D. SERVICE CABINET

THE SERVICE CABINET SHALL BE THE CITY OF MINNEAPOLIS STANDARD STREET LIGHT AND SIGNAL SERVICE CABINET; SHALL BE NO BIGGER THAN THAT SHOWN ON THE PLANS; AND SHALL BE A PAD-MOUNTED, WEATHERPROOF CONTROL CABINET. SEE EQUIPMENT PAD DETAILS FOR SPECIFIC SERVICE CABINET REQUIREMENTS AT EACH SERVICE POINT.

SINGLE CONDUCTOR POLE WIRES CONNECTING THE LUMINAIRE TO THE DISTRIBUTION CIRCUITS SHALL BE 1/C #12 STRANDED WIRE WITH THHN/THWN RATING.

MINNEAPOLIS TRAFFIC & PARKING SERVIVES DIVISION FOR USE IN THE LIGHTING SYSTEM.

THE SINGLE CONDUCTOR FEEDER WIRES, CONTROL WIRES, AND DISTRIBUTION WIRES SHALL HAVE CLASS B STRANDED ANNEALED UNCOATED COPPER CONDUCTORS AND BE LISTED BY UL AS TYPE RHW-2/USE-2, 90 DEGREE C, CROSSLINKED POLYETHYLENE, INSULATION RATED 600 VOLTS IN ACCORDANCE WITH ARTICLE 338 OF THE NATIONAL ELECTRICAL CODE. CABLE SHALL MEET REQUIREMENTS OF ICEA PUBLICATION NO. S-66-524, NEMA PUB. NO. WC7 FOR CROSSLINKED-POLYETHYLENE-INSULATED WIRE AND CABLE, AND UL STANDARD 854 FOR SERVICE ENTRANCE CABLES. WIRE SHALL BEAR UL LABEL FOR TYPE USE-2, HAVE FOOTAGE MARKINGS EVERY METER, AND SURFACE-MARKING INDICATING MANUFACTURER'S ID, CONDUCTOR SIZE AND METAL, VOLTAGE RATING, UL SYMBOL AND TYPE DESIGNATIONS. THE INSULATION ON EACH 1/C #4 CONDUCTOR SHALL BE COLORED RED, BLACK, GREEN OR WHITE IN ACCORDANCE WITH THE COLOR-CODING SHOWN IN THE CONSTRUCTION PLAN. AS AN ALTERNATE, A 4/C CABLE OF SIMILAR DESIGN STANDARDS MAY BE USED BUT MUST BE APPROVED BY THE CITY OF

B. HANDHOLES (PULL BOXES): ALL HANDHOLES SHALL BE PER MINNEAPOLIS STANDARD PLATE TRAF -1725 AND TRAF - 1730 AND SHALL INCLUDE A DRAIN FIELD. C. ELECTRICAL CABLES AND CONDUCTORS: ALL ELECTRICAL CABLES AND CONDUCTORS SHALL CONFORM TO THE REQUIREMENTS OF MN/DOT 2545.2D AMENDED AS FOLLOWS.

A. CONDUIT: ALL CONDUIT SHALL BE TYPE II SCHEDULE 40 PVC WITH FITTINGS PER MNDOT 3803 UNLESS NOTED OTHERWISE IN THE PLAN.

ENGINEER MAY, AT HIS OPTION, ACCEPT MATERIALS ON THE BASIS OF LISTING BY UNDERWRITERS LABORATORIES, INC. FABRICATION AND INSPECTION OF STRUCTURAL METALS USED FOR THE LIGHTING SYSTEMS SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF MN/DOT 2471.

MATERIALS: THE ENGINEER RESERVES THE RIGHT TO SAMPLE, TEST, INSPECT, AND ACCEPT OR REJECT ANY OF THE MATERIALS USED FOR THE LIGHTING SYSTEMS BASED ON MN/DOT OR CITY OF MINNEAPOLIS TESTS. HOWEVER, THE

SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS. PROVIDE MANUFACTURER'S WARRANTY INFORMATION.

APPROVAL OF SHOP DRAWINGS AND SUBMITTALS SHALL NEITHER RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY FOR DEVIATIONS FROM THE DRAWINGS OR SPECIFICATIONS UNLESS HE HAS, IN WRITING, CALLED THE ENGINEER'S ATTENTION TO THE DEVIATIONS AT THE TIME OF SUBMISSION, AND SECURED WRITTEN APPROVAL, NOR SHALL IT RELIEVE HIM FROM THE RESPONSIBILITY FOR ERRORS IN SHOP DRAWINGS OR SUBMITTALS. PROVIDE CERTIFICATION BY A REGISTERED ENGINEER IN THE STATE OF MINNESOTA THAT THE LIGHTING UNITS HAVE BEEN DESIGNED TO THE LOADING REQUIREMENTS OF THE MOST CURRENT AASHTO STANDARD

(4) CITY OF MINNEAPOLIS TRAFFIC AND PARKING SERVICES

(3) PROJECT ENGINEER (TWO SETS)

(2) CONTRACTOR'S FABRICATOR

(1) CONTRACTOR

THE CONTRACTOR SHALL FURNISH TO THE ENGINEER, FOR FINAL APPROVAL, FIVE (5) COMPLETE SETS OF SHOP DETAIL DRAWINGS. THE FIVE SETS OF DRAWINGS SHALL BE DISTRIBUTED, AFTER APPROVAL TO THE FOLLOWING:

THE CONTRACTOR SHALL FURNISH TO THE ENGINEER, FOR PRELIMINARY REVIEW, FOUR (4) COMPLETE SETS OF SHOP DETAIL DRAWINGS, IN ACCORDANCE WITH THE PROVISIONS OF MN/DOT 2471.3B. THE SHOP DETAIL DRAWINGS SHALL BE IDENTIFIED BY "CITY OF MINNEAPOLIS" AND THE FABRICATOR. THREE SETS OF DRAWINGS SHALL BE RETURNED TO THE CONTRACTOR SHOWING ANY NECESSARY CORRECTIONS. THE CONTRACTOR SHALL FURNISH AND OBTAIN APPROVAL OF TEMPLATES USED FOR SETTING ANCHOR BOLTS AND VERIFYING CONCRETE WORKMANSHIP FOR ALL LIGHT AND CABINET BASES.

THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A COMPLETE LIST OF ELECTRICAL SYSTEM COMPONENTS. THIS LIST SHALL INCLUDE THE NAMES OF ALL SUPPLIERS AND MANUFACTURERS AND CATALOG NUMBERS FOR THE VARIOUS COMPONENTS. THIS LIST MUST BE APPROVED BY THE ENGINEER PRIOR TO INITIATING ANY WORK ON THE ELECTRICAL SYSTEMS.

SHOP DRAWINGS AND SUBMITTALS:

THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING FOR ALL ELECTRICAL SERVICE CONNECTIONS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT WITH NO DIRECT COMPENSATION PAID THEREFORE.

THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING ELECTRICAL SERVICE WITH THE TRAFFIC AND PARKING SERVICES DIVISION (TPS) AND XCEL ENERGY FOR ALL NEW METERED LOCATIONS. THIS INCLUDES SUBMITTING AN APPLICATION THAT IS APPROVED BY THE TPS ELECTRICAL GENERAL FOREMAN (612-673-5759) FOR EACH METERED ELECTRICAL SERVICE LOCATION. THE TPS DIVISION WILL VERIFY METER ADDRESS, LOCATION, AND USE. NO APPLICATIONS WILL BE APPROVED BY XCEL ENERGY WITHOUT THE PRIOR APPROVAL BY THE TPS ELECTRICAL GENERAL FOREMAN.

- GROUND RODS - IN-THE-LINE FUSE HOLDERS AND FUSES

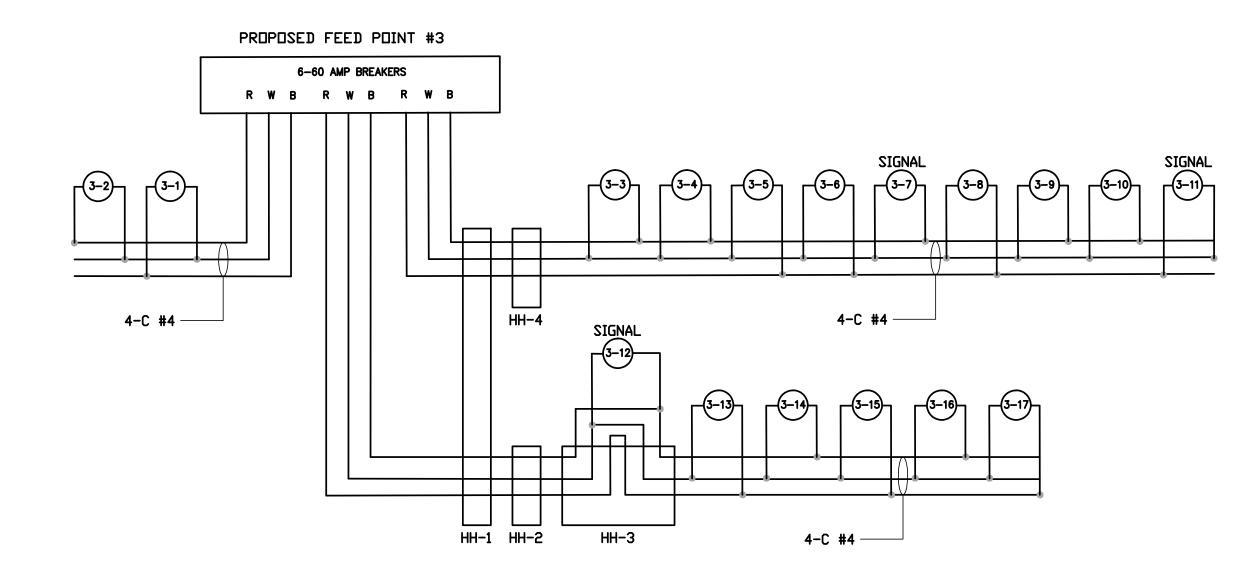
- STREET LIGHTING POLE WIRE AND CABLE

- ELECTRICAL HANDHOLES (PULL BOXES)- MINNEAPOLIS STANDARD - LIGHTING CONDUCTORS
- STREET LIGHT FOUNDATIONS (LIGHT BASES) FOR BOTH POLE TYPES - END CAPS
- RIGID STEEL RSC, NON-METALLIC NMC AND HDPE CONDUITS - SERVICE CABINET FOUNDATION
- SERVICE CABINET PAD MOUNTED, AND SERVICE LATERALS
- HIGH AND LOW LEVEL STREET LIGHTING POLES AND LUMINAIRES

ELECTRIC LIGHTING SYSTEM:

THE CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND MATERIALS FOR THE INSTALLATION AND CONNECTION OF SEPARATE UNDERGROUND DISTRIBUTION CIRCUITS IN CONDUIT TO A STREET LIGHTING SYSTEM. THESE MATERIALS SHALL BE AS SHOWN IN THE PLAN OR DESCRIBED WITHIN THESE NOTES AND SPECIAL PROVISIONS AND INCLUDE BUT SHALL NOT BE LIMITED TO THE FOLLOWING ITEMS:

SCOPE OF WORK:



VENDOR SHALL INCLUDE:

TWO (2) 200 AMP METER SOCKETS WITH DISCONNECT ONE (1) SINGLE POLE TEST SWITCH RATED FOR 15 AMPS ONE (1) PHOTOELECTRIC CELL NORMALLY OPEN RATED FOR 15 AMPS TWO (2) 12 CIRCUIT PANELS

E. LIGHTING EQUIPMENT GENERAL SPECIFICATIONS

POLES AND FIXTURES USED FOR STREET LIGHTING MUST BE APPROVED FOR USE BY THE CITY OF MINNEAPOLIS PRIOR TO PURCHASE OR INSTALLATION. APPROVAL IS BASED ON OPERATION. MAINTENANCE, LOCATION OF THE PROJECT AND COST CRITERIA. THE FOLLOWING WEB SITE LINKS PROVIDE INFORMATION ON THE CITY OF MINNEAPOLIS STREET LIGHTING POLICY. HTTP://WWW.MINNEAPOLISMN.GOV/PUBLICWORKS/STREETLIGHTING/INDEX.HTM DETAILED POLE AND LUMINAIRE SPECIFICATIONS ARE AVAILABLE FROM THE CITY OF MINNEAPOLIS TRAFFIC & PARKING SERVICES DIVISION ISSUED BY BILL PRINCE UNDER THE SUBJECT "SPECIFICATION - 2014 STREET LIGHTING EQUIPMENT". THE DOCUMENT IS DATED MARCH 17. 2014 AND IS AVAILABLE BY REQUEST FROM THE CITY.

G. FUSES

STREET LIGHT STANDARDS IN THE 120/240-VOLT SYSTEM SHALL BE FUSED IN ACCORDANCE WITH PLAN DETAILS. FUSES AND FUSE HOLDERS SHALL BE "UL" LISTED. FUSE HOLDERS SHALL BE FERRAZ-SHAWMUT IN-THE-LINE FEB-11-11 WITH A FSB-1 WATERPROOF BOOT AND A BUSSMAN BAF-10 SINGLE ELEMENT FUSE, OR APPROVED EQUAL

H. LUMINAIRES

LUMINAIRES ON THE 30 FT HIGH LIGHT POLES SHALL BE AMERICAN ELECTRIC AUTOBOHN SERIES LED ATB2 FIXTURES. FIXTURES SHALL BE 120 VOLT TYPE III DISTRIBUTION OR AN APPROVED EQUAL BY CITY OF MINNEAPOLIS TRAFFIC & PARKING SERVICES DIVISION.

LUMINAIRES ON THE 15 FT HIGH ANODIZED ALUMINUM LIGHT POLES SHALL BE HOLOPHANE LED LANTERN STYLE 120 VOLT UNITS. HOLOPHANE PART NUMBER AUL 070 4K AS B L3 S DM RFD 183216 OR CITY APPROVED EQUAL. CONSTRUCTION REQUIREMENTS

A. GROUNDING

B. PAINTING ALL 30 FT HIGH LIGHT UNITS SHALL BE FACTORY FINISHED BY THE MANUFACTURER. THE LUMINAIRES, POLES, ARMS, FITTERS, AND ALL OTHER EXPOSED HARDWARE SHALL BE FINISHED WITH POLYESTER POWDER PAINT TO INSURE MAXIMUM DURABILITY. ALL PAINTED METAL PARTS SHALL GO THROUGH AN ALKALINE CLEANING PROCESS, RECEIVE MICROCRYSTALLINE PHOSPHATE PRETREATMENT, A SEALING TREATMENT, THEN THE PREPARED METAL SURFACE SHALL BE THOROUGHLY RINSED WITH HIGH PURITY DEIONIZED WATER TO REMOVE UNWANTED CHEMICALS. A CONTROLLED DRYING PROCESS SHALL BE COMPLETED PRIOR TO APPLYING THE ELECTROSTATIC POLYESTER POWDER PAINT COLOR SHALL BE COMPLIANT WITH CITY OF MINNEAPOLIS STANDARD FOR THE AREA. ALL 15 FT HIGH LIGHT POLES SHALL BE FACTORY FINISHED BY THE MANUFACTURER. THE FINISH SHALL BE ANODIZED DURANODIC #335 BLACK (ALUMINUM ASSOCIATION DESIGNATION M10C22A42 INTEGRAL COLOR BLACK) PAINTING OF ALL MATERIAL FOR LIGHTING UNITS SHALL COME WITH A 5-YEAR MANUFACTURER'S WARRANTY. THIS WARRANTY SHALL COVER DEFECTS IN MATERIAL AND WORKMANSHIP. PAINTING OF ALL OTHER EQUIPMENT

SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF MN/DOT 2565.3T, EXCEPT THAT FINISH COAT PAINT FOR ALL ITEMS SHALL BE TWO COATS. HANDHOLE RINGS AND COVERS SHALL BE PRIMED WITH A RED OXIDE PRIMER, AND FINISHED WITH CITY-APPROVED GREEN ENAMEL (RAL 6005). IF FIELD PAINTING IS REQUIRED, IT SHALL BE APPROVED IN ADVANCE AND BE ACCEPTED BY APPROVAL OF THE ENGINEER. PAINT SAMPLES MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PAINTING. THE CONTRACTOR SHALL FURNISH ALL PAINT REQUIRED AFTER CONFIRMATION OF THE EXACT PAINTS AND COLORS.

ALL LIGHTING UNITS, CABINETS, AND HANDHOLES SHALL BE SHOP OR FACTORY PAINTED AS REQUIRED EXCEPT FOR PROVIDING ANY NECESSARY REPAIRS OF DAMAGE TO PAINT COATS THAT OCCUR DURING UNLOADING AND ERECTION AT THE SITE.

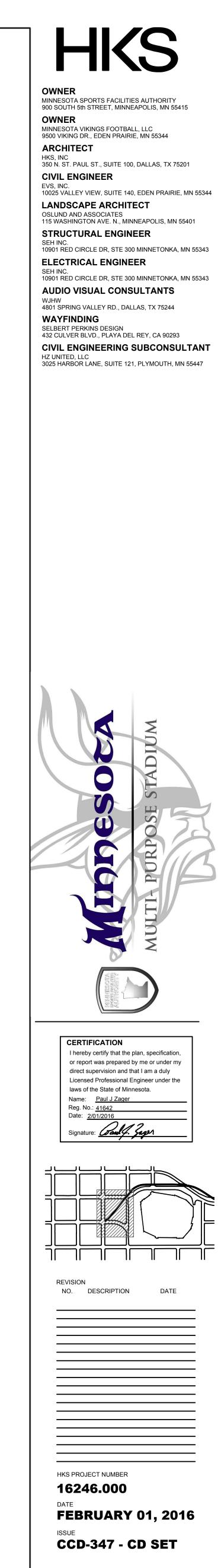
C. REMOVING EXISTING SYSTEMS

THE CONTRACTOR SHALL REMOVE REQUIRED EXISTING LIGHTING EQUIPMENT IN ACCORDANCE WITH APPLICABLE PROVISIONS OF MNDOT 2104.

CONTRACTOR SHALL SALVAGE AND HAUL THOSE COMPONENTS THAT THE CITY IDENTIFIES THEY WANT RETURNED TO DESIGNATED PUBLIC WORKS STORAGE FACILITY.

ALL OTHER ITEMS SHALL BE DISPOSED OF BY THE CONTRACTOR ACCORDING TO APPLICABLE MNDOT STANDARD SPECIFICATIONS.

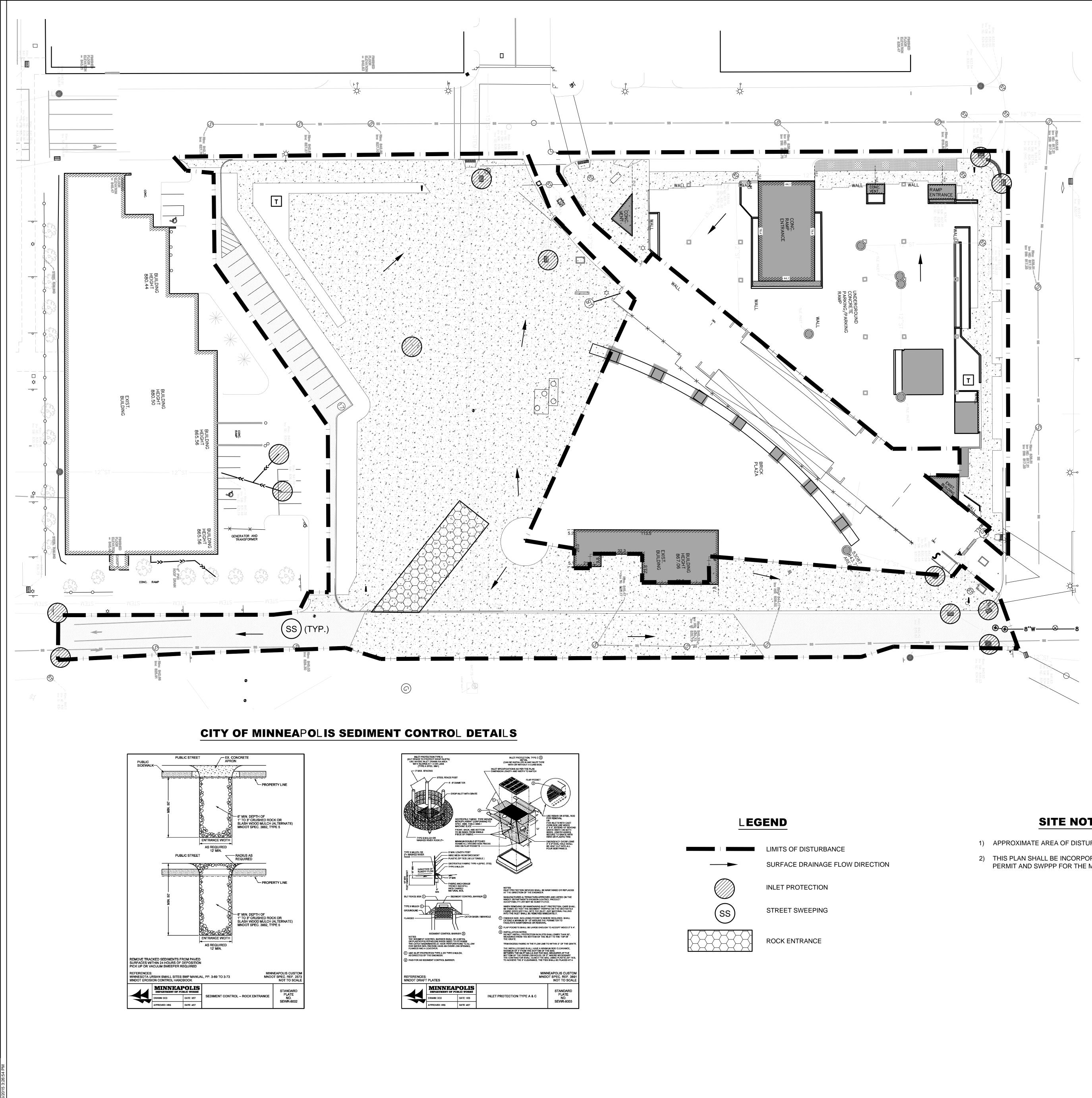
THE GROUNDING CONDUCTOR SHALL BE BONDED TO THE GROUNDING LUG AND THE FOUNDATION (LIGHT BASE) GROUND ROD AT EVERY STREET LIGHT. A NO. 12 AWG BARE COPPER CONDUCTOR SHALL BE USED.



SHEET TITLE PLAZA LIGHTING WIRING DIAGRAM

SHEET NO.

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CITY OF MINNEAPOLIS EROSION AND SEDIMENT CONTROL NOTES

- 1) CONTRACTOR MUST NOTIFY CITY OF MINNEAPOLIS PUBLIC WORKS ENGINEERING AND DESIGN (612-673-2258) 48 HOURS PRIOR TO ANY LAND DISTURBANCES. FAILURE TO DO SO MAY RESULT IN THE REVOCATION OF PERMIT AND A STOP WORK ORDER BEING ISSUED.
- 2) INSTALL PERIMETER EROSION CONTROL AT THE LOCATIONS SHOWN ON THE PLANS PRIOR TO BEGINNING CONSTRUCTION. (HAY BALES ARE NOT AN ACCEPTABLE PERIMETER CONTROL).
- BEFORE BEGINNING CONSTRUCTION, INSTALL A TEMPORARY ROCK CONSTRUCTION EXIT AT EACH POINT WHERE VEHICLES EXIT THE CONSTRUCTION SITE. USE 2 INCH OR GREATER DIAMETER ROCK IN A LAYER AT LEAST 6 INCHES THICK ACROSS THE ENTIRE WIDTH OF THE ENTRANCE. EXTEND THE ROCK ENTRANCE AT LEAST 50 FEET INTO THE CONSTRUCTION ZONE. USE A GEOTEXTILE FABRIC BENEATH THE AGGREGATE IN ORDER TO PREVENT MIGRATION OF SOIL INTO THE ROCK FROM BELOW.
- 4) REMOVE ALL SOILS AND SEDIMENTS TRACKED OR OTHERWISE DEPOSITED ONTO PUBLIC AND PRIVATE PAVEMENT AREAS. REMOVAL SHALL BE ON A DAILY BASIS WHEN TRACKING OCCURS. SWEEPING MAY BE ORDERED BY AT ANY TIME IF CONDITIONS WARRANT. SWEEPING SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE CONSTRUCTION AND DONE IN A MANNER TO PREVENT DUST BLOWN TO ADJACENT PROPERTIES.
- 5) INSTALL INLET PROTECTION AT ALL PUBLIC AND PRIVATE CATCH BASIN INLETS, WHICH RECEIVE RUNOFF FROM THE DISTURBED AREAS. CATCH BASIN INSERTS ARE REQUIRED IN UNDISTURBED AREAS THAT RECEIVE RUNOFF FROM DISTURBED AREAS. STAKED SILT FENCE OR OTHER APPROVED BMP'S IN DISTURBED AREAS NOT SUBJECT TO PUBLIC VEHICLE TRAFFIC MAY BE ACCEPTABLE. NOTE: HAY BALES OR FABRIC WRAPPING THE GRATES ARE NOT EFFECTIVE OR AN ACCEPTABLE FORM OF INLET PROTECTION.
- 6) LOCATE SOIL OR DIRT STOCKPILES NO LESS THAN 25 FEET FROM ANY PUBLIC OR PRIVATE ROADWAY OR DRAINAGE CHANNEL. IF REMAINING FOR MORE THAN SEVEN DAYS, STABLIZE THE STOCKPILES BY MULCHING, VEGETATIVE COVER, TARPS, OR OTHER MEANS. CONTROL EROSION FROM ALL STOCKPILES BY PLACING SILT FENCE BARRIERS AROUND THE PILES. TEMPORARY STOCKPILES LOCATED ON PAVED SURFACES MUST BE NO LESS THAN TWO FEET FROM THE DRAINAGE/GUTTER LINE AND SHALL BE COVERED IF LEFT MORE THAN 24 HOURS.
- 7) MAINTAIN ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES IN PLACE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED. INSPECT TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES ON A DAILY BASIS AND REPLACE DETERIORATED, DAMAGED, OR ROTTED EROSION CONTROL DEVICES IMMEDIATELY.
- 3) TEMPORARILY OR PERMANENTLY STABILIZE ALL DENUDED AREAS WHICH HAVE BEEN FINISH-GRADED, AND ALL DENUDED AREAS IN WHICH GRADING OR SITE BUILDING CONSTRUCTION OPERATIONS ARE NOT ACTIVELY UNDERWAY AGAINST EROSION DUE TO RAIN, WIND, AND RUNNING WATER WITHIN 14 DAYS. USE SEEDING AND MULCHING, EROSION CONTROL MATTING, AND/OR SODDING AND STAKING IN GREEN SPACE AREAS. USE EARLY APPLICATION OF GRAVEL BASE ON AREAS TO BE PAVED.
- REMOVE ALL TEMPORARY SYNTHETIC, STRUCTURAL, NON-BIODEGRADABLE EROSION AND SEDIMENT CONTROL DEVICES AFTER THE SITE HAS UNDERGONE FINAL STABILIZATION AND PERMANENT VEGETATION HAS BEEN ESTABLISHED. MINIMUM VEGETATION ESTABLISHMENT IS 70% COVER. MAINTAIN ALL TEMPORARY EROSION CONTROL DEVICES UNTIL 70% ESTABLISHED COVER IS ACHIEVED.
- 10) READY MIXED CONCRETE AND CONCRETE BATCH PLANTS PROHIBITED WITHIN THE PUBLIC RIGHT OF WAY. DESIGNATE CONCRETE MIXING/WASHOUT LOCATIONS IN THE EROSION CONTROL PLAN. UNDER NO CIRCUMSTANCES MAY WASHOUT WATER DRAIN ONTO THE PUBLIC RIGHT OF WAY OR INTO THE PUBLIC STORM SEWER.
- 11) FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS ON ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); EMBANKMENT OF PONDS, BASINS, AND TRAPS; AND WITHIN FOURTEEN (14) DAYS ON ALL OTHER DISTURBED OR GRADED AREAS. THE REQUIREMENTS OF THIS SECTION DO NOT APPLY TO THOSE AREAS WHICH ARE SHOWN ON THE PLAN AND ARE CURRENTLY BEING USED FOR MATERIAL STORAGE OR FOR THOSE AREAS ON WHICH ACTUAL CONSTRUCTION ACTIVITIES ARE CURRENTLY BEING PERFORMED.

SITE NOTES

- 1) APPROXIMATE AREA OF DISTURBANCE = 180,000 SF (4.13 ACRES).
- 2) THIS PLAN SHALL BE INCORPORATED INTO THE EXISTING NPDES PERMIT AND SWPPP FOR THE MMPS (VIKINGS STADIUM) PROJECT.

Minnesota CALL BEFORE YOU DIG ! MINNESOTA LAW REQUIRES EXCAVATORS TO NOTIF THE REGIONAL NOTIFICATION CENTER AT LEAST TWO (2) BUSINESS DAYS BUT NOT MORE THAN FOURTEEN (14) CALENDAR DAY PRIOR TO EXCAVATION

GOPHER STATE ONE CALL

www.gopherstateonecall.org 1-800-252-1166



MINNESOTA SPORTS FACILITIES AUTHORITY 900 SOUTH 5th STREET, MINNEAPOLIS, MN 55415 OWNER MINNESOTA VIKINGS FOOTBALL, LLC 9500 VIKING DR., EDEN PRAIRIE, MN 55344

ARCHITECT

HKS, INC 350 N. ST. PAUL ST., SUITE 100, DALLAS, TX 75201 **CIVIL ENGINEER**

EVS, INC. 10025 VALLEY VIEW, SUITE 140, EDEN PRAIRIE, MN 55344 LANDSCAPE ARCHITECT

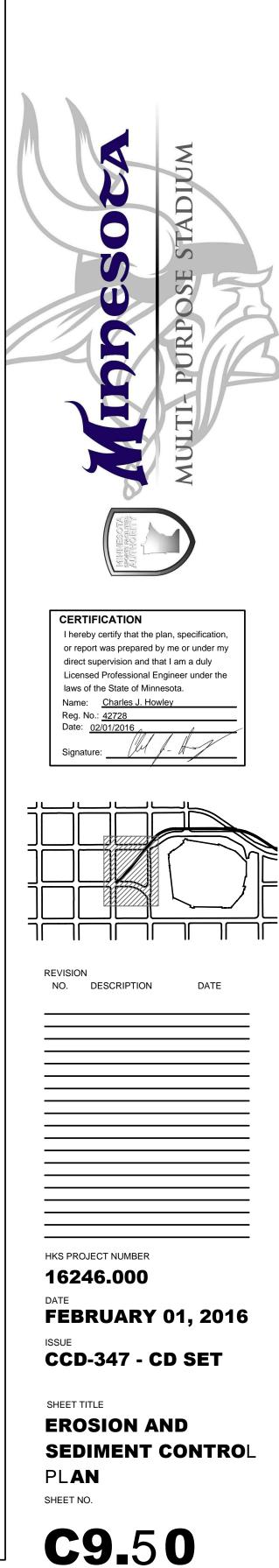
OSLUND AND ASSOCIATES 115 WASHINGTON AVE. N., MINNEAPOLIS, MN 55401 STRUCTURAL ENGINEER SEH INC.

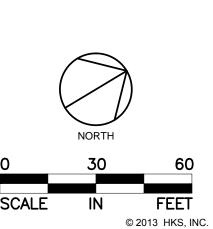
10901 RED CIRCLE DR, STE 300 MINNETONKA, MN 55343 ELECTRICAL ENGINEER

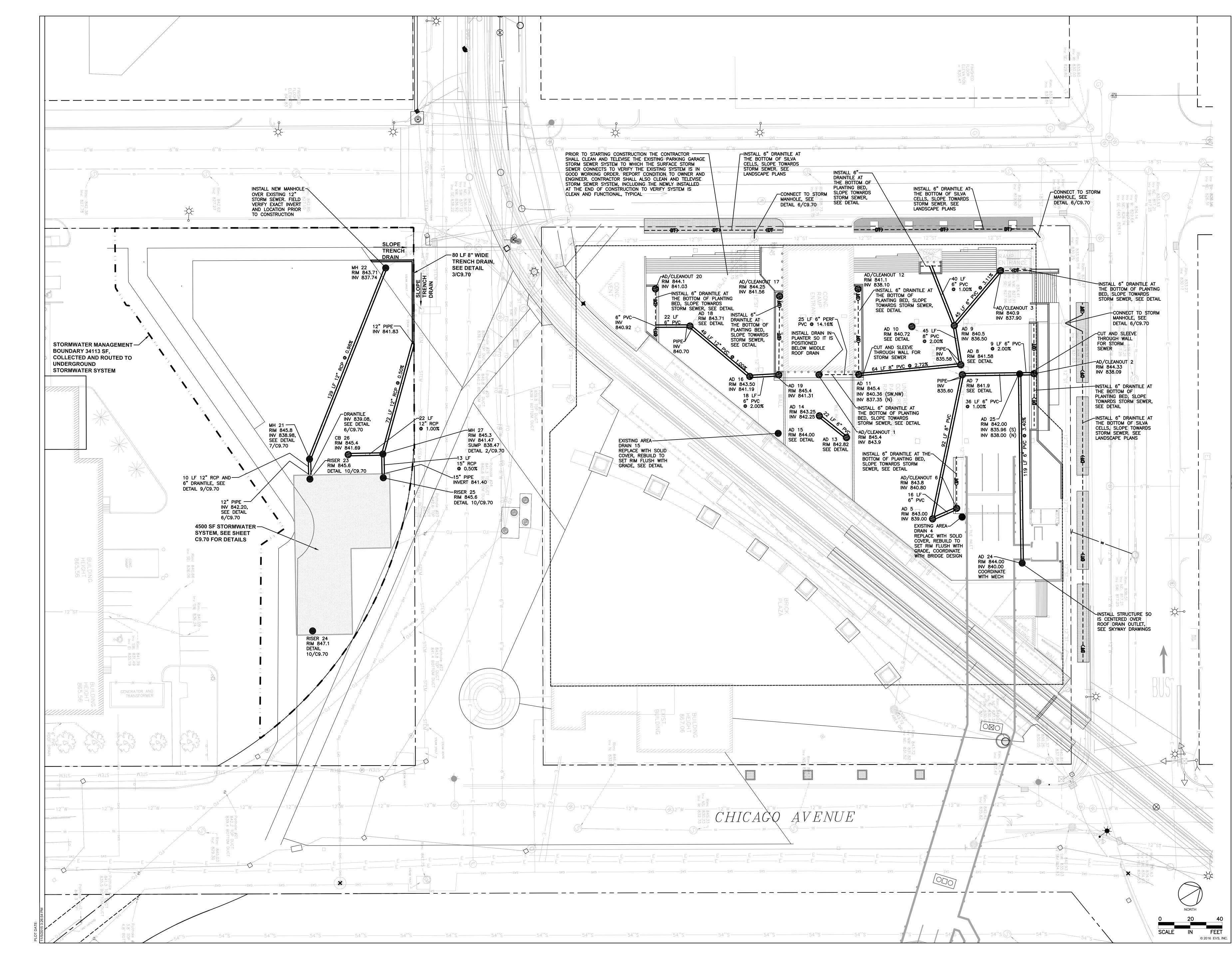
SEH INC. 10901 RED CIRCLE DR, STE 300 MINNETONKA, MN 55343 AUDIO VISUAL CONSULTANTS WJHW 4801 SPRING VALLEY RD., DALLAS, TX 75244 WAYFINDING

SELBERT PERKINS DESIGN 432 CULVER BLVD., PLAYA DEL REY, CA 90293

CIVIL ENGINEERING SUBCONSULTANT HANSEN THORP PELLINEN OLSON, INC. (HTPO) 7510 MARKET PLACE DR., EDEN PRAIRIE, MN 55344









OWNER MINNESOTA SPORTS FACILITIES AUTHORITY 900 SOUTH 5th STREET, MINNEAPOLIS, MN 55415 OWNER MINNESOTA VIKINGS FOOTBALL, LLC 9500 VIKING DR., EDEN PRAIRIE, MN 55344

9500 VIKING DR., EDEN PRAIRIE, MN 55344 ARCHITECT

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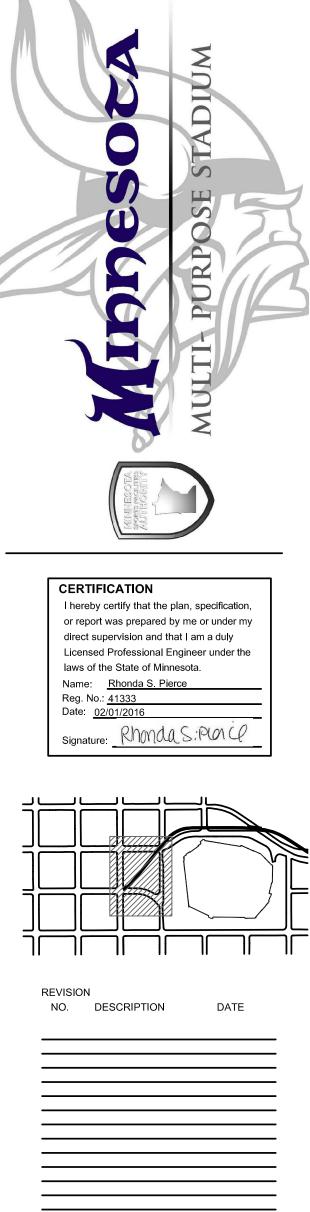
115 WASHINGTON AVE. N., MINNEAPOLIS, MN 55401 STRUCTURAL ENGINEER SEH INC.

10901 RED CIRCLE DR, STE 300 MINNETONKA, MN 55343 **ELECTRICAL ENGINEER** SEH INC. 10901 RED CIRCLE DR, STE 300 MINNETONKA, MN 55343

10901 RED CIRCLE DR, STE 300 MINNETONKA, MN 5534 AUDIO VISUAL CONSULTANTS WJHW 4801 SPRING VALLEY RD., DALLAS, TX 75244 WAYFINDING

SELBERT PERKINS DESIGN 432 CULVER BLVD., PLAYA DEL REY, CA 90293

CIVIL ENGINEERING SUBCONSULTANT PIERCE PINI AND ASSOCIATES, INC. 9298 CENTRAL AVE. NE, STE 312, BLAINE, MN 55434

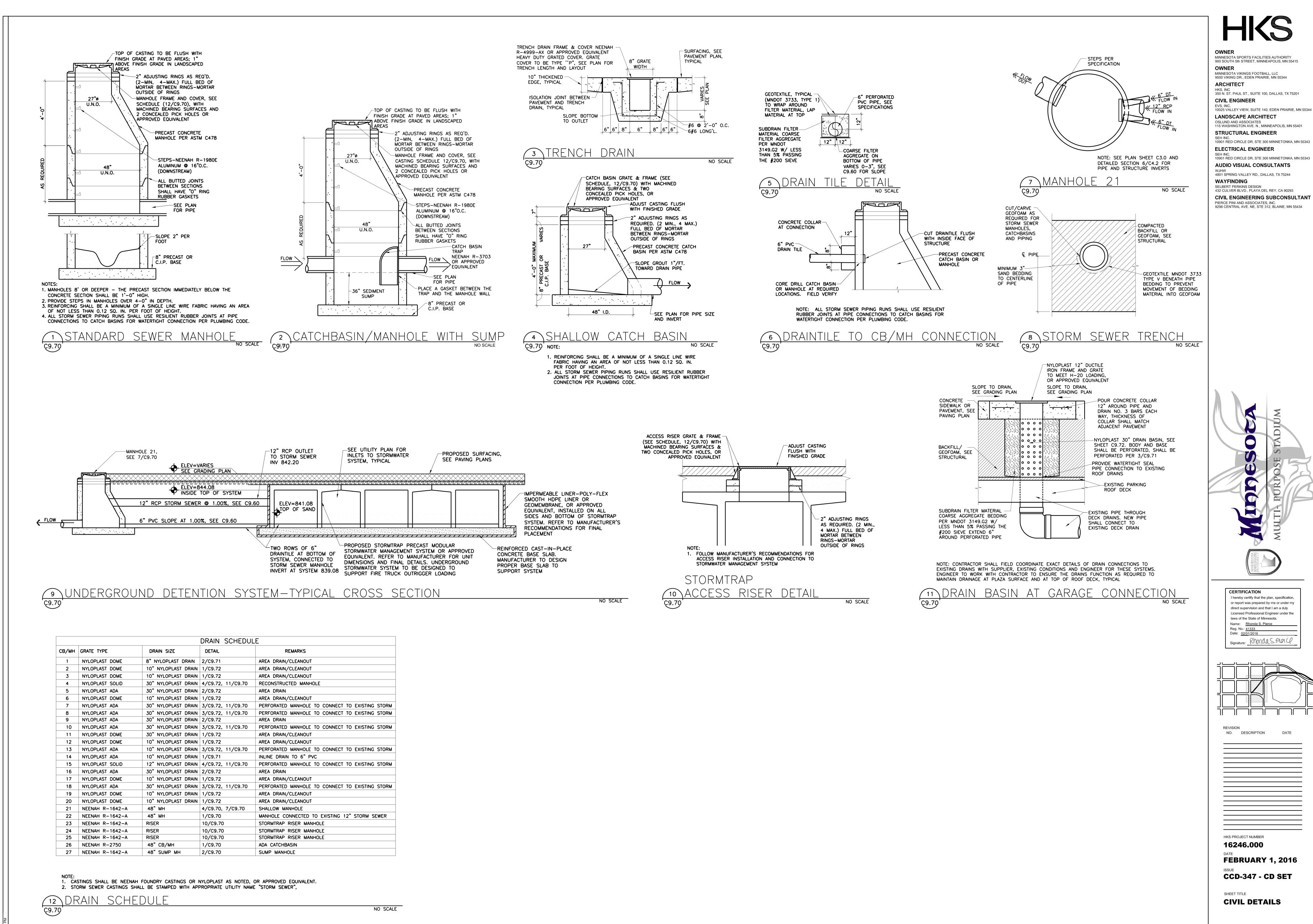


HKS PROJECT NUMBER 16246.000 DATE FEBRUARY 1, 2016 ISSUE CCD-347 - CD SET

SHEET TITLE STORM SEWER PLAN

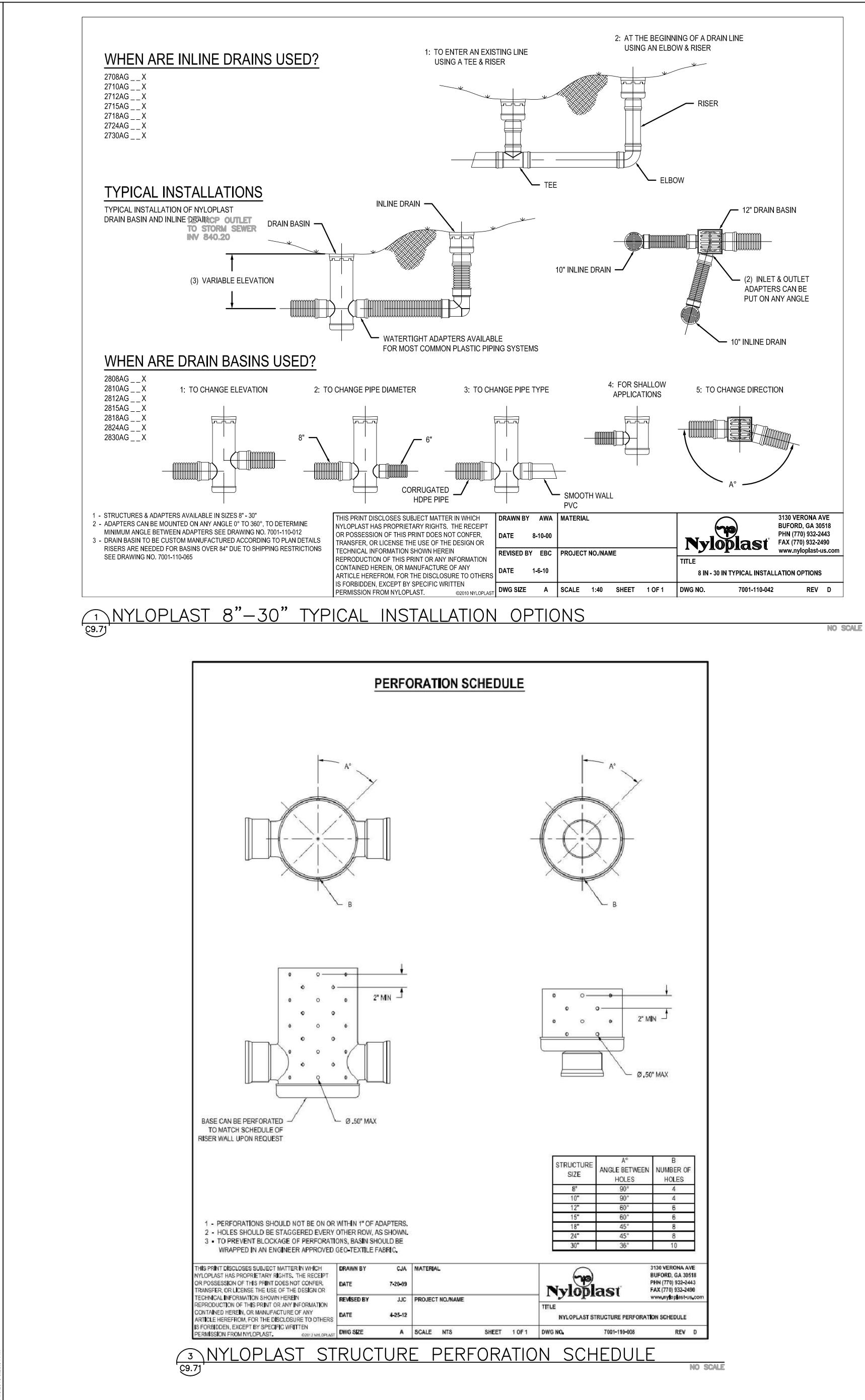
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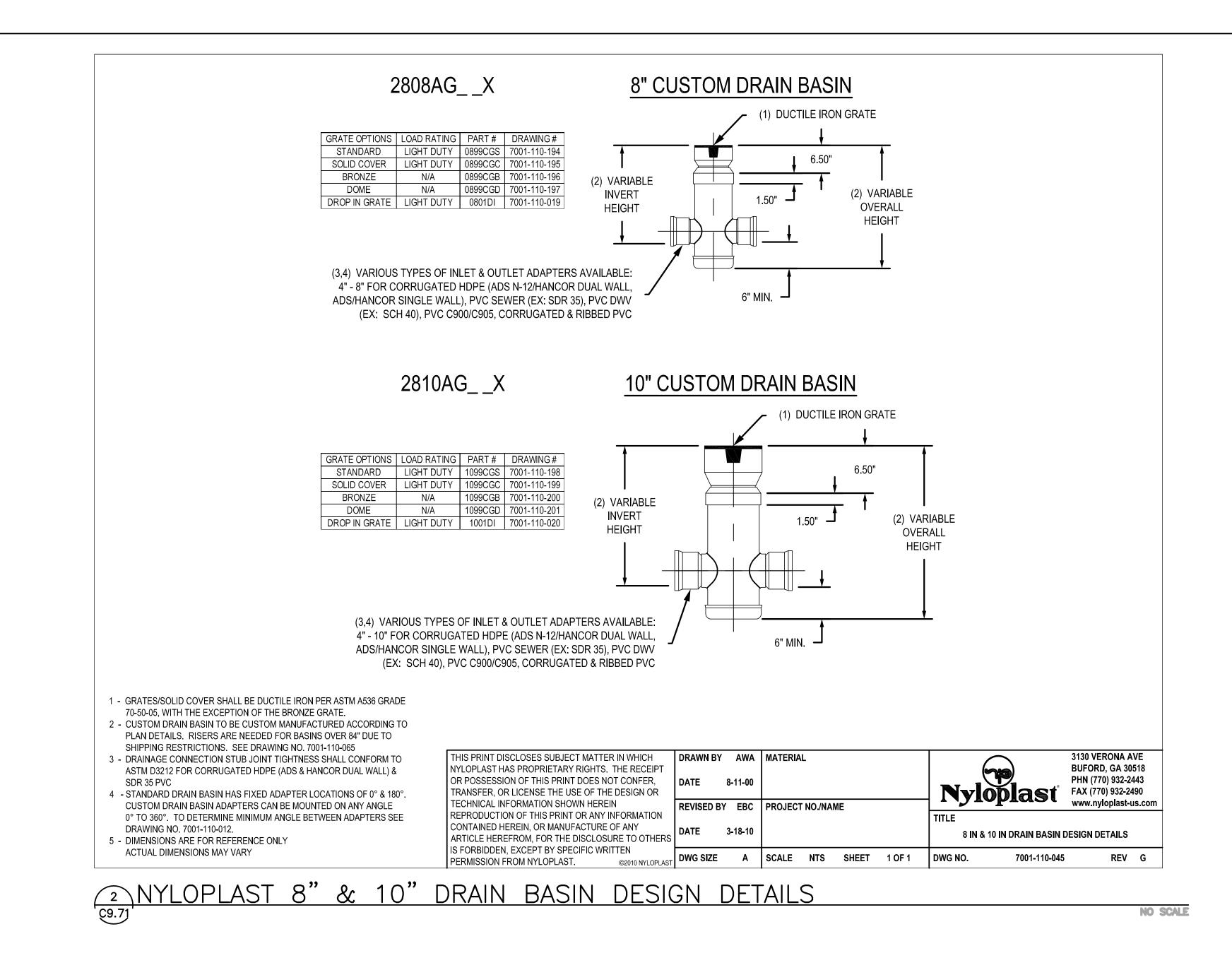
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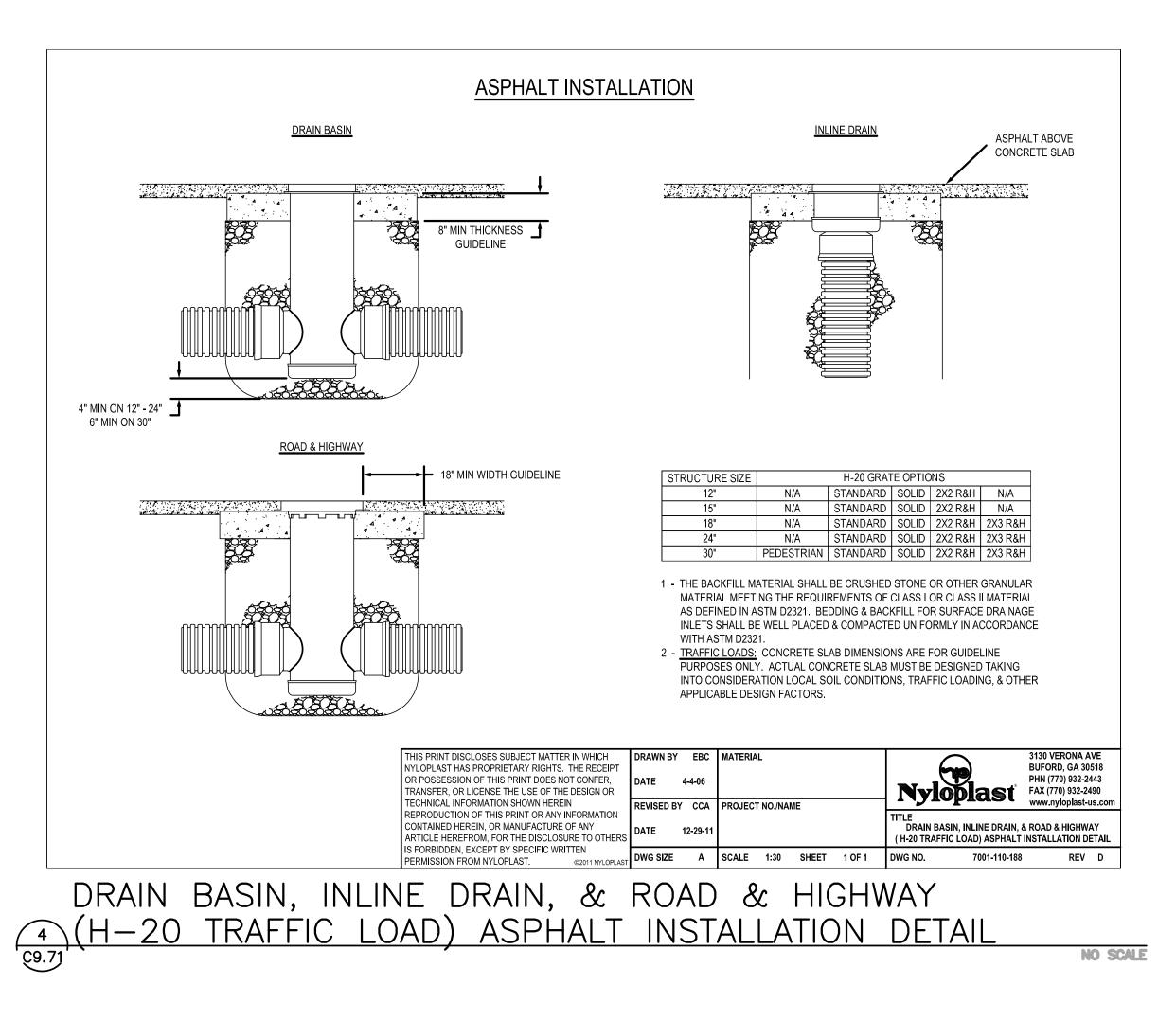


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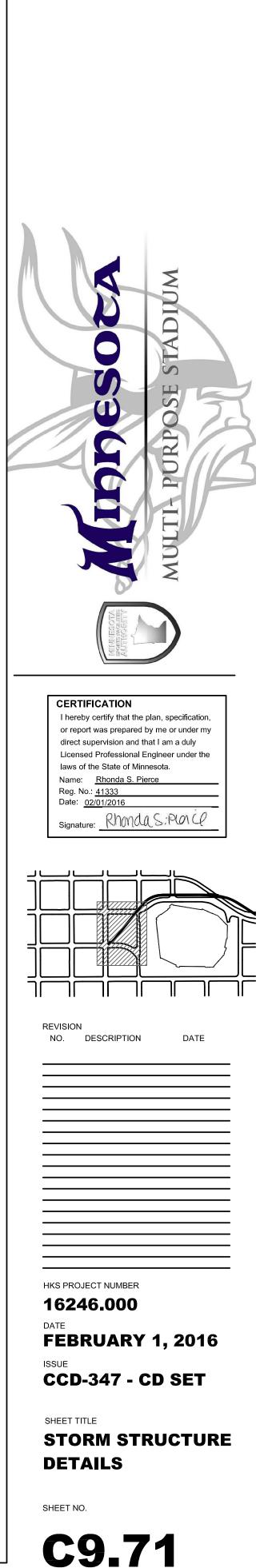
OSLUND AND ASSOCIATES 115 WASHINGTON AVE. N., MINNEAPOLIS, MN 55401 STRUCTURAL ENGINEER

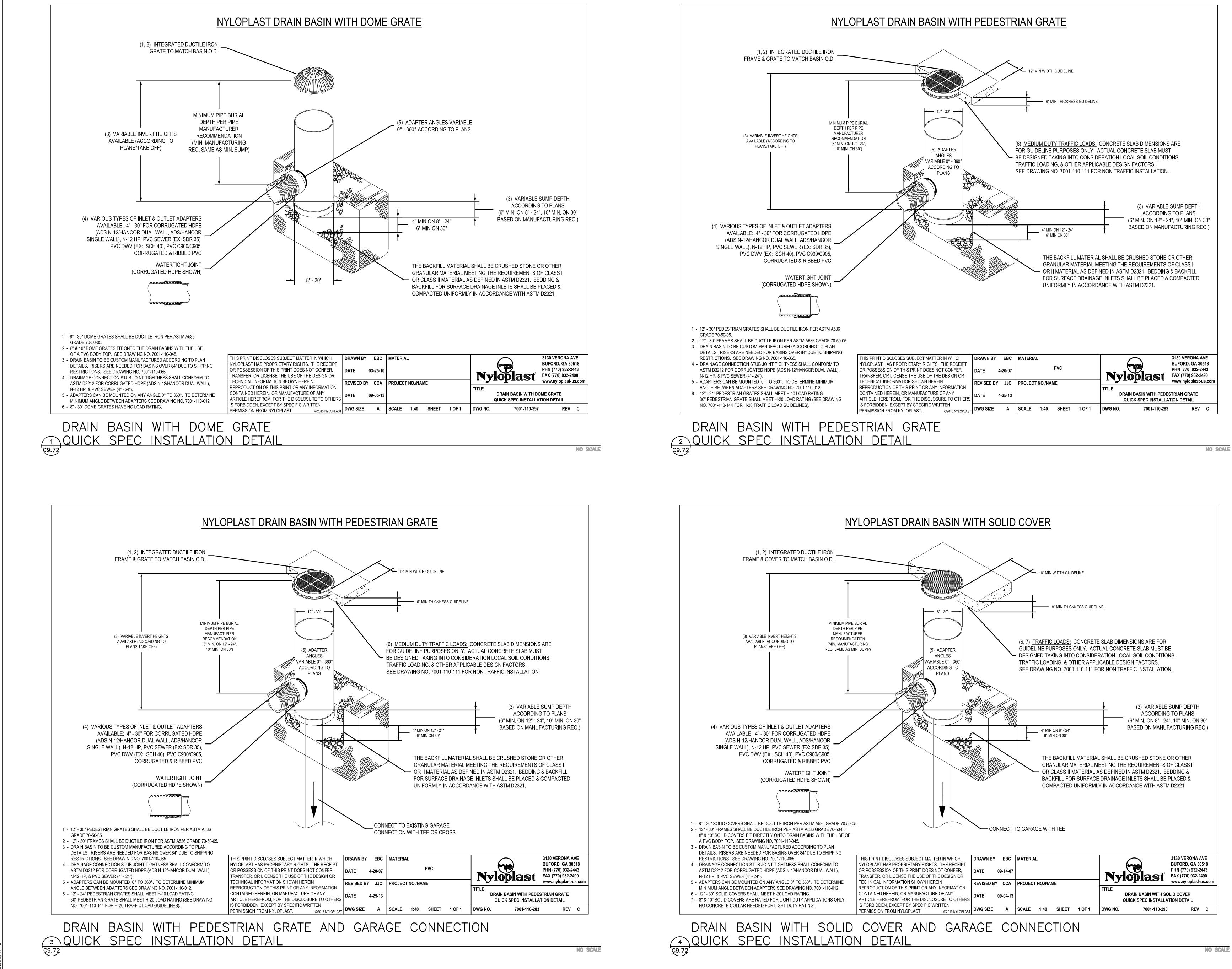
SEH INC. 10901 RED CIRCLE DR, STE 300 MINNETONKA, MN 55343 ELECTRICAL ENGINEER

SEH INC. 10901 RED CIRCLE DR, STE 300 MINNETONKA, MN 55343 AUDIO VISUAL CONSULTANTS WJHW 4801 SPRING VALLEY RD., DALLAS, TX 75244

WAYFINDING

SELBERT PERKINS DESIGN 432 CULVER BLVD., PLAYA DEL REY, CA 90293 **CIVIL ENGINEERING SUBCONSULTANT** PIERCE PINI AND ASSOCIATES, INC. 9298 CENTRAL AVE. NE, STE 312, BLAINE, MN 55434







MINNESOTA SPORTS FACILITIES AUTHORITY 900 SOUTH 5th STREET, MINNEAPOLIS, MN 55415 OWNER

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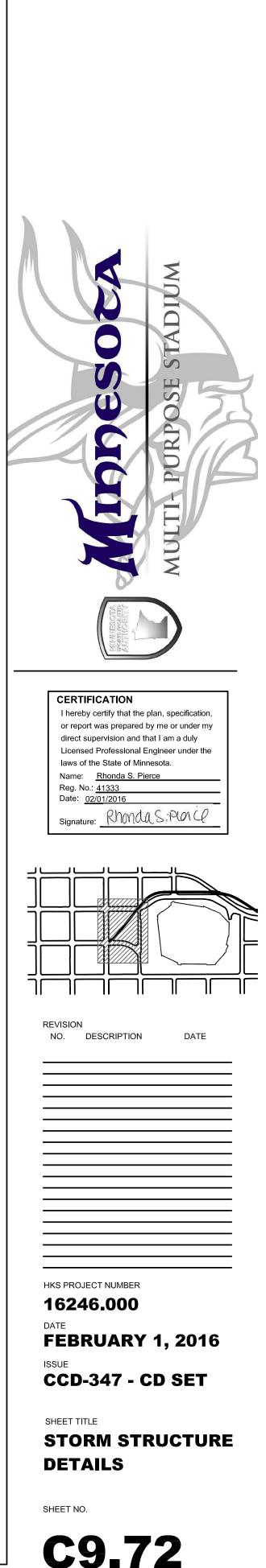
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SEH INC 10901 RED CIRCLE DR, STE 300 MINNETONKA, MN 55343 **ELECTRICAL ENGINEER** SEH INC

10901 RED CIRCLE DR, STE 300 MINNETONKA, MN 55343 AUDIO VISUAL CONSULTANTS WJHW 4801 SPRING VALLEY RD., DALLAS, TX 75244

WAYFINDING SELBERT PERKINS DESIGN

432 CULVER BLVD., PLAYA DEL REY, CA 90293 **CIVIL ENGINEERING SUBCONSULTANT** PIERCE PINI AND ASSOCIATES, INC. 9298 CENTRAL AVE. NE, STE 312, BLAINE, MN 55434



LEGEND OF SYMBOLS

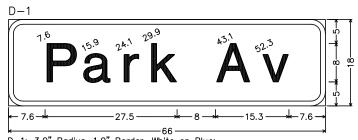
CONTROLLER AND SERVICE EQPT NO'S.	
INPLACE CONDUIT	
PEDESTRIAN INDICATORS IN PLACE PEDESTRIAN PUSH BUTTONS ON PEDESTAL OR POLE PEDESTRIAN PUSH BUTTON STATION TRAFFIC SIGNAL PEDESTAL TRAFFIC SIGNAL PEDESTAL IN PLACE TRAFFIC SIGNAL POLE AND MAST ARM TRAFFIC SIGNAL POLE AND MAST ARM IN PLACE STREET LIGHT POLE AND LUMINAIRE STREET LIGHT POLE AND LUMINAIRE IN PLACE	
MAST ARM AND LUMINAIRE	→ → → → → → → → → → → → → →
EDGE OF ROADWAY	

	ABB	REVIA	TIONS
	EQUIPMEN	IT AND	INDICATIONS
=			
	RED	_	RED
	YEL	-	YELLOW
	GRN	-	GREEN
	WLK	-	WALK
	NEU	-	NEUTRAL
	DWK	-	DON'T WALK
	LUM	-	LUMINAIRE
	DNL	-	DOWNLIGHT
	н.н.	-	HANDHOLE
	EQG	-	EQUIPMENT GROUND
	R.S.C.	-	RIGID STEEL CONDUIT
	GLTA	-	GREEN LEFT TURN ARROW
	YRTA	-	YELLOW RIGHT TURN ARROW
	D2-1 (eg)	-	DETECTOR – PHASE "2"
	GR.R	-	GROUND ROD
	SER	-	SERVICE
	P2-1 (eg)	-	PEDESTRIAN INDICATIONS-PHASE "2"
	2-1 (eg)	-	SIGNAL HEADS-PHASE "2"
	SPR	-	SPARE CONDUCTORS
	N.M.C.	-	NON METALLIC CONDUIT
	E.V.P.	-	EMERGENCY VEHICLE PRE-EMPTION
	J.B.	-	JUNCTION BOX
	W.P.	-	WOOD POLE
	P.E.C.	-	PHOTOELECTRIC CELL
	GTHA	-	GREEN THROUGH ARROW
	PB2-2 (e	g) —	PEDESTRIAN PUSH BUTTON-PHASE "2"
	TDW	-	TELEPHONE DROP WIRE
	S.O.P.	-	SOURCE OF POWER
	H.P.S.	-	HIGH PRESSURE SODIUM
	F&I	-	FURNISH AND INSTALL
	R & S	-	REMOVE AND SALVAGE
	Br. Gr.	-	BARE GROUND
		-	EQG CONNECTION
	—• —	-	SPLICE

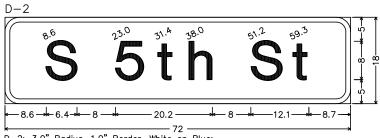
	TRAFFIC SIGNAL MOUNTED SIGN PANELS - TYPE C (FURNISH AND INSTALL)								
SYSTEM NUMBER	SIGN CODE	PANEL LEGEND	SIZE (in.)	NO.	SQ. FT.	TOTAL AREA (SF)	POLE NO.	a	ь
В	R1-9b	STATE LAW-STOP FOR PEDESTRIANS IN CROSSWALK	90x30	1	18.75	18.75	2	-	16'
В	R1-9b	STATE LAW-STOP FOR PEDESTRIANS IN CROSSWALK	90x30	1	18.75	18.75	2	-	16'
В	W11-15	BIKE/PEDESTRIAN CROSSING	36x36	1	9.00	9.00	2	1'	_
В	W11-15	BIKE/PEDESTRIAN CROSSING	36x36	1	9.00	9.00	2	11'	-
В	W11-15	BIKE/PEDESTRIAN CROSSING	30x30	2	6.25	12.50	1,2	-	-
В	W16-7mPL	DOWN ARROW (LEFT)	24x18	2	3.00	6.00	1,2	-	-
	TOTAL ESTIMATED QUANTITIES			8		74.00		-	

MAST ARM MOUNTED SIGNS									
	SIGN PANELS – TYPE D (FURNISH & INSTALL)								
SYSTEM NUMBER	SIGN PANEL	SIZE (in.)	NO. REQ.	NO. POSTS/ STIFFENERS PER SIGN	BAND SPACING (**)	SQ. FT. PER SIGN	POLE NO.	a	b
А	D-1	66x18	1	3	-	8.25	4	2'	-
А	D-2	72x18	1	3	-	9.00	6	24'	1
TOTAL	QUANTITIE	s	2			17.25			

(**)= SPACING BETWEEN STIFFENERS SHALL NOT EXCEED 36 INCHES AND SHALL BE UNIFORMLY SPACED. SEE STANDARD SIGNS MANUAL, PAGE 105A (REVISION DATE: 7/06/07) FOR BRACKET SPACING REQUIREMENTS.



D-1; 3.0" Radius, 1.0" Border, White on Blue; [Park Av] E Mod;



D-2; 3.0" Radius, 1.0" Border, White on Blue; [S 5th St] E Mod;

NOTES:

- 1) SEE STANDARD SIGNS MANUAL FOR DETAILED DRAWINGS OF TYPE C SIGN PANELS.
- 2) CORNERS EXTENDING BEYOND THE BORDERS SHALL NOT BE TRIMMED.
- 3) ALL NEW TYPE C SIGN PANELS SHALL BE FABRICATED USING DG3 SHEETING.
- 4) SEE PLANS FOR LOCATIONS WHERE SIGN PANELS SHALL BE MOUNTED AT EACH SIGNAL OR FLASHER SYSTEM. 5) FURNISHING AND INSTALLING TYPE C AND TYPE D SIGNS SHALL
- BE CONSIDERED INCIDENTAL TO EACH SIGNAL/FLASHER SYSTEM.
- 6) FOR STRUCTURAL DETAILS OF MAST ARM MOUNTED SIGNS, SEE STANDARD SIGNS MANUAL, PAGE 105A (REVISION DATE: 7/06/07).
- 7) R10-25 SIGN PANELS (PUSH BUTTON TO TURN ON WARNING FLASHER) ARE INCLUDED AS PART OF APS PUSH BUTTON INSTALLATION AT PEDESTRIAN CROSSWALK FLASHER SYSTEM "B".

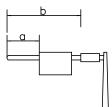
TRAFFIC SIGNAL TABULATION					
ITEM NO	ITEM	UNIT	TOTAL ESTIMATED QUANTITY		
2104.601	SALVAGE SIGNAL SYSTEM "A"	LUMP SUM	1		
2104.601	SALVAGE SIGNAL SYSTEM "B"	LUMP SUM	1		
2565.616	REVISE SIGNAL SYSTEM "A"	SYSTEM	1		
2565.616	PEDESTRIAN CROSSWALK FLASHER SYSTEM "B"	SYSTEM	1		

CONDUCTOR COLOR CODE

- R – RED – ORANGE BL BLUE WH WHITE R/BLK - RED WITH BLACK TRACER

0

- O/BLK ORANGE WITH BLACK TRACER
- BL/BLK BLUE WITH BLACK TRACER
- WH/BLK WHITE WITH BLACK TRACER
- BLK BLACK
- BLK/WH BLACK WITH WHITE TRACER
- G/BLK GREEN WITH BLACK TRACER
- G GREEN



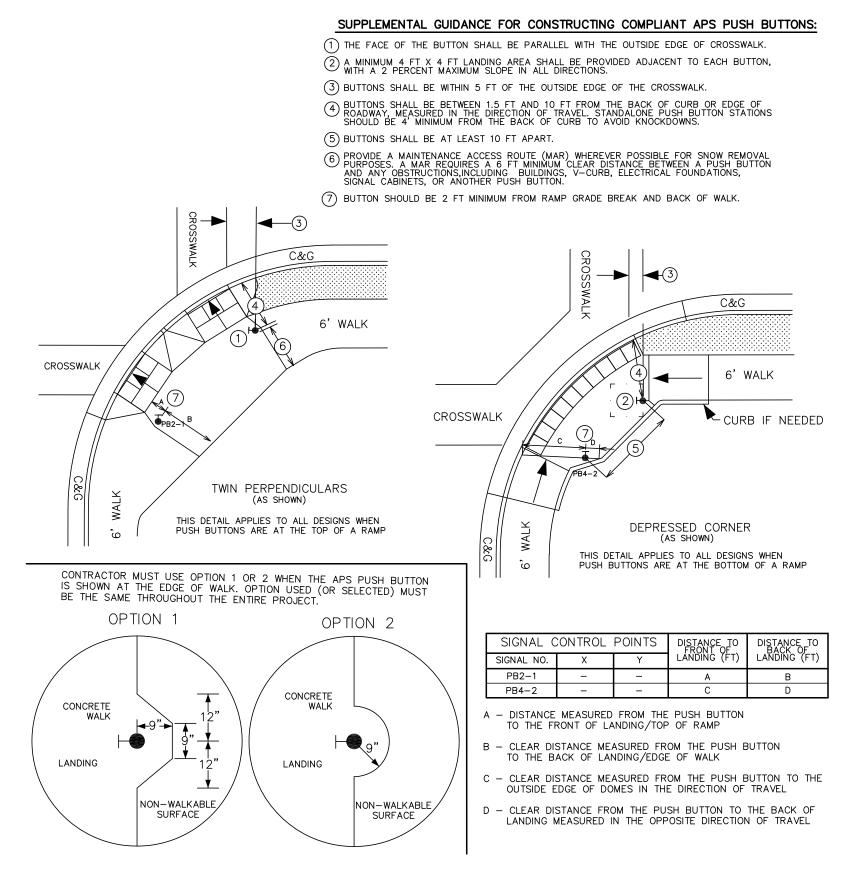
SIGNAL/FLASHER SYSTEMS "A-B" LEGENDS AND TABULATIONS PARK AVE/CHICAGO AVE SYSTEMS



OWNER MINNESOTA SPORTS FACILITIES AUTHORITY 900 SOUTH 5th STREET, MINNEAPOLIS, MN 55415 OWNER MINNESOTA VIKINGS FOOTBALL, LLC 9500 VIKING DR., EDEN PRAIRIE, MN 55344 9900 VIKING DR., EDEN PRAIRE, MN 55344 ARCHITECT HKS, IN, ST. PAUL ST., SUITE 100, DALLAS, TX 75201 CIVIL ENGINEER EVS, IXC. 10025 VALLEY VIEW, SUITE 140, EDEN PRAIRIE, MN LANDSCAPE ARCHITECT OSLUND AND ASSOCIATES 115 WASHINGTON AVE. N., MINNEAPOLIS, MN 55401 SEH INC. 10901 RED CIRCLE DR. STE 300 MINNET ELECTRICAL ENGINEER SEH INC. 10901 RED CIRCLE DR, STE 300 MINNETONKA, I AUDIO VISUAL CONSULTANTS WJHW 4801 SPRING VALLEY RD., DALLAS, TX 75244 WAYFIND WALEF RD., DALLARS, TX 73244 WAYFIND SELBERT PERKINS DESIGN 432 CULVER BLVD., PLAYA DEL REY, CA 90293 432 COLVER BLVD, PLATA DEL RET, CA 90283 CIVIL ENGINEERING SUBCONSULTANT COMPANY NAME, INC. COMPANY ADDRESS Minnesoca STADIUI PURPOSE RTIFICATION REVISION NO. DATE DESCRIPTION 16246.000 FEBRUARY 01, 2016 CCD-347 - CD SET SIGNALS/FLASHERS **VOLUME 1** WEST PLAZA SHEET NO C10.01

TYPICAL APS PEDESTRIAN PUSH BUTTON LOCATION

THIS IS A GENERAL DETAIL INTENDED TO SHOW THE REQUIREMENTS OF APS PUSH BUTTON LOCATION. FOR PROJECT SPECIFIC INFORMATION REGARDING PEDESTRIAN RAMP LAYOUT AND PUSH BUTTON LOCATIONS, SEE THE PLAN.





OWNER MINNESOTA SPORTS FACILITIES AUTHORITY 2010 SOLITIU SE STREET MINNEADOLIS MIL SEAT

ARCHITECT HKS, INC 350 N ST PAUL ST. SUITE 100. DALLAS, TX 7520

LANDSCAPE ARCHITECT OSLUND AND ASSOCIATES 115 WASHINGTON AVE. N., MINNEAPCUS, MIN STRUCTURAL ENGINEER SEH INC. 10001 RED CIRCLE DR. STE 300 MINNETONKA

AUDIO VISUAL CONSULTANTS

WJHW 4801 SPRING VALLEY RD., DALLAS, TX 75244

OWNER MINNESOTA VIKINGS FOOTBALL, LLC 9500 VIKING DR., EDEN PRAIRIE, MN 55344

CIVIL ENGINEER EVS. INC. 10025 VALLEY VIEW, SUITE 140, EDEN

ELECTRICAL ENGINEER SEH INC.

WAYFINDING SELBERT PERKINS DESIGN 432 CULVER BLVD., PLAYA DEL REY, CA 9029 CIVIL ENGINEERING SUBCONSULTANT COMPANY NAME, INC. COMPANY ADDRESS Minnesoca STADIUN PURPOSE RTIFICATION VL M. REVISION NO. DATE 16246.000 FEBRUARY 01, 2016 CCD-347 - CD SET SIGNALS/FLASHERS **VOLUME 1** WEST PLAZA C10.02

SIGNAL/FLASHER SYSTEMS "A-B" APS PB INSTALLATION DETAILS PARK AVE/CHICAGO AVE SYSTEMS