283 RAYMOND RD	GROSSE POINTE WOODS	MI	48236

ownersname	ownersna_1	ownerstree	ownercity	state	zip
ROBERTSON THOMAS		19290 LINVILLE AVE	GROSSE POINTE WOODS	MI	48236
MARKEY, FRANCIS J		19290 RAYMOND	GROSSE POINTE WOODS	MI	48236
PRECZEWSKI, PHILIP		19291 RAYMOND	GROSSE POINTE WOODS	MI	48236
KELLY PAULA & LAWRENCE		19298 LINVILLE AVE	GROSSE POINTE WOODS	MI	48236
MONETTE KENNETH F		19298 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19299 MACK AVE	GROSSE POINTE WOODS	MI	48236
OCCUPANT		19299 RAYMOND RD	GROSSE POINTE WOODS	MI	48236
AUTOMOBILE CLUB INS ASSOC		19299 MACK AVE	GROSSE POINTE WOODS	MI	48236
CHARTER ONE BANK		19307 MACK AVE	GROSSE POINTE WOODS	MI	48236
MERIT WOODS PHARMACY		19325 MACK AVE	GROSSE POINTE WOODS	MI	48236
LENSCRAFTERS #5576		19329 MACK AVE	GROSSE POINTE WOODS	MI	48236
FRANKS ALEXANDER & POLEN		19337 MACK AVE	GROSSE POINTE WOODS	MI	48236
EINSTEIN BROS. BAGELS #851		19341 MACK AVE	GROSSE POINTE WOODS	MI	48236
CAHILL KATHLEEN		809 BLAIRMOOR CT	GROSSE POINTE WOODS	MI	48236
KNECHTEL JAMES S & PHILLIPS SARAH		12112 ROLLING MEADOW CIR	ANCHORAGE	AK	99516
FIERIMONTE MANAGEMENT CORP		15500 NINETEEN MILE RD STE# 350	CLINTON TWP	MI	48038
AUTOMOBILE CLUB INS ASSOC	J. METIVIER - PROCUREMENT	1 AUTO CLUB DRIVE	DEARBORN	MI	48126
DETROIT AUTO INS - INS EXC		AUTO CLUB DRIVE	DEARBORN	MI	48126
ST JOHNS HEALTH SYSTEM		22101 MONROSS RD	DETROIT	MI	48236
ST JOHN HOSPITAL	JIM WILD, ENG & MAINT. DEPT.	22101 MOROSS	DETROIT	MI	48224
GARCIA JOSE R		1200 LAMBERT AVE	FLAGLER BEACH	FL	32136
KRALL MARTIN A		122 MORAN RD	GROSSE POINTE FARMS	MI	48236
O'NEILL RICHARD J		1206 BUCKINGHAM RD	GROSSE POINTE PARK	MI	48230
BEDWAY ROSEMARY		9 S DEEPLANDS	GROSSE POINTE SHORES	MI	48236
CRE JV FIVE BRANCH HOLDINGS LLC	CHARTER ONE BANK	PO BOX 167129	IRVING	TX	75016
EINSTEIN NOAH CORPORATION		555 ZANG STE# 300	LAKEWOOD	CO	80228
EINSTEIN BROS. BAGELS #851	CORPORATE LICENSING	555 ZANG ST. SUITE 300	LAKEWOOD	CO	80228
POINTE PLAZA		17800 LAUREL PARK DR N STE 200C	LIVONIA	MI	48152
LENSCRAFTERS #5576	BUSINESS LICENSING DEPT.	P. O. BOX 8506	MASON	OH	45040
DRUMMCOR HOLDING INCORPORATED		2901 ADMIRAL WILSON BLVD	PENNSAUKEN	NJ	08109
ST. JOHN - BUSINESSES	PROVIDENCE PAVILION BUILDING SHARI A. FISCHER, PROPERTY MANAGER	22255 GREENFIELD RD, STE 200	SOUTHFIELD	MI	48075
STEVENS RICHARD S & MARLENE A TRUST		23330 GREENCREST	ST CLAIR SHORES	MI	48080
LAWRENCE PATRICIA K ESTATE OF		20365 EMPIRE ST	TAYLOR	MI	48180
FRANKS PLACE ONE LLC		70 W LONG LAKE RD	TROY	MI	48098
GOUDIE KEVIN & DEMBECK MICHAEL &	DEMBECK LAURA	9724 AUTUMN WAY	ZIONSVILLE	IN	46077
AT&T	Mr. Tim Black - Area Manager	100 S. Main Room 314	Mount Clemens	MI	48043
MichCon	Michael Sage, Permit Liaison	3150 E. Michigan Ave	Ypsilanti Township	MI	48198
Detroit Edison Company	Michael Blunden, Corp. Permit Coordinator	One Energy Plaza Dr.	Detroit	MI	48226



CITY OF GROSSE POINTE WOODS
CIRCUMDATA PECTORIBUS
MICHIGAN

INFORMATION TECHNOLOGY DEPARTMENT
Geographic Information Systems (GIS) Division

Subject: 19231 Mack - St. John Heliport

Date: 10/04/2012

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ST. JOHN HOSPITAL & MEDICAL CENTER

Temporary Helistop

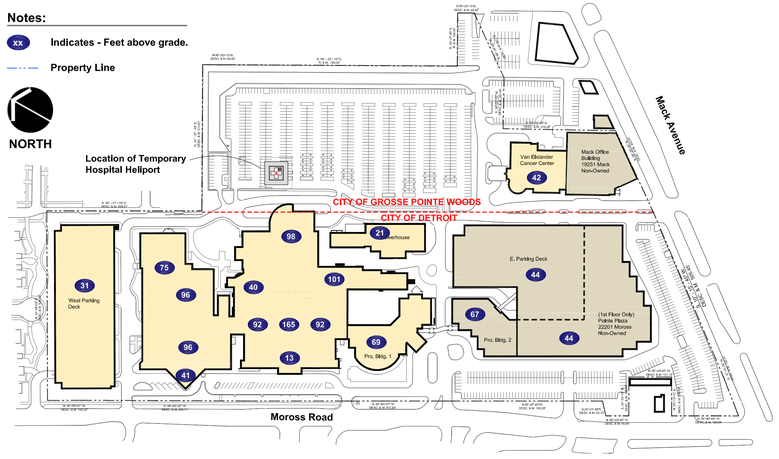
St John Hospital & Medical Center

North Parking Lot
19231 & 19233 Mack Ave., Grosse Pointe Woods Michigan

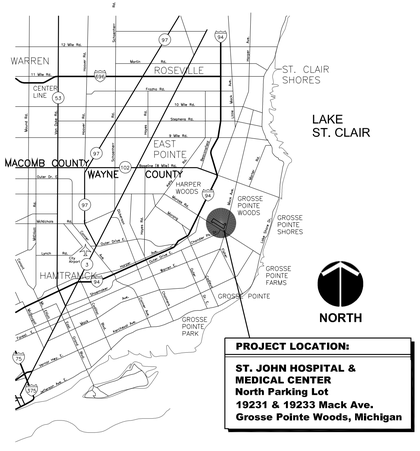
SATELLITE PHOTO

Location of Temporary Hospital Heliport

CAMPUS KEY PLAN



LOCATION MAP:



PROJECT LOCATION:

ST. JOHN HOSPITAL & MEDICAL CENTER
North Parking Lot
19231 & 19233 Mack Ave.
Grosse Pointe Woods, Michigan

SCOPE OF WORK:

THIS PROJECT WILL PROVIDE A TEMPORARY HOSPITAL HELISTOP LANDING SITE WITHIN THE HOSPITALS EXISTING PUBLIC PARKING AREA. THE LANDING AREA SHALL BE PAINTED AND LIGHTING SHALL BE PROVIDED ONTO THE EXISTING CONCRETE/ ASPHALT PAVEMENT.

DEMOLITION WILL WILL INCLUDE: LANDSCAPING, LIGHTING, FENCING AND SOME NEARBY LANDSCAPE. 25 TOTAL PARKING SPACES WILL BE TAKEN OFF-LINE.

NEW CONSTRUCTION WILL INCLUDE: HOSPITAL DESIGNATORS, NEW BEACON LIGHTING, COMMUNICATIONS EQUIPMENT, WIND SOCK, LANDSCAPING AND A LOW FENCE BETWEEN EXISTING PARKING AND HELISTOP.

CODE INFORMATION:

"THESE CONSTRUCTION DOCUMENTS WERE PREPARED FOR COMPLIANCE WITH THE MICHIGAN CONSTRUCTION CODES IN EFFECT AT TIME OF PERMIT SUBMITTAL. ALL ENGINEERS, CONTRACTORS AND SUPPLIERS INVOLVED WITH THIS PROJECT SHALL COMPLY WITH THE SAME CODES, ISSUED AND APPROVED CODE MODIFICATIONS AND/OR CITY OF GROSSE POINTE WOODS CONSTRUCTION BOARDS OF APPEALS RULINGS AND WHENEVER REQUIRED SHALL PROVIDE SHOP DRAWINGS AND SUBMITTALS CLEARLY DESCRIBING COMPLIANCE TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE FOR REVIEW AND APPROVAL."

APPLICABLE CODES & REFERENCE STANDARDS

BUILDING:	2006 1998	MICHIGAN BUILDING CODE ICC/ANSI A117.1-1998 AND 2006 MICHIGAN BARRIER FREE DESIGN LAW OF 1966 AMENDED
LIFE SAFETY:	2001	NFPA 101 1997 W/ O.F.S. AMENDMENTS 2001
ELECTRICAL:	2006	MICHIGAN ELECTRICAL CODE, NEC w/PART 8 STATE AMENDMENTS
MECHANICAL:	2006	MICHIGAN MECHANICAL CODE
PLUMBING:	2006	MICHIGAN PLUMBING CODE
FIRE:	2003 2002 2002	INTERNATIONAL FIRE CODE NFPA 13 - EDITION FIRE SPRINKLERS NFPA 72 - EDITION NATIONAL FIRE ALARM CODE
ENERGY:	1999	MICHIGAN UNIFORM ENERGY CODE RULES PART 10 WITH ANSI/ASHRAE/IESNA STANDARD 90.1-1999

INSTRUCTIONS TO BIDDERS:

PARKING:
CONTRACTORS SHALL PARK THE CONSTRUCTION VEHICLES ON THE ROOF OF THE EAST PARKING DECK (JUST NORTH OF PB2). A BRIDGE CONNECTING THE DECK TO PB2 IS ON THE SECOND LEVEL.

DEBRIS REMOVAL:
THIS BUILDING HAS NO RESTRICTIONS OF TIME OR SPECIFIC ELEVATOR USE FOR DEBRIS REMOVAL. CONSTRUCTION DUMPSTERS SHALL BE LOCATED IN THE ALLEY WAY BETWEEN PB2 AND THE EAST PARKING DECK. CONTACT PROJECT MANAGER FOR EXACT LOCATION.

BADGES:
ALL CONTRACTORS MUST DISPLAY HOSPITAL ISSUED IDENTIFICATION BADGE AT ALL TIMES. BADGES CAN BE PICKED UP IN THE SECURITY OFFICE LOCATED ON THE FIRST FLOOR NORTH IN THE FISHER CENTER. A $10.00 REFUNDABLE DEPOSIT MAY BE REQUIRED.

RIGHT TO KNOW:
THE MATERIAL DATA SHEETS FOR THE HOSPITAL ARE LOCATED IN INDIVIDUAL DEPARTMENTS AS WELL AS A FULL SET IN THE PHYSICAL FACILITIES OFFICE AND THE EMERGENCY DEPARTMENT. MATERIAL SAFETY DATA SHEETS MUST BE AVAILABLE ON ALL PRODUCTS WHICH ARE BEING USED IN OUR BUILDING. PLEASE PROVIDE 3 COPIES (1) JOB SITE (2) PHYSICAL FACILITIES OFFICE (3) EMERGENCY DEPARTMENT.

FIRE EXTINGUISHER:
FIRE EXTINGUISHERS NEEDED TO BE AVAILABLE WITHIN THE WORK SITE. THE EXTINGUISHER NEEDS TO BE CLEARLY LABELED AND APPROPRIATE FOR THE PRODUCT BEING USED.

FLAMMABLE MATERIAL STORAGE:
FLAMMABLE MATERIAL STORAGE MUST BE IN APPROVED CONTAINER AND THE AMOUNT SHOULD RESTRICTED TO ONE DAY USAGE.

SMOKING/ TOBACCO:
ALL ST. JOHN HEALTH FACILITIES INCLUDING THIS ONE HAS ADOPTED A TOBACCO FREE CAMPUS WIDE POLICY. TOBACCO USE AND SMOKING IS STRICTLY PROHIBITED ANYWHERE ON THE GROUNDS.

FIRE SAFETY/ REPORTING:
CONTRACTORS MUST FAMILIARIZE THEMSELVES WITH THE LOCATION OF PULL STATIONS AND BE PREPARED TO ACTIVATE FIRE ALARM IF THEY DISCOVER A FIRE. FIRE RESPONSE AND FIRE EXTINGUISHER PROCEDURE INSTRUCTIONS ARE ON THE CARD ATTACHED TO THE BADGE.

DRESS CODE:
ALL CONSTRUCTION TRADE WORKERS MUST HAVE A CLEAN AND PROFESSIONAL APPEARANCE. T-SHIRTS, TANK TOPS OR SHIRTS WITH LOGOS (OTHER THAN COMPANY LOGOS) WILL NOT BE ACCEPTABLE. ALL SHIRTS MUST HAVE A COLLAR. DENIM JEANS WILL BE PERMITTED, BUT MUST NOT BE TORN OR FRAYED.

BUILDING OCCUPANCY:

MBC: USE I2 HEALTH CARE
NFPA: 2006 EDITION - 101 SECTION 13-1.2.2

NOTE:
THE BUILDING OCCUPANCY WILL NOT CHANGE THROUGH CONSTRUCTION. ALL BUILDING EXITS WILL REMAIN UNOBSTRUCTED THROUGHOUT CONSTRUCTION. AREA OF CONSTRUCTION WILL BE UNOCCUPIED DURING THE CONSTRUCTION.

CONSTRUCTION TYPE:

MBC: TYPE 1-B, PROTECTED
NFPA: CONSTRUCTION TYPE II (222)

SHEET INDEX:

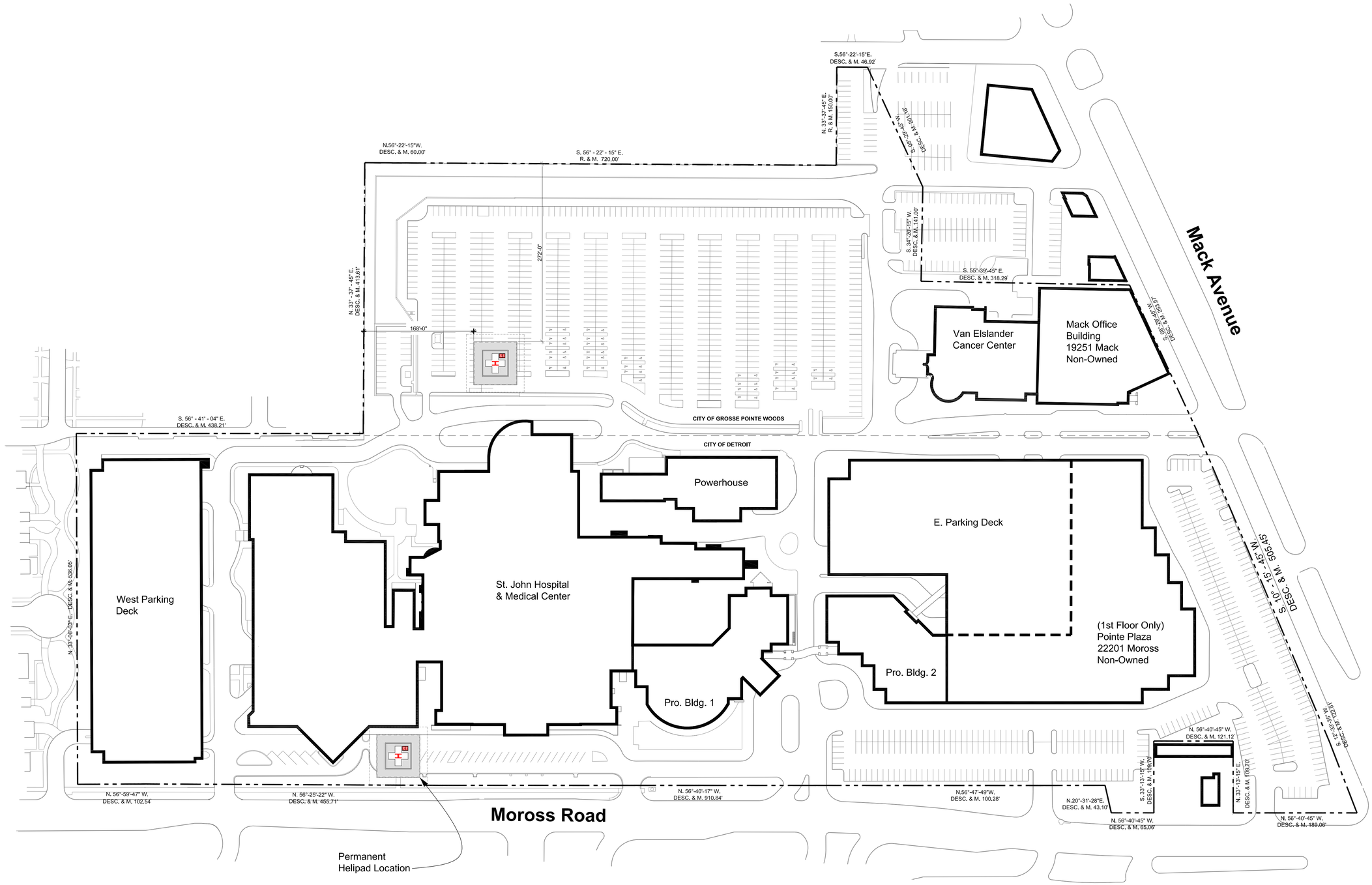
LEGAL DESCRIPTION:

PARCEL -A-

PART OF LOTS 22, 23, 24 AND 25 AND PART OF THE "WIDOWS DOWER" LYING NORTHERLY OF SAID LOTS, OF THE "SURVEY AND PLAT OF THE ESTATE OF MAGLOIRE MOROSS DEC'D, OF P.C. 123" AS RECITED IN PROBATE FILE NO. 6668, BOOK 92; ALSO VACATED LOTS 1 THRU 55 INCLUSIVE, VACATED McCORMICK AVENUE, AND THE VACATED PUBLIC ALLEY (20 FEET WIDE) LYING BETWEEN McCORMICK AVENUE AND SEVEN MILE ROAD, AS PLATTED IN THE VACATED "MANSARD MANOR SUBD'N OF PART OF LOT 26 PARTITION OF PLAT OF MAGLOIRE MOROSS E'ST OF PART OF P.C. 123", AS RECORDED IN LIBER 62 PLATS, PAGE 17, WAYNE COUNTY RECORDS, ALSO VACATED LOTS 168 THRU 174 INCLUSIVE, VACATED LOTS 234 AND 235 WITH VACATED McCORMICK AVENUE AND THE VACATED ALLEY (20 FEET WIDE) LYING BETWEEN McCORMICK AVENUE AND SEVEN MILE ROAD, AS PLATTED IN "ROLAND ESTATE SUBD'N OF LOTS 27, 28, 29 AND THAT PART OF WIDOWS DOWER LYING NORTHERLY OF SAID LOTS OF PARTITION PLAT OF MAGLOIRE MOROSS ESTATE OF PART OF P.C. 123" AS RECORDED IN LIBER 56 OF PLATS, PAGE 16, WAYNE COUNTY RECORDS; ALSO THE VACATED SOUTH HALF OF KINGSVILLE AVENUE LYING BETWEEN THE EASTERLY LINE OF LINVILLE AVENUE AND THE WESTERLY LINE OF MACK AVENUE, OF SAID "SURVEY AND PLAT OF THE ESTATE OF MAGLOIRE MOROSS DEC'D OF P.C. 123", AND PART OF PRIVATE CLAIM 617, ALL BEING LOCATED IN THE CITY OF DETROIT AND THE CITY OF GROSSE POINTE WOODS, WAYNE COUNTY, MICHIGAN, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHEASTERLY CORNER OF MOROSS ROAD (204 FEET WIDE) AND LINVILLE AVENUE (60 FEET WIDE) AND PROCEEDING THENCE FROM SAID POINT OF BEGINNING NORTH 33 DEGREES 06 MINUTES 03 SECONDS EAST ALONG THE EASTERLY LINE OF SAID LINVILLE AVENUE, A DISTANCE OF 536.05 FEET TO A POINT ON THE NORTHERLY LINE OF PRIVATE CLAIM 123; THENCE SOUTH 56 DEGREES 41 MINUTES 04 SECONDS EAST, ALONG SAID NORTHERLY LINE OF PRIVATE CLAIM 123, SAID LINE BEING ALSO THE LINE COMMON TO THE CITY OF DETROIT AND THE CITY OF GROSS POINTE WOODS, AND THE NORTHERLY LINE OF THAT PART OF KINGSVILLE AVENUE AS VACATED BY THE CITY OF DETROIT (JCC OCTOBER 31, 1972), A DISTANCE OF 438.21 FEET TO THE SOUTHEASTERLY CORNER OF THE PLAT OF "COLONIAL VILLAGE SUBDIVISION" AS RECORDED IN LIBER 70 OF PLATS ON PAGE 51, WAYNE COUNTY RECORDS; THENCE NORTH 33 DEGREES 37 MINUTES 45 SECONDS EAST, ALONG THE EASTERLY LINE OF SAID "COLONIAL VILLAGE SUBDIVISION" (L. 70 PLATS, P. 51, W.C.R.), A DISTANCE OF 413.61 FEET TO THE SOUTHWESTERLY CORNER OF THE "PUBLIC EASEMENT" (60 FEET WIDE) AS SHOWN ON SAID PLAT OF "COLONIAL VILLAGE SUBDIVISION"; THENCE SOUTH 56 DEGREES 22 MINUTES 15 SECONDS EAST, ALONG THE SOUTHERLY LINE OF SAID "PUBLIC EASEMENT" AND ALONG THE SOUTHERLY LINE OF "COLONIAL VILLAGE SUBDIVISION NO. 2", AS RECORDED IN LIBER 70 OF PLATS ON PAGE 61, WAYNE COUNTY RECORDS, A DISTANCE OF 720.00 FEET TO THE SOUTHEASTERLY CORNER OF SAID "COLONIAL VILLAGE SUBDIVISION NO. 2" (L. 70 PLATS, P. 61 W.C.R.); THENCE NORTH 33 DEGREES 37 MINUTES 45 SECONDS EAST, ALONG THE EASTERLY LINE OF SAID "COLONIAL VILLAGE SUBDIVISION NO. 2", A DISTANCE OF 150.00 FEET TO THE NORTHEASTERLY CORNER OF SAID SUBDIVISION; THENCE SOUTH 56 DEGREES 22 MINUTES 15 SECONDS EAST, ALONG THE SOUTHERLY LINE OF BOURNEMOUTH ROAD (60 FEET WIDE), A DISTANCE OF 46.92 FEET TO A POINT; THENCE THE FOLLOWING COURSES AND DISTANCES ALONG THE EASTERLY AND SOUTHERLY LINES OF PROPERTY AS DESCRIBED IN LIBER 24177 OF DEEDS, ON PAGE 380, WAYNE COUNTY RECORDS, SOUTH 08 DEGREES 29 MINUTES 45 SECONDS WEST, 201.18 FEET; THENCE SOUTH 34 DEGREES 20 MINUTES 15 SECONDS WEST, 141.00 FEET; THENCE SOUTH 55 DEGREES 39 MINUTES 45 SECONDS EAST, 343.29 FEET TO A POINT ON THE WESTERLY LINE OF MACK AVENUE (RECORDED 150 FEET WIDE); THENCE SOUTH 08 DEGREES 29 MINUTES 45 SECONDS WEST, ALONG THE WESTERLY LINE OF SAID MACK AVENUE, A DISTANCE OF 253.57 FEET TO A POINT ON THE NORTHERLY LINE OF SAID "SURVEY AND PLAT OF THE ESTATE OF MAGLOIRE MOROSS DEC'D. OF P.C. 123", SAID POINT BEING ALSO AN ANGLE POINT IN SAID ROAD LINE; THENCE SOUTH 10 DEGREES 15 MINUTES 45 SECONDS WEST, CONTINUING ALONG THE WESTERLY LINE OF SAID MACK AVENUE, A DISTANCE OF 505.45 FEET TO AN ANGLE POINT IN SAID ROAD LINE; THENCE CONTINUING ALONG SAID ROAD LINE SOUTH 12 DEGREES 33 MINUTES 55 SECONDS WEST, A DISTANCE OF 122.51 FEET TO THE NORTHWESTERLY CORNER OF MOROSS ROAD (162 FEET WIDE AT THIS POINT) AND SAID MACK AVENUE; THENCE NORTH 56 DEGREES 40 MINUTES 45 SECONDS WEST ALONG THE NORTHERLY LINE OF SAID MOROSS ROAD, A DISTANCE OF 189.06 FEET TO A POINT; THENCE NORTH 33 DEGREES 13 MINUTES 15 SECONDS EAST A DISTANCE OF 109.70 FEET TO A POINT; THENCE NORTH 56 DEGREES 40 MINUTES 45 SECONDS WEST, ALONG A LINE PARALLEL WITH THE NORTHERLY LINE OF SAID MOROSS ROAD, A DISTANCE OF 121.12 FEET TO A POINT; THENCE SOUTH 33 DEGREES 13 MINUTES 15 SECONDS WEST, A DISTANCE OF 109.70 FEET TO A POINT ON THE NORTHERLY LINE OF SAID MOROSS ROAD; THENCE NORTH 56 DEGREES 40 MINUTES 45 SECONDS WEST, ALONG SAID NORTHERLY LINE OF MOROSS ROAD, A DISTANCE OF 65.06 FEET TO A JOG IN SAID ROAD LINE; THENCE NORTH 20 DEGREES 31 MINUTES 28 SECONDS EAST, ALONG SAID JOG, A DISTANCE OF 43.10 FEET TO POINT ON THE NORTHERLY LINE OF MOROSS ROAD (204 FEET WIDE AT THIS POINT); THENCE NORTH 56 DEGREES 47 MINUTES 49 SECONDS WEST, ALONG THE NORTHERLY LINE OF SAID MOROSS ROAD, A DISTANCE OF 100.28 FEET TO A POINT ON THE EASTERLY LINE OF LOT 24 OF SAID "SURVEY AND PLAT OF THE ESTATE OF MAGLOIRE MOROSS DEC'D. OF P.C. 123", SAID POINT BEING ALSO AN ANGLE POINT IN SAID ROAD LINE; THENCE CONTINUING ALONG THE NORTHERLY LINE OF SAID MOROSS ROAD, NORTH 56 DEGREES 40 MINUTES 17 SECONDS WEST, A DISTANCE OF 910.84 FEET TO AN ANGLE POINT IN SAID ROAD LINE; THENCE NORTH 56 DEGREES 25 MINUTES 22 SECONDS WEST, ALONG SAID NORTHERLY LINE OF MOROSS ROAD, A DISTANCE OF 455.71 FEET TO AN ANGLE POINT IN SAID ROAD LINE; THENCE NORTH 56 DEGREES 59 MINUTES 47 SECONDS WEST, ALONG SAID NORTHERLY LINE OF MOROSS ROAD, A DISTANCE OF 102.54 FEET TO THE POINT OF BEGINNING. CONTAINING 32.899 ACRES, MORE OR LESS, OF LAND IN AREA.

PARCEL -B-

THE "PUBLIC EASEMENT" (60 FEET WIDE) AS SHOWN ON THE PLAT OF "COLONIAL VILLAGE SUBDIVISION OF PART OF PRIVATE CLAIM 617", CITY OF GROSSE POINT WOODS, WAYNE COUNTY, MICHIGAN, AS RECORDED IN LIBER 70 OF PLATS ON PAGE 51, WAYNE COUNTY RECORDS AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHEASTERLY CORNER OF A "PUBLIC EASEMENT" (60 FEET WIDE) AS SHOWN ON THE RECORDED PLAT OF SAID "COLONIAL VILLAGE SUBDIVISION" (L. 70 PLATS, P. 51 W.C.R.), SAID POINT BEING DISTANT NORTH 56 DEGREES 22 MINUTES 15 SECONDS WEST 955.45 FEET AS MEASURED ALONG THE SOUTHERLY LINE OF BOURNEMOUTH ROAD (60 FEET WIDE) FROM THE POINT OF INTERSECTION OF SAID STREET LINE WITH THE WESTERLY LINE OF MACK AVENUE (RECORDED 150 WIDE); PROCEEDING THENCE FROM SAID POINT OF BEGINNING SOUTH 33 DEGREES 37 MINUTES 45 SECONDS WEST, ALONG THE EASTERLY LINE OF SAID "PUBLIC EASEMENT" SAID LINE BEING ALSO THE WESTERLY LINE OF LOT 79 OF THE PLAT OF "COLONIAL VILLAGE SUBDIVISION NO. 2" AS RECORDED IN LIBER 70 OF PLATS ON PAGE 61, WAYNE COUNTY RECORDS, A DISTANCE OF 150.00 FEET TO THE SOUTHEASTERLY CORNER OF SAID "PUBLIC EASEMENT"; THENCE NORTH 56 DEGREES 22 MINUTES 15 SECONDS WEST, ALONG THE SOUTHERLY LINE OF SAID "PUBLIC EASEMENT", SAID LINE BEING ALSO A SOUTHERLY LINE OF SAID "COLONIAL VILLAGE SUBDIVISION", A DISTANCE OF 60.00 FEET TO THE SOUTHWESTERLY CORNER OF SAID "PUBLIC EASEMENT"; THENCE NORTH 33 DEGREES 37 MINUTES 45 SECONDS EAST, ALONG THE WESTERLY LINE OF SAID "PUBLIC EASEMENT", SAID LINE BEING ALSO PART OF THE EASTERLY LINE OF LOT 15 AND ALL OF THE EASTERLY LINE OF LOTS 14, 13 AND 12 OF SAID "COLONIAL VILLAGE SUBDIVISION", A DISTANCE OF 150.00 FEET TO THE NORTHWESTERLY CORNER OF SAID "PUBLIC EASEMENT"; THENCE SOUTH 56 DEGREES 22 MINUTES 15 SECONDS EAST, ALONG THE SOUTHERLY LINE OF SAID BOURNEMOUTH ROAD, SAID LINE BEING ALSO THE NORTHERLY LINE OF SAID "PUBLIC EASEMENT," A DISTANCE OF 60.00 FEET TO THE POINT OF BEGINNING; CONTAINING 9,000 SQUARE FEET OR 0.207 ACRE MORE OR LESS OF LAND IN AREA.



NORTH

OVERALL SITE PLAN

SCALE: 1"=60'-0"

PERMITS

DOCUMENTS PREPARED BY:
Design and
Construction Services
22255 Greenfield Road - Suite #200
Southfield, MI 48075
Phone (248) 849-5753
Fax (248) 949-4570

PROJECT LOCATION:
St John Hospital & Medical Center
19231 & 19233 Mack Ave.
Grosse Pointe Woods, MI

PROJECT TITLE:
Temporary Helistop
North Parking Lot

DRAWING TITLE:
Site Plan and Notes

PROJECT NO.
SJH&MC-1101

DATE:

SCALE:
AS NOTED

DRAWN BY:
CAD GUY

SHEET NO.
2 of 5

EXISTING FIRE HYDRANT TO REMAIN

PAINT OVER EXISTING PARKING LOT STRIPING AS INDICATED.

REMOVE AND SAVLVAGE (18) PARKING BLOCKS.

REMOVE & SALVAGE FENCE.

BOILER HOUSE

SITE DEMOLITION PLAN

SCALE: 1/32"=1'-0"

NORTH

DOCUMENTS PREPARED BY:

Design and Construction Services

22255 Greenfield Road - Suite #200
Southfield, MI 48075
Phone (248) 849-5753
Fax (248) 849-2570

ST JOHN PROVIDENCE HEALTH SYSTEM

PROJECT LOCATION

St. John Hospital & Medical Center
Parking Lot
19231 & 19233 Mack Ave.
Grosse Pointe Woods, MI
Capitol Proj. #

PROJECT TITLE

Temporary Helistop
North Parking Lot

DRAWING TITLE

DEMOLITION DRAWING

PROJECT NO.: SJH&MC1101

DATE:

SCALE: AS NOTED

DRAWN BY: BAW

SHEET NO.: 3 OF 5

PROVIDE AVIATION MARKER LIGHT ON TOP OF EXISTING LIGHT POLE BY "AVLITE MODEL AV70"

PROVIDE AVIATION MARKER LIGHT ON TOP OF EXISTING LIGHT POLE BY "AVLITE MODEL AV70"

PROVIDE AVIATION MARKER LIGHT ON TOP OF EXISTING LIGHT POLE BY "AVLITE MODEL AV70"

VENTILATION SHAFT

VENTILATION SHAFT

PROVIDE A 3'-0" HIGH CHAINLINK FENCE ON (4) SIDES OF THE TEMP. PAD.

PROVIDE A DRY CHEMICAL FIRE EXTINGUISHER (10-A:120-B) & A WEATHER PROOF ENCLOSURE.

EXISTING FIRE HYDRANT

PROVIDE A DRY CHEMICAL FIRE EXTINGUISHER (10-A:120-B) & A WEATHER PROOF ENCLOSURE.

PROVIDE MODEL L-807 COMBINATION WIND SOCK / AVIATION MARKER LIGHT (SOLAR POWERED) ON ROOF OF ELEVATOR BUILDING

PROVIDE MODEL L-807 COMBINATION WIND SOCK / AVIATION MARKER LIGHT (SOLAR POWERED) ON ROOF NORTH PAVILION ROOF

F

F

BOILER HOUSE

PROVIDE AVIATION MARKER LIGHT ON TOP OF EXISTING LIGHT POLE BY "AVLITE MODEL AV07"

NORTH

CONSTRUCTION PLAN

SCALE: 1/32"=1'-0"

DOCUMENTS PREPARED BY:

Design and Construction Services
22255 Greenfield Road - Suite #200
Southfield, MI 48075
Phone (248) 848-4753
Fax (248) 848-2570

SJOHN PROVIDENCE HEALTH SYSTEM

PROJECT LOCATION

St. John Hospital & Medical Center
Parking Lot
19231 & 19233 Mack Ave.
Grosse Pointe Woods, MI
Capitol Proj. #

PROJECT TITLE: **Temporary Helistop**

DRAWING TITLE: **CONSTRUCTION DRAWING**
North Parking Lot

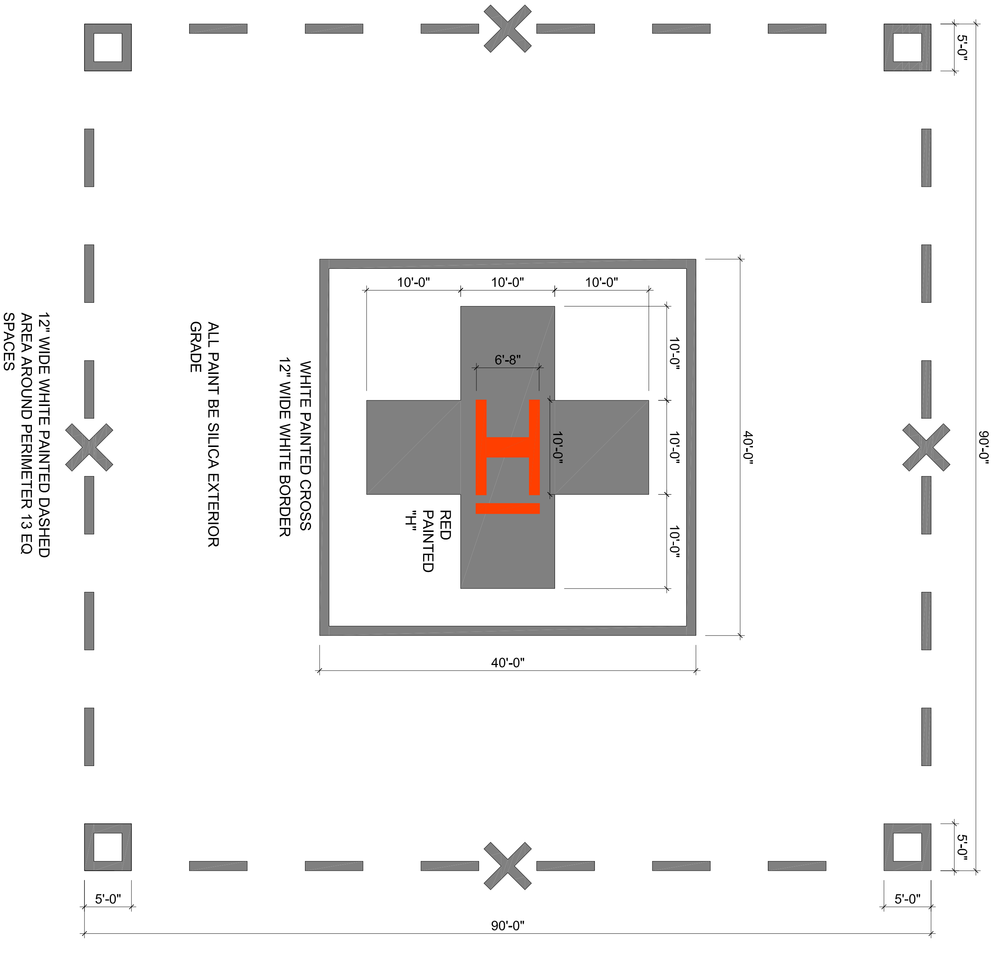
PROJECT NO.: **SJH&MC1101**

DATE:

SCALE: **AS NOTED**

DRAWN BY: **BAW**

SHEET NO.: **4 OF 5**



PROJECT NO.
SJH&MC1101

SHEET NO.
5 OF 5

DATE:

SCALE:
AS NOTED

DRAWN BY:
BAW

PROJECT TITLE
Temporary Helistop
North Parking Lot

DRAWING TITLE
PAINTING PLAN

PROJECT LOCATION
St. John Hospital & Medical Center
Parking Lot
19231 & 19233 Mack Ave.
Grosse Pointe Woods, MI
Capitol Proj. #

ST JOHN PROVIDENCE HEALTH SYSTEM

DOCUMENTS PREPARED BY:
Design and Construction Services
22255 Greenfield Road - Suite #200
Southfield, MI 48075
Phone (248) 849-5753
Fax (248) 849-2570

Handout 12/13/04

PC Meeting

RECEIVED
DEC 13 2004
CITY OF GROSSE PTE. WOODS

7.D(13)

St. John Hospital and Medical Center
Detroit, Michigan

ST. JOHN REVITALIZATION

ST. JOHN HEALTH SYSTEM CAPITAL PROJECT NO: 1775

Van Elslander Cancer Center

NORTH PARKING LOT

Materials Management (Below Grade)
GROSS AREA 33,248 s.f.

DOCK CANOPY 17,140 s.f.
ENCLOSED AREA 16,108 s.f.

Loading Dock (Below Grade)

Glass Enclosed Stair Tower (Above Grade)

NORTH PAVILION ADDITION
FIN. FL. ELEV. = 107.44

Power Plant

Existing Hospital

Pointe Plaza Parking Structure

PARKING TABULATION

NORTH LOT EXISTING PARKING:
909 REGULAR SPACES
72 BARRIER-FREE SPACES

NORTH LOT PROPOSED PARKING:
818 REGULAR SPACES
75 BARRIER-FREE SPACES

NET PROPOSED PARKING DECREASE: 322 SPACES

TOTAL EXISTING CAMPUS PARKING AVAILABLE: 3,285 SPACES

TOTAL PROPOSED CAMPUS PARKING AVAILABLE: 2963 SPACES

SURPLUS EXISTING PARKING AVAILABLE: 383 SPACES

SURPLUS PROPOSED PARKING AVAILABLE: 61 SPACES

TOTAL EXISTING PARKING REQUIRED: 2,278 SPACES

TOTAL PROPOSED PARKING REQUIRED: 2277 SPACES

PARKING PROVIDED IN EXCESS OF REQUIRED: 686 SPACES

NOTE:
FINAL LOCATION FOR DOCK AREA AND FIRE HYDRANT TO BE DETERMINED GROSS POINTE WOODS PUBLIC SAFETY DEPARTMENT.

N

SITE LAYOUT PLAN
SCALE: 1" = 30'

Date:	Issued For:
11-22-04	SPA/Special Land Use Approval
12-13-04	SPA/Special Land Use Approval

HARLEY ELLIS
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36913 Northwestern Hwy.
Suite 200
Southfield, Michigan
48034-3478 | USA
248.262.1500 (telephone)
248.262.1515 (facsimile)
www.harleyellis.com

Project Number:	70275
Drawn By:	S. Sieg
Checked By:	R. Browski
Approved By:	F. Schwar
Sheet Title:	Site Layout Plan
Sheet Number:	CP1.101

zrcp1101.dgn 12/13/2004 5:12:49 PM

CITY OF GROSSE POINTE WOODS
BUILDING DEPARTMENT
MEMORANDUM

TO: Planning Commission

FROM: Gene Tutag, Building Official

DATE: October 19, 2012

SUBJECT: Land Uses & Zoning on Mack Avenue

City Attorney Chip Berschback and myself have met with Planning Consultant John Jackson regarding permitted uses in the C zoning district. We had a productive discussion and the results of the meeting will be shared with the Planning Commission at the November meeting.

I have spoken with Planning Commission Chair Gilezan regarding this item not being on the October meeting's agenda due to the 20/20 presentation at the workshop and the public hearing on SJH&MC helistop. Chair Gilezan agreed.

Thanks

COMMITTEE-OF-THE-WHOLE EXCERPT
10-01-12

The first item discussed was regarding the **proposed Solar Ordinance**. The City Attorney requested input from the Committee regarding the proposed ordinance prior to the Planning Commission Public Hearing. The Mayor discussed technology such as windows that are energy collectors. Other discussion included solar pool covers, visibility of energy collectors, and clear glass panels.

10.

City of Grosse Pointe Woods
BUILDING DEPARTMENT
Monthly Financial Report – September 2012

Permits Issued: 132
Rental Certificates: 13 Total Amount: $ 17,909
Vacant/Foreclosure: 1

CODE ENFORCEMENT

Abandoned/Foreclosure Compl. Notices Issued:	0
# of Complaints Investigated by Code Enforcement:	23
Closed Due to Compliance:	8
Open for Longer Compliance Time:	15
Citations Issued:	0
Early Trash Notices:	5
Code Violation Notices to Residents:	27
Tall Grass Notices Issued:	16
Stop Work notices to Contractors (working w/o permit):	15
Outside Storage:	10

NEW BUSINESS

Grosse Pointe News, 21312 Mack Avenue