# OWOSSO PUBLIC SCHOOL DISTRICT 2015 SINKING FUND IMPROVEMENTS

AREA MAP

NOT TO SCALE

### EXISTING ITEMS LEGEND

O - MANHOLE  $\rightarrow$  - FENCE ∅ – CATCHBASIN △ – SPRINKLER □ - CURB CATCHBASIN □□ - RAILROAD SIGNAL ♥ - FIRE HYDRANT  $\square$  – ANTENNA ⊗ − SATELLITE DISH  $\oplus$  - GAS VAL VE ⊗ − WATER VALVE AC - AIR CONDITIONING UNIT ● - POWER POLE SOIL BORING Ø - TELEPHONE POLE — POWER AND TELEPHONE POLE ☆ – LIGHT POLE  $\leftarrow$   $\bigcirc$  - GUY ANCHOR AND POLE CABLE TV PEDESTAL □ − TELEPHONE PEDESTAL ■ - ELECTRICAL PEDESTAL □ − MAIL BOX TRANSFORMER

### PROPOSED ITEMS LEGEND

MANHOLE - CATCHBASIN ■ O LIGHT POLES

-- - CONTOUR

### CB = CATCH BASINCF = CUBIC FEET CL = CENTERLINECMP = CORRUGATED METAL PIPE CSP = CORRUGATED STEEL PIPE CONC = CONCRETEDIP = DUCTILE IRON PIPE ELEC = ELECTRICELEV = ELEVATIONESM'T = EASEMENTEX OR EXIST = EXISTINGFS = FINISH SURFACE FG = FINISH GRADE G = GUTTERHYD = HYDRANTINV = INVERTMH = MANHOLEMIN = MINIMUMNFL = NOT FIELD LOCATED NTS = NOT TO SCALESHIA WASSEE-PROP = PROPOSEDPVC = POLYVINYL CHLORIDECOUNTY RCP = REINFORCED CONCRETE PIPE SAN = SAN/TARY

ABBREVIATIONS

BIT = BITUMINOUS

STA = STATIONSTM = STORM

SWR = SEWER

TC = TOP OF CURB TELE = TELEPHONE

TW = TOP OF WALK

WM = WATER MAIN

BM = BENCH MARK

### SOIL EROSION & SEDIMENTATION CONTROL MEASURES KEY CHARACTERISTICS **DETAIL** Mulch tacking agent used to provide immediate protection until grass is rooted Should include prepared topsoil bed Collects high velocity concentrated runoff May use filter cloth over inlet Controls and Contains sediment from sheet flow conditions. abric must be "toed" into the soil 6" or more to prevent underflow. Must be constructed of adequate strength filter fabric and stakes.

### T - DENOTES TEMPORARY MEASURES P - DENOTES PERMANANT MEASURES

COMMUNICATION SERVICE

1025 N. Shiawassee Street

Corunna, MI 48817

TEL 989-743-3471

SRESD

Chris Suire

CONTRACTOR SHALL CONFORM TO SOIL EROSION AND SEDIMENTATION CONTROL ACT, PART 91 OF PUBLIC ACT 451 OF 1994, AS AMENDED. ALL CATCH BASINS, ON THE SITE AND ADJACENT TO THE SITE, SHALL BE COVERED WITH CLOTH FILTERS FOR SOIL EROSION AND SEDIMENTATION CONTROL.

### <u>CONTACTS</u>

TELEPHONE SERVICE Verizon/Frontier Communications Consumers Energy 530 W. Willow c/o Engineering Department 224 West Exchange Lansing, MI 48909 Owosso. MI 48867 TEL 517-374-2002 TEL (989) 723-0373 PUBLIC WORKS ELECTRIC SERVICE City of Owosso Consumers Energy 301 W. Main Street Tamara Ellzey Owosso, MI 48867 TEL 989-729-3253 TEL 989-725-0550 COMMUNICATION SERVICE Daystarr, LLC Charter Communications P.O. Box 250 Gorden Brooks Corunna, MI 48817 2525 State Street TEL 989-720-1000

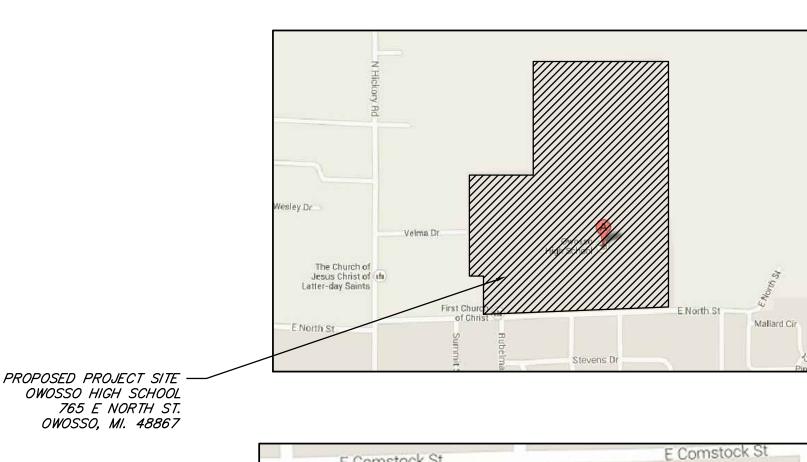
Saginaw, MI 48602 TEL 989-737-5356

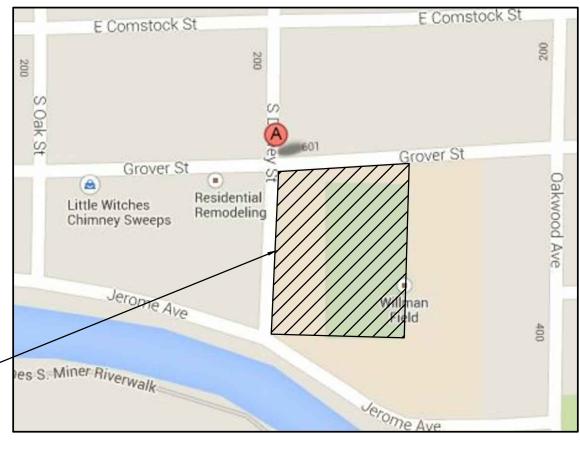
PROPOSED PROJECT SITE

WILLMAN FIELD

301 S DEWEY ST.

OWOSSO, MI. 48867





LOCATION MAP CITY OF OWOSSO SHIAWASSEE COUNTY, MICHIGAN

	PLAN INDEX						
FILE NO.	DESCRIPTION	SHT. #					
D-5103-01	COVER SHEET	1					
D-5103-02	OWOSSO HIGH SCHOOL — SOCCER FIELD IMPROVEMENTS	2					
D-5103-03	OWOSSO HIGH SCHOOL — BASEBALL FIELD IMPROVEMENTS	3					
D-5103-04	BRYANT ELEMENTARY SCHOOL - SANITARY IMPROVEMENTS	4					
D-5103-05	WILLMAN FIELD — DRAINAGE IMPROVEMENTS	5					
D-5103-06	WILLMAN FIELD - LIGHTING IMPROVEMENTS	6					
D-5103-07	OWOSSO HIGH SCHOOL GYM IMPROVEMENTS	7					
DE-1011-01	OWOSSO HIGH SCHOOL GYM LIGHTING IMPROVEMENTS	8					
D-5103-08	CONSTRUCTION DETAILS	9					

### GENERAL NOTES

CONTRACTOR SHALL CALL "MISS DIG" 811 A MINIMUM OF 3 WORKING DAYS PRIOR TO ANY CONSTRUCTION FOR THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES. THE EXISTING UTILITIES ON THESE DRAWINGS HAVE BEEN SHOWN ACCORDING TO THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES AND NOTIFY THE ENGINEER WHERE POSSIBLE CONFLICT EXISTS PRIOR TO BEGINNING CONSTRUCTION.

ELECTRIC SERVICE TO BUILDING AND PARKING LOT LIGHTS SHALL BE UNDERGROUND. ALL UTILITY COMPANY SERVICE LINES AND PAD LOCATIONS ARE SHOWN FOR REFERENCE ONLY.

PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED BY THE APPROPRIATE MUNICIPALITIES OR STATE OF MICHIGAN. CONSTRUCTION PROCEDURES SHALL CONFORM TO THE REQUIREMENTS OF THE APPROPRIATE MUNICIPALITIES. ALL DRIVES AND APPROACHES SHALL BE CONSTRUCTED ACCORDING TO REQUIREMENTS OF THE APPROPRIATE GOVERNING AUTHORITY.

ALL TRENCHED CONSTRUCTION UNDER GRAVEL, PAVED SURFACES OR UTILITIES SHALL BE BACKFILLED WITH CLASS II SAND OR OTHER APPROVED GRANULAR MATERIAL IN 12" LAYERS AND COMPACTED TO 95% OF ITS MAXIMUM UNIT WEIGHT.

UNPAVED AREAS SHALL BE SMOOTHLY GRADED AND THE SURFACE STABILIZED BY SEEDING OR OTHERWISE. THE MAXIMUM DESIRABLE SLOPE IS 3 HORIZONTAL TO 1 VERTICAL UNLESS NOTED

CONTRACTOR SHALL SAWCUT PAVEMENT AND CURB & GUTTER FOR A CLEAN EDGE TO INSTALL PROPOSED PAVEMENT AND CURB & GUTTER.

CONTRACTOR IS RESPONSIBLE TO MAINTAIN POSITIVE DRAINAGE PATTERN TO ENSURE NO PONDING OF WATER ON ADJACENT EXISTING AND PROPOSED PAVED SURFACES.

DIMENSIONS SHOWN ARE GIVEN TO THE BACK OF CURBS AND FACE OF BUILDINGS UNLESS NOTED OTHERWISE.

- PROPOSED PROJECT SITE

BRYANT SCHOOL

925 HAMPTON ST.

OWOSSO, MI. 48867

<u>STORM SEWER</u> PIPE MATERIALS SHALL BE AS FOLLOWS:

• 12" DIAMETER AND ABOVE — CONCRETE PIPE, C—76, ASTM C—443 <u>OR</u> CORRUGATED PVC PIPE. • LESS THAN 12" DIAMETER - CORRUGATED PVC PIPE, OR HIGH DENSITY POLYETHYLENE (HDPE), DUAL WALL, CORRUGATED.

ALL SANITARY SEWER SHALL BE PVC, SDR35, TYPE PSM PLASTIC, CONFORMING TO ANSI/ASTM D3034 WITH RUBBER GASKET JOINTS, UNLESS SPECIFIED OTHERWISE.

ALL PRODUCTS SHALL BE MANUFACTURER'S BEST BRAND OR GRADE AND INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS.

ALL WORK SHALL BE GUARANTEED FOR A MINIMUM OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.

CONSTRUCT ALL MATERIALS STRAIGHT, PLUMB, AND LEVEL UNLESS SPECIFICALLY NOTED OR INDICATED OTHERWISE.

ALL WORK SHALL BE INSTALLED IN CONFORMANCE WITH FEDERAL, STATE, AND LOCAL - CODES, RULES, AND REGULATIONS. ALL MATERIALS SHALL BE INSTALLED IN CONFORMANCE WITH INDUSTRY STANDARDS AND THE ASSOCIATION THAT PERTAINS TO THE PARTICULAR PRODUCT. FOR EXAMPLE. AISC — AMERICAN INSTITUTE FOR STEEL CONSTRUCTION.

USE THE MOST CURRENT EDITION WHEN REFERRING TO INDUSTRY STANDARDS.

SITE PROTECTION: THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING ANY AND ALL ADJACENT EXISTING STRUCTURES AND UTILITIES DURING CONSTRUCTION. ANY DAMAGE INCURRED DURING CONSTRUCTION SHALL, AT A MINIMUM, BE RESTORED TO A STATE EQUAL TO ITS PRE-CONSTRUCTION STATE AT THE CONTRACTORS EXPENSE.

ALL CONSTRUCTION UNDER EXISTING OR PROPOSED PAVEMENT AND FUTURE UTILITIES, INCLUDING HOUSE SERVICES, SHALL BE COMPLETELY BACKFILLED WITH SAND, IN 12" LAYERS, AND COMPACTED TO NOT LESS THAN 95% OF ITS MAXIMUM UNIT WEIGHT.

THE EXISTING UTILITIES ON THESE DRAWINGS HAVE BEEN SHOWN ACCORDING THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND SHALL NOTIFY THE ENGINEER AS TO WHERE POSSIBLE CONFLICT EXISTS.

BY	MARK	REVISIONS	DATE
SPECIFIC WITH TH DOES NO	APPLICATI E CONDITIO	ENTED BY THIS DRAWING WAS DESIGNED BY THE ENGINEER ON AND SPECIFIC LOCATION DESCRIBED HEREON IN ACCOR NS PREVALENT AT THE TIME THE DESIGN WAS DONE. THE TEE AND WILL NOT BE LIABLE FOR ANY OTHER LOCATION, SE.	DANCE ENGINEER

OWOSSO PUBLIC SCHOOL DISTRICT OWOSSO, MICHIGAN

2015 SINKING FUND **IMPROVEMENTS** OWOSSO PUBLIC SCHOOLS



DE. BY: *AJS* 

DR. BY: *AJS* 

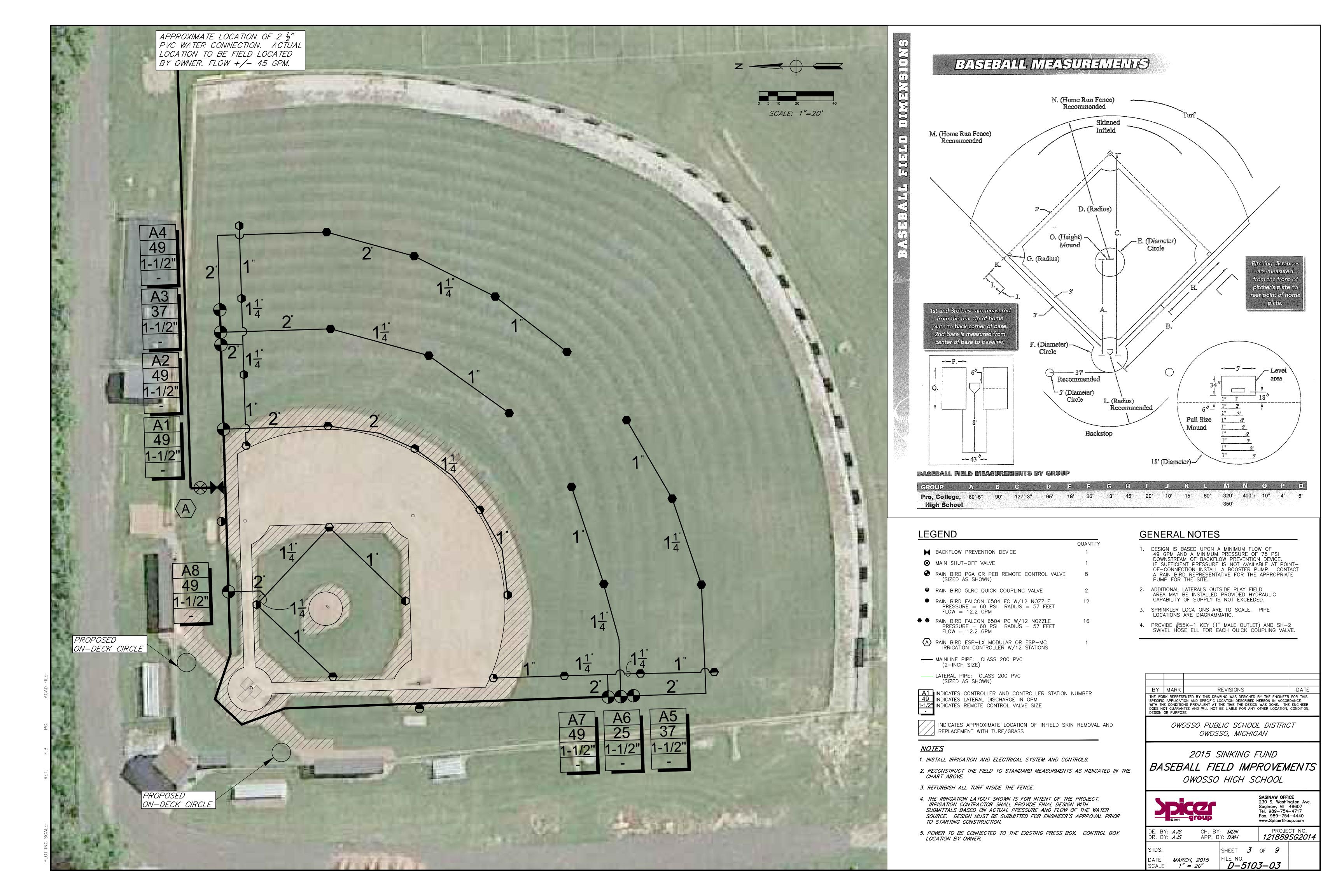
SAGINAW OFFICE 230 S. Washington Ave. Saginaw, MI 48607 Tel. 989-754-4717 Fax. 989-754-4440 www.SpicerGroup.com CH. BY: *MDN* 

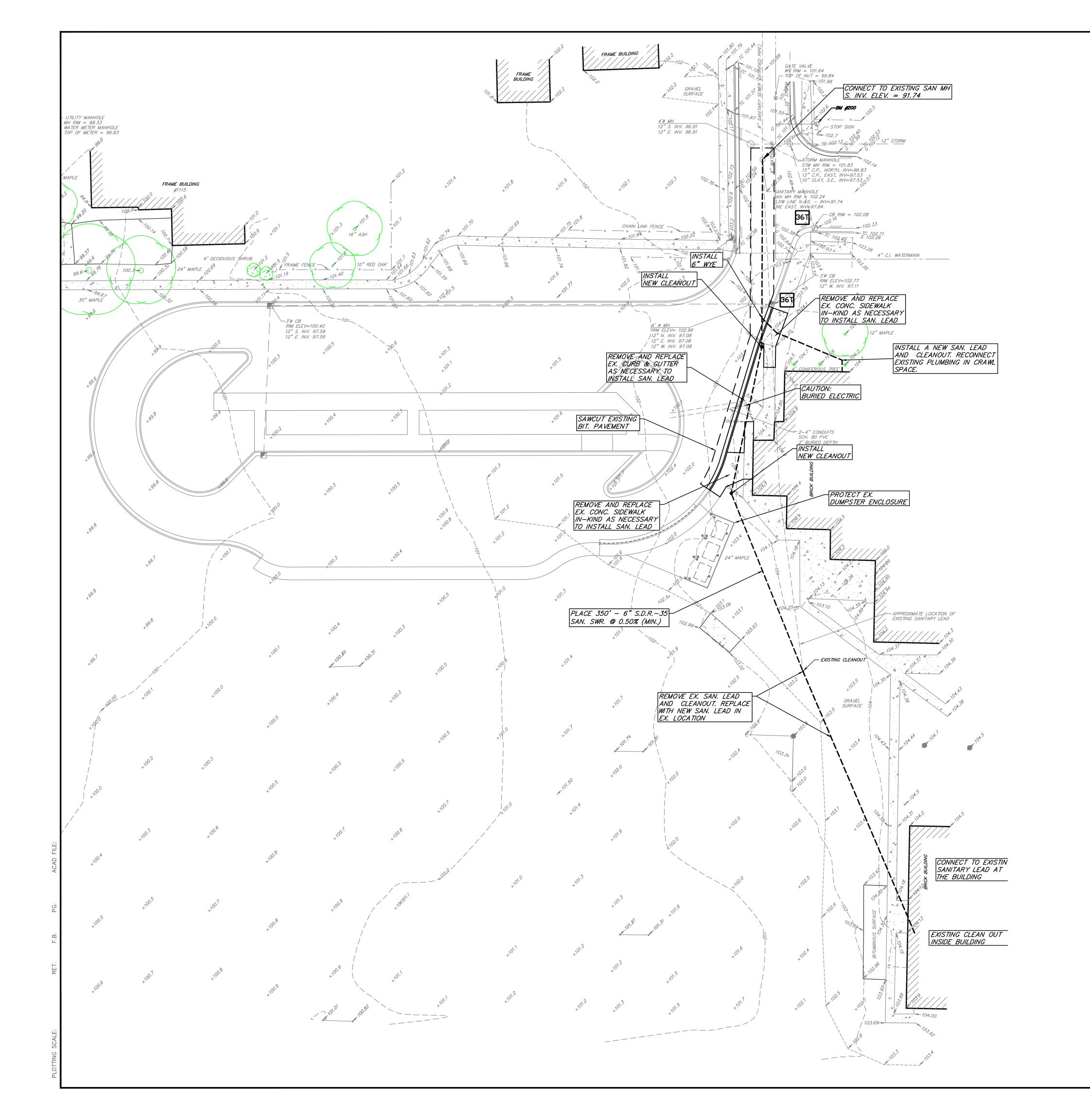
121889SG2014

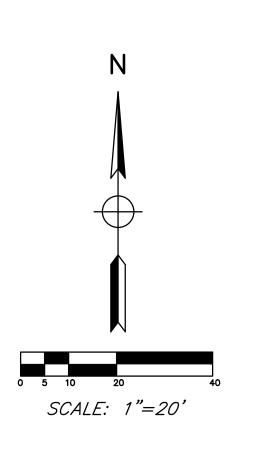
SHEET 1 of 9MARCH, 2015 D-5103-01 NONE

APP. BY: *DWH* 









APPROXIMATE QUANITITIES THIS SHEET						
l TEM	UNIT	QTY.				
6" SDR-35 SANITARY SEWER, TRENCH DETAIL A	LIN. FT.	350				
6" SANITARY CLEANOUT	EACH	2				
CURB & GUTTER REPLACEMENT	LIN. FT.	<i>85</i>				
BITUMINOUS PAVEMENT REPLACEMENT	TON	20				
CONCRETE SIDEWALK REPLACEMENT	SFT.	255				
CONNECT TO EXISTING SANITARY MANHOLE	EACH	1				

### <u>NOTES</u>

- 1. CONTRACTOR SHALL FIND EXISTING CLEAN OUT APPROXIMATELY
  30' NORTH OF THE UTILITY POLE AND FOLLOW THE EXISTING SANITARY
  SERVICE LINE SOUTH TO THE BUILDING.
- 2. CONTRACTOR SHALL VERIFY INVERT ELEVATIONS AT THE EXISTING MANHOLE CONNECTION AND AT THE SCHOOL TO DETERMINE GRADE PRIOR TO INSTALLING THE SANITARY SEWER SERVICE.

# <u>BENCHMARK</u>

*BM#200* 

ARROW ON DOME OF HYDRANT @ NE CORNER S. LYON ST. & HAMPTON <u>ELEV. 105.24</u>

BY	MARK	REVISIONS	DATE
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OWOSSO, MICHIGAN

2015 SINKING FUND SANITARY LEAD REPLACEMENT BRYANT ELEMENTARY SCHOOL



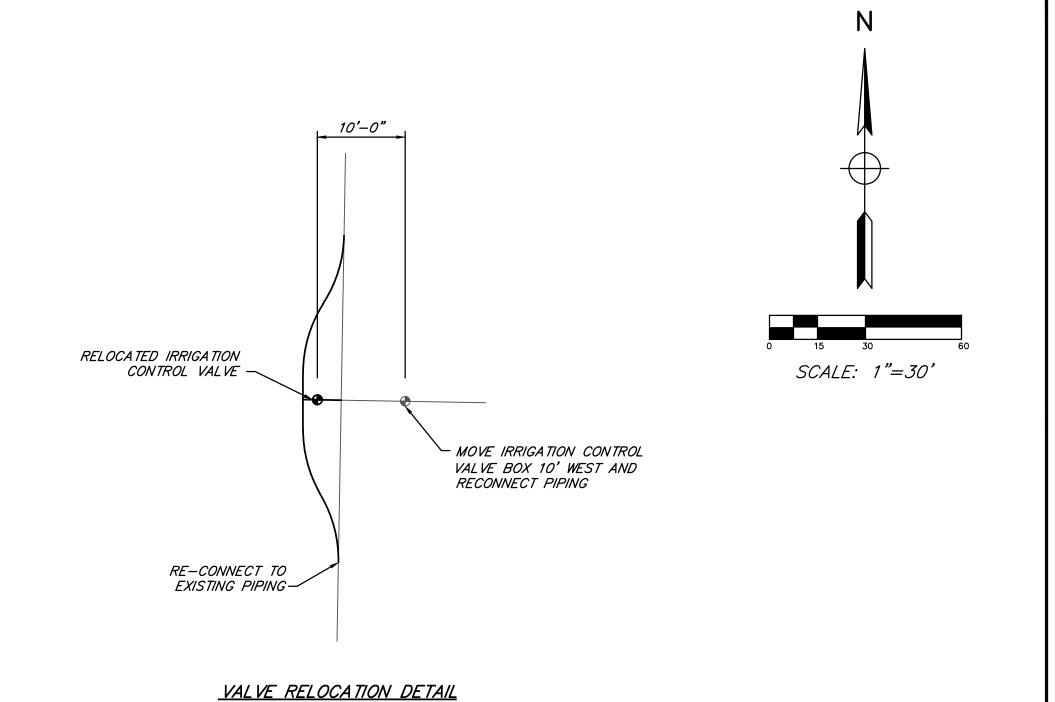
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PROJECT NO. **121889SG2014** 

DE. BY: *AJS*DR. BY: *AJS*CH. BY: *MDN*APP. BY: *DWH* 

STDS. SHEET **4** OF **9**DATE MARCH, 2015 SCALE 1" = 20' FILE NO. **D-5103-04** 





### SAND CAP BUILD UP SYSTEM

NOT TO SCALE

- 1. CONTRACTOR SHALL BUILD UP THE EXISTING TURF AND CORRECT ANY LOW (WET) SPOTS IN THE EXISTING SLOPE BY LEVELING WITH TOPSOIL. PRÉPARE THE EXISTING SURFACE TO A SLOPE OF 1.25%. ADD SEED AND FERTILIZER TO ALLOW TURF TO BE RE—ESTABLISHED. TRAFFIC ON THE FIELD SHALL BE RESTRICTED OVER THE COURSE OF THIS PROCESS.
- 2. ONCE THE TURF HAS BEEN RE-ESTABLISHED, BEGIN A SAND-BASED TOP DRESSING PROGRAM USING A WELL GRADED 90% SAND -10% SILT & CLAY ROOT ZONE MATERIAL. ADD THE SAND-BASED TOP DRESSING TO THE FIELD IN 4" LAYERS. UP TO 1" CAN BE ADDED OVER A TEN (10) WEEK PERIOD.
- 4. REGULARLY CLEAN AND MAINTAIN IRRIGATION HEADS TO PREVENT SAND
- 5. CONTRACTOR SHALL RE—SEED AS NEEDED, MANAGE, AND MAINTAIN THE FIELD TURF THROUGHOUT THE PROJECT TO ENSURE GROWTH.
- 6. THE FINAL 4 " LAYER OF TOP DRESSING SHALL BE COMPLETED BY AUGUST 1, 2015.
- 7. A SECOND 1 INCH LAYER OF TOP DRESSING SHALL BE APPLIED IN THE SUMMER OF 2016. TOP DRESSING PLACEMENT SHALL BEGIN THE WEEK OF MAY 23, 2016 TO ALLOW THE 10 WEEK PROCESS TO BE COMPLETE BY AUGUST 1, 2016.

### <u>BENCHMARK</u>

BM — ARROW ON HYDRANT, NE CORNER OF GROVER AND DEWEY.

### <u>NOTES</u>

- 1. POWER SHALL BE ROUTED FROM THE SCORE BOARD LIGHT DISCONNECT TO THE PROPOSED LIGHT POLE.
- 2. SEE EXHIBIT "A" IN CONTRACT DOCUMENTS FOR PORTABLE
  BLEACHER IMPROVEMENTS, SCOPE FOR BLEACHER SECTIONS
  1 6.

	Sand P	ortion Sp	pecification	#28 <b>Sand</b> Sports Field Topdressing	•
<u>.</u>	Size (mm)	<u>Sieve</u>	% Retained	& Construction	& Construction
Very Coarse	1.0 - 2.0	#18	<i>5 - 20</i>	15.0	16.9
Coarse	.50 - 1.0	#35	20 - 35	32.0	24.7
Medium	.2550	#60	30 - 40	41.0	31.2
Fine	.1025	#100	05 - 25	11.0	13.2
Very Fine	.0510	#270	< 5	0.8	4.0
Silt & Clay				0.2	10.0

with sand component.

ΒY	MARK	REVISIONS	DATE			
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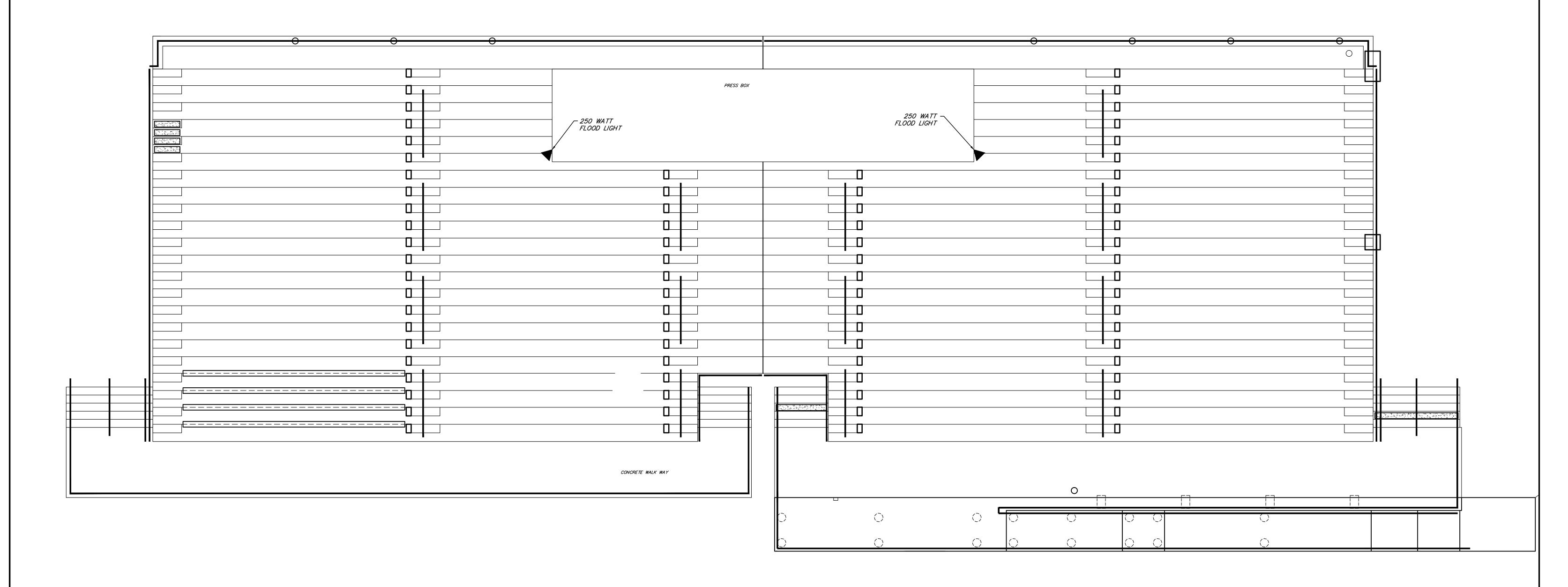
2015 SINKING FUND DRAINAGE IMPROVEMENTS WILLMAN FIELD

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AJS AJS				SY: BY:	

DE. BY: DR. BY:		CH. BY APP. B			1		CT NO. SG2014
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EXISTING STADIUM — PLAN VIEW

SCALE: 3/16"=1'-0"

## <u>NOTES</u>

- 1. CONTRACTOR SHALL PLACE TWO FLOOD LIGHTS ON THE PRESS BOX
  AS SHOWN. PROVIDE AN INTERIOR SWITCH AND CONNECT TO EXISTING
  POWER WITHIN.
- 2. CONTRACTOR SHALL APPLY AN ANTI-RUST COATING OVER THE ENTIRE TOP SURFACE OF THE GRAND STANDS. COLOR TO BE SELECTED BY OWNER. PRODUCT SHALL BE SIKA. SURFACE SHALL BE PREPPED PER MANUFACTURER'S INSTRUCTIONS PRIOR TO APPLICATION.

BY	MARK	REVISIONS	DATE
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OWOSSO PUBLIC SCHOOL DISTRICT OWOSSO, MICHIGAN

2015 SINKING FUND BLEACHER LIGHTING WILLMAN FIELD

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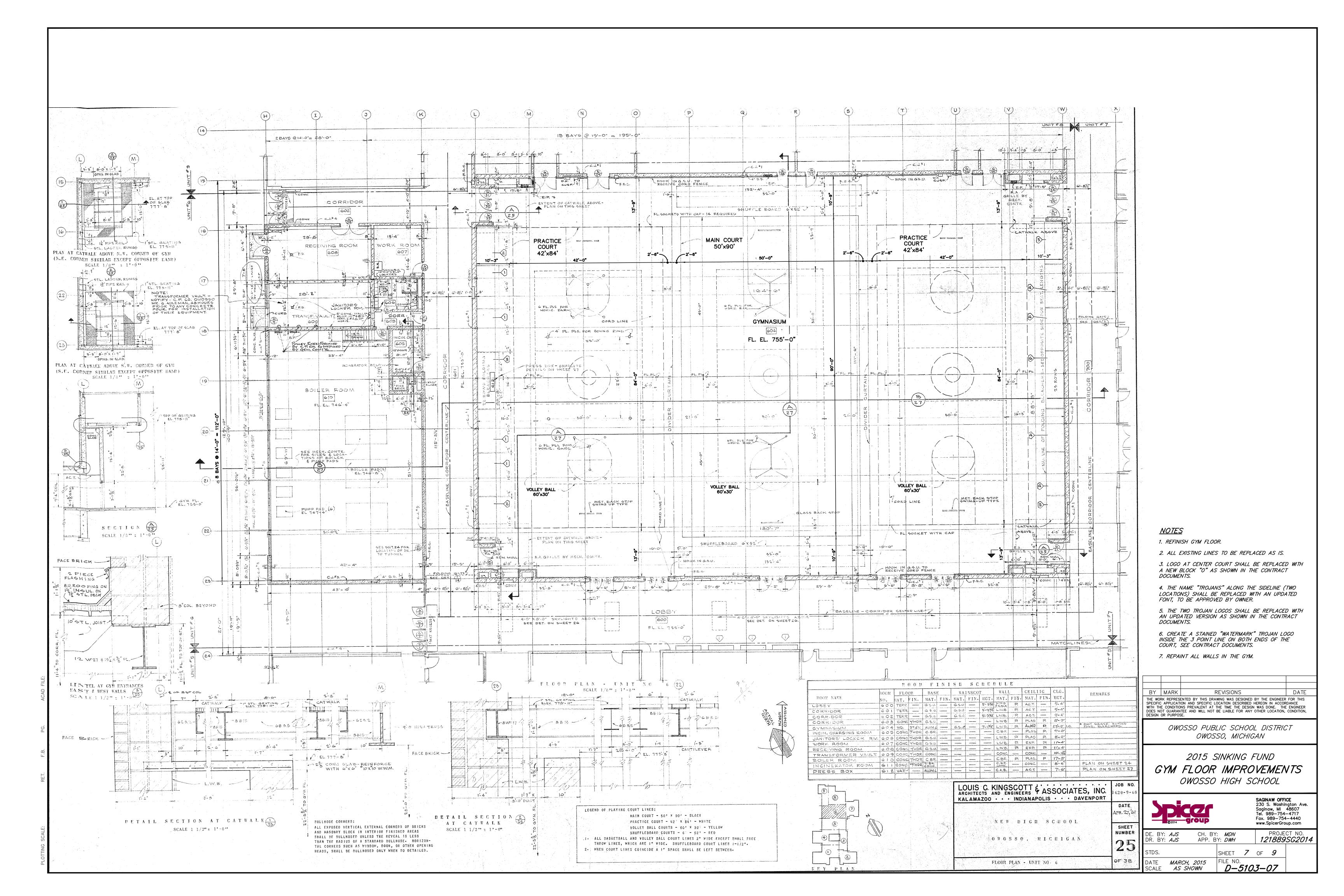
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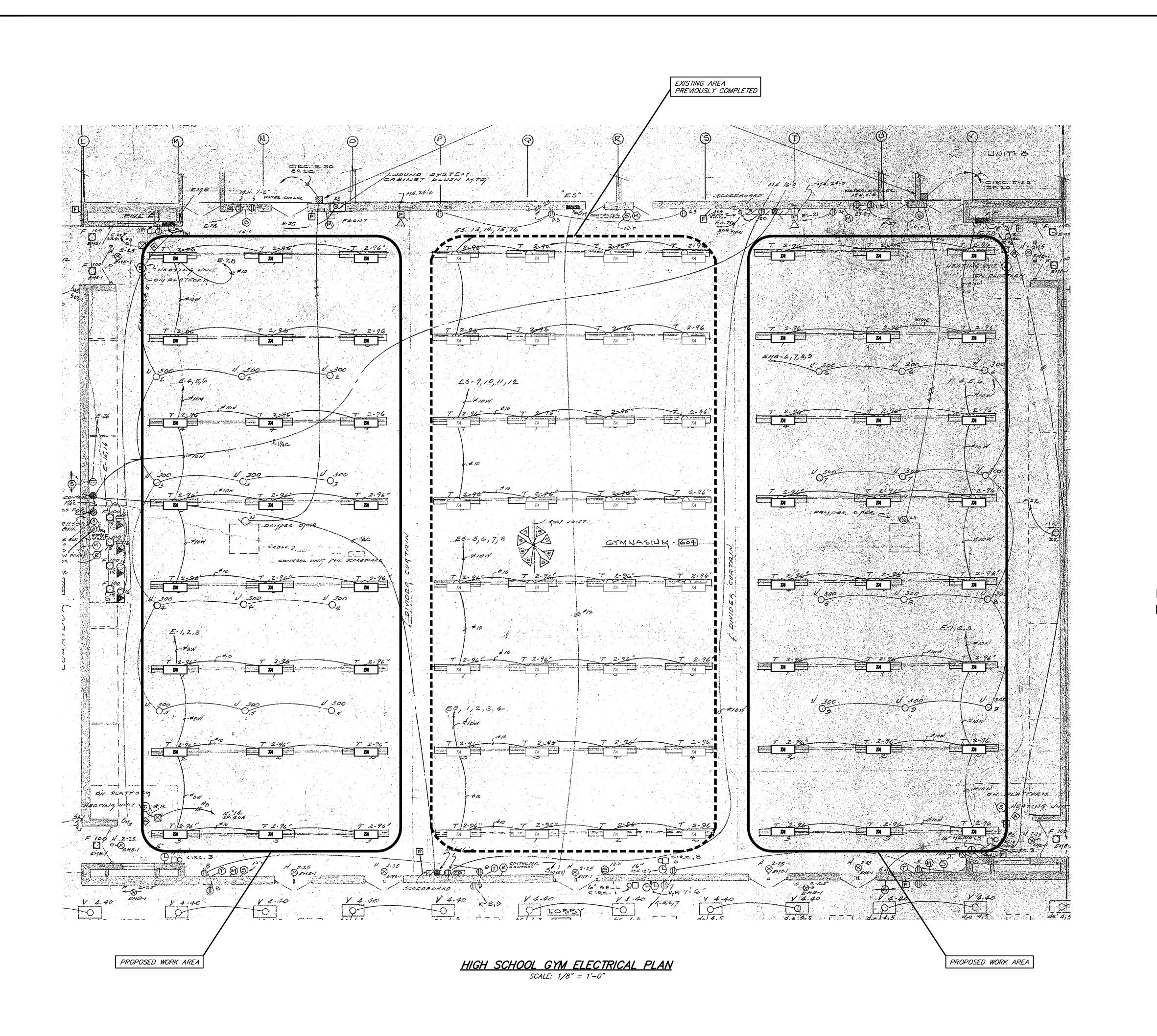
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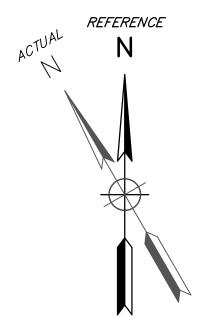
DATE MARCH, 2015
SCALE AS SHOWN D-5103-06

RET. F.B. P.G.

PLOTTING SCALE:







<u>PROPOSED EQUIPMENT</u>

<u>TAG</u> <u>DESCRIPTION</u> TA MANUF: HOWARD LIGHTING PRODUCTS MODEL: HFA3-E-6-54-H-HE-MV-OOD-01-0-I HIGH BAY, PENDANT MOUNT, T5 FLUORESCENT FIXTURE. 4 FOOT, 6 LAMP, T5, 54W, 85 CRI, 4100K

<u>QTY</u> 32 EXISTING 48 PROPOSED

### NOTES\*

- 1. CONTRACTOR SHALL REPLACE EACH EXISTING "T 2-96" FIXTURE WITH ONE (1) "TA" FIXTURE WHERE INDICATED.
- 2. CONTRACTOR SHALL REUSE EXISTING POWER WIRING AT EACH LOCATION.
- 2.1. CONTRACTOR SHALL VERIFY MINIMUM WIRE SIZES ARE MET AND PROPER GROUNDING PRACTICES ARE USED.
- 3. CONTRACTOR TO VERIFY FIELD LOCATIONS AND QUANTITIES BEFORE STARTING WORK.
- 5. PROPOSED LUMINAIRES TO BE MOUNTED, AIMED, AND ADJUSTED TO MATCH EXISTING "TA" LUMINAIRES' INSTALLATION.
- 6. CONTRACTOR TO COORDINATE WORK WITH ALL TRADES TO AVOID INTERFERENCE WITH OTHER WORK.
- 6.1. LIGHTING AND ASSOCIATED ELECTRICAL WORK TO BE COMPLETED PRIOR TO BEGINNING WORK ON FLOORS.
- \* LIGHTING WORK TO BE COMPLETED BEFORE FLOOR IS REFURBISHED.

### KE

TA EXISTING LIGHT FIXTURE TO BE MATCHED

TA PROPOSED LIGHT FIXTURE TO MATCH EXISTING "TA"

BY MARK REVISIONS DATE

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OWOSSO PUBLIC SCHOOL DISTRICT OWOSSO, MICHIGAN

2015 SINKING FUND **GYM LIGHTING PLAN** OWOSSO HIGH SCHOOL

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DE. BY: LAM CH. BY: DWH PROJECT NO. 121889SG2014

STDS. SHEET 8 OF 9

DATE MARCH, 2015 SCALE 1/8" = 1'-0"

DE. BY: LAM CH. BY: DWH PROJECT NO. 121889SG2014

SHEET 8 OF 9

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