

**CITY OF WEST DES MOINES
PLAN AND ZONING COMMISSION COMMUNICATION**

Meeting Date: August 29, 2016

Item: Delavan Townhomes, 2500 EP True Parkway – Subdivide the property into 16 lots and 7 outlots for construction of a townhome development – Jerry’s Homes Inc. – PP-003072-2016/SP-003073-2016

Requested Action: Approval of Preliminary Plat and Site Plan

Case Advisor: J. Bradley Munford 

Applicant’s Request: Jay Cowan with Jerry’s Homes Inc. is requesting approval of a 2.33 acre Preliminary Plat to create a 16 lots and 7 outlot for common use and storm water detention. The applicant is also seeking approval of a Site Plan to allow construction of 16 townhome units.

History: On May 19, 1988 the Comprehensive Plan and Zoning for this area was changed from M-1 Light Industrial and R-5 Multi-Family Residential to BEH II Planned Unit Development (Ordinance 846). This property was identified as Parcel B within the PUD and specifically allowed apartments, office, daycares, health clubs, government buildings, and churches. On October 10, 1989 the property was platted as Delavan Plat 1. That plat established Outlot B. On January 8, 2001 the PUD was amended for Parcel B and removed apartments as an allowed use (Ordinance 1430). On November 30, 2015 the City Council approved an Amendment to the Comprehensive Plan to change the property’s designation from Office to Medium Density Residential. During the same meeting the Council approved an amendment to the BEH II Planned Unit Development (PUD) to modify the zoning regulations to allow development of 16 attached townhome units (Ordinance 2126).

City Council Subcommittee: This item will be presented at the September 5, 2016 Development and Planning City Council Subcommittee as an informational item. This will be prior to City Council meeting that evening.

Staff Review and Comment: This request was distributed to other City departments and other agencies for their review and comment. There are no outstanding issues. Staff would note the following:

Architecture: The applicant has worked with staff to create townhome building designs that fit within the architectural context of the neighborhood. The buildings feature 360 degree architecture, a creative mix of durable exterior material and colors and articulations of the roof line and facades that break up the building mass.

Comprehensive Plan Consistency: The project has been reviewed for consistency with the Comprehensive Plan. Based upon that review, a finding has been made that the proposed project is consistent with the Comprehensive Plan in that the project is consistent with all of the goals and policies of the Comprehensive Plan and the land use map of the Comprehensive Plan.

Findings: This proposed project was distributed to various city departments for review and comment. Based upon that review, the following findings have been made on the proposed project:

1. The proposed development and use is consistent with the West Des Moines Comprehensive Plan in that the project has been reviewed for consistency with the Comprehensive Plan. Based upon that review, a finding has been made that the proposed project is consistent with the Comprehensive Plan in that the project is consistent with all of the goals and policies of the Comprehensive Plan.
2. The proposed development and use does assure compatibility of property uses within the zone and general area in that this project was reviewed by various City Departments for compliance with the Zoning Ordinance.

3. All applicable standards and conditions have been imposed which protects the public health, safety and welfare in that this project was reviewed by various City Departments and public agencies for compliance with the various state and local regulations. Based upon that review a finding is made that the project has been adequately conditioned to protect the health, welfare and safety of the community.
4. There is adequate on-site and off-site public infrastructure to support the proposed development in that this project was reviewed by various public agencies and City Departments and public utilities to ensure that either the petitioner will construct or the project has been conditioned to construct adequate public infrastructure to serve the development.
5. The proposed development and use has met the requirements contained in the City Code in that this project was reviewed by various City Departments and the project has complied with or has been conditioned to comply with all City Code requirements.
6. The proposed development and use is in keeping with the scale and nature of the surrounding neighborhood in that the proposed project is consistent with the zoning designation and Comprehensive Plan which designates this site as suitable for development such as that proposed by this project.

Staff Recommendation And Conditions Of Approval: Based upon the preceding review and a finding of consistency with the goals and policies of the Comprehensive Plan, staff recommends the Plan and Zoning Commission adopt a resolution recommending the City Council approve the Preliminary Plat to create 16 lots and 7 outlots and approve the Site Plan to allow the development of a 16 lot townhome development and associated site improvements, subject to the applicant meeting all City Codes.

Property Owner/Applicant:

Jay Cowan
 Jerry's Homes Inc.
 10430 New York Avenue Suite C
 Urbandale, IA 50322
Jayc@jerryshomes.com

Applicant's Representative:

Melissa Hills
 Civil Engineering Consultants Inc.
 2400 86th Street Suite 12
 Urbandale, IA 50322
Hills@ceclac.com

ATTACHMENTS:

- Attachment A - Plan and Zoning Commission Resolution
- Exhibit A - Conditions of Approval
- Attachment B - Location Map
- Attachment C - Preliminary Plat / Site Plan
- Attachment D - Architecture concepts

RESOLUTION NO.

A RESOLUTION OF THE PLAN AND ZONING COMMISSION OF THE CITY OF WEST DES MOINES, RECOMMENDING TO THE CITY COUNCIL THAT IT APPROVE A PRELIMINARY PLAT TO SUBDIVIDE THE PROPERTY INTO 16 LOTS AND 7 OUTLOTS AND APPROVE A SITE PLAN FOR THE CONSTRUCTION OF 16 TOWNHOMES

WHEREAS, pursuant to the provisions of Title 10, Chapter 1 et seq, of the West Des Moines Municipal Code, the applicant, Jerry's Homes Inc, has requested approval for a Preliminary Plat (PP-003072-2016) for that approximately 2.33 acre site located at 2500 EP True Parkway to subdivide the property into 16 lots and 7 outlots for common use and storm water detention.

WHEREAS, pursuant to the provisions of Title 9, Chapter 1 et seq, of the West Des Moines Municipal Code, the applicant, Jerry's Homes Inc. has requested approval of a Site Plan (SP-003073-2016) for that approximately 2.33 acre site located at 2500 EP True Parkway to allow the construction of 16 townhomes and associated site improvements;

WHEREAS, studies and investigations were made, and staff reports and recommendations were submitted which is made a part of this record and herein incorporated by reference;

WHEREAS, on August 29, 2016, this Commission held a duly-noticed public meeting to consider the applications for a Preliminary Plat (PP-003072-2016) and Site Plan (SP-003073-2016);

NOW, THEREFORE, THE PLAN AND ZONING COMMISSION OF THE CITY OF WEST DES MOINES DOES RESOLVE AS FOLLOWS:

SECTION 1. The findings, for approval, in the staff report, dated August 29, 2016, or as amended orally at the Plan and Zoning Commission meeting of August 29, 2016, are adopted.

SECTION 2. Preliminary Plat (PP-003072-2016) and Site Plan (SP-003073-2016) to subdivide the property into 16 lots and allow construction of 16 townhomes are recommended to the City Council for approval, subject to compliance with all the conditions in the staff report, dated August 29, 2016, including conditions added at the meeting, and attached hereto as Exhibit "A". Violation of any such conditions shall be grounds for revocation of the permit, as well as any other remedy which is available to the City.

PASSED AND ADOPTED on August 29, 2016.

Craig Erickson, Chairperson
Plan and Zoning Commission

ATTEST:

Recording Secretary

I HEREBY CERTIFY that the foregoing resolution was duly adopted by the Plan and Zoning Commission of the City of West Des Moines, Iowa, at a regular meeting held on August 29, 2016, by the following vote:

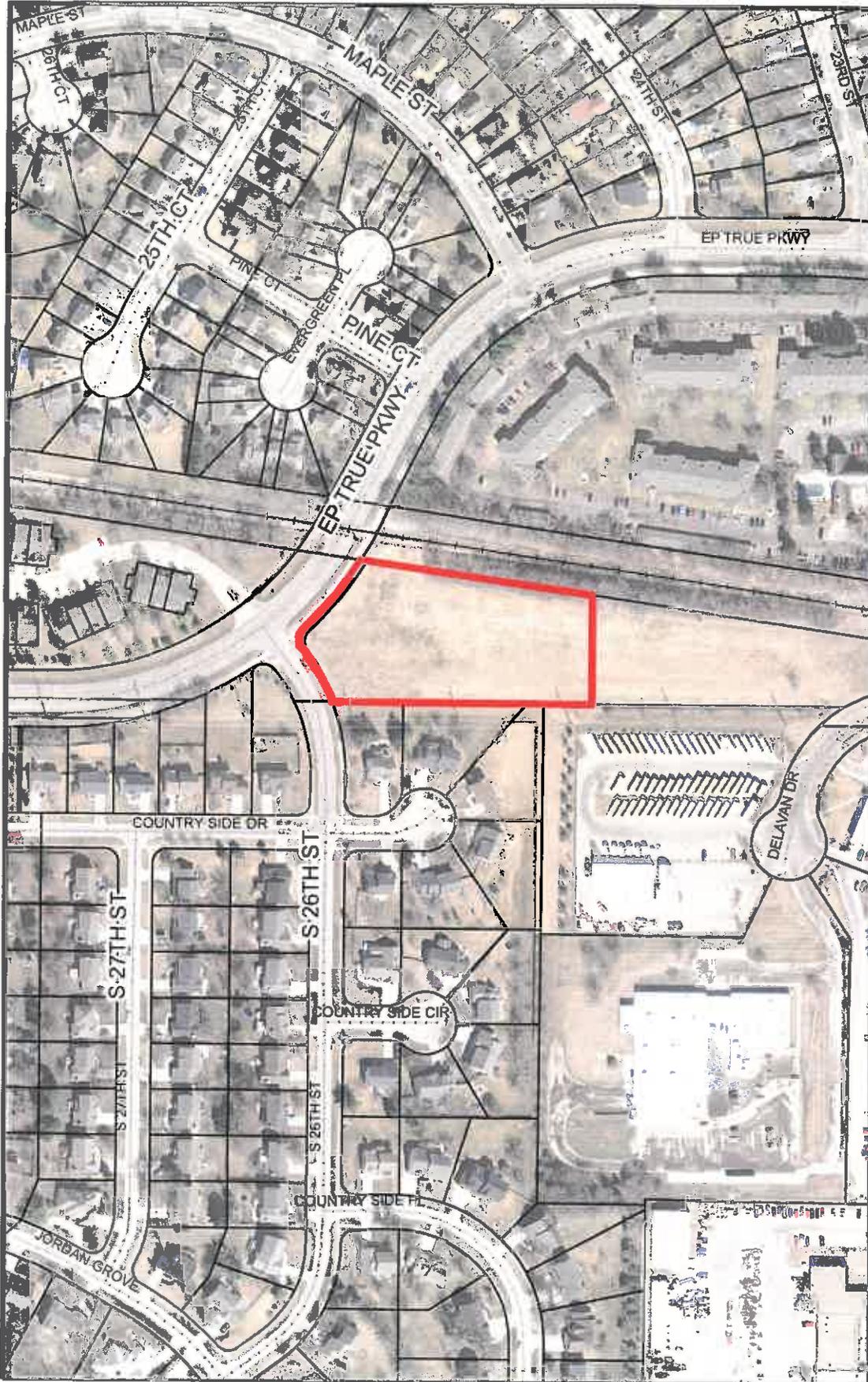
- AYES:
- NAYS:
- ABSTENTIONS:
- ABSENT:

ATTEST:

Recording Secretary

**EXHIBIT A
CONDITIONS OF APPROVAL**

1. None



**Delavan
Townhomes**



NOT TO SCALE

DELAVAN TOWNHOMES PLAT 1

2500 EP TRUE PARKWAY, WEST DES MOINES, IOWA



DRAWING INDEX

SHEET #	SHEET TITLE
1	COVER
2	DIMENSION PLAN
3	UTILITY PLAN
4	GRADING PLAN
5	LANDSCAPE PLAN

UTILITIES
 SANITARY SEWER: CITY OF WEST DES MOINES, WEST DES MOINES PUBLIC WORKS
 WATER: WEST DES MOINES WATER WORKS

AREAS:

BUILDINGS	= 15360 S.F.	128
PAVING	= 32,472 S.F.	268
GRASS	= 10,881 S.F.	90
TOTAL		486

SETBACKS:
 MULTI-FAMILY PARCELS SHALL HAVE 25' MINIMUM PERIMETER SETBACK EXCEPT ALONG THOROUGHFARES WHICH SHALL HAVE 50' SETBACK.

GENERAL NOTES:
 ALL CONSTRUCTION, PUBLIC OR PRIVATE, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE WEST DES MOINES STANDARD CONSTRUCTION SPECIFICATIONS FOR SUBDIVISIONS.
 1. ONE WEEK PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL NOTIFY:
 A. CITY OF WEST DES MOINES, BRIAN HEHEBATH 222-3470
 B. WEST DES MOINES WATER WORKS 282-222-3465
 C. CIVIL ENGINEERS CONSULTANTS, INC. 515-276-4884
 D. WEST DES MOINES PUBLIC WORKS 282-222-3465
 2. THE LOCATION OF EXISTING FACILITIES AND APPURTENANCES SHOWN ON THIS PLAN ARE BASED ON AVAILABLE INFORMATION WITHOUT UNCOVERING AND MEASURING TO DETERMINE EXACT FACILITIES LOCATIONS. CIVIL ENGINEERS CONSULTANTS, INC. DOES NOT GUARANTEE THE LOCATION OF EXISTING FACILITIES AS SHOWN, OR THAT ALL EXISTING FACILITIES ARE SHOWN. IT IS CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL PUBLIC AND PRIVATE UTILITY PROVIDERS SERVING THIS AREA, AND IOWA ONE CALL, TO DETERMINE THE EXTENT AND PRECISE LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION BEGINS.
 3. GEOTECHNICAL REPORT FOR THIS PROJECT CAN BE OBTAINED BY CONTACTING THE OWNER AND ASKING FOR GEOTECHNICAL EXPLORATION REPORT.
 4. IF THERE IS A DISCREPANCY BETWEEN THE DETAILED PLANS AND QUANTITIES SUMMARY, THE DETAILED PLANS SHALL GOVERN.
 5. THE CONTRACTOR SHALL VERIFY THE LOCATION AND PROTECT UTILITIES AND STRUCTURES, DAMAGE TO UTILITIES AND STRUCTURES SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER OF THE UTILITIES.
 6. THE CONTRACTOR SHALL BACKFILL AROUND UNDERGROUND UTILITIES IN 6-INCH LAYERS TO 95% STANDARD PROCTOR DENSITY.
 7. IT SHALL BE NOTED THAT PROVISIONS FOR SHORING AND BRACING OF DEEP EXCAVATIONS ARE REQUIRED BY O.S.H.A.
 8. THE CONTRACTOR SHALL RECONNECT ALL FIELD TILE INTERCEPTED DURING CONSTRUCTION.
 9. ALL CONNECTIONS TO EXISTING PUBLIC STRUCTURES NEED TO BE CORE DRILLED.
 10. AT LEAST ONE WEEK PRIOR TO ANY CONSTRUCTION WITHIN PUBLIC ROW/EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, THE CONTRACTOR SHALL CONTACT THE HDH CONSTRUCTION DIVISION-BRIAN HEHEBATH (222-3470) TO OBTAIN APPLICABLE CITY PERMITS THAT MAY BE NECESSARY.
 11. ALL CONSTRUCTION WITHIN PUBLIC ROW/EASEMENTS, AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, SHALL COMPLY WITH THE WEST DES MOINES STANDARD CONSTRUCTION SPECIFICATIONS FOR SUBDIVISIONS AND THE WEST DES MOINES METROPOLITAN DESIGN STANDARDS MANUAL WITH WEST DES MOINES ADDENDA.
 12. ALL PUBLIC SEWERS CONSTRUCTED AS PART OF THIS PLAT WILL NEED TO BE TELEVIEWED BY THE CITY OF WEST DES MOINES AS PART OF THE FINAL INSPECTION. CONTACT THE PUBLIC WORKS DEPARTMENT (NOW HEHEBATH 222-3465) TO SCHEDULE TELEVIEWING. PROVIDE A MINIMUM OF 48 HOURS NOTICE.
 13. TRAFFIC CONTROL SHALL BE PER MUTCD SPECS.
 14. COORDINATE STAGING AND TRAFFIC CONTROL WITH HDH EMERGENCY SERVICES.
 15. TRUNCATED DOWNS MUST BE SUBMITTED TO CITY OF HDH PUBLIC WORKS FOR APPROVAL A MINIMUM OF 48 HOURS IN ADVANCE OF CLOSURE.
 16. IF ADDITIONAL PAVEMENT REMOVAL IS REQUIRED OTHER THAN A STANDARD BOX OUT, FULL PANEL REMOVAL WILL BE REQUIRED. NO HALF PANEL REMOVAL IS ALLOWED.
 17. CONTRACTOR SHALL COORDINATE WITH OTHER PROJECTS IN THE AREA.
 18. ALL DIMENSIONS ARE TO BACK OF CURB, OUTSIDE OF BUILDING WALL, AND TO PROPERTY LINES.
 19. ALL DEBRIS SPILLED ON CITY ROW, AND ADJOINING PROPERTY SHALL BE REMOVED BY OWNER/CONTRACTOR IN A TIMELY FASHION.
 20. VERIFY COORDINATES AND BUILDING CORNERS WITH ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION.
 21. ALL UNITS ARE SLAB ON GRADE CONSTRUCTION (NO BASEMENTS).
 22. LOTS 11A - 11B SHALL BE TIED TO THE ADJACENT NUMBERED LOT. THESE LOTS ARE FOR STORM WATER DETENTION, STORM SEWER 1' OVERLAND FLOWAGE EASEMENT AND ARE NOT BUILDABLE LOTS. TO BE MAINTAINED BY THE HOME OWNERS ASSOCIATION.
 23. LOT 11A SHALL BE TIED TO THE GRADING TO THIS LOT IS DEDICATED AS A PUBLIC ACCESS EASEMENT AND IS NOT BUILDABLE. TO BE MAINTAINED BY HOME OWNERS ASSOCIATION.
 24. REFER TO PUBLIC IMPROVEMENTS DRAWINGS FOR THE CONSTRUCTION OF SANITARY SEWER, HANDICAP RAMPS AND SIDEWALK AND TRAIL CONNECTIONS.

HORIZONTAL CONTROL
 Point Name: NDM-HZ 46 Network Point ID: 2006
 Designation: West Des Moines GPS Control Pt. - NDM-HZ 46
 Northing: 571217.206ft Easting: 151036.171ft
 Orthometric Height: 414.016ft Ellipsoid Height: 812.086ft Geoid04
 Mapping Angle: 0°10'08" Combination Scale Factor: 0.999930058
 Monument Type: 3" x 1/2" long Benchmark Top Security Rod monument with a 2-1/2" dia. domed survey cap and permanent magnet encased in a white PVC pipe with a NGS style alum. access cover.
 Point Name: NDM-EM-126 Network Point ID: 126
 Designation: West Des Moines Vertical Control Pt. 126 (set by others)
 Northing: 571841.258ft Easting: 155373.566ft
 Orthometric Height: 410.225ft Ellipsoid Height: 808.488ft Geoid04
 Mapping Angle: 0°11'05" Combination Scale Factor: 0.999930428
 Monument Type: #5 rebar encased in a 6" dia. x 48" minimum depth concrete cylinder with a 1-1/2" dia. aluminum cap offset to the top of the rebar.

SANITARY SEWER NOTES:

- ALL SANITARY SEWER SERVICES SHALL BE 6" SDR 25.3. ALL SERVICES SHALL BE EXTENDED TO WITHIN 10 FEET OF THE BUILDING FOUNDATION.
- THE UTILITY CONTRACTOR SHALL COORDINATE BUILDING SERVICE CONNECTIONS WITH THE BUILDING MECHANICAL CONTRACTOR.
- ALL 6" SANITARY SEWER SHALL BE PVC TRUSS PIPE WITH GLASS. PROVIDE BEDDING IN CONFORMANCE WITH WEST DES MOINES STANDARD SPECIFICATIONS FOR SUBDIVISIONS.
- ALL MANHOLES WITHIN PAVEMENT SHALL HAVE TYPE 'B' ADJUSTABLE CASTINGS AND INTERNAL CHIMNEY SEALS. ALL MANHOLES NOT WITHIN PAVEMENT SHALL HAVE TYPE 'A' NON-ADJUSTABLE CASTINGS AND EXTERNAL CHIMNEY SEALS.
- ALL SEWERS SHALL BE CONSTRUCTED UNDER PLUMBING PERMIT.
- ALL CONNECTIONS TO EXISTING PUBLIC STRUCTURES NEED TO BE CORE DRILLED.
- ALL PUBLIC SEWER CONSTRUCTION AS PART OF THIS PLAT SHALL BE TELEVIEWED BY THE CITY OF WEST DES MOINES AS PART OF THE FINAL INSPECTION. NOTIFY IRON NEESE IN PUBLIC WORKS AT 222-3460. PROVIDE MINIMUM 48 HOUR NOTICE.
- EXISTING PIPES WITH NEW SERVICES INSTALLED NEED TO BE TELEVIEWED AND RETESTED AS PART OF THE FINAL INSPECTION.

STORM SEWER NOTES:

- ALL STORM SEWER IS PRIVATE UNLESS NOTED OTHERWISE.
- ALL INTAKES WITHIN PAVED AREAS SHALL HAVE VANE GRATES.
- WHERE THE STORM SEWER CROSSED OVER OR LESS THAN 10 INCHES BELOW A WATER MAIN, LOCATE ONE FULL LENGTH OF SEWER PIPE OF WATER MAIN MATERIAL OR REINFORCE CONCRETE PIPE (RCP) WITH FLEXIBLE O-RING GASKET JOINTS ARE AS FAR AS POSSIBLE FROM THE WATER MAIN.
- ALL STORM SEWER CONSTRUCTION SHALL BE BUILT IN ACCORDANCE WITH WEST DES MOINES STANDARD CONSTRUCTION SPECIFICATIONS FOR SUBDIVISIONS.
- ALL F.S.S. TO BE BUILT IN ACCORDANCE WITH THE 'CITY OF WEST DES MOINES STANDARD SPECIFICATIONS FOR SUBDIVISIONS' INCLUDING FOOTINGS, THE LAST THREE SECTIONS AND APRON GUARDS.
- ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION SHALL BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM.
- CASTING TYPES FOR 18-INCH RCP AREA INTAKES ARE PER SDAS SPECIFICATIONS.
- ALL PRIVATE INFRASTRUCTURE SHALL BE OWNED & MAINTAINED BY THE HOMEOWNERS ASSOCIATION.

PAVING NOTES:

- PROVIDE CURB DROPS FOR SIDEWALKS AT INTERSECTIONS.
- IF ADDITIONAL PAVEMENT REMOVAL IS REQUIRED OTHER THAN A STANDARD BOX OUT, FULL PANEL REMOVAL WILL BE REQUIRED. NO HALF PANEL REMOVAL WILL BE ALLOWED.
- ALL PAVING SHALL BE 6-INCH NON-REINFORCED P.C.C. WITH 6-INCH CURB. A 2" ROLL CURB SHALL BE USED WHERE PAVING IS ADJACENT TO THE TOYHOMER DRIVEWAYS. PAVEMENT REMOVED AND REPLACED ON S. 26TH ST SHALL BE REPLACED TO EXISTING PAVEMENT DEPTH USING 6-INCH REINFORCED P.C.C.
- ALL PEDESTRIAN RAMPS TO BE INSTALLED AS A PART OF THIS PROJECT SHALL HAVE APPROPRIATE DETECTABLE WALKWAYS (TRUNCATED DOWNS). USE RED/CLAY COLORED FIBERGLASS DOWNS.
- ALL REINFORCED STEEL SHALL BE EPOXY COATED.
- COORDINATE STAGING AND TRAFFIC CONTROL WITH HDH EMERGENCY SERVICES.
- LANE CLOSURE NOTICES MUST BE SUBMITTED TO CITY OF HDH PUBLIC WORKS FOR APPROVAL A MINIMUM OF 48 HOURS IN ADVANCE OF CLOSURE.
- USE APPROPRIATE MEASURES TO PREVENT SLURRY FROM SANKUT OPERATIONS FROM ENTERING STORM SEWERS & OPEN DRAINAGEWAYS.
- PROVIDE 2' BOXOUT AROUND ALL INTAKES AND MANHOLES WITHIN PAVED AREAS.
- THE ACCESS DRIVE SHALL BE CONSTRUCTED WITH 6" NON-REINFORCED P.C.C. OVER A 12" SUBGRADE, COMPACTED IN TWO 6" LIFTS.

WATER NOTES:

- CONTRACTOR IS REQUIRED TO CONTACT WATER WORKS PLANT AT 515-222-3465 PRIOR TO ANY WORK IN THE VICINITY OF THE 20" WATER MAIN PIPE. PROVIDE NOTICE A MINIMUM OF 24 HOURS PRIOR TO ANY EXCAVATION NEAR THE PIPE.
- ALL WATER MAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH 'STANDARD CONSTRUCTION SPECIFICATIONS, WEST DES MOINES WATER WORKS, WEST DES MOINES, IOWA.'
- PIPE MATERIAL: 8-INCH & 10-INCH, DUCTILE IRON OR ANHSA C900 CLASS ISO 2/C W/ TRACER WIRE. 16-INCH, DUCTILE IRON OR ANHSA C905 CLASS ISO 2/C W/ TRACER WIRE. TRACER WIRE, NO. 10 THIN STRANDED COPPER TRACER WIRE UNDER PIPE, BRING TRACER WIRE TO SURFACE AT FIRE HYDRANTS, VALVES, AND NEW DEAD-ENDS. CONNECT NEW TRACER WIRE TO EXISTING TRACER WIRE WITH WATER-PROOF SPLICER.
- HYDRANTS SHALL BE SET 9 1/2 FEET FROM WATER MAIN EXCEPT WHERE CONFLICTS WITH SIDEWALKS.
- WATER MAIN TO HAVE 5.0 FEET BURY TYPICAL.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLIANCE WITH THE WEST DES MOINES WATER WORKS AND THE CITY'S CROSS CONNECTION CONTROL/CONTAINMENT PROVISION.
- ONE WEEK PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT WEST DES MOINES WATER WORKS AT 515-222-3465.
- STATIC WATER PRESSURES MAY EXCEED 80PSI. PRESSURE REDUCING VALVES WITH EXPANSION TANKS MAY BE DESIRED BY THE END USER.
- WATER MAIN TEES (W/M & W/M) WILL HAVE TO BE COMPLETED UNDER PRESSURE TO MAINTAIN WATER SERVICE TO OTHER CUSTOMERS. CONTRACTOR TO COMPLETE ALL WORK EXCEPT FOR THE SIDE CUT ITSELF, WHICH WILL BE PERFORMED BY HDH/MH CREWS. CONTRACTOR TO PROVIDE ALL MATERIALS.
- PER IDNR GUIDELINES, WATER MAIN SHALL BE SEPARATED FROM GRAVITY SANITARY SEWER AND STORM SEWER MAINS BY A HORIZONTAL DISTANCE OF AT LEAST 10 FEET. WATER MAINS CROSSING SANITARY OR STORM SEWERS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER MAIN.

GRADING & EROSION CONTROL:

- ALL GRADING & EROSION CONTROL NOTES SHOWN ON GRADING / SWPPP PLANS

OWNER/APPLICANT:

JERRY'S HOMES INC.
 ATTN: JAY CONAN
 10400 NEW YORK AVE. STE. C
 URANDALE, IA 50922
 PH: 515-276-4884
 E-MAIL: JAY@JERRYSHOMES.COM

PROPERTY ADDRESS:

2500 EP TRUE PARKWAY
 WEST DES MOINES, IA 50265

LAND SURVEYOR:

CIVIL ENGINEERS CONSULTANTS
 ATTN: JEFFREY A. GADDIS, PLS #8861
 2400 86TH STREET, SUITE #12
 URANDALE, IA 50922
 PHONE: 515-276-4884 EXT 21
 FAX: 515-276-7084
 EMAIL: GADDIS@CECLAG.COM

ENGINEER:

CIVIL ENGINEERS CONSULTANTS
 ATTN: MELISSA HILLS, P.E. #60225
 2400 86TH STREET, SUITE #12
 URANDALE, IA 50922
 PHONE: 515-276-4884 EXT 28
 FAX: 515-276-7084
 EMAIL: HILLS@CECLAG.COM

QUANTITIES

SANITARY SEWER
 ** REFER TO PUBLIC IMPROVEMENTS DRAWINGS **

337 L.F.	8-INCH SANITARY SEWER
3 EA.	MANHOLE
16 EA.	SERVICES

WATER MAIN

421	8-INCH WATERMAIN
2 EA.	20"x8"x20" TEE
2 EA.	HYDRANT, TEE & 6-INCH VALVE
2 EA.	8-INCH VALVE
4 EA.	8-INCH 45° BEND
2 EA.	8-INCH 11.25° BEND
16 EA.	WATER SERVICES

STORM SEWER

343 L.F.	12-INCH RCP
200 L.F.	15-INCH RCP
9 EA.	12-INCH PES
1 EA.	13-INCH FES
2 EA.	8-INCH ANIMAL GUARD
3 EA.	1'-4" MANHOLE
1 EA.	1'-4" INTAKE
2 EA.	1'-6" INTAKE

PAVING

2,472 SF.	6-INCH NON-REINFORCED P.C.C.
2,874 SF.	SUBGRADE PREP, WORK
57 L.F.	4-INCH P.C.C. PUBLIC SIDEWALK PAVING
	INCLUDING RAMP
4 EA.	TRUNCATED DOWNS (MUST BE FULL WIDTH OF WALK OR TRAIL)

SEEDING & EROSION CONTROL

QUANTITIES ARE LOCATED ON SHEET #4

LEGAL DESCRIPTION

LOT 2, DELAVAN PLAT 3, AN OFFICIAL PLAT RECORDED IN BOOK 1608, PAGE 367-376 AT THE POLK COUNTY RECORDER'S OFFICE, CITY OF WEST DES MOINES, POLK COUNTY, IOWA, CONTAINS 2.24 ACRES MORE OR LESS.

FLOOD ZONE DESIGNATION

THE DESCRIBED PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION 'X' BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 102230010C REVISED ON FEBRUARY 16, 2006.

LAND AREA

10,881 SQUARE FEET
 2.50 ACRES

COMPREHENSIVE PLAN LAND USE

MEDIUM DENSITY RESIDENTIAL - OUTLOT 'B' & LOT 1 (EXISTING & PROPOSED LOT 1)
 LIGHT INDUSTRIAL - OUTLOT 'A' & LOT 2 (EXISTING & PROPOSED LOT 2)

ZONING

DEM 1 FUD (M) - BOOK 6657, PAGE 934
 MEDIUM DENSITY RESIDENTIAL (PROPOSED LOT 1)
 LIGHT INDUSTRIAL (PROPOSED LOT 2)

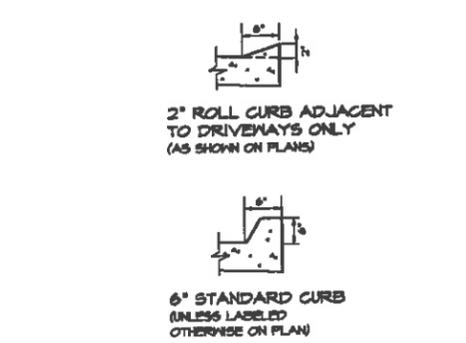
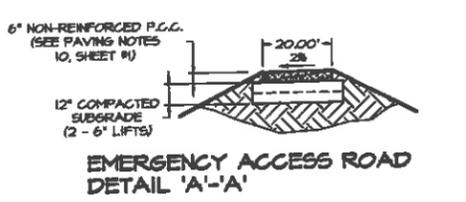
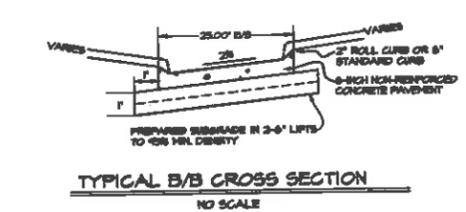
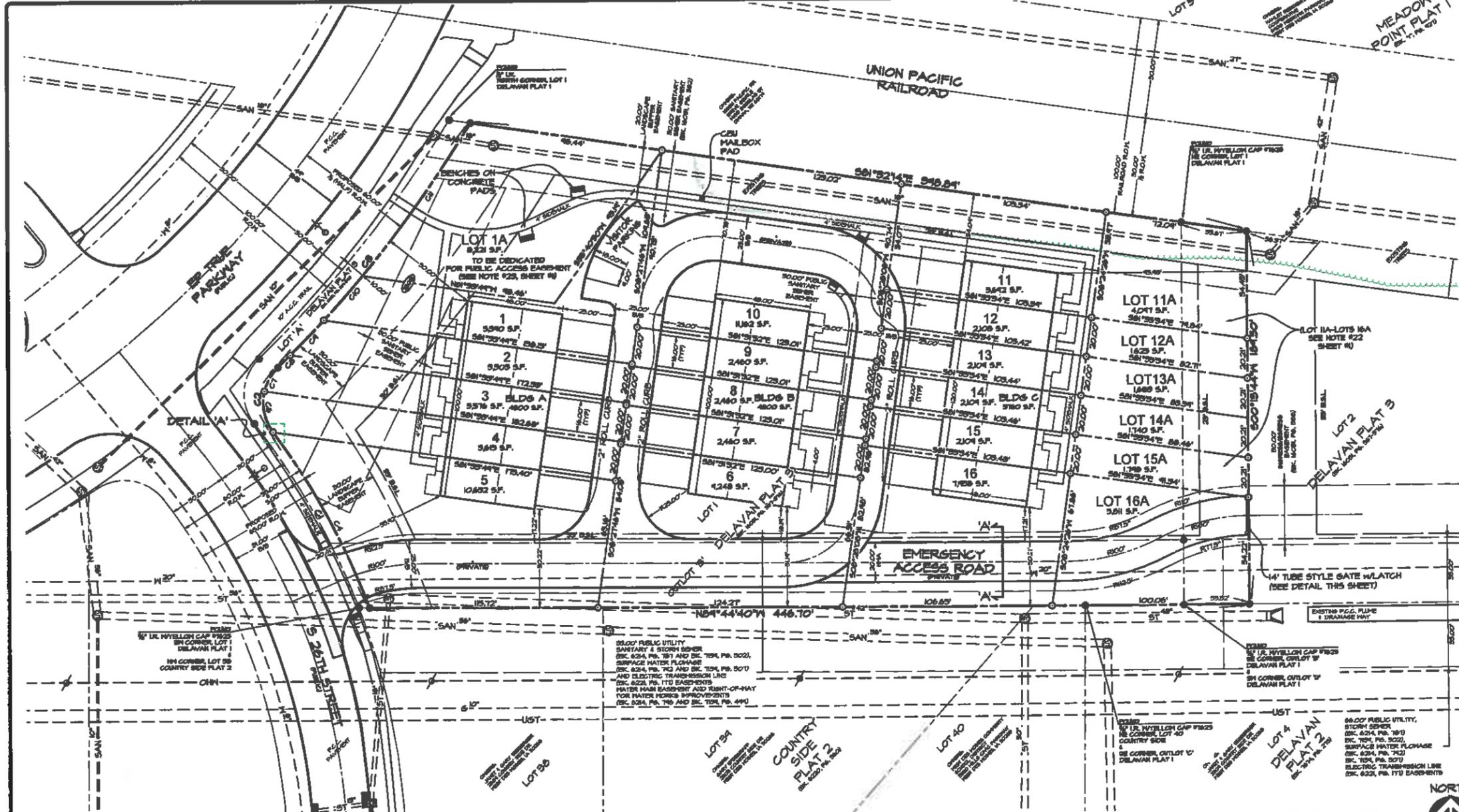
BENCHMARK

WEST DES MOINES BENCHMARK #20
 SOUTHWEST CORNER OF GRAND AVENUE AND EP. TRUE PARKWAY, 10 FEET WEST OF BACK OF WALK AND 17 FEET SOUTH OF TRAFFIC SIGNAL POLE AT THE SOUTHWEST CORNER OF EP. TRUE PARKWAY AND GRAND AVENUE.

WEST DES MOINES BENCHMARK #21
 SOUTHWEST CORNER OF EP. TRUE AND S. 48TH STREET, 4.5 FEET SOUTH OF THE EAST-NORTH BACK OF WALK AND 4.5 FEET WEST OF THE NORTH SOUTH BACK OF WALK.

GENERAL LEGEND

---	PROPOSED PLAT BOUNDARY	---	EXISTING LOT LINE
---	SECTION LINE	○	SANITARY/STORM MANHOLE
---	LOT LINE	○	WATER VALVE
---	CENTERLINE	○	FIRE HYDRANT
---	EASEMENT LINE	○	STORM SEWER SINGLE INTAKE
---	PLANNED END SECTION	○	STORM SEWER DOUBLE INTAKE
---	TYPE SM-301 STORM INTAKE	○	STORM SEWER ROUND INTAKE
---	TYPE SM-302 STORM INTAKE	○	PLANNED END SECTION
---	TYPE SM-303 STORM INTAKE	○	DECIDUOUS TREE
---	TYPE SM-304 STORM INTAKE	○	CONIFEROUS TREE
---	TYPE SM-305 STORM INTAKE	○	SHRUB
---	TYPE SM-306 STORM INTAKE	○	POWER POLE
---	TYPE SM-307 STORM INTAKE	○	STREET LIGHT
---	TYPE SM-308 STORM INTAKE	○	BUY ANCHOR
---	TYPE SM-309 STORM INTAKE	○	ELECTRIC TRANSFORMER
---	TYPE SM-310 STORM INTAKE	○	GAS METER
---	TYPE SM-311 STORM INTAKE	○	TELEPHONE RISER
---	TYPE SM-312 STORM INTAKE	○	SIGN
---	TYPE SM-313 STORM INTAKE	○	UNDERGROUND TELEVISION
---	TYPE SM-314 STORM INTAKE	○	UNDERGROUND ELECTRIC
---	TYPE SM-315 STORM INTAKE	○	UNDERGROUND GAS
---	TYPE SM-316 STORM INTAKE	○	UNDERGROUND FIBER OPTIC
---	TYPE SM-317 STORM INTAKE	○	UNDERGROUND TELEPHONE
---	TYPE SM-318 STORM INTAKE	○	OVERHEAD ELECTRIC
---	TYPE SM-319 STORM INTAKE	○	SANITARY SEWER WITH SIZE
---	TYPE SM-320 STORM INTAKE	○	STORM SEWER WITH SIZE
---	TYPE SM-321 STORM INTAKE	○	WATER MAIN WITH SIZE
---	TYPE SM-322 STORM INTAKE	○	EXISTING CONTOUR
---	TYPE SM-323 STORM INTAKE	○	TREELINE
---	TYPE SM-324 STORM INTAKE	○	B.S.L. BUILDING SETBACK LINE
---	TYPE SM-325 STORM INTAKE	○	P.U.E. PUBLIC UTILITY EASEMENT
---	TYPE SM-326 STORM INTAKE	○	M.O.E. MINIMUM OPENING ELEVATION
---	TYPE SM-327 STORM INTAKE	○	
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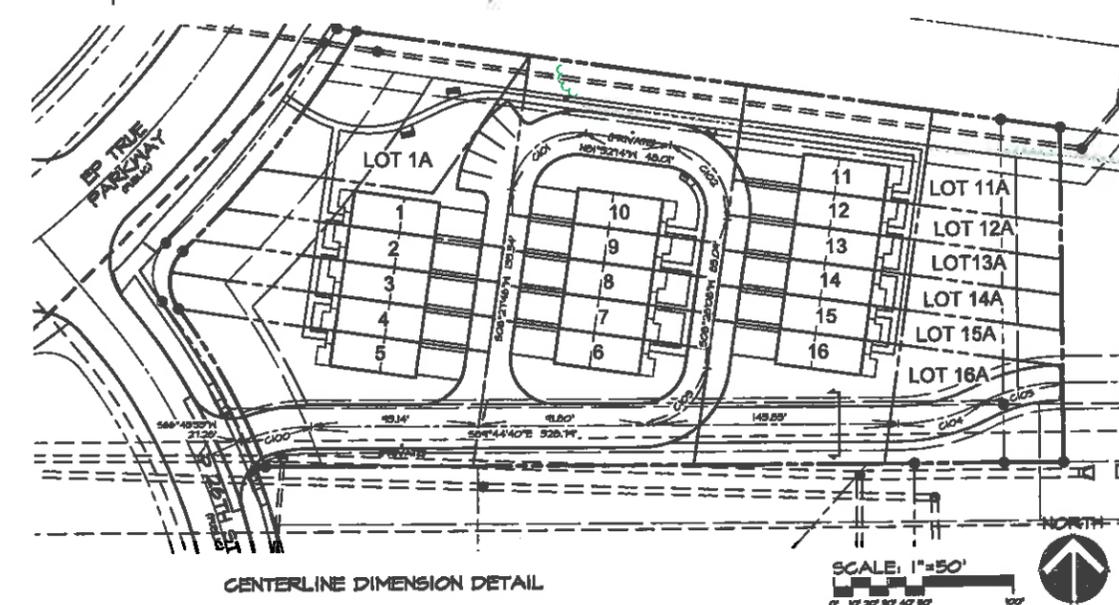


CURVE DATA

CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD	CH BEARING
C1	8°49'15"	572.50'	102.56'	51.51'	102.04'	S28°46'56"E
C2	81°31'55"	25.00'	55.12'	21.88'	52.76'	S04°48'45"W
C3	14°21'08"	652.46'	59.53'	74.54'	55.91'	S38°52'10"W
C4	8°42'54"	572.50'	102.11'	51.55'	101.74'	S28°52'27"E
C5	0°02'14"	572.50'	0.23'	0.13'	0.23'	S58°08'05"E
C6	49°48'03"	25.00'	21.75'	11.62'	21.25'	S11°31'12"E
C7	53°05'52"	25.00'	15.44'	7.61'	15.81'	S24°40'47"W
C8	0°48'24"	652.46'	8.41'	4.48'	8.41'	S48°18'31"W
C9	2°18'12"	652.46'	24.55'	12.28'	24.32'	S48°47'45"W
C10	2°41'44"	652.46'	24.78'	14.54'	24.78'	S41°20'51"W

CENTERLINE CURVE DATA

CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD	CH BEARING
C100	23°31'21"	100.00'	41.08'	30.82'	40.11'	S78°24'57"W
C101	40°00'00"	57.50'	58.40'	51.50'	55.05'	S55°27'46"W
C102	40°00'25"	57.50'	58.41'	51.50'	55.04'	N58°52'08"W
C103	81°41'12"	57.50'	59.53'	52.48'	44.02'	N41°24'44"E
C104	21°25'20"	100.00'	41.88'	34.40'	41.41'	N76°52'40"E
C105	21°25'44"	100.00'	41.81'	34.57'	41.56'	S76°31'52"W



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DATE	COMMENTS
08-22-2016	
08-04-2016	
01-28-2016	
04-23-2016	

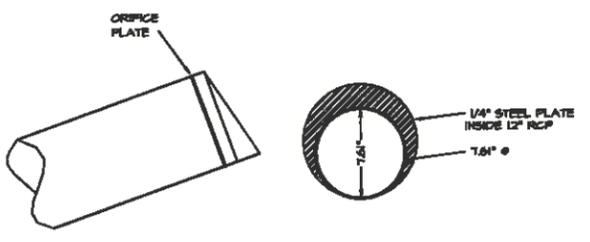
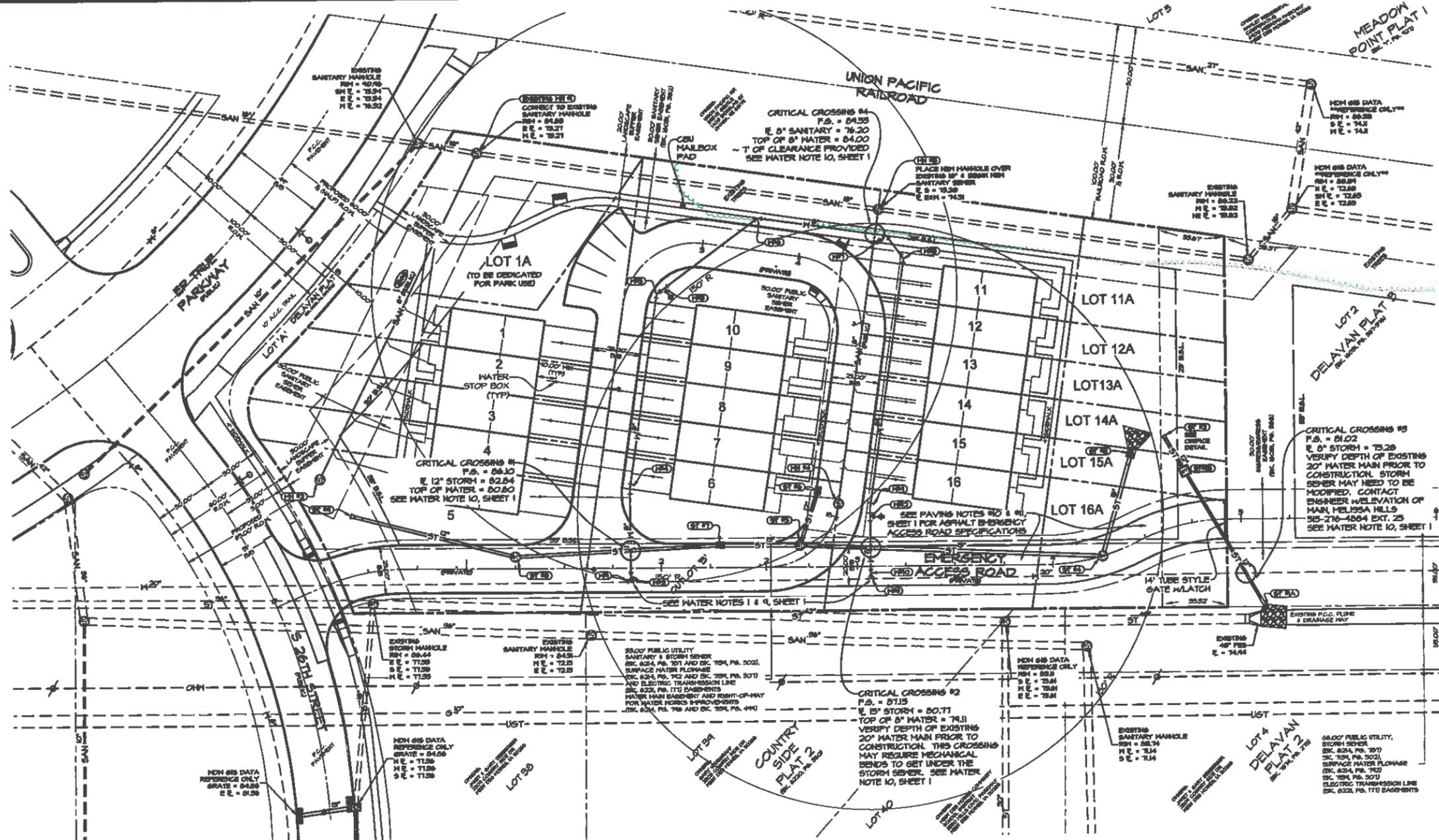
DATE OF SURVEY: 01-22-2016
DESIGNED BY: MHI
DRAWN BY: CK

DELAVAN TOWNHOMES PLAT 1
2500 EP TRUE PARKWAY, WEST DES MOINES, IOWA

DIMENSION PLAN

SHEET
2
OF
5

E-1463



ORIFICE PLATE DETAIL - ST#2
 PLACE RESTRICTOR PLATE IN FIRST SECTION OF THE PIPE DOWNSTREAM FROM THE EXISTING 12" INLET P.F.S.

SANITARY STRUCTURE TABLE			
NAME	LOCATION	DETAILS	
EXISTING MH #1	STA. 0+00.00, 0.00' E.	RIM = 84.88 IN S = 78.00 E. ELEV = 78.27	
MH #2 SANITARY MANHOLE W/TYPE 'W' CASTING	STA. 10+44.00, 0.00' E.	RIM = 86.22 OUT N = 78.22	
MH #3 SANITARY MANHOLE W/TYPE 'W' CASTING	STA. 0+00.00, 0.00' E.	RIM = 84.78 IN S = 75.20 E. ELEV = 75.55	
MH #4 SANITARY MANHOLE W/TYPE 'W' CASTING	STA. 10+51.00, 0.00' E.	RIM = 86.60 OUT N = 77.89	

SANITARY PIPE TABLE			
PIPE	DIA.	LENGTH	SLOPE
EXISTING MH #1 TO MH #2	8" PVC	105 L.F.	1.20%
MH #4 TO MH #3	8" PVC	83 L.F.	1.80%

STORM PIPE TABLE			
PIPE	DIA.	LENGTH	SLOPE
ST #2 TO ST #3	12" RCP CLASS III	21 L.F.	1.88%
ST #4 TO ST #5	12" RCP CLASS III	54 L.F.	2.00%
ST #5 TO ST #4	12" RCP CLASS III	50 L.F.	1.80%
ST #5 TO ST #6	12" RCP CLASS III	24 L.F.	2.80%
ST #7 TO ST #8	12" RCP CLASS III	4 L.F.	1.80%
ST #8 TO ST #9	12" RCP CLASS III	105 L.F.	0.87%
ST #9 TO ST #10	12" RCP CLASS III	86 L.F.	2.16%
ST #8 TO ST #9A	12" PVC	83 L.F.	1.86%

PAVEMENT INTAKE TABLE		
NAME	LOCATION	DETAILS
ST #6 TYPE 'M-A' INTAKE W/TYPE 'W' CASTING	STA. 3+21.00, 12.50' LT. E.	GRATE = 86.64 OUT S = 82.94
ST #7 TYPE 'M-A' INTAKE W/TYPE 'W' CASTING	STA. 2+50.00, 12.50' LT. E.	GRATE = 85.21 IN N = 82.20 OUT E = 82.07

STORM P.F.S. TABLE		
NAME	LOCATION	DETAILS
ST #9A 12" P.F.S.	STA. 3+21.00, 12.50' LT. E.	E = 79.08
ST #2 12" P.F.S.	STA. 4+70.00, 46.5' LT. E.	E = 76.30
ST #8 12" P.F.S.	STA. 4+57.00, 42.5' LT. E.	E = 77.00
ST #4 12" P.F.S.	STA. 0+15.00, 30.0' LT. E.	E = 84.87

STORM M-6 INTAKE TABLE	
STRUCTURE NAME	STRUCTURE DETAILS
ST #8 4' x 4' M-6 INTAKE W/TYPE 'W' CASTING	STA. 4+75.00, 28.50' LT. E. RIM = 84.53 OPEN N. E. AND W. SIDES 6.5' ELEV = 85.00 8' IN = 78.25 8' IN OUT = 79.11

MANHOLE TABLE		
NAME	LOCATION	DETAILS
ST #6 TYPE 'M-A' MANHOLE W/TYPE 'W' CASTING	STA. 4+28.00, 0.00' E.	RIM = 87.91 IN N = 78.84 OUT N = 78.04
ST #5 TYPE 'M-A' MANHOLE W/TYPE 'W' CASTING	STA. 3+75.00, 0.00' LT. E.	RIM = 86.08 IN N = 81.71 IN W = 81.42 OUT E = 81.33
ST #9 TYPE 'M-A' MANHOLE W/TYPE 'W' CASTING	STA. 10+50.00, 0.00' LT. E.	RIM = 86.69 IN N = 83.00 OUT S = 82.90

WATER STRUCTURE TABLE		
NAME	LOCATION	DETAILS
MH 20" x 120" TEE	STA. 10+42.00, 1.20' RT. E.	FG ELEV = 86.42
MV 8" INCH VALVE	STA. 10+42.00, 4.0' RT. E.	FG ELEV = 86.58
MV HYDRANT, TEE & 8" INCH VALVE	STA. 2+02.22, 142.0' LT. E.	FG ELEV = 84.47
MV 8" INCH 1.25 END	STA. 8+91.74, 16.50' LT. E.	FG ELEV = 87.12
MV 8" INCH 1.25 END	STA. 3+48.55, 14.87' LT. E.	FG ELEV = 84.41
MV 8" INCH 1.25 END	STA. 4+74.25, 16.50' RT. E.	FG ELEV = 84.74
MV 8" INCH 1.25 END	STA. 4+28.00, 5.50' RT. E.	FG ELEV = 84.26
MV 8" INCH 1.25 END	STA. 4+12.50, 8.50' RT. E.	FG ELEV = 84.07
MV 8" INCH 1.25 END	STA. 3+08.20, 16.50' RT. E.	FG ELEV = 87.11
MV 8" INCH VALVE	STA. 2+81.75, 24.0' RT. E.	FG ELEV = 87.35
MV 20" x 120" TEE	STA. 2+00.00, 9.87' RT. E.	FG ELEV = 87.57
MV HYDRANT, TEE & 8" INCH VALVE	STA. 3+08.75, 17.50' RT. E.	FG ELEV = 87.14



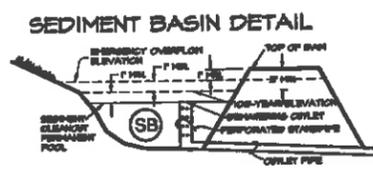
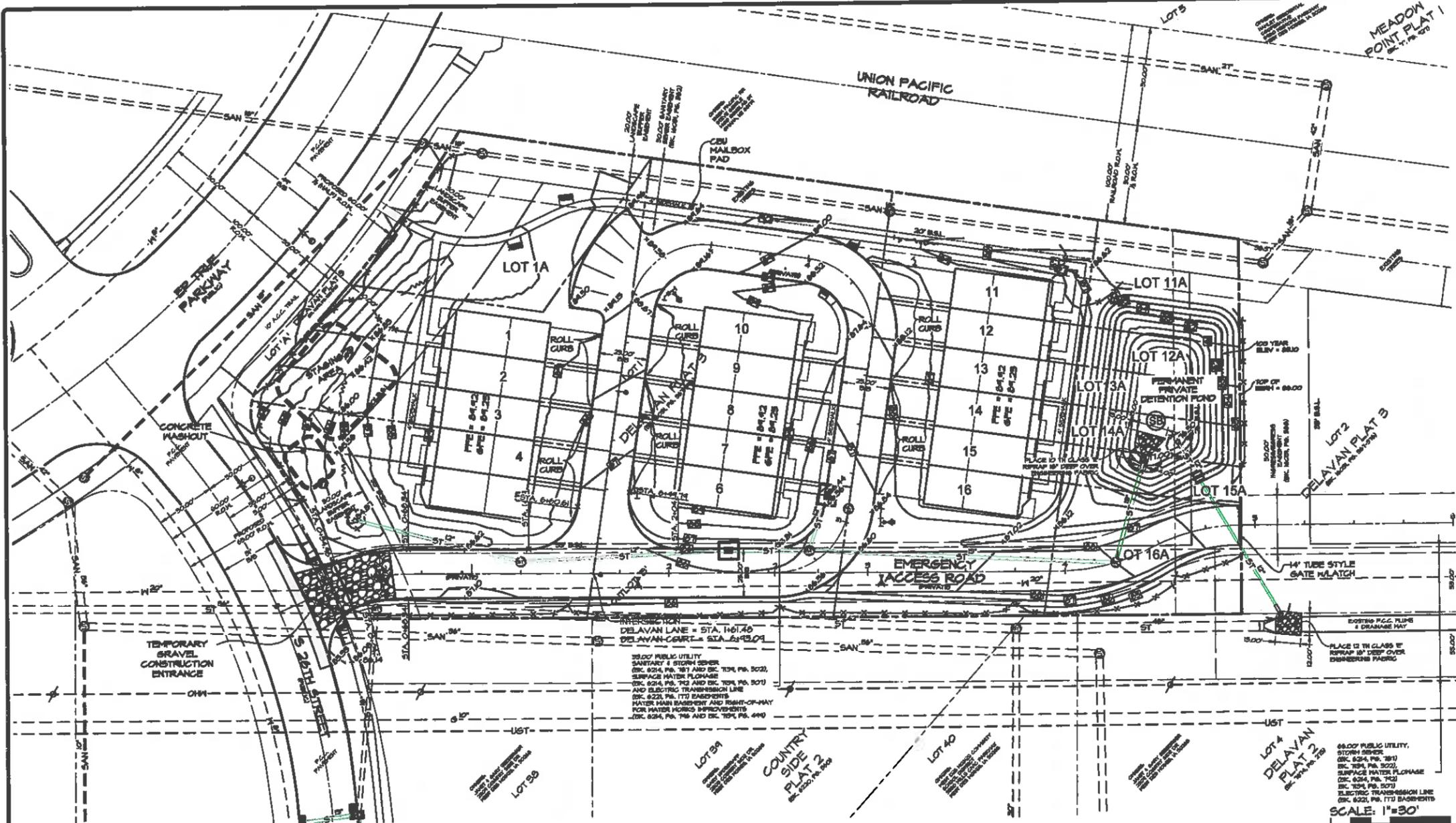
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DATE	COMMENTS
08-22-2016	
08-07-2016	
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01-22-2016	

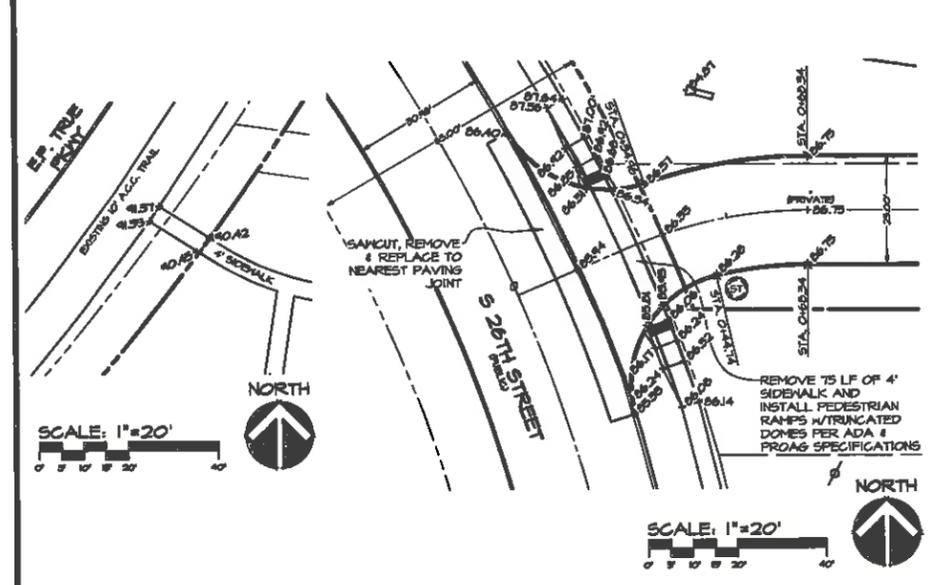
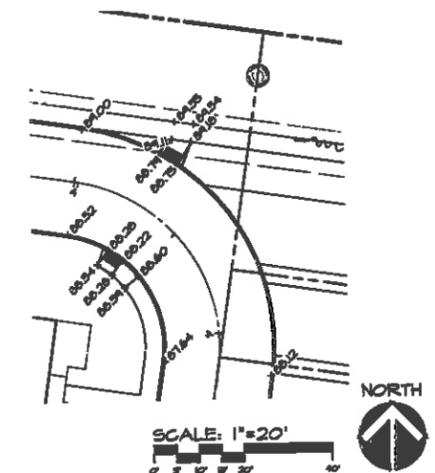
DATE OF SURVEY: 01-22-2016
 DRAWN BY: M41
 CHECKED BY: C1

DELANAY TOWNHOMES PLAT 1
 2500 EP TRUE PARKWAY, WEST DES MOINES, IOWA
 UTILITY PLAN



OVERFLOW = 80.00, 1ST STORAGE ELEV = 79.25
 TOP OF 5' REEF = 80.00
 3 ROWS OF 3 - 100' HOLES @ ELEV = 79.50

QUANTITIES
 1.2 AC SEEDING (TYPE II EROSION CONTROL MIX)
 1000 LF SALT FENCE
 2 EA. INLET FILTERS
 22 TH CLASS 1' RCP RAMP



SEEDING NOTES

1. FERTILIZER (6-6-46) SHALL BE APPLIED TO THE AREA TO BE SEEDING AT A RATE OF 650 LBS/ACRE.
2. THE AREA TO BE SEEDING SHALL BE SMOOTH, AND ALL WASHES AND GULLIES FILLED TO MEET THE DESIRED CROSS SECTION. AREAS ACCESSIBLE TO MACHINERY SHALL BE CULTIVATED TO A DEPTH OF 5". AREAS INACCESSIBLE TO MACHINERY SHALL BE CULTIVATED TO A DEPTH OF 1 1/2 INCHES.
3. THE FERTILIZER SHALL BE INCORPORATED INTO THE SOIL TO A DEPTH OF 5" WITH A MECHANICAL ROCK PICKER OR A SPRING TOOTH CULTIVATOR.
4. ON ALL AREAS ACCESSIBLE TO MACHINERY, A DROP-TYPE SEEDER ATTACHED TO A LANDSCAPE ROLLER SHALL BE USED TO SOW THE GRASS SEED.
5. ON AREAS INACCESSIBLE TO MACHINERY, A CYCLOPS SEEDER WILL BE FURNISHED. NO OTHER HAND SEEDING METHOD IS ACCEPTABLE.
6. ALL SEEDING AREAS SHALL BE MULCHED IMMEDIATELY AFTER SEEDING BY APPLYING 2 TONS OF DRY MULCH PER ACRE.
7. THE MULCH MAY CONSIST OF STRAW (OAT, WHEAT, BARLEY OR RYE), HAY, BROMSGRASS, TIMOTHY, ORCHARD GRASS, ALFALFA OR CLOVER SHALL NOT BE USED. ALL MATERIAL MUST BE FREE FROM ALL NOXIOUS WEEDS.
8. ALL SEEDING AREAS SHALL BE WATERED ARTIFICIALLY A MINIMUM OF THREE (3) TIMES A DAY FOR THE FIRST WEEK AFTER INSTALLATION, AND ONCE A DAY DURING THE SECOND AND THIRD WEEK AFTER INSTALLATION.

GRADING NOTES

1. ALL DIMENSIONS ARE TO BACK OF CURB, OUTSIDE OF BUILDING WALL, AND TO PROPERTY LINES.
2. THE LOCATIONS AND DIMENSIONS SHOWN ON THE PLANS FOR EXISTING FACILITIES ARE IN ACCORDANCE WITH AVAILABLE INFORMATION WITHOUT UNCOVERING AND MEASURING. IT IS THE RESPONSIBILITY OF THE ENGINEER DOES NOT GUARANTEE THE ACCURACY OF THIS INFORMATION OR THAT ALL EXISTING UNDERGROUND FACILITIES ARE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL PUBLIC AND/OR PRIVATE UTILITIES SERVING THE AREA TO DETERMINE THE PRESENT EXTENT AND EXACT LOCATION OF THEIR FACILITIES BEFORE BEGINNING WORK.
3. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES OR STRUCTURES AT THE SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING WORK. THE CONTRACTOR SHALL NOTIFY THE PROPER UTILITY IMMEDIATELY UPON BREAKING OR DAMAGE TO ANY UTILITY LINE OR APPURTENANCE, OR THE INTERRUPTION OF THEIR SERVICE. IF EXISTING UTILITY LINES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.
4. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF MOHAWK STANDARD SPECIFICATIONS.
5. STRIP TOPSOIL A MINIMUM OF 4-INCHES FROM ALL AREAS WHICH ARE TO BE FILLED OR CUT.
6. STOCKPILE SUFFICIENT TOPSOIL RESERVE A MINIMUM OF 4-INCHES ON UNPAVED AREAS.
7. ALL AREAS TO RECEIVE FILL TO BE BENCHED.
8. PREPARE BOTTOM OF BENCH FOR FILL BY DISCS TO A DEPTH OF 6-INCHES.
9. ALL SITE GRADING FILL SHALL BE COMPACTED TO A DENSITY THAT IS NOT LESS THAN 95% STANDARD PROCTOR.
10. THE MOISTURE CONTENT OF THE FILL MATERIAL SHALL NOT DEVIATE FROM OPTIMUM BY MORE THAN -1% TO +4%.
11. MAINTAIN ALL CUT AND FILL AREAS FOR SURFACE DRAINAGE AT ALL TIMES.
12. FINAL GRADES WITHIN PAVED AREAS SHALL BE WITHIN 0.1' OF PLAN GRADE. ALL OTHER AREAS TO BE WITHIN 0.2' OF PLAN GRADE.
13. THE GRADING CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL SALT FENCES.
14. ALL AREAS WHICH ARE DISTURBED SHALL BE SEEDING WITH EROSION CONTROL MIX OR SODDED.
15. A MINIMUM OF ONE FOOT OF COMPACTED LOW PLASTICITY COHESIVE SUBGRADE SHALL BE PROVIDED BENEATH ALL PAVEMENTS.
16. INSTALL SALT FENCE PRIOR TO CONSTRUCTION.
17. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION, PERIODIC CHECKING AND REINSTALLATION OF EROSION AND SEDIMENTATION CONTROL MEASURES.
18. A COPY OF THE NPDES PERMIT SHALL BE FORWARDED TO THE CITY OF WEST DES MOINES BUILDING DIVISION PRIOR TO CONSTRUCTION.
19. ANY SOIL OR SPILL WASHES, TRACKED OR DROPPED ON TO ADJOINING RIGHT-OF-WAYS AND PROPERTY SHALL BE CLEANED UP BY THE CONTRACTOR WITHIN 24 HOURS. EARTH BANKS SHALL NOT BE CONSTRUCTED IN THE STREET GUTTER.
20. CONTACT TIM HUCKABY (PH 515-343-0810), PAPER STREET CONSULTANTS, L.L.C. REGARDING INSTALLATION, PERIODIC CHECKING AND REINSTALLATION OF EROSION AND SEDIMENTATION CONTROL MEASURES AND RELATED EROSION CONTROL ISSUES AS WELL AS ENSURING MUD AND ROCK ARE CLEANED OFF PUBLIC STREETS ON A DAILY BASIS.

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DATE	REVISIONS	COMMENTS
06-22-2016		
08-01-2016		
07-26-2016		
06-23-2016		
04-22-2016		

DATE OF SURVEY: 04-22-2016
 DESIGNED BY: NPH
 DRAWN BY: CM

DELAVAN TOWNHOMES PLAT 1
 2500 EP TRUE PARKWAY, WEST DES MOINES, IOWA
GRADING PLAN

SHEET
4
 OF 5
 E-1483

Delavan Townhomes Six-plex



Front Elevation



Left Elevation



Right Elevation



Rear Elevation



Delavan Townhomes Six-plex



Front Elevation



Left Elevation



Right Elevation



Rear Elevation



Delavan Townhomes Six-plex



Front Elevation



Left Elevation



Right Elevation



Rear Elevation

