\bigoplus

 \bigoplus



2015 OPERATIONS RESURFACING PROGRAM CITY OF CLEVELAND STATE OF OHIO

INDEX OF SHEETS

TITLE SHEET	1
SCHEMATIC PLANS	2-3
TYPICAL SECTIONS	4-5
TYPICAL SECTION QUANTITY TABLES	6-7
GENERAL NOTES	8-19
GENERAL SUMMARY	20-22
PAVEMENT REPAIR DETAILS	
MAINTENANCE OF TRAFFIC DETAILS	24

APPROVED IN THE	CITY OF CLEVELAND
ORDINANCE OF CONSENT	NO. <u>195–14</u>
DACCED MA	RCH 31, 2014

TITLE SHEET	1
SCHEMATIC PLANS	2-3
TYPICAL SECTIONS	4-5
TYPICAL SECTION QUANTITY TABLES	6-7
GENERAL NOTES	8-19
GENERAL SUMMARY	20-22
PAVEMENT REPAIR DETAILS	23
MAINTENANCE OF TRAFFIC DETAILS	24

CUYAHOGA CNTY ENG CITY OF CLEVELAND CONSTRUCTION CONSTRUCTION SUPPLEMENTAL STANDARD CONSTRUCTION DRAWINGS DRAWINGS DRAWINGS **SPECIFICATIONS** NUMBER DATE NUMBER DATE NUMBER NUMBER DATE NUMBER NUMBER DATE DATE DATE BP-1.1 07-28-00 04-18-14 BP - 2.107-19-13 TC-41.10 07-19-13 BP-2.5C10-31-13 ASPH-1 07-08-08 10-31-13 07-18-08 CONC-1 07-08-08 BP - 2.2BP-2.6C BP - 2.507-19-13 TC-41.20 10-18-13 PR-1 04-14-08 BP-2.7C 10-10-08 244-ME 04-14-08 821 04-20-12 10-18-13 BP-4.1C 10-31-13 TC-42.10 CR-1 12-08-09 TC-42.20 10-18-13 BP-2.8C 10-10-08 08-03-09 BP - 3.107-18-14 CD-1BP-5.1 07-19-13 MT-95.31 07-18-14 TC-52.10 10-18-13 07-08-08 01-17-14 MH-1MT-95.32 | 07-18-14 | TC-52.20 | 07-18-14 | MB-1C 10-31-13 CB-1 07-08-08 832 01-17-14 BP - 7.107-18-14 MT-95.50 | 07-19-13 MD-1C 05-31-10 A - 50307-08-08 MT-97.10 07-18-14 07-08-08 A - 605921 04-20-12 930 MT-97.11 07-18-14 TC-82.10 10-18-13 MD-6C 10-31-13 A-695 07-08-08 01-17-14 MH - 1.101-18-13 01-18-13 MT-99.20 | 07-19-13 MH - 1.2SPECIAL PROVISIONS 07-20-12 10-31-13 DM - 4.4MH-10C MT-101.60 | 07-19-13 | MT-97.10 | 07-18-14 SEE SECTION 200 OF THE CUYAHOGA MT-97.11 07-18-14 MKG-1C 01-26-04

MKG-2C

PROJECT DESCRIPTION

THE WORK WITHIN THE LIMITS OF THIS 1.33 MILE 2015 OPERATIONS RESURFACING IMPROVEMENT INCLUDES THE REMOVAL OF THE EXISTING ASPHALT CONCRETE WEARING COURSE, THE REPAIR OF THE DETERIORATED RIGID (BRICK AND CONCRETE) BASE, AND THE REMOVAL & REPLACEMENT OF DETERIORATED CURB AND ABUTTING DRIVE APRONS; THE CONSTRUCTION OF A UNIFORM THREE INCH (3") ASPHALT CONCRETE OVERLAY; THE INSTALLATION OF ADA COMPLIANT CURB RAMPS AND OTHER RELATED ITEMS AS SHOWN ON THE PLANS OR STIPULATED IN THE SPECIFICATIONS, PLAN NOTES PROPOSAL NOTES OR ELSEWHERE IN THE BID PACKAGE FOR WOODHILL ROAD (C.R. 398) FROM KINSMAN ROAD TO QUINCY AVENUE IN THE CITY OF CLEVELAND, OHIO.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA..... < 1 ACRE

ESTIMATED CONTRACTOR

EARTH DISTURBED AREA N/A (MAINTENANCE PROJECT)

NOTICE OF INTENT

EARTH DISTURBED AREA N/A (MAINTENANCE PROJECT)

2013 SPECIFICATIONS

THE STANDARD CONSTRUCTION AND MATERIAL SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, SHALL GOVERN THIS IMPROVEMENT EXCEPT WHEN MODIFIED BY THE PLANS, SPECIAL PROVISIONS, SUPPLEMENTAL SPECIFICATIONS OR PROPOSAL NOTES.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING OF THE HIGHWAY TO TRAFFIC AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

BONITA G. TEEUWEN, P.E. DIRECTOR OF PUBLIC WORKS

DIRECTOR OF PUBLIC WORKS

DATE

DATE

EDWARD FITZGERALD CUYAHOGA COUNTY EXECUTIVE

CUYAHOGA COUNTY EXECUTIVE



AD

MUST BE CALLED DIRECTLY - AND -CALL 1-800-925-0988 (TOLL FREE) OHIO OIL & GAS PRODUCERS

- CARNEGIE

QUINCY

WOODLAND

RTA SHAKER

BEGIN PROJECT

STA. 11+00

PROJECT LOCATION

COUNTY AND OTHER ROADS

SHAKER

NOT TO SCALE

LOCATION MAP

INTERSTATE, U.S. AND STATE ROUTES

UNDERGROUND UTILITIES

TWO (2) WORKING DAYS

BEFORE YOU DIG

CALL 1-800-362-2764 (TOLL FREE) OHIO UTILITIES PROTECTION SERVICE

NON MEMBERS

LATITUDE: 41°-28'-58"N LONGITUDE: 81°-37'-04"W

I RAPID TRANSIT

BUCKEYE

RESUME PROJECT

STA. 55+89

SUSPEND PROJECT

STA. 47+38

ENGINEER'S SEAL

MT-105.10 | 07-19-13

END PROJECT

STA. 91+00

STA. 73+58

STA. 72+18

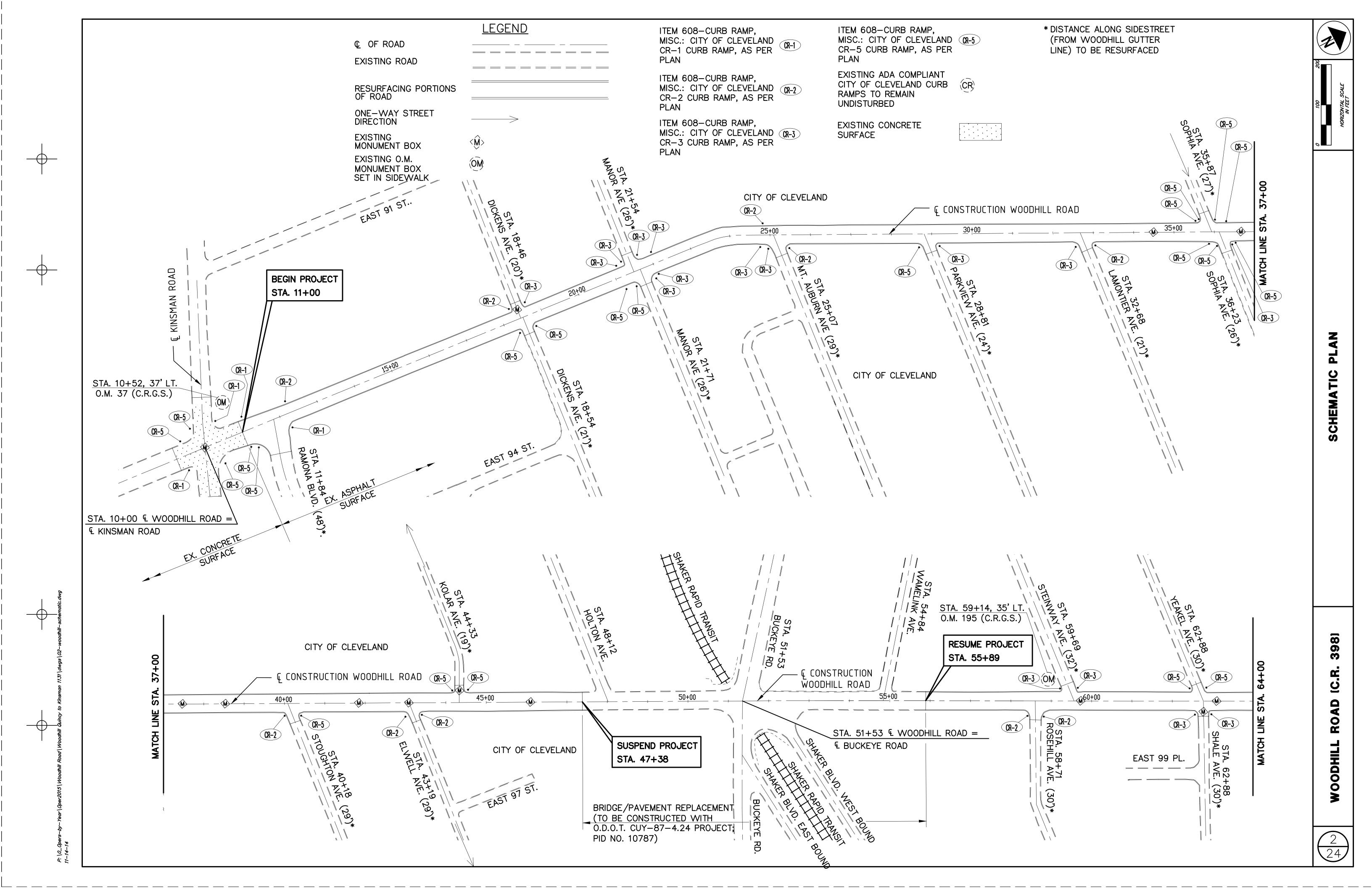
RESUME PROJECT

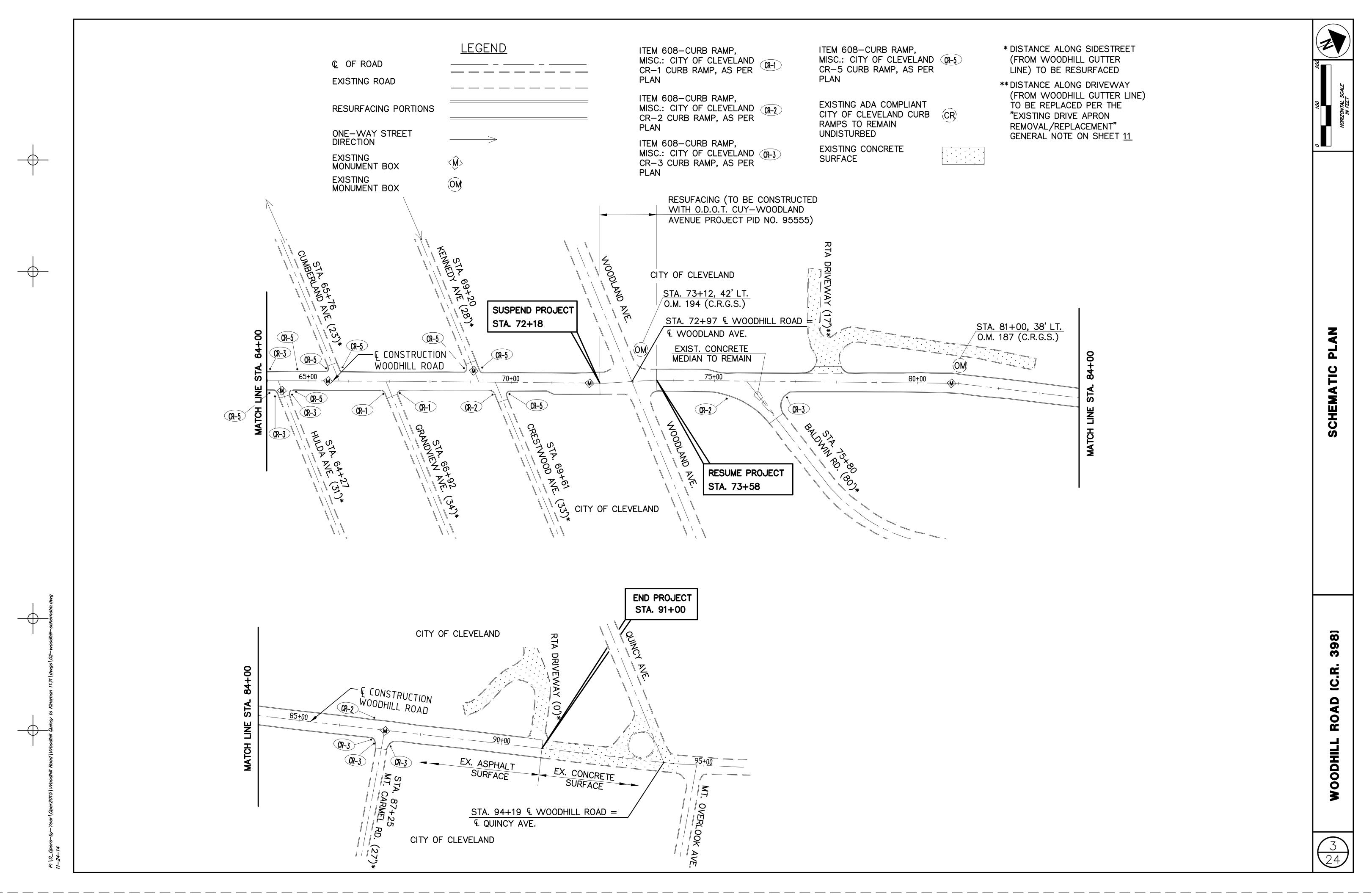
SUSPEND PROJECT

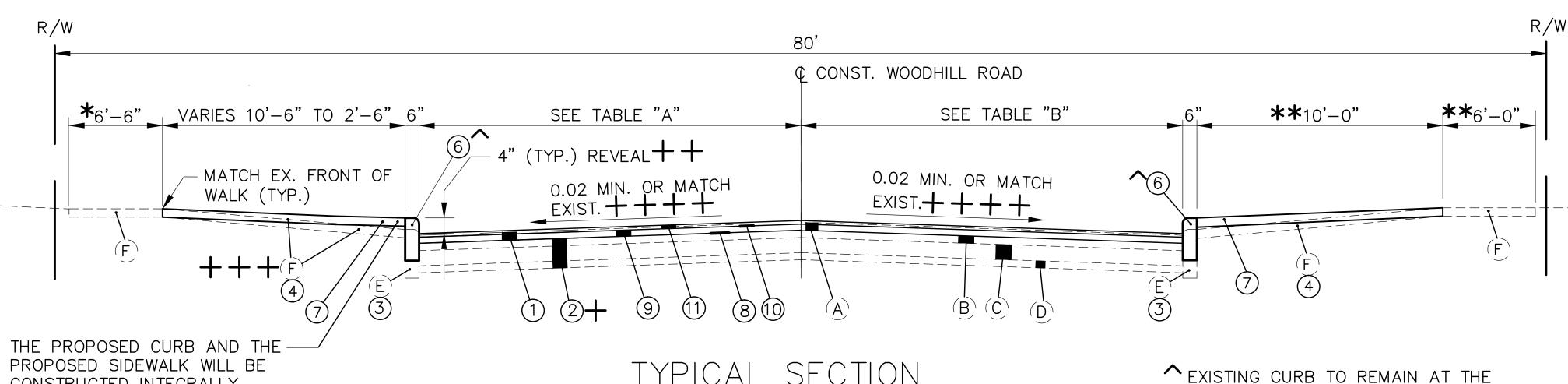
OHIO DEPARTMENT OF TRANSPORTATION

COUNTY ENGINEER SPECIFICATION BOOKLET 11-08-13 IN THE BID PACKAGE

O.D.O.T.







PROPOSED SIDEWALK WILL BE CONSTRUCTED INTEGRALLY (CLASS QC MS) AS PER THE CITY OF CLEVELAND'S CONSTRUCTION DRAWING CD-1 WHEN THE EXISTING CURB AND

SIDEWALK ARE INTEGRAL

TYPICAL SECTION

NO SCALE

STA. 11+00 (BEGIN PROJECT) TO STA. 11+84 STA. 73+58 (RESUME PROJECT) TO STA. 75+20 EXISTING CURB TO REMAIN AT THE FOLLOWING APPROX. LOCATIONS:

STA. 11+00 TO STA. 11+84 (RT.)

STA. 73+58 TO STA. 74+37 (LT.)

STA. 73+58 TO STA. 75+20 (RT.)

TABLE "A" EXISTING AVERAGE WIDTHS

STA. 11+00 TO STA. 11+70	28'-6"
STA. 11+70 TO STA. 11+84	28'-6" TO 22'-6"
STA. 73+58 TO STA. 74+95	30'-6"
STA. 74+95 TO STA. 75+20	30'-6" TO 22'-6"

TABLE "B" EXISTING AVERAGE WIDTHS

STA.	11+00	ТО	STA.	11+84	30'-6"
STA.	73+58	ТО	STA.	75+20	22'-6"
STA.	60+87	ТО	STA.	61+70.00	20'-6"

NOTES:

- ★ FROM STA. 11+00 LT. TO STA. 11+84 LT. EXISTING WALK IS APPROX. 6'-0" WIDE.
- ** FROM STA. 11+00 RT. TO STA. 11+84 RT. THE EXISTING COMBINED CONCRETE TREE LAWN/WALK ADJACENT TO CURB IS APPROX. 8'-0" WIDE.

LEGEND

- (1) ITEM 202 WEARING COURSE REMOVED
- + 2 PAVEMENT REPAIR
 - (3) ITEM 202 CURB REMOVED
- 4) ITEM 202 WALK REMOVED
- (5) ITEM 203 EXCAVATION
- 6 ITEM 609 CURB, TYPE 6 USING CLASS QC MS CONCRETE, AS PER PLAN
- (7) ITEM 608 4" CONCRETE WALK, AS PER PLAN
- (8) ITEM 407 TACK COAT, TRACKLESS TACK, AS PER PLAN
- 9 ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22, AS PER PLAN (1-3/4)
- (O) ITEM 407 TACK COAT, TRACKLESS TACK,
 INTERMEDIATE COURSE, AS PER PLAN
- 11) ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN (1-1/4")
- (12) ITEM 209 LINEAR GRADING, AS PER PLAN
- (3) ITEM 659 SEEDING AND MULCHING, AS PER PLAN
- \widehat{A} EXISTING ASPHALT (2" TO 6"; 3" AVG.)
- (\widehat{B}) EXISTING BRICK (0" TO 5"; 5" AVG.)
- $\widehat{(C)}$ EXISTING CONCRETE (0" TO 16"; 8" AVG.)
- (D) EXISTING (GRAVEL/SAND) SUBBASE (O" TO 7"; 4" AVG.)
- (È) EXISTING NON-INTEGRAL SANDSTONE/CONCRETE/ GRANITE CURB
- (F) EXISTING CONCRETE/ SANDSTONE WALK
- (\widehat{G}) EXISTING ASPHALT TREE LAWN

PAVEMENT CORE TAKEN BETWEEN STA. 18+46 AND STA. 21+54 INDICATES 2" OF LSM UNDER THE EXISTING BRICK AND NO EXISTING CONCRETE BASE OR SUBBASE.

- + SEE "PAVEMENT REPAIR" PLAN NOTE (SHEET <u>15</u>) AND "PAVEMENT REPAIR DETAILS" (SHEET <u>23</u>) FOR ASSOCIATED PAY ITEMS AND ESTIMATED QUANTITIES TO BE USED AS DIRECTED BY THE ENGINEER.
- + + CURB REVEAL MAY VARY FROM A 4" MINIMUM TO A 6"
 MAXIMUM WHILE THE RESULTANT TREE LAWN SLOPE MAY
 VARY FROM A 0.02 MINIMUM SLOPE TO A 0.08 MAXIMUM
 TREE LAWN SLOPE; ALL AS DIRECTED OR OTHERWISE
 APPROVED BY THE ENGINEER.
- +++FROM STA. 74+95 LT. TO STA. 75+20 LT., EXISTING TREE LAWN COMPOSITION IS GRASS AND TAPERS FROM A WIDTH OF 2'-6" TO 10'-6". USE ITEM 12 AND ITEM 13 INSTEAD OF ITEMS 4 AND 7.
- ++++ AS DIRECTED BY THE ENGINEER, ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22, AS PER PLAN (VARIABLE THICKNESS; 1/2 " AVG. ESTIMATED) MAY BE USED BETWEEN ITEM 9 AND B AS A LEVELING COURSE FOR CROWN CORRECTION OR FOR ESTABLISHING A MINIMUM 0.02 CROSS SLOPE.

 \bigoplus

LEGEND

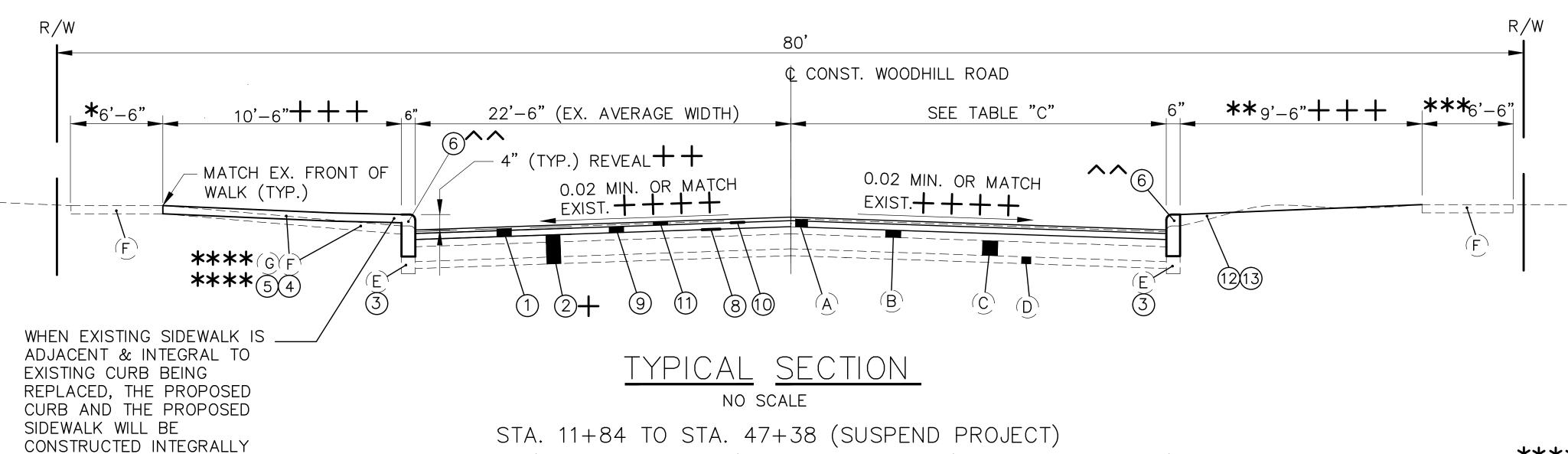
- (1) ITEM 202 WEARING COURSE REMOVED
- + (2) PAVEMENT REPAIR
 - (3) ITEM 202 CURB REMOVED
 - (4) ITEM 202 WALK REMOVED
- **** 5 ITEM 203 EXCAVATION
 - 6 ITEM 609 CURB, TYPE 6 USING CLASS QC MS CONCRETE, AS PER PLAN
 - (7) ITEM 608 4" CONCRETE WALK, AS PER PLAN
 - (8) ITEM 407 TACK COAT, TRACKLESS TACK, AS PER PLAN
 - 9 ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22, AS PER PLAN (1-3/4")
 - (O) ITEM 407 TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE, AS PER PLAN
 - 1) ITEM 448 ASPHALT CONCRETE SURFACE COURSE,

 TYPE 1, PG70-22M, AS PER PLAN (1-1/4")
 - (12) ITEM 209 LINEAR GRADING, AS PER PLAN
 - (3) ITEM 659 SEEDING AND MULCHING, AS PER PLAN
 - \widehat{A}) EXISTING ASPHALT (2" TO 6"; 3" AVG.)
 - (\widehat{B}) EXISTING BRICK (0" TO 5"; 5" AVG.)
 - (C) EXISTING CONCRETE (O" TO 16"; 8" AVG.)
 - \widehat{D} EXISTING (GRAVEL/SAND) SUBBASE (0" TO 7"; 4" AVG.)
 - (È) EXISTING NON-INTEGRAL SANDSTONE/CONCRETE/ GRANITE CURB
 - (F) EXISTING CONCRETE / SANDSTONE WALK
- $****(\widehat{G})$ Existing asphalt tree Lawn

PAVEMENT CORE TAKEN BETWEEN STA. 18+46 AND STA. 21+54 INDICATES 2" OF LSM UNDER THE EXISTING BRICK AND NO EXISTING CONCRETE BASE OR SUBBASE.

PAVEMENT CORE TAKEN BETWEEN STA. 75+80 AND STA. 87+25 INDICATES 1" OF LSM BETWEEN THE EXISTING CONCRETE BASE AND THE EXISTING SUBBASE.

- + SEE "PAVEMENT REPAIR" PLAN NOTE (SHEET _15_) AND "PAVEMENT REPAIR DETAILS" (SHEET _23_) FOR ASSOCIATED PAY ITEMS AND ESTIMATED QUANTITIES TO BE USED AS DIRECTED BY THE ENGINEER.
- + + CURB REVEAL MAY VARY FROM A 4" MINIMUM TO A 6" MAXIMUM WHILE THE RESULTANT TREE LAWN SLOPE MAY VARY FROM A 0.02 MINIMUM SLOPE TO A 0.08 MAXIMUM TREE LAWN SLOPE; ALL AS DIRECTED OR OTHERWISE APPROVED BY THE ENGINEER.
- +++ EXISTING TREE LAWN COMPOSITIONS VARY FROM BEING GRASS, CONCRETE OR ASPHALT.
- ++++ AS DIRECTED BY THE ENGINEER, ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22, AS PER PLAN (VARIABLE THICKNESS; 1/2 " AVG. ESTIMATED) MAY BE USED BETWEEN ITEM (9) AND (B) AS A LEVELING COURSE FOR CROWN CORRECTION OR FOR ESTABLISHING A MINIMUM 0.02 CROSS SLOPE.



STA. 55+89 (RESUME PROJECT) TO STA. 72+18 (SUSPEND PROJECT)

STA. 75+20 TO STA. 91+00 (END PROJECT)

TABLE "C" EXIS	STING AVERAGE	WIDTHS
STA. 11+84 TO STA. 47-	+38 22'-6"	
STA. 55+89 TO STA. 70	+75 22'-6"	
STA. 70+75 TO STA. 70	+98 22'-6"	TO 30'-6"
STA. 70+98 TO STA. 72	+18 30'-6"	
STA. 75+20 TO STA. 91-	+00 22'-6"	

EXISTING CURB TO REMAIN AT THE FOLLOWING APPROX. LOCATIONS: STA. 27+15 TO STA. 35+94 (LT.) STA. 75+20 TO STA. 75+80 (RT.) STA. 85+26 TO STA. 86+26 (RT.) STA. 87+80 TO STA. 89+80 (LT.) STA. 90+79 TO STA. 91+00 (LT.)

NOTES:

(CLASS QC MS) AS PER THE

CONSTRUCTION DRAWING CD-1

CITY OF CLEVELAND'S

- ** FROM STA. 70+98 RT. TO STA. 72+18 RT. THE EXISTING COMBINED CONCRETE TREE LAWN/WALK ADJACENT TO CURB IS APPROX. 8'-0" WIDE.
- *** FROM STA. 75+20 RT. TO STA. 91+00 RT. THE EXISTING TREE LAWN WIDTH IS 10'-0" AND THE EXISTING WALK WIDTH IS 6'-0".
- **** WHEN EXISTING TREE LAWNS ARE ASPHALT, REMOVE USING ITEM 5 PRIOR TO REPLACING WITH ITEM 7.

PR	OPOSED	PAVEN	MENT	DATA	ATA EXISTING TREELAWN DATA													ITEMIZ	ED QUAN	ITITIES (*** CONT	INGENCY	(QUANTI	TY)		-ATED G KED
STATION TO STATION	SIDE	MENT LENGTH (FT.)	PVMT. WIDTH (FT.)	AVEMENT AREA (SQ. FT.)	AVEMENT AREA (SQ. YD.)	PAVED TREELAWN LENGTH (FT.)	PAVED TREELAWN VG. WIDTH (FT.)	PAVED TREELAWN AREA (SQ. FT.)	SEEDED TREELAWN LENGTH (FT.)	SEEDED TREELAWN VG. WIDTH (FT.)	SEEDED TREELAWN AREA (SQ. FT.)	WEARING COURSE COURSE	CURB CORED CO	WALK REMOVED	EXCAVATION EXCAVATION	CURB, TYPE 6 USING CLASS QC MS CONCRETE, APP	RETE PER	TACK COAT, RACKLESS TACK, AS PER PLAN (0.10 GAL/SY)	ASPHALT CONC. INTERMEDIATE OURSE, TYPE 2, 45 PG64-22, 00 AS PER PLAN	TACK COAT, ACKLESS TACK, A INTERMEDIATE OURSE, AS PER	SPHALT CONC. SURFACE DURSE, TYPE 1, 45 370-22M, 00	INEAR GRADING, DAS PER PLAN 6	SEEDING AND MULCHING, 93		ASPHALT CONC. INTERMEDIATE COURSE, TYPE 1, PG64-22, AS PER PLAN ***	CALCULA CAG CHECKE
		PAVEN	AVG.	۵	۵	EX.	EX.	EX.	EX.	EX.	EX.	(SQ. YD.)	(FT.)	(SQ. FT.)	(CU. YD.)		(SQ. FT.)	⊬ ← ∪ (GAL.)	(CU. YD.)	(GAL.)	(CU. YD.)	(SQ. YD.)	(SQ. YD.)		(CU. YD.)	
11+00 TO 11+70	LT.	70	28.5	1,995	222	70	5	350	_	_	_	222	70	350	_	70	350	22.2	11	8.9	8	_	_		3	1
11+70 TO 11+84	LT.	14	25.5	357	40	14	7.75	109	_	_	_	40	14	109	_	14	109	4.0	2	1.6	2	_	_		1	ES
11+84 TO 27+15	LT.	1,531	22.5	34,448	3,828	105	10.5	1,103	1,426	10.5	14,973	3,828	1,531	1,103	_	1,531	1,103	382.8	186	153.1	133	1,664	1,664		54	
27+15 TO 35+94	LT.	879	22.5	19,778	2,198	_	_	_	879	10.5	**9,230	2,198	_	_	_	_	_	219.8	107	87.9	77	_	_		31	
35+94 TO 47+38	LT.	1,144	22.5	25,740	2,860	258	10.5	2,709	697	10.5	7,319	2,860	1,144	2,709	_	1,144	2,709	286.0	139	114.4	100	814	814		40	
						189	10.5	*1,985	_	_	_	_	_	_	25	_	1,985	_	_	_	_	_	_		_	
11+00 TO 11+84	RT.	84	30.5	2,562	285	84	8	**672	_	_	_	285	_	_	_	_	_	28.5	14	11.4	10	_	_		4	
11+84 TO 28+81	RT.	1,697	22.5	38,183	4,243	750	9.5	7,125	947	9.5	8,997	4,243	1,697	7,125	_	1,697	7,125	424.3	207	169.7	148	1,000	1,000		59	
28+81 TO 47+38	RT.	1,857	22.5	41,783	4,643	518	9.5	4,921	1,252	9.5	11,894	4,643	1,857	4,921	_	1,857	4,921	464.3	226	185.7	162	1,322	1,322		65	
						87	9.5	*827	_	_	_	_	_	_	11	_	827	_	_	_	_	_	_		_	
55+89 TO 59+69	LT.	380	22.5	8,550	950	17	10.5	179	359	10.5	3,770	950	380	179	_	380	179	95.0	47	38.0	33	419	419		14] -
						4	10.5	*42	_	_	_	_	_	_	1	_	42	_	_	_	_	_	_		-	
59+69 TO 62+88	LT.	319	22.5	7,178	798	97	10.5	*1,019	222	10.5	2,331	798	319	_	13	319	_	79.8	39	31.9	28	259	259		11	
62+88 TO 65+76	LT.	288	22.5	6,480	720	178	10.5	1,869	110	10.5	1,155	720	288	1,869	_	288	1,869	72.0	35	28.8	25	129	129		10]
65+76 TO 72+18	LT.	642	22.5	1,244	1,605	246	10.5	2,583	208	10.5	2,184	1,605	642	2,583	_	642	2,583	160.5	78	64.2	56	243	243		23	
						188	10.5	*1,974	_	_	_	-	_	_	25	_	1,974	_	_	_	_	_	_		_	
55+89 TO 70+75	RT.	1,486	22.5	33,435	3,715	283	9.5	2,689	1,203	9.5	11,429	3,715	1,486	2,689	_	1,486	2,689	371.5	181	148.6	129	1,270	1,270		52	
70+75 TO 70+98	RT.	23	26.5	610	68	23	9.5	219	_	_	_	68	23	219	_	23	219	6.8	4	2.7	3	_	_		1	
70+98 TO 72+18	RT.	120	30.5	3,660	407	120	9.5	1,140	_	_	_	407	120	1,140	_	120	1,140	40.7	20	16.3	15	_	_		6	_
73+58 TO 74+37	LT.	79	30.5	2,410	268	70	2.5	**198	_	_	_	268	_		_			26.8	13	10.7	10		_		4	
74+37 TO 74+95	LT.	58	30.5	1,769	197	58	2.5	145	_	_	_		58	145	_	50	145				10	_			7	}
74+37 TO 74+95 74+95 TO 75+20	LT.	25	26.5	663	74		2.5	145	25	6.5	163	197 	25	145	_	58	145	19.7 	10	7.9 3.0	7	10	10		1	
75+20 TO 87+80	LT.	1,260	22.5	28,350	3,150	29	10.5	305	1,231	10.5	12,926	3,150	1,260	305	_	1,260	305	315.0	154	126.0	110	1,437	1,437		44	'
87+80 TO 89+80	LT.	200	22.5	4,500	500	_	-	_	200	10.5	**2,100	500	-		_	- 1,200	_	50.0	25	20.0	18	-	-		7	9
89+80 TO 90+79	LT.	99	22.5	2,228	248	_	_	_	99	10.5	1,040	248	99	_	_	99	_	24.8	12	9.9	9	116	116		4	
90+79 TO 91+00	LT.	21	22.5	473	53	_	_	_	21	10.5	**221	53	_	_	_	_	_	5.3	.3	2.1	2	_	_		1	6
		<u></u>		.,,							221									۷٠١					'	
73+58 TO 75+80	RT.	222	22.5	4,995	555	222	10	**2,220	_	_	_	555	_	_	_	_	_	55.5	27	22.2	20	_	_		8	
75+80 TO 85+26	RT.	946	22.5	21,285	2,365	14	10	140	932	10	9,320	2,365	946	140	_	946	140	236.5	115	94.6	83	1,036	1,036		33	}
85+26 TO 86+26	RT.	100	22.5	2,250	250	16	10	**160	84	10	**840	250	_	_	_	_	_	25.0	13	10.0	9	_	_		4	
86+26 TO 91+00	RT.	474	22.5	10,665	1,185	65	9.5	618	409	9.5	3,886	1,185	474	618	_	474	618	118.5	58	47.4	42	432	432		17	
* AREAS OF EX	ISTING T	TREE LA	AWNS	PAVED	WITH A	ASPH	ALT IN	STEAD	O OF	CONC	RETE.															
** AREAS NOT	DISTURB	BED SIN	ICE E	XISTING	CURB	TO R	EMAIN.	•																		
		T	OTALS	S CARRI	IED TO	SHEE	T NO.	:				35,427	12,433	26,204	75	12,433	31,032	3,543	1,730	1,417	1,242	10,160	10,160		500] \2

		PROF	OSED	PAVEN	IENT DAT	A							[TEMIZED	QUANTIT	TIES (***	CONTINGE	ENCY QL	JANTITY	<u>()</u>			-ATED
STATION TO STATION	SIDE	VEMENT LENGTH (FT.)	AVMENT WIDTH (FT.)	PAVEMENT AREA (SQ. FT.)		DIUS RETURNS AREA (SQ. FT.)	TAL PAVEMENT AREA (SQ. FT.)	TAL	WEARING COURSE COURSE COURSE	CURB REMOVED 20	WALK REMOVED	EXCAVATION EXCAVATION	LINEAR GRADING, CO AS PER PLAN	TACK COAT, TRACKLESS TACK, 6 AS PER PLAN 4 (0.10 GAL/SY)	TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE, AS PER PLAN (0.04 GAL/SY)	ASPHALT CONC. INTERMEDIATE COURSE, TYPE 2, PG64-22, AS PER PLAN	ASPHALT CONC. SURFACE COURSE, TYPE 1, P PG64-22, © AS PER PLAN	ASPHALT CONC. SURFACE COURSE, TYPE 1, 45 PG70-22M, 00	4" CONCRETE ON WALK, AS PER O PLAN	CURB, TYPE 6 USING CLASS QC MS CONCRETE, AS PER PLAN	SEEDING AND ON MULCHING, CT AS PER PLAN	ASPHALT CONC. INTERMEDIATE COURSE, TYPE 1, P	<u>√</u> 3
ADDING EXTRA AREAS		P A	۵			\ \A	2	2	(SQ. YD.)	(FT.)	(SQ. FT.)	(CU. YD.)	(SQ. YD.)	(GAL.)	(GAL.)	(CU. YD.)	(CU. YD.)	(CU. YD.)	(SQ. FT.)	(FT.)	(SQ. YD.)	(CU. YD.)	.)
FOR INTERSECTIONS:																							
RAMONA BLVD.	RT.	48	53	2,544		1,296	3,840	427	427	63	_	_	_	42.7	17.1	21	15	_	_	63	_	_	_
DICKENS AVE.	LT.	20	27	540		120	660	74	74	44	_	_	_	7.4	3.0	4	3	_	_	44	_	_	_
DICKENS AVE.	RT.	21	27	567		147	714	80	80	47	_	_	_	8.0	3.2	4	3	_	_	47	_	_	_
MANOR AVE.	LT.	26	27	702		125	827	92	92	65	_	_	_	9.2	3.7	5	4	_	_	65	_	_	_
MANOR AVE.	RT.	26	29	754		186	940	105	105	64	_	_	_	10.5	4.2	6	4	_	_	64	_	_	_
MT. AUBURN AVE.	RT.	29	29	841		172	1,013	113	113	75	_	_	_	11.3	4.5	6	4	_	_	75	_	_	
PARKVIEW AVE.	RT.	24	30	720		200	920	103	103	59	_	_	_	10.3	4.1	5	4	-	_	59	_	_	_
LAMONTIER AVE.	RT.	21	30	630		168	798	89	89	49	_	_	_	8.9	3.6	5	3	_	_	49	_	_	4
SOPHIA AVE.	LT.	27	26	702		127	829	93	93	29	_	_	_	9.3	3.7	5	4	_	_	29	_	_	
SOPHIA AVE.	RT.	26	27	702		121	823	92	92	57	_	_	_	9.2	3.7	5	4	_	_	57	_	_	_
STOUGHTON AVE.	RT.	29	27	783		104	887	99	99	66	_	_	_	9.9	4.0	5	4	_	_	66	_	_	
ELWELL AVE.	RT.	29	23	667		158	825	92	92	67	_	_	_	9.2	3.7	5	4	_	_	67	_	_	
KOLAR AVE.	LT.	19	20	380		54	434	49	49	44	_	_	_	4.9	2.0	3	2	_	_	44	_	_	
ROSEHILL AVE.	RT.	30	26	780		175	955	107	107	76	_	_	_	10.7	4.3	6	4	_	_	76	_	_	
STEINWAY AVE.	LT.	32	31	992		203	1,195	133	133	67	_	_	_	13.3	5.3	7	5	_	_	67	_	_	
YEAKEL AVE.	LT.	30	25	750		220	970	108	108	69	_	_	_	10.8	4.3	6	4	_	_	69	_	_	
SHALE AVE.	RT.	30	25	750		107	857	96	96	66	_	_	_	9.6	3.8	5	4	_	_	66	_	_	
HULDA AVE.	RT.	31	23	713		168	881	98	98	72	_	_	_	9.8	3.9	5	4	_	_	72	_	_	
CUMBERLAND AVE.	LT.	23	25	575		123	698	78	78	49	_	_	_	7.8	3.1	4	3	_	_	49	-	_	
GRANDVIEW AVE.	RT.	34	25	850		144	994	111	111	78	_	_	_	11.1	4.4	6	4	_	_	78	_	_	
KENNEDY AVE.	LT.	28	25	700		112	812	91	91	63	_	_	_	9.1	3.6	5	4	_	_	63	_	_	
CRESTWOOD AVE.	RT.	33	24	792		85	877	98	98	77	_	_	_	9.8	3.9	5	4	_	_	77	_	_	
BALDWIN RD.	RT.	80	42	3,360		4,309	7,669	853	853	95	_	_	_	85.3	34.1	42	30	_	_	95	_	_	
MT. CARMEL RD.	RT.	27	27	729		342	1,071	119	119	67	_	_	_	11.9	4.8	6	5	_	_	67	_	_	
SUBTRACTING F	FOR EXIS	STING	CONC	RETE M	EDIAN (TO	REMAIN) IN	BALDWIN:		(-58)	_	_	_	_	(-5.8)	(-2.3)	(-3)	(-2)	_	_	_	_	_	
TOTALS CARRIE	D OVER	FROM	SHE	ET NO	<u>6</u> :				35,427	12,433	26,204	75	10,160	3,543	1,417	1,730	_	1,242	31,032	12,433	10,160	500	
SUBTRACTING F	FOR INTI	ERSEC1	TIONS:	•						(-1,468) –	_	(-1,621)		-	_	_		_	(-1,468)	(-1,621)	_	
SUBTRACTING F	FOR DRI	VE APF	RONS:	<u> </u>						_	_	_	(-1,976)	_	-	_	_		_	_	(-1,976)	_	
							TOTALS:		38,769	12,473	26,204	75	6,563	3,877.2	1,550.7	1,903	127	1,242	31,032	12,473	6,563	500	
		T	PIATO	S CARRI	ED TO TH	HE GENERAL S	UMMARY:		38,770	12,480	26,210	75	6,570	3,880	1,560	1,910	130	1,250	31,040	12,480	6,570	500	┤

GENERAL

SCOPE OF WORK

THE WORK WITHIN THE LIMITS OF THIS 1.33 MILE 2015 OPERATIONS RESURFACING IMPROVEMENT INCLUDES THE REMOVAL OF THE EXISTING ASPHALT CONCRETE WEARING COURSE, THE REPAIR OF THE DETERIORATED RIGID (BRICK AND CONCRETE) BASE, AND THE REMOVAL & REPLACEMENT OF DETERIORATED CURB AND ABUTTING DRIVE APRONS; THE CONSTRUCTION OF A UNIFORM THREE INCH (3") ASPHALT CONCRETE OVERLAY; THE INSTALLATION OF ADA COMPLIANT CURB RAMPS AND OTHER RELATED ITEMS AS SHOWN ON THE PLANS OR STIPULATED IN THE SPECIFICATIONS, PLAN NOTES, PROPOSAL NOTES OR ELSEWHERE IN THE BID PACKAGE FOR WOODHILL ROAD (C.R. 398) FROM KINSMAN ROAD TO QUINCY AVENUE IN THE CITY OF CLEVELAND, OHIO.

UTILITIES

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

CITY OF CLEVELAND DEPARTMENT OF PUBLIC WORKS 500 LAKESIDE AVENUE CLEVELAND, OHIO 44114 ATTN: MICHAEL E. COX, DIRECTOR PHONE: (216) 664-2485 FAX: (216) 664-4086 EMAIL: MCOX@CITY.CLEVELAND.OH.US

CITY OF CLEVELAND DIVISION OF WATER 1201 LAKESIDE AVENUE, 6th FLOOR CLEVELAND, OHIO 44114 ATTN: TINA GOSHA PHONE: (216) 664-2444 EXT. 5526 FAX: (216) 664-2838 EMAIL: TINA_GOSHA@CLEVELANDWATER.COM

DOMINION EAST OHIO 320 SPRINGSIDE DRIVE, SUITE 320 AKRON, OHIO 44333 ATTN: BRYAN D. DAYTON PHONE: (330) 664-2409 EMERGENCY: 1-800-362-7557 FAX: (800) 504-0126 EMAIL: RELOCATION@DOM.COM

CITY OF CLEVELAND DIVISION OF TRAFFIC ENGINEERING 601 LAKESIDE AVENUE. ROOM 25 CLEVELAND, OHIO 44114 ATTN: ROBERT MAVEC PHONE: (216) 664-3197 FAX: (216) 664-3167 EMAIL: RMAVEC@CITY.CLEVELAND.OH.US

CITY OF CLEVELAND DIVISION OF WATER POLLUTION CONTROL 12302 KIRBY AVENUE CLEVELAND, OHIO 44108 ATTN: ELIE RAMY PHONE: (216) 664-2756 FAX: (216) 664-3477 EMAIL: ERAMY@CLEVELANDWPC.COM

CITY OF CLEVELAND DEPARTMENT OF PUBLIC SAFETY 601 LAKESIDE AVENUE, ROOM 230 CLEVELAND, OHIO 44114 ATTN: MICHAEL McGRATH, DIRECTOR PHONE: (216) 664-2200 FAX: (216) 664-3734 EMAIL: MMCGRATH@CITY.CLEVELAND.OH.US

CITY OF CLEVELAND DIVISION OF CLEVELAND PUBLIC POWER 1300 LAKESIDE AVENUE, ROOM 152 CLEVELAND, OHIO 44114 ATTN: CHRISTOPHER M. HIRZEL, P.E., P.S. PHONE: (216) 664-3922 EXT. 115

FAX: (216) 664-2972 EMAIL: CHIRZEL@CPP.ORG

AT&T OHIO 13630 LORAIN AVENUE - 2nd FLOOR CLEVELAND, OHIO 44111 ATTN: JAMES JANIS, MANAGER PHONE: (216) 476-6142 FAX: (216) 476-6016 EMAIL: PJ8191@ATT.COM

FIRST ENERGY 6896 MILLER ROAD, SUITE 110 BRECKSVILLE, OHIO 44141 ATTN: MARK E. ROBINSON PHONE: (440) 717-6845 FAX: (440) 546-8780 EMAIL: ROBINSONME@FIRSTENERGYCORP.COM

TIME WARNER CABLE 8150 DOW CIRCLE STRONGSVILLE, OHIO 44136 ATTN: PAUL SILVESTRO, CONSTRUCTION COORDINATOR PHONE: (216) 575-8016 EXT. 5034 CELL: (216) 854-0717 FAX: (440) 826-2940 EMAIL: PAUL.SILVESTRO@TWCABLE.COM

NORTHEAST OHIO REGIONAL SEWER DISTRICT (NEORSD) 3900 EUCLID AVENUE CLEVELAND, OHIO 44115-2504 ATTN: MARY MACIEJOWSKI, PERMIT PROGRAM MANAGER PHONE: (216) 881-6600 FAX: (216) 881-2738 EMAIL: MACIEJOWSKIM@NEORSD.ORG

CITY OF CLEVELAND MAYOR'S OFFICE OF CAPITAL PROJECTS 601 LAKESIDE AVENUE, ROOM 113 CLEVELAND, OHIO 44114 ATTN: MATT SPRONZ, DIRECTOR PHONE: (216) 664-2231 FAX: (216) 664-2198 EMAIL: MSPRONZ@CITY.CLEVELAND.OH.US

CLEVELAND DEPARTMENT OF PUBLIC UTILITIES CARL B. STOKES BUILDING 1201 LAKESIDE AVENUE CLEVELAND, OHIO 44114 ATTN: PAUL BENDER, DIRECTOR PHONE: (216) 664-2444 FAX: (216) 664-3454 EMAIL: PBENDER@CITY.CLEVELAND.OH.US

CALL OHIO OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE (OGPUPS) TOLL FREE NO. 1-800-925-0988 CALL OHIO UTILITIES PROTECTION SERVICE TWO (2) WORKING DAYS BEFORE YOU DIG TOLL FREE NO. 1-800-362-2764 (NON-MEMBERS MUST BE CALLED DIRECTLY)

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT IS ANTICIPATED TO ONLY INVOLVE CASTING ADJUSTMENTS OF ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

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 SUBSIDIARY AGREEMENT GOVERNING COMPLETION OF THIS PROJECT.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION, AND OPERATION (INCLUDING ERECTION, MAINTENANCE AND REMOVAL) OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS, EXCEPT WHERE OTHERWISE NOTED, SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

EXISTING TYPICAL SECTIONS

EXISTING TYPICAL SECTIONS HAVE BEEN DEVELOPED FROM SITE MEASUREMENTS, PAVEMENT CORES AND RECORD PLANS AND ARE BELIEVED TO REPRESENT THE WIDTH AND COMPOSITION OF THE EXISTING PAVEMENT, BUT THE COUNTY DOES NOT GUARANTEE THE ACCURACY OF SAME. A COPY OF PAVEMENT CORE DATA FOR WOODHILL ROAD IS INCLUDED UNDER SECTION 500 OF THE "CUYAHOGA COUNTY ENGINEER SPECIFICATION BOOKLET" CONTAINED IN THE BID PACKAGE.

ITEM 619 - FIELD OFFICE, TYPE B, AS PER PLAN

THE FIELD OFFICE SHALL, IN ADDITION TO THE ITEMS LISTED IN ITEM 619, BE FURNISHED WITH TWO CELLULAR TELEPHONES.

THE CONTRACTOR'S INSURANCE SHALL INCLUDE A RIDER FOR COVERAGE OVER ANY CUYAHOGA COUNTY PROPERTY INSIDE THE FIELD OFFICE WHICH MAY BECOME DAMAGED OR STOLEN.

THE FOLLOWING QUANTITY HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR THIS ITEM:

___3__ MONTH ITEM 619 - FIELD OFFICE, TYPE B, AS PER PLAN

ADJUSTMENTS IN CONTRACT TIME

TIME EXTENSIONS WILL ONLY BE CONSIDERED WHEN CONTROLLING ITEMS OF WORK ON THE APPROVED PROGRESS SCHEDULE ARE AFFECTED DUE TO NO FAULT OF THE CONTRACTOR. WHEN ADDITIONAL WORK IS REQUIRED, TIME EXTENSIONS WILL ONLY BE GRANTED FOR CONTROLLING ITEMS ON THE PROGRESS SCHEDULE (SEE SECTION 108.06 OF THE CUYAHOGA COUNTY ENGINEER'S GENERAL PROVISIONS).

COOPERATION BETWEEN CONTRACTORS

IT IS ANTICIPATED THAT OTHER CONTRACTORS WILL BE WORKING ON ODOT'S CUY-87-4.24 PROJECT (STA.47+38 TO STA.55+89) AND ON ODOT'S CUY-WOODLAND AVENUE PROJECT (STA.72+18 TO STA.73+58) WHILE THIS PROJECT IS BEING CONSTRUCTED.

THE CONTRACTOR SHALL COOPERATE AND COORDINATE HIS/HER OPERATIONS, INCLUDING PROVISIONS FOR THE MAINTENANCE OF TRAFFIC, WITH THE CONTRACTORS OF THESE PROJECTS THAT MAY BE IN FORCE DURING THE LIFE OF THIS CONTRACT. THE CONTRACTOR'S ATTENTION IS SPECIFICALLY DRAWN TO SECTION 105.08 OF THE CUYAHOGA COUNTY ENGINEER'S GENERAL PROVISIONS. NO WAIVER OF ANY OF THE PROVISIONS OF SECTION 105.08 IS INTENDED.

PROJECT PROGRESS MEETINGS

PROGRESS MEETINGS WILL BE HELD EVERY FOUR (4) WEEKS AT THE PROJECT OFFICE OR OTHER LOCATION DESIGNATED BY THE AREA CONSTRUCTION ENGINEER. AND WILL BE ATTENDED BY COUNTY AND CONTRACTOR DECISION-MAKING PERSONNEL.

THE PURPOSE OF THESE MEETINGS IS TO DISCUSS CRITICAL OPERATIONS AND POTENTIAL PROBLEMS. ALSO, THE CONTRACTOR WILL CONFIRM THE NUMBER AND DURATION OF WORK SHIFTS, NUMBER OF WORK CREWS, AND SPECIFIC PORTIONS OF THE WORK TO BE PERFORMED DURING THE FOLLOWING WEEKS.

THESE MEETINGS CAN ONLY BE WAIVED BY THE AREA CONSTRUCTION ENGINEER.

DEFINITIONS AND TERMS

WHEREVER THERE APPEARS, IN THE STANDARD SPECIFICATIONS (ODOT ITEMIZED CMS), SUPPLEMENTAL SPECIFICATIONS OR PROPOSAL NOTES, THE TERM "THE STATE", "DIRECTOR OF TRANSPORTATION", "DEPARTMENT", "DISTRICT CONSTRUCTION ENGINEER/DISTRICT CONSTRUCTION ADMINISTRATOR (DCA)", "ENGINEER", OR ANY OTHER TERM DESIGNATING ANY REPRESENTATIVE OR EMPLOYEE OF THE STATE OR ITS DEPARTMENT OF TRANSPORTATION, SUCH TERM SHALL, FOR THE PURPOSE OF THIS CONTRACT, BE CONSIDERED AND TAKEN AS MEANING AND DESIGNATING THE RESPECTIVE OFFICER OR EMPLOYEE OF CUYAHOGA COUNTY WHOSE DUTY OR FUNCTION IT IS TO DEAL WITH THE SUBJECT MATTER IN CONNECTION WITH WHICH SUCH TERM IS USED AND SPECIFICALLY:

THE STATE DEPARTMENT

DIRECTOR

- MEANS CUYAHOGA COUNTY.

- MEANS THE CUYAHOGA COUNTY DEPARTMENT OF PUBLIC WORKS.

- MEANS THE CUYAHOGA COUNTY DIRECTOR OF

PUBLIC WORKS, HIS/HER DEPUTIES, OR ANY ENGINEER DESIGNATED AS THE DIRECTOR'S REPRESENTATIVE.

DISTRICT CONSTRUCTION ENGINEER/DISTRICT CONSTRUCTION ADMINISTRATOR (DCA) OR ENGINEER

- MEANS THE AREA CONSTRUCTION ENGINEER, OR THE DULY AUTHORIZED AGENT OR REPRESENTATIVE OF THE CUYAHOGA COUNTY DIRECTOR OF PUBLIC WORKS, ACTING WITHIN THE SCOPE OF HIS/HER AUTHORITY FOR THE PURPOSES OF CONSTRUCTION ENGINEERING AND ADMINISTRATION OF THE CONTRACT.

- MEANS ANY LABORATORY DESIGNATED BY THE LABORATORY COUNTY

8

GENERAL (CONTINUED)

GENERAL PROVISIONS

ALL REFERENCES TO THE GENERAL PROVISIONS (SECTION 100) OF THE OHIO DEPARTMENT OF TRANSPORTATION'S CONSTRUCTION AND MATERIAL SPECIFICATIONS (ODOT CMS) THAT ARE CITED IN THE ITEMIZED SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, PROPOSAL NOTES, PLANS OR ELSEWHERE IN THE CONTRACT DOCUMENTS SHALL, FOR THE PURPOSE OF THIS CONTRACT BE CONSIDERED AND TAKEN AS MEANING THE CUYAHOGA COUNTY ENGINEER'S GENERAL PROVISIONS AS CONTAINED IN THE "CUYAHOGA COUNTY ENGINEER SPECIFICATION BOOKLET". THE SUBSECTION NUMBERS AND TOPICS USED IN THE COUNTY'S GENERAL PROVISIONS CORRESPOND TO THOSE CONTAINED IN THE ODOT CMS.

STATIONING AND LOCATIONS

STATIONING AND LOCATIONS INDICATED ON THESE PLANS ARE APPROXIMATE. ALL LOCATIONS AND ITEMS CALLED OUT BY STATION ARE SUBJECT TO ADJUSTMENT IN THE FIELD AS DIRECTED BY THE ENGINEER.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS. DO NOT OPERATE ANY POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 7:00 P.M. AND 8:00 A.M. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

PERSONAL PROPERTY ITEMS

THERE WERE PERSONAL PROPERTY ITEMS (SUCH AS LANDSCAPE ROCKS IN THE TREELAWN AT 3162 WOODHILL ROAD) THAT WERE OBSERVED IN THE FIELD AND MAY BE IMPACTED BY THE PROPOSED WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT LOCATIONS OF ANY PERSONAL PROPERTY ITEMS WHICH MAY BE AFFECTED BY HIS/HER WORK.

NO LESS THAN TWO (2) WEEKS PRIOR TO COMMENCING ANY WORK IN THE VICINITY OF ANY PERSONAL PROPERTY ITEMS, THE CONTRACTOR SHALL NOTIFY THE AFFECTED OWNERS IN ORDER TO ALLOW THEM SUFFICIENT TIME TO APPROPRIATELY MOVE THEIR PERSONAL PROPERTY ITEMS. AFTER SAID PERIOD. ANY SUCH PERSONAL PROPERTY ITEMS ENCOUNTERED WITHIN THE PROJECT WORK LIMITS SHALL BE REMOVED BY THE CONTRACTOR IF NECESSITATED BY THE PROJECT WORK AND AS PROVIDED FOR UNDER ITEM 203; ALL AS DIRECTED AND/OR APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL COORDINATE/COOPERATE WITH THE AFFECTED OWNERS DURING THE PROSECUTION OF ALL PROXIMATE CONTRACT WORK TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR THE ABOVE SHALL BE CONSIDERED INCIDENTAL TO THE ASSOCIATED CONTRACT WORK ITEMS.

EXISTING PERSONAL PROPERTY ITEMS SHALL BE RESTORED AND/OR REPLACED AT THE CONTRACTOR'S EXPENSE IF, AS DETERMINED BY THE ENGINNER, THEY ARE DAMAGED AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE AND NOT AS A RESULT OF THE REQUIRED PROJECT WORK; ALL AS SPECIFIED AND DIRECTED BY THE ENGINEER.

LOCAL LAWS, ORDINANCES AND REGULATIONS

IN ACCORDANCE WITH SECTION 107.01 OF THE GENERAL PROVISIONS, THE CONTRACTOR SHALL STAY FULLY INFORMED OF ALL LOCAL LAWS, ORDINANCES, REGULATIONS, ORDERS AND DECREES THAT AFFECT THE WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBSERVE AND COMPLY WITH ALL SUCH LAWS, ORDINANCES, REGULATIONS, ORDERS AND DECREES AT NO ADDITIONAL COST TO THE PROJECT/COUNTY.

ITEM 201- 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. THIS IS TO BE USED TO CLEAR THE EXISTING VEGETATION TO THE EXISTING R/W (OFFSET OF 40' RT.) BETWEEN STA. 87+25 AND STA. 91+00 (EAST SIDE), TO REMOVE THE EXISTING 40" DIAMETER STUMP ADJACENT TO THE ABANDONED APRON BETWEEN SOPHIA AND STOUGHTON (EAST SIDE) AND AT ANY OTHER LOCATIONS IDENTIFIED SPECIFIED BY THE ENGINEER. 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.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER AND CALCIUM CHLORIDE FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITFM 616 - WATER ITEM 616 - CALCIUM CHLORIDE 38 M GAL. <u>3.8</u> TON

PERMITS

IN THE CITY OF CLEVELAND ALL PERMITS MUST BE OBTAINED FROM THE DIVISION OF ASSESSMENTS AND LICENSES PRIOR TO BEGINNING ANY WORK. PERMITS INCLUDE BUT ARE NOT LIMITED TO STREET OPENING PERMIT, OVERLOAD PERMIT, OBSTRUCTION PERMIT AND/OR SIDEWALK PERMIT AND MAY BE OBTAINED THROUGH THE FOLLOWING CONTACT:

TRAVIS EVANS DEPARTMENT OF FINANCE DIVISION OF ASSESSMENTS AND LICENCES 601 LAKESIDE AVENUE, ROOM 122 CLEVELAND, OHIO 44114 PHONE: (216) 664-2174 EMAIL: DALPÉRMITS@CITY.CLEVELAND.OH.US

ALL STREET OPENING REPAIRS, CURB REPAIRS AND/OR SIDEWALK REPAIRS EITHER INCIDENTAL TO THE PROJECT OR PART OF THE PROJECT MUST BE PERFORMED IN ACCORDING TO CITY OF CLEVELAND STANDARDS. A COPY OF THE STANDARDS CAN BE OBTAINED FROM THE DIVISION OF ENGINEERING AND CONSTRUCTION BY CALLING (216) 664-2381.

ALL PERMITS, FEES AND CHARGES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THEIR ASSOCIATED COST SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR THE PERTINENT WORK ITEMS, FOR BIDDING PURPOSES, FEES AND CHARGES MAY BE OBTAINED FROM THE DIVISION OF ASSESSMENTS AND LICENSES AT (216) 664-2174.

ROADWAY

ITEM 202 - REMOVAL MISC.: EXISTING TROLLEY/STREET CAR RAILS

ALONG WITH THE REQUIREMENTS OF ITEM 202, THE FOLLOWING SHALL ALSO APPLY TO THIS ITEM:

PER THE CONTRACTOR OF ODOT'S CUY-87-4.24 PROJECT AND PER RESIDENTS, THERE ARE INDICATIONS THAT WITHIN THE EXISTING SUBBASE, ABANDONED TROLLEY/STREET CAR RAILS MAY BE ENCOUNTERED/ IMPACTED BY THE WORK AND MAY THUS REQUIRE REMOVAL (AS DIRECTED BY THE ENGINEER) PRIOR TO OVERLAYING.

PAYMENT AT THE UNIT PRICE BID PER FOOT SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO REMOVE AND DISPOSE OF ANY EXISTING RAILS AND/OR TRACK BASE TO THE SATISFACTION OF THE ENGINEER. SUITABLE EMBANKMENT MATERIAL (204.02) REQUIRED TO BACKFILL THE CAVITY CREATED BY THIS REMOVAL SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM AND WILL BE PLACED IN EIGHT (8) INCH MAXIMUM (LOOSE DEPTH) MECHANICALLY COMPACTED LAYERS. NO ADDITIONAL PAYMENT SHALL BE MADE.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO COMPLETE THIS WORK. THE QUANTITY IS TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM 202 - REMOVAL MISC.: EXISTING TROLLEY/STREET CAR RAILS 1,500 FEET

EXISTING CONCRETE PLANTERS/GARBAGE CANS

THE CONTRACTOR SHALL CONTACT MICHAEL E. COX OF THE CLEVELAND PUBLIC WORKS DEPARTMENT AT (216) 664-2485 TWO (2) WEEKS PRIOR TO COMMENCING WORK ON THE PROJECT. THE CITY OF CLEVELAND PUBLIC WORKS DEPARTMENT SHALL COORDINATE THE REMOVAL AND REINSTALLATION OF ANY CONCRETE PLANTERS/GARBAGE CANS ALONG THE PROJECT THAT ARE IN THE WAY OF ANY PROPOSED CONSTRUCTION.

EXISTING RTA BUS SHELTERS

THE CONTRACTOR SHALL CONTACT JOHN BOBEREK OF THE GREATER CLEVELAND RTA AT (216) 431-8034 TWO (2) WEEKS PRIOR TO COMMENCING WORK ON THE PROJECT. THE GREATER CLEVELAND RTA SHALL COORDINATE THE REMOVAL AND REINSTALLATION OF ANY BUS SHELTERS ALONG THE PROJECT THAT ARE IN THE WAY OF THE PROJECT CURB/PAVED TREELAWN REPLACEMENTS.

U.S. POSTAL SERVICE MAILBOXES

THE CONTRACTOR SHALL COORDINATE WITH THE U.S. POSTAL SERVICE TO TEMPORARILY RELOCATE EXISTING MAILBOXES THAT ARE LOCATED ON EXISTING SIDEWALK TO BE REPLACED. THIS COORDINATION IS IN ACCORDANCE WITH SECTION 107.10 OF THE CUYAHOGA COUNTY ENGINEER'S GENERAL PROVISIONS AS CONTAINED IN THE "CUYAHOGA COUNTY ENGINEER SPECIFICATION BOOKLET" AND NO ADDITIONAL COMPENSATION SHALL BE MADE.

ITEM 623 - CUYAHOGA COUNTY CENTERLINE MONUMENT BOX ASSEMBLY, TYPE 1

WHERE, AS DETERMINED BY THE ENGINEER, EXISTING MONUMENT BOXES ARE SUITABLE FOR REUSE, THEY SHALL REMAIN UNDISTURBED IN PLACE OR, IF/WHERE REQUIRED, THEY SHALL SIMPLY BE ADJUSTED TO GRADE.

EXISTING MONUMENT BOXES THAT ARE BOTH SUITABLE FOR REUSE AND CONFORM TO THE CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWING MB-1C, MAY BE ADJUSTED USING "ADJUSTING RINGS" AS DETAILED ON THE MB-1C DRAWING. EXISTING MONUMENT BOXES THAT ARE DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR REUSE SHALL BE REMOVED AND REPLACED WITH A CUYAHOGA COUNTY MONUMENT BOX AS DETAILED ON THE CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWING MB-1C, SET TO GRADE.

CARE AND/OR PROTECTIVE MEASURES SHALL BE EMPLOYED BY THE CONTRACTOR TO AVOID DAMAGE OR DISRUPTION OF EXISTING MONUMENTS DURING THE MONUMENT BOX ADJUSTMENT OR REMOVAL AND REPLACEMENT OPERATIONS AND ALL OTHER OPERATIONS IN THE PROXIMITY OF SAID MONUMENTS. THOSE MONUMENTS THAT ARE DISPLACED OR DAMAGED DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REMOVED AND REPLACED WITH A TYPE 1 CUYAHOGA COUNTY CENTERLINE MONUMENT BOX ASSEMBLY UNDER THE SUPERVISION OF A LICENSED SURVEYOR: ALL AT THE CONTRACTOR'S EXPENSE. WHERE NO EXISTING MONUMENTS ARE FOUND WITHIN SAID MONUMENT BOXES OR WHERE MONUMENTS ARE DISPLACED OR DAMAGED AT NO FAULT OF THE CONTRACTOR, THEY SHALL BE PLACED OR REPLACED IN ACCORDANCE WITH "ITEM 623 - CUYAHOGA COUNTY CENTERLINE MONUMENT BOX ASSEMBLY, TYPE 1", AS SPECIFIED BELOW; ALL AT THE DIRECTION OF THE ENGINEER.

WHERE DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL REMOVE THE EXISTING MONUMENT ASSEMBLY IN ITS ENTIRETY AND SHALL INSTALL, EXCEPTING THE "MONUMENT PIN," THE ENTIRE MONUMENT ASSEMBLY, INCLUDING THE BOX AS DETAILED ON THE CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWING MB-1C. INSTALLATION SHALL BE SUCH THAT WHEN THE CUYAHOGA COUNTY DEPARTMENT OF PUBLIC WORKS' SURVEYOR SUBSEQUENTLY PLACES THE "MONUMENT PIN," IT CAN BE CENTERED IN THE BOX. PAYMENT FOR THE ABOVE WORK SHALL BE MADE UNDER ITEM 623 - CUYAHOGA COUNTY CENTERLINE MONUMENT BOX ASSEMBLY, TYPE 1.

EXISTING CONCRETE (BLOCK-OUT) PAVEMENT REMOVED SHALL BE REPLACED USING MEDIUM-SETTING CONCRETE (CLASS QC MS) PER 499.03 OF THE SPECIFICATIONS. ALL WORK SHALL BE PERFORMED AT THE DIRECTION OF THE ENGINEER. PAYMENT FOR THE ABOVE SHALL BE MADE AT THE PER EACH CONTRACT UNIT PRICE BID FOR "ITEM 623 - MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN," "ITEM 623 — CUYAHOGA COUNTY MONUMENT BOX" OR "ITEM 623 — CUYAHOGA COUNTY CENTERLINE MONUMENT BOX ASSEMBLY, TYPE 1".

EXISTING CLEVELAND REGIONAL GEODETIC SURVEY (CRGS) MONUMENT ASSEMBLIES ARE SHOWN ON SHEETS 2 & 3 (O.M. 37, O.M. 187, O.M. 194 & O.M. 195) AND ARE TO BE PROTECTED AND PRESERVED. WHERE NECESSARY, CAREFULLY ADJUST THE EXISTING MONUMENT BOX OR SET A NEW MONUMENT BOX TO GRADE WITHOUT DISTURBING THE MONUMENT.

MONUMENTS SHALL BE LEFT UNDISTURBED UNTIL THE CUYAHOGA COUNTY DEPARTMENT OF PUBLIC WORKS' SURVEY OFFICE HAS CHECKED/VERIFIED THE REFERENCES PROVIDED BY THE CONTRACTOR'S SURVEYOR. IN ALL CASES THE CONTRACTOR SHALL CONTACT THE CUYAHOGA COUNTY DEPARTMENT OF PUBLIC WORKS' SURVEY OFFICE AT (216) 348-3846 NO LESS THAN TWO (2) WEEKS PRIOR TO THE DISTURBANCE OF ANY EXISTING MONUMENTS.

THE FOLLOWING QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 623 — MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN ___6__ EACH <u>6</u> EACH ITEM 623 - CUYAHOGA COUNTY MONUMENT BOX ITEM 623 - CUYAHOGA COUNTY CENTERLINE MONUMENT BOX ___6__ EACH ASSEMBLY, TYPE 1

ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER

623.08 CONSTRUCTION LAYOUT STAKING

- 1.ALL HORIZONTAL CONTROL AND, IF NECESSARY, VERTICAL CONTROL REQUIRED FOR THE COMPLETE LAYOUT AND PERFORMANCE OF THE WORK UNDER THIS CONTRACT SHALL BE DONE BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE AND MAY BE PERIODICALLY REVIEWED BY THE ENGINEER. ANY INSPECTION OR REVIEWING OF THE CONTRACTOR'S LAYOUT BY THE ENGINEER AND THE ACCEPTANCE OF ALL OR ANY PART OF IT SHALL NOT RELIEVE THE CONTRACTOR OF HIS/HER RESPONSIBILITY TO PRODUCE THE PROPER WORK DIMENSIONS, GRADES AND ELEVATIONS. THE REQUIREMENTS OF SECTION 107.10 OF THE GENERAL PROVISIONS ALSO APPLY.
- 2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND, IF APPLICABLE, ALL GRADES, LINES AND LEVELS AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS, AND HE/SHE SHALL REPORT ANY ERRORS OR INCONSISTENCIES IN THE ABOVE TO THE ENGINEER BEFORE COMMENCING WORK OR ORDERING ANY MATERIAL.
- 3. THE CONTRACTOR SHALL MARK (PAINT) OR STAKE THE PROJECT STATION NUMBERS AT INTERVALS OF 50 FEET (OR LESS AS DIRECTED OR APPROVED BY THE ENGINEER) BEFORE COMMENCING THE WORK.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL STAKES AND MARKS AND SHALL REPLACE THEM AT HIS/HER EXPENSE IF THEY ARE DAMAGED, LOST, DISPLACED OR REMOVED. THE CONTRACTOR SHALL USE COMPETENT PERSONNEL AND SUITABLE EQUIPMENT FOR THE LAYOUT WORK REQUIRED AND SHALL PROVIDE THAT IT IS DONE UNDER THE SUPERVISION OF A REGISTERED SURVEYOR.

623.11 BASIS OF PAYMENT

PAYMENT WILL BE MADE UNDER:

ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN

ITEM SPECIAL — MONUMENT REFERENCING

THIS ITEM SHALL CONSIST OF LOCATING AND REFERENCING ALL EXISTING ROADWAY AND/OR CENTERLINE MONUMENTS WITHIN THE LIMITS OF THE PROPOSED WORK FOR THE PURPOSES OF RESETTING/REESTABLISHING THEIR EXACT LOCATION IN THE EVENT THEY ARE DISPLACED OR DAMAGED DURING CONSTRUCTION. ALL WORK SHALL BE PERFORMED UNDER THE SUPERVISION OF A LICENSED SURVEYOR PROVIDED BY THE CONTRACTOR AND SHALL BE COMPLETED PRIOR TO THE START OF ANY PROXIMATE GRADING, PAVING OR OTHER SUCH OPERATIONS.

A THOROUGH SEARCH SHALL BE MADE TO LOCATE THE MONUMENTS WITHIN THE LIMITS OF THE PROPOSED WORK. UPON LOCATING THE EXISTING MONUMENTS, THE MONUMENT PINS/POINTS SHALL BE CAREFULLY EXPOSED AND REFERENCED TO NO LESS THAN THREE (3) PERMANENT OBJECTS. ANY EXISTING MONUMENTS THAT MIGHT REQUIRE REPLACEMENT SHALL BE NOTED. THE REFERENCES ALONG WITH ALL NOTATIONS SHALL BE DELIVERED TO THE CUYAHOGA COUNTY DEPARTMENT OF PUBLIC WORKS' SURVEY OFFICE IMMEDIATELY UPON COMPLETION. ADJUSTMENTS OR REPLACEMENTS OF MONUMENT BOXES OR ASSEMBLIES MAY NOT COMMENCE UNTIL THE REFERENCES HAVE BEEN CHECKED/VERIFIED AND APPROVED BY THE CUYAHOGA COUNTY DEPARTMENT OF PUBLIC WORKS' SURVEY OFFICE.

THE PER EACH UNIT PRICE PAYMENT FOR THIS WORK SHALL INCLUDE LOCATING THE MONUMENTS, CAREFULLY CLEANING OUT THE MONUMENT BOXES AND/OR EXPOSING THE MONUMENT PINS/POINTS, REFERENCING THE MONUMENTS AND ALL RELATED NOTATION.

THE FOLLOWING ESTIMATED QUANTITY IS PROVIDED IN THE GENERAL SUMMARY FOR ALL MONUMENTS KNOWN TO EXIST OR INITIALLY FOUND/ENCOUNTERED WITHIN THE PROPOSED WORK LIMITS:

ITEM SPECIAL - MONUMENT REFERENCING

__<u>18</u>__ EACH

(LUMP SUM)

ITEM 209 - LINEAR GRADING, AS PER PLAN

WHEN THE ABOVE ITEM IS CALLED FOR ON THE PLANS OR IN THE PROPOSAL, ALL APPLICABLE PROVISIONS OF ITEM 209, AS SET FORTH IN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, SHALL APPLY EXCEPT AS MODIFIED HEREIN.

209.01 DESCRIPTION

THIS WORK SHALL CONSIST OF THE COMPLETE GRADING AND PREPARATION OF AREAS UPON WHICH TOPSOIL AND SEED/SOD ARE TO BE PLACED; ALL IN ACCORDANCE WITH THESE SPECIFICATIONS AND IN REASONABLY CLOSE CONFORMITY WITH THE LINES, GRADES, DEPTHS AND LIMITS SHOWN ON THE PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. SEE THE TYPICAL SECTIONS SHOWN ON SHEETS 4 & 5. THIS WORK SHALL INCLUDE ALL LABOR AND EQUIPMENT NECESSARY TO PRODUCE TYPICAL SECTIONS AND TREE LAWN GRADES AS DETAILED IN THE PLANS. THIS SHALL INCLUDE EXCAVATION TO THE REQUIRED LIMITS AND DEPTH, DISPOSAL OF UNUSED MATERIAL AND EMBANKMENT CONSTRUCTION USING NATURAL SOILS (703.16.A).

209.08 METHOD OF MEASUREMENT

THE QUANTITY OF LINEAR GRADING WILL BE MEASURED BY THE NUMBER OF SQUARE YARDS COMPLETED AND ACCEPTED.

209.09 BASIS OF PAYMENT

THE ACCEPTED QUANTITY OF LINEAR GRADING WILL BE PAID AT THE CONTRACT UNIT PRICE BID PER SQUARE YARD FOR:

ITEM 209 - LINEAR GRADING, AS PER PLAN.

EXISTING UNDERGROUND SPRINKLER SYSTEMS

THERE ARE NO KNOWN LOCATIONS OF EXISTING PRIVATELY OWNED UNDERGROUND SPRINKLER SYSTEMS WITHIN OR NEAR THE PROJECT WORK LIMITS IN ACCORDANCE WITH FIELD OBSERVATION. HOWEVER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT LOCATIONS OF ANY SPRINKLER SYSTEMS WHICH MAY BE AFFECTED BY HIS/HER WORK.

NO LESS THAN TWO (2) WEEKS PRIOR TO COMMENCING ANY WORK IN THE VICINITY OF ANY UNDERGROUND SPRINKLER SYSTEMS, THE CONTRACTOR SHALL NOTIFY THE AFFECTED OWNERS IN ORDER TO ALLOW THEM SUFFICIENT TIME TO APPROPRIATELY MOVE THEIR SPRINKLER SYSTEMS. AFTER SAID PERIOD, ANY SUCH SPRINKLERS ENCOUNTERED WITHIN THE PROJECT WORK LIMITS SHALL BE REMOVED BY THE CONTRACTOR IF NECESSITATED BY THE PROJECT WORK AND AS PROVIDED FOR UNDER ITEM 203; ALL AS DIRECTED AND/OR APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL SUBSEQUENTLY NOTIFY AFFECTED OWNERS NO LESS THAN TWO (2) WEEKS PRIOR TO THE FINAL TOPSOIL, SOD OR SEED PLACEMENT(S), SO THAT THE OWNERS MAY RESTORE THE SPRINKLER SYSTEMS TO THEIR DESIRED LOCATIONS.

THE CONTRACTOR SHALL COORDINATE / COOPERATE WITH THE AFFECTED OWNERS DURING THE PROSECUTION OF ALL PROXIMATE CONTRACT WORK TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR THE ABOVE SHALL BE CONSIDERED INCIDENTAL TO THE ASSOCIATED CONTRACT WORK ITEMS.

EXISTING SPRINKLER SYSTEMS SHALL BE RESTORED AND/OR REPLACED AT THE CONTRACTOR'S EXPENSE IF, AS DETERMINED BY THE ENGINEER, THEY ARE DAMAGED AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE AND NOT AS A RESULT OF THE REQUIRED PROJECT WORK; ALL AS SPECIFIED AND DIRECTED BY THE ENGINEER.

GENERAL

3981 G.R. AD **R**0/ WOODHILL

ROADWAY (CONTINUED)

NON-INTEGRAL CURB REMOVED

EXISTING NON—INTEGRAL CURB SHALL BE REMOVED AND DISPOSED OF PER 202.05 IN A MANNER AND BY METHODS THAT WILL NOT DISTURB, DAMAGE OR UNDERMINE ADJACENT PAVEMENT OR CURB INTENDED TO REMAIN IN PLACE. ANY ADJACENT FACILITIES DAMAGED AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE, AS DETERMINED BY THE ENGINEER, AND WHICH ARE NOT OTHERWISE DESIGNATED FOR REPLACEMENT, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE: ALL AT THE DIRECTION OF THE ENGINEER.

PAYMENT FOR NON-INTEGRAL CURB REMOVAL SHALL BE MADE AT THE CONTRACT UNIT PRICE BID PER FOOT FOR ITEM 202-CURB REMOVED.

EXISTING WALK REMOVAL/REPLACEMENT

IN ADDITION TO THE WALK REPLACEMENT NECESSITATED BY ADJACENT CURB REPLACEMENT (SEE TYPICAL SECTION SHEETS 4 & 5 AN ESTIMATED QUANTITY OF WALK REMOVAL AND REPLACEMENT HAS BEEN PROVIDED HEREIN IN ORDER TO BRING ALL CURB RAMPS INTO COMPLIANCE WITH THE AMERICAN WITH DISABILITIES ACT (ADA) REQUIREMENTS. SEE THE "ITEM 608 — CURB RAMP, MISC.: CITY OF CLEVELAND (CR-1, CR-2, CR-3, CR-5) CURB RAMP, AS PER PLAN" NOTE.

WALK REMOVAL/REPLACEMENT LIMITS SHALL TYPICALLY EXTEND TO THE NEAREST EXISTING WALK JOINT/DIVISION LINE UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE EXACT LOCATIONS AND LIMITS OF EXISTING WALK REMOVAL/REPLACEMENT SHALL BE ESTABLISHED AND DESIGNATED BY THE ENGINEER. AEROSOL SPRAY PAINT FOR OUTLINING SHALL BE PROVIDED BY THE CONTRACTOR.

EXISTING WALK SHALL BE REMOVED AND DISPOSED OF PER 202.05 AND IN A MANNER THAT WILL NOT DISTURB, DAMAGE OR UNDERMINE ADJACENT WALK OR DRIVES INTENDED TO REMAIN IN PLACE. ANY ADJACENT FACILITIES DAMAGED AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE, AS DETERMINED BY THE ENGINEER, AND WHICH ARE NOT OTHERWISE DESIGNATED FOR REPLACEMENT, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE; ALL AT THE DIRECTION OF THE ENGINEER.

REPLACEMENT WALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH "ITEM 608 - 4" CONCRETE WALK, AS PER PLAN" (SEE PLAN NOTE).

PER THE CITY OF CLEVELAND STANDARD CONSTRUCTION DRAWING CR-1, THE EXISTING NON-INTEGRAL CURB IS COMPLETELY REMOVED AND REPLACED INTEGRALLY AS PART OF THE PROPOSED CURB RAMP.

EXISTING NON-INTEGRAL CURB SHALL BE COMPLETELY REMOVED (ITEM 202 – CURB REMOVED) AND REPLACED (ITEM 608 – CURB RAMP, MISC.: CITY OF CLEVELAND (CR-1, CR-2, CR-3, CR-5) CURB RAMP, AS PER PLAN) TO THE LIMITS SPECIFIED BY THE ENGINEER. NON-INTEGRAL CURB SHALL BE REMOVED AND DISPOSED OF PER ITEM 202.05 IN A MANNER AND BY THE METHODS THAT WILL NOT DISTURB, DAMAGE OR UNDERMINE THE ADJACENT PAVEMENT INTENDED TO REMAIN IN PLACE.

PROVIDE 1/2 INCH THICK EXPANSION JOINT MATERIAL (705.03) BETWEEN THE NEWLY INSTALLED CURB AND CURB RAMP WALK PER 608.03. CURB RAMP LOCATIONS AS SHOWN ON THE SCHEMATIC PLAN ARE SUBJECT TO ADJUSTMENT TO MINIMIZE CONFLICTS WITH EXISTING CATCH BASINS, MANHOLES, UTILITY POLES, HYDRANTS OR OTHER SUCH APPURTENANCES. ALSO SEE THE "ITEM 608 – CURB RAMP, MISC.: CITY OF CLEVELAND (CR-1, CR-2, CR-3, CR-5) CURB RAMP, AS PER PLAN" NOTE.

PAYMENT FOR THE ACTUALLY COMPLETED AND ACCEPTED QUANTITIES OF THE ABOVE WORK SHALL BE MADE AT THE CONTRACT UNIT PRICE BID FOR:

ITEM 202 — WALK REMOVED SQ. FT.
ITEM 608 — 4" CONCRETE WALK, AS PER PLAN SQ. FT.

ITEM 608 - CURB RAMP, MISC.: CITY OF CLEVELAND

(CR-1, CR-2, CR-3, CR-5) CURB RAMP,
AS PER PLAN

EACH

IN CONJUNCTION WITH THE CURB RAMP AND TRUNCATED DOME ITEMS, THE FOLLOWING ESTIMATED REMOVAL AND REPLACEMENT ITEMS/QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER AND ARE IN ADDITION TO PLAN QUANTITIES TABULATED ON SHEET NOS. 6 & 7:

THE LIMITS OF ADDITIONAL CONTINGENCY WALK REMOVAL/REPLACEMENT REQUIRED TO FACILITATE ANY OTHER ADJACENT WORK NOT SHOWN OR SPECIFIED IN THE PLANS SHALL BE DESIGNATED BY THE ENGINEER. THIS WORK SHALL INCLUDE THE COST OF ANY SAW CUTS AND PRE-MOLDED JOINT FILLER REQUIRED BY THE ENGINEER TO COMPLETE THIS WORK.

THE FOLLOWING CONTINGENCY QUANITITIES ARE CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER AND ARE IN ADDITION TO THE PLAN QUANTITIES TABULATED ABOVE AND ON SHEET 6 & 7:

ITEM 202 - WALK REMOVED ___415_ SQ. FT.

ITEM 608 - 4" CONCRETE WALK, AS PER PLAN __415_ SQ. FT.

EXISTING DRIVE APRON REMOVAL/REPLACEMENT

ALL EXISTING DRIVE APRONS WITHIN THE PROJECT WORK LIMITS (THAT ARE TO REMAIN IN SERVICE; SEE ABANDONED DRIVE APRON PARAGRAPHS BELOW) WILL BE REMOVED AND REPLACED WITH NEW CONCRETE APRONS FROM THE FRONT OF EXISTING SIDEWALK TO THE PROPOSED CURB REPLACEMENTS.

THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE EXISTING DRIVE APRONS PER 202.05 OR 203.04(E), AS APPLICABLE, AND BY METHODS THAT WILL NOT DISTURB, DAMAGE OR UNDERMINE THE ADJACENT WALK INTENDED TO REMAIN IN PLACE. ANY ADJACENT FACILITIES DAMAGED AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE, AS DETERMINED BY THE ENGINEER, AND WHICH ARE NOT OTHERWISE DESIGNATED FOR REPLACEMENT, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, ALL AT THE DIRECTION OF THE ENGINEER.

WHEN THE ADJACENT WALK PORTION OF AN EXISTING DRIVE IS TOO DETERIORATED TO PLACE THE NEW CONCRETE APRON, OR IS OTHERWISE UNAVOIDABLY DAMAGED AS DETERMINED BY THE ENGINEER, THE PROPOSED CONCRETE APRON REPLACEMENT WILL BE EXTENDED THROUGH TO THE BACK OF WALK. CONTINGENCY QUANTITIES ARE PROVIDED HEREIN FOR THESE REPAIRS TO BE MADE TO ABUTTING WALK AND PARKING LOT AREAS UNAVOIDABLY DAMAGED AS DIRECTED BY THE ENGINEER.

EXCEPT AS OTHERWISE DIRECTED BY THE ENGINEER, THE CONFIGURATIONS OF ANY REPLACED DRIVE APRONS SHALL GENERALLY MATCH THE EXISTING (AND BE CONSTRUCTED INTEGRALLY WITH THE PROPOSED CURB PER THE CITY OF CLEVELAND'S CONSTRUCTION DRAWING CD-1) AND THE COMPOSITIONS SHALL MINIMALLY CONFORM TO THE DETAILS SHOWN ON THE CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWING BP-4.1C. ALL CONCRETE SHALL HAVE RETRACED PICTURE FRAME TOOLED EDGE JOINTS.

THE "CLASS QC MS" CONCRETE USED FOR THE ITEM 451 OR 452 CONCRETE DRIVES SHALL CONFORM TO THE "MODIFICATIONS TO ITEM 499 CONCRETE — GENERAL" AS CONTAINED IN THE "SECTION 400 PROPOSAL NOTES" OF THE "CUYAHOGA COUNTY ENGINEER SPECIFICATION BOOKLET".

THE CONTRACTOR SHALL STAGE HIS/HER OPERATIONS SUCH THAT THE MAXIMUM OUT OF SERVICE TIME FOR ANY RESIDENTIAL DRIVE IS <u>FIVE</u> (5) DAYS. THE CONTRACTOR SHALL NOTIFY EACH RESIDENT OF ANY RESTRICTED ACCESS TO THEIR PROPERTY NO LATER THAN ONE (1) WEEK IN ADVANCE. ACCESS TO COMMERCIAL AND HANDICAP PROPERTY SHALL BE MAINTAINED AT ALL TIMES.

THE FOLLOWING ESTIMATED QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY FOR PERFORMING THE ABOVE DESCRIBED APRON REPLACEMENT WORK:

ITEM 202 - PAVEMENT REMOVED	<u>1,596</u> SQ. YD.
ITEM 203 - EXCAVATION	<u>274</u> CU. YD.
ITEM 204 - SUBGRADE COMPACTION	<u>1,620</u> SQ. YD.
ITEM 304 - AGGREGATE BASE, AS PER PLAN	<u>270</u> CU. YD.
ITEM 451 — 8" REINFORCED CONCRETE PAVEMENT, CLASS QC MS CONCRETE, AS PER PLAN	<u>1,356</u> SQ. YD.
ITEM 452 — 6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS CONCRETE, AS PER PLAN	<u>264</u> SQ. YD.

THE FOLLOWING CONTINGENCY QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR EXTENDING THE PROPOSED CONCRETE APRON REPLACEMENTS THROUGH TO THE BACK OF ABUTTING DETERIORATED WALK AND FOR REPAIRING ABUTTING PARKING LOT AREAS.

ITEM	202 —	PAVEMENT REMOVED	<u> 55</u>	SQ.	YD.
ITEM	202 -	WALK REMOVED	<u>90</u>	SQ.	FT.
ITEM	203 -	EXCAVATION	<u>20</u>	CU.	YD.
ITEM	204 -	SUBGRADE COMPACTION	<u>120</u>	SQ.	YD.
ITEM	301 –	ASPHALT CONCRETE BASE, PG64-22 (DRIVEWAYS), AS PER PLAN	6_	CU.	YD.
ITEM	304 -	AGGREGATE BASE, AS PER PLAN	<u>20</u>	CU.	YD.
ITEM	408 -	PRIME COAT	5_	GAL	•
ITEM	448 —	ASPHALT CONCRETE SURFACE COURSE,			
		TYPE 1, PG64-22 (DRIVEWAYS), AS PER PLAN	4_	CU.	YD.
ITEM	451 —	8" REINFORCED CONCRETE PAVEMENT, CLASS QC MS CONCRETE, AS PER PLAN	_44	SQ.	YD.
ITEM	452 –	6" NON-REINFORCED CONCRETE PAVEMENT CLASS QC MS CONCRETE, AS PER PLAN		SQ.	YD.

ON THE EAST SIDE OF WOODHILL ROAD, THE FOLLOWING ABANDONED DRIVE APRONS ARE TO BE ADDRESSED AS FOLLOWS:

RAMONA TO DICKENS:	1 RESIDENTIAL CONCRETE (REMOVE & SEED)
DICKENS TO MANOR:	1 COMMERCIAL CONCRETE (REMOVE & SEED)
PARKVIEW TO LAMONTIER:	2 RESIDENTIAL CONCRETE (REMOVE & SEED)
LAMONTIER TO SOPHIA:	1 RESIDENTIAL CONCRETE (REMOVE & SEED)
	2 COMMERCIAL CONCRETE (REMOVE & REPLACE W/SIDEWALK)

SOPHIA TO STOUGHTON:

ELWELL TO BUCKEYE:

SHALE TO HULDA:

GRANDVIEW TO CRESTWOOD:

1 RESIDENTIAL CONCRETE (REMOVE & SEED)

2 RESIDENTIAL CONCRETE (REMOVE & REPLACE W/SIDEWALK)

1 RESIDENTIAL CONCRETE (REMOVE & SEED)

ON THE WEST SIDE OF WOODHILL ROAD, THE FOLLOWING ABANDONED DRIVE APRONS ARE TO BE ADDRESSED AS FOLLOWS:

SOPHIA TO KOLAR:	2	RESIDENTIAL	CONCRETE	(REMOVE	&	SEED)
	1	COMMERCIAL	CONCRETE	(REMOVE	&	SEED)
KOLAR TO HOLTON:	2	COMMERCIAL	CONCRETE	(REMOVE	&	SEED)
	1	RESIDENTIAL	CONCRETE	(REMOVE	&	SFFD)

YEAKEL TO CUMBERLAND: 1 RESIDENTIAL CONCRETE (REMOVE & SEED)

THE RESULTANT CAVITY BETWEEN THE BACK OF THE NEW NORMAL HEIGHT CURB AND THE FRONT OF THE EXISTING SIDEWALK SHALL BE SUITABLY BACKFILLED WITH ITEM 203— EMBANKMENT, AS PER PLAN LIMITED TO NATURAL SOIL (703.16.A), GRADED AND SEEDED.

THE FOLLOWING ESTIMATED QUANTITIES ARE INCLUDED IN THE GENERAL SUMMARY FOR PERFORMING THESE NINETEEN (19) ABANDONED DRIVE APRONS:

ITEM 202 - PAVEMENT REMOVED	<u>371</u> SQ. YD.
ITEM 203 — EXCAVATION	<u>61</u> CU. YD.
ITEM 203 — EMBANKMENT, AS PER PLAN	<u>90</u> CU. YD.
ITEM 209 — LINEAR GRADING, AS PER PLAN	<u>270</u> SQ. YD.
ITEM 608 - 4" CONCRETE WALK, AS PER PLAN	<u>910</u> SQ. FT.
ITEM 659 - SEEDING AND MULCHING, AS PER PLAN	<u>270</u> SQ. YD.

NOTE THAT ALONG THE FLARES OF A COMMERCIAL DRIVE APRON BETWEEN MANOR AND SOPHIA (WEST SIDE), THERE IS AN EXISTING METAL POST PROTRUDING FROM THE SURFACE. THE CONTRACTOR SHALL REMOVE THIS AS PART OF THEIR REMOVAL AND REPLACEMENT OF THE EXISTING DRIVE APRON. COST TO BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ITEM 203 — EXCAVATION.

11

24

DWG.: L:\OPER'S BY YEAR\OPER2015\WOODHILL QUINCY TO KIN PLOT: 1 = 1 DATE: 11-19-14

ROADWAY (CONTINUED)

ITEM 608 - 4" CONCRETE WALK, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF 608, THE FOLLOWING SHALL APPLY:

WHEN EXISTING SIDEWALK IS ADJACENT AND INTEGRAL TO EXISTING CURB BEING REPLACED, THE PROPOSED SIDEWALK AND THE PROPOSED CURB WILL BE CONSTRUCTED INTEGRALLY (CLASS QC MS) AS PER THE CITY OF CLEVELAND'S CONSTRUCTION DRAWING CD-1.

THE "CLASS QC MISC" OR CLASS "QC 1" CONCRETE USED FOR SIDEWALK (608) SHALL CONFORM TO THE "MODIFICATIONS TO ITEM 499 CONCRETE - GENERAL" AS CONTAINED IN THE "SECTION 400 PROPOSAL NOTES" OF THE CUYAHOGA COUNTY ENGINEER SPECIFICATION BOOKLET AS WELL AS THE SPECIFICATIONS IN THE "CONCRETE DESIGN MIX (CITY OF CLEVELAND)" GENERAL NOTE ON SHEET 16.

ALL CONCRETE WALK SHALL BE A MINIMUM OF 4" THICK AND HAVE A 2" COMPACTED SCREENINGS BED WHICH MEETS THE REQUIREMENTS OF 703.10 (LIMITED TO CRUSHED STONE). THE COST FOR FURNISHING AND PLACING THE 2" COMPACTED SCREENINGS BED SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ITEM 608 - 4" CONCRETE WALK, AS PER PLAN.

PER 608.03(C), IT IS REQUIRED THAT 1/2 INCH THICK EXPANSION JOINT MATERIAL (705.03) BE INSTALLED BETWEEN THE WALK AND THE BACK OF CURB OR ANY OTHER FIXED OBJECT. IN ADDITION TO THE LOCATIONS SPECIFIED UNDER 608.03(C), TRANSVERSE EXPANSION JOINTS SHALL BE CONSTRUCTED AT INTERVÀLS OF NOT MORE THAN 25 TO 30 FEET UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE EXPANSION JOINT FILLER (705.03) SHALL BE PLACED AT THE TRANSVERSE EXPANSION JOINTS FOR THE FULL DEPTH/WIDTH OF THE CONCRETE WALK AND SHALL BE TRULY NORMAL TO GRADE. THE TOP 1/2 INCH OF THE EXPANSION JOINT PLACED BETWEEN THE WALK AND BACK OF CURB SHALL BE SEALED WITH 705.04 JOINT SEALER.

UNLESS OTHERWISE REQUIRED BY MUNICIPAL STANDARDS/ORDINANCES, THE FINAL SURFACE SHALL BE TEXTURED BY USE OF AN ACCEPTED BROOM SO AS TO PRODUCE A UNIFORM, GRITTY, TRANSVERSE TEXTURE, AFTER WHICH, THE CONTRACTOR IS REQUIRED TO RETRACE THE PREVIOUSLY FORMED JOINTS AND OUTSIDE EDGES OF THE WALK.

FINAL FINISH SHALL BE IN ACCORDANCE WITH THE APPLICABLE MUNICIPAL STANDARDS/ORDINANCES. ALL CONCRETE SHALL HAVE RETRACED PICTURE FRAME TOOLED EDGE JOINTS.

THE COST OF THE MATERIAL AND LABOR ASSOCIATED WITH THE ABOVE WORK IS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ITEM 608 - 4" CONCRETE WALK, AS PER PLAN.

ITEM 608 - CURB RAMP, MISC.: CITY OF CLEVELAND (CR-1, CR-2, CR-3, CR-5) AS PER PLAN

ALL APPLICABLE PROVISIONS OF ITEM 608 SHALL APPLY EXCEPT AS MODIFIED HEREIN.

608.01 DESCRIPTION

THIS WORK SHALL CONSIST OF CONSTRUCTING AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANT CURB RAMPS IN ACCORDANCE WITH THE CITY OF CLEVELAND STANDARD CONSTRUCTION DRAWING CR-1 AND "SPECIAL PROVISIONS - CURB RAMPS" (SEE SECTION 200 IN THE BID PACKAGE) AND IN ACCORDANCE WITH ODOT'S STANDARD CONSTRUCTION DRAWING BP-7.1 (EXCEPT AS MODIFIED HEREIN) AT THE LOCATIONS SHOWN ON THE SCHEMATIC PLAN OR AT LOCATIONS DETERMINED BY THE ENGINEER.

608.02 MATERIALS

THE "CLASS QC MISC." OR "CLASS QC 1" CONCRETE USED FOR SIDEWALK (608) SHALL CONFORM TO THE "MODIFICATIONS TO ITEM 499 CONCRETE -GENERAL" AS CONTAINED IN THE SECTION 400 PROPOSAL NOTES" OF THE "CUYAHOGA COUNTY ENGINEER SPECIFICATION BOOKLET" AS WELL AS THE SPECIFICATIONS IN THE "CONCRETE DESIGN MIX (CITY OF CLEVELAND)" GENERAL NOTE ON SHEET 17.

608.07 CURB RAMPS

THE ENGINEER WILL DETERMINE THE EXACT LOCATIONS AND APPROPRIATE CURB RAMP DESIGNS TO BE CONSTRUCTED. EXISTING CURB RAMPS THAT ARE NOT AFFECTED BY THE CONSTRUCTION AND ARE CURRENTLY ADA COMPLIANT NEED NOT BE REPLACED. AT THE COMPLETION OF THE PROJECT ALL CURB RAMPS WITHIN THE PROJECT LIMITS SHALL BE ADA COMPLIANT.

THE ENGINEER SHALL CAREFULLY CONSIDER POTENTIAL IMPACTS TO UTILITIES AND ADJACENT PROPERTY OWNERS WHEN DETERMINING THE EXACT CURB RAMP LOCATIONS AND DESIGNS.

THICKNESS OF THE CURB RAMP WALK AND CONCRETE BASE BENEATH THE DETECTABLE WARNINGS SHALL BE A MINIMUM OF EIGHT (8) INCHES. IN ADDITION, A TWO (2) INCH COMPACTED SCREENINGS BED, AS SPECIFIED UNDER "ITEM 608 - 4" CONCRETE WALK, AS PER PLAN", SHALL BE FURNISHED AND PLACED BENEATH ALL CURB RAMP AREAS.

ALL CONCRETE SHALL HAVE RETRACED PICTURE FRAME TOOLED EDGE JOINTS. 608.09 BASIS OF PAYMENT

PAYMENT WILL BE MADE UNDER ITEM 608 - CURB RAMP, MISC.: CITY OF CLEVELAND (CR-1, CR-2, CR-3, CR-5) CURB RAMP, AS PER PLAN (EACH).

THE PER EACH PAYMENT FOR CURB RAMPS SHALL ALSO INCLUDE THICKENING THE CONCRETE WALK TO EIGHT (8) INCHES AND THE DETECTABLE WARNINGS.

PAYMENT FOR FURNISHING AND PLACING THE TWO (2) INCH COMPACTED SCREENINGS BED IS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ITEM 608 -4" CONCRETE WALK, AS PER PLAN WHICH IS MEASURED THROUGH ALL CURB RAMP AREAS.

THE FOLLOWING ITEMS/ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS WORK:

ITEM 608 - CURB RAMP, MISC.: CITY OF CLEVELAND CR-1 CURB RAMP, AS PER PLAN	6 EACH
ITEM 608 - CURB RAMP, MISC.: CITY OF CLEVELAND CR-2 CURB RAMP, AS PER PLAN	_ <u>13</u> EACH
ITEM 608 - CURB RAMP, MISC.: CITY OF CLEVELAND CR-3 CURB RAMP, AS PER PLAN	_ <u>23</u> EACH
ITEM 608 - CURB RAMP, MISC.: CITY OF CLEVELAND CR-5 CURB RAMP, AS PER PLAN	_ <u>30</u> EACH

NOTE THAT IN THE SOUTHEAST CORNER OF THE GRANDVIEW AVENUE INTERSECTION, THERE IS AN EXISTING LIGHT POLE POST ADJACENT TO THE CURB AND SIDEWALK. THE CONTRACTOR SHALL REMOVE THIS EXISTING POLE AS PART OF THEIR INSTALLATION OF THE PROPOSED CURB RAMPS AT THIS CORNER. COST TO BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ITEM 608 - CURB RAMP, MISC.: CITY OF CLEVELAND CR-3 CURB RAMP, AS PER PLAN.

ESTIMATED QUANTITY FOR GUARDRAIL REMOVAL

AS DIRECTED BY THE ENGINEER, EXISTING UNWARRANTED GUARDRAIL SHALL BE CAREFULLY REMOVED AND DISMANTLED (BY THE CONTRACTOR) FOR STORAGE IN ACCORDANCE WITH SECTION 202.09. THE RAIL ELEMENTS, METAL POSTS, SPACER BLOCKS, SIGNS, DELINEATORS, ETC. WHICH ARE CONSIDERED SALVAGEABLE WILL BE STORED WITHIN THE EXISTING RIGHT OF WAY FOR SUBSEQUENT REMOVAL BY CITY FORCES. ALL OTHER GUARDRAIL COMPONENTS AND HARDWARE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 202.02.

THE FOLLOWING ITEM AND ASSOCIATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE ABOVE DESCRIBED WORK:

ITEM 202 - GUARDRAIL REMOVED FOR STORAGE

185 FT

EROSION CONTROL

ITEM 659 - SEEDING AND MULCHING, AS PER PLAN

WHEN THE ABOVE ITEM IS CALLED FOR ON THE PLANS OR IN THE PROPOSAL. ALL APPLICABLE PROVISIONS OF ITEM 659, AS SET FORTH IN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, SHALL APPLY UNLESS MODIFIED HEREIN.

659.07 SEEDS. UNLESS OTHERWISE DIRECTED/APPROVED BY THE ENGINEER, HIGH QUALITY GERMINATION RATES ARE REQUIRED.

659.09 NATIVE GRASSES AND WILDFLOWERS. UNLESS OTHERWISE DIRECTED/APPROVED BY THE ENGINEER, THE FOLLOWING SEED MIXTURE CLASS SHALL BE USED: CLASS 1.

659.10 SITE PREPARATION. IN ADDITION TO "AREAS IN FRONT OF RESIDENCES, COMMERCIAL PROPERTIES, ETC." REFERRED TO IN 659.10(A), THE SPECIAL PREPARATION SHALL BE EXTENDED TO ENCOMPASS ALL LAWNS AND/OR LAWN-LIKE AREAS AS DETERMINED BY THE ENGINEER. REMOVE ALL STONES 1-INCH OR GREATER BY APPROVED METHODS/EQUIPMENT SUCH AS "ROCK HOUNDING", RAKING, ETC.

659.11 PLACING TOPSOIL. TOPSOIL SHALL BE PLACED AND SPREAD TO A MINIMUM COMPACTED DEPTH OF FOUR (4) INCHES. THE FINISHED TOPSOIL SURFACES SHALL BE SEEDED AND MULCHED WITHIN SEVENTY-TWO (72) HOURS OF THEIR ACCEPTED COMPLETION.

659.13 MULCHING OPERATION. UNLESS OTHERWISE DIRECTED OR APPROVED BY THE ENGINEER, STRAW MULCH (PER 659.14) OR COMPOST MULCH (PER 659.16) SHALL BE USED.

659.17 WATERING. IN ADDITION TO THE REQUIREMENTS OF 659.17, THE SEED BED SHALL BE KEPT ACCEPTABLY MOIST UNTIL THE SEED HAS GERMINATED; ALL AT THE DIRECTION OR APPROVAL OF THE ENGINEER.

659.23 PERFORMANCE. THE COUNTY WILL INSPECT ALL SEEDED AREAS NO EARLIER THAN ONE (1) MONTH AND NO LATER THAN NINE (9) MONTHS AFTER FINAL/COMPLETED SEEDING; ALL AT THE DISCRETION/DETERMINATION OF THE ENGINEER.

12

659.25 BASIS OF PAYMENT. PAYMENT FOR THIS WORK SHALL BE MADE AT THE CONTRACT UNIT PRICE BID FOR THE ACTUALLY COMPLETED AND ACCEPTED QUANTITIES OF:

ITEM 659 — SEEDING AND MULCHING, AS PER PLAN	SQ.YD.
ITEM 659 — SOIL ANALYSIS TEST	EACH
ITEM 659 — TOPSOIL	CU.YD.
ITEM 659 — COMMERCIAL FERTILIZER	TON
ITEM 659 — LIME	ACRE
ITEM 659 — WATER	M GAL.

THE QUANTITY FOR ITEM 659- SEEDING AND MULCHING, AS PER PLAN IS CALCULATED ON SHEET NOS. 6 & 7 AND IN THE " EXISTING DRIVE APRON REMOVAL/ REPLACEMENT" GENERAL NOTE ON SHEET NO. 11.

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS IN ACCORDANCE WITH THE SPECIFICATIONS:

ITEM 659 - SOIL ANALYSIS TEST	2 EACH
ITEM 659 - TOPSOIL	760 CU.YD.
ITEM 659 — COMMERCIAL FERTILIZER	<u>1.00</u> TON
ITEM 659 — LIME	<u>1.40</u> ACRE
ITEM 659 — WATER	<u>37</u> M GAL.

ITEM 832 - EROSION CONTROL

THE FOLLOWING ESTIMATED QUANTITY IS PROVIDED FOR TEMPORARY SEDIMENT AND EROSION CONTROL (TSEC) IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF ODOT SUPPLEMENTAL SPECIFICATION 832:

ITEM 832 - EROSION CONTROL

4,000 EACH

UNLESS OTHERWISE APPROVED BY THE ENGINEER, DAMAGED FILTER FABRIC FENCE SHALL BE REPLACED IN LIEU OF ANY/ALL METHODS OF REPAIR.

DRAINAGE

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE COUNTY, REPRESENTATIVES OF THE COUNTY AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE COUNTY.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE COUNTY.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

ITEM SPECIAL - MISCELLANEOUS METAL

THE ENGINEER SHALL INSPECT THE EXISTING CASTINGS ON ALL STRUCTURES WITHIN THE WORK LIMITS, EXCEPTING CASTINGS ON STRUCTURES OWNED BY PRIVATE COMPANIES AND CASTINGS ON STRUCTURES TO BE REMOVED AND/OR REPLACED. THOSE CASTINGS THAT THE ENGINEER DETERMINES ARE UNSUITABLE SHALL BE REPLACED. TO PROVIDE FOR THIS CONTINGENCY, AN ESTIMATED QUANTITY OF ITEM SPECIAL - MISCELLANEOUS METAL HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL CASTING MATERIALS SHALL CONFORM TO ITEM 611 OR ITEM 638, IF APPLICABLE, AND HAVE THE PRIOR APPROVAL OF THE ENGINEER.

WHERE IT IS NECESSARY TO REPLACE UNSUITABLE STORM/SANITARY SEWER MANHOLE CASTINGS (FRAMES AND COVERS), THEY SHALL BE REPLACED WITH CITY OF CLEVELAND STANDARD FRAMES AND COVERS PER STANDARD CONSTRUCTION DRAWINGS A-503, A-605 AND A-695.

WHERE THE ENGINEER DETERMINES CATCH BASIN GRATES ENCOUNTERED WITHIN THE WORK ARE NON-BICYCLE/PEDESTRIAN SAFE, THEY SHALL BE REMOVED AND REPLACED WITH THE APPROPRIATE BICYCLE / PEDESTRIAN SAFE GRATES AS AVAILABLE AND RECOMMENDED BY THE VARIOUS CASTING MANUFACTURERS AND APPROVED BY THE ENGINEER.

THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, CLEANING, STORAGE AND RESETTING OF ALL EXISTING CASTINGS. CASTINGS DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTINGS AT THE CONTRACTOR'S EXPENSE.

EXCEPT WHERE /IF SPECIFICALLY REQUIRED AND SO SPECIFIED ELSEWHERE IN THE PLANS, THE CONTRACTOR SHALL NOT ORDER ANY OF THE ABOVE CASTINGS UNTIL DIRECTED BY THE ENGINEER, AND IN THE EVENT NO REPLACEMENT CASTINGS ARE REQUIRED, THE ITEM SHALL BE NONPERFORMED.

ALL COST ASSOCIATED WITH FURNISHING ACCEPTABLE NEW CASTING MATERIALS SHALL BE INCLUDED UNDER THIS ITEM. IN ADDITION, THE COST FOR SIMPLY INSTALLING NEW GRATES/COVERS ONLY SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. ALL COST ASSOCIATED WITH SETTING NEW CASTINGS (FRAMES AND COVERS/GRATES) TO GRADE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT STRUCTURE (611) "ADJUSTED TO GRADE, AS PER PLAN" OR "RECONSTRUCTED TO GRADE, AS PER PLAN".

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM SPECIAL - MISCELLANEOUS METAL

88,000 POUND

EXISTING TEST TEES

STORM WATER DRAINAGE AND/OR ACTIVE SANITARY SEWER CONNECTION TEST TEES ENCOUNTERED WITHIN THE CONSTRUCTION LIMITS SHALL BE ADJUSTED TO GRADE, RECONSTRUCTED TO GRADE, ABANDONED WITH NEW TEST TEES INSTALLED AT ALTERNATE LOCATIONS, OR SIMPLY REPLACED, AS REQUIRED AT THE LOCATION SHOWN IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER; ALL IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF ITEM 611 AND THE DETAILS ON THE CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWING MD-6C. WHEN IT BECOMES NECESSARY TO PLACE OR REPLACE TEST TEES WITHIN PAVED AREAS SUCH AS DRIVEWAYS, SIDEWALKS, ETC. (RELOCATE OUTSIDE PAVED AREAS WHERE POSSIBLE), THEY SHALL BE SET TO FINISHED PAVED SURFACE GRADE AS DETAILED ON THE CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWING MD-6C AND/OR AS OTHERWISE SPECIFIED BY THE ENGINEER.

WHEN ADJUSTING/RECONSTRUCTING TEST TEES TO GRADE, NEW PIPE MATERIALS SHALL, TO THE EXTENT FEASIBLE, MATCH EXISTING IN-KIND MATERIAL (PVC FOR PVC; DUCTILE IRON FOR DUCTILE IRON; ETC.). MATERIAL SPECIFICATIONS ARE INDICATED ON MD-6. SEWER JOINTS SHALL CONFORM TO ASTM C-425 FOR CLAY PIPE, ASTM D-3212 FOR PLASTIC PIPE, AWWA C-111 FOR CAST IRON PIPE, AWWA C-111 FOR DUCTILE IRON PIPE. JOINTS FOR PVC PIPE SHALL BE ELASTOMERIC O-RING. SOLVENT CEMENT JOINTS FOR PIPES SIX (6) INCHES OR UNDER IS ACCEPTABLE. IF THE JOINT IS OF THE SOLVENT CEMENT TYPE, IT SHALL BE INSTALLED PER ASTM D-2235 AND THE MANUFACTURER'S RECOMMENDATIONS. ADDITIONALLY, ALL EXPOSED ENDS OF THE ABS COMPOSITE PIPE SHALL BE FULLY SEALED WITH SOLVENT CEMENT. ELASTOMERIC QUALITIES OF THE JOINT GASKETS OR O-RINGS SHALL MEET ASTM F-477. SOLVENT CEMENT FOR PVC PIPING AND FITTINGS SHALL CONFORM TO ASTM D-2564. WELDED JOINTS SHOULD BE AIR TESTED 24 HOURS AFTER INSTALLATION.

WHEN SIMPLY REPLACING TEST TEES IN THE SAME LOCATION, THE COST FOR REMOVAL AND DISPOSAL OF THE EXISTING TEST TEE SHALL BE INCLUDED IN THE PAYMENT FOR THE NEW TEST TEE.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 202 - ABANDON MISC.: TEST TEE	5 EACH
ITEM 611 — DRAINAGE STRUCTURE, MISC.: TEST TEE ADJUSTED TO GRADE	5 EACH
ITEM 611 — DRAINAGE STRUCTURE, MISC.: TEST TEE RECONSTRUCTED TO GRADE	<u>5</u> EACH
ITEM 611 — DRAINAGE STRUCTURE, MISC.: TEST TEE, AS PER PLAN	5 EACH

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER.

STRUCTURES ADJUSTED TO GRADE, RECONSTRUCTED TO GRADE OR REPLACED

ALL ADJUSTMENT, RECONSTRUCTION OR REPLACED WORK, EXCEPT FOR THOSE STRUCTURES OWNED BY PRIVATE COMPANIES, SHALL BE PERFORMED BY THE CONTRACTOR. WHERE APPLICABLE, THE TIME BETWEEN RESETTING THE CASTINGS AND RESURFACING SHALL BE KEPT TO AN ABSOLUTE MINIMUM.

EXCEPT AS NOTED BELOW FOR EXISTING PRECAST SANITARY SEWER MANHOLES. ALL PUBLICLY OWNED CASTINGS SHALL BE ADJUSTED OR RECONSTRUCTED TO GRADE IN ACCORDANCE WITH 611.10 USING CLAY BRICKS (704.01), CLASS QC 1 CONCRETE (511) AND/OR CONCRETE MORTAR (602), OR PER 638.18 AND AS SPECIFIED BELOW FOR SERVICE BOX AND VALVE BOX ADJUSTMENTS. EXCEPT FOR EXISTING PRECAST SANITARY MANHOLES, NO GRADE RINGS OR METAL ADJUSTING RINGS (CASTINGS) ARE PERMITTED. MAXIMUM CONCRETE MORTAR THICKNESS IS 1-1/2".

NOTES

398] IC.R. AD **R**0 WOODHILL

DRAINAGE (CONTINUED)

STRUCTURES ADJUSTED TO GRADE, RECONSTRUCTED TO GRADE OR REPLACED (CONTINUED)

EXISTING PRECAST SANITARY SEWER MANHOLES SHALL BE RECONSTRUCTED TO GRADE USING A FOUR (4) INCH MINIMUM TO TWELVE (12) INCH MAXIMUM DEPTH OF EXISTING AND/OR PROPOSED GRADE RINGS (706.13) IN LIEU OF BRICK OR CLASS QC 1 CONCRETE. GROUT BETWEEN GRADE RINGS AND ON THE OUTSIDE OF THE GRADE RINGS. SET THE MANHOLE FRAME IN A FINISHED MORTAR BED WITH A FLUSH MORTAR JOINT. WHERE NECESSARY, RECONSTRUCTION WORK SHALL BE ACCOMPLISHED BY THE REMOVAL AND/OR ADDITION OF FOUR (4) FOOT DIAMETER PRECAST MANHOLE RISER SECTIONS (706.13). IN ADDITION, APPROVED CHIMNEY SEALS SHALL BE INSTALLED AFTER THE EXISTING PRECAST SANITRAY SEWER MANHOLES HAVE BEEN RECONSTRUCTED TO GRADE.

THE CONTRACTOR SHALL RESET EXISTING VALVE BOXES OR EXISTING CURB SHUT—OFF VALVE BOXES TO ESTABLISHED GRADE BY RAISING OR LOWERING THE EXISTING CASTINGS OR BY EITHER ADDING, DELETING OR CUTTING THE APPROPRIATE VALVE BOX STEM SECTIONS. IN RAISING OF THE CASTINGS, NO INSERTS WILL BE PERMITTED. ANY VALVE BOXES OR CURB SHUT—OFF VALVE BOXES FOUND TO BE DAMAGED OR UNSUITABLE FOR REUSE SHALL BE REPLACED BY THE CONTRACTOR AND PAID FOR UNDER ITEM SPECIAL—MISCELLANEOUS METAL. THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY AS REQUIRED OR AS ORDERED TO COMPLETE THE ITEM.

ADJUST TO GRADE, RECONSTRUCT TO GRADE OR TOTAL REPLACEMENT WORK SHALL, WHERE REQUIRED, INCLUDE THE REMOVAL AND REPLACEMENT OF ANY EXISTING CONCRETE BLOCKOUT CURB AND/OR PAVEMENT USING MEDIUM SET (CLASS QC MS) CONCRETE OR, IF APPROVED/DIRECTED BY THE ENGINEER, FAST- SET (CLASS QC FS) CONCRETE PER 499.03 OF THE SPECIFICATIONS. TO FACILITATE REMOVAL, THE BLOCKOUT PAVEMENTS SHALL BE SAWED FULL DEPTH (PER 255.03) ALONG THE LIMITS OF THEIR REMOVAL UNLESS OTHERWISE DESIGNATED/DIRECTED BY THE ENGINEER. UNLESS OTHERWISE APPROVED/DIRECTED BY THE ENGINEER, BLOCKOUT PAVEMENT, REINFORCING STEEL, JOINT MATERIAL AND LOAD TRANSFER DEVICES SHALL BE REPLACED / INSTALLED IN ACCORDANCE WITH THE CITY OF CLEVELAND CONSTRUCTION DRAWING CONC-1. CB-1 OR OTHER APPROPRIATE CATCH BASIN DRAWING(S). UNLESS OTHERWISE DIRECTED / APPROVED BY THE ENGINEER, REPLACE EXCAVATED SUBBASE AND SUBGRADE MATERIALS BELOW THE PROPOSED BLOCKOUT PAVEMENT WITH "CLEVELAND LSM" (SEE "ITEM 611 STRUCTURES, AS PER PLAN" NOTE). ALL COSTS ASSOCIATED WITH THE BLOCKOUT REMOVALS/REPLACEMENTS SHALL BE CONSIDERED INCIDENTAL TO THE PER EACH BID ITEMS.

EXISTING WATER METER MANHOLES (OUTSIDE OF THE PAVEMENT WITH LIGHT DUTY/NON-TRAFFIC BEARING CASTINGS) THAT NEED TO BE ADJUSTED TO GRADE HAVE BEEN ITEMIZED SEPARATELY.

ALL EXISTING CASTINGS FOR STRUCTURES TO BE ADJUSTED OR RECONSTRUCTED TO GRADE SHALL BE FIELD CHECKED AT THE TIME OF CONSTRUCTION AND MARKED SUITABLE FOR SALVAGE AND REUSE OR REPLACED AS DIRECTED BY THE ENGINEER. UNLESS OTHERWISE INDICATED ON THE PLAN, REPLACEMENT CASTINGS ARE PAID UNDER ITEM SPECIAL — MISCELLANEOUS METAL.

THE ENGINEER WILL DETERMINE THE ITEM 611 WORK REQUIRED BASED ON THE GUIDELINES STIPULATED BELOW:

1."ADJUST TO GRADE, AS PER PLAN" SHALL INCLUDE ALL WORK SPECIFIED IN 611.10 (D) AS NECESSARY TO RAISE THE EXISTING/NEW CASTING NO MORE THAN ONE (1) FOOT FROM ITS EXISTING ELEVATION OR TO LOWER THE EXISTING/ NEW CASTING NO MORE THAN SIX (6) INCHES FROM ITS EXISTING ELEVATION.

IN ADDITION, THIS ITEM WILL INCLUDE ANY SUPPORTING WALL REPAIR WORK NECESSARY, UP TO SIX (6) INCHES BELOW THE TOP OF THE EXISTING SUPPORTING WALL.

PAYMENT SHALL BE MADE UNDER THE APPROPRIATE STRUCTURE (ITEM 611) ADJUSTED TO GRADE, AS PER PLAN.

2. "RECONSTRUCT TO GRADE, AS PER PLAN" SHALL INCLUDE ALL WORK SPECIFIED IN 611.10(C) AND SHALL ALSO INCLUDE EXISTING/NEW CASTINGS RAISED MORE THAN ONE (1) FOOT FROM THEIR EXISTING ELEVATION OR LOWERED MORE THAN SIX (6) INCHES FROM THEIR EXISTING ELEVATION.

THE WORK LIMIT SHALL BE SPECIFIED BY THE ENGINEER AND PAYMENT SHALL BE MADE UNDER THE APPROPRIATE STRUCTURE (ITEM 611) RECONSTRUCTED TO GRADE, AS PER PLAN.

ONLY ONE (1) OF THE ABOVE PAYMENT ITEMS MAY BE USED PER STRUCTURE.

"RECONSTRUCT TO GRADE, AS PER PLAN" WORK SHALL NOT BE PERFORMED UNLESS SPECIFICALLY INDICATED IN THE PLANS OR OTHERWISE ORDERED BY THE ENGINEER. ANY SUCH WORK MADE NECESSARY DUE TO THE CONTRACTOR'S NEGLIGENT OPERATIONS, AS DETERMINED BY THE ENGINEER, SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 611 - CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN 22 E	- ACH
$\Delta \subseteq D \vdash D \mid \Delta N \mid \qquad \qquad$	$^{T}AU\square$
ITEM 611 - CATCH BASIN RECONSTRUCTED TO GRADE,	EACH
ITEM 611 — MANHOLE ADJUSTED TO GRADE,	ACH
=	ACH
ITEM 611 — MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN 33 E	ACH
ITEM 638 — VALVE BOX ADJUSTED TO GRADE, AS PER PLAN 90 E	ACH
ITEM 638 - SERVICE BOX ADJUSTED TO GRADE, AS PER PLAN 140 E	ACH

THE ENGINEER MAY DETERMINE THAT CERTAIN STRUCTURES SHALL BE REPLACED RATHER THAN BEING ADJUSTED OR RECONSTRUCTED. HIS/HER DETERMINATION MAY BE BASED ON EITHER OR BOTH OF THESE JUDGMENTS:

- 1. THE CONDITION OF THE STRUCTURE.
- 2. THE COMPARATIVE CONTRACT PRICES OF THE ADJUST TO GRADE, RECONSTRUCT TO GRADE AND REPLACEMENT WORK ITEMS.

WHERE TOTAL REPLACEMENT WORK IS DETERMINED TO BE PRUDENT BY THE ENGINEER, THE EXISTING STRUCTURE SHALL BE COMPLETELY REMOVED AND REPLACED IN KIND WITH A NEW STRUCTURE OF THE TYPE SPECIFIED BY THE ENGINEER AND IN ACCORDANCE WITH ITEM 611. NEW STORM OR SANITARY SEWER MANHOLE CASTINGS SHALL CONFORM WITH CITY OF CLEVELAND STANDARD FRAMES AND COVERS PER STANDARD CONSTRUCTION DRAWINGS A-503, A-605 AND A-695. THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR THIS CONTINGENCY:

ITEM 202 — CATCH BASIN REMOVED	<u>6</u> EACH
ITEM 202 — MANHOLE REMOVED	1 EACH
ITEM 611 — MANHOLE, NO1, AS PER PLAN	1 EACH
ITEM 611 — CATCH BASIN, CITY OF CLEVELAND	
NO. 1, AS PER PLAN	<u>6</u> EACH

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER.

THE COST OF REPLACING EXISTING CONDUIT CONNECTIONS, IF REQUIRED, SHALL BE PAID FOR BY SIZE AND TYPE SPECIFIED AND/OR DESIGNATED BY THE ENGINEER. DISTURBED CONNECTIONS SHALL BE REPLACED AT ONE PERCENT (1%) MINIMUM SLOPES. ALL NEW CATCH BASIN CONNECTIONS SHALL HAVE THREE (3) FEET OF MINIMUM COVER AND TIE DIRECTLY TO THE NEAREST STORM MANHOLE. AN ESTIMATED QUANTITY OF THE FOLLOWING IS PROVIDED IN THE GENERAL SUMMARY FOR THIS WORK:

ITEM 202 — PIPE REMOVED, 24" AND UNDER	<u> </u>
ITEM 611 - 12 CONDUIT, TYPE B, 706.08 (ES), AS PER PLAN	<u>48</u> FT.
ITEM 611 - 12" CONDUIT, TYPE C, 706.08 (ES), AS PER PLAN	<u>32</u> FT.
ITEM 611 — 4" CONDUIT, TYPE F FOR UNDERDRAIN	
OUTLETS, AS PER PLAN	<u>24</u> FT.

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER.

<u>ITEM 611 - CONDUITS, AS PER PLAN AND ITEM 611 - STRUCTURES, AS PER PLAN</u>

IN ADDITION TO THE REQUIREMENTS OF ITEM 611, AS SET FORTH IN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, THE FOLLOWING ADDITIONAL RESTRICTIONS SHALL BE MET FOR ITEM 611 — CONDUITS, AS PER PLAN AND ITEM 611 — STRUCTURES, AS PER PLAN:

611.02 (B): MAXIMUM ALLOWABLE SIZE FOR NON-REINFORCED CONCRETE PIPE (706.01) IS 21". ONLY CLASS III MINIMUM FOR REINFORCED CONCRETE CIRCULAR PIPE (706.02) AND CLASS HE-III MINIMUM FOR REINFORCED CONCRETE ELLIPTICAL PIPE (706.04) WILL BE USED. MAXIMUM ALLOWABLE SIZE FOR VITRIFIED CLAY PIPE (706.08) IS 15".

611.02 (C): USE CLASS 3 MINIMUM FOR NON-REINFORCED CONCRETE CIRCULAR PIPE (706.01) WITH A MAXIMUM ALLOWABLE SIZE OF 21". MAXIMUM ALLOWABLE SIZE FOR VITRIFIED CLAY PIPE (706.08) IS 15" AND ONLY EXTRA STRENGTH WILL BE USED.

STORM SEWER MANHOLES CONSTRUCTED FOR THIS PROJECT SHALL HAVE A CUYAHOGA COUNTY NO. 9 FRAME AND NO. 28 COVER, AS DETAILED ON THE CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWING MH-10C.

OUTSIDE PAVEMENT LIMITS

STRUCTURAL BACKFILL MATERIAL (703.11) FURNISHED FOR BEDDING AND BACKFILL OPERATIONS SHALL BE LIMITED TO CRUSHED CARBONATE STONE. GRANULAR EMBANKMENT MATERIAL (203.02.R) FURNISHED FOR NON-STRUCTURAL BACKFILL OPERATIONS SHALL BE LIMITED TO NATURAL GRANULAR MATERIAL (203.02.H) AND RECYCLED PORTLAND CEMENT CONCRETE (RPCC). IN ADDITION TO THE REQUIREMENTS OF 703.16, THE USE OF RPCC IS SUBJECT TO THE RESTRICTIONS OF 203.03(B) AND 203.03(E). BEDDING SHALL BE PLACED AND COMPACTED PER 611.06. THE METHOD OF BACKFILLING SHALL BE PER 611.06.

WITHIN PAVEMENT LIMITS

FOR ALL STRUCTURAL BACKFILL WITHIN PAVEMENT LIMITS THE MATERIAL MENTIONED ABOVE SHALL BE REPLACED WITH A FLOWABLE FILL OF CLEVELAND LSM (LOW STRENGTH MORTAR). THE LSM SHALL MEET THE FOLLOWING SPECIFICATIONS:

MATERIAL MUST COME FROM A PLANT WITH A CURRENT CERTIFICATE OF COMPLIANCE DEMONSTRATING THE ABILITY OF THE MIX DESIGN TO MEET THE SPECIFIED REQUIREMENTS. CERTIFICATES IN EXCESS OF ONE YEAR WILL NOT BE ACCEPTED. CERTIFICATES MUST CONTAIN THE NAME OF SUPPLIER, DATE, CONTRACT NUMBER AND MIX DESIGN DATA ON EACH DELIVERY TICKET.

ALL MATERIALS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS STATED HEREIN.

- 1.) CEMENT SHALL BE ASTM C-150 TYPE 1.
- 2.) THE USE OF FLY ASH IS STRICTLY PROHIBITED.
- 3.) FINE AGGREGATE SHALL CONFORM TO ODOT SPEC. 703.03 FINE AGGREGATE FOR MORTAR OR GROUT. THE USE OF SPENT FOUNDRY SAND OR CORE SAND IS STRICTLY PROHIBITED.

AN AIR ENHANCING ADMIXTURE SHALL BE INCORPORATED IN THE MIX THAT WILL HAVE THE EFFECT OF LOWERING THE WATER/CEMENT RATIO BETWEEN 95 AND 105 LBS/CUBIC FOOT. THE AIR ENTRANCED CONTENT OF THE MIX SHALL BE 30% TO ELIMINATE/MINIMIZE THE EXCESSIVE WATER AND SEGREGATION. COMPRESSIVE STRENGTHS WITH A RANGE OF 50 PSI TO 80 PSI AT 28 DAYS WILL BE REQUIRED IF ADDITIONAL EXCAVATION BY MACHINE OR HAND IS REQUIRED.

APPROVED ADMIXTURES:

MASTER BUILDERS REOFILL

AXIM FLOW AIR

W.R. GRACE DARAFILL

APPROVED EQUAL

MIX DESIGN PROPORTIONS

CEMENT (TYPE 1) 50 LBS./CU. YD.

SAND (SSD) 2475 LBS./CU.YD.

WATER 25 GALLONS/CU. YD.

ADMIXTURE (AIR) 3 OZ./CU. YD.

MATERIAL FOR PIPE BEDDING AND PIPE ZONE TO A DEPTH OF 12" (12 INCHES) OVER THE TOP OF PIPE SHALL BE AS SPECIFIED ABOVE FOR PIPES OUTSIDE PAVEMENT LIMITS. THE FLOWABLE FILL SHALL CONTINUE FROM 12 INCHES ABOVE THE TOP OF THE PIPE TO THE TOP OF THE PROPOSED SUBGRADE. ALL BOLTS AND VALVES EXPOSED IN THE TRENCH SHOULD BE WRAPPED WITH POLYETHYLENE MATERIAL CONFORMING TO ODOT 748.07 (8 MIL THICK). COVER ALL JOINTS IN CLAY PIPE IN THE TRENCH AREA WITH POLYETHYLENE MATERIAL BEFORE POURING FLOWABLE FILL. REPAIR ALL OBSERVED OPENINGS IN ANY PIPE OR MANHOLE IN THE TRENCH AREA PRIOR TO BACKFILLING WITH TECHNIQUES IN ACCORDANCE WITH THE MAINTAINING AGENCIES STANDARD PROCEDURES.

PROVIDE 706.11 JOINTS FOR ALL CONCRETE PIPE (706.02) AND FOR ALL PRECAST MANHOLE OR CATCH BASIN SECTIONS. PROVIDE 706.12 JOINTS FOR CLAY PIPE (706.08 EXTRA STRENGTH).

 $\frac{14}{24}$

EXISTING UNDERDRAINS WHICH THE ENGINEER DETERMINES ARE ADVERSELY AFFECTED (THROUGH NO FAULT OF THE CONTRACTOR) BY THE CONSTRUCTION OF THIS IMPROVEMENT OR ARE FOUND TO BE OTHERWISE UNSUITABLE SHALL BE REMOVED AND REPLACED, IN KIND, (INCLUDING ALL NECESSARY BENDS OR BRANCHES), AT THE SAME TRENCH WIDTH AND DEPTH, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.

GRANULAR BACKFILL MATERIAL SHALL BE LIMITED TO LIMESTONE.

THE COST FOR REMOVAL AND DISPOSAL OF EXISTING UNDERDRAIN PIPE/OUTLET PIPE IS INCLUDED UNDER THESE ITEMS.

THE FOLLOWING ESTIMATED QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 611 — 4" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS, AS PER PLAN

<u>144</u> FT.

ITEM 605 - 4" BASE PIPE UNDERDRAINS, 706.08 (ES). AS PER PLAN

_1,440 FT.

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER.

WATERWORK

ALL WATERWORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND DRAWINGS OF THE CITY OF CLEVELAND, DEPARTMENT OF PUBLIC UTILITIES, DIVISION OF WATER (C.W.D.), 1201 LAKESIDE AVENUE, CLEVELAND, OHIO. THE COST OF ALL LABOR, MATERIAL, EQUIPMENT, TOOLS, EXCAVATION, BEDDING AND BACKFILL FOR THE WATER WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR EACH WATER WORK ITEM. THE REPLACEMENT OF PAVEMENT, WALKS, DRIVES, LANDSCAPING AND ALL OTHER WORK EXCEPTING THE "WATERWORK" ITSELF, SHALL BE AS STIPULATED IN THE CONTRACT SPECIFICATIONS.

ALL PERMITS, FEES AND C.W.D. CHARGES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THEIR ASSOCIATED COST SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR THE PERTINENT WATERWORK ITEMS. FOR BIDDING PURPOSES, THE CLEVELAND DIVISION OF WATER (CWD) CHARGES AND FEES MAY BE OBTAINED FROM THE DIVISION OF WATER, PERMIT AND SALES SECTION AT (216) 664-244-5203.

<u>ITEM 611 - CPP/MELP MANHOLE ADJUSTED TO GRADE.</u> <u>AS PER PLAN</u>

AS DIRECTED BY THE ENGINEER, THESE WILL BE ADJUSTED TO GRADE IN ACCORDANCE WITH 604.03, THE "STRUCTURES ADJUSTED TO GRADE, RECONSTRUCTED TO GRADE OR REPLACED" GENERAL NOTE ON SHEETS 13 & 14 AND IN ACCORDANCE WITH ANY APPLICABLE CLEVELAND PUBLIC POWER STANDARD/SPECIFICATIONS.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THIS WORK:

ITEM 611 - CPP/MELP MANHOLE ADJUSTED TO GRADE,
AS PER PLAN

<u>2</u> EACH

PAVEMENT

ITEMS 301 AND 448, PG64-22, AS PER PLAN

USE OF RECLAIMED ASPHALT CONCRETE PAVEMENT IS LIMITED TO A MAXIMUM OF 10% FOR SURFACE COURSES. USE OF RECLAIMED ASPHALT SHINGLES IS NOT PERMITTED IN ANY ASPHALT CONCRETE COURSE.

THE COARSE AGGREGATE SHALL BE CRUSHED CARBONATE STONE (CCS) AND/OR CRUSHED AIR COOLED BLAST FURNACE SLAG (ACBFS).

PRIOR TO PRODUCING THE ASPHALT CONCRETE FOR THIS CONTRACT, SUBMIT A JOB MIX FORMULA (JMF) FOR APPROVAL BY THE ENGINEER. USE A JMF THAT MEETS ALL REQUIREMENTS ESTABLISHED IN THE CONTRACT AND HAS PREVIOUSLY BEEN APPROVED FOR USE ON ODOT WORK. WHERE NO PREVIOUSLY APPROVED (BY ODOT) JMF IS AVAILABLE, DEVELOP A JMF MEETING ALL CRITERIA ESTABLISHED IN THE CONTRACT AND HAVE IT REVIEWED AND APPROVED BY AN INDEPENDENT TESTING LABORATORY PRIOR TO SUBMISSION TO THE ENGINEER. THE INDEPENDENT TESTING LABORATORY SHALL HAVE APPROPRIATELY APPROVED PERSONNEL AND TESTING EQUIPMENT PER ODOT SUPPLEMENT 1041. ALL COST ASSOCIATED WITH THE ABOVE SHALL BE INCLUDED IN THE CUBIC YARD COST OF THE ASPHALT CONCRETE BID ITEM(S).

SAMPLING FOR VERIFICATION ACCEPTANCE (403.06.A) SHALL BE PERFORMED IN ACCORDANCE WITH ODOT SUPPLEMENT 1035 FOR ALL ITEM 448 MIXES.

UNLESS OTHERWISE DIRECTED/APPROVED BY THE ENGINEER, CONDUCT DENSITY GAUGE QUALITY CONTROL TESTING ON BOTH THE ITEM 448 ASPHALT CONCRETE SURFACE COURSE AND INTERMEDIATE COURSE MATS ACCORDING TO ODOT SUPPLEMENT 1055 REGARDLESS OF THE NUMBER OF LANES OR LENGTH OF CONTINUOUS PAVING.

<u>ITEMS 448 – ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70–22M, AS PER PLAN</u>

USE OF RECLAIMED ASPHALT CONCRETE PAVEMENT IS LIMITED TO A MAXIMUM OF 10%.

THE COARSE VIRGIN AGGREGATE SHALL BE A BLEND OF SIXTY PERCENT (60%) MINIMUM AIR COOLED BLAST FURNACE SLAG (ACBFS) OR TRAP ROCK FROM ONTARIO WITH THE REMAINING PERCENTAGE COMPRISED OF CRUSHED CARBONATE STONE (CCS).

PRIOR TO PRODUCING THE ASPHALT CONCRETE FOR THIS CONTRACT, SUBMIT A JOB MIX FORMULA (JMF) FOR APPROVAL BY THE ENGINEER. USE A JMF THAT MEETS ALL REQUIREMENTS ESTABLISHED IN THE CONTRACT AND HAS PREVIOUSLY BEEN APPROVED FOR USE ON ODOT WORK. WHERE NO PREVIOUSLY APPROVED (BY ODOT) JMF IS AVAILABLE, DEVELOP A JMF MEETING ALL CRITERIA ESTABLISHED IN THE CONTRACT AND HAVE IT REVIEWED AND APPROVED BY AN INDEPENDENT TESTING LABORATORY PRIOR TO SUBMISSION TO THE ENGINEER. THE INDEPENDENT TESTING LABORATORY SHALL HAVE APPROPRIATELY APPROVED PERSONNEL AND TESTING EQUIPMENT PER ODOT SUPPLEMENT 1041. ALL COST ASSOCIATED WITH THE ABOVE SHALL BE INCLUDED IN THE CUBIC YARD COST OF THE ASPHALT CONCRETE BID ITEM.

SAMPLING FOR VERIFICATION ACCEPTANCE (403.06.A) SHALL BE PERFORMED IN ACCORDANCE WITH ODOT SUPPLEMENT 1035.

UNLESS OTHERWISE DIRECTED/APPROVED BY THE ENGINEER, CONDUCT DENSITY GAUGE QUALITY CONTROL TESTING ON THE ITEM 448 ASPHALT CONCRETE SURFACE COURSE MAT ACCORDING TO ODOT SUPPLEMENT 1055 REGARDLESS OF THE NUMBER OF LANES OR LENGTH OF CONTINUOUS PAVING.

PAVEMENT REPAIR

WHEN THE WEARING COURSE REMOVAL OPERATIONS HAVE BEEN ACCEPTABLY COMPLETED, THE ENGINEER WILL DESIGNATE THE LOCATIONS AND LIMITS OF ANY PAVEMENT REPAIR REQUIRED. IN AREAS DESIGNATED FOR PAVEMENT REPAIR, THE ENGINEER WILL DETERMINE IF BRICK REMOVAL IS REQUIRED. THE ENGINEER WILL DESIGNATE/MARK ALL AREAS REQUIRING BRICK REMOVAL. ONCE THE EXISTING BRICK IS REMOVED OR THE CONCRETE BASE SURFACE IS OTHERWISE EXPOSED, THE ENGINEER WILL EXAMINE THE CONCRETE BASE AND DETERMINE THE LIMITS OF PARTIAL DEPTH PAVEMENT REPAIR (ITEM 251) OR FULL DEPTH REPAIR (ITEM 255) REQUIRED. SEE PAVEMENT REPAIR DETAILS ON SHEET 23 AND THE ITEM 251 AND ITEM 255 GENERAL NOTES ON SHEETS 15—16.

APPROVED METHODS FOR REMOVAL OF ANY BRICK BASE COURSE SHALL SATISFACTORILY ESTABLISH NEAT VERTICAL FACES ALONG THE ENTIRE PERIMETER OF EACH RECTANGULARLY SHAPED REMOVAL AREA IN ORDER TO SUBSEQUENTLY PERMIT THE PROPER PLACEMENT AND COMPACTION OF THE ASPHALT CONCRETE REPLACEMENT MATERIALS.

BEFORE PLACING THE ASPHALT CONCRETE REPLACEMENT MATERIALS, CLEAN ALL VERTICAL FACES OF THE EXISTING PAVEMENT AND COAT THEM WITH ASPHALT MATERIAL ACCORDING TO 401.14. ALSO APPLY ITEM 407 — TACK COAT, 702.13 TO THE SURFACE OF THE REPAIRED/EXISTING CONCRETE BASE OR EXISTING BRICK BASE COURSE.

REMOVAL OF THE EXISTING BRICK BASE COURSE SHALL BE MEASURED AND PAID FOR PER SQUARE YARD IN ACCORDANCE WITH ITEM 202 — BRICK BASE REMOVED. AS PER PLAN.

THE FOLLOWING ESTIMATED QUANTITIES TO BE USED AS DIRECTED BY THE ENGINEER ARE CARRIED TO THE GENERAL SUMMARY FOR THIS WORK AND PAYMENT IS INCLUDED IN THE CONTRACT UNIT BID PRICE FOR:

ITEM 202 - BRICK BASE REMOVED, AS PER PLAN

<u>8,000</u> SQ. YD.

ITEM 301 - ASPHALT CONCRETE BASE, PG64-22, AS PER PLAN

<u>1,100</u> CU. YD.

ITEM 407 - TACK COAT, 702.13

<u>800</u> GALLON

GENERAL

<u>ITEM 255 – FULL DEPTH PAVEMENT REMOVAL AND RIGID</u> <u>REPLACEMENT, CLASS QC MS, AS PER PLAN</u>

WHEN THIS ITEM IS CALLED FOR ON THE PLANS OR IN THE PROPOSAL, ALL APPLICABLE PROVISIONS OF ITEM 255, AS SET FORTH IN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, SHALL APPLY EXCEPT AS MODIFIED HEREIN AND AS OTHERWISE DETAILED OR SPECIFIED ON THE CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWING BP-2.5C AND THE CITY OF CLEVELAND'S CONSTRUCTION DRAWING CONC-1.

255.02 MATERIALS

THE "CLASS QC MS" CONCRETE USED FOR THE RIGID PAVEMENT REPLACEMENT (255) AND INTEGRAL CONCRETE CURB (609) SHALL CONFORM TO THE "MODIFICATIONS TO ITEM 499 CONCRETE — GENERAL" AS CONTAINED IN THE "SECTION 400 PROPOSAL NOTES" OF THE CUYAHOGA COUNTY ENGINEER SPECIFICATION BOOKLET" AS WELL AS THE SPECIFICATIONS CONTAINED IN PLAN NOTE "CONCRETE DESIGN MIX (CITY OF CLEVELAND)."

255.04 CORRECTION OF DISTURBED SUBBASE AND SUBGRADE

SUITABLE SUBBASE DISTURBED IN AREAS WHERE CONCRETE PAVEMENT IS REMOVED SHALL BE SHAPED AND RECOMPACTED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE COUNTY. UNSUITABLE SUBBASE, AS DETERMINED BY THE ENGINEER, SHALL BE REMOVED AND REPLACED WITH "ITEM 304 — AGGREGATE BASE, AS PER PLAN" TO THE DEPTH OF ADJACENT SUBBASE.

WHERE UNSUITABLE SUBGRADE MATERIAL IS ENCOUNTERED, IT SHALL BE REMOVED TO THE DEPTH DETERMINED BY THE ENGINEER, AND REPLACED IN EIGHT (8) INCH MAXIMUM (LOOSE DEPTH) MECHANICALLY COMPACTED LAYERS. SUITABLE EMBANKMENT MATERIAL (204.02) REQUIRED TO REPLACE THE UNDERCUT SUBGRADE SHALL, TO THE EXTENT POSSIBLE, EXHIBIT THE SAME PHYSICAL PROPERTIES AS THE ADJACENT SOUND SUBGRADE MATERIALS. HOWEVER, USE OF SLAG, IN ANY FORM, IS NOT PERMITTED. ALL EXPOSED OR RECONSTRUCTED SUBGRADE SOILS SHALL BE COMPACTED TO THE SATISFACTION OF THE ENGINEER. IN CONJUNCTION WITH THE ABOVE SUBGRADE WORK, AN ESTIMATED QUANTITY OF ITEM 204 — GEOTEXTILE FABRIC IS PROVIDED FOR USE AS DIRECTED BY THE ENGINEER.

REMOVAL AND DISPOSAL OF UNSUITABLE SUBBASE OR SUBGRADE MATERIAL SHALL BE CONSIDERED INCIDENTAL TO ITEM 255 AND NO SEPARATE PAYMENT WILL BE MADE.

255.061 CURB REPLACEMENT

INTEGRAL CONCRETE CURB REMOVED IN CONJUNCTION WITH THE PAVEMENT REMOVAL OPERATIONS (ASSOCIATED WITH ANY EXISTING BUS PAD REPAIRS) SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE ITEM 255 PAVEMENT REMOVAL. INTEGRAL CONCRETE CURB SO REMOVED SHALL BE REPLACED (IN KIND) IN ACCORDANCE WITH THE "INTEGRAL CONCRETE CURB REPLACEMENT DETAIL, METHOD B", AS SHOWN ON THE CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWING MD-1C AND PAID FOR UNDER ITEM 609 — CURB, TYPE 2A USING CLASS QC MS CONCRETE, AS PER PLAN.

255.07 WEARING COURSE REPLACEMENT

MATERIAL FOR ANY ASPHALT CONCRETE OVERLAYS SHALL BE PAID FOR SEPARATELY AND BE AS DETAILED/SPECIFIED ELSEWHERE IN THE PLANS.

WOODHILL

ANY RESULTING CAVITIES BEHIND THE PROPOSED TYPE 6 CURB WITHIN ANY EXISTING UNDERDRAIN TRENCH SHALL BE BACKFILLED PER 605.03(C) WITH THE TOP 8" DEPTH CONSISTING OF TAMPED NON-GRANULAR EARTH FILL (703.16.A). THE COST OF THIS IS TO BE INCLUDED IN THE UNIT PRICE BID FOR "ITEM 609 - CURB, TYPE 6 USING CLASS QC MS CONCRETE, AS PER PLAN" UNLESS THE

PAVEMENT (CONTINUED)

THE REPLACEMENT MATERIAL FOR UNSUITABLE SUBGRADE MATERIAL SHALL BE

- EMBANKMENT, AS PER PLAN OR, WHERE DIRECTED BY THE ENGINEER, ITEM

204 - GRANULAR EMBANKMENT, AS PER PLAN. THE REPLACEMENT MATERIAL

FOR IN ACCORDANCE WITH ITEM 304 - AGGREGATE BASE, AS PER PLAN.

PAYMENT FOR ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID

FURNISHING ALL MATERIALS AND LABOR PER 255.10 AND AS SPECIFIED

REPLACEMENT, CLASS QC MS, AS PER PLAN IS FULL COMPENSATION FOR

HEREIN, INCLUDING BUT NOT LIMITED TO INTERGRAL CONCRETE CURB AND/OR

NECESSARY, FURNISHING AND PLACING DOWELS, TIE BARS, MESH AND THE

THE FOLLOWING ESTIMATED QUANTITIES TO BE USED AS DIRECTED BY THE

ENGINEER. ARE CARRIED TO THE GENERAL SUMMARY FOR THIS WORK AND

PAYMENT IS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR:

ITEM 204 - GRANULAR EMBANKMENT, AS PER PLAN

ITEM 609 - CURB, TYPE 2-A USING CLASS QC MS

CONCRETE. AS PER PLAN

ITEM 255 - FULL DEPTH PAVEMENT SAWING

ITEM 304 - AGGREGATE BASE, AS PER PLAN

ITEM 304 - AGGREGATE BASE, AS PER PLAN

AS PER PLAN

QC MS CONCRETE, AS PER PLAN."

EXISTING UNDERDRAIN IS REPLACED.

(CITY OF CLEVELAND)" GENERAL NOTE ON SHEET 17.

ITEM 204 - EMBANKMENT, AS PER PLAN

ITEM 204 - GEOTEXTILE FABRIC

PROFILE AND ALIGNMENT

ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID

PAVEMENT REMOVAL, SUBBASE/SUBGRADE CORRECTION AND/OR REMOVAL, AS

MATERIAL FURNISHED FOR THIS ITEM SHALL BE LIMITED TO CRUSHED CARBONATE

THE PROPOSED PAVEMENT RESURFACING SHALL FOLLOW THE ALIGNMENT AND

PROFILE OF THE EXISTING PAVEMENT. THE PROPOSED ASPHALT CONCRETE

THE "CLASS QC MS" CONCRETE SHALL CONFORM TO THE "MODIFICATIONS TO

OVERLAY SHALL HAVE A UNIFORM THICKNESS OF THREE (3) INCHES.

ITEM 609 - CURB, TYPE 6 USING CLASS QC MS CONCRETE.

ITEM 499 CONCRETE - GENERAL" AS CONTAINED IN THE "SECTION 400

PROPOSAL NOTES" OF THE "CUYAHOGA COUNTY ENGINEER SPECIFICATION

BOOKLET" AS WELL AS THE SPECIFICATIONS IN THE "CONCRETE DESIGN MIX

ANY CAVITIES BELOW THE PROPOSED TYPE 6 CURB RESULTING FROM THE

OF POROUS NO. 8 LIMESTONE MATERIALS. THE COST OF THIS IS TO BE

EXISTING CURB REMOVAL OPERATIONS SHALL BE BACKFILLED WITH A FIRM BED

INCLUDED IN THE UNIT PRICE BID FOR "ITEM 609 - CURB. TYPE 6 USING CLASS

REPLACEMENT, CLASS QC MS, AS PER PLAN 3,600 SQ. YD.

_9,000 FT.

__<u>150</u>__ CU. YD.

__<u>150</u> CU. YD.

<u>900</u> SQ. YD.

___100_ CU. YD.

__<u>100</u>__FT.

FOR UNSUITABLE SUBBASE SHALL BE FURNISHED, PLACED, MEASURED AND PAID

FURNISHED, PLACED, MEASURED AND PAID FOR IN ACCORDANCE WITH ITEM 204

255.09 METHOD OF MEASUREMENT

255.10 BASIS FOR PAYMENT

CLASS QC MS CONCRETE.

STONE.

IN LIEU OF INSTALLING EXPANSION JOINT MATERIAL PER BP-5.1, THOROUGHLY SEAL THE ABUTTING JOINT WHEN CURB IS PLACED ADJACENT TO EXISTING PAVEMENT. WHEN EXISTING SIDEWALK IS ADJACENT & INTEGRAL TO EXISTING CURB BEING REPLACED, THE PROPOSED CURB AND THE PROPOSED SIDEWALK WILL BE CONSTRUCTED INTEGRALLY (CLASS QC MS) AS PER THE CITY OF CLEVELAND'S CONSTRUCTION DRAWING CD-1.

ITEM 251 — PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN

WHEN THIS ITEM IS CALLED FOR ON THE PLANS OR IN THE PROPOSAL, ALL APPLICABLE PROVISIONS OF ITEM 251, AS SET FORTH IN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, SHALL APPLY EXCEPT AS MODIFIED HEREIN.

251.02 REMOVAL OF EXISTING PAVEMENT.

APPROVED REMOVAL METHODS SHALL SATISFACTORILY ESTABLISH A NEAT VERTICAL FACE ALONG THE ENTIRE PERIMETER OF THE REPAIR AREA IN ORDER TO SUBSEQUENTLY PERMIT THE PROPER PLACEMENT AND COMPACTION OF THE ASPHALT CONCRETE PATCHING MATERIAL. UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, REMOVAL DEPTHS SHALL VARY FROM A ONE AND A HALF (1-1/2) INCH MINIMUM TO A THREE (3) INCH MAXIMUM.

PARTIALLY EMBEDDED STEEL MESH EXPOSED SHALL BE WIRE—BRUSHED OR OTHERWISE CLEANED TO REMOVE ALL LOOSE RUST. LOOSENED OR TOTALLY EXPOSED WIRE MESH REINFORCING SHALL BE CUT AND REMOVED AS REQUIRED WITHOUT DISPLACEMENT OR DISRUPTION TO THE REINFORCEMENT AND/OR PAVEMENT TO REMAIN.

251.04 METHOD OF MEARSUREMENT

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE BID PER SQUARE YARD FOR ITEM 251 — PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN 4,400 SQ. YD.

<u>ITEM 407 – TACK COAT. TRACKLESS TACK. INTERMEDIATE COURSE.</u> <u>AS PER PLAN</u>

ITEM 407 - TACK COAT, TRACKLESS TACK, AS PER PLAN

407.01 DESCRIPTION.

THE WORK DESCRIBED UNDER THIS SPECIFICATION CONSISTS OF PREPARING AND TREATING A PAVED SURFACE WITH A TRACKLESS TACK ASPHALT EMULSION. FURNISH MATERIALS ACCORDING TO ODOT'S APPROVED LIST. ALL REQUIREMENTS OF THE ITEM 407 TACK COAT SPECIFICATION IN THE ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS SHALL BE MET EXCEPT AS MODIFIED HEREIN:

407.02 MATERIALS.

MEET ALL PROPERTIES OF THE APPROVED MANUFACTURER'S TRACKLESS TACK SPECIFICATION REQUIREMENTS ON FILE WITH THE LABORATORY AT THE TIME OF PLACEMENT.

407.021 ACCEPTANCE OF MATERIALS.

SUPPLY CERTIFIED TEST DATA TO THE ENGINEER DEMONSTRATING THAT THE TRACKLESS TACK SUPPLIED WAS TESTED FOR AND MEETS ALL MATERIAL PROPERTIES SHOWN ON ODOT'S APPROVED LIST.

<u>407.03 EQUIPMENT.</u>

FOLLOW THE MANUFACTURER'S RECOMMENDATIONS FOR CORRECT DISTRIBUTOR SETTINGS. THOROUGHLY CLEAN ALL EQUIPMENT IF PREVIOUSLY USED MATERIAL CHARGE IS DIFFERENT THAN THE PROPOSED MATERIAL.

407.06 APPLICATION OF ASPHALT MATERIAL.

UNIFORMLY APPLY THE TRACKLESS TACK WITH A DISTRIBUTOR ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS. IF TRACKLESS TACK IS STORED FOR AN EXTENDED PERIOD OF TIME, PRIOR TO APPLICATION, AGITATE OR GENTLY CIRCULATE THE MATERIAL.

ENSURE ALL NOZZLES AND SPRAY PATTERNS ARE IDENTICAL TO ONE ANOTHER ALONG THE DISTRIBUTOR SPRAY BAR. PLACE THE ANGLE OF THE NOZZLE AT A 15 TO 30 DEGREE ANGLE TO THE SPRAY BAR AXIS TO MAXIMIZE OVERLAP OR AS RECOMMENDED BY THE NOZZLE MANUFACTURER. CONTACT THE MANUFACTURER'S REPRESENTATIVE FOR REQUIRED SPRAY NOZZLE SIZE AND DISTRIBUTOR AND NOZZLE SETTINGS.

APPLY AT A RATE OF 0.04 TO 0.10 GALLONS PER SQUARE YARD. DO NOT DILUTE TRACKLESS TACK. RECOMMENDED APPLICATION TEMPERATURE IS 160°F TO 180°F. DO NOT EXCEED 180°F.

THE ENGINEER WILL APPROVE THE QUANTITY, RATE OF APPLICATION, TEMPERATURE, DISTRIBUTOR SETTINGS AND AREAS TO BE TREATED BEFORE APPLICATION OF THE TRACKLESS TACK COAT. THE ENGINEER WILL DETERMINE THE ACTUAL APPLICATION IN GALLONS PER SQUARE YARD BY A CHECK ON THE PROJECT.

407.061 PERFORMANCE OF TRACKLESS TACK.

THE CONTRACTOR WILL DETERMINE THE TIME TO SET FOR THE MATERIAL TO BECOME TRACKLESS. THE ENGINEER WILL NOTE ANY ISSUES WITH EXCESSIVE TIME TO SET, OR AFTER SET ISSUES WITH STICKINESS, OR PICKUP OF THE TACK.

IF THE CERTIFIED TEST DATA FAILS TO MEET THE LAB TESTING CRITERIA OR THE TRACKLESS TACK FAILS TO PERFORM SATISFACTORILY IN THE FIELD, AS NOTED ABOVE BY THE ENGINEER, THE CONTRACTOR WILL BE REQUIRED TO REPLACE AND SUPPLY ANOTHER APPROVED TRACKLESS TACK PRODUCT FOR THE REMAINDER OF THE PRODUCT AT NO ADDITIONAL COST.

407.07 METHOD OF MEASUREMENT.

THE ENGINEER WILL MEASURE TRACKLESS TACK COAT BY THE NUMBER OF GALLONS OF UNDILUTED ASPHALT MATERIAL APPLIED.

407.08 BASIS OF PAYMENT.

THE ACCEPTED QUANTITY OF TRACKLESS TACK COAT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER GALLON FOR ITEM 407 — TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE, AS PER PLAN OR ITEM 407 — TACK COAT, TRACKLESS TACK, AS PER PLAN WHICH PRICE AND PAYMENT SHALL BE FULL COMPENSATION FOR FURNISHING ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND INCIDENTALS FOR DOING ALL WORK INVOLVED IN FURNISHING AND PLACING THE ASPHALT MATERIAL.

ITEM	UNIT	DESCRIPTION
407	GALLON	TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE, AS PER PLAN
407	GALLON	TACK COAT, TRACKLESS TACK, AS PER PLAN

16 24

OWG.: L:\OPER'S PLOT: 1 = 1 OATE: 11-20-14

PAVEMENT (CONTINUED)

CONCRETE DESIGN MIX (CITY OF CLEVELAND)

ALL APPLICABLE WORK ITEMS SHALL BE BID USING THE CONCRETE MIX DESIGN SPECIFIED IN THIS SECTION. UNDER THIS SECTION OF THESE SPECIFICATIONS THE CONTRACTOR IS REQUIRED TO SUBMIT A SEPERATE MIX DESIGN FOR EACH COMBINATION OF CEMENT TYPE, AGGREGATE TYPE AND CONCRETE SUPPLIER THEY WILL USE UNDER THIS CONTRACT. EACH MIX SHALL BE DESIGNED IN ACCORDANCE WITH ASTM—C94—94 AND AS HEREIN MODIFIED.

REQUIREMENT

DESCRIPTION

MINIMUM TWENTY EIGHT (28)

4000 PSI FOR 28 DAYS COMPRESSIVE STRENGTH TEST. FOUR CYLINDERS WILL BE TAKEN AND TESTED AS PER ASTM C-39-04. ONE TO BE TESTED AT 7 DAYS AND THE REMAINING THREE WILL BE TESTED AT TWENTY EIGHT DAYS. ACCEPTANCE WILL BE BASED ON THE AVERAGE RESULTS OF THE THREE CYLINDERS.

MINIMUM CEMENT CONTENT

650 LBS. PER CUBIC YARD. THE CEMENT SHALL CONFORM TO ASTM C-150-04. OR C-595-04. IF ANY LIMESTONE IS USED, THEN THE CITY REQUIRES THAT ALL OF THE INFORMATION DESCRIBED IN ASTM C-150-04 BE FURNISHED.

WATER CEMENT RATIO

0.45 MAXIMUM

SLUMP

NOMINAL THREE INCHES (3") AS PER ASTM C-94-04 (2"-4" ACTUAL). THE USE OF CHEMICAL ADMIXTURES MEETING ASTM C-494, TO INCREASE THE SLUMP TO A MAXIMUM OF 7", MAY BE USED WITH PRIOR WRITTEN APPROVAL OF THE ENGINEER. IF THIS OPTION IS SELECTED THE ADMIXTURE AND RESULTANT MAXIMUM SLUMP SHALL BE SUBMITTED FOR APPROVAL.

AIR CONTENT

FOUR PERCENT (4%) TO SEVEN AND ONE HALF PERCENT (7.5%) ASTM C-173-04 OR C-231-04.

AGGREGATE SIZE

NO. 57 FOR COARSE AGGREGATE SHALL BE LIMESTONE, GRAVEL OR CRUSHED AIR COOLED BLAST FURNACE SLAG. BOTH COARSE AND FINE AGGREGATE PER ASTM C-33-04.

IF CRUSHED AIR—COOLED BLAST FURNACE SLAG IS USED IT SHALL MEET ALL OF THE REQUIREMENTS OF ODOT 703.01 AND 703.02. COPIES OF ALL TESTS AND CERTIFICATIONS FOR THE CRUSHED AIR—COOLED BLAST FURNACE SLAG, IF USED,

STEEL SLAG AGGREGATE (703.01E) IS NOT PERMITTED FOR USE AS AN AGGREGATE IN CONCRETE.

SHALL BE SUBMITTED AS A PART OF THE CONCRETE MIX DESIGN.

WHEN HIGH EARLY STRENGTH IS REQUIRED, ASTM C-150-04 TYPE III A CEMENT OR ADMIXTURES IN ACCORDANCE WITH ASTM C-494-04 SHALL BE USED.

THE ENGINEER WILL DETERMINE IF THE CONTRACTOR IS REQUIRED TO FURNISH A SIGNED AFFIDAVIT, IN TRIPLICATE, FROM EACH CONCRETE SUPPLIER TO THE CITY GIVING DRY WEIGHT AND TYPE OF CONCRETE, SATURATED SURFACE—DRY WEIGHT AND THE TYPE OF FINE AND COARSE AGGREGATE, AND QUANTITY TYPE AND NAME OF EACH ADMIXTURE AND WEIGHT OF WATER PER CUBIC YARD OF CONCRETE. THE CONTRACTOR SHALL ALSO FURNISH TWENTY—EIGHT (28) DAY CYLINDER TESTS (PER TESTING SECTION) AS VERIFICATION THAT THE MATERIALS USED AND THE PROPORTIONS SELECTED WILL PRODUCE CONCRETE OF THE QUANTITY SPECIFIED.

HOT AND COLD WEATHER PROTECTION (BLANKETS, HEATERS, ICE, ETC.) SHALL BE INCLUDED IN THE UNIT PRICE BID.

THE CONTRACTOR IS REQUIRED TO COMPLY WITH ALL THE ABOVE REQUIREMENTS. THE CONTRACTOR SHALL ALSO REQUIRE THAT ALL OF THE SUB-CONTRACTORS PLACING CONCRETE UNDER THIS CONTRACT COMPLY WITH ALL OF THE ABOVE REQUIREMENTS.

THE ENGINEER MAY REQUIRE THE CONTRACTOR TO SUPPLY TEST RESULTS FOR MATERIALS USED WITHIN THE PROJECT LIMITS. CURRENT ODOT AND CITY OF CLEVELAND STANDARDS FOR TESTING ASPHALT CONCRETE, EMBANKMENT, ETC. MUST BE FOLLOWED, WITH ALL RESULTS BEING SUBMITTED TO THE ENGINEER.

GUTTER SEAL

UNLESS OTHERWISE SPECIFIED OR PERMITTED, GUTTERS SHALL BE SEALED WITH THE SAME TYPE OF ASPHALT CEMENT USED IN THE CONCRETE MIXTURE FOR A DISTANCE OF 4 INCHES FROM THE CURB. THE SEAL SHALL BE APPLIED AT A UNIFORM RATE AND WIDTH BY THE MEANS OF A SQUEEGEE OR DISTRIBUTOR IN SUCH A MANNER THAT NO EXCESS MATERIAL WILL BE LEFT ON THE SURFACE. THE ASPHALT GUTTER SEAL SHALL BE APPLIED AT A TEMPERATURE BETWEEN 300 DEGREES FAHRENHEIT AND 350 DEGREES FAHRENHEIT IMMEDIATELY UPON THE COMPLETION OF THE SURFACE COURSE.

THE COST OF THE GUTTER SEAL APPLIED AS HEREIN SPECIFIED SHALL BE INCLUDED IN THE PRICE PER CUBIC YARD FOR SURFACE COURSE BID BY THE CONTRACTOR.

ASPHALT CONCRETE SURFACE COURSE

IN ADDITION TO THE GUTTER SEALING REQUIREMENTS SPECIFIED ON SCD BP-3.1 AND IN 401.15, AFTER COMPLETION OF THE SURFACE COURSE, THE CONTRACTOR SHALL SEAL, WITH CERTIFIED PG BINDER, THE FOLLOWING LOCATIONS:

- ALL CASTINGS INCLUDING BUT NOT LIMITED TO MONUMENTS, MANHOLES, WATER VALVES, CATCH BASINS.
- BUTT JOINTS AND FEATHER JOINTS INCLUDING BRIDGE APPROACHES.
- FORWARD JOINT FOR DRIVEWAY ASPHALT AND TRAILING JOINT WHEN BUTTING TO EXISTING ASPHALT DRIVE.
- PERIMETER OF ALL PAVEMENT REPAIRS WHEN PAVEMENT REPAIRS ARE NOT OVERLAID WITH ASPHALT CONCRETE.
- ALL LONGITUDINAL AND TRANSVERSE COLD JOINTS (SEALING SHALL OCCUR PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS).

THE MATERIAL USED SHALL BE HOT APPLIED CERTIFIED 702.01 PG BINDER. THE WIDTH OF SEALER SHALL BE 2 INCHES AS PER 401.15.

MAINTENANCE OF TRAFFIC

ITEM 614 - MAINTAINING TRAFFIC

FOR THE DURATION OF THIS PROJECT, A DETOUR WILL BE IN EFFECT (FROM HOLTON AVENUE TO WAMELINK AVENUE) IN CONJUNCTION WITH ODOT'S CUY-87-4.24 PROJECT (PID NO. 10787). THE CONTRACTOR SHALL COORDINATE HIS/ HER MAINTENANCE OF TRAFFIC AND/OR LOCAL ACCESS WITH THIS PROJECT OR ANY OTHER PROJECT/CONTRACTOR WORK IN THE VICINITY.

THROUGH TRAFFIC AND/OR LOCAL ACCESS SHALL BE MAINTAINED AT ALL TIMES IN ACCORDANCE WITH SECTION 614 AND THE DETAILS AND NOTES ON STANDARD CONSTRUCTION DRAWINGS MT-95.31, MT-95.32, MT-97.10 AND MT-97.11. AS APPLICABLE.

THE LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE KEPT TO A MINIMUM CONSISTENT WITH THE SPECIFICATION REQUIREMENTS FOR PROTECTION OF COMPLETED PAVEMENT COURSES, AND SHALL BE AT THE APPROVAL OF THE ENGINEER.

THE CONTRACTOR SHALL MAINTAIN SAFE AND SATISFACTORY ACCESS TO ABUTTING PROPERTY. THE CONTRACTOR SHALL MAINTAIN ADEQUATE PEDESTRIAN WALKS AT ALL INTERSECTIONS, INCLUDING ASPHALT CONCRETE WALKS, WHERE DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL DIVERT TRAFFIC FROM NORMAL CHANNELS BY PLASTIC DRUMS, FLASHING ARROW BOARDS COMPLYING WITH SS821, TRAFFIC SIGNS, FLAGGERS WHERE NECESSARY, AND WORK ZONE PAVEMENT MARKINGS, AS SHOWN ON MT-95.31, MT-95.32, MT-97.10 AND MT-97.11, AS APPLICABLE, OR AS OTHERWISE DIRECTED BY THE ENGINEER.

ALL CONSTRUCTION TRAFFIC CONTROL DEVICES USED FOR THIS PROJECT SHALL CONFORM TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AND SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR, EXCEPT AS NOTED BELOW.

THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY SAFEGUARDS, SUCH AS TYPE III BARRICADES, LIGHTING, FLAGGERS, AND SUCH OTHER TRAFFIC CONTROL DEVICES AS PROVIDED IN ITEM 614, MAINTAINING TRAFFIC, SO AS TO AVOID DAMAGE AND/OR INJURY TO VEHICLES AND PERSONS USING THE ROADWAY DURING CONSTRUCTION.

EXISTING TRAFFIC CONTROL DEVICES (SIGNS AND/OR TRAFFIC SIGNALS), LOCATED WITHIN THE WORK AREA, WHICH ARE REQUIRED FOR INTERIM OR PERMANENT TRAFFIC CONTROL, SHALL BE RELOCATED TO POINTS APPROVED BY THE ENGINEER. APPROPRIATE TRAFFIC CONTROL DEVICES SHALL BE MAINTAINED, IN COMPLIANCE WITH THE MANUAL, AT ALL TIMES WHILE TRAFFIC IS MAINTAINED. THE COST OF RELOCATION, IF REQUIRED, SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 — MAINTAINING TRAFFIC.

THE LENGTH AND DURATION OF LANE CLOSURES AND/OR TRAFFIC RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. THE INTENT IS TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR 614 — MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

ITEM 615 - ROADS FOR MAINTAINING TRAFFIC, AS PER PLAN

IN ADDITION TO THE APPLICABLE REQUIREMENTS OF ITEM 615, THIS ITEM INCLUDES ANY REQUIRED PREPARATORY WORK, MAINTENANCE AND THE SUBSEQUENT REMOVAL OF THE ITEMS LISTED IN THE "ESTIMATED QUANTITIES FOR MAINTAINING TRAFFIC" PLAN NOTE. PAYMENT FOR ALL NECESSARY LABOR, EQUIPMENT AND ADDITIONAL MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT BID FOR ITEM 615 — ROADS FOR MAINTAINING TRAFFIC, AS PER PLAN.

DWG.: L:\OPER'S BY YEAR\OPER2015\WOODHILL PLOT: 1 = 1
DATE: 11-24-14

17

MAINTENANCE OF TRAFFIC (CONTINUED)

600 FT.

__1.2 TON

__12 M GAL.

ESTIMATED QUANTITIES FOR MAINTAINING TRAFFIC AND/OR LOCAL ACCESS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC AND /OR LOCAL ACCESS!

INAFFIC AND/C	TOUAL ACCESS.		
ITEM 410 -	TRAFFIC COMPACTED SURFACE, TYPE A OR B, AS PER PLAN	600	CU. YD.
ITEM 608 -	2"ASPHALT CONCRETE WALK	<u>1,600</u>	SQ. FT.
ITEM 614 -	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	_100	CU. YD.
	PORTABLE CHANGEABLE MESSAGE SIGN WORK ZONE CENTER LINE, CLASS II, 642 PAINT		SIGN MON MILE
ITEM 614 -	WORK ZONE EDGE LINE, CLASS I, 642 PAINT	<u>5.50</u>	MILE
ITEM 614 -	WORK ZONE LANE LINE, CLASS II, 642 PAINT	<u>5.40</u>	MILE
ITEM 614 -	WORK ZONE STOP LINE, CLASS I, 642 PAINT	<u>1,100</u>	FT.
ITEM 614 -	WORK ZONE CROSSWALK LINE, CLASS I, 642 PAINT	5,800	FT.
ITEM 614 -	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT	_120	FT.
ITEM 614 -	WORK ZONE CHANNELIZING LINE, CLASS I,	0.00	

USE OF SLAG IS NOT PERMITTED FOR ITEM 410 MATERIAL.

642 PAINT

ITEM 616 - CALCIUM CHLORIDE

ITEM 616 - WATER

FOR ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, IT IS INTENDED THAT A MINIMUM OF <u>FOUR</u> (4) SIGNS BE SUPPLIED FOR APPROXIMATELY <u>THREE</u> (3) MONTHS EACH, TOTALING TWELVE (12) SIGN MONTHS.

NOTIFICATION

THE CONTRACTOR SHALL NOTIFY IN WRITING THE FOLLOWING AGENCIES AT LEAST TWO (2) WEEKS PRIOR TO THE START OF CONSTRUCTION, AND AT LEAST 72 HOURS BEFORE IMPLEMENTING ANY SUBSTANTIAL CHANGE IN TRAFFIC PATTERN OR CLOSING ANY STREET TO TRAFFIC:

THE CUYAHOGA COUNTY DEPARTMENT OF PUBLIC WORKS - PUBLIC INFORMATION OFFICER

THE OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT 12 - PUBLIC INFORMATION OFFICE

THE GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY

THE CUYAHOGA COUNTY BOARD OF DEVELOPMENTAL DISABILITIES

THE UNITED STATES POSTAL SERVICE

THE CITY OF CLEVELAND BOARD OF EDUCATION

THE CITY OF CLEVELAND:

DIVISION OF ENGINEERING AND CONSTRUCTION

DIVISION OF STREETS

DIVISION OF TRAFFIC ENGINEERING

DIVISION OF EMERGENCY MEDICAL SERVICE (EMS)

DIVISION OF FIRE

DIVISION OF POLICE

CLEVELAND MUNICIPAL SCHOOL DISTRICT

CONSTRUCTION TRAFFIC

ALL CONSTRUCTION TRAFFIC SHALL USE ACCEPTABLE TRUCK ROUTES TO ACCESS THE CONSTRUCTION AREA. USE OF LOCAL RESIDENTIAL STREETS IS STRICTLY PROHIBITED UNLESS ALLOWED IN WRITING BY THE LOCAL ENFORCEMENT AUTHORITY.

CONSTRUCTION WARNING SIGNS

IMMEDIATELY PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL INSTALL THE CONSTRUCTION WARNING SIGNS SHOWN ON SHEET 24.

AS A MINIMUM, G20-1 SIGNS FACING TRAFFIC ENTERING THE PROJECT, AND G20-2 SIGNS FACING TRAFFIC LEAVING THE PROJECT, SHALL BE PLACED AS SHOWN IN THE MANUAL. ADDITIONAL G20-1 SIGNS SHALL BE PLACED AFTER EACH MAJOR INTERSECTION, IN BOTH DIRECTIONS, AND AFTER EACH SUSPENSION AND RESUMPTION OF WORK.

ADDITIONALLY, A W20-1 SIGN SHALL BE PLACED ON EACH INTERSECTING STREET A MINIMUM OF 200 FEET IN ADVANCE OF THE PROJECT, AND ON THE APPROACHES TO THE PROJECT A MINIMUM OF 500 FEET IN ADVANCE OF THE WORK LIMITS. G20-2 SIGNS SHALL ALSO BE INSTALLED ON EACH MAJOR INTERSECTING STREET, FACING TRAFFIC LEAVING THE PROJECT, A MINIMUM OF ONTH 200 FEET FROM THE PROJECT.

THE TRAFFIC CONTROL DEVICES SHOWN ON MT-95.31, MT-95.32, MT-97.10 AND MT-97.11, AS APPLICABLE, SHALL BE IN ADDITION TO THOSE INDICATED ABOVE. IF DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL ALSO INSTALL W8-11 "UNEVEN LANES", W8-7 "LOOSE GRAVEL," AND/OR W21-2 "FRESH OIL /TAR" SIGNS.

FLUORESCENT ORANGE TYPE G SIGN SHEETING SHALL BE USED FOR ALL CONSTRUCTION WARNING SIGNS.

ALL CONSTRUCTION WARNING SIGNS SHALL BE COVERED OR REMOVED WHEN NO LONGER APPLICABLE.

THE COST OF FURNISHING, INSTALLING, MAINTAINING, REPLACING AND REMOVING ALL CONSTRUCTION WARNING SIGNS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OMUTCD. A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.

WHEN CONSTRUCTION VEHICLES ARE ENTERING/EXITING THE ZONE DIRECTLY FROM/INTO AN OPEN LANE OF TRAFFIC. IF A LANE HAS BEEN CLOSED TO PROVIDE AN ACCELERATION/DECELERATION LANE FOR THE VEHICLE, THE LEO WILL NOT BE REQUIRED.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS. THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS WITH PATROL CAR REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE

__160__ HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

TEMPORARY RAMPING OF VERTICAL SURFACES

IN ORDER TO PROVIDE FOR LOCAL ACCESS. LONGITUDINAL VERTICAL FACES ABUTTING DRIVES SHALL BE TEMPORARILY RAMPED. TRANSVERSE VERTICAL FACES SHALL BE TEMPORARILY RAMPED A MINIMUM OF TEN (10) FEET IN LENGTH AND TRAFFIC SHALL BE WARNED WITH W8-1 "BUMP" SIGNS IN ADVANCE OF THE RAMPED AREAS.

ALL CASTINGS ENCOUNTERED SHALL BE SET TO GRADE AND PAID FOR UNDER VARIOUS ITEMS DESCRIBED ELSEWHERE IN THE GENERAL NOTES OR SPECIFICATIONS. THE CASTING ELEVATION DIFFERENTIAL SHALL NOT BE GREATER THAN ONE (1) INCH WHEN EXPOSED TO TRAFFIC.

ALL TEMPORARY RAMPING SHALL BE INSTALLED, AT THE DIRECTION OF THE ENGINEER, USING ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

18

MAINTENANCE OF TRAFFIC (CONTINUED)

CONSTRUCTION ADJACENT TO DRIVES

ACCESS TO COMMERCIAL AND HANDICAP PROPERTY SHALL BE MAINTAINED AT ALL TIMES. IN ADDITION, THE CONTRACTOR SHALL MAKE REASONABLE PROVISIONS TO ALLOW RESIDENTIAL ACCESS AT ALL TIMES OR OTHERWISE ALLOW RESIDENTS TO PARK SAFELY WITHIN THE PROJECT WORK LIMITS WHEN ACCESS IS NOT POSSIBLE; ALL AT THE APPROVAL/DIRECTION OF THE ENGINEER. THE MAXIMUM OUT OF SERVICE TIME FOR ANY RESIDENTIAL DRIVE SHALL BE FIVE (5) DAYS. THE PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED TO MAINTAIN COMMERCIAL, HANDICAP AND RESIDENTIAL ACCESS AND/OR SAFE PARKING AREAS FOR RESIDENTS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR "ITEM 614 - MAINTAINING TRAFFIC"; EXCEPT FOR THE SEPARATELY ESTIMATED ITEMS/QUANTITIES ADDITIONALLY PROVIDED IN THE PLANS FOR MAINTAINING TRAFFIC (ACCESS).

THE CONTRACTOR SHALL PLAN/STAGE ALL WORK TO MAINTAIN SAFE ACCESS TO COMMERCIAL AND HANDICAP PROPERTY AT ALL TIMES AND TO MAINTAIN SAFE ACCESS TO RESIDENTIAL PROPERTY OR PROVIDE SAFE PARKING WITHIN REASONABLE PROXIMITY TO RESIDENTIAL PROPERTY WHEN ACCESS IS UNAVAILABLE. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A PLAN FOR THE APPROVAL OF THE ENGINEER WHICH OUTLINES HIS/HER STRATEGY FOR THE MAINTENANCE OF SAFE ACCESS TO COMMERCIAL, HANDICAP AND RESIDENTIAL PROPERTY AND/OR FOR ALLOWING RESIDENTS TO PARK SAFELY WITHIN THE PROJECT LIMITS WHEN ACCESS IS NOT POSSIBLE. EXCEPT AS NOTED ABOVE, ALL ASSOCIATED COSTS SHALL BE INCLUDED UNDER ITEM 614 - MAINTAINING TRAFFIC".

SIDE STREET CLOSURE LIMITATION

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON THE FOLLOWING STREETS:

DICKENS AVENUE (WEST) BALDWIN ROAD

OTHER INTERSECTING STREETS MAY BE CLOSED FOR A PERIOD NOT TO EXCEED FIVE (5) CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOÙRED. NO TWO ADJACENT STREETS SHALL BE CLOSED SIMULTANEOUSLY.

LIQUIDATED DAMAGES SHALL BE ASSESSED IN ACCORDANCE WITH SECTION 108.07 FOR EACH CALENDAR DAY THAT ANY INTERSECTING STREET REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

ALL CLOSED STREETS SHALL BE BARRICADED AT THE WORK LIMITS WITH GATES AND BARRICADES PER MT-101.60 AND SIGNED WITH A "ROAD CLOSED" R11-2 SIGN MOUNTED ON THE BARRICADES. IN ADDITION. A "ROAD CLOSED AHEAD" (W20-3) SIGN SHALL BE INSTALLED AT THE FIRST INTERSECTION BEYOND THE WORK, AND/OR WHERE SHOWN ON THE PLANS, THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN AND REMOVE ALL SIGNS AND BARRICADES REQUIRED FOR THIS PURPOSE.

WORK ZONE MARKING SIGNS

WORK ZONE MARKING SIGNS (R4-1, R4-2, W8-H12, W8-H12a, AND/OR W8-11) SHOWN ON SHEET 24 SHALL BE INSTALLED AT THE LOCATION SHOWN, AS DESCRIBED IN SECTION 614.04.

THESE SIGNS SHALL BE ERECTED AND VISIBLE TO TRAFFIC ONLY WHEN. AND FOR THE DURATION OF THE PERIOD WHEN THE APPROPRIATE PAVEMENT MARKINGS ARE NOT PRESENT. THEY SHALL BE PROMPTLY COVERED OR REMOVED AFTER THE FINAL PAVEMENT MARKINGS HAVE BEEN INSTALLED.

NO SEPARATE PAYMENT FOR THESE SIGNS WILL BE MADE. THE COST OF FURNISHING, INSTALLING, MAINTAINING, AND REMOVING THESE SIGNS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614-MAINTAINING TRAFFIC.

TRAFFIC CONTROL

INSTALLATION OF PAVEMENT MARKINGS

THE CONTRACTOR MAY REDUCE THE NUMBER OF THROUGH TRAFFIC LANES BY 50%, AS DIRECTED BY THE ENGINEER. IN ORDER TO REMOVE PAVEMENT MARKINGS OR WORK ZONE PAVEMENT MARKINGS, AND INSTALL PERMANENT PAVEMENT MARKINGS. HE/SHE SHALL LIMIT THE AFOREMENTIONED CLOSURE TO BETWEEN THE HOURS OF 9:00 A.M. AND 3:00 P.M. UNLESS OTHERWISE APPROVED BY THE ENGINEER.

THE FINAL THERMOPLASTIC PAVEMENT MARKINGS (ITEM 644) SHALL BE PLACED WITHIN TWO (2) WORKING DAYS AFTER THE FINAL SURFACE COURSE IS COMPLETE. IF THE FINAL THERMOPLASTIC PAVEMENT MARKINGS CANNOT BE INSTALLED WITHIN TWO (2) WORKING DAYS AFTER THE FINAL ASPHALT CONCRETE SURFACE COURSE IS COMPLÉTE, THE CONTRACTOR SHALL INSTALL CLASS III WORK ZONE PAVEMENT MARKINGS (FULL PATTERN, LOW RATE), PER 614.11.F.3, AS AN INTERIM PAVEMENT MARKING, ÀS DIRECTED BY THE ENGINEER. THE FINAL THERMOPLASTIC PAVEMENT MARKINGS MUST BE INSTALLED WITHIN 30 DAYS AFTER THE FINAL SURFACE COURSE IS COMPLETE.

THE FOLLOWING QUANTITIES ARE INCLUDED IN THE GENERAL SUMMARY, AS ESTIMATES OF THE TYPE AND QUANTITY OF THE VARIOUS PAVEMENT MARKINGS TO BE INSTALLED UNDER ITEM 644:

ITEM 644 -	CENTER LINE	1.50 MILE
ITEM 644 -	LANE LINE, 4"	<u>2.70</u> _ MILE
ITEM 644 -	STOP LINE	_ <u>550</u> _ FT.
ITEM 644 -	CROSSWALK LINE	<u>2,900</u> FT.
ITEM 644 -	TRASVERSE/DIAGONAL LINE	<u>60</u> _ FT.
ITEM 644 -	EDGE LINE, 4"	0.05 MILE
ITEM 644 -	CHANNELIZING LINE, 8"	_ <u>300</u> _ FT.

PAYMENT SHALL BE BASED ON THE MEASUREMENTS OF THE FINAL QUANTITIES INSTALLED. ANY INTERIM CLASS III WORK ZONE PAVEMENT MARKINGS REQUIRED WILL BE INCLUDED IN THE UNIT PRICE BID OF THE PERTINENT 644 ITEMS.

LAYOUT OF PAVEMENT MARKINGS

ALTHOUGH PERMANENT PAVEMENT MARKINGS ARE TO BE INSTALLED AT THE END OF CONSTRUCTION. PAVEMENT MARKING PLAN SHEETS HAVE NOT BEEN INCLUDED IN THE CONTRACT PLANS. IN LIEU OF A PAVEMENT MARKING PLAN, THE CONTRACTOR SHALL, PRIOR TO THE START OF CONSTRUCTION, PREPARE AN INVENTORY AND LOG OF ALL EXISTING PAVEMENT MARKINGS, INCLUDING LANE WIDTHS, NO PASSING ZONES, AND CHANNELIZATIONS, FOR USE IN RESTORING THE MARKINGS AT THE END OF CONSTRUCTION. HE/SHE SHALL DELIVER TWO (2) COPIES OF THE INVENTORY AND LOG TO THE ENGINEER BEFORE BEGINNING ANY PAVEMENT REMOVALS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF THE VARIOUS FINAL PAVEMENT MARKINGS, INCLUDING LOCATION OF NO PASSING ZONES, CENTER LINES, LANE LINES, AND EDGE LINES ON THE FINAL SURFACE COURSE, IN ACCORDANCE WITH SECTION 641.06.

UNLESS DIRECTED OTHERWISE BY THE ENGINEER. THE FINAL PAVEMENT MARKINGS SHALL BE RESTORED IN THEIR ORIGINAL PATTERNS AND LOCATIONS. NOTE THAT THE CONSTRUCTION OF ADA COMPLIANT CURB RAMPS MAY NECESSITATE ADJUSTMENT OF THE CROSSWALK AND/OR STOP BAR LOCATIONS, ALL AS DIRECTED BY THE ENGINEER.

THE COST OF LOGGING AND PREMARKING SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS PAVEMENT MARKING ITEMS. NO SEPARATE PAYMENT WILL BE MADE.

ITEM 632 - DETECTOR LOOP, AS PER PLAN

ALTHOUGH REPLACEMENT TRAFFIC SIGNAL DETECTOR LOOPS ARE TO BE INSTALLED AT THE END OF CONSTRUCTION, A PLAN SHOWING THE SIZE AND LOCATION OF THE VARIOUS LOOPS HAS NOT BEEN INCLUDED IN THE CONTRACT PLANS. IN LIEU OF A TRAFFIC SIGNAL PLAN, THE CONTRACTOR SHALL, PRIOR TO THE START OF CONSTRUCTION, PREPARE AN INVENTORY AND LOG OF ANY AND ALL EXISTING VISIBLE DETECTOR LOOPS, FOR USE IN RESTORING THEM AT THE END OF CONSTRUCTION. HE/SHE SHALL DELIVER TWO COPIES OF THE INVENTORY AND LOG TO THE ENGINEER BEFORE BEGINNING ANY PAVEMENT REMOVALS.

ANY EXISTING LOOP DETECTORS THAT ARE NOT VISIBLE PRIOR TO CONSTRUCTION (BUT ARE DISTURBED DURING THE PAVEMENT PLANING / REMOVAL OPERATIONS), SHALL BE ADDED TO THE INITIAL INVENTORY AND LOG FOR INSTALLATION INTO THE INTERMEDIATE COURSE.

THE ENGINEER WILL COORDINATE THE INSTALLATION OF THE DETECTOR LOOPS WITH THE CITY OF CLEVELAND, DIVISION OF TRAFFIC ENGINEERING (216) 664 -3197.

REPLACE ALL EXISTING STOP LINE INDUCTANCE DETECTOR LOOPS PER THE POWERHEAD CONFIGURATION SHOWN ON TC-82.10. THE WIDTH SHALL BE AS SPECIFIED ON TC-82.10 AND THE LENGTH SHALL BE AS INDICATED BELOW. THE STOP LINE DETECTOR LOOPS SHALL NOT BE WIRED TO ANY OTHER LOOPS AND SHALL HAVE ITS OWN DETECTOR CHANNEL. THE LOCATION OF THESE LOOPS SHALL BE SUCH THAT THE POWERHEAD IS LOCATED AT THE STOP LINE, NOT PAST IT. SIGN R10-22 AND PAVEMENT MARKING FIGURE 9C-7 FROM PAGE 9C-10 IN SECTION 9C.05 OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES SHALL BE INSTALLED TO DENOTE THE POWERHEAD LOCATION. PAYMENT FOR THESE ITEMS SHALL BE INCIDENTAL TO THE COST OF THE DETECTOR LOOP.

SYSTEM LOOP DIMENSIONS SHALL BE 6'X 6', CENTERED IN THE LANE AND THE ANGULAR DESIGN (ADD) LOOP AS SHOWN ON TC-82.10.

ALL STOP LINE DETECTION SHALL BE TESTED FOR A BICYCLE TARGET AND ALL DILEMMA ZONES SHALL BE TESTED FOR A MOTORCYCLE TARGET.

CENTER EACH LOOP IN THE LANE.

THE LENGTH OF EACH STOP LINE POWERHEAD LOOP SHALL BE 35 FEET.

THE INSTALLATION OF POURED EPOXY INSULATED SPLICES BETWEEN THE LOOP DETECTOR WIRES AND THE EXISTING LOOP DETECTOR LEAD IN CABLE SHALL BE CONSIDERED AS INCIDENTAL TO THIS ITEM OF WORK. NO SEPARATE PAYMENT FOR THESE SPLICES WILL BE MADE.

THE FOLLOWING ESTIMATED QUANTITY IS CARRIED TO THE GENERAL SUMMARY AS A CONTINGENCY QUANTITY WHICH IS INCLUDED FOR USE ONLY AND IN AMOUNTS AS DIRECTED BY THE ENGINEER. THE PROVISIONS OF SECTION 104.02 WILL APPLY TO THIS ITEM. THE AMOUNT OF THIS ITEM AND THE LOCATIONS WHERE USED SHALL BE RECORDED AS USED, AND PAYMENT WILL BE BASED ON FINAL MEASUREMENTS.

ITEM 632 - DETECTOR LOOP, AS PER PLAN

___6__ EACH

19

REF.			SHEET	NUME	BER						GRAND TOTAL	UNIT	ITEM	ITEM	DESCRIPTION	FOR AS PER PLAN OR ITEM SPECIAL, SEE SHEET NO.
NO.	7	9	10	11	12	13	14	15	16	3	TOTAL	OIVII	NO.	EXTENSION		SHEET NO.
											 		004		ROADWAY	1
1		LUMP		2.022							LUMP	VD	201	11000	CLEARING AND GRUBBING PAVEMENT REMOVED	
3	38,770			2,022							2,022 38,770	SQ. YD.	202	23000 23500	WEARING COURSE REMOVED	
4	30,770							8,000			8,000	SQ. YD.	202	24001	BRICK BASE REMOVED, AS PER PLAN	15
5	26,210			5,880				0,000			32,090	SQ. FT.	202	30000	WALK REMOVED	
6	12,480										12,480	FT.	202	32000	CURB REMOVED	1
7							104				104	FT.	202	35100	PIPE REMOVED, 24" AND UNDER	
8					185						185	FT.	202	38100	GUARDRAIL REMOVED FOR STORAGE	
9							1				1	EACH	202	58000	MANHOLE REMOVED	
10							6				6	EACH	202	58100	CATCH BASIN REMOVED	
11		1,500									1,500	FT.	202	98200	REMOVAL MISC: EXISTING TROLLEY/STREET CAR RAILS	
12						5					5	EACH	202	98600	ABANDON MISC.: TEST TEE	
											1					1
13	75			355							430	CU. YD.	203	10000	EXCAVATION	
14				90							90	CU. YD.	203	20001	EMBANKMENT, AS PER PLAN	11
15				1,740					1 4 5	0	1,740	SQ. YD.	204	10000	SUBGRADE COMPACTION	15 16
16									15		150	CU. YD.		20001	EMBANKMENT, AS PER PLAN	15, 16 15, 16
17 18									90		150 900	SQ. YD.	204 204	21001	GRANULAR EMBANKMENT, AS PER PLAN GEOTEXTILE FABRIC	10, 10
19	6,570			270					90		6,840	SQ. YD.	204	50000 60201	LINEAR GRADING, AS PER PLAN	10
19	0,570			270							0,040	3Q. ID.	209	60201	LINEAR GRADING, AS FER FLAN	1
20	31,040			6,700							37,740	SQ. FT.	608	10001	4" CONCRETE WALK, AS PER PLAN	12
21	2.,5			1,000	6						6	EACH	608	97201	CURB RAMP, MISC.: CITY OF CLEVELAND CR-1 CURB RAMP, AS PER PLAN	12
22					13						13	EACH	608	97201	CURB RAMP, MISC.: CITY OF CLEVELAND CR-2 CURB RAMP, AS PER PLAN	12
23					23						23	EACH	608	97201	CURB RAMP, MISC.: CITY OF CLEVELAND CR-3 CURB RAMP, AS PER PLAN	12
24					30						30	EACH	608	97201	CURB RAMP, MISC.: CITY OF CLEVELAND CR-5 CURB RAMP, AS PER PLAN	12
25			6								6	EACH	623	38504	CUYAHOGA COUNTY CENTERLINE MONUMENT BOX ASSEMBLY, TYPE 1	
26			6								6	EACH	623	38600	CUYAHOGA COUNTY MONUMENT BOX	
27			6								6	EACH	623	39501	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	10
28			18								18	EACH	SPECIAL	62340500	MONUMENT REFERENCING	10
											1					
													050		EROSION CONTROL	
29						2					2	EACH	659 650	00100	SOIL ANALYSIS TEST	
30	6.570			270		760					760	CU. YD.	659 659	00300	TOPSOIL SEEDING AND MULICULING AS DED DI ANI	10 17
31 32	6,570			270		1.00					6,840 1.00	SQ. YD.	659	10001 20000	SEEDING AND MULCHING, AS PER PLAN COMMERCIAL FERTILIZER	12, 13
32						1.00					1.00	TON	009	20000	COMMERCIAL PERTILIZER	
33						1.40					1.40	ACRE	659	31000	LIME	
34						37					37	M GAL.	659	35000	WATER	
35						4,000					4,000	EACH	832	30000	EROSION CONTROL	
											1				DRAINAGE	+
36							24	144			168	FT.	611	00411	4" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS, AS PER PLAN	14, 15
37							48				48	FT.	611	04401	12" CONDUIT, TYPE B, 706.08 (ES), AS PER PLAN	14
38							32				32	FT.	611	04601	12" CONDUIT, TYPE C, 706.08 (ES), AS PER PLAN	14
39							6				1	5 4600	844	00704	CATCH DASIN CITY OF CLEVELAND NO. 4 AS DED DLAN	4 4
78							0				6	EACH	611	00301	CATCH BASIN, CITY OF CLEVELAND NO. 1, AS PER PLAN	14
40							22				22	EACH	611	09001	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	13, 14
41							22				22	EACH	611	09501	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	13, 14
42							1				1	EACH	611	30101	MANHOLE, NO. 1, AS PER PLAN	14
43							33				33	EACH	611	34501	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	13, 14
44							23				23	EACH	611	34501	WATER METER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	13 - 15
45								2			2	EACH	611	34501	CCP/MELP MANHOLE ADJUSTED TO GRADE, AS PER PLAN	15
46							33				33	EACH	611	35501	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN	13, 14
47						5					5	EACH	611	98000	DRAINAGE STRUCTURE, MISC.: TEST TEE ADJUSTED TO GRADE	
48						5					5	EACH	611	98000	DRAINAGE STRUCTURE, MISC.: TEST TEE RECONSTRUCTED TO GRADE	+
49						5					5	EACH	611	98001	DRAINAGE STRUCTURE, MISC.: TEST TEE, AS PER PLAN	13







REF.	. II II I I I I I I I I I I I I I I I I						GRAND TOTAL	UNIT	ITEM		DESCRIPTION	FOR AS PER PLAN OR ITEM SPECIAL, SEE SHEET NO.		
	7	11		12 13	14	15 16			TOTAL		NO.	EXTENSION		SHEET NO.
													DRAINAGE (CONT.)	
50						1,440			1,440	FT.	605	06001	4" BASE PIPE UNDERDRAINS, 706.08 (ES), AS PER PLAN	15
						·			.,				(20), 10 (20)	
51					90				90	EACH	638	10801	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	13 - 15
52					140				140	EACH	638	10901	SERVICE BOX ADJUSTED TO GRADE, AS PER PLAN	13 - 15
53				88,000					88,000	POUND	SPECIAL	60450000	MISCELLANEOUS METAL	13
														+
													PAVEMENT	
54						4,400	1		4,400	SQ. YD.	251	01001	PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN	16
									·					
														-
55						3,600			3,600	SQ. YD.	255	10151	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS,	15, 16
56						9,000)		9,000	FT.	255	20000	AS PER PLAN FULL DEPTH PAVEMENT SAWING	
									3,333					
57						1,100			1,100	CU. YD.	301	46001	ASPHALT CONCRETE BASE, PG 64-22, AS PER PLAN	15
58		6							6	CU. YD.	301	48001	ASPHALT CONCRETE BASE, PG64-22 (DRIVEWAYS), AS PER PLAN	15
59		290				100			390	CU. YD.	304	20001	AGGREGATE BASE, AS PER PLAN	16
60						800			800	GALLON	407	13900	TACK COAT, 702.13	
61	1,560								1,560	GALLON	407	20001	TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE, AS PER PLAN	16
62	3,880								3,880	GALLON	407	20101	TACK COAT, TRACKLESS TACK, AS PER PLAN	16
63		5							5	GALLON	408	10000	PRIME COAT	
64 65	500 1,910								500 1,910	CU. YD.	448 448	46021	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64—22, AS PER PLAN	15 15
66	1,250								1,250	CU. YD.	448	46051 46905	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64–22, AS PER PLAN ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70–22M, AS PER PLAN	15
67	130								130	CU. YD.	448	47021	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, AS PER PLAN	15
										011 1/0	140			
68		4							4	CU. YD.	448	48021	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS), AS PER PLAN	15
													AS I EN I EAN	
69		1,400							1,400	SQ. YD.	451	13001	8" REINFORCED CONCRETE PAVEMENT, CLASS QC MS CONCRETE, AS PER PLAN	11
70		274							274	SQ. YD.	452	10001	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS CONCRETE,	11
, 0													AS PER PLAN	
											222			
71						100			100	FT.	609	14001	CURB, TYPE 2A USING CLASS QC MS CONCRETE, AS PER PLAN	15, 16
72	12,480								12,480	FT.	609	26001	CURB, TYPE 6 USING CLASS QC MS CONCRETE, AS PER PLAN	5, 16
											<u> </u>			



 \Leftrightarrow

DWG.: L:\OPER'S PLOT: 1 = 1
DATE: 11-24-14

 $\stackrel{+}{\updownarrow}$

 \Rightarrow

22	\
24	

					ITEM	ITEM		FOR AS PER PLAN OR ITEM SPECIAL, SEE SHEET NO.	
REF. NO.	8 9 10	17 18	19	GRAND TOTAL	UNIT	NO.	EXTENSION	DESCRIPTION	SPECIAL, SEE SHEET NO.
									3
								TRAFFIC CONTROL	
73			6		EACH	632	26501	DETECTOR LOOP, AS DEP DIAM	19
/3				0	LAOIT	002	20301	DETECTOR LOOP, AS PER PLAN	19
74			0.05	0.05	MILE	644	00100	EDGE LINE, 4"	
75			2.70	2.70	MILE	644	00200	LANE LINE, 4"	
76			1.50	1.50	MILE	644	00300	CENTER LINE	
77			300	300	FT.	644	00400	CHANNELIZING LINE, 8"	
78			550	550	11.	644	00500	STOP LINE	
79			2,900	2,900	FT.	644	00600	CROSSWALK LINE	
80			60	60	FT.	644	00700	TRANSVERSE/DIAGONAL LINE	
								MAINTENANCE OF TRAFFIC	
81		600		600	CU. YD.	410	12001	TRAFFIC COMPACTED SURFACE, TYPE A OR B, AS PER PLAN	18
82		1,600		1,600	SQ. FT.	608	20000	2" ASPHALT CONCRETE WALK	
83		160		160	HOUR CU. YD.	614 614	11110	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
84 85		100		100 12	SIGN MNTH		13000 18600	PORTABLE CHANGEABLE MESSAGE SIGN	
				12		011	18000	TONTABLE STIMINGERBLE MILESPACE STORY	
86		5.40		5.40	MILE	614	20500	WORK ZONE LANE LINE, CLASS II, 642 PAINT	
87		3.00		3.00	MILE	614	21500	WORK ZONE CENTER LINE, CLASS II, 642 PAINT	
88		5.50		5.50	MILE	614	22100	WORK ZONE EDGE LINE, CLASS I, 642 PAINT	
89		600		600	FT.	614	23200	WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT	
90		120		120	FT.	614	25200	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT	
91		1,100		1,100	FT.	614	26200	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
92		5,800		5,800	FT.	614	27200	WORK ZONE CROSSWALK LINE, CLASS I, 642 PAINT	
93		LUMP		LUMP	_	615	10001	ROADS FOR MAINTAINING TRAFFIC, AS PER PLAN	17
94 95	38 3.8	12		50	M GAL.	616 616	10000	WATER CALCIUM CHLORIDE	I
93	3.6	1.2		3	1014	010	20000	MISCELLANEOUS	
						61.4	11222	MAINITAINING TRAFFIC	47
96 97	3	LUMP		LUMP 3	– MONTH	614 619	11000 16011	MAINTAINING TRAFFIC FIELD OFFICE, TYPE B, AS PER PLAN	17
98	LUMP			LUMP	_	623	10001	CONSTRUCTION LAYOUT STAKES, AS PER PLAN	10
99				LUMP	_	624	10000	MOBILIZATION	
100				LUMP	_	SPECIAL	_	PROJECT DVD RECORDING (SEE PROPOSAL NOTES)	P.N.
				I		[



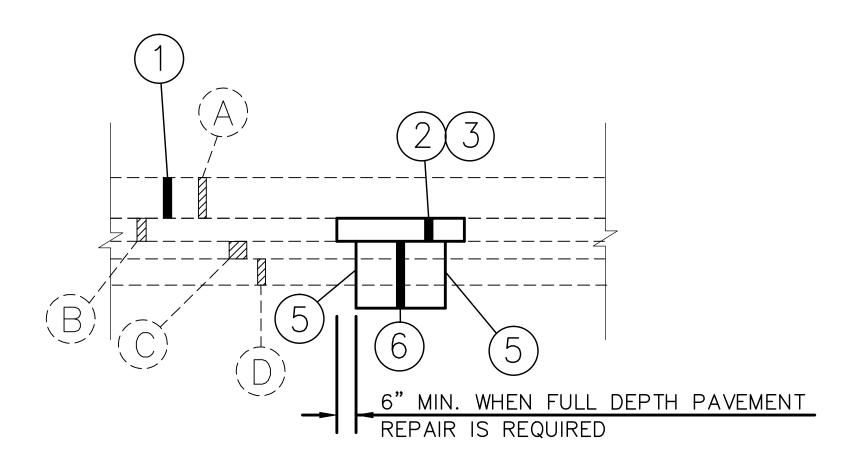


でア per's by year\oper2015\woodhill Quincy to Kinsman 1131\DWG\22—Gei

THE SE

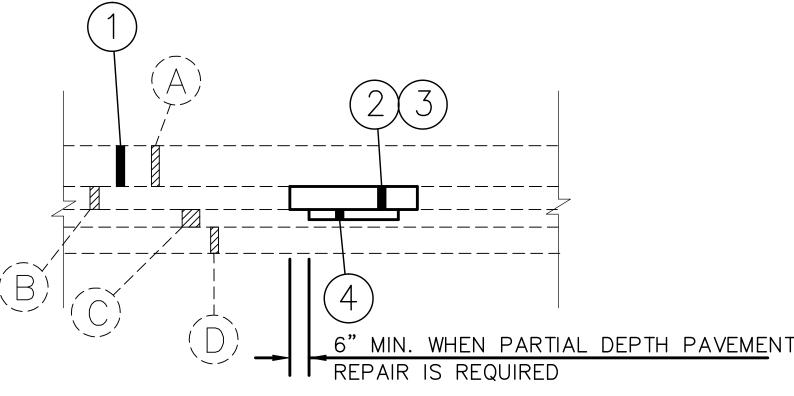
PAVEMENT REPAIR DETAILS AFTER ITEM 202- WEARING COURSE <u>REMOVED</u>

(SEE TYPICAL SECTIONS, SHEET NOS. 4 & 5)



FULL DEPTH PAVEMENT REPAIR

NO SCALE

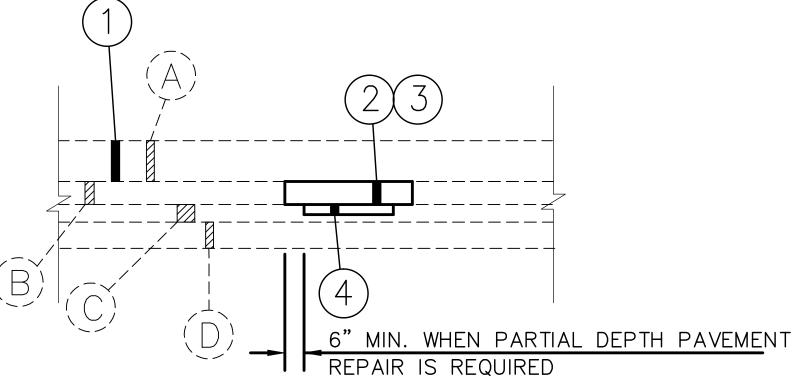


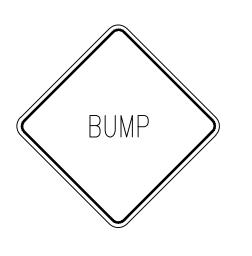
PARTIAL DEPTH PAVEMENT REPAIR

NO SCALE

LEGEND

- EX. ASPHALT (2" TO 6"; 3" AVG.)
- EX. BRICK (0" TO 5"; 5" AVG.)
- EX. CONCRETE (0" TO 16"; 8" AVG.)
- EX. (GRAVEL/SAND) SUBBASE (O" TO 7"; 4" AVG.)
- ITEM 202 WEARING COURSE REMOVED
- ITEM 202 BRICK BASE REMOVED, AS PER PLAN (SEE "PAVEMENT REPAIR" GENERAL NOTE ON SHEET __15__)
- ITEM 301 ASPHALT CONCRETE BASE, PG64-22, AS PER PLAN (SEE "PAVEMENT REPAIR" GENERAL NOTE ON SHEET __15__)
- ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN (SEE ITEM 251 GENERAL NOTE ON SHEET 16.)
- ITEM 255 FULL DEPTH PAVEMENT SAWING
- ITEM 255 FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN (SEE "PAVEMENT REPAIR" AND ITEM 255 GENERAL NOTES ON SHEETS <u>15 & 16</u>.)





MAINTENANCE OF TRAFFIC DETAILS Sign Codes, Legends & Sizes

W8 - 1

30"×30"

ROAD WORK

ROAD WORK

















G20-1

36"×18"

36"×18"

G20 - 2

W20-1

W8-7

W21 - 2

W8-H12a W8-H12

48"x48" 30"x30" 30"x30" 36"x36" 36"x36" 36"x36"

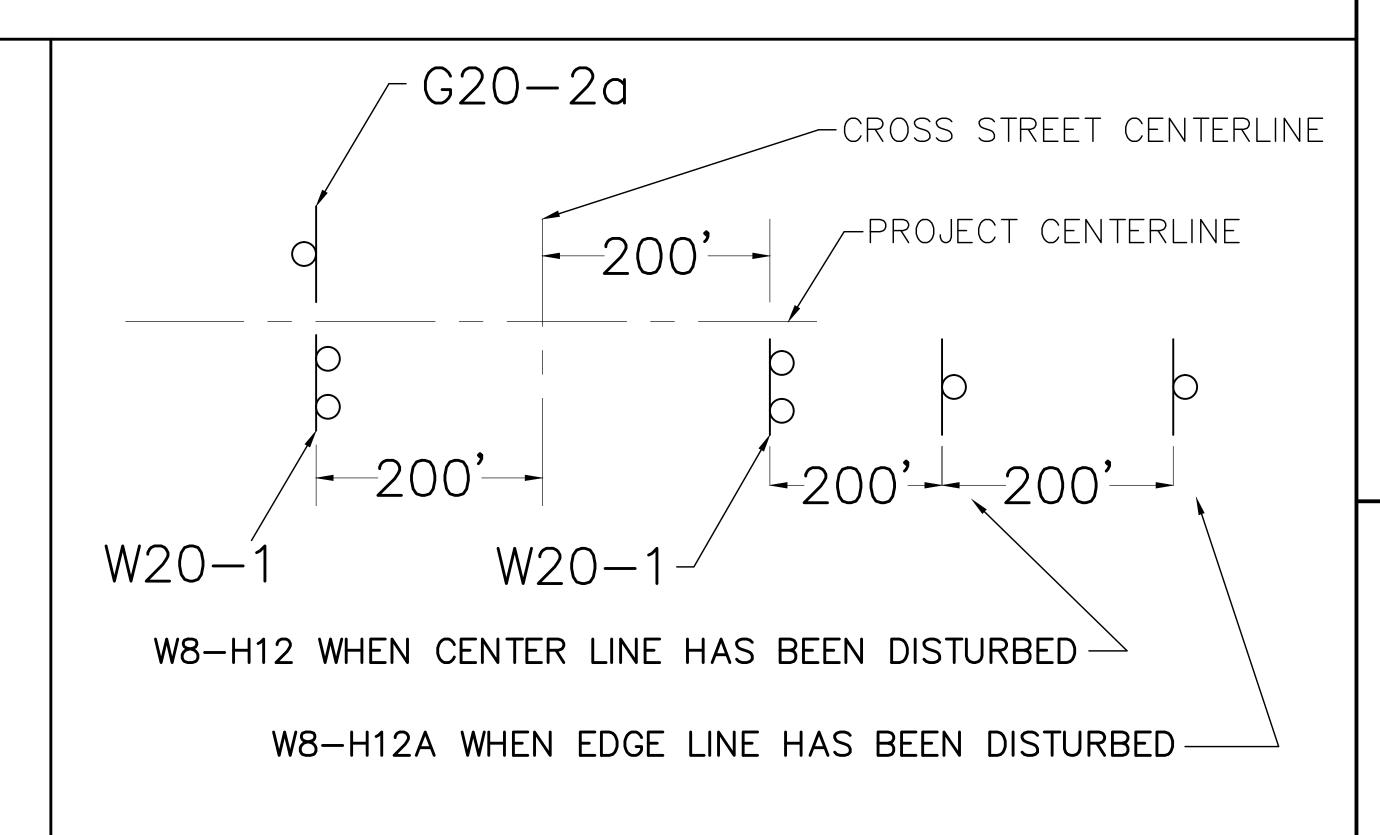
W8 - 11

R4 - 124"×30"

R4 - 224"×30"

egend

- Sign mounted on 1 Channel Post
- Sign Mounted on 2 Channel Posts



Typical Sign Spacing