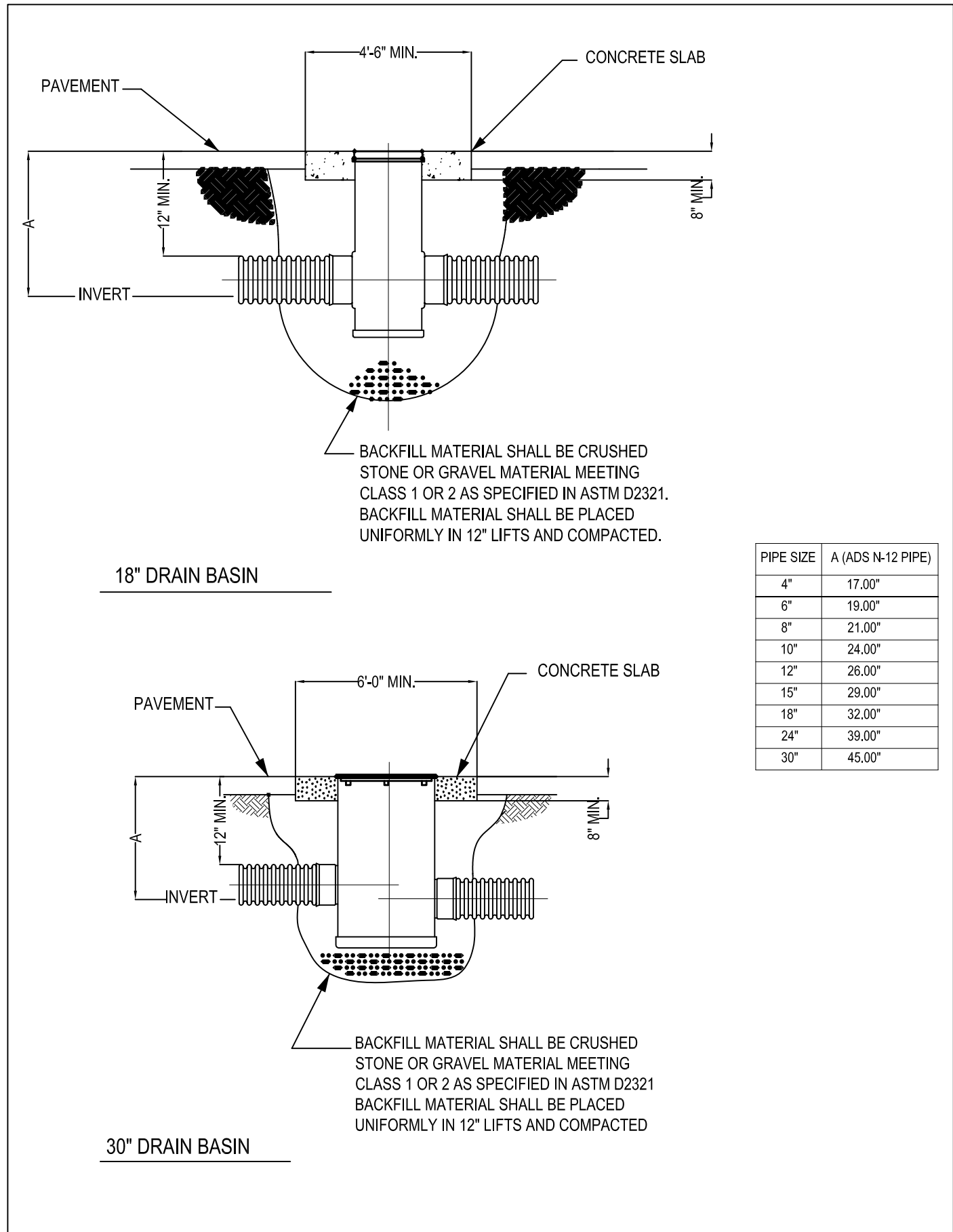


CONSTRUCTION NOTES

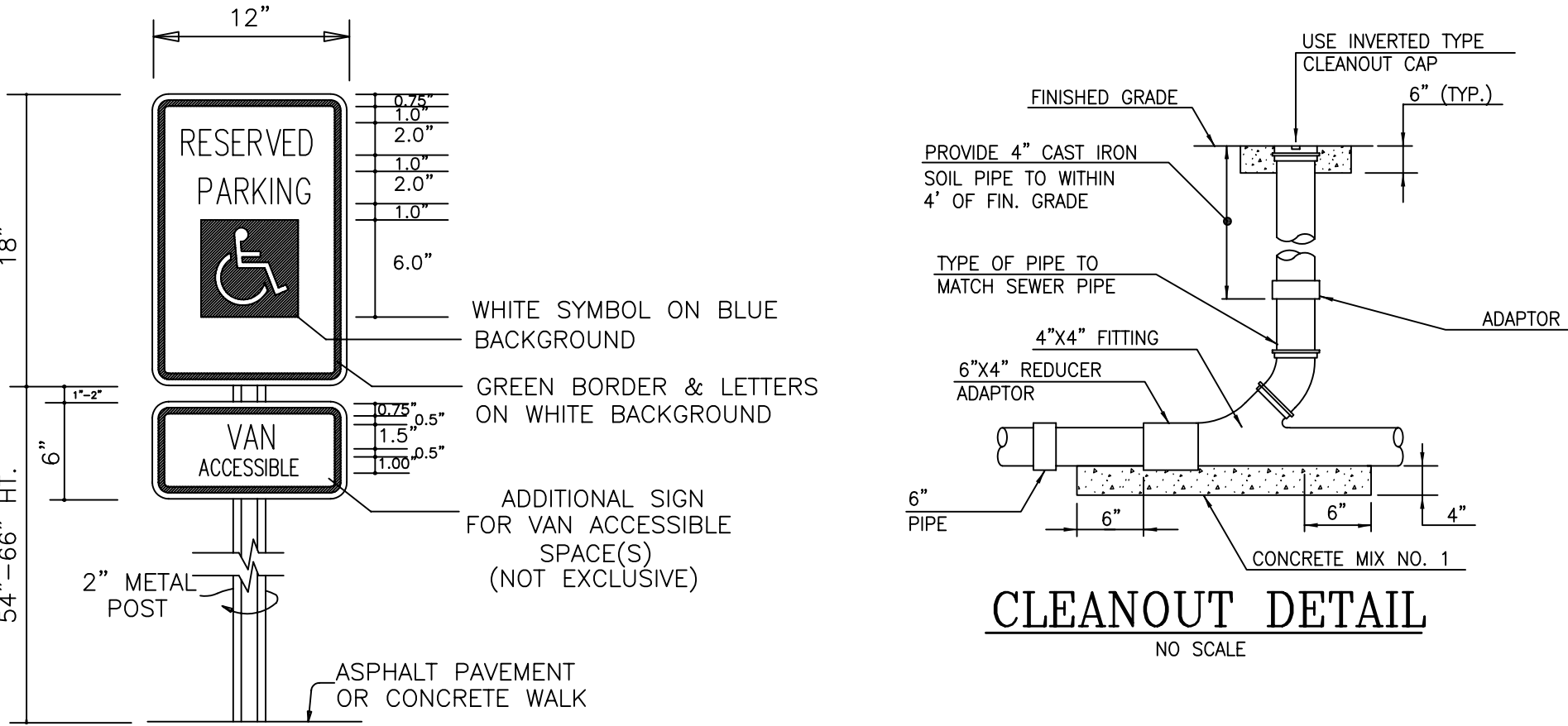
1. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE VIRGINIA DEPARTMENT OF HIGHWAYS AND TRANSPORTATION.
2. ALL STORM SEWER SHALL BE ASTM, C-76, CLASS III, EXCEPT AS NOTED.
3. ALL DRAINAGE STRUCTURES SHALL BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.
4. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC UTILITIES PRIOR TO MAKING ANY ADJUSTMENTS TO THE WATER OR SEWERAGE SYSTEMS.
5. THE CONTRACTOR SHALL NOTIFY RICHMOND PUBLIC WORKS AT LEAST 24 HOURS PRIOR TO STARTING WORK ON THE PROJECT.
6. A DI ON GRADE SHALL BE POURED WITH THE THROAT ON THE SAME GRADE AS THE ADJOINING CURB AND GUTTER.
7. THE PAVEMENT DESIGN IS SUBJECT TO CHANGE DUE TO SOIL CONDITION AT THE TIME OF CONSTRUCTION, AS DETERMINED ENGINEER.
8. ALL DIMENSIONS ARE TO FACE OF CURB OR BUILDING.
9. ANY DIMENSION THAT DOES NOT SCALE AS NOTED MUST BE CONFIRMED WITH THE DESIGN ENGINEER.
10. ALL CURB RADII ARE 5.0' UNLESS NOTED OTHERWISE.
11. TRAFFIC PAINT SHALL BE WHITE (ON ASPHALT) OR 'ADA' BLUE (ON HANDICAPPED SPACES). PARKING STRIPES SHALL BE 4" WIDE. STOP BARS SHALL BE 24" WIDE AND BE PLACED 10' FROM RIGHT OF WAY. PER CURRENT VDOT STANDARDS.
12. STOP SIGNS AND HANDICAP PARKING SIGNS SHALL CONFORM TO THE 'MANUAL OF UNIFORM TRAFFIC CODE DEVICES' AND THE VIRGINIA SUPPLEMENT.
13. CONTRACTOR SHALL ACQUIRE ANY AND ALL NECESSARY CONSTRUCTION PERMITS.
14. ALL CONSTRUCTION MATERIALS AND WORKMANSHIP MUST CONFORM TO THE FOLLOWING STANDARDS AND SPECIFICATIONS:
VIRGINIA DEPARTMENT OF TRANSPORTATION
VIRGINIA DEPARTMENT OF HEALTH
RICHMOND DEPARTMENT OF UTILITIES
RICHMOND DEPARTMENT OF COMMUNITY DEVELOPMENT
15. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH V.D.O.T. STANDARDS.
16. ELECTRIC POWER, TELEPHONE POWER, AND GAS SUPPLY TRENCHES ARE TO BE COMPACTED, MULCHED AND SEEDED WITHIN 15 DAYS AFTER BACKFILL.
17. VIRGINIA LAW REQUIRES THE CONTRACTOR NOTIFY MISS UTILITY AT 1-800-552-7001 AT LEAST 48 HRS. PRIOR TO ANY LAND DISTURBANCE. THIS PLAN DOES NOT GUARANTEE THE EXISTENCE OF LOCATION OF UNDERGROUND UTILITIES. THE UNDERGROUND UTILITIES SHOWN HEREON WERE ESTABLISHED USING ABOVE GROUND STRUCTURES (VALVES, METERS, MANHOLES, ETC.) AND AVAILABLE UTILITY MAPS. PRIOR TO ANY EXCAVATION OR CONSTRUCTION, THE CONTRACTOR SHALL UNCOVER ALL UTILITIES WHICH ARE SHOWN ON THE PLANS OR WHICH HAVE BEEN MARKED BY MISS UTILITY AS BEING IN THE AREA OF EXCAVATION OR CONSTRUCTION. THE CONTRACTOR SHALL TAKE VERTICAL AND HORIZONTAL MEASUREMENTS ADEQUATE TO DETERMINE IF ANY CONFLICT WILL OCCUR. IF ANY POTENTIAL CONFLICT IS FOUND, THE CONTRACTOR SHALL NOTIFY THE SITE ENGINEER PRIOR TO BEGINNING ANY EXCAVATION OR CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REINSTALLING AT HIS EXPENSE ANY UTILITY WHICH MUST BE RELOCATED BECAUSE OF A CONFLICT WHICH WAS NOT REPORTED TO THE SITE ENGINEER PRIOR TO THE BEGINNING OF ANY EXCAVATION OR CONSTRUCTION.
18. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. ANY WORK OR MATERIAL NOT IN CONFORMANCE WITH THESE DOCUMENTS IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
19. ANY QUANTITIES PROVIDED ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE QUANTITIES AND SUBMITTING HIS BID ACCORDINGLY.
20. ALL EXISTING UTILITIES, SERVICE POLES, AND CONNECTIONS SHALL BE PROTECTED AT THE CONTRACTOR'S EXPENSE. IF DAMAGE IS CAUSED BY CONSTRUCTION TO ANY EXISTING UTILITY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR RESTORATION OF SAME.
21. CONTRACTOR SHALL PRESERVE ALL CONERSTONES, IRON PINS, CONCRETE MONUMENTS, OR ANY OTHER TYPE OF MONUMENTATION. THE CONTRACTOR SHALL ALSO PROVIDE A REGISTERED SURVEYOR TO RESTORE ANY/ALL MONUMENTATION SHOULD THAT MONUMENTATION BECOME DAMAGED OR DESTROYED.
22. ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED, EXCEPT IN THE INSTANCE OF EXISTING COMBINED SEWER.
23. ALL EQUIPMENT AND MATERIALS DESIGNATED FOR REMOVAL SHALL BECOME THE PROPERTY OF THE CONTRATOR UNLESS NOTED ON PLANS.



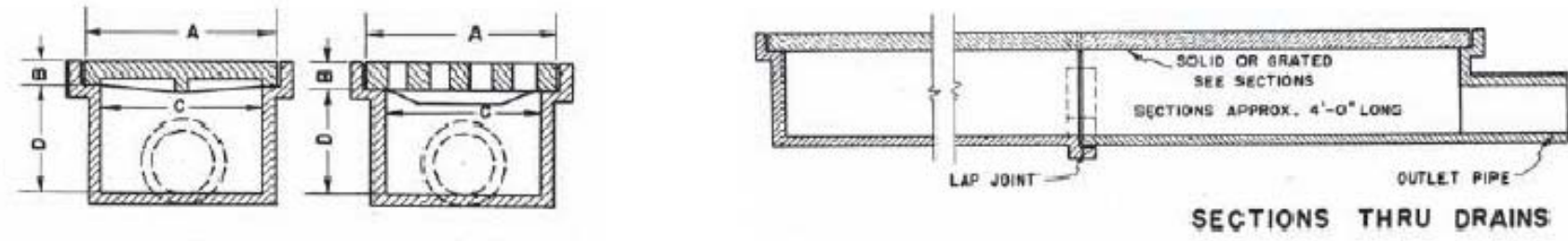
DRAIN BASIN INSTALLATION DETAIL
NO SCALE

UTILITY NOTES

1. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE CITY DEPARTMENT PRIOR TO MAKING ANY UTILITY ADJUSTMENTS OR PERFORMING OTHER WORK WITHIN THE RIGHT-OF-WAY.
2. THE SEQUENCE OF UTILITY CONSTRUCTION SHALL BE DEVELOPED IN SUCH A MANNER THAT WATER AND SANITARY SEWER SERVICE IS MAINTAINED AT ALL TIMES DURING CONSTRUCTION EXCEPT DURING TIE-INS AND CONNECTIONS. WHEN SERVICE IS INTERRUPTED, THE CONTRACTOR SHALL PROVIDE THE CITY WITH 72 HOURS NOTICE PRIOR TO THE INTERRUPTION. THE AFFECTED PROPERTY OWNER SHALL BE NOTIFIED WITHIN 48 HOURS PRIOR TO SERVICE INTERRUPTIONS. CONTRACTORS SHALL PROVIDE THE CITY WITH A DETAILED PLAN AND SCHEDULE FIVE (5) WORKING DAYS IN ADVANCE TO PERFORMING WORK WHICH REQUIRES INTERRUPTION TO CUSTOMER UTILITY SERVICE. SERVICE INTERRUPTIONS SHALL BE KEPT TO A MINIMUM.
3. UNLESS OTHERWISE NOTED, ALL GAS AND WATER UTILITY MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATION FOR GAS AND WATER SYSTEM-CONSTRUCTION AND MAINTENANCE DPU NO. 1-92, LATEST EDITION. THE CITY OF RICHMOND'S SEWER SPECIFICATIONS AND THE LATEST EDITIONS OF THE VIRGINIA DEPARTMENT OF HEALTH WATERWORKS REGULATIONS AND PROPOSED SEWAGE COLLECTION AND TREATMENT REGULATIONS.
4. LOCATIONS OF EXISTING UTILITIES ACROSS OR ALONG THE LINE OF THE PROPOSED WORK ARE SHOWN ONLY IN AN APPROXIMATE LOCATION ON THE PLANS. CONTRACTOR SHALL LOCATE ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY. CONTRACTOR SHALL CALL "MISS UTILITY 1-800-552-7001 PRIOR TO CONSTRUCTION AND IS RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND LINES OR STRUCTURES.
5. GATE VALVES SHALL BE U.S. PIPE, METROSEAL 250, OPEN RIGHT (CLOCKWISE), WITH MECHANICAL JOINT END FITTINGS, NON-RISEING STEM.
6. FIRE HYDRANTS SHALL BE U.S. PIPE, METROPOLITAN 250, OPEN RIGHT (CLOCKWISE), WITH A 4 1/2" VALVE OPENING.
7. ALL FIRE HYDRANTS AND VALVE BOXES DESIGNATED TO BE REMOVED SHALL BE SALVAGED AND DELIVERED TO THE DEPARTMENT OF UTILITIES AT 400 JEFFERSON DAVIS HIGHWAY.
8. ALL GAS AND WATER SERVICES AND SEWER CONNECTIONS SHALL BE RENEWED AS DIRECTED BY THE CITY OF RICHMOND, DEPARTMENT OF PUBLIC UTILITIES ENGINEER.
9. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS.
10. DATUM FOR ALL ELEVATIONS SHOWN IS NATIONAL GEODETIC SURVEY.
11. MINIMUM DEPTH OF COVER FOR GAS AND WATER MAINS IS 42 INCHES.
12. WATER MAINS SHALL BE DUCTILE IRON, DOUBLE COAT CEMENT LINED AS MANUFACTURED BY U.S. PIPE OR EQUAL. PIPE CLASS SHALL BE AS FOLLOWS:
DIAMETER (INCHES) SPECIAL CLASS
(3) 52
(4) 53
(6) 52
(8) 52
(10) 52
(12) & LARGER 51
13. THE CITY WILL INSPECT ALL GAS, WATER AND SANITARY SEWER MAINS, CONNECTIONS AND APPURTENANCES TO INSURE THAT THE MATERIALS AND CONSTRUCTION METHODS ARE IN ACCORDANCE WITH THE APPROVED PLANS, SPECIFICATION AND STANDARDS. ALL OTHER LINES AND CONNECTIONS WILL BE INSPECTED AND APPROVED BY THE DEPARTMENT OF BUILDING INSPECTIONS.
14. THE CONTRACTOR SHALL REQUEST VALVE OPERATION BY THE OWNER'S FORCES NO LESS THAN 48 HOURS IN ADVANCE. THE CONTRACTOR SHALL NOT OPERATE ANY EXISTING VALVES UNLESS DIRECTED BY THE OWNER.
15. THE CITY DOES NOT GUARANTEE A 100 PERCENT SHUTDOWN OF ITS EXISTING WATER MAINS. THE CONTRACTOR SHALL PROVIDE ALL PLUGS AND DE WATERING EQUIPMENT NECESSARY TO PERFORM THE WORK.
16. MECHANICAL JOINT LONG SOLID SLEEVES SHALL BE USED FOR ALL CONNECTION TO EXISTING WATER MAINS.
17. COUPLINGS FOR CONNECTIONS TO EXISTING SANITARY SEWER LATERALS SHALL BE FERNCO OR EQUAL.
18. BASED ON CITY RECORDS, EXISTING SANITARY SEWER LATERALS ARE ASSUMED TO BE 6-INCHES WITHIN THE RIGHT-OF-WAY AND 18. 4-INCHES ON PRIVATE PROPERTY.

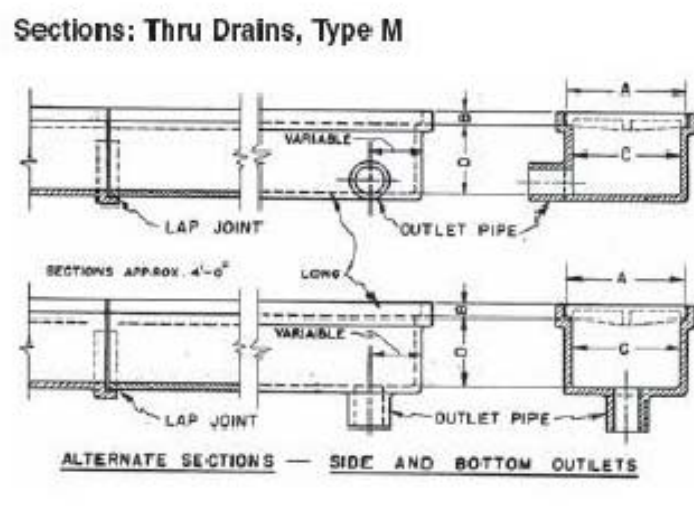


HANDICAP PARKING SIGN DETAIL
NO SCALE



Trench covers are used over areas requiring long drainage assemblies. Can be supplied in a variety of sizes and lengths to meet special needs. For trenches of irregular pattern, arrangements can be made to furnish cover to fit.

Standard 4-inch outlet at end of drain. Special size outlets are available on special order. Side and bottom outlets optional and furnished only when specified.



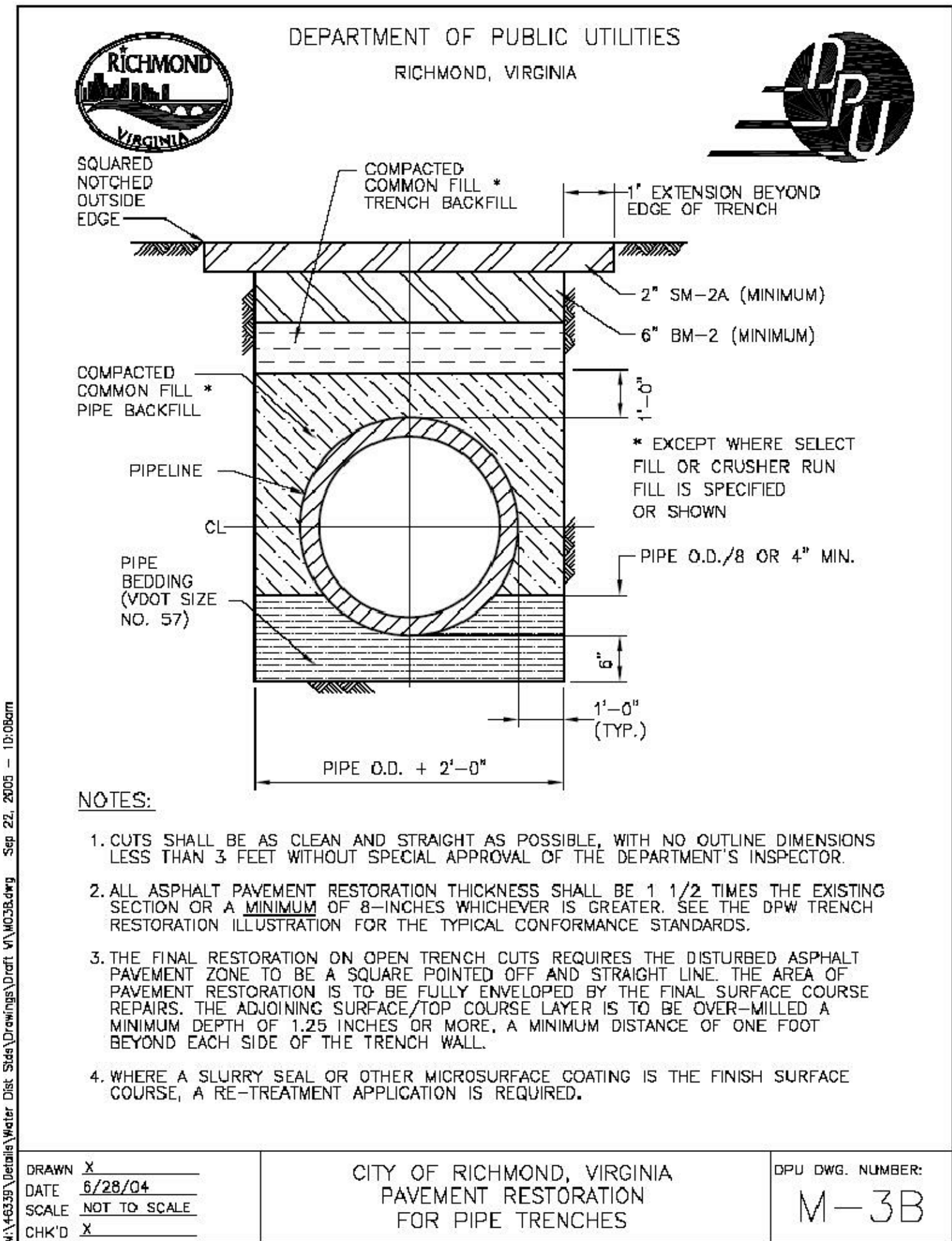
Dimensions in inches				
Catalog No.	Description	A	B	C
Standard Sizes-Light Duty				
R-4995-A1**	with grated cover	11 1/2	3/4	10
R-4995-A2**	with grated cover	7	3/4	5
R-4995-B1	with solid cover	11 1/2	3/4	10
R-4995-B2	with solid cover	7	3/4	5
Standard Sizes-Heavy Duty				
R-4996-A1**	with grated cover	11 1/2	1 1/2	10
R-4996-A2**	with grated cover	7	1 1/2	5
R-4996-B1	with solid cover	11 1/2	1 1/2	10
R-4996-B2	with solid cover	7	1 1/2	5

Above Standard Frames made in 4 ft. sections, covers in 2 ft. lengths.
*Available with Type B grate only.
**Also available with type F grate.

TRENCH DRAIN DETAIL

- LIGHT DUTY TRENCH DRAIN FOR BACK SERVICE AREA
- HEAVY DUTY TRENCH DRAIN FOR END OF LOADING DOCK RAMP

CITY OF RICHMOND PIPE TRENCH DETAIL



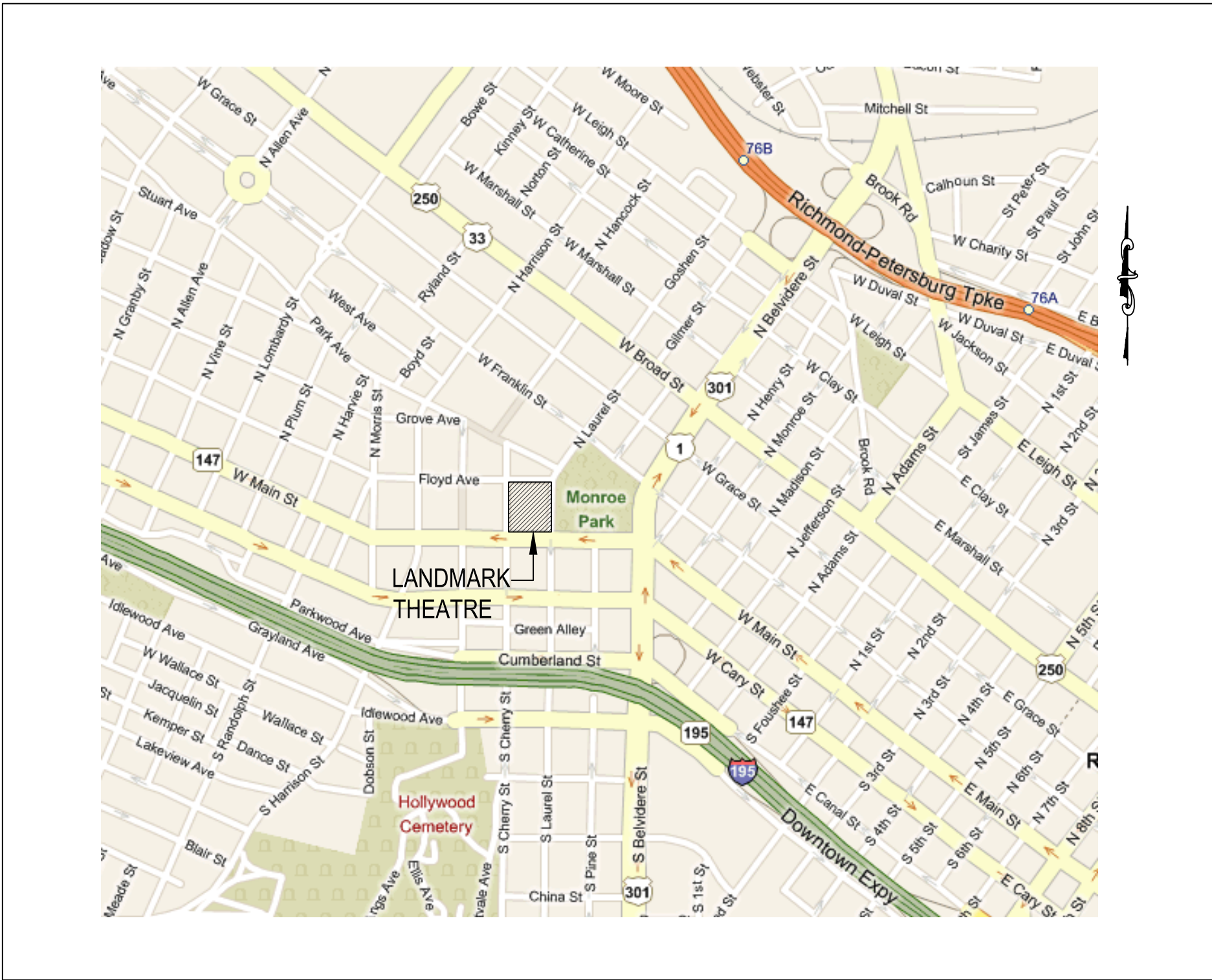
CITY OF RICHMOND PIPE TRENCH DETAIL
NO SCALE

STORM DRAIN PIPING NOTES

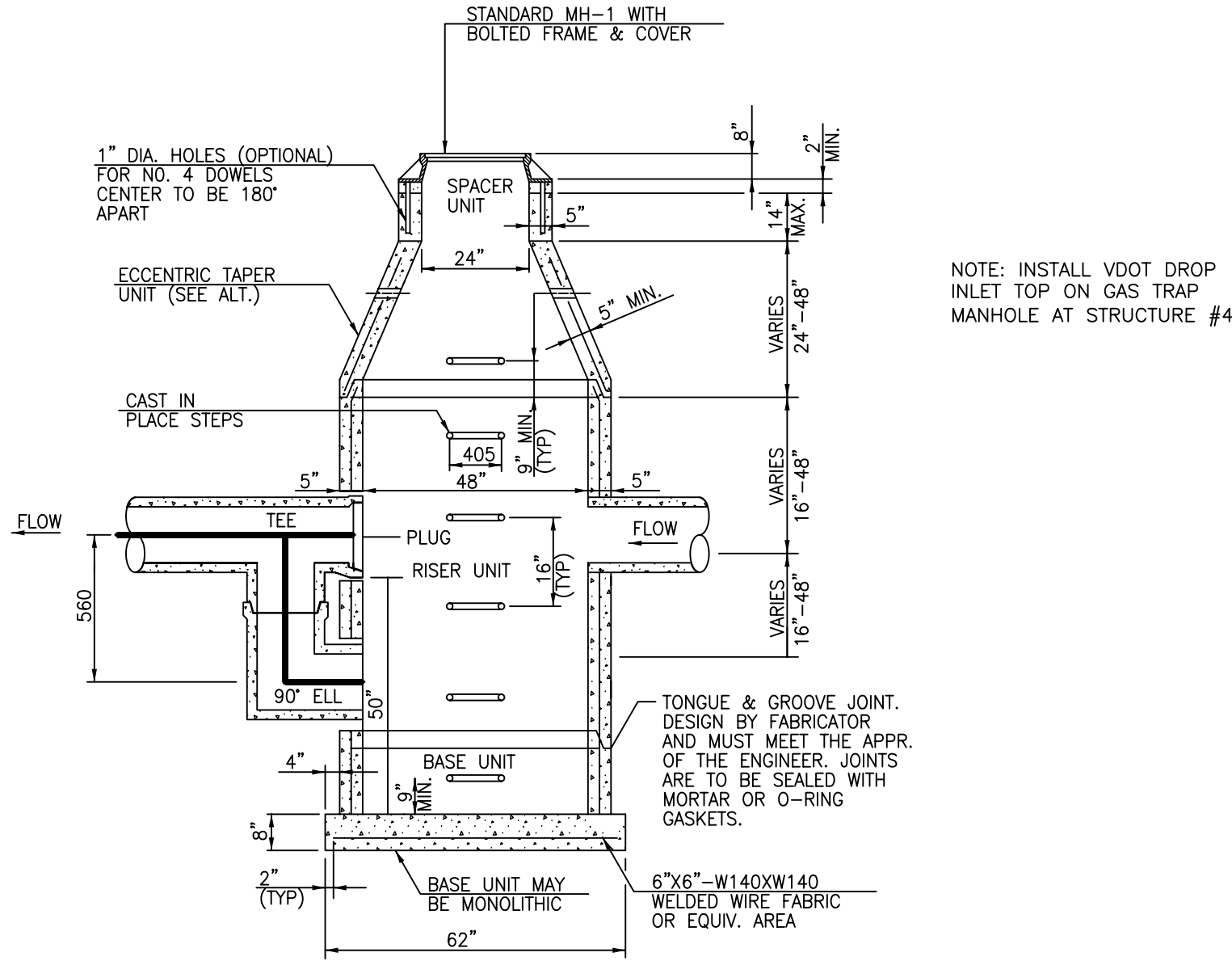
1. PROVIDE PVC WATER TIGHT STORM SEWER PIPING IN ACCORDANCE WITH ASTM D 3034.
2. PROVIDE PVC FITTINGS IN ACCORDANCE WITH ASTM D 2464.
3. PROVIDE GASKETS WITH ELASTOMERIC SEALS MEETING ASTM 477.
4. REFER TO THE SPECIFICATIONS MANUAL FOR ADDITIONAL INFORMATION.

GENERAL WATER NOTES

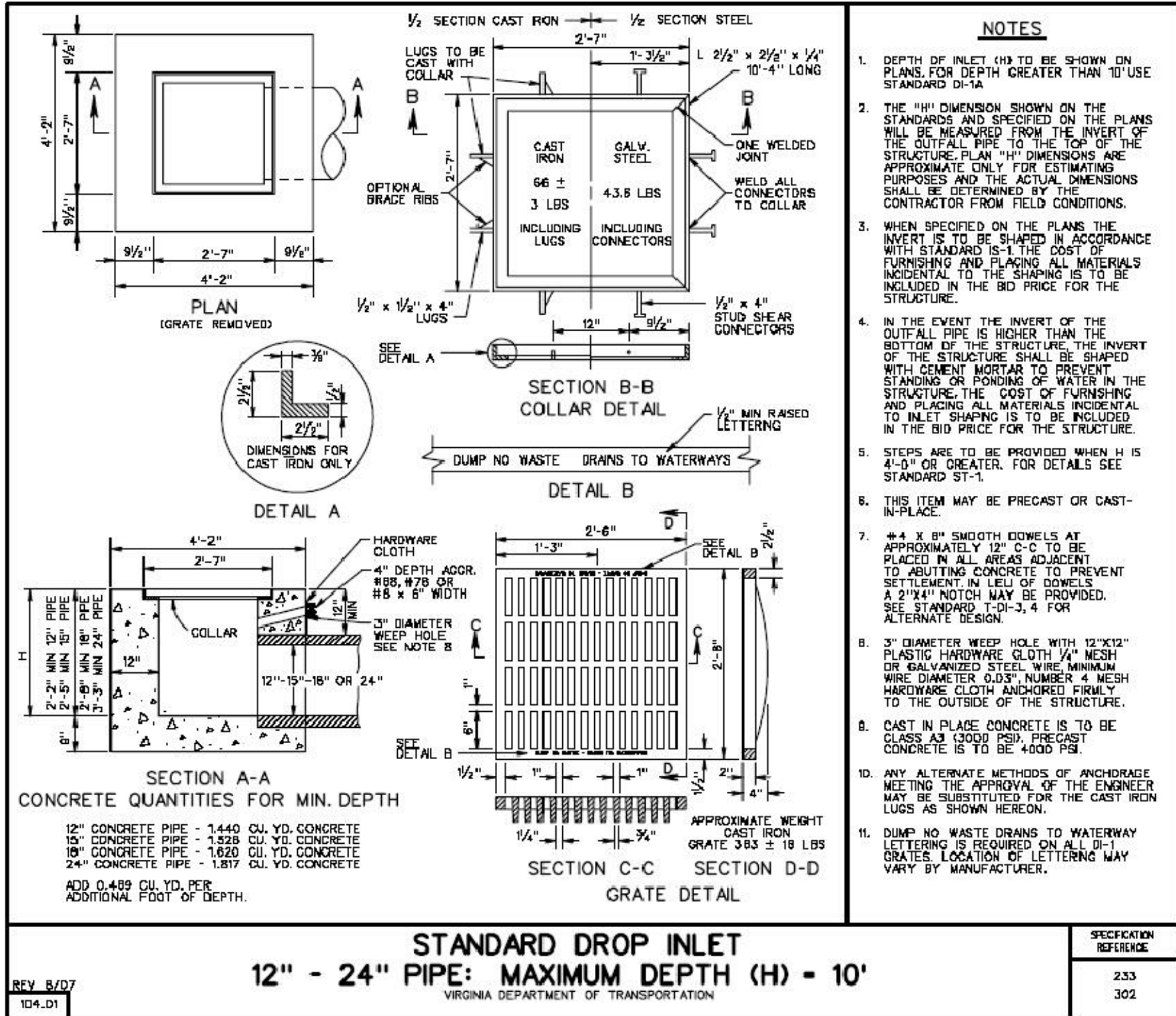
1. ALL MATERIALS FOR WATER SHOWN SHALL BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH THE LATEST APPLICABLE CODES AND SPECIFICATIONS OF THE CITY OF RICHMOND. DEPARTMENT OF PUBLIC UTILITIES REQUIREMENTS ARE STANDARD SPECIFICATIONS FOR GAS AND WATER AND WATER SYSTEM CONSTRUCTION & MAINTENANCE (DPU NO. 192 OR LATEST EDITION). RULES AND REGULATIONS FOR THE MUNICIPAL WATER SUPPLY OF RICHMOND, VIRGINIA, LATEST EDITION. CITY OF RICHMOND SPECIFICATIONS FOR DUCTILE IRON WATER PIPE AND FITTINGS, LATEST EDITION. CITY OF RICHMOND STANDARD DETAIL DRAWINGS FOR METERS AND FIRELINES.
2. ALL WORK SHALL BE SUBJECT TO INSPECTION BY UTILITY DEPARTMENT OFFICIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF APPROPRIATE CITY OFFICIALS 48 HOURS PRIOR TO START OF WORK.
3. THE UTILITY CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY HIGHWAY PERMITS AND SENDING A COPY OF THE PERMIT TO THE CITY PRIOR STARTING ANY CONSTRUCTION WORK.
4. MINIMUM CLEAR COVER FOR ALL WATER PIPE, FIRE SERVICE LATERALS AND SERVICES SHALL BE 3.5 FEET, INCLUDING DITCH CROSSINGS.
5. ALL WATER SERVICES ARE TO BE COPPER, TYPE K DRAWN TUBING. SERVICE 3/4" TO 1" SHALL BE TYPE K SOFT COPPER AND SERVICE 1-1/2" TO 2" SHALL BE TYPE K HARD COPPER.
6. ON WATER MAINS INSTALLED BY THE CONTRACTOR, THE CONTRACTOR SHALL INSTALL ALL WATER SERVICE CONNECTIONS, EXCEPT FIRELINE SERVICES AND METER BOXES.
7. BACKFILL FOR ALL UTILITIES WITHIN CITY STREETS SHALL BE PLACED GENERALLY IN ACCORDANCE WITH CITY SPECIFICATIONS, AND THE FOLLOWING CRITERIA:
(A) NO TRENCH SHALL BE BACKFILLED UNTIL AUTHORIZED BY THE CITY. MATERIAL USED FOR BACKFILL FROM THE BOTTOM OF THE TRENCH TO 12" (TWELVE INCHES) ABOVE THE PIPE SHALL BE SELECT MATERIAL, FREE FROM FROST, LARGE CLODS, STONES AND DEBRIS, AND SHALL BE THOROUGHLY AND CAREFULLY COMPACTED.
(B) BACKFILL SHALL BE COMPACTED BY MECHANICAL TAMPERING THROUGHOUT THE DEPTH OF THE TRENCH TO INSURE A SUITABLE SUBBASE, ACCEPTABLE TO THE ROAD ENGINEER, IF THE MATERIAL TAKEN FROM THE TRENCH IS NOT A SUITABLE SUBBASE, IT SHALL BE REMOVED AND ACCEPTABLE MATERIAL USED FOR BACKFILLING THE TRENCH.
8. THE ENGINEER WILL CERTIFY THAT THE ROADS AND DITCHES ARE WITHIN 6" OF SUBGRADE BEFORE WATERLINE CONSTRUCTION CAN BEGIN.
9. FOR WATER INSTALLATION WITHIN EXISTING RIGHT-OF-WAY, THE UTILITY CONTRACTOR MUST NOTIFY THE CITY INSPECTOR WHEN INSTALLATION BEGINS SO THAT DENSITY CAN BE TESTED (95% @ OPTIMUM MOISTURE +20%).
10. THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT ENGINEER IMMEDIATELY IF LOCATION OR ELEVATION IS DIFFERENT FROM THAT SHOWN ON THE PLAN, OR IF THERE APPEARS TO BE A CONFLICT OR IF ANY UTILITY NOT SHOWN ON THE PLAN IS DISCOVERED. TO LOCATE UTILITIES, CALL "MISS UTILITY" OF CENTRAL VIRGINIA: 1-800-552-7001 (TOLL FREE).
11. ALL PLUMBING DIAGRAMS SHALL BE REVIEWED BY THE CROSS-CONNECTION SPECIALIST FOR CROSS-CONNECTION CONTROL AND BACKFLOW PREVENTION PRIOR TO ANY WATER PERMIT REQUEST. THE INSTALLATION OF BACKFLOW DEVICES IS REQUIRED IN ALL BUILDINGS WHERE THE FINISHED GRADE IS BELOW THE TOP ELEVATION OF NEAREST MANHOLE. THIS DEVICE WILL BE INSPECTED BY THE CITY PLUMBING INSPECTOR AT TELEPHONE NUMBER 646-6981 AND THE CROSS-CONNECTION SPECIALIST AT TELEPHONE NUMBER 646-8534.
12. ALL FUTURE BUILDINGS BELOW THE CONTOUR WILL REQUIRE INDIVIDUAL PRESSURE REGULATORS.
13. ALL UTILITIES SHALL BE IN PLACE PRIOR TO PLACEMENT OF BASE MATERIAL.
14. THE CONTRACTOR SHALL OPEN AND PREPARE ALL TRENCHES FOR THE CITY TO MAKE ANY CONNECTIONS TO THE EXISTING WATER MAIN FOR THE PROJECT WATER MAINS OR SERVICES TO CONNECT TO.



VICINITY MAP
SCALE: 1"=2000' (±)



TYPICAL GAS TRAP MANHOLE DETAIL
NO SCALE



STANDARD DROP INLET
12" - 24" PIPE: MAXIMUM DEPTH (H) - 10'

GRADIENT
1627 Westbrook Avenue
Richmond, VA 23227
804.399.0500

bam
PROJECT NAME:
**CITY OF RICHMOND
LANDMARK THEATRE
RENOVATIONS - PHASE I**
PROJECT NO: **0806**
ISSUE: DATE:
FINAL OWNER REVIEW 05-19-08
BUILDING PERMIT 09-19-08
PERMIT REVISIONS 10-23-08
BID 10-27-08
APPROVED BY:
SEAL:
COMMONWEALTH OF VIRGINIA
COURT REPORTER
34157
10.27.08

DRAWING TITLE:

NOTES & DETAILS

DRAWING NO.:

C1.1

GENERAL EROSION AND SEDIMENT CONTROL NOTES

(FROM CHAPTER 6 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK)

- ES-1- 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 VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS.
- ES-2- 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 FINAL INSPECTION.
- ES-3- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
- ES-4- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- ES-5- 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.
- ES-6- 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 TIME DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- ES-8- DURING Dewatering OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- ES-9- 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.

EROSION AND SEDIMENT CONTROL NARRATIVE

- A. PROJECT DESCRIPTION:**
THIS PROJECT REQUIRES MINOR SITE DEMOLITION, GRADING AND PAVING APPROPRIATE FOR CONSTRUCTION OF A PARKING LOT ADJACENT TO A BUILDING ADDITION AT THE LANDMARK THEATER. THE DISTURBED AREA OF THE SITE IS APPROXIMATELY 0.40 ACRES.
- B. EXISTING SITE CONDITIONS:**
THE EXISTING SITE IN THE AREA OF THE PROPOSED PARKING LOT ADDITION IS UTILIZED AS A GRAVEL PARKING AND SERVICE AREA. DRAINAGE ACROSS THE PROJECT AREA FLOWS GENERALLY TO THE SOUTH.
- C. ADJACENT AREAS:**
THE PROJECT AREA IS WITHIN THE WALLED AREA OF THE LANDMARK THEATER.
- D. OFF-SITE AREAS:**
THIS PROJECT WILL NOT ADVERSELY IMPACT OFF SITE AREAS. IF OFF-SITE BORROW MATERIAL IS REQUIRED TO COMPLETE THE WORK, CONTRACTOR IS RESPONSIBLE FOR ENSURING PROPER EROSION CONTROL MEASURES ARE IN PLACE, FUNCTIONAL AND MAINTAINED AT BORROW SITE LOCATION.
- E. SOILS:**
ACCORDING TO USDA SOIL SURVEY LAND IN THE AREA OF THE PROPOSED CONSTRUCTION IS 41 - URBAN LAND. REFER TO GEOTECHNICAL ENGINEERING STUDY BY SCHNABEL ENGINEERING, LLC DATED MAY 7, 2008 FOR SOIL INFORMATION.
- F. CRITICAL AREAS:**
THERE ARE NO CRITICAL EROSION AREAS WITHIN THE PROJECT AREA.
- G. EROSION & SEDIMENT CONTROL MEASURES**
NOTE: THE PROPOSED CONSTRUCTION WILL OCCUR ON EXISTING PAVED OR GRAVEL AREAS THAT WILL NOT CAUSE EROSION.

CONSTRUCTION ENTRANCE: THE EXISTING CONCRETE AND GRAVEL ENTRANCE FROM MAIN STREET WILL SERVE AS THE CONSTRUCTION ENTRANCE.

STORM DRAIN INLET PROTECTION - 3.07: STONE FILTERS SHALL BE PLACED AT THE INLET OF EXISTING DRAINAGE STRUCTURES AS INDICATED.

- H. PERMANENT STABILIZATION:**
THE ENTIRE AREA SHALL BE PAVED OR BUILT UPON AT THE CONCLUSION OF THE PROJECT.
- I. STORMWATER RUN-OFF CONSIDERATIONS:**
STORMWATER WILL BE COLLECTED ON-SITE AND DISCHARGED TO THE EXISTING CITY STORM SEWER SYSTEM. CURRENTLY, THE EXISTING SITE RUNOFF SHEET FLOWS TO THE EXISTING SYSTEM.
- J. CALCULATIONS:**
ANALYSIS OF PRE AND POST DEVELOPMENT WILL BE TAKEN AT EXISTING INLET AT THE CORNER OF N. CHERRY STREET AND W. MAIN STREET.

STORMWATER QUANTITY:
PRE DEVELOPMENT: AREA=0.92 AC; C=0.9; Tc=5 MIN.; Ito=7.2 IN/HR
Q=C*IA
Qto=(0.9)*(7.2)*(0.92) = 5.96 CFS
POST DEVELOPMENT: AREA=0.92 AC; C=0.9; Tc=5.95 MIN.; Ito=7.0 IN/HR
Q=C*IA
Qto=(0.9)*(7.0)*(0.945) = 5.96 CFS

STORMWATER QUALITY:
THERE IS NO CHANGE TO THE IMPERVIOUSNESS OF THE SITE.
PRE DEVELOPED IMPERVIOUSNESS = 100%
POST DEVELOPED IMPERVIOUSNESS = 100%

REFER TO DRAWING C3.1 FOR STORM SEWER DESIGN COMPUTATIONS.

CONSTRUCTION SEQUENCE

1. THE OWNER SHALL GIVE THE INSPECTOR 48 HOURS NOTIFICATION TO SCHEDULE AN ON-SITE PRE-CONSTRUCTION MEETING FOR THE ISSUANCE OF A LAND DISTURBANCE PERMIT. THE CERTIFIED RESPONSIBLE LAND DISTURBER (CRLD) MUST ATTEND THE PRE-CONSTRUCTION MEETING.
2. ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK, AND VIRGINIA REGULATION VR 625-02-00.
3. 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 FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
4. CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT EXISTING SITE FEATURES TO REMAIN AT ALL TIMES DURING CONSTRUCTION. ANY DAMAGE TO EXISTING SITE FEATURES TO REMAIN SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT NO ADDITIONAL CHARGE TO THE OWNER.
5. BEGIN SITE DEMOLITION INCLUDING PAVEMENT REMOVAL.
6. BEGIN SITE GRADING OPERATIONS.
7. BRING THE SITE TO SUB-GRADE ELEVATIONS AND BEGIN BUILDING SLAB AND FOUNDATION CONSTRUCTION.
8. COMPLETE CONSTRUCTION INCLUDING STORM SEWER CONSTRUCTION, PAVING AND FINAL GRADING.
9. MAINTAIN EXISTING SITE GRAVEL FOR PURPOSES OF CONSTRUCTION ENTRANCES. DO NOT TRANSPORT SEDIMENT OFF OF THE SITE. CONSTRUCTION ENTRANCES SHALL BE MAINTAINED UNTIL THERE IS NO LONGER A THREAT TO TRANSPORT SOIL FROM THE CONSTRUCTION SITE.

SOIL DATA

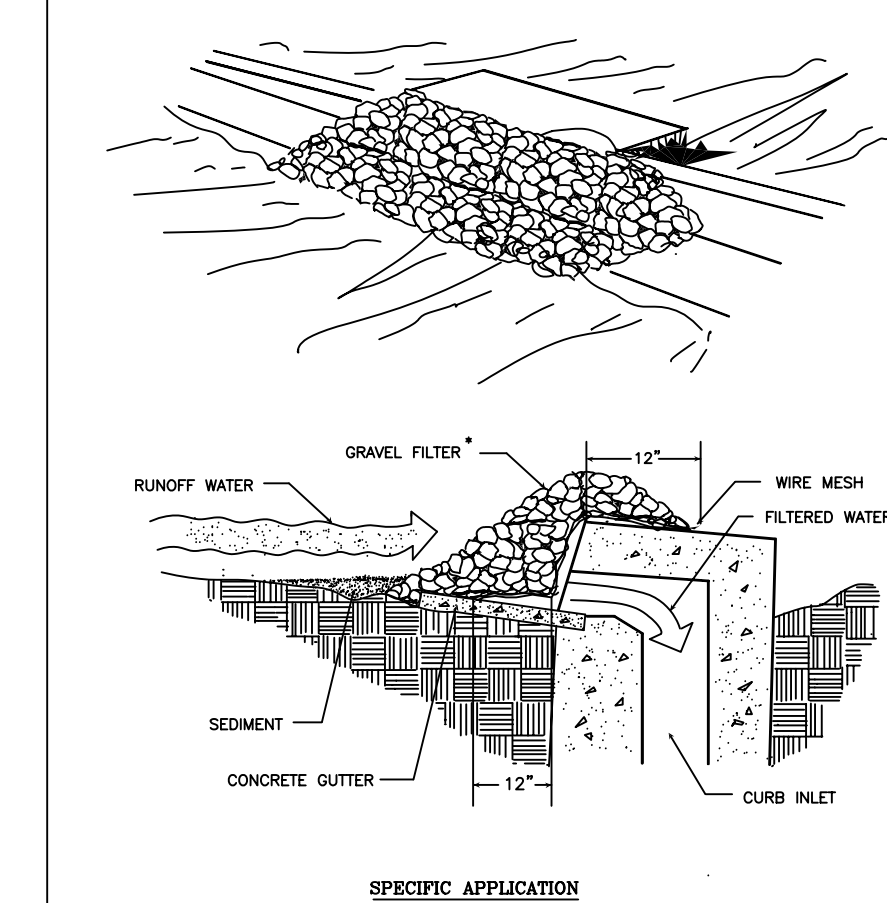
PROJECT AREA:
41 - URBAN LAND



SOURCE: VA, DSWC

PLATE 3.07-B

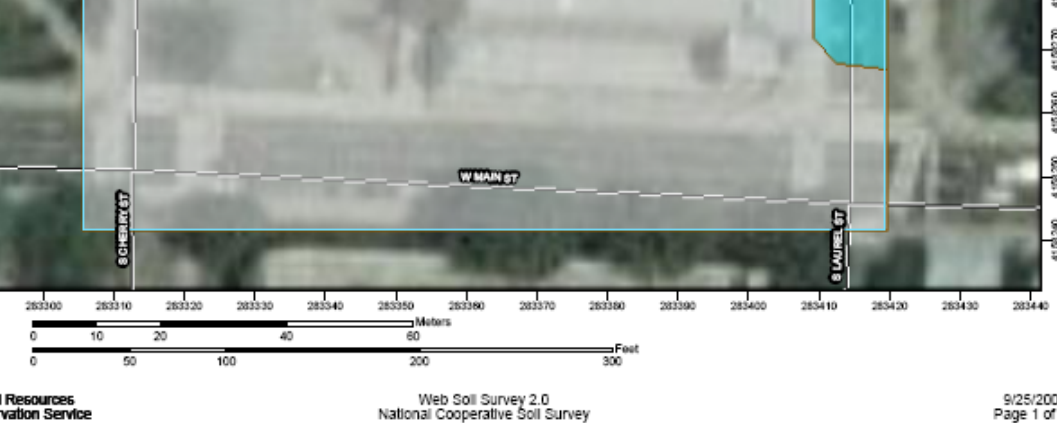
GRAVEL CURB INLET SEDIMENT FILTER



THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE PAVING IN FRONT OF THE STRUCTURE IS NOT LIKELY TO CAUSE INCURVEMENT OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.
* GRAVEL SHALL BE VDOT #3, #507 OR 5 COURSE AGGREGATE.

SOIL MAP

N. Factor: Universal Soil-Color Chart of Richmond, Virginia (Landmark Theater/Theater)



VA COMMONWEALTH UNIVERSITY

901 WEST MAIN STREET

WOOD00340002

USE B - COLLEGE/UNIVERSITY

VA COMMONWEALTH UNIVERSITY

901 WEST MAIN STREET

WOOD00340002

USE B - COLLEGE/UNIVERSITY

VA COMMONWEALTH UNIVERSITY

901 WEST MAIN STREET

WOOD00340002

USE B - COLLEGE/UNIVERSITY

VA COMMONWEALTH UNIVERSITY

901 WEST MAIN STREET

WOOD00340002

USE B - COLLEGE/UNIVERSITY

VA COMMONWEALTH UNIVERSITY

901 WEST MAIN STREET

WOOD00340002

USE B - COLLEGE/UNIVERSITY

VA COMMONWEALTH UNIVERSITY

901 WEST MAIN STREET

WOOD00340002

USE B - COLLEGE/UNIVERSITY

VA COMMONWEALTH UNIVERSITY

901 WEST MAIN STREET

WOOD00340002

USE B - COLLEGE/UNIVERSITY

VA COMMONWEALTH UNIVERSITY

901 WEST MAIN STREET

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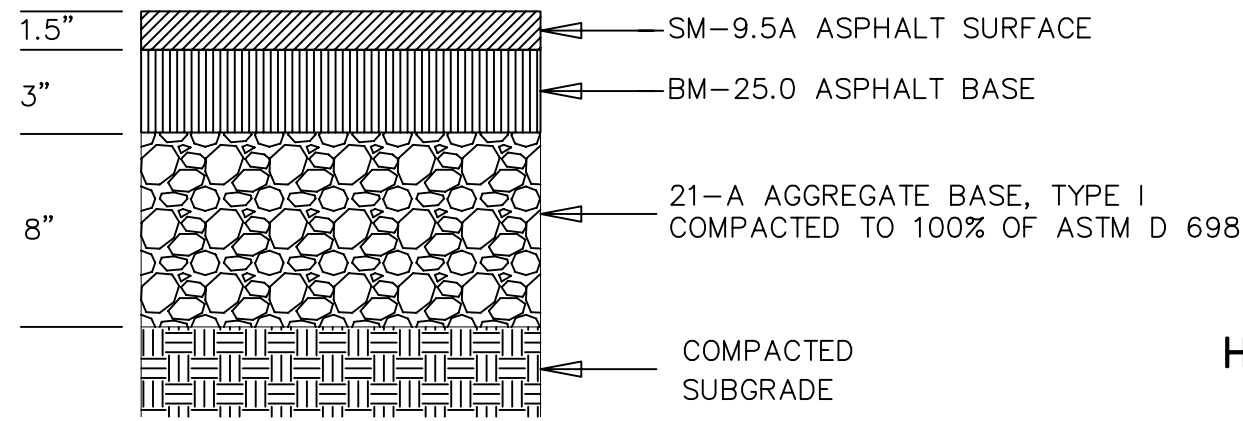
VA COMMONWEALTH UNIVERSITY

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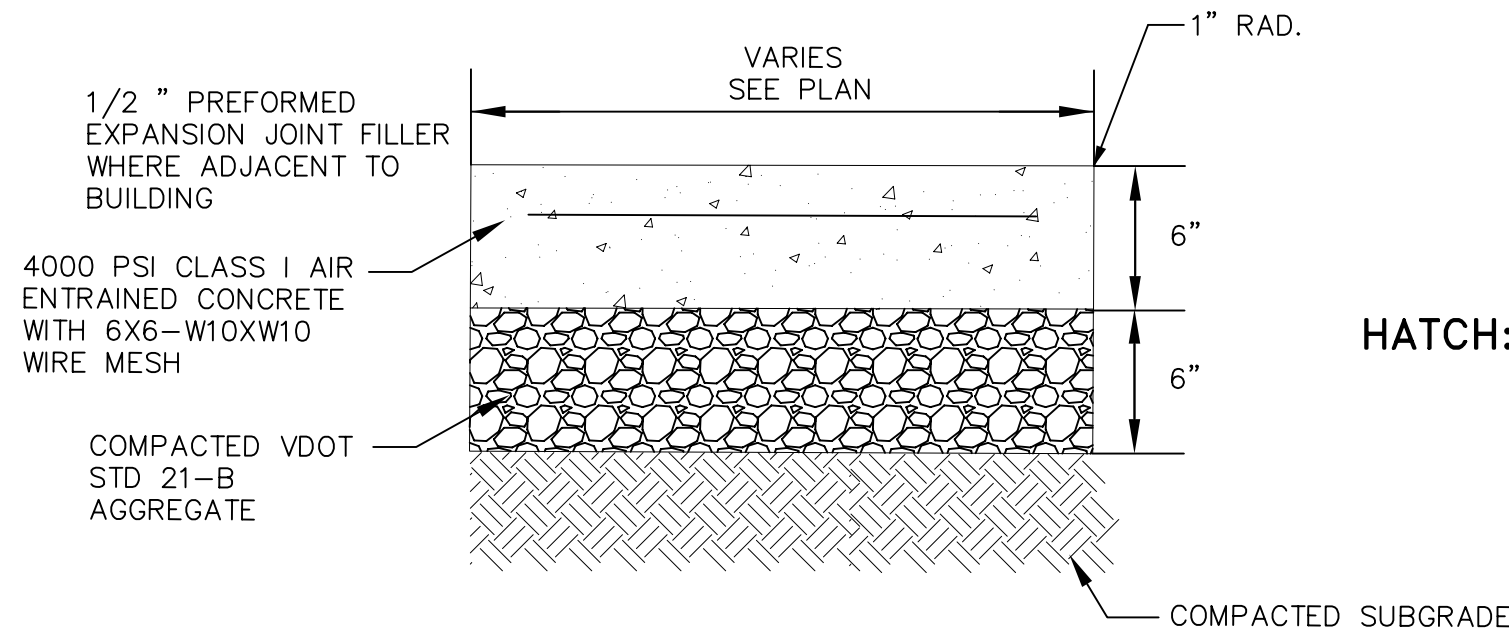
GENERAL CONSTRUCTION NOTES

1. ALL UNDERGROUND UTILITIES ILLUSTRATED ARE APPROXIMATE AS LOCATED BY ACCUMARK AND PAINTED LINES WERE FIELD LOCATED BY JENNINGSTEPHENSON, PC.
2. CONTRACTOR SHALL CONTACT "MISS UTILITY" 48 HOURS PRIOR TO THE START OF ANY WORK. VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES IN THE AREA OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT THE ARCHITECT IMMEDIATELY IF LOCATION OR ELEVATION IS DIFFERENT FROM THAT INDICATED IF THERE APPEARS TO BE A CONFLICT, AND/OR UPON DISCOVERY OF ANY UTILITY NOT INDICATED. TO LOCATE UTILITIES, CALL "MISS UTILITY" OF CENTRAL VIRGINIA 1-800-552-7001.
3. ACQUIRE ANY AND ALL NECESSARY CONSTRUCTION PERMITS REQUIRED TO COMPLETE THE SITEWORK AND FURNISH COPIES TO THE OWNER.
4. ALL WORK SHALL BE SUBJECT TO INSPECTION BY DESIGNATED OFFICIALS. NOTIFY THE CHIEF INSPECTOR 48 HOURS PRIOR TO START OF WORK.
5. PROTECT ALL EXISTING SITE FEATURES AT ALL TIMES DURING CONSTRUCTION. DAMAGE TO ANY ITEM NOT LISTED FOR REMOVAL OR RELOCATION ON THE DEMOLITION PLAN SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL CHARGE TO THE OWNER. IF THERE ARE EXISTING SITE FEATURES IN CONFLICT WITH THE PROPOSED WORK NOT IDENTIFIED TO BE RELOCATED OR REMOVED, NOTIFY THE ARCHITECT IMMEDIATELY FOR CLARIFICATION.



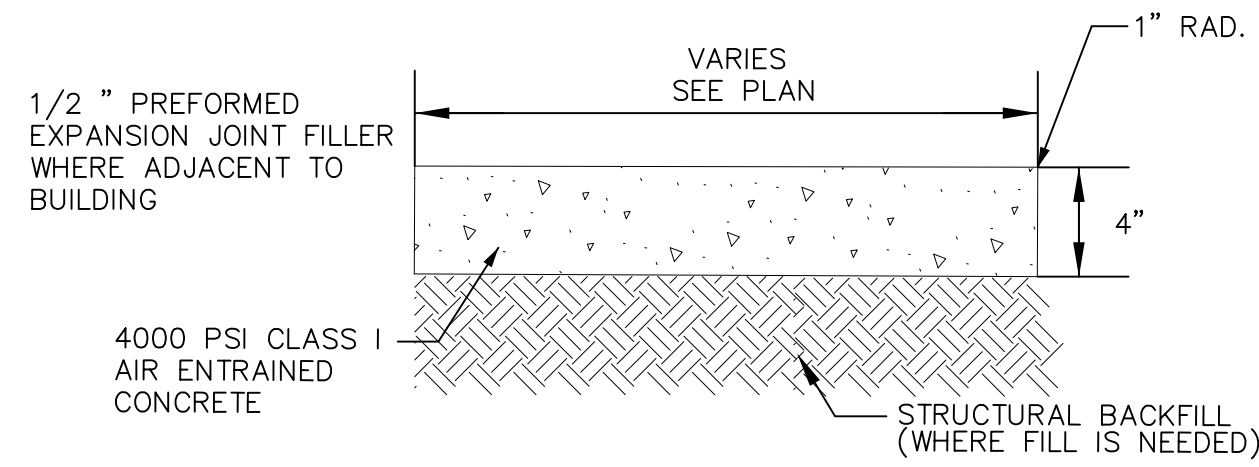
ASPHALT PAVEMENT SECTION
NO SCALE

NOTE: PAVEMENT SECTIONS ARE BASED ON AN ASSUMED CBR OF 10. IF FIELD CONDITIONS VARY, NOTIFY ENGINEER FOR REVISED PAVEMENT SECTION.



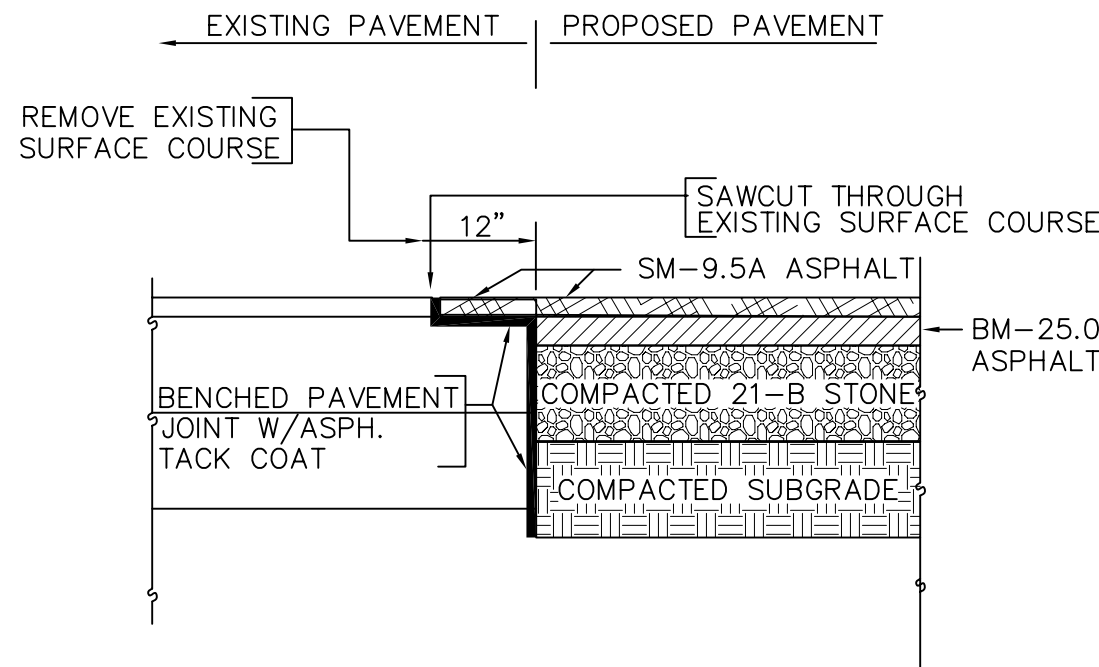
CONCRETE PAVEMENT SECTION
TRASH COMPACTOR & DRIVEWAY ENTRANCES
NO SCALE

NOTE: FINISH - TROWELED EDGES, BROOM FINISH SCORING EVERY 6\"/>



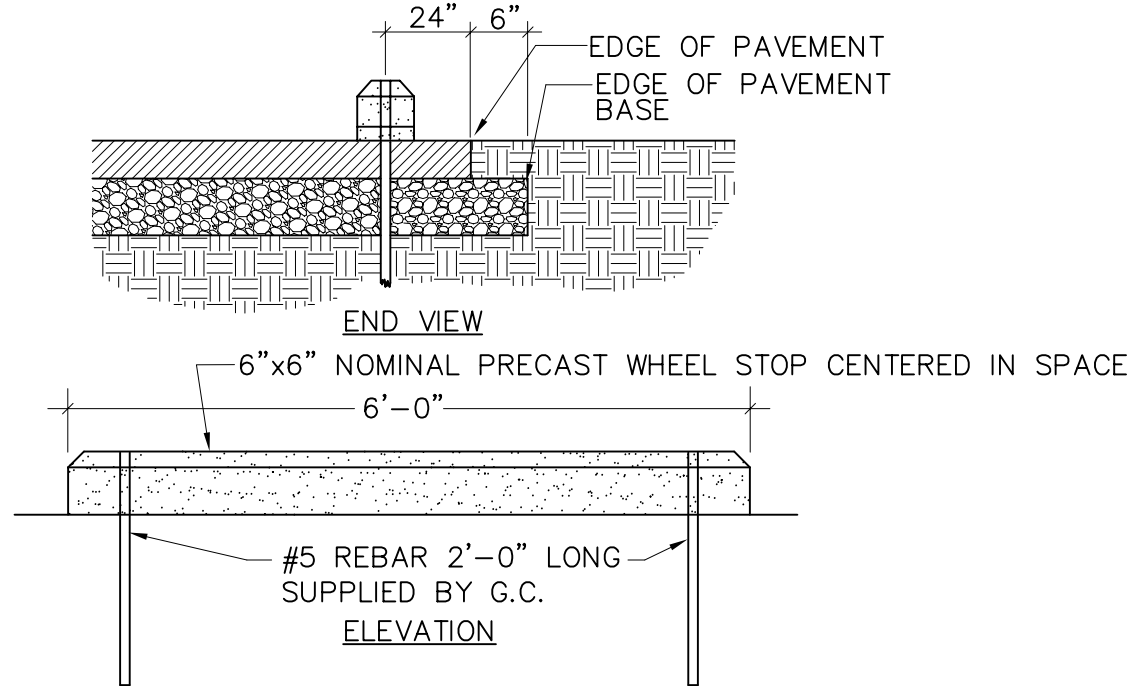
SIDEWALK DETAIL
NO SCALE

NOTE: FINISH - TROWELED EDGES, BROOM FINISH SCORING EVERY 6\"/>

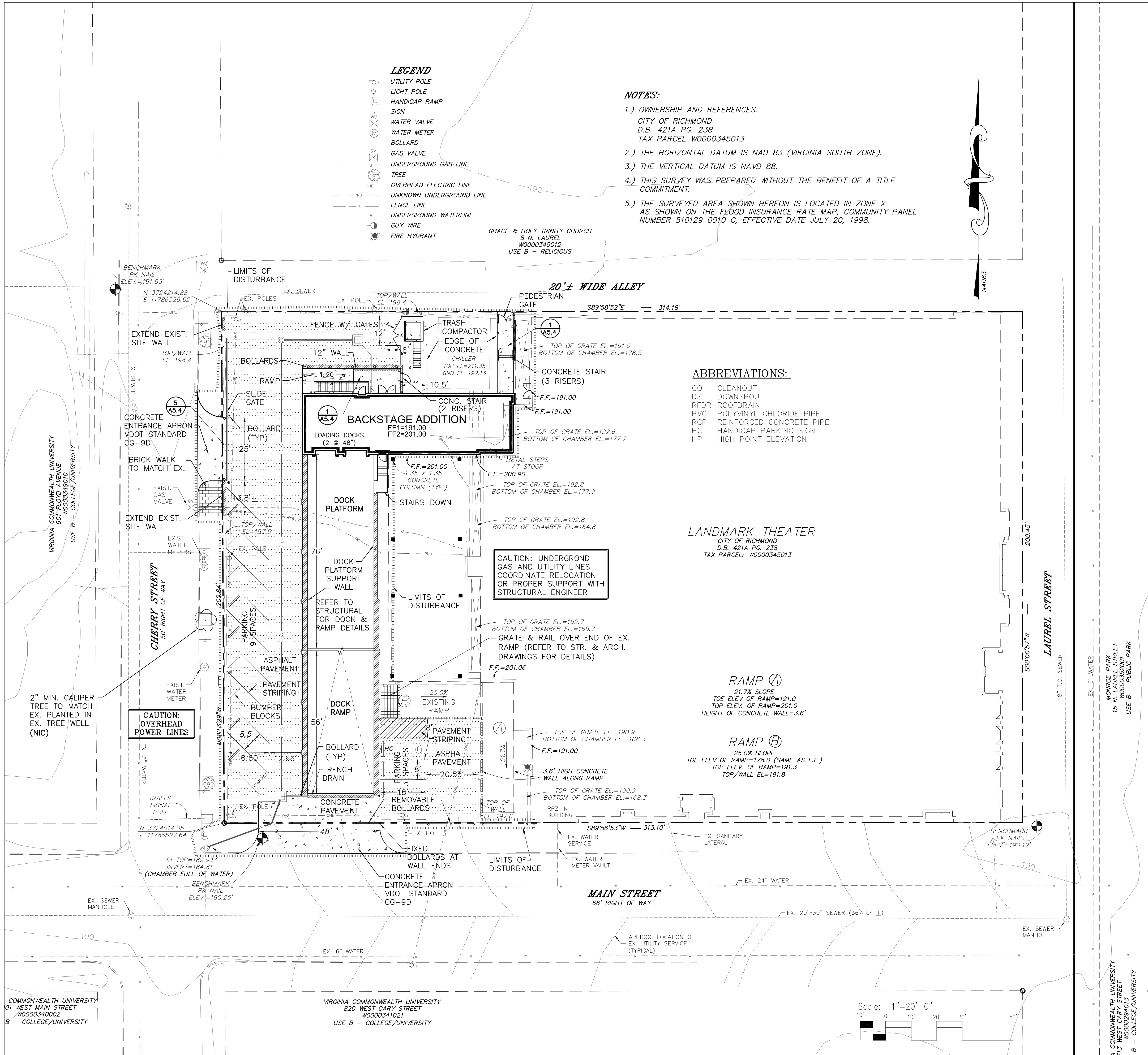


PAVEMENT JOINT
NO SCALE

NOTE: PROPOSED PAVEMENT MUST TIE IN WITH EXISTING PAVEMENT



CONCRETE BUMPER BLOCK DETAIL
NO SCALE



STORM SEWER DESIGN COMPUTATIONS

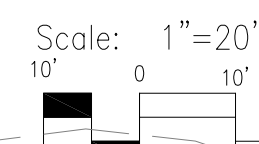
STORM SEWER DESIGN COMPUTATIONS																			
PROJECT: LANDMARK THEATRE ADDITION 1746																			
COUNTY: CITY OF RICHMOND																			
DATE: 10/22/2008																			
Storm Frequent 10 year																			
n = 0.013 PVC																			
* = Manual Input of Data																			
FROM PIPE TO DRAINAGERUNOFF CA CA INLETRAINRUNOFF TOP-HEIGHT INV INV LENGTHSLOPE DIACAPACITYVELOCITY FLOW TIME																			
POINT NAME	POINT	AREA	EFFICIENCY	TIME	FALL	Q	STR	STR	UPPER	LOWER	Q	STR	STR	UPPER	LOWER	Q	STR	STR	UPPER
1	2	2	0.91	0.90	0.01	0.01	5.00	7.2	0.05	180.79	0.99	189.80	189.10	11.64	0.0501	8	3.2	9.20	0.02
2	3	3	0.10	0.90	0.05	0.10	5.02	7.2	0.70	191.81	4.17	187.44	187.29	30.80	0.0058	8	0.9	2.65	0.19
3	4	4	0.00	0.90	0.00	0.10	5.21	7.2	0.70	191.86	4.77	187.19	186.29	179.12	0.0059	8	0.9	2.65	1.13
4	4	EX	0.24	0.90	0.22	0.31	6.33	7	2.20	190.57	4.44	186.13	185.52	37.30	0.0106	10	3.1	5.61	0.11

HYDRAULIC GRADE LINE COMPUTATIONS

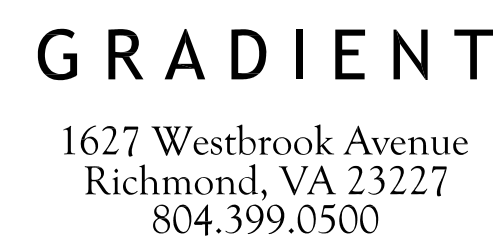
Hydraulic Grade Line Analysis																													
Project: LANDMARK THEATRE RENOVATIONS - PHASE 1																		Date: 10/22/2008											
Stationing: 1746																		Station: 1746											
Initial Water Surface Elevation	Inlet Sta.	Inlet Elev.	Outlet Water Surface Elev.	Outlet Water Surface Elev.	Q	Qo	Ls	So	HF	V	Vo	B	Qo	Vi	Q/Vi	Vyng	Hi	Aug	Hi	1.50	0.30	Hand	Inlet Water Surface Elev.	Run Elev.	Fig. Hi	Fig. Hi	Shape	Comments	
																									Y/N	Y/N	Y/N	10 year Storm	
180.40	4	1.51	187.52	180.40	19"	2.25	2.73	0.68%	0.32	4.03	0.56	0	0.70	2.02	1.4	0.06	0.82	9	0.01	0.08	0.12	0.06	0.18	180.78	19.96	y	Y	OK	-0.79 Ft
180.78	5	1	188.54	180.78	2"	0.70	1.84	0.28%	0.22	2.23	0.28	0	0.70	2.02	1.4	0.06	0.82	9	0.01	0.08	0.12	0.06	0.18	180.78	19.96	y	Y	OK	-1.19 Ft
180.34	2	0.63	187.29	180.44	8"	0.76	18.00	2.50%	0.08	2.93	0.82	0.09	0.16	0.1	0.01	0.00	0.00	88	0.00	0.05	0.05	0.01	0.01	190.44	19.61	y	Y	OK	-1.87 Ft
190.44	3	0.09	189.10	190.44	8"	0.04	11.6	0.00%	0.01	0.18	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	190.44	19.99	y	Y	OK	-0.33 Ft	



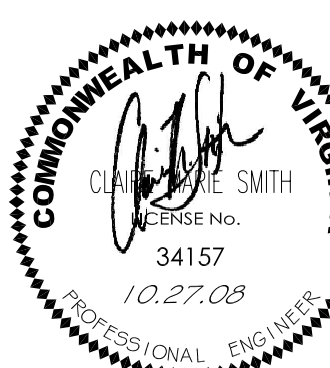
HEAVY DUTY CAST IRON TRENCH DRAIN
NEENAH FOUNDARY R-4996-M OR
APPROVED EQUAL
TOP ELEVATION = 190.90
GRATE LENGTH = 25'
GRATE WIDTH = 11½"
BASIN DEPTH = 6"
END DISCHARGING WITH 4" PVC PIPE
SERVICEABLE/OPERABLE LID



REFERENCE
ARCHITECTURAL
DRAWINGS FOR
ADDITIONAL DETAILING
OF SITE ELEMENTS



PROJECT NO:		0806
ISSUE:		DATE
FINAL OWNER REVIEW		05-19-08
BUILDING PERMIT		09-19-08
PERMIT REVISIONS		10-23-08
BID		10-27-08



DRAWING TITLE: GRADING & DRAINAGE PLAN

DRAWING NO.

C4.1