

CIVIL SITE PLAN FOR ASTRONOMY DISCOVERY CENTER AT LOWELL OBSERVATORY

FLAGSTAFF, ARIZONA

A PORTION OF THE SOUTHWEST QUARTER OF SECTION 16 & SECTION 17,
TOWNSHIP 21 NORTH, RANGE 07 EAST, GILA AND SALT RIVER MERIDIAN,
COCONINO COUNTY, ARIZONA

CITY CONCEPT APPROVAL

THE CITY APPROVES THESE PLANS FOR CONCEPT ONLY.
ALL LIABILITY FOR ERRORS AND OMISSIONS IS THE
RESPONSIBILITY OF THE DESIGN ENGINEER.

CITY ENGINEER:

BY: _____ DATE: _____

CITY PUBLIC WORKS DIRECTOR

BY: _____ DATE: _____

CITY WATER SERVICE DIRECTOR

BY: _____ DATE: _____

AUTHORIZATION TO CONSTRUCT:

THE SIGNATURES ABOVE ARE REQUIRED BEFORE THE
CONTRACTOR CAN COMMENCE. UNSIGNED, THESE PLANS
HAVE NOT BEEN COMPLETED WITH RESPECT TO AGENCY
REVIEW AND APPROVAL.

UTILITY COMPANY APPROVAL

ARIZONA PUBLIC SERVICE

BY: LETTER _____ DATE: _____

UNISOURCE ENERGY SERVICES

BY: LETTER _____ DATE: _____

CENTURYLINK

BY: LETTER _____ DATE: _____

ALTICE U.S.A.

BY: LETTER _____ DATE: _____

UTILITY COMPANY CONTACTS

APS
CONTACT: RYAN WIESNER
2200 E. HUNTINGTON
FLAGSTAFF, AZ 86004
RYAN.WIESNER@APS.COM
PHONE: (928) 773-6447

UNISOURCE ENERGY SERVICES
CONTACT: MARTIN CONBOY
2901 W SHAMRELL BLVD #110
FLAGSTAFF, AZ 86001
MCONBOY@UESAZ.COM
PHONE: (928) 226-2269

CENTURYLINK
CONTACT: JASON DALE
112 NORTH BEAVER STREET
FLAGSTAFF, AZ 86001
MANUEL.HERNANDEZ4@CENTURYLINK.COM
PHONE: (928) 779-4935

ALTICE USA
CONTACT: SANFORD YAZZIE
1601 SOUTH PLAZA WAY
FLAGSTAFF, AZ 86001
SANFORD.YAZZIE@ALTICEUSA.COM
PHONE: (928) 266-0672

RESOURCE PRESERVATION

APNs 100-14-001B & 111-03-001A CURRENTLY FALL WITHIN THE CITY OF
FLAGSTAFF RESOURCE PROTECTION OVERLAY ZONE AND WILL REQUIRE A
RESOURCE PROTECTION PLAN.

FEMA DESIGNATION

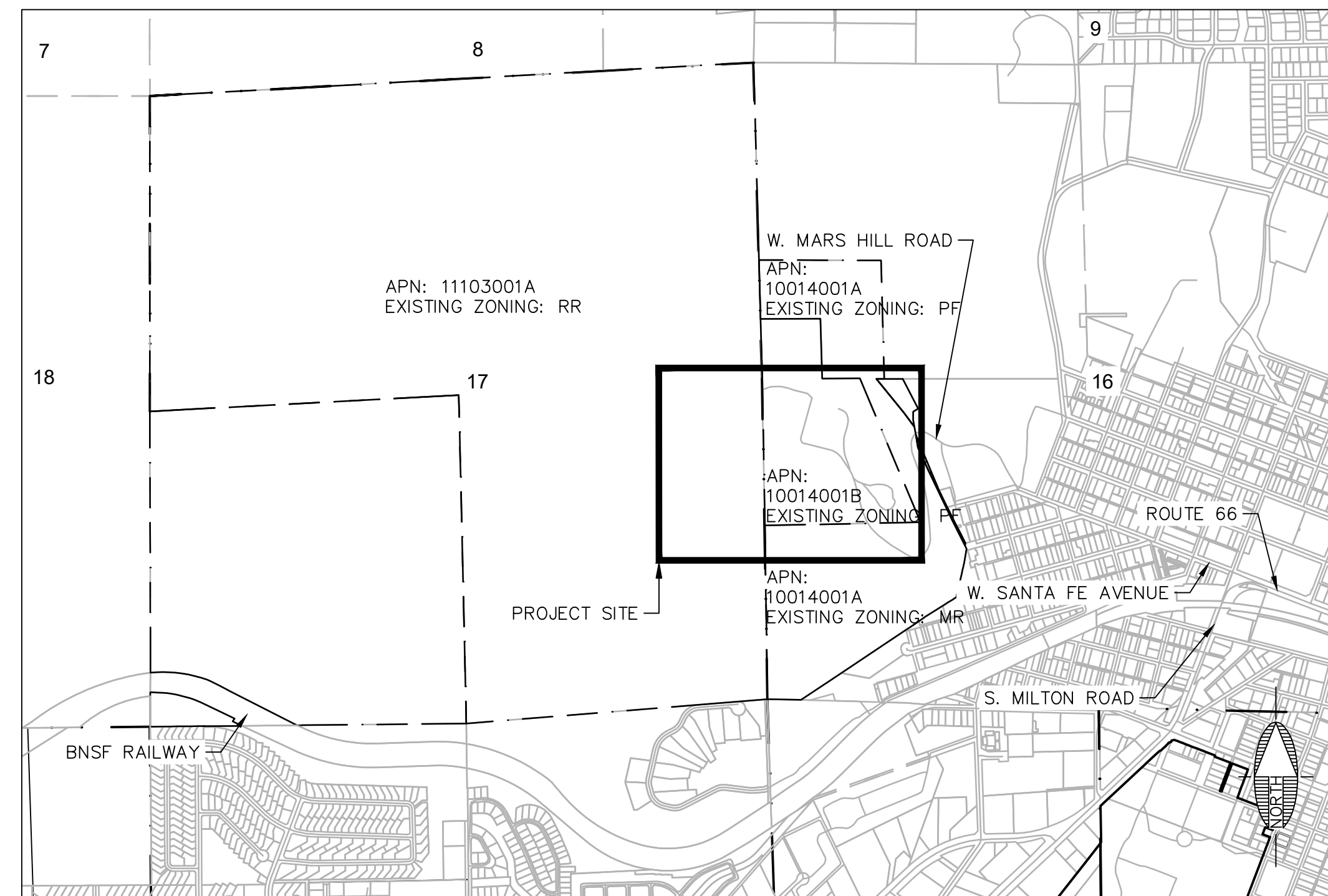
THIS PROJECT IS LOCATED WITHIN ZONE X OF FEMA FIRM MAP
#04005C6808G, EFFECTIVE SEPTEMBER 3, 2010. ZONE X IS DESCRIBED AS
AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

SOURCE OF PROJECT INFORMATION

TOPOGRAPHIC INFORMATION BASED ON DATA PROVIDED BY SHEPARD-
WESNITZER, INC. DATED MARCH 13, 2017.

IMPERVIOUS AREA SUMMARY

PRE-DEVELOPMENT IMPERVIOUS AREA = 365,717 SF
POST-DEVELOPMENT IMPERVIOUS AREA = 585,853 SF



VICINITY MAP
N.T.S.

Impervious Area & LID Analysis								
LID Required Depth (ft)								
0.0833								
Basin ID	Existing Basin Area (sf)	Proposed Basin Area (sf)	Existing Basin Impervious Area for LID (sf)	Proposed Basin Impervious Area for LID (sf)	Net Impervious Area (sf)	Required LID Volume (cf)	Required Detention Volume (cf)	Provided Volume (cf)
A1	1,666,884	1,666,884	246,887	294,219	47,332	3,944	0	4,000
A2	108,619	108,619	13,490	93,081	79,591	6,633	18,959	19,910
A3	332,434	332,434	76,190	108,193	32,003	2,667	4,849	10,234
A4	773,465	773,465	4,638	37,213	32,575	2,715	5,058	
B	1,019,878	1,019,878	24,512	24,512	0	0	0	15,228
C	18,297,427	18,297,427	0	28,635	28,635	2,386	0	

- Gross required 1" LID volume is for impervious area including proposed streets, parking, sidewalks, and buildings.
- The required detention volumes for Basin A2, A3, and A4 are inclusive of the required LID runoff capture volume (ROCV).
- The excess volume in the existing EDB provided during Phase 0 will retain the required volume for Basin A1.
- The required runoff volume for Basin A2 will be retained in Retention Basin 1.
- The required runoff volume for Basin A3 will be retained in Detention Basin 1.
- The required runoff volume for Basin A4 and C will be retained in Detention Basin 2.

CLEAR VIEW ZONE CALCULATIONS											
ID #	MAJOR STREET	MANEUVER DIRECTION	DESIGN SPEED (VMAJOR)1	TIME GAP tg (unadjusted)2	GRADE ≤ 3%	ACTUAL GRADES	MULTIPLE LANE CROSSINGS	NO. OF LANES4	TIME GAP tg(adjusted)2	INTERSECTION SIGHT DISTANCE (ISD3)	STOPPING SIGHT DISTANCE (SSD)
D1	Mini Loop Road	Left	25	7.5	Yes	2%	No	1	7.5	280	155
D2	ADC drive aisle	Right	25	6.5	Yes	2%	No	1	6.5	240	155

Notes:

- The major road speed limits (VMAJOR in MPH) are based on existing conditions in the project vicinity.
- The time gap values, adjusted (tg (adjusted) in seconds) and unadjusted (tg (unadjusted) in seconds), are based on the current site plan and the AASHTO-Geometric Design of Highways and Streets Exhibits 9-54 and 9-57 for D1 and D2 and Exhibits 9-66 and 9-67 for M1. The first lane crossed does not warrant an adjustment to the time gap.
- The intersection site distance (ISD in feet) calculations are based on Equation 9-1 in the AASHTO-Geometric Design of Highways and Streets. Equation 9-1: $ISD = 1.47 * VMAJOR * tg$
- The number of lanes crossed may include medians converted to equivalent lanes. The number of lanes provided in the table includes the first lane crossed.
- If the approach grade is greater than 3%, add 0.1 seconds for each percent grade.

PROJECT OWNER/DEVELOPER:

LOWELL OBSERVATORY
CONTACT: DAVID SAWYER
1400 WEST MARS HILL ROAD
FLAGSTAFF, ARIZONA 86001
(928) 774-3358

PROJECT ENGINEER:

SHEPARD-WESNITZER, INC.
CONTACT: STEPHEN IRWIN, PE
110 WEST DALE AVENUE
FLAGSTAFF, ARIZONA 86001
(928) 773-0354

PROJECT ARCHITECT:

JOHNSON WALZER ASSOCIATES, LLC.
CONTACT: TIM WHITESIDE
17 NORTH SAN FRANCISCO ST, SUITE 3A
FLAGSTAFF, ARIZONA 86001
(928) 779-0470

PROPERTY INFORMATION

ADDRESS: 1400 W. MARS HILL ROAD

APN:
111-03-001A (635.22 ACRES)
100-14-001B (35.27 ACRES)

EXISTING ZONING:
RURAL RESIDENTIAL (RR) & PUBLIC FACILITY (PF)

SHEET INDEX		
SHEET NO.	DWG NO.	SHEET TITLE
01	CVR	COVER SHEET
02	SP01	SITE PLAN

LEGEND	
—	ROW
- - - - -	EASEMENT
— 8"SS —	GRAVITY SEWER LINE
— 8"W —	PUBLIC WATER LINE
—	STORM DRAIN PIPE
- - - - -	LOT BOUNDARY
⊗	FIRE HYDRANT
W	WATER METER
⊙	SEWER MANHOLE
⊕	STORM DRAIN MANHOLE
⊞	STORM DRAIN GRATE
RPA	REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY
⊗	GATE VALVE
→	DRAINAGE ARROW
S	PROPOSED SEWER SERVICE
8"W	PROPOSED WATER SERVICE
- - - - -	EX. LOT LINE
- - - - -	EX. EASEMENT
- - - - -	EX. 100-YR FLOODPLAIN
- - - - -	EX. INTERMEDIATE CONTOUR
- - - - -	EX. INDEX CONTOUR
- - - - -	EX. WATER LINE
- - - - -	EX. SEWER LINE
- - - - -	EX. GAS
- - - - -	EX. STORM DRAIN
- - - - -	EX. UNDERGROUND UTIL.
- - - - -	EX. OVERHEAD UTIL.
- - - - -	SECTION LINE
- - - - -	EX. ROAD STRIPING
- - - - -	EX. WATER VALVE
⊞	EX. IRRIGATION
⊞	EX. SIGNAGE
⊞	EX. LIGHT POLE
⊞	EX. ELECTRIC BOX
→	EX. DRAINAGE ARROW

PRELIMINARY

NOT FOR CONSTRUCTION,
BIDDING OR RECORDING

C.O.F. Project #PZ-17-00233

FLAGSTAFF ARIZONA

LOWELL OBSERVATORY ADC

COVER SHEET

JOB NO: 18054

DATE: JUN 20

SCALE: AS SHOWN

DRAWN: BH

DESIGN: BH

CHECKED: SCI

110 W. Dale Avenue
Flagstaff, AZ 86001
928.773.0354
928.774.8934 fax
www.swi.wz.com

SWI
Shepard Wesnitzer, Inc.

NO.	DESCRIPTION	DATE	BY

Call out least two full working days before you begin excavation.

ARIZONA 801
Arizona Blue Stakes, Inc.
808 841-1111 or 1-800-514-1111 (928-5348)

DRAWING NO.
CVR

SHT NO. OF
01 OF 02

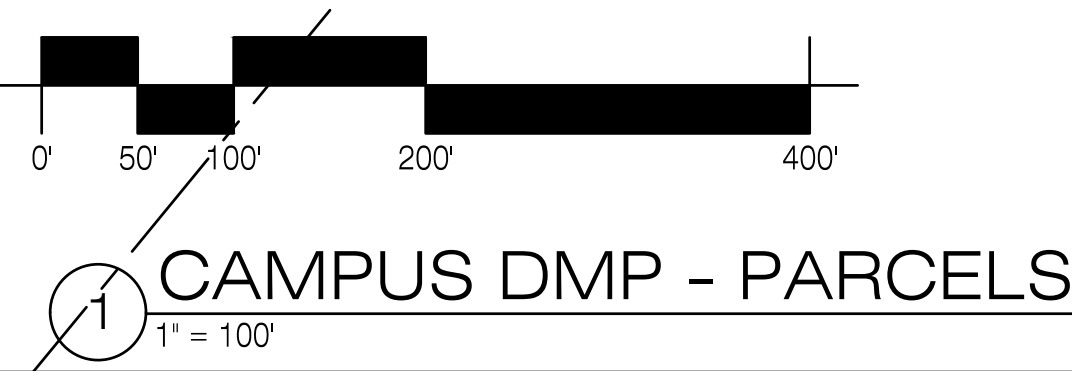
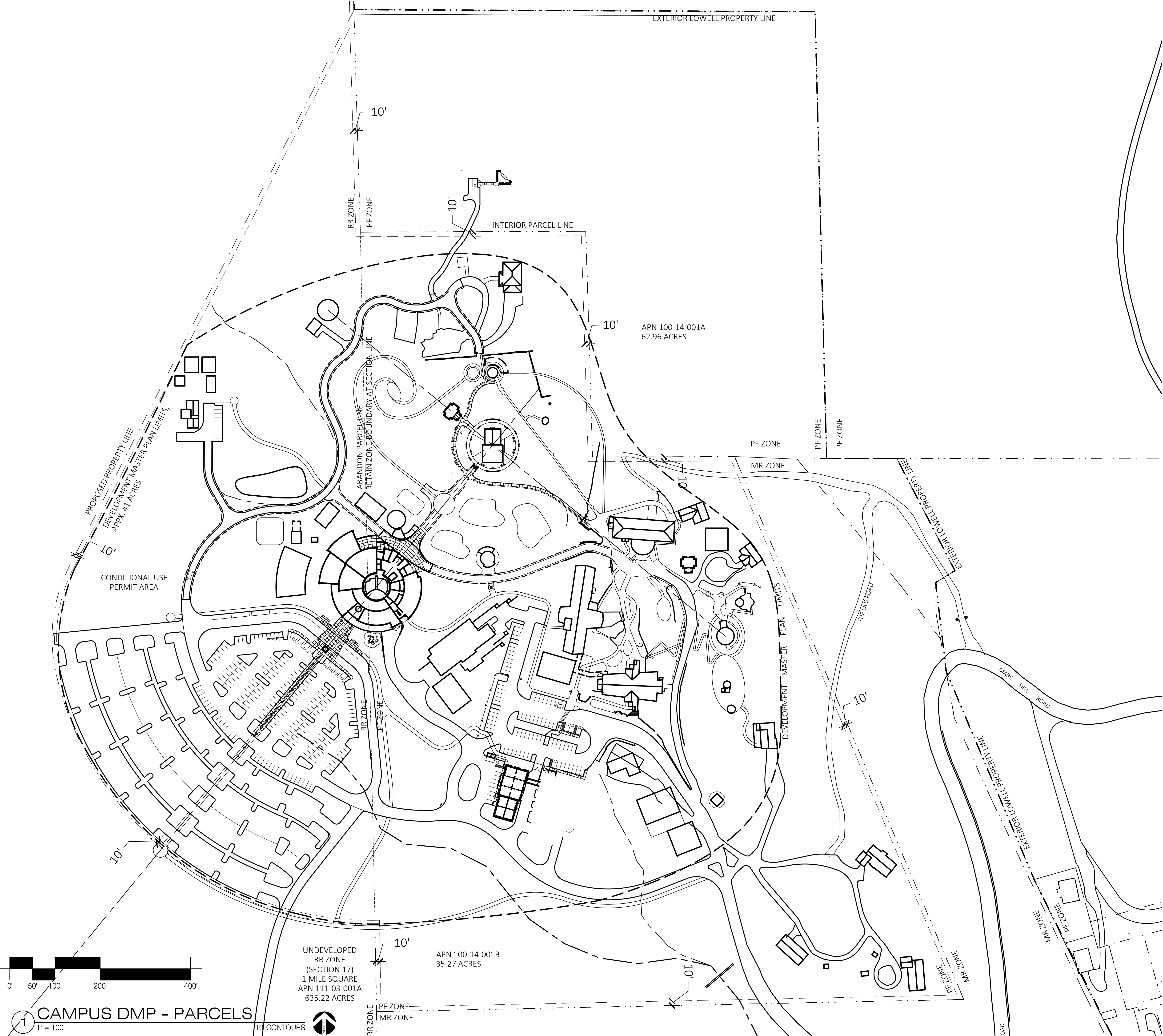


- ### KEYNOTES
1. IMPROVED SECONDARY FIRE APPARATUS ACCESS ROADWAY, 20' WIDE AGGREGATE PAVING PER CITY REQUIREMENTS
 2. EXISTING PAVED SUBDIVISION ROADWAY, PRIVATE STREET WITH UNLIMITED PUBLIC ACCESS PER SUBDIVISION PLAT
 3. DEVELOPMENT MASTER PLAN LIMITS, APPX 41 ACRES
 4. PROPOSED RELOCATED PROPERTY LINE
 5. EXISTING FUTS

JOHNSON WALZER ASSOCIATES LLC, 17 NORTH SAN FRANCISCO STREET, SUITE 3A, FLAGSTAFF, ARIZONA 86001 (928) 779-0470
 PROJECT: **19021**
 SCALE: 1" = 300'
 DRAWN BY: ALP
 CHECKED BY: TW
 DATE: MAY 2020
 TITLE: DEVELOPMENT MASTER PLAN SECTION 17
 DMP1



LOWELL OBSERVATORY
 ASTRONOMY DISCOVERY CENTER
 FLAGSTAFF, ARIZONA



UNDEVELOPED
RR ZONE
(SECTION 17)
1 MILE SQUARE
APN 111-03-001A
635.22 ACRES

APN 100-14-001A
62.96 ACRES

APN 100-14-001B
35.27 ACRES

ZONING NOTES

Zoning and Land Use. The Astronomy Discovery Center straddles two zones, the RR Rural Residential to the west and the PF Public Facilities Zone. The observatory function is an allowed use in the PF zone. In the RR zone, it is an allowed use with a Conditional Use Permit. We plan to pursue the CUP immediately after City acceptance of the Site Plan submittal. The existing site is undeveloped forest land, with several primitive forest trails crossing the site.

Zoning and Building Height. Maximum building height is determined by sloping "building plane" criteria. Zone PF allows 60' maximum building height above grade. Zone RR allows 35' above grade.

Zoning and Building Setbacks. Zone PF specifies building setbacks are to match adjacent zones. Zone RR and Zone MR are adjacent to Zone PF. Zone RR requires 75' front and 10' side setbacks. Zone MR requires 10' front and 5' side setbacks. See sheet DMP1 for setbacks illustrated for entire campus.

NOTES

Total DMP limits = appx 41 acres

APN 100-14-001B

Current area	35.27 acres
Increase	20 acres
New total area	55.27 acres



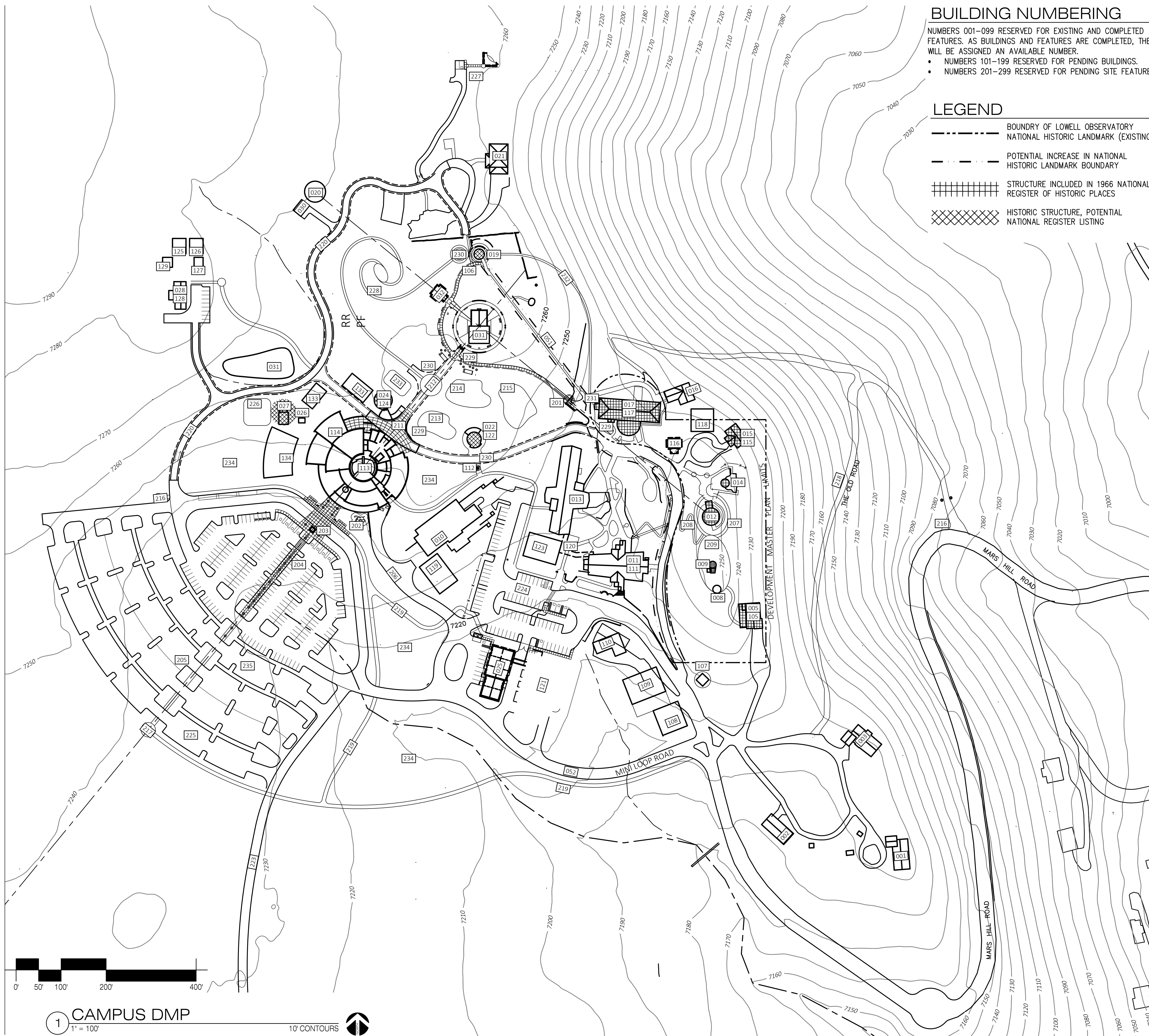
JOHNSON WALZER ASSOCIATES LLC, 17 NORTH SAN FRANCISCO STREET, SUITE 3A, FLAGSTAFF, ARIZONA 86001 (928) 779-0470

LOWELL OBSERVATORY
ASTRONOMY DISCOVERY CENTER
FLAGSTAFF, ARIZONA

PROJECT: **19021**
SCALE: 1" = 100'
DRAWN BY: ALP
CHECKED BY: TW
DATE: MAY 2020

TITLE: DEVELOPMENT MASTER PLAN
PARCEL EXHIBIT

DMP2



BUILDING NUMBERING

NUMBERS 001-099 RESERVED FOR EXISTING AND COMPLETED FEATURES. AS BUILDINGS AND FEATURES ARE COMPLETED, THEY WILL BE ASSIGNED AN AVAILABLE NUMBER.

- NUMBERS 101-199 RESERVED FOR PENDING BUILDINGS.
- NUMBERS 201-299 RESERVED FOR PENDING SITE FEATURES.

LEGEND

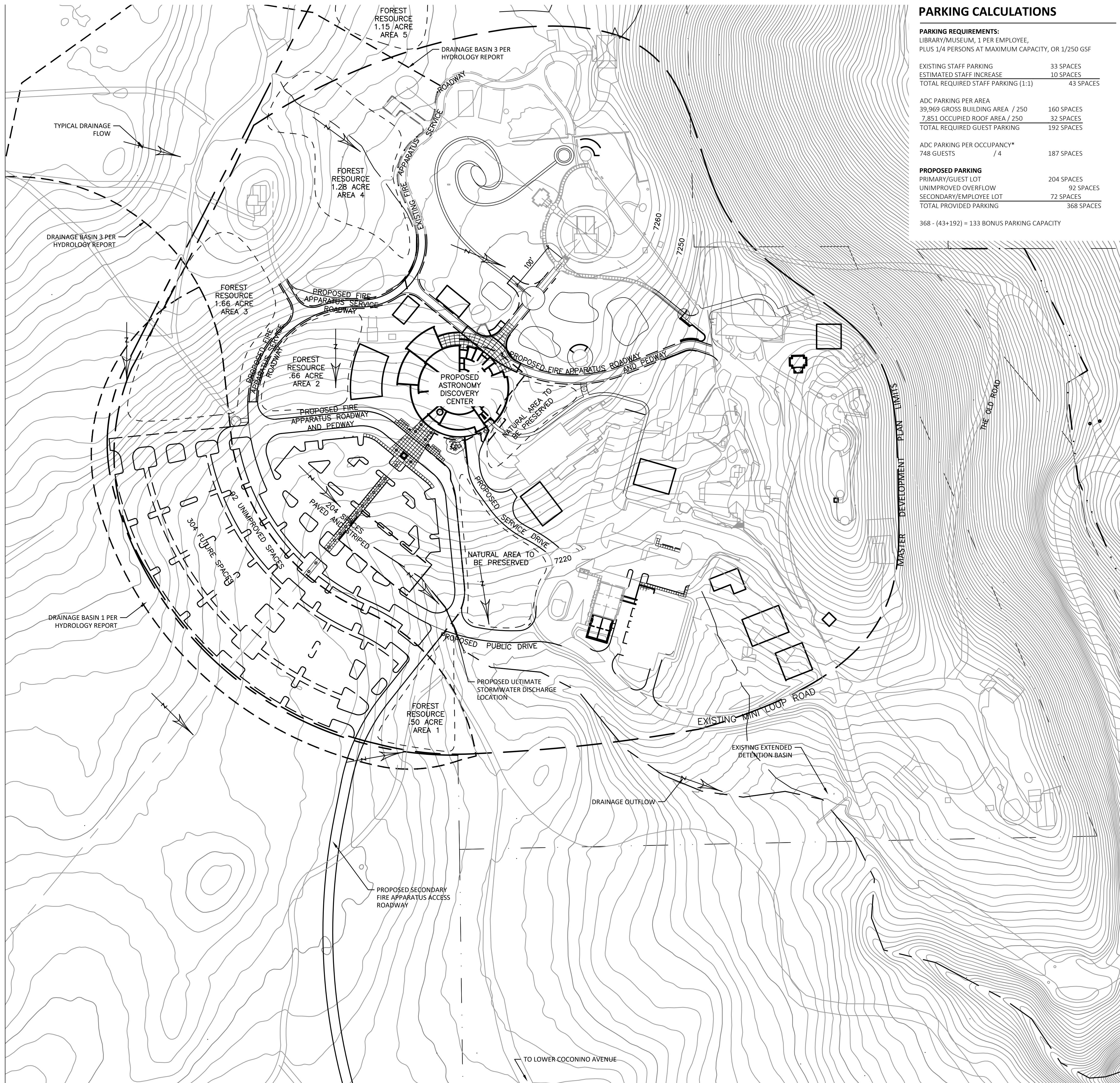
- BOUNDARY OF LOWELL OBSERVATORY NATIONAL HISTORIC LANDMARK (EXISTING)
- POTENTIAL INCREASE IN NATIONAL HISTORIC LANDMARK BOUNDARY
- STRUCTURE INCLUDED IN 1966 NATIONAL REGISTER OF HISTORIC PLACES
- HISTORIC STRUCTURE, POTENTIAL NATIONAL REGISTER LISTING

BUILDINGS AND FEATURES

- | | |
|--|---|
| <p>EXISTING FACILITIES</p> <ul style="list-style-type: none"> 001 PRIVATE RESIDENCE #1 - 1882 SF 002 MARS HILL RESIDENCE - 1385 SF 003 PRIVATE RESIDENCE #3 - 1882 SF 005 PRIVATE RESIDENCE #5 (NRHP LISTING) - 2300 SF 006 PRIVATE RESIDENCE #6, TO BE REMOVED 007 BUSINESS OFFICE - 2010 SF, TO BE REMOVED 008 MCALLISTER DOME - 183 SF 009 MARS HILL CISTERN (NRHP LISTING) 010 PUTNAM COLLECTION CENTER - 8048 SF 011 STEELE VISITOR CENTER - 6439 SF 012 CLARK DOME (NRHP LISTING) - 1304 SF 013 HENDRICKS CENTER FOR PLANETARY STUDIES - 7336 SF 014 MAUSOLEUM (NRHP LISTING) 015 RESIDENCE #15 (NRHP LISTING) 016 RESIDENCE #16 017 SLIPHER BUILDING (NRHP LISTING) - 15011 SF 018 --- 019 PLUTO DOME (HISTORIC STRUCTURE) - 676 SF 020 250,000 GALLON WATER TANK 021 TRUSTEE'S RESIDENCE - 5340 SF 022 18" ASTROGRAPH DOME (HISTORIC LANDMARK) - 1843 SF 023 MACHINE SHOP - 4388 SF (REMOVED) 024 LAMPLAND DOME (HISTORIC LANDMARK) - 2498 SF 025 FLEET/WAREHOUSE - 3240 SF 026 0.5-M DOME 027 21" ROLL OFF (HISTORIC LANDMARK) - 348 SF 028 CHALET - 1629 SF 029 LAMPLAND SHED (REMOVED) 030 PUMPHOUSE - 660 SF 031 GIOVALE OPEN DECK OBSERVATORY (GODO) - 2687 SF 032 WASH HOUSE - 600 SF 050 JILL ALLEN CHALLENGE COURSE 051 SOLAR SYSTEM WALK/WALK TO PLUTO (HISTORIC) 052 MINI LOOP ROAD | <p>PLANNED FACILITIES</p> <ul style="list-style-type: none"> 105 LAMPLAND RESIDENCE RESTORATION AND EXHIBIT 106 PLUTO INTERPRETIVE EXHIBIT (ACCESSIBLE) 107 RAMADA 108 SPECIAL EVENTS PAVILION - 3441 SF 109 FINE DINING - 4800 SF 110 GUEST LODGE - 2132 SF 111 STEELE LEARNING CENTER (REMODEL) 112 HISTORIC TELESCOPE MOUNT EXHIBIT (HISTORIC LANDMARK) 113 ASTRONOMY DISCOVERY CENTER (OPEN SKY PLANETARIUM & LUT), THREE STORIES, 34,183 SF 114 ADC EXPANSION 1 - 5888 SF 115 LOWELL LIBRARY RESTORATION AND EXHIBIT 116 WASH HOUSE #2 - 600 SF 117 SLIPHER DOME RESTORATION AND EXHIBIT 118 SCIENCE/OFFICE EXPANSION - 2500 SF 119 SCIENCE BUILDING - 3750 SF 120 COVERED LINK/PATIO AREA 121 INSTRUMENT TECH CENTER - 19745 SF 122 ASTROGRAPH/APOLLO DOME RESTORATION 123 ADMINISTRATION - 4050 SF 124 LAMPLAND DOME RESTORATION 125 YOUTH CAMP - BUNK HOUSE 1 - 1020 SF 126 YOUTH CAMP - BUNK HOUSE 2 - 1020 SF 127 YOUTH CAMP - WASH HOUSE - 720 SF 128 YOUTH CAMP - DINING HALL - 7576 SF (REMODEL & ADDITION) 129 YOUTH CAMP - LEADER'S BUNK HOUSE - 484 SF 133 FUTURE GUEST EXPERIENCE BUILDING - 3400 SF + 2100 SF 134 ADC EXPANSION 2 - 6000 SF |
|--|---|
-
- | |
|--|
| <p>PLANNED SITE AMENITIES</p> <ul style="list-style-type: none"> 201 SATURN GATE RELOCATION AND EXHIBIT (NRHP LISTING) 202 CHILDREN'S PLAY AREA ADJACENT TO CAFE PATIO 203 OBELISK 204 GUEST PARKING 205 GUEST PARKING EXPANSION 206 SERVICE DRIVE 207 CLARK DOME PLAZA IMPROVEMENTS 208 CLARK ACCESSIBLE PATH 209 SMALL GROUP OBSERVING - 100 SF 210 --- 211 DISCOVERY PLAZA 212 WEST GARDEN/LINEAR PLAZA 213 LEARNING PLAY AREA 214 INTERMEDIATE PLAY AREA 215 ADVENTURE PLAY AREA 216 LOWELL OBSERVATORY TRAIL GATEWAY (HISTORIC LANDMARK) 217 OVERLOOK FEATURE 218 THE OLD ROAD HISTORIC PATHWAY (HISTORIC) 219 PEDESTRIAN/BIKE PATHWAY 220 SERVICE ROAD 221 --- 222 --- 223 EMERGENCY SECONDARY ACCESS 224 REPURPOSE PARKING FOR STAFF 225 FUTURE GUEST PARKING 226 FUTURE OUTDOOR GUEST EXPERIENCE 227 PRIVATE COLUMBARIUM 228 UNIVERSE AND GALAXY WALK WITH BLACK HOLE FEATURE 229 WAYFINDING ELEMENT 230 FEATURE ARRIVAL SIGNAGE 231 PLUTO WALK PLAZA 232 WALK TO PLUTO ACCESSIBLE SCENIC OVERLOOK 233 DARK SKY LAB 234 NATURAL RESOURCE PRESERVATION AREA 235 OVERFLOW PARKING, UNPAVED |
|--|

JOHNSON WALZER ASSOCIATES LLC, 17 NORTH SAN FRANCISCO STREET, SUITE 3A, FLAGSTAFF, ARIZONA 86001 (928) 779-0470
 ARCHITECTS
 REGISTERED ARCHITECT
 1842
 TIMOTHY W. WALZER
 FLAGSTAFF, ARIZONA, U.S.A.
 LICENSE NO. 12702000
PRELIMINARY
 LOWELL OBSERVATORY
 ASTRONOMY DISCOVERY CENTER
 FLAGSTAFF, ARIZONA
 PROJECT: **19021**
 SCALE: 1" = 100'
 DRAWN BY: ALP
 CHECKED BY: TW
 DATE: MAY 2020
 TITLE: DEVELOPMENT MASTER PLAN
 CAMPUS LAND USE AND
 HISTORIC PLACES
DMP3

"The Development Master Plan shall be kept up to date by the owner and submitted to the city for review as future modifications take place."



PARKING CALCULATIONS

PARKING REQUIREMENTS:
LIBRARY/MUSEUM, 1 PER EMPLOYEE,
PLUS 1/4 PERSONS AT MAXIMUM CAPACITY, OR 1/250 GSF

EXISTING STAFF PARKING	33 SPACES
ESTIMATED STAFF INCREASE	10 SPACES
TOTAL REQUIRED STAFF PARKING (1:1)	43 SPACES
ADC PARKING PER AREA	
39,969 GROSS BUILDING AREA / 250	160 SPACES
7,851 OCCUPIED ROOF AREA / 250	32 SPACES
TOTAL REQUIRED GUEST PARKING	192 SPACES
ADC PARKING PER OCCUPANCY*	
748 GUESTS / 4	187 SPACES
PROPOSED PARKING	
PRIMARY/GUEST LOT	204 SPACES
UNIMPROVED OVERFLOW	92 SPACES
SECONDARY/EMPLOYEE LOT	72 SPACES
TOTAL PROVIDED PARKING	368 SPACES

368 - (43+192) = 133 BONUS PARKING CAPACITY

ENGINEERING, FIRE, PUBLIC WORKS, STORM WATER AND UTILITIES

Parking. This ADC project will include construction of a new public parking lot with 296 spaces (204 paved, 92 unimproved.) This includes 8 accessible spaces. Future public parking needs can be met with an additional 304 space planned lot to the southwest. The existing public parking area south of the Steele Center will be repurposed as primarily staff parking. Currently 65 parking spaces are available for combined employee and public use, plus 33 spaces for staff only use, total of 98 spaces in this central parking area. Additional parking is provided on campus for the various astronomers' residences. The new warehouse has 7 parking spaces for Lowell pool vehicles.

a. Parking Requirements. City code for a museum require one space per employee plus one space per 4 people at maximum occupancy or 1 space per 250 SF. 5% of required parking is required for bicycles. Spaces are to use hoops that can be locked in two places.

b. Proposed parking. Staff parking is addressed via the existing 33 staff spaces plus the repurposed Steele parking area, total of 76. This will be plenty to address any increase in staff required for the new ADC. Using the simple 1/250 GSF guideline above, 39,969 GSF area / 250 = 160 spaces. The ADC also has two roof top venues totaling 7,851 GSF / 250 = 32 additional spaces. This is a combined total of 192 spaces. We propose 204 spaces plus 92 unimproved overflow spaces. Calculating another way, the planned 296 spaces for public parking could provide for a capacity of 296*4 occupants per car = 1184 guests. The ADC has two planned venues with combined seating of 380, a cafe plus four exhibit spaces, one event hall and an innovative learning place. The public parking at the ADC also provides for guests that are out touring on the campus, so the calculation per code becomes difficult. Currently Lowell has only 65 spaces for the public. We have a specialist on the team that has analyzed the parking at Lowell Observatory and projected growth patterns based on the new guest experiences planned. He recommended the increase to the proposed 296 spaces. The expansion parking to the southwest could eventually handle an additional 304 spaces, or 304*4=1216 total guest capacity. 1184 guests presently anticipated at peak + 1216 future guest expansion = 2400 final total guest capacity for the Lowell Development Master Plan.

c. Proposed Bicycle Parking. Per item (b) above, 192 parking spaces are required. 195 x .05 = 10 required bicycle space. Sheet AS1.1 illustrates 28 planned bicycle spaces.

d. EV Ready Parking. Cof code amendments require 3 EV ready spaces for lots over 100 spaces. 4 EV ready spaces provided

Accessibility. The facility is being designed to exceed the minimums specified in the Americans with Disabilities Act. Eight universal accessible spaces are provided at the main visitor lot, this is the required number for 301-400 space parking lots. 296 spaces are planned, including the improved overflow spaces. Accessible paths will extend from the parking area to the front door, and from the north ADC doors out on the campus. An accessible path will extend north to the new GODO development. The phase two pedway/fire

access paths project will extend ADC access east to the existing Slipper Building and related historical part of the campus. The building itself will have accessible seating in the Lowell University Theater and the Dark Sky Planetarium. All floors and guest areas are accessible either via ramps or elevators. Multi-unit public toilets are fully accessible. Two family toilets are provided for the comfort of disabled patrons and a special family toilet is provided at the second floor with more elaborate facilities to meet special needs patrons' requirements.

Fire Prevention. The ADC will have non-combustible exteriors. The planned structure will be provided with fire sprinkler and automatic fire alarm system. Fire truck access will be from the existing loop road, which will provide truck access right up to the front door. The truck access will continue in a big loop through the parking and back out to the access drive. Separate fire truck access will be along the north edge of the ADC, sized for the larger fire-fighting equipment, 26' wide minimum, from a new service road going around the west side. Two new fire hydrants are planned, one near the south entrance and the fire riser, and the second near the north entrance. A secondary fire apparatus access road is planned at the south extending to the existing access point at West Lower Coconino Avenue. This is in the Flag Mesa Subdivision. The subdivision plat specifies that West Lower Coconino Avenue is developed and maintained as a private street, but is to provide free public access at all times.

Public Works Materials Management Plan. Space for two dumpsters has recently been constructed adjacent to the warehouse. These dumpsters will provide for solid waste created by the ADC and the planned Tech Center. Lowell Observatory facilities staff will continue to collect trash and recycle items collected within each building and along the campus walkways and deposit at the new dumpster and recycle location. The ADC will have collection gathering space near a loading area planned at the southeast corner of the building, for the convenience of staff who will then shuttle the waste down to the new dumpsters. Primary source of waste will be the new cafe planned, as well as trash that may be getting removed from traveling guest vehicles.

Storm Water. SWI has prepared a Preliminary Drainage Report for the ADC project area. The primary drainage features for this project is Retention Basin 1, Detention Basin 1, and Detention Basin 2. The basins will have a combined detention/LID volume of 45,372. The calculated minimum required detention/LID volume for the project is 35,197 CF.

- a. Existing impervious area 365,717 SF
- b. Proposed impervious area 585,853 SF
- c. Net increase of impervious area 202,136 SF
- d. Required 1" LID volume, surface area 18,345 CF

The site requires detention/LID for any commercial development greater than 1/2 acre in size. A waiver may be granted for sites with under 5,000 square feet of impervious area. Based on the site plan, there is an increase in 202,136 square feet of impervious cover in post-development conditions. Three detention basins will be proposed with this project to store the required runoff volume due to the increase in impervious cover. An underground chamber system is proposed to be located underneath the southern portion of the ADC parking lot to retain the required runoff volume. An above-ground detention basin will be located near the intersection of Mini Loop Road and the drive aisle to the ADC and another detention basin will be located at the southern end of the temporary parking lot to detain the required runoff volumes. All storage basins will discharge into the existing natural swale to the southeast, continue to the existing extended detention basin located near the Campus entrance and ultimately converge with the Rio de Flag, which is the ultimate stormwater concentration point for the Campus. Refer to the Preliminary Drainage Report for more detailed discussion.

Utilities. An 8" private water line will be extended from the existing private 8" line in the southeast existing parking area. This was installed with the Lowell Warehouse project recently completed. It will extend east of the ADC to connect to another 8" line near the GODO, completing a loop. This extension will feed two new hydrants and one fire riser plus one domestic water line for the building itself. The source of this water is the newly installed big water tank and pump system up the mesa to the northwest of this site. That tank is fed by city water down the hill at Thorpe Park. Wastewater will tie into the existing 6" gravity line in the existing southeast parking lot. This was also installed with the Lowell Warehouse project. APS power and communications will be extended from existing to the northeast and extended to the existing stubs near the Warehouse to the southeast. Unisource gas service will also be extended from existing service located near the machine shop, located northeast of the site and extended to another Unisource gas line to the southeast, near the Warehouse.

Traffic. The newly constructed mini-loop road is currently operating as a two way road. With the new ADC, parking demand will be fully met with the large new parking lot southwest of the building. The mini-loop will continue to be two way flow, and connected directly to the ADC parking lot. The geometry will be changed at the tie in to the existing Mars Hill Road to provide continuous traffic flow with no stop required. This will become the main entrance drive. The existing road up to the existing parking lot will become a secondary road feeding only that lot, which will be devoted to employee parking primarily. A separate service lane will connect to the mini-loop, providing direct connection from the warehouse area to the service area at the ADC. In the future, when Section 17 lands to the west are developed, the ultimate Mars Hill Road extension will be constructed to handle the demands of associated development at that time. A full time second public access to both city and Lowell lands will be established at that time.

A Lowell Observatory Campus Master Development - Trip Generation ↦ TIA Scoping Letter dated February 18, 2020 has been submitted and approved by the City of Flagstaff. "Street Light" cell phone data provided by the City will be used to determine the existing traffic volumes for the Campus. The volume will then be grown to account for the new ADC based on the Lowell Master Plan. West Mars Hill Road, Thorpe Road, and Siggraves/Santa Fe intersection will be analyzed with the proposed development. Refer to the Trip Generation ↦ Scoping Letter for a more detailed discussion.



GENERAL NOTES

A. REFER TO SHEET AS1.3 FOR RESOURCE CALCULATION

LEGEND

- TREE, EXISTING
- TREE TO BE REMOVED

NATURAL RESOURCE PRESERVATION

Natural Resource Narrative. The existing site embraced by the resource protection overlay and within the development boundary limits is existing natural forest land. As such this land has generally ponderosa pine and occasional clumps of mature oak trees. Both are important natural resources to retain wherever possible. Pine trees create shade and encourage filtering of the rainwater below their drip lines. The oaks provide fall color and are useful for natural low level screening. The overlay zone forest is generally away from the major observing areas, so heights of trees are not major problems, as they are to the east on the PF zoned property. The trees on this portion of land are generally healthy, with limited infestation of the mistletoe found in many of the trees that exist in the neighboring PF zone.

Natural Resource Preservation. The west portion of the ADC site is in the RR zone, which requires Resource Preservation. No areas within this site exceed 17% maximum slope, so "steep slope" requirements will not apply.

a. City requirements. 50% is the applicable forest resource protection threshold. As a site over 5 acres, sampling strategy may be used in lieu of surveying all associated trees.

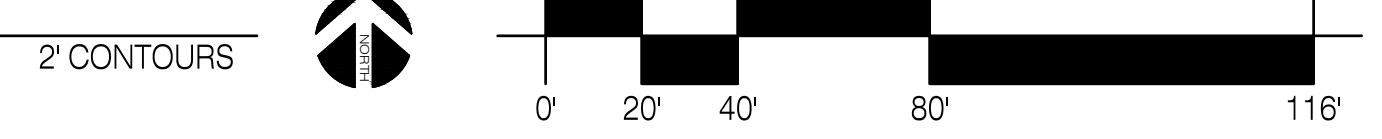
b. Provided. The Natural Resource map contains the entirety of Section 17. Section 17 = 635.22 acres x 50% = 317.66 acres preserved
This project defines 5.25 acres of protection + 620 acres of undeveloped mesa

Area 1	0.50 acre
east of parking lot	
Area 2	0.66 acre
between building and service road	
Area 3	1.66 acre
west of service road extending north to chalet	
Area 4	1.28 acre
between chalet and pumphouse	
Area 5	1.15 acre
north of pumphouse	
Total provided	5.25 acres

LEGEND

- PRIMARY PROPERTY LINE
- SETBACK LINE
- GAS LINE
- SEWER LINE
- WATER LINE
- UNDERGROUND ELECTRIC LINE
- OVERHEAD ELECTRIC LINE
- CABLE LINE
- TELEPHONE LINE
- IRRIGATION LINE
- FIRE WATER LINE

1 SITE PLAN - RESOURCE
1" = 40'



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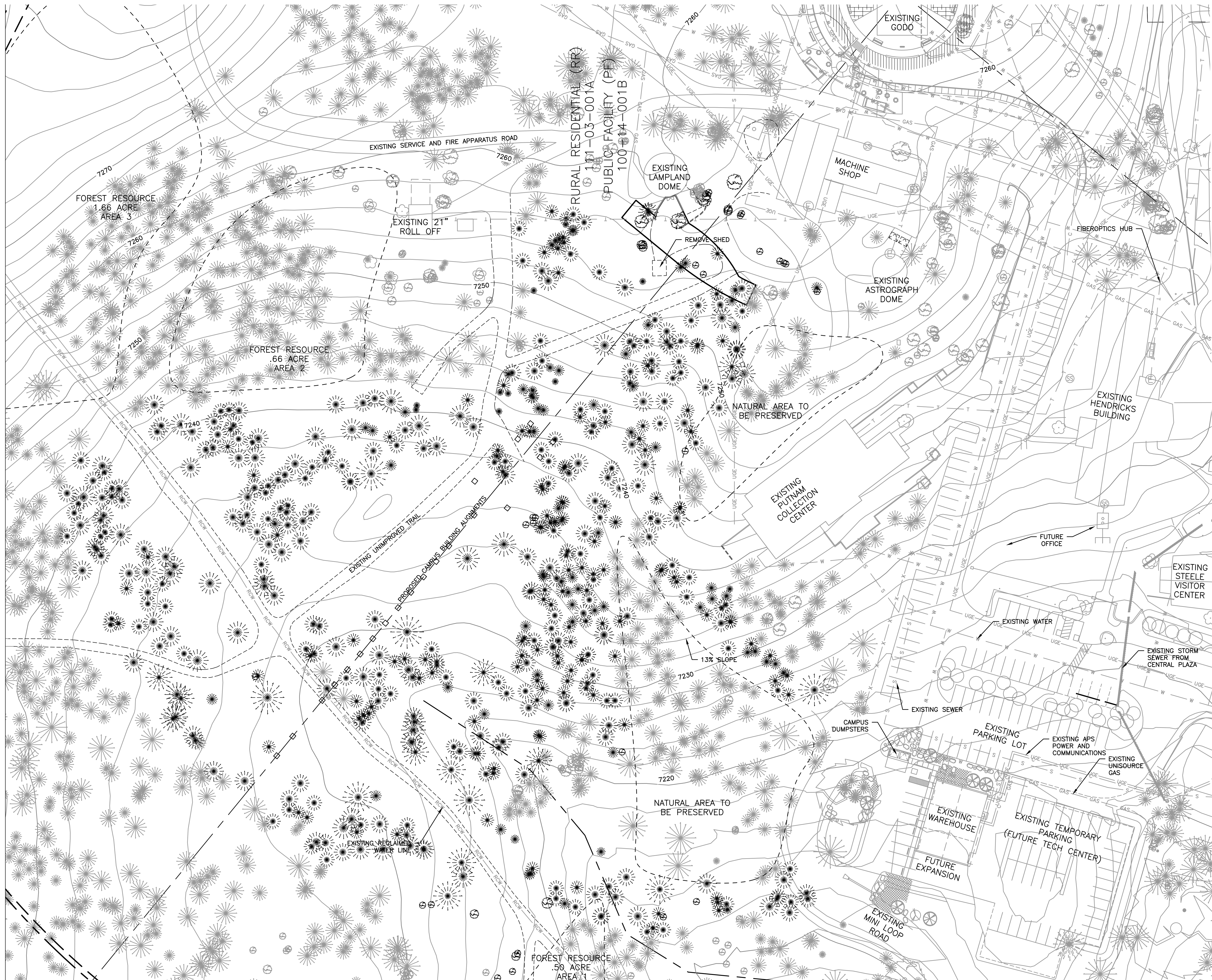


LOWELL OBSERVATORY
ASTRONOMY DISCOVERY CENTER
FLAGSTAFF, ARIZONA

CONCEPT SUBMITAL
PROJECT: **19021**
SCALE: 1" = 40'
DRAWN BY: ALP
CHECKED BY: TW
DATE: MAY 2020

TITLE: SITE PLAN - RESOURCE

SR 1



GENERAL NOTES

A. REFER TO SHEET ASD1.3 FOR RESOURCE CALCULATION

LEGEND

- TREE, EXISTING
- TREE TO BE REMOVED

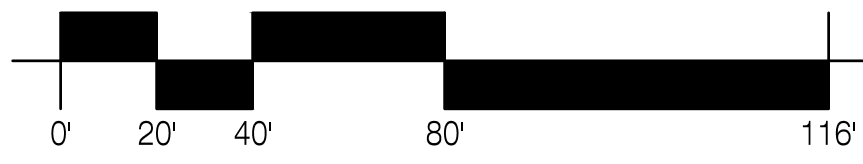
LEGEND

- PRIMARY PROPERTY LINE
- SETBACK LINE
- GAS LINE
- SEWER LINE
- WATER LINE
- UNDERGROUND ELECTRIC LINE
- OVERHEAD ELECTRIC LINE
- CABLE LINE
- TELEPHONE LINE
- IRRIGATION LINE
- FIRE WATER LINE

1 SITE PLAN - PHASE 1 DEMOLITION

1" = 40'

2' CONTOURS



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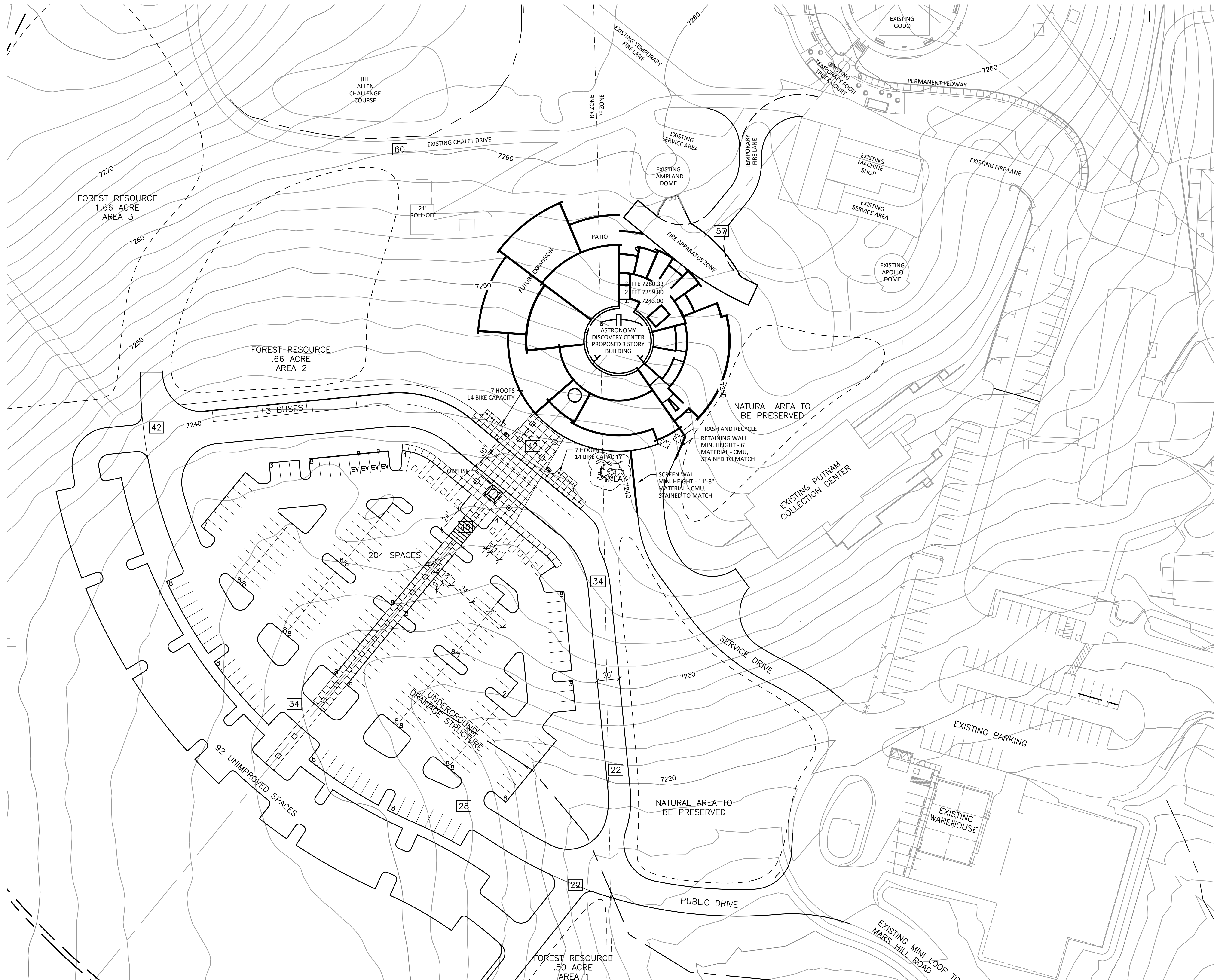


**LOWELL OBSERVATORY
ASTRONOMY DISCOVERY CENTER
FLAGSTAFF, ARIZONA**

CONCEPT SUBMITAL
PROJECT: **19021**
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DATE: MAY 2020

TITLE: PHASE 1 - DEMOLITION

ASD1.1



- PHASE 1 SCOPE**
- A. SOUTH SITWORK, SOUTH PARKING AND PATHS, ADC PAD, SOUTH UTILITIES
 - B. ADC FOUNDATION, UNDER SLAB PLUMBING AND ELECTRICAL, MASONRY WALLS, STRUCTURAL STEEL, ROOFING, BUILDING DRIED-IN
 - C. NORTH SITWORK, NORTH PATHS, NORTH UTILITIES
 - D. BUILDING INTERIOR BASICS
 - E. BUILDING AND SITE INTERPRETIVE ELEMENTS, BUILDING INTERIOR FINISHES

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 FLAGSTAFF, ARIZONA

PROJECT: **19021**
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 DATE: MAY 2020

TITLE: PHASE 1 - SITE PLAN

AS1.1

1 SITE PLAN - PHASE 1
 1" = 40'
 2' CONTOURS



KEYNOTES

1. EXISTING UNDERGROUND ELECTRIC
2. UNDERGROUND ELECTRIC, COMM, AND CATV
3. PROPOSED TRANSFORMER
4. COMM AND CATV SERVICE ENTRY
10. GAS METER
11. GAS LINE EXTENSION
12. EXISTING GAS
20. EXISTING 8" WATER
21. 8" WATER LINE EXTENSION
22. FIRE HYDRANT
23. FIRE RISER
24. FIRE DEPARTMENT CONNECTION
25. FIRE TRUCK/SEMI TRUCK TURN AROUND
30. EXISTING GRAVITY SEWER
31. 6" SEWER LINE EXTENSION
40. -
41. -
50. CONCRETE PAVING
51. CONCRETE CROSSWALK
52. ASPHALT PAVING
53. PAVED FIRE ACCESS PATH
54. EXISTING RECLAIM WATER LINE
55. -
56. FUTURE PARKING AND DRIVE
57. PROPOSED POINT ELEVATION
58. EXISTING CONCRETE
59. CONCRETE UTILITY YARD
70. UNDERGROUND STORM WATER, LID DETENTION SYSTEM
71. CULVERT
72. STORM SEWER

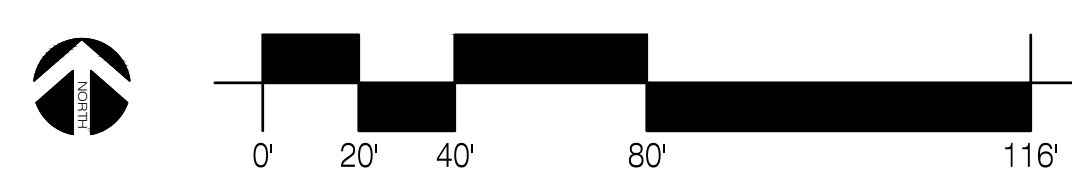
GENERAL NOTES

- A. SEE SHEET AS3.1 FOR SITE LIGHTING
- B. THIS SHEET ILLUSTRATES THE ADC PROJECT AT THE CONCLUSION OF PHASE ONE. THIS WILL BE A TEMPORARY CONDITION UNTIL THE MACHINE SHOP IS REMOVED, ALLOWING COMPLETION OF ROADS AND PEDWAYS NORTH OF THE ADC AS SHOWN ON AS1.0

LEGEND

PRIMARY PROPERTY LINE	—————
INTERIOR PROPERTY LINE	—————
ASSUMED PROPERTY LINE	—————
SETBACK LINE	—————
GAS LINE	—— GAS —— GAS —— GAS —— GAS ——
SEWER LINE	—— S —— S —— S —— S ——
WATER LINE	—— W —— W —— W —— W ——
UNDERGROUND ELECTRIC LINE	—— UGE —— UGE —— UGE —— UGE ——
OVERHEAD ELECTRIC LINE	—— OHP —— OHP —— OHP —— OHP ——
CABLE LINE	—— CTV —— CTV —— CTV —— CTV ——
TELEPHONE LINE	—— T —— T —— T —— T ——
IRRIGATION LINE	—— IRR —— IRR —— IRR —— IRR ——
FIRE WATER LINE	—— FW —— FW —— FW —— FW ——

1 SITE PLAN - GRADING AND SITE UTILITIES
1" = 40'
2' CONTOURS



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ASTRONOMY DISCOVERY CENTER
FLAGSTAFF, ARIZONA

PROJECT: **19021**
SCALE: 1" = 40'
DRAWN BY: ALP
CHECKED BY: TW
DATE: MAY 2020

TITLE: PHASE 1 - SITE UTILITIES

AS1.2



KEYNOTES

1. PROPOSED PUBLIC PLAZA AREA
2. PROPOSED LANDSCAPE AREA
3. PROPOSED NATURAL RESOURCE AREA TO BE PRESERVED
4. HEATED SITE PAVING
5. ELECTRIC VEHICLE (EV) CHARGING STATION
6. "LOT FULL" ELECTRIC MESSAGE SIGN
7. PLAY AREA
8. BICYCLE PARKING
9. STROLLER PARKING AREA
10. NORTH PLAZA AND AERIAL FIRE APPARATUS ACCESS AREA (MINIMUM CLEAR AREA TO BE RESERVED)
11. SOUTH DROP OFF AREA AND FIRE APPARATUS ACCESS ROADWAY
12. THREE STORY/30' PLUS PORTION OF BUILDING (CROSSHATCHED)
13. BOULEVARD TREE, PLAZA TREE GRATE AND LIGHTING ELEMENT
14. WATER MAIN
15. IRRIGATION ZONE VALVE
16. IRRIGATION MAIN LINE
17. SLEEVES FOR SECONDARY LINE
18. IRRIGATION CONTROLLER
19. IRRIGATION BACKFLOW PREVENTER IN HOT BOX

LEGEND - LIGHTING

- NSALED PARKING LIGHT, ONE OR TWO HEAD

LEGEND - LANDSCAPE

- ☼ TREE, EXISTING
- PROPOSED 15 GALLON BOULEVARD TREE, PLAZA TREE GRATE, AND LIGHTING ELEMENT. HONEY LOCUST (GLEDTISIA TRIACANTHUS INTERMIS) 2" DIA
14 PROPOSED
- ⊕ PROPOSED 15 GALLON BOULEVARD TREE, PLAZA TREE GRATE, AND LIGHTING ELEMENT. FREEMAN MAPLE (ACER X FREEMANALI) 2" DIA
6 PROPOSED
- ⊗ PROPOSED 15 GALLON TREE. QUAKING ASPEN (POPULUS TREMULOIDES) 2" DIA MULTITRUNK, HONEY LOCUST (GLEDTISIA TRIACANTHUS INTERMIS) 2" DIA
44 PROPOSED
- ⊖ PROPOSED 15 GALLON PINE TREE. AUSTIAN PINE (PINUS NIGRA) 6' MIN. HEIGHT
17 PROPOSED
- PROPOSED SHRUB, 5 GALLON. APACHE PLUME (FALLUGIA PARADOX), JUNIPER (JUNIPERUS), OREGON GRAPE HOLLY (MAHONIA AQUIFOLIUM), AND CLIFFROSE (COWANIA MEXICANA)
162 PROPOSED
- ⊞ PROPOSED GROUNDCOVER, 1 GALLON. WOOLY YARROW (ACHILLEA TOMENTOSA), BLUE RUG JUNIPER (JUNIPERUS HORIZONTALIS), HONEY SUCKLE (LONICERA), CREEPING MAHONIA (MAHONIA REPENS), SPRINK CINQUE FOIL (POTENTILLA TABERNAEMONTANLI)
162 PROPOSED

LANDSCAPE, LIGHTING AND SIGNAGE NOTES

Heritage Preservation. The ADC development will not impact any historic structures or campus site elements. The Development Master Plan identifies and provides for preservation for these features. The ADC is sited to protect the neighboring Lampland Dome Structure and the Astrograph Dome, both of which are older facilities planned to be refurbished in the future. A cultural resource study, archaeological, has been prepared for the site. No items were identified in the archaeologist's research and site investigation.

Landscaping. The setting for Lowell Observatory is natural forest. This theme will be maintained around the ADC project. The site is not adjacent to any public streets or zoning boundaries, so no peripheral or parking perimeter screening is required. Disturbed areas will be hydro-seeded with natural grasses and wild flower mix.

City requirements, parking areas, 30 SF per parking space. Two 15 gallon trees and four 5 gallon shrubs and four 1 gallon groundcovers required per every 8 parking spaces.

Calculation: 204 improved parking spaces are provided. At 1/8, this produces 26 units of two trees, four shrubs and four groundcovers. This totals 52 trees, 104 shrubs and 104 groundcovers, to be located at the parking areas. 6,120 SF of parking lot landscaping area is required and provided.

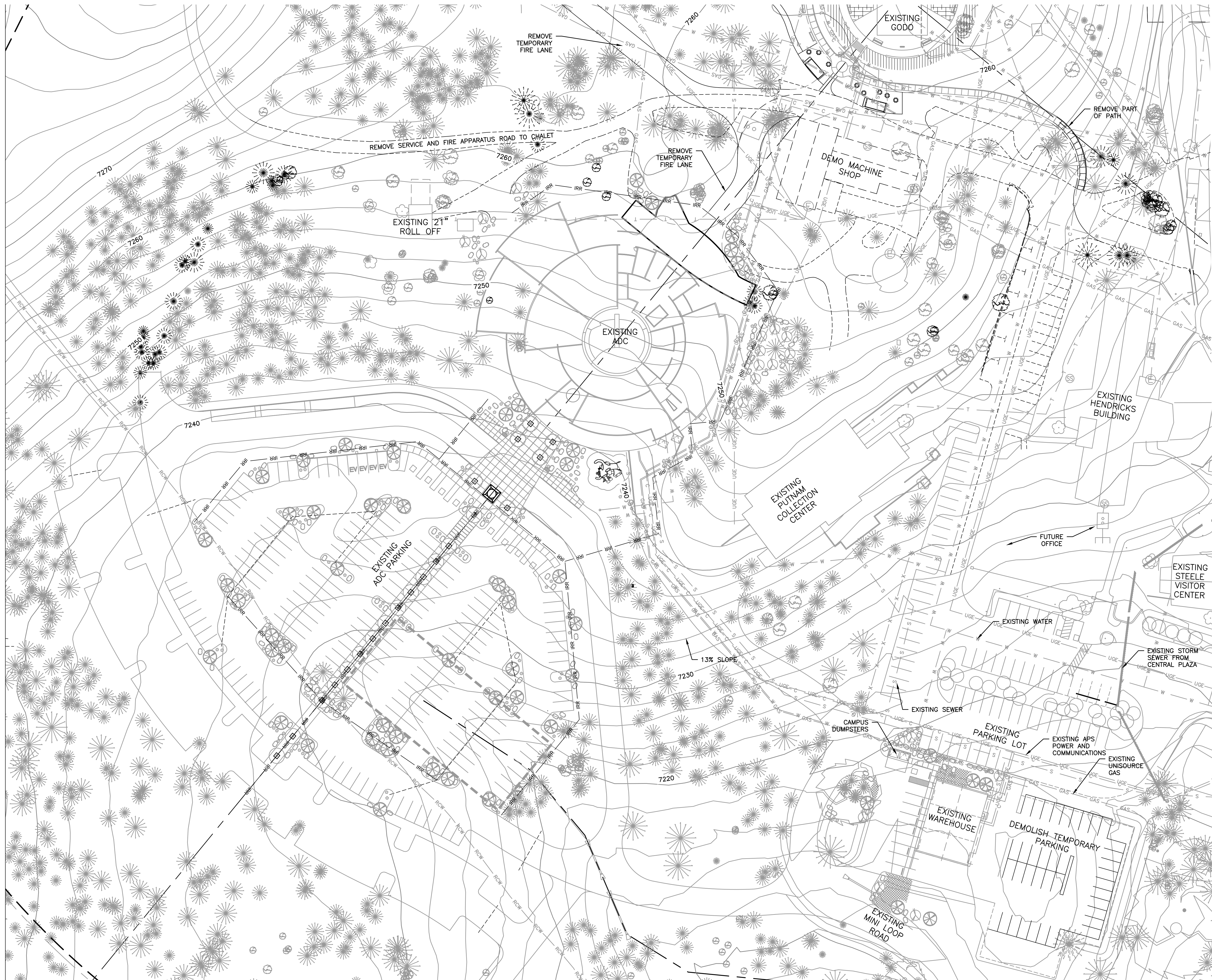
City requirements, building perimeter. Existing trees within 25' of the ADC foundation will be preserved as resource where feasible, with 1 for 1 credit against new landscaping. One 15 gallon tree, two 5 gallon shrubs and two 1 gallon groundcovers are required for each 25' of building perimeter.

Calculation: 704' building perimeter produces 29 units of one tree, two shrubs and two groundcovers. This totals 29 new or saved existing trees, 58 shrubs and 58 groundcovers.

Lighting. These facilities will exceed city standards for dark skies. Illustrating proper dark sky design is central to Lowell's plans for guest education. While the lighting ordinance would be based on the overall campus area, lighting calculations are voluntarily based on the much tighter Astronomy Discovery Center boundaries as illustrated in the Master Development Plan. This area is roughly 500' x 700', or 8.00 acres. Lighting zone 2, which is the applicable lighting zone per the code, would allow 50,000 lumens per acre. Zone 1, a better measure given the use, would allow 25,000 lumens per acre. This produces 100,000 lumens allowed under the most stringent guidelines. Lighting for the ADC will be primarily illuminating pedestrian night time paths and parking area safety lighting. Pedway lighting will be integrated with pedway landscape trees wherever possible, utilizing NSALED technology. NSALED wall mounted lights, bollards and under soffit down lights are planned. All exterior light sources will utilize the Narrow Spectrum Amber LED sources. Any interior lighting near exterior glazing will be shielded to eliminate any potential for lighting leakage or glare. A separate lighting permit application will be provided with the final site construction documents.

Signage. Exterior signage will be primarily wayfinding directional signs, interpretive signs and signs recognizing significant donors. They will typically be internally illuminated.





LEGEND

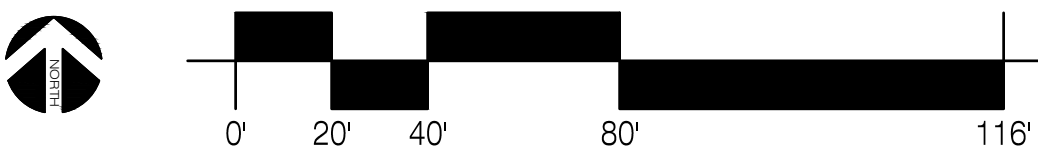
- TREE, EXISTING
- TREE TO BE REMOVED

LEGEND

- PRIMARY PROPERTY LINE
- SETBACK LINE
- GAS LINE
 - GAS — GAS — GAS — GAS — GAS
- SEWER LINE
 - S — S — S — S — S
- WATER LINE
 - W — W — W — W — W
- UNDERGROUND ELECTRIC LINE
 - UGE — UGE — UGE — UGE
- OVERHEAD ELECTRIC LINE
 - OHP — OHP — OHP — OHP — OHP
- CABLE LINE
 - CTV — CTV — CTV — CTV — CTV
- TELEPHONE LINE
 - T — T — T — T — T
- IRRIGATION LINE
 - IRR — IRR — IRR — IRR — IRR
- FIRE WATER LINE
 - FW — FW — FW — FW — FW

1 SITE PLAN - PHASE 2 DEMOLITION
1" = 40'

2' CONTOURS



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ASTRONOMY DISCOVERY CENTER
FLAGSTAFF, ARIZONA

CONCEPT SUBMITAL
PROJECT: 19021
SCALE: 1" = 40'
DRAWN BY: ALP
CHECKED BY: TW
DATE: MAY 2020

TITLE: PHASE 2 DEMOLITION

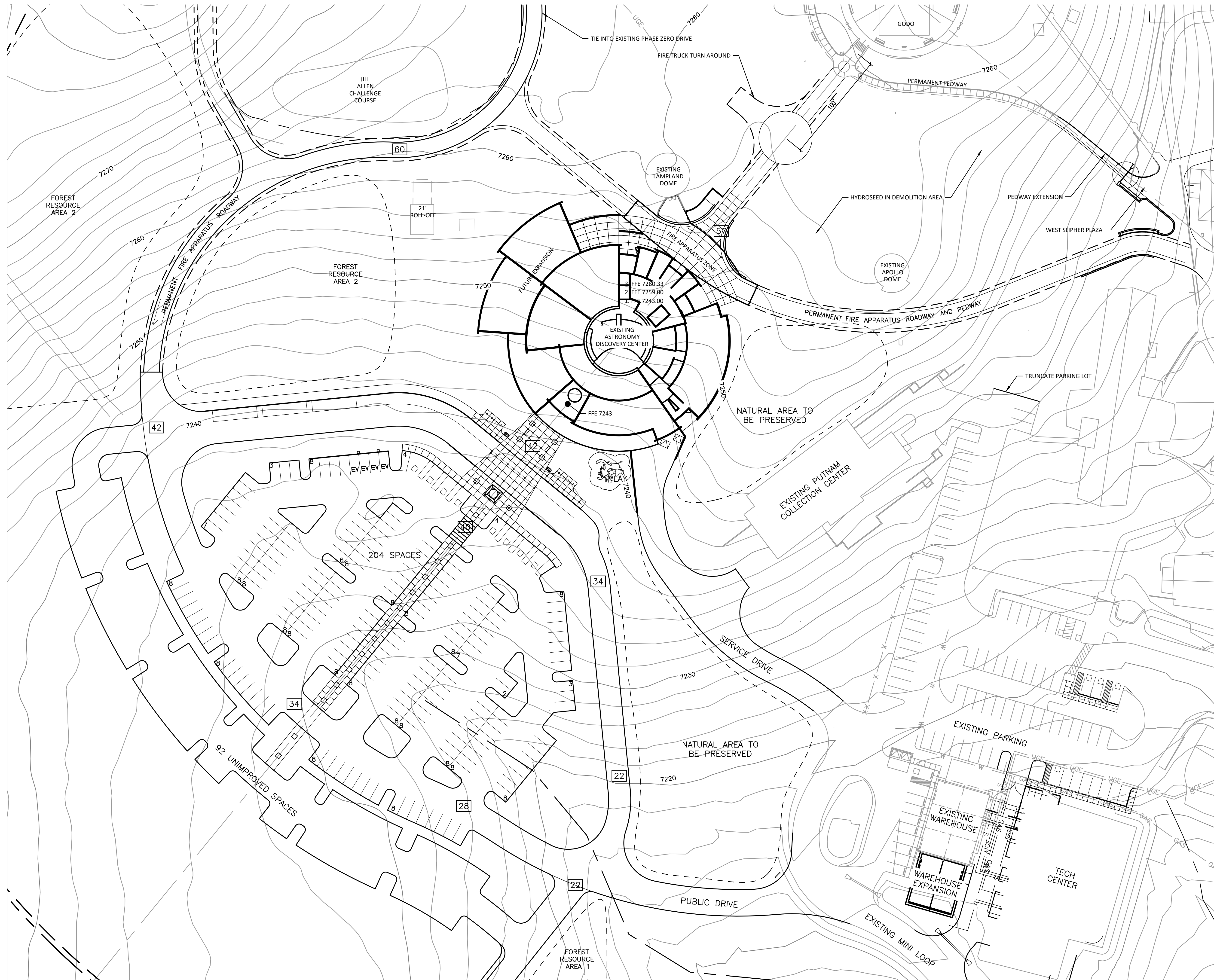
ASD2.1

PHASE 2 SCOPE

- A. TECH CENTER, WAREHOUSE EXPANSION, AND ADJOINING SITEWORK
- B. FIRE ACCESS AT NORTH AND WEST WITH FINAL PAVEMENTS
- C. EXTEND PHASE ZERO'S PATHS EAST OF THE GODO AREA AND NEW WEST SLIPPER PLAZA



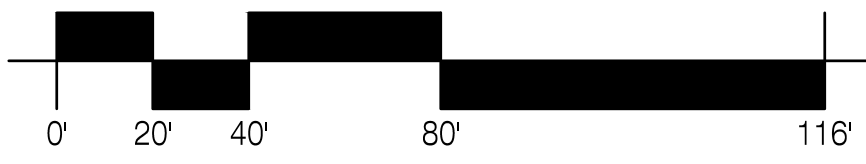
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1 SITE PLAN - PHASE 2

1" = 40'

2' CONTOURS



PROJECT: 19021
 SCALE: 1" = 40'
 DRAWN BY: ALP
 CHECKED BY: TW
 DATE: MAY 2020

TITLE: PHASE 2 - SITE PLAN

AS2.1



- PHASE 3 SCOPE**
- A. INTERPRETIVE ELEMENTS ALONG DISCOVERY AND LINEAR PLAZAS AND WEST GARDENS
 - B. WAYFINDING ELEMENTS
 - C. INDIVIDUAL DESTINATION FEATURES
 1. SATURN GATE
 2. PLUTO WALK PLAZA
 3. UNIVERSE/GALAXY WALK
 4. APOLLO DOME
 5. LAMPLAND DOME
 6. STEELE CENTER REMODEL
 7. SCIENCE PLAY AREAS 1, 2, & 3
 8. DARK SKY LAB
 9. TELESCOPE MOUNT

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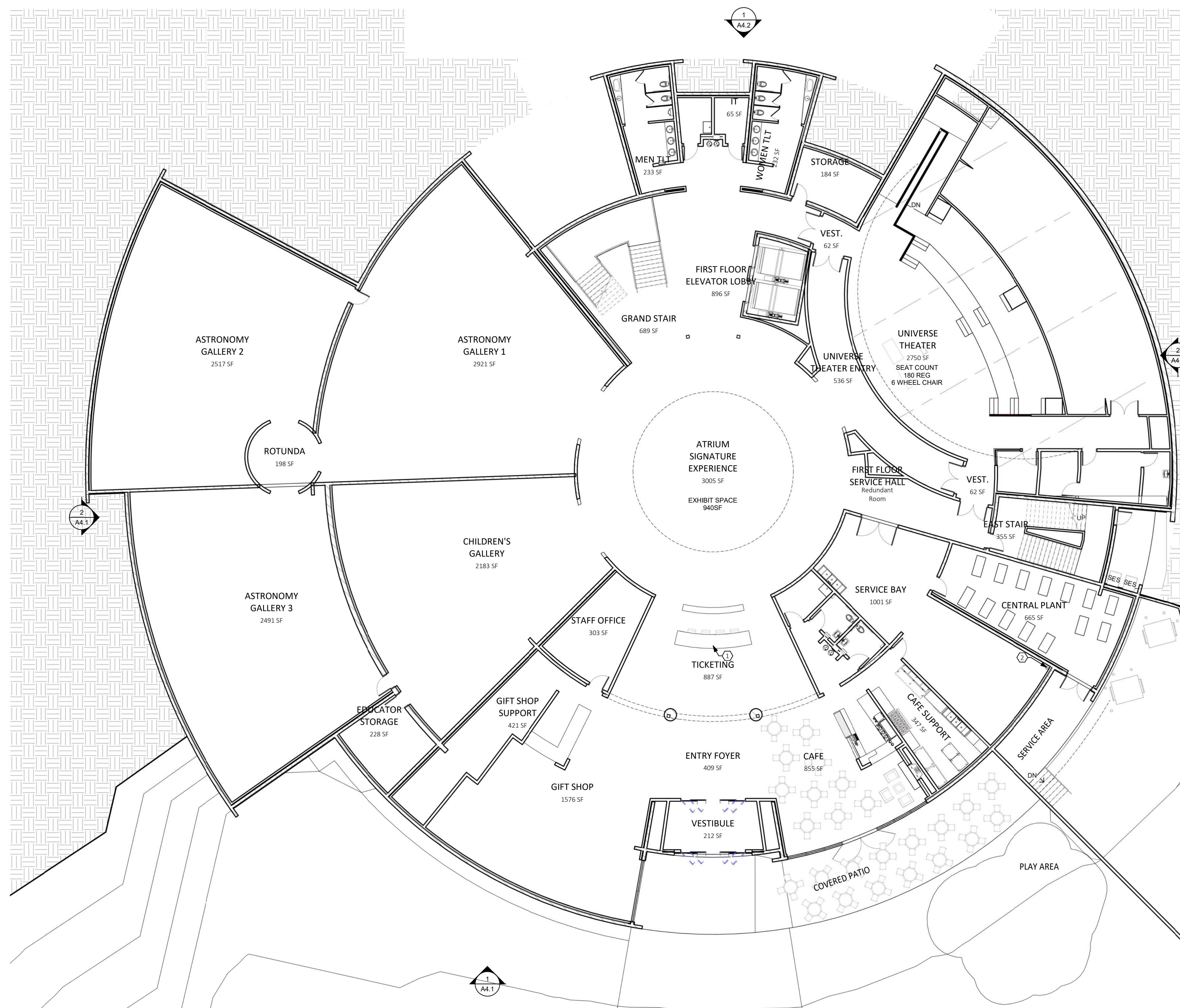


1 SITE PLAN - PHASE 3
 1" = 40'
 2' CONTOURS
 0 20' 40' 80' 116'

PROJECT: **19021**
 SCALE: 1" = 40'
 DRAWN BY: ALP
 CHECKED BY: TW
 DATE: MAY 2020

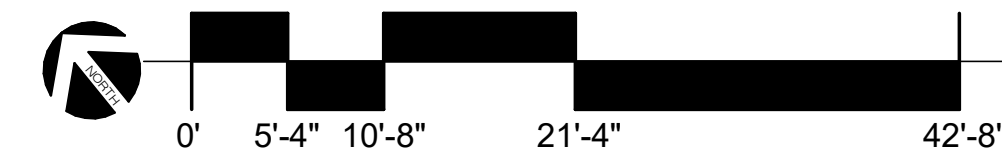
TITLE: PHASE 3 - SITE PLAN

AS3.1



1 FIRST FLOOR PLAN

3/32" = 1'-0"



KEYNOTES

- 1 MEMBERSHIP COUNTER
- 2 FIRE SPRINKLER RISER

GENERAL NOTES

- A. FOR REFERENCE, GICLAS IS 1600 SF, STEELE EXHIBIT/GIFT IS 1900 SF

BUILDING & SAFETY

Building & Safety. The ADC will be Type II – A non-combustible rated construction, protected steel primary frame, metal low-slope roof and non-combustible exterior siding. Exterior walls will be load bearing masonry or structural steel stud framing. Ceiling/floor assemblies at second and third levels will be rated composite metal deck and concrete with protected joists or steel beams. Ceiling/roof assemblies at the roofs will be protected metal deck/joists/steel beams and rigid insulation. Occupancy will be Type A1, A2 and A3 for various assembly uses. The Lowell Universe Theater will have 180 fixed seats, Occupancy A1. The Event Hall will provide space for 200 people at banquets or 300 people at lectures, Occupancy A2. The remainder will be exhibit halls and galleries, Occupancy A3. The building will have fire sprinklers and automatic fire detection/alarm systems with voice evacuation capabilities.

Code Data.
 Proposed Construction Type: II-A
 Allowable Building Area: 46,500 SF tabular area, maximum first floor area

Planned Gross Building Areas:

First Level	29,510 SF
Second Level	9,051 SF
Third Level	1,400 SF
Total Enclosed Area	39,961 SF

Planned Gross Occupied Roof Areas:

Dark Sky Planetarium	2,803 SF
Roof Garden	5,048 SF
Total Occupied Roof Area	7,851 SF

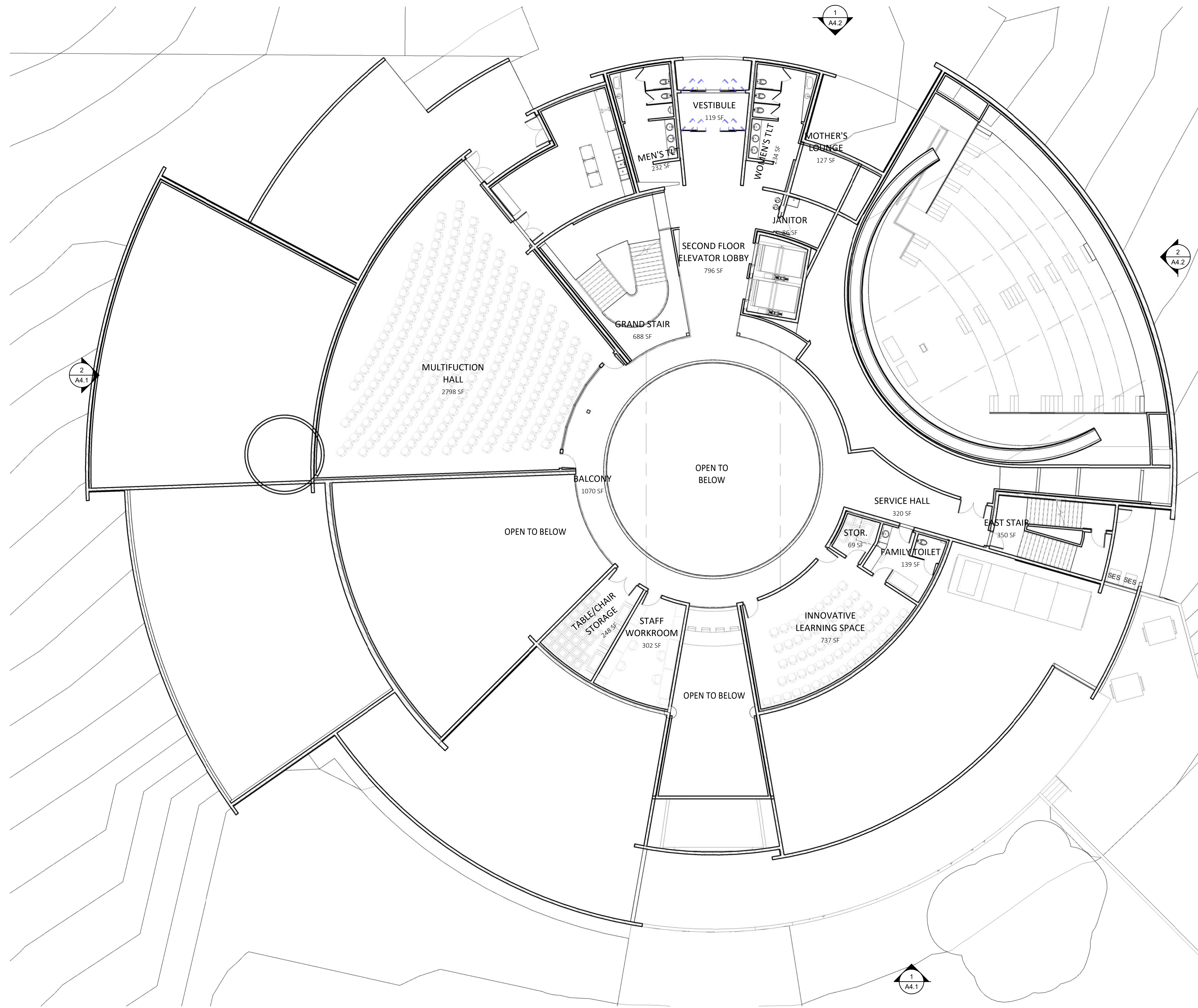
Planned Occupancy Classification:

Lowell Universe Theater	3,189 SF	180 fixed seats
Event Hall	2,836 SF	189 occupants
(15 NSF/occ.)	A2	
Innovative Learning Space	751 SF	50 occupants (15 NSF/occ.)
Astronomy Exhibit Hall	2,916 SF	95 occupants (30 NSF/occ.)
A3		
Children's Exhibit Gallery	2,540 SF	85 occupants (30 NSF/occ.)
A3		
Optional Exhibit Hall 3	2,767 SF	93 occupants (30 NSF/occ.)
A3		
Optional Exhibit Hall 4	2,231 SF	75 occupants (30 NSF/occ.)
A3		
Café	851 SF	58 occupants (15 NSF/occ.)
A2		
Gift Shop	1,576 SF	27 occupants (60 GSF/occ.)
A3		
Dark Sky Planetarium rooftop fixed seats	1,720 SF	200
A1		
Rooftop Terrace 1	3,133 SF	209 occupants (15 NSF/occ.)
A3		
Rooftop Terrace 2	1,207 SF	81 occupants (15 NSF/occ.)
A3		

Allowable Building Height: 4 stories above grade plane, 85' above grade plane for sprinklered building, per IBC. Zoning Code is 60' for Public Facilities

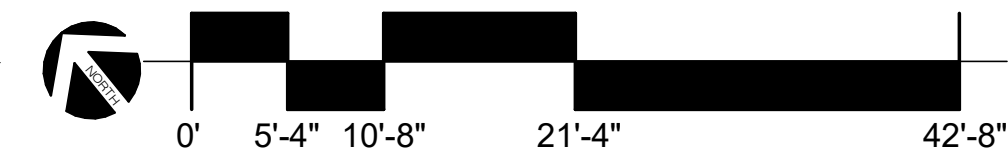
Planned Building Height: 50'-8" to top of parapet third level core area. 22'-8" at front

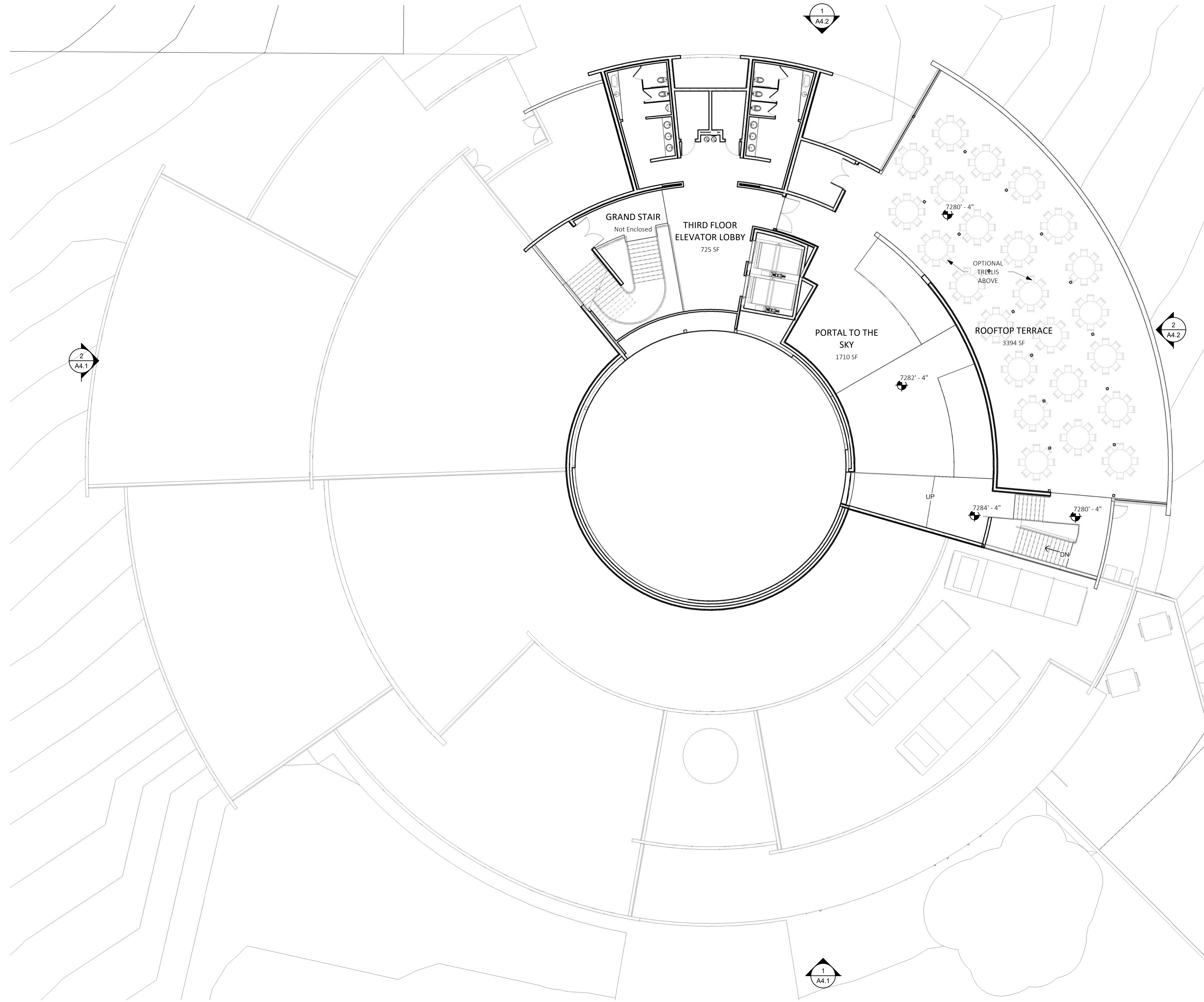




1 SECOND FLOOR PLAN

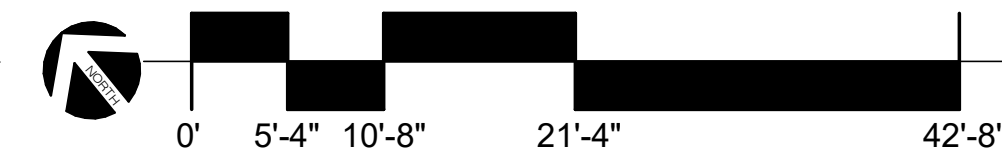
3/32" = 1'-0"





1 THIRD FLOOR PLAN

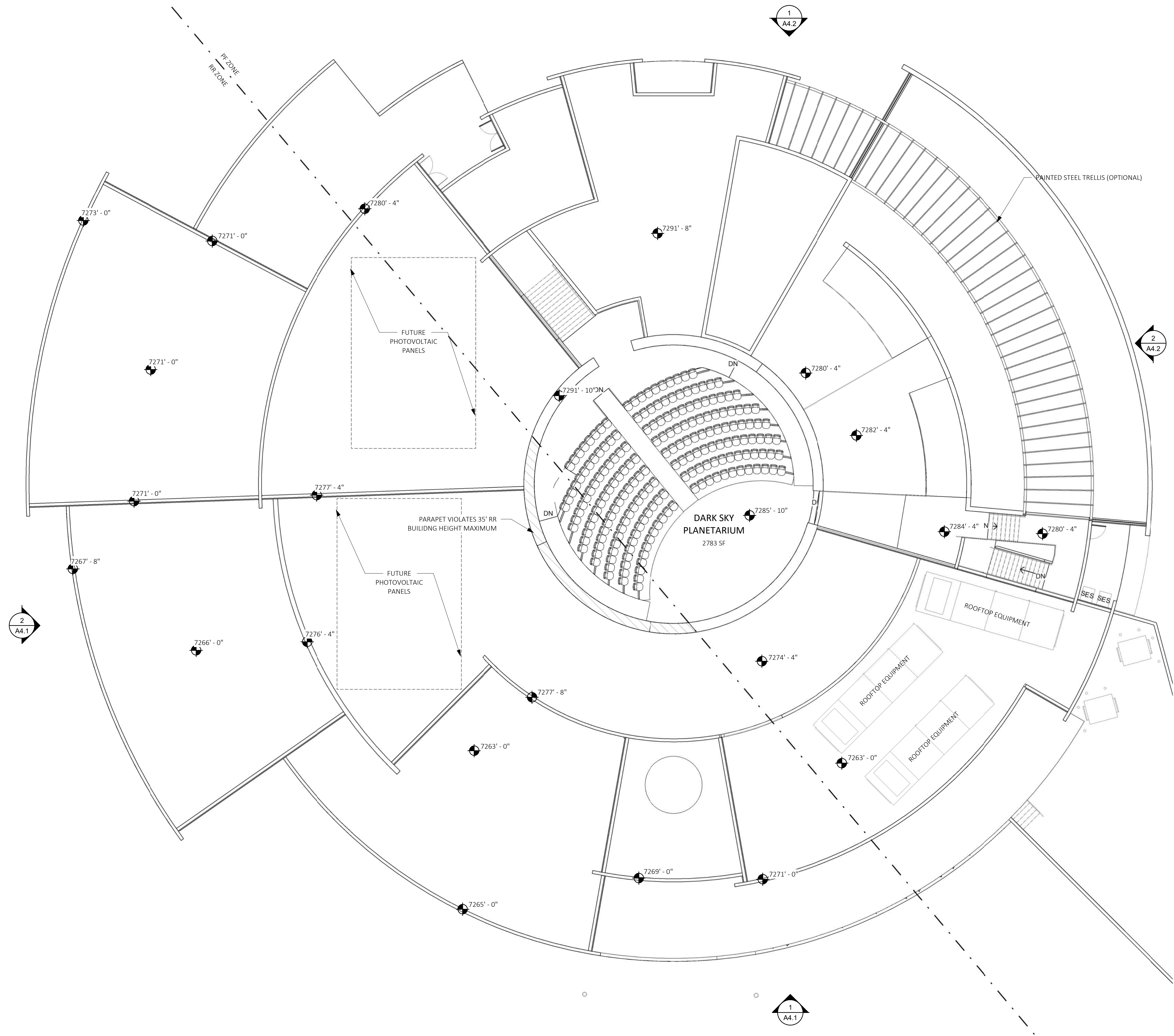
3/32" = 1'-0"



PROJECT: **19021**
 SCALE: 3/32" = 1'-0"
 DRAWN BY: ALP
 CHECKED BY: TW
 DATE: MAY 2020

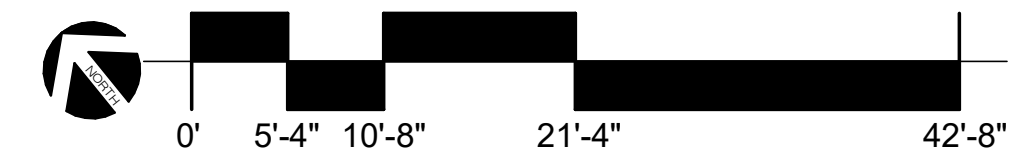
TITLE: THIRD FLOOR PLAN

A1.3



1 ROOF PLAN

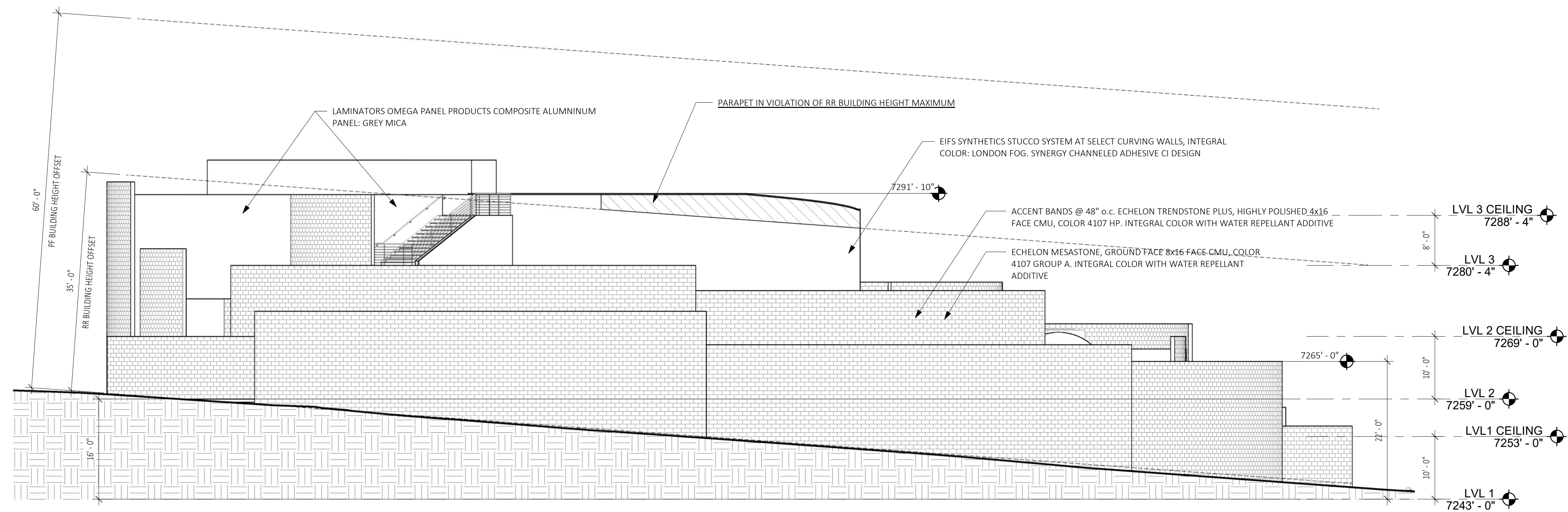
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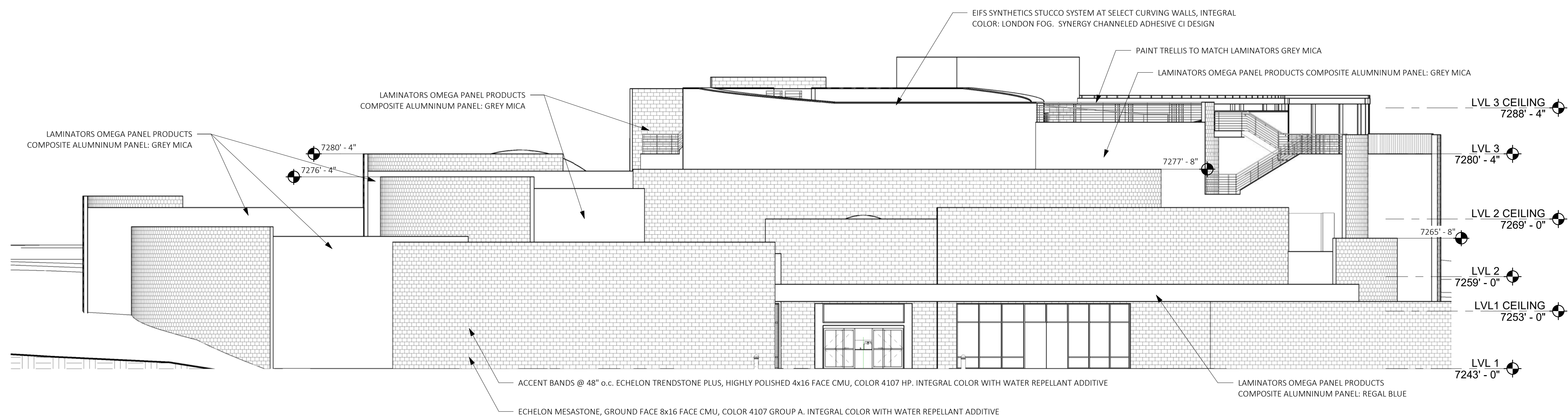
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 FLAGSTAFF, AZ

PROJECT: **19021**
 SCALE: 3/32" = 1'-0"
 DRAWN BY: ALP
 CHECKED BY: TW
 DATE: MAY 2020

TITLE: ROOF PLAN



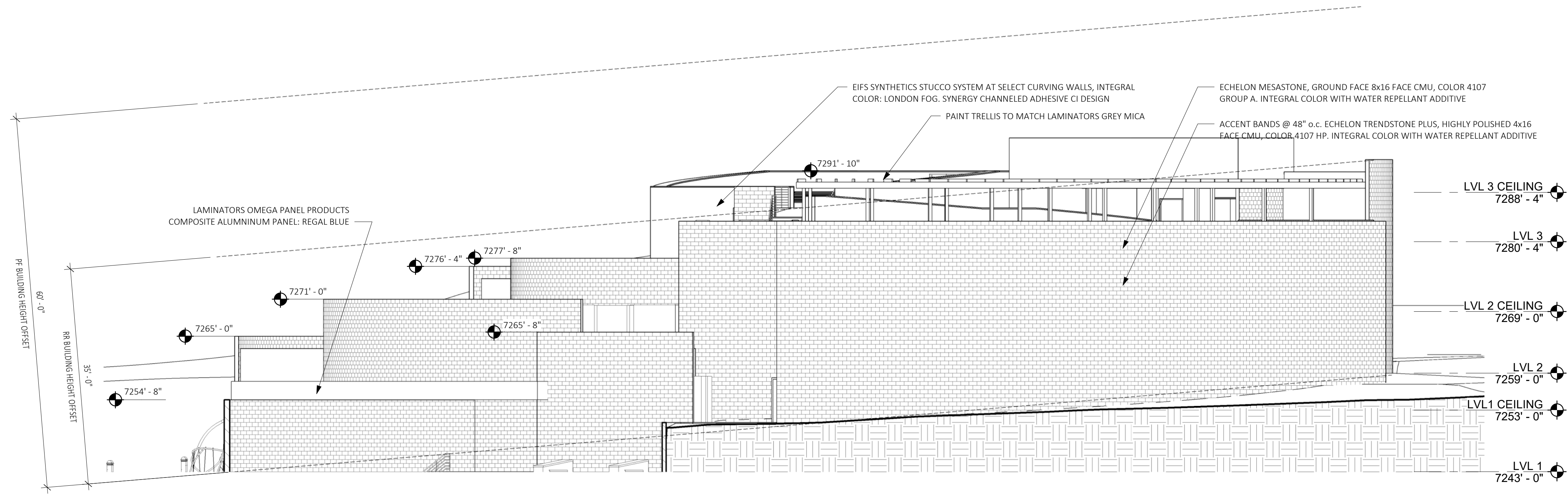
2 NORTHWEST ELEVATION
3/32" = 1'-0"



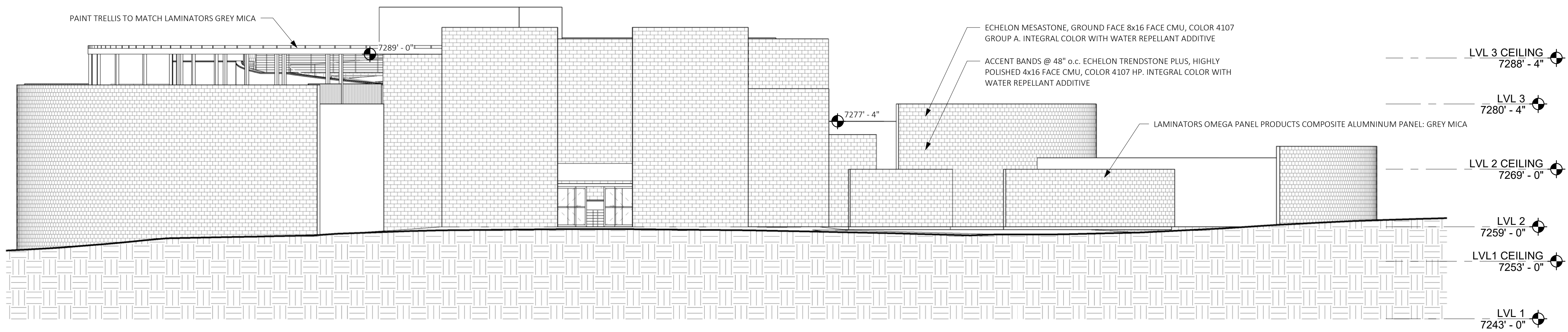
1 SOUTHWEST ELEVATION - GUEST ENTRY
3/32" = 1'-0"

5/28/2020 9:56:45 AM





② SOUTHEAST ELEVATION
3/32" = 1'-0"



① NORTHEAST ELEVATION - CAMPUS ENTRY
3/32" = 1'-0"