Amended Items

- Decreased density
 - Further modeling of site to more accurately calculate "Net Developable Acre"
 - Decreased unit count to arrive at a density of less than 5 du/Net Developable Acre
- Removal of duplexes on south side of site
- Removal of alleys servicing duplexes
- Addition of left turn lane exiting site
- Additional detail provided to ensure fire truck maneuverability
- Increased detail throughout





Fire Chief AJ Miller
Lt. Craig A. Hall, Fire Prevention

Date:

August 2, 2022

To:

Jesse Lee, MS Consultants

From:

Lt. Craig A. Hall

Subject:

Berlin Twp. Fire Department Final Plan Review

I am writing in response to your request regarding the proposed land use development known as The Greenery – Final Engineering Plan. This Section of land is located in Berlin Township and Berlin Township Fire Department does provide fire protection for this area.

I have reviewed, the final plan that was sent to me for review. That plan showed, that all of the below following concerns had been addressed.

- 1) 8" Water Mains shall flow 1000 GPM.
- 2) Fire Department hydrant spacing
- 3) Alley access, would be no parking on both sides
- 4) Signage "Fire Lane No Parking "shall be installed on the Fire Hydrant side of the street.
- 5) Accessibility for fire truck passage on primary streets. (OVERLAY was provided)

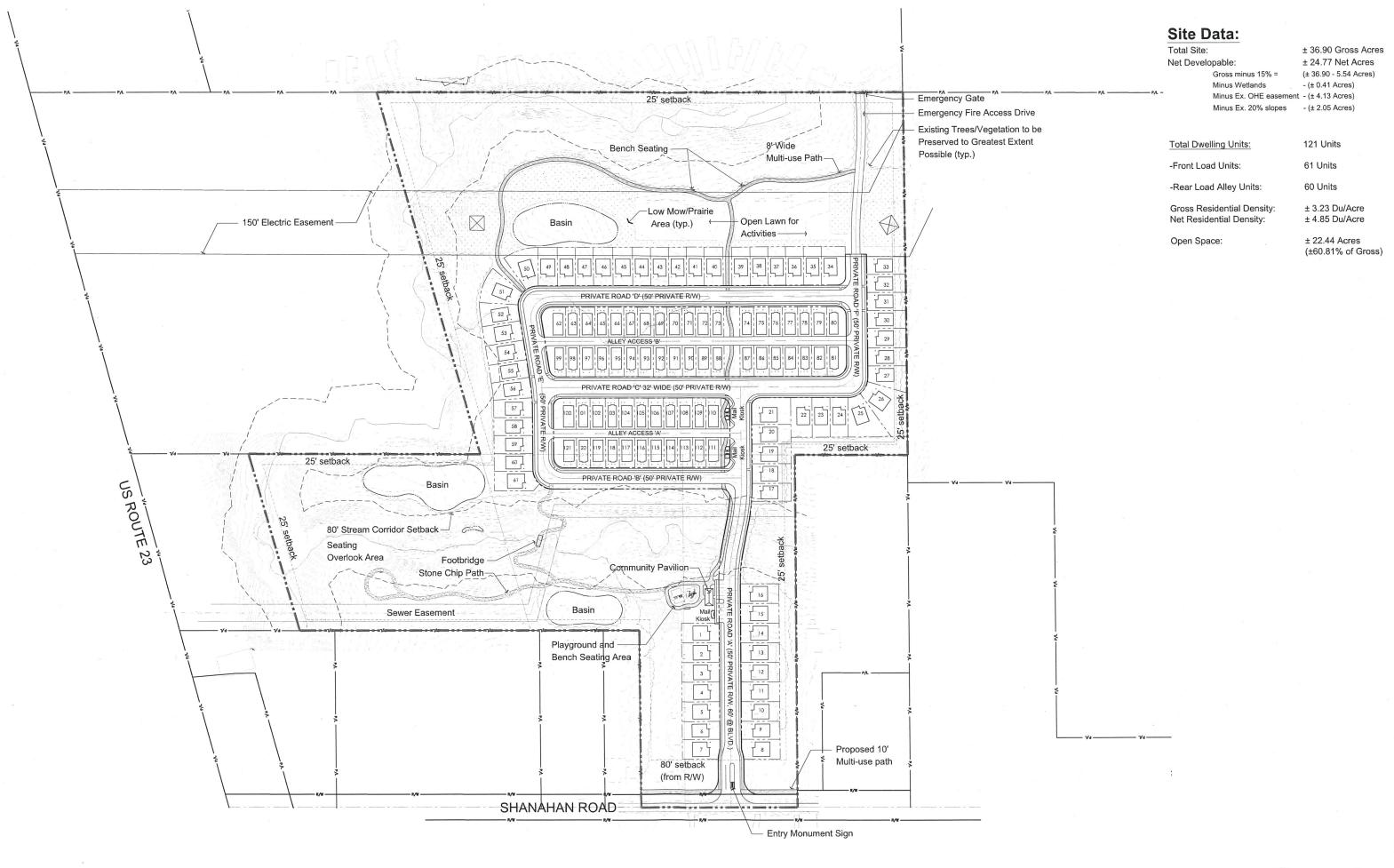
I have approved said plans dated July 29, 2022, With the following exception:

Need documentation that all roadways and emergency access drive will be built to hold a hold a 75,00 lbs. vehicle?

We appreciate the opportunity to work with you in the future and thank you for your interest in Berlin Township. If we can be of any further assistance please do not hesitate to call or visit our 2708 Lackey Old State location.

Respectfully,

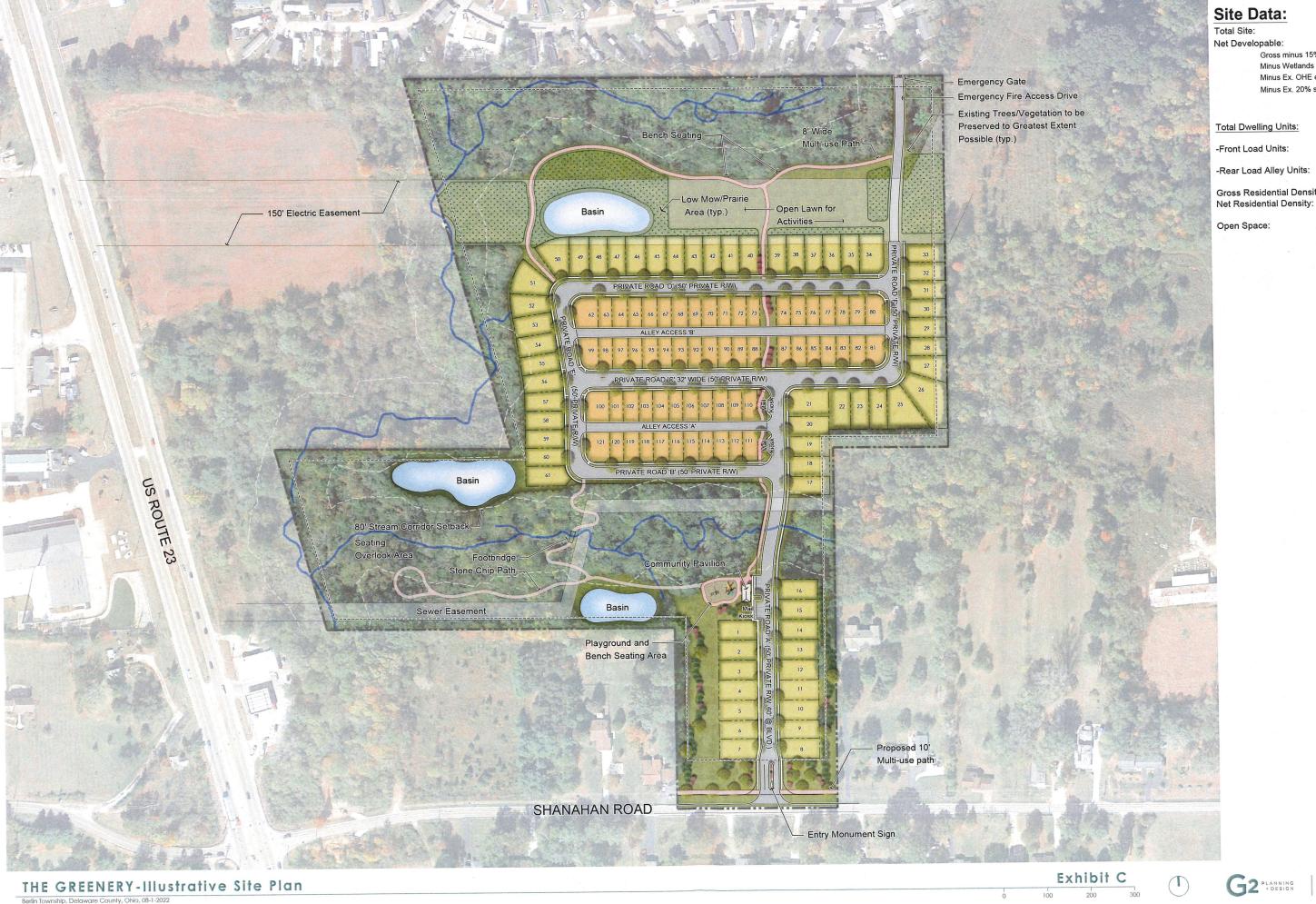
Lt. Craig A. Hall, CFSI











Site Data:

Total Site:

± 36.90 Gross Acres ± 24.77 Net Acres

Net Developable: Gross minus 15% = Minus Wetlands

(± 36.90 - 5.54 Acres) - (± 0.41 Acres)

Minus Ex. OHE easement - (± 4.13 Acres) Minus Ex. 20% slopes - (± 2.05 Acres)

Total Dwelling Units:

121 Units

-Front Load Units:

61 Units 60 Units

Gross Residential Density:

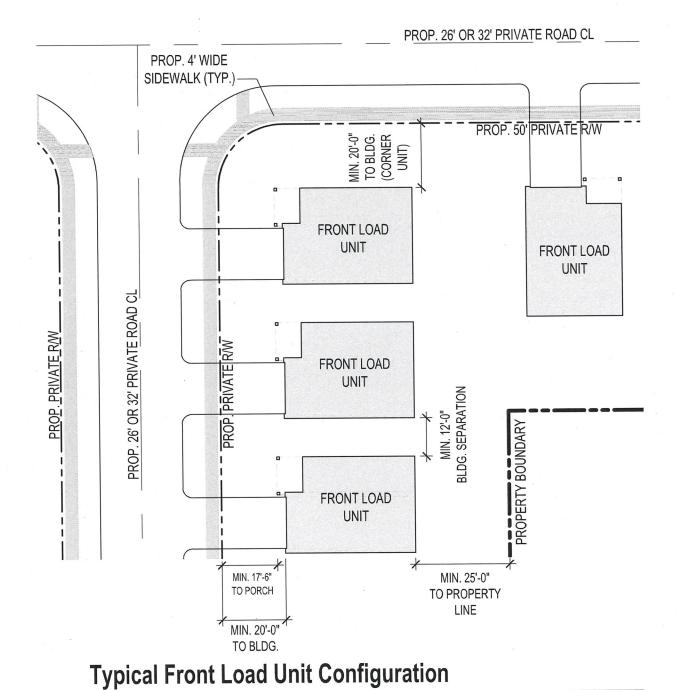
± 3.23 Du/Acre ± 4.85 Du/Acre

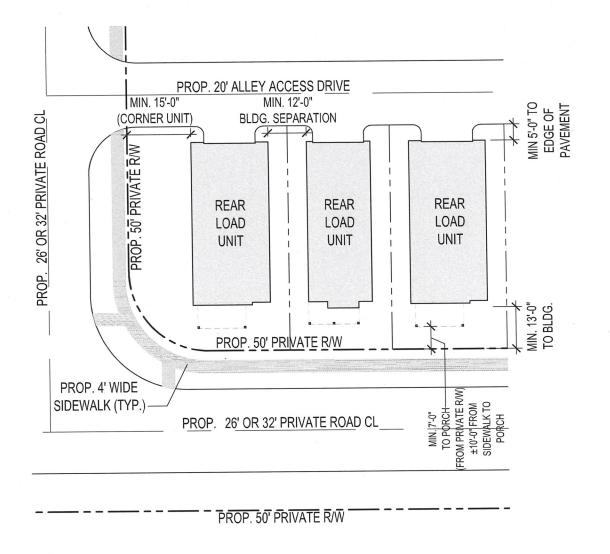
Open Space:

± 22.44 Acres (±60.81% of Gross)









Typical Rear Load Single Configuration

SCALE: 1" = 30'



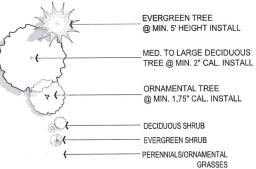




SCALE: 1" = 30'

- Emergency Gate **Emergency Fire Access Drive** Existing Trees/Vegetation to be Bench Seating, See Preserved to Greatest Extent 8' Wide Detail G, Exhibit D3-Possible (typ.) Multi-use Path Low Mow/Prairie X Open Lawn for Area (typ.) (150' Electric Easement Activities -----> 33 59 60 Existing Trees at Perimeter Basin North Kiesk Area - See Detail A. Exhibit to be Preserved to Greatest D2 For Enlargement In This Area Extent Possible (typ.) Playground / Pavilion / South Mail Deciduous Shade 80' Stream Corridor Setback Kiosk - See Detail B, Exhibit D2 Tree (typ.) Seating For Enlargement In This Area Overlook Area Footbridge Proposed 8' Wide Multi-Use Path Basin Sewer Easement Stone Chip Path -Existing Trees & -Final Location to be adjusted in Vegetaion To Remain To field at time of install to minimize Greatest Extent Possible impact on existing natural features Flowering Ornamental Tree (typ.) Flowering Ornamental & Deciduous Shade Trees to be -Proposed Evergreer Incorporated into Perimeter Buffers Tree (typ.) Proposed 10' Wide Multi-use path Shanahan Road Entry Boulevard with Double Sided Monument Sign - See Detail B, Exhibit D1 For Enlargement In This Area

LANDSCAPE KEY PLAN



PLANT LIST

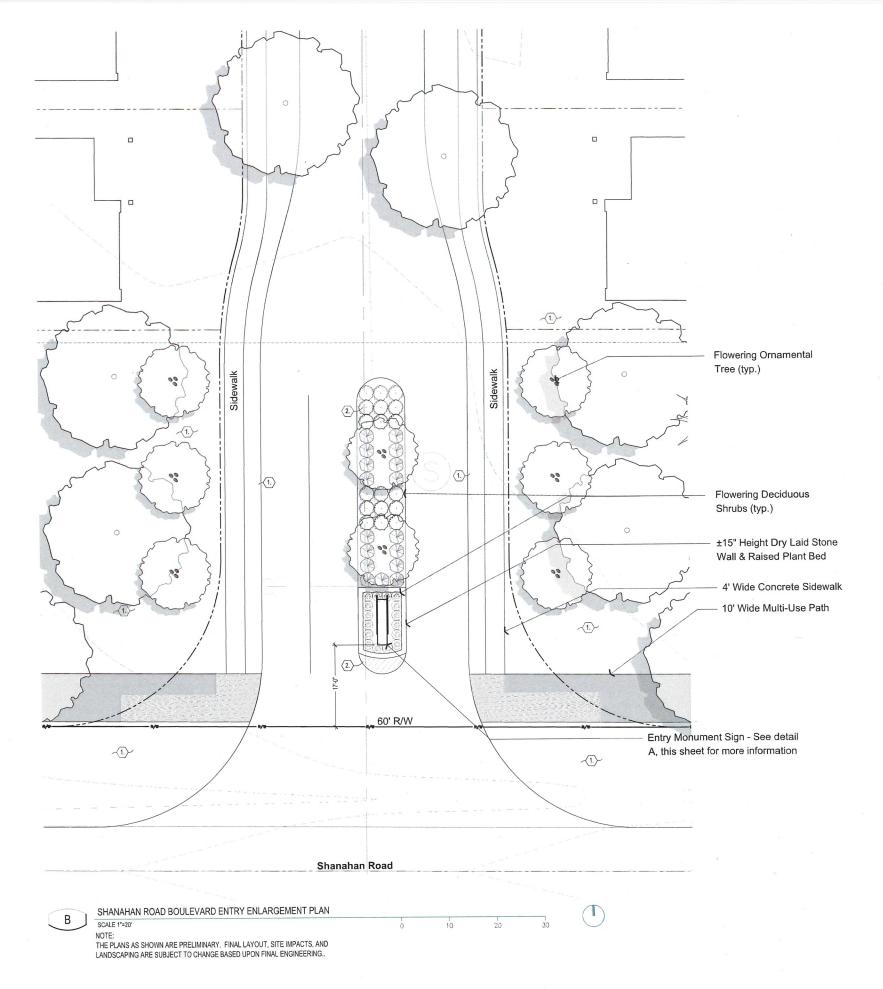
BOT. NAME/COMMON NAME	SIZE	COND.	SPACING	NOTES
CIDUOUS SHADE TREES / STREET T	REES			
Acer rubrum 'Armstrong' Armstrong Red Maple	2" CAL.	B&B	AS SHOWN	Match Form
Platanus x acerifolia 'Bloodgood' Bloodgood London Planetree	2" CAL.	B&B	AS SHOWN	
Cladrastis kentuckea American Yellowwood	2" CAL.	B&B	AS SHOWN	
Nyssa sylvatica 'Wildfire' Wildfire Blackgum	2" CAL.	B&B	AS SHOWN	
Quercus rubra Red Oak	2" CAL.	B&B	AS SHOWN	
Quercus bicolor Swamp White Oak	2" CAL.	B&B	AS SHOWN	
Ulmus x 'Morton' Accolade Elm	2" CAL.	B&B	AS SHOWN	
Betula nigra 'Heritage' Heritage River Birch	2" CAL.	B&B	AS SHOWN	
Tilia cordata 'Greenspire' Greenspire Littleleaf Linden	2" CAL.	B&B	AS SHOWN	Match For
Zelkova serrata 'Green Vase' Green Vase Zelkova	2" CAL.	B&B	AS SHOWN	Match For
	2" CAL.	B&B	AS SHOWN	Match For
Green Vase Zelkova	2" CAL.	B&B B&B	AS SHOWN	Match For
Green Vase Zelkova MALL / ORNAMENTAL TREES Magnolia virginiana				Match For
Green Vase Zelkova MALL / ORNAMENTAL TREES Magnolia virginiana Sweetbay Magnolia Amelanchier canadensis 'Glennform'	1.75" CAL.	B&B	AS SHOWN	Match For
Green Vase Zelkova MALL / ORNAMENTAL TREES Magnolia virginiana Sweetbay Magnolia Amelanchier canadensis 'Glennform' Rainbow Pilar Serviceberry Cercis canadensis	1.75" CAL.	B&B B&B B&B	AS SHOWN	Match For
Green Vase Zelkova MALL / ORNAMENTAL TREES Magnolia virginiana Sweetbay Magnolia Amelanchier canadensis 'Glennform' Rainbow Pillar Serviceberry Cercis canadensis Eastern Redbud Cercis canadensis 'Forest Pansy'	1.75" CAL. 1.75" CAL. 1.75" CAL.	B&B B&B B&B	AS SHOWN AS SHOWN AS SHOWN	Match For
Green Vase Zelkova MALL / ORNAMENTAL TREES Magnolia virginiana Sweetbay Magnolia Amelanchier canadensis 'Glennform' Rainbow Pilar Serviceberry Cercis canadensis Eastem Redbud Cercis canadensis 'Forest Pansy' Forest Pansy	1.75" CAL. 1.75" CAL. 1.75" CAL. 1.75" CAL.	B&B B&B B&B	AS SHOWN AS SHOWN AS SHOWN	Match For
Green Vase Zelkova MALL / ORNAMENTAL TREES Magnolia virginiana Sweethay Magnolia Amelanchier canadensis 'Glennform' Rainbow Pilar Serviceberry Cercis canadensis Eastem Redbud Cercis canadensis 'Forest Pansy' Forest Pansy Eastem Redbud Crataegus viridus 'Winter King' Winter King Hawthorn	1.75" CAL. 1.75" CAL. 1.75" CAL. 1.75" CAL.	B&B B&B B&B	AS SHOWN AS SHOWN AS SHOWN	Match For
Green Vase Zelkova MALL / ORNAMENTAL TREES Magnolia virginiana Sweetbay Magnolia Amelanchier canadensis 'Glennform' Rainbow Pillar Serviceberry Cercis canadensis Eastern Redbud Cercis canadensis 'Forest Pansy' Forest Pansy Eastern Redbud Crataegus viridus 'Winter King' Winter King Hawthorn EVERGREEN TREES Abies Concolor	1.75" CAL. 1.75" CAL. 1.75" CAL. 1.75" CAL. 1.75" CAL.	B&B B&B B&B B&B	AS SHOWN AS SHOWN AS SHOWN AS SHOWN	Match For
Green Vase Zelkova MALL / ORNAMENTAL TREES Magnolia virginiana Sweetbay Magnolia Amelanchier canadensis 'Glennform' Rainbow Pillar Serviceberry Cercis canadensis Eastern Redbud Cercis canadensis 'Forest Pansy' Forest Pansy Eastern Redbud Crataegus viridus 'Winter King' Winter King Hawthorn EVERGREEN TREES Abies Concolor White Fir Picea abies	1.75" CAL. 1.75" CAL. 1.75" CAL. 1.75" CAL. 1.75" CAL. 5' HT.	B&B B&B B&B B&B B&B	AS SHOWN AS SHOWN AS SHOWN AS SHOWN PER PLAN	Match For

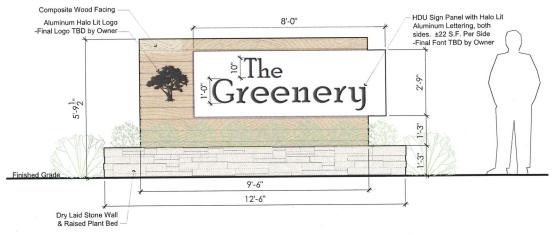
NOTE.
THE PLAN AS SHOWN IS PRELIMINARY. FINAL LAYOUT, SITE IMPACTS, AND LANDSCAPING ARE SUBJECT TO CHANGE BASED UPON FINAL ENGINEERING..







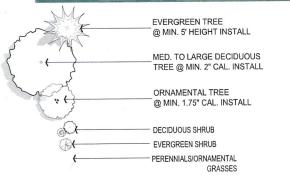






DOUBLE SIDED ENTRY MONUMENT SIGN SCALE: 1/2" = 1'-0"

LANDSCAPE KEY PLAN



CODED LANDSCAPE NOTES

- (2.) LANDSCAPE BED PROVIDE 3" DEPTH HARDWOOD MULCH, POSITIVE DRAINAGE IN ALL DIRECTIONS. HAND SPADE EDGE.

THILTIALIA

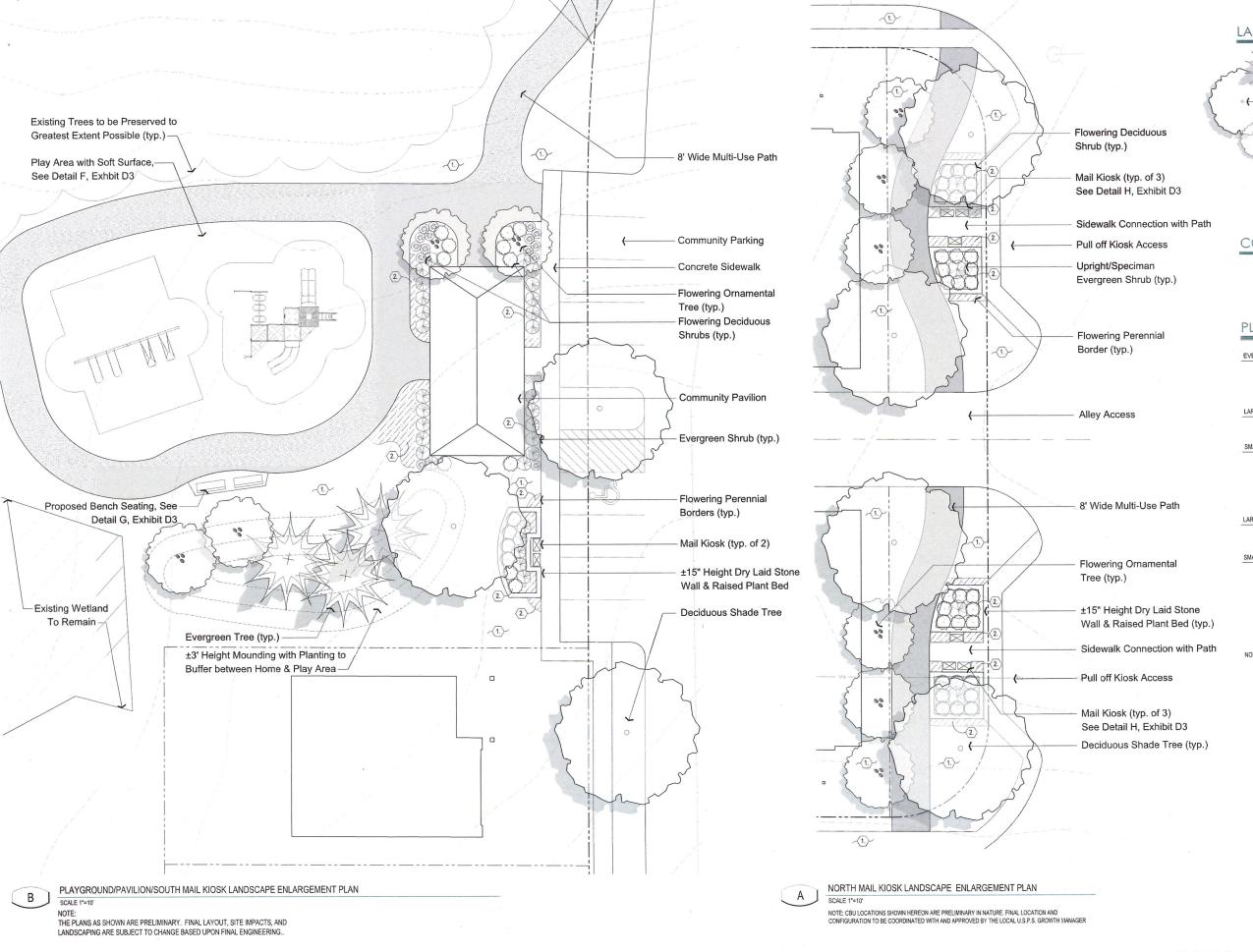
PLANT LIST			7	
BOT. NAME/COMMON NAME EVERGREEN SHRUBS	SIZE	COND.	SPACING	NOTES
Buxus x 'Green Velvet' Green Velvet Boxwood	24" HT.	B&B	PER PLAN	
LARGE FLOWERING / DECIDUOUS SHRUBS				
Viburnum carlesii Koreanspice Viburnum	30" HT.	B&B	PER PLAN	
SMALL FLOWERING / DECIDUOUS SHRUBS				
Aronia melanocarpa Low Scape Mound Aronia	12" HT.	#3 Cont.	PER PLAN	
Hydrangea paniculata 'Jane' PP #22,330 Little Lime Hydrangea	24" HT.	#3 Cont.	PER PLAN	
SMALL GRASSES, PERENNIALS, GROUNDCOVERS, &	VINES			
Coreopsis verticillata Moonbeam Moonbeam Tickseed	-	#1 Cont.	Plant @ 18" O.C.	
Salvia x sylvestris 'Snow Hill' Snow Hill Meadow Sage	-	#1 Cont.	Plant @ 12" O.C.	
Hemerocallis 'Going Bananas' Going Bananas Daylily		#1 Cont.	Plant @ 18" O.C.	
Pennisetum alopecuroides 'Hameln' Hameln Dwarf Fountain Grass	-	#1 Cont.	Plant @ 24" O.C.	

NOTE: SEE EXHIBIT xx FOR TYPICAL TREE PLANTING LIST

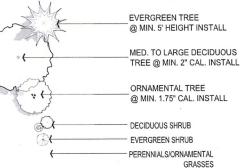








LANDSCAPE KEY PLAN



CODED LANDSCAPE NOTES

(1.) TURF

2. LANDSCAPE BED - PROVIDE 3" DEPTH HARDWOOD MULCH, POSITIVE DRAINAGE IN ALL DIRECTIONS. HAND SPADE EDGE.

PLANT LIST

LAINI LISI				
BOT. NAME/COMMON NAME	SIZE	COND.	SPACING	NOTE
EVERGREEN SHRUBS				
Thuja occidentalis 'Bobozam' Mr. Bowling Ball Arborvitae	24" HT.	B&B	PER PLAN	
Buxus x 'Green Velvet' Green Velvet Boxwood	24" HT.	B&B	PER PLAN	
LARGE FLOWERING / DECIDUOUS SHRUBS				
Viburnum carlesii Koreanspice Viburnum	30" HT.	B&B	PER PLAN	
SMALL FLOWERING / DECIDUOUS SHRUBS				
Fothergilla x 'Mount Airy' Mount Airy Fothergilla	24" HT.	#3 Cont.	PER PLAN	
Hydrangea paniculata 'Jane' PP #22,330 Little Lime Hydrangea	24" HT.	#3 Cont.	PER PLAN	
Aronia melanocarpa Low Scape Hedger Low Scape Hedger Chokeberry	18" HT.	#2 Cont.		
LARGE GRASSES & PERENNIALS				
Miscanthus sinensis 'Morning Light' Morning Light Miscanthus	-	#3 Cont.	Plant @ 36" O.C.	
SMALL GRASSES, PERENNIALS, GROUNDCOVERS,	& VINES			
Coreopsis verticillata Moonbeam Moonbeam Tickseed		#1 Cont.	Plant @ 18" O.C.	
Salvia x sylvestris 'Snow Hill' Snow Hill Meadow Sage	-	#1 Cont.	Plant @ 12" O.C.	
Hemerocallis 'Going Bananas' Going Bananas Daylily		#1 Cont.	Plant @ 18" O.C.	
Pennisetum alopecuroides 'Hameln' Hameln Dwarf Fountain Grass	-	#1 Cont.	Plant @ 24" O.C.	
NOTE: SEE EXHIBIT XX FOR TYPICAL TREE PLANTIN	G LIST			









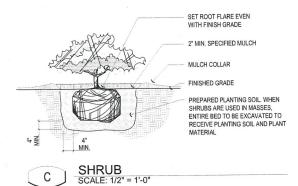
PLAY EQUIPMENT OR OWNER APPROVED EQUAL

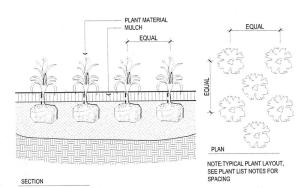


TYPICAL BENCH SEATING OR OWNER APPROVED EQUAL



MAIL KIOSK - DECORATIVE CLUSTER BOX UNIT OR OWNER APPROVED EQUAL NOTE: CBU SHOWN HEREON IS PRELIMINARY IN NATURE. FINAL LOCATION AND CONFIGURATION TO BE COORDINATED WITH AND APPROVED BY THE LOCAL U.S.P.S. GROWTH MANAGER

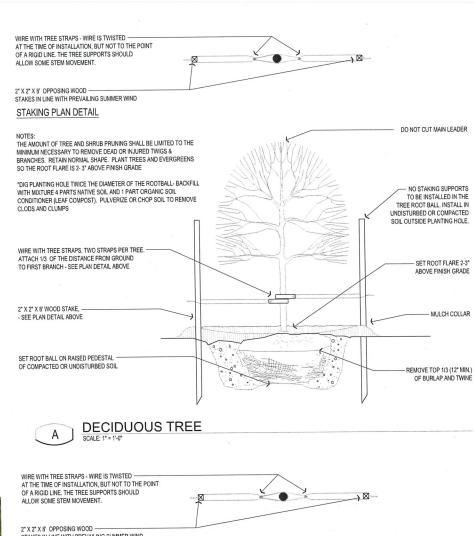


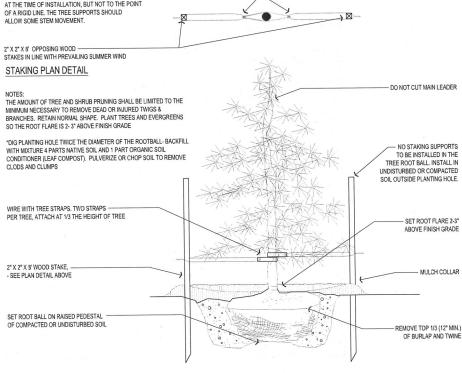


PERENNIALS & GROUNDCOVER D



20' X 40' PAVILION















Open Space Data:

Open Space:

± 22.44 Acres (±60.81% of Gross

± 36.90 Gross Acres

Proposed Path:

±3,800 Lineal Feet

Multi-Use Path: Stone Chip Path:

±2,530 LF ±1,270 LF





