City of West Branch

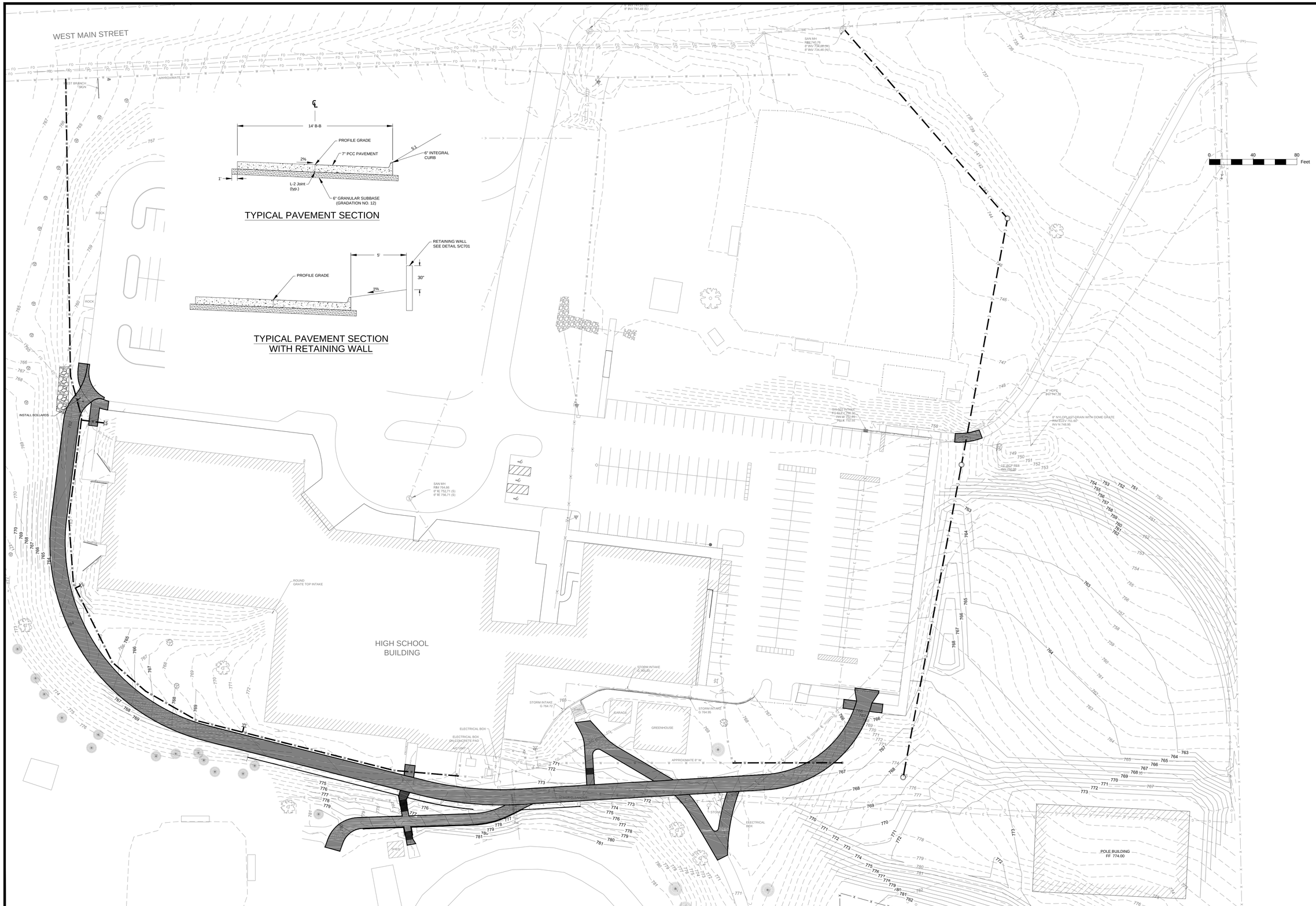
~A Heritage for Success~

110 N. Poplar Street • PO Box 218 • West Branch, Iowa 52358
(319) 643-5888 • Fax (319) 643-2305 • www.westbranchiowa.org • city@westbranchiowa.org

SPECIAL PLANNING AND ZONING COMMISSION MEETING
Thursday, September 29, 2016 ● 7:00 p.m.
West Branch City Council Chambers, 110 N. Poplar St.
Council Quorum May Be Present

1. Call to Order
2. Roll Call
3. Approve Agenda/Consent Agenda/Move to action.
4. Public Hearing/Non-Consent Agenda
   a. Approve recommendation to City Council to approve West Branch High School Phase 3 Improvements Project Site Plan, excepting the building marked "Pole Building" on the site plan which will require its own site plan to be submitted by the West Branch Community School District at a later date./Move to action.
5. City Staff Reports
6. Comments from Chair and Commission Members
7. Discussion concerning the next regularly-scheduled Planning and Zoning Commission Meeting – November 22, 2016 at 7:00 p.m.
8. Adjourn

Planning & Zoning Commission Members: Chair John Fuller, Vice Chair Ryan Bowers, LeeAnn Aspelmeier, Sally Peck, Clara Oleson, Liz Seiberling, Gary Slach · **Zoning Administrator:** Paul Stagg · **Deputy City Clerk:** Leslie Brick
Mayor: Roger Laughlin · **Council Members:** Jordan Ellyson, Colton Miller, Brian Pierce, Tim Shields, Mary Beth Stevenson
City Administrator/Clerk: Matt Muckler · **Fire Chief:** Kevin Stoolman · **Library Director:** Nick Shimmin
Parks & Rec Director: Melissa Russell · **Police Chief:** Mike Horihan · **Public Works Director:** Matt Goodale



PROJECT NUMBER:
16-0849

PROJECT NAME:
WEST BRANCH HS
PH 3 IMPROVEMENTS
FIRE SAFETY & GRADING
IMPROVEMENTS

TITLE:
SITE PLAN

ENGINEER:

hbk ENGINEERING

HBK ENGINEERING, LLC
509 S. GILBERT ST.
IOWA CITY, IA 52240
PHONE: (319) 338-7557
FAX: (319) 358-2937

IOWA DEPARTMENT
OF LABOR
REGISTRATION
NO. 00527328

WWW.HBKENGINEERING.COM

OWNER/DEVELOPER:

WEST BRANCH COMMUNITY SCHOOLS

WEST BRANCH
COMMUNITY SCHOOL DISTRICT
148 N. OLIPHANT ST
WEST BRANCH, IA 52358

FOLDER NAME:
16-0849

DATE CREATED:
08-15-2016

DRAWING LOG

DATE	ISSUED FOR	DB	CB
08-15-16	SITE PLAN	JDP	NJB
09-14-16	BID DOCUMENTS	JDP	NJB

PROJECT MANAGER:
BETTIS

SHEET:

WEST BRANCH HIGH SCHOOL
PHASE 3 IMPROVEMENTS
FIRE SAFETY AND GRADING IMPROVEMENTS
WEST BRANCH, IOWA

CONTACTS

UTILITY LOCATING CREW	"ONE CALL" Phone: 1-800/292-8989
PUBLIC WORKS DEPARTMENT	Attn: MATT GOODALE Phone: 319-643-5888
SUPERINTENDENT OF SCHOOLS	Attn: KEVIN HATFIELD Phone: (319) 643-7213
CITY ADMINISTRATOR	Attn: MATT MUCKLER Phone: (319) 643-5888
MAYOR	Attn: ROGER LAUGHLIN Phone: (319) 643-5888
EMERGENCY	Attn: WEST BRANCH POLICE DEPARTMENT Phone: (319) 643-2222
CITY ENGINEER	Attn: DAVE SCHECHINGER VEENSTRA & KIMM, INC. Phone: (319) 466-1000

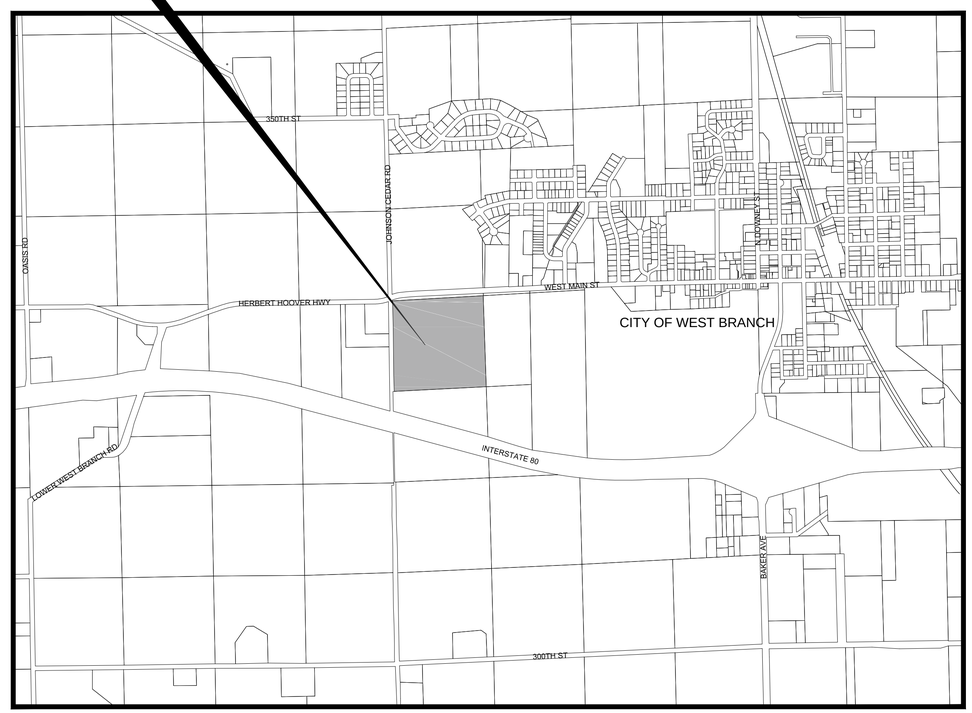
PROJECT INFORMATION

SCOPE OF WORK

1. NEW 14' FIRE LANE WITH 8" WATER MAIN AND HYDRANTS AROUND HIGH SCHOOL BUILDING.
2. GRADING AND SANITARY SEWER FOR FUTURE MULTI-USE FACILITY DEVELOPMENT.

PROJECT LOCATION

LOCATION MAP
NOT TO SCALE



INDEX OF SHEETS

SHEET	TITLE
C100	COVER SHEET
C200	EXISTING SITE PLAN & TOPOGRAPHIC SURVEY
C300	DEMOLITION PLAN
C400	SITE GRADING AND EROSION CONTROL
C401	SITE GRADING AND EROSION CONTROL
C500	UTILITY LAYOUT PLAN
C501	WATER PROFILE
C502	SANITARY PROFILE
C503	SANITARY PROFILE
C600	PAVING PLAN AND PROFILE SHEETS
C601	PAVING PLAN AND PROFILE SHEETS
C602	SIDEWALK PAVING DETAILS
C603	SIDEWALK PAVING DETAILS
C700	GENERAL NOTES
C701	SITE DETAILS
C702	SITE DETAILS
C703	SITE DETAILS
C704	SITE DETAILS

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com
811 Know what's below. Call before you dig.

CERTIFICATION

LICENSED PROFESSIONAL ENGINEER
BRIAN B. BOELK
16503
IOWA

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT 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.

SIGNED: DATE:

BRIAN B. BOELK, P.E.

LICENSE NUMBER 16503.

MY LICENSED RENEWAL DATE IS DECEMBER 31, 2016.

PAGES OR SHEETS COVERED BY THIS SEAL: _____.

N W E S

PROJECT NUMBER: 16-0849

PROJECT NAME: WEST BRANCH HS PH 3 IMPROVEMENTS FIRE SAFETY & GRADING IMPROVEMENTS

TITLE: COVER

ENGINEER:
hbk ENGINEERING
HBK ENGINEERING, LLC
509 S. GILBERT ST.
IOWA CITY, IA 52240
PHONE: (319) 338-7557
FAX: (319) 358-2937
IOWA DEPARTMENT OF LABOR REGISTRATION NO. 00527328
WWW.HBKENGINEERING.COM

OWNER/DEVELOPER:
WEST BRANCH COMMUNITY SCHOOLS
WEST BRANCH COMMUNITY SCHOOL DISTRICT
148 N. OLIPHANT ST
WEST BRANCH, IA 52358

FOLDER NAME: 16-0849

DATE CREATED: 08-15-2016

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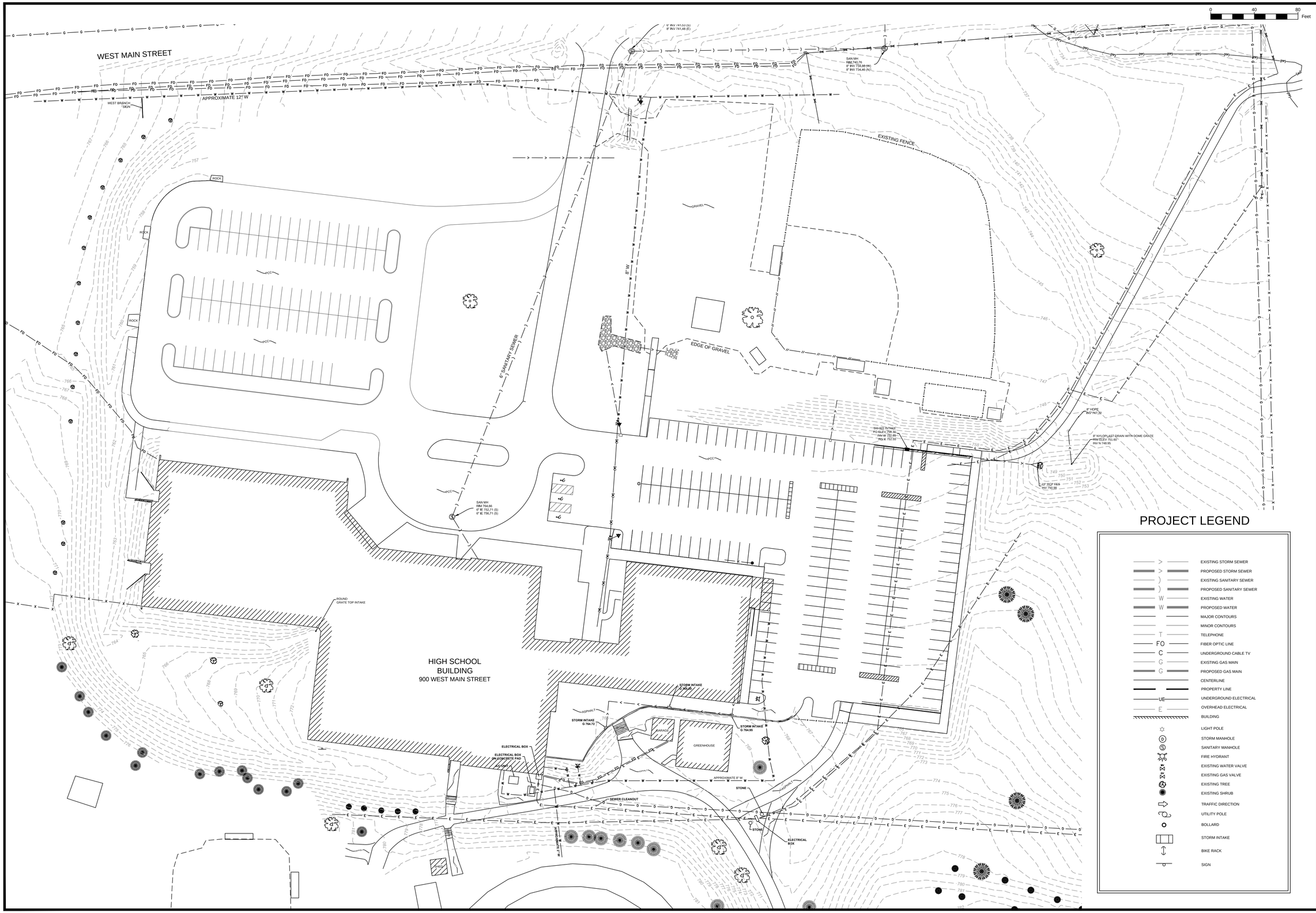
08-15-16	SITE PLAN	JDP	NJB
09-14-16	BID DOCUMENTS	JDP	NJB
09-19-16	BID DOCUMENTS	SPR	BAB

PROJECT MANAGER: BOELK

SHEET: C100



N
W hbk E
S

PROJECT NUMBER:
16-0849

PROJECT NAME:
WEST BRANCH HS PH 3 IMPROVEMENTS FIRE SAFETY & GRADING IMPROVEMENTS

TITLE:
EXISTING SITE PLAN & TOPOGRAPHICAL SURVEY

ENGINEER:

hbk ENGINEERING

HBK ENGINEERING, LLC
509 S. GILBERT ST.
IOWA CITY, IA 52240
PHONE: (319) 338-7557
FAX: (319) 358-2937

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WEST BRANCH COMMUNITY SCHOOL DISTRICT
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PROJECT MANAGER:
BOELK

SHEET:
C200

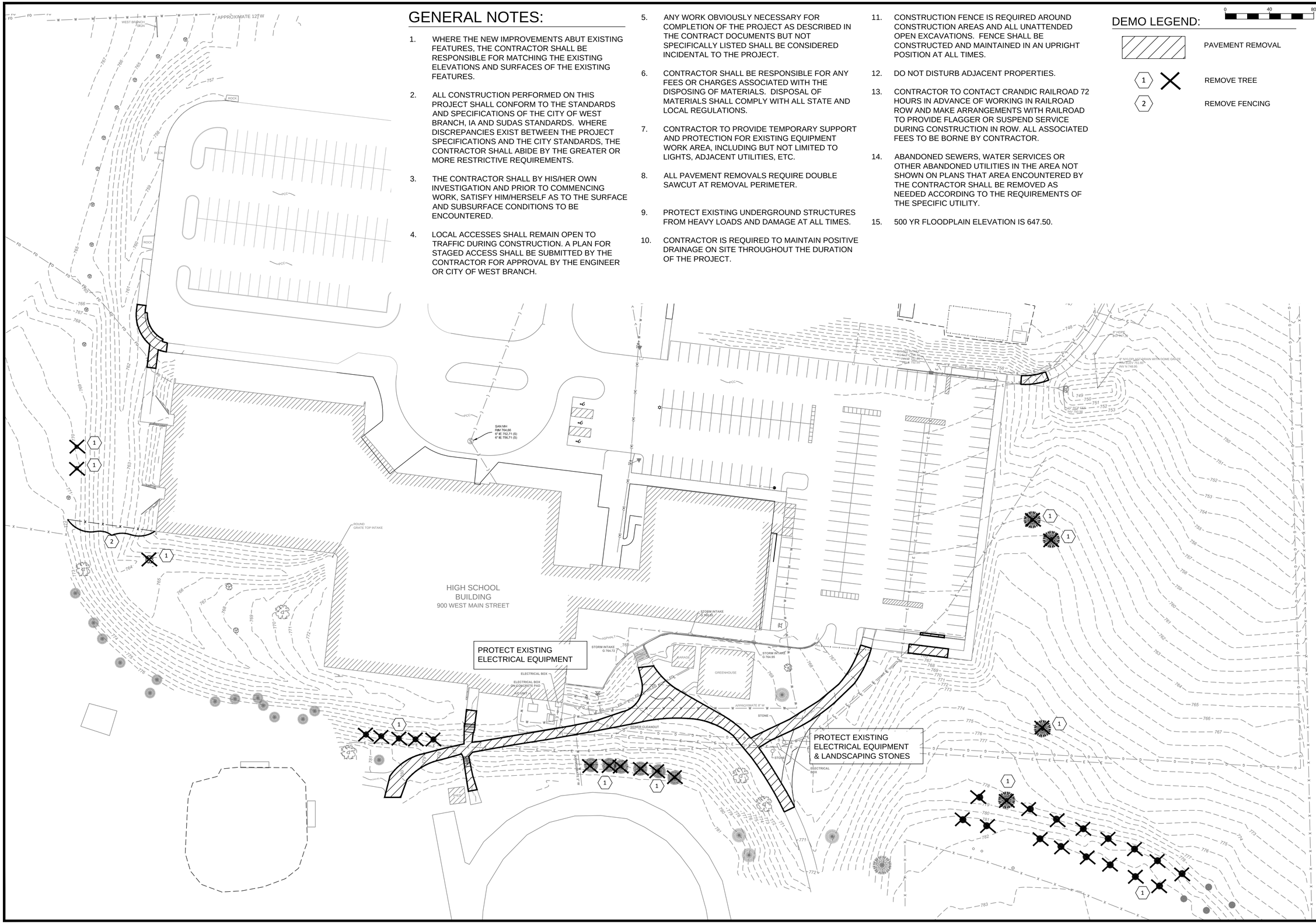
GENERAL NOTES:

1. WHERE THE NEW IMPROVEMENTS ABUT EXISTING FEATURES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MATCHING THE EXISTING ELEVATIONS AND SURFACES OF THE EXISTING FEATURES.
2. ALL CONSTRUCTION PERFORMED ON THIS PROJECT SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY OF WEST BRANCH, IA AND SUDAS STANDARDS. WHERE DISCREPANCIES EXIST BETWEEN THE PROJECT SPECIFICATIONS AND THE CITY STANDARDS, THE CONTRACTOR SHALL ABIDE BY THE GREATER OR MORE RESTRICTIVE REQUIREMENTS.
3. THE CONTRACTOR SHALL BY HIS/HER OWN INVESTIGATION AND PRIOR TO COMMENCING WORK, SATISFY HIM/HERSELF AS TO THE SURFACE AND SUBSURFACE CONDITIONS TO BE ENCOUNTERED.
4. LOCAL ACCESSES SHALL REMAIN OPEN TO TRAFFIC DURING CONSTRUCTION. A PLAN FOR STAGED ACCESS SHALL BE SUBMITTED BY THE CONTRACTOR FOR APPROVAL BY THE ENGINEER OR CITY OF WEST BRANCH.
5. ANY WORK OBVIOUSLY NECESSARY FOR COMPLETION OF THE PROJECT AS DESCRIBED IN THE CONTRACT DOCUMENTS BUT NOT SPECIFICALLY LISTED SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FEES OR CHARGES ASSOCIATED WITH THE DISPOSING OF MATERIALS. DISPOSAL OF MATERIALS SHALL COMPLY WITH ALL STATE AND LOCAL REGULATIONS.
7. CONTRACTOR TO PROVIDE TEMPORARY SUPPORT AND PROTECTION FOR EXISTING EQUIPMENT WORK AREA, INCLUDING BUT NOT LIMITED TO LIGHTS, ADJACENT UTILITIES, ETC.
8. ALL PAVEMENT REMOVALS REQUIRE DOUBLE SAWCUT AT REMOVAL PERIMETER.
9. PROTECT EXISTING UNDERGROUND STRUCTURES FROM HEAVY LOADS AND DAMAGE AT ALL TIMES.
10. CONTRACTOR IS REQUIRED TO MAINTAIN POSITIVE DRAINAGE ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
11. CONSTRUCTION FENCE IS REQUIRED AROUND CONSTRUCTION AREAS AND ALL UNATTENDED OPEN EXCAVATIONS. FENCE SHALL BE CONSTRUCTED AND MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES.
12. DO NOT DISTURB ADJACENT PROPERTIES.
13. CONTRACTOR TO CONTACT CRANDIC RAILROAD 72 HOURS IN ADVANCE OF WORKING IN RAILROAD ROW AND MAKE ARRANGEMENTS WITH RAILROAD TO PROVIDE FLAGGER OR SUSPEND SERVICE DURING CONSTRUCTION IN ROW. ALL ASSOCIATED FEES TO BE BORNE BY CONTRACTOR.
14. ABANDONED SEWERS, WATER SERVICES OR OTHER ABANDONED UTILITIES IN THE AREA NOT SHOWN ON PLANS THAT AREA ENCOUNTERED BY THE CONTRACTOR SHALL BE REMOVED AS NEEDED ACCORDING TO THE REQUIREMENTS OF THE SPECIFIC UTILITY.
15. 500 YR FLOODPLAIN ELEVATION IS 647.50.

DEMO LEGEND:

0 40 80 Feet

- PAVEMENT REMOVAL
- (1) REMOVE TREE
- (2) REMOVE FENCING



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PROJECT NUMBER:
16-0849

PROJECT NAME:
WEST BRANCH HS PH 3 IMPROVEMENTS FIRE SAFETY & GRADING IMPROVEMENTS

TITLE:
DEMOLITION PLAN

ENGINEER:

hbk ENGINEERING

HBK ENGINEERING, LLC
509 S. GILBERT ST.
IOWA CITY, IA 52240
PHONE: (319) 338-7557
FAX: (319) 358-2937

IOWA DEPARTMENT OF LABOR REGISTRATION NO. 00527328

WWW.HBKENGINEERING.COM

OWNER/DEVELOPER:

WEST BRANCH COMMUNITY SCHOOL DISTRICT
148 N. OLIPHANT ST
WEST BRANCH, IA 52358

FOLDER NAME:
16-0849

DATE CREATED:
08-15-2016

DRAWING LOG

DATE	ISSUED FOR	DB	CB
08-15-16	SITE PLAN	JDP	NJB
09-14-16	BID DOCUMENTS	JDP	NJB
09-19-16	BID DOCUMENTS	SPR	BAB

PROJECT MANAGER:
BOELK

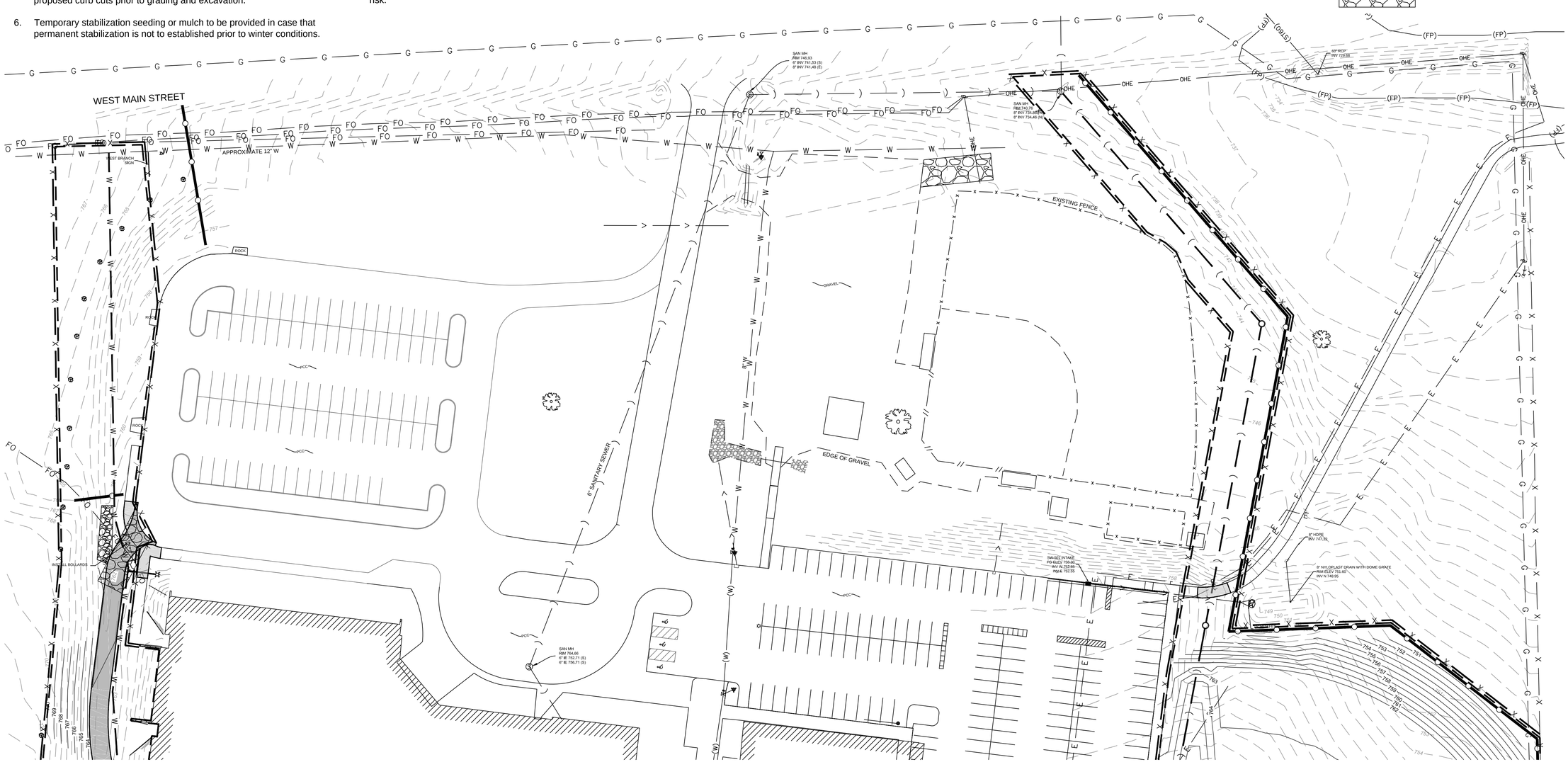
SHEET:
C300

Erosion Control

1. Silt fence or filter sock installation needed at time for specific construction task and remain in place until sufficient stabilization is met per General Permit No.2.
2. Silt fence shall be used for more permanent tasks and those areas directly involved in 4:1 slopes. Filter sock may be used for utility installation such as water main and sanitary sewer connections to Main Street.
3. Construction accesses shown on plans are suggestive and approximate. Locations may move with approval by Engineer and shall be noted on all SWPPP documentation.
4. Location of portable restroom and concrete washout as shown on plans is approximate and may change with approval by Engineer and shall be noted on all SWPPP documentation.
5. Inlet protection to be provided for all nearby existing intakes and proposed curb cuts prior to grading and excavation.
6. Temporary stabilization seeding or mulch to be provided in case that permanent stabilization is not to established prior to winter conditions.

Construction Limits

1. Protect all building and utilities which are to remain.
2. Remove all trees and brush as indicated on plans and dispose offsite. If Contractor feels tree can be saved or salvaged Contractor shall contact Engineer prior to removal.
3. Construction fence shall be included in Mobilization item and maintained throughout the project as needed.
4. Construction fence locations as shown on plans for utility connections only required during excavation and if or while open trenches exist. Construction fence around the perimeter of the full project not needed throughout and shall be dictated by construction phases and open excavation.
5. Safety is of importance as this is a school. Evaluation of site conditions shall be evaluated at the end of each day and open excavation protected so that students and the general public are not at risk.



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PROJECT NUMBER:
16-0849

PROJECT NAME:
WEST BRANCH HS PH 3 IMPROVEMENTS FIRE SAFETY & GRADING IMPROVEMENTS

TITLE:
SITE GRADING & EROSION CONTROL PLAN NORTH SIDE

ENGINEER:

hbk ENGINEERING

HBK ENGINEERING, LLC
509 S. GILBERT ST.
IOWA CITY, IA 52240
PHONE: (319) 338-7557
FAX: (319) 358-2937

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WWW.HBKENGINEERING.COM

OWNER/DEVELOPER:

WEST BRANCH COMMUNITY SCHOOLS

WEST BRANCH COMMUNITY SCHOOL DISTRICT
148 N. OLIPHANT ST
WEST BRANCH, IA 52358

FOLDER NAME:
16-0849

DATE CREATED:
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09-19-16	BID DOCUMENTS	SPR	BAB

PROJECT MANAGER:
BOELK

SHEET:
C400

Erosion Control

1. Silt fence or filter sock installation needed at time for specific construction task and remain in place until sufficient stabilization is met per General Permit No.2.
2. Silt fence shall be used for more permanent tasks and those areas directly involved in 4:1 slopes. Filter sock may be used for utility installation such as water main and sanitary sewer connections to Main Street.
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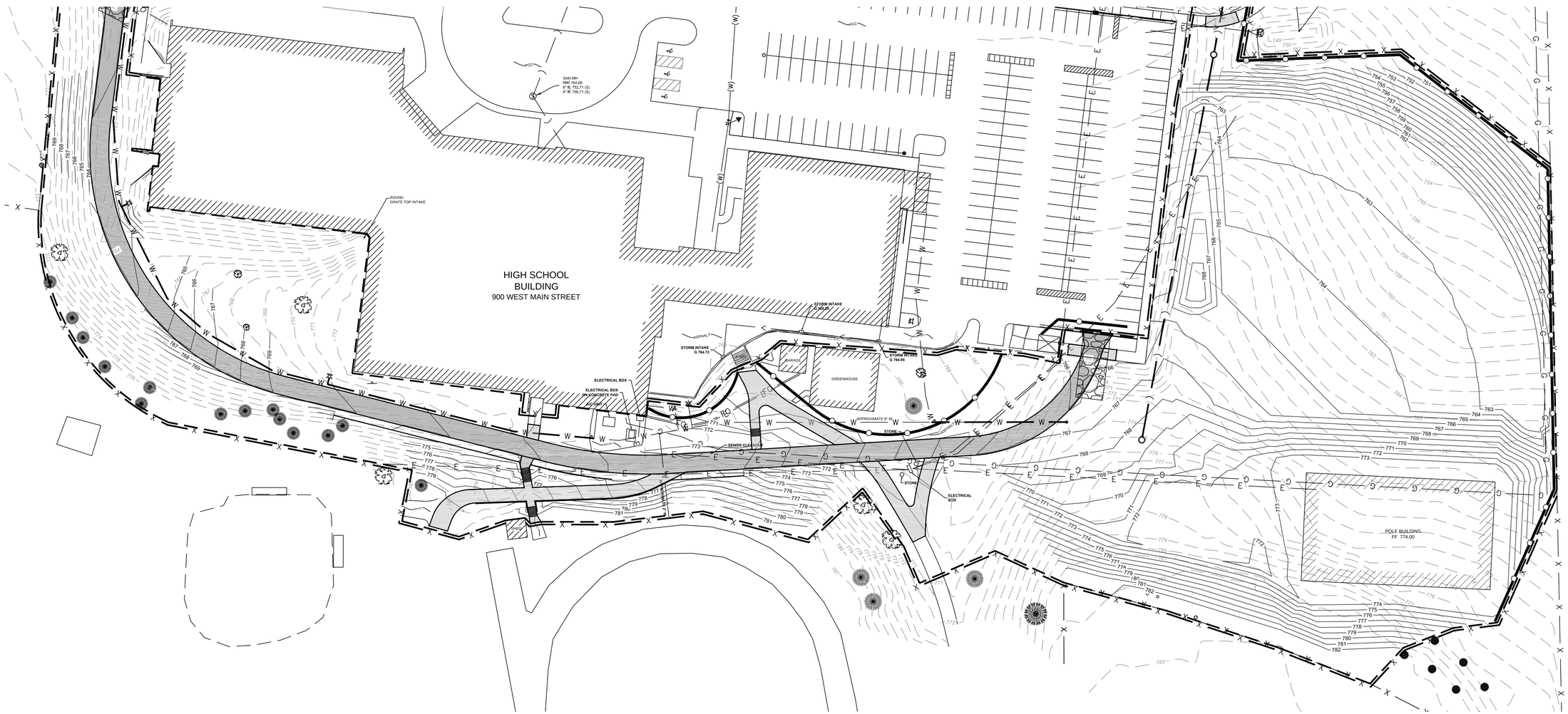
0 40 80 Feet

EROSION CONTROL LEGEND:

- CONST. FENCE
- INTAKE PROTECTION
- SILT FENCE
- PORTABLE RESTROOM
- CONSTRUCTION LIMITS



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S

PROJECT NUMBER:
16-0849

PROJECT NAME:
WEST BRANCH HS PH 3 IMPROVEMENTS FIRE SAFETY & GRADING IMPROVEMENTS

TITLE:
SITE GRADING & EROSION CONTROL PLAN SOUTH SIDE

ENGINEER:

hbk ENGINEERING

HBK ENGINEERING, LLC
509 S. GILBERT ST.
IOWA CITY, IA 52240
PHONE: (319) 338-7557
FAX: (319) 358-2937

IOWA DEPARTMENT
OF LABOR
REGISTRATION
NO. 00527328

WWW.HBKENGINEERING.COM

OWNER/DEVELOPER:

WEST BRANCH COMMUNITY SCHOOLS

WEST BRANCH
COMMUNITY SCHOOL DISTRICT
148 N. OLIPHANT ST
WEST BRANCH, IA 52358

FOLDER NAME:
16-0849

DATE CREATED:
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08-15-16	SITE PLAN	JDP	NJB
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09-19-16	BID DOCUMENTS	SPR	BAB

PROJECT MANAGER:
BOELK

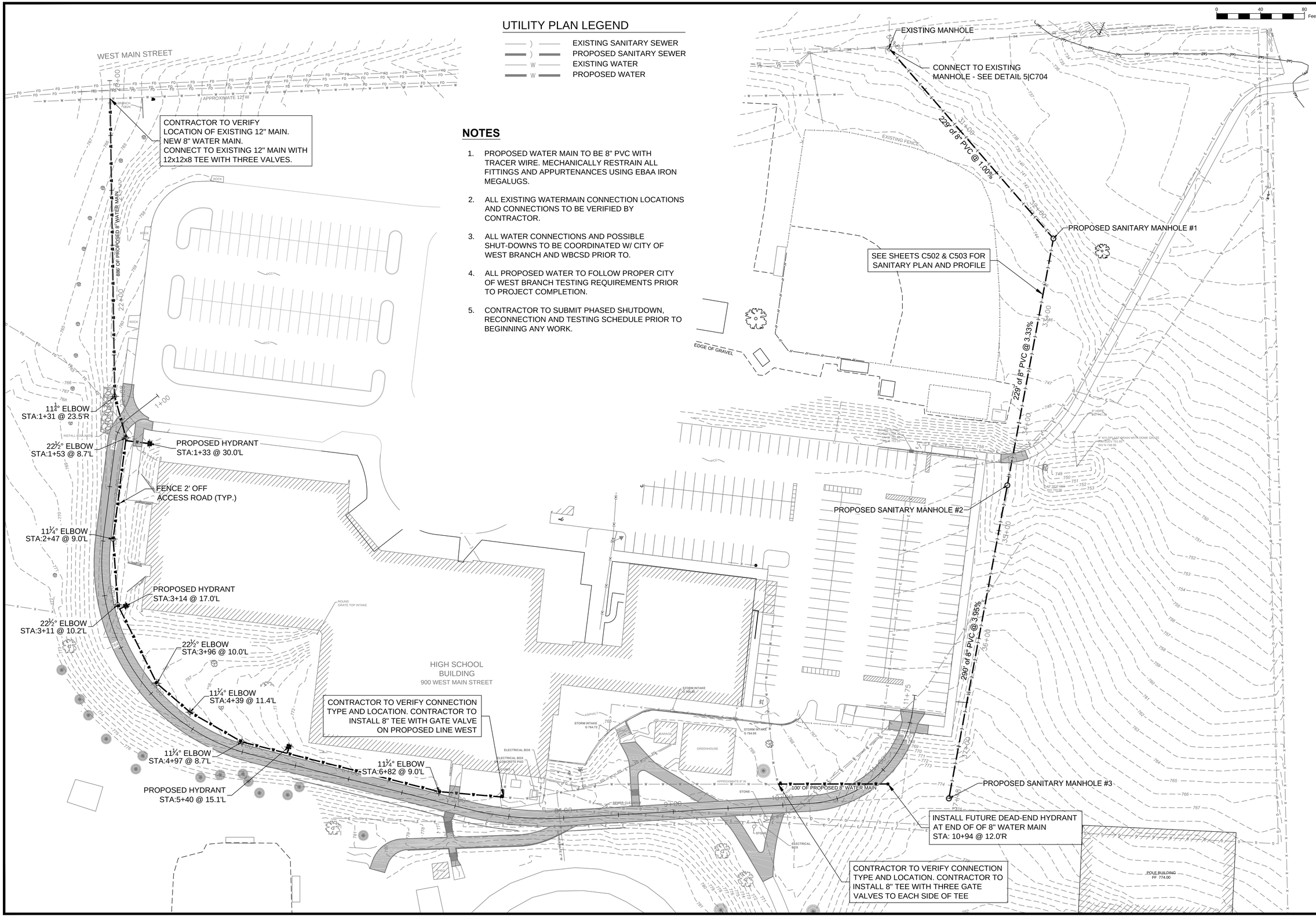
SHEET:
C401

UTILITY PLAN LEGEND

- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- EXISTING WATER
- PROPOSED WATER

NOTES

1. PROPOSED WATER MAIN TO BE 8" PVC WITH TRACER WIRE. MECHANICALLY RESTRAIN ALL FITTINGS AND APPURTENANCES USING EBAA IRON MEGALUGS.
2. ALL EXISTING WATERMAIN CONNECTION LOCATIONS AND CONNECTIONS TO BE VERIFIED BY CONTRACTOR.
3. ALL WATER CONNECTIONS AND POSSIBLE SHUT-DOWNS TO BE COORDINATED W/ CITY OF WEST BRANCH AND WBCSD PRIOR TO.
4. ALL PROPOSED WATER TO FOLLOW PROPER CITY OF WEST BRANCH TESTING REQUIREMENTS PRIOR TO PROJECT COMPLETION.
5. CONTRACTOR TO SUBMIT PHASED SHUTDOWN, RECONNECTION AND TESTING SCHEDULE PRIOR TO BEGINNING ANY WORK.



PROJECT NUMBER: 16-0849

PROJECT NAME: WEST BRANCH HS PH 3 IMPROVEMENTS FIRE SAFETY & GRADING IMPROVEMENTS

TITLE: UTILITY PLAN

ENGINEER:

HBK ENGINEERING, LLC
509 S. GILBERT ST.
IOWA CITY, IA 52240
PHONE: (319) 338-7557
FAX: (319) 358-2937

IOWA DEPARTMENT OF LABOR REGISTRATION NO. 00527328

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OWNER/DEVELOPER:

WEST BRANCH COMMUNITY SCHOOL DISTRICT
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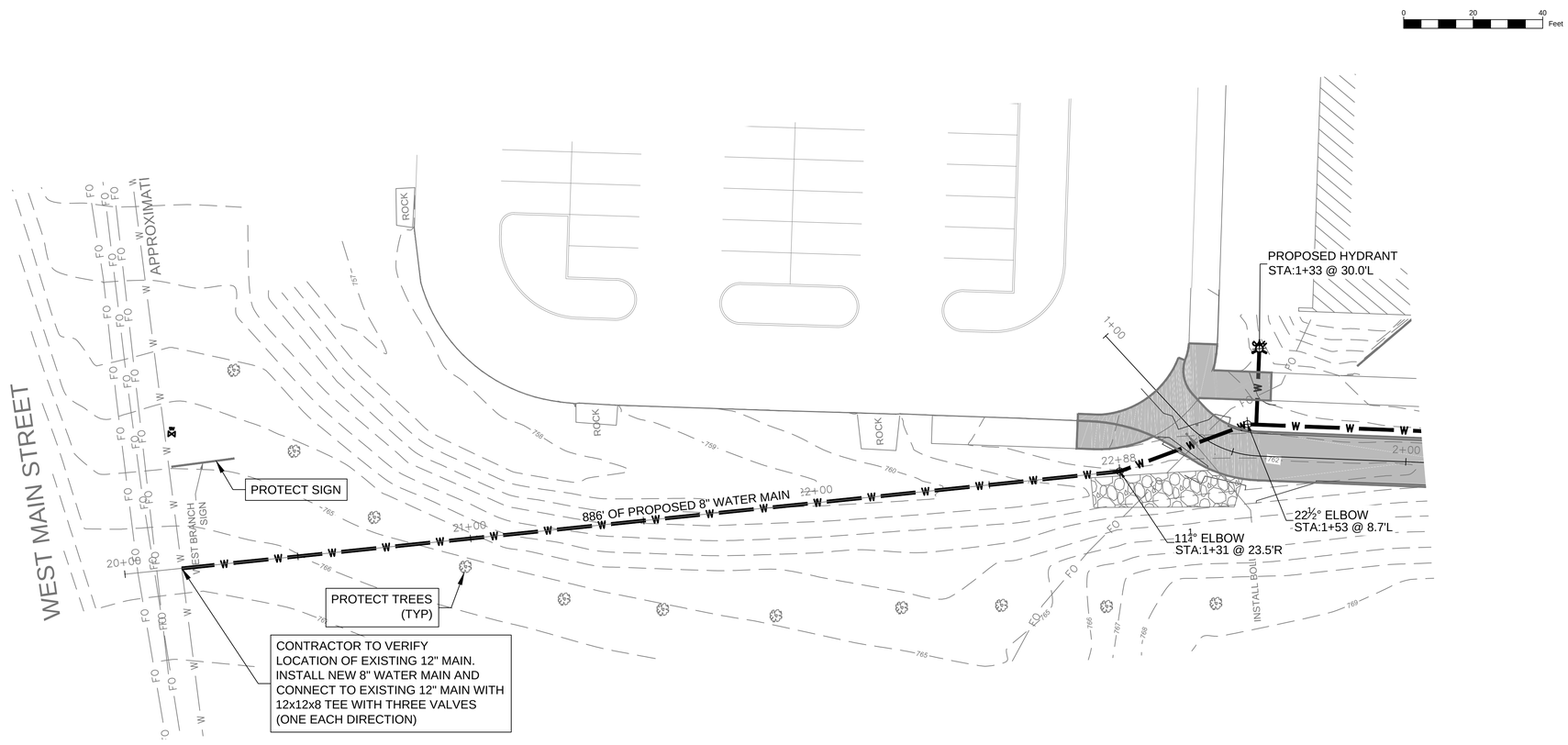
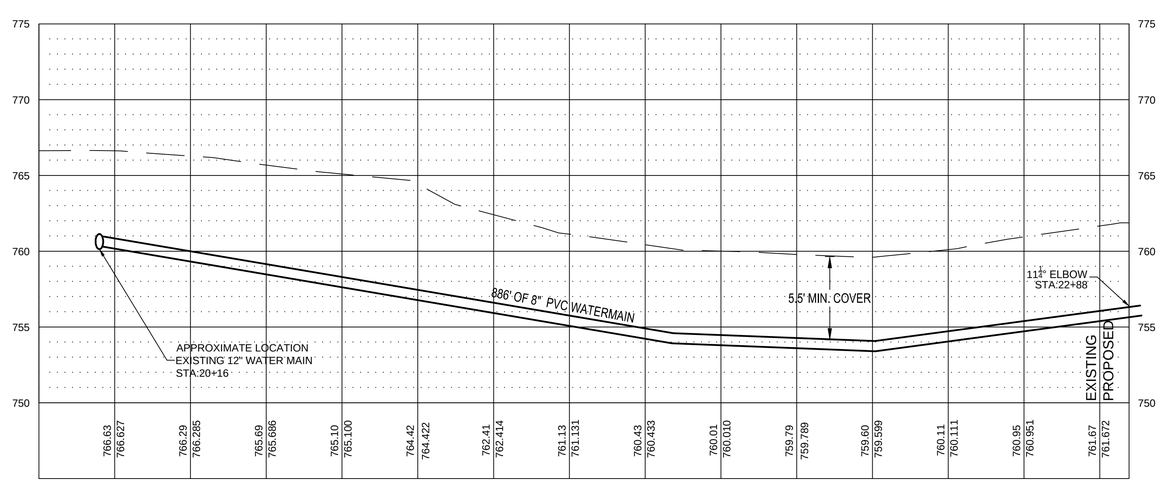
09-19-16	BID DOCUMENTS	SPR	BAB

PROJECT MANAGER: BOELK

SHEET: C500





WATERMAIN PROFILE FROM CONNECTION TO MAIN TO NW CORNER OF BUILDING

SEE C600 & C601 FOR WATERMAIN PROFILE ADJACENT TO FIRE LANE

PROJECT NUMBER: 16-0849

PROJECT NAME: WEST BRANCH HS PH 3 IMPROVEMENTS FIRE SAFETY & GRADING IMPROVEMENTS

TITLE: WATERMAIN PROFILE

ENGINEER:
hbk ENGINEERING
HBK ENGINEERING, LLC
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IOWA CITY, IA 52240
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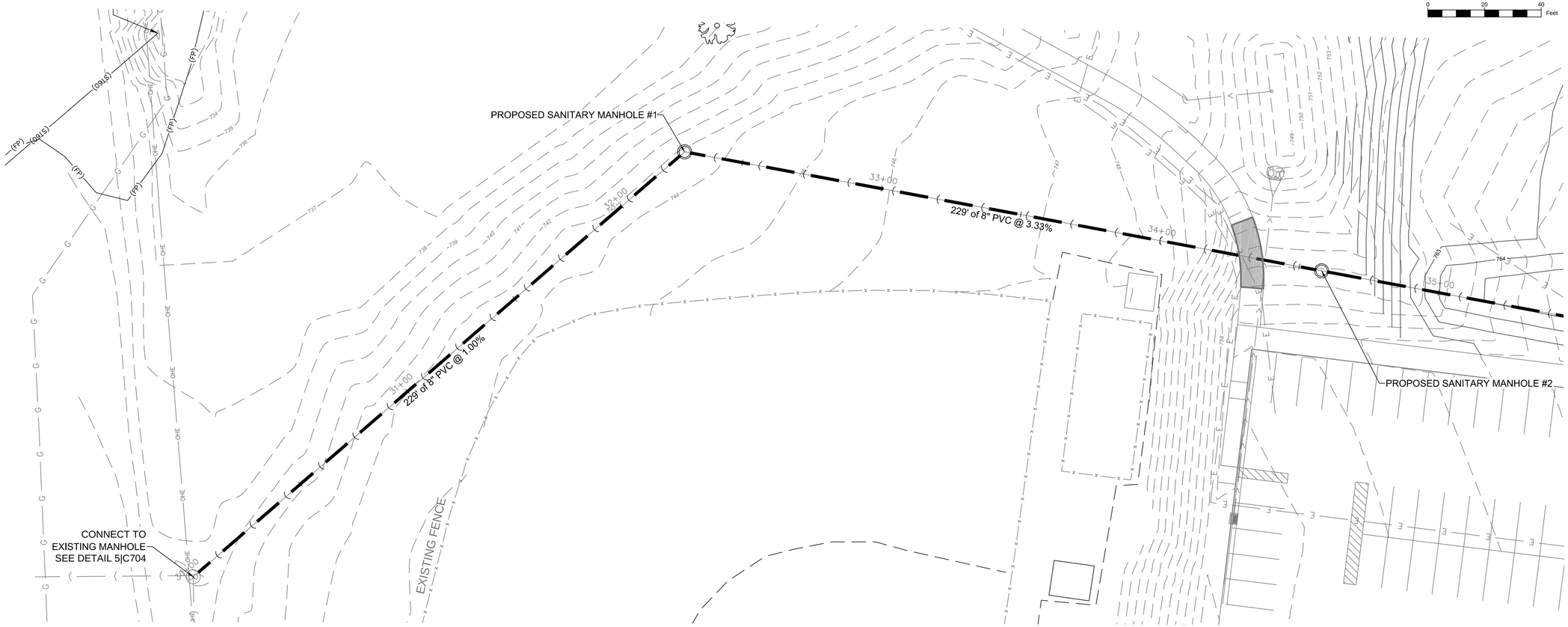
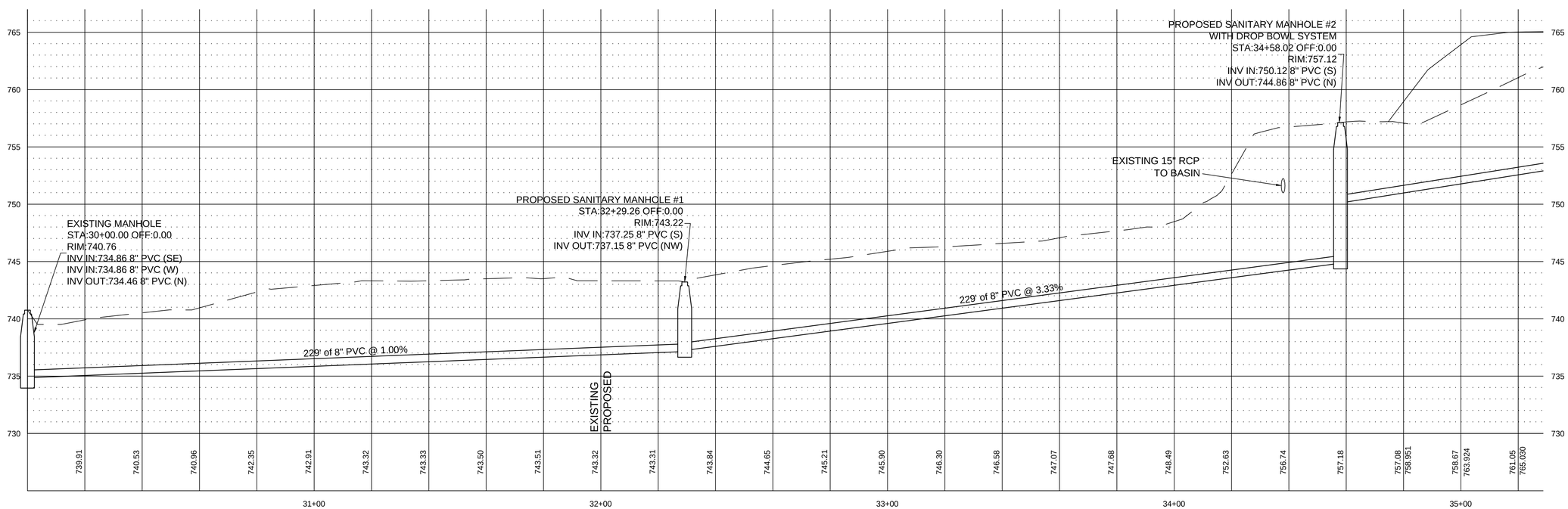
PROJECT MANAGER: BOELK

SHEET: C501





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16-0849

PROJECT NAME:
WEST BRANCH HS PH 3 IMPROVEMENTS FIRE SAFETY & GRADING IMPROVEMENTS

TITLE:
SANITARY PROFILE

ENGINEER:

hbk ENGINEERING

HBK ENGINEERING, LLC
509 S. GILBERT ST.
IOWA CITY, IA 52240
PHONE: (319) 338-7557
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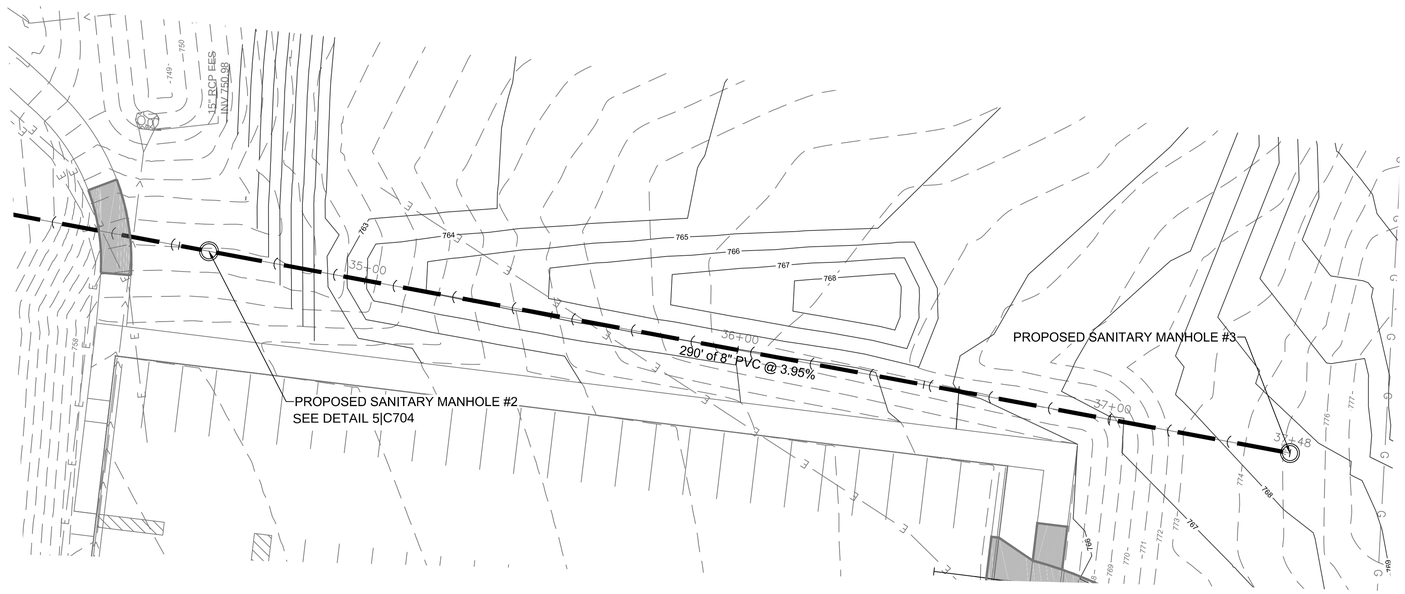
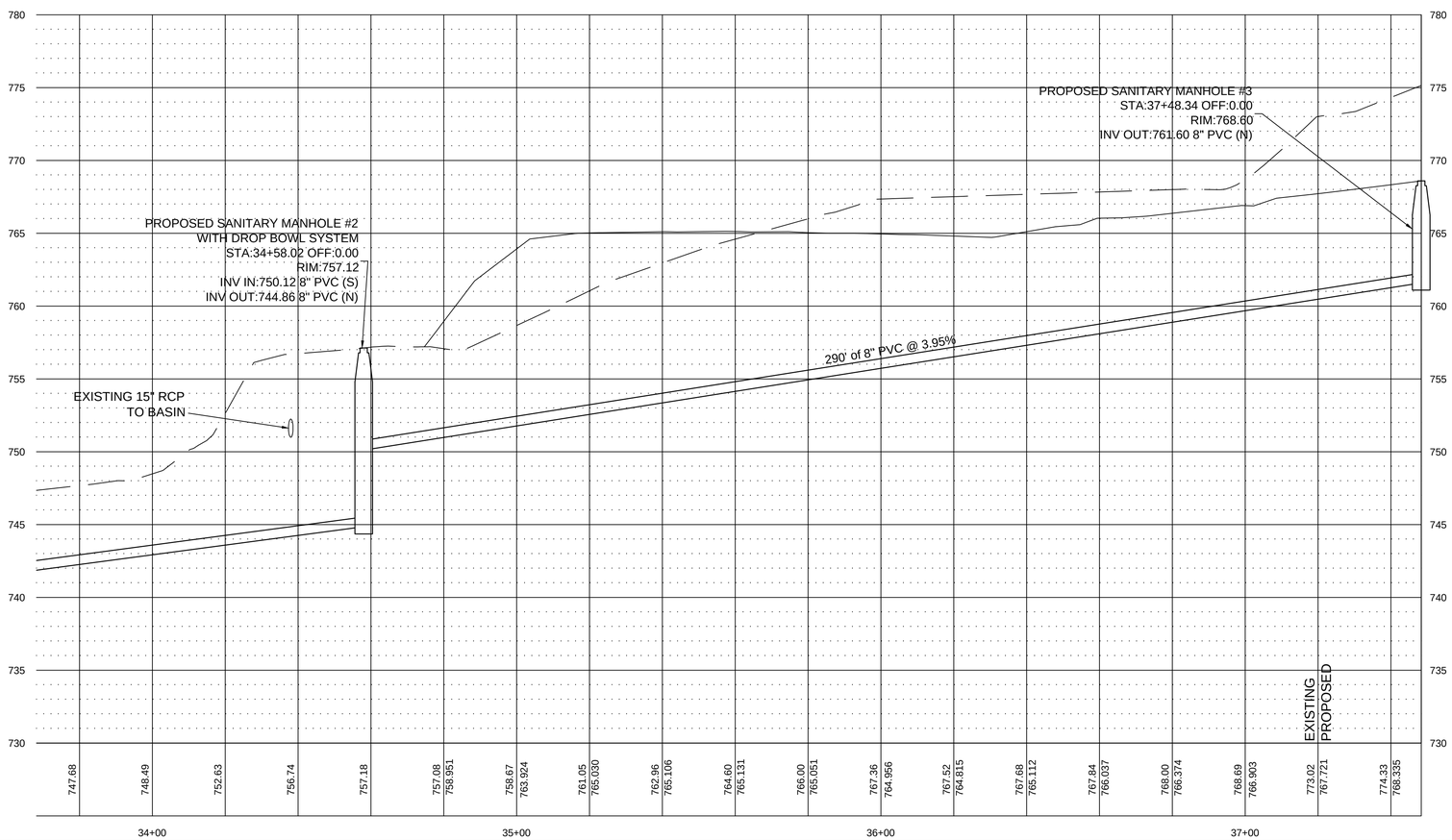
PROJECT MANAGER:
BOELK

SHEET:
C502





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PROJECT NUMBER:
16-0849

PROJECT NAME:
WEST BRANCH HS PH 3 IMPROVEMENTS FIRE SAFETY & GRADING IMPROVEMENTS

TITLE:
SANITARY PROFILE

ENGINEER:
hbk ENGINEERING

HBK ENGINEERING, LLC
509 S. GILBERT ST.
IOWA CITY, IA 52240
PHONE: (319) 338-7557
FAX: (319) 358-2937

IOWA DEPARTMENT OF LABOR REGISTRATION NO. 00527328

WWW.HBKENGINEERING.COM

OWNER/DEVELOPER:
WESTBRANCH COMMUNITYSCHOOLS

WEST BRANCH COMMUNITY SCHOOL DISTRICT
148 N. OLIPHANT ST
WEST BRANCH, IA 52358

FOLDER NAME:
16-0849

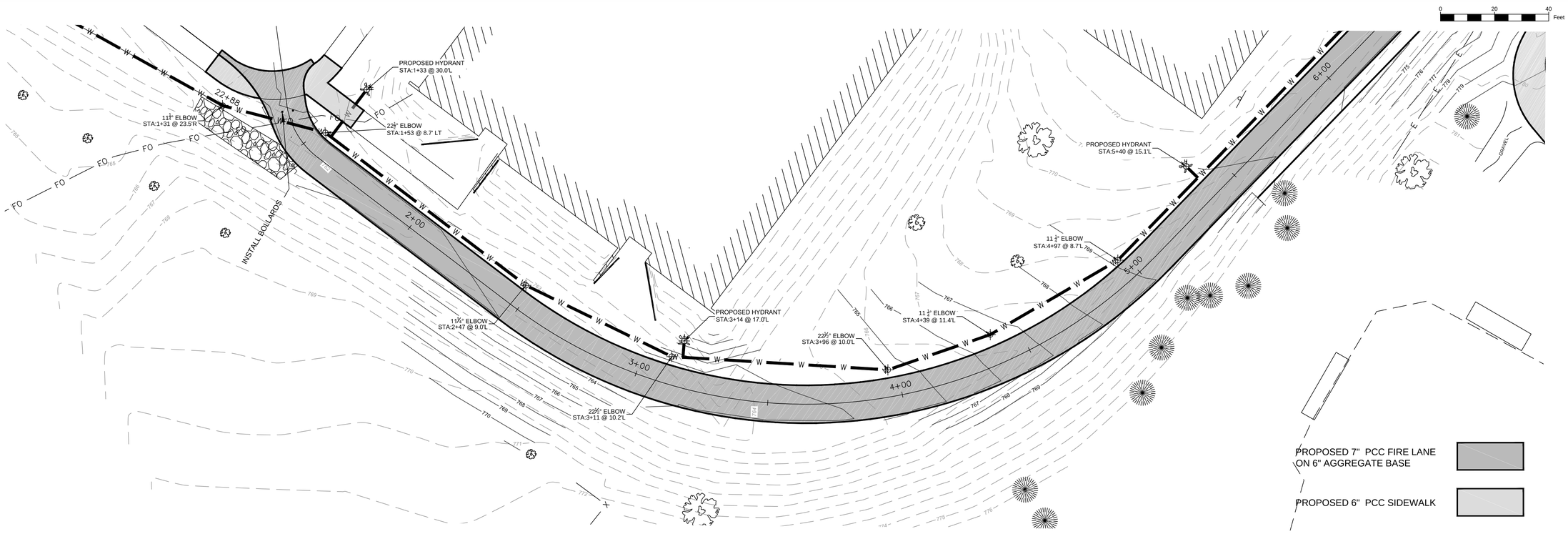
DATE CREATED:
08-15-2016

DRAWING LOG

DATE	ISSUED FOR	DB	CB
08-15-16	SITE PLAN	JDP	NJB
09-14-16	BID DOCUMENTS	JDP	NJB
09-19-16	BID DOCUMENTS	SPR	BAB

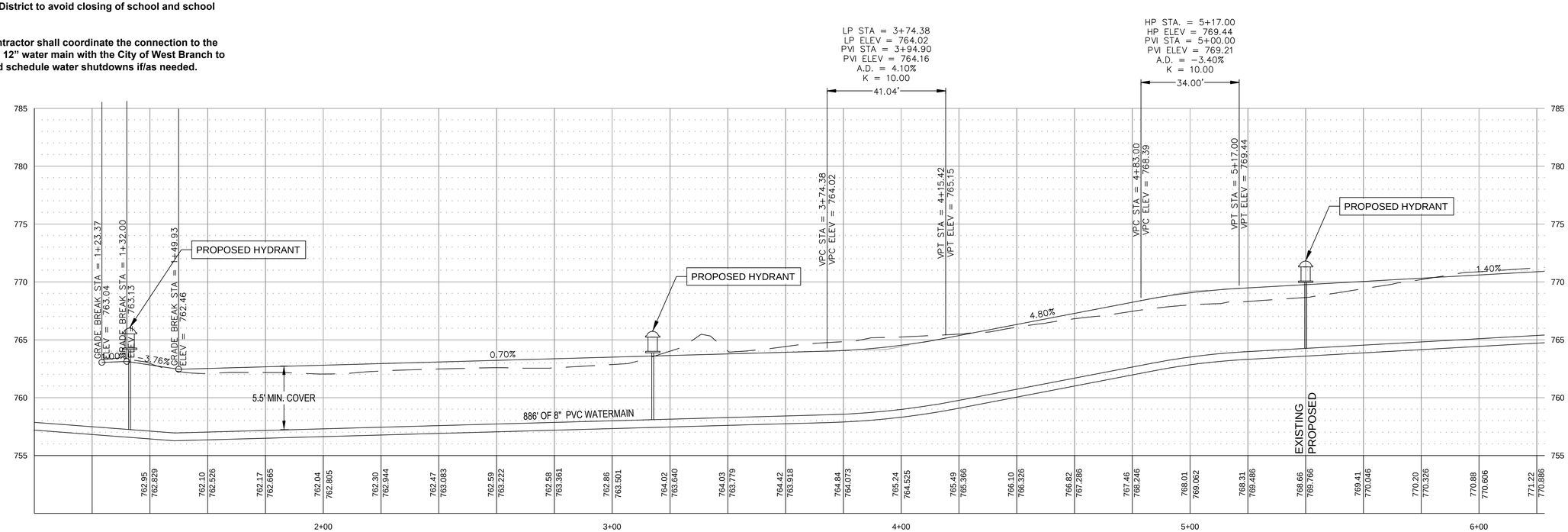
PROJECT MANAGER:
BOELK

SHEET:
C503



NOTES

1. The Contractor shall coordinate water main and water service installation with the West Branch Community School District to avoid closing of school and school events.
2. The Contractor shall coordinate the connection to the existing 12" water main with the City of West Branch to plan and schedule water shutdowns if/as needed.



PROJECT NUMBER:
16-0849

PROJECT NAME:
WEST BRANCH HS PH 3 IMPROVEMENTS FIRE SAFETY & GRADING IMPROVEMENTS

TITLE:
PAVING & WATER PLAN

ENGINEER:

hbk ENGINEERING
HBK ENGINEERING, LLC
509 S. GILBERT ST.
IOWA CITY, IA 52240
PHONE: (319) 338-7557
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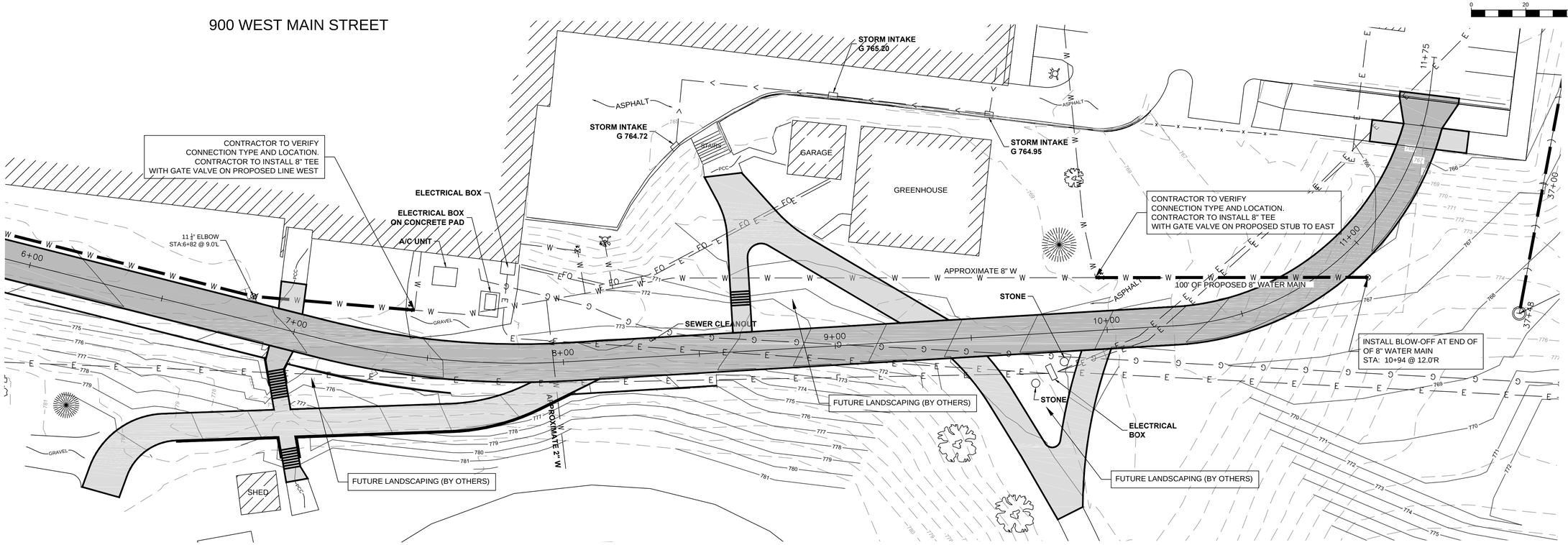
PROJECT MANAGER:
BOELK

SHEET:
C600

900 WEST MAIN STREET



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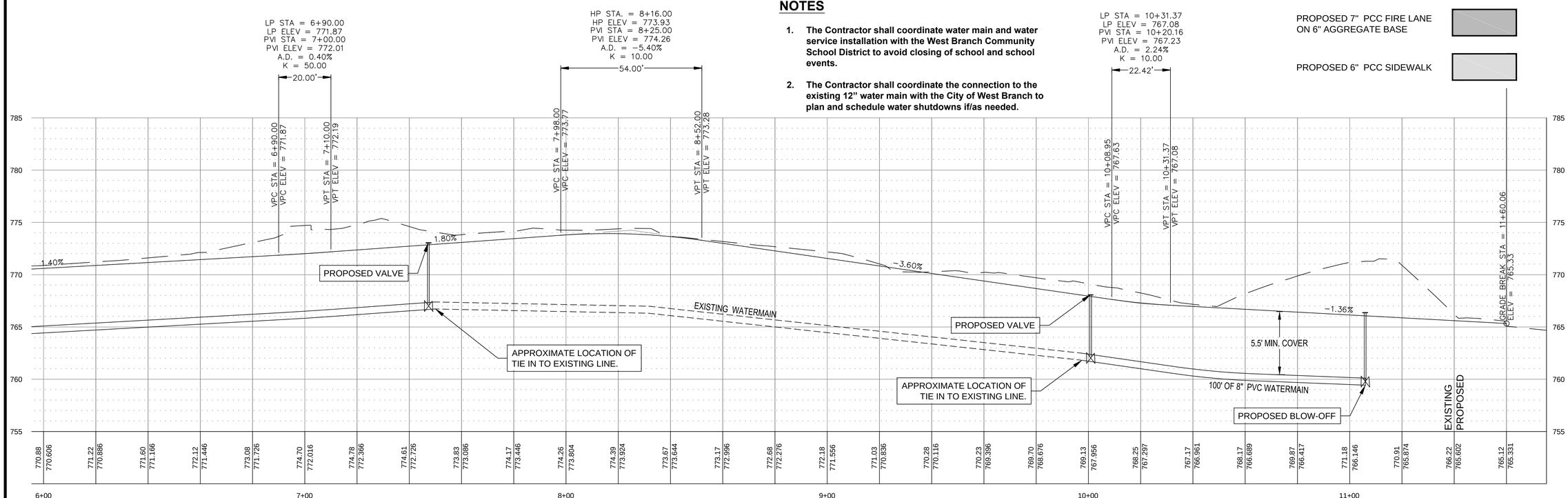
PROPOSED 7" PCC FIRE LANE ON 6" AGGREGATE BASE

PROPOSED 6" PCC SIDEWALK



PROJECT NUMBER:
16-0849

PROJECT NAME:
WEST BRANCH HS PH 3
IMPROVEMENTS FIRE SAFETY
& GRADING IMPROVEMENTS

TITLE:
PAVING & WATER PLAN

ENGINEER:
hbk ENGINEERING
HBK ENGINEERING, LLC
509 S. GILBERT ST.
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PHONE: (319) 338-7557
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IOWA DEPARTMENT
OF LABOR
REGISTRATION
NO. 00527328

WWW.HBKENGINEERING.COM

OWNER/DEVELOPER:
WEST BRANCH COMMUNITY SCHOOLS
WEST BRANCH
COMMUNITY SCHOOL DISTRICT
148 N. OLIPHANT ST
WEST BRANCH, IA 52358

FOLDER NAME:
16-0849

DATE CREATED:
08-15-2016

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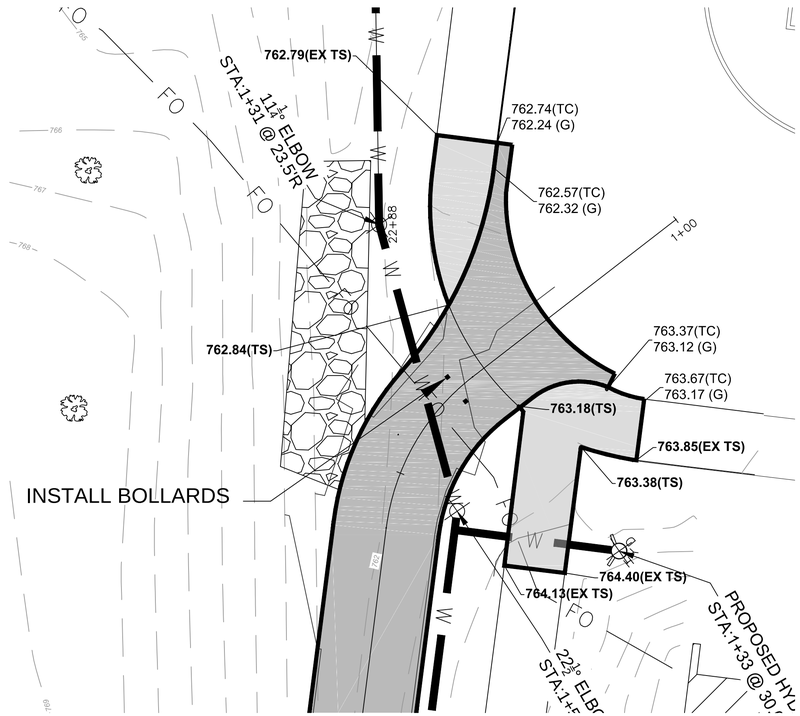
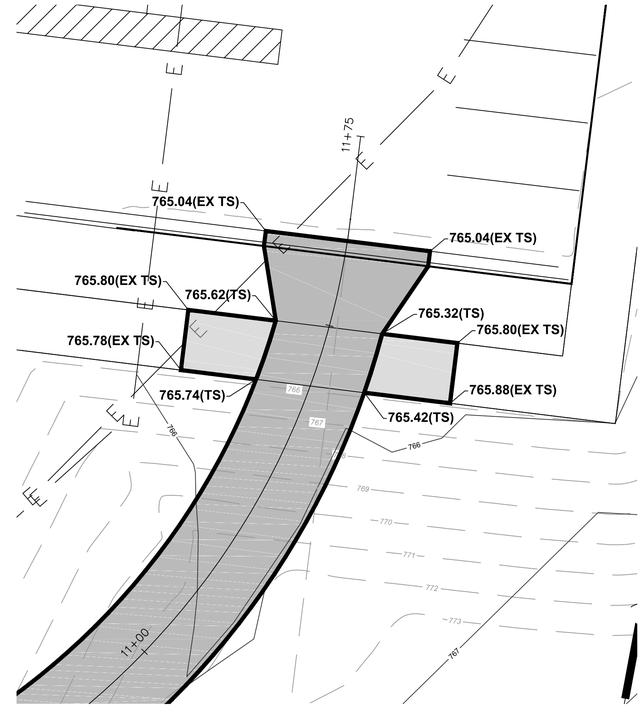
PROJECT MANAGER:
BOELK

SHEET:
C601





0 10 20 Feet

NOTES

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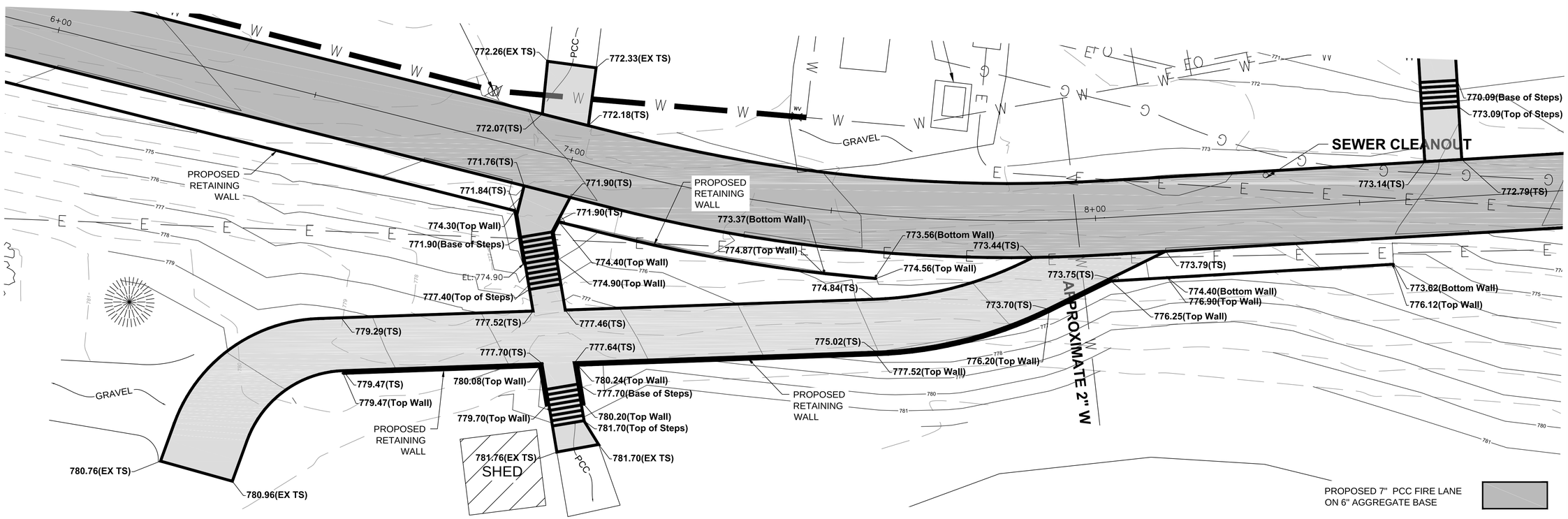

N W E S

hbk ENGINEERING

PROJECT NUMBER: 16-0849

PROJECT NAME: WEST BRANCH HS PH 3 IMPROVEMENTS FIRE SAFETY & GRADING IMPROVEMENTS

TITLE: SIDEWALK PAVING DETAILS

ENGINEER:

hbk ENGINEERING

HBK ENGINEERING, LLC
509 S. GILBERT ST.
IOWA CITY, IA 52240
PHONE: (319) 338-7557
FAX: (319) 358-2937

IOWA DEPARTMENT OF LABOR REGISTRATION NO. 00527328

WWW.HBKENGINEERING.COM

OWNER/DEVELOPER:

WEST BRANCH COMMUNITY SCHOOLS

WEST BRANCH COMMUNITY SCHOOL DISTRICT
148 N. OLIPHANT ST
WEST BRANCH, IA 52358

FOLDER NAME: 16-0849

DATE CREATED: 08-15-2016

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PROJECT MANAGER: BOELK

SHEET: C602

NOTES

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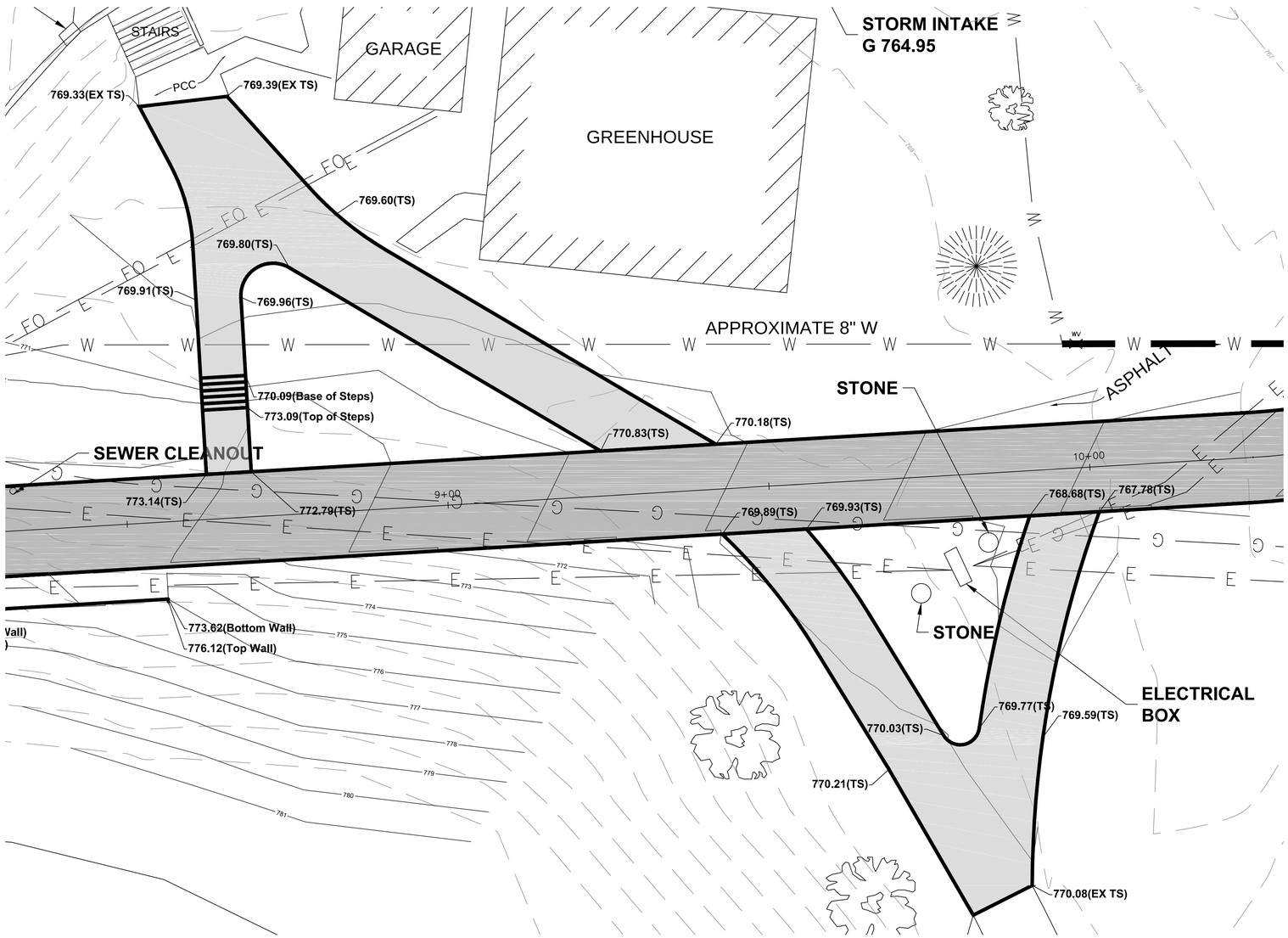

PROPOSED 7" PCC FIRE LANE ON 6" AGGREGATE BASE

PROPOSED 6" PCC SIDEWALK

0 20 40 Feet

PROJECT NUMBER: 16-0849

PROJECT NAME: WEST BRANCH HS PH 3 IMPROVEMENTS FIRE SAFETY & GRADING IMPROVEMENTS

TITLE: SIDEWALK PAVING DETAILS

ENGINEER:

hbk ENGINEERING

HBK ENGINEERING, LLC
509 S. GILBERT ST.
IOWA CITY, IA 52240
PHONE: (319) 338-7557
FAX: (319) 358-2937

IOWA DEPARTMENT OF LABOR REGISTRATION NO. 00527328

WWW.HBKENGINEERING.COM

OWNER/DEVELOPER:

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WEST BRANCH COMMUNITY SCHOOL DISTRICT
148 N. OLIPHANT ST
WEST BRANCH, IA 52358

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PROJECT MANAGER: BOELK

SHEET: C603

POLLUTION PREVENTION PLAN

ALL CONTRACTORS / SUBCONTRACTORS SHALL CONDUCT THEIR OPERATIONS IN A MANNER THAT MINIMIZES EROSION AND PREVENTS SEDIMENTS FROM LEAVING THE PROJECT LIMITS FOR WEST BRANCH HIGH SCHOOL PHASE 3 IMPROVEMENTS FIRE SAFETY AND GRADING IMPROVEMENTS. THE PRIME CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE AND IMPLEMENTATION OF THE POLLUTION PREVENTION PLAN (PPP) FOR THEIR ENTIRE CONTRACT. THIS RESPONSIBILITY SHALL BE FURTHER SHARED WITH SUBCONTRACTORS WHOSE WORK IS A SOURCE OF POTENTIAL POLLUTION AS DEFINED IN THIS PPP.

1. SITE DESCRIPTION

THIS POLLUTION PREVENTION PLAN (PPP) IS FOR THE CONSTRUCTION OF WEST BRANCH HIGH SCHOOL PHASE 3 IMPROVEMENTS FIRE SAFETY AND GRADING IMPROVEMENTS IN WEST BRANCH, IA. THIS PROJECT INCLUDES CLEARING AND GRUBBING, GRADING, RESTORATION AND INSTALLATION OF PAVEMENT, WATER MAIN, STORM SEWER, AND SANITARY SEWER.

THIS PPP COVERS APPROXIMATELY 21 ACRES WITH AN ESTIMATED 6.5 ACRES BEING DISTURBED. THE PORTION OF THE PPP COVERED BY THIS CONTRACT HAS MORE THAN ONE ACRE DISTURBED; THUS, AN IDNR GENERAL PERMIT NO. 2 HAS BEEN OBTAINED AND SHALL BE FOLLOWED.

REFER TO THE PROJECT PLANS FOR LOCATIONS OF TYPICAL SLOPES, DITCH GRADES, AND MAJOR STRUCTURAL AND NON-STRUCTURAL CONTROLS. A COPY OF THESE PLANS WILL BE ON FILE AT THE CLERKS OFFICE OF CITY OF WEST BRANCH. RUNOFF FROM THIS PROJECT WILL FLOW INTO AN EXISTING DETENTION POND AND DITCH WHICH THEN LEADS TO THE HOOVER RIVER.

POTENTIAL SOURCES OF POLLUTION:
SITE SOURCES OF POLLUTION GENERATED AS A RESULT OF THIS WORK RELATE TO SILTS AND SEDIMENT THAT MAY BE TRANSPORTED AS A RESULT OF A STORM EVENT. HOWEVER, THIS PPP PROVIDES CONVEYANCE FOR OTHER (NON-PROJECT RELATED) OPERATIONS. THESE OTHER OPERATIONS HAVE STORM WATER RUNOFF, THE REGULATION OF WHICH IS BEYOND THE CONTROL OF THIS PPP. POTENTIALLY THIS RUNOFF CAN CONTAIN VARIOUS POLLUTANTS RELATED TO SITE-SPECIFIC LAND USES. EXAMPLES ARE:

COMMERCIAL AND INDUSTRIAL ACTIVITIES:
RUNOFF FROM COMMERCIAL, INDUSTRIAL, AND COMMERCE LAND USE MAY CONTAIN CONSTITUENTS ASSOCIATED WITH THE SPECIFIC OPERATION. SUCH OPERATIONS ARE SUBJECT TO POTENTIAL LEAKS AND SPILLS THAT COULD BE COMMINGLED WITH RUNOFF FROM THE FACILITY. POLLUTANTS ASSOCIATED WITH COMMERCIAL AND INDUSTRIAL ACTIVITIES ARE NOT READILY AVAILABLE SINCE THEY ARE TYPICALLY PROPRIETARY.

2. CONTROLS

AT LOCATIONS WHERE RUNOFF CAN MOVE OFFSITE, SILT FENCE SHALL BE PLACED ALONG THE PERIMETER OF THE AREAS TO BE DISTURBED PRIOR TO BEGINNING GRADING, EXCAVATION OR CLEARING AND GRUBBING OPERATIONS. VEGETATION IN AREAS NOT NEEDED FOR CONSTRUCTION SHALL BE PRESERVED. USE SILT FENCE AS DITCH CHECKS AND TO PROTECT INTAKES. TEMPORARY STABILIZING SEEDING SHALL BE COMPLETED AS THE DISTURBED AREAS ARE CONSTRUCTED. IF CONSTRUCTION ACTIVITY IS NOT PLANNED TO OCCUR IN A DISTURBED AREA FOR AT LEAST 21 DAYS, THE AREA SHALL BE STABILIZED BY TEMPORARY SEEDING OR MULCHING WITHIN 14 DAYS. OTHER STABILIZING METHODS SHALL BE USED OUTSIDE THE SEEDING PERIOD.

THIS WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 2602 OF THE STANDARD SPECIFICATION. IF THE WORK INVOLVED IS NOT APPLICABLE TO ANY CONTRACT ITEMS, THE WORK SHALL BE PAID FOR ACCORDING TO ARTICLE 1109.03 PARAGRAPH B.

AS THE WORK PROGRESSES, ADDITIONAL EROSION CONTROL ITEMS MAY BE REQUIRED AS DETERMINED BY THE ENGINEER AFTER FIELD INVESTIGATION. THESE MAY BE ITEMS SUCH AS SILT FENCE DITCH CHECKS, MULCH AND OTHER APPROPRIATE MEASURES, WHICH SHALL BE INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR WILL COMPLETE THE CONSTRUCTION WITH THE ESTABLISHMENT OF PERMANENT PERENNIAL VEGETATION ON ALL DISTURBED AREAS.

3. OTHER CONTROLS

CONTRACTOR DISPOSAL OF UNUSED CONSTRUCTION MATERIALS AND CONSTRUCTION MATERIAL WASTES SHALL COMPLY WITH APPLICABLE STATE AND LOCAL WASTE DISPOSAL, SANITARY SEWER, OR SEPTIC SYSTEM REGULATIONS. IN THE EVENT OF A CONFLICT WITH OTHER GOVERNMENTAL LAWS, RULES AND REGULATIONS, THE MORE RESTRICTIVE LAWS, RULES OR REGULATIONS SHALL APPLY.

APPROVED STATE OR LOCAL PLANS:
DURING THE COURSE OF THIS CONSTRUCTION, IT IS POSSIBLE THAT SITUATIONS WILL ARISE WHERE UNKNOWN MATERIALS WILL BE ENCOUNTERED. WHEN SUCH SITUATIONS ARE ENCOUNTERED, THEY WILL BE HANDLED ACCORDING TO ALL FEDERAL, STATE, AND LOCAL REGULATIONS IN EFFECT AT THE TIME.

4. MAINTENANCE

THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL TEMPORARY EROSION CONTROL MEASURES IN PROPER WORKING ORDER, INCLUDING CLEANING, REPAIRING OR REPLACING THEM THROUGHOUT THE CONTRACT PERIOD. CLEANING OF SILT CONTROL DEVICES SHALL BEGIN WHEN THE FEATURES HAVE LOST 50% OF THEIR CAPACITY.

THE CONTRACTOR IS REQUIRED TO CLEAN ADJACENT PARKING LOTS AND/OR STREETS OF SOIL DEPOSITED BY CONSTRUCTION TRAFFIC AS REQUIRED TO PREVENT SOIL RUNOFF AND FUGITIVE DUST.

5. INSPECTIONS

INSPECTIONS SHALL BE MADE JOINTLY BY THE CONTRACTOR AND THE CONTRACTING AUTHORITY EVERY SEVEN CALENDAR DAYS. THE CONTRACTOR SHALL IMMEDIATELY BEGIN CORRECTIVE ACTION ON ALL DEFICIENCIES FOUND. THE FINDINGS OF THIS INSPECTION SHALL BE RECORDED IN THE PROJECT DIARY. THIS PPP MAY BE REVISED BASED ON THE FINDINGS OF THE INSPECTION. THE CONTRACTOR SHALL IMPLEMENT ALL REVISIONS. ALL CORRECTIVE ACTIONS SHALL BE COMPLETED WITHIN 3 CALENDAR DAYS OF THE INSPECTION.

6. NON-STORM DISCHARGES

NON-STORM DISCHARGE INCLUDES SUBSURFACE DRAINS (I.E. LONGITUDINAL AND STANDARD SUB-DRAINS), SLOPE DRAINS AND BRIDGE END DRAINS. THE VELOCITY OF THE DISCHARGE FROM THESE FEATURES MAY BE CONTROLLED BY THE USE OF PATIO BLOCKS, CLASS A STONE OR EROSION STONE.

STABILIZATION SEEDING

STABILIZATION SEEDING SHALL BE IN ACCORDANCE WITH I.D.O.T. STANDARD SPECIFICATION SECTION 2601.5 STABILIZING CROP SEEDING AND FERTILIZING.

SEED MIXTURES SHALL BE ON OF THE FOLLOWING:

SPRING - MARCH 1 TO MAY 20	
WINTER RYE OR OATS	1 BUSHEL PER ACRE
SUDANGRASS (PIPER)	25 LBS. PER ACRE
FESCUE, KENTUCKY 31 OR FAWN	15 LBS PER ACRE
ALFALFA (RANGER OR VERNAL)	5 LBS PER ACRE
SUMMER - MAY 21 TO JULY 20	
OATS	1 BUSHEL PER ACRE
SUDANGRASS (PIPER)	35 LBS. PER ACRE
FESCUE, KENTUCKY 31 OR FAWN	15 LBS PER ACRE
ALFALFA (RANGER OR VERNAL)	5 LBS PER ACRE
FALL - JULY 21 TO SEPTEMBER 30	
WINTER RYE	2 BUSHEL PER ACRE
FESCUE, KENTUCKY 31 OR FAWN	15 LBS PER ACRE
ALFALFA (RANGER OR VERNAL)	5 LBS PER ACRE

*AFTER AUGUST 31, HAIRY VETCH SHALL BE SUBSTITUTED FOR ALFALFA AT THE RATE OF 10 LBS PER ACRE

FERTILIZER SHALL BE APPLIED AT A RATE OF 450 LBS PER ACRE USING CHEMICALLY COMBINED COMMERCIAL 13-13-13 FERTILIZER.

GRADING NOTES

1) MAXIMUM SLOPE ON CUTS AND FILLS SHALL BE 4% HORIZONTAL TO 1% VERTICAL.

2) NO EXCAVATION SHALL BE ALLOWED WITHIN 2 FEET OF PROPERTY LINES.

3) WHERE HEIGHT OF FILL IS GREATER THAN 30 FEET, AN INTERMEDIATE TERRACE OF AT LEAST 6 FEET WIDE SHALL BE ESTABLISHED AT MID HEIGHT. SEE TYPICAL FILL SECTION.

4) COMPACTION TO BE 95% STANDARD PROCTOR WHERE > 6:1 SLOPE.

5) PRIOR TO ANY GRADING A CONSTRUCTION SAFETY FENCE SHALL BE INSTALLED 50 FEET FROM TRUNKS OF TREES TO BE PROTECTED.

6) SILT FENCE LOCATIONS AND LENGTHS, AS INDICATED, ARE APPROXIMATE ONLY. FINAL LOCATIONS AND LENGTHS WILL BE DETERMINED, AS NEEDED. UPON COMPLETION OF GRADING OPERATIONS IN AN AREA.

7) ALL STREET SUBGRADES SHALL BE CONSTRUCTED AND COMPACTED IN ACCORDANCE WITH CITY OF IOWA CITY DESIGN AND CONSTRUCTION STANDARDS AND PROCEDURES.

8) STABILIZATION SEEDING SHALL BE COMPLETED AS SOON AS POSSIBLE, BUT NOT MORE THAN 14 DAYS, UPON COMPLETION OF GRADING IN ANY AREA OF GRADING OPERATIONS. DISTURBED AREAS SHALL BE KEPT AS SMALL AS POSSIBLE TO PREVENT LARGE SCALE EROSION PROBLEMS. IF TH4E GRADING CONTRACTOR STOPS GRADING OPERATIONS FOR MORE THAN 14 DAYS, THEN STABILIZATION SEEDING SHALL BE DONE ON ALL DISTURBED AREAS.

NPDES STORM WATER CONSTRUCTION PERMIT

1) THIS SUBDIVISION FALLS UNDER THE NPDES STORM WATER PERMIT REQUIREMENT.

2) THE POLLUTION PREVENTION PLAN (PPP) AND EROSION CONTROL PLAN SHEET MUST BE KEPT SOMEWHERE ON SITE AT ALL TIME OR AVAILABLE WITHIN 24 HOURS.

3) THE DEVELOPER (OR CONSULTANT) SHALL SUBMIT APPLICATION TO THE IDNR AND THE IDNR SHALL RECEIVE THIS APPLICATION AT LEAST 24 HOURS PRIOR TO THE START OF WORK THIS PERMIT APPLICATION SHALL INCLUDE PROOF OF PUBLIC NOTIFICATION AS WELL AS THE PERMIT FEE. A COPY OF THE PERMIT FROM IDNR SHALL BE SUBMITTED TO THE CITY OF IOWA CITY ENGINEERING DIVISION.

4) ONCE WORK IS COMPLETED, A NOTICE OF DISCONTINUATION SHALL BE SUBMITTED TO THE IDNR AND A COPY GIVEN TO THE CITY OF IOWA CITY ENGINEERING DIVISION WITHIN 30 DAYS AFTER FINAL STABILIZATION.

5) THE PPP SHOULD BE CONSIDERED AN ACTIVE DOCUMENT AND BE REVISED ACCORDING TO REPRESENTATION IN THE FIELD.

SANITARY SEWER AND WATER MAIN CONSTRUCTION NOTES

1) SANITARY SEWER AND WATER MAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AS PREPARED BY HBK ENGINEERING, LLC. CONSTRUCTION SHALL ALSO CONFORM TO SUDAS. WEST BRANCH STANDARDS AND SPECIFICATIONS SHALL PREVAIL.

2) CONTRACTOR SHALL PROVIDE CRUSHED STONE ENCASEMENT BEDDING FOR ALL SANITARY SEWER UNLESS NOTED OTHERWISE ON THE PLANS.

3) SANITARY SEWERS TO BE PVC TRUSS PIPE UNLESS NOTED OTHERWISE. SANITARY SEWER SERVICE LINES SHALL BE PVC, SDR 23.5 WITH GASKETED JOINTS

4) 6" AND 8" DIAMETER WATER MAINS SHALL BE DR-18 PVC PIPE, EXCEPT AROUND CUL-DE-SACS, SMALL RADIUS CURVES AND WHERE CLASS 52 DIP SHALL BE USED, UNLESS NOTED OTHERWISE ON THE PLANS.

5) SANITARY SEWER TRENCHES SHADED ON THE PROFILE VIEW SHALL BE BACKFILLED CRUSHED STONE AS SPECIFIED FOR GRANULAR TRENCH BACKFILL SHALL BE USED. COMPACTED TO 95% STANDARD PROCTOR DENSITY.

6) GRANULAR TRENCH BACKFILL SHALL BE CLASS A CRUSHED STONE CONFORMING TO I.D.O.T. STANDARD SPECIFICATION 4120.041 WITH 1" MAXIMUM AGGREGATE SIZE. COMPACT TO 95% STANDARD PROCTOR DENSITY.

7) WATER MAINS WITHIN STREET RIGHT OF WAYS OR WITHIN EASEMENTS ADJACENT TO THE STREET RIGHT OF WAYS SHALL BE BACKFILLED WITH CRUSHED STONE AS SPECIFIED FOR GRANULAR TRENCH BACKFILL AND COMPACTED TO 95% STANDARD PROCTOR DENSITY:

8) ALL SANITARY SEWER SERVICE LINES CROSSING STREET RIGHT-OF-WAY SHALL BE BACKFILLED IN ACCORDANCE WITH THE PRECEDING NOTE.

9) ALL SANITARY SEWER SERVICE LINES SHALL BE EXTENDED:

A) TO THE UTILITY EASEMENT LINE FOR THOSE LOCATIONS WHERE THE LOTS BEING SERVED ARE ON THE OPPOSITE SIDE OF THE STREET FROM THE SEWER MAIN.

B) TO THE UTILITY EASEMENT LINE FOR THOSE LOCATIONS WHERE THE LOTS BEING SERVED ARE ADJACENT TO THE SEWER MAIN.

10) WATER MAIN SHALL BE LOCATED 10 FEET HORIZONTALLY DISTANT FROM ALL SANITARY SEWER AND STORM SEWER.

11) WATER MAIN SHALL NOT PASS THROUGH NOR CONTACT A SEWER OR A SEWER MANHOLE. A MINIMUM HORIZONTAL SEPARATION OF 3 FEET SHALL BE MAINTAINED.

12) VERTICAL SEPARATION OF WATER MAINS CROSSING OVER ANY SANITARY SEWER SHOULD BE A MINIMUM OF 18-INCHES, MEASURED OUTSIDE TO OUTSIDE FROM THE CLOSEST EDGE OF EACH PIPE. IF PHYSICAL CONDITIONS PROHIBIT THIS SEPARATION, THE WATER MAIN SHALL NOT BE PLACED CLOSER THEN 6 INCHES ABOVE A SEWER OR 18 INCHES BELOW A SEWER. THE SEPARATION DISTANCE SHALL BE THE MAXIMUM FEASIBLE IN ALL CASES.

13) WHERE THE WATER MAIN CROSSES SEWER, ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SO BOTH JOINTS ARE AS FAR AS POSSIBLE FROM THE SEWER. THE WATER AND SEWER PIPES MUST BE ADEQUATELY SUPPORTED AND HAVE WATER TIGHT JOINTS. A LOW PERMEABILITY SOIL SHALL BE USED FOR BACKFILL MATERIAL WITHIN 10 FEET OF THE POINT OF CROSSING.

14) NOMINAL DEPTH OF WATER MAIN = 5.5 FEET TO TOP OF PIPE.

15) WATER MAIN AND WATER SERVICE LINES CROSSING STREETS SHALL BE INSTALLED PRIOR TO PAVING.

16) ALL SANITARY SEWER AND SERVICE LINES SHALL BE AIR TESTED TO PASS THE CITY OF WEST BRANCH REQUIRED TEST RESULTS.

17) SANITARY SEWER MANHOLE FRAME AND LID TO BE NEENAH R-1642 SELF SEALING OR APPROVED EQUAL.

18) ALL PVC TRUSS SEWERS SHALL HAVE A DEFLECTION TEST PERFORMED AS FOLLOWS:
A. DEFLECTION TEST SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS.
B. DEFLECTION TEST TO BE CONDUCTED USING A RIGID BALL OR MANDREL WITH A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. NO MECHANICAL PULLING DEVICE ALLOWED.
C. NO PIPE SHALL EXCEED A DEFLECTION OF 5%.

AIR TESTING

1. PERFORM FROM MANHOLE-TO-MANHOLE AFTER BACKFILL.

2. PLACE PNEUMATIC PLUGS:
A) SEALING LENGTH: EQUAL TO OR GREATER THAN PIPE DIAMETER,
B) CAPABLE OF RESISTING INTERNAL TEST PRESSURE WITHOUT EXTERNAL BRACING OR BLOCKING.

3. INTRODUCE LOW-PRESSURE AIR INTO SEALED LINE AND ACHIEVE INTERNAL AIR PRESSURE 4 PSIG GREATER THAN MAXIMUM PRESSURE EXERTED ON GROUNDWATER ABOVE PIPE INVERT.

4. LIMIT INTERNAL PRESSURE IN SEALED LINE BELOW 8 PSIG.

5. ALLOWS 2 MINUTES MINIMUM FOR AIR PRESSURE TO STABILIZE. DISCONNECT LOW PRESSURE AIR HOSE FROM CONTROL PANEL.

PAVEMENT GENERAL NOTES

1. ALL SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING.

2. ALL DIMENSIONS TO BACK-OF-CURB UNLESS NOTED OTHERWISE.

3. REMOVE AND REPLACE OR RESTORE ALL STREET SIGNS, PAVEMENT MARKINGS, SIDEWALK LAMPS, SIDEWALKS, STEPS, LANDSCAPE STRUCTURES, CURB AND GUTTER, STREETS, DRIVES AND ALL OTHER SURFACE STRUCTURES REMOVED OR OTHERWISE DAMAGED DURING THE COURSE OF THE WORK. SIDEWALKS SHALL BE REMOVED AND REPLACED TO NEAREST JOINT BEYOND CONSTRUCTION AREA.

4. COMPACT SUBGRADE BENEATH PAVEMENTS IN ACCORDANCE WITH GRADING NOTES.

5. GRANULAR SUBBASE FOR PAVEMENTS SHALL MEET THE LIMITS OF GRADUATION NO. 11 WHERE NO SUBDRAIN IS TO BE PLACED AND GRADATION NO. 12 FOR WHERE SUBDRAIN IS TO BE INSTALLED PER IOWA DOT STANDARD SPECIFICATION FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 4120.04.

6. PROOF-ROLL SUBGRADE WITH A MINIMUM 25 TON G.V.W. TRUCK TO IDENTIFY AREAS OF SOFT OR UNSTABLE SUBGRADE. REMOVE AND REPLACE UNSTABLE AREAS WITH SUITABLE COMPACTED MATERIAL.

7. ALL CURB AND GUTTER IS 6" UNLESS STATED OTHERWISE.

PCC PAVEMENT NOTES

1. PCC PAVING THICKNESS SHALL BE AS NOTED ON THE PLANS.

2. MATERIALS AND CONSTRUCTION FOR PORTLAND CEMENT CONCRETE PAVEMENTS SHALL MEET THE REQUIREMENT OF IOWA DOT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, LATEST REVISION, SECTION 2301. THE PARAGRAPHS FOR MEASUREMENT AND PAYMENT SHALL NOT APPLY.

3. MINIMUM 28-DAY COMPRESSIVE STRENGTH FOR CONCRETE USED FOR PAVEMENTS SHALL BE 4000 PSI. CONCRETE SHALL BE C-3 OR C-4 WITH TYPE 1 CEMENT. AIR CONTENT SHALL BE 6-1/2% ± 1.5% COARSE AGGREGATE. AIR ENTRAINMENT ADMIXTURES AND WATER REDUCING ADMIXTURES SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 4103. DURABILITY FOR PORTLAND CEMENT CONCRETE SHALL BE CLASS 2. JOINT SEALER SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 4136 FOR HOT POURED JOINT SEALER.

4. JOINT SEALER SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 4136 FOR HOT POURED JOINT SEALER.

5. CURING COMPOUND (WHITE, DARK OR CLEAR) SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR SECTION 4105. APPLICATION METHOD AND CURING SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 2301.19.

6. FLYASH PER IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 4108 MAY BE SUBSTITUTED FOR CEMENT AT THE RATES SPECIFIED IN SECTION 2301.04E AFTER NOTIFICATION AND AUTHORIZATION BY THE OWNER'S REPRESENTATIVE.

7. PAVEMENT TIE BARS AND DOWEL BARS SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 4151. EPOXY COATING, WHEN SPECIFIED, SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 4151.03B.

8. CURBS SHALL BE CAST INTEGRAL WITH CONCRETE PAVEMENT UNLESS NOTED OTHERWISE. EDGES SHALL BE ROUNDED BUT NOT ROLLED.

9. PCC SIDEWALKS SHALL BE 4 INCHES THICK, EXCEPT AT DRIVEWAYS. THICKNESS OF PCC WALKS AT DRIVEWAYS SHALL MATCH THAT OF THE ADJACENT DRIVEWAY. TRANSVERSE CONSTRUCTION JOINTS SPACING SHALL BE AT 3 FEET MAXIMUM CENTERS FOR 3 FEET WIDE WALKS, 4 FEET MAXIMUM CENTERS FOR 4 FEET WIDE WALKS, AND 5 FEET MAXIMUM CENTERS FOR 5 FEET WIDE WALKS, 6 FEET MAXIMUM CENTERS FOR WALKS GREATER THAN 5 FEET IN WIDTH. LONGITUDINAL CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN SLABS GREATER THAN 8 FEET IN WIDTH. PLACE EXPANSION JOINTS WHERE WALK MEETS OTHER WALKS, BACK OF CURBS, FIXTURES, OR OTHER STRUCTURES, AND AT INTERVALS NOT EXCEEDING 50 FEET. SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2% DRAINING TOWARDS BACK OF CURB, UNLESS OTHERWISE NOTED.

10. ONE INCH PREFORMED FOAM EXPANSION JOINT MATERIAL SONOFLEX "F" BY SONOBORN OR APPROVED EQUAL SHALL BE PLACED BETWEEN NEW PAVEMENT CONSTRUCTION AND THE FACES OF BUILDINGS, STOOPS, EXISTING SLABS, AND OTHER FIXTURES, UNLESS NOTED ON THE DRAWINGS. JOINTS AT THESE LOCATIONS SHALL BE SEALED WITH A SELF-LEVELING POLYURETHANE SUCH AS SONOLASTIC SL-1 OR APPROVED EQUAL.

11. CONSTRUCT 1" EXPANSION JOINTS ON PCC CURB AT ALL ENDS OF RETURN RADII.

12. ALL 1/2" EXPANSION JOINTS TO BE SEALED.

PROJECT NUMBER:
16-0849

PROJECT NAME:
WEST BRANCH HS PH 3 IMPROVEMENTS FIRE SAFETY & GRADING IMPROVEMENTS

TITLE:
GENERAL NOTES

ENGINEER:
hbk ENGINEERING
HBK ENGINEERING, LLC
509 S. GILBERT ST.
IOWA CITY, IA 52240
PHONE: (319) 338-7557
FAX: (319) 358-2937

IOWA DEPARTMENT OF LABOR REGISTRATION NO. 00527328

WWW.HBKENGINEERING.COM

OWNER/DEVELOPER:
WEST BRANCH COMMUNITY SCHOOLS
WEST BRANCH COMMUNITY SCHOOL DISTRICT
148 N. OLIPHANT ST
WEST BRANCH, IA 52358

FOLDER NAME:
16-0849

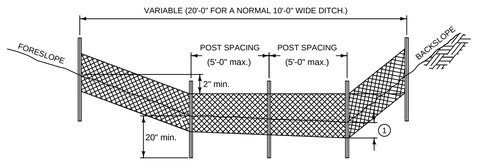
DATE CREATED:
08-15-2016

DRAWING LOG

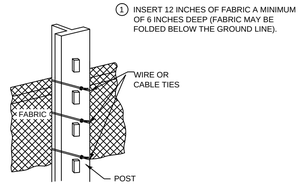
DATE	ISSUED FOR	DB	CB
08-15-16	SITE PLAN	JDP	NJB
09-14-16	BID DOCUMENTS	JDP	NJB
09-19-16	BID DOCUMENTS	SPR	BAB

PROJECT MANAGER:
BOELK

SHEET:
C700

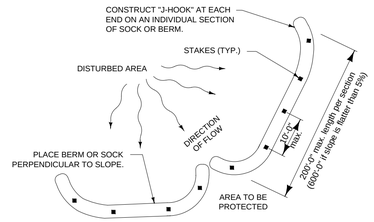


TYPICAL SILT FENCE DITCH CHECK

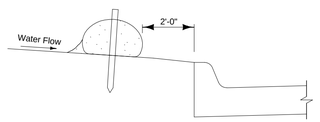


ATTACHMENT TO POST

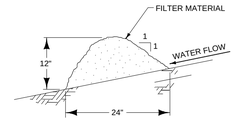
1 C701 SILT FENCE
-NTS-



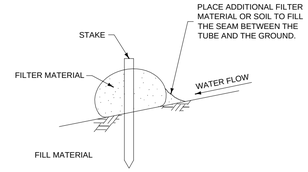
PLAN VIEW OF SLOPE
(for sediment and slope control)



SECTION VIEW AT STREET
(for perimeter control along street)



FILTER BERM

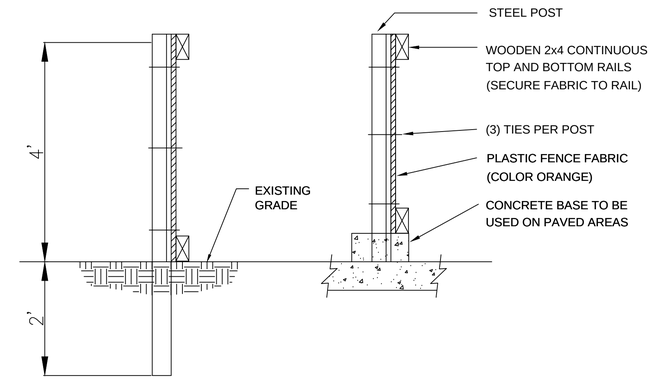


FILTER SOCK

NOTES:

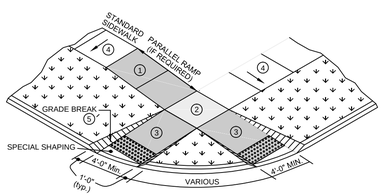
1. BERM SHOWN IS TYPICAL FOR SLOPES FLATTER THAN 3:1. FOR STEEPER SLOPES, INCREASE BERM SIZE AS DIRECTED BY THE ENGINEER.
2. PLACE BERM IN UNCOMPACTED WINDROW PERPENDICULAR TO THE SLOPE AT LOCATIONS SPECIFIED IN THE CONTRACT DOCUMENTS.
3. FILTER SOCK DIAMETER AS SPECIFIED IN THE CONTRACT DOCUMENTS.

2 C701 FILTER SOCK
-NTS-



3 C701 CONSTRUCTION FENCE
-NTS-

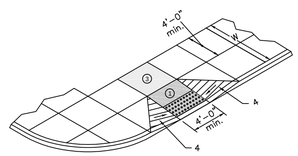
NOTE: ALL ELEVATIONS ARE TOP OF SLAB UNLESS NOTED OTHERWISE.



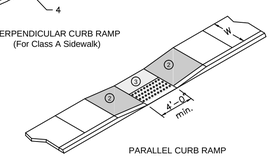
KEY
- CURB RAMP
- TURNING SPACE
- DETECTABLE WARNING
- GRASS

1. PARALLEL CURB RAMP: IF NORMAL SIDEWALK ELEVATION CANNOT BE ACHIEVED WITH THE PERPENDICULAR RAMP BETWEEN THE STREET AND LANDING DUE TO LIMITED RAMP LENGTH, PROVIDE A PARALLEL RAMP TO MAKE UP THE ELEVATION DIFFERENCE BETWEEN THE LANDING AND THE STANDARD SIDEWALK.

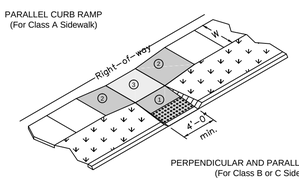
   THE LENGTH OF THE PARALLEL RAMP IS NOT REQUIRED TO EXCEED 15 FEET, REGARDLESS OF THE RESULTING SLOPE. DO NOT EXCEED 8.3% SLOPE FOR PARALLEL RAMPS SHORTER THAN 15 FEET.
2. TURNING SPACE: TARGET SLOPE OF 1.5% WITH MAXIMUM SLOPE PERPENDICULAR TO THE TRAVEL DIRECTIONS OF 2.0%. MINIMUM 4 FEET BY 4 FEET.
3. PERPENDICULAR CURB RAMP: TARGET RUNNING SLOPE OF 6.25% WITH MAXIMUM RUNNING SLOPE OF 8.3%.
4. TARGET CROSS SLOPE OF 1.5% WITH A MAXIMUM CROSS SLOPE OF 2.0%.
5. MATCH PEDESTRIAN STREET CROSSING CROSS SLOPE OR FLATTER.



PERPENDICULAR CURB RAMP
(For Class A Sidewalk)



PARALLEL CURB RAMP
(For Class A Sidewalk)

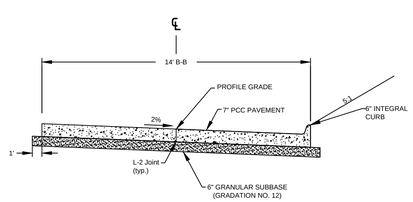


PERPENDICULAR AND PARALLEL CURB RAMP
(For Class B or C Sidewalk)

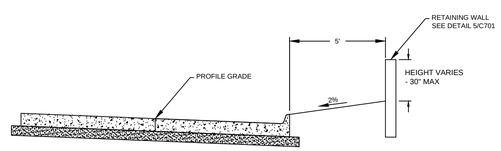
KEY
- CURB RAMP
- TURNING SPACE
- DETECTABLE WARNING

1. PERPENDICULAR CURB RAMP: TARGET RUNNING SLOPE OF 6.25% WITH MAXIMUM RUNNING SLOPE OF 8.3% MATCH PEDESTRIAN STREET CROSSING CROSS SLOPE AT BACK OF CURB. AT MID-BLOCK CROSSINGS, CROSS SLOPE MAY EXCEED 2.0% TO MATCH ROADWAY GRADE.
2. PARALLEL CURB RAMP: TARGET CROSS SLOPE OF 1.5% WITH A MAXIMUM CROSS SLOPE OF 2.0%. THE LENGTH OF THE PARALLEL RAMP IS NOT REQUIRED TO EXCEED 15 FEET, REGARDLESS OF RESULTING SLOPE. DO NOT EXCEED 8.3% SLOPE FOR PARALLEL RAMPS SHORTER THAN 15 FEET.
3. TURNING SPACE: TARGET SLOPE OF 1.5%, WITH A MAXIMUM SLOPE PERPENDICULAR TO THE TRAVEL DIRECTIONS OF 2.0%. AT MID-BLOCK CROSSINGS, CROSS SLOPE OF LANDING MAY EXCEED 2.0% TO MATCH ROADWAY GRADE. MINIMUM 4 FEET BY 4 FEET.
4. FLARED SIDES (10% MAX.) REQUIRED IF RAMP IS CONTIGUOUS WITH SIDEWALK.

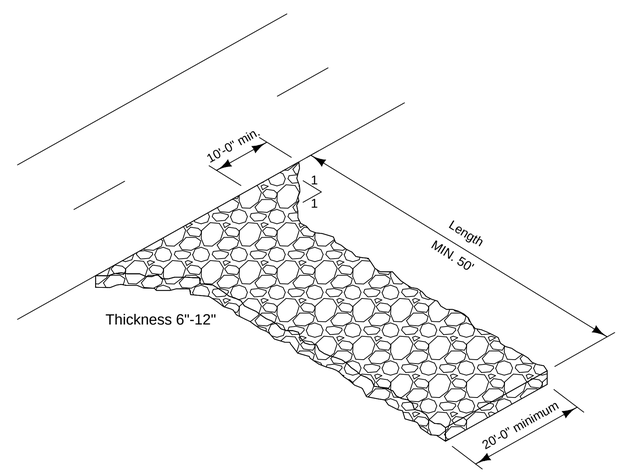
4 C701 ADA RAMP DETAILS
-NTS-



5 C701 TYPICAL PAVEMENT SECTION
-NTS-



6 C701 TYPICAL PAVEMENT SECTION WITH RETAINING WALL
-NTS-



7 C701 CONSTRUCTION ACCESS
-NTS-

PROJECT NUMBER: 16-0849

PROJECT NAME: WEST BRANCH HS PH 3 IMPROVEMENTS FIRE SAFETY & GRADING IMPROVEMENTS

TITLE: DETAILS

ENGINEER:
hbk ENGINEERING
HBK ENGINEERING, LLC
509 S. GILBERT ST.
IOWA CITY, IA 52240
PHONE: (319) 338-7557
FAX: (319) 358-2937

IOWA DEPARTMENT OF LABOR REGISTRATION NO. 00527328

WWW.HBKENGINEERING.COM

OWNER/DEVELOPER:
WEST BRANCH COMMUNITY SCHOOLS
WEST BRANCH COMMUNITY SCHOOL DISTRICT
148 N. OLIPHANT ST
WEST BRANCH, IA 52358

FOLDER NAME: 16-0849

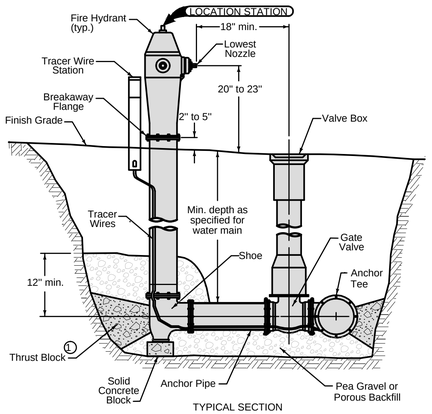
DATE CREATED: 08-15-2016

DRAWING LOG

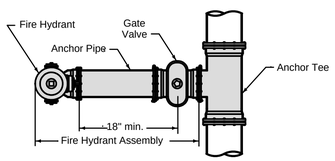
DATE	ISSUED FOR	DB	CB
08-15-16	SITE PLAN	JDP	NJB
09-14-16	BID DOCUMENTS	JDP	NJB
09-19-16	BID DOCUMENTS	SPR	BAB

PROJECT MANAGER: BOELK

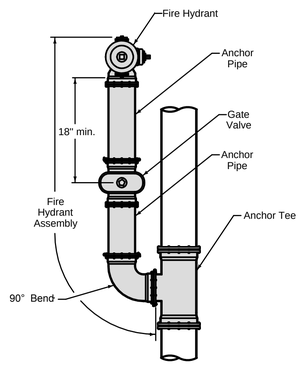
SHEET: C701



TYPICAL SECTION



TYPICAL PLAN



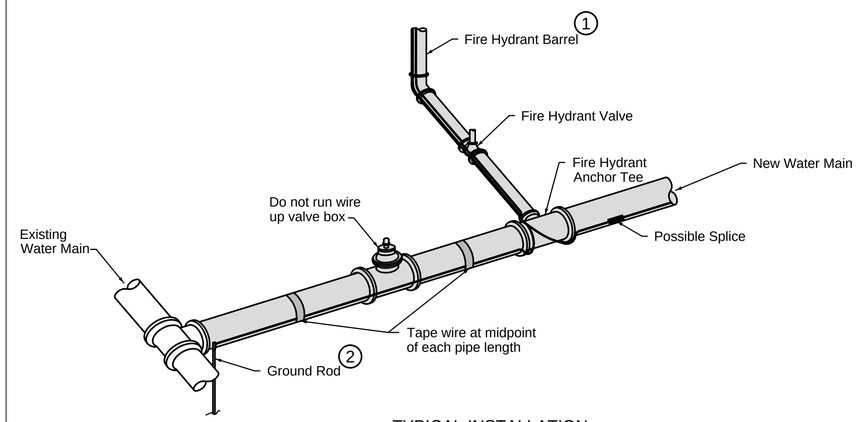
ALTERNATE PLAN

Use ductile iron pipe with restrained mechanical joints for fire hydrant assembly and anchor tee.

(1) Do not cover drain holes or tracer wire.

1 C702 FIRE HYDRANT ASSEMBLY

-NTS-



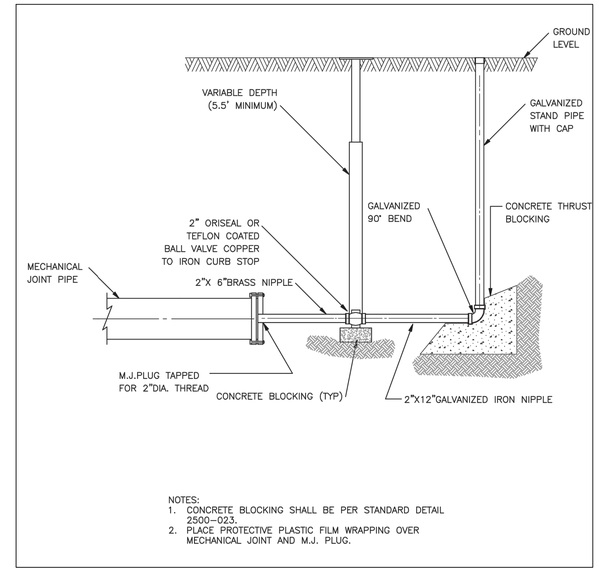
TYPICAL INSTALLATION

(1) Extend tracer wire up fire hydrant barrel to internal terminals of tracer wire station and back down. Refer to WM-201 for details of fire hydrant assembly.

(2) Clamp tracer wire to ground rod at system termination points.

2 C702 TRACER SYSTEM

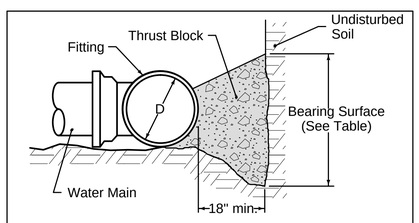
-NTS-



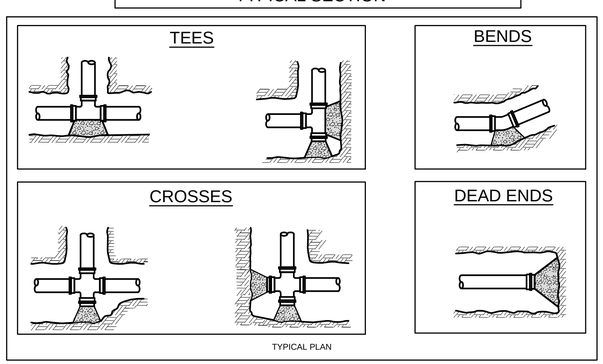
NOTES:
1. CONCRETE BLOCKING SHALL BE PER STANDARD DETAIL 2500-023.
2. PLACE PROTECTIVE PLASTIC FILM WRAPPING OVER MECHANICAL JOINT AND M.J. PLUG.

3 C702 BLOW OFF DETAIL

-NTS-



TYPICAL SECTION



TYPICAL PLAN

Extend thrust blocks to undisturbed soil. Excavation into trench wall may be necessary.

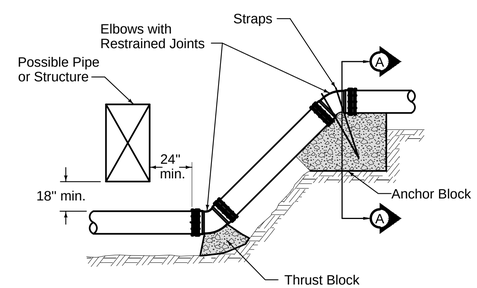
Form vertical surfaces of poured concrete thrust blocks except on bearing surface.

Encase all fittings in polyethylene wrap. Do not allow concrete to directly contact joints or fitting bolts.

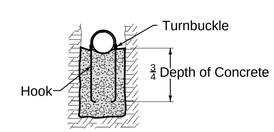
Diameter of Pipe, D (inches)	MINIMUM BEARING SURFACE (sf)				
	Bends				Tees and Dead Ends
	11¼°	22½°	45°	90°	
4	1	1	2	4	3
6	1	2	4	8	6
8	2	4	7	14	10
10	3	6	11	21	15
12	4	8	16	29	21
14	5	11	21	39	28
16	7	14	27	50	36
18	9	17	34	63	45
20	11	21	42	78	55
24	15	31	60	111	78
30	24	47	92	171	120
36	34	67	132	244	173

Minimum surface area based on water pressure of 150 psi and allowable soil pressure of 1,000 psf.

CHANGES IN PIPE DEPTH



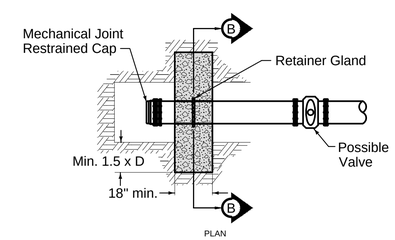
ELEVATION



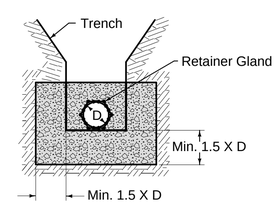
SECTION A-A

DEAD ENDS (ALTERNATE METHOD)

Use only when allowed by the Engineer, or when specified in the contract documents.



PLAN



SECTION B-B

4 C702 THRUST BLOCKS

-NTS-

PROJECT NUMBER: 16-0849

PROJECT NAME: WEST BRANCH HS PH 3 IMPROVEMENTS FIRE SAFETY & GRADING IMPROVEMENTS

TITLE: DETAILS

ENGINEER:

hbk ENGINEERING
HBK ENGINEERING, LLC
509 S. GILBERT ST.
IOWA CITY, IA 52240
PHONE: (319) 338-7557
FAX: (319) 358-2937

IOWA DEPARTMENT OF LABOR REGISTRATION NO. 00527328

WWW.HBKENGINEERING.COM

OWNER/DEVELOPER:

WEST BRANCH COMMUNITY SCHOOL DISTRICT
148 N. OLIPHANT ST
WEST BRANCH, IA 52358

FOLDER NAME: 16-0849

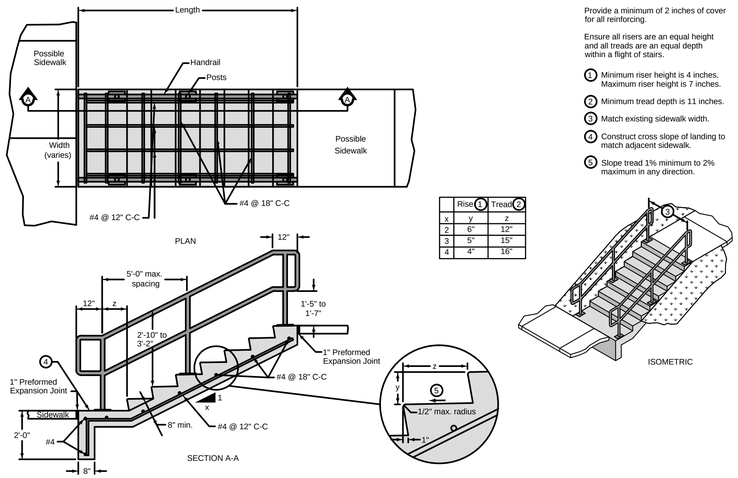
DATE CREATED: 08-15-2016

DRAWING LOG

DATE	ISSUED FOR	DB	CB
08-15-16	SITE PLAN	JDP	NJB
09-14-16	BID DOCUMENTS	JDP	NJB
09-19-16	BID DOCUMENTS	SPR	BAB

PROJECT MANAGER: BOELK

SHEET: C702



Provide a minimum of 2 inches of cover for all reinforcing.

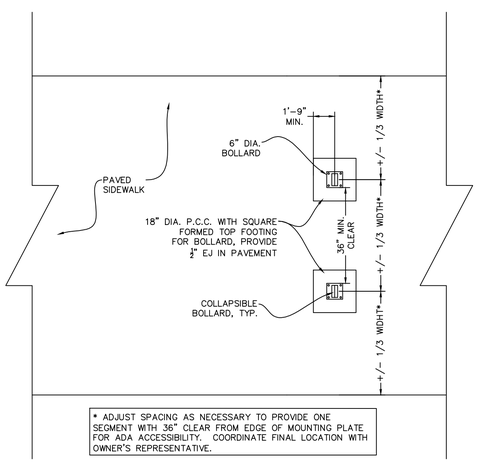
Ensure all risers are an equal height and all treads are an equal depth within a flight of stairs.

1. Minimum riser height is 4 inches. Maximum riser height is 7 inches.
2. Minimum tread depth is 11 inches.
3. Match existing sidewalk width.
4. Construct cross slope of landing to match adjacent sidewalk.
5. Slope tread 1% minimum to 2% maximum in any direction.

	Rise (1)	Tread (2)
x	y	z
2	6"	12"
3	5"	15"
4	4"	16"

1 / C703 CONCRETE STEPS WITH HANDRAIL

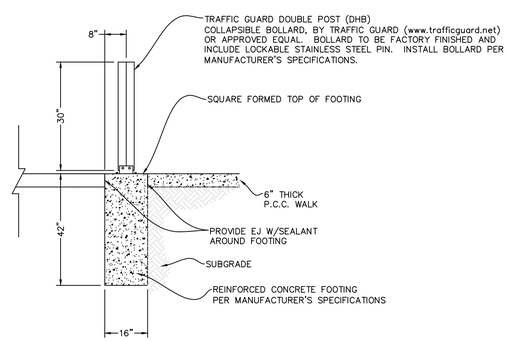
-NTS-



* ADJUST SPACING AS NECESSARY TO PROVIDE ONE SEGMENT WITH 36" CLEAR FROM EDGE OF MOUNTING PLATE FOR ADA ACCESSIBILITY. COORDINATE FINAL LOCATION WITH OWNER'S REPRESENTATIVE.

COLLAPSIBLE BOLLARD PLAN DETAIL

NOT TO SCALE

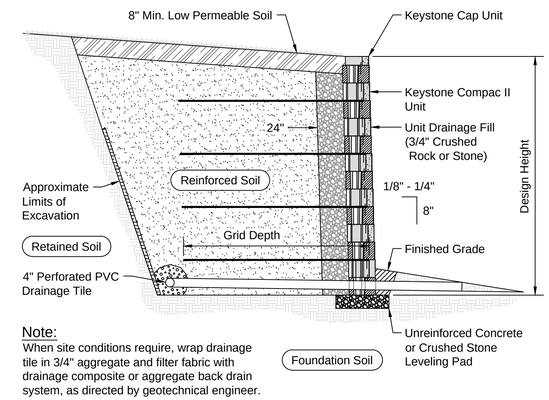


COLLAPSIBLE BOLLARD SECTION DETAIL

NOT TO SCALE

2 / C703 COLLAPSIBLE BOLLARD

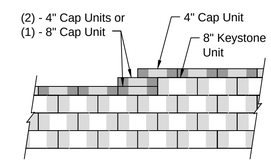
-NTS-



Note:
When site conditions require, wrap drainage tile in 3/4" aggregate and filter fabric with drainage composite or aggregate back drain system, as directed by geotechnical engineer.

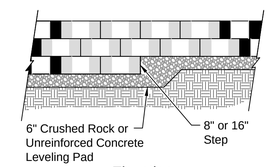
Typical Reinforced Wall Section

Compac II Unit - Near Vertical Setback



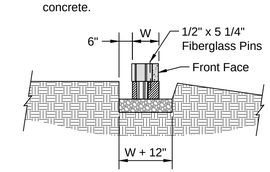
Note:
1. Secure all cap units with Keystone Kapseal or equal.

Top of Wall Steps



Elevation

Note:
1. The leveling pad is to be constructed of crushed stone or 2000 psi ± unreinforced concrete.



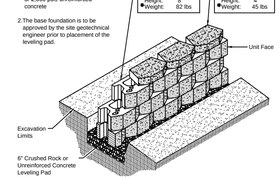
Section

Leveling Pad Detail

Base Leveling Pad Notes:
1. The leveling pad is to be constructed of crushed stone or 2,000 psia unreinforced concrete
2. The base foundation is to be approved by the site geotechnical engineer prior to placement of the leveling pad.

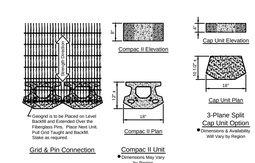
Compac II Unit	
Width:	18"
Depth:	13"
Height:	8"
Weight:	82 lbs

Cap Unit	
Width:	18"
Depth:	10 1/2"
Height:	4"
Weight:	45 lbs



Compac II Unit/Base Pad Isometric Section View

Dimensions & Weight May Vary by Region



3 / C703 RETAINING WALL DETAILS

-NTS-

PROJECT NUMBER: 16-0849

PROJECT NAME: WEST BRANCH HS PH 3 IMPROVEMENTS FIRE SAFETY & GRADING IMPROVEMENTS

TITLE: DETAILS

ENGINEER:

hbk ENGINEERING

HBK ENGINEERING, LLC
509 S. GILBERT ST.
IOWA CITY, IA 52240
PHONE: (319) 338-7557
FAX: (319) 358-2937

IOWA DEPARTMENT OF LABOR REGISTRATION NO. 00527328

WWW.HBKENGINEERING.COM

OWNER/DEVELOPER:

WEST BRANCH COMMUNITY SCHOOL DISTRICT
148 N. OLIPHANT ST
WEST BRANCH, IA 52358

FOLDER NAME: 16-0849

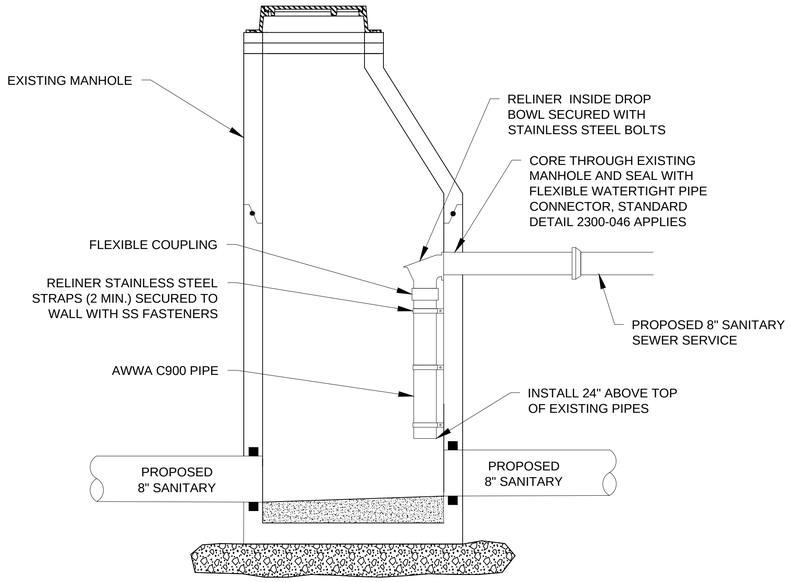
DATE CREATED: 08-15-2016

DRAWING LOG

DATE	ISSUED FOR	DB	CB
08-15-16	SITE PLAN	JDP	NJB
09-14-16	BID DOCUMENTS	JDP	NJB
09-19-16	BID DOCUMENTS	SPR	BAB

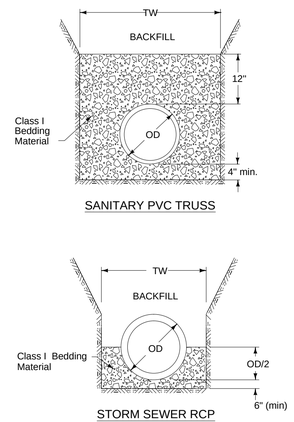
PROJECT MANAGER: BOELK

SHEET: C703



1 C704 DROP BOWL SYSTEM FOR SANITARY MANHOLE

-NTS-



BACKFILL OPTIONS

1. SUITABLE ON-SITE MATERIAL COMPACTED TO 95% STANDARD PROCTOR.
2. CLASS A ROADSTONE UNDER AND WITHIN 5 FEET OF PUBLIC PAVEMENT
3. GRASSY AREAS-SUITABLE ON-SITE MATERIAL COMPACTED TO 90% STANDARD PROCTOR
4. FILL IN STANDARD LIFTS OF 8-12"

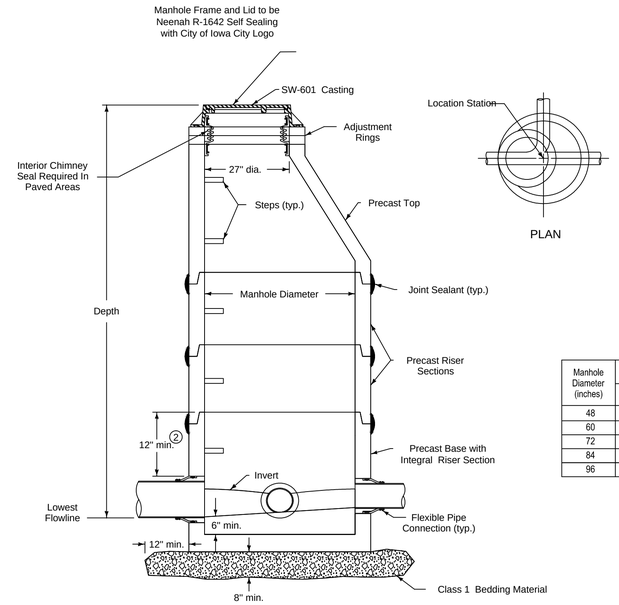
Key

OD = Outside diameter of pipe

TW = Trench width at top of pipe:
Min. = OD+18 inches
Max.= 1.25xOD+12 inches OR 54 inches (whichever is greater)

2 C704 TRENCH DETAIL

-NTS-



TYPICAL SECTION

PLAN

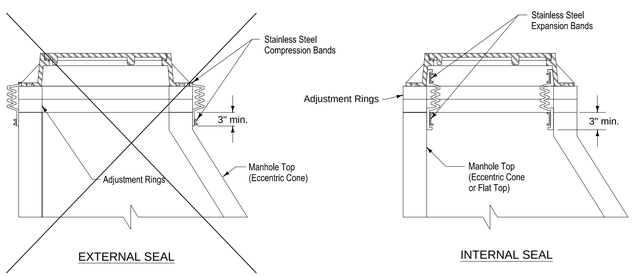
Manhole Diameter (inches)	Maximum Pipe Diameter (inches) for 2 Pipes (1)	
	At 180 ° Separation	At 90 ° Separation
48	24	18
60	36	24
72	42	30
84	48	36
96	60	42

1. For additional configurations, maintain a minimum of 12 inches of concrete between vertical edges of pipe openings.
2. 12 inch minimum riser height above all pipe openings.

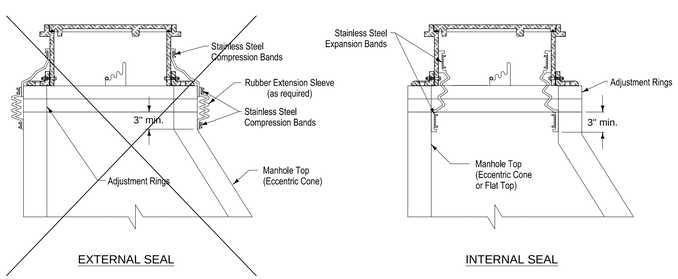
3 C704 CIRCULAR SANITARY MANHOLE

-NTS-

CHIMNEY SEALS FOR 2-PIECE CASTINGS

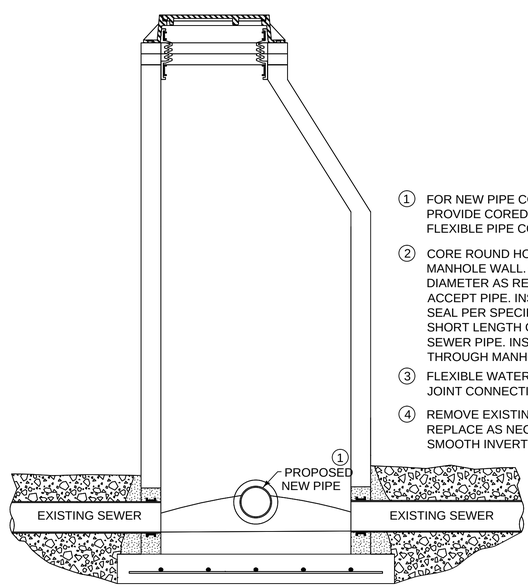


CHIMNEY SEALS FOR 3-PIECE CASTINGS

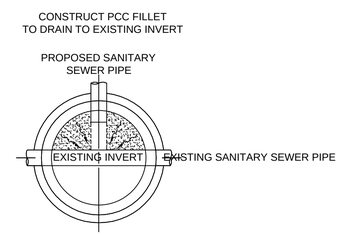


4 C704 SANITARY MANHOLE CHIMNEY SEALS

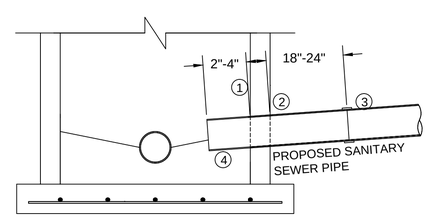
-NTS-



1. FOR NEW PIPE CONNECTIONS, PROVIDE CORED OPENING WITH FLEXIBLE PIPE CONNECTOR.
2. CORE ROUND HOLE THROUGH MANHOLE WALL. CORE HOLE DIAMETER AS REQUIRED TO ACCEPT PIPE. INSTALL MODULAR SEAL PER SPECIFICATIONS AROUNDE SHORT LENGTH OF SANITARY SEWER PIPE. INSERT ASSEMBLY THROUGH MANHOLE WALL.
3. FLEXIBLE WATERTIGHT JOINT CONNECTION
4. REMOVE EXISTING FILLET AND REPLACE AS NECESSARY TO PROVIDE SMOOTH INVERT TO DRAIN



PLAN



5 C704 SANITARY SEWER CONNECTION TO EXISTING MANHOLE

-NTS-

PROJECT NUMBER: 16-0849

PROJECT NAME: WEST BRANCH HS PH 3 IMPROVEMENTS FIRE SAFETY & GRADING IMPROVEMENTS

TITLE: DETAILS

ENGINEER:

hbk ENGINEERING

HBK ENGINEERING, LLC
509 S. GILBERT ST.
IOWA CITY, IA 52240
PHONE: (319) 338-7557
FAX: (319) 358-2937

IOWA DEPARTMENT OF LABOR REGISTRATION NO. 00527328

WWW.HBKENGINEERING.COM

OWNER/DEVELOPER:

WEST BRANCH COMMUNITY SCHOOL DISTRICT
148 N. OLIPHANT ST
WEST BRANCH, IA 52358

FOLDER NAME: 16-0849

DATE CREATED: 08-15-2016

DRAWING LOG

DATE	ISSUED FOR	DB	CB
08-15-16	SITE PLAN	JDP	NJB
09-14-16	BID DOCUMENTS	JDP	NJB
09-19-16	BID DOCUMENTS	SPR	BAB

PROJECT MANAGER: BOELK

SHEET: C704

VEENSTRA & KIMM, INC.
860 22nd Avenue - Suite 4 • Coralville, Iowa 52241-1565
319-466-1000 • 319-466-1008(FAX) • 888-241-8001(WATS)

September 23, 2016

Matt Muckler
City Administrator
City of West Branch
110 North Poplar St.
West Branch, IA 52358

WEST BRANCH, IOWA
WEST BRANCH COMMUNITY SCHOOLS
PHASE 3 IMPROVEMENTS – FIRE SAFETY & GRADING
SITE PLAN

We have reviewed the site plan for the Phase 3 Improvements – Fire Safety & Grading for the West Branch Community School High School. The site plan does meet with the requirements of the West Branch City Code, however, there are a few items of concern that should be addressed.

1. The construction drawings show grading up to the fence line on the east side of the property. The property lines should be verified to confirm that work is confined to property owned by the School District.

2. The connection to the water line on West Main Street is at a high point in the line being extended to the south. This will be problematic for disinfecting the line due to trapping air. A temporary hydrant should be provided to properly flush and disinfect the new line.

3. Fire hydrants are to have STORZ adapter on the large nozzle.

4. Site plan indicates "POLE BUILDING FF 774.00) No details are included on the pole building. Confirm that the pole building is not part of the current project.

Should you have any questions or comments, please contact us at 319-466-1000.

VEENSTRA & KIMM, INC.

Dave Schechinger

City of West Banch
110 N. Poplar Street
West Branch, IA 52358

SITE PLAN REVIEW CHECKLIST

Project Name WBHS Ph III Fire Safety & Grading

Engineer HBK

Reviewer DRS

Reviewed Date 9-23-2016

1. SITE PLAN ☒

   A. Site plans shall only be required whenever any person proposes to place any structure for which a building permit is required under any other section of this Code, on any tract or parcel of and within any district of the West Branch Zoning Ordinance, and for any use, except one and two family dwellings.

2. DESIGN STANDARDS ☒

   A. The design of the proposed improvements shall make adequate provisions for surface and subsurface drainage, for connections to water and sanitary sewer lines, each so designed as to neither overload existing public utility lines nor increase the danger of erosion, flooding, landslide, or other endangerment of adjoining or surrounding property

   B. The proposed improvements shall be designed and located within the property in such manner as not to unduly diminish or impair the use and enjoyment of adjoining property and to this end shall minimize the adverse effects on such adjoining property from automobile headlights, illumination of required perimeter yards, refuse containers, and impairment of light and air.

   C. The proposed development shall have such entrances and exits upon adjacent streets and such internal traffic circulation pattern as will not unduly increase congestion on adjacent or surrounding public streets

   D. The proposed development shall conform to all applicable provisions of the Code of Iowa, as amended, Iowa Statewide Urban Design and Specifications (SUDAS), Iowa Stormwater Management Manual and all applicable provisions of the Code of Ordinances of the City of West Branch, as amended

City of West Branch
110 N. Poplar Street
West Branch, IA 52358

March 14, 2016

SITE PLAN:

1. Prepared by a licensed Engineer or Land Surveyor — [X] YES [ ] NO

2. Date of preparation, North point and scale no smaller than 1"=100'. — [X] YES [ ] NO
   Comments:

3. Legal description and address of the property to be developed. — [X] YES [ ] NO
   Comments: All work is shown inside existing limits; confirm east property line.

4. Name and address of the record property owner, the applicant, and the person or firm preparing the site plan
   Comments: — [X] YES [ ] NO

5. The existing topography with a maximum of two (2) foot contour intervals. Where existing ground is on a slope of less than two percent (2%), either one (1) foot contours or spot elevations where necessary but not more than fifty (50) feet apart in both directions, shall be indicated on site plan.
   Comments: — [X] YES [ ] NO

6. Existing and proposed utility lines and easements in accordance with Iowa Statewide Urban Design and Specifications (SUDAS) and City of West Branch Subdivision Regulations.
   Comments: — [X] YES [ ] NO

7. Structure Information:

   a. Total number and type of dwelling units proposed — [ ] YES [ ] NO N/A

   b. Proposed uses for all buildings — [ ] YES [ ] NO N/A

   c. Total floor area of each building — [ ] YES [ ] NO N/A

   d. Estimated number of employees for each proposed use where applicable — [ ] YES [ ] NO N/A

   e. Any other information, including peak demand, which may be necessary to determine the number of off-street parking spaces and loading spaces. — [ ] YES [ ] NO N/A

8. Location, shape, and all exterior elevation views of all proposed buildings, for the purpose of understanding the structures and building materials to be used, the location of windows, doors, overhangs, projection height, etc. and the grade relationship to floor elevation, and the number of stories of each existing building to be retained and of each proposed building. — [ ] YES [ ] NO N/A

9. Property lines and all required yard setbacks. Confirm east property line — [ ] YES [X] NO

10. Location, grade and dimensions of all existing and proposed paved surfaces and all abutting streets. — [X] YES [ ] NO

11. Complete traffic circulation and parking plan, showing the location and dimensions of all existing and proposed parking stalls, loading areas, entrance and exit drives, sidewalks, dividers, planters, and other similar permanent improvements. ☒ YES ☐ NO

12. Location and type of existing or proposed signs and of any existing or proposed lighting on the property which illuminates any part of any required yard. ☐ YES ☐ NO N/A

13. Location of existing trees six (6) inches or larger in diameter, landslide areas, springs and streams and other bodies of water, and any area subject to flooding by a one hundred (100) year storm on site and downstream off site. ☒ YES ☐ NO

14. Location, amount and type of any proposed landscaping. Location of proposed plantings, fences, walls, or other screening as required by the zoning regulations and the design standards set forth in Section 173.03. ☐ YES ☒ NO

15. A vicinity map at a scale of 1" = 500' or larger, showing the general location of the property, and the adjoining land uses and zoning. ☒ YES ☐ NO

16. Soil tests and similar information, if deemed necessary by the City Engineer, to determine the feasibility of the proposed development in relation to the design standards set forth in Section 173.03. ☐ YES ☐ NO N/A

17. Where possible ownership or boundary problems exist, as determined by the Zoning Administrator, a property survey by a licensed land surveyor may be required. ☐ YES ☐ NO N/A

18. Stormwater Pollution Prevention Plan. ☒ YES ☐ NO

19. Stormwater Management Plan. ☐ YES ☒ NO

20. Pre-Application Conference. ☐ YES ☒ NO

21. Provide 25% of open space

    a. Said open space shall be unencumbered with any structure, or off-street parking or roadways and drives, and shall be landscaped and maintained with grass, trees and shrubbery. ☐ YES ☐ NO N/A

    b. Each principal structure of an apartment or office complex on same site shall be separated from any other principal structure in the complex by an open space of not less than sixteen (16) feet. ☐ YES ☐ NO N/A

22. Landscaping Requirements

    a. Minimum requirements at the time of planting - Two (2) trees minimum or one (1) tree of the following size per 1,500 square feet of open space, whichever is greater: 40 Percent 1½" - 2" caliper diameter. Balance 1" - 1½" caliper diameter. (Evergreen trees shall not be less than three (3) feet in height.) ☐ YES ☐ NO N/A

    b. Minimum requirements at the time of planting - 6 shrubs, or 1 shrub per 1,000 square feet of open space, whichever is greater. ☐ YES ☐ NO N/A

23. Buffer Required

    a. Any other zoning district, other than an Agricultural A-1 District, that abuts any residential district shall require a buffer as described in this section. The buffer shall be provided by the non-residential use when adjoining a residential district. ☐ YES ☐ NO N/A

    b. All Industrial Districts that abut any other district shall provide a buffer as required by this section. ☐ YES ☐ NO N/A

    c. Any storage area, garbage storage, junk storage or loading docks, and loading areas, in any District shall be screened from public street view by a buffer ☐ YES ☐ NO N/A

24. Buffers

    a. Buffer Wall: A buffer wall shall not be less than six (6) feet in height; constructed of a permanent low maintenance material such as concrete block, cinder block, brick, concrete, precast concrete or tile block; the permanent low-maintenance wall shall be designed by an architect or engineer for both structural adequacy and aesthetic quality. ☐ YES ☐ NO N/A

    b. Landscape Buffer: A landscape buffer shall not be less than twenty-five (25) feet in width, designed and landscaped with earth berm and predominant plantings of evergreen type trees, shrubs and plants so as to assure year around effectiveness. ☐ YES ☐ NO N/A

25. Surfacing Requirements.

    a. All off-street parking and loading areas and access roadways shall have a durable and dustless surface paved with asphaltic or Portland cement concrete pavement or pervious pavement. Off-street parking of automobiles, vans, campers, trucks, trailers, tractors, recreational vehicles, boats, construction equipment, and any other mobile vehicles shall be on an asphaltic or Portland cement concrete paved off-street parking area and not parked or stored within the landscaped open space area of the front yard. All off-street parking areas and associated driveways, access roadways and frontage roads, except driveways for single family residences, shall be constructed with permanent, integrally attached 6" high curbing or curbing of alternate height. ☒ YES ☐ NO

    b. Portland Cement Concrete shall have a minimum thickness of five (5) inches. ☒ YES ☐ NO N/A

    c. Asphaltic Cement Concrete shall have a minimum thickness of six (6) inches. ☐ YES ☐ NO N/A

    d. Material utilized in the subgrade shall be well drained and not susceptible to frost boils. Driveways for attached townhouse style residences shall be Portland cement concrete or asphaltic concrete with minimum thickness of five (5) inches and six (6) inches, with well-drained subgrade base and not greater than eighteen (18) feet in width. ☒ YES ☐ NO

26. Landscaping, Screening and Open Space Requirements.

    a. All parking areas be aesthetically improved to reduce obtrusive characteristics that are inherent to their use. ☐ YES ☐ NO Not part of current proejct

    b. Parking areas shall be effectively screened from general public view and contain shade trees within parking islands where multiple aisles of parking exist. Not less than five (5) percent of the interior parking area shall be landscaped within parking islands. ☐ YES ☐ NO N/A

27. Off-Street Parking Access to Public Streets and Internal Traffic Circulation.

    a. forward movement of the vehicle. ☐ YES ☐ NO N/A

    b. Driveway approach returns shall not extend beyond the side lot line as extended. ☐ YES ☐ NO N/A

    c. The number of ingress/egress access points to public streets from offstreet parking areas located to limit vehicular conflicts, preserve proper traffic safety. ☐ YES ☐ NO N/A

28. Handicap Accessible Parking Requirements - comply with the parking space minimum requirements. ☐ YES ☐ NO N/A

29. Traffic Analysis Requirements. Any project which contains 100 dwelling units or 1,000 average day trips. ☐ YES ☒ NO N/A

30. Architectural Standards - architectural plans for buildings shall be submitted for review and approval. ☐ YES ☐ NO N/A

September 27, 2016

Matt Muckler
City Administrator
City of West Branch
110 North Poplar St.
West Branch, IA 52358

Re: West Branch Community Schools – Phase 3 Improvements

Dear Mr. Muckler,

Please see my responses below to Mr. Schechinger's review of the Phase 3 Improvements – Fire Safety & Grading Project for the West Branch Community School High School.

1. All grading is proposed and intended to take place within the School District property. There is not an easement or acquisition needed as it relates to this project directly. During construction, property line will be determined and marked, and grading will be inspected and monitored to insure it remains on school property. Erosion control practices will be placed within school property as well.
2. HBK does not feel that an additional temporary hydrant is needed for flushing and air release purposes as we were proposing to utilize the hydrant located at the Southwest corner of Johnson Cedar Road and Main Street. However, if concerns still remain we can address in addendum to bid documents.
3. HBK will issue an addendum to the bid documents to request and required all fire hydrants to have STORZ adapters on the large nozzle.
4. The Pole Building is not part of the Phase 3 bid documents or construction. We show a proposed preliminary Finished Floor (FF) elevation in order to assist with the grading portion of this project. The Pole Building has yet to be designed and will be a part of the ACE program which has been initiated and is currently in progress; thus, details are not yet available.

In addition to these items, HBK has put together a preliminary landscaping plan as a secondary bid contract for this project. Such landscaping work will be bid out separately and constructed following the Phase 3 work in order to help insure a reliable landscaping contractor obtain the job and to have all other work completed prior to.

Storm water management is planned to drain to and account for drainage patterns as they are today. There is a high point (break point) within the fire lane located around STA 8+16.00. Storm water to the east and south will flow north to the parking lot and appropriate basin as designed and constructed with Phase 2 Improvements. Storm water to the west and south will flow northwest to the existing drainage swale as designed and constructed in Phase 1 Improvements.

I believe this addresses all issues as noted in the review comments. Please let me know if you have any additional concerns questions. We greatly appreciate your attention to this project and your timely response.

Sincerely,

Brian A Boelk, PE, CPESC, CMS4S
HBK Engineering