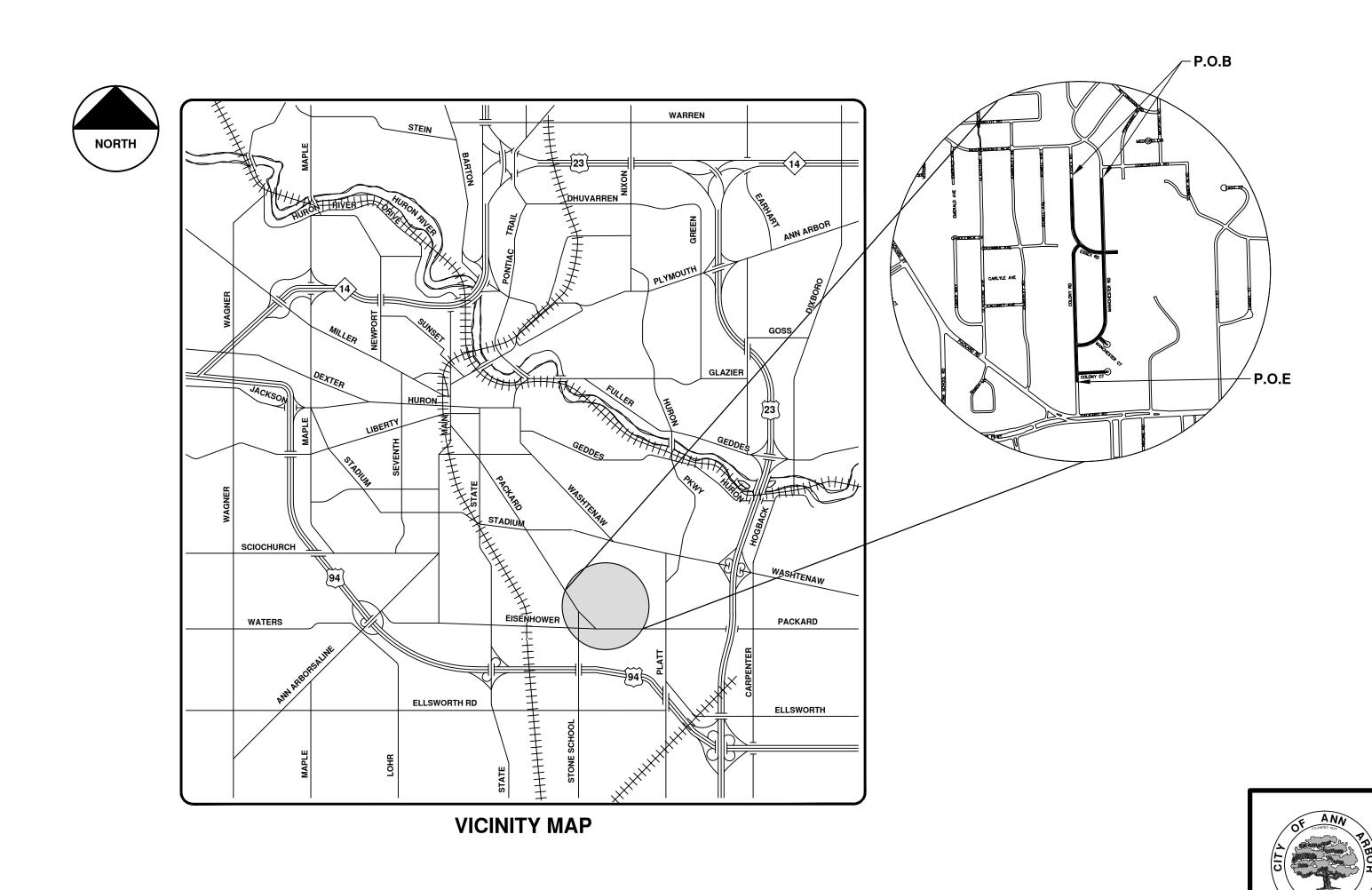


CITY OF ANN ARBOR PROJECT MANAGEMENT

COLONY RD, ESSEX RD, AND MANCHESTER RD CONCRETE PAVEMENT REPAIRS

BID No. 4379, FILE No. 2015024

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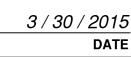
STANDARD SPECIFICATIONS FOR CONSTRUCTION (INCLUDING REFERENCED M.D.O.T. PUBLICATIONS) AND THIS PROJECT'S CONTRACT DOCUMENTS.



PROJECT MANAGEMENT SERVICE UNIT

PREPARED UNDER THE SUPERVISION OF

DAVID ARTHUR DYKMAN, P.E. - MI LICÉNSE No. 52912 **PROJECT MANAGER**





CONSTRUCTION NOTES:

- 1. Driveways and entrances to buildings, real property, and the like shall not be blocked unless approved by the Engineer. Vehicular and pedestrian access shall be maintained at all times. It shall be the Contractor's responsibility to coordinate all necessary driveway closures with the property owner(s) and resident(s) in the areas of construction.
- 2. The location and depth of all existing utilities and service leads are to be field verified by the Contractor prior to construction.
- 3. Location and depth of utilities as depicted on the plans is approximate and shown according to the best information available. It is the Contractor's responsibility to excavate ahead and adjust depth of conflict utilities accordingly. Any damage to utilities is the Contractor's responsibility to avoid and/or repair as necessary.
- 4. "No Parking" signs shall be installed by the Contractor at locations as approved or directed by the Engineer. All signs shall be installed in accordance with the detailed specification.
- 5. Postal delivery and refuse pickup service shall be maintained at all times by the Contractor.
- 6. All curb, sidewalk, driveway approach removals shall be approved by Engineer before the work
- 7. The location of material stock piles and on—site staging areas to be approved by the Engineer.
- 8. All structures within concrete pavement repairs areas shall receive new castings as directed by the Engineer, as specified on the standard casting schedule. The existing castings are the property of the City of Ann Arbor. The Contractor shall deliver to City of Ann Arbor Field Operations and Maintenance Facility at the W.R. Wheeler Service Center located at 4251 Stone School Road.
- 9. Payment for drainage structure sumps, where specified, shall be included in the payment for the various drainage structure sizes and or
- 10. Where sewer pipes of different sizes or materials are joined, Fernco flexible couplings with stainless steel shear rings shall be used. The Contractor's purchase price for these devices, including shipping, shall be paid as an extra. Prior to payment for this item, the Contractor shall submit receipts for the Engineer's review and approval. All other costs associated with the installation of these devices shall be included in the payment for the sewer.
- 11. Existing street name, guide, and regulatory signs, and mailboxes which conflict with the proposed construction shall be removed prior to construction, stored in a manner which will prevent damage, and re-set in locations as directed by the Engineer. This work will not be paid for separately, but shall be included in "General Conditions."

SOIL EROSION & SEDIMENT CONTROL GENERAL NOTES:

NOTIFY THE CITY OF ANN ARBOR SOIL EROSION CONTROL OFFICE 48 HOURS PRIOR TO BEGINNING WORK ON THE PROJECT. PHONE: 734-794-6265.

- 1. THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN SOIL EROSION CONTROL MEASURES AS DIRECTED BY THE ENGINEER AT ALL TIMES DURING CONSTRUCTION. ANY MODIFICATIONS OR ADDITIONS TO THE SOIL EROSION CONTROL MEASURES DUE TO CONSTRUCTION OR CHANGED CONDITIONS SHALL BE AS DIRECTED AND APPROVED BY THE ENGINEER.
- 2. ALL SOIL EROSION AND SEDIMENTATION CONTROL WORK SHALL CONFORM TO THE PERMIT REQUIREMENTS OF THE CITY OF ANN ARBOR, CITY ORDINANCE CHAPTER 63, CITY OF ANN ARBOR STANDARDS DIVISION VII, THE LAWS OF THE STATE OF MICHIGAN, AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- 3. DAILY, OR AFTER ANY STORM EVENT, INSPECTIONS OF EROSION CONTROL MEASURES SHALL BE MADE BY THE CONTRACTOR. PERIODIC INSPECTIONS MAY BE MADE BY THE ENGINEER TO DETERMINE THE EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES. ANY NECESSARY CORRECTIONS SHALL BE MADE WITHOUT DELAY, AND WITHOUT ADDITIONAL COST TO THE CITY OF ANN ARBOR.
- 4. EROSION AND SEDIMENTATION FROM WORK ON THE SITE SHALL BE CONTAINED ON THE SITE AND NOT BE ALLOWED TO COLLECT ON ANY OFF-SITE AREAS, ROADWAYS OR WATERWAYS.
- 5. ALL MUD/DIRT TRACKED ONTO ROADWAYS FROM THE SITE DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR. IF SO ORDERED, THE CONTRACTOR SHALL PROVIDE AND OPERATE A VACUUM-TYPE STREET SWEEPER, AT NO ADDITIONAL COST TO THE CITY OF ANN ARBOR, WITHIN FOUR (4) HOURS OF BEING SO ORDERED.
- 6. RESTORATION OF ALL DISTURBED AREAS, INCLUDING PLACEMENT OF TOPSOIL, SEED, FERTILIZER AND MULCH AND/OR SOD SHALL BE PERFORMED WITHIN FIVE (5) DAYS OF THE COMPLETION OF FINAL GRADE.
- 7. CONSTRUCTION OPERATIONS SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTATIVE SOIL EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION IN CRITICAL AREAS AND TEMPORARY STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING OPERATIONS.
- 8. SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PROMOTE EROSION.
- 9. PROPER DUST CONTROL SHALL BE MAINTAINED DURING CONSTRUCTION BY USE OF WATER TRUCKS AND/OR DUST PALLATIVE AS REQUIRED.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND REMOVAL OF SOME MEASURES UPON AUTHORIZED COMPLETION OF THE PROJECT. FINAL COMPLETION OF PROJECT WILL NOT BE AUTHORIZED UNTIL ALL SITE WORK AND UTILITY CONSTRUCTION IS COMPLETE AND ALL SOILS ARE STABILIZED.
- 11. THE CONTRACTOR SHALL NOT GRADE INTO ADJACENT PROPERTIES. SILT AND PROTECTIVE FENCE SHALL BE INSTALLED AND MAINTAINED TO PREVENT GRADING, EROSION AND SEDIMENTATION INTO THE ADJACENT PROPERTIES.
- 12. TREE PROTECTION FENCING MUST REMAIN INTACT UNTIL RESTORATION OF THE SITE IS COMPLETE.

SEQUENCE OF EROSION CONTROL MEASURES:

1. THE CONTRACTOR IS TO SUBMIT TO THE ENGINEER, A SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION CONTROL MEASURES FOR REVIEW, COMMENT AND APPROVAL. THIS SCHEDULE IS TO INCLUDE INSPECTION AND REPAIR OF ALL TEMPORARY EROSION CONTROL MEASURES DAILY AND WITHIN 24 HOURS OF A STORM EVENT.

SAMPLE SOIL EROSION AND SEDIMENTATION CONTROL INSTALLATION MINIMUM REQUIREMENTS: 1.1. INSTALL SILT FENCE, TREE PROTECTION FENCING, AND INLET FILTERS ON EXISTING DRAINAGE FEATURES

- PRIOR TO ANY CLEARING OR EARTH MOVING OPERATION.
- 1.2. STRIP AND STOCKPILE TOPSOIL. STABILIZE STOCKPILE AS REQUIRED.
- 1.3. INSTALL WATER MAINS, STORM AND SANITARY SEWERS, AND OTHER ENCLOSED DRAINAGE FEATURES. NEW INLET FILTERS SHALL BE INSTALLED IMMEDIATELY FOLLOWING INSTALLATION OF NEW DRAINAGE INLETS.
- 1.4. PERFORM MACHINE GRADING OPERATIONS AND CONSTRUCT PAVEMENTS (MAINLINE, SIDEWALKS, DRIVES, ETC.).
- 1.5. CONTINUALLY MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES, AS REQUIRED TO ALLOW DRAINAGE AND SEDIMENT REMOVAL. REMOVE ANY ACCUMULATED SEDIMENT IMMEDIATELY.
- 1.6. COMPLETE ALL GRADING AND FINE GRADING.
- 1.7. TEMPORARY SEED AND INSTALL EROSION CONTROL BLANKET IN ALL DISTURBED AREAS.
- 1.8. CLEAN OUT STORM SEWER SYSTEMS.
- 1.9. REMOVE ALL TEMPORARY SOIL EROSION CONTROL MEASURES UPON FINAL INSPECTION AND APPROVAL BY
- 1.10. REMEDY ANY NOTED DEFECTS TO THE SATISFACTION OF THE CITY OF ANN ARBOR'S SOIL EROSION AND SEDIMENTATION CONTROL OFFICIAL.

THIS SEQUENCE IS FOR INFORMATION ONLY. IT IS INTENDED TO SHOW THE SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THEIR OWN DETAILED CONSTRUCTION SEQUENCE AND SCHEDULE TO THE ENGINEER FOR REVIEW, COMMENT, AND APPROVAL.

TEMPORARY SEEDING:

- 1. SEED IN ACCORDANCE WITH PROJECT DRAWINGS AND SPECIFICATIONS.
- 2. ANY DISTURBED AREA NOT PAVED, SEEDED, MULCHED, SODDED OR BUILT UPON BY NOVEMBER 15TH OR JUNE 30TH IS TO BE TEMPORARILY STABILIZED PER SPECIFICATIONS.

TREE PROTECTION

 $^{-1}\cdot$ CONTRACTOR SHALL NOT STORE OR PLACE EQUIPMENT AND/OR MATERIALS INSIDE DRIP LINE OF ANY CITY TREE. MECHANICAL DAMAGE TO CITY OWNED TREES (I.E. BARK DAMAGE, BRANCH BREAKAGE) IS NOT PERMITTED CONTRACTOR IS RESPONSIBLE FOR PROPERLY PRUNING TREES TO PREVENT DAMAGE. IF BRANCHES GREATER THAN 2" IN DIAMETER REQUIRE PRUNING, CONTRACTOR TO CONTACT FORESTRY FOR CONSULTATION AND EVALUATION AT (734) 794-6350. NO ROOTS OF CITY-OWNED TREES GREATER THAN 2 INCHES IN DIAMETER ARE TO BE CUT. IF CONTRACTOR ENCOUNTERS CITY-OWNED TREES WITH ROOTS GREATER THAN 2 INCHES IN DIAMETER THAT THEY DETERMINE NEED TO BE CUT, CONTACT FORESTRY IMMEDIATELY FOR EVALUATION. ALL TRENCHING AND BORE PITS OF ANY KIND SHALL BE CLEAR OF TREE DRIP LINES. IF ANY CITY-OWNED STREET TREES ARE DAMAGED BY THIS WORK, THE CONTRACTOR MUST CONTACT FORESTRY AS SOON AS POSSIBLE SO THAT THE DAMAGE CAN BE ASSESSED. CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH DAMAGE REMEDIATION.

O STOP BOX □ WATER VAULT □ WELL □ CATCH BASIN (SO) □ CATCH BASIN (RD) ○ STORM MANHOLE □ CATCH BASIN (RD) ○ STORM MANHOLE □ CATCH BASIN (SO) □ STORM MANHOLE □ CATCH BASIN (SO) □ STORM MANHOLE □ CATCH BASIN (SO) ○ CATTERLINE OF DITCH □ CATCH BASIN (SO) □ CATCH BASIN OF DITCH □ CATCH BASIN (SO) □ CATCH BASIN (SO) □ CATCH BASIN OF DITCH □ CATCH BASIN (SO) □ C	ф+	FIRE HYDRANT		WATER MAIN
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■ WATER VAULT WELL WELL CATCH BASIN (SQ) CATCH BASIN (RD) STORM MANHOLE CATCH BASIN (SQ) STORM MANHOLE CENTERLINE OF DITCH NON-CURB CATCH BASIN (SQ) SANITARY MANHOLE CLEAN-OUT POST POST POST HAND HOLE ORNAMENTAL LIGHT FLOOD LIGHT UNKNOWN MANHOLE GAS VENT GAS BOX ELECTRICAL RISER TRANSFORMER GUITITY POLE GUY ANCHOR GUY POLE MONTORING WELL MAILBOX SOIL BORING TRAVERSE POINT BENCH MARK IEDRICH MARK INDICATE THE ELECTRICAL OVER HEAD ELECTRICAL UNDER GROUNE IEDRICH MARK I	8	GATE VALVE IN WELL	s	SANITARY SEWER
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© CATCH BASIN (RD) ○ STORM MANHOLE ○ NON-CURB CATCH BASIN (SQ) ○ SANITARY MANHOLE ○ CLEAN-OUT ○ POST ○ POST ○ PEDESTRIAN SIGNAL ○ SIGN ○ HAND HOLE ○ ORNAMENTAL LIGHT ○ UNKNOWN MANHOLE ○ GAS VENT □ GAS BOX □ TELEPHONE RISER ○ GAS VENT □ GAS BOX □ TREE (CONIFEROUS) □ TREE (CONIFEROUS) □ TREE (CONIFEROUS) □ TREE (DECIDUOUS) □ TREE (CONIFEROUS) □ TREE (DECIDUOUS) □ TREE (CONIFEROUS)	@	WELL		ELECTRICAL UNDER GROUND
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O SANITARY MANHOLE ○ CLEAN—OUT ○ POST ○ POST ○ PEDESTRIAN SIGNAL ○ STONE WALL □ HAND HOLE ○ ORNAMENTAL LIGHT ○ UNKNOWN MANHOLE ○ TELEPHONE MANHOLE ○ GAS VALVE ○ GAS VALVE ○ GAS VALVE ○ GAS VENT □ GUY ANCHOR ○ GUY POLE ○ MONITORING WELL ■ MALBOX ○ SOIL BORING ○ TRAVERSE POINT □ BENCH MARK ○ IRON PIPE	0	STORM MANHOLE		CENTERLINE OF DITCH
O CLEAN—OUT POST POST PEDESTRIAN SIGNAL STONE WALL R.O.W. R.O.W. RELINE ORNAMENTAL LIGHT UNKNOWN MANHOLE TELEPHONE MANHOLE GAS VALVE GAS VALVE GAS VALVE GAS BOX FLOOD LIGHT UNITITY POLE UTILITY POLE MONITORING WELL MALBOX SOIL BORING TRAVERSE POINT BENCH MARK INCOMPOSE ITREE (CONIFEROUS) STUMP STUMP STUMP STUMP		NON-CURB CATCH BASIN (SQ)		CENTERLINE/CROWN OF ROA
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FLOOD LIGHT UNKNOWN MANHOLE TREE (DECIDUOUS) TREE (DECIDUOUS) TREE (DECIDUOUS) TREE (CONIFEROUS) TREE (DECIDUOUS)		HAND HOLE		TREELINE
© UNKNOWN MANHOLE © TELEPHONE MANHOLE © TELEPHONE RISER © GAS VALVE O GAS VENT ⊞ GAS BOX □ TRANSFORMER □ UTILITY POLE □ LAMP POLE □ GUY ANCHOR □ GUY POLE □ MONITORING WELL □ MAILBOX □ SOIL BORING □ TRAVERSE POINT □ BENCH MARK ○ IRON PIPE	۵	ORNAMENTAL LIGHT		WETLAND
© TELEPHONE MANHOLE □ TELEPHONE RISER □ GAS VALVE □ GAS VENT □ GAS BOX □ TREE (CONIFEROUS) □ STUMP □ LAMP POLE □ GUY ANCHOR □ GUY POLE □ MONITORING WELL □ MAILBOX □ SOIL BORING □ TRAVERSE POINT □ BENCH MARK □ IRON PIPE	짞	FLOOD LIGHT		
© GAS VALVE ○ GAS VENT ⊞ GAS BOX TREE (CONIFEROUS) □ TRANSFORMER ○ UTILITY POLE ○ LAMP POLE □ MONITORING WELL □ MAILBOX • SOIL BORING ↑ TRAVERSE POINT ↑ BENCH MARK ○ IRON PIPE	?	UNKNOWN MANHOLE		
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## GAS BOX FELECTRICAL RISER TRANSFORMER UTILITY POLE GUY ANCHOR GUY POLE MONITORING WELL MAILBOX SOIL BORING TRAVERSE POINT BENCH MARK IRON PIPE TRANSFORMER STUMP SHRUB (DECIDUOUS) TRAVERSE POINT BENCH MARK IRON PIPE TRAVERSE T	9	GAS VALVE		
™ ELECTRICAL RISER ™ TRANSFORMER © UTILITY POLE © LAMP POLE © GUY ANCHOR © GUY POLE MONITORING WELL MAILBOX SOIL BORING ↑ TRAVERSE POINT † BENCH MARK • IRON PIPE	0	GAS VENT		
▼ TRANSFORMER Ø UTILITY POLE © LAMP POLE © GUY ANCHOR © GUY POLE MONITORING WELL MAILBOX SOIL BORING TRAVERSE POINT BENCH MARK IRON PIPE © IRON PIPE	⊞	GAS BOX	< Z	TREE (CONIFEROUS)
Ø UTILITY POLE © LAMP POLE © GUY ANCHOR © GUY POLE ■ MONITORING WELL ■ MAILBOX ◆ SOIL BORING ↑ TRAVERSE POINT + BENCH MARK • IRON PIPE	⊠£	ELECTRICAL RISER		
O LAMP POLE O LAMP POLE O GUY ANCHOR O GUY POLE MONITORING WELL MAILBOX SOIL BORING TRAVERSE POINT BENCH MARK IRON PIPE	\boxtimes	TRANSFORMER		
GUY ANCHOR GUY POLE MONITORING WELL MAILBOX SOIL BORING TRAVERSE POINT BENCH MARK IRON PIPE	Ø	UTILITY POLE		STUMP
GUY POLE MONITORING WELL MAILBOX SOIL BORING TRAVERSE POINT BENCH MARK IRON PIPE	0	LAMP POLE		
 MONITORING WELL MAILBOX SOIL BORING 	7	GUY ANCHOR	(2)	SHRUB (DECIDUOUS)
■ MAILBOX SOIL BORING TRAVERSE POINT BENCH MARK IRON PIPE	ρ	GUY POLE		
SOIL BORING TRAVERSE POINT BENCH MARK IRON PIPE	•	MONITORING WELL		
TRAVERSE POINT BENCH MARK IRON PIPE	MAL	MAILBOX		
BENCH MARK IRON PIPE	•	SOIL BORING		
• IRON PIPE	\triangle	TRAVERSE POINT		
	+	BENCH MARK		
	0	IRON PIPE		
	•			

PROPOSED LEGEND

→ HYDRANT (PLAN)

▼ REDUCER

ı	WATER GATE VALVE		CENTERLINE OF DITCH
(W)	WATER STOP BOX		CENTERLINE OF ROAD
W	WATER VAULT	////	FENCE
•	INLET		SILT FENCE
	DOUBLE INLET		LOT/UNIT
•	INLET JUNCTION CHAMBER		
	ROUND CATCH BASIN		CURB
•	STORM MANHOLE		TEMPORARY GRADING PERM
•	DRAIN ARROW		WATER EASMENT
∇	FLARED END SECTION		STORM EASEMENT
6	SANITARY MANHOLE		SANITARY EASEMENT
©	CLEAN-OUT	-	R.O.W.
•	BARREL		LIMITS OF CONSTRUCTION
-	SIGN	احتاصالحتاصالحتاصالحتاصالحتا	STONE WALL
	PUSH BUTTON		
			DETECTABLE WARNING
			ASPHALT
		A	CONCRETE
			SIDEWALK
			TREE (DECIDUOUS)

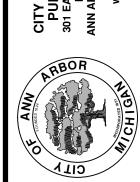
WATER MAIN

— — STORM SEWER

- SANITARY SEWER



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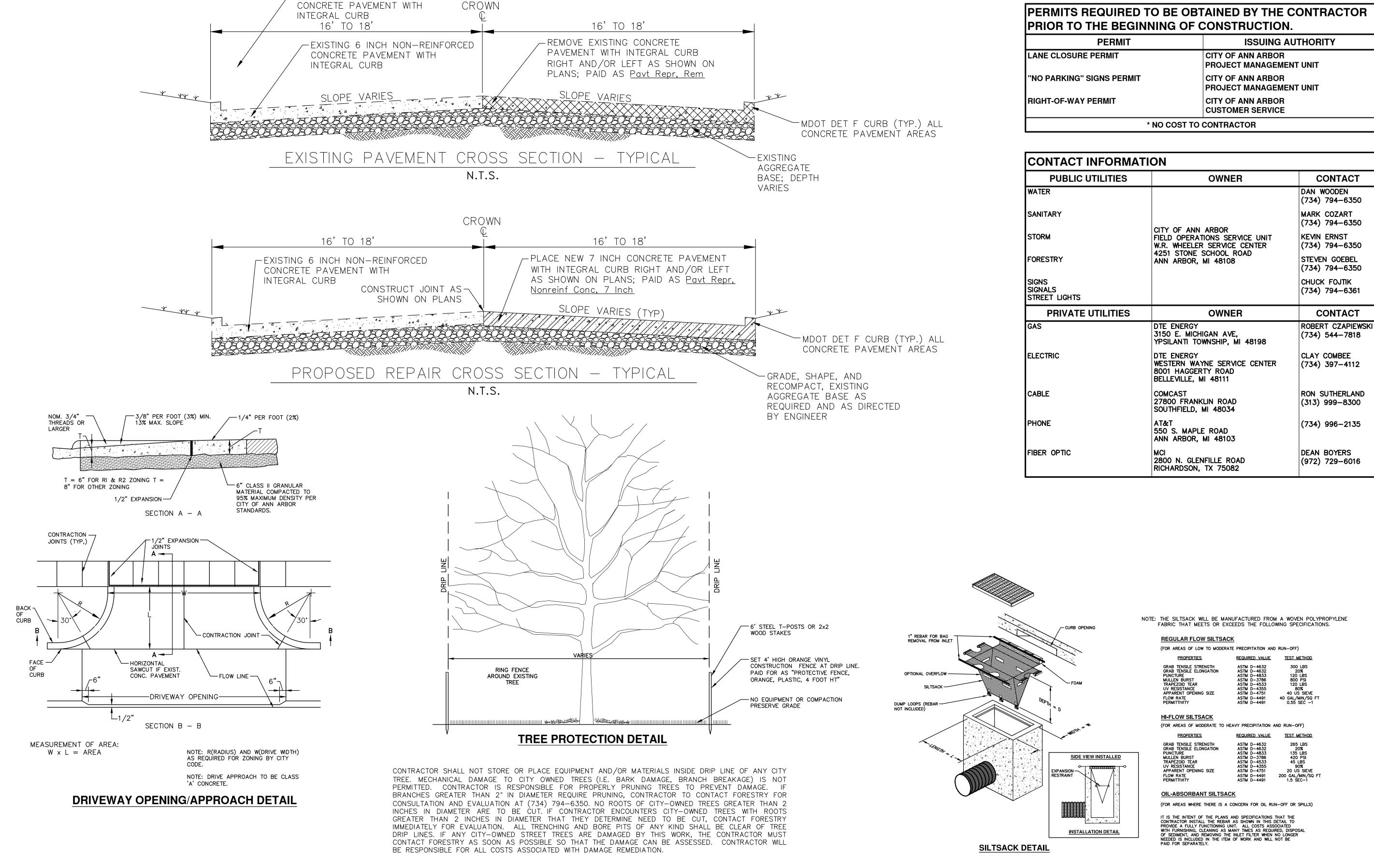
ES - CITY OF ANI SEX MANCHESTE AVEMENT REPA

₩ SS Z SLIC SERVICE COLONY ESS CONCRETE F

MANAGEM

TREE (CONIFEROUS)

SHEET No. 2 OF 27



XISTING 6 INCH NON-REINFORCED

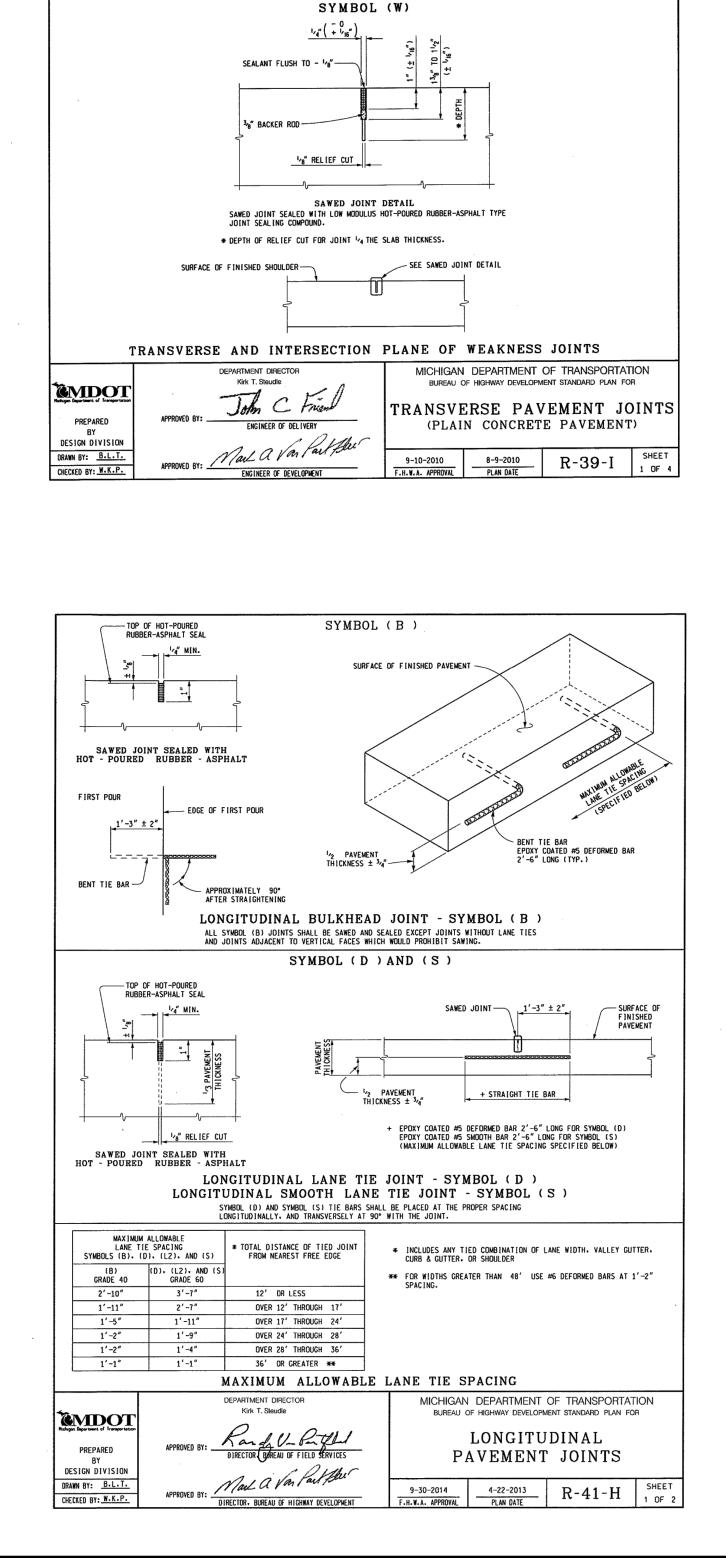
OF ANN ARB

COLONY ESSEX MANCHESTER
CONCRETE PAVEMENT REPAIR
TYPICAL SECTIONS AND DETAILS

PUBLIC SERVICES

PROJECT MANAGEMENT -

SHEET No.



SYMBOL (Cp) AND (C3p)

TRANSVERSE CONTRACTION JOINT

1/8" RELIEF CUT

LOAD TRANSFER ASSEMBLY METHOD

SURFACE OF FINISHED PAVEMENT OR SHOULDER-

SAWED JOINT DETAIL

SAWED JOINT SEALED WITH LOW MODULUS HOT-POURED RUBBER-ASPHALT TYPE
JOINT SEALING COMPOUND.

* DEPTH OF RELIEF CUT FOR JOINT (Cp) AND (C3p) SHALL BE '4 THE SLAB THICKNESS FOR PAVEMENTS LESS THAN OR EQUAL TO 7" IN THICKNESS AND '43 THE SLAB THICKNESS FOR PAVEMENTS GREATER THAN 7" THICK.

- SEE SAWED JOINT DETAIL

LOAD TRANSFER JOINT USE

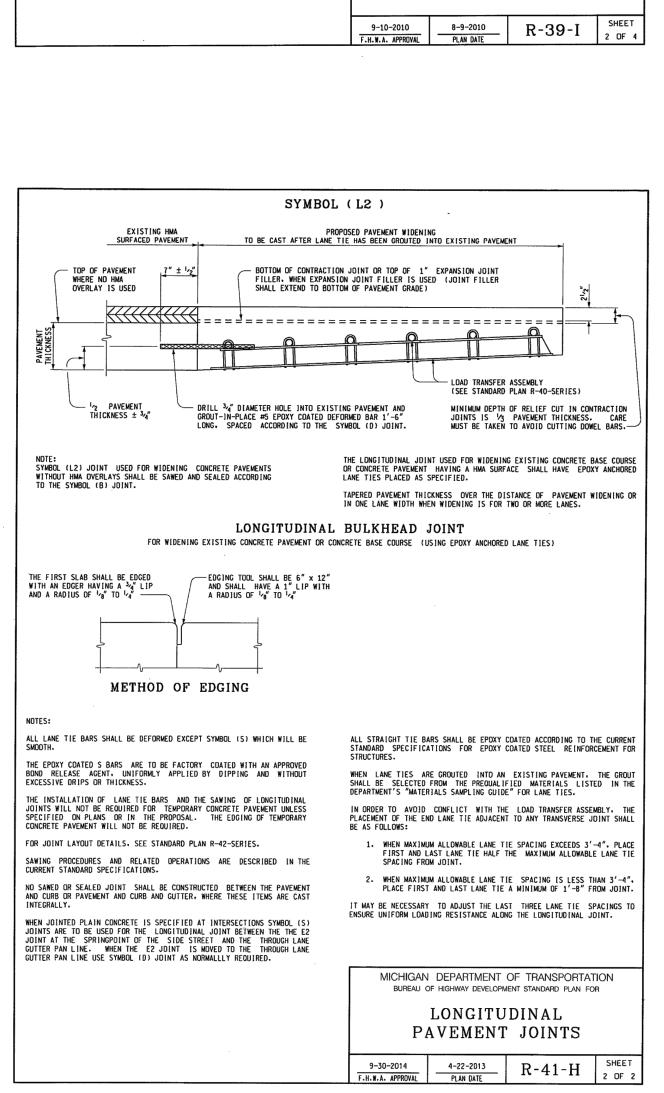
- SEE SAWED JOINT DETAIL

PAVEMENT SHOULDER

YES

DOWEL BAR INSERTER METHOD

NO



SYMBOL (E2), (E3) AND (E4)

1" FIBER FILLER

TRANSVERSE EXPANSION JOINT

SYMBOL (U)

TRANSVERSE PLANE OF WEAKNESS

JOINTS IN CONCRETE BASE COURSE

45° BEVELED EDGE (TYP.)

1" FIBER FILLER

- SEE SAWED JOINT DETAIL

1/8" SAWED JOINT OR A FORMED JOINT MADE BY PLACING 1/4" HARDBOARD OR OTHER APPROVED MATERIAL FLUSH WITH THE SURFACE OF THE CONCRETE BASE COURSE AND TRUE TO POSITION AND LINE BEFORE THE CONCRETE HAS SET

SAWED JOINT DETAIL

SAWED JOINT SEALED WITH LOW MODULUS HOT-POURED RUBBER-ASPHALT TYPE JOINT SEALING COMPOUND.

THE FINAL WIDTH OF THE GROOVE SHALL BE 1" + \(\frac{\lambda_{16}}{\lambda_{2}}\)
PLUS ANY INCREASE OR MINUS ANY DECREASE IN THE WIDTH OF THE RELIEF CUT. THE FINAL SAW CUT SHALL BE TO THE TOP OF THE FIBER FILLER WITH A MINIMUM DEPTH AS SHOWN AND SHALL BE CENTERED OVER THE FIBER FILLER WITH A HORIZONTAL TOLERANCE OF \(\frac{\lambda_{4}}{\lambda_{2}}\). FIBER FILLER FOR EXPANSION JOINTS IN CONCRETE SHOULDERS SHALL BE FREE OF HOLES OR OTHER DEFECTS AND TRIMMED TO FIT SHOULDERS CONFIGURATIONS.

SYMBOL LOAD TRANSFER ASSEMBLY

OUTSIDE EDGE TREATMENT

MICHIGAN DEPARTMENT OF TRANSPORTATION

TRANSVERSE PAVEMENT JOINTS

(PLAIN CONCRETE PAVEMENT)

BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

JOINT USE

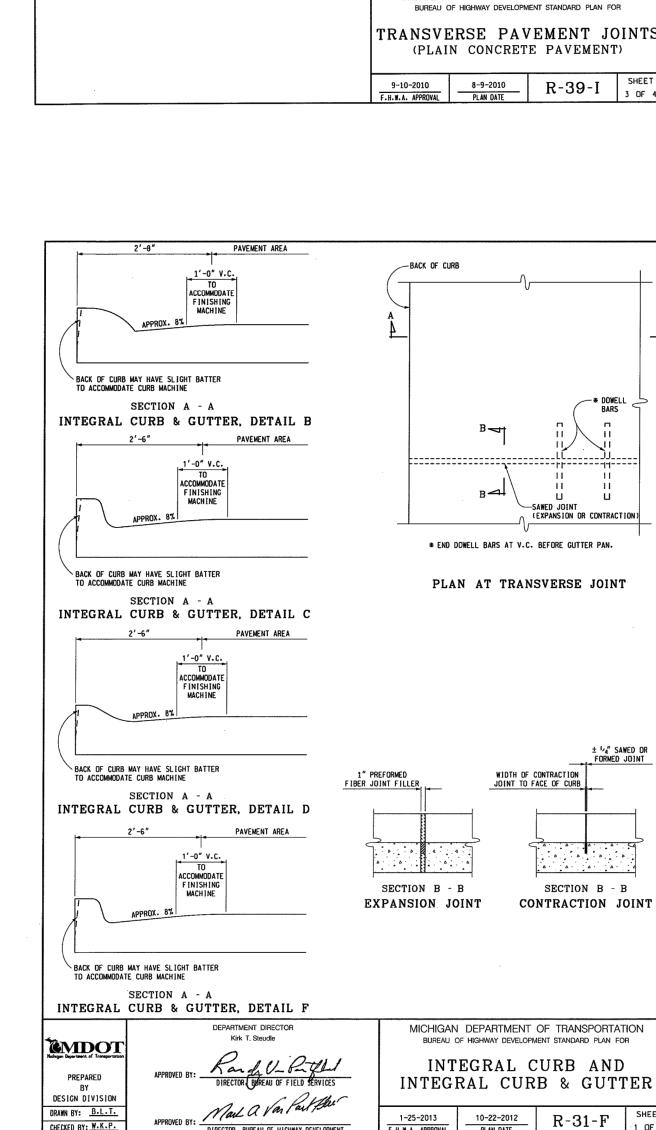
PAVEMENT

PAVEMENT & SHOULDE

LOW MODULUS HOT-POURE

RUBBER-ASPHALT TYPE JOINT SEALING COMPOUND

(MINIMUM DIAMETER 1.25 x FINAL WIDTH)



SYMBOL (H)

12'-0" RIGHT LANE PAVED AT 14'-0"

TRANSVERSE END OF POUR JOINT (SPLIT HEADER METHOD)

12'-0" RIGHT LANE PAVED AT 14'-0"

DEFORMED BAR SPACING

NOTE: THE HOLE SPACING MAY BE ADJUSTED 1" HORIZONTALLY. RAISED 1/2". OR LOWERED
1" FROM THE ABOVE LOCATIONS TO AVOID DRILLING INTO THE REINFORCEMENT.

TRANSVERSE END OF POUR JOINT (DRILLED IN METHOD)

12'-0" (LANE WIDTH)

1′-0″1′-0″1′-0″1′-0″1′-0″1′-0″ 2′-0″ 1′-0″1′-0″1′-0″1′-0″1′-0″1′-0″1′-0″

SEE NOTES SHEET 4 OF 4

DEFORMED BAR (GROUT IN PLACE

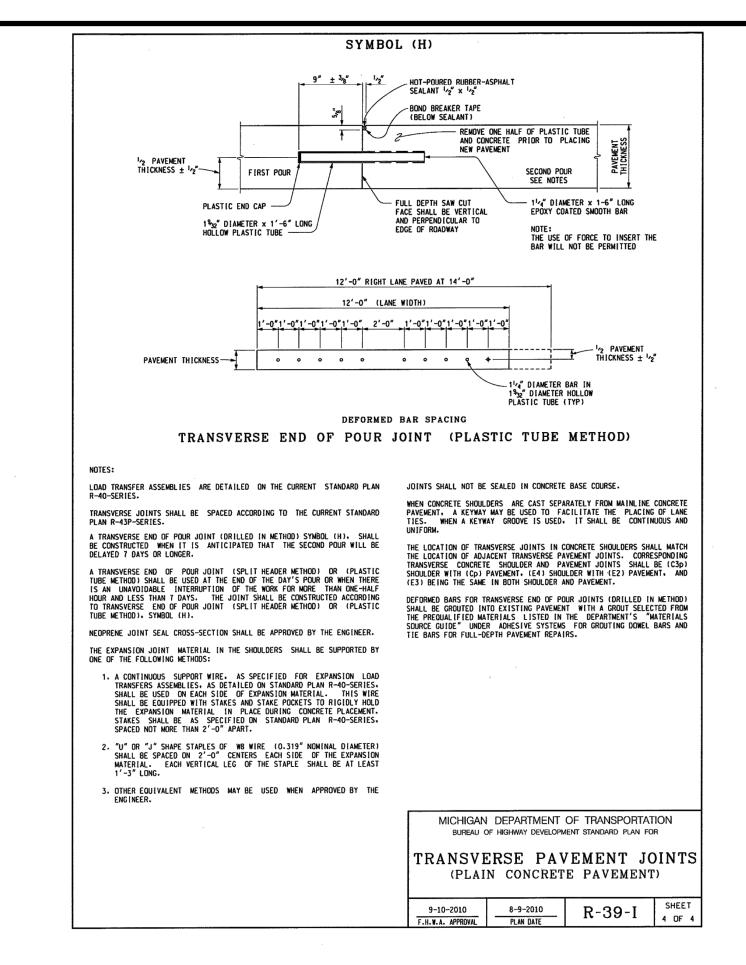
MICHIGAN DEPARTMENT OF TRANSPORTATION

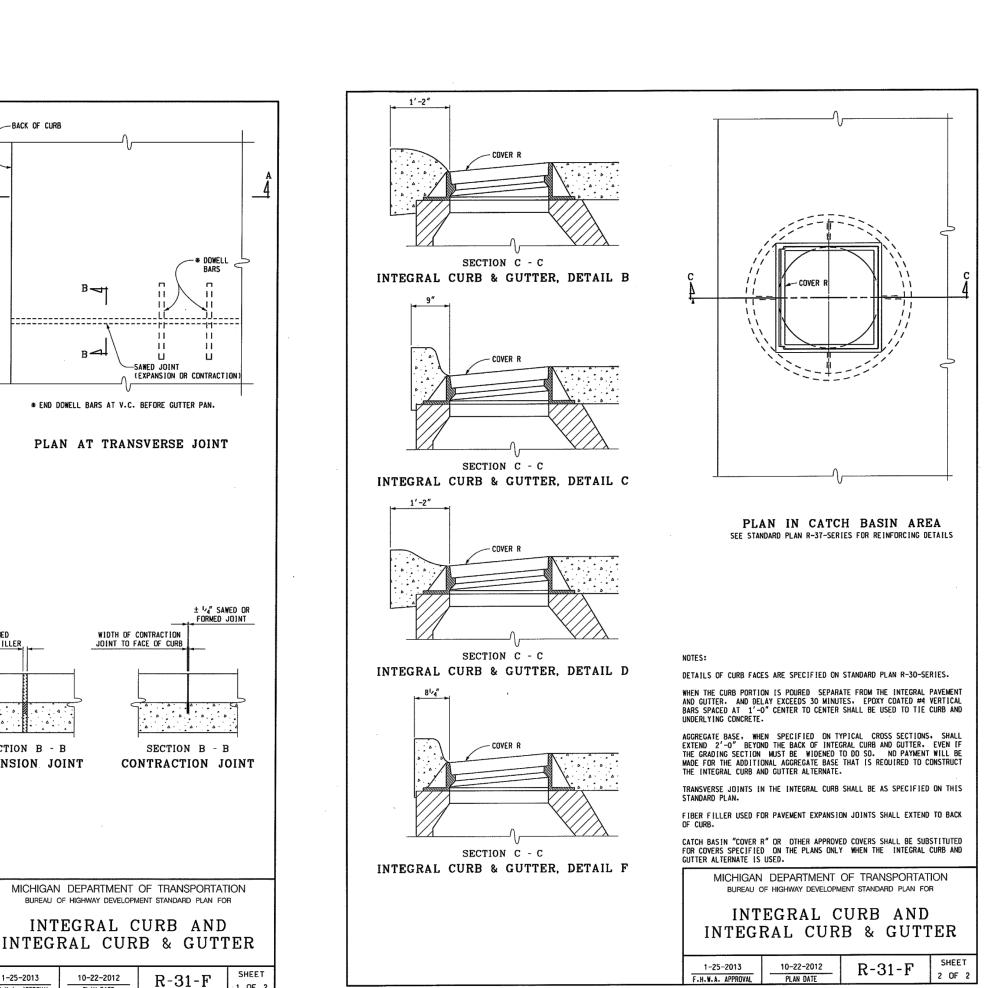
FIRST POUR

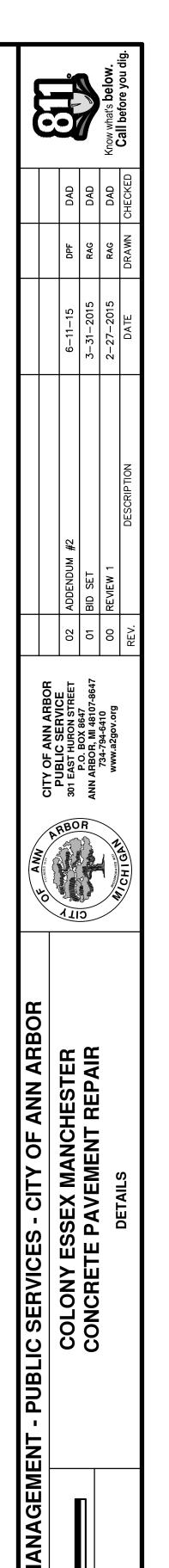
FIRST POUR

13/8" DIAMETER HOLE-

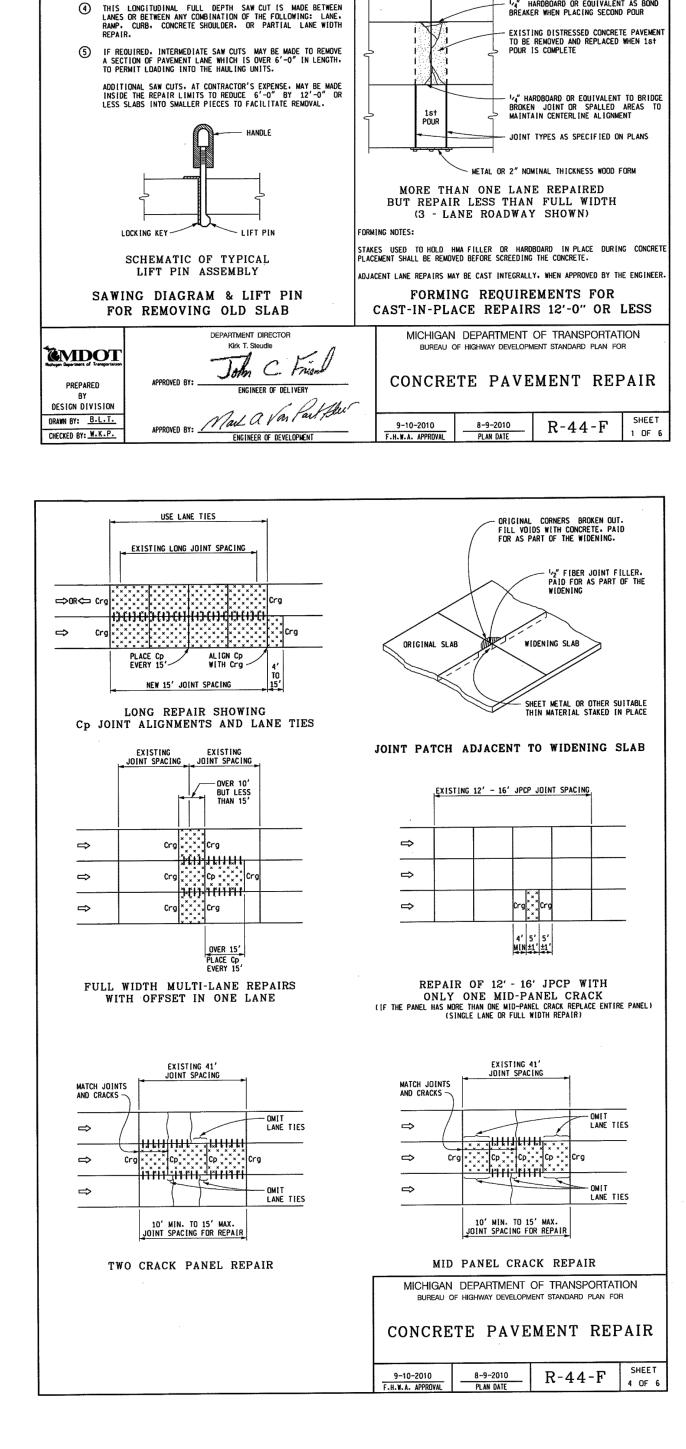
THICKNESS ± 1/2"







SHEET No.



4" TO 6" (M[N. TAPER)

REPAIR LENGTH

PLAN OF SAWING DIAGRAM

1 & 2 THESE SAW CUTS SHALL BE FULL DEPTH AND PERPENDICULAR TO THE EDGE OF THE ROADWAY. WITHIN A TOLERANCE OF 1". NO OVERCUTTING INTO ADJACENT LANES SHALL BE MADE UNLESS THE OVERCUT IS WITHIN THE LIMITS OF A SUBSCUENT REPAIR TO THE ADJACENT LANE. SHOULDER OVERCUTS WILL BE ALLOWED.

THIS FULL DEPTH SAW CUT IS MADE TO FACILITATE OPENING A TRENCH ACROSS THE SLAB TO RELIEVE COMPRESSION IN THE PAVEMENT PRIOR TO LIFTING OUT THE FAILED AREA. THIS SAW CUT MAY BE OMITTED PROVIDED NO SPALLING OF THE REMAINING CONCRETE OCCURS. IF SPALLING DOES OCCUR. THE CONTRACTOR WILL BE REQUIRED TO MAKE THIS SAW CUT ON SUBSEQUENT REPAIRS. WHEN THIS SAW CUT IS USED AND THE ADJACENT LANE IS NOT REPAIRED. NO OVERCUTTING INTO THAT LANE SHALL BE MADE.

THIS METHOD OF REMOVING DISTRESSED CONCRETE SHALL BE USED IN CONJUNCTION WITH FULL DEPTH CAST-IN-PLACE REPAIRS LESS THAN 50'-0" LONG AND IS OPTIONAL FOR REPAIRS OVER 50'-0"

- 1/4" HARDBOARD OR EQUIVALENT AS BOND BREAKER

JOINT TYPES AS SPECIFIED ON PLANS

- EXISTING DISTRESSED CONCRETE PAVEMENT TO BE REMOVED AND REPLACED WHEN 1st

- 1/4" HARDBOARD OR EQUIVALENT TO BRIDGE BROKEN JOINT OR SPALLED AREAS TO MAINTAIN CENTERLINE ALIGNMENT

JOINT TYPES AS SPECIFIED ON PLANS

- METAL OR 2" NOMINAL THICKNESS WOOD FORM

- METAL OR 2" NOMINAL THICKNESS WOOD FORM

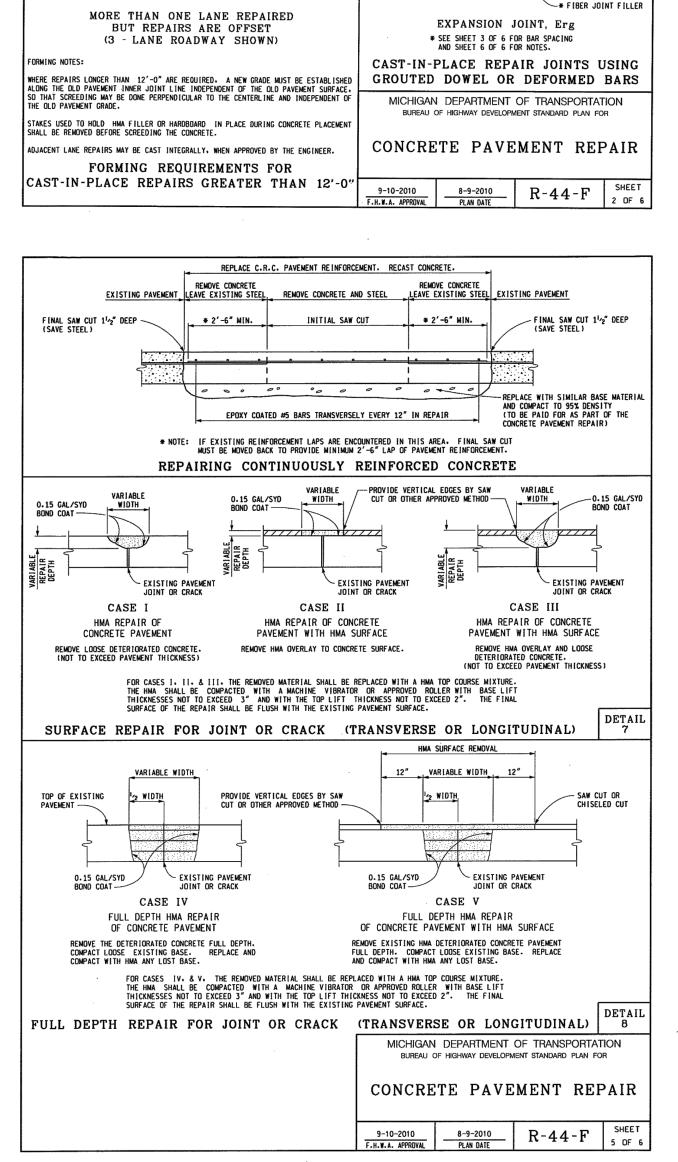
POUR IS COMPLETE

ONE LANE REPAIRS

(2 - LANE ROADWAY SHOWN)

ALL LANES REPAIRED

(2 - LANE ROADWAY SHOWN)



EXISTING CONCRETE

TIED JOINT, Trg

CONTRACTION JOINT, Crg

1

EXISTING CONCRETE

EXISTING CONCRETE

(4'-0" MIN. LENGTH)

RUBBER-ASPHALT SEALANT 1/4" x 1"

- BACKER ROD (BELOW SEALANT)

RUBBER-ASPHALT SEALANT 1" x 1"

* EXPANSION CAP

--- 1/8" TO 1/4" R

THICKNESS

* DRILL 13₈" DIAMETER HOLE INTO EXISTING CONCRETE PAVEMENT AND GROUT-IN-PLACE #9 x 1'-6" LONG EPOXY COATED DEFORMED BARS

2 PAVEMENT

DRILL 13/8" DIAMETER HOLE INTO EXISTING CONCRETE PAVEMENT AND GROUT-IN-PLACE 11/4" DIAMETER x 1'-6" LONG EPOXY COATED BARS-

PAVEMENT THICKNESS ±

DRILL 13/8" DIAMETER HOLE INTO EXISTING CONCRETE PAVEMENT AND GROUT-IN-PLACE 11/4" DIAMETER x 1'-6" LONG EPDXY COATED BARS—

- 14" HARDBOARD OR EQUIVALENT AS BOND BREAKER

- JOINT TYPES AS SPECIFIED ON PLANS

- EXISTING DISTRESSED CONCRETE PAVEMENT TO BE REMOVED AND REPLACED WHEN 1st POUR IS COMPLETE

- 1" MIN. THICKNESS WOOD FORM TO ESTABLISH INDEPENDENT ALIGNMENT

- JOINT TYPES AS SPECIFIED ON PLANS

- EXISTING DISTRESSED CONCRETE PAVEMENT TO BE REMOVED AND REPLACED WHEN 1st POUR IS COMPLETE

MIN. THICKNESS WOOD FORM TO

ESTABLISH INDEPENDENT ALIGNMENT

JOINT TYPES AS SPECIFIED ON PLANS

- METAL OR 2" NOMINAL THICKNESS WOOD FORM

WHEN OFFSET IS GREATER THAN 6'-0" PLACE (C2) JOINT IN LINE WITH ADJACENT LANE REPAIR JOINT.

- METAL OR 2" NOMINAL THICKNESS WOOD FORM

- METAL OR 2" NOMINAL THICKNESS WOOD FORM

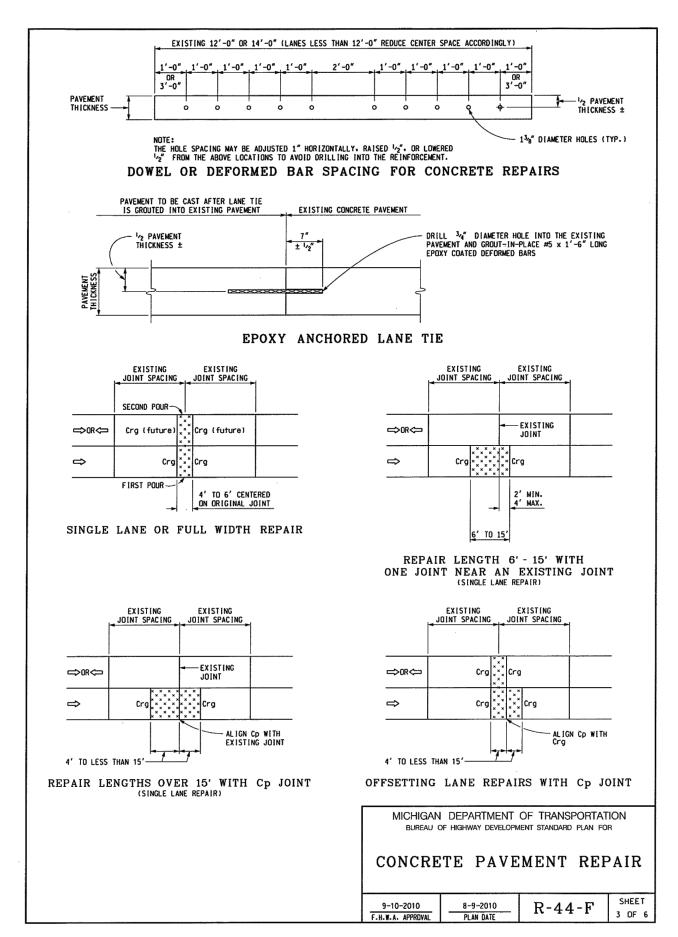
ONE LANE REPAIRS

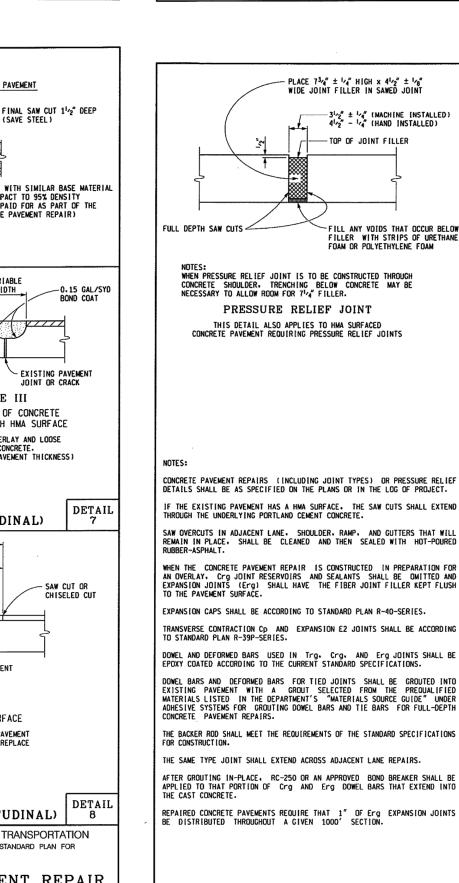
(2 - LANE ROADWAY SHOWN)

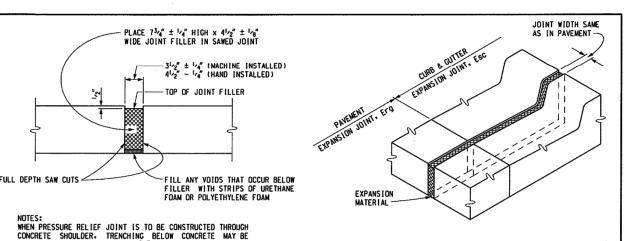
ALL LANES REPAIRED

(2 - LANE ROADWAY SHOWN)

AS BOND BREAKER







WHEN PRESSURE RELIEF JOINT IS TO BE CONSTRUCTED THROUGH CONCRETE SHOULDER, TRENCHING BELOW CONCRETE MAY BE NECESSARY TO ALLOW ROOM FOR 71/4" FILLER. PRESSURE RELIEF JOINT THIS DETAIL ALSO APPLIES TO HMA SURFACED CONCRETE PAVEMENT REQUIRING PRESSURE RELIEF JOINTS

CURB. GUTTER. AND CURB FACE SHALL BE SAWED AS DEEP AS THE EXISTING PAYEMENT THICKNESS. THE REMAINING CONCRETE SHALL BE CHIPPED OUT AND EXPANSION MATERIAL OF SUFFICIENT THICKNESS SHALL BE PLACED IN SAWED JOINT TO FILL THE GAP AS DIRECTED BY THE ENGINEER. EXPANSION JOINT, Esc

CONCRETE PAVEMENT REPAIRS (INCLUDING JOINT TYPES) OR PRESSURE RELIEF DETAILS SHALL BE AS SPECIFIED ON THE PLANS OR IN THE LOG OF PROJECT. IF THE EXISTING PAVEMENT HAS A HMA SURFACE. THE SAW CUTS SHALL EXTEND THROUGH THE UNDERLYING PORTLAND CEMENT CONCRETE. SAW OVERCUTS IN ADJACENT LANE, SHOULDER, RAMP, AND GUTTERS THAT WILL REMAIN IN PLACE, SHALL BE CLEANED AND THEN SEALED WITH HOT-POURED RUBBER-ASPHALT. WHEN THE CONCRETE PAVEMENT REPAIR IS CONSTRUCTED IN PREPARATION FOR AN OVERLAY. Crg JOINT RESERVOIRS AND SEALANTS SHALL BE OMITTED AND EXPANSION JOINTS (Erg) SHALL HAVE THE FIBER JOINT FILLER KEPT FLUSH TO THE PAVEMENT SURFACE. EXPANSION CAPS SHALL BE ACCORDING TO STANDARD PLAN R-40-SERIES. TRANSVERSE CONTRACTION CP AND EXPANSION E2 JOINTS SHALL BE ACCORDING TO STANDARD PLAN R-39P-SERIES.

DOWEL BARS AND DEFORMED BARS FOR TIED JOINTS SHALL BE GROUTED INTO EXISTING PAVEMENT WITH A GROUT SELECTED FROM THE PREDUALIFIED MATERIALS LISTED IN THE DEPARTMENT'S "MATERIALS SOURCE GUIDE" UNDER ADHESIVE SYSTEMS FOR GROUTING DOWEL BARS AND TIE BARS FOR FULL-DEPTH CONCRETE PAVEMENT REPAIRS. THE BACKER ROD SHALL MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE SAME TYPE JOINT SHALL EXTEND ACROSS ADJACENT LANE REPAIRS. AFTER GROUTING IN-PLACE. RC-250 OR AN APPROVED BOND BREAKER SHALL BE APPLIED TO THAT PORTION OF Crg AND Erg DOWEL BARS THAT EXTEND INTO THE CAST CONCRETE.

EXPANSION JOINT FILLER SHALL EXTEND THE FULL DEPTH OF THE REPAIR AND BE FLUSH WITH THE EXISTING PAVEMENT SURFACE. PRIOR TO SEALING, THE JOINT FIBER FILLER AT THE PAVEMENT SURFACE SHALL BE REMOVED BY CUTTING 1" WIDE AND 1½" DEEP TO PERMIT THE PLACEMENT OF THE HOT-POURED RUBBER ASPHALT SEALANT. HOLES IN EXPANSION JOINT FILLER SHALL BE 1½" MAXIMUM DIAMETER AND SHALL BE ALIGNED TO FIT DRILLED HOLES IN CONCRETE. Erg JOINTS SHALL BE CONSTRUCTED ONLY WHEN THEY EXTEND ACROSS ALL LANES, RAMPS, OR SHOULDERS. WHEN Erg JOINTS ARE PLACED ADJACENT TO CONCRETE CURB AND GUTTER THAT IS NOT REQUIRED TO BE REMOVED. AN ESC JOINT SHALL BE CONSTRUCTED IN THE CURB AND GUTTER. JOINT RESERVOIRS FOR THE HOT-POURED RUBBER-ASPHALT SEALANT SHALL BE ABRASIVE BLAST CLEANED, FOLLOWED BY A FINAL CLEANING OF OIL-FREE COMPRESSED AIR PRIOR TO SEALING.

WHERE THERE ARE NO REPAIR LOCATIONS WITHIN A 1000' LENGTH, NO EXPANSION SPACE WILL BE PROVIDED.

LANE TIES (TO ADJACENT PAVEMENT LANE, WHEN REQUIRED) SHALL BE SPACED ACCORDING TO STANDARD PLAN R-41-SERIES, EXCEPT THAT THE FIRST LANE TIE ADJACENT TO A TRANSVERSE JOINT SHALL BE INSTALLED AT A DISTANCE OF I'-8" FROM THE JOINT. WHEN BOTH SIDES OF A LONGITUDINAL JOINT ARE POURED INTEGRALLY, LANE TIES SHALL BE STRAIGHT DEFORMED EPDXY COATED BARS CAST-IN-PLACE AS SPECIFIED ON STANDARD PLAN R-41-SERIES. WHEN ADJACENT LANES ARE CAST SEPARATELY, LANE TIES SHALL BE GROUTED-IN-PLACE AS SPECIFIED ON THIS PLAN. THE GROUT SHALL BE SELECTED FROM THE PREQUALIFIED MATERIALS LISTED IN THE DEPARTMENT'S "MATERIALS SOURCE GUIDE", UNDER LANE TIES.

THE MONTH AND YEAR OF CASTING AND STATION NUMBER (IF REMOVED) SHALL BE STENCILED ON EACH CONCRETE REPAIR. ALL REPAIRS WILL BE JOINTED PLAIN CONCRETE PAVEMENT.

MICHIGAN DEPARTMENT OF TRANSPORTATION

BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

CONCRETE PAVEMENT REPAIR

 $\frac{8-9-2010}{\text{PLAN DATE}}$ R-44-F SHEET

|8|5|8|

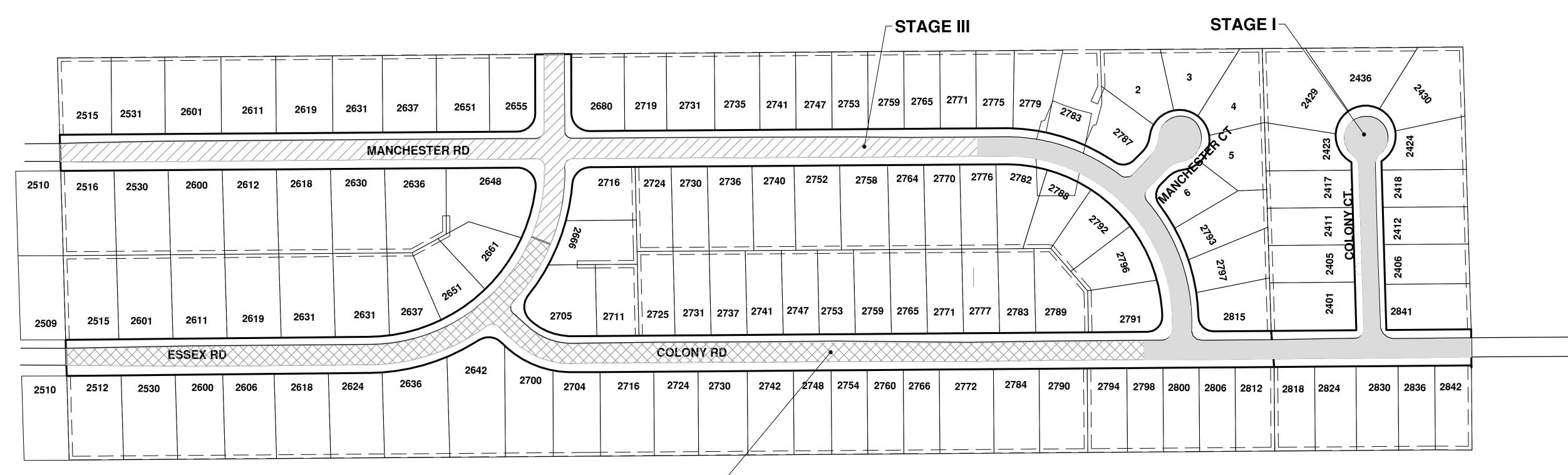
PROJECT MANAGEMENT

SSEX MANCHESTER
E PAVEMENT REPAIR
DETAILS

SERVICES -

CO

SHEET No.



THE CONTRACTOR SHALL REVIEW THE TRAFFIC MAINTENANCE PLANS, DETOUR PLANS, AND THE CONTRACT DOCUMENTS AND NOTE THAT EACH OF THE MAJOR STAGES OF CONSTRUCTION (STAGES 1 THROUGH 3) ARE SHOWN FOR THE PURPOSE OF COMPLETING THE CONCRETE PAVEMENT REPAIRS AND SIDEWALK WHILE MAINTAINING ACCESS TO ALL RESIDENCES SOLELY ACCESSED OFF OF COLONY RD, MANCHESTER RD., ESSEX RD. AND COLONY COURT. EACH CONSTRUCTION STAGE SHOWN ON SHEET 4 WILL BE BUILT CONSTRUCTING ONE SIDE OF ROAD AT A TIME. CONTRACTOR WILL BE REQUIRED TO KEEP ONE SIDE OF ROAD OPEN AT ALL TIMES FOR RESIDENTS AND EMERGENCY VEHICLES. CONTRACTOR WILL BE REQUIRED TO REMOVE ONLY ENOUGH OF CONCRETE PAVEMENT THAT CAN BE PLACED BACK IN SAME DAY; 25 FEET OF REMOVAL PROPERLY SECURED IS ALL THAT CAN BE LEFT OPEN AT END OF EACH DAY. WERE STORM SEWER STRUCTURES TO BE REPLACED ARE IN FRONT OF DRIVES, CONTRACTOR TO SCHEDULE REMOVAL, REPLACEMENT, BACKFILL, CONCRETE PLACEMENT, AND CURE TIME TO BE COMPLETED IN NO MORE THAN 5 DAYS FROM START TO FINISH. THE INTENT IS TO HAVE CONTRACTOR ALSO WORKING ON RESTORING LAWN AREAS AS SOON AS POSSIBLE AND COMPLETE WORK IN EACH STAGE BEFORE MOVING ON TO NEXT STAGE. WHEN CONTRACTOR NEEDS TO UTILIZE BOTH LANES TO PLACE CONCRETE REPAIRS FLAG CONTROL WILL BE REQUIRED TO BE USED TO CONTROL ACCESS. CONTRACTOR WILL SUBMIT DETAILED SCHEDULE OF WORK ITEMS AND PROPOSED COMPLETION DATES ON WEEKLY BASIS. THESE WORK ITEMS AND DATES WILL BE DISCUSSED AND ADJUSTED AS NEEDED AT WEEKLY PROGRESS MEETING. THE CONTRACTOR MAY CHOOSE TO ADJUST THE LIMITS OR SEQUENCING OF CONSTRUCTION IN ORDER TO COMPLETE THE WORK MORE EFFICIENTLY. HOWEVER, CHANGES TO THE RECOMMENDED STAGES MUST BE APPROVED IN WRITING BY THE ENGINEER PRIOR TO CONSTRUCTION AND MUST ASSURE THAT ACCESS IS MAINTAINED AS DESCRIBED

ABOVE. STAGE I

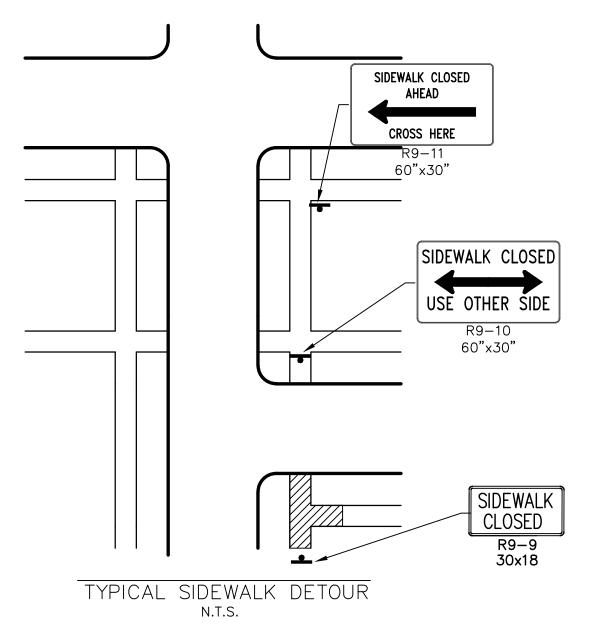
- 1. PLACE MESSAGE BOARDS 1 WEEK PRIOR TO START OF CONSTRUCTION. PLACE MESSAGE PER ENGINEER.
- 2. INSTALL TRAFFIC CONTROL DEVICES FOR DETOUR AND MAINTENANCE OF TRAFFIC PER STAGE I.
- 3. PLACE NO PARKING SIGNS.
- 4. PLACE SOIL EROSION CONTROL ITEMS AND TREE PROTECTION.
- 5. CONSTRUCT STORM SEWER INLETS ON COLONY AND MANCHESTER COURT.
- REMOVE AND REPLACE CONCRETE PAVEMENT AND SIDEWALK.
- 7. FINISH RESTORATION, CLEAN STREET, AND COMPLETE PRELIMINARY PUNCH LIST FOR STAGE I. 8. REMOVE SOIL EROSION CONTROL MEASURES AND TREE PROTECTION.
- 9. REMOVE NO PARKING SIGNS, DETOUR AND CONSTRUCTION SIGNAGE.

STAGE II

- 1. ADJUST MESSAGE ON MESSAGE BOARDS, PLACE MESSAGE PER ENGINEER.
- 2. INSTALL TRAFFIC CONTROL DEVICES FOR DETOUR AND MAINTENANCE OF TRAFFIC PER STAGE II.
- 3. PLACE NO PARKING SIGNS.
- 4. PLACE SOIL EROSION CONTROL ITEMS AND TREE PROTECTION.
- 5. CONSTRUCT STORM SEWER FRONT OF 2724 AND 2731 COLONY COURT.
- 6. REMOVE AND REPLACE CONCRETE PAVEMENT AND SIDEWALK. 7. FINISH RESTORATION, CLEAN STREET, AND COMPLETE PRELIMINARY PUNCH LIST FOR STAGE II.
- 8. REMOVE SOIL EROSION CONTROL MEASURES AND TREE PROTECTION. 9. REMOVE NO PARKING SIGNS, DETOUR AND CONSTRUCTION SIGNAGE.

STAGE III

- ADJUST MESSAGE ON MESSAGE BOARDS, PLACE MESSAGE PER ENGINEER.
- 2. INSTALL TRAFFIC CONTROL DEVICES FOR DETOUR AND MAINTENANCE OF TRAFFIC PER STAGE III.
- 3. PLACE NO PARKING SIGNS.
- 4. PLACE SOIL EROSION CONTROL ITEMS AND TREE PROTECTION.
- 5. CONSTRUCT STORM SEWER FRONT OF 2611, 2612, 2636, 2637, 2648, 2735 AND 2736 MANCHESTER RD.
- 6. REMOVE AND REPLACE CONCRETE PAVEMENT AND SIDEWALK.
- 7. FINISH RESTORATION, CLEAN STREET, AND COMPLETE PRELIMINARY PUNCH LIST FOR STAGE III AND OVERALL PROJECT PUNCH LIST.
- 8. REMOVE SOIL EROSION CONTROL MEASURES AND TREE PROTECTION.
- 9. REMOVE NO PARKING SIGNS, DETOUR AND CONSTRUCTION SIGNAGE.



STAGE II

PEDESTRIAN TRAFFIC CONTROL SIGNS			
SIGN NUMBER QUANTITY TOTAL SF			TOTAL SFT
SIDEWALK CLOSED USE OTHER SIDE	R9-10 60X30	3	38
SIDEWALK CLOSED CROSS HERE	R9-11 60X30	3	38
SIDEWALK CLOSED	R9-9 30x18	3	14
SIDEWALK CLOSED AHEAD CROSS HERE	R9-11 48×36	3	36

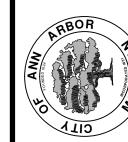
SIDEWALK DETOUR

1. SIGNS PROVIDED AS NEEDED. PEDESTRIAN DETOUR PLACED AS DIRECTED BY ENGINEER

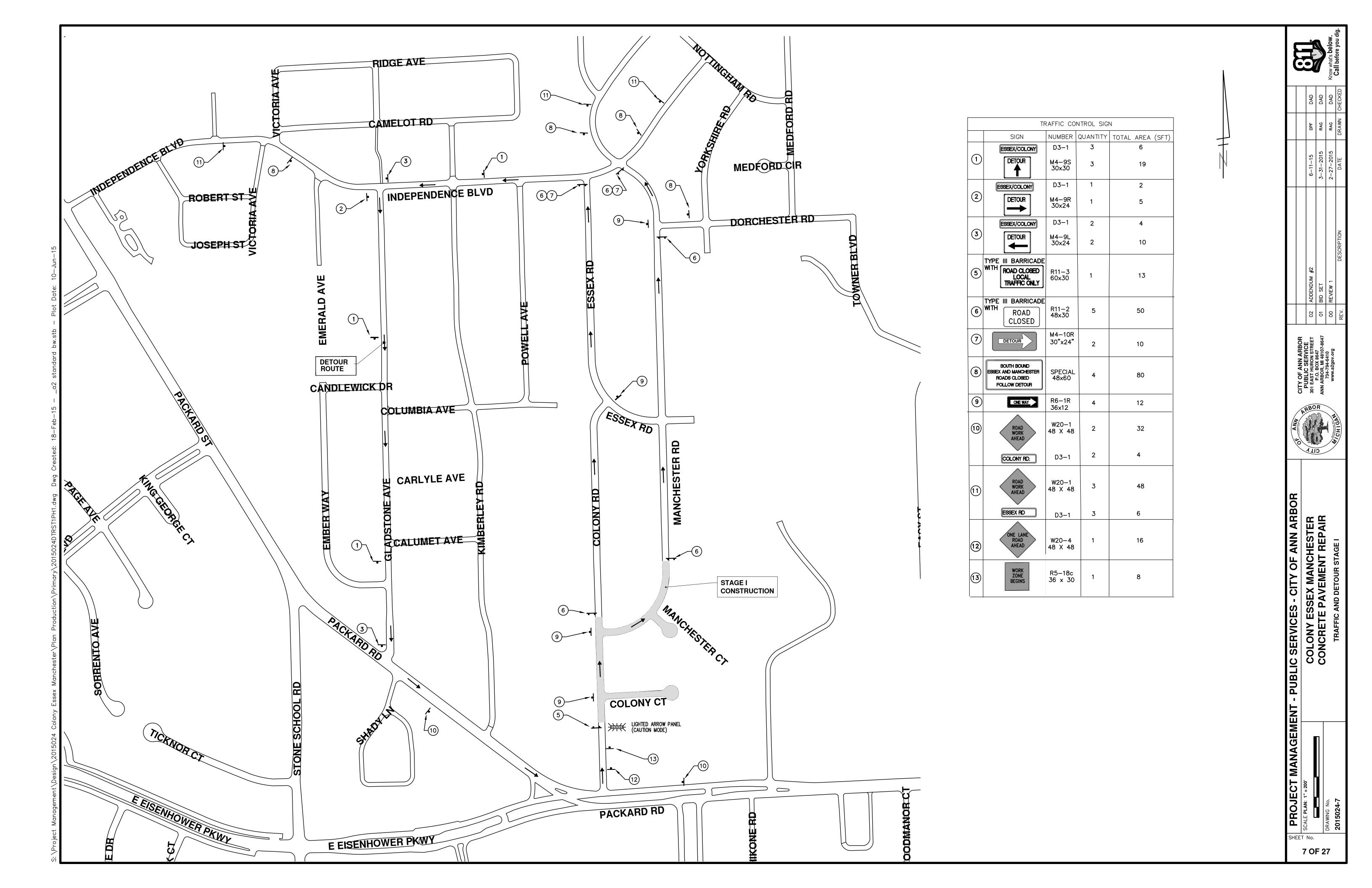
TRAFFIC NOTES FOR STAGE 1, 2, AND 3

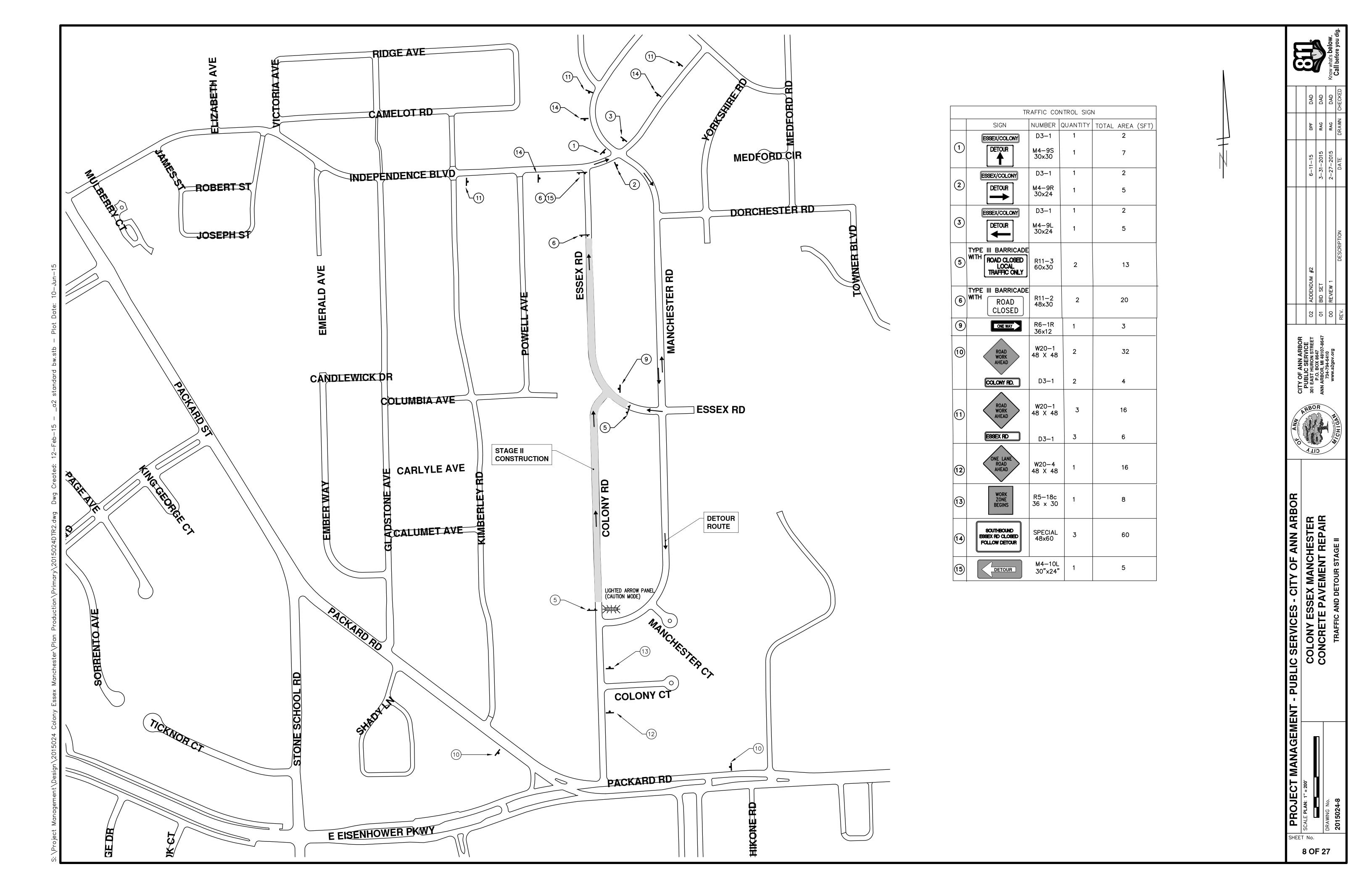
- 1. CONTRACTOR SHALL PLACE PORTABLE, CHANGEABLE MESSAGE SIGNS A MINIMUM OF ONE (1) WEEK PRIOR TO THE START OF CONSTRUCTION IN LOCATIONS INDICATED BY ENGINEER. MESSAGE TO BE PROVIDED BY THE ENGINEER.
- 2. SIGN SPACING PER MMUTCD 6C-4 OR AS DIRECTED BY ENGINEER.
- 3. ONE SIDE OF SIDEWALK TO BE OPEN FOR USE AT ALL TIMES.
- 4. ALL TRAFFIC CONTROL DEVICES TO MEET CURRENT MMUTCD PART 6 STANDARDS.
- 5. MAINTAIN ACCESS TO PROPERTIES AND EMERGENCY VEHICLES AT ALL TIMES.
- 6. CONTRACTOR TO PROVIDE TRAFFIC REGULATORS AS NEEDED AND AS DIRECTED BY ENGINEER.
- 7. COVER CONFLICTING SIGNS AS NEEDED OR AS DIRECTED BY ENGINEER, PAID AS PART OF MINOR TRAFFIC CONTROL.

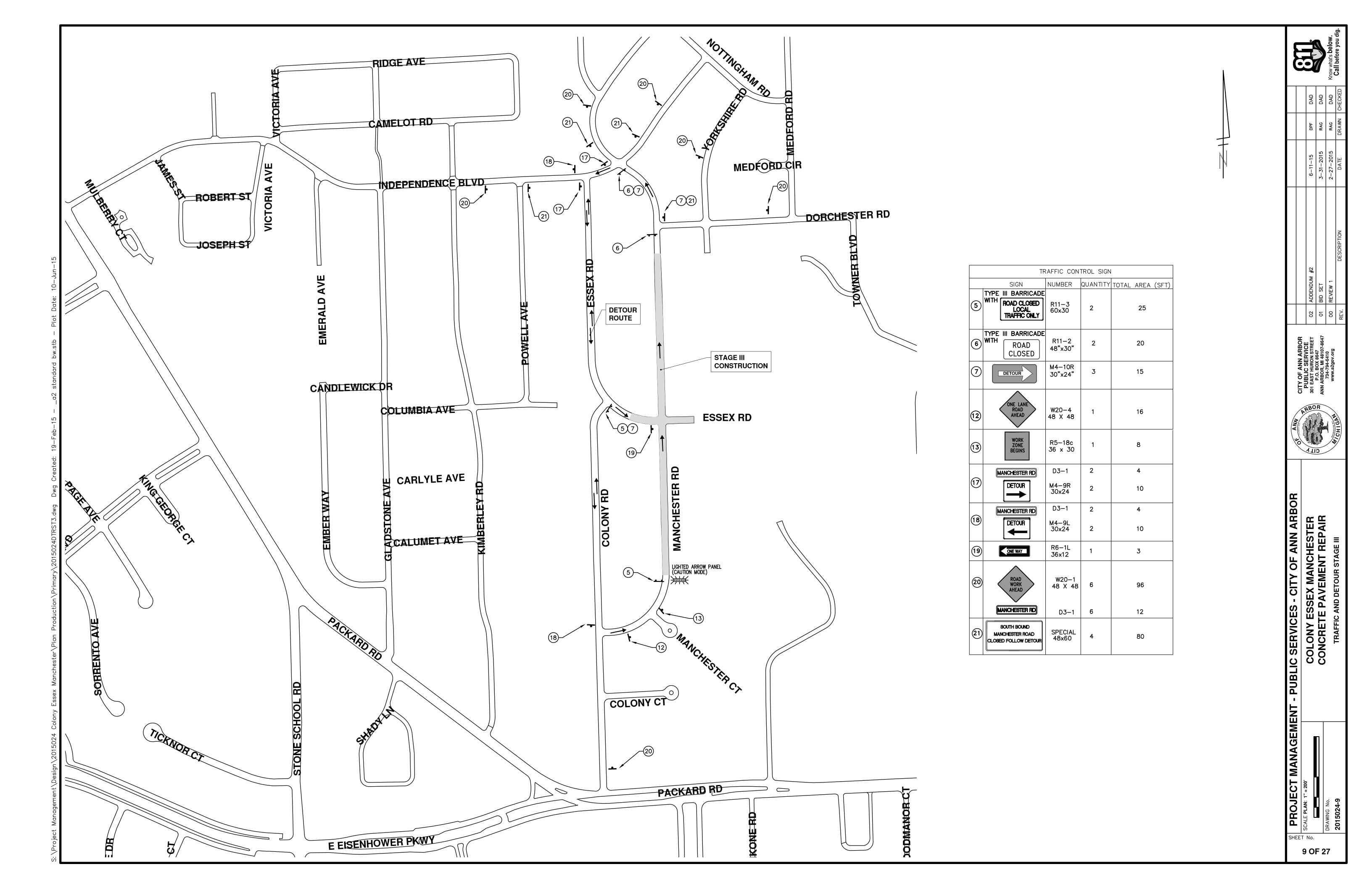
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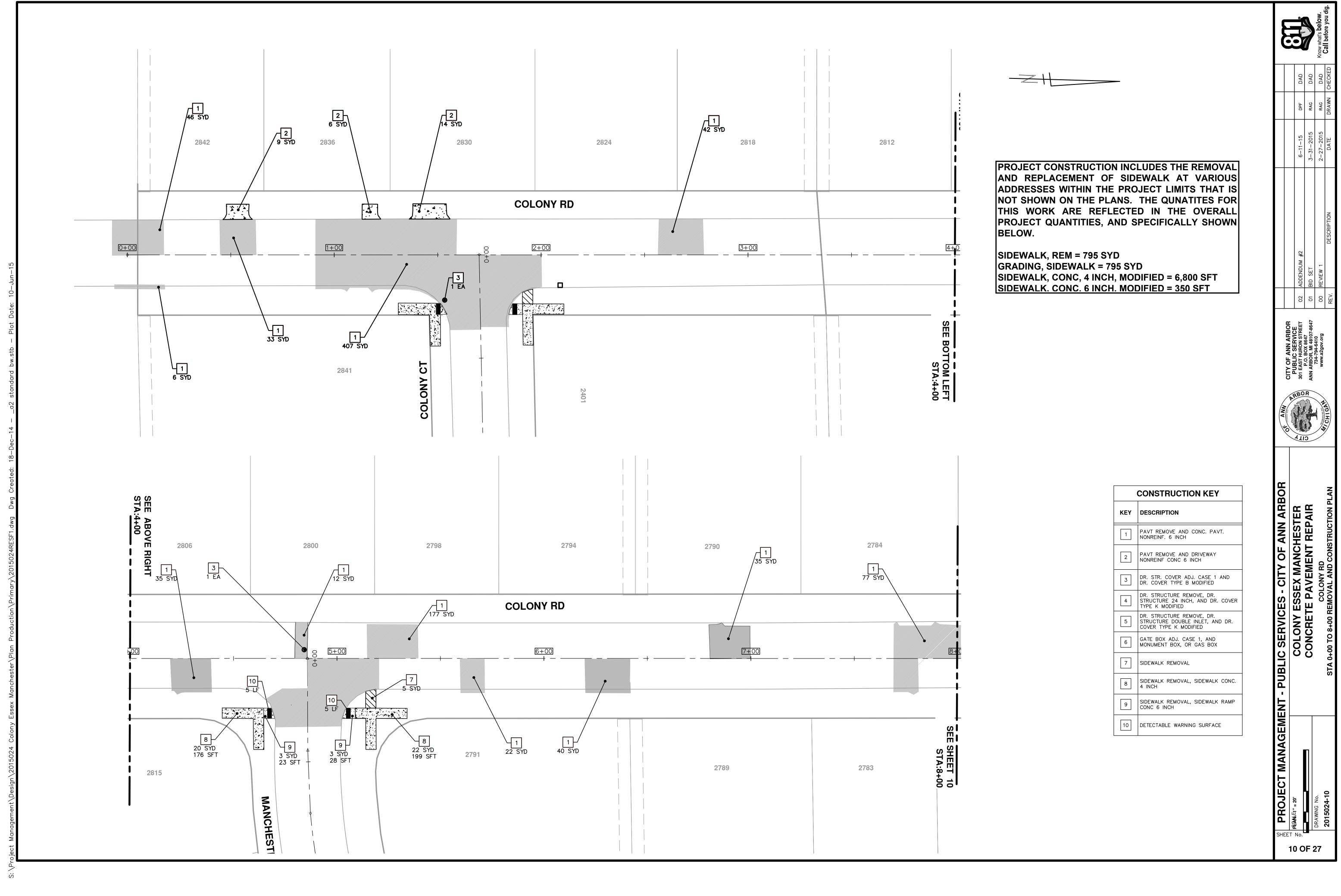


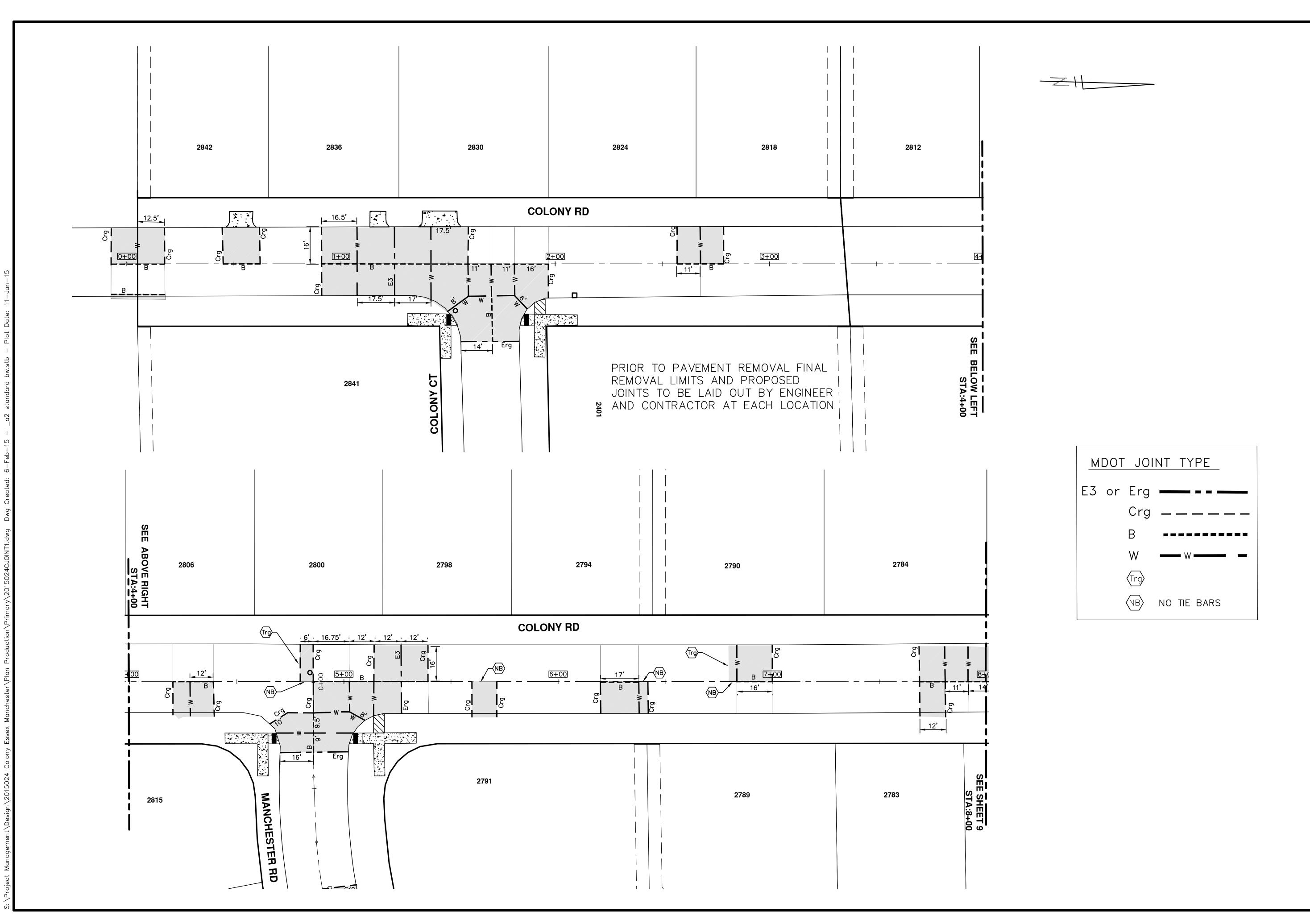
SHEET No.











2	ADDENDUM #2	6-11-15	DPF	DAD
1	BID SET	3-31-2015	RAG	DAD
0	REVIEW 1	2-27-2015	RAG	DAD
· .	DESCRIPTION	DATE	DRAWN	DRAWN CHECKED

C) R	A	
ANN CF ANN	ARBO		M CHIGAN

	ANCHESTER	REPAIR	NA
5	ANCH	JENT	SD INTING PLAN

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY

SCALE PLAN: 1" = 20'

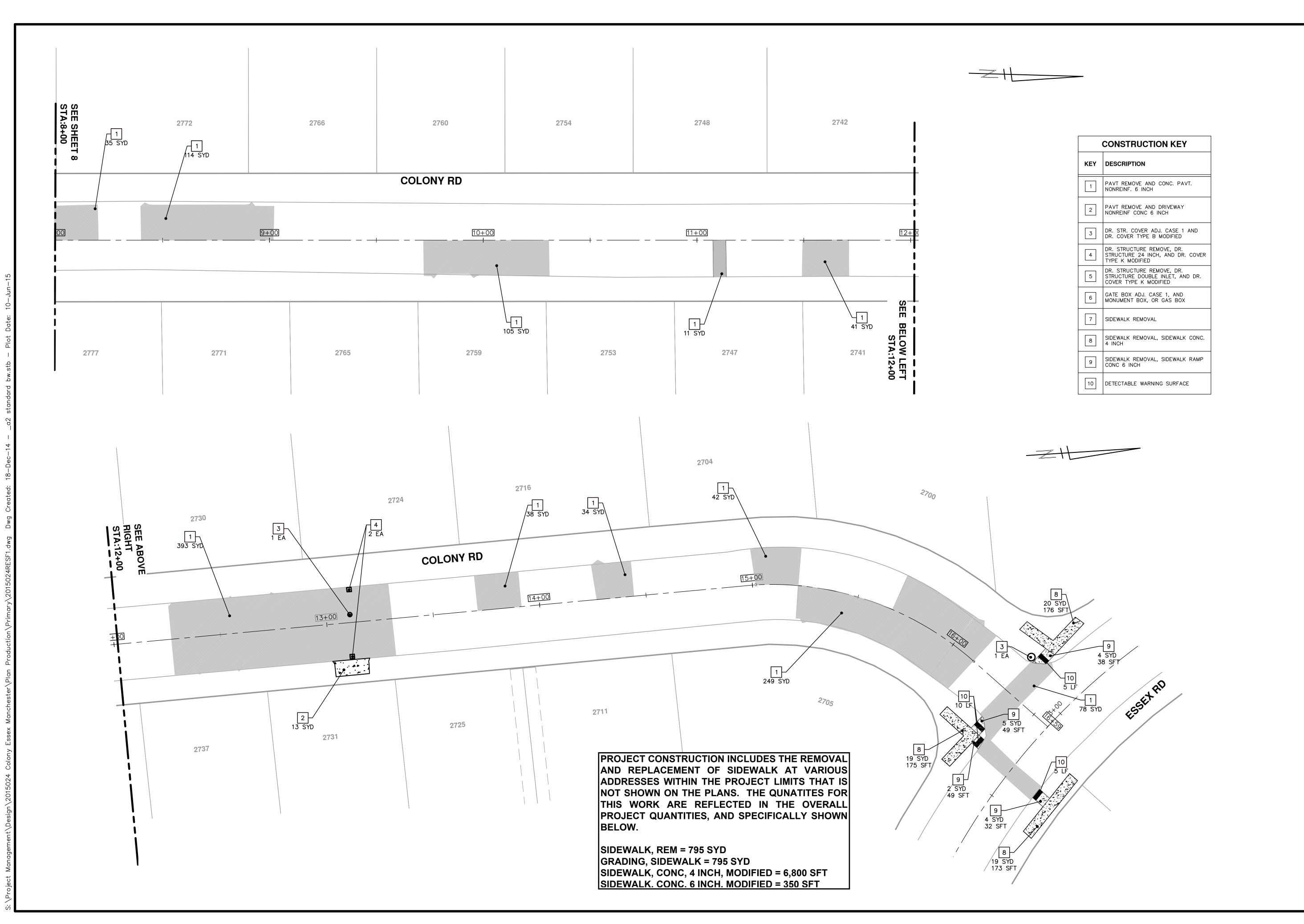
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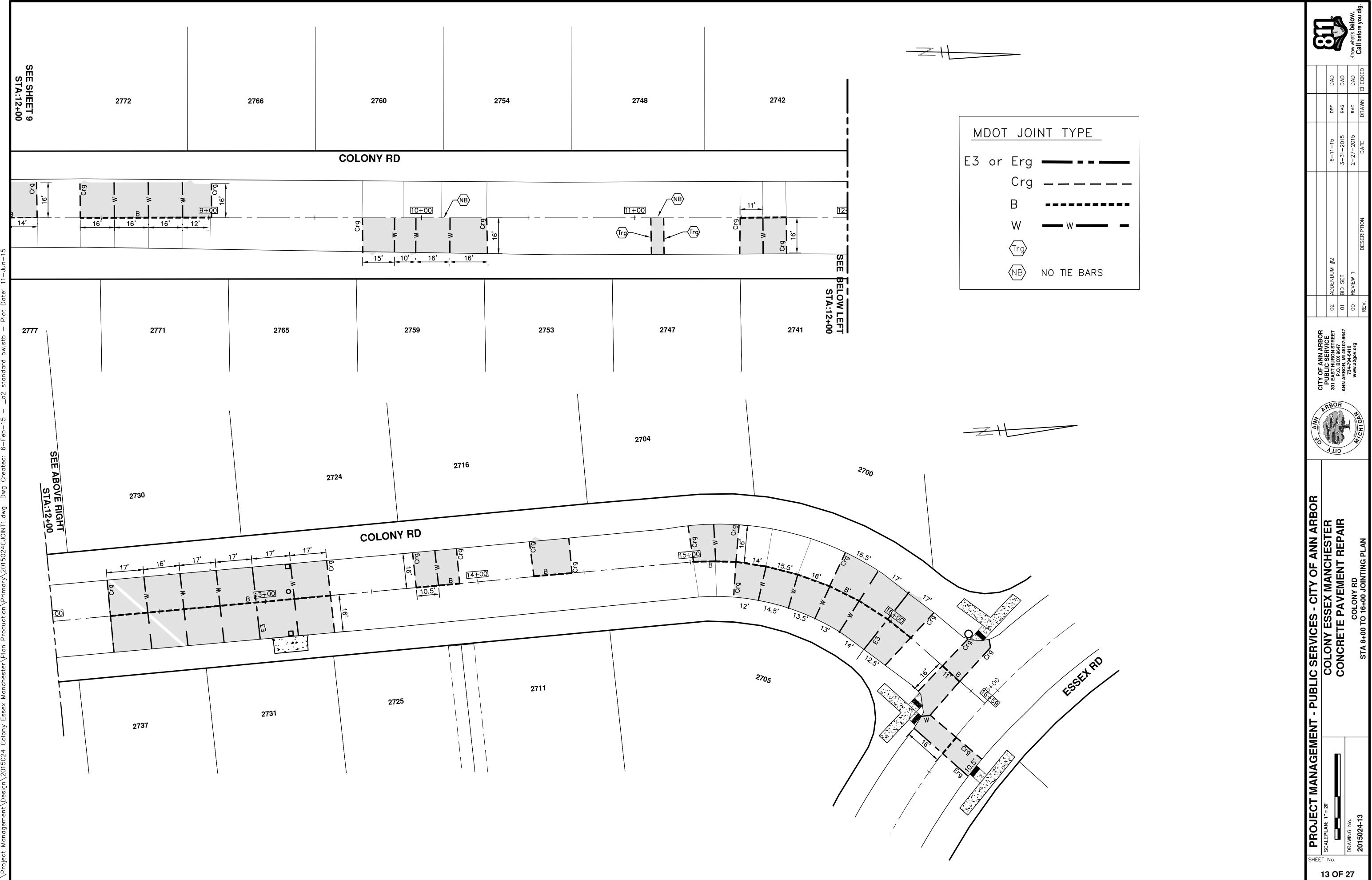
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DAD	DAD	DAD	DRAWN CHECKED
DPF	RAG	RAG	DRAWN
6-11-15	3-31-2015	2-27-2015	DATE
O2 ADDENDUM #2	01 BID SET	00 REVIEW 1	DESCRIPTION
02	10	00	REV.

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

COLONY ESSEX MANCHESTER

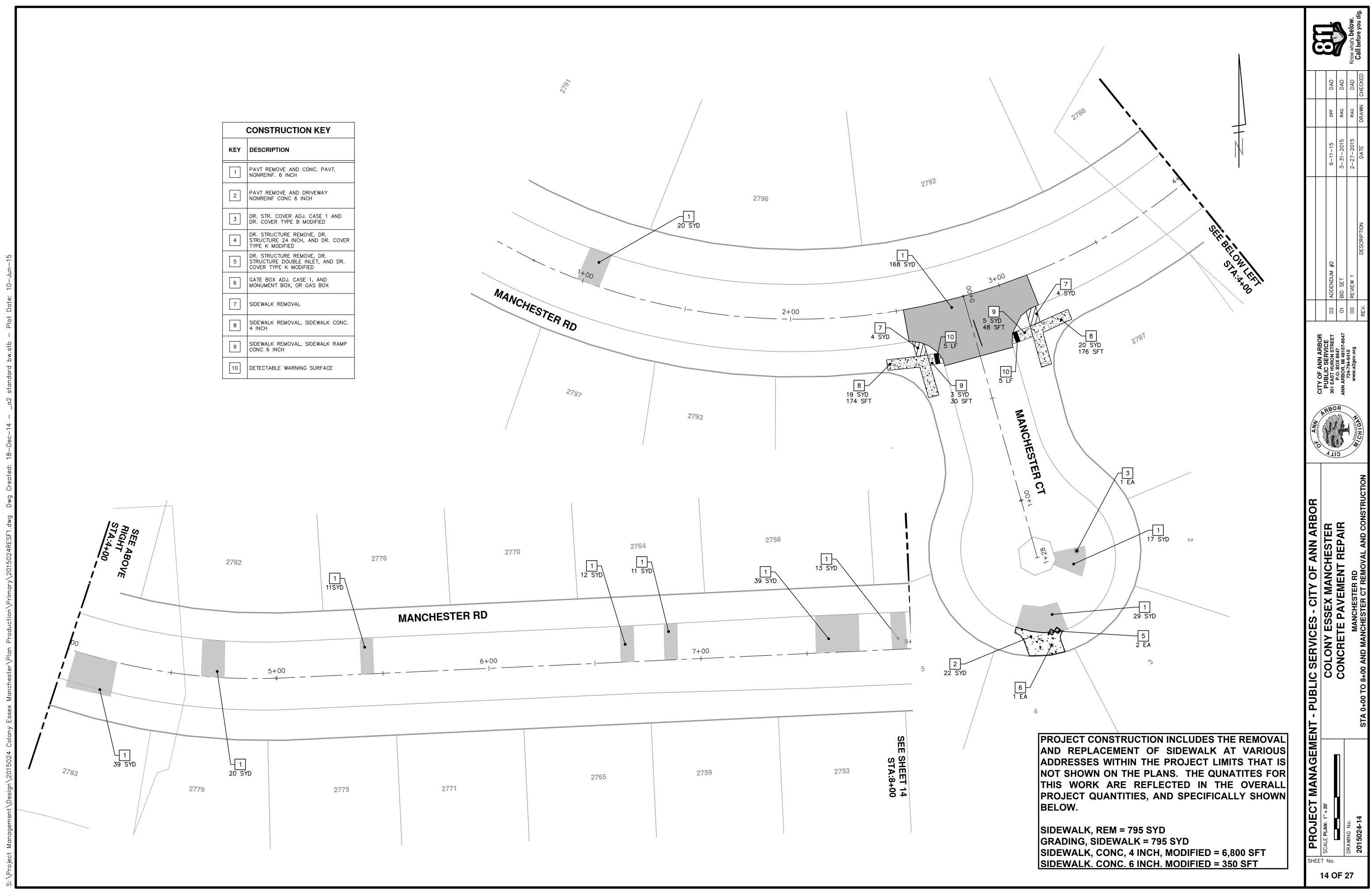
CONCRETE PAVEMENT REPAIR

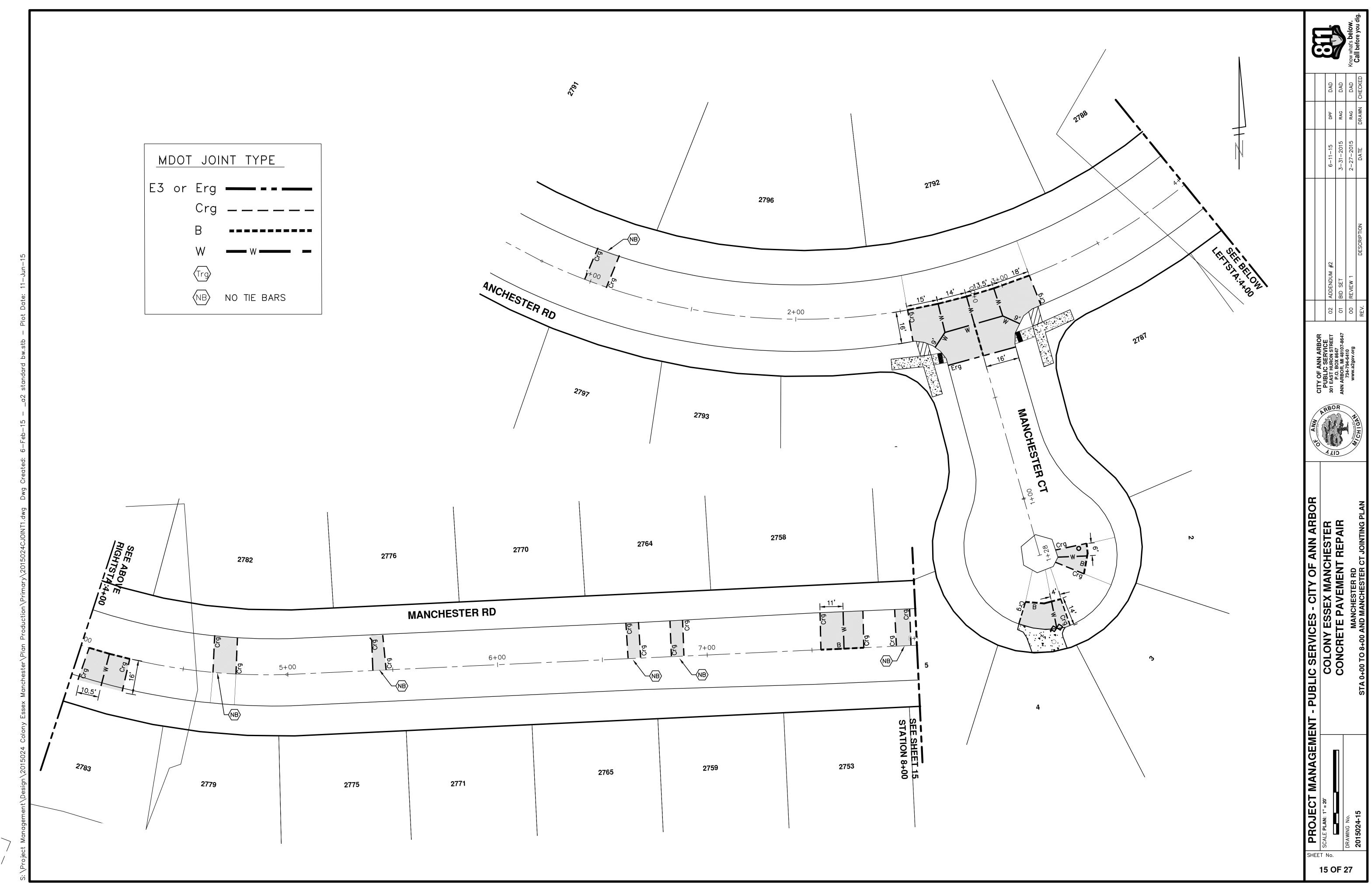
CONCRETE PAVEMENT REPAIR

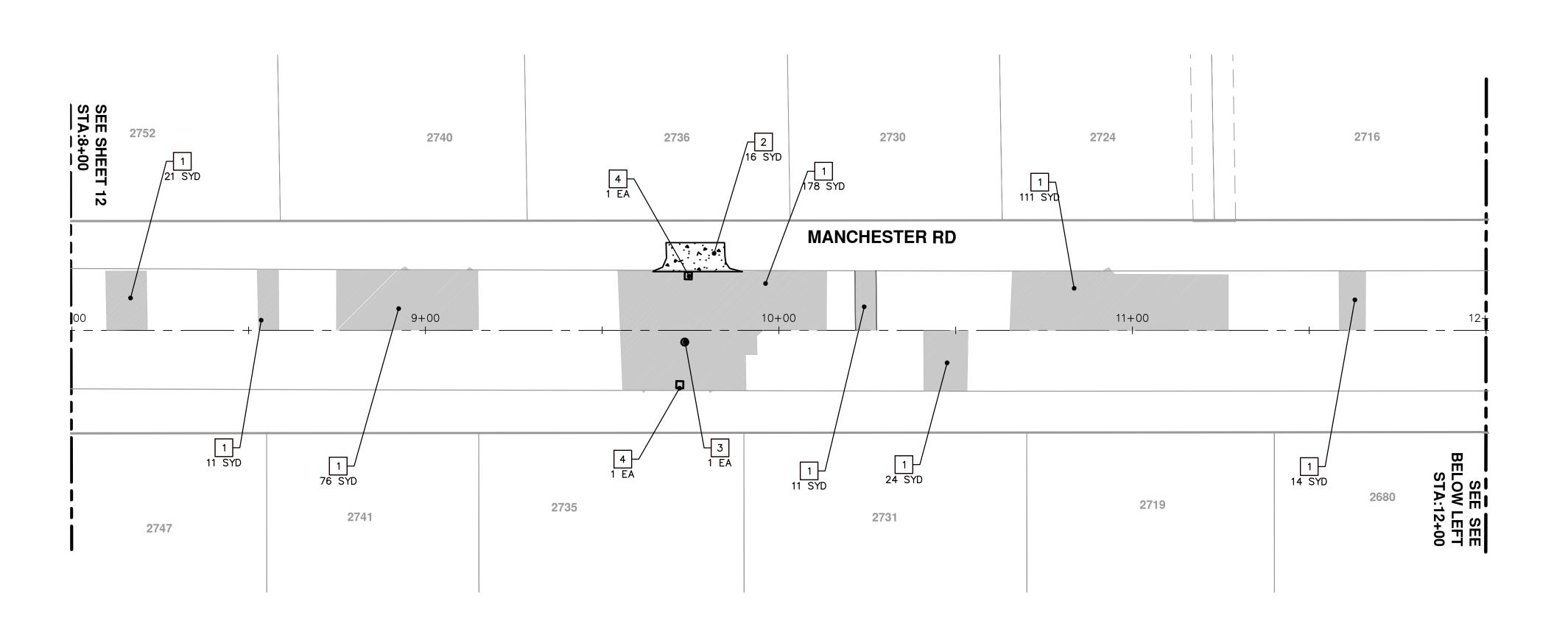


CITY OF ANN ARBON PUBLIC SERVICE 301 EAST HURON STREE P.O. BOX 8647 ANN ARBOR, MI 48107-864 734-794-6410 www.a2gov.org	
ARBOR	\





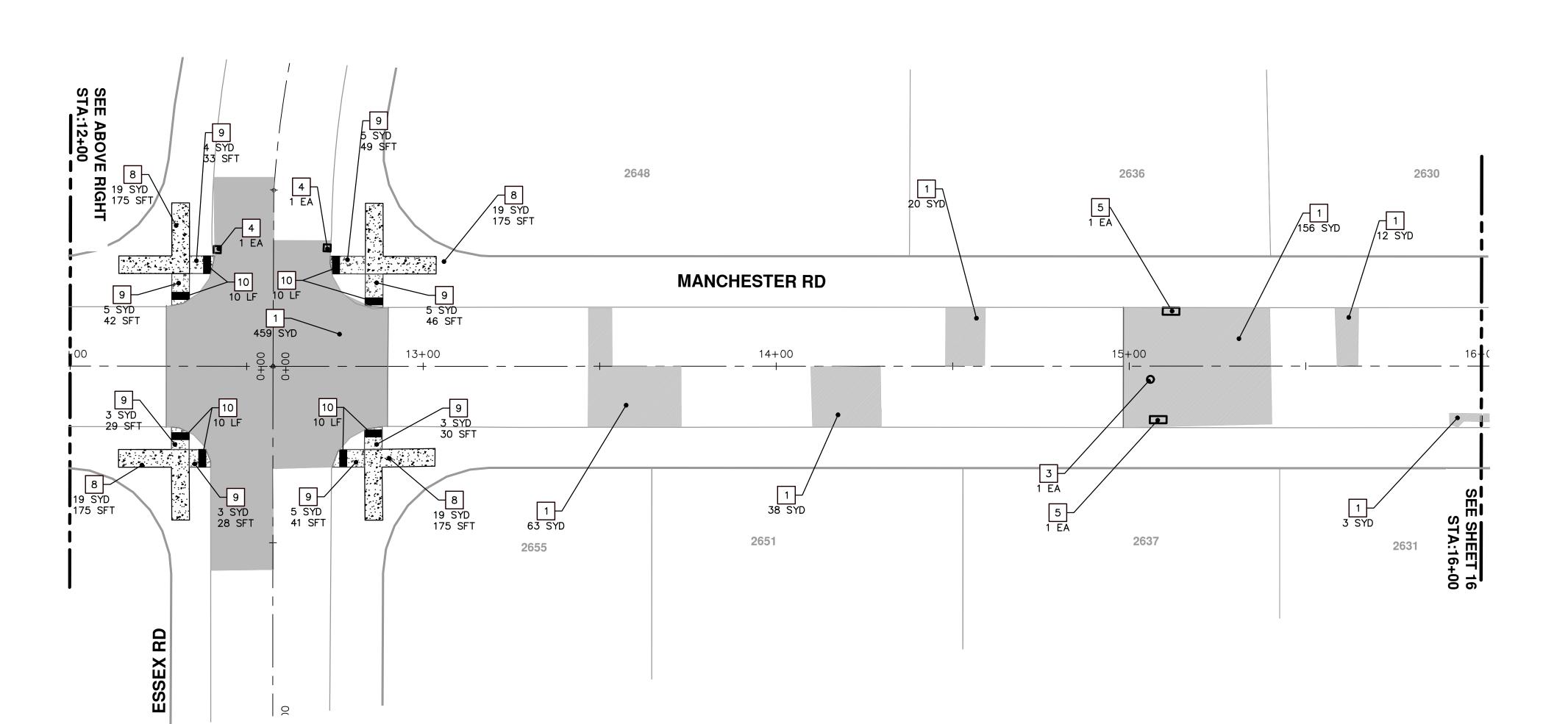






PROJECT CONSTRUCTION INCLUDES THE REMOVAL AND REPLACEMENT OF SIDEWALK AT VARIOUS ADDRESSES WITHIN THE PROJECT LIMITS THAT IS NOT SHOWN ON THE PLANS. THE QUNATITES FOR THIS WORK ARE REFLECTED IN THE OVERALL PROJECT QUANTITIES, AND SPECIFICALLY SHOWN BELOW.

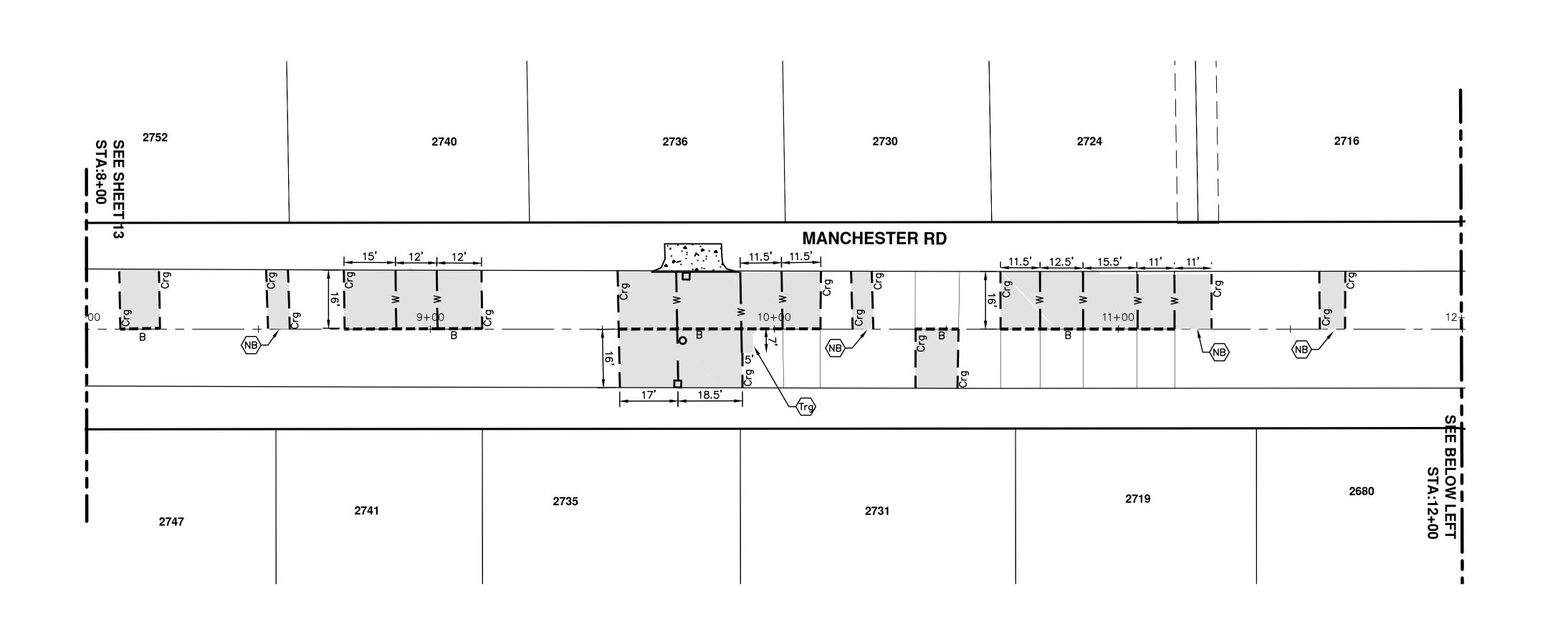
SIDEWALK, REM = 795 SYD GRADING, SIDEWALK = 795 SYD SIDEWALK, CONC, 4 INCH, MODIFIED = 6,800 SFT SIDEWALK. CONC. 6 INCH. MODIFIED = 350 SFT

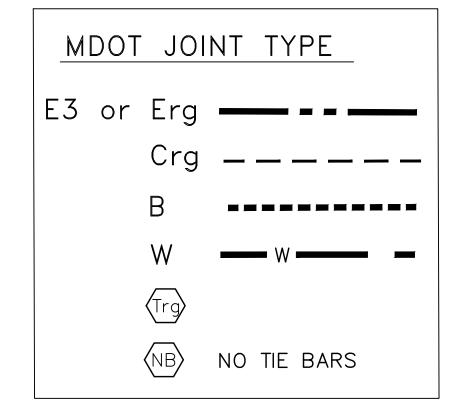


	CONSTRUCTION KEY
ΕY	DESCRIPTION
1	PAVT REMOVE AND CONC. PAVT. NONREINF. 6 INCH
2	PAVT REMOVE AND DRIVEWAY NONREINF CONC 6 INCH
3	DR. STR. COVER ADJ. CASE 1 AND DR. COVER TYPE B MODIFIED
4	DR. STRUCTURE REMOVE, DR. STRUCTURE 24 INCH, AND DR. COVER TYPE K MODIFIED
5	DR. STRUCTURE REMOVE, DR. STRUCTURE DOUBLE INLET, AND DR. COVER TYPE K MODIFIED
6	GATE BOX ADJ. CASE 1, AND MONUMENT BOX, OR GAS BOX
7	SIDEWALK REMOVAL
8	SIDEWALK REMOVAL, SIDEWALK CONC. 4 INCH
9	SIDEWALK REMOVAL, SIDEWALK RAMP CONC 6 INCH
10	DETECTABLE WARNING SURFACE

PUBLIC SERVICE 301 EAST HURON STREET
ANN ARBOR, MI 48107-8647
734-794-6410 734-794-6410 www.a2gov.org
CHIGA

INT - PUBLIC SERVICES - CITY OF ANN ARBOR	COLONY ESSEX MANCHESTER	CONCRETE PAVEMENT REPAIR	DA GETER BO	MANCHEOLICA DA MANCHEOLICA DA CAROLLA DE CAR
PROJECT MANAGEMEN	SCALE PLAN: 1" = 20'		DRAWING No.	2015024-16
SHEE				
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SEE ABOVE RIGHT STA:12+00	2648		2636	2630
28 29 20 20 20 20 20 20 20 20 20 20 20 20 20		CHESTER RD		
W 13+00 13" 17 6 6.5" B 16	Trg NB D D D D D D D D D D D D D) 14+00 10'-	11' 15' 15' 15' 15'	16- NB
Erg W 16' SEE SHEET 19	2655	2651	2637	SEE SHEET 17 STA:16+00
ESSEX RD				

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1" = 20'

COLONY ESSEX MANCHESTER

COLONY ESSEX MANCHESTER

CONCRETE PAVEMENT REPAIR

SCALE PLAN: 1" = 20'

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CONCRETE PAVEMENT REPAIR

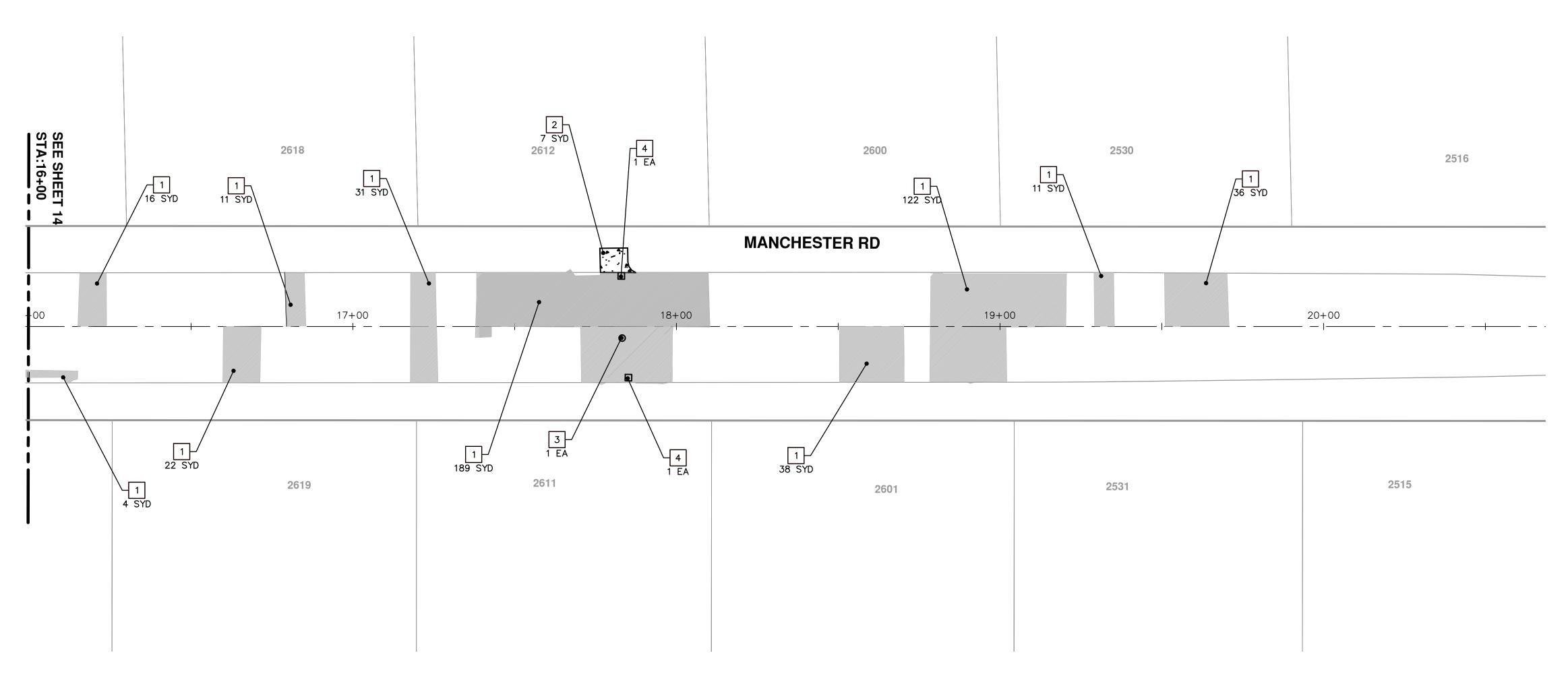
SCALE PLAN: 1" = 20'

COLONY ESSEX MANCHESTER

CONCRETE PAVEMENT REPAIR

SCALE PLAN: 1" = 20'

CONCRETE PAREMENT RE



PROJECT CONSTRUCTION INCLUDES THE REMOVAL AND REPLACEMENT OF SIDEWALK AT VARIOUS ADDRESSES WITHIN THE PROJECT LIMITS THAT IS NOT SHOWN ON THE PLANS. THE QUNATITES FOR THIS WORK ARE REFLECTED IN THE OVERALL PROJECT QUANTITIES, AND SPECIFICALLY SHOWN BELOW.

SIDEWALK, REM = 795 SYD GRADING, SIDEWALK = 795 SYD SIDEWALK, CONC, 4 INCH, MODIFIED = 6,800 SFT SIDEWALK. CONC. 6 INCH. MODIFIED = 350 SFT

CONSTRUCTION KEY							
KEY	DESCRIPTION						
1	PAVT REMOVE AND CONC. PAVT. NONREINF. 6 INCH						
2	PAVT REMOVE AND DRIVEWAY NONREINF CONC 6 INCH						
3	DR. STR. COVER ADJ. CASE 1 AND DR. COVER TYPE B MODIFIED						
4	DR. STRUCTURE REMOVE, DR. STRUCTURE 24 INCH, AND DR. COVER TYPE K MODIFIED						
5	DR. STRUCTURE REMOVE, DR. STRUCTURE DOUBLE INLET, AND DR. COVER TYPE K MODIFIED						
6	GATE BOX ADJ. CASE 1, AND MONUMENT BOX, OR GAS BOX						
7	SIDEWALK REMOVAL						
8	SIDEWALK REMOVAL, SIDEWALK CONC. 4 INCH						
9	SIDEWALK REMOVAL, SIDEWALK RAMP CONC 6 INCH						
10	DETECTABLE WARNING SURFACE						

	02	02 ADDENDUM #2	6-11-15	JAO	DAD
	10	01 BID SET	3-31-2015	RAG	DAD
	00	00 REVIEW 1	2-27-2015	RAG	DAD
	REV.	DESCRIPTION	DATE	DRAWN	DRAWN CHECKED
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1" = 20'

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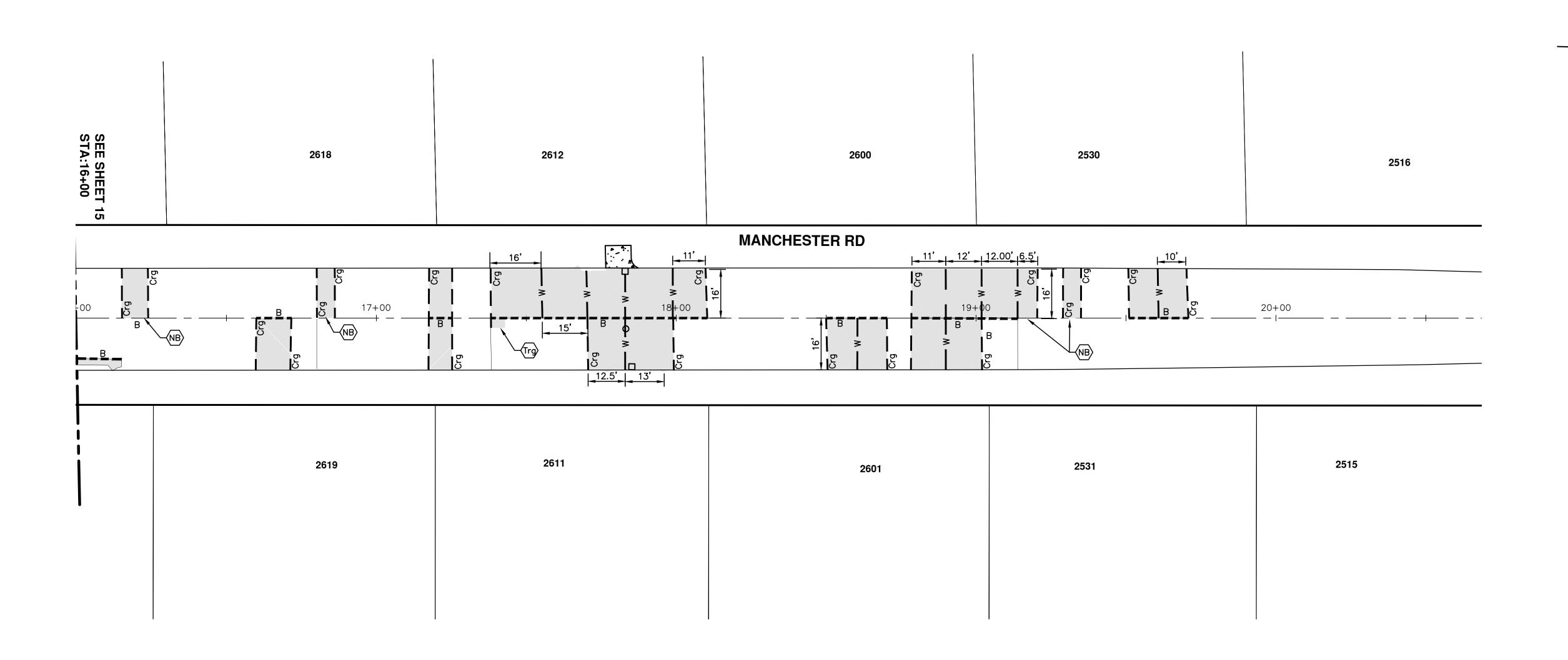
SCALE PLAN: 1" = 20'

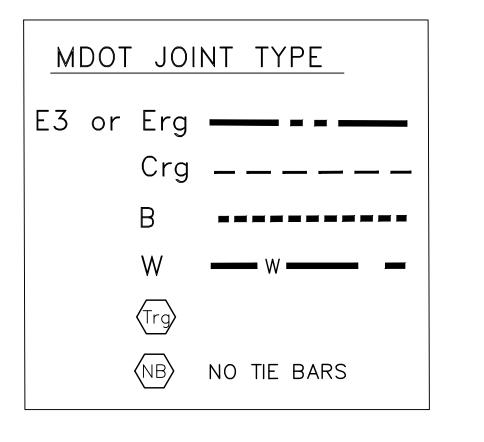
COLONY ESSEX MANCHESTER R

CONCRETE PAVEMENT REPAIR

MANCHESTER RD

STA 16+00 TO 20+00 REMOVAL AND CONSTRUCTION PLAN





	DAD	DAD	DAD	DRAWN CHECKED
	ЗdО	RAG	RAG	DRAWN
	6-11-15	3-31-2015	2-27-2015	DATE
	02 ADDENDUM #2	01 BID SET	00 REVIEW 1	DESCRIPTION
	02	10	00	REV.

CITY OF ANN ARBOR PUBLIC SERVICE 301 EAST HURON STREET P.O. BOX 8647 ANN ARBOR, MI 48107-8647 734-794-6410 www.a2gov.org
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

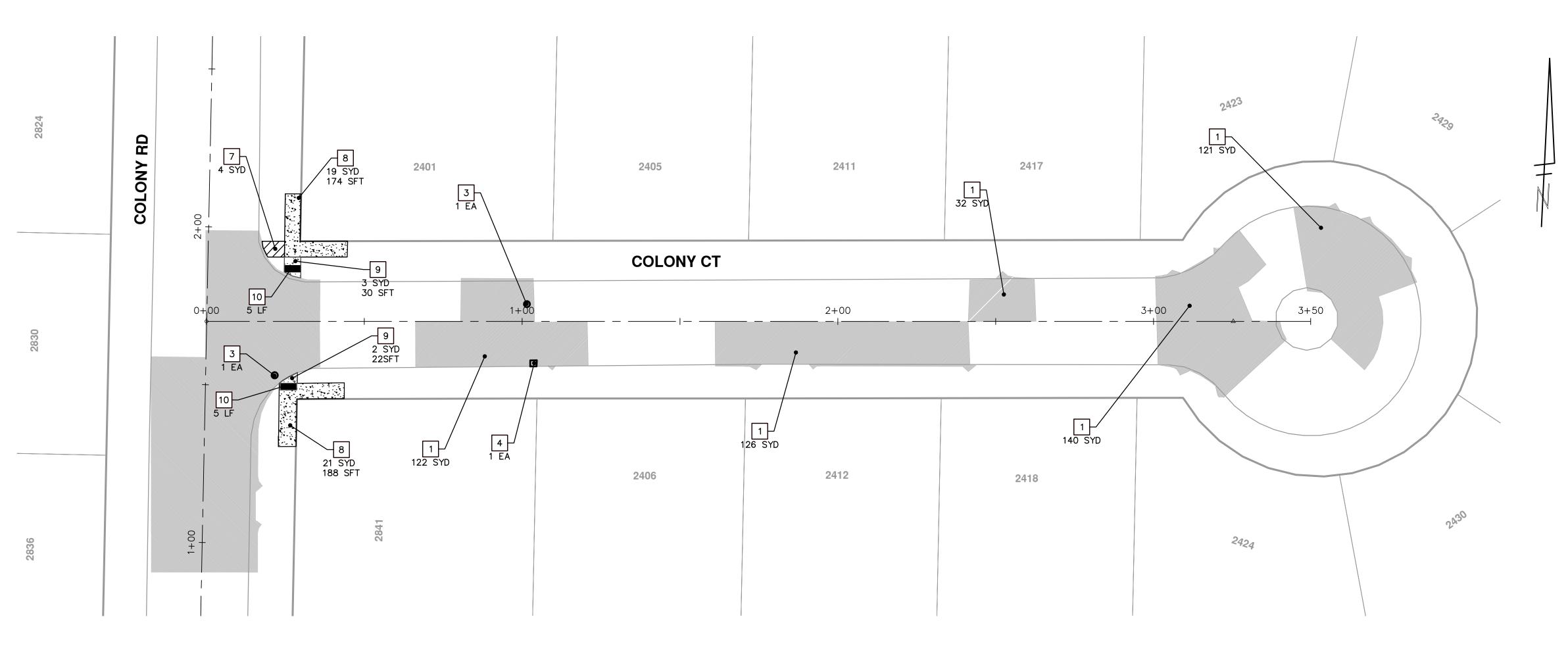
SCALE PLAN: 1" = 20

COLONY ESSEX MANCHESTER

CONCRETE PAVEMENT REPAIR

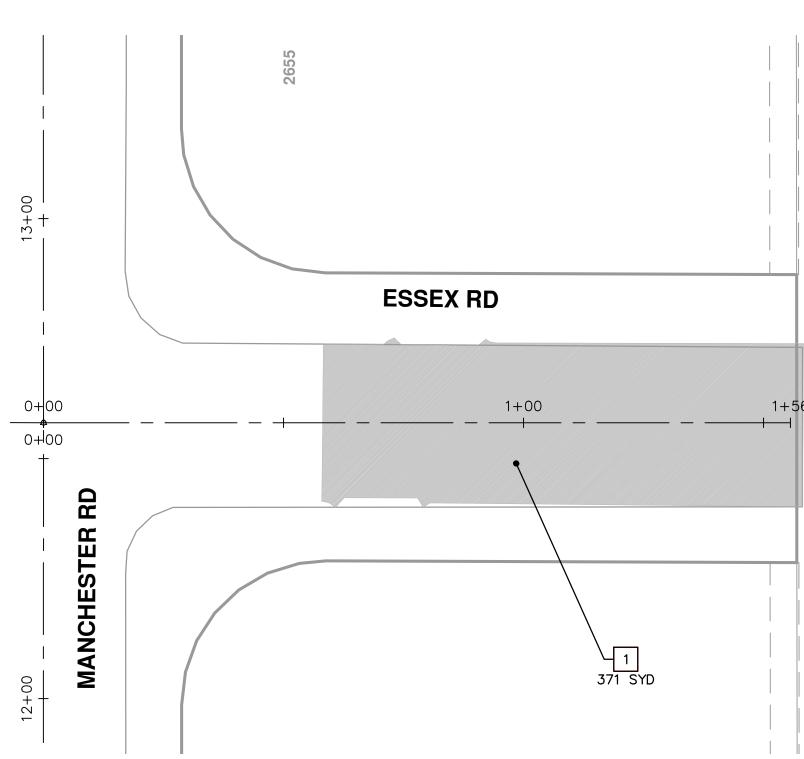
CONCRETE PAVEMENT REPAIR

STA 16+00 TO 20+00 JOINTING PLAN



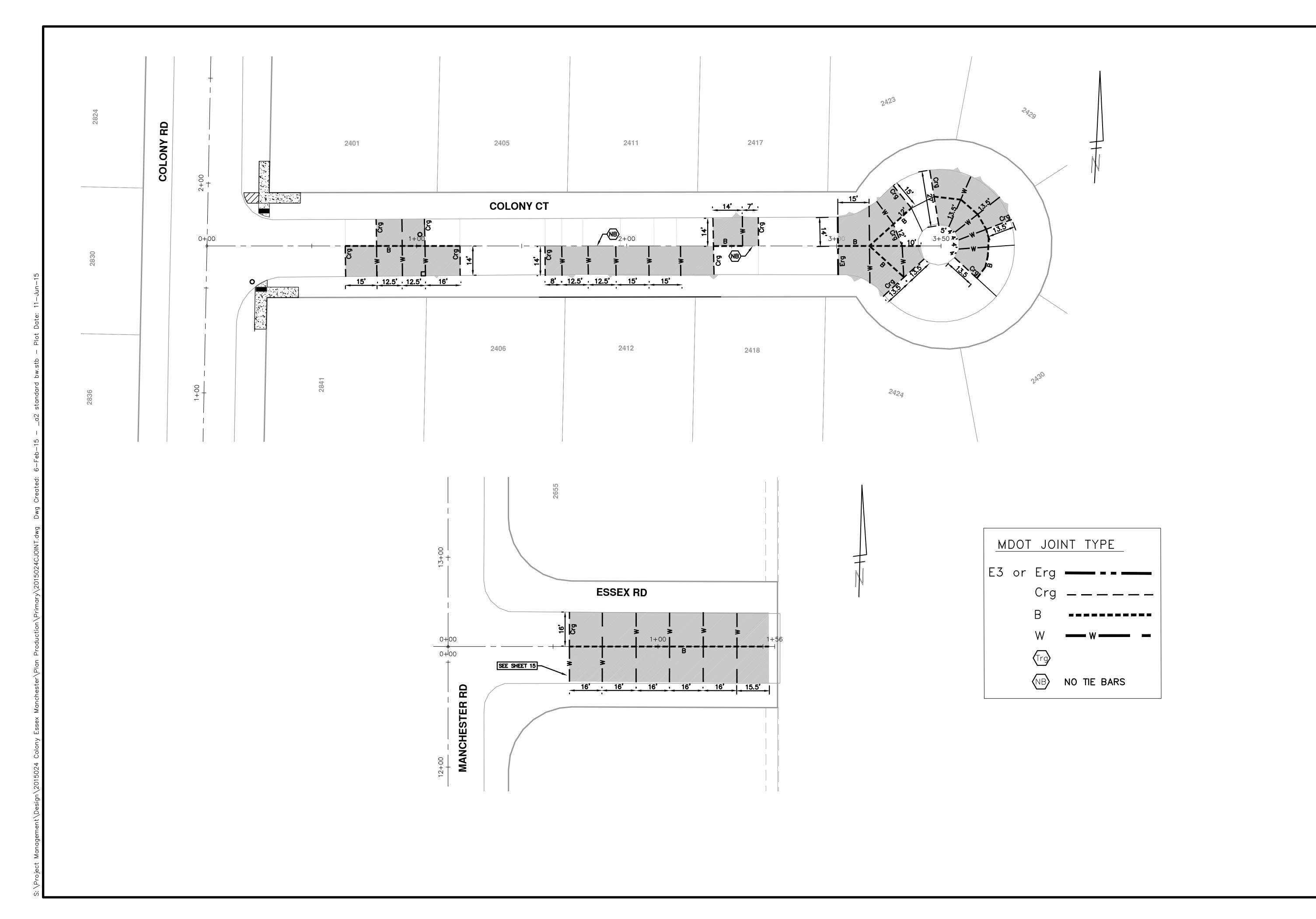
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10	DETECTABLE WARNING SURFACE

Know what's below. Call before you dig.						
		DAD	DAD	DAD	DRAWN CHECKED	
		DPF	RAG	RAG	DRAWN	
		6–11–15	3-31-2015	2-27-2015	DATE	
		O2 ADDENDUM #2	01 BID SET	00 REVIEW 1	DESCRIPTION	
		02	01	00	REV.	
MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR COLONY ESSEX MANCHESTER COLONY CT AND ESSEX EAST COLONY CT AND ESSEX EAST COLONY CT AND CONSTRUCTION PLAN STA 0+00 TO 1+55 REMOVAL AND CONSTRUCTION PLAN						
NT - PUBLIC SERVICES - CITY (COLONY ESSEX MAN	CONCRETE PAVEMEN	COLONY CT AND ESSEX	STA 0+00 TO 1+55 REMOVAL AND CON	



DAD	DAD	DAD	DRAWN CHECKED
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6-11-15	3-31-2015	2-27-2015	DATE
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ARBOR	`

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1" = 20'

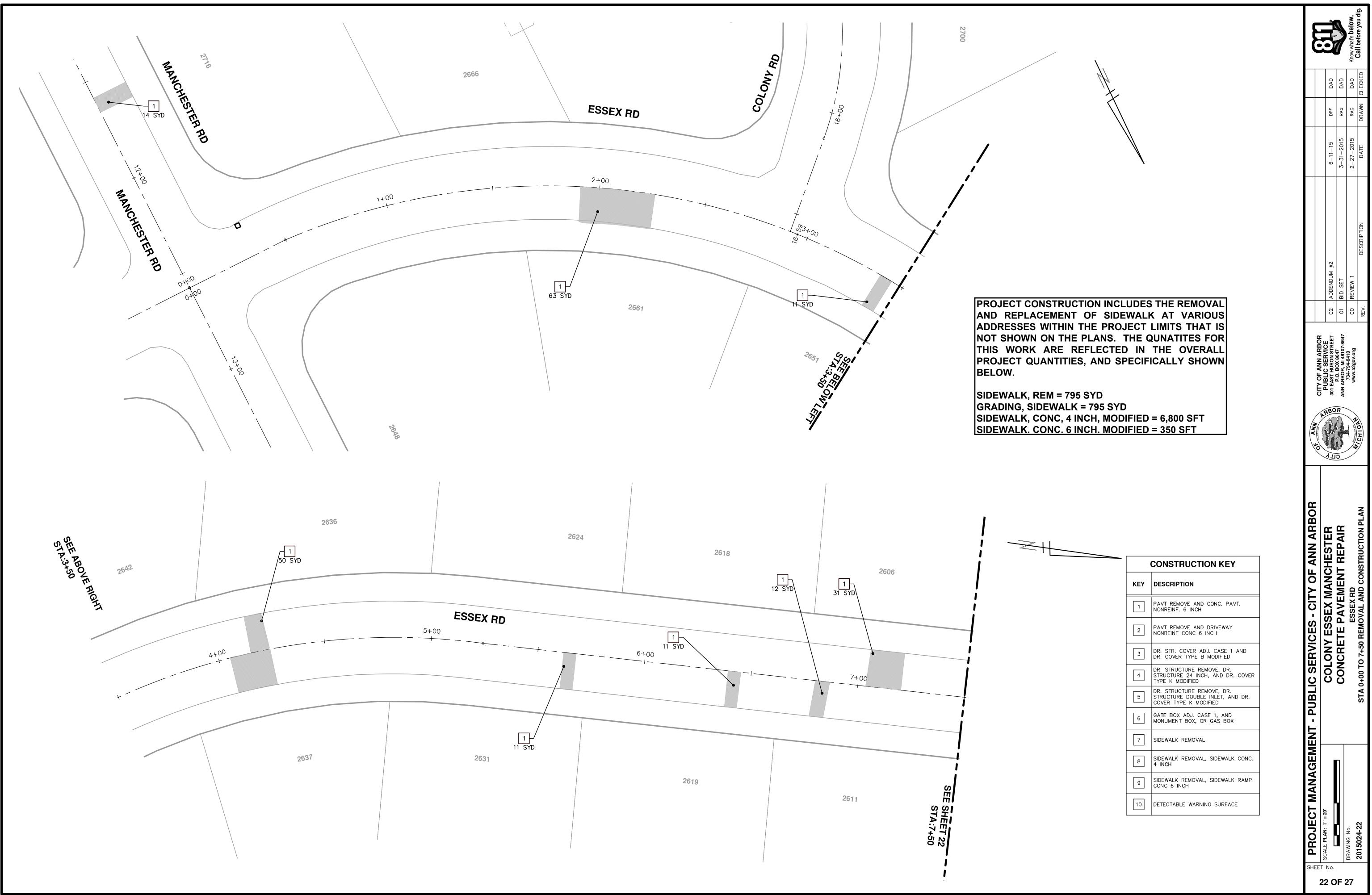
SCALE PLAN: 1" = 20'

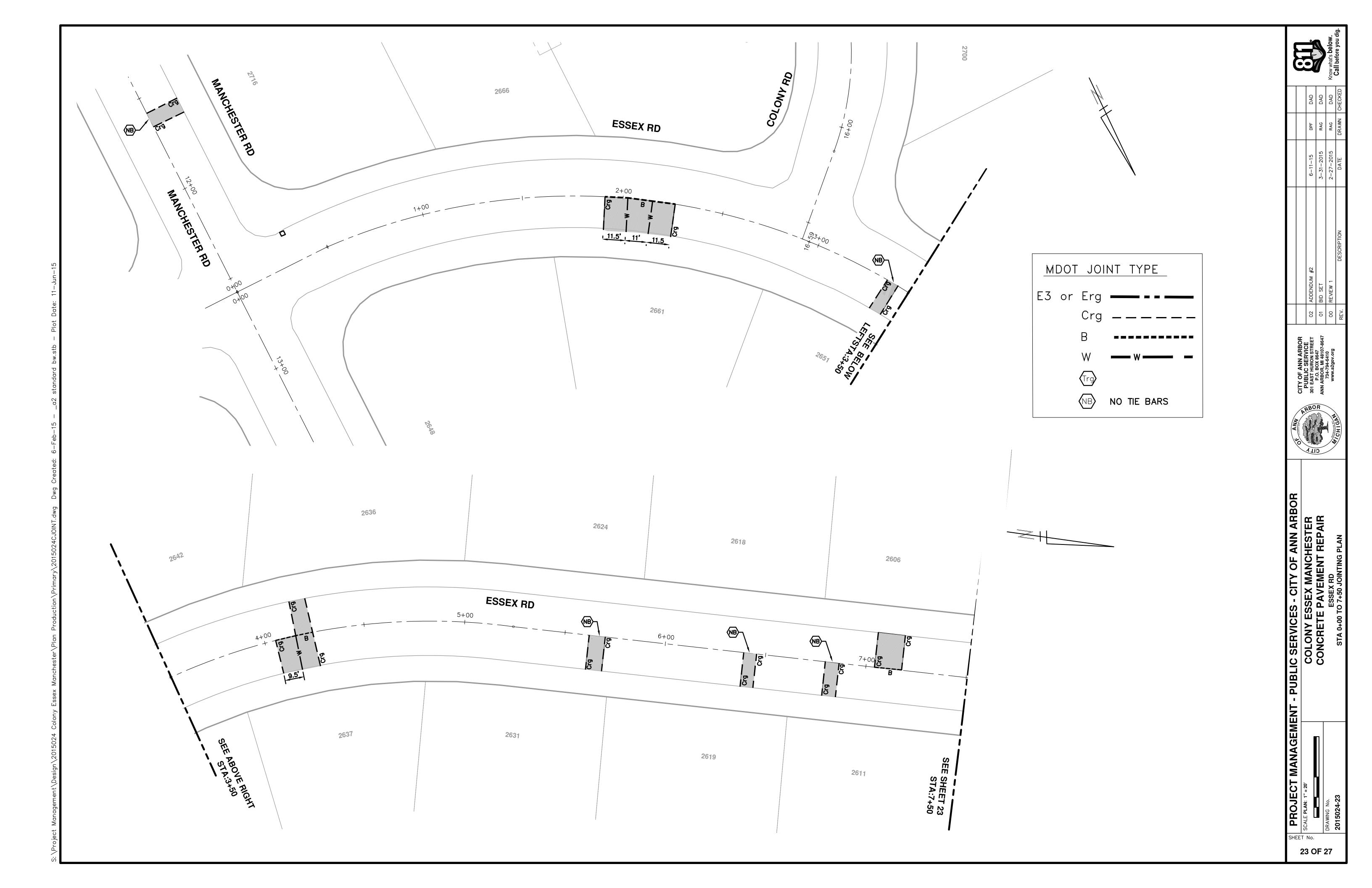
SCALE PLAN: 1" = 20'

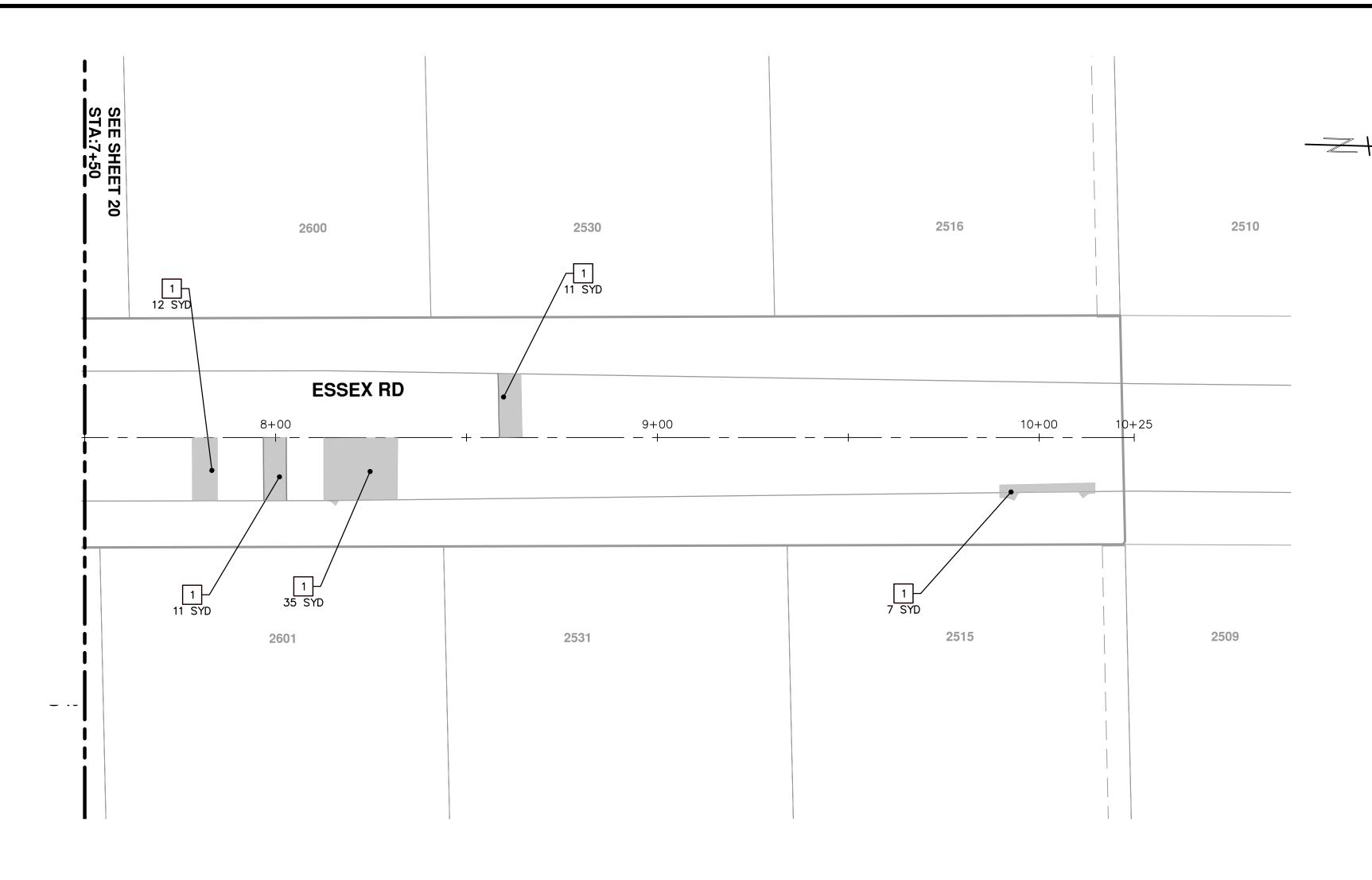
COLONY ESSEX MANCHESTER

COLONY CT AND ESSEX EAST

STA 0+00 1+55 JOINTING PLAN







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	01	01 BID SET	3-31-2015	RAG	DAD
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RE	REV.	DESCRIPTION	DATE	DRAWN	DRAWN CHECKED



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

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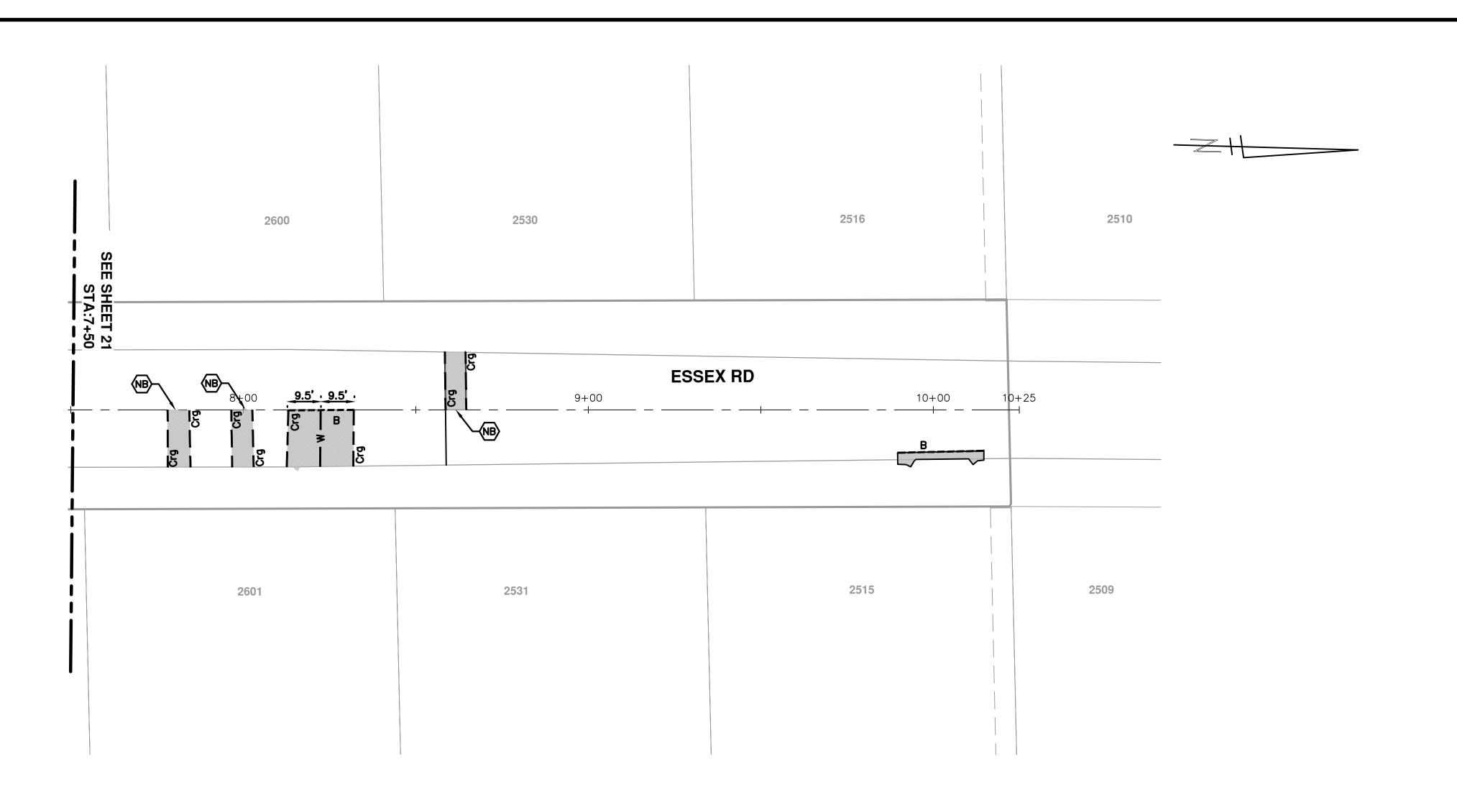
SCALE PLAN: 1" = 20

COLONY ESSEX MANCHESTER

CONCRETE PAVEMENT REPAIR

CONCRETE PAVEMENT REPAIR

STA 7+50 TO 10+25 REMOVAL AND CONSTRUCTION PLAN



MDOT JOINT TYPE

E3 or Erg ————

Crg —————

B —————

W —— W ———

Trg)

NB NO TIE BARS

Know what's below.

Call before you dig.

 02
 ADDENDUM #2
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 2-27-2015
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COLONY ESSEX MANCHESTER
CONCRETE PAVEMENT REPAIR
ESSEX RD
STA 7+50 TO 10+25 JOINTING PLAN

MENT - PUBLIC SERVICE

COLONY ES

CONCRETE

PLAN: 1" = 20'

NG No.

SHEET No.



Know what's below.

