## DRAWING INDEX

<table>
<thead>
<tr>
<th>Sheet No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD 0.0</td>
<td>Title, Design Team, Drawing Index, Map</td>
</tr>
<tr>
<td>SD 0.1</td>
<td>Site Plan</td>
</tr>
<tr>
<td>SD 0.2</td>
<td>Site Plan from Southeast</td>
</tr>
<tr>
<td>SD 1.0</td>
<td>First Floor Plan</td>
</tr>
<tr>
<td>SD 1.1</td>
<td>Second Floor Plan</td>
</tr>
<tr>
<td>SD 1.2</td>
<td>Third Floor Plan</td>
</tr>
<tr>
<td>SD 2.0</td>
<td>Building Elevations</td>
</tr>
<tr>
<td>PD 0.0</td>
<td>Plumbing Details</td>
</tr>
<tr>
<td>PD 0.1</td>
<td>Roof Plan</td>
</tr>
<tr>
<td>PD 0.2</td>
<td>Second Floor Plumbing Plan - Water</td>
</tr>
<tr>
<td>ME 0.0</td>
<td>Schematics</td>
</tr>
<tr>
<td>ME 0.1</td>
<td>Roof Mechanical Piping Plan</td>
</tr>
<tr>
<td>ME 0.2</td>
<td>Enlarged Plans and Sections</td>
</tr>
<tr>
<td>ES 0.0</td>
<td>Power Riser Diagram</td>
</tr>
<tr>
<td>ES 0.1</td>
<td>Electrical Site Plan</td>
</tr>
<tr>
<td>ES 0.2</td>
<td>Second Floor Electrical Plan - PCC</td>
</tr>
<tr>
<td>ES 0.3</td>
<td>Second Floor Electrical Plan - Lighting</td>
</tr>
<tr>
<td>ES 0.4</td>
<td>Panelboard Schedules</td>
</tr>
<tr>
<td>ES 0.5</td>
<td>Panelboard Schedules</td>
</tr>
<tr>
<td>ES 0.6</td>
<td>Electrical Details</td>
</tr>
</tbody>
</table>

### KEY

- Indicates scope of Solar Developer options
- Indicates note directly related to scope of Solar Developer
- Indicates note has been included for reference only, and is not included in scope of solar developer

**NOTE:** FOR A COMPLETE DESCRIPTION OF SCOPE, REFER TO BID DOCUMENTS. IT IS THE RESPONSIBILITY OF THE SOLAR DEVELOPER TO DETERMINE HOW SOLAR COMPONENTS TIE INTO OTHER BUILDING SYSTEMS.

## PROJECT VICINITY MAP

![Project Vicinity Map](image)

## ARCHITECT:
**Innovative Design Inc.**
850 W. Morgan St.
Raleigh, NC. 27603
(919) 832 6303

## PLUMBING - MECHANICAL - ELECTRICAL:
**Elm Engineering Inc.**
212 South Tryon St. Suite 1375
Charlotte, NC. 28281
(704) 335 0396
<table>
<thead>
<tr>
<th>No.</th>
<th>Code</th>
<th>Description</th>
<th>Species</th>
<th>Size (ft)</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FlD</td>
<td>Flowering Dogwood</td>
<td>Cornus</td>
<td>10</td>
<td>1 Speaker, all other vocal</td>
</tr>
<tr>
<td>2</td>
<td>MaS</td>
<td>Magnolia stellata</td>
<td>Magnolia</td>
<td>26</td>
<td>1 Speaker, all other vocal</td>
</tr>
<tr>
<td>3</td>
<td>HoA</td>
<td>Honeylocustus</td>
<td>Locustus</td>
<td>30</td>
<td>1 Speaker, all other vocal</td>
</tr>
<tr>
<td>4</td>
<td>HoA</td>
<td>Honeylocustus</td>
<td>Locustus</td>
<td>35</td>
<td>1 Speaker, all other vocal</td>
</tr>
<tr>
<td>5</td>
<td>HoA</td>
<td>Honeylocustus</td>
<td>Locustus</td>
<td>37</td>
<td>1 Speaker, all other vocal</td>
</tr>
<tr>
<td>6</td>
<td>HoA</td>
<td>Honeylocustus</td>
<td>Locustus</td>
<td>25</td>
<td>1 Speaker, all other vocal</td>
</tr>
<tr>
<td>7</td>
<td>HoA</td>
<td>Honeylocustus</td>
<td>Locustus</td>
<td>30</td>
<td>1 Speaker, all other vocal</td>
</tr>
<tr>
<td>8</td>
<td>HoA</td>
<td>Honeylocustus</td>
<td>Locustus</td>
<td>28</td>
<td>1 Speaker, all other vocal</td>
</tr>
<tr>
<td>9</td>
<td>HoA</td>
<td>Honeylocustus</td>
<td>Locustus</td>
<td>32</td>
<td>1 Speaker, all other vocal</td>
</tr>
<tr>
<td>10</td>
<td>HoA</td>
<td>Honeylocustus</td>
<td>Locustus</td>
<td>34</td>
<td>1 Speaker, all other vocal</td>
</tr>
</tbody>
</table>

**2D Site Plan**

- **Sheet Name:** Haywood Creative Arts Building Site Plan
- **Not For Construction:** 1/32" = 1'-0" 1 SD - Shading Site Plan

---

**3D Model View:**

- **Name:** 3D Model View
- **Description:** 3D Model View of Creative Arts Building

---

**3D Analytic Site Plan:**

- **Name:** 3D Analytic Site Plan
- **Description:** 3D Analytic Site Plan of Creative Arts Building

---

**Material Schedule:**

- **Name:** Material Schedule
- **Description:** Material Schedule for Creative Arts Building

---

**Tree Schedule:**

- **Name:** Tree Schedule
- **Description:** Tree Schedule for Creative Arts Building

---

**Legend:**

- **Legend:** Legend for Creative Arts Building Site Plan

---

**Copyright:** Innovative Design 2009

---

**Freedlander Dr, Clyde, NC 28721**

---

**Project Number:** SD0.1

---

**Date:** 4/08/10

---

**Solar Developer Package Creative Arts Building**

---

**Not For Construction:** 1/32" = 1'-0" 1 SD - Shading Site Plan
SOLAR DEVELOPER OPTION 1:
SOLAR WATER HEATING SYSTEM
800 SF ROOF AREA
SEE 2/SD3.0 FOR INSTALLATION DETAIL

SOLAR DEVELOPER OPTION 2:
PHOTOVOLTAIC SYSTEM
AREA 6: 1020 SF AVAILABLE ROOF AREA
SEE 1/SD3.0 FOR INSTALLATION DETAIL

SOLAR DEVELOPER OPTION 2:
PHOTOVOLTAIC SYSTEM
AREA 7: 1260 SF AVAILABLE ROOF AREA
SEE 1/SD3.0 FOR INSTALLATION DETAIL

SOLAR DEVELOPER OPTION 1:
SOLAR HEATING/COOLING SYSTEM
7757 SF AVAILABLE ROOF AREA
SEE 2/SD3.0 FOR INSTALLATION DETAIL

SOLAR DEVELOPER OPTION 2:
PHOTOVOLTAIC SYSTEM
AREA 4: 1300 SF AVAILABLE ROOF AREA
SEE 1/SD3.0 FOR INSTALLATION DETAIL

SOLAR DEVELOPER OPTION 2:
PHOTOVOLTAIC SYSTEM
AREA 5: 2790 SF AVAILABLE ROOF AREA
SEE 1/SD3.0 FOR INSTALLATION DETAIL

SOLAR DEVELOPER OPTION 2:
PHOTOVOLTAIC SYSTEM
AREA 1 = 1450 SF AVAILABLE ROOF AREA
SEE 1/SD3.0 FOR INSTALLATION DETAIL

SOLAR DEVELOPER OPTION 2:
PHOTOVOLTAIC SYSTEM
AREA 2 = 3860 SF AVAILABLE ROOF AREA
SEE 1/SD3.0 FOR INSTALLATION DETAIL

SOLAR DEVELOPER OPTION 2:
PHOTOVOLTAIC SYSTEM
AREA 3 = 300 SF AVAILABLE ROOF AREA
SEE 1/SD3.0 FOR INSTALLATION DETAIL

SOLAR DEVELOPER STAGING AREA
LOCATED ACROSS STREET.
APPROX. 30’X70’

GENERAL CONTRACTOR BASE BID:
(8) PHOTOVOLTAIC PANELS FOR WETLAND PUMP
NOT IN SCOPE OF WORK OF SOLAR DEVELOPER

850 W. MORGAN STREET
RALEIGH, NORTH CAROLINA  27603
919-832-6303
919-832-3339 FAX
AVAILABLE ROOF AREAS:

OPTION 1:
- SOLAR WATER HEATING SYSTEM - 800 SF AT SOUTHEAST ROOF
- SOLAR HEATING AND COOLING SYSTEM - 1020 SF AT SOUTH WEST ROOF

OPTION 2:
- PHOTOVOLTAIC SYSTEM - 6: 1300 SF AVAILABLE ROOF AREA
- PHOTOVOLTAIC SYSTEM - 5: 2790 SF AVAILABLE ROOF AREA
- PHOTOVOLTAIC SYSTEM - 1: 1450 SF AVAILABLE ROOF AREA
- PHOTOVOLTAIC SYSTEM - 2: 3860 SF AVAILABLE ROOF AREA
- PHOTOVOLTAIC SYSTEM - 3: 300 SF AVAILABLE ROOF AREA

NOTE: THE AREAS LISTED ARE MAXIMUM ROOF AREAS AVAILABLE. IT IS IMPORTANT TO PROVIDE ACCESS FOR MAINTENANCE TO EACH SOLAR THERMAL COLLECTOR, AS WELL AS PERIMETER WALKWAY ACCESS ON EACH ROOF AREA.

GENERAL CONTRACTOR BASE BID:
(8) PHOTOVOLTAIC PANELS FOR WETLAND PUMP
NOT IN SCOPE OF WORK OF SOLAR DEVELOPER
SOLAR DEVELOPER OPTION 2:
PHOTOVOLTAIC SYSTEM
AREA 6 : 1020 SF AVAILABLE ROOF AREA
SEE 1/SD3.0 FOR INSTALLATION DETAIL

SOLAR DEVELOPER OPTION 1:
SOLAR WATER HEATING SYSTEM
800 SF AVAILABLE ROOF AREA
SEE 2/SD3.0 FOR INSTALLATION DETAIL

SOLAR DEVELOPER OPTION 2:
PHOTOVOLTAIC SYSTEM
AREA 5 : 2790 SF AVAILABLE ROOF AREA
SEE 1/SD3.0 FOR INSTALLATION DETAIL

SOLAR DEVELOPER OPTION 2:
PHOTOVOLTAIC SYSTEM
AREA 4 : 1300 SF AVAILABLE ROOF AREA
SEE 1/SD3.0 FOR INSTALLATION DETAIL

SOLAR DEVELOPER OPTION 2:
PHOTOVOLTAIC SYSTEM
AREA 1 = 1450 SF AVAILABLE ROOF AREA
SEE 1/SD3.0 FOR INSTALLATION DETAIL

SOLAR DEVELOPER OPTION 2:
PHOTOVOLTAIC SYSTEM
AREA 3 = 300 SF AVAILABLE ROOF AREA
SEE 1/SD3.0 FOR INSTALLATION DETAIL

SOLAR DEVELOPER OPTION 2:
PHOTOVOLTAIC SYSTEM
AREA 2 = 3860 SF AVAILABLE ROOF AREA
SEE 1/SD3.0 FOR INSTALLATION DETAIL

SOLAR DEVELOPER OPTION 1:
SOLAR HEATING/COOLING SYSTEM
7757 SF AVAILABLE ROOF AREA
SEE 2/SD3.0 FOR INSTALLATION DETAIL

EXTERIOR ROOF ACCESS:
(3'-6" HIGH x 3' WIDE DOOR)

850 W. MORGAN STREET
RALEIGH, NORTH CAROLINA  27603
919-832-6303
919-832-3339 FAX
Solar Panel Installation Notes:
1. Solar system installer is responsible for providing structural sealed drawings on complete mounting requirements for each installed array. Sealed drawings and calculations to be provided by a North Carolina licensed professional engineer.
2. See Sheet SD 2.0 for solar panel locations.

Fall Protection Notes:
1. Fall protection installation will be provided by general contractor and is not in the scope of this contract. Drawings are included here for reference only.
2. Fall protection anchor shall be engineered and sealed by an engineer licensed in North Carolina to withstand 5000 lbs ultimate load.
3. See Sheet SD 2.0 for fall protection locations.

Allowable Loadings - The following loading restrictions shall apply:
1. Maximum allowable dead load of collectors, fluid, piping, conduit is 6 lbs/sq ft.
2. Maximum allowable point load approved during construction or maintenance is 3 lbs/sq ft. Maximum concentrated roof load for maintenance is 300 lbs.
3. Maximum loading on each fall protection anchor is 5000 lbs.
4. Maximum loading on standing seam roofing, both uplift and point load, is per manufacturer's recommendations.

Material Notes:
- PTD Galv Steel Plate w/ 1" Dia Hole Shop Welded to Plate
- Lap Sealant
- Clamp
- Rubberized Boot Flashing
- Backer Rod and Sealant
- Galv Steel Base Plate Shop Welded to Pipe
- CMU, GROUT SOLID
- Spray Foam Insulation
- Fiber Cement Siding
- Seal Around Plate
- Standing Seam Insulated Metal Roof Panels
- Metal Roof Decking
- Standing Seam Insulated Metal Roof Panels
- Metal Roof Decking

Dimensions:
1 1/2" = 1'-0"
3" = 1'-0"
Solar Development Package
Creative Arts Building
Haywood Community College
Fayetteville Dr. Open No. 2012

P0.03
SECOND FLOOR POWER PLAN