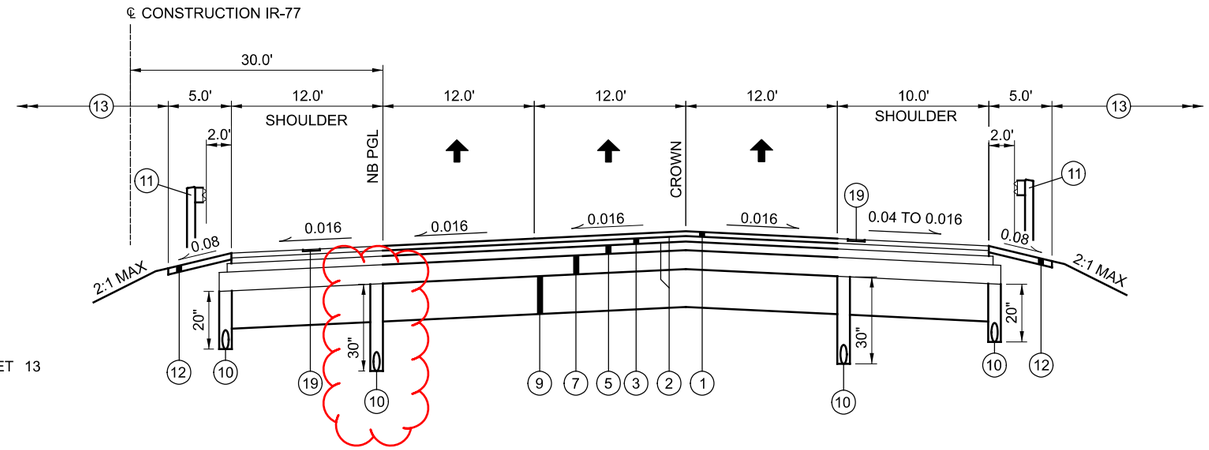
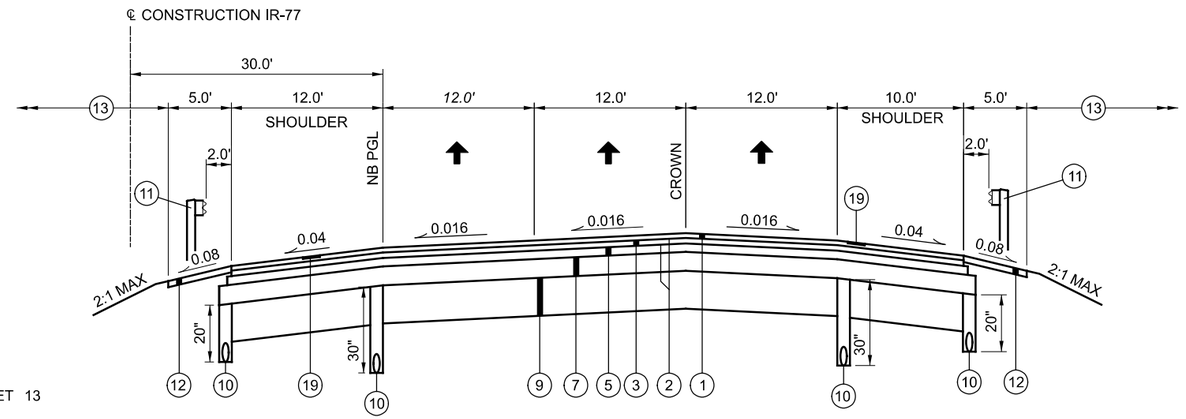
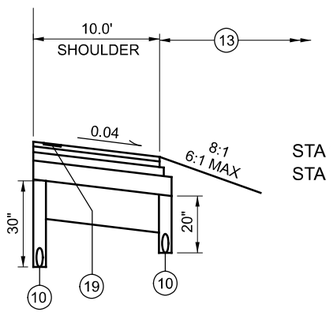



FOR MEDIAN GRADING SEE SHEET 13

PROPOSED NORMAL SECTION - IR-77 NORTHBOUND
STA 1026+40.00 TO STA 1026+61.03




FOR MEDIAN GRADING SEE SHEET 13




STA 1038+50.00 TO STA 1043+25.00
STA 1046+50.00 TO STA 1048+87.50

PROPOSED NORMAL SECTION - IR-77 NORTHBOUND
STA 1029+27.85 TO STA 1047+53.11

FOR GUARDRAIL LOCATIONS, SEE SHEETS 83 - 89

FOR BASE AND SUBBASE STEP DETAIL, SEE SHEET 7
FOR GUARDRAIL ROUNDING DETAIL, SEE SHEET 7
FOR PROPOSED PAVEMENT LEGEND, SEE SHEET 7

# TYPICAL SECTIONS - PROPOSED

SUM-77-32.27

MODEL: Sheet 5 PAPERSIZE: 17x11 (in.) DATE: 9/15/2022 TIME: 4:40:37 PM USER: tdinh
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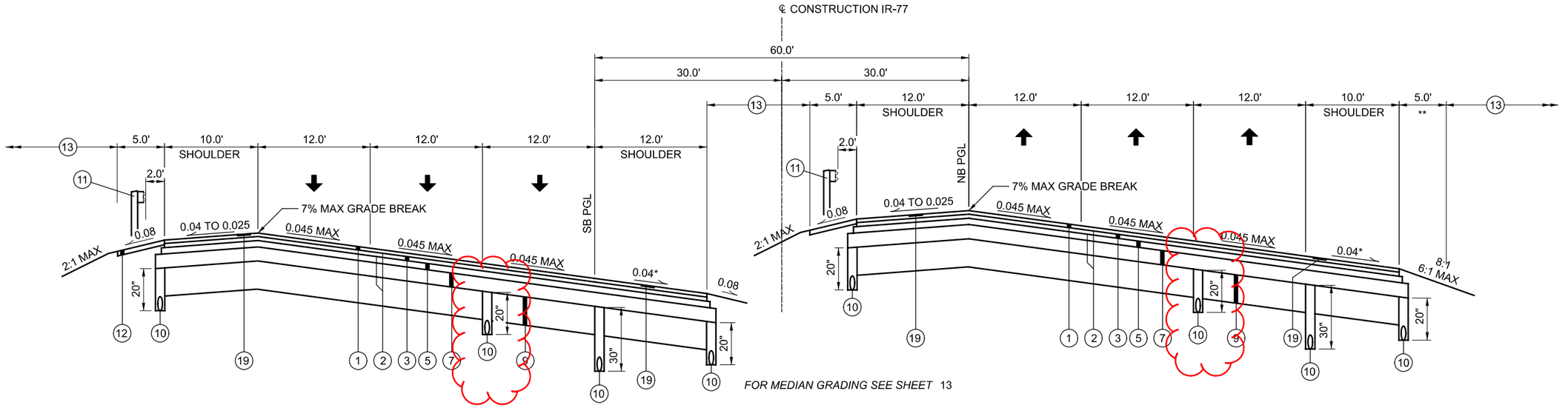
DESIGN AGENCY
Gannett Fleming
ENGINEERS AND ARCHITECTS, P.C.
2300 Corporate Exchange Drive
Suite 230
Columbus, OH 43231

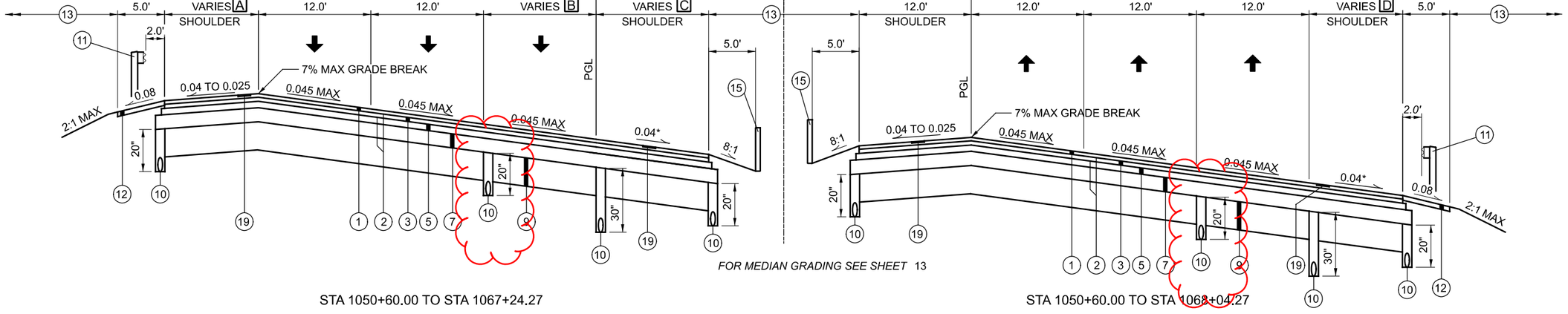
DESIGNER TQD
REVIEWER DRJ 05/03/22
PROJECT ID 104983 (PRT 2)
SHEET 9 TOTAL 312




STA 1048+33.11 TO STA 1050+60.00

PROPOSED SUPERELEVATED BIFURCATED SECTION - IR-77

STA 1047+53.11 TO STA 1050+60.00




STA 1050+60.00 TO STA 1067+24.27

STA 1050+60.00 TO STA 1068+04.27

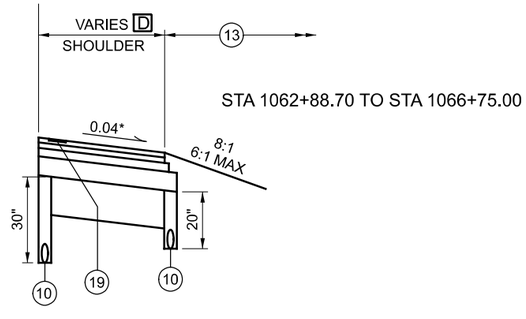
PROPOSED SUPERELEVATED SECTION - IR-77

A 10.0' STA 1050+50.00 TO STA 1066+75.00
10.0' TO 10.91' STA 1066+75.00 TO STA 1067+24.27

B 12.0' STA 1050+50.00 TO STA 1066+75.00
12.0' TO 12.10' STA 1066+75.00 TO STA 1067+24.27

C 12.0' STA 1050+50.00 TO STA 1066+75.00
12.0' TO 12.32' STA 1066+75.00 TO STA 1067+24.27

D 10.0' STA 1050+50.00 TO STA 1066+75.00
10.0' TO 12.33' STA 1066+75.00 TO STA 1068+04.27




STA 1062+88.70 TO STA 1066+75.00

FOR GUARDRAIL LOCATIONS, SEE SHEETS 83 - 89
* OR RATE OF SUPERELEVATION IF GREATER
** REFER TO SB TYPICAL, LEFT SIDE, FOR SHOULDER AND GUARDRAIL

FOR BASE AND SUBBASE STEP DETAIL, SEE SHEET 7
FOR GUARDRAIL ROUNDING DETAIL, SEE SHEET 7
FOR PROPOSED PAVEMENT LEGEND, SEE SHEET 7

# TYPICAL SECTIONS - PROPOSED

SUM-77-32.27

MODEL: Sheet 6 PAPERSIZE: 17x11 (in.) DATE: 9/15/2022 TIME: 4:38:56 PM USER: tdinh
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DESIGN AGENCY
Gannett Fleming
ENGINEERS AND ARCHITECTS, P.C.
2550 Corporate Exchange Drive
Suite 230
Columbus, OH 43231

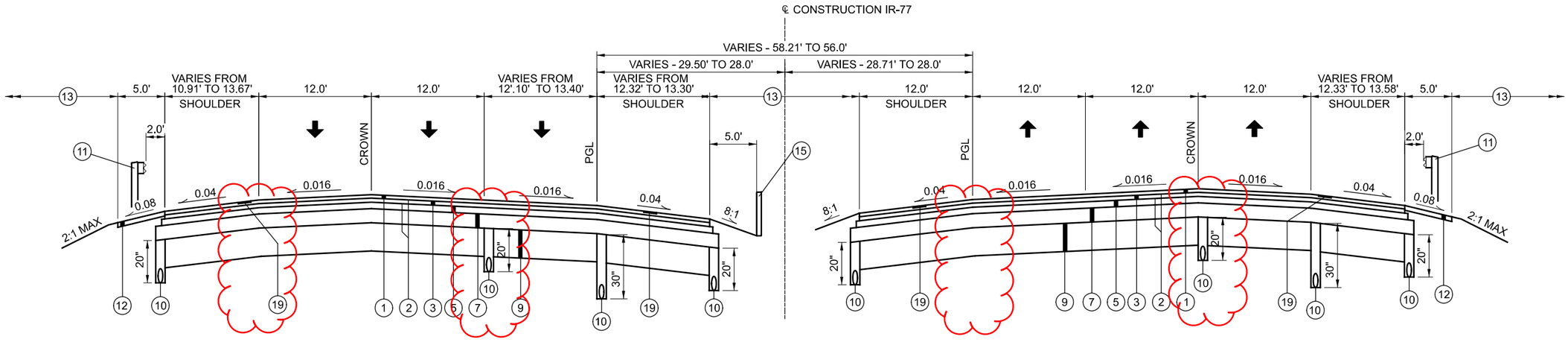
DESIGNER TQD

REVIEWER DRJ 05/03/22

PROJECT ID 104983 (PRT 2)

SHEET 10 TOTAL 312

SHEET 7

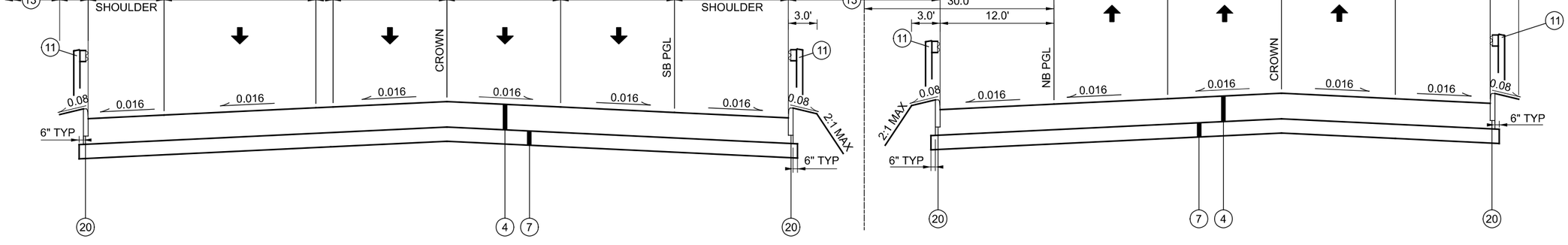



*FOR MEDIAN GRADING SEE SHEET* 13

## PROPOSED NORMAL SECTION - IR-77

STA 1067+24.27 TO STA 1068+75.00

STA 1068+04.27 TO STA 1068+75.00

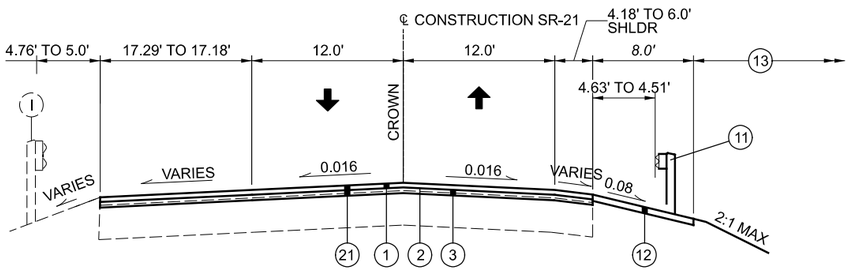



STA 1025+95.25 TO STA 1026+20.25
BRIDGE: STA 1026+20.25 TO STA 1028+54.19
STA 1028+54.19 TO STA 1028+79.19

*FOR MEDIAN GRADING SEE SHEET* 13

STA 1026+61.03 TO STA 1026+86.03
BRIDGE: STA 1026+86.03 TO STA 1029+02.85
STA 1029+02.85 TO STA 1029+27.85

## PROPOSED APPROACH SLAB - IR-77




EXISTING APPROACH SLAB SECTION - SR-21
STA 495+60.00 TO STA 495+73.38

FOR GUARDRAIL LOCATIONS, SEE SHEETS 83 - 89

FOR BASE AND SUBBASE STEP DETAIL, SEE SHEET 7
FOR GUARDRAIL ROUNDING DETAIL, SEE SHEET 7
**FOR PROPOSED PAVEMENT LEGEND, SEE SHEET 7**

TYPICAL SECTIONS - PROPOSED

SUM-77-32.27

MODEL: Sheet 7 PAPERSIZE: 17x11 (in.) DATE: 9/15/2022 TIME: 4:38:56 PM USER: tdinh
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DESIGN AGENCY
Gannett Fleming
ENGINEERS AND ARCHITECTS, P.C.
2300 Corporate Exchange Drive
Suite 330
Columbus, OH 43231

DESIGNER TQD
REVIEWER DRJ 05/03/22
PROJECT ID 104983 (PRT 2)
SHEET 11 TOTAL 312

## ITEM SPECIAL - STRUCTURAL SURVEY AND MONITORING OF VIBRATION

MINIMUM REQUIRED SURVEY AND VIBRATION:
AT A MINIMUM, A CONDITION SURVEY SHALL BE COMPLETED FOR ALL EXISTING BUILDINGS, STRUCTURES, AND UTILITIES WITHIN 300-FT OF THE WORK ON THE FOLLOWING PROPERTIES:

4640 BERKLEY ROAD, RICHFIELD, OH 44286
4660 BERKLEY ROAD, RICHFIELD, OH 44286
4860 BERKLEY ROAD, RICHFIELD, OH 44286

OTHER STRUCTURES WITHIN 300' OF THE WORK MAY BE PRESENT ON THE PROJECT, THE CONTRACTOR SHALL IDENTIFY, SURVEY, AND MONITOR THOSE IN ADDITION TO THE MINIMUM REQUIRED PROPERTIES.

STRUCTURAL SURVEY:
BEFORE ROADWAY WORK WITHIN 250' OF IDENTIFIED STRUCTURES BEGINS, CONDUCT A CONDITION SURVEY OF ALL EXISTING BUILDINGS, STRUCTURES, AND UTILITIES WITHIN 300-FT OF THE WORK. THE PURPOSE OF THE SURVEY IS TO DOCUMENT THE CONDITION OF THE BUILDINGS, STRUCTURES, OR UTILITIES PRIOR TO ROADWAY WORK, SO THAT CLAIMS OF DAMAGE CAUSED BY THE WORK CAN BE VERIFIED.

RETAIN AN EXPERIENCED VIBRATION SPECIALIST TO PERFORM OR SUPERVISE THE CONDITION SURVEY. USE A VIBRATION SPECIALIST THAT MEETS THE QUALIFICATION REQUIREMENTS FOR VIBRATION MONITORING.

RECORD THE CONDITION OF EXISTING STRUCTURES AND BUILDING MATERIALS, USING WRITTEN TEXT, PHOTOGRAPHS, AND VIDEO RECORDINGS. INSPECT INTERIOR WALLS, CEILINGS, AND FLOORS THAT ARE ACCESSIBLE. INSPECT THE EXTERIOR OF THE BUILDING THAT IS VISIBLE FROM GROUND LEVEL. ALSO RECORD THE LOCATION, SIZE, AND TYPE OF ALL CRACKS AND OTHER STRUCTURAL DEFICIENCIES.

IF OWNERS OR OCCUPANTS FAIL TO ALLOW ACCESS TO THE PROPERTY FOR THE PRECONSTRUCTION CONDITION SURVEY, SEND A CERTIFIED LETTER TO THE OWNER OR OCCUPANT. DOCUMENT THE NOTIFICATION EFFORT AND THE CERTIFIED LETTER IN THE REPORT.

SUBMIT THREE COPIES OF A STRUCTURAL SURVEY REPORT TO THE ENGINEER THAT SUMMARIZES THE PRECONSTRUCTION CONDITION OF THE BUILDINGS, STRUCTURES, AND UTILITIES, AND THAT IDENTIFIES AREAS OF CONCERN.

VIBRATION MONITORING:
MONITOR GROUND VIBRATIONS CAUSED BY ROADWAY WORK WITHIN 250' OF IDENTIFIED STRUCTURES TO MINIMIZE THE POTENTIAL DAMAGE TO EXISTING STRUCTURES.

RETAIN AN EXPERIENCED VIBRATION SPECIALIST TO ESTABLISH THE ACCEPTABLE VIBRATION LIMITS AND TO PERFORM THE VIBRATION MONITORING. USE A VIBRATION SPECIALIST THAT IS AN EXPERT IN THE INTERPRETATION OF VIBRATION DATA, AND WHO MEETS ONE OF THE FOLLOWING CRITERIA: 1) IS A REGISTERED ENGINEER WITH AT LEAST TWO YEARS OF PROVEN EXPERIENCE IN MONITORING VIBRATIONS ON SIMILAR CONSTRUCTION PROJECTS, OR 2) HAS AT LEAST FIVE YEARS OF PROVEN EXPERIENCE IN MONITORING VIBRATIONS ON SIMILAR CONSTRUCTION PROJECTS. DO NOT USE A VIBRATION SPECIALIST THAT IS AN EMPLOYEE OF THE CONTRACTOR.

## ITEM SPECIAL - STRUCTURAL SURVEY AND MONITORING OF VIBRATION (CONTINUED)

SUBMIT A RESUME OF THE CREDENTIALS OF THE PROPOSED VIBRATION SPECIALIST AT OR BEFORE THE PRECONSTRUCTION MEETING. INCLUDE IN THE RESUME A LIST OF CONSTRUCTION PROJECTS ON WHICH THE VIBRATION SPECIALIST WAS RESPONSIBLY IN CHARGE OF MONITORING THE VIBRATIONS. LIST A DESCRIPTION OF THE PROJECTS, WITH DETAILS OF THE VIBRATION INTERPRETATIONS MADE ON THE PROJECT. LIST THE NAMES AND TELEPHONE NUMBERS OF PROJECT OWNERS WITH SUFFICIENT KNOWLEDGE OF THE PROJECTS TO VERIFY THE SUBMITTED INFORMATION. OBTAIN THE ENGINEER'S ACCEPTANCE OF THE VIBRATION SPECIALIST BEFORE BEGINNING ANY ROADWAY WORK NEAR EXISTING STRUCTURES. ALLOW 30 DAYS FOR THE REVIEW OF THIS DOCUMENTATION.

USE SEISMOGRAPHS CAPABLE OF CONTINUOUSLY RECORDING THE PEAK PARTICLE VELOCITY FOR THREE MUTUALLY PERPENDICULAR COMPONENTS OF VIBRATION, AND OF PROVIDING A PERMANENT RECORD OF THE ENTIRE VIBRATION EVENT. USE A SUFFICIENT NUMBER OF SEISMOGRAPHS TO PROVIDE REDUNDANCY IN CASE ONE DEVICE SHOULD FAIL. SUBMIT A PLAN OF THE PROPOSED SEISMOGRAPH LOCATIONS TO THE ENGINEER FOR REVIEW.

THE VIBRATION SPECIALIST SHALL PERFORM THE FOLLOWING:
1. MEASURE THE AMBIENT GROUND VIBRATIONS NEAR EXISTING STRUCTURES BEFORE ROADWAY WORK BEGINS WITHIN THE SPECIFIED DISTANCE.
2. ESTABLISH VIBRATION LIMITS TO MINIMIZE POTENTIAL DAMAGE TO EXISTING STRUCTURES AND EXPLAIN WHY THEY ARE BEING USED TO THE ENGINEER BEFORE ROADWAY WORK NEAR EXISTING STRUCTURES.
3. MONITOR GROUND VIBRATIONS DURING ROADWAY WORK WITHIN THE SPECIFIED DISTANCE.
4. IMMEDIATELY INFORM THE CONTRACTOR AND ENGINEER IF THE VIBRATION LIMITS ARE REACHED OR EXCEEDED.
5. FURNISH THE DATA RECORDED AND INCLUDE THE FOLLOWING:
   A. IDENTIFICATION OF SEISMOGRAPH.
   B. DISTANCE AND DIRECTION OF SEISMOGRAPH FROM ROADWAY WORK.
   C. START TIME AND DURATION OF ROADWAY WORK.
   D. DESCRIPTION OF ROADWAY WORK PERFORMED DURING EACH MONITORING INTERVAL.

IMMEDIATELY SUSPEND ALL ROADWAY WORK WITHIN THE SPECIFIED DISTANCE IF THE VIBRATION LIMITS ARE REACHED OR EXCEEDED. EVALUATE ALTERNATIVE CONSTRUCTION PROCEDURES TO REDUCE THE VIBRATIONS. SUBMIT THREE COPIES OF THE FINAL REPORT WHICH CONTAINS ALL MEASUREMENTS, INTERPRETATIONS, AND RECOMMENDATIONS TO THE ENGINEER.

PAYMENT:
THE DEPARTMENT WILL PAY FOR THIS ITEM AT THE CONTRACT LUMP SUM PRICE FOR SPECIAL - STRUCTURAL SURVEY AND MONITORING OF VIBRATION.

THE DEPARTMENT WILL PAY THE INITIAL EIGHTY PERCENT AFTER THE ENGINEER RECEIVES ALL STRUCTURAL SURVEY REPORTS.

THE DEPARTMENT WILL PAY THE FINAL TWENTY PERCENT AFTER THE ENGINEER RECEIVES THE FINAL VIBRATION MONITORING REPORT.

THE DEPARTMENT WILL PAY ACCORDING TO C&MS 109.05 FOR ALTERNATIVE CONSTRUCTION PROCEDURES THAT THE ENGINEER DETERMINES ARE NECESSARY TO REDUCE VIBRATIONS.

## PN 127- 01/18/2019 - LANE VALUE CONTRACT

THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES AS DESIGNATED IN THE LANE VALUE CONTRACT TABLE FOR EACH UNIT OF TIME THE DESCRIBED CRITICAL LANE/RAMP IS RESTRICTED FROM FULL USE BY THE TRAVELING PUBLIC WITHIN THE RESTRICTED TIME PERIOD. THE LANE VALUE CONTRACT TABLE IS LOCATED IN THE PLAN GENERAL NOTES. THE DISINCENTIVES WILL BE ASSESSED FOR ALL RESTRICTIONS OF THE CRITICAL WORK.

CRITICAL WORK IS SHOWN IN THE LANE VALUE CONTRACT TABLE.

CRITICAL WORK IS DEFINED AS HAVING THE DESIGNATED SECTIONS OPEN TO UNRESTRICTED TRAFFIC AS SHOWN IN THE TABLE, OR THE ENTIRE PROJECT IF NOT OTHERWISE LISTED.

UNRESTRICTED TRAFFIC IS DEFINED AS ALL TRAFFIC LANES BEING AVAILABLE FOR USE WITH SPECIFIED STRIPING AND SAFETY FEATURES IN PLAN.

| DESCRIPTION OF CRITICAL LANE TO BE MAINTAINED | RESTRICTED TIME PERIOD | TIME UNIT | DISINCENTIVE $ PER TIME UNIT |
|---|---|---|---|
| (AFTER COMPLETION PHASE 2) IR77 SB 3-LANES | AS PER THE PERMITTED LANE CLOSURE SCHEDULE | MINUTE | $305 |
| (AFTER COMPLETION PHASE 3) IR77 NB 3-LANES | AS PER THE PERMITTED LANE CLOSURE SCHEDULE | MINUTE | $305 |

## EARTHWORK FOR MAINLINE PAVEMENT

EXCAVATED SOILS ON THE PROJECT SITE MAY NOT BE SUITABLE FOR EMBANKMENT USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ANY ON-SITE SOIL USED AS EMBANKMENT MEETS THE REQUIREMENTS OF 203.

ITEM 203, EXCAVATION, INCLUDES WASTING ANY EXCAVATED MATERIAL WITHIN THE RIGHT-OF-WAY WITH THE APPROVAL OF THE ENGINEER OR OUTSIDE THE RIGHT-OF-WAY AT THE CONTRACTOR'S EXPENSE, IF NO SUITABLE AREAS EXIST FOR WASTING WITHIN THE RIGHT-OF-WAY.

ITEM 203, EMBANKMENT INCLUDES CONSTRUCTION EMBANKMENTS TO PLAN LINES AND INCLUDES FURNISHING AND PLACING SUITABLE BORROW MATERIAL AS SPECIFIED IN 203, WHEN REQUIRED. FOR SOIL BORROW OR OTHER MATERIALS NOT ALREADY CERTIFIED TO MEET 203 REQUIREMENTS, THE CONTRACTOR SHALL ALLOW THE ENGINEER 10 DAYS TO PERFORM IN SITU TESTS PRIOR TO USING THE MATERIAL. BENCHING PER SECTION 800 OF THE GEOTECHNICAL DESIGN MANUAL SHALL BE FOLLOWED AND ANY TEMPORARY FILL SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

PRIOR TO EARTH DISTURBING ACTIVITIES, INSTALL ALL REQUIRED EROSION CONTROL ITEMS AS SPECIFIED ON THE STORMWATER POLLUTION PREVENTION PLAN PREPARED BY THE CONTRACTOR. FOR EARTH DISTURBING WORK OUTSIDE THE WORK LIMITS, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ACQUIRING ALL NECESSARY PERMITS, IF REQUIRED, INCLUDING FOR BORROW AREAS. PROVIDE THE APPROPRIATE EROSION CONTROL MEASURES AS REQUIRED.

THE CUT VOLUME LISTED ON EACH CROSS SECTION IS FOR INFORMATION ONLY AND INCLUDES ALL DISTURBED EARTH, INCLUDING THOSE PAID FOR AS ITEM 202, PAVEMENT REMOVED (SY) AND ITEM 206, CEMENT STABALIZED SUBGRADE (SY). THE WORK FOR PAVEMENT REMOVAL AND SUBGRADE STABILIZATION SHALL BE PAID FOR AND TABULATED BY THEIR SPECIFIC SPECIFICATIONS, WHICH IS IN UNITS OF SQUARE YARDS.ITEM 203, EXCAVATION, IS THE CUT VOLUME REMAINING AFTER THE ITEM 202 AND ITEM 206 VOLUMES ARE DEDUCTED FROM THE TOTAL.

THE FOLLOWING IS A SUMMARY OF ALL DISTURBED EARTHWORK QUANTITIES GENERATED BY THE CROSS SECTIONS.

IR-77

| | |
|---|---|
| CUT VOLUME (DISTURBED EARTH) | 50387 CU. YD. |
| PAVEMENT REMOVAL | 11637 CU. YD. |
| SUBGRADE STABILIZATION | 19660 CU. YD. |
| EXCAVATION VOLUME (ITEM 203) | 19090 CU. YD. |
| FILL VOLUME (ITEM 203) | 10047 CU. YD. |

SR-21

| | |
|---|---|
| CUT VOLUME (DISTURBED EARTH) | 8490 CU. YD. |
| PAVEMENT REMOVAL | 1582 CU. YD. |
| SUBGRADE STABILIZATION | 5026 CU. YD. |
| EXCAVATION VOLUME (ITEM 203) | 1882 CU. YD. |
| FILL VOLUME (ITEM 203) | 132 CU. YD. |

RAMP G

| | |
|---|---|
| CUT VOLUME (DISTURBED EARTH) | 6611 CU. YD. |
| PAVEMENT REMOVAL | 1629 CU. YD. |
| SUBGRADE STABILIZATION | 1157 CU. YD. |
| EXCAVATION VOLUME (ITEM 203) | 3825 CU. YD. |
| FILL VOLUME (ITEM 203) | 193 CU. YD. |

THE FOLLOWING GRAND TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR EARTHWORK:

| | |
|---|---|
| 203, EXCAVATION | 24797 CU. YD. |
| 203, EMBANKMENT | 10372 CU. YD. |

GENERAL NOTES

DESIGN AGENCY
Gannett Fleming
ENGINEERS AND ARCHITECTS, P.C.
2500 Corporate Exchange Drive
Suite 230
Columbus, OH 43231

DESIGNER
TQD

REVIEWER
DRJ 05/03/22

PROJECT ID
104983 (PRT 2)

SHEET 18 TOTAL 312

SUM-77-32.27

MODEL: 111405_GN001_5 PAPERSIZE: 17x11 (in.) DATE: 9/16/2022 TIME: 2:19:33 PM USER: tdnh
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SHEET 1

| SHEET NUMBER | | | | | | | | | | | | | | | FUNDING | | ITEM | ITEM EXT. | GRAND TOTAL | UNIT | DESCRIPTION | SEE SHEET NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0C | 14 | 15 | 16 | 17 | 18 | 19 | 25 | 78 | 81 | 82 | 190 | 197 | 198 | 199 | 03/IMS/PV | 04/IMS/PV | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | **ROADWAY** | |
| | LS | | | | | | | | | | | | | | LUMP | | 201 | 11000 | LS | | CLEARING AND GRUBBING | 14 |
| | | | | | | | | | 10 | | 2 | | | | 12 | | 202 | 20010 | 12 | EACH | HEADWALL REMOVED | |
| 26878 | | | | | | | | | | | | | | | 26878 | | 202 | 23000 | 26878 | SY | PAVEMENT REMOVED | |
| | | | | | | | | 541 | | | | | | | 541 | | 202 | 30700 | 541 | FT | CONCRETE BARRIER REMOVED | |
| | | | | | | | | 210 | | | | | | | 210 | | 202 | 32000 | 210 | FT | CURB REMOVED | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 1029 | | | | | | 1029 | | 202 | 35100 | 1029 | FT | PIPE REMOVED, 24" AND UNDER | |
| | | | | | | | | | 334 | | 8 | | | | 342 | | 202 | 35200 | 342 | FT | PIPE REMOVED, OVER 24" | |
| | | | | | | | | 10021 | | | | | | | 10021 | | 202 | 38000 | 10021 | FT | GUARDRAIL REMOVED | |
| | | | | | | | | | 9 | | | | | | 9 | | 202 | 58100 | 9 | EACH | CATCH BASIN REMOVED | |
| | | | | | | | | | 290 | | | | | | 290 | | SPECIAL | 20270000 | 290 | FT | FILL AND PLUG EXISTING CONDUIT | 17 |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | 2 | | | | | | | 2 | | 202 | 98100 | 2 | EACH | REMOVAL MISC.: EXISTING ODOT ITS HIGHWAY ADVISORY RADIO | 17 |
| | | 2 | | | | | | | | | | | | | 2 | | 202 | 98100 | 2 | EACH | REMOVAL MISC.: INSPECTION WELL | 15 |
| | | 200 | | | | | | | | | | | | | 200 | | 202 | 98200 | 200 | FT | REMOVAL MISC.: CONDUIT | 15 |
| | | | | | | | | 227 | | | | | | | 227 | | 202 | 98300 | 227 | SY | REMOVAL MISC.: CONCRETE PAD | 17 |
| | | | | | | | | | 262 | | | | | | 262 | | 202 | 98700 | 262 | FT | ABANDON MISC.: ABANDON PIPE IN PLACE | 16 |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | 24797 | | | | | | | | | | 16533 | 8264 | 203 | 10000 | 24797 | CY | EXCAVATION | |
| | | | | | 10372 | | | | | | 2 | | | | 6917 | 3457 | 203 | 20000 | 10374 | CY | EMBANKMENT | |
| | | 25 | | | | | | | | | | | | | 25 | | 203 | 20001 | 25 | CY | EMBANKMENT, AS PER PLAN | 15 |
| | | 3230 | | | | | | | | | | | | | 3230 | | 204 | 13000 | 3230 | CY | EXCAVATION OF SUBGRADE | 15 |
| | | 3230 | | | | | | | | | | | | | 3230 | | 204 | 30010 | 3230 | CY | GRANULAR MATERIAL, TYPE B | 15 |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | 9689 | | | | | | | | | | | | | 9689 | | 204 | 50000 | 9689 | SY | GEOTEXTILE FABRIC | 15 |
| 1701 | | | | | | | | | | | | | | | 1701 | | 206 | 10500 | 1701 | TON | CEMENT | 14 |
| 64952 | | | | | | | | | | | | | | | 64952 | | 206 | 11000 | 64952 | SY | CURING COAT | |
| 62450 | | | | | | | | | | | | | | | 62450 | | 206 | 15010 | 62450 | SY | CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP | |
| | | | | | | | | | | | | | | | | | | | | | | |
| 5026 | | | | | | | | | | | | | | | 3351 | 1675 | 206 | 15020 | 5026 | SY | CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP | |
| 34.5 | | | | | | | | | | | | | | | 35 | | 206 | 20000 | 34.5 | HOUR | TEST ROLLING | |
| | | | | | | | | 126.2 | | | | | | | 126 | | 209 | 60201 | 126.2 | STA | LINEAR GRADING, AS PER PLAN | 16 |
| | | | | | LS | | | | | | | | | | LUMP | | SPECIAL | 53000200 | LS | | STRUCTURAL SURVEY AND MONITORING OF VIBRATION | 18 |
| | | | | | | | | 11638 | | | | | | | 11638 | | 606 | 15050 | 11638 | FT | GUARDRAIL, TYPE MGS | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | 12 | | | | | | | 12 | | 606 | 26150 | 12 | EACH | ANCHOR ASSEMBLY, MGS TYPE E MASH 2016 | 16 |
| | | | | | | | | 9 | | | | | | | 9 | | 606 | 26550 | 9 | EACH | ANCHOR ASSEMBLY, MGS TYPE T | |
| | | | | | | | | 8 | | | | | | | 8 | | 606 | 35002 | 8 | EACH | MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 | |
| | | | | | | | | 3 | | | | | | | 3 | | 606 | 35102 | 3 | EACH | MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2 | |
| | | | | | | | | 2153 | | | | | | | 2153 | | SPECIAL | 60655010 | 2153 | FT | CABLE BARRIER WITH CONCRETE LINE POST FOUNDATION | 16 |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | 4 | | | | | | | 4 | | SPECIAL | 60655150 | 4 | EACH | CABLE BARRIER, ANCHOR ASSEMBLY | 16 |
| | | | | | | | | 1 | | | | | | | 1 | | 606 | 60028 | 1 | EACH | IMPACT ATTENUATOR, TYPE 2 (BIDIRECTIONAL), 45 MPH/24 INCH | |
| | | | | | | | | 1334 | | | | | | | 1334 | | 622 | 24000 | 1334 | FT | CONCRETE BARRIER, TYPE D | |
| | | | | | | | | 6 | | | | | | | 6 | | 622 | 25050 | 6 | EACH | CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | **EROSION CONTROL** | |
| | | | | | | | | | | | 4 | | | | 4 | | 601 | 11000 | 4 | SY | RIPRAP, TYPE D | |
| | | | 10 | | | | | | | | | 28 | | | 38 | | 601 | 21050 | 38 | SY | TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT | |
| | | | | | | | | | | | 8 | | | | 8 | | 601 | 32104 | 8 | CY | ROCK CHANNEL PROTECTION, TYPE B WITH GEOTEXTILE FABRIC | |
| | | | | | | | | | 425 | | | | | | 425 | | 601 | 32204 | 425 | CY | ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC | |
| | | | 2 | | | | | | | | | | | | 2 | | 659 | 00100 | 2 | EACH | SOIL ANALYSIS TEST | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | 3689 | | | | | | | 1610 | | | | | 5299 | | 659 | 00300 | 5299 | CY | TOPSOIL | |
| | | | 33215 | | | | | | | | 100 | | | | 33315 | | 659 | 10000 | 33315 | SY | SEEDING AND MULCHING | |
| | | | 1661 | | | | | | | | | | | | 1661 | | 659 | 14000 | 1661 | SY | REPAIR SEEDING AND MULCHING | |
| | | | 1661 | | | | | | | | | | | | 1661 | | 659 | 15000 | 1661 | SY | INTER-SEEDING | |
| | | | 10 | | | | | | | | | | | | 10 | | 659 | 20000 | 10 | TON | COMMERCIAL FERTILIZER | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | 7 | | | | | | | | | | | | 7 | | 659 | 31000 | 7 | ACRE | LIME | |
| | | | 270 | | | | | | | | | | | | 270 | | 659 | 35000 | 270 | MGAL | WATER | |
| | | | 75 | | | | | | | | | | | | 75 | | 659 | 40000 | 75 | MSF | MOWING | |
| | | | | | | | | | | 14640 | | | | | 14640 | | 670 | 00500 | 14640 | SY | SLOPE EROSION PROTECTION | |
| | | | | | | | | | 1855 | | | | | | 1855 | | 670 | 00700 | 1855 | SY | DITCH EROSION PROTECTION | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | LS | | | | | LUMP | | 832 | 15000 | LS | | STORM WATER POLLUTION PREVENTION PLAN | 82 |
| | | | | | | | | | | LS | | | | | LUMP | | 832 | 15002 | LS | | STORM WATER POLLUTION PREVENTION INSPECTIONS | 82 |

SUM-77-32.27

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pw:\\gfnet-pw.bentley.com:gfnet-pw-01\Documents\Projects\67490\104983\401-Engineering-GF\Roadway\Sheets\104983_GG001.dgn

GENERAL SUMMARY

DESIGN AGENCY
Gannett Fleming
ENGINEERS AND ARCHITECTS, P.C.
2280 Corporate Exchange Drive, Suite 230, Columbus, OH 43231

DESIGNER TQD

REVIEWER DRJ 05/03/22

PROJECT ID 104983 (PRT 2)

SHEET 74 TOTAL 312

SHEET 2

| SHEET NUMBER | | | | | | | | | | | | | | | FUNDING | | ITEM | ITEM EXT. | GRAND TOTAL | UNIT | DESCRIPTION | SEE SHEET NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0C | 14 | 15 | 16 | 17 | 18 | 19 | 25 | 78 | 81 | 82 | 190 | 197 | 198 | 199 | 03/IMS/PV | 04/IMS/PV | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | **EROSION CONTROL - CONTINUED FROM PREVIOUS PAGE** | |
| | | | | | | | | | | LS | | | | | LUMP | | 832 | 15010 | LS | | STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE | 82 |
| | | | | | | | | | | 150000 | | | | | 150000 | | 832 | 30000 | 150000 | EACH | EROSION CONTROL | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | **DRAINAGE** | |
| | | | | | | | | | 2.6 | | 1.2 | | | | 3.8 | | 602 | 20000 | 3.8 | CY | CONCRETE MASONRY | |
| | | | | | | | | | | | | 36432 | | | 36432 | | 605 | 11110 | 36432 | FT | 6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC | |
| | | | 100 | | | | | | | | | | | | 100 | | 605 | 13410 | 100 | FT | 6" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC | |
| | | | | | | | | | | | | 1709 | | | 1709 | | 605 | 14020 | 1709 | FT | 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC | |
| | | | 100 | | | | | | | | | 638 | | | 738 | | 611 | 00510 | 738 | FT | 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 92 | | | | | | 92 | | 611 | 04400 | 92 | FT | 12" CONDUIT, TYPE B | |
| | | | | | | | | | 49 | | | | | | 49 | | 611 | 06100 | 49 | FT | 15" CONDUIT, TYPE C | |
| | | | | | | | | | 228 | | | | | | 228 | | 611 | 06700 | 228 | FT | 15" CONDUIT, TYPE F, 707.05 TYPE C OR 707.21 | |
| | | | | | | | | | 50 | | | | | | 50 | | 611 | 07400 | 50 | FT | 18" CONDUIT, TYPE B | |
| | | | | | | | | | 352 | | | | | | 352 | | 611 | 07600 | 352 | FT | 18" CONDUIT, TYPE C | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 107 | | | | | | 107 | | 611 | 10400 | 107 | FT | 24" CONDUIT, TYPE B, 748.01 | |
| | | | | | | | | | | | 8 | | | | 8 | | 611 | 13200 | 8 | FT | 30" CONDUIT, TYPE A, 706.02 | |
| | | | | | | | | | 50 | | | | | | 50 | | 611 | 13600 | 50 | FT | 30" CONDUIT, TYPE C | |
| | | | | | | | | | | | | 602 | | | 602 | | 611 | 96600 | 602 | FT | 6" CONDUIT, BORED OR JACKED, 748.06 | |
| | | | | | | | | | 552 | | | | | | 552 | | 611 | 96600 | 552 | FT | 15" CONDUIT, BORED OR JACKED, 748.06 | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 107 | | | | | | 107 | | 611 | 96600 | 107 | FT | 21" CONDUIT, BORED OR JACKED, 748.06 | |
| | | | | | | | | | 239 | | | | | | 239 | | 611 | 96600 | 239 | FT | 30" CONDUIT, BORED OR JACKED, 748.06 | |
| | | 100 | | | | | | | | | | | | | 100 | | 611 | 97400 | 100 | FT | CONDUIT, MISC.: TYPE B FOR DRAINAGE DISCHARGE CONTINUANCE | 15 |
| | | 100 | | | | | | | | | | | | | 100 | | 611 | 97400 | 100 | FT | CONDUIT, MISC.: TYPE C FOR DRAINAGE DISCHARGE CONTINUANCE | 15 |
| | | 100 | | | | | | | | | | | | | 100 | | 611 | 97400 | 100 | FT | CONDUIT, MISC.: TYPE E FOR DRAINAGE DISCHARGE CONTINUANCE | 15 |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | 100 | | | | | | | | | | | | | 100 | | 611 | 97400 | 100 | FT | CONDUIT, MISC.: TYPE F FOR DRAINAGE DISCHARGE CONTINUANCE | 15 |
| | | | | | | | | | 1 | | | | | | 1 | | 611 | 98180 | 1 | EACH | CATCH BASIN, NO. 3A | |
| | | | | | | | | | 6 | | | | | | 6 | | 611 | 98230 | 6 | EACH | CATCH BASIN, NO. 4 | |
| | | | | | | | | | 1 | | | | | | 1 | | 611 | 98450 | 1 | EACH | CATCH BASIN, NO. 2-2A | |
| | | | | | | | | | 2 | | | | | | 2 | | 611 | 98510 | 2 | EACH | CATCH BASIN, NO. 2-3 | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 1 | | | | | | 1 | | 611 | 98630 | 1 | EACH | CATCH BASIN ADJUSTED TO GRADE | |
| | | | | | | | | | 3 | | | | | | 3 | | 611 | 99114 | 3 | EACH | INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D | |
| | | | | | | | | | 2 | | | | | | 2 | | 611 | 99574 | 2 | EACH | MANHOLE, NO. 3 | |
| | | | 2 | | | | | | | | | 14 | | | 16 | | 611 | 99710 | 16 | EACH | PRECAST REINFORCED CONCRETE OUTLET | |
| | | 2 | | | | | | | | | | | | | 2 | | 611 | 99720 | 2 | EACH | INSPECTION WELL | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | **PAVEMENT** | |
| 78 | | | | | | | | | | | | | | | 63 | 25 | 254 | 01001 | 78 | SY | PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN | 15 |
| 12722 | | | | | | | | | | | | | | | 8482 | 4240 | 302 | 56001 | 12722 | CY | ASPHALT CONCRETE BASE, PG64-22, (449), AS PER PLAN | 16 |
| 11655 | | | | | | | | | | | | | | | 7771 | 3884 | 304 | 20000 | 11655 | CY | AGGREGATE BASE | |
| 6760 | | | | | | | | | | | | | | | 4507 | 2253 | 401 | 20000 | 6760 | GAL | NON-TRACKING TACK COAT (0.055 GAL/SY) | |
| | 3443 | | | | | | | | | | | | | | 2296 | 1147 | 441 | 00100 | 3443 | CY | ANTI-SEGREGATION EQUIPMENT | 14 |
| | | | | | | | | | | | | | | | | | | | | | | |
| 185 | | | | | | | | | | | | | | | 124 | 61 | 441 | 10101 | 185 | CY | ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446) PG64-22, AS PER PLAN | 15 |
| 232 | | | | | | | | | | | | | | | 155 | 77 | 441 | 10200 | 232 | CY | ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (446) | |
| | | | | | | | | | 357 | | | | | | 239 | 118 | 441 | 70801 | 357 | CY | ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN | 16 |
| 2767 | | | | | | | | | | | | | | | 1845 | 922 | 442 | 10080 | 2767 | CY | ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446) | |
| 2363 | | | | | | | | | | | | | | | 1576 | 787 | 442 | 10301 | 2363 | CY | ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN | 15 |
| | | | | | | | | | | | | | | | | | | | | | | |
| 3337 | | | | | | | | | | | | | | | 2225 | 1112 | 452 | 14122 | 3337 | SY | 11.5" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P | |
| | | | | | | | | | 164 | | | | | | 164 | | 609 | 24510 | 164 | FT | CURB, TYPE 4-C | |
| | | | | | | | | | 3.45 | | | | | | 3 | 0.45 | 618 | 41000 | 3.45 | MILE | RUMBLE STRIPES, EDGE LINE (ASPHALT CONCRETE) | 19 |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | **LIGHTING** | |
| | | | | | | | | | 40 | | | | | | 40 | | 625 | 25600 | 40 | FT | CONDUIT, 4", 725.04 | |
| | | | | | | | | | 4 | | | | | | 4 | | 625 | 30710 | 4 | EACH | PULL BOX, 725.08, 32" | |
| | | | | | | | | | 4 | | | | | | 4 | | 625 | 32000 | 4 | EACH | GROUND ROD | |
| | | | | LS | | | | | | | | | | | LUMP | | 625 | 39000 | LS | | TEMPORARY LIGHTING | 17 |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | **TRAFFIC CONTROL** | |
| | | | | | | | | | | | | | LS | | LUMP | | SPECIAL | 20199000 | LS | | CLEARING AND GRUBBING | 198 |
| | | | | | | | | | | | | | | 425 | 425 | | 621 | 00100 | 425 | EACH | RPM | |
| | | | | | | | | | | | | | | 425 | 425 | | 621 | 54000 | 425 | EACH | RAISED PAVEMENT MARKER REMOVED | |
| | | | | | | | | | | | | | | 5 | 5 | | 625 | 32000 | 5 | EACH | GROUND ROD | |
| | | | | | | | | | | | | | | 20 | 20 | | 626 | 00102 | 20 | EACH | BARRIER REFLECTOR, TYPE 1, 1WAY | |

GENERAL SUMMARY

DESIGN AGENCY
Gannett Fleming
ENGINEERS AND ARCHITECTS, P.C.
2300 Corporate Exchange Drive
Suite 230
Columbus, OH 43231

DESIGNER TQD

REVIEWER DRJ 05/03/22

PROJECT ID 104983 (PRT 2)

SHEET 75 TOTAL 312

SUM-77-32.27

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