CLINTON PARKING LOT REDESIGN

THE DESIGN TEAM

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Transportation

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Text Editor
Structural

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Graphics Editor
Water Resources

Derek Gansebom
Technical Expert
Transportation

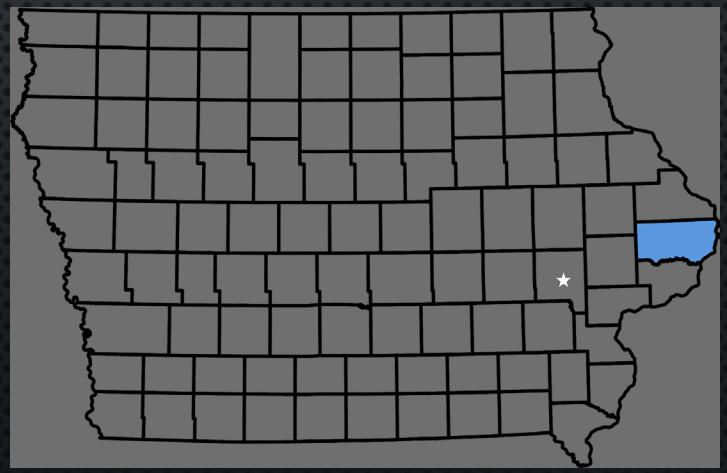

Downtown
Clinton
Alliance


WELCOME TO IOWA
CLINTON
ON THE MISSISSIPPI

THE CLIENT

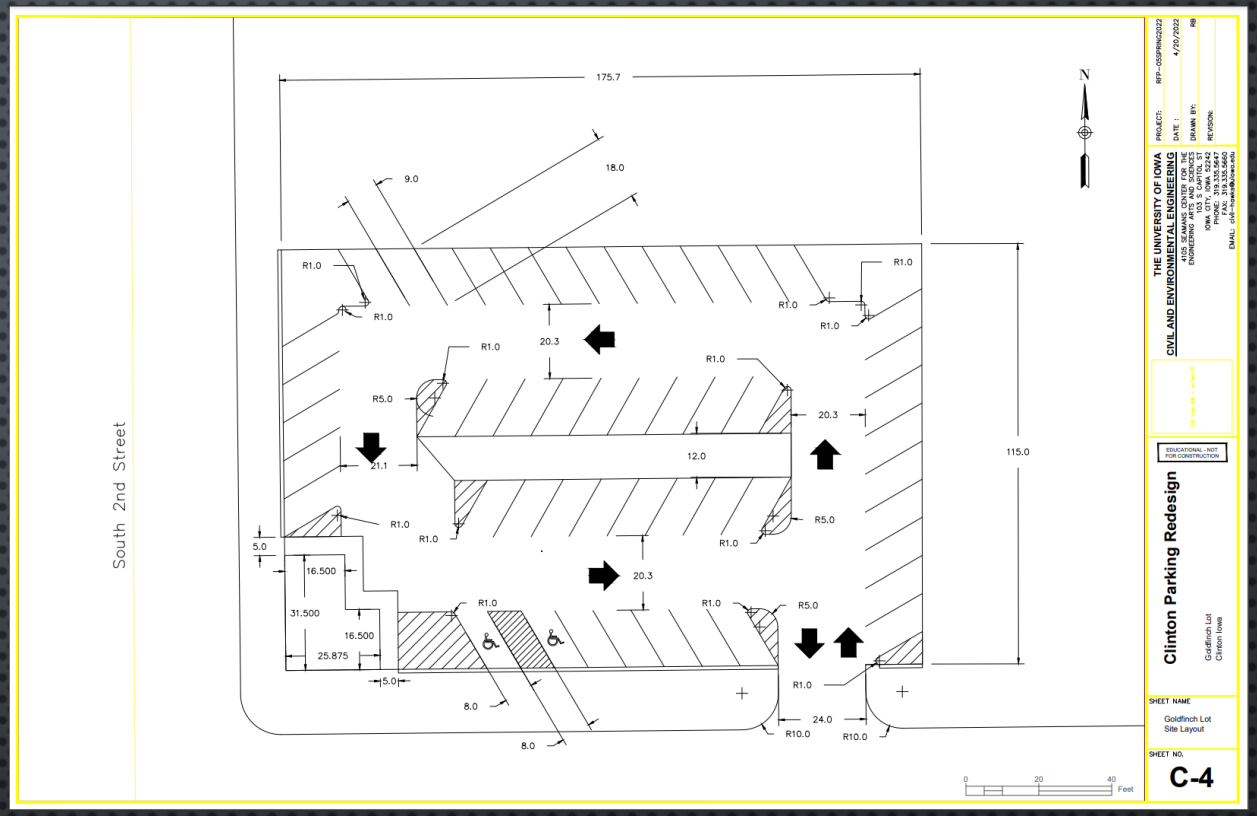
PROJECT LOCATION

CLINTON, IOWA

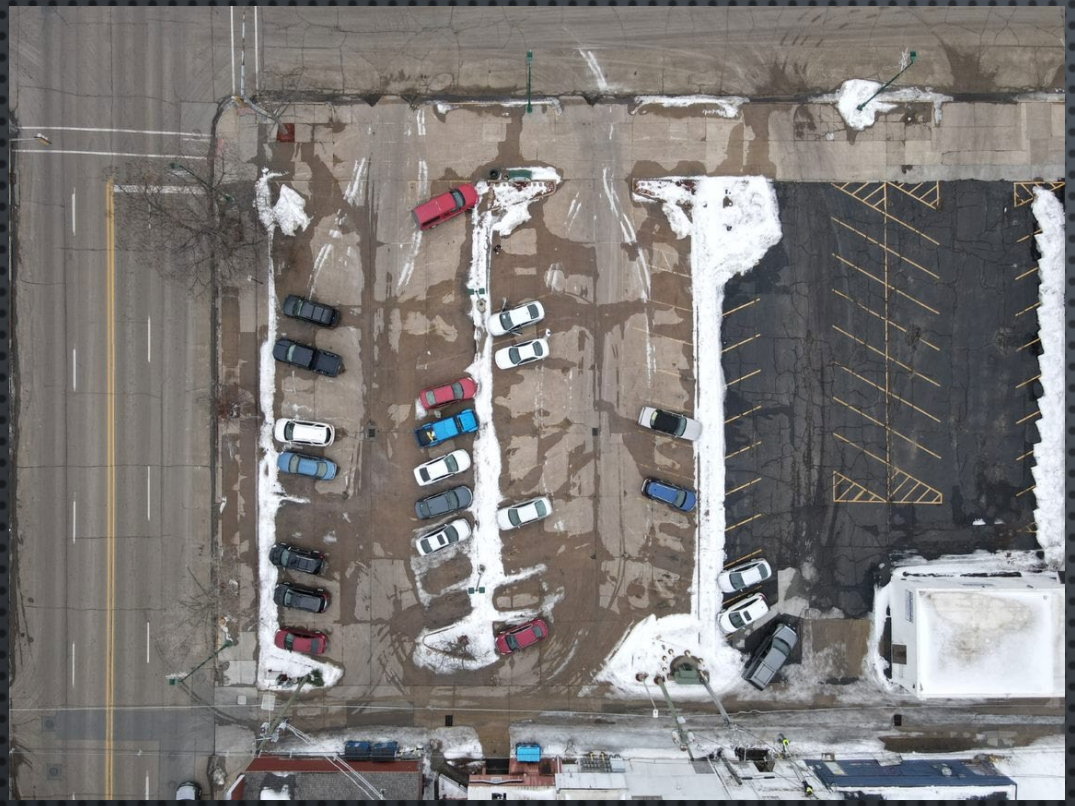


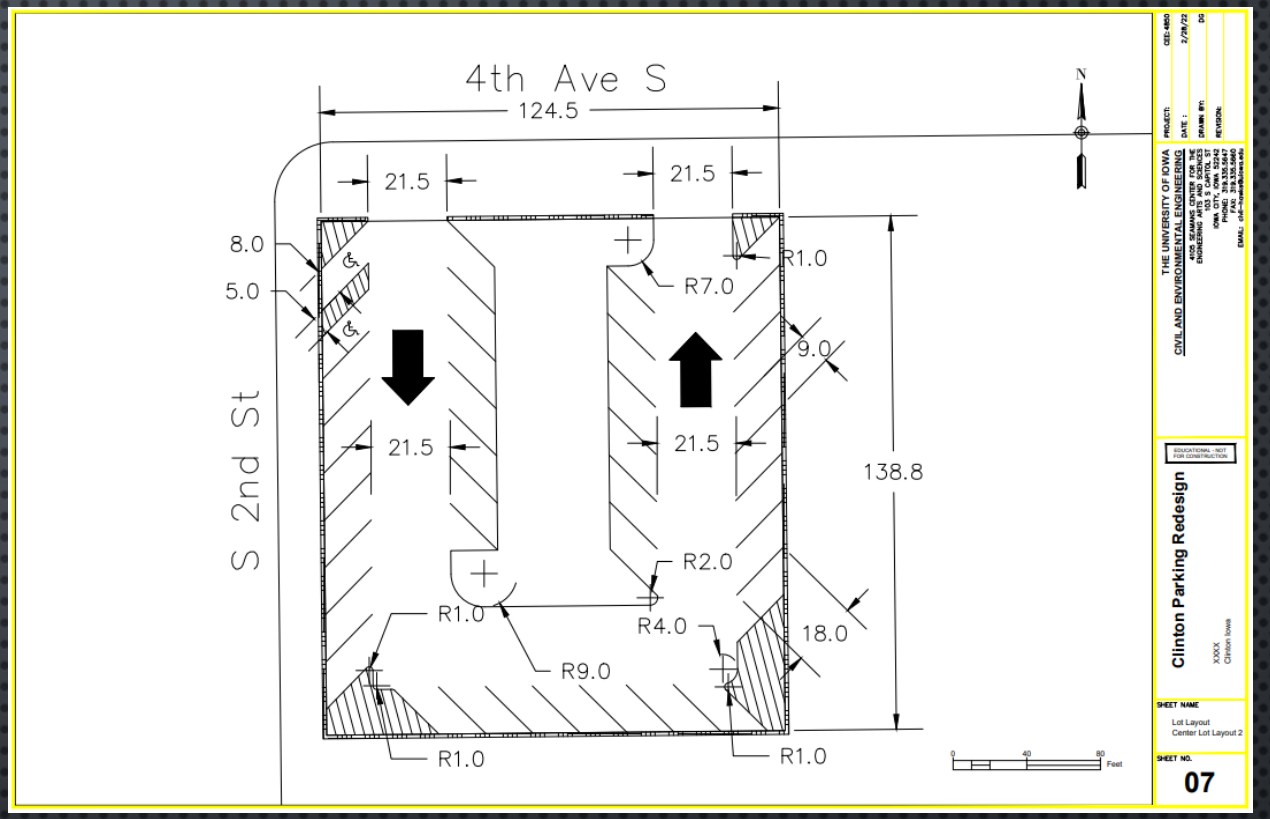

Clinton Park
Clinton Drivers
LicenseStation - By...
Chickadee Lot
Oriole Lot
Blue Jay Lot
Grackle Lot
Goldfinch Lot
Clinton County
Human Services

PROJECT GOALS



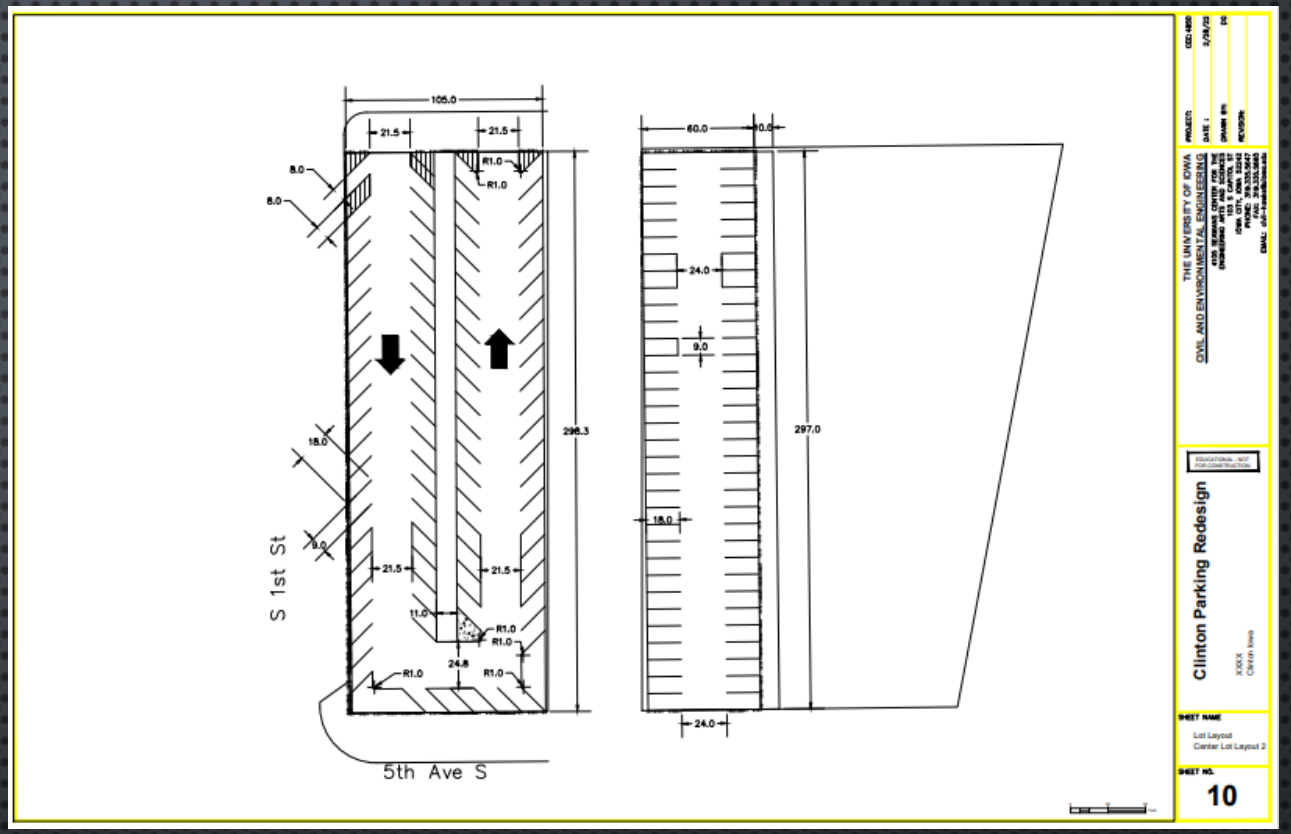
GOLDFINCH LOT





CHICKADEE LOT

Iowa SUDAS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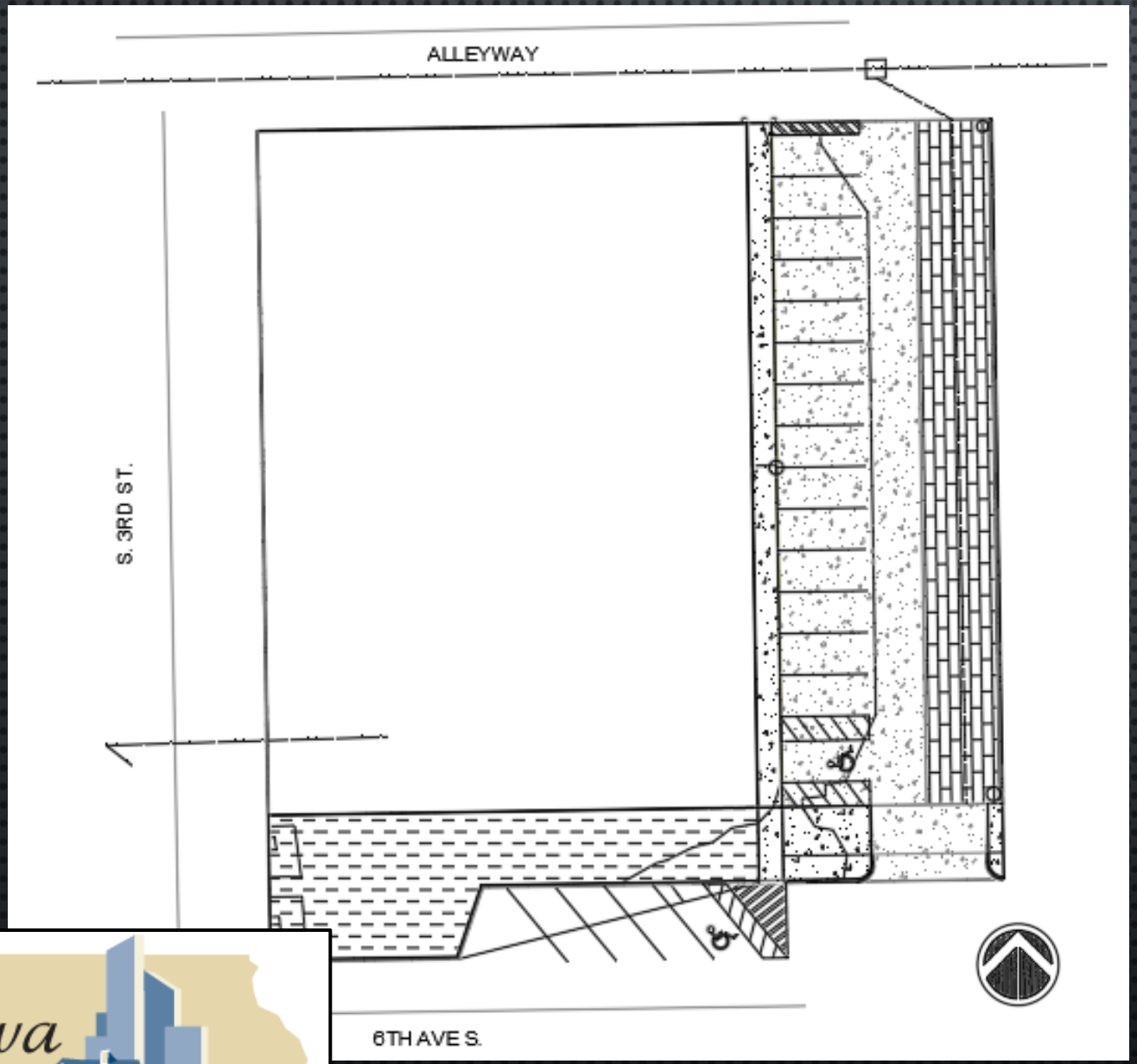
21.5
21.5
R1.0
R1.0
8.0
8.0
18.0
9.0
21.5
21.5
11.0
R1.0
R1.0
24.8
R1.0
R1.0
296.3
S 1st St
5th Ave S
60.0
0.0
24.0
9.0
297.0
18.0
24.0
THE UNIVERSITY OF IOWA
CIVIL AND ENVIRONMENTAL ENGINEERING
Clinton Parking Redesign
SHEET NAME
Lot Layout
Center Lot Layout 2
SHEET NO.
10

ORIOLE LOT

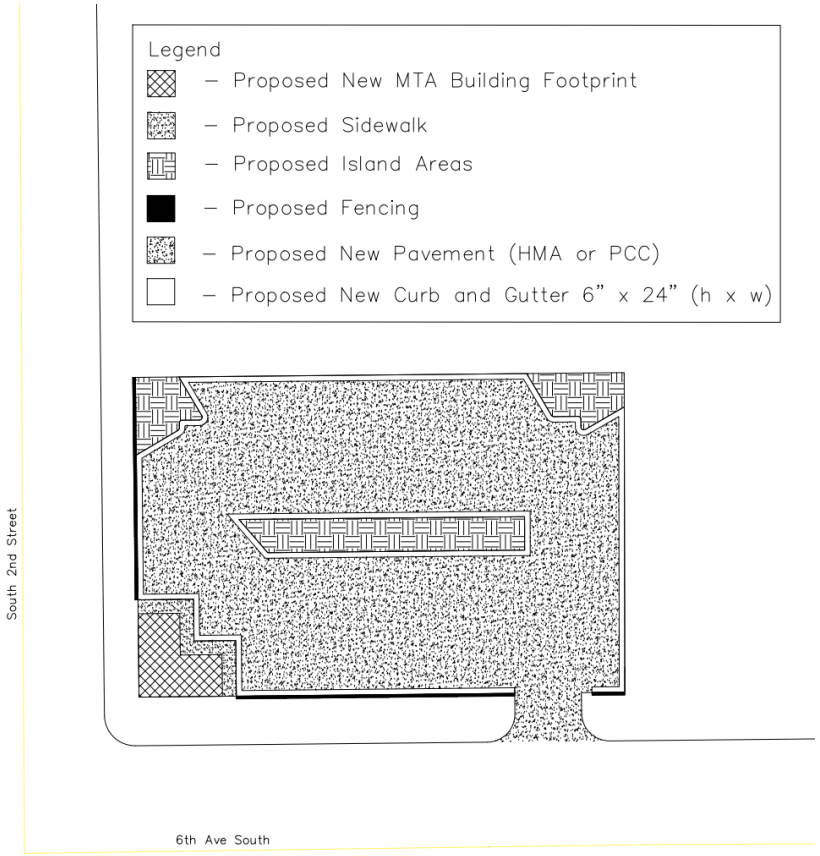
Iowa SUDAS

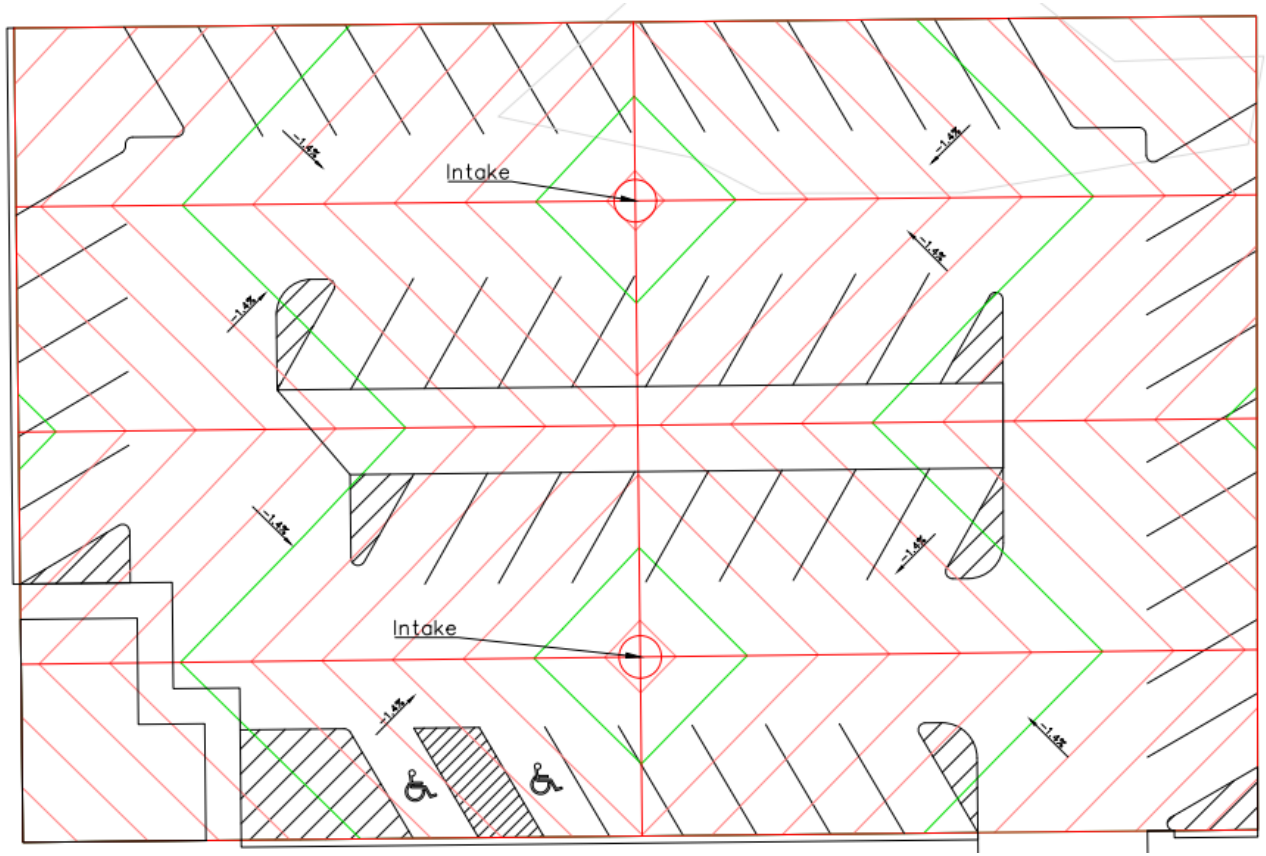
BLUE JAY LOT



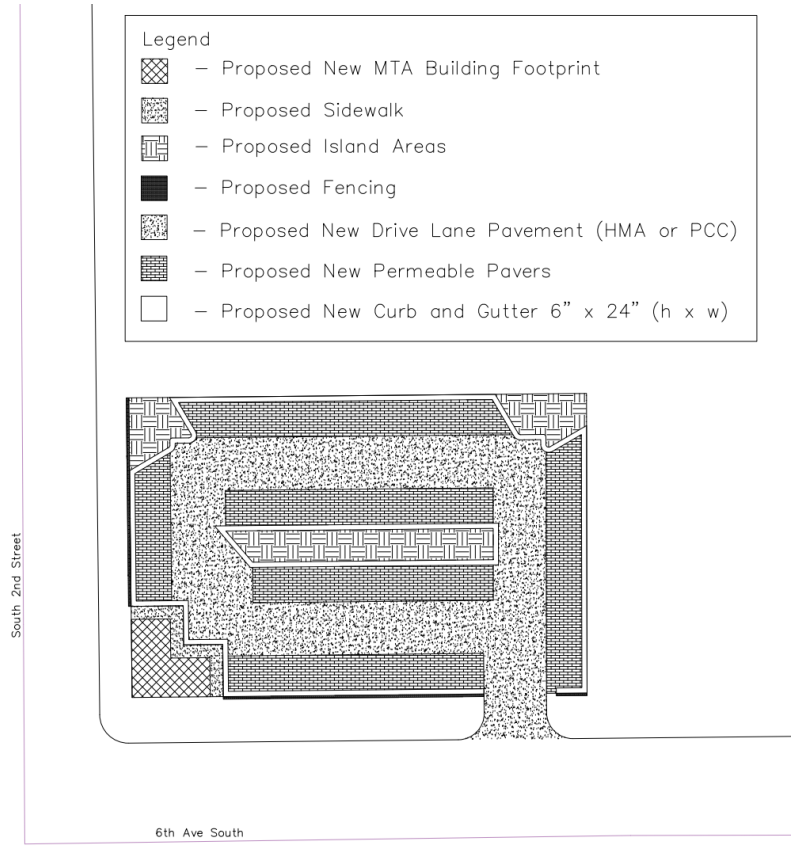
Iowa SUDAS

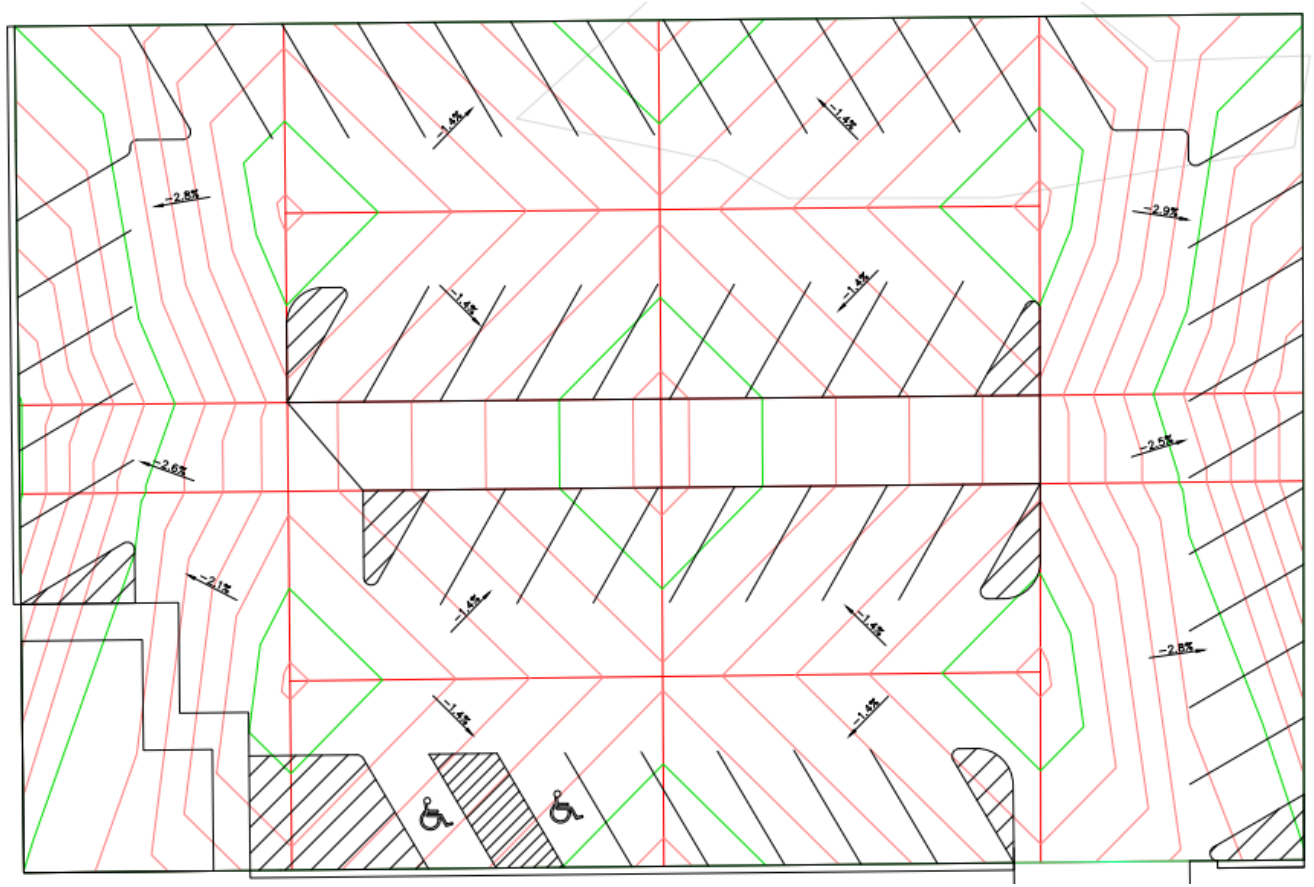
GRACKLE LOT



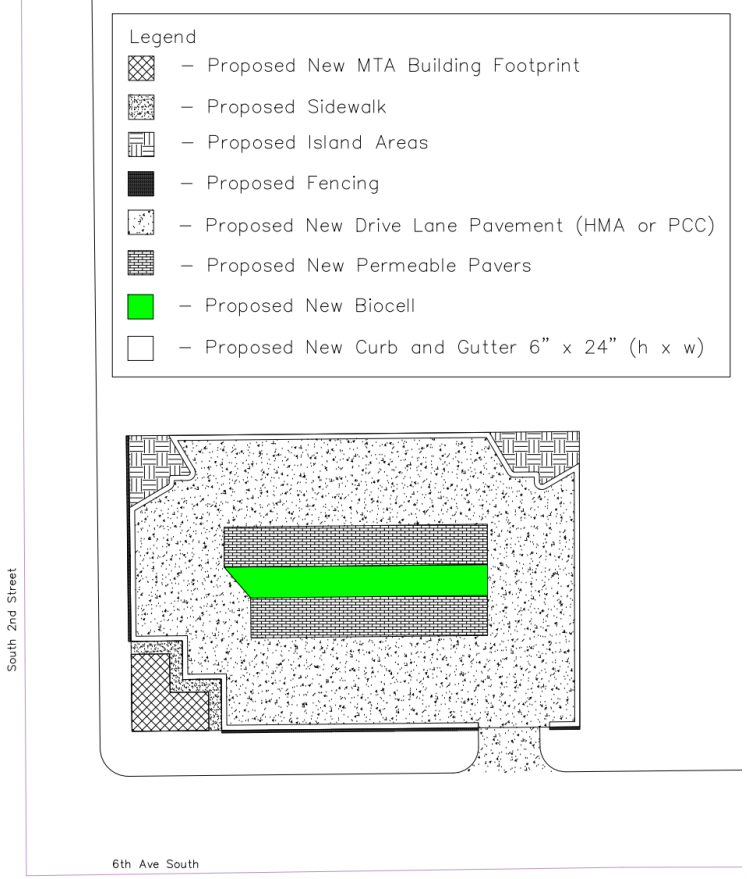


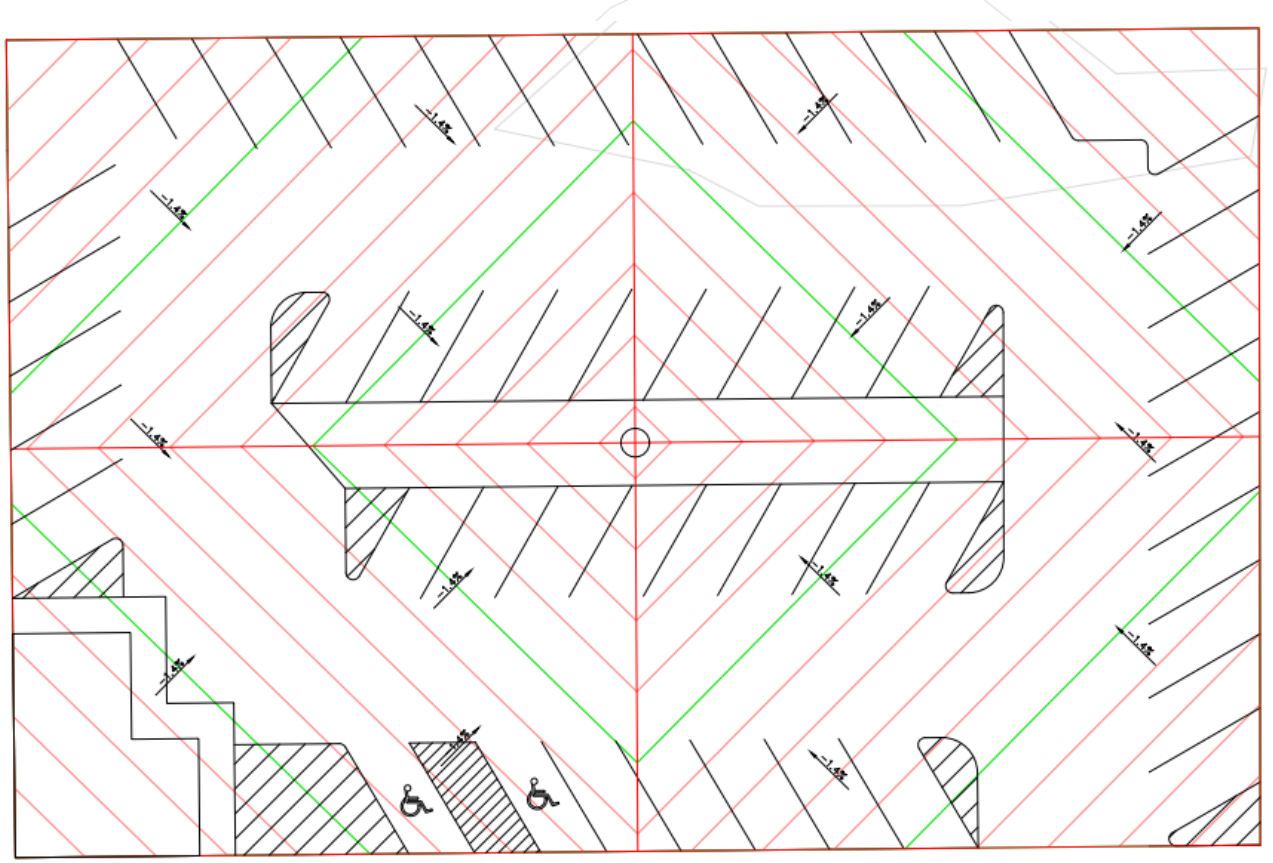
GOLDFINCH LOT – TRADITIONAL



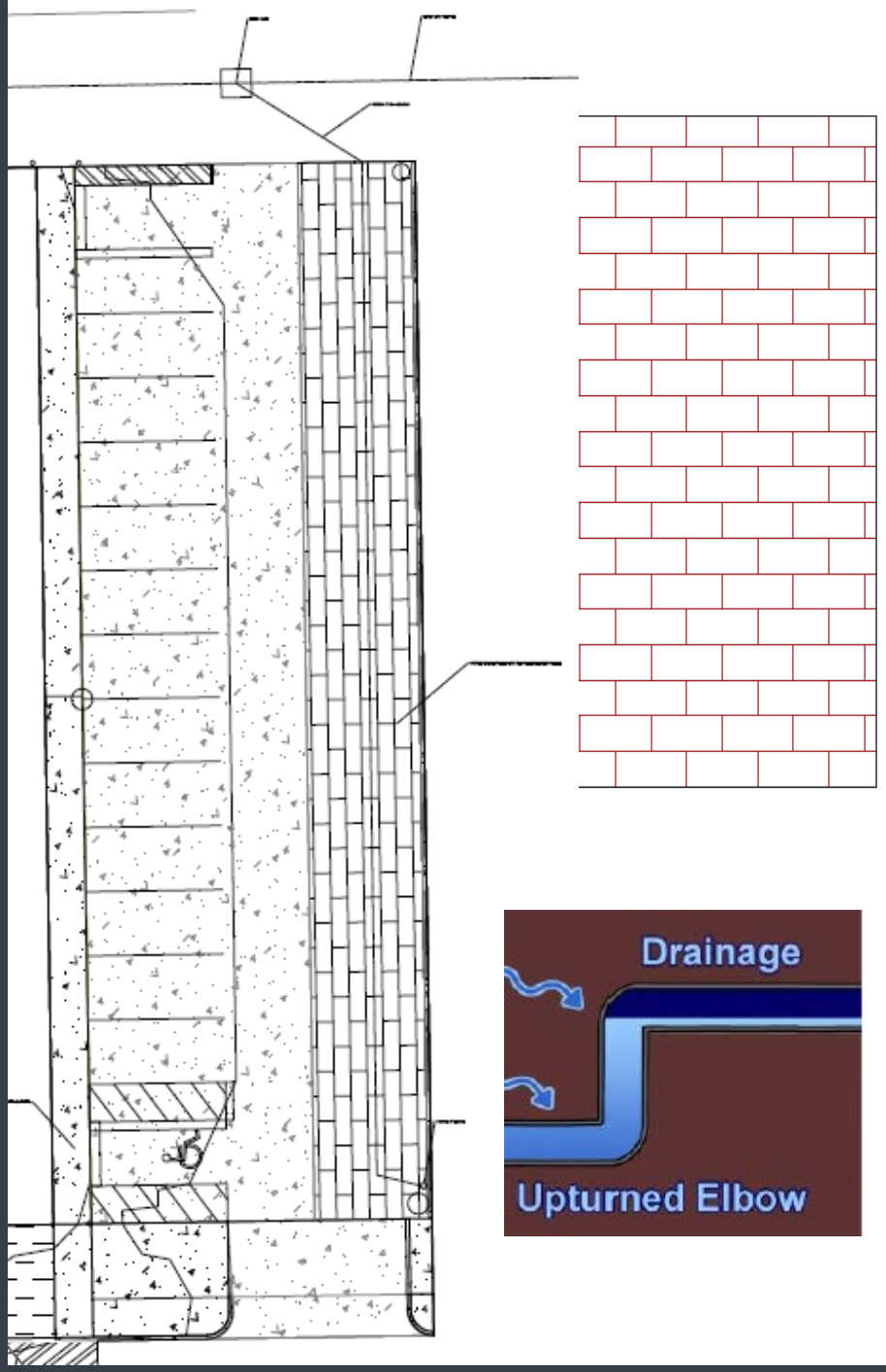


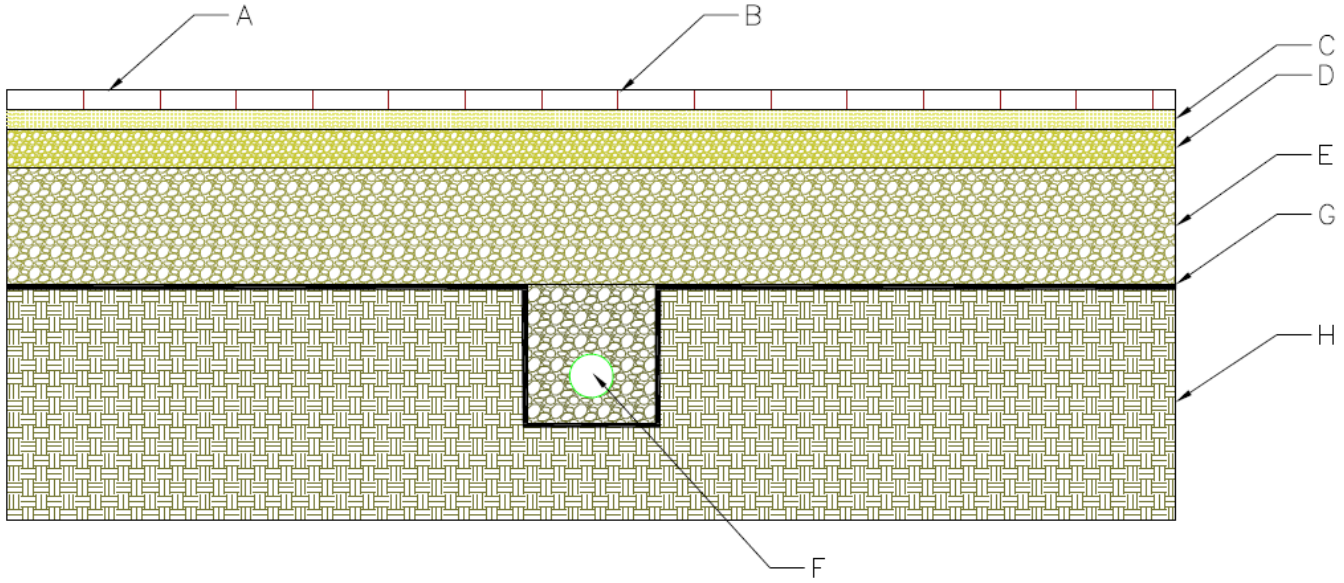
GOLDFINCH - PERMEABLE





GOLDFINCH – BIO CELL





A. Pavers: solid concrete pavers that fit together with slight gaps

B. Granular Fill: 1/8th inch typ gaps in pavers usually filled with a small granite chip to allow water to pass through

C. Setting Bed Aggregate: 2" layer of clean crushed 3/8" stone (ASTM No. 8)

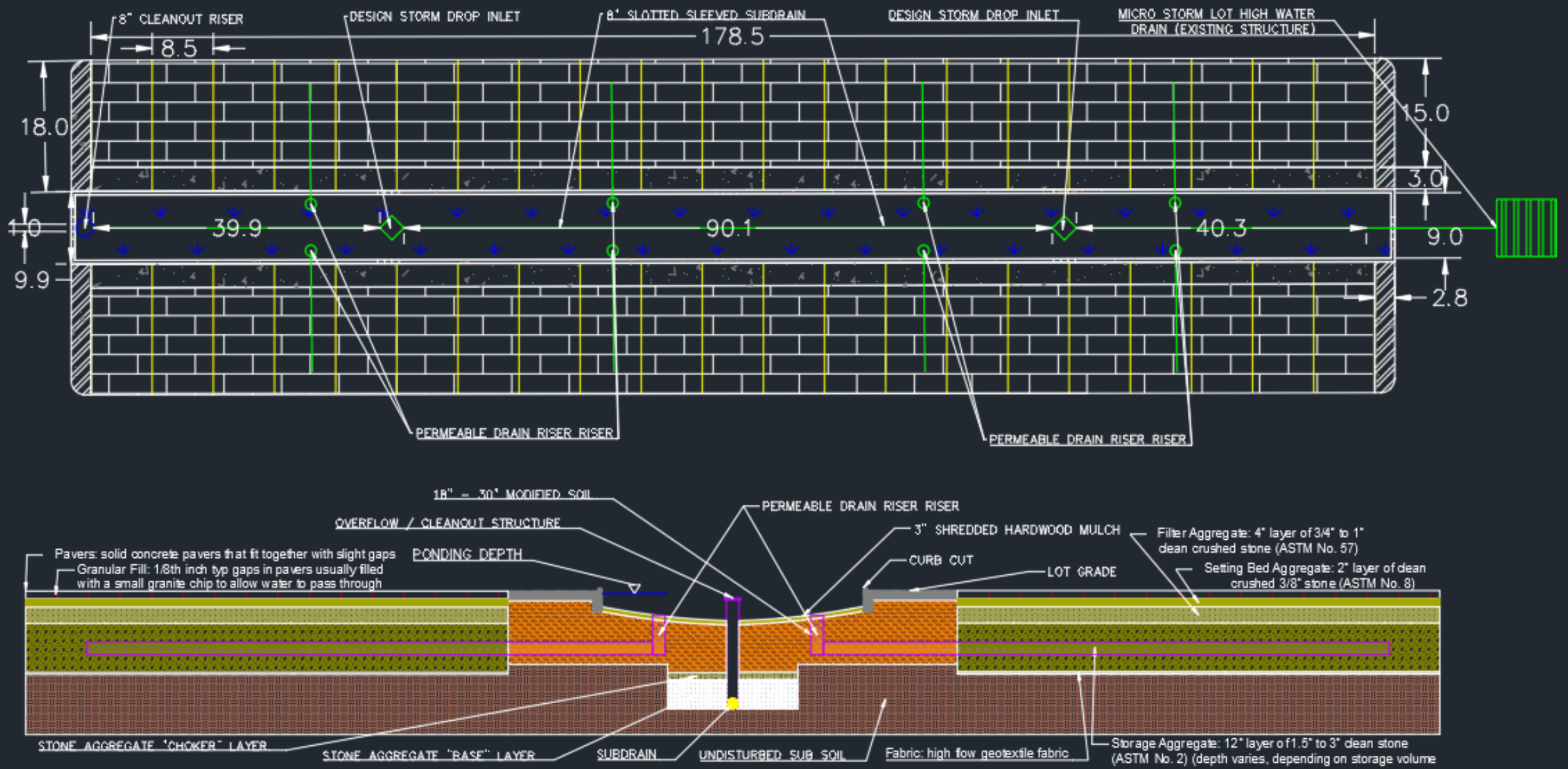
D. Filter Aggregate: 4" layer of 3/4" to 1" clean crushed stone (ASTM No. 57)

E. Storage Aggregate: 12" layer of 1.5" to 3" clean stone (ASTM No. 2) (depth varies, depending on storage volume)

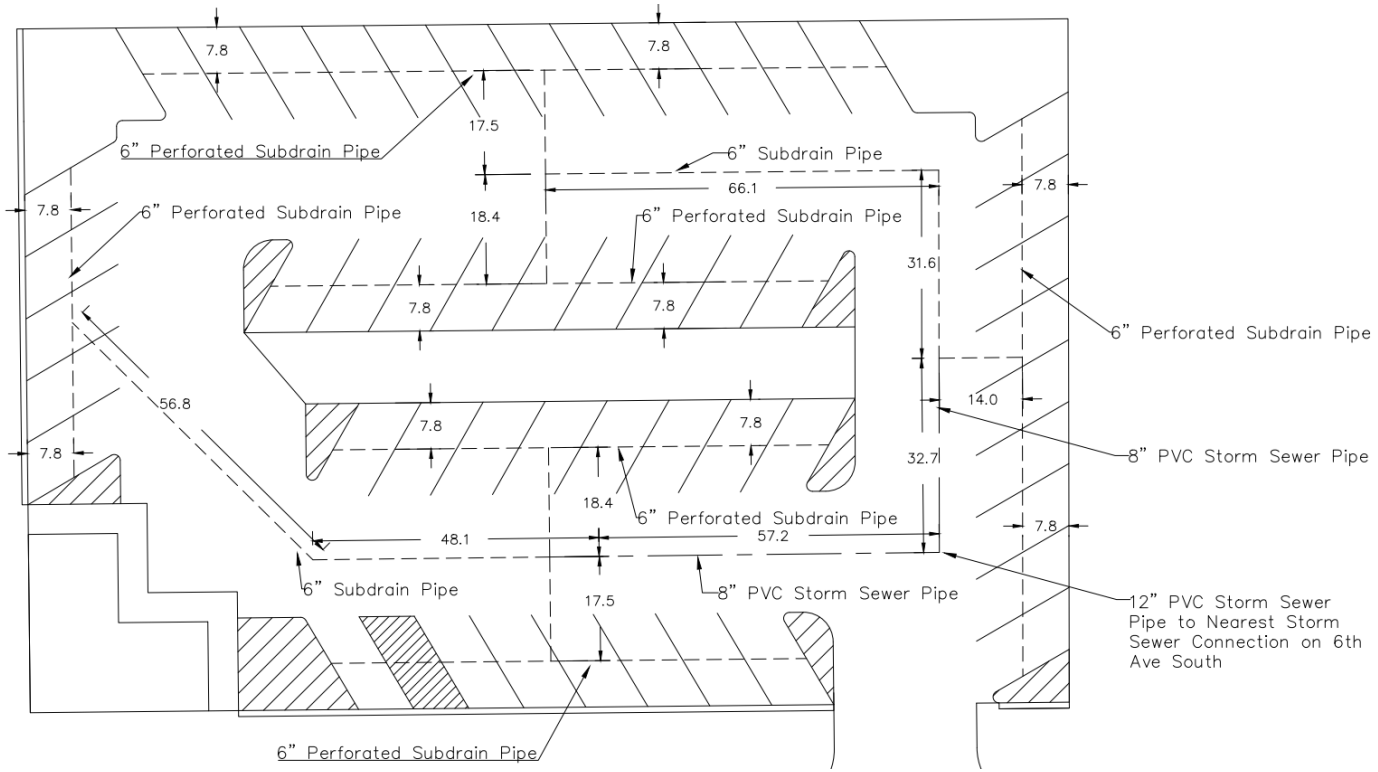
F. Subdrain: Perforated subdrain tile ensures the system never stays saturated

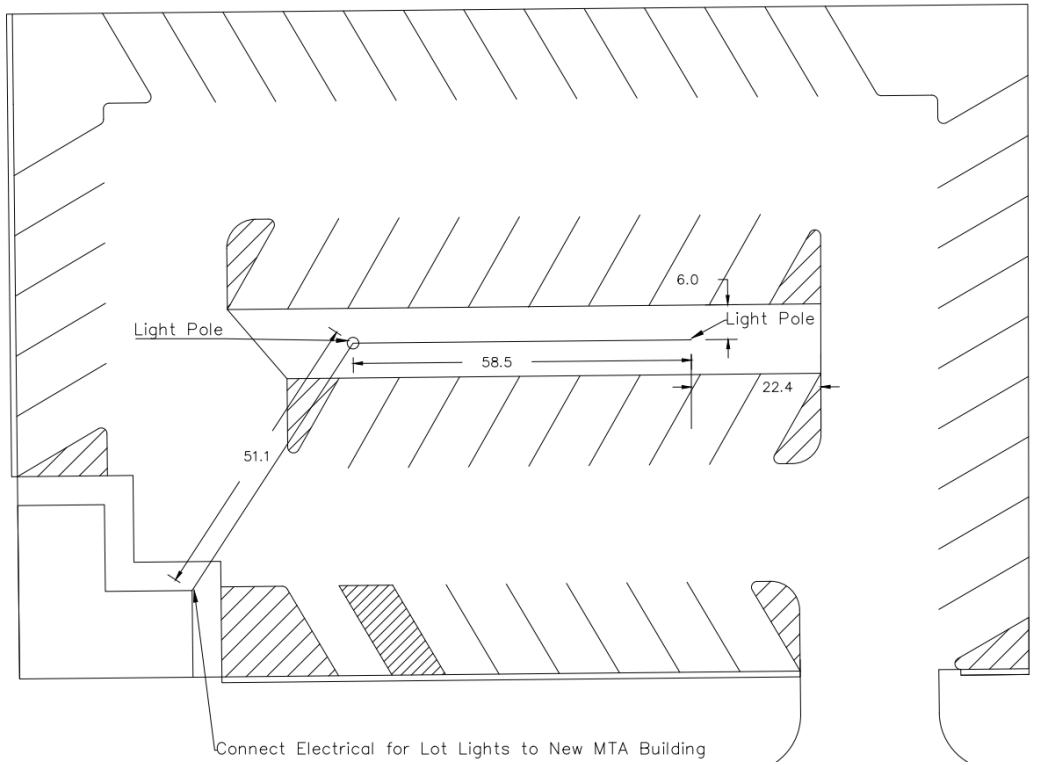
G. Fabric: high flow geotextile fabric

H. Existing Soils: soils under the rock layer

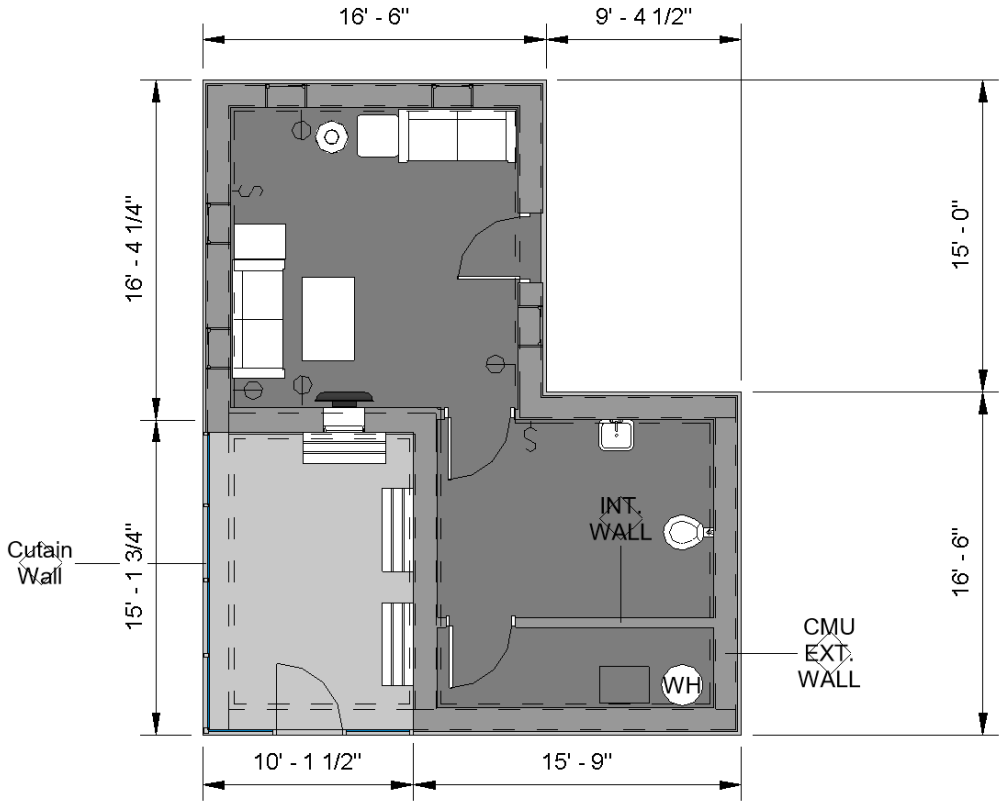


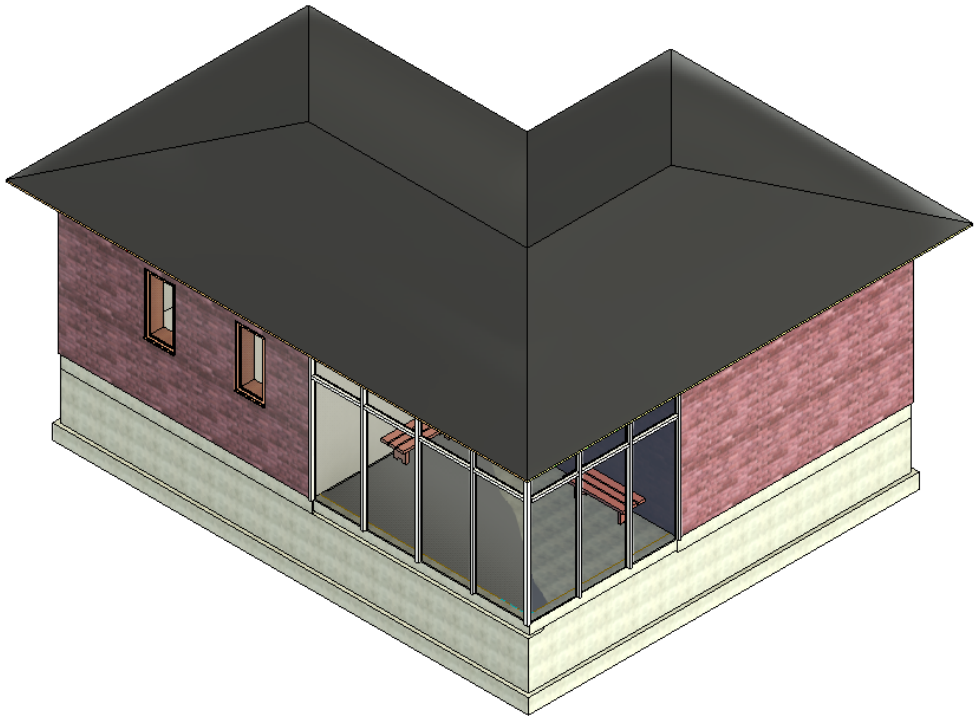
Modified Rain Garden (Bio Retention Cell W/ Permeable Paver Cells)



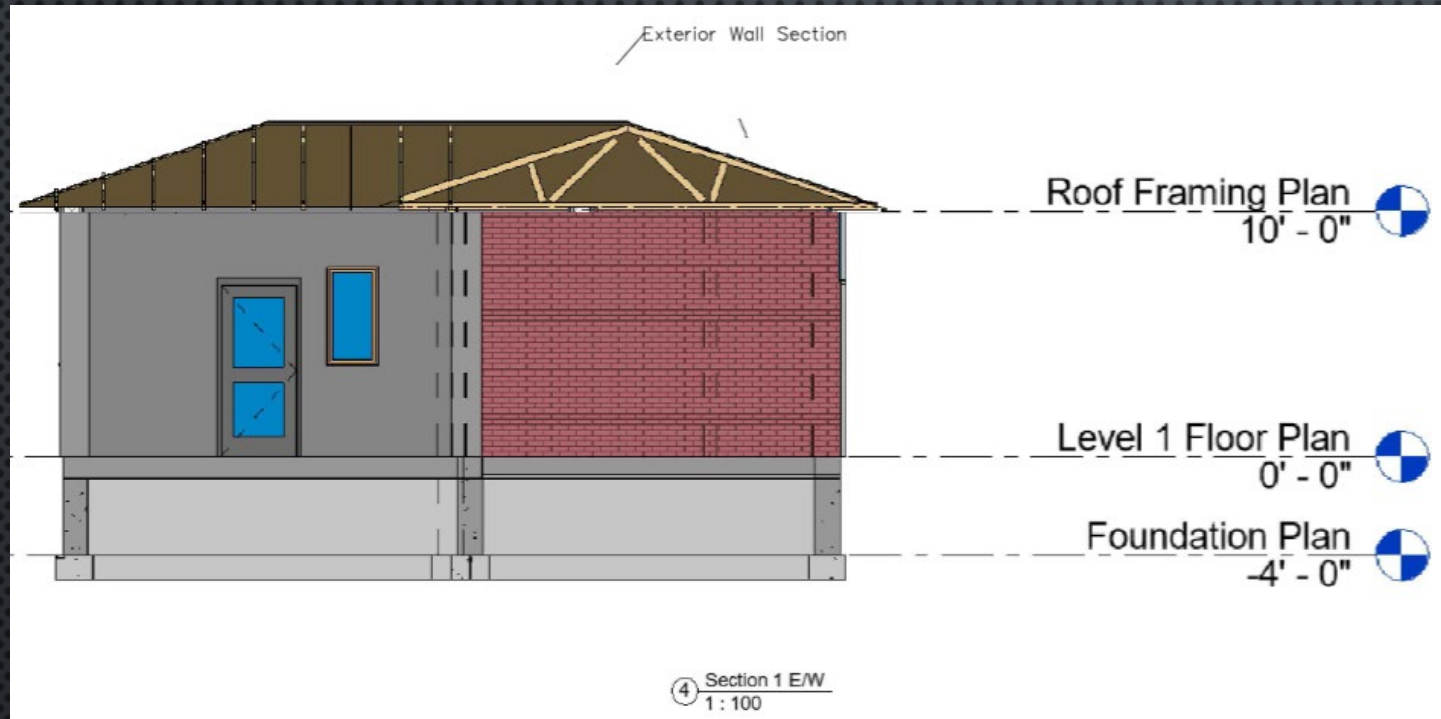


GOLDFINCH UTILITIES





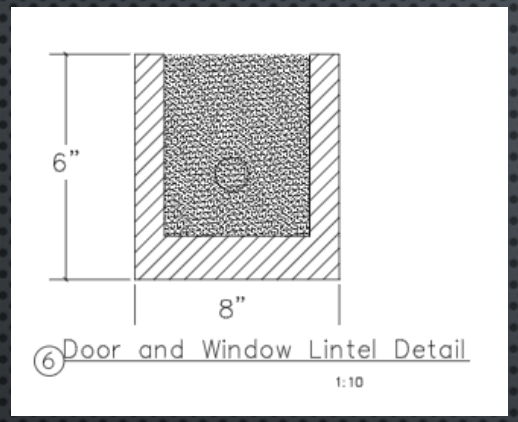
REST AREA DESIGN



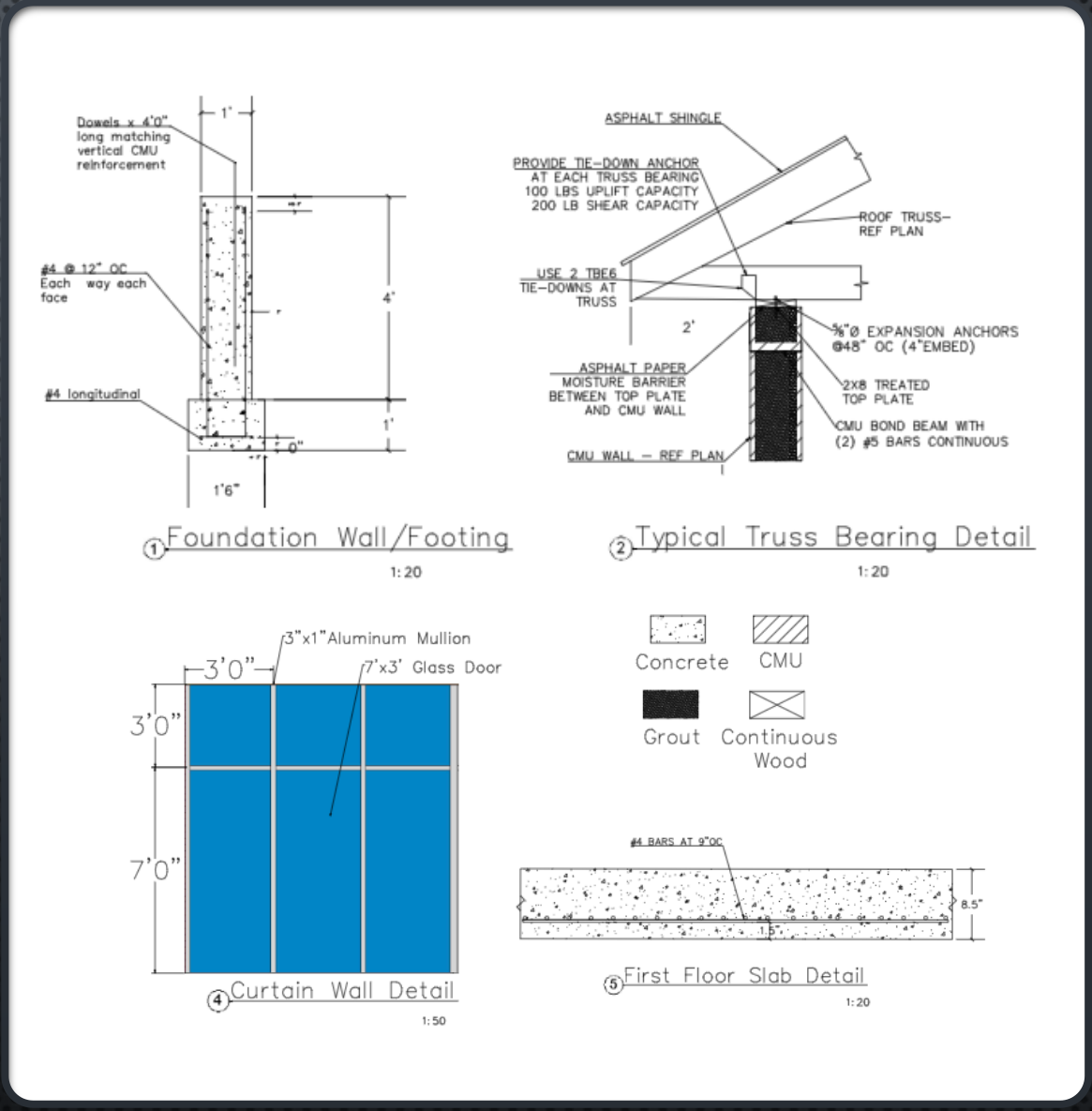
2. DESIGN LOADS:

ROOF DEAD LOAD:	
TOP CHORD DL:	10PSF
BOTTOM CHORD DL:	10PSF
RISK CATEGORY	II
WIND-PARAMETERS	
BASIC WIND SPEED (ASCE 7-16)	115MPH
RISK CATEGORY	II
EXPOSURE CLASS	B
WIND-MAIN WIND FORCE RESISTING SYSTEM PRESSURES - SIMPLIFIED	
NOMINAL WIND PRESSURE	16.5 PSF
DESIGN WIND PRESSURE	13 PSF
ROOF UPLIFT FORCE (GROSS)	16 PSF
ROOF UPLIFT FORCE (NET)	4 PSF
LIVE LOADS	
OFFICE	50 PSF
BATHROOM	40 PSF
SNOW LOADS	
GROUND SNOW LOAD	26 PSF
SNOW EXPOSURE FACTOR	1.0
THERMAL FACTOR	1.0
IMPORTANCE FACTOR	1.0
ROOF DESIGN SNOW LOAD	20 PSF

REST AREA DESIGN CONT.



BUILDING DESIGN DETAILS



Overall Costs for Project	Biocell Design with PCC - Grackle Permeable PCC		
Item	Unit	Qty	Cost
Mobilization	LS	1	$ 7,500.00
Erosion Control	LS	1	$ 500.00
Traffic Control	LS	1	$ 500.00
Pavement Striping	LS	1	$ 3,000.00
Goldfinch Lot	LS	1	$ 256,000.00
Chickadee Lot	LS	1	$ 261,000.00
Oriole Lot	LS	1	$ 820,500.00
Bluejay Lot	LS	1	$ 620,000.00
Grackle	LS	1	$ 73,000.00
New MTA Building (Golfinch Lot)	LS	1	$ 134,000.00
Subtotal with contingency			$ 2,176,000.00
Engineering / Administrative Fees		20%	$ 435,200.00
Total Project Cost			$ 2,611,200.00

COST BREAKDOWN – RECOMMENDED DESIGN