

WDMCSD - CLIVE ELEMENTARY BUS LANE MODIFICATION

WINDSOR HEIGHTS, IOWA

SHEET INDEX

C000	COVER SHEET
C101	DEMO & SITE PLAN
C201	GRADING PLAN & DETAILS

OWNER:

WEST DES MOINES COMMUNITY SCHOOL DISTRICT
ATTN: ERIC SMITH
3550 MILLS CIVIC PARKWAY
WEST DES MOINES, IA 50265-5556

SITE ADDRESS:

1600 73RD ST.
WINDSOR HEIGHTS, IA 50324

ZONING:

R-1 (SINGLE-FAMILY RESIDENTIAL)

ENGINEER

SHIVE-HATTERY, INC.
4125 WESTOWN PARKWAY, SUITE 100
WEST DES MOINES, IA 50266
(515) 223-8104
FAX: (515) 223-0622

CONTROL POINTS

- CP-1 CUT X IN (W) EDGE OF SIDEWALK @ (NE) CORNER OF 73RD ST AND BELLAIRE AVE.
N = 586015.519
E = 158083.394
EL = 854.900
(IOWA SOUTH GRID)
- CP-2 CUT X IN CURB ON (N) SIDE OF MEDIAN ISLAND OF PARKING LOT ON (S) SIDE OF SCHOOL.
N = 585770.712
E = 1580717.214
EL = 845.827
(IOWA SOUTH GRID)

SPECIFICATIONS

THE MOST RECENT EDITION OF THE IOWA STATEWIDE URBAN DESIGN SPECIFICATIONS FOR PUBLIC IMPROVEMENTS SHALL APPLY TO ALL SITE WORK PERFORMED ON THIS PROJECT EXCEPT AS MODIFIED HEREIN.

A. SUBGRADE PREPARATION
REFER TO SUDAS SECTION 2010. INCLUDES PREPARING SIDEWALK AND PARKING SUBGRADE AND PLACING A MINIMUM OF SIX INCHES (6") OF GRANULAR SUBBASE AS SHOWN ON THE PAVEMENT CROSS SECTION. PREPARE SUBGRADE AND COMPACT SOIL TO NOT LESS THAN 95% OF THE MAXIMUM DENSITY. MOISTURE CONTENT OF SOIL SHALL BE WITHIN RANGE OF OPTIMAL MOISTURE TO + 4%.

B. GRANULAR SUBBASE:
COMPLY WITH IOWA DOT SPECIFICATION SECTION 4121 FOR MATERIAL AND SECTION 2110 FOR INSTALLATION.

C. CONCRETE PAVING:
MATERIALS AND MIXING FOR ALL CONCRETE WORK, UNLESS OTHERWISE SPECIFIED, SHALL CONFORM TO IOWA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, SECTIONS 2301.01 THROUGH 2301.03 AND MATERIALS I.M. 529 FOR AIR-ENTRAINED TYPE C-4 MIX WITH TYPE I CEMENT. M-MIX CAN BE USED WITH APPROVAL OF ENGINEER.

COARSE AGGREGATE DURABILITY SHALL BE CLASS II

COMPRESSIVE STRENGTH: 2800 PSI @ 7 DAYS AND 4000 PSI @ 28 DAYS

SLUMP: 3" ± 1"

AIR CONTENT: 7.0% ± 1.5%

TESTING - ONE SET OF TEST CYLINDERS REQUIRED FOR EACH 100 C.Y. OR ONE PER DAY IF LESS THAN 100 CY FROM SAME READY MIX PLANT. CONCRETE TESTING TO BE COMPLETED BY AN INDEPENDENT TESTING LABORATORY AND PAID FOR BY OWNER. CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL REQUIRED TESTING AND GEOTECHNICAL WORK. SUBMIT ALL REPORTS TO THE ENGINEER.

SURFACE CURING: CONTRACTOR SHALL APPLY WHITE PIGMENT LIQUID CURING COMPOUND IN A FINE SPRAY TO FORM CONTINUOUS UNIFORM FILM AFTER FINISHING AND SURFACE MOISTURE HAS DISAPPEARED, OR WITHIN 30 MINUTES OF PLACEMENT.

SUBMIT CONCRETE MIX DESIGN TO ENGINEER FOR APPROVAL.

D. PAVEMENT JOINTING:
SIDEWALK JOINTS TO BE TYPE 'C' JOINTS MATCHING EXISTING SPACING. SEAL ALL EXPANSION AND COLD JOINTS. PROVIDE EXPANSION JOINTS AT LOCATIONS SHOWN ON PLANS.

E. SEALANTS:
JOINT SEALERS: MEET IOWA DOT STANDARD SPECIFICATION REQUIREMENTS INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL JOINTS TO BE SEALED WITH NO BACKER ROD.

F. PAVEMENT MARKING:
USE FACTORY MIXED QUICK DRYING, NON-BLEEDING WATERBORNE PAINT COMPLYING WITH IOWA DOT STANDARD SPECIFICATION SECTION 4183. COLOR/WIDTH: REFER TO PLANS. SUBMIT TO ENGINEER FOR APPROVAL.

G. SEEDING:
REFER TO SUDAS SECTION 9010. SEED ALL AREAS DISTURBED BY CONSTRUCTION.

H. TRAFFIC AND PEDESTRIAN CONTROL:
PROVIDE BARRICADES, FENCING, SIGNAGE, AND OTHER DEVICES TO KEEP UNAUTHORIZED PERSONNEL FROM PROJECT SITE AND WORK ZONES. KEEP INTERFERENCE WITH TRAFFIC TO A MINIMUM. PROVIDE OWNERS REPRESENTATIVE WITH A CONSTRUCTION STAGING PLAN SHOWING CONSTRUCTION SEQUENCING, STAGING AREAS, AND ALL ACCESS REQUIREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING SIDEWALK CLOSURE WITH THE CITY OF WINDSOR HEIGHTS.

GENERAL NOTES:

- NOTIFY UTILITY COMPANIES WHOSE FACILITIES ARE SHOWN ON THE PLANS OR KNOWN TO BE WITHIN CONSTRUCTION LIMITS OF THE SCHEDULE PRIOR TO EACH STAGE OF CONSTRUCTION.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES AT CRITICAL LOCATIONS TO VERIFY EXACT HORIZONTAL AND VERTICAL LOCATION.
- IOWA CODE 480, UNDERGROUND FACILITIES INFORMATION, REQUIRES VERBAL NOTICE TO IOWA ONE-CALL 1-800-292-8989, NOT LESS THAN 48 HOURS BEFORE EXCAVATING, EXCLUDING WEEKENDS AND HOLIDAYS.
- THE MEANS OF THE WORK AND THE SAFETY OF THE CONTRACTOR'S EMPLOYEES ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. ALL WORK SHALL BE CONDUCTED IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THE DRAWINGS OR SPECIFICATIONS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ALL APPLICABLE SAFETY REGULATIONS.
- UNLESS OTHERWISE SPECIFIED OR MODIFIED, ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS).
- NO WORK SHALL BE PERFORMED BEYOND THE PROJECT LIMITS WITHOUT PRIOR AUTHORIZATION FROM THE OWNER'S REPRESENTATIVE.
- MAINTAIN POSITIVE DRAINAGE ON THE SITE THROUGHOUT THE PROJECT DURATION.
- SITE CLEAN-UP SHALL BE PERFORMED ON A DAILY BASIS. SIDEWALKS, PARKING LOTS, ROADWAYS, ETC. SHALL BE KEPT CLEAN AT ALL TIMES.
- ALL OPEN EXCAVATIONS SHALL BE PROTECTED.
- REPLACE ANY PROPERTY MONUMENTS REMOVED OR DESTROYED BY CONSTRUCTION. MONUMENTS SHALL BE SET BY A LAND SURVEYOR REGISTERED TO PRACTICE IN THE STATE OF IOWA.
- CONTROL DUST SPREADING FROM ALL WORK AND STAGING AREAS.
- ANY WORK REQUIRED TO COMPLETE THE SCOPE OF THIS PROJECT BUT NOT SPECIFICALLY CALLED OUT, SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THE COMPLETION OF THIS WORK.
- REPAIR OR REPLACE EXISTING FACILITIES (CURBS, PAVEMENT, PAVEMENT MARKINGS, UTILITIES, ETC.) TO REMAIN, AT NO ADDITIONAL EXPENSE TO THE OWNER.
- WORK WHICH DOES NOT CONFORM TO THE REQUIREMENTS OF THE CONTRACT WILL BE CONSIDERED UNACCEPTABLE. UNACCEPTABLE WORK, WHETHER THE RESULT OF POOR WORKMANSHIP, USE OF DEFECTIVE MATERIALS, DAMAGE THROUGH CARELESSNESS OR ANY OTHER CAUSE, FOUND TO EXIST PRIOR TO THE FINAL ACCEPTANCE OF THE WORK, SHALL BE REMOVED AND REPLACED IN AN ACCEPTABLE MANNER, AS REQUIRED BY OWNER'S REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE. WORK DONE CONTRARY TO THE INSTRUCTIONS OF THE OWNERS' REPRESENTATIVE, WORK DONE BEYOND THE LINES SHOWN ON THE PLANS OR ANY EXTRA WORK DONE WITHOUT PRIOR AUTHORIZATION.
- ALL SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING. NO PONDING OF WATER WILL BE ACCEPTED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY ANY AREAS OF EXISTING OR PROPOSED IMPROVEMENTS AND GROUND THAT HAVE POTENTIAL TO POND WATER AND MAKE ANY ADJUSTMENTS NECESSARY TO ENSURE THAT WATER WILL POSITIVELY DRAIN.
- ALL DIMENSIONS TO BACK-OF-CURB UNLESS NOTED OTHERWISE.
- SPOT ELEVATIONS SHOWN REPRESENT ELEVATION AT FINISHED GRADE.
- CONTRACTOR TO COORDINATE ANY GRADE ADJUSTMENTS WITH THE DESIGN ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK OF ALL SUBCONTRACTOR(S) INVOLVED IN THE PROJECT.
- ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE FERTILIZED, SEEDED, MULCHED AND WATERED ACCORDING TO PLANS AND SPECIFICATIONS.
- ALL EXISTING UTILITY STRUCTURES SHALL BE ADJUSTED TO FINAL FINISH GRADES.
- THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL FOR ALL WORK WITHIN STREET RIGHTS OF WAY AT NO ADDITIONAL COST TO THE OWNER. TRAFFIC CONTROL SHALL CONSIST OF PERMANENT AND TEMPORARY STRIPING, BARRICADES, SIGNAGE, AND LIGHTS AS NECESSARY TO PROTECT VEHICLE AND PEDESTRIAN TRAFFIC IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- AT LEAST ONE WEEK PRIOR TO ANY CONSTRUCTION WITHIN PUBLIC R.O.W. / EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWER AND STREETS, THE CONTRACTOR SHALL CONTACT CITY OF WINDSOR HEIGHTS TO OBTAIN APPLICABLE CITY PERMITS THAT MAY BE NECESSARY.
- ALL JOINTING SHALL MEET IOWA DOT SPECIFICATIONS AND REQUIREMENTS. ALL LONGITUDINAL PAVEMENT JOINTS SHALL HAVE EITHER TYPE "BT", "KT", OR "L" JOINTS DEPENDING ON THE POURING SEQUENCE. ALL TRAVERSE JOINTS SHALL BE TYPE "C" WITH TYPE "DW" JOINTS USED BETWEEN POURS. MAXIMUM JOINT SPACING SHALL BE 12' ON ALL PAVEMENT AND SQUARE ON ALL SIDEWALKS WITH A MAXIMUM JOINT SPACING OF 10'. SEAL ALL PAVEMENT JOINTS. CONTRACTOR SHALL SUBMIT POURING SEQUENCE AND JOINTING PLANS FOR APPROVAL BY ENGINEER PRIOR TO BEGINNING PAVING OPERATIONS.
- ALL FIELD TILE AND EXISTING SUBDRAINAGE PIPING THAT IS ENCOUNTERED DURING CONSTRUCTION SHOULD BE RECONNECTED OR ROUTED TO PROPOSED STORM SEWER, AS DIRECTED BY ENGINEER, AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL RECORD ACCURATE AS-BUILT LOCATIONS AND DEPTHS OF ALL EXISTING AND PROPOSED UNDERGROUND UTILITY INSTALLATIONS.
- MATERIALS NOT SUITABLE FOR CONSTRUCTION, INCLUDING, TRENCH BACKFILL AND SURFACE RESTORATION, AND EXCESS MATERIALS SHALL BE PROPERLY DISPOSED OF OFFSITE AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR ALL SITE RESTORATION AND SEEDING THAT IS REQUIRED AT THE DISPOSAL SITE AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL PREVENT ENTRY OF MUD, DIRT, DEBRIS, AND OTHER MATERIAL INTO NEW AND EXISTING SEWERS. ANY MUD, DIRT, DEBRIS, AND OTHER MATERIAL ENTERING INTO SEWERS SHALL BE REMOVED BY THE CONTRACTOR AT NO COST TO THE OWNER.
- ALL PEDESTRIAN SIDEWALK RAMP SHALL BE CONSTRUCTED IN COMPLIANCE WITH SUDAS REQUIREMENTS AND SHALL MEET "AMERICANS WITH DISABILITIES ACT ACCESSIBILITIES GUIDELINES" (ADAAG) AND "PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN PUBLIC RIGHT-OF-WAY" (PROWAG) GUIDELINES. ANY RAMP NOT IN COMPLIANCE WILL NOT BE ACCEPTED AND WILL REQUIRE RECONSTRUCTION.

CIVIL ENGINEER

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT DESCRIBED BELOW WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.	
Signature: _____	Date: _____
Printed or typed name: JASON L. MATHES	
License Number: 20529	
My License Renewal Date is: DECEMBER 31, 2016	
PAGES, SHEETS OR DIVISIONS COVERED BY THIS SEAL: C00, C101, C201	

LEGEND:

	EXISTING	PROPOSED
SANITARY MANHOLE		
STORM MANHOLE		
ELECTRIC TRANSFORMER		
TELEPHONE PEDESTAL		
WATER VALVE		
STORM INTAKE		
LIGHT POLE		
DECIDUOUS TREE		
SIGN		
FIRE HYDRANT		
CONTROL POINT		
CONSTRUCTION LIMITS	---	---
MAJOR CONTOUR	---	---
MINOR CONTOUR	---	---
UNDERGROUND TELEPHONE	---	---
UNDERGROUND ELECTRIC	---	---
OVERHEAD ELECTRIC	---	---
GAS MAIN	---	---
WATER MAIN	---	---
SANITARY SEWER	---	---
STORM SEWER	---	---
PCC PAVING REMOVAL		
PCC SIDEWALK REMOVAL		
6" PCC PAVING		
PCC SIDEWALK		



