STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
HAM-71-8.65
CITY OF CINCINNATI
COLUMBIA TOWNSHIP
HAMILTON COUNTY

LOCATION MAP

LATITUDE: 39°10'05" N LONGITUDE: -84°25'20" W

SCALE IN MILES
0 1 2

N

PORTION TO BE IMPROVED
INTERSTATE HIGHWAY
FEDERAL ROUTES
STATE ROUTES
COUNTY & TOWNSHIP ROADS
OTHER ROADS

DESIGN DESIGNATION

SEE SHEET NO. 2 FOR ROADWAY SPECIFIC INFORMATION

INDEX OF SHEETS:

ADDITIONAL SHEETS: 6A, 81A-E, 109A-D
NOT USED: 83, 115

PROJECT DESCRIPTION

PROJECT SHALL MODIFY THE USACE FLOOD CONTROL PROJECT AND COMPLETE THE PROPOSED RAMPS FROM KENNEDY AVE. TO NORTHBOUND I.R. 71.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 23.27 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 1.50 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: 24.77 ACRES

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2019 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES TWO WORKING DAYS **BEFORE YOU DIG.**

OHIO Utilities Protection SERVICE — *Call Before You Dig* **1-800-362-2764**

(Non-members must be called directly)

OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE **1-800-925-0988**

PLAN PREPARED BY:

Stantec
10200 Alliance Rd, Suite 300
Cincinnati, Ohio 45242
(513) 842-8200

LJB Inc. • 2500 Newmark Drive
Miamisburg, OH 45342
(937) 259-5000 tel • (937) 259-5100 fax
LJBinc.com

ENGINEERS SEAL: SHEETS: 1-58, 67-71, 78-116, 125-129

STATE OF OHIO · STEVEN N SHADIX · E-63359 · REGISTERED · PROFESSIONAL ENGINEER

ENGINEERS SEAL: SHEETS: 59-66

STATE OF OHIO · ERIC D. ADKINS · 74762 · REGISTERED · PROFESSIONAL ENGINEER

ENGINEERS SEAL: SHEETS: 72-77

ENGINEERS SEAL: SHEETS: 117-124

STANDARD CONSTRUCTION DRAWINGS

BP-2.1	1/21/22	F-1.1	7/19/13	HW-2.2	7/20/18	MT-95.50	7/21/17	MT-104.10	4/21/23	TC-74.10	1/20/23	800-2019	4/21/23
BP-2.2	1/15/21	F-3.1	7/19/13	NBS-1-09	7/15/22	MT-95.61	4/19/19	MT-105.10	1/17/20	TC-81.22	4/21/23	804	1/20/23
BP-3.1	1/21/22	F-3.3	7/19/13	PCB-91	7/17/20	MT-95.73	1/17/20	MT-110.10	7/19/13	TC-83.10	1/17/20	807	1/21/22
BP-5.1	7/15/22	F-3.4	7/19/13	SBR-1-20	1/20/23	MT-96.11	4/16/21	MT-120.00	1/20/23	TC-83.20	7/15/22	808	1/18/19
BP-7.1	1/20/23			SBR-2-20	1/15/21	MT-96.20	7/15/16			TC-85.10	10/21/22	809	4/21/23
BP-9.1	1/18/19	MGS-1.1	7/16/21	VPF-1-90	1/20/23	MT-96.26	1/18/19	TC-12.31	4/15/22	TC-85.20	4/21/23	821	4/20/12
		MGS-2.1	1/19/18			MT-97.10	4/19/19	TC-21.21	1/20/23			831	4/21/23
CB-2-2A, 2B, 2C	1/20/23	MGS-3.1	1/19/18	HL-10.11	7/15/22	MT-98.10	1/17/20	TC-22.10	4/21/23	ITS-14.10	4/21/23	832	7/15/22
CB-2-3, 2-4	1/20/23	MGS-3.2	1/18/13	HL-10.12	1/20/23	MT-98.11	1/17/20	TC-22.20	1/17/14	ITS-14.11	1/20/23	836	1/19/18
CB-3	7/16/21	MGS-4.2	7/19/13	HL-10.13	1/20/23	MT-98.20	4/19/19	TC-41.10	7/19/13	ITS-14.50	1/20/23	848	1/15/21
CB-3A	7/16/21	MGS-4.3	1/18/13	HL-10.31	7/15/22	MT-98.22	1/17/20	TC-41.20	10/18/13			850	4/15/22
CB-4	7/16/21	MGS-5.2	7/15/16	HL-20.11	10/21/22	MT-98.28	1/17/20	TC-41.30	4/21/23			878	1/21/22
CB-5	7/16/21	MGS-5.3	7/15/16	HL-20.21	1/15/21	MT-98.29	1/17/20	TC-41.40	10/18/13			902	7/19/19
		MGS-6.1	1/19/18	HL-30.11	1/15/21	MT-98.30	7/16/21	TC-41.41	7/19/19			904	7/15/22
DM-1.1	7/17/20			HL-30.21	4/17/20	MT-99.20	4/19/19	TC-41.50	10/18/13			908	10/20/17
DM-1.2	7/16/21	RM-1.1	1/20/23	HL-30.22	1/15/21	MT-99.30	1/17/20	TC-42.10	10/18/13			921	4/20/12
DM-2.1	1/18/13	RM-4.1	7/21/17			MT-99.60	7/15/16	TC-42.20	10/18/13			961	4/17/20
DM-4.2	7/20/12	RM-4.2	4/17/20	HL-30.33	1/21/22	MT-100.00	7/16/21	TC-51.11	1/15/16				
DM-4.3	1/15/16	RM-4.3	1/21/22	HL-60.11	7/21/17	MT-101.60	4/21/23	TC-51.12	1/15/16				
DM-4.4	1/15/16	RM-4.4	7/19/19	HL-60.21	7/20/18	MT-101.70	4/21/23	TC-52.10	10/18/13				
		RM-4.5	7/21/17	HL-60.31	1/17/20	MT-101.75	1/17/20	TC-52.20	1/15/21				
1-3D	7/15/22	RM-4.6	7/19/13			MT-101.80	1/17/20	TC-61.10	4/21/23				
				MT-95.30	7/19/19	MT-101.90	7/17/20	TC-61.30	7/19/19				
MH-1	7/15/22	AS-1-15	1/20/23	MT-95.31	7/19/19	MT-102.10	1/17/20	TC-65.10	1/17/14				
MH-3	7/16/21	AS-2-15	1/20/23	MT-95.40	1/17/20	MT-102.20	4/19/19	TC-65.11	7/15/22				
		EXJ-4-87	1/20/23	MT-95.41	1/17/20	MT-102.30	10/16/15	TC-72.20	7/20/18				
		HW-2.1	7/15/22	MT-95.45	1/17/20	MT-103.10	1/21/22	TC-73.20	1/17/20				

SUPPLEMENTAL SPECIFICATIONS

SPECIAL PROVISIONS

WATERWAY PERMIT 05/25/2023

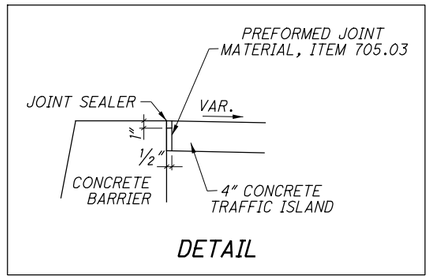
I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT FOR THE SIDE ROADS AS DESCRIBED ON SHEETS 13 AND 14 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

FEDERAL PROJECT NO. E210 (529)
PID NO. 114992
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
HAM-71-8.65
1 / 129

V:\1736\active\173620049\engineering\114992\Design\Roadway\Sheets\114992_GT001.dgn 8/18/2023 8:57:10 AM eadkins

LEGEND

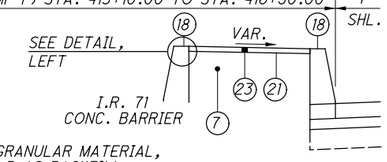
1. ITEM 442, 1½" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)
2. ITEM 407, NON-TRACKING TACK COAT
3. ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE, 1 1/2"
4. NOT USED
5. NOT USED
6. NOT USED
7. ITEM 203, GRANULAR MATERIAL, TYPE B
8. ITEM 304, 6" AGGREGATE BASE
9. NOT USED
10. ITEM 452, 13½" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1
11. ITEM 204, PROOF ROLLING
12. ITEM 618, RUMBLE STRIPS, ASPHALT
13. ITEM 605, 6" SHALLOW PIPE UNDERDRAINS
14. NOT USED
15. ITEM 659, SEEDING AND MULCHING
16. ITEM 606, GUARDRAIL, TYPE MGS
17. ITEM 206, CEMENT STABILIZED SUBGRADE (DEPTH 16"), RIDGE AVE. (DEPTH 12")
18. ITEM 622, CONCRETE BARRIER, SINGLE SLOPE, TYPE D
19. ITEM 609, TYPE 4-C CURB
20. ITEM 609, TYPE 6 CURB
21. ITEM 204, SUBGRADE COMPACTION
22. ITEM 608, 5" CONCRETE WALK
23. ITEM 609, 4" CONCRETE TRAFFIC ISLAND



DETAIL

(NDC 4'-0")

(RAMP P) STA. 416+75.00 TO STA. 417+96.00 — 3'-4¾" [A]
(RAMP P) STA. 416+50.00TO STA. 416+75.00 — 4' TO 3'-4¾"
(RAMP P) STA. 413+10.00 TO STA. 416+50.00 — 4' SHL.

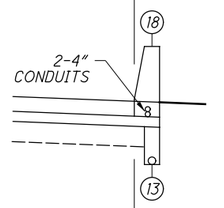


(7) USE GRANULAR MATERIAL, TYPE B AS BACKFILL BETWEEN BARRIERS ALONG RAMP P.

NOTE: SOME PORTIONS OF THE BARRIER IN THIS AREA HAVE BEEN CONSTRUCTED. TIE TO EXISTING BARRIERS AS NEEDED IN THIS AREA.

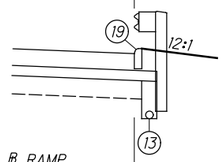
[A] RAMP P LEFT SHOULDER VARIES FROM -0.031 @ STA 417+50 TO +0.039 @ STA 418+00.

6'-0" SHOULDER — (RAMP P) STA. 412+75.00 TO STA. 413+84.61
(RAMP P) STA. 415+28.45 TO STA. 415+50.00



SEE PLAN AND CROSS SECTIONS FOR SOIL NAIL WALL STA. 415+75.00 TO STA. 417+50.00 RAMP P.

(RAMP P) STA. 408+95.89 TO STA. 412+75.00



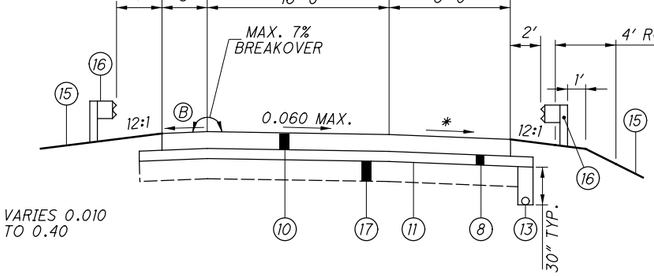
FOR SIDE SLOPES SEE CROSS SECTIONS

℄ RAMP

(RAMP P) STA. 413+84.18 TO STA. 414+34.18 — VAR. 18'-0" TO 16'-0"
(RAMP P) STA. 410+59.06 TO STA. 413+84.18 — 18'-0"
(RAMP P) STA. 410+09.06 TO STA. 410+59.06 — VAR. 16'-0" TO 18'-0"

FOR SIDE SLOPES SEE CROSS SECTIONS

VARIES — 6'-6" TO 6'-0" — (RAMP N) STA. 408+97.30 TO STA. 409+22.30



(B) VARIES 0.010 TO 0.40

* DENOTES SE OR 0.04 WHICHEVER IS GREATER

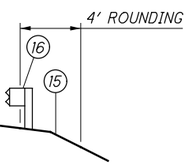
SUPERELEVATED RAMP TYPICAL

(RAMP N)
STA. 408+97.30 TO STA. 410+22.30 (TRAN.)
STA. 410+22.30 TO STA. 410+95.18 (0.060)
STA. 410+95.18 TO STA. 412+25.55 (TRAN.)**

(RAMP P**)
**STA. 409+60.55 TO STA. 410+74.10 (TRAN.)
STA. 410+74.10 TO STA. 412+34.18 (0.060)
STA. 412+34.18 TO STA. 413+84.14 (TRAN.)

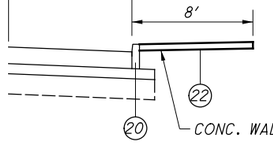
(RAMP P)
STA. 415+28.45 TO STA. 415+96.60 (TRAN.)
STA. 415+96.60 TO STA. 418+00.00 (0.039)

**SEE INTERSECTION DETAIL SHEET 69 FOR
STA. 412+25.55 TO STA. 414+36.74 (RAMP N)
STA. 408+18.39 TO STA. 409+60.55 (RAMP P)

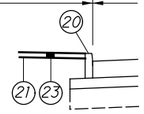


℄ KENNEDY
℄ RAMP
VARIES

STA. 11+18.86 LT. KENNEDY TO STA. 413+66.53 RT. RAMP N
STA. 408+92.10 RT. RAMP P TO STA. 15+31.00 LT. KENNEDY

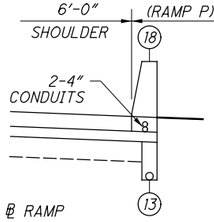


(RAMP P) STA. 408+22.24 TO STA. 408+79.25 — NO SHL.
(RAMP P) STA. 408+41.07 TO STA. 410+36.85 — 3' SHL.
(RAMP N) STA. 412+00.00 TO STA. 414+00.00 — 3' SHL.



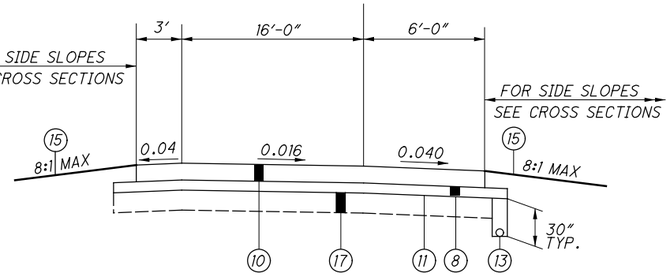
4" CONC. TRAFFIC ISLAND

6'-0" SHOULDER — (RAMP P) STA. 413+84.61 TO STA. 415+39.00



℄ RAMP

FOR SIDE SLOPES SEE CROSS SECTIONS

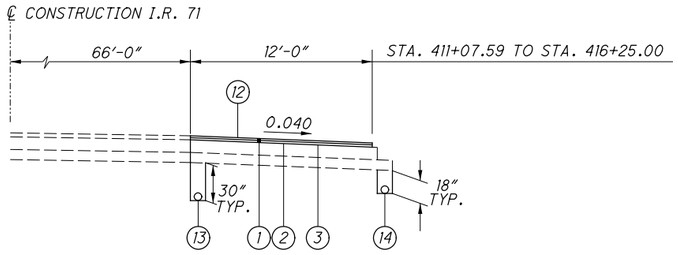


FOR SIDE SLOPES SEE CROSS SECTIONS

NORMAL RAMP TYPICAL

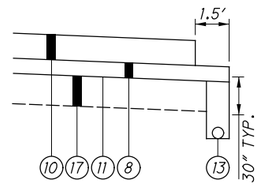
(RAMP N) STA. 412+25.55 TO STA. 414+36.74
(RAMP P) STA. 408+18.39 TO STA. 409+60.55
(RAMP P) STA. 413+84.14 TO STA. 415+28.45

℄ CONSTRUCTION I.R. 71



I.R. 71 NORMAL TYPICAL

STA. 410+90.00 TO STA. 416+27.62



STEP DETAIL

CALCULATED LEH CHECKED SNS

TYPICAL SECTIONS RAMPS N, P AND I.R. 71

HAM-71-8.65

3
129

ROUNDING

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

UTILITIES

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

ELECTRIC:
DUKE ENERGY
139 EAST FOURTH STREET, ROOM 467A
CINCINNATI, OHIO 45202
(513) 287-3674 (AARON WRIGHT)

ELECTRIC TRANSMISSION:
DUKE ENERGY
139 EAST FOURTH STREET, ROOM 552A
CINCINNATI, OHIO 45202
(513) 287-1266 (TIM MEYER)

GAS:
DUKE ENERGY
139 EAST FOURTH STREET, ROOM 460A
CINCINNATI, OHIO 45202
(513) 287-1205 (KELSEY PACE)

TELEPHONE:
CINCINNATI BELL
221 EAST FOURTH STREET, BLDG. 121-900
CINCINNATI, OHIO 45202
(513) 565-7043 (MARK CONNER)

CINCINNATI BELL AERIAL & PLACING
209 WEST SEVENTH STREET, BLDG. 121-900
CINCINNATI, OHIO 45202
(513) 566-5120 (DORIAN JOHNSON)

WATER:
GREATER CINCINNATI WATER WORKS
4747 SPRING GROVE AVENUE
CINCINNATI, OHIO 45232
(513) 591-7362 (JON HUNSEDER)
EMERGENCIES (513) 591-7900

SANITARY:
METROPOLITAN SEWER DISTRICT (MSD)
1600 GEST STREET
CINCINNATI, OHIO 45204
(513) 557-7108 (ROB FRANKLIN)
EMERGENCIES (513) 352-4900 OR (513) 244-5500

CABLE:
CHARTER COMMUNICATIONS (FKA) TIME WARNER CABLE
11252 CORNELL PARK DRIVE
CINCINNATI, OHIO 45242
(513) 469-5483 (KENT RIEGER)

STORMWATER MANAGEMENT:
CINCINNATI STORMWATER MANAGEMENT UTILITY
225 W. GALBRAITH ROAD
CINCINNATI, OHIO 45215
(513) 352-4287 (JEFF OXENHAM)

TRAFFIC:
CITY OF CINCINNATI TRAFFIC
801 PLUM STREET, ROOM 320
CINCINNATI, OHIO 45202
(513) 352-6229 (JEFF WILHOIT)

UTILITIES (CONTINUED)

TRAFFIC MAINTENANCE:
ODOT DISTRICT 8
505 SOUTH STATE ROUTE 741
LEBANON, OH 45036
PHONE: (513) 933-6689

ITS:
ODOT OFFICE OF TRAFFIC OPERATIONS
1606 W. BROAD STREET
COLUMBUS, OH 43223
PHONE: (614) 752-8846

ITS:
CENTRAL OFFICE ITS LAB
614-387-4113 - PHONE
614-887-4134 - FAX
CEN.ITS.LAB@DOT.OHIO.GOV - EMAIL

THE OHIO DEPARTMENT OF TRANSPORTATION HAS UTILITY FACILITIES (HIGHWAY LIGHTING, TRAFFIC SIGNALS, AND ITS) WITHIN THE LIMITS OF THIS PROJECT.

IN ADDITION TO THE INFORMATION OUTLINED IN THE UTILITY NOTE OF THIS CONTRACT, THE CONTRACTOR SHALL TAKE THE FOLLOWING ACTION TO PROTECT ODOT'S FACILITIES DURING CONSTRUCTION:

HIGHWAY LIGHTING AND TRAFFIC SIGNALS:

EVEN THOUGH ODOT IS LISTED AS A MEMBER OF THE OHIO UTILITIES PROTECTION SERVICE (OUPS), THE CONTRACTOR ON THIS PROJECT IS REQUIRED TO CONTACT ODOT, DISTRICT 8 TRAFFIC MAINTENANCE DEPARTMENT DIRECTLY SO THAT THE ODOT UTILITIES LOCATED WITHIN THIS PROJECT ARE MARKED. THE CONTRACTOR SHALL NOTIFY DISTRICT 8 TRAFFIC MAINTENANCE AT 513-933-6689 AND THE PROJECT ENGINEER, FOURTEEN (14) CALENDAR DAYS IN ADVANCE OF ANY WORK, FOR THE NEED TO MARK ODOT OWNED UTILITIES.

THE ABOVE REQUIREMENTS ARE IN ADDITION TO SECTION 105.07 & 107.16 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS AND THE UTILITY PROPOSAL NOTE.

THE CONTRACTOR SHALL NOTIFY OTHER UTILITIES THROUGH OUPS OR DIRECTLY A MINIMUM OF FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY WORK.

THE COST FOR THE ABOVE DESCRIBED WORK IS INCIDENTAL TO THE OVERALL BID PRICE OF THE PROJECT.

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

ITEM 206 - CURING COAT, AS PER PLAN

CURE THE CHEMICALLY STABILIZED SUBGRADE WITH RAPID SETTING EMULSIFIED ASPHALT, CONFORMING TO 702.04. NO SUBSTITUTE FOR THE EMULSIFIED ASPHALT CURE SHALL BE PERMITTED. ALL OTHER ITEMS OF ITEM 206, CHEMICALLY STABILIZED SUBGRADE SHALL APPLY.

IN STREAM WORK

IN STREAM WORK IS NOT PERMITTED BETWEEN APRIL 15 THROUGH JUNE 30, IN ORDER TO PROTECT AQUATIC HABITAT:

ALSO NO WASTEWATER OF ANY KIND SHALL BE DISCHARGED INTO YONONTE CREEK. NO STORAGE OF ANY IDLE EQUIPMENT, FUELS, LUBRICANTS, OR OTHER POTENTIALLY TOXIC OR HAZARDOUS MATERIALS SHALL BE PERMITTED WITHIN THE 100-YEAR FLOODPLAIN OF YONONTE CREEK.

CONSTRUCTION NOISE

THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL NOISE ORDINACES FOR ALL WORK OUTSIDE OF THE LIMITED ACCESS RIGHT-OF-WAY.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 26 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

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

PROJECT CONTROL

POSITIONING METHOD: GPS OPUS
MONUMENT TYPE: 30" x 3/4" IRON PIN W/ CAP

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: 12A

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD-83 (2011) (EPOCH 2010.0000)
ELLIPSOID: (GRS-80)
MAP PROJECTION: LAMBERT CONFORMAL
COORDINATE SYSTEM: SPC (3402 OH SOUTH)
COMBINED SCALE FACTOR: 1.000080436
ORIGIN OF COORDINATE SYSTEM: 0,0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623. UNITS ARE IN U.S. SURVEY FEET. USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.280833333 U.S. SURVEY FEET.

WORK LIMITS

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

CLEARING AND GRUBBING

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

BENCHING OF FOUNDATION SLOPES

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

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 60 FT.. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. NOTIFY THE ODOT OFFICE OF AVIATION WHEN SUBMITTING AN FAA FORM 7460-1.

NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

EXPRESS PROCESSING CENTER
THE FEDERAL AVIATION ADMINISTRATION
SOUTHWEST REGIONAL OFFICE
AIR TRAFFIC AIRSPACE BRANCH ASW-520
2601 MEACHAN BLVD.
FORT WORTH, TX 76137-4298

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF AVIATION
2829 WEST DUBLIN-GRANVILLE ROAD
COLUMBUS, OHIO 43235
614-387-2346

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

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

CALCULATED LBA
CHECKED SNS

GENERAL NOTES

HAM-71-8.65

REVIEW OF DRAINAGE FACILITIES

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

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

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

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

UNRECORDED STORM WATER DRAINAGE

FURNISH A CONTINUANCE FOR ALL UNRECORDED STORM WATER DRAINAGE, SUCH AS ROOF DRAINS, FOOTER DRAINS, OR YARD DRAINS, DISTURBED BY THE WORK. FURNISH EITHER AN OPEN CONTINUANCE OR AN UNOBSTRUCTED CONTINUANCE BY CONNECTING A CONDUIT THROUGH THE CURB OR INTO A DRAINAGE STRUCTURE. THE LOCATION, TYPE, SIZE AND GRADE OF THE NEEDED CONDUIT TO REPLACE OR EXTEND AN EXISTING DRAIN WILL BE DETERMINED BY THE ENGINEER. ALL SUCH CONTINUANCE REQUIRES A RIGHT OF WAY USE PERMIT.

THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.33, 707.41 NON-PERFORATED, 707.42, 707.43, 707.45, 707.46, 707.47, 707.51, 707.52 SDR35.

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

611, 6" CONDUIT, TYPE B, FOR DRAINAGE CONNECTION 100 FT.

611, 6" CONDUIT, TYPE C, FOR DRAINAGE CONNECTION 100 FT.

611, 6" CONDUIT, TYPE E, FOR DRAINAGE CONNECTION 100 FT.

611, 6" CONDUIT, TYPE F, FOR DRAINAGE CONNECTION 100 FT.

POST CONSTRUCTION STORM WATER DESIGN

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

SEEDING AND MULCHING

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

659, SOIL ANALYSIS TEST 1 EACH

659, SEEDING AND MULCHING 20373 SQ. YD.

659, REPAIR SEEDING AND MULCHING 1020 SQ. YD

659, COMMERCIAL FERTILIZER 3 TONS

659, LIME 5 ACRES

659, WATER 111 M. GAL.

659, MOWING 46 M. SQ. FT.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

ITEM 204 - PROOF ROLLING

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING. SEE PLAN SHEET NO. 49 FOR ADDITIONAL INFORMATION.

ITEM 204 - PROOF ROLLING 3 HOURS.

MONUMENT ASSEMBLIES

CONSTRUCT A MONUMENT ASSEMBLY IN ACCORDANCE WITH THE DETAILS SHOWN ON THE STANDARD CONSTRUCTION DRAWINGS AT STATION 412+39.63 AS SHOWN ON SHEET NO. 2 OF 18 IN THE HAM-71-6.86 RIGHT OF WAY PLANS.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS WORK.

ITEM 623 REFERENCE MONUMENT 1 EACH

CONSTRUCTION OF THE LEVEE AND WORK IN THE USACE PERMITTED AREA

ALL WORK PERFORMED ON THE USACE LEVEE AND PERMITTED AREAS SHALL CONFORM TO ALL RESTRICTIONS AND REGUALTIONS SET FORTH IN THE 408 PERMIT ONCE APPROVED.

621 RAISED PAVEMENT MARKER REMOVED

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR PURPOSES OF REMOVING RAISED PAVEMENT MARKERS.

ITEM 621 RAISED PAVEMENT MARKER REMOVED 10 EACH

SPECIAL REQUIREMENT FOR PROTECTION OF ENDANGERED SPECIES HABITAT - INDIANA BAT, NORTHERN LONG-EARED BAT

UNAVOIDABLE CUTTING OF TREES, 3" DIAMETER OR GREATER, WILL BE PERFORMED ONLY BEFORE APRIL 1 OR AFTER SEPTEMBER 30 WHEN BATS, INCLUDING THE INDIANA BAT AND THE NORTHERN LONG-EARED BAT, WILL NOT BE USING TREES FOR ROOST HABITAT. NO TREES SHALL BE CLEARED PRIOR TO THE ISSUANCE OF ALL REQUIRED WATERWAY PERMITS.

WATERWAY PERMITTING

CONSTRUCTION ACTIVITIES IN STREAMS AND WETLANDS ("WATERS OF THE U.S.") ARE SUBJECT TO U.S. ARMY CORPS OF ENGINEER'S (USACE) AND OHIO EPA JURISDICTION UNDER THE CLEAN WATER ACT. ODOT IS APPLYING FOR A USACE/OHIO EPA PERMIT AUTHORIZATION FOR THE ACTIVITIES SHOWN IN THE PLANS. THE FINAL PERMIT IS PENDING. EXCAVATION, DISCHARGE OF FILL MATERIAL, EQUIPMENT OPERATION, AND OTHER DISTURBANCES IN STREAMS AND/OR WETLANDS WITHIN THE CONSTRUCTION LIMITS MUST BE CONDUCTED IN ACCORDANCE WITH THE PLANS, AND THE CONTRACTOR MUST ABIDE BY ALL CONDITIONS AND REQUIREMENTS IN THE WATERWAY PERMIT SPECIAL PROVISIONS.

THE CONTRACTOR SHALL NOT DISTURB ANY WETLAND OR PORTION THEROF OUTSIDE OF THE CONSTRUCTION LIMITS AS SHOWN ON THE PLANS.

DRAINAGE FACILITY REPAIR

THIS WORK SHALL CONSIST OF THE FOLLOWING:

FOR REPAIR - THE CONTRACTOR SHALL CAREFULLY REMOVE THE DAMAGED AREA(S) AND REPAIR SO THAT STRUCTURE IS AT OR NEAR ORIGINAL CONDITION AND FUCNTIONS PROPERLY. REPAIR CONCRETE PER CMS 519 - PATCHING CONCRETE STRUCTURE.

ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS PER CMS 105

PAYMENT INCLUDES FURNISHING ALL MATERIALS, EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE DRAINAGE FACILITY REPAIRS, COMPLETE AND APPROVED BY THE ENGINEER.

MATERIALS FURNISHED BY PREVIOUS CONTRACTS:

SOME MATERIALS FOR THIS WORK HAVE ALREADY BEEN PURCHASED IN PREVIOUS CONTRACTS. THESE MATERIALS ARE BEING STORED WITHIN THE EXISTING INFIELD AREAS AND AT DISTRICT 8'S BLUE ASH STORAGE YARD. THE CONTRACTOR WILL BE RESPONSIBLE FOR TRANSPORTING ALL PREVIOUSLY FURNISHED MATERIALS TO THE CONSTRUCTION SITE IN A DESIGNATED LOCATION APPROVED BY THE ENGINEER. THESE MATERIALS SHALL BE STORED WITHIN THE CONSTRUCTION LIMITS AND IN A MANNER THAT WILL PRECLUDE THEM FROM BEING DAMAGED.

THE FOLLOWING IS A LIST OF THESE ITEMS.

BOX CULVERT EXTENSION ITEMS STORED AT THE DISTRICT'S BLUE ASH STORAGE YARD:

EXTENSION SECTIONS
PRECAST HEADWALLS

MATERIALS FURNISHED BY PREVIOUS CONTRACTS (CONTINUED):

DRAINAGE ITEMS STORED IN THE INFIELD AREA ON RAMP P:

CULVERT PIPE
- 15" TYPE B - 100'
- 18" TYPE B - 120'
- 24" TYPE C - 40'
- 30" TYPE C - 340'

STRUCTURES
- D2 - INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D
- D6 - CATCH BASIN, NO. 3A
- D7 - CATCH BASIN, NO. 3A
- D8 - CATCH BASIN, NO. 2-3
- D9 - MANHOLE, NO. 3
- D20 - CATCH BASIN, NO. 3A
- D21 CB - CATCH BASIN, NO. 3
- D21 MH - MANHOLE, NO. 3
- D 24 - MANHOLE, NO. 3

UNDERDRAIN
- 6" PIPE, UNDERDRAIN - 3100'
- 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLET - 240'
- 6" UD FITTINGS:
  - WYE - 8
  - EACH TEE - 28 EACH
  - 45 BEND - 8 EACH
  - CROSS - 5 EACH
  - 90 BEND - 2 EACH
  - COUPLING - 1 EACH
- 6" PRECAST INLET - 2 EACH

PAYMENT FOR THESE ITEMS SHALL BE MADE ACCORDING TO THE FOLLOWING CORRESPONDING PAY ITEMS:

ITEM 511 - CLASS QC1 CONCRETE, HEADWALL, AS PER PLAN
ITEM 611 - 15" CONDUIT, TYPE B, AS PER PLAN
ITEM 611 - 18" CONDUIT, TYPE B, AS PER PLAN
ITEM 611 - 24" CONDUIT, TYPE C, AS PER PLAN
ITEM 611 - 30" CONDUIT, TYPE C, AS PER PLAN
ITEM 611 - CATCH BASIN, NO. 3, AS PER PLAN
ITEM 611 - CATCH BASIN, NO. 3A, AS PER PLAN
ITEM 611 - CATCH BASIN, NO. 2-3, AS PER PLAN
ITEM 611 - INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D, AS PER PLAN
ITEM 611 - MANHOLE NO. 3, AS PER PLAN
ITEM 611 - CONDUIT, MISC., EXTENSION SECTIONS, AS PER PLAN

IN THE EVENT ANY OF THE MATERIAL FURNISHED PRIOR TO AWARD IS FOUND DEFICIENT BY THE DEPARTMENT, THE CONTRACTOR SHALL BE COMPENSATED PER C&MS 109.05 TO REPLACE THE MATERIAL IN KIND. ANY DELAY TO THE PROJECT TO ORDER NEW MATERIAL WILL BE AN EXCUSABLE, NON-COMPENSABLE DELAY PER C&MS 108.06.B.8.

PAYMENT SHALL BE MADE AT THE CORRESPONDING CONTRACT BID PRICE PER UNIT FOR EACH ITEM AND SHALL INCLUDE ALL EQUIPMENT, LABOR, AND INCIDENTALS (INCLUDING INCIDENTAL MATERIALS NOT PREVIOUSLY FURNISHED) REQUIRED TO COMPLETE THE WORK. THERE SHALL BE NO WAIVER OF ANY ITEM SPECIFICATION EXCEPT THAT THE LISTED MATERIALS WILL NOT BE FURNISHED BY THE CONTRACTOR. THE CONTRACTOR SHALL DELIVER ALL UNUSED MATERIAL TO DISTRICT 8'S BLUE ASH STORAGE YARD AT THE CONCLUSION OF THE PROJECT.

CALCULATED LBA CHECKED SNS

GENERAL NOTES

HAM-71-8.65

ITEM 611 CONDUIT MISC.; SEWER INSPECTION

REQUIREMENTS OF PACP CCTV AND MANHOLE SEWER INSPECTIONS

MSD CONFORMS TO THE NATIONAL ASSOCIATION OF SEWER SERVICE COMPANIES' (NASSCO) PIPELINE ASSESSMENT CERTIFICATION PROGRAM (PACP) AND MANHOLE INSPECTION UTILIZING MSD INSPECTION FORMS. THESE INSPECTIONS WILL BE MAINTAINED WITHIN MSD'S LIBRARY OF SEWER INSPECTIONS AND IT IS IMPERATIVE THAT THEY MEET ALL APPROPRIATE MSD REQUIREMENTS. ALL PACP CCTV WORK TO BE PERFORMED VIA THIS CONTRACT SHALL THEREFORE CONFORM TO ALL CURRENT NASSCO STANDARDS EXCEPT WHERE SPECIFICALLY INSTRUCTED OTHERWISE BY THE MSDGC PROGRAM MANAGER (PM). THESE STANDARDS INCLUDE BUT ARE NOT LIMITED TO: SPEED OF CAMERA TRAVEL, CENTERING OF CAMERA IN PIPE, CODING OF DEFECTS/STRUCTURAL FEATURES/OBSERVATIONS, PANNING OF DEFECTS/STRUCTURAL FEATURES, CAMERA LIGHTING, HEADER INFORMATION, FLOW CONTROL, AND REVERSAL INSPECTIONS. MSD GIS STANDARDS AND DESIGNATIONS SHALL APPLY FOR HEADER INFORMATION INCLUDING, BUT NOT LIMITED TO: MANHOLE NUMBERS, ASSET ID NUMBERS, CITYWORKS⊗ WORK ORDER NUMBERS, BUILDING SEWER NAMES AND IDENTIFICATION, AND PREVIOUSLY UNDOCUMENTED MANHOLES.

ALL PACP CCTV WORK TO BE PERFORMED VIA THIS WORK ORDER SHALL BE CARRIED OUT UTILIZING A COLOR PAN AND TILT ROTATING HEAD CAMERA SPECIFICALLY DESIGNED AND CONSTRUCTED FOR SEWER INSPECTION. ALL CCTV WORK SHALL BE RECORDED ENTIRELY IN DIGITAL MP4 FORMAT ENCODED WITH A FILE COMPRESSION OF HIGH EFFICIENCY VIDEO CODING (HEVC OR H.265) (OTHER FORMATS NEED MSDGC PM APPROVAL) WITH AN APPROPRIATE PACP DATABASE FILE (NASSCO PACP DATABASE HAVING COMPATIBILITY WITH PIPETECH⊗ PIPELINE INSPECTION SOFTWARE), AND ALL VIDEO MUST BE CONTINUOUSLY METERED.

THE PERSON CODING THE PIPELINE INSPECTION MUST BE NASSCO PACP CERTIFIED WITH A MINIMUM OF THREE YEARS OF FULL-TIME EXPERIENCE CODING DEFECTS USING THE NASSCO STANDARD. PACP CERTIFICATION NUMBERS MUST BE PROVIDED TO MSDGC AND PROOF OF EXPERIENCE MUST BE DEMONSTRATED BY DOCUMENTATION SUCH AS A RESUME WITH REFERENCES.

ROBOTIC PACP & MANHOLE INSPECTION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR:

CONDUCTING A FINAL MANHOLE-TO-MANHOLE (MH-MH), TELEVISING OF THE MAINLINE SEWER SECTION TO EVALUATE THE CONDITION OF THE SEWER AFTER ALL APPROPRIATE CLEANING, TRIMMING, GRINDING, AND FLUSHING HAS BEEN PERFORMED. IN THE EVENT AN INSPECTION CANNOT BE COMPLETED FROM ONE SET-UP DUE TO A STRUCTURAL OR MAINTENANCE DEFECT, THE INSPECTOR SHALL PERFORM A REVERSE INSPECTION FROM AN ADDITIONAL SET-UP THE SAME DAY. THE INSPECTOR SHALL SUBMIT TWO INSPECTION REPORTS AS THE FINAL INSPECTION. THIS FINAL TELEVISING SHALL BE IN PACP AND SHALL FOLLOW ALL PACP V 7.0 STANDARDS.

EMPLOYING VARIOUS FLOW CONTROL METHODS AS APPROPRIATE TO ENSURE VISIBILITY OF THE ENTIRE CIRCUMFERENCE OF THE SEWER.

CONDUCTING A FINAL TELEVISING OF EACH INDIVIDUAL BUILDING SEWER FROM THE MAIN SEWER LINE TO THE PUBLIC RIGHT OF WAY DESIGNATION OR SEWER EASEMENT LIMIT. UNLESS OTHERWISE DIRECTED BY MSD PERSONNEL, THE EASEMENT LIMIT SHOULD BE ASSUMED TO BE A MINIMUM OF 10'. IF A FULL MAINLINE TO RIGHT OF WAY OR EASEMENT INSPECTION IS UNABLE TO BE COMPLETED DUE TO AN OBSTRUCTION OF ANY SORT, SAID OBSTRUCTION MUST BE LOCATED AND REPORTED TO THE MSD PM IMMEDIATELY.

WALK THROUGH PACP INSPECTION (MANNED ENTRY)

THE CONTRACTOR SHALL BE RESPONSIBLE FOR:

THE OPERATOR ENTERING INTO LARGE DIAMETER SEWERS IN ORDER TO CONDUCT A FINAL MANHOLE-TO-MANHOLE (MH-MH) TELEVISING OF THE SEWER TO EVALUATE THE CONDITION OF THE SEWER AFTER ALL APPROPRIATE CLEANING, TRIMMING, GRINDING, AND FLUSHING HAS BEEN PERFORMED. THE FINAL TELEVISING SHALL BE IN PACP AND SHALL FOLLOW ALL PACP V7.0 STANDARDS. THE CONTRACTOR MAY UTILIZE ROBOTIC EQUIPMENT TO PERFORM A PACP INSPECTION IN PIPE SIZES GREATER THAN 60 INCHES AT THE DIRECTION/APPROVAL OF THE MSD PM.

ALL MAN ENTRY INTO THE SEWER WILL FOLLOW THE CONTRACTOR'S HEALTH AND SAFETY PLAN WITH REGARDS TO CONFINED SPACE ENTRY.

THE CONTRACTOR SHALL SUBMIT WORK IN THE FORMAT REQUIRED BY MSDGC AND SHALL FOLLOW GUIDELINES FROM THE MSDGC PROJECT PM. IN ORDER TO CONTINUE IMPROVING THE UPLOADING OF DATA AND SUBMITTALS, THE MSDGC PM MAY UPDATE THE REQUIREMENTS AT ANY TIME, BUT WILL GIVE THE CONTRACTOR SUFFICIENT ACCESS TO MSD'S PROGRAMS AS NEEDED.

SUBMITTAL OF WORK TO MSDGC

WORK COMPLETED AND SUBMITTED TO MSDGC SHALL FOLLOW THE SPECIFICATIONS DETAILED IN THE SUBSECTIONS BELOW.

REQUIREMENTS OF ALL PACP CCTV SUBMITTALS AND MANHOLE INSPECTION SUBMITTALS ALL SUBMITTALS OF PACP INSPECTIONS SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:

EACH SUBMITTAL - THE PACP DATABASE FILE AND ITS CORRESPONDING VIDEO FILES - SHALL CONTAIN WORK FROM ONLY 1 (ONE) INSPECTOR AND ONLY 1 (ONE) CCTV WORK CATEGORY FROM THE LIST BELOW:

SANITARY AND/OR COMBINED MAINLINE SEWER INSPECTIONS (PACP)

STORM MAINLINE SEWER INSPECTIONS (PACP)

EACH SUBMITTAL SHALL BE ASSIGNED A UNIQUE TRACKING IDENTIFIER.

IN THE EVENT THAT A SUBMITTAL IS REJECTED AS UNACCEPTABLE, THE MSD PM SHALL DIRECT THE CONTRACTOR WHETHER TO REUSE THE ORIGINAL OR TO ASSIGN A NEW TRACKING IDENTIFIER.

EACH SUBMITTAL SHALL INCLUDE INSPECTIONS FROM ONLY ONE CALENDAR MONTH.

EACH PACP VIDEO FILE MUST BE IN STANDARD *.MP4 FORMAT AND NAMED AS DESCRIBED BELOW:

[MONTH]_[DAY]_[YEAR]-[HOUR]_[MINUTE]_[AM/PM]-[INSPECTOR NAME]-[WORK ORDER NUMBER].MP4

E.G., "1_03_2012-11_23_AM-M LONGMIRE-411032.MP4"

EACH MANHOLE INSPECTION SHALL FOLLOW THE FORMAT PROVIDED BY MSD UTILIZING THEIR MANHOLE INSPECTION FORM.

ALL PACP AND MANHOLE INSPECTIONS MUST BE SUBMITTED WITHIN FOURTEEN (14) CALENDAR DAYS OF THE DATE OF WORK.

IN THE CASE OF REJECTION OF A WHOLE OR ANY PART OF A SUBMITTAL, CONTRACTOR SHALL HAVE FOURTEEN (14) CALENDAR DAYS FROM THE DATE OF NOTIFICATION OF SAID REJECTION TO ADDRESS, CORRECT, AND/OR RE- PERFORM AND THEN RE-SUBMIT SAID WORK TO MSDGC.

PAYMENT FOR THE LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK SHALL BE AT THE LUMP SUM PRICE BIDFOR ITEM 611 CONDUIT MISC.; SEWER INSPECTION

ITEM 202 REMOVAL MISC,: SANDBAGS

THIS ITEM IS FOR THE REMOVAL OF SANDBAGS PLACED AS A TEMPORARY MEASURE TO RESTOR THE FUNCTION OF THE USACE LEVEE THAT WAS DISTURBED BY A PREVIOUS CONTRACT.

PAYMENT FOR THE LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR ITEM 203 ROADWAY MISC.; FLOOD CONTROL EMBANKMENT.

CALCULATED LBA | CHECKED SNS

GENERAL NOTES

HAM-71-8.65

6A
129

SHEET NUM.													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
4	6	6A	19	20	21	22							01/1MS/OT						
																		ROADWAY	
LS													LS	201	11000	LS		CLEARING AND GRUBBING	
				3									3	202	20010	3	EACH	HEADWALL REMOVED	
				1,595	43								1,638	202	23000	1,638	SY	PAVEMENT REMOVED	
				75									75	202	30700	75	FT	CONCRETE BARRIER REMOVED	
				810	538								1,348	202	32000	1,348	FT	CURB REMOVED	
				134									134	202	32700	134	SY	GUTTER REMOVED	
				477									477	202	35101	477	FT	PIPE REMOVED, 24" AND UNDER, AS PER PLAN	51
				152									152	202	35200	152	FT	PIPE REMOVED, OVER 24"	
				675									675	202	38000	675	FT	GUARDRAIL REMOVED	
				6									6	202	58100	6	EACH	CATCH BASIN REMOVED	
				50									50	SPECIAL	20270000	50	FT	FILL AND PLUG EXISTING CONDUIT. 12"	
				LS									LS	202	98000	LS		REMOVAL MISC.: LIGHT TOWER RETAINING WALL	
		LS											LS	202	98000	LS		REMOVAL MISC.: SANDBAGS	6A
			20,257										20,257	203	10000	20,257	CY	EXCAVATION	
			6,143										6,143	203	20000	6,143	CY	EMBANKMENT	
			438										438	203	35110	438	CY	GRANULAR MATERIAL, TYPE B	
			2,155										2,155	203	98000	2,155	CY	ROADWAY, MISC.:FLOOD CONTROL EMBANKMENT	51
			562										562	203	98000	562	CY	ROADWAY, MISC.:UNDERCUT	51
	3												3	204	45000	3	HOUR	PROOF ROLLING	
			207										207	206	10500	207	TON	CEMENT	
			5,226										5,226	206	11001	5,226	SY	CURING COAT, AS PER PLAN	
						5,425							5,425	206	15030	5,425	SY	CEMENT STABILIZED SUBGRADE, 16 INCHES DEEP	
					831.25								831.25	606	15050	831.25	FT	GUARDRAIL, TYPE MGS	
					3								3	606	26150	3	EACH	ANCHOR ASSEMBLY, MGS TYPE E(NCHRP 350 OR MASH 2016)	
					1								1	606	26500	1	EACH	ANCHOR ASSEMBLY, TYPE T	
					3								3	606	35002	3	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
					1								1	606	35103	1	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2, AS PER PLAN	5
					4,655								4,655	608	12000	4,655	SF	5" CONCRETE WALK	
					306								306	608	52000	306	SF	CURB RAMP	
					943								943	622	10160	943	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	
					3								3	622	25000	3	EACH	CONCRETE BARRIER END SECTION, TYPE D	
					4								4	622	25050	4	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D	
	1												1	623	40500	1	EACH	REFERENCE MONUMENT	
					13								13	626	00102	13	EACH	BARRIER REFLECTOR, TYPE 1, 1 WAY	
					20								20	626	00110	20	EACH	BARRIER REFLECTOR, TYPE 2, 1 WAY	
													LS	878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS	

CALCULATED LBA
CHECKED SNS

GENERAL SUMMARY

HAM-71-8.65

SHEET NUM.													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
5	6	20	21	22	23	25							01/1MS/0T						
																		DRAINAGE	
					1.12								1.12	602	20000	1.12	CY	CONCRETE MASONRY	
						1,253							1,253	605	11101	1,253	FT	6" SHALLOW PIPE UNDERDRAINS, AS PER PLAN, 707.31, 707.41	6
						64							64	611	00511	64	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS, AS PER PLAN	6
	100												100	611	00900	100	FT	6" CONDUIT, TYPE B FOR DRAINAGE CONNECTION	
	100												100	611	01100	100	FT	6" CONDUIT, TYPE C FOR DRAINAGE CONNECTION	
	100												100	611	01400	100	FT	6" CONDUIT, TYPE E FOR DRAINAGE CONNECTION	
	100												100	611	01500	100	FT	6" CONDUIT, TYPE F FOR DRAINAGE CONNECTION	
					6								6	611	04600	6	FT	12" CONDUIT, TYPE C	
					138								138	611	05900	138	FT	15" CONDUIT, TYPE B	
					100								100	611	05901	100	FT	15" CONDUIT, TYPE B, AS PER PLAN	6
					96								96	611	06700	96	FT	15" CONDUIT, TYPE F	
					13								13	611	07401	13	FT	18" CONDUIT, TYPE B, AS PER PLAN	6
					136								136	611	07600	136	FT	18" CONDUIT, TYPE C	
					295								295	611	10600	295	FT	24" CONDUIT, TYPE C	
					40								40	611	10601	40	FT	24" CONDUIT, TYPE C, AS PER PLAN	6
					154								154	611	13400	154	FT	30" CONDUIT, TYPE B	
					235								235	611	13601	235	FT	30" CONDUIT, TYPE C, AS PER PLAN	6
													LS	611	97300	LS		CONDUIT, MISC.: SEWER INSPECTION	6A
					1								1	611	98150	1	EACH	CATCH BASIN, NO. 3	
					1								1	611	98151	1	EACH	CATCH BASIN, NO. 3, AS PER PLAN	6
					1								1	611	98180	1	EACH	CATCH BASIN, NO. 3A	
					3								3	611	98181	3	EACH	CATCH BASIN, NO. 3A, AS PER PLAN	6
					1								1	611	98470	1	EACH	CATCH BASIN, NO. 2-2B	
					1								1	611	98511	1	EACH	CATCH BASIN, NO. 2-3, AS PER PLAN	6
					1								1	611	99114	1	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D	
					1								1	611	99115	1	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D, AS PER PLAN	6
					2								2	611	99574	2	EACH	MANHOLE, NO. 3	
					3								3	611	99575	3	EACH	MANHOLE, NO. 3, AS PER PLAN	6
																		PAVEMENT	
				717									717	254	01000	717	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1 ½"	
				905									905	304	20000	905	CY	AGGREGATE BASE	
9													9	301	56000	9	CY	ASPHALT CONCRETE BASE, MG64-22, (449)	
				79									79	407	20000	79	GAL	NON-TRACKING TACK COAT	
1.5													1.5	441	50000	1.5	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE X, (448), PG64-22	
				30									30	442	10000	30	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)	
				4,912									4,912	452	16060	4,912	SY	13.5" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1R WITH QC/QA	
			66										66	609	24510	66	FT	CURB, TYPE 4-C	
			1,835										1,835	609	26000	1,835	FT	CURB, TYPE 6	
		347	190										537	609	50000	537	SY	4" CONCRETE TRAFFIC ISLAND	

CALCULATED LBA
CHECKED SNS

GENERAL SUMMARY

HAM-71-8.65

SHEET NUM.													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
51	74	108	120										01/IMS/OT						
																		TRAFFIC SIGNALS	
			295										295	625	25500	295	FT	CONDUIT, 3", 725.04	
			10										10	625	25600	10	FT	CONDUIT, 4", 725.04	
			198										198	625	25908	198	FT	CONDUIT, JACKED OR DRILLED, 725.052, 3"	
			227										227	625	29000	227	FT	TRENCH	
			5										5	625	30706	5	EACH	PULL BOX, 725.08, 24"	
			5										5	625	32000	5	EACH	GROUND ROD	
			1										1	630	79100	1	EACH	SIGN HANGER ASSEMBLY, MAST ARM	
			1										1	630	79500	1	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	
			15.8										15.8	630	80100	15.8	SF	SIGN, FLAT SHEET	
			6										6	632	05006	6	EACH	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK	
			2										2	632	20731	2	EACH	PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN	115
			6										6	632	25000	6	EACH	COVERING OF VEHICULAR SIGNAL HEAD	
			2										2	632	26000	2	EACH	PEDESTRIAN PUSHBUTTON	
			976										976	632	40700	976	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	
			2										2	632	64011	2	EACH	SIGNAL SUPPORT FOUNDATION, AS PER PLAN	118
		4	2										6	632	64020	6	EACH	PEDESTAL FOUNDATION	
		1,503											1,503	632	66000	1,503	FT	POWER CABLE, 3 CONDUCTOR, NO. 14 AWG	
		909											909	632	67300	909	FT	POWER CABLE, 3 CONDUCTOR, NO. 8 AWG	
			251										251	632	68300	251	FT	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG	
			50										50	632	69500	50	FT	SERVICE CABLE, 2 CONDUCTOR, NO. 6 AWG	
			1										1	632	70000	1	EACH	POWER SERVICE	
		1											1	632	70001	1	EACH	POWER SERVICE, AS PER PLAN	105
			1										1	632	71368	1	EACH	SIGNAL SUPPORT, TYPE TC-12.31 DESIGN 10 POLE, WITH MAST ARMS TC-81.22 DESIGN 13 AND DESIGN 12	
			1										1	632	72140	1	EACH	SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 13	
			2										2	632	89600	2	EACH	PEDESTAL, 8'	
		4											4	632	90010	4	EACH	PEDESTAL, MISC.: PEDESTAL, 15', TRANSFORMER BASE	105
			1										1	633	65521	1	EACH	CABINET, TYPE 332, AS PER PLAN	115
			1										1	633	67100	1	EACH	CABINET FOUNDATION	
			1										1	633	67200	1	EACH	CONTROLLER WORK PAD	
			1										1	633	75001	1	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	116
			1										1	809	69101	1	EACH	STOP LINE RADAR DETECTION, AS PER PLAN	116
			1										1	809	69123	1	EACH	ATC CONTROLLER, AS PER PLAN	115
																		RETAINING WALLS (I-WALL)	
LS													LS	503	21300	LS		UNCLASSIFIED EXCAVATION	
5,014													5,014	504	11101	5,014	SF	STEEL SHEET PILING LEFT IN PLACE, AS PER PLAN	73
11,485													11,485	509	10000	11,485	LB	EPOXY COATED REINFORCING STEEL	
139													139	511	46010	139	CY	CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING	
288													288	512	10100	288	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
533													533	516	13601	533	SF	1" PREFORMED EXPANSION JOINT FILLER, AS PER PLAN	
																		STRUCTURE 20 FOOT SPAN AND UNDER (3115275)	
	LS												LS	202	11201	LS		PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	73
	LS												LS	503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
	LS												LS	503	21301	LS		UNCLASSIFIED EXCAVATION, AS PER PLAN	6, 73
	10,121												10,121	509	10000	10,121	LB	EPOXY COATED REINFORCING STEEL	
	91												91	511	46210	91	CY	CLASS QC1 CONCRETE, RETAINING/WINGWALL INCLUDING FOOTING	
	2												2	511	46611	2	CY	CLASS QC1 CONCRETE, HEADWALL, AS PER PLAN	
	68												68	512	10100	68	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
	150												150	512	33000	150	SY	TYPE 2 WATERPROOFING	
	38												38	516	13600	38	SF	1" PREFORMED EXPANSION JOINT FILLER	
	12												12	518	21200	12	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
	35												35	611	97400	35	FT	CONDUIT, MISC.:12' X 9' CONDUIT, TYPE A, 706.05, DESIGN COVER 3 FT, AS PER PLAN	6, 73

CALCULATED LBA
CHECKED SNS

GENERAL SUMMARY

HAM-71-8.65

SHEET NUM.													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
5	7	8	9										01/IMS/OT						
																		MAINTENANCE OF TRAFFIC	
	40												40	614	11110	40	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
		25											25	614	11630	25	FT	INCREASED BARRIER DELINEATION	
		1											1	614	12384	1	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	
		1											1	614	12400	1	EACH	WORK ZONE IMPACT ATTENUATOR, MISC.:REMOVE AND RELOCATE FROM RAMP P	
		1											1	614	12400	1	EACH	WORK ZONE IMPACT ATTENUATOR, MISC.:REMOVE AND STORE ODOT OWNED ATTENUATOR	
			LS										LS	614	12420	LS		DETOUR SIGNING	9
		25											25	614	13310	25	EACH	BARRIER REFLECTOR, TYPE 1, BIDIRECTIONAL	
		18											18	614	13360	18	EACH	OBJECT MARKER, TWO WAY	
		10											10	614	18000	10	EACH	MAINTAINING TRAFFIC, MISC.:REMOVE AND STORE ODOT OWNED SIGN	
		85											85	616	10000	85	MGAL	WATER	
		300											300	622	41100	300	FT	PORTABLE BARRIER, UNANCHORED	
		590											590	622	90000	590	FT	BARRIER, MISC.:REMOVE AND RELOCATE FROM RAMP P TO KENNEDY AVE.	
		410											410	622	90000	410	FT	BARRIER, MISC.:ADJUST BARRIER TO CLOSE OUTSIDE SHOULDER OF IR-71 NB	
		1,910											1,910	622	90000	1,910	FT	BARRIER, MISC.:REMOVE AND STORE ODOT OWNED PORTABLE BARRIER	
																		INCIDENTALS	
	LS												LS	614	11000	LS		MAINTAINING TRAFFIC	
													LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
													LS	624	10000	LS		MOBILIZATION	
LS													LS	SPECIAL	69098400	LS		CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION	51

CALCULATED LBA
CHECKED SNS

GENERAL SUMMARY

HAM-71-8.65

REF. NO.	SHEET NO.	STATION (P = RAMP P, N = RAMP N, K = KENNEDY, R = RIDGE) FROM	TO	SIDE	202 HEADWALL REMOVED EACH	202 PAVEMENT REMOVED SQ YD	202 CONCRETE BARRIER REMOVED FOOT	202 CURB REMOVED FOOT	202 GUTTER REMOVED SQ YD	202 PIPE REMOVED, 24" AND UNDER FOOT	202 PIPE REMOVED, OVER 24" FOOT	202 GUARDRAIL REMOVED FOOT	202 CATCH BASIN REMOVED EACH	202 REMOVAL MISC.: LUMP	609 4" CONCRETE TRAFFIC ISLAND SQ YD	SPECIAL FILL & PLUG EXISTING CONDUIT FOOT	REMARKS
R1		NOT USED															
R2		NOT USED															
R3		NOT USED															
R4		NOT USED															
R5		NOT USED															
R6		NOT USED															
R7		NOT USED															
R8	29	411+85.93	412+50.89	RT	1					118			2				
R9	29-30	411+39.04	414+90.75	RT			75										
R10		NOT USED															
R11		NOT USED															
R12		NOT USED															
R13	30	412+91.78	417+96.00	RT											347		
R14		NOT USED															
R15		NOT USED															
R16		NOT USED															
R17		NOT USED															
R18		NOT USED															
R19		NOT USED															
R20		NOT USED															
R21		NOT USED															
R22		NOT USED															
R23		NOT USED															
R24		NOT USED															
R25	29,31	412+03.60 P	14+67.00 K	LT/LT								675.00					
R26	29,31	411+96.04 P	13+87.47 K	LT/LT		1595											
R27	31	409+95.00 P	411+76.00 N	RT/RT	1					237			1				
R28	31	12+19.34 K	12+69.46 K	LT						72			1				
R29	31	12+69.46 K		LT						4	8						
R30	31	413+28.00 N	12+69.46 K	RT/LT							144						
R31	31	411+69.84 N	413+84.40 N	RT/LT					134								
R32	31	11+18.86 K	11+92.00 K	LT				83									
R33	31	12+10.65 K	13+78.92 K	LT				581									
R34	31	13+87.88 K	15+31.00 K	LT				146									
R35		NOT USED															
R36	31	412+22.63 N	412+56.98 N	RT										LUMP			LIGHT TOWER RETAINING WALL
R37	31	413+03.47 N	413+10.65 N	RT	1					46			1				
R38	31	14+50.00 K		LT/RT									1			50	PLUG AND SEAL 12" CONDUIT
TOTALS CARRIED TO GENERAL SUMMARY					3	1595	75	810	134	477	152	675	6	LUMP	347	50	

CALCULATED LEH
CHECKED SNS

ROADWAY QUANTITIES

HAM-71-8.65

REF. NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	202 PAVEMENT REMOVED (SQ YD)	202 CURB REMOVED (FOOT)	441 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22 (CY)	452 9" NON-REINFORSED CONCRETE PAVEMENT, CLASS QC1 (SQ YD)	519 PATCHING CONCRETE STRUCTURE (SQ FT)	606 GUARDRAIL, TYPE MGS (FOOT)	606 ANCHOR ASSEMBLY, MGS TYPE E (NCHRP 350/MASH 2016) (EACH)	606 ANCHOR ASSEMBLY, MGS TYPE T (EACH)	606 MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 (EACH)	606 BRIDGE TERMINAL ASSEMBLY, TYPE 2, AS PER PLAN (EACH)	608 CURB RAMP, TYPE A1 (SQ FT)	608 CURB RAMP, TYPE B1 (SQ FT)	608 5" CONCRETE WALK (SQ FT)	609 CURB, TYPE 4-C (FOOT)	609 CURB, TYPE 6 (FOOT)	609 (FOOT)	609 4" CONCRETE TRAFFIC ISLAND (SQ YD)	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE D (FOOT)	622 CONCRETE BARRIER END SECTION, TYPE D (EACH)	622 CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D (EACH)	626 BARRIER REFLECTOR, TYPE 1, 1WAY (EACH)	626 BARRIER REFLECTOR, TYPE 2, 1WAY (EACH)
		I.R. 71																									
G1		NOT USED																									
G2	29	411+15.23	412+40.23	RT						50	1		1														2
G3		NOT USED																									
		RAMP P																									
G4	29-30	412+32.58	413+10.60	LT						12.50	1		1														2
G5	29-30,31	18+90.39 KENNEDY	409+15.61	LT/RT						468.75		1		1													16
G6	30,31	408+95.89	412+75.60	RT						300	1		1														
		I.R. 71																									
C1		NOT USED																									
C2	29	412+21.63	412+39.63	RT														18									
		RAMP P																									
C3	29-30	412+92.00	413+10.00	LT														18									
C4	29	412+57.00	412+75.00	RT														18									
C5	31	408+95.89	412+75.60	LT														12	358								
C6	31	408+22.24	408+79.25	RT											108				184.50		122						
		RAMP N																									
C7	31	412+00.00	414+00.00	LT															401.50		68						
		KENNEDY AVENUE																									
C8	31	11+18.86	413+66.53 RAMP N	LT/RT	18	159	0.8	18											295								
C9	31	408+95.89 RAMP P	18+87.73	RT/LT	43	379	1.8	43											596								
		I.R. 71																									
B1		NOT USED																									
B2		NOT USED																									
B3	29-30	412+39.63	416+24.99	RT																			336	1	2	5	
		RAMP P																									
B4		NOT USED																									
B5	30	413+10.00	417+00.19	LT																			376	1		4	
B6	29-30	412+75.00	415+50.00	RT																			231	1	2	4	
		KENNEDY AVE																									
W1	31	11+18.86	18+90.39	LT												198	4655										
		KENNEDY AVE																									
IP1	31	12+26.53		LT					10																		
TOTALS CARRIED TO GENERAL SUMMARY					61	538	2.6	61	10	831.25	3	1	3	1	306		4655	66	1835	0	190	943	3	4	13	20

CALCULATED LEH
CHECKED SNS

ROADWAY QUANTITIES

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21
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REF. NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	COMPUTER GENERATED AREA SQ FT	206 CEMENT STABILIZED SUBGRADE, 16 INCHES DEEP (AREA/9) SQ YD	254 PAVEMENT PLANING, ASPHALT CONCRETE, 1 1/2" (AREA/9) SQ YD	304 6" AGGREGATE BASE (AREAx0.50/27) CU YD	407 NON-TRACKING TACK COAT (AREAx2x0.055/9) GAL	442 1½" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446) (AREAx0.125/27) CU YD	452 13.5" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1 WITH QC/QA (AREA/9) SQ YD						REMARKS
		I.R. 71															
P1		NOT USED															
P2		NOT USED															
P3	29	410+90.00	413+00.00	RT	2520		280		31	11.67							
P4	30	413+00.00	416+27.62	RT	3931		436.78		48	18.20							
P5		NOT USED															
P6		NOT USED															
P7		NOT USED															
P8		NOT USED															
P9		NOT USED															
P10		NOT USED															
		RAMP N															
P11		NOT USED															
P12		NOT USED															
P13		NOT USED															
P14	29	408+97.30	410+50.00	LT/RT	3918	487.56		81.26			435.33						ADD 470 SF FOR 206, 304
P15	31	410+50.00	12+73.83 KENNEDY	LT/RT	10183	1260.00		210.00			1131.44						ADD 1157 SF FOR 206, 304
		RAMP P															
P16	31	15+31.00 KENNEDY	411+50.00	LT/RT	14392	1759.00		293.17			1599.11						ADD 1439 SF FOR 304, 206
P17	29	411+50.00	413+00.00	LT/RT	4207	518.78		86.46			467.44						ADD 462 SF FOR 304, 206
P18	30	413+00.00	418+00.00	LT/RT	11500	1399.33		233.22			1277.78						ADD 1094 SF FOR 206, 304, 452
SUBTOTAL						5424.67	716.78	904.11	79.00	29.87	4911.10						
TOTALS CARRIED TO GENERAL SUMMARY						5425	717	905	79	30	4912						

CALCULATED LEH
CHECKED SNS

PAVEMENT QUANTITIES

HAM-71-8.65

ITEM 203 ROADWAY MISC.; FLOOD CONTROL EMBANKMENT

THE PLACING OF EMBANKMENT WITHIN THE LEVEE LIMITS SHALL REQUIRE THE FOLLOWING:

THE EXISTING GROUND SURFACE SHALL BE STRIPPED OF ORGANICS AND TOPSOIL TO A DEPTH OF APPROXIMATELY 6 INCHES PRIOR TO BENCHING THE FLOOD CONTROL EMBANKMENT.

THE SOIL ON WHICH THE BACKFILL IS TO BE PLACED SHOULD NOT BE EXCAVATED UNTIL IMMEDIATELY BEFORE BACKFILLING, AND SHALL NOT BE ALLOWED TO BECOME OVERLY WET OR DRY WHILE EXPOSED. THE SURFACE AREA OF THE SOIL SHALL BE SCARIFIED AS NECESSARY TO ENSURE A GOOD BOND BETWEEN THE EXISTING SOIL AND THE BACKFILL MATERIAL.

BACKFILL MATERIAL MUST BE LOW PERMEABILITY SOILS - IMPERMEABLE SOILS (E.G. SC, CL OR CL-ML WITH AN ESTIMATED HYDRAULIC CONDUCTIVITY LESS THAN 1 X 10^{-5} CM/SEC) IN ACCORDANCE WITH ASTM 2488 - USCS CLASSIFICATION SYSTEM.

BACKFILL MATERIAL SHALL BE PLACED IN LOOSE LIFTS WITH THICKNESSES NOT TO EXCEED 6-INCHES AND COMPACTED TO A MINIMUM OF 95 PERCENT STANDARD PROCTOR DENSITY DETERMINED AT OPTIMUM MOISTURE CONTENT ACCORDING TO ASTM D-698. MOISTURE CONTROL LIMITS ARE TO BE WITHIN -1% TO +3% OF OPTIMUM.

COMPACTION TEST RESULTS OF WORK ACCOMPLISHED AS DESCRIBED ABOVE SHALL BE SUBMITTED TO THE US ARMY CORPS OF ENGINEERS FOR REVIEW AND APPROVAL THROUGHOUT THE CONSTRUCTION PROCESS.

THE DISTURBED AREAS SHALL BE SEEDED AND COVERED WITH A BIO-DEGRADABLE GEOTEXTILE CONFORMING TO ODOT SPECIFICATION 712.11 FOR TYPE B TEMPORARY EROSION CONTROL MAT, WHEN FINAL GRADING IS COMPLETE.

THE TYPE B TEMPORARY EROSION CONTROL MAT IS INCLUDED IN ITEM 203 ROADWAY MISC.; FLOOD CONTROL EMBANKMENT FOR PAYMENT. SEEDING AND MULCHING IS PAID FOR SEPERATELY UNDER ITEM 659 SEEDING AND MULCHING.

PAYMENT FOR THE LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR ITEM 203 ROADWAY MISC.; FLOOD CONTROL EMBANKMENT.

ITEM 203 ROADWAY MISC.; UNDERCUT

THE UNDERCUT AREAS ON THE PROPOSED LEVEE AND YONONTE CREEK CROSS SECTIONS ARE LOCATIONS WHERE THE EXISTING SOIL MUST BE REMOVED AND REPLACED WITH ITEM 203 ROADWAY MISC.; FLOOD CONTROL EMBANKMENT FOR THE PURPOSE OF PREVENTING SEEPAGE UNDER THE PROPOSED LEVEE.

PAYMENT FOR THE UNDERCUTTING / EXCAVATION OF THE EXISTING SOILS, AS SHOWN IN THE PLANS, AND PAYMENT FOR THE REPLACEMENT OF THIS UNDERCUT SOIL WITH FLOOD CONTROL EMBANKMENT, ACCORDING TO THE NOTE ABOVE, SHALL BE INCLUDED IN THE UNIT PRICE BID PER CUBIC YARD FOR ITEM 203 ROADWAY MISC,; UNDERCUT. THIS PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.

ITEM 630 SIGNING, MISC; LEVEE SIGNAGE

FIVE SIGNS, AS SHOWN BELOW, SHALL BE PLACED ALONG THE LENGTH OF THE I-WALL. SIGNS SHALL BE SPACED NO MORE THAN 150 FEET APART AND SHOULD BE LOCATED TO MINIMIZE ANY IMPACTS TO INSPECTION, OPERATION AND MAINTENANCE, OR ABILITY TO PERFORM EFFORTS DURING HIGH WATER OR FLOOD EVENTS. SIGNS SHALL MEET ALL THE REQUIREMENTS OF ITEM 630.

PAYMENT FOR THE LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK SHALL BE INCLUDED IN THE FOLLOWING QUANTITIES CARRIED TO THE GENERAL SUMMARY.

ITEM 630 SIGNING, MISC; LEVEE SIGNAGE 5 EACH

RIPRAP REPAIR

THE CONTRACTOR SHALL TAKE CARE TO NOT DAMAGE THE CONCRETE LINING OF THE YONONTE CREEK CHANNEL. ANY DAMAGE TO THE CHANNEL LINING SHALL BE REPAIRED USING ITEM 601 RIPRAP, TYPE D AS DEFINED IN THE ODOT CMS. REPAIRING DAMAGE SHALL BE AT THE CONTRACTOR'S EXPENSE.

ITEM 202 PIPE REMOVED, 24" AND UNDER, AS PER PLAN

THIS ITEM SHALL BE IDENTICAL TO ITEM 202 PIPE REMOVED, 24" AND UNDER WITH THE EXCEPTION THAT ALL BACKFILL FOR THE REMOVAL SHALL USE ITEM 203 ROADWAY MISC.; FLOOD CONTROL EMBANKMENT WITHIN THE FLOODWALL INFLUENCE ZONE. THE FLOODWALL INFLUENCE ZONE IS 15' FROM THE OUTERMOST FLOODWALL FEATURE THAT EXTENDS AT A 1:1 SLOPE INTO THE GROUND.

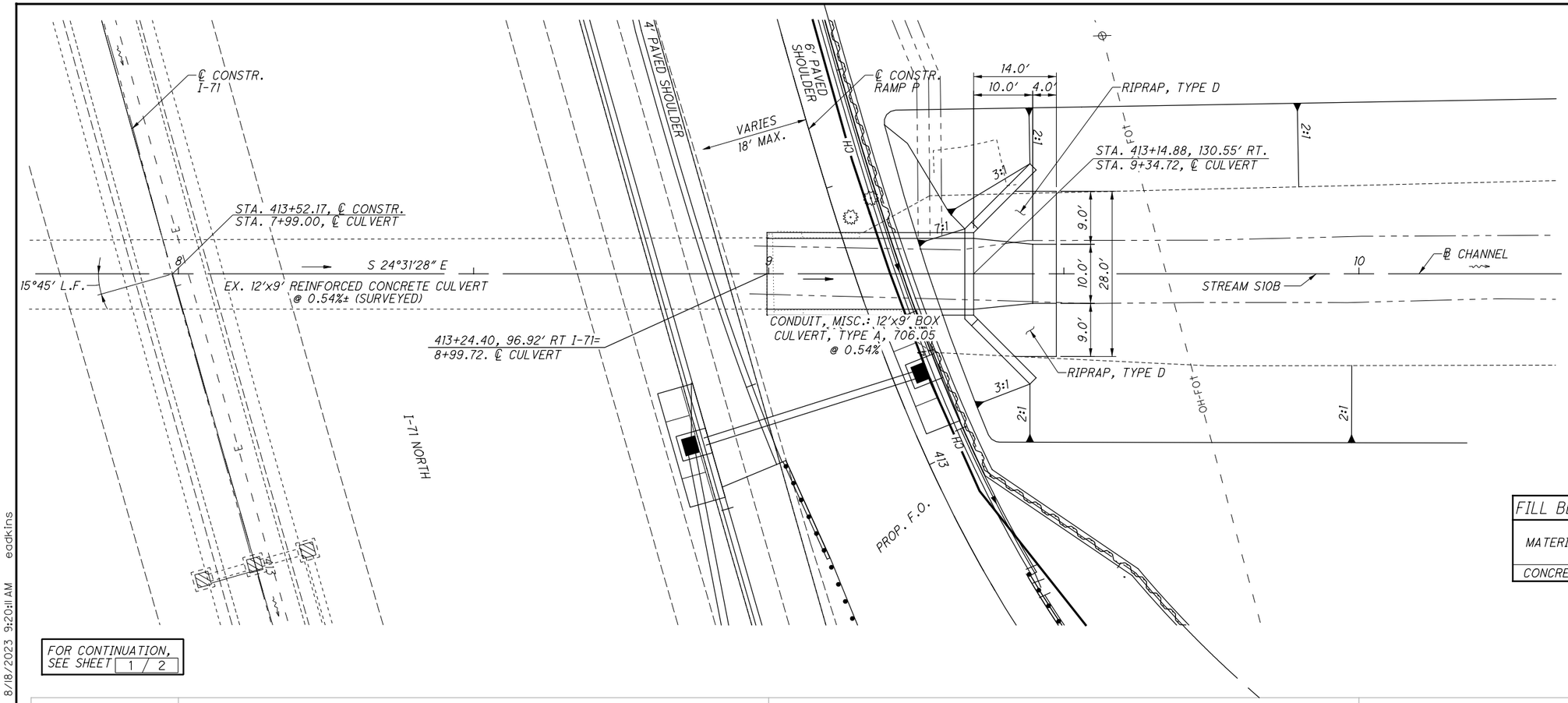
I-WALL ESTIMATED QUANTITIES

ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	GEN.	SHEET #
503	21300	LUMP	LS	UNCLASSIFIED EXCAVATION	1	
504	11101	5014	SF	STEEL SHEET PILING LEFT IN PLACE, AS PER PLAN	5014	131-131B
509	10000	11,485	LB	EPOXY COATED REINFORCING STEEL	11,485	131G
511	46010	139	CY	CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING	139	131-131B
512	10100	288	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	288	131G
516	13601	533	SF	1" PREFORMED EXPANSION JOINT FILLER, APP	533	131G

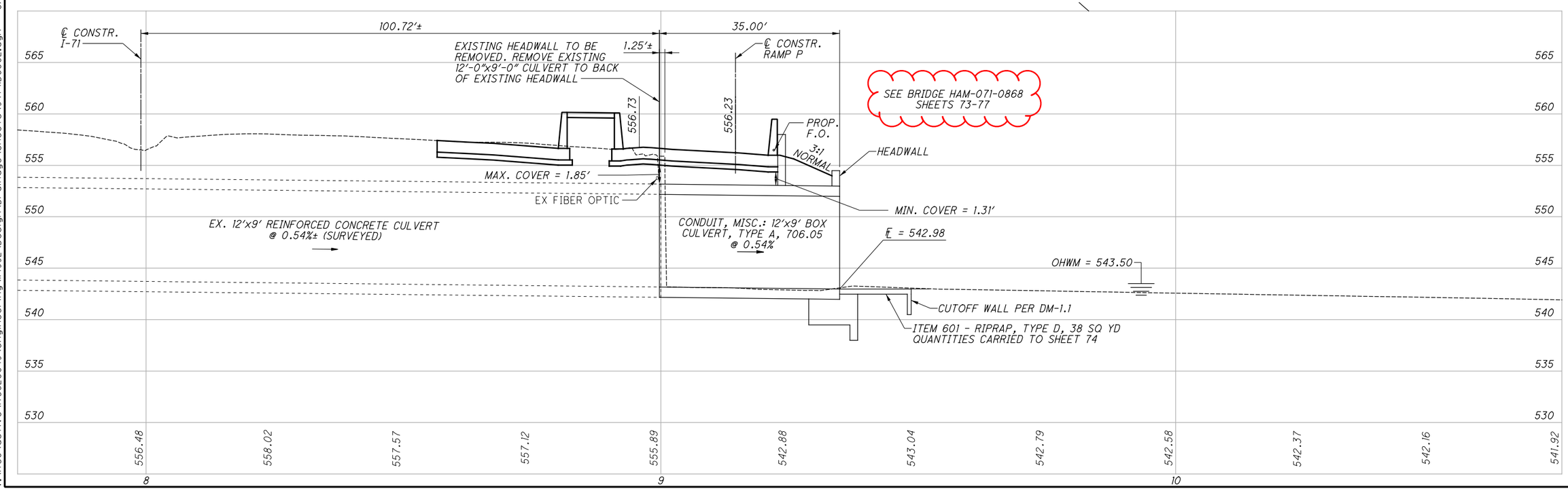
CALCULATED EDA
CHECKED PJD

GENERAL NOTES

HAM-71-8.65



FOR CONTINUATION, SEE SHEET 1 / 2



HYDRAULIC DESIGN DATA

DRAINAGE AREA	=	1024 Ac.
Q_{10}	=	830 cfs
Q_{50}	=	1360 cfs
Q_{100}	=	1470 cfs
HW_{10}	=	554.2
HW_{50}	=	559.1
HW_{100}	=	560.6
V_{10}	=	3.5 fps
V_{50}	=	2.1 fps
V_{100}	=	1.71 fps

DESIGN SERVICE LIFE = 75 YRS.
pH = 7.01
ABRASION LEVEL: 1

EXISTING STRUCTURE

SFN 3115275
TYPE: 12′x9′ REINFORCED CONCRETE CULVERT
SKEW: 15°45′ L.F.
ALIGNMENT: TANGENT
LENGTH: 276 FT
DATE BUILT: 1966

FILL BELOW OHWM FOR STREAM S10B

MATERIAL	LENGTH (FT)	SURFACE AREA (ACRE)	VOLUME (CY)
CONCRETE	49	0.0146	12

HORIZONTAL SCALE IN FEET
0 5 10 20

CALCULATED GKB
CHECKED HGH

CULVERT DETAIL
I-71 STA. 413+52.17

HAM-71-6.86

2 2

72 129

8/18/2023 9:20:11 AM eadkins
V:\1736\active\173620049\engineering\ll4992\Design\Drainage\Sheets\947411DC002.dgn

ESTIMATED QUANTITIES - CARRIED TO GENERAL SUMMARY

ITEM	ITEM EXTENSION	TOTAL	UNIT	DESCRIPTION	AS PER PLAN SHEET NUMBER
202	11201	LUMP		PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	1 / 5
503	11100	LUMP		COFFERDAMS AND EXCAVATION BRACING	
503	21301	LUMP		UNCLASSIFIED EXCAVATION, AS PER PLAN	1 / 5
509	10000	10121	POUND	EPOXY COATED REINFORCING STEEL	
511	46210	91	CU YD	CLASS QC1 CONCRETE, RETAINING/WINGWALL INCLUDING FOOTING	
511	46611	2	CU YD	CLASS QC1 CONCRETE, HEADWALL, AS PER PLAN	
512	10100	68	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
512	33000	150	SQ YD	TYPE 2 WATERPROOFING	
516	13600	38	SQ FT	1" PREFORMED EXPANSION JOINT FILLER	
518	21200	12	CU YD	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
601	11000	38	SQ YD	RIPRAP, TYPE D	
611	97400	35	FT	CONDUIT, MISC.: 12" X 9" CONDUIT, TYPE A, 706.05, DESIGN COVER 3 FT, AS PER PLAN	1 / 5

QUANTITIES COMPUTED BY: JBR 8/16

QUANTITIES CHECKED BY: AMT 3/17

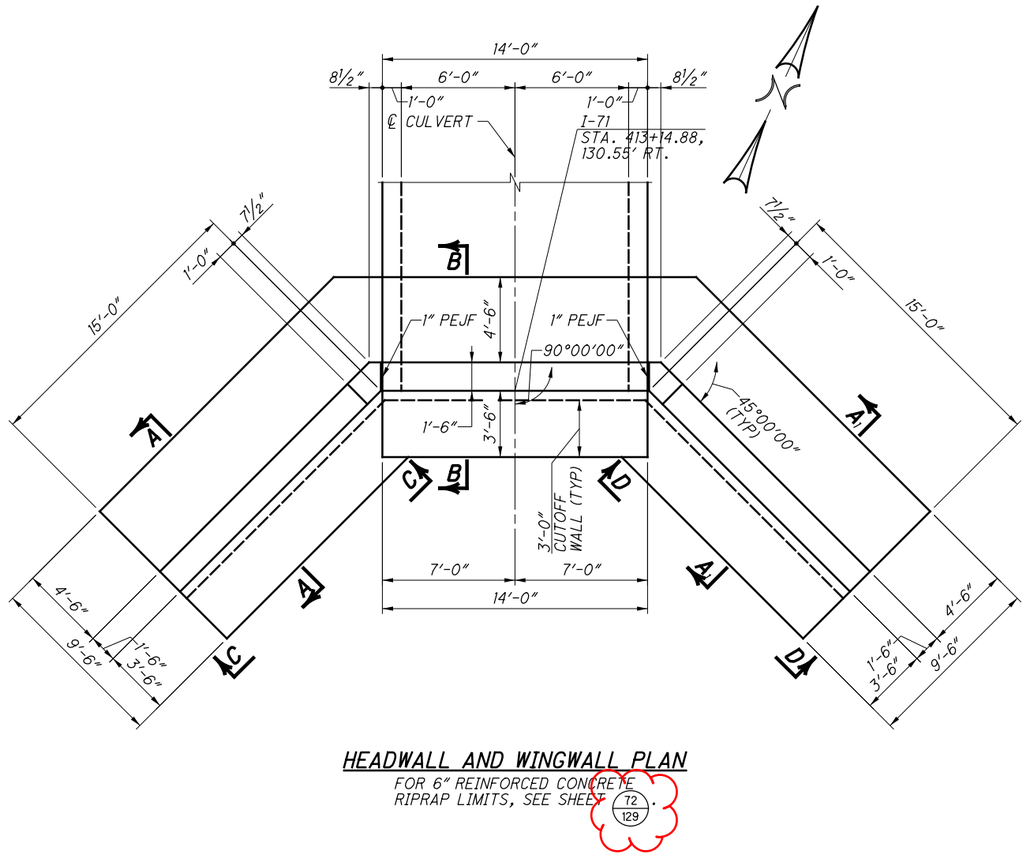
DESIGN AGENCY
LJB Inc. • 2500 Newmark Drive
Miamisburg, OH 45342
(937) 259-5000 tel • (937) 259-5100 fax • LJBinc.com

DESIGNED AMT | DRAWN MNM | REVIEWED DWS | DATE 7-17

CHECKED SJM | REVISED JWG | STRUCTURE FILE NUMBER 31152?5

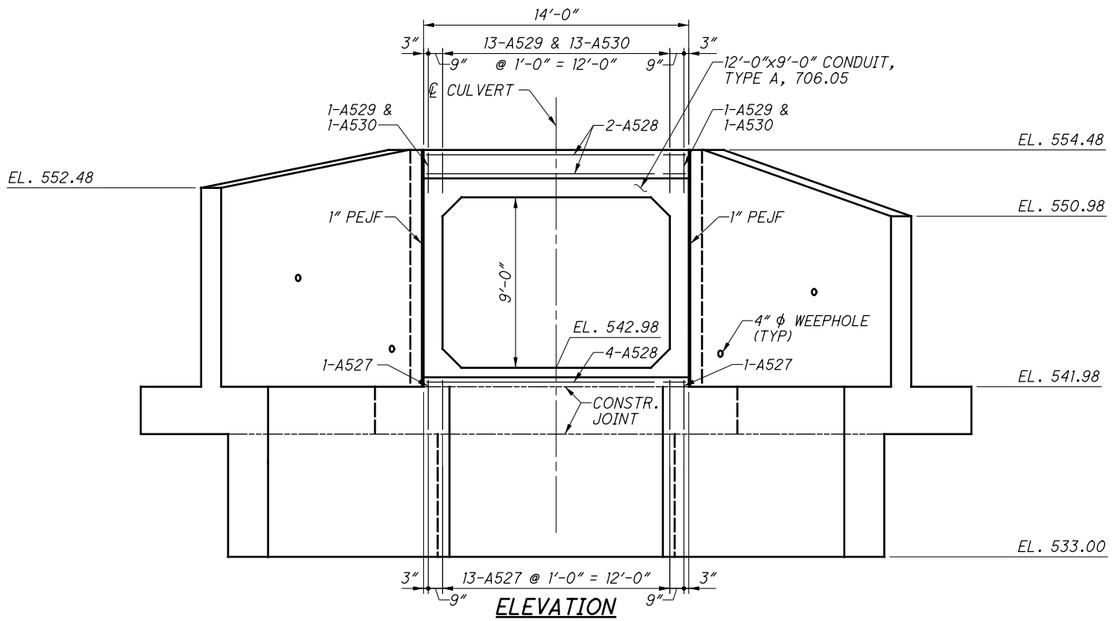
ESTIMATED QUANTITIES
BRIDGE No. HAM-071-0868
I-71 OVER TRIBUTARY OF DUCK CREEK

HAM-71-8.65
PID No. 114992

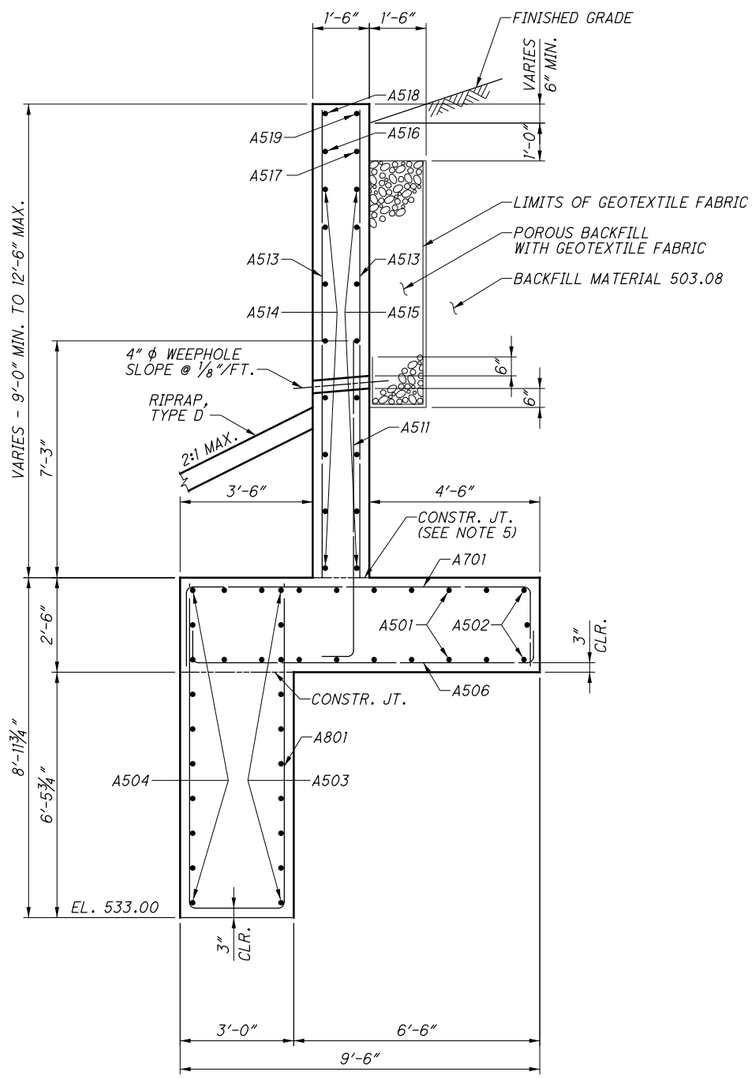


HEADWALL AND WINGWALL PLAN

FOR 6" REINFORCED CONCRETE RIPRAP LIMITS, SEE SHEET 72/129.



ELEVATION



SECTION A-A

(SECTION A_1-A_1 SIMILAR)

LEGEND

PEJF = PREFORMED EXPANSION JOINT FILLER

NOTES

1. FOR GENERAL NOTES, SEE SHEET 1 / 5.
2. FOR REINFORCING STEEL LIST, SEE SHEET 5 / 5.
3. FOR SECTION B-B, SEE SHEET 4 / 5.
4. FOR VIEWS C-C AND D-D, SEE SHEET 4 / 5.
5. THE INTERFACE BETWEEN THE TOP OF FOOTING AND BASE OF WINGWALL STEM SHALL BE INTENTIONALLY ROUGHENED TO A FULL AMPLITUDE OF APPROXIMATELY ¼" BY MEANS OF A SERRATED TROWEL.

DESIGN AGENCY
LJB Inc. - 2500 Newmark Drive
Miamisburg, OH 45342
(937) 259-5000 tel - (937) 259-5100 fax - LJBinc.com

DESIGNED	DRAWN	REVIEWED	DATE
AMT	MNM	DWS	7-17
CHECKED	REVISED	STRUCTURE FILE NUMBER	
SJM	JWG	3115275	

HEADWALL AND WINGWALL PLAN, ELEVATION AND SECTION DETAIL

BRIDGE No. HAM-071-0868
I-71 OVER TRIBUTARY OF DUCK CREEK

HAM-71-8.65
PID No. 114992