

PAVER SPECIFICATIONS

- REFERENCES
- A. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
 1. AMERICAN NATIONAL SPECIFICATIONS FOR THE INSTALLATION OF CERAMIC TILE.
 - A. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)
 1. C 67, STANDARD TEST METHODS FOR SAMPLING AND TESTING BRICK AND STRUCTURAL CLAY TILE, SECTION 8, FREEZING AND THAWING.
 2. C 140, STANDARD TEST METHODS FOR SAMPLING AND TESTING CONCRETE MASONRY UNITS AND RELATED UNITS.
 3. C 920, SPECIFICATION FOR ELASTOMERIC JOINT SEALANTS.
 4. C 936, SPECIFICATION FOR SOLID CONCRETE INTERLOCKING PAVING UNITS.
 5. C 979, STANDARD SPECIFICATION FOR PIGMENTS FOR INTEGRALLY COLORED CONCRETE.
 - C. TILE COUNCIL OF AMERICA (TCA):
 1. HANDBOOK FOR CERAMIC TILE INSTALLATION.

- QUALITY ASSURANCE
- A. SINGLE-SOURCE RESPONSIBILITY: OBTAIN EACH COLOR, TYPE, AND VARIETY OF UNIT PAVING, JOINT MATERIALS, AND SETTING MATERIALS FROM SINGLE SOURCES WITH RESOURCES TO PROVIDE PRODUCTS AND MATERIALS OF CONSISTENT QUALITY, APPEARANCE AND PHYSICAL PROPERTIES WITHOUT DELAYING PROGRESS OF THE WORK.
 - B. FIELD-CONSTRUCTED MOCK-UP: PRIOR TO INSTALLATION OF PAVERS, ERECT MOCK-UP(S) FOR EACH FORM AND PATTERN OF UNIT PAVES REQUIRED, BUILD MOCK-UP(S) USING MATERIALS, BASE CONSTRUCTION, EXPANSION JOINTS, AND SPECIAL FEATURES FOR CONTIGUOUS WORK, AS INDICATED FOR FINAL UNIT OF WORK.

- SUBMITTALS
- A. IN ACCORDANCE WITH CONDITIONS OF THE CONTRACT.
 - B. MANUFACTURER'S DRAWINGS AND DETAILS: INDICATE PERIMETER CONDITIONS, RELATIONSHIP TO ADJOINING MATERIALS AND ASSEMBLIES, [EXPANSION AND CONTROL JOINTS,] CONCRETE PAVER [LAYOUT,] [PATTERNS,] [COLOR ARRANGEMENT,] [INSTALLATION [AND SETTING] DETAILS.
 - C. MORTAR COLOR SAMPLES THAT INDICATE THE EXTREMES OF COLOR VARIATION EXPECTED IN THE FINISHED INSTALLATION.
 - D. CONCRETE PAVERS:
 1. REPRESENTATIVE FULL-SIZE SAMPLE OF PAVER TYPE, THICKNESS, COLOR, FINISH THAT INDICATE THE RANGE OF COLOR VARIATION AND TEXTURE EXPECTED IN THE FINISHED INSTALLATION. COLOR SELECTED BY ENGINEER FROM MANUFACTURER'S AVAILABLE COLORS.
 2. ACCEPTED SAMPLES BECOME THE STANDARD OF ACCEPTANCE FOR THE WORK.
 3. TEST RESULTS FROM AN INDEPENDENT TESTING LABORATORY FOR COMPLIANCE OF PAVING UNIT REQUIREMENTS TO ASTM C 936.
 4. MANUFACTURER'S CERTIFICATION OF CONCRETE PAVERS BY ICPI AS HAVING MET APPLICABLE ASTM STANDARDS.
 5. MANUFACTURER'S CATALOG PRODUCT DATA, INSTALLATION INSTRUCTIONS, AND MATERIAL SAFETY DATA SHEETS FOR THE SAFE HANDLING OF THE SPECIFIED MATERIALS AND PRODUCTS.

- QUALITY ASSURANCE
- A. REGULATORY REQUIREMENTS AND APPROVALS: CONTRACTOR SHALL BE LICENSED, INSURED AND BONDED TO PERFORM WORK WITHIN THE STATE OF MARYLAND.
 - B. MOCK-UPS:
 1. INSTALL A 7 FT X 7 FT (2 X 2 M) PAVER AREA.
 2. USE THIS AREA TO DETERMINE SURCHARGE OF THE MORTAR BED, JOINT SIZES, LINES, LAYING PATTERN COLOR, AND TEXTURE OF THE JOB.
 3. THIS AREA WILL BE USED AS THE STANDARD BY WHICH THE WORK WILL BE JUDGED.
 4. SUBJECT TO ACCEPTANCE BY OWNER, MOCK-UP MAY BE RETAINED AS PART OF FINISHED WORK.
 6. IF MOCK-UP IS NOT RETAINED, REMOVE AND PROPERLY DISPOSE OF MOCK-UP.

- DELIVERY, STORAGE & HANDLING
- A. COMPLY WITH MANUFACTURER'S ORDERING INSTRUCTIONS AND LEAD-TIME REQUIREMENTS TO AVOID CONSTRUCTION DELAYS.
 - B. DELIVERY: DELIVER MATERIALS IN MANUFACTURER'S ORIGINAL, UNOPENED, UNDAMAGED CONTAINERS PACKAGING WITH IDENTIFICATION LABELS INTACT.
 1. COORDINATE DELIVERY AND PAVING SCHEDULE TO MINIMIZE INTERFERENCE WITH NORMAL USE OF BUILDINGS ADJACENT TO PAVING.
 2. DELIVER CONCRETE PAVERS TO THE SITE IN STEEL BANDED, PLASTIC BANDED OR PLASTIC WRAPPED PACKAGING CAPABLE OF TRANSFER BY FORKLIFT OR CLAMP LIFT.
 3. UNLOAD PAVERS AT JOB SITE IN SUCH A MANNER THAT NO DAMAGE OCCURS TO THE PRODUCT.
 - C. STORAGE AND PROTECTION: STORE MATERIALS PROTECTED SUCH THAT THEY ARE KEPT FREE FROM MUD, DIRT, AND OTHER FOREIGN MATERIALS. [STORE CONCRETE PAVER CLEANERS AND SEALERS PER MANUFACTURER'S INSTRUCTIONS.]
 1. COVER MORTAR SAND WITH WATERPROOF COVERING IF NEEDED TO PREVENT EXPOSURE TO RAINFALL OR REMOVAL BY WIND. SECURE THE COVERING IN PLACE.
 2. PROTECT CEMENTITIOUS MATERIALS FROM MOISTURE AND FREEZING TEMPERATURES. STORE IN A DRY LOCATION.

- PROJECT/SITE CONDITIONS
- A. ENVIRONMENTAL REQUIREMENTS:
 1. DO NOT INSTALL IN RAIN OR SNOW.
 2. DO NOT INSTALL OVER WHEN OUTSIDE TEMPERATURE IS BELOW 45° F (5° C).

- MAINTENANCE
- A. EXTRA MATERIALS: PROVIDE 10% ADDITIONAL MATERIAL FOR USE BY OWNER FOR MAINTENANCE AND REPAIR.
 - B. PAVERS SHALL BE FROM THE SAME PRODUCTION RUN AS INSTALLED MATERIALS.

- CONCRETE PAVERS
- A. MANUFACTURER: E.P. HENRY.
 1. CONTACT: SHANE ROBINSON: 301-367-5124.
 - B. INTERLOCKING CONCRETE PAVER UNITS, INCLUDING THE FOLLOWING:
 1. PAVER TYPE: EP HENRY COVENTRY I.
 - A. MATERIAL STANDARD: COMPLY WITH MATERIAL STANDARDS IN ASTM C 936.
 - B. COLOR AND FINISH: COVENTRY I DAKOTA BLEND.
 - C. COLOR PIGMENT MATERIAL STANDARD: COMPLY WITH ASTM C 979.
 - D. SIZE: 30% 6" X 6" X 2 3/8"; 70% 6" X 9" X 2 3/8".
 - E. AVERAGE COMPRESSIVE STRENGTH (C140): 8000 PSI (55 MPa) WITH NO INDIVIDUAL UNIT UNDER 7200 PSI (50 MPa).
 - F. AVERAGE WATER ABSORPTION (ASTM C 140): 5% WITH NO UNIT GREATER THAN 7%.
 - G. FREEZE/THAW RESISTANCE (ASTM C 67): RESISTANT TO 50 FREEZE/THAW CYCLES WITH NO GREATER THAN 1% LOSS OF MATERIAL. FREEZE-THAW TESTING REQUIREMENTS SHALL BE WAIVED FOR APPLICATIONS NOT EXPOSED TO FREEZING CONDITIONS.
 2. PERIMETER BAND PAVER TYPE: EP HENRY COVENTRY BRICK STONE.
 - A. MATERIAL STANDARD: COMPLY WITH MATERIAL STANDARDS IN ASTM C 936.
 - B. COLOR AND FINISH: COVENTRY I DAKOTA BLEND.
 - C. COLOR PIGMENT MATERIAL STANDARD: COMPLY WITH ASTM C 979.
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- PRODUCT SUBSTITUTIONS
- A. SUBSTITUTIONS: NO SUBSTITUTIONS PERMITTED UNLESS APPROVED BY THE OWNER IN WRITING.

- EPOXY MORTAR
- A. EPOXY MORTAR: MEETS ANSI 118.3, SPECIFICATIONS FOR CHEMICAL RESISTANT, WATER CLEANABLE TILE-SETTING, AND-TILE GROUTING EPOXY AND WATER CLEANABLE TILE-SETTING EPOXY ADHESIVE.
- GROUT
- A. MEETS ANSI 118.3, SPECIFICATIONS FOR CHEMICAL RESISTANT, WATER CLEANABLE TILE-SETTING, AND-TILE GROUTING EPOXY AND WATER CLEANABLE TILE-SETTING EPOXY ADHESIVE.
 - B. GROUT COLORS: SELECTED BY THE OWNER FROM THE MANUFACTURER'S COMPLETE COLOR RANGE.
 - C. ACCEPTANCE OF GROUT PRODUCTS IS SUBJECT TO THE APPROVAL OF BOTH THE ENGINEER AND THE PAVER MANUFACTURER PRIOR TO BID CLOSING.

- ACCESSORIES
- A. WATER: POTABLE AND FREE FROM MINERALS OR OTHER MATERIALS THAT ARE DETRIMENTAL TO MORTAR AND GROUT MIXES.
 - A. PRIMER: AS RECOMMENDED BY THE MORTAR MATERIAL MANUFACTURER.
 - B. SEALANT [AND BACKING MATERIALS]: CONFORMING TO ASTM C 920 AS SPECIFIED IN SECTION []
 - D. MIXES: PREPARE PRE-MIX MATERIALS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
 - E. EDGE RESTRAINTS: PROVIDE EDGE RESTRAINTS INSTALLED AROUND THE PERIMETER OF ALL INTERLOCKING CONCRETE PAVING UNIT AREAS AS FOLLOWS:
 1. MATERIAL: CONCRETE CURB, CONCRETE SIDEWALK, AND PROPOSED CONCRETE BLOCK RETAINING WALL, AS SHOWN ON CONSTRUCTION DRAWINGS.

- EXAMINATION
- A. INSPECT AREAS AND CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED AND NOTIFY THE ENGINEER IN WRITING OF CONDITIONS DETRIMENTAL TO THE PROPER AND TIMELY COMPLETION OF THE WORK.
 - B. VERIFY THAT CONCRETE BASE IS SLOPED FOR DRAINAGE AND IS FREE OF STANDING WATER, DUST, OIL, GREASE, PAINT, WAX, CURING COMPOUNDS, PRIMER, SEALERS, FORM RELEASE AGENTS, OR ANY DELETERIOUS SUBSTANCES AND DEBRIS WHICH MAY PREVENT OR REDUCE BONDING. [CONDUCT MOISTURE TESTS TO VERIFY THAT CONCRETE SURFACES ARE COMPLETELY CURED, FREE FROM HYDROSTATIC PRESSURE AND HAVING A MOISTURE CONTENT OF LESS THAN 5%.]
 - C. VERIFY THAT GROUT MATERIALS CAN BE CLEANED FROM PAVERS, OR PROVIDE COATING TO PAVERS TO FACILITATE REMOVAL OF GROUT MATERIALS.
 - D. DO NOT PROCEED WITH THE WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED BY THE CONTRACTOR OR DESIGNATED SUBCONTRACTOR TO THE SATISFACTION OF THE INSTALLER AND SURFACES AND CONDITIONS COMPLY WITH THE APPLICABLE REQUIREMENTS OF ANSI A-108.1.

- PREPARATION
- A. COMPLETELY REMOVE LOOSE PARTICLES AND DEBRIS FROM SURFACE OF CONCRETE BASE. THIS MAY REQUIRE MECHANICAL GRINDING AND SCARIFYING OF THE SURFACE.
 - B. NEUTRALIZE ANY TRACE OF STRONG ACID OR ALKALI FROM THE SUBSTRATE PRIOR TO MORTAR APPLICATION.
 - C. IF LEVELING OF THE CONCRETE SURFACE IS NECESSARY, APPLY LATEX PORTLAND CEMENT MORTAR SURFACE LEVELING MATERIALS TO THE SURFACE OF THE SUBSTRATE TO BRING THE SURFACE TO A TRUE, EVEN PLANE. ALLOW MORTAR-LEVELING MATERIALS TO SET PRIOR TO INSTALLATION.
 - D. SURFACE TO RECEIVE [SLURRY COAT AND] MORTAR SHALL HAVE A TOLERANCE OF ±1/4 IN. (6 MM) OVER 10 FT (3 M) FOR NORMAL MORTAR SETTING BED APPLICATIONS AND ±1/8 IN. (3 MM) OVER 10 FT (3 M) FOR THIN SET MORTAR SETTING BED APPLICATIONS.

- INSTALLATION
- A. MOISTEN CONCRETE BASE AND APPLY SLURRY BOND COAT TO CONCRETE BASE PER MANUFACTURER'S DIRECTIONS.
 - B. MIX AND APPLY MORTAR SETTING BED MATERIAL IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. SPREAD MORTAR IN QUANTITIES THAT WILL REMAIN PLASTIC AND WORKABLE DURING INSTALLATION OF PAVERS.
 - C. MOISTEN THE BOTTOMS OF THE PAVERS PRIOR TO PLACING ON MORTAR OR THIN-SET MATERIALS.
 - D. LAY PAVERS IN PATTERN(S) ON MORTAR BED AS INDICATED ON THE DRAWINGS. SAW CUT PAVERS AS REQUIRED WITH A MASONRY SAW CUT PRIMER UNITS NO LESS THAN [1/4] OF FULL SIZE UNITS. DO NOT INSTALL STAINED, CHIPPED, CRACKED, OR BROKEN PAVERS.
 - E. MAINTAIN [3/8] IN. ((10 MM)) JOINT SPACES.
 - F. JOINTS SHALL BE UNIFORM AND STRAIGHT IN ALL BOTH DIRECTIONS AS INDICATED ON THE DRAWINGS.
 - G. LIPPAGE: MAINTAIN NO GREATER THAN 1/16 IN. (1.5 MM) HEIGHT DIFFERENCE BETWEEN ADJACENT PAVERS.
 - H. FOLLOW MANUFACTURER'S RECOMMENDED TIMES FOR SETTING MORTAR TO CURE BEFORE GROUTING.
 - I. MAINTAIN CLEAN SURFACES AND JOINTS PRIOR TO APPLYING GROUT.
 - J. GROUT JOINTS IN ACCORDANCE WITH ANSI A108.10.

- EXPANSION AND CONTROL JOINTS
- A. LOCATE AND OBTAIN THE APPROVAL OF THE ENGINEER BEFORE COMMENCING THE INSTALLATION.
 - B. IN ACCORDANCE WITH TCA DETAIL NO. EJI71, HANDBOOK FOR CERAMIC TILE INSTALLATION.
 1. PROVIDE [AT MAXIMUM 12 FT (3.6 M) ON CENTER IN EACH DIRECTION] [AS INDICATED ON THE DRAWINGS].
 2. PROVIDE WHERE DISSIMILAR MATERIALS CONTACT THE PAVERS INCLUDING WALLS, COLUMNS, AND CURBS.
 3. CARRY COMPLETELY THROUGH THE ASSEMBLY TO SURFACE.
 4. KEEP CLEAR OF MORTAR SETTING MATERIALS AND GROUT.
 5. APPLY BACKER MATERIALS AND SEALANT IN JOINTS AS SPECIFIED IN SECTION []

- CLEANING OR SEALING
- A. CLEAN OR SEAL CONCRETE PAVERS IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN RECOMMENDATIONS.

- FIELD QUALITY CONTROL
- A. THE FINAL SURFACE TOLERANCE FROM GRADE ELEVATIONS SHALL NOT DEVIATE MORE THAN ±1/4 IN. (±10 MM) UNDER A 10 FT (3 M) STRAIGHTEDGE.
 - B. CHECK FINAL SURFACE ELEVATIONS FOR CONFORMANCE TO DRAWINGS.

- PROTECTION
- A. PROTECT FINISHED WORK AGAINST WEATHER, FREEZING AND IMMERSION IN WATER FOR [AT LEAST 21 DAYS AFTER INSTALLATION][PER MORTAR AND GROUT MANUFACTURER'S RECOMMENDATIONS].
 - B. PROTECT PAVERS FROM CONSTRUCTION-RELATED FOOT TRAFFIC [FOR AT LEAST 24 HOURS AFTER COMPLETION OF THE INSTALLATION] AND GENERAL FOOT TRAFFIC [FOR AT LEAST 72 HOURS AFTER INSTALLATION] [PER THE MORTAR AND GROUT MANUFACTURER'S RECOMMENDATIONS].
 - C. PROTECT TEXTURED MATERIAL DURING INSTALLATION AND AFTERWARDS. [SEAL ARCHITECTURAL FINISHES OF PAVERS IMMEDIATELY AFTER THE GROUT IS DRY.] COVER AND PROTECT THE TEXTURED SURFACE FROM VEHICULAR TRAFFIC DURING THE CONSTRUCTION PERIOD.
 - D. AFTER WORK IN THIS SECTION IS COMPLETE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING WORK FROM DAMAGE DUE TO SUBSEQUENT CONSTRUCTION ACTIVITY ON THE SITE.

RAILING SPECIFICATIONS

WORK INCLUDED
THE CONTRACTOR SHALL PROVIDE LABOR, MATERIALS AND ALL NECESSARY ACCESSORY ITEMS FOR THE INSTALLATION OF THE ORNAMENTAL ALUMINUM FENCE HEREIN AT (SPECIFIED PROJECT LOCATION).

SYSTEM DESCRIPTION
THE MANUFACTURER SHALL SUPPLY A TOTAL ORNAMENTAL ALUMINUM FENCING SYSTEM OF THE STYLE, STRENGTH AND COLOR DEFINED HEREIN. THE SYSTEM SHALL BE A TOTAL PACKAGE INCLUDING ALL COMPONENTS; PICKETS, POSTS, STRINGERS, GATES AND HARDWARE AS REQUIRED.

QUALITY ASSURANCE
THE CONTRACTOR SHALL PROVIDE LABORERS AND SUPERVISORS WHO ARE THOROUGHLY FAMILIAR WITH THE TYPE OF CONSTRUCTION INVOLVED AND THE MATERIALS SPECIFIED.

REFERENCES
AAMA 603.8 - PERFORMANCE REQUIREMENTS AND TESTING PROCEDURES FOR PIGMENTED ORGANIC COATINGS.
ASTM B221 - SPECIFICATION FOR ALUMINUM ALLOY EXTRUDED BARS, SHAPES AND TUBES.

SUBMITTAL
THE MANUFACTURER'S LITERATURE SHALL BE SUBMITTED PRIOR TO INSTALLATION TO CONFIRM COMPLIANCE WITH ALL REQUIREMENTS FOR MATERIALS SPECIFIED IN THIS SECTION.

DELIVERY, STORAGE AND HANDLING
A. FENCE PANELS, GATES, POSTS AND ACCESSORIES SHALL BE DELIVERED TO THE CONSTRUCTION SITE IN PACKAGED CARTONS.
B. EACH PACKAGE SHALL BE IDENTIFIED AND SHALL BEAR THE NAME OF THE MANUFACTURER.
C. STORE ALL MATERIALS IN A SECURE AND DRY AREA.

MANUFACTURER
THE ALUMINUM FENCING SYSTEM SHALL BE AS MANUFACTURED BY SPECIRAL, 333 WELTON ST, HAMDEN, CT 06517 OR AS APPROVED BY THE OWNER. THE FENCE SHALL BE THE BENNINGTON STYLE, 24" IN HEIGHT, AND BLACK IN COLOR.

MATERIALS
A. ALUMINUM EXTRUSIONS: ALL COMPONENTS SHALL BE MADE OF 6063-T52 AND 6105-T5 IN ACCORDANCE WITH ASTM B221.
B. FASTENERS: ALL SCREWS SHALL BE 302 STAINLESS SELF-DRILLING HEAD. ALL SCREWS SHALL BE PAINTED TO MATCH THE FINISH ON THE FENCE.
C. ACCESSORIES: ALUMINUM CASTINGS SHALL BE USED FOR ALL POST CAPS, WALL BRACKETS, SCROLLS, FINALS AND OTHER MISCELLANEOUS HARDWARE. HINGES AND LATCHES SHALL BE FABRICATED FROM ALUMINUM EXTRUSIONS WITH STAINLESS STEEL SPRINGS.

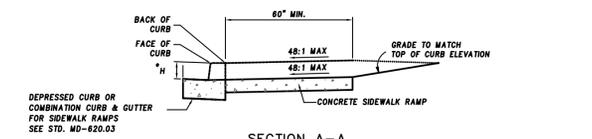
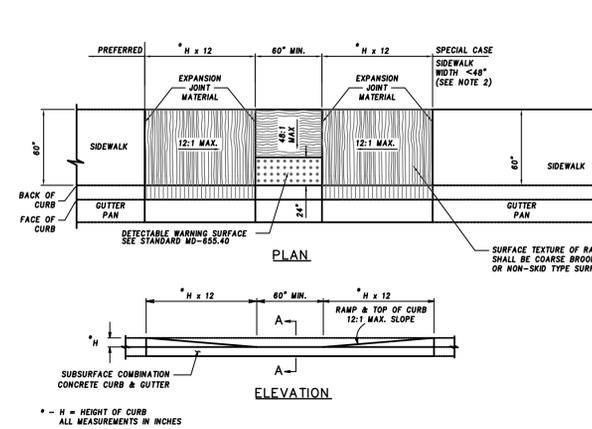
FINISH
THE FENCE SHALL BE COATED WITH POLY-COLOR, AN ENVIRONMENTALLY APPROVED, PREMIUM HIGH-SOLIDS ACRYLIC COATING WHICH EXCEEDS AAMA 603.8. APPLICATION OF POLY-COLOR SHALL BE ELECTROSTATIC SPRAY. CURING SHALL BE AT A TEMPERATURE OF 375° TO 400°.

FABRICATION
A. STRINGERS, (HORIZONTAL RAILS) SHALL BE PUNCHED TO ALLOW PICKETS TO PASS THROUGH THE TOP OF THE RAIL. THE NUMBER OF STRINGERS SHALL VARY WITH THE STYLE, HEIGHT AND GRADE AS DETERMINED BY THE MANUFACTURER.
B. PICKETS, (VERTICAL MEMBERS) SHALL BE FASTENED TO STRINGERS MECHANICALLY USING STAINLESS STEEL TEK SCREWS ON ONE SIDE OF THE STRINGERS ONLY.
C. POSTS, SHALL BE PRE-PUNCHED TO ALLOW THE STRINGERS TO SLIDE IN AND BE FASTENED WITH STAINLESS STEEL TEK SCREWS. CAST ALUMINUM POST CAPS SHALL BE AFFIXED TO ALL POSTS.

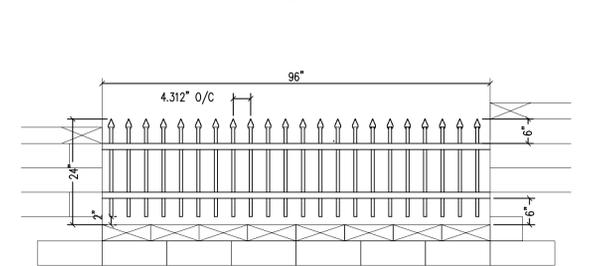
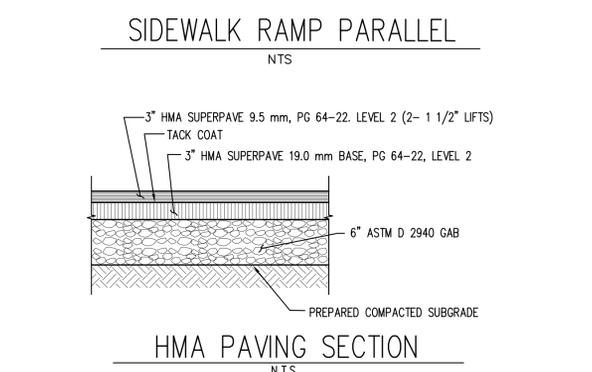
PREPARATION
PREPARE THE GRADE AND REMOVE SURFACE IRREGULARITIES, IF ANY, WHICH MAY CAUSE INTERFERENCE WITH THE INSTALLATION OF THE ORNAMENTAL ALUMINUM FENCE.

INSTALLATION
A. SET FENCE POSTS AT ON-CENTER (O.C.) DISTANCE SET FORTH ON POST SPACING GUIDE INCLUDED WITH THE TECH MANUAL. SET GATEPOSTS FOR GATE OPENINGS SPECIFIED IN THE CONSTRUCTION DRAWINGS.
B. INSERT STRINGERS INTO THE PRE-PUNCHED POSTS AND FASTEN WITH STAINLESS STEEL TEK SCREWS.
C. CENTER AND ALIGN POSTS. POUR CONCRETE AROUND POSTS AND VIBRATE OR TAMP FOR CONSOLIDATION. RECHECK VERTICAL AND TOP ALIGNMENT OF POSTS AND MAKE NECESSARY ADJUSTMENTS PRIOR TO CONCRETE SETTING.
D. INSTALL GATES PLUMB, LEVEL AND SECURE FOR FULL OPENING WITHOUT INTERFERENCE FOR DOUBLE GATES. INSTALL DROP KIT. ADJUST ALL HARDWARE FOR SMOOTH OPERATION.

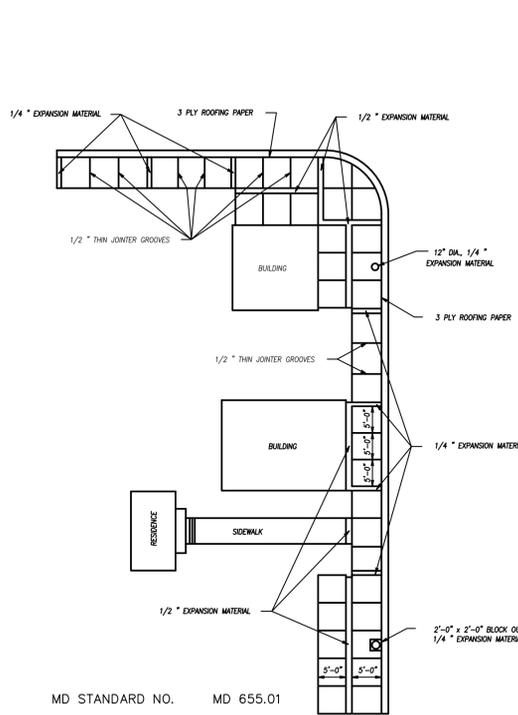
CLEANING
CONTRACTOR SHALL CLEAN JOBSITE OF EXCESS MATERIALS; POSTHOLE EXCAVATIONS SHALL BE SCATTERED UNIFORMLY AND AWAY FROM POSTS. CLEAN ORNAMENTAL ALUMINUM FENCE WITH A MILD SOLUTION OF HOUSEHOLD DETERGENT AND CLEAN WATER. RINSE WELL. MORTAR SHOULD BE REMOVED FROM EXPOSED POSTS USING A 10% SOLUTION OF MURIATIC ACID FOLLOWED BY IMMEDIATE AND THOROUGH RINSING WITH CLEAN WATER.



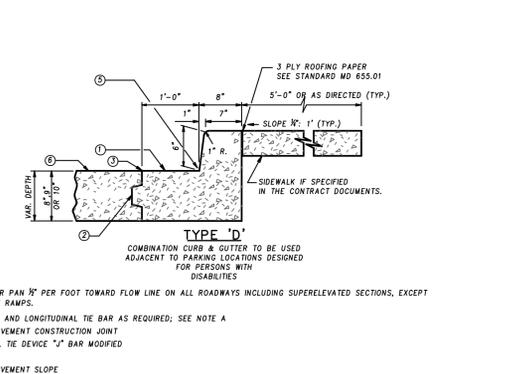
- NOTES
1. TO BE USED WHERE SIDEWALK IS ADJACENT TO THE CURB. THIS STANDARD MAY BE MODIFIED TO SUIT A PARTICULAR LOCATION.
 2. WHERE 60" SIDEWALK CAN NOT BE PROVIDED, A DESIGN WAIVER MUST BE REQUESTED.
 3. NO TRAVERSABLE SLOPE ON THE RAMP OR SIDEWALK SHALL EXCEED 12:1 IN THE DIRECTION OF PEDESTRIAN TRAVEL, OR 48:1 PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL.
 4. EXPANSION JOINT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH STD. MD-655.01.
 5. SIDEWALK RAMP SHALL BE INCLUDED IN PRICE BID FOR CONCRETE SIDEWALK. DEPRESSED CURB AND CURB TRANSITION SHALL BE INCLUDED IN PRICE BID FOR CURB ON CURB & GUTTER ADJACENT TO SIDEWALK RAMP. DETECTABLE WARNING SURFACE SHALL BE PAID FOR IN ACCORDANCE WITH SECTION 611 OF THE SPECIFICATIONS.
 6. SIDEWALK RAMP TO BE SHOWN ON PLANS SYMBOLICALLY AND REFERENCED WITH THE CENTER OF THE RAMP ALIGNED TO A STATION ON THE CONSTRUCTION CENTERLINE. SEPARATE DETAILS SHALL BE SHOWN WHERE PROPOSED RAMP VARIES FROM STANDARD CASES.
- MD STANDARD NO. MD 655.12



INSTALL TOP AND BOTTOM RAIL TO CONCRETE BLOCK COLUMNS WITH SPECIRAL COMMERCIAL WALL MOUNT BRACKETS. FASTEN WALL MOUNT BRACKETS WITH 3/8" X 2 1/2" GALVANIZED STEEL LAG SCREWS AND LAG SHIELDS. CONTRACTOR SHALL EXPAND 1/4" PRE-DRILLED FACTORY SUPPLIED WALL MOUNTS TO ACCOMMODATE THE 3/8" LAG SCREW. PAINT LAG SCREWS WITH BLACK FINISH UPON COMPLETION OF INSTALLATION.



MD STANDARD NO. MD 655.01



- NOTES
1. SLOPE GUTTER PAN 1/8" PER FOOT TOWARD FLOW LINE ON ALL ROADWAYS INCLUDING SUPERELEVATED SECTIONS, EXCEPT INTERCHANGE RAMP.
 2. PROVIDE KEY AND LONGITUDINAL TIE BAR AS REQUIRED; SEE NOTE A.
 3. ROADWAY PAVEMENT CONSTRUCTION JOINT.
 4. LONGITUDINAL TIE DEVICE "I" BAR MODIFIED.
 5. FLOW LINE.
 6. ROADWAY PAVEMENT SLOPE.
- A. RIGID PAVEMENT ROADWAY ADJACENT TO COMBINATION CURB AND GUTTER AND CLOSED SECTION ROADWAY USING RIGID PAVEMENT WITH COMBINATION CURB AND GUTTER SHALL BE KEPT AND TIED AT THE ROADWAY PAVEMENT CONSTRUCTION JOINT. REFER TO STANDARD MD 572.61 FOR METHOD OF KEYWAY AND LONGITUDINAL TIE DEVICES. SPACING OF THE TIE BARS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS. RIGID PAVEMENT AND CURB SHALL BE CONSTRUCTED AS INDICATED. THE DEVICES AND KEYS ARE NOT REQUIRED WHEN USING FLEXIBLE PAVEMENT FOR ROADWAY.
- B. MAXIMUM JOINT SPACING FOR CONCRETE CURB AND COMBINATION CURB & GUTTER IS 10'. SEE SPECIFICATION FOR LOCATIONS AND DESCRIPTION OF TREATMENT FOR THE TYPES OF JOINTS USED.
- C. TYPE C OR D COMBINATION CURB AND GUTTER SHALL BE USED FOR ALL APPLICABLE NEW CONSTRUCTION AND IN THOSE AREAS WHERE THE COMBINATION CURB AND GUTTER IS TO BE REPLACED IN R.W.D.
- D. TYPE C OR D CURB SHALL BE USED FOR THE REPLACEMENT OF LIKE KIND OF CURB ONLY. NOT TO BE USED FOR NEW CONSTRUCTION EXCEPT WHERE INDICATED ON APPROPRIATE INLET STANDARDS.
- MD STANDARD NO. MD 620.02



PROJECT: **TAKOMA PARK LINDEN AVE WATER QUALITY RETROFIT & RETAINING WALL REMEDIATION**

TITLE: **SITE DETAILS**

T.E. SCOTT + ASSOCIATES
LANDSCAPE | STORMWATER | ENVIRONMENT

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Designed By: TES/WRK Scale: AS SHOWN Proj. No. 0901
Drawn By: TAM Date: 6/29/09
Checked By: TES Approved SHEET 4 OF 11

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 32602, EXPIRATION DATE: 1-15-2010.