5.1 General Description of the Project

In this Urban Library Plaza in Semarang project aimed to transform the space for reading into a social hub especially the urban with multiple responsibilities. The focus of the concept is to reexamine common library experience and incorporate a combination of personal and social cultivation, culture enhancement and entertainment. Urban Library plaza in Semarang is proposing modern – impressive building which acts as a gathering place and important Semarang cultural cluster. Intriguing proposal for the Library was developed in open exchange library manner; significantly remove the current library paradigm that has been performing a closed personality of the building. The point of the issue is to break down the paradigm into an open library which has an innovative experience to visitor and how the library can present an urban way of knowledge to every visitor. Reflecting this new concept urban library plaza into a new urban culture in Semarang.

5.2 Problem Solving

There are several problems which later can be solve by analyzing a detailed point break down into the best solution.

- Breaking the present library paradigm into an open exchange library
- Creating a social hub in Semarang Urban environment
- Providing a impressive library experience
- Creating a library building that reflects the Urban character of Semarang
5.3 Location

The consideration of site feasibility:

1. *The relationship with existing buildings* in the immediate neighborhood with regard to both the general environment and possible limitations on a freedom to plan

2. *The adequacy of the site* for future extensions to the building

3. *External traffic patterns* in the neighborhood as decreed in the overall traffic plans, road access to the building in a way considered suitable

4. *Noise factor*, if noise from the immediate surrounding area is inevitable, (traffic, student movement, etc) provision of protection must be made in the structure, layout, surface and external environment

5. *Immediate surroundings*, gardens or other areas to insulate the library from its neighborhood or to improve its appearance

6. *Car parking-* related to the planning authority

7. *Pedestrian access routes*, need some protections for the visitor approaching the building

8. *Access for servicing* - have to be kept separate from the public approach.

From those consideration, the selected site has been chosen as its fulfilled some several factor that Urban Library Plaza is suitable to settle up in that location. Veteran Street belong to BWK II (see the attachment of City Planning Regulation) which suitable for the recreation and educational sector.

The existing medium contour topography provide a fascinating view which support the library alot in creating borderless interaction between inside and outside.

5.4 Design Theme

Today’s library is no longer merely a central repository for book storage and protection. The friendly climate of Semarang, the Urban library and plaza breaks down the conventional borders between interior and exterior
activities. The plaza can be as much a place of learning as the library can be a space of engagement. The library of “Open Exchange” is organized around a series of partially exterior spaces that traverse the building horizontally and diagonally and, like the plaza, turns indoor and outdoor relationships “inside out.” These interactive spaces, collectively initiate both natural and artificial flows through the library.

The Urban Library Plaza proposal creates a space of public engagement by challenging the role of the library in the contemporary city of Semarang. The project becomes a social and public space made possible by new technology, with the potential to transcend the traditional definition of learning spaces

5.5 Area Programming

The major facilities in this Urban Library Plaza in Semarang are:
1. Library Hall which include lobby, library hall for adult and children, reading room, multipurpose room and staff office
2. Entertainment Lounge which include cafe, bookstore
3. Plaza which include public locker deck

Tb5.1: Area programming
Source: Private docs

<table>
<thead>
<tr>
<th>Space Inquiry</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library Hall</td>
<td>6.027</td>
</tr>
<tr>
<td>Library Staff Office</td>
<td>593</td>
</tr>
<tr>
<td>Entertainment Lounge</td>
<td>2.590</td>
</tr>
<tr>
<td>Plaza</td>
<td>1.256</td>
</tr>
<tr>
<td>Public Locker deck</td>
<td>100</td>
</tr>
<tr>
<td>Service Facilitia</td>
<td>562</td>
</tr>
<tr>
<td>Parking Area</td>
<td>1.718</td>
</tr>
<tr>
<td>Area</td>
<td>12.846</td>
</tr>
</tbody>
</table>
Building Coverage Ratio = Building total Area : Floor Area Ratio
= 10.256 : 2.4
= 4274 m²

Ground Floor Area = Building Coverage Ratio x 60%
= 4274 x 60%
= 2564 m²

Wide Floor Ratio = Building Coverage Ratio - Ground Floor Area
= 4.455 - 2.685
= 1.710 (3 levels)m²

Development Area as Plaza space inquiry
(Open Space left) 1.770 x 100% (Circulation on Plaza) = 3.420 m²
Outdoor Sitting group = 528 m²

Total Space = Ground coverage + Plaza + Parking Area
= 4.274 + 3.420 + 1.710 + 528
= 12.824 m² = 1.3 ha

5.6 Structural, Utility and Environmental Programming

These are several programming of the Urban library project

1. Structure:
   - Low : Coisson foundation, bearing wall
   - Middle : Skeleton
   - Upper : Concrete, Space frame, Conventional Truss

2. Building Enclosure:
   - Floor : lightweight block, vinyl, granite tile, carpet, wool insulation, tactile floor
   - Wall : lightweight block, ACP, glass panel, gypsum
   - Ceiling : gypsum board, Acoustical perforated-metal deck, Lay-in acoustical ceiling tile
   - Roof : Roof garden

3. Utility:
   - Transportation:
     Vertical : ramp, dumb waiter/ book elevator
     Horizontal : loading dock, lounge, breezeway
• Electricity: Government Electricity Company with a solar energy as supportive energy source.

• Fire Protection: Smoke detector, Heat detector, Fire Extinghuser, Wet-pipe Sprinkler System, Hydrant Box

• Communication:
  Internal: 2 ways intercom, Speaker
  External: By phone, faximile & internet

• Lightning rod system: Faraday lightning rod system

• Litter: Divided separately into organic and unorganic. Organic for composting process, and urgonic to send into Laystall, Municipal landfill

• Clean water system: Down Feed system

• Sewage system: Solute sewage from disposal activity flow into the water treatment and the dish water sewage into municipal ditch. Dense sewage: septic tank

• Building protection: Conventional system, CCTV

• Security system: CCTV, BMI Anti-Theft system


4. Building performance:

• Natural lighting: glass wall, window, skylight

• Artificial lighting: downlight, spotlight,

• Natural ventilation: cross ventilation on window

• Artificial ventilation: Central Air Conditioning system, Split AC, Exhaust fan

• Acoustic: Sound lock material system (Acoustic wool insulation & Acoustic perforated-metal deck)
5. Environment:

- Vegetation: tree, shrubs, grass
- Plaza in outdoor grass field and park
- Rain harvesting
- Water treatment pool