Innovation Campus Development Guidelines

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Facilities Planning, Design and Construction

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Figures
Cover, I-a
Pg. 4, I-b, II-a, II-e
I-c
I-d
I-e, III-d to III-I, IV-b, IV-e to IV-g, IV-i, IV-j, IV-m to IV-p, V-a
II-b, II-d, II-f, III-a to III-c, IV-r, IV-t
II-c, IV-a, IV-c, IV-h, IV-I, IV-q
IV-d, IV-k, IV-s
# Table of Contents

I. **Background, Purpose & Interpretation**  
   A. Background  
   B. Abbreviations  
   C. Purpose & Objective  
   D. Interpretation & Application  

II. **Procedures**  
   A. Introduction  
   B. Application Process  
   C. Schematic Design Submittal / Approval Process  
   D. Review Criteria for Compliance with Design Guidelines  
   E. Appeal Process  

III. **Site and Landscape**  
   A. Site Development  
   B. Landscape Development  
   C. Roads & Parking  
   D. Lighting & Site Furnishings  
   E. Fencing  
   F. Signage  

IV. **Building Design**  
   A. Architectural Style  
   B. Massing and Height  
   C. Exterior Walls  
   D. Materials and Finishes  
   E. Roofs  
   F. Doors and Entrances  
   G. Windows and Glazing  
   H. Projections Beyond the Building Envelope  
   I. Mechanical & Service Areas  
   J. Lighting  
   K. Codes and Standards  
   L. Energy Efficiency and Sustainability  
   M. Information Technology Guidelines  
   N. Exceptional Standards  

V. **Development Guidelines Checklist**
The USU Innovation Campus is located in the beautiful Cache Valley at the foot of the East Cache Range of the Wasatch Mountains. USU’s main academic campus can be seen in the background.
Fig 1-a: Utah State University is the oldest residential campus in Utah. It has become recognized as one of the top values in university education in the country. The high quality academics and nationally recognized research provide unparalleled resources which has helped the Innovation Campus become one of the region’s premier high-tech research parks.

I. BACKGROUND, PURPOSE & INTERPRETATION
A. Background

These Development Guidelines for the Utah State University Innovation Campus have been created to provide a common source of information for project development guidelines within the USU Innovation Campus. These Development Guidelines are derived from, referenced to, and coordinated with the following Utah State University documents:

1. Declaration of Covenants, Conditions and Restrictions of the Utah State University Research and Technology Park (1985)
2. Research and Technology Park Utah State University Architectural Guidelines (1985)
4. Utah State University Innovation Campus Site Development and Landscape Guidelines (2005)
5. Revised & Restated Declaration of Covenants, Conditions and Restrictions of the Utah State University Research and Technology Park now known as Innovation Campus (2011)
6. Utah State University Signage Requirements (2011)

Additionally, these Development Guidelines reference other documents created and maintained by entities outside the jurisdiction of Utah State University. These documents include the following:

1. Applicable building codes and life safety codes.
2. City ordinances of Logan City and North Logan City, Utah.

The documents, guidelines, and standards referenced above are subject to replacement, revision and / or modification. The client may be required to comply with any future modifications to these listed documents.

B. Abbreviations

The following is a list of abbreviations for titles and terms commonly used within this document:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Title or Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAC</td>
<td>Facility Advisory Council of the USU Innovation Campus</td>
</tr>
<tr>
<td>CCR’s</td>
<td>Revised and Restated Declaration of Covenants, Conditions and Restrictions of the Utah State University Research and Technology Park now known as Innovation Campus</td>
</tr>
<tr>
<td>GB</td>
<td>Governing Board of the USU Innovation Campus</td>
</tr>
<tr>
<td>SDSP</td>
<td>Schematic Design Submittal Package</td>
</tr>
<tr>
<td>USU</td>
<td>Utah State University</td>
</tr>
<tr>
<td>USU IC</td>
<td>Utah State University Innovation Campus</td>
</tr>
</tbody>
</table>
C. Purpose & Objective

The USU Innovation Campus (USU IC) is a community of organizations involved in scientific research, development and manufacturing, working in cooperation with the interest of USU. Operations located in the USU IC must be substantially research, development and/or technology-oriented activities compatible with research, educational and public service activities of the University. Businesses or organizations that provide services to tenants of the USU IC and/or the University will also be permitted in areas approved by the Governing Board (GB). Mixed use facilities such as restaurants, banks, medical offices and other retail establishments may be constructed to fit within the scope of their respective normal activities within approved area in a way that will help provide ancillary support services within the USU IC.

The design and construction of the physical facilities of these organizations should reflect the high level of commitment to innovation, excellence and value. These Development Guidelines have been created to guide in the process of defining elements that reflect these values.

Each building should attempt to show a subtle quality and professionalism rather than a loud or commercial appearance. Individual identities are encouraged but with a complementary and enduring context. Overall feelings should be one of well designed statement of lasting style rather that “trendy” design themes.

Generally, the USU IC is situated adjacent to a variety of neighborhoods, including hospital, commercial and mixed-use developments, and multi-family and single-family residential neighborhoods. It is contiguous with the Utah State University campus. The massing of buildings and projects affected by these Development Guidelines and added to this environment should respect the overall character and scale of the area in which they are located. Consideration will be given to the project’s location within the USU IC. These Development Guidelines provide direction for project scale and massing to support the overall design direction.

Fig 1-c: The Space Dynamics Lab is one of the several world class research and development organizations that make up the Innovation Campus community.

Fig 1-d: The Innovation Campus is a community of organizations involved in scientific research, development and manufacturing in cooperation with USU.
D. Interpretation & Application

The USU IC is controlled and governed by the Board of Trustees and the President of the University. To assist the President in the administration and operation of the USU IC, the President has created the USU IC Governing Board (GB) and Facility Advisory Council (FAC). Subject to approval of the President, the USU IC GB and FAC has been charged with the following tasks with regard to project development at the USU IC:

- The FAC shall review and provide guidance and recommendations to the GB on all proposed construction design for a new building, structure, or other improvement, or significant alteration of any building, structure or other improvement, including landscaping, and all ground and underground infrastructure within the USU IC.

In addition, the FAC shall, in a timely manner, review and provide guidance, to all plans and specifications pertaining to such construction or alteration and certify the compliance of such plans and specifications with the governing Covenants, Conditions and Restrictions of the USU IC.

- The GB shall review and approve new tenant applications, joint ventures, ground leases, assignments of ground leases and other matters pertaining to the tenancy and occupation of the USU IC. They shall exercise discretion and best judgment in honoring the intent of the Covenants, Conditions and Restrictions of the USU IC and not unreasonably withhold its consent or approval of any project or activity contemplated within said Covenants, Conditions and Restrictions.

Based on the duties outlined above, it is the role of the FAC to assist in the interpretation of these Development Guidelines, and aid in the coordination of compliance with these standards. As a project is developed and submitted, it is the role of the FAC to assess application of these Development Guidelines, and to make recommendation to the GB regarding approval of the project. It is the role of the GB to approve the project.

It should be noted that all projects are developed within their own unique circumstances. In some limited cases the FAC may determine that deviation from these Development Guidelines is necessary. As such, non-compliance with these Development Guidelines shall not be used by the applicant or any other party to invalidate any action taken by the GB or recommendation of the FAC, nor shall such non-compliance constitute a cause of action against USU or the USU IC or their members or employees of agents concerning any matter.
II. PROCEDURES

Fig II-a: USTAR BiInnovations Center, 650 Grand Avenue
A. Introduction

The USU IC Administration desires to be supportive in encouraging quality design without arbitrarily limiting the options available to tenant firms. Consistent with this, the USU IC Administration recommends a meeting with the owner’s representative and their architect early in the design process to gain mutual understandings and to encourage design directions consistent with the overall intent of the USU IC prior to the Schematic Design Submittal.

An “Application and Review Procedure Summary Chart” is provided in Table II-a as a guideline to allow both the USU IC and the prospective firms an opportunity to efficiently arrive at building designs consistent with the needs of both parties. If additional interface is desired, the USU IC Administration should be contacted.

B. Application Process

Approval for any project developed on the USU IC must be obtained at Schematic Design. This is necessary prior to the start of any further stages of a project. Future phases and stages of the project will then be reviewed for continuity with the approved Schematic Design submittal.

The Application process can begin at the end of Schematic Design. However, it is recommended that the Application process commence in the Pre-Design phase of the work. The USU IC Administration is available to work with potential clients through all phases of project development to aid in project approval. The following sections contain a brief outline and description of the application process. See also Table II-a.

As per the CCR’s section 6.3:

“All plans, specifications, requests or other matters requiring review and approval of both the Advisory Council and the Governing Board, are to be responded to in writing by the Governing Board Chair within sixty (60) days of the original submission to the Advisory Council Chair. The Advisory Council chair is to direct appropriate Advisory Council review(s) and the forwarding of the original material, with accompanying Advisory Council recommendations, to the Governing Board Chair.”
<table>
<thead>
<tr>
<th>Time Period</th>
<th>Action Required</th>
<th>Purpose</th>
<th>Duration</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREDESIGN / SCOPING SUBMITTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>CONCEPT THRU SCHEMATIC DESIGN</td>
<td></td>
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</tr>
<tr>
<td>During Schematic Design</td>
<td>1. Meet with USU IC Administration to discuss and gain mutual understanding of expectations</td>
<td>Common project understanding</td>
<td>As Required</td>
<td></td>
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<tr>
<td>SCHEMATIC DESIGN SUBMITTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>PROGRESS REVIEW(S)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>End of Design Development</td>
<td>Submit packet of progress drawings for review. No meeting is required unless requested</td>
<td>Compliance with Project Approval</td>
<td>One week</td>
<td>Same Drawings as Schematic Design plus: a. Drainage Design  b. Irrigation Design  c. Landscape Design</td>
</tr>
<tr>
<td>FINAL PROGRESS REVIEW</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>65% Through Construction Documents</td>
<td>Submit package of progress drawings for review</td>
<td>Compliance with Project Approval</td>
<td>One week</td>
<td>a. Complete set of progress prints  b. Samples of materials to be used on exterior of building</td>
</tr>
<tr>
<td>PRE-CONSTRUCTION SUBMITTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>End of Bid or Prior to Start of Construction</td>
<td>1. Submit list of contractors and major subcontractors 2. Submit schedule and access plans 3. Submit Drawings &amp; Specifications for compliance review w/ Project Approval and USU IC Standards (See Section I-A)</td>
<td>Compliance with Project Approval</td>
<td>As Required</td>
<td></td>
</tr>
<tr>
<td>AS-BUILT SUBMITTAL</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>As built drawings of site, building footprint, landscaping and site irrigation</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
C. **Schematic Design Submittal / Approval Process**

In order to expedite the Schematic Design Review process, it is strongly recommended that the client work with the USU IC Administration during the Pre-Design, Concept Design and Schematic Design phases of the project, as outlined in the USU Innovation Campus Application & Review Process Chart in Table II-a.

Given that project approval is obtained prior to the commencement of the Design Development stage of the work, the following is a more detailed description of the Schematic Design Submittal Review and Approval process:

1. The client is to request a meeting with the FAC and submit their Schematic Design Submittal Package (SDSP) to the USU IC Administration two weeks prior to their desired Schematic Design presentation time to the FAC. The SDSP is to contain the items outlined in the Materials section of the USU Innovation Campus Application & Review Process Chart in Table II-a above. Once the SDSP is received the sixty-day (60) time line for written response to the SDSP from the GB commences.

2. The USU IC Administrator will schedule a presentation time for the client within the two weeks following the SDSP submittal. This presentation date will be based on calendars and schedules of the members of the FAC and the client.

3. After the client presentation the FAC will vote on a project development recommendation. The FAC may inform the client as to the nature of their recommendation (either positive or negative).

4. Insofar as possible, the FAC will work with the client to resolve issues that may impact a positive recommendation. As such, if, the FAC deems minor modifications to the design are necessary they can recommend to the GB “conditional project approval” based on incorporation of the desired modifications. If the GB provides project approval then compliance with these conditions can be reviewed at the subsequent project progress review(s).

   If the FAC deems significant modifications to the design necessary, they can recommend that the client resubmit the effected portions of the SDSP. As state above, insofar as possible, the FAC will work with the client to resolve issues that may impact a positive recommendation. However, if desired by the client, the FAC can forward a negative recommendation to the GB.

   After all reviews and modifications (if any) are completed, the recommendation of the FAC, along with the SDSP is forwarded to the GB for their review and action. The GB will approve or disapprove the project in writing within sixty days of the original submission date.

5. If the Schematic Design Submittal Package is not recommended for approval by the FAC and/or approved by the GB, revisions to the SDSP may require that the sixty-day time period be suspended. Equally, the GB has the option to extend the sixty-day time period if corrections cannot be addressed within this period.
D. **Review Criteria for Compliance with Design Guidelines**

Architectural design within the USU IC shall reinforce the existing design character of this campus and express an exploratory and pioneering spirit. As such, the FAC and GB will review and approve proposed work that:

- Is harmonious with the architectural character of the specific neighborhood of the USU IC
- Is sensitive to existing approvals on adjacent properties
- Utilizes appropriate building materials, scale, size and height for design as defined herein
- Provides site amenities, street furniture and appropriate signage and graphics

Architectural Standards Review Criteria are defined more specifically in Section III of this document. A Development Guidelines checklist is provided in Section IV of this document.

E. **Appeal Process**

 Appeals of Governing Board decisions may be submitted to the GB in writing, stating in a concise manner the issues to be considered. If the GB finds it appropriate, a personal appearance may be scheduled. The decision of this appeal is final.
Fig II-f: The pond and fountain at the center of the USU Innovation Campus is one of the main features of a beautifully landscaped campus.
III. SITE AND LANDSCAPE

Fig III-a: Grand Avenue
A. Site Development

1. No setbacks are required; however the following items should be considered.
   a. Buildings are preferred close to the street line along main corridors within the campus. The building should acknowledge any public way within the campus through the architectural design.
   b. Setbacks from the streets should be consistent with the character and intent of the USU IC.
   c. Parking should be located primarily behind or, if necessary and approved, to the side of the buildings. Parking to the side of any building should be appropriately screened from the primary public way, or should be developed with an appropriate architectural character as to enhance the overall character of the public way.

2. All site development work is to comply with the guidelines contained in the August 2005 Site Development and Landscape Guidelines as referenced in Item I.A.4 above. These guidelines specifically reference site development requirements for:
   a. Streets & Streetscapes
   b. Pedestrian Corridors
   c. Tenant Building On-Site Improvement

B. Landscape Development

1. The design and appearance of ground and common areas are significant in achieving the environment within the Campus. Careful attention must be given to this dimension of the USU IC development. As a minimum the following is required for all developed land within the USU IC:
   a. Landscape, irrigation, drainage and planting shall be an integral part of the project design.
   b. All ground and exterior areas shall be clean, neat and properly maintained at appropriate intervals.
   c. Water efficient plantings and irrigation shall be used

2. All landscape work is to comply with the guidelines contained in the August 2005 Site Development and Landscape Guidelines as referenced in Item I.A.4 above. These guidelines specifically reference landscape requirements for:
   a. General Landscape Requirements
   b. Streets and Streetscapes
   c. Pedestrian Corridors
   d. Tenant Building On-Site Improvements
C. Roads & Parking

1. All roads and parking areas within the USU IC shall be surfaced with permanent material (concrete or asphalt) and properly maintained.
   a. Exception: Where compliance with sustainable design intent is sought alternate methods may be considered.
2. Ground lessees shall maintain minimum parking within the USU IC which shall be one parking space for every 300 square feet of gross building floor space unless greater or lesser spaces can be justified a specific building use. (See also Section 8.8(a) of CCR’s)
   a. Exception #1: Where compliance with sustainable design intent is sought alternate methods may be considered as part of a holistic employee transportation solution.
   b. Exception #2: In a project that is to be phased, it may not be necessary that all parking required as part of the final build-out be paved as part of the initial phase(s) of the work. The total parking requirement must be shown on the master plan, and the land must be kept available and the initial parking must be shown to be adequate. Alternative methods of compliance may also be considered.
3. Wherever possible, parking areas should include landscaped areas or trees and be substantially screened by plantings or berming.

D. Lighting & Site Furnishings

1. Uniform exterior lighting within the USU IC is desirable to achieve overall continuity and to avoid unnecessary glare. Exterior lighting shall be coordinated with adjacent tenants and is subject to review, recommendation and approval.

2. Lighting of the building exteriors shall be designed in accordance to the guidelines contained below in the Lighting section of the Building Development Guidelines, and must comply with Dark Sky Ordinances of the appropriate municipality as referenced in Section I.A of this document.

3. All lighting and site furnishing work is to comply with the guidelines contained in the August 2005 Site Development and Landscape Guidelines as referenced in Item I.A.4 above. These guidelines specifically reference landscape requirements for:
   a. Streets & Streetscapes
   b. Pedestrian Corridors
   c. Tenant Building On-Site Improvements

Fig III-e: Special attention was given to this retention basin with landscape design and plantings to make it fit better within the campus.

Fig III-f: Landscaping is used to shield the parking from public view along a public way on the USU IC.

Fig III-g: Lighting and enhanced landscaping on Grand Avenue
E. Fencing

1. The use of fencing is discouraged. When allowed, fencing is to be of permanent material and shall be integrated with the building and the overall approach to landscape design. The use of chain link fencing is not permitted except as approved under special exemption, such as for secure enclosures required as part of a building program. All allowed fencing must be architectural in design and character, or screened from public view along primary public traffic corridors. All allowed fencing must be properly maintained.

F. Signage

In a competitive commercial marketplace, the opportunity to have signage on the exterior of a building is often a strong enticement to businesses in selecting a location for its physical facilities. The Innovation Campus has a unique and separate purpose from other university campus buildings. In order to help promote the commercialization of technologies and the identity of well established and emerging businesses, additional signage opportunities are allowed. Such signing shall be of uniform character and quality. All signage work for Utah State University buildings shall comply with the guidelines contained in the 2011 Utah State University Signage Requirements as referenced in Item I.A.6. Reference to the USU Signage Requirements, along with these guidelines, is encouraged in development of the signage. All signage must be indicated in the Schematic Design Submittal Package and must be approved by the Governing Board. Signage installed after completion of the building must be approved by the GB and/or USU IC Administration.

1. Building Signs

   a. Tenant identification from the exterior may be provided by signs mounted on the buildings for major building occupants only. A major occupant is defined as any business occupying an entire building, an entire floor of a multistory building, or more than 8,000 sf of gross rentable area. Generally, building signs are to be located on the building fascia above the highest level of windows, but alternatively may be located on solid fascias between levels of windows, adjacent to or above primary entries, on entrance canopies, or on solid wall surface backgrounds where appropriate for visibility and readability.
b. The maximum limits and size will be controlled and confined within areas to be indicated on specific building elevations as part of the design review process. The area of such signs shall not exceed more than 5% of the area of the elevation on which it is placed. Generally, sign letters are to be centered both horizontally and vertically within the allowable signing area of the wall panel to which it is attached. Left or right justification may be approved at building corners or where otherwise determined appropriate.

c. All sign letters to have a uniform return and face color consistent with the window framing members or metal materials used elsewhere on the building. The letter font may vary depending on the trademark style of the tenant. Maximum height shall not exceed 24 in.

d. Logos may be included as part of the overall signage. The height of the logo may exceed the established maximum height by no more than 20%. The face of the logo may be illuminated with routed-out or punched-through elements where-in the background remains opaque.

e. Non illuminated building signs shall be cut from metal plate or constructed from metal pans having a minimum one inch thickness. Letters and Logos shall be mounted on the wall with 3/4 inch concealed spacers behind.

f. All illuminated sign letters to be 3 in. deep reverse metal pans set 3-inches away from the wall and have clear plastic backs with internal LED lighting to illuminate the wall panel behind, creating a halo effect. The faces shall be solid and opaque.

g. Face-lit illuminated signage is not allowed unless specifically approved by the GB and/or USU IC Administration.

h. On parking decks, signage conforming to the same requirements as building signs may be permitted where decks front onto primary or secondary streets.

i. The numeric address of each building shall be prominently displayed on the face of the front entry canopy using 12-inch high cut-out aluminum. Letters shall be non-illuminated and set off the wall with ½-inch concealed spacer rods.

j. Variations of building sign size and style may be permitted for retail, service or restaurant pad buildings subject to individual site plan approvals by the GB or USU IC Administration.

2. **Monument Signs**

a. Separate monument signs are permitted for each building. Monument signs may be located on the street in the landscape zone, near the main building entry and/or vehicular entry to the primary parking of each building.

b. Monument signs oriented perpendicular to the street shall be 2-sided.

c. Monument sign walls placed parallel to the structure/street are generally single sided. Sign walls shall be constructed of the same character and quality and utilizing the same materials as the building.

d. Signs may be either indirectly or internally illuminated as described below.

i. Indirectly illuminated sign shall be placed on a background base or wall constructed of the same primary materials utilized on the building. Lights shall be located and shielded such that it does not create glare for people on roadways and pedestrian pathways. Reference the dark-sky ordinances for the applicable jurisdiction for other requirements for lighting.
ii. Internally illuminated cabinets set on a base or within a structure matching primary materials will be permitted. Cabinet faces to have opaque metal panels with routed-out or punch-through type letters. Multiple panels may be provided to identify the principal tenants occupying the building.

iii. Face-lit illuminated signage is not allowed unless specifically approved by the GB and/or USU IC Administration.

e. Overall sign height shall be no more than 6’-0”. Individual letters shall not exceed 18” in height and logos shall not exceed the maximum height by more than 20%. Varying fonts depicting individual tenant trademarks and/or letter styles will be allowed.

f. Building address numbers may be provided on monument signs.

g. Variations of monument sign size and style may be permitted for retail, service or restaurant pad buildings subject to individual site plan approvals by the GB or USU IC Administration.

3. Exterior Building Directories

a. Directories may be placed on the outside of multi-tenant buildings. Such directories when facing primary or secondary streets shall be mounted on the building. Directories should be placed near primary building entrances. Freestanding directories supported on pedestals may only be placed in planters areas facing primary parking. Height shall not exceed 7’-0”.

b. Letters shall be placed on a background panel. Total area shall not exceed 32 sf. The registered name of each tenant/business within the building may be identified thereon. Letter font and height shall be the same for all businesses identified therein and shall not exceed 4 inches.

c. Directories shall be indirectly illuminated

4. Window and Door Signage

a. Limited vinyl or similar window and door signage will be allowed upon individual approval by the USU IC Administration. Overall size shall be limited to 24” high by 36” wide.

5. Temporary Signage

a. Temporary signage during construction or special events will be permitted upon individual approval by the USU IC Administration.

b. Such signage shall be designed to be professional in nature and shall not detract from the professional nature of the campus. Signage shall be durable enough to last for the duration of the construction/event period without deterioration in appearance.
IV. BUILDING DESIGN
A. **Architectural Style**

1. While there is no specific architectural style that is anticipated on the USU IC, the design of proposed projects should be sensitive to the following guidelines and should be sensitive to existing buildings and approvals on adjacent properties. The design should enhance the pleasant and professional nature of the USU IC and should not detract from the existing character.

2. Architectural design should express the nature of its anticipated use. Expressions of the technology and research aspect of the USU IC are encouraged.

B. **Massing and Height**

1. Building heights shall be 4 stories or less with a preferred height of between 2 and 4 stories. One level of mechanical is not included in the four story limit. If excessive height is added to the building due to the required height of the mechanical level, review and coordination with the USU IC Administration is encouraged during the early design phase.

2. The building massing should be consistent with the character and intent of the USU IC. The overall massing should reflect the intent and use of the building, and should be balanced in scale and proportion. Surface details and material application will not serve as an appropriate substitute for distinctive massing.

3. Building elements that are out of scale in either height or overall mass with the balance of the building are not allowed. Articulation of the mass is encouraged. Large facades shall incorporate vertical and horizontal articulation as appropriate to break up the scale.

4. The massing of the building shall respect the pedestrian scale. All areas of the building that will have pedestrian flow shall be articulated such that a comfortable and pleasant environment is maintained.

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*Fig IV-b:* An articulation of the mass and a green screen at the ground level help to break up a large mass on this building, necessitated by the building's program.

*Fig IV-c:* The Calibration and Optical Research Building demonstrates a well proportioned massing and uses a successful palette of materials. An appropriate amount of vertical and horizontal articulation is used to break up the overall scale.
C. Exterior Walls

1. Buildings shall have an integrated expression of design on all sides that unites the design into a cohesive whole. Buildings with a “finished” front and “unfinished” sides or back are not permitted. Quality, consistency and a sophisticated simplicity are objectives to be sought in the building’s appearance.

2. As appropriate, the design should encourage a connection of the interior and exterior through the use of transparency at the ground level, especially near pedestrian pathways. See also Windows and Glazing guidelines below.

D. Materials and Finishes

While it is difficult to clearly limit or designate specific material palettes (some materials may be used successfully or unsuccessfully depending on design and application), the USU IC remains open to suggestions on exterior materials. The USU IC reserves the right to disapprove materials or their application and/or design viability, and to suggest alternatives to prospective owners based on perceived appropriateness and integration with the overall design intent of the USU IC.

1. Acceptable exterior wall materials generally include: brick, architectural block, architectural concrete, pre-cast concrete, synthetic stucco (EIFS), exterior plaster systems, metal panels, natural cut stone, glass, and pre-finished metal curtain wall systems. The materials used in the design should be selected and constructed to provide lasting durability. Non-acceptable exterior wall materials generally include: wood or aluminum siding, pre-fabricated metal siding (unless integrated into fascia or other building components), unfinished or untextured concrete masonry units (CMU), and selective types of reflective glass and / or some stone (such as natural or cultured stone which has a rustic or river look).

2. Rather than the use of one exterior material overall, it is recommend-ed that multiple materials be integrated and blended to create a visual balance and the impression of overall quality, harmony and consistency. An effort should be made to visually emphasize key building elements such as the building’s primary entry, or unique interior elements, systems, features, etc. that may be expressed on the building exterior.

3. Application of materials to create patterns and texture is encouraged to create articulation and visual interest. Patterns and textures should be used in a simple and sophisticated manner and should not detract from the character of the building or campus. “Loud” or “busy” patterns and textures are not permitted.

4. The project should have a balanced overall exterior color pallet. Elements significantly out of chromatic harmony with the rest of the exterior or campus are not allowed. Likewise, completely monochromatic color schemes are discouraged. Elements that are intended to be visually controversial are not permitted.
E. Roofs

1. Roof types shall be consistent with building type and other buildings within the USU IC. If roofs are exposed to public view, they shall be of finished, durable material consistent with the overall design of the building. Materials not approved include highly reflective materials, false mansards of any material, uncoated aluminum, steel, or galvanized metal.

2. Rooftops shall be free from objects which are unsightly from views from the ground. Special consideration should be made when roofs will be highly visible from adjacent buildings and approvals. All mechanical and other unsightly equipment shall be appropriately concealed from view. Parapets and screening elements shall be designed to be consistent with the overall architectural character of the building. Screening elements which appear “tacked on” should be avoided. In some instances, having mechanical or technology equipment visible may be desired for the architectural expression of the building. Whenever this is the case it shall be presented in a manner that is harmonious to the building design and must be approved.

3. All roof materials, roof flashing, coping and related materials shall be harmonious with the overall building color palette and must be approved.

4. Roof access shall be provided on the interior of the building. No exterior ladders will be allowed.

5. Alternative roof systems (green roofs, living roofs, etc.) are encouraged and will be recognized under the Exceptional Standards section of this document.
F. Doors and Entrances

1. The main entrance(s) shall be designed so that they are visually emphasized and engage the primary means of access. When the primary parking areas are located on portions of the site not adjacent to the main public way, the entrance should appropriately address all the directions of primary public access.

2. Entrances shall be located appropriately for the building function and should provide access to public pathways within the project. Entrances shall be clearly defined and shall be integrated into the architectural design. Entrance elements that appear “tacked on” are inappropriate. Hardware styles should enhance the door type. Doors may be of metal, glass or storefront. As noted above, an effort should be made to visually emphasize key building elements such as the building’s primary entry or entries.

3. Entrances should be designed to provide protection from the elements (wind, snow, solar, etc.).

Figures IV-g, IV-h, IV-i & IV-j: Each of these USU IC buildings show unique solutions to visually emphasize the entrances and successfully integrate them into the architectural design.
**Fig IV-k:** The design of the USTAR building successfully locates the windows according to solar orientation by placing the most fenestration on the north side and providing solar shading (perforated metal panels) on the east and south faces. Windows on the west are avoided to reduce HVAC loads. The program of the building was appropriately located to maximize the benefit of the windows (views, daylight, etc.) for the building occupants.

**G. Windows and Glazing**

1. Projects should have adequate views to the outside for building occupants in order to create a pleasing internal environment. Window placement should be consistent with the overall building design. Windows creating transparency when appropriate for the function is encouraged especially at the ground level near pedestrian pathways. Placement and quantity of windows should be considerate of environmental aspects such as solar orientation and views, while being sensitive to the resultant demands to building systems, including HVAC loads.

2. Glazing should not be of highly-reflective glass. Window frames may be of metal, wood or fiberglass material.

3. Windows shall have appropriate interior coverings (drapes, blinds, etc.). Window coverings are to be consistent throughout the project with regards to type, style and color. They are to be in place prior to occupancy of any building.

4. Incorporating day-lighting strategies through the use of windows and skylights is encouraged to create a more pleasant internal environment.

5. Providing windows with exterior shading devices is encouraged where appropriate. Shading devices should be appropriate to the orientation of the elevation element being shaded. They should be integrated aesthetically into the overall building elevation in color and/or material. They should not appear to be an afterthought or a “tacked on” element. Where possible horizontal shading devices should be continuous rather than a series of individual sections. Acceptable materials should be durable and low maintenance. Fabric or canvas exterior awnings or sunshades are not allowed.

**Fig IV-l:** Daylighting is maximized in the entrance lobby for the Jake Garn Building (Space Dynamics Lab).

**Fig IV-m:** Daylighting is used in this USU IC research laboratory to help create a more pleasant interior environment.
H. Projections Beyond the Building Envelope

1. Projections beyond the basic building envelope that are developed as part of an architectural design feature (such as an entry canopy, stair tower, extended fascia, or expressive design element) are encouraged insofar as they do not detract from the overall character of the project. It is encouraged that such elements and features should be reviewed with the USU IC Administration prior to the submittal of the Schematic Design Submittal Package.

2. All significant exposed and noticeable projections outside of any building, associated with mechanical and electrical equipment, cooling towers, transformers, ducts, vents, etc., but excluding communications equipment, shall be screened from public view by appropriate enclosures. All plans submitted for approval shall show such projections and enclosures. Acceptable screening elements and materials include: vegetation / landscaping, fencing and screen walls. Screening elements are subject to review for both the material selected and the application of the selected material.

I. Mechanical & Service Areas

1. All loading, service and trash areas shall be appropriately located to allow for good vehicular circulation on site and within the USU IC. Areas served by large trucks should be designed appropriately. Coordination with the USU IC Administration regarding large truck circulation as it relates to the campus is encouraged prior to submittal of design.

2. All loading, service, trash and mechanical units shall be screened from public view. Acceptable screening elements and materials include: vegetation/landscaping, fencing and screen walls. Permanent screening elements should match the building wherever possible. Screening elements are subject to review for both the material selected and the application of the selected material. Trash enclosures should have pedestrian access to limit the use of large access gates.
J. Lighting

1. Lighting strategies should enhance the architectural design of the buildings. Lighting around building entrances should be enhanced appropriately. Neon lights and flood lighting is not appropriate.

2. Light fixtures should enhance the aesthetic of the building and be integrated into the overall design. Light fixtures selected should not appear to be “tacked on” but rather have an appearance that is harmonious to the design.

3. Lighting should also be provided so that lighting of all circulation areas around the building are adequate for personal safety and security.

4. Lighting design is to comply with the Lighting ordinances for the City of Logan and the City of North Logan, including any Dark Sky Ordinances, as applicable.

K. Energy Efficiency and Sustainability

1. Buildings should integrate highly efficient HVAC systems. Due to geothermal properties, the USU IC is particularly adaptable to systems such as ground source heat pumps and use of this technology, whenever appropriate, is encouraged.

2. Buildings are encouraged to implement energy efficient and sustainable strategies throughout the design including, but not limited to, the use of solar panels, recycled/recyclable materials, regional materials, water conserving fixtures, energy efficient lighting, and strategies for improving the indoor environmental quality. Compliance with sustainable design standards is encouraged (LEED, etc.)
L. Codes and Standards


2. All building signage work is to comply with the guidelines contained in the 2011 Utah State University Signage Requirements as referenced in Item I.A.6 above.

3. Requirements for specific building materials and assemblies (type, color, performance, warranty, etc.) shall comply with the most current version of Utah State University Reference Outline Specifications.

M. Information Technologies

Information technology is a standard that is constantly changing due to the rapid pace of advances in technology. As such Utah State University has created the USU IC Information Technology Standards and Guidelines. If interface with the USU network system is desired or anticipated (connection provides interface to USU police, security, access control, security data storage, mechanical system monitoring, etc.) then the design team should verify compliance with the most current version of this document.

N. Exceptional Standards

Any development is encouraged to explore Exceptional Standards that enhance creativity, innovation, or sensitivity to the project users, building environment, the neighborhood, or the overall Innovation Campus character. Incorporation of Exceptional Standards may allow for consideration of deviation from the development guidelines outlined above, subject to recommendation by the FAC and approval of the GB.

A partial list of Exceptional Standards to be considered include the following:

1. Enhanced Landscape
2. Water Features
3. Public Art
4. Sustainable Design Standards Certification (Leadership in Energy and Environmental Design (LEED), etc.)
5. 2030 Challenge
**Fig IV-t:** The Jake Garn Building (Space Dynamics Lab) from across the pond of the USU Innovation Campus
V. CHECKLIST
Site and Landscape Development Guidelines

A. Site Development
   1. ☐ Placement of building appropriate for character and intent of the USU IC
   2. ☐ Placement on site is appropriate for pedestrian and vehicular circulation and meets the Site Development and Landscape Guidelines

B. Landscape Development
   1. ☐ Landscape design complements building design and is consistent with the appearance of the overall campus. Water efficient plantings and irrigation systems are used.
   2. ☐ Landscape design complies with the Site Development and Landscape Guidelines.

C. Roads and Parking
   1. ☐ All roads and Parking areas are properly surfaced
   2. ☐ Design meets the parking requirements for the building size, use, and phasing of the project
   3. ☐ Parking areas are properly landscaped and screened

D. Lighting and Site Furnishings
   1. ☐ Lighting design is consistent with the USU IC
   2. ☐ Building lighting meets building development guidelines for lighting and applicable city ordinances.
   3. ☐ Design is in accordance with the Site Development and Landscape Guidelines.

E. Fencing
   1. ☐ Fencing, if used, is appropriate type and location

F. Signage
   1. ☐ Building Signs meet design requirements (and USU standards, if applicable)
   2. ☐ Monument Signs meet design requirements (and USU standards, if applicable)
   3. ☐ Exterior Building Directories meet design requirements (and USU standards, if applicable)
Building Design Development Guidelines

A. Architectural Style
   1. ☐ Architectural Style is appropriate for the USU IC and adjacent properties
   2. ☐ Architecture is expressive of use and technology/research

B. Massing & Height
   1. ☐ Height meets standards
   2. ☐ Massing has balance, scale and proportion consistent with the surrounding area and reflects use
   3. ☐ Building elements are appropriately scaled and articulation is consistent with overall massing
   4. ☐ Pedestrian scale is provided near pedestrian circulation areas

C. Exterior Walls
   1. ☐ Consistent expression of all facades
   2. ☐ Project provides proper connection between interior and exterior of building at the ground level near pedestrian pathways

D. Materials and Finishes
   1. ☐ Appropriate, durable materials are used
   2. ☐ Appropriate mix of materials
   3. ☐ Textures and Patterns do not detract from building or campus
   4. ☐ Color scheme is harmonious and not monochromatic

E. Roofs
   1. ☐ Roof type is appropriate for the USU IC and building type
   2. ☐ Rooftop is free from objects which are unsightly or appropriate screens are provided to hide from view
   3. ☐ Roof, roof top units (RTU’s), screens, and flashing colors are approved
   4. ☐ Internal roof access is provided
   5. ☐ Alternate roof system, if applicable, is used

F. Doors and Entrances
   1. ☐ Main entrance(s) are appropriately located to the site and are appropriately emphasized
   2. ☐ Entrance design is integrated into the overall architectural design
   3. ☐ Entrances are protected from the elements

G. Windows and Glazing
   1. ☐ Windows provide adequate views to the outside for occupants, where appropriate
   2. ☐ Glazing is not highly reflective and windows are of appropriate materials
   3. ☐ Consistent, appropriate window coverings are provided
   4. ☐ Building incorporates appropriate day-lighting strategies
   5. ☐ Exterior Solar Control devises (if used) are appropriately located and integrated into the design

H. Projections beyond the Building Envelope
   1. ☐ Architectural projections do not detract from overall character of building or campus
   2. ☐ Mechanical and electrical projections are appropriately screened
Building Design Development Guidelines (continued)

I. Mechanical & Service Areas
   1. ☐ Loading, service and trash areas are appropriately located for vehicular circulation
   2. ☐ Mechanical and service areas are screened from public view

J. Lighting
   1. ☐ Lighting strategy compliments architectural design but is not flood lighting
   2. ☐ Lighting fixtures are architecturally appropriate
   3. ☐ Adequate lighting is provided for safety and security
   4. ☐ Lighting design meets applicable city standards.

K. Energy Efficiency and Sustainability
   1. ☐ Efficient HVAC systems are used
   2. ☐ Appropriate sustainable technologies/strategies are incorporated. Please list. If certification with a sustainable design standard is sought, please so indicate.

L. Codes and Standards
   1. ☐ Building and sites comply with appropriate codes
   2. ☐ Building and site signage follows USU Signage Requirements
   3. ☐ USU Reference Outline Specifications

M. Information Technologies
   ☐ If interface with the USU network system is desired, design is in compliance with the current USU information technology standards

N. Exceptional Standards
   Please list any exceptional design standards incorporated in design.

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