

**ROADWAY (CONTINUED)**

**ITEM 608 - WALKWAY, MISC.: TRUNCATED DOMES ON CURB RAMPS**

INSTALL DETECTABLE WARNINGS (TRUNCATED DOMES) FOR A DISTANCE OF 24" FROM THE BACK OF THE CURB FOR THE ENTIRE WIDTH OF THE RAMP OPENING WHERE IT IS FLUSH WITH THE PAVEMENT. SQUARE FOOTAGE OF PAVERS FOR EACH TYPE OF RAMP ARE AS FOLLOWS (SEE STANDARD CONSTRUCTION DRAWING BP-7.1 FOR DIFFERENT STYLES OF CURB RAMPS):

RAMP DESIGN	RAMP TYPE	DIMENSIONS (SEE PLANS)	AREA
PERPENDICULAR	TYPES A, E AND G	24" x 4'-0" (MIN. WIDTH)	8 SF (MIN.)
PARALLEL	TYPES B AND F	24" x 5'-0" (MIN. WIDTH)	10 SF (MIN.)
COMBINED	TYPE C	24" x 5'-0" (6'-0" PREFERRED)	10 SF MIN. (12 SF PREF.)
DIAGONAL	SPECIAL INSTALLATION	24" x 4'-0" (MIN. WIDTH)	8 SF (MIN.)

PAVERS WILL MEET AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS FOR DETECTABLE WARNINGS (TRUNCATED DOMES) AND EITHER ASTM C 902 PEDESTRIAN AND LIGHT TRAFFIC PAVING BLOCK, CLASS SX, TYPE 1; OR ASTM C 936 SOLID CONCRETE INTERLOCKING PAVING UNITS; OR ASTM C 1272 HEAVY VEHICULAR PAVING BRICK, TYPE R.

MANUFACTURERS	PRODUCTS
WHITACRE-GREER FIREPROOFING COMPANY 1400 S. MAHONING AVE., ALLIANCE, OH, 44601	ADA PAVER, 4"x8"x2-1/4" CLEAR RED (RUSTINC) #30
HANOVER ARCHITECTURAL PRODUCTS 240 BENDER RD., HANOVER, PA, 17331	DETECTABLE WARNING PAVER, 11-3/4" x 11-3/4" x 2" RED OR QUARRY RED
ENDICOTT CLAY PRODUCTS, PO BOX 17, FAIRBURY, NE, 68352	HANDICAP DETECTABLE WARNING PAVER, NOMINAL 4"x8"x2-1/4" RED BLEND

PAVERS WILL BE LAID ON TOP OF A 4" UNREINFORCED CONCRETE BASE. SETTING BED AND JOINTS TO BE MORTARED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS OR WITH A MAXIMUM 1/2" THICK SETTING BED OF LATEX MODIFIED CEMENT MORTAR. MORTAR JOINTS TO A WIDTH NOT GREATER THAN 5/32" AND NOT LESS THAN 1/16". PAVERS SHALL NOT BE DIRECTLY TOUCHING EACH OTHER UNLESS THEY HAVE SPACING BARS. PORTION OF CONCRETE RAMP THAT IS THICKENED TO 6" SHALL BE EXTENDED SUCH THAT A MINIMUM 4" OF CONCRETE SHALL BE BENEATH THE BRICK PAVERS.

JOINTS ARE TO BE FLUSH WITH TOP SURFACE AND STRUCK SO AS TO GIVE A SMOOTH SURFACE. PAVERS SHALL BE LAID SUCH THAT JOINTS ARE LEVEL WITH ADJOINING JOINTS SO AS TO PROVIDE A SMOOTH TRANSITION FROM BRICK TO BRICK AND BRICK TO CONCRETE SURFACE. THE TOP SURFACE OF ANY TWO ADJACENT UNITS SHOULD NOT DIFFER BY MORE THAN 1/8" IN HEIGHT FOR MORTARED BRICK PAVING. BRICKS SHALL BE PLACED IN A RUNNING BOND PATTERN. PAVERS THAT DO NOT CONFORM TO THE SMOOTHNESS REQUIREMENT SHALL BE REMOVED AND REPLACED AT THE EXPENSE OF THE CONTRACTOR AS DETERMINED BY THE ENGINEER. FACE OF ALL BRICK SHALL BE CLEAN OF CEMENT AND PROTECTED SO AS TO AVOID CHIPPING DURING CONSTRUCTION.

ALL MATERIAL, LABOR, AND EQUIPMENT REQUIRED TO PERFORM THE ABOVE WORK SHALL BE PAID FOR UNDER ITEM 608, WALKWAY, MISC.: TRUNCATED DOMES ON CURB RAMPS. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS PURPOSE. THIS AREA IS STILL INCLUDED FOR PAY UNDER THE ORIGINAL ITEM FOR CURB RAMP.

ITEM 608 - WALKWAY, MISC.: TRUNCATED DOMES ON CURB RAMPS 240 SQ.FT.

**ITEM 448 ASPHALT SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN**

THE COARSE AGGREGATE FOR THE SURFACE COURSE SHALL BE LIMITED TO AIR COOLED BLAST FURNACE SLAG OR LIMESTONE.

**PAVING UNDER GUARDRAIL**

THIS OPERATION SHALL INCLUDE PREPARATION OF THE GRADED SHOULDER USING 203, LINEAR GRADING, AND PAVING UNDER THE GUARDRAIL USING 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, UNDER GUARDRAIL, PG 64-22.

ITEM 203, LINEAR GRADING, SHALL CONSIST OF EXCAVATING TOPSOIL, PLACING GRANULAR MATERIAL AND APPLYING HERBICIDE AS SPECIFIED IN THE PLANS AND IN ACCORDANCE WITH THE FOLLOWING:

ALL COLLECTED DEBRIS AND TOPSOIL, INCLUDING RHIZOMES, ROOTS AND OTHER VEGETATIVE PLANT MATERIAL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN 203.05.

THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 203.02 PLACED TO GRADE AS DETAILED ON THE TYPICAL SECTION OR AS APPROVED BY THE ENGINEER.

HERBICIDE SHALL BE EPA APPROVED FOR PAVING UNDER GUARD- RAIL. IT SHALL BE APPLIED TO THE PREPARED AREA AFTER FINAL LEVELING AND GRADING HAS BEEN COMPLETED. THE APPLICATION SHALL BE JUST PRIOR TO PAVING AND SHALL STRICTLY ADHERE TO THE MANUFACTURER'S INSTRUCTIONS.

EACH SUCCESSFUL BIDDER MUST BE LICENSED BY THE OHIO DEPARTMENT OF AGRICULTURE AS A COMMERCIAL APPLICATOR AND ALL PERSONS INVOLVED IN THE ACTUAL SPRAYING SHALL BE LICENSED AS COMMERCIAL OPERATORS IN THE APPROPRIATE SPRAY CATEGORY.

HERBICIDE LABEL, MATERIAL SAFETY DATA SHEET AND COPY OF APPLICATORS LICENSES SHALL BE SUBMITTED TO THE ENGINEER FOR VERIFICATION PRIOR TO COMMENCING WORK.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 203, LINEAR GRADING. PAVING UNDER GUARDRAIL SHALL CONSIST OF PLACING ITEM 448 TO THE DEPTH SPECIFIED USING ONE OF THE FOLLOWING METHODS:

METHOD A:

1) SET GUARDRAIL POSTS

2) PLACE ITEM 448

METHOD B:

1) PLACE ITEM 448

2) BORE ASPHALT AT POST LOCATIONS (MAY BE OMITTED IF STEEL POSTS ARE USED)

3) SET GUARDRAIL POSTS

4) PATCH AROUND POSTS. THE MATERIALS USED FOR PATCHING SHALL BE A BITUMINOUS CONCRETE APPROVED BY THE ENGINEER. PATCHED AREAS SHALL BE COMPACTED USING EITHER HAND OR MECHANICAL METHODS. FINISHED SURFACES SHALL BE SMOOTH AND SLOPED TO DRAIN AWAY FROM THE POSTS.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE, WITH THE EXCEPTION OF SETTING GUARDRAIL POSTS, SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 448, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 1, UNDER GUARDRAIL, PG 64-22.

**EROSION CONTROL**

**ITEM 870, SEEDING AND MULCHING**

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. THE CONTRACTOR SHALL ESTABLISH A GOOD STRAND OF GRASS WITH UNIFORM COLOR AND DENSITY, TO THE SATISFACTION OF THE ENGINEER. QUANTITY CALCULATIONS FOR ITEM 870, SEEDING AND MULCHING, ARE BASED ON THESE LIMITS.

**SEEDING AND MULCHING OF LAWNS**

IN ADDITION TO "AREAS IN FRONT OF RESIDENCES" REFERRED TO IN 659.09, THE SPECIAL PREPARATION SHALL BE EXTENDED TO ENCOMPASS ALL LAWNS AND/OR LAWN-LIKE AREAS AS DETERMINED BY THE ENGINEER.

**WATERING AND MOWING PERMANENT SEEDED AREAS**

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER TO PROMOTE GROWTH AND TO CARE FOR PERMANENT SEEDED AREAS

PER 870.18 :  
 870, WATER 93 M. GAL. 870, TOPSOIL 1916 CU. YD.  
 870, MOWING 78 M. SQ.FT. 870, COMMERCIAL FERTILIZER 4.6 TON  
 870, SOIL ANALYSIS TEST 5 EACH 870, AGRICULTURAL LIME 14.3 TON

**TEMPORARY SOIL EROSION AND SEDIMENT CONTROL**

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES:

870, INTER-SEEDING	1723 SQ.YDS.
870, COMMERCIAL FERTILIZER	2.7 TONS
870, REPAIR SEEDING AND MULCHING	1723 SQ.YD.
870, WATER	10.4 M GALS.
877, TEMPORARY SEEDING AND MULCHING	34448 SQ.YDS.
877, TEMPORARY PERIMETER FILTER FABRIC FENCE	6153 LIN.FT.
877, INLET PROTECTION FILTER FABRIC FENCE	2712 LIN.FT.
877, SEDIMENT REMOVAL	50 CU. YDS.

**STORM WATER POLLUTION PREVENTION PLAN**

THE CONDITIONS OF THE NPDES CONSTRUCTION STORM WATER GENERAL PERMIT (SEE PROPOSAL) SHALL BE MET DURING ALL STAGES OF CONSTRUCTION. THE LOCATION AND TIMING OF ALL EROSION AND SEDIMENT CONTROL ITEMS SHALL BE FIELD ADJUSTED TO PREVENT SIGNIFICANT IMPACTS ON RECEIVING WATERS. IMPLEMENTATION OF THIS STORM WATER POLLUTION PREVENTION PLAN SHALL CONTINUE THROUGHOUT THE DURATION OF THE PROJECT OR UNTIL SUCH TIME THAT THE UPSLOPE DISTURBED AREAS ARE STABILIZED.

INSTALLATION OF SEDIMENT BASINS/DAMS, PERIMETER FILTER FABRIC FENCE, AND DITCH CHECKS TEMPORARY SEEDING AND MULCHING, EROSION CONTROL MATTING OR OTHER APPROPRIATE EROSION SHALL BE CONCURRENT WITH CLEARING AND GRUBBING AND/OR GRADING OPERATIONS.

ALL REASONABLE ATTEMPTS SHOULD BE MADE TO MINIMIZE THE TOTAL AREA OF DISTURBED LAND.

AREAS TO REMAIN DORMANT FOR MORE THAN 45 DAYS SHOULD BE IMMEDIATELY STABILIZED WITH TEMPORARY SEEDING AND MULCHING, EROSION CONTROL MATTING OR OTHER APPROPRIATE EROSION CONTROL MEASURES.

ADDITIONAL QUANTITIES OF TEMPORARY SOIL EROSION AND SEDIMENT CONTROL ITEMS ARE GIVEN IN THE GENERAL NOTES.

**DRAINAGE**

**ITEM 604 - CATCH BASIN, NO. 2-2B, AND INLET SIDE DITCH.**

INLETS SHALL BE CONSTRUCTED AS REQUIRED BY FIELD CONDITIONS AND CONNECTED TO THE PROPOSED TRUNK SEWER, MANHOLE OR TO THE NEAREST CATCH BASINS. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 603 - 8" CONDUIT, TYPE B	200 LIN.FT.
ITEM 603 - 8" CONDUIT, TYPE C	200 LIN.FT.
ITEM 603 - 12" CONDUIT, TYPE B	100 LIN.FT.
ITEM 603 - 12" CONDUIT, TYPE C	100 LIN.FT.
ITEM 604 - CATCH BASIN, NO. 2-2B	4 EACH
ITEM 604 - INLET, SIDE DITCH	10 EACH

THE CONTRACTOR SHALL BE CAREFUL DURING THE INSTALLATION OF PIPES TO AVOID EXISTING UTILITY CONFLICTS. THE PROPOSED 12" DRAIN PIPES SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 12" FROM THE NEAREST EXISTING UTILITY LINE.

**ITEM 604 - MANHOLE NO.3 AND CATCH BASIN NO. 2-2B, AS PER PLAN**

MANHOLES AND CATCH BASIN SHALL BE CONSTRUCTED IN CONFORMANCE WITH ITEM 604 EXCEPT THAT THE EXCAVATION SHALL BE BACKFILLED WITH ITEM 613 LOW STRENGTH MORTAR BACKFILL. PAYMENT FOR ITEM 613 SHALL BE INCLUDED IN THE CONTRACT PRICE BID PER EACH MANHOLE AND CATCH BASIN.

**CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES**

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

CALCULATED  
H.J.H.  
CHECKED  
W.D.B.

GENERAL NOTES

LAK-20-18.72