FRANKLIN AVENUE
80' R/W 48' STREET

PATCH STREET CUT

NEW CURB & GUTTER

8" PVC WATERMAIN

8" PVC SANITARY SEWER

MANHOLE RIM 64.85

MANHOLE RIM 64.70

ADA RAMP PER CITY REQUIREMENTS

LANDSCAPE ROCK

N89°48'51"W 597.96'

MOBIFY MANHOLE

LANDSCAPE ROCK

LANDSCAPE ROCK

HAMILTON STREET
80' R/W 48' STREET

LANDSCAPE ROCK

6' CITY SIDEWALK

403.52'

N00°43'47"E

NEW CURB & GUTTER

F CITY SIDEWALK

SEED & MULCH

SEED & MULCH DISTURBED AREA

SEED & MULCH

LANDSCAPE ROCK

SPRINKLER LINE

## SANITARY SEWER

(S1) ABANDON EXISTING MANHOLE IN PLACE. SEAL LIFTING HOLE IN CONE SECTION. PLACE LANDSCAPE ROCK OVER CASTING.

(S2) RAISE CASTING TO NEW ELEVATION OF DRIVEWAY 0.5'±.

# 3220 E CENTURY AVENUE

## IRRIGATION

(IR1) THE AREAS TO BE IRRIGATED ARE:
- a) THE SOUTH BOULEVARD FROM FENCE TO BACK OF CURB ON CENTURY AVE.,
- b) ALL SHRUBS AND TREES (INCLUDING ALL BOULEVARD TREES).
- c) THE WEST BOULEVARD SOUTH OF NEW DRIVEWAY.
- d) THE INTERIOR ISLAND IN PARKING LOT.

(IR2) COORDINATE WITH OWNER FOR LOCATION OF IRRIGATION CONTROLLER IN WORK ROOM.

(IR3) SEE LOCATION OF SUGGESTED MAINLINE FROM BUILDING TO BOULEVARD.

(IR4) THE IRRIGATION CONTRACTOR SHALL INSTALL AN IRRIGATION SYSTEM WITH ALL COMPONENTS. SYSTEM SHALL PROVIDE 100% HEAD TO HEAD COVERAGE. PROVIDE AND INSTALL CLASS 35 PVC CONDUITS THAT ARE TWICE THE DIAMETER OF THE IRRIGATION PIPE. INCLUDE WINTERIZING FOR THE FIRST YEAR AFTER INSTALLATION OF IRRIGATION SYSTEM.

## STORM SEWER INLET/MANHOLE SCHEDULE

| Inlet/MH Number | Inlet #1 | Inlet #2 | MH#1 | Inlet #3 | MH#2 | MH#3 | INLET #4 |
|---|---|---|---|---|---|---|---|
| Manhole/Inlet Size | 48" | 48" | 30" | 30" | 30" | 30" | 30" |
| Casting Type | MEDIUM DUTY w/ 4 SLOTS | MEDIUM DUTY w/ 4 SLOTS | MEDIUM DUTY w/ SOLID LID | MEDIUM DUTY w/ 4 SLOTS | MEDIUM DUTY w/ SOLID LID | MEDIUM DUTY w/ SOLID LID | MEDIUM DUTY w/ 4 SLOTS |
| Rim/Gutter Elev. | 62.60 | 64.10 | 65.90 | 62.50 | 63.30 | 64.60 | 63.20 |
| Top P.C. Section | 61.26 | 62.56 | 64.66 | 61.46 | 62.26 | 63.56 | 62.16 |
| Invert Elev. (a) | 57.50 | 58.10 | 59.00 | 57.50 | 57.47 | 58.65 | 59.20 |
| Invert Elev. (b) | 57.60 | 58.20 | 59.10 | --- | 57.57 | 58.75 | --- |
| Invert Elev. (c) | --- | 59.50 | --- | --- | --- | --- | --- |
| Length of P.C. | 3.76 | 4.46 | 5.86 | 3.96 | 4.79 | 4.91 | 2.96 |

F.F. 1766.2±

## WATERMAIN

(W1) MATERIALS AND CONSTRUCTION METHODS SHALL COMPLY WITH CITY OF BISMARCK SPECIFICATIONS. ALL BACKFILL SHALL BE 95% OF STANDARD PROCTOR AT RECOMMENCED MOISTURE CONTENT. WATERLINES SHALL BE CHLORINATED, PRESSURE TESTED AND FLUSHED. TESTING IS CONSIDERED INCIDENTAL.

(W2) INSTALL 8"x8" TAPPING SLEEVE AND 8" VALVE.

(W3) INSTALL 47.42 LF 8" WATER SERVICE FOR CONNECTION INTO BUILDING. COORDINATE WITH MC.

(W4) ALL WATERMAIN WITHIN 10 FEET OF BUILDING SHALL BE DUCTILE IRON.

INLET #1 — MH#1 — INLET #2 — INLET #3 — MH#2 — MH#3 — INLET #4

S00°28'58"W 403.50'

8" PVC SANITARY SEWER

15' STORM SEWER EASEMENT

92.33

DRIVING LANE

FIRE WALL

COLD STORAGE CONCRETE FLOOR (SEE ARCHITECT DRAWINGS)

DRIVING LANE

DRIVING LANE

SUGGESTED LOCATION OF IRRIGATION MAINLINE

EXISTING ASPHALT TO REMAIN

EXISTING ASPHALT TO REMAIN

93 PARKING SPACES

SEE SHEET C5.0 FOR PLANT PALETTE

OVERHEAD POWER LINE EASEMENT

N89°48'51"W 599.94'

LANDSCAPE ROCK W/EDGING

LANDSCAPE ROCK W/EDGING

LANDSCAPE BED

LANDSCAPE BED

LANDSCAPE BED

REPLACE CONCRETE

24" RCP STORM SEWER

24" RCP STORM SEWER

24" RCP STORM SEWER

24" RCP STORM SEWER

24" RCP STORM SEWER

24" RCP

CENTURY AVENUE

## STORM SEWER

(ST1) MATERIALS AND CONSTRUCTION METHODS SHALL COMPLY WITH CITY OF BISMARCK CONSTRUCTION SPECIFICATIONS. ALL BACKFILL SHALL BE 95% OF STANDARD PROCTOR AT RECOMMENDED MOISTURE CONTENT.

(ST2) BREAK INTO BACK OF EXISTING 2'x3' INLET WITH 12" STORM SEWER; INV. 57.00.

(ST3) INSTALL 82.12 LF OF 12" STORM SEWER AT 0.6085% AND INLET #1; CTR: 62.80; S INV. 57.50; NE INV. 57.60.

(ST4) INSTALL 96.06 LF OF 12" STORM SEWER AT 0.5205% AND INLET #2; CTR: 64.10; SW INV. 58.10, N INV. 58.20; SE INV. 59.50.

(ST5) INSTALL 15.00 LF OF 12" RCP AT 13.3333% AND 12" FES; INV. 61.50.

(ST6) INSTALL 150.15 LF OF 12" STORM SEWER AT 0.5328% AND MH#1; RIM 65.90; S INV. 59.00; NE INV. 59.10.

(ST7) INSTALL 20.00 LF OF 10" STORM SEWER, 45° BEND, AND 3.67 LF OF 10" STORM SEWER AT 0.8027DS; INV. 61.05. VERIFY INVERT OF CONNECTION TO ACO DRAIN KLASSIKDRAIN.

(ST8) INSTALL 55.77 LF OF ACO DRAIN KLASSIKDRAIN - K300 STEEL EDGE RAIL SLOPED CHANNEL SYSTEM WITH TYPE B610 SLOTTED DUCTILE IRON GRATE PER MANUFACTURES SPECIFICATIONS. GRATE ELEVATION 62.2.

(ST9) BREAK INTO BACK OF EXISTING INLET WITH 12" STORM SEWER; INV. 57.00.

(ST10) INSTALL 1.00 LF OF 12" STORM SEWER, 22.5° BEND, 11.25° BEND AND 74.81 LF OF 12 " STORM SEWER AT 0.6595% AND INLET #3; RIM: INV. 57.50.

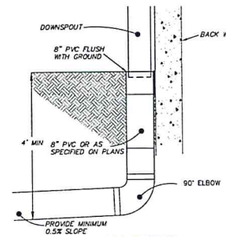
(ST11) BREAK INTO BACK OF EXISTING INLET WITH 12" STORM SEWER; INV. 57.00.

(ST12) INSTALL 90.68 LF OF 12" STORM SEWER AT 0.5183% AND MH#2; RIM: 63.30; SW INV. 57.47; N INV. 57.57.

(ST13) INSTALL 209.41 LF OF 12" STORM SEWER AT 0.5157% WITH 12" BY 8" WYES AT STATIONS 0+12.67, 0+45.67, 0+85.67, 1+25.67, 1+60.67, AND 2+00.67, AND MH#3; RIM: 64.60; S INV. 58.65, NW INV. 58.75.

(ST14) INSTALL 87.24 LF OF 12" RCP AT 0.5158% AND INLET #4; RIM: 63.20; SE INV. 59.20.

(ST15) CONNECT TO 12" BY 8" WYES WITH 7.50 LF OF 8" STORM SEWER @ 1.0000DE AND 45° BEND(TURNED UP). CONNECT TO 45° BEND WITH 8" RISER PIPE FOR CONNECTION TO DOWNSPOUTS. SEE DETAIL THIS SHEET.




PVC DRAIN DETAIL
NOT TO SCALE

## PROPOSED LEGEND

- STORM SEWER
- 5" CONC. UNREINFORCED
- 6" CONC. REINFORCED
- GRAVEL
- SILT FENCE
- 62 PROPOSED CONTOUR
- x 63.50 NEW SPOT SHOT
- LANDSCAPE ROCK
- SEED & MULCH

## LEGEND EXISTING ITEMS

- SANITARY SEWER
- STORM SEWER
- WATERMAIN
- ASPHALT PAVING
- CONCRETE
- GRAVEL
- HYDRANT
- VALVE
- RISER
- MANHOLE
- GUARD POST
- LIGHT
- OVERHEAD ELEC
- POWER POLE WITH GUY
- UNDERGROUND ELECTRIC
- UNDERGROUND GAS
- UNDERGROUND TELEPHONE
- UNDERGROUND FIBER
- UNDERGROUND CABLE TV
- CHAIN LINK FENCE
- TREE
- SIGN

REGISTERED PROFESSIONAL ENGINEER — LONNIE K. ROMSAAS, P.E. #3983 — NORTH DAKOTA

SWENSON HAGEN & CO.

THIS DOCUMENT WAS ORIGINALLY SEALED BY LONNIE K. ROMSAAS, PE, ON 8/14/2015 AND THE ORIGINAL DOCUMENT IS STORED AT THE OFFICE OF SWENSON, HAGEN & CO. P.C.

N W E S

20' 0 20' 40'

SCALE - 1"=20'

AUGUST 14, 2015

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## UTILITY NOTE

The locations of existing underground utilities are shown in an approximate way only and have not been independently verified by the owner or its representative. The contractor shall determine the exact location of all existing utilities before commencing work, and agrees to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any and all underground utilities.

CALL BEFORE YOU DIG
NORTH DAKOTA
UTILITIES UNDERGROUND LOCATION SERVICE
1-800-795-0555

| REVISION | DATE: |
|---|---|
| | |

PROJECT **DIMENSION, UTILITY & LANDSCAPE PLAN**
**LOTS 7 - 18 BLOCK 3**
**CARUFEL'S 2ND SUBDIVISION**
**BISMARCK, NORTH DAKOTA**

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| | |
|---|---|
| DRAWN BY: | TF |
| CHECK BY: | LKR |
| DATE: | 2/10/2015 |
| FILE DESC: | CARUFEL'S 2ND SUB |
| COMPUTER FILE: | L7-18 blk 3 NORTHERN IMP. |
| SURVEY FILE: | |

SHEET C4.0

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AUG 20 2015

APPROVED BY PLANNING
Brad Lamont
SENIOR PLANNER 08.20.15
DATE TITLE

APPROVED BY FORESTRY
Landscape Architect 8-20-15
DATE TITLE

SP2015-048 FRONT STREET MILLWORK

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