CITY OF LA PORTE, INDIANA
MONROE MANOR
SEWER SEPARATION PROJECT

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NICK MINICH

WASTE WATER DEPARTMENT

JERRY JACKSON, SUPERINTENDENT

WATER DEPARTMENT

TODD TAYLOR, SUPERINTENDENT

LOCATION MAP

NOT TO SCALE

INDEX OF SHEETS

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*SHEETS 4,5,6,7,10,12,14,&16 RD - INCLUDED AT END OF PLAN SET REFLECT RECORD CONDITIONS AFTER COMPLETION OF PHASES 1B&C. SHEETS REFLECT REQUIRED DESIGN CHANGES ASSOCIATED WITH ADJUSTMENTS MADE IN THE FIELD DURING PHASE 1B&C.

STREET CROSS SECTIONS:

4,5,6,7,10,12,14,&16 RD - REVISED DRAWINGS

Know what's below. Call before you dig.

CHARLES N. THOMPSON III
REGISTERED
NO. 11100657
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

PLANS PREPARED BY:

NIES engineering, inc.
2421 173rd Street, Hammond, Indiana. 46323
Phone: (219) 844 8680 Fax: (219) 844 7754
e-mail: mail@niesengineering.com
Your Vision • Our Focus

REBID - (2ND LETTING) BY ABONMARCHE CONSULTANTS
219-246-4248 - CTHOMPSON@ABONMARCHE.COM

MONROE MANOR SEWER SEPARATION PROJECT

08/20/15 – 10:00

GENERAL NOTES

1. CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES AND REPORT ANY DISCREPANCIES FROM THE PLAN TO THE ENGINEER IMMEDIATELY.
2. CONTRACTOR SHALL PRODUCE AND SUBMIT A PRE–CONSTRUCTION VIDEO DETAILING THE EXISTING CONDITION OF THE ENTIRE PROJECT. CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ANY ITEM DAMAGED, UNLESS SUCH DAMAGE IS PROVEN BY THE VIDEO TO HAVE EXISTED PRIOR TO CONSTRUCTION. SEE SECTION 01545 OF PROJECT SPECIFICATIONS.
3. CONTRACTOR SHALL LIMIT DISTURBANCE TO AREA WITHIN PUBLIC R.O.W. AND PERMANENT UTILITY EASEMENTS. SEE SECTION 00820 OF PROJECT SPECIFICATIONS.
4. CONTRACTOR IS RESPONSIBLE FOR THE RESTORATION OF WATER SERVICES, SANITARY LATERALS, STORM LATERALS, GAS SERVICES, UTILITIES AND ALL OTHER PROPERTY AT THE CONTRACTOR'S OWN EXPENSE IF DAMAGED BY THE CONTRACTOR'S ACTIVITIES. NO ADDITIONAL PAYMENT WILL BE ALLOWED.
5. CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION DEWATERING. EXCAVATION DEWATERING SHALL BE INCIDENTAL TO THE CONTRACT.
6. EXISTING WATER MAINS SHALL BE MAINTAINED IN SERVICE DURING CONSTRUCTION.
7. OPENING AND CLOSING OF EXISTING WATER VALVES SHALL BE PERFORMED ONLY BY LAPORTE WATER WORKS EMPLOYEES. IF OPERATING NUT OF EXISTING VALVE IS NOT ACCESSIBLE DUE TO DEBRIS INSIDE VALVE BOX, CONTRACTOR SHALL REMOVE DEBRIS, INCLUDING EXCAVATION AND REMOVAL OF VALVE BOX IF NECESSARY. ALL COSTS ASSOCIATED WITH REMOVING DEBRIS AND/OR VALVE BOXES SHALL BE INCIDENTAL TO THE COST OF THE NEW WATER MAIN. NO ADDITIONAL PAYMENT WILL BE ALLOWED.
8. RESTORE ALL DISTURBED GRASS AREAS WITH SOD. PROVIDE WATERING FOR 30 DAYS AFTER PROJECT COMPLETION.
9. REMOVE AND REINSTALL LIGHT POLES, FENCING, LANDSCAPING ETC. TO PRE CONSTRUCTION CONDITION. NO SEPARATE PAYMENT WILL BE MADE.
10. CONTRACTOR SHALL COORDINATE WITH NIPSCO TO HOLD LIGHT POLES DURING CONSTRUCTION.
11. CONTRACTOR TO REMOVE EXISTING TREES WHERE DENOTED INCLUDING MILLING OF STUMP AND ROOTS. REPLACE WITH SELECTED APPROVED TREES.
12. CONTRACTOR TO TAKE CARE DURING EXCAVATION & REPLACEMENT OF SIDEWALK TO NOT DAMAGE PROPERTY CORNERS. NOTIFY ENGINEER IF PROPERTY CORNER NEEDS TO BE REMOVED.
13. STREET SIGNS SHALL ONLY BE REMOVED TEMPORALITY. LOCATE AS NECESSARY ON A TEMPORARY BASIS. THE CITY OF LAPORTE IS PLANNING ON REPLACING STREET SIGNS AFTER COMPLETION OF THIS PROJECT. AT NO TIME SHALL STOP SIGNS BE REMOVED OVER NIGHT.
14. RELOCATION OF MAILBOXES ARE INCIDENTAL ALONG WITH ANY DAMAGE CAUSED BY THE RELOCATION.

WATER MAIN NOTES

1. ALL TRENCH EXCAVATIONS IN PAVEMENT AREAS FOR WATER MAIN SHALL BE SAW CUT TO NEAT, SQUARE EDGES. PAVEMENT REMOVAL OVER TRENCHES SHALL BE PAID FOR AS A SEPARATE BID ITEM, WHICH INCLUDES SAWCUTTING EACH SIDE OF TRENCH AND REMOVAL AND DISPOSAL OF PAVEMENT MATERIAL.
2. TRENCH EXCAVATIONS IN PAVEMENT SHALL BE BACKFILLED ACCORDING TO THE RESPECTIVE PIPE BEDDING DETAIL ON SHEET 27. ALL BACKFILL SHALL BE COMPACTED IN LIFTS AS SPECIFIED.
3. ALL DUCTILE IRON PIPE SHALL BE PRESSURE CLASS 350.
4. ALL WATER MAIN FITTINGS SHALL BE DUCTILE IRON MECHANICAL JOINT COMPACT FITTINGS PER AWWA C153, MECHANICALLY RESTRAINED WITH DEVICES UTILIZING DUCTILE IRON GRIPPING WEDGES (MEGALUG SERIES 1100 RETAINER GLANDS, OR EQUAL).
5. ALL PROPOSED WATER MAIN SHALL BE RESTRAINED IN ACCORDANCE WITH THE RESTRAINED PIPE LENGTH TABLE ON SHEET 26, INCLUDING ALL JOINTS WITHIN THE REQUIRED DISTANCE FROM EVERY TEMPORARY DEAD END OF THE PROPOSED WATER MAIN TO FACILITATE INSTALLATION OF THE WATER MAIN IN PHASES AND MAKING TIE–INS.
6. RESTRAINED STRAIGHT PIPE JOINTS SHALL BE EITHER MECHANICAL JOINT DUCTILE IRON PIPE WITH RESTRAINT DEVICES UTILIZING DUCTILE IRON GRIPPING WEDGES (MEGALUG SERIES 1100 RETAINER GLANDS, OR EQUAL) OR PUSH–ON RESTRAINED JOINT DUCTILE IRON PIPE WITH RESTRAINT DEVICES UTILIZING DUCTILE IRON LOCKING SEGMENTS (U.S. PIPE TR FLEX, OR EQUAL). FOR 12–INCH DIAMETER AND SMALLER PIPE, PUSH–ON JOINT DUCTILE IRON PIPE WITH LOCKING GASKETS (U.S. PIPE FIELD LOK 350, OR EQUAL) MAY BE USED; FOR 16–INCH DIAMETER AND LARGER PIPE, LOCKING GASKETS ARE NOT PERMITTED.
7. ALL DUCTILE IRON PIPE, FITTINGS AND BURIED VALVES SHALL HAVE POLYETHYLENE ENCASEMENT, MINIMUM 8 MIL THICKNESS. FOR OPEN CUT APPLICATIONS, A SINGLE LAYER OF POLYETHYLENE ENCASEMENT IS REQUIRED. FOR DIRECTIONAL DRILL APPLICATIONS, TWO LAYERS OF POLYETHYLENE ENCASEMENT, TIGHTLY WRAPPED AND TAPED ALONG THE ENTIRE PIPE LENGTH, IS REQUIRED. CONTRACTOR IS RESPONSIBLE FOR ENSURING POLYETHYLENE WRAP REMAINS TIGHTLY ADHERED TO THE PIPE DURING DIRECTIONAL DRILLING OPERATIONS.
8. MAINTAIN MINIMUM 18 INCHES OF VERTICAL SEPARATION BETWEEN PROPOSED WATER MAIN AND ALL OTHER EXISTING CROSSING PIPES.
9. MAINTAIN MINIMUM 10 FEET OF HORIZONTAL SEPARATION BETWEEN PROPOSED WATER MAIN AND EXISTING PARALLEL SEWERS AND FORCE MAINS. MAINTAIN MINIMUM 20 FEET OF HORIZONTAL SEPARATION BETWEEN PROPOSED WATER MAIN AND PARALLEL HIGH PRESSURE PETROLEUM PRODUCTS PIPELINES.
10. MAINTAIN MINIMUM 5' 6" FEET OF COVER OVER WATER MAIN.
11. CONTRACTOR TO PROVIDE 2" FLUSHING TAPS, SADDLES, AND CAPS WHERE REQUIRED FOR FLUSHING MAINS END TO END.
12. ALL WATER SERVICES CURRENTLY CONNECTED TO EXISTING WATER MAIN, IDENTIFIED TO BE ABANDONED, SHALL BE RECONNECTED TO THE NEW WATER MAIN AFTER THE NEW WATER MAIN HAS PASSED PRESSURE TESTING, DISINFECTION AND BACTERIOLOGICAL TESTING.
13. RECONNECTION OF WATER SERVICES SHALL BE PER THE WATER SERVICE TAP AND CONNECTION DETAIL ON SHEET 27. ALL MISCELLANEOUS FITTINGS NECESSARY FOR RESTORATION OF WATER SERVICES SHALL BE INCLUDED IN THE PRICE OF THE WATER SERVICE SETS. NEW 1–INCH (TYP.) AND 1–1/4–INCH TYPE "K" COPPER SERVICE LINE WILL BE MEASURED AND PAID SEPARATELY FROM THE WATER SERVICE SETS.
14. ALL LINE STOPS SHALL BE PLACED A DISTANCE GREATER THAN THE MINIMUM RESTRAINED DISTANCE FOR A DEAD END OF THE RESPECTIVE PIPE SIZE AS SHOWN ON THE RESTRAINED PIPE LENGTH TABLE ON SHEET 27.
15. ALL CUT ENDS OF EXISTING WATER MAINS IDENTIFIED TO BE ABANDONED IN PLACE SHALL BE SEALED CLOSED WITH A DUCTILE IRON CAP, MECHANICALLY RESTRAINED TO EXISTING PIPE. SPACE BETWEEN CAPS SHALL BE BRACED WITH CONCRETE CLOCKS. ALL CAPS REQUIRED TO SEAL OFF EXISTING WATER MAIN IDENTIFIED TO BE ABANDONED IN PLACE SHALL BE MEASURED AND PAID FOR AS DUCTILE IRON COMPACT FITTINGS. REMOVAL OF EXISTING WATER MAIN PIPE NECESSARY TO ABANDON EXISTING WATER MAINS AND ANY NECESSARY THRUST BLOCKING SHALL BE INCIDENTAL TO THE COST OF THE NEW WATER MAIN.
16. ALL EXISTING VALVES LOCATED ON EXISTING WATER MAINS IDENTIFIED TO BE ABANDONED SHALL HAVE THE RESPECTIVE VALVE BOXES REMOVED AFTER WATER MAIN ABANDONMENT IS COMPLETE. REMOVAL OF VALVE BOXES SHALL BE INCIDENTAL TO THE COST OF THE NEW WATER MAIN.
17. ALL EXISTING FIRE HYDRANT ASSEMBLIES LOCATED ON EXISTING WATER MAINS IDENTIFIED TO BE ABANDONED SHALL BE REMOVED AFTER WATER MAIN ABANDONMENT IS COMPLETE. REMOVAL OF FIRE HYDRANT ASSEMBLIES SHALL BE PAID FOR AS A SEPARATE BID ITEM, WHICH INCLUDES THE COST OF REMOVAL, SALVAGE OF SPECIFIED HYDRANTS AND HYDRANT COMPONENTS AND DISPOSAL OF THE FIRE HYDRANT, AUXILIARY VALVE, VALVE BOX AND CONNECTING PIPE, SEALING THE CUT ABANDONED PIPE AND BACKFILLING TO GRADE.
18. WATER MAIN LENGTHS ARE SHOWN FOR REFERENCE, USE STATIONS FOR FINAL PLACEMENT OF WATER MAIN

CURB AND GUTTER NOTES

1. CONTRACTOR SHALL REMOVE AND REPLACE CONCRETE CURB AND GUTTER THROUGH OUT THE PROJECT. REMOVAL OF CURB SHALL BE IN THE COST FOR THE CURB INSTALL REMOVE AND REPLACE.
2. APPROXIMATE LOCATIONS OF CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT ARE SHOWN ON THE PLANS. FINAL LOCATIONS SHALL BE AS AUTHORIZED BY THE ENGINEER.
3. CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT SHALL BE PAID FOR BY THE LINEAR FOOT, MEASURED ALONG THE FLOW LINE, AND SHALL INCLUDE SAW CUTTING, CURB AND GUTTER REMOVAL, 4–INCH DEPTH OF COMPACTED INDOT #53 LIMESTONE AGGREGATE BASE, EXPANSION JOINTS, REINFORCING DOWELS TO TIE INTO EXISTING CURB AND GUTTER, AND CONCRETE CURB AND GUTTER, AS SHOWN ON SHEET 28 AND AS SPECIFIED.
4. CONTRACTOR SHALL INSTALL CONCRETE CURB AND GUTTER THAT IS FREE FROM PONDING. WHEN ADDITIONAL CURB AND GUTTER MUST BE REMOVED TO ENSURE PROPER CURB DRAINAGE, CONTRACTOR SHALL NOTIFY ENGINEER FOR APPROVAL.

DRIVEWAY APRON NOTES

1. CONTRACTOR SHALL REMOVE AND REPLACE DRIVEWAY APRONS ADJACENT TO PROJECT AREA. APRONS ARE TO BE INSTALLED WITH CONCRETE REGARDLESS OF EXISTING MATERIAL, AS AUTHORIZED BY THE ENGINEER.
2. APPROXIMATE LOCATIONS OF DRIVEWAY APRON REMOVAL AND REPLACEMENT ARE SHOWN ON THE PLANS. FINAL LOCATIONS SHALL BE AS AUTHORIZED BY THE ENGINEER.
3. EXISTING GRAVEL AND CONCRETE DRIVEWAY APRONS TO BE REPLACED WITH CONCRETE. CONCRETE DRIVEWAY APRON REMOVAL AND REPLACEMENT SHALL INCLUDE SAW CUTTING, MATERIAL REMOVAL, 6–INCH DEPTH OF COMPACTED INDOT #53 LIMESTONE AGGREGATE BASE AND 6–INCH THICK CONCRETE WITH CONTROL AND EXPANSION JOINTS, AS SHOWN ON SHEET 28 AND AS SPECIFIED.
4. AREA BETWEEN WALK AND DRIVE ON OWNERS SIDE SHALL BE REPLACED IN EXISTING ADJACENT MATERIAL.

SIDEWALK AND CURB RAMP NOTES

1. CONTRACTOR SHALL REMOVE AND REPLACE CONCRETE SIDEWALK THROUGHOUT THE PROJECT AREA.
2. CONCRETE SIDEWALK INSTALLMENT SHALL, EXCAVATION WHERE NECESSARY, 4–INCH DEPTH OF COMPACTED INDOT #53 LIMESTONE AGGREGATE BASE AND 4–INCH THICK CONCRETE (5–INCH THICK CONCRETE ACROSS DRIVEWAYS) WITH CONTROL AND EXPANSION JOINTS, AS SHOWN ON SHEET 28 AND AS SPECIFIED.
3. CONCRETE WALK REMOVAL SHALL BE PAID PER SQUARE YARD AND SHALL INCLUDE REMOVAL AND DISPOSAL.
4. CONTRACTOR SHALL INSTALL CONCRETE SIDEWALK THAT IS FREE FROM PONDING.
5. CONCRETE CURB RAMPS SHALL BE CONSTRUCTED ACCORDING TO APPLICABLE INDOT STANDARD TYPES, INCLUDING TRUNCATED DOME PANELS, TO PROVIDE ADA COMPLIANCE.
6. 4–INCH THICK CONCRETE SIDEWALK, ~~5–INCH THICK CONCRETE SIDEWALK/DRIVEWAY APRON A~~ND CONCRETE CURB RAMPS TO BE PAID FOR AS SEPARATE BID ITEMS.
7. DEPRESSED CURB TO BE PLACED IN FRONT OF ALL DRIVEWAYS.
8. CONCRETE DRIVEWAY APRONS AND ADA RAMPS SHALL BE 6" THICK AS SPECIFIED.

SANITARY/STORM

1. SANITARY SEWER LATERAL TO BE 6" SDR 35 PVC INSTALLED FROM SANITARY SEWER TO PROPERTY LINE PROPOSED. MAINTAIN CONSTANT SLOPE. (MINIMUM 1.0%.)
2. CONTRACTOR TO VERIFY LOCATION OF ALL ACTIVE SANITARY SEWER LATERALS BASED ON OWNER PROVIDED SEWER VIDEOS. INACTIVE SANITARY LATERALS OR ACTIVE STORM DRAINS ARE NOT TO BE CONNECTED TO SANITARY SEWER.
3. CONNECTIONS TO SANITARY SEWER TO BE MADE USING INLINE WYE TEES ONLY. INSERTA TEES ARE NOT ACCEPTABLE.
4. SHOWN SEWER LENGTHS ARE ROUNDED TO WHOLE NUMBER AND FROM THE INTERIOR OF MANHOLES. GRADES AND COORDINATES ARE SHOWN FROM CENTER OF STRUCTURES.
5. ALL CATCH BASINS, INLETS, MANHOLES, AND SEWER PIPES IN PROJECT AREA ARE TO BE REMOVED AND DISPOSED OF UNLESS OTHERWISE SHOWN OR DIRECTED BY ENGINEER.
6. REPLACE ALL SANITARY SERVICES TO PROPERTY LINE. MAKE CONNECTION TO EXISTING USING FERNCO COUPLINGS. (SEE DETAIL SHEET 27). ALL NECESSARY FITTING 6" AND UNDER FOR SERVICE LATERALS SHALL BE INCIDENTAL.
7. REMOVE AND REINSTALL LIGHT POLES, FENCING, LANDSCAPING ETC. TO PRE CONSTRUCTION CONDITION. NO SEPARATE PAYMENT WILL BE MADE.
8. RIM AND INVERT ELEVATIONS OF EXISTING MANHOLES ARE APPROXIMATE, AND ARE INTENDED FOR USE ONLY TO ESTIMATE DEPTH OF COVER. CONTRACTOR SHALL FIELD VERIFY.
9. PLUG ALL EXISTING HOLES IN SANITARY STRUCTURES WHERE PIPE HAS BEEN VACATED OR REMOVED. PLUG TO BE SEALED FOR LEAKAGE.

STREET REPLACEMENT

1. REMOVAL OF ASPHALT, AND AGGREGATE BASE IS INCLUDED IN THE UNCLASSIFIED EXCAVATION QUANTITIES.
2. EXCAVATION FOR INSTALLATION OF WALK, DRIVES AND SOD SHALL BE INCLUDED IN THEIR RESPECTIVE INSTALLATION QUANTITIES.
3. INSTALLATION OF ROAD PAVEMENT SHALL BE IN ACCORDANCE WITH THE SPECIFIED CROSS–SECTION AND PROFILE FOUND ON SHEET 28 AND SHALL MEET THE REQUIREMENTS OF THE CITY OF LAPORTE.
4. TENSAR TRIAX TX–5 GEOGRID SHALL BE USED FOR GROUND STABILIZATION AS APPROVED BY THE ENGINEER.
5. EXCAVATION FOR UNSUITABLE SOIL AND BACKFILL WITH INDOT NUMBER 2 AGGREGATE WILL BE AS AUTHORIZED BY THE FIELD ENGINEER.
6. PROOF ROLL TESTING WILL BE PERFORMED ON ALL SUB–GRADE AND APPROVED BY THE FILED ENGINEER PRIOR TO PLACEMENT OF AGGREGATE BASE.
7. PROOF ROLL TESTING WILL BE PERFORMED ON ALL SUB–GRADE AND APPROVED BY THE FILED ENGINEER PRIOR TO PLACEMENT OF AGGREGATE ASPHALT.
8. NO SLAG OR RECYCLED CONCRETE SHALL BE USED IN ROAD BASE OR PIPE BEDDING. SLAG IS NOT TO BE USED AS FILL OF ANY KIND.

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	NORTHING	EASTING
PRO. 48"ø SAN MH 210	2315162.542	3059918.624
PRO. 48"ø SAN MH 208	2315162.075	3059723.931
PRO. 48"ø SAN MH 215	2315148.080	3060336.291
PRO. 48"ø SAN MH 207	2315092.773	3059635.726
PRO. 48"ø SAN MH 214	2315154.390	3060211.319
PRO. 48"ø SAN MH 229	2314984.975	3060821.781
PRO. 48"ø SAN MH 206	2314836.858	3059629.786
PRO. 48"ø SAN MH 227	2314967.738	3060872.989
PRO. 48"ø SAN MH 223	2314330.534	3060755.081
PRO. 48"ø SAN MH 220	2315081.666	3060541.111
PRO. 48ø SAN MH 228	2314235.209	3060284.010
PRO. 48"ø SAN MH 213	2314841.967	3060208.294
PRO. 48"ø SAN MH 221	2314085.474	3060663.401
PRO. 48"ø SAN MH 226	2314403.361	3059897.718
EX. 48"ø SAN MH 708	2313959.246	3060941.512
PRO. 48"ø SAN MH 202	2314434.030	3059912.921
PRO. 48"ø SAN MH 205	2314676.260	3059626.555
PRO. 48"ø SAN MH 203	2314507.378	3059741.455
PRO. 48"ø SAN MH 230	2314385.282	3060165.013
PRO. 48"ø SAN MH 231	2314875.757	3060790.082

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	NORTHING	EASTING
PRO. 48"ø SAN MH 201	2314285.453	3059847.477
PRO. 48"ø SAN MH 225	2313985.124	3060888.377
PRO. 48"ø SAN MH 217	2314373.027	3060466.594
PRO. 48"ø SAN MH 200	2314171.860	3059797.579
PRO. 48"ø SAN MH 222	2314180.379	3060707.811
PRO. 48"ø SAN MH 209	2314792.446	3059915.076
PRO. 48"ø SAN MH 153	2314305.454	3060124.222
PRO. 48"ø SAN MH 219	2314929.679	3060502.419
PRO. 48"ø SAN MH 224	2314546.505	3060782.787
PRO. 48"ø SAN MH 204	2314576.738	3059667.207
PRO. 48"ø SAN MH 216	2314200.079	3060394.332
PRO. 48"ø SAN MH 218	2314583.517	3060494.948
PRO. 48"ø SAN MH 212	2314527.001	3060202.557

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	NORTHING	EASTING
PRO. STM TYPE "A" CB 114 B	2314782.289	3059922.477
PRO. STM TYPE "C" CB 111 B	2314276.250	3059856.129
PRO. 48"ø STM MH 121	2314931.329	3060511.357
PRO. STM TYPE "D" INL 111 A	2314288.283	3059824.340
PRO. STM TYPE "A" CB 107 B	2314572.866	3059678.775
PRO. 48"ø STM MH 125	2314172.940	3060713.815
PRO. STM TYPE "A" CB 129 B	2314571.021	3060789.916
PRO. STM TYPE "A" INL 129 A	2314571.711	3060763.304
PRO. 96"ø STM MH 103	2314232.772	3060384.549
PRO. 60"ø STM MH 102	2314221.800	3060411.997
PRO. STM STR 131	2314019.251	3060293.482
PRO. STM TYPE "A" INL 120 A	2314577.585	3060473.622
PRO. STM TYPE "A" CB 120 B	2314578.773	3060499.637
PRO. 48"ø STM MH 120	2314580.817	3060508.648
PRO. STM TYPE "A" CB 115 B	2314518.279	3060205.158
PRO. STM TYPE "A" INL 115 A	2314522.290	3060179.452
PRO. 48"ø STM MH 115	2314517.725	3060209.656

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	NORTHING	EASTING
PRO. 48"ø STM MH 122	2315041.880	3059930.083
PRO. 48"ø STM MH 110	2315075.018	3059643.957
PRO. STM TYPE "B" CB 122 B	2315041.894	3059925.772
PRO. STM TYPE "B" INL 122 A	2315041.907	3059899.778
PRO. STM TYPE "A" INL 110 A	2315087.145	3059616.251
PRO. STM TYPE "A" CB 110 B	2315076.548	3059640.150
PRO. 48"ø STM MH 109	2314860.050	3059636.699
PRO. 48"ø STM MH 116	2314872.137	3060217.234
PRO. STM TYPE "C" INL 118 A	2315190.416	3060188.668
PRO. STM TYPE "C" CB 118 B	2315190.783	3060220.460
PRO. 48"ø STM MH 118	2315190.460	3060226.322
PRO. STM TYPE "A" CB 112 C	2314436.345	3059931.865
PRO. STM TYPE "A" CB 112 B	2314392.807	3059909.133
PRO. STM TYPE "A" CB 112 A	2314406.777	3059875.613
PRO. STM TYPE "A" CB 117 B	2315102.633	3060216.616
PRO. STM TYPE "A" INL 117 A	2315102.566	3060190.627
PRO. STM TYPE "A" 107 A	2314557.895	3059657.317
PRO. 48"ø STM MH 123	2315075.544	3060544.379
PRO. 48"ø STM MH 113	2314574.705	3059923.879
PRO. STM TYPE "A" CB 123 A	2315100.039	3060549.171

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	NORTHING	EASTING
PRO. 48"ø STM MH 117	2315102.581	3060219.897
PRO. 48"ø STM MH 124	2315032.623	3060676.058
PRO. 48"ø STM MH 101	2314106.311	3060680.657
PRO. STM TYPE "C" CB 124 A	2315029.324	3060674.715
PRO. STM TYPE "C" CB 124 B	2315053.691	3060683.151
PRO. 48"ø STM MH 112	2314397.961	3059902.292
PRO. STM TYPE "A" INL 116 A	2314872.290	3060187.641
PRO. STM TYPE "A" CB 116 B	2314872.179	3060213.536
PRO. 72"ø STM MH 155	2314443.038	3059907.149
PRO. 72"ø STM MH 105	2314436.480	3059919.881
PRO. 48"ø STM MH 130	2314870.693	3060797.436
PRO. 48"ø STM MH 108	2314680.709	3059630.964
PRO. 48"ø STM MH 126	2314319.024	3060762.182
PRO. STM TYPE "B" CB 108 A	2314680.522	3059607.456
PRO. STM TYPE "B" CB 108 B	2314681.338	3059633.575
PRO. 72"ø STM MH 104	2314332.816	3060161.457
PRO. STM TYPE "A" CB 130 B	2314870.888	3060794.046
PRO. STM TYPE "A" INL 130 A	2314872.434	3060767.607
PRO. 48"ø STM MH 111	2314301.448	3059860.587
PRO. 48"ø STM MH 114	2314781.702	3059926.561

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	NORTHING	EASTING
PRO. STM TYPE "C" INL 103 C	2314185.063	3060418.032
PRO. STM TYPE "C" INL 103 A	2314209.394	3060361.040
PRO. STM TYPE "C" CB 103 D	2314220.555	3060430.310
PRO. STM TYPE "C" CB 103 B	2314243.009	3060379.272
PRO. STM TYPE "A" CB 104 A	2314312.234	3060131.506
PRO. 48"ø STM MH 100	2314025.175	3060862.376
PRO. STM TYPE "A" CB 101 A	2314078.844	3060666.007
PRO. 48"ø STM MH 107	2314574.538	3059681.425
PRO. STM TYPE "A" CB 125 B	2314175.313	3060709.632
PRO. STM TYPE "A" INL 125 A	2314184.859	3060685.530
PRO. 48"ø STM MH 106	2314517.015	3059747.981
PRO. STM TYPE "A" CB 100 B	2313998.215	3060850.964
PRO. STM TYPE "A" CB 100 A	2314029.986	3060863.401
PRO. 48"ø STM MH 129	2314571.024	3060794.136
PRO. 48"ø STM MH 119	2314367.827	3060472.779
PRO. STM TYPE "A" CB 121 B	2314932.117	3060507.785
PRO. STM TYPE "A" INL 121 A	2314937.091	3060482.081
PRO. STM INL TYPE "A" 113 A	2314575.757	3059893.544
PRO. STM CB TYPE "A" 113 B	2314574.931	3059919.593
PRO. STM TYPE "A" INL 114 A	2314781.684	3059896.489

CHARLES W. THOMPSON III
REGISTERED
NO. 11100657
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

NES engineering, inc.
2421 123rd Street, Hammond, Indiana, 46323
PH: (219) 844-0450 FAX: (219) 844-7764
Your Vision • Our Focus

Drawing Title: GENERAL NOTES AND LEGENDS
Sub Title:
Drawing Filename: X:\Projects\LAPORTE\WASTWATR\15-5140\dwg\03_DETAILS_15-5140.DWG\2
Horizontal Scale: N/A
Vertical Scale: N/A
Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15.514
Date & Time: 08/20/15 - 10:00
Designed: CWT
Drawn: RRH
Checked: JPP

SHEET 2 OF 37

PHASE 1C
COMPLETE

PHASE 2

PHASE 3

ALT A

ALT B

ALT C

PHASE LIMIT

PHASE LIMIT

PHASE 1B
COMPLETE

PHASE 1A
NOT INCLUDED
IN PROJECT

PHASE 1A
NOT INCLUDED
IN PROJECT

SILVERBROOK AVENUE
UTILITY SHEETS 8, 9 – ROAD SHEET 22
STA. 30+80 – STA. 35+75
STA. 35+75 – STA. 43+20

OAKDALE AVENUE
UTILITY SHEETS 4, 5 – ROAD SHEET 19
STA. 2+75 – STA. 9+10

PARKVIEW AVENUE
UTILITY SHEETS 12, 13 – ROAD SHEET 24
STA. 15+00 – STA. 12+30
STA. 10+00 – STA. 12+30

GLENVIEW AVENUE
UTILITY SHEETS 10, 11 – ROAD SHEET 23
STA. 20+00 – STA. 13+70
STA. 10+00 – STA. 13+70

LAWNDALE AVENUE
UTILITY SHEETS 14, 15 – ROAD SHEET 25
STA. 22+00 – STA. 13+70
STA. 10+50 – STA. 13+70

EASTWOOD AVENUE
UTILITY SHEETS 16, 17 – ROAD SHEET 26
STA. 19+20 – STA. 10+50

UTILITY SHEET 12 – ROAD SHEET 23

BOYD BLVD

MONROE ST – S.R. 4

60' 0 30' 60' 120'
1" = 60'-0"

NIES engineering, inc.
2421 173rd Street, Hammond, Indiana 46323
Phone: (219) 844-8665 Fax: (219) 844-7764
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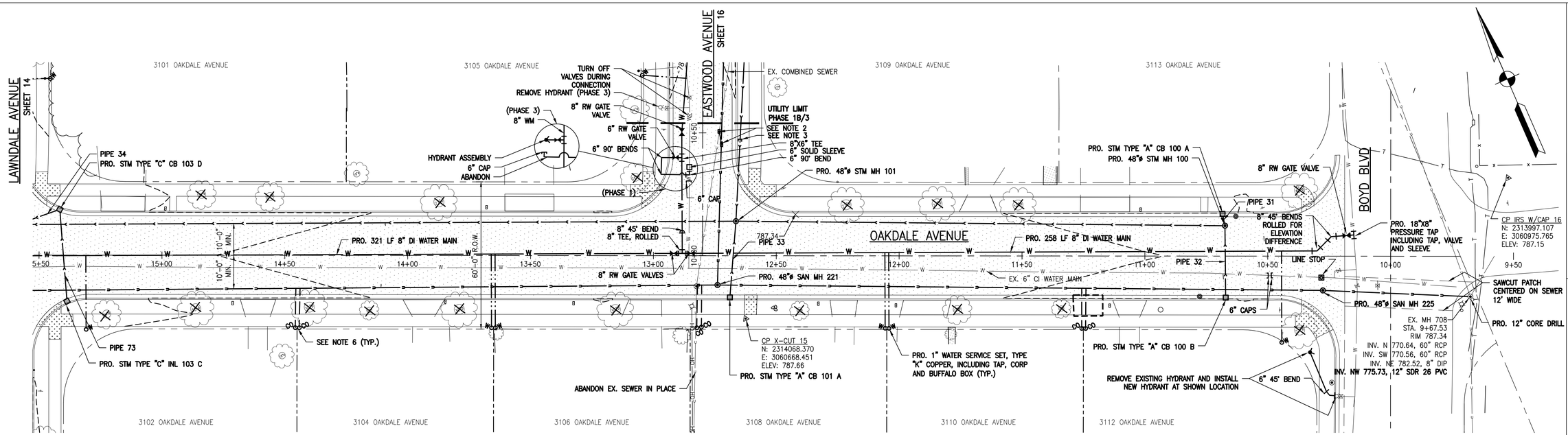
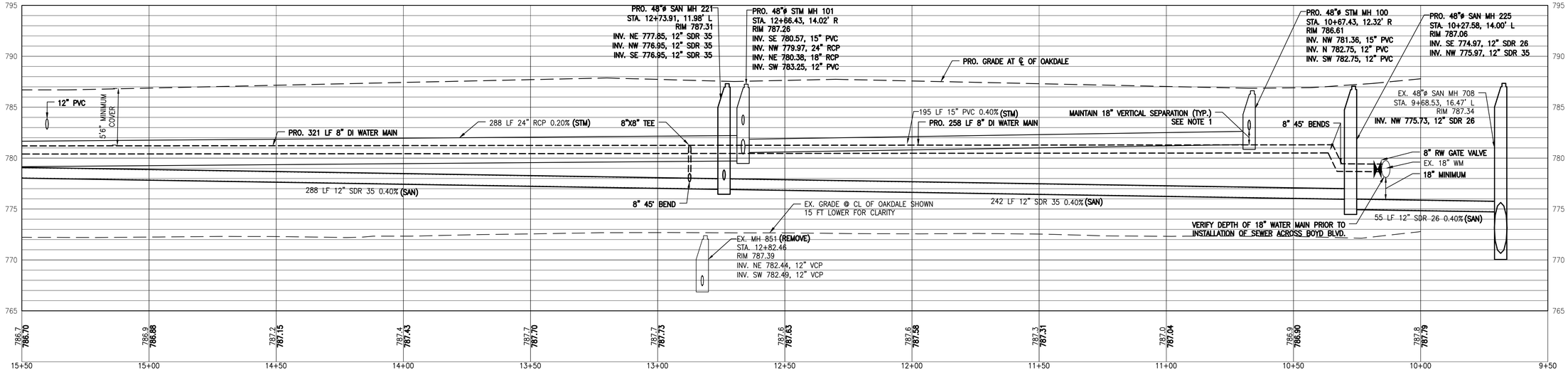
Drawing Title:	OVERALL
Sub Title:	PHASE MAP
Drawing Filename:	X:\Projects\LAPORTE\WASTWATR\15-5140\dwgs\OVERALL.DWG\3
Horizontal Scale:	1" = 60'-0"
Vertical Scale:	N/A
Customer:	CITY OF LA PORTE, INDIANA
Project Name:	MONROE MANOR SEWER SEPARATION PROJECT
Project Number:	15-514
Date & Time:	08/21/15 - 08:34

Designed: CWT
Drawn: RRH
Checked: JPP

CHARLES W THOMPSON III
REGISTERED
NO. 11100657
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

SHEET 3 OF 37





NOTES:

1. MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER PIPES. MAINTAIN A 10 FOOT HORIZONTAL SEPARATION BETWEEN WATER AND SEWER PIPES AND 8 FOOT SEPARATION BETWEEN WATER MAIN AND SEWER STRUCTURES.
2. INSTALL FERNCO COUPLINGS AND PIPE TO TRANSITION FROM EXISTING SEWER TO NEW. TRANSITION PIPE AND COUPLINGS TO BE REMOVED PRIOR TO EXTENDING SEWER.
3. PLUG NEW STORM SEWER PIPE BETWEEN PHASES WITH BRICK, MORTAR AND HYDRAULIC CEMENT. BACKFILL WITH LIMESTONE AGGREGATE. INSTALLATION/ REMOVAL SHALL BE INCLUDED IN THE PIPE UNIT PRICE.
4. INSTALL FERNCO, AND PIPE TO TRANSITION FROM MANHOLE TO EXISTING PIPE. REMOVE PIPE AND FERNCO BEFORE EXTENDING SEWER IN LATER PHASE.
5. PROVIDE INLET PROTECTION PER SWPPP FOR ALL STORM AND COMBINED STRUCTURES.
6. 6" SDR 35 PVC SANITARY SERVICE, INCLUDING 6" BY MAINLINE DIAMETER TEE (NO INSERTA TEES), PIPE, NECESSARY FITTINGS AND CLEAN OUT. CAP AT PROPERTY LINE. SEWER VIDEO SHOWING LOCATIONS AND NUMBER OF SEWER SERVICES WILL BE PROVIDED BY LA PORTE WASTE WATER PRIOR TO CONSTRUCTION.
7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
- EXISTING INLET
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- PROPERTY CORNER
- EXISTING GAS
- EXISTING COMBINED SANITARY/STORM
- EXISTING STORM
- EXISTING WATERMAIN
- EXISTING FENCE
- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

- PRO. FIRE HYDRANT
- PRO. WATER VALVE
- PRO. BUFFALO BOX
- PRO. MAN HOLE
- PRO. CATCH BASIN
- LINE STOP
- SLEEVE
- 22° BEND
- 45° BEND
- PRO. SANITARY SEWER
- PRO. STORM SEWER
- PRO. WATER MAIN
- PRO. SANITARY CLEAN OUT
- 45° BEND
- CAP
- TEE
- 90° BEND

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "C" INL 103 C	RIM = 786.25 SUMP = 782.95 STA: 15+38.63, 18.82' L	PIPE 73, 12" PVC INV. OUT = 782.95 38 LF, 0.53% SLOPE
PRO. STM TYPE "C" CB 103 D	RIM = 786.15 SUMP = 782.55 STA: 15+41.57, 18.62' R	PIPE 73, 12" PVC INV. IN = 782.75 38 LF, 0.53% SLOPE PIPE 34, 15" PVC INV. OUT = 782.55 18 LF, 0.54% SLOPE
PRO. STM TYPE "A" CB 101 A	RIM = 787.19 SUMP = 781.35 STA: 12+68.87, 17.02' L	PIPE 33, 12" PVC INV. OUT = 783.35 31 LF, 0.32% SLOPE
PRO. STM TYPE "A" CB 100 A	RIM = 786.52 SUMP = 780.85 STA: 10+68.41, 17.14' R	PIPE 31, 12" PVC INV. OUT = 782.85 5 LF, 2.03% SLOPE
PRO. STM TYPE "A" CB 100 B	RIM = 786.52 SUMP = 780.85 STA: 10+67.11, 16.96' L	PIPE 32, 12" PVC INV. OUT = 782.85 29 LF, 0.34% SLOPE

20' 0 10' 20' 40'
1" = 20'-0"

CONSTRUCTION COMPLETE

CHARLES W THOMPSON III
REGISTERED
NO. 11100657
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 123rd Street, Hammond, Indiana 46323
Phone: (219) 844-8660 Fax: (219) 844-7764
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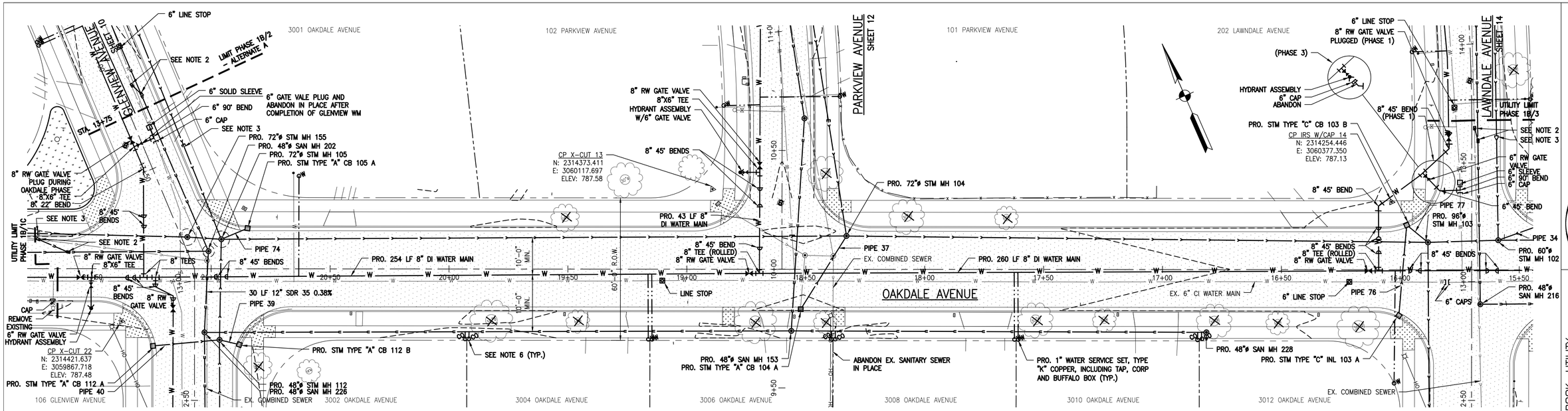
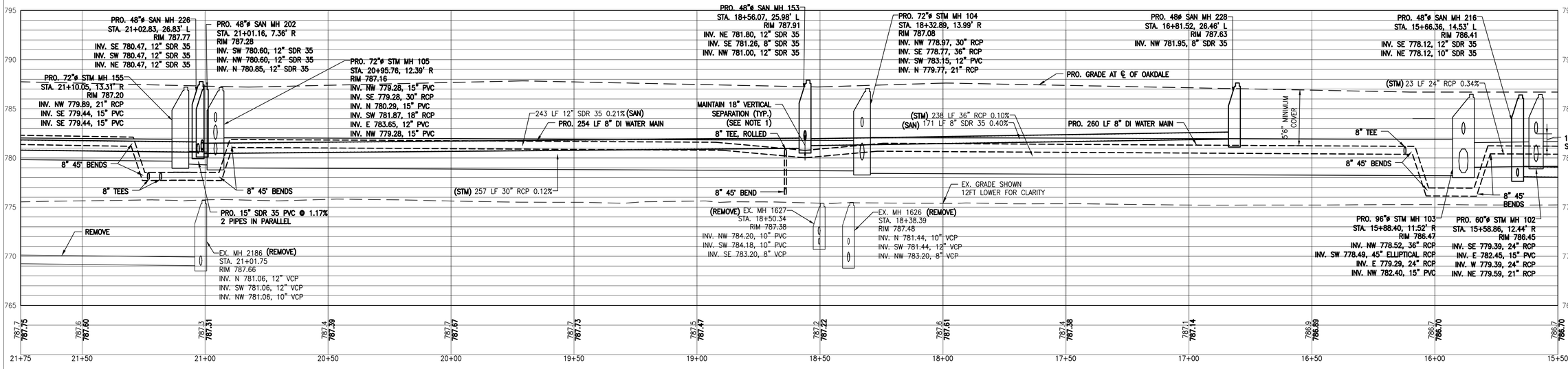
Drawing Title: OAKDALE/SILVERBROOK - UTILITY
Sub Title: PLAN & PROFILE - STA. 9+50 - STA. 15+50
Drawing Filename: X:\Projects\LAPORTE\WASTWATR\15-5140\dwgs\01_PRO_UTILITIES_15-514.DWG\4
Horizontal Scale: 1" = 20'-0"
Vertical Scale: 1" = 5'-0"
Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/20/15 - 09:39
Designed: CWT
Drawn: RRH
Checked: JPP
SHEET 4 OF 37





NOTES:

1. MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER PIPES. MAINTAIN A 10 FOOT HORIZONTAL SEPARATION BETWEEN WATER AND SEWER PIPES AND 8 FOOT SEPARATION BETWEEN WATER MAIN AND SEWER STRUCTURES.
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3. PLUG NEW STORM SEWER PIPE BETWEEN PHASES WITH BRICK, MORTAR AND HYDRAULIC CEMENT. BACKFILL WITH LIMESTONE AGGREGATE. INSTALLATION/ REMOVAL SHALL BE INCLUDED IN THE PIPE UNIT PRICE.
4. INSTALL FERNCO, AND PIPE TO TRANSITION FROM MANHOLE TO EXISTING PIPE. REMOVE PIPE AND FERNCO BEFORE EXTENDING SEWER IN LATER PHASE.
5. PROVIDE INLET PROTECTION PER SWPPP FOR ALL STORM AND COMBINED STRUCTURES.
6. 6" SDR 35 PVC SANITARY SERVICE, INCLUDING 6" BY MAINLINE DIAMETER TEE (NO INSERTA TEES), PIPE, NECESSARY FITTINGS AND CLEAN OUT. CAP AT PROPERTY LINE. SEWER VIDEO SHOWING LOCATIONS AND NUMBER OF SEWER SERVICES WILL BE PROVIDED BY LA PORTE WASTE WATER PRIOR TO CONSTRUCTION.
7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
- EXISTING INLET
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- PROPERTY CORNER
- EXISTING GAS
- EXISTING COMBINED SANITARY/STORM
- EXISTING STORM
- EXISTING WATERMAIN
- EXISTING FENCE
- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

- PRO. FIRE HYDRANT
- PRO. WATER VALVE
- PRO. BUFFALO BOX
- PRO. MAN HOLE
- PRO. CATCH BASIN
- LINE STOP
- SLEEVE
- 22° BEND
- 45° BEND
- PRO. SANITARY SEWER
- PRO. STORM SEWER
- PRO. WATER MAIN
- PRO. SANITARY CLEAN OUT
- 45° BEND
- CAP
- TEE
- 90° BEND

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "A" CB 104 A	RIM = 786.88 SUMP = 781.25 STA: 18+52.11, 16.85' L	PIPE 37, 12" PVC INV. OUT = 783.25 36 LF, 0.28% SLOPE
PRO. STM TYPE "C" INL 103 A	RIM = 786.25 SUMP = 782.85 STA: 16+00.60, 19.31' L	PIPE 76, 12" PVC INV. OUT = 782.85 38 LF, 0.52% SLOPE
PRO. STM TYPE "C" CB 103 B	RIM = 786.15 SUMP = 780.50 STA: 15+97.33, 18.79' R	PIPE 76, 12" PVC INV. IN = 782.65 38 LF, 0.52% SLOPE PIPE 77, 15" PVC INV. OUT = 782.50 12 LF, 0.87% SLOPE
PRO. STM TYPE "A" CB 105 A	RIM = 787.70 SUMP = 781.75 STA: 20+84.72, 17.06' R	PIPE 74, 12" PVC INV. OUT = 783.75 12 LF, 0.83% SLOPE
PRO. STM TYPE "A" CB 112 B	RIM = 786.70 SUMP = 781.07 STA: 20+88.14, 31.94' L	PIPE 39, 12" PVC INV. OUT = 783.07 9 LF, 0.22% SLOPE
PRO. STM TYPE "A" CB 112 A	RIM = 787.22 SUMP = 781.11 STA: 21+24.45, 32.54' L	PIPE 40, 12" PVC INV. OUT = 783.11 28 LF, 0.22% SLOPE

20' 0 10' 20' 40'
1" = 20'-0"

CONSTRUCTION COMPLETE

CHARLES W. THOMPSON III
REGISTERED
NO. 11100557
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 120th Street, Hammond, Indiana 46323
Phone: (219) 844-8660 Fax: (219) 844-7764
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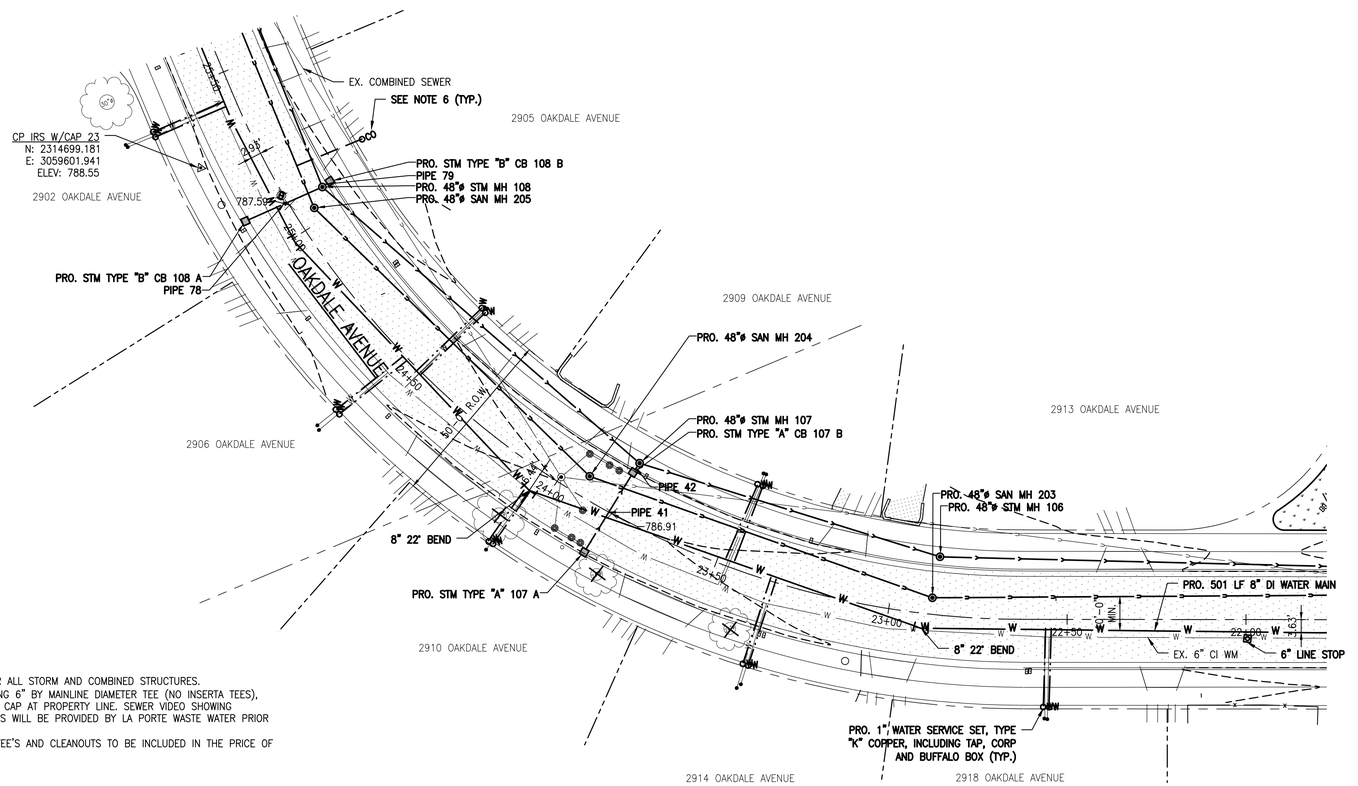
Drawing Title: OAKDALE/SILVERBROOK - UTILITY
Sub Title: PLAN & PROFILE - STA. 15+50 - STA. 21+75
Drawing Filename: X:\Projects\LAPORTE\WASTWATR\15-5140\dwgs\01_PRO_UTILITIES_15-514.DWG\5
Horizontal Scale: 1" = 5'-0"
Vertical Scale: 1" = 20'-0"

Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/20/15 - 09:40

Designed: CWT
Drawn: RRH
Checked: JPP

SHEET 5 OF 37



NOTES:

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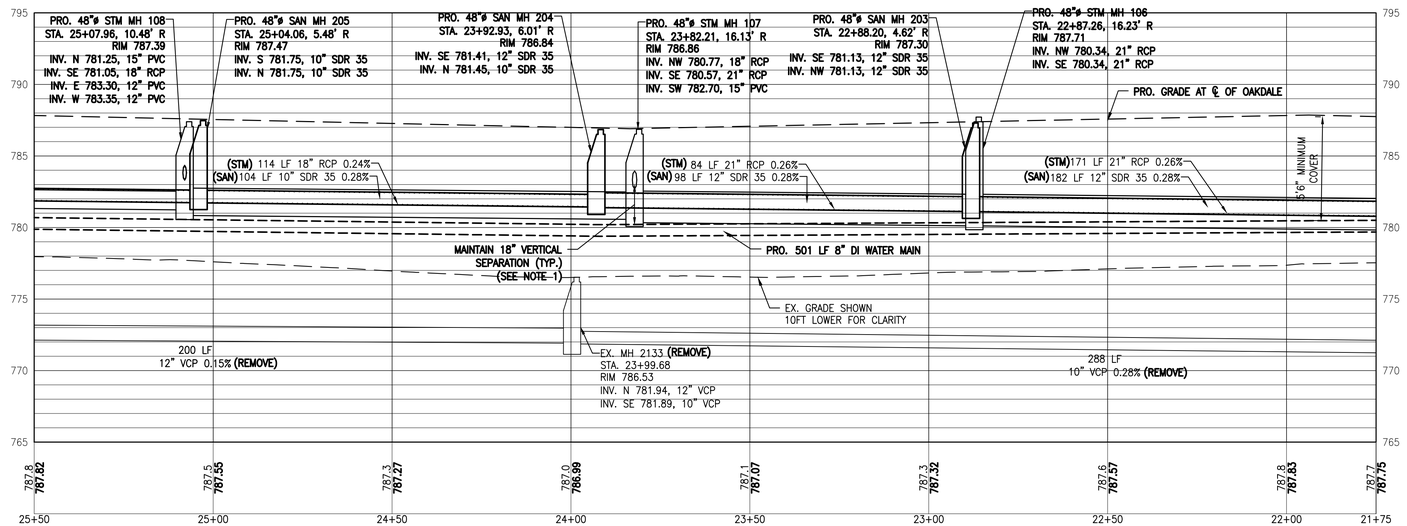
2. INSTALL FERNCO COUPLINGS AND PIPE TO TRANSITION FROM EXISTING SEWER TO NEW. TRANSITION PIPE AND COUPLINGS TO BE REMOVED PRIOR TO EXTENDING SEWER.
3. PLUG NEW STORM SEWER PIPE BETWEEN PHASES WITH BRICK, MORTAR AND HYDRAULIC CEMENT. BACKFILL WITH LIMESTONE AGGREGATE. INSTALLATION/ REMOVAL SHALL BE INCLUDED IN THE PIPE UNIT PRICE.
4. INSTALL FERNCO, AND PIPE TO TRANSITION FROM MANHOLE TO EXISTING PIPE. REMOVE PIPE AND FERNCO BEFORE EXTENDING SEWER IN LATER PHASE.
5. PROVIDE INLET PROTECTION PER SWPPP FOR ALL STORM AND COMBINED STRUCTURES.
6. 6" SDR 35 PVC SANITARY SERVICE, INCLUDING 6" BY MAINLINE DIAMETER TEE (NO INSERTA TEES), PIPE, NECESSARY FITTINGS AND CLEAN OUT. CAP AT PROPERTY LINE. SEWER VIDEO SHOWING LOCATIONS AND NUMBER OF SEWER SERVICES WILL BE PROVIDED BY LA PORTE WASTE WATER PRIOR TO CONSTRUCTION.
7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

PROPOSED STRUCTURE DATA TABLE		
STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "A" CB 107 B	RIM = 786.57 SUMP = 780.80 STA: 23+82.53, 13.01' R	PIPE 41, 12" PVC INV. IN = 783.00 26 LF, 0.38% SLOPE PIPE 42, 15" PVC INV. OUT = 782.80 3 LF, 3.19% SLOPE
PRO. STM TYPE "A" 107 A	RIM = 786.57 SUMP = 783.10 STA: 23+83.74, 13.12' L	PIPE 41, 12" PVC INV. OUT = 783.10 26 LF, 0.38% SLOPE
PRO. STM TYPE "B" CB 108 B	RIM = 787.34 SUMP = 781.35 STA: 25+08.25, 13.15' R	PIPE 79, 12" PVC INV. OUT = 783.35 3 LF, 1.86% SLOPE
PRO. STM TYPE "B" CB 108 A	RIM = 787.34 SUMP = 781.50 STA: 25+10.79, 12.86' L	PIPE 78, 12" PVC INV. OUT = 783.50 24 LF, 0.64% SLOPE



CONSTRUCTION COMPLETE

LEGEND

	EXISTING TREE	G G G	EXISTING GAS
	EXISTING FIRE HYDRANT		EXISTING COMBINED SANITARY/STORM
	EXISTING WATER VALVE		EXISTING STORM
	EXISTING BUFFALO BOX	W W	EXISTING WATERMAIN
	EXISTING MAN HOLE	x x x	EXISTING FENCE
	EXISTING CATCH BASIN		EXISTING TREE LINE
	EXISTING INLET		EXISTING ROAD ℄ ALIGNMENT
	EXISTING UTILITY POLE		RIGHT-OF-WAY
	EXISTING LIGHT POLE		CONTROL POINT
	PROPERTY CORNER		

PROPOSED LEGEND

	PRO. FIRE HYDRANT		PRO. SANITARY SEWER
	PRO. WATER VALVE		PRO. STORM SEWER
OW	PRO. BUFFALO BOX	W W	PRO. WATER MAIN
	PRO. MAN HOLE		PRO. SANITARY CLEAN OUT
	PRO. CATCH BASIN		45° BEND
	LINE STOP		CAP
	SLEEVE		TEE
	22° BEND		90° BEND
	45° BEND		

20' 0 10' 20' 40'
1" = 20'-0"

CHARLES W THOMPSON III REGISTERED NO. 11100557 STATE OF INDIANA PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 120th Street, Hammond, Indiana 46323
Phone: (219) 844-8868 Fax: (219) 844-7764
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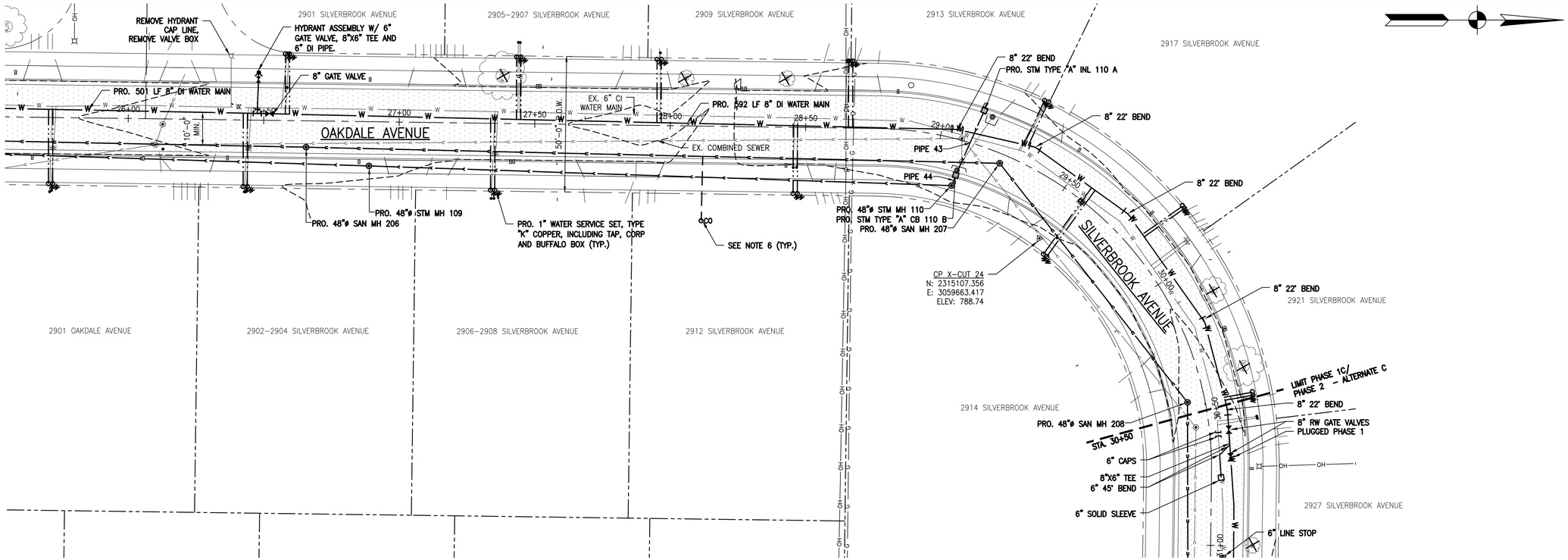
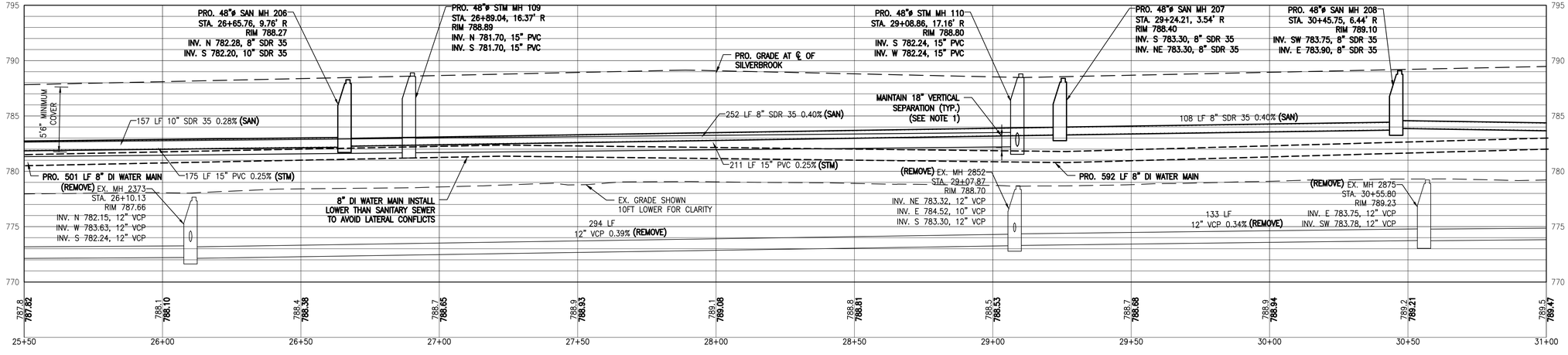
Customer:	CITY OF LA PORTE, INDIANA
Project Name:	MONROE MANOR SEWER SEPARATION PROJECT
Project Number:	15-514
Date & Time:	08/20/15 - 09:42
Drawing Title:	OAKDALE/SILVERBROOK - UTILITY
Sub Title:	PLAN & PROFILE - STA. 21+75 - STA. 25+50
Drawing Filename:	X:\Projects\LAPORTE\WASTWATR\15-514\Dwgs\01_PRO_UTILITIES_15-514.DWG
Horizontal Scale:	1" = 20'-0"
Vertical Scale:	1" = 5'-0"
Designed:	CWT
Drawn:	RRH
Checked:	JPP

SHEET 6 OF 37





CONSTRUCTION COMPLETE

NOTES:

1. MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER PIPES. MAINTAIN A 10 FOOT HORIZONTAL SEPARATION BETWEEN WATER AND SEWER PIPES AND 8 FOOT SEPARATION BETWEEN WATER MAIN AND SEWER STRUCTURES.
2. INSTALL FERNCO COUPLINGS AND PIPE TO TRANSITION FROM EXISTING SEWER TO NEW. TRANSITION PIPE AND COUPLINGS TO BE REMOVED PRIOR TO EXTENDING SEWER.
3. PLUG NEW STORM SEWER PIPE BETWEEN PHASES WITH BRICK, MORTAR AND HYDRAULIC CEMENT. BACKFILL WITH LIMESTONE AGGREGATE. INSTALLATION/ REMOVAL SHALL BE INCLUDED IN THE PIPE UNIT PRICE.
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7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
- EXISTING INLET
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- PROPERTY CORNER
- EXISTING GAS
- EXISTING COMBINED SANITARY/STORM
- EXISTING STORM
- EXISTING WATERMAIN
- EXISTING FENCE
- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

- PRO. FIRE HYDRANT
- PRO. WATER VALVE
- PRO. BUFFALO BOX
- PRO. MAN HOLE
- PRO. CATCH BASIN
- LINE STOP
- SLEEVE
- 22° BEND
- 45° BEND
- PRO. SANITARY SEWER
- PRO. STORM SEWER
- PRO. WATER MAIN
- PRO. SANITARY CLEAN OUT
- 45° BEND
- CAP
- TEE
- 90° BEND

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "A" INL 110 A	RIM = 788.16 SUMP = 784.35 STA: 29+12.68, 12.85' L	PIPE 43, 12" PVC INV. OUT = 784.35 26 LF, 0.38% SLOPE
PRO. STM TYPE "A" CB 110 B	RIM = 788.16 SUMP = 780.30 STA: 29+09.36, 13.08' R	PIPE 43, 12" PVC INV. IN = 784.25 26 LF, 0.38% SLOPE PIPE 44, 15" PVC INV. OUT = 782.30 4 LF, 1.46% SLOPE

20' 0 10' 20' 40'
1" = 20'-0"

CHARLES W. THOMPSON III REGISTERED NO. 11100557 STATE OF INDIANA PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 123rd Street, Hammond, Indiana, 46323
Phone: (219) 844-0561 Fax: (219) 844-7764
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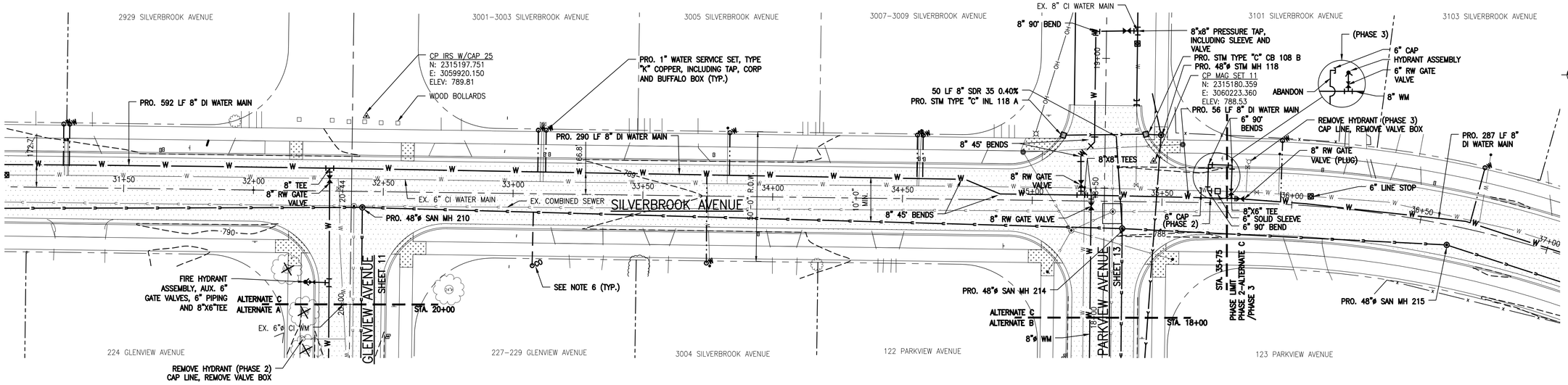
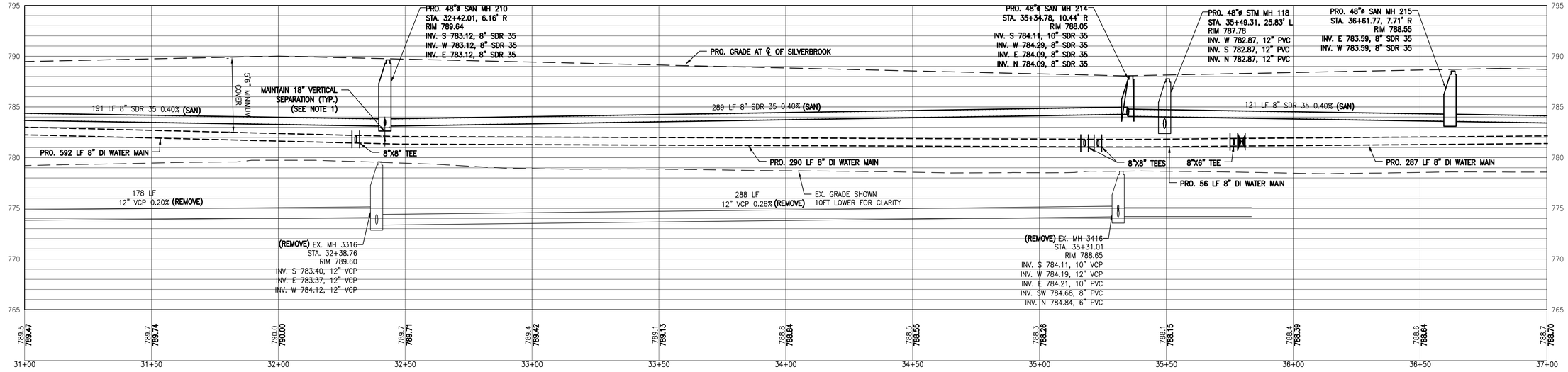
Drawing Title: OAKDALE/SILVERBROOK - UTILITY
Sub Title: PLAN & PROFILE - STA. 25+50 - STA. 31+00
Drawing Filename: X:\Projects\LAPORTE\WASTWATR\15-5114\Dwgs\01_PRO_UTILITIES_15-5114.DWG7
Horizontal Scale: 1" = 20'-0"
Vertical Scale: 1" = 5'-0"
Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-5114
Date & Time: 08/20/15 - 09:42
Designed: CWT
Drawn: RRH
Checked: JPP

SHEET 7 OF 37





NOTES:

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7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
- EXISTING INLET
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- PROPERTY CORNER
- EXISTING GAS
- EXISTING COMBINED SANITARY/STORM
- EXISTING STORM
- EXISTING WATERMAIN
- EXISTING FENCE
- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

- PRO. FIRE HYDRANT
- PRO. WATER VALVE
- PRO. BUFFALO BOX
- PRO. MAN HOLE
- PRO. CATCH BASIN
- LINE STOP
- SLEEVE
- 22° BEND
- 45° BEND
- PRO. SANITARY SEWER
- PRO. STORM SEWER
- PRO. WATER MAIN
- PRO. SANITARY CLEAN OUT
- 45° BEND
- CAP
- TEE
- 90° BEND

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "C" CB 118 B	RIM = 787.84 SUMP = 780.89 STA: 35+43.44, 26.08' L	PIPE 57, 12" PVC INV. IN = 782.89 32 LF, 0.35% SLOPE PIPE 58, 12" PVC INV. OUT = 782.89 6 LF, 0.34% SLOPE
PRO. STM TYPE "C" INL 118 A	RIM = 787.84 SUMP = 783.00 STA: 35+11.66, 25.29' L	PIPE 57, 12" PVC INV. OUT = 783.00 32 LF, 0.35% SLOPE

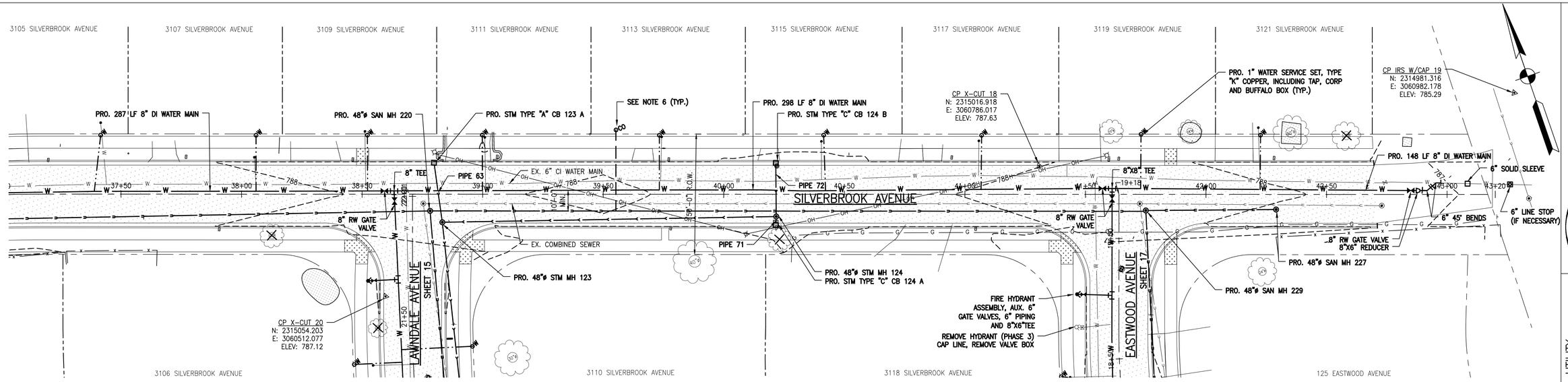
20' 0 10' 20' 40'
1" = 20'-0"

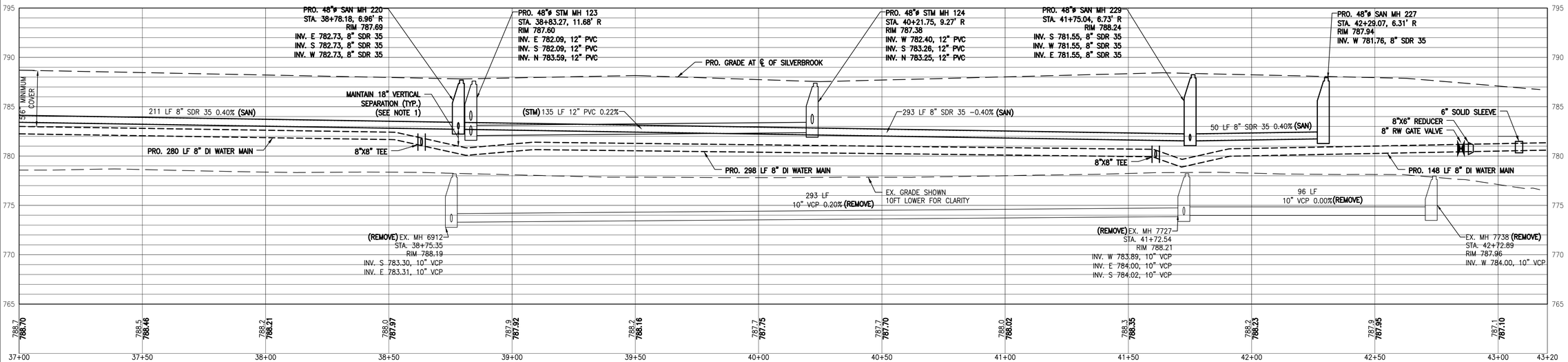
CHARLES W. THOMPSON III
REGISTERED
NO. 11100657
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 123rd Street, Hammond, Indiana 46323
Phone: (219) 844-8680 Fax: (219) 844-7764
Your Vision • Our Focus

Drawing Title: OAKDALE/SILVERBROOK - UTILITY
Sub Title: PLAN & PROFILE STA. 31+00 - STA. 37+00
Drawing Filename: X:\Projects\LAPORTE\WASTWTR\15-514\Dwgs\01_PRO_UTILITIES_15-514.DWG
Horizontal Scale: 1" = 20'-0" | Vertical Scale: 1" = 5'-0"
Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/20/15 - 09:45
Designed: CWT
Drawn: RRH
Checked: JPP

SHEET 8 OF 37





NOTES:

1. MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER PIPES. MAINTAIN A 10 FOOT HORIZONTAL SEPARATION BETWEEN WATER AND SEWER PIPES AND 8 FOOT SEPARATION BETWEEN WATER MAIN AND SEWER STRUCTURES.
2. INSTALL FERNCO COUPLINGS AND PIPE TO TRANSITION FROM EXISTING SEWER TO NEW. TRANSITION PIPE AND COUPLINGS TO BE REMOVED PRIOR TO EXTENDING SEWER.
3. PLUG NEW STORM SEWER PIPE BETWEEN PHASES WITH BRICK, MORTAR AND HYDRAULIC CEMENT. BACKFILL WITH LIMESTONE AGGREGATE. INSTALLATION/ REMOVAL SHALL BE INCLUDED IN THE PIPE UNIT PRICE.
4. INSTALL FERNCO, AND PIPE TO TRANSITION FROM MANHOLE TO EXISTING PIPE. REMOVE PIPE AND FERNCO BEFORE EXTENDING SEWER IN LATER PHASE.
5. PROVIDE INLET PROTECTION PER SWPPP FOR ALL STORM AND COMBINED STRUCTURES.
6. 6" SDR 35 PVC SANITARY SERVICE, INCLUDING 6" BY MAINLINE DIAMETER TEE (NO INSERTA TEES), PIPE, NECESSARY FITTINGS AND CLEAN OUT. CAP AT PROPERTY LINE. SEWER VIDEO SHOWING LOCATIONS AND NUMBER OF SEWER SERVICES WILL BE PROVIDED BY LA PORTE WASTE WATER PRIOR TO CONSTRUCTION.
7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
- EXISTING INLET
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- PROPERTY CORNER
- EXISTING GAS
- EXISTING COMBINED SANITARY/STORM
- EXISTING STORM
- EXISTING WATERMAIN
- EXISTING FENCE
- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

- PRO. FIRE HYDRANT
- PRO. WATER VALVE
- PRO. BUFFALO BOX
- PRO. MAN HOLE
- PRO. CATCH BASIN
- LINE STOP
- SLEEVE
- 22° BEND
- 45° BEND
- PRO. SANITARY SEWER
- PRO. STORM SEWER
- PRO. WATER MAIN
- PRO. SANITARY CLEAN OUT
- 45° BEND
- CAP
- TEE
- 90° BEND

PROPOSED STRUCTURE DATA TABLE		
STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "C" CB 124 A	RIM = 787.31 SUMP = 781.35 STA: 40+21.56, 12.82' R	PIPE 71, 12" PVC INV. OUT = 783.35 4 LF, 2.67% SLOPE
PRO. STM TYPE "C" CB 124 B	RIM = 787.31 SUMP = 781.35 STA: 40+21.58, 12.96' L	PIPE 72, 12" PVC INV. OUT = 783.35 22 LF, 0.45% SLOPE
PRO. STM TYPE "A" CB 123 A	RIM = 787.49 SUMP = 781.65 STA: 38+79.80, 13.03' L	PIPE 63, 12" PVC INV. OUT = 783.65 25 LF, 0.24% SLOPE

20' 0 10' 20' 40'
1" = 20'-0"

CHARLES W THOMPSON III REGISTERED NO. 11100657 STATE OF INDIANA PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 N. 123rd Street, Hammond, Indiana 46323
Phone: (219) 844-1960 Fax: (219) 844-7764
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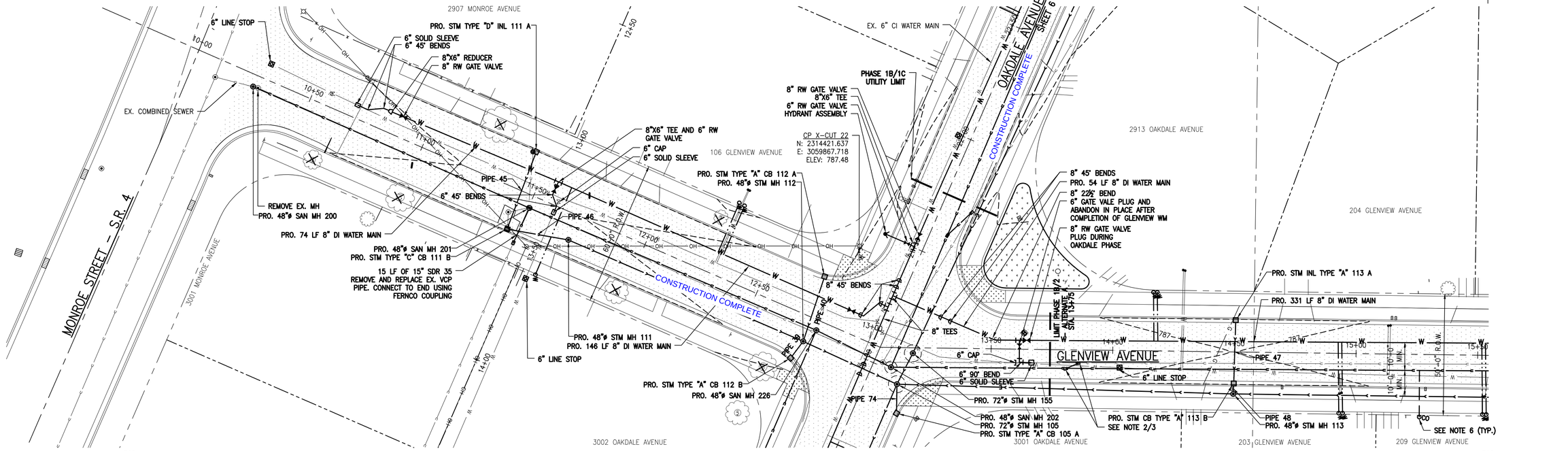
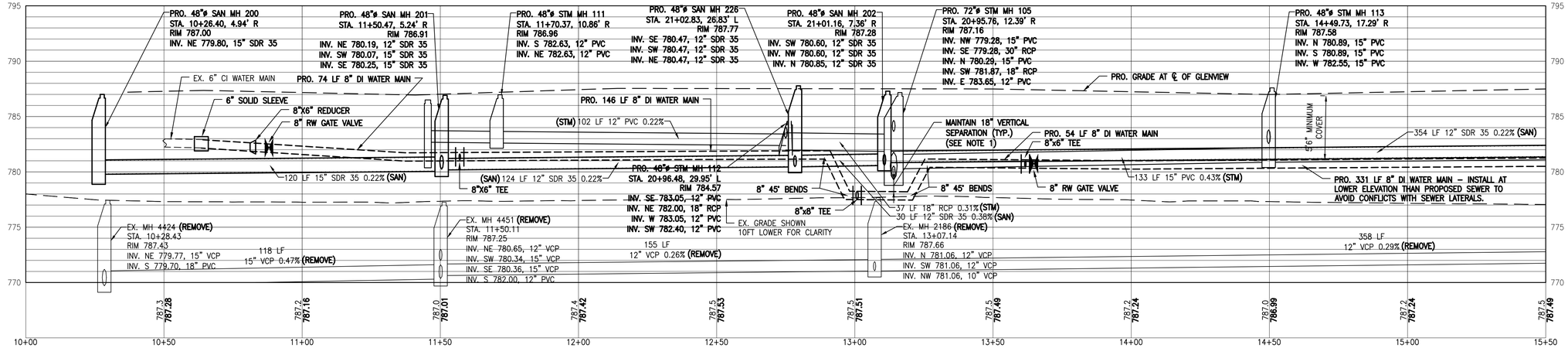
Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: DB(20)15 - 09:46
Drawing Title: OAKDALE/SILVERBROOK - UTILITY
Sub Title: PLAN & PROFILE - STA. 37+00 - STA. 43+20
Drawing Filename: X:\Projects\LAPORTE\WASTWTR\15-514\Dwgs\01_PRO_UTILITIES_15-514.DWG
Horizontal Scale: 1" = 5'-0"
Vertical Scale: 1" = 20'-0"
Designed: CWT
Drawn: RRH
Checked: JPP
SHEET 9 OF 37





NOTES:

1. MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER PIPES. MAINTAIN A 10 FOOT HORIZONTAL SEPARATION BETWEEN WATER AND SEWER PIPES AND 8 FOOT SEPARATION BETWEEN WATER MAIN AND SEWER STRUCTURES.
2. INSTALL FERNCO COUPLINGS AND PIPE TO TRANSITION FROM EXISTING SEWER TO NEW. TRANSITION PIPE AND COUPLINGS TO BE REMOVED PRIOR TO EXTENDING SEWER.
3. PLUG NEW STORM SEWER PIPE BETWEEN PHASES WITH BRICK, MORTAR AND HYDRAULIC CEMENT. BACKFILL WITH LIMESTONE AGGREGATE. INSTALLATION/ REMOVAL SHALL BE INCLUDED IN THE PIPE UNIT PRICE.
4. INSTALL FERNCO, AND PIPE TO TRANSITION FROM MANHOLE TO EXISTING PIPE. REMOVE PIPE AND FERNCO BEFORE EXTENDING SEWER IN LATER PHASE.
5. PROVIDE INLET PROTECTION PER SWPPP FOR ALL STORM AND COMBINED STRUCTURES.
6. 6" SDR 35 PVC SANITARY SERVICE, INCLUDING 6" BY MAINLINE DIAMETER TEE (NO INSERTA TEES), PIPE, NECESSARY FITTINGS AND CLEAN OUT. CAP AT PROPERTY LINE. SEWER VIDEO SHOWING LOCATIONS AND NUMBER OF SEWER SERVICES WILL BE PROVIDED BY LA PORTE WASTE WATER PRIOR TO CONSTRUCTION.
7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
- EXISTING INLET
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- PROPERTY CORNER
- EXISTING GAS
- EXISTING COMBINED SANITARY/STORM
- EXISTING STORM
- EXISTING WATERMAIN
- EXISTING FENCE
- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

- PRO. FIRE HYDRANT
- PRO. WATER VALVE
- PRO. BUFFALO BOX
- PRO. MAN HOLE
- PRO. CATCH BASIN
- LINE STOP
- SLEEVE
- 22° BEND
- 45° BEND
- PRO. SANITARY SEWER
- PRO. STORM SEWER
- PRO. WATER MAIN
- PRO. SANITARY CLEAN OUT
- 45° BEND
- CAP
- TEE
- 90° BEND

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "D" INL 111 A	RIM = 786.50 SUMP = 782.85 STA: 11+43.81, 17.10' L	PIPE 45, 12" PVC INV. OUT = 782.85 34 LF, 0.44% SLOPE
PRO. STM TYPE "C" CB 111 B	RIM = 786.50 SUMP = 780.70 STA: 11+45.49, 16.85' R	PIPE 45, 12" PVC INV. IN = 782.70 34 LF, 0.44% SLOPE PIPE 46, 12" PVC INV. OUT = 782.70 26 LF, 0.27% SLOPE
PRO. STM TYPE "A" CB 105 A	RIM = 787.70 SUMP = 781.75 STA: 20+84.72, 17.06' R	PIPE 74, 12" PVC INV. OUT = 783.75 12 LF, 0.83% SLOPE
PRO. STM TYPE "A" CB 112 B	RIM = 786.70 SUMP = 781.07 STA: 20+88.14, 31.94' L	PIPE 39, 12" PVC INV. OUT = 783.07 9 LF, 0.22% SLOPE
PRO. STM TYPE "A" CB 112 A	RIM = 787.22 SUMP = 781.11 STA: 21+24.45, 32.54' L	PIPE 40, 12" PVC INV. OUT = 783.11 28 LF, 0.22% SLOPE
PRO. STM CB TYPE "A" 113 B	RIM = 786.73 SUMP = 780.60 STA: 14+49.90, 13.01' R	PIPE 47, 12" PVC INV. IN = 782.80 26 LF, 0.38% SLOPE PIPE 48, 15" PVC INV. OUT = 782.60 4 LF, 1.17% SLOPE
PRO. STM INL TYPE "A" 113 A	RIM = 786.73 SUMP = 782.90 STA: 14+50.38, 13.05' L	PIPE 47, 12" PVC INV. OUT = 782.90 26 LF, 0.38% SLOPE

20' 0 10' 20' 40'
1" = 20'-0"

CHARLES W. THOMPSON III
REGISTERED
NO. 11100557
STATE OF INDIANA
PROFESSIONAL ENGINEER
6/21/2015

NIES engineering, inc.
2421 - 123rd Street, Hammond, Indiana 46323
Phone: (219) 844-8665 Fax: (219) 844-7764
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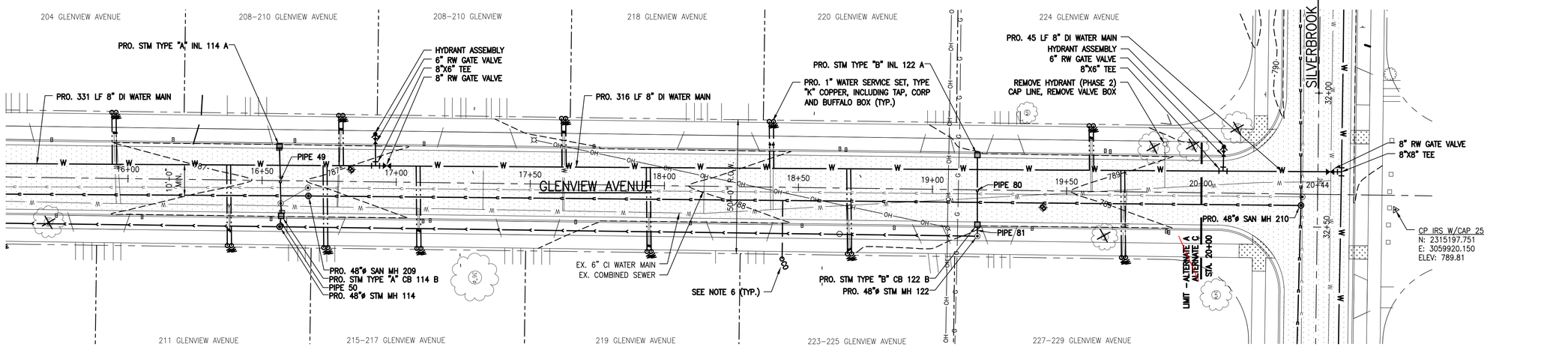
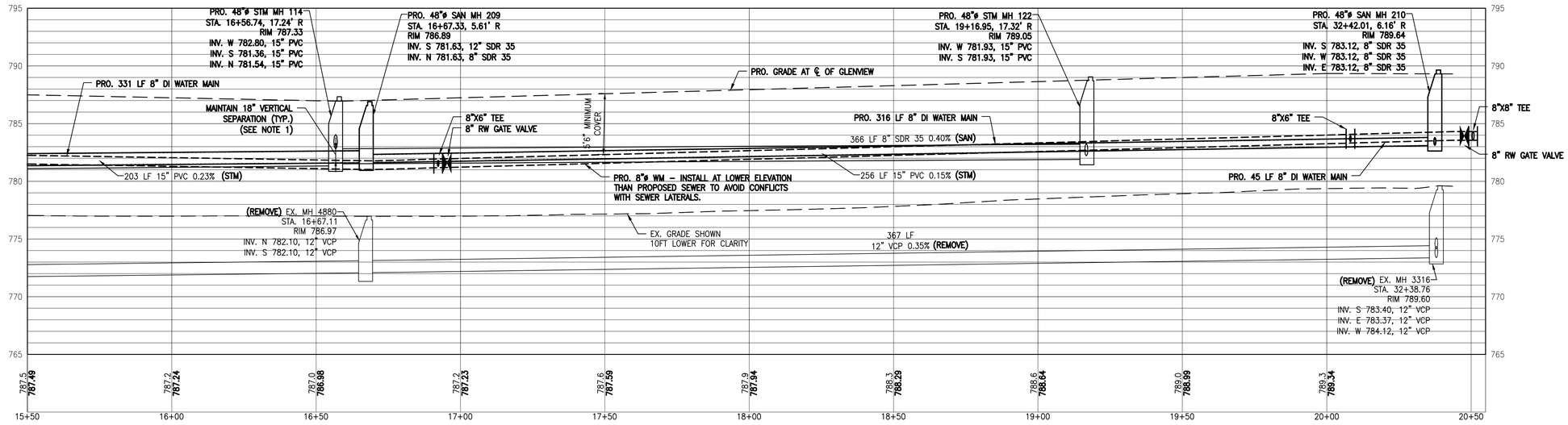
Drawing Title: GLENVIEW - UTILITY
Sub Title: PLAN & PROFILE - STA. 10+00 - STA. 15+50
Drawing Filename: X:\Projects\LAPORTE\WASTWATR\13-5140\dwgs\01_PRO_UTILITIES_13-5140.DWG\10GV
Horizontal Scale: 1" = 5'-0"
Vertical Scale: 1" = 20'-0"
Date & Time: 08/20/15 - 09:47
Project Number: 13-5140
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Customer: CITY OF LA PORTE, INDIANA
Designed: CWT
Drawn: RRH
Checked: JPP
SHEET 10 OF 37





NOTES:

1. MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER PIPES. MAINTAIN A 10 FOOT HORIZONTAL SEPARATION BETWEEN WATER AND SEWER PIPES AND 8 FOOT SEPARATION BETWEEN WATER MAIN AND SEWER STRUCTURES.
2. INSTALL FERNCO COUPLINGS AND PIPE TO TRANSITION FROM EXISTING SEWER TO NEW. TRANSITION PIPE AND COUPLINGS TO BE REMOVED PRIOR TO EXTENDING SEWER.
3. PLUG NEW STORM SEWER PIPE BETWEEN PHASES WITH BRICK, MORTAR AND HYDRAULIC CEMENT. BACKFILL WITH LIMESTONE AGGREGATE. INSTALLATION/ REMOVAL SHALL BE INCLUDED IN THE PIPE UNIT PRICE.
4. INSTALL FERNCO, AND PIPE TO TRANSITION FROM MANHOLE TO EXISTING PIPE. REMOVE PIPE AND FERNCO BEFORE EXTENDING SEWER IN LATER PHASE.
5. PROVIDE INLET PROTECTION PER SWPPP FOR ALL STORM AND COMBINED STRUCTURES.
6. 6" SDR 35 PVC SANITARY SERVICE, INCLUDING 6" BY MAINLINE DIAMETER TEE (NO INSERTA TEES), PIPE, NECESSARY FITTINGS AND CLEAN OUT. CAP AT PROPERTY LINE. SEWER VIDEO SHOWING LOCATIONS AND NUMBER OF SEWER SERVICES WILL BE PROVIDED BY LA PORTE WASTE WATER PRIOR TO CONSTRUCTION.
7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
- EXISTING INLET
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- PROPERTY CORNER
- EXISTING GAS
- EXISTING COMBINED SANITARY/STORM
- EXISTING STORM
- EXISTING WATERMAIN
- EXISTING FENCE
- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

PRO. FIRE HYDRANT		PRO. SANITARY SEWER	
PRO. WATER VALVE		PRO. STORM SEWER	
PRO. BUFFALO BOX		PRO. WATER MAIN	
PRO. MAN HOLE		PRO. SANITARY CLEAN OUT	
PRO. CATCH BASIN		45° BEND	
LINE STOP		CAP	
SLEEVE		TEE	
22° BEND		90° BEND	
45° BEND			

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "B" INL 122 A	RIM = 788.45 SUMP = 782.33 STA: 19+16.57, 12.98' L	PIPE 80, 12" PVC INV. OUT = 782.33 26 LF, 0.77% SLOPE
PRO. STM TYPE "B" CB 122 B	RIM = 788.45 SUMP = 780.13 STA: 19+16.90, 13.01' R	PIPE 80, 12" PVC INV. IN = 782.13 26 LF, 0.77% SLOPE PIPE 81, 15" PVC INV. OUT = 782.13 4 LF, 4.64% SLOPE
PRO. STM TYPE "A" INL 114 A	RIM = 786.69 SUMP = 783.10 STA: 16+56.33, 12.83' L	PIPE 49, 12" PVC INV. OUT = 783.10 26 LF, 0.38% SLOPE
PRO. STM TYPE "A" CB 114 B	RIM = 786.68 SUMP = 780.75 STA: 16+57.28, 13.15' R	PIPE 50, 15" PVC INV. IN = 782.75 4 LF, 1.21% SLOPE PIPE 49, 12" PVC INV. IN = 783.00 26 LF, 0.38% SLOPE

20' 0 10' 20' 40'
1" = 20'–0"

CHARLES W THOMPSON III
REGISTERED
NO. 11100557
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

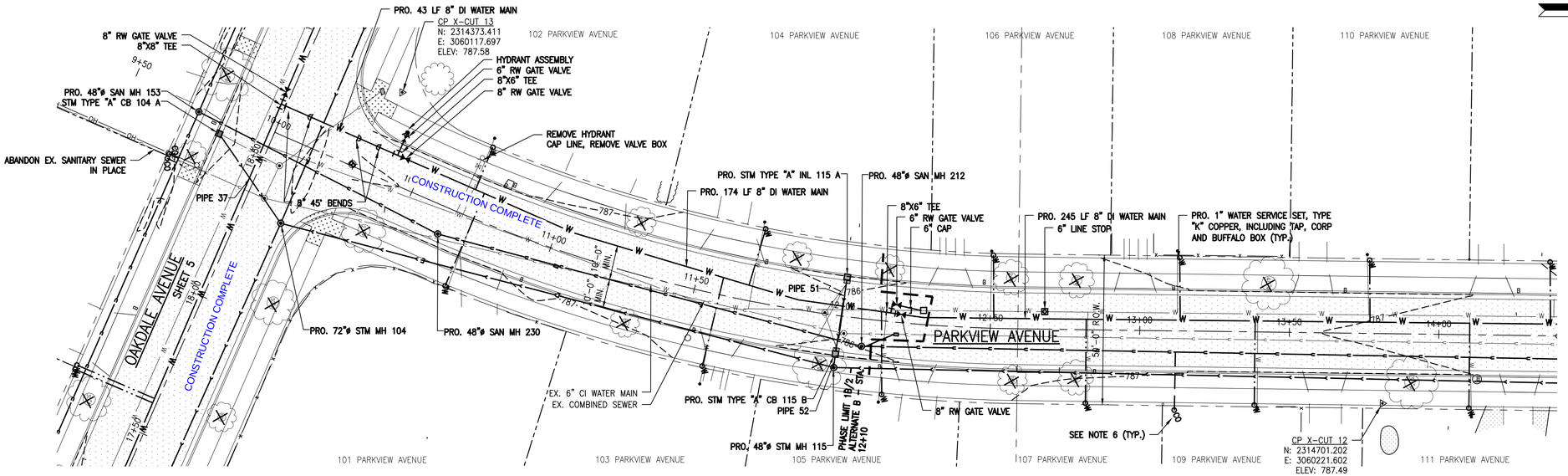
NIES engineering, inc.
2421 123rd Street, Hammond, Indiana 46323
Phone: (219) 844-1600 Fax: (219) 844-7764
Your Vision • Our Focus

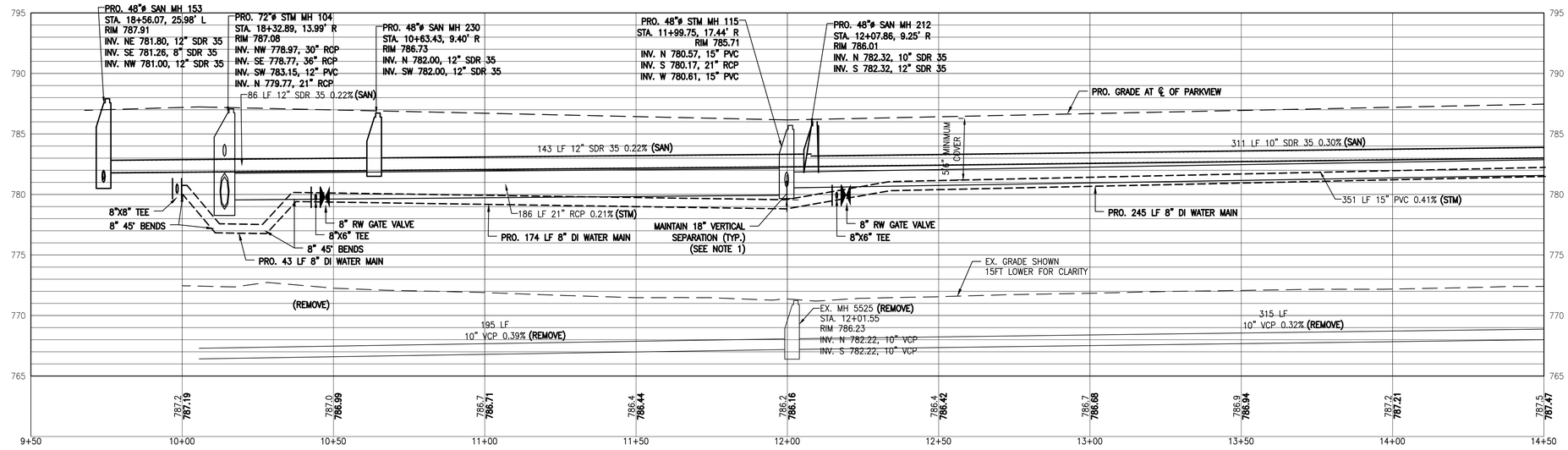
Drawing Title: GLENVIEW - UTILITY
Sub Title: PLAN & PROFILE - STA. 15+50 - STA. 20+44
Drawing Filename: X:\Projects\LAPORTE\WASTWATR\15-514\Dwgs\01_PRO_UTILITIES_15-514.DWG\11
Horizontal Scale: 1" = 20'-0" Vertical Scale: 1" = 5'-0"

Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/20/15 - 09:48

Designed: CWT
Drawn: RRH
Checked: JPP

SHEET 11 OF 37





NOTES:

1. MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER PIPES. MAINTAIN A 10 FOOT HORIZONTAL SEPARATION BETWEEN WATER AND SEWER PIPES AND 8 FOOT SEPARATION BETWEEN WATER MAIN AND SEWER STRUCTURES.
2. INSTALL FERNCO COUPLINGS AND PIPE TO TRANSITION FROM EXISTING SEWER TO NEW. TRANSITION PIPE AND COUPLINGS TO BE REMOVED PRIOR TO EXTENDING SEWER.
3. PLUG NEW STORM SEWER PIPE BETWEEN PHASES WITH BRICK, MORTAR AND HYDRAULIC CEMENT. BACKFILL WITH LIMESTONE AGGREGATE. INSTALLATION/ REMOVAL SHALL BE INCLUDED IN THE PIPE UNIT PRICE.
4. INSTALL FERNCO, AND PIPE TO TRANSITION FROM MANHOLE TO EXISTING PIPE. REMOVE PIPE AND FERNCO BEFORE EXTENDING SEWER IN LATER PHASE.
5. PROVIDE INLET PROTECTION PER SWPPP FOR ALL STORM AND COMBINED STRUCTURES.
6. 6" SDR 35 PVC SANITARY SERVICE, INCLUDING 6" BY MAINLINE DIAMETER TEE (NO INSERTA TEES), PIPE, NECESSARY FITTINGS AND CLEAN OUT. CAP AT PROPERTY LINE. SEWER VIDEO SHOWING LOCATIONS AND NUMBER OF SEWER SERVICES WILL BE PROVIDED BY LA PORTE WASTE WATER PRIOR TO CONSTRUCTION.
7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
- EXISTING INLET
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- PROPERTY CORNER
- EXISTING GAS
- EXISTING COMBINED SANITARY/STORM
- EXISTING STORM
- EXISTING WATERMAIN
- EXISTING FENCE
- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

- PRO. FIRE HYDRANT
- PRO. WATER VALVE
- PRO. BUFFALO BOX
- PRO. MAN HOLE
- PRO. CATCH BASIN
- LINE STOP
- SLEEVE
- 22° BEND
- 45° BEND
- PRO. SANITARY SEWER
- PRO. STORM SEWER
- PRO. WATER MAIN
- PRO. SANITARY CLEAN OUT
- 45° BEND
- CAP
- TEE
- 90° BEND

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "A" INL 115 A	RIM = 785.90 SUMP = 780.95 STA: 12+00.32, 13.11' L	PIPE 51, 12" PVC INV. OUT = 780.95 26 LF, 0.38% SLOPE
PRO. STM TYPE "A" CB 115 B	RIM = 785.90 SUMP = 778.65 STA: 11+99.71, 12.90' R	PIPE 51, 12" PVC INV. IN = 780.85 26 LF, 0.38% SLOPE PIPE 52, 15" PVC INV. OUT = 780.65 5 LF, 0.88% SLOPE

20' 0 10' 20' 40'
1" = 20'-0"

CHARLES W. THOMPSON III
REGISTERED
NO. 11100557
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

nies engineering, inc.
2421 123rd Street, Hammond, Indiana 46323
Phone: (219) 844-8683 Fax: (219) 844-7764
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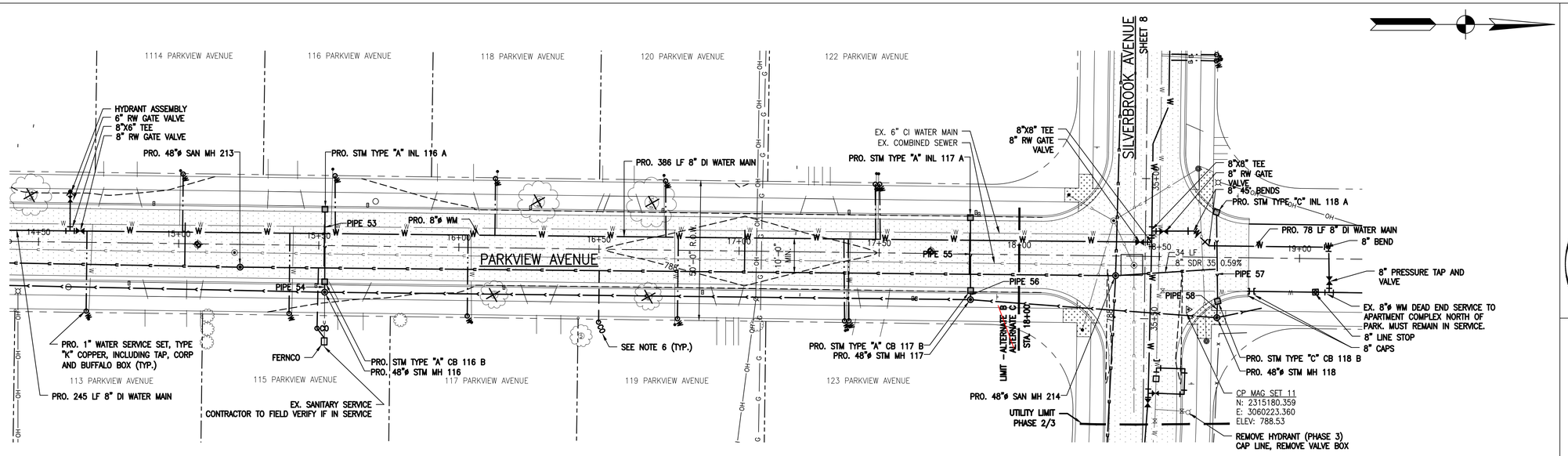
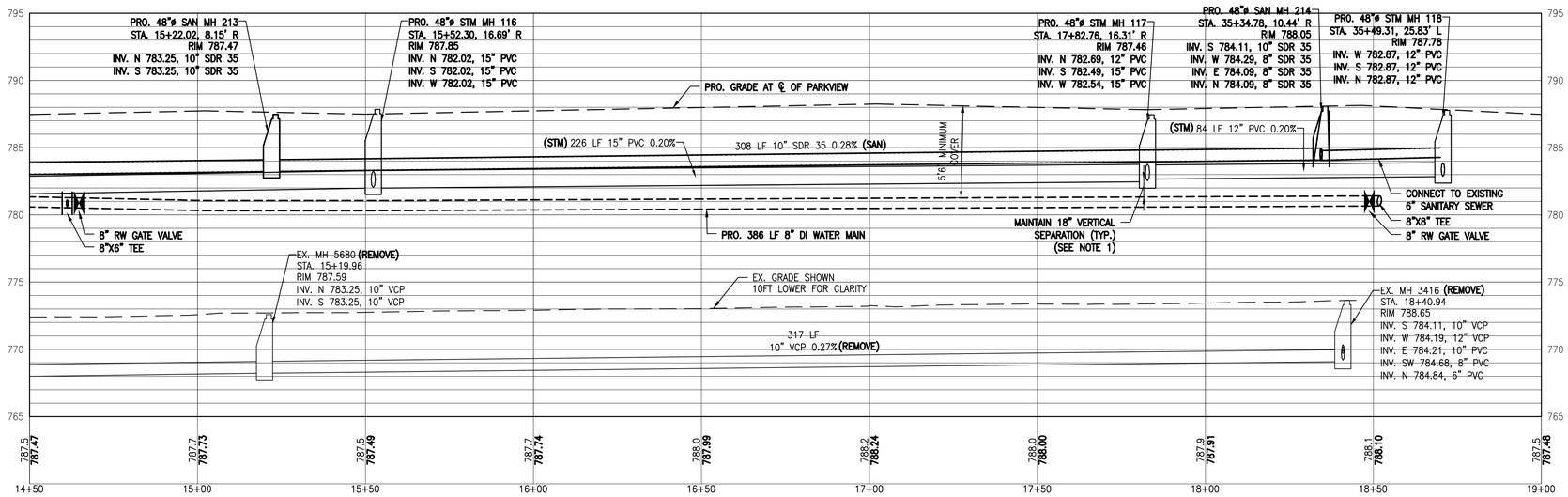
Drawing Title: PARKVIEW - UTILITY
Sub Title: PLAN & PROFILE - STA. 10+00 - STA. 14+50
Drawing Filename: X:\Projects\LAPORTE\WASTWATR\15-5140\dwgs\01_PRO_UTILITIES_15-514.DWG\12 PV
Horizontal Scale: 1" = 20'-0" Vertical Scale: 1" = 5'-0"
Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/20/15 - 09:48
Designed: CWT Drawn: RRH Checked: JPP

SHEET 12 OF 37





NOTES:

1. MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER PIPES. MAINTAIN A 10 FOOT HORIZONTAL SEPARATION BETWEEN WATER AND SEWER PIPES AND 8 FOOT SEPARATION BETWEEN WATER MAIN AND SEWER STRUCTURES.
2. INSTALL FERNCO COUPLINGS AND PIPE TO TRANSITION FROM EXISTING SEWER TO NEW. TRANSITION PIPE AND COUPLINGS TO BE REMOVED PRIOR TO EXTENDING SEWER.
3. PLUG NEW STORM SEWER PIPE BETWEEN PHASES WITH BRICK, MORTAR AND HYDRAULIC CEMENT. BACKFILL WITH LIMESTONE AGGREGATE. INSTALLATION/ REMOVAL SHALL BE INCLUDED IN THE PIPE UNIT PRICE.
4. INSTALL FERNCO, AND PIPE TO TRANSITION FROM MANHOLE TO EXISTING PIPE. REMOVE PIPE AND FERNCO BEFORE EXTENDING SEWER IN LATER PHASE.
5. PROVIDE INLET PROTECTION PER SWPPP FOR ALL STORM AND COMBINED STRUCTURES.
6. 6" SDR 35 PVC SANITARY SERVICE, INCLUDING 6" BY MAINLINE DIAMETER TEE (NO INSERTA TEES), PIPE, NECESSARY FITTINGS AND CLEAN OUT. CAP AT PROPERTY LINE. SEWER VIDEO SHOWING LOCATIONS AND NUMBER OF SEWER SERVICES WILL BE PROVIDED BY LA PORTE WASTE WATER PRIOR TO CONSTRUCTION.
7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
- EXISTING INLET
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- PROPERTY CORNER
- EXISTING GAS
- EXISTING COMBINED SANITARY/STORM
- EXISTING STORM
- EXISTING WATERMAIN
- EXISTING FENCE
- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

- PRO. FIRE HYDRANT
- PRO. WATER VALVE
- PRO. BUFFALO BOX
- PRO. MAN HOLE
- PRO. CATCH BASIN
- LINE STOP
- SLEEVE
- 22° BEND
- 45° BEND
- PRO. SANITARY SEWER
- PRO. STORM SEWER
- PRO. WATER MAIN
- PRO. SANITARY CLEAN OUT
- 45° BEND
- CAP
- TEE
- 90° BEND

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "A" CB 116 B	RIM = 787.24 SUMP = 780.08 STA: 15+52.30, 12.99' R	PIPE 53, 12" PVC INV. IN = 782.18 26 LF, 0.39% SLOPE PIPE 54, 15" PVC INV. OUT = 782.08 4 LF, 1.62% SLOPE
PRO. STM TYPE "A" INL 116 A	RIM = 787.24 SUMP = 782.28 STA: 15+52.06, 12.90' L	PIPE 53, 12" PVC INV. OUT = 782.28 26 LF, 0.39% SLOPE
PRO. STM TYPE "A" CB 117 B	RIM = 787.57 SUMP = 780.54 STA: 17+82.77, 13.02' R	PIPE 55, 12" PVC INV. IN = 782.74 26 LF, 0.31% SLOPE PIPE 56, 15" PVC INV. OUT = 782.54 3 LF, 0.00% SLOPE
PRO. STM TYPE "A" INL 117 A	RIM = 787.57 SUMP = 782.82 STA: 17+82.36, 12.96' L	PIPE 55, 12" PVC INV. OUT = 782.82 26 LF, 0.31% SLOPE
PRO. STM TYPE "C" CB 118 B	RIM = 787.84 SUMP = 780.89 STA: 35+43.44, 26.08' L	PIPE 57, 12" PVC INV. IN = 782.89 32 LF, 0.35% SLOPE PIPE 58, 12" PVC INV. OUT = 782.89 6 LF, 0.34% SLOPE
PRO. STM TYPE "C" INL 118 A	RIM = 787.84 SUMP = 783.00 STA: 35+11.66, 25.29' L	PIPE 57, 12" PVC INV. OUT = 783.00 32 LF, 0.35% SLOPE

20' 0 10' 20' 40'
1" = 20'-0"

CHARLES W. THOMPSON III
REGISTERED
NO. 11100657
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 123rd Street, Hammond, Indiana 46323
Phone: (219) 844-8680 Fax: (219) 844-7764
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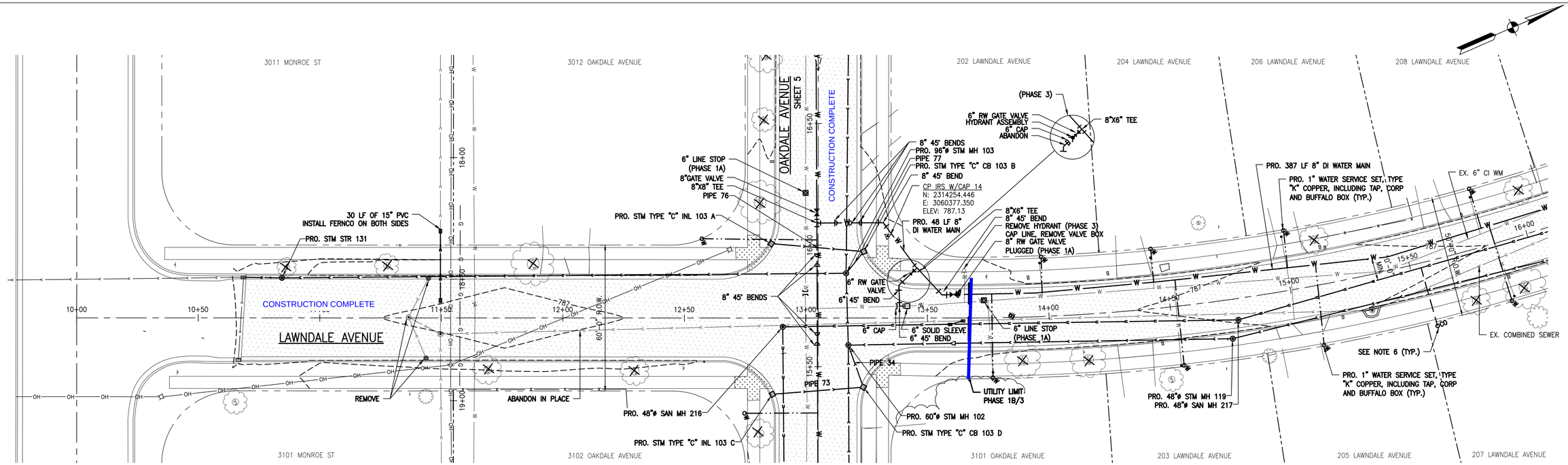
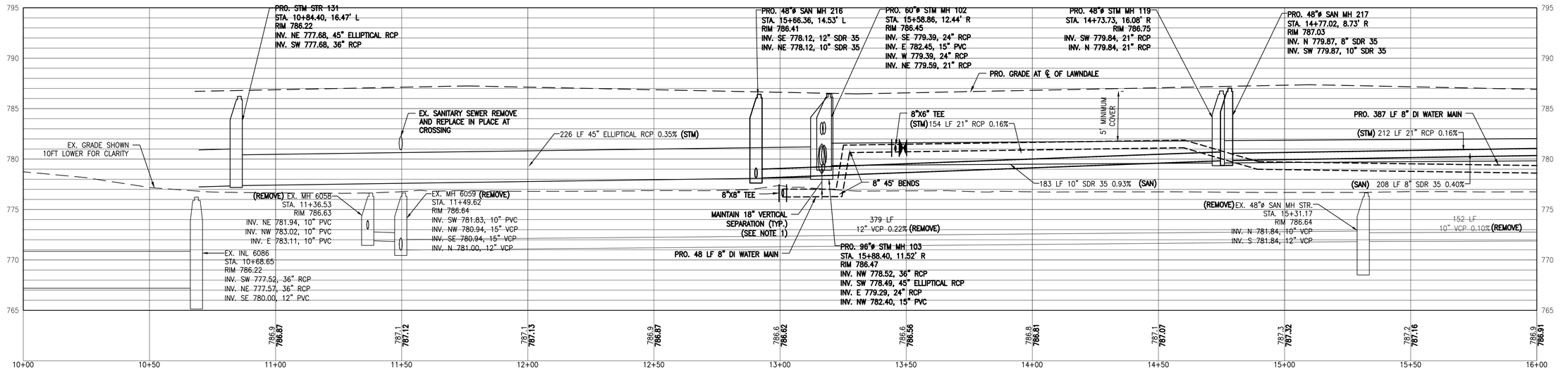
Drawing Title: PARKVIEW - UTILITY
Sub Title: PLAN & PROFILE - STA. 14+50 - STA. 19+00
Drawing Filename: X:\Projects\LAPORTE\WASTWATR\15-514\Dwgs\01_PRO_UTILITIES_15-514.DWG\13
Horizontal Scale: 1" = 20'-0" Vertical Scale: 1" = 5'-0"
Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/20/15 - 09:49
Designed: CWT Drawn: RRH Checked: JPP

SHEET 13 OF 37





NOTES:

1. MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER PIPES. MAINTAIN A 10 FOOT HORIZONTAL SEPARATION BETWEEN WATER AND SEWER PIPES AND 8 FOOT SEPARATION BETWEEN WATER MAIN AND SEWER STRUCTURES.
2. INSTALL FERNCO COUPLINGS AND PIPE TO TRANSITION FROM EXISTING SEWER TO NEW. TRANSITION PIPE AND COUPLINGS TO BE REMOVED PRIOR TO EXTENDING SEWER.
3. PLUG NEW STORM SEWER PIPE BETWEEN PHASES WITH BRICK, MORTAR AND HYDRAULIC CEMENT. BACKFILL WITH LIMESTONE AGGREGATE. INSTALLATION/ REMOVAL SHALL BE INCLUDED IN THE PIPE UNIT PRICE.
4. INSTALL FERNCO, AND PIPE TO TRANSITION FROM MANHOLE TO EXISTING PIPE. REMOVE PIPE AND FERNCO BEFORE EXTENDING SEWER IN LATER PHASE.
5. PROVIDE INLET PROTECTION PER SWPPP FOR ALL STORM AND COMBINED STRUCTURES.
6. 6" SDR 35 PVC SANITARY SERVICE, INCLUDING 6" BY MAINLINE DIAMETER TEE (NO INSERTA TEES), PIPE, NECESSARY FITTINGS AND CLEAN OUT. CAP AT PROPERTY LINE. SEWER VIDEO SHOWING LOCATIONS AND NUMBER OF SEWER SERVICES WILL BE PROVIDED BY LA PORTE WASTE WATER PRIOR TO CONSTRUCTION.
7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
- EXISTING INLET
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- PROPERTY CORNER
- EXISTING GAS
- EXISTING COMBINED SANITARY/STORM
- EXISTING STORM
- EXISTING WATERMAIN
- EXISTING FENCE
- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

- PRO. FIRE HYDRANT
- PRO. WATER VALVE
- PRO. BUFFALO BOX
- PRO. MAN HOLE
- PRO. CATCH BASIN
- LINE STOP
- SLEEVE
- 22° BEND
- 45° BEND
- PRO. SANITARY SEWER
- PRO. STORM SEWER
- PRO. WATER MAIN
- PRO. SANITARY CLEAN OUT
- 45° BEND
- CAP
- TEE
- 90° BEND

PROPOSED STRUCTURE DATA TABLE		
STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "C" INL 103 C	RIM = 786.25 SUMP = 782.95 STA: 15+38.63, 18.82' L	PIPE 73, 12" PVC INV. OUT = 782.95 38 LF, 0.53% SLOPE
PRO. STM TYPE "C" CB 103 D	RIM = 786.15 SUMP = 782.55 STA: 15+41.57, 18.62' R	PIPE 73, 12" PVC INV. IN = 782.75 38 LF, 0.53% SLOPE PIPE 34, 15" PVC INV. OUT = 782.55 18 LF, 0.54% SLOPE
PRO. STM TYPE "C" INL 103 A	RIM = 786.25 SUMP = 782.85 STA: 16+00.60, 19.31' L	PIPE 76, 12" PVC INV. OUT = 782.85 38 LF, 0.52% SLOPE
PRO. STM TYPE "C" CB 103 B	RIM = 786.15 SUMP = 780.50 STA: 15+97.33, 18.79' R	PIPE 76, 12" PVC INV. IN = 782.65 38 LF, 0.52% SLOPE PIPE 77, 15" PVC INV. OUT = 782.50 12 LF, 0.87% SLOPE

20' 0 10' 20' 40'
1" = 20'-0"

CHARLES W THOMPSON III
REGISTERED
NO. 11100557
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 123rd Street, Hammond, Indiana, 46323
Phone: (219) 844-8660 Fax: (219) 844-7764
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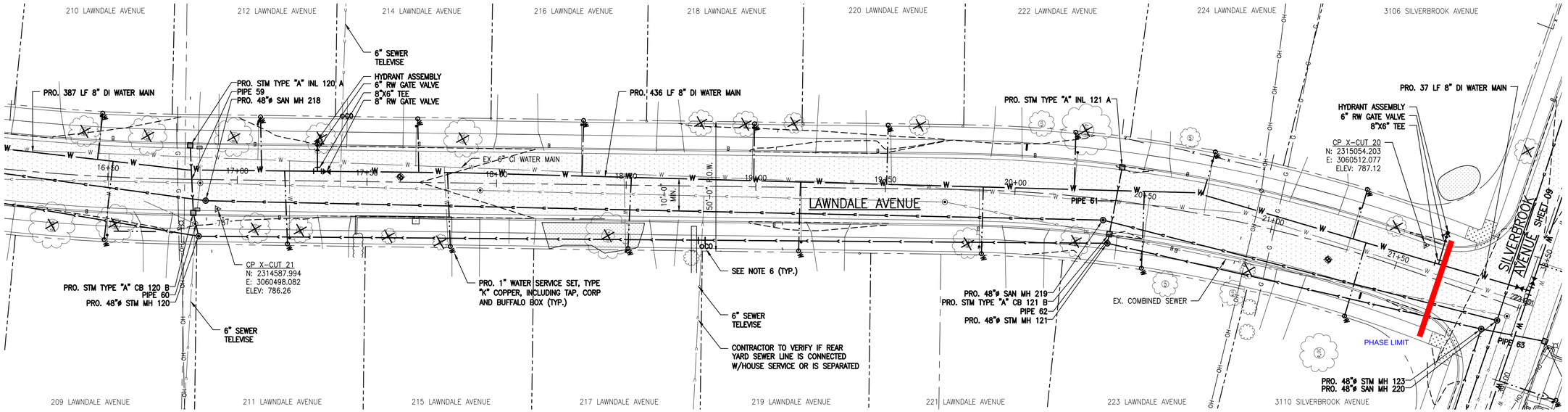
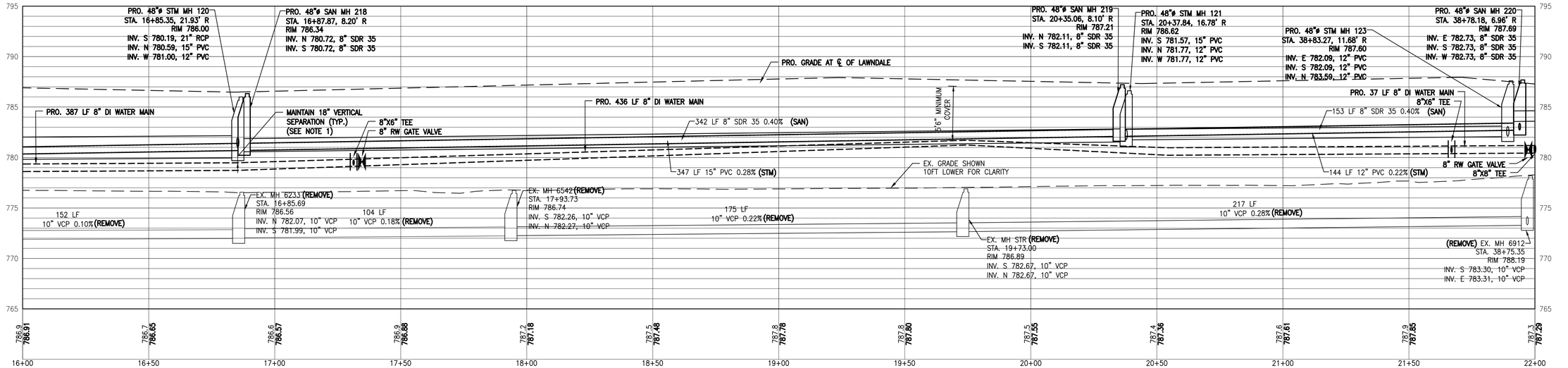
Drawing Title: LAWNDALE - UTILITY
Sub Title: PLAN & PROFILE - STA. 10+00 - STA. 16+00
Drawing Filename: X:\Projects\LAPORTE\WASTWATR\15-5140\dwgs\01. PRO. UTILITIES 15-5140.DWG
Horizontal Scale: 1" = 20'-0"
Vertical Scale: 1" = 5'-0"

Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/20/15 - 09:49

Designed: CWT
Drawn: RRH
Checked: JPP

SHEET 14 OF 37





NOTES:

1. MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER PIPES. MAINTAIN A 10 FOOT HORIZONTAL SEPARATION BETWEEN WATER AND SEWER PIPES AND 8 FOOT SEPARATION BETWEEN WATER MAIN AND SEWER STRUCTURES.
2. INSTALL FERNCO COUPLINGS AND PIPE TO TRANSITION FROM EXISTING SEWER TO NEW. TRANSITION PIPE AND COUPLINGS TO BE REMOVED PRIOR TO EXTENDING SEWER.
3. PLUG NEW STORM SEWER PIPE BETWEEN PHASES WITH BRICK, MORTAR AND HYDRAULIC CEMENT. BACKFILL WITH LIMESTONE AGGREGATE. INSTALLATION/ REMOVAL SHALL BE INCLUDED IN THE PIPE UNIT PRICE.
4. INSTALL FERNCO, AND PIPE TO TRANSITION FROM MANHOLE TO EXISTING PIPE. REMOVE PIPE AND FERNCO BEFORE EXTENDING SEWER IN LATER PHASE.
5. PROVIDE INLET PROTECTION PER SWPPP FOR ALL STORM AND COMBINED STRUCTURES.
6. 6" SDR 35 PVC SANITARY SERVICE, INCLUDING 6" BY MAINLINE DIAMETER TEE (NO INSERTA TEES), PIPE, NECESSARY FITTINGS AND CLEAN OUT. CAP AT PROPERTY LINE. SEWER VIDEO SHOWING LOCATIONS AND NUMBER OF SEWER SERVICES WILL BE PROVIDED BY LA PORTE WASTE WATER PRIOR TO CONSTRUCTION.
7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
- EXISTING INLET
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- PROPERTY CORNER
- EXISTING GAS
- EXISTING COMBINED SANITARY/STORM
- EXISTING STORM
- EXISTING WATERMAIN
- EXISTING FENCE
- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

- PRO. FIRE HYDRANT
- PRO. WATER VALVE
- PRO. BUFFALO BOX
- PRO. MAN HOLE
- PRO. CATCH BASIN
- LINE STOP
- SLEEVE
- 22° BEND
- 45° BEND
- PRO. SANITARY SEWER
- PRO. STORM SEWER
- PRO. WATER MAIN
- PRO. SANITARY CLEAN OUT
- 45° BEND
- CAP
- TEE
- 90° BEND

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "A" INL 121 A	RIM = 787.01 SUMP = 783.20 STA: 20+39.89, 12.99' L	PIPE 61, 12" PVC INV. OUT = 783.20 26 LF, 0.76% SLOPE
PRO. STM TYPE "A" CB 121 B	RIM = 787.01 SUMP = 781.00 STA: 20+38.19, 13.14' R	PIPE 61, 12" PVC INV. IN = 783.00 26 LF, 0.76% SLOPE PIPE 62, 12" PVC INV. OUT = 783.00 4 LF, 33.63% SLOPE
PRO. STM TYPE "A" CB 120 B	RIM = 786.22 SUMP = 780.10 STA: 16+83.19, 12.95' R	PIPE 59, 12" PVC INV. IN = 782.10 26 LF, 0.77% SLOPE PIPE 60, 12" PVC INV. OUT = 782.10 9 LF, 11.91% SLOPE
PRO. STM TYPE "A" INL 120 A	RIM = 786.23 SUMP = 782.30 STA: 16+81.65, 13.05' L	PIPE 59, 12" PVC INV. OUT = 782.30 26 LF, 0.77% SLOPE

20' 0 10' 20' 40'
1" = 20'-0"

CHARLES W THOMPSON III
REGISTERED
NO. 11100657
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 123rd Street, Hammond, Indiana, 46323
Phone: (219) 844-8661 Fax: (219) 844-7764
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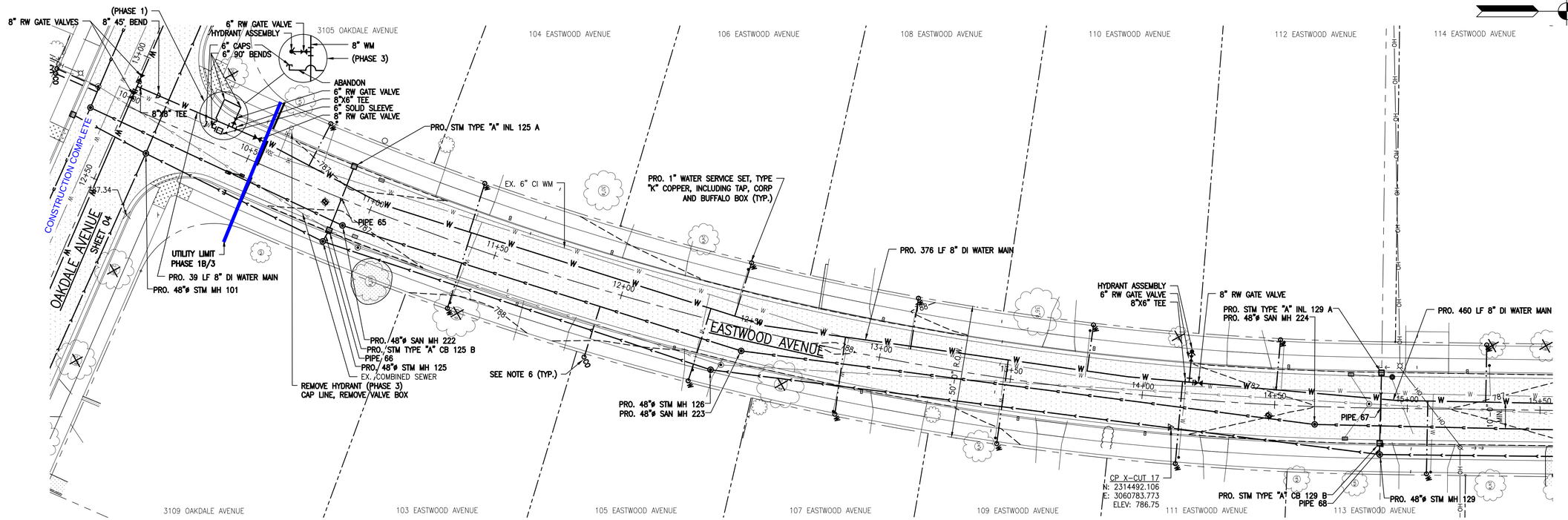
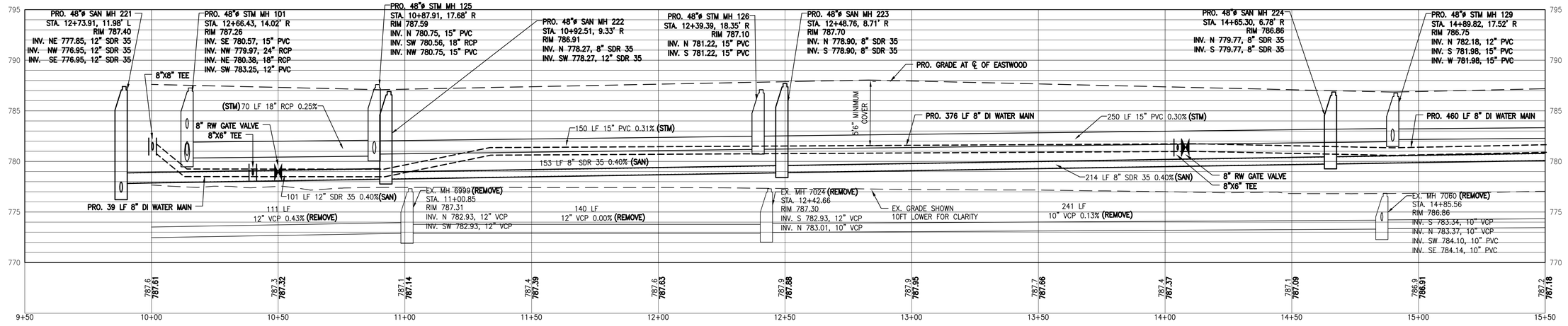
Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/20/15 - 09:50
Drawing Title: LAWNDALE - UTILITY
Sub Title: PLAN & PROFILE - STA. 16+00 - STA. 22+00
Drawing Filename: X:\Projects\LAPORTE\WASTWATR\15-514\Dwgs\01_PRO_UTILITIES_15-514.DWG
Horizontal Scale: 1" = 20'-0"
Vertical Scale: 1" = 5'-0"
Designed: CWT
Drawn: RRH
Checked: JPP
SHEET 15 OF 37





NOTES:

1. MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER PIPES. MAINTAIN A 10 FOOT HORIZONTAL SEPARATION BETWEEN WATER AND SEWER PIPES AND 8 FOOT SEPARATION BETWEEN WATER MAIN AND SEWER STRUCTURES.
2. INSTALL FERNCO COUPLINGS AND PIPE TO TRANSITION FROM EXISTING SEWER TO NEW. TRANSITION PIPE AND COUPLINGS TO BE REMOVED PRIOR TO EXTENDING SEWER.
3. PLUG NEW STORM SEWER PIPE BETWEEN PHASES WITH BRICK, MORTAR AND HYDRAULIC CEMENT. BACKFILL WITH LIMESTONE AGGREGATE. INSTALLATION/ REMOVAL SHALL BE INCLUDED IN THE PIPE UNIT PRICE.
4. INSTALL FERNCO, AND PIPE TO TRANSITION FROM MANHOLE TO EXISTING PIPE. REMOVE PIPE AND FERNCO BEFORE EXTENDING SEWER IN LATER PHASE.
5. PROVIDE INLET PROTECTION PER SWPPP FOR ALL STORM AND COMBINED STRUCTURES.
6. 6" SDR 35 PVC SANITARY SERVICE, INCLUDING 6" BY MAINLINE DIAMETER TEE (NO INSERTA TEES), PIPE, NECESSARY FITTINGS AND CLEAN OUT. CAP AT PROPERTY LINE. SEWER VIDEO SHOWING LOCATIONS AND NUMBER OF SEWER SERVICES WILL BE PROVIDED BY LA PORTE WASTE WATER PRIOR TO CONSTRUCTION.
7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
- EXISTING INLET
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- PROPERTY CORNER
- EXISTING GAS
- EXISTING COMBINED SANITARY/STORM
- EXISTING STORM
- EXISTING WATERMAIN
- EXISTING FENCE
- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

- PRO. FIRE HYDRANT
- PRO. WATER VALVE
- PRO. BUFFALO BOX
- PRO. MAN HOLE
- PRO. CATCH BASIN
- LINE STOP
- SLEEVE
- 22° BEND
- 45° BEND
- PRO. SANITARY SEWER
- PRO. STORM SEWER
- PRO. WATER MAIN
- PRO. SANITARY CLEAN OUT
- 45° BEND
- CAP
- TEE
- 90° BEND

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "A" CB 125 B	RIM = 786.84 SUMP = 778.80 STA: 10+88.53, 12.91' R	PIPE 65, 12" PVC INV. IN = 781.00 26 LF, 0.58% SLOPE PIPE 66, 15" PVC INV. OUT = 780.80 5 LF, 1.04% SLOPE
PRO. STM TYPE "A" INL 125 A	RIM = 786.84 SUMP = 781.15 STA: 10+88.32, 13.01' L	PIPE 65, 12" PVC INV. OUT = 781.15 26 LF, 0.58% SLOPE
PRO. STM TYPE "A" INL 129 A	RIM = 786.59 SUMP = 782.38 STA: 14+90.10, 13.31' L	PIPE 67, 12" PVC INV. OUT = 782.38 27 LF, 0.56% SLOPE
PRO. STM TYPE "A" CB 129 B	RIM = 786.59 SUMP = 780.03 STA: 14+89.76, 13.31' R	PIPE 67, 12" PVC INV. IN = 782.23 27 LF, 0.56% SLOPE PIPE 68, 15" PVC INV. OUT = 782.03 4 LF, 1.19% SLOPE

20' 0 10' 20' 40'
1" = 20'-0"

CHARLES W THOMPSON III
REGISTERED
NO. 11100557
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 173rd Street, Hammond, Indiana 46323
Phone: (219) 844-1600 Fax: (219) 844-7764
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EASTWOOD - UTILITY
PLAN & PROFILE - STA. 9+50 - STA. 15+50
X:\Projects\LAPORTE\WASTWATR\15-5140\dwgs\01_PRO_UTILITIES_15-5114.DWG\16
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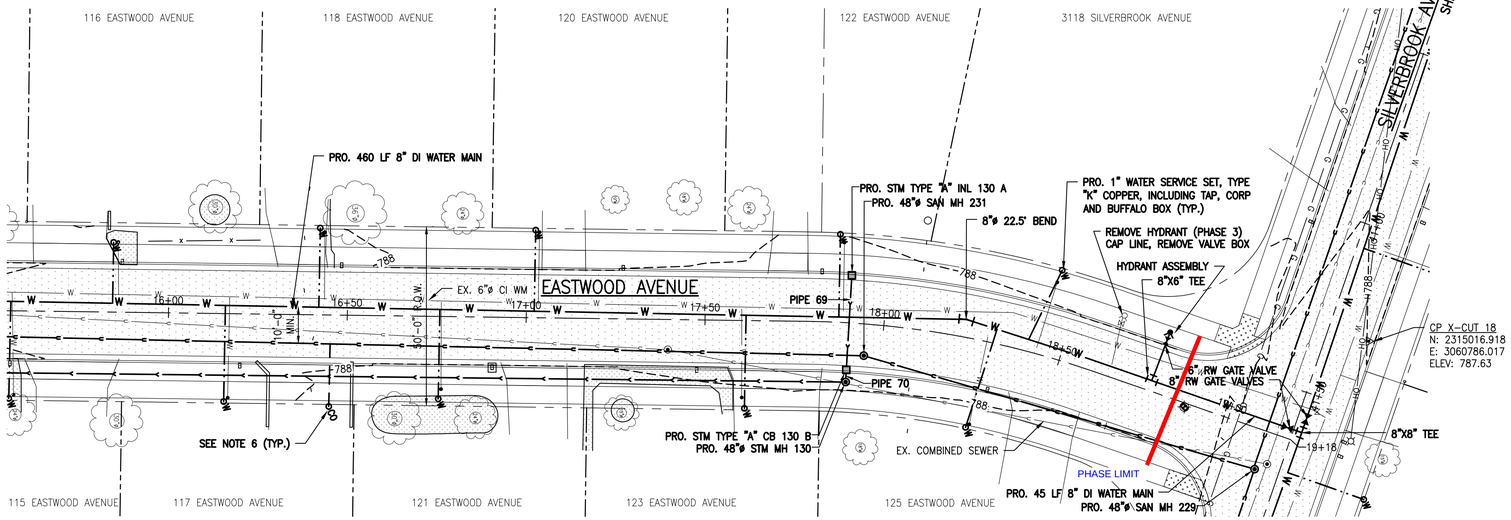
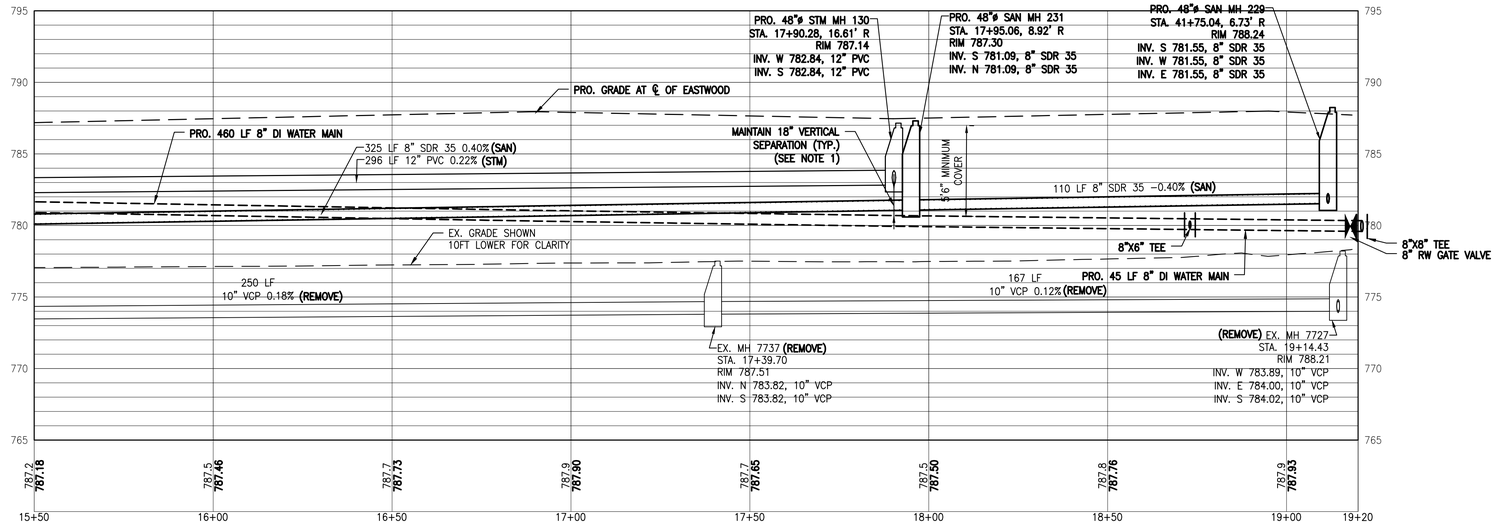
Sub Title:
Drawing Filename:
Horizontal Scale: 1" = 20'-0"
Vertical Scale: 1" = 5'-0"
CITY OF LA PORTE, INDIANA
MONROE MANOR SEWER SEPARATION PROJECT
Customer:
Project Name:
Project Number: 15-5114
Date & Time: 08/20/15 - 09:51
Designed: CWT
Drawn: RRH
Checked: JPP
SHEET 16 OF 37





NOTES:

1. MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER PIPES. MAINTAIN A 10 FOOT HORIZONTAL SEPARATION BETWEEN WATER AND SEWER PIPES AND 8 FOOT SEPARATION BETWEEN WATER MAIN AND SEWER STRUCTURES.
2. INSTALL FERNCO COUPLINGS AND PIPE TO TRANSITION FROM EXISTING SEWER TO NEW. TRANSITION PIPE AND COUPLINGS TO BE REMOVED PRIOR TO EXTENDING SEWER.
3. PLUG NEW STORM SEWER PIPE BETWEEN PHASES WITH BRICK, MORTAR AND HYDRAULIC CEMENT. BACKFILL WITH LIMESTONE AGGREGATE. INSTALLATION/ REMOVAL SHALL BE INCLUDED IN THE PIPE UNIT PRICE.
4. INSTALL FERNCO, AND PIPE TO TRANSITION FROM MANHOLE TO EXISTING PIPE. REMOVE PIPE AND FERNCO BEFORE EXTENDING SEWER IN LATER PHASE.
5. PROVIDE INLET PROTECTION PER SWPPP FOR ALL STORM AND COMBINED STRUCTURES.
6. 6" SDR 35 PVC SANITARY SERVICE, INCLUDING 6" BY MAINLINE DIAMETER TEE (NO INSERTA TEES), PIPE, NECESSARY FITTINGS AND CLEAN OUT. CAP AT PROPERTY LINE. SEWER VIDEO SHOWING LOCATIONS AND NUMBER OF SEWER SERVICES WILL BE PROVIDED BY LA PORTE WASTE WATER PRIOR TO CONSTRUCTION.
7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
- EXISTING INLET
- EXISTING UTILITY POLE
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- EXISTING COMBINED SANITARY/STORM
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- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

- PRO. FIRE HYDRANT
- PRO. WATER VALVE
- PRO. BUFFALO BOX
- PRO. MAN HOLE
- PRO. CATCH BASIN
- LINE STOP
- SLEEVE
- 22° BEND
- 45° BEND
- PRO. SANITARY SEWER
- PRO. STORM SEWER
- PRO. WATER MAIN
- PRO. SANITARY CLEAN OUT
- 45° BEND
- CAP
- TEE
- 90° BEND

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "A" INL 130 A	RIM = 787.19 SUMP = 783.04 STA: 17+90.24, 13.27' L	PIPE 69, 12" PVC INV. OUT = 783.04 26 LF, 0.57% SLOPE
PRO. STM TYPE "A" CB 130 B	RIM = 787.19 SUMP = 780.84 STA: 41+86.07, 123.62' R	PIPE 69, 12" PVC INV. IN = 782.89 26 LF, 0.57% SLOPE PIPE 70, 12" PVC INV. OUT = 782.84 3 LF, 0.00% SLOPE

20' 0 10' 20' 40'
1" = 20'-0"

CHARLES W. THOMPSON III
REGISTERED
NO. 11100657
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 123rd Street, Hammond, Indiana 46323
Phone: (219) 844-8680 Fax: (219) 844-7764
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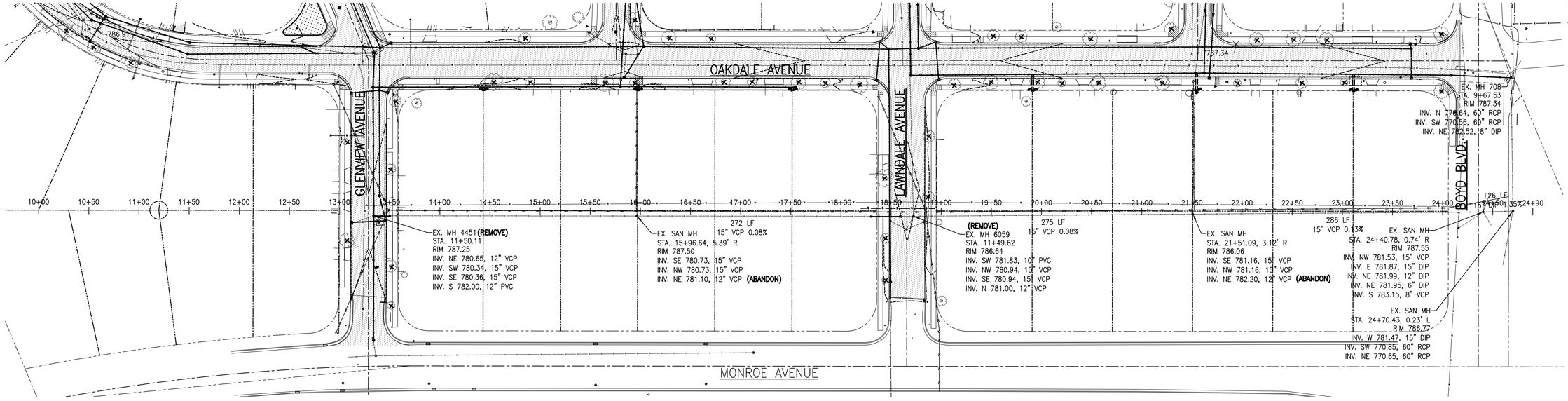
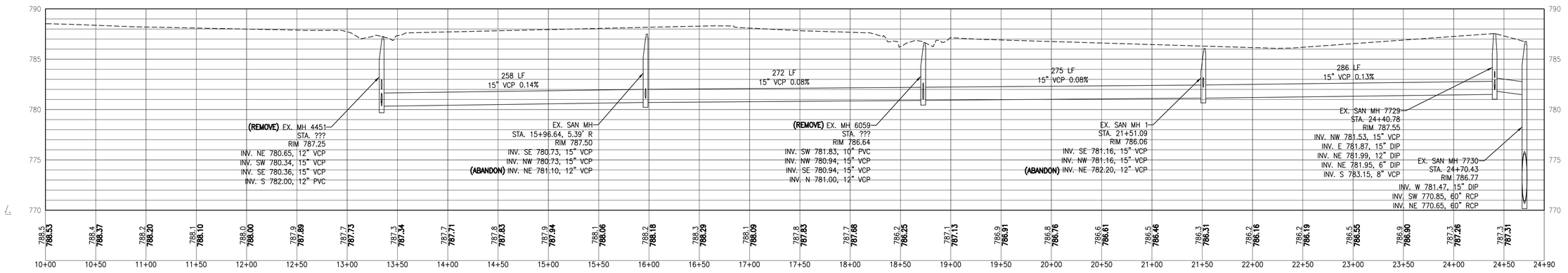
Drawing Title: EASTWOOD - UTILITY
Sub Title: PLAN AND PROFILE - STA. 15+50 - STA. 19+20
Drawing Filename: X:\Projects\LAPORTEWASTWATR\15-514\Dwgs\01_PRO_UTILITIES_15-514.DWG\17
Horizontal Scale: 1" = 20'-0"
Vertical Scale: 1" = 5'-0"
Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/20/15 - 09:52
Designed: CWT
Drawn: RRH
Checked: JPP

SHEET 17 OF 37





LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
- EXISTING INLET
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- EXISTING FENCE
- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

- PRO. FIRE HYDRANT
- PRO. WATER VALVE
- PRO. BUFFALO BOX
- PRO. MAN HOLE
- PRO. CATCH BASIN
- LINE STOP
- SLEEVE
- 22° BEND
- 45° BEND
- PRO. SANITARY SEWER
- PRO. STORM SEWER
- PRO. WATER MAIN
- PRO. SANITARY CLEAN OUT
- 45° BEND
- CAP
- TEE
- 90° BEND

50' 0 25' 50' 100'
1" = 50'-0"

CHARLES W. THOMPSON III
REGISTERED
NO. 11100557
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 123rd Street, Hammond, Indiana, 46323
Phone: (219) 844-8868 Fax: (219) 844-7764
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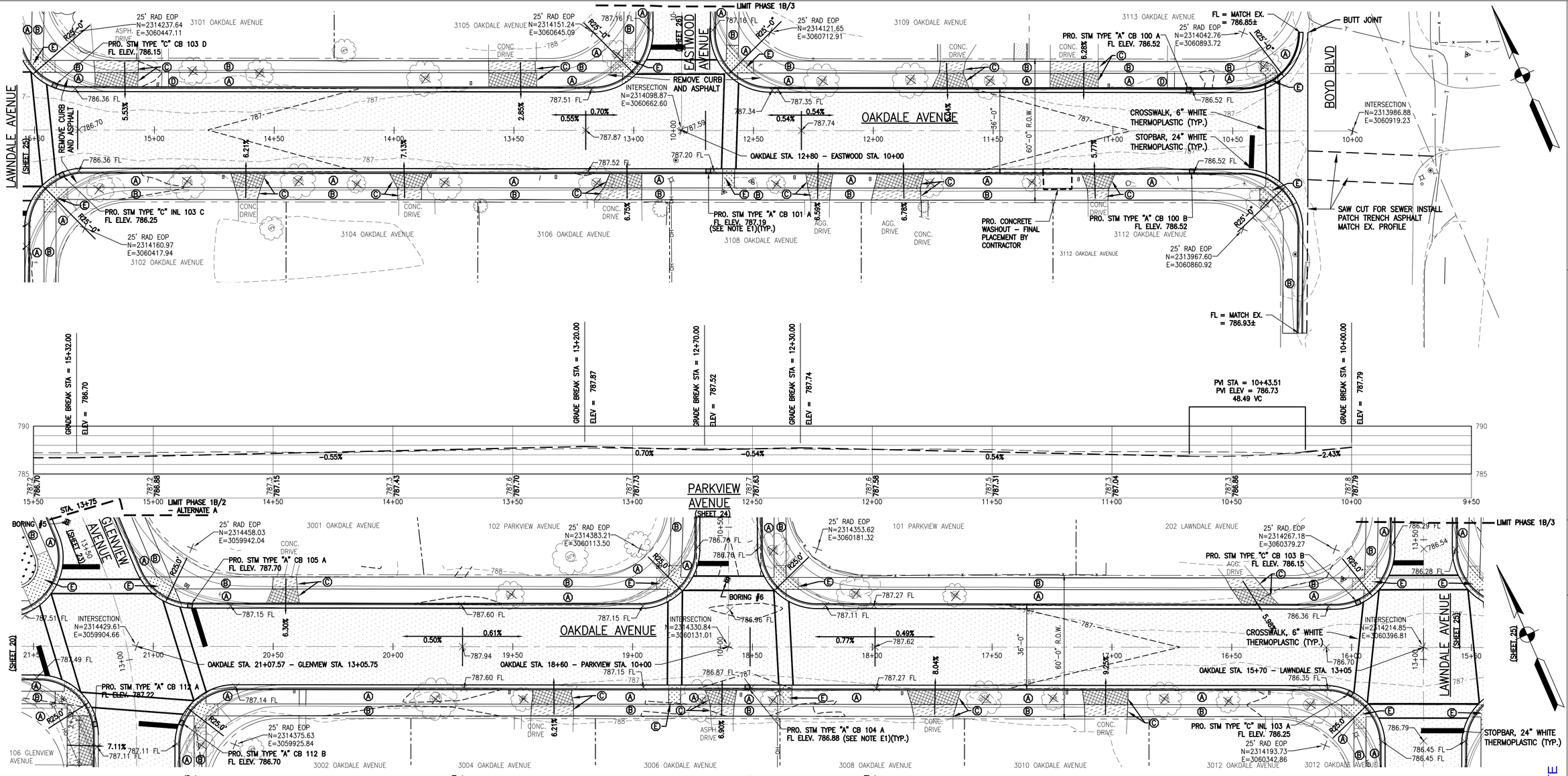
Drawing Title: BACKYARD SEWER - UTILITY
Sub Title: PLAN AND PROFILE - STA. 10+00 - STA. 24+90
Drawing Filename: X:\Projects\LAPORTE\WASTWATR\15-5140\dwg\01_PRO_UTILITIES_15-514.DWG
Horizontal Scale: 1" = 5'-0"
Vertical Scale: 1" = 20'-0"

Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/20/15 - 09:52

Designed: CWT
Drawn: RRH
Checked: JPP

SHEET 18 OF 37



CONSTRUCTION COMPLETE

PROPOSED LEGEND

- PRO. MAN HOLE
- PRO. SIGN
- B21.01 PRO. GRADE
- PRO. DRIVEWAY APRON
- PRO. 6" SIDEWALK
- PRO. HANDICAP RAMPS
- REMOVE TREE

(A) REPLACE 4" TOP SOIL INSTALL SOD
(B) 4" SIDEWALK – 5' WIDE W/ BASE
(C) CONCRETE DRIVE APRON AND THICKENED WALK SECTION
(D) CARRIAGE WALK TYP. MATCH EXISTING
(E) ADA COMPLIANT RAMP WITH TRUNCATED DOME PANELS CUT TO FIT AS REQUIRED.

NOTES:

E1.– PROVIDE INLET FILTER PROTECTION CONSISTING OF INLET FILTER BASKET AND STONE BAG CURB INLET PROTECTION AS DETAILED ON SHEET 29 OF THE PLANS AND DETAILED IN THE SWPPP. PROTECTION SHALL BE PROVIDED ON ALL INSTALLED AND EXISTING INLETS WITH IN THE PROJECT AREA AND ALL DOWN STREAM STRUCTURES AND ADDITIONALLY AROUND ALL STOCKPILES.

E2.– PROVIDE CONCRETE WASHOUT CONTAINMENT BASIN AT LOCATIONS ACCESSIBLE TO CONCRETE TRUCKS AND WITH MINIMAL INTERFERENCE WITH TRAFFIC. CONTRACTOR TO CONSTRUCT BASINS PRIOR TO DELIVERY OF CONCRETE. BASIN SHALL BE REGULARLY CLEANED AND CONCRETE PROPERLY DISPOSED OF.

1. ALL SHOWN SLOPES ON DRIVES ARE SHOWN FOR REFERENCE. CONTRACTOR TO VERIFY SLOPES BEFORE INSTALLATION OF SIDEWALK. SHOWN SLOPES ARE FROM THE FRONT OF THE PROPOSED WALK TO THE FLOW LINE OF THE CURB AND DOES NOT TAKE INTO ACCOUNT THE HEIGHT OF THE DEPRESSED CURB. MAXIMUM SLOPE OF DRIVE APRONS SHALL BE 10% UNLESS APPROVED BY THE FIELD ENGINEER.
2. DEPRESSED CURB SHALL BE INSTALLED IN FRONT OF ALL DRIVES.
3. FRONT YARD SHALL POSITIVELY DRAIN OVER WALK AND PARKWAY AND CURB INTO GUTTER.

1" = 20'–0"

CHARLES N. THOMPSON III REGISTERED NO. 11100557 STATE OF INDIANA PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 N. 129th Street, Hammond, Indiana, 46323
Phone: 1 (219) 844-1884 Fax: 1 (219) 844-1764
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Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/21/15 - 08:13
Drawing Title: OAKDALE/SILVERBROOK - STREET
Sub Title: PLAN & PROFILE - STA. 9+50 - STA. 21+50
Drawing Filename: X:\Projects\LAPORTE\WASTWTR\15-514\Dwg\02_PRO_ROAD_15-514.DWG
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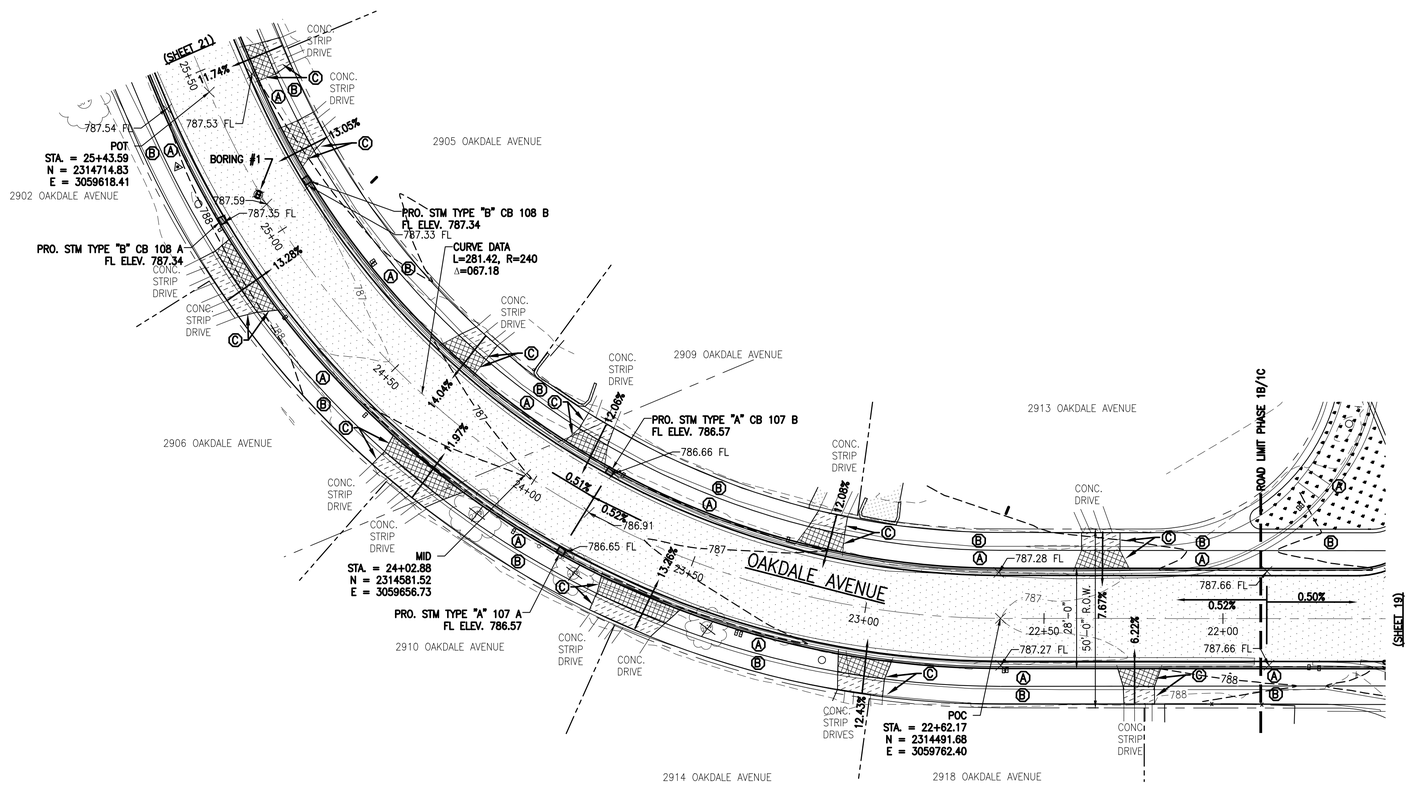
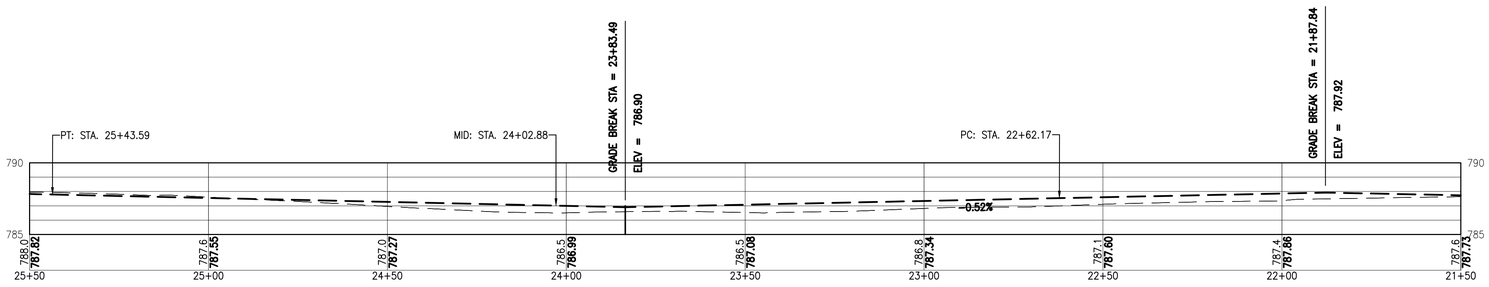
Vertical Scale: 1" = 20'-0"
Designed: CWT
Drawn: RRH
Checked: JPP

SHEET 19 OF 37





CONSTRUCTION COMPLETE

PROPOSED LEGEND

- PRO. MAN HOLE
- PRO. SIGN
- 821.01 PRO. GRADE
- PRO. DRIVEWAY APRON
- PRO. 6" SIDEWALK
- PRO. HANDICAP RAMPS
- REMOVE TREE

Ⓐ REPLACE 4" TOP SOIL INSTALL SOD
Ⓑ 4" SIDEWALK – 5' WIDE W/ BASE
Ⓒ CONCRETE DRIVE APRON AND THICKENED WALK SECTION
Ⓓ CARRIAGE WALK TYP. MATCH EXISTING
Ⓔ ADA COMPLIANT RAMP WITH TRUNCATED DOME PANELS CUT TO FIT AS REQUIRED.

NOTES:

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3. FRONT YARD SHALL POSITIVELY DRAIN OVER WALK AND PARKWAY AND CURB INTO GUTTER.

20' 0 10' 20' 40'
1" = 20'-0"

CHARLES W THOMPSON III
REGISTERED
NO. 11100557
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 123rd Street, Hammond, Indiana 46323
Phone: (219) 844-8665 Fax: (219) 844-7764
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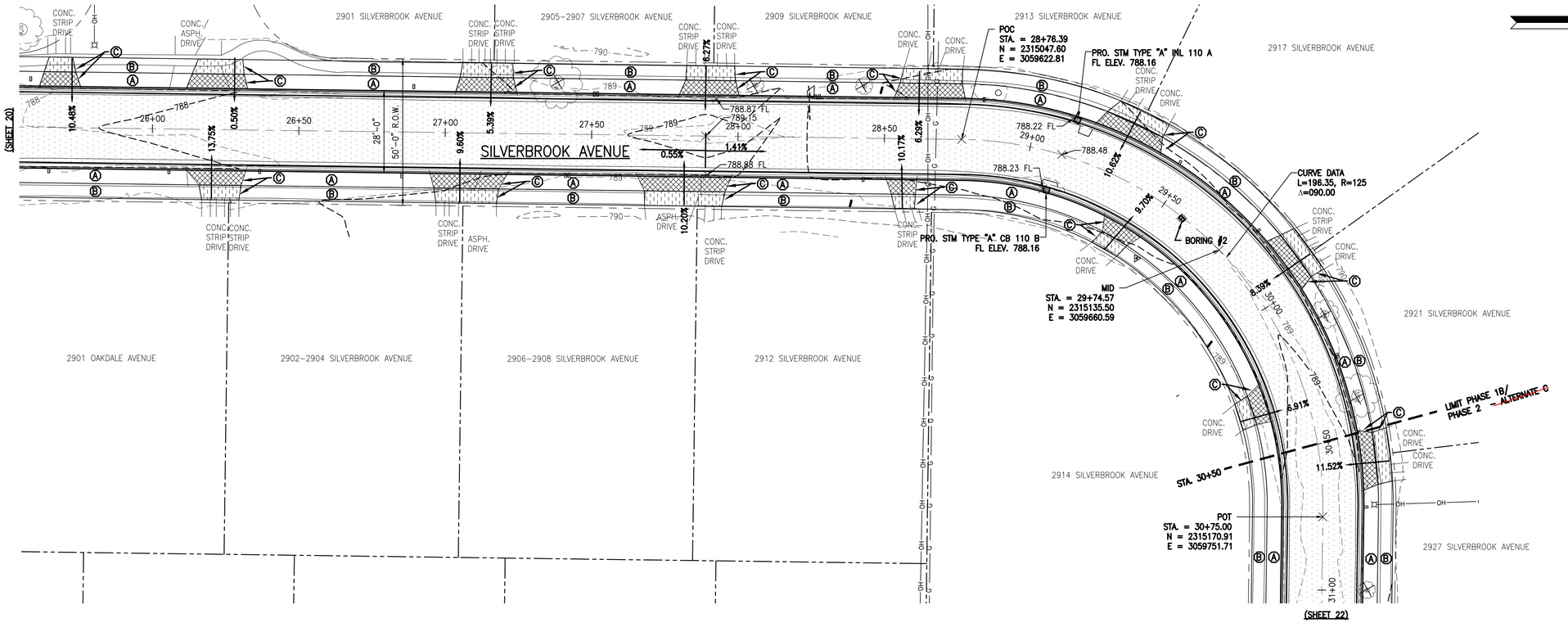
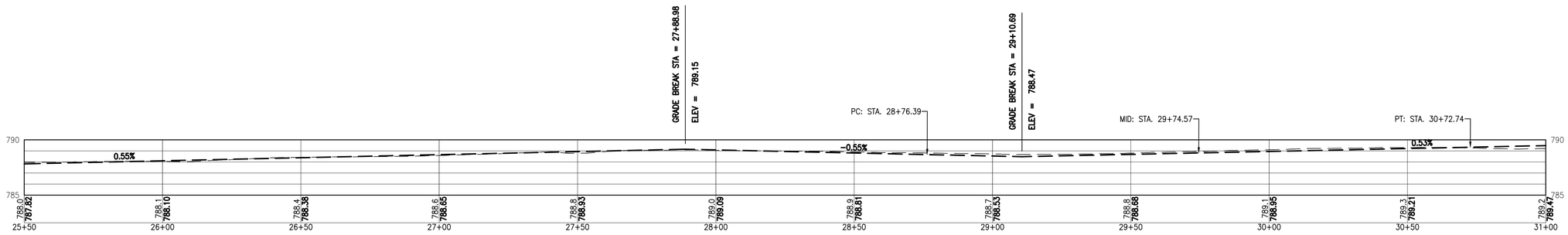
Drawing Title:	OAKDALE/SILVERBROOK - STREET
Sub Title:	PLAN & PROFILE - STA. 21+50 - STA. 25+50
Drawing Filename:	X:\Projects\JAPORTIEWASTWATR\15-5140\dwg\02_PRO_ROAD_15-514.DWG
Horizontal Scale:	1" = 20'-0"
Vertical Scale:	1" = 5'-0"
Customer:	CITY OF LA PORTE, INDIANA
Project Name:	MONROE MANOR SEWER SEPARATION PROJECT
Project Number:	15-514
Date & Time:	08/21/15 - 08:13
Designed:	CWT
Drawn:	RRH
Checked:	JPP

SHEET 20 OF 37





CONSTRUCTION COMPLETE

PROPOSED LEGEND

- PRO. MAN HOLE
- PRO. SIGN
- 821.01 PRO. GRADE
- PRO. DRIVEWAY APRON
- PRO. 6" SIDEWALK
- PRO. HANDICAP RAMPS
- REMOVE TREE

Ⓐ REPLACE 4" TOP SOIL INSTALL SOD
Ⓑ 4" SIDEWALK – 5' WIDE W/ BASE
Ⓒ CONCRETE DRIVE APRON AND THICKENED WALK SECTION
Ⓓ CARRIAGE WALK TYP. MATCH EXISTING
Ⓔ ADA COMPLIANT RAMP WITH TRUNCATED DOME PANELS CUT TO FIT AS REQUIRED.

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3. FRONT YARD SHALL POSITIVELY DRAIN OVER WALK AND PARKWAY AND CURB INTO GUTTER.

20' 0 10' 20' 40'
1" = 20'–0"

CHARLES N. THOMPSON III
REGISTERED
NO. 11100557
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 123rd Street, Hammond, Indiana, 46323
Phone: (219) 844-1600 Fax: (219) 844-7764
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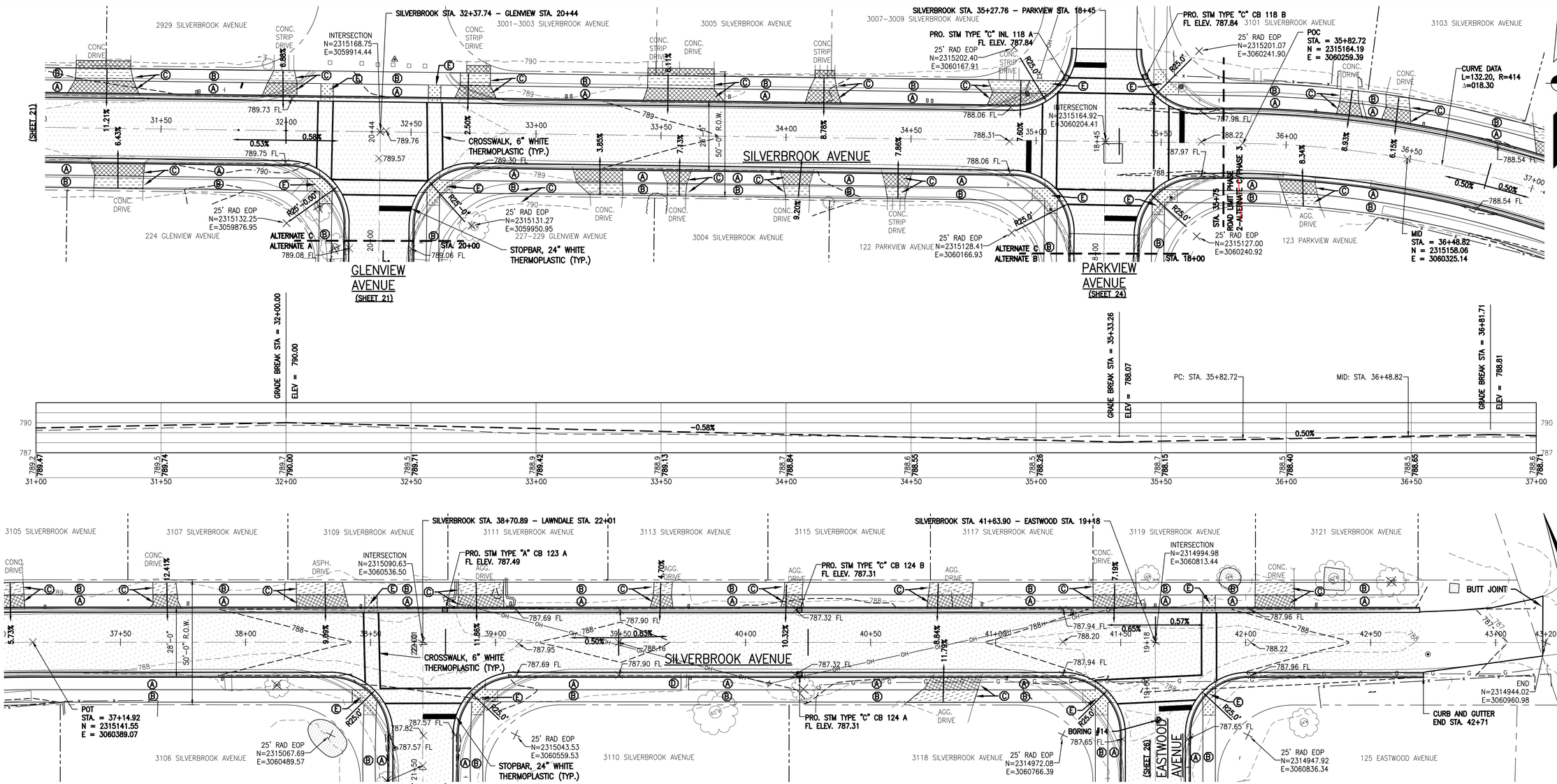
Drawing Title:	OAKDALE/SILVERBROOK - STREET
Sub Title:	PLAN & PROFILE - STA. 25+50 - STA. 31+00
Drawing Filename:	X:\Projects\LAPORTE\WASTWATR\15-514\Dwg\02_PRO_ROAD_15-514.DWG
Horizontal Scale:	1" = 20'-0"
Vertical Scale:	1" = 5'-0"
Customer:	CITY OF LA PORTE, INDIANA
Project Name:	MONROE MANOR SEWER SEPARATION PROJECT
Project Number:	15-514
Date & Time:	08/21/15 - 08:13
Designed:	CWT
Drawn:	RRH
Checked:	JPP

SHEET 21 OF 37



PROPOSED LEGEND

- PRO. MAN HOLE
- PRO. SIGN
- 821.01 PRO. GRADE
- PRO. DRIVEWAY APRON
- PRO. 6" SIDEWALK
- PRO. HANDICAP RAMPS
- REMOVE TREE

(A) REPLACE 4" TOP SOIL INSTALL SOD
(B) 4" SIDEWALK – 5' WIDE W/ BASE
(C) CONCRETE DRIVE APRON AND THICKENED WALK SECTION
(D) CARRIAGE WALK TYP. MATCH EXISTING
(E) ADA COMPLIANT RAMP WITH TRUNCATED DOME PANELS CUT TO FIT AS REQUIRED.

NOTES:

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2. DEPRESSED CURB SHALL BE INSTALLED IN FRONT OF ALL DRIVES.

3. FRONT YARD SHALL POSITIVELY DRAIN OVER WALK AND PARKWAY AND CURB INTO GUTTER.

20' 0 10' 20' 40'
1" = 20'–0"

CHARLES W. THOMPSON III REGISTERED NO. 11100657 STATE OF INDIANA PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
6421 123rd Street, Hammond, Indiana 46323
Phone: (219) 844-8664 Fax: (219) 844-7764
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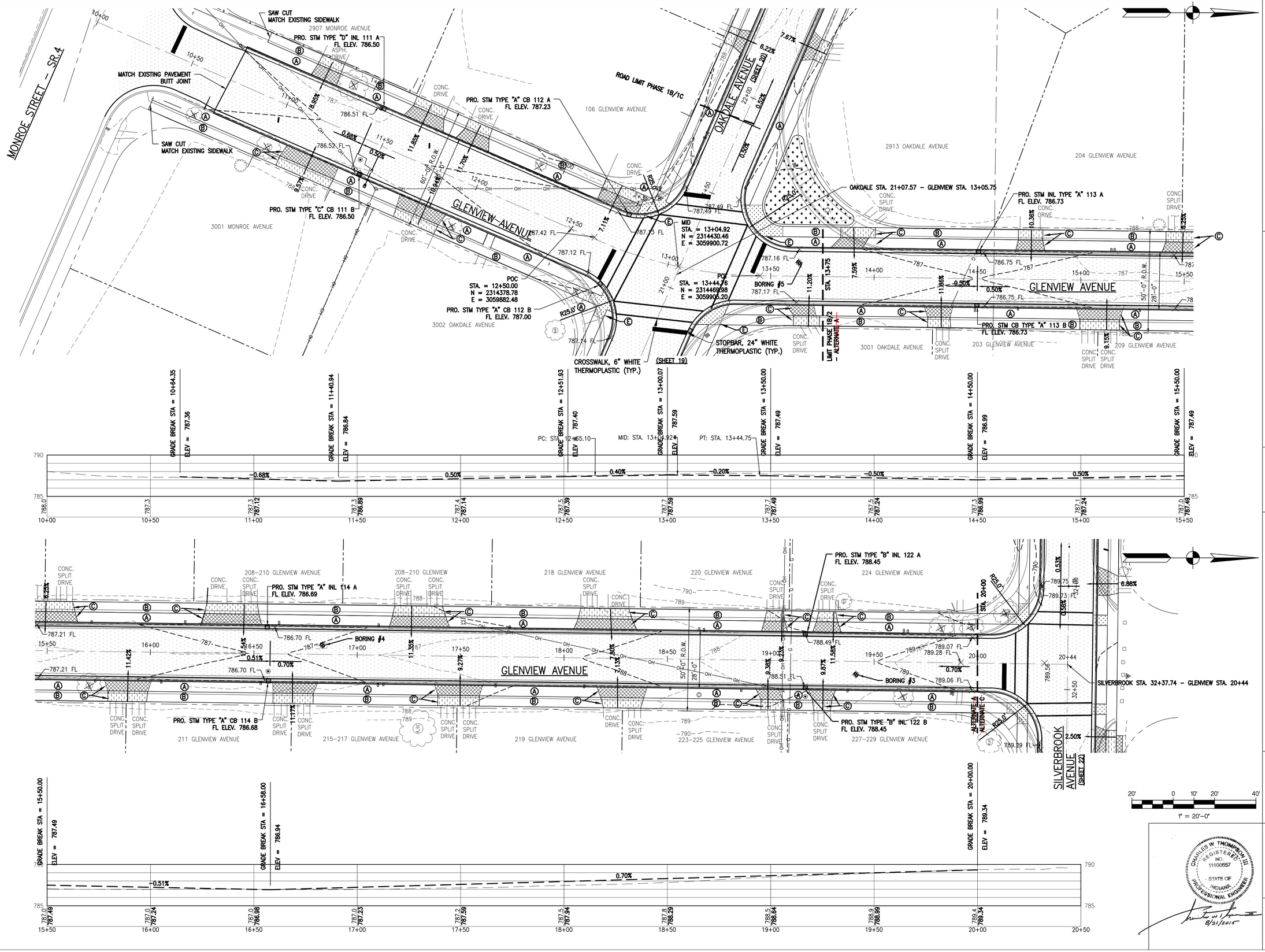
Drawing Title:
Sub Title: PLAN & PROFILE - STA. 31+00 - STA. 43+20
Drawing Filename: X:\Projects\LAPORTE\WASTWATR\15-514\Dwg\02_PRO_ROAD_15-514.DWG
Horizontal Scale: 1" = 20'-0"
Vertical Scale: 1" = 5'-0"

Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/21/15 - 08:13

Designed: CWT
Drawn: RRH
Checked: JPP

SHEET 22 OF 37

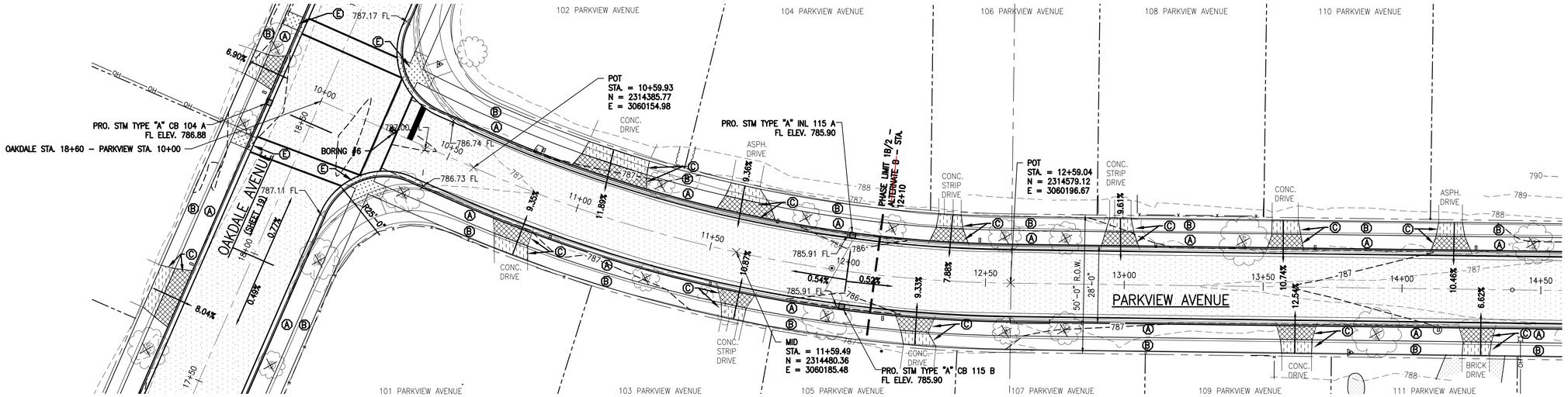


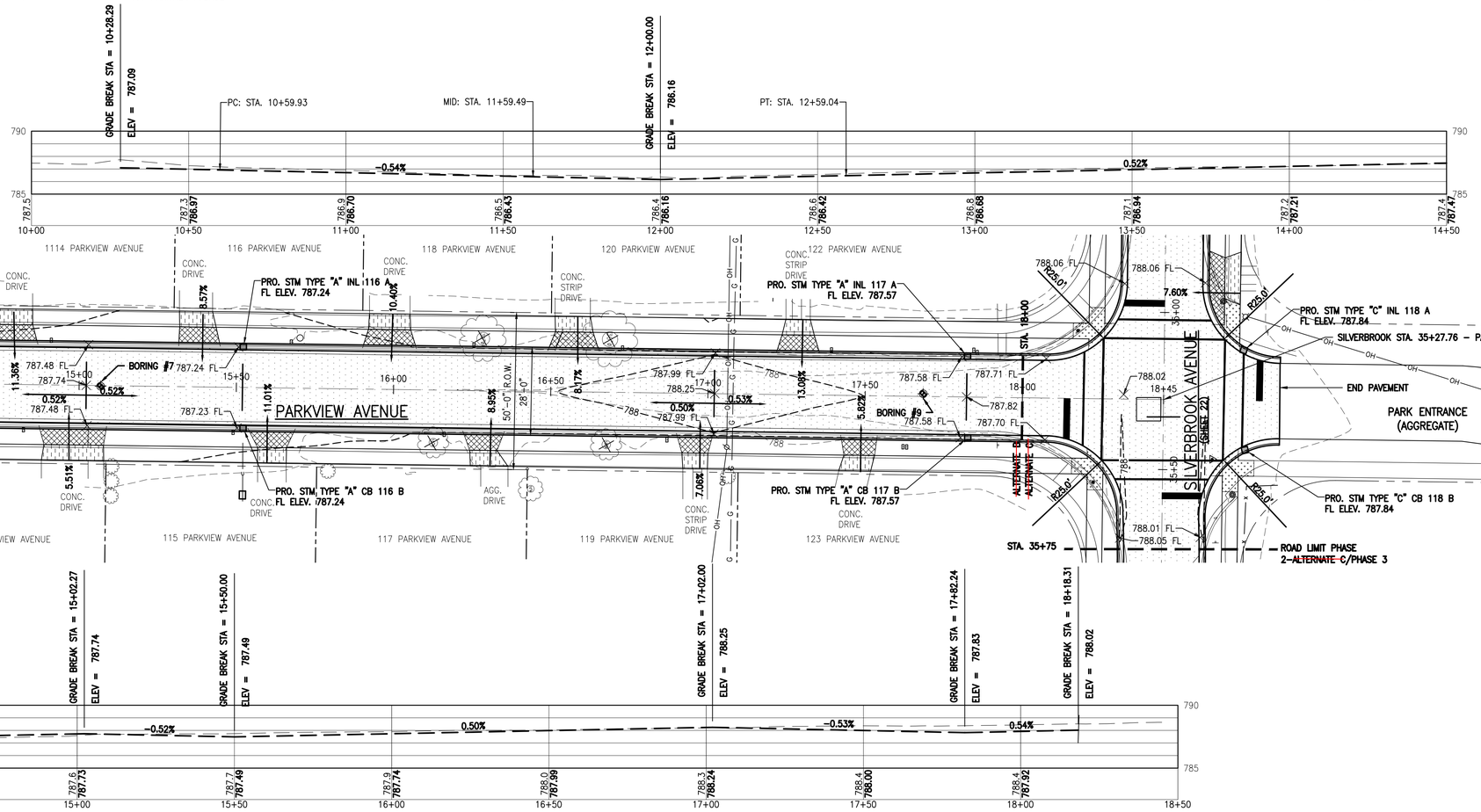
NIES engineering, inc.
2421 123rd Street, Hammond, Indiana 46323
Phone: (219) 844-8685 Fax: (219) 844-7764
Your Vision • Our Focus

Drawing Title:	GLENVIEW - STREET
Sub Title:	PLAN & PROFILE - STA. 10+00 - STA. 20+44
Drawing Filename:	X:\Projects\JAPORTE\WASTWATR\15-5140\dwg\02_PRO_ROAD_15-514.DWG
Horizontal Scale:	1" = 20'-0"
Vertical Scale:	1" = 5'-0"
Customer:	CITY OF LA PORTE, INDIANA
Project Name:	MONROE MANOR SEWER SEPARATION PROJECT
Project Number:	15-514
Date & Time:	08/21/15 - 08:13
Designed:	CWT
Drawn:	RRH
Checked:	JPP

CHARLES N THOMPSON III
REGISTERED
NO. 11100657
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

SHEET 23 OF 37





PROPOSED LEGEND

- PRO. MAN HOLE
- PRO. SIGN
- 821.01 PRO. GRADE
- PRO. DRIVEWAY APRON
- PRO. 6" SIDEWALK
- PRO. HANDICAP RAMPS
- REMOVE TREE

Ⓐ REPLACE 4" TOP SOIL INSTALL SOD
Ⓑ 4" SIDEWALK – 5' WIDE W/ BASE
Ⓒ CONCRETE DRIVE APRON AND THICKENED WALK SECTION
Ⓓ CARRIAGE WALK TYP. MATCH EXISTING
Ⓔ ADA COMPLIANT RAMP WITH TRUNCATED DOME PANELS CUT TO FIT AS REQUIRED.

NOTES:

E1.– PROVIDE INLET FILTER PROTECTION CONSISTING OF INLET FILTER BASKET AND STONE BAG CURB INLET PROTECTION AS DETAILED ON SHEET 29 OF THE PLANS AND DETAILED IN THE SWPPP. PROTECTION SHALL BE PROVIDED ON ALL INSTALLED AND EXISTING INLETS WITH IN THE PROJECT AREA AND ALL DOWN STREAM STRUCTURES AND ADDITIONALLY AROUND ALL STOCKPILES.

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3. FRONT YARD SHALL POSITIVELY DRAIN OVER WALK AND PARKWAY AND CURB INTO GUTTER.

20' 0 10' 20' 40'
1" = 20'–0"

CHARLES W THOMPSON III REGISTERED NO. 11100557 STATE OF INDIANA PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 E 123rd Street, Hammond, Indiana 46323
Phone: (219) 844-1660 Fax: (219) 844-1764
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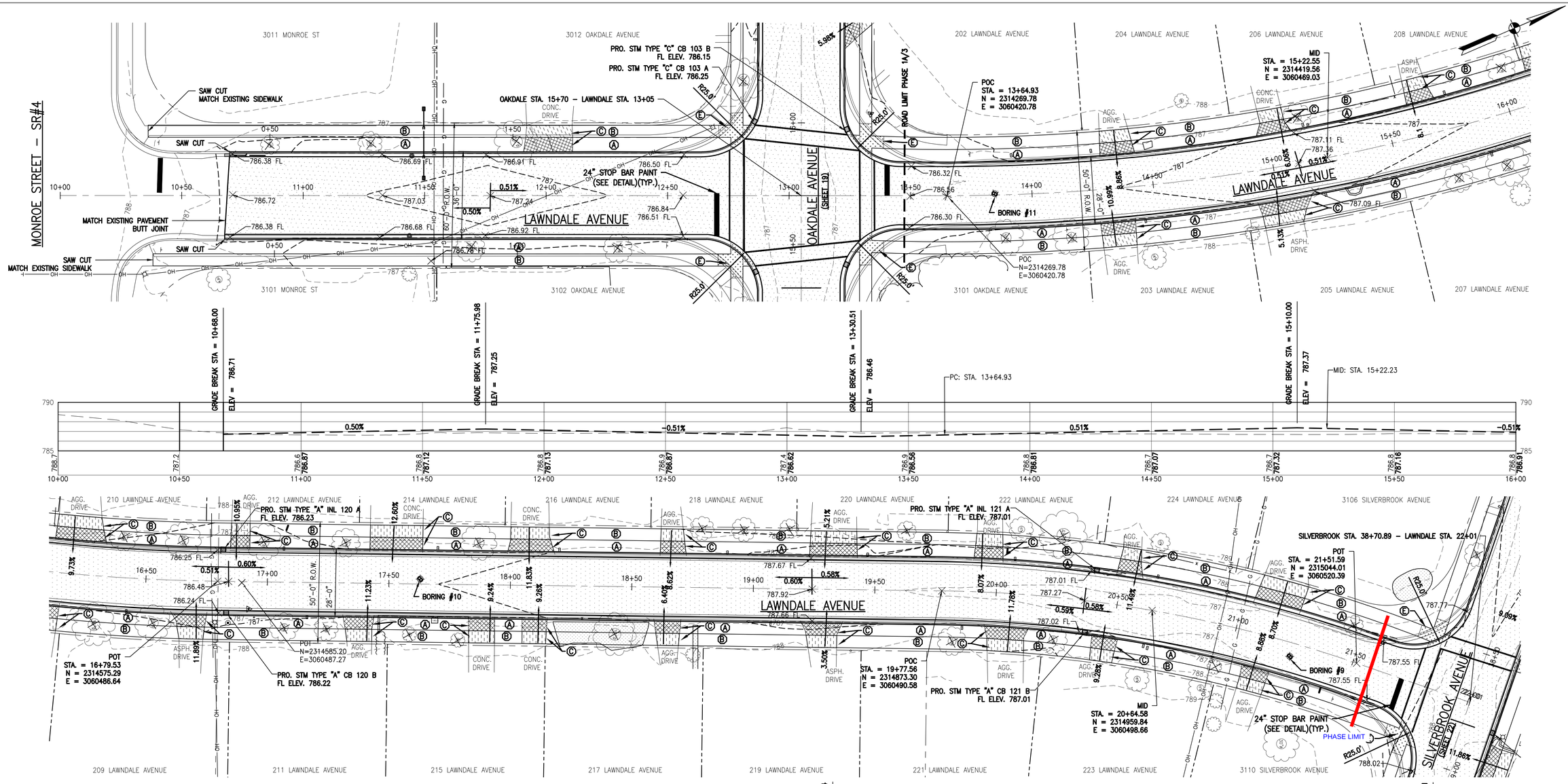
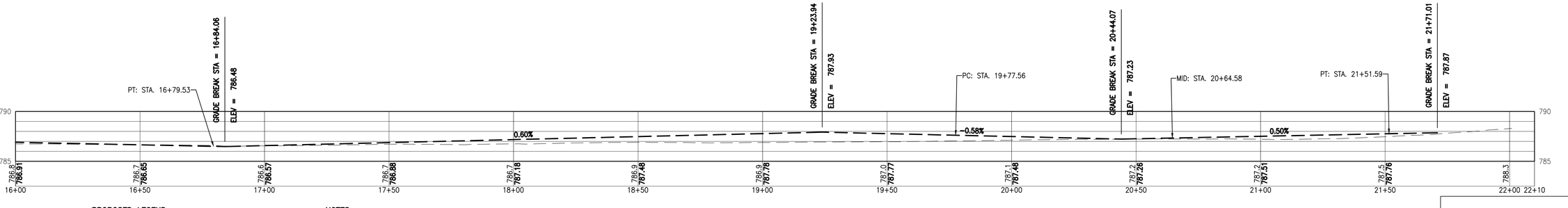
Drawing Title:	PARKVIEW - STREET
Sub Title:	PLAN & PROFILE - STA. 10+00 - STA. 18+45
Drawing Filename:	X:\Projects\LAPORTE\WASTWATR\15-514\Dwgs\02_PRO_ROAD_15-514.DWG
Horizontal Scale:	1" = 20'-0"
Vertical Scale:	1" = 5'-0"
Customer:	CITY OF LA PORTE, INDIANA
Project Name:	MONROE MANOR SEWER SEPARATION PROJECT
Project Number:	15-514
Date & Time:	08/21/15 - 08:13
Designed:	CWT
Drawn:	RRH
Checked:	JPP

SHEET 24 OF 37





PROPOSED LEGEND

- PRO. MAN HOLE
- PRO. SIGN
- 821.01 PRO. GRADE
- PRO. DRIVEWAY APRON
- PRO. 6" SIDEWALK
- PRO. HANDICAP RAMPS
- REMOVE TREE

(A) REPLACE 4" TOP SOIL INSTALL SOD
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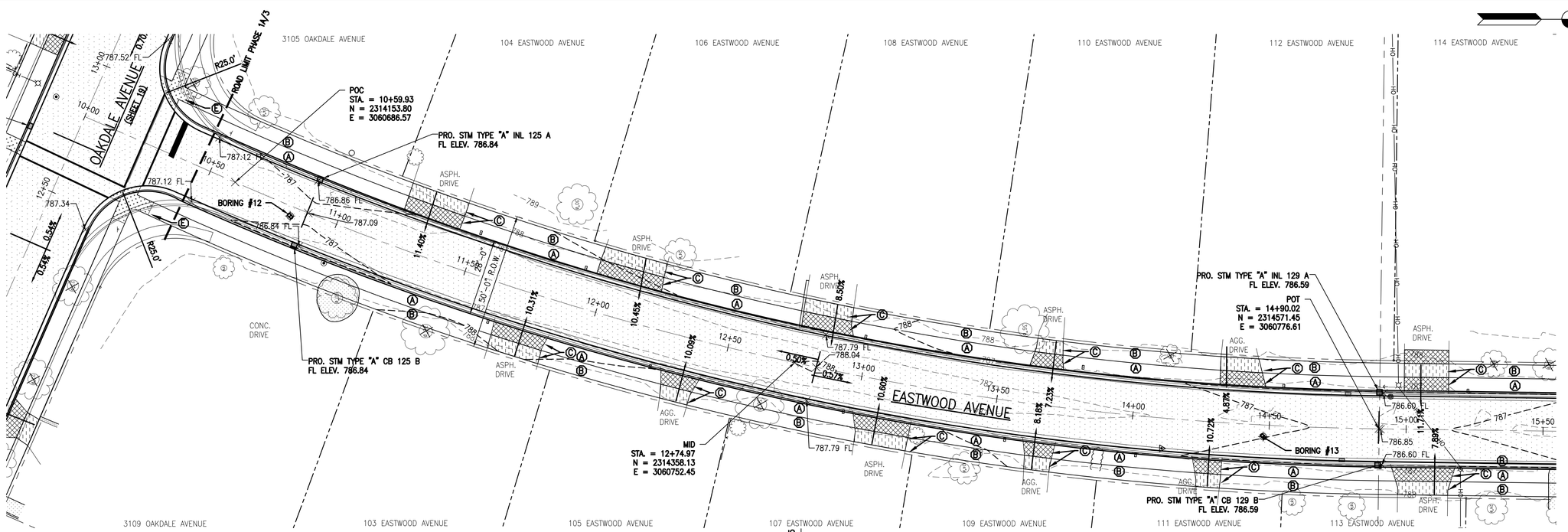
20' 0 10' 20' 40'
1" = 20'–0"

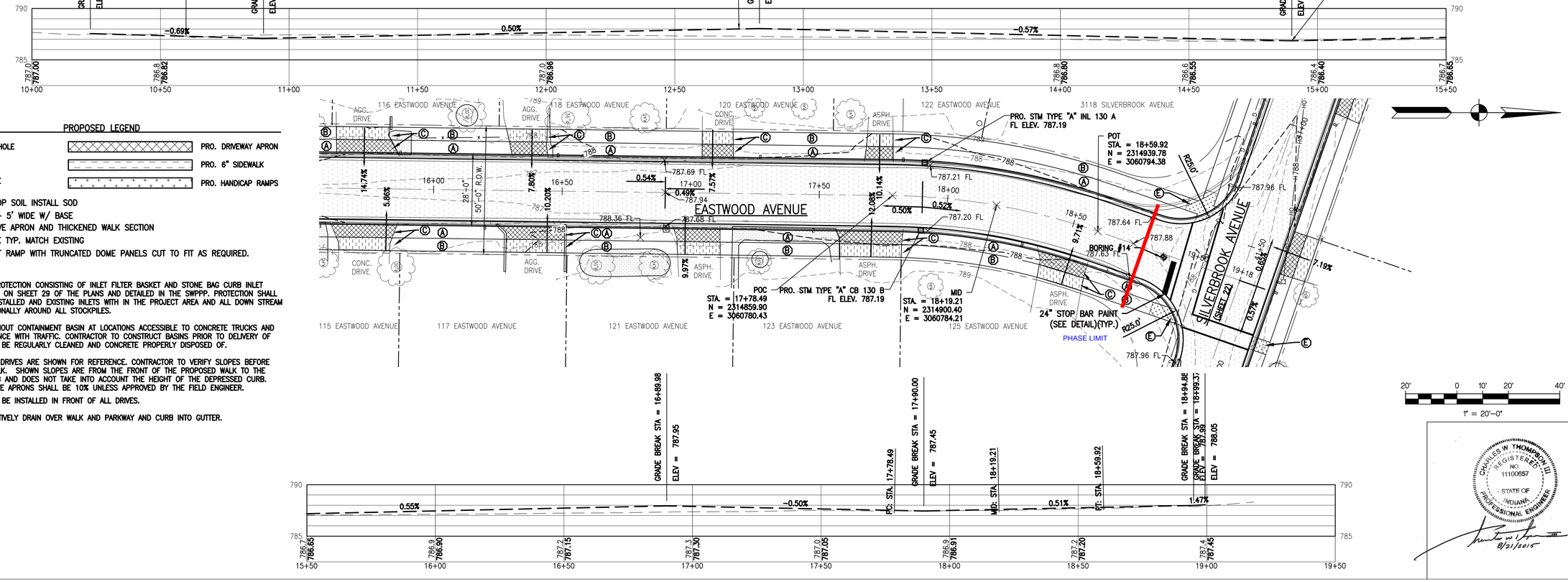
CHARLES N THOMPSON III REGISTERED NO. 11100557 STATE OF INDIANA PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 123rd Street, Hammond, Indiana 46323
Phone: (219) 844-1660 Fax: (219) 844-1764
Your Vision • Our Focus

Drawing Title:	LAWNDALE - STREET
Sub Title:	PLAN & PROFILE - STA. 10+00 - STA. 22+00
Drawing Filename:	X:\Projects\JAPORTE\WASTWATR\15-514\Dwg\02_PRO_ROAD_15-514.DWG
Horizontal Scale:	1" = 20'-0"
Vertical Scale:	1" = 5'-0"
Customer:	CITY OF LA PORTE, INDIANA
Project Name:	MONROE MANOR SEWER SEPARATION PROJECT
Project Number:	15-514
Date & Time:	08/21/15 - 08:13
Designed:	CWT
Drawn:	RRH
Checked:	JPP

SHEET 25 OF 37





PROPOSED LEGEND

- PRO. MAN HOLE
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- PRO. DRIVEWAY APRON
- PRO. 6" SIDEWALK
- PRO. HANDICAP RAMPS

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(D) CARRIAGE WALK TYP. MATCH EXISTING
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E2.– PROVIDE CONCRETE WASHOUT CONTAINMENT BASIN AT LOCATIONS ACCESSIBLE TO CONCRETE TRUCKS AND WITH MINIMAL INTERFERENCE WITH TRAFFIC. CONTRACTOR TO CONSTRUCT BASINS PRIOR TO DELIVERY OF CONCRETE. BASIN SHALL BE REGULARLY CLEANED AND CONCRETE PROPERLY DISPOSED OF.

1. ALL SHOWN SLOPES ON DRIVES ARE SHOWN FOR REFERENCE. CONTRACTOR TO VERIFY SLOPES BEFORE INSTALLATION OF SIDEWALK. SHOWN SLOPES ARE FROM THE FRONT OF THE PROPOSED WALK TO THE FLOW LINE OF THE CURB AND DOES NOT TAKE INTO ACCOUNT THE HEIGHT OF THE DEPRESSED CURB. MAXIMUM SLOPE OF DRIVE APRONS SHALL BE 10% UNLESS APPROVED BY THE FIELD ENGINEER.
2. DEPRESSED CURB SHALL BE INSTALLED IN FRONT OF ALL DRIVES.
3. FRONT YARD SHALL POSITIVELY DRAIN OVER WALK AND PARKWAY AND CURB INTO GUTTER.

20' 0 10' 20' 40'
1" = 20'-0"

CHARLES N. THOMPSON III
REGISTERED
NO. 11100557
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 - 123rd Street, Hammond, Indiana, 46323
Phone: (219) 844-1660 Fax: (219) 844-1664
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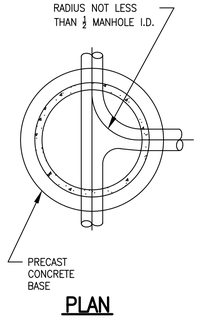
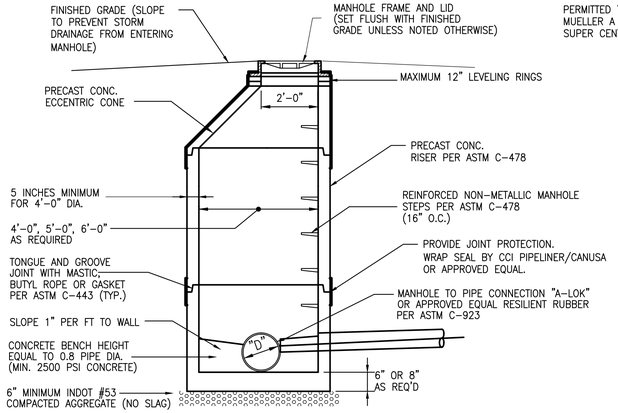
Customer:	CITY OF LA PORTE, INDIANA
Project Name:	MONROE MANOR SEWER SEPARATION PROJECT
Project Number:	15-5114
Date & Time:	08/21/15 - 08:13
Drawing Title:	EASTWOOD - STREET
Sub Title:	PLAN & PROFILE - STA. 10+00 - STA. 19+18
Drawing Filename:	X:\Projects\LAPORTE\WASTWTR\15-5140\dwg\02_PRO_ROAD_15-5114.DWG
Horizontal Scale:	1" = 5'-0"
Vertical Scale:	1" = 20'-0"
Designed:	CWT
Drawn:	RRH
Checked:	JPP

SHEET 26 OF 37



PLAN

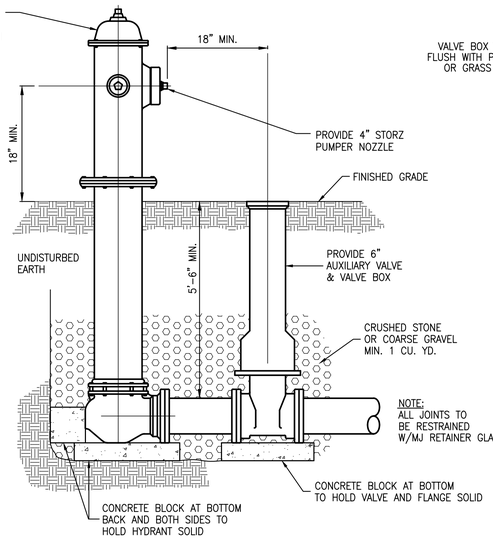


SANITARY SEWER MANHOLE

NOT TO SCALE

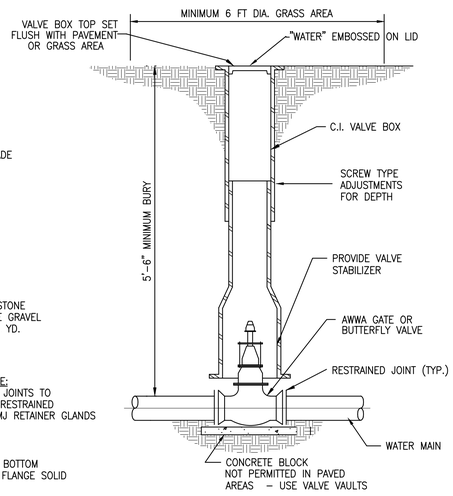
NOTES:

1. FOR ALL MANHOLES 6'-0" OR LESS IN DEPTH– PROVIDE RISER WITH PLAT TOP IN LIEU OF ECCENTRIC CONE IN ACCORDANCE WITH ASTM C-478
2. THE CROWN OF THE INFLUENT PIPE SHALL BE AT OR ABOVE THE CROWN OF THE OUTLET PIPE
3. DROP MANHOLES SHALL BE USED WHENEVER THE DISTANCE FROM THE INVERT OF THE INCOMING LINE AND BOTTOM OF THE MANHOLE IS GREATER THAN TWO FEET



TYPICAL HYDRANT ASSEMBLY DETAIL

TRAFFIC MODEL – BREAKABLE FLANGE AND COUPLING
*FIRE HYDRANT MUST BE ACCEPTABLE BY CITY OF LAPORTE STANDARDS
NOT TO SCALE

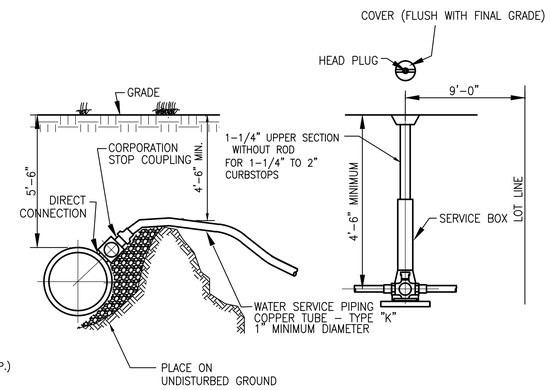


VALVE BOX INSTALLATION

NOT TO SCALE

NOTE:

1. ALL VALVES IN PAVED AREAS OR VALVES CLOSER THAN 3' TO A PAVED AREA SHALL BE CONSTRUCTED INSIDE VALVE VAULTS.

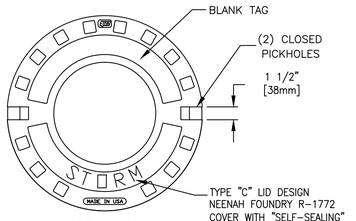


WATER SERVICE TAP AND CONNECTION DETAIL

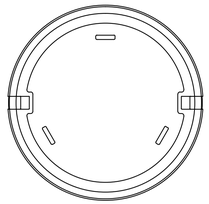
NOT TO SCALE

NOTES:

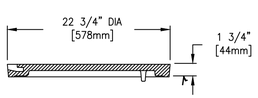
1. CORPORATION IS TO BE COMPRESSION TYPE (MUELLER)
2. 2-1/2" CURB BOX IS ARCH PATTERN WITHOUT INTERIOR ROD FOR 1" UPPER SECTION ONLY, WHEN USING 1" CURB STOPS.
3. 2-1/2" CURB BOX IS ARCH PATTERN WITHOUT ROD 1-1/4" UPPER IF FOR 1-11/4" TO 2" CURB STOP.
4. CURB BOXES SHALL BE SUITABLE FOR 6 FT DEPTH AND BE TYLER MODEL 95E, OR EQUAL.
5. CURB BOX IS WITH COMPRESSION COUPLINGS – (1" CURB – STOP) MUELLER OR EQUAL.
6. B-BOX CAP HAS 1 INCH THREADED BRASS PENTAGON PLUG WITH THE WORD "WATER" IN RAISED LETTERS
7. SERVICE TAPS GREATER THAN 1" IN DIAMETER MUST HAVE A STAINLESS STEEL BANDED DUCTILE IRON SADDLE (FORD 101S 202S, OR MUELLER EQUAL)
8. CORPORATION STOPS SHALL BE INSTALLED A MINIMUM OF 18" FROM PIPE ENDS. MULTIPLE INSTALLATIONS SHOULD BE STAGGERED AROUND THE MAIN BY 90 DEGREES AND SEPARATED BY 18".



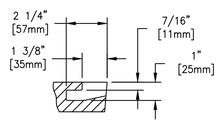
TOP VIEW



BOTTOM VIEW



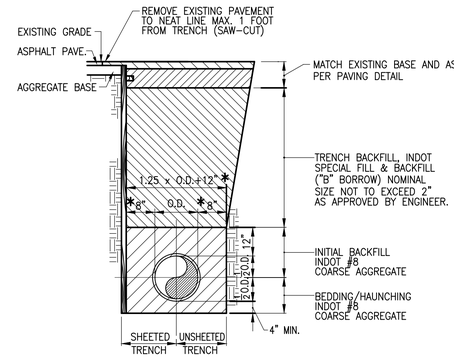
COVER SECTION



PICKHOLE DETAIL

STORM/SANITARY SEWER MANHOLE LID DETAIL

NOT TO SCALE



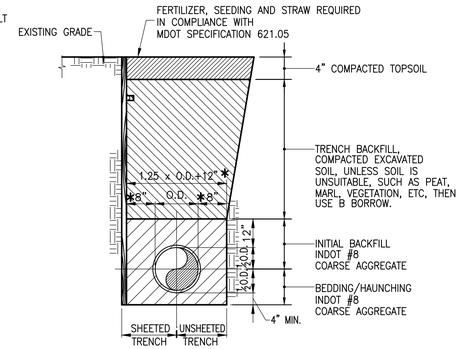
PIPE BEDDING DETAIL

NOT TO SCALE

FOR TRENCH IN PAVED AREAS

NOTES:

1. THE COST OF TRENCH SUPPORT SHALL BE INCLUDED IN THE COST OF THE PIPE.
2. OPEN-CUT TRENCHES SHALL BE SHEETED AND BRACED AS REQUIRED BY OSHA (29CFR 1926/1910), AND AS NECESSARY TO PROTECT LIFE, PROPERTY, AND THE WORK.
* 3. WHICHEVER PROVIDES GREATER TRENCH WIDTH



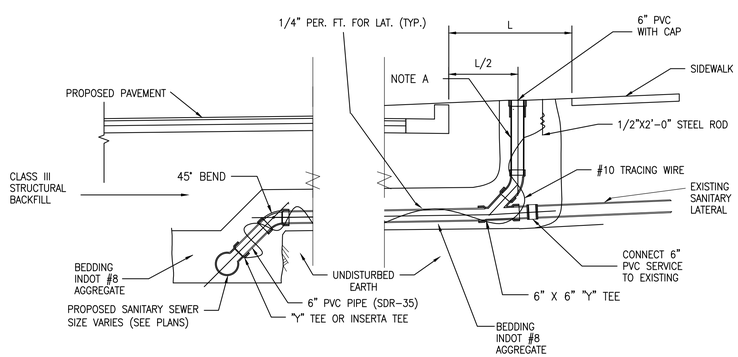
PIPE BEDDING DETAIL

NOT TO SCALE

FOR TRENCH IN GRASS AREAS

NOTES:

1. THE COST OF TRENCH SUPPORT SHALL BE INCLUDED IN THE COST OF THE PIPE.
2. OPEN-CUT TRENCHES SHALL BE SHEETED AND BRACED AS REQUIRED BY OSHA (29CFR 1926/1910), AND AS NECESSARY TO PROTECT LIFE, PROPERTY, AND THE WORK.
* 3. WHICHEVER PROVIDES GREATER TRENCH WIDTH



SANITARY LATERAL DETAIL

NOTE:

1. EXCAVATED MATERIAL MAY BE USED FOR TRENCH BACKFILL IN LAWN AREAS
2. IF THERE IS NO SIDEWALK, PLACE CLEAN OUT AT PROPERTY LINE

RESTRAINED PIPE LENGTH (FEET)

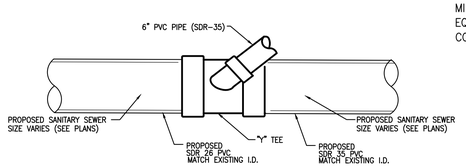
PIPE SIZE (INCHES)	TEE* BRANCH	90° ELBOW	45° ELBOW	22 1/2° ELBOW	11 1/4° ELBOW	DEAD ENDS
4	0	15	6	3	2	20
6	9	22	9	4	2	28
8	18	27	11	5	3	37
10	25	33	14	7	3	44
12	33	39	16	8	4	52
14	41	44	18	9	4	60
16	48	50	21	10	5	68
18	56	55	23	11	5	75
20	63	61	25	12	6	82
24	77	71	29	14	7	96
30	97	86	36	17	8	116
36	116	100	41	20	10	135

* ONE FULL LENGTH (18') OF PIPE ON BOTH SIDES OF BRANCH TO BE RESTRAINED.

INCREASE ALL LENGTHS IN TABLE BY 75% FOR USE ON POLYETHYLENE WRAPPED DUCTILE IRON PIPE OR PVC PIPE.

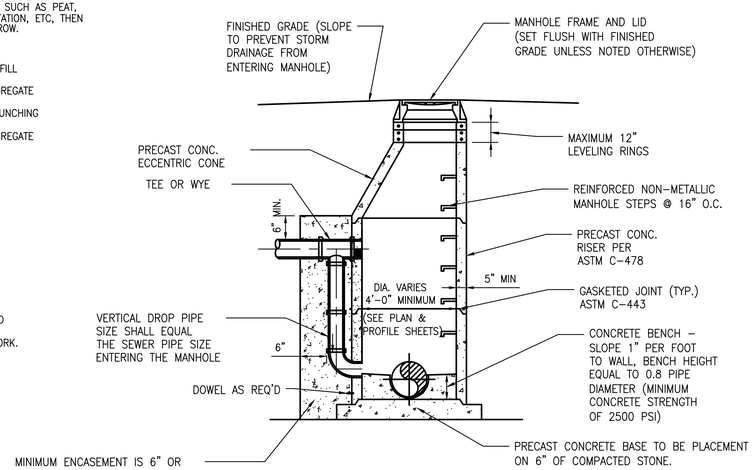
TEST PRESSURE BASED ON 150 PSI.

RESTRAINED PIPE LENGTH TABLE



SANITARY LATERAL DETAIL

NOT TO SCALE



SANITARY DROP MANHOLE DETAIL

NOT TO SCALE

NOTES:

1. FOR ALL MANHOLES 6'-0" OR LESS IN DEPTH – PROVIDE RISER WITH FLAT TOP IN LIEU OF ECCENTRIC CONE IN ACCORDANCE WITH ASTM C-478
2. THE CROWN OF THE INFLUENT PIPE SHALL BE AT OR ABOVE THE CROWN OF THE OUTER PIPE
3. DROP MANHOLES SHALL BE USED WHENEVER THE DISTANCE FROM THE INVERT OF THE INCOMING LINE AND BOTTOM OF MANHOLE IS GREATER THAN TWO FEET.

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2421 123rd Street, Hammond, Indiana 46323
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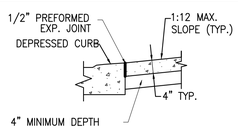
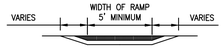
Drawing Title: DETAILS
Sub Title:
Drawing Filename: X:\Projects\LAPORTE\WASTWATR\15-5140\dwg\03_DETAILS_15-5114.DWG27
Horizontal Scale: N/A
Vertical Scale: N/A
Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-5114
Date & Time: 08/20/15 - 10:01
Designed: CWT
Drawn: RRH
Checked: JPP

SHEET 27 OF 37



SECTION A
NOT TO SCALE



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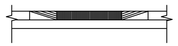

SECTION C
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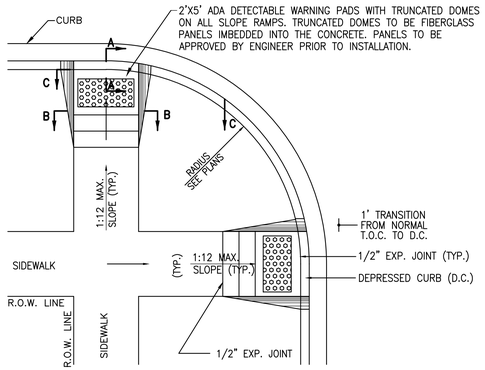
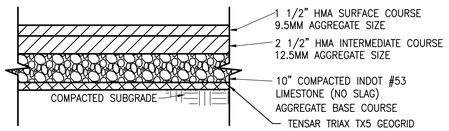
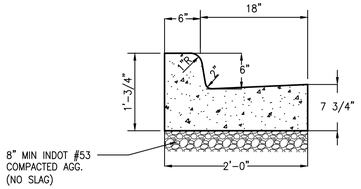


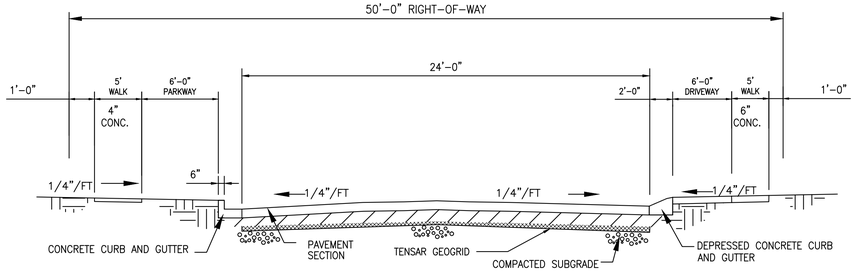
SIDEWALK WHEELCHAIR RAMP
NOT TO SCALE



ASPHALT PAVING REPLACEMENT DETAIL
NOT TO SCALE

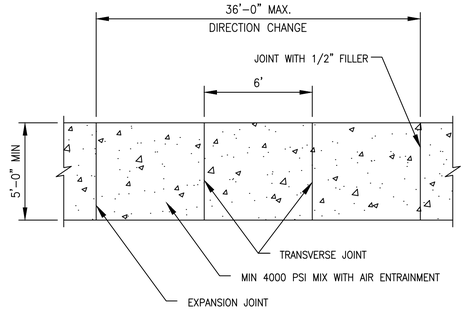


CONCRETE CURB AND GUTTER DETAIL
NOT TO SCALE

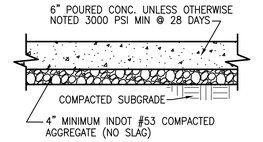


PAVEMENT DETAIL
NOT TO SCALE

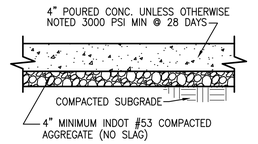
NOTES:
1. OTHER PAVEMENT SECTIONS WILL BE CONSIDERED PROVIDING THEY ARE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER, AND ARE ON TRAFFIC NEEDS AND EXISTING SOIL CONDITIONS.
2. ALL RIGHT-OF-WAY IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, LATEST EDITION.



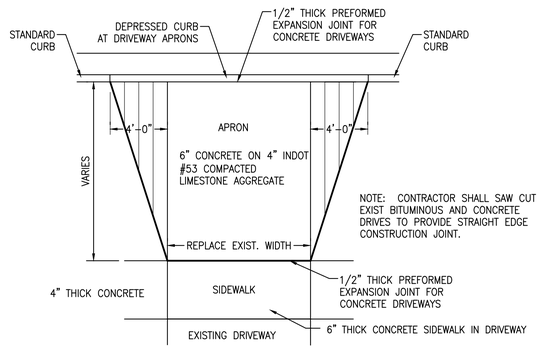
SIDEWALK PLAN
NOT TO SCALE



CONCRETE DRIVEWAY APRONS AND CONCRETE SIDEWALKS CROSSING DRIVEWAYS

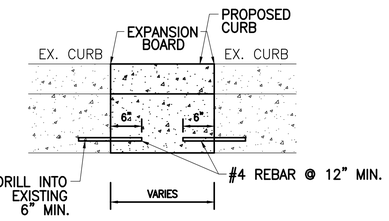


CONCRETE SIDEWALKS

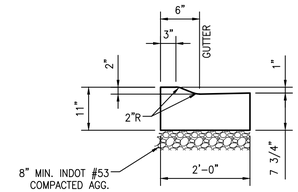


TYP. RESIDENTIAL DRIVE APPROACH DETAIL
NOT TO SCALE

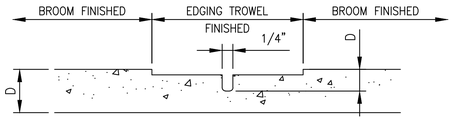
NOTES:
1. CURB CUT APRONS ARE TO BE LOCATED AS SHOWN ON THE PLANS OR AS DIRECTED.
2. SURFACE TEXTURE OF THE APRON SHALL BE NO LESS THAN A BROOM FINISH, BUT SHALL MEET AMERICANS WITH DISABILITIES ACT REQUIREMENTS.
3. CARE SHALL BE TAKEN TO ASSURE A UNIFORM GRADE ON ALL APRONS WITH NO BREAKS IN GRADE.
4. THE NORMAL GUTTER LINE PROFILE SHALL BE MAINTAINED THROUGH THE AREA OF THE APRON.
5. EXPANSION JOINT FOR THE APRON SHALL BE A MAXIMUM 1/2" WIDE. THE TOP OF THE JOINT FILLER FOR ALL RAMP TYPES SHALL BE FLUSH WITH ADJACENT CONCRETE.



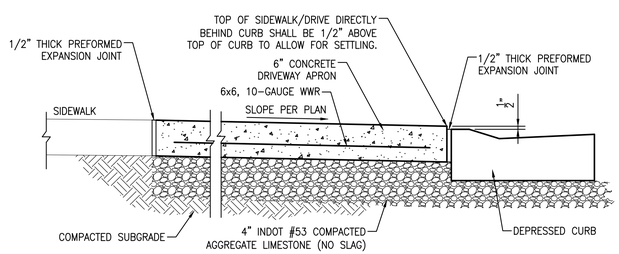
CONCRETE CURB AND GUTTER REPLACEMENT DETAIL
NOT TO SCALE



CONCRETE DEPRESSED CURB AND GUTTER
NOT TO SCALE
USE AT DRIVEWAYS AND SIDEWALKS



TRANSVERSE JOINT DETAIL
NOT TO SCALE



CONCRETE DRIVEWAY
NOT TO SCALE

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Drawing Title: DETAILS
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Customer: CITY OF LA PORTE, INDIANA
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Designed: CWT
Drawn: RRH
Checked: JPP

CHARLES W. THOMPSON III REGISTERED NO. 11100557 STATE OF INDIANA PROFESSIONAL ENGINEER
8/21/2015

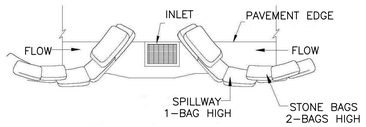
SHEET 28 OF 37

STABILIZATION PRACTICE	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEPT.	OCT.	NOV.	DEC.
PERMANENT SEEDING			1 →		→	2 →		1 →	2 →			
DORMANT SEEDING	3 →										3 →	
TEMPORARY SEEDING			5 →	4 →		2 →		6 →	4 →			
SODDING			7 →		→	2 →			→	7 →		
MULCHING	→											→

1 = Optimal planting for most turf mixes when properly fertilized, hydro–mulched, or straw mulched.
2 = Reduce Bluegrass % in mixes during this period.
3 = Seed only when germination cannot occur and increase seeding rates by 25% during this period.
4 = Annual ryegrass 50 lb per acre (1 lb. / 1000 s.f.)
5 = Spring oats 3 bu. per acre
6 = Wheat or Rye 2 bu. per acre
7 = Sod, irrigate 2–3 weeks after installation

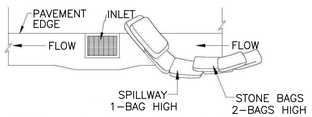
SEE SECTION 02481 OF PROJECT SPECIFICATIONS FOR SEEDING AND SODDING REQUIREMENTS.

SEASONAL SOIL PROTECTION CHART



STONE BAG PROTECTION – INLET ON SUMP

NOT TO SCALE

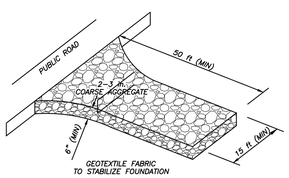


STONE BAG PROTECTION – INLET ON GRADE

NOT TO SCALE

NOTES:

1. OVERLAP STONE BAGS ONTO CURB OR SIDEWALK, AS APPLICABLE.
2. INTENDED FOR SHORT–TERM USE, IN CONJUNCTION WITH INLET FILTER BASKET PROTECTION.
3. ALLOW FOR PROPER MAINTENANCE AND CLEANUP.
4. STONE AGGREGATE MUST BE LARGER THAN STORM SEWER GRATE OPENINGS TO PREVENT IT FROM FALLING INTO THE STORM SEWER IN THE EVENT A BAG BREAKS.



INSTALLATION:

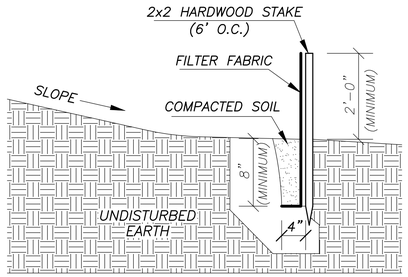
1– AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS
2– REMOVE ALL VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA AND GRADE AND CROWN FOR POSITIVE DRAINAGE
3– INSTALL 18" CULVERT IN SWALE AT ROAD TO INSURE PROPER DRAINAGE
4– PLACE STONE TO DIMENSIONS AND GRADE AS SHOWN BELOW
5– DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN

MAINTENANCE:

1– INSPECT ENTRANCE PAD AND SEDIMENT DISPOSAL AREA WEEKLY OR AFTER STORM EVENTS OR HEAVY USE
2– RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL
3– TOPDRESS WITH CLEAN STONE AS NEEDED
4– IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING, SCRAPING AND/OR SWEEPING. FLUSHING SHOULD ONLY BE USED IF THE WATER IS CONVEYED INTO A SEDIMENT TRAP OR BASIN
5– REPAIR ANY BROKEN ROAD PAVEMENT IMMEDIATELY

TEMPORARY STONE CONSTRUCTION ENTRANCE

(N.T.S.)

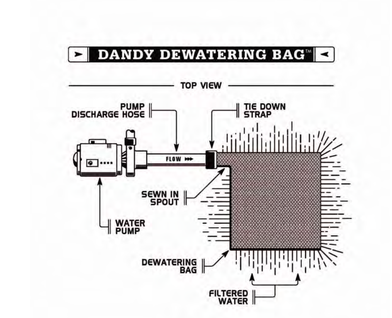


SILT FENCE INSTALLATION DETAIL

(N.T.S.)

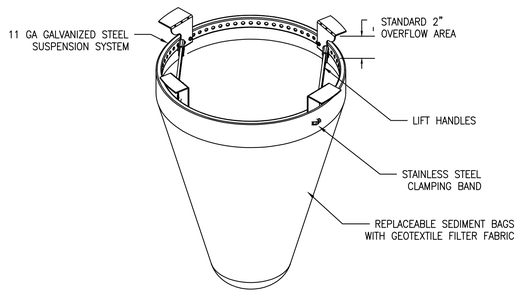
LOCATION: *FENCE NEARLY LEVEL, APPROXIMATELY FOLLOWING THE LAND CONTOUR, AND AT LEAST 10–FT FROM TOE OF SLOPE TO PROVIDE A BROAD, SHALLOW SEDIMENT POOL.*
TRENCH: *8 IN. MINIMUM DEPTH, FLAT BOTTOM, FILLED WITH COMPACTED SOIL TO BURY LOWER PORTION OF FENCE FABRIC (SEE DETAIL AT LEFT).*
SUPPORT POSTS: *2x2 HARDWOOD POSTS SET AT LEAST 1 FT. DEEP.*
POST SPACING: *6 FT. MAXIMUM – SEE DETAIL AT LEFT.*
FENCE HEIGHT: *HIGH ENOUGH SO THAT DEPTH OF IMPOUNDED WATER DOES NOT EXCEED 1–1/2 FT. AT ANY POINT ALONG FENCE LINE.*
FENCE FABRIC: *BELTED SILT RETENTION FENCE SHALL BE A 36" WIDE, NON–WOVEN SPUN–BOND POLYESTER FABRIC WITH AN INTERNAL FIBERGLASS SCRIM OR NET BETWEEN THE LAYERS. BELTED SILT RETENTION FENCE SHALL BE SILT–SAVER SYSTEM AS MANUFACTURED BY SILT–SAVER, INC., OR APPROVED EQUAL.*
ADDITIONALLY: *PROVIDE ACCESS TO AREA IF SEDIMENT CLEANOUT WILL BE NEEDED. FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS. SILT FENCE TO BE INSTALLED AROUND THE PERIMETER OF ANY STOCKPILE. ALL STOCKPILES TO BE LOCATED WITHIN PERIMETER SILT FENCE BOUNDARY SHOWN ON THE PLANS.*

ADDITIONAL SILT FENCE REQUIREMENTS



PUMP DISCHARGE FILTER BAG

(N.T.S.)

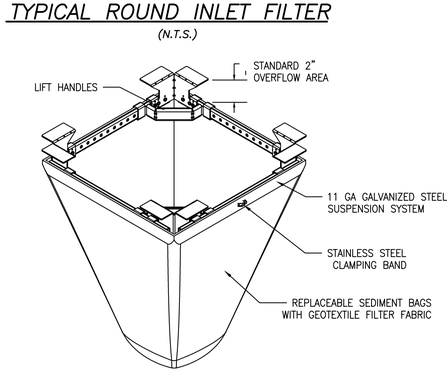


TYPICAL ROUND INLET FILTER

(N.T.S.)

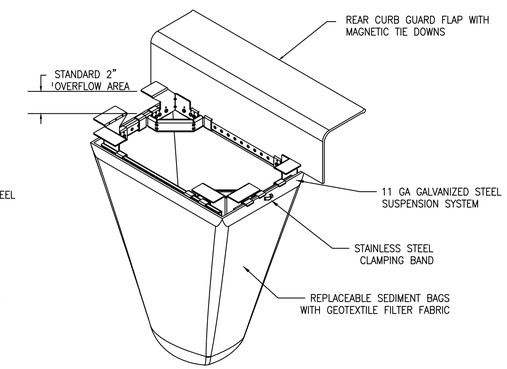
NOTES:

1. INLET FILTER BASKET TO BE FLEXSTORM CATCH–IT "FX", OR APPROVED EQUAL WITH CLEAN WATER FLOW RATE OF 200 GPM PER SQ. FT. AND APPARENT OPENING SIZE OF US SIEVE 40.
2. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
3. REMOVE GRATE FROM DRAINAGE STRUCTURE.
4. CLEAN STONE AND DIRT FROM LEDGE OF DRAINAGE CASTING FRAME.
5. DROP THE INLET FILTER THROUGH THE CLEAR OPENING SUCH THAT THE HANGERS REST FIRMLY ON THE LEDGE OF DRAINAGE CASTING FRAME.
6. REPLACE THE GRATE AND CONFIRM IT IS NOT ELEVATED MORE THAN 1/8".
7. REFER TO SWPPP FOR MAINTENANCE GUIDELINES.



TYPICAL RECTANGULAR INLET FILTER

(N.T.S.)

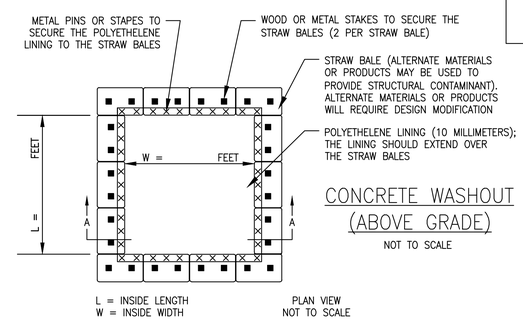


TYPICAL CURB BOX INLET FILTER

(N.T.S.)

GENERAL NOTES

FRAME: TOP FLANGE FABRICATED FROM 1¼"X1¼"X⅛" ANGLE. BASE RIM FABRICATED FROM 1½"X1½"X¼" CHANNEL. HANDLES AND SUSPENSION BRACKETS FABRICATED FROM 1¼"X¼" FLAT STOCK. ALL STEEL CONFORMING TO ASTM–36A. SEDIMENT BAG: BAG FABRICATED FROM 4 OZ./SQ.YD. NON–WOVEN POLYPROPYLENE GEOTEXTILE REINFORCED WITH POLYESTER MESH. BAG SECURED TO BASE RIM WITH A STAINLESS STEEL BAND AND LOCK.

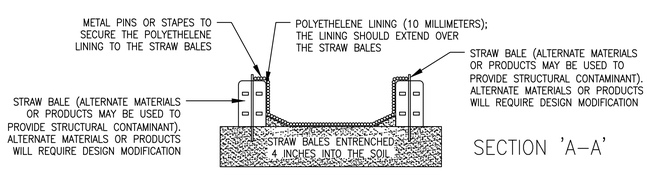


CONCRETE WASHOUT (ABOVE GRADE)

NOT TO SCALE

L = INSIDE LENGTH
W = INSIDE WIDTH

PLAN VIEW
NOT TO SCALE



SECTION 'A–A'

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Drawing Title: EROSION CONTROL PLAN
Sub Title:
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Vertical Scale: N/A

Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/20/15 - 10:01

Designed: CWT
Drawn: RRH
Checked: JPP

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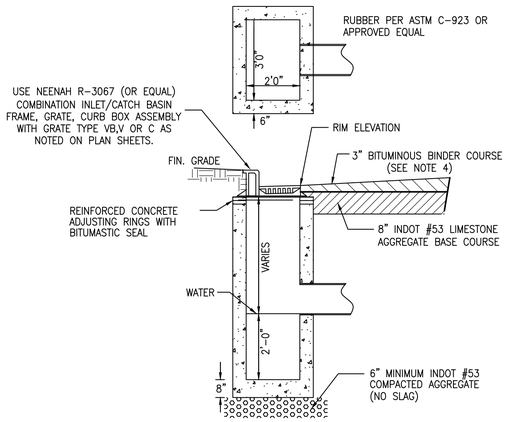
8/21/2015

SHEET 29 OF 37

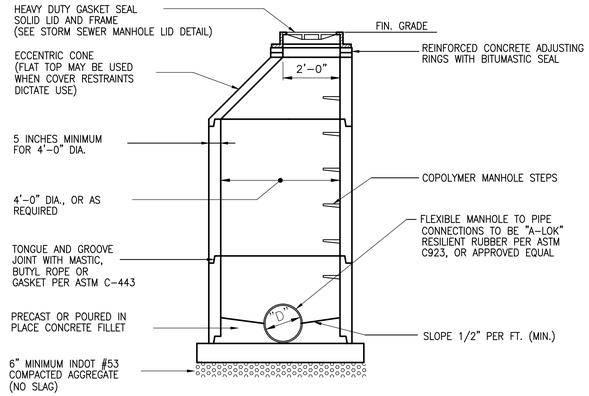


STORM SEWER CATCH BASIN TYPE A & C

NOT TO SCALE

NOTES:

1. CATCH BASIN / INLET SHALL CONFORM TO ASTM C-478 SPECIFICATIONS
2. BACKFILL WITH COMPACTED STRUCTURAL FILL IN PAVED AREAS
3. RECTANGULAR PCC STORM CATCH BASIN: INDOT TYPE "K"
4. RECTANGULAR PCC STORM INLET: INDOT TYPE "J"
5. GRATE TYPE A = NEENAH R-3067-VB
   GRATE TYPE B = NEENAH R-3067-V

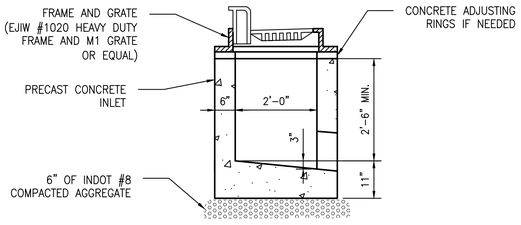


STORM SEWER MANHOLE DETAIL

NOT TO SCALE

NOTES:

1. MANHOLE SHALL CONFORM TO ASTM C478
2. BACKFILL WITH COMPACTED STRUCTURAL FILL IN PAVED AREAS
3. COPOLYMER / STEEL MH STEPS AS MANUFACTURED BY M.A. INDUSTRIES INC. OR EQUAL

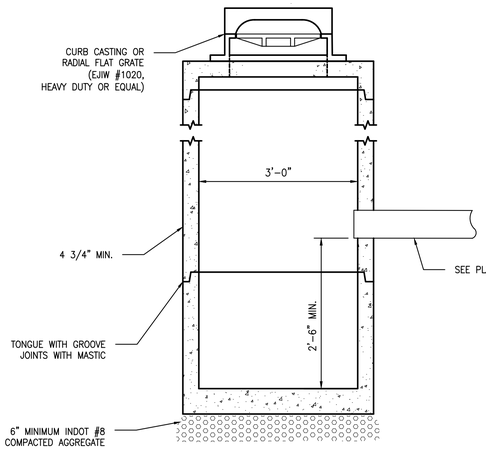


INLET DETAIL TYPE A & C

NOT TO SCALE

NOTES:

1. INLET AND APPURTENANCES SHALL MEET ASTM C-478 SPECIFICATIONS
2. GRATE TYPE A = NEENAH R-3067-VB
   GRATE TYPE B = NEENAH R-3067-V

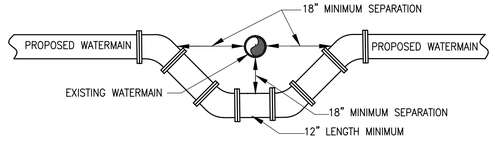


STORM SEWER CATCH BASIN/INLET

NOT TO SCALE

NOTES:

1. PRECAST REINFORCED CONCRETE MANHOLE BASE SECTIONS, RISER SECTIONS AND APPURTENANCES SHALL MEET ASTM C478 SPECIFICATIONS
2. THE BOTTOM MAY BE PRECAST OR CAST IN PLACE
3. THE CONCRETE FOR THE WALL SHALL BE 4000 PSI
4. NEEHAH R3161 COMBINATION INLET FRAME, GRATE, CURB BOX



WATER MAIN CROSSING DETAIL

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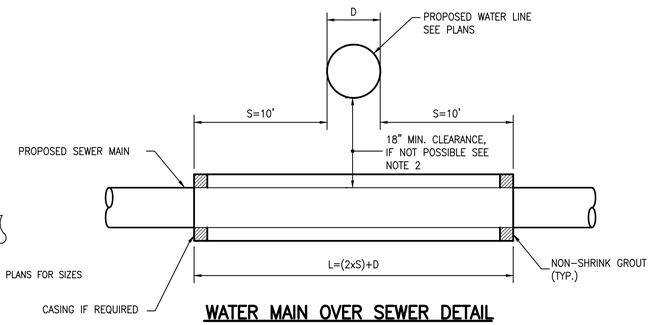
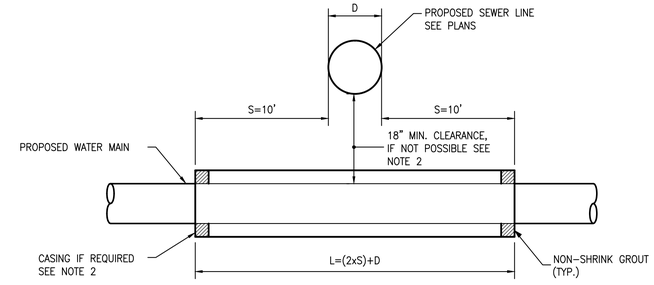


WATER MAIN OVER SEWER DETAIL

NOT TO SCALE

1. WATER MAIN CROSSING OVER A SEWER SHALL ADHERE TO THE RECOMMENDED TEN STATE STANDARDS FOR WATER WORKS, MOST CURRENT ADDITION.
2. IF 18" SEPARATION IS NOT MAINTAINED UNDER WATER INSTALL "L" FEET OF WATER MAIN GRADE PIPE FOR CASING AND SEAL BOTH ENDS WITH NON-SHRINK GROUT.
3. THE CONTACTOR HAS THE OPTION TO INSTALL THE CASING ON THE WATER LINE. CASING LENGTH AND MATERIAL SHALL BE PER NOTE 1 AND 2.

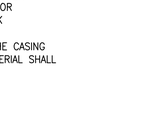


WATER MAIN UNDER SEWER DETAIL

SEE NOTE 2

NOT TO SCALE

1. WATER MAIN CROSSING UNDER A SEWER SHALL ADHERE TO THE RECOMMENDED TEN STATE STANDARDS FOR WATER WORKS, MOST CURRENT ADDITION.
2. IF 18" SEPARATION IS NOT MAINTAINED UNDER SEWER INSTALL "L" FEET OF WATER MAIN GRADE PIPE FOR CASING AND SEAL BOTH ENDS WITH NON-SHRINK GROUT.
3. THE CONTACTOR HAS THE OPTION TO INSTALL THE CASING ON THE SEWER LINE. CASING LENGTH AND MATERIAL SHALL BE PER NOTE 1 AND 2.



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Drawing Title: CATCH BASIN DETAILS
Sub Title:
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Project Name: MONROE MANOR SEWER SEPARATION PROJECT
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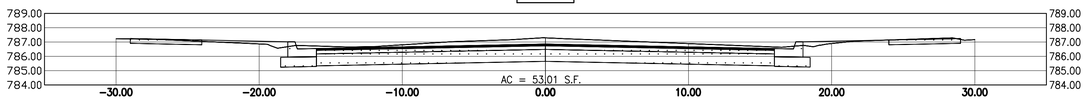
Date & Time: 08/20/15 - 10:01

Designed: CWT
Drawn: RRH
Checked: JPP

SHEET 30 OF 37

10+50.00



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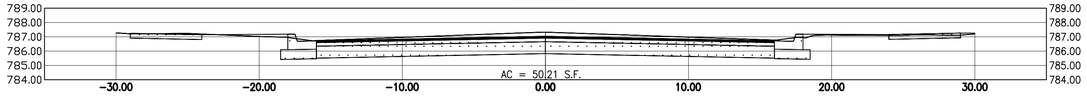

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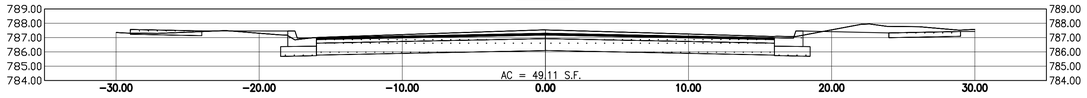

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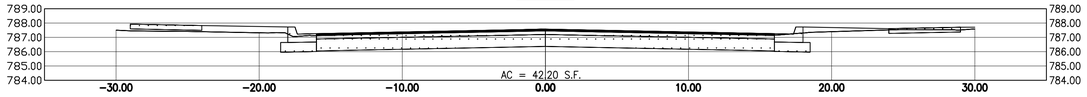

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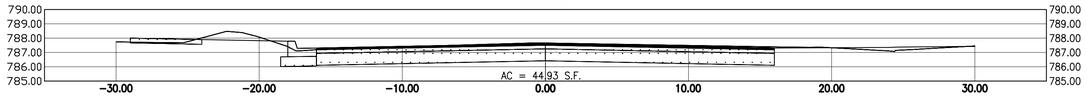

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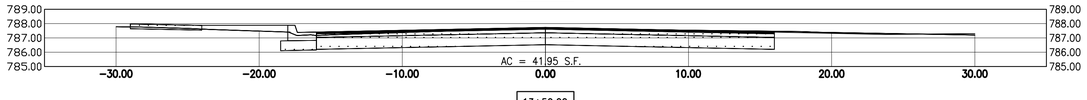

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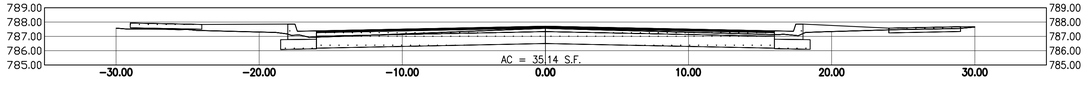

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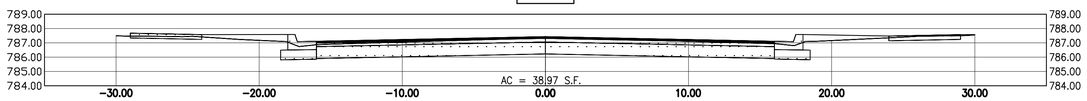

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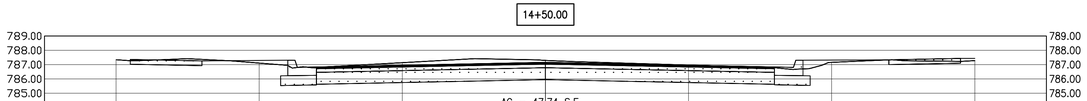

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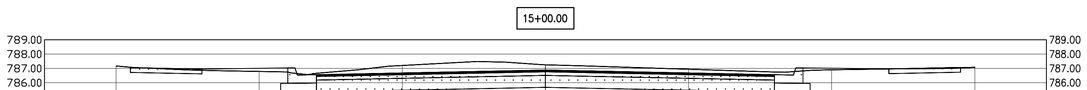

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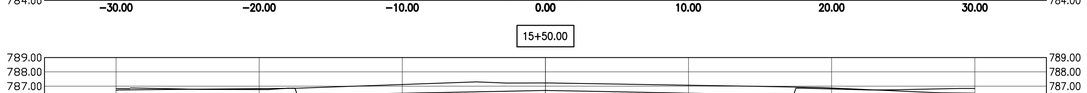

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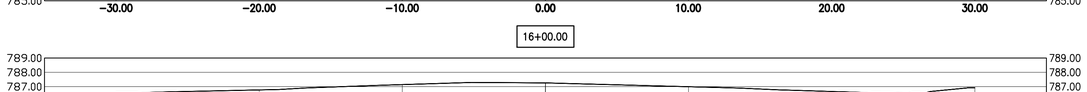

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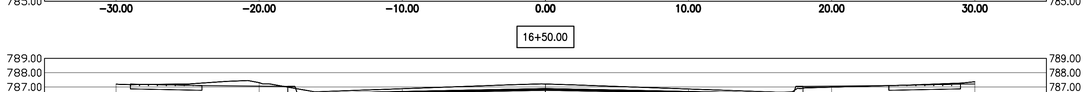

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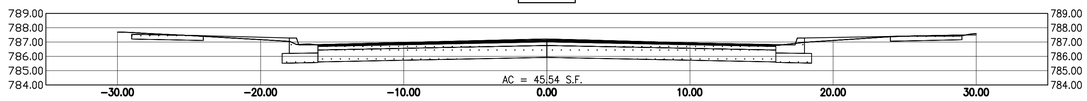

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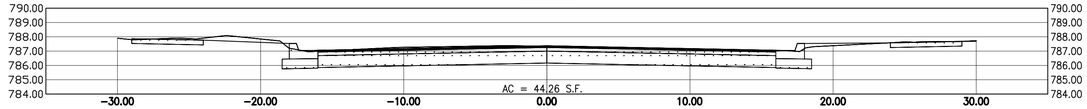

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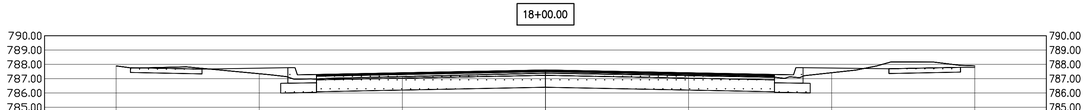

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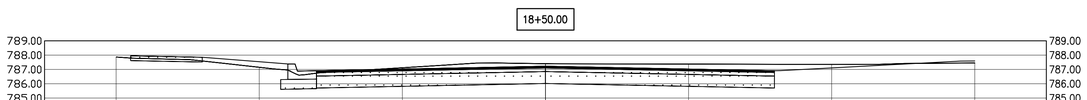

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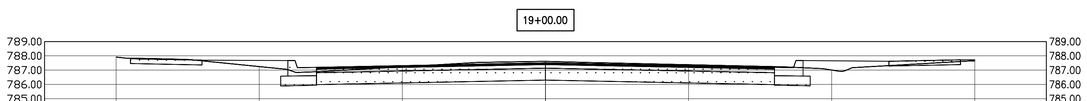

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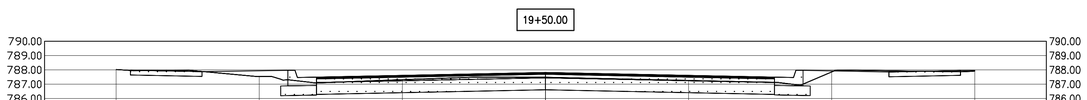

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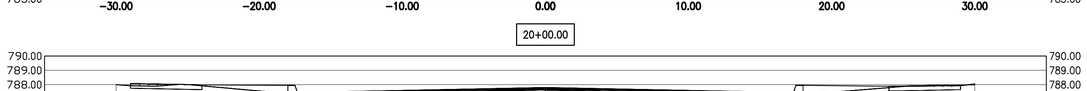

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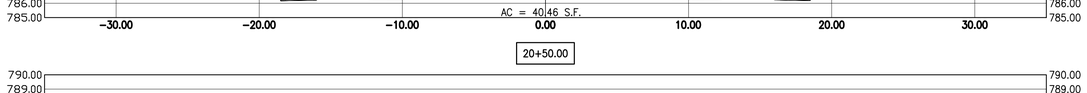

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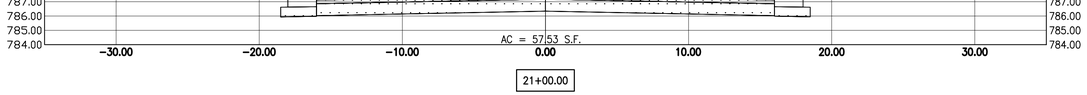

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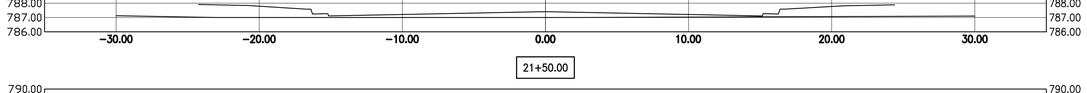

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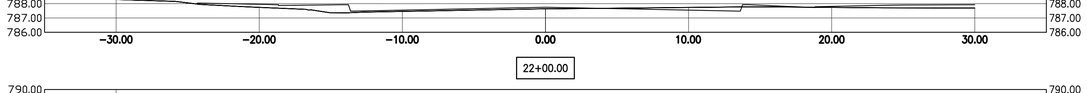

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Drawing Title: ROAD PROFILE SECTIONS
Sub Title: OAKDALE AVENUE
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Customer: CITY OF LA PORTE, INDIANA
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Designed: CWT
Drawn: RRH
Checked: JPP

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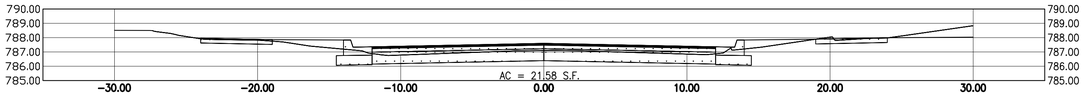
8/21/2015

SHEET 31 OF 37

22+50.00



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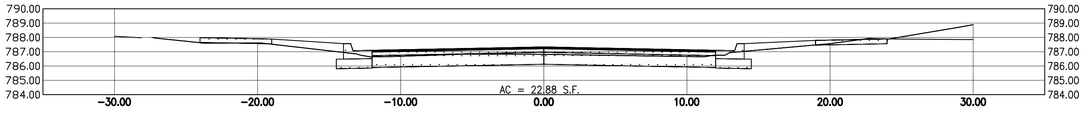

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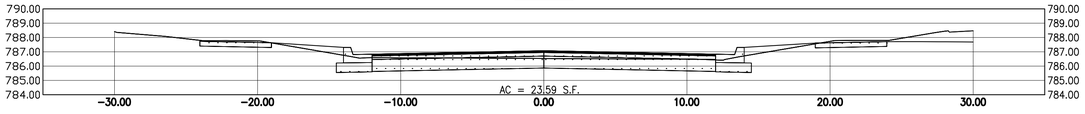

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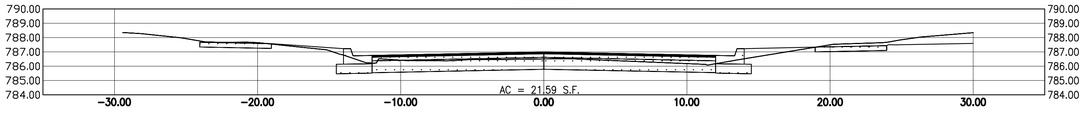

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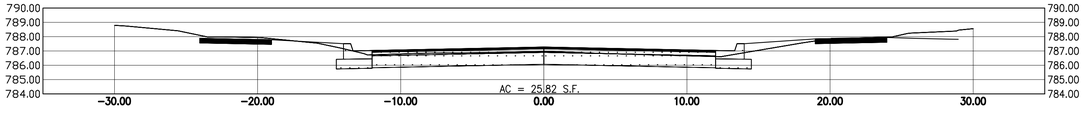

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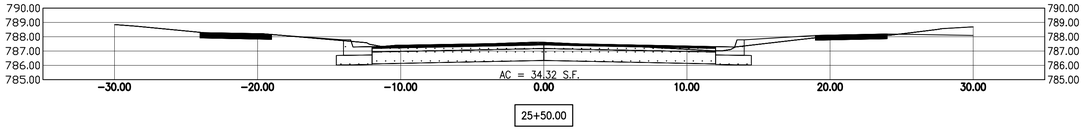

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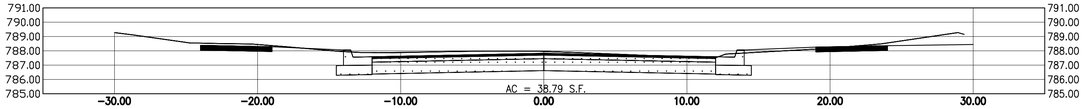

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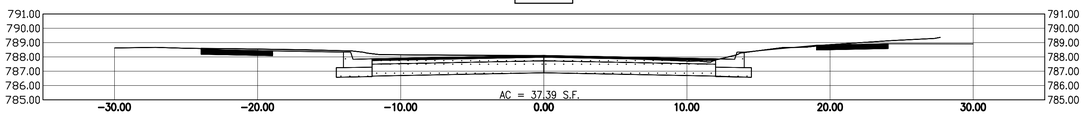

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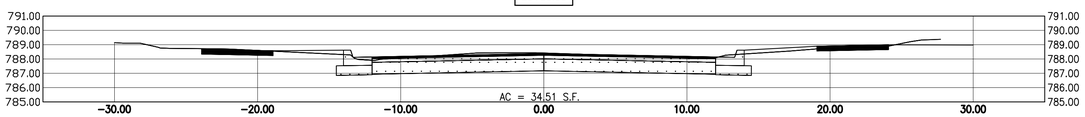

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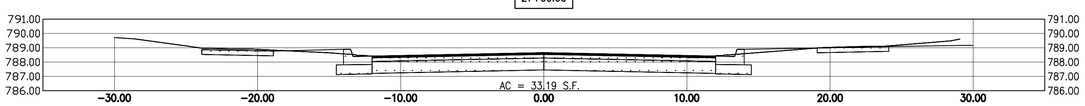

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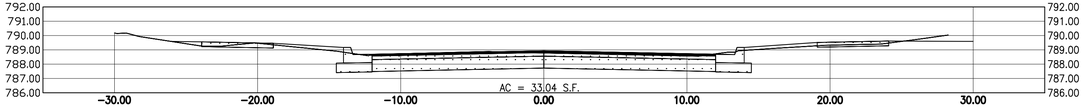

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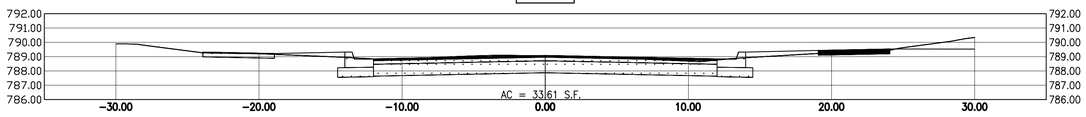

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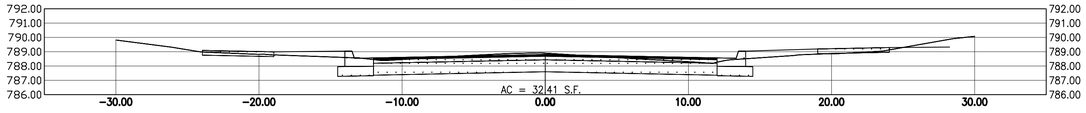

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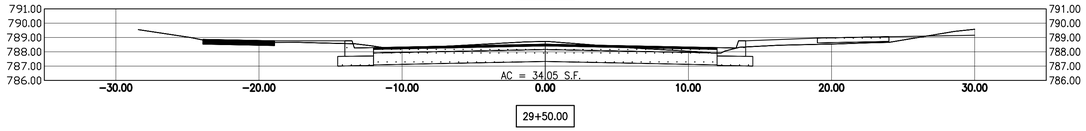

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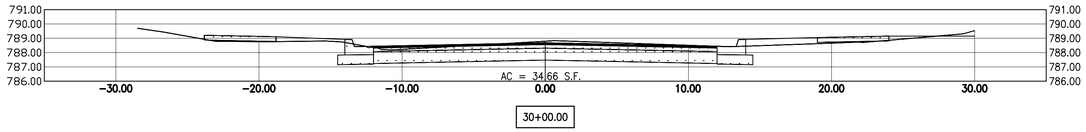

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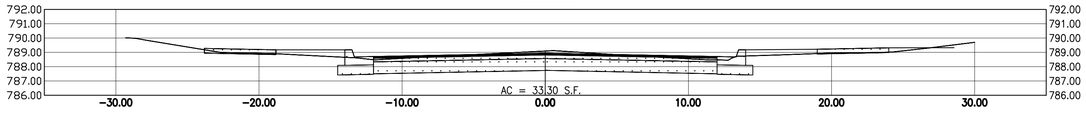

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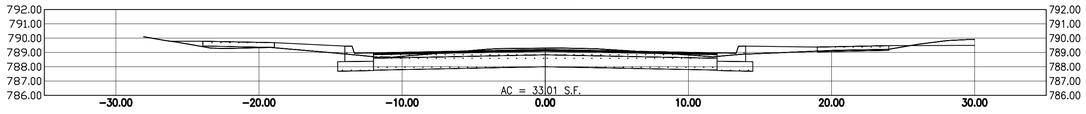

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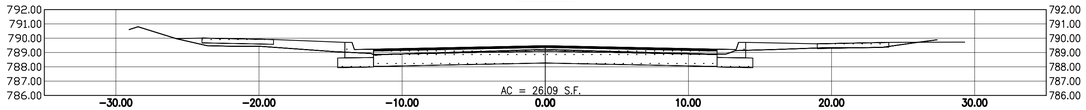

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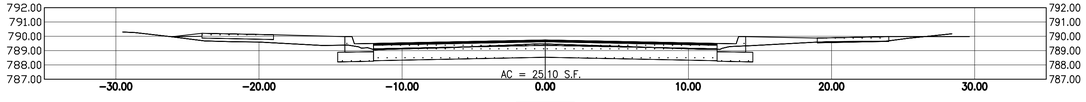

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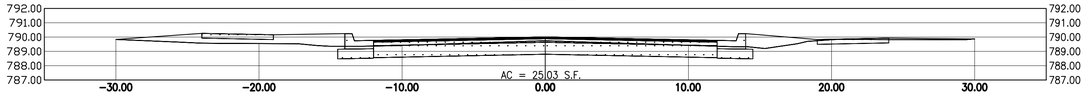

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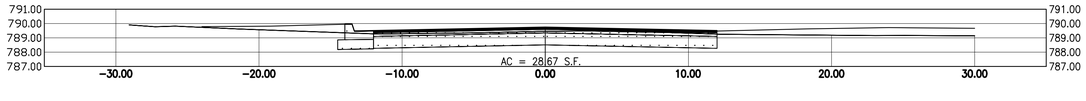

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Drawing Title: ROAD PROFILE SECTIONS

Sub Title: OAKDALE/ SILVERBROOK AVENUES

Drawing Filename: X:\Projects\JAPORTE\WASTWATR\15-5140\dwg\02_PRO_ROAD_15-514.DWG

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Customer: CITY OF LA PORTE, INDIANA

Project Name: MONROE MANOR SEWER SEPARATION PROJECT

Project Number: 15-514

Date & Time: 08/21/15 - 08:13

CHARLES N. THOMPSON III
REGISTERED
NO. 11100557
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

Designed: CWT | Drawn: RRH | Checked: JPP

SHEET 32 OF 37

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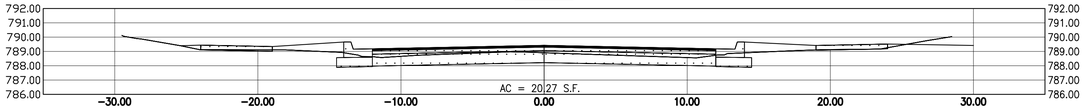

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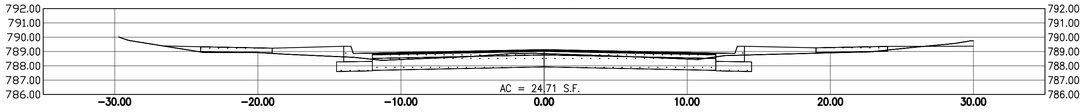

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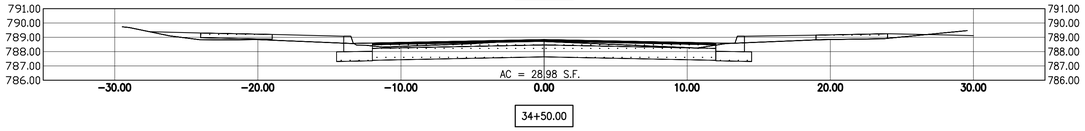

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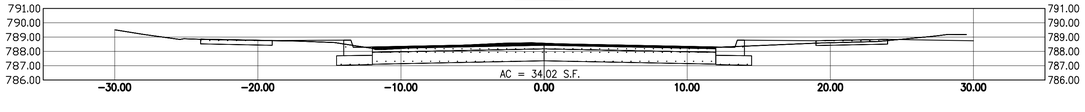

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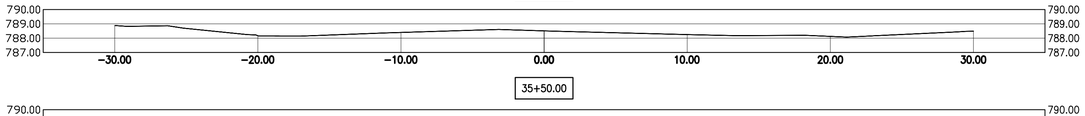

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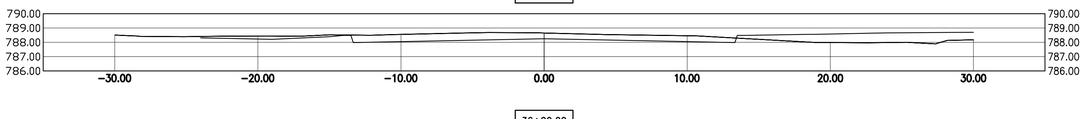

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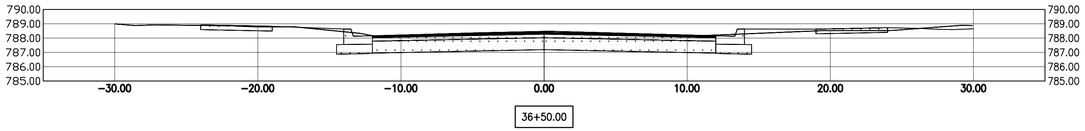

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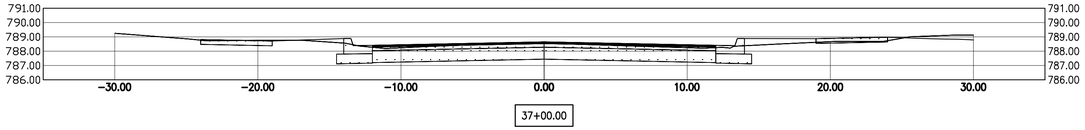

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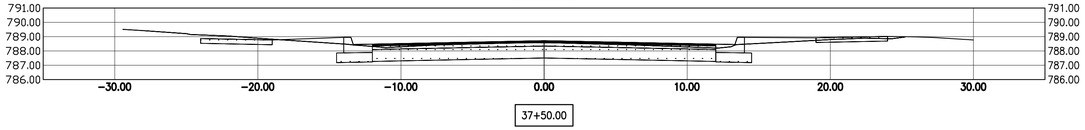

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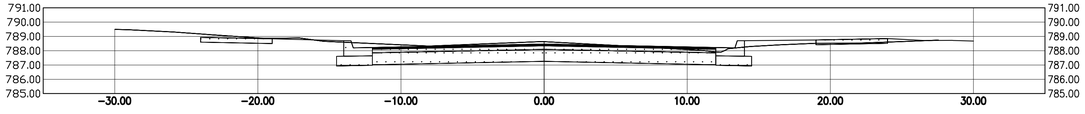

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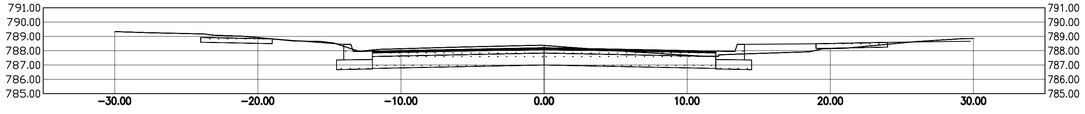

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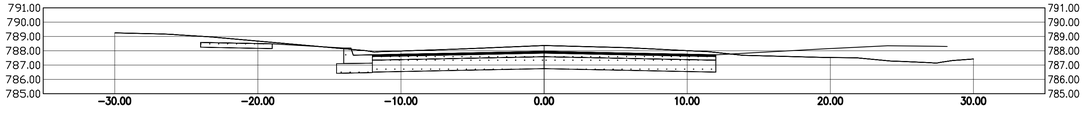

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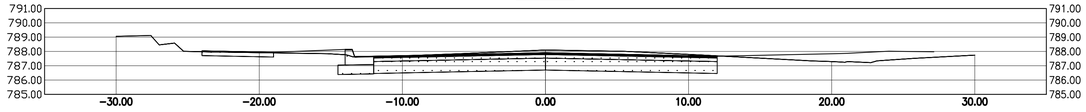

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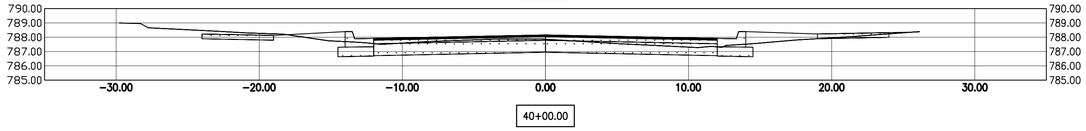

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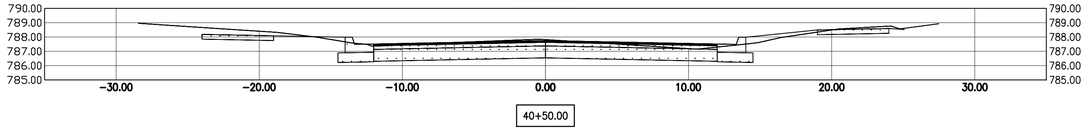

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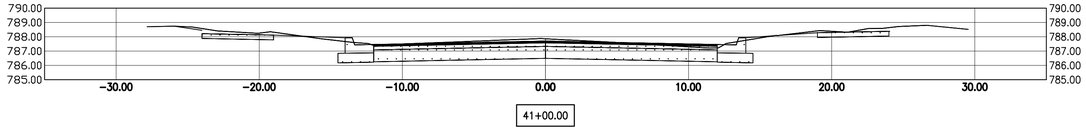

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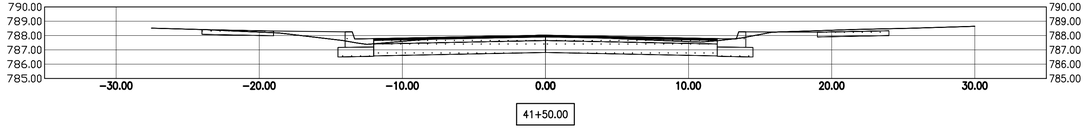

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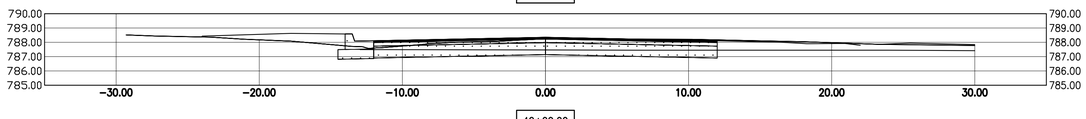

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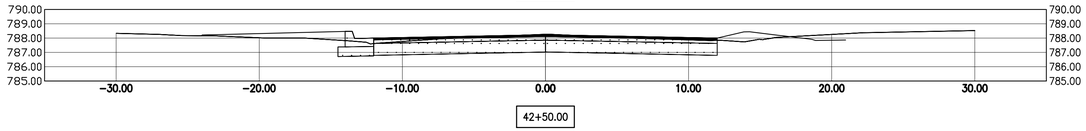

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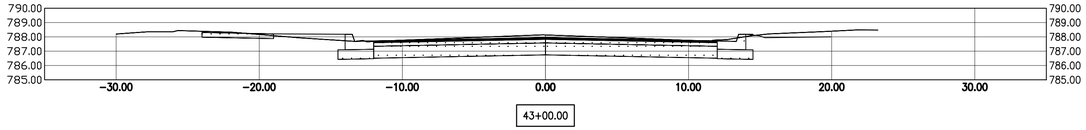

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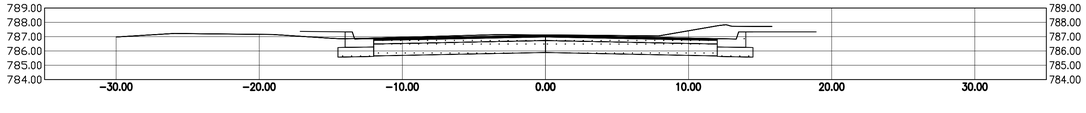

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Drawing Title: ROAD PROFILE SECTIONS
Sub Title: SILVERBROOK AVENUE
Drawing Filename: X:\Projects\JAPORTE\WASTWATR\15-514\Dwgs\02_PRO_ROAD_15-514.DWG
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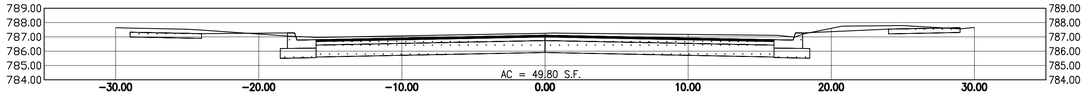
Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/21/15 - 08:13

CHARLES W. THOMPSON III
REGISTERED
NO. 11100557
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

Designed: CWT
Drawn: RRH
Checked: JPP

SHEET
33
OF 37

11+00.00



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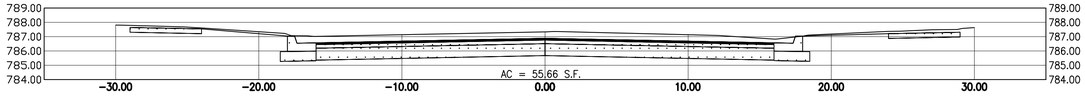

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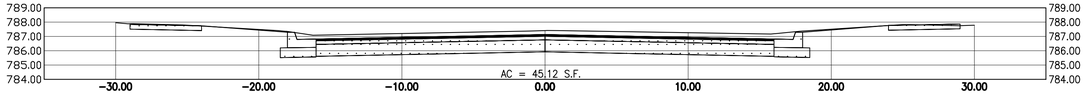

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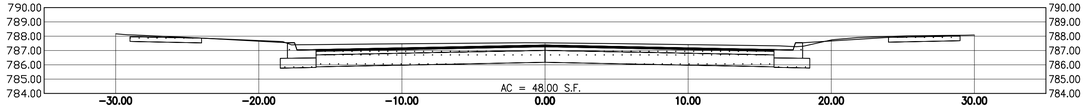

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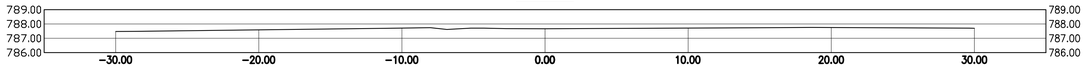

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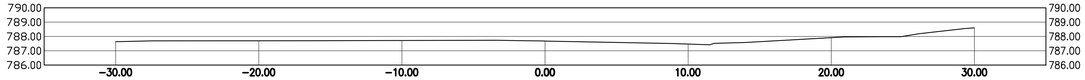

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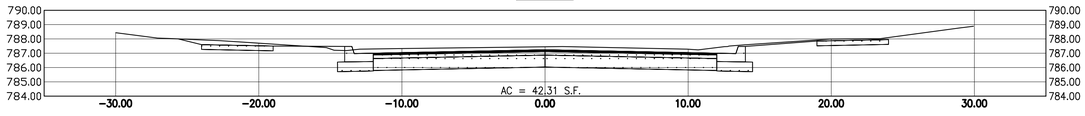

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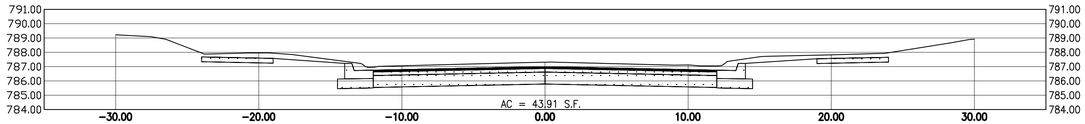

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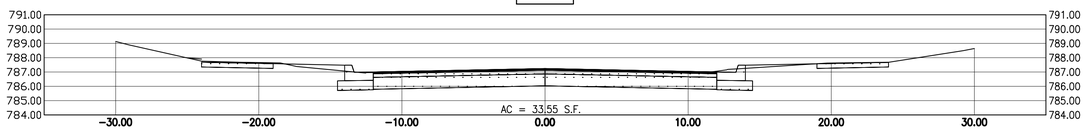

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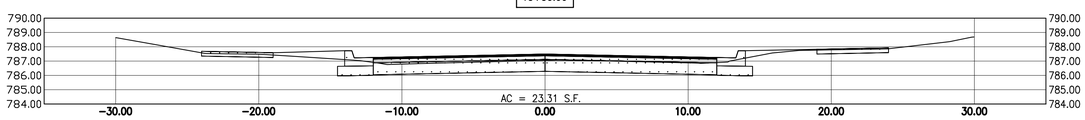

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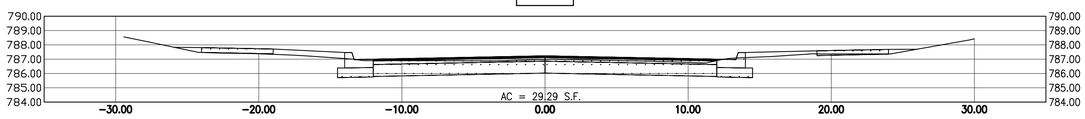

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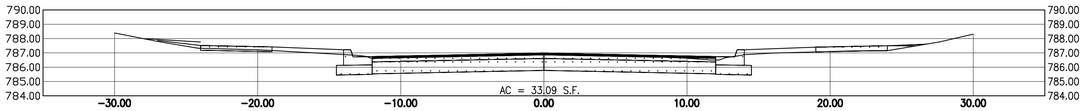

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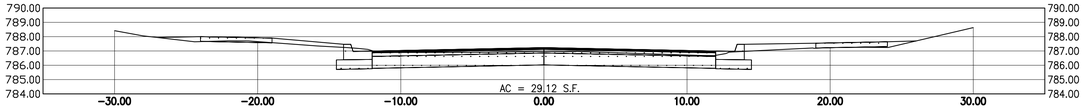

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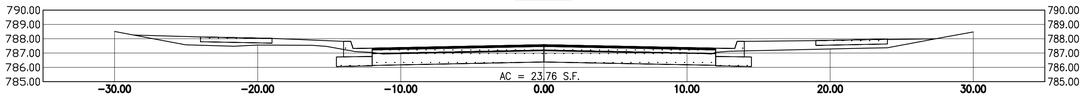

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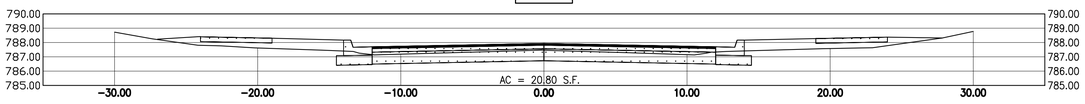

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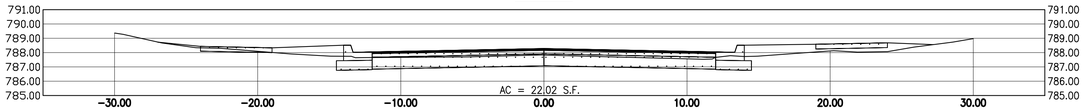

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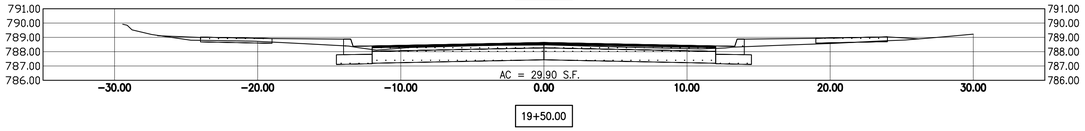

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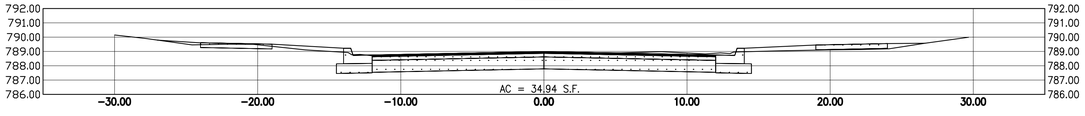

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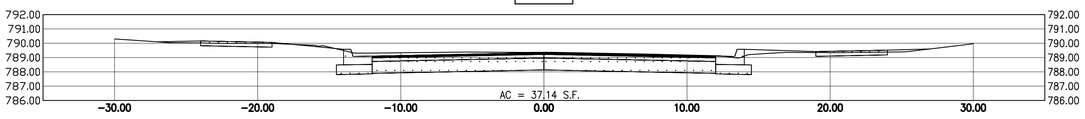

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Drawing Title: ROAD PROFILE SECTIONS

Sub Title: GLENVIEW AVENUE

Drawing Filename: X:\Projects\JAPORTE\WASTWATR\15-514\Dwgs\02_PRO_ROAD_15-514.DWG

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Vertical Scale: 1" = 5'-0"

Customer: CITY OF LA PORTE, INDIANA

Project Name: MONROE MANOR SEWER SEPARATION PROJECT

Project Number: 15-514

Date & Time: 08/21/15 - 08:13

CHARLES W. THOMPSON III
REGISTERED
NO. 11100657
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

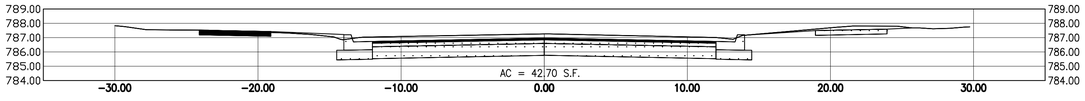
Designed: CWT

Drawn: RRH

Checked: JPP

SHEET 34 OF 37

10+50.00



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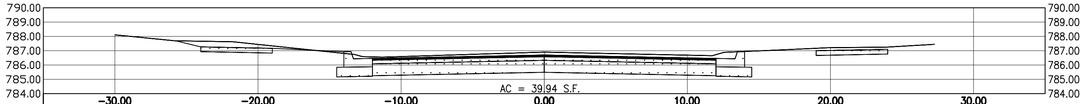

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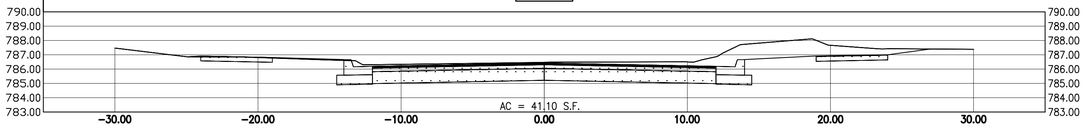

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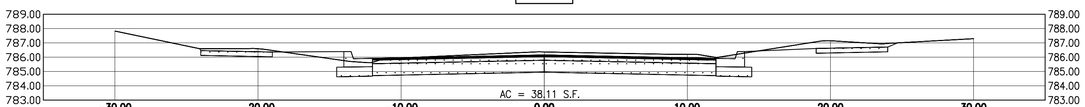

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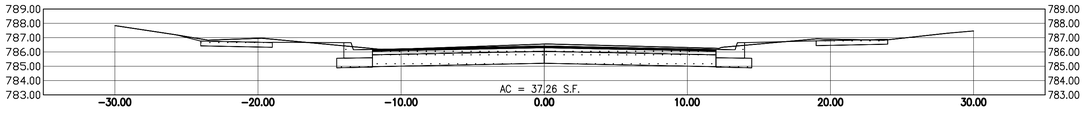

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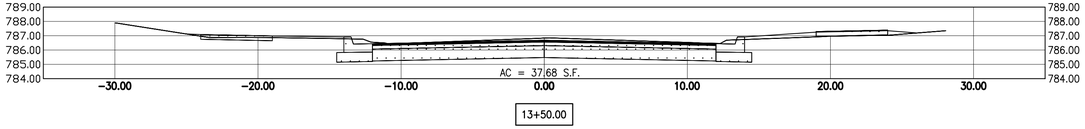

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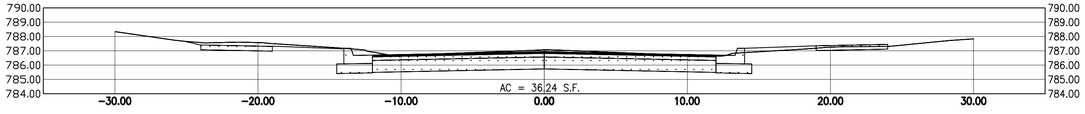

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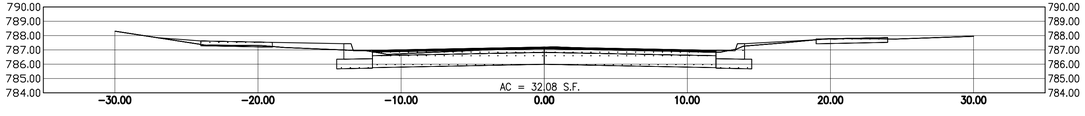

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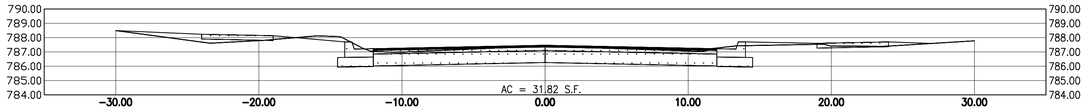

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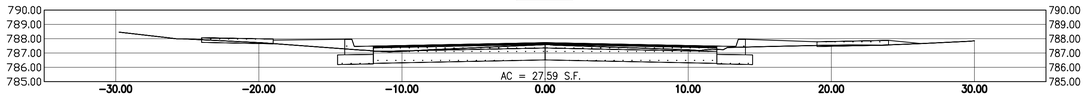

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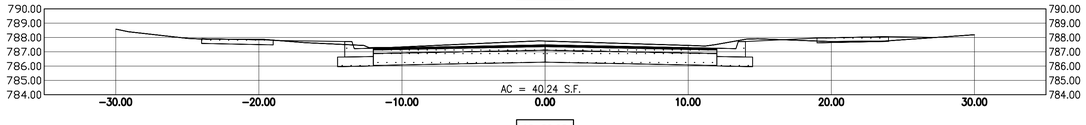

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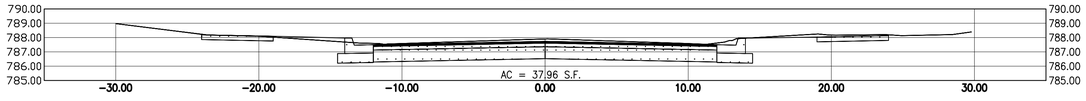

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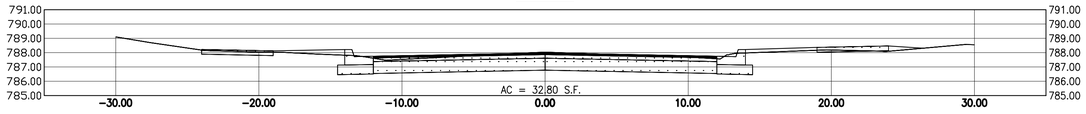

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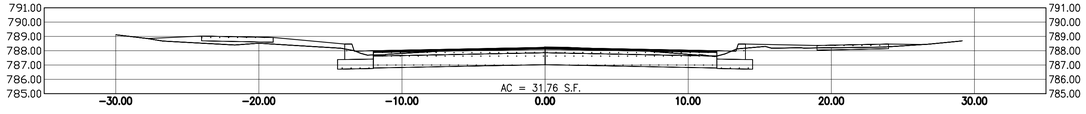

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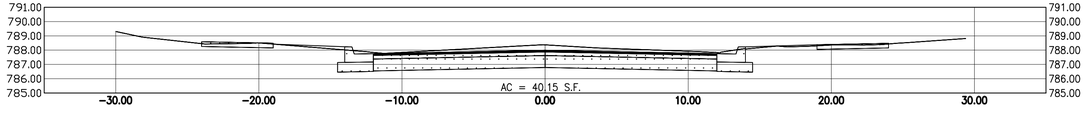

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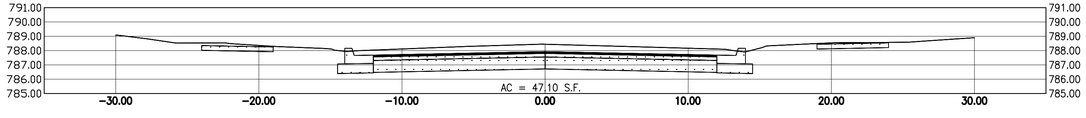

CHARLES W. THOMPSON, III
REGISTERED
NO.
11100657
STATE OF
INDIANA
PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 E. 129th Street, Hammond, Indiana 46323
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Drawing Title: ROAD PROFILE SECITONS
Sub Title: PARKVIEW AVENUE
Drawing Filename: X:\Projects\JAPORTE\WASTWATR\15-514\Dwgs\02_PRO_ROAD_15-514.DWG
Horizontal Scale: 1" = 20'-0"
Vertical Scale: 1" = 5'-0"

Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/21/15 - 08:13

Designed: CWT
Drawn: RRH
Checked: JPP

SHEET
35
OF 37

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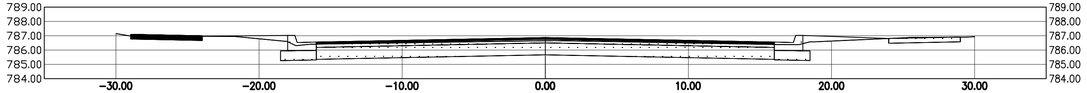

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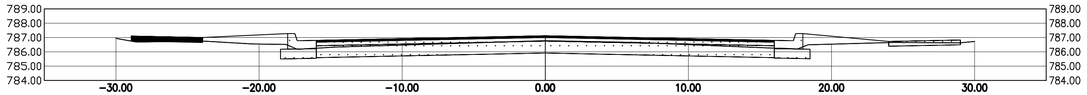

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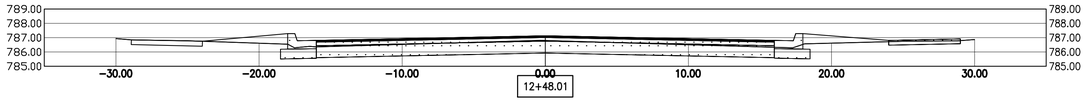

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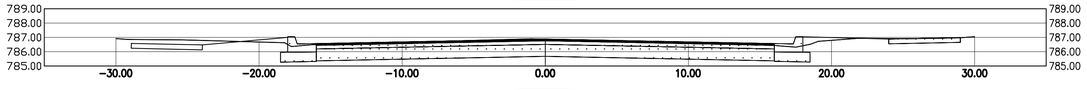

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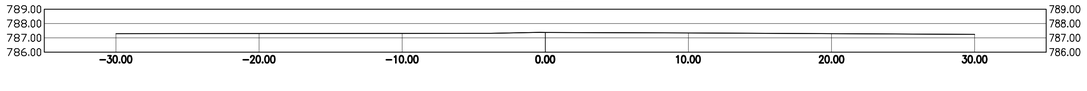

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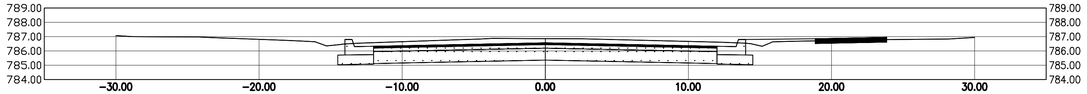

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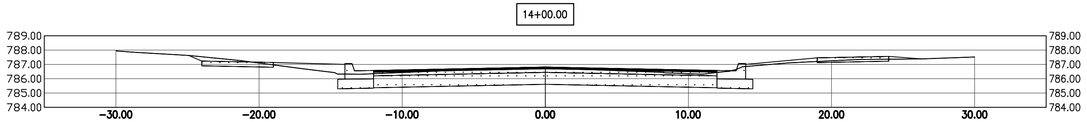

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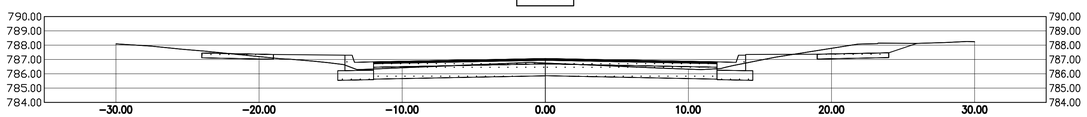

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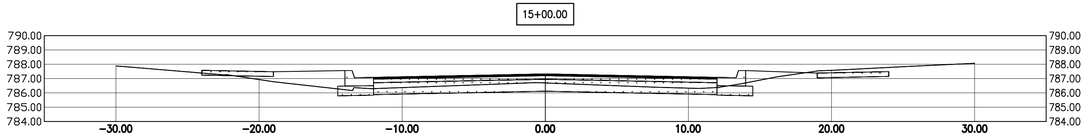

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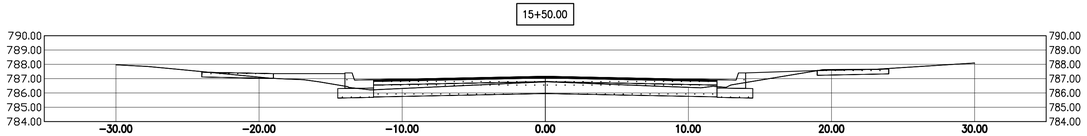

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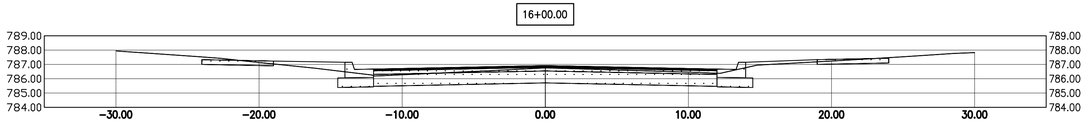

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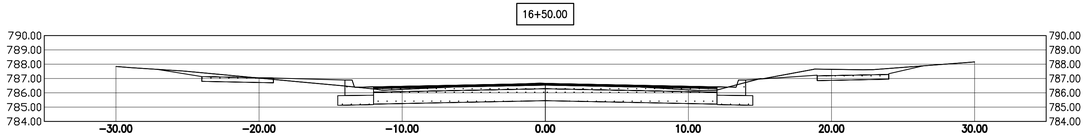

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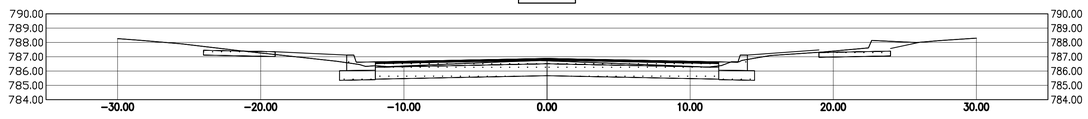

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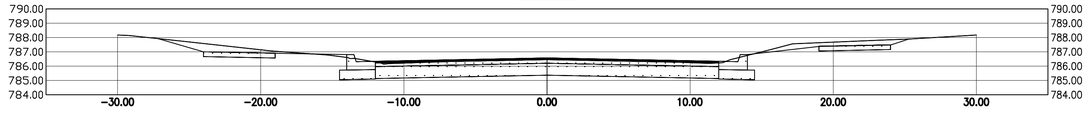

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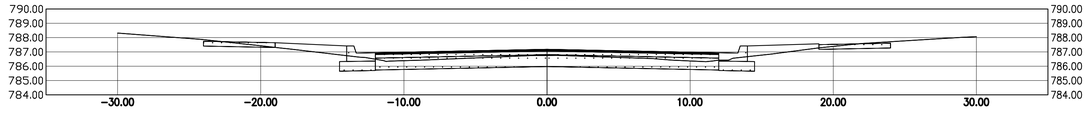

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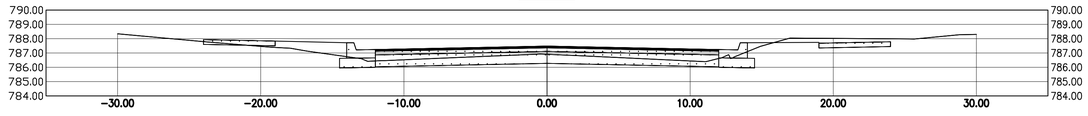

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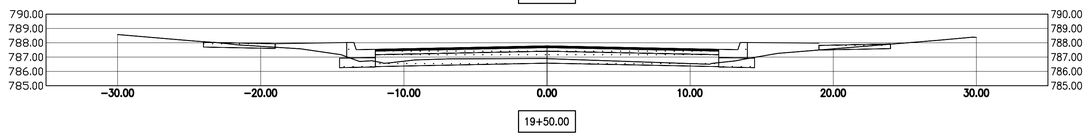

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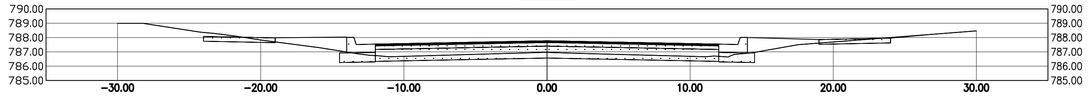

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Drawing Title: ROAD PROFILE SECTIONS

Sub Title: LAWNDALE AVENUE

Drawing Filename: X:\Projects\LAPORTE\WASTWATR\15-514\Dwgs\02_PRO_ROAD_15-514.DWG

Horizontal Scale: 1" = 20'-0" | Vertical Scale: 1" = 5'-0"

Customer: CITY OF LA PORTE, INDIANA

Project Name: MONROE MANOR SEWER SEPARATION PROJECT

Project Number: 15-514

Date & Time: 08/21/15 - 08:13

CHARLES W. THOMPSON, III
REGISTERED
NO. 11100557
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

Designed: CWT
Drawn: RRH
Checked: JPP

SHEET 36 OF 37

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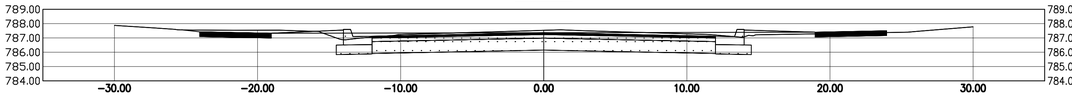

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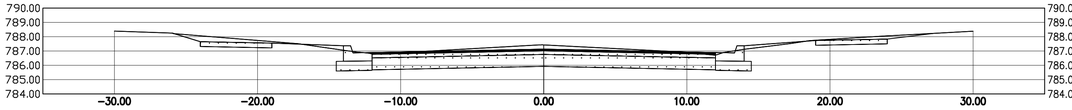

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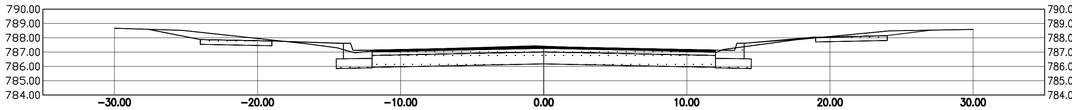

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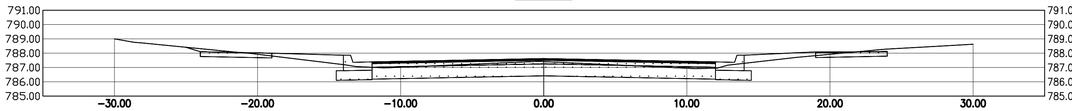

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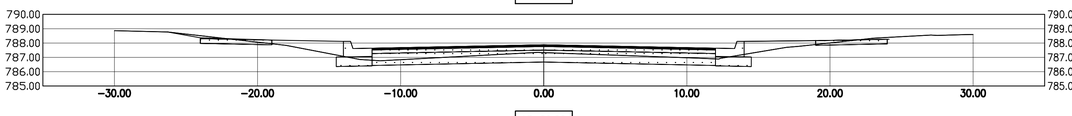

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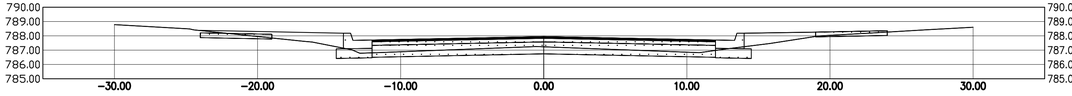

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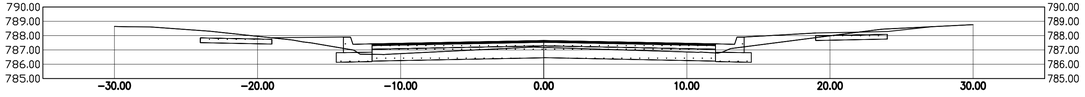

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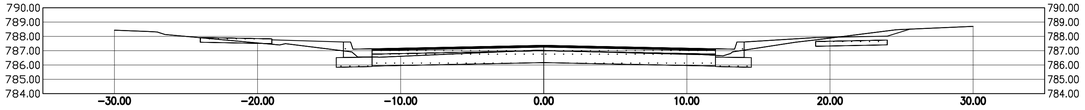

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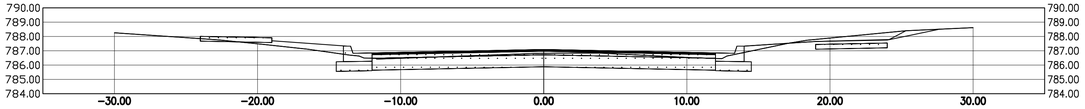

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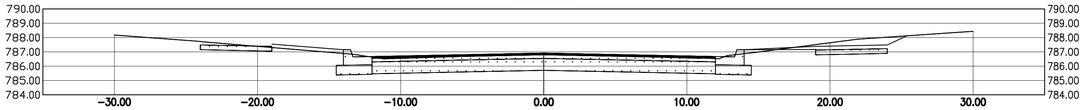

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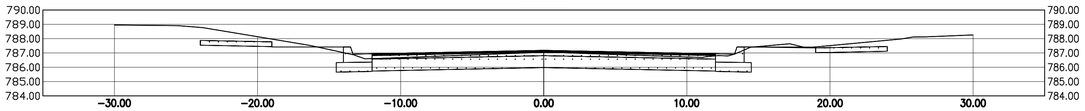

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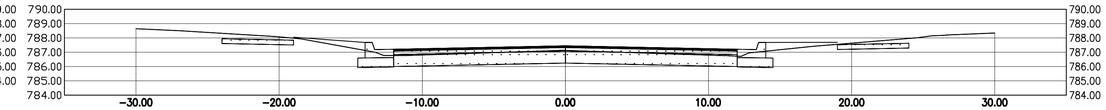

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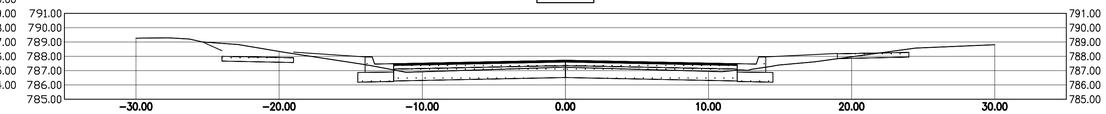

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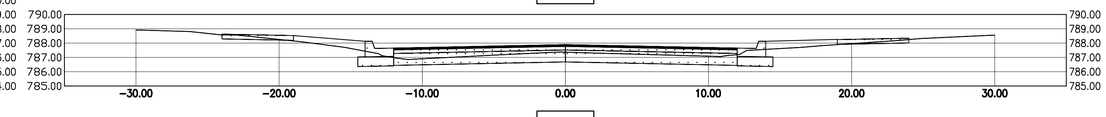

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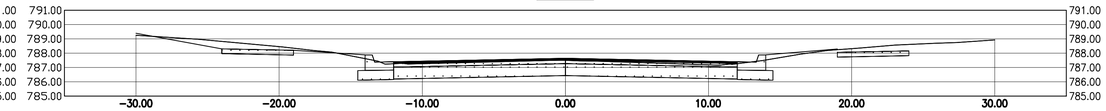

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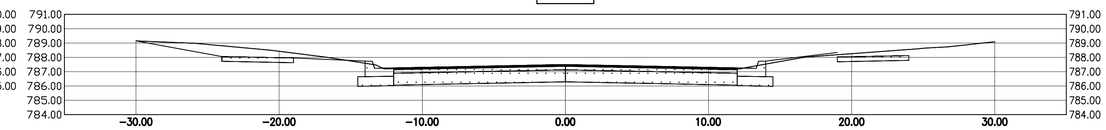

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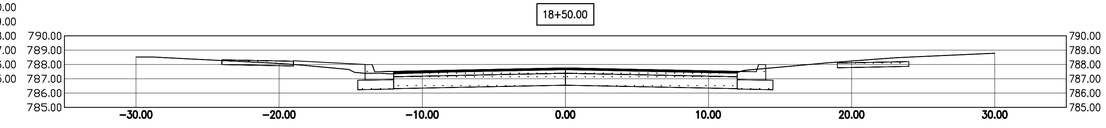

engineering, inc.
2421 N. 173rd Street, Hammond, Indiana, 46323
Phone: (219) 844-8580 Fax: (219) 844-7764
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Drawing Title: ROAD PROFILE SECTIONS

Sub Title: EASTWOOD AVENUE

Drawing Filename: X:\Projects\JAPORTE\WASTWATR\15-514\Dwgs\02_PRO_ROAD_15-514.DWG

Horizontal Scale: 1" = 5'-0"

Vertical Scale:

Customer: CITY OF LA PORTE, INDIANA

Project Name: MONROE MANOR SEWER SEPARATION PROJECT

Project Number: 15-514

Date & Time: 08/21/15 - 08:13

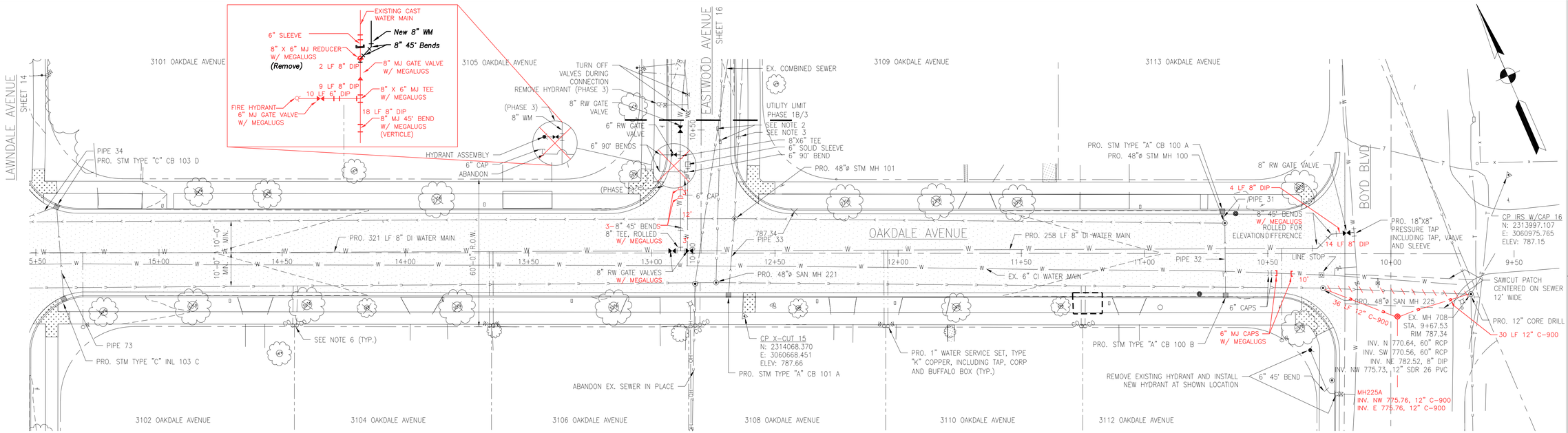
Designed: CWT

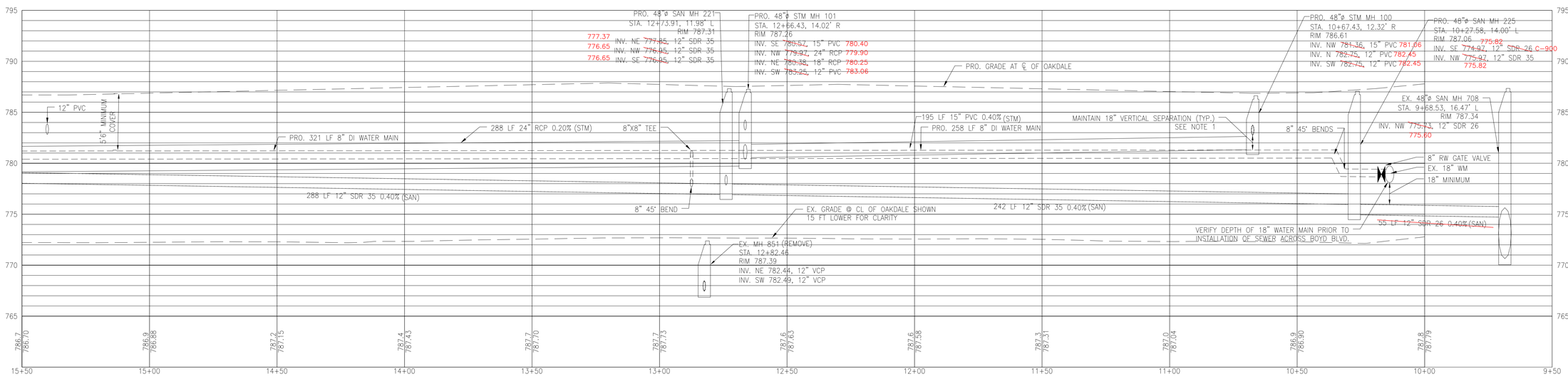
Drawn: RRH

Checked: JPP

CHARLES W. THOMPSON III
REGISTERED
NO. 11100557
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

SHEET 37 OF 37





NOTES:

1. MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER PIPES. MAINTAIN A 10 FOOT HORIZONTAL SEPARATION BETWEEN WATER AND SEWER PIPES AND 8 FOOT SEPARATION BETWEEN WATER MAIN AND SEWER STRUCTURES.
2. INSTALL FERNCO COUPLINGS AND PIPE TO TRANSITION FROM EXISTING SEWER TO NEW. TRANSITION PIPE AND COUPLINGS TO BE REMOVED PRIOR TO EXTENDING SEWER.
3. PLUG NEW STORM SEWER PIPE BETWEEN PHASES WITH BRICK, MORTAR AND HYDRAULIC CEMENT. BACKFILL WITH LIMESTONE AGGREGATE. INSTALLATION/ REMOVAL SHALL BE INCLUDED IN THE PIPE UNIT PRICE.
4. INSTALL FERNCO, AND PIPE TO TRANSITION FROM MANHOLE TO EXISTING PIPE. REMOVE PIPE AND FERNCO BEFORE EXTENDING SEWER IN LATER PHASE.
5. PROVIDE INLET PROTECTION PER SWPPP FOR ALL STORM AND COMBINED STRUCTURES.
6. 6" SDR 35 PVC SANITARY SERVICE, INCLUDING 6" BY MAINLINE DIAMETER TEE (NO INSERTA TEES), PIPE, NECESSARY FITTINGS AND CLEAN OUT. CAP AT PROPERTY LINE. SEWER VIDEO SHOWING LOCATIONS AND NUMBER OF SEWER SERVICES WILL BE PROVIDED BY LA PORTE WASTE WATER PRIOR TO CONSTRUCTION.
7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
- EXISTING INLET
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- PROPERTY CORNER
- EXISTING GAS
- EXISTING COMBINED SANITARY/STORM
- EXISTING STORM
- EXISTING WATERMAIN
- EXISTING FENCE
- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

- PRO. FIRE HYDRANT
- PRO. WATER VALVE
- PRO. BUFFALO BOX
- PRO. MAN HOLE
- PRO. CATCH BASIN
- LINE STOP
- SLEEVE
- 22° BEND
- 45° BEND
- PRO. SANITARY SEWER
- PRO. STORM SEWER
- PRO. WATER MAIN
- PRO. SANITARY CLEAN OUT
- 45° BEND
- CAP
- TEE
- 90° BEND

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "C" INL 103 C	RIM = 786.25 SUMP = 782.95 STA: 15+38.63, 18.82' L	PIPE 73, 12" PVC INV. OUT = ~~782.95~~ 782.93 36 ~~38~~ LF, 0.53% SLOPE
PRO. STM TYPE "C" CB 103 D	RIM = 786.15 SUMP = 782.55 STA: 15+41.57, 18.62' R	PIPE 73, 12" PVC INV. IN = 782.75 39 ~~38~~ LF, 0.53% SLOPE PIPE 34, 15" PVC INV. OUT = ~~782.55~~ 782.59 16 ~~18~~ LF, 0.54% SLOPE
PRO. STM TYPE "A" CB 101 A	RIM = 787.19 SUMP = 781.35 STA: 12+68.87, 17.02' L	PIPE 33, 12" PVC INV. OUT = ~~783.35~~ 783.74 30 ~~31~~ LF, 0.32% SLOPE
PRO. STM TYPE "A" CB 100 A	RIM = 786.52 SUMP = 780.85 STA: 10+68.41, 17.14' R	PIPE 31, 12" PVC INV. OUT = ~~782.85~~ 782.63 6 ~~5~~ LF, 2.03% SLOPE
PRO. STM TYPE "A" CB 100 B	RIM = 786.52 SUMP = 780.85 STA: 10+67.11, 16.96' L	PIPE 32, 12" PVC INV. OUT = ~~782.85~~ 783.58 27 ~~29~~ LF, 0.34% SLOPE

NOTE: ALL WATER MAIN FITTINGS, VALVES, ETC. HAVE BEEN RESTRAINED WITH MEGALUGS.

Added Notes:

1. *Red Lines are from HRP & Walsh & Kelly Phase 1 record drawings. Contractor to field excavate and verify position and elevation of all utilities stubs connections at phase limits prior to construction.*
2. *Remove transitional curb at phase limits.*
3. *Phase 1 storm sewer bulkheaded/ capped near phase limits*
4. *Ex. combined sanitary & storm system tied into phase 1 sanitary sewer. Installation of temporary fittings may be necessary for maintaining service during construction.*
5. *Surface asphalt shall be milled to a clean transitional butt joint outside the limits of excavation for phase 2&3.*

20' 0 10' 20' 40'
1" = 20'-0"

CHARLES W. THOMPSON III
REGISTERED
NO. 11100657
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 173rd Street, Hammond, Indiana, 46323
Phone: (219) 844 8680 Fax: (219) 844 7754
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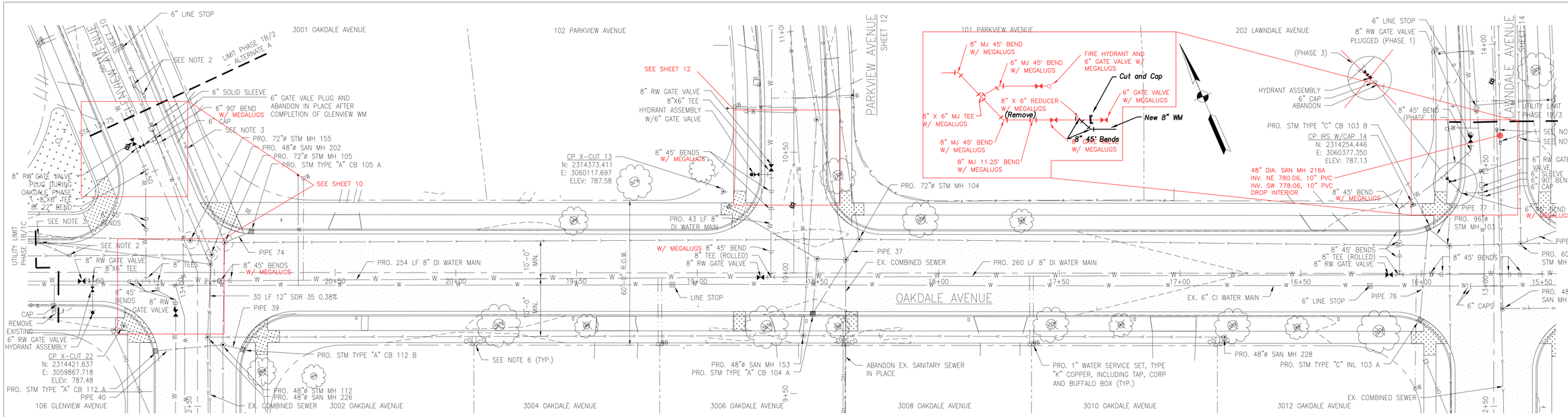
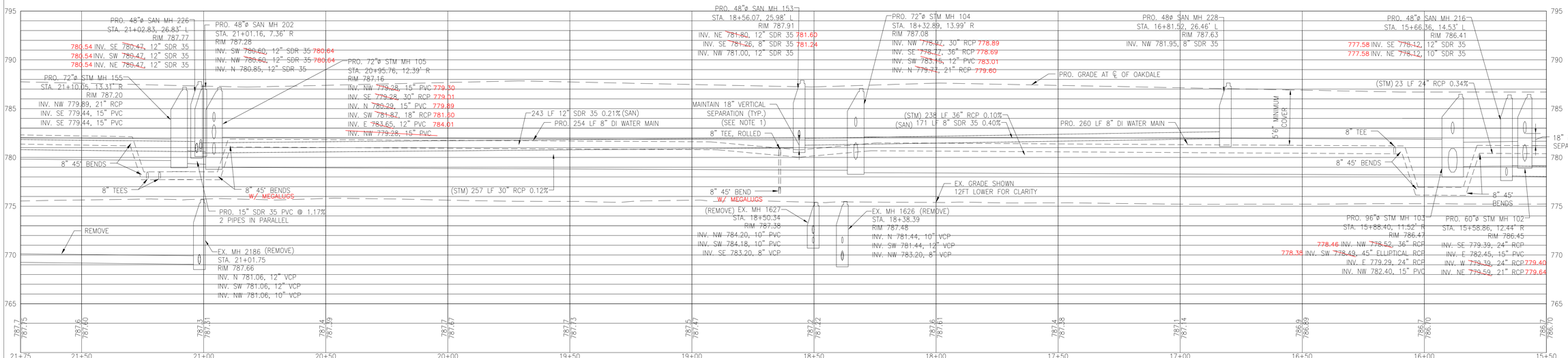
Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/20/15 - 09:39

Drawing Title: OAKDALE/SILVERBROOK - UTILITY *Record Drawing*
Sub Title: PLAN & PROFILE - STA. 9+50 - STA. 15+50
Drawing Filename: X:\Projects\LAPORTE\WASTWATR\15-514\Dwgs\01_PRO_UTILITIES 15-514.DWG
Horizontal Scale: 1" = 20'-0"
Vertical Scale: 1" = 5'-0"

Designed: CWT
Drawn: RRH
Checked: JPP

SHEET 4RD OF 37





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7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

LEGEND

	EXISTING TREE	G G G	EXISTING GAS
	EXISTING FIRE HYDRANT	S S S S	EXISTING COMBINED SANITARY/STORM
	EXISTING WATER VALVE	S S S S	EXISTING STORM
	EXISTING BUFFALO BOX	W W	EXISTING WATERMAIN
	EXISTING MAN HOLE	X X X	EXISTING FENCE
	EXISTING CATCH BASIN		EXISTING TREE LINE
	EXISTING INLET		EXISTING ROAD ℄ ALIGNMENT
	EXISTING UTILITY POLE		RIGHT-OF-WAY
	EXISTING LIGHT POLE		CONTROL POINT
	PROPERTY CORNER		

PROPOSED LEGEND

	PRO. FIRE HYDRANT	S S S S	PRO. SANITARY SEWER
	PRO. WATER VALVE	S S S S	PRO. STORM SEWER
OW	PRO. BUFFALO BOX	W W	PRO. WATER MAIN
	PRO. MAN HOLE	CO	PRO. SANITARY CLEAN OUT
	PRO. CATCH BASIN		45° BEND
	LINE STOP		CAP
	SLEEVE		TEE
	22° BEND		90° BEND
	45° BEND		

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "A" CB 104 A	RIM = 786.88 SUMP = 781.25 STA: 18+52.11, 16.85' L	PIPE 37, 12" PVC INV. OUT = 783.25 36 LF, 0.28% SLOPE
PRO. STM TYPE "C" INL 103 A	RIM = 786.25 SUMP = 782.85 STA: 16+00.60, 19.31' L	PIPE 76, 12" PVC INV. OUT = 782.85 38 LF, 0.52% SLOPE
PRO. STM TYPE "C" CB 103 B	RIM = 786.15 SUMP = 780.50 STA: 15+97.33, 18.79' R	PIPE 76, 12" PVC INV. IN = 782.65 38 LF, 0.52% SLOPE PIPE 77, 15" PVC INV. OUT = 782.50 12 LF, 0.87% SLOPE
PRO. STM TYPE "A" CB 105 A	RIM = 787.70 SUMP = 781.75 STA: 20+84.72, 17.06' R	PIPE 74, 12" PVC INV. OUT = 783.75 12 LF, 0.83% SLOPE
PRO. STM TYPE "A" CB 112 B	RIM = 786.70 SUMP = 781.07 STA: 20+88.14, 31.94' L	PIPE 39, 12" PVC INV. OUT = 783.07 9 LF, 0.22% SLOPE
PRO. STM TYPE "A" CB 112 A	RIM = 787.22 SUMP = 781.11 STA: 21+24.45, 32.54' L	PIPE 40, 12" PVC INV. OUT = 783.11 28 LF, 0.22% SLOPE

NOTE: ALL WATER MAIN FITTINGS, VALVES, ETC. HAVE BEEN RESTRAINED WITH MEGALUGS.

Added Notes:

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4. ***Ex. combined sanitary & storm system tied into phase 1 sanitary sewer. Installation of temporary fittings may be necessary for maintaining service during construction.***
5. ***Surface asphalt shall be milled to a clean transitional butt joint outside the limits of excavation for phase 2&3.***

20' 0 10' 20' 40'

1" = 20'-0"

CHARLES W. THOMPSON III REGISTERED NO. 11100657 STATE OF INDIANA PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 173rd Street, Hammond, Indiana, 46323
Phone: (219) 844 8680 Fax: (219) 844 7754
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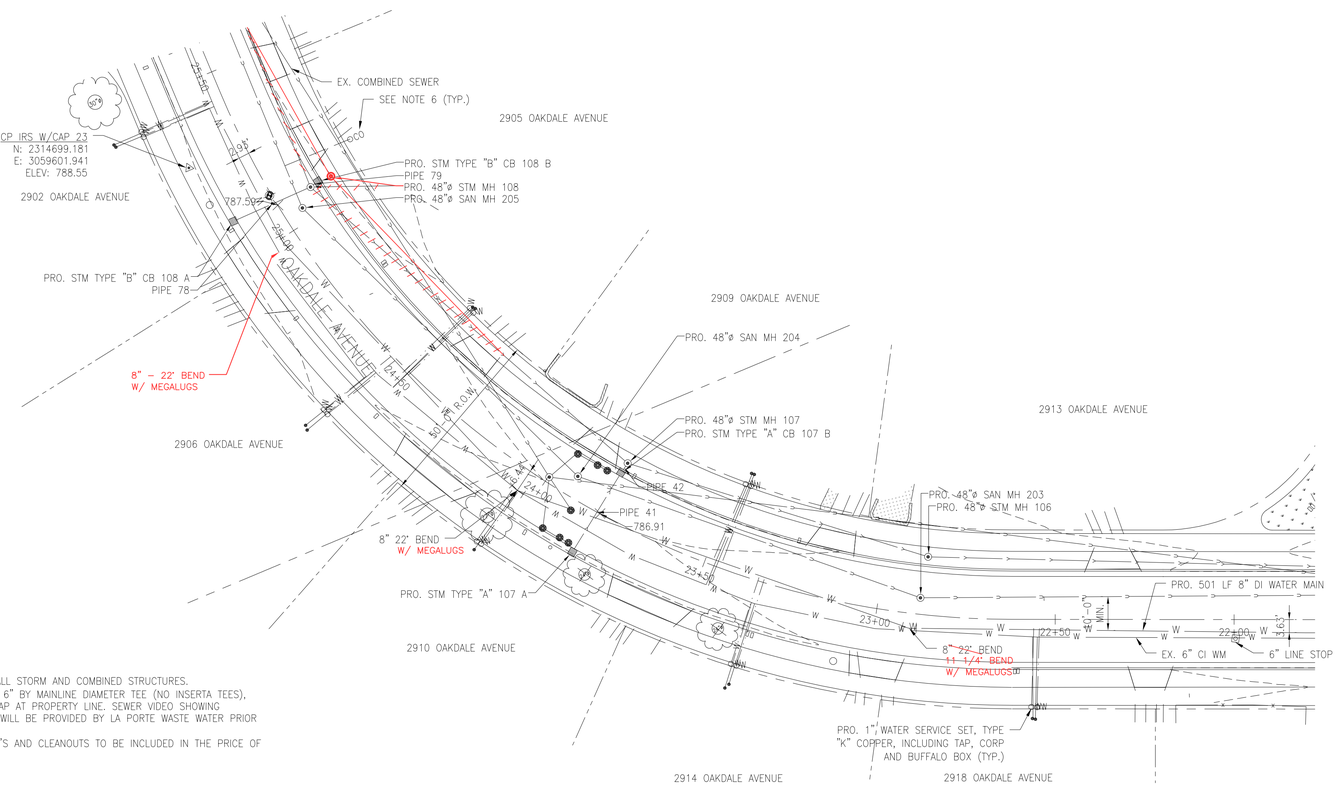
Drawing Title: OAKDALE/SILVERBROOK - UTILITY *Record Drawing*
Sub Title: PLAN & PROFILE - STA. 15+50 - STA. 21+75
Drawing Filename: X:\Projects\LAPORTE\WASTWATR\15-514\Dwgs\01 PRO_UTILITIES_15-514.DWGS
Horizontal Scale: 1" = 20'-0"
Vertical Scale: 1" = 5'-0"

Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/20/15 - 09:40

Designed: CWT
Drawn: RRH
Checked: JPP

SHEET 5RD
OF 37



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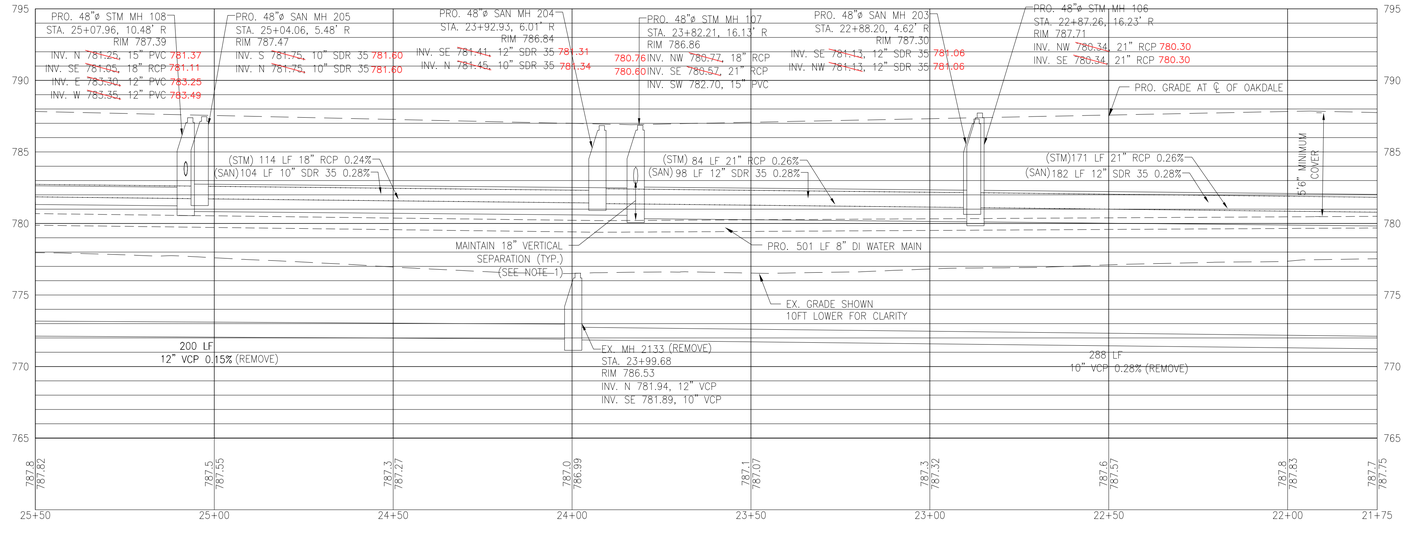
8. SEE SHEET 2 FOR ADDITIONAL NOTES

PROPOSED STRUCTURE DATA TABLE		
STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "A" CB 107 B	RIM = 786.57 SUMP = 780.80 STA: 23+82.53, 13.01' R	PIPE 41, 12" PVC INV. IN = ~~783.00~~ 783.16 26 LF, 0.38% SLOPE PIPE 42, 15" PVC INV. OUT = ~~782.80~~ 782.90 3 LF, 3.19% SLOPE
PRO. STM TYPE "A" 107 A	RIM = 786.57 SUMP = 783.10 STA: 23+83.74, 13.12' L	PIPE 41, 12" PVC INV. OUT = ~~783.10~~ 783.57 26 LF, 0.38% SLOPE
PRO. STM TYPE "B" CB 108 B	RIM = 787.34 SUMP = 781.35 STA: 25+08.25, 13.15' R	PIPE ~~79, 12" PVC~~ 15" INV. OUT = ~~783.35~~ 783.59 3 LF, 1.86% SLOPE
PRO. STM TYPE "B" CB 108 A	RIM = 787.34 SUMP = 781.50 STA: 25+10.79, 12.86' L	PIPE 78, 12" PVC INV. OUT = ~~783.50~~ 784.04 ~~25~~ 24 LF, 0.64% SLOPE



LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
- EXISTING INLET
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- PROPERTY CORNER
- EXISTING GAS
- EXISTING COMBINED SANITARY/STORM
- EXISTING STORM
- EXISTING WATERMAIN
- EXISTING FENCE
- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

- PRO. FIRE HYDRANT
- PRO. WATER VALVE
- PRO. BUFFALO BOX
- PRO. MAN HOLE
- PRO. CATCH BASIN
- LINE STOP
- SLEEVE
- 22° BEND
- 45° BEND
- PRO. SANITARY SEWER
- PRO. STORM SEWER
- PRO. WATER MAIN
- PRO. SANITARY CLEAN OUT
- 45° BEND
- CAP
- TEE
- 90° BEND

Added Notes:

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20' 0 10' 20' 40'
1" = 20'-0"

CHARLES W. THOMPSON III
REGISTERED
NO. 11100657
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 173rd Street, Hammond, Indiana, 46323
Phone: (219) 844 8680 Fax: (219) 844 7754
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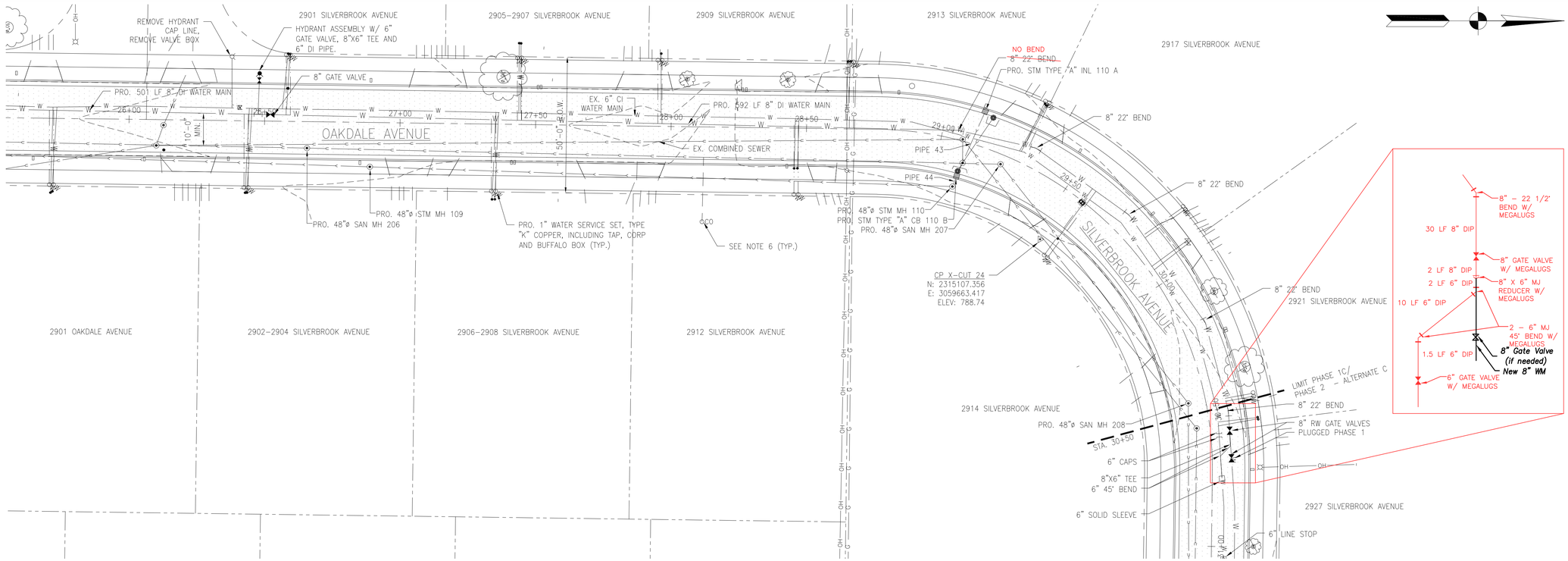
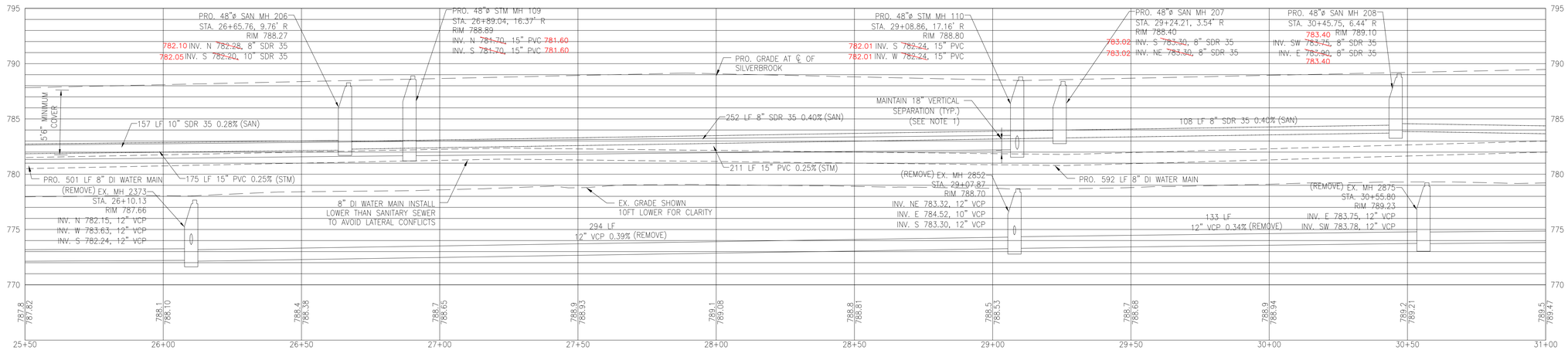
Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/20/15 - 09:42

Drawing Title: OAKDALE/SILVERBROOK - UTILITY *Record Drawing*
Sub Title: PLAN & PROFILE - STA. 21+75 - STA. 25+50
Drawing Filename: X:\Projects\LAPORTE\WASTWATR\15-514\Dwgs\01 PRO_UTILITIES 15-514.DWGB
Horizontal Scale: 1" = 20'-0"
Vertical Scale: 1" = 5'-0"

Designed: CWT
Drawn: RRH
Checked: JPP

SHEET 6 RD
OF 37





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LEGEND

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- CAP
- TEE
- 90° BEND

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "A" INL 110 A	RIM = 788.16 SUMP = 784.35 STA: 29+12.68, 12.85' L	PIPE 43, 12" PVC INV. OUT = ~~784.35~~ 785.16 26 LF, 0.38% SLOPE
PRO. STM TYPE "A" CB 110 B	RIM = 788.16 SUMP = 780.30 STA: 29+09.36, 13.08' R	PIPE 43, 12" PVC INV. IN = ~~784.25~~ 784.58 26 LF, 0.38% SLOPE PIPE 44, 15" PVC INV. OUT = ~~782.30~~ 782.76 4 LF, 1.46% SLOPE

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8/21/2015

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Drawing Title: PLAN & PROFILE - STA. 25+50 - STA. 31+00
Sub Title:
Drawing Filename: X:\Projects\LAPORTE\WASTWATR\15-514\Dwgs\01 PRO_UTILITIES_15-514.DWG7
Horizontal Scale: 1" = 20'-0"
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Project Number: 15-514
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Designed: CVT
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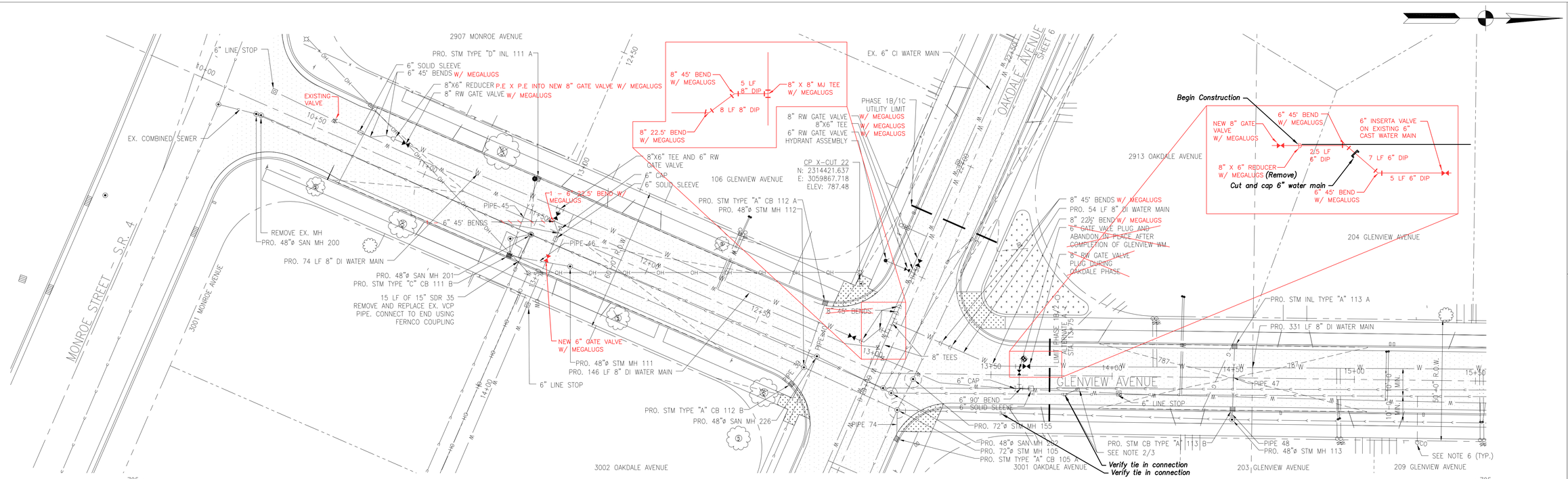
Checked: JPP

SHEET 7RD OF 37



NOTES:

1. MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER PIPES. MAINTAIN A 10 FOOT HORIZONTAL SEPARATION BETWEEN WATER AND SEWER PIPES AND 8 FOOT SEPARATION BETWEEN WATER MAIN AND SEWER STRUCTURES.
2. INSTALL FERNCO COUPLINGS AND PIPE TO TRANSITION FROM EXISTING SEWER TO NEW. TRANSITION PIPE AND COUPLINGS TO BE REMOVED PRIOR TO EXTENDING SEWER.
3. PLUG NEW STORM SEWER PIPE BETWEEN PHASES WITH BRICK, MORTAR AND HYDRAULIC CEMENT. BACKFILL WITH LIMESTONE AGGREGATE. INSTALLATION/ REMOVAL SHALL BE INCLUDED IN THE PIPE UNIT PRICE.
4. INSTALL FERNCO, AND PIPE TO TRANSITION FROM MANHOLE TO EXISTING PIPE. REMOVE PIPE AND FERNCO BEFORE EXTENDING SEWER IN LATER PHASE.
5. PROVIDE INLET PROTECTION PER SWPPP FOR ALL STORM AND COMBINED STRUCTURES.
6. 6" SDR 35 PVC SANITARY SERVICE, INCLUDING 6" BY MAINLINE DIAMETER TEE (NO INSERTA TEES), PIPE, NECESSARY FITTINGS AND CLEAN OUT. CAP AT PROPERTY LINE. SEWER VIDEO SHOWING LOCATIONS AND NUMBER OF SEWER SERVICES WILL BE PROVIDED BY LA PORTE WASTE WATER PRIOR TO CONSTRUCTION.
7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
- EXISTING INLET
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- PROPERTY CORNER
- EXISTING GAS
- EXISTING COMBINED SANITARY/STORM
- EXISTING STORM
- EXISTING WATERMAIN
- EXISTING FENCE
- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

- PRO. FIRE HYDRANT
- PRO. WATER VALVE
- PRO. BUFFALO BOX
- PRO. MAN HOLE
- PRO. CATCH BASIN
- LINE STOP
- SLEEVE
- 22° BEND
- 45° BEND
- PRO. SANITARY SEWER
- PRO. STORM SEWER
- PRO. WATER MAIN
- PRO. SANITARY CLEAN OUT
- 45° BEND
- CAP
- TEE
- 90° BEND

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "D" INL 111 A	RIM = 786.50 SUMP = 782.85 STA: 11+43.81, 17.10' L	PIPE 45, 12" PVC INV. OUT = ~~782.85~~ 784.00 34 LF, 0.44% SLOPE
PRO. STM TYPE "C" CB 111 B	RIM = 786.50 SUMP = 780.70 STA: 11+45.49, 16.85' R	PIPE 45, 12" PVC INV. IN = ~~782.70~~ 783.99 34 LF, 0.44% SLOPE PIPE 46, 12" ~~PVC~~ C-900 INV. OUT = ~~782.70~~ 783.49 26 LF, 0.27% SLOPE
PRO. STM TYPE "A" CB 105 A	RIM = 787.70 SUMP = 781.75 STA: 20+84.72, 17.06' R	PIPE 74, 12" PVC INV. OUT = ~~783.75~~ 784.27 12 LF, 0.83% SLOPE
PRO. STM TYPE "A" CB 112 B	RIM = 786.70 SUMP = 781.07 STA: 20+88.14, 31.94' L	PIPE 39, 12" PVC INV. OUT = ~~783.07~~ 784.10 9 LF, 0.22% SLOPE
PRO. STM TYPE "A" CB 112 A	RIM = 787.22 SUMP = 781.11 STA: 21+24.45, 32.54' L	PIPE 40, 12" PVC INV. OUT = ~~783.11~~ 784.32 28 LF, 0.22% SLOPE
PRO. STM CB TYPE "A" 113 B	RIM = 786.73 SUMP = 780.60 STA: 14+49.90, 13.01' R	PIPE 47, 12" PVC INV. IN = 782.80 26 LF, 0.38% SLOPE PIPE 48, 15" PVC INV. OUT = 782.60 4 LF, 1.17% SLOPE
PRO. STM INL TYPE "A" 113 A	RIM = 786.73 SUMP = 782.90 STA: 14+50.38, 13.05' L	PIPE 47, 12" PVC INV. OUT = 782.90 26 LF, 0.38% SLOPE

NOTE: ALL WATER MAIN FITTINGS, VALVES, ETC. HAVE BEEN RESTRAINED WITH MEGALUGS.

Added Notes:

1. ***Red Lines are from HRP & Walsh & Kelly Phase 1 record drawings. Contractor to field excavate and verify position and elevation of all utilities stubs connections at phase limits prior to construction.***
2. ***Remove transitional curb at phase limits.***
3. ***Phase 1 storm sewer bulkheaded/ capped near phase limits***
4. ***Ex. combined sanitary & storm system tied into phase 1 sanitary sewer. Installation of temporary fittings may be necessary for maintaining service during construction.***
5. ***Surface asphalt shall be milled to a clean transitional butt joint outside the limits of excavation for phase 2&3.***

20' 0 10' 20' 40'
1" = 20'-0"

CHARLES W. THOMPSON II REGISTERED NO. 11100657 STATE OF INDIANA PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 173rd Street, Hammond, Indiana, 46323
Phone: (219) 844 8680 Fax: (219) 844 7754
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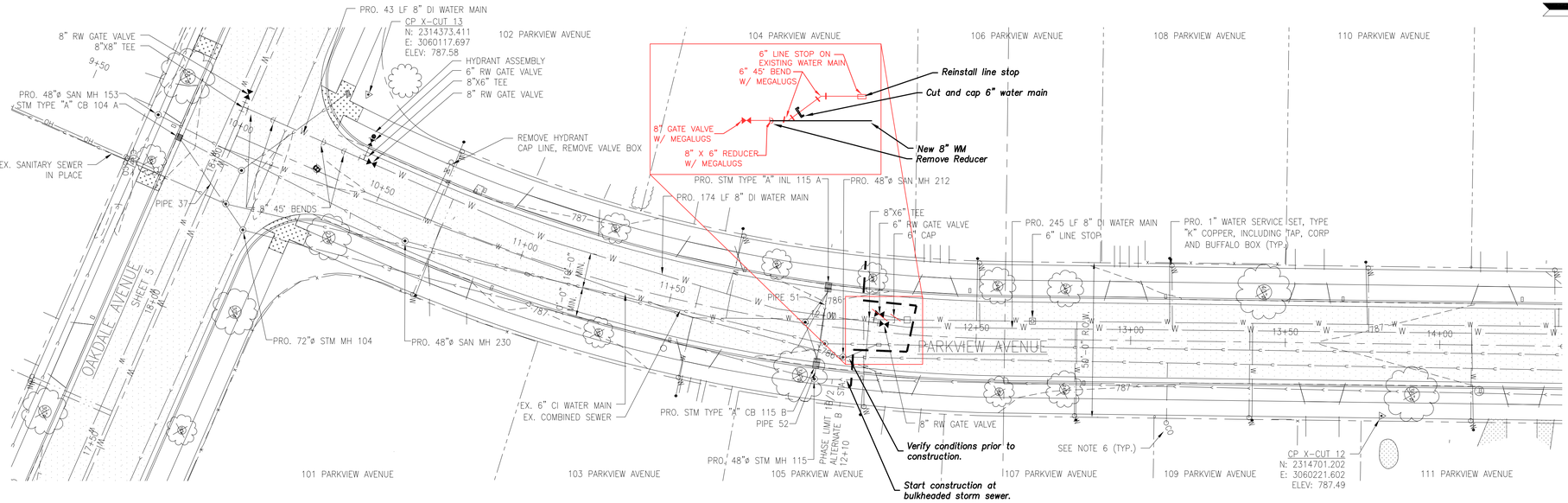
Record Drawing

Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/20/15 - 09:47

Drawing Title: GLENVIEW - UTILITY
Sub Title: PLAN & PROFILE - STA. 10+00 - STA. 15+50
Drawing Filename: X:\Projects\LAPORTE\WASTWATR\15-514\Dwgs\01 PRO_UTILITIES_15-514.DWG\10GV
Horizontal Scale: 1" = 20'-0"
Vertical Scale: 1" = 5'-0"

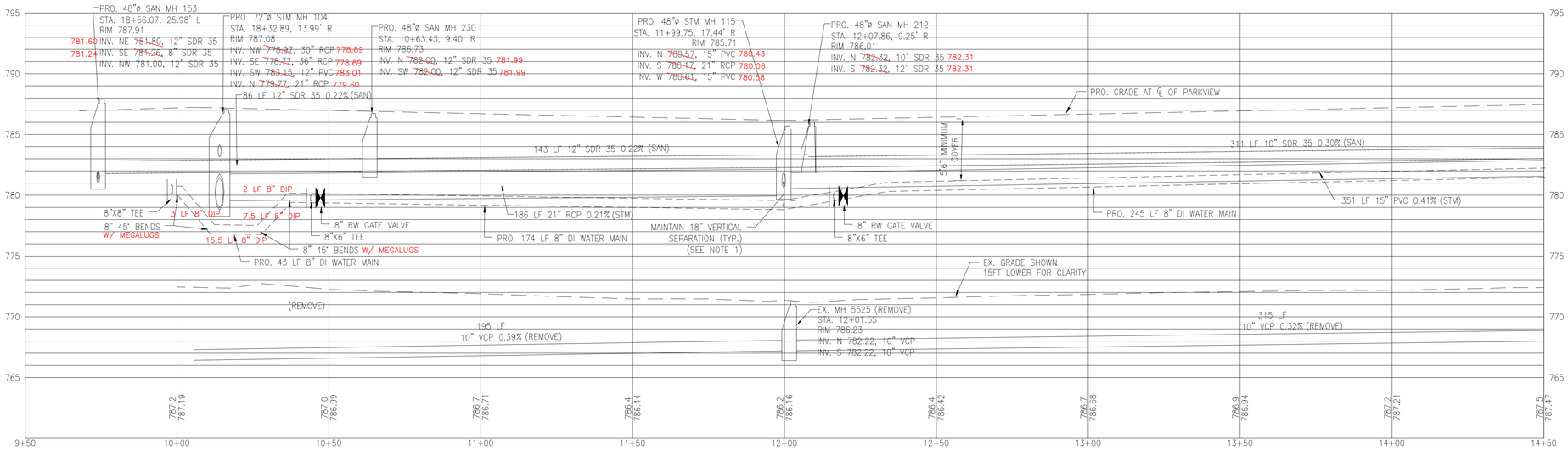
Designed: CWT
Drawn: RRH
Checked: JPP

SHEET 10 RD
OF 37



Added Notes:

1. *Red Lines are from HRP & Walsh & Kelly Phase 1 shop drawings. Contractor to field excavate and verify position and elevation of all utilities stubs connections at phase limits prior to construction.*
2. *Remove transitional curb at phase limits.*
3. *Phase 1 storm sewer bulkheaded/ capped near phase limits*
4. *Ex. combined sanitary & storm system tied into phase 1 sanitary sewer. installation of temporary fittings may be necessary for maintaining service during construction.*
5. *Surface asphalt shall be milled to a clean transitional butt joint outside the limits of excavation for phase 2&3.*



NOTES:

1. MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER PIPES. MAINTAIN A 10 FOOT HORIZONTAL SEPARATION BETWEEN WATER AND SEWER PIPES AND 8 FOOT SEPARATION BETWEEN WATER MAIN AND SEWER STRUCTURES.
2. INSTALL FERNCO COUPLINGS AND PIPE TO TRANSITION FROM EXISTING SEWER TO NEW. TRANSITION PIPE AND COUPLINGS TO BE REMOVED PRIOR TO EXTENDING SEWER.
3. PLUG NEW STORM SEWER PIPE BETWEEN PHASES WITH BRICK, MORTAR AND HYDRAULIC CEMENT. BACKFILL WITH LIMESTONE AGGREGATE. INSTALLATION/ REMOVAL SHALL BE INCLUDED IN THE PIPE UNIT PRICE.
4. INSTALL FERNCO, AND PIPE TO TRANSITION FROM MANHOLE TO EXISTING PIPE. REMOVE PIPE AND FERNCO BEFORE EXTENDING SEWER IN LATER PHASE.
5. PROVIDE INLET PROTECTION PER SWPPP FOR ALL STORM AND COMBINED STRUCTURES.
6. 6" SDR 35 PVC SANITARY SERVICE, INCLUDING 6" BY MAINLINE DIAMETER TEE (NO INSERTA TEES), PIPE, NECESSARY FITTINGS AND CLEAN OUT. CAP AT PROPERTY LINE. SEWER VIDEO SHOWING LOCATIONS AND NUMBER OF SEWER SERVICES WILL BE PROVIDED BY LA PORTE WASTE WATER PRIOR TO CONSTRUCTION.
7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
- EXISTING INLET
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- PROPERTY CORNER
- EXISTING GAS
- EXISTING COMBINED SANITARY/STORM
- EXISTING STORM
- EXISTING WATERMAIN
- EXISTING FENCE
- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

- PRO. FIRE HYDRANT
- PRO. WATER VALVE
- PRO. BUFFALO BOX
- PRO. MAN HOLE
- PRO. CATCH BASIN
- LINE STOP
- SLEEVE
- 22° BEND
- 45° BEND
- PRO. SANITARY SEWER
- PRO. STORM SEWER
- PRO. WATER MAIN
- PRO. SANITARY CLEAN OUT
- 45° BEND
- CAP
- TEE
- 90° BEND

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "A" INL 115 A	RIM = 785.90 SUMP = 780.95 STA: 12+00.32, 13.11' L	PIPE 51, 12" PVC INV. OUT = ~~780.95~~ 780.89 26 LF, 0.38% SLOPE
PRO. STM TYPE "A" CB 115 B	RIM = 785.90 SUMP = 778.65 STA: 11+99.71, 12.90' R	PIPE 51, 12" PVC INV. IN = ~~780.85~~ 780.65 26 LF, 0.38% SLOPE PIPE 52, 15" PVC INV. OUT = ~~780.65~~ 780.45 5 LF, 0.88% SLOPE

NOTE: ALL WATER MAIN FITTINGS, VALVES, ETC. HAVE BEEN RESTRAINED WITH MEGALUGS.

Added Notes:

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2. *Remove transitional curb at phase limits.*
3. *Phase 1 storm sewer bulkheaded/ capped near phase limits*
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20' 0 10' 20' 40'
1" = 20'-0"

CHARLES W. THOMPSON III REGISTERED NO. 11100657 STATE OF INDIANA PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 173rd Street, Hammond, Indiana, 46323
Phone: (219) 844 8680 Fax: (219) 844 7754
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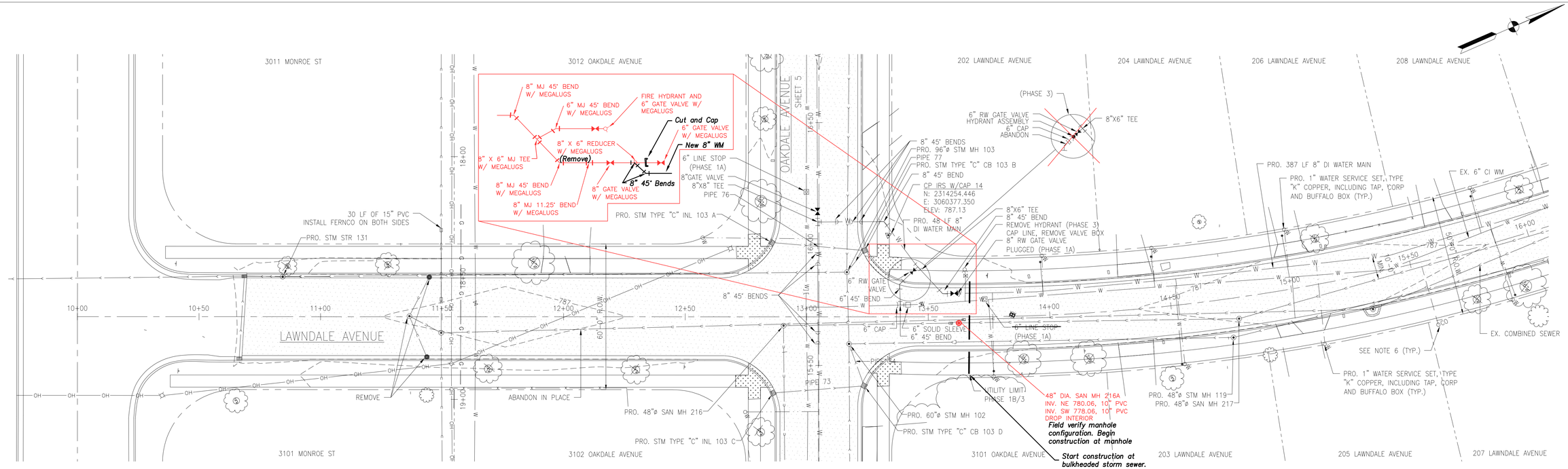
Record Drawing

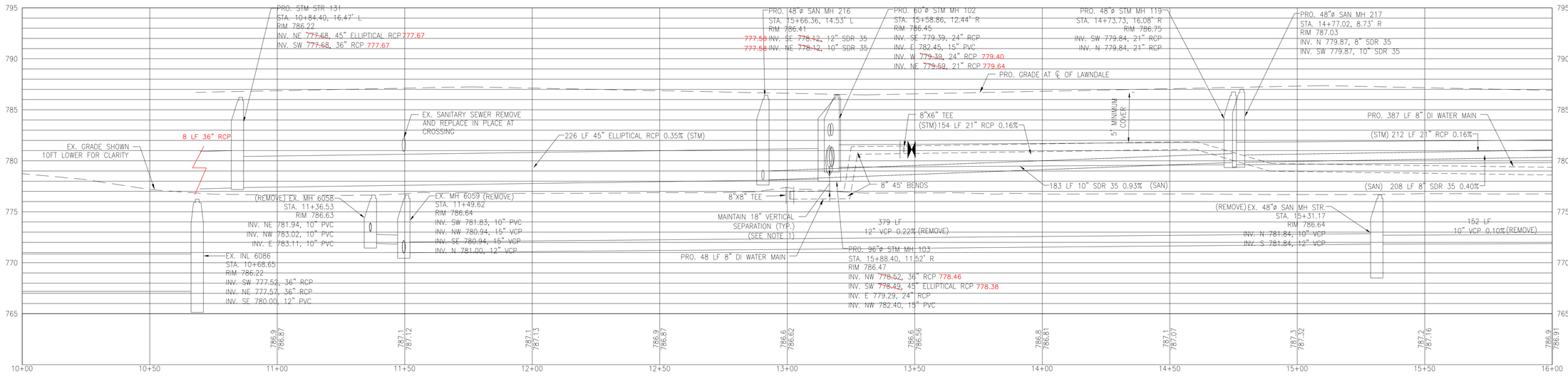
Drawing Title: PARKVIEW - UTILITY
Sub Title: PLAN & PROFILE - STA. 10+00 - STA. 14+50
Drawing Filename: X:\Projects\LAPORTE\WASTWATR\15-5140\dwg\01 PRO_UTILITIES_15-514.DWG\12 PV
Horizontal Scale: 1" = 20'-0" Vertical Scale: 1" = 5'-0"

Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514 Date & Time: 08/20/15 - 09:48

Designed: CWT Drawn: RRH Checked: JPP

SHEET 12RD OF 37





NOTES:

1. MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER PIPES. MAINTAIN A 10 FOOT HORIZONTAL SEPARATION BETWEEN WATER AND SEWER PIPES AND 8 FOOT SEPARATION BETWEEN WATER MAIN AND SEWER STRUCTURES.
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4. INSTALL FERNCO, AND PIPE TO TRANSITION FROM MANHOLE TO EXISTING PIPE. REMOVE PIPE AND FERNCO BEFORE EXTENDING SEWER IN LATER PHASE.
5. PROVIDE INLET PROTECTION PER SWPPP FOR ALL STORM AND COMBINED STRUCTURES.
6. 6" SDR 35 PVC SANITARY SERVICE, INCLUDING 6" BY MAINLINE DIAMETER TEE (NO INSERTA TEES), PIPE, NECESSARY FITTINGS AND CLEAN OUT. CAP AT PROPERTY LINE. SEWER VIDEO SHOWING LOCATIONS AND NUMBER OF SEWER SERVICES WILL BE PROVIDED BY LA PORTE WASTE WATER PRIOR TO CONSTRUCTION.
7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
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- EXISTING STORM
- EXISTING WATERMAIN
- EXISTING FENCE
- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

- PRO. FIRE HYDRANT
- PRO. WATER VALVE
- PRO. BUFFALO BOX
- PRO. MAN HOLE
- PRO. CATCH BASIN
- LINE STOP
- SLEEVE
- 22° BEND
- 45° BEND
- PRO. SANITARY SEWER
- PRO. STORM SEWER
- PRO. WATER MAIN
- PRO. SANITARY CLEAN OUT
- 45° BEND
- CAP
- TEE
- 90° BEND

PROPOSED STRUCTURE DATA TABLE		
STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "C" INL 103 C	RIM = 786.25 SUMP = 782.95 STA: 15+38.63, 18.82' L	PIPE 73, 12" PVC INV. OUT = ~~782.95~~ 782.80 38 LF, 0.53% SLOPE
PRO. STM TYPE "C" CB 103 D	RIM = 786.15 SUMP = 782.55 STA: 15+41.57, 18.62' R	PIPE 73, 12" PVC INV. IN = 782.75 38 LF, 0.53% SLOPE PIPE 34, 15" PVC INV. OUT = ~~782.55~~ 782.60 18 LF, 0.54% SLOPE
PRO. STM TYPE "C" INL 103 A	RIM = 786.25 SUMP = 782.85 STA: 16+00.60, 19.31' L	PIPE 76, 12" PVC INV. OUT = ~~782.85~~ 782.95 38 LF, 0.52% SLOPE
PRO. STM TYPE "C" CB 103 B	RIM = 786.15 SUMP = 780.50 STA: 15+97.33, 18.79' R	PIPE 76, 12" PVC INV. IN = ~~782.65~~ 782.49 38 LF, 0.52% SLOPE PIPE 77, 15" PVC INV. OUT = ~~782.50~~ 782.49 12 LF, 0.87% SLOPE

NOTE: ALL WATER MAIN FITTINGS, VALVES, ETC. HAVE BEEN RESTRAINED WITH MEGALUGS.

Added Notes:

1. *Red Lines are from HRP & Walsh & Kelly Phase 1 record drawings. Contractor to field excavate and verify position and elevation of all utilities stubs connections at phase limits prior to construction.*
2. *Remove transitional curb at phase limits.*
3. *Phase 1 storm sewer bulkheaded/ capped near phase limits*
4. *Ex. combined sanitary & storm system tied into phase 1 sanitary sewer. Installation of temporary fittings may be necessary for maintaining service during construction.*
5. *Surface asphalt shall be milled to a clean transitional butt joint outside the limits of excavation for phase 2&3.*

20' 0 10' 20' 40'

1" = 20'-0"

CHARLES W. THOMPSON III REGISTERED NO. 11100657 STATE OF INDIANA PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 173rd Street, Hammond, Indiana, 46323
Phone: (219) 844 8680 Fax: (219) 844 7754
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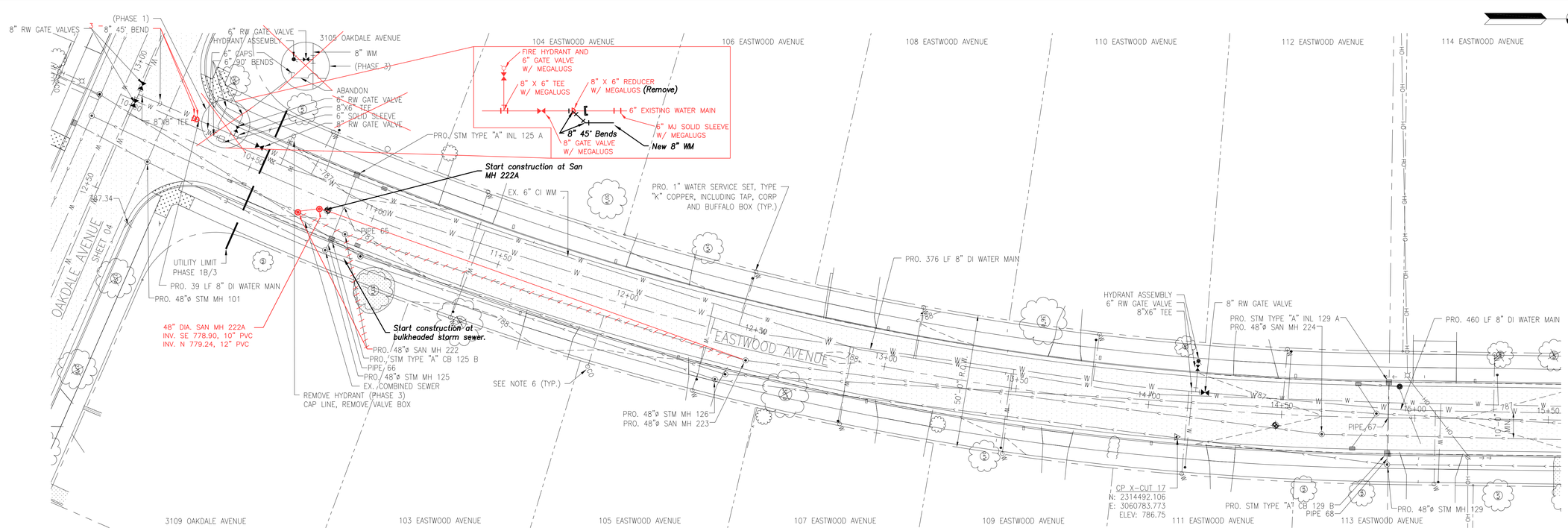
Record Drawing

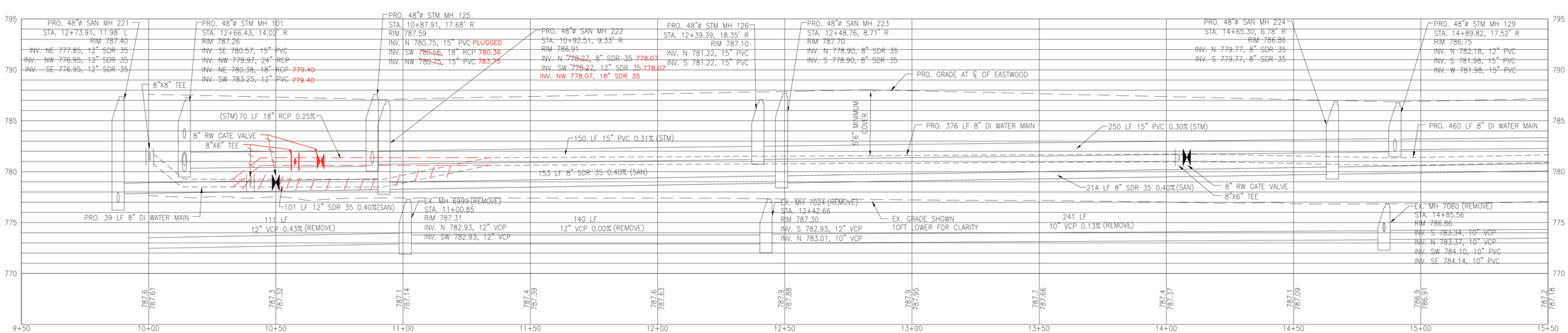
Drawing Title: LAWNDALE - UTILITY
Sub Title: PLAN & PROFILE - STA. 10+00 - STA. 16+00
Drawing Filename: X:\Projects\LaPORTE\WASTWATR\15-514\Dwg\01 PRO_UTILITIES_15-514.DWG\14
Horizontal Scale: 1" = 20'-0"
Vertical Scale: 1" = 5'-0"

Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/20/15 - 09:49

Designed: CWT
Drawn: RRH
Checked: JPP

SHEET 14 RD
OF 37





NOTES:

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7. THE COST OF ALL CONNECTIONS, ELBOWS, TEE'S AND CLEANOUTS TO BE INCLUDED IN THE PRICE OF 6" SANITARY SERVICE.
8. SEE SHEET 2 FOR ADDITIONAL NOTES

LEGEND

- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING BUFFALO BOX
- EXISTING MAN HOLE
- EXISTING CATCH BASIN
- EXISTING INLET
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- EXISTING TREE LINE
- EXISTING ROAD ℄ ALIGNMENT
- RIGHT-OF-WAY
- CONTROL POINT

PROPOSED LEGEND

- PRO. FIRE HYDRANT
- PRO. WATER VALVE
- PRO. BUFFALO BOX
- PRO. MAN HOLE
- PRO. CATCH BASIN
- LINE STOP
- SLEEVE
- 22° BEND
- 45° BEND
- PRO. SANITARY SEWER
- PRO. STORM SEWER
- PRO. WATER MAIN
- PRO. SANITARY CLEAN OUT
- 45° BEND
- CAP
- TEE
- 90° BEND

PROPOSED STRUCTURE DATA TABLE

STRUCTURE SIZE/TYPE/NAME	STRUCTURE DETAILS	INVERT ELEVATIONS/LENGTHS/SLOPES
PRO. STM TYPE "A" CB 125 B	RIM = 786.84 SUMP = 778.80 STA: 10+88.53, 12.91' R	PIPE 65, 12" PVC INV. IN = ~~781.00~~ 783.75 26 LF, 0.58% SLOPE PIPE 66, 15" PVC INV. OUT = ~~780.80~~ 783.75 5 LF, 1.04% SLOPE
PRO. STM TYPE "A" INL 125 A	RIM = 786.84 SUMP = 781.15 STA: 10+88.32, 13.01' L	PIPE 65, 12" PVC INV. OUT = ~~781.15~~ 783.84 26 LF, 0.58% SLOPE
PRO. STM TYPE "A" INL 129 A	RIM = 786.59 SUMP = 782.38 STA: 14+90.10, 13.31' L	PIPE 67, 12" PVC INV. OUT = 782.38 27 LF, 0.56% SLOPE
PRO. STM TYPE "A" CB 129 B	RIM = 786.59 SUMP = 780.03 STA: 14+89.76, 13.31' R	PIPE 67, 12" PVC INV. IN = 782.23 27 LF, 0.56% SLOPE PIPE 68, 15" PVC INV. OUT = 782.03 4 LF, 1.19% SLOPE

NOTE: ALL WATER MAIN FITTINGS, VALVES, ETC. HAVE BEEN RESTRAINED WITH MEGALUGS.

Added Notes:

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20' 0 10' 20' 40'

1" = 20'-0"

CHARLES W. THOMPSON, III
REGISTERED
NO. 11100657
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/21/2015

NIES engineering, inc.
2421 173rd Street, Hammond, Indiana, 46323
Phone: (219) 844 8680 Fax: (219) 844 7754
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Record Drawing

EASTWOOD - UTILITY

PLAN & PROFILE - STA. 9+50 - STA. 15+50

X:\Projects\LAPORTE\WASTWTR\15-514\Dwg\01 PRO_UTILITIES_15-514.DWG\16

Customer: CITY OF LA PORTE, INDIANA
Project Name: MONROE MANOR SEWER SEPARATION PROJECT
Project Number: 15-514
Date & Time: 08/20/15 - 09:51
Drawing Title:
Sub Title:
Drawing Filename:
Horizontal Scale: 1" = 20'-0"
Vertical Scale: 1" = 5'-0"

Designed: CWT
Drawn: RRH
Checked: JPP

SHEET 16RD OF 37