

Greening Richmond Public Libraries

IMPROVING THE HEALTH OF THE JAMES RIVER BY REDUCING STORMWATER POLLUTION

East End Branch Library

1200 North 25th Street, Richmond, 23223

Legend:

City Water Sampling Station

Water Meter **Existing Trees**

& Shrubs To Gas Meter Be Preserved:

Electric Meter

Gas Vault

Clean out

Bollard, 8

Basins

Interpretive Sign

/salt trap, see detail

Roll down curbs for

ingress/egress of

Bioretention basin

No Parking sign, 7

inspection port, connect

stormwater

NOTES Backflow preventer

City Electrical Vault

THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES IS SHOWN City Street Lights ON THIS PLAN, CONTRACTOR TO CONTACT MISS UTILITY AND LOCATE GAS LINE CLOSEST TO PROPOSED IMPROVEMENTS ON R STREET.

City Utility Pole CONTRACTOR TO ASSUME ALL RESPONSIBILITY FOR CONSTRUCTION METHODS EMPLOYED AND FIELD VERIFY ALL DIMENSIONS. ISSUES AND Hose Bib CONCERNS SHALL BE REPORTED TO FOUR WINDS.

> CONTRACTOR TO ENSURE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS AT ALL TIMES DURING THE DEMOLITION AND BUILDING PROCESS

Pour new curb

and gutter to

layout shown,

see detail

NO PUBLIC THOROUGHFARES INCLUDING SIDEWALKS SHALL BE BLOCKED DURING PERMITS. NO HOLES SHALL BE LEFT OPEN OVERNIGHT WITHOUT SECURING

Proposed Trash Can, 3

roposed Bioretention

THIS DRAWING SHALL BE PRINTED IN COLOR AND PRINTS TO SCALE ON 24"x36" PAPER. USING SMALLER PRINT SIZES IN THE FIELD IS NOT PERMISSIBLE. A COPY OF THE CITY APPROVED DRAWINGS AND STORMWATER PERMIT SHALL BE KEPT ON SITE AT Velocity reducer & trash

> IRRIGATION WILL BE INSTALLED BY RICHMOND IRRIGATION, CONTACT DAN BRADY FOR QUOTE TO INCLUDE IN CONTRACTORS PROPOSAL. SEE PLANTING PLAN FOR LAYOUT NARRATIVE FOR CONSIDERATION IN CONCRETE WORK.

Bee Zone Markers, 10 THE PERVIOUS PAVERS WILL BE INSTALLED IN A SEPARATE PHASE TO OCCUR IN WINTER 2023. AFTER ALL DEBRIS HAS BEEN REMOVED FROM FORMER PAVED AREAS AND WITHIN THE

PLANTERS, A TOPSOIL / COMPOST MIX SHALL BE INSTALLED TO BRING GRADES BACK UP

TO 3" BELOW ALL PAVING OR WALL CAPS TO REMAIN. The bottom of the bioretention basin shall be scarified before installation of media if the $31'-0\frac{5}{16}$ " BASIN HAS RECEIVED ANY FOOT TRAFFIC OR COMPACTION. MAINTAIN SOIL DEPTH AS NOTED.

THE BIORETENTION SOIL SHALL BE 80% COARSE (MORTAR) SAND, 10% HIGH GRADE TOPSOIL, AND 10% LEAF OR MUSHROOM COMPOST

SOIL TESTING: CONTRACTOR TO PROVIDE TESTING OF THE BIORETENTION SOIL MIX FOR ACCEPTABLE PHOSPHOROUS LEVELS. THE MIX SHALL HAVE A P-INDEX BETWEEN 10 AND 30 OR BETWEEN 7 AND to underdrain, see notes 21 MG/ KG OF PHOSPHOROUS TOTAL IN THE SOIL MIX.

> EACH BIORETENTION BASIN SHALL HAVE A 6" PERFORATED SCHEDULE 40 PVC PIPE IN A NYLON SOCK RUNNING THE LENGTH OF THE BASIN. THESE UNDERDRAINS SHALL BE DEAD LEVEL. A STANDPIPE TO THE SURFACE SHOULD BE FITTED WITH A METAL SCREW CAP. THESE INSPECTION PORTS ALLOW MAINTENANCE 7'-11 CREWS TO CONFIRM THE BASIN HASN'T BECOME SILTED IN THE FUTURE.

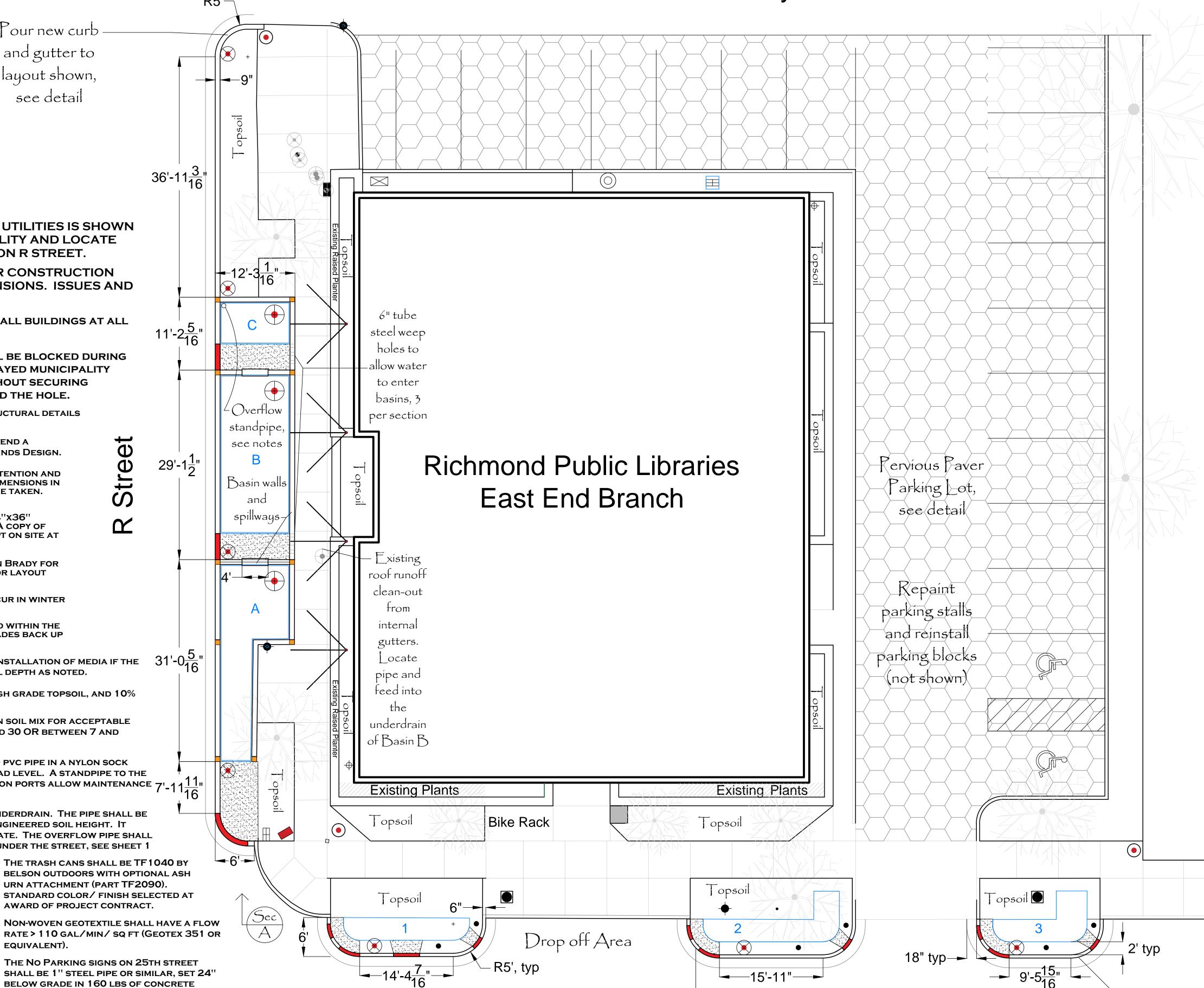
BASIN C SHALL HAVE AN OVERFLOW STANDPIPE INDEPENDENT OF THE UNDERDRAIN. THE PIPE SHALL BE 8" SCHEDULE 40 PVC WITH A FINISHED ELEVATION 3" ABOVE FINISHED ENGINEERED SOIL HEIGHT. IT SHALL BE FITTED WITH AN 8" DOMED TRASH RACK/ FLOATING DEBRIS GRATE. THE OVERFLOW PIPE SHALL BE CONNECTED TO THE EXISTING 20" BELOW GRADE CITY STORM SEWER UNDER THE STREET, SEE SHEET 1

reestanding Trellis

Bioretention Basin Sizes and Media Depths

Basin	Basin Footprint	Engineered Soil Depth	Gravel Layer Depth	Underdrain	Overflow
Α	216 square feet	24"	none	6" perf PVC	stone ledge into Basin B
В	260 square feet	24"	none	6" perf PVC	stone ledge into Basin C
С	69 square feet	24"	none	6" perf PVC	standpipe to city storm sewer
1	64 square feet	30"	12"	6" perf PVC	back into street
2	87 square feet	30"	12"	6" perf PVC	back into street
3	68 square feet	30"	12"	6" perf PVC	back into street

Public Alley

















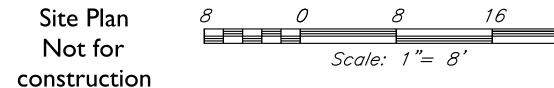
EQUIVALENT).



(THESE ARE BEING USED AS BOLLARDS)



25th Street



Pour new curb and gutter to layout shown, see detail-

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East End Branch Library

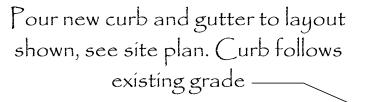
1200 North 25th Street, Richmond, 23223

VESCH GENERAL EROSION

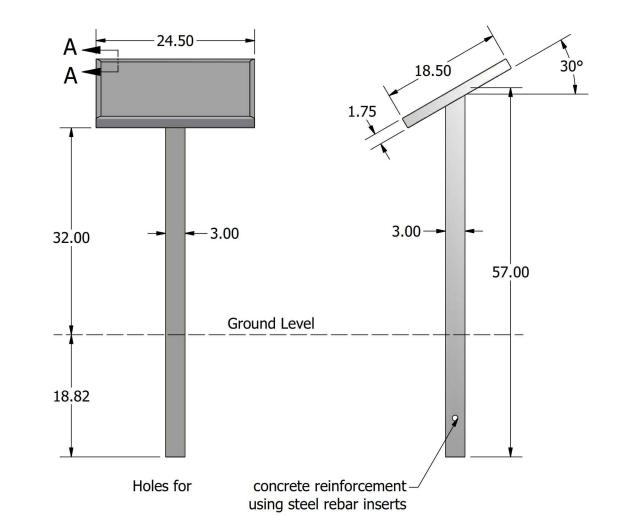
- UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS 9VAC25-840.
- THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE—CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
- ES-7: ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY

RICHMOND STANDARD E&S NOTES

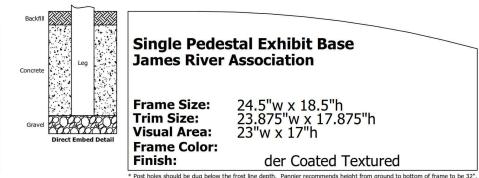
- 1. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN, DORMANT (UNDISTURBED) FOR LONGER THAN 14 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
- 2. EXCESS EXCAVATION DISPOSED OF OFF THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
- 3. EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED IN ACCORDANCE WITH VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND SHALL BE PLACED PRIOR TO OR AS THE FIRST STEP OF THE LAND DISTURBING ACTIVITY.
- 4. EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED SO THAT THE SEDIMENT CARRYING RUNOFF FROM THE SITE WILL NOT ENTER STORM DRAINAGE FACILITIES.
- 5. EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED UNTIL THE DISTURBED AREA IS STABILIZED
- 6. PROPERTIES ADJOINING THE SITE SHALL BE KEPT CLEAN OF MUD OR SILT CARRIED FROM THE SITE BY VEHICULAR TRAFFIC OR RUNOFF.
- 7. THE DISPOSAL OF WASTE MATERIALS REMOVED FROM EROSION AND SEDIMENT CONTROL FACILITIES AND THE DISPOSAL OF THESE FACILITIES SHALL BE IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

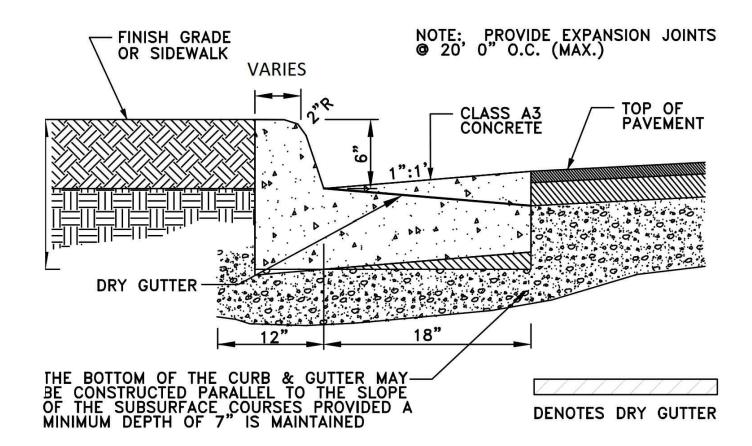


Red line denotes existing grade



HARDWARE INCLUDED					
Туре	QTY	Image			
1/4"-20 x 3/8" Stainless Steel Hex Drive Button Head Screws	4 each				
5/32" Hex Key	1 each				
1/4" Aluminum Drive Rivets	2 each				

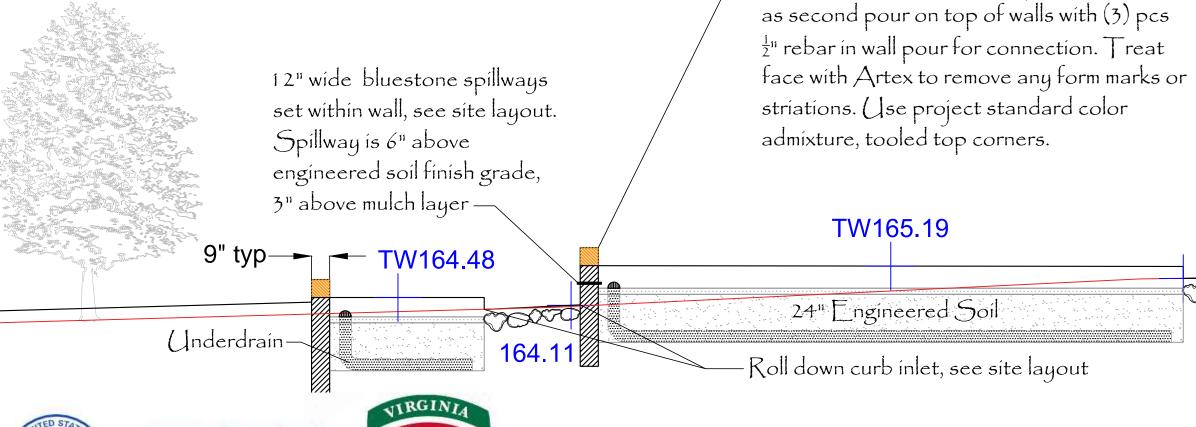


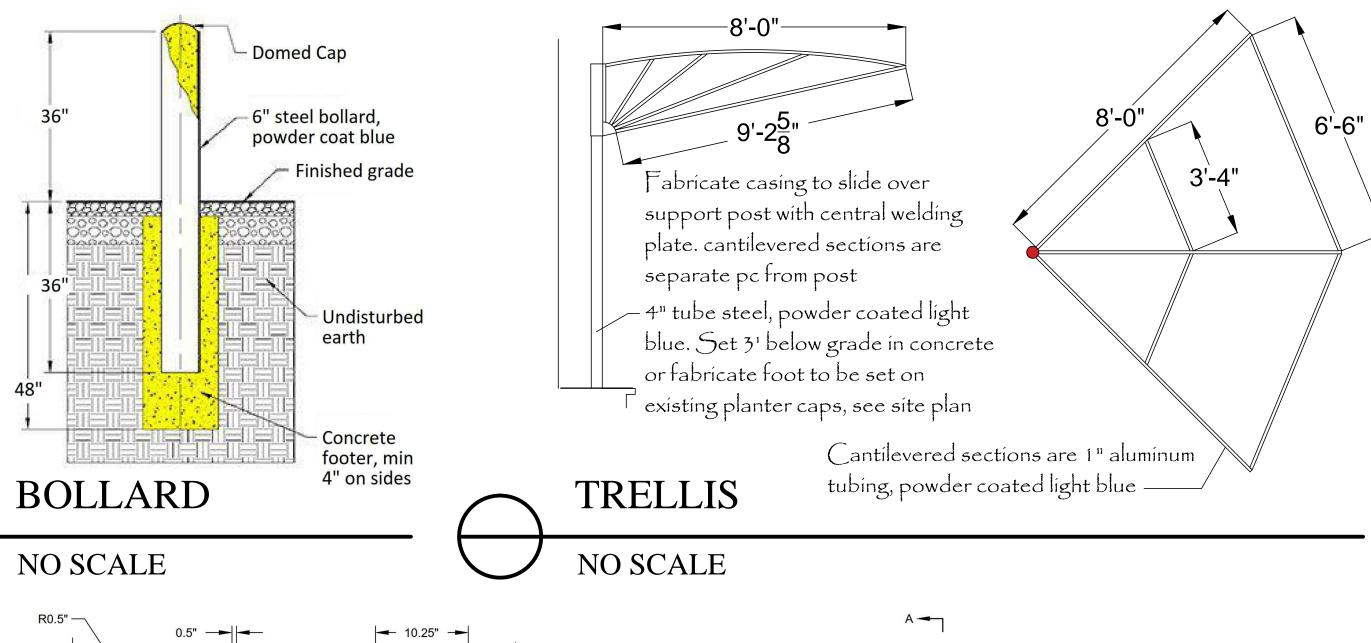


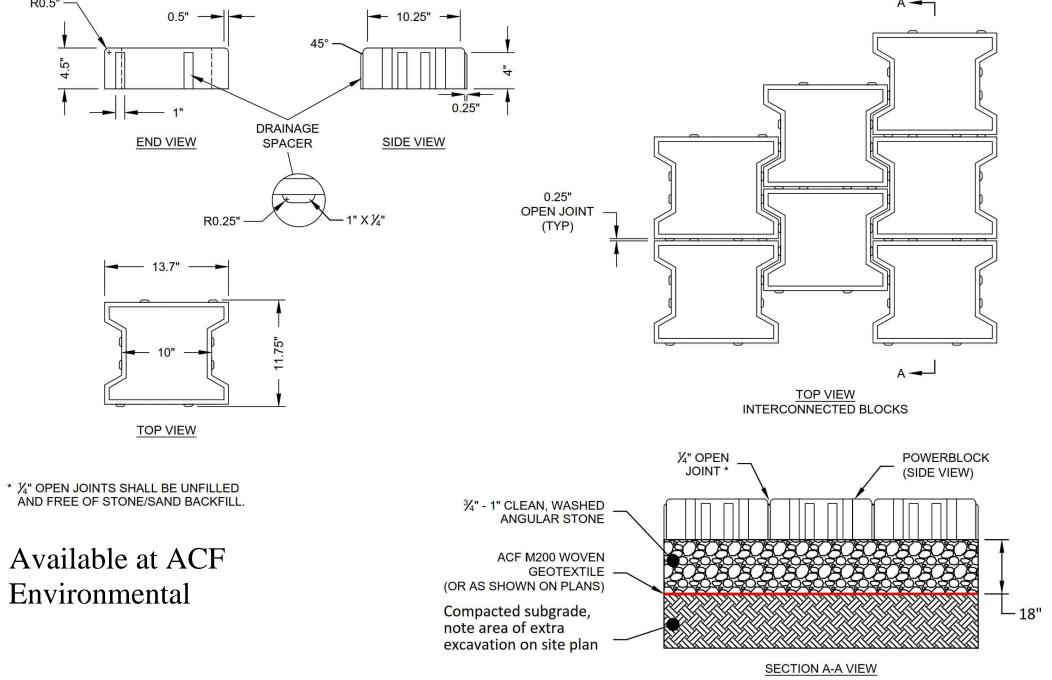
CURB AND GUTTER DETAIL

NO SCALE

- 8. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
- 9. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.







Bioretention basin walls: 3500 psi

concrete with $\frac{1}{2}$ " rebar 18" \bigcirc

horizontally and vertically. Treat

any form marks or striations.

interior of walls, contractor to

submit product cut sheet.

3" Mulch layer-

exposed faces with artex to remove

Tooled top corners. Waterproof

POWERBLOCK PERVIOUS PAVERS

NO SCALE

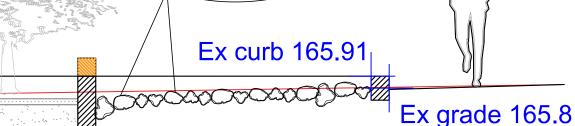
DOWO

164.69

Bee Zone Markers: 3500 psi concrete, set

Velocity reduced and trash/salt trap: mix 3-5" and 2-3" tan riverstone sizes at 75/25%. Place larger stones over fabric and carefully fill gaps with mortar, apply smaller stones. No mortar shall be visible. This application is intended to be semi-pervious to capture road salt. Contractor to provide mock-up for approval

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SECTION A SCALE 1'' = 4'



TW165.91

















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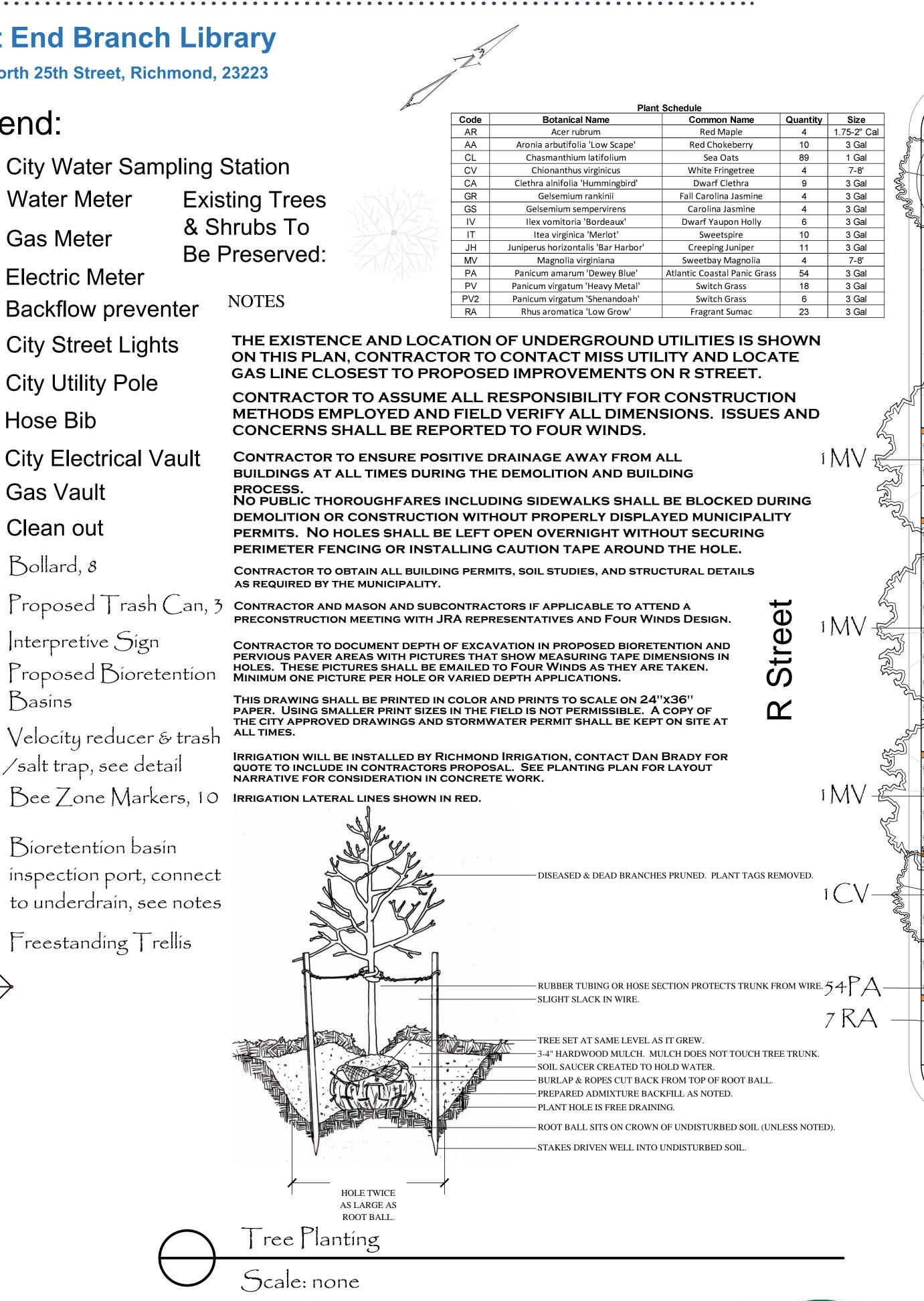
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Legend:

- City Water Sampling Station
- Water Meter
- Gas Meter
- City Street Lights
- City Utility Pole
- Hose Bib
- City Electrical Vault
- Gas Vault
- Clean out
- Bollard, 8
- Proposed Trash Can, 3
- Interpretive Sign
 - Proposed Bioretention Basins
- Velocity reducer & trash /salt trap, see detail
- - Bioretention basin inspection port, connect to underdrain, see notes
 - Freestanding Trellis







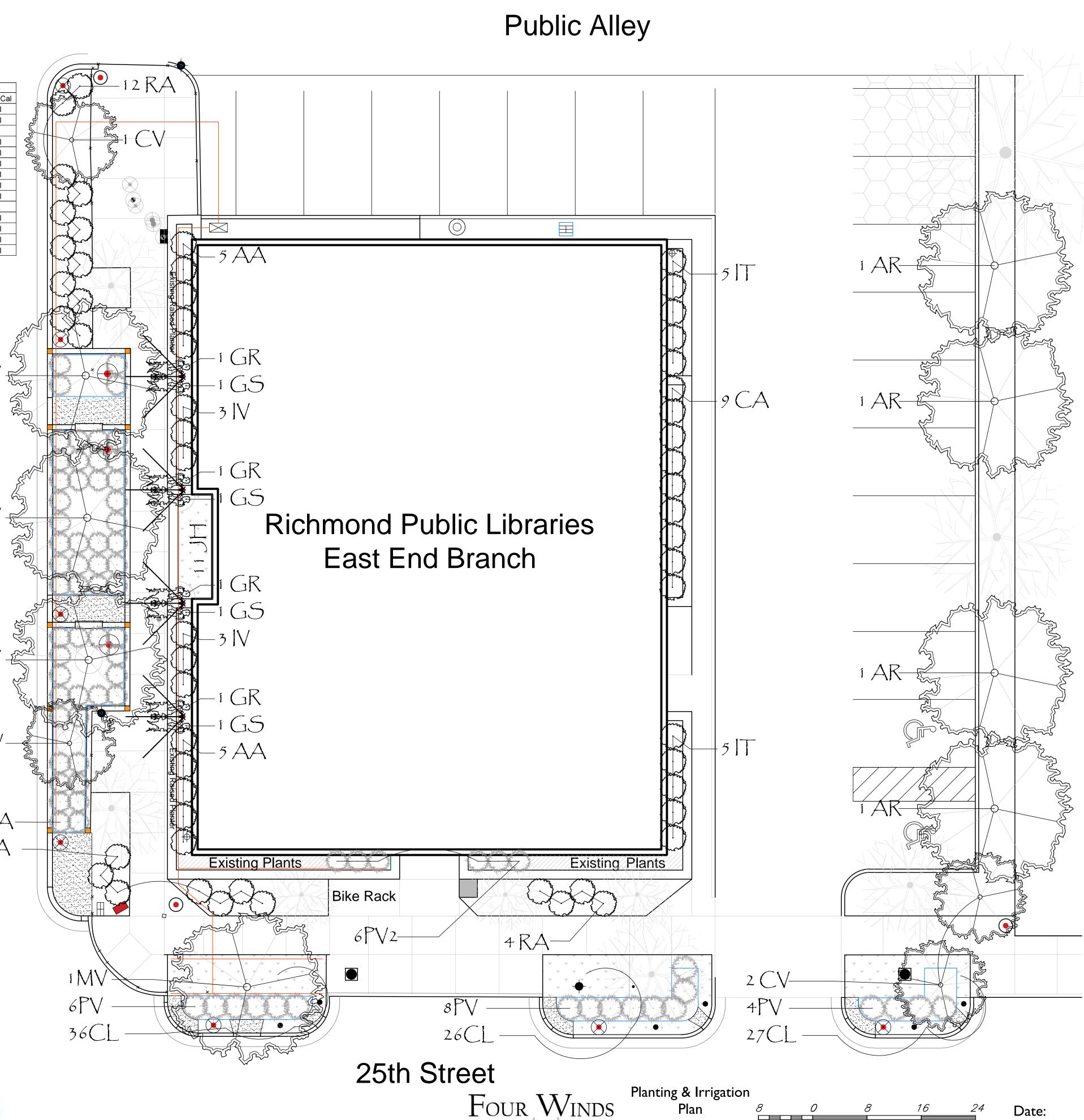












DESIGN, LC

Not for

construction

7-19-22