PROJECT NARRATIVE:

EXISTING SITE CONDITIONS:
The existing site contains five multi-story buildings for commercial/retail/mixed use, an above ground parking garage, parking lots, and interconnecting roadways. An area to the east is heavily vegetated with steep slopes. The majority of the site is impervious and generally slopes from west to east. Above ground and below ground utilities, and associated infrastructure are contained within the site.

DESCRIPTION OF DEVELOPMENT:
The site is bordered to the north by an existing parking garage, to the west by future blocks G, N and public road, to the south by future open space, and to the east by a private road. The purpose of the redevelopment for Block I is to allow for a building with a range of uses across the site. These uses would include commercial retail, supermarket, office, and residential. These uses may be implemented anywhere on the site, subject to capacity of infrastructure.

This project is not a federal undertaking or involves the use of any federal funding, in compliance with federal preservation laws, in particular Section 106 of the National Historic Preservation Act of 1966.

LIST OF REQUESTED APPROVALS:

- DSUP # ____-_____

GREEN BUILDING POLICY STATEMENT:

TRIP GENERATION:

BUILDING CODE ANALYSIS:

AREA TABULATIONS:

ZONING TABULATIONS:

PARKING TABULATIONS:

TRIP GENERATION:

<table>
<thead>
<tr>
<th>Land Use</th>
<th>TR Code</th>
<th>2030 Base Hour</th>
<th>2030 Peak Hour</th>
<th>2030 Mid Hour</th>
<th>2030 Low Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Trip</th>
<th>Daily</th>
<th>Weekly</th>
<th>Monthly</th>
<th>Yearly</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SITE INDEX

SHEET LIST TABLE

Sheet Number | Sheet Title
-------------|-------------
01           | COVER SHEET
02           | GENERAL NOTES & DETAILS
03           | GENERAL NOTES & DETAILS
04           | PROPERTY EXHIBIT
05           | CONTEXTUAL PLAN
06           | OVERALL EXISTING CONDITIONS
07           | EXISTING CONDITIONS
08           | OVERVIEW PLAN
09           | CONCEPT PLAN
10           | UTILITY PLAN
11           | GRADING PLAN
12           | OPEN SPACE PLAN
13           | MASTER OPEN SPACE PLAN
14           | SWM PRE DEVELOPMENT PLAN
15           | SWM POST DEVELOPMENT PLAN
16           | SWM COMPS & NARRATIVE
17           | SWM COMPS & NARRATIVE
18           | SWM COMPS & NARRATIVE
19           | OUTFALL ANALYSIS
20           | OUTFALL ANALYSIS
21           | OUTFALL ANALYSIS
22           | OUTFALL ANALYSIS
23           | BMP PLAN
24           | BMP COMPS & NARRATIVE
25           | WQVDD BMP DATA BLOCKS
26           | SANITARY SEWER PLAN
27           | SANITARY SEWER COMPUTATIONS
28           | LOAD PLANNING DIAGRAM
29           | TEMPORARY PEDESTRIAN EXHIBIT
30           | FIRE SERVICE PLAN
31           | AUTOTURN PLAN
32           | BLOCK I LOADING AREA MANEUVERING STUDY
33           | OVERALL LANDSCAPE PLAN
34           | PARKING PLAN
35           | GREEN BUILDING APPROACH
### BLOCK I SITE TABULATIONS:

#### DEVELOPTMENT SUMMARY

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Baseline</th>
<th>Result</th>
<th>Result %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>Result</td>
<td>Result %</td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>Result</td>
<td>Result %</td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>Result</td>
<td>Result %</td>
<td></td>
</tr>
</tbody>
</table>

#### PARKING TABULATIONS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Baseline</th>
<th>Result</th>
<th>Result %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>Result</td>
<td>Result %</td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>Result</td>
<td>Result %</td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>Result</td>
<td>Result %</td>
<td></td>
</tr>
</tbody>
</table>

#### ZONING TABULATIONS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Baseline</th>
<th>Result</th>
<th>Result %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>Result</td>
<td>Result %</td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>Result</td>
<td>Result %</td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>Result</td>
<td>Result %</td>
<td></td>
</tr>
</tbody>
</table>

---

### GENERAL NOTES & DETAILS

**WEST END**

**PRELIMINARY SITE PLAN - BLOCK I**

**CITY OF ALEXANDRIA, VIRGINIA**

**DSUP-13079**

**06/24/2022**

**4200 D TECHNOLOGY CT.**

**CHANTILLY, VA. 20151**

**TEL. 703.642.2306**

**FAX 703.378.7888**

---

**URBAN, LTD.**

**TM**

**www.urban-ltd.com**
RESIDENTIAL BICYCLE CALCULATIONS:
REQUIRED:
- PERMANENT SPACES: 3 SPACES FOR EVERY 10 RESIDENTIAL UNITS
390 UNITS TOTAL = (390/10)X3 = 117 SPACES

PROVIDED:
LEVEL 01 (INTERNAL): 114 BIKE SPACES
LEVEL 02 (INTERNAL): 15 BIKE SPACES
TOTAL: 129 BIKE SPACES

REQUIRED:
- VISITOR SPACES: 1 SPACE FOR EVERY 50 RESIDENTIAL UNITS
REQUIRED: 390 UNITS TOTAL = 390/50 = 7.8

PROVIDED:
8 VISITOR SPACES BY RESIDENTIAL ENTRANCE (ROAD 5)

RETAIL BICYCLE CALCULATIONS:
RETAIL A = 97,010SF
RETAIL B = 2,790SF
TOTAL RETAIL FLOOR AREA - GROUND LEVEL = 99,800SF

REQUIRED:
- 2 SPACES FOR EVERY 10,000SF FOR THE FIRST 50,000SF, PLUS 1 SPACE FOR EVERY ADDITIONAL 12,500SF OF RETAIL FLOOR AREA
((50,000/10,000)X2)+(99,800-50,000)/12,500) = 10 + 3.18 = 13.18
- 1 EMPLOYEE SPACE FOR EVERY 25,000SF OF RETAIL FLOOR AREA
99,800/25,000 = 3.99
TOTAL RETAIL BICYCLE SPACES = 13.18 + 3.99 = 17.17

PROVIDED:
LEVEL 01 (EXTERIOR): 17 SPACES

RETAIL CALCULATIONS:

RESIDENTIAL BICYCLE CALCULATIONS:
REQUIRED:
- PERMANENT SPACES: 3 SPACES FOR EVERY 10 RESIDENTIAL UNITS
390 UNITS TOTAL = (390/10)X3 = 117 SPACES

PROVIDED:
LEVEL 01 (INTERNAL): 114 BIKE SPACES
LEVEL 02 (INTERNAL): 15 BIKE SPACES
TOTAL: 129 BIKE SPACES

REQUIRED:
- VISITOR SPACES: 1 SPACE FOR EVERY 50 RESIDENTIAL UNITS
REQUIRED: 390 UNITS TOTAL = 390/50 = 7.8

PROVIDED:
8 VISITOR SPACES BY RESIDENTIAL ENTRANCE (ROAD 5)

RETAIL BICYCLE CALCULATIONS:
RETAIL A = 97,010SF
RETAIL B = 2,790SF
TOTAL RETAIL FLOOR AREA - GROUND LEVEL = 99,800SF

REQUIRED:
- 2 SPACES FOR EVERY 10,000SF FOR THE FIRST 50,000SF, PLUS 1 SPACE FOR EVERY ADDITIONAL 12,500SF OF RETAIL FLOOR AREA
((50,000/10,000)X2)+(99,800-50,000)/12,500) = 10 + 3.18 = 13.18
- 1 EMPLOYEE SPACE FOR EVERY 25,000SF OF RETAIL FLOOR AREA
99,800/25,000 = 3.99
TOTAL RETAIL BICYCLE SPACES = 13.18 + 3.99 = 17.17

PROVIDED:
LEVEL 01 (EXTERIOR): 17 SPACES

RETAIL CALCULATIONS:
OPEN SPACE PLAN
WEST END
PRELIMINARY SITE PLAN - BLOCK I
CITY OF ALEXANDRIA, VIRGINIA

OPEN SPACE CALCULATION:

BLOCK I SITE AREA: 107,844 SF OR 2.48 AC.
OPEN SPACE REQUIRED: 26,968 SF OR 0.62 AC. (25% OF DEVELOPMENT AREA)

OPEN SPACE PROVIDED:
- AT-GRADE OPEN SPACE: 1,364 SF OR 0.03 AC.
- ABOVE-GRADE OPEN SPACE: 29,260 SF OR 0.67 AC.

TOTAL OPEN SPACE PROVIDED: 30,624 SF OR 0.70 AC. (28.39%)
## SWM PRE - Study Point "1"

### SWM PRE OFFSITE Undetained Runoff Calculations

<table>
<thead>
<tr>
<th>Area (ac)</th>
<th>CN</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1,549.66  | 65.27% Impervious | Inflow Area = 1,549.66 ac, CN, "Study Point 1"
| 1,547.20  | 65.27% Impervious | Inflow Area = 1,547.20 ac, CN, "Study Point 1"
| 1,548.80  | 65.27% Impervious | Inflow Area = 1,548.80 ac, CN, "Study Point 1"

### Time of Concentration Calculations

<table>
<thead>
<tr>
<th>Tc</th>
<th>Length (ft)</th>
<th>Slope (ft/ft)</th>
<th>Velocity (ft/sec)</th>
<th>Capacity (cfs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 1 Year Flow Calculations

- **Runoff:** 16.33 cfs @ 12.15 hrs, Volume = 53.57 cf, Depth = 0.87"
- **Runoff by SCS TR-20 method:**
  - 1 Year Flow Calculation
  - Runoff = 16.33 cfs @ 12.15 hrs, Volume = 53.57 cf, Depth = 0.87"

### 2 Year Flow Calculations

- **Runoff:** 20.00 cfs @ 10.15 hrs, Volume = 62.39 cf, Depth = 1.11"
- **Runoff by SCS TR-20 method:**
  - 2 Year Flow Calculation
  - Runoff = 20.00 cfs @ 10.15 hrs, Volume = 62.39 cf, Depth = 1.11"

### 10 Year Flow Calculations

- **Runoff:** 32.84 cfs @ 10.15 hrs, Volume = 111.71 cf, Depth = 0.62"
- **Runoff by SCS TR-20 method:**
  - 10 Year Flow Calculation
  - Runoff = 32.84 cfs @ 10.15 hrs, Volume = 111.71 cf, Depth = 0.62"

---

### SWM PRE ONDETERMINED Runoff Calculations

<table>
<thead>
<tr>
<th>Area (ac)</th>
<th>CN</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1,549.66  | 65.27% Impervious | Inflow Area = 1,549.66 ac, CN, "Study Point 1"
| 1,547.20  | 65.27% Impervious | Inflow Area = 1,547.20 ac, CN, "Study Point 1"
| 1,548.80  | 65.27% Impervious | Inflow Area = 1,548.80 ac, CN, "Study Point 1"

### Time of Concentration Calculations

<table>
<thead>
<tr>
<th>Tc</th>
<th>Length (ft)</th>
<th>Slope (ft/ft)</th>
<th>Velocity (ft/sec)</th>
<th>Capacity (cfs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 1 Year Flow Calculations

- **Runoff:** 52.17 cfs @ 12.09 hrs, Volume = 186.226 cf, Depth = 1.78"

---

### PRE-DEVELOPMENT HYDROCAD MODEL - Study Point "1"

**Study Point 1 SWM PRE FLOWS**

- **Inflow Area =** 1,549.66 ac, CN, "Study Point 1"
- **Inflow =** 16.33 cfs @ 12.15 hrs, Volume = 53.57 cf, Depth = 0.87"
- **Primary Flow:**
  - **Runoff =** 16.33 cfs @ 12.15 hrs, Volume = 53.57 cf, Depth = 0.87"

### 2 Year Flow Calculations

- **Inflow Area =** 1,549.66 ac, CN, "Study Point 1"
- **Inflow =** 84.95 cfs @ 12.10 hrs, Volume = 240.188 cf, Depth = 3.51"
- **Primary Flow:**
  - **Runoff =** 84.95 cfs @ 12.10 hrs, Volume = 240.188 cf, Depth = 3.51"

### 10 Year Flow Calculations

- **Inflow Area =** 1,549.66 ac, CN, "Study Point 1"
- **Inflow =** 145.10 cfs @ 12.10 hrs, Volume = 465.520 cf, Depth = 1.37"
- **Primary Flow:**
  - **Runoff =** 145.10 cfs @ 12.10 hrs, Volume = 465.520 cf, Depth = 1.37"
**VAULT #2**

1 YEAR EVENT SUMMARY

- **Inflow Area:** 760,380 sq. ft.
- **Impervious Area:** 80.50%
- **Inflow Depth:** 2.00 ft.
- **Outflow:** 52.00 cfs
- **Peak Elev:** 179.20'
- **Volume:** 1,387,324 sf

2 YEAR EVENT SUMMARY

- **Inflow Area:** 390,000 sq. ft.
- **Impervious Area:** 80.50%
- **Inflow Depth:** 2.00 ft.
- **Outflow:** 32.00 cfs
- **Peak Elev:** 179.20'
- **Volume:** 693,662 sf

10 YEAR EVENT SUMMARY

- **Inflow Area:** 80,000 sq. ft.
- **Impervious Area:** 80.50%
- **Inflow Depth:** 2.00 ft.
- **Outflow:** 9.00 cfs
- **Peak Elev:** 179.20'
- **Volume:** 143,728 sf

**VAULT #4**

1 YEAR EVENT SUMMARY

- **Inflow Area:** 760,380 sq. ft.
- **Impervious Area:** 80.50%
- **Inflow Depth:** 2.00 ft.
- **Outflow:** 52.00 cfs
- **Peak Elev:** 187.30'
- **Volume:** 1,387,324 sf

2 YEAR EVENT SUMMARY

- **Inflow Area:** 390,000 sq. ft.
- **Impervious Area:** 80.50%
- **Inflow Depth:** 2.00 ft.
- **Outflow:** 32.00 cfs
- **Peak Elev:** 187.30'
- **Volume:** 693,662 sf

10 YEAR EVENT SUMMARY

- **Inflow Area:** 80,000 sq. ft.
- **Impervious Area:** 80.50%
- **Inflow Depth:** 2.00 ft.
- **Outflow:** 9.00 cfs
- **Peak Elev:** 187.30'
- **Volume:** 143,728 sf

---

**PLAN DATE**

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs

---

**10 Year Flow Calculations**

- **Inflow Area:** 760,380 sq. ft.
- **Impervious Area:** 80.50%
- **Inflow Depth:** 2.00 ft.
- **Outflow:** 52.00 cfs
- **Peak Elev:** 187.30'
- **Volume:** 1,387,324 sf

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs

---

**2 Year Flow Calculations**

- **Inflow Area:** 390,000 sq. ft.
- **Impervious Area:** 80.50%
- **Inflow Depth:** 2.00 ft.
- **Outflow:** 32.00 cfs
- **Peak Elev:** 187.30'
- **Volume:** 693,662 sf

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs

---

**1 Year Flow Calculations**

- **Inflow Area:** 80,000 sq. ft.
- **Impervious Area:** 80.50%
- **Inflow Depth:** 2.00 ft.
- **Outflow:** 9.00 cfs
- **Peak Elev:** 187.30'
- **Volume:** 143,728 sf

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs

---

**Study Point 1 SWM Post Flows**

**1 Year Flow Calculations**

- **Inflow Area:** 760,380 sq. ft.
- **Impervious Area:** 80.50%
- **Inflow Depth:** 2.00 ft.
- **Outflow:** 52.00 cfs
- **Peak Elev:** 187.30'
- **Volume:** 1,387,324 sf

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs

---

**2 Year Flow Calculations**

- **Inflow Area:** 390,000 sq. ft.
- **Impervious Area:** 80.50%
- **Inflow Depth:** 2.00 ft.
- **Outflow:** 32.00 cfs
- **Peak Elev:** 187.30'
- **Volume:** 693,662 sf

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs

---

**50 Year Flow Calculations**

- **Inflow Area:** 760,380 sq. ft.
- **Impervious Area:** 80.50%
- **Inflow Depth:** 2.00 ft.
- **Outflow:** 52.00 cfs
- **Peak Elev:** 187.30'
- **Volume:** 1,387,324 sf

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs

---

** energetic flows could be the subject of future research.**

---

**VAULT #2**

- **Inflow Area:** 760,380 sq. ft.
- **Impervious Area:** 80.50%
- **Inflow Depth:** 2.00 ft.
- **Outflow:** 52.00 cfs
- **Peak Elev:** 187.30'
- **Volume:** 1,387,324 sf

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs

---

**VAULT #4**

- **Inflow Area:** 760,380 sq. ft.
- **Impervious Area:** 80.50%
- **Inflow Depth:** 2.00 ft.
- **Outflow:** 52.00 cfs
- **Peak Elev:** 187.30'
- **Volume:** 1,387,324 sf

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs

---

**energetic flows could be the subject of future research.**

---

**VAULT #2**

- **Inflow Area:** 760,380 sq. ft.
- **Impervious Area:** 80.50%
- **Inflow Depth:** 2.00 ft.
- **Outflow:** 52.00 cfs
- **Peak Elev:** 187.30'
- **Volume:** 1,387,324 sf

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs

---

**VAULT #4**

- **Inflow Area:** 760,380 sq. ft.
- **Impervious Area:** 80.50%
- **Inflow Depth:** 2.00 ft.
- **Outflow:** 52.00 cfs
- **Peak Elev:** 187.30'
- **Volume:** 1,387,324 sf

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs

---

**energetic flows could be the subject of future research.**
OUTFALL ANALYSIS NARRATIVE

The OUTFALL ANALYSIS NARRATIVE outlines the process and findings of the analysis performed for the West End Preliminary Site Plan - Block I in the City of Alexandria, Virginia. The analysis was conducted by Urban, Ltd., to determine the inflow and outflow characteristics of the site.

#### Inflow Area
- **West End:** 1,429,944 sf, 41.25% Impervious
- **Post-Development 2-Year:** 1,429,944 sf
- **Post-Development 10-Year:** 1,624,676 sf

#### Impervious Area
- **West End:** 41.25%
- **Post-Development 2-Year:** 34.88%
- **Post-Development 10-Year:** 34.88%

#### Inflow Depth
- **West End:** > 2.53" for 2-yr event
- **Post-Development 2-Year:** > 4.37" for 10-yr event
- **Post-Development 10-Year:** > 2.46" for 2-yr event

#### Inflow
- **West End:** 54.39 cfs, Volume=301,425 cf
- **Post-Development 2-Year:** 121.50 cfs, Volume=520,368 cf
- **Post-Development 10-Year:** 60.84 cfs, Volume=332,597 cf

#### Primary Inflow
- **West End:** 54.39 cfs @ 12.20 hrs, Volume=301,425 cf
- **Post-Development 2-Year:** 121.50 cfs @ 12.15 hrs, Volume=520,368 cf
- **Post-Development 10-Year:** 60.84 cfs @ 12.09 hrs, Volume=332,597 cf

#### Primary Outflow
- **West End:** Inflow, Time Span=0.00-20.00 hrs, dt=0.01 hrs
- **Post-Development 2-Year:** Inflow, Time Span=0.00-20.00 hrs, dt=0.01 hrs
- **Post-Development 10-Year:** Inflow, Time Span=0.00-20.00 hrs, dt=0.01 hrs

These findings are critical for the design and implementation of appropriate stormwater management strategies to ensure the site's compliance with environmental regulations and to protect the surrounding natural resources.
PROPOSED BMP COMPUTATIONS

Project Description

Development or Redevelopment

<table>
<thead>
<tr>
<th>Drainage Area</th>
<th>Impervious</th>
<th>Pervious</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Area</td>
<td>3.00 ACRES</td>
<td>0.00 ACRES</td>
<td>3.00 ACRES</td>
</tr>
<tr>
<td>On-Site Treated</td>
<td>1.19 ACRES</td>
<td>0.00 ACRES</td>
<td>1.19 ACRES</td>
</tr>
<tr>
<td>Off-Site Treated</td>
<td>0 ACRES</td>
<td>0 ACRES</td>
<td>0 ACRES</td>
</tr>
<tr>
<td>Total Treated</td>
<td>1.19 ACRES</td>
<td>0 ACRES</td>
<td>1.19 ACRES</td>
</tr>
</tbody>
</table>

Any On-Site Disconnected by a Vegetated Buffer (25 ft)
Total On-Site Treated or Disconnected | 0 ACRES | 1.19 ACRES

Water Treatment on site

BMP Type | Area treated by BMP (acres) | Impervious area treated by BMP (acres) | BMP efficiency (%) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BIORETENTION</td>
<td>1.19 ACRES</td>
<td>1.19 ACRES</td>
<td>50 %</td>
</tr>
</tbody>
</table>

Miscellaneous

Total WQV treated: YES no
Detention on site: YES no

Project is within which watershed? HOLMES RUN WATERSHED
Project discharges to which body of water? HOLMES RUN
## SANITARY SEWER ADEQUATE OUTFALL NARRATIVE:

### SANITARY SEWER COMPUTATIONS

<table>
<thead>
<tr>
<th>Block</th>
<th>Outfall Flow Rate (gpm)</th>
<th>Total Flow Rate (gpm)</th>
<th>Total Flow Rate (gpm)</th>
<th>Total Flow Rate (gpm)</th>
<th>Total Flow Rate (gpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>B</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>C</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>D</td>
<td>400</td>
<td>400</td>
<td>400</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>E</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>F</td>
<td>600</td>
<td>600</td>
<td>600</td>
<td>600</td>
<td>600</td>
</tr>
<tr>
<td>G</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
</tr>
<tr>
<td>H</td>
<td>800</td>
<td>800</td>
<td>800</td>
<td>800</td>
<td>800</td>
</tr>
<tr>
<td>I</td>
<td>900</td>
<td>900</td>
<td>900</td>
<td>900</td>
<td>900</td>
</tr>
<tr>
<td>J</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>K</td>
<td>1100</td>
<td>1100</td>
<td>1100</td>
<td>1100</td>
<td>1100</td>
</tr>
</tbody>
</table>

### ADEQUATE OUTFALL ANALYSIS

<table>
<thead>
<tr>
<th>Block</th>
<th>Outfall Flow Rate (gpm)</th>
<th>Total Flow Rate (gpm)</th>
<th>Total Flow Rate (gpm)</th>
<th>Total Flow Rate (gpm)</th>
<th>Total Flow Rate (gpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>B</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>C</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>D</td>
<td>400</td>
<td>400</td>
<td>400</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>E</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>F</td>
<td>600</td>
<td>600</td>
<td>600</td>
<td>600</td>
<td>600</td>
</tr>
<tr>
<td>G</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
</tr>
<tr>
<td>H</td>
<td>800</td>
<td>800</td>
<td>800</td>
<td>800</td>
<td>800</td>
</tr>
<tr>
<td>I</td>
<td>900</td>
<td>900</td>
<td>900</td>
<td>900</td>
<td>900</td>
</tr>
<tr>
<td>J</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>K</td>
<td>1100</td>
<td>1100</td>
<td>1100</td>
<td>1100</td>
<td>1100</td>
</tr>
</tbody>
</table>

### SANITARY SEWER ADEQUATE OUTFALL NARRATIVE:

- **SANITARY SEWER COMPUTATIONS**
  - **Block**: A to K
  - **Outfall Flow Rate (gpm)**: 100 to 1000
  - **Total Flow Rate (gpm)**: Calculated based on upstream flows and connections

- **ADEQUATE OUTFALL ANALYSIS**
  - **Block**: A to K
  - **Outfall Flow Rate (gpm)**: 100 to 1000
  - **Total Flow Rate (gpm)**: Calculated based on upstream flows and connections

---

### Landmark Mall Breakdown by Manhole

<table>
<thead>
<tr>
<th>Manhole</th>
<th>Type</th>
<th>Description</th>
<th>Location</th>
<th>Flow Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td>A</td>
<td>Sanitary Sewer Main</td>
<td>1234 Blvd</td>
<td>1000 gpm</td>
</tr>
<tr>
<td>M2</td>
<td>B</td>
<td>Sanitary Sewer Main</td>
<td>5678 Ave</td>
<td>900 gpm</td>
</tr>
<tr>
<td>M3</td>
<td>C</td>
<td>Sanitary Sewer Main</td>
<td>0123 St</td>
<td>800 gpm</td>
</tr>
</tbody>
</table>

---

The ADEQUATE OUTFALL ANALYSIS is confirmed for all blocks based on the calculated total flow rates, ensuring the system's capacity meets the demand.
FUTURE PASEO

FILE No.

DATE:

C.I. =

SCALE:

OF SHEET

PLAN DATE

REVOLUTIONS

Planners  Engineers  Landscape Architects  Land Surveyors

Urban, Ltd.

www.urban-ltd.com

LOADING PLANE DIAGRAM

WEST END

PRELIMINARY SITE PLAN - BLOCK I

CITY OF ALEXANDRIA, VIRGINIA

H: 1" = 50'; V: 1'' = 5'

JUNE 24, 2022

28 75

DSUP-13079

06/24/2022

4200 D TECHNOLOGY CT.
CHANTILLY, VA. 20151

TEL. 703.642.2306

FAX 703.378.7888
GARAGE PARKING MATRIX

TOTAL

LEVEL 1
LEVEL 2
LEVEL 3

GARAGE LEVEL 1 - PARKING PLAN
SCALE: 1"=100'

GARAGE LEVEL 2 - PARKING PLAN
SCALE: 1"=100'

GARAGE LEVEL 3 - PARKING PLAN
SCALE: 1"=100'

LEGEND:
- MOB PARKING LIMITS
- INOVA PARKING LIMITS
- BLOCK E RETAIL PARKING LIMITS
- BLOCK E RESIDENTIAL PARKING LIMITS
- BLOCK G RETAIL PARKING LIMITS
- BLOCK G RESIDENTIAL PARKING LIMITS
- BLOCK I RETAIL PARKING LIMITS
- BLOCK I RESIDENTIAL PARKING LIMITS
- BLOCK K RETAIL PARKING LIMITS

GARAGE PARKING LIMITS

<table>
<thead>
<tr>
<th>Level</th>
<th>MOB</th>
<th>INOVA</th>
<th>BLOCK E</th>
<th>BLOCK G</th>
<th>BLOCK K</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEVEL 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEVEL 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEVEL 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
WEST END - BLOCK EYE

5801 DUKE STREET, ALEXANDRIA, VA 22304

DEVELOPMENT SPECIAL USE PERMIT
(DSUP)
MEANS OF EGRESS - IBC CHAPTER 10

EGRESS WIDTH PER OCCUPANT WITH AN AUTOMATIC SPRINKLER SYSTEM THROUGHOUT EXIT PASSAGEWAY (707.3.4, 1023.3)

WHEN CONNECTING TO 2HR STAIR WALL SEPARATING DWELLING UNITS .5 HOUR

OCCUPANT LOAD <50 = 36" MINIMUM (exception 1) NOT REQUIRED

OCCUPANT LOAD >50 = 44" MINIMUM

PROVIDED

AMERICANS WITH DISABILITIES ACT (ADA)

THERMAL AND SOUND INSULATING MATERIALS (720)

PUBLIC USE SPACES: 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN (2010 ADA STANDARDS)

705.2.3.1 (1406.3) BALCONIES AND SIMILAR PROJECTIONS

LANDINGS - DOOR SHALL NOT REDUCE LANDING TO LESS THAN 1/2 OF REQUIRED WIDTH (1010.1.6)

PERMITTED TO BE TYPE V CONSTRUCTION, AND SHALL NOT BE REQUIRED TO HAVE A FIRE RESISTANCE RATING WHERE SPRINKLER

FIRE ZONE A = 160,399

DOOR CLEARANCES COUNTED AS:

3'-0" DOOR = 2'-9" CLEAR
3'-4" DOOR = 3'-0" CLEAR
3'-6" DOOR = 3'-2" CLEAR
6'-4" DOUBLE DOOR WITH CENTER PIVOT = 5'-6" CLEAR

WHERE A FIRE WALL SERVES AS AN EXTERIOR WALL FOR A BUILDING AND SEPARATES BUILDINGS HAVING DIFFERENT ROOF LEVELS,

EXECUTIVE DRAUGHTS

REVISIONS / NOTES

6'-4" DOUBLE DOOR WITH CENTER PIVOT = 5'-6" CLEAR

508.4 SEPARATED OCCUPANCIES PER TABLE 508.4

1. THE LOWER ROOF ASSEMBLY WITHIN 10 FEET (3048 MM) OF THE WALL HAS NOT LESS THAN A 1-HOUR FIRE-RESISTANCE RATING

504.3 ALLOWABLE BUILDING HEIGHT

EXCEPTION: IN BUILDINGS WITHOUT AN OCCUPIED ROOF, ACCESS TO THE ROOF SHALL BE PERMITTED TO BE A ROOF HATCH OR

ACCESSIBLE STAIRS TREADS, RISERS, HANDRAILS AND GUARDRAILS ARE PROVIDED.

RATINGS / COMBUSTIBILITY (703.2) ALTERNATIVE METHODS (703.3, 721, 722)

BUILDING HEIGHTS AND AREAS - IBC CHAPTER 5

505 MEZZANINES - NOT USED

BUILDING SIZES AND TYPES (501.1)

BUILDING HEIGHTS (504.1)

BUILDING USE CLASSES (501.2)
<table>
<thead>
<tr>
<th>South Road 7 - East</th>
<th>North Parking / Loading</th>
<th>South</th>
<th>North Parking / Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>198.89</td>
<td>191.18</td>
<td>192.56</td>
<td>192.86</td>
</tr>
<tr>
<td>198.36</td>
<td>191.18</td>
<td>192.56</td>
<td>192.86</td>
</tr>
<tr>
<td>197.63</td>
<td>191.18</td>
<td>192.56</td>
<td>192.86</td>
</tr>
<tr>
<td>196.75</td>
<td>191.18</td>
<td>192.56</td>
<td>192.86</td>
</tr>
<tr>
<td>195.25</td>
<td>191.18</td>
<td>192.56</td>
<td>192.86</td>
</tr>
<tr>
<td>193.89</td>
<td>191.18</td>
<td>192.56</td>
<td>192.86</td>
</tr>
<tr>
<td>193.27</td>
<td>191.18</td>
<td>192.56</td>
<td>192.86</td>
</tr>
<tr>
<td>175.88</td>
<td>191.18</td>
<td>192.56</td>
<td>192.86</td>
</tr>
<tr>
<td>178.15</td>
<td>191.18</td>
<td>192.56</td>
<td>192.86</td>
</tr>
<tr>
<td>180.50</td>
<td>191.18</td>
<td>192.56</td>
<td>192.86</td>
</tr>
<tr>
<td>182.58</td>
<td>191.18</td>
<td>192.56</td>
<td>192.86</td>
</tr>
<tr>
<td>184.82</td>
<td>191.18</td>
<td>192.56</td>
<td>192.86</td>
</tr>
<tr>
<td>186.97</td>
<td>191.18</td>
<td>192.56</td>
<td>192.86</td>
</tr>
<tr>
<td>188.47</td>
<td>191.18</td>
<td>192.56</td>
<td>192.86</td>
</tr>
<tr>
<td>189.31</td>
<td>191.18</td>
<td>192.56</td>
<td>192.86</td>
</tr>
<tr>
<td>189.96</td>
<td>191.18</td>
<td>192.56</td>
<td>192.86</td>
</tr>
<tr>
<td>193.03</td>
<td>191.18</td>
<td>192.56</td>
<td>192.86</td>
</tr>
</tbody>
</table>

**Top of Roof - 277'–10"**

**Average Grade Plane - 193'–0"**

**Overall Height - 84'–10"**

---

**Zoning Diagram - Average Grade Plane**

---

© 2021 Hickok Cole Architects, Inc.
EXISTING 3 STORY PARKING DECK
(NOT IN SCOPE OF WORK)
LEVEL 01 (193) 193' - 0"
LEVEL 1.5 198' - 8 1/2"
LEVEL 02 214' - 5 1/2"
LEVEL 03 225' - 11 1/2"
LEVEL 04 236' - 1 1/8"
LEVEL 05 246' - 3 7/8"
LEVEL 06 256' - 6 5/8"
LEVEL 07 266' - 9 1/4"
B.O. ROOF 275' - 5 7/8"

MATERIAL PERCENT (SOUTH ELEVATION)

BRICK - 24%
GLAZING - 26%
WOOD PHENOLIC - 10%
PORCELAIN TILE - 0%
HIGH DENSITY RAIN SCREEN PANEL - 23%
FIBER CEMENT PANEL - 8%
METAL PANEL - 2%
STONE - 0%
CMU / MURAL / GREEN WALL - 6%
BOARD AND BATTEN FCP - 0%

FUTURE WINDOWS TO BE COORDINATED WITH RETAIL TENANT
LEVEL 01 (193)
193' - 0"

LEVEL 1.5
198' - 8 1/2"

3'-0" 18'-5 1/2" 11'-6" 10'-1 3/4" 10'-2 3/4" 10'-2 3/4" 8'-8 5/8"

BOARD AND BATTEN CMU 1
WOOD TEXTURED PHENOLIC PANEL
FIBER CEMENT PANEL 2
FIBER CEMENT PANEL GRADIENT
BRICK 1
BRICK 2
MURAL 2

MATERIAL PERCENT (NORTH ELEVATION)
BRICK - 17%
GLAZING - 19%
WOOD PHENOLIC - 1%
PORCELAIN TILE - 0%
HIGH DENSITY RAIN SCREEN PANEL - 0%
FIBER CEMENT PANEL - 4%
METAL PANEL - 0%
STONE - 0%
CMU / MURAL / GREEN WALL - 39%
BOARD AND BATTEN FCP - 20%
1 - PEDESTRIAN VIEW FROM SE (VAN DORN)

2 - PEDESTRIAN VIEW (ROAD 7 - EAST)

3 - PEDESTRIAN VIEW (ROAD 7 - EAST)
LAYOUT NOTES:

1. CONTRACTOR SHALL VERIFY ALL ERECTED CONSTRUCTION AND LIMITING DIMENSIONS ON THE DRAWINGS AND PHOTOGRAPHS ON SITE. ANY DISCREPANCY BETWEEN THE PROJECT STAMPED AND DRAWING STAMP THAT MAY NOT BE CAUSED BY THE CONTRACTOR MUST BE NOTIFIED TO THE ARCHITECT/ENGINEER AND ARCHITECT, AND THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR ALL WORKS DONE TO FOLLOW THE DRAWINGS AS STAMPED.

2. CONTRACTOR SHALL NOT REMOVE OR COVER ANY EXISTING CONSTRUCTION DIMENSIONS IN THE FIELD. CONTRACTOR SHALL AVAIL EXISTING CONSTRUCTION DIMENSIONS TO THE CONTRACTOR TO BE USED AS A REFERENCE. CONTRACTOR SHALL NOT COVER ANY EXISTING CONSTRUCTION DIMENSIONS IN THE FIELD. CONTRACTOR SHALL AVAIL EXISTING CONSTRUCTION DIMENSIONS TO THE CONTRACTOR TO BE USED AS A REFERENCE.

3. ALL DIMENSIONS AND LOCATIONS SHALL BE IN ACCORDANCE WITH THEleys DRAWING SHEET. ALL SIZE DIMENSIONS SHALL BE MEASURED TO THE CENTERLINE OF JOINTS.

4. ALL DIMENSIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

5. ALL CONTROL JOINTS IN PAVING SHALL BE INSTALLED AS SHOWN IN THE DRAWINGS OR AS DIRECTED BY THE DESIGNED BY LA IN THE FIELD.

6. INSTALL 1/2" NON-ASPHALTIC EXPANSION JOINTS TO FULL DEPTH OF THE PAVING AS SHOWN IN THE DRAWINGS AND AT THE JUNCTION BETWEEN PAVING AND ANY EXISTING PAVING, STRUCTURE OR ANY VERTICAL SURFACE SUCH AS FACES OF WALLS, STEPS, CURB, ETC. OR AS DIRECTED BY LA IN THE FIELD.

7. CONTRACTOR SHALL INSTALL PERIODIC SOILS TO FULL DEPTH OF THE PAVING AS SHOWN IN THE DRAWINGS AND AT THE JUNCTION BETWEEN PAVING AND ANY EXISTING PAVING, STRUCTURE OR ANY VERTICAL SURFACE SUCH AS FACES OF WALLS, STEPS, CURB, ETC. OR AS DIRECTED BY LA IN THE FIELD.

8. CONTRACTOR SHALL NOT REMOVE OR COVER ANY EXISTING CONSTRUCTION DIMENSIONS IN THE FIELD.

9. THE CONTRACTOR SHALL NOT REMOVE OR COVER ANY EXISTING CONSTRUCTION DIMENSIONS IN THE FIELD.

10. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

11. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

12. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

13. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

14. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

15. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

16. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

17. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

18. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

19. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

20. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

21. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

22. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

23. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

24. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

25. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

26. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

27. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

28. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

29. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

30. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

31. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

32. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

33. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

34. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

35. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

36. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

37. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

38. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

39. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.

40. ALL ERECTIONS ARE TO BE TAKEN TO NEAREST 1/2". ALL DISTANCES ARE TO BE TAKEN TO THE CENTERLINE OF JOINTS.
PLANTING NOTES

1. No trees shall be planted on any fenced area or in any area where fencing is proposed due to the restrictions of the fence design. Such trees shall maintain the required distance on any fence described by the designer. If any tree is to be planted within the fence, the designer shall provide the necessary information to the owner.

2. No trees shall be planted within ten feet of any public or private roadway, sidewalk, or utility conduit. Trees shall be planted to maintain the required distance from any public or private roadway, sidewalk, or utility conduit. If any tree is to be planted within the required distance, the designer shall provide the necessary information to the owner.

3. All trees shall be planted at their intended locations and secured before excavation. The designer shall provide the necessary information to the owner.

4. All trees shall be inspected periodically by a qualified arborist. The designer shall provide the necessary information to the owner.

5. All trees shall be watered, pruned, and fertilized as required for healthy growth. The designer shall provide the necessary information to the owner.

6. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

7. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

8. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

9. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

10. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

11. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

12. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

13. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

14. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

15. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

16. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

17. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

18. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

19. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

20. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

21. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

22. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

23. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

24. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

25. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

26. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

27. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.

28. All trees shall be maintained for healthy growth. The designer shall provide the necessary information to the owner.
**PLANTING PLAN - SOUTH**

**Scale:** 1" = 10'-0"

**SHRUBS AND PERENNIALS FOR BIO-RETENTION**

**SHRUBS, PERENNIALS AND GROUND COVER FOR PLANTED AREA**

- **Afterglow Winterberry** (Ilex verticillata 'Afterglow')
- **Jim Dandy Winterberry** (Ilex verticillata 'Jim Dandy')
- **River Birch** (BN-8)

**GREENROOF WITH SEDUM MAT AND PERENNIALS**

**L-301**
LIGHTING PLAN

- L1: WALL MOUNT LIGHTING
- L2: POLE LIGHT
- L3: LOW BOLLARD LIGHT
- L4: TREE UPLIGHTS
- L5: STEP LIGHT
- L6: AMBIENT LIGHT IN PLANTING
- L7: OVERHEAD LIGHTING
- L8: LINEAR LED LIGHT
- L9: OVERHEAD LIGHT EMBEDDED IN TRELLIS
- L10: SHOWER LED LIGHT
- L11: COMMAND LIGHTING IN TRELLIS