

# ALLEGAN COUNTY ROAD COMMISSION

## 44TH STREET RECONSTRUCTION PROJECT

### 137TH AVENUE TO 139TH AVENUE

### OVERISEL TOWNSHIP

#### NOTES

EXCEPT WHERE OTHERWISE INDICATED ON THESE PLANS OR IN THE PROPOSAL AND SUPPLEMENTAL SPECIFICATIONS CONTAINED THEREIN, ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2012 MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION.

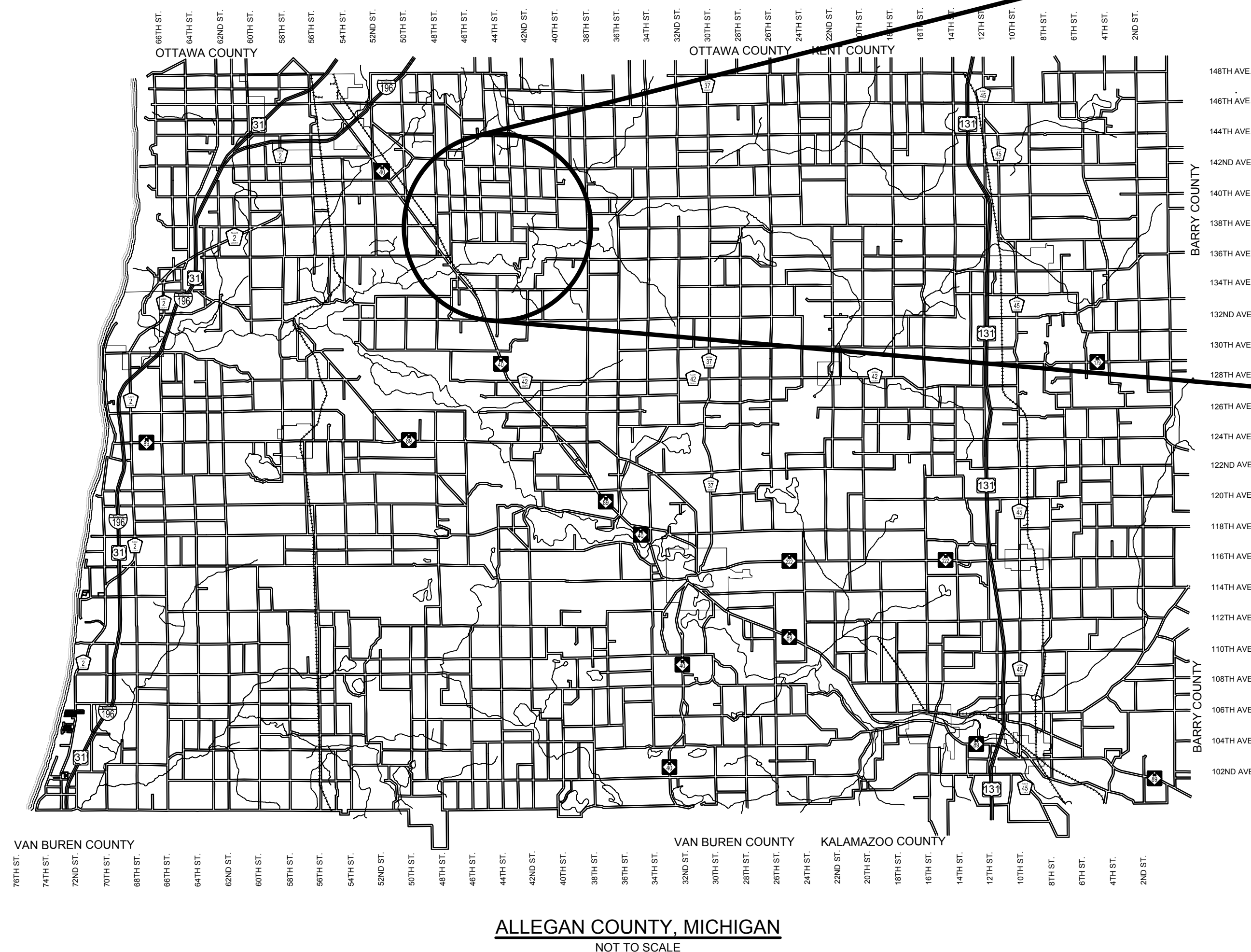
THE PLACING OF PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS SHALL BE DONE IN ACCORDANCE WITH THE 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS AMENDED.

THE IMPROVEMENTS COVERED BY THESE PLANS ARE IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2011 EDITION; A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS AND WITH THE GUIDELINES FOR GEOMETRIC DESIGN OF VERY LOW-VOLUME LOCAL ROADS (ADT<400), 1ST EDITION.

THE CONTRACTOR SHALL DIAL MISS DIG @ 811 FOR PROTECTION OF UNDER GROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

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#### UTILITY CONTACTS

**ELECTRIC**  
 CONSUMERS ENERGY  
 2500 E. CORK ST  
 KALAMAZOO, MI 49001  
 269-998-6440  
 MR. BILL BRINDLEY  
 wjbrindley@csmenergy.com

**TELEPHONE**  
 FRONTIER  
 601 N. U.S. 131  
 THREE RIVERS, MI 49093  
 269-273-0371  
 MR. JEFFREY MCCORD  
 jeffrey.l.mccord@ftr.com

**GAS**  
 MICHIGAN GAS UTILITIES  
 1708 EATON DRIVE  
 GRAND HAVEN, MI 49417  
 616-844-7514  
 MR. RYAN SEALS  
 rseals@michigangasutilities.com

**SEMOCO**  
 739 PAW PAW DRIVE  
 HOLLAND, MI 49423  
 800-860-4277  
 SCOTT TERHORST  
 scott.terhorst@semcoenergy.com

\*MISS DIG\* 811

**Board of County Road Commissioners  
 Of Allegan County**

1308 LINCOLN ROAD  
 ALLEGAN, MICHIGAN 49010-9762  
 TELEPHONE: (269) 673-2184 www.alleganroads.org FAX: (269) 673-5922

REVISIONS

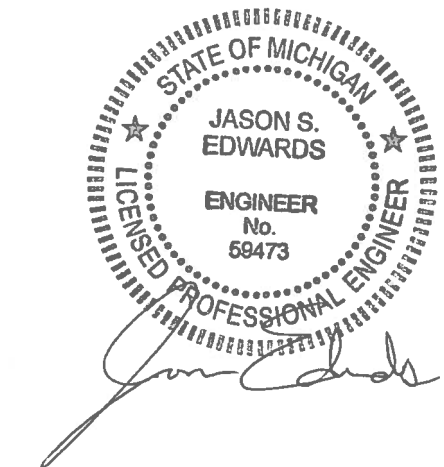
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**44TH STREET RECONSTRUCTION PROJECT**  
 OVERISEL TOWNSHIP - 137TH AVENUE TO 139TH AVENUE

COVER SHEET

**CONTRACT FOR ROAD IMPROVEMENTS**  
 1.00 MILES OF ROADWAY RECONSTRUCTION INCLUDING CLEARING, GRADE ESTABLISHMENT, SAND SUBBASE, AGGREGATE BASE, CULVERT REPLACEMENTS, AND RESTORATION ON 44TH STREET FROM 137TH AVENUE TO 139TH AVENUE IN OVERISEL TOWNSHIP, ALLEGAN COUNTY.

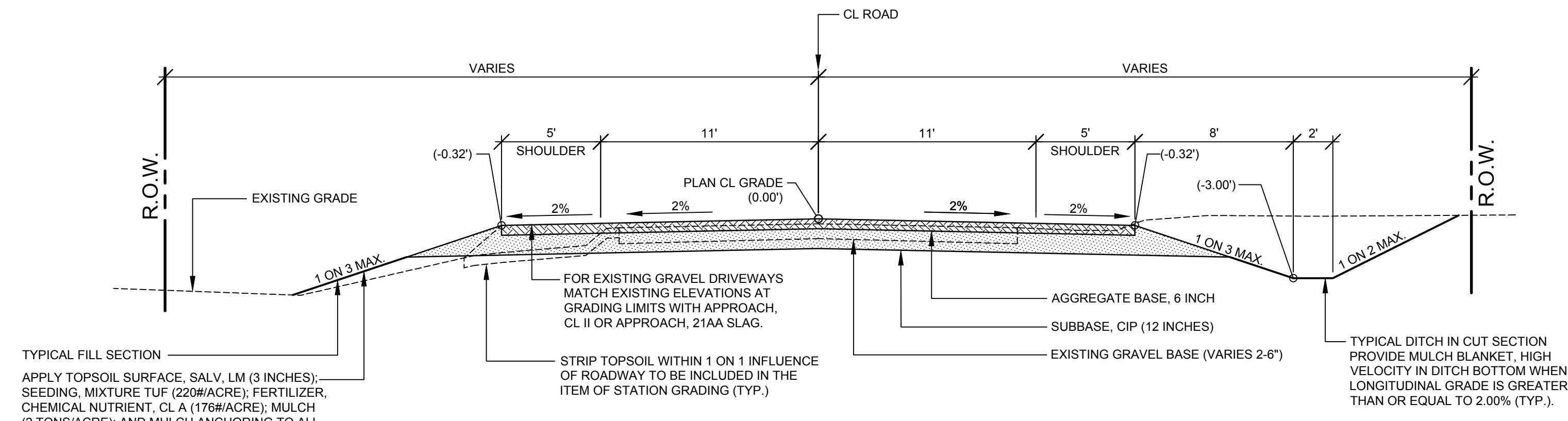
PREPARED UNDER THE SUPERVISION OF:



JASON S. EDWARDS  
 REGISTERED PROFESSIONAL ENGINEER No. 69473

**DRAWN BY:** J.S.E.  
**REVIEWED BY:**  
**DATE:** DECEMBER, 2016  
**SCALE:** NONE

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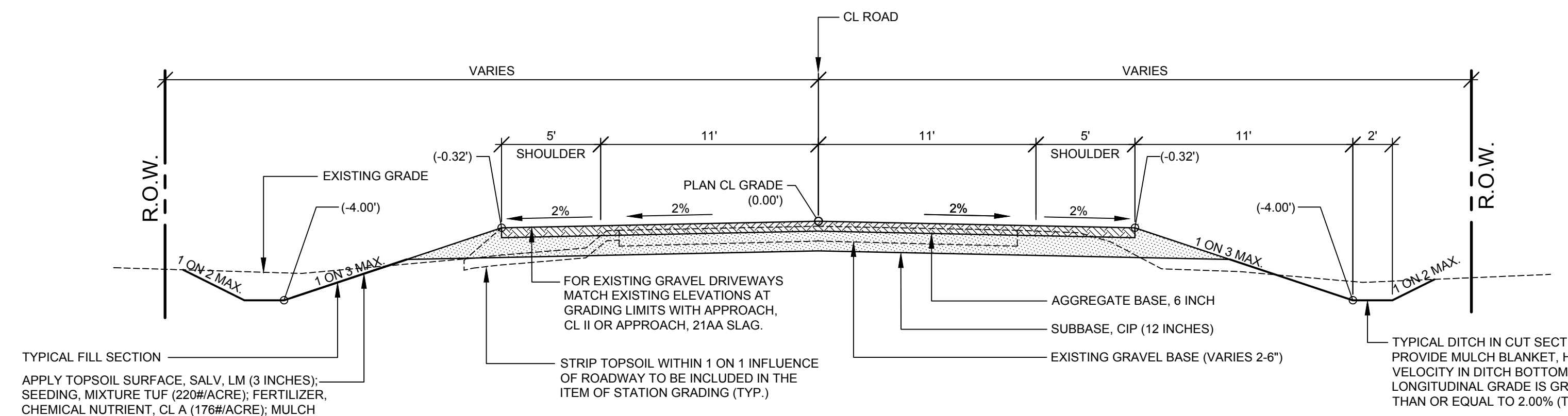


TYPICAL FILL SECTION  
 APPLY TOPSOIL SURFACE, SALV. LM (3 INCHES); SEEDING, MIXTURE TUF (220#/ACRE); FERTILIZER, CHEMICAL NUTRIENT, CL A (176#/ACRE); MULCH (2 TONS/ACRE); AND MULCH ANCHORING TO ALL DISTURBED AREAS (TYP.) TO BE PAID AS RESTORAION (LS). INSTALL MULCH BLANKETS ON ALL FORESLOPES GREATER THAN 1 ON 3 OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

FOR EXISTING GRAVEL DRIVEWAYS MATCH EXISTING ELEVATIONS AT GRADING LIMITS WITH APPROACH, CL II OR APPROACH, 21AA SLAG.  
 STRIP TOPSOIL WITHIN 1 ON 1 INFLUENCE OF ROADWAY TO BE INCLUDED IN THE ITEM OF STATION GRADING (TYP.)  
 AGGREGATE BASE, 6 INCH  
 SUBBASE, CIP (12 INCHES)  
 EXISTING GRAVEL BASE (VARIES 2-6")  
 TYPICAL DITCH IN CUT SECTION PROVIDE MULCH BLANKET, HIGH VELOCITY IN DITCH BOTTOM WHEN LONGITUDINAL GRADE IS GREATER THAN OR EQUAL TO 2.00% (TYP.).

**TYPICAL SECTION - 44TH STREET**

SCALE: 1" = 5'  
 THIS SECTION APPLIES TO:  
 P.O.B. TO P.O.E. EXCEPT AS NOTED BELOW



TYPICAL FILL SECTION  
 APPLY TOPSOIL SURFACE, SALV. LM (3 INCHES); SEEDING, MIXTURE TUF (220#/ACRE); FERTILIZER, CHEMICAL NUTRIENT, CL A (176#/ACRE); MULCH (2 TONS/ACRE); AND MULCH ANCHORING TO ALL DISTURBED AREAS (TYP.) TO BE PAID AS RESTORAION (LS). INSTALL MULCH BLANKETS ON ALL FORESLOPES GREATER THAN 1 ON 3 OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

FOR EXISTING GRAVEL DRIVEWAYS MATCH EXISTING ELEVATIONS AT GRADING LIMITS WITH APPROACH, CL II OR APPROACH, 21AA SLAG.  
 STRIP TOPSOIL WITHIN 1 ON 1 INFLUENCE OF ROADWAY TO BE INCLUDED IN THE ITEM OF STATION GRADING (TYP.)  
 AGGREGATE BASE, 6 INCH  
 SUBBASE, CIP (12 INCHES)  
 EXISTING GRAVEL BASE (VARIES 2-6")  
 TYPICAL DITCH IN CUT SECTION PROVIDE MULCH BLANKET, HIGH VELOCITY IN DITCH BOTTOM WHEN LONGITUDINAL GRADE IS GREATER THAN OR EQUAL TO 2.00% (TYP.).

**TYPICAL SECTION - 4' DEEP DITCHES**

SCALE: 1" = 5'  
 THIS SECTION APPLIES TO:  
 STA. 15+75 TO 25+75

**PROJECT NOTES**

THE "2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION" AND "STANDARD PLANS" BY THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) ARE HEREBY INCORPORATED INTO THESE CONTRACT DOCUMENTS. COPIES OF THESE STANDARDS ARE AVAILABLE FOR INSPECTION AT THE OFFICE OF THE ENGINEER.

THE CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING THE ALLEGAN COUNTY ROAD COMMISSION TO NOTIFY THEM THAT WORK IS COMMENCING.

THE CONTRACTOR SHOULD NOTE THAT STATION GRADING WILL INCLUDE THE REMOVAL OF FENCES, CULVERTS, BRUSH, TREES SMALLER THAN 6", CONCRETE FOUNDATIONS, AND MISCELLANEOUS ITEMS AS REQUIRED AND WILL ALSO INCLUDE ALL EARTH EXCAVATION, EMBANKMENT, AND ALL OTHER OPERATIONS NECESSARY TO DEVELOP THE DESIRED CROSS SECTION. ALL TOPSOIL AND OTHER UNSUITABLE MATERIAL LOCATED BENEATH THE PROPOSED PAVEMENT SECTION WILL BE REMOVED TO THE SUBGRADE ELEVATION AS PART OF STATION GRADING. ALL TOPSOIL REMOVED MAY BE STOCKPILED AND REUSED AS TOPSOIL SURFACE, SALV. LM.

DO NOT STRIP THE EXISTING ROAD GRAVEL THAT LAYS BELOW THE PROPOSED CLAY GRADE UNLESS DIRECTED BY THE ENGINEER.

ALL FILL FOR THIS PROJECT MUST BE OBTAINED AND FURNISHED BY THE CONTRACTOR. ALL REQUIRED FILL SHALL BE SELECTED EXCAVATED MATERIAL FROM THE SITE APPROVED BY THE ENGINEER, OR MDOT CLASS II GRANULAR MATERIAL FROM BORROW. EXCESS FILL WILL BE REMOVED FROM SITE BY THE CONTRACTOR. NO BORROW OR SOIL REMOVAL ARRANGEMENTS HAVE BEEN PREARRANGED FOR THIS PROJECT AND WILL BE THE TOTAL RESPONSIBILITY OF THE CONTRACTOR.

THE SOIL BORINGS WERE TAKEN BY GREAT LAKES DRILLING COMPANY, P.O. BOX 51, ALLEGAN, MI 49010 ON DECEMBER 12, 2016. THE TEST BORINGS REPRESENT POINT INFORMATION AND MAY NOT HAVE ENCOUNTERED ALL THE TYPES AND MATERIALS WHICH ARE PRESENT AT THE SITE. THESE BORING LOGS DO NOT CONSTITUTE A GUARANTEE OF THE SOIL OR GROUNDWATER CONDITIONS, OR THAT THE TEST BORINGS ARE AN EXACT REPRESENTATION OF THE SOIL OR GROUNDWATER CONDITIONS AT ALL POINTS ON THE SITE.

SEE PLAN AND PROFILE SHEETS FOR SOIL BORING DATA.

DRIVE REPLACEMENT WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

THE ITEM OF SUBBASE, CIP WILL BE PAID FOR AT PLAN QUANTITY EXCEPT IN THE CASE OF A DESIGN CHANGE OR DEMONSTRATED ERROR.

AS PART OF THIS PROJECT THE CONTRACTOR WILL COORDINATE WITH THE ALLEGAN COUNTY ROAD COMMISSION TO PRESERVE AND RESET ALL GOVERNMENT CORNERS WITHIN THE PROJECT LIMITS.

CONTRACTOR WILL RELOCATE ALL MAILBOXES TO A TEMPORARY CENTRAL LOCATION APPROVED BY THE POSTAL SERVICE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL INSTALL A 1" x 3" STAKE WITH THE RESPECTIVE PROPERTY ADDRESS WRITTEN ON IT IN THE FRONT YARD OF EACH RESIDENCE TO ASSIST WITH IDENTIFICATION FOR EMERGENCY VEHICLES. PAYMENT FOR RELOCATION WILL BE INCLUDED IN THE ITEM OF PROJECT CLEANUP. AT THE COMPLETION OF THE PROJECT SAID MAILBOXES SHALL BE RESET AT THEIR APPROPRIATE LOCATIONS.

ALL DISTURBED AREAS NOT TO BE PAVED WILL BE RESTORED WITH TOPSOIL SURFACE, SALV. LM (3 INCHES), MDOT SEED MIXTURE TUF (220#/ACRE); FERTILIZER, CHEMICAL NUTRIENT, CL A (176#/ACRE); AND MULCH AND MULCH ANCHORING (2 TON/ACRE), TO BE PAID AS RESTORATION (LUMP SUM).

ADEQUATE DUST CONTROL MEASURES WILL BE MAINTAINED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER IN THE FIELD, TO BE INCLUDED IN THE VARIOUS ITEMS OF WORK.

MULCH BLANKET, HIGH VELOCITY WILL BE PLACED ON THE BOTTOM OF ALL DITCHES WHEN THE LONGITUDINAL GRADE IS GREATER THAN OR EQUAL TO 2.00% UNLESS OTHERWISE NOTED, OR AS DIRECTED BY THE ENGINEER IN HE FIELD.

WHEN FIELD DRAIN TILES ARE ENCOUNTERED IN THE EXISTING DITCHES, THE CONTRACTOR WILL EXTEND THEM AS REQUIRED WITH UNDERDRAIN, SUBGRADE 4" OR 6" AND ADJUST THE DITCH GRADES AS NECESSARY TO PROVIDE POSITIVE DRAINAGE AS DIRECTED BY THE ENGINEER IN THE FIELD. THE COST OF THE CONNECTION WILL BE INCLUDED IN THE NEW PIPE ITEM. IF THE ENGINEER DETERMINES THAT AN EXISTING TILE IS TOO LONG THE CONTRACTOR WILL REMOVE THE TILE AS NECESSARY. TO BE INCLUDED IN THE ITEM OF STATION GRADING. DRAINS THAT ARE ENCOUNTERED AND IDENTIFIED AS SOMETHING OTHER THAN A FIELD DRAIN SHOULD BE REPORTED TO THE ENGINEER IMMEDIATELY.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EXISTING DRAINAGE PATTERNS, AND WILL RESOLVE ANY DRAINAGE PROBLEMS ON ADJACENT PROPERTIES WHICH MAY RESULT FROM THE CONTRACTOR'S ACTIVITIES.

DATUM REFERS TO NAVD88 DATUM.

DIMENSIONS TAKE PRECEDENCE OVER SCALE. CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.

**UTILITY NOTES**

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR WILL CONTACT "MISS DIG" AT 811, A MINIMUM OF 72 HOURS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS, PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE CONTRACTOR WILL LOCATE ALL ACTIVE UNDERGROUND UTILITIES PRIOR TO STARTING WORK AND WILL CONDUCT HIS OPERATIONS IN A MANNER AS TO ENSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.

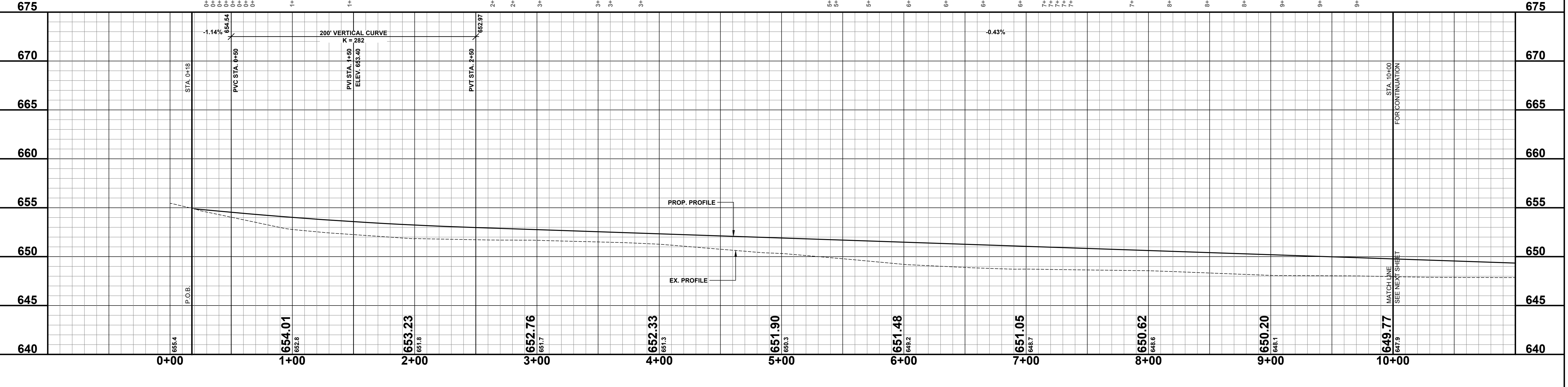
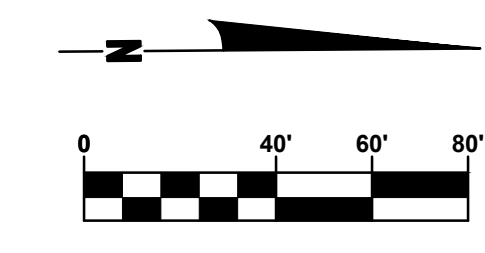
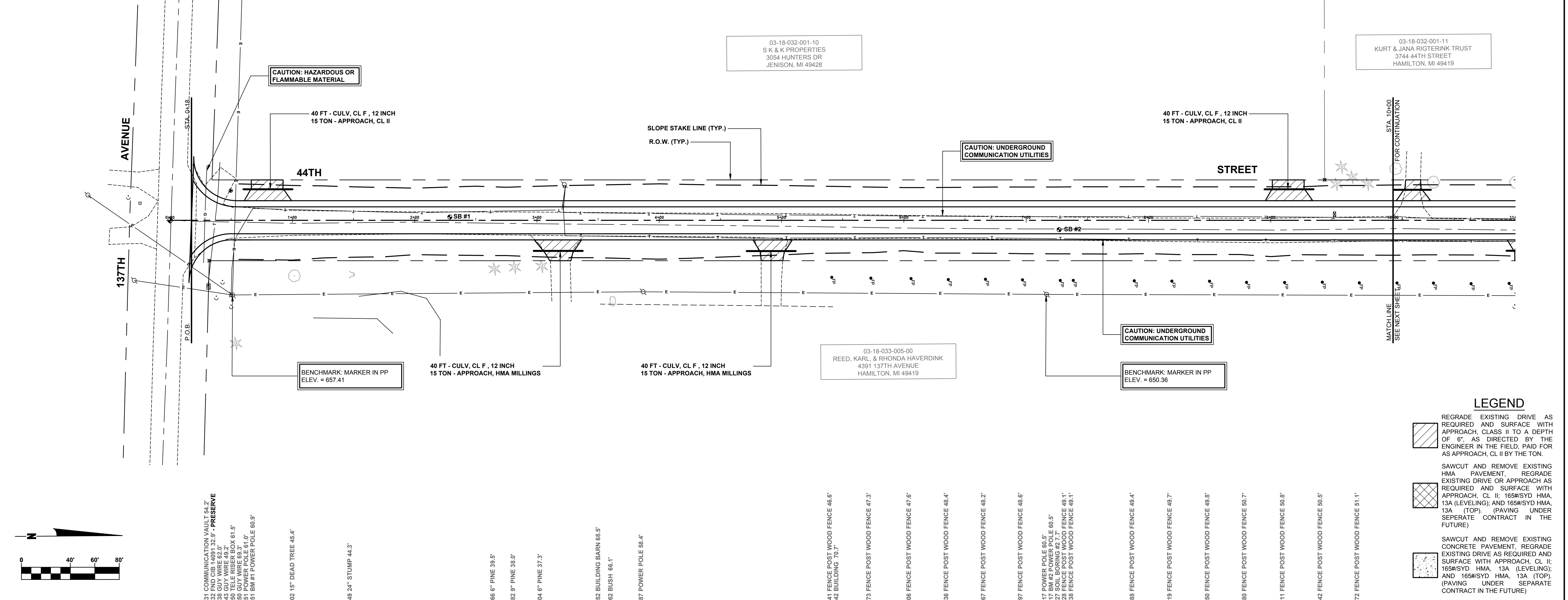
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REVISIONS	1	2	3	4	5	6	7

**44TH STREET RECONSTRUCTION PROJECT**  
 OVERISEL TOWNSHIP - 137TH AVENUE TO 139TH AVENUE  
 TYPICAL SECTIONS, DETAILS, & NOTES

DRAWN BY: J.S.E.  
 REVIEWED BY:  
 DATE: DECEMBER, 2016  
 SCALE: AS NOTED

SOIL BORINGS	
SB #1	0 - 7" BROWN FINE TO MEDIUM SAND AND GRAVEL 7" - 13" BROWN & DK BROWN FINE SAND, TR FINE GRAVEL 13" - 5' BROWN SILTY FINE TO MED SAND, TR FINE GRAVEL 5' END OF BORING
SB #2	0 - 5" BROWN FINE TO MEDIUM SAND AND GRAVEL 5" - 1' BROWN & DK BROWN FINE SAND, TR FINE GRAVEL 1' - 5' BROWN SILTY FINE TO MED SAND, TR FINE GRAVEL 5' END OF BORING



**LEGEND**

- REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II TO A DEPTH OF 6" AS DIRECTED BY THE ENGINEER IN THE FIELD, PAID FOR AS APPROACH, CL II BY THE TON.
- SAWCUT AND REMOVE EXISTING HMA PAVEMENT. REGRADE EXISTING DRIVE OR APPROACH AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 13A (LEVELING); AND 165#/SYD HMA, 13A (TOP). (PAVING UNDER SEPERATE CONTRACT IN THE FUTURE)
- SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT. REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 13A (LEVELING); AND 165#/SYD HMA, 13A (TOP). (PAVING UNDER SEPERATE CONTRACT IN THE FUTURE)

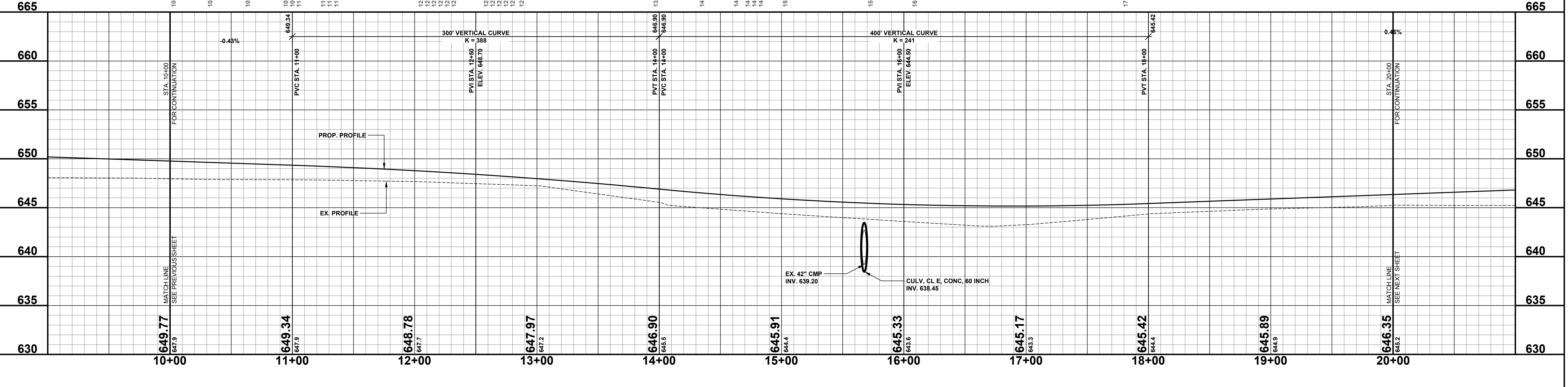
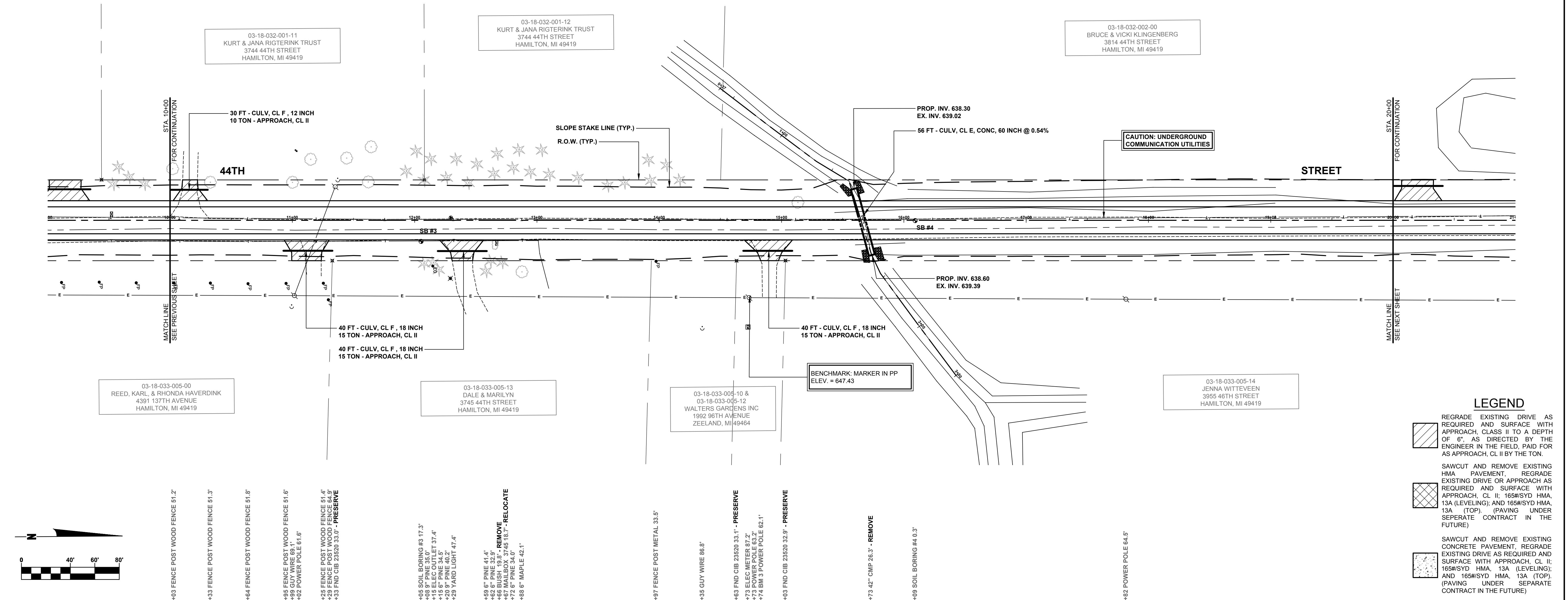
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**44TH STREET RECONSTRUCTION PROJECT**  
OVERISEL TOWNSHIP - 137TH AVENUE TO 139TH AVENUE  
PLAN & PROFILE - STA. P.O.B. TO STA. 10+00

DRAWN BY: J.S.E.  
REVIEWED BY:  
DATE: DECEMBER, 2016  
SCALE: 1"= 40'H, 5'V

SOIL BORINGS	SB #3	SB #4
0-6" BROWN FINE TO MEDIUM SAND AND GRAVEL	6"-11" BROWN & DK BROWN FINE SAND, TR FINE GRAVEL	0-13" BROWN FINE TO MEDIUM SAND AND GRAVEL
11"-5" BROWN SILTY FINE TO MED SAND, TR FINE GRAVEL	5" END OF BORING	13"-3" BROWN & DK BROWN SILTY FINE TO MED SAND, TR TOPSOIL
		3'-5" DK BROWN PEATY TOPSOIL
		5'-10" BROWN SILTY FINE TO MED SAND, TR FINE GRAVEL
		10' END OF BORING



**LEGEND**

- REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II TO A DEPTH OF 6" AS DIRECTED BY THE ENGINEER IN THE FIELD, PAID FOR AS APPROACH, CL II BY THE TON.
- SAWCUT AND REMOVE EXISTING HMA PAVEMENT. REGRADE EXISTING DRIVE OR APPROACH AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 13A (LEVELING); AND 165#/SYD HMA, 13A (TOP). (PAVING UNDER SEPERATE CONTRACT IN THE FUTURE)
- SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT. REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 13A (LEVELING); AND 165#/SYD HMA, 13A (TOP). (PAVING UNDER SEPERATE CONTRACT IN THE FUTURE)

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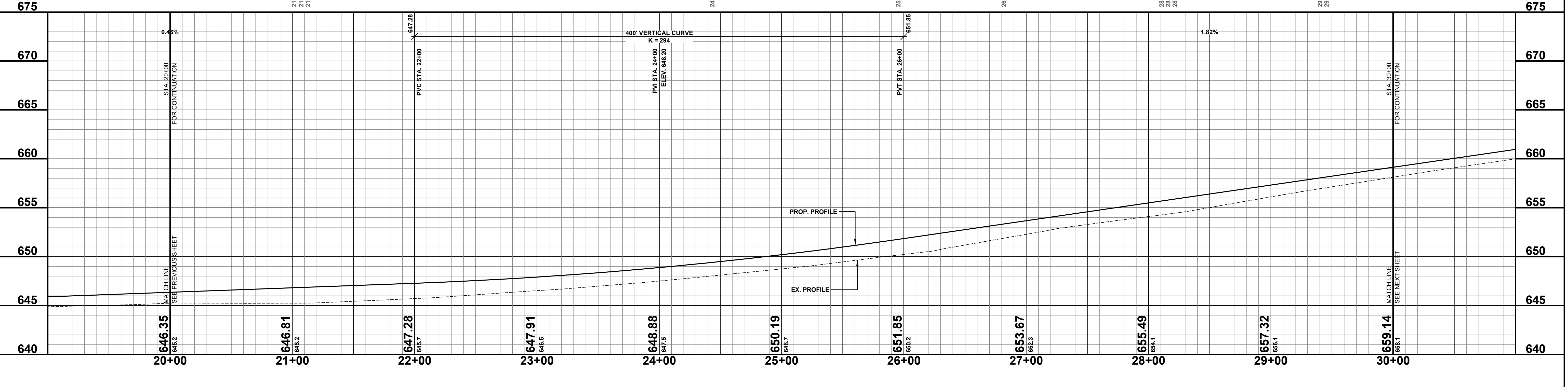
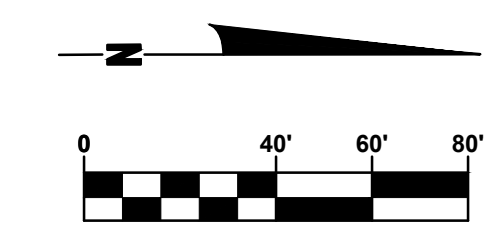
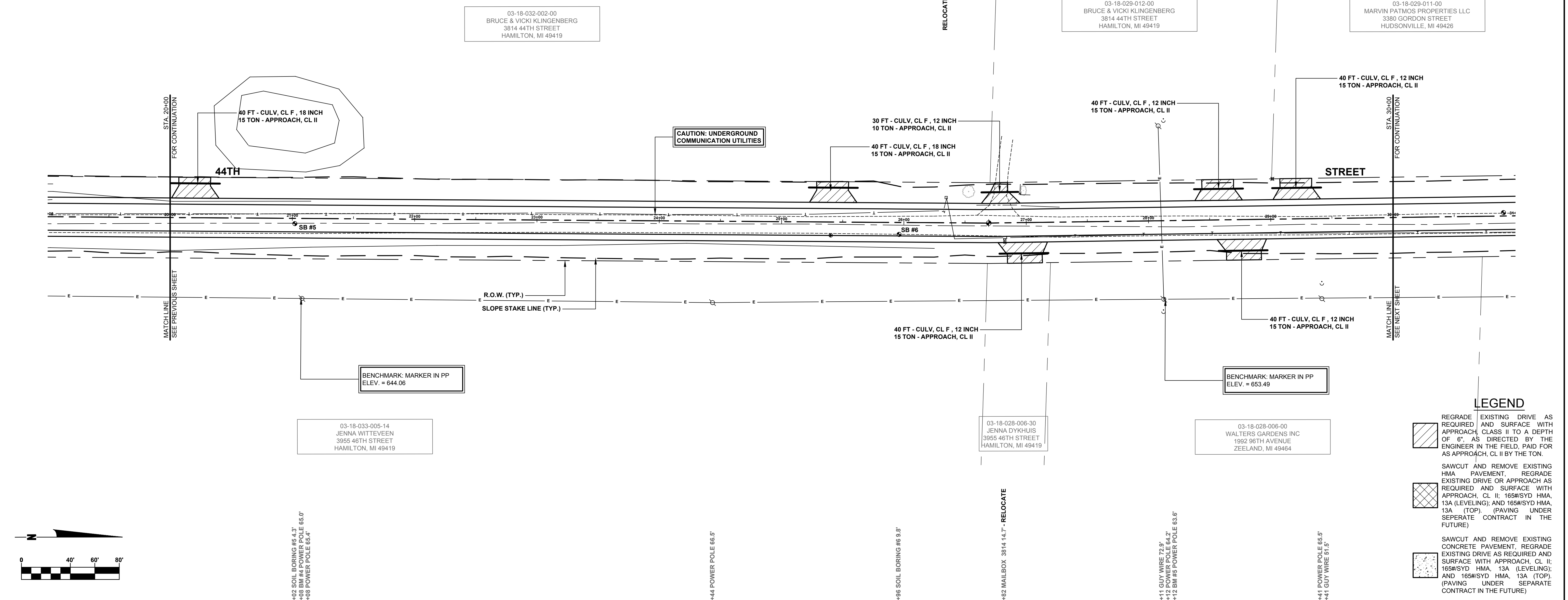
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**44TH STREET RECONSTRUCTION PROJECT**  
 OVERISEL TOWNSHIP - 137TH AVENUE TO 139TH AVENUE  
 PLAN & PROFILE - STA. 10+00 TO STA. 20+00

DRAWN BY: J.S.E.  
 REVIEWED BY:  
 DATE: DECEMBER, 2016  
 SCALE: 1"= 40'H, 5'V

**SOIL BORINGS**

<b>SB #5</b>	0 - 11" BROWN FINE TO MEDIUM SAND AND GRAVEL
	11" - 3' BROWN & DK BROWN PEATY TOPSOIL
	3' - 5' BROWN SILTY FINE TO MED SAND, TR TOPSOIL
	5' - 10' BROWN SILTY FINE TO MED SAND, TR FINE GRAVEL
	10' END OF BORING
<b>SB #6</b>	0 - 13" BROWN FINE TO MEDIUM SAND AND GRAVEL
	13" - 4' BROWN CLAYEY FINE TO MED SAND, TR FINE GRAVEL
	4' - 5' BROWN SILTY, SANDY CLAY
	5' END OF BORING



**LEGEND**

	REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH CLASS II TO A DEPTH OF 6" AS DIRECTED BY THE ENGINEER IN THE FIELD, PAID FOR AS APPROACH, CL II BY THE TON.
	SAWCUT AND REMOVE EXISTING HMA PAVEMENT, REGRADE EXISTING DRIVE OR APPROACH AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 13A (LEVELING); AND 165#/SYD HMA, 13A (TOP). (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)
	SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT, REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 13A (LEVELING); AND 165#/SYD HMA, 13A (TOP). (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)

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**44TH STREET RECONSTRUCTION PROJECT**  
OVERISEL TOWNSHIP - 137TH AVENUE TO 139TH AVENUE

PLAN & PROFILE - STA. 20+00 TO STA. 30+00

DRAWN BY: J.S.E.  
REVIEWED BY:  
DATE: DECEMBER, 2016  
SCALE: 1"= 40'H, 5'V

**SOIL BORINGS**

<b>SB #7</b>	0 - 9"	BROWN FINE TO MEDIUM SAND AND GRAVEL
	9" - 3'	BROWN & DK BROWN SILTY FINE TO MED SAND, TR FINE GRAVEL
	3' - 5'	BROWN SILTY FINE TO MED SAND, TR FINE GRAVEL
	5'	END OF BORING
<b>SB #8</b>	0 - 6"	BROWN FINE TO MEDIUM SAND AND GRAVEL
	6" - 2'	BROWN & DK BROWN SILTY FINE TO MED SAND, TR FINE GRAVEL
	2' - 5'	BROWN SILTY FINE TO MED SAND, TR FINE GRAVEL
	5'	END OF BORING

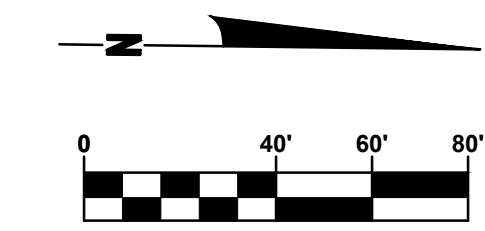
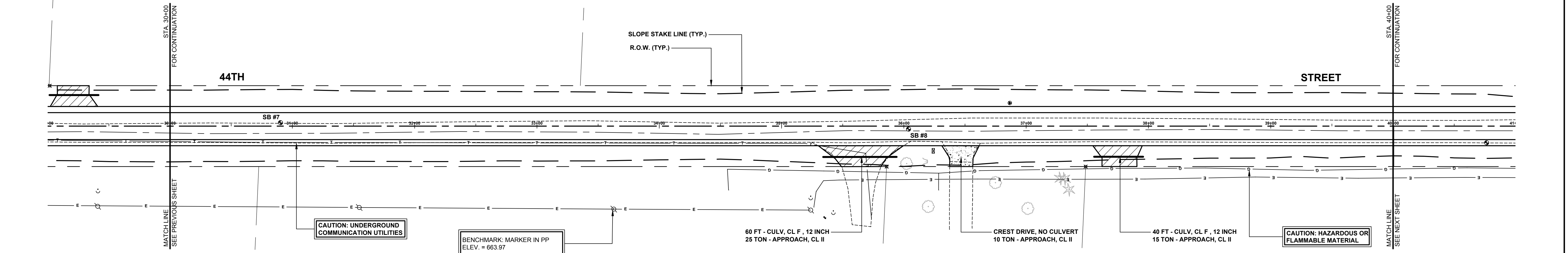
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MARVIN PATMOS PROPERTIES LLC  
3380 GORDON STREET  
HUDSONVILLE, MI 49426

03-18-029-009-00  
MARVIN PATMOS PROPERTIES LLC  
3380 GORDON STREET  
HUDSONVILLE, MI 49426

03-18-028-006-30  
JENNA DYKHUIS  
3955 46TH STREET  
HAMILTON, MI 49419

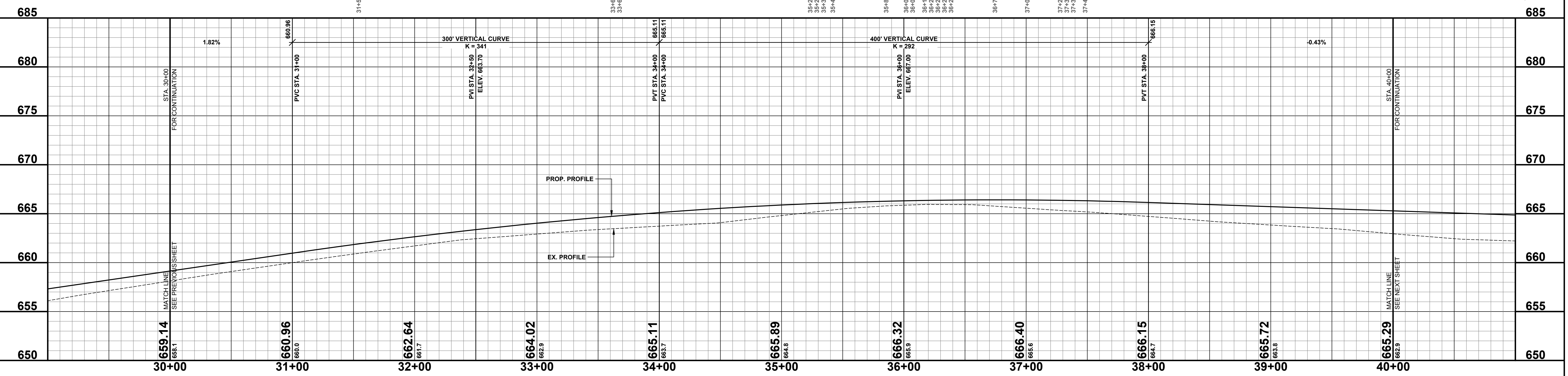
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MICHAEL & JODI ELHART  
3841 44TH STREET  
HAMILTON, MI 49419

03-18-028-006-30  
JENNA DYKHUIS  
3955 46TH STREET  
HAMILTON, MI 49419



**LEGEND**

	REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II TO A DEPTH OF 6" AS DIRECTED BY THE ENGINEER IN THE FIELD, PAID FOR AS APPROACH, CL II BY THE TON.
	SAWCUT AND REMOVE EXISTING HMA PAVEMENT. REGRADE EXISTING DRIVE OR APPROACH AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 13A (LEVELING); AND 165#/SYD HMA, 13A (TOP). (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)
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**44TH STREET RECONSTRUCTION PROJECT**  
OVERISEL TOWNSHIP - 137TH AVENUE TO 139TH AVENUE  
PLAN & PROFILE - STA. 30+00 TO STA. 40+00

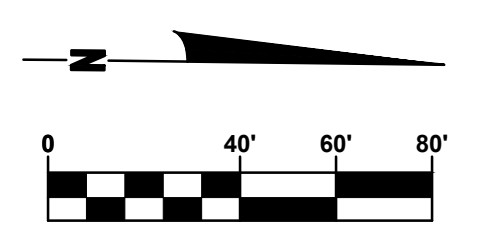
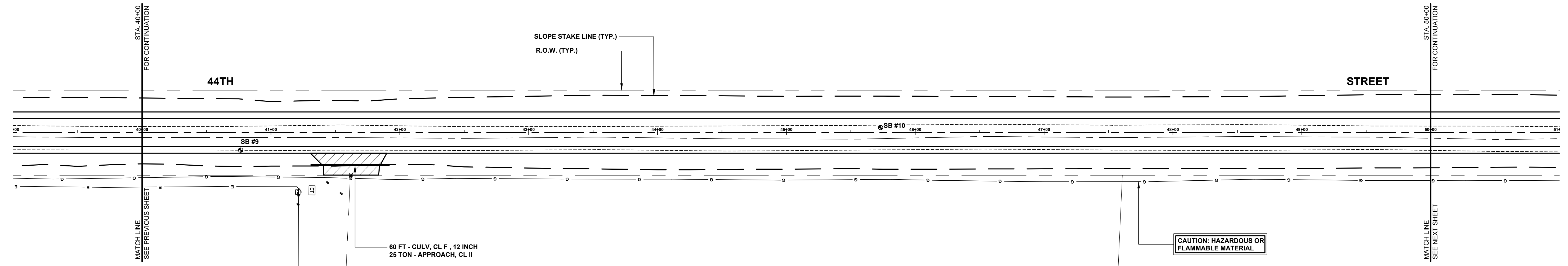
DRAWN BY: J.S.E.  
REVIEWED BY:  
DATE: DECEMBER, 2016  
SCALE: 1" = 40'H, 5'V

**SOIL BORINGS**

<b>SB #9</b>	0 - 4"	BROWN FINE TO MEDIUM SAND AND GRAVEL
	4" - 2'	BROWN & DK BROWN FINE TO MED SAND, TR FINE GRAVEL
	2' - 5'	BROWN SILTY FINE TO MED SAND, TR FINE GRAVEL
	5'	END OF BORING
<b>SB #10</b>	0 - 9"	BROWN FINE TO MEDIUM SAND AND GRAVEL
	9" - 2.5'	BROWN & DK BROWN FINE TO MED SAND, TR FINE GRAVEL
	2.5' - 5'	BROWN SILTY FINE TO MED SAND, TR FINE GRAVEL
	5'	END OF BORING

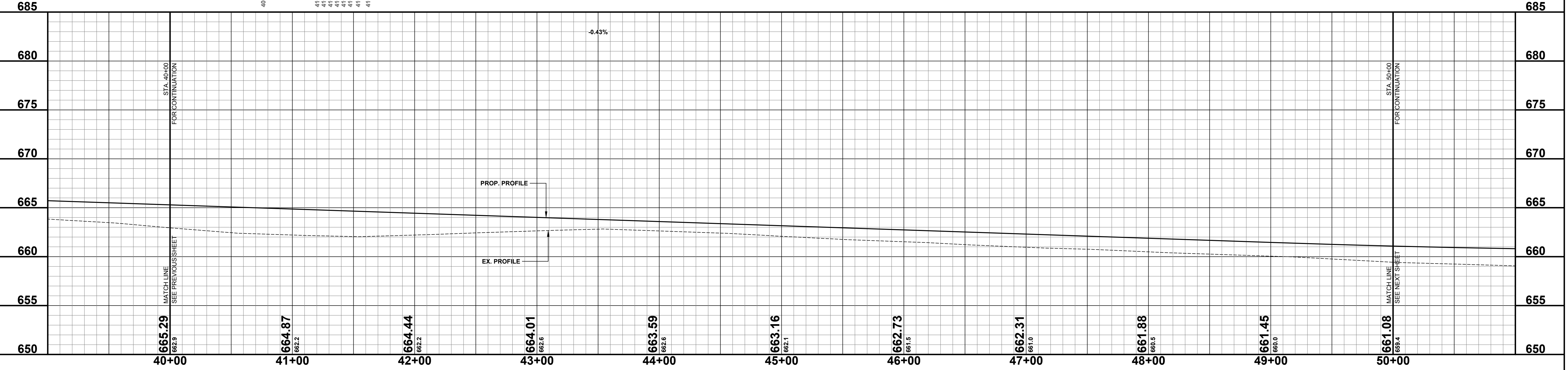
03-18-029-009-00  
MARVIN PATMOS PROPERTIES LLC  
3380 GORDON STREET  
HUDSONVILLE, MI 49426

45-773 SOIL BORING #10 3.8'



**LEGEND**

- REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II TO A DEPTH OF 6" AS DIRECTED BY THE ENGINEER IN THE FIELD, PAID FOR AS APPROACH, CL II BY THE TON.
- SAWCUT AND REMOVE EXISTING HMA PAVEMENT. REGRADE EXISTING DRIVE OR APPROACH AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 13A (LEVELING); AND 165#/SYD HMA, 13A (TOP). (PAVING UNDER SEPERATE CONTRACT IN THE FUTURE)
- SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT. REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 13A (LEVELING); AND 165#/SYD HMA, 13A (TOP). (PAVING UNDER SEPERATE CONTRACT IN THE FUTURE)



**Board of County Road Commissioners  
Of Allegan County**

1308 LINCOLN ROAD  
ALLEGAN, MICHIGAN 49010-9762  
TELEPHONE: (269) 673-2184 www.alleganroads.org FAX: (269) 673-5922

REVISIONS

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**44TH STREET RECONSTRUCTION PROJECT**  
OVERISEL TOWNSHIP - 137TH AVENUE TO 139TH AVENUE

PLAN & PROFILE - STA. 40+00 TO STA. 50+00

DRAWN BY: J.S.E.  
REVIEWED BY:  
DATE: DECEMBER, 2016  
SCALE: 1"= 40'H, 5'V

**SOIL BORINGS**

SB #11	0 - 8"	BROWN FINE TO MEDIUM SAND AND GRAVEL
	8" - 3'	BROWN & DK BROWN SILTY FINE TO MED SAND
	3' - 5'	BROWN SILTY, CLAYEY FINE SAND WITH SILTY CLAY LAYERS
	5'	END OF BORING

03-18-029-009-00  
MARVIN PATMOS PROPERTIES LLC  
3380 GORDON STREET  
HUDSONVILLE, MI 49426

BENCHMARK MARKER ON  
GUARDRAIL POST  
ELEV. = 659.37

STA. 50+00  
FOR CONTINUATION

SLOPE STAKE LINE (TYP.)  
R.O.W. (TYP.)  
**44TH**

40 FT - CULV, CL F, 12 INCH  
15 TON - APPROACH, CL II

**STREET**

AVENUE

139TH

CAUTION: HAZARDOUS OR  
FLAMMABLE MATERIAL

40 FT - CULV, CL F, 12 INCH  
15 TON - APPROACH, CL II

DR STR. #1, 24 INCH DIA, 1 EA COVER B  
RIM 659.90  
INV. 656.90 - 12" CPP, W (EX.)  
INV. 656.90 - 12" CONC, E  
(NO SUMP)

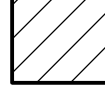
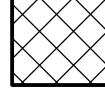

78 FT - CULV, CL E, CONC, 12 INCH @ 1.43%

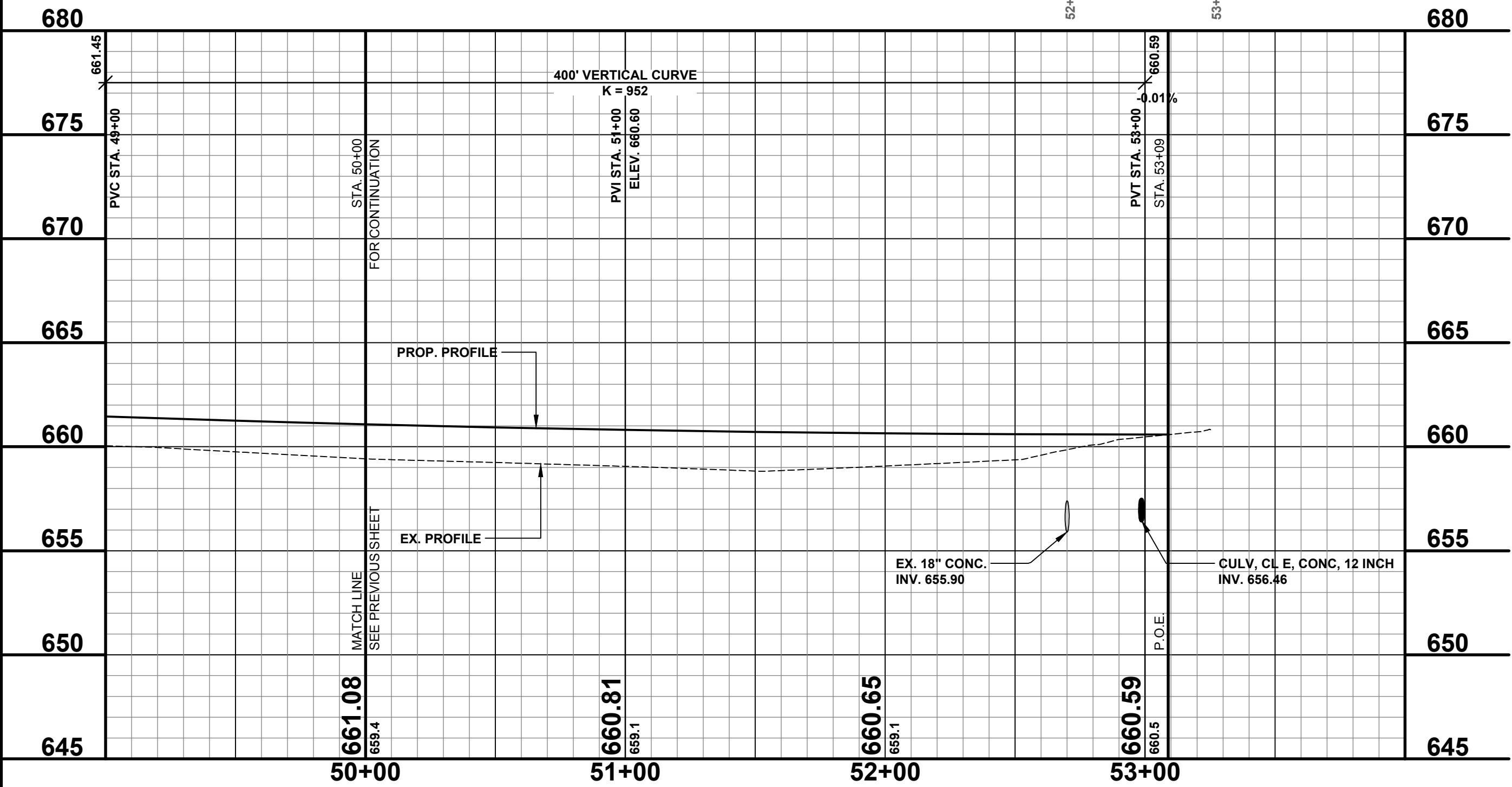
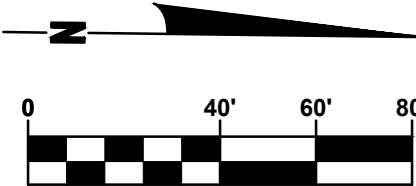
1 EA - CULV END SECT, CONC, 12 INCH  
INV. 655.70

03-18-028-005-50  
BERENS LAND LLC  
3720 142ND AVENUE  
HAMILTON, MI 49419

PRESERVE - 52+70.18" CONC CULV 26.5'  
52+69 GUARDRAIL 38.9'  
52+88 GAS VALVE 41.9'  
52+90 GAS VALVE 41.7'  
52+91 GAS LINE 42.2'  
52+91 GAS LINE 42.2'  
52+94 TELE. USER BOX 43.1'  
52+95 GUARDRAIL 43.1'  
52+96 GUARDRAIL 43.1'  
52+97 GAS MARKER POST 43.3'  
52+97 GAS LINE 43.8'  
52+98 GAS LINE 44.1'  
53+02 12" CPP 51.1'  
53+10 GAS LINE 53.2'

**LEGEND**

-  REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II TO A DEPTH OF 6" AS DIRECTED BY THE ENGINEER IN THE FIELD, PAID FOR AS APPROACH, CL II BY THE TON.
-  SAWCUT AND REMOVE EXISTING HMA PAVEMENT. REGRADE EXISTING DRIVE OR APPROACH AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 13A (LEVELING); AND 165#/SYD HMA, 13A (TOP). (PAVING UNDER SEPERATE CONTRACT IN THE FUTURE)
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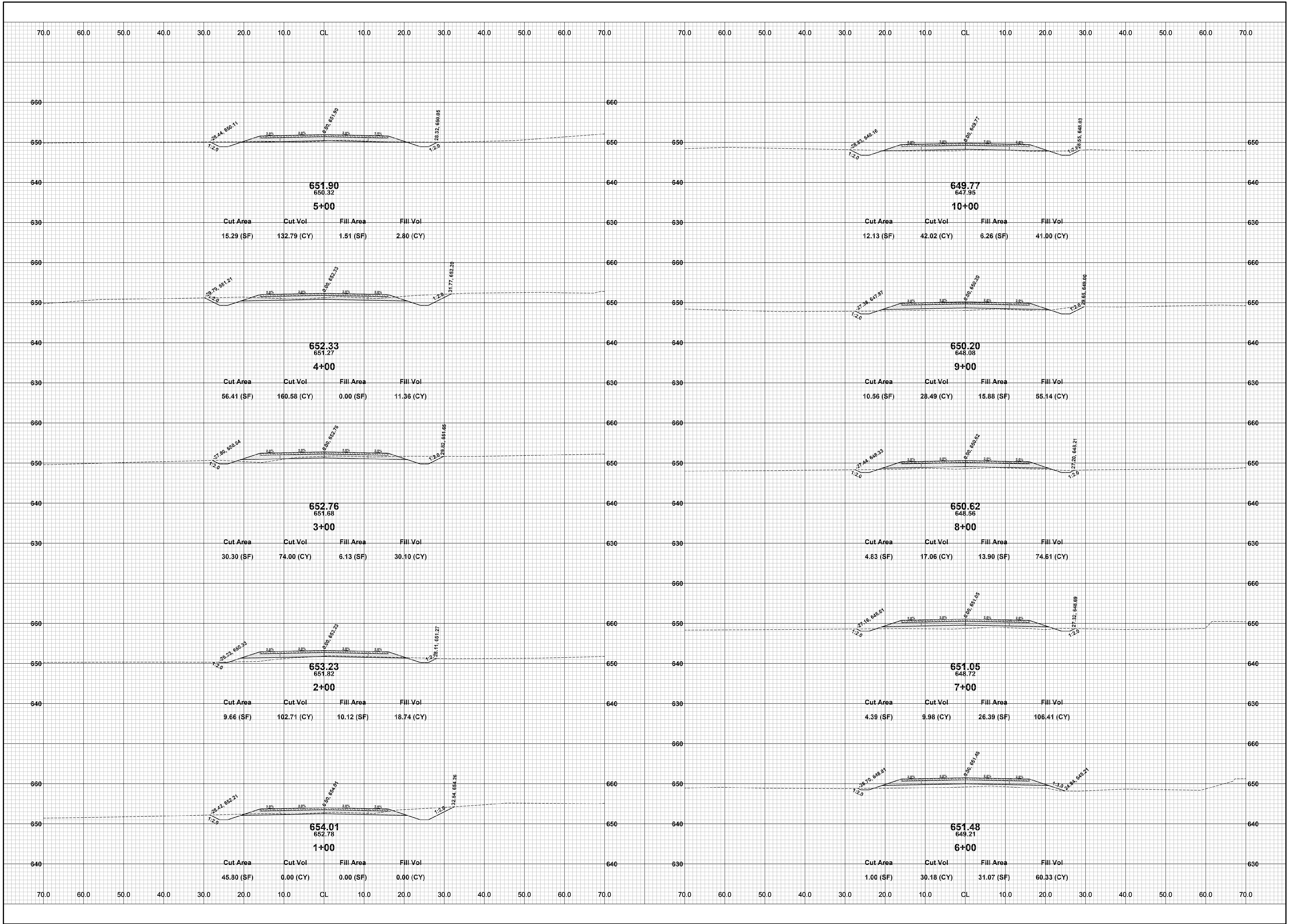
**Board of County Road Commissioners  
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1308 LINCOLN ROAD  
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TELEPHONE: (269) 673-2184 FAX: (269) 673-5922

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**44TH STREET RECONSTRUCTION PROJECT**  
OVERISEL TOWNSHIP - 137TH AVENUE TO 139TH AVENUE  
PLAN & PROFILE - STA. 50+00 TO STA. P.O.E.

DRAWN BY: J.S.E.  
REVIEWED BY:  
DATE: DECEMBER, 2016  
SCALE: 1"= 40'H, 5'V

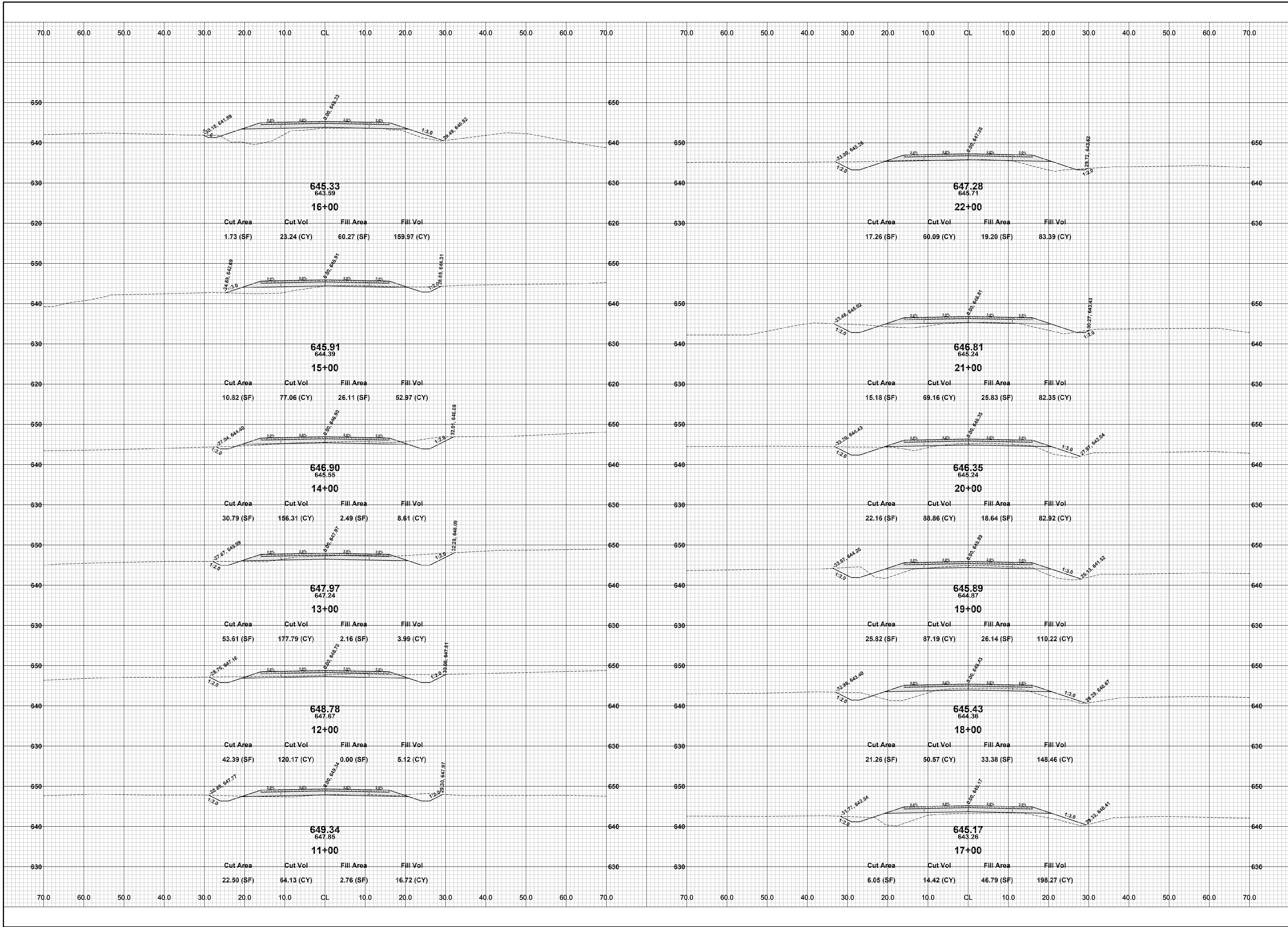




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**44TH STREET RECONSTRUCTION PROJECT**  
OVERISEL TOWNSHIP - 137TH AVENUE TO 139TH AVENUE  
CROSS SECTIONS - STA. 1+00 TO STA. 10+00

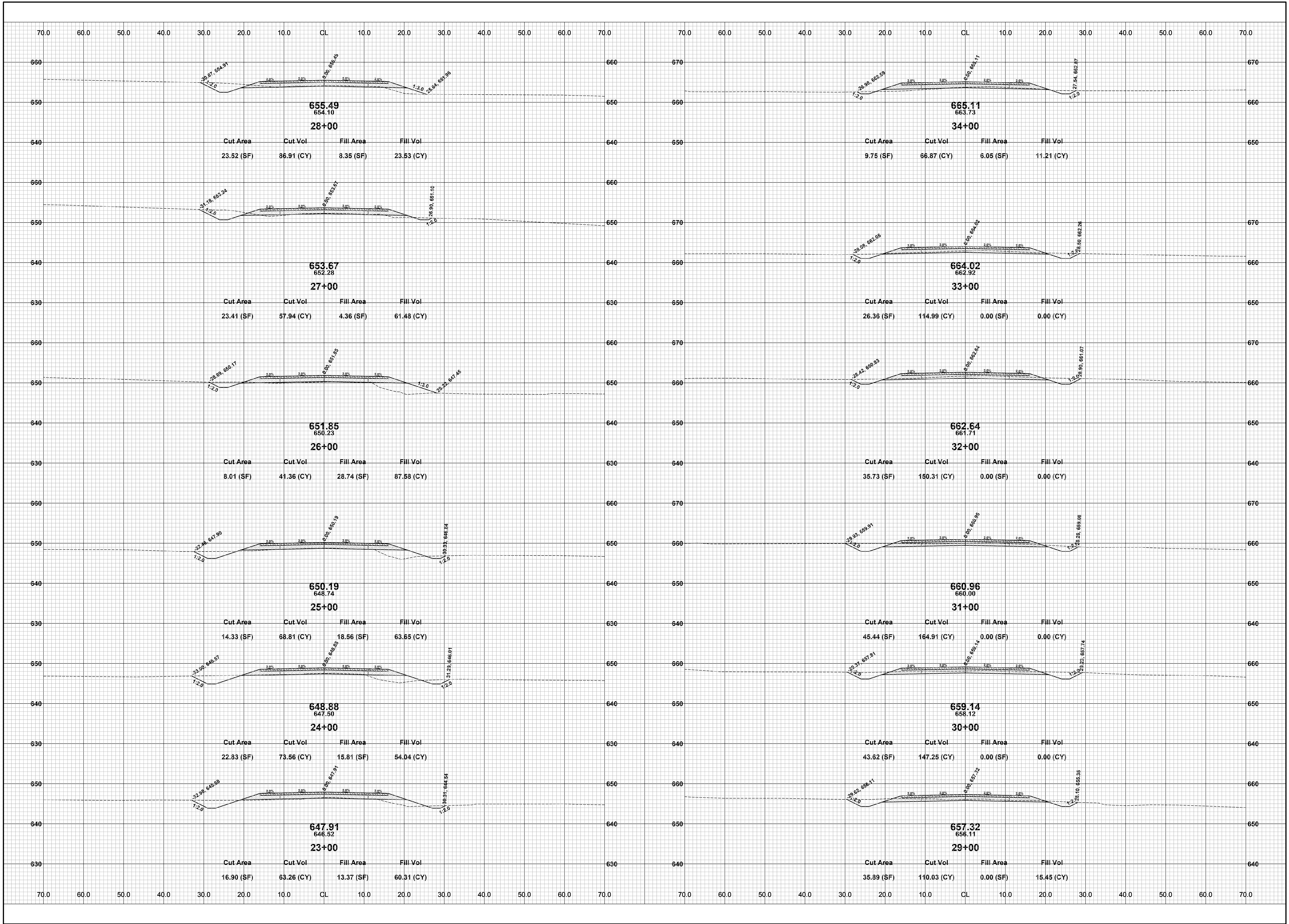
DRAWN BY: J.S.E.  
REVIEWED BY:  
DATE: DECEMBER, 2016  
SCALE: 1" = 10'



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**44TH STREET RECONSTRUCTION PROJECT**  
OVERISEL TOWNSHIP - 137TH AVENUE TO 139TH AVENUE  
CROSS SECTIONS - STA. 11+00 TO STA. 22+00

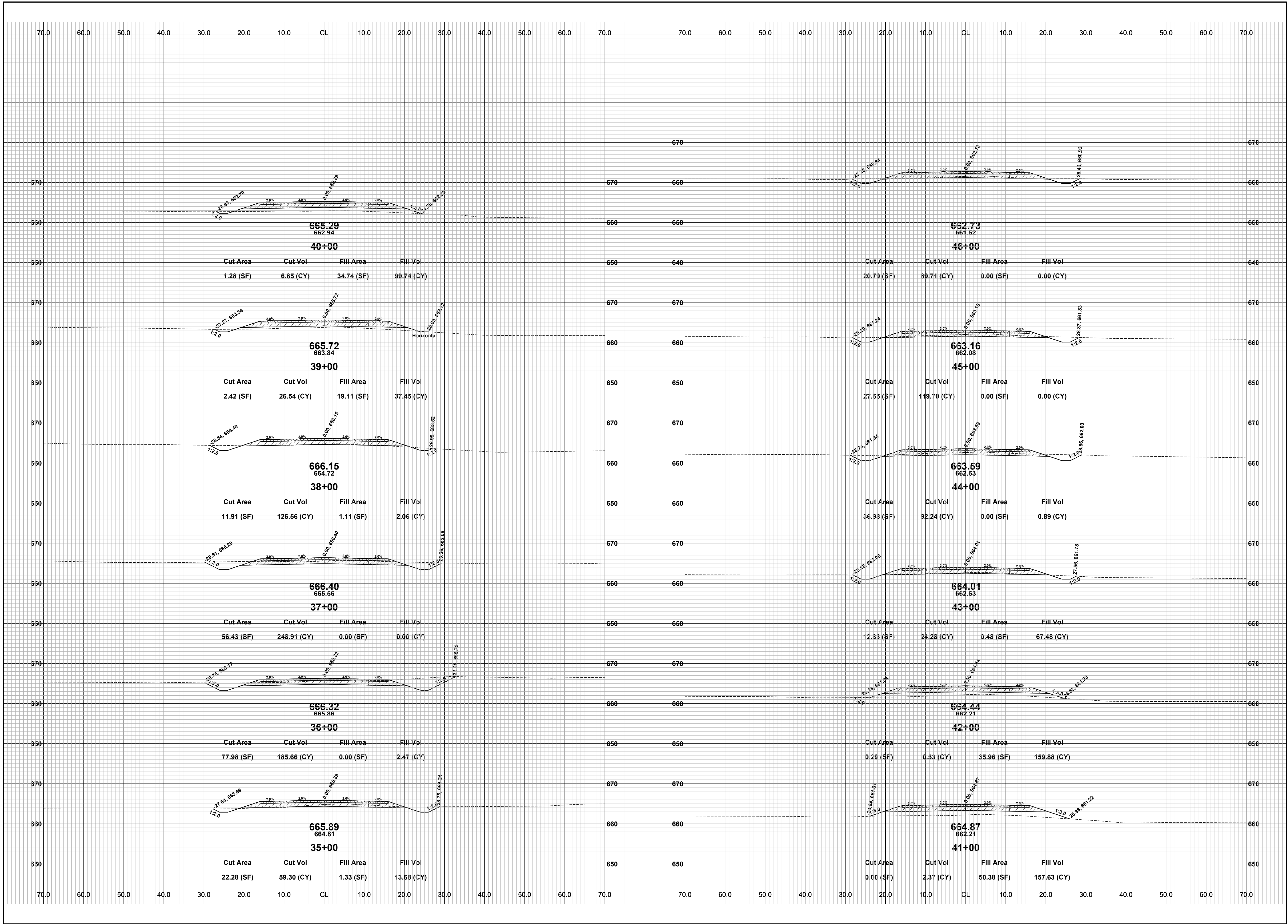
DRAWN BY: J.S.E.  
REVIEWED BY:  
DATE: DECEMBER, 2016  
SCALE: 1" = 10'



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**44TH STREET RECONSTRUCTION PROJECT**  
OVERISEL TOWNSHIP - 137TH AVENUE TO 139TH AVENUE  
CROSS SECTIONS - STA. 23+00 TO STA. 34+00

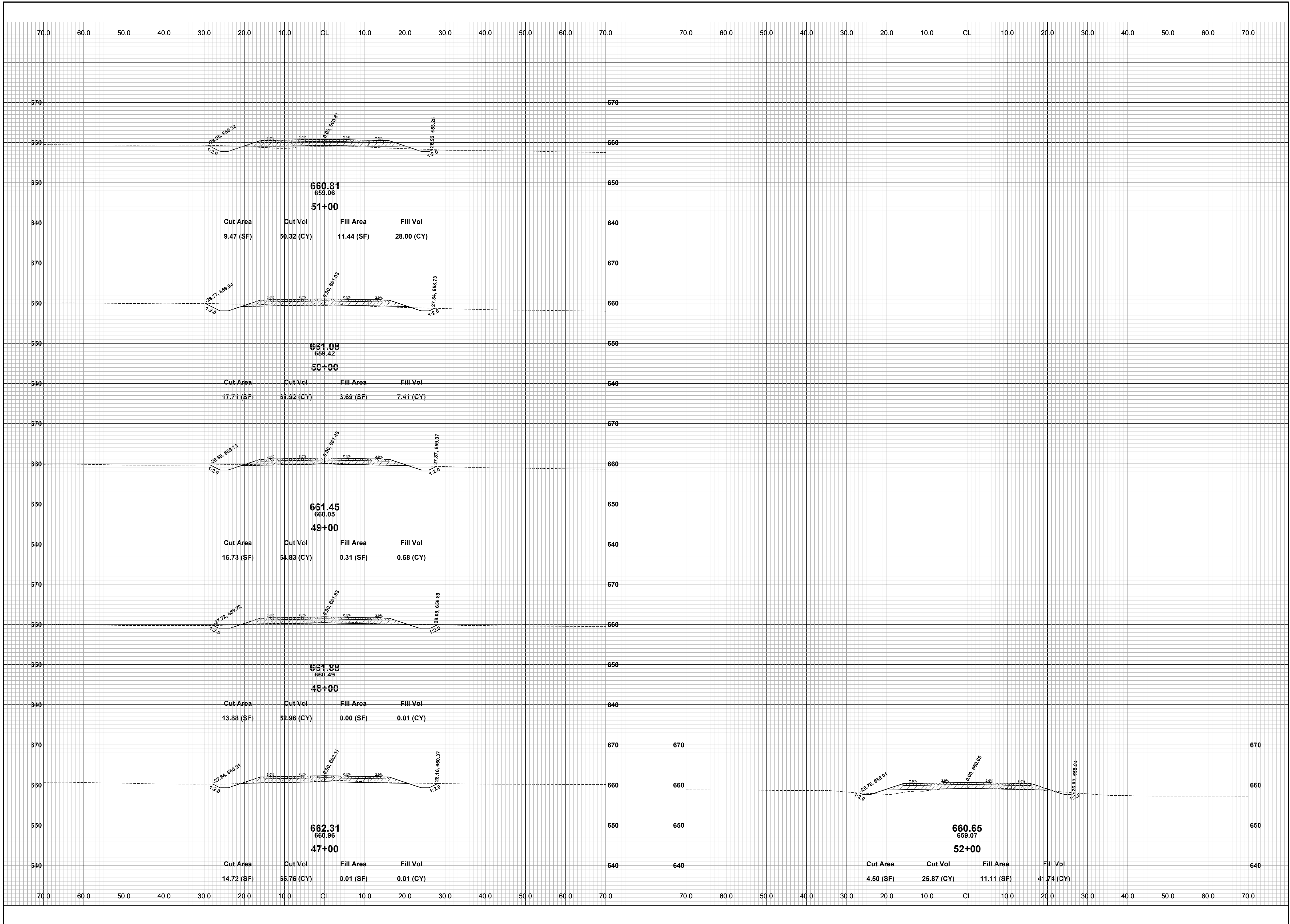
DRAWN BY: J.S.E.  
REVIEWED BY:  
DATE: DECEMBER, 2016  
SCALE: 1" = 10'



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**44TH STREET RECONSTRUCTION PROJECT**  
 OVERISEL TOWNSHIP - 137TH AVENUE TO 139TH AVENUE  
 CROSS SECTIONS - STA. 35+00 TO STA. 46+00

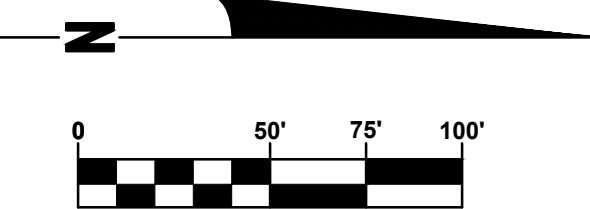
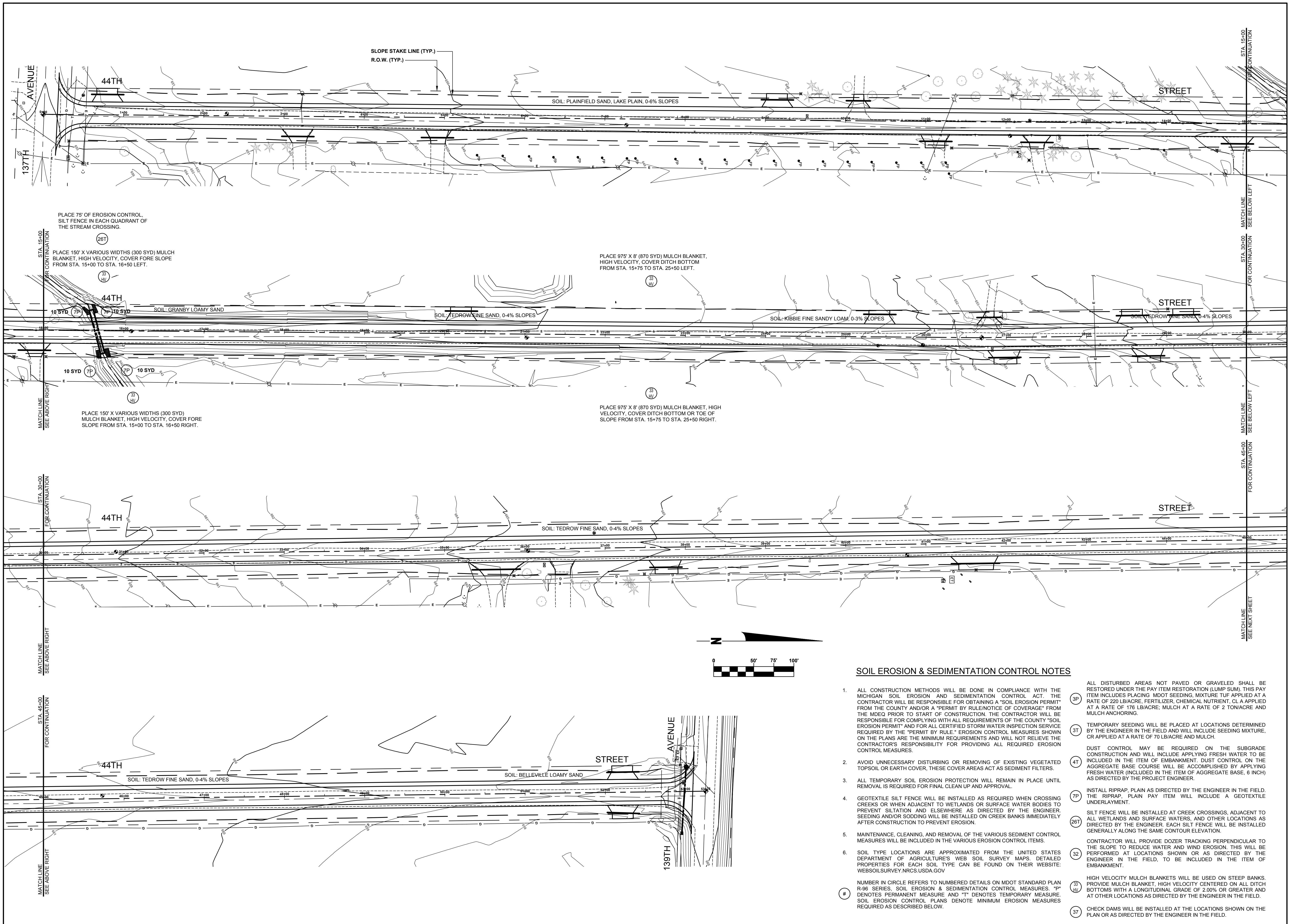
DRAWN BY: J.S.E.  
 REVIEWED BY:  
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 SCALE: 1" = 10'



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**44TH STREET RECONSTRUCTION PROJECT**  
 OVERISEL TOWNSHIP - 137TH AVENUE TO 139TH AVENUE  
 CROSS SECTIONS - STA. 47+00 TO STA. 52+00

DRAWN BY: J.S.E.  
 REVIEWED BY:  
 DATE: DECEMBER, 2016  
 SCALE: 1" = 10'



**SOIL EROSION & SEDIMENTATION CONTROL NOTES**

- ALL CONSTRUCTION METHODS WILL BE DONE IN COMPLIANCE WITH THE MICHIGAN SOIL EROSION AND SEDIMENTATION CONTROL ACT. THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING A "SOIL EROSION PERMIT" FROM THE COUNTY AND/OR A "PERMIT BY RULE/NOTICE OF COVERAGE" FROM THE MDOE PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR COMPLYING WITH ALL REQUIREMENTS OF THE COUNTY "SOIL EROSION PERMIT" AND FOR ALL CERTIFIED STORM WATER INSPECTION SERVICE REQUIRED BY THE "PERMIT BY RULE." EROSION CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS AND WILL NOT RELIEVE THE CONTRACTOR'S RESPONSIBILITY FOR PROVIDING ALL REQUIRED EROSION CONTROL MEASURES.
  - AVOID UNNECESSARY DISTURBING OR REMOVING OF EXISTING VEGETATED TOPSOIL OR EARTH COVER. THESE COVER AREAS ACT AS SEDIMENT FILTERS.
  - ALL TEMPORARY SOIL EROSION PROTECTION WILL REMAIN IN PLACE UNTIL REMOVAL IS REQUIRED FOR FINAL CLEAN UP AND APPROVAL.
  - GEOTEXTILE SILT FENCE WILL BE INSTALLED AS REQUIRED WHEN CROSSING CREEKS OR WHEN ADJACENT TO WETLANDS OR SURFACE WATER BODIES TO PREVENT SILTATION AND ELSEWHERE AS DIRECTED BY THE ENGINEER. SEEDING AND/OR SODDING WILL BE INSTALLED ON CREEK BANKS IMMEDIATELY AFTER CONSTRUCTION TO PREVENT EROSION.
  - MAINTENANCE, CLEANING, AND REMOVAL OF THE VARIOUS SEDIMENT CONTROL MEASURES WILL BE INCLUDED IN THE VARIOUS EROSION CONTROL ITEMS.
  - SOIL TYPE LOCATIONS ARE APPROXIMATED FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE'S WEB SOIL SURVEY MAPS. DETAILED PROPERTIES FOR EACH SOIL TYPE CAN BE FOUND ON THEIR WEBSITE: [WEBSOILSURVEY.NRCS.USDA.GOV](http://WEBSOILSURVEY.NRCS.USDA.GOV)
- NUMBER IN CIRCLE REFERS TO NUMBERED DETAILS ON MDOT STANDARD PLAN R-96 SERIES, "SOIL EROSION & SEDIMENTATION CONTROL MEASURES." "P" DENOTES PERMANENT MEASURE AND "T" DENOTES TEMPORARY MEASURE. SOIL EROSION CONTROL PLANS DENOTE MINIMUM EROSION MEASURES REQUIRED AS DESCRIBED BELOW.
- (3P) ALL DISTURBED AREAS NOT PAVED OR GRAVELED SHALL BE RESTORED UNDER THE PAY ITEM RESTORATION (LUMP SUM). THIS PAY ITEM INCLUDES PLACING MDT SEEDING, MIXTURE TUF APPLIED AT A RATE OF 220 LB/ACRE, FERTILIZER, CHEMICAL NUTRIENT, CL A APPLIED AT A RATE OF 176 LB/ACRE; MULCH AT A RATE OF 2 TON/ACRE AND MULCH ANCHORING.
  - (3T) TEMPORARY SEEDING WILL BE PLACED AT LOCATIONS DETERMINED BY THE ENGINEER IN THE FIELD AND WILL INCLUDE SEEDING MIXTURE, OR APPLIED AT A RATE OF 70 LB/ACRE AND MULCH.
  - (4T) DUST CONTROL MAY BE REQUIRED ON THE SUBGRADE CONSTRUCTION AND WILL INCLUDE APPLYING FRESH WATER TO BE INCLUDED IN THE ITEM OF EMBANKMENT. DUST CONTROL ON THE AGGREGATE BASE COURSE WILL BE ACCOMPLISHED BY APPLYING FRESH WATER (INCLUDED IN THE ITEM OF AGGREGATE BASE, 6 INCH) AS DIRECTED BY THE PROJECT ENGINEER.
  - (7P) INSTALL RIPRAP, PLAIN AS DIRECTED BY THE ENGINEER IN THE FIELD. THE RIPRAP, PLAIN PAY ITEM WILL INCLUDE A GEOTEXTILE UNDERLAYMENT.
  - (26T) SILT FENCE WILL BE INSTALLED AT CREEK CROSSINGS, ADJACENT TO ALL WETLANDS AND SURFACE WATERS, AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER. EACH SILT FENCE WILL BE INSTALLED GENERALLY ALONG THE SAME CONTOUR ELEVATION.
  - (32) CONTRACTOR WILL PROVIDE DOZER TRACKING PERPENDICULAR TO THE SLOPE TO REDUCE WATER AND WIND EROSION. THIS WILL BE PERFORMED AT LOCATIONS SHOWN OR AS DIRECTED BY THE ENGINEER IN THE FIELD, TO BE INCLUDED IN THE ITEM OF EMBANKMENT.
  - (33) HIGH VELOCITY MULCH BLANKETS WILL BE USED ON STEEP BANKS. PROVIDE MULCH BLANKET, HIGH VELOCITY CENTERED ON ALL DITCH BOTTOMS WITH A LONGITUDINAL GRADE OF 2.00% OR GREATER AND AT OTHER LOCATIONS AS DIRECTED BY THE ENGINEER IN THE FIELD.
  - (37) CHECK DAMS WILL BE INSTALLED AT THE LOCATIONS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

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**44TH STREET RECONSTRUCTION PROJECT**  
OVERISEL TOWNSHIP - 137TH AVENUE TO 139TH AVENUE

**SOIL EROSION & SEDIMENTATION CONTROL PLAN**

DRAWN BY: J.S.E.  
REVIEWED BY:  
DATE: DECEMBER, 2016  
SCALE: 1" = 50'