# Growing Power General Plan Development

Common Council File #100767 | October 21, 2010

#### **Purpose:**

Growing Power Inc. requests that the zoning be amended from RS<sub>5</sub> to a General Plan Development (GPD) in accodance with this document. This statement, together with the accompanying drawings and related materials, constitutes and supports the General Plan Development.

#### **Documents:**

- Description of Overall Development Concept
- Exhibit A: Statistical Sheet
- Exhibit B: Vicinity Map
- Exhibit C: Existing Site Photos

#### Plan Sheets:

- Plat of Survey dated 10.5.10
- Building/Tree Demo & Relocation Plan dated 10.21.10
- Proposed Site Plan dated 10.21.10

### Description of Overall Development Concept

#### 295-907 PLANNED DEVELOPMENT DISTRICT

General Plan Project Description and Owner's Statement of Intent for the property located at 5500 West Silver Spring Drive.

#### **Description of Overall Development Concept**

Growing Power, Inc. is a non-profit organization and land trust supporting people from diverse backgrounds and the environment in which they live by helping to provide equal access to healthy, high-quality, safe and affordable food. This mission is implemented by providing hands-on training, on-the-ground demonstration, outreach, and technical assistance through the development of Community Food Systems that help people grow, process, market and distribute food in a sustainable manner.

Growing Power has become a national leader in providing neighborhood-based sustainable agricultural education. As the organization has grown, the need for additional space to support production, classes, meetings, meal preparation, offices, and on-site warehousing has grown exponentially.

Growing Power requests the establishment of a General Plan consisting of a facility, located at 5500 West Silver Spring Drive, where people can learn those sustainable practices. The facility, on a 1.74 acre parcel, consists of a proposed 34,000 square foot (+/-) five-story vertical farm building aimed at being as carbon neutral & energy and water efficient as possible. The vertical farm building contains food & fish growing, classrooms, staff offices, a demo kitchen, a retail food outlet, food processing. Existing greenhouses & hoop houses with hydroponic & aquaponic uses and a farm yard for cultivation, composting and temporary seasonal hoop houses complete the development.

A Certified Survey Map is being done to add land from the 5532 W. Silver Spring Drive parcel to the development site to accommodate on-site truck turnaround.

#### 295-907(3)(A) USES

The proposed development is comprised of multiple uses that are consistent with those uses stated below as well as potential near-term uses. All the uses stated below relate to the sustainable practices to grow, process, market, & distribute food that is grown onsite as well as uses related to the processing and sale of materials that are generated by those practices. Community education and outreach are also part of these stated uses.

The existing uses will continue to be allowed until such time that a detailed plan is approved. General maintenance that is required for existing principal buildings will be completed on an as needed basis.

All uses stated below are included for approval.

#### **EDUCATIONAL USES:**

School, specialty or personal instruction - "a business, professional, trade, or other specialty school."

#### COMMUNITY-SERVING USES:

**Community center** - building operated by a non-profit group and used for educational and cultural services.

#### COMMERCIAL AND OFFICE USES:

**Retail establishment, general** - an establishment providing retail sale of new products to the public and rendering services incidental to the sale of such products

Outdoor merchandise sales - "retail sales of produce"

#### HEALTH CARE AND SOCIAL ASSISTANCE:

**Social service facility** - "a facility offering life skills training"

#### GENERAL SERVICE USES:

**Catering service** - "establishment providing the processing, assembly and packaging of food into servings for consumption off-premises without provision for on-site pick-up or consumption" life skills training"

#### **MOTOR VEHICLE USES:**

Heavy motor vehicle outdoor storage - "outdoor storage of operable heavy motor vehicles for more than 48 hours."

Heavy motor vehicle parking lot, accessory use - "surface parking spaces for 5 or more heavy motor vehicles"

#### ACCOMMODATION AND FOOD SERVICE USES:

**Restaurant, sit-down** - a restaurant where food or beverages sold are consumed at tables located on the premises, where taking food or beverages from the premises is purely incidental, where food or beverages are normally served utilizing non-disposable containers and utensils"

#### STORAGE, RECYCLING AND WHOLESALETRADE USES:

**Wholesale and distribution facility, indoor** - "an establishment providing indoor storage and sale of factory direct merchandise and bulk goods"

Wholesale and distribution facility, outdoor - "an establishment providing outdoor storage of materials or goods"

#### **INDUSTRIAL USES:**

**Manufacturing, light** - "an establishment engaged in the indoor manufacturing, assembly, fabrication, packaging or other industrial processing of finished parts or products, primarily from previously prepared materials, ... where there are few external effects across property lines."

**Research and development** - "an establishment which conducts research, development or controlled production of high-technology electronic, industrial, or scientific products or commodities for sale or aboratories conducting educational or medical research or testing.

#### AGRICULTURAL USES:

**Plant nursery or greenhouse** - "an establishment engaged in growing crops of any kind within or under a greenhouse, cold frame, cloth house or lath house, or growing nursery stock, annual or perennial flowers, vegetables or other garden or land-scaping plants."

**Raising of crops or livestock** - "the growing of crops, including any farm, orchard, community garden or other premises or establishment used for the growing of crops, or the use of land or buildings for the keeping of ... goats, chickens, ducks, turkeys, geese or any other domesticated livestock".

#### TEMPORARY USES:

Seasonal market - "a temporary facility used to conduct retail trade for a period not exceeding 180 days in a calendar year"

#### 295-907(3)(B) DESIGN STANDARDS

#### The Vertical Farm

The conceptual design being developed by Growing Power and The Kubala Washatko Architects, Inc. will expand and improve Growing Power's greenhouse and aquaponics operations currently spread over a two-acre site located in the City of Milwaukee. With a maximum height of 85 feet, the five stories of south-facing greenhouse areas will allow production of plants, vegetables, and herbs year-round. Expanded educational classrooms, conference spaces, demonstration kitchen, food processing and storage, freezers, and loading docks will further support Growing Power's expanding mission as a local and national resource for learning about sustainable urban food production. Administrative offices, volunteer spaces, and staff support areas will be closely connected to greenhouse and educational areas to allow for active observation and participation.

Cast-in-place tilt-up concrete panel construction will provide an affordable, energy efficient, structurally stable, and long-last-ing building shell appropriate for intensive farming operations. The vertical exterior wall panels will be broken into smaller forms and window openings to provide an appearance that will not be monolithic in nature. The vertical farming concept can also be applied to the re-use of abandoned industrial buildings often found in urban centers. Several existing historic greenhouses will be preserved on-site.

#### **The Outdoor Market**

In its current facility, Growing Power operates a small retail store to sell produce, meat, worm castings, and compost to the community. The new Vertical Farm will expand and improve the year-round indoor retail space selling fresh, nutritious, and affordable food. In addition, the Vertical Farm will create an active outdoor market area and become a community gathering place for work, learning, and social activities.

#### Water, Nutrients and Energy

Water is an important part of daily life at Growing Power. Water fills the hydroponic tanks for raising fish and is essential for growing a myriad variety of plants, vegetables, and herbs. A closed loop of water and nutrients circulates throughout the building; fish wastes are used as food for plants, while plants clean and filter the water for fish. Rainwater is planned to be collected and stored to support the system.

Energy flows throughout the building will be carefully designed. The dramatic sloped surface of the building will absorb sunlight and take advantage of convective currents created by solar heating. Heat generated by the sun will be stored in thermal mass developed within the building and used to warm the building in winter. Roof-mounted photovoltaic panels and thermal solar panels will generate a portion of the building energy needs. Introduction of natural daylight will reduce energy use.

#### 295-907(3)(C) DENSITY

N/A

#### 295-907(3)(D) SPACE BETWEEN STRUCTURES

The existing greenhouse separations vary from 4 feet to approximately 18 feet. The proposed vertical growing building has a minimum separation from existing buildings of 20 feet. See attached drawing C.1- Proposed Site Plan dated 10.21.2010.

#### 295-907(3)(E) SETBACKS

Front, Street Setback ( South property line):	0′-0″
<b>Side Setback</b> (Western property lines from street to Lincoln Creek)	6'-0"
Rear Setback (North Property line)	6'-0"
Side Setback (East property line)	0'-0"

The setback requirement of 25 feet for Planned Development applies to lots that exceed 5 acres in size.

This Project's lot size is 1.7416 acres and therefore this requirement is not applicable to this Project.

#### 295-907(3)(F) SCREENING

A Type 'H' residential buffer will be utilized to screen this Project from the residential uses to the west and north of the site. A 6'-o" high opaque wood fence with deciduous street-type trees planted a maximum of 25 feet on center will be utilized.

#### 295-907(3)(H) OPEN SPACES

The residential buffer will be utilized as a portion of the landscaped open space. The existing trees at the west property line adjacent to the street will border a potential perennial planting area. The Work Yard will be open in nature and serve as a multipurpose space to serve the function of the development. See attached drawing C.1- Proposed Site Plan dated 10.21.2010.

#### 295-907(3)(I) LANDSCAPING

All required vegetation shall be of a quality consistent with the standards of the American Association of Nurserymen (ANSI 260.1). All required vegetation shall be maintained on an ongoing basis, including seasonal tree and plant replacement.

#### 295-907(3)(J) LIGHTING

All outdoor lighting will comply with the current lighting regulations for a planned development. All on-site lighting will have cut-off fixtures that ensure that lighting levels and glare are controlled as follows:

- 1. No light source shall be visible from an adjoining property or public right-of-way.
- 2. Where adjoining properties are zoned residential, the maximum illumination at a property line shall be one foot-candle. In all other circumstances, the maximum illumination at a property line shall be 5 foot-candles.

#### 295-907(3)(K) UTILITIES

Currently, this parcel is supplied with electrical power by way of overhead lines located on the adjacent parcel to the east. If available, new electrical service will be located underground. All utility work internal to the site will be installed underground where possible. Transformers and substations, if required, will be installed within buildings or otherwise screened from view. It is requested that the Common Council wave the burial of overhead utility lines requirement for this development per 295-907(3)(k).

#### 295-907(3)(L) SIGNS

The development will comply with the sign standards dictated by Table 295-605-5 Commercial Sign District Standards for Local Business Districts LB-1.

One Type 'A' project identification wall sign with a maximum area of 60 square feet will be utilized on the street (south) elevation of the proposed vertical growing building. One Type 'A' project identification wall sign with a maximum area of 60 square feet will be located on the east elevation and one Type 'A' project identification wall sign with a maximum area of 60 square feet will be located on the west elevation for visibility to vehicular traffic. This signage will be comprised of individual letters with internal illumination.

One Type 'A' wall sign with a maximum area of 60 square feet will be utilized on street (south) elevation of the existing market greenhouse building. This signage will be comprised of individual letters with internal illumination.

One Type 'A' freestanding project identification sign with monument base will be located at the entrance to the development. The sign will be internally illuminated with a maximum area of 100 square feet.

#### 295-907(3)(M) SIGN ILLUMINATION

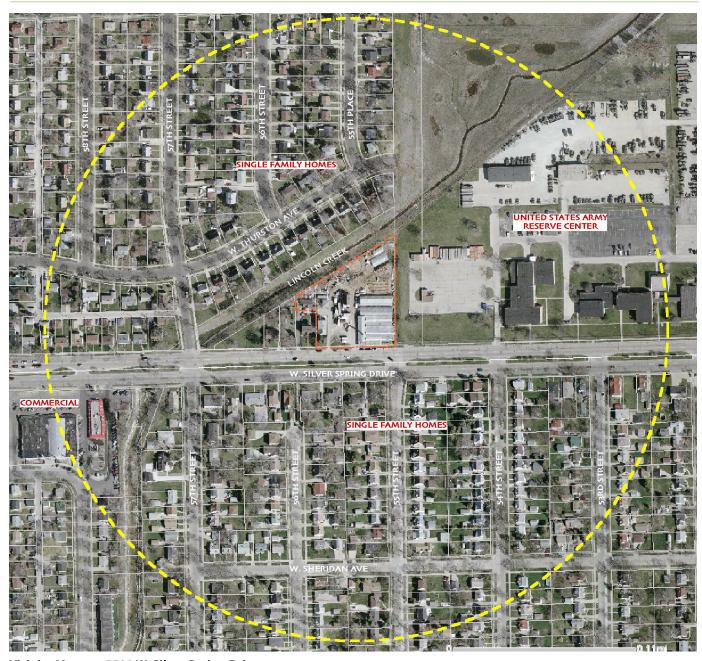
If signage is illuminated, the source of illumination shall not be visible or intermittent.

# Exhibit A

#### STATISTICAL SHEET PER 295-907(B-1)

b-1-a	Gross Land Area		75,865 SF	100%
b-1-b	Maximum amt. of land covered l	by principle buildings	31,291 SF	41%
		New Vertical Growing Building	9,356 SF	
		Office, Kitchen, Market	1,788	
		Greenhouse #1	1,845	
		Greenhouse #2	1,915	
		Greenhouse #3	1,816	
		Greenhouse #4	1,724	
		Greenhouse #5	2,754	
		Greenhouse #6	2,938	
		Greenhouse #7	2,315	
		Greenhouse #8	1,694	
		Greenhouse #9	743	
		Greenhouse #10	1,115	
		Greenhouse #11	1,288	
b-1-c	Maximum amt. of land devoted	to parking and drives	13,624 SF	18%
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b-1-d	Minimum amt. of land devoted t	o landscaped open space	5,728 SF	8%
		Landscape Buffer	2,632	
		Gravel Work Yard	3,096	
b-1-e	Total square footage devoted to	non-residential uses	75,865 SF	100%
b-1-f	Proposed number of buildings		13	
b-1-g	Maximum number of dwelling units per building		N/A	
b-1-h	Bedrooms per unit		N/A	
b-1-i	Parking spaces provided Total		28	
	0.60.0		0	
	On-Site Pa Street Parl	rking king (per 295. 403(2)b-2)	18 10	
	Parking spaces per thousand square feet of building area		0.52	
	53, 832 S.F. / 1000 Existing 20,147 S.F. Proposed 33,685 +/- S.F.			

# Exhibit B



Vicinity Map 5500 W. Silver Spring Drive

View of the Project east property boundary looking northwest

**Exhibit** C

Composite view of the Project south property boundary looking north

# **Exhibit** C

View of the Project north property boundary looking southwest