CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)
May 2019
P-928

UNDERGROUND UTILITIES

TWO WORKING DAYS BEFORE YOU DIG

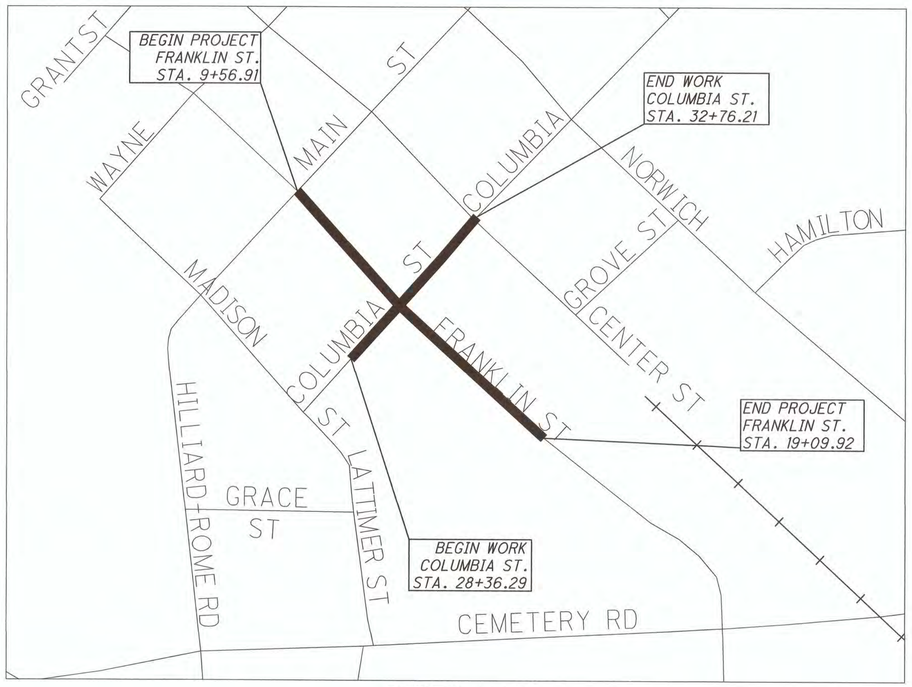
CALL 800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE

NON-MEMBERS
MUST BE CALLED DIRECTLY

BENCH MARKS
(BASED ON NAVD88)

BM #1: MAG NAIL SET	ELEV: 934.056	NORTHING: 741286.438	EASTING: 1784118.315
BM #2: MAG NAIL SET	ELEV: 933.205	NORTHING: 740619.787	EASTING: 1784304.535
BM #3: MAG NAIL SET	ELEV: 935.941	NORTHING: 740832.196	EASTING: 1783702.760
BM #4: MAG NAIL SET	ELEV: 935.583	NORTHING: 741329.946	EASTING: 1783523.028
BM #5: MAG NAIL SET	ELEV: 934.713	NORTHING: 741012.160	EASTING: 1783872.137
BM #6: IRON PIN W/ CAP SET	ELEV: 934.217	NORTHING: 741214.125	EASTING: 1784024.549
BM #7: TEMPORARY BENCHMARK	ELEV: 936.286	NORTHING: 741269.654	EASTING: 1784067.328

SHEET INDEX



INDEX MAP
SCALE: 1" = 200'

VICINITY MAP
NOT TO SCALE

PROJECT DESCRIPTION

FULL DEPTH REPLACEMENT OF 0.17 MILES OF FRANKLIN STREET AND 0.08 MILES OF COLUMBIA STREET. WORK INCLUDES PARKING BAYS, SIDEWALKS, TREES, LIGHTING AND CURBED ROADWAY. UTILITY IMPROVEMENTS INCLUDE STORM SEWER AND WATER MAIN REPLACEMENTS AND SANITARY SEWER LINING.

EARTH DISTURBED

TOTAL ESTIMATED DISTURBED AREA: 1.91 ACRES
PRE-CONSTRUCTION IMPERVIOUS AREA: 1.18 ACRES
POST-CONSTRUCTION IMPERVIOUS AREA: 1.48 ACRES

CITY OF HILLIARD SPECIFICATIONS

THE REGULATIONS AND CONSTRUCTION STANDARDS OF THE CITY OF HILLIARD, TOGETHER WITH THE 2012 CONSTRUCTION AND MATERIAL SPECIFICATIONS OF THE CITY OF COLUMBUS (COLS) AND THE 2016 OHIO DEPARTMENT OF TRANSPORTATION (ODOT), INCLUDING ALL SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THIS PLAN UNLESS OTHERWISE NOTED.

2012 CITY OF COLUMBUS SPECIFICATIONS

THE CITY OF COLUMBUS CONSTRUCTION AND MATERIALS SPECIFICATIONS (CMSC), 2012 EDITION INCLUDING ALL REVISIONS AND SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THIS PLAN UNLESS NOTES OTHERWISE.

SIGNATURES ON THIS PLAN SIGNIFY ONLY CONCURRENCE WITH THE GENERAL PURPOSE AND GENERAL LOCATION OF THE PROJECT. ALL TECHNICAL DETAILS REMAIN THE RESPONSIBILITY OF THE ENGINEER PREPARING THE PLAN.

REVIEWED BY:

Albert Dome — 05/20/19
DIRECTOR OF PUBLIC SERVICE, CITY OF HILLIARD — DATE

Clark A. Rausch — 5/20/2019
CITY ENGINEER, CITY OF HILLIARD — DATE

Jeffrey W Warren — 5/20/2019
FIRE CHIEF, NORWICH TOWNSHIP — DATE

APPROVAL ON THE PART OF THE CITY OF COLUMBUS IS GIVEN PURSUANT TO THE PROVISIONS OF THE WATER SERVICE AGREEMENT WITH THE CITY OF HILLIARD, OHIO, AND THE CITY OF COLUMBUS, OHIO, ON FEBRUARY 9, 1990 AND ALL SUBSEQUENT AMENDMENTS THEREOF.

ADMINISTRATOR, DIVISION OF WATER, CITY OF COLUMBUS — DATE

DIRECTOR OF PUBLIC UTILITIES, CITY OF COLUMBUS — DATE

REVISIONS

REV NO.	DATE OF REV.	SHEETS REVISED	DESCRIPTION	APPROVED BY	DATE OF APPROVAL

STANDARD DRAWINGS

HILLIARD	COLUMBUS								ODOT	
	STREETS		SEWER		WATER		SUPPLEMENTAL SPEC			
CD-1	1441	3/4/2019	AA-S102	12/6/2013	L-1001	5/14/2013	L-7601 5/16/2013	SS1100 11/1/2017	HL-30.11	1/18/2019
CR-1	3/6/2015	1510 9/15/2015	AA-S106	7/9/2012	L-6306	5/14/2013	L-9901 11/5/2015	CS1032 10/31/2011	MT-97.10	7/18/2014
DD-1		1511 9/15/2015	AA-S107	7/9/2012	L-6309A	5/14/2013			MT-97.11	1/20/2017
DD-2		2000 3/30/2018	AA-S111	12/6/2013	L-6309B	5/14/2013			SS800	1/18/2019
ID-2	4/16/2015	2151 4/30/2018	AA-S112	12/6/2013	L-6310	5/14/2013				
MHA-1		2160 12/31/2018	AA-S119	8/8/2014	L-6311	5/14/2013				
SL-5	9/1/2015	2170 4/30/2018	AA-S121	7/9/2012	L-6312	5/14/2013				
SL-6	9/1/2015	2201 12/31/2018	AA-S125B	8/8/2014	L-6409A	5/15/2013				
SL-16	9/1/2015	2202 12/31/2018	AA-S128	8/8/2014	L-6637A	5/16/2013				
SL-17	9/1/2015	2301 4/30/2018	AA-S130	12/6/2013	L-6640	5/16/2013				
SW-1		2328 4/30/2018	AA-S142	12/6/2013	L-7102A	11/5/2015				
TC-1	7/30/2015	2337 4/30/2018	AA-S14910	15/2014	L-7102B	11/5/2015				
TC-2	7/29/2015		AA-S150	7/9/2012	L-7102C	11/5/2015				
TC-5	6/14/2016				L-7401	11/5/2015				

THE STANDARD DRAWINGS LISTED ABOVE ARE TO BE THE CURRENT DRAWING AT THE TIME OF PLAN APPROVAL.

PREPARED BY:

WOOLPERT
DESIGN | GEOSPATIAL | INFRASTRUCTURE

One Easton Oval
Suite 400
Columbus, OH 43219
614.476.6000
FAX: 614.476.6225

Nathan Fischer — 5/20/19
NATHAN.FISCHER@WOOLPERT.COM — DATE
REGISTERED ENGINEER

STATE OF OHIO
NATHAN G. FISCHER
E-71880
REGISTERED
PROFESSIONAL ENGINEER

TITLE SHEET

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

P-928

1
75

Layout Tab Name: TITLE SHEET, Images: , Xrefs:
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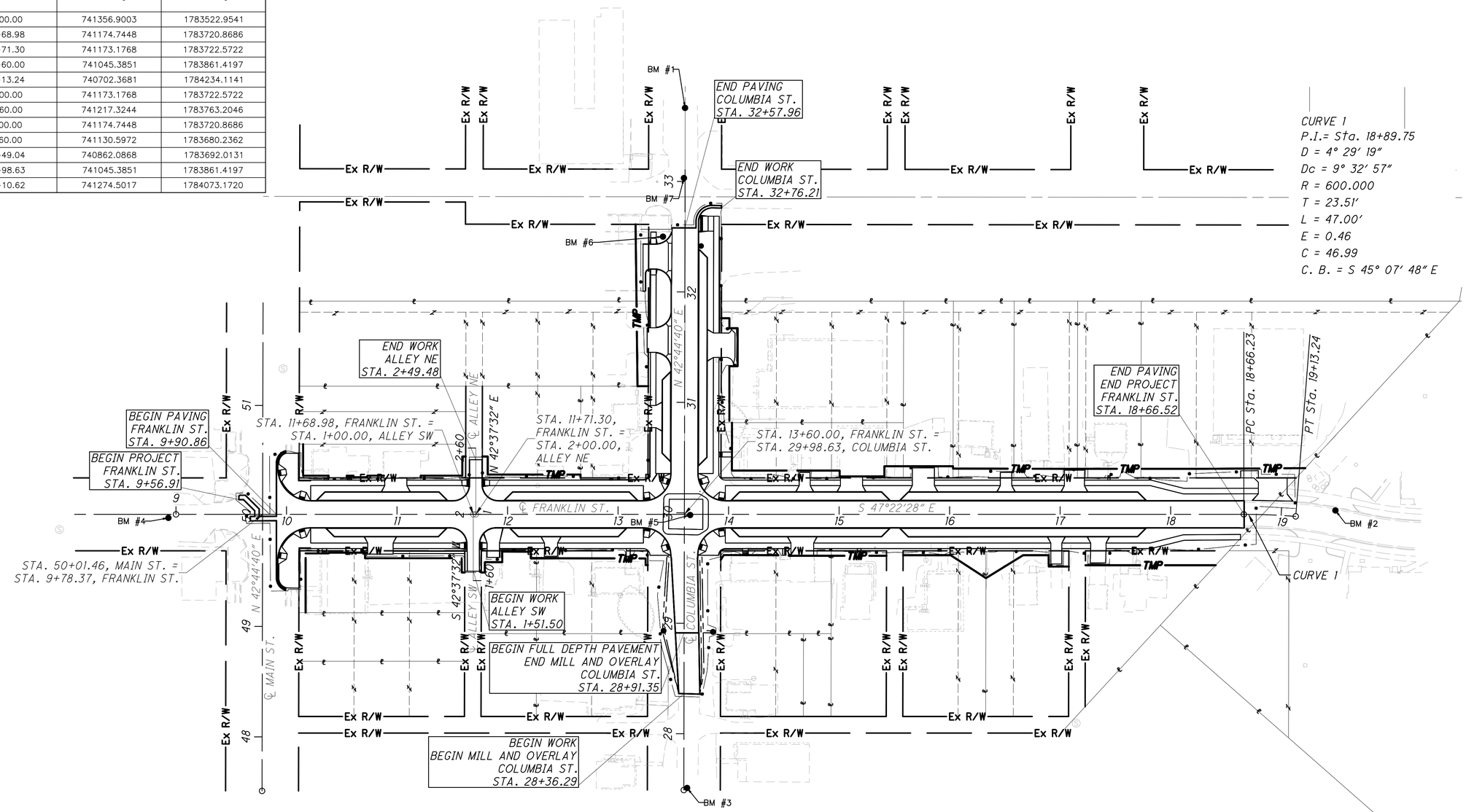
CENTERLINE REFERENCE POINTS

Centerline	Station	Northing	Easting
FRANKLIN ST.	9+00.00	741356.9003	1783522.9541
FRANKLIN ST.	11+68.98	741174.7448	1783720.8686
FRANKLIN ST.	11+71.30	741173.1768	1783722.5722
FRANKLIN ST.	13+60.00	741045.3851	1783861.4197
FRANKLIN ST.	19+13.24	740702.3681	1784234.1141
ALLEY NE	2+00.00	741173.1768	1783722.5722
ALLEY NE	2+60.00	741217.3244	1783763.2046
ALLEY SW	1+00.00	741174.7448	1783720.8686
ALLEY SW	1+60.00	741130.5972	1783680.2362
COLUMBIA ST.	27+49.04	740862.0868	1783692.0131
COLUMBIA ST.	29+98.63	741045.3851	1783861.4197
COLUMBIA ST.	33+10.62	741274.5017	1784073.1720



SURVEY DATA

Point ID	Ground Northing	Ground Easting	Grid Northing	Grid Easting	Elevation	Latitude (Global)	Longitude (Global)	Ellipsoid Height (Global)	Feature Code	Description	Type of Control
BM #1	741315.675	1784111.042	741286.438	1784118.315	934.056	N40°02'00.18120"	W83°09'30.41805"	824.156	103 MAG	MAG NAIL SET	Horizontal
BM #2	740648.999	1784297.270	740619.787	1784304.535	933.205	N40°01'53.60676"	W83°09'27.96165"	823.307	103 MAG	MAG NAIL SET	Horizontal
BM #3	740861.415	1783695.471	740832.196	1783702.760	935.941	N40°01'55.66239"	W83°09'35.71757"	826.055	103 MAG	MAG NAIL SET	Horizontal
BM #4	741359.185	1783515.732	741329.946	1783523.028	935.583	N40°02'00.56818"	W83°09'38.07489"	825.697	103 MAG	MAG NAIL SET	Horizontal
BM #5	741041.387	1783864.855	741012.160	1783872.137	934.713	N40°01'57.45303"	W83°09'33.55706"	824.821	103 MAG	MAG NAIL SET	Horizontal
BM #6	741243.360	1784017.273	741214.125	1784024.549	934.217	N40°01'59.45985"	W83°09'31.61668"	824.320	103 IP/IP	IRON PIN W/ CAP SET	Horizontal
BM #7	741298.891	1784060.054	741269.654	1784067.328	936.286	N40°02'00.01167"	W83°09'31.07194"	826.387	143	TEMPORARY BENCHMARK	Vertical

Horizontal Datum:	North American Datum of 1983 (NAD83) 2011 Adjustment, US Survey Feet
Vertical Datum:	North American Vertical Datum of 1988 (NAVD88), GEOID 12B, US Survey Feet
Combined Factor:	1.0000394416 (grid about (0,0) to get ground)

HORIZONTAL SCALE IN FEET
0 25 50 100
CALCULATED ESD
CHECKED NGF

SCHEMATIC PLAN

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

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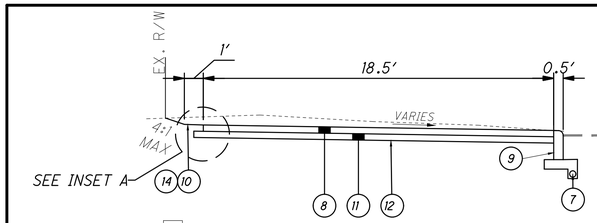
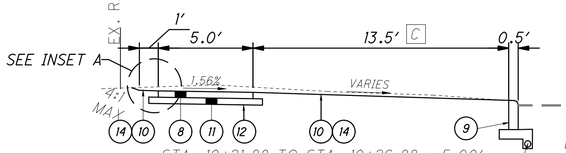
2
75

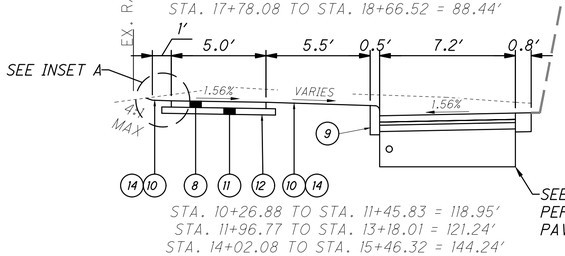


B

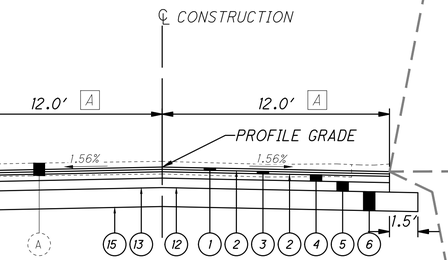
STA. 9+90.86 TO STA. 10+21.88 = 31.02'
STA. 13+22.97 TO STA. 13+97.08 = 74.11'



STA. 10+21.88 TO STA. 10+26.88 = 5.00'
STA. 11+45.83 TO STA. 11+96.77 = 50.94'
STA. 13+18.01 TO STA. 13+22.97 = 4.96'
STA. 13+97.08 TO STA. 14+02.08 = 5.00'
STA. 15+46.32 TO STA. 15+54.75 = 8.43'
STA. 17+78.08 TO STA. 18+66.52 = 88.44'



STA. 10+26.88 TO STA. 11+45.83 = 118.95'
STA. 11+96.77 TO STA. 13+18.01 = 121.24'
STA. 14+02.08 TO STA. 15+46.32 = 144.24'
STA. 15+54.75 TO STA. 17+78.08 = 223.33'



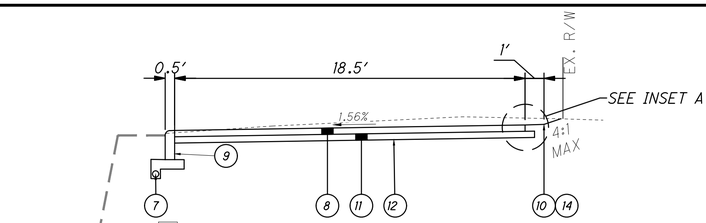
FRANKLIN ST. - TYPICAL SECTION
STA. 9+90.86 TO STA. 18+66.52 = 875.66' *

A STA. 18+61.52 TO STA. 18+66.52 LT. AND STA. 18+61.51 TO STA. 18+66.52 RT. TAPER TO MATCH EXISTING 12.1'±.

B SEE SHEET 44 FOR DETAILS ON DECORATIVE BRICK PAVER BORDER FOR WALK

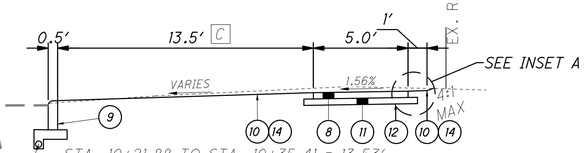
C WIDTH VARIES FROM 13.5' AT STA. 17+81.50 TO 6.0' AT STA. 18+11.50 LT. & RT.

* SECTION FOR STA. 9+56.91 TO STA. 9+90.86 SHOWN ON SHEET 18

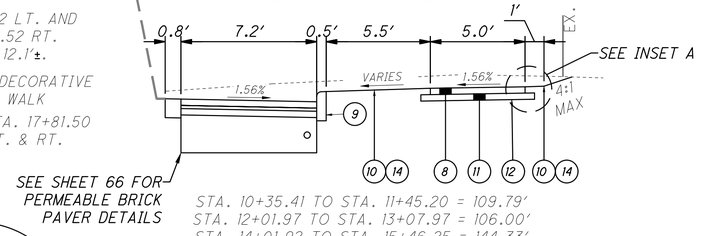


B

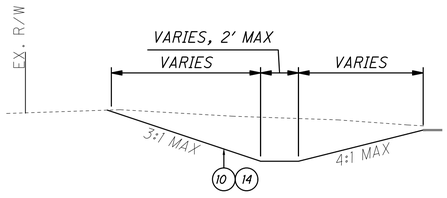
STA. 9+90.86 TO STA. 10+21.88 = 31.02'
STA. 13+22.97 TO STA. 13+97.08 = 74.11'



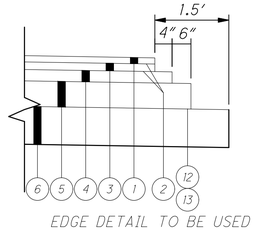
STA. 10+21.88 TO STA. 10+35.41 = 13.53'
STA. 11+45.20 TO STA. 12+01.97 = 56.77'
STA. 13+07.97 TO STA. 13+22.97 = 15.00'
STA. 13+97.08 TO STA. 14+01.92 = 4.84'
STA. 15+46.25 TO STA. 15+54.70 = 8.45'
STA. 17+77.92 TO STA. 18+66.52 = 88.60'



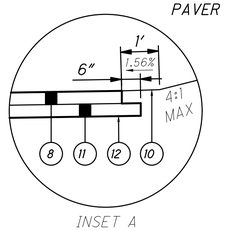
STA. 10+35.41 TO STA. 11+45.20 = 109.79'
STA. 12+01.97 TO STA. 13+07.97 = 106.00'
STA. 14+01.92 TO STA. 15+46.25 = 144.33'
STA. 15+54.70 TO STA. 17+77.92 = 223.22'



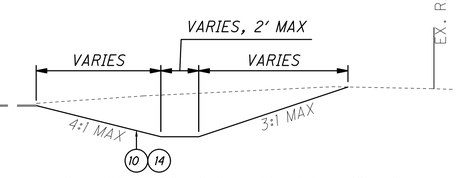
STA. 28+36.29 TO STA. 29+61.62 = 125.33'



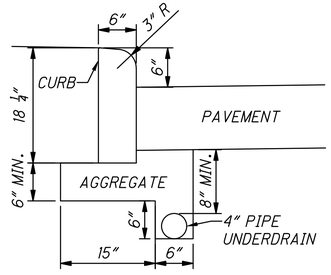
EDGE DETAIL TO BE USED
STA. 28+36.29 TO STA. 29+61.65 RT.
STA. 28+36.29 TO STA. 29+61.62 LT.



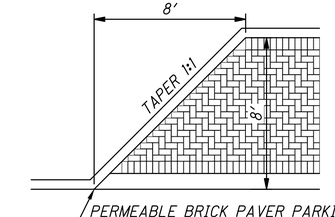
INSET A



STA. 28+36.29 TO STA. 29+61.65 = 125.36'

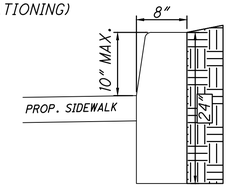


UNDERDRAIN DETAIL

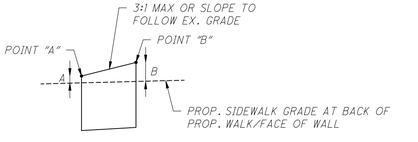


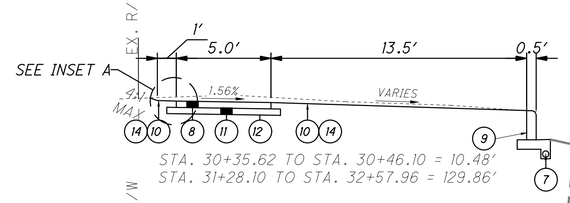
PERMEABLE BRICK PAVER PARKI
BAY TAPER RATE DETAIL (TYP

BEGINNING OF PARKING BAY (POINT OF STATIONING)

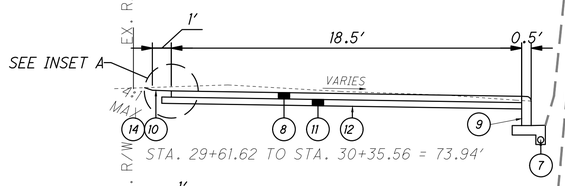


ITEM SPECIAL - CURB WALL, TYPE A





STA. 30+35.62 TO STA. 30+46.10 = 10.48'
STA. 31+28.10 TO STA. 32+57.96 = 129.86'

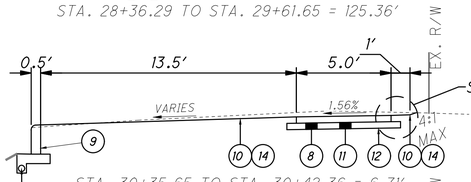


STA. 29+61.62 TO STA. 30+35.56 = 73.94'

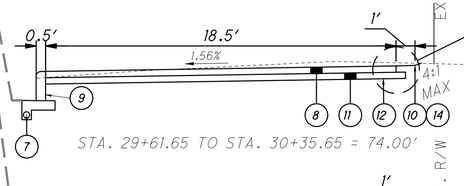
STA. 30+46.10 TO STA. 31+28.10 = 82.00'

COLUMBIA ST. - TYPICAL SECTION
STA. 28+91.35 TO STA. 32+57.96 = 366.61'

COLUMBIA ST. - MILL AND OVERLAY SECTION
STA. 28+36.29 TO STA. 28+91.35 = 55.06'



STA. 30+35.65 TO STA. 30+42.36 = 6.71'
STA. 32+38.98 TO STA. 32+57.96 = 18.98'



STA. 29+61.65 TO STA. 30+35.65 = 74.00'

STA. 30+42.36 TO STA. 32+38.98 = 196.62'

LEGEND

1. ITEM 448 - 1.5" ASPHALT CONCRETE SURFACE COURSE (MEDIUM TRAFFIC), PG64-22
2. ITEM 407 - TACK COAT, AS PER PLAN
3. ITEM 448 - 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE (MEDIUM TRAFFIC), PG64-22
4. ITEM 301 - 4" ASPHALT CONCRETE BASE
5. ITEM 304 - 6" AGGREGATE BASE
6. ITEM 204 - EXCAVATION OF SUBGRADE (12" DEPTH)
   ITEM 204 - GRANULAR MATERIAL, TYPE B OR C
7. ITEM 605 - 4" PIPE UNDERDRAIN
8. ITEM 608 - 4" CONCRETE WALK
9. ITEM 609 - CURB, STRAIGHT 18"
10. ITEM 659 - SEEDING AND MULCHING, AS PER PLAN
11. ITEM 1525 - AGGREGATE BASE, #57 STONE (T=4")
12. ITEM 204 - SUBGRADE COMPACTION
13. ITEM 204 - PROOF ROLLING
14. ITEM 659 - TOPSOIL
15. ITEM 204 - GEOTEXTILE FABRIC, 712.09, TYPE D
16. ITEM 254 - 1.5" PAVEMENT PLANING, ASPHALT CONCRETE

A EXISTING ASPHALT PAVEMENT

SEE SHEET 46 FOR SPEED TABLE DETAIL AND PAVEMENT MAKEUP
SEE SHEET 48 FOR DRIVEWAY PAVEMENT BUILDUP

WALL TYPE A

SIDE	BEGIN WALL STA.	A	B	MAX HEIGHT	END WALL STA.	TOTAL LENGTH OF WALL
LT.	12+66.07	8"	4"	8"	30+77.10 (COLUMBIA)	106
LT.	31+67.45	10"	10"	10"	32+20.32	53

CALCULATED ESD | CHECKED NGF

TYPICAL SECTIONS

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

3 / 75

P-928

Layout Tab Name: 3 TYPICAL SECTION, Images: , Xrefs:
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CALCULATED ESD | CHECKED NGF

GENERAL NOTES

1. THE REGULATIONS AND CONSTRUCTION STANDARDS OF THE CITY OF HILLIARD, TOGETHER WITH THE 2012 CONSTRUCTION AND MATERIAL SPECIFICATIONS OF THE CITY OF COLUMBUS (COLS) AND THE 2016 OHIO DEPARTMENT OF TRANSPORTATION (ODOT), INCLUDING ALL SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THIS PLAN UNLESS OTHERWISE NOTED. ALL ITEMS SHALL BE PER CITY OF COLUMBUS STANDARDS UNLESS OTHERWISE NOTED.

2. THE CITY ENGINEER OR CITY REPRESENTATIVE WILL MAKE INSPECTION OF THE WORK. THE CITY ENGINEER WILL REQUIRE AT LEAST 48 HOURS WRITTEN NOTICE BEFORE ANY WORK TAKES PLACE. FAILURE TO REQUEST THE NECESSARY INSPECTION MAY RESULT IN THE REJECTION OF THE WORK AND THE PROJECT.

3. IT IS THE INTENTION OF THE PLANS TO PROVIDE AND REQUIRE A COMPLETED PROJECT READY FOR OPERATION. ANY WORK ITEMS OMITTED FROM THE PLANS, WHICH ARE CLEARLY NECESSARY FOR COMPLETION OF THE WORK, AND ITS APPURTENANCES SHALL BE CONSIDERED A PART OF SUCH WORK, THOUGH NOT DIRECTLY SPECIFIED OR CALLED FOR IN THE PLANS. THIS INCLUDES, BUT IS NOT LIMITED TO SUCH INCIDENTAL ITEMS AS RELOCATION OF MAILBOXES, SAW CUTTING, AND REMOVAL AND/OR RELOCATION OF SIGNS, SPRINKLERS, OR OTHER MISCELLANEOUS ITEMS.

4. ALL ITEMS OF WORK CALLED FOR ON THE PLANS FOR WHICH NO SPECIFIC METHOD OF PAYMENT IS PROVIDED SHALL BE PERFORMED BY THE CONTRACTOR WITH THE COST TO BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS RELATED ITEMS.

5. THE CONTRACTOR OR DEVELOPER SHALL DEPOSIT THE TOTAL ESTIMATED COST FOR INSPECTIONS, AS DETERMINED BY THE CITY ENGINEER OR CITY REPRESENTATIVE, WITH THE CITY OF HILLIARD PRIOR TO THE START OF CONSTRUCTION.

6. THE CONTRACTOR SHALL PROVIDE THE CITY OF HILLIARD, A SURETY, ACCEPTABLE TO THE CITY OF HILLIARD, EQUAL TO 100% OF CONSTRUCTION COSTS. THE SURETY SHALL GUARANTEE THE WORK FOR ONE YEAR AFTER ACCEPTANCE BY THE CITY.

7. THE CITY ENGINEER OR CITY REPRESENTATIVE WILL NOT BE RESPONSIBLE FOR MEANS, METHODS, PROCEDURES, TECHNIQUES, OR SEQUENCES OF CONSTRUCTION THAT ARE NOT SPECIFIED HEREIN. THE CITY ENGINEER OR CITY REPRESENTATIVE WILL NOT BE RESPONSIBLE FOR SAFETY ON THE WORK SITE, OR THE FAILURE BY THE CONTRACTOR TO PERFORM WORK ACCORDING TO PLANS.

8. THE CITY ACQUIRED "RIGHTS OF ENTRY" FROM PROPERTY OWNERS FOR THE AREAS DESIGNATED "EASEMENT" OR "TMP" ON THE PLANS. NO WORK SHALL BE DONE OUTSIDE OF THESE EASEMENTS.

9. THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL SAFETY REQUIREMENTS INCLUDING THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970. THE CONTRACTOR SHALL EXERCISE PRECAUTION ALWAYS FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT SHALL ALSO BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTION AND PROGRAMS IN CONNECTION WITH THE WORK, INCLUDING THE REQUIREMENTS FOR CONFINED SPACES PER 29 CFR 1910.146.

10. THE CONTRACTOR/DEVELOPER SHALL BE RESPONSIBLE TO OBTAIN ALL NECESSARY PERMITS.

11. THE CONTRACTOR SHALL CONFINE HIS ACTIVITIES TO THE PROJECT SITE, EXISTING RIGHT-OF-WAYS, TEMPORARY AND PERMANENT EASEMENTS, AND SHALL NOT ENTER UPON OTHER PROPERTIES WITHOUT WRITTEN PERMISSION OF THE OWNER. IF THE PROPOSED WORK REQUIRES ENTERING EASEMENTS UPON OTHER PROPERTIES, THE CONTRACTOR SHALL NOTIFY THE OWNER(S) IN WRITING NO LESS THAN 72 HOURS IN ADVANCE OF THE COMMENCEMENT OF THE WORK, AND COPY THE CITY ON ALL CORRESPONDENCE. FAILURE TO NOTIFY AFFECTED PROPERTY OWNERS MAY SUBJECT THE CONTRACTOR TO THE PENALTIES ASSOCIATED WITH THE VIOLATION OF HILLIARD CITY CODE, SECTION 541.05, CRIMINAL TRESPASS.

12. THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCHMARKS, PROPERTY CORNERS, REFERENCE POINTS, STAKES AND OTHER SURVEY REFERENCE MONUMENTS OR MARKERS. IN CASES OF WILLFUL OR CARELESS DESTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE. RESETTING THE MARKERS SHALL BE PERFORMED BY AN OHIO PROFESSIONAL SURVEYOR AS APPROVED BY THE CITY ENGINEER AT THE CONTRACTOR'S EXPENSE.

13. PROPERTY BOUNDARIES, INCLUDING PROPERTY LINES AND ROAD RIGHT-OF-WAY, ARE SHOWN FROM THE BEST INFORMATION AVAILABLE AND ARE NOT NECESSARILY COMPLETE OR CORRECT.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE FINISHED WORK CONFORM TO THE LINES, GRADES, ELEVATIONS AND DIMENSIONS CALLED FOR ON THE DRAWINGS AND TYPICAL SECTIONS.

15. ANY DEVICE SHALL NOT BE OPERATED AT ANY TIME 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. PURSUANT TO HILLIARD CITY CODE, SECTION 509.08, CONSTRUCTION ACTIVITY IS ONLY PERMITTED BETWEEN THE HOURS OF 7:30 A.M. AND 7:00 P.M. ANY CONSTRUCTION ACTIVITY BEYOND THESE HOURS REQUIRES A WRITTEN REQUEST TO THE DIRECTOR OF PUBLIC SERVICE MEETING THE REQUIREMENTS OF HILLIARD CITY CODE, SECTION 509.08(B).

16. PAVEMENTS SHALL BE CUT IN NEAT, STRAIGHT LINES THE FULL DEPTH OF THE EXISTING PAVEMENT, OR AS REQUIRED BY THE CITY ENGINEER OR CITY REPRESENTATIVE.

17. ALL SOIL SUBGRADE SHALL BE PREPARED AND COMPACTED IN ACCORDANCE WITH ITEM 204 TO A DEPTH OF 12 INCHES BELOW THE SUBGRADE SURFACE. SUBGRADE SHALL BE SCARIFIED AND CONTAIN SUFFICIENT MOISTURE TO MEET ITEM 203 COMPACTION REQUIREMENTS.

18. THE CONTRACTOR IS NOT PERMITTED TO USE ANY RECLAIMED MATERIALS IN ITEM 304.

19. NON-RUBBER TIRED VEHICLES SHALL NOT BE MOVED ON OR ACROSS PUBLIC STREETS OR HIGHWAYS WITHOUT THE WRITTEN PERMISSION OF THE CITY ENGINEER OR CITY REPRESENTATIVE.

20. TRACKING OR SPILLING MUD, DIRT, OR DEBRIS UPON STREETS, RESIDENTIAL OR COMMERCIAL DRIVES, SIDEWALKS OR BIKE PATHS IS PROHIBITED PER HILLIARD CITY CODE, SECTION 905.12 AND ANY SUCH OCCURRENCE SHALL BE CLEANED UP IMMEDIATELY BY THE CONTRACTOR. IF THE CONTRACTOR FAILS TO REMOVE SAID MUD, DIRT, DEBRIS, OR SPILLAGE, THE CITY OF HILLIARD RESERVES THE RIGHT TO REMOVE THESE MATERIALS AND CLEAN AFFECTED AREAS, THE COST OF WHICH SHALL BE PAID BY THE CONTRACTOR/DEVELOPER PER HILLIARD CITY CODE, SECTION 905.13.

21. DURING CONSTRUCTION THE CONTRACTOR SHALL PROVIDE ADEQUATE DRAINAGE AND PROPER SOIL EROSION CONTROL MEASURES FOR PROTECTION OF ALL ADJACENT ROADS AND LANDS, PER COLS ITEM 207.

22. DURING CONSTRUCTION, THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO A CONDITION EQUAL OR BETTER THAN THAT WHICH EXISTED BEFORE CONSTRUCTION. DRAINAGE DITCHES OR WATERCOURSES THAT ARE DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO THE GRADES AND CROSS-SECTIONS THAT EXISTED BEFORE CONSTRUCTION.

23. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO MAINTAIN AT ALL TIMES SEWER, DRAIN, AND DITCH FLOWS THROUGH EXISTING FACILITIES TO REMAIN IN PLACE AND THROUGH EXISTING FACILITIES TO BE REPLACED UNTIL NEW FACILITIES ARE COMPLETED AND PUT INTO SERVICE. THE CONTRACTOR, TO A CONDITION SATISFACTORY TO THE CITY ENGINEER OR CITY REPRESENTATIVE, SHALL RESTORE THE FLOW OF ALL SEWERS, DRAINS, AND OTHER WATERCOURSES DISTURBED DURING THE PROSECUTION OF THE WORK.

24. ANY MODIFICATION OF THE WORK AS SHOWN ON THESE DRAWINGS MUST HAVE PRIOR WRITTEN APPROVAL BY THE CITY ENGINEER OR CITY REPRESENTATIVE.

25. THE CONTRACTOR SHALL CALL TOLL FREE, THE OHIO UTILITIES PROTECTION SERVICE (OUPS) AT 1-800-362-2764 SEVENTY-TWO (72) HOURS IN ADVANCE OF THE ANTICIPATED START OF CONSTRUCTION, AND SHALL NOTIFY ALL UTILITY COMPANIES AT LEAST FORTH-EIGHT (48) HOURS PRIOR TO WORK IN THE VICINITY OF THEIR LINES.

UTILITY	OWNER	CONTACT
TELEPHONE	AT&T SBC 111 N. FOURTH ST., ROOM 802 COLUMBUS, OH 43215	GARY VAN ALMSICK GV2758@ATT.COM (614) 223-7276
ELECTRIC	AMERICAN ELECTRIC POWER 700 MORRISON ROAD, 3RD FLOOR GAHANNA, OH 43230	PAUL PAXTON PTPAXTON@AEP.COM (614) 833-6831
	AMERICAN ELECTRIC POWER (TRANSMISSION) 700 MORRISON ROAD, 3RD FLOOR GAHANNA, OHIO 43230	COURTNE BUZZARD TL_PUBLICPROJECTS@AEP.COM 614-552-1893
GAS	COLUMBIA GAS 3550 JOHNNY APPLESEED CT COLUMBUS, OH 43211	MATT MYERS MMYERS@NISOURCE.COM (614) 818-2113
CABLE	SPECTRUM 3760 INTERCHANGE ROAD COLUMBUS, OH 43204	DAVE HOLSTEIN DAVID.HOLSTEIN@CHARTER.COM (614) 975-7468
	WOWI INTERNET & CABLE 3675 CORPORATE DRIVE COLUMBUS, OH 43231	DOUGAL BRAMMER DOUGAL.BRAMMER@WOWINC.COM (614) 569-9885
	ZAYO FIBER SOLUTIONS 4199 KINROSS LAKES PARKWAY, SUITE 10 RICHFIELD, OH 44286	SCOTT HEINLEN SCOTT.HEINLEN@ZAYO.COM (740) 501-6921

26. EXISTING UTILITIES SHOWN ON THE PLAN ARE FROM THE BEST AVAILABLE RECORDS AND FIELD INVESTIGATION AND ARE NOT NECESSARILY COMPLETE OR CORRECT. THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES WHETHER SHOWN OR NOT.

27. THE CONTRACTOR SHALL EXPOSE AND VERIFY THE LOCATION AND ELEVATION OF ANY UTILITIES WITHIN THE LIMITS OF THE PROPOSED CONDUIT PATH, PRIOR TO STARTING ANY EXCAVATION. IN CASE OF CONFLICT, ADJUSTMENTS IN LOCATION AND ELEVATION OF THE PROPOSED UTILITIES MAY BE MADE IF APPROVED PER GENERAL NOTE #24, OR ARRANGEMENTS SHALL BE MADE TO MOVE THE EXISTING UTILITY TO PROVIDE ADEQUATE CLEARANCE.

28. ALL WATER LINES MUST BE CONSTRUCTED WITH A MINIMUM TEN (10) FEET HORIZONTAL AND ONE & ONE-HALF (1.5) FOOT VERTICAL SEPARATION FROM ALL SEWER LINES. ALL NON-WATER LINE UTILITIES MUST BE CONSTRUCTED WITH A MINIMUM THREE (3) FEET HORIZONTAL AND ONE (1) FOOT VERTICAL SEPARATION.

29. EXISTING DRAIN TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE RECONNECTED OR CONNECTED TO THE STORM SEWER SYSTEM BY THE CONTRACTOR, AS APPROVED BY THE CITY ENGINEER OR CITY REPRESENTATIVE. THE COST OF SAID WORK TO BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS RELATED ITEMS.

30. ALL TRENCHES WITHIN PAVEMENT, BERM, AND SHOULDER LIMITS SHALL BE BACKFILLED OR SECURELY PLATED DURING NON-WORKING HOURS.

31. ACCESS TO ALL ADJOINING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES. AREAS WITH MULTIPLE DRIVES SHALL HAVE AT LEAST HALF OF THE DRIVES OPEN AT ALL TIMES. PROPERTIES WITH A SINGLE ACCESS WILL REQUIRE STAGED CONSTRUCTION; SHORT-TERM FULL CLOSURE OF A SINGLE ACCESS WILL BE PERMITTED WITH THE PROPERTY OWNER AND/OR TENANT'S AGREEMENT. SUCH FULL CLOSURES SHALL BE SCHEDULED AND COORDINATED WITH THE PROPERTY OWNER/TENANT BY THE CONTRACTOR WITH DOCUMENTATION OF THE APPROVED CLOSURE PROVIDED TO THE CITY ENGINEER OR CITY REPRESENTATIVE PRIOR TO CLOSURE.

32. AT ALL STORM SEWER AND SANITARY SEWER CROSSINGS, THE TRENCH BACKFILL SHALL CONSIST OF COMPACTED GRANULAR MATERIAL, COLS ITEM 912, BETWEEN THE DEEPER AND SHALLOWER PIPE. FOR WATER LINE CROSSINGS, SEE CITY OF HILLIARD (COH) WATER LINE GENERAL NOTE #13.

33. COMPACTED GRANULAR MATERIAL, COLS ITEM 912 SHALL CONSIST OF NATURAL, BROKEN OR CRUSHED STONE, CRUSHED GRAVEL, OR CRUSHED SLAG. SYNTHETIC OR MAN-MADE MATERIALS ARE UNACCEPTABLE.

34. BACKFILL FOR STORM SEWER AND SANITARY SEWER TRENCHES UNDER PAVEMENT AND WITHIN THE RIGHT-OF-WAY SHALL BE COMPACTED GRANULAR MATERIAL, COLS ITEM 912, TO THE PAVEMENT SUBGRADE. WHERE STORM SEWER AND SANITARY SEWER TRENCHES CROSS THE PAVEMENT, COLS ITEM 912 SHALL EXTEND THE FULL WIDTH OF THE RIGHT-OF-WAY, AND TO WITHIN 6 INCHES OF FINISHED GRADE WHERE NOT UNDER PAVEMENT. FOR BACKFILL OF WATER LINE TRENCHES UNDER PAVEMENT AND WITHIN THE RIGHT-OF-WAY, SEE COH WATER LINE GENERAL NOTE #14.

35. BACKFILL FOR STORM SEWER AND SANITARY SEWER TRENCHES PARALLEL TO THE PAVEMENT AND WITHIN THE RIGHT-OF-WAY, WITH THE TOP OF THE TRENCH 3 FEET OR CLOSER TO THE BACK OF CURB OR EDGE OF PAVEMENT OR LOCATED UNDER A PEDESTRIAN PATHWAY, SHALL BE COMPACTED GRANULAR MATERIAL, COLS ITEM 912, TO WITHIN 6 INCHES OF FINISHED GRADE. BACKFILL FOR ALL OTHER STORM SEWER AND SANITARY SEWER TRENCHES WITHIN THE RIGHT-OF-WAY PARALLEL TO THE PAVEMENT, SHALL BE COMPACTED BACKFILL, COLS ITEM 911, EXCEPT THAT COMPACTION SHALL BE TO A MINIMUM 95 PERCENT MAXIMUM DRY DENSITY. PRIOR TO CONSTRUCTION OF THE STREETS, THE CITY ENGINEER MAY REQUIRE SOIL TESTS ON THE BACKFILL. WHERE TEST RESULTS INDICATE THAT THE BACKFILL DOES NOT MEET COMPACTION REQUIREMENTS, THE BACKFILL SHALL BE REMOVED, REPLACED, AND RE-TESTED UNTIL MEETING THOSE REQUIREMENTS. FOR BACKFILL FOR WATER LINE TRENCHES PARALLEL TO THE PAVEMENT, SEE COH WATER LINE GENERAL NOTE #15.

36. THE CONTRACTOR SHALL INSTALL STREET LIGHTS AT THE LOCATIONS SHOWN ON THE PLANS, INCLUDING ALL WIRING AND DISCONNECTS AND PROVIDE A COMPLETE OPERATING LIGHTING SYSTEM THAT COMPLIES WITH THE CITY OF HILLIARD SPECIFICATIONS.

37. ALL AREAS FOR UNDERGROUND ELECTRIC AND STREET LIGHTING ELECTRIC, TELEPHONE, AND CABLE TV INSTALLATIONS SHALL BE BROUGHT TO FINISHED GRADE, AS SHOWN ON THE GRADING PLAN, PRIOR TO THEIR BEING INSTALLED. ALL FILL REQUIRED SHALL BE COMPACTED IN ACCORDANCE WITH COLS ITEM 203.12, CONDITION 1. THIS WORK SHALL BE PERFORMED AS PART OF THIS PLAN AND THE COST SHALL BE INCLUDED UNDER ITEM 203.

38. ALL SEEDING SHALL BE APPLIED AT THE RATE OF 8 POUNDS (LB.) PER 1,000 SQUARE FEET (SF) AND SHALL USE THE FOLLOWING SEED MIXTURE:

40% TITIAN TALL FESCUE
40% TARHEEL TALL FESCUE
10% DENIM KENTUCKY BLUEGRASS
10% RENAISSANCE PERENNIAL RYE GRASS

COMMERCIAL-GRADE COMPLETE FERTILIZER OF NEUTRAL CHARACTER, CONSISTING OF FAST, AND SLOW RELEASE NITROGEN, 50% DERIVED FROM NATURAL ORGANIC SOURCES OF UREA-FORM, PHOSPHOROUS, AND POTASSIUM AND WITH THE FOLLOWING COMPOSITION SHALL BE APPLIED:

COMPOSITION: 13% NITROGEN, 26% PHOSPHOROUS, AND 12% POTASSIUM BY WEIGHT.

FERTILIZER SHOULD BE APPLIED AT THE RATE OF 6 POUNDS (LB.) PER 1,000 SQUARE FEET (SF).

39. ALL SIGNS, LANDSCAPING, STRUCTURES OR OTHER APPURTENANCES DISTURBED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION OF THE CITY ENGINEER OR CITY REPRESENTATIVE. THE CONTRACTOR SHALL PAY FOR THE COST OF THIS WORK.

GENERAL NOTES

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

4
75

P-928

GENERAL NOTES FOR EROSION CONTROL

SITE DATA OWNER/DEVELOPER: CITY OF HILLIARD

PLAN DESIGNER: WOOLPERT, INC.
ONE EASTON OVAL, SUITE 310
COLUMBUS, OH 43219
PHONE: 614-476-6000
NATHAN.FISCHER@WOOLPERT.COM

DEVELOPMENT TYPE: CIP ROADWAY IMPROVEMENT

SITE ACREAGE: 2.00 ACRES

DISTURBED ACREAGE: 1.91 ACRES

SITE VEGETATION: EXISTING GROUND COVER CONSISTS OF GRASS, BUSHES, AND TREES

ADJACENT AREAS: RESIDENTIAL AND COMMERCIAL

RECEIVING WATERS: UNNAMED TRIBUTARIES TO THE SCIOTO RIVER

STORM WATER MANAGEMENT: PERMEABLE BRICK PAVERS

STORM WATER QUALITY: PERMEABLE BRICK PAVERS

A COPY OF THE SWP3, THE NPDES PERMIT & THE OHIO EPA NOI MUST BE KEPT ON SITE AND CLEARLY DISPLAYED AT ALL TIMES.

MAINTENANCE NOTES

THE OWNER'S REPRESENTATIVE WILL INSPECT ALL EROSION AND SEDIMENTATION CONTROL MEASURES WEEKLY AND WITHIN 24 HOURS AFTER EACH RAINFALL EVENT TO ASSURE THAT THE MEASURES ARE FUNCTIONING PROPERLY. THE OWNER/CONTRACTOR SHALL KEEP INSPECTION REPORTS, COPIES OF WHICH SHALL BE PROVIDED TO THE CITY OF HILLIARD OR OHIO EPA UPON REQUEST.

THE OWNER/DEVELOPER MUST MAINTAIN A DOCUMENT SIGNED BY ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED IN THE SWP3 IMPLEMENTATION. THE DOCUMENT MUST CERTIFY THAT THE CONTRACTOR(S) HAS READ AND UNDERSTANDS THE SWP3. THE OWNER/DEVELOPER IS TO PROVIDE THE CITY OF HILLIARD WITH A COPY OF THIS DOCUMENT.

CONSTRUCTION ROAD/CONSTRUCTION ENTRANCE:
BOTH TEMPORARY AND PERMANENT ROADS AND PARKING AREAS MAY REQUIRE PERIODIC TOP DRESSING WITH NEW GRAVEL. SEEDED AREAS ADJACENT TO THE ROADS AND PARKING AREAS SHOULD BE CHECKED PERIODICALLY TO ENSURE THAT A VIGOROUS STAND OF VEGETATION IS MAINTAINED. ROADSIDE DITCHES AND OTHER DRAINAGE STRUCTURES SHOULD BE CHECKED REGULARLY TO ENSURE THAT THEY DO NOT BECOME CLOGGED WITH SILT OR OTHER DEBRIS.

FILTER FABRIC FENCE:
FILTER FABRIC FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

SEDIMENT THAT IS COLLECTED WILL BE DISTRIBUTED ON THE PROTECTED PORTION OF THE SITE AND STABILIZED. ALL STOCKPILES OF EARTH AND TOPSOIL WILL BE PROTECTED WITH TEMPORARY SEEDING OR OTHER MEANS TO PREVENT EROSION.

SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF (1/2) THE HEIGHT OF THE BARRIER.

ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.

INLET PROTECTION:
ALL STORM SEWER INLETS SHALL BE PROTECTED BY SEDIMENT TRAPS (INLET PROTECTION), WHICH WILL BE MAINTAINED AND MODIFIED AS REQUIRED AS CONSTRUCTION PROGRESSES.

THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAINFALL AND REPAIRS MADE AS NEEDED.

SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF (1/2) THE DESIGN OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA IN SUCH A MANNER THAT IT WILL NOT ERODE.

ANY SEDIMENT BLOCKING DRAINAGE AT INLETS THAT CREATES STANDING WATER ON ROADWAYS AND/OR DRIVEWAYS SHALL BE REMOVED IMMEDIATELY.

INLET PROTECTION STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

GENERAL LAND CONSERVATION NOTES

ALL STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE PLACED PRIOR TO BEGINNING CONSTRUCTION OR AS THE FIRST STEP IN GRADING FOR ALL SITES.

PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED ACCORDING TO THE FOLLOWING OHIO EPA CRITERIA:

PERMANENT STABILIZATION
1. AREAS THAT WILL BE DORMANT FOR MORE THAN A YEAR. WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE.
2. ANY OTHER AREAS AT FINAL GRADE. WITHIN 2 DAYS OF REACHING FINAL GRADE.

TEMPORARY STABILIZATION
1. AREAS WITHIN 50 FT OF A STREAM AND NOT AT FINAL GRADE. WITH 2 DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 21 DAYS.
2. ANY DISTURBED AREAS THAT WILL BE DORMANT FOR MORE THAN 21 DAYS BUT LESS THAN 1 YEAR, AND NOT WITHIN 50 FT OF A STREAM. WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA.
3. DISTURBED AREAS THAT WILL BE IDLE OVER WINTER SHALL BE STABILIZED PRIOR TO THE ONSET OF WINTER WEATHER.

ALL STORM SEWER, SANITARY SEWER, WATER MAIN AND SERVICE TRENCHES SHALL BE SEEDED AND MULCHED WITHIN 14 DAYS AFTER BACKFILL IF INSTALLATION IS THROUGH STABILIZED AREAS. NO MORE THAN 250 FEET OF TRENCH WILL BE OPEN AT ANY ONE TIME.

ELECTRICAL POWER, TELEPHONE, CABLE TELEVISION AND GAS SUPPLY TRENCHES SHALL BE COMPACTED, SEEDED AND MULCHED WITHIN 14 DAYS AFTER BACKFILL IF INSTALLATION IS THROUGH STABILIZED AREAS.

ALL TEMPORARY DIVERSIONS, SEDIMENT BASIN EMBANKMENTS AND EARTH STOCKPILES SHALL BE SEEDED AND MULCHED FOR TEMPORARY VEGETATIVE COVER WITHIN 7 DAYS AFTER GRADING.

ANY DISTURBED AREA NOT STABILIZED WITH SEEDING, SODDING, PAVING OR BUILT UPON BY NOVEMBER 1ST, OR AREAS DISTURBED AFTER THAT DATE, SHALL BE MULCHED IMMEDIATELY WITH HYDRO MULCH AT THE RATE OF ONE (1) TON PER ACRE AND OVER-SEEDED BY APRIL 15TH.

AT THE COMPLETION OF CONSTRUCTION, ALL DENUDED AREAS SHALL BE STABILIZED AND TEMPORARY SEDIMENTATION & EROSION CONTROLS SHALL BE REMOVED ONCE THE SITE HAS BEEN STABILIZED.

GENERAL NOTES FOR STORM SEWERS

1. ANY MODIFICATION OF THE WORK AS SHOWN ON THESE DRAWINGS MUST HAVE PRIOR WRITTEN APPROVAL BY THE CITY ENGINEER OR CITY REPRESENTATIVE.
2. BEFORE THE CONTRACTOR STARTS ANY WORK ON THE PROJECT AND AGAIN BEFORE ACCEPTANCE OF THE WORK, REPRESENTATIVES OF THE CITY AND THE CONTRACTOR SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS THAT 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. THE CITY SHALL KEEP RECORDS OF THE INSPECTION IN WRITING.
3. 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. THE CONTRACTOR, TO THE SATISFACTION OF THE CITY ENGINEER OR CITY REPRESENTATIVE, SHALL CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS.
4. PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT CONTRACT ITEMS.
5. ALL STORM SEWERS CONSTRUCTED UNDER THIS PLAN SHALL MEET THE REQUIREMENTS OF COLS ITEM 901, WITH A MINIMUM INSIDE DIAMETER OF 12 INCHES.
6. ALL NEW CONDUITS, CATCH BASINS AND MANHOLES CONSTRUCTED, AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEANED CONDITION BEFORE THE CITY WILL ACCEPT THE PROJECT.
7. ALL INLETS, CATCH BASINS, AND MANHOLES SHALL BE CHANNELIZED.
8. ROADWAY UNDERDRAINS SHALL BE DISCHARGED INTO THE NEAREST STORM STRUCTURE AVAILABLE ALONG THE LINE OF FLOW UNLESS SHOWN OTHERWISE ON THE PLANS.
9. THE CONTRACTOR SHALL ADJUST ALL EXISTING AND PROPOSED CASTINGS TO MATCH THE SURROUNDING FINISHED GRADE. THE COST OF ALL CASTING ADJUSTMENTS SHALL BE INCLUDED IN THE VARIOUS SEWER ITEMS.
10. ALL DRAINAGE SWALES ALONG REAR LOT LINES, SHOWN ON THE GRADING PLAN, SHALL BE CONSTRUCTED TO FINISHED GRADE AS A PART OF THIS PLAN AND THE COST SHALL BE INCLUDED UNDER COLS ITEM 203.
11. THE CONTRACTOR SHALL PROVIDE ROOF DRAIN OPENINGS IN THE CURB FOR ANY FOUND EXISTING ROOF DRAINS. LOCATED AS DIRECTED BY THE OWNERS. LOCATIONS ARE SHOWN ON SHEETS 18 - 23 FOR QUANTITATIVE PURPOSES, BUT MAY BE ALTERED IN THE FIELD AS NEEDED.
12. UPON COMPLETION OF CONSTRUCTION FOR EACH PHASE OF STORM SEWER WORK, THE CONTRACTOR, THROUGH ITS ENGINEER, SHALL FURNISH THE CITY ENGINEER OR CITY REPRESENTATIVE A TABULATION OF STRUCTURE NUMBERS, AND THE ELEVATION OF THE TOP OF CASTING, AS BUILT. FURTHER, A TABULATION OF STATIONING AND TOP OF CURB ELEVATION, AS BUILT, AT THE ENDS OF ALL STREETS, THAT ARE TO BE EXTENDED IN THE FUTURE, SHALL BE SUBMITTED. THE CITY ENGINEER OR CITY REPRESENTATIVE WILL DETERMINE ADJUSTMENTS, IF ANY, THAT ARE NECESSARY AND ALL NECESSARY ADJUSTMENTS SHALL BE DONE PRIOR TO SUBMITTAL OF "AS BUILT" DRAWINGS.
13. THE ORIGINAL TRACINGS, REVISED "AS BUILT" , AND TWO SETS OF PRINTS SHALL BE GIVEN TO THE CITY PRIOR TO ANY TAP PERMITS BEING ISSUED, OR ACCEPTANCE BY THE CITY FOR THE ONE YEAR MAINTENANCE PERIOD. THE INFORMATION SHOWN ON THE "AS BUILT" PLANS SHALL BE FROM FIELD MEASUREMENTS. WATER SERVICES AND MAIN LINE VALVES SHALL BE LOCATED BY STREET STATIONING. TOP OF CASTING ELEVATIONS FOR ALL STORM SEWER STRUCTURES AND ANY VARIANCE IN THE HORIZONTAL LOCATION OF THE UTILITIES FROM THAT SHOWN IN THE APPROVED PLANS, SHALL BE SHOWN.

UTILITY TRENCHING

WHEN THE PAVEMENT IS REMOVED AND THE CONTRACTOR IS UNABLE TO COMPLETE THE REQUIRED REPLACEMENT IN TIME FOR IT TO BE OPENED TO TRAFFIC AS INDICATED ON THE PERMIT, THE EXCAVATION SHALL BE FILLED WITH A BITUMINOUS PATCH MATERIAL WITH A DURABLE SURFACE OR PROPERLY PLATED.

ITEM 659 - SEEDING AND MULCHING, AS PER PLAN
ITEM 659 - COMMERCIAL FERTILIZER, AS PER PLAN

SEEDING AND MULCHING AND COMMERCIAL FERTILIZER SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. SEED SHALL BE FREE OF WEEDS AND SEEDED AREAS SHALL BE MAINTAINED AS WEED FREE UNTIL GRASS IS ESTABLISHED. IF GRASS IS DETERMINED TO HAVE EXCESSIVE WEEDS, AS DETERMINED BY THE CITY ENGINEER OR CITY REPRESENTATIVE, THEN THE CONTRACTOR SHALL BE RESPONSIBLE FOR REESTABLISHMENT. CONTRACTOR IS ALSO RESPONSIBLE TO WATER AND MAINTAIN SEEDED AREAS UNTIL GRASS HAS BEEN ESTABLISHED. AREAS THAT DO NOT ESTABLISH SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPLACE. BARE SPOTS AND SPOTS THAT APPEAR TO BE DEAD SHALL BE REPLACED. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS. SEE NOTE 38 ON SHEET 4 FOR SEEDING AND FERTILIZER REQUIREMENTS.

EROSION CONTROL SUMMARY

659	659	659	659	659	659	659	659
SOIL ANALYSIS TEST	TOPSOIL	COMMERCIAL FERTILIZER, AS PER PLAN	LIME	SEEDING AND MULCHING, AS PER PLAN	REPAIR SEEDING AND MULCHING	WATER	INTER-SEEDING
EA	CY	TON	ACRES	SY	SY	MGAL	SY
2	255	0.32	0.47	2,293	115	13	115

EXCAVATION AND EMBANKMENT SUMMARY TABLE

SHEET NO.	203 EXCAVATION CY	203 EMBANKMENT CY
26	286	8
27	346	0
28	620	0
29	168	4
30	345	4
31	422	0
32	474	0
33	367	2
34	59	14
35	59	1
36	122	7
37	345	17
38	328	5
39	0	0
TOTALS CARRIED TO GENERAL SUMMARY	3,941	62

CALCULATED ESD | CHECKED NGF

GENERAL NOTES

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

EXCAVATION AND REPLACEMENT OF UNSUITABLE/UNSTABLE SUBGRADE

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.
2. EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. THE EXCAVATION LIMITS ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSUITABLE SUBGRADE. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO 204.05.
   IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.
3. COMPACT THE SUBGRADE ACCORDING TO 204.03.
4. APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSTABLE SUBGRADE. THE CITY ENGINEER OR CITY REPRESENTATIVE WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS. PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO 204.06.
5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.
6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO 204.06 TO VERIFY STABILITY.
   ITEM 204 - PROOF ROLLING 2 HOURS
7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

FRANKLIN STREET DESIGN CRITERIA

DESIGN SPEED = 30 MPH
LEGAL SPEED = 25 MPH
DESIGN FUNCTIONAL CLASSIFICATION = LOCAL CONNECTOR
NHS PROJECT = NO

COLUMBIA STREET DESIGN CRITERIA

DESIGN SPEED = 30 MPH
LEGAL SPEED = 25 MPH
DESIGN FUNCTIONAL CLASSIFICATION = LOCAL CONNECTOR
NHS PROJECT = NO

SOILS INVESTIGATION
GEOTECHNICAL REPORTS HAVE BEEN PREPARED FOR THIS PROJECT. COPIES OF THESE REPORTS CAN BE OBTAINED UPON REQUEST.

ITEM SPECIAL - BRICK PAVERS INCLUDING CONCRETE BASE

MATERIAL NOTES:

NEOPRENE-MODIFIED ASPHALT ADHESIVE - FURNISH NEOPRENE-MODIFIED ASPHALT ADHESIVE THAT CONTAINS 2% NEOPRENE GRADE WMI OXIDIZED ASPHALT WITH A 150° F SOFTENING POINT (77 PENETRATION), AND 10% LONG FIBERED INERT MATERIAL AS SUPPLIED BY (OR APPROVED EQUAL):

SEIDEL COMPANY, INC.
11 MARKET SQUARE
NEWBURYPORT, MASSACHUSETTS 01950
(617) 649-6740

HASTING PAVEMENT COMPANY INC.
410 LAKEVILLE ROAD
LAKE SUCCESS, NEW YORK 11042
(516) 379-3500

BITUMINOUS SETTING BED - FURNISH ASPHALT CEMENT CONFORMING TO ASTM D3381, VISCOSITY GRADE AC-10 OR AC-20.

FURNISH FINE AGGREGATE OF NATURAL SAND AND/OR STONE SAND, COMPOSED OF HARD, TOUGH, DURABLE, UNCOATED PARTICLES, FREE FROM CLAY, SILT, ORGANIC MATERIAL OR OTHER DELETERIOUS SUBSTANCES. ENSURE THE SAND IS UNIFORMLY GRADED WITH ALL MATERIAL PASSING THE NO. 4 SIEVE AND MEETING THE REQUIREMENTS OF ASTM C136.

COMBINE THE DRIED FINE AGGREGATE WITH HOT ASPHALT CEMENT AND MIX HEAT TO APPROXIMATELY 300° F AT AN ASPHALT PLANT.

A. PROVIDE AN APPROXIMATE PROPORTION OF MATERIALS OF 7% ASPHALT CEMENT AND 93% FINE AGGREGATE.

B. PROVIDE EACH TON APPORTIONED BY WEIGHT TO 140 POUNDS OF ASPHALT CEMENT AND 1,860 POUNDS OF FINE AGGREGATE.

PAVERS - ALL BRICK PAVERS SHALL BE SOLID CONCRETE PAVING UNITS CONFORMING TO ASTM C936 (4"W x 8"L x 2 ¾"H). OTHER SIZES MAY BE USED WITH PRIOR C.O.C. APPROVAL.

CONCRETE BASE - ALL WORK FOR THE CONCRETE BASE SHALL CONFORM TO ITEM 608, EXCEPT THAT THE 608 REQUIREMENTS FOR EDGING OUTSIDE EDGES AND CONTROL JOINTS AT 5 FOOT INTERVALS SHALL BE WAIVED.

METHOD OF MEASUREMENT - PAVERS WILL BE MEASURED BY THE SQUARE FOOT FINISHED PAVERS COMPLETE IN PLACE.

BASIS OF PAYMENT - THE ACCEPTED QUANTITIES OF BRICK PAVERS WILL BE PAID FOR AT THE CONTRACT PRICES DESIGNATED FOR EACH OF THE PAVER TYPES SHOWN ON THE PLANS. EXCAVATION, BACKFILL, EXPANSION JOINT MATERIAL, ASPHALT ADHESIVE, BITUMINOUS SETTING BED, 4 INCH CONCRETE BASE, AND OTHER RELATED MISCELLANEOUS ITEMS WILL NOT BE PAID FOR SEPARATELY, BUT THE COST THEREOF SHALL BE INCLUDED IN THE COST OF THE BRICK PAVERS OF WHICH THEY ARE A PART.

ITEM 202 - RAILROAD TIMBERS REMOVED, AS PER PLAN

THIS ITEM SHALL BE USED TO REMOVE THE EXISTING RAILROAD TIMBERS SHOWN IN THE PLANS IN ACCORDANCE WITH CMS 202.

PAYMENT FOR ALL OF THE ABOVE WORK SHALL BE AT THE UNIT BID PER EACH FOR THE ABOVE ITEM, WHICH INCLUDES ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 604 - MANHOLE, ADJUSTED TO GRADE, AS PER PLAN

MANHOLES THAT ARE DESIGNATED AS ADJUSTED TO GRADE SHALL FOLLOW THE REQUIREMENTS AND SPECIFICATIONS OF CITY OF COLUMBUS ITEM 604 - MANHOLE ADJUSTED TO GRADE WITH THE FOLLOWING ADDITION.

SUPPLY NEW MANHOLE FRAME AND SOLID COVER CASTING PER COC STANDARD DRAWING AA-S112 AT THE FOLLOWING STRUCTURES:

MH-34 STA. 30+81.02, 25.49' RT.
MH-8 STA. 10+05.11, 8.79' LT.
MH-9 STA. 9+99.92, 31.01' RT.
MH-10 STA. 13+35.46, 26.16' RT.
MH-12 STA. 13+87.75, 20.39' LT.
MH-14 STA. 13+87.42, 20.63' RT.

THE FRAME AND CASING SHALL MEET THE REQUIREMENTS OF COC 604.02 AND AASHTO M306.

ITEM SPECIAL - MAILBOX, REMOVE AND RESET, AS PER PLAN

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF THE REMOVED MAILBOX SUPPORTS AND ANY MAILBOXES AND ASSOCIATED MOUNTING HARDWARE THAT ARE NOT RESET.

THE ABOVE REMOVAL AND ANY SALVAGING FOR RESET WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR ITEM SPECIAL - MAILBOX REMOVE AND RESET.

ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE ROADWAY SUBSUMMARY AND CARRIED TO THE GENERAL SUMMARY.

ITEM SPECIAL - 8" CIPP SANITARY LINING

CIPP SANITARY SEWER LINING SHALL BE INCLUDED WITH THIS PROJECT. THE CONTRACTOR SHALL COORDINATE SANITARY SEWERS AND LIMITS OF LINING WITH THE CITY OF HILLIARD. CIPP LINING SPECIFICATIONS ARE INCLUDED WITH BID PACKAGE. THE CONTRACTOR SHALL ASSUME 1442 FEET (FT) OF LINING WITH THIS IMPROVEMENT.

ITEM SPECIAL - SITE RESTORATION

ALL SITE RESTORATION NECESSARY AFTER THE CIPP LINING SHALL BE PAID FOR UNDER THIS ITEM. SITE RESTORATION SHALL INCLUDE ALL WORK, MATERIAL AND LABOR NECESSARY TO RESTORE ALL WORK AREA TO THE EXISTING CONDITIONS. WORK AREAS SHALL BE APPROVED BY THE CITY ENGINEER OR CITY REPRESENTATIVE BEFORE CIPP LINING IS TO BEGIN.

ITEM SPECIAL - DIVERSION PUMPING

ALL DIVERSION PUMPING ACTIVITIES ASSOCIATED WITH THE CIPP LINING SHALL BE PAID FOR UNDER THIS ITEM. DIVERSION PUMPING SHALL INCLUDE ALL PUMPS, WORK, MATERIAL AND LABOR NECESSARY TO PROVIDED DIVERSION PUMPING. THE CONTRACTOR SHALL SUBMIT A DIVERSION PUMPING PLAN TO THE CITY ENGINEER OR CITY REPRESENTATIVE BEFORE CIPP LINING IS TO BEGIN. DIVERSION PUMPING SPECIFICATIONS ARE INCLUDED WITH THE BID PACKAGE.

ITEM SPECIAL - 8" UV CIPP SANITARY LINING
(ALTERNATE BID 1)

UV CIPP SANITARY SEWER LINING SHALL BE INCLUDED WITH THIS PROJECT AS AN ALTERNATE BID IN LIEU OF TRADITIONAL CIPP SANITARY SEWER LINING THAT USES HEAT OR CHEMICAL CURING AGENT. THE CONTRACTOR SHALL COORDINATE SANITARY SEWERS AND LIMITS OF LINING WITH THE CITY OF HILLIARD. UV CIPP LINING ALTERNATE BID SPECIFICATIONS ARE INCLUDED WITH BID PACKAGE. THE CONTRACTOR SHALL ASSUME 1442 FEET (FT) OF LINING WITH THIS IMPROVEMENT. IF THE CITY ACCEPTS ALTERNATE 1, THEN THE ITEM SPECIAL - 8" CIPP SANITARY LINING WILL NOT BE PERFORMED.

ITEM 407 - TACK COAT, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ITEM 407, THE CONTRACTOR SHALL PROVIDE CERTIFIED NON-TRACKING ASPHALT EMULSION MATERIAL PER CITY SUPPLEMENT 1032. EMULSION WILL COMPLY WITH ALL SPECIFICATION REQUIREMENTS FOR AT LEAST 30 DAYS AFTER SAMPLE DATE.

ITEM SPECIAL - CURB WALL, TYPE A

CURB WALL SHALL BE CONSTRUCTED IN ACCORDANCE WITH ITEM 609 EXCEPT THE REVEAL AND THICKNESS OF THE STRAIGHT 18" CURB SHALL BE INCREASED AS SHOWN ON SHEET 3.

CONSTRUCTION PHASING

THE CONTRACTOR SHALL NOT REMOVE THE EXISTING PAVEMENT NOR CONSTRUCT THE PROPOSED PAVEMENT BETWEEN 11/22/19 AND 4/1/20. ALL WORK ASSOCIATED WITH PAVEMENT CONSTRUCTION MUST BE COMPLETED BEFORE THIS WINTER SHUTDOWN PERIOD OR NOT BEGIN UNTIL THE FOLLOWING SPRING. THE CONTRACTOR'S SCHEDULE SHALL INCLUDE DETAILS RELATIVE TO WHICH PHASES OUTLINED BELOW WILL BE COMPLETED DURING CALENDAR YEAR 2019. THE CONTRACTOR SHALL SUBMIT TO THE CITY ENGINEER OR CITY REPRESENTATIVE A PLAN DETAILING HOW DRAINAGE AND TRAFFIC WILL BE MAINTAINED DURING THE WINTER PERIOD IF THE NEW PAVEMENT IS NOT COMPLETED BY 11/22/19. ITEM 410 TRAFFIC COMPACTED SURFACE (TYPE A OR B) AND ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC (TYPE B) HAVE BEEN ESTABLISHED TO MAINTAIN THE ROADWAYS OVER THE WINTER MONTHS IN A CONDITION SIMILAR TO WHAT EXISTED PRIOR TO CONSTRUCTION. IN THE EVENT THAT THE CONTRACTOR DOES NOT REMOVE THE EXISTING PAVEMENT AND CONSTRUCT THE PROPOSED PAVEMENT UNTIL CALENDAR YEAR 2020, THE FINAL COMPLETION DATE WILL BE EXTENDED (EXCUSABLE, NON-COMPENSABLE) TO ALLOW FOR COMPLETION OF THE LANDSCAPE PLANTINGS AS DETAILED ON PLAN PAGE 73 WITHIN PLANTING TIMEFRAME REQUIRED BY THE SPECIFICATIONS (9/15-11/30/2020). IN THIS CASE, FAILURE TO COMPLETE ALL OTHER CONTRACT WORK (WITH THE EXCEPTION OF LANDSCAPING) BY THE ESTABLISHED COMPLETION DATE WILL RESULT IN ASSESSMENT OF LIQUIDATED DAMAGES.

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

ITEM 410 - TRAFFIC COMPACTED SURFACE, TYPE A OR B 600 CY
ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B 1470 SY

PRIOR TO BEGINNING CONSTRUCTION, ALL MOT AND EROSION CONTROL MEASURES SHALL BE IN PLACE. WHILE UNDER ROAD CLOSURE, EXCEPT TO LOCAL TRAFFIC, THE FOLLOWING UTILITIES AND ITEMS ARE ANTICIPATED TO BE CONSTRUCTED FOLLOWING THIS ORDER:

1. LINE THE EXISTING SANITARY SEWER ON FRANKLIN STREET AND COLUMBIA STREET THAT WILL REMAIN WITH UV LINER. CONTRACTOR TO COORDINATE WORK WITH CITY.
2. ABANDON OR REMOVE EXISTING STORM SEWER TO FACILITATE WATER LINE INSTALLATION. CONTRACTOR TO COORDINATE REMOVALS TO MAINTAIN ACCESS AND DRAINAGE.
3. INSTALL PROPOSED WATER LINE ON FRANKLIN STREET AND COLUMBIA STREET AS SHOWN.
4. INSTALL FIRE HYDRANTS AND WATER SERVICES ON FRANKLIN STREET AND COLUMBIA STREET AS SHOWN.
5. ABANDON OR REMOVE EXISTING WATER LINE, SERVICES, AND FIRE HYDRANTS ON FRANKLIN STREET AND COLUMBIA STREET AS SHOWN.
6. ABANDON OR REMOVE REMAINING STORM SEWER ON FRANKLIN STREET AND COLUMBIA STREET.
7. INSTALL PROPOSED STORM SEWER MAIN LINE ON FRANKLIN STREET FROM MAIN STREET TO COLUMBIA STREET AS SHOWN.
8. INSTALL PROPOSED STORM SEWER STRUCTURES AND INLETS ON COLUMBIA STREET AS SHOWN.
9. INSTALL STORM SEWER STRUCTURES AND INLETS ON FRANKLIN STREET AS SHOWN.
10. INSTALL PERMEABLE PAVER PARKING SECTIONS ON FRANKLIN STREET AND COLUMBIA STREET AS SHOWN.
11. INSTALL PROPOSED LIGHTING CONDUIT AND LIGHT POLES AS SHOWN.
12. INSTALL REMAINDER OF ROAD WORK.
13. INSTALL LANDSCAPING AND SEED & MULCH DISTURBED AREAS.

CALCULATED ESD | CHECKED NGF

GENERAL NOTES

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

6
75

P-928

GENERAL NOTES FOR MAINTENANCE OF TRAFFIC

IN ADDITION TO THE REQUIREMENTS OF ITEM 614 MAINTAINING TRAFFIC, THE FOLLOWING SHALL APPLY:

1. ACCESS TO ALL DRIVEWAYS, BUSINESSES, AND RESIDENCES MUST BE MAINTAINED AT ALL TIMES THROUGHOUT CONSTRUCTION FOR BOTH VEHICLES AND PEDESTRIANS. WHEN IT IS NECESSARY TO PLACE AGGREGATE OR UTILIZE STEEL PLATES IN ORDER TO MAINTAIN VEHICLE AND PEDESTRIAN TRAFFIC TO THE VARIOUS HOMES AND BUSINESSES, THE COST OF THE AGGREGATE OR STEEL PLATES IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED WITH ITEM 614 - MAINTENANCE OF TRAFFIC.
2. ALL TRAFFIC CONTROL DEVICES USED FOR MAINTENANCE OF TRAFFIC SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR CONSTRUCTION AND MAINTENANCE OPERATIONS" (OMUTCD) (CURRENT EDITION), COPIES OF WHICH ARE AVAILABLE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, BUREAU OF TRAFFIC, 1980 WEST BROAD STREET, COLUMBUS, OHIO, 43223.
3. TRAFFIC CONTROL FOR ANY WORK THAT RESTRICTS TRAFFIC SHALL BE ERECTED IN ADVANCE AND SHALL BE REVIEWED BY THE CITY ENGINEER OR CITY REPRESENTATIVE AT LEAST 10 DAYS PRIOR TO THE START OF WORK. THE OFFICE OF THE CITY ENGINEER OR CITY REPRESENTATIVE SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF THE ROAD CLOSURE AND IMPLEMENTATION OF THE MAINTENANCE OF TRAFFIC PLAN. ALL MAINTENANCE OF TRAFFIC SIGNS SHALL BE COVERED OR REMOVED FROM VIEW OF TRAFFIC WHEN THEY ARE NOT APPLICABLE, AS DETERMINED BY THE CITY ENGINEER OR CITY REPRESENTATIVE.
4. NO LANE CLOSURE ALONG MAIN ST. AND CENTER ST. SHALL BE IMPLEMENTED DURING THE HOURS OF 7:00 A.M. TO 9:00 A.M. OR 3:30 P.M. TO 6:00 P.M. ALL OTHER HOURS, THE CONTRACTOR SHALL MAINTAIN TRAFFIC ACCORDING TO APPLICABLE GUIDELINES ESTABLISHED IN THE CITY OF COLUMBUS STANDARD CONSTRUCTION DRAWINGS. ANY LANE CLOSURES TAKING PLACE ON MAIN STREET AND CENTER STREET FOR UTILITY WORK AND ROADWAY CONNECTIONS SHALL OCCUR FOLLOWING CITY OF COLUMBUS STANDARD DRAWINGS 1510 AND 1511 AS APPLICABLE. FULL LANE CLOSURES ON THESE ROADS ARE NOT PERMITTED. UNIFORMED, OFF-DUTY CITY OF HILLIARD POLICE OFFICERS SHALL REPLACE THE FLAGMEN ON THESE PAGES, AND THE OFFICERS SHALL BE PRESENT WHENEVER ONE-LANE, TWO-WAY OPERATION IS IN EFFECT.
5. A FLASHING ARROW PANEL (48" X 96" - TYPE "C") SHALL BE USED FOR LANE CLOSURES IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
6. STEADY BURNING, TYPE "C" LIGHTS SHALL BE REQUIRED ON ALL BARRICADES, DRUMS, AND SIMILAR TRAFFIC CONTROL DEVICES IN USE AT NIGHT. CONES ARE NOT APPROVED FOR USE AT NIGHT.
7. THE ROADWAY SHALL NOT BE OPENED TO TRAFFIC UNTIL PERMANENT TRAFFIC CONTROLS ARE IN PLACE, OR UNTIL TEMPORARY TRAFFIC CONTROLS, APPROVED BY THE CITY ENGINEER OR CITY REPRESENTATIVE, ARE INSTALLED. THE CONTRACTOR ASSUMES ALL LIABILITY FOR THE PREMATURE REMOVAL OF TEMPORARY TRAFFIC CONTROLS.
8. THE CONTRACTOR SHALL MAINTAIN ALL PERMANENT TRAFFIC CONTROLS NOT IN CONFLICT WITH THE TEMPORARY TRAFFIC CONTROLS THROUGHOUT THIS PROJECT. PERMANENT TRAFFIC CONTROLS MAY BE TEMPORARILY RELOCATED, AS APPROVED BY THE CITY ENGINEER. THE CONTRACTOR SHALL ASSUME LIABILITY FOR MISSING, DAMAGED AND IMPROPERLY PLACED SIGNS.
9. IT IS THE POLICY OF THE HILLIARD POLICE DEPARTMENT (HPD - 876-7321) TO PROVIDE SPECIAL DUTY OFFICERS FOR ALL PROJECTS IN THE CITY OF HILLIARD, WHEN REQUIRED OR REQUESTED. HOWEVER, TO COMPLY WITH THIS POLICY AND ALLOW APPROPRIATE TIME FOR SCHEDULING, THEY REQUIRE A FORTY-EIGHT (48) HOUR ADVANCE NOTIFICATION. IF THEY ARE UNABLE TO FILL THE REQUEST, THEY WILL GIVE THE APPROPRIATE CONTRACTOR TWENTY-FOUR (24) HOURS NOTICE, SO THEY MAY MAKE ALTERNATE ARRANGEMENTS. IN THE EVENT OF CANCELLATION, THEY REQUIRE AT LEAST TWO (2) HOURS NOTIFICATION, OTHERWISE THE CONTRACTOR WILL BE OBLIGATED TO PAY THREE (3) HOURS SHOW-UP TIME AT THE SPECIAL DUTY RATE. A POLICE OFFICER CAN BE FURNISHED AT NO CHARGE FOR SHORT DURATIONS OF FIFTEEN (15) MINUTES OR LESS WITH A TWO (2) HOUR PRIOR NOTICE TO THE HPD AND THE ENGINEER.
10. IF, IN THE OPINION OF THE CITY ENGINEER OR CITY REPRESENTATIVE OR POLICE, THE CONTRACTOR IS NOT PROVIDING PROPER MAINTENANCE OF TRAFFIC, THE CITY ENGINEER OR CITY REPRESENTATIVE WILL INSTALL THE APPROPRIATE TRAFFIC CONTROL DEVICES, AND OFF DUTY POLICE OFFICERS WILL BE ASSIGNED TO THE PROJECT, ALL AT THE CONTRACTOR'S EXPENSE.
11. DETOUR TO BE PUT IN PLACE PRIOR TO BEGINNING ROADWORK. SEWER LINING AND STORM REPLACEMENT CAN TAKE PLACE AS LONG AS ONE LANE OF TRAFFIC CAN BE MAINTAINED PER THE OMUTCD. OVERNIGHT LANE CLOSURES ARE NOT PERMITTED AND LANE USAGE MUST BE RESTORED. ANY OPEN TRENCHES NEED TO BE BACK-FILLED OR PLATED DURING NON-WORK HOURS.
12. THE CONTRACTOR SHALL MAINTAIN ACCESS AND PARKING FOR THE PROPERTIES WITHIN THE PROJECT LIMITS. IT IS ANTICIPATED THAT PROPERTY OWNERS WILL BE ABLE TO UTILIZE THEIR DRIVEWAYS FOR PARKING AND ACCESS DURING CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COMMUNICATE SHORT TERM DISRUPTIONS OF ACCESS TO THE PROPERTY OWNER AND INFORM THEM AS TO WHERE THEY MAY PARK. THESE DISRUPTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE CITY ENGINEER OR THEIR REPRESENTATIVE. PRIOR TO DISCUSSING ALTERNATIVE PARKING LOCATIONS WITH THE PROPERTY OWNER, THE CONTRACTOR SHALL SUBMIT A PARKING PLAN TO CITY AND OR THEIR REPRESENTATIVE. ALTERNATIVE PARKING LOCATIONS ARE ANTICIPATED TO BE PROVIDED WITHIN 100 TO 150 FEET OF THE EFFECTED PROPERTY.
13. 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.
IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND CITY OF COLUMBUS SCDS, 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 CONTROL TASKS:

- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.
- DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

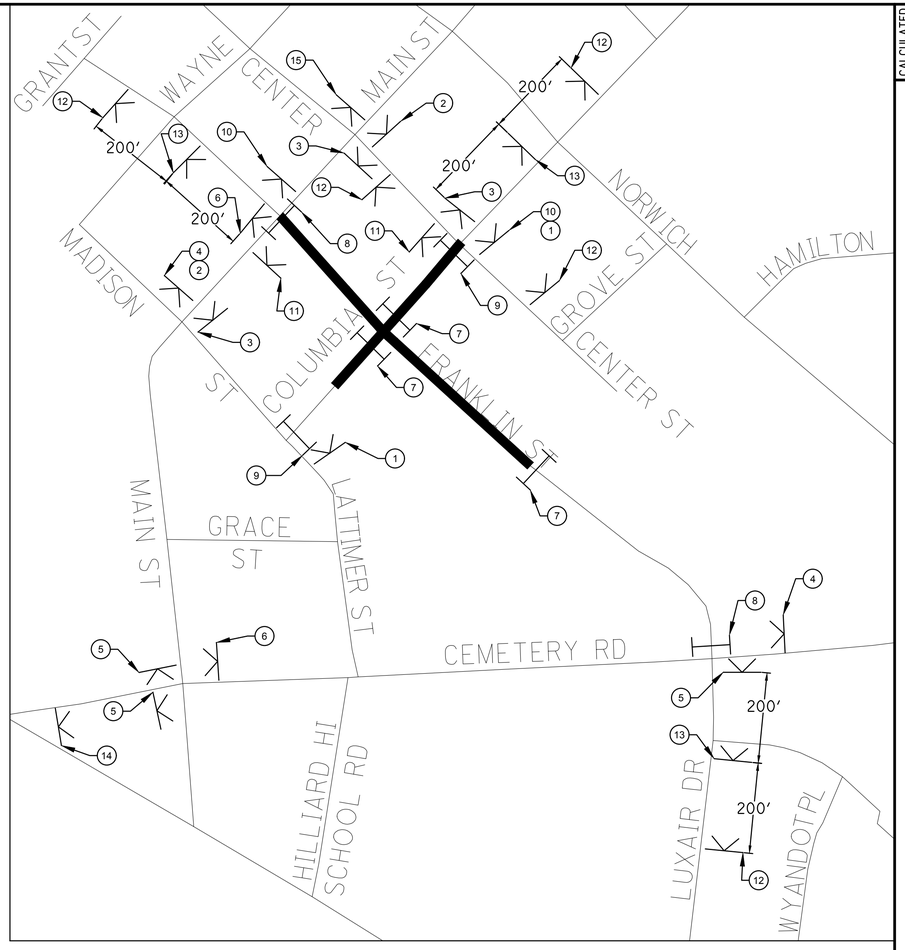
IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND CITY OF COLUMBUS SCDS, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

- 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.

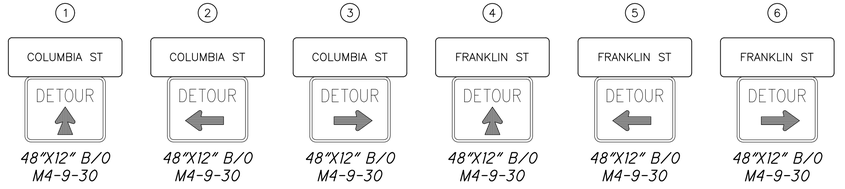
IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.
LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS 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.

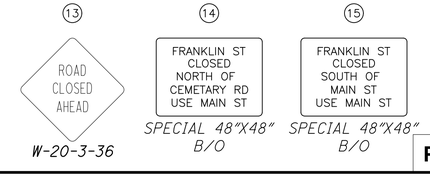
ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
20 HOURS

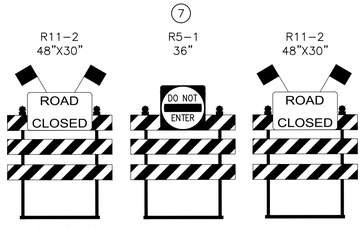
THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.
ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.



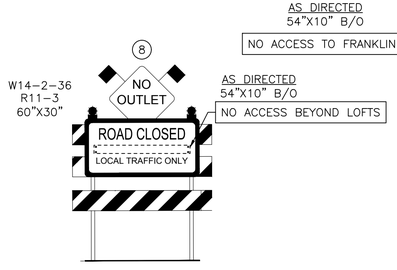
NOTE: THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND SAFE MOVEMENT OF PEDESTRIANS THROUGH, AROUND, OR DETOURED AWAY FROM THE CONSTRUCTION SITE. TRAFFIC CONTROL FOR PEDESTRIAN MOVEMENT SHALL BE AS PER FIGURES 6H-28 (TA-28) AND 6H-29 (TA-29) OF PART VI OF THE OMUTCD. ALL SIDEWALK DIVERSIONS AND TEMPORARY MID-BLOCK CROSSINGS SHALL BE PRE-APPROVED BY THE CITY ENGINEER OR CITY REPRESENTATIVE.







10' TYPE III BARRICADES (SOLID ACROSS STREET)



6' TYPE III (PORTABLE)

6' TYPE III (PORTABLE)

CALCULATED ESD | CHECKED NGF

MAINTENANCE OF TRAFFIC

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

7/75

P-928

Layout Tab Name: 7 MAINTENANCE OF TRAFFIC, Images: . Xrefs:
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G:\DE\Clients\OH_City_of_Hilliard\076347_FranklinSt\00138_FRANKLIN_ST\Design\Roadway\Sheets\76347_GN001.dwg Plotted By:Keating, Matthew Plotted:June 3, 2019, 3:33:42 PM

CONTRACTOR RESPONSIBILITY: Details have been provided on the plans in an effort to help the Contractor provide erosion and sedimentation control. The details shown on the plan shall be considered a minimum. Additional or alternate details may be found in the O.D.N.R. Manual "Rainwater and Land Development". The Contractor shall be solely responsible for providing necessary and adequate measures for proper control of erosion and sediment runoff from the site along with proper maintenance and inspection in compliance with the NPDES General Permit for Storm Water Discharges Associated with Construction Activity.

Prior to Construction Operations in a particular area, all sedimentation and erosion control features shall be in place. Field adjustments with respect to locations and dimensions may be made by the Engineer.

The Contractor shall place inlet and channel protection for erosion control immediately after construction of the inlets or channels which are not tributary to a sediment basin or dam.

It may become necessary to remove portions of the barrier during construction to facilitate the grading operations in certain areas. However, the barrier shall be in place in the evening or during any inclement weather.

The limits of seeding and mulching are as shown within the plans. Those areas disturbed outside the seeding limits shall be seeded and mulched at the Contractor's expense.

"Temporary seeding" No area for which grading has been completed or where a denuded area will remain idle for more than 21 days shall be left unseeded for longer than 7 days. If permanent seed is not applied at this time, temporary seeding shall be done at the following rates:

March 1 to August 15
Seed: Oats 2 lbs./1,000 Sq.Ft.
Fertilizer: (12:12:12) 25 lbs./1,000 Sq.Ft.
Mulch: (Straw or Hay) 2 tons/acre

August 15 to November 1
Seed: Annual Rye 2 lbs./1,000 Sq.Ft.
Fertilizer: (12:12:12) 25 lbs./1,000 Sq.Ft.
Mulch: (Straw or Hay) 2 tons/acre

November 1 to March 1
Mulch (ONLY): (Straw or Hay) 2 tons/acre

"Permanent seeding" shall be done between March 15 and September 15. If seeding is done between September 15 and March 15, it shall be classified as "Temporary Seeding." Permanent seed shall be 40% Kentucky Bluegrass, 40% Creeping Red Fescue, 20% Annual Ryegrass. Permanent seeding shall consist of fertilizing, watering and seeding rates indicated under Item 659. Seeding shall be applied within two (2) days after final grading or following seed bed preparation.

Rates of application of Item 659:
Seed: 4 lbs./1,000 Sq.Ft.
Fertilizer: (12:12:12) 20 lbs./1,000 Sq.Ft.
Mulch: Straw (Hay) 2 tons/acre (3 tons/acre)

MAINTENANCE: It is the Contractor's responsibility to maintain the sediment control features used on this project. The site shall be inspected periodically and within 24 hours of a significant rainfall. Records of these inspections shall be kept and made available to jurisdictional agencies if requested. Any sediment or debris which has reduced the efficiency of a structure shall be removed immediately. Should a structure or feature become damaged, the Contractor shall repair or replace at no additional cost to the Owner. Not all details shown on this sheet may be required for this project. Reference Sediment Control Plan.

The cost for temporary channels, sediment dams, sediment basins, and other appurtenant earthmoving operations shall be included in the price bid for erosion and sedimentation control quantities.

Not all details shown on this sheet may be required for this project.

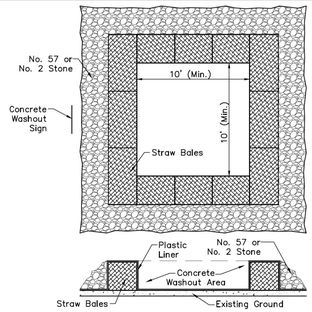
The Contractor shall be responsible to ensure that off-site tracking of sediments by vehicles and equipment is minimized. All such off-site sediment shall be cleaned up daily. Construction of stabilized construction entrances are a part of that responsibility.

Street Cleaning (on an as-needed basis) ir required through the duration of this construction project. This includes sweeping, power cleaning and (if necessary) manual removal of dirt or mud in the street gutters.

The Contractor shall be responsible to ensure that no solid or liquid waste is discharged into stormwater runoff. Sediment-laden water shall be filtered through the use of sediment filtering fences or sedimentation basins prior to discharge to surface waters. Concrete trucks will not be allowed to wash out or discharge surplus concrete into or alongside rivers, streams, and creeks or into natural or man-made channels or swales leading thereto. Concrete truck wash water and surplus concrete shall be confined to areas approved by the Engineer; after solidifying, these waste materials shall be removed from the site.

ALL EROSION & SEDIMENT CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATION AT THE DIRECTION OF THE CITY OF COLUMBUS AND/OR OHIO EPA.

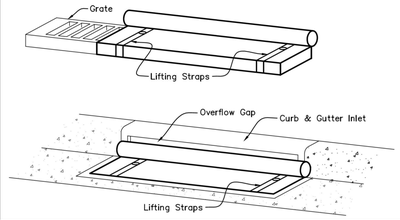
CONCRETE WASHOUT AREA



Concrete trucks shall utilize areas to washout trucks. Accumulated concrete shall be removed from the site and disposed of properly.

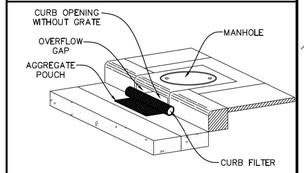
As an alternative, contractor shall use a roll off box with liner.

CURB INLET PROTECTION WITH GRATE



MAINTENANCE:
With a stiff bristle broom sweep silt and other debris off surface after each event.

CURB INLET PROTECTION WITHOUT GRATE

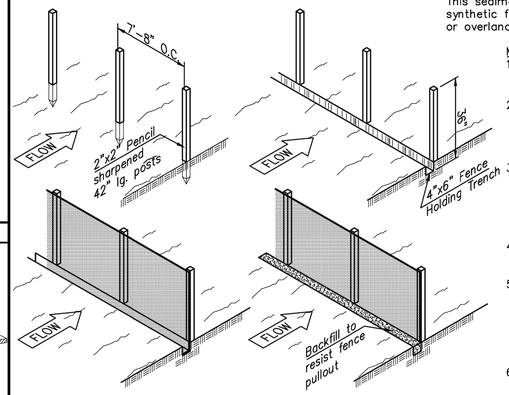


MAINTENANCE:
Remove all accumulated sediment and debris from the surface and vicinity of the unit after each storm event.

If using optional oil absorbents, remove and replace absorbents when they near saturation.

SILT FENCE:

This sediment barrier utilizes standard strength or extra strength synthetic filter fabrics. It is designed for situations in which only sheet or overland flows are expected.



MATERIAL PROPERTIES ARE:

1. The height of a silt fence shall not exceed 36 inches (higher fences may impound volumes of water sufficient to cause failure of the structure).
2. The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are necessary, filter cloth shall be spliced together only at a support post, with a minimum of a 6 inch overlap, and securely sealed.
3. Posts shall be spaced a maximum of 10 feet apart at the barrier location and driven securely into the ground (minimum of 12 inches). Wood posts will be a minimum of 32" long When extra strength fabric is used without the wire support fence, post spacing shall not exceed 6 feet.
4. A trench shall be excavated approximately 4 inches wide and 6 inches deep along the line of posts and upslope from the barrier.
5. When standard strength filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least 1-inch long, tie wires or hog rings. The wire shall extend into the trench a minimum of 2 inches and shall not extend more than 36 inches above the original ground surface.
6. The standard strength filter fabric shall be stapled or wired to the fence, and 8 inches of the fabric shall be extended into the trench. The fabric shall not extend more than 36 inches above the original ground surface. Filter fabric shall not be stapled to existing trees.
7. When extra strength filter fabric and closer post spacing are used, the wire mesh support fence may be eliminated. In such a case, the filter fabric is stapled or wired directly to the posts with all other provisions of Item No. 6 applying.
8. The trench shall be backfilled and soil compacted over the filter fabric. Silt fences shall be removed when they have served their useful purpose, but not before the upslope area has been permanently stabilized.
9. Silt fences and filter barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.
10. To prevent water ponded by the silt fence from flowing around the ends, each end shall be constructed upslope so that the ends are at a higher elevation.

FABRIC PROPERTIES	VALUES	TEST METHOD
Grab Tensile Strength	90 lb. Minimum	ASTM 1682
Mullen Burst Strength	190 psi Minimum	ASTM 3786
Slurry Flow Rate	0.3 gal./min./f^2 Max	
Equivalent Opening Size	40-80	U.S. Std. Sieve CW-02215
Ultraviolet Radiation Stability	90% Minimum	ASTM-G-26

Note: The use of straw wattles has proven to be a versatile and effective ESC BMP, especially in residential settings. Straw wattles may be substituted for silt fence in linear installations. The use of compost filter socks and compost blankets are gaining wider acceptance nationwide. they are now approved for use on all Columbus SWP3 plans and construction sites.

MAINTENANCE:
Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the fabric shall be replaced promptly.

Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately one-half the height of the barrier.

Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform with the existing grade, prepared and seeded.

NOTES

1. THE CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL MEASURES PRIOR TO CONSTRUCTION.

2. THE CONTRACTOR SHALL PROVIDE A CONCRETE WASHOUT AREA. COST OF THE CONCRETE WASHOUT IS INCIDENTAL TO THE CONCRETE WORK BEING PERFORMED.

3. DIRECT DISCHARGE OF SEDIMENT LADEN WATER TO THE CITY'S SEWER SYSTEM OR A RECEIVING STREAM IS A VIOLATION OF OHIO EPA AND CITY OF COLUMBUS REGULATIONS. THE CONTRACTOR WILL BE HELD LIABLE FOR THE VIOLATION AND SUBSEQUENT FINES.

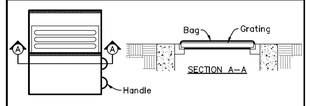
4. ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATIONS AT THE DISCRETION OF THE CITY OF HILLIARD AND/OR THE OHIO EPA.

5. THE USE OF PORTABLE CONCRETE WASHOUT UNITS IS APPROVED (AND ENCOURAGED) FOR ALL CONSTRUCTION AREAS IN THE CITY OF HILLIARD.

6. THE USE OF STRAW WATTLES HAS PROVEN TO BE A VERSATILE AND EFFECTIVE ESC BMP, ESPECIALLY IN RESIDENTIAL SETTINGS. STRAW WATTLES MAY BE SUBSTITUTED FOR SILT FENCE.

7. ADDITIONALLY: THE USE OF COMPOST FILTER SOCKS AND COMPOST BLANKETS ARE GAINING WIDER ACCEPTANCE NATIONWIDE. THEY ARE NOW APPROVED FOR USE ON ALL COLUMBUS SWPPP PLANS AND CONSTRUCTION SITES.

CATCH BASIN OR MANHOLE PROTECTION



MAINTENANCE:
With a stiff bristle broom or square point shovel remove silt & other debris off surface after each event.

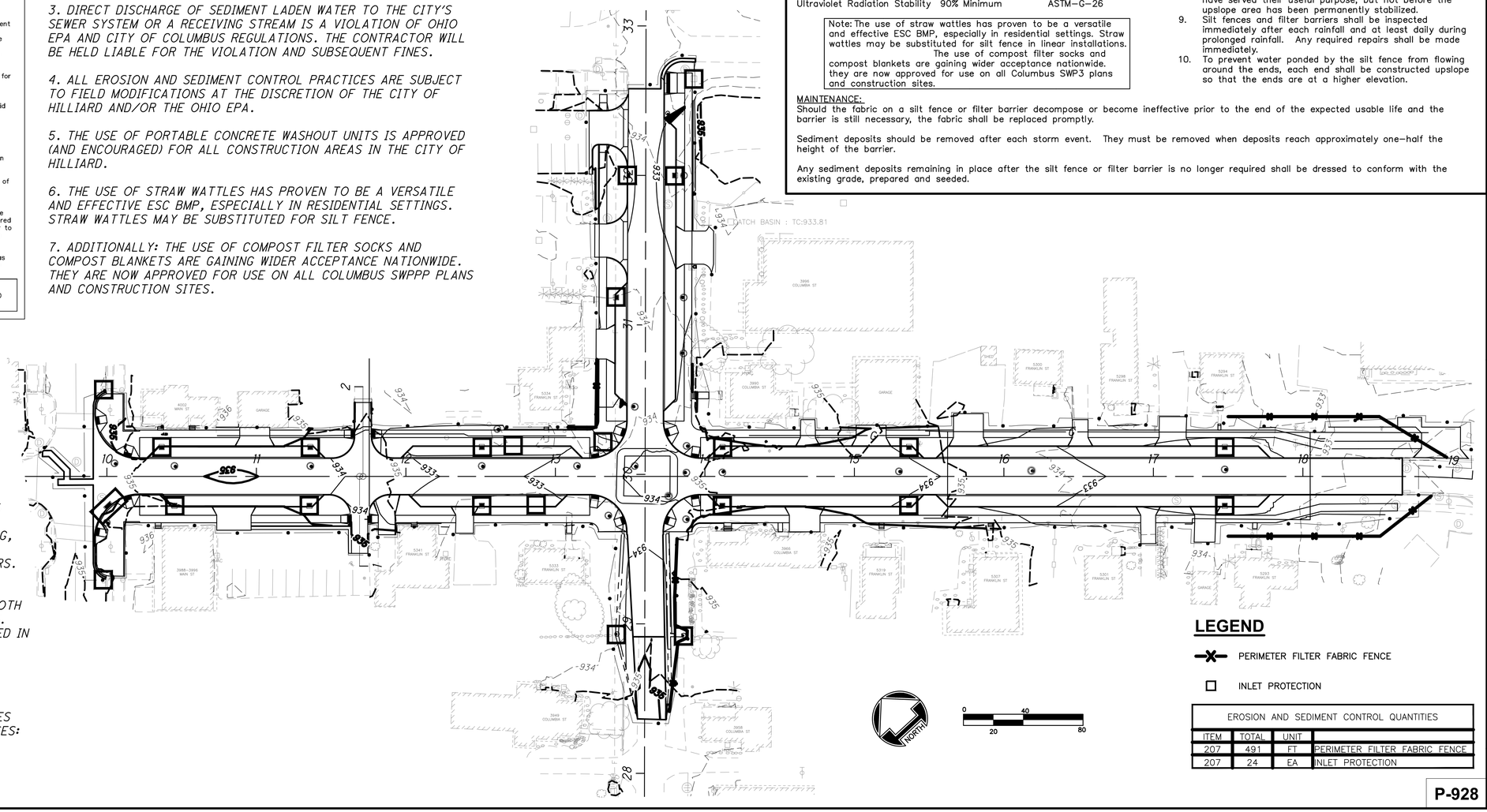
NOTES (CONTINUED)

8. STREET CLEANING (ON AN AS-NEEDED BASIS) IS REQUIRED THROUGH THE DURATION OF THIS CONSTRUCTION PROJECT. THIS INCLUDES SWEEPING, POWER CLEANING, AND (IF NECESSARY) MANUAL REMOVAL OF DIRT OR MUD IN THE STREET GUTTERS.

9. THROUGHOUT CONSTRUCTION IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO KEEP BOTH THE BASE, PAVERS AND SPACES CLEAN OF DEBRIS. PAYMENT FOR COVERING AND CLEANING IS COVERED IN THE BRICK PAVER ITEM. SEE SHEET 64 FOR MORE DETAILS CONCERNING THE PAVERS.

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

ITEM 616, WATER 9 M. GAL



LEGEND

PERIMETER FILTER FABRIC FENCE

INLET PROTECTION

EROSION AND SEDIMENT CONTROL QUANTITIES

ITEM	TOTAL	UNIT	
207	491	FT	PERIMETER FILTER FABRIC FENCE
207	24	EA	INLET PROTECTION

CALCULATED ESD CHECKED NGF

EROSION CONTROL PLAN

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

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Layout Tab Name: EROSION CONTROL PLAN; Images: . Xrefs: 076347-BP001.dwg; 76347_BE001 - Removal.dwg; 076347-BP002.dwg; Parcel 12 Exhibit.dwg; 2019-02-04_Columbia Gas Relocation.dwg; 076347-BU100-GPD Working.dwg
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SHEET NUMBER																ITEM	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
5	6	8	13	15	17	19	21	23	24	25										
																			ROADWAY	
																201	1	LUMP	CLEARING AND GRUBBING	
			5	3												201	8	EA	TREE REMOVED, 18" SIZE	
			1	4												201	5	EA	TREE REMOVED, 30" SIZE	
			1	2												201	3	EA	TREE REMOVED, 48" SIZE	
					30				3,591	1,665						202	5,286	SY	PAVEMENT REMOVED	
			2,341	290												202	2,631	SF	WALK REMOVED	
			197													202	197	SF	BRICK WALK REMOVED	
			186	36	157											202	379	FT	CURB REMOVED	
			8	33												202	41	FT	FENCE REMOVED	
				37												202	37	FT	RAILROAD TIMBERS REMOVED, AS PER PLAN	6
			1,109	872	156											202	2,137	FT	PIPE REMOVED	
			1													202	1	EA	CATCH BASIN OR INLET REMOVED	
			4													202	4	LUMP	STEP REMOVED	
			109													202	109	SF	BRICK PAVERS TO BE REMOVED AND RELOCATED	
					2											202	2	EA	REMOVAL MISC: LANDSCAPE TIMBERS	
			3		2											202	5	EA	MANHOLE INLET, ADJUSTED TO GRADE (STORM)	
			5	1												202	6	EA	MANHOLE REMOVED	
					1											202	1	EA	MANHOLE ABANDONED	
				1												202	1	EA	CATCH BASIN OR INLET ABANDONED	
3,941										156						203	4,097	CY	EXCAVATION	
62										1						203	63	CY	EMBANKMENT	
									1,169							204	1,169	CY	EXCAVATION OF SUBGRADE	
									1,169							204	1,169	CY	GRANULAR MATERIAL, TYPE B OR C	
									3,745							204	3,745	SY	GEOTEXTILE FABRIC, 712.09, TYPE D	
	2															204	2	HR	PROOF ROLLING	
						1,153	950	458	3,745	838						204	7,144	SY	SUBGRADE COMPACTION	
						5,767	3,552	1,862								608	11,181	SF	4" CONCRETE WALK	
						16										608	16	EA	CURB RAMP, TYPE D	
								1								608	1	EA	CURB RAMP, TYPE C MODIFIED	
								2								608	2	EA	CURB RAMP, TYPE C	
						160		27								608	187	SF	DETECTABLE WARNING, TYPE E	
						46	5	14								608	65	FT	CONCRETE STEPS	
						1,172	1,276	583								1525	3,031	SY	SUBGRADE STABILIZED GEOTEXTILE	
					1											SPEC	1	EA	MAILBOX, REMOVE AND RESET, AS PER PLAN	6
						106		53								SPEC	159	FT	CURB WALL, TYPE A	6
																			EROSION CONTROL	
		491														207	491	FT	PERIMETER FILTER FABRIC FENCE	
		24														207	24	EA	INLET PROTECTION	
2,293																659	2,293	SY	SEEDING AND MULCHING, AS PER PLAN	5
255																659	255	CY	TOPSOIL	
2																659	2	EA	SOIL ANALYSIS TEST	
0.32																659	0.32	TON	COMMERCIAL FERTILIZER, AS PER PLAN	5
13																659	13	MGAL	WATER	
115																659	115	SY	INTER SEEDING	
0.47																659	0.47	ACRE	LIME	
115																659	115	SY	REPAIR SEEDING AND MULCHING	

CALCULATED ESD CHECKED NGF

GENERAL SUMMARY

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

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P-928

Layout Tab Name: GENERAL SUMMARY, Images: . Xrefs:
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SHEET NUMBER																ITEM	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
13	15	17	19	21	23	24	25	59												
																			DRAINAGE	
					10											901	10	FT	8" SANITARY PIPE, WITH TYPE I BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL	
																901	10	FT	10" STM PIPE, 720.08, W/ TYPE I BEDDING, W/ ITEM 912 COMPACTED GRANULAR MATERIAL	
			206	86	84											901	376	FT	12" STORM PIPE, WITH TYPE I BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL	
			38													901	38	FT	15" STORM PIPE, WITH TYPE I BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL	
10	10	10	24	338												901	392	FT	18" STORM PIPE, WITH TYPE I BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL	
			478													901	478	FT	24" STORM PIPE, WITH TYPE I BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL	
			50													901	50	FT	36" STORM PIPE, WITH TYPE I BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL	
			188	247	72											603	507	FT	3" CONDUIT, TYPE E, 720.08 (PVC)	
			8	4	2											604	14	EA	CURB INLET, AS PER PLAN	67
				1												604	1	EA	CATCH BASIN (AA-S133A)	
			9	3	2											604	14	EA	MANHOLE, TYPE C (AA-S102) W/ AA-S112	
			1													604	1	EA	DOUBLE CURB INLET (AA-S125B) W/ AA-S128	
	1															604	1	EA	VALVE BOX, ADJUST TO GRADE	
		1														604	1	EA	CATCH BASIN, ADJUSTED TO GRADE	
			6													604	6	EA	MANHOLE, ADJUSTED TO GRADE, AS PER PLAN	6
			1													604	1	EA	INLET (AA-S130)	
					1											604	1	EA	INLET (AA-S121) W/ AA-S142	
			1													604	1	EA	MANHOLE RECONSTRUCTED TO GRADE	
			587	196	179											605	962	FT	4" PIPE UNDERDRAINS	
			588	612	293											605	1,493	FT	6" UNDERDRAIN (PERFORATED), 720.07	
																			PAVEMENT	
						124										254	124	SY	1.5" PAVEMENT PLANING, ASPHALT CONCRETE	
			7		3											259	10	CY	PERMANENT PAVEMENT, TYPE I	
						373										301	373	CY	4" ASPHALT CONCRETE BASE	
						561	23									304	584	CY	6" AGGREGATE BASE	
							18									304	18	CY	8" AGGREGATE BASE	
						426	5									407	431	GAL	TACK COAT, AS PER PLAN	6
						6										423	6	SY	CRACK SEALING, TYPE 1	
							3									441	3	CY	1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
							8									441	8	CY	2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
							4									441	4	CY	1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
						152										448	152	CY	1.5" ASPHALT CONCRETE SURFACE COURSE, (MEDIUM TRAFFIC), PG 64-22	
						233										448	233	CY	2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, (MEDIUM TRAFFIC), PG64-22	
						76										448	76	CY	VAR. ASPHALT CONCRETE, INTERMEDIATE COURSE (MEDIUM TRAFFIC), PG64-22	
							323									452	323	SY	6" NON-REINFORCED CONCRETE PAVEMENT	
							116									452	116	SY	7" NON-REINFORCED CONCRETE PAVEMENT	
							172									452	172	SY	8" NON-REINFORCED CONCRETE PAVEMENT	
			1,300	834	578		125									609	2,837	FT	CURB, STRAIGHT 18"	
			574	622	279											1525	1,475	LF	PERMEABLE PAVEMENT CONCRETE EDGE RESTRAINT	
			423	475	209											1525	1,107	SY	PERMEABLE PAVER ROADWAY, AS PER PLAN	65
			128	112	55		21									1525	317	SY	AGGREGATE BASE, #57 STONE (T=4")	
			773	683	315											1525	1,772	CY	AGGREGATE BASE, NO. 2 OR 4 STONE	
							90									SPEC	90	SF	BRICK PAVERS	18, 48
			117													SPEC	117	SF	BRICK PAVERS INCLUDING CONCRETE BASE	6
							1									SPEC	1	CY	1" SAND/CEMENT LEVELING COURSE	48
																			WATER	
								144								625	144	LF	CONDUIT 2", 725.051, SCHEDULE 80, AS PER PLAN	58
								60								801	60	LF	2" WATER PIPE AND FITTINGS	
								8								801	5	LF	3" WATER PIPE AND FITTINGS	
								60								801	60	LF	4" WATER PIPE AND FITTINGS	
								430								801	434	LF	6" WATER PIPE AND FITTINGS	
								990								801	990	LF	8" WATER PIPE AND FITTINGS	
								500*								801	500	LB	DUCTILE IRON FITTINGS, INCREASE OR DECREASE	
								8*								801	8	CY	CONCRETE BLOCKING CLASS C, INCREASE OR DECREASE	
								1								802	1	EA	2" VALVE AND APPURTENANCES	
								1								802	1	EA	3" VALVE AND APPURTENANCES	
								1								802	1	EA	4" VALVE AND APPURTENANCES	
								9								802	9	EA	6" VALVE AND APPURTENANCES	
								2								802	2	EA	8" VALVE AND APPURTENANCES	
								1								803	1	EA	12" X 8" TAPPING SLEEVE & VALVE & APPURTENANCES	
								16*								805	16	EA	CURB BOX	
								8								805	8	EA	3/4" WATER SERVICE TAP, TRANSFERRED, LONG	
								7								805	7	EA	3/4" WATER SERVICE TAP, TRANSFERRED, SHORT	
								1*								805	1	EA	3/4" WATER SERVICE TAP, TRANSFERRED	
								5*								805	5	EA	C.I. FERRULE VALVE BOX AND COVER	
								2*								807	2	EA	VALVE BOX ADJUSTED TO GRADE	
								5								809	5	EA	FIRE HYDRANT	
								2*								810	2	EA	6 INCH HYDRANT EXTENSIONS	
								4*								810	4	EA	12 INCH HYDRANT EXTENSIONS	
								1*								810	1	EA	18 INCH HYDRANT EXTENSIONS	
								1*								810	1	EA	24 INCH HYDRANT EXTENSIONS	
								36*								811	36	CY	INCREASE OR DECREASE IN EXCAVATION AND BACKFILL	
								1								SPEC	1	LUMP	SURVEY COORDINATES	60
																			* DENOTES CONTINGENCY QUANTITIES	P-928

CALCULATED ESD CHECKED NGF

GENERAL SUMMARY

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

10
75

Layout Tab Name: 9 GENERAL SUMMARY, Images: , Xrefs:
Last Saved By:keatingm, 6/3/2019 6:29:16 PM
G:\DE\Clients\OH_City_of_Hilliard\076347_FranklinSt\00138_FRANKLIN_ST\Design\Roadway\Sheets\76347_GG001.dwg Plotted By:Keating, Matthew Plotted:June 3, 2019, 6:32:00 PM

SHEET NUMBER																ITEM	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
6	7	8	13	15	17	19	23	69	72	75										
																			LIGHTING	
									15							625	15	EA	CONNECTION, FUSED PULL APART	
									15							625	15	EA	CONNECTION, UNFUSED PULL APART	
									15							625	15	EA	LIGHT POLE, DECORATIVE, AS PER PLAN	70
									2							625	2	EA	LIGHT POLE, DECORATIVE, AS PER PLAN (MATERIAL ONLY)	70
									16							625	16	EA	LIGHT POLE, FOUNDATION, AS PER PLAN	70
									1							625	1	EA	LIGHT POLE, MISC.: EXISTING LIGHT POLE AND LUMINAIRE TO BE REMOVED AND REERECTED	70
									5,661							625	5,661	FT	NO. 8 AWG 600 VOLT DISTRIBUTION CABLE	
									1,080							625	1,080	FT	NO. 10 AWG POLE AND BRACKET CABLE	
									1,711							625	1,711	FT	CONDUIT, 3", 725.051	
									353							625	353	FT	CONDUIT, MISC.: CONDUIT, 4", SCHEDULE 80 PVC	70
									15							625	15	EA	LUMINAIRE, DECORATIVE, AS PER PLAN	70
									2							625	2	EA	LUMINAIRE, DECORATIVE, AS PER PLAN (MATERIAL ONLY)	70
									1,498							625	1,498	FT	TRENCH, 30" DEEP, AS PER PLAN	70
									213							625	213	EA	TRENCH IN PAVED AREA, TYPE B, AS PER PLAN	70
									7							625	7	EA	PULL BOX, 725.08, 18"	
									1							625	1	EA	PULL BOX REMOVED	
			1		1											625	2	EA	PULL BOX, ADJUSTED TO GRADE	
									15							625	15	EA	GROUND ROD	
									1							625	1	EA	POWER SERVICE, AS PER PLAN	70
									1,711							625	1,711	FT	PLASTIC CAUTION TAPE	
																			TRAFFIC CONTROL	
								31								630	31	SF	SIGN, FLAT SHEET	
								2								630	2	EA	STREET NAME SIGN, DOUBLE SIDED, TYPE E, AS PER PLAN	69
								2								630	2	EA	STREET NAME SIGN, DOUBLE SIDED, TYPE F, AS PER PLAN	69
								2								630	2	EA	STREET NAME SIGN SUPPORT AND ANCHOR (TYPE E/F), AS PER PLAN	69
								6								630	6	EA	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
								128.5								630	128.5	FT	GROUND MOUNTED SIGN SUPPORT, AS PER PLAN	69
								0.15								644	0.15	MILE	CENTERLINE, 5" SOLID DOUBLE	
								36								644	36	FT	STOP LINE, 20" WHITE	
								156								644	156	FT	CROSSWALK LINE, 10" WHITE	
								108								644	108	FT	TRANSVERSE/DIAGONAL LINE	
								8								646	8	EA	SPEED HUMP MARKING	
																			LANDSCAPING	
										10						661	10	EA	DECIDUOUS TREE, 2.5", OSTRYA VIRGINIANA	
										3						661	3	EA	DECIDUOUS TREE, 2.5", ULMUS X 'PATRIOT'	
										27						661	27	EA	DECIDUOUS TREE, 1.5", AESCULUS PAVIA	
										8						661	8	EA	DECIDUOUS TREE, 1.5", CARPINUS CAROLINIANA	
										850						662	850	GAL	LANDSCAPE WATERING	
			2													666	2	EA	PRUNING EX TREES, 3 TO 8-INCH DIAMETER	
			1													666	1	EA	PRUNING EX TREES, 24 TO 36-INCH	
				1												666	1	EA	PRUNING EX TREES, 36 INCH AND OVER	
																			SANITARY	
			1	3	1											604	5	EA	MANHOLE, ADJUSTED TO GRADE (SANITARY)	
						1										604	1	EA	MANHOLE RECONSTRUCTED TO GRADE	
							1									604	1	EA	MANHOLE, TYPE C (AA-S102) W/ AA-S111	
1,442																SPEC	1,442	FT	8" CIPP SANITARY SEWER LINING	6
1																SPEC	1	LS	SITE RESTORATION	6
1																SPEC	1	LS	DIVERSION PUMPING	6
																			MAINTENANCE OF TRAFFIC	
600																410	600	CY	TRAFFIC COMPACTED SURFACE, TYPE A OR B	
	1															614	1	LUMP	MAINTENANCE OF TRAFFIC	
	1															614	1	LUMP	DETOUR SIGNING	
	20															614	20	HR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
1,470																615	1,470	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B	
		9														616	9	MGAL	WATER	
																			INCIDENTALS	
																623	1	LUMP	CONSTRUCTION LAYOUT STAKES	
																624	1	LUMP	MOBILIZATION	
																			BID ALTERNATE 1	
-1,442																SPEC	-1,442	FT	DEDUCT 8" CIPP SANITARY SEWER LINING	
1,442																SPEC	1,442	FT	8" UV CIPP SANITARY SEWER LINING	

CALCULATED ESD CHECKED NGF

GENERAL SUMMARY

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

11
75

P-928

Layout Tab Name: 10 GENERAL SUMMARY, Images: , Xrefs:
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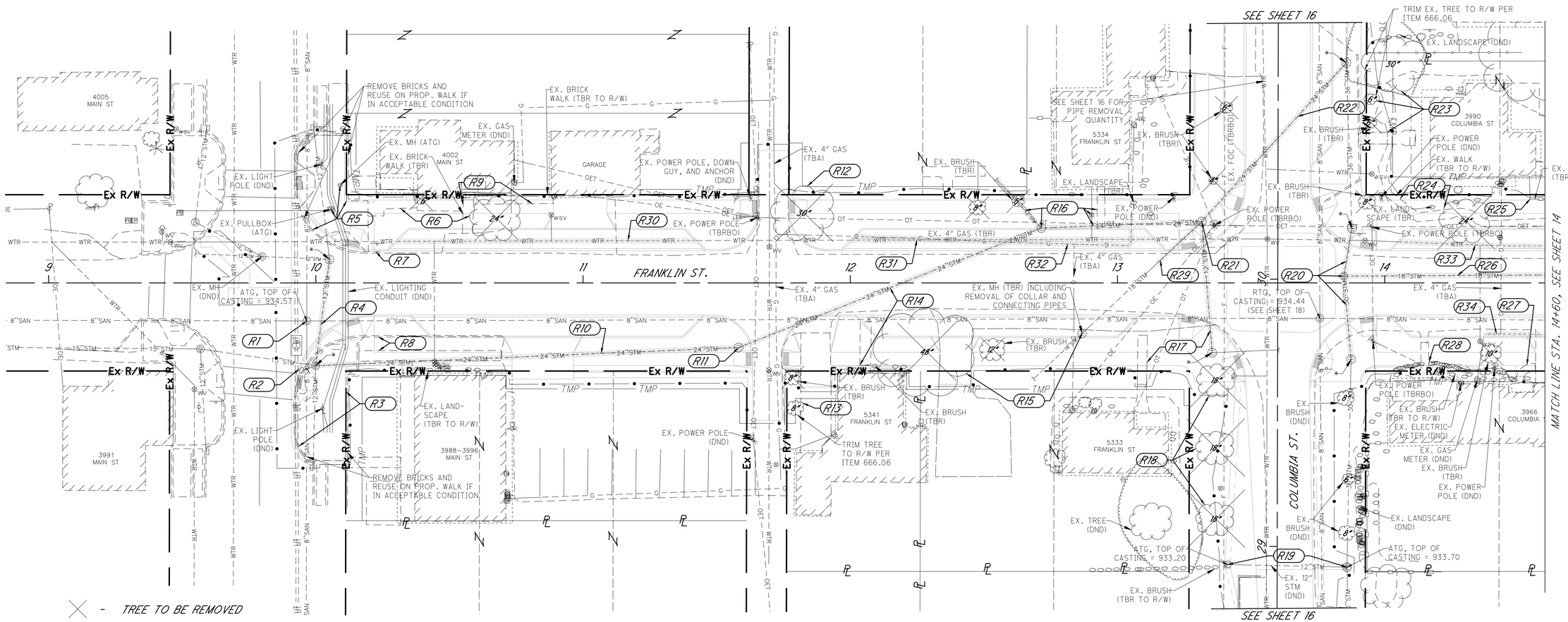
G:\DE\Clients\OH_City_of_Hilliard\076347_FranklinSt\00138_FRANKLIN_ST\Design\Roadway\Sheets\76347_GG001.dwg Plotted By:Keating, Matthew Plotted:June 3, 2019, 3:34:59 PM



NOTES: PER CITY OF COLUMBUS ITEM 201, TREES UNDER 12" ARE CONSIDERED BRUSH.

PAVEMENT REMOVAL COVERED ON SHEETS 24 AND 25.

SEE SHEET 69 FOR SIGN REMOVAL.

WATER MAINS ABANDONED PER 808. TAPS ABANDONED BY LINE TRANSFER.

PORTIONS OF THE EXISTING WATER MAIN ARE TO BE REMOVED TO FACILITATE CONSTRUCTION OF OTHER PLAN ITEMS. PAVEMENT FOR REMOVAL IS QUANTIFIED ON THESE SHEETS. SEALING ENDS OF THE WATER MAIN TO REMAIN COVERED UNDER 808.

* SEE SHEET 18 FOR MANHOLE, ADJUSTED TO GRADE, AS PER PLAN QUANTITIES.

CALCULATED ESD
CHECKED NGF

FRANKLIN ST. DEMOLITION PLAN
STA. 9+00 TO STA. 14+60

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

12
75

P-928

REF. NO.	STATION TO STATION		SIDE	201 TREE REMOVED, 18" SIZE	201 TREE REMOVED, 30" SIZE	201 TREE REMOVED, 48" SIZE	202 WALK REMOVED	202 BRICK WALK REMOVED	202 CURB REMOVED	202 FENCE REMOVED	202 PIPE REMOVED	202 CATCH BASIN OR INLET REMOVED	202 STEP REMOVED	202 BRICK PAVERS TO BE REMOVED AND RELOCATED	202 MANHOLE REMOVED	604 MANHOLE, ADJUSTED TO GRADE (SANITARY)	604 MANHOLE INLET, ADJUSTED TO GRADE (STORM)		625 PULL BOX, ADJUSTED TO GRADE		666 PRUNING EX TREES, 3 TO 8-INCH DIAMETER	666 PRUNING EX TREES, 24 TO 36-INCH		901 18" STORM PIPE, WITH TYPE I BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL								
				EA	EA	EA	SF	SF	FT	FT	FT	EA	LS	SF	EA	EA	EA		EA		EA	EA		FT								
R1	9+97		RT													1															
R2	9+95		RT									1																			
R3	9+92	10+16	RT				800							54																	
R4	10+00	10+05	RT								41																				
R5	9+93	10+23	LT				818							55			1		1												
R6	10+20	10+59	LT	1				83																							
R7	9+93	10+24	LT						69																						
R8	9+92	10+70	RT				227		117																						
R9	10+55	10+89	LT					114					1																		
R10	10+00	11+58	RT								159																				
R11	11+58		RT												1																
R12	11+83		LT		1																										
R13	11+79		RT																		1										
R14	11+58	12+72	RT				80				122		1																		
R15	12+30	12+87	RT			1									1										10						
R16	12+48	13+32	LT				35				86				1																
R17	13+08	13+35	RT				65				50																				
R18	13+37	13+44	RT	3																											
R19	13+41	13+86	RT														2														
R20	13+76	13+88	LT/RT								51				1																
R21	13+32		LT												1																
R22	13+15	14+01	LT								81																				
R23	13+91	14+01	LT				42						1								1	1									
R24	13+94	14+63	LT	1			187																								
R25	14+54	14+64	LT							8																					
R26	13+85	14+60	LT								76																				
R27	14+49	14+56	RT				26																								
R28	14+36	14+39	RT				61						1																		
R29	13+15	13+32	LT								24																				
R30	10+30	11+43	LT								114																				
R31	12+00	13+15	LT								115																				
R32	12+00	13+05	LT								111																				
R33	14+05	14+60	LT								55																				
R34	14+37	14+60	RT								24																				
TOTALS CARRIED TO GENERAL SUMMARY				5	1	1	2,341	197	186	8	1,109	1	4	109	5	1	3		1		2	1		10							

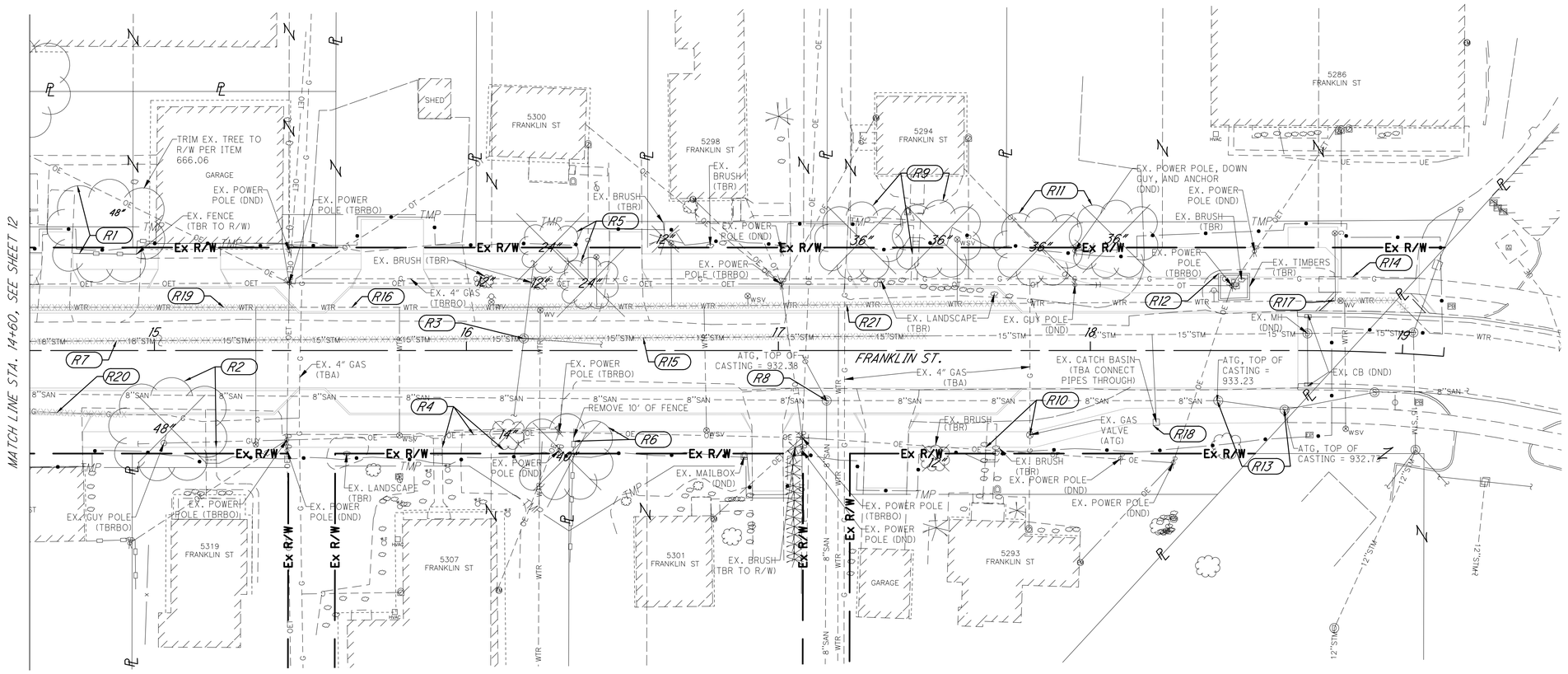
CALCULATED ESD
CHECKED NGF

FRANKLIN ST. DEMOLITION PLAN
STA. 9+00 TO STA. 14+60
REMOVAL SUBSUMMARY

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

13
75

P-928



X - TREE TO BE REMOVED

NOTES: PER CITY OF COLUMBUS ITEM 201, TREES UNDER 12" ARE CONSIDERED BRUSH.

PAVEMENT REMOVAL COVERED ON SHEETS 24 AND 25.

SEE SHEET 69 FOR SIGN REMOVAL.

WATER MAINS ABANDONED PER 808. TAPS ABANDONED BY LINE TRANSFER.

PORTIONS OF THE EXISTING WATER MAIN ARE TO BE REMOVED TO FACILITATE CONSTRUCTION OF OTHER PLAN ITEMS. PAVEMENT FOR REMOVAL IS QUANTIFIED ON THESE SHEETS. SEALING ENDS OF THE WATER MAIN TO REMAIN COVERED UNDER 808.

NORTH

0 20 10 5 0 40 10 2.5

CALCULATED ESD
CHECKED NGF

FRANKLIN ST. DEMOLITION PLAN
STA. 14+60 TO STA. 19+40

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

P-928

14
75

REF. NO.	STATION TO STATION		SIDE	201 TREE REMOVED, 18" SIZE	201 TREE REMOVED, 30" SIZE	201 TREE REMOVED, 48" SIZE	202 WALK REMOVED	202 CURB REMOVED	202 FENCE REMOVED	202 RAILROAD TIMBERS REMOVED, AS PER PLAN	202 PIPE REMOVED	202 CATCH BASIN OR INLET ABANDONED	202 MANHOLE REMOVED	604 MANHOLE, ADJUSTED TO GRADE (SANITARY)	604 VALVE BOX, ADJUST TO GRADE	666 PRUNING EX TREES, 36 INCH AND OVER	901 18" STORM PIPE, WITH TYPE 1 BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL
				EA	EA	EA	SF	FT	FT	FT	FT	EA	EA	EA	EA	EA	FT
R1	14+74	14+94	LT						23							1	
R2	15+06	15+20	RT			1	53										
R3	16+18		LT										1				
R4	15+89	16+34	RT	1			15	36									
R5	16+27	16+42	LT	2													
R6	16+35		RT			1			10								
R7	14+60	16+18	LT								159						
R8	17+15		RT											1			
R9	17+27	17+52	LT		2		25										
R10	17+50	17+81	RT				36								1		
R11	17+84	18+08	LT		2												
R12	18+41	18+51	LT							37							
R13	18+41	18+62	RT											2			
R14	18+73	19+04	LT				161										
R15	16+18	17+48	LT								130						
R16	14+60	17+80	LT								260						
R17	18+70	18+97	LT								27						
R18	18+20		RT									1					10
R19	14+60	15+45	LT								87						
R20	14+60	14+92	RT								33						
R21	16+00	17+76	LT								176						
TOTALS CARRIED TO GENERAL SUMMARY				3	4	2	290	36	33	37	872	1	1	3	1	1	10

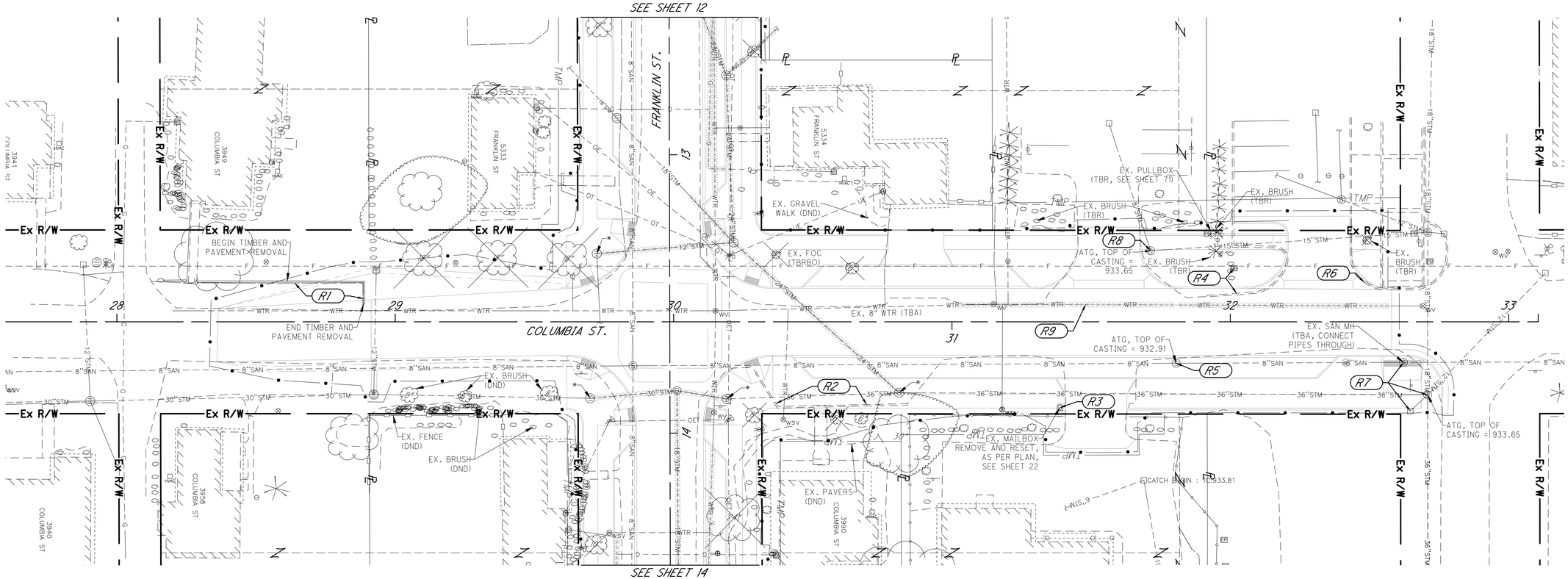
CALCULATED ESD
CHECKED NGF

FRANKLIN ST. DEMOLITION PLAN
STA. 14+60 TO STA. 19+40
REMOVAL SUBSUMMARY

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

15
75

P-928



X - TREE TO BE REMOVED

NOTES: PER CITY OF COLUMBUS ITEM 201, TREES UNDER 12" ARE CONSIDERED BRUSH.

PAVEMENT REMOVAL COVERED ON SHEETS 24 AND 25.

SEE SHEET 69 FOR SIGN REMOVAL.

WATER MAINS ABANDONED PER 808. TAPS ABANDONED BY LINE TRANSFER.

ITEMS COVERED ON SHEETS 12 AND 14 ARE NOT LISTED ON THIS SHEET OR SHEET 17.

PORTIONS OF THE EXISTING WATER MAIN ARE TO BE REMOVED TO FACILITATE CONSTRUCTION OF OTHER PLAN ITEMS. PAVEMENT FOR REMOVAL IS QUANTIFIED ON THESE SHEETS. SEALING ENDS OF THE WATER MAIN TO REMAIN COVERED UNDER 808.

* SEE SHEETS 18 AND 22 FOR MANHOLE, ADJUSTED TO GRADE, AS PER PLAN QUANTITIES.

NORTH

0 20 40
0 10 5 10
0 2.5

CALCULATED ESD
CHECKED NGF

COLUMBIA ST. DEMOLITION PLAN

STA. 28+00 TO STA. 33+00

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

16
75

P-928

REF. NO.	STATION TO STATION		SIDE	202 CURB REMOVED	202 REMOVAL MISC: LANDSCAPE TIMBERS	202 PAVEMENT REMOVED	202 MANHOLE ABANDONED	202 PIPE REMOVED	604 MANHOLE, ADJUSTED TO GRADE (SANITARY)	604 MANHOLE INLET, ADJUSTED TO GRADE (STORM)	604 CATCH BASIN, ADJUSTED TO GRADE	625 PULL BOX, ADJUSTED TO GRADE	901 18" STORM PIPE, WITH TYPE I BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL	SPEC MAILBOX, REMOVE AND RESET, AS PER PLAN
				FT	EA	SY	EA	FT	EA	EA	EA	EA	FT	EA
R1	28+60	28+89	LT		2	30								
R2	30+29	30+84	RT	57										
R3	31+36	31+83	RT											1
R4	31+92	32+21	LT	68								1		
R5	31+81		RT						1					
R6	32+10	32+54	LT	32										
R7	32+62	32+71	RT				1			1	1		10	
R8	31+71		LT							1				
R9	31+03	32+58	LT					156						
TOTALS CARRIED TO GENERAL SUMMARY				157	2	30	1	156	1	2	1	1	10	1

CALCULATED ESD
CHECKED NGF

COLUMBIA ST. DEMOLITION PLAN
STA. 28+00 TO STA. 33+00
REMOVAL SUBSUMMARY

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

17
75

P-928

Layout Tab Name: 17 ROADWAY SUBSUMMARY, Images: , Xrefs:
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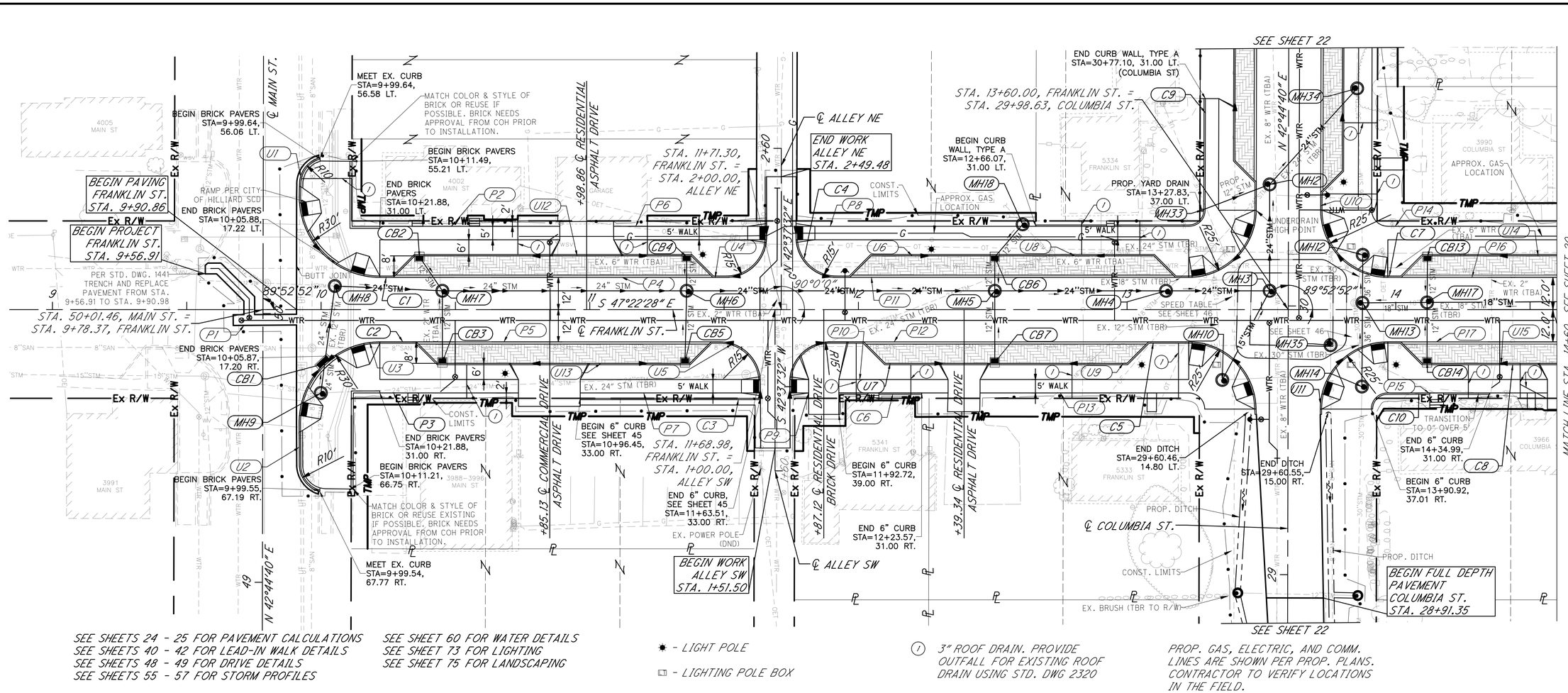

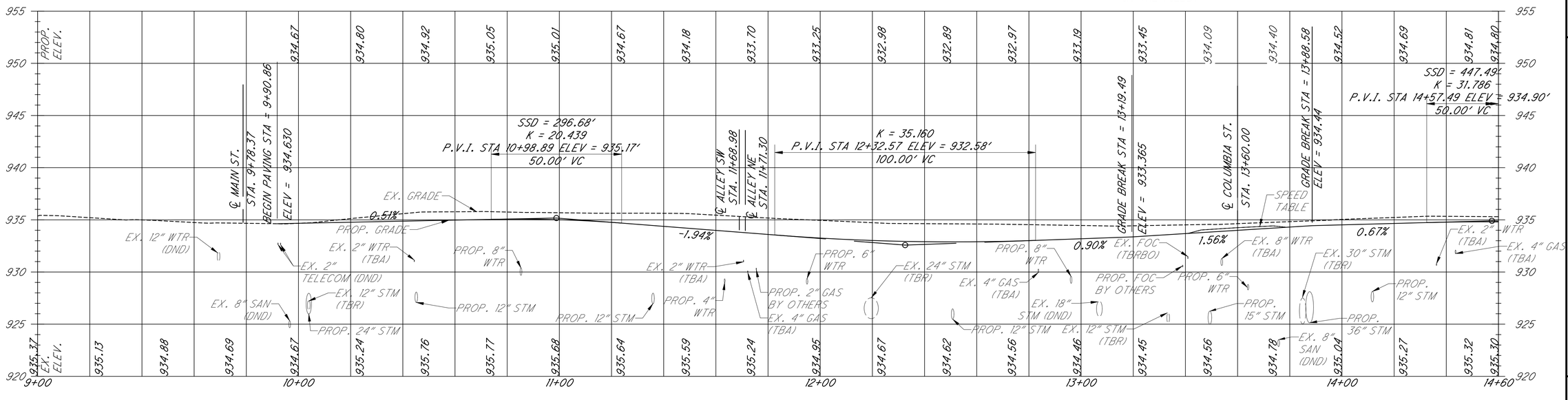

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NORTH

HORIZ. 0 20 40
VERTICAL SCALE 0 5 10 25

CALCULATED ESD
CHECKED NGF

FRANKLIN ST. PLAN & PROFILE
STA. 9+00 TO STA. 14+60

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

REF. NO.	STATION TO STATION		SIDE	204 SUBGRADE COMPACTION	259 PERMANENT PAVEMENT, TYPE I	603 3" CONDUIT, TYPE E, 720.08 (PVC)	608 4" CONCRETE WALK	608 CURB RAMP, TYPE D	608 DETECTABLE WARNING, TYPE E	608 CONCRETE STEPS		1525 SUBGRADE STABILIZED GEOTEXTILE	1525 PERMEABLE PAVEMENT CONCRETE EDGE RESTRAINT	1525 PERMEABLE PAVER ROADWAY, AS PER PLAN	1525 AGGREGATE BASE, #57 STONE (T=4")	1525 AGGREGATE BASE, NO. 2 OR 4 STONE	SPEC BRICK PAVERS INCLUDING CONCRETE BASE
				SY	CY	FT	SF	EA	SF	FT		SY	LF	SY	CY	CY	SF
P1	9+67	9+92	RT		7												
P2	9+92	10+89	LT	121		31	941	2	20	16					13		51
P3	9+92	10+73	RT	135		13	1078	2	20	8					15		66
P4	10+27	11+46	LT	88								241	119	88	10	125	
P5	10+35	11+45	RT	81								222	110	81	9	115	
P6	11+09	11+66	LT	34		13	250	1	10						4		
P7	10+96	11+63	RT	41			300	1	10						4		
P8	11+77	13+48	LT	129		26	1010	3	30	3					14		
P9	11+74	11+82	RT					1	10								
P10	11+93	12+33	RT	28		34	208			4					3		
P11	11+97	13+18	LT	90								253	122	90	10	136	
P12	12+02	13+08	RT	78								220	106	78	9	273	
P13	12+45	13+48	RT	87		34	721	2	20						10		
P14	13+72	14+60	LT	78			614	2	20						9		
P15	13+72	14+56	RT	77		37	645	2	20	15					9		
P16	14+02	14+60	LT	43								118	58	43	5	62	
P17	14+02	14+60	RT	43								118	59	43	5	62	
TOTALS CARRIED TO GENERAL SUMMARY				1153	7	188	5,767	16	160	46		1,172	574	423	128	773	117

REF. NO.	STATION	SIDE	604 CURB INLET, AS PER PLAN	604 MANHOLE, TYPE C (AA-S102) W/ AA-S112	604 MANHOLE, ADJUSTED TO GRADE, AS PER PLAN	604 DOUBLE CURB INLET (AA-S125B) W/ AA-S128	604 INLET (AA-S130)	604 MANHOLE RECONSTRUCTED TO GRADE	901 12" STORM PIPE, WITH TYPE 1 BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL	901 15" STORM PIPE, WITH TYPE 1 BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL	901 18" STORM PIPE, WITH TYPE 1 BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL	901 24" STORM PIPE, WITH TYPE 1 BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL	901 36" STORM PIPE, WITH TYPE 1 BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL
			EA	EA	EA	EA	EA	EA	FT	FT	FT	FT	FT
MH9	10+00	RT			1							11	
MH8	10+05	LT			1							40	
CB1	10+01	RT				1						29	
CB2	10+37	LT	1						16				
MH7	10+45	LT		1								91	
CB3	10+45	RT	1						27				
CB4	11+36	LT	1						13				
MH6	11+36	LT		1								115	
CB5	11+36	RT	1						27				
MH5	12+51	LT		1								64	
CB6	12+51	LT	1						13				
CB7	12+51	RT	1						27				
MH4	13+15	LT		1								39	
MH2	13+53	LT		1								49	
MH3	13+53	LT		1								40	
MH10	13+35	RT			1					38			
MH34	13+86	LT			1								
MH12	13+88	LT			1								
MH13	13+88	LT		1									18
MH14	13+88	RT			1								32
CB13	14+12	LT	1						17				
MH17	14+12	LT		1							24		
CB14	14+12	RT	1						23				
MH18	12+61	LT		1					16				
MH33	13+28	LT					1		27				
MH35	13+76	RT						1					
TOTALS CARRIED TO GENERAL SUMMARY			8	9	6	1	1	1	206	38	24	478	50

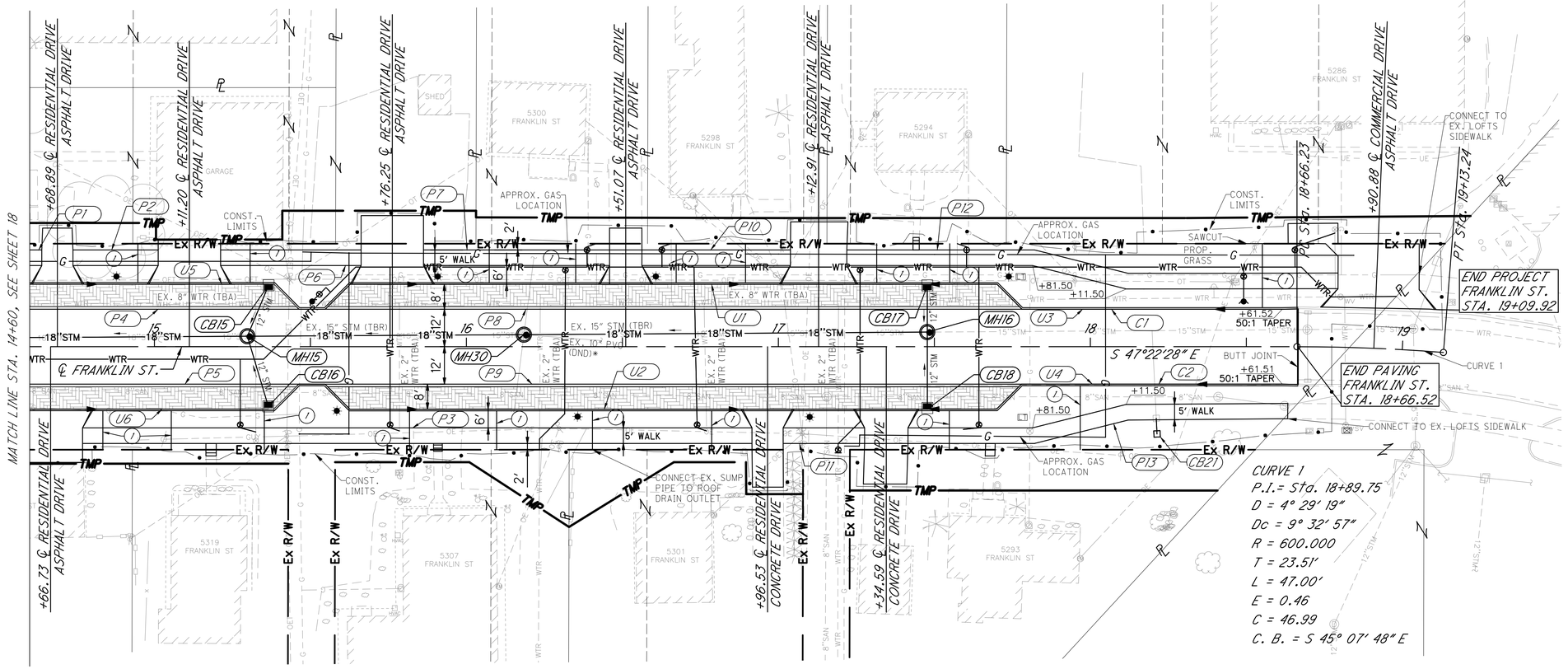
REF. NO.	STATION TO STATION		SIDE	605 4" PIPE UNDERDRAINS	605 6" UNDERDRAIN (PERFORATED), 720.07	FOR INFORMATION ONLY 4" X 45° BEND	FOR INFORMATION ONLY 4" PLUG
				FT	FT	EA	EA
U1	10+00	10+37	LT	71	14	2	1
U2	10+00	10+01	RT	54			1
U3	10+01	10+35	RT	37			1
U4	11+36	11+66	LT	52	14	2	1
U5	11+35	11+64	RT	52	14	2	1
U6	11+77	12+51	LT	52	58	2	1
U7	11+75	12+51	RT	61	53	2	1
U8	12+51	13+48	LT	55	71	2	1
U9	12+51	13+48	RT	55	61	2	1
U10	13+72	13+97	LT	51		2	1
U11	13+72	14+12	RT	47	14	2	1
U12	10+37	11+36	LT		100		2
U13	10+45	11+36	RT		91		2
U14	13+88	14+60	LT		49		1
U15	13+88	14+60	RT		49		1
TOTALS CARRIED TO GENERAL SUMMARY				587	588	18	13

REF. NO.	STATION		SIDE	609 CURB, STRAIGHT 18"	SPEC 10" CURB WALL, TYPE A
				FT	FT
C1	9+92	11+66	LT	247	
C2	9+92	11+63	RT	238	
C3	10+96	11+64	RT	88	
C4	11+77	13+48	LT	224	
C5	11+74	13+48	RT	210	
C6	11+93	12+24	RT	35	
C7	13+72	14+60	LT	106	
C8	13+72	14+60	RT	108	
C9	12+66 FRANKLIN	30+77 COLUMBIA	LT		106
C10	13+91	14+35	RT	44	
TOTALS CARRIED TO GENERAL SUMMARY				1,300	106

CALCULATED ESD | CHECKED NGF

FRANKLIN STREET PLAN & PROFILE
STA. 9+00 TO STA. 14+60
PROPOSED SUBSUMMARY

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)



SEE SHEETS 24 - 25 FOR PAVEMENT CALCULATIONS
SEE SHEETS 42 - 43 FOR LEAD-IN WALK DETAILS
SEE SHEETS 49 - 51 FOR DRIVE DETAILS
SEE SHEETS 55 - 57 FOR STORM PROFILES

SEE SHEET 61 FOR WATER DETAILS
SEE SHEET 74 FOR LIGHTING
SEE SHEET 75 FOR LANDSCAPING

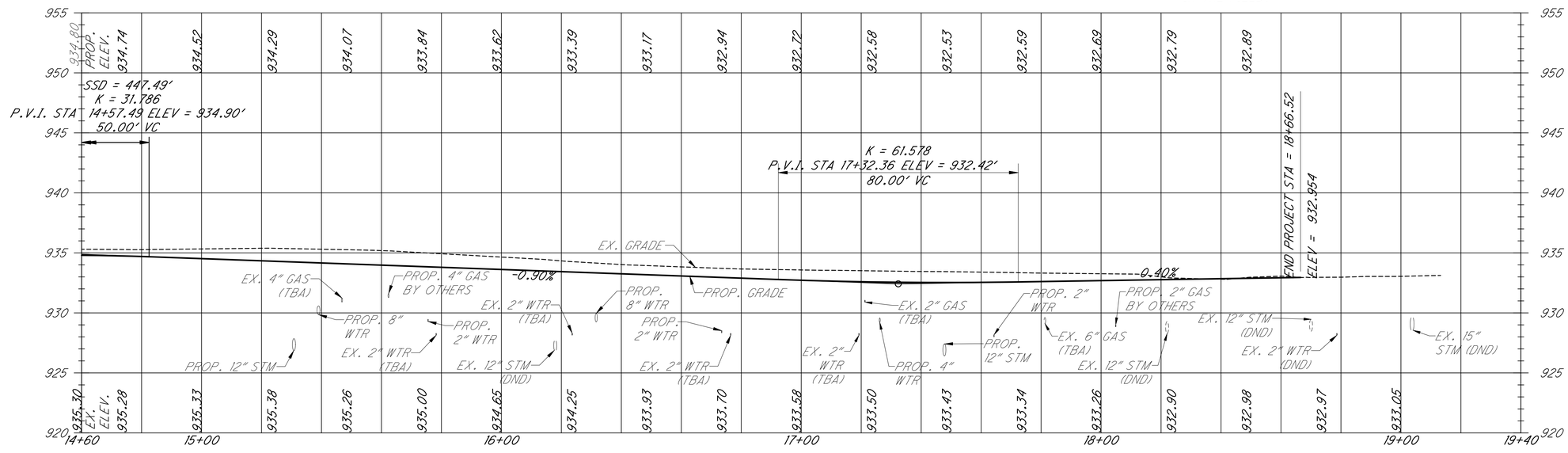
✸ - LIGHT POLE

▣ - LIGHTING POLE BOX

(1) 3" ROOF DRAIN. PROVIDE OUTFALL FOR EXISTING ROOF DRAIN USING STD. DWG 2320

PROP. GAS, ELECTRIC, AND COMM. LINES ARE SHOWN PER PROP. PLANS. CONTRACTOR TO VERIFY LOCATIONS IN THE FIELD.

* 10" PVC TO BE REPLACED IN THE FIELD AS NEEDED, QTY CARRIED FOR REPLACEMENT.



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NORTH

HORIZ. 0 20 40
VERTICAL SCALE 0 5 10 25

CALCULATED ESD
CHECKED NGF

FRANKLIN ST. PLAN & PROFILE
STA. 14+60 TO STA. 19+40

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

REF. NO.	STATION TO STATION		SIDE	204 SUBGRADE COMPACTION		603 3" CONDUIT, TYPE E, 720.08 (PVC)	608 4" CONCRETE WALK	608 CONCRETE STEPS		1525 SUBGRADE STABILIZED GEOTEXTILE	1525 PERMEABLE PAVEMENT CONCRETE EDGE RESTRAINT	1525 PERMEABLE PAVER ROADWAY, AS PER PLAN	1525 AGGREGATE BASE, #57 STONE (1=4")	1525 AGGREGATE BASE, NO. 2 OR 4 STONE		
				SY		FT	SF	FT		SY	LF	SY	CY	CY		
P1	14+60	14+64	LT	3			20						1			
P2	14+74	15+01	LT	19		13	137						3			
P3	14+77	16+92	RT	144		88	1085	3					16			
P4	14+60	15+46	LT	66						177	87	66	8	94		
P5	14+60	15+46	RT	66						177	87	66	8	94		
P6	15+21	15+66	LT	31		13	226						4			
P7	15+86	16+46	LT	40		26	299						5			
P8	15+55	17+78	LT	171						469	224	171	19	257		
P9	15+55	17+78	RT	172						453	224	172	20	239		
P10	16+56	17+04	LT	32		26	239						4			
P11	17+02	17+28	RT	18			131						2			
P12	17+22	18+17	LT	106		47	792	2					12			
P13	17+42	18+63	RT	82		34	623						10			
TOTALS CARRIED TO GENERAL SUMMARY				950		247	3,552	5		1,276	622	475	112	683		

REF. NO.	STATION TO STATION		SIDE	604 CURB INLET, AS PER PLAN	604 CATCH BASIN (AA-S133A)	604 MANHOLE, TYPE C (AA-S102) W/ AA-S112	901 12" STORM PIPE, WITH TYPE 1 BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL	901 15" STORM PIPE, WITH TYPE 1 BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL	901 18" STORM PIPE, WITH TYPE 1 BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL	901 24" STORM PIPE, WITH TYPE 1 BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL	901 10" STM PIPE, 720.08, W/ TYPE 1 BEDDING, W/ ITEM 912 COMPACTED GRANULAR MATERIAL
				EA	EA	EA	FT	FT	FT	FT	FT
CB15	15+36		LT	1			18				
MH15	15+30		LT			1			119		
CB16	15+36		RT	1			24				
MH30	16+18		LT			1			89		50
CB17	17+48		LT	1			15				
MH16	17+48		LT			1			130		
CB18	17+48		RT	1			24				
CB21	18+21		RT		1		5				
TOTALS CARRIED TO GENERAL SUMMARY				4	1	3	86		338		50

REF. NO.	STATION TO STATION		SIDE	605 4" PIPE UNDERDRAINS	605 6" UNDERDRAIN (PERFORATED), 720.07	FOR INFORMATION ONLY 4" X 45° BEND	FOR INFORMATION ONLY 4" PLUG
				FT	FT	EA	EA
U1	15+46	17+48	LT	9	230	2	1
U2	15+46	17+48	RT	9	230	2	1
U3	17+48	18+67	LT	89		2	1
U4	17+48	18+67	RT	89		2	1
U5	14+60	15+36	LT		76		
U6	14+60	15+36	RT		76		
TOTALS CARRIED TO GENERAL SUMMARY				196	612	8	4

REF. NO.	STATION TO STATION		SIDE	609 CURB, STRAIGHT 18"
				FT
C1	14+60	18+67	LT	417
C2	14+60	18+67	RT	417
TOTALS CARRIED TO GENERAL SUMMARY				834

CALCULATED ESD | CHECKED NGF

FRANKLIN STREET PLAN & PROFILE
STA. 14+60 TO STA. 19+40
PROPOSED SUBSUMMARY

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

21
75

P-928

Layout Tab Name: 15 ROADWAY SUBSUMMARY, Images: , Xrefs:
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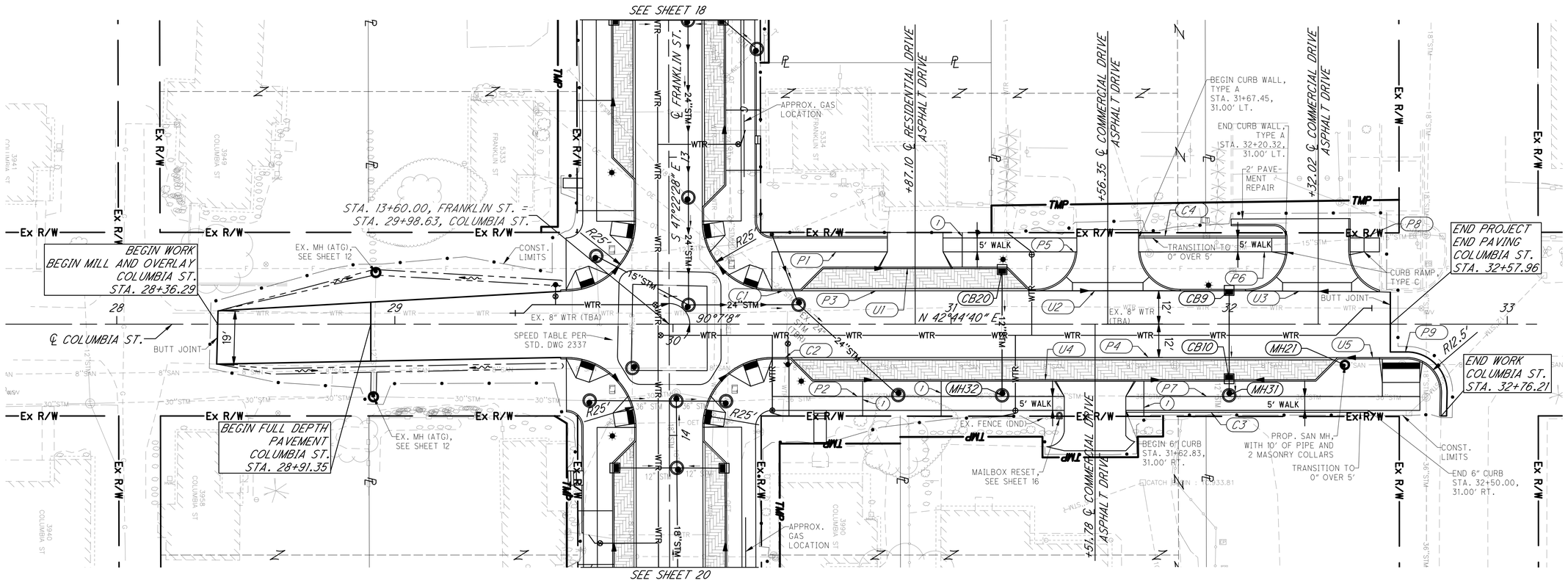


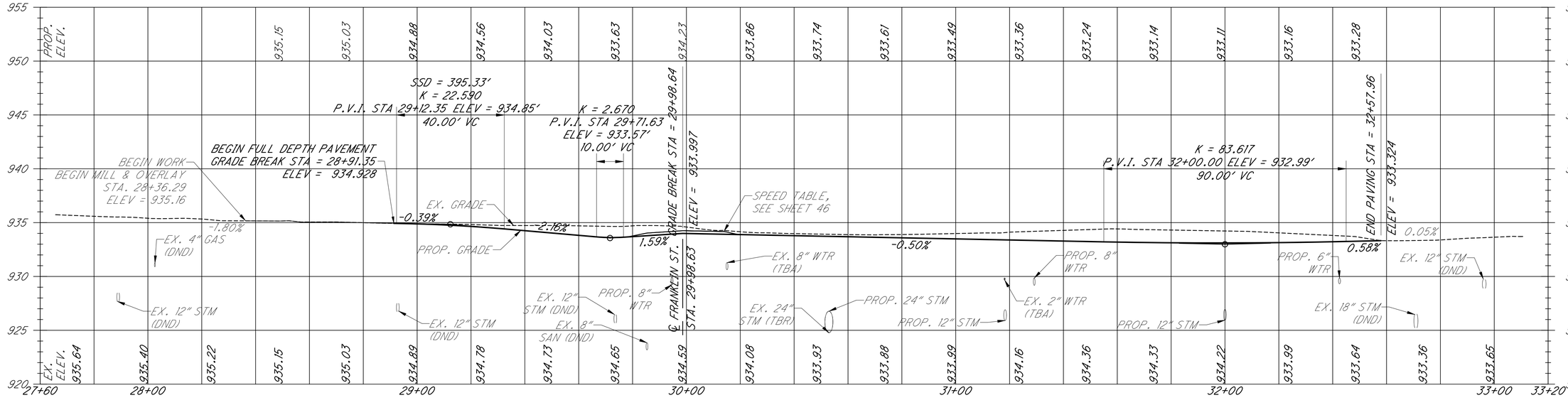
SEE SHEETS 24 - 25 FOR PAVEMENT CALCULATIONS
SEE SHEET 43 FOR LEAD-IN WALK DETAILS
SEE SHEET 53-54 FOR DRIVE DETAILS
SEE SHEETS 55-57 FOR STORM PROFILES

SEE SHEETS 62 FOR WATER DETAILS
SEE SHEET 73 FOR LIGHTING
SEE SHEETS 75 FOR LANDSCAPING

✸ - LIGHT POLE
▭ - LIGHTING POLE BOX

(1) 3" ROOF DRAIN. PROVIDE OUTFALL FOR EXISTING ROOF DRAIN USING STD. DWG 2320

PROP. GAS, ELECTRIC, AND COMM. LINES ARE SHOWN PER PROP. PLANS. CONTRACTOR TO VERIFY LOCATIONS IN THE FIELD.



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HORIZ. 0 20 40
VERTICAL SCALE 0 5 10 25
CALCULATED ESD
CHECKED NGF

COLUMBIA ST. PLAN & PROFILE
STA. 27+60 TO STA. 33+20

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

22
75

P-928

REF. NO.	STATION TO STATION		SIDE	204 SUBGRADE COMPACTION SY	259 PERMANENT PAVEMENT, TYPE I CY	603 3" CONDUIT, TYPE E, 720.08 (PVC) FT	608 4" CONCRETE WALK SF	608 CURB RAMP, TYPE C MODIFIED EA	608 CURB RAMP, TYPE C EA	608 DETECTABLE WARNING, TYPE E SF	608 CONCRETE STEPS FT		1525 SUBGRADE STABILIZED GEOTEXTILE SY	1525 PERMEABLE PAVEMENT CONCRETE EDGE RESTRAINT LF	1525 PERMEABLE PAVER ROADWAY, AS PER PLAN SY	1525 AGGREGATE BASE, #57 STONE (T=4") CY	1525 AGGREGATE BASE, NO. 2 OR 4 STONE CY
P1	30+36	30+77	LT	28			208									4	
P2	30+36	31+41	RT	74		46	553				14					9	
P3	30+46	31+28	LT	59									169	82	59	7	89
P4	30+42	32+39	RT	150									414	197	150	17	226
P5	30+97	31+45	LT	32		13	239									4	
P6	31+67	32+21	LT	32			237		1							4	
P7	31+63	32+69	RT	79		13	597	1								9	
P8	32+43	32+54	LT	4			28		1							1	
P9	32+58	32+78	RT		3					27							
TOTALS CARRIED TO GENERAL SUMMARY				458	3	72	1,862	1	2	27	14		583	279	209	55	315

REF. NO.	STATION TO STATION		SIDE	605 4" PIPE UNDERDRAINS FT	605 6" UNDERDRAIN (PERFORATED), 720.07 FT	FOR INFORMATION ONLY 4" X 45° BEND EA	FOR INFORMATION ONLY 4" PLUG EA
U1	30+46	31+11	LT		68	1	1
U2	31+11	32+00	LT	72	21	2	1
U3	32+00	32+54	LT	54			1
U4	30+42	32+00	RT		161	1	1
U5	32+00	32+76	RT	53	43	2	1
TOTALS CARRIED TO GENERAL SUMMARY				179	293	6	5

REF. NO.	STATION TO STATION		SIDE	604 CURB INLET, AS PER PLAN EA	604 INLET (AA-S121) W/ AA-S142 EA	604 MANHOLE, TYPE C (AA-S102) W/ AA-S111 EA	604 MANHOLE, TYPE C (AA-S102) W/ AA-S126 EA	901 8" SANITARY PIPE, WITH TYPE 1 BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL FT	901 12" STORM PIPE, WITH TYPE 1 BEDDING, WITH ITEM 912 COMPACTED GRANULAR MATERIAL FT
CB9	32+00		LT		1				32
CB10	32+00		RT	1					6
MH31	32+00		RT				1		
MH21	32+41		RT			1		10	
CB20	31+18		LT	1					46
MH32	31+18		RT				1		
TOTALS CARRIED TO GENERAL SUMMARY				2	1	1	2	10	84

REF. NO.	STATION TO STATION		SIDE	609 CURB, STRAIGHT 18" FT	SPEC 10" CURB WALL, TYPE A FT
C1	30+36	32+54	LT	226	
C2	30+36	32+76	RT	264	
C3	31+63	32+50	RT	88	
C4	31+67	32+20	LT		53
TOTALS CARRIED TO GENERAL SUMMARY				578	53

CALCULATED ESD
CHECKED NGF

COLUMBIA STREET PLAN & PROFILE
STA. 27+60 TO STA. 33+20
PROPOSED SUBSUMMARY

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

23
75

P-928

Layout Tab Name: 17 ROADWAY SUBSUMMARY, Images: , Xrefs:
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STATION FROM	STATION TO	SIDE	LENGTH "L"	AVERAGE WIDTH "W"	RADIUS "R"	CADD GENERATED AREA	202 PAVEMENT REMOVED	204 SUBGRADE COMPACTION	204 GEOTEXTILE FABRIC, 712.09, TYPE D	204 EXCAVATION OF SUBGRADE	204 GRANULAR MATERIAL, TYPE B OR C	254 1.5" PAVEMENT PLANING, ASPHALT CONCRETE	301 4" ASPHALT CONCRETE BASE	304 6" AGGREGATE BASE	407 TACK COAT, AS PER PLAN	423 CRACK SEALING, TYPE 1	448 1.5" ASPHALT CONCRETE SURFACE COURSE, (MEDIUM TRAFFIC), PG 64-22	448 2.5" ASPHALT CONCRETE (INTERMEDIATE COURSE, (MEDIUM TRAFFIC), PG64-22	448 VAR. ASPHALT CONCRETE, INTERMEDIATE COURSE (MEDIUM TRAFFIC), PG64-22				
FROM	TO		FT	FT	FT	SF	SY	SY	SY	CY	CY	SY	CY	CY	GAL	SY	CY	CY	CY			
FRANKLIN ST.																						
9+90.86	13+23.03	LT/RT	332.2	24.0	30.0	8,466.30	1,014.44	1,063.96	1,063.96	329.25	329.25		104.52	156.78	112.88		39.20	65.33				
13+23.03	13+97.00	LT/RT	74.0	24.0		1,775.28	209.11	197.43	197.43	65.76	65.76		21.92	32.88	23.67		8.22	13.70				
13+97.00	18+66.52	LT/RT	469.5	24.0		11,268.48	1,417.67	1,408.58	1,408.58	428.84	428.84		139.12	208.68	150.25		52.17	86.95				
COLUMBIA ST.																						
28+36.29	28+91.35	LT/RT	55.1	20.2		1,112.21						123.58			14.83		5.15					
28+91.35	29+86.63	LT/RT	95.3	22.5	25.0	2,450.57	232.78	286.11	286.11	102.83	102.83		31.16	48.76	32.67		11.35	18.91				
30+10.63	32+57.96	LT/RT	247.3	24.0	25.0	6,145.81	716.56	788.54	788.54	241.45	241.45		75.87	113.81	81.94		28.45	47.42				
SPEED TABLE																						
13+41.02	13+81.68	LT/RT				1,447.11									9.65	5.84	6.70		75.15			
TOTALS CARRIED TO GENERAL SUMMARY							3,591	3,745	3,745	1,169	1,169	124	373	561	426	6	152	233	76			

CALCULATED ESD
CHECKED NGF

PAVEMENT CALCULATIONS

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

P-928

24
75

SHEET NO.	REFERENCE NO.	STATION	SIDE	DRIVE TYPE	EXISTING DRIVE	APRON LENGTH "L1"	DRIVEWAY LENGTH "L2"	WIDTH AT WALK "W1"	WIDTH AT TIE IN "W2"	FLARE WIDTH "F"	R (DRIVE RADIUS)	202	203		204	304	304	407	441	441	441	452			609	1525	SPEC	SPEC
												PAVEMENT REMOVED	EMBANKMENT	EXCAVATION	SUBGRADE COMPACTION	6" AGGREGATE BASE	8" AGGREGATE BASE	TACK COAT, AS PER PLAN	1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	6" NON-REINFORCED CONCRETE PAVEMENT	7" NON-REINFORCED CONCRETE PAVEMENT	8" NON-REINFORCED CONCRETE PAVEMENT	CURB, STRAIGHT 18"	AGGREGATE BASE, #57 STONE (T=4")	BRICK PAVERS	1" SAND/CEMENT LEVELING COURSE
						FT	FT	FT	FT	FT	FT	SY	CY	CY	SY	CY	CY	GAL	CY	CY	CY	SY	SY	SY	FT	CY	SF	CY
		FRANKLIN ST																										
48	DR1	10+85.13	RT	COMM.	ASPHALT	10.5	5.0	23.0	23.0	3.0		166.2		2.21	41.75		2.84	0.77	0.45		0.63			28.97		3.22		
48	DR2	10+98.86	LT	RES.	ASPHALT	10.5	1.9	20.0	20.0	3.0		112.7	0.15	3.36	29.39	0.71				0.24		25.17						
12	AL1	11+68.98	RT	ALLEY		19.0	20.5	11.0	11.0		15.0	47.9		21.84	58.84								58.84					
12	AL2	11+71.30	LT	ALLEY		19.0	18.5	11.0	11.0		15.0	52.1		22.10	56.56								56.56					
48	DR3	11+87.12	RT	RES.	BRICK	18.5	8.0	11.2	11.2	3.0		25.0		9.27	37.48							27.52				1.11	89.60	0.28
49	DR4	12+39.34	RT	RES.	ASPHALT	10.5	7.0	12.0	12.0	3.0		105.9		4.98	25.17	1.56				0.52		15.83						
49	DR5	14+66.73	RT	RES.	ASPHALT	10.5	6.1	20.5	20.5	3.0		43.1		3.38	39.64	2.32				0.77		25.75						
49	DR6	14+68.89	LT	RES.	ASPHALT	10.5	7.0	10.0	9.4	3.0		31.3		4.02	20.81	1.22				0.41		13.50						
50	DR7	15+11.20	LT	RES.	ASPHALT	10.5	3.3	20.0	20.0	3.0		134.8		4.20	32.50	1.22				0.41		25.17						
50	DR8	15+76.25	LT	RES.	ASPHALT	10.5	11.0	20.0	20.0	3.0		137.2		11.25	49.61	4.07				1.36		25.17						
50	DR9	16+51.07	LT	RES.	ASPHALT	10.5	7.0	10.5	10.5	3.0		39.0		3.24	22.25	1.36				0.45		14.08						
51	DR10	16+96.53	RT	RES.	CONCRETE	10.5	14.0	10.0	9.9	3.0		39.3		5.83	28.90							28.90						
51	DR11	17+12.91	LT	RES.	ASPHALT	10.5	9.0	18.1	18.5	3.0		121.2		8.39	41.45	3.08				1.03		22.95						
51	DR12	17+34.59	RT	RES.	CONCRETE	10.5	13.0	13.9	13.9	3.0		53.2		8.48	38.13							38.13						
52	DR17	18+90.88	LT	RES.	ASPHALT	11.0	9.4	26.0	26.0	5.0		172.3		1.12	75.29	6.70				2.23		35.11						
		COLUMBIA ST																										
53	DR13	30+87.10	LT	RES.	ASPHALT	10.5	1.9	20.0	19.5	3.0		106.3		2.00	29.28	0.69				0.23		25.17						
53	DR14	31+51.78	RT	COMM.	ASPHALT	10.5	14.5	22.1	22.1	3.0		88.7		18.26	65.81		8.49	2.30	1.33		1.86			27.62		3.07		
54	DR15	31+56.35	LT	COMM.	ASPHALT	19.0	3.0	22.2	22.2		15.0	90.7		12.89	65.00		1.65	0.45	0.26		0.36			57.60	46	6.40		
54	DR16	32+32.02	LT	COMM.	ASPHALT	19.3	7.0	22.5	22.5		15.0	97.9		8.73	79.53		4.89	1.32	0.77		1.07			57.57	79	6.40		
TOTALS CARRIED TO GENERAL SUMMARY												1,665	1	156	838	23	18	5	3	8	4	323	116	172	125	21	90	1

CALCULATED ESD
CHECKED NGF

PAVEMENT CALCULATIONS

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

25
75

P-928

Layout Tab Name: PAVEMENT CALCULATIONS, Images: , Xrefs:
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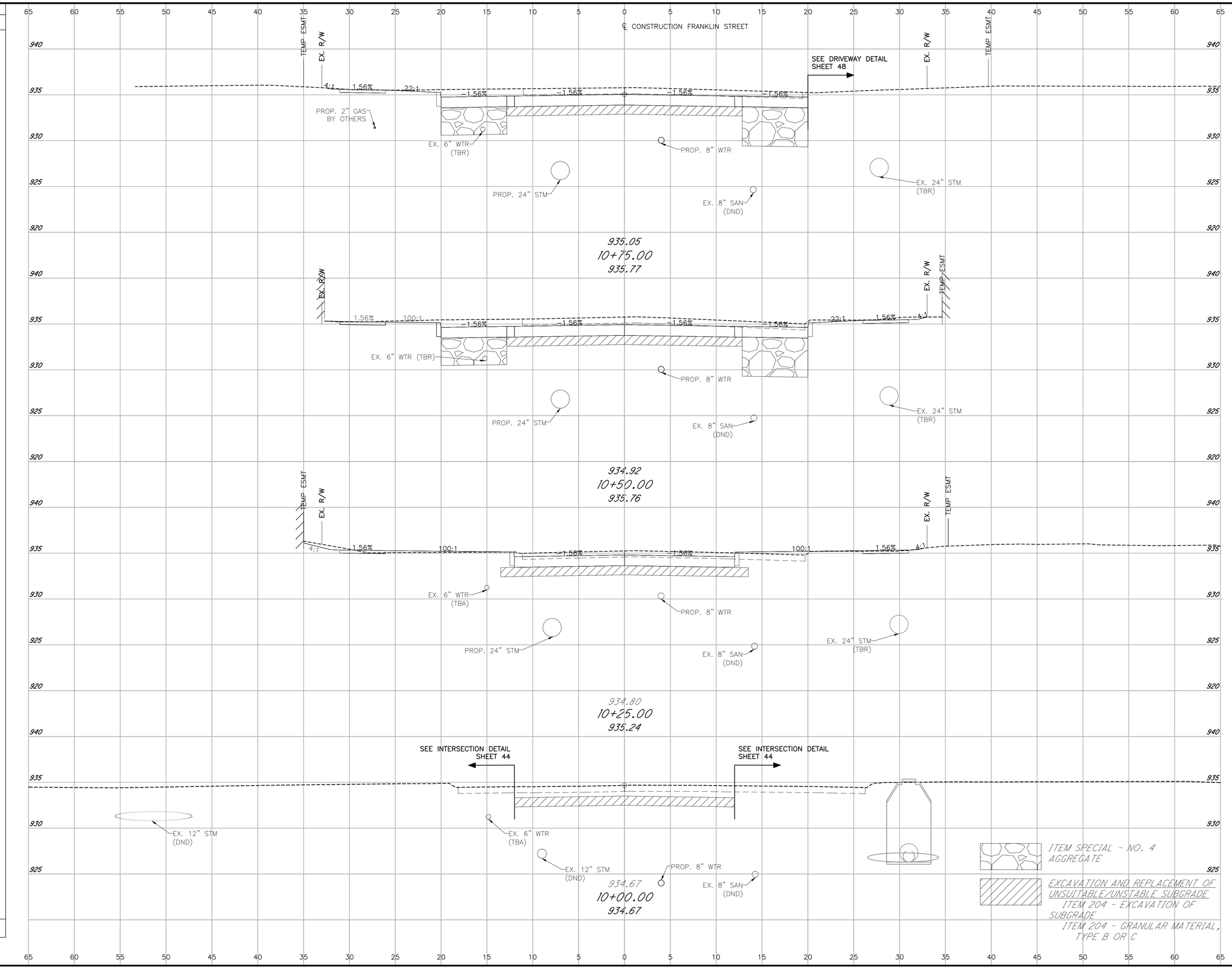

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
	20			101	0
7		109	0		
	30				
				103	0
15		113	1		
	66				
				64	4
33		27	9		
	46				
				18	4
0		13	0		
55	162	262	10	286	8

ITEM SPECIAL - NO. 4 AGGREGATE

EXCAVATION AND REPLACEMENT OF UNSUITABLE/UNSTABLE SUBGRADE
ITEM 204 - EXCAVATION OF SUBGRADE
ITEM 204 - GRANULAR MATERIAL, TYPE B OR C

HORIZ. 0 20 40
VERTICAL SCALE 0 10 25 5 10

CALCULATED ESD
CHECKED JDB

CROSS SECTIONS
FRANKLIN STREET
STA. 10+00 TO STA. 10+75

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

P-928

26
75

Layout Tab Name: 18 CROSS SECTION, Images: . Xrefs: 076347-KG001.dwg; 076347-BP001.dwg; Parcel 12 Exhibit.dwg; 76347_BE001 - Removal.dwg; 076347-BP002.dwg; 2019-02-04_Columbia Gas Relocation.dwg
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SEEDING	
END WIDTH	SQ. YDS.
0	39
	43
31	
	63
15	
	31
8	
54	176

65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65

℄ CONSTRUCTION FRANKLIN STREET

940 935 930 925 920

EX. R/W

SEE INTERSECTION DETAIL SHEET 45

SEE INTERSECTION DETAIL SHEET 45

-1.56% -1.56%

PROP. 2" GAS BY OTHERS

EX. 4" GAS (TBA)

EX. 6" WTR (TBA)

PROP. 8" WTR

PROP. 24" STM

EX. 24" STM (TBR)

EX. 8" SAN (DND)

933.70
11+75.00
935.24

TEMP. ESMT

EX. R/W

4:1 1.56% 100:1 -1.56% -1.56% 100:1 1.56% 4:1

PROP. 6" CURB

TEMP. ESMT

EX. R/W

PROP. 2" GAS BY OTHERS

EX. 6" WTR (TBA)

PROP. 8" WTR

PROP. 24" STM

EX. 24" STM (TBR)

EX. 8" SAN (DND)

934.18
11+50.00
935.59

TEMP. ESMT

EX. R/W

4:1 1.56% 22:1 -1.56% -1.56% -1.56% -1.56% 22:1 1.56% 4:1

EX. R/W

TEMP. ESMT

PROP. 6" CURB

PROP. 2" GAS BY OTHERS

EX. 6" WTR (TBR)

PROP. 8" WTR

PROP. 24" STM

EX. 8" SAN (DND)

EX. 24" STM (TBR)

934.67
11+25.00
935.64

EX. R/W

SEE DRIVEWAY DETAIL SHEET 48

-1.56% -1.56% -1.56% -1.56% 22:1 1.56% 4:1

EX. R/W

TEMP. ESMT

EX. PAVEMENT

PROP. 6" CURB

PROP. 2" GAS BY OTHERS

EX. 6" WTR (TBR)

PROP. 8" WTR

PROP. 24" STM

EX. 8" SAN (DND)

EX. 24" STM (TBR)

ITEM SPECIAL - NO. 4 AGGREGATE

EXCAVATION AND REPLACEMENT OF UNSUITABLE/UNSTABLE SUBGRADE
ITEM 204 - EXCAVATION OF SUBGRADE
ITEM 204 - GRANULAR MATERIAL, TYPE B OR C

935.01
11+00.00
935.68

END AREA		VOLUME	
CUT	FILL	CUT	FILL
		76	0
51	0		
		61	0
81	0		
		98	0
130	1		
		111	0
108	1		
370	2	346	0

HORIZ. 0 10 20 40

VERTICAL SCALE 0 5 10 25

CALCULATED ESD
CHECKED JDB

CROSS SECTIONS
FRANKLIN STREET
STA. 11+00 TO STA. 11+75

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

27
75

P-928

Layout Tab Name: 19 CROSS SECTION, Images: . Xrefs: 076347-KG001.dwg; 076347-BP001.dwg; Parcel 12 Exhibit.dwg; 76347_BE001 - Removal.dwg; 076347-BP002.dwg; 2019-02-04_Columbia Gas Relocation.dwg
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SEEDING	
END WIDTH	SQ. YDS.
	34
12	
	41
17	
	50
19	
	65
28	
76	190

END AREA		VOLUME	
CUT	FILL	CUT	FILL
		145	0
164	0		
		161	0
183	0		
		173	0
192	0		
		141	0
112	0		
651	0	620	0

HORIZ. 0 20 10 0 — VERTICAL SCALE 0 40 5 10 25

CALCULATED ESD
CHECKED JDB

CROSS SECTIONS
FRANKLIN STREET
STA. 12+00 TO STA. 12+75

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

P-928

28
75

Layout Tab Name: 20 CROSS SECTION, Images: . Xrefs: 076347-KG001.dwg; 076347-BP001.dwg; Parcel 12 Exhibit.dwg; 76347_BE001 - Removal.dwg; 076347-BP002.dwg; 2019-02-04_Columbia Gas Relocation.dwg
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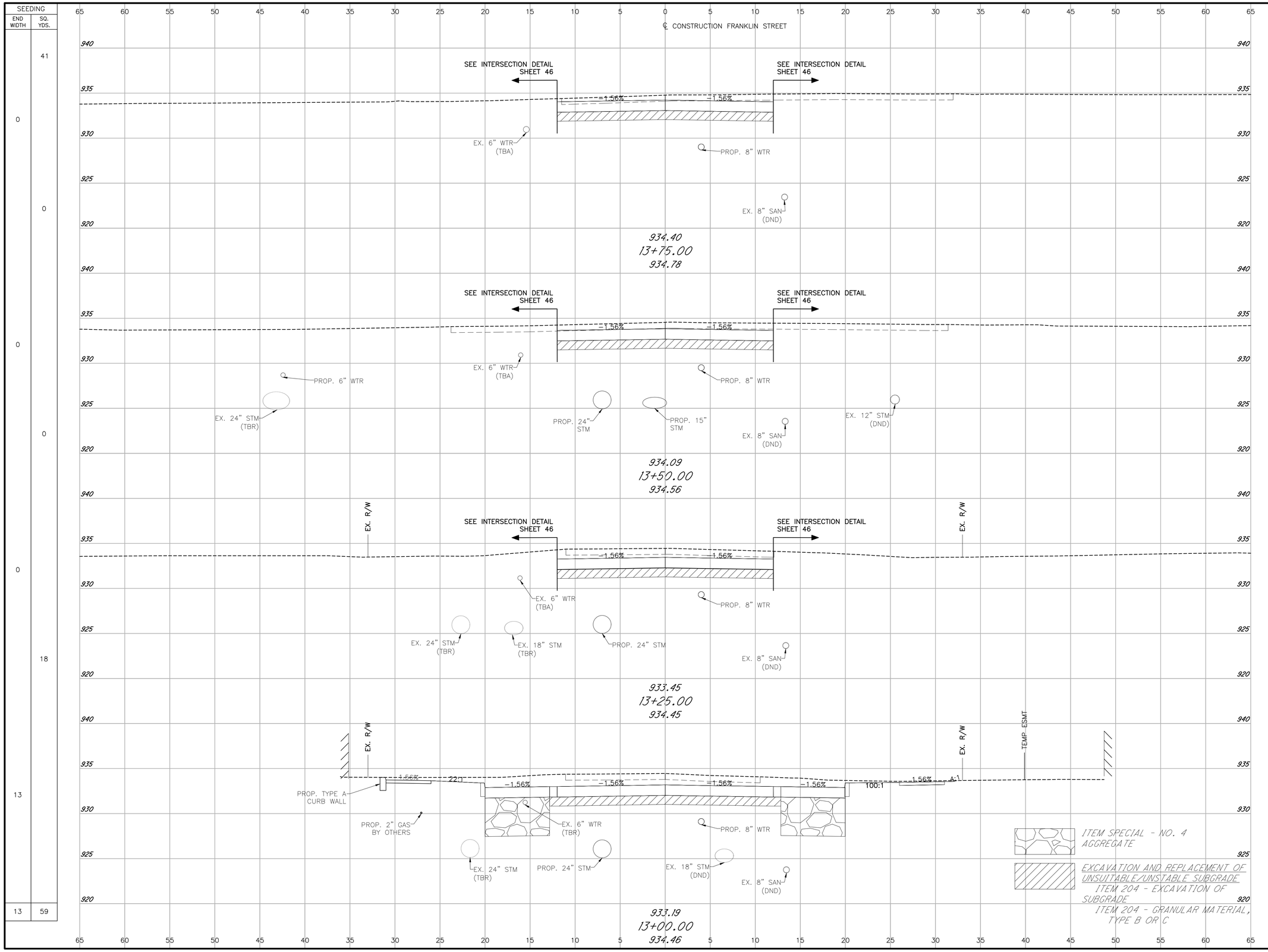
SEEDING	
END WIDTH	SQ. YDS.
	41
0	
	0
0	
	0
0	
	18
13	
13	59



END AREA		VOLUME	
CUT	FILL	CUT	FILL
		27	4
26	0		
		25	0
29	0		
		30	0
36	0		
		86	0
150	0		
241	0	168	4

HORIZ. 0 10 20 40
VERTICAL SCALE 0 5 10 25

CALCULATED ESD
CHECKED JDB

CROSS SECTIONS
FRANKLIN STREET
STA. 13+00 TO STA. 13+75

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

29
75

P-928

Layout Tab Name: 21 CROSS SECTION, Images: . Xrefs: 076347-KG001.dwg; 076347-BP001.dwg; Parcel 12 Exhibit.dwg; 76347_BE001 - Removal.dwg; 076347-BP002.dwg; 2019-02-04_Columbia Gas Relocation.dwg
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SEEDING	
END WIDTH	SQ. YDS.
	10
0	
	19
13	
	38
14	
	60
29	
56	127

END AREA		VOLUME	
CUT	FILL	CUT	FILL
		96	0
100	0		
		92	0
99	0		
		94	0
103	0		
		63	4
32	8		
334	8	345	4

HORIZ. 0 20 40
VERTICAL SCALE 0 5 10 25

CALCULATED ESD
CHECKED JDB

CROSS SECTIONS
FRANKLIN STREET
STA. 14+00 TO 14+75

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

30
75

P-928

Layout Tab Name: 22 CROSS SECTION, Images: . Xrefs: 076347-KG001.dwg; 076347-BP001.dwg; Parcel 12 Exhibit.dwg; 76347_BE001 - Removal.dwg; 076347-BP002.dwg; 2019-02-04_Columbia Gas Relocation.dwg
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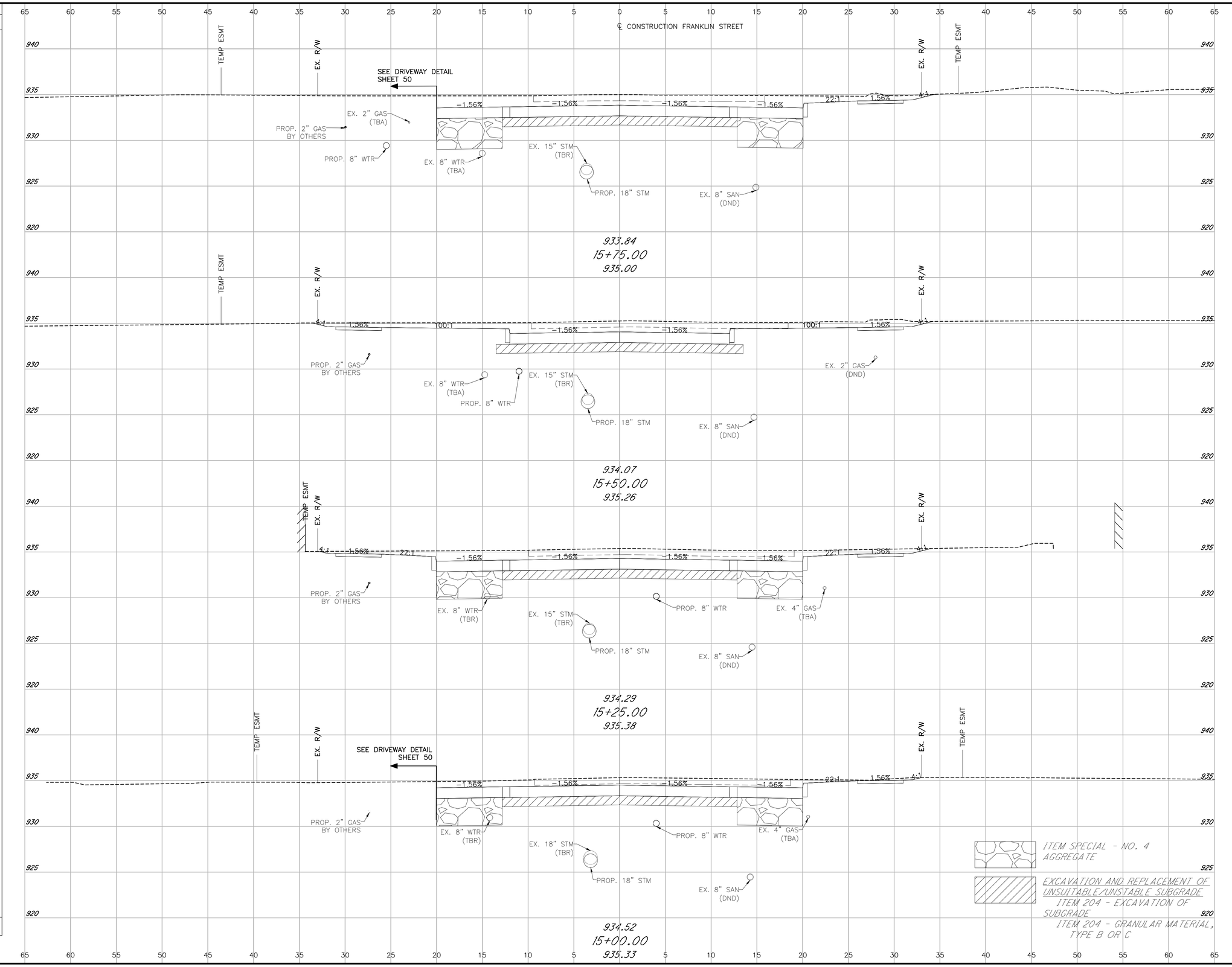
SEEDING	
END WIDTH	SQ. YDS.
	36
9	
	58
33	
	68
16	
	32
7	
65	194



END AREA		VOLUME	
CUT	FILL	CUT	FILL
		129	0
136	0		
		94	0
67	0		
		90	0
129	0		
		109	0
107	0		
439	0	422	0

HORIZ. 0 20 40
VERTICAL SCALE 0 5 10 25

CALCULATED ESD
CHECKED JDB

CROSS SECTIONS
FRANKLIN STREET
STA. 15+00 TO STA. 15+75

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

31
75

P-928

Layout Tab Name: 23 CROSS SECTION, Images: . Xrefs: 076347-KG001.dwg; 076347-BP001.dwg; Parcel 12 Exhibit.dwg; 76347_BE001 - Removal.dwg; 076347-BP002.dwg; 2019-02-04_Columbia Gas Relocation.dwg
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Layout Tab Name: 24 CROSS SECTION, Images: . Xrefs: 076347-KG001.dwg; 076347-BP001.dwg; Parcel 12 Exhibit.dwg; 76347_BE001 - Removal.dwg; 076347-BP002.dwg; 2019-02-04_Columbia Gas Relocation.dwg
Last Saved By:boecker, 4/26/2019 3:33:40 PM
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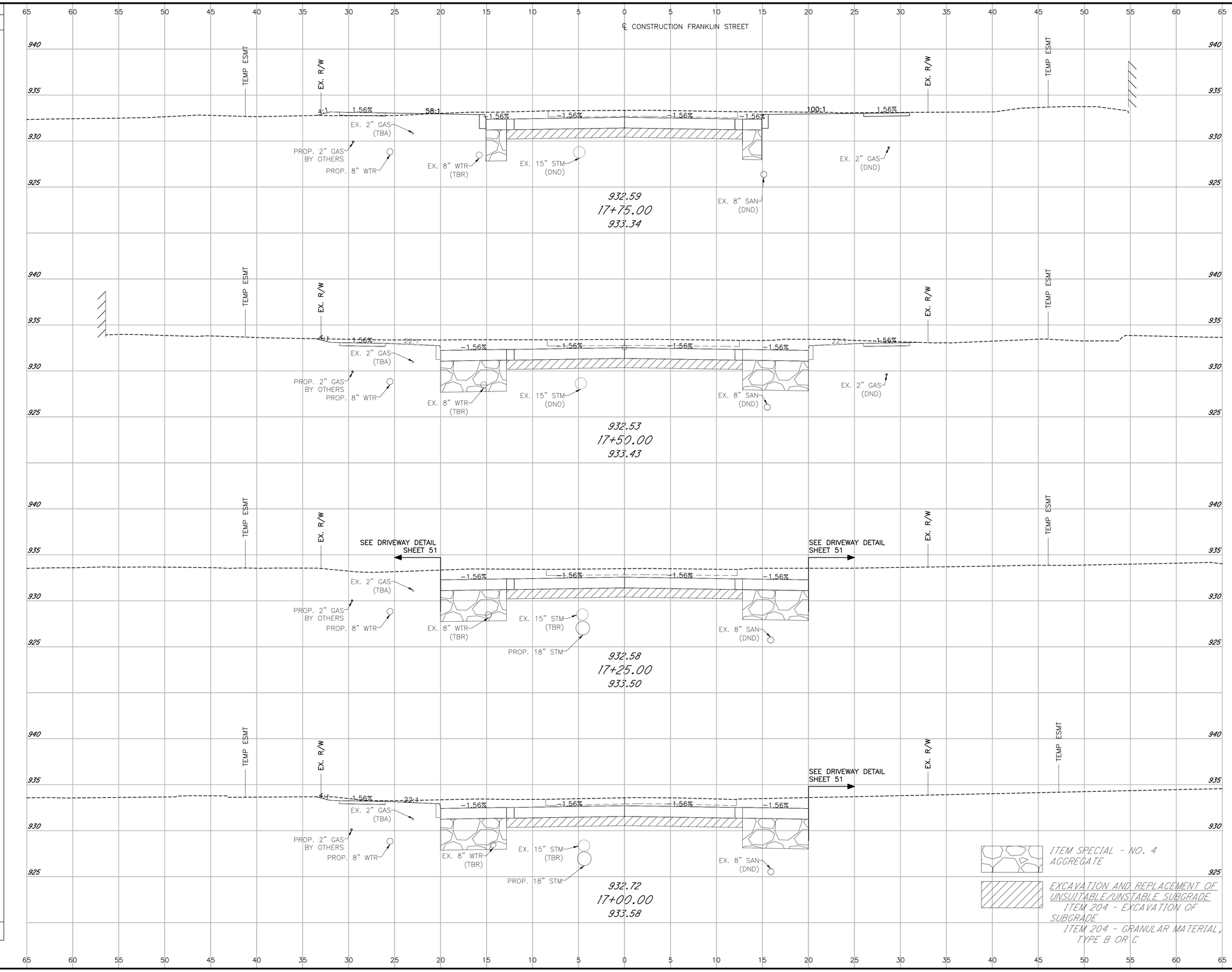

SEEDING	
END WIDTH	SQ. YDS.
	61
23	
	53
15	
	20
0	
	11
8	
46	145

END AREA		VOLUME	
CUT	FILL	CUT	FILL
		45	1
64	2		
		91	1
133	0		
		118	0
122	0		
		113	0
122	0		
441	2	367	2

HORIZ. 0 20 40
VERTICAL SCALE 0 5 10 25

CALCULATED ESD
CHECKED JDB

CROSS SECTIONS FRANKLIN STREET STA. 17+00 TO STA. 17+75

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

Layout Tab Name: CROSS SECTION, Images: , Xrefs: 076347-KG001.dwg; 076347-BP001.dwg; Parcel 12 Exhibit.dwg; 76347_BE001 - Removal.dwg; 076347-BP002.dwg; 2019-02-04_Columbia Gas Relocation.dwg
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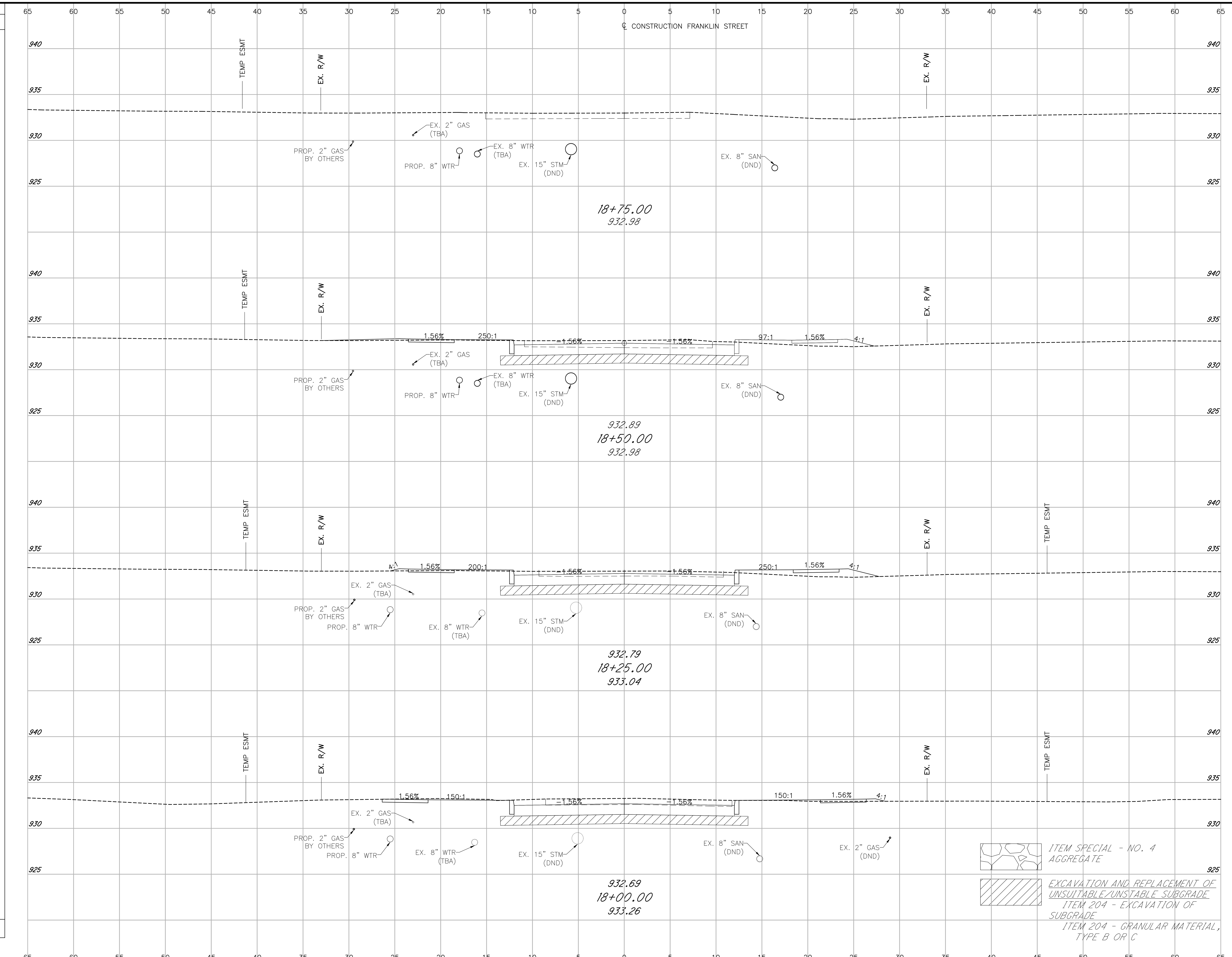
SEEDING END WIDTH	SEEDING SQ. YDS.
0	
	35
25	
	60
18	
	54
21	
39	103



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
0	0		
		10	3
23	7		
		22	7
26	8		
		27	4
32	1		
55	9	59	14

HORIZ. / VERTICAL SCALE: 0 10 20 40 / 0 2.5 5 10

CALCULATED ESD
CHECKED JDB

CROSS SECTIONS
FRANKLIN STREET
STA. 18+00 TO STA. 18+75

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

P-928

Layout Tab Name: 27 CROSS SECTION, Images: , Xrefs: 076347-KG001.dwg; 076347-BP001.dwg; 76347_BE001 - Removal.dwg
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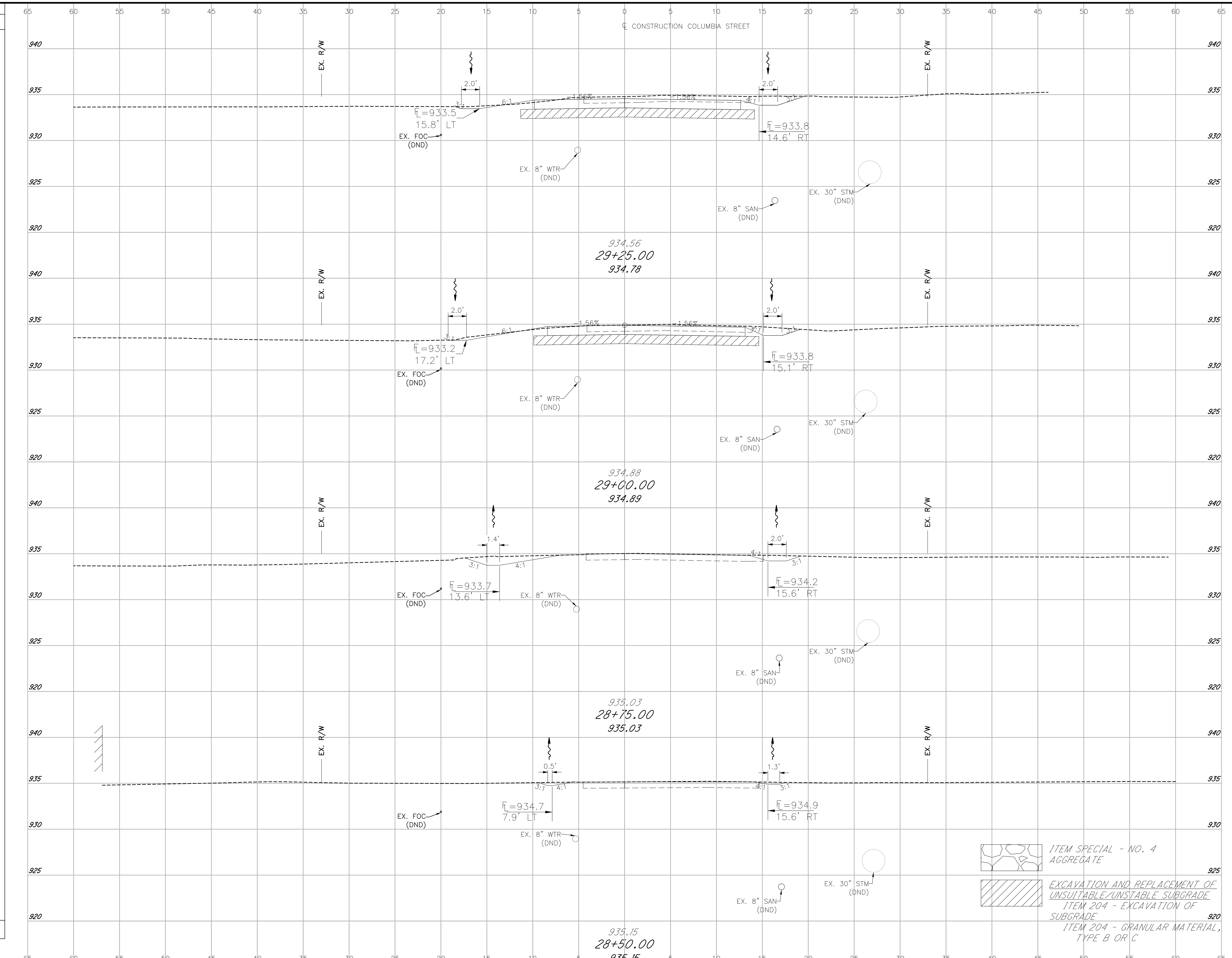
SEEDING	
END WIDTH	SQ. YDS.
	40
16	
	42
14	
	43
16	
	33
7	
53	158



END AREA		VOLUME	
CUT	FILL	CUT	FILL
		26	0
22	1		
		18	1
16	1		
		11	0
8	0		
		4	0
1	0		
47	2	59	1

HORIZ. SCALE 0 10 20 40
VERTICAL SCALE 0 2.5 5 10

CALCULATED ESD
CHECKED JDB

CROSS SECTIONS
COLUMBIA STREET
STA. 28+50 TO STA. 29+25

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

P-928

SEEDING	
END WIDTH	SQ. YDS.
	28
0	
	0
0	
	18
13	
13	46

65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65

℄ CONSTRUCTION COLUMBIA STREET

940 935 930 925 920

INTERSECTION WITH FRANKLIN ST.

EX. FOC (DND)
EX. 8" WTR (TBA)
PROP. 6" WTR
EX. 24" STM (TBR)
PROP. 24" STM
EX. 36" STM (DND)
EX. 8" SAN (DND)

933.86
30+25.00
934.08

EX. FOC (DND)
EX. 8" WTR (TBA)
PROP. 6" WTR
EX. 18" STM (DND)
EX. 12" STM (TBR)
PROP. 15" STM
EX. 36" STM (TBR)
PROP. 36" STM
EX. 8" SAN (DND)

934.23
30+00.00
934.59

EX. FOC (DND)
PROP. 6" WTR
EX. 8" WTR (TBA)
PROP. 15" STM
EX. 30" STM (TBR)
PROP. 36" STM
EX. 8" SAN (DND)

933.63
29+75.00
934.65

EX. R/W

2.0' 3:1 18:1 1.56% 1.56% 11:1 3:1 2.0'

T=933.7 14.3' LT
T=933.7 14.2' RT

EX. FOC (DND)
PROP. 6" WTR
EX. 8" WTR (TBA)
EX. 30" STM (DND)
EX. 8" SAN (DND)

ITEM SPECIAL - NO. 4 AGGREGATE

EXCAVATION AND REPLACEMENT OF UNSUITABLE/UNSTABLE SUBGRADE
ITEM 204 - EXCAVATION OF SUBGRADE
ITEM 204 - GRANULAR MATERIAL, TYPE B OR C

934.03
29+50.00
934.73

END AREA		VOLUME	
CUT	FILL	CUT	FILL
		43	7
28	0		
		25	0
25	0		
		25	0
30	0		
		29	0
33	0		
116	0	122	7

HORIZ. 0 20 10 40
VERTICAL SCALE 0 5 25 10

CALCULATED ESD
CHECKED JDB

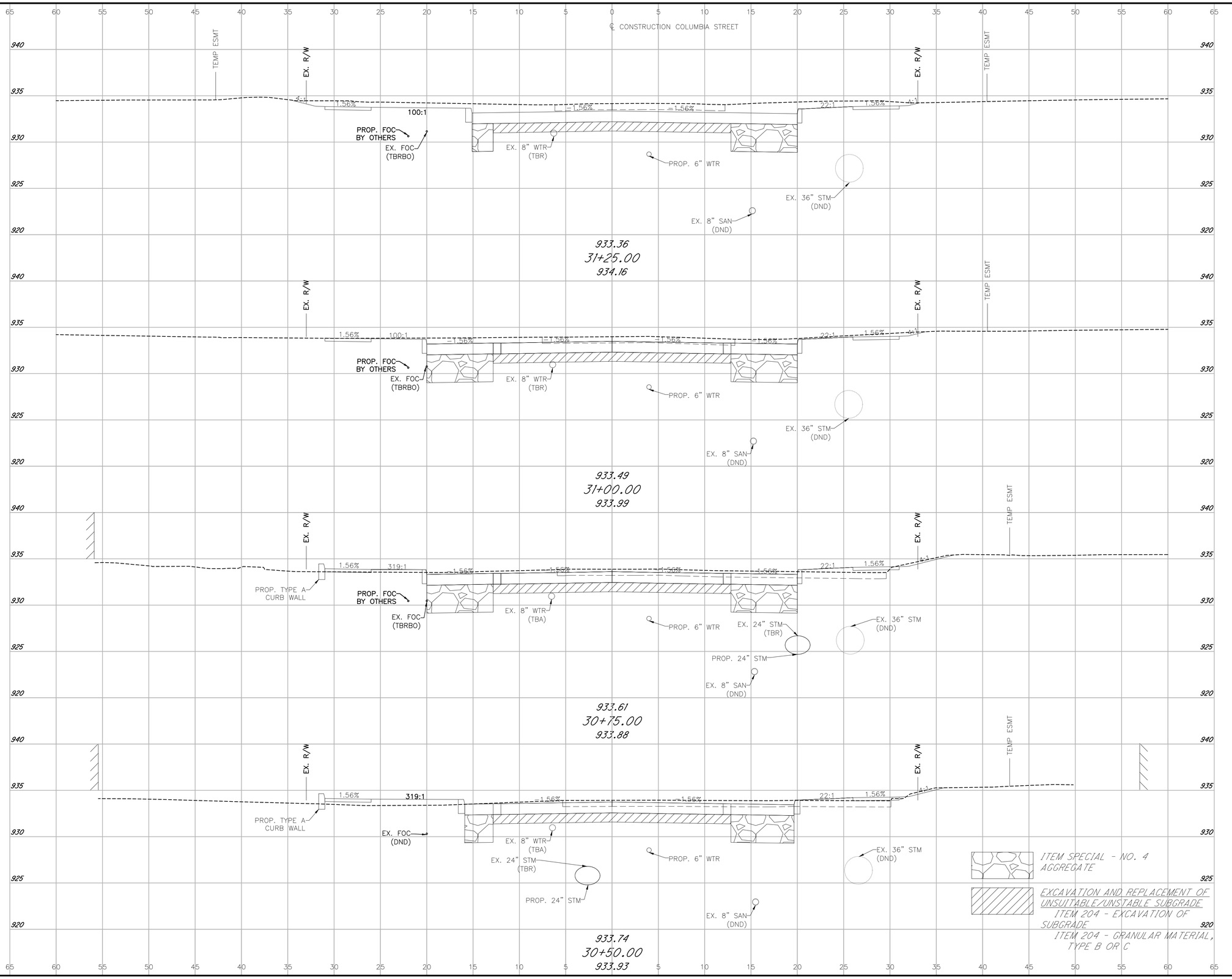
CROSS SECTIONS
COLUMBIA STREET
STA. 29+50 TO STA. 30+25

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

36
75

P-928

SEEDING	
END WIDTH	SQ. YDS.
30	
22	
	50
14	
	43
17	
	52
20	
73	175



END AREA		VOLUME	
CUT	FILL	CUT	FILL
		89	0
110	0		
		99	0
104	0		
		88	5
85	11		
		69	12
64	14		
363	25	345	17

HORIZ. 0 20 40
VERTICAL SCALE 0 5 10 25

CALCULATED ESD
CHECKED JDB

CROSS SECTIONS
COLUMBIA STREET
STA. 30+50 TO STA. 31+25

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

37
75

P-928

Layout Tab Name: 29 CROSS SECTION, Images: , Xrefs: 076347-KG001.dwg; 076347-BP001.dwg; 76347_BE001 - Removal.dwg
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SEEDING	
END WIDTH	SQ. YDS.
	27
6	
	42
24	
	61
20	
	28
0	
50	158

65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65

℄ CONSTRUCTION COLUMBIA STREET

940 935 930 925 920

TEMP ESMT | EX. R/W | SEE DRIVEWAY DETAIL SHEET 54 | PROP. FOC BY OTHERS | EX. FOC (TBRBO) | EX. 15" STM (DND) | EX. 8" WTR (TBR) | PROP. 6" WTR | EX. 36" STM (DND) | EX. 8" SAN (DND) | PROP. 6" CURB | 1.56% | 22:1 | 4:1

933.16
32+25.00
933.99

TEMP ESMT | EX. R/W | PROP. TYPE A CURB WALL | 4:1 | 90:1 | 13:1 | PROP. FOC BY OTHERS | EX. FOC (TBRBO) | EX. 15" STM (DND) | EX. 8" WTR (TBR) | PROP. 6" WTR | 32'~12" STM @ 1.22% SEE SHEET 57 | EX. 36" STM (DND) | EX. 8" SAN (DND) | PROP. 6" CURB | 1.56% | 22:1

933.11
32+00.00
934.22

TEMP ESMT | EX. R/W | PROP. TYPE A CURB WALL | 4:1 | 78:1 | PROP. FOC BY OTHERS | EX. FOC (TBRBO) | EX. 15" STM (DND) | EX. 8" WTR (TBR) | PROP. 6" WTR | EX. 36" STM (DND) | EX. 8" SAN (DND) | PROP. 6" CURB | 1.56% | 22:1

933.14
31+75.00
934.33

TEMP ESMT | EX. R/W | SEE DRIVEWAY DETAIL SHEET 54 | SEE DRIVEWAY DETAIL SHEET 53 | PROP. FOC BY OTHERS | EX. FOC (TBRBO) | EX. 8" WTR (TBR) | PROP. 6" WTR | EX. 36" STM (DND) | EX. 8" SAN (DND) | 1.56%

933.24
31+50.00
934.36

ITEM SPECIAL - NO. 4 AGGREGATE

EXCAVATION AND REPLACEMENT OF UNSUITABLE/UNSTABLE SUBGRADE
ITEM 204 - EXCAVATION OF SUBGRADE
ITEM 204 - GRANULAR MATERIAL, TYPE B OR C

END AREA		VOLUME	
CUT	FILL	CUT	FILL
		44	5
72	1		
		88	0
117	0		
		106	0
112	0		
		90	0
83	0		
384	1	328	5

HORIZ. 0 10 20 40
VERTICAL SCALE 0 5 10 25

CALCULATED ESD
CHECKED JDB

CROSS SECTIONS
COLUMBIA STREET
STA. 31+50 TO STA. 32+25

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

38
75

P-928

Layout Tab Name: 30 CROSS SECTION, Images: , Xrefs: 076347-KG001.dwg; 076347-BP001.dwg; 76347_BE001 - Removal.dwg
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SEEDING	
END WIDTH	SQ. YDS.
14	0

65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65

℄ CONSTRUCTION COLUMBIA STREET

940 935 930 925 920

TEMP ESMT

EX. R/W

SEE DRIVEWAY DETAIL SHEET 54

PROP. FOC BY OTHERS

EX. FOC (TBRBO)

EX. 12" STM (DND)

EX. 15" STM (DND)

EX. 8" WTR (TBR)

PROP. 6" WTR

EX. 8" SAN (DND)

EX. 36" STM (DND)

1.56%

100:1

1.56%

EX. R/W

933.28
32+50.00
933.64

ITEM SPECIAL - NO. 4 AGGREGATE

EXCAVATION AND REPLACEMENT OF UNSUITABLE/UNSTABLE SUBGRADE
ITEM 204 - EXCAVATION OF SUBGRADE
ITEM 204 - GRANULAR MATERIAL, TYPE B OR C

END AREA		VOLUME	
CUT	FILL	CUT	FILL
23	10	0	0

HORIZ. 0 10 20 40

VERTICAL SCALE 0 2.5 5 10

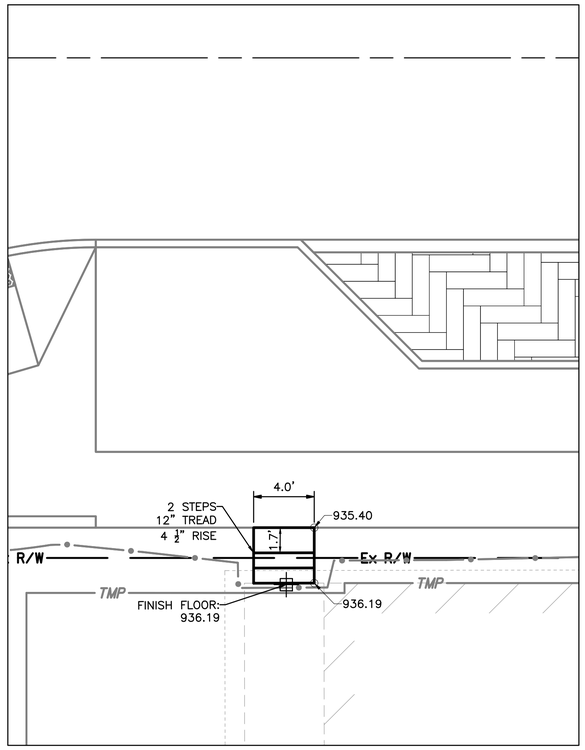
CALCULATED ESD
CHECKED JDB

CROSS SECTIONS
COLUMBIA STREET
STA. 32+50

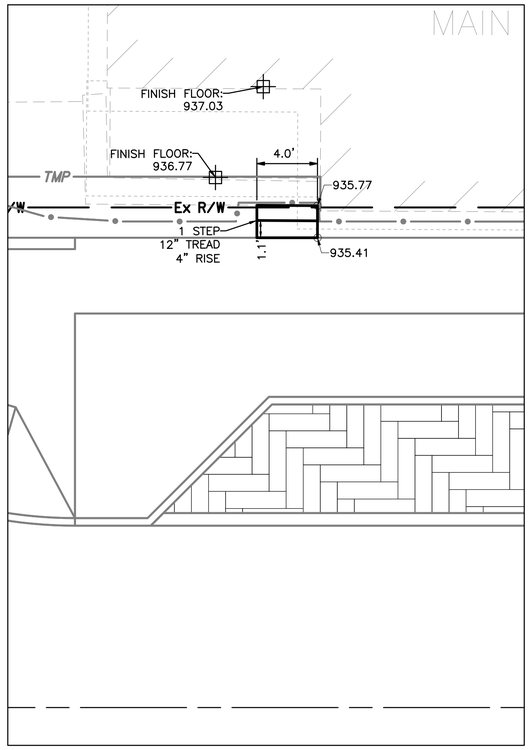
CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

P-928

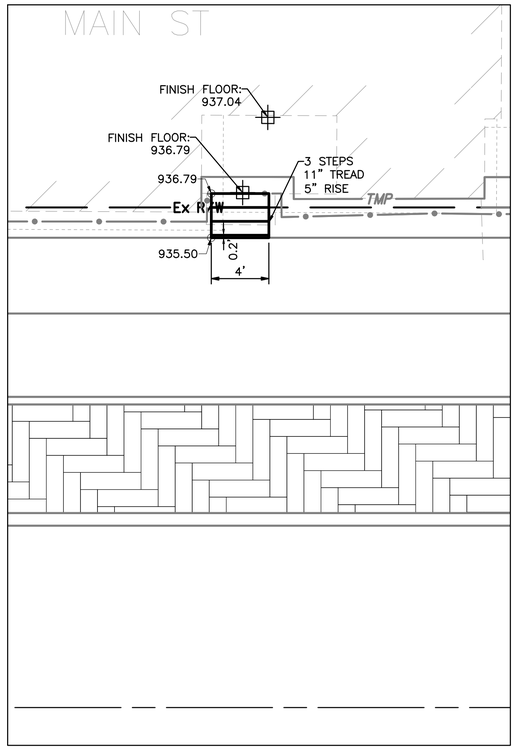
39
75



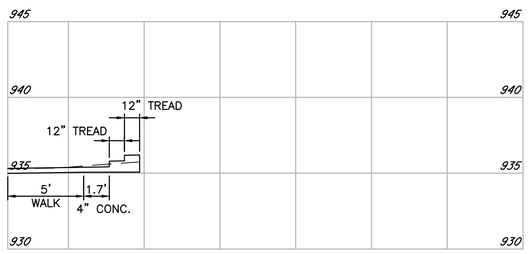
LEAD–IN WALK
3988 – 3996 MAIN ST.

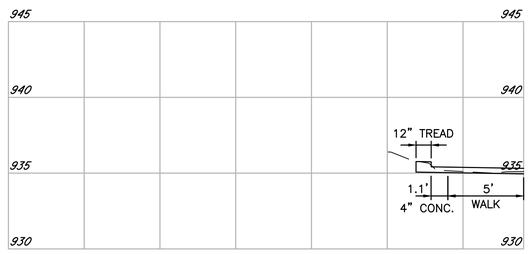


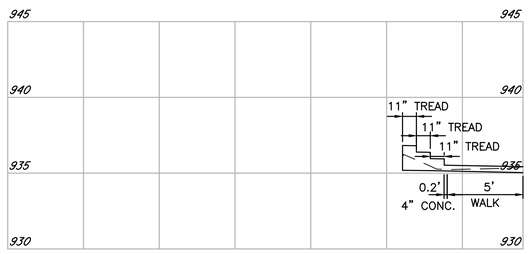
LEAD–IN WALK
4002 MAIN ST. (WEST)



LEAD–IN WALK
4002 MAIN ST. (EAST)







FOLLOW CITY OF COLUMBUS STANDARD DRAWING 2328 SHEET 3/3 FOR CONCRETE STEP DETAILS.

NORTH

HORIZ.
0
2.5
5
10

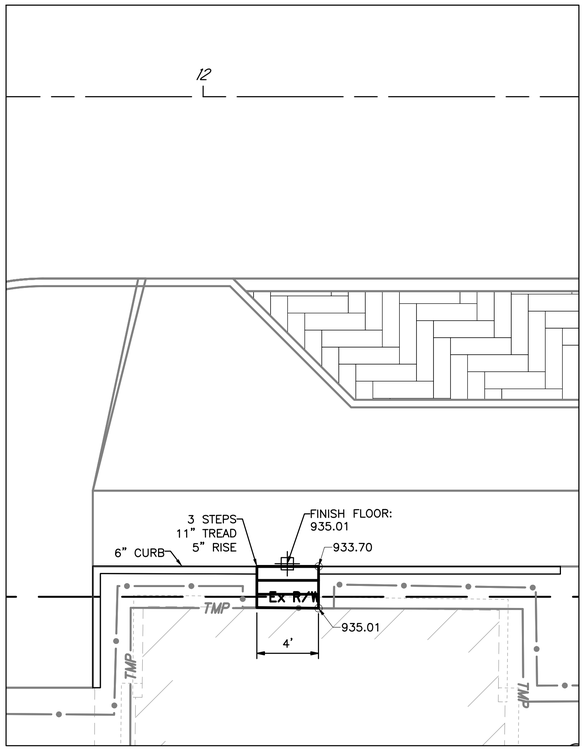
CALCULATED ESD
CHECKED NGF

LEAD-IN WALK DETAILS

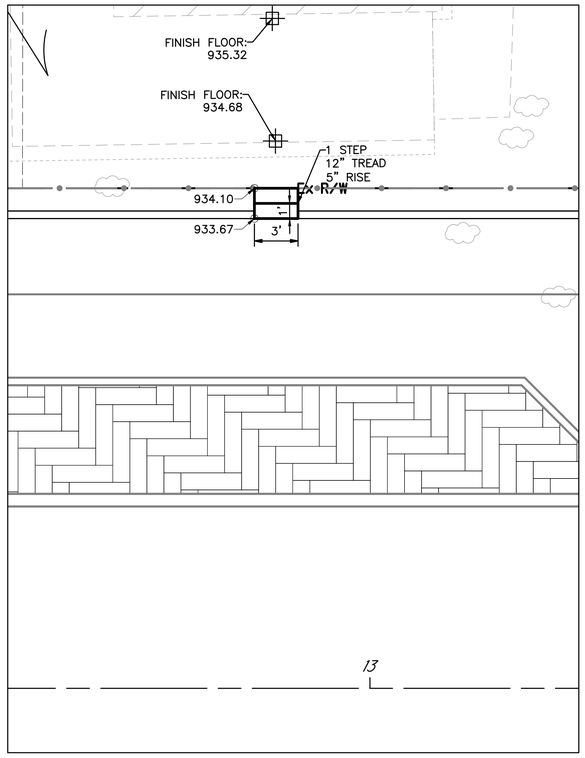
CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

P-928

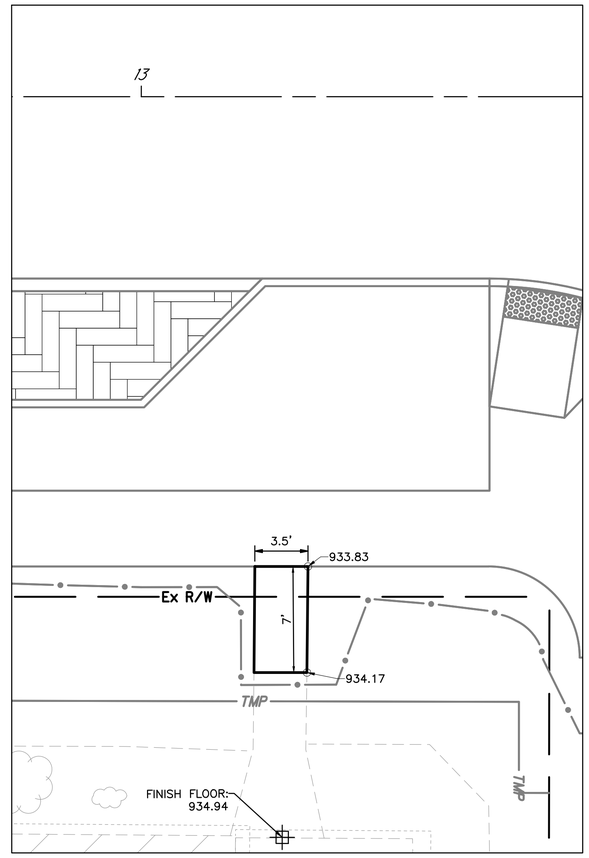
40
75



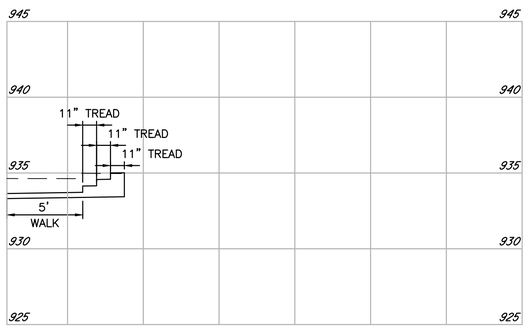
LEAD–IN WALK
5341 FRANKLIN ST.

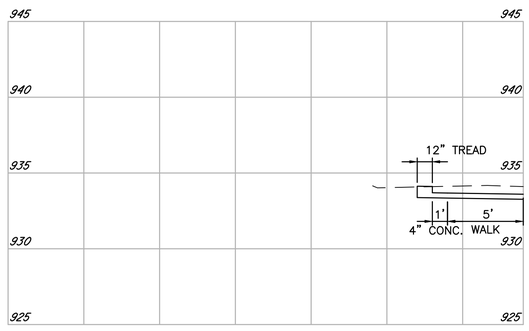


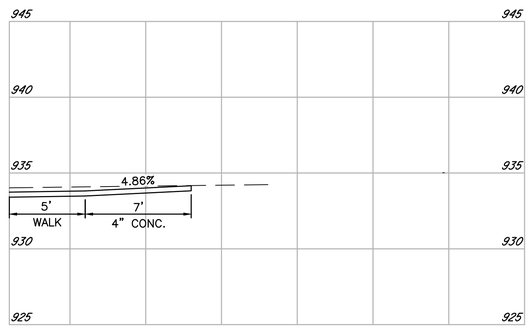
LEAD–IN WALK
5334 FRANKLIN ST.



LEAD–IN WALK
5333 FRANKLIN ST.







FOLLOW CITY OF COLUMBUS STANDARD DRAWING 2328 SHEET 3/3 FOR CONCRETE STEP DETAILS

NORTH

HORIZ.
0
2.5
5
10

CALCULATED ESD
CHECKED NGF

LEAD-IN WALK DETAILS

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

P-928

41
75

Layout Tab Name: LEAD–IN WALK DETAILING 2, Images: , Xrefs: 076347–BP001.dwg; 076347–BR001.dwg; 76347_BE001 – Removal.dwg; 76347TPO_ADD_20180416.dwg; Parcel 12 Exhibit.dwg; 076347–BP002.dwg; 076347–BU100–GPD Working.dwg; 2019–02–04_Columbia
Last Saved By:keatingm, 6/3/2019 6:04:39 PM
Plotted By:Keating, Matthew Plotted:June 3, 2019, 6:08:07 PM
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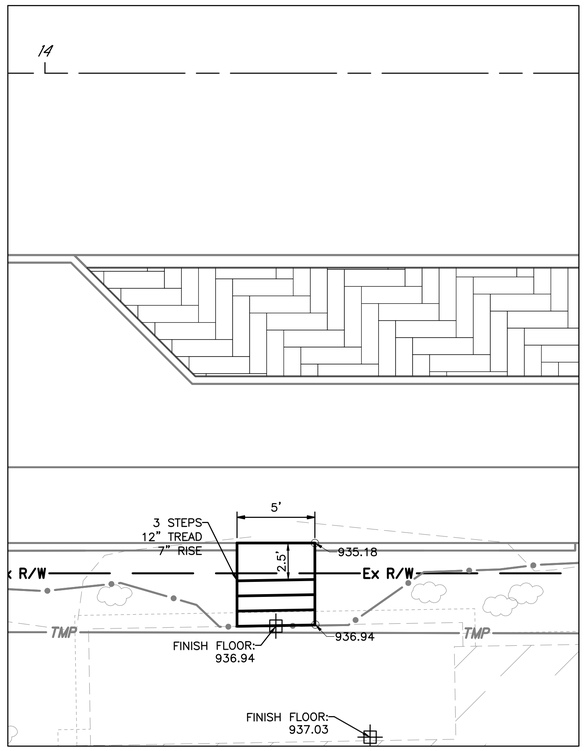
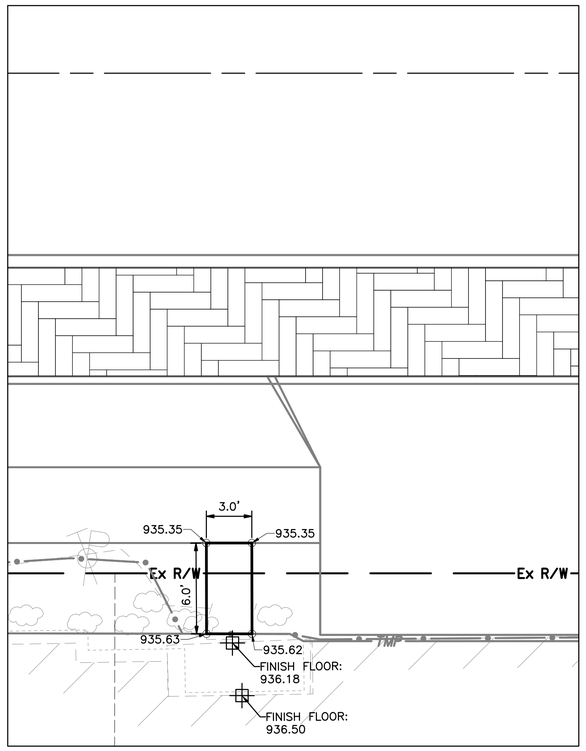
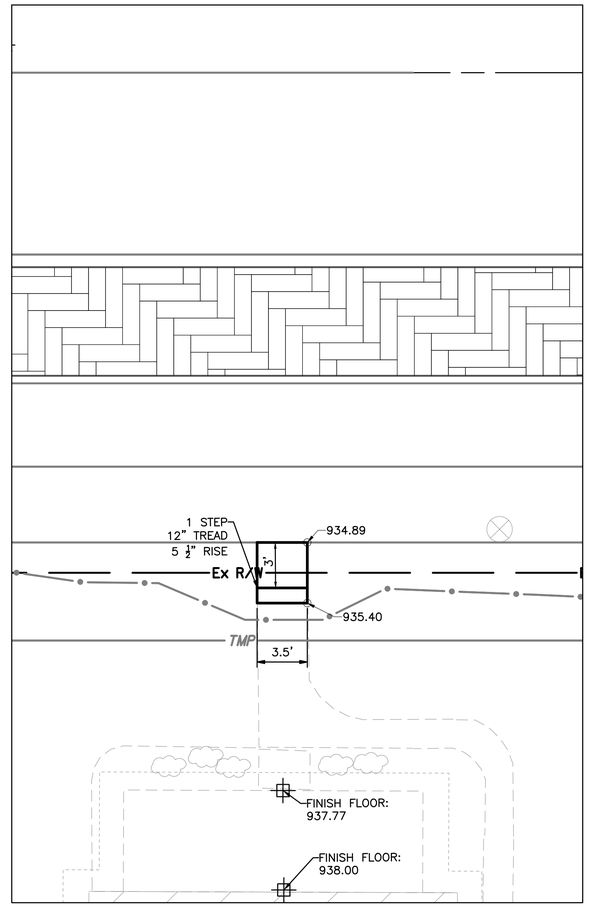


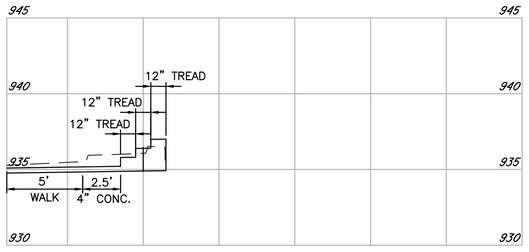
LEAD–IN WALK
3966 COLUMBIA ST. (WEST)

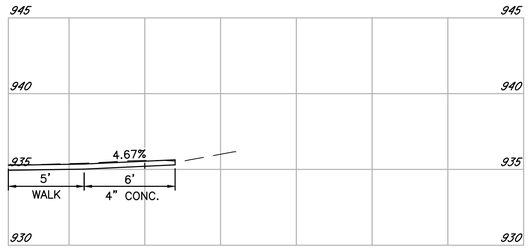


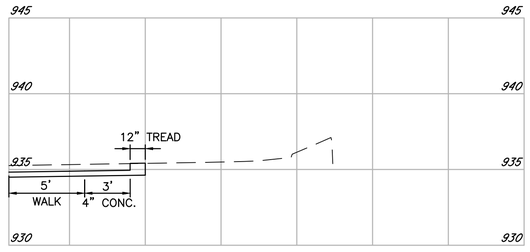
LEAD–IN WALK
3966 COLUMBIA ST. (EAST)



LEAD–IN WALK
5319 FRANKLIN ST.







FOLLOW CITY OF COLUMBUS STANDARD DRAWING 2328 SHEET 3/3 FOR CONCRETE STEP DETAILS

NORTH

HORIZ.
0
2.5
5
10

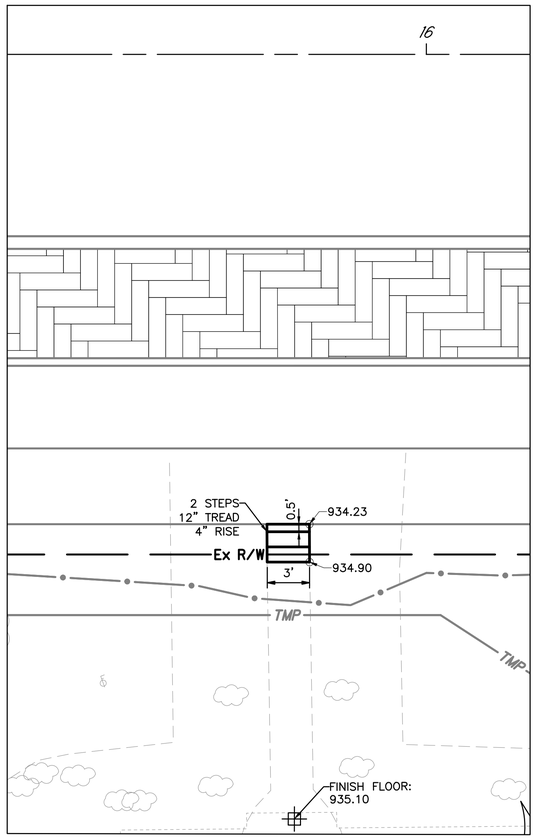
CALCULATED ESD
CHECKED NGF

LEAD-IN WALK DETAILS

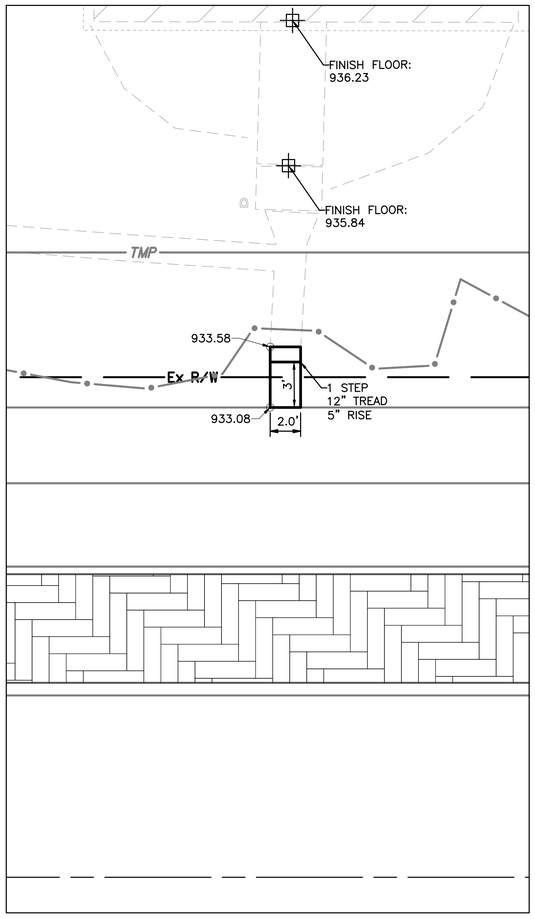
CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

P-928

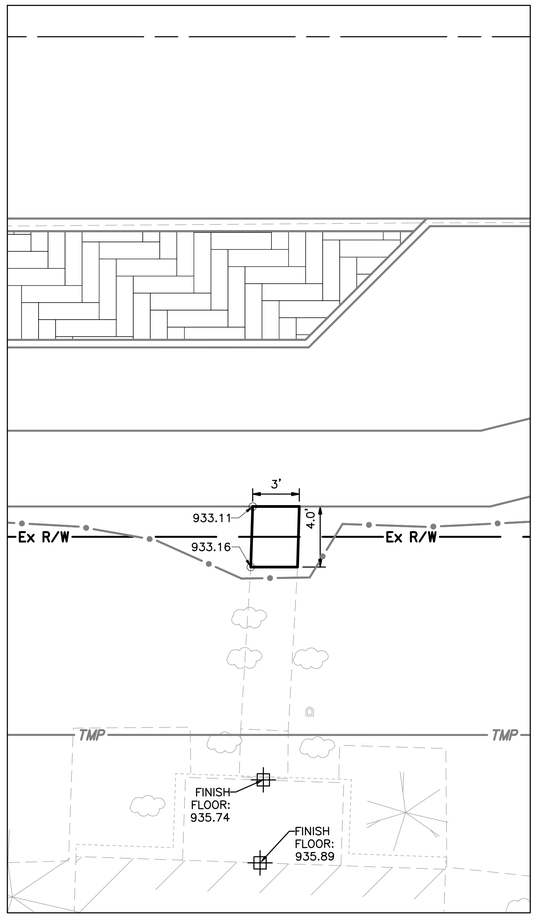
42
75



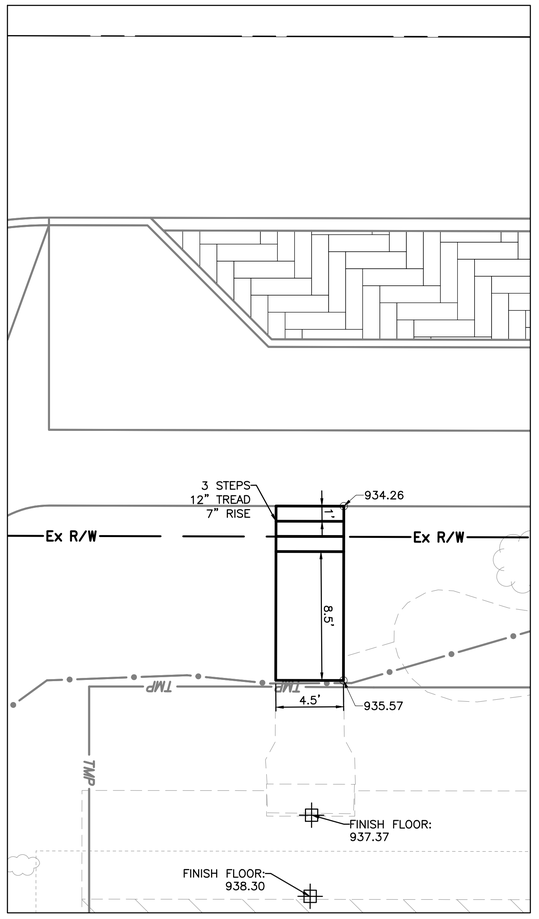
LEAD–IN WALK
5307 FRANKLIN ST.



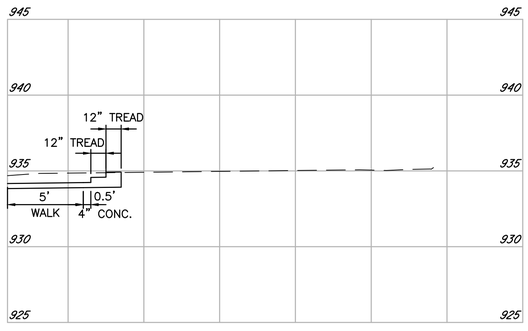
LEAD–IN WALK
5294 FRANKLIN ST.

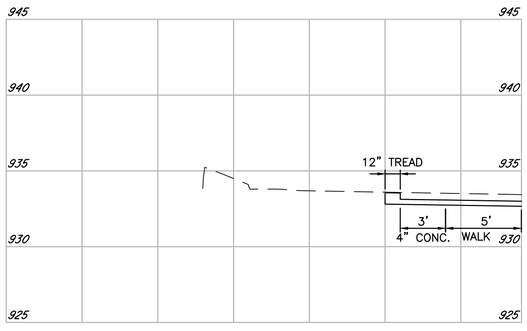


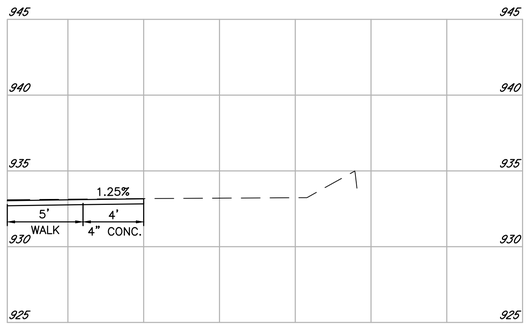
LEAD–IN WALK
5293 FRANKLIN ST.

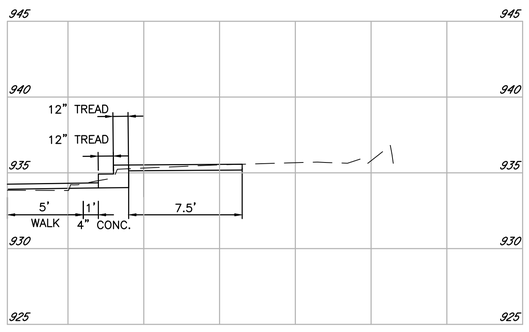


LEAD–IN WALK
3990 COLUMBIA ST.









FOLLOW CITY OF COLUMBUS STANDARD DRAWING 2328 SHEET 3/3 FOR CONCRETE STEP DETAILS

NORTH

HORIZ.
0
2.5
5
10

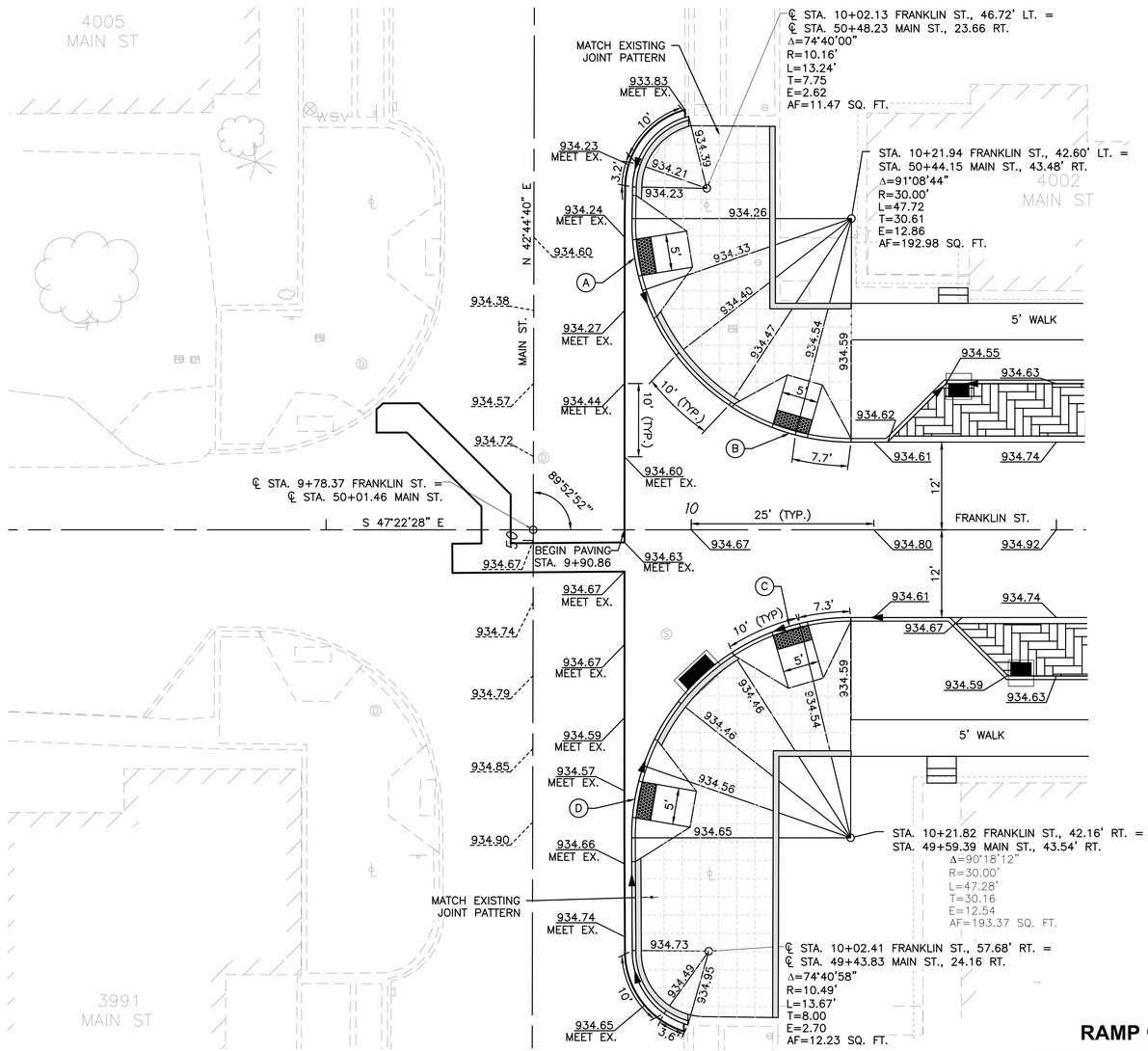
CALCULATED ESD
CHECKED NGF

LEAD-IN WALK DETAILS

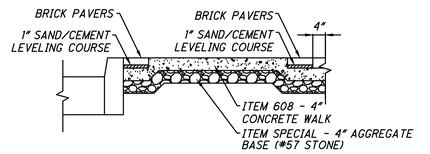
CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

P-928

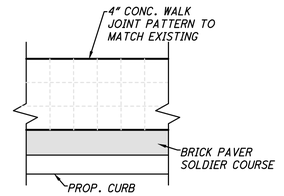
43
75



FRANKLIN STREET AT MAIN STREET
SCALE 1" = 10'



BRICK PAVER DETAIL



PLAN VIEW DETAIL

RAMP ℄ LOCATIONS

RAMP	STATION	OFFSET	SIDE
A	9+92.27	37.20'	LT.
B	10+13.45	13.21	LT.
C	10+13.45	13.20'	RT.
D	9+92.28	36.86'	RT.

ALL CURB RAMPS ARE TYPE A, UNLESS OTHERWISE NOTED.
FOLLOW CITY OF HILLIARD STANDARD DRAWING CR-1.
ALL ELEVATIONS SHOWN ARE PAVEMENT ELEVATIONS UNLESS OTHERWISE NOTED.

NORTH

HORIZONTAL SCALE IN FEET
0 5 10 20

CALCULATED ESD
CHECKED NGF

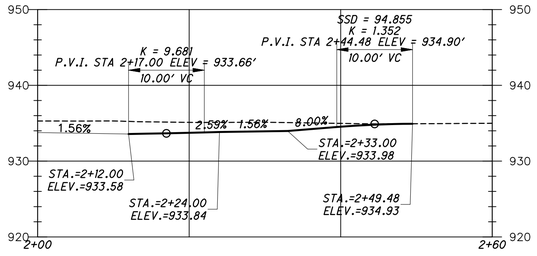
INTERSECTION DETAILS

FRANKLIN ST. & MAIN ST.

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

P-928

44
75

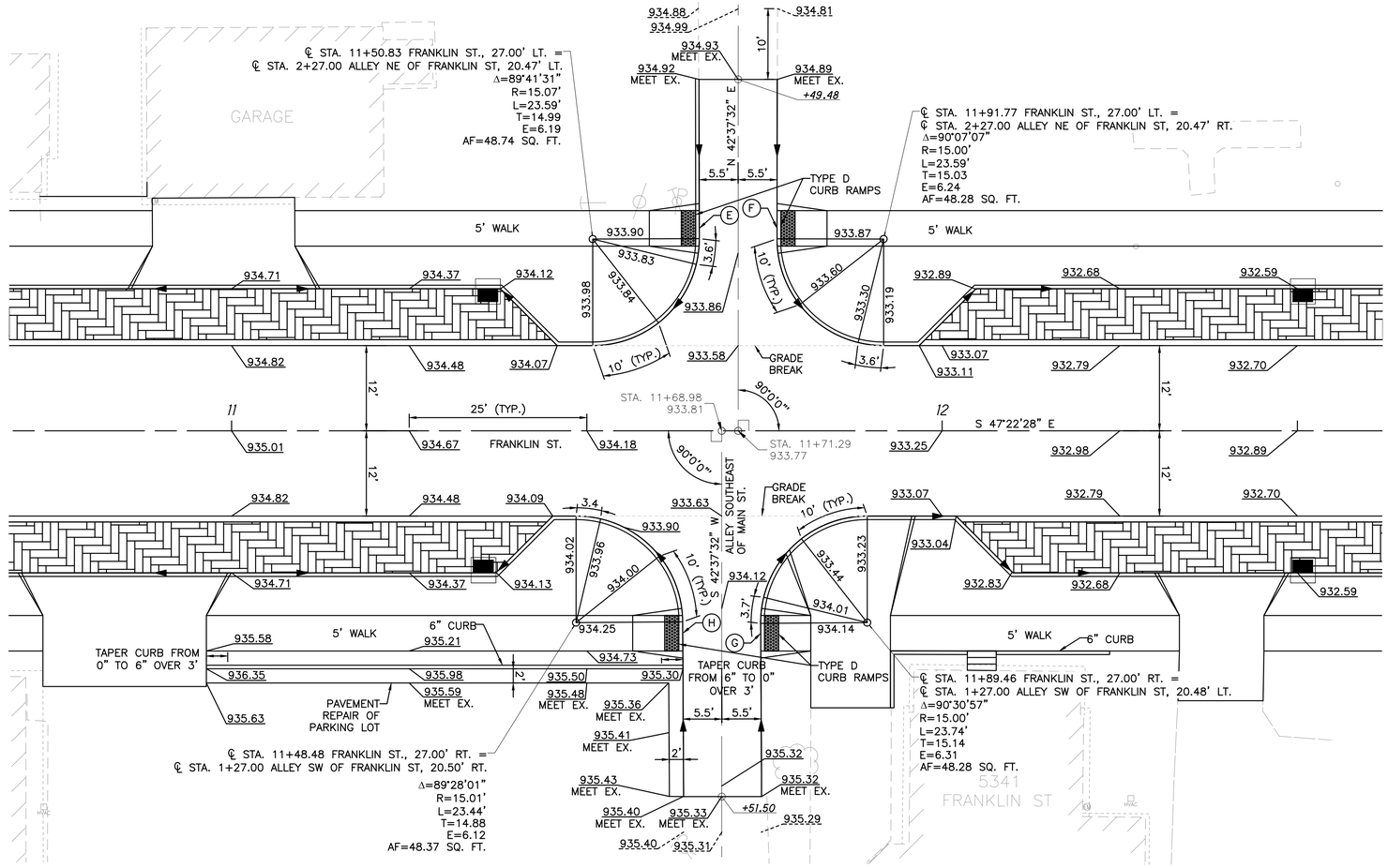


ALLEY NE OF FRANKLIN ST. PROFILE

ITEM 452 – 7" NON-REINFORCED CONCRETE PAVEMENT

ITEM 204 – SUBGRADE COMPACTION

ALLEY PAVEMENT BUILD-UP

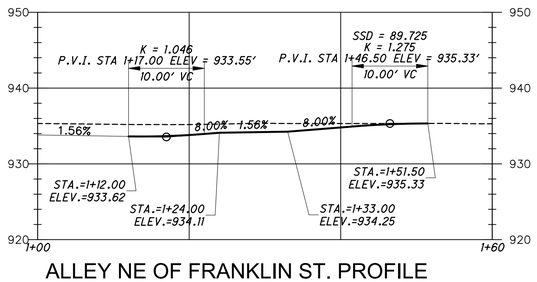


FRANKLIN STREET AT ALLEY SOUTHEAST OF MAIN ST.
SCALE 1" = 10'

ALL CURB RAMPS ARE TYPE D, UNLESS OTHERWISE NOTED.
FOLLOW CITY OF HILLIARD STANDARD DRAWING CR-1.
ALL ELEVATIONS SHOWN ARE PAVEMENT ELEVATIONS UNLESS OTHERWISE SHOWN.

RAMP ℄ LOCATIONS

RAMP	STATION	OFFSET	SIDE
E	11+65.82	28.50'	LT.
F	11+76.77	28.50'	LT.
G	11+74.47	28.50'	RT.
H	11+63.50	28.50'	RT.



ALLEY NE OF FRANKLIN ST. PROFILE

NORTH

HORIZONTAL
SCALE IN FEET
0 5 10 20

CALCULATED ESD
CHECKED NGF

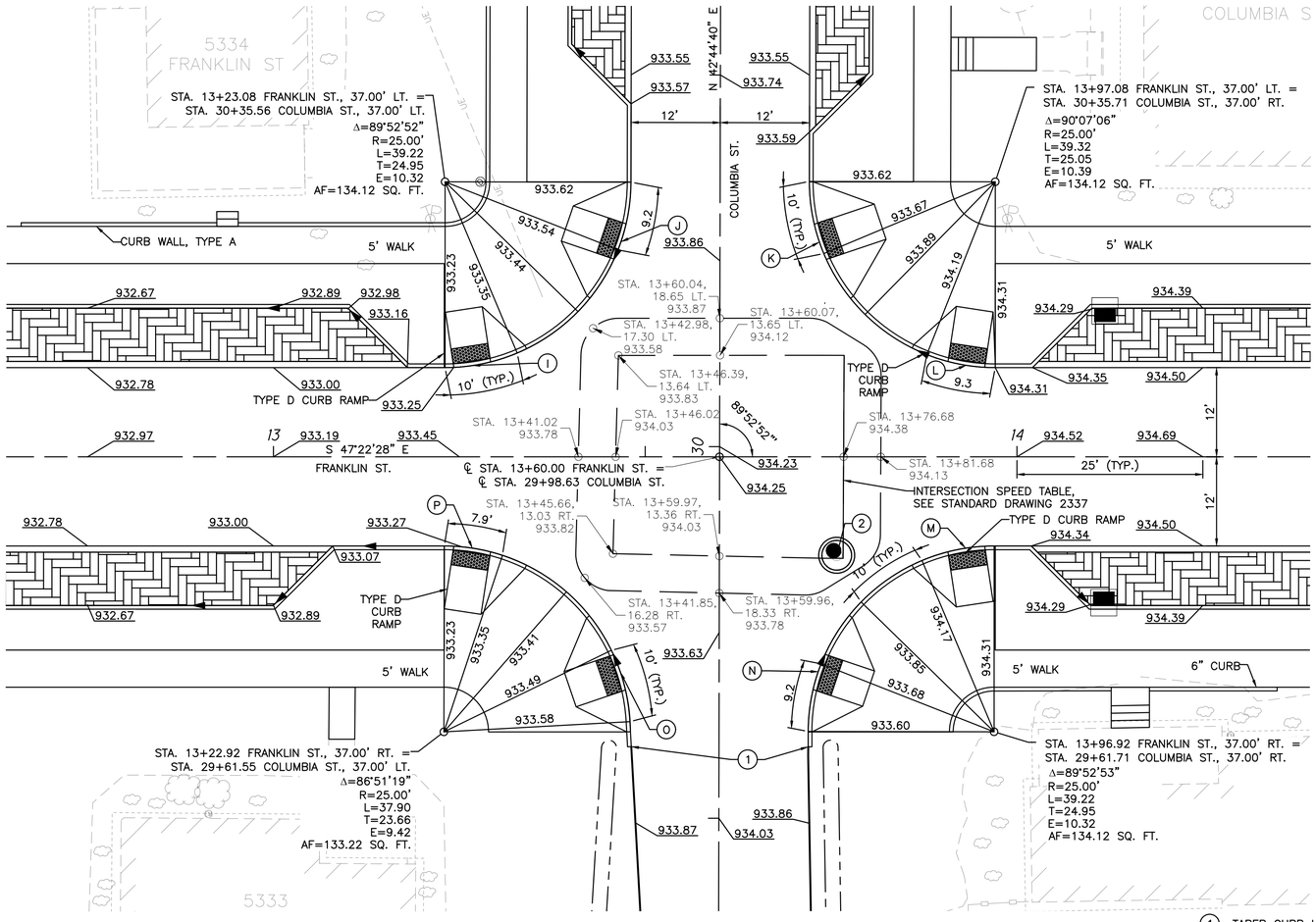
INTERSECTION DETAILS

FRANKLIN ST. & ALLEY SE OF MAIN ST.

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

P-928

45
75



FRANKLIN STREET AT COLUMBIA STREET
SCALE 1" = 10'

ALL CURB RAMPS ARE TYPE A, UNLESS OTHERWISE NOTED.
FOLLOW CITY OF HILLIARD STANDARD DRAWING CR-1.
ALL ELEVATIONS SHOWN ARE PAVEMENT ELEVATIONS UNLESS OTHERWISE NOTED.

(1) TAPER CURB HEIGHT FROM 0" TO 6" IN 2'.

(2) RECONSTRUCT THE MANHOLE USING AN ECCENTRIC CONE TOP TO POSITION THE LID AS CLOSE TO THE TOP OF THE SPEED TABLE AS POSSIBLE. ADJUST THE LENGTH OF THE TABLE TO ACCOMMODATE THE RECONSTRUCTED MANHOLE. ENSURE THAT ALL SIDES OF THE MANHOLE HAVE A MINIMUM OF 2" OF LEVEL ASPHALT BEFORE BEGINNING THE SPEED TABLE TAPER.

RAMP ℄ LOCATIONS

RAMP	CENTERLINE	STATION	OFFSET	SIDE
I	FRANKLIN ST.	13+26.79	12.28'	LT.
J	COLUMBIA ST.	30+27.54	13.32'	LT.
K	COLUMBIA ST.	30+27.55	13.37'	RT.
L	FRANKLIN ST.	13+93.17	12.31'	LT.
M	FRANKLIN ST.	13+93.09	12.30'	RT.
N	COLUMBIA ST.	29+69.75	13.33'	RT.
O	COLUMBIA ST.	29+69.64	13.29'	LT.
P	FRANKLIN ST.	13+26.75	12.29'	RT.

NORTH

HORIZONTAL SCALE IN FEET
0 5 10 20

CALCULATED ESD
CHECKED NGF

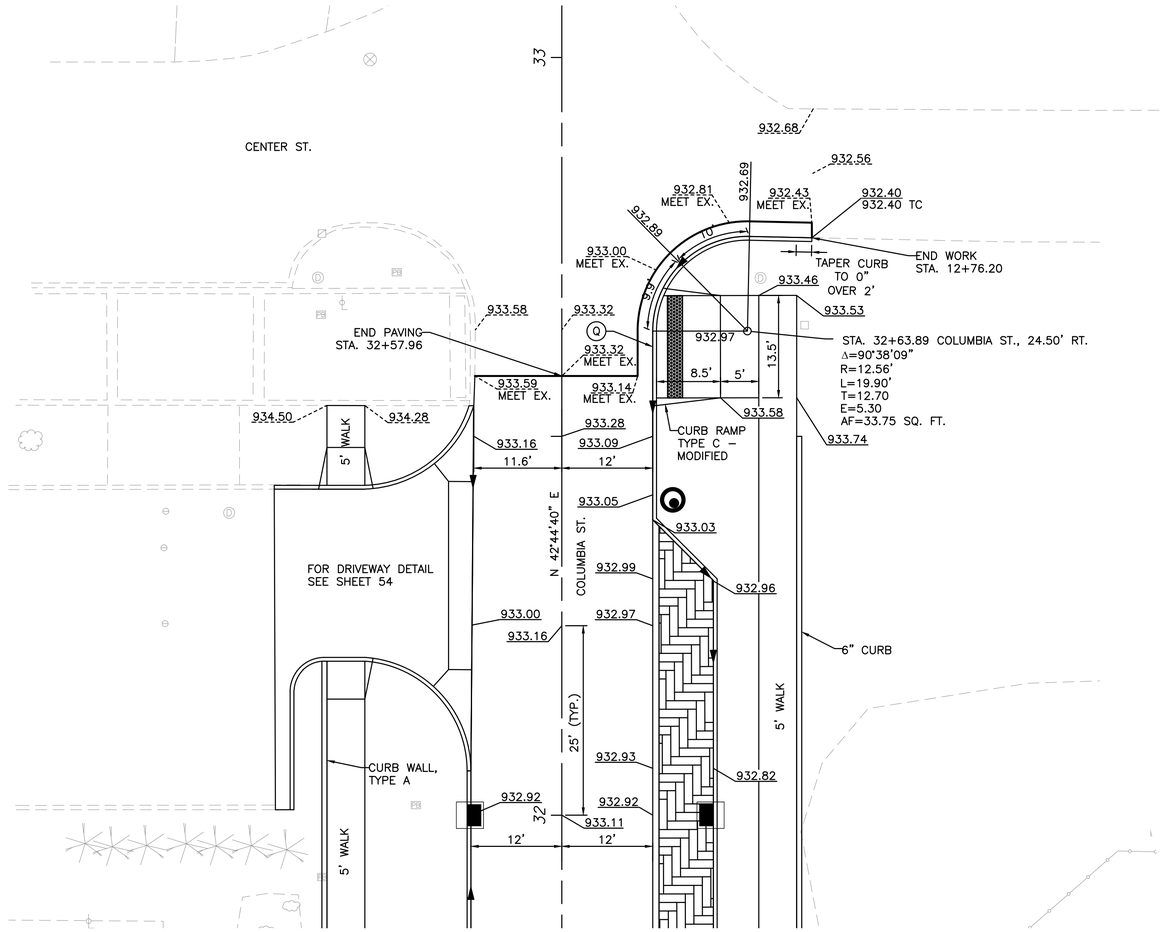
INTERSECTION DETAILS

FRANKLIN ST. & COLUMBIA ST.

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

P-928

46
75



COLUMBIA STREET AT CENTER STREET
SCALE 1" = 10'

FOLLOW CITY OF HILLIARD STANDARD DRAWING CR-1.
ALL ELEVATIONS SHOWN ARE PAVEMENT ELEVATIONS UNLESS OTHERWISE NOTED.

RAMP ℄ LOCATIONS

RAMP	STATION	OFFSET	SIDE
Q	32+61.81	12.00'	RT.

NORTH

0 5 10 20
HORIZONTAL
SCALE IN FEET

CALCULATED ESD
CHECKED NGF

INTERSECTION DETAILS

COLUMBIA ST. & CENTER ST.

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

P-928

47
75

Layout Tab Name: 40 INTERSECTION DETAILS; Images: , Xrefs: 076347-BP001.dwg; 076347-BP002.dwg; 76347_BE001 – Removal.dwg; Parcel 12 Exhibit.dwg; 076347-BU100-GPD Working.dwg; 2019-02-04_Columbia Gas Relocation.dwg
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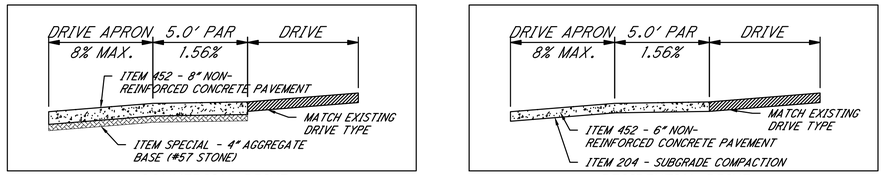
PAVEMENT BUILD-UP TO BACK OF WALK



COMMERCIAL DRIVE

RESIDENTIAL DRIVE

PAVEMENT BUILD-UP FROM BACK OF WALK TO TIE IN

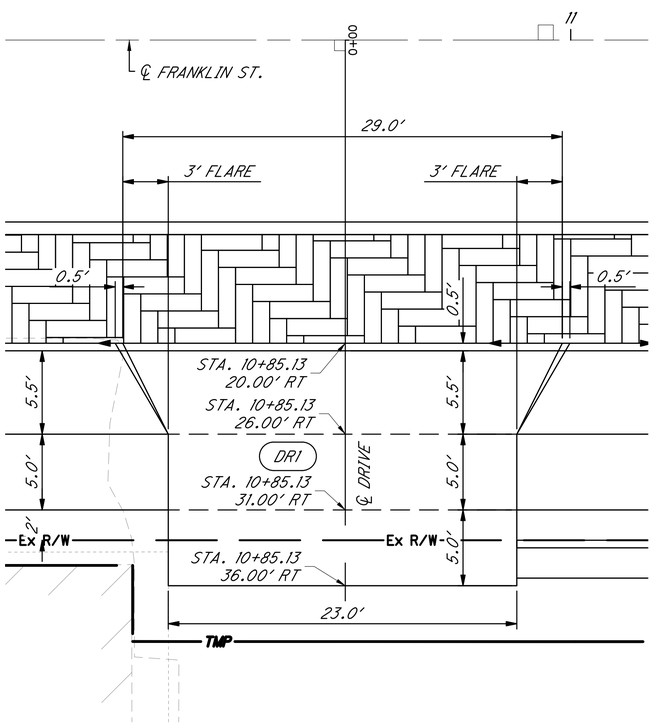
RESIDENTIAL DRIVE - CONCRETE
ITEM 452 - 6" NON-REINFORCED CONCRETE PAVEMENT

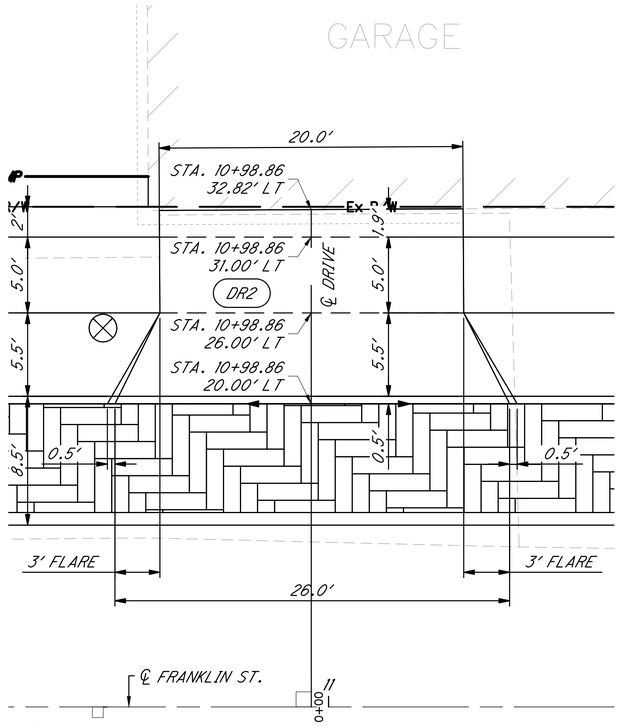
RESIDENTIAL DRIVE - ASPHALT
ITEM 441 - 2" AC SURFACE COURSE, TYPE 1 (448), PG64-22 ON
ITEM 304 - 6" AGGREGATE BASE

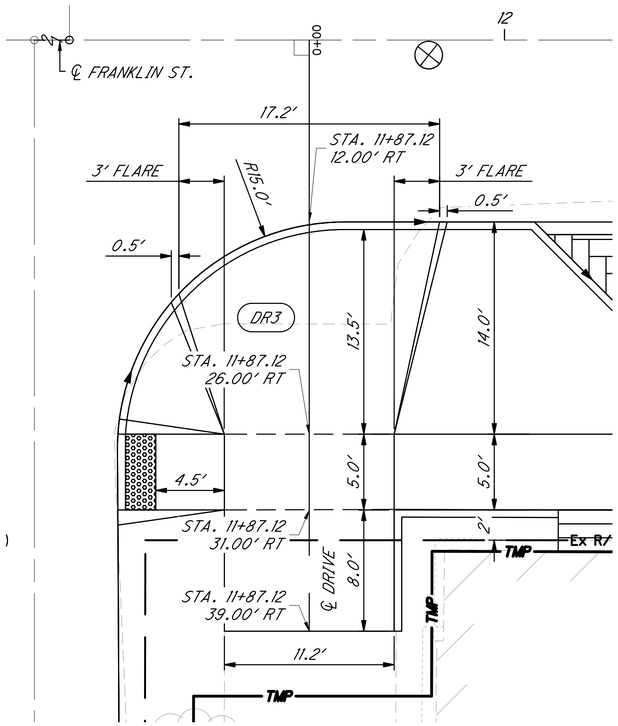
RESIDENTIAL DRIVE - BRICK
ITEM SPEC - BRICK PAVERS ON
ITEM SPEC - 1" (5:1) SAND/CEMENT LEVELING COURSE ON
ITEM 1525 - AGGREGATE BASE, NO. 57 STONE (T=4")

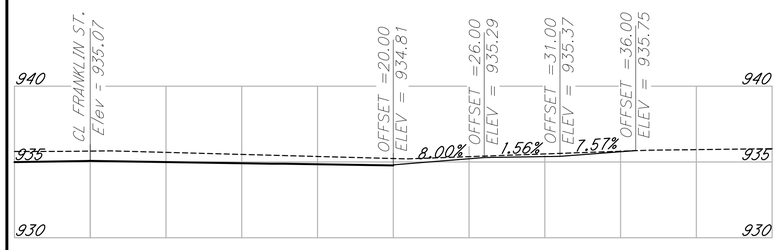
COMMERCIAL DRIVE - CONCRETE
ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT

COMMERCIAL DRIVE - ASPHALT
ITEM 441 - 1.25" AC SURFACE COURSE, TYPE 1 (448), PG64-22 ON
ITEM 407 - TACK COAT, AS PER PLAN ON
ITEM 441 - 1.75" AC INTERMEDIATE COURSE, TYPE 2 (448) ON
ITEM 304 - 8" AGGREGATE BASE

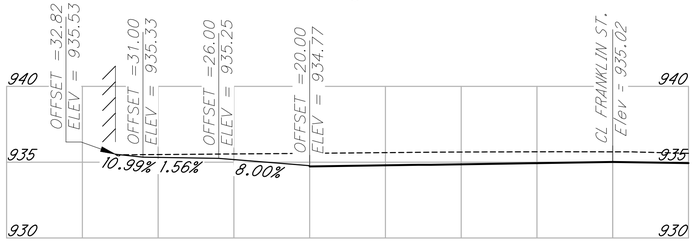




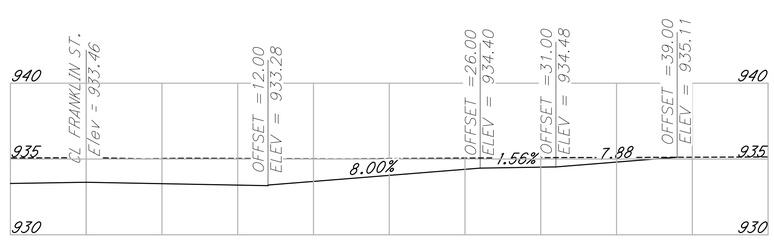




COMMERCIAL DRIVE (EX. ASPHALT)
STA. 10+85.13 RT (FRANKLIN ST.)
3988-3996 MAIN ST.



RESIDENTIAL DRIVE (EX. ASPHALT)
STA. 10+98.86 LT (FRANKLIN ST.)
4002 MAIN ST.



RESIDENTIAL DRIVE (EX. BRICK)
STA. 11+87.12 RT (FRANKLIN ST.)
5341 FRANKLIN ST.

USE CITY OF COLUMBUS DROP CURB AT DRIVE ENTRANCES. SEE CITY OF COLUMBUS STANDARD DRAWINGS 2201 AND 2203. ELEVATIONS MEASURED FROM TOP OF THE DROP-CURB.

NORTH

HORIZ. 0 5 10
VERTICAL SCALE 0 2.5 5 10

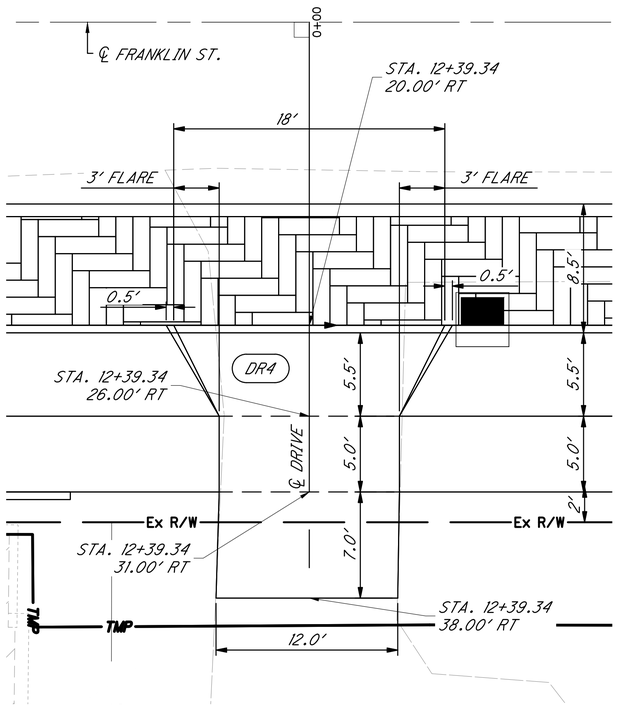
CALCULATED ESD
CHECKED NGF

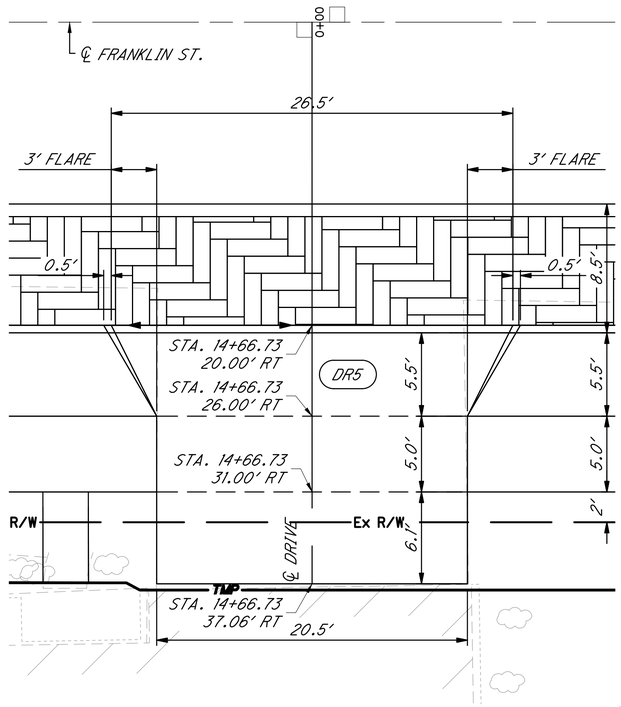
FRANKLIN ST. DRIVEWAY DETAILS

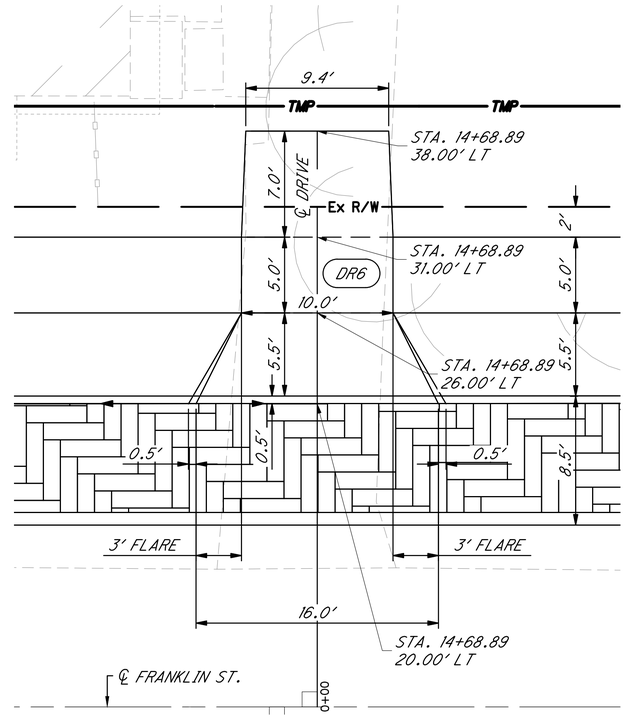
CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

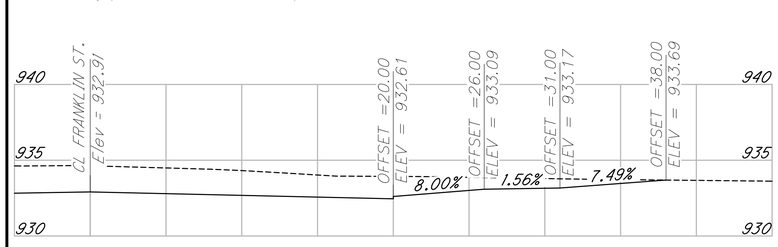
P-928

48
75

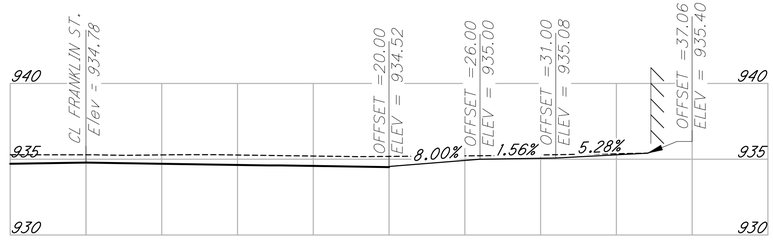




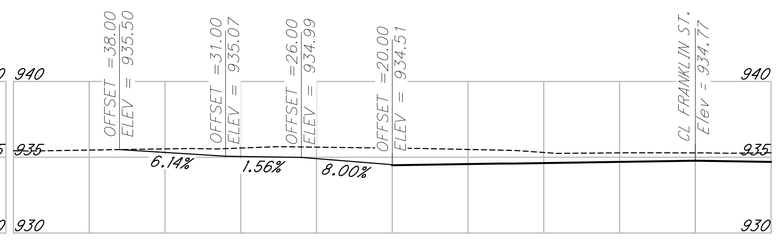




RESIDENTIAL DRIVE (EX. ASPHALT)
STA. 12+39.34 RT (FRANKLIN ST.)
5333 FRANKLIN ST.



RESIDENTIAL DRIVE (EX. ASPHALT)
STA. 14+66.73 RT (FRANKLIN ST.)
3966 COLUMBIA ST.



RESIDENTIAL DRIVE (EX. ASPHALT)
STA. 14+68.89 LT (FRANKLIN ST.)
3990 COLUMBIA ST.

USE CITY OF COLUMBUS DROP CURB AT DRIVE ENTRANCES. SEE CITY OF COLUMBUS STANDARD DRAWINGS 2201 AND 2203. ELEVATIONS MEASURED FROM THE TOP OF THE DROP-CURB.

SEE SHEET 48 FOR PAVEMENT BUILDUP.

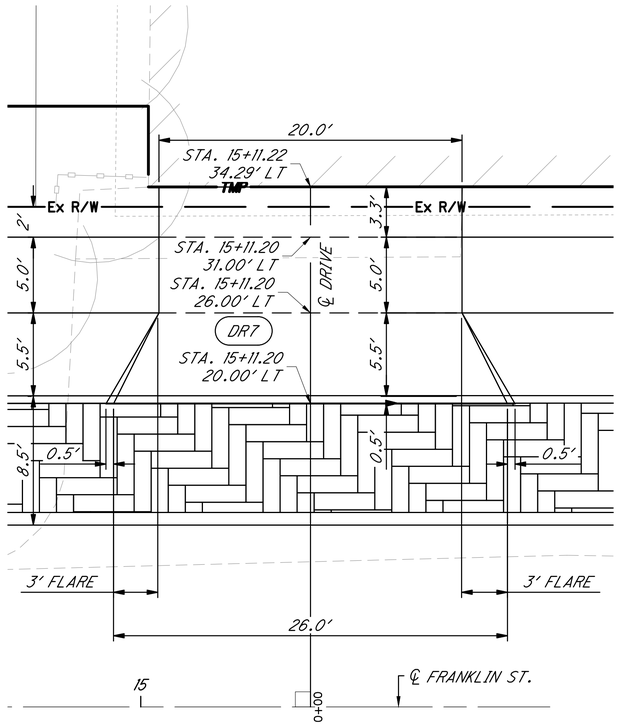
NORTH

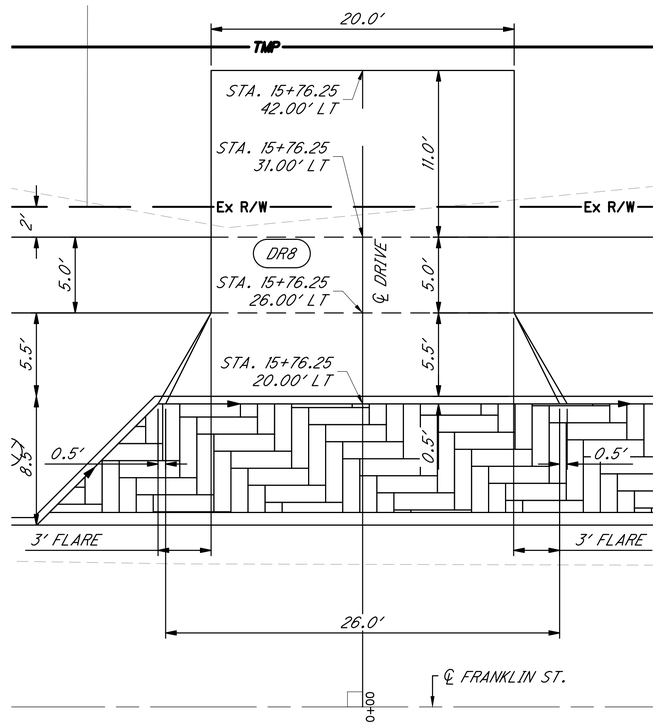
HORIZ. 0 5 10
VERTICAL SCALE 0 2.5 5 10

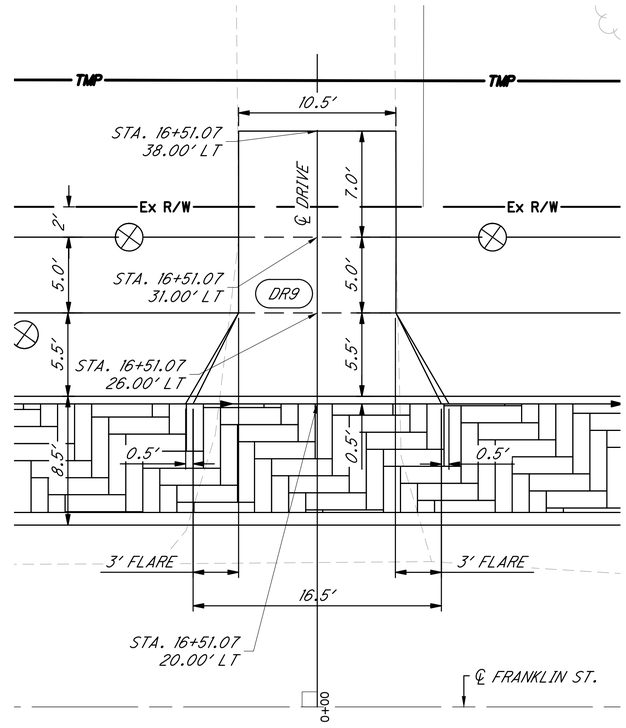
CALCULATED ESD
CHECKED NGF

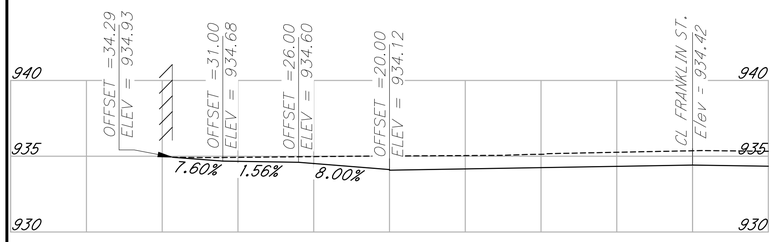
FRANKLIN ST. DRIVEWAY DETAILS

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

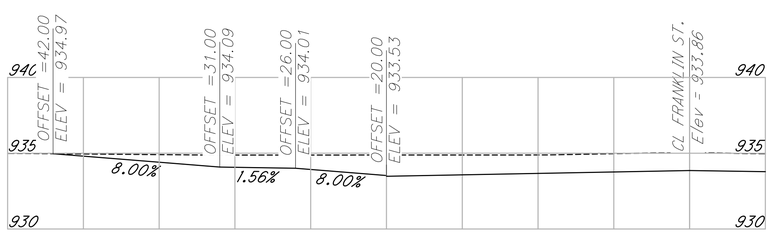




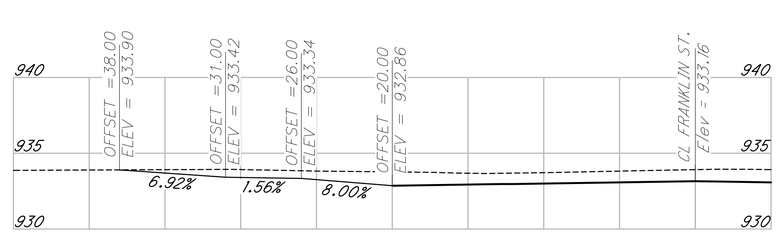




RESIDENTIAL DRIVE (EX. ASPHALT)
STA. 15+11.20 LT (FRANKLIN ST.)



RESIDENTIAL DRIVE (EX. ASPHALT)
STA. 15+76.25 LT (FRANKLIN ST.)



RESIDENTIAL DRIVE (EX. ASPHALT)
STA. 16+51.07 LT (FRANKLIN ST.)
5300 FRANKLIN ST.

USE CITY OF COLUMBUS DROP CURB AT DRIVE ENTRANCES. SEE CITY OF COLUMBUS STANDARD DRAWINGS 2201 AND 2203. ELEVATIONS MEASURED FROM THE TOP OF THE DROP-CURB.

SEE SHEET 48 FOR PAVEMENT BUILDUP.

HORIZ. 0 2.5 5 10
VERTICAL SCALE 0 2.5 5 10

CALCULATED ESD
CHECKED NGF

FRANKLIN ST. DRIVEWAY DETAILS

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

Layout Tab Name: 43 FRANKLIN ST. DRIVEWAY DETAILS, Images: , Xrefs: 076347-BP001.dwg; 076347-BR001.dwg; 76347_BE001 - Removal.dwg; 076347-BP002.dwg; Parcel 12 Exhibit.dwg; 076347-BU100-GPD Working.dwg; 2019-02-04_Columbia Gas Relocation.dwg
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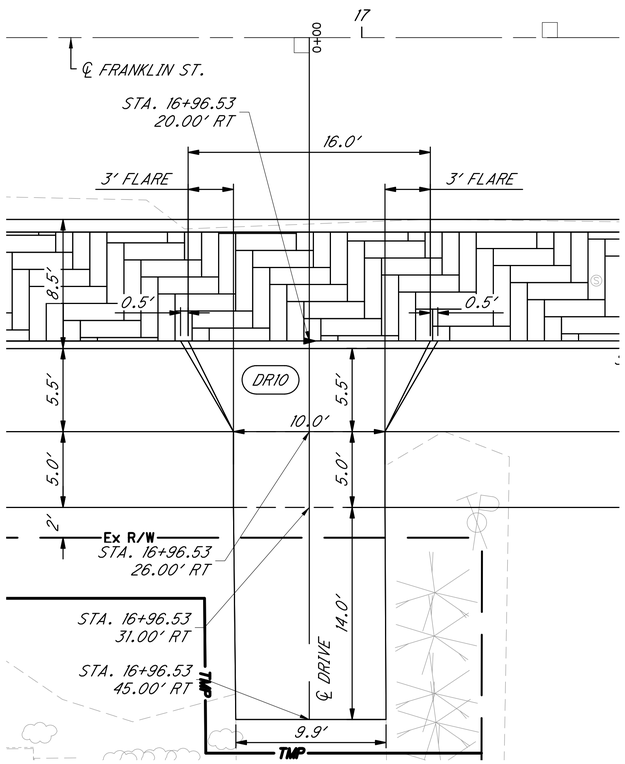
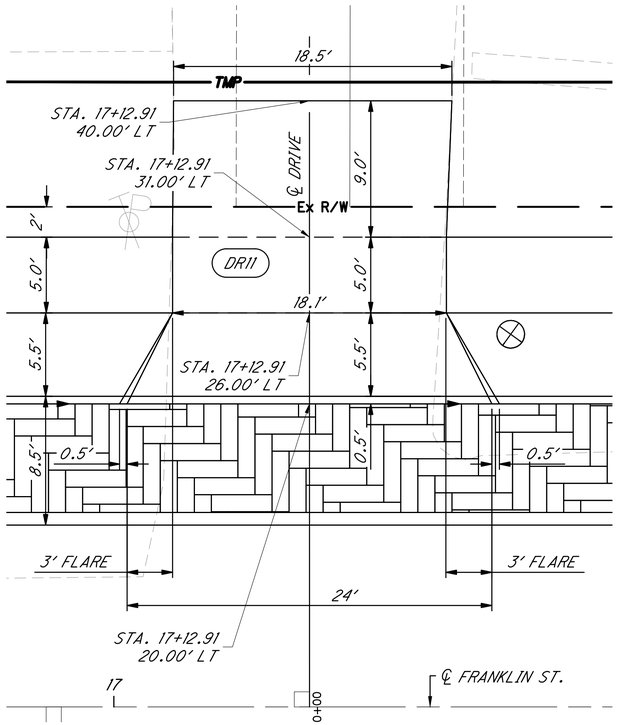
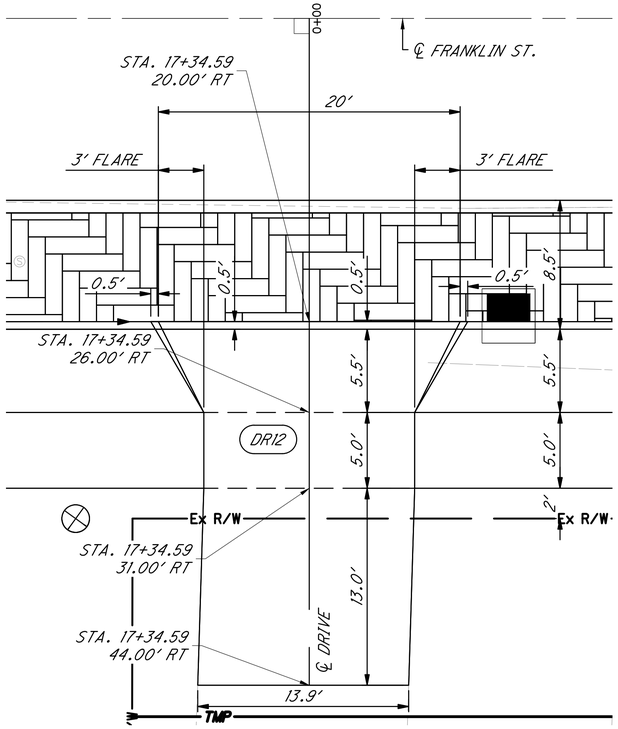
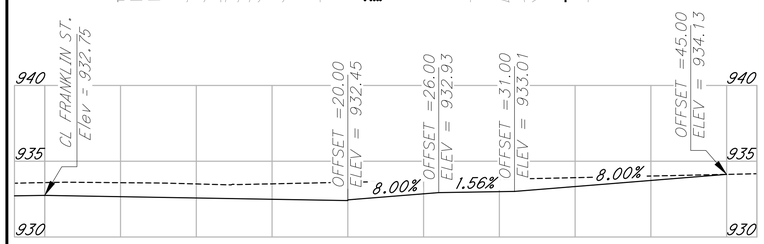
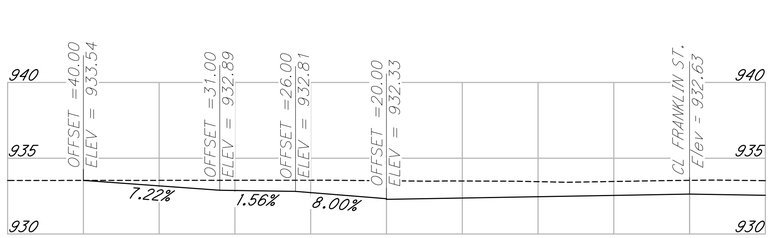




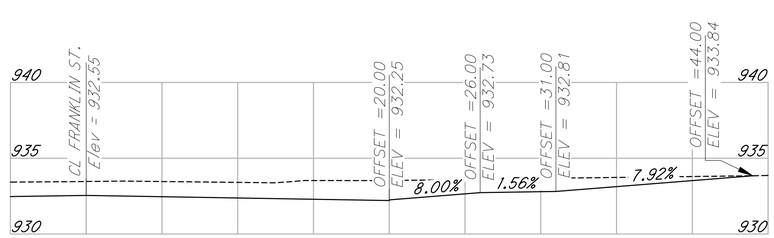




RESIDENTIAL DRIVE (EX. CONCRETE)
STA. 16+96.53 RT (FRANKLIN ST.)
5301 FRANKLIN ST.



RESIDENTIAL DRIVE (EX. ASPHALT)
STA. 17+12.91 LT (FRANKLIN ST.)
5298 FRANKLIN ST. AND 5294 FRANKLIN ST.



RESIDENTIAL DRIVE (EX. CONCRETE)
STA. 17+34.59 RT (FRANKLIN ST.)
5293 FRANKLIN ST.

USE CITY OF COLUMBUS DROP CURB AT DRIVE ENTRANCES. SEE CITY OF COLUMBUS STANDARD DRAWINGS 2201 AND 2203. ELEVATIONS MEASURED FROM THE TOP OF THE DROP-CURB.

SEE SHEET 48 FOR PAVEMENT BUILDUP.

NORTH

HORIZ. 0 5 10
VERTICAL SCALE 0 2.5 5 10

CALCULATED ESD
CHECKED NGF

FRANKLIN ST. DRIVEWAY DETAILS

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

Layout Tab Name: FRANKLIN ST. DRIVEWAY DETAILS, Images: , Xrefs: 076347-BP001.dwg; 076347-BP002.dwg; Parcel 12 Exhibit.dwg; 076347-BU100-GPD Working.dwg; 2019-02-04_Columbia Gas Relocation.dwg
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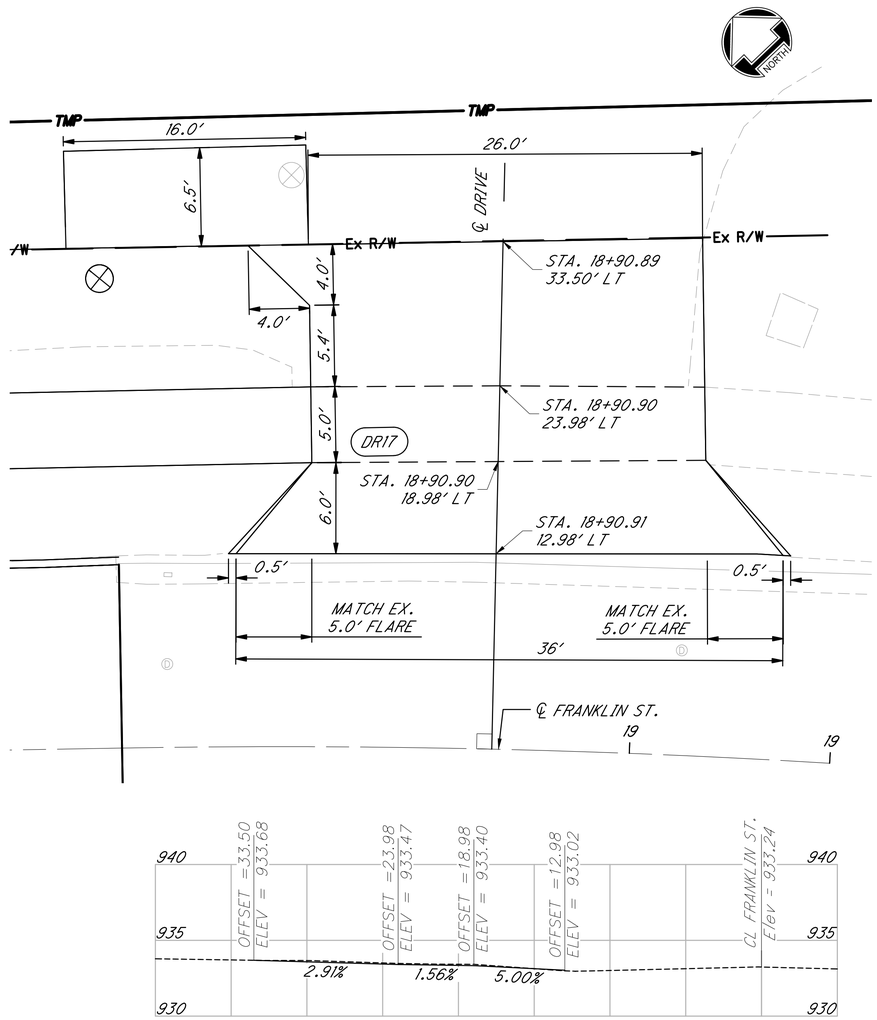


COMMERCIAL DRIVE (EX. ASPHALT)
STA. 18+90.88 LT (FRANKLIN ST.)

USE CITY OF COLUMBUS DROP CURB AT DRIVE ENTRANCES. SEE CITY OF COLUMBUS STANDARD DRAWINGS 2201 AND 2203. ELEVATIONS MEASURED FROM THE TOP OF THE DROP-CURB.

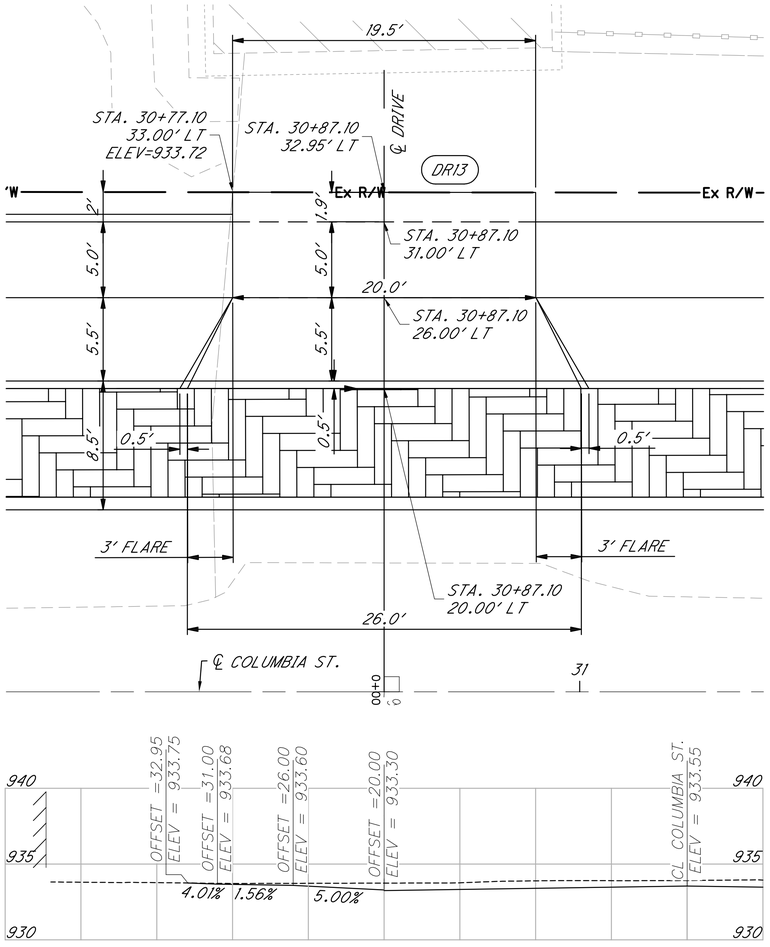
SEE SHEET 48 FOR PAVEMENT BUILDUP.

HORIZ. 0 5 10
VERTICAL SCALE 0 2.5 5 10

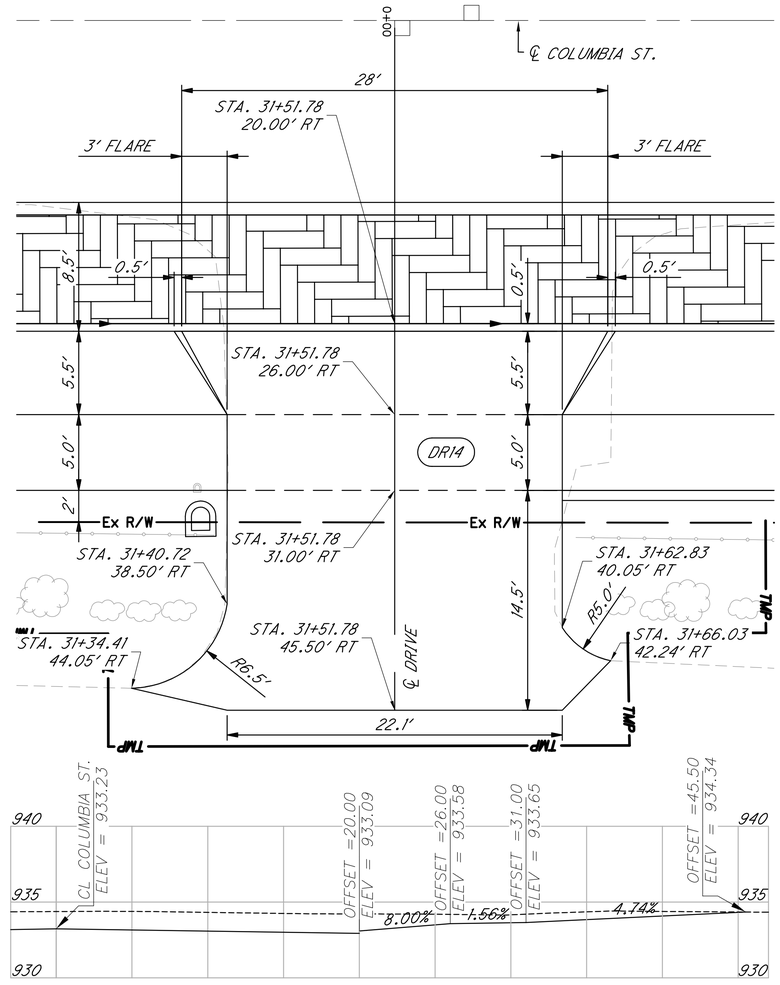
CALCULATED ESD
CHECKED NGF

FRANKLIN ST. DRIVEWAY DETAILS

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)



RESIDENTIAL DRIVE (EX. ASPHALT)
STA. 30+87.10 LT (COLUMBIA ST.)
5334 FRANKLIN ST.



COMMERCIAL DRIVE (EX. ASPHALT)
STA. 31+51.78 RT (COLUMBIA ST.)
3996 COLUMBIA ST.

USE CITY OF COLUMBUS DROP CURB AT DRIVE ENTRANCES. SEE CITY OF COLUMBUS STANDARD DRAWINGS 2201 AND 2203. ELEVATIONS MEASURED FROM THE TOP OF THE DROP-CURB.

SEE SHEET 48 FOR PAVEMENT BUILDUP.

NORTH

HORIZ. 0 2.5 5 10
VERTICAL SCALE 0 2.5 5 10

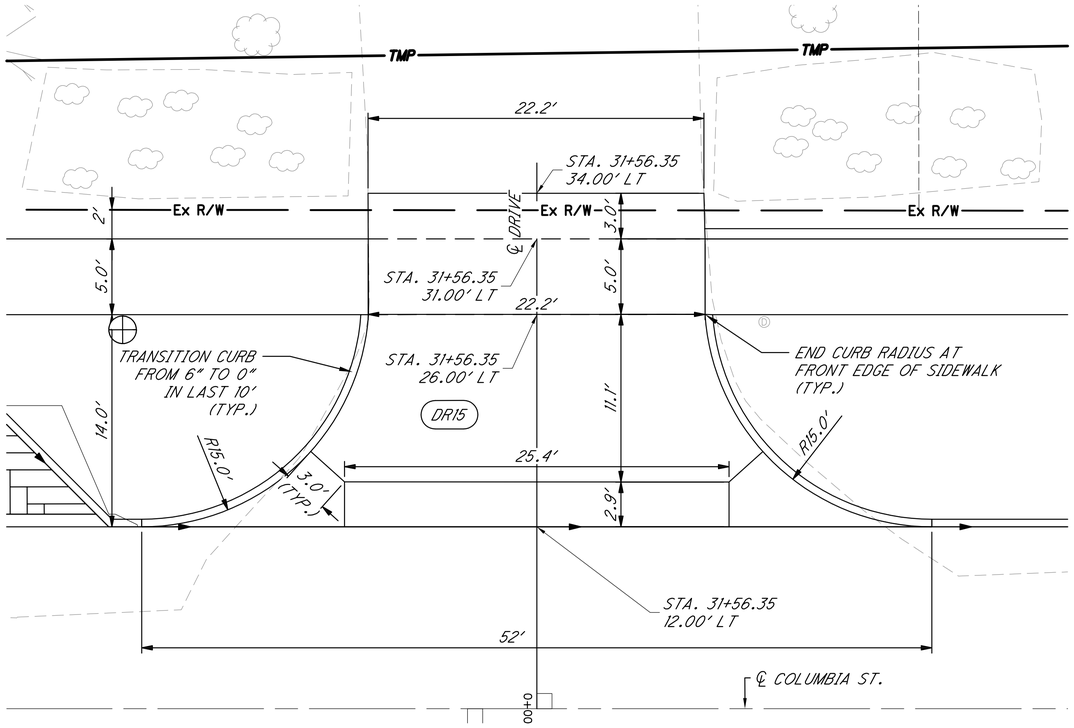
CALCULATED ESD
CHECKED NGF

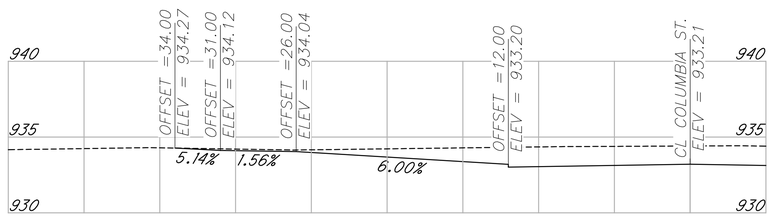
COLUMBIA ST. DRIVEWAY DETAILS

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

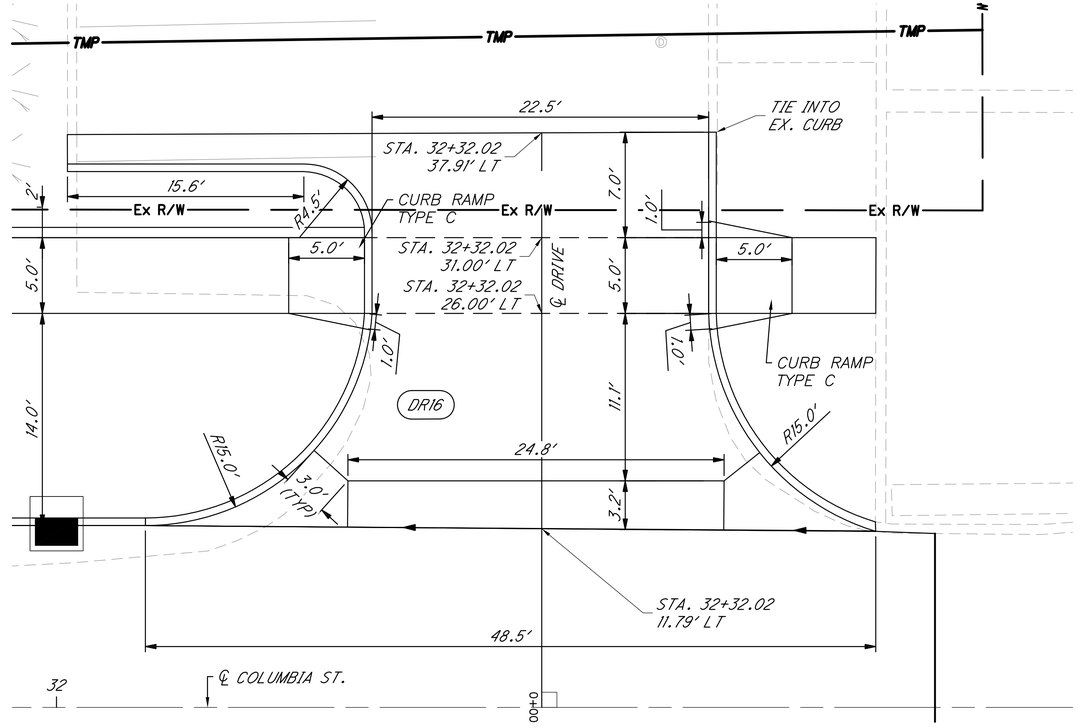
P-928

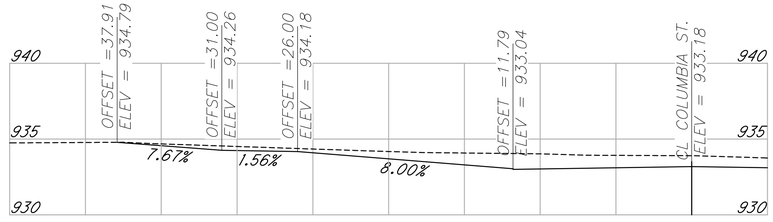
53
75





COMMERCIAL DRIVE (EX. ASPHALT)
STA. 31+56.35 LT (COLUMBIA ST.)





COMMERCIAL DRIVE (EX. ASPHALT)
STA. 32+32.02 LT (COLUMBIA ST.)

USE CITY OF COLUMBUS DROP CURB AT DRIVE ENTRANCES. SEE CITY OF COLUMBUS STANDARD DRAWINGS 2201 AND 2203. ELEVATIONS MEASURED FROM THE TOP OF THE DROP-CURB.

SEE SHEET 48 FOR PAVEMENT BUILDUP.

NORTH

HORIZ. 0 2.5 5 10
VERTICAL SCALE 0 2.5 5 10

CALCULATED ESD
CHECKED NGF

COLUMBIA ST. DRIVEWAY DETAILS

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

Layout Tab Name: COLUMBIA ST. DRIVEWAY DETAILS, Images: , Xrefs: 076347-BP001.dwg; 076347-BR001.dwg; 76347_BE001 - Removal.dwg; 076347-BP002.dwg; Parcel 12 Exhibit.dwg; 076347-BU100-GPD Working.dwg; 2019-02-04_Columbia Gas Relocation.dwg
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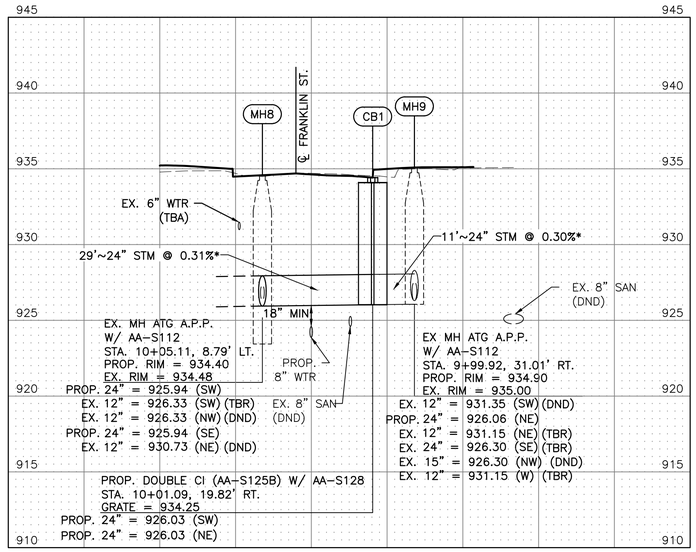
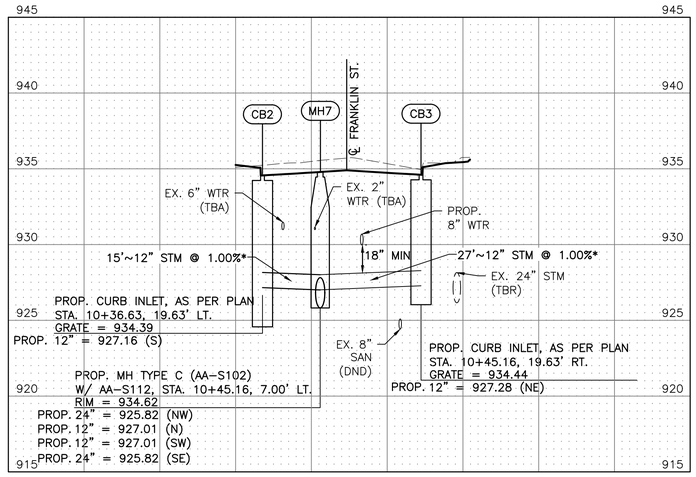
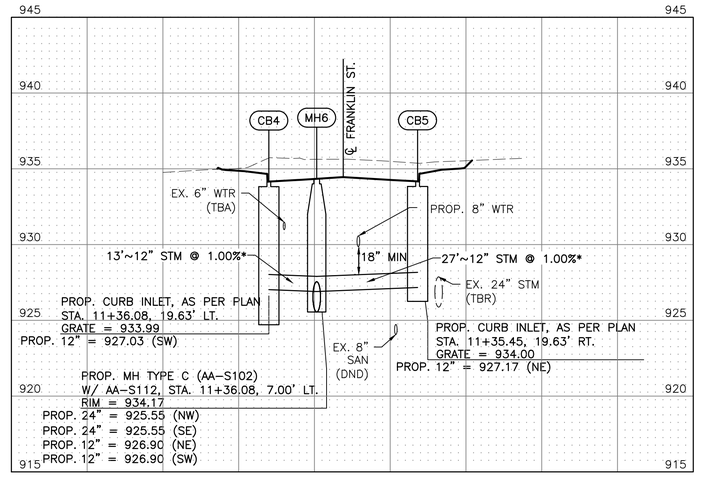


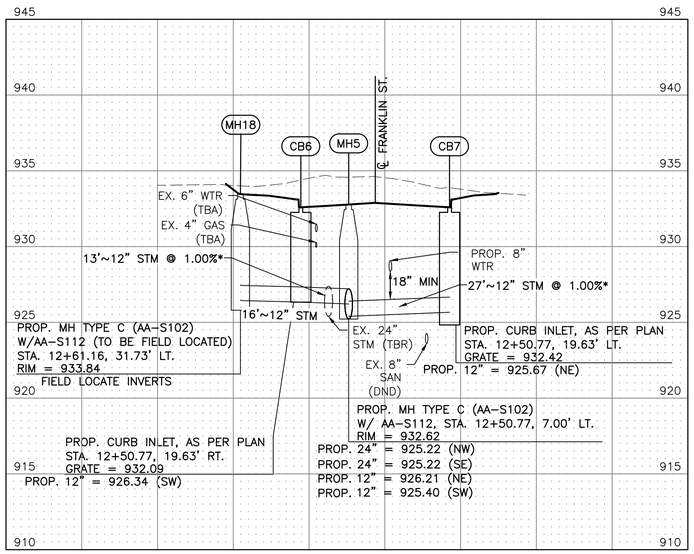
FOR PLANVIEW, SEE SHEET 18



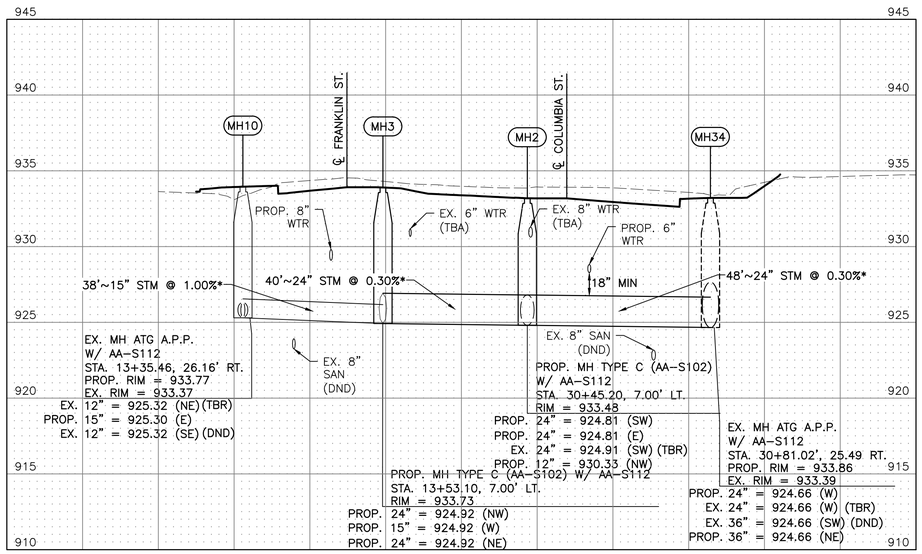
FOR PLANVIEW, SEE SHEET 18



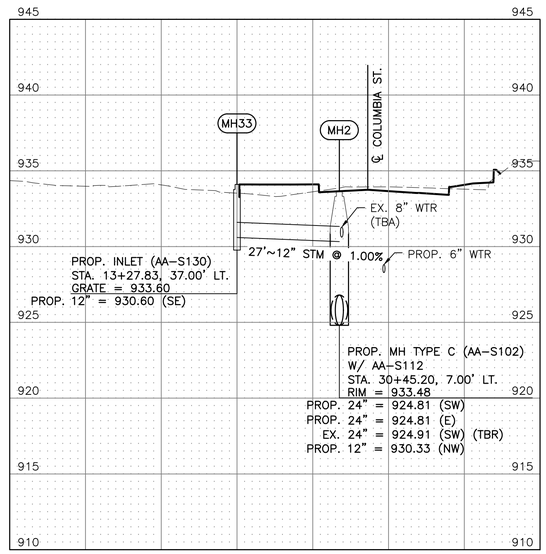
FOR PLANVIEW, SEE SHEET 18



FOR PLANVIEW, SEE SHEET 18



FOR PLANVIEW, SEE SHEET 18



FOR PLANVIEW, SEE SHEET 18

* – COMPACTED BACKFILL PER ITEM 912, COMPACTED GRANULAR MATERIAL

NORTH

HORIZ. 0 10 20 40
VERTICAL SCALE 0 10 20 40

CALCULATED ESD
CHECKED NGF

STORM PROFILE

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

P-928

55
75

Layout Tab Name: 47 STORM PROFILE, Images: , Xrefs: 076347-BU001.dwg; 076347-BP001.dwg; 076347-BU200-GPD Working-2.dwg; 76347_BE001.dwg
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Plotted By:Keating, Matthew Plotted:June 3, 2019, 4:08:28 PM
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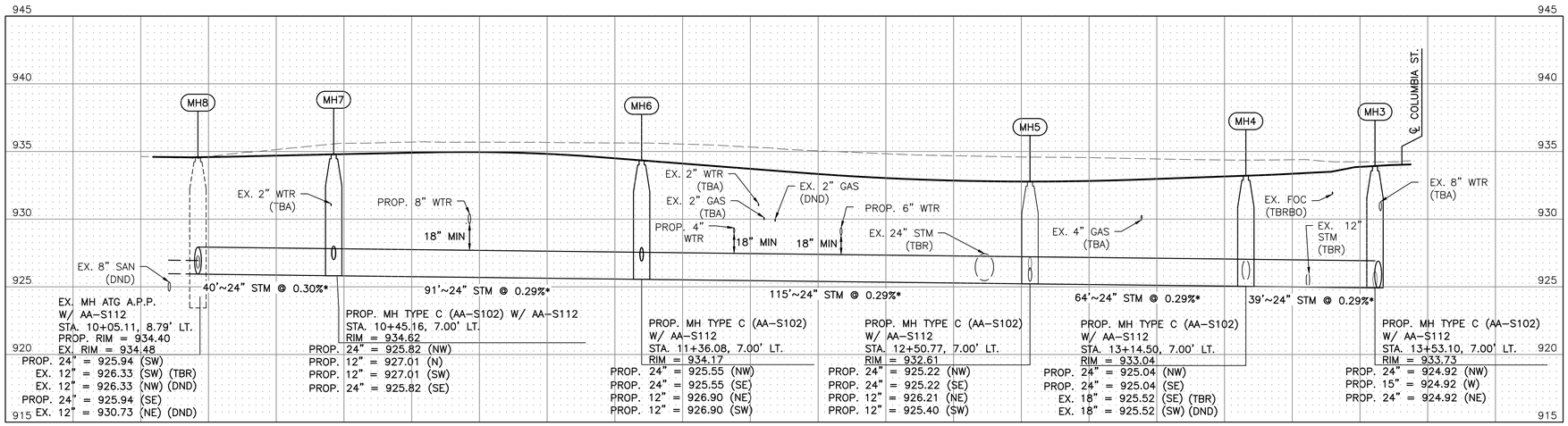
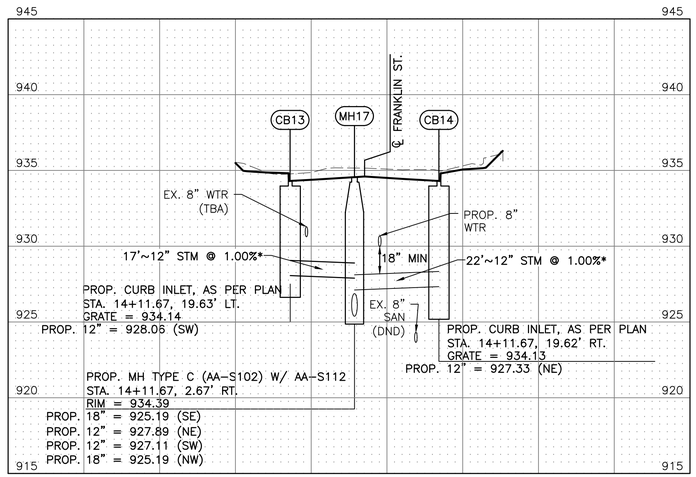
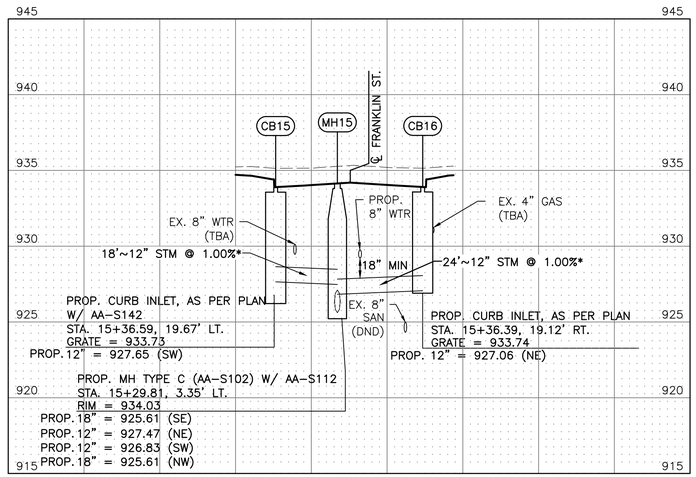


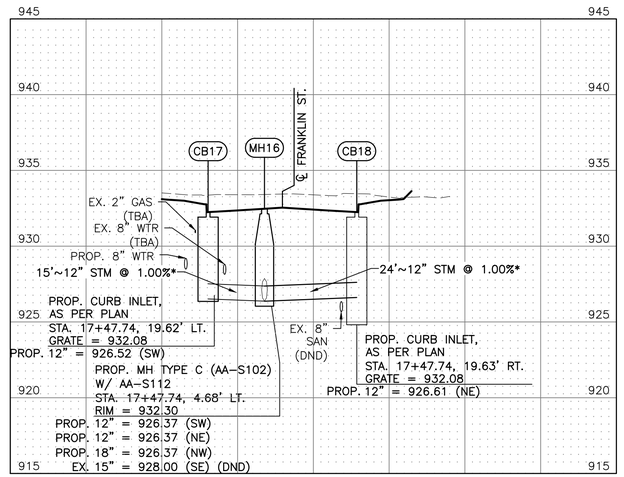
FOR PLANVIEW, SEE SHEET 18



FOR PLANVIEW, SEE SHEET 18



FOR PLANVIEW, SEE SHEET 20



FOR PLANVIEW, SEE SHEET 20

* – COMPACTED BACKFILL PER ITEM 912, COMPACTED GRANULAR MATERIAL

NORTH

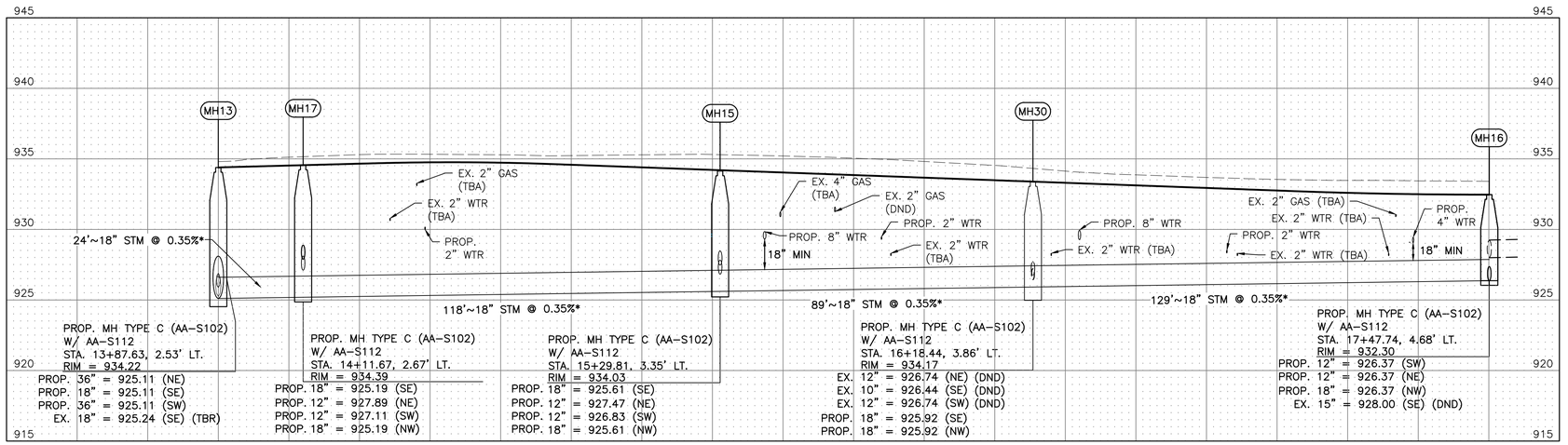
HORIZ. 0 20 40
VERTICAL SCALE 0 10 20 40

CALCULATED ESD
CHECKED NGF

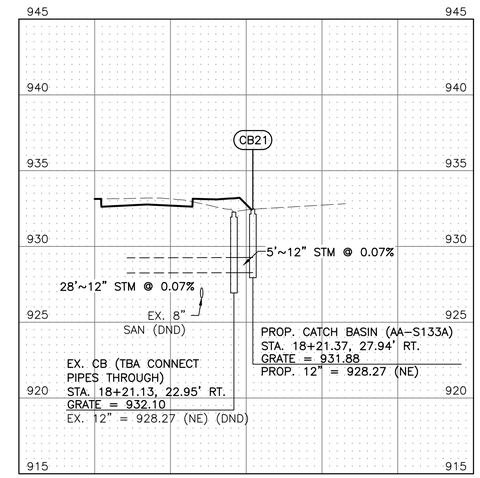
STORM PROFILE

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

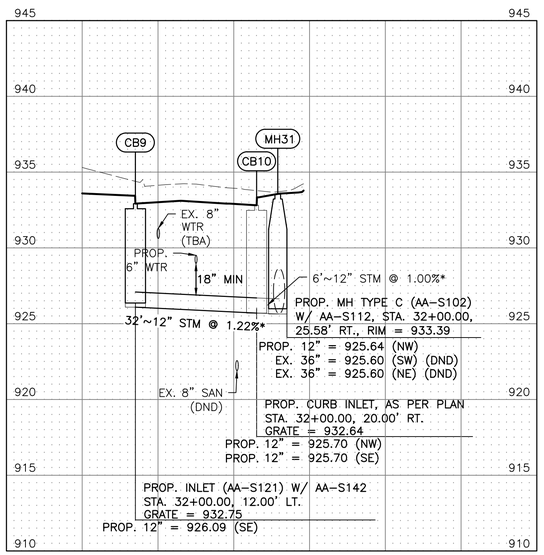
P-928



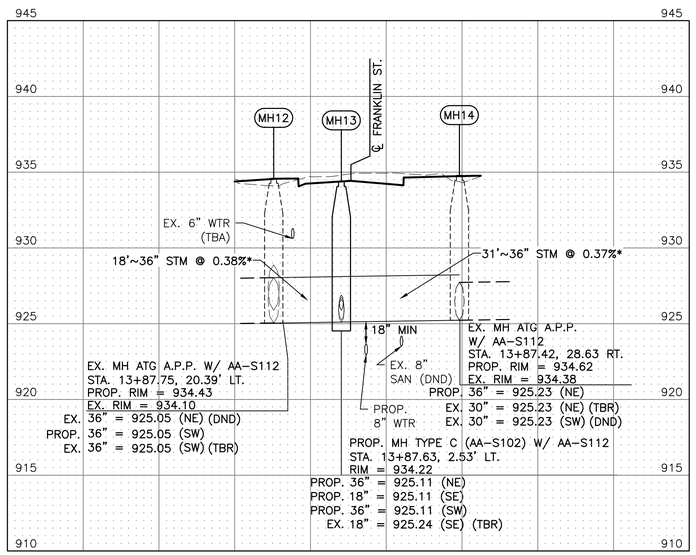
FOR PLANVIEW, SEE SHEET 18 – 20



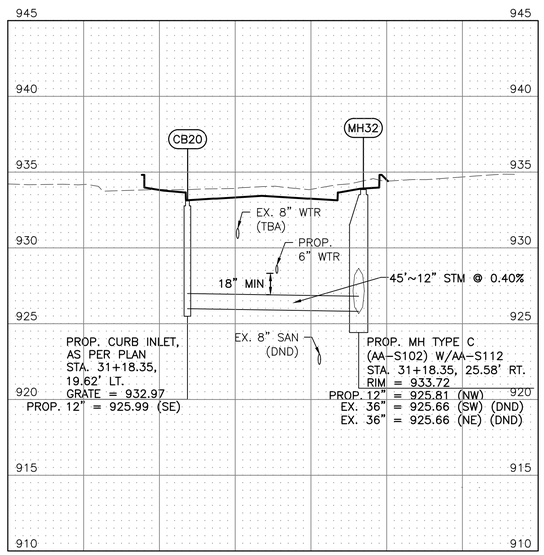
FOR PLANVIEW, SEE SHEET 20



FOR PLANVIEW, SEE SHEET 22



FOR PLANVIEW, SEE SHEET 18



FOR PLANVIEW, SEE SHEET 22

* – COMPACTED BACKFILL PER ITEM 912, COMPACTED GRANULAR MATERIAL

NORTH

HORIZ. 0 20 40
VERTICAL SCALE 0 10 40

CALCULATED ESD
CHECKED NGF

STORM PROFILE

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

P-928

57
75

Layout Tab Name: 49 STORM PROFILE, Images: , Xrefs: 076347-BU001.dwg; 076347-BP001.dwg; 076347-BU200-GPD Working-2.dwg; 76347_BE001.dwg
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G:\DE\Clients\OH_City_of_Hilliard\076347_FranklinSt\00138_FRANKLIN_ST\Design\Roadway\Sheets\76347_DF001.dwg Plotted By:Keating, Matthew Plotted:June 3, 2019, 4:09:06 PM

CITY OF HILLIARD - GENERAL NOTES FOR WATER LINES

1. CITY OF COLUMBUS WATER DIVISION PERSONNEL ARE TO OPERATE ALL WATER VALVES.

2. ANY MODIFICATION OF THE WORK AS SHOWN ON THESE DRAWINGS MUST HAVE PRIOR WRITTEN APPROVAL BY THE HILLIARD CITY ENGINEER AND THE ADMINISTRATOR, DIVISION OF WATER, CITY OF COLUMBUS.

3. ALL WATER LINE MATERIALS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE CURRENT RULES AND REGULATIONS OF THE CITY OF COLUMBUS, DIVISION OF WATER.

4. NO PERSON SHALL BEGIN CONSTRUCTION OR INSTALLATION OF A PUBLIC WATER MAIN UNTIL PLANS HAVE BEEN APPROVED BY THE STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA).

5. APPROVAL OF THESE PLANS IS CONTINGENT UPON THE CITY OF HILLIARD SECURING AN EASEMENT THAT WILL HOLD THE CITY OF COLUMBUS HARMLESS FOR DAMAGES RESULTING FROM MAINTENANCE WORK AND/OR WATER DAMAGES THAT COULD BE ASSOCIATED WITH THIS WATER LINE. PRIOR TO APPROVAL OF THE PLAN BY THE ADMINISTRATOR, DIVISION OF WATER, ALL EASEMENTS REQUIRED FOR WATER MAIN CONSTRUCTION SHALL BE SECURED AND RECORDED.

7. WATER LINES SHALL BE LAID WITH A MINIMUM OF 4 FEET 0 INCHES FROM THE FINISHED SURFACE GRADE TO THE TOP OF THE WATER LINE.

8. ALL BENDS, JOINTS DEFLECTIONS AND FITTINGS SHALL BE BACKED WITH CONCRETE PER CITY OF COLUMBUS STANDARDS.

9. ALL WATER LINES SHALL MAINTAIN AT LEAST TEN (10) FEET HORIZONTAL AND ONE & ONE-HALF (1.5) FEET VERTICAL SEPARATION FROM ALL SANITARY OR STORM SEWER LINES UNLESS NOTED OTHERWISE IN PLANS.

10. ALL DUCTILE IRON WATER MAINS SHALL BE WRAPPED WITH TUBE STYLE 8 MIL LINEAR LOW DENSITY POLYETHYLENE (LLDPE) FILM IN ACCORDANCE WITH STANDARD DRAWINGS L-1003 AND L-1004.

11. IN CASE OF CONFLICT IN GRADE BETWEEN WATER LINES AND SEWERS, THE WATER LINE SHALL BE LOWERED DURING CONSTRUCTION. WATER LINES SHALL BE DEFLECTED AROUND STRUCTURES WITHOUT THE USE OF SPECIAL FITTINGS, WHERE POSSIBLE, WITHOUT EXCEEDING THE MANUFACTURE'S ALLOWABLE DEFLECTION.

13. AT ALL POINTS OF CROSSING OF WATER LINES AND SEWERS, THE TRENCH BACKFILL SHALL BE COMPACTED GRANULAR MATERIAL PER COLS ITEM 801.11, BETWEEN THE DEEPER AND SHALLOWER PIPE.

14. BACKFILL FOR WATER LINE TRENCHES UNDER PAVEMENT AND WITHIN THE RIGHT-OF-WAY SHALL BE COMPACTED GRANULAR MATERIAL, COLS ITEM 801.11, TO THE PAVEMENT SUBGRADE. WHERE WATER LINE TRENCHES CROSS THE PAVEMENT, COLS ITEM 801.11 SHALL EXTEND THE FULL WIDTH OF THE RIGHT-OF-WAY, AND TO WITHIN 6 INCHES OF FINISHED GRADE WHERE NOT UNDER PAVEMENT.

15. BACKFILL FOR WATER LINE TRENCHES PARALLEL TO THE PAVEMENT AND WITHIN THE RIGHT-OF-WAY, WITH THE TOP OF THE TRENCH 3 FEET OR CLOSER TO THE BACK OF CURB OR EDGE OF PAVEMENT OR LOCATED UNDER A PEDESTRIAN PATHWAY, SHALL BE COMPACTED GRANULAR MATERIAL, COLS ITEM 801.11, TO WITHIN 6 INCHES OF FINISHED GRADE. BACKFILL FOR ALL OTHER WATER LINE TRENCHES WITHIN THE RIGHT-OF-WAY PARALLEL TO THE PAVEMENT, SHALL BE COMPACTED BACKFILL, COLS ITEM 801.12. PRIOR TO CONSTRUCTION OF THE STREETS, THE CITY ENGINEER MAY REQUIRE SOIL TESTS ON THE BACKFILL. WHERE TEST RESULTS INDICATE THAT THE BACKFILL DOES NOT MEET COMPACTION REQUIREMENTS, THE BACKFILL SHALL BE REMOVED, REPLACED, AND RE-TESTED UNTIL MEETING THOSE REQUIREMENTS.

16. WATER SERVICE BOXES SHALL BE LOCATED BETWEEN THE CURB AND PROPOSED OR EXISTING SIDEWALK, 1 FOOT FROM THE EDGE OF THE PROPOSED OR EXISTING SIDEWALK. WHEN NO SIDEWALK IS PRESENT OR PROPOSED, WATER SERVICE BOXES SHALL BE LOCATED 2' INSIDE THE RIGHT-OF-WAY OR EASEMENT LINE. REFER TO COLS STANDARD DRAWING L-9901.

17. FIRE HYDRANTS SHALL BE INSTALLED PER COLS ITEM 809, AND SHALL MEET CITY OF HILLIARD AND NORWICH TOWNSHIP FIRE DEPARTMENT HYDRANT SPECIFICATIONS INCLUDED IN THIS PLAN.

18. ALL WATER LINES SHALL BE CLEANED AND FLUSHED IN ACCORDANCE WITH COLS ITEM 801.13 PRIOR TO HYDROSTATIC TESTING. ANY WATER MAIN 12 INCHES AND LARGER MUST ALSO BE PROPERLY PIGGED PRIOR TO HYDROSTATIC TESTING.

19. THE CONTRACTOR SHALL TEST ALL WATER LINES IN ACCORDANCE WITH COLS ITEM 801.14, WITH THE FOLLOWING EXCEPTION: 150 PSI PRESSURE SHALL BE MAINTAINED FOR AT LEAST 2 HOURS, REGARDLESS OF THE AMOUNT OF LEAKAGE. TESTING SHALL BE DONE UNDER THE SUPERVISION OF THE CITY ENGINEER OR HIS AUTHORIZED REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.

20. ALL WATER LINES SHALL BE DISINFECTED IN ACCORDANCE WITH COLS ITEM 801.15. SPECIAL ATTENTION IS DIRECTED TO APPLICABLE SECTIONS OF A.W.W.A. C-651, PARTICULARLY FOR FLUSHING (SECTION 5) AND FOR CHLORINATING VALVES AND FOR FIRE HYDRANTS (SECTION 7). COST OF WORK IS TO BE INCLUDED IN PRICE BID FOR ITEM 801.

21. WHEN WATER LINES ARE READY FOR DISINFECTING, THE CONTRACTOR SHALL SUBMIT FOUR (4) SETS OF "AS BUILT" PLANS (FULL SIZE SHEETS), AN EXCEL FILE OF THE AS-BUILT WATER LINE COORDINATES SHOWN ON THE PLAN, TWO (2) SETS OF THE COMPLETED WATER SERVICE REPORTS FOR EACH WATER SERVICE CONSTRUCTED, AND A LETTER STATING THAT THE WATER LINES HAVE BEEN PRESSURE TESTED AND NEED TO BE DISINFECTED, TO THE HILLIARD CITY ENGINEER. THE CITY OF HILLIARD WILL, IN TURN, SUBMIT A WRITTEN REQUEST FOR CHLORINATION, THREE (3) SETS OF "AS-BUILT" PLANS (FULL SIZE SHEETS ONLY), THE AS-BUILT SURVEY COORDINATES, THE WATER SERVICE REPORTS, AND THE RESULTS OF THE PRESSURE TEST TO THE CITY OF COLUMBUS, DIVISION OF WATER. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE DISINFECTING OF ALL WATER LINES CONSTRUCTED UNDER THIS PLAN.

22. SURVEY COORDINATES SHALL BE OBTAINED FOR THE COMPLETED WATER MAIN CONSTRUCTION AND SHALL INCLUDE ALL VALVES, TEES, CROSSES, BENDS, DEFLECTIONS, PLUGS, REDUCERS, TAPPING SLEEVES, BLOW OFFS, CHLORINATION TAPS, FIRE HYDRANTS, AIR RELEASES, CURB STOPS, CASING PIPE TERMINI, AND OTHER FITTINGS. ADDITIONAL SURVEY COORDINATES ARE REQUIRED ON THE WATER MAIN EVERY 200 FEET WHERE NO FITTING OR OTHER WATER MAIN STRUCTURE IS BEING INSTALLED WITHIN THAT LENGTH OF THE IMPROVEMENT. "SURVEY COORDINATES" INCLUDE ALL MATERIAL, EQUIPMENT, AND LABOR NECESSARY TO OBTAIN HORIZONTAL AND VERTICAL (NORTHING, EASTING, AND ELEVATION) SURVEY COORDINATES FOR THE WATER MAIN IMPROVEMENTS.

    ALL SURVEY COORDINATES SHALL BE REFERENCED TO THE APPLICABLE COUNTY ENGINEER'S MONUMENTS, AND SHALL BE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD 83) WITH THE (NSRS2007) ADJUSTMENT, WITH FURTHER REFERENCE MADE TO THE OHIO STATE PLANE SOUTH COORDINATE SYSTEM, SOUTH ZONE, WITH ELEVATIONS BASED UPON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). ALL COORDINATES (NORTHING, EASTING, ELEVATION) SHALL BE REFERENCED TO THE NEAREST HUNDREDTH (N XXXXXXX.XX, E XXXXXXX.XX, ELEVATION XXX.XX). ALL SURVEY COORDINATES SHALL BE ACCURATE TO WITHIN 1.0 FOOT OR LESS HORIZONTAL AND ONE-TENTH FOOT (0.10) OR LESS VERTICAL.

    THE SURVEY COORDINATES SHALL BE DOCUMENTED TO THE HILLIARD CITY ENGINEER IN DIGITAL SPREADSHEET FORMAT AND SHALL INCLUDE THE APPLICABLE ITEM, STATION, NORTHING, EASTING, AND ELEVATION. SURVEY COORDINATES SHALL BE SUBMITTED TO THE HILLIARD CITY ENGINEER ON A BI-WEEKLY BASIS. SURVEY COORDINATES SHALL ALSO BE REQUIRED TO BE SUBMITTED TO THE DIVISION OF WATER AS PART OF THE REQUEST FOR CHLORINATION SUBMITTED BY THE HILLIARD CITY ENGINEER.

23. NO SERVICE CONNECTION PERMITS SHALL BE ISSUED OR CONNECTIONS MADE TO ANY SERVICE TAPS UNTIL WATER LINES HAVE BEEN DISINFECTED BY THE CITY OF COLUMBUS, DIVISION OF WATER. WHEN A 3-INCH OR LARGER TAP IS TO OCCUR ON A 20-INCH OR LARGER WATER MAIN, THE CONTRACTOR SHALL NOTIFY THE DIVISION OF WATER OPERATIONS CONTROL CENTER AT (614) 645-7168 TWENTY FOUR (24) HOURS IN ADVANCE OF PERFORMING THE TAP.

24. A TAP PERMIT FOR EACH WATER SERVICE MUST BE OBTAINED FROM THE CITY OF HILLIARD AND THE CITY OF COLUMBUS, DIVISION OF WATER PRIOR TO MAKING ANY TAPS INTO THE WATER LINE.

25. THE PROPOSED WATER LINE SHALL BE LOCATED A MINIMUM DISTANCE OF TWENTY (20) FEET AWAY FROM ANY STRUCTURE, OVERHANG, OR FOOTER.

28. MAGNETIC LOCATOR TAPE SHALL BE PLACED IN THE TRENCH (6 INCHES +/-) ABOVE ALL PVC WATER LINES.

29. THE CONTRACTOR SHALL IMPRINT A "W", THREE INCHES HIGH, IN THE CURB AT EACH WATER SERVICE LOCATION.

30. THE CITY OF COLUMBUS, DIVISION OF WATER WILL BE RESPONSIBLE FOR THE REPAIR AND MAINTENANCE OF THE WATER LINE WITHIN THE EASEMENT AREA. BACKFILLING OF ANY EXCAVATION CAUSED BY THE MAINTENANCE, REPAIR, OR REPLACEMENT OF SAID WATER LINE SHALL BE SUCH THAT THE SURFACE IS RESTORED TO ITS FORMER ELEVATION AS NEAR AS IS REASONABLY POSSIBLE.

31. THE CONTRACTOR SHALL GIVE WRITTEN NOTICE TO ALL AFFECTED PROPERTY OWNERS AT LEAST ONE (1) WORKING DAY BUT NOT MORE THAN THREE (3) WORKING DAYS PRIOR TO ANY TEMPORARY INTERRUPTION OF WATER SERVICE. INTERRUPTION OF WATER SERVICE SHALL BE HELD TO A MINIMUM AND SHALL BE APPROVED BY THE CITY ENGINEER.

THE FOLLOWING CITY OF HILLIARD GENERAL NOTES FOR WATER LINE ARE NOT APPLICABLE: 6, 12, 26, AND 27.

CITY OF HILLIARD AND NORWICH TOWNSHIP - FIRE HYDRANT SPECIFICATIONS

1. FIRE HYDRANTS SHALL BE POST TYPE, MADE OF CAST IRON, AND SHALL CONFORM IN ALL RESPECTS TO THE "AMERICAN WATER WORKS ASSOCIATION STANDARD FOR DRY-BARREL FIRE HYDRANTS", ANSI/AWWA C502-85, EXCEPT WHERE MODIFIED HEREIN.

2. MAIN VALVE SHALL BE COMPRESSION TYPE OPENING AGAINST THE PRESSURE AND CLOSING WITH THE PRESSURE. MAIN VALVE SEAT SHALL BE MADE OF BRONZE AND SHALL BE DESIGNED TO ALLOW EASY REPLACEMENT IN THE FIELD. THE DESIGN SHALL ELIMINATE THE CONTACT OF DISSIMILAR METALS IN AREAS OF THE HYDRANT THAT ARE SUBJECT TO THE CONTINUOUS PRESENCE OF MOISTURE.

3. ALL INTERNAL WORKING PARTS SHALL BE REMOVABLE FROM THE TOP OF THE HYDRANT, WITH SIMPLE TOOLS, AND WITHOUT DISTURBING THE GROUND LINE JOINT OR THE UPPER SECTION OF THE HYDRANT BARREL.

4. BREAKABLE TRAFFIC FEATURES SHALL BE PROVIDED, AND SHALL INCLUDE A BREAKABLE SAFETY FLANGE ON THE GROUND LINE JOINT, AND A BREAKABLE COUPLING ON THE MAIN VALVE STEM AT THE GROUND LINE JOINT. THE DESIGN SHALL ASSURE THAT ON HEAVY IMPACT, THE UPPER AND LOWER SECTIONS OF THE HYDRANT WILL BREAK APART CLEANLY WITHOUT DAMAGE TO ANY OTHER HYDRANT PARTS. THE GROUND LINE JOINT SHALL BE DESIGNED TO ALLOW THE NOZZLE SECTION OF THE HYDRANT TO BE ROTATED 360 DEGREES.

5. NOZZLES SHALL BE BRONZE AND REPLACEABLE, DESIGNED FOR EASY REMOVAL FROM THE HYDRANT BARREL, IN THE FIELD, WITH SIMPLE TOOLS.

6. MAIN VALVE OPENING SHALL BE 4-1/2 INCHES IN DIAMETER FOR USE IN RESIDENTIAL AREAS AND 5-1/4 INCHES IN DIAMETER FOR USE IN COMMERCIAL AREAS & MULTI-FAMILY DEVELOPMENTS AS DEFINED BY THE OHIO BUILDING CODE.

7. TWO (2) HOSE NOZZLES, 2-1/2 INCHES INSIDE DIAMETER WITH NATIONAL STANDARD THREADS.

8. ONE (1) PUMPER NOZZLE, 4-1/2 INCHES INSIDE DIAMETER WITH NATIONAL STANDARD THREADS.

9. ALL FIRE HYDRANTS INSTALLED IN THE CITY OF HILLIARD SHALL BE FITTED WITH A 5" STORZ CONNECTION WITH NATIONAL STANDARD THREAD IN ACCORDANCE WITH NORWICH TOWNSHIP FIRE DEPARTMENT STANDARDS.

10. MAIN VALVE SHALL OPEN COUNTERCLOCKWISE (LEFT).

11. OPERATING NUT SHALL BE PENTAGON SHAPED, MEASURING 1-1/2 INCHES FROM POINT TO OPPOSITE FLAT.

12. BURY SHALL BE FIVE (5) FEET UNLESS OTHERWISE SPECIFIED.

13. DRAINING DEVICES SHALL BE ELIMINATED OR THE DRAIN HOLES PLUGGED.

14. THE SHOE SHALL HAVE A SIX (6) INCH DIAMETER INLET AND A MECHANICAL JOINT CONNECTION WITH ACCESSORIES.

15. FOR PUBLICLY MAINTAINED HYDRANTS (LOCATED IN PUBLIC STREET RIGHT-OF-WAY OR AN ABUTTING EASEMENT), THE COLOR OF THE BARREL AND CAPS SHALL BE NAVY BLUE, RUST-OLEUM #7723830 OR APPROVED EQUAL, AND THE COLOR OF THE BONNET SHALL BE WHITE.

17. THE CONTRACTOR/DEVELOPER SHALL SUBMIT DETAILED DRAWINGS AND SPECIFICATIONS FOR THE HYDRANT TO THE SERVICE DIRECTOR FOR APPROVAL, PRIOR TO INSTALLATION.

18. WHERE FOUR (4) OR MORE FIRE HYDRANTS ARE TO BE INSTALLED ON THE PROJECT, OR ANY PHASE OF THE PROJECT, THE CONTRACTOR, DEVELOPER, OR OWNER SHALL FURNISH AND DELIVER TO THE CITY OF HILLIARD, AT NO COST TO THE CITY, ONE (1) COMPLETE FIRE HYDRANT. WHEN MORE THAN TEN (10) FIRE HYDRANTS ARE INSTALLED, TWO (2) COMPLETE FIRE HYDRANTS SHALL BE FURNISHED AND DELIVERED TO THE CITY OF HILLIARD, AT NO COST TO THE CITY. EACH FIRE HYDRANT SUPPLIED TO THE CITY SHALL BE COMPLETE WITH ACCESSORIES, INCLUDING OPERATING WRENCH, SPECIAL WRENCHES AND TOOLS, AND LUBRICANTS NECESSARY FOR THE OPERATION, MAINTENANCE AND REPAIR OF FIRE HYDRANTS.

19. FIRE HYDRANTS APPROVED FOR USE IN THE CITY OF HILLIARD ARE THE AMERICAN DARLING "MARK 73" OR "B-84-B", THE CLOW "MEDALLION", AND THE MUELLER "CENTURION".

THE FOLLOWING CITY OF HILLIARD FIRE HYDRANT SPECIFICATIONS ARE NOT APPLICABLE: 16.

GENERAL PLAN NOTES

1. CONTRACTOR SHALL MAINTAIN AND PROTECT TRANSFERRED WATER SERVICES DURING THE CONSTRUCTION OF THE PERMEABLE BRICK PAVER PARKING BAYS. TRANSFERRED WATER SERVICES SHALL BE INSTALLED AT A MINIMUM 1' (ONE FOOT) BELOW THE BOTTOM OF THE AGGREGATE SUB-BASE. CONDUIT SLEEVE HAS BEEN PROVIDED PER NOTE 2 BELOW, BUT ANY ADDITIONAL WORK MAINTAINING AND PROTECTING TRANSFERRED WATER SERVICES CROSSING UNDER THE PERMEABLE PAVEMENT IS INCIDENTAL TO THE APPLICABLE ITEM 805 - 3/4" WATER SERVICE TAP TRANSFERRED AND SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY.

2. ITEM 625, CONDUIT 2", 725.051, SCHEDULE 80, AS PER PLAN
IT IS THE INTENT OF THIS ITEM THAT THE 2" CONDUIT SLEEVE USED FOR THE TRANSFERRED WATER SERVICE CROSSINGS UNDER THE PERMEABLE PAVEMENT SHALL BE SCHEDULE 80 PVC CONDUIT. THE SCHEDULE 80 PVC SHALL EXTEND 2' (TWO FEET) BEYOND THE LIMITS OF THE AGGREGATE SUB-BASE ON BOTH SIDES OF THE CROSSING. SEE SHEET 66 FOR DETAIL.

ALL MATERIALS AND LABOR, ARE PAID FOR AT THE CONTRACT PRICE FOR ITEM 625, CONDUIT 2", 725.051, SCHEDULE 80, AS PER PLAN.

CALCULATED BGC CHECKED JLR

WATERLINE - GENERAL NOTES

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

CITY OF COLUMBUS - GENERAL NOTES

1. THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS, 2012 EDITION AND ALL REVISIONS, INCLUDING ALL SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THIS PLAN, UNLESS OTHERWISE NOTED.

2. ALL WATER MAIN MATERIALS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE CURRENT RULES AND REGULATIONS OF THE CITY OF COLUMBUS, DIVISION OF WATER. ALL CITY OF COLUMBUS, DIVISION OF WATER STANDARD DRAWINGS SHALL APPLY TO THE PROJECT, UNLESS OTHERWISE NOTED.

3. FOR ANY EMERGENCIES INVOLVING THE WATER DISTRIBUTION SYSTEM, PLEASE CONTACT THE DIVISION OF WATER DISTRIBUTION MAINTENANCE OFFICE AT 614-645-7788.

4. ALL BRASS FITTINGS ASSOCIATED WITH WATER WORK, INCLUDING REPAIRS TO THE EXISTING SYSTEM, SHALL CONFORM TO THE REVISED ALLOWABLE LEAD EXTRACTION LIMIT PER THE UPDATED NSF/ANSI 61 STANDARD. THE DIVISION OF WATER'S APPROVED MATERIALS LIST HAS BEEN UPDATED TO REFLECT THIS REQUIREMENT.

5. IT SHALL BE UNLAWFUL FOR ANY PERSON TO PERFORM ANY WORK ON CITY OF COLUMBUS WATER MAIN SYSTEMS WITHOUT FIRST SECURING LICENSE TO ENGAGE IN SUCH WORK, AS INDICATED IN COLUMBUS CITY CODE SECTION 1103.02 AND 1103.06. THIS WORK INCLUDES ANY ATTACHMENTS, ADDITIONS TO OR ALTERATIONS IN ANY CITY SERVICE PIPE OR APPURTENANCES (INCLUDING WATER SERVICE LINES AND TAPS). THIS REQUIREMENT MAY BE MET BY UTILIZATION OF A SUBCONTRACTOR WHO HOLDS A CITY OF COLUMBUS WATER CONTRACTOR LICENSE OR A COMBINED WATER/SEWER CONTRACTOR LICENSE TO PERFORM THIS WORK. UTILIZATION OF A SUBCONTRACTOR MUST MEET THE LICENSING REQUIREMENTS OF CITY OF COLUMBUS BUILDING CODE, IN PARTICULAR SECTION 4114.119 AND 4114.529.

6. THE CONTRACTOR SHALL OBTAIN THE PROPER HYDRANT PERMIT(S), AND PAY ANY APPLICABLE FEES, FOR ANY APPROVED HYDRANT USAGE DEEMED NECESSARY FOR WORK UNDER THIS IMPROVEMENT. PERMITS MAY BE OBTAINED FROM THE RESPECTIVE HYDRANT OWNER (CITY OF HILLIARD) PRIOR TO CONTACTING THE DIVISION OF WATER PERMIT OFFICE (614-645-7330). THE CONTRACTOR SHALL ADHERE TO ALL RULES & REGULATIONS GOVERNING SAID PERMIT AND MUST HAVE THE ORIGINAL PERMIT ON SITE ANYTIME IN WHICH THE HYDRANT IS IN USE. COST TO BE INCLUDED IN THE VARIOUS BID ITEMS.

7. ALL WATER MAINS SHALL BE CLEANED AND FLUSHED, AND ANY WATER MAIN 12-INCH AND LARGER MUST BE PROPERLY PIGGED, IN ACCORDANCE WITH SECTION 801.13 OF THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS.

8. ALL WATER MAINS SHALL BE PRESSURE TESTED IN ACCORDANCE WITH SECTION 801.14 OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS, WITH THE FOLLOWING EXCEPTION: 150 PSI OF PRESSURE SHALL BE MAINTAINED FOR AT LEAST TWO HOURS IN ANY TESTED SECTION. THE CITY MAY NOT APPROVE ANY TEST LASTING LESS THAN TWO HOURS REGARDLESS OF THE AMOUNT OF LEAKAGE.

9. ALL WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH SECTION 801.15 OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS. SPECIAL ATTENTION IS DIRECTED TO APPLICABLE SECTIONS OF A.W.W.A. C-651. WHEN THE WATER MAINS ARE READY FOR DISINFECTION, THE CITY OF HILLIARD SHALL SUBMIT A WRITTEN REQUEST FOR CHLORINATION OF THE MAINS THAT NEED DISINFECTED, THREE (3) SETS OF "AS-BUILT" PLANS (FULL SIZE SHEETS ONLY), THE AS-BUILT SURVEY COORDINATES, WATER SERVICE REPORTS AND A PRESSURE TEST TO THE CITY OF COLUMBUS, DIVISION OF WATER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE DISINFECTION OF ALL WATER MAINS CONSTRUCTED UNDER THIS PLAN.

10. ANY SECTION OF WATER MAIN THAT IS LONGER THAN 20 FEET IN LENGTH SHALL BE CHLORINATED. HAND SWABBING METHODS WILL ONLY BE PERMITTED FOR SECTIONS LESS THAN OR EQUAL TO 20 FEET IN LENGTH. USE UNSCENTED HOUSEHOLD BLEACH FOR HAND SWABBING OF PIPE AND FITTINGS.

11. ONLY ONE CONNECTION TO AN EXISTING WATER LINE IS PERMITTED BEFORE DISINFECTION OF A NEW WATER LINE HAS BEEN COMPLETED. ALL OTHER CONNECTIONS MUST BE MADE AFTER THE LINE HAS BEEN DISINFECTED.

12. WHERE INDICATED ON THE PLANS, THE EXISTING WATER MAIN SHALL BE ABANDONED; AND ANY EXISTING WATER SERVICE LINES OFF THIS MAIN SHALL BE TRANSFERRED TO THE NEW WATER MAIN. PRIOR TO ABANDONMENT OF THE EXISTING WATER MAIN, THE PROPOSED WATER MAIN SHALL BE PIGGED (IF REQUIRED), TESTED, CHLORINATED AND PUT IN SERVICE AND THEN THE EXISTING WATER SERVICE LINES SHALL BE TRANSFERRED. THE CONTRACTOR SHALL MAINTAIN WATER SERVICE TO ALL PROPERTIES DURING CONSTRUCTION OF THE NEW WATER MAIN AND SHALL NOTIFY ALL CUSTOMERS AFFECTED BY THE TRANSFER OF WATER SERVICE LINES. TO ENSURE THAT ALL EXISTING WATER SERVICE LINES ARE TRANSFERRED TO THE NEW MAIN, NO WATER MAIN SHALL BE ABANDONED UNTIL THE NEW MAIN HAS BEEN PUT IN SERVICE; ALL AFFECTED WATER SERVICE LINES HAVE BEEN TRANSFERRED; AND THE EXISTING MAIN TO BE ABANDONED HAS BEEN SHUT DOWN FOR 24 HOURS. ALL VISIBLE VALVE BOXES, FIRE HYDRANTS, AND WATER TAP BOXES ON THE WATER MAIN TO BE ABANDONED, WHICH WILL NO LONGER BE IN SERVICE, SHALL BE REMOVED. ALL WATER MAINS TO BE ABANDONED SHALL BE MADE WATER TIGHT. THE COST TO ABANDON THE EXISTING WATER MAIN, REMOVE ABANDONED VALVES, SERVICE BOXES AND HYDRANTS IS TO BE INCLUDED IN THE IN THE PRICE BID FOR ITEM 801. THE REQUIRED SURFACE RESTORATION SHALL BE PAID FOR UNDER THE APPROPRIATE BID ITEM(S).

13. NO SERVICE CONNECTION PERMITS SHALL BE ISSUED OR CONNECTIONS MADE TO ANY SERVICE TAPS UNTIL WATER MAINS HAVE BEEN DISINFECTED BY THE CITY OF COLUMBUS, DIVISION OF WATER. WHEN A 3-INCH OR LARGER TAP IS TO OCCUR ON A 20-INCH OR LARGER WATER MAIN, THE CONTRACTOR SHALL NOTIFY THE DIVISION OF WATER OPERATIONS CONTROL CENTER AT (614)-645-7168 TWENTY-FOUR (24) HOURS IN ADVANCE OF PERFORMING THE TAP.

14. WATER SERVICE BOXES SHALL BE PLACED 1' FROM THE EDGE OF THE PROPOSED OR EXISTING SIDEWALK BETWEEN THE SIDEWALK AND THE CURB, OR 2 FEET INSIDE THE RIGHT-OF-WAY OR EASEMENT LINE WHEN NO SIDEWALK IS PRESENT OR PROPOSED. REFER TO STANDARD DRAWING L-9901 FOR ADDITIONAL INFORMATION.

15. MAINTAIN EIGHTEEN (18) INCHES VERTICAL AND TEN (10) FEET HORIZONTAL SEPARATION BETWEEN ANY SANITARY OR STORM SEWER PIPING AND ALL PROPOSED WATER MAINS UNLESS OTHERWISE NOTED IN THE PLANS.

16. WHEN CONTROLLED DENSITY FILL (ITEM 613) IS TO BE USED AS BACKFILL, THE CONTRACTOR SHALL PROVIDE SIZE NO. 57 CRUSHED CARBONATE STONE (CCS) 1 FOOT BELOW TO 1 FOOT ABOVE THE EXISTING WATER LINE.

17. WHEN PERFORMING WATER SERVICE LINE TRANSFERS, THE CONTRACTOR SHALL FLUSH THE WATER TAP PRIOR TO CONNECTING TO THE EXISTING SERVICE LINE.

18. CONTRACTOR SHALL ADHERE TO THE REQUIREMENTS OF THE OHIO ADMINISTRATIVE CODE CHAPTER 3745-83-02 WATER DISRUPTION SERVICE RULE. EXCAVATE PITS SUFFICIENTLY BELOW THE AREA TO BE CONNECTED TO IN ORDER TO MAINTAIN WATER LEVELS BELOW THE WATER MAIN. IF WATER FROM THE PIT ENTERS THE EXISTING MAIN, CONTACT DIVISION OF WATER IMMEDIATELY. ENSURE SUFFICIENTLY SIZED PUMPS ARE UTILIZED TO REMOVE WATER FROM THE TRENCH AND BACKUP PUMPS ARE KEPT ON SITE FOR REDUNDANCY.

19. "SURVEY COORDINATES" SHALL INCLUDE ALL MATERIAL, EQUIPMENT, AND LABOR NECESSARY TO OBTAIN HORIZONTAL AND VERTICAL (NORTHING, EASTING, AND ELEVATION) SURVEY COORDINATES FOR THE WATER MAIN IMPROVEMENTS. THE SURVEY COORDINATES SHALL BE OBTAINED FOR THE COMPLETED WATER MAIN CONSTRUCTION AND SHALL INCLUDE ALL VALVES, TEES, CROSSES, BENDS, HORIZONTAL DEFLECTIONS, PLUGS, REDUCERS, TAPPING SLEEVES, FIRE HYDRANTS, AIR RELEASES, CURB STOPS, AND CASING PIPE TERMINI. ADDITIONAL SURVEY COORDINATES ARE REQUIRED ON THE WATER MAIN EVERY 200 FEET WHERE NO FITTING OR OTHER WATER MAIN STRUCTURE IS BEING INSTALLED WITHIN THAT LENGTH OF THE IMPROVEMENT.

    ALL SURVEY COORDINATES SHALL BE REFERENCED TO THE APPLICABLE COUNTY ENGINEER'S MONUMENTS, AND SHALL BE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD 83) WITH THE (NSRS2007) ADJUSTMENT, WITH FURTHER REFERENCE MADE TO THE OHIO STATE PLANE SOUTH COORDINATE SYSTEM, SOUTH ZONE, WITH ELEVATIONS BASED ON NAVD 88 DATUM. ALL COORDINATES (NORTHING, EASTING, ELEVATION) SHALL BE REFERENCED TO THE NEAREST HUNDREDTH (N XXXXXX.XX, E XXXXXX.XX, ELEV. XXX.XX). ALL SURVEY COORDINATES SHALL BE ACCURATE TO WITHIN 1.0 FOOT HORIZONTAL AND A TENTH OF A FOOT (0.10) OR LESS VERTICAL.

    THE COORDINATES SHALL BE DOCUMENTED TO THE MUNICIPALITY ENGINEER OR DESIGNATED REPRESENTATIVE IN DIGITAL SPREADSHEET FORM AND SHALL INCLUDE THE APPLICABLE ITEM, STATION, NORTHING, EASTING, AND ELEVATION. COORDINATES SHALL BE SUBMITTED TO THE MUNICIPALITY ENGINEER OR DESIGNATED REPRESENTATIVE ON A BI-WEEKLY BASIS. COORDINATES SHALL ALSO BE REQUIRED TO BE SUBMITTED TO THE DIVISION OF WATER AS PART OF THE REQUEST FOR CHLORINATION.

    LUMP SUM PAYMENT IS FULL COMPENSATION FOR ALL WORK INVOLVED IN OBTAINING AND DOCUMENTING THE SURVEY COORDINATES AS DESCRIBED IN THIS SPECIFICATION.

ITEM	DESCRIPTION	TOTAL	UNIT	61	62	63	64
625	CONDUIT 2", 725.051, SCHEDULE 80, AS PER PLAN	144	LF	36	96	12	
801	2 INCH WATER PIPE & FITTINGS	60	LF				60
801	3 INCH WATER PIPE & FITTINGS	5	LF				5
801	4 INCH WATER PIPE & FITTINGS	60	LF			3	57
801	6 INCH WATER PIPE & FITTINGS	434	LF	46	19	332	37
801	8 INCH WATER PIPE & FITTINGS	990	LF	450	478		62
801*	DUCTILE IRON FITTINGS, INCREASE OR DECREASE	500	LB				
801*	CONCRETE BLOCKING CLASS C, INCREASE OR DECREASE	8	CY				
802	2 INCH VALVE & APPURTENANCES	1	EA				1
802	3 INCH VALVE & APPURTENANCES	1	EA				1
802	4 INCH VALVE & APPURTENANCES	1	EA				1
802	6 INCH VALVE & APPURTENANCES	9	EA	2	2	4	1
802	8 INCH VALVE & APPURTENANCES	2	EA	1			1
803	12 INCH BY 8 INCH TAPPING SLEEVE & VALVE & APPURTENANCES	1	EA	1			
805*	CURB BOX	16	EA				
805	3/4 INCH WATER SERVICE TAP, TRANSFERRED, LONG	8	EA	2	3	3	
805	3/4 INCH WATER SERVICE TAP, TRANSFERRED, SHORT	7	EA	1	6		
805*	3/4 INCH WATER SERVICE TAP, TRANSFERRED	1	EA				
807*	C.I. FERRULE VALVE BOX AND COVER	5	EA				
807*	VALVE BOX ADJUSTED TO GRADE	2	EA				
809	FIRE HYDRANT	5	EA	1	2	2	
810*	6 INCH HYDRANT EXTENSIONS	2	EA				
810*	12 INCH HYDRANT EXTENSIONS	4	EA				
810*	18 INCH HYDRANT EXTENSIONS	1	EA				
810*	24 INCH HYDRANT EXTENSIONS	1	EA				
811*	INCREASE OR DECREASE IN EXCAVATION AND BACKFILL	36	CY				
SPEC	SURVEY COORDINATES	1	LS				

* DENOTES CONTINGENCY QUANTITIES. ALL QUANTITIES ARE CARRIED TO SHEET 10

CITY OF COLUMBUS - SPECIAL NOTES

1. ALL WATER LINE VALVE BOXES, SERVICE BOXES, TEST STATIONS, PITOMETER TAP STRUCTURES, METER PIT COVERS, AND OTHER SURFACE UTILITY STRUCTURES WITHIN THE DISTURBED AREA SHALL BE ADJUSTED TO GRADE. ANY OF THESE STRUCTURES LOCATED WITHIN PAVEMENT, DRIVEWAYS, OR OTHER TRAVELED AREAS, WHETHER EXISTING OR PROPOSED, SHALL BE EQUIPPED WITH A TRAFFIC RATED, HEAVY DUTY VALVE BOX AND/OR COVER IN ACCORDANCE WITH THE STANDARD DRAWINGS. EXISTING WATER SERVICE BOXES TO REMAIN THAT ARE ENCOUNTERED WITHIN THE PROJECT LIMITS SHALL BE CLEANED OUT, CENTERED OVER THE CURB STOP, AND ADJUSTED TO THE PROPOSED GRADE.

2. WHERE NEW CONDUIT IS PROPOSED TO CROSS AN EXISTING OR PROPOSED WATER MAIN OR WATER SERVICE, A MINIMUM OF 12-INCHES OF VERTICAL CLEARANCE SHALL BE MAINTAINED BETWEEN THE CONDUIT AND THE WATER MAIN OR SERVICE. A MINIMUM OF 3-FEET OF HORIZONTAL CLEARANCE (OUT TO OUT) IS REQUIRED AT LOCATIONS WHERE THE CONDUIT IS PARALLEL TO THE WATER MAIN AND AT LOCATIONS OF WATER LINE THRUST BLOCKS.

3. A MINIMUM OF 3 FEET OF HORIZONTAL CLEARANCE (OUT TO OUT) SHALL BE MAINTAINED BETWEEN ALL EXISTING WATER MAINS AND FOUNDATIONS FOR POLES, PULL BOXES, PUSH BUTTON PEDESTALS, AND ANY OTHER MISCELLANEOUS ELECTRICAL STRUCTURE.

4. A MINIMUM OF 4 FEET OF COVER IS REQUIRED PRIOR TO PRESSURE TESTING ANY WATER MAIN. A SUFFICIENT AMOUNT OF BACKFILL SHALL BE INSTALLED TO PROVIDE THE ADEQUATE RESTRAINT IN AREAS WHERE REQUIRED.

5. THE PROPOSED WATER MAIN SHALL BE LOCATED A MINIMUM DISTANCE OF TWENTY (20) FEET AWAY FROM ANY STRUCTURE, OVERHANG OR FOOTER.

6. NO TWO (2) ADJACENT FIRE HYDRANTS SHALL BE TAKEN OUT OF SERVICE CONCURRENTLY.

7. RELOCATED FIRE HYDRANTS SHALL BE PUT BACK IN SERVICE AS SOON AS POSSIBLE.

8. THE CONTRACTOR SHALL COORDINATE HIS WORK SUCH THAT NO WATER CUSTOMER WILL HAVE THEIR SERVICE DISRUPTED MORE THAN TWO (2) TIMES THROUGHOUT THE DURATION OF THIS PROJECT.

9. FIRE HYDRANT RELOCATIONS SHALL CONFORM TO APPLICABLE SECTIONS OF ITEM 809 OF THE COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS. WORK SHALL CONSIST OF REMOVING THE EXISTING HYDRANT, INSTALLING NEW 6" PIPE AND FITTING AS REQUIRED TO LOCATE THE FIRE HYDRANT 2 FEET FROM BACK OF PROPOSED CURB OR 8 FEET OFF EDGE OF PAVEMENT, RESETTING HYDRANT AND BLOCKING AS REQUIRED. ALL 6" PIPE SHALL BE INSTALLED AT 4'-0" MINIMUM COVER. HYDRANT EXTENSIONS SHALL BE PROVIDED PER ITEM 810, AS REQUIRED. RELOCATED FIRE HYDRANTS SHALL BE ADJUSTED TO PROPER GRADE AND FACED IN THE PROPER DIRECTION. WHEN A HYDRANT IS RELOCATED FIFTEEN (15) FEET OR MORE FROM THE "TYPICAL HYDRANT SETTING" VALVE LOCATION (SEE L-6409 & L-6637), AN ADDITIONAL VALVE SHALL BE INSTALLED, AND RESTRAINED, WITHIN TWO (2) FEET OF THE RELOCATED HYDRANT. PAYMENT IS TO BE INCLUDED UNDER ITEM 809, FIRE HYDRANT RELOCATED.

10. IF A LEAD WATER TAP IS FOUND DURING CONSTRUCTION, THE CONTRACTOR SHALL REPLACE THE EXISTING LEAD TAP WITH A COPPER LINE FROM THE EXISTING CORPORATION STOP TO THE NEW CURB STOP. REFER TO DIVISION OF WATER STANDARD DRAWINGS L-7102C AND L-9901 FOR INFORMATION ON WATER TAP RELOCATIONS, PLACING NEW CURB STOPS, AND RELOCATING CURB BOXES. ALL WORK FOR THIS ITEM SHALL BE PAID FOR UNDER ITEM 805-WATER SERVICE LINE TRANSFER. A CONTINGENCY QUANTITY OF 1 EA HAS BEEN INCLUDED IN THE GENERAL SUMMARY.

CALCULATED BGC CHECKED JLR

WATERLINE - GENERAL NOTES

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

59
75

ITEM SPECIAL - SURVEY COORDINATES						
				AS-BUILT		
SHEET	DESCRIPTION	STATION	OFFSET	NORTHING	EASTING	℄ ELEV.
	FRANKLIN ST					
61	CONNECT TO EX. 6" WATERLINE	50+00	-			
61	6" 45° HORIZONTAL BEND	50+03	-			
61	6" 22.5° VERTICAL BEND	50+13	-			
61	6" 45° HORIZONTAL BEND	50+19	-			
61	6" 22.5° VERTICAL BEND	50+22	-			
61	6" VALVE	50+26	-			
61	12"x8" TAPPING SLEEVE AND VALVE	100+00	-			
61	8"x6" ANCHORING TEE	100+04/50+27	-			
61	8" 11.25° VERTICAL BEND	100+19	-			
61	8" 11.25° VERTICAL BEND	100+31	-			
61	8" 45° VERTICAL BEND	100+40	-			
61	8" 45° VERTICAL BEND	100+46	-			
61	3/4" WATER SERVICE (3988 MAIN ST.)	-	-			N/A
61	3/4" WATER SERVICE (3994 MAIN ST.)	-	-			N/A
61	3/4" WATER SERVICE (3996 MAIN ST.)	-	-			N/A
61	3/4" WATER SERVICE (4002 MAIN ST)	-	-			N/A
61	2" CORPORATION STOP	101+94	-			
61	8" X 6" ANCHORING TEE	101+97	-			
61	8" X 6" ANCHORING TEE	102+26	-			
61	6" VALVE (FOR HYDRANT)	102+26	3' LT.			
61	FIRE HYDRANT	102+26	18.5' LT.			
61	3/4" WATER SERVICE (5334 FRANKLIN ST)	-	-			N/A
61	8" X 6" ANCHORING TEE	103+84	-			
61	8" X 6" ANCHORING TEE	103+95	-			
62	3/4" WATER SERVICE (3966 COLUMBIA ST)	-	-			N/A
62	3/4" WATER SERVICE (5319 FRANKLIN ST)	-	-			N/A
62	8" 45° HORIZONTAL BEND	105+66	-			
62	FIRE HYDRANT	105+90	2.08' LT.			
62	6" VALVE (FOR HYDRANT)	105+93	2.08' LT.			
62	6" 90° HORIZONTAL BEND	105+96	2.08' LT.			
62	8" X 6" TEE	105+96	-			
62	8" 45° HORIZONTAL BEND	106+07	-			
62	3/4" WATER SERVICE (5307 FRANKLIN ST)	-	-			N/A
62	3/4" WATER SERVICE (5300 FRANKLIN ST)	-	-			N/A
62	3/4" WATER SERVICE (5298 FRANKLIN ST)	-	-			N/A
62	3/4" WATER SERVICE (5301 FRANKLIN ST)	-	-			N/A
62	8" 22.5° VERTICAL BEND	106+67	-			
62	8" 22.5° VERTICAL BEND	106+71	-			
62	8" X 8" ANCHORING TEE	106+75	-			
62	8" X 4" TEE	107+69	-			
62	3/4" WATER SERVICE (5294 FRANKLIN ST)	-	-			N/A
62	3/4" WATER SERVICE (5293 FRANKLIN ST)	-	-			N/A
62	8" X 6" ANCHORING TEE	108+92	-			
62	6" VALVE (FOR HYDRANT)	108+92	3' RT.			
62	FIRE HYDRANT	108+92	11' RT.			
62	3/4" WATER SERVICE (5286 FRANKLIN ST)	-	-			N/A
62	8" 45° HORIZONTAL BEND	109+11	-			
62	8" 45° HORIZONTAL BEND	109+24	-			
62	CONNECT TO EX. 8" VALVE W/ 8" 45° HORZ. BEND	109+27	-			

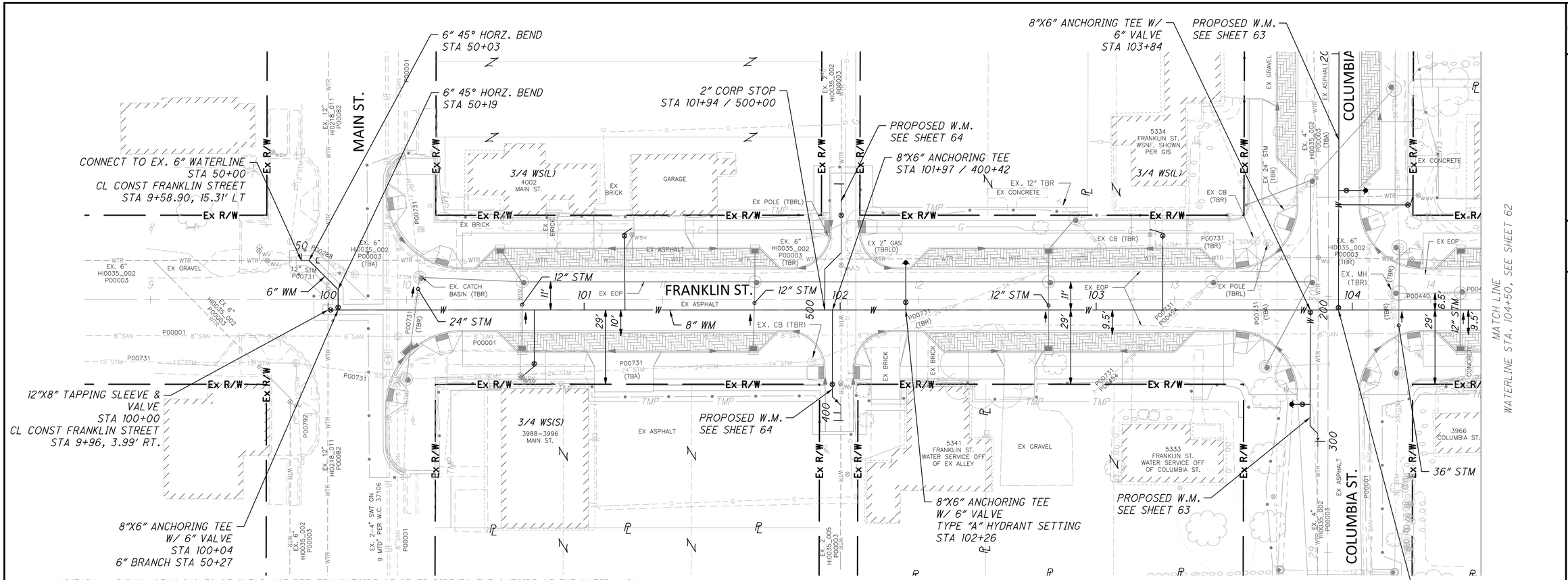
ITEM SPECIAL - SURVEY COORDINATES						
				AS-BUILT		
SHEET	DESCRIPTION	STATION	OFFSET	NORTHING	EASTING	℄ ELEV.
	COLUMBIA ST					
63	6" VALVE	200+03	-			
63	3/4" WATER SERVICE (3990 COLUMBIA ST)	-	-			N/A
63	6" X 6" ANCHORING TEE	200+47	-			
63	6" VALVE (FOR HYDRANT)	200+47	3' RT.			
63	FIRE HYDRANT	200+47	10.5' RT.			
63	3/4" WATER SERVICE (3996 COLUMBIA ST)	-	-			N/A
63	3/4" WATER SERVICE (4010 MAIN ST)	-	-			N/A
63	6" 45° HORIZONTAL BEND	202+44	-			
63	6" 45° HORIZONTAL BEND	202+58	-			
63	CONNECT TO EX 6" W.M.	202+61	-			
63	CONNECT TO EX 4" W.M.	299+98	-			
63	6" X 4" REDUCER	300+01	-			
63	6" 45° HORIZONTAL BEND	300+03	-			
63	6" 45° HORIZONTAL BEND	300+07	-			
63	6" 11.25° VERTICAL BEND	300+13	-			
63	6" X 6" ANCHORING TEE	300+16	-			
63	6" VALVE (FOR HYDRANT)	300+16	3' LT.			
63	FIRE HYDRANT	300+16	7.2' LT.			
63	6" VALVE	300+50	-			
	ALLEYS					
64	2" VALVE	500+40	-			
64	CONNECT TO EX. 2" W.M.	500+52	-			
			-			
			-			
			-			
			-			
64	CONNECT TO EX. 2" W.M.	399+97	-			
64	6" X 2" REDUCER	400+05	-			
64	6" 45° HORIZONTAL BEND	400+08	-			
64	6" VALVE	400+13	-			
			-			
			-			
			-			
64	CONNECT TO EX. 8" W.M.	600+00	-			
64	8" 45° HORIZONTAL BEND	600+04	-			
64	8" 45° HORIZONTAL BEND	600+15	-			
64	8" 11.25° VERTICAL BEND	600+24	-			
64	8" 11.25° VERTICAL BEND	600+34	-			
64	8" 22.5° VERTICAL BEND	600+39	-			
64	8" 22.5° VERTICAL BEND	600+43	-			
64	8" VALVE	600+55	-			
64	CONNECT TO EX. 3" W.M.	700+00	-			
64	3" 45° HORIZONTAL BEND	700+03	-			
64	4" X 3" REDUCER	700+05	-			
64	4" 11.25° VERTICAL BEND	700+08	-			
64	4" 45° HORIZONTAL BEND	700+13	-			
64	4" 45° VERTICAL BEND	700+35	-			
64	4" 45° VERTICAL BEND	700+39	-			
64	4" 45° VERTICAL BEND	700+44	-			
64	4" 45° VERTICAL BEND	700+48	-			
64	4" VALVE	700+62	-			

CALCULATED BGC
CHECKED JLR

WATERLINE - GENERAL NOTES
SURVEY COORDINATES

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

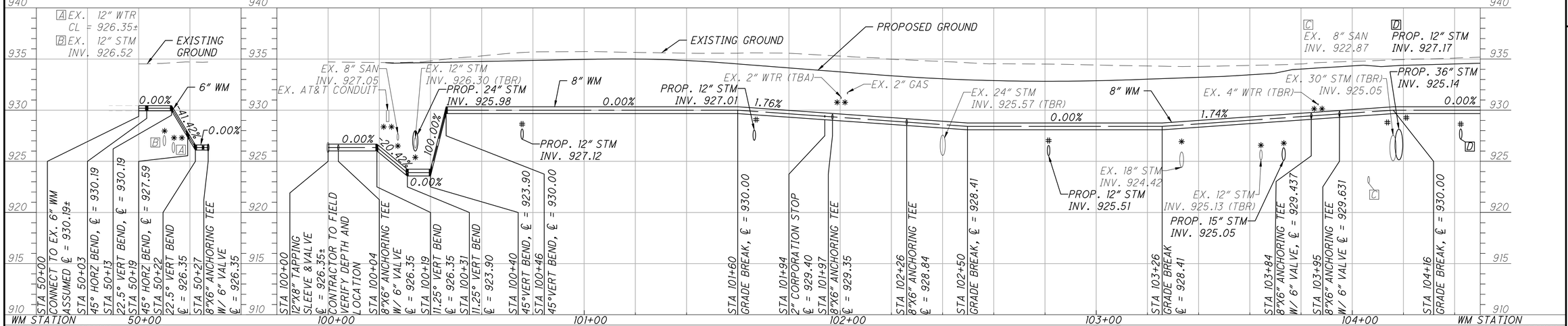
60
75



* - MAINTAIN A MINIMUM OF 18 INCHES OF CLEARANCE BETWEEN OUTSIDE OF SEWER PIPE TO THE OUTSIDE OF THE WATER MAIN
** - MAINTAIN A MINIMUM OF 12 INCHES OF CLEARANCE BETWEEN EXISTING/PROPOSED UTILITY AND PROPOSED WATER MAIN.
\# - SEE SEPARATION REPORT FOR VERTICAL CLEARANCES LESS THAN THE MINIMUMS DEFINED ABOVE.

CONTRACTOR TO FIELD LOCATE WATER SERVICE FOR 5334 FRANKLIN STREET

3988-3996 HAS THREE (3) WATER SERVICES FOR THIS ADDRESS - 3988, 3994 AND 3996 MAIN ST. 1 SERVICE SURVEYED ON FRANKLIN STREET AND GIS SHOWS 2 SERVICES COMING FROM THE ALLEY TO THE EAST OUTSIDE OF THE PROPOSED WORK LIMITS. CONTRACTOR TO FIELD LOCATE WATER SERVICES FOR THIS ADDRESS.



WM STATION	50+00		100+00		101+00	102+00		103+00		104+00	WM STATION
PROPOSED GROUND	934.52		934.69		934.96	933.74		932.87		934.33	PROPOSED GROUND
C/L OF PIPE	930.19		926.35		930.00	929.30		928.54		929.33	C/L OF PIPE
CUT TO INVERT	4.58'		8.67'		5.29'	4.77'		4.67'		5.33'	CUT TO INVERT
	STA 50+00	CONNECT TO EX. 6" WM	STA 100+00	12"X8" TAPPING SLEEVE & VALVE	STA 100+04	8"X6" ANCHORING TEE W/ 6" VALVE	STA 101+60	GRADE BREAK, ℄ = 930.00	STA 101+94	2" CORPORATION STOP	
	ASSUMED ℄ = 930.19±		℄ = 926.35±	CONTRACTOR TO FIELD VERIFY DEPTH AND LOCATION	℄ = 926.35		℄ = 929.40		STA 101+97	8"X6" ANCHORING TEE	
	STA 50+03	45° HORZ BEND, ℄ = 930.19					STA 101+97	8"X6" ANCHORING TEE	℄ = 929.35		
	STA 50+13	22.5° VERT BEND, ℄ = 930.19									
	STA 50+19	45° HORZ BEND, ℄ = 927.59									
	STA 50+22	22.5° VERT BEND									
	℄ = 926.35										
	STA 50+27	8"X6" ANCHORING TEE W/ 6" VALVE	℄ = 926.35								
					STA 100+31	11.25° VERT BEND	℄ = 926.35				
							℄ = 923.90				
					STA 100+40	45°VERT BEND, ℄ = 923.90					
					STA 100+46	45°VERT BEND, ℄ = 930.00					
									STA 102+26	8"X6" ANCHORING TEE ℄ = 928.84	
									STA 102+50	GRADE BREAK, ℄ = 928.41	
									STA 103+26	GRADE BREAK ℄ = 928.41	
									STA 103+84	8"X6" ANCHORING TEE W/ 6" VALVE, ℄ = 929.437	
									STA 103+95	8"X6" ANCHORING TEE W/ 6" VALVE ℄ = 929.631	
											STA 104+16 GRADE BREAK, ℄ = 930.00

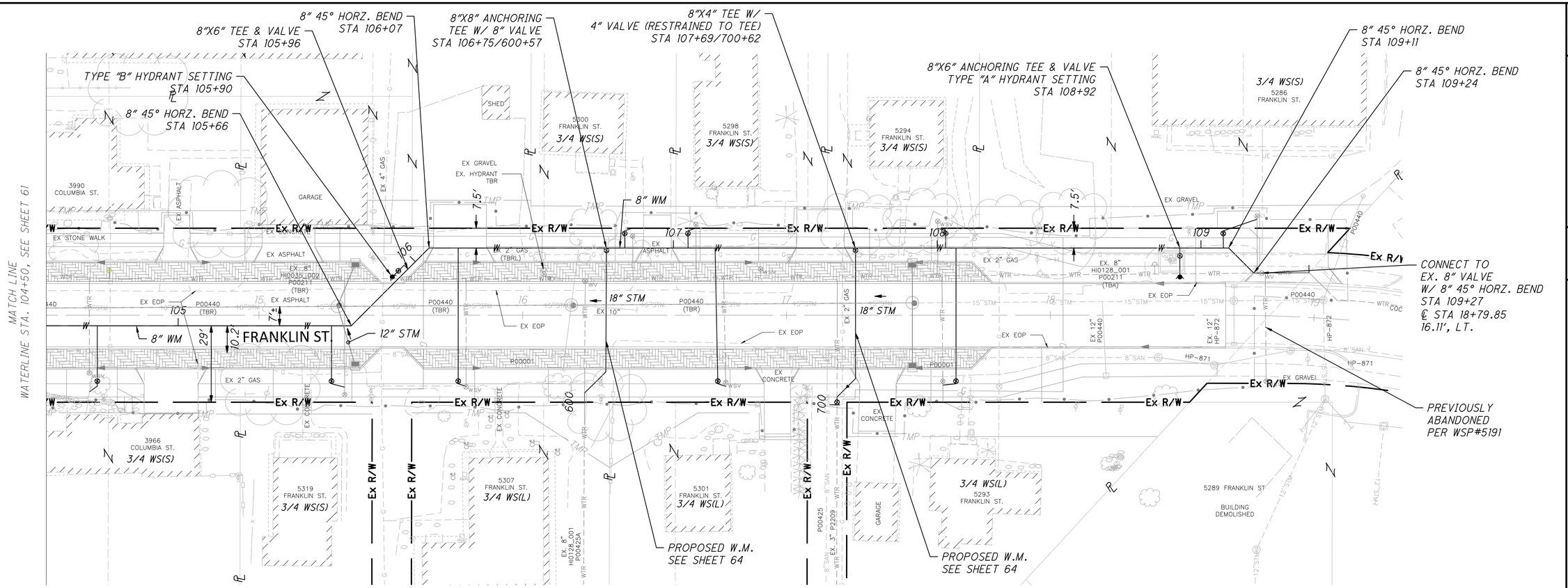
NORTH

HORIZ. 0 20 40
VERTICAL SCALE 0 5 10 25

CALCULATED BGC
CHECKED JLR

WATERLINE - FRANKLIN ST PLAN & PROFILE
STA. 50+00 TO 104+50

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)



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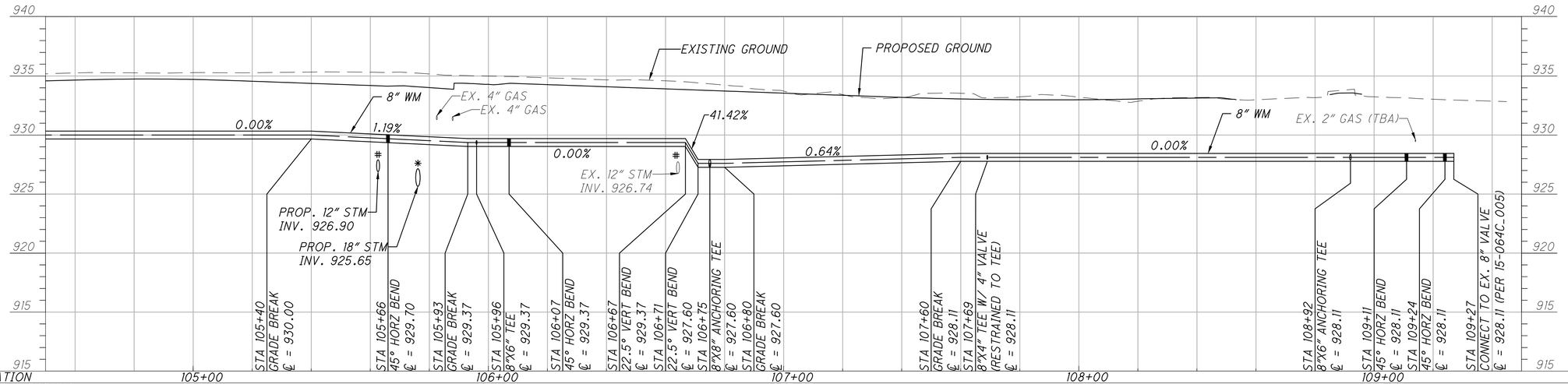


WM STATION	105+00	106+00	107+00	108+00	109+00	WM STATION
PROPOSED GROUND	934.71	934.30	933.55	932.99	933.33	PROPOSED GROUND
C/L OF PIPE	930.00	929.22	928.51	928.11	928.11	C/L OF PIPE
CUT TO INVERT	5.04'	5.33'	5.37'	5.21'	5.55'	CUT TO INVERT

NORTH

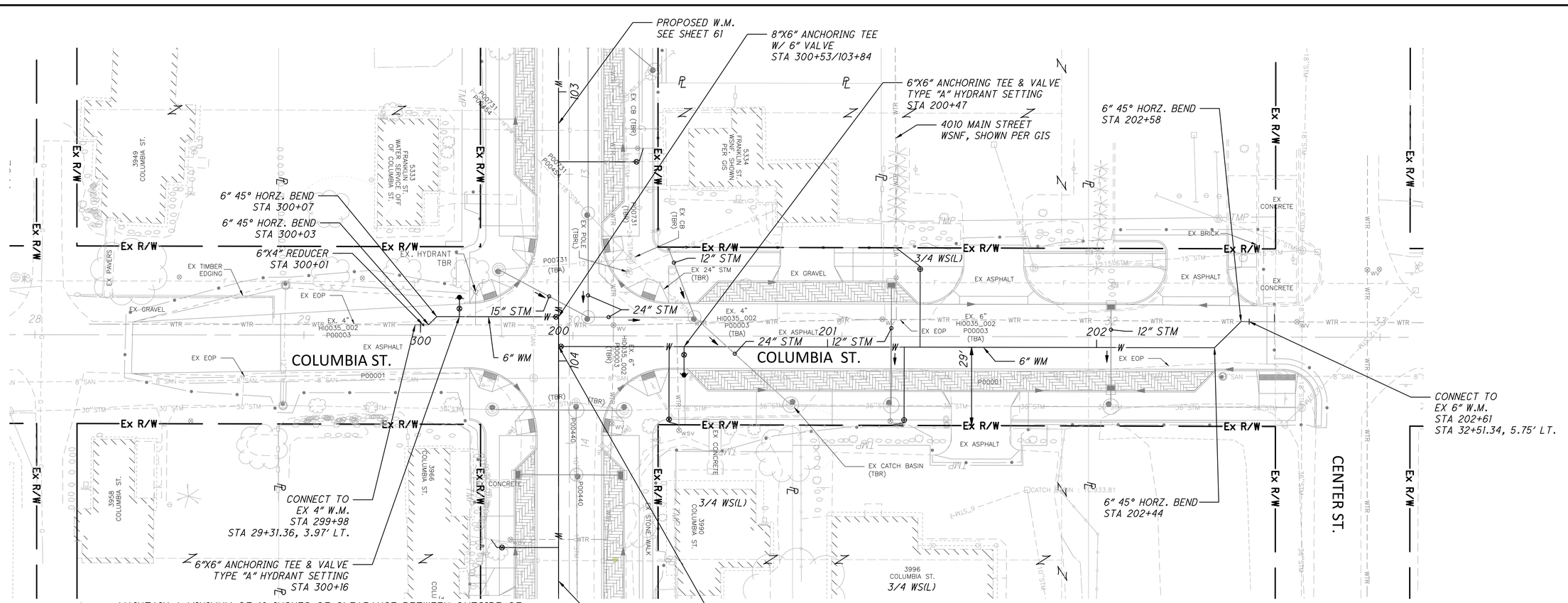
HORIZ. 0 20 40
VERTICAL SCALE 0 5 10 25

CALCULATED BGC
CHECKED JLR

WATERLINE - FRANKLIN ST PLAN & PROFILE
STA. 104+50 TO END

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

62
75



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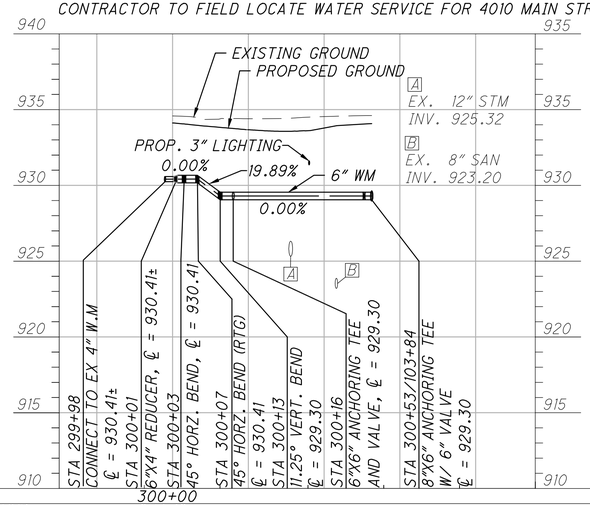
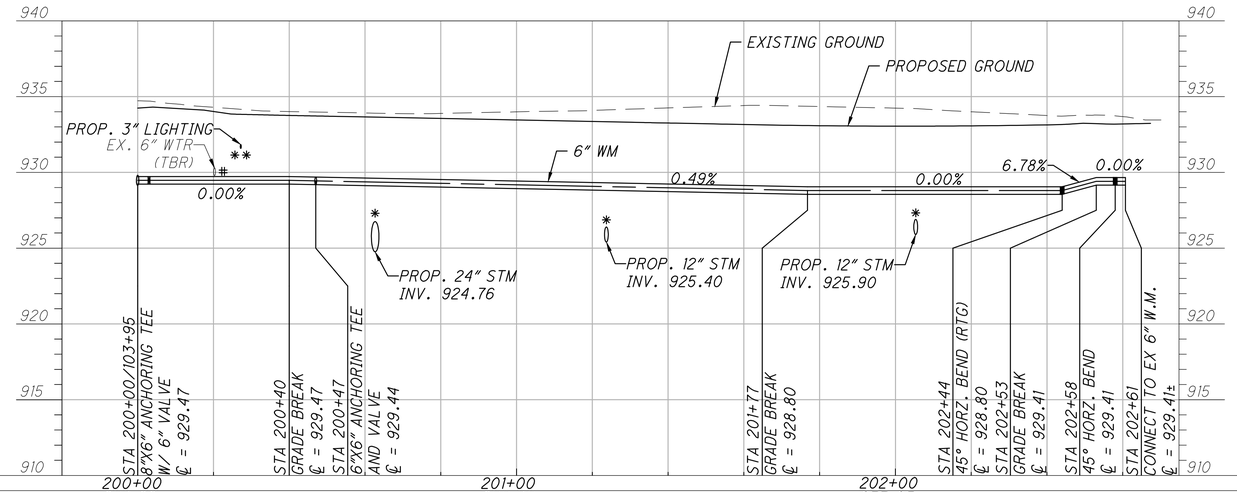
\# - SEE SEPARATION REPORT FOR VERTICAL CLEARANCES LESS THAN THE MINIMUMS DEFINED ABOVE.

CONTRACTOR TO FIELD LOCATE WATER SERVICE FOR 4010 MAIN STREET





WM STATION	300+00	200+00	201+00	202+00	WM STATION
PROPOSED GROUND	934.12	934.26	933.45	933.05	PROPOSED GROUND
C/L OF PIPE	930.41	929.47	929.18	928.80	C/L OF PIPE
CUT TO INVERT	3.88	5.04	4.52	4.50	CUT TO INVERT

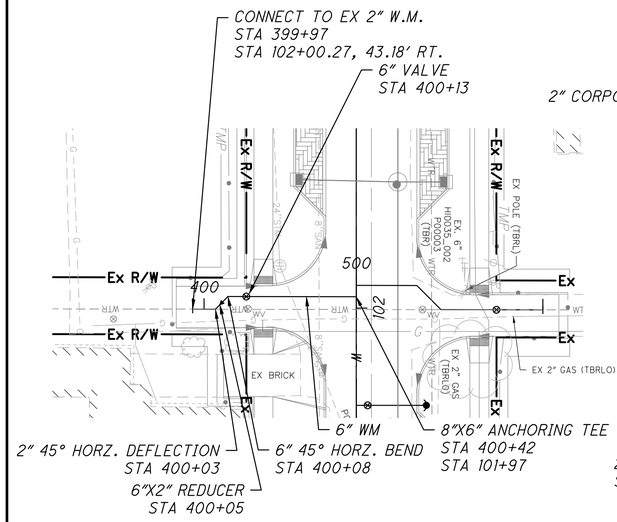
HORIZ. 0 20 40 — VERTICAL SCALE 0 5 10 25

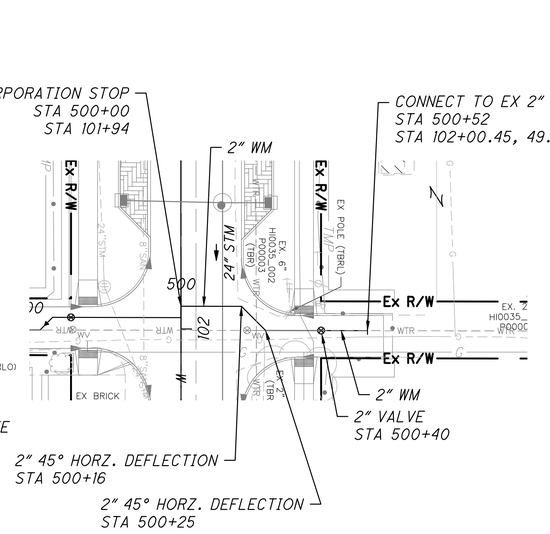
CALCULATED BGC — CHECKED JLR

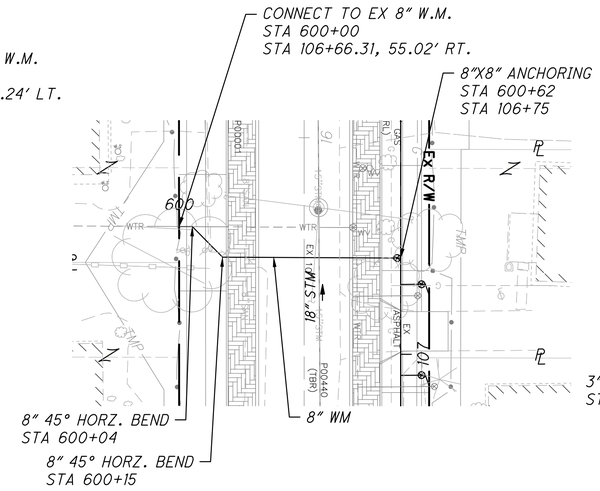
WATERLINE - COLUMBIA ST PLAN & PROFILE

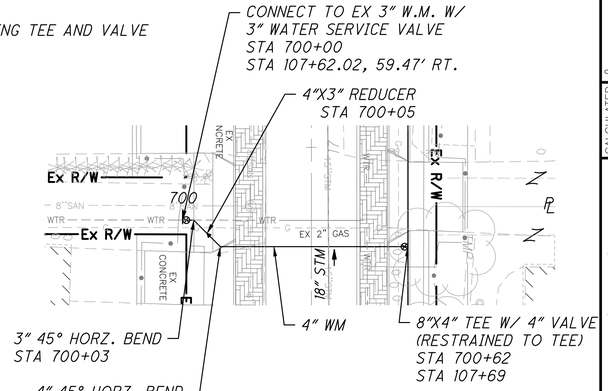
WATERLINE - CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)
STA. 200+00 TO 204+70

63
75









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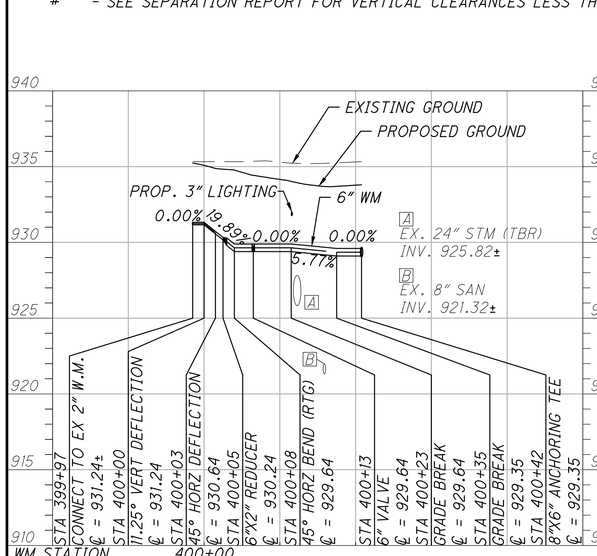
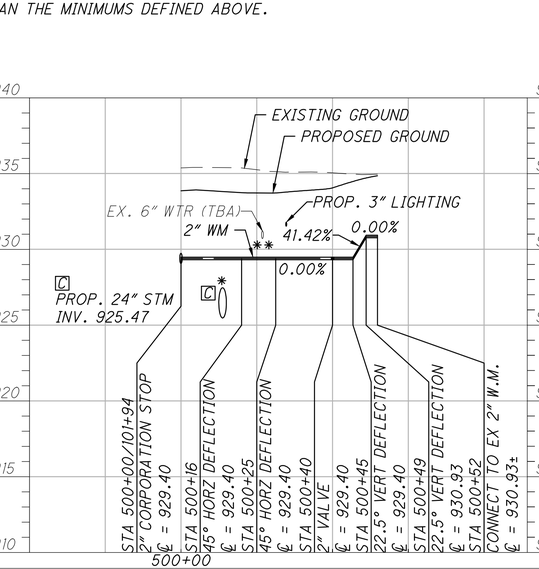
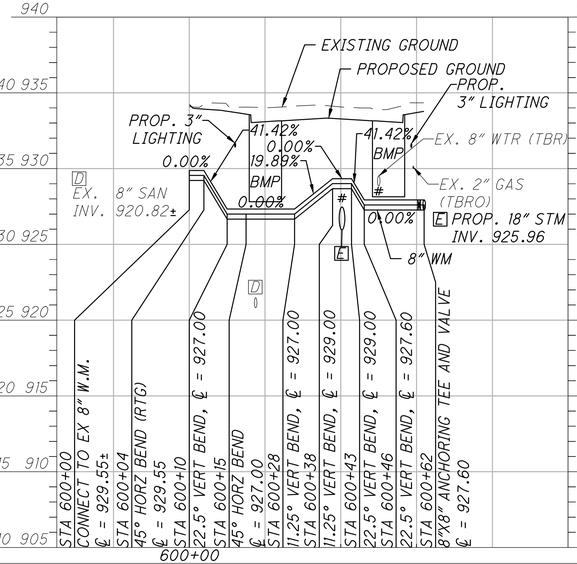
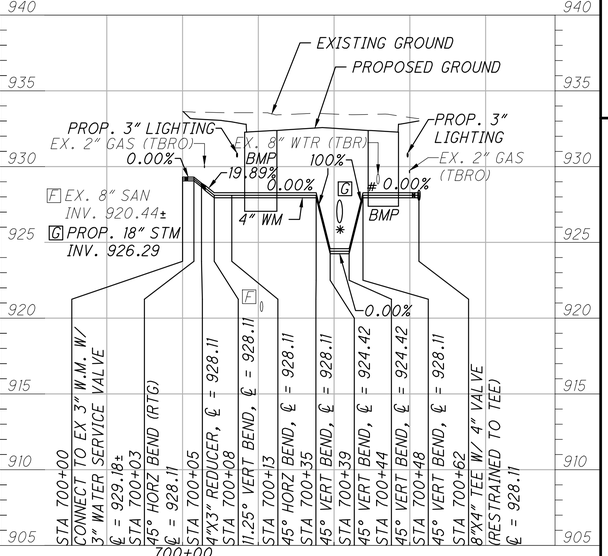








WATERLINE - ALLEY PLAN AND PROFILES
STA. 400+00 TO 700+62

WATERLINE - CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

HORIZ. 0 20 40
VERTICAL SCALE 0 5 10 25
CALCULATED SMJ
CHECKED JT

64
75

ITEM 1525 - PERMEABLE PAVER ROADWAY (AS PER PLAN)

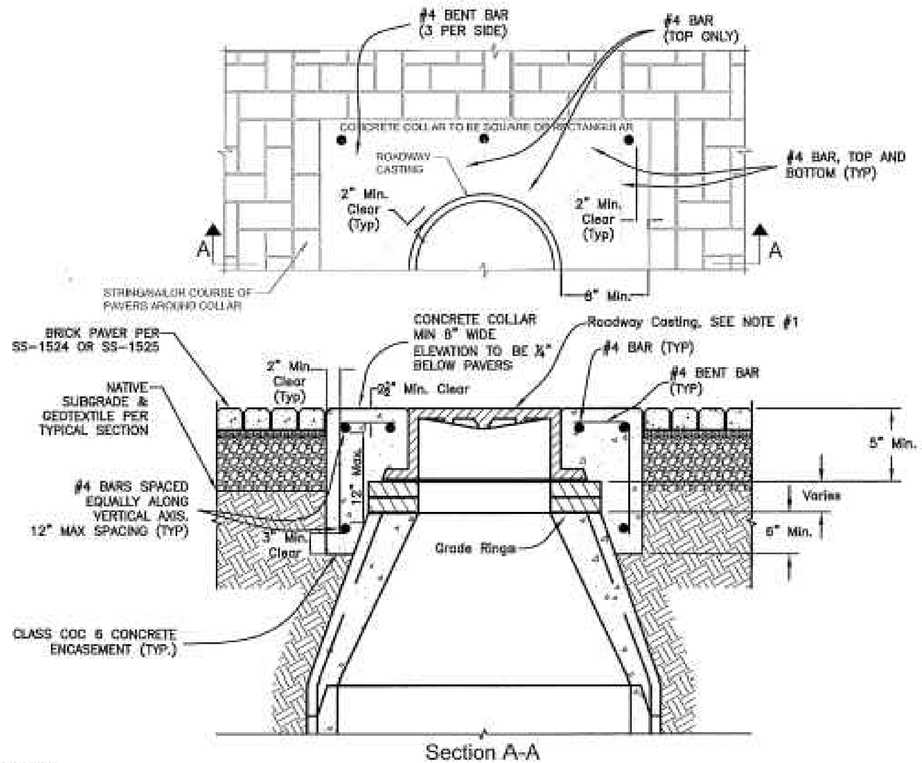
1. INSTALL PERMEABLE PAVER ROADWAY PER CITY OF COLUMBUS SUPPLEMENTAL SPECIFICATION 1525

2. PERMEABLE PAVERS SHALL BE STORM PAVE HEAVY DUTY PAVERS OR APPROVED EQUAL. 2- ⅜" X 4" X 8" COLOR = FULL RANGE.

3. CONTRACTOR SHALL PROVIDE SAMPLES NOTED IN SS 1525 SECTION 1525.02.2 PRIOR TO ORDERING. INCLUDE SAMPLES OF THE GRAY COLORED PAVER NOTED ON PAGE 69.

4. CELLULAR CONFINEMENT SYSTEM AND GEO MEMBRANE PVC LINER ARE NOT REQUIRED.

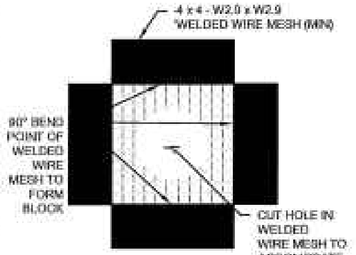
NOTE: THE COST FOR CONCRETE COLLAR FOR ROADWAY CASTINGS IN BRICK PAVEMENT IS INCLUDED IN THE STRUCTURE COST



Section A-A

NOTES:

1. Roadway castings include any castings within the brick portion of the brick roadway and may include sanitary manholes, catch basins, water valves, gas valves, and other castings.
2. Concrete shall at a minimum conform to City of Columbus CMSC Item 511, Class COC6.
3. Epoxy Coated Reinforcing steel shall at a minimum conform to City of Columbus CMSC Item 509, Grade 60.
4. Minimum reinforcement, unless otherwise shown, shall be #4 Bars, each way, at 12" spacing. Use of galvanized (Grade 60 Min) welded wire reinforcing is permitted in lieu of detailed reinforcing. The welded wire reinforcing shall be a minimum of 4x4 – W2.9xW2.9 with a minimum of 2 layers in the horizontal plane and 1 layer in the vertical plane. Details shown in this drawing depict a schematic representation of the two layers of welded wire reinforcing to be installed.



PLAN VIEW OF WELDED WIRE REINFORCING ALTERNATIVE

LEGEND:

- VERTICAL LEGS OF WELDED WIRE MESH BLOCK
- HORIZONTAL PLANE TO BE TWO THICKNESSES OF WIRE MESH

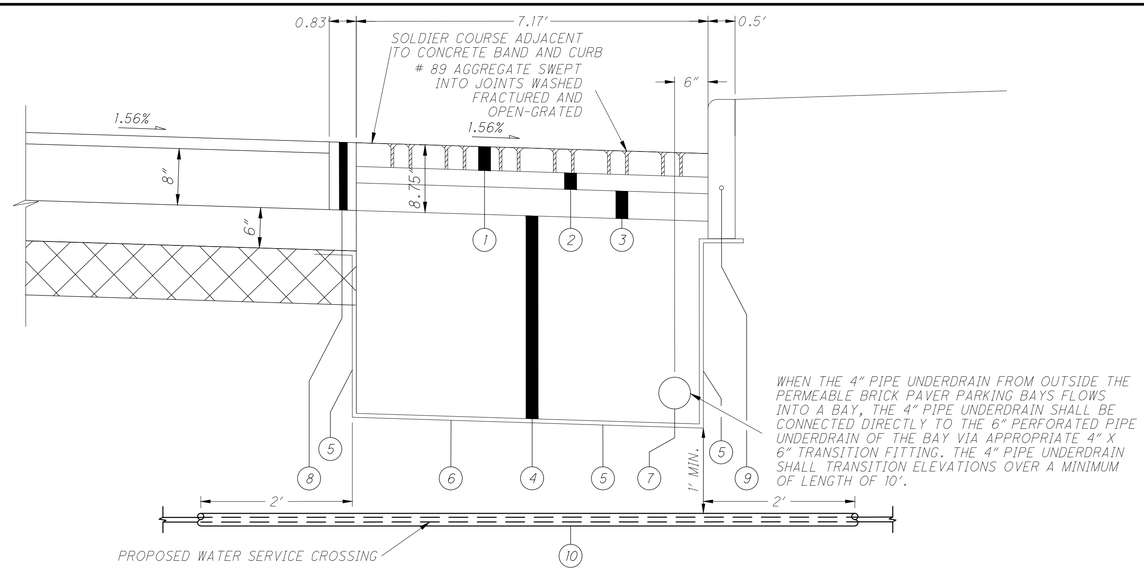
CONCRETE COLLAR FOR ROADWAY CASTINGS IN BRICK PAVEMENT

CITY OF COLUMBUS DEPARTMENT OF PUBLIC SERVICE DIVISION OF DESIGN AND CONSTRUCTION	4/1/19

CALCULATED BGC CHECKED JLR

STORM SEWER - POST CONSTRUCTION BMPS
PERMEABLE PAVER SPECIFICATIONS

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)



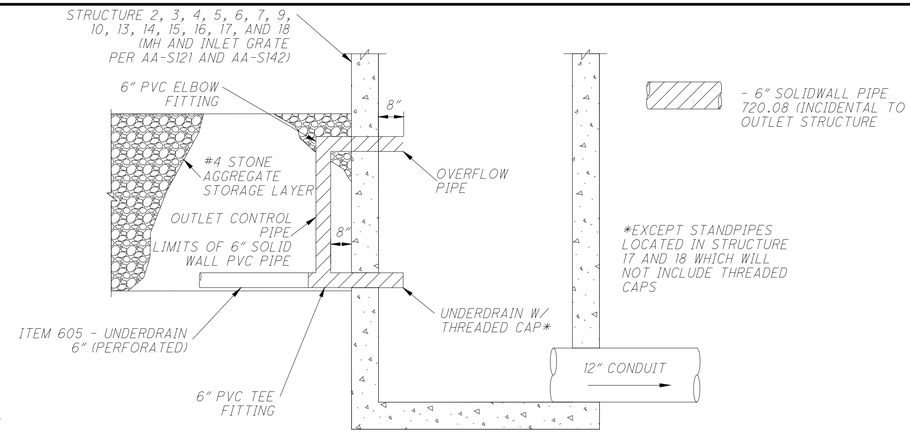
WHEN THE 4" PIPE UNDERDRAIN FROM OUTSIDE THE PERMEABLE BRICK PAVER PARKING BAYS FLOWS INTO A BAY, THE 4" PIPE UNDERDRAIN SHALL BE CONNECTED DIRECTLY TO THE 6" PERFORATED PIPE UNDERDRAIN OF THE BAY VIA APPROPRIATE 4" X 6" TRANSITION FITTING. THE 4" PIPE UNDERDRAIN SHALL TRANSITION ELEVATIONS OVER A MINIMUM OF LENGTH OF 10'.

PERMEABLE BRICK PAVER PARKING BAY DETAIL
(NTS)

1. ITEM 1525- PERMEABLE PAVERS (2 - ¾" X4"X8") (INCLUDED WITH PERMEABLE PAVER ROADWAY FOR PAYMENT)
2. ITEM 1525- AGGREGATE SETTING BED, NO. 8 STONE (T=2") (INCLUDED WITH PERMEABLE PAVER ROADWAY FOR PAYMENT)
3. ITEM 1525- AGGREGATE BASE NO. 57 STONE (T=4")
4. ITEM 1525 - AGGREGATE BASE, NO. 2 OR 4 STONE (T= SEE BELOW)

(AREA 1) DEPTH = 4.27' MIN. AT FRANKLIN ST.
STA 10+28 TO 11+45 LT.
(AREA 2) DEPTH = 4.52' MIN. AT FRANKLIN ST.
STA 11+98 TO 13+17 LT.
(AREA 3) DEPTH = 4.27' MIN. AT FRANKLIN ST.
STA 10+36 TO 11+44 RT.
(AREA 4) DEPTH = 4.52' MIN. AT FRANKLIN ST.
STA 12+03 TO 13+07 RT.
(AREA 5) DEPTH = 4.52' MIN. AT COLUMBIA ST.
STA 30+47 TO 31+27 LT.
(AREA 6) DEPTH = 4.52' MIN. AT COLUMBIA ST.
STA 30+43 TO 32+38 RT.
(AREA 7) DEPTH = 4.27' MIN. AT FRANKLIN ST.
STA 14+03 TO 15+45 LT.
(AREA 8) DEPTH = 4.27' MIN. AT FRANKLIN ST.
STA 14+03 TO 15+45 RT.
(AREA 9) DEPTH = 4.50' MIN. AT FRANKLIN ST.
STA 15+56 TO 17+77 LT.
(AREA 10) DEPTH = 4.16' MIN. AT FRANKLIN ST.
STA 15+56 TO 17+77 RT.

5. ITEM 1525- SUBGRADE STABILIZED GEOTEXTILE
6. ITEM 204 - SUBGRADE COMPACTION
7. ITEM 605 - UNDERDRAIN 6" (PERFORATED), 720.07 - (FT)
8. ITEM 1525 - PERMEABLE PAVEMENT CONCRETE EDGE RESTRAINT
9. ITEM 609 - CURB, STRAIGHT 18"
10. ITEM 625 - CONDUIT 2", 725.051, SCHEDULE 80, AS PER PLAN - (FT) SEE SHEET 58 FOR MORE INFORMATION.



DRAINAGE INLET DETAIL
(NTS)

POST-CONSTRUCTION INSPECTION AND MAINTENANCE SCHEDULE:

THE CONTRACTOR SHALL PROVIDE THE FIRST CLEANING OF THE PERMEABLE BRICK PAVER 1 TO 2 MONTHS AFTER FINAL ACCEPTANCE OF THE PROJECT BY THE CITY. SHOULD FINAL ACCEPTANCE NOT OCCUR UNTIL AFTER NOVEMBER 1ST, THEN THE FIRST CLEANING SHALL NOT BE PERFORMED UNTIL SPRING THE FOLLOWING YEAR. SHOULD PERMEABLE BRICK PAVER BECOME CLOGGED PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL PROVIDE CLEANING OF THE PERMEABLE BRICK PAVERS AS NECESSARY AT NO ADDITIONAL COST TO THE PROJECT. THE BRICK PAVERS ARE CONSIDERED CLEAN WHEN INFILTRATION RATES MATCH THAT OF THE INITIAL DESIGN.

AFTER FINAL ACCEPTANCE AND COMPLETION OF THE FIRST CLEANING BY THE CONTRACTOR, THE PERMEABLE BRICK PAVERS SHALL BE CLEANED AND FREE OF DEBRIS BY EITHER VACUUM, POWER BLOWER, OR POWER WASHING BI-ANNUALLY. THE PERMEABLE BRICK PAVERS MAY NEED CLEANED MORE OFTEN IN ORDER TO MAINTAIN THE INFILTRATION RATES.

REMOVE SNOW WITH A RUBBER TIPPED SHOVEL OR PLOW. KEEP PLOW TIP 1 INCH ABOVE THE SURFACE TO PREVENT DAMAGE TO THE BRICK PAVERS. STANDARD ROAD SALT IS ACCEPTABLE AS A DEICER.

MAINTENANCE ITEMS	SERVICE TIME			
	AS NEEDED	MONTHLY	SIX (6) MONTHS	ANNUALLY
VISUAL INSPECTION		X		
VISUAL INSPECTION TO SEE IF PERMEABLE PAVERS DEWATERS AFTER LARGE STORM EVENTS	X			
CLEAN PERMEABLE BRICK PAVERS	X	X		
SNOW REMOVAL	X			
INSPECT PERMEABLE BRICK PAVERS FOR STRUCTURAL REPAIR				X
REMOVE TRASH/DEBRIS	X			

THE PROPOSED BMPS SHALL BE OWNED AND MAINTAINED BY THE CITY OF HILLIARD

SUMMARY OF POST-CONSTRUCTION STORMWATER CONTROL FACILITIES (PROPOSED)

PERMEABLE BRICK PAVER AREA	CONTROL/OUTLET STRUCTURE NO. (AS REF. ON PLANS)	CONTROL FUNCTIONS	DRAINAGE AREA TO CONTROL FACILITY (ACRES)	FACILITY TYPE	GREEN INFRASTRUCTURE (FT2)
1	2, 4	WATER QUALITY/QUANTITY	0.134	PERM. BRICK PAVER	789
2	6	WATER QUALITY/QUANTITY	0.479	PERM. BRICK PAVER	806
3	3, 5	WATER QUALITY/QUANTITY	0.189	PERM. BRICK PAVER	724
4	7	WATER QUALITY/QUANTITY	0.316	PERM. BRICK PAVER	696
5	20	WATER QUALITY/QUANTITY	0.112	PERM. BRICK PAVER	524
6	10	WATER QUALITY/QUANTITY	0.232	PERM. BRICK PAVER	1346
7	13, 15	WATER QUALITY/QUANTITY	0.183	PERM. BRICK PAVER	973
8	14, 16	WATER QUALITY/QUANTITY	0.210	PERM. BRICK PAVER	971
9	17	WATER QUALITY/QUANTITY	0.813	PERM. BRICK PAVER	1537
10	18	WATER QUALITY/QUANTITY	0.612	PERM. BRICK PAVER	1542

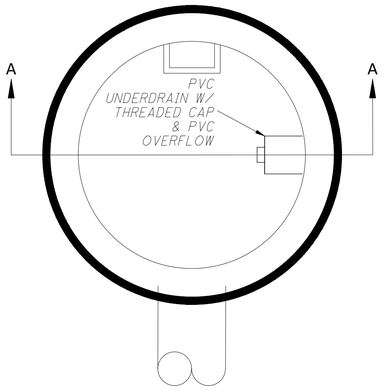
PERMEABLE BRICK PAVER AREA	RELEASE RATE								ALLOWABLE RELEASE RATE (CFS)	
	WQv (CFS)	1YR (CFS)	2YR (CFS)	5YR (CFS)	10YR (CFS)	25YR (CFS)	50YR (CFS)	100YR (CFS)	1YR	100YR
1	0.01	0.01	0.02	0.16	0.36	0.60	0.74	0.85	0.27	0.87
2	0.01	0.01	0.06	0.50	1.01	1.51	1.83	2.17	0.49	2.38
3	0.01	0.02	0.14	0.51	0.75	0.96	1.09	1.21	0.51	1.32
4	0.01	0.02	0.10	0.62	1.03	1.39	1.64	1.90	0.61	2.03
5	0.01	0.01	0.01	0.01	0.02	0.10	0.31	0.55	0.17	0.67
6	0.01	0.02	0.09	0.40	0.67	0.95	1.12	1.26	0.40	1.44
7	0.01	0.01	0.06	0.32	0.56	0.81	0.96	1.08	0.33	1.15
8	0.01	0.01	0.07	0.37	0.64	0.91	1.06	1.20	0.36	1.29
9	0.01	0.18	0.94	1.66	2.10	2.83	4.06	4.99	1.65	5.29
10	0.01	0.07	0.44	1.23	1.63	2.06	2.35	2.91	1.24	3.98

CALCULATED BGC
CHECKED JLR

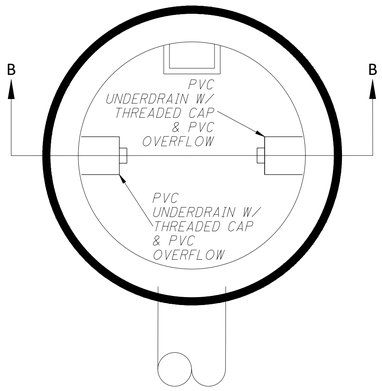
STORM SEWER - POST CONSTRUCTION BMPS
PERMEABLE BRICK PAVER DETAILS

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

66
75



SECTION A-A
NTS



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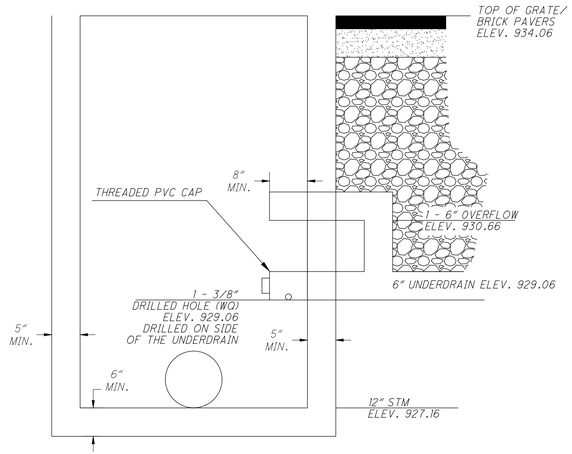
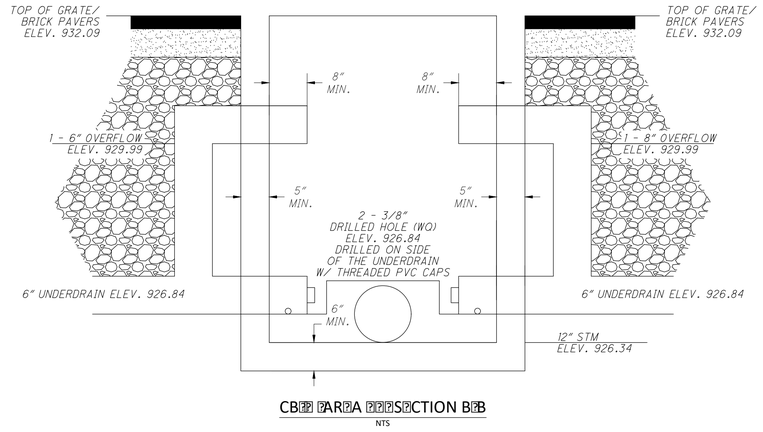
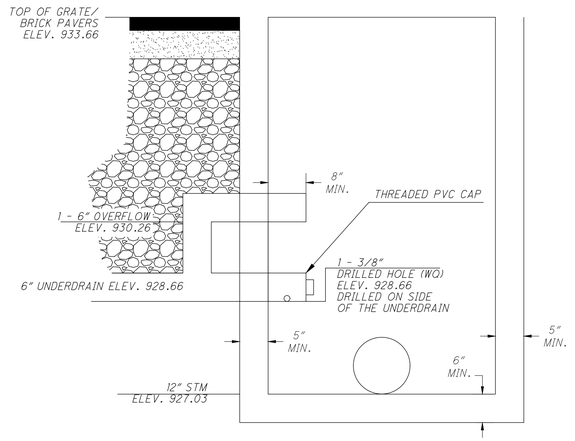


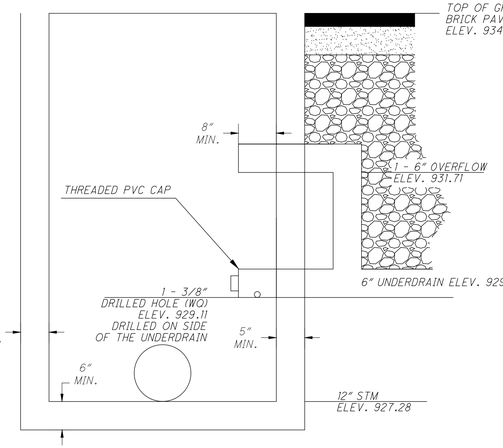
CB-2 PARA-A PROJECTION A-A
NTS



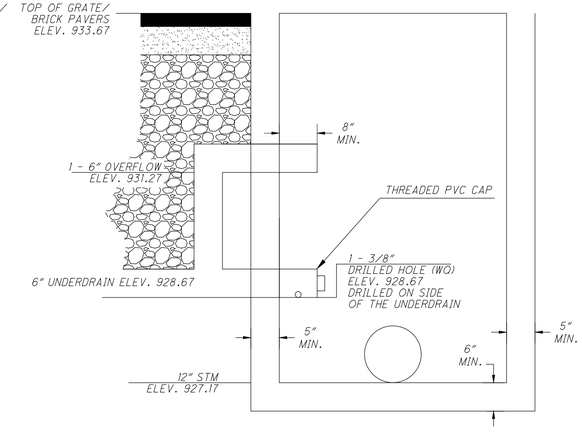
CB-2 PARA-A PROJECTION B-B
NTS



CB-2 PARA-A PROJECTION A-A
NTS



CB-2 PARA-A PROJECTION A-A
NTS



CB-2 PARA-A PROJECTION A-A
NTS

OUTLET STRUCTURE MAINTENANCE TABLE

SCHEDULE	ACTIVITY
MONTHLY	VISUALLY INSPECT AND CLEAN TRASH AND DEBRIS FROM OUTLET STRUCTURE.
ANNUALLY	INSPECT OUTLET STRUCTURE FOR DAMAGE AND PROPER FLOW. REMOVE DEBRIS AND MONITOR SEDIMENT ACCUMULATIONS IN BOTTOM OF OUTLET STRUCTURE.
3-7 YEARS	REMOVE SEDIMENT FROM OUTLET STRUCTURES.

NOTES:

LOCATION AND ELEVATION: AS NOTED FOR EACH CONTROL STRUCTURE AND OUTLET CONTROL PIPE, THE LOCATION AND THE ELEVATION ARE AT THE TOP CENTER OF THE INLET GRATE AND BOTTOM OF ORIFICE HOLE. PLACE THE ORIFICE HOLES AT THE ELEVATIONS AS SHOWN BELOW.

OWNER: POST-CONSTRUCTION BMP IS OWNED BY THE CITY OF HILLIARD

ITEM 604 - CURB INLETS, AS PER PLAN

BASIN MATERIALS: PROVIDE BASIN DIMENSIONS AND MATERIALS PER AA-S121 AND GRATE PER AA-S142. PROVIDE FLAT TOP AS NECESSARY IN LIEU OF THE TAPERED SECTION AS SHOWN IN STANDARD AA-S121.

OUTLET CONTROL PIPE: USE SCHEDULE 40 POLYVINYL CHLORIDE CONDUIT IN ACCORDANCE WITH CITY OF COLUMBUS ITEM 605 6" PIPE UNDERDRAIN (SOLID WALL), 720.08 - FOOT, WITH PERFORATIONS ONLY AS DETAILED.

PAYMENT: ALL MATERIALS AND LABOR, INCLUDING EXCAVATION AND BACKFILL, ARE PAID FOR AT THE CONTRACT PRICE FOR ITEM 604 - CURB INLETS, AS PER PLAN.

STRUCTURES	PIPE LENGTH	ANGLE	STRUCTURES	PIPE LENGTH	ANGLE
MH2-MH33	27.02'	S68°07'37"E	CB15-MH15	17.67'	S65°09'46"W
MH2-MH34	48.36'	S84°57'28"W	CB16-MH15	23.45'	N26°03'08"E
MH2-MH3	39.58'	S42°37'32"W	CB17-MH16	14.94'	N42°37'32"E
MH3-MH4	38.60'	N47°22'28"W	CB18-MH16	24.31'	S42°36'42"W
MH4-MH5	63.73'	N47°22'28"W	CB20-MH32	45.20'	S47°15'20"E
MH5-MH6	114.69'	N47°22'28"W			
MH6-MH7	90.92'	N47°22'28"W			
MH7-MH8	40.08'	N44°49'12"W			
MH8-CB1	28.89'	S50°03'49"W			
MH10-MH3	37.56'	N70°38'26"E			
MH12-MH13	17.86'	N43°00'29"W			
MH13-MH14	31.16'	S43°00'29"W			
MH13-MH17	24.05'	S47°42'17"E			
MH15-MH30	88.63'	S47°42'17"E			
MH17-MH15	118.14'	S47°42'17"E			
MH18-CB6	15.95'	N83°14'46"E			
MH30-MH16	129.30'	S47°44'15"E			
CB1-MH9	11.25'	S50°03'49"W			
CB2-MH7	15.24'	N08°35'20"E			
CB3-MH7	26.63'	S42°37'32"W			
CB4-MH6	12.63'	N42°37'32"E			
CB5-MH6	26.63'	S43°58'29"W			
CB6-MH5	12.63'	N42°37'32"E			
CB7-MH5	26.63'	S42°37'32"W			
CB9-CB10	31.25'	S47°15'20"E			
CB10-MH31	6.34'	S47°15'20"E			
CB13-MH17	16.96'	S43°08'39"W			
CB14-MH17	22.30'	N42°37'32"E			

STORM STRUCTURE COORDINATES			AS-BUILT	
STRUCTURE	NORTHING	EASTING	NORTHING	EASTING
CB1	741273.486	1783583.915		
CB2	741279.090	1783637.029		
CB3	741243.884	1783616.215		
CB4	741211.743	1783710.203		
CB5	741182.736	1783682.653		
CB6	741134.073	1783794.593		
CB7	741104.641	1783767.504		
CB9	741201.411	1783989.281		
CB10	741179.692	1784012.781		
CB13	741025.004	1783913.098		
CB14	740995.676	1783885.896		
CB15	740940.553	1784004.927		
CB16	740911.142	1783977.744		
CB17	740797.521	1784160.260		
CB18	740768.081	1784133.173		
CB20	741146.886	1783927.995		
CB21	740712.382	1784181.978		
MH2	741084.337	1783887.887		
MH3	741055.211	1783861.081		
MH4	741081.348	1783832.682		
MH5	741124.507	1783785.789		
MH6	741202.178	1783701.399		
MH7	741263.750	1783634.500		
MH8	741292.182	1783606.246		
MH9	741266.417	1783575.471		

STORM STRUCTURE COORDINATES			AS-BUILT	
STRUCTURE	NORTHING	EASTING	NORTHING	EASTING
MH10	741042.760	1783825.645		
MH12	741041.601	1783895.647		
MH13	741028.539	1783883.463		
MH14	741005.752	1783862.208		
MH15	740932.854	1783988.636		
MH16	740786.251	1784149.888		
MH17	741012.357	1783901.249		
MH18	741135.673	1783810.181		
MH21 (SAN)	741213.885	1784037.098		
MH30	740873.203	1784054.193		
MH31	741175.905	1784016.879		
MH32	741175.645	1784017.160		
MH33	741094.403	1783862.812		
MH34	741088.587	1783936.062		
MH35	741024.967	1783864.044		

CALCULATED KDK
CHECKED JAM

STORM SEWER - POST CONSTRUCTION BMPS
OUTLET STRUCTURE ELEVATION DETAILS

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

67
75

CB## #AREA ###SECTION B#B

NTS

CB### #AREA ###SECTION A#A

NTS

CB### #AREA ###SECTION A#A

NTS

CB### #AREA ###SECTION B#B

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CB### #AREA ###SECTION B#B

NTS

CALCULATED KDK
CHECKED JAM

STORM SEWER - POST CONSTRUCTION BMPS
OUTLET ELEVATION DETAILS

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

68
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LEGEND

EXISTING SIGN TO REMAIN

EXISTING SIGN TO BE REMOVED

PROPOSED SIGN

PROPOSED CROSSWALK

(DY) CENTERLINE, 5" SOLID DOUBLE

(SL) STOP LINE, 20" WHITE

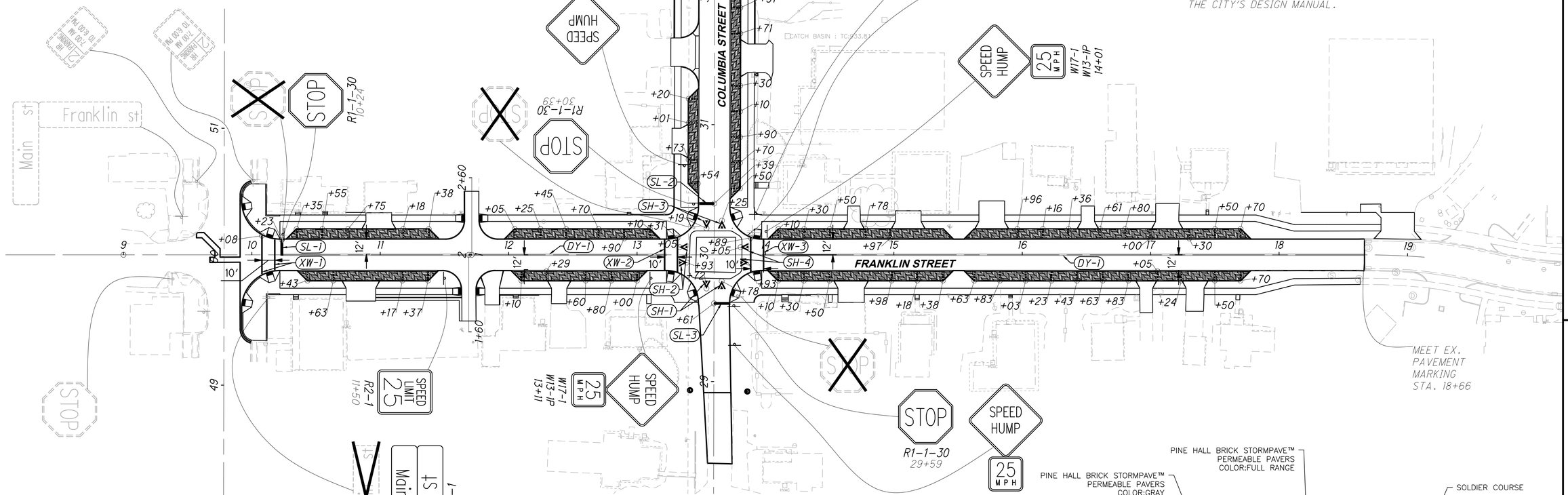
(XW) CROSSWALK LINE, 10" WHITE

(SH) SPEED HUMP MARKING, (ITEM 646)

NOTE

1. ANY EXISTING STRIPING DISTURBED BY CONSTRUCTION SHALL BE REPLACED IN KIND WITH NEW TRAFFIC PAINT PER ITEM 642.

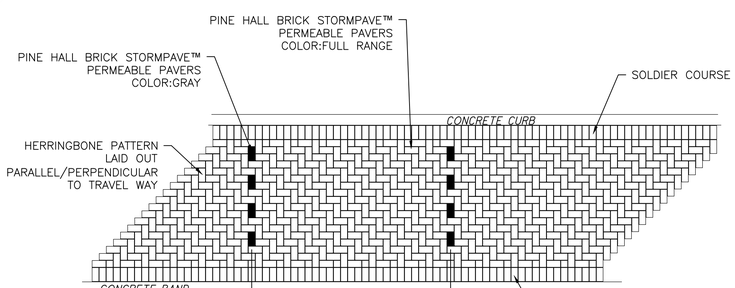
2. ALL SIGN POSTS ARE TO BE ITEM 630-GROUND MOUNTED SIGN SUPPORT, AS PER PLAN (PER CITY OF HILLIARD STANDARD DRAWING TC-2) UNLESS OTHERWISE NOTED.



ITEM	DESCRIPTION	TOTAL	UNIT
630	SIGN, FLAT SHEET	31	SF
630	STREET NAME SIGN, DOUBLE SIDED, TYPE E, AS PER PLAN	2	EA
630	STREET NAME SIGN, DOUBLE SIDED, TYPE F, AS PER PLAN	2	EA
630	STREET NAME SIGN SUPPORT AND ANCHOR (TYPE E/F), AS PER PLAN	2	EA
630	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	6	EA
630	GROUND MOUNTED SIGN SUPPORT, AS PER PLAN	128.5	FT
644	CENTERLINE, 5" SOLID DOUBLE	0.15	MILE
644	STOP LINE, 20" WHITE	36	FT
644	CROSSWALK LINE, 10" WHITE	156	FT
644	TRANSVERSE/DIAGONAL LINE	108	FT
646	SPEED HUMP MARKING	8	EA

GENERAL NOTES FOR TRAFFIC CONTROL

1. ALL TRAFFIC CONTROL SHALL BE REVIEWED BY THE OFFICE OF THE CITY ENGINEER AT LEAST TEN (10) DAYS PRIOR TO START OF WORK ON THIS PROJECT.
2. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED & ERECTED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD) (CURRENT EDITION LATEST REVISION), COPIES OF WHICH ARE AVAILABLE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DIVISION OF ENGINEERING, 1980 WEST BROAD STREET, COLUMBUS, OHIO, 43223.
3. ALL SIGN SUPPORTS SHALL BE 2-INCH SQUARE BLACK POSTS WITH DIE CUT KNOCKOUTS (TELESPAR QWIK-PUNCH SIGNPOSTS OR APPROVED EQUAL) AND A SINGLE BREAKAWAY ANCHOR.
4. ANCHORS SHALL BE 2 ¼-INCH SQUARE, 42-INCH LONG, AND EMBEDDED SUCH THAT 2 INCHES OF ANCHOR REMAINS ABOVE GROUND LEVEL. THE OVERLAP OF THE POST WITHIN THE ANCHOR SLEEVE SHALL BE 8 INCHES. SEE ODOT STANDARD CONSTRUCTION DRAWING, TC-41.20.
5. ALL SIGNS SHALL BE ERECTED WITH A 7-FOOT MINIMUM VERTICAL CLEARANCE BETWEEN THE EDGE OF PAVEMENT AND THE BOTTOM OF SIGN FOR BOTH CURB AND DITCH SECTIONS. HORIZONTAL CLEARANCES FOR BOTH CURB AND DITCH SECTIONS SHALL BE AS PER OMUTCD/ODOT STANDARDS. SEE OMUTCD FIGURE 2A-1.
6. STREET SIGNS SHALL MEET THE CURRENT REQUIREMENTS OF THE CITY OF HILLIARD, DIVISION OF ENGINEERING, FOUND IN CHAPTER 9 OF THE CITY'S DESIGN MANUAL.



PARKING DETAILS
N.T.S

NORTH
HORIZ.
0 20 40 80
CALCULATED ESD
CHECKED JDB

PAVEMENT MARKING AND SIGNING

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

69
75

P-928

ITEM - POWER SER ICE AS PER PLAN

POWER SERVICE SHALL BE PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT C&MS 625.15. THE CONTRACTOR SHALL TIE INTO THE EXISTING LIGHTING CONTROL CENTER FOR THE LANDMARK LOFTS DEVELOPMENT AS INDICATED IN THE PLANS BY CONNECTING THE NEW LIGHTING CIRCUIT TO THE UNUSED BREAKER CIRCUIT IN THE EXISTING LIGHTING CONTROL CENTER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING ELECTRICAL TESTS AS PER ITEM #9 UNDER CITY OF HILLIARD GENERAL NOTES FOR STREET LIGHTING LOCATED IN THE SECOND COLUMN ON THIS SHEET.

ALL COSTS FOR ELECTRICAL TEST ITEMS SHALL BE CONSIDERED INCIDENTAL TO THIS PAY ITEM.

THE COST FOR ALL NECESSARY MATERIALS AND ASSOCIATED LABOR SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR ITEM 625 - POWER SERVICE, AS PER PLAN.

ITEM - TRENCH " DEEP AS PER PLAN

TRENCH SHALL BE IN ACCORDANCE WITH CITY OF HILLIARD STANDARD CONSTRUCTION DRAWING SL-6, WITH THE EXCEPTION OF THE FOLLOWING:

1. ALL TRENCHING SHALL BE 30" DEEP.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID PER FOOT FOR ITEM 625 - TRENCH, 30" DEEP, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE TRENCH WORK IN ACCORDANCE WITH THE STANDARD CONSTRUCTION DRAWINGS.

ITEM - TRENCH IN PA ED AREA TYPE AS PER PLAN

TRENCH SHALL BE IN ACCORDANCE WITH CITY OF HILLIARD STANDARD CONSTRUCTION DRAWING SL-6, WITH THE EXCEPTION OF THE FOLLOWING:

1. ALL 4" CONDUIT SLEEVES SHALL BE A MINIMUM SCHEDULE 80 PVC CONDUIT.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID PER FOOT FOR ITEM 625 - TRENCH IN PAVED AREA, TYPE B, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE TRENCH WORK IN ACCORDANCE WITH THE STANDARD CONSTRUCTION DRAWINGS.

ITEM - LIGHT POLE DECORATI E AS PER PLAN

LIGHT POLES SHALL BE PER CITY OF HILLIARD STANDARD CONSTRUCTION DRAWING SL-16 AND THE DETAILS SHOWN ON SHEET 71.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID PER EACH FOR ITEM 625 - LIGHT POLE, DECORATIVE, AS PER PLAN AND INCLUDE ALL LABOR, MATERIALS, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN A SATISFACTORY MANNER.

ITEM - L MINAIRE DECORATI E AS PER PLAN

LUMINAIRES SHALL BE PER CITY OF HILLIARD STANDARD CONSTRUCTION DRAWING SL-16 AND THE DETAILS SHOWN ON SHEET 71.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID PER EACH FOR ITEM 625 - LUMINAIRE, DECORATIVE, AS PER PLAN AND INCLUDE ALL LABOR, MATERIALS, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN A SATISFACTORY MANNER.

ITEM - LIGHT POLE FO NDATION AS PER PLAN

LIGHT POLE FOUNDATIONS SHALL BE PER CITY OF HILLIARD STANDARD CONSTRUCTION DRAWING SL-16 AND THE DETAILS SHOWN ON SHEET 71.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID PER EACH FOR ITEM 625 - LIGHT POLE FOUNDATION, AS PER PLAN AND INCLUDE ALL LABOR, MATERIALS, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN A SATISFACTORY MANNER.

ITEM - COND IT MISC COND IT " SCHED LE P C

THIS ITEM SHALL CONFORM TO C&MS 725.051, EXCEPT THAT THE PVC SHALL BE SCHEDULE 80.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 625 - CONDUIT, MISC.: CONDUIT, 4", SCHEDULE 80 PVC AND INCLUDE ALL LABOR, MATERIALS, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN A SATISFACTORY MANNER.

ITEM - LIGHT POLE MISC E ISTING LIGHT POLE AND L MINAIRE TO E REMO ED AND REERECTED

THE CONTRACTOR SHALL REMOVED THE EXISTING LIGHT POLE AND LUMINAIRE, LOCATED AT STA. 31+95.5, 29.4' LT. AND REERECT IT AT THE LOCATION SPECIFIED IN THE LIGHTING PLANS.

THE CONTRACTOR SHALL REMOVE THE EXISTING LIGHT POLE FOUNDATION IN ITS ENTIRETY.

THE CONTRACTOR SHALL TAKE GREAT CARE NOT TO DAMAGE THE EXISTING POLE, LUMINIARE, POLE AND BRACKET CABLE AND DISTRIBUTION CABLE AS IT IS THE DESIGNER'S INTENT TO REUSE THE AFOREMENTIONED ITEMS. IF THE PROJECT ENGINEER HAS DETERMINED ANY EQUIPMENT PROPOSED FOR REUSE HAS BEEN DAMAGED, THE CONTRACTOR SHALL REPLACE THE EQUIPMENT IN LIKE KIND, AS APPROVED BY THE ENGINEER, AT THE CONTRACTOR'S COST.

PAYMENT FOR ITEM 625 - LIGHT POLE, MISC.: EXISTING LIGHT POLE AND LUMINAIRE TO BE REMOVED AND REERECTED SHALL BE MADE AT THE CONTRACT UNIT PRICE BID PER EACH AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT AND OTHER INCIDENTALS NECESSARY TO COMPLETE THE WORK.

CITY OF HILLIARD - GENERAL NOTES FOR STREET LIGHTING

1. THE DESIGN AND LAYOUT FOR STREET LIGHTS, UNDERGROUND WIRING AND OTHER PERTINENT EQUIPMENT TO BE USED SHALL BE IN CONFORMANCE WITH GUIDELINES ISSUED BY THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA), STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND APPROVED BY THE CITY ENGINEER.

2. ALL ELECTRIC WORK PERFORMED UNDER THESE SPECIFICATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE (NEC), WHICH IS PUBLISHED BY THE NATIONAL FIRE PROTECTION ASSOCIATION AND IS A UNITED STATES STANDARD FOR THE SAFE INSTALLATION OF ELECTRICAL WIRING AND EQUIPMENT, AND ALL STATE OR LOCAL CODES THAT MAY APPLY, INCLUDING BUT NOT LIMITED TO COLUMBUS ITEM 1000 AND ODOT ITEM 625.

3. METERING OF ELECTRICITY FOR STREET LIGHTING IS NOT REQUIRED. STREET LIGHTING DESIGNS SHALL BE COORDINATED WITH THE ELECTRICAL ENERGY SUPPLIER BY THE DESIGN ENGINEER; THE TYPE OF LIGHTING, INCLUDING THE USE OF ALL ADVANCED LIGHTING TECHNOLOGIES, SHALL BE CLEARLY DEFINED IN ORDER TO ESTIMATE ENERGY USE. THE NUMBER AND FORMAT OF RECORD PLANS TO BE SUBMITTED SHALL BE DETERMINED BY THE SUPPLIER OF ELECTRIC ENERGY. ALL SERVICE ENCLOSURES ALONG PUBLIC STREETS SHALL BE PAD-MOUNTED AND SCREENED; ABOVEGROUND POLE OR POST-MOUNTED ASSEMBLIES ARE NOT PERMITTED.

4. LIGHTING CONDUIT PARALLEL TO THE STREET SHALL BE LOCATED PER HILLIARD STANDARD DRAWING SL-6. ALL OTHER LIGHTING CONDUIT SHALL BE LOCATED TWO (2) FEET MINIMUM OFF SIDE AND REAR LOT LINES IN A FIVE (5) FOOT MINIMUM EASEMENT. MINIMUM DEPTH FOR CONDUIT IS TWO (2) FEET. ELECTRICAL WARNING TAPE (RED) SHALL BE PROVIDED ONE (1) FOOT OVER TOP OF STREET LIGHT CABLE AND CONDUIT.

5. THE CONTRACTOR/OWNER/DEVELOPER SHALL SUBMIT MANUFACTURER'S SPECIFICATION SHEETS TO THE CITY ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. MANUFACTURER'S SPECIFICATION SHEETS ARE REQUIRED FOR THE FOLLOWING ITEMS:

   - LUMINAIRE
   - LAMPS
   - POLE
   - PHOTOCELL
   - SERVICE ENCLOSURE
   - PULL BOX
   - CONDUIT
   - CABLE
   - HAND HOLES
   - CONTROLS

6. FOR EACH NEW PROJECT WHERE STREET LIGHT POLES ARE INSTALLED IN PUBLIC RIGHT-OF-WAY, ADDITIONAL POLE(S), LUMINAIRE(S), AND ALL INCIDENTAL HARDWARE, SHALL BE PROVIDED TO THE CITY OF HILLIARD SERVICE DEPARTMENT FOR MAINTENANCE PURPOSES. THE REQUIRED NUMBER OF SPARES IS BASED ON A RATIO OF 1 SPARE FOR EACH 10 NEW POLES WITH A MINIMUM OF ONE COMPLETE ASSEMBLY (POLE, LUMINAIRE, AND ALL INCIDENTAL HARDWARE) FOR ALL SYSTEMS OF FOUR (4) OR MORE POLES. IF FEWER THAN 4 POLES ARE INSTALLED, THIS REQUIREMENT IS WAIVED. THE FOLLOWING ARE THE NUMBER OF ADDITIONAL POLES, LUMINAIRES, AND INCIDENTAL HARDWARE THAT ARE REQUIRED:

POLES INSTALLED	ADDITIONAL POLES, LUMINAIRES, & HARDWARE TO BE DELIVERED TO CITY
0 - 3	0
4 - 10	1
11 - 20	2
21 - 30	3
31 - 40	4
MORE THAN 40	5

THESE ADDITIONAL "MATERIAL ONLY" ITEMS SHALL BE CLEARLY DEFINED AS A SEPARATE LINE ITEM IN THE GENERAL SUMMARY OR QUANTITIES. ALL SPARE EQUIPMENT SHALL BE DELIVERED TO THE CITY OF HILLIARD SERVICE DEPARTMENT PRIOR TO ACCEPTANCE OF THE PROJECT. A SIGNED ITEMIZED RECEIPT SHOWING THE ITEMS AND QUANTITIES DELIVERED TO THE CITY SHALL BE PROVIDED BY THE CONTRACTOR TO THE INSPECTOR PRIOR TO ACCEPTANCE AND/OR PAYMENT OF MATERIALS.

7. THE CONTRACTOR/OWNER/DEVELOPER SHALL OBTAIN ALL PERMITS REQUIRED BY THE PUBLIC AUTHORITY HAVING JURISDICTION, INCLUDING A HILLIARD RIGHT-OF-WAY PERMIT. ALL EASEMENTS REQUIRED FOR CONSTRUCTION SHALL BE SECURED AND SUBMITTED TO THE CITY OF HILLIARD FOR RECORDING PRIOR TO COMMENCEMENT OF WORK; NO WORK WHICH REQUIRES AN EASEMENT SHALL PROCEED UNTIL THIS IS COMPLETE.

8. THE CITY ENGINEER OR HIS AUTHORIZED REPRESENTATIVE SHALL PERFORM INSPECTION OF THE WORK. THE CITY ENGINEER WILL REQUIRE AT LEAST FORTY-EIGHT (48) HOURS' NOTICE BEFORE ANY WORK TAKES PLACE. NO UNDERGROUND CABLE SHALL BE BACKFILLED UNTIL INSPECTED. FAILURE TO REQUEST THE NECESSARY INSPECTION MAY RESULT IN THE REJECTION OF THE WORK AND THE PROJECT.

9. THE CONTRACTOR/OWNER/DEVELOPER SHALL CONDUCT ELECTRICAL TESTS PER COLUMBUS ITEM 1001.18 AND ODOT ITEM 625.19. PAYMENT FOR THE ELECTRICAL TEST AND ALL ASSOCIATED COSTS SHALL BE UNDER ITEM 625 - POWER SERVICE, AS PER PLAN.

10. THE CONTRACTOR/OWNER/DEVELOPER SHALL PROVIDE ONE PAPER COPY AND ONE ELECTRONIC (PDF) COPY OF THE FOLLOWING ITEMS:

    - FINAL "AS-BUILT" DRAWINGS FOR THE LIGHTING SYSTEM
    - AN OPERATIONS & MAINTENANCE (O&M) MANUAL (PAPER COPY IN A 3-RING BINDER) FOR ALL ELECTRICAL ITEMS PROVIDED IN THE PROJECT

11. FOLLOWING INSTALLATION OF THE LIGHTING SYSTEM, THE CONTRACTOR/OWNER/DEVELOPER SHALL REQUEST FINAL INSPECTION BY THE CITY OF HILLIARD OPERATIONS DIVISION. WITHIN ONE WEEK, THE FINAL INSPECTION WILL BE CONDUCTED, AND A FINAL PUNCH LIST WILL BE ISSUED. UPON COMPLETION OF ALL PUNCH LIST ITEMS, THE CITY, OR THEIR REPRESENTATIVE, WILL OFFICIALLY ACCEPT THE LIGHTING SYSTEM IN WRITING. THIS DATE ESTABLISHES THE BEGINNING OF THE WARRANTY PERIOD.

12. THE WARRANTY PERIOD FOR ALL LIGHTING SYSTEMS, MATERIALS, AND/OR OTHER ELECTRIC COMPONENTS IS ONE (1) YEAR UNLESS OTHERWISE EXTENDED IN THE PLANS. ANY POLES, LUMINAIRES OR OTHER EQUIPMENT THAT ARE DAMAGED AS PART OF CONSTRUCTION ACTIVITIES ARE THE SOLE RESPONSIBILITY OF THE DEVELOPER TO REPAIR AND/OR REPLACE, INDEPENDENT OF THE STATUS OF THE WARRANTY PERIOD.

13. THE STREET LIGHTING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE 2016 OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS) AND THE CITY OF HILLIARD STANDARD DRAWINGS. THESE DOCUMENTS SHALL GOVERN ALL MATERIALS AND WORKMANSHIP INVOLVED IN THE IMPROVEMENTS SHOWN ON THESE PLANS, EXCEPT AS SUCH SPECIFICATIONS ARE MODIFIED BY THE FOLLOWING SPECIFICATIONS OR BY THE CONSTRUCTION DETAILS SET FORTH HEREIN.

14. NO SPLICES SHALL BE MADE TO CIRCUIT CABLES EXCEPT AT NOTED LOCATIONS. THE PLAN DETAILS SHALL BE CONSIDERED SUPPLEMENTAL TO C&MS SPECIFICATIONS.

15. PULL BOXES SHALL BE LOCATED APPROXIMATELY WHERE SHOWN ON PLANS WITH EXACT LOCATION OF EACH PULL BOX TO BE DETERMINED AFTER CAREFUL CONSIDERATION HAS BEEN GIVEN TO THE LOCATION OF UTILITIES, PAVEMENTS, AND GRADES. THE QUANTITY OF PULL BOXES MAY VARY DEPENDING UPON THE ACTUAL SITE CONDITIONS AND LOCATION OF UTILITIES.

16. THE CONTRACTOR IS RESPONSIBLE TO COMPLY WITH ALL LOCAL CODES AND ORDINANCES PERTINENT TO THE PROGRESSION OF THE WORK DESCRIBED WITHIN THE PROJECT PLANS. ANY REQUIRED PERMIT SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR. THE CONTRACTOR AND SUB-CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE AND LOCAL SAFETY REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUB-CONTRACTOR TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO AN EQUAL OR BETTER CONDITION THAN LISTED PRIOR TO CONSTRUCTION.

17. CIRCUIT VOLTAGE FOR ALL LUMINAIRES SHALL BE 120 VOLT. ALL LUMINAIRES SHALL BE LED.

18. ALL UNDERGROUND LIGHTING CABLES TO BE PLACED IN 3" PVC CONDUIT EXCEPT WHERE NOTED ON PLANS. THE CENTERLINE OF THE TRENCH SHALL BE LOCATED IN ACCORDANCE WITH THE PLAN DETAILS. TRENCH LOCATION MAY BE DEFLECTED AROUND OBSTACLES AS APPROVED BY THE CITY ENGINEER.

19. ALL EXISTING LIGHTING CIRCUITS MUST BE MAINTAINED DURING CONSTRUCTION.

20. EXISTING STREET LIGHTS ON FRANKLIN STREET THROUGH THE LOFT DEVELOPMENT AT CEMETERY ROAD SHALL OPERATE NIGHTLY WITHOUT INTERRUPTION.

PAINT CHIP S MITTAL

PRIOR TO ANY PAINTING, THE CONTRACTOR SHALL SUBMIT PAINT SAMPLES TO THE CITY ENGINEER AND THE CITY OF HILLIARD. PAINT SAMPLES SHALL BE REPRESENTATIVE OF THE COLOR, TYPE AND MANUFACTURE THAT WILL BE USED FOR FINISHING THE VARIOUS ITEMS. THE CITY ENGINEER AND THE CITY OF HILLIARD SHALL REVIEW THE PAINT SAMPLES PRIOR TO THE COMMENCEMENT OF THE FINISHING PROCESS. PAINT SAMPLES SHALL BE SUBMITTED FOR ALL PROPOSED STREET LIGHTING ITEMS CALLED FOR IN THIS PLAN SET, INCLUDING POLES, LUMINAIRES AND CONTROL CENTER CABINET.

CITY OF HILLIARD - STREET LIGHTING STANDARD DRAWINGS

SL-5	THOROUGHFARE STREET OLD HILLIARD SERVICE ENCLOSURE
SL-6	UNDERGROUND CONDUIT TRENCH DETAILS (3 SHEETS)
SL-16	OLD HILLIARD STREET POLE BASE-POLE AND LUMINAIRE
SL-17	CONDUCTOR DETAILS

COPIES ARE AVAILABLE ONLINE AT WWW.HILLIARDOHIO.GOV

CALCULATED BJS CHECKED SDS

LIGHTING - GENERAL NOTES

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

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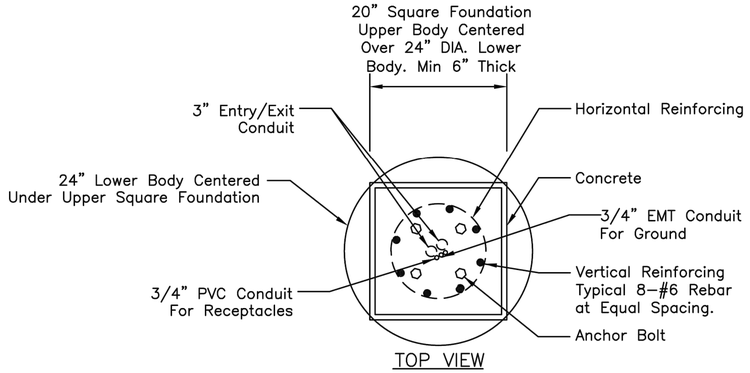
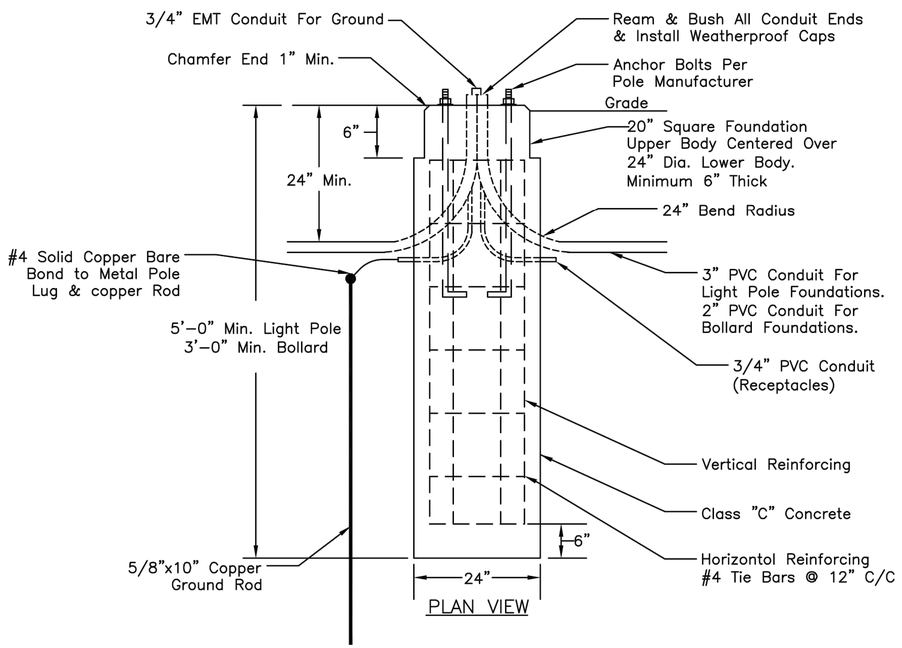
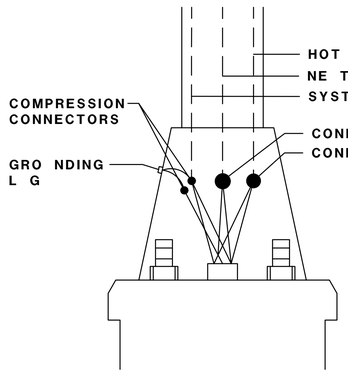




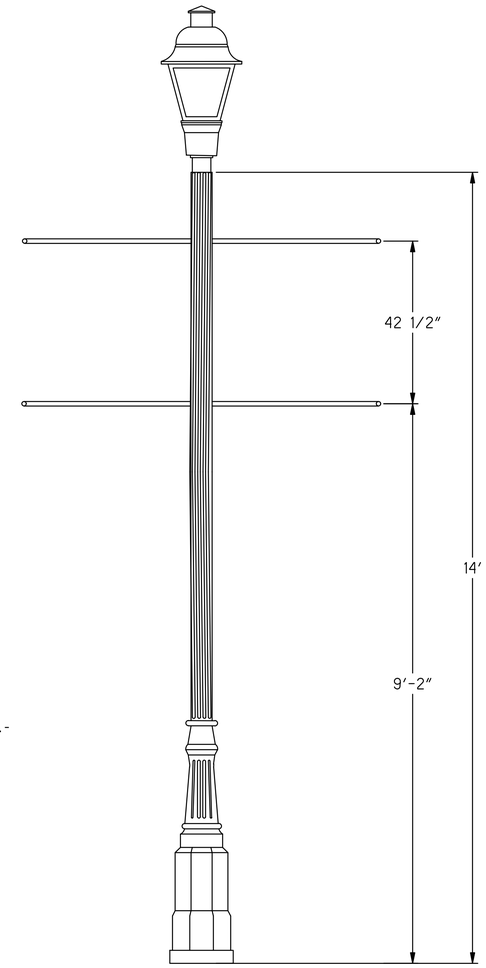
FO NDATION DETAIL
SL-

NOTES

1. *LUMINAIRE ASSEMBLY: CAST ALUMINUM WITH STAINLESS STEEL FASTENERS. HINGED ROOF. SLIPFITTER FOR 4" O.D. TENON. ARCHITECTURAL AREA LIGHTING PROVIDENCE LED MODEL # PROV-Y3-32LED-3K-700-BLK-LDL-550.*
2. *POLE: CAST ALUMINUM OCTAGONAL BASE WITH AN 8" X 9 1/2" ACCESS DOOR, A TAPERED, FLUTED SHAFT AND A WALL THICKNESS OF 0.188", ALUMINUM ALLOY 6063-T6 WITH SATIN GROUND FINISH, BLACK.*
3. *POLE BASE CABLE CONNECTIONS: INSTALL WEATHERPROOF IN-LINE FUSEHOLDERS WITH 1 AMP FUSE, BUSS KTK-1 FUSE OR APPROVED INTERCHANGEABLE EQUAL. BUSS HEB-AA ON THE PHASE CONDUCTOR AND NEUTRAL, OR APPROVED INTERCHANGEABLE EQUAL. PROVIDE ENOUGH SLACK CABLE TO ALLOW FUSEHOLDERS TO BE PULLED OUT OF ACCESS HOLE 12".*
4. *DOUBLE BANNER ARMS SHALL BE PROVIDED PER SL-16.*
5. *REFERENCED GFCI RECEPTACLE AND CLAMP ON PT3. PLANTER BASKET PER SL-16 WILL NOT BE PROVIDED.*



POLE WIRING DETAIL
SL- MODIFICATION



OLD HILLIARD STREET POLE ASE POLE L MINAIRE
SL- MODIFICATION

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LIGHTING - DETAILS

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

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SHEET NO.	LOCATION	STATION FROM	STATION TO	SIDE	625 CONNECTION, FUSED PULL APART EACH	625 CONNECTION, UNFUSED PULL APART EACH	625 LIGHT POLE, DECORATIVE, AS PER PLAN EACH	625 LIGHT POLE FOUNDATION, AS PER PLAN EACH	625 LIGHT POLE, MISC.: EXISTING LIGHT POLE AND LUMINAIRE TO BE REMOVED AND REERECTED EACH	625 NO. 8 AWG 600 VOLT DISTRIBUTION CABLE FT	625 NO. 10 AWG POLE AND BRACKET CABLE FT	625 CONDUIT, 3", 725.051 FT	625 CONDUIT, MISC.: CONDUIT, 4", SCHEDULE 80 PVC FT	625 LUMINAIRE, DECORATIVE, AS PER PLAN EACH	625 TRENCH, 30" DEEP, AS PER PLAN FT	625 TRENCH IN PAVED AREA, TYPE B, AS PER PLAN FT	625 PULL BOX, 725.08, 18" EACH	625 PULL BOX REMOVED EACH	625 GROUND ROD EACH	625 POWER SERVICE, AS PER PLAN EACH	625 PLASTIC CAUTION TAPE FT
71	FRANKLIN ST.	11+42.0		LT	1	1	1	1			72			1					1		
71	FRANKLIN ST.	11+42.0	12+27.2	LT						285		85	20		65	20					85
71	FRANKLIN ST.	12+27.2		LT	1	1	1	1			72			1					1		
71	FRANKLIN ST.	12+27.2	13+38.6	LT						374		112			112						112
71	FRANKLIN ST.	13+38.6		LT													1				
71	FRANKLIN ST.	13+38.6	13+83.4	LT						135		45	90			45					45
71	FRANKLIN ST. / COLUMBIA ST.	13+38.6	31+24.3	LT						347		103			103						103
71	COLUMBIA ST.	31+18.7		LT	1	1	1	1			72			1					1		
71	COLUMBIA ST.	31+18.7	31+92.6	LT						255		75	33		42	33					75
71	COLUMBIA ST.	31+92.6		LT	1	1	1	1			72			1					1		
71	COLUMBIA ST.	31+91.4		LT													1				
71	COLUMBIA ST.	31+91.8		LT														1			
71	COLUMBIA ST.	31+91.4	31+98.9	LT								8			8						8
71	COLUMBIA ST.	31+95.5		LT					1												
71	COLUMBIA ST.	31+98.9		LT				1													
71	COLUMBIA ST.	30+46.2		RT	1	1	1	1			72			1					1		
71	COLUMBIA ST. / FRANKLIN ST.	30+46.2	13+83.4	RT/LT						98		25			25						25
71	FRANKLIN ST.	13+83.4		LT													1				
71	FRANKLIN ST.	10+68.5		RT	1	1	1	1			72			1					1		
71	FRANKLIN ST.	10+68.5	13+05.5	RT						744		238	20		218	20					238
71	FRANKLIN ST.	13+05.5		RT	1	1	1	1			72			1					1		
71	FRANKLIN ST.	13+05.5	13+33.2	RT						122		28			28						28
71	FRANKLIN ST.	13+33.2		RT													1				
71	FRANKLIN ST.	13+33.2	13+83.4	RT						150		50	100			50					50
71	FRANKLIN ST.	13+83.4		RT													1				
71	FRANKLIN ST.	13+83.4	14+00.0	RT						74		17			17						17
71	FRANKLIN ST.	14+00.0		RT	1	1	1	1			72			1					1		
72	FRANKLIN ST.	13+83.4	14+87.8	LT						338		105			105						105
72	FRANKLIN ST.	14+87.8		LT	1	1	1	1			72			1					1		
72	FRANKLIN ST.	14+87.8	15+90.8	LT						339		103			103						103
72	FRANKLIN ST.	15+90.8		LT	1	1	1	1			72			1					1		
72	FRANKLIN ST.	15+90.8	16+60.7	LT						240		70			70						70
72	FRANKLIN ST.	16+60.7		LT	1	1	1	1			72			1					1		
72	FRANKLIN ST.	16+60.7	17+73.8	LT						369		113			113						113
72	FRANKLIN ST.	17+73.8		LT	1	1	1	1			72			1					1		
72	FRANKLIN ST.	17+73.8	17+77.7	LT						50		4			4						4
72	FRANKLIN ST.	17+77.7		LT													1				
72	FRANKLIN ST.	17+77.7	17+78.4	LT/RT						135		45	90			45					45
72	FRANKLIN ST.	14+00.0	15+58.5	RT						507		159			159						159
72	FRANKLIN ST.	15+58.5		RT	1	1	1	1			72			1					1		
72	FRANKLIN ST.	15+58.5	16+35.8	RT						264		78			78						78
72	FRANKLIN ST.	16+35.8		RT	1	1	1	1			72			1					1		
72	FRANKLIN ST.	16+35.8	17+10.0	RT						255		75			75						75
72	FRANKLIN ST.	17+10.0		RT	1	1	1	1			72			1					1		
72	FRANKLIN ST.	17+10.0	17+78.4	RT						227		68			68						68
72	FRANKLIN ST.	17+78.4		RT													1				
72	FRANKLIN ST.	17+78.4	EX. LIGHT CONTROL	RT						353		105			105					1	105
TOTALS CARRIED TO GENERAL SUMMARY					15	15	15	16	1	5661	1080	1711	353	15	1498	213	7	1	15	1	1711

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LIGHTING - SUBSUMMARY

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

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LEGEND

PROPOSED LIGHT POLE (SL-16) AND LUMINAIRE (SL-16 MOD) W/ LIGHT POLE FOUNDATION (SL-16)

PROPOSED PULL BOX

PROPOSED 3" PVC LIGHTING CONDUIT IN TRENCH IN OPEN AREAS (SL-6)
W/ (3)-#8 AWG, 600V CABLES (SL-17)

PROPOSED 3" PVC LIGHTING CONDUIT IN 4" PVC, SCH. 80 LIGHTING CONDUIT, IN TRENCH UNDER PAVEMENT (SL-6)
W/ (3)-#8 AWG, 600V CABLES (SL-17)

EXISTING LIGHT POLE TO REMAIN

NOTE:
1. THE CONTRACTOR SHALL PULL THE EXISTING LIGHTING CABLES FROM THE EXISTING LIGHT POLE TO BE RELOCATED INTO THE PROPOSED PULL BOX AT STA. 31+91.4, 37.3' LT. PRIOR TO RELOCATING THE LIGHT POLE. ONCE THE CONTRACTOR HAS RELOCATED THE EXISTING LIGHT POLE THE CONTRACTOR SHALL UTILIZE THE EXISTING LIGHTING CABLES TO REWIRE THE LUMINAIRE. THE CONTRACTOR SHALL TAKE GREAT CARE NOT TO DAMAGE THE EXISTING LIGHTING CABLES AS IT IS THE DESIGNER'S INTENT TO REUSE THE CABLES. IF IT IS DETERMINED, BY THE ENGINEER THAT THE LIGHTING CABLES HAVE BEEN DAMAGED THE CONTRACTOR SHALL REPLACE THE SIGNAL CABLES IN LIKE KIND AT THE CONTRACTOR'S COST.

EX. LIGHT POLE (SL-16)
TO BE REMOVED AND REERECTED
STA. 31+95.5, 29.4' LT.

EXISTING PULL BOX TO BE REMOVED
STA. 31+91.8, 31.6' LT.

PROPOSED 4" SCH. 80 CONDUIT
IN TRENCH UNDER PAVEMENT (SL-6)
W/ (3)-#8 AWG, 600V CABLES (SL-17), 33'

RELOCATED LIGHT POLE
STA. 31+98.9, 39.8' LT.

PROPOSED 3" PVC CONDUIT, 8'

PROPOSED PULL BOX
STA. 31+91.4, 37.3' LT.
(SEE NOTE 1)

PROPOSED 3" PVC CONDUIT, 75'

PROPOSED OLD HILLIARD LIGHT POLE
W/ 75 WATT LED LUMINAIRE (SL-16 MOD)
STA. 31+18.7, 23.3' LT.

PROPOSED 3" PVC CONDUIT, 103'

PROPOSED 4" PVC, SCH. 80 CONDUIT (FOR FUTURE USE)
PROPOSED 4" PVC, SCH. 80 CONDUIT
IN TRENCH UNDER PAVEMENT (SL-6)
W/ (3)-#8 AWG, 600V CABLES (SL-17), 45'

PROPOSED PULL BOX
STA. 13+38.6, 22.5' LT.

PROPOSED 3" PVC CONDUIT, 112'

PROPOSED OLD HILLIARD LIGHT POLE
W/ 75 WATT LED LUMINAIRE (SL-16 MOD)
STA. 31+92.6, 14.0' LT.

PROPOSED OLD HILLIARD LIGHT POLE
W/ 75 WATT LED LUMINAIRE (SL-16 MOD)
STA. 30+46.2, 20.5' RT.

PROPOSED 3" PVC CONDUIT, 25'

PROPOSED PULL BOX
STA. 13+83.4, 23.6' LT.

PROPOSED 3" PVC CONDUIT, 85'

PROPOSED OLD HILLIARD LIGHT POLE
W/ 75 WATT LED LUMINAIRE (SL-16 MOD)
STA. 12+27.2, 22.5' LT.

PROPOSED OLD HILLIARD LIGHT POLE
W/ 75 WATT LED LUMINAIRE (SL-16 MOD)
STA. 11+42.0, 20.5' LT.

PROPOSED 4" PVC, SCH. 80 CONDUIT
IN TRENCH UNDER PAVEMENT (SL-6)
W/ (3)-#8 AWG, 600V CABLES (SL-17), 20'

EX. LIGHT POLE
(TO REMAIN)

EX. LIGHT POLE
(TO REMAIN)

EX. LIGHT POLE
(TO REMAIN)

EX. LIGHT POLE
(TO REMAIN)

PROPOSED OLD HILLIARD LIGHT POLE
W/ 75 WATT LED LUMINAIRE (SL-16 MOD)
STA. 10+68.5, 23.7' RT.

PROPOSED 3" PVC CONDUIT, 238'

PROPOSED 4" PVC, SCH. 80 CONDUIT
IN TRENCH UNDER PAVEMENT (SL-6)
W/ (3)-#8 AWG, 600V CABLES (SL-17), 20'

PROPOSED OLD HILLIARD LIGHT POLE
W/ 75 WATT LED LUMINAIRE (SL-16 MOD)
STA. 13+05.5, 20.5' RT.

PROPOSED 3" PVC CONDUIT, 28'

PROPOSED PULL BOX
STA. 13+33.2, 20.5' RT.

PROPOSED 4" PVC, SCH. 80 CONDUIT (FOR FUTURE USE)
PROPOSED 4" PVC, SCH. 80 CONDUIT
IN TRENCH UNDER PAVEMENT (SL-6)
W/ (3)-#8 AWG, 600V CABLES (SL-17), 50'

PROPOSED OLD
HILLIARD LIGHT POLE
W/ 75 WATT LED
LUMINAIRE (SL-16 MOD)
STA. 14+00.0, 23.1' RT.

PROPOSED 3" PVC CONDUIT, 17'

PROPOSED PULL BOX
STA. 13+83.4, 20.5' RT.

FRANKLIN ST.

COLUMBIA ST.

MATCH LINE STA. 14+50, SEE SHEET 74

NORTH

HORIZ.
0 10 20 40

CALCULATED BJS
CHECKED SDS

FRANKLIN ST LIGHTING PLAN
STA. 8+95.37 TO STA. 14+50

CITY OF HILLIARD, OHIO
FRANKLIN SREET IMPROVEMENT (CIP T-138)

73
75

Layout Tab Name: 73 1 FRANKLIN ST PLAN & PROFILE, Images: , Xrefs: 076347-BP001.dwg; 076347-BH001.dwg; 076347-BU100-GPD Working.dwg; LANDSCAPE.DWG; 76347_BE001 - Removal.dwg; 2016154BR001.dwg; Franklin St Surface-Alignments.dwg
Last Saved By:bbinsley, 5/3/2019 10:37:12 AM
O:\2016\2016154\00 Hilliard - Franklin Street\lighting\Sheets\HL_01_FRANKLIN_LP.dwg Plotted By:Jaffee, Scott Plotted:May 9, 2019, 4:01:52 PM

NOTES

1. EXISTING LCC FROM HP-872 TO BE USED FOR PROPOSED LIGHTING CIRCUIT.

PROPOSED PULL BOX
STA. 17+77.7, 22.5' LT.

PROPOSED OLD HILLIARD LIGHT POLE
W/ 75 WATT LED LUMINAIRE (SL-16 MOD)
STA. 15+90.8, 22.5' LT.

PROPOSED 3" PVC CONDUIT, 4'

PROPOSED 3" PVC CONDUIT, 103'

PROPOSED OLD HILLIARD LIGHT POLE
W/ 75 WATT LED LUMINAIRE (SL-16 MOD)
STA. 17+73.8, 22.5' LT.

PROPOSED OLD HILLIARD LIGHT POLE
W/ 75 WATT LED LUMINAIRE (SL-16 MOD)
STA. 14+87.8, 22.5' LT.

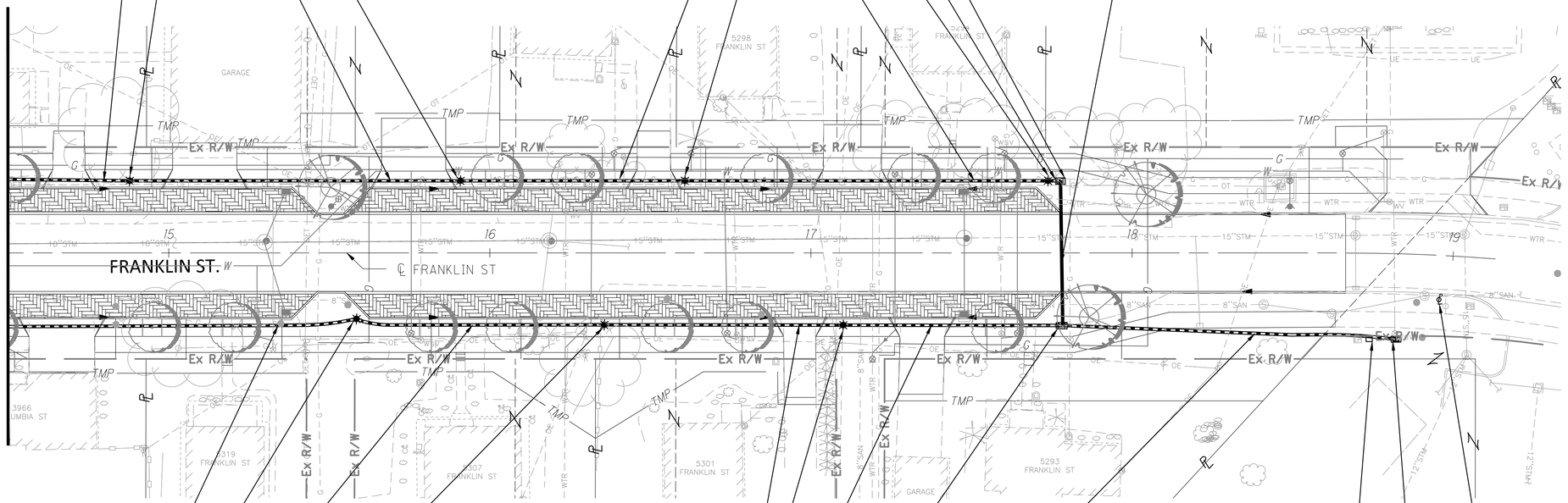
PROPOSED 3" PVC CONDUIT, 113'

PROPOSED 3" PVC CONDUIT, 105'

PROPOSED OLD HILLIARD LIGHT POLE
W/ 75 WATT LED LUMINAIRE (SL-16 MOD)
STA. 16+60.7, 22.5' LT.

PROPOSED 3" PVC CONDUIT, 70'

PROPOSED 4" PVC, SCH. 80 CONDUIT (FOR FUTURE USE)
PROPOSED 4" PVC, SCH. 80 CONDUIT IN TRENCH UNDER PAVEMENT (SL-6)
W/ (3)-#8 AWG, 600V CABLES (SL-17), 45'



PROPOSED 3" PVC CONDUIT, 159'

PROPOSED OLD HILLIARD LIGHT POLE
W/ 75 WATT LED LUMINAIRE (SL-16 MOD)
STA. 15+58.5, 20.6' RT.

PROPOSED 3" PVC CONDUIT, 78'

PROPOSED OLD HILLIARD LIGHT POLE
W/ 75 WATT LED LUMINAIRE (SL-16 MOD)
STA. 16+35.8, 23.4' RT.

PROPOSED 3" PVC CONDUIT, 75'

PROPOSED OLD HILLIARD LIGHT POLE
W/ 75 WATT LED LUMINAIRE (SL-16 MOD)
STA. 17+10.0, 22.5' RT.

PROPOSED 3" PVC CONDUIT, 68'

PROPOSED PULL BOX
STA. 17+78.4, 22.5' RT.

PROPOSED 3" PVC CONDUIT, 105'

EX. POWER SERVICE

1 EX. LIGHTING CONTROL CENTER

EX. LIGHT POLE (TO REMAIN)

LEGEND

- PROPOSED LIGHT POLE (SL-16) AND LUMINAIRE (SL-16 MOD) W/ LIGHT POLE FOUNDATION (SL-16)
- PROPOSED PULL BOX
- PROPOSED 3" PVC LIGHTING CONDUIT IN TRENCH IN OPEN AREAS (SL-6) W/ (3)-#8 AWG, 600V CABLES (SL-17)
- PROPOSED 3" PVC LIGHTING CONDUIT IN 4" PVC, SCH. 80 LIGHTING CONDUIT, IN TRENCH UNDER PAVEMENT (SL-6) W/ (3)-#8 AWG, 600V CABLES (SL-17)
- EXISTING LIGHT POLE TO REMAIN

NORTH

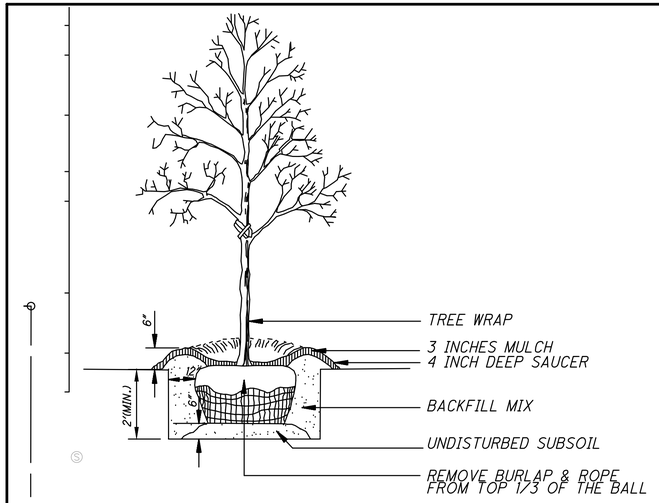
HORIZ. 0 10 20 40

CALCULATED BJS
CHECKED SDS

FRANKLIN ST LIGHTING PLAN
STA. 14+50 TO STA. 18+74.27

CITY OF HILLIARD, OHIO
FRANKLIN SREET IMPROVEMENT (CIP T-138)

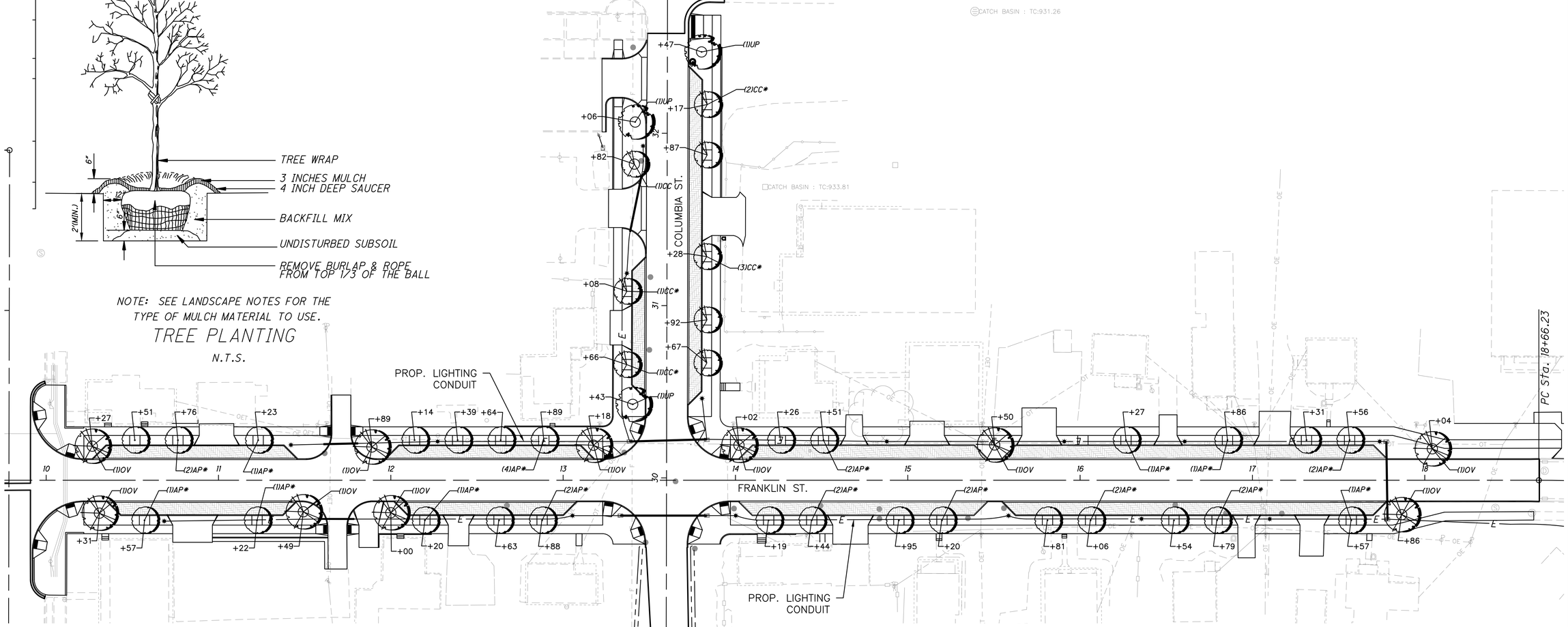
74
75



NOTE: SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.

TREE PLANTING

N.T.S.



							ITEM 662
TAG	QTY	SCIENTIFIC NAME	COMMON NAME	COND.	SIZE	REMARKS	LANDSCAPE WATERING (GAL) PER TREE
MEDIUM TREE							
OV	10	Ostrya Virginiana	American Hophornbeam	B&B	2.5" cal. 14'ht. 7'wd	Full, well shaped	25
UP	3	Ulmus x 'Patriot'	Patriot Elm	B&B	2.5" cal. 14'ht. 7'wd	Full, well shaped	25
SMALL TREE							
AP	27	Aesculus Pavia	Red Buckeye	B&B	1.5" cal. 8'ht. 4'wd.	Full, well shaped, single-stem	15
CC	8	Carpinus caroliniana	American Hornbeam	B&B	1.5" cal. 8'ht. 4'wd.	Full, well shaped, single-stem	15
							850

LANDSCAPE NOTES:

1. LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES, PRIOR TO DIGGING, IS RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
2. PRIOR TO INSTALLATION, THE LANDSCAPE CONTRACTOR SHALL INSPECT THE SUB GRADE, GENERAL SITE CONDITIONS, VERIFY ELEVATIONS, UTILITY LOCATIONS, IRRIGATION, APPROVE TOPSOIL PROVIDED BY GENERAL CONTRACTOR AND OBSERVE THE SITE CONDITIONS UNDER WHICH THE WORK IS TO BE DONE. NOTIFY GENERAL CONTRACTOR OF ANY UNSATISFACTORY CONDITIONS. WORK SHALL NOT PROCEED UNTIL SUCH CONDITIONS HAVE BEEN CORRECTED AND ARE ACCEPTABLE TO THE LANDSCAPE CONTRACTOR AND/OR CONSTRUCTION MANAGER.
3. ALL TREES TO BE MULCHED WITH A MINIMUM OF 3 INCHES OF CLEAN SHREDDED HARDWOOD MULCH.
4. PLANTING HOLES TO BE DUG A MINIMUM OF TWICE THE WIDTH AND 6-12 INCHES DEEPER THAN THE SIZE OF THE ROOT BALL. AMEND BACKFILL WITH TOPSOIL MIX. BACKFILL AND TAMP BOTTOM OF HOLE PRIOR TO PLANTING SO TOP OF ROOT BALL DOES NOT SETTLE BELOW SURROUNDING GRADE.
5. TOPSOIL MIX TO BE 4 PARTS SCREENED TOPSOIL AND 1 PART ORGANIC MATERIAL (i.e. NATURE'S HELPER OR PRO MIX).
6. SOIL TO BE TESTED TO DETERMINE FERTILIZER AND LIME REQUIREMENTS. LIME AND FERTILIZER TO BE DISTRIBUTED PRIOR TO SPREADING SEED.
7. ALL CHANGES TO DESIGN AND/OR PLANT SUBSTITUTIONS TO BE AUTHORIZED BY LANDSCAPE ARCHITECT.
8. ALL LANDSCAPING SHALL BE INSTALLED IN CONFORMANCE WITH ITEM 661.
9. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS INSTALLED FOR ONE FULL YEAR FROM DATE OF ACCEPTANCE BY THE OWNER. ALL PLANTS SHALL BE ALIVE AND AT A VIGOROUS RATE OF GROWTH AT THE END OF THE GUARANTEE PERIOD. THE LANDSCAPE CONTRACTOR SHALL NOT BE RESPONSIBLE FOR ACTS OF GOD OR VANDALISM.
10. ANY PLANT THAT IS DETERMINED DEAD, IN AN UNHEALTHY OR UNSIGHTLY CONDITION, LOST ITS SHAPE DUE TO DEAD BRANCHES OR OTHER SYMPTOMS OF POOR, NON-VIGOROUS GROWTH SHALL BE REPLACED BY THE LANDSCAPE CONTRACTOR WITH THE COST OF THE REPLACEMENT INCLUDED IN THE BID OR PROPOSAL PRICE.
11. WATER THOROUGHLY TWICE IN THE FIRST 24 HOURS AND APPLY MULCH IMMEDIATELY. WATER PER ITEM 662.
12. PER ITEM 661 TREES, MULCH, AND BACKFILL ARE ALL COVERED UNDER ITEM 661.

NOTE:

* - TREES WILL BE SURROUNDED BY A 5.5'X6' MULCH BED CENTERED ON THE LOCATION OF THE TREE. FURNISH BY SPEC 661.

HORIZ. 0 20 40 80

CALCULATED JM CHECKED JDB

LANDSCAPE PLAN

CITY OF HILLIARD, OHIO
FRANKLIN STREET IMPROVEMENT (CIP T-138)

75
75

P-928

Layout Tab Name: LANDSCAPE PLAN, Images: , Xrefs: 076347-BP001.dwg; 076347-BH001.dwg; 76347_BE001 - Removal.dwg; 076347-BP002.dwg; Parcel 12 Exhibit.dwg; 2019-02-04_Columbia Gas Relocation.dwg
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