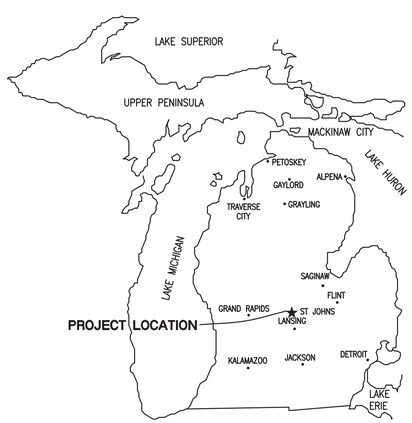
CITY OF ST JOHNS
IN CO-OPERATION WITH
MICHIGAN DEPARTMENT OF TRANSPORTATION
AND
FEDERAL HIGHWAY ADMINISTRATION
PLAN AND PROFILE OF PROPOSED
SCOTT ROAD IMPROVEMENTS

STU PROJECT	CMAQ PROJECT
CONTROL SECTION NO.19000	CONTROL SECTION NO.19000
JOB NO. 208128	JOB NO. 203619

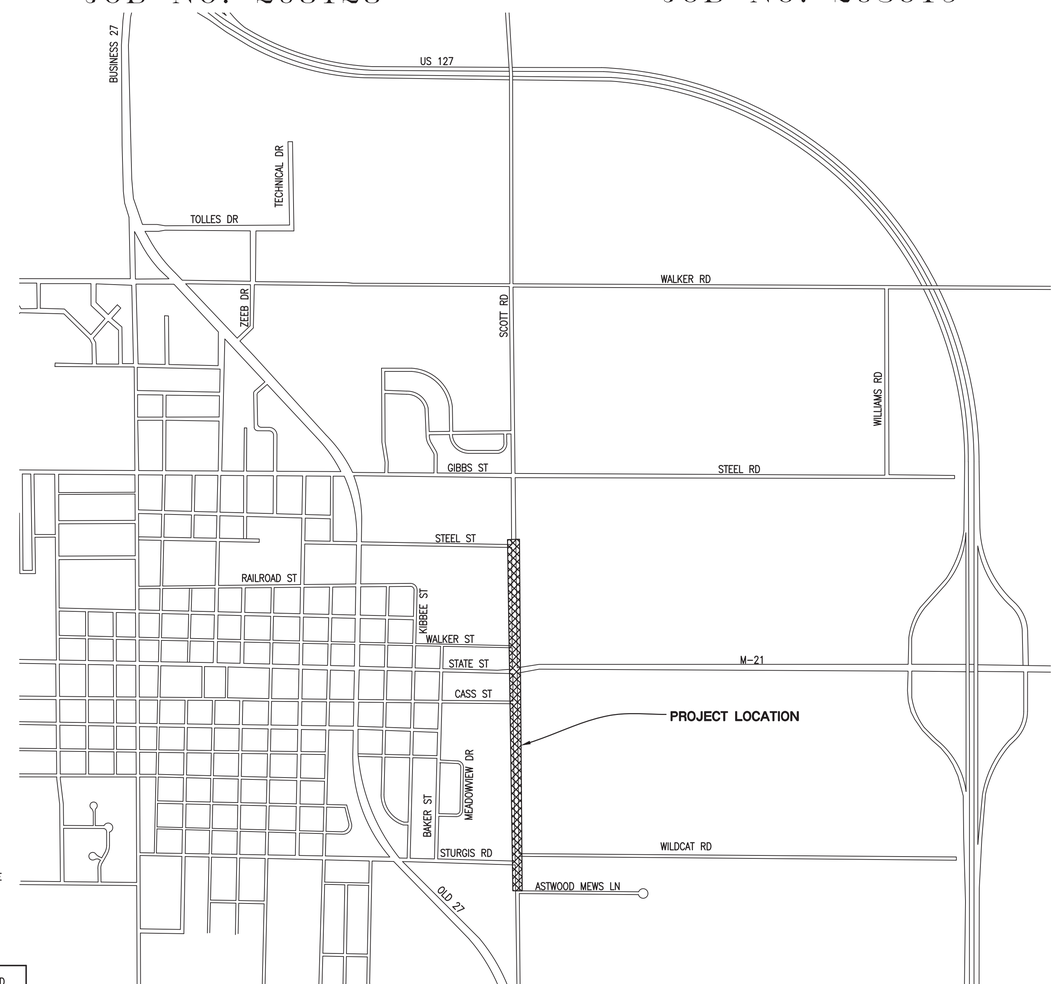
COUNTY	CITY	SHEET NO.	TOTAL SHEETS
CLINTON	ST JOHNS	1	25

POSTED SPEED	35 MPH
DESIGN SPEED	40 MPH
SCOTT ROAD ADT	4,651



LOCATION MAP

SCALE: NTS



PROJECT MAP

SCALE: NTS

N
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S

THIS PROJECT IS DESIGNED IN ACCORDANCE WITH THE AASHTO GUIDE FOR THE PLANNING, DESIGN, AND OPERATIONS OF PEDESTRIAN FACILITIES (2004).

THIS PROJECT IS DESIGNED IN ACCORDANCE WITH THE 2018 EDITION OF A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS.

THIS PROJECT IS DESIGNED IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) 2011 EDITION.

THE CONTRACTOR SHALL PERFORM ALL WORK UNDER THIS CONTRACT IN ACCORDANCE WITH ALL APPLICABLE PROVISIONS, POLICIES, RULES AND STANDARDS OF THE MICHIGAN OCCUPATIONAL SAFETY AND HEALTH ACT (MIOSHA), BEING ACT 154 OF THE PUBLIC ACTS OF 1974 AND AS AMENDED.

EXCEPT WHERE OTHERWISE INDICATED ON THE PLANS OR IN THE PROPOSAL AND SUPPLEMENTAL SPECIFICATIONS CONTAINED THEREIN, ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2012 EDITION, AND THE CURRENT SUPPLEMENTAL SPECIFICATIONS (AVAILABLE AT http://mdotcf.state.mi.us/public/specbook/2012/).

SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE
1	TITLE
2	NOTE SHEET
3–4	TYPICAL CROSS SECTIONS
5	DETAIL SHEETS
6	SESC NOTES & DETAILS
7	DETOUR SHEET
8–21	PLAN AND PROFILE SHEETS
22–25	INTERSECTION AND RAMP GRADE DETAILS

LEGEND

SHOULDER REHAB: 2,616 FT (0.50 MILES)
SCOTT ROAD
STATION 19+50 to 45+66

CRUSH AND SHAPE: 1,766 FT (0.33 MILES)
SCOTT ROAD
STATION 46+56 to 64+22

SHARED USE PATH: 4,781 FT (0.91 MILES)
SCOTT ROAD
STATION 15+84 to 63+65

CONTRACT FOR: 0.50 MILES OF SHOULDER RECONSTRUCTION, 0.33 MILES OF ROAD CRUSH AND SHAPE, ,1300 FEET OF STORM SEWER, AND 0.91 MILES OF CONCRETE SHARED USE PATH ON SCOTT ROAD.

STATE OF MICHIGAN
CORY S. DAVIS
ENGINEER No. 54606
LICENSED PROFESSIONAL ENGINEER

PREPARED UNDER SUPERVISION OF

CORY DAVIS, P.E.

04/24/2020
DATE

C2AE
ORGANIZATION

648 MONROE AVENUE NW, SUITE 210 GRAND RAPIDS, MICHIGAN 49503
ADDRESS

811 Know what's below. Call before you dig.

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CITY OF ST JOHNS
SCOTT ROAD IMPROVEMENTS
CLINTON COUNTY, MI

TITLE SHEET

REVISIONS

REV	DESCRIPTION	DATE

PROJ. #: 190139
DATE: 04/24/2020
SHEET
1

BID SET

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WHITE BLACK
WE RECYCLE

PLOTTED BY: SEIBEL MICHAEL 4/24/2020 11:36 AM
S:\2019\190139_Scotts_Scott%20road\Drawings\Sheets\190139_Title.dwg TITLE SHEET
CAD STANDARD 0.75
DESIGNED BY: -
APPROVED BY: -
CHECKED BY: -

ABBREVIATIONS

AGGREGATE	= AGG
AVENUE	= AVE
BOULEVARD	= BLVD
BULKHEAD	= BULK
CATCH BASIN	= CB
CENTERLINE	= CL
COMBINED SEWER	= CS
CONCRETE	= CONC
ELECTRIC	= ELEC
EXISTING	= EX
FEET	= FT
GAS	= G
HOT MIX ASPHALT	= HMA
HYDRANT	= HYD
INVERT ELEVATION	= IE
LEFT	= L
MANHOLE	= MH
MICHIGAN BELL TELEPHONE	= MBT
MULTIPLE TILE DUCT	= MTD
PROPERTY LINE	= PL
PROPOSED	= PR
REMOVE AND REPLACE	= R/R
RIGHT	= R
RIGHT-OF-WAY	= ROW
ROAD	= RD
SANITARY SEWER	= SAN
STORM SEWER	= STM
STREET	= ST
DRAINAGE STRUCTURE TAP	= TAP
TELEPHONE	= TELE
TERRACE	= TER
WATER MAIN	= WM

GENERAL PLAN LEGEND

(M)	MEASURED DISTANCE
(R)	RECORD DISTANCE
	SET 1/2" BAR WITH CAP
	FOUND IRON AS NOTED
	DEED LINE
	DISTANCE NOT TO SCALE
	FENCE
	ASPHALT
	CONCRETE
	DECK
	GRAVEL
+860	EXISTING SPOT ELEVATION
860	EXISTING CONTOUR ELEVATION
	BUILDING OVERHANG
SAN	SANITARY SEWER
ST	STORM SEWER
	WATER LINE
G	GAS LINE
TU	UNDERGROUND TELEPHONE
C	UNDERGROUND TELEVISION
EU	UNDERGROUND ELECTRIC
EO	OVERHEAD WIRES
12" WM-W	PROPOSED WATER MAIN
SA1 SAN 8" SS	PROPOSED SANITARY SEWER
1A 15" ST ST	PROP STORM SEWER
	PROPOSED FENCELINE
705	PROPOSED MAJOR CONTOUR
705	PROPOSED MINOR CONTOUR
+873.25	SPOT ELEVATION
+873.25TC	TOP OF CURB ELEVATION
+873.25LIP	LIP OF GUTTER ELEVATION
+873.25TW	TOP OF WALK ELEVATION
	GRADING LIMITS
HMA CONC	REMOVE EXISTING ASPHALT OR CONC PAVEMENT SAW CUT AT REMOVAL LIMITS
	COLD MILL HMA SURFACE
	CURB REMOVAL AND CURB AND GUTTER REMOVAL
	PROPOSED PAVEMENT LIMIT LINE
	REMOVE/REPLACE FENCE

S	SANITARY MANHOLE
D	DRAINAGE MANHOLE
E	ELECTRIC MANHOLE
W	WATER MANHOLE
MH	UNKNOWN MANHOLE
	CATCHBASIN
CO	SANITARY CLEANOUT
	FIRE HYDRANT
	VALVE
	UTILITY POLE
	LIGHT POLE
	GUY POLE
	GUY WIRE
	UTILITY PEDESTAL
	TRANSFORMER
	HANDHOLE
	ELECTRIC METER
GV	GAS VALVE
	GAS METER
	WATER METER
	SIGN
	POST/MAILBOX
	EDGE OF WOODS
	DECIDUOUS TREE
	CONIFEROUS TREE
ADJ	ADJUST
U	UTILITY CO. TO RELOCATE
REL	RELOCATE
R	REMOVE
BH	BULKHEAD
AB	ABANDON
B/O	RELOCATE BY OTHERS
S58	INLET PROTECTION, FABRIC DROP

PUBLIC UTILITIES

THE EXISTING UTILITY AGENCIES LISTED BELOW AND THE UTILITIES SHOWN ON THESE PLANS REPRESENT THE BEST INFORMATION AVAILABLE AS OBTAINED ON OUR SURVEYS. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO VERIFY ITS ACCURACY AND THE LOCATION OF EXISTING UTILITIES.

CONSUMERS ENERGY 530 W. WILLOW STREET LANSING, MI 48909 ATTN: JACOB CHALUT (517) 374-2329	ELECTRIC
CONSUMERS ENERGY 530 W. WILLOW STREET LANSING, MICHIGAN 48909 ATTN: ADAM BERTRAM (517) 374-2375	GAS
CITY OF ST JOHNS 100 E. STATE ST, SUITE 1100 ST JOHNS, MI 48879 ATTN: STEVE MARTIN (989) 224-8944 EXT. 281	WATER SANITARY SEWER
CLINTON COUNTY DRAIN COMMISSIONER 100 E. STATE STREET, SUITE 2300 ST. JOHNS, MICHIGAN 48879 ATTN: JON MORRISON (989) 224-5160	STORM SEWER
CLINTON COUNTY ROAD COMMISSION 3536 SOUTH US-27 ST. JOHNS, MICHIGAN 48879 ATTN: DOUG STEFFEN (989) 668-0030	ROADS
FRONTIER COMMUNICATIONS 1943 W M-21 OWOSSO, MICHIGAN 48867 ATTN: MARK STEVENS (989) 723-0373	TELEPHONE
WESTPHALIA BROADBAND 4273 58TH STREET HOLLAND MICHIGAN 49423 ATTN: KEN LOPEZ (616) 393-0138 EXT. 114	FIBER OPTIC

NOTES APPLYING TO MDOT STANDARD PLANS

WHERE THE FOLLOWING ITEMS ARE CALLED FOR ON THE PLANS, THEY ARE TO BE CONSTRUCTED ACCORDING TO THE CURRENT STANDARD DESCRIPTION AND PLAN NUMBER UNLESS OTHERWISE INDICATED BY THE ENGINEER.

ROAD STANDARD PLANS

DRAINAGE STRUCTURES	R-1-G (SPECIAL DETAIL)
COVER B	R-7-F
MONUMENT BOXES	R-11-E
COVER K	R-15-F
DRIVEWAY OPENINGS & CONCRETE SIDEWALKS	R-29-I
CONCRETE CURB AND CONCRETE CURB AND GUTTER	R-30-G
GUARDRAIL TYPES A, B, BD, T, TD, MGS-8, & MGS-8D	R-60-J (SPECIAL DETAIL)
GUARDRAIL APPROACH TERMINAL TYPE 2M	R-62-H (SPECIAL DETAIL)
GUARDRAIL DEPARTING TERMINAL TYPES B, T, & MGS	R-66-E (SPECIAL DETAIL)
BEDDING AND FILLING AROUND PIPE CULVERTS	R-82-D
UTILITY TRENCHES	R-83-C
PRECAST CONCRETE END SECTION FOR PIPE CULVERT	R-86-F (SPECIAL DETAIL)
SOIL EROSION & SEDIMENTATION CONTROL MEASURES	R-96-E
GUARDRAIL AT INTERSECTIONS	21 (SPECIAL DETAIL)

TRAFFIC AND SAFETY STANDARD PLANS

TEMPORARY TRAFFIC CONTROL DEVICES	WZD-125-E (SPECIAL DETAIL)
TRAFFIC SIGNING GENERAL NOTES (E)	(SPECIAL DETAIL)
ROADSIDE SIGN LOCATIONS & SUPPORT SPACING	SIGN-120-D
PLACEMENT OF D3-1 SIGNS ABOVE R1-1	SIGN-140-A
STEEL POST	SIGN-200-D
MISCELLANEOUS SIGN CONNECTION DETAILS	SIGN-740-B
INTERSECTION, STOP BAR, AND CROSSWALK MARKINGS	PAVE-945-C

GENERAL PLAN NOTES

1. UNDERGROUND UTILITIES
   FOR PROTECTION OF UNDERGROUND UTILITIES THE CONTRACTOR SHALL DIAL 1(800)482-7171 A MINIMUM OF 3 FULL WORKING DAYS (EXCLUDING SATURDAY, SUNDAY, AND HOLIDAYS) PRIOR TO EXCAVATING IN THE VICINITY OF UTILITY LINES. ALL "MISS DIG" PARTICIPATING MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE PART OF THE "MISS DIG" ALERT SYSTEM. ALL UNDERGROUND UTILITIES SHOWN ON PLANS ARE APPROXIMATE, AND MUST BE VERIFIED IN FIELD.

2. GOVERNMENT CORNERS
   GOVERNMENT CORNERS ON THIS PROJECT SHALL BE PRESERVED AND/OR PROTECTED WHERE NECESSARY. MONUMENT BOXES SHALL BE REPLACED OR ADJUSTED, WHETHER SHOWN ON THE PLANS OR NOT.

3. PERMANENT SIGNS
   SIGNS REQUIRING RELOCATION DUE TO CONSTRUCTION OPERATIONS SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT LOCATIONS DESIGNATED BY THE ENGINEER. STREET NAME SIGNS SHALL BE SALVAGED AND REINSTALLED BY CONTRACTOR AT LOCATIONS DESIGNATED BY THE ENGINEER. REGULATORY SIGNS SHALL BE REPLACED IMMEDIATELY BY THE CONTRACTOR.

4. SAW CUTTING PAVEMENT
   SAW CUTTING THE EXISTING PAVEMENT AT THE LIMITS OF CONSTRUCTION, APPROACH STREETS, SIDEWALKS AND DRIVEWAYS IS INCLUDED IN THE UNIT PRICE FOR THE RELATED ITEMS. SAW CUTTING SHALL BE FULL DEPTH OF THE PAVEMENT BEING SAWED. IF THE EDGE IS DAMAGED AFTER SAW CUTTING, THE EDGE SHALL BE RE-CUT AS DIRECTED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE OWNER.

5. DRAINAGE STRUCTURE COVERS
   DRAINAGE STRUCTURE COVERS SHALL BE ADJUSTED PRIOR TO THE FINAL PAVING COURSE IS PLACED. FINAL ADJUSTMENT OF THE COVERS AFTER THE TOP COURSE OF HMA IS PLACED IS NOT ALLOWED.

6. MAINTAIN ACCESS TO DRIVES
   ACCESS TO ALL DRIVEWAYS SHALL BE MAINTAINED BY THE CONTRACTOR, PAID FOR AS "Maintenance Gravel". DRIVEWAYS MUST BE ACCESSIBLE FOR ALL ADDRESSES AT THE END OF EACH DAY, EXCEPT AFTER INSTALLATION OF CURB AND GUTTER AND DRIVE APPROACHES.

7. DISPOSAL OF EXCESS MATERIAL
   ALL EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT A LOCATION PROVIDED BY THE CONTRACTOR.

8. BENCH MARKS
   USE TWO BENCH MARKS FOR VERIFICATION OF GRADE FOR ALL CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING ADDITIONAL BENCH MARKS, AS REQUIRED, TO CONFORM TO THIS REQUIREMENT.

9. REMOVAL ITEMS
   UNLESS SPECIFICALLY NOTED FOR REMOVAL ON THE PLANS, ALL SIDEWALKS, DRIVES, CULVERTS, DRAINAGE STRUCTURES AND ABOVE GROUND UTILITIES SHALL BE PROTECTED. ALL SUCH UTILITIES DAMAGED OR DESTROYED DURING CONSTRUCTION SHALL BE REMOVED AND REPLACED WITH NEW MATERIAL BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

10. CONSTRUCTION STAKING
    THE CITY WILL PROVIDE CONSTRUCTION STAKING REQUIRED FOR LAYOUT OF STORM SEWER, CURB AND GUTTER, CENTERLINE PROFILE, AND SHARED USE PATH. CONTRACTOR IS RESPONSIBLE FOR PROTECTING SURVEY STAKING UPON COMPLETION OF STAKING, AND SHALL BE RESPONSIBLE FOR COST OF ANY ADDITIONAL STAKING/RE-STAKING.

11. DRAINAGE STRUCTURE COVER TOLERANCE
    DRAINAGE STRUCTURE COVERS FOR DRAINAGE STRUCTURES, SANITARY SEWER STRUCTURES, AND WATERMAIN GATE WELLS SHALL BE PLACED IN ACCORDANCE WITH THESE SPECIFICATIONS.

    MEASUREMENT AND TOLERANCE

    EACH COVER SHALL BE FLUSH WITH, OR SLIGHTLY BELOW, THE LEVEL OF THE FINISHED COURSE OF PAVEMENT. THE ENGINEER WILL MEASURE ANY COVER THAT APPEARS TO BE OUT OF TOLERANCE. DETERMINATION OF WHETHER A COVER MUST BE ADJUSTED WILL BE BASED UPON THE FOLLOWING:

    COVERS BELOW PAVEMENT SURFACE:
    A 10' STRAIGHT EDGE WILL BE PLACED OVER THE COVER, PARALLEL TO THE ROAD CENTERLINE. MEASUREMENT WILL BE MADE FROM THE BOTTOM OF THE STRAIGHT EDGE TO THE COVER. THIS DISTANCE SHALL BE NO GREATER THAN 3/8". ANY MEASUREMENT FOUND OVER 3/8" WILL RATE THE COVER OUT OF TOLERANCE. THE ENGINEER SHALL DIRECT THE CONTRACTOR TO ADJUST THAT COVER.

    COVERS ABOVE PAVEMENT SURFACE:
    BECAUSE OF POTENTIAL DAMAGE BY SNOWPLOW BLADES, COVERS PROTRUDING ABOVE THE LEVEL OF FINISHED PAVEMENT WILL BE CONSIDERED OUT OF TOLERANCE. THE ENGINEER SHALL DIRECT THE CONTRACTOR TO ADJUST THAT COVER.

    COVERS OUTSIDE OF ROADWAY:
    ALL MANHOLES OUTSIDE OF THE ROADWAY SHALL BE ADJUSTED TO FINISHED GRADE. STRUCTURES LOCATED WITHIN THE LIMITS OF THE SHARED USE PATH SHALL HAVE THE SAME TOLERANCES AS COVERS LOCATED IN PAVEMENT. STRUCTURES LOCATED IN LAWN AREAS SHALL HAVE A COVER TOLERANCE OF 3" ABOVE FINISHED GRADE, AND THE COVER SHALL NOT BE BELOW FINISHED GRADE.

203619 PARTICIPATING MISCELLANEOUS QUANTITIES

THE FOLLOWING ITEMS OF WORK SHALL BE COMPLETED AS THEY APPLY THROUGHOUT THE PROJECT. THESE ITEMS ARE NOT DETAILED OR INCLUDED ON THE PLAN OR PROFILE SHEETS.

0.41	LS	Mobilization, Max
100	Ft	Exploratory Investigation, Vertical
150	Syd	Subgrade Undercutting, Type II
1,750	Ft	Erosion Control, Silt Fence
10	Ea	Dr Structure Cover, Adj, Case 2
25	Ft	Dr Structure, Adj, Add Depth
15	Ton	Hand Patching
100	Ft	Video Taping Sewer and Culv Pipe
8	Ton	Cement

208128 PARTICIPATING MISCELLANEOUS QUANTITIES

THE FOLLOWING ITEMS OF WORK SHALL BE COMPLETED AS THEY APPLY THROUGHOUT THE PROJECT. THESE ITEMS ARE NOT DETAILED OR INCLUDED ON THE PLAN OR PROFILE SHEETS.

0.31	LS	Mobilization, Max
100	Ft	Exploratory Investigation, Vertical
150	Syd	Subgrade Undercutting, Type II
3,750	Ft	Erosion Control, Silt Fence
5	Ea	Sanitary Structure Cover, Adj, Case 1
15	Ft	Sanitary Structure Cover, Adj, Add Depth
15	Ton	Hand Patching
8	Ton	Cement
1	Ea	Monument Preservation
1	Ea	Monument Box

NON-PARTICIPATING MISCELLANEOUS QUANTITIES

THE FOLLOWING ITEMS OF WORK SHALL BE COMPLETED AS THEY APPLY THROUGHOUT THE PROJECT. THESE ITEMS ARE NOT DETAILED OR INCLUDED ON THE PLAN OR PROFILE SHEETS.

0.28	LS	Mobilization, Max
10	Ft	Exploratory Investigation, Vertical
25	Syd	Subgrade Undercutting, Type II
1,500	Ft	Erosion Control, Silt Fence
300	Ton	Aggregate Base
10	Ton	Hand Patching
1,338	Ft	Video Taping Sewer and Culv Pipe
2	Ton	Cement
1	Ea	Monument Preservation
1	Ea	Monument Box

203619 PARTICIPATING MAINTAINING TRAFFIC ESTIMATES

5	Ton	Dust Palliative, Applied
0.25	LS	Minor Traf Devices
150	Ea	Plastic Drum, High Intensity, Lighted, Furn
150	Ea	Plastic Drum, High Intensity, Lighted, Oper
0.25	LS	Traf Regulator Control
50	Ton	Maintenance Gravel

208128 PARTICIPATING MAINTAINING TRAFFIC ESTIMATES

5	Ton	Dust Palliative, Applied
377	Sft	Sign, Type B, Temp, Prismatic, Furn
377	Sft	Sign, Type B, Temp, Prismatic, Oper
0.31	LS	Minor Traf Devices
150	Ea	Plastic Drum, High Intensity, Lighted, Furn
150	Ea	Plastic Drum, High Intensity, Lighted, Oper
0.31	LS	Traf Regulator Control
100	Ton	Maintenance Gravel

NON-PARTICIPATING MAINTAINING TRAFFIC ESTIMATES

12	Ea	Barricade, Type III, High Intensity, Lighted, Furn
12	Ea	Barricade, Type III, High Intensity, Lighted, Oper
5	Ton	Dust Palliative, Applied
377	Sft	Sign, Type B, Temp, Prismatic, Furn
377	Sft	Sign, Type B, Temp, Prismatic, Oper
0.28	LS	Minor Traf Devices
100	Ea	Plastic Drum, High Intensity, Lighted, Furn
100	Ea	Plastic Drum, High Intensity, Lighted, Oper
0.28	LS	Traf Regulator Control

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CITY OF ST JOHNS
SCOTT ROAD IMPROVEMENTS
CLINTON COUNTY, MI

GENERAL NOTES

REVISIONS

REV	DESCRIPTION	DATE

PROJ. #: 190139

DATE: 04/24/2020

SHEET 2

BID SET

WE RECYCLE
THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WHITE BLACK

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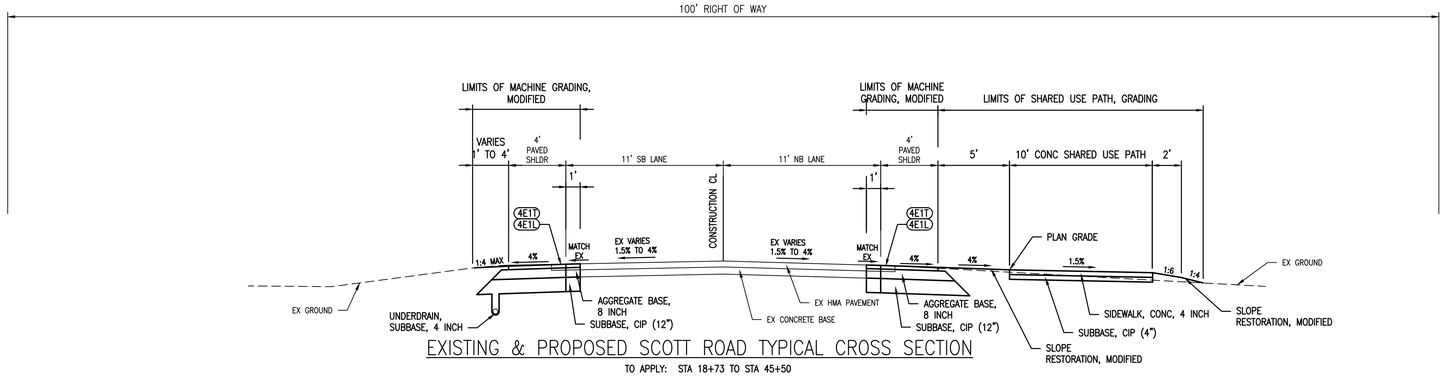
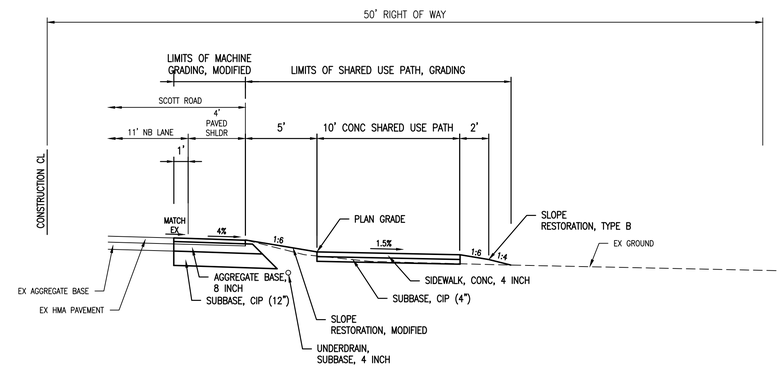
CHECKED BY: -



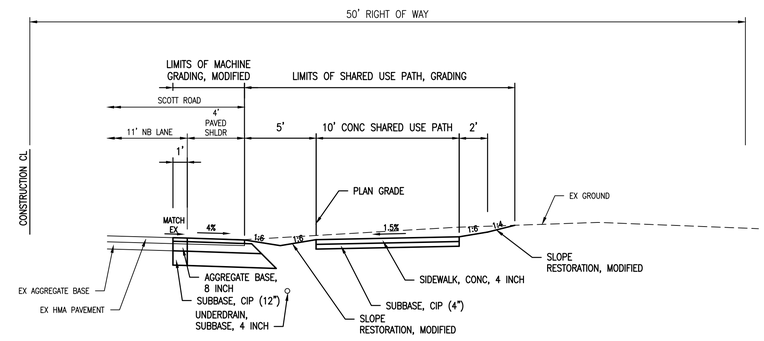
EXISTING & PROPOSED SCOTT ROAD TYPICAL CROSS SECTION

TO APPLY: STA 18+73 TO STA 45+50



PROPOSED PATH TYPICAL CROSS SECTION

TO APPLY: STA 18+73 TO STA 24+00



PROPOSED PATH TYPICAL CROSS SECTION

TO APPLY: STA 32+25 TO STA 34+00
STA 47+00 TO STA 49+40

HMA APPLICATION ESTIMATE

IDENT. NO	ITEM	RATE PER SYD	PERFORMANCE GRADE	REMARKS
13AT	HMA, 13A	165 LBS	58-28	TOP COURSE - ROADWAY & INTERSECTIONS - AWI 220 (MIN)
13AL	HMA, 13A	165 LBS	58-28	LEVELING COURSE - ROADWAY & INTERSECTIONS
4E1T	HMA, 4E1	165 LBS	58-28	SHOULDER PAVING- USE 165 LBS/LIFT
4E1L	HMA, 4E1	165 LBS	58-28	SHOULDER PAVING- USE 165 LBS/LIFT
-	HMA APPROACH	440 LBS	58-28	USE HMA, 13A - DRIVEWAYS - MAX 220 LBS/LIFT
-	HAND PATCHING	VARIES	58-28	USE HMA, 13A - MAX 220 LBS/LIFT
-	HMA BOND COAT	0-0.10 GAL	-	FOR INFORMATION ONLY

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CITY OF ST JOHNS
SCOTT ROAD IMPROVEMENTS
CLINTON COUNTY, MI

TYPICAL CROSS SECTIONS

REVISIONS

REV	DESCRIPTION	DATE

PROJ. #: 190139

DATE: 04/24/2020

SHEET

3

BID SET

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WHITE BLACK
WE RECYCLE

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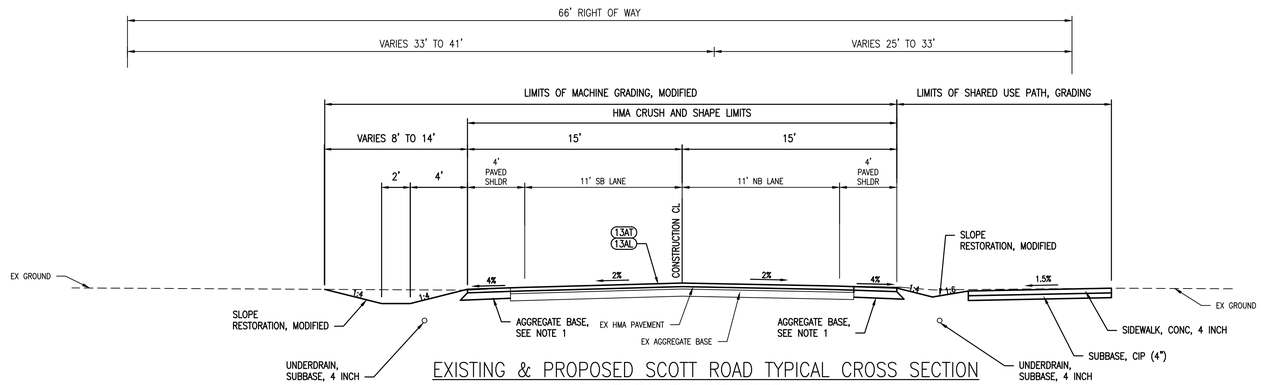
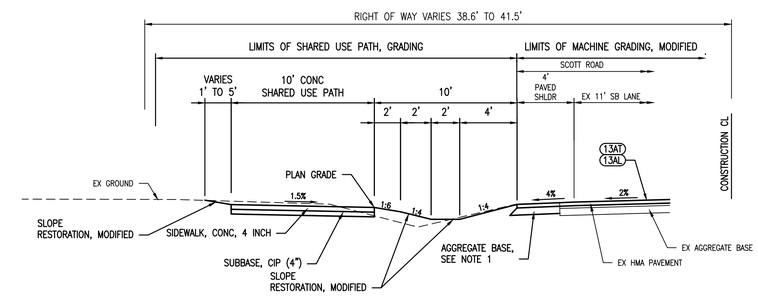
APPROVED BY: -



EXISTING & PROPOSED SCOTT ROAD TYPICAL CROSS SECTION

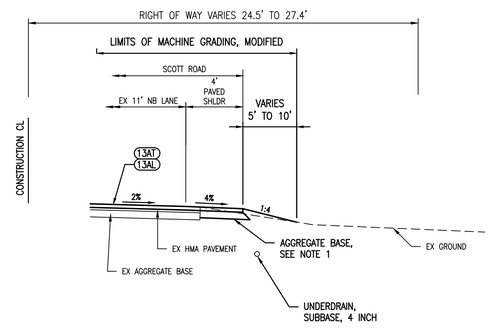
TO APPLY: STA 46+56 TO STA 64+22

NOTE:
1. WHERE PROPOSED ROAD WIDTH EXCEEDS EXISTING ROAD WIDTH, SUPPLEMENT CRUSHED HMA BASE WITH ADDITIONAL AGGREGATE BASE TO ENSURE A UNIFORM 6 INCH DEPTH OF BASE, PAID FOR AS "Aggregate Base".
2. BACKSLOPE SHALL BE A 1:6 MAX WITHIN 2' OF THE EDGE OF PATH. RESTORATION BEYOND 2' OF THE EDGE OF PATH CAN UTILIZE A BACKSLOPE OF 1:4 MAX.



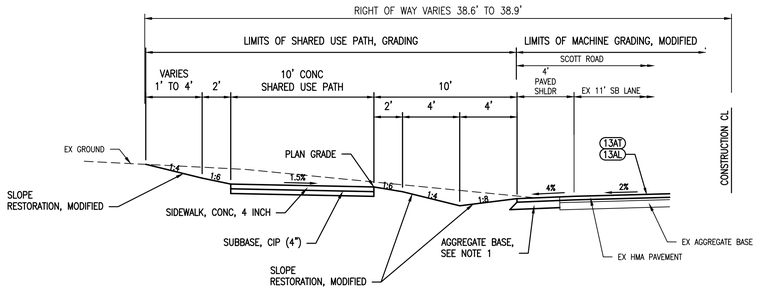
PROPOSED PATH TYPICAL CROSS SECTION

TO APPLY: STA 50+10 TO STA 60+75



PROPOSED TYPICAL CROSS SECTION

TO APPLY: STA 50+10 TO STA 64+22



PROPOSED PATH TYPICAL CROSS SECTION

TO APPLY: STA 60+75 TO STA 64+22

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CLINTON COUNTY, MI

TYPICAL CROSS SECTIONS 2

REVISIONS

REV	DESCRIPTION	DATE

PROJ. #: 190139

DATE: 04/24/2020

SHEET

4

BID SET

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK

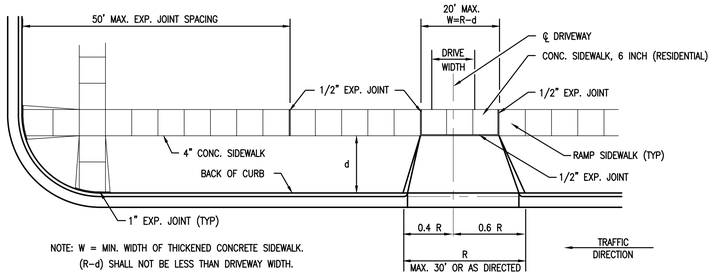
WHITE BLACK

WE RECYCLE

PLOTTED BY: GEUNG, MICHAEL 4/24/2020 2:57 PM
S:\2019\190139_Scotts_Scott\Drawings\Sheet\190139_Typicals.dwg - TYPICAL CROSS SECTIONS 2

DESIGNED BY: - APPROVED BY: -

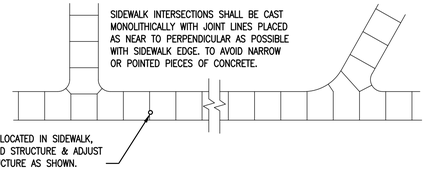
CHECKED BY: -



NOTE: W = MIN. WIDTH OF THICKENED CONCRETE SIDEWALK.
(R-d) SHALL NOT BE LESS THAN DRIVEWAY WIDTH.

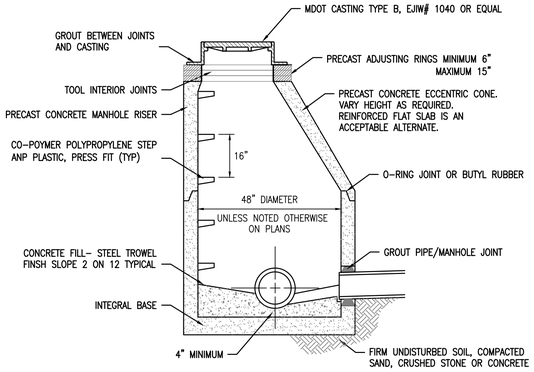
GENERAL CONCRETE SIDEWALK LAYOUT

NOTES:
SIDEWALK TRANSVERSE SLOPE MAY VARY FROM ZERO TO 1/2" PER FT. TO MEET SIDE CONDITIONS. WHEN TRANSVERSE SLOPE IS LESS THAN 1/4" PER FT. LONGITUDINAL DRAINAGE MUST BE PROVIDED. IN SETTING GRADES FOR COMMERCIAL DRIVES THE TYPES OF THE USING VEHICLES SHOULD BE CONSIDERED



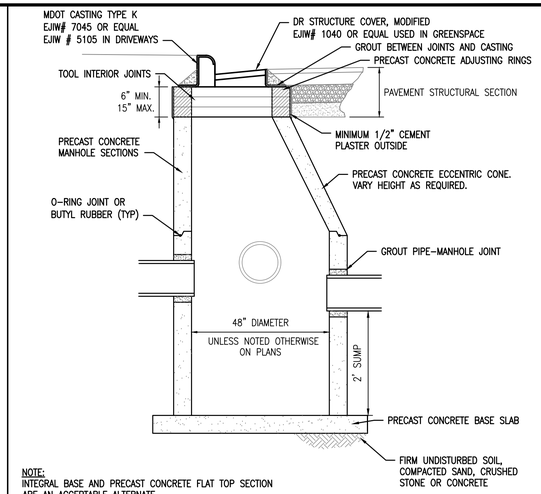
TYPICAL SIDEWALK JOINT LAYOUT

SIDEWALK DETAILS



STANDARD STORM MANHOLE

NO SCALE



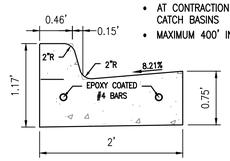
NOTE:
INTEGRAL BASE AND PRECAST CONCRETE FLAT TOP SECTION ARE AN ACCEPTABLE ALTERNATE.

STANDARD CATCH BASIN

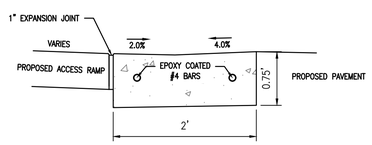
NO SCALE

JOINT SPACING

1. CONTRACTION JOINTS – 10' SPACING
2. 1" FIBER JOINTS
   - AT SPRING POINTS OF RADIUS AT INTERSECTIONS
   - AT CONTRACTION JOINTS EACH SIDE OF CATCH BASINS
   - MAXIMUM 400' INTERVALS

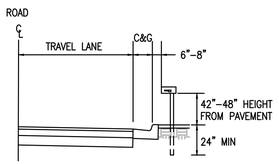


MDOT DETAIL F4 CONCRETE CURB & GUTTER



0" HEIGHT CURB AND GUTTER AT ACCESS RAMP

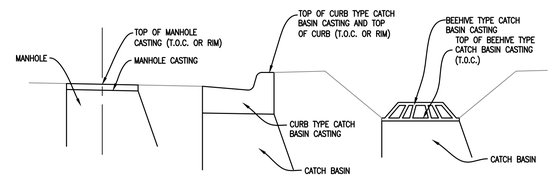
NOTE:
THE CONTRACTOR SHALL RELOCATE MAIL BOXES AND GANG MAIL BOXES TO FACILITATE CONSTRUCTION. ALL MAIL BOXES THAT ARE RELOCATED DURING CONSTRUCTION SHALL BE SET IN THEIR ORIGINAL LONGITUDINAL LOCATION ACCORDING TO THE REQUIREMENTS AND SPECIFICATIONS OF THE UNITED STATES POSTAL SERVICE. THESE SPECIFICATIONS SHALL INCLUDE, BUT NOT BE LIMITED TO, THE CORRECT OFFSET FROM THE ROAD, AND THE HEIGHT AND TYPE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ASSURING THAT THE UNITED STATES POSTAL SERVICES CAN MAINTAIN NORMAL MAIL DELIVERY THROUGHOUT THE ENTIRE PROJECT DURATION.



SEE R-74-D AND WWW.USPS.COM/MANAGE/KNOW-MAILBOX-GUIDELINES.HTM FOR ADDITIONAL INFORMATION

POST, MAILBOX SETTING DETAIL

SCALE: NONE



TOC CLARIFICATION DETAIL

NO SCALE

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CITY OF ST JOHNS
SCOTT ROAD IMPROVEMENTS
CLINTON COUNTY, MI

STANDARD DETAILS

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BID SET

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WHITE BLACK
WE RECYCLE

PLOTTED BY: SELINS, MICHAEL 4/24/2020 2:57 PM
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CREATE PNG/DWG/DSTB
DESIGNED BY: -
APPROVED BY: -
CHECKED BY: -

GENERAL REQUIREMENTS

1. THE CONTRACTOR SHALL OBTAIN THE SOIL EROSION CONTROL PERMIT FROM THE OFFICE OF THE CLINTON COUNTY DRAIN COMMISSIONER.
2. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE OFFICE OF THE CLINTON COUNTY DRAIN COMMISSIONER REQUIREMENTS AND PROJECT SPECIFICATIONS.
3. ANY EROSION OR SEDIMENT FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF SITE AREAS OR IN WATERWAYS: WATERWAYS INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES AND PONDS.
4. CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES AS REQUIRED AND AS DIRECTED ON THESE PLANS. HE SHALL REMOVE TEMPORARY MEASURES AS SOON AS PERMANENT STABILIZATION OF SLOPES, DITCHES AND OTHER EARTH CHANGES HAVE BEEN ESTABLISHED. THE PERMIT WILL NOT BE CLOSED UNTIL THE TEMPORARY MEASURES HAVE BEEN REMOVED.
5. IF DEWATERING IS NECESSARY, CONTRACTOR SHALL SUBMIT A DEWATERING PLAN TO THE OFFICE OF THE CLINTON COUNTY DRAIN COMMISSIONER FOR APPROVAL.

SEQUENCE OF CONSTRUCTION

1. THE CONTRACTOR SHALL PLACE THE TEMPORARY SILT FENCE AND CATCH BASIN SILT TRAPS PRIOR TO COMMENCING ANY GRADING OR REMOVAL OPERATIONS.
2. INSTALL FABRIC DROP BETWEEN THE FRAME AND COVER OF ALL EXISTING CATCH BASINS WHICH MAY BE SUSCEPTIBLE TO SEDIMENT EROSION FROM THE PROPOSED CONSTRUCTION AS SHOWN IN THESE PLANS.
3. EXCAVATE FOR UTILITY CONSTRUCTION AND ROADWAY RECONSTRUCTION. DO NOT EXPOSE AREAS FAR IN ADVANCE OF THE PROPOSED CONSTRUCTION. ROUGHEN AND SCARIFY EXPOSED SURFACES TO REDUCE RUNOFF VELOCITY AND SEDIMENTATION. MAINTAIN VEGETATION WHENEVER POSSIBLE TO PROVIDE A NATURAL BUFFER.
4. AFTER COMPLETION OF THE PROPOSED UTILITIES, INSTALL INLET PROTECTION-FABRIC PROTECTION FOR ALL CATCH BASINS. INLET PROTECTION-FABRIC PROTECTION SHALL BE SILTSACK®, OR BASIN BAG®, OR EQUAL.
5. TOPSOIL, SEED, FERTILIZE & MULCH BLANKET ALL EXPOSED AREAS WITHIN 5 CALENDAR DAYS OF ACHIEVING FINAL GRADE TO PROTECT AND RESTORE PERMANENT VEGETATION.
6. APPLY WATER TO EXPOSED GROUND REGULARLY TO CONTROL AIRBORNE PARTICULATE MATTER.
7. THE CONTRACTOR SHALL MAINTAIN ALL TEMPORARY AND PERMANENT SOIL EROSION AND SEDIMENTATION CONTROL MEASURES THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS AND UNTIL PERMANENT VEGETATION IS RE-ESTABLISHED IN ALL EXPOSED AREAS. REMOVE ACCUMULATED SEDIMENT FROM ALL DRAINAGE STRUCTURES.
8. THE SITE WILL BE PERIODICALLY INSPECTED BY THE STAFF OF THE CLINTON COUNTY DRAIN COMMISSIONER'S OFFICE. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE RULES AND REGULATIONS OF THAT OFFICE.
9. UPON FINAL APPROVED INSPECTION OF THE COMPLETED CONSTRUCTION BY ALL REVIEWING AGENCIES, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES.

SLOPE RESTORATION REQUIREMENTS

1. SEED SHALL BE MDOT THM SEED MIXTURE APPLIED AT 220# PER ACRE.
2. FERTILIZER SHALL BE MDOT CLASS A APPLIED AT 228 LBS OF CHEMICAL FERTILIZER NUTRIENT PER ACRE.
3. MULCH BLANKETS SHALL BE STRAW MULCH BLANKETS IN ACCORDANCE WITH MDOT SECTION 917 TURF AND LANDSCAPING MATERIALS.

2020							
SESC SCHEDULE AND SEQUENCING	AUG	SEPT	OCT	NOV	DEC	OCT	
PLACE & MAINTAIN EROSION CONTROLS							
REMOVE EROSION CONTROL MEASURES							

SOIL EROSION CONTROL MEASURES TABLE

KEY	DETAIL	NOTES
E5	DUST CONTROL	USE OF AN APPROVED TACKIFIER WITH DUST CONTROL IS REQUIRED.
E8	PERMANENT SEEDING	
E9	MULCH BLANKETS	PRIOR TO PLACEMENT OF THE MULCH BLANKETS, THE GROUND SHALL BE TREATED WITH SILT STOP OR OTHER APPROVED POLYMER SYSTEM.
S51	SILT FENCE	
S53	STABILIZED CONSTRUCTION ACCESS	FILTER FABRIC SHALL BE MDOT GEOTEXTILE SEPARATOR, WOVEN REQUIREMENTS (TABLE 910-1)
S58	INLET PROTECTION - FABRIC DROP	CATCH BASIN SILT GUARD SHALL BE "SILT SACK" AS MANUFACTURED BY ACF OR "BASIN BAG" AS SUPPLIED BY CONSTRUCTION SUPPLY INC., OR APPROVED EQUAL

SESC DETAILS UTILIZE STATE OF MICHIGAN, DEPARTMENT OF MANAGEMENT AND BUDGET, INFRASTRUCTURE SERVICES, DESIGN AND CONSTRUCTION DIVISION "SOIL EROSION AND SEDIMENTATION CONTROL GUIDEBOOK".

SOIL EROSION CONTROL INSTALLATION & MAINTENANCE PROGRAM

1. THE CONTRACTOR SHALL MAINTAIN ALL TEMPORARY AND PERMANENT SOIL EROSION AND SEDIMENTATION CONTROL MEASURES THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS AND UNTIL PERMANENT VEGETATION IS RE-ESTABLISHED IN ALL EXPOSED AREAS. REMOVE ACCUMULATED SEDIMENT FROM ALL DRAINAGE STRUCTURES.
2. DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR TO DETERMINE EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES, AND ANY NECESSARY REPAIRS SHALL BE PERFORMED WITHOUT DELAY.
3. AFTER EACH RAINFALL EVENT, CONTRACTOR SHALL INSPECT AND MAINTAIN ALL SOIL EROSION CONTROL MEASURES AND CLEAN AND REPLACE CATCH BASIN FILTERS (INLET PROTECTION FABRIC DROP).
4. DUST CONTROL WILL BE EXERCISED AT ALL TIMES WITHIN THE PROJECT BY THE CONTRACTORS. SPRINKLING TANK TRUCKS SHALL BE AVAILABLE AT ALL TIMES TO BE USED ON HAUL ROUTES OR OTHER PLACES WHERE DUST BECOMES A PROBLEM.
5. ALL MUD, DIRT AND DEBRIS TRACKED ONTO EXISTING ROADS SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR NO LESS THAN ON A DAILY BASIS. ALL MUD, DIRT AND DEBRIS TRACKED OR SPILLED ONTO PAVED SURFACES WITHIN THIS SITE SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.

NOTES

1. ALL SOIL EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED AND MAINTAINED ON A DAILY BASIS AND IMMEDIATELY FOLLOWING EVERY SIGNIFICANT RAINFALL EVENT.
2. ALL EXCESS SPOILS ARE TO BE REMOVED FROM THE SITE. OTHERWISE, STOCKPILES MUST BE PROVIDED WITH TEMPORARY AND PERMANENT STABILIZATION MEASURES.
3. EXCESS DIRT IS NOT TOT BE PLACED ON ANY AREAS ON OR ADJACENT TO THE SITE WHERE PLAN DOES NOT SHOW THE AREA BEING DISTURBED.
4. SILT FENCING IS REQUIRED ALONG ALL DOWNSTREAM EDGES OF THE GRADING LIMITS AND MUST REMAIN IN PLACE UNTIL VEGETATION IS UNIFORMLY RE-ESTABLISHED. THE SILT FENCE MUST BE TOED IN A MINIMUM OF 6 INCHES ALONG ITS BASE.
5. ALL SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATIONS, AND SHALL BE MAINTAINED UNTIL VEGETATION IS UNIFORMLY RE-ESTABLISHED AND THE SITE IS PERMANENTLY STABILIZED.
6. NO SEDIMENT SHALL BE TRACKED ONTO THE ADJACENT PUBLIC STREET AND IF IT DOSS OCCUR, SHALL BE CLEANED DAILY.

E5 DUST CONTROL

WHEN
- ON CONSTRUCTION SITES DURING PERIODS OF LOW PRECIPITATION, LOW HUMIDITY, AND HIGH TEMPERATURE OR HIGH WINDS.

WHY
- TO REDUCE DUST AND SEDIMENTATION FROM WIND AND CONSTRUCTION ACTIVITIES.

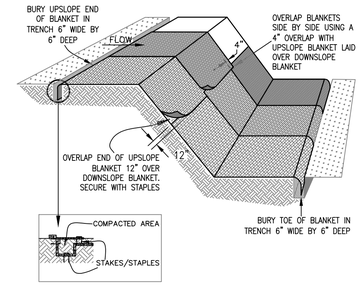
WHERE
- USE ON UNPAVED ROADWAYS, CONSTRUCTION SITES WITH VEHICLE TRAFFIC, SOIL STOCKPILE AREAS, AND GENERAL AREAS WITH UNSTABILIZED, OR FINE SOILS.

HOW
1. DUST CONTROL APPLICATIONS CAN INCLUDE WATERING, CHEMICAL DUST SUPPRESSION, GRAVEL OR ASPHALT SURFACING, TEMPORARY AGGREGATE COVER, AND HAUL TRUCK COVERS.
2. MINIMIZE LENGTH OF TIME VULNERABLE AREAS ARE EXPOSED ON CONSTRUCTION SITE.
3. IDENTIFY AND STABILIZE KEY ACCESS POINTS PRIOR TO INITIATING CONSTRUCTION.
4. QUICKLY STABILIZE EXPOSED SOIL BY VEGETATION, MULCH, SOIL EROSION CONTROL BLANKETS, SPRAY-ON ADHESIVES, SPRINKLING, OR STONE LAYERING TO MINIMIZE AREAS IN NEED OF DUST CONTROL.
5. FOLLOW MANUFACTURERS INSTRUCTIONS REGARDING APPLICATION OF ANY DUST PALLIATIVE. PAY PARTICULAR ATTENTION TO MIXING DETAILS.
6. APPLY DUST SUPPRESSANT TO SURFACES USING A PRESSURE TYPE WATER DISTRIBUTOR TRUCK EQUIPPED WITH A SPRAY SYSTEM.
7. THE NUMBER OF APPLICATIONS TO BE DETERMINED BY SITE ENGINEER.
8. IMMEDIATELY CLEAN-UP SEDIMENT TRACKED ONTO PAVED ROADS.
9. LIMIT VEHICLE TRAFFIC TO 15 MILES PER HOUR.
10. UTILIZE AGGREGATE COVER ON ACCESS, PARKING, AND PAVED ROADS.
11. KEEP CONSTRUCTION TRAFFIC DIRECTED TO STABILIZED SITE ROADWAYS WHEN POSSIBLE.

MAINTENANCE
- FREQUENT, EVEN DAILY APPLICATION MAY BE REQUIRED TO INCREASE EFFECTIVENESS.
- DO NOT OVERWATER, AS OVERWATERING MAY CAUSE EROSION.
- OIL SHOULD NOT BE USED FOR DUST CONTROL, AS IT MAY ENTER A DRAINAGEWAY THROUGH RUNOF OR SEEPING INTO THE SOIL.

LIMITATIONS
- TO CONTINUE ITS EFFECTIVENESS, DUST CONTROL APPLICATION NEEDS TO BE APPLIED ON A REGULAR SCHEDULE.
- APPLYING TOO MUCH WATER TO SURFACE MAY CAUSE EROSION.
- SOME TYPES OF DUST SUPPRESSANTS MAY MAKE SOIL WATER REPELLANT, INCREASING RUNOFF.

E9 MULCH BLANKETS



NOTES:
1. PLACE MULCH BLANKET PARALLEL TO FLOW AND ANCHOR SECURELY.
2. WHEN BLANKETS ARE USED IN FLOWING DITCH, BLANKETS SHOULD NOT OVERLAP IN DITCH CENTER PARALLEL TO FLOW.
3. STAPLES INSTALLED/SECURED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
4. WHERE POSSIBLE, CONSTRUCT WITH BIODEGRADABLE MATERIAL.

E8 PERMANENT SEEDING

WHEN
- TO FINALIZE STABILIZATION OF TEMPORARY SEEDING AREAS OR WHEN AN AREA NEEDS PERMANENT STABILIZATION FOLLOWING COMPLETION OF CONSTRUCTION. ALSO USED WHEN VEGETATIVE ESTABLISHMENT CAN CORRECT EXISTING SOIL EROSION OR SEDIMENTATION PROBLEM.
- WITHIN 5 DAYS OF FINAL GRADE.

WHY
- TO STABILIZE SOIL AND PREVENT OR REDUCE SOIL EROSION/SEDIMENTATION PROBLEMS FROM DEVELOPING.

WHERE
- USED ON CONSTRUCTION AND EARTH CHANGE SITES WHICH REQUIRE PERMANENT VEGETATIVE STABILIZATION.

HOW
1. REVIEW SESC PLAN AND CONSTRUCTION PHASING TO IDENTIFY AREAS IN NEED OF PERMANENT VEGETATIVE STABILIZATION.
2. SELECT PERENNIAL GRASS AND GROUND COVER FOR PERMANENT COVER.
3. SEED MIXES VARY. HOWEVER, THEY SHOULD CONTAIN NATIVE SPECIES.
4. SEED MIXES SHOULD BE SELECTED THROUGH CONSULTATION WITH A CERTIFIED SEED PROVIDER AND WITH CONSIDERATION OF SOIL TYPE, LIGHT, MOISTURE, USE APPLICATIONS, AND NATIVE SPECIES CONTENT.
5. SOIL TESTS SHOULD BE PERFORMED TO DETERMINE THE NUTRIENT AND PH LEVELS IN THE SOIL. THE PH MAY NEED TO BE ADJUSTED TO BETWEEN 6.5 AND 7.0.
6. PREPARE A 3-5" DEEP SEEDBED, WITH THE TOP 3-4" CONSISTING OF TOPSOIL.
7. SLOPES STEEPER THAN 1:3 SHOULD BE ROUGHENED.
8. APPLY SEED AS SOON AS POSSIBLE AFTER SEEDBED PREPARATION. SEED MAY BE BROADCAST BY HAND, HYDROSEEDING, OR BY USING MECHANICAL DRILLS.
9. MULCH IMMEDIATELY AFTER SEEDING.
10. DORMANT SEED MIXES ARE FOR USE AFTER THE GROWING SEASON, USING SEED WHICH LIES DORMANT IN THE WINTER AND BEGINS GROWING AS SOON AS SITE CONDITIONS BECOME FAVORABLE.
11. PROTECT SEEDED AREAS FROM PEDESTRIAN OR VEHICULAR TRAFFIC.
12. DIVERT CONCENTRATED FLOWS AWAY FROM THE SEEDED AREA UNTIL VEGETATION IS ESTABLISHED.

MAINTENANCE
- INSPECT WEEKLY AND WITHIN 24 HOURS FOLLOWING EACH RAIN EVENT IN THE FIRST FEW MONTHS FOLLOWING INSTALLATION TO BE SURE SEED HAS GERMINATED AND PERMANENT VEGETATIVE COVER IS BEING ESTABLISHED.
- ADD SUPPLEMENTAL SEED AS NECESSARY.

LIMITATIONS
- SEEDS NEED ADEQUATE TIME TO ESTABLISH.
- MAY NOT BE APPROPRIATE IN AREAS WITH FREQUENT TRAFFIC.
- SEEDED AREAS MAY REQUIRE IRRIGATION DURING DRY PERIODS.
- SEEDING SUCCESS IS SITE SPECIFIC, CONSIDER MULCHING OR SODDING WHEN NECESSARY.

Planting Zones	Lower Peninsula (South of T20N) Zone 1	Lower Peninsula (North of T20N) Zone 2	Upper Peninsula Zone 3
Seeding Window Permanent Seeding	4/15 - 10/10	5/1 - 10/1	5/1 - 9/20
Seeding Window Dormant Seeding*	11/15 - Freeze	11/01 - Freeze	11/01 - Freeze

	Zone 1 Lower Peninsula (South of U.S. 10)	Zone 2 Lower Peninsula (North of U.S. 10)	Zone 3 Upper Peninsula
Seeding Dates (with Irrigation or Mulch)	4/1 - 8/1	5/1 - 9/20	5/1 - 9/10
Seeding Dates (w/o Irrigation or Mulch)	4/1 - 5/20 or 8/10 - 10/1	5/1 - 6/10 or 8/1 - 9/20	5/1 - 6/15 or 8/1 - 9/20
Dormant Seeding Dates*	11/1 - Freeze	10/25 - Freeze	10/25 - Freeze

SOURCE: ADAPTED FROM USDA NRCS TECHNICAL GUIDE #342 (1999)

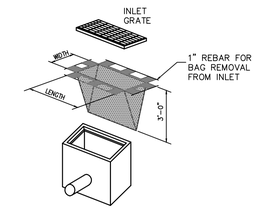
* DORMANT SEEDING IS FOR USE IN THE LATE FALL AFTER THE SOIL TEMPERATURE REMAINS CONSISTENTLY BELOW 50° F, PRIOR TO THE GROUND FREEZING. THIS PRACTICE IS APPROPRIATE IF CONSTRUCTION ON A SITE IS COMPLETED IN THE FALL BUT THE SEED WAS NOT PLANTED PRIOR TO RECOMMENDED SEEDING DATES. NO SEED GERMINATION WILL TAKE PLACE UNTIL SPRING. A COOL SEASON ANNUAL GRASS MAY BE ADDED IN AN ATTEMPT TO HAVE SOME FALL GROWTH.

* MULCH BLANKETS MUST BE USED WITH DORMANT SEED.

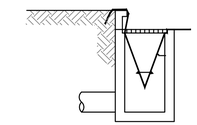
* DO NOT SEED WHEN THE GROUND IS FROZEN OR SNOW COVERED.

* DO NOT USE A DORMANT SEED MIX ON GRASSED WATERWAYS.

S58 INLET PROTECTION - FABRIC DROP



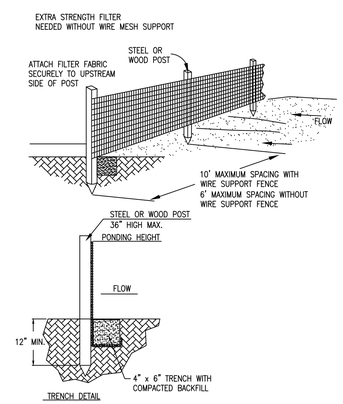
ISOMETRIC VIEW



INSTALLATION DETAIL

MAINTENANCE
- DROP INLET FILTERS SHOULD BE INSPECTED ROUTINELY AND AFTER EACH MAJOR RAIN EVENT.
- DAMAGED FILTER BAGS SHOULD BE REPLACED.
- CLEAN AND/OR REPLACE FILTER BAG WHEN 1/2 FULL.
- REPLACE CLOGGED FABRIC IMMEDIATELY.
- IF NEEDED, INITIATE REPAIRS IMMEDIATELY UPON INSPECTION.
- REMOVE ENTIRE PROTECTIVE MECHANISM WHEN UPGRADIENT AREAS ARE STABILIZED AND STREETS HAVE BEEN SWEPT.

S51 SILT FENCE



TRENCH DETAIL

NOTES:
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

MAINTENANCE
- INSPECT FREQUENTLY AND IMMEDIATELY AFTER EACH STORM EVENT. CHECK SEVERAL TIMES DURING PROLONGED STORM EVENTS. IF NECESSARY, REPAIR IMMEDIATELY.
- IF THE SEDIMENT HAS REACHED 1/3 THE HEIGHT OF THE FENCE, THE SOIL SHOULD BE REMOVED AND DISPOSED OF IN A STABLE UPLAND SITE.
- THE FENCE SHOULD BE RE-INSTALLED IF WATER IS SEEPING UNDERNEATH IT OR IF THE FENCE HAS BECOME INEFFECTIVE.
- SILT FENCE SHOULD BE REMOVED ONCE VEGETATION IS ESTABLISHED AND UP-SLOPE AREA HAS STABILIZED.

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CITY OF ST JOHNS
SCOTT ROAD IMPROVEMENTS
CLINTON COUNTY, MI

SESC NOTES & DETAILS

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WHITE BLACK
PLOTTED BY: SELING, MICHAEL 4/24/2020 2:57 PM
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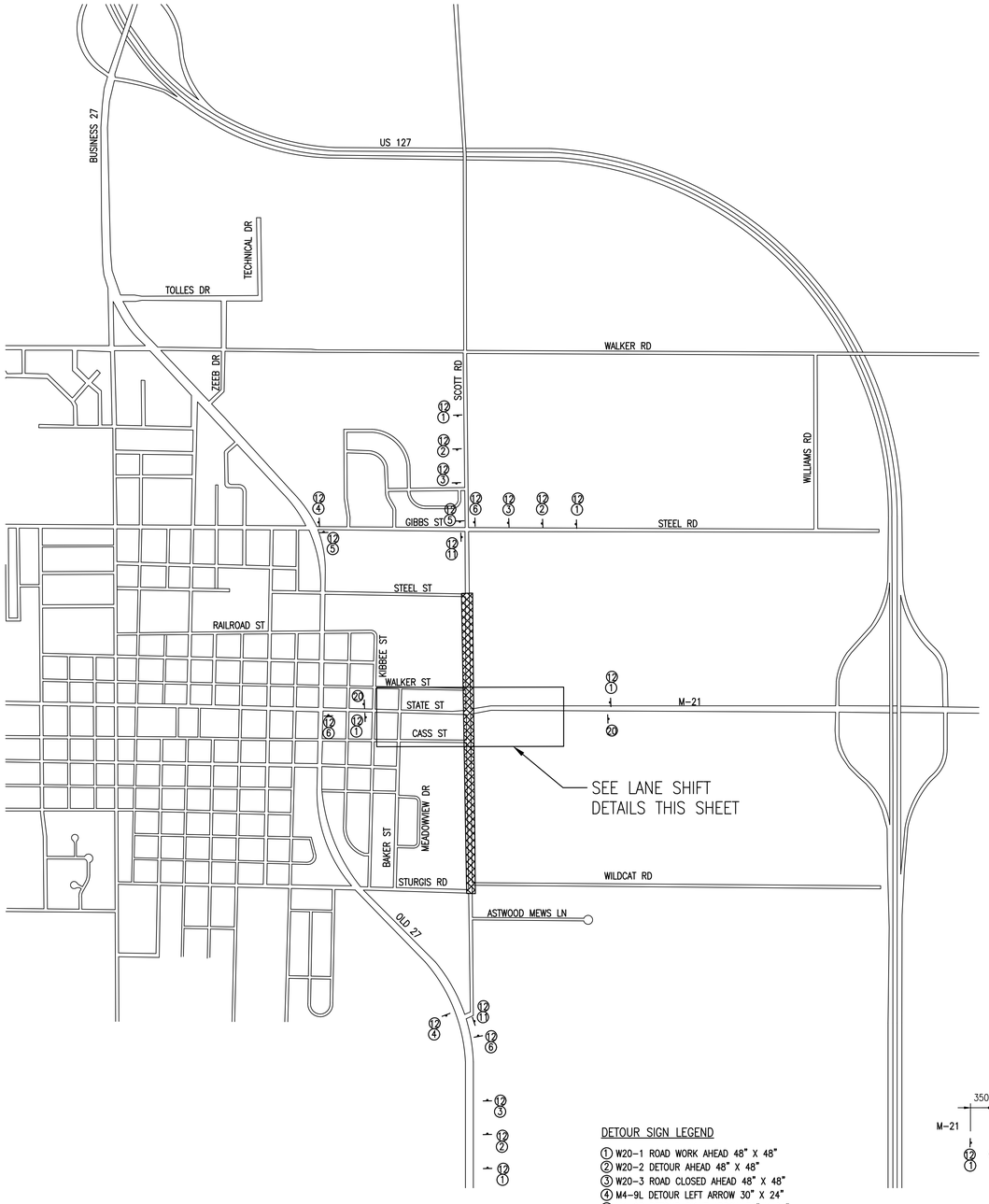
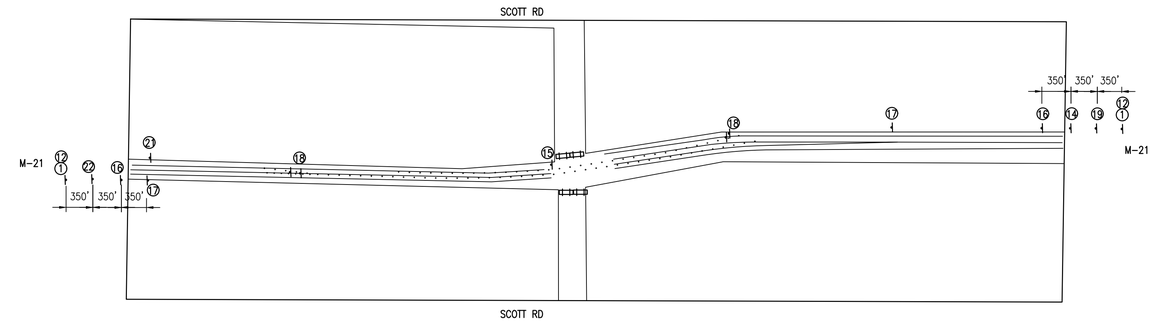
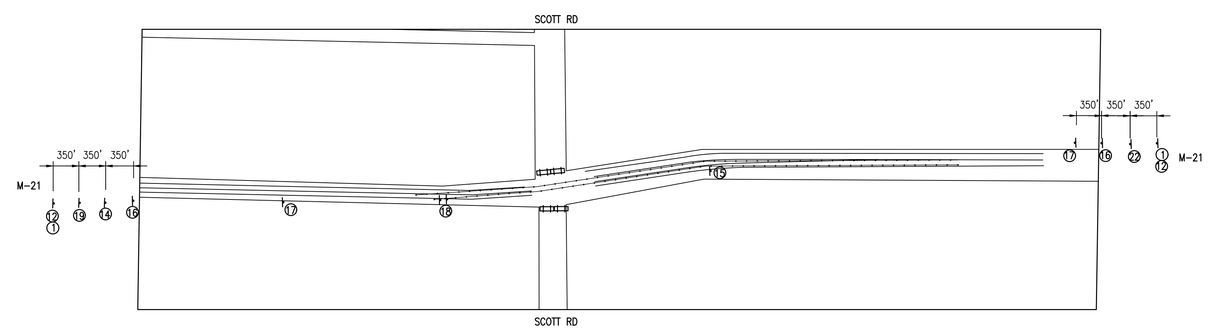
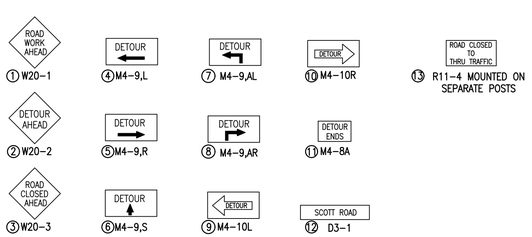




WESTBOUND M-21 TRAFFIC LANE SHIFT DETAIL



EASTBOUND M-21 TRAFFIC LANE SHIFT DETAIL



DETOUR SIGN LEGEND

1. W20-1 ROAD WORK AHEAD 48" X 48"
2. W20-2 DETOUR AHEAD 48" X 48"
3. W20-3 ROAD CLOSED AHEAD 48" X 48"
4. M4-9L DETOUR LEFT ARROW 30" X 24"
5. M4-9R DETOUR RIGHT ARROW 30" X 24"
6. M4-9S DETOUR STRAIGHT ARROW 30" X 24"
7. M4-9,AL DETOUR AHEAD LEFT ARROW 30" X 24"
8. M4-9,AR DETOUR AHEAD RIGHT ARROW 30" X 24"
9. M4-10R DETOUR ARROW LEFT 48" X 18"
10. M4-10R DETOUR ARROW RIGHT 48" X 18"
11. M4-8A END DETOUR 24" X 18"
12. D3-1 SCOTT RD 36" X 8"
13. R11-4 ROAD CLOSED TO THRU TRAFFIC 60" X 30"
14. W1-4L REVERSE CURVE TO LEFT 48" X 48"
15. W1-4R REVERSE CURVE TO RIGHT 48" X 48"
16. R5-18c WORK ZONE BEGINS 48" X 48"
17. R2-1 SPEED LIMIT 25 48" X 60"
18. W1-6 ARROW 48" X 24"
19. W3-5b REDUCED SPEED ZONE AHEAD 48" X 48"
20. G20-2 END ROAD WORK 24" X 48"
21. R2-1 SPEED LIMIT 35 48" X 60"
22. W20-5b(mod) CENTER LANE CLOSED AHEAD 48" X 48"

MAP LEGEND

- DETOUR ROUTE
- CONSTRUCTION ZONE
- PEDESTAL MOUNTED TRAFFIC SIGN
- TYPE 3 BARRICADE

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DETOUR SHEET

REVISIONS

REV	DESCRIPTION	DATE

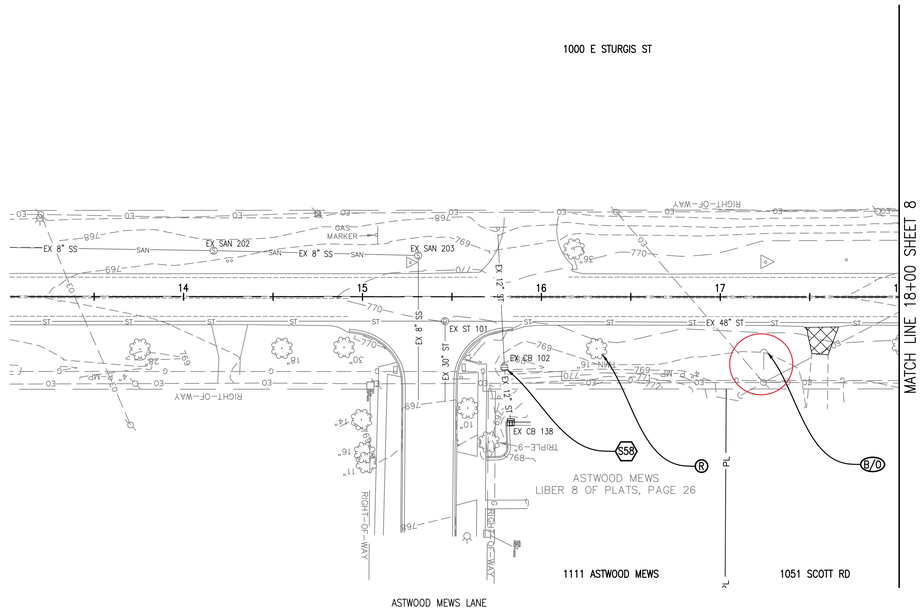
PROJ. #: 190139
DATE: 04/24/2020
SHEET
7

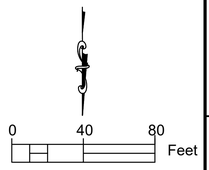
BID SET

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WHITE BLACK
WE RECYCLE

PLOTTED BY: BENIC, MICHAEL 4/24/2020 3:47 PM
S:\2019\190139_St Johns_South\Drawings\Sheets\190139_T Ma.dwg , DETOUR SHEET
CONFORMANCE 19.0
DESIGNED BY: - APPROVED BY: -
CHECKED BY: -

SCOTT ROAD PLAN SHEET STA
10+00 TO 18+00





203619 PARTICIPATING REMOVAL QUANTITIES THIS SHEET

23	Syd	Pavt, Rem
1	Ea	Stump, Rem, 6 inch to 18 inch

REMOVE EXISTING BITUMINOUS SURFACE SAWCUT AT REMOVAL LIMITS

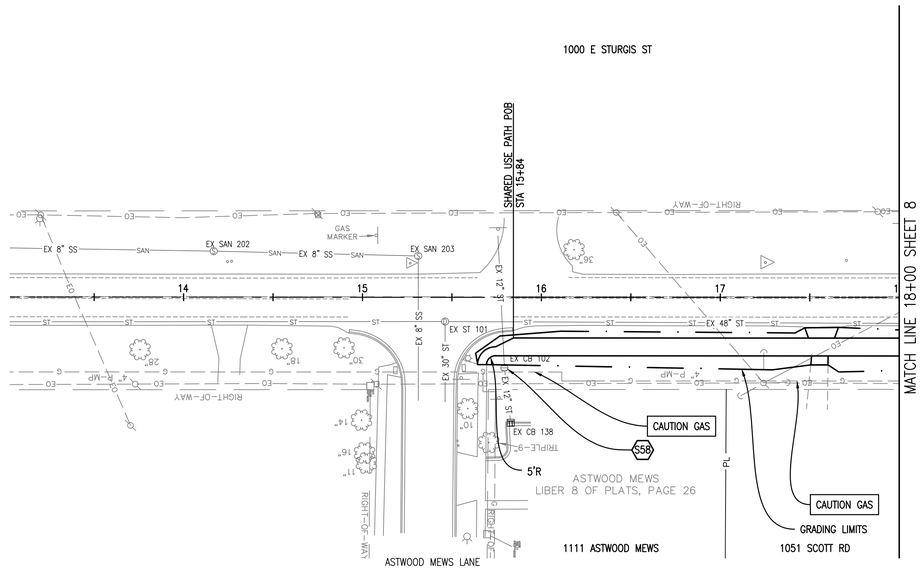
REMOVE EXISTING CONCRETE SIDEWALK

S58 EROSION CONTROL ITEM. SEE SHEET 6 FOR DETAIL.

THE AREA WITHIN THE EARTH DISTURBANCE LIMITS IS APPROXIMATELY 4.87 ACRES.

203619 PARTICIPATING QUANTITIES THIS SHEET

1	Ea	Erosion Control, Inlet Protection, Fabric Drop
230	Ft	Shared Use Path, Grading
30	Cyd	Subbase, CIP
2,115	Sft	Sidewalk, Conc, 4 inch
150	Sft	Sidewalk, Conc, 6 inch
250	Syd	Slope Restoration, Modified
22	Syd	Approach, CI I, 6 inch
3	Ton	HMA Approach



STATION	Driveway Opening		DRIVEWAY APPROACHES					
	WIDTH AT MATCH	WIDTH AT EOM	DIST. FROM EX. EOM TO MATCH	DRIVE APPROACH SLOPE	Approach, CI I, 6 inch	HMA, Approach (4 inch)	Driveway, Nonreinf Conc, 6 inch	Sidewalk, Conc, 6 inch
	Ft	Ft	Ft	%	Syd	Ton	Syd	Sft
17+57, RT	14.5	18.8	25.8	8.0,1.5,2.5	22.3	2.5	–	150
TOTALS					22.3	2.5	–	150

DRIVEWAY TABLE FOR INFORMATION ONLY

PROPOSED LEGEND

ADJ.	ADJUST
U	UTILITY CO. TO RELOCATE
REL.	RELOCATE
R	REMOVE
BH	BULKHEAD
AB	ABANDON
B/O	RELOCATE BY OTHERS

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SCOTT ROAD PLAN SHEET STA
10+00 TO 18+00

REVISIONS

REV	DESCRIPTION	DATE

PROJ. #: 190139

DATE: 04/24/2020

SHEET

8

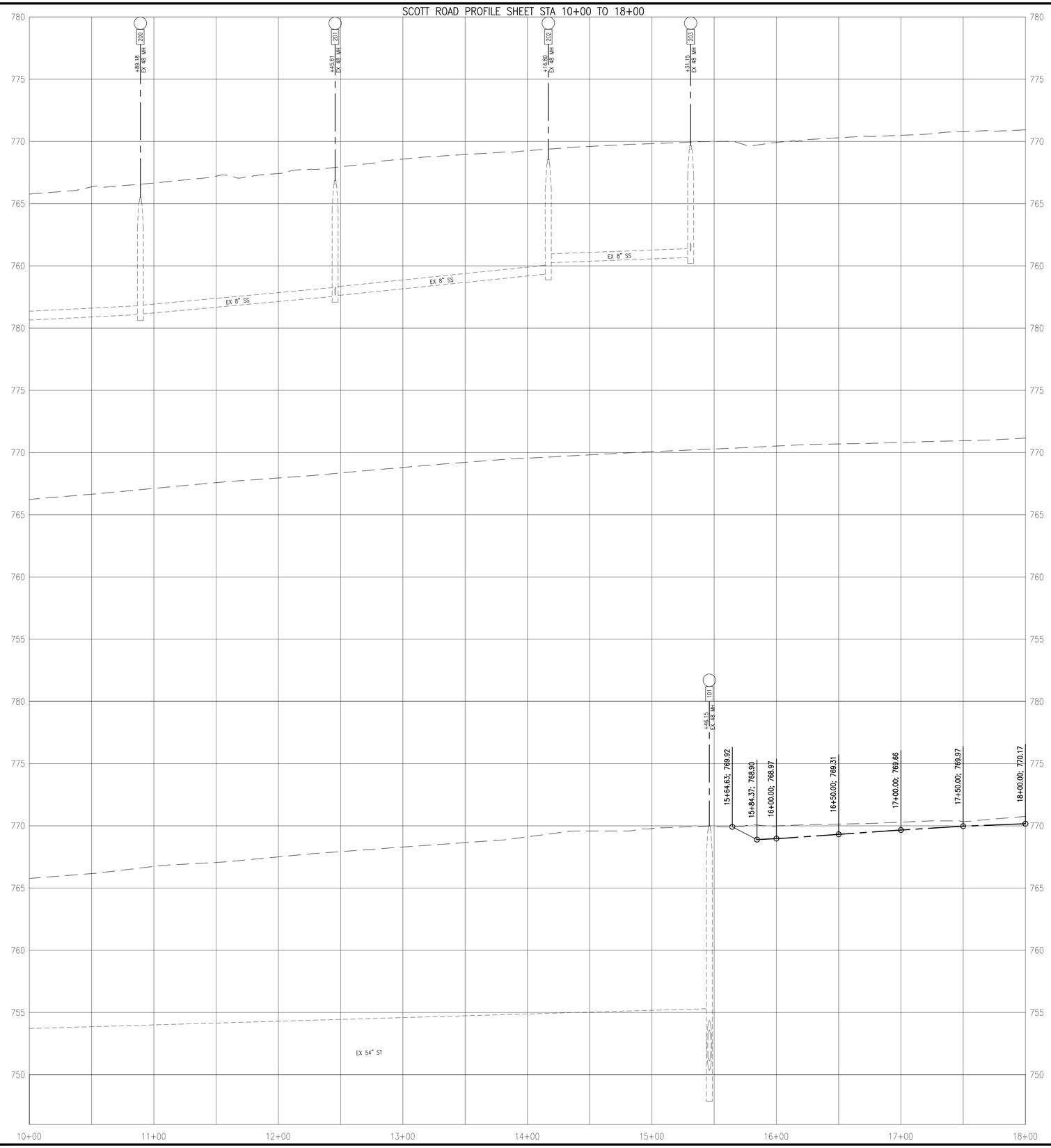
BID SET

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WHITE BLACK

WE RECYCLE

PLOTTED BY: SEUNG, MICHAEL 4/24/2020 3:57 PM
S:\2019\19139_Sturgis_Scott\Drawings\Sheet\19139_Scott_PP.dwg - SCOTT ROAD PLAN SHEET STA 10+00 TO 18+00
CAD STANDARD 0.18

DESIGNED BY: - APPROVED BY: -
CHECKED BY: -



EX GROUND AT LEFT EDGE OF PAVEMENT

EX GROUND AT CENTERLINE OF ROAD

PROP FRONT EDGE OF PATH

EX GROUND AT RIGHT EDGE OF PAVEMENT

PROFILE LEGEND

EXISTING 999.9 PROPOSED 999.99

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK

WHITE BLACK

WE RECYCLE

PLOTTED BY: SEUNG, MICHAEL 4/24/2020 2:58 PM
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CHELSTROM/DB/JTB

DESIGNED BY: - APPROVED BY: -

CHECKED BY: -

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CLINTON COUNTY, MI

SCOTT ROAD PROFILE SHEET
STA 10+00 TO 18+00

REVISIONS

REV	DESCRIPTION	DATE

PROJ. #: 190139

DATE: 04/24/2020

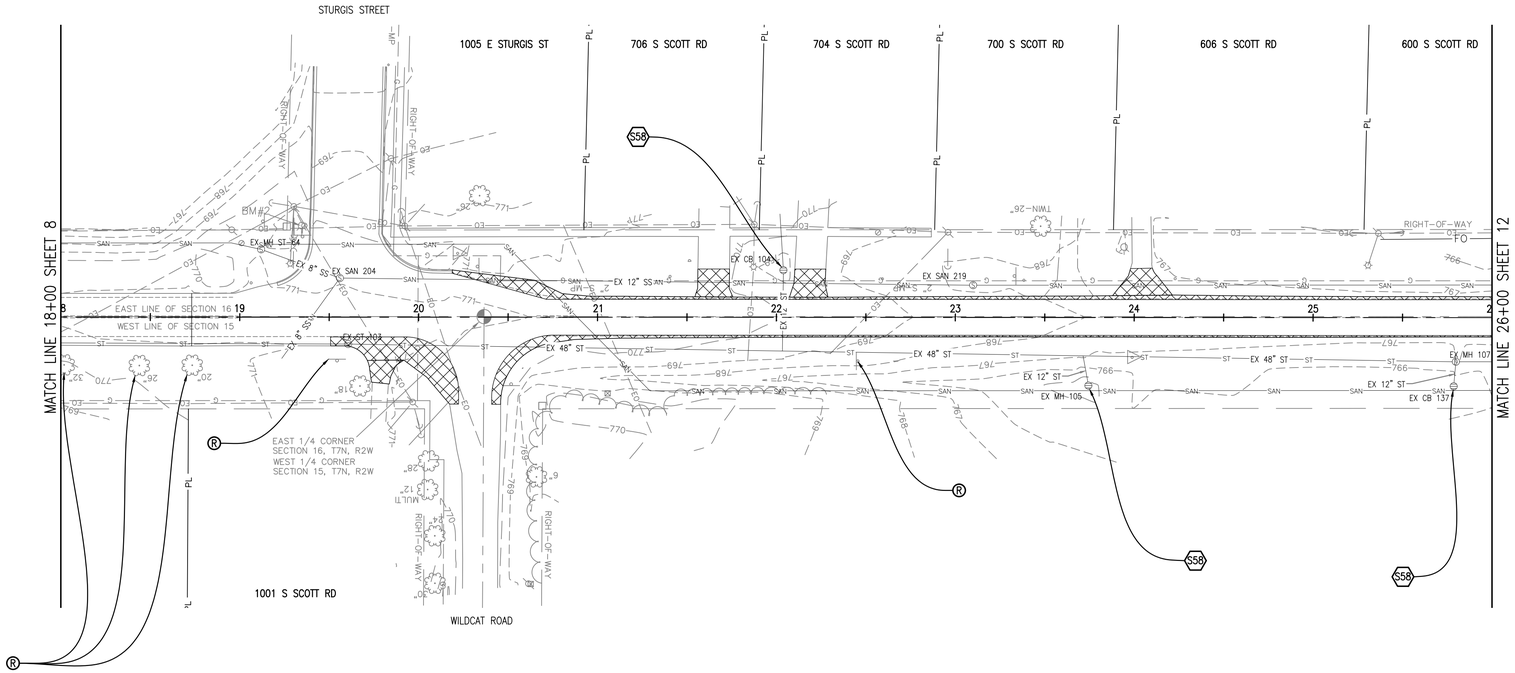
SHEET

9

BID SET

BENCHMARKS
B.M. #2 – SOUTHWEST FLANGE BOLT ON HYDRANT ABOVE "S" IN WATEROUS ON SOUTH SIDE OF STURGIS STREET & WEST SIDE OF SCOTT ROAD
ELEV. 773.29' NAVD 88

SCOTT ROAD PLAN SHEET STA 18+00 TO 26+00



0 40 80 Feet

203619 PARTICIPATING REMOVAL QUANTITIES THIS SHEET

2	Ea	Sign, Type III, Rem
3	Ea	Stump, Rem, 19 inch to 26 inch

208128 PARTICIPATING REMOVAL QUANTITIES THIS SHEET

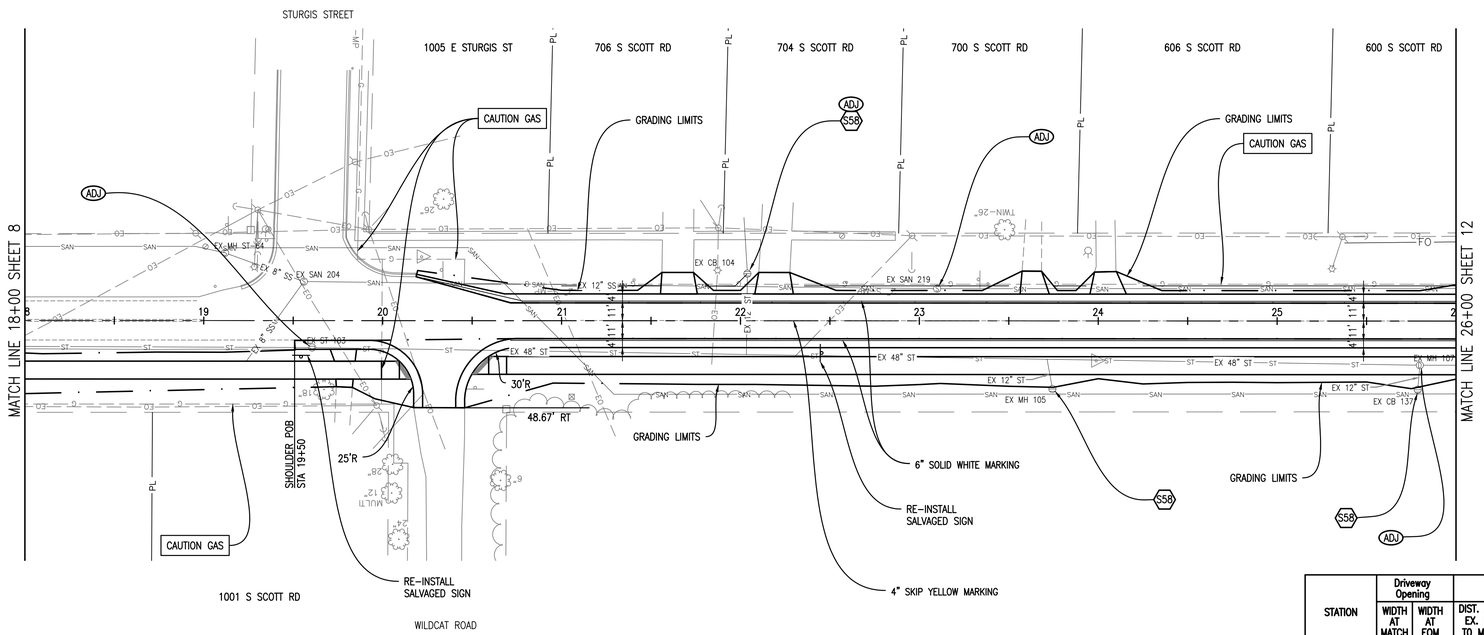
125	Syd	Pavt, Rem
355	Syd	HMA Surface, Rem

REMOVE EXISTING BITUMINOUS SURFACE SAWCUT AT REMOVAL LIMITS

REMOVE EXISTING CONCRETE SIDEWALK

S58 EROSION CONTROL ITEM. SEE SHEET 6 FOR DETAIL.

THE AREA WITHIN THE EARTH DISTURBANCE LIMITS IS APPROXIMATELY 4.87 ACRES.



203619 PARTICIPATING QUANTITIES THIS SHEET

765	Ft	Shared Use Path, Grading
90	Cyd	Subbase, CIP
7,235	Sft	Sidewalk, Conc, 4 inch
150	Sft	Sidewalk, Conc, 6 inch
200	Sft	Sidewalk Ramp, Conc, 6 inch
20	Ft	Detectable Warning Surface
17	Syd	Approach, Cl I, 6 inch
4	Ton	HMA Approach
2	Ea	Sign, Type III, Erect, Salv
48	Ft	Post, Steel, 3 lb
1,000	Syd	Slope Restoration, Modified
1	Ea	Dr Structure Cover, Adj, Case 2
1	Ea	Sanitary Structure Cover, Adj, Case 2

208128 PARTICIPATING QUANTITIES THIS SHEET

3	Ea	Erosion Control, Inlet Protection, Fabric Drop
5.8	Sta	Machine Grading, Modified
700	Syd	Aggregate Base, 8 inch
240	Cyd	Subbase, CIP
120	Ton	HMA, 4E1
1,345	Ft	Underdrain, Subbase, 4 inch
40	Syd	Approach, Cl I, 6 inch
9	Ton	HMA Approach
56	Syd	Driveway, Nonreinf Conc, 6 inch
4	Ea	Post, Mailbox
1,000	Syd	Slope Restoration, Modified
1	Ea	Dr Structure Cover, Adj, Case 2
138	Ft	Pavt Mrkg, Waterborne, 4 inch, Yellow
1,107	Ft	Pavt Mrkg, Waterborne, 6 inch, White

STATION	Driveway Opening		DRIVEWAY APPROACHES					
	WIDTH AT MATCH	WIDTH AT EOM	DIST. FROM EX. EOM TO MATCH	DRIVE APPROACH SLOPE	Approach, Cl I, 6 inch	HMA, Approach (4 inch)	Driveway, Nonreinf Conc, 6 inch	Sidewalk, Conc, 6 inch
	Ft	Ft	Ft	%	Syd	Ton	Syd	Sft
19+79, RT	9.0	15.5	22.5	1.2,1.5	17.0	4	–	150
21+66, LT	17.7	20.5	18.6	0.5	–	–	30.9	–
22+19, LT	16.1	20.2	15.6	0.5	–	–	25.3	–
23+63, LT	10.9	16.1	15.2	0.9	18.3	4	–	–
24+04, LT	12.2	20.0	15.2	–0.7	21.3	5	–	–
TOTALS					56.6	13	56.2	150

DRIVEWAY TABLE FOR INFORMATION ONLY

PROPOSED LEGEND

ADJ	ADJUST
U	UTILITY CO. TO RELOCATE
REL	RELOCATE
R	REMOVE
BH	BULKHEAD
AB	ABANDON
B/O	RELOCATE BY OTHERS

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CLINTON COUNTY, MI

SCOTT ROAD PLAN SHEET STA 18+00 TO 26+00

REVISIONS

REV	DESCRIPTION	DATE

PROJ. #: 190139
DATE: 04/24/2020
SHEET 10

BID SET

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WE RECYCLE

PLOTTED BY: SEUNG, MICHAEL 4/24/2020 2:58 PM
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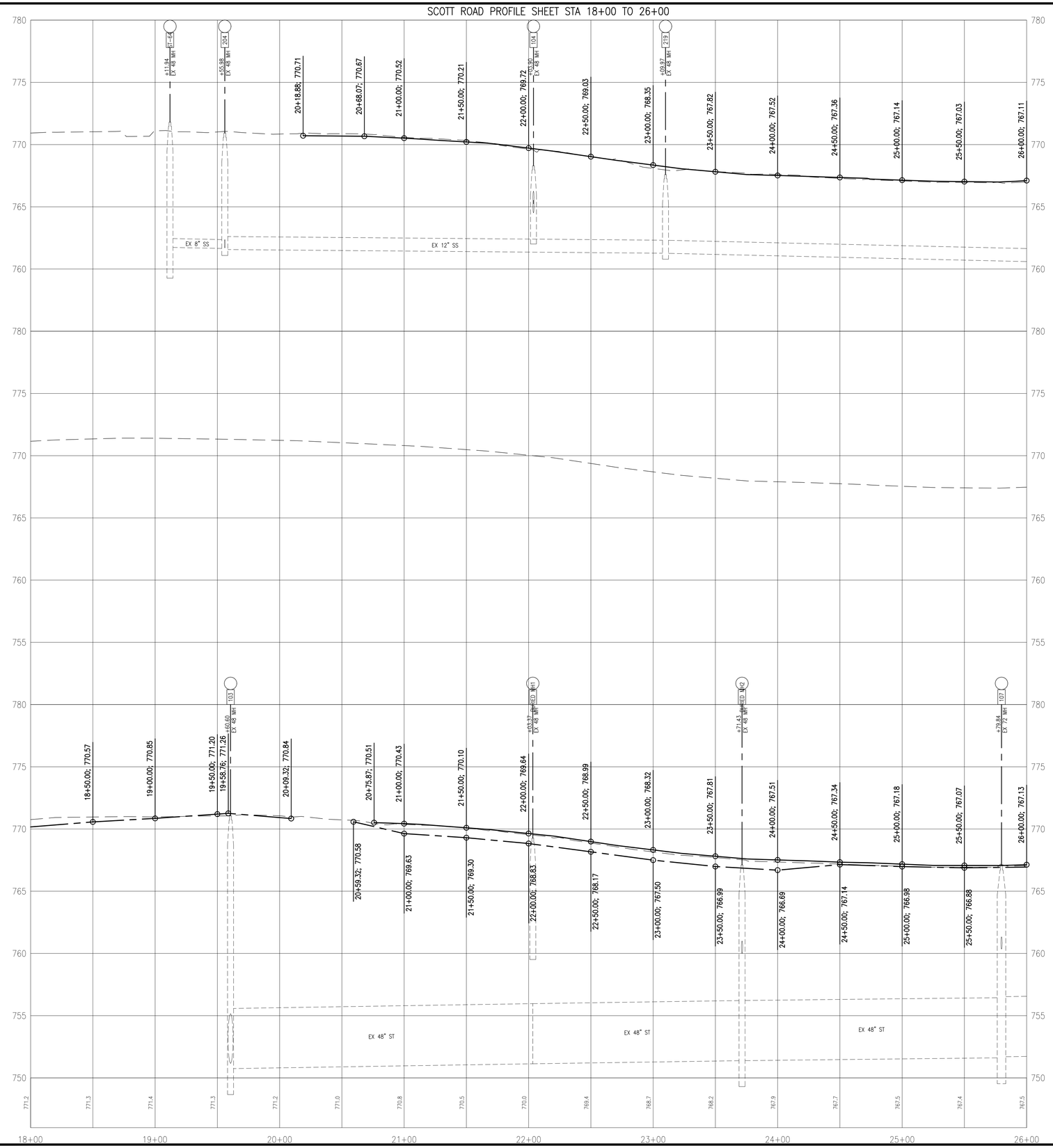
CAD STANDARD 2018
DESIGNED BY: - APPROVED BY: -
CHECKED BY: -



PROP LEFT EDGE OF PAVEMENT
EX GROUND AT LEFT EDGE OF PAVEMENT
EX GROUND AT CENTERLINE OF ROAD
PROP RIGHT EDGE OF PAVEMENT
EX GROUND AT RIGHT EDGE OF PAVEMENT
PROP FRONT OF PATH

PROFILE LEGEND

EXISTING 66.99 PROPOSED 67.99

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SCOTT ROAD PROFILE SHEET
STA 18+00 TO 26+00

REVISIONS

REV	DESCRIPTION	DATE

PROJ. #: 190139

DATE: 04/24/2020

SHEET

11

BID SET

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WHITE BLACK
WE RECYCLE

PLOTTED BY: SEBING, MICHAEL 4/24/2020 2:09 PM
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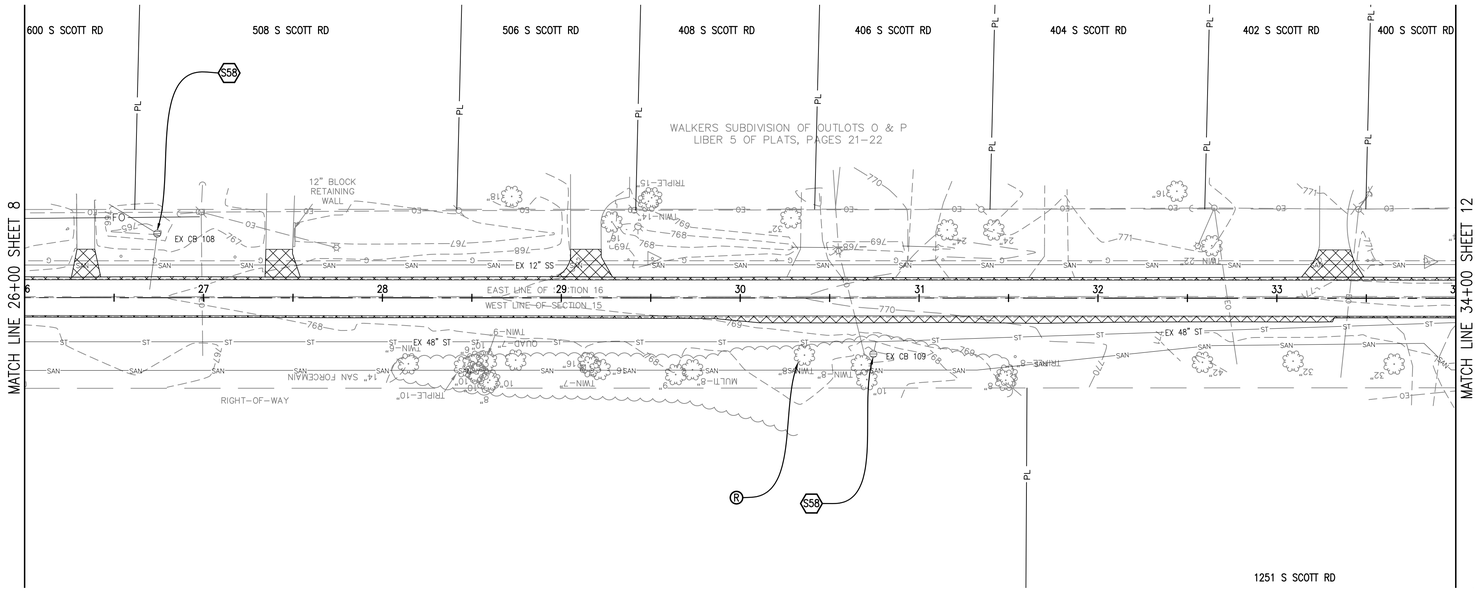
CAD ELEVATION:0.0 TO 1.0

DESIGNED BY: - APPROVED BY: -
CHECKED BY: -

SCOTT ROAD PLAN SHEET STA
26+00 TO 34+00



0 40 80 Feet

203619 PARTICIPATING REMOVAL QUANTITIES THIS SHEET

1	Ea	Stump, Rem, 6 inch to 18 inch

208128 PARTICIPATING REMOVAL QUANTITIES THIS SHEET

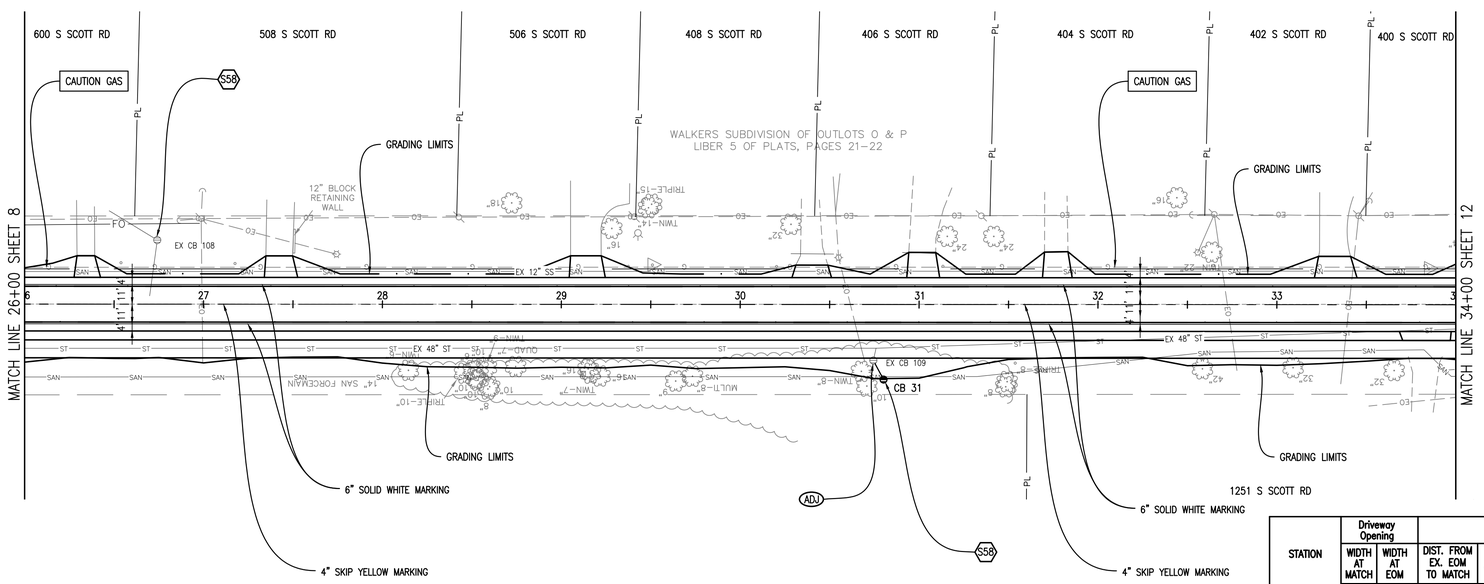
132	Syd	Pavt, Rem
336	Syd	HMA Surface, Rem

REMOVE EXISTING BITUMINOUS SURFACE SAWCUT AT REMOVAL LIMITS

REMOVE EXISTING CONCRETE SIDEWALK

S58 EROSION CONTROL ITEM. SEE SHEET 6 FOR DETAIL.

THE AREA WITHIN THE EARTH DISTURBANCE LIMITS IS APPROXIMATELY 4.87 ACRES.



203619 PARTICIPATING QUANTITIES THIS SHEET

800	Ft	Shared Use Path, Grading
1	Ea	Dr Structure, 48 inch dia
1	Ea	Dr Structure Cover, Type B
1	Ea	Dr Structure Cover, Type E
10	Ft	Sewer, Cl IV, 12 inch, Tr Det B
1	Ea	Dr Structure, Tap, 12 inch
100	Cyd	Subbase, CIP
7,700	Sft	Sidewalk, Conc, 4 inch
300	Sft	Sidewalk, Conc, 6 inch
16	Syd	Approach, Cl I, 6 inch
4	Ton	HMA Approach
1,500	Syd	Slope Restoration, Modified
1	Ea	Dr Structure Cover, Adj, Case 2

208128 PARTICIPATING QUANTITIES THIS SHEET

8	Ea	Erosion Control, Inlet Protection, Fabric Drop
8	Sta	Machine Grading, Modified
900	Syd	Aggregate Base, 8 inch
300	Cyd	Subbase, CIP
150	Ton	HMA, 4E1
1,600	Ft	Underdrain, Subbase, 4 inch
124	Syd	Approach, Cl I, 6 inch
27	Ton	HMA Approach
37	Syd	Driveway, Nonreinf Conc, 6 inch
8	Ea	Post, Mailbox
1,000	Syd	Slope Restoration, Modified
200	Ft	Pavt Mrkg, Waterborne, 4 inch, Yellow
1,600	Ft	Pavt Mrkg, Waterborne, 6 inch, White

STATION	Driveway Opening		DRIVEWAY APPROACHES					
	WIDTH AT MATCH	WIDTH AT EOM	DIST. FROM EX. EOM TO MATCH	DRIVE APPROACH SLOPE	Approach, Cl I, 6 inch	HMA, Approach (4 inch)	Driveway, Nonreinf Conc, 6 inch	Sidewalk, Conc, 6 inch
	Ft	Ft	Ft	%	Syd	Ton	Syd	Sft
26+34, LT	9.9	14.5	15.6	−1.3	–	–	15.4	–
27+42, LT	14.9	18.4	15.5	−0.7	–	–	21.1	–
29+14, LT	17.1	20.0	15.4	1.4	23.2	5	–	–
30+40, LT	12.6	19.9	10.4	1.0	26.9	6	–	–
31+02, LT	15.0	18.2	17.7	1.5	24.3	5	–	–
31+77, LT	13.1	16.4	17.9	1.9	22.3	5	–	–
33+32, LT	17.4	23.3	15.2	0.4	27.4	6	–	–
33+83, RT	26.5	29.5	19.0	1.3,2.0	16.2	4	–	300
TOTALS					140.3	31	36.5	300

DRIVEWAY TABLE FOR INFORMATION ONLY

PROPOSED LEGEND

ADJ	ADJUST
U	UTILITY CO. TO RELOCATE
REL	RELOCATE
R	REMOVE
BH	BULKHEAD
AB	ABANDON
B/O	RELOCATE BY OTHERS

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SCOTT ROAD PLAN SHEET STA
26+00 TO 34+00

REVISIONS

REV	DESCRIPTION	DATE

PROJ. #: 190139

DATE: 04/24/2020

SHEET 12

BID SET

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WHITE BLACK
WE RECYCLE

PLOTTED BY: SEUNG, MICHAEL 4/24/2020 2:58 PM
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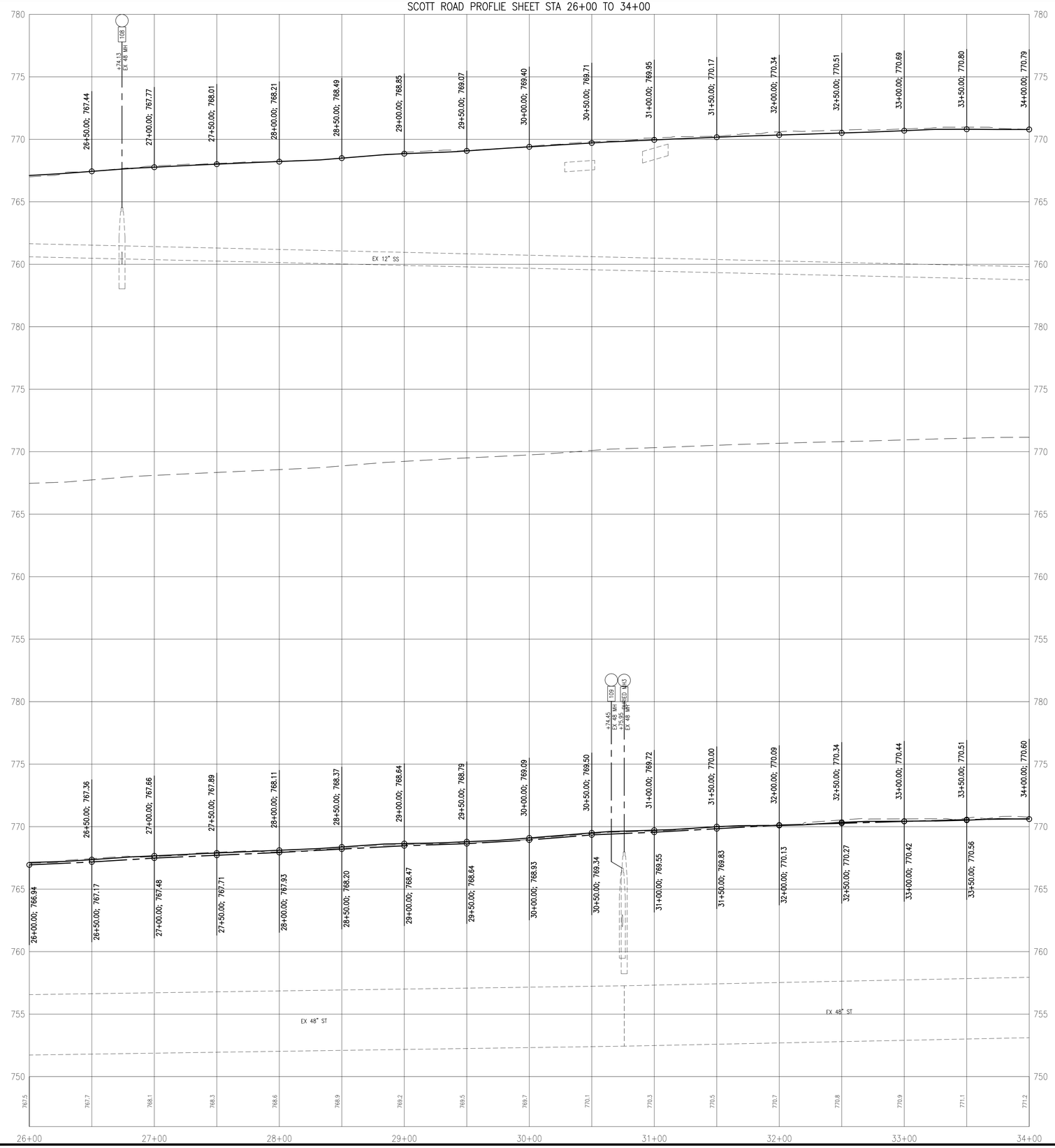
CAD STANDARDS 018

DESIGNED BY: - APPROVED BY: -
CHECKED BY: -

SCOTT ROAD PROFLIE SHEET STA 26+00 TO 34+00



PROP LEFT EDGE OF PAVEMENT
EX GROUND AT LEFT EDGE OF PAVEMENT
EX GROUND AT CENTERLINE OF ROAD
PROP RIGHT EDGE OF PAVEMENT
EX GROUND AT RIGHT EDGE OF PAVEMENT
PROP FRONT OF PATH

PROFILE LEGEND

EXISTING
PROPOSED

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WHITE BLACK
WE RECYCLE

PLOTTED BY: SEBING, MICHAEL 4/24/2020 2:09 PM
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CAD ELEVATION 0.0

DESIGNED BY: -
APPROVED BY: -
CHECKED BY: -

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SCOTT ROAD PROFLIE SHEET
STA 26+00 TO 34+00

REVISIONS

REV	DESCRIPTION	DATE

PROJ. #: 190139

DATE: 04/24/2020

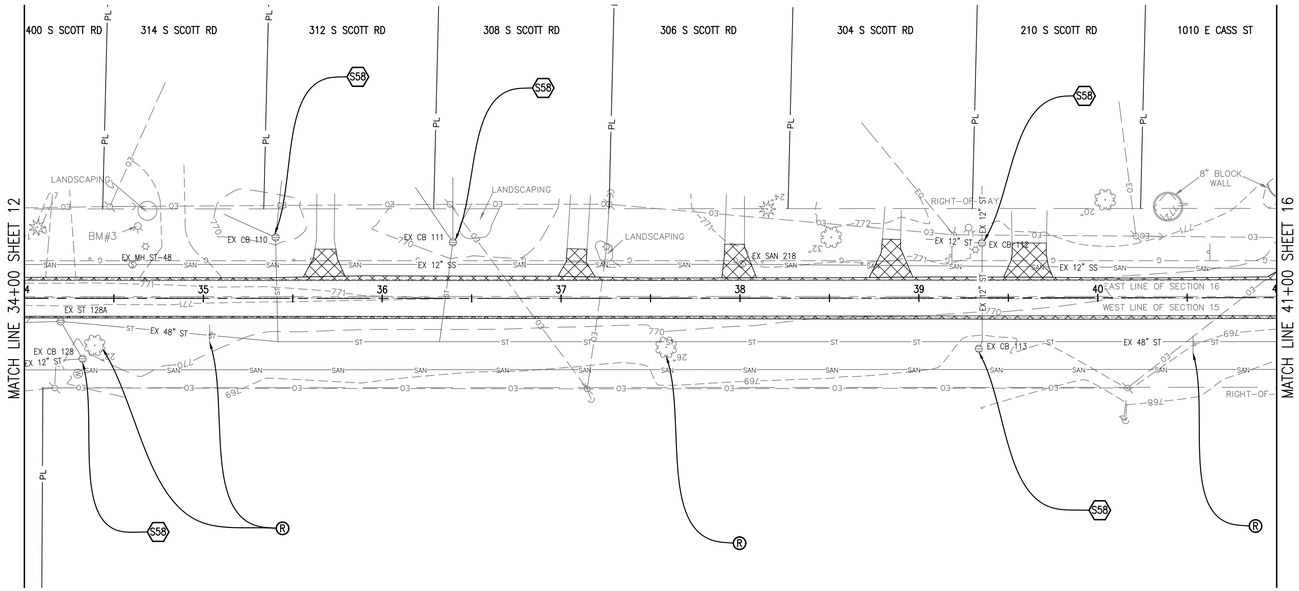
SHEET
13

BID SET

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WHITE BLACK

WE RECYCLE

SCOTT ROAD PLAN SHEET STA 34+00 TO 41+00



BENCHMARKS
B.M. #3 – NORTHWEST FLANGE BOLT ON HYDRANT UNDER "M" IN MICHIGAN ON WEST SIDE OF SCOTT ROAD, 650'± SOUTH OF CASS STREET
ELEV. 771.68' NAVD 88

0 40 80 Feet

203619 PARTICIPATING REMOVAL QUANTITIES THIS SHEET

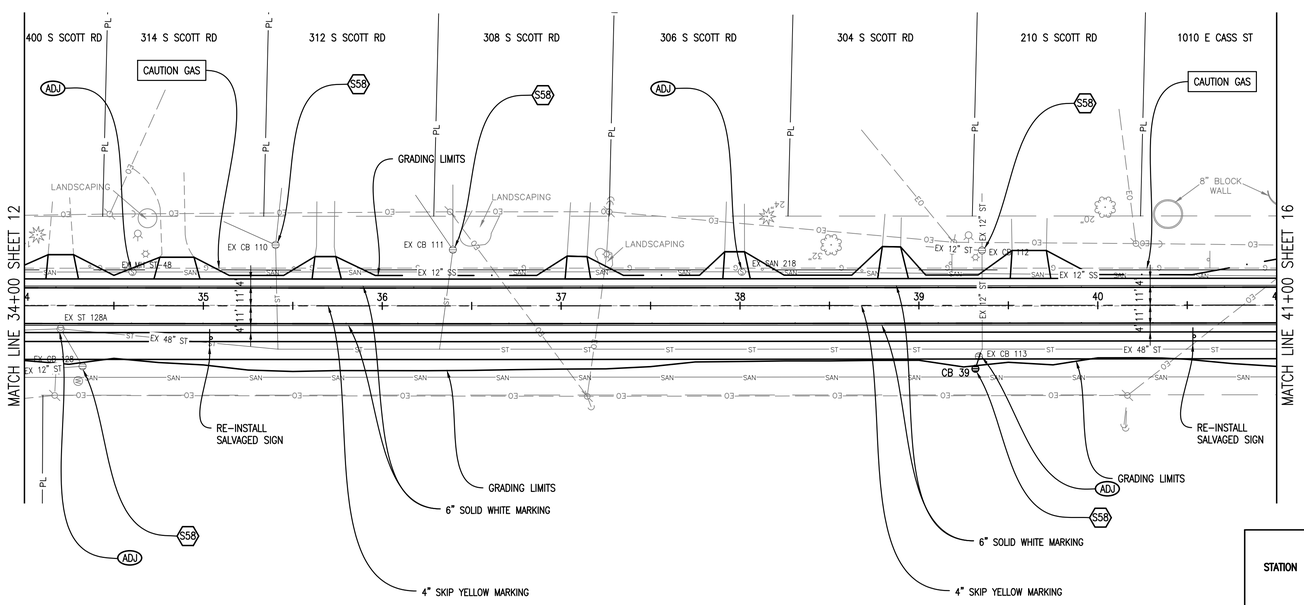
2	Ea	Sign, Type III, Rem
2	Ea	Stump, Rem, 19 inch to 36 inch

208128 PARTICIPATING REMOVAL QUANTITIES THIS SHEET

165	Syd	Pavt, Rem
246	Syd	HMA Surface, Rem

REMOVE EXISTING BITUMINOUS SURFACE SAWCUT AT REMOVAL LIMITS

REMOVE EXISTING CONCRETE SIDEWALK



S58 EROSION CONTROL ITEM. SEE SHEET 6 FOR DETAIL.

THE AREA WITHIN THE EARTH DISTURBANCE LIMITS IS APPROXIMATELY 4.87 ACRES.

203619 PARTICIPATING QUANTITIES THIS SHEET

800	Ft	Shared Use Path, Grading
1	Ea	Dr Structure, 48 inch dia
1	Ea	Dr Structure Cover, Type B
1	Ea	Dr Structure Cover, Type E
10	Ft	Sewer, Cl IV, 12 inch, Tr Det B
1	Ea	Dr Structure, Tap, 12 inch
100	Cyd	Subbase, CIP
8,000	Sft	Sidewalk, Conc, 4 inch
2	Ea	Sign, Type III, Erect, Salv
32	Ft	Post, Steel, 3 lb
1,500	Syd	Slope Restoration, Modified
1	Ea	Dr Structure Cover, Adj, Case 2

208128 PARTICIPATING QUANTITIES THIS SHEET

5	Ea	Erosion Control, Inlet Protection, Fabric Drop
8	Sta	Machine Grading, Modified
900	Syd	Aggregate Base, 8 inch
300	Cyd	Subbase, CIP
150	Ton	HMA, 4E1
1,600	Ft	Underdrain, Subbase, 4 inch
232	Syd	Driveway, Nonreinf Conc, 6 inch
4	Ea	Post, Mailbox
1,000	Syd	Slope Restoration, Modified
1	Ea	Dr Structure Cover, Adj, Case 1
2	Ea	Sanitary Structure Cover, Adj, Case 1
200	Ft	Pavt Mrkg, Waterborne, 4 inch, Yellow
1,600	Ft	Pavt Mrkg, Waterborne, 6 inch, White

STATION	Driveway Opening		DRIVEWAY APPROACHES					
	WIDTH AT MATCH	WIDTH AT EOM	DIST. FROM EX. EOM TO MATCH	DRIVE APPROACH SLOPE	Approach, Cl I, 6 inch	HMA, Approach (4 inch)	Driveway, Nonreinf Conc, 6 inch	Sidewalk, Conc, 6 inch
	Ft	Ft	Ft	%	Syd	Ton	Syd	Sft
34+20, LT	14.3	17.9	16.8	1.1	22.6	5	–	–
34+85, LT	19.1	25.1	15.6	−2.7	28.7	6	–	–
35+68, LT	11.7	15.9	15.3	−2.8	–	–	17.7	–
37+09, LT	11.2	14.1	15.5	−1.6	–	–	16.6	–
38+00, LT	11.1	15.1	18.7	4.0	20.7	5	–	–
38+84, LT	10.2	16.8	21.2	6.8	25.1	6	–	–
39+61, LT	19.2	22.5	19.0	5.0	–	–	34.2	–
TOTALS					97.1	22	68.5	–

DRIVEWAY TABLE FOR INFORMATION ONLY

PROPOSED LEGEND

ADJ	ADJUST
U	UTILITY CO. TO RELOCATE
REL	RELOCATE
R	REMOVE
BH	BULKHEAD
AB	ABANDON
B/O	RELOCATE BY OTHERS

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CITY OF ST JOHNS
SCOTT ROAD IMPROVEMENTS
CLINTON COUNTY, MI

SCOTT ROAD PLAN SHEET STA 34+00 TO 41+00

REVISIONS

REV	DESCRIPTION	DATE

PROJ. #: 190139
DATE: 04/24/2020
SHEET 14

BID SET

PLOTTED BY: SEUNG, MICHAEL 4/24/2020 2:58 PM
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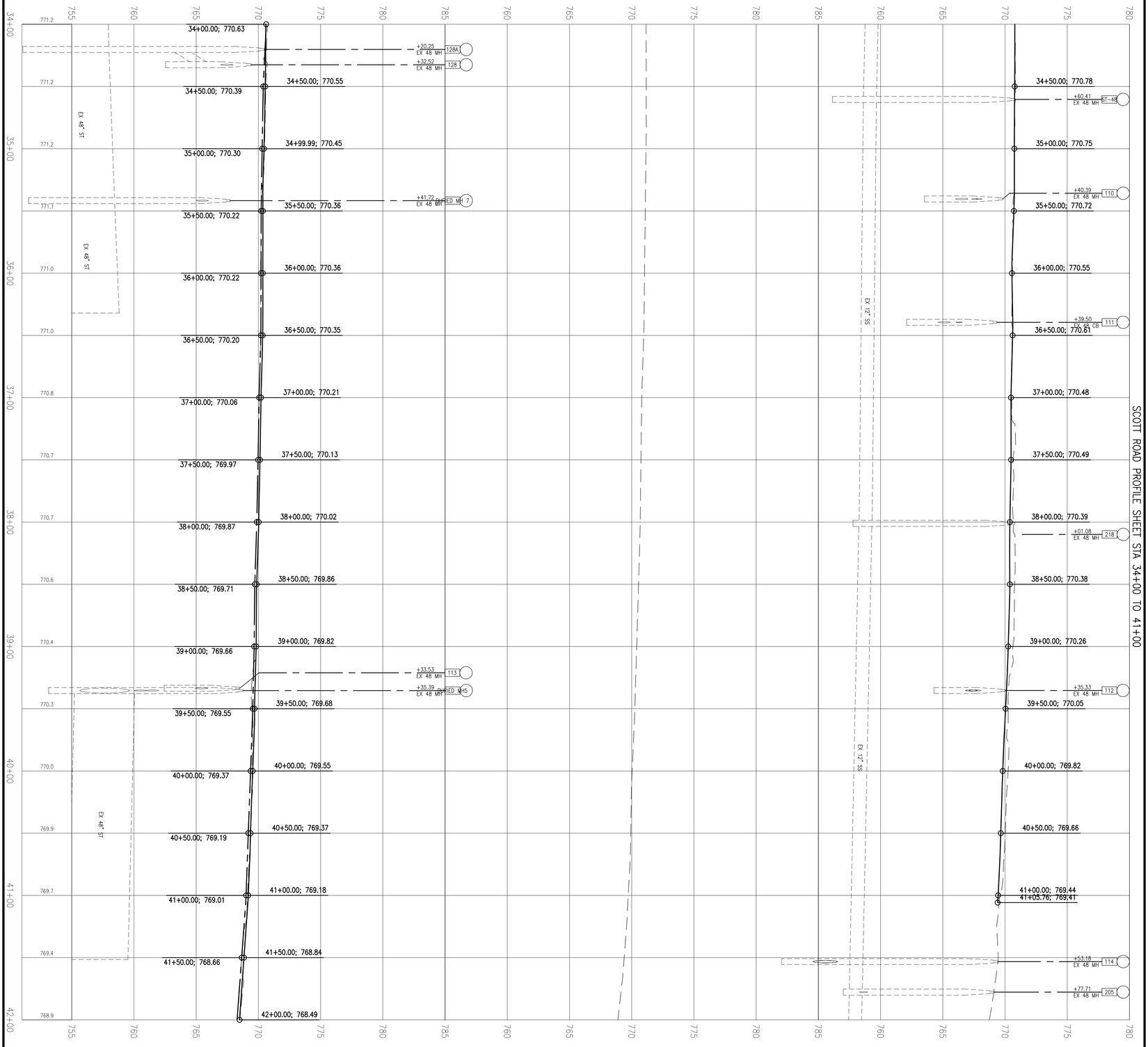
CAD STANDARD 2018
DESIGNED BY: -
CHECKED BY: -
APPROVED BY: -

PLOTTED BY: SEUING, MICHAEL 4/24/2020 2:59 PM
S:\2019\190139_StJohns_ScottRd\Drawings\Sheets\190139_ScottRd_ProfileSheets.dwg - SCOTT ROAD PROFILE SHEET STA 34+00 TO 41+00
C2AE.STANDARD.STB

DESIGNED BY: - APPROVED BY: -

CHECKED BY: -

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WHITE BLACK
WE RECYCLE



PROP RIGHT EDGE OF PAVEMENT
EX GROUND AT RIGHT EDGE OF PAVEMENT
PROP FRONT OF PATH

EX GROUND AT CENTERLINE OF ROAD

PROP LEFT EDGE OF PAVEMENT
EX GROUND AT LEFT EDGE OF PAVEMENT

999.9 EXISTING
999.99 PROPOSED

PROFILE LEGEND

REV	DESCRIPTION	DATE

REVISIONS

SCOTT ROAD PROFILE SHEET
STA 34+00 TO 41+00

CITY OF ST JOHNS
SCOTT ROAD IMPROVEMENTS
CLINTON COUNTY, MI

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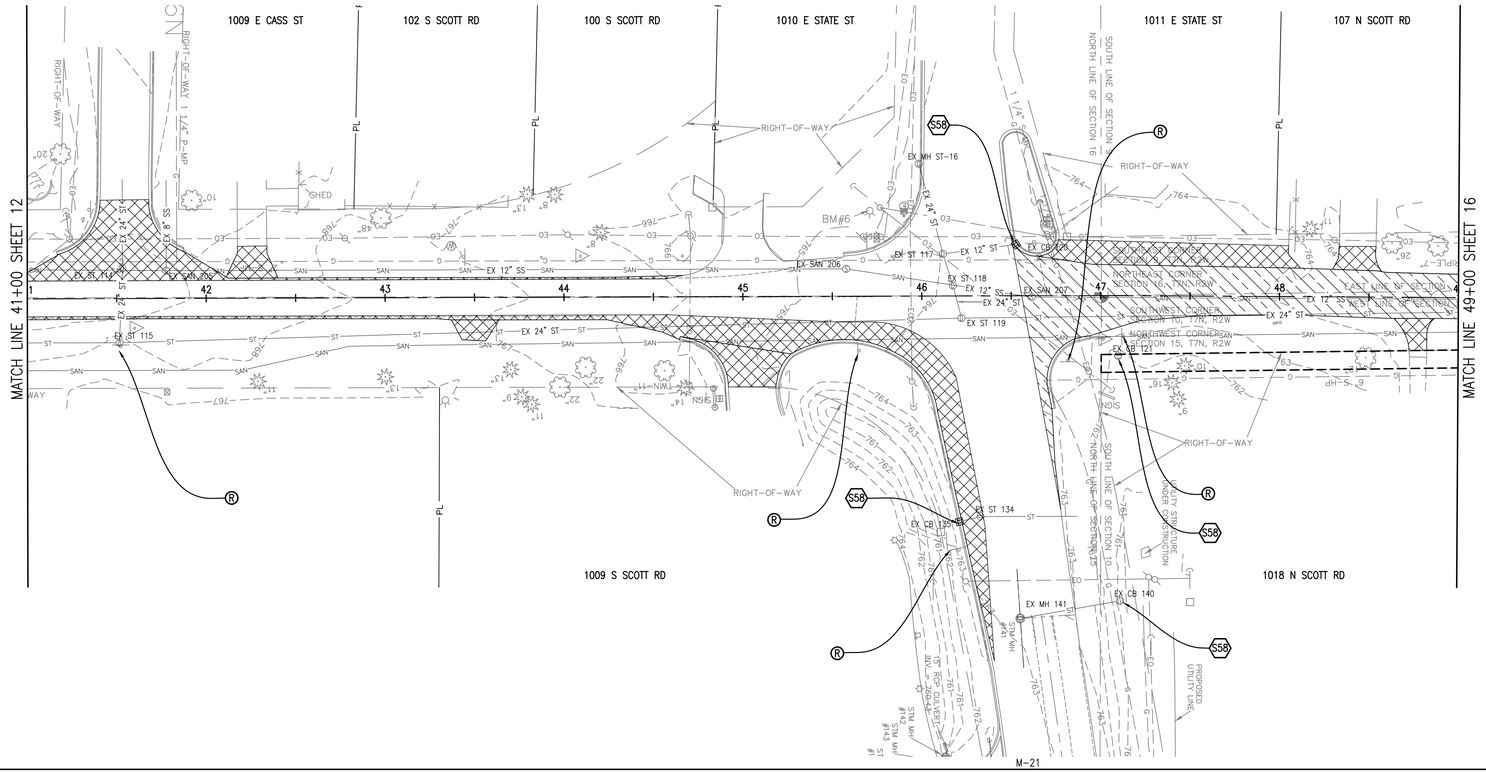
PROJ. # 190139
DATE 04/24/2020
SHEET 15

BID SET

SCOTT ROAD PLAN SHEET STA 41+00 TO 49+00



BENCHMARKS
B.M. #6 – WEST FLANGE BOLT ON HYDRANT UNDER "1" IN 1979 ON SOUTH SIDE OF STATE STREET/M-21 & WEST SIDE OF SCOTT ROAD
ELEV. 767.35' NAVD 88

0 40 80 Feet

203619 PARTICIPATING REMOVAL QUANTITIES THIS SHEET

66	Syd	Pavt, Rem
4	Ea	Sign, Type III, Rem

208128 PARTICIPATING REMOVAL QUANTITIES THIS SHEET

30	Syd	Pavt, Rem
405	Ft	Curb and Gutter, Rem
850	Syd	HMA Surface, Rem
1	Ea	Sign, Type III, Rem

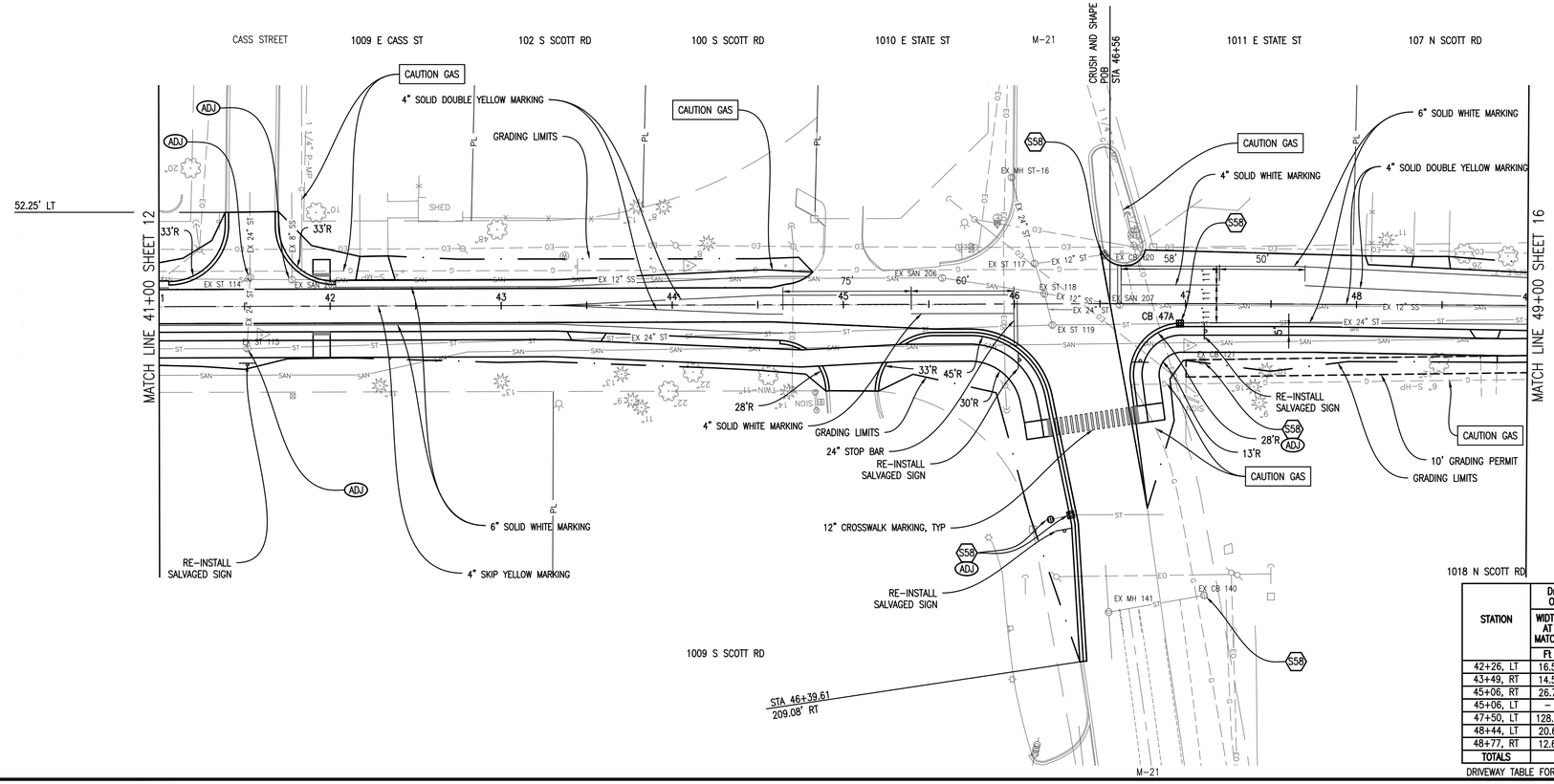
NON-PARTICIPATING REMOVAL QUANTITIES THIS SHEET

221	Syd	Pavt, Rem
884	Syd	HMA Base Crushing and Shaping

CRUSH AND SHAPE EXISTING BITUMINOUS SURFACE
REMOVE EXISTING BITUMINOUS SURFACE SAWCUT AT REMOVAL LIMITS
REMOVE EXISTING CONCRETE SIDEWALK

S58 EROSION CONTROL ITEM. SEE SHEET 6 FOR DETAIL.

THE AREA WITHIN THE EARTH DISTURBANCE LIMITS IS APPROXIMATELY 4.87 ACRES.



208128 PARTICIPATING QUANTITIES THIS SHEET

2	Ea	Erosion Control, Inlet Protection, Fabric Drop
3.6	Sta	Machine Grading, Modified
1	Ea	Dr Structure Cover, Type E
1	Ea	Dr Structure Cover, Type K
740	Syd	Aggregate Base, 8 inch
245	Cyd	Subbase, CIP
125	Ton	HMA, 4E1
560	Ft	Curb and Gutter, Conc, Det F4
1,277	Ft	Underdrain, Subbase, 4 inch
30	Syd	Driveway, Nonreinf Conc, 6 inch
2	Ea	Post, Mailbox
1	Ea	Sign, Type III, Erect, Salv
16	Ft	Post, Steel, 3 lb
500	Syd	Slope Restoration, Modified
1	Ea	Dr Structure Cover, Adj, Case 1
1	Ea	Sanitary Structure Cover, Adj, Case 1
667	Ft	Pavt Mrkg, Waterborne, 4 inch. Yellow
60	Ft	Pavt Mrkg, Waterborne, 4 inch, White
646	Ft	Pavt Mrkg, Waterborne, 6 inch, White
30	Ft	Pavt Mrkg, Ovly Cold Plastic, 24 inch, Stop Bar

203619 PARTICIPATING QUANTITIES THIS SHEET

750	Ft	Shared Use Path, Grading
95	Cyd	Subbase, CIP
6,525	Sft	Sidewalk, Conc, 4 inch
850	Sft	Sidewalk, Conc, 6 inch
815	Sft	Sidewalk Ramp, Conc, 6 inch
50	Ft	Detectable Warning Surface
65	Ft	Curb Ramp Opening, Conc
197	Syd	Approach, Cl I, 6 inch
41	Ton	HMA, Approach
96	Ft	Post, Steel, 3 lb
4	Ea	Sign, Type III, Erect, Salv
1,000	Syd	Slope Restoration, Modified
2	Ea	Dr Structure Cover, Adj, Case 2
140	Ft	Pavt Mrkg, Ovly Cold Plastic, 12 inch, Crosswalk

NON-PARTICIPATING QUANTITIES THIS SHEET

4	Ea	Erosion Control, Inlet Protection, Fabric Drop
2.4	Sta	Machine Grading, Modified
1	Ea	Dr Structure, 60 inch dia
1	Ea	Dr Structure Cover, Type K
190	Ton	HMA, 13A
400	Ft	Underdrain, Subbase, 4 inch
240	Syd	Approach, Cl I, 6 inch
52	Ton	HMA Approach
50	Syd	Slope Restoration, Modified
1	Ea	Sanitary Structure Cover, Adj, Case 1
734	Ft	Pavt Mrkg, Waterborne, 4 inch. Yellow
60	Ft	Pavt Mrkg, Waterborne, 4 inch, White
440	Ft	Pavt Mrkg, Waterborne, 6 inch, White
22	Ft	Pavt Mrkg, Ovly Cold Plastic, 24 inch, Stop Bar

STATION	Driveway Opening		DRIVEWAY APPROACHES					
	WIDTH AT MATCH	WIDTH AT EOM	DIST. FROM EX. EOM TO MATCH	DRIVE APPROACH SLOPE	Approach, Cl I, 6 inch	HMA, Approach (4 inch)	Driveway, Nonreinf Conc, 6 inch	Sidewalk, Conc, 6 inch
	Ft	Ft	Ft	%	Syd	Ton	Syd	Sft
42+26, LT	16.5	22.9	17.9	2.4	–	–	30.1	–
43+49, RT	14.5	16.2	11.6	–1.0,1.5	8.9	2	–	200
45+06, RT	26.7	95.7	26.2	1.0,1.5	188.0	41	–	–
45+06, LT	–	–	–	–	–	–	–	–
47+50, LT	128.6	145.0	12.8	0.5	185.1	41	–	–
48+44, LT	20.6	24.6	13.3	–1.8	29.9	7	–	–
48+77, RT	12.6	16.6	21.6	–4.1,1.5	6.7	2	–	150
TOTALS					418.6	93	30.1	350

DRIVEWAY TABLE FOR INFORMATION ONLY

PROPOSED LEGEND

ADJ	ADJUST
U	UTILITY CO. TO RELOCATE
REL	RELOCATE
R	REMOVE
BH	BULKHEAD
AB	ABANDON
B/O	RELOCATE BY OTHERS

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CLINTON COUNTY, MI

SCOTT ROAD PLAN SHEET STA 41+00 TO 49+00

REVISIONS

REV	DESCRIPTION	DATE

PROJ. #: 190139
DATE: 04/24/2020
SHEET 16

BID SET

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WE RECYCLE

PLOTTED BY: SEB ING, MICHAEL 4/24/2020 2:09 PM
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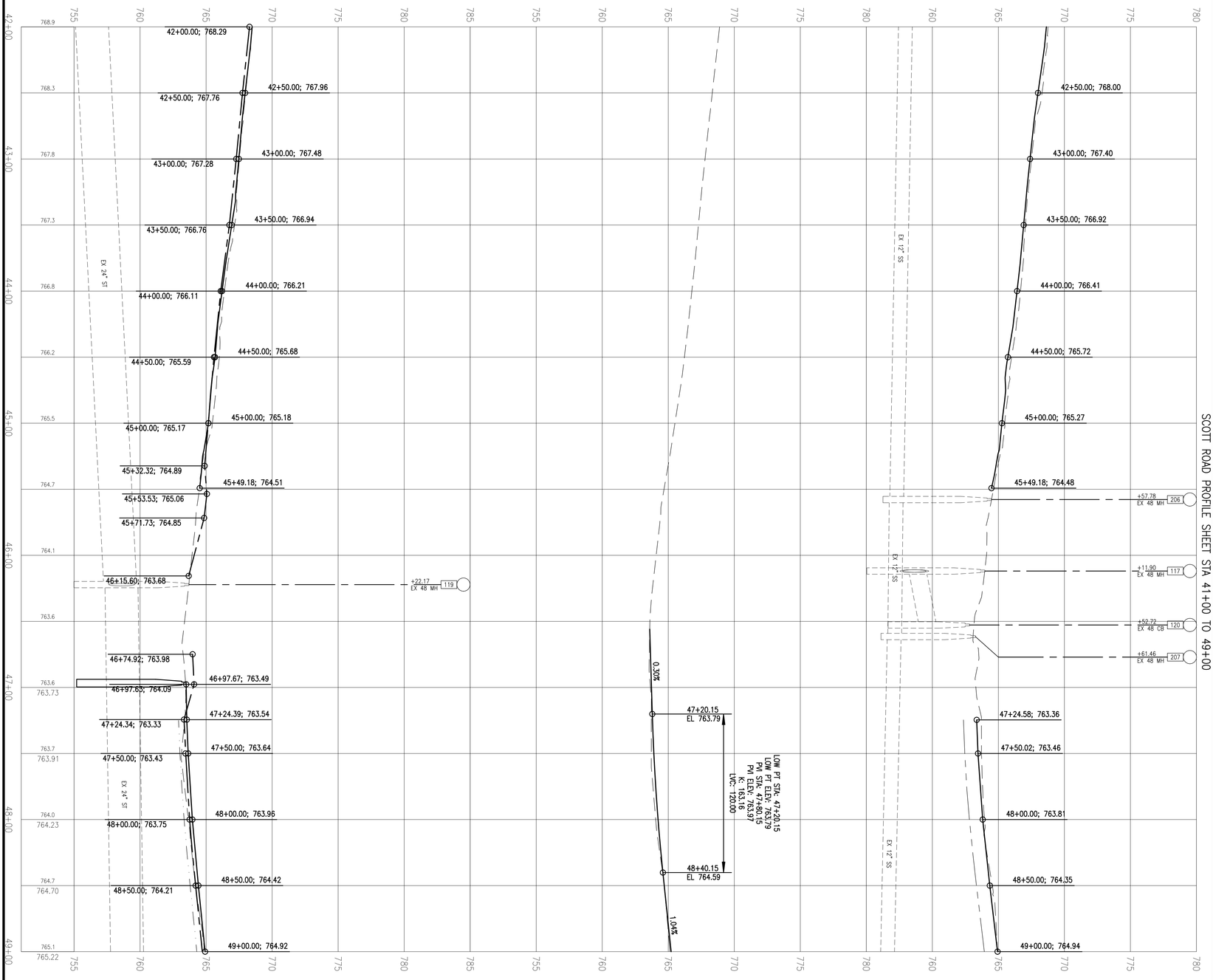
DESIGNED BY: APPROVED BY:
CHECKED BY:



PROP RIGHT EDGE OF PAVEMENT
EX GROUND AT RIGHT EDGE OF PAVEMENT
PROP FRONT OF PATH
PROP RIGHT SWALE

PROP PLAN GRADE AT CENTERLINE OF ROAD
EX GROUND AT CENTERLINE OF ROAD

PROP LEFT EDGE OF PAVEMENT
EX GROUND AT LEFT EDGE OF PAVEMENT
PROP LEFT SWALE

PROFILE LEGEND

999.9 EXISTING
999.99 PROPOSED

REV	DESCRIPTION	DATE
	REVISIONS	

SHEET 17
DATE: 04/24/2020
PROJ. #: 190139

SCOTT ROAD PROFILE SHEET
STA 41+00 TO 49+00

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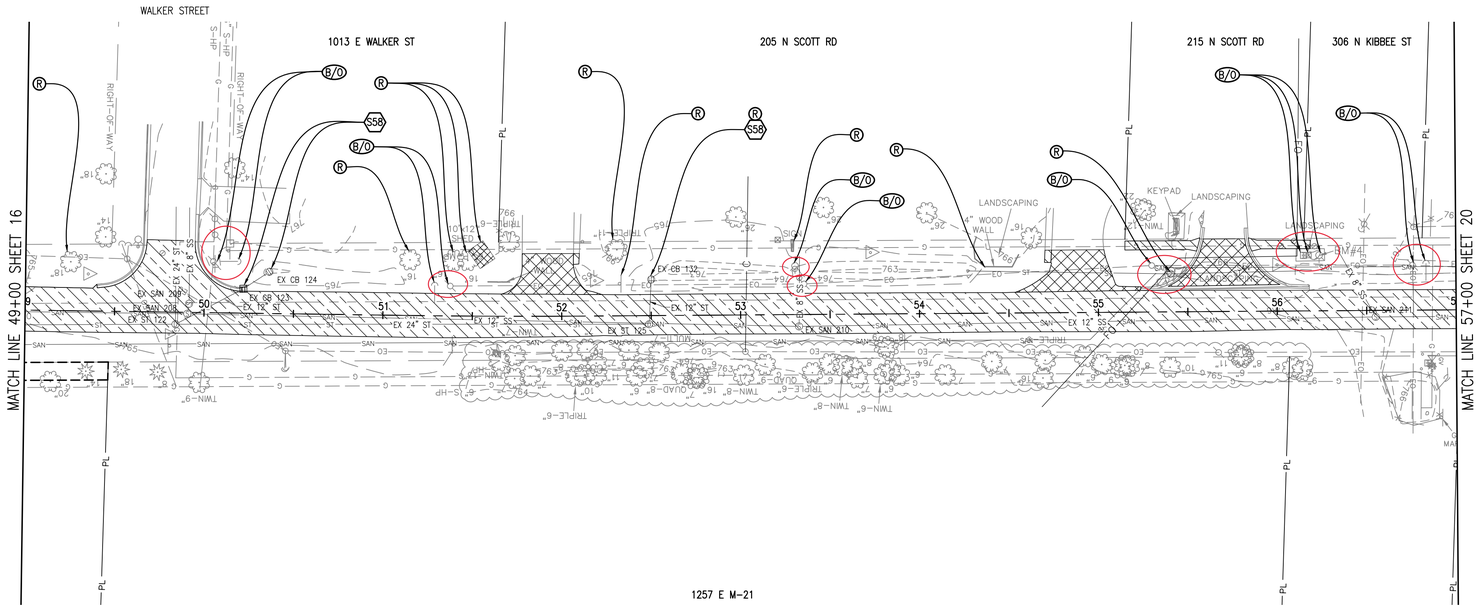
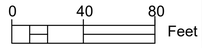
BID SET

BENCHMARKS
B.M. #4 – NORTHWEST FLANGE BOLT ON HYDRANT UNDER "M" IN MADE ON WEST SIDE OF SCOTT ROAD, 600'± NORTH OF WALKER STREET
ELEV. 767.58' NAVD 88

SCOTT ROAD PLAN SHEET STA 49+00 TO 57+00





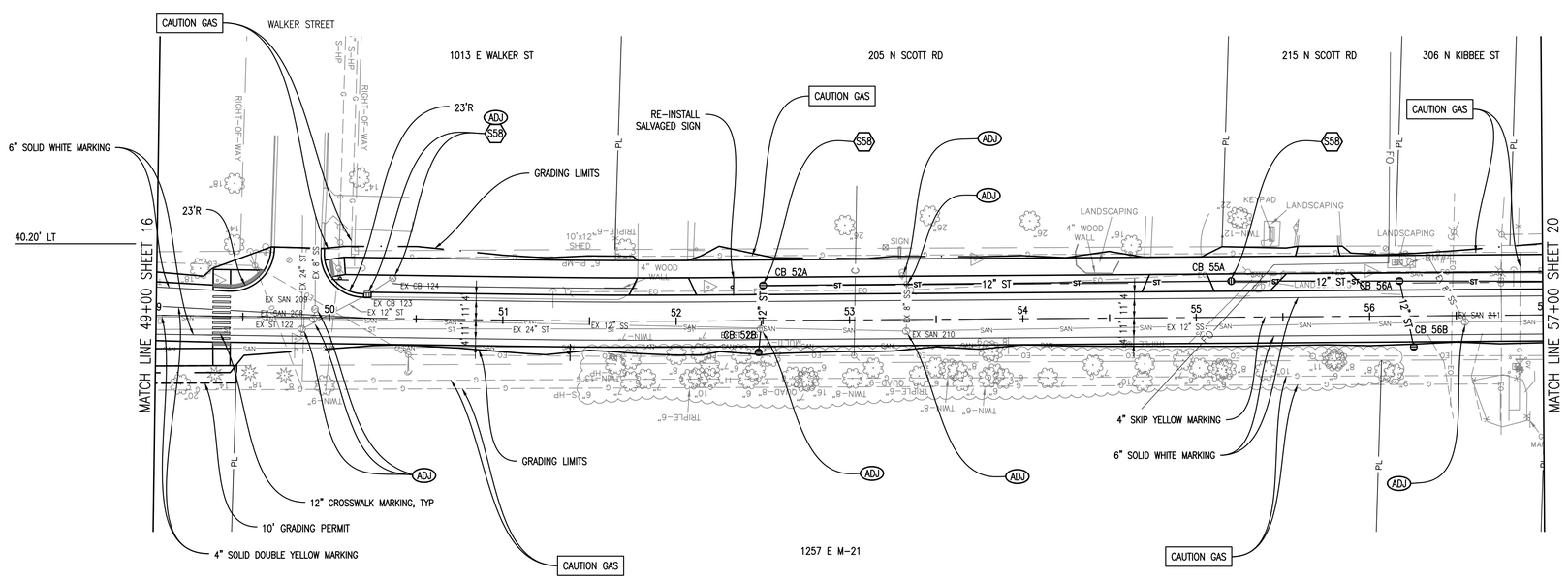
203619 PARTICIPATING REMOVAL QUANTITIES THIS SHEET

303	Syd	Pavt, Rem
269	Ft	Curb and Gutter, Rem
47	Syd	Sidewalk, Rem
4	Ea	Stump, Rem, 6 inch to 18 inch
1	Ea	Sign, Type III, Rem

NON-PARTICIPATING REMOVAL QUANTITIES THIS SHEET

2,180	Syd	HMA Base Crushing and Shaping
3	Ea	Dr Structure, Rem
200	Ft	Sewer, Rem, Less than 24 inch

DEMOLISH EXISTING BUILDING
CRUSH AND SHAPE EXISTING BITUMINOUS SURFACE
REMOVE EXISTING BITUMINOUS SURFACE SAWCUT AT REMOVAL LIMITS
REMOVE EXISTING CONCRETE SIDEWALK



S58 EROSION CONTROL ITEM. SEE SHEET 6 FOR DETAIL.

THE AREA WITHIN THE EARTH DISTURBANCE LIMITS IS APPROXIMATELY 4.87 ACRES.

203619 PARTICIPATING QUANTITIES THIS SHEET

808	Ft	Shared Use Path, Grading
100	Cyd	Subbase, CIP
6,780	Sft	Sidewalk, Conc, 4 inch
1,100	Sft	Sidewalk, Conc, 6 inch
470	Sft	Sidewalk Ramp, Conc, 6 inch
56	Ft	Detectable Warning Surface
46	Ft	Curb Ramp Opening, Conc
80	Ft	Curb and Gutter, Conc, Det F4
132	Syd	Approach, Cl I, 6 inch
29	Ton	HMA Approach
1	Ea	Sign, Type III, Erect, Salv
32	Ft	Post, Steel, 3 lb
1	Ea	Gate Box, Adj, Case 2
2,500	Syd	Slope Restoration, Modified
90	Ft	Pavt Mrkg, Ovly Cold Plastic, 12 inch, Crosswalk

NON-PARTICIPATING QUANTITIES THIS SHEET

4	Ea	Erosion Control, Inlet Protection, Fabric Drop
8	Sta	Machine Grading, Modified
2	Ea	Dr Structure, 24 inch dia
3	Ea	Dr Structure, 48 inch dia
5	Ea	Dr Structure Cover, Modified
523	Ft	Sewer, Cl A, 12 inch, Tr Det B, Modified
465	Ton	HMA, 13A
800	Ft	Underdrain, Subbase, 4 inch
500	Syd	Slope Restoration, Modified
3	Ea	Dr Structure Cover, Adj, Case 1
4	Ea	Sanitary Structure Cover, Adj, Case 1
667	Ft	Pavt Mrkg, Waterborne, 4 inch, Yellow
1,510	Ft	Pavt Mrkg, Waterborne, 6 inch, White

STATION	Driveway Opening		DRIVEWAY APPROACHES					
	WIDTH AT MATCH	WIDTH AT EOM	DIST. FROM EX. EOM TO MATCH	DRIVE APPROACH SLOPE	Approach, Cl I, 6 inch	HMA, Approach (4 inch)	Driveway, Nonreinf Conc, 6 inch	Sidewalk, Conc, 6 inch
	Ft	Ft	Ft	%	Syd	Ton	Syd	Sft
51+92, LT	29.4	38.9	22.8	0.9	37.9	8	–	350
54+90, LT	33.1	41.7	23.2	0.3	41.9	9	–	350
55+70, LT	25.7	60.9	28.0	0.3	52.6	12	–	400
TOTALS					132.4	29	–	1,100

DRIVEWAY TABLE FOR INFORMATION ONLY

PROPOSED LEGEND

ADJ	ADJUST
U	UTILITY CO. TO RELOCATE
REL	RELOCATE
R	REMOVE
BH	BULKHEAD
AB	ABANDON
B/O	RELOCATE BY OTHERS

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SCOTT ROAD PLAN SHEET STA 49+00 TO 57+00

REVISIONS

REV	DESCRIPTION	DATE

PROJ. #: 190139
DATE: 04/24/2020
SHEET 18

BID SET

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WHITE BLACK
WE RECYCLE

PLOTTED BY: SEUNG, MICHAEL 4/24/2020 3:06 PM
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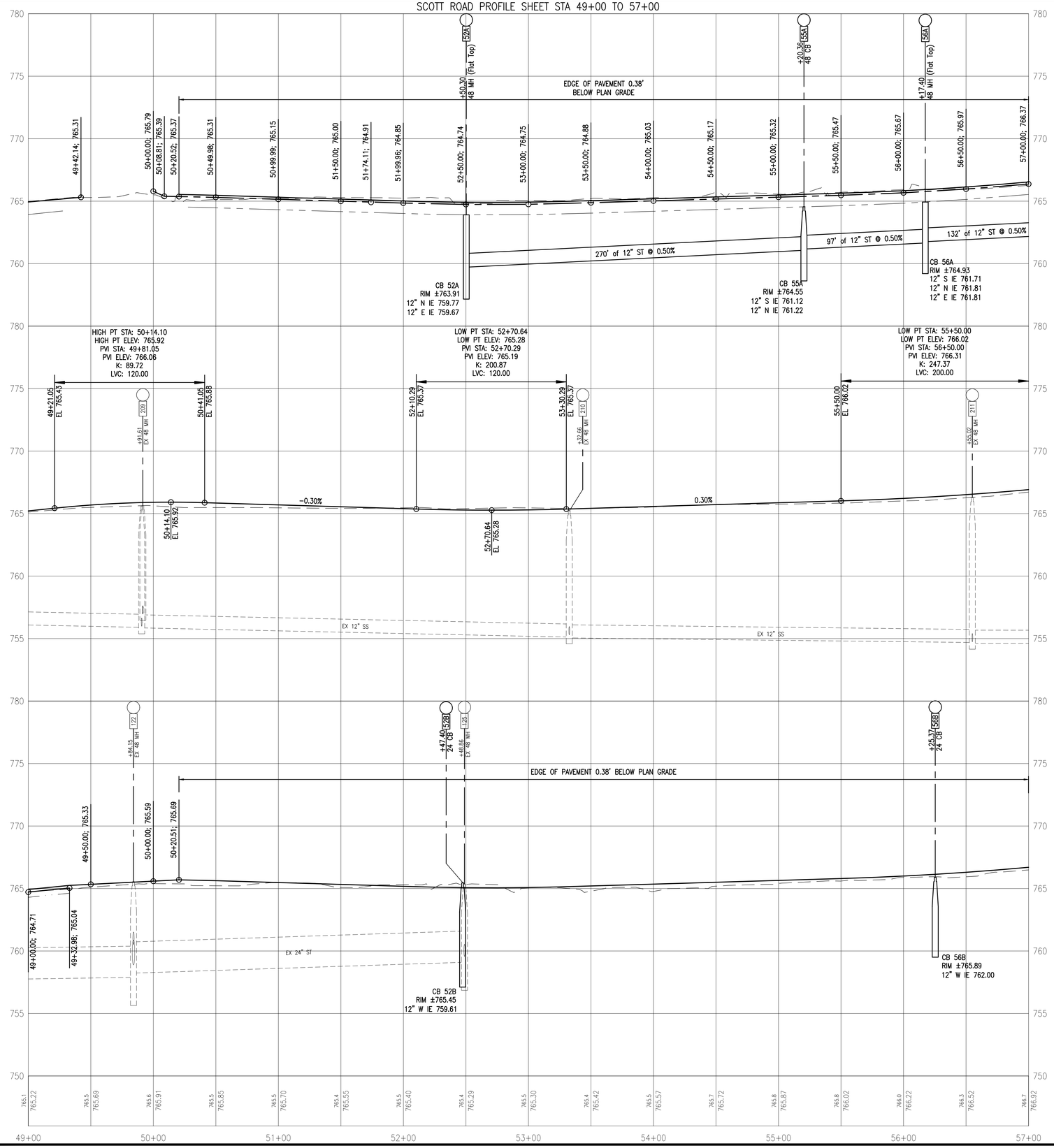
CHECKED BY: -

SCOTT ROAD PROFILE SHEET STA 49+00 TO 57+00



PROP LEFT EDGE OF PAVEMENT
EX GROUND AT LEFT EDGE OF PAVEMENT
PROP FRONT OF PATH
PROP LEFT SWALE

PROP PLAN GRADE AT CENTERLINE OF ROAD
EX GROUND AT CENTERLINE OF ROAD

PROP RIGHT EDGE OF PAVEMENT
EX GROUND AT RIGHT EDGE OF PAVEMENT
PROP FRONT OF PATH
PROP RIGHT SWALE

PROFILE LEGEND

EXISTING 765.69 | PROPOSED 765.69

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SCOTT ROAD PROFILE SHEET
STA 49+00 TO 57+00

REVISIONS

REV	DESCRIPTION	DATE

PROJ. #: 190139

DATE: 04/24/2020

SHEET 19

BID SET

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WHITE BLACK
WE RECYCLE

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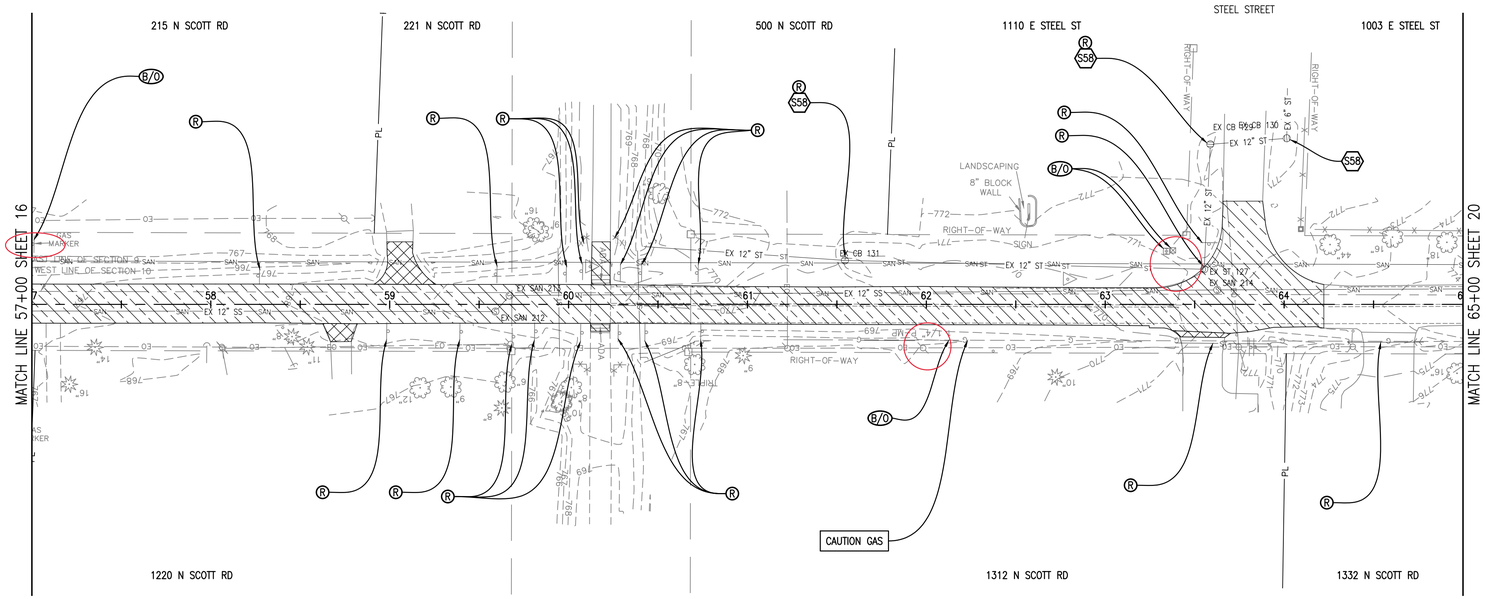
CHECKED BY: -

SCOTT ROAD PLAN SHEET STA
57+00 TO 65+00



0 40 80 Feet

203619 PARTICIPATING REMOVAL QUANTITIES THIS SHEET

49	Syd	Pavt, Rem
28	Syd	Sidewalk, Rem
8	Ea	Sign, Type III, Rem
12	Ft	Fence, Rem

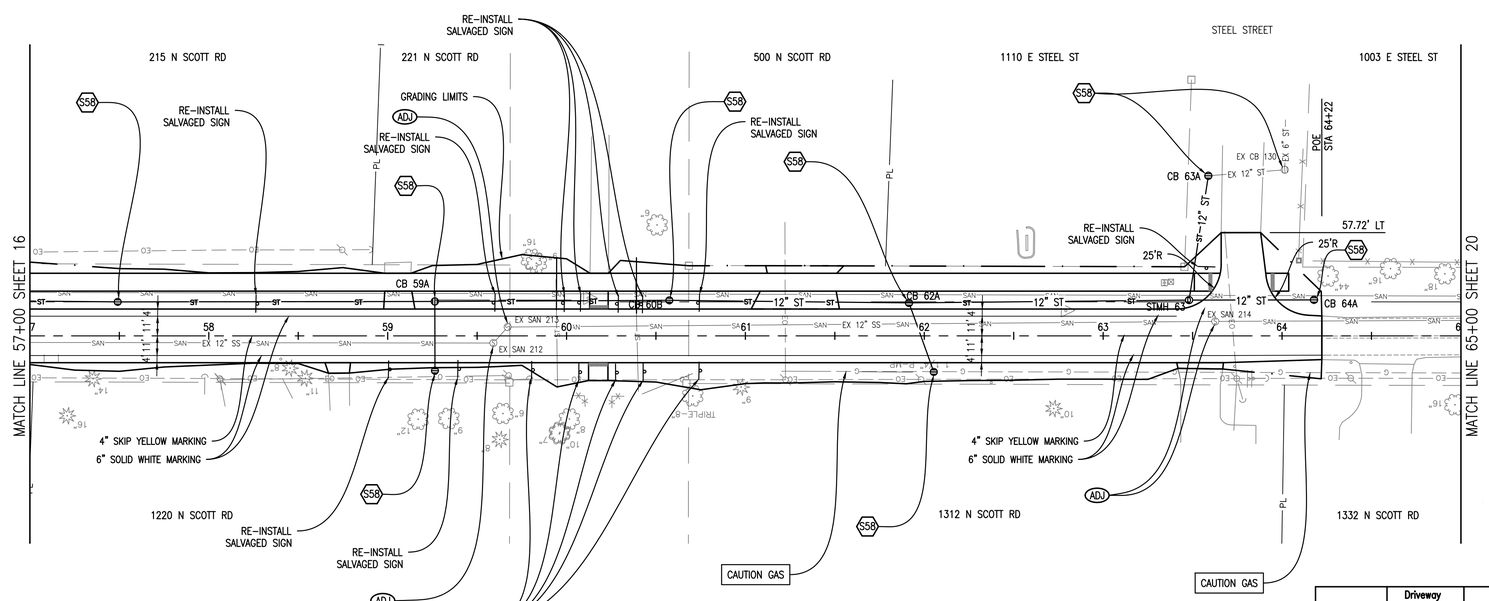
NON-PARTICIPATING REMOVAL QUANTITIES THIS SHEET

33	Syd	Pavt, Rem
1,950	Syd	HMA Base Crushing and Shaping
8	Ea	Sign, Rem
3	Ea	Dr Structure, Rem
382	Ft	Sewer, Rem, Less than 24 inch
2	Ea	Culv, Rem, Less than 24 inch

CRUSH AND SHAPE EXISTING BITUMINOUS SURFACE

REMOVE EXISTING BITUMINOUS SURFACE SAWCUT AT REMOVAL LIMITS

REMOVE EXISTING CONCRETE SIDEWALK



S58 EROSION CONTROL ITEM. SEE SHEET 6 FOR DETAIL.

THE AREA WITHIN THE EARTH DISTURBANCE LIMITS IS APPROXIMATELY 4.87 ACRES.

203619 PARTICIPATING QUANTITIES THIS SHEET

670	Ft	Shared Use Path, Grading
40	Cyd	Subbase, CIP
60	Ft	Culv, Cl A, 24 inch
5,930	Sft	Sidewalk, Conc, 4 inch
600	Sft	Sidewalk, Conc, 6 inch
450	Sft	Sidewalk Ramp, Conc, 6 inch
40	Ft	Detectable Warning Surface
97	Syd	Approach, Cl I, 6 inch
4	Ton	HMA Approach
8	Ea	Sign, Type III, Erect, Salv
128	Ft	Post, Steel, 3 lb
2,500	Syd	Slope Restoration, Modified

NON-PARTICIPATING QUANTITIES THIS SHEET

9	Ea	Erosion Control, Inlet Protection, Fabric Drop
7.2	Sta	Machine Grading, Modified
3	Ea	Dr Structure, 24 inch dia
6	Ea	Dr Structure, 48 inch dia
1	Ea	Dr Structure Cover, Type B
8	Ea	Dr Structure Cover, Modified
866	Ft	Sewer, Cl A, 12 inch, Tr Det B, Modified
30	Ft	Culv, Cl A, 12 inch
490	Ton	HMA, 13A
720	Ft	Underdrain, Subbase, 4 inch
24	Syd	Driveway, Nonreinf Conc, 6 inch
9	Ea	Sign, Type III, Erect, Salv
128	Ft	Post, Steel, 3 lb
750	Syd	Slope Restoration, Modified
3	Ea	Sanitary Structure Cover, Adj, Case 1
175	Ft	Pavt Mrkg, Waterborne, 4 inch. Yellow
1,363	Ft	Pavt Mrkg, Waterborne, 6 inch, White

STATION	Driveway Opening		DRIVEWAY APPROACHES					
	WIDTH AT MATCH	WIDTH AT EOM	DIST. FROM EX. EOM TO MATCH	DRIVE APPROACH SLOPE	Approach, Cl I, 6 inch	HMA, Approach (4 inch)	Driveway, Nonreinf Conc, 6 inch	Sidewalk, Conc, 6 inch
	Ft	Ft	Ft	%	Syd	Ton	Syd	Sft
58+72, RT	11.7	14.3	10.1	−7.8	–	–	8.7	–
59+06, LT	14.5	17.5	23.8	−1.8,1.5	18.2	4	–	200
61+30, LT	38.5	49.3	29.6	10.0,1.5	79.2	–	–	400
63+54, RT	25.1	26.1	3.0	1.2	–	–	15.0	–
64+59, RT	–	–	–	–	–	–	–	–
TOTALS					97.4	4	23.7	600

DRIVEWAY TABLE FOR INFORMATION ONLY

PROPOSED LEGEND

ADJ	ADJUST
U	UTILITY CO. TO RELOCATE
REL	RELOCATE
R	REMOVE
BH	BULKHEAD
AB	ABANDON
B/O	RELOCATE BY OTHERS

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CLINTON COUNTY, MI

SCOTT ROAD PLAN SHEET STA
57+00 TO 65+00

REVISIONS

REV	DESCRIPTION	DATE

PROJ. #: 190139

DATE: 04/24/2020

SHEET 20

BID SET

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK

WE RECYCLE

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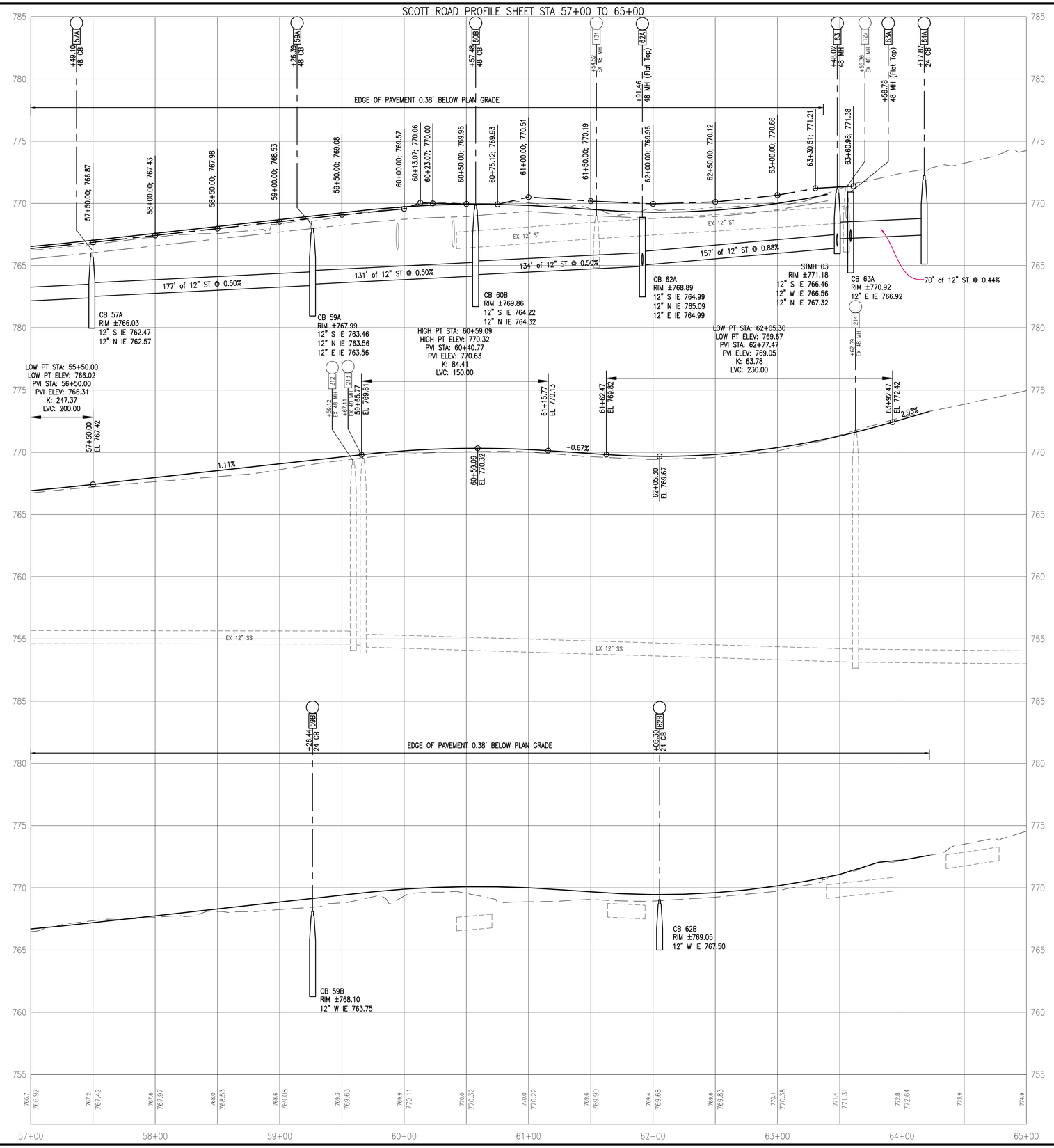
CAD STANDARDS 0.18

DESIGNED BY: -
CHECKED BY: -
APPROVED BY: -

SCOTT ROAD PROFILE SHEET STA 57+00 TO 65+00



PROP LEFT EDGE OF PAVEMENT
EX GROUND AT LEFT EDGE OF PAVEMENT
PROP FRONT OF PATH
PROP LEFT SWALE

PROP PLAN GRADE AT CENTERLINE OF ROAD
EX GROUND AT CENTERLINE OF ROAD

PROP RIGHT EDGE OF PAVEMENT
EX GROUND AT RIGHT EDGE OF PAVEMENT

PROFILE LEGEND

EXISTING — PROPOSED

999.9 — 999.9

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WHITE — BLACK

WE RECYCLE

PLOTTED BY: SEIFAS, MICHAEL 4/24/2020 3:01 PM
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CLINTON COUNTY, MI

SCOTT ROAD PROFILE SHEET
STA 57+00 TO 65+00

REVISIONS

REV	DESCRIPTION	DATE

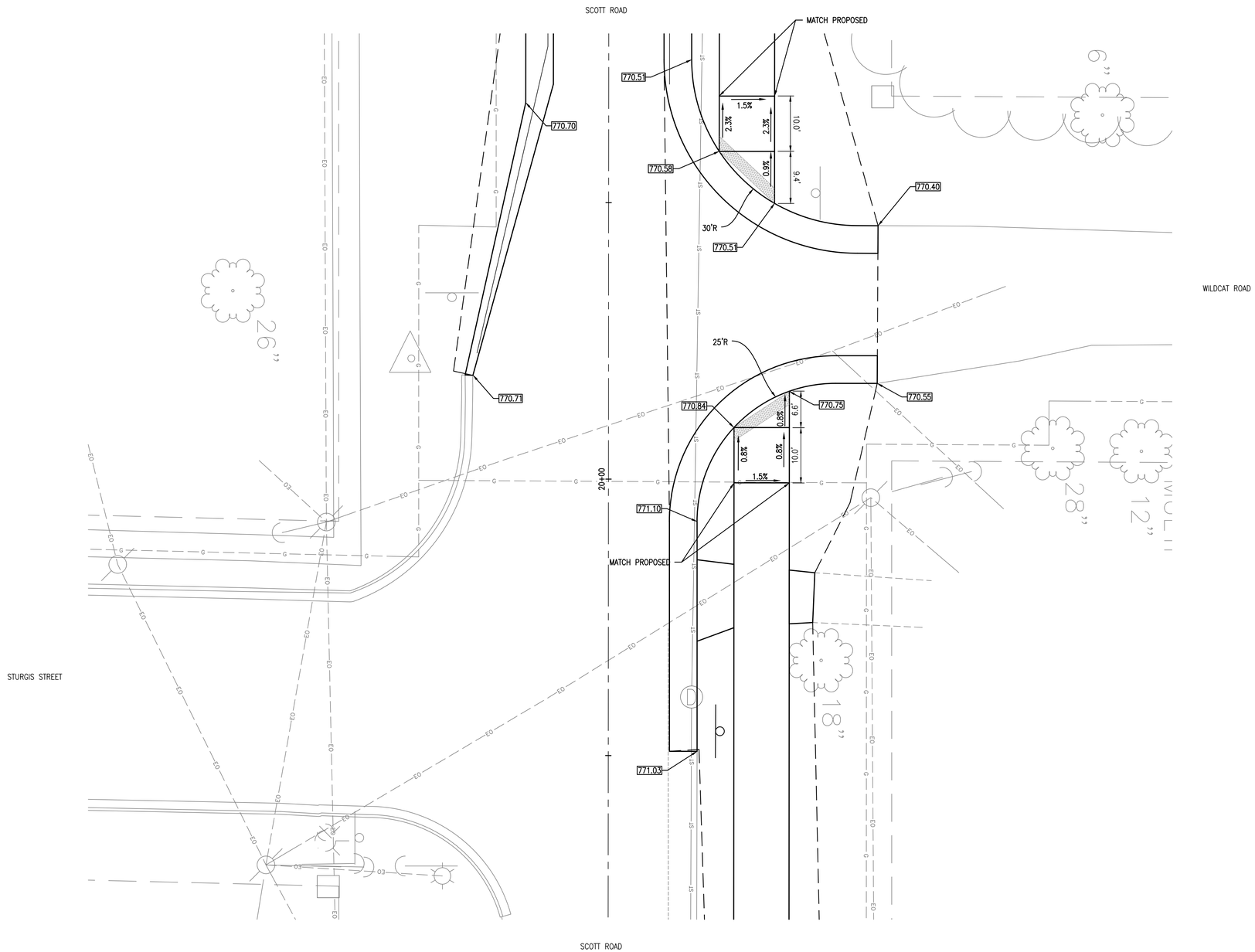
PROJ. #: 190139

DATE: 04/24/2020

SHEET

21

BID SET



SCOTT RD–WILDCAT RD
SIDEWALK RAMP & INTERSECTION GRADE DETAIL
SCALE: 1"=10'

0 10 20 Feet

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CITY OF ST JOHNS
SCOTT ROAD IMPROVEMENTS
CLINTON COUNTY, MI

SCOTT-WILDCAT INTERSECTION DETAIL

REVISIONS

REV	DESCRIPTION	DATE

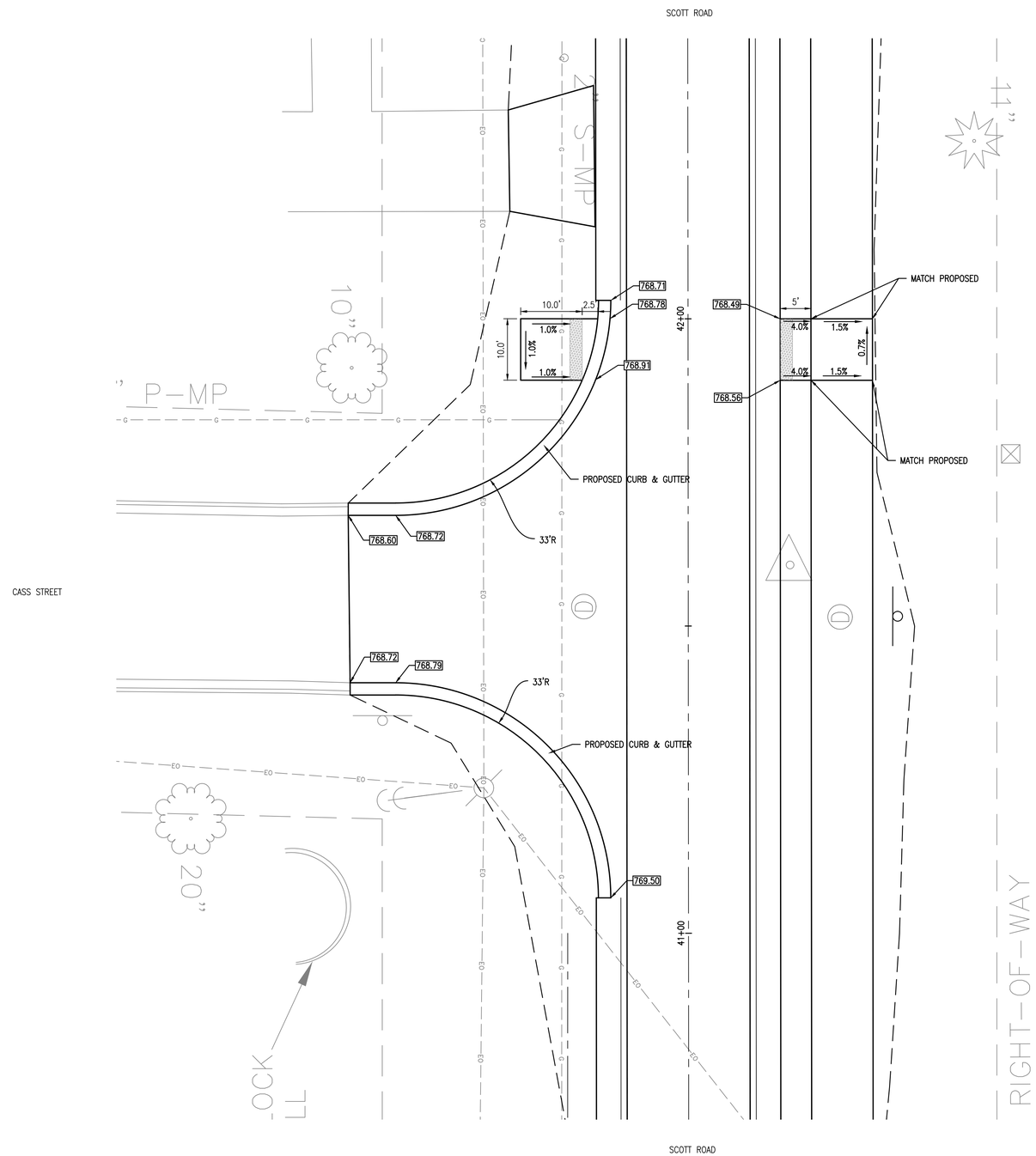
PROJ. #: 190139
DATE: 01/16/2007
SHEET
22

BID SET

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WHITE BLACK
WE RECYCLE

PLOTTED BY: SEUNG, MICHAEL 4/24/2023 3:51 PM
S:\2019\190139_Scions_Scott\Drawings\Sheets\190139_Scott\Rd_Cross Details.dwg - SCOTT-WILDCAT INTERSECTION DETAIL
CAD STANDARD 8.1B

DESIGNED BY: - APPROVED BY: -
CHECKED BY: -



SCOTT RD–CASS ST
SIDEWALK RAMP & INTERSECTION GRADE DETAIL
SCALE: 1"=10'

0 10 20 Feet

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CITY OF ST JOHNS
SCOTT ROAD IMPROVEMENTS
CLINTON COUNTY, MI

SCOTT-CASS
INTERSECTION DETAIL

REVISIONS

REV	DESCRIPTION	DATE

PROJ. #: 190139
DATE: 01/16/2007
SHEET
23

BID SET

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WHITE BLACK
WE RECYCLE

PLOTTED BY: SEIFAS, MICHAEL 4/24/2020 3:01 PM
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CAD STANDARD 07B
DESIGNED BY: - APPROVED BY: -
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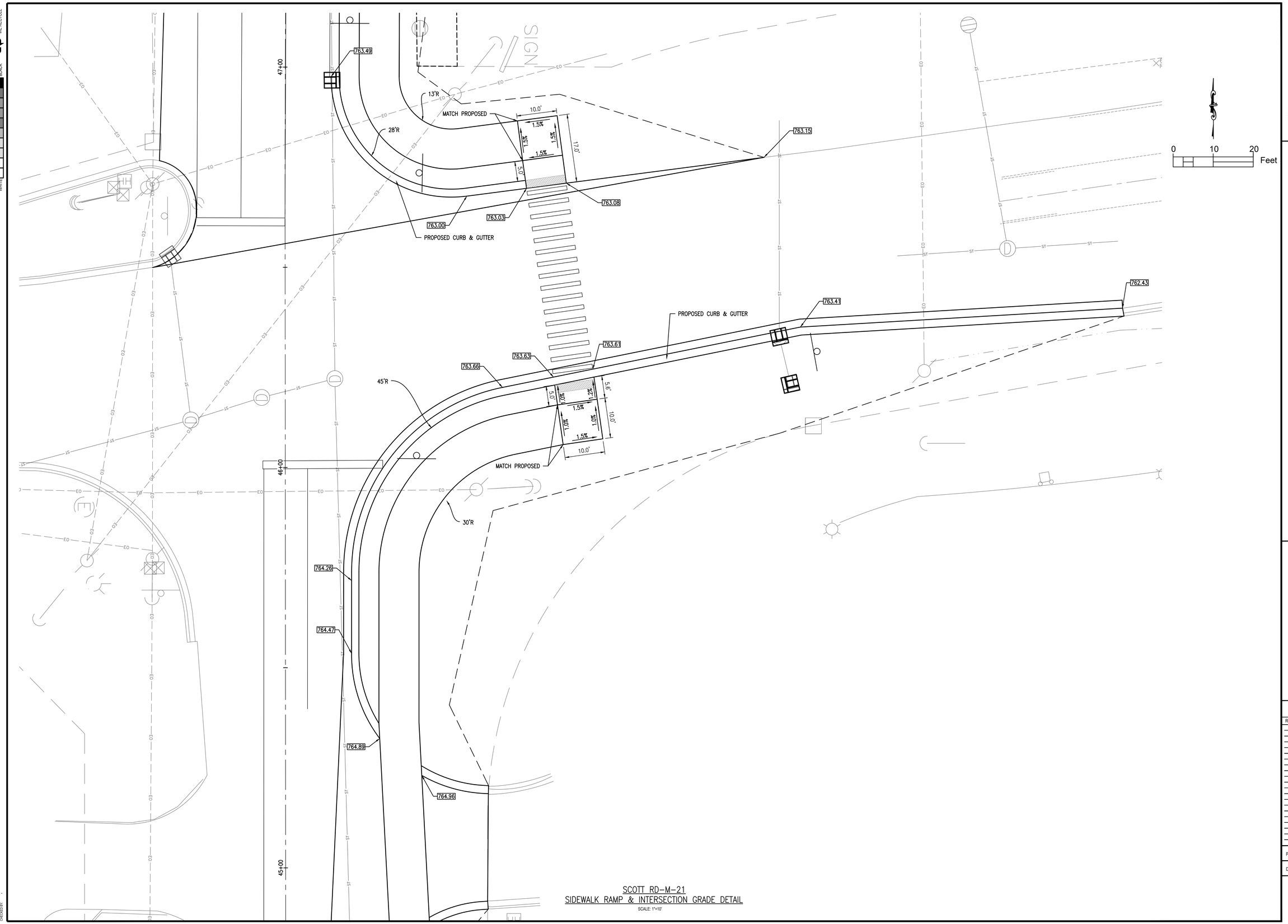

SCOTT RD-M-21
SIDEWALK RAMP & INTERSECTION GRADE DETAIL
SCALE: 1"=10'

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CITY OF ST JOHNS
SCOTT ROAD IMPROVEMENTS
CLINTON COUNTY, MI

SCOTT-M-21
INTERSECTION DETAIL

REVISIONS

REV	DESCRIPTION	DATE

PROJ. #: 190139

DATE: 01/16/2007

SHEET

24

BID SET

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WHITE BLACK
WE RECYCLE

PLOTTED BY: SEIWG, MICHAEL 4/24/2020 3:01 PM
S:\2019\190139_Johns_South\Drawings\Sheets\190139_South_Grade Details.dwg - SCOTT-M-21 INTERSECION DETAIL
C4E-STANDARD STB

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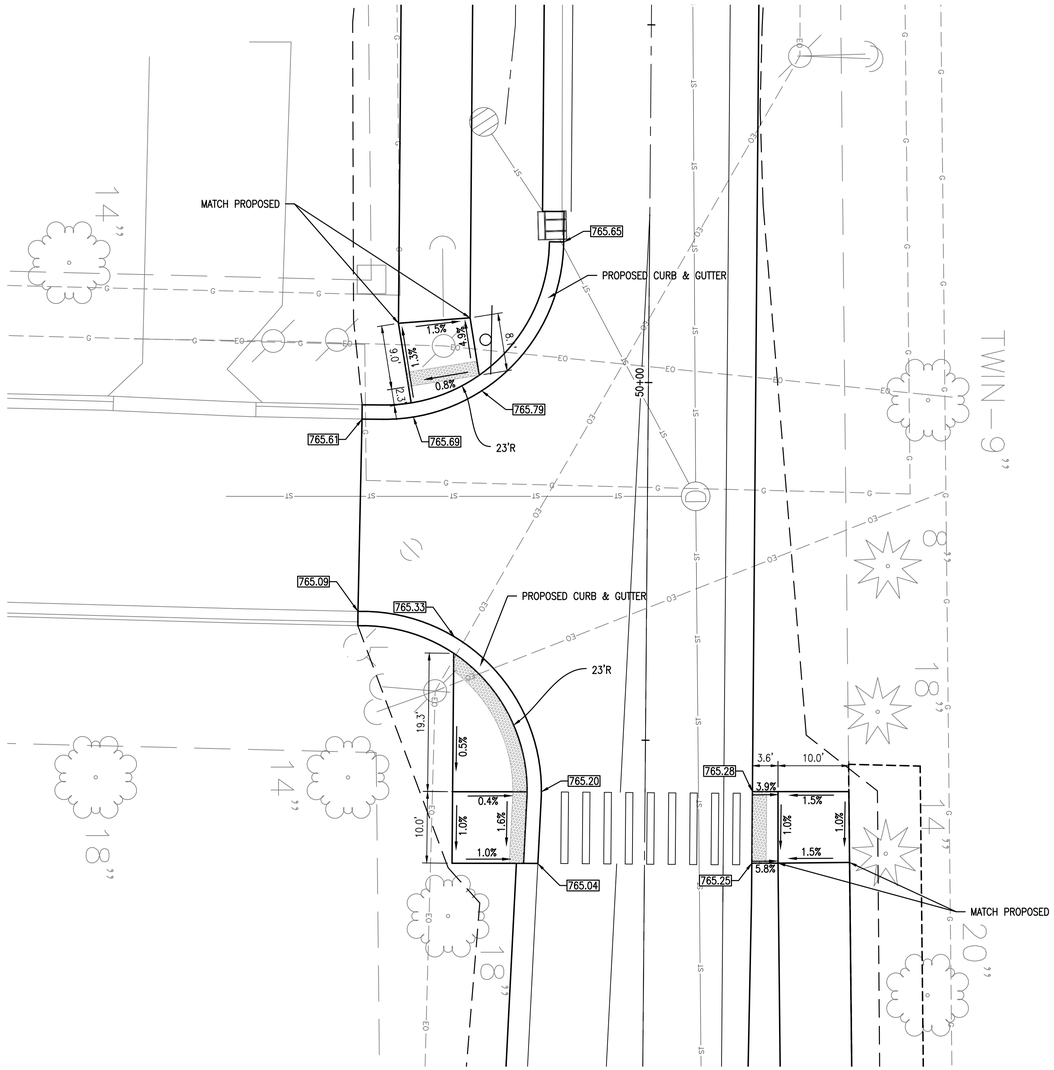
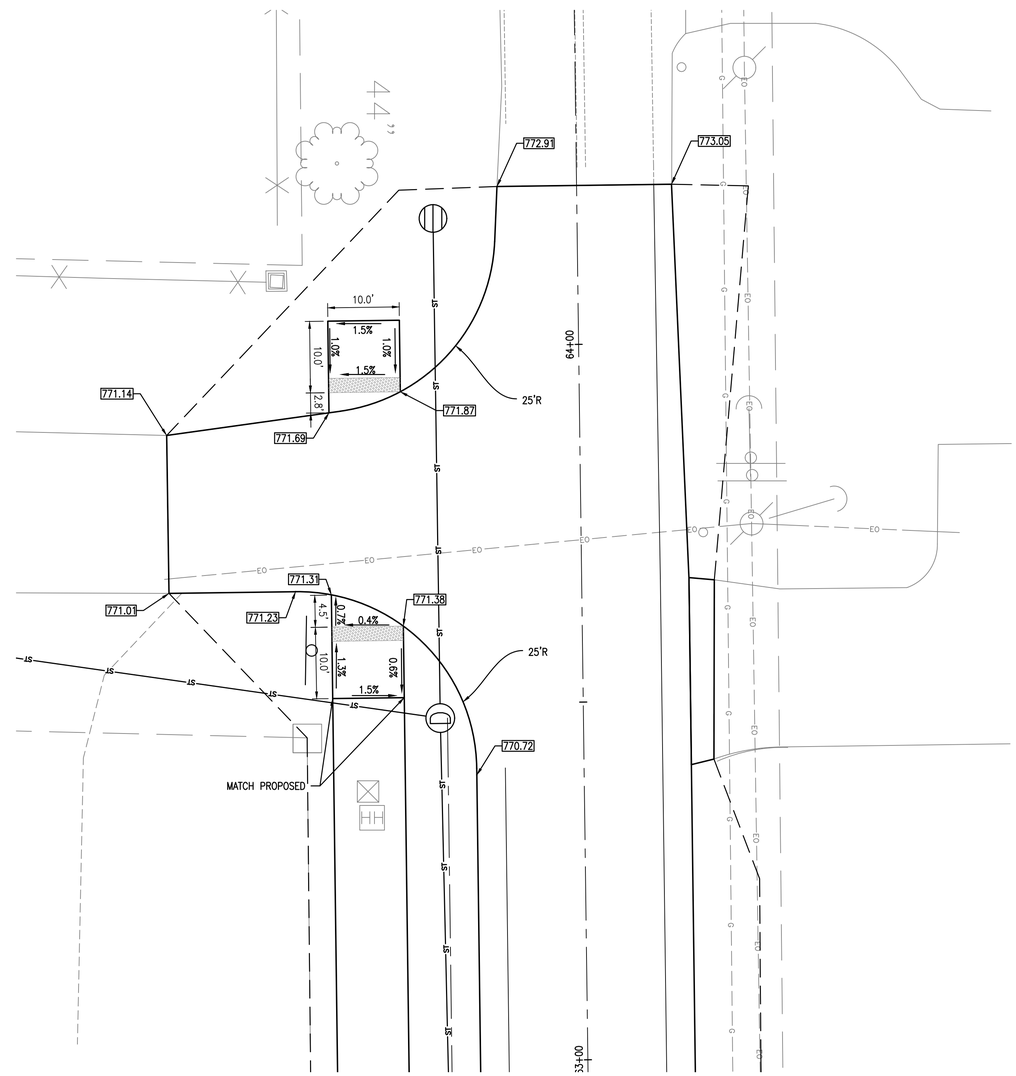


SCOTT RD-WALKER ST
SIDEWALK RAMP & INTERSECTION GRADE DETAIL
SCALE: 1"=10'



SCOTT RD-STEEL ST
SIDEWALK RAMP & INTERSECTION GRADE DETAIL
SCALE: 1"=10'

0 10 20 Feet

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CITY OF ST JOHNS
SCOTT ROAD IMPROVEMENTS
CLINTON COUNTY, MI

SCOTT-WALKER &
SCOTT-STEEL
INTERSECTION DETAIL

REVISIONS

REV	DESCRIPTION	DATE

PROJ. #: 190139
DATE: 01/16/2007
SHEET
25

BID SET

THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
WHITE BLACK
WE RECYCLE

PLOTTED BY: SEUNG, MICHAEL 4/24/2023 3:52 PM
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CHECKPRINT 3/31/19

DESIGNED BY: - APPROVED BY: -
CHECKED BY: -