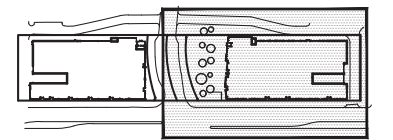
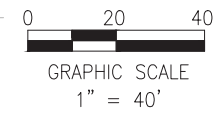


SPOT SHOT LEGEND

- XX^{XX}/_{FF}X FINISHED FLOOR SPOT
- XX^{XX}/_GX GROUND SPOT
- XX^{XX}/_{TC}X TOP OF CURB SPOT
- XX^{XX}/_{BC}X BOTTOM OF CURB SPOT
- XX^{XX}/_{TW}X TOP OF WALL SPOT
- XX^{XX}/_{BW}X BOTTOM OF WALL SPOT
- XX^{XX}/_{TS}X TOP OF STEPS SPOT
- XX^{XX}/_{BS}X BOTTOM OF STEPS SPOT
- XX^{XX}/_{MAT}X MATCH EXISTING SPOT



425 M STREET SW UTILITY NARRATIVE

THE REDEVELOPMENT OF 425 M STREET SW WILL INCLUDE NEW UTILITIES SERVICING THE SITE. NEW DOMESTIC AND FIRE PROTECTION SERVICES WILL BE PROVIDED BY A CONNECTION FROM THE EXISTING 8" WATER MAIN IN M STREET SW. NEW SANITARY CONNECTION WILL TIE INTO THE EXISTING 10" SANITARY SEWER MAIN WITHIN THE WESTERN LIMITS OF THE PROPERTY. STORMWATER SERVICE WILL BE PROVIDED FROM A CONNECTION TO AN EXISTING 18" STORM SEWER MAIN IN 4TH STREET SW.

NOTE: INSIDE WATER METER TO BE PENDING COORDINATION BETWEEN DC WATER AND THE OWNER. EXTERNAL WATER METER VAULT MAY BE ADDED TO THE PLAN DURING FINAL ENGINEERING PHASE.

UTILITY KEYNOTES

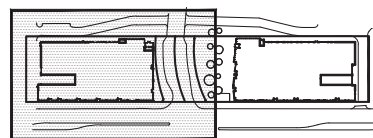
- 1 NEW ELECTRICAL TRANSFORMERS.
- 2 NEW 4" DIP DOMESTIC SERVICE.
- 3 NEW 6" DIP FIRE SERVICE.
- 4 NEW 6" WATER VALVE.
- 5 NEW 6" x 4" REDUCER.
- 6 NEW 8" x 6" TEE WITH THRUST BLOCK.
- 7 NEW 8" PVC SDR-35 SANITARY LATERAL.
- 8 NEW 15" RCP CL IV STORM LATERAL.
- 9 NEW DOGHOUSE MANHOLE.
- 10 NEW CONNECTION TO EXISTING MANHOLE.
- 11 NEW GRATE INLET.
- 12 NEW PRIVATE 12" PVC SCH-40 STORM.
- 13 NEW 45° BEND.
- 14 NEW CLEANOUT MANHOLE.

WATER AND SEWER DEMAND (425 M STREET SW)

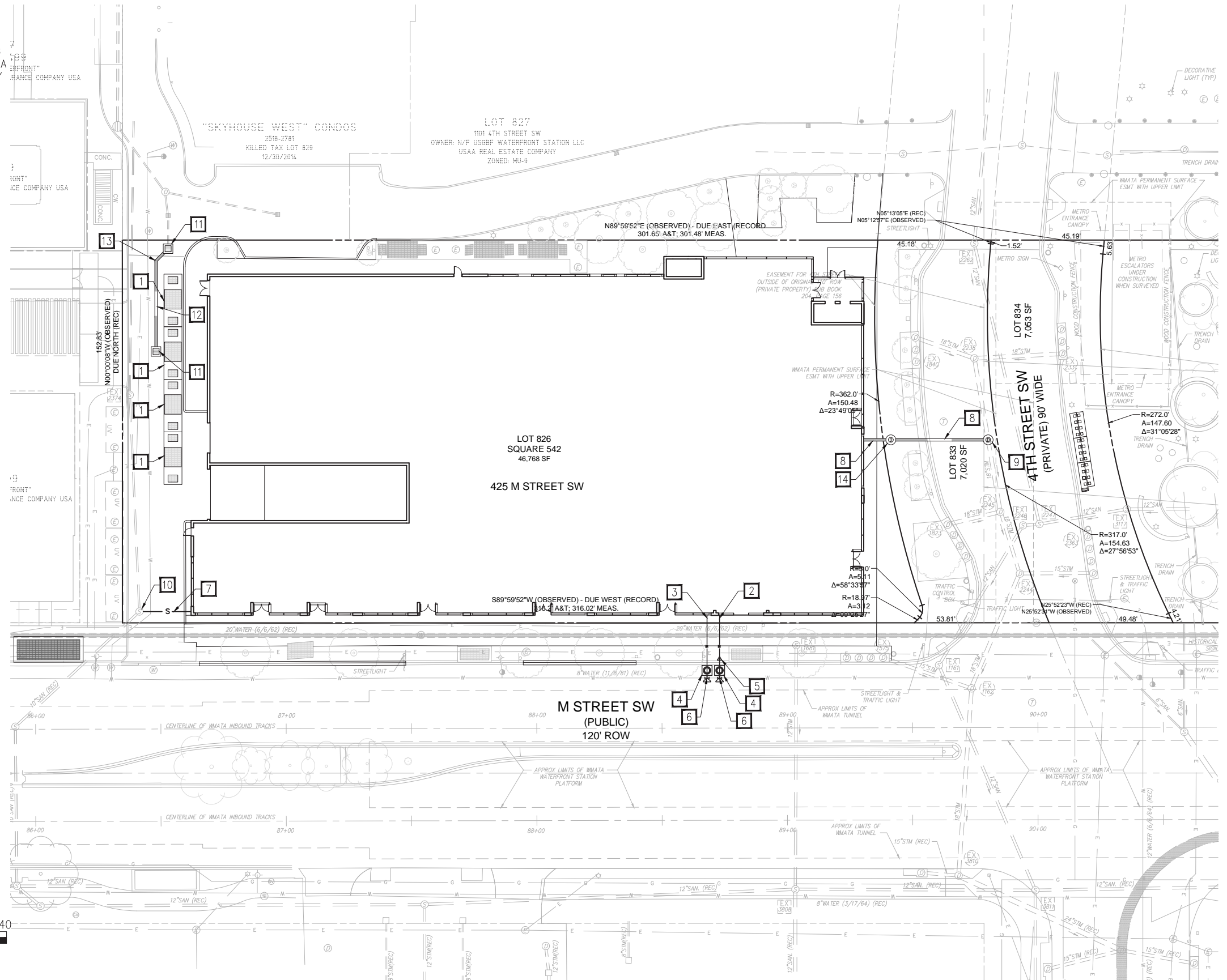
WATER
 (170 GPD PER UNIT X 301 UNITS) +
 (14.4 GPD PER SF X 16,580 SF) + (0.288 GPD PER SF X 16,040 SF)
 = 294,542 GPD

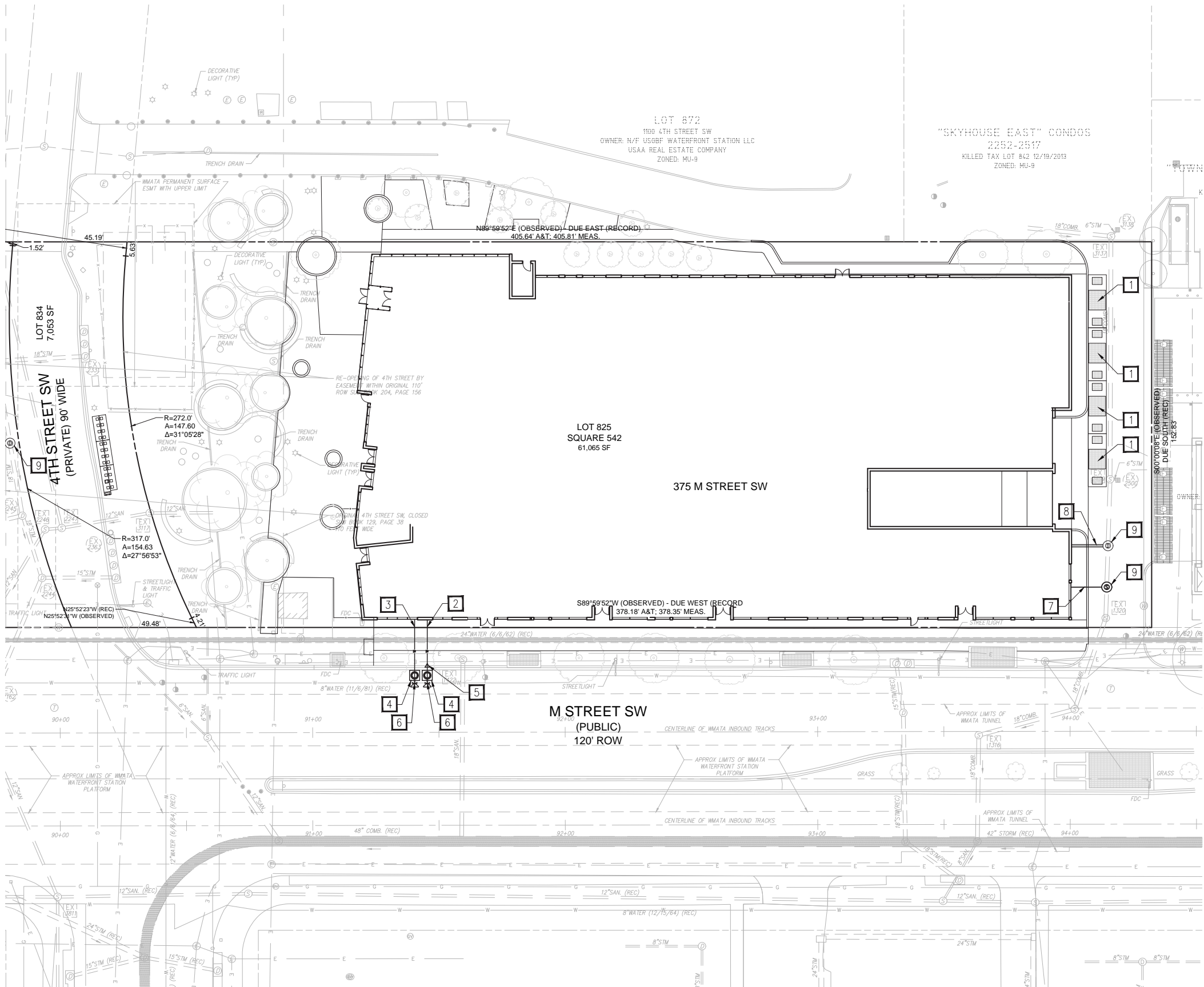
SEWER
 294,542 GPD = 0.46 CFS

DEMANDS ARE BASED ON AVERAGE WASTEWATER FLOW FACTOR PER WSSC PIPELINE DESIGN MANUAL OF 2008. ALL RETAIL IS ASSUMED TO BE CARRY OUT RESTAURANT. FINAL UNIT COUNTS WILL BE DETERMINED DURING THE FINAL ENGINEERING PHASE.



NOTE: UNIT AMOUNTS MAY VARY SLIGHTLY. REFER





375 M STREET SW UTILITY NARRATIVE

THE REDEVELOPMENT OF 375 M STREET SW WILL INCLUDE NEW UTILITIES SERVICING THE SITE. NEW DOMESTIC AND FIRE PROTECTION SERVICES WILL BE PROVIDED BY A CONNECTION FROM THE EXISTING 8" WATER MAIN IN M STREET SW. NEW SANITARY CONNECTION WILL TIE INTO THE EXISTING 18" COMBINED SEWER MAIN WITHIN THE EASTERN LIMITS OF THE PROPERTY. STORMWATER SERVICE WILL BE PROVIDED FROM A CONNECTION TO AN EXISTING 18" COMBINED SEWER MAIN WITHIN THE EASTERN LIMITS OF THE PROPERTY.

NOTE: INSIDE WATER METER TO BE PENDING COORDINATION BETWEEN DC WATER AND THE OWNER. EXTERNAL WATER METER VAULT MAY BE ADDED TO THE PLAN DURING FINAL ENGINEERING PHASE.

UTILITY KEYNOTES

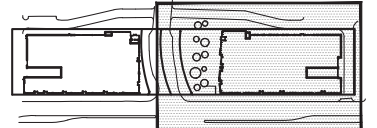
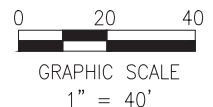
- 1 NEW ELECTRICAL TRANSFORMERS.
- 2 NEW 4" DIP DOMESTIC SERVICE.
- 3 NEW 6" DIP FIRE SERVICE.
- 4 NEW 6" WATER VALVE.
- 5 NEW 6" x 4" REDUCER.
- 6 NEW 8" x 6" TEE WITH THRUST BLOCK.
- 7 NEW 8" PVC SDR-35 SANITARY LATERAL.
- 8 NEW 15" RCP CL IV STORM LATERAL.
- 9 NEW DOGHOUSE MANHOLE.
- 10 NEW CONNECTION TO EXISTING MANHOLE.
- 11 NEW GRATE INLET.
- 12 NEW PRIVATE 12" PVC SCH-40 STORM.
- 13 NEW 45° BEND.
- 14 NEW CLEANOUT MANHOLE.

WATER AND SEWER DEMAND (375 M STREET SW)

WATER
 (170 GPD PER UNIT X 308 UNITS) +
 (14.4 GPD PER SF X 19,670 SF) + (0.288 GPD PER SF X 17,850 SF)
 = 340,749 GPD

SEWER
 340,749 GPD = 0.53 CFS

DEMANDS ARE BASED ON AVERAGE WASTEWATER FLOW FACTOR PER WSSC PIPELINE DESIGN MANUAL OF 2008. ALL RETAIL IS ASSUMED TO BE CARRY OUT RESTAURANT. FINAL UNIT COUNTS WILL BE DETERMINED DURING THE FINAL ENGINEERING PHASE.



STORMWATER MANAGEMENT NARRATIVE:

ACCORDING TO THE 2013 SWM GUIDEBOOK FOR THE DISTRICT OF COLUMBIA, THIS PROJECT SITE DEVELOPMENT IS CATEGORIZED AS A "MAJOR LAND DISTURBANCE" FOR THE ENTIRETY OF THE BUILDING FOOTPRINT, THUS REQUIRING A STORMWATER RETENTION VOLUME (SWR_v) BASED ON THE 1.2" STORM EVENT. IN ADDITION TO THE RETAINED VOLUME, THE SWM FACILITIES MUST PROVIDE 15-YR STORM CONTROL FOR PEAK DISCHARGE TO THE PRE-PROJECT RATE.

SITE AREA DISTURBED = 46,940 sf
 REQUIRED SWR_v = 4,459 cf

THE SWR_v REQUIREMENT IS ACHIEVED BY THE DESIGN AND IMPLEMENTATION OF GREEN ROOF. THE RUNOFF FROM THE EXISTING BUILDING IS ROUTED DIRECTLY TO GREEN ROOF AREAS FOR TREATMENT. ADDITIONALLY, THE DETENTION REQUIREMENT WILL BE MET THROUGH A COMBINATION OF GREEN ROOF AND DETENTION VAULT. THE STORAGE CAPACITY OF THESE FACILITIES ARE SIZED TO ATTENUATE THE 2-YR STORM PEAK DISCHARGE BACK TO PRE-DEVELOPMENT CONDITION AND THE 15-YR STORM PEAK DISCHARGE BACK TO PRE-PROJECT CONDITIONS.

DESIGN CRITERIA IS BASED OFF THE DISTRICT'S 2013 SWM GUIDEBOOK FOR GREEN ROOF.

STORMWATER MANAGEMENT EXEMPTIONS:

CHAPTER 21 DCMR :: 517

THE FOLLOWING DEVELOPMENT ACTIVITIES SHALL BE EXEMPT FROM THE PROVISIONS OF THE STORM WATER MANAGEMENT REQUIREMENTS:

- CUTTING A TRENCH FOR UTILITY WORK AND RELATED REPLACEMENT OF SIDEWALKS AND RAMPS
- REPAVING OR REMILLING THAT DOES NOT EXPOSE THE UNDERLYING SOIL.

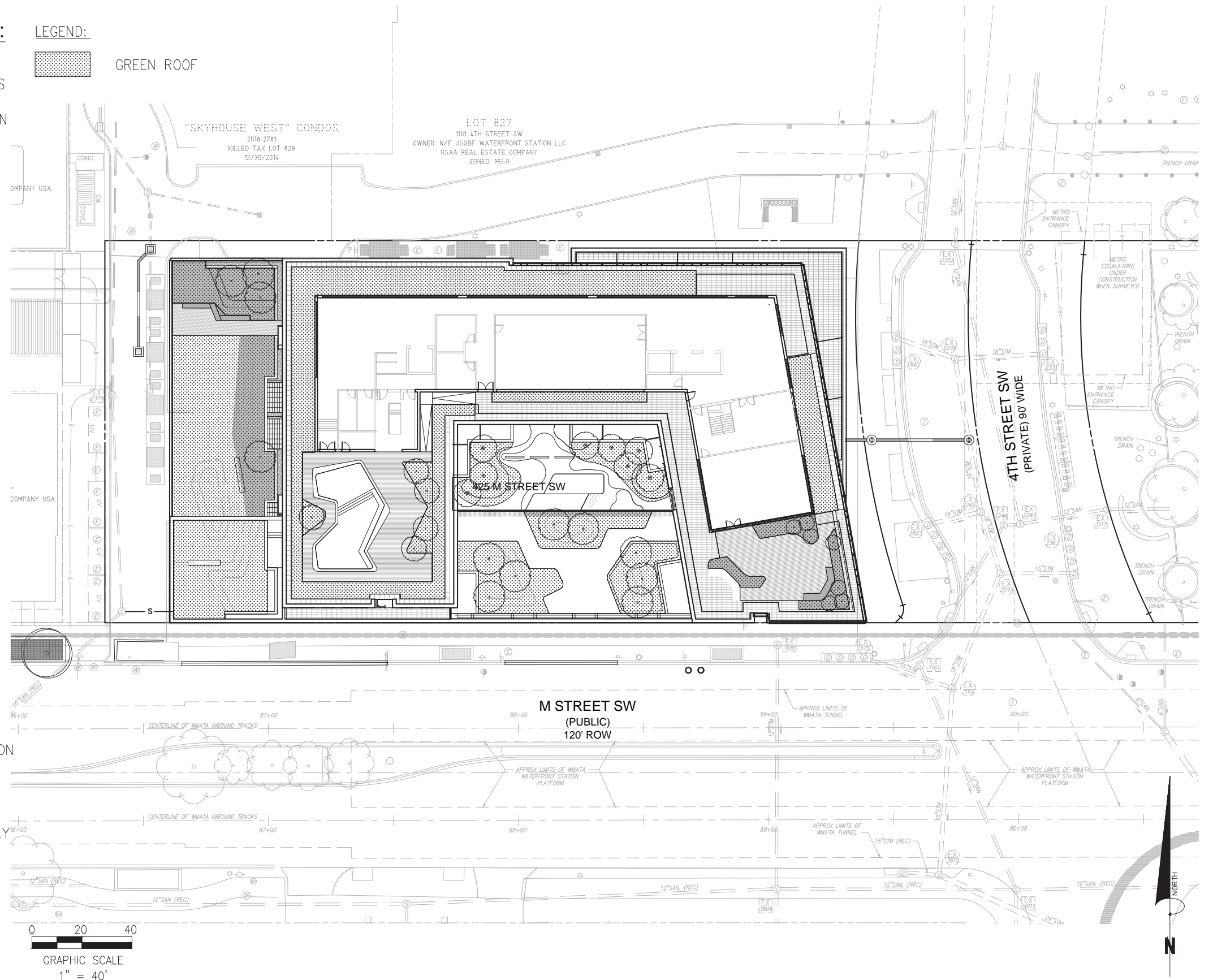
GREEN ROOF PROVIDED:

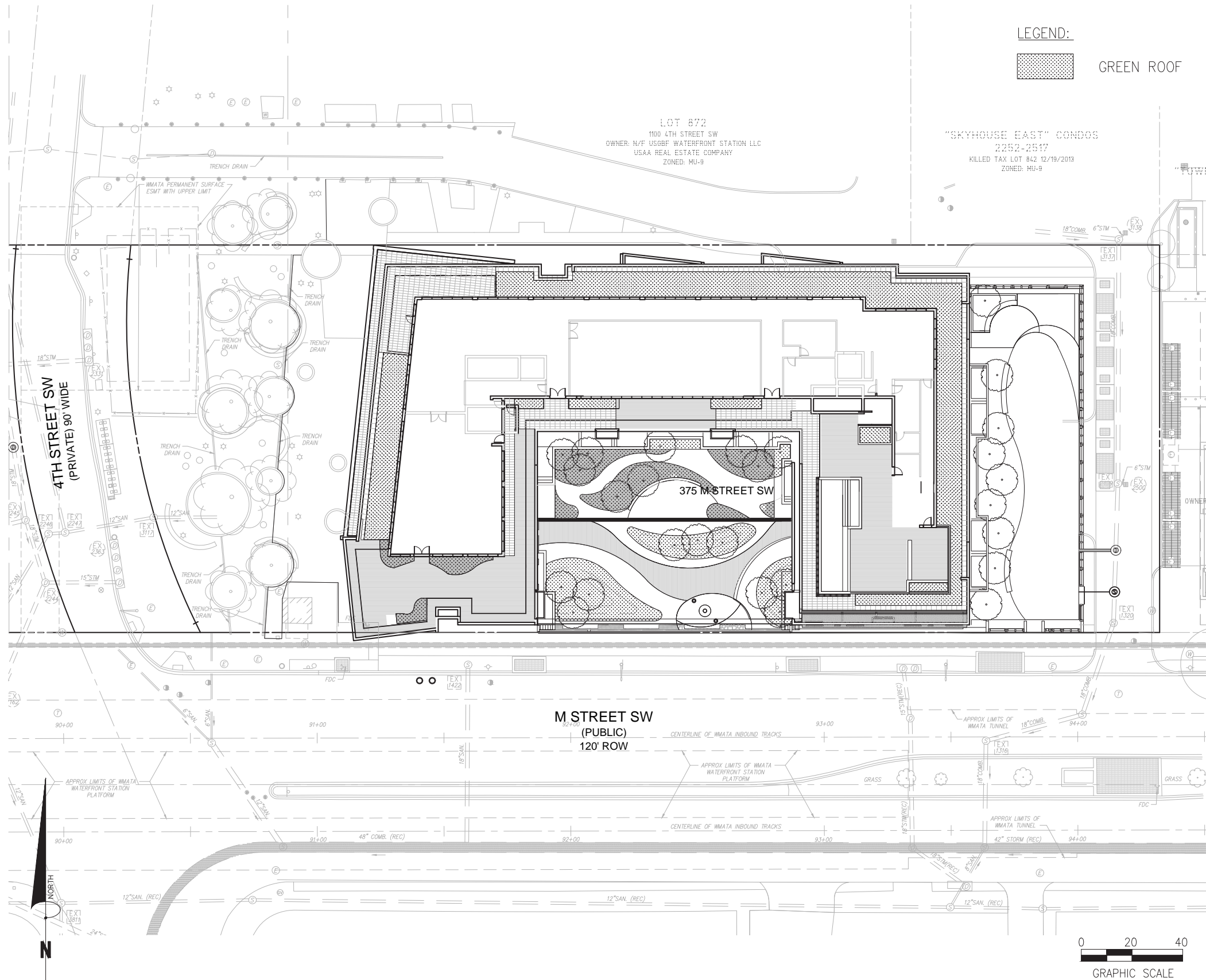
ASSUMED 6" GREEN ROOF AT 0.50 POROSITY

±17,900 sf OF 6" GREEN ROOF IS REQUIRED TO MEET RETENTION REQUIREMENTS.

CONCEPTUAL STORMWATER MANAGEMENT PROVIDED FOR PUD REVIEW ONL. DURING THE FINAL ENGINEERING PHASE, STORMWATER MANAGEMENT DESIGN WILL BE ADVANCED AND MAY USE OTHER METHOD WHICH WILL PROVIDE THE REQUIRED RETENTION TO BE IN ACCORDANCE WITH THE 2013 SWM GUIDEBOOK FOR THE DISTRICT OF COLUMBIA.

LEGEND:
 GREEN ROOF





LEGEND:
 GREEN ROOF

STORMWATER MANAGEMENT NARRATIVE:

ACCORDING TO THE 2013 SWM GUIDEBOOK FOR THE DISTRICT OF COLUMBIA, THIS PROJECT SITE DEVELOPMENT IS CATEGORIZED AS A "MAJOR LAND DISTURBANCE" FOR THE ENTIRETY OF THE BUILDING FOOTPRINT, THUS REQUIRING A STORMWATER RETENTION VOLUME (SWR_v) BASED ON THE 1.2" STORM EVENT. IN ADDITION TO THE RETAINED VOLUME, THE SWM FACILITIES MUST PROVIDE 15-YR STORM CONTROL FOR PEAK DISCHARGE TO THE PRE-PROJECT RATE.

SITE AREA DISTURBED = 61,063 sf
 REQUIRED SWR_v = 5,801 cf

THE SWR_v REQUIREMENT IS ACHIEVED BY THE DESIGN AND IMPLEMENTATION OF GREEN ROOF. THE RUNOFF FROM THE EXISTING BUILDING IS ROUTED DIRECTLY TO GREEN ROOF AREAS FOR TREATMENT. ADDITIONALLY, THE DETENTION REQUIREMENT WILL BE MET THROUGH A COMBINATION OF GREEN ROOF AND DETENTION VAULT. THE STORAGE CAPACITY OF THESE FACILITIES ARE SIZED TO ATTENUATE THE 2-YR STORM PEAK DISCHARGE BACK TO PRE-DEVELOPMENT CONDITION AND THE 15-YR STORM PEAK DISCHARGE BACK TO PRE-PROJECT CONDITIONS.

DESIGN CRITERIA IS BASED OFF THE DISTRICT'S 2013 SWM GUIDEBOOK FOR GREEN ROOF.

STORMWATER MANAGEMENT EXEMPTIONS:

CHAPTER 21 DCMR :: 517
 THE FOLLOWING DEVELOPMENT ACTIVITIES SHALL BE EXEMPT FROM THE PROVISIONS OF THE STORM WATER MANAGEMENT REQUIREMENTS:

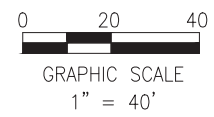
- CUTTING A TRENCH FOR UTILITY WORK AND RELATED REPLACEMENT OF SIDEWALKS AND RAMPS
- REPAVING OR REMILLING THAT DOES NOT EXPOSE THE UNDERLYING SOIL.

GREEN ROOF PROVIDED:

ASSUMED 6" GREEN ROOF AT 0.50 POROSITY

±23,200 sf OF 6" GREEN ROOF IS REQUIRED TO MEET RETENTION REQUIREMENTS.

CONCEPTUAL STORMWATER MANAGEMENT PROVIDED FOR PUD REVIEW ONL. DURING THE FINAL ENGINEERING PHASE, STORMWATER MANAGEMENT DESIGN WILL BE ADVANCED AND MAY USE OTHER METHOD WHICH WILL PROVIDE THE REQUIRED RETENTION TO BE IN ACCORDANCE WITH THE 2013 SWM GUIDEBOOK FOR THE DISTRICT OF COLUMBIA.





LEED v4 for BD+C: New Construction and Major Renovation

Project Checklist

Project Name: 425 M St SW

Date: 8/15/16

Y ? N

1			Credit	Integrative Process	1
---	--	--	--------	---------------------	---

11 3 18 Location and Transportation 16

16			Credit	LEED for Neighborhood Development Location	16
1			Credit	Sensitive Land Protection	1
		2	Credit	High Priority Site	2
4	1		Credit	Surrounding Density and Diverse Uses	5
5			Credit	Access to Quality Transit	5
	1		Credit	Bicycle Facilities	1
	1		Credit	Reduced Parking Footprint	1
1			Credit	Green Vehicles	1

6 2 2 Sustainable Sites 10

Y			Prereq	Construction Activity Pollution Prevention	Required
1			Credit	Site Assessment	1
		2	Credit	Site Development - Protect or Restore Habitat	2
1			Credit	Open Space	1
1	2		Credit	Rainwater Management	3
2			Credit	Heat Island Reduction	2
1			Credit	Light Pollution Reduction	1

4 1 6 Water Efficiency 11

Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
1	1		Credit	Outdoor Water Use Reduction	2
2		4	Credit	Indoor Water Use Reduction	6
		2	Credit	Cooling Tower Water Use	2
1			Credit	Water Metering	1

12 16 7 Energy and Atmosphere 33

Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
6			Credit	Enhanced Commissioning	6
4	12	4	Credit	Optimize Energy Performance	18
	1		Credit	Advanced Energy Metering	1
	2		Credit	Demand Response	2
		3	Credit	Renewable Energy Production	3
	1		Credit	Enhanced Refrigerant Management	1
2			Credit	Green Power and Carbon Offsets	2

2 6 5 Materials and Resources 13

Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
	3	2	Credit	Building Life-Cycle Impact Reduction	5
	1	1	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
	1	1	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
	1	1	Credit	Building Product Disclosure and Optimization - Material Ingredients	2
2			Credit	Construction and Demolition Waste Management	2

7 7 2 Indoor Environmental Quality 16

Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
2			Credit	Enhanced Indoor Air Quality Strategies	2
1	2		Credit	Low-Emitting Materials	3
1			Credit	Construction Indoor Air Quality Management Plan	1
	2		Credit	Indoor Air Quality Assessment	2
1			Credit	Thermal Comfort	1
1	1		Credit	Interior Lighting	2
	2	1	Credit	Daylight	3
		1	Credit	Quality Views	1
1			Credit	Acoustic Performance	1

6 0 0 Innovation 6

5			Credit	Innovation	5
1			Credit	LEED Accredited Professional	1

2 2 0 Regional Priority 4

1			Credit	Regional Priority: Access to Quality Transit	1
1			Credit	Regional Priority: Green Vehicles	1
	1		Credit	Regional Priority: Reduced Parking Footprint	1
	1		Credit	Regional Priority: Rainwater Management	1

51 37 40 TOTALS Possible Points: 110

Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110





LEED v4 for BD+C: New Construction and Major Renovation

Project Checklist

Project Name: 375 M St SW

Date: 8/15/16

Y ? N

1			Credit	Integrative Process	1
---	--	--	--------	---------------------	---

11	3	18	Location and Transportation		16
		16	Credit	LEED for Neighborhood Development Location	16
1			Credit	Sensitive Land Protection	1
		2	Credit	High Priority Site	2
4	1		Credit	Surrounding Density and Diverse Uses	5
5			Credit	Access to Quality Transit	5
	1		Credit	Bicycle Facilities	1
	1		Credit	Reduced Parking Footprint	1
1			Credit	Green Vehicles	1

6	2	2	Sustainable Sites		10
Y			Prereq	Construction Activity Pollution Prevention	Required
1			Credit	Site Assessment	1
		2	Credit	Site Development - Protect or Restore Habitat	2
1			Credit	Open Space	1
1	2		Credit	Rainwater Management	3
2			Credit	Heat Island Reduction	2
1			Credit	Light Pollution Reduction	1

4	1	6	Water Efficiency		11
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
1	1		Credit	Outdoor Water Use Reduction	2
2		4	Credit	Indoor Water Use Reduction	6
		2	Credit	Cooling Tower Water Use	2
1			Credit	Water Metering	1

12	16	7	Energy and Atmosphere		33
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
6			Credit	Enhanced Commissioning	6
4	12	4	Credit	Optimize Energy Performance	18
	1		Credit	Advanced Energy Metering	1
	2		Credit	Demand Response	2
		3	Credit	Renewable Energy Production	3
	1		Credit	Enhanced Refrigerant Management	1
2			Credit	Green Power and Carbon Offsets	2

2	6	5	Materials and Resources		13
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
	3	2	Credit	Building Life-Cycle Impact Reduction	5
	1	1	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
	1	1	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
	1	1	Credit	Building Product Disclosure and Optimization - Material Ingredients	2
2			Credit	Construction and Demolition Waste Management	2

7	7	2	Indoor Environmental Quality		16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
2			Credit	Enhanced Indoor Air Quality Strategies	2
1	2		Credit	Low-Emitting Materials	3
1			Credit	Construction Indoor Air Quality Management Plan	1
	2		Credit	Indoor Air Quality Assessment	2
1			Credit	Thermal Comfort	1
1	1		Credit	Interior Lighting	2
	2	1	Credit	Daylight	3
		1	Credit	Quality Views	1
1			Credit	Acoustic Performance	1

6	0	0	Innovation		6
5			Credit	Innovation	5
1			Credit	LEED Accredited Professional	1

2	2	0	Regional Priority		4
1			Credit	Regional Priority: Access to Quality Transit	1
1			Credit	Regional Priority: Green Vehicles	1
	1		Credit	Regional Priority: Reduced Parking Footprint	1
	1		Credit	Regional Priority: Rainwater Management	1

51	37	40	TOTALS		Possible Points: 110
Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110					

