

**ROUNDING**

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

**UTILITIES**

THERE ARE NO KNOWN UNDERGROUND OR OVERHEAD UTILITIES WITHIN THE PROJECT CONSTRUCTION LIMITS.

**SURVEYING PARAMETERS**

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE BELOW FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

**PROJECT CONTROL**

POSITIONING METHOD: ODOT VRS  
MONUMENT TYPE: AS NOTED IN PROJECT CONTROL TABLE SHOWN ON THIS SHEET

**VERTICAL POSITIONING**

ORTHOMETRIC HEIGHT DATUM: NAVD 88  
GEOID: GEOID 2012A

**HORIZONTAL POSITIONING**

REFERENCE FRAME: NAD 83 (2011) (EPOCH: 2010.0000)  
ELLIPSOID: GRS 80  
MAP PROJECTION: LAMBERT CONFORMAL CONIC  
COORDINATE SYSTEM: OHIO STATE PLANE (NORTH ZONE) (3401)  
COMBINED SCALE FACTOR: 0.9999069813  
ORIGIN OF COORDINATE SYSTEM: 0,0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

PRIMARY PROJECT CONTROL POINTS - PAF 0.9999069813 SCALE ABOUT ORIGIN POINT N=0, E=0 LOCAL COORDINATES USED FOR CONTROL POINTS				
SOURCE OF CONTROL	PROJ. NORTH	PROJ. EAST	MON. TYPE	ELEV.
T1	584578.824	2230493.132	#5 REBAR W/ ODOT CAP	774.65
T2	585258.634	2231063.028	#5 REBAR W/ ODOT CAP	802.84
T9	584193.263	2230223.348	#5 REBAR W/ ODOT CAP	765.14

**WORK LIMITS**

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

**PROTECTION OF RIGHT-OF-WAY LANDSCAPING**

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE MAINTAINING AGENCY WILL REVIEW AND RECORD ALL LANDSCAPING ITEMS WITHIN THE RIGHT-OF-WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS). A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF LANDSCAPING ITEMS WILL BE MADE.

CONSTRUCT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE CONSTRUCTION LIMITS ARE IDENTIFIED AS 30 FEET FROM THE EDGE OF PAVEMENT.

SUBMIT A WRITTEN REQUEST TO THE PROJECT ENGINEER TO USE ANY AREA OUTSIDE THESE LIMITS. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. USE OF THESE AREAS FOR DISPOSAL OF WASTE MATERIAL AND CONSTRUCTION DEBRIS, EXCAVATION OF BORROW MATERIAL AND PLACEMENT OF PORTABLE PLANTS IS PROHIBITED. THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA.

ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS, AS DEFINED ABOVE, WILL BE REPLACED IN KIND OR AS APPROVED BY THE PROJECT ENGINEER.

**CLEARING AND GRUBBING**

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201 - CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201 - CLEARING AND GRUBBING.

**BENCHING OF FOUNDATION SLOPES**

ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN 203.05. NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF 203.05.

**ITEM 203 - EMBANKMENT USING NO. 57 AGGREGATE**

FURNISH DURABLE, NATURAL AGGREGATE NO. 57 SIZE. PLACE THE AGGREGATE AT THE THICKNESS AND SLOPE AS SHOWN ON THE TYPICAL SECTION AND CROSS-SECTIONS.

**ITEM 304 - AGGREGATE BASE, AS PER PLAN**

GRANULATED SLAG (GS) SHALL NOT BE PERMITTED FOR THIS ITEM. ALL OTHER REQUIREMENTS OF SECTIONS 304 AND 703.17 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS SHALL STILL BE APPLICABLE.

**CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL**

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

**SEEDING AND MULCHING**

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

- ITEM 659 - TOPSOIL \_ \_ \_ \_ \_ .541 CY
- ITEM 659 - COMMERCIAL FERTILIZER \_ \_ \_ \_ \_ 0.66 TON
- ITEM 659 - LIME \_ \_ \_ \_ \_ 1.01 AC
- ITEM 659 - WATER \_ \_ \_ \_ \_ 26 MGAL
- ITEM 671 - EROSION CONTROL MAT, TYPE E \_ \_ \_ \_ .4875 SY

THE EROSION CONTROL MAT 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. QUANTITY CALCULATIONS FOR THE EROSION CONTROL MAT ARE BASED ON THESE LIMITS.

**EXISTING SUBSURFACE DRAINAGE**

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE.

UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

- ITEM 605 - 6" UNCLASSIFIED PIPE UNDERDRAINS \_ \_ \_ \_ 20 FT

ITEM 203 - EXCAVATION, AS PER PLAN

ALL PROVISIONS OF CMS ITEM 203 APPLY, EXCEPT THE REMOVAL OF EXISTING GEOWEB WILL BE CONSIDERED INCIDENTAL TO THE UNIT BID PRICE OF ITEM 203 EXCAVATION, AS PER PLAN.

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CALCULATED	SLP	CHECKED	ALB		
GENERAL NOTES					
SUM - 271 - 8.80					
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3					
16					

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SHEET NUM.											PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED	SLP	CHECKED	ALB
3	5	6	9	16							01/MS/OT	EXT	TOTAL								
											<b>ROADWAY</b>										
LS											LS	201	11000	LS		CLEARING AND GRUBBING					
			757								757	202	23010	757	SY	PAVEMENT REMOVED, ASPHALT					
			400								400	202	38000	400	FT	GUARDRAIL REMOVED					
				17,177							17,177	203	10001	17,177	CY	EXCAVATION, AS PER PLAN					
				16,428							16,428	203	20000	16,428	CY	EMBANKMENT					
				723							723	203	35000	723	CY	GRANULAR EMBANKMENT, NO. 57 STONE					
				854							854	203	35120	854	CY	GRANULAR MATERIAL, TYPE C					
			600								600	204	10000	600	SY	SUBGRADE COMPACTION					
				4,647							4,647	204	50100	4,647	SY	GEOTEXTILE FABRIC, 712.09, TYPE A					
			4								4	209	60201	4	STA	LINEAR GRADING, AS PER PLAN				4	
											400	606	15100	400	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS					
											<b>EROSION CONTROL</b>										
				6							6	601	21050	6	SY	TIED CONCRETE BLOCK MAT, TYPE I					
541											541	659	00300	541	CY	TOPSOIL					
0.66											0.66	659	20000	0.66	TON	COMMERCIAL FERTILIZER					
1.01											1.01	659	31000	1.01	ACRE	LIME					
26											26	659	35000	26	MGAL	WATER					
4,875											4,875	671	15040	4,875	SY	EROSION CONTROL MAT, TYPE E					
											10,829	832	30000	10,829	EACH	EROSION CONTROL					
											<b>DRAINAGE</b>										
				400							400	605	11100	400	FT	6" SHALLOW PIPE UNDERDRAINS					
20											20	605	13300	20	FT	6" UNCLASSIFIED PIPE UNDERDRAINS					
											400	605	14000	400	FT	6" BASE PIPE UNDERDRAINS					
											234	611	00510	234	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS					
											594	611	01500	594	FT	6" CONDUIT, TYPE F, 707.41 (PERFORATED)					
											3	611	99710	3	EACH	PRECAST REINFORCED CONCRETE OUTLET					
											<b>PAVEMENT</b>										
				138							138	301	46000	138	CY	ASPHALT CONCRETE BASE, PG64-22					
				97							97	304	20001	97	CY	AGGREGATE BASE, AS PER PLAN				3	
				59							59	407	20000	59	GAL	NON-TRACKING TACK COAT					
				19							19	441	50701	19	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I, (448), (UNDER GUARDRAIL), AS PER PLAN				4	
				45							45	442	20051	45	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE B (448), AS PER PLAN				4	
											400	618	40100	400	FT	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)					
											<b>TRAFFIC CONTROL</b>										
				5							5	626	00110	5	EACH	BARRIER REFLECTOR, TYPE 2, 1-WAY					
				0.08							0.08	644	00104	0.08	MILE	EDGE LINE, 6"					
											<b>MAINTENANCE OF TRAFFIC</b>										
			100								100	614	11110	100	HR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE					
1											1	614	12336	1	EACH	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)					
10											10	614	12460	10	EACH	WORK ZONE MARKING SIGN					
500											500	614	12801	500	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN				5	
15											15	614	13310	15	EACH	BARRIER REFLECTOR, TYPE 1, 1-WAY					
15											15	614	13350	15	EACH	OBJECT MARKER, ONE WAY					
											2	614	18601	2	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN				6	
1.3											1.3	614	22010	1.3	MILE	WORK ZONE EDGE LINE, CLASS 1, 6"					
3,440											3,440	614	23010	3,440	FT	WORK ZONE CHANNELIZING LINE, CLASS 1, 12"					
LS											LS	615	10000	LS		ROADS FOR MAINTAINING TRAFFIC					
900											900	615	20001	900	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN				5	
											101	616	10000	101	MGAL	WATER					
730											730	622	41000	730	FT	PORTABLE BARRIER, 32"					
1.31											1.31	642	30030	1.31	MILE	REMOVAL OF PAVEMENT MARKING					
											<b>INCIDENTALS</b>										
											LS	614	11000	LS		MAINTAINING TRAFFIC					
											4	619	16010	4	MNTH	FIELD OFFICE, TYPE B					
											LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING					
											LS	624	10000	LS		MOBILIZATION					

GENERAL SUMMARY

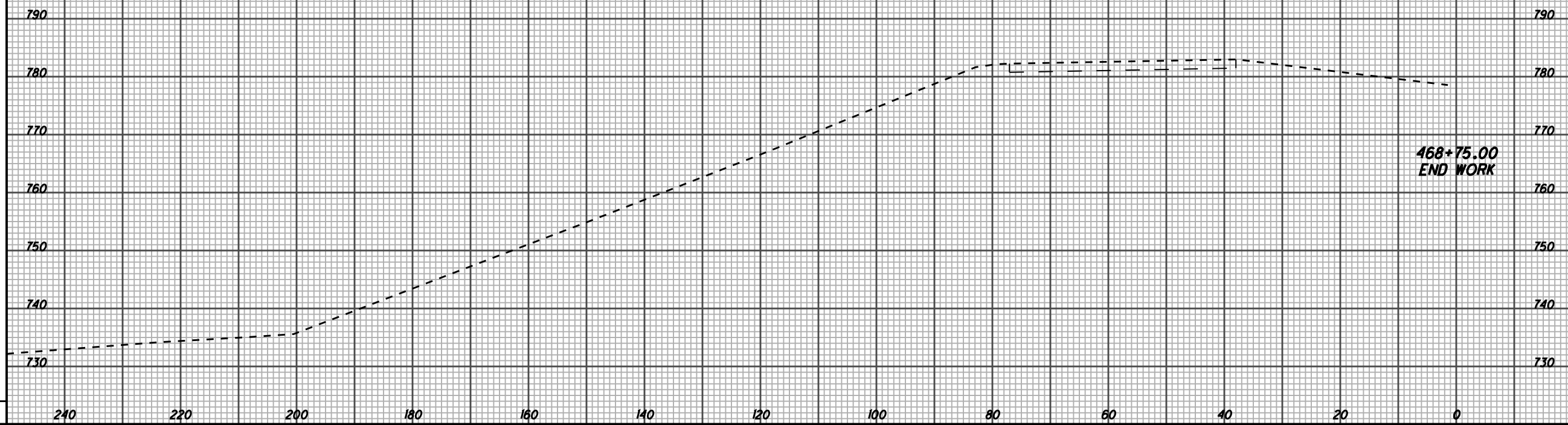
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SEEDING	
END WIDTH	SO. YDS.

END AREA		VOLUME		CALCULATED SLP	CHECKED ALB
CUT	FILL	CUT	FILL		
0	0	337	269		
337	269				

ITEM 203 - EXCAVATION, AS PER PLAN 17177 CY  
 ITEM 203 - EMBANKMENT 16428 CY  
 ITEM 203 - GRANULAR MATERIAL, TYPE C 854 CY  
 ITEM 203 - GRANULAR EMBANKMENT, (NO. 57 STONE) 723 CY  
 ITEM 204 - GEOTEXTILE FABRIC, 712.09, TYPE A 4647 SY  
 TOTALS CARRIED TO GENERAL SUMMARY, SEE SHEET 8



468+75.00  
END WORK

CROSS SECTIONS I.R. 271  
STA. 468+75.00

SUM - 271 - 8.80

16  
16