

DETAILED DESCRIPTION: GENERAL STANDARDS FOR CONDITIONAL USES

When reviewing and application for a conditional use permit, the Planning Commission must determine that the proposed conditional use satisfies the standards listed on this form, as well as any use-specific standards that may apply to the proposal. It is the applicant's responsibility to address all general and specific standards for a conditional use. (See Title Seven – Conditional Use Regulations at:

https://codelibrary.amlegal.com/codes/clevelandhths/latest/clevelandhths_oh/0-0-0-13983#JD_Part11T.7

1. Provide a brief narrative describing your use, including detail to help the Planning Commission understand your use such as number of full-time employees, hours of operation, how the building and/or the site will be used, number of persons who you will serve, the maximum number of people that will be serving at one time, any specific details that explain how the building or site is used, for example day care centers have designated drop-off and pick up parking spaces.

TWG Development, LLC has a planned 52-unit multifamily project located at 2228 Noble Rd., Cleveland Heights, OH 44112. The project will be one, four story building on approximately 2.1 acres. It is a LIHTC project that will rent to individuals at or below 60% of the median income. The land is currently owned by the City of Cleveland Heights, who approved the sale under option contract to TWG Development. The seven parcels under contract are parcel ID numbers 681-06-004, 681-06-121, 681-38-008, 681-38-009, 681-38-010, 681-38-012, and 681-38-080.

The building will be comprised of one, two, and three bedroom units. The unit mix cannot be changed; since TWG is receiving tax credits from the Ohio Housing and Finance Agency (OHFA), there are certain obligations that TWG has committed to. TWG has committed to using NGBS Silver for sustainability and energy efficiency. Amenities include a leasing office, entry lobby, common restroom, playground, picnic tables, indoor bike storage, and four EV parking stalls. TWG is requesting a conditional use permit for parking located on the "A" Single-Family zoned properties. If these parcels are adjacent and contiguous to an S-2 zoned site, in which they are, the developer may apply for a conditional use to allow for parking in order to meet the minimum parking requirements.

2. The conditional the use will be in general accord with the purpose, intent, and basic planning objectives of the Zoning Code, and with objectives for the district in which it would be located. Describe how your use would be viewed by eachv of the following general standards for conditional uses (a through j).

- a. The establishment, maintenance, or operation of the conditional use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare.

TWG Development has worked tirelessly and will continue to do so to make sure the conditional use puts no one, including community members and neighbors, in danger in terms of a public health, safety, morals, comfort, or general welfare aspect.

TWG Development will operate this property with the upmost dignity and respect when it comes to community members and the surrounding area.

The conditional use for parking will, in fact, improve these aspects of community by alleviating street parking in the surrounding neighborhood and greatly benefiting the potential development. TWG has elected to operate their multifamily development using the minimum 1:1 parking requirement. Rather than applying for a parking reduction, which the city allows for, TWG believes that it is important for each multifamily unit to have one space allowed for parking to reduce potential street parking, which would negatively affect neighboring residents.

- b. The conditional use will be designed, constructed, operated, and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity, and that such use will not essentially change the character of the area.

TWG's Design Team is determined to make sure the site and the advancements made have only positive enhancements to the neighborhood and to the City of Cleveland Heights as a whole. The conditional use for parking will uphold the character of the neighborhood, while taking away street parking in the adjacent residential area. The character of the neighborhood will be maintained so that parking overflow from the development will not become an issue, which in essence could lead to street congestion due to street parking from residents.

- c. The conditional use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish or impair property values within the neighborhood.

Actions are being taken to maintain the current protection between property lines. TWG Development is working to ensure that all current barriers are either maintained or added to to ensure the protection of the neighbors. This includes, but is not limited to, a landscaping plan around the parking, along with a 6' privacy fence to block both views and noise from the current development to nearby property owners.

The conditional use will provide the development to stay contained and not spread throughout the neighborhood. Because of this, property values will not diminish within the surrounding neighborhood.

- d. The establishment of the conditional use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.

TWG Development and the conditional use will not impede the orderly development of the surrounding area.

The conditional use for parking will do the exact opposite of impede on the surrounding area, and will help alleviate parking issues that may be caused without the conditional use. It will help maintain the feel of the surrounding neighborhood.

- e. Adequate utilities, access roads, drainage, and necessary facilities have been or are being provided.

All utilities are available to the site. Regarding drainage, TWG is using underground storm.

- f. Adequate measures have been or will be taken to provide ingress and egress designed as to minimize traffic congestion in the public streets.

Measures will be taken to ensure the improvements will not have severe impact on traffic congestion in the public streets.

The conditional use for parking will ensure that there is not congestion caused to public streets that may otherwise be caused without the conditional use. The parking will alleviate street parking in the surrounding neighborhood and will help contain the development and its residents to just the site.

- g. The establishment of the conditional use will not be detrimental to the economic welfare of the community by creating excessive additional requirements at public cost for public facilities such as police, fire, and schools.

TWG Development, if successful through the permitting and approvals process, will be purchasing the land and financing the development at their sole cost. TWG has a by-right, 10-year 100% tax abatement based on the CRA. With that said, TWG is required to hold the property for a minimum 15 years to stay in compliance with OHFA. Beginning year 11, TWG will begin to pay property taxes, which will positively affect police, fire, and schools.

- h. There is minimal potential for future hardship on the conditional use that could result from the proposed use being surrounded by uses permitted by right that are incompatible.

The conditional use will cause no hardship in the future. The surrounding uses in the area include single family, businesses, and multifamily; very much a mixed-use community. TWG's proposed multifamily development fits right in with that. Finally, the conditional use permit for parking is next to an S-2 zoned parcel. Based on the current zoning, receiving a conditional use permit for the additional adjacent parcels zoned single family is the best future use for it.

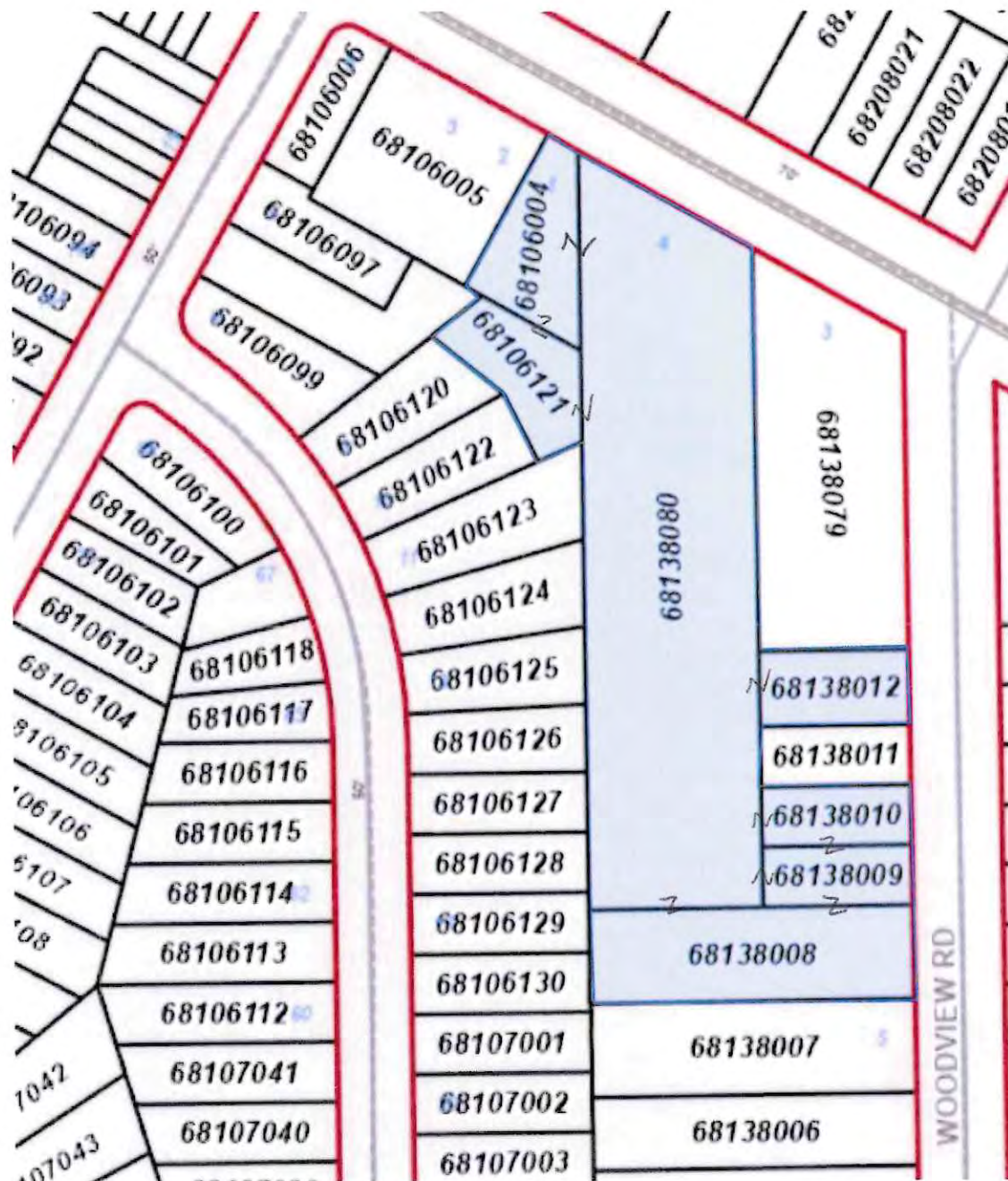
- i. The conditional use shall, in all other respects, conform to the applicable regulations of the district in which it is located, as well as the specific supplemental conditions set forth in Chapter 1153 of the Zoning Code.

The conditional use will conform to Chapter 1153 of the Zoning Code as well as all other applicable district regulations. The conditional use will adhere to the regulations laid out in Chapter 1153 as well as section 1153.03 Specific Area, Width, and Yard Regulations. This is shown on the site plan.

- j. That the conditional use shall, in all other aspects, conform to the applicable regulations of the district in which it is located as well as the specific supplemental conditions set forth in Chapter 1153 of the Zoning Code.

The conditional use will conform to Chapter 1153 of the Zoning Code as well as all other applicable district regulations. The conditional use will adhere to the regulations laid out in Chapter 1153 as well as section 1153.03 Specific Area, Width, and Yard Regulations. This is shown on the site plan.

Request for 7 parcels to be joined





NOBLE STATION PLANNING SET

2228 NOBLE ROAD, CLEVELAND HEIGHTS, OH



PROJECT DESCRIPTION

THE SITE IS LOCATED IN CLEVELAND HEIGHTS, OH. THE SITE CONSISTS OF 2228 NOBLE ROAD (PARCEL 681-38-004), 890 WOODVIEW ROAD (PARCEL 681-38-004), 868 WOODVIEW ROAD (PARCEL 681-38-004), 860 WOODVIEW ROAD (PARCEL 681-38-004), AND PARCEL 681-38-004 AND PARCEL 681-06-121.

THE PROPOSED PROJECT CONSISTS OF A 4 STORY RESIDENTIAL USE BUILDING CONSISTING OF 52 MULTI-FAMILY RENTAL RESIDENTIAL DWELLING UNITS AND 52 PARKING SPACES.

<u>ZONING:</u>	S-2 MIXED (MF-2 USE)
<u>LOT AREA:</u>	94,133 SF (2.161 ACRES)
<u>LAND USE:</u>	R-2 (RESIDENTIAL)
<u>TOTAL GROSS AREA:</u>	48,744 SF
<u>PROPOSED RESIDENT PARKING:</u>	52 PARKING STALLS
<u>ALLOWABLE HEIGHT:</u>	4 STORY (60'-0") MAXIMUM
<u>PROPOSED ROOF HEIGHT:</u>	4 STORY (47'-0")

NOBLE STATION		TWG ARCHITECTURE					
UNIT TYPE		LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	TOTAL	% OF TOTAL
A1	1 BEDROOM UNIT	2	2	2	2	8	15%
A2	1 BEDROOM UNIT	0	1	1	1	3	6%
A2-UFAS M	1 BEDROOM UNIT	1	0	0	0	1	2%
B1	2 BEDROOM UNIT	1	2	2	2	7	13%
B1-UFAS H/V	2 BEDROOM UNIT	1	0	0	0	1	2%
B2	2 BEDROOM UNIT	4	4	4	4	16	31%
B2-UFAS H/V	2 BEDROOM UNIT	1	0	0	0	1	2%
B2-UFAS M	2 BEDROOM UNIT	0	1	1	1	3	6%
B2.1	2 BEDROOM UNIT	1	0	0	0	1	2%
C1	3 BEDROOM UNIT	1	2	2	1	6	12%
C1-UFAS M	3 BEDROOM UNIT	1	0	0	1	2	4%
C2	3 BEDROOM UNIT	0	1	1	1	3	6%
TOTAL		13	13	13	13	52	100%

Parking Required per Zoning Code				
Dwelling Units:	52	units @	1 SPACE PER UNIT	52
TOTAL SPACES REQUIRED PER TABLE 1161.03 OF THE CLEVELAND HEIGHTS ZONING ORDINANCE: 1 PARKING SPACE PER UNIT				

Parking Provided (Unbundled)					
	Standard	ADA			Total
Total Residential Parking	48	4			52
Parking Ratio/Unit	1 to 1				

13 Bicycle Spaces

PROJECT DIRECTORY

OWNER:
TWG NOBLE, LP
1301 E WASHINGTON ST, SUITE 100
INDIANAPOLIS, IN 46202
P: 317.690.3185
CONTACT: ALEX FRAZIER

CIVIL ENGINEER:
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CONTACT: JOSHUA CRIBELAR

MECHANICAL ENGINEER:
GnA ENGINEERING
874 CHELTENHAM WAY
AVON, IN 46123
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CONTACT: JEFF PERKEY

ELECTRICAL ENGINEER:
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CONTACT: MARK JACKSON

PLUMBING ENGINEER:
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INTERIOR DESIGNER:
TWG DEVELOPMENT, LLC
1301 E WASHINGTON ST, SUITE 100
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CONTACT: DANIELLE DOWNER

ARCHITECT:
TWG DEVELOPMENT, LLC
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CONTACT: JOHN RUTHVEN

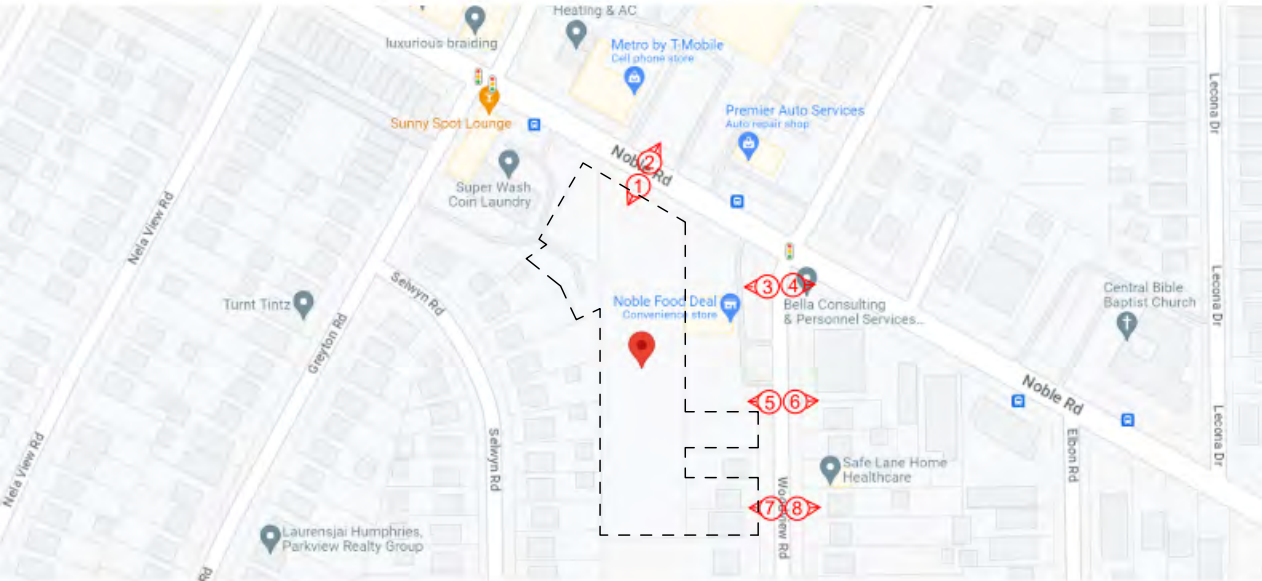
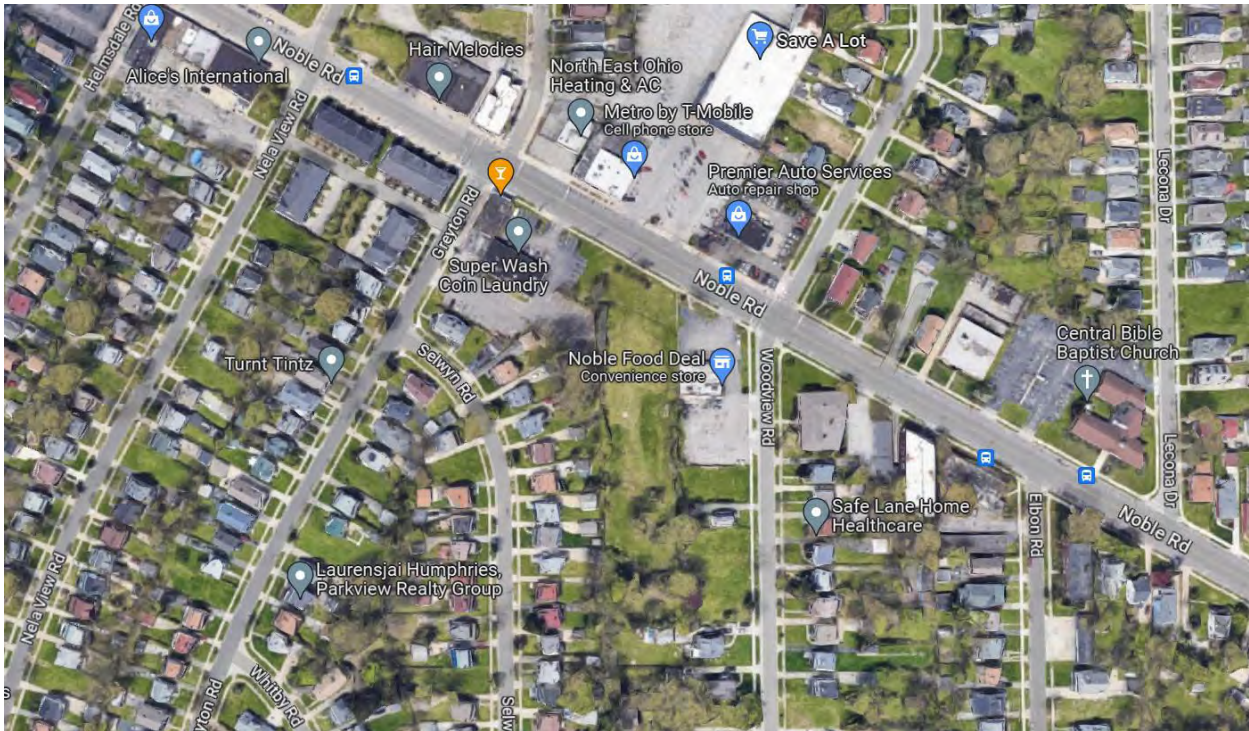
LANDSCAPE ARCHITECT:
ROB MORGAN LLS
PO BOX 294
NOVELTY, OH 44072
P: 440.338.1119
CONTACT: ROB MORGAN

STRUCTURAL ENGINEER:
PROVIDENCE ENGINEERING
106 ISABELLA ST, SUITE 301
PITTSBURG, PA 15212
P: 717.275.6223
CONTACT: ARRON KING

GREEN CONSULTANT:
TSI ENERGY SOLUTIONS
4650 KILLARNY DR
CARMEL, IN 46033
P: 317.697.4028
CONTACT: TRAVIS DUNN

SHEET INDEX

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G0.00	PROJECT INFORMATION
G0.01	SITE PHOTOS
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C400	GRADING PLAN
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L200	LANDSCAPE SPECS/DETAILS
L300	LANDSCAPE SPECIFICATIONS
L400	LANDSCAPE PLAN-COLORED
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AP2.02	3RD & 4TH FLOOR PLAN
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AP3.01	BUILDING SECTIONS
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7 - WOODVIEW ROAD LOOKING W



6 - WOODVIEW ROAD LOOKING E



5 - WOODVIEW ROAD LOOKING W



4 - NOBLE ROAD & WOODVIEW ROAD LOOKING E



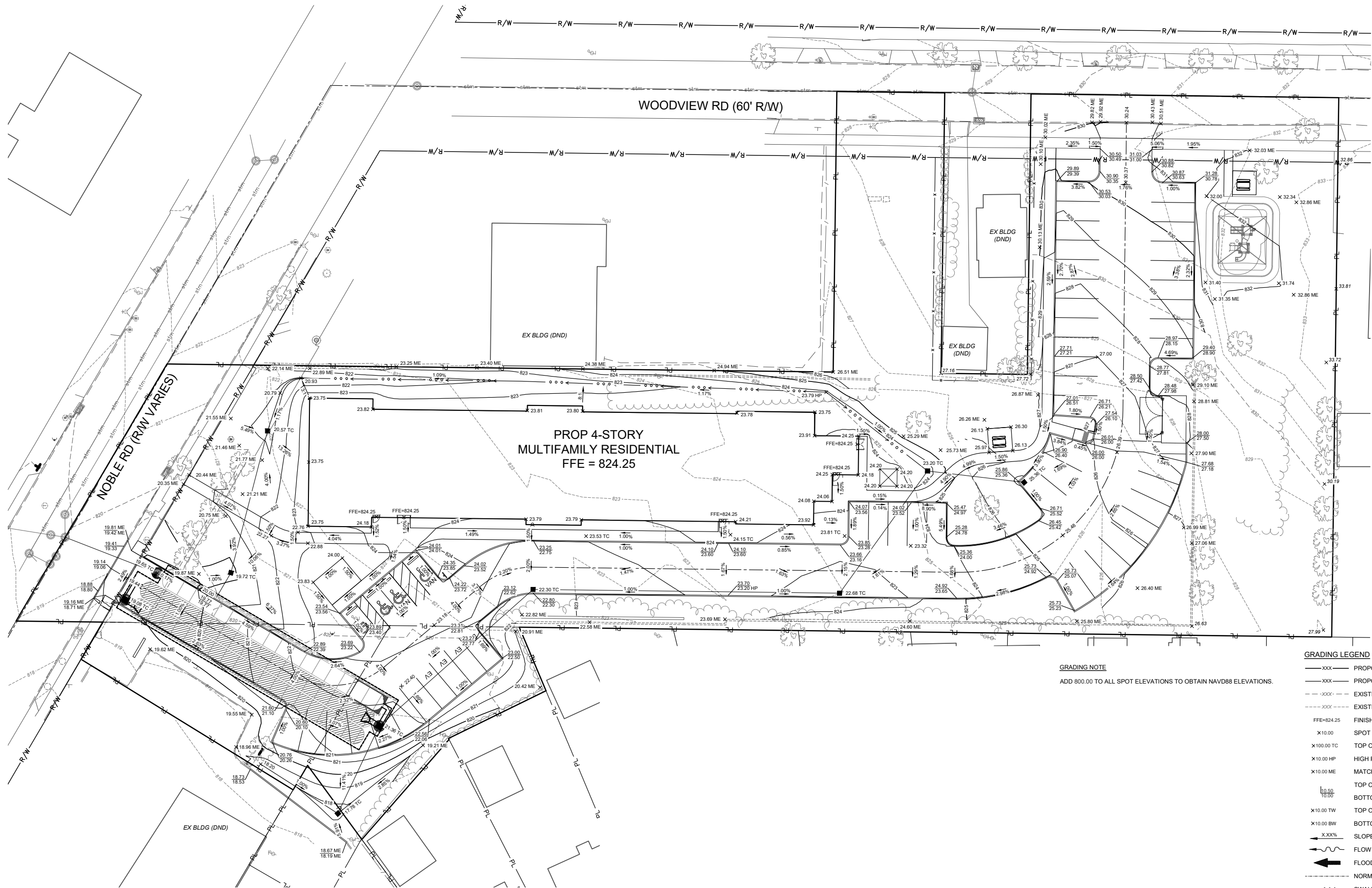
3 - NOBLE ROAD & WOODVIEW ROAD LOOKING W



2 - NOBLE ROAD LOOKING NE



1 - NOBLE ROAD LOOKING SW

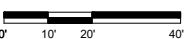


GRADING NOTE

ADD 800.00 TO ALL SPOT ELEVATIONS TO OBTAIN NAVD88 ELEVATIONS.

GRADING LEGEND

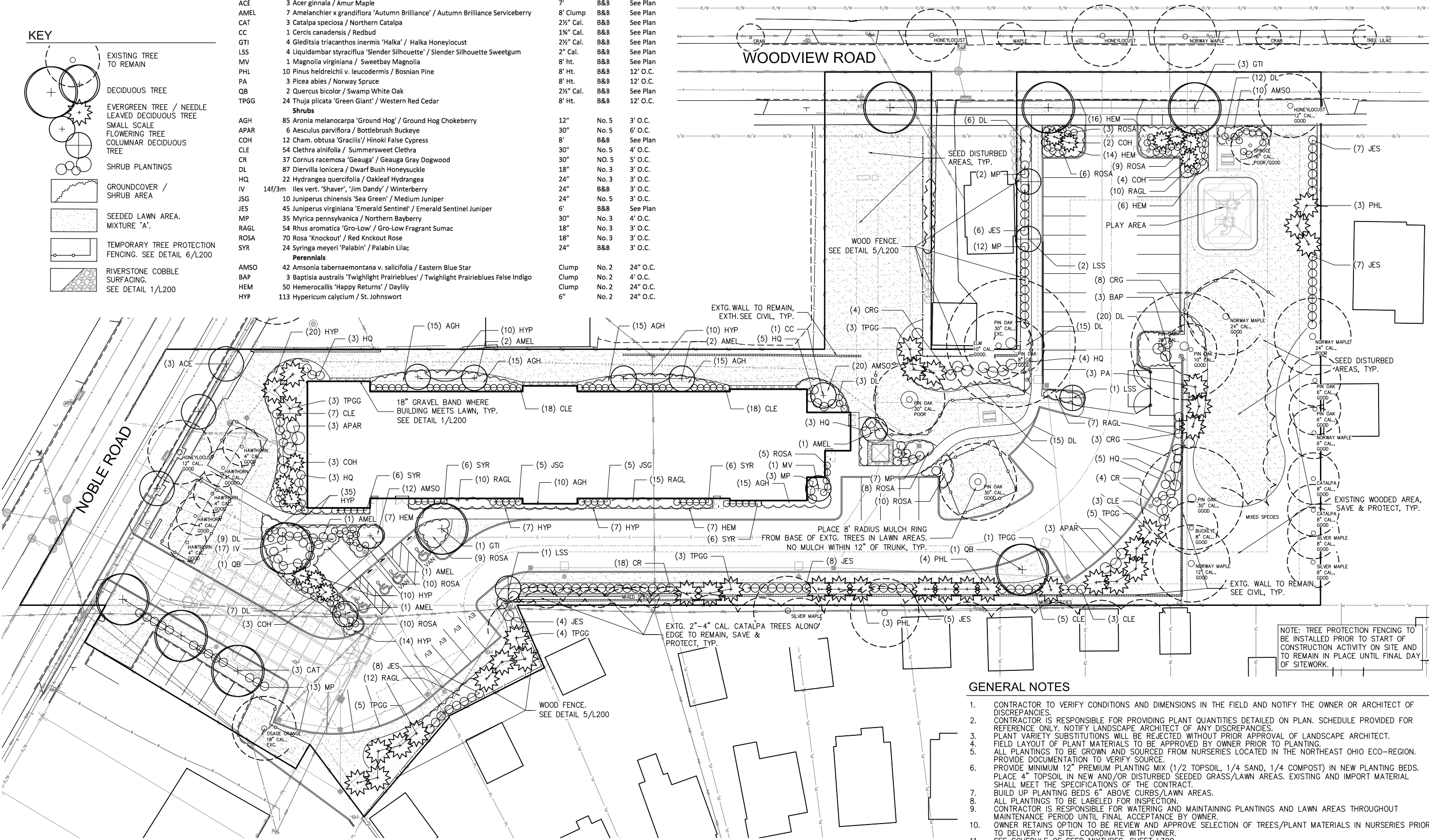
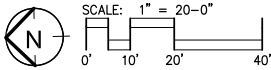
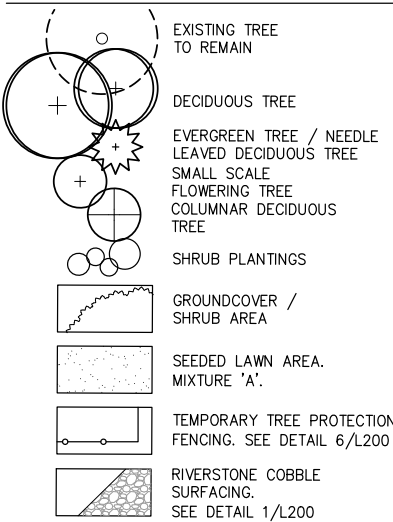
- XXX--- PROPOSED MAJOR CONTOUR
- XXX--- PROPOSED MINOR CONTOUR
- - -XXX- - - EXISTING MAJOR CONTOUR
- - -XXX- - - EXISTING MINOR CONTOUR
- FFE=824.25 FINISHED FLOOR ELEVATION
- X10.00 SPOT ELEVATION
- X100.00 TC TOP OF CASTING ELEVATION
- X10.00 HP HIGH POINT ELEVATION
- X10.00 ME MATCH EXISTING ELEVATION
- 10.50 TOP OF CURB ELEVATION
- 10.00 BOTTOM OF CURB ELEVATION
- X10.00 TW TOP OF WALL ELEVATION
- X10.00 BW BOTTOM OF WALL ELEVATION
- >XXX<- SLOPE ARROW
- >--- FLOW ARROW
- >--- FLOOD ROUTE
- NORMAL POOL
- > o o o SWALE
- ATG ADJUST TO GRADE



PLANT SCHEDULE

Key	Qty	Botanical / Common Name	Size	Cond.	Spacing
Trees					
ACE	3	Acer ginnala / Amur Maple	7"	B&B	See Plan
AMEL	7	Amelanchier x grandiflora 'Autumn Brilliance' / Autumn Brilliance Serviceberry	8' Clump	B&B	See Plan
CAT	3	Catalpa speciosa / Northern Catalpa	2½" Cal.	B&B	See Plan
CC	1	Cercis canadensis / Redbud	1¾" Cal.	B&B	See Plan
GTI	4	Gleditsia triacanthos inermis 'Halka' / Halka Honeylocust	2¾" Cal.	B&B	See Plan
LSS	4	Liquidambar styraciflua 'Slender Silhouette' / Slender Silhouette Sweetgum	2" Cal.	B&B	See Plan
MV	1	Magnolia virginiana / Sweetbay Magnolia	8' ht.	B&B	See Plan
PHL	10	Pinus heldreichii v. leucodermis / Bosnian Pine	8' ht.	B&B	12' O.C.
PA	3	Picea abies / Norway Spruce	8' ht.	B&B	12' O.C.
QB	2	Quercus bicolor / Swamp White Oak	2¾" Cal.	B&B	See Plan
TPGG	24	Thuja plicata 'Green Giant' / Western Red Cedar	8' Ht.	B&B	12' O.C.
Shrubs					
AGH	85	Aronia melanocarpa 'Ground Hog' / Ground Hog Chokeberry	12"	No. 5	3' O.C.
APAR	6	Aesculus parviflora / Bottlebrush Buckeye	30"	No. 5	6' O.C.
COH	12	Cham. obtusa 'Gracilis' / Hinoki False Cypress	8"	B&B	See Plan
CLE	54	Clethra alnifolia / Summersweet Clethra	30"	No. 5	4' O.C.
CR	37	Cornus racemosa 'Geauga' / Geauga Gray Dogwood	30"	NO. 5	5' O.C.
DL	87	Diervilla lonicera / Dwarf Bush Honeysuckle	18"	No. 3	3' O.C.
HQ	22	Hydrangea quercifolia / Oakleaf Hydrangea	24"	No. 3	3' O.C.
IV	14f/3m	Ilex vert. 'Shaver', 'Jim Dandy' / Winterberry	24"	B&B	3' O.C.
JSG	10	Juniperus chinensis 'Sea Green' / Medium Juniper	24"	No. 5	3' O.C.
JES	45	Juniperus virginiana 'Emerald Sentinel' / Emerald Sentinel Juniper	6"	B&B	See Plan
MP	35	Myrica pennsylvanica / Northern Bayberry	30"	No. 3	4' O.C.
RAGL	54	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	18"	No. 3	3' O.C.
ROSA	70	Rosa 'Knockout' / Red Knockout Rose	18"	No. 3	3' O.C.
SYR	24	Syringa meyeri 'Paladin' / Paladin Lilac	24"	B&B	3' O.C.
Perennials					
AMSO	42	Amsonia tabernaemontana v. salicifolia / Eastern Blue Star	Clump	No. 2	24" O.C.
BAP	3	Baptisia australis 'Twilight Prairieblues' / Twilight Prairieblues False Indigo	Clump	No. 2	4' O.C.
HEM	50	Heemerallis 'Happy Returns' / Daylily	Clump	No. 2	24" O.C.
HYP	113	Hypericum calycium / St. Johnswort	6"	No. 2	24" O.C.

KEY



GENERAL NOTES

- CONTRACTOR TO VERIFY CONDITIONS AND DIMENSIONS IN THE FIELD AND NOTIFY THE OWNER OR ARCHITECT OF DISCREPANCIES.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING PLANT QUANTITIES DETAILED ON PLAN. SCHEDULE PROVIDED FOR REFERENCE ONLY. NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES.
- PLANT VARIETY SUBSTITUTIONS WILL BE REJECTED WITHOUT PRIOR APPROVAL OF LANDSCAPE ARCHITECT.
- FIELD LAYOUT OF PLANT MATERIALS TO BE APPROVED BY OWNER PRIOR TO PLANTING.
- ALL PLANTINGS TO BE GROWN AND SOURCED FROM NURSERIES LOCATED IN THE NORTHEAST OHIO ECO-REGION. PROVIDE DOCUMENTATION TO VERIFY SOURCE.
- PROVIDE MINIMUM 12" PREMIUM PLANTING MIX (1/2 TOPSOIL, 1/4 SAND, 1/4 COMPOST) IN NEW PLANTING BEDS. PLACE 4" TOPSOIL IN NEW AND/OR DISTURBED SEEDING GRASS/LAWN AREAS. EXISTING AND IMPORT MATERIAL SHALL MEET THE SPECIFICATIONS OF THE CONTRACT.
- BUILD UP PLANTING BEDS 6" ABOVE CURBS/LAWN AREAS.
- ALL PLANTINGS TO BE LABELED FOR INSPECTION.
- CONTRACTOR IS RESPONSIBLE FOR WATERING AND MAINTAINING PLANTINGS AND LAWN AREAS THROUGHOUT MAINTENANCE PERIOD UNTIL FINAL ACCEPTANCE BY OWNER.
- OWNER RETAINS OPTION TO BE REVIEW AND APPROVE SELECTION OF TREES/PLANT MATERIALS IN NURSERIES PRIOR TO DELIVERY TO SITE. COORDINATE WITH OWNER.
- SEE SCHEDULE OF SEED MIXTURES, SHEET L300.
- PROVIDE 6" DIAMETER MULCH RING AROUND NEW TREES IN LAWN AREAS. DO NOT MOUND AGAINST TRUNK.
- EXISTING TREES TO REMAIN ARE TO BE PRUNED BY A CERTIFIED ARBORIST TO REMOVE DISEASED, DAMAGED, DYING BRANCHES AND TO IMPROVE THE GENERAL HEALTH OF THE TREE AND ELIMINATE HAZARDOUS CONDITIONS.
- SEE SHEET L200 FOR TREE PROTECTION DETAIL AND SPECIFICATIONS.

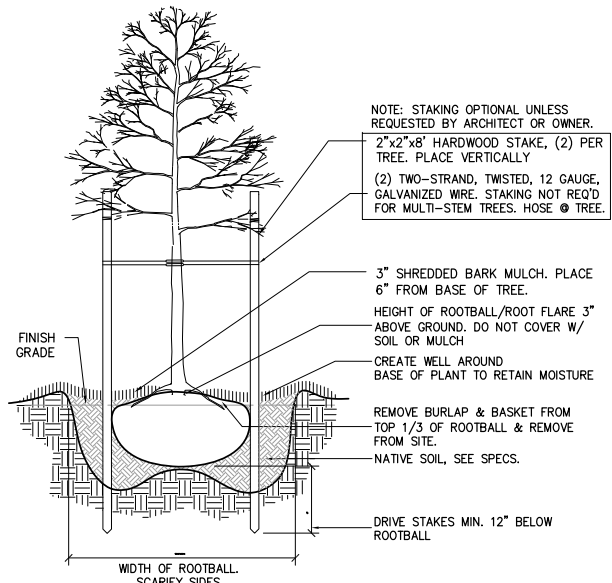
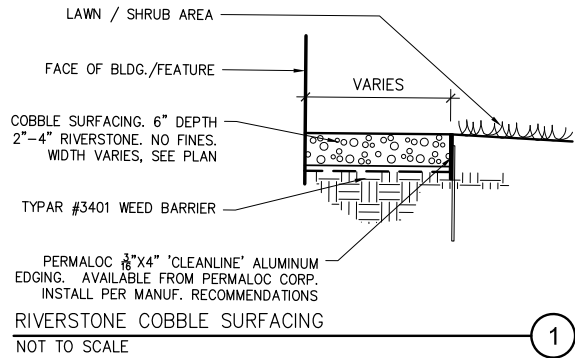


NOBLE STATION

PRELIMINARY
NOT FOR CONSTRUCTION

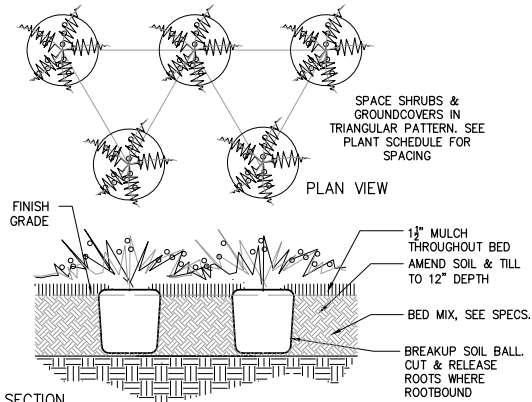
08/24/23

LANDSCAPE
PLAN
L100



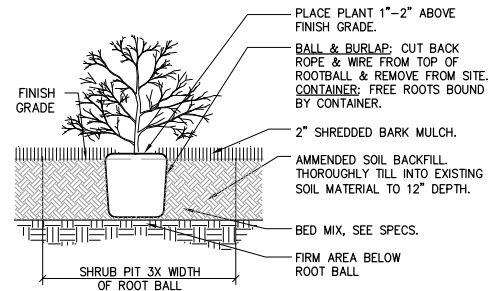
TREE PLANTING & STAKING

NOT TO SCALE



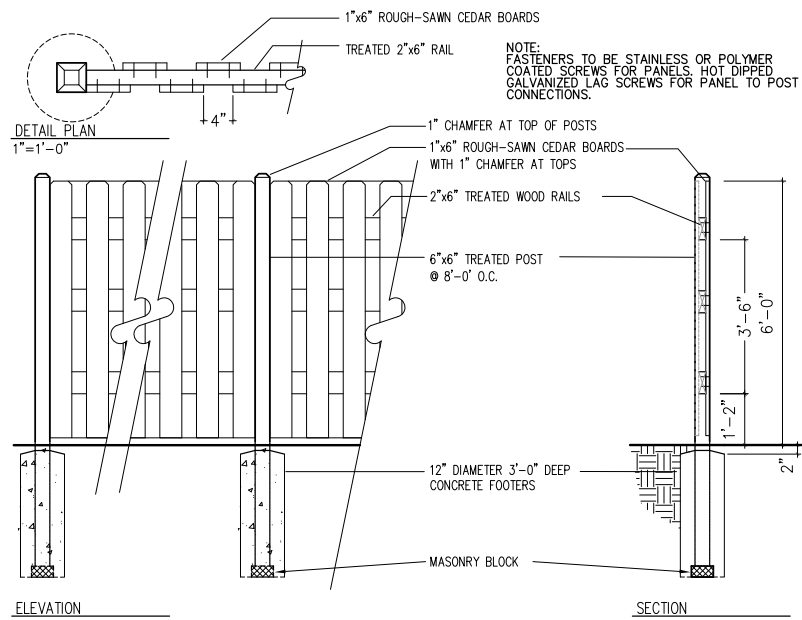
GROUNDCOVER / PERENNIAL PLANTING

NOT TO SCALE



SHRUB PLANTING

NOT TO SCALE



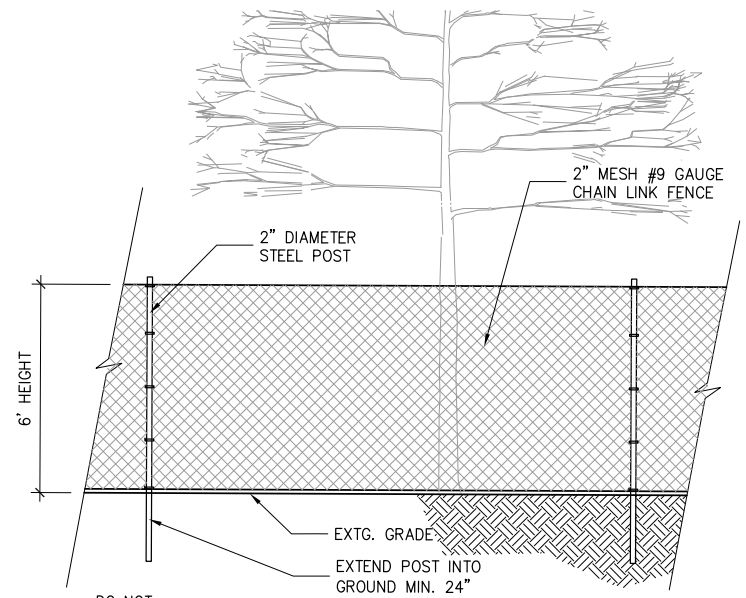
WOOD SCREEN FENCE

NOT TO SCALE

TREE PROTECTION

General requirements and limitations for operations within the tree and plant protection area.

- The contractor shall not engage in any construction activity within the tree and plant protection area without the approval of the owner's representative including: operating, moving or storing equipment; storing supplies or materials; locating temporary facilities including trailers or portable toilets and shall not permit employees to traverse the area to access adjacent areas of the project or use the area for lunch or any other work breaks. Permitted activity, if any, within the tree and plant protection area may be indicated on the drawings along with any required remedial activity as listed below.
- At start of construction apply composted hardwood/leaf mold/bulk mulch around existing trees to be saved (See detail, this plan). The mulch should be 4-6 inches in depth and extend out to the dripline of the tree. Mulch is not to be piled up against the root flare/buttrressing roots.
- Protect the tree from soil compaction by prohibiting any activity including driving, congregating or storage of heavy equipment or materials within the drip line of the tree. The drip line of a tree is defined as the outer most circumference of a tree's canopy or beyond as space allows.
- Place metal T-posts and rigid construction fencing work-limit fencing around the drip line of the tree to prevent equipment storage, driving or other activities under or near the tree. Exclusion fencing should be durable and must last the duration of the project. This should be the first thing done on site by the contractor and the last thing removed when work is completed. Tree protection area should be delineated in the work limits and is to be fenced. Fencing should be erected with metal T-posts and heavy construction fence. Fence should be installed prior to any other activity by the contractor and should be the last item removed when the site is being restored.
- Avoid root damage by pruning ripped and damaged roots with a sharp handsaw or chainsaw. This root repair should occur at the end of each workday or at the end of each work week.
- Newly pruned roots should be covered with 3-6 inches of wood chips, straw, other loose organic matter and or jute matting at the end of each work day.
- On dry/hot days lay a sprinkler within the drip line of the tree after hours.
- Cover all exposed roots with 3-6 inches of wood chips.
- Mulch/straw at the end of each work day and at the end of every work week to protect tree roots from weather extremes.
- In the event that construction activity is unavoidable within the tree and plant protection area, notify the owner's representative and submit a detailed written plan of action for approval. The plan shall include: a statement detailing the reason for the activity including why other areas are not suited; a description of the proposed activity; the time period for the activity, and a list of remedial actions that will reduce the impact on the tree and plant protection area from the activity. Remedial actions shall include but shall not be limited to the following:
 - In general, demolition and excavation within the drip line of trees and shrubs shall proceed with extreme care either by the use of hand tools, directional boring and or air knife excavation where indicated or with other low impact equipment that will not cause damage to the tree, roots or soil.
 - When encountered, exposed roots 1 inches and larger in diameter, shall be worked around in a manner that does not break the outer layer of the root surface (bark). These roots shall be covered in wood chips and shall be maintained above permanent wilt point at all times. Roots one inch and larger in diameter shall not be cut without the approval of the owners representative. Excavation shall be tunneled under these roots without cutting them. In the areas where roots are encountered, work shall be performed and scheduled to close excavations as quickly as possible over exposed roots.
 - Tree branches that interfere with the construction may be tied back or pruned to clear only to the point necessary to complete the work. Other branches shall only be removed when specifically indicated by the owner's representative. Tying back or trimming of all branches and the cutting of roots shall be in accordance with accepted arboricultural practices (ANSI a300, part 8) and be performed under supervision of an arborist.



DO NOT:

- RELOCATE TREE PROTECTION FENCING WITHOUT PRIOR CONSENT OF ARCHITECT.
- ALLOW RUN OFF OF DAMAGING MATERIALS TO FLOW BELOW TREE CANOPY.
- STORE OR STOCKPILE SOIL OR CONSTRUCTION MATERIALS BELOW DRIP LINE OF EXISTING TREES.
- PARK VEHICLES BELOW DRIP LINE OF TREES.
- TRENCH, DIG OR EXCAVATE WITHIN THE DRIPLINE OR THE TREE PROTECTION ZONE DEFINED ON THE PLANS WITHOUT PRIOR APPROVAL FROM ARCHITECT/ARBORIST.
- APPLY SOIL STERILANTS UNDER PAVEMENT NEAR EXISTING TREES.

TREE PROTECTION FENCING

NOT TO SCALE

PLANTING SPECIFICATIONS

SECTION 32 91 13 - SOIL PREPARATION
GENERAL
DESCRIPTION
This Section includes the following: Furnish all labor, materials, utilities, and equipment necessary to prepare beds for plants, shrubs and trees. The work does not include tree locations not part of a planting bed.
REQUIREMENTS FOR REGULATORY AGENCIES
Comply with federal and state plant inspection requirements, fertilizer laws and other applicable laws and regulations.
REFERENCE STANDARDS
Scientific and common names for plants are generally in conformity with approved names given in Standardized Plant Names published by the American Joint Committee on Horticulture Nomenclature. Names of varieties not included in that reference are generally in conformity with names accepted in the nursery trade. Quality as established by American Standard for Nursery Stock, AAN.
SUBMITTALS
1. Imported soils composition and source.
CONTRACTOR CERTIFICATION
1. Contractor shall supply evidence sufficient to document that contractor has 5 or more years of experience in handling, maintaining and installing plant material from off-site sources. The Owner Representative shall be the sole judge of the competency of the contractor for this work.
PRODUCTS
INORGANIC SOIL AMENDMENTS
Material shall be as specified in Section 32 92 00.
FERTILIZER
1. Composite commercial fertilizer shall be 5-10-5 standard product which complies with applicable laws and bears the trade name or trademark and warranty. Fertilizer and topsoil shall be thoroughly mixed by hand or rotary mixer.
MULCH
1. Mulch shall be shredded hardwood bark and shall have been aged for at least 2 years. No dye.
TOPSOIL
1. Existing and Imported Topsoil: All topsoil furnished shall be cleaned and shredded and consist of a natural fertile, friable soil processing characteristics of representative of productive soils in the vicinity. It shall be free of subsoil, refuse, roots larger than 1 inch diameter, heavy, sticky or stiff clay, stones larger than 2 inches in diameter, noxious seeds, sticks, brush, litter, or any substances deleterious to plant growth. Topsoil shall be suitable for the germination of seeds and the support of vegetative growth. Imported Topsoil shall not contain weed seeds in quantities that cause noticeable weed infestations in the final planting beds. Imported Topsoil shall meet the following physical and chemical criteria:
2. Soil texture: USDA loam, sandy clay loam or sandy loam with clay content between 15 and 25%. And a combined clay/silt content of no more than 55%.
3. pH value shall be between 5.5 and 7.0.
4. Percent organic matter (OM): 2.0-5.0%, by dry weight.
5. Soluble salt level: Less than 2 mmho/cm.
6. Soil chemistry suitable for growing the plants specified.
COMPOST
1. Compost shall be aged yard-leaf compost and shall be free of deleterious materials including but not limited to clay, silt, manure solids, woody debris, plastics, construction debris, or other materials that may negatively affect infiltration. The pH shall be between 5.5 and 8.5. Particles shall be able to pass through a 1-inch screen or smaller. Compost that smells putrid, has an ammonia odor, or shows visible signs of mold is unacceptable. Utilize screened decomposed leaf compost.
COARSE SAND
1. Clean, washed, sand, free of toxic materials
2. Coarse concrete sand, ASTM C-33 Fine Aggregate, with a Fines Modulus Index of 2.8 and 3.2.
3. Coarse Sands shall be clean, sharp, natural Coarse Sands free of limestone, shale and slate particles. Manufactured Coarse Sand shall not be permitted.
4. PH shall be lower than 7.0.
Provide Coarse Sand with the following particle size distribution:
Sieve Percent passing:

3/8 inch (9.5 mm)	100	No 30 (.60 mm)	25-60
No 4 (4.75 mm)	95-100	No 50 (.30 mm)	10-30
No 8 (2.36 mm)	80-100	No 100 (.15 mm)	2-10
No 16 (1.18 mm)	50-85	No 200 (0.75 mm)	2-5

EXECUTION
CONDITION OF AREA
1. Ascertain locations of utilities and subsurface drainage so that proper precautions may be taken not to disturb or damage any subsurface improvements. The Contractor will be held responsible for making at his own expense, all repairs to subsurface improvements damaged by the work of this section. Contact all utilities prior to digging as required. All known utilities are listed on the drawings.
GUIDE TO PLANTING
1. Location for plant bed areas shall be marked on the ground by the Contractor and reviewed and approved by the Owner Representative before any excavation is made.
2. Owner shall provide plant lists to correspond to planting plan for Contractor's reference for bed preparation depths.
3. Plant pits shall be of ample size to accommodate the individual earth ball or root spread of each plant and to allow for the specified amount of topsoil mixture under and around the ball or roots. For bare root plants, pits shall be minimum 1' - 0" wider than root spread and a minimum 5-inches deeper than spread. For "B&B" plants, pits shall be twice as wide and minimum 3-inches deeper than ball. See planting details on drawings for additional information.
4. When soil excavated from plant pits is of suitable quality, it may be used in the planting operation when mixed with additives as specified. Sod must be thoroughly broken up in mixing operation.
5. If plant pits are augured, side and bottom of hole shall be broken down to permit root penetration. If impervious material (asphalt, rock, etc.) is encountered in planting areas, notify the Owner Representative prior to planting.
6. When pits are dug in wet areas or where subsoil will not permit drainage, Contractor shall set plant higher than normal. Subject to the approval of the Owner Representative, plants may be set up to 6 inches higher than normal, provided the immediate area outside the saucer is blended to meet existing grade within 5 feet of the edge of the pit. Owner Representative may also require relocation of plants in problem locations. Contact Owner Representative before planting in problem areas.
7. Contractor shall return after plants have been installed to repair beds as necessary and install mulch.
MULCHING
1. All plants shall be mulched with double shredded bark mulch in areas indicated on the drawings and to depths detailed on plans.
MAINTENANCE OF PLANTING
1. The Contractor shall maintain all planted trees within the limits of the work in accordance with these specifications, and as directed by the Owner Representative, until final inspection and acceptance of the project by the Owner.
2. Maintenance shall include watering as necessary to ensure the health and survival of the plants and during dry periods as directed by the Owner Representative, weeding, cultivating, pruning, re-fertilization, application of anti-desiccant, and control of insects, fungus and other diseases by means of spraying with an approved insecticide or fungicide.
3. All weeds within the mulched area shall be removed as often as required. Under no circumstances shall weeds be allowed to attain more than 6-inches of growth or allowed to flower.
CLEANUP AND PROTECTION
1. During landscape work, keep pavements clean and work area in an orderly condition.
2. Protect landscape work and materials from damage due to landscape operations, operations by other contractors and trades and trespassers. Maintain protection during installation and maintenance periods. Treat, repair or replace damaged landscape work as directed.

SECTION 32 92 00 - TURF AND GRASSES
GENERAL
DESCRIPTION
This Section includes the following: Furnish and installing all seeded areas of the site per the plans and details.
QUALITY ASSURANCE
General. Ship landscape materials with certificates of inspection required by governing authorities. Comply with regulations applicable to landscape materials.
Do not make substitutions. If specified landscape material is not obtainable, submit proof of non-availability to Landscape Architect, together with proposal for use of equivalent materials.
Analysis and Standards. Package standard products with manufacturer's certified analysis. For other materials, provide analysis by recognized laboratory made in accordance with methods established by the Association of Official Agriculture Chemists, wherever applicable.
SUBMITTALS
1. Certification. Submit manufacturers' or vendors' certified analysis for soil amendments and fertilizer materials. Submit other data substantiating that materials comply with specified requirements.
2. Submit seed vendor's certified statement for grass seed mixture required, stating botanical and common name, percentage by weight, and percentages of purity germination and weed seed for each grass seed species.
3. Planting Schedule. Submit proposed planting schedule, indicating dates for each type of landscape work during normal seasons for such work in area of site. Correlate with specified maintenance periods to provide maintenance from date of substantial completion.
4. Maintenance Instructions. Submit typewritten instructions recommending procedures to be established by Owner for maintenance of landscape work for one full year. Submit prior to expiration of required maintenance period(s).
DELIVERY, STORAGE AND HANDLING
1. Packaged Materials. Deliver packaged materials in containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery, and while stored at site.
JOB CONDITIONS
1. Proceed with and complete landscape work as rapidly as portions of site become available, working within seasonal limitations for each kind of landscape work required.
2. Utilities. Determine location of underground utilities and perform work in a manner which will avoid possible damage. Hand excavate, as required. Maintain grade stakes set by others until removal is mutually agreed upon by parties concerned.
3. Excavation. When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions, or obstructions, notify Architect before planting.
4. Coordination with Plants. Plant trees and shrubs after final grades are established and prior to planting of lawns, unless otherwise acceptable to Architect. If planting of trees and shrubs occurs after lawn work, protect lawn areas and promptly repair damage to lawns resulting from planting operations.
SPECIAL PROJECT WARRANTY
1. Warranty laws through specified lawn maintenance period, and until final acceptance.
PRODUCTION
SOIL AMENDMENTS
1. Lime. Natural domestic limestone containing not less than 85% of total carbonates with a minimum of 30% magnesium carbonates, ground so that not less than ninety percent (90%) passes a 20-mesh sieve and not less than fifty percent (50%) passes a 100-mesh sieve.
2. Commercial Fertilizer. Complete fertilizer of neutral character, with some elements derived from organic sources and containing the following percentages of available plant nutrients, should be delivered to the site in bags or other convenient containers, each fully labeled, conforming to the applicable State Fertilizer Law, and bearing the name, trade name or trademark, and warranty of the producer.
3. For lawns, fertilizer shall be 10-8-4, uniform in composition, free-flowing and suitable for application with approved equipment.
4. Lawn Mulch. Clean straw, free of seed and weed seed.
GRASS MATERIALS
1. Grass Seed. Provide fresh, clean, new-crop seed complying with tolerance for purity and germination established by official Seed Analysts of North America. Provide seed mixture composed of grass species, proportions and minimum percentages of purity, germination, and maximum percentage of weed seed, as specified.

EXECUTION
PREPARATION AND REPAIR OF LAWN AREAS
1. Equipment necessary for the proper preparation of the ground surface and for handling and placing all required materials shall be on hand, in good condition, and shall be subject to approval of Landscape Architect.
2. Fine Grading. Areas that require seeding shall be fine graded with topsoil, as provided by the general contractor, to a minimum depth of 4" for lawn areas, as required to attain the proper grade. The work shall be performed only during periods when beneficial results are likely to be obtained. When conditions are such, by reason of drought, excessive moisture, or other factors, that satisfactory results are not likely to be obtained, work shall be stopped and resumed only when desirable results are likely to be obtained.
3. Cleanup. Prior to seeding, the surface shall be cleared of all stones and/or other objects larger than one inch (1") thickness or diameter, and of all roots, brush, wire and other objects that might be a hindrance to maintenance operations.
4. Application of Fertilizer. Fertilizer shall be distributed uniformly at a rate of thirty (30) pounds per one thousand (1,000) square feet over the areas to be seeded, and shall be incorporated into the soil to a depth of at least two inches (2") by discing, harrowing, or other approved methods. The incorporation of fertilizer may be part of the tillage operation specified above.
5. Application of Lime. Immediately following or simultaneously with the incorporation of the fertilizer, the lime shall be distributed uniformly at a rate of fifty (50) pounds per one thousand (1,000) square feet and shall be incorporated into the soil to a depth of at least three inch (3") by discing, harrowing, or other accepted methods. The incorporation of lime along with the fertilizer may form a part of the tillage operation specified above.
6. Leveling. Any undulations or irregularities in the surface resulting from tillage, fertilizing, liming or other operations shall be leveled out before seeding operations are begun.
7. Before any seeded is sown, all soft spots and inequalities in grade shall be corrected. No seed shall be sown on any area that has not been prepared. Immediately after the seed has been sown, it shall be mulched and watered. The finished seeded surface shall be true to grade, smooth, even and equally firm at all points.
SEEDING OPERATIONS
1. All seeded areas shall require topsoil. All topsoil required for lawn areas in addition to the existing site topsoil re-spread shall be furnished and spread as needed.
2. Loosen topsoil for fine grading. Preserve and establish finish grades shown on drawings. Remove all stones or other objects larger than one inch (1") thickness or diameter, and all roots, brush, wire and other objects that might be a hindrance to fine grading operation.
3. Seed will be sown at a rates prescribed by supplier. Seed at half rate in each of two directions at right angles to each other.
4. Contractor has the option to hydro-seed large open area. Contractor shall not hydro seed within fifty (50) feet of building walls, or a distance whereby the hydro seeding operation would cause damage of create any problems by the nature of its composition to any surrounding areas.
MULCHING OF SEEDED AREAS
1. Mulching material shall be clean straw, free of seed and weed seed.
2. Mulch shall be spread uniformly in a continuous blanket, using one hundred (100) pounds per one thousand (1,000) square feet. It is the intent of these specifications to provide a light covering of mulch corresponding to "3-or-4-straw thick" through which can be seen a small percentage of the bare earth. If the mulching material is too long and brittle for proper securing in the surface soil, it shall be cut by an engine cutter or other equipment to lengths of not more than eight inches (8") and watered as needed before spreading, to assure proper securing of mulch into the soil as specified below. The mulch shall be spread by hand or by use of manure spreader, a modified grain combine with straw spreader attachment or other suitable equipment. Mulching shall be started at the windward side of relatively flat areas, or at the upper part of a steep slope, and shall continue uniformly until the area is completely covered.
MAINTENANCE OF LAWN AREAS
1. General. The Contractor shall be responsible for continued proper care of the seed areas during the period when the grass is becoming established. The period of maintenance for all lawn area shall extend for sixty (60) days or as much longer as necessary to establish over the entire lawn area a uniformly cost stand of grasses as specified, free of weeds and undesirable grasses. After the required maintenance period and upon acceptance of lawn area by the Architect, the Owner will assume maintenance responsibility.
2. Mowing. The lawn area shall be mowed with approved mowing equipment to a height of two inches (2") whenever the average height of grass becomes three and one-half inches (3 1/2"). If weeds or other undesirable vegetation threaten to smother the planted species, such vegetation shall be mowed, or in the case of exceedingly rank growths, be uprooted, raked and removed from the area.
3. Re-fertilizing. Areas needed re-fertilizing will be designated by the Architect at least fifteen (15) days prior to the time that the application is required. The fertilizer shall be distributed on the seeded area between 15 August and 15 October, during a period when the grass is dry. The fertilizer shall be 10-8-4 grade and shall be applied uniformly at the rate of ten (10) pounds per one thousand (1,000) square feet. Physical condition, packaging and marking of the fertilizer shall be specified for original seeding.

4. Reseeding. Areas that require reseeding will be designated by the Architect at least fifteen (15) days prior to the period specified for reseeding. Reseeding shall be with the seed specified hereinbefore and shall be drilled at four (4) pounds per one thousand (1,000) square feet in a manner which will cause a minimum of disturbance to the existing stand of grass, and at an angle of not less than fifteen (15) degrees from the direction of the rows of prior seeding.
5. Lawns shall be protected against damage including erosion and washouts. Damaged areas shall be promptly replanted.
6. The contractor is responsible to clean the site of all mulching materials and other debris prior to the final inspection.
7. Final inspection. Inspection of work for lawns will be made at the conclusion of maintenance; written notice requesting inspection shall be submitted at least ten (10) days prior to anticipation date.
8. Acceptance. Final inspection shall determine acceptance or non-acceptance of lawn areas. Acceptance indicates a complete cover of grasses in all lawn areas, which have been maintained by weeding, reseeding and re-fertilizing as necessary, watering and mowing as stated above and appears to be in a potential healthy state with weeds, rocks, stones and debris removed and all erosion or ruts repaired. Lawns not maintained or appearing as stated herein shall be unacceptable and shall be reworked as necessary until desired results are obtained.
INSPECTION AND ACCEPTANCE
1. When landscape work is completed, including maintenance, Architect will, upon request, make an inspection to determine acceptability.
2. Landscape work may be inspected for acceptance in part agreeable to the Landscape Architect, provided work offered for inspection is complete.
3. When inspected landscape work does not comply with requirements, replace rejected work and continuous specified maintenance until re-inspected by Architect and found to be acceptable. Remove rejected plants and materials promptly from project site.

SECTION 329300 - PLANTS
GENERAL
DESCRIPTION
Scope of work includes furnishing and installing all landscape plantings and seeded areas of the site per the plans and details.
QUALITY ASSURANCE
1. General. Ship landscape materials with certificates of inspection required by governing authorities. Comply with regulations applicable to landscape materials.
2. Do not make substitutions. If specified landscape material is not obtainable, submit proof of non-availability to Landscape Architect, together with proposal for use of equivalent materials.
3. Analysis and Standards. Package standard products with manufacturer's certified analysis. For other materials, provide analysis by recognized laboratory made in accordance with methods established by the Association of Official Agriculture Chemists, wherever applicable.
4. Trees, Shrubs and Plants. Provide trees, shrubs and plants of quantity, size, genus, species and variety shown and specified for landscape work and complying with recommendations and requirements of ANSI Z60.1 "American Standard for Nursery Stock." Provide healthy, vigorous stock, grown in recognized nursery in accordance with good horticultural practice and free of disease, insects, eggs, larvae and defects such as knots, sun-scald, injuries, abrasions, or disfigurement.
5. Label each tree and shrub with securely attached waterproof tag bearing legible designation of botanical and common name.
6. Landscape Inspection. The Landscape Architect may inspect trees and shrubs either at place of growth or at site before planting, for compliance with requirements for genus, species, variety, size and quality. Architect retains right to further inspect trees and shrubs for size and condition of balls and root systems, insects, injuries and latent defects, and to reject unsatisfactory or defective material at any time during progress of work. Remove rejected trees or shrubs immediately from project site.

SUBMITTALS
1. Certification. Submit manufacturers' or vendors' certified analysis for soil amendments and fertilizer materials. Submit other data substantiating that materials comply with specified requirements.
DELIVERY, STORAGE AND HANDLING
1. Packaged Materials. Deliver packaged materials in containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery, and while stored at site.
2. Trees and Shrubs. Provide freshly-dug trees and shrubs. Do not prune prior to delivery unless otherwise approved by the Landscape Architect. Do not bend or bind-tie trees or shrubs in such manner as to damage bark, break branches or destroy natural shape. Provide protective covering during delivery. Do not drop balled and burlapped stock during delivery.
3. Deliver Trees and Shrubs after preparations for planting have been completed and plant immediately. If planting is delayed more than six (6) hours after delivery, set trees and shrubs in shade, protect them from weather and mechanical damage, and keep roots moist by covering with mulch, burlap or other acceptable means or retaining moisture.
JOB CONDITIONS
1. Proceed with and complete landscape work as rapidly as portions of site become available, working within seasonal limitations for each kind of landscape work required.
2. Utilities. Determine location of underground utilities and perform work in a manner which will avoid possible damage. Hand excavate, as required. Maintain grade stakes set by others until removal is mutually agreed upon by parties concerned.
3. Excavation. When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions, or obstructions, notify Architect before planting.
4. Coordination with Lawns. Plant trees and shrubs after final grades are established and prior to planting of lawns, unless otherwise acceptable to Architect. If planting of trees and shrubs occurs after lawn work, protect lawn areas and promptly repair damage to lawns resulting from planting operations.

SPECIAL PROJECT WARRANTY
1. Warranty trees, shrubs and groundcover for a period of (2) two years after date of substantial completion, against defects including death of unsatisfactory growth, except for defects resulting from neglect by Owner, abuse or damage by others, or unusual phenomena or incidents which are beyond Landscape Installer's control.
2. Remove and replace trees, shrubs, or other plants found to be dead or in unhealthy condition during warranty period. Make replacements during growth season following end of warranty period. Replace trees and shrubs which are in doubtful condition at end of warranty period; unless, in opinion of the Architect, it is advisable to extend warranty period for a full growing season.
3. Another inspection will be conducted at end of extended warranty period, if any, to determine acceptance or rejection. Only one replacement (per tree, shrub or plant) will be required at end of warranty period, except for losses or replacements due to failure to comply with specified requirements.
PRODUCTS
SOIL AMENDMENTS
1. Compost shall be aged yard-leaf compost and shall be free of deleterious materials including but not limited to clay, silt, manure solids, woody debris, plastics, construction debris, or other materials that may negatively affect infiltration. The pH shall be between 5.5 and 8.5. Particles shall be able to pass through a 1-inch screen or smaller. Compost that smells putrid, has an ammonia odor, or shows visible signs of mold is unacceptable. Utilize screened decomposed leaf compost.
2. Imported Topsoil: All topsoil furnished shall be cleaned and shredded and consist of a natural fertile, friable soil processing characteristics of representative of productive soils in the vicinity. It shall be free of subsoil, refuse, roots larger than 1 inch diameter, heavy, sticky or stiff clay, stones larger than 2 inches in diameter, noxious seeds, sticks, brush, litter, or any substances deleterious to plant growth. Topsoil shall be suitable for the germination of seeds and the support of vegetative growth. Imported Topsoil shall not contain weed seeds in quantities that cause noticeable weed infestations in the final planting beds. Imported Topsoil shall meet the following physical and chemical criteria:
a. Soil texture: USDA loam, sandy clay loam or sandy loam with clay content between 15 and 25%. And a combined clay/silt content of no more than 55%.
b. pH value shall be between 5.5 and 7.0.
c. Percent organic matter (OM): 2.0-5.0%, by dry weight.
d. Soluble salt level: Less than 2 mmho/cm.
e. Soil chemistry suitable for growing the plants specified.
3. Coarse Sand: Clean, washed, sand, free of toxic materials. Coarse concrete sand, ASTM C-33 Fine Aggregate, with a Fines Modulus Index of 2.8 and 3.2. Coarse Sands shall be clean, sharp, natural Coarse Sands free of limestone, shale and slate particles. Manufactured Coarse Sand shall not be permitted. pH shall be lower than 7.0.
4. Mulch. Organic shredded hardwood bark mulch free from deleterious materials and suitable for top dressing of trees, shrubs or plants.
5. Commercial Fertilizer. Complete fertilizer of neutral character, with some elements derived from organic sources and containing the following percentages of available plant nutrients, should be delivered to the site in bags or other convenient containers, each fully labeled, conforming to the applicable State Fertilizer Law, and bearing the name, trade name or trademark, and warranty of the producer.
6. For trees and shrubs, provide fertilizer with not less than 12% total nitrogen, 12% available phosphoric acid and 12% soluble potash.

PLANT MATERIALS
1. Quality. Provide trees, shrubs, and other plants of size, genus, species and variety shown and scheduled for landscape work and complying with recommendations and requirements of ANSI Z60.1 "American Standard for Nursery Stock."
2. Deciduous Trees. Provide trees of height and caliper scheduled or shown and with branching configuration recommended by ANSI Z60.1 for type and height of shrub required.
3. Deciduous Shrubs. Provide shrubs of the height shown or listed and with not less than minimum number of canes required by ANSI Z60.1 for type and height of shrub required.
4. Coniferous and Broadleaved Evergreens. Provide evergreens of sizes shown or listed. Dimensions indicated minimum spread for spreading and semi-spreading type evergreens and height for other types, such as globe, dwarf, cone, pyramidal, broad up-right, and columnar. Provide normal quality evergreens with well-balanced form complying with requirements for other size relationships to the primary dimensions shown.
MISCELLANEOUS LANDSCAPE MATERIALS
1. Anti-Desiccant. Emulsion type, film-forming agent designed to permit transpiration but retard excessive loss of moisture from plants. Deliver in manufacturer's fully-identified containers and mix in accordance with manufacturer's instructions.
2. Herbicide. Round up or equal.
3. Wrapping. Tree-wrap tape not less than four inches (4") wide, designed to protect bore damage and winter freezing.
4. Stakes and Guys. Provide stakes and deadmen of sound new hardwood, treated softwood, or redwood, free of knot holes and other defects. Provide wire ties and guys of 2-strand, twisted, pliable galvanized iron wire not lighter than 12 ga. with zinc-coated turnbuckles. Provide not less than one-half inch (1/2") diameter rubber or plastic hose, cut to required lengths and of uniform color, material and size to protect tree trunks from damage by wire.
EXECUTION
LAYOUT
1. Lay out individual tree and shrub locations and areas for multiple plantings. Stake locations and outline areas and secure Architect's acceptance before start of planting work. Make minor adjustments as requested.
PREPARATION OF PLANTING SOIL
1. Before mixing, clean topsoil of roots, plants, sods, stones, clay lumps, and other extraneous materials harmful or toxic to plant growth.
2. For pit and trench type backfill, mix planting soil prior to backfilling, and stockpile at site.
3. Soil mixture for backfilling to be one part premium topsoil, one part sand and one part compost by volume. Add 1/2 lb. of commercial fertilizer per inch of caliber of tree. Build up beds six (6) inches above finish grade.
PREPARATION FOR PLANTINGS
1. Excavate the tree pits as per the planting detail in the contract documents. Remove stones over 1 1/2 inches in any dimension, and sticks, stones, rubbish and other extraneous matter.
2. Excavate pits, beds and trenches with vertical sides and with bottom of excavation slightly raised at center to provide proper drainage. Loosen hard subsoil in bottom of excavation. Scarify sides of planting pit.
3. For balled and burlapped (B&B) trees and shrubs, make excavations three times as wide as the ball diameter and equal to the ball depth.
4. Fill excavations for trees and shrubs with water and allow to percolate out before planting.
5. All burlaps and twine are to be removed prior to installation of trees.
PLANTING TREES AND SHRUBS
1. Space plants as shown on plant list.
2. Dig holes large enough to allow for spreading of roots and backfill with planting soil. Work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water. Water thoroughly after planting, taking care not to cover crowns of plants with wet soils.
3. Set balled and burlapped (B&B) stock on undisturbed subgrade, plumb and in center of pit or trench with top of ball at same elevation or slightly higher than adjacent finished landscape grades so that when settled they will bear the same relation to the required grade as they bore to natural grade before being transplanted. Remove burlap from top of balls; retain on sides and bottoms. When set, place additional backfill around base and sides of top of ball at same elevation as adjacent finished landscape grades. When excavation is approximately 2/3 full, water thoroughly before placing remainder of backfill. Repeat watering until no more is absorbed. Water again after placing final layer of backfill.
4. Dish top of backfill to allow for mulching.
5. Mulch pits, trenches and planted areas. Provide not less than following thickness of mulch and work into top of backfill and finish level with adjacent finish grades. Provide depth as detailed on plan.
6. Apply anti-desiccant using power spray to provide an adequate film over trunks, branches, stems, twigs and foliage of all evergreen and broad leaf evergreen trees.
7. If deciduous trees of shrubs are moved in full-leaf, spray with anti-desiccant at nursery before moving and again two (2) weeks after planting.
8. Prune, thin out and shape trees and shrubs in accordance with standard horticultural practice. Prune trees to retain required height and spread. Unless otherwise directed by the Landscape Architect, do not cut tree leaders, and remove only injured or dead branches from flowering trees, if any. Prune shrubs to retain natural character.
9. Remove and replace excessively pruned or malformed stock resulting from improper pruning.
10. Wrap single stem tree trunks of two inch (2") caliper and larger. Start at ground and cover trunk to height of first branches and securely attach. Inspect tree trunks for injury, improper pruning and insect infestation and take corrective measures before wrapping.
MAINTENANCE OF PLANTINGS
1. Begin maintenance immediately after planting.
2. Maintain trees, shrubs and other plants until final acceptance but in no case less than 60 days after substantial completion of planting.
3. Maintain trees, shrubs and other plants by pruning, cultivating, watering and weeding as required for healthy growth. Restore planting saucers. Tighten and repair stake and guy supports and reset trees and shrubs to proper grades or vertical position as required. Restore or replace damaged wrappings. Spray as required to keep trees and shrubs free of insects and disease.
4. Provide watering of plant materials as required to maintain health of the plantings until final acceptance and not less than four (4) weeks after installation. Water to be provided by contractor.

INSPECTION AND ACCEPTANCE
1. When landscape work is completed, including maintenance, Architect will, upon request, make an inspection to determine acceptability.
2. Landscape work may be inspected for acceptance in part agreeable to the Landscape Architect, provided work offered for inspection is complete.
3. When inspected landscape work does not comply with requirements, replace rejected work and continuous specified maintenance until re-inspected by Architect and found to be acceptable. Remove rejected plants and materials promptly from project site.
SEED MIX
SCHEDULE OF SEED MIXTURES
SEED MIXTURE A: Lawn Area Seed - Tall Fescue Blend - "Fescue Plus Mixture"
1. Available from: Oliger Seed Company 330-724-1266 or approved equal.
2. Apply at rate of 7lbs./1,000sf
3. Plant prior to October 10th.



robmorganti

NOBLE STATION

PRELIMINARY
NOT FOR CONSTRUCTION

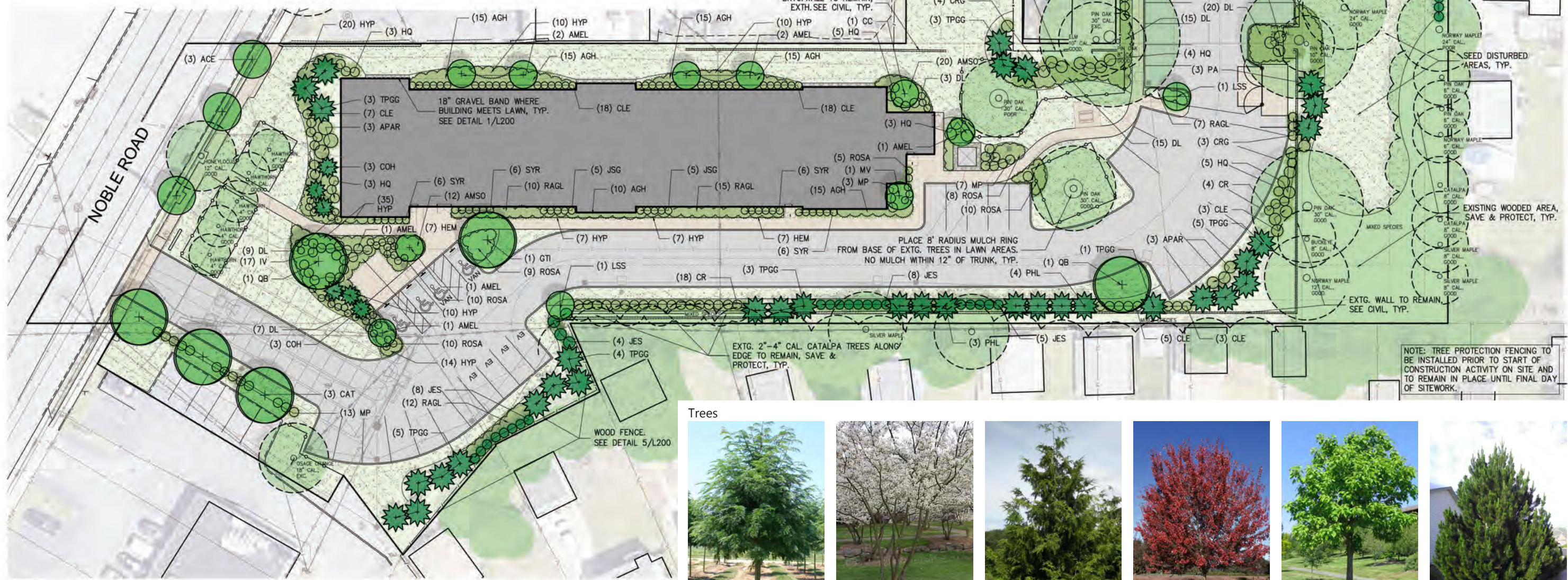
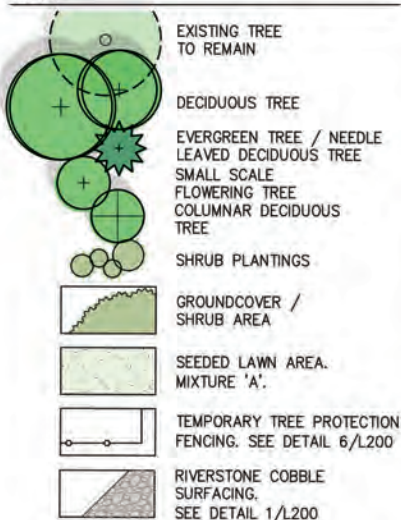
LANDSCAPE
SPECIFICATIONS
L300

08/24/23

PLANT SCHEDULE

Key	Qty	Botanical / Common Name	Size	Cond.	Spacing
Trees					
ACE	3	Acer ginnala / Amur Maple	7'	B&B	See Plan
AMEL	7	Amelanchier x grandiflora 'Autumn Brilliance' / Autumn Brilliance Serviceberry	8' Clump	B&B	See Plan
CAT	3	Catalpa speciosa / Northern Catalpa	2 1/2" Cal.	B&B	See Plan
CC	1	Cercis canadensis / Redbud	1 1/4" Cal.	B&B	See Plan
GTI	4	Gleditsia triacanthos inermis 'Halka' / Halka Honeylocust	2 1/2" Cal.	B&B	See Plan
LSS	4	Liquidambar styraciflua 'Slender Silhouette' / Slender Silhouette Sweetgum	2" Cal.	B&B	See Plan
MV	1	Magnolia virginiana / Sweetbay Magnolia	8' ht.	B&B	See Plan
PHL	10	Pinus heldreichii v. leucodermis / Bosnian Pine	8' ht.	B&B	12' O.C.
PA	3	Picea abies / Norway Spruce	8' ht.	B&B	12' O.C.
QB	2	Quercus bicolor / Swamp White Oak	2 1/2" Cal.	B&B	See Plan
TPGG	24	Thuja plicata 'Green Giant' / Western Red Cedar	8' ht.	B&B	12' O.C.
Shrubs					
AGH	85	Aronia melanocarpa 'Ground Hog' / Ground Hog Chokeberry	12"	No. 5	3' O.C.
APAR	6	Aesculus parviflora / Bottlebrush Buckeye	30"	No. 5	6' O.C.
COH	12	Cham. obtusa 'Gracilis' / Hinoki False Cypress	8'	B&B	See Plan
CLE	54	Clethra alnifolia / Summersweet Clethra	30"	No. 5	4' O.C.
CR	37	Cornus racemosa 'Geauga' / Geauga Gray Dogwood	30"	No. 5	5' O.C.
DL	87	Diervilla lonicera / Dwarf Bush Honeysuckle	18"	No. 3	3' O.C.
HQ	22	Hydrangea quercifolia / Oakleaf Hydrangea	24"	No. 3	3' O.C.
IV	147/3m	Ilex vert. 'Shaver', 'Jim Dandy' / Winterberry	24"	B&B	3' O.C.
JSG	10	Juniperus chinensis 'Sea Green' / Medium Juniper	24"	No. 5	3' O.C.
JES	45	Juniperus virginiana 'Emerald Sentinel' / Emerald Sentinel Juniper	6'	B&B	See Plan
MP	35	Myrica pennsylvanica / Northern Bayberry	30"	No. 3	4' O.C.
RAGL	54	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	18"	No. 3	3' O.C.
ROSA	70	Rosa 'Knockout' / Red Knockout Rose	18"	No. 3	3' O.C.
SYR	24	Syringa meyeri 'Palabrin' / Palabrin Lilac	24"	B&B	3' O.C.
Perennials					
AMSO	42	Amsonia tabernaemontana v. salicifolia / Eastern Blue Star	Clump	No. 2	24" O.C.
BAP	3	Baptisia australis 'Twilight Prairieblues' / Twilight Prairieblues False Indigo	Clump	No. 2	4' O.C.
HEM	50	Hemerocallis 'Happy Returns' / Daylily	Clump	No. 2	24" O.C.
HYP	113	Hypericum calycium / St. Johnswort	6"	No. 2	24" O.C.

KEY



Trees



'Halka' Honeylocust



'Autumn Brilliance' Serviceberry



'Green Giant' Arborvitae



Amur Maple



Catalpa



Bosnian Pine

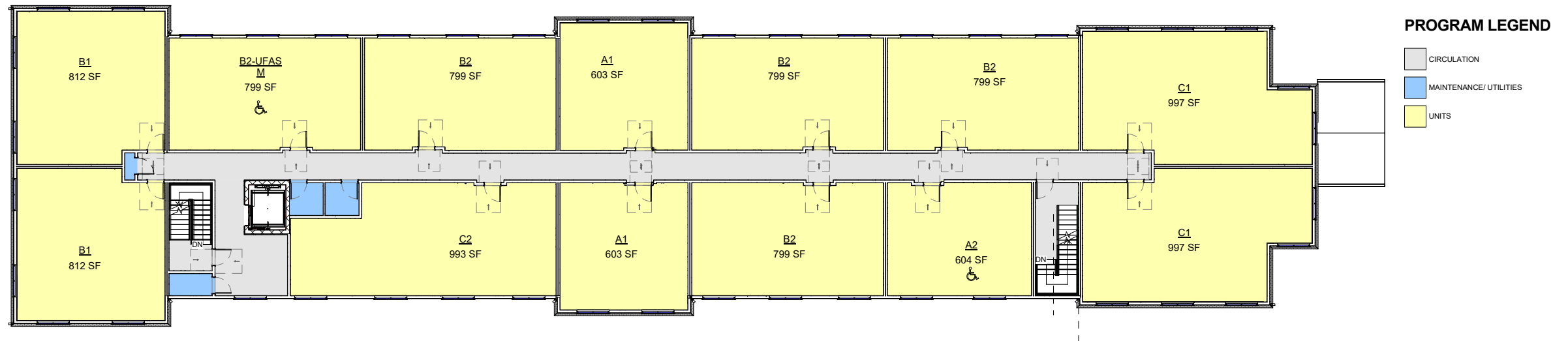


NOBLE STATION

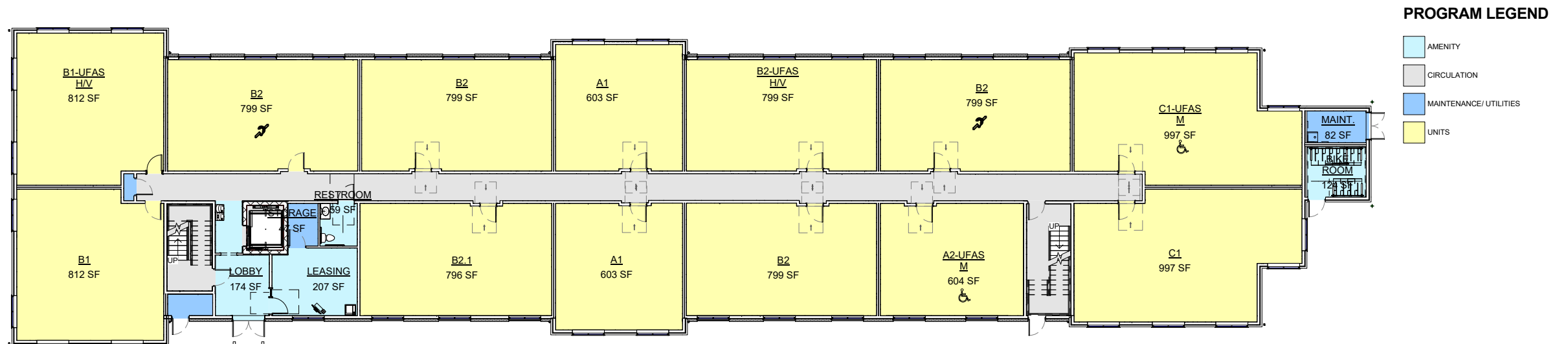
PRELIMINARY
NOT FOR CONSTRUCTION

08/24/23

LANDSCAPE
PLAN
L100

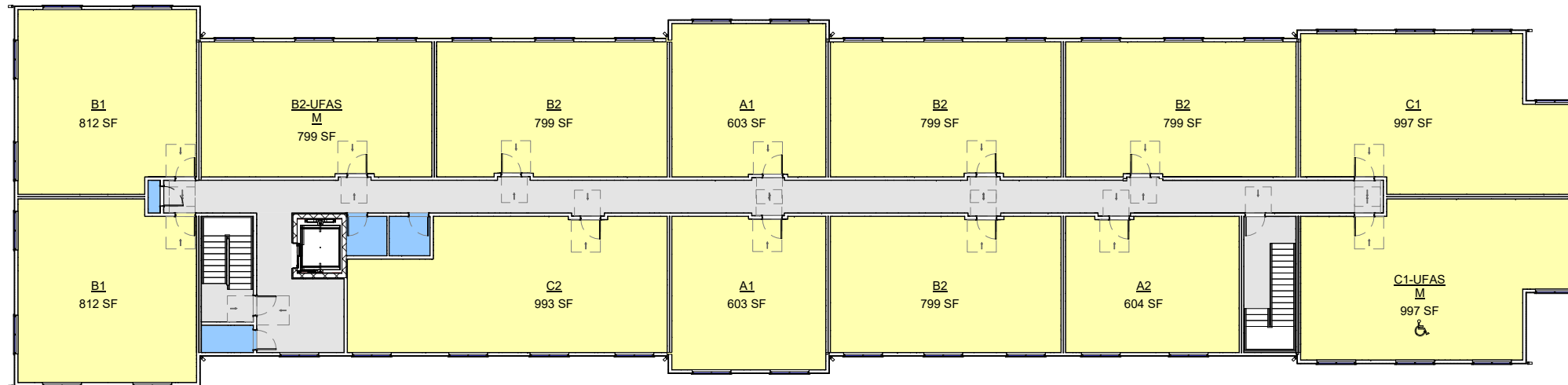


2 OVERALL FLOOR PLAN - LEVEL 2
3/32" = 1'-0"



1 OVERALL FLOOR PLAN - LEVEL 1
3/32" = 1'-0"

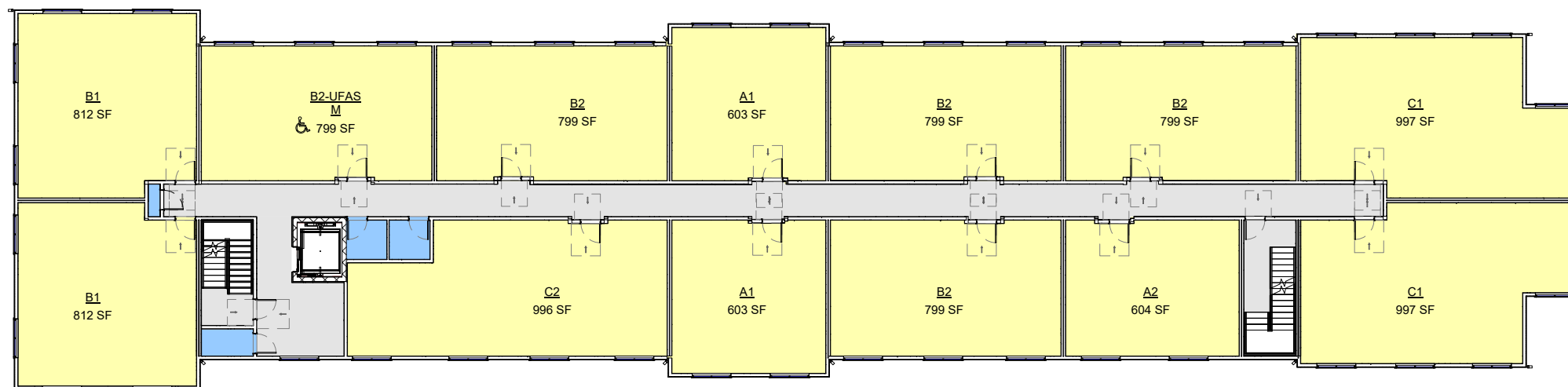




PROGRAM LEGEND

- CIRCULATION
- MAINTENANCE/ UTILITIES
- UNITS

2 OVERALL FLOOR PLAN - LEVEL 4
3/32" = 1'-0"

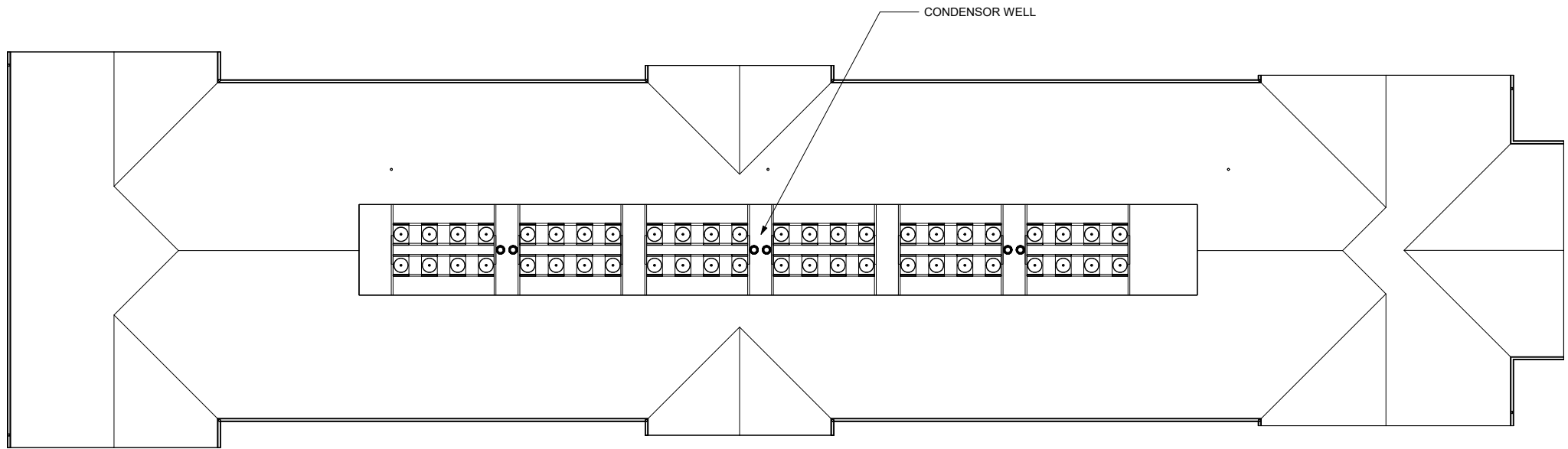


PROGRAM LEGEND

- CIRCULATION
- MAINTENANCE/ UTILITIES
- UNITS

1 OVERALL FLOOR PLAN - LEVEL 3
3/32" = 1'-0"





1 UPPER ROOF PLAN
3/32" = 1'-0"





4 EAST ELEVATION
1/16" = 1'-0"



2 NORTH ELEVATION
1/16" = 1'-0"

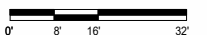


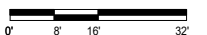
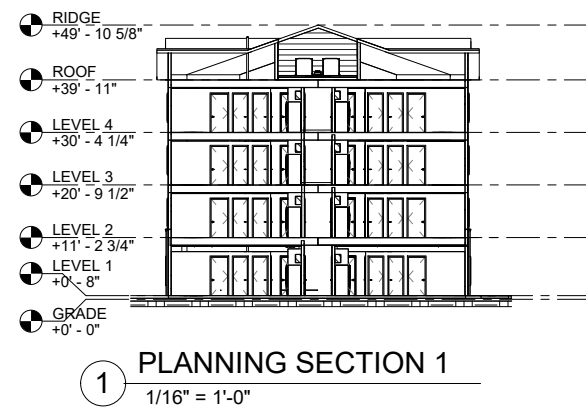
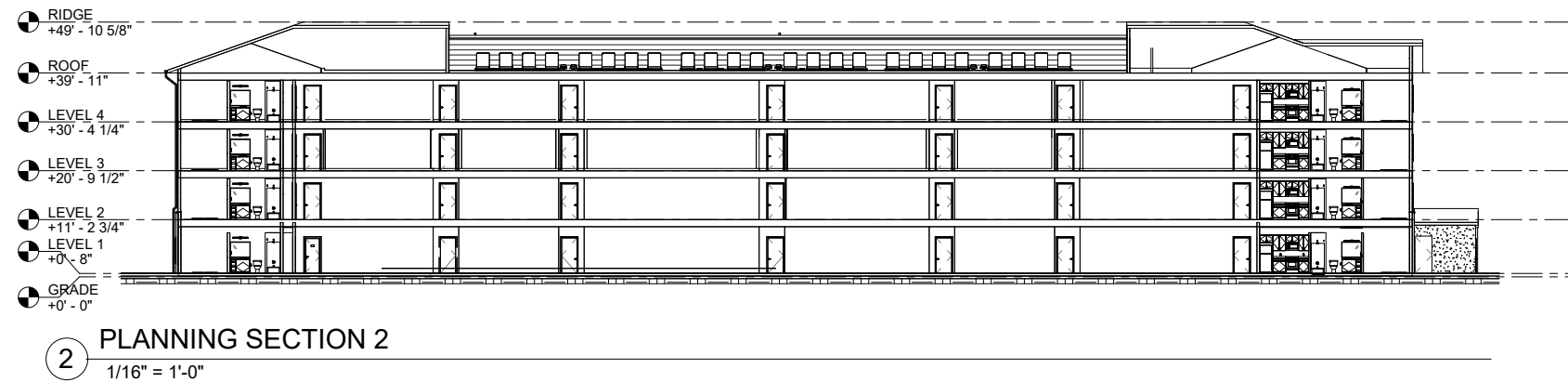
3 SOUTH ELEVATION
1/16" = 1'-0"



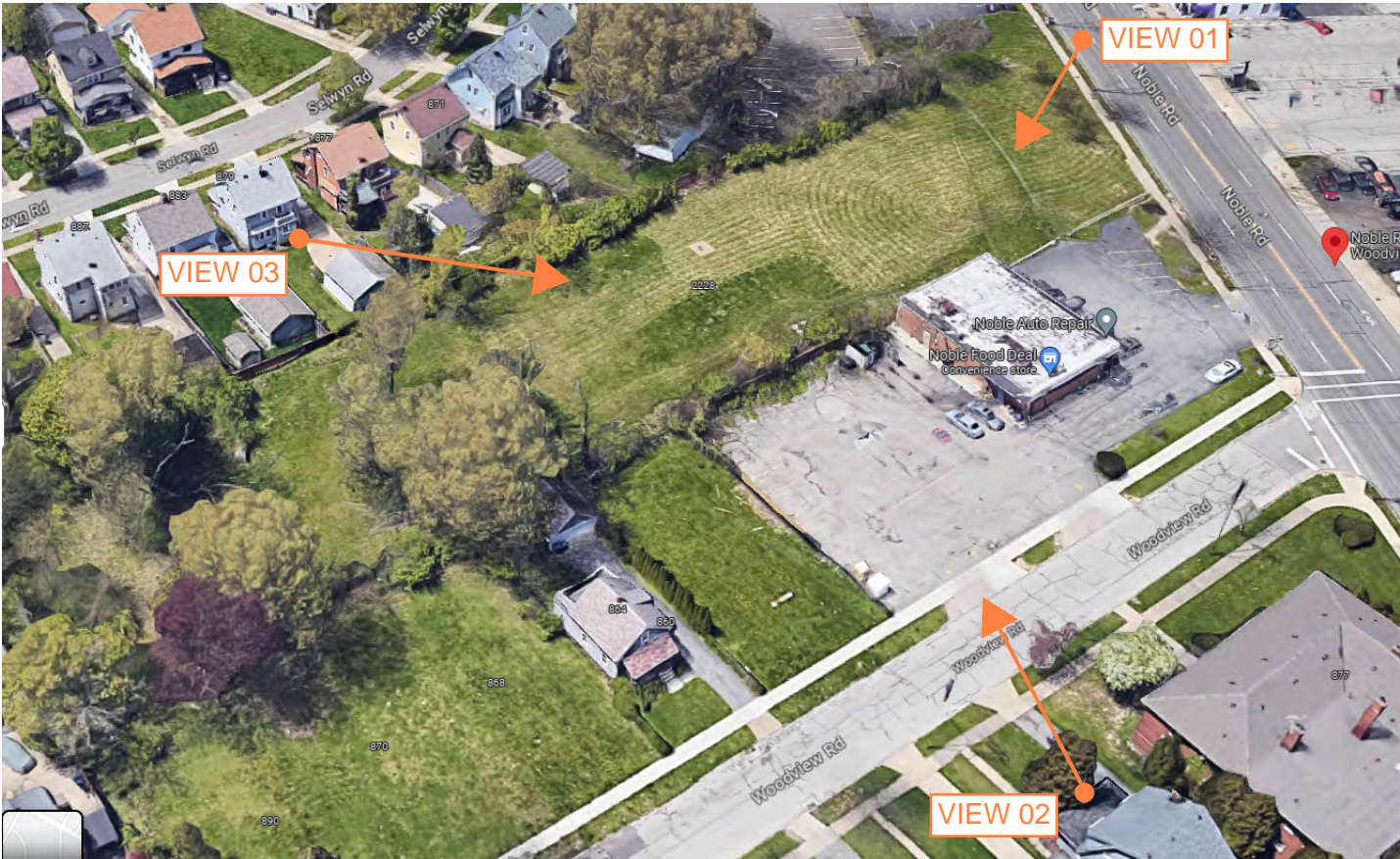
1 WEST ELEVATION
1/16" = 1'-0"

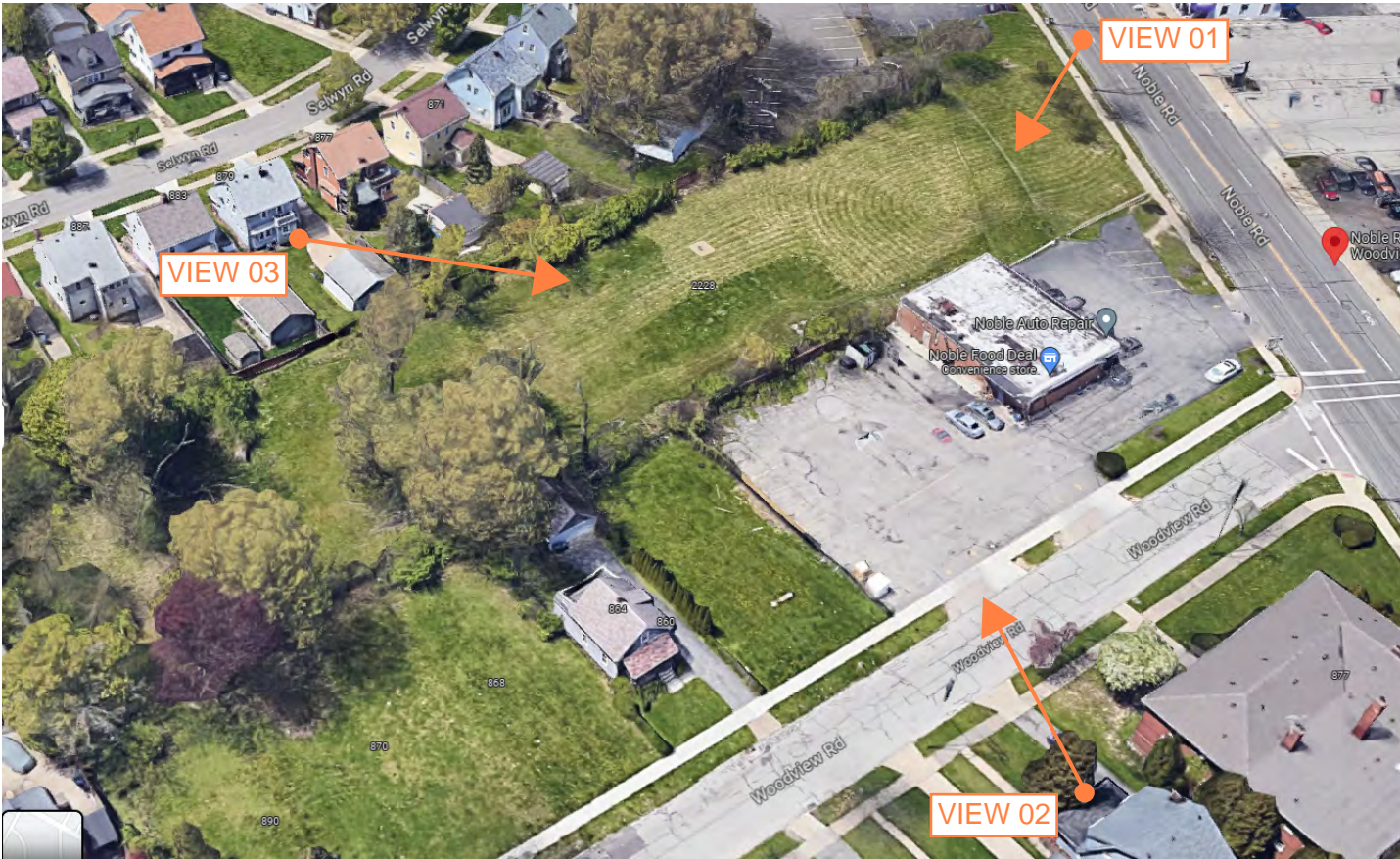
	BRICK VENEER
	BOARD & BATTEN VINYL SIDING
	HORIZONTAL VINYL LAP SIDING
	VERTICAL VINYL LAP SIDING













6



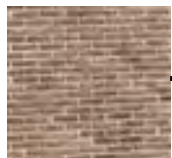
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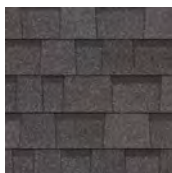
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3



2



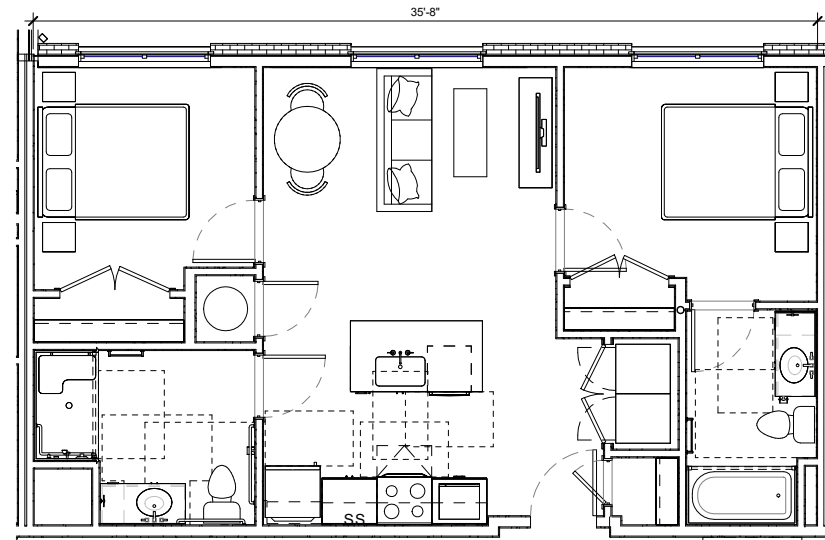
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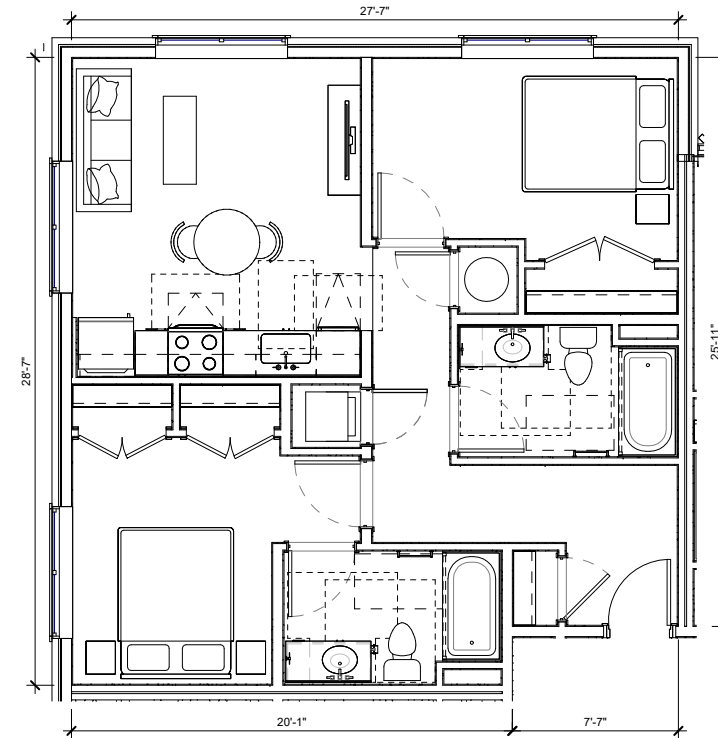
SHEET NOTES

NOTE: NOT ALL NOTES ARE USED ON EVERY SHEET.HEET.

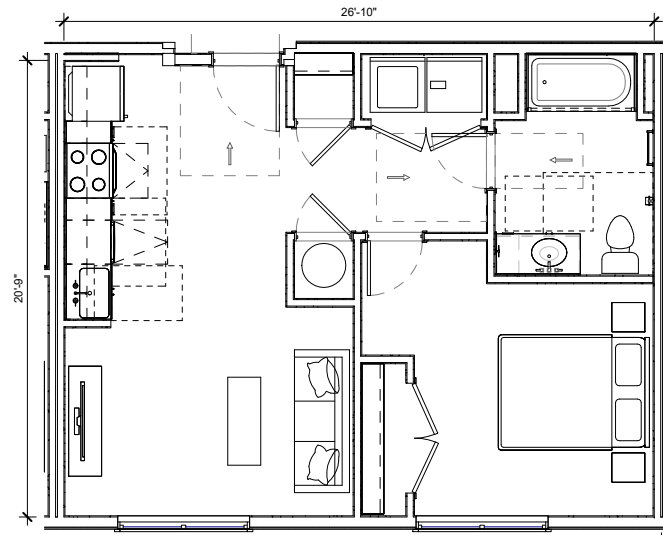
- 1 ASPHALT SHINGLES, COLOR: BLACK
- 2 BRICK VENEER
- 3 VERTICAL VINYL SIDING, COLOR: WHITE
- 4 HORIZONTAL VINYL SIDING, COLOR: WHITE
- 5 HORIZONTAL VINYL SIDING, COLOR: DARK GRAY
- 6 VERTICAL VINYL SIDING, COLOR: BLUE
- 7 VERTICAL VINYL TRIM, COLOR: WHITE
- 8 VINYL WINDOW, COLOR: WHITE
- 9 ALUMINUM STOREFRONT SYSTEM
- 10 WINDOW SHUTTER, COLOR: BLACK
- 11 GUTTER & DOWNSPOUT, COLOR: WHITE



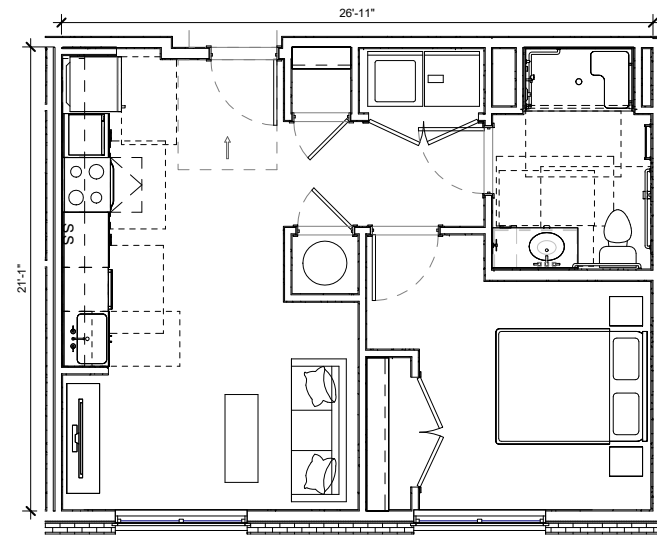
5 UNIT PLAN B2-UFAS M - 799 SF
1/4" = 1'-0"



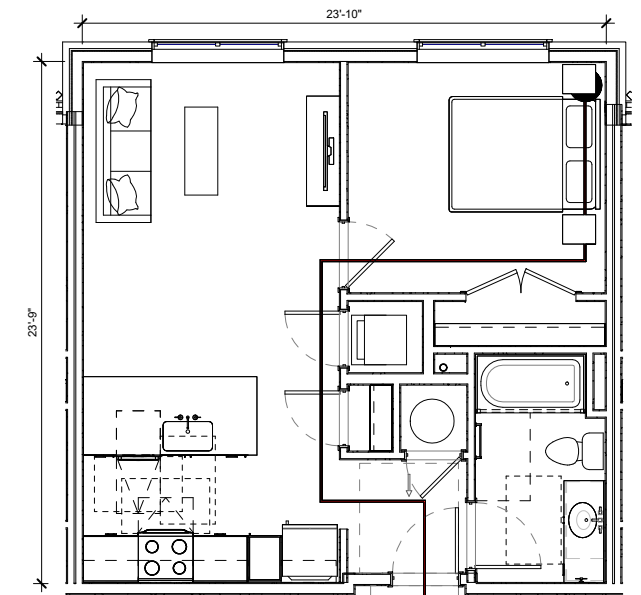
4 UNIT PLAN B1 - 812 SF
1/4" = 1'-0"



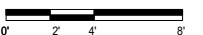
3 UNIT PLAN A2 - 604 SF
1/4" = 1'-0"

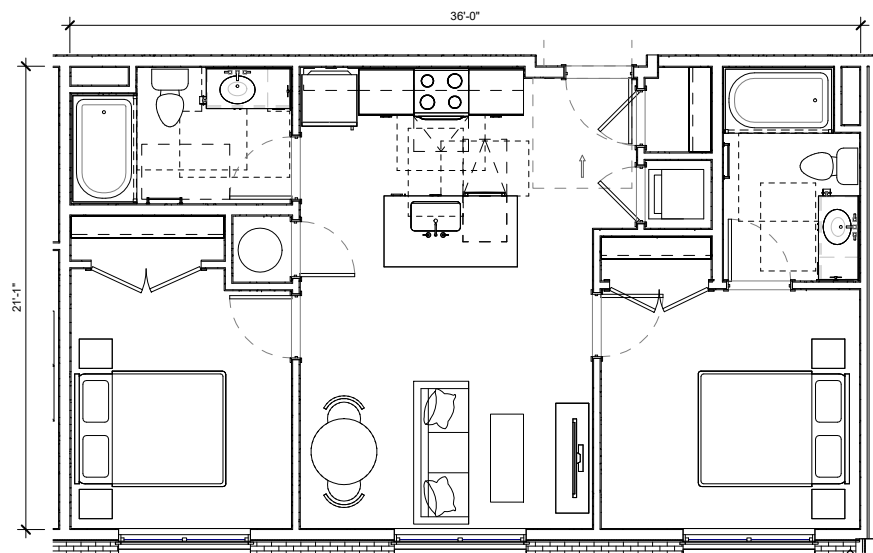


2 UNIT PLAN A2-UFAS M - 604 SF
1/4" = 1'-0"

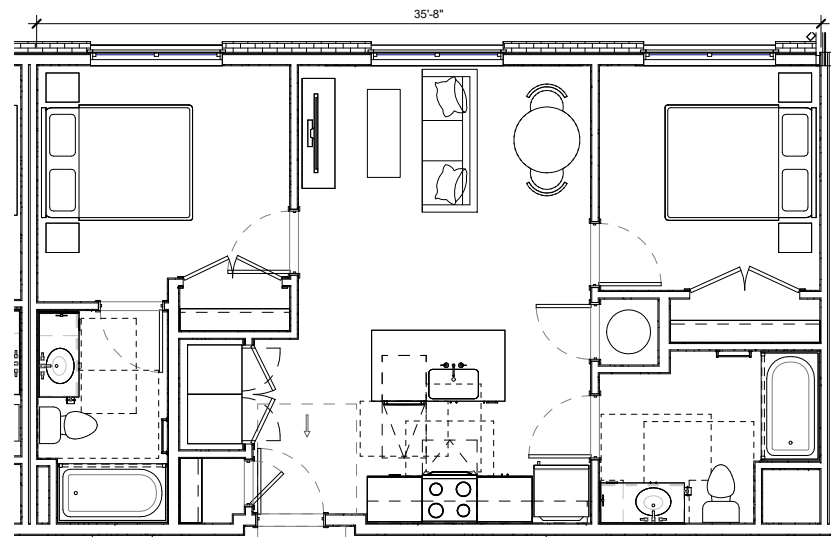


1 UNIT PLAN A1 - 603 SF
1/4" = 1'-0"

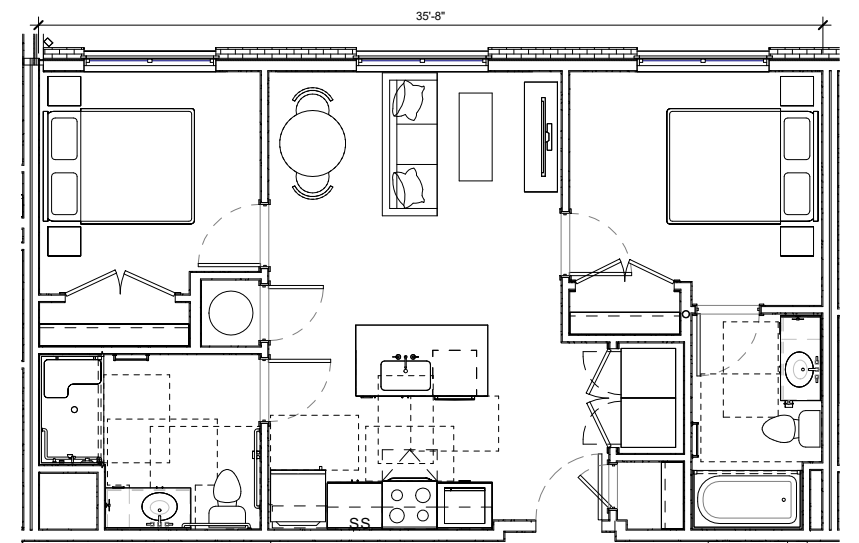




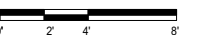
3 UNIT PLAN B2.1 - 805 SF
1/4" = 1'-0"

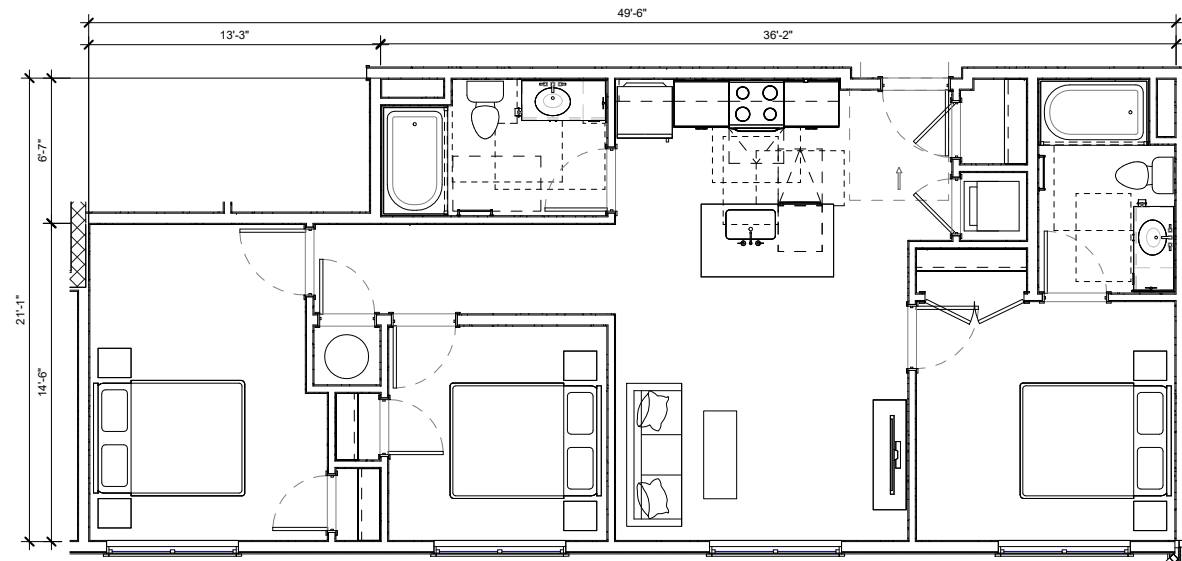


2 UNIT PLAN B2 - 799 SF
1/4" = 1'-0"

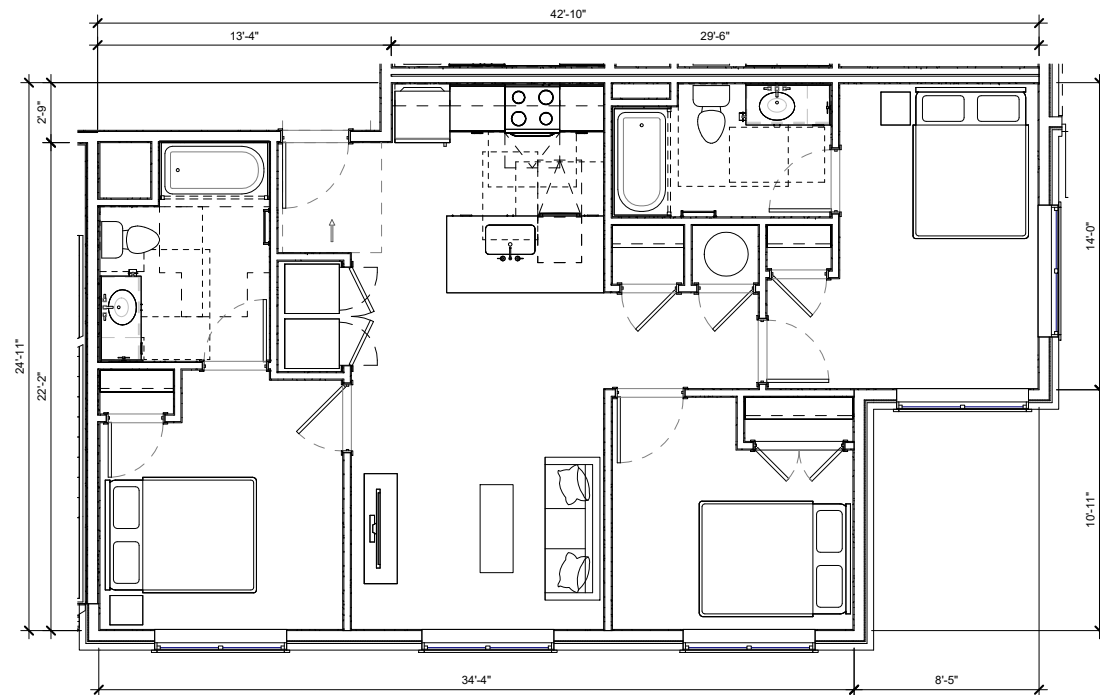


1 UNIT PLAN B2-UFAS H/V - 799 SF
1/4" = 1'-0"

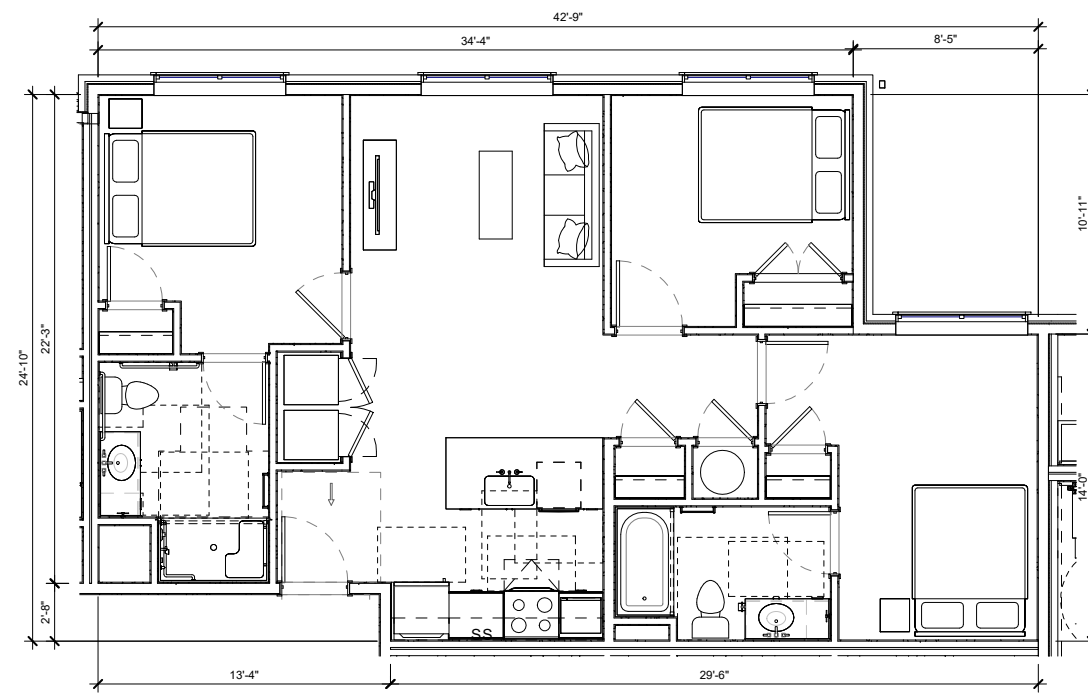




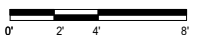
3 UNIT PLAN C2 - 805 SF
1/4" = 1'-0"








2 UNIT PLAN C1 - 997 SF
1/4" = 1'-0"

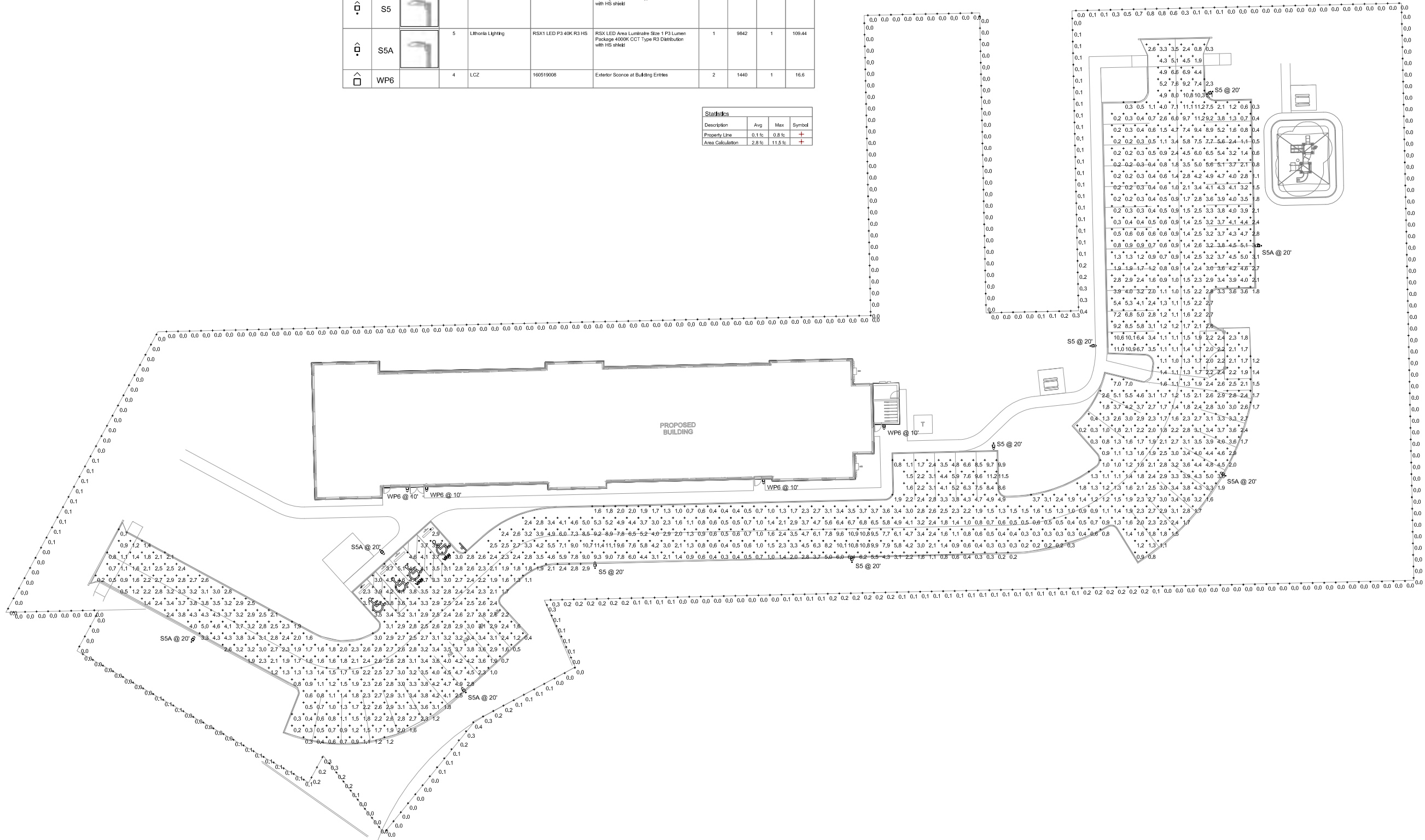


1 UNIT PLAN C1 UFAS M - 997 SF
1/4" = 1'-0"



Schedule										
Symbol	Label	Image	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power
	S5		5	Lithonia Lighting	RSX1 LED P3 40K R2 HS	RSX LED Area Luminaire Size 1 P3 Lumen Package 4000K CCT Type R2 Distribution with HS shield	1	10640	1	109.44
	S5A		5	Lithonia Lighting	RSX1 LED P3 40K R3 HS	RSX LED Area Luminaire Size 1 P3 Lumen Package 4000K CCT Type R3 Distribution with HS shield	1	9842	1	109.44
	WP6		4	LCZ	160519008	Exterior Sconce at Building Entries	2	1440	1	16.6

Statistics			
Description	Avg	Max	Symbol
Property Line	0.1 fc	0.8 fc	+
Area Calculation	2.8 fc	11.5 fc	+



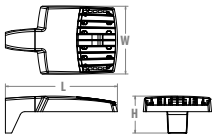


RSX1 LED Area Luminaire



Specifications

EPA
(ft²@90°): 0.57 ft² (0.05 m²)
Length: 21.8" (55.4 cm)
(SPA mount)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
7.2" (18.4 cm) Arm
Weight:
(SPA mount): 22.0 lbs (10.0 kg)



Catalog Number RSX1LED P3 40K R2 HS

Notes

Type S5

Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX1 delivers 7,000 to 17,000 lumens allowing it to replace 70W to 400W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.



Items marked by a **shaded background** qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect. *See ordering tree for details



Design Select options indicated by this color background.

Ordering Information

EXAMPLE: RSX1 LED P4 40K R3 MVOLT SPA DDBXD

RSX1 LED	Performance Package	Color Temperature	Distribution	Voltage	Mounting
RSX1 LED	P1	30K 3000K	R2 Type 2 Wide	MVOLT (120V-277V) 1	SPA Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°)
	P2	40K 4000K	R3 Type 3 Wide	HVOLT (347V-480V) 1	RPA Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 180°, 3 at 120°)
	P3	50K 5000K	R4 Type 4 Wide	XVOLT (277V-480V) 1	MA Mast arm adaptor (fits 2-3/8" OD horizontal torso)
			R5 Type 5 Wide 1	use specific voltage for options as noted	IS Adjustable slipfitter (fits 2-3/8" OD torso) *
			R6 Type 6 Short	120V 277V	WSA Wall bracket 1
			R7 Type 7 Wide 1	208V 240V	WSAC Wall bracket with surface conduit box
			R8 Type 8 Short		AKSP Adjustable tilt arm square pole mounting *
			R9 Type 9 Short 1		AARP Adjustable tilt arm round pole mounting *
			R10 Automotive Front Row Right Rotated		ARWR Adjustable tilt arm with wall bracket *
			R11 Automotive Front Row Left Rotated		ARWLC Adjustable tilt arm wall bracket and surface conduit box *

Options	Finish
Shipped Installed	
HS House-side shield 1	DDBXD Dark Bronze
PE Photocentric, button style 1	DBLXD Black
PER7 Seven-wire twist-lock receptacle only (no controls) 1	DNAXD Natural Aluminum
SE Single face (120, 277, 347) 1	DWHXD White
DF Double face (208, 240, 480) 1	DDBXD Textured Dark Bronze
SPD20KV 20KV Surge pack (10KV standard)	DBLXD Textured Black
FAO Field adjustable output *	DNAXD Textured Natural Aluminum
DMG 0-10V dimming extend out back of housing for external control (control ordered separately) 1	DWHXD Textured White
Shipped Separately	
ESS External glare shield 1	
EGFV External glare full view (360° around light aperture) 1	
BS Bird spikes 1	

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Lithonia RSX1 Area LED Rev. 06/27/23 Page 1 of 9

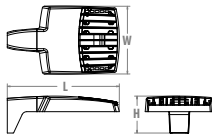


RSX1 LED Area Luminaire



Specifications

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Length: 21.8" (55.4 cm)
(SPA mount)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
7.2" (18.4 cm) Arm
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(SPA mount): 22.0 lbs (10.0 kg)



Catalog Number RSX1LED P3 40K R3 HS

Notes

Type SSA

Introduction

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Items marked by a **shaded background** qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect. *See ordering tree for details



Design Select options indicated by this color background.

Ordering Information

EXAMPLE: RSX1 LED P4 40K R3 MVOLT SPA DDBXD

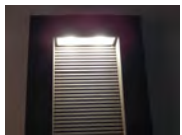
RSX1 LED	Performance Package	Color Temperature	Distribution	Voltage	Mounting
RSX1 LED	P1	30K 3000K	R2 Type 2 Wide	MVOLT (120V-277V) 1	SPA Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°)
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	P3	50K 5000K	R4 Type 4 Wide	XVOLT (277V-480V) 1	MA Mast arm adaptor (fits 2-3/8" OD horizontal torso)
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Options	Finish
Shipped Installed	
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PE Photocentric, button style 1	DBLXD Black
PER7 Seven-wire twist-lock receptacle only (no controls) 1	DNAXD Natural Aluminum
SE Single face (120, 277, 347) 1	DWHXD White
DF Double face (208, 240, 480) 1	DDBXD Textured Dark Bronze
SPD20KV 20KV Surge pack (10KV standard)	DBLXD Textured Black
FAO Field adjustable output *	DNAXD Textured Natural Aluminum
DMG 0-10V dimming extend out back of housing for external control (control ordered separately) 1	DWHXD Textured White
Shipped Separately	
ESS External glare shield 1	
EGFV External glare full view (360° around light aperture) 1	
BS Bird spikes 1	

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Lithonia RSX1 Area LED Rev. 06/27/23 Page 1 of 9

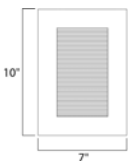
Avenue LED | 54350ABZ

Job Name: _____ Job Type: **WP6** Quantity: _____ Comments: _____



PRODUCT DESCRIPTION

This great architectural outdoor design provides illumination from two places. A slash of light washes down the grated diffuser and out away from the wall while additional light is directed out the bottom straight down that washes the wall and illuminates the walkway below. Available in three sizes and finished in Architectural Bronze.



MEASUREMENTS

DIMENSION : 7" W x 10" H x 2" Ex
BACK PLATE : 7" W x 10" H x 5" HCO
HANGING WEIGHT : 3.96 lb
LAMPING
INPUT VOLTAGE : 120V
LUMENS : 960 Rated (390 Del.)
BULB : 2 x 8W LED PCB Integrated, 16W Total
DIMMABLE : (Integrated)
CRI : 90+ CRI
COLOR_TEMP : 3000K
LIGHTING_DIRECTION : Down

FINISHES OPTION

Architectural Bronze (ABZ)

MATERIAL

Aluminum

RATINGS

cETus
Wet Location
For OutdoorADA
DARKSKY



ADDITIONAL

INSTALL UP/DOWN: Down
OPERATING TEMPERATURE:
-20°C (-4°F), 40°C (104°F)

PHOTOMETRIC: Report Found Online

Always consult a qualified electrician before installing any lighting product.



WESTERN DISTRIBUTION CENTER (HEADQUARTER)
253 NORTH VINELAND AVE | CITY OF INDUSTRY, CA 91746
EASTERN DISTRIBUTION CENTER
101 GARDNER PARK | PEACHTREE CITY, GA 30269
P. 626.956.4200 | F. 626.956.4225 | maximlighting.com