

**GENERAL**

**ROUNDING**

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLY TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

**UTILITIES**

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

AMERITECH  
13630 LORAIN AVE, 4TH FLOOR  
CLEVELAND, OHIO 44111  
ATTN: DICK LICHT  
PHONE (216) 476-6142  
FAX (216) 476-6013

THE ILLUMINATING CO.  
6896 MILLER RD.  
BRECKSVILLE, OHIO 44141  
ATTN: FRANKS DIBBS  
PHONE (440) 546-8748  
FAX (440) 546-8775

LAKE CO. DEPT. OF UTILITIES  
ADMINISTRATION BUILDING  
105 MAIN ST.  
PAINSEVILLE, OHIO 44077  
ATTN: ALBERT SAARI  
(440) 350-2649

DOMINION EAST OHIO GAS CO.  
1201 EAST 55TH STREET  
CLEVELAND, OHIO 44103  
ATTN: SAM MERCURIO  
PHONE (216) 736-6755  
FAX (216) 736-6780

Os AIR, INC.  
8635 EAST AVENUE  
MENTOR, OHIO 44060-4336  
ATTN: JOHN MAGNUSSON  
PHONE (440) 951-1111  
FAX (440) 974-6561

CONTINENTAL CABLEVISION  
7820 DIVISION DRIVE  
MENTOR, OHIO 44060  
ATTN: DAVE MENCKE  
PHONE (440) 365-2556, EXT. 624

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

**WORK ON, NEAR, OVER, OR UNDER RAILROAD RIGHT OF WAY**

ANY WORK ON, NEAR, OVER, OR UNDER RAILWAY RIGHT OF WAY SHALL BE IN ACCORDANCE WITH THE SPECIAL CLAUSES IN THE PROPOSAL.

TEMPORARY CONSTRUCTION CLEARANCES OF 4.000 METERS (13'-0") HORIZONTAL AND 6.700 METERS (22'-0") VERTICAL SHALL BE MAINTAINED TO ALL RAILWAY FACILITIES.

**CONTINGENCY QUANTITIES**

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

**ELEVATION DATUM**

ALL ELEVATIONS ARE BASED ON U.S.G.S. DATUM.

**WORK LIMITS**

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

**ROADWAY**

**NON-RIGID PAVEMENT REMOVAL**

THE REMOVAL AND DISPOSAL OF EXISTING NON-RIGID PAVEMENT, INCLUDING DRIVES, SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION, UNLESS OTHERWISE INDICATED ON THE PLANS.

**PAVEMENT REMOVED, AS PER PLAN**

THIS ITEM SHALL INCLUDE PAVEMENT, ALL TYPES OF CURB, CONCRETE MEDIAN, CONCRETE WALK, BRICK WEARING COURSE, CONCRETE DRIVES AND THE CONCRETE SLOPE PROTECTION UNDER STATE ROUTE 2.

THESE ITEMS SHALL BE REMOVED AS PER ITEM 202.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATION MANUAL. ALL ITEMS MENTIONED HEREIN ARE TOTALED AND CARRIED TO THE GENERAL SUMMARY UNDER ITEM 202 - PAVEMENT REMOVED, AS PER PLAN.

**SOFT SUBGRADE AND SHALLOW EMBANKMENT, AS PER PLAN**

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER, FOR THE REMOVAL AND REPLACEMENT OF SOFT SUBGRADE OR EMBANKMENT FOUNDATION MATERIAL.

ITEM 203 - EXCAVATION, NOT INCLUDING EMBANKMENT CONSTRUCTION	1800 CU. METER
ITEM 203 - EMBANKMENT USING GRANULAR MATERIAL	1800 CU. METER

SLAG SHALL NOT BE USED AS A BACKFILL MATERIAL.

**ITEM 202 - FENCE REMOVED FOR STORAGE, AS PER PLAN**

WHERE DESIGNATED, THE EXISTING FENCE SHALL BE CAREFULLY DISMANTLED AND PLACED ON THE OWNER'S PROPERTY FOR THEIR REUSE. QUANTITIES FOR THIS ITEM HAVE BEEN CALCULATED ON SHEET 57.

**ITEM 203, PROOF ROLLING**

AN ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

203, PROOF ROLLING	15 HOURS
--------------------	----------

**EROSION CONTROL**

**ITEM 870, SEEDING AND MULCHING**

SEEDING AND MULCHING SHALL BE APPLIED TO DESIGNATED AREAS ALONG THE OUTLET CHANNEL EAST OF ERIE STREET AND WITHIN THE DISTURBED AREAS OF THE 900 mm STORM SEWER BETWEEN BEN-HUR AND SKIFF ROADS. ADDITIONAL QUANTITIES ALSO ARE DESIGNATED FOR AREAS ALONG THE SIDE SLOPES NEAR THE STATE ROUTE 2 AND RAILROAD OVERPASS. THESE QUANTITIES HAVE BEEN CALCULATED WITHIN THE STORM WATER POLLUTION PREVENTION PLAN.

THE FOLLOWING ESTIMATED QUANTITY IS TO BE USED AS DIRECTED BY THE ENGINEER AND HAS BEEN CARRIED TO THE GENERAL SUMMARY:

870, SEEDING AND MULCHING	1000 SQ. METERS
---------------------------	-----------------

**ITEM 660, SODDING, UNSTAKED AS PER PLAN**

THE PREPARATION OF SODDED AREAS SHALL INCLUDED TWO (2) INCHES OF TOPSOIL FURNISHED AND PLACED BEFORE SODDING IN ACCORDANCE WITH ITEM 653, EXCEPT IGNITION TESTING LISTED IN ITEM 653.02 IS NOT REQUIRED.

SODDING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, FROM THE BACK OF CURB TO THE FACE OF SIDEWALK. QUANTITY CALCULATIONS FOR ITEM 660 SODDING ARE BASED ON THESE LIMITS.

PAYMENT FOR PREPARING AND PLACING SODDED AREAS, INCLUDING THE 2" TOPSOIL BEDDING, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER SQUARE METER FOR ITEM 660 - SODDING, UNSTAKED AS PER PLAN.

**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:

601, ROCK CHANNEL PROTECTION, TYPE C (WITHOUT FILTER)	50 CU METER
870, REPAIR SEEDING AND MULCHING	250 SQ. METER
870, COMMERCIAL FERTILIZER	60 KG
870, WATER	32,200 CU METER
877, TEMPORARY SEEDING AND MULCHING	1500 SQ. METER
877, TEMPORARY PERIMETER FILTER FABRIC FENCE	2000 METER
877, TEMPORARY INLET PROTECTION FILTER FABRIC FENCE	750 METER
877, TEMPORARY DITCH PROTECTION	100 SQ. METER

**EROSION CONTROL**

ITEMS 601, 660, 667, 668 AND 670 ARE PROVIDED IN THE PLANS FOR EROSION CONTROL. ROCK OF A STABLE NATURE SHALL NOT BE REMOVED IN ORDER TO PLACE ANY OF THESE ITEMS AND TURF OF A STABLE NATURE SHALL NOT BE REMOVED IN ORDER TO PLACE 660, 667 OR 668. THE ENGINEER SHALL CHECK AND NON-PERFORM QUANTITIES OR ADJUST LOCATIONS AND QUANTITIES OF THESE ITEMS WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION. IN ADDITION, THESE ITEMS SHALL MEET THE REQUIREMENT OF 108.04.

**DRAINAGE**

**ITEM SPECIAL, FILL AND PLUG EXISTING CONDUIT**

THIS ITEM SHALL CONSIST OF THE CONSTRUCTION OF BULKHEADS IN THE EXISTING 610 mm CONDUIT CALLED OUT FROM STATION 5+056.46 TO STATION 5+197.33 ON THE CORRESPONDING PLAN AND PROFILE SHEETS, AND FILLING THE AREA THUS SEALED OFF WITH LEAN GROUT, CONTROLLED LOW STRENGTH MATERIAL, SAND, OR OTHER MATERIAL APPROVED BY THE ENGINEER.

BULKHEADS SHALL BE LOCATED AT THE LIMITS OF THE AREA TO BE FILLED AS INDICATED HERE AND ON THE PLANS. THE BULKHEADS SHALL CONSIST OF BRICK OR CONCRETE MASONRY WITH A MINIMUM THICKNESS OF 300 MILLIMETERS.

THE FILL MATERIAL SHALL BE PUMPED INTO PLACE, OR PLACED BY OTHER MEANS APPROVED BY THE ENGINEER, SO THAT, AFTER SETTLEMENT, AT LEAST 90 PERCENT OF THE CROSS-SECTIONAL AREA OF THE CONDUIT, FOR ITS ENTIRE LENGTH, SHALL BE FILLED. THE LENGTH OF FILLED AND PLUGGED CONDUIT TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF METERS (MEASURED ALONG THE CENTERLINE OF EACH CONDUIT FROM OUTER FACE TO OUTER FACE OF BULKHEADS) FILLED AND PLUGGED AS DESCRIBED ABOVE.

THE LENGTH, MEASURED AS PROVIDED ABOVE, SHALL BE PAID FOR AT THE CONTRACT PRICE PER METER FOR, ITEM SPECIAL, FILL AND PLUG EXISTING CONDUIT.

**PIPE ABANDONED**

THE CONTRACTOR SHALL BULKHEAD ALL CONDUIT CALLED OUT TO BE ABANDONED IN PLACE. BULKHEADS SHALL CONSIST OF BRICK OR CONCRETE MASONRY. THE COST OF BULKHEADING SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM SPECIAL, FILL AND PLUG EXISTING CONDUIT.

**MANHOLES, CATCH BASINS AND INLETS REMOVED OR ABANDONED**

ALL CASTINGS SHALL BE CAREFULLY REMOVED AND TAKEN TO THE CITY OF WILLOUGHBY SERVICE GARAGE FOR SALVAGE BY THE CITY OF WILLOUGHBY FORCES.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 ITEM.

**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.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEM.

**TEMPORARY CATCH BASIN TIE-INS**

THE FOLLOWING QUANTITIES ARE TO BE USED "AS DIRECTED BY THE ENGINEER" FOR THE TEMPORARY CONNECTIONS OF EXISTING CATCH BASINS TO THE PROPOSED STORM SEWER. THESE PIPES WILL BE INSTALLED DURING PHASE 1 OF CONSTRUCTION AS SHOWN ON THE PLAN SHEETS AND THEN TO BE ABANDON IN PLACE DURING PHASE 2.

THE TEMPORARY CONNECTIONS OCCUR AT THE FOLLOWING STATIONS AND ARE NOTED ON THE CORRESPONDING PLAN AND PROFILE SHEETS.

4+153.3	4+444	4+586.5*
4+215	4+509*	4+649.5
4+380	4+549*	4+984

CONNECTION TO EXISTING PIPE DURING PHASE I AND ABANDON IN PHASE II SHALL BE AS DESCRIBED IN OTHER GENERAL NOTES.

MATERIAL FOR THE TEMPORARY CONNECTION SHALL BE UNLIMITED 300 mm PIPE UNLESS THE ABOVE STATION HAS AN ASTERISK, IN WHICH THE MATERIAL MUST BE 300 mm REINFORCED CONCRETE PIPE-TYPE B.

ALL QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY AS REINFORCED CONCRETE PIPE FOR THE WORK NOTED ABOVE.

603 - 300 mm CONDUIT TYPE B, AS PER PLAN:	706.02.	50 METERS
603 - 300 mm CONDUIT TYPE C, AS PER PLAN:	706.02.	10 METERS

CALC. BY:  
CHECKED BY:

GENERAL NOTES

LAK-640-3.444