



CITY OF WOOD DALE

PUBLIC NOTICE

Pursuant to the updated Illinois Attorney General Guidance to Public Bodies on the Open Meetings Act during the COVID-19 Pandemic, dated July 2, 2020, Aldermen may participate without being physically present, with the compliance with the established conditions.

IN ACCORDANCE WITH THE STATUTES OF THE STATE OF ILLINOIS AND THE ORDINANCES OF THE CITY OF WOOD DALE, NOTICE IS HEREBY GIVEN THAT THE CITY COUNCIL WILL CONTINUE ITS REGULAR STANDING COMMITTEE MEETINGS AT 7:30 P.M. ON THURSDAY, AUGUST 13, 2020 IN THE COUNCIL CHAMBERS OF THE CITY HALL, 404 NORTH WOOD DALE ROAD, WOOD DALE, ILLINOIS, FOR THE PURPOSES SET FORTH IN THE FOLLOWING AGENDAS:

STANDING COMMITTEES OF THE CITY OF WOOD DALE, ILLINOIS AUGUST 13, 2020

I. PLANNING, ZONING & BUILDING COMMITTEE

- A. Call to Order
- B. Roll Call
- C. Approval of Minutes of Meeting
 - i. July 9, 2020 Planning, Zoning & Building Committee Minutes
- D. Report and Recommendation
 - i. Approval to Draft a Facade Improvement Grant Agreement with The Local for Site and Facade Improvements at 396 W Irving Park Road in an Amount Not to Exceed \$71,062.50
- E. Items to be Considered at Future Meetings
- F. Adjournment

II. PUBLIC HEALTH, SAFETY, JUDICIARY & ETHICS COMMITTEE

- A. Call to Order
- B. Roll Call
- C. Approval of Minutes of Meeting
 - i. May 14, 2020 Public Health, Safety, Judiciary & Ethics Committee Minutes

- D. Report and Recommendation
 - i. An Ordinance Amending Chapter 5, Article IV, Section 5.407 of the Municipal Code of the City of Wood Dale to Amend the Language Regarding Persons Under Twenty-One (21) Years Of Age
 - ii. Request for Additional Class GS Liquor License
- E. Items to be Considered at Future Meetings
 - i. Potter & Spruce Intersection Options
- F. Adjournment

III. PUBLIC WORKS COMMITTEE

- A. Call to Order
- B. Roll Call
- C. Approval of Minutes of Meeting
 - i. July 9, 2020 Public Works Committee Minutes
- D. Report and Recommendation
 - i. Adopting the City of Wood Dale Engineering Design and Development Standards Manual
 - ii. Authorizing an Agreement between the City of Wood Dale and BP&T Construction for the Salt Creek Greenway Trail Bridge Rehabilitation Project in an Amount Not to Exceed \$130,329
 - iii. Approval of an Agreement between the City of Wood Dale and HR Green for Phase I Engineering Services for Elizabeth Drive Bridge Over Salt Creek Replacement/Rehabilitation in an Amount Not to Exceed \$301,071
 - iv. Approval of an Agreement between the City of Wood Dale and Superior Road Striping, Inc. for the 2020 Pavement Marking Program in an Amount Not to Exceed \$17,115
 - v. Approval of an Agreement between the City of Wood Dale and Schroeder Asphalt Services, Inc. for the 2020 Pavement Patching and Crack Sealing Program in an Amount Not to Exceed \$164,110
 - vi. I and I Sewer Repair - Approval of an Agreement between the City of Wood Dale and Hoerr Construction Inc. for the FY 2021 Sewer Rehabilitation in a Not to Exceed Amount of \$722,105.00
- E. Items to be Considered at Future Meetings
- F. Adjournment

IV. FINANCE & ADMINISTRATION COMMITTEE

- A. Call to Order
- B. Roll Call

- C. Approval of Minutes of Meeting
 - i. July 9, 2020 Finance & Administration Committee Minutes
- D. Report and Recommendation
 - i. Series 2012 Refunding Analysis
- E. Items to be Considered at Future Meetings
- F. Adjournment

POSTED IN CITY HALL ON AUGUST 7, 2020 AT 4:00 PM
LYNN CURIALE, CITY CLERK
BY: MAURA MONTALVO, CITY DEPUTY CLERK



PLANNING ZONING & BUILDING WORKS **COMMITTEE MINUTES**

Committee Date: July 9, 2020
Present: Ald. Catalano, Jakab, Sorrentino,
Susmarski & Woods
Absent: Ald. Messina, E. Wesley, R. Wesley
Also Present: Mayor Pulice, Treasurer Porch, Clerk Curiale, City Manager
Mermuys, Police Chief Vesta, A. Lange, E. Cage, B. Wilson
Meeting Convened at: 7:30 p.m.

APPROVAL OF MINUTES:

The minutes of the June 11, 2020 meeting were approved as presented.

REPORT & RECOMMENDATION

APPROVAL OF WALL SIGN VARIATION FOR CASE NO. 2020-CDC-04 TO ALLOW FOR A WALL SIGN ON AN ELEVATION WITHOUT STREET FRONTAGE TO BE LOCATED AT 650 N WOOD DALE RD – FORWARD SPACE

DISCUSSION:

Director Cage reviewed the request, explaining the company, Forward Space, wants to put a second wall sign on the south side of their new building. It is in compliance in terms of size, but just doesn't have secondary street frontage. CDC gave their approval since the request meets the standard for sign variation.

VOTE:

Ald. Woods made a motion, seconded by Ald. Jakab, to approve a Wall Sign Variation for Case No. 2020-CDC-04, to allow for a Wall Sign on an Elevation without street frontage, to be located at 650 N. Wood Dale Road, Forward Space. A roll call vote was taken, with the following results:

Ayes: Ald. Catalano, Jakab, Sorrentino, Susmarski & Woods
Nays: None
Abstained: None
Motion: Carried

REPORT & RECOMMENDATION:

372 PARKVIEW STATION – SPECIAL USE FOR MULTIPLE-FAMILY DWELLING UNITS, PLANNING UNIT DEVELOPMENT (PUD) – PRELIMINARY AND FINAL, MAJOR SITE PLAN REVIEW, CASE NO. CDC-2020-05, 372 N WOOD DALE RD

DISCUSSION:

Director Cage recapped the existing conditions for this project at the former SBT Bank location and shared the future land use map. The zoning is TCB (Town Center Business zoning district). The site plan has four buildings, one is a four-story and three are three-story. They are proposing 142 units with 219 park spaces. On June 15th this item went to CDC with a number of requested deviations. With PUD developments recently, a number of these deviations are consistent. Other requests are engineering stormwater detention and building code which requires 85% of brick/stone on elevations. He noted the City Code needs updating and staff is in the process of working with a consultant in doing so. CDC did not recommend; it failed 2 to 2 for Special Use Permit. Five conditions recommended in the staff report and staff found it was consistent with the UDO and the City's Comprehensive Plan. However, the Special Use PUD failed.

Aristotle Halikias, President of Intercontinental Real Estate Development, stated they have been dealing with many challenges since this process first started. While their modifications to the original plan may seem subtle, they represent significant improvements and benefits to the overall project. Their renderings, drawings, engineering and reports were prepared by experts in their fields.

Chris Kalischefski of WT Group stated they reached out to City Attorney Pat Bond to expedite the development process using access agreements to begin demolition in the fall. He reviewed the economic impact analysis. He believes they will contribute toward Wood Dale as they are geared toward millennials and active seniors looking for a walkable transit-oriented development lifestyle. Proposed rent will be between \$800 for a studio to \$1,675 for the largest unit. He reviewed the unit amenities, entrance and lobby.

Javier Millan with KLOA Associates addressed parking and traffic concerns. After doing a parking analysis and summary, they determined 1.26 spaces per unit to be adequate, so the proposed amount of 1.44 parking spaces per unit will be sufficient to meet demand. He talked about existing traffic volumes; they conducted traffic counts in the area and patterns, along with a capacity analysis and growth factors for future. He also addressed the potential of traffic going down Commercial to Grove Street and over to the signal on School St. After

driving that route through the neighborhood, it was determined the route to go to Foster takes 145 sec to get to the signal compared to just making a left turn onto Wood Dale Rd. If this should become a problem, they can do a “left out only” with signage, but he doesn’t anticipate a problem.

Chris Kalischefski stated that by granting of the deviations, they are offering Wood Dale a much better product. Even though they are requesting a variation, they are not trying to do bare minimum. He explained the front design of the buildings with full and French balconies. Stow is the only product he specs out on projects as it is designed for a midwest climate and is better than Dryvit. It also allows for highly efficient buildings that use lower energy. When it rains, it is a self-cleaning product. The back of each building also has French balconies. All buildings surround a courtyard, and the entrance at Wood Dale Rd. is planned to be closer to the roadway to create an urban industrial feel to the building. The 4-story building is 47’ feet 11.5” inches; the other three are just under 36’ feet. They could do 72’ feet by code, but are doing only 25% and not the 40% Code allows. The parking lot will have pervious pavers, and although ground coverage can be 80%, they are less. They are also adding 100 trees to the site, which are a mixture of deciduous and coniferous. Wood Dale’s Code only allowed 20 coniferous and they want to do 40. They plan to plant evergreens along the Police Department side and throughout the development. 55 of the 100 are replacement trees. Of the 194 currently on the site, 163 are prohibited and the City Code requires them to be removed since they are invasive. They will be adding 16 different types of shrubs, bushes and grasses to provide year-round color. 17 trees are being removed and replaced; they are just not replacing “garbage trees.” The brick request is to do a more contemporary, modern energy efficient building.

Chris Starke, talked about signage, Wood Dale Rd. pedestrian building access, trash enclosure and stormwater. He showed photos of the previously submitted site plan and revised plan. The sign originally was at 6’8” and is now at 6’. The trash enclosure has been moved from the maintenance garage to the center courtyard for ease of residents from both sides of the courtyard. Trees were placed in parking area per the City’s request.

Jim Glascott of WT Group talked about stormwater, stating they designed their system to exceed the county’s stormwater ordinance and that three underground detention systems will be on site. Design will reduce stormwater runoff up to 83%. Mr. Glascott showed current drainage conditions and explained where water currently goes along with the proposed layout and conditions.

Mayor Pulice requested clarification on trees. Paul stated there are 194 trees currently on the site; of those 163 are not allowed per code. An additional 10 are slated to be removed

right away; they are keeping 4 and replacing 17 good trees. The rest of the trees are dead, scrub or evasive trees. Of the 100 they plant, there will be maples, oaks, and lotus, and they are eliminating the garbage ones with very nice mature trees. When Mayor Pulice asked Director Cage for his input, he was told the City does not often fight battles for tree ordinances with new developments. Staff is overly restrictive so people don't just cut down trees. The issue they experience with developments is that they have considerably higher amounts of trees.

Ald. Woods inquired about tree replacement, noting there are 193 at the site. Paul stated they will have 100 high quality trees planted. Mayor Pulice commented that stormwater is a big concern to the City. Mr. Paul explained that if they do nothing and it rains, the water is just running off; their plan will reduce that flow by 83% and provide enough retention to fill an Olympic size swimming. Mr. Kalischefski added that they are providing 1.27 (check at 835) of true detention storage on the site. Ald. Woods pointed out that physical underground storage is under one acre, and the rest of that calculation is permeable pavers.

Ald. Catalano asked about a start date and was advised by the builder he wants to start immediately, but does not yet have the title to the property until the agreements are worked through. They would do access agreement and start the demo process and then continue to work on finalizing the rest of the project. Ald. Catalano asked if they have notified nearby neighbors and was advised they plan to be good neighbors of White Cottage, the Police Department and Park District.

VOTE:

Ald. Woods made a motion, seconded by Ald. Sorrentino, to approve a Special Use for Multiple-Family Dwelling Units, Planned Unit Development (PUD) – Preliminary & Final, Major Site Plan Review, Case No. CDC-2020-05, 372 N. Wood Dale Road with the following three amendments:

- Change the stormwater to meet the City's stormwater code at 100%
- Change the brick on the elevation from 41% to 65%
- Monetize the 94 trees to offset whatever monetary participation the city has in this project (City Code has provision to offset those trees monetarily and place them wherever they deem necessary. Per Mr. Cage, Code has monetary value of \$650.00 a tree; that times 94 is the number to offset the City's participation in the project – whatever the money was in the agreement)



A roll call vote was taken with the following results:

Ayes: Ald. Catalano, Jakab, Sorrentino, Susmarski & Woods
Nays: None
Abstained: None
Motion: Carried

ITEMS TO BE CONSIDERED AT FUTURE MEETINGS:

- Parking on patios on yard (Ald. Jakab)
- Swimming pool coverage

ADJOURNMENT:

The meeting adjourned at 8:45 p.m.

Minutes taken by Eileen Schultz



REQUEST FOR COMMITTEE ACTION

Referred to Committee: August 13, 2020
Subject: Façade Improvement Grant Application –
The Local (formerly Crossroads)
Staff Contact: Ed Cage, Community Development Director
Department: CD Department

TITLE: Approval to Draft a Façade Improvement Grant Agreement with The Local for Site and Façade Improvements at 396 W Irving Park Road in an Amount Not to Exceed \$71,062.50

RECOMMENDATION:

Staff concurs with the Streetscape and Economic Enhancement Committee's (SEEC) recommendation to approve a Façade Improvement Grant in the amount of \$71,062.50 for improvements at The Local, 396 W Irving Park Road.

ANALYSIS:

The Streetscape and Economic Enhancement Committee (SEEC) concurred with the Staff scoring policy and recommended 37.5% reimbursement for site and façade improvements.

The proposed façade improvements include a new decorative entrance canopy on the west elevation, new siding, soffit and gutters (where needed), painting of the entire building, reframing of the roof on the north elevation and installation of new exterior doors and windows. The proposed site improvements include removing and replacing of the parking lot, an expansion of the parking lot paved area and new landscaping.

The total cost of construction is estimated to be \$161,500.00. Staff recommended, from the policy scoring criteria, that the applicant met the 37.5% threshold of the total estimated amount, which totaled \$60,562.50. Subsequently at the SEEC meeting, the Committee recommended that a portion of the parking lot should be included in recommended façade improvement grant, as Staff had not included this figure in their original calculations. The

parking lot cost estimate was \$56,000.00. The SEEC recommended that 50% of this amount should be made available in the grant amount, and this 50% is \$28,000.00. As the applicant had qualified for 37.5% of the available amount, this 37.5% equaled \$10,500.00. This amount added to the original \$60,562.50, totaled a SEEC recommended adjusted amount of \$71,062.50.

Due to the Covid-19 events and the fact that the business has been closed, some of the improvements have already been completed, such as painting and landscaping. The remainder of the improvements are anticipated to be completed within 60 days.

The FY21 budgeted amount for the Facade Improvement Grant Program is \$150,000.00. To date, no funds have been accessed during this fiscal year and this would be the first façade grant improvement application. This would leave 52.6% or \$78,937.50 of the already budgeted amount of \$150,000.00, for future façade grant improvement application requests.

DOCUMENTS ATTACHED

- ✓ Streetscape Staff Memorandum dated July 6, 2020 with exhibits

CITY OF WOOD DALE

Community Development



MEMO

DATE: Monday, July 6, 2020
TO: Streetscape & Economic Enhancement Committee
FROM: Gosia Pociecha, AICP - Planner
SUBJECT: Façade Improvement Grant for 396 W Irving Park Rd, Crossroads Too, Inc.

OVERVIEW

A Façade Improvement Grant application was submitted to request reimbursement for the façade improvement for 396 W Irving Park Road, Crossroads. The proposed façade improvements include new entrance canopy on the west elevation, new siding, soffit and gutters (where needed), painting of the entire building, reframing of the roof on the north elevation and installation of new exterior doors and windows. The proposed site improvements include removing and replacing of the parking lot, expanding of the parking lot paved area and new landscaping.

Required Documents & Submittals

The following items were submitted with the application and are attached to this memo:

Exhibit A: Description of proposed improvements and timeline for completion

Exhibit B: Photos of the existing building

Exhibit C: Detailed contractor cost estimates:

1. Alter Casa LLC
2. AB Creative Construction, Inc
3. Flavian Construction

Exhibit D: Proposed Illustrations

Exhibit E: Location Map

ANALYSIS

The subject property is located at the southwest corner of West Irving Park Road and Dalewood Avenue, across the street from Target. The property is zoned C-1, Neighborhood Commercial, and is improved with a one story restaurant, outdoor eating areas and surface parking lots. Restaurants with outdoor cafes are permitted uses in the C-1 zoning district.

Background

The previous owner of the Crossroads Tavern & Eatery applied for a Façade Improvement Grant in 2015. At that time the scope of work included site improvements comprising of installing a new compliant monument sign, removing and replacing the existing asphalt parking lot, installing a dumpster enclosure and installing landscaping. Façade improvements included replacing the deck railing with an insulated half wall, replacing the upper gable wall, replacing the curtains and painting the exterior of the building. The Streetscape Committee recommended approval of the grant award in the amount of \$32,735.13 (50% reimbursement of the entire scope of work excluding the parking lot replacement). The City Council approved the grant agreement on 01/21/2016.

Per the Façade Improvement Program Policy, properties may be eligible for a grant award of up to 50% of the total improvement cost, up to a maximum of \$130,000.00. Further, the improvements shall be maintained in their finished form, except as may be approved by the City Council, for a period of 3 years from completion. With the grant amount that was approved in 2016, the property still has the ability to apply for a reimbursement of up to \$97,264.87.

Façade and Site Improvements

The building was originally constructed in 1977 with a major addition built in 1986. Construction of the outdoor seating area occurred over ten years ago with many modifications since: the canopy was added over a portion of the deck in 2006, insulation added to the "open air" porch in 2014 and porch railings enclosed, many of which required variations. In order to enclose the railings of the covered deck, the applicant had to receive a variation, which was approved in 2015. Additionally, the most recent variation approval stipulated that the installation of windows in the "open air" porch is prohibited. However, the applicant is petitioning to City Council for modification of said variation to have the ability to install windows. This request will be considered during the July 16, 2020 City Council meeting.

Eligible Expenses

The applicant received three proposals for the proposed façade renovation and site improvements, see Exhibit C. The project exceeds the minimum total construction value of \$10,000 and is eligible for reimbursement.

Per the Façade Improvement Program Policy, improvements that qualify for reimbursement include façade improvements that improve the appearance of the building by change of materials or colors, including painting. Replacement of doors and windows is also eligible, as well as renovation of entry features. Planting new landscaping is an eligible expense. However, items categorized as routine maintenance or improvements beyond the street facing façade/or areas visible from the public right-of-way are not eligible.

The following table lists the cost comparisons for the entire scope of the project. Please note that some of the costs are not eligible including the construction of a new shed, parking

lot removal and replacement, and installation of new decking. Other items may be considered for partial funding.

Cost Comparison Plus Permit Fee Estimate			
	Alter Casa LLC	AB Creative Construction Inc	Flavian Construction
Concrete work to support entrance canopy	\$12,000.00	-	\$13,500.00
Frame front door canopy	\$14,000.00	\$47,000.00 (includes concrete work and front framing)	\$15,000.00
New roof ¹	\$38,000.00	\$36,000.00 (includes siding soffit and gutters)	\$41,000.00
New siding, soffit and gutters (where needed) ¹	\$8,000.00	-	\$9,500.00
Paint the entire building ¹	\$13,000.00	\$15,000.00	\$14,750.00
New shed ²	\$8,500.00	\$8,500.00	\$8,000.00
Framing of exterior front (at the deck)	\$14,000.00	-	\$16,000.00
Install new exterior doors and windows ¹	\$45,000.00	\$50,000.00	\$45,000.00
Remove and replace parking and add new paving ²	\$56,000.00	\$60,000.00	\$64,500.00
New Decking ²	\$8,000.00	\$10,000.00	\$11,000.00
Demolition and Debris Haul Away	\$7,000.00	-	\$9,500.00
Landscaping	\$9,200.00	\$12,000.00	\$9,500.00
Est. Permit Fee: ³	\$1,500.00	\$1,500.00	\$1,500.00
Total:	\$234,200.00	\$240,000.00	\$258,750.00
Total excluding ineligible expenses ²	\$161,700.00	\$161,500.00	\$175,250.00

¹ Cost estimates for the entire building, not just the street facing façade.

² Costs not eligible for reimbursement under the Façade Improvement Grant.

³ The scope of the work is divided into multiple permits. Not all permit fees are not available at this time as they will be dependent on the total square footage of improvement. The estimated permit fees provided by the staff.

Existing Conditions

The applicant purchased the subject property in November of 2019. Prior to their purchase, the canopy on the west elevation was damaged by a vehicle and needed repair. While the previous owners applied for a building permit, they never completed the work due to the sale of the property. The new owners have engaged Alter Casa, LLC, which was the lowest bidder to complete the renovations. Due to the COVID-19 pandemic and the State

mandated closures of bars and restaurants, the property owners wanted to use the down time to complete some of the work listed in the scope. A more detailed completion schedule is included in Exhibit A.

Images below show the front of the building, prior to the façade improvements. Images of existing conditions are included in Exhibit B, while the proposed final renovation illustrations are attached in Exhibit D.



Source: Google Street View

Façade Improvement Scoring

CRITERIA	POINTS
Visual Impact	
<i>Improved curb appeal</i> The curb appeal of the property is being improved by including a change in colors both for the façade and the roof, new doors and windows and architectural screens. Additional landscaping is also being proposed. The intent is to make the building more inviting and modern.	2
<i>Improved pedestrian experience</i> The proposed project will have fair improvement on pedestrian experience by addition of architectural screens at the canopy and at the deck. New landscaping is also being installed providing pedestrians with visual appeal.	1
<i>Significant visual improvements</i> The proposed modifications include a significant change to the front door canopy on the west elevation which has visibility from Irving Park Road. The roof line at the deck will also be modified to eliminate a metal roof and new framing to accommodate an overhead door.	3
Financial Impact	
The proposed improvements are not limited to the façade improvement renovation eligible for grant funding. The applicant is leveraging more private investment than required to obtain grant funding.	3
The proposed project is part of a larger project that improves both the façade and site. The applicants are planning to remove and replace the parking lot, as well as expand the parking lot into a currently vacant area.	3
Property Use	
The space is used for a bar and restaurant with outdoor seating.	3
Points Total:	15

When asked to submit a façade improvement scoring sheet, the applicant scored their projects at 19.

RECOMMENDATION

Staff recommends to enter into a grant agreement to reimburse the applicant thirty seven and a half percent (37.5%) of eligible costs. The Streetscape and Economic Enhancement Committee is asked to identify the eligible costs. Based on the lowest estimate provided by the applicant, and excluding the ineligible costs (new shed, decking, and parking lot), the total reimbursement value shall not exceed sixty thousand five hundred sixty-two dollars and fifty cents (\$60,562.50) (or 37.5% of \$161,500.00). Staff's recommendation is based on the eligibility of the project and the façade improvement scoring criteria, which totaled to 15 points. The project exceeds the \$10,000 minimum cost valuation requirement, the property is greater than 30 years old and the proposed improvements fall under the façade improvement and renovation category of improvements.

Description of proposed improvements and timeline for completion
396 W Irving Park Rd

- Demolition and Debris Haul Away (\$7,000) / Completion date 7/10/2020
- Concrete Work to support entrance canopy (\$12,000) / Completion date 7/10/2020
- Framed Front Door canopy (\$14,000) / Completion date 7/10/2020
- Complete New Roof (\$38,000) / Work Complete
- New Siding, Soffit and Gutters Where Required (\$8,000) / Completion date 7/10/2020
- Paint Entire Building (\$13,000) / Work Complete
- Build New Shed (\$8,500) / Work Complete.
- Frame Exterior Front (\$14,000) / Work Complete
- Install New Exterior Doors, Windows, Garage Door (\$45,000) / Garage Door has been installed; 7/10/2020 for Exterior Doors; Awaiting final guidance on installation of Windows
- Black Top and Mark Existing Parking Lot and Lay New Asphalt in unfinished lot (\$56,000) / Completion Date TBD
- Landscaping (\$9,200) / Completion date 7/15/2020
- Install New decking (\$8,000) / Work Complete

Photos of existing conditions
396 W Irving Park Rd



Photos of existing conditions
396 W Irving Park Rd





Contract/Quote

Exhibit C

Date: 2/12/2020

Exp. Date:

Alter Casa LLC
 105 Yarrow Ct
 Rolling Meadows, IL, 60008
 +1 (224) 324-2411
altercasallic@gmail.com
www.altercasallic.com

Ted Bouffis DBA Crossroads Inc.
 396 W Irving Park Rd
 Wood Dale, IL, 60191
 (219) 314-3037
tedbouffis@yahoo.com

Contractor	Job	Payments	Due Date
Christos Katseas	Owner		

Description	Line Total
Demolition And Debris Haul Away (All Materials Included)	\$7,000.00
Concrete Work Required To Support Entrance Canopy Per Blueprints (All Materials Included)	\$12,000.00
Frame Front Door Canopy Per Blueprints (All Materials Included)	\$14,000.00
Complete New Roof Entire Building (All Materials Included)	\$38,000.00
New Siding, Soffit And Gutters Where Required (All Materials Included)	\$8,000.00
Paint Entire Building (All Materials Included)	\$13,000.00
Build New Shed (All Materials Included)	\$8,500.00
Frame Exterior Front Per Blueprints (All Materials Included)	\$14,000.00
Install New Exterior Doors, Windows, Garage Door (All Materials Included)	\$45,000.00
Black Top And Mark Existing Parking Lot And Lay New Asphalt And Drains In Unfinished Lot (All Materials Included)	\$56,000.00
Landscaping All Around Building And Parking Lot (All Materials Included)	\$9,200.00
Install New Decking (All Materials Included)	\$8,000.00
Total:	\$232,700.00

Notes:

Prepared by: Christos Katseas

This is a quotation on the services/materials named above, subject to the conditions noted below.

100% Customer Satisfaction at the end of the project.

All payments must be made on time agreed.

To accept this quote/contract, sign here and return: _____

- 100% Customer Satisfaction!
- High Quality Services!
- Warranty In Every Job!
- No Job Is Too Small!

Thank You For Your Business!





3628 HERITAGE DR
 NORTHBROOK, IL
 847-489-5110

PROPOSAL

FEBRUARY 20, 2020
 PROPOSAL #:10-034
 396 W. IRVING PARK

BILL TO:
ATTN: TED BOUFIS (CROSSROADS, INC)

DESCRIPTION	AMOUNT
PER BLUEPRINTS, COMPLETE CONCRETE WORK AND FRAMING FOR THE ENTRANCE CANOPY AND FFRAME THE FRONT EXTERIOR	\$ 47,000.00
REMOVE AND REPLACE EXISTING ROOF, SIDING, SOFFIT AND GUTTERS	\$ 36,000.00
INSTALL NEW WINDOWS, EXTERIOR DOORS AND GARAGE DOOR	\$ 50,000.00
INSTALL NEW DECK	\$ 10,000.00
INSTALL A NEW SHED	\$ 8,500.00
RE-ASPHALT EXISTING PARKING LOTT AND LAY NEW ASPHALT IN LOT	\$ 60,000.00
PAINT BUILDING THROUGHOUT	\$ 15,000.00
LANDSCAPE AROUND THE ENTIRE BUILDING	\$ 12,000.00
PRICE INCLUDES: DEMO, HAUL AWAY OF DEBRIS, ALL MATERIAL NEEDED FOR THE SCOPE OF WORK	
	\$ 238,500.00

PLEASE MAKE ALL CHECKS PAYABLE TO AB CREATIVE CONSTRUCTION, INC

THANK YOU FOR YOUR BUSINESS!

339 Tracy Ln
 Elgin, IL, 60124
 (773) 630-7572
 flavianconstruction@gmail.com

Estimate

Flavian Construction

For: Ted Boufis /Crossroads Inc.
 tedboufis@yahoo.com
 396 W Irving Park Rd
 Wood Dale, IL, 60191

Estimate No: 52
 Date: 02/03/2020

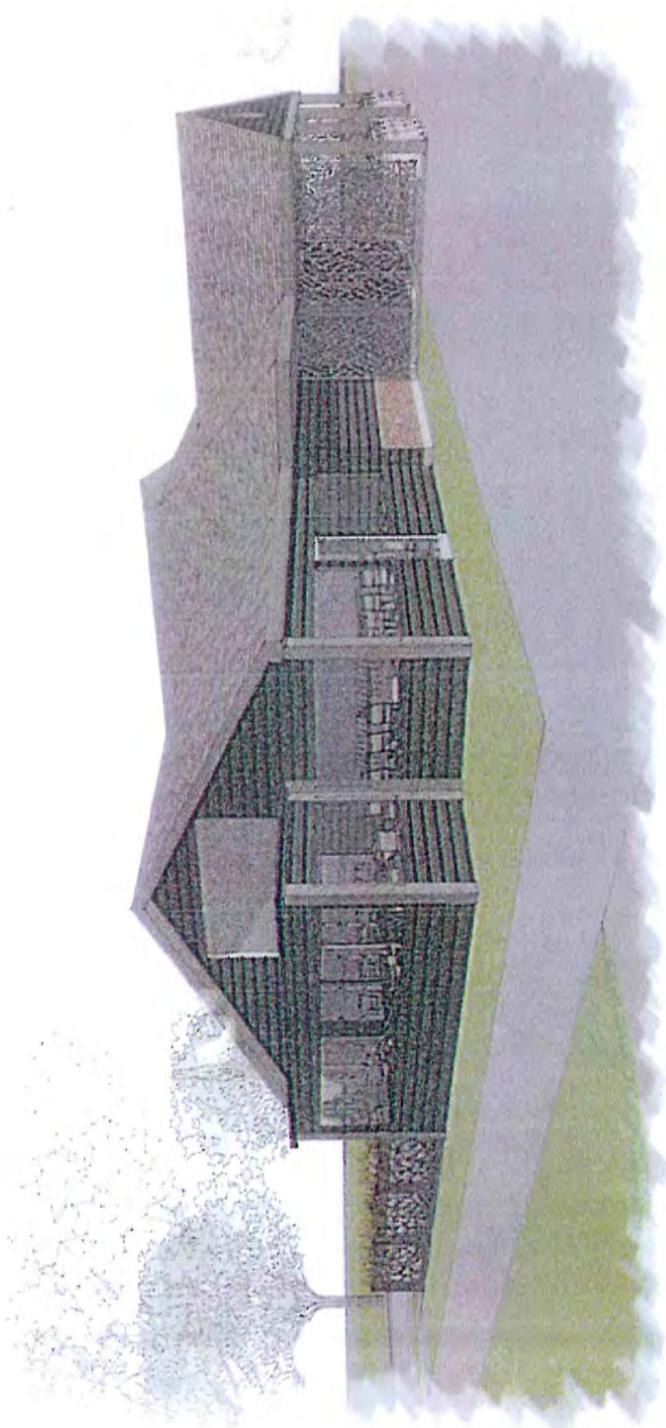
Description	Quantity	Rate	Amount
Demo and clean up	1	\$9,500.00	\$9,500.00
New roof on building (materials included)	1	\$41,000.00	\$41,000.00
Pour needed concrete for supports for front entrance canopy(materials included)	1	\$13,500.00	\$13,500.00
Re-frame front entrance canopy (materials included)	1	\$15,000.00	\$15,000.00
Re-frame front of building according to blueprints (materials included)	1	\$16,000.00	\$16,000.00
Install all new windows, doors and garage door on exterior of building (all materials included)	1	\$45,000.00	\$45,000.00
Paint building (materials included)	1	\$14,750.00	\$14,750.00
Add new siding, soffit and gutters where needed (materials included)	1	\$9,500.00	\$9,500.00
Build new storage shed (materials included)	1	\$8,000.00	\$8,000.00
Add new asphalt on unfinished side of parking lot. Add new drains as needed. Resurface existing parking lot with black top and mark all parking area (materials included)	1	\$64,500.00	\$64,500.00
Build new deck area (materials included)	1	\$11,000.00	\$11,000.00
Landscaping work on round the property, building and parking lot area (materials included)	1	\$9,500.00	\$9,500.00
		Subtotal	\$257,250.00
		TAX 0%	\$0.00
		Total	\$257,250.00
Total			\$257,250.00

Exhibit D

Local Bar & Grille



B PAKER
DESIGN



Exterior Concept

Issue no.	Date
Concepts R1	22 Jan 2020
Design Development Review	6 March 2020
Design Development Review	3 April 2020
Final Design Review	17 April 2020
Final Design Review Edits V1	27 April 2020
Revisions V2	1 May 2020
Revisions V3	21 May 2020
Revisions V4	

Exterior Perspective

003

Local Bar & Grille



B PARKER
DESIGN

Exterior Concept

Issue no.	date
Concepts R1	22 Jun 2020
Design Development Review	6 March 2020
Design Development Review	3 April 2020
Final Design Review	17 April 2020
Final Design Review Edits V1	24 April 2020
Revisions V2	27 April 2020
Revisions V3	1 May 2020
Revisions V4	21 May 2020



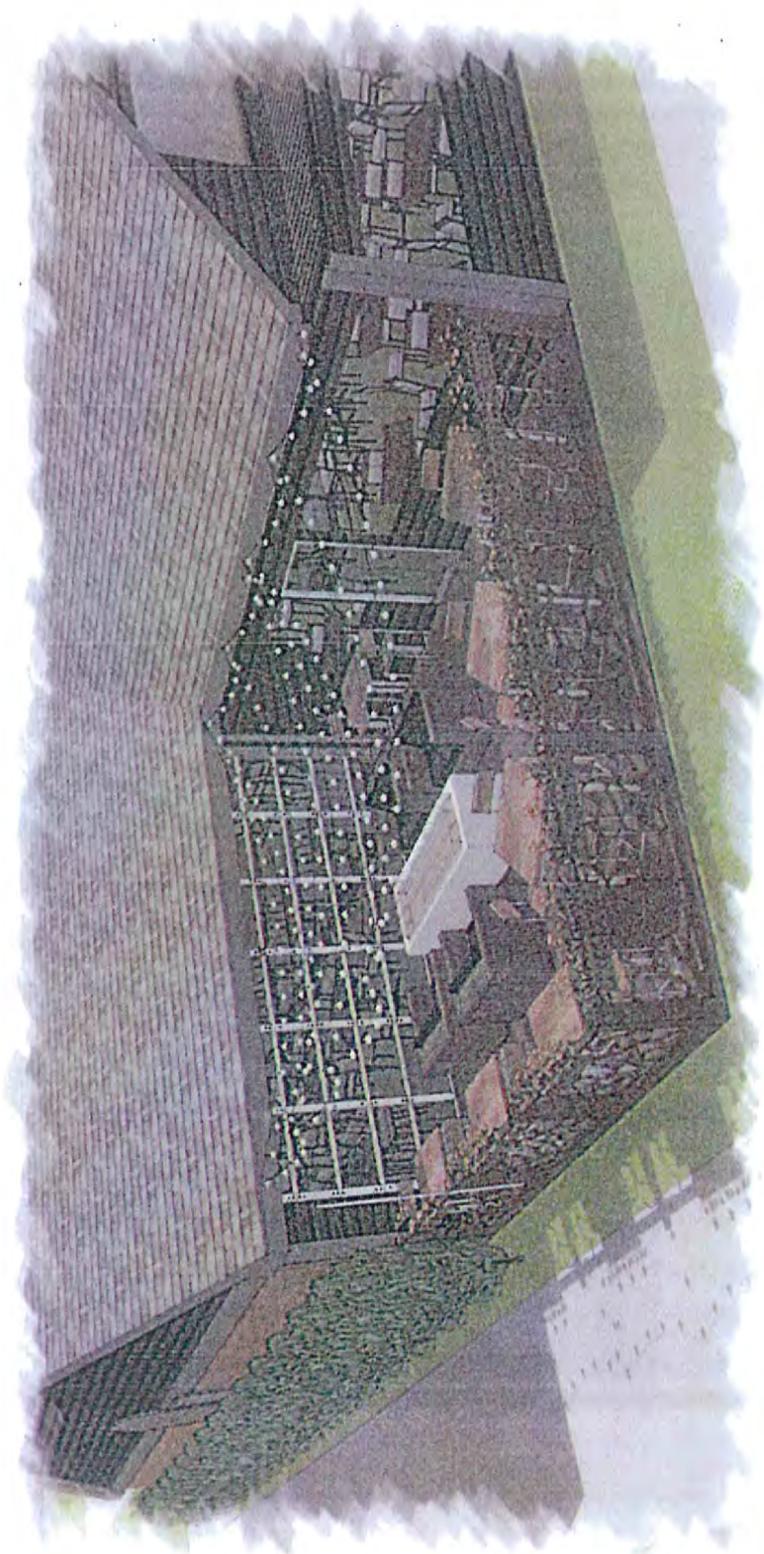
Aerial Perspective

004

Local Bar & Grille



B. PAIKER
C O L E S T A R



Exterior Concept

Issue no.	date
Concepts R1	22 Jan 2020
Design Development Review	6 March 2020
Design Development Review	3 April 2020
Final Design Review	17 April 2020
Final Design Review Edits V1	24 April 2020
Revisions V2	27 April 2020
Revisions V3	1 May 2020
Revisions V4	21 May 2020

Outdoor Dining w/Lighting

005

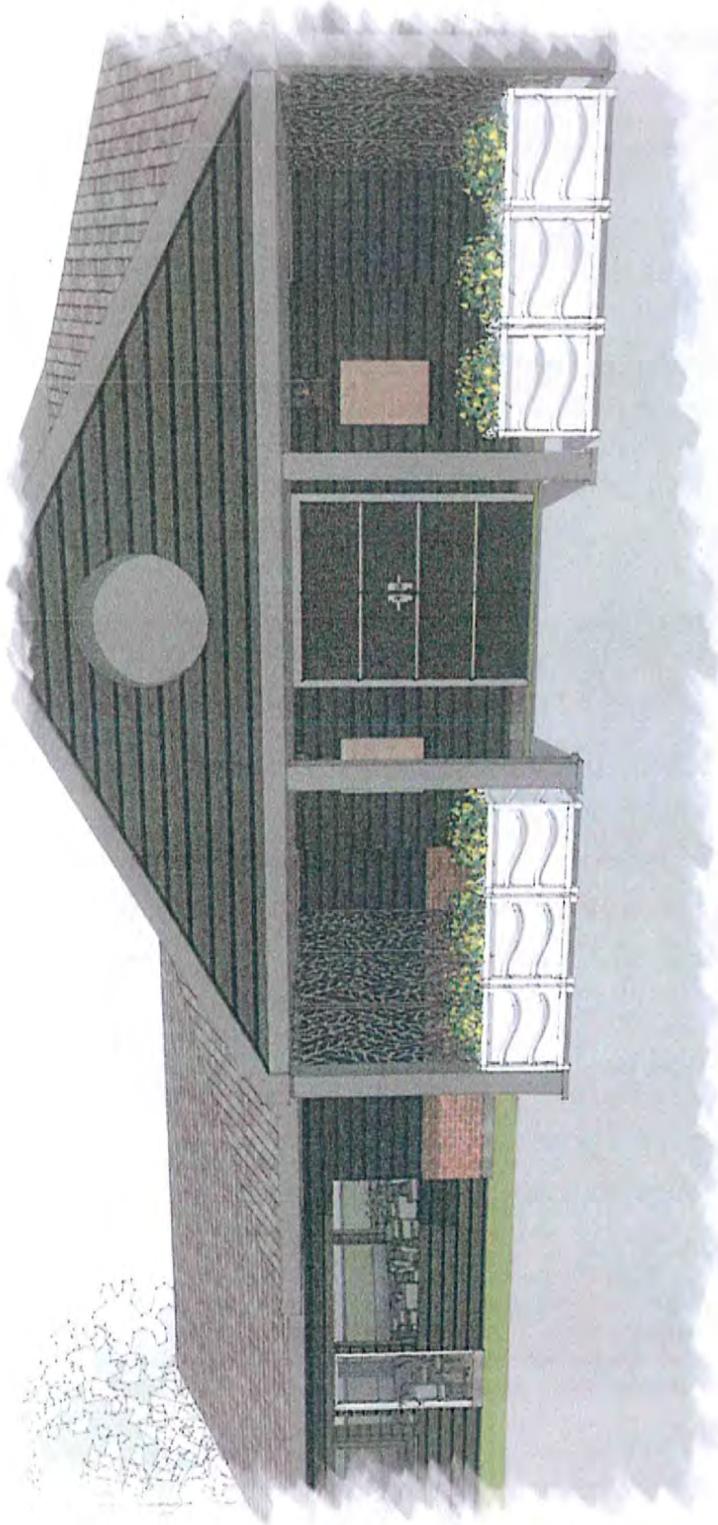
Local Bar & Grille



B PARKER
DESIGN

Entry Concept.

Issue no.	date
Concepts R1	22 Jan 2020
Design Development Review	6 March 2020
Design Development Review	3 April 2020
Final Design Review	17 April 2020
Final Design Review Edits V1	24 April 2020
Revisions V2	27 April 2020
Revisions V3	1 May 2020
Revisions V4	21 May 2020

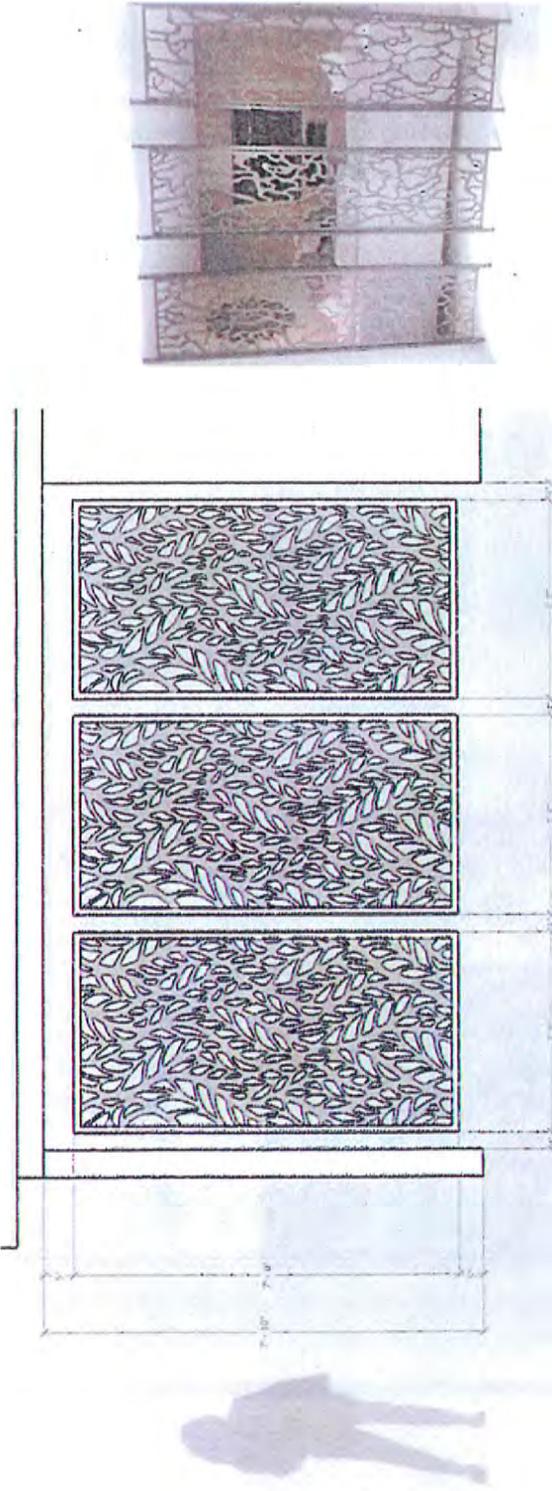


Exterior Perspective

Local Bar & Grille



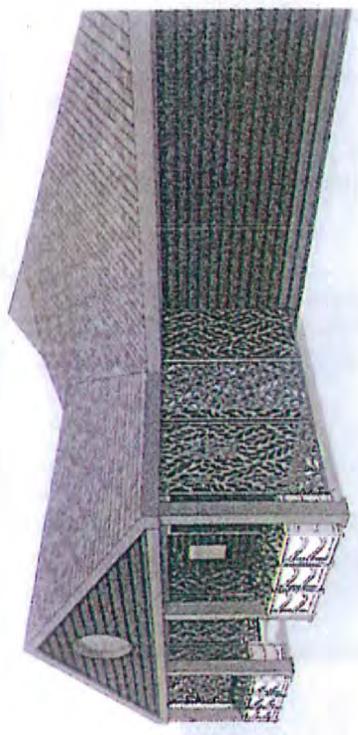
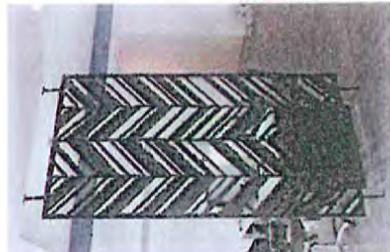
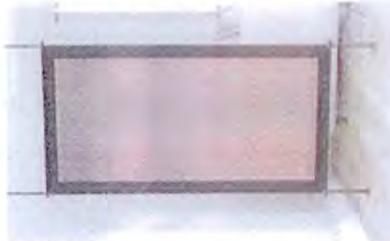
B. PAPIKER
DESIGN



Architectural Screen at Entry

Outdoor Entry Screens

Issue no.	date
Concepts R1	22 Jan 2020
Design Development Review	6 March 2020
Design Development Review	3 April 2020
Final Design Review	17 April 2020
Final Design Review Edits V1	24 April 2020
Revisions V2	27 April 2020
Revisions V3	1 May 2020
Revisions V4	21 May 2020



Entry - Perspective

Local Bar & Grille



B PARKER
DESIGN

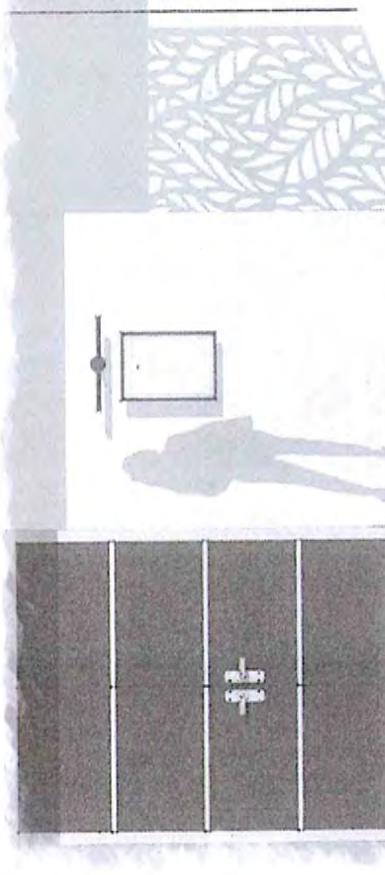
Menu Display at Entry

Issue no.	date
Concepts R1	22 Jan 2020
Design Development Review	6 March 2020
Design Development Review	3 April 2020
Final Design Review	17 April 2020
Final Design Review Edits V1	24 April 2020
Revisions V2	27 April 2020
Revisions V3	1 May 2020
Revisions V4	21 May 2020

007.a



Menu Board at Entry - Option A

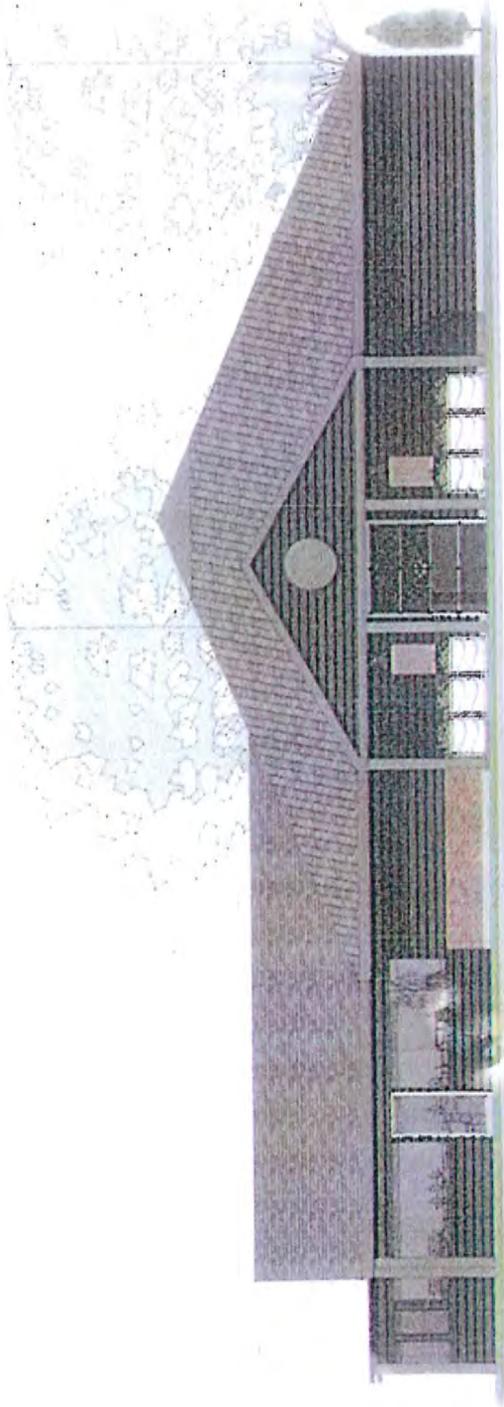


Menu Board at Entry - Option B

Local Bar & Grille



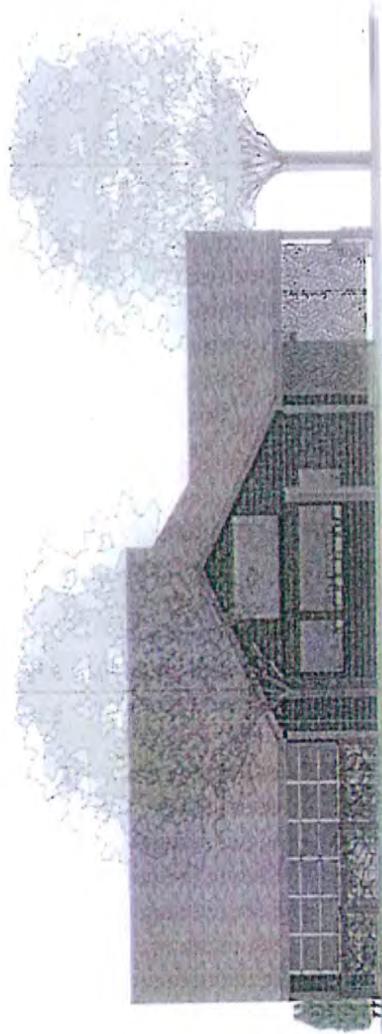
B PARKER
ARCHITECTS



West Elevation

Building Elevations

Issue no.	date
Concepts R1	22 Jan 2020
Design Development Review	6 March 2020
Design Development Review	3 April 2020
Final Design Review	17 April 2020
Final Design Review Edits V1	27 April 2020
Revisions V2	1 May 2020
Revisions V3	21 May 2020
Revisions V4	



North Elevation

008

Local Bar & Grille

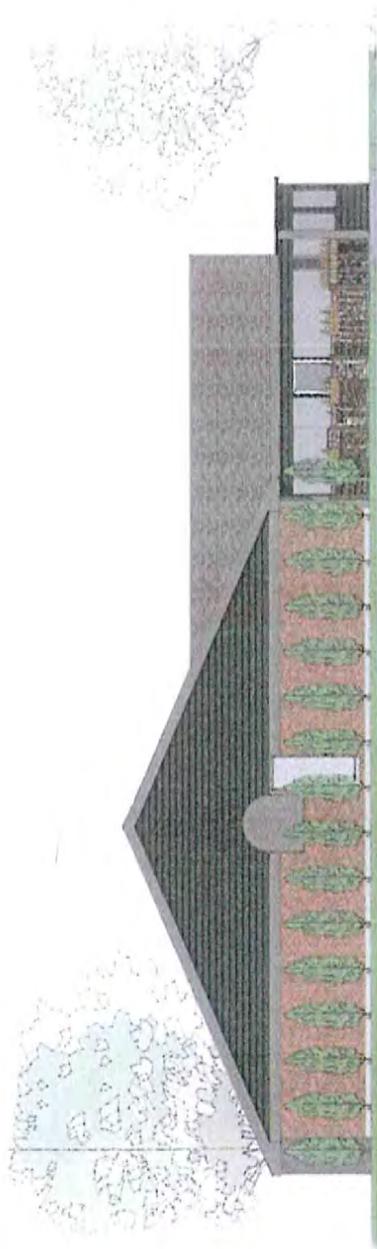


B PARKER
DESIGN

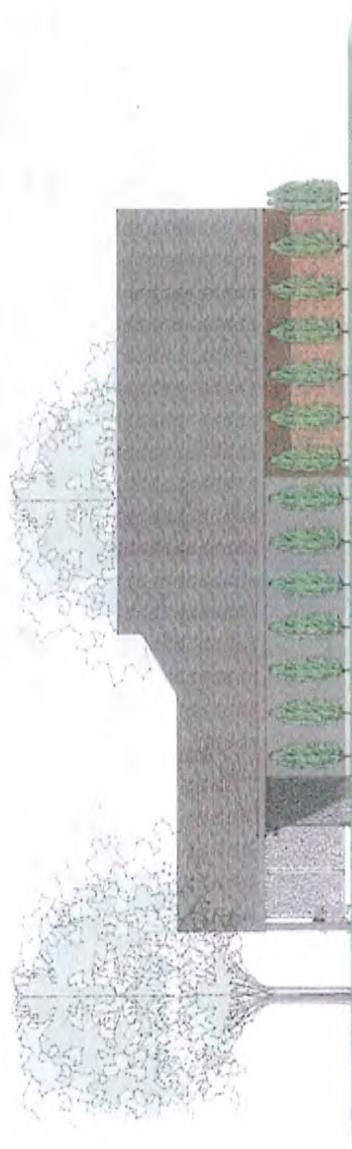
Building Elevations

issue no.	date
Concepts R1	22 Jan 2020
Design Development Review	6 March 2020
Design Development Review	3 April 2020
Final Design Review	17 April 2020
Final Design Review Edits V1	24 April 2020
Revisions V2	27 April 2020
Revisions V3	1 May 2020
Revisions V4	21 May 2020

009



East Elevation



South Elevation

Local Bar & Grille

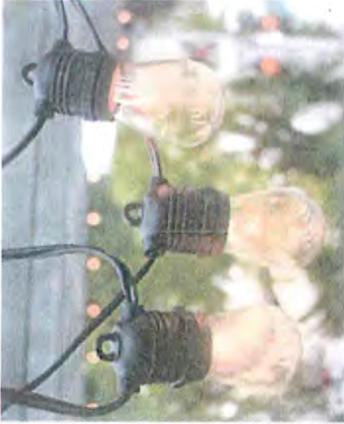


B PARKER
DESIGN

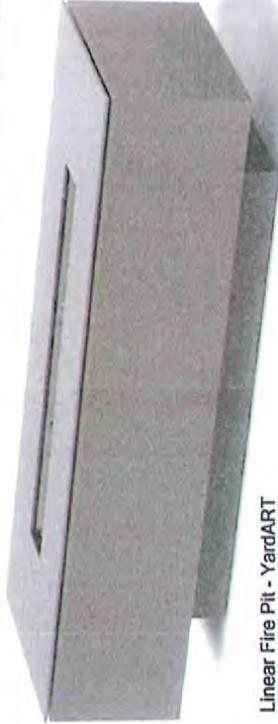
Outdoor Patio Furnishings

issue no.	date
Concepts R1	22 Jan 2020
Design Development Review	6 March 2020
Design Development Review	3 April 2020
Final Design Review	17 April 2020
Final Design Review Edits V1	24 April 2020
Revisions V2	27 April 2020
Revisions V3	1 May 2020
Revisions V4	21 May 2020

019



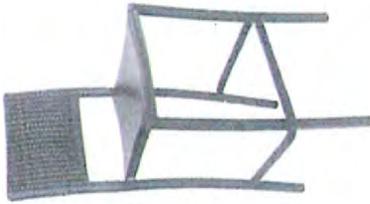
Outdoor Patio Lighting



Linear Fire Pit - YardART
SKU: LNFP-S
59L x 22W x 17H
Metallic Silver Aluminum
Natural Gas
1/2" Aluminum Tabletop to match base
Matching lid
Glass Surround
Lava Rocks - Blue
Electronic Ignition



Decking Material - Trex
SKU: IMT90000
1" x 6" x 12"



Patio Chair - Grosflex
Java Wicker Barstool
Charcoal
US927002



Patio Chair - Grosflex
Java Wicker Sidechair
Charcoal
US926002



Patio Table Top - Grosflex
Walnut
US32H790

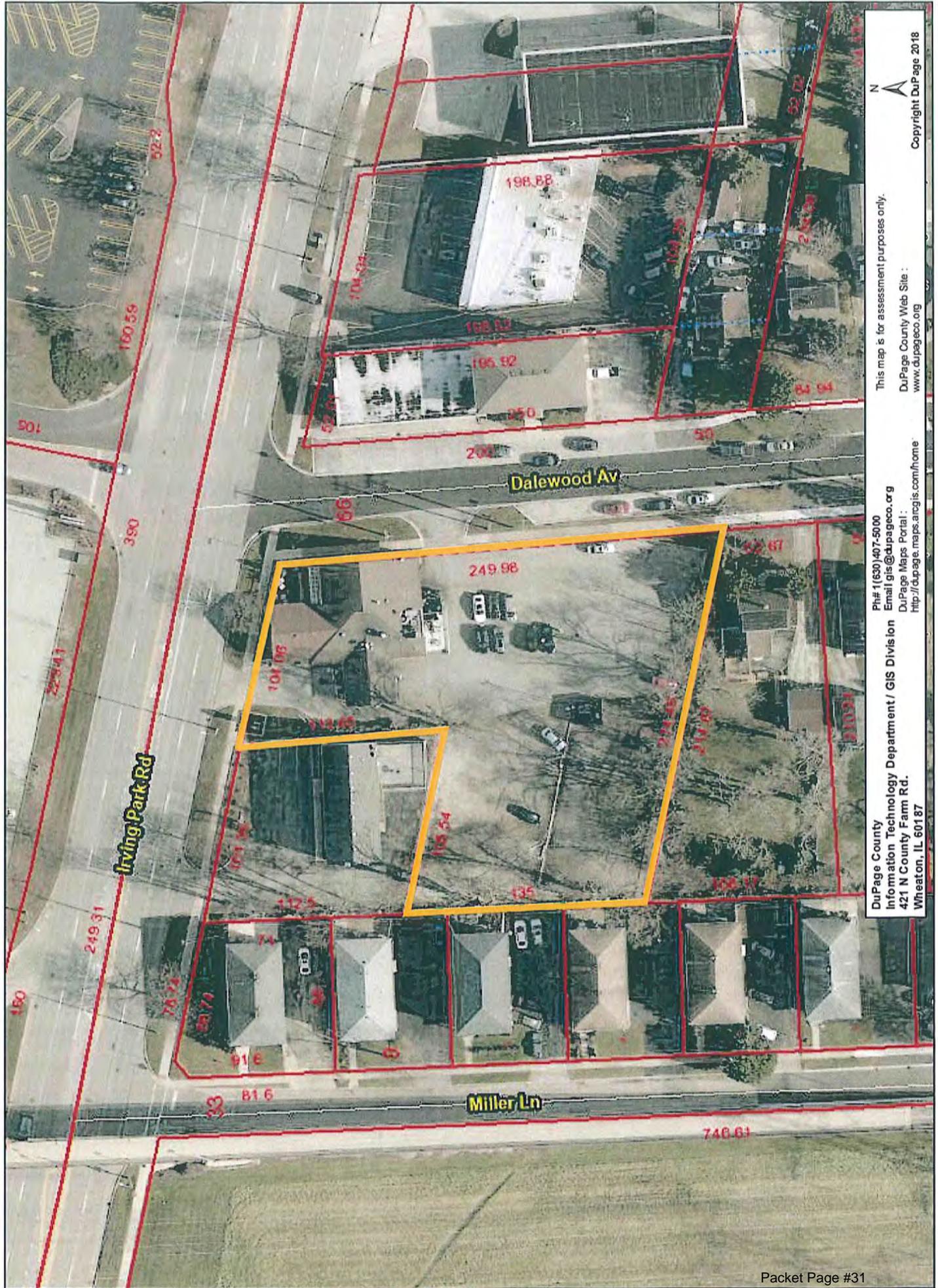


Patio Table Base - Grosflex
X1 Tilt Top Base
Black
USX1H017

Outdoor/Patio Furnishings

Exhibit E

396 W Irving Park Rd, Wood Dale, IL 60191
DuPage Web Mapping Application - DuPage County, Illinois



This map is for assessment purposes only.
DuPage County Web Site : www.dupageco.org

Ph.# 1(630)407-5000
Email gis@dupageco.org
DuPage Maps Portal : <http://dupage.maps.arcgis.com/home>

DuPage County
Information Technology Department / GIS Division
421 N County Farm Rd.
Wheaton, IL 60187

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PUBLIC HEALTH, SAFETY, JUDICIARY & ETHICS
COMMITTEE MINUTES

Committee Date: May 14, 2020
Present (via Zoom): (via Zoom): Ald. Catalano, Jakab, Messina, Sorrentino, Susmarski, E. Wesley and Woods
Absent: Ald. R. Wesley
Also Present Mayor Pulice, City Manager Mermuys, Treasurer Porch, Clerk (via Zoom): Curiale, Chief Vesta, A. Lange, B. Wilson, B. Garelli, N. Kace
Meeting Convened at: 8:21 p.m.

APPROVAL OF MINUTES:

The minutes of the March 12, 2020 meeting were approved as presented.

REPORT & RECOMMENDATION

AN ORDINANCE AMENDING CHAPTER 5, ARTICLE III, SECTION 5.305 OF THE MUNICIPAL CODE OF THE CITY OF WOOD DALE TO INCREASE NUMBER OF CLASS "GS" LIQUOR LICENSES AUTHORIZED FOR ISSUANCE

DISCUSSION:

This is for the new Seven-11 opening at Irving Park and Addison Roads.

VOTE:

Ald. E. Wesley made a motion, seconded by Ald. Woods, to approve An Ordinance Amending Chapter 5, Article III, Section 5.305, of the Municipal Code of the City of Wood Dale to increase the number of Class "GS" Liquor Licenses Authorized for Issuance. A roll call vote was taken, with the following results:

Ayes: Ald. Catalano, Jakab, Messina, Sorrentino, Susmarski, E. Wesley & Woods
Nays: None
Abstained: None
Motion: Carried

ITEMS TO BE CONSIDERED AT FUTURE MEETINGS:

- DuPage County Senior Citizen Council request for funding

ADJOURNMENT:

The meeting adjourned at 8:24 p.m.

Minutes taken by Eileen Schultz



REQUEST FOR COMMITTEE ACTION

Referred to Committee: August 13, 2020
Subject: Revisions to Liquor Ordinance
Staff Contact: Greg Vesta, Chief of Police
Department: Police

TITLE: An Ordinance Amending Chapter 5, Article IV, Section 5.407 of the Municipal Code of the City of Wood Dale to Amend the Language Regarding Persons Under Twenty-One (21) Years Of Age.

RECOMMENDATION:

Approve an ordinance amending the Municipal Code of the City of Wood Dale regarding the possession or delivery of alcoholic beverages by persons under the age of twenty-one.

BACKGROUND:

In reviewing the current ordinance relating to the possession or delivery of alcoholic beverages by persons under twenty-one (21) years of age, it was discovered that the language referencing the “order of his or her parent” should not be included as permissible conduct.

ANALYSIS:

State law does allow for delivery and service by those under 21, but provides local municipalities to further restrict these activities. Current ordinance does not permit for any such person under twenty one (21) years of age as an employee or agent of any licensee to draw, pour and/or mix alcoholic liquor.

The consumption for religious exemptions is covered later in the code, so any references to the parental approval for consumption of alcohol would be exempted by that language.

This revision would also provide additional reference to the requirements that any employees involved in the delivery or service of alcoholic liquor would be subject to the state and local codes regarding Beverage Alcohol Sellers and Servers Education and Training (BASSET).

The proposed language for the new section 5.407.5 would read:

5. Any person under the age of twenty one (21) years who has any alcoholic beverage in his possession on any street or highway or in any public place or in any place open to the public is guilty of a Class B misdemeanor. This subsection does not apply to the possession by a person under the age of twenty one (21) years making a delivery of an alcoholic beverage container in connection with his or her employment. It shall be unlawful for any such person under twenty one (21) years of age as an employee or agent of any licensee to draw, pour and/or mix alcoholic liquor or to maintain or service any video gaming terminal or to be within any video gaming terminal area. All delivery or service must be conducted by persons who have completed Beverage Alcohol Sellers and Servers Education and Training (BASSET) in accordance with section 5.302.C.3 of the City of Wood Dale Municipal Code.

DOCUMENTS ATTACHED

✓ Draft Ordinance

ORDINANCE NO. O-20-

AN ORDINANCE AMENDING CHAPTER 5, ARTICLE IV, SECTION 5.407, OF THE MUNICIPAL CODE OF THE CITY OF WOOD DALE AMEND THE LANGUAGE REGARDING PERSONS UNDER TWENTY-ONE (21) YEARS OF AGE.

WHEREAS, the City of Wood Dale is a body politic and corporate, organized and existing pursuant to the Illinois Municipal Code, 65 ILCS 5/1-1-1, *et seq.*; and

WHEREAS, the City of Wood Dale is authorized and empowered, under the Illinois Municipal Code; the Liquor Control Act of 1934, 235 ILCS 5/1-1, *et seq.*; and the Municipal Code of the City of Wood Dale of 1993, as amended, to regulate the retail sale and consumption of alcoholic beverages within the municipal boundaries of the City and to establish classes of liquor licenses and maximum number of licenses that can be issued for each class; and

WHEREAS, Section 5.407 of Chapter 5, Article IV, of the Municipal Code of the City of Wood Dale of 1993, as amended, presently authorizes the possession of alcohol by a person under twenty-one (21) years of age “in pursuance of the order of his or her parent”, and

WHEREAS, the delivery and service by those under twenty-one (21) years of age is currently permitted if the act is conducted in connection with their employment, and after completion of a Beverage Alcohol Sellers and Servers Education and Training (BASSET) program; and

WHEREAS, it has been determined that any exemptions for consumption under the direct supervision of a parent or for religious ceremonies is exempted under another section of the City of Wood Dale Municipal Code.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WOOD DALE, DUPAGE COUNTY, ILLINOIS, as follows:

SECTION ONE: The recitals set forth above are incorporated herein and made a part hereof.

SECTION TWO: That Chapter 5 of the Municipal Code of the City of Wood Dale of 1993, as amended, Article IV, Section 5.407, is restated and amended in its entirety to read as follows:

5. Any person under the age of twenty one (21) years who has any alcoholic beverage in his possession on any street or highway or in any public place or in any place open to the public is guilty of a Class B misdemeanor. This subsection does not apply to the possession by a person under the age of twenty one (21) years making a delivery of an alcoholic beverage container in connection with his or her employment. It shall be unlawful for any such person under twenty one

(21) years of age as an employee or agent of any licensee to draw, pour and/or mix alcoholic liquor or to maintain or service any video gaming terminal or to be within any video gaming terminal area. All delivery or service must be conducted by persons who have completed Beverage Alcohol Sellers and Servers Education and Training (BASSET) in accordance with section 5.302.C.3 of the City of Wood Dale Municipal Code.

SECTION THREE: That the City Clerk of the City of Wood Dale be and is directed hereby to publish this Ordinance in pamphlet form, pursuant to the statutes of the State of Illinois.

SECTION FOUR: That this Ordinance shall be in full force and effect from and after its passage, approval, and publication in the manner provided by law.

PASSED this 20th day of August, 2020

AYES: _____

NAYS: _____

ABSENT: _____

APPROVED this 20th day of August, 2020.

SIGNED: _____
Annunziato Pulice, Mayor

ATTEST: _____
Lynn Curiale, City Clerk



REQUEST FOR COMMITTEE ACTION

Referred to Committee: August 13, 2020
Subject: Addition of Class GS Liquor License
Staff Contact: Greg Vesta, Chief of Police
Department: Police

TITLE: Request for additional Class GS Liquor License

RECOMMENDATION:

Determine if City Council wants to add an additional Class GS liquor license.

BACKGROUND:

City Council determines the number of liquor licenses available in each classification, and the liquor commissioner then has the authority to issue those licenses.

City Council does not leave additional liquor licenses available until there is a location that has expressed an interest in obtaining a license.

The Shell gas station at 1001 N. Wood Dale Road has contacted the Liquor Commissioner and has expressed a desire to have a Class GS liquor license available. There are currently 3 of these licenses issued.

ANALYSIS:

The Class GS liquor license is specifically for gas stations, and allows the sale of alcoholic liquor for consumption off-premises, and is limited in the amount of floor space that can be dedicated to liquor sales.

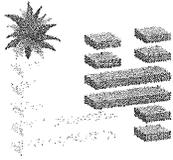
CLASS GS: Authorizing the sale of alcoholic liquor in the original package for off premises consumption by any convenience or similar store selling food, groceries, prepared foods and drink for immediate consumption, and other products on the same premises with the retail sale of gasoline and other motor fuels dispensed directly into vehicles. Such premises shall not be eligible for any

other class of license provided for under this section, even though it may meet the requirements for such. Alcoholic liquors shall be stocked, displayed, and sold within only one building on such premises, which shall be a building in which food, groceries, and prepared foods and drink are also displayed and sold. The display of alcoholic liquor for sale shall not occupy an area greater than ten percent (10%) of the total floor area of such building. No beer or wine shall be consumed on the premises nor displayed, stocked, stored, or sold on any portion of the premises except as provided herein.

If City Council determines that they wish to add an additional Class GS license, staff will prepare the appropriate ordinance for passage.

DOCUMENTS ATTACHED

- ✓ Letter requesting liquor license



LAKHANI
HOSPITALITY

Liquor License Request: 1001 N Wood Dale Rd.
July 29, 2020

Karim Lakhani
Director of Operations & Development
Lakhani Hospitality
5300 W Touhy Ave.
Skokie, IL 60077

July 29, 2020

Mayor Nunzio Pulice
City of Wood Dale
404 N. Wood Dale Road
Wood Dale, IL 60191

Mayor Nunzio Pulice,

My name is Karim Lakhani, and I am the Director of Operations and Development for Lakhani Hospitality. Our company develops and manages hotels, restaurants, and refueling stations in the Chicagoland area. One particular gas station that we developed and continue to own and manage is the Shell located at 1001 N Wood Dale Road, at the corner of Wood Dale Road and Thorndale Avenue.

I am submitting to you today a written request to the City Council to grant a liquor license to our Shell Gas Station. We believe the addition of beer sales can help the gas station survive the substantial reduction in traffic we have seen given COVID and the Elgin-O'Hare expressway, and stay competitive with other refueling stations in the City that already sell beer.

Please let me know if I can provide any documents or answer any questions. I look forward to an opportunity to address you and the Council.

Thank you,

Karim



PUBLIC WORKS
COMMITTEE MINUTES

Committee Date: July 9, 2020
Present: Ald. Catalano, Jakab, Sorrentino, Susmarski, E. Wesley
and Woods
Absent: Ald. Messina, E. Wesley and R. Wesley
Also Present: Mayor Pulice, Treasurer Porch, Clerk Curiale, City Manager
Mermuys, Police Chief Vesta, A. Lange, E. Cage, B. Wilson
Meeting Convened at: 8:45 p.m.

APPROVAL OF MINUTES:

The minutes of the June 11, 2020 meeting were approved as presented.

REPORT & RECOMMENDATION

APPROVAL OF AGREEMENT BETWEEN CITY OF WOOD DALE AND CORRECTIVE ASPHALT
MATERIALS FOR PAVEMENT PREVENTATIVE MAINTENANCE

DISCUSSION:

None

VOTE:

Ald. Catalano made a motion, seconded by Ald. Jakab, to approve an Agreement between the City of Wood Dale and Corrective Asphalt Materials for Pavement Preventative Maintenance in an amount not to exceed \$34,320. A roll call vote was taken, with the following results:

Ayes: Ald. Catalano, Jakab, Sorrentino, Susmarski & Woods
Nays: None
Abstained: None
Motion: Carried

REPORT & RECOMMENDATION:

APPROVAL OF CHANGE ORDER NO. 1 TO AGREEMENT WITH BROTHERS ASPHALT PAVING FOR
FY21 CAPITAL ROADS PROGRAM

DISCUSSION:

Mayor Pulice asked for clarification; Director Lange stated this is for the extension of the 8" storm sewer and addition of two inlets on Apollo Ct. He explained that the storm sewer

currently on Apollo ends halfway down the block, so they are going to extend from the catch basin in the street northward down the cul-de-sac and install two additional inlets to collect surface water and also provide access points for the residents to connect their sump pump discharges. Ald. Catalano asked if those residents were contacted. Director Lange has spoken to several already and will provide yard drains similar to what they did on Dalewood. The City would provide yard drainage to the edge of the parkway and they are responsible for connection from house to the actual yard drain. When asked about the estimated cost for a resident to do this, Director Lange agreed to talk with the contractor to obtain that information.

VOTE:

Ald. Catalano made a motion, seconded by Ald. Jakab, to approve Change Order No. 1 to an Agreement with Brothers Asphalt Paving for FY21 Capital Roads Program in the not to exceed amount of \$26,610.50. A roll call vote was taken with the following results:

Ayes: Ald. Catalano, Jakab, Sorrentino, Susmarski & Woods
Nays: None
Abstained: None
Motion: Carried

REPORT & RECOMMENDATION:

APPROVAL OF AMENDMENT TO AGREEMENT WITH BAXTER & WOODMAN FOR PROFESSIONAL SERVICES FOR FY21-22 CAPITAL ROADS PROGRAM

DISCUSSION:

Ald. Woods asked for clarification of the Amendment. Director Lange explained it is to partially cover work on Apollo Court, and Phase and I and II engineering for Foster Avenue.

VOTE:

Ald. Catalano made a motion, seconded by Ald. Jakab, to approve an Amendment to the Agreement with Baxter & Woodman for Professional Services for the FY 21-22 Capital Roads Program in an amount not to exceed \$25,100. A roll call vote was taken with the following results:

Ayes: Ald. Catalano, Jakab, Sorrentino, Susmarski & Woods
Nays: None
Abstained: None
Motion: Carried



ITEMS TO BE CONSIDERED AT FUTURE MEETINGS:

- Clock Tower
- Engineering Standards – August
- Creek dredging by Army Corp of Engineers (Susmarski)

ADJOURNMENT:

The meeting adjourned at 8:55 p.m.

Minutes taken by Eileen Schultz



REQUEST FOR COMMITTEE ACTION

Referred to Committee: August 13, 2020
Subject: Engineering Design Standards Manual
Staff Contact: Alan Lange, Public Works Director
Department: Public Works

TITLE: Recommendation Adopting the City of Wood Dale Engineering Design and Development Standards Manual

RECOMMENDATION:

Staff Recommendation Adopting the City of Wood Dale Engineering Design and Development Standards Manual.

BACKGROUND:

City staff had previously identified a need to establish standards of construction workmanship and materials for City improvements as well as improvements on City infrastructure by private developers. To satisfy this need the City previously contracted with Thomas Engineering to create a set of written specifications and detail drawings for various elements of public infrastructure relating to water distribution, sanitary and storm collection, pavement, street lighting and signage, landscaping and erosion control, as well as administrative details. These documents were reviewed and modified by City staff as well as the City's engineer to ensure they were complete, void of any conflicts with City Code, as well as taking into account the most up-to-date industry practices and materials. The standards were compiled into one document to be used by reference for City staff and engineers as well as private developers and will be modified as needed to keep with the most current practices and meet the needs of the City. Specifications and design standards relating to small cell wireless infrastructure will be adopted later as these are still in development.

ANALYSIS:

There is no direct cost related to the adoption of this manual.

DOCUMENTS ATTACHED

- ✓ Engineering Design and Development Standards Manual

Engineering Design and Development Standards Manual



CITY OF
WOOD DALE

THE CITY OF WOOD DALE
COUNTY OF DUPAGE
STATE OF ILLINOIS

Distributed by:
CITY OF WOOD DALE
DEPARTMENT OF PUBLIC WORKS
720 N. Central Avenue
Wood Dale, Illinois 60191
(630) 350-3530

TABLE OF CONTENTS

1. Written Standards

- Bid Documents
- Standard Specifications
- Standard General Notes

2. Details

- 100: General Administration
- 200: Storm Sewer
- 300: Sanitary Sewer
- 400: Water Distribution System
- 500: Pavement
- 600: Street Lighting & Traffic Signals
- 700: Grading, Landscaping & Erosion Control

1

Written Standards

*Bid documents
Standard Specifications
Standard General Notes*

BID DOCUMENTS

RETURN WITH BID

Submitted By: _____

Company Name: _____

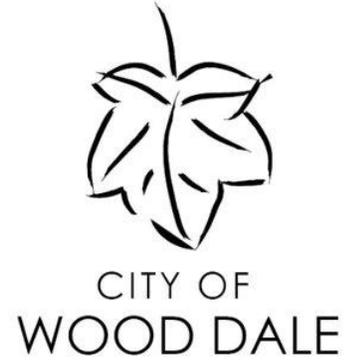
Contact Person: _____

Address: _____

City, State, Zip: _____

Telephone: _____

Fax: _____



**CITY OF WOOD DALE
DUPAGE COUNTY, ILLINOIS**

**NOTICE TO CONTRACTORS
CONTRACT DOCUMENTS
SPECIFICATIONS**

FOR

**PROJECT NAME
DATE**

Annunziato Pulice, Mayor

Lynn Curiale, City Clerk

Prepared By:

City of Wood Dale, Public Works
404 N. Wood Dale Road
Wood Dale, Illinois 60191
630-350-3530

TABLE OF CONTENTS

Cover Sheet.....1

Table of Contents.....2

Notice to Bidders.....3

Definitions.....4

General Terms and Conditions and Instructions to Bidders
.....5

Insurance Requirements.....11

Special Instructions.....14

Bid Proposal.....15

Contract.....19

Disclosure of Beneficiaries.....22

Bidder’s Certification Forms.....24

Contractor References.....30

Performance Bond.....31

Maintenance Bond.....33

Project Special Provisions or Technical Specifications.....--

Attachments.....--

CITY OF WOOD DALE
PROJECT NAME

NOTICE TO BIDDERS

Sealed bids for the “**PROJECT NAME**” will be received in the office of the City Clerk, City of Wood Dale, IL 60191 until **BID TIME** on the **BID DATE**, at which time all bids will be publicly opened and read. All bids must be submitted in a sealed envelope marked in the lower left hand corner “SEALED BID, DO NOT OPEN; PROPOSAL OF [NAME OF BIDDER] FOR THE CITY OF WOOD DALE [**PROJECT NAME**].” Specifications may be obtained at the Clerk’s office or by mail/email upon request. This is a prevailing wage project.

IF MANDATORY PRE-BID MEETING IS HELD INCLUDE THIS PARAGRAPH.

A mandatory pre-bid meeting will be held for all prospective bidders on PRE-BID MEETING DATE at PRE-BID MEETING TIME at PRE-BID MEETING LOCATION. All contractors planning on submitting bids for this project must attend the meeting. The City reserves the right to deny bid documents to any contractor they believe does not possess the necessary qualifications to complete the work.

Please contact **CONTACT NAME, CONTACT TITLE**, by phone at **CONTACT PHONE**, or by email at **CONTACT EMAIL** with any questions regarding the bid.

All proposals must be accompanied by a bid guarantee consisting of a bid bond, a cashier's check, or certified check in the amount of not less than ten percent (10%) of the amount of the bid.

Failure of the U.S. Post Office or any other messenger service to deliver the bid on time will not be the responsibility of the City of Wood Dale. The bidders accept full responsibility for timely delivery of their bids. The City of Wood Dale is not liable for any costs incurred in submitting a bid.

The City Council reserves the right to reject any or all bids and to waive any technicalities. The City of Wood Dale also reserves the right to delay the bid opening for a reasonable time and/or to make changes to the project’s specifications by means of bid addendum which will be mailed to all interested parties that have obtained bid documents.

Lynn Curiale
City Clerk

Dated this **ADVERTISE DATE**.

CITY OF WOOD DALE
PROJECT NAME

DEFINITIONS

1. Owner - The officials, employees, and agents of the City of Wood Dale, Illinois.
2. Director - The City of Wood Dale's Director of Public Works or designee.
3. City - The geographic area of the City of Wood Dale, Illinois.
4. Contract - The agreement created by and consisting of the Contract Documents.
5. Contract Documents - The following documents including the Notice to Bidders, Definitions, General Terms and Conditions and Instructions to Bidders, Special Instructions, Proposal, Specifications, Special Provisions, Disclosure of Beneficiaries, Certifications, and attachments, together with all addenda issued prior to the award of the Contract supplementing or modifying any of those documents.
6. Contractor or General Contractor - The party contracting for the work.
7. Days - Unless otherwise stated, days as used herein will be understood to mean calendar days.
8. Completion Date - Date on which the work as described herein is to be completed, as set forth in the Contract.
9. Final Acceptance - The work shall be deemed to have been finally accepted after it has been determined that the Contractor has compiled with the Specifications and other Contract Documents.
10. Notice of Award – Verbal or written communication by the Director of Public Works or designee informing the Contractor of the Council’s decision to accept their proposal.
11. Notice to Proceed – Verbal or written communication by the Director of Public Works or designee authorizing the contractor to commence construction activities on a specified date.
12. Specifications - Specifications identified in the Contract.
13. Subcontractor - Secondary Contractor engaged by the Contractor.
14. Supplier - Any vendor supplying materials, equipment, or apparatus.

CITY OF WOOD DALE
PROJECT NAME

GENERAL TERMS AND CONDITIONS AND INSTRUCTIONS TO BIDDERS

THE GENERAL RULES AND CONDITIONS THAT FOLLOW APPLY TO EACH FORMAL INVITATION TO BID ISSUED BY THE CITY OF WOOD DALE, UNLESS OTHERWISE SPECIFIED. BIDDERS OR THEIR AUTHORIZED REPRESENTATIVES ARE EXPECTED TO FULLY INFORM THEMSELVES OF THE TERMS, CONDITIONS, REQUIREMENTS AND SPECIFICATIONS BEFORE SUBMITTING BIDS. FAILURE TO DO SO WILL BE AT THE BIDDER'S OWN RISK AND NO RELIEF WILL BE GRANTED OR SECURED ON A PLEA OF ERROR.

INSTRUCTIONS TO BIDDERS

1. PROPOSAL FORMS HAVE BEEN FURNISHED: Proposals shall be submitted on the forms provided, properly signed in the appropriate place and submitted in a sealed envelope.
2. LATE BIDS: Bids will be opened precisely at the assigned time. Bids received after the assigned time will be rejected and returned unopened to the sender. Formal bids, amendments thereto, or requests for withdrawal of bids after the time specified for the bid opening will not be considered.
3. WITHDRAWAL OF BIDS: A written request for the withdrawal of a bid will be granted if the request is received by the City prior to the specified time of opening.
4. SUBMISSION OF BIDS: All bids are to be placed in a sealed, opaque envelope addressed to the City Clerk, City of Wood Dale, Illinois, clearly marked "**SEALED BID, DO NOT OPEN. PROPOSAL OF (NAME OF BIDDER) FOR CITY OF WOOD DALE PROJECT NAME**".
5. SIGNATURES: All signatures shall be in handwriting, and no proposal shall be considered unless properly signed by the bidder or its legally authorized agent or representative, with addresses given in the correct spaces provided in the Proposal and in accordance with the directions set forth.
6. ERRORS IN BIDS: When an error is made in extending total prices, the unit bid price will govern. Erasures, etc., must be initialed by the bidder prior to submission of the bid.
7. TIME FOR RECEIVING BIDS: Bids received prior to the time of opening will be kept secure and unopened. No responsibility will attach to the City Clerk or his or her representative for the premature opening of a bid not properly addressed or identified. The City Clerk or her representative, whose duty it is to open the bids, will decide when the specified time for opening has arrived, and no bid received after that time will be considered.

8. BIDDERS PRESENT: At the time assigned for the opening of formal bids, the bids will be opened and read aloud. Bidders are encouraged to attend all openings and to offer constructive suggestions for improvements to bid format or any way in which greater savings can be realized.
9. NO BID RESPONSE: In the event you cannot submit a bid on the Owner's requirements, please return the Proposal with an explanation as to why you are unable to bid and mark it "NO BID."
10. BIDDER INTERESTED IN MORE THAN ONE BID: Only one bid can be offered by any one vendor. A party who has quoted prices for work, materials, or supplies to a bidder is not thereby disqualified from quoting prices to other bidders or from submitting a bid directly for the work, materials, or supplies.

Unless the proposal form states that an alternate proposal is permissible, each vendor may submit only ONE proposal. If an alternate is included in the bid and it was not requested by the Owner, the first proposal seen by the Owner will be read, and the other will not be considered.

11. CERTIFICATIONS AND DISCLOSURE OF BENEFICIARIES: The Bidder is required to complete the forms listed above and return with the Bid Proposal. Failure to complete and return these forms may be considered sufficient reason for rejection of the bid.
12. BID DEPOSIT: When a bid deposit (bid guarantee) is required as indicated in the Invitation to Bid, each bid must be accompanied by a bid bond signed by a surety company authorized to do business in the State of Illinois, or by a cashier's check or certified check in an amount equal to ten percent (10%) of the total bid price or the specific amount indicated in the Invitation to Bid.
13. RETURN OF CHECKS: The bid deposit of all except the three (3) lowest responsible, responsive bidders on each contract will be returned within fifteen (15) days after the opening of bids. The remaining bid deposits of each contract will be returned within fifteen (15) days after the City Council has awarded the contract and the required appurtenances to the contract have been received.
14. ACCEPTANCE OF PROPOSALS: The owner will accept, in writing, one of the proposals within sixty (60) days from the date of opening of bids, or the time specified within the specifications, unless the lowest responsible, responsive bidder extends the time of acceptance to the Owner.
15. TAX EXEMPTION: The City of Wood Dale is exempt from Illinois Retailers Occupational Tax (Sec. IROETA); the Illinois use tax (Sec. 3, IUTA), and the federal excise tax as an exempt entity (Sec. 4222, IRC). The City's Tax Exemption Identification Number is E9997-4282-03.
16. PREVAILING WAGE: Under Public Works contracts, the State of Illinois requires that the general prevailing rate of wages in this locality be paid for each craft or type of work hereunder. This shall include payment of the general prevailing rate for legal holiday and overtime work. It shall be mandatory upon the subcontractor under the Contractor. If wage rates change during the

course of the project, the new rate information will be available at <http://labor.illinois.gov/>. This requirement is in accordance with Public Act 86-799.

17. CHANGE ORDER AUTHORIZATIONS: All Change Orders which authorize a net increase or decrease in the cost of the contract by \$10,000 or more or in the time of completion by 30 days or more require a written determination supporting the change, executed first by the Contractor, then by the City Council.

All Change Orders which authorize a net increase or decrease in the cost of the contract by less than \$10,000, or in the time of completion by less than 30 days, require a written determination supporting the change, executed first by the Contractor, then by the City Manager.

Requests for Change Orders must state that the circumstances said to necessitate the change were not reasonably foreseeable at the time the contract was signed and were not within the contemplation of the contract as signed.

18. EQUAL EMPLOYMENT OPPORTUNITY: In the event of the contractor's noncompliance with any provision of the Equal Employment Opportunity Act, the Americans with Disabilities Act (ADA), the Illinois Fair Employment Practices Act, or the Fair Employment Practices Commission's Rules and Regulations for Public Contracts, the contractor may be declared non-responsible and therefore ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be canceled or avoided, in whole or in part, and such other sanctions or penalties may be imposed or remedies involved as provided by statute or regulation.

19. AWARD OR REJECTION OF BIDS: The contract will be awarded to the lowest responsible, responsive bidder or any other bidder determined by the Owner to be in the best interest of the City of Wood Dale complying with all the provisions of the invitation, provided the bid price is reasonable and it is in the interest of the City to accept it. No proposal will be accepted from or contract awarded to any person, firm, or corporation that is in arrears or is in default to the City of Wood Dale upon any debt or contract, or that is a defaulter, as surety or otherwise, upon any obligation to said City of Wood Dale, or had failed to perform faithfully any previous contract with the City of Wood Dale. The Owner reserves the right to reject any or all bids and to waive any informality in bids received whenever such rejection or waiver is in the interests of the City.

In determining responsibility, the following qualifications, in addition to price, will be considered by the Owner:

- A. The ability, capacity and skill of the bidder to perform the service required within the specified time;
- B. The character, integrity, reputation, judgment, experience, and efficiency of the bidder;

- C. The quality of performance of previous contracts or services with the City of Wood Dale or other clients;
 - D. The previous and existing compliance by the bidder with laws and ordinances relating to previous contracts with the City of Wood Dale, the bidder's employment practices and compliance with ADA requirements;
 - E. The sufficiency of the financial resources and ability of the bidder to perform the contract or provide the service;
 - F. The quality, availability, and adaptability of the supplies or contractual services to the particular use required;
 - G. The ability of the bidder to provide future maintenance and service for the use of the subject of the contract;
 - H. The number and scope of conditions attached to the bid; and
 - I. Such other information as may be secured by the Owner having a bearing on the decision to make the award.
20. ESTIMATED BID QUANTITIES: On "Estimated Bid Quantities," acceptance will bind the Owner to pay for, at unit bid prices, only quantities ordered and delivered. Any reference to forecasted or estimated quantities within the bidding documents is intended to inform the bidder of approximate annual requirements. The Owner may purchase as little as zero (0) percent or as much as one hundred fifty (150) percent of the forecasted or estimated quantities.
21. CONTRACTOR PAYMENTS: Contractor will be paid from funds allocated to the project. Payments will be made according to the Local Government Prompt Payment Act (50 ILCS 505).
22. GENERAL GUARANTY: Contractor agrees to save the City of Wood Dale, its agents, and employees harmless from liability of any nature or kind for the use of any copyrighted or uncopyrighted composition, secret process, patented or unpatented invention, article, or appliance furnished or used in the performance of the contract of which the Contractor is not the patentee, assignee, licensee, or owner.

Contractor agrees to protect the City of Wood Dale against latent defective material or workmanship and to repair or replace any damages or marring occurring in transit or delivery.

Contractor agrees to pay for all permits, licenses, and fees; and give all notices and comply with all laws, ordinances, and rules of the City of Wood Dale and State of Illinois.

23. ASSIGNMENT: Assignment of this contract or any part thereof, or any funds to be received thereunder by the contractor shall be subject to written approval of the Owner.
24. DEFAULT: The contract may be canceled or annulled by the Owner in whole or in part by written notice of default to the Contractor upon nonperformance or violation of contract terms. An award made to the next low Bidder or materials/services specified may be procured on the open market similar to those so terminated. In either event, the defaulting Contractor (or his surety) shall be liable to the City of Wood Dale for costs to the City in excess of the defaulted contract prices provided, that the Contractor shall continue the performance of this contract to the extent not terminated under the provisions of this clause. Failure of the contractor to deliver materials or services within the time stipulated in the bid, unless extended in writing by the Owner, shall constitute contract default.
25. INSURANCE: The Contractor shall procure, and maintain for the duration of the contract, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees, or subcontractors.

A. Minimum Scope of Insurance

Policy shall include the following coverage types:

1. Commercial General Liability Occurrence form with the City of Wood Dale named as additional insured;
2. Owners and Contractors Protective Liability (OCP) policy with the City of Wood Dale named as additional insured (if applicable);
3. Business Auto Liability Coverage;
4. Worker's Compensation as required by the Worker's Compensation Act of the State of Illinois and Employer's Liability insurance;
5. Builder Risk Property Coverage with City of Wood Dale as loss payee (if applicable); and
6. Environmental Impairment/Pollution Liability Coverage for pollution incidents as a result of a claim for bodily injury, property damage or remediation costs from an incident at, on or migrating beyond the contracted work site. Coverage shall be extended to Non-Owned Disposal sites resulting from a pollution incident at, on or mitigating beyond the site; and also provide coverage for incidents occurring during transportation of pollutants (if applicable).

B. Minimum Limits of Insurance: See attachment "A"

26. QUESTIONS OF THE BIDDER DIRECTED TO THE CITY REGARDING SPECIFICATIONS: If the question pertains to information which is provided in the specifications or the bidder is requesting a clarification of a point which is answerable within the context of the specification, the Director of Public Works, or designee, may refer the bidder to the location within the specification providing the information which will readily answer the contractor's question.

If the question is a request to deviate from the terms and conditions of the specification or if the bidder needs clarification that is not apparent in the specification such as an interpretation of the drawings, specifications, or the bid documents, the bidder must make such an inquiry in writing to Alan Lange, Director of Public Works, City of Wood Dale, 404 N. Wood Dale Road, Wood Dale, IL 60191. Phone Number: (630)787-3761. The Director of Public Works will then respond in writing in the form of an addendum to the specifications to all those who receive bid packages. Only inquiries received a minimum of seven (7) working days prior to the date set for the opening of bids will be given any consideration. Oral answers will not be binding on the City of Wood Dale.

27. SPECIAL CONDITIONS: Whenever special conditions are written into the Specifications, Special Provisions, or Special Instructions which conflict with conditions stated in these General Terms and Conditions and Instructions to Bidders, the conditions stated in the Specifications, Special Provisions, or Special Instructions shall take precedence.

ATTACHMENT "A"
INSURANCE REQUIREMENTS

<u>Type of Insurance</u>	<u>Limits of Liability</u>
General Liability:	Property Damage:
Comprehensive Form	\$1,000,000 each occurrence
Premises – Operations	
Products/Completed Operations	
Hazard	
Contractual Insurance	
Broad Form Property Damage	Bodily Injury:
Independent Contractors	\$1,000,000 aggregate
Personal Injury	
Explosion and Collapse Hazard	
Underground Hazard	
 Automobile Liability:	 Bodily Injury and Property
Comprehensive Form	Damage Combined:
Owned	\$1,000,000 each occurrence
Hired	
Non-owned	
 Excess Liability:	 Bodily Injury and Property
Umbrella Form	Damage Combined:
	\$2,000,000 each occurrence
	\$2,000,000 aggregate
 Worker’s Compensation and Employer’s Liability:	 \$500,000 each accident

The coverage afforded the additional insureds shall be primary insurance for the additional insureds with respect to claims or suits arising out of operations performed by or on behalf of the Contractor.

If the additional insureds have other insurance which is applicable to the loss, such other insurance shall be on an excess or contingent basis. The amount of the company’s liability under the insurance policy shall not be reduced by the existence of such other insurance.

A. Workers' Compensation and Employers' Liability Coverages

The insurer shall agree to waive all rights of subrogation against the City of Wood Dale, its officials, agents, employees and volunteers for losses arising from work performed by Contractor for the City of Wood Dale.

B. All Coverages

Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, cancelled, reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the City.

C. Verification of Coverage

Contractor shall furnish the City with certificates of insurance naming the member, its officials, agents, employees and volunteers as additional insureds, and with original endorsements affecting coverage required by this clause. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements may be on the forms provided by the City and are to be received and approved by the City before any work commences.

D. Assumption of Liability

The contractor assumes liability for all injury or death of any person or persons including employees of the contractor, or any sub-contractor, any supplier or any other person and assumes liability for all damage to property sustained by any person or persons so occasioned by or in any way arising out of any work performed pursuant to this agreement.

E. Regulatory Requirements

Contractor bidder must comply with all applicable laws, regulations, and rules promulgated by any Federal, State, County, Municipal and/or other governmental unit or regulatory body now in effect or which may be in effect during the performance of the work. Included within the scope of the laws, regulations, and rules referred to in this paragraph but in no way to operate as a limitation, are Occupational Safety and Health Act (OSHA), Illinois Department of Labor (IDOL), Department of Transportation, all forms of traffic regulations, public utility, Intrastate and Interstate Laws, the Social Security Act of the Federal Government and any of its titles, the Illinois Department of Human Rights, Human Rights Commission, or EEOC statutory provisions and rules and regulations.

F. Contractor's Drug-Free Workplace Certification

Pursuant to Chapter 30, Section 580/1 of the Illinois compiled Statutes (30 ILCS 580/1) "Drug Free Workplace Act", the Contractor must certify to the contracting agency that it will provide a drug free workplace that will be included in the bid packet.

G. Sexual Harassment Policy Certification

The contractor, pursuant to Illinois compiled statutes 775 ILCS 5/2-105 (A) (4), must be in full compliance and have a written sexual harassment policy in place and provide a copy of such written policy to the Illinois Department of Human Rights upon request.

H. Indemnity/Hold Harmless

The Contractor hereby agrees to indemnify and defend the City of Wood Dale, its officers, agents, and employees and each of them, against and hold it and them harmless from any and all lawsuits, claims, demands, liabilities, losses and expenses, including court costs and attorneys' fees, for or on account of any injury to any person, or any death at any time resulting from such injury, or any damage to any property, which may arise (or which may be alleged to have arisen) out of or in connection with the work covered by the Agreement. The foregoing indemnity (together with Contractor's obligation to defend) shall apply unless it shall be found by a court of competent jurisdiction that such injury, death, or damage shall have been caused solely by the negligence of the City of Wood Dale, its officers and employees, or any of them. The City of Wood Dale shall be entitled to withhold from any payment otherwise due pursuant to the Agreement such amount or amounts as may be reasonably necessary to protect it against liability from any personal injury, death, or property damage resulting from the performance of the work hereunder.

CITY OF WOOD DALE

PROJECT NAME

-SPECIAL INSTRUCTIONS-

1. Return With Bid:

- a) Cover Sheet;
- b) Signed Proposal, including location of Bidder's office or permanent place of business;
- c) Bid guarantee consisting of a bid bond, a cashier's check, or certified check in an amount not less than ten percent (10%) of the amount of the bid;
- d) Completed Disclosure of Beneficiaries Form;
- e) Signed Certification Forms; and
- f) Completed References Form listing similar projects.

RETURN WITH BID

CITY OF WOOD DALE

PROJECT NAME

PROPOSAL

Honorable Mayor and City Council
City of Wood Dale
404 N. Wood Dale Road
Wood Dale, IL 60191

Ladies and Gentlemen:

The undersigned does hereby state he has examined the Notice to Bidders, Instructions to Bidders, Special Instructions, General Requirements, Proposal, Sample Contract, Technical Specifications, Certifications, and all other documents, and all work shall be done in accordance with the documents contained herein.

The undersigned does hereby propose to furnish all labor, services, materials, supplies, equipment, apparatus, appliances and to do all work and pay all costs and expenses connected therein required to complete this order in accordance with the documents named in the foregoing paragraph, on the basis of the quantities of work and services actually performed and for the unit prices stated herein below.

Name of Company: _____

Address: _____

City, State, Zip: _____

Signed: _____ Date: _____

Title: _____

****Continued on next page****

RETURN WITH BID

BID SHEET

The undersigned, having become familiar with the specifications and with local conditions affecting the cost of the work, hereby proposes and agrees, if this bid is accepted, to enter into an agreement with the City in the form included in the contract documents for the contract sum and within the contract time indicated in this bid and in accordance with other terms and conditions of the contract documents, and in so doing, to provide and furnish all the labor, equipment, materials, supplies, hardware, necessary tools, expendable equipment and supplies, and all utility and transportation services necessary to perform and complete, in a first-class manner, the entire work in conjunction with the **PROJECT NAME**.

In accordance with the complete specifications, the following amount constitutes as a total sum of the bid:

PROJECT NAME

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	AMOUNT
1					
2					
3					
4					
5					
6					
7					
8					
TOTAL:				\$	

RETURN WITH BID

Accompanying this Proposal is a proposal guarantee in the amount of \$_____ (10%) which is hereby tendered in accordance with the requirement of the Instructions to Bidders and the Specifications and/or Special Provisions. If this proposal is accepted and the undersigned fails to execute a contract as required herein, it is hereby agreed that the proposal guarantee shall become the property of the City of Wood Dale, and shall be considered as payment of damages due to delay and other consequences suffered by the City of Wood Dale due to the failure to execute said contract.

The undersigned acknowledges receipt of addenda as follows:

Addendum, No. _____, dated _____

No. _____, dated _____

No. _____, dated _____

This bid is an offer which shall be considered accepted only after the Corporate Authorities authorize the execution of the contract. In the event that this proposal is accepted and an award of contract is made to the undersigned bidder, the undersigned does hereby covenant and agree to deliver to the Owner the signed and executed Contract as specified in the Instructions to Bidders and Specifications within ten (10) days after the date of such acceptance and notification thereof.

The proposal shall be binding for sixty (60) days following the bid opening date unless the bidder, upon request of the City of Wood Dale, agrees to an extension.

THIS BID, WHEN ACCEPTED AND SIGNED BY AN AUTHORIZED SIGNATORY OF THE CITY, SHALL BECOME A CONTRACT BINDING UPON BOTH THE PERSON, PARTNERSHIP, OR CORPORATION TO SUPPLY OR PERFORM AS SPECIFIED AND UPON THE CITY TO ACCEPT THE PRODUCT OR SERVICE.

RETURN WITH BID

The undersigned further agrees to begin work within ten (10) working days after the executions and acceptance of the Contract, and thereafter to carry on the work diligently and continuously in such manner as to insure final completion and delivery to the Owner of the entire work under contract in accordance with the provisions of the Contract and Detailed Specifications.

Witness _____ Hand(s) and Seal this _____ day of _____, 2020.
my/our

If an individual, sign _____
and give address.
Address _____

If partnership, sign all _____
individual names and
give address of each
partner.
Partnership Name

Name and address of
individual partners.

If corporation, officers duly
authorized should sign,
attach corporate seal.

Corporate Name

ATTEST: _____

Address: _____

By: _____
Secretary

-CORPORATE SEAL-

CITY OF WOOD DALE

PROJECT NAME

CONTRACT

This CONTRACT, made and entered into this _____ day of _____, 2020, by and between the CITY OF WOOD DALE, an Illinois municipal corporation (hereinafter “**City**”), and _____, an Illinois corporation (hereinafter “**Contractor**”);

RECITALS

WHEREAS, the City desires to engage the Contractor to provide (hereinafter “**Work**”), located within the corporate limits of the City of Wood Dale; and

WHEREAS, the Contractor represents itself to be in compliance with Illinois Statutes relating to all matters affecting its status as a corporation operating as a general contractor within the State of Illinois and to have the necessary expertise and experience to furnish such services for the Work upon the terms and conditions set forth herein below:

NOW, THEREFORE, in consideration of the mutual promises herein contained, it is hereby agreed by and between the City and the Contractor that:

I. SCOPE OF SERVICES

The Scope of Services shall be as set forth in the “Notice to Bidders”, “Instructions to Bidders”, “Special Instructions”, “Technical Specifications”, “General Requirements”, “Specifications”, and “Special Provisions” prepared by the City. Should there be a conflict in terms between this Contract and the other documents, which are a component part hereof, this Document shall control.

II. PERFORMANCE OF WORK

The Contractor shall perform all work, furnishing all materials and labor, and shall abide by the terms of this Contract and the requirements of the City. Contractor must complete, in its entirety, the project within [specify contract length], weather permitting, from the date the City provides Contractor with notice to proceed.

III. PAYMENT TO THE CONTRACTOR

For the Work, the Contractor shall be paid in accordance with the Proposal. The City shall make payments to the Contractor within 30 days after completion of the Work and upon receipt of an invoice in a format approved by the City.

This contract calls for the construction of a “public work,” within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/.01 et seq. (“the Act”). The Act requires contractors and subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than the current “prevailing rate of wages” (hourly cash wages plus amount

for fringe benefits) in the county where the work is performed. The Department publishes the prevailing wage rates on its website at <http://labor.illinois.gov/>. The Department revises the prevailing wage rates and the contractor/subcontractor has an obligation to check the Department's web site for revisions to prevailing wage rates. For information regarding current prevailing wage rates, please refer to the Illinois Department of Labor's website. All contractors and subcontractors rendering services under this contract must comply with all requirements of the Act, including but not limited to, all wage requirements and notice and record keeping duties.

IV. NO CO-PARTNERSHIP OR AGENCY

It is understood that nothing herein contained is intended or shall be construed to, in any respect, create or establish the relationship of co-partners between the City and the Contractor, or as constituting the Contractor as the general representative or general agent for the City for any purpose whatsoever.

V. CONTRACT DOCUMENTS

It is further understood that this Contract consists of the following documents which are hereby made a part hereof: the Notice to Bidders, Instructions to Bidders, Specifications, Special Instructions, Special Provisions, Proposal, Performance Bond, Maintenance Bond, Anti-Collusion Affidavit of Compliance, Americans with Disabilities Act of 1990 Certificate, Policy Against Sexual Harassment Certificate, Hold Harmless Agreement, Anti-bid Rigging Certificate, and Drug-free Workplace Certificate.

VI. MATERIALS AND LABOR/WORKMANSHIP WARRANTY

Upon completion of the Work, and satisfactory acceptance by the City, the Contractor will provide a written one (1) year warranty covering both parts and labor/workmanship. Warranty shall include, but is not limited by this provision, that any defective material(s) and/or defective installation or workmanship will be repaired and/or replaced by Contractor at no cost to the City. The City's preferred warranty template is attached to this document.

VII. SEVERABILITY

The parties intend and agree that, if any paragraph, subparagraph, phrase, clause, or other provision of this Contract, or any portion thereof, shall be held to be void or otherwise unenforceable, all other portions of this Contract shall remain in full force and effect.

VIII. HEADINGS

The headings of the several paragraphs of this Contract are inserted only as a matter of convenience and for reference and in no way are they intended to define, limit, or describe the scope or intent of any provision of this Contract, nor shall they be construed to affect in any manner the terms and provisions hereof or the interpretation or construction thereof.

IX. MODIFICATION OR AMENDMENT

This Contract constitutes the entire contract of the parties on the subject matter hereof and may not be changed, modified, discharged, or extended except by written amendment duly

executed by the parties. Each party agrees that no representations or warranties shall be binding upon the other party unless expressed in writing herein or in a duly executed amendment hereof, or Change Order as herein provided.

XX. APPLICABLE LAW

This Contract shall be deemed to have been made in, and shall be construed in accordance with the laws of the 18th Judicial Circuit Court of DuPage County, State of Illinois.

XXI. NEWS RELEASES

The Contractor may not issue any news releases without prior approval from the City Manager nor will the Contractor make public proposals developed under this Contract without prior written approval from the City Manager prior to said documentation becoming a matter of public record.

XXII. COOPERATION WITH OTHER CONTRACTORS

The Contractor shall cooperate with any other Contractors in the City's employ or any matter associated with the Work.

XXIII. NOTICES

All notices, reports and documents required under this Contract shall be in writing and shall be mailed by first class mail, postage prepaid, addressed as follows:

If to City:

Jeffrey Mermuys
City Manager
404 N. Wood Dale Road
Wood Dale, Illinois 60191

With a copy to:

Lynn Curiale
City Clerk
404 N. Wood Dale Road
Wood Dale, Illinois 60191

If to Contractor:

IN WITNESS WHEREOF, the undersigned have placed their hands and seals hereto on the date first above written.

CITY OF WOOD DALE:

Annunziato Pulice, Mayor

ATTEST:

Lynn Curiale, City Clerk

CONTRACTOR:

By _____
Its _____

ATTEST:

By _____

RETURN WITH BID

CITY OF WOOD DALE PROJECT NAME

-DISCLOSURE OF BENEFICIARIES-

In compliance with City of Wood Dale Purchasing Procedures requiring the disclosure of certain interests by persons applying for permits, licenses, approval, or benefits from the City of Wood Dale:

1. Applicant: _____
Name

Address

2. Nature of Transaction Sought; for example, license permit approval or sale of products, services. or miscellaneous (explain miscellaneous):

3. Nature of Applicant: (Please check one)

- a. Natural Person: _____
- b. Corporation: _____
- c. Land Trust/Trustee: _____
- d. Trust/Trustee: _____
- e. Partnership: _____
- f. Joint Venture: _____

4. If applicant is an entity other than described in Section 3, briefly state the nature and characteristics of the applicant:

5. If in your answer to Section 3 you have checked Box b, c, d, or e, identify by name and address each person or entity who is a 7.5 percent shareholder in the case of a corporation, a beneficiary in the case of a trust or land trust, a joint venturer in the case of a joint venture, or who otherwise has a proprietary interest, interest-in profits and losses, or right to control such entity.

Name	Address	Interest
------	---------	----------

- a. _____
- b. _____
- c. _____

6. Name, address, and capacity of person making this disclosure on behalf of the applicant:

IMPORTANT NOTE: In the event your answer to Section 5 identifies entities other than a natural person, additional disclosures are required for each such entity.

VERIFICATION

I, _____, being first duly sworn under oath, depose and state that I am the person making this disclosure on behalf of the applicant, that I am duly authorized to make this disclosure, that I have read the above and foregoing Disclosure of Beneficiaries, and that the statements contained therein are true in both substance and fact.

By: _____
(Authorized Signature and Title)

Subscribed and sworn to before me this _____ day
of _____, 2020.

Notary Public

RETURN WITH BID

CITY OF WOOD DALE
PROJECT NAME

BID CERTIFICATION FORM

RE: CERTIFICATION OF BIDDER, COMPLIANCE WITH SECTION 33E-11
OF ILLINOIS CRIMINAL CODE OF 1961

I/we hereby certify that _____ is not barred from bidding on this contract as the result of a violation of either Section 33E-3 or 33E-4 of this Article of the Illinois Criminal Code of 1961.

Signed: _____

Date: _____

Title: _____

INTERFERENCE WITH PUBLIC CONTRACTING - - BID RIGGING AND ROTATING - - KICKBACKS - - BRIBERY

PUBLIC ACT 85-1295 S.B. 2002

AN ACT to add Article 33E to the "Criminal Code of 1961", approved July 28, 1961, as amended. Be it enacted by the People of the State of Illinois, represented in the General Assembly: Section 1: Article 33E is added to the "Criminal Code of 1961", approved July 28, 1961, as amended, the added Article to read as follows:

ARTICLE 33E. PUBLIC CONTRACTS

Sec. 33E-3 Bid-rigging. A person commits the offense of bid-rigging when he knowingly agrees with any person who is, or but for such agreement would be, a competitor of such person concerning any bid submitted or not submitted by such person or another to a unit of State or local government when with the intent that the bid submitted or not submitted will result in the award of a contract to such person or another and he either (1) Provides such person or receives, from another, information be disclosed to a competitor in an independent, noncollusive submission of bids or (2) Submits a bid that is off such a price, or other material terms, that he does not intend the bid to be accepted.

Bid-rigging is a Class 3 felony. Any person convicted of this offense shall be barred for 5 years from the date of conviction from bidding on any contract offered for bid by any unit of State or local government.

Sec 33E-4. Bid rotating. A person commits the offense of bid rotating when pursuant to any

collusive scheme or agreement with another. He engages in a patten over time (which, for the purposes of this Section, shall include at least 3 contract bids within a period of 10 years, the most recent of which occurs after the effective date of this amendatory Act of 1988) of submitting sealed bids to units of State or local government with the intent that the award of such bids rotates, or is distributed among persons or business entities which submit bids on a substantial number of the same contracts. Bid rotating is a Class 2 felony. Any person convicted of this offense shall be permanently barred from bidding on public contracts in the State of Illinois.

Bidder hereby certifies:

- A. That this bid is genuine and it not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation.
- B. That he has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid.
- C. That he has not solicited or induced any person, firm, or corporation to refrain from bidding.
- D. That he has not sought by collusion or otherwise to obtain for himself any advantage over any other bidder or over the Owner.
- E. That he is not barred from bidding for this Contract as a result of a violation of Section 33E-3 or Section 33E-4 of the Illinois Criminal Code of 1961 (Ill. Rev Stat. ch. 38, Paragraph 33E-1 et seq.).

SUBMITTED: _____ DATE: _____

FIRM NAME: _____ (SEAL)

ADDRESS: _____

SIGNED BY: _____

(Signature and Date)

(Title)

ATTEST: _____

(Secretary)

Subscribed and sworn to before me this _____ day of _____ 2020.

(Notary Public)

RETURN WITH BID

**CITY OF WOOD DALE
PROJECT NAME**

CERTIFICATION

_____ (hereinafter referred to as “Contractor”)
having submitted a bid/proposal for _____ to the City of Wood Dale,
DuPage County, Illinois, for _____, hereby certifies
that:

5/2-105(A) (4) including the following information:

1. An acknowledgement of the illegality of sexual harassment.
2. The definition of sexual harassment under State law.
3. A description of sexual harassment, utilizing examples.
4. The contractor’s internal complaint process, including penalties.
5. The legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Human Rights Commission.
6. Directions on how to contact the Department of the Commission.
7. An acknowledgement of protection of a complainant against retaliation as provided in Section 6-101 of the Human Rights Act.

Each contractor must provide a copy of such written policy to the Illinois Department of Human Rights upon request.

By: _____
Authorized Agent of Contractor

Subscribed and sworn to before me on this _____ day of _____ 2020.

Notary Public

RETURN WITH BID

CITY OF WOOD DALE
PROJECT NAME

CONTRACTOR'S DRUG-FREE WORKPLACE CERTIFICATION

Pursuant to Ill. Rev. Stat. ch. 127 paragraph 132.311 et. seq. ("Drug Free Workplace Act), the undersigned contractor hereby certifies to the contracting agency that it will provide a drug-free workplace by:

- (a) Publishing a statement:
 - (1) Notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance, including cannabis, is prohibited in the grantee's of contractor's workplace.
 - (2) Specifying the actions that will be taken against employees for violations of such prohibition.
 - (3) Notifying the employee that, as a condition of employment on such contract or grant, the employee will:
 - (A) Abide by the terms of the statement; and
 - (B) Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.
- (b) Establishing a drug free awareness program to inform employees about:
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee's or contractor's policy of maintaining drug-free workplace;
 - (3) Any available drug counseling, rehabilitation, and employee assistance program; and
 - (4) The penalties that may be imposed upon employees for drug violation.
- (c) Making it a requirement to give a copy of the statement required by subsection (a) to each employee engaged in the performance of the contract or grant and to post the statement in a prominent place in the workplace.
- (d) Notifying the contracting agency within ten (10) days after receiving notice under par (B) of paragraph (3) of subsection (a) from an employee or otherwise receiving actual notice of such conviction.

Dated: _____

By: _____

Authorized Agent of Contractor

RETURN WITH BID

CITY OF WOOD DALE PROJECT NAME

CERTIFICATION

_____, being first duly sworn, deposes and states that he is _____ of _____ (Partner, Officer, Owner, etc.)

(Corporation / Company)

and that he is cognizant of the following statutory requirements and under penalty of perjury and certifies the following:

Anti-Collusion Affidavit of Compliance: That bid is genuine and not collusive or sham; that said bidder has not colluded, conspired, connived or agreed directly or indirectly with any bidder or person to put in a sham bid or to refrain from bidding; and has not in any manner directly or indirectly sought by agreement or collusion or communication or conference with any person to fix the bid price element of said bid or that of any other bidder; or to secure any advantage against any other bidder or any person interested in the proposed contract.

Public Act 85-1295: That bidder is not barred from bidding on this contract as a result of a violation of either Section 33E-3 or 33E-4 of P.A. 85-1295 (720ILCS 5).

Public Act 86-1039: That bidder is not barred from contracting with the City of Wood Dale because of any delinquency in the payment of any tax administered by the Department of Revenue unless the individual or entity is contesting, in accordance with the procedures established by the appropriate revenue act, liability for the tax, or the amount of the tax (65ILCS 5/11-42.1-1).

Public Act 86-1459: That bidder will provide a drug free workplace in accordance with the Illinois Drug Free Workplace Act (30ILCS 580/2).

Illinois Human Rights Act: That bidder is presently in compliance and agrees to comply with all applicable provisions of the Illinois Human Rights Act, together with all rules and regulations promulgated and adopted pursuant thereto (775ILCS 5/1 -101 et seq.).

Equal Employment Opportunities-Affirmative Action: That bidder is presently in compliance and agrees to comply with all applicable provisions of Equal Employment Opportunities--Affirmative Action (775ILCS 5/2-105 [A]).

Americans with Disabilities Act of 1990: That bidder is presently in compliance and agrees to comply with all applicable provisions of the Americans with Disabilities Act of 1990 together with all rules and regulations promulgated and adopted pursuant thereto.

INDIVIDUAL:

Signature of Bidder: _____

Business Address: _____

Business Phone Number: _____

PARTNERSHIP:

Partnership Name: _____

Signed By: _____

Business Address: _____

Business Phone Number: _____

Insert Names and Addresses of All Partners: _____

CORPORATION:

Corporate Name: _____

Signed By: _____

Title: _____

Business Address: _____

Business Phone Number: _____

Insert Names of Corporate Officers

President: _____

Secretary: _____

Treasurer: _____

Attest: _____

RETURN WITH BID

CITY OF WOOD DALE PROJECT NAME

REFERENCES

Name of Bidding Firm: _____
(Please print)

The Contractor must list three (3) references with needs similar to the City of Wood Dale for whom Contractor has supplied the materials and services for which he is bidding on this contract within the last three years. Please include name, address, telephone number, contact person, and type of work you performed for that entity.

1. CompanyName/Municipality: _____

Address: _____

Phone: _____

Contact Person: _____

Type of Work: _____

2. CompanyName/Municipality: _____

Address: _____

Phone: _____

Contact Person: _____

Type of Work: _____

3. CompanyName/Municipality: _____

Address: _____

Phone: _____

Contact Person: _____

Type of Work: _____

CITY OF WOOD DALE

PERFORMANCE BOND

BOND NO. _____

KNOW ALL MEN BY THESE PRESENTS: That the Contractor hereinafter identified and the Surety set forth herein jointly and severally bind themselves, their successors and assigns unto the CITY OF WOOD DALE, (hereinafter referred to as the "CITY"), for the full and complete performance of the Project identified herein.

_____ [insert name of Contractor], located at _____ [insert address of Contractor], (hereinafter referred to as the "Contractor"), is performing certain work in the CITY in connection with _____ [insert Project name] Project No.: _____ [insert Project No.] (hereinafter referred to as the "Project"). In order to ensure that the Contractor fully performs all work required as part of the Project referenced herein and as a condition of the CITY's approval of the Project, the Contractor agrees to enter into a Performance Bond with a Surety licensed and authorized to transact business in the State of Illinois.

_____ [insert name of Surety], (hereinafter referred to as the "Surety") with its principal Office located at, _____ [insert address of Surety], represents that it is a Corporation authorized to perform surety business in the State of Illinois, and hereby agrees to be held and firmly bound unto the CITY, with its Principal Office located at 404 N. Wood Dale Road, Wood Dale, Illinois, 60191, in the sum of _____ [insert amount of Contract] (\$ _____) lawful money of the United States of America, for which payment is made, binds itself, its heirs, executors, administrators, successors and assigns.

The Surety, on behalf of the Contractor, as Principal, has entered into this Performance Bond with the CITY, guaranteeing that the Contractor will complete the Project, which Project shall be completed in accordance with the Project Specifications, Applications, Permits, Designs, Drawings and the applicable CITY Code provisions and State law on or before the completion date or any extension thereof. The Surety hereby provides the instant Performance Bond to ensure the timely completion of the Project.

If the Contractor fully performs the obligations of the Project, the Surety and Contractor shall have no obligation to the CITY under this Performance Bond.

If the Contractor fails to perform the obligations of the Project as required, said failure shall be deemed a default if the obligations are not remedied by the Contractor within ten (10) days from the date the Contractor is notified of said default by the CITY as provided for herein. In the event of said default, the CITY shall notify the Contractor and the Surety of said default. Notice shall be sent to the Contractor and the Surety by Regular or Certified Mail or electronic mail transmission. Upon receipt of Notice of Default from the CITY, the Surety shall be obligated for the costs to the CITY for completing the Project, including, but not limited to, any and all Contractor costs, Engineering fees and reasonable Attorney's fees incurred in connection with the completion of the Project and enforcing the conditions of the Performance Bond,

along with any Court costs associated therewith.

In the event of a dispute regarding the instant Performance Bond or the underlying Contract documents, the Parties agree to resolve any such dispute in the Eighteenth Judicial Circuit Court of DuPage County, Wheaton, Illinois. The CITY shall be entitled to recover reasonable Attorney's fees and costs incurred in said action

SIGNED, SEALED AND DATED THIS ____ day of _____, 2020.

CITY OF WOOD DALE

By: _____
Its: _____

CONTRACTOR

By : _____
Its: President

SURETY

By: _____
Its: Attorney-In-Fact

AGENT OR BROKER

[insert name, address, phone number and e-mail for Agent/Broker]

[NOTE: ATTACH SURETY POWER OF ATTORNEY]

account of PRINCIPAL'S failure to correct such defect. In addition, CITY shall have the right to contract for the correction of such defect and the PRINCIPAL and SURETY shall become immediately liable for the amount of the said Contract; and, in the event the CITY commences legal proceedings for the collection thereof of any sums due hereunder, interest shall accrue on said amount at the maximum rate allowed by law, but in no event less than six percent (6%) per annum, beginning at the commencement of said legal proceedings. The CITY, in its discretion, may permit the SURETY to correct such defect in the event of the PRINCIPAL'S failure to perform.

In the event of a dispute regarding the instant Maintenance Bond or the underlying Contract documents, the Parties agree to resolve any such dispute in the Eighteenth Judicial Circuit Court of DuPage County, Wheaton, Illinois. The CITY shall be entitled to recover reasonable Attorney's fees and costs incurred in said action

SIGNED, SEALED AND DATED THIS ____ day of _____ 20 ____.

PRINCIPAL

By : _____
Its: President

SURETY

By: _____
Its: Attorney-In-Fact

AGENT OR BROKER
[insert name, address, phone number and e-mail for Agent/Broker]

[NOTE: ATTACH SURETY POWER OF ATTORNEY]

STANDARD SPECIFICATIONS

**SECTION 100:
GENERAL ADMINISTRATION**

Page No.	Description
100-3	101 GENERAL
100-4	102 STANDARD SPECIFICATIONS
100-4	102.1 WOOD DALE STANDARD SPECIFICATIONS
100-4	102.2 OTHER SPECIFICATIONS
100-6	102.3 RESOLUTION OF CONFLICTS
100-6	102.4 USE OF OTHER MATERIALS
100-7	102.5 REVISIONS AND AMENDMENTS
100-7	102.6 DESIGN MANUAL FOR PUBLIC IMPROVEMENTS
100-8	103 DEVELOPER/CONTRACTOR RESPONSIBILITIES
100-8	103.1 PERMITTING
100-8	103.2 BONDING AND LICENSING
100-8	103.3 LIABILITY
100-8	103.4 WARRANTY OF WORK
100-9	104 SURVEYING AND BENCHMARKS
	104.1 CITY BENCHMARKS
100-9	105 GENERAL CONSTRUCTION ACTIVITIES
100-10	105.1 PRE-CONSTRUCTION
100-10	105.2 NOTIFICATION TO CITY
100-10	105.3 EXISTING UTILITY
100-10	105.4 HOURS OF WORK
100-11	106 TRAFFIC CONTROL REQUIREMENTS
100-11	106.1 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
100-11	106.2 ARTERIAL LANE CLOSURES
100-11	107 PERMITS
100-11	108 (RESERVED)
100-11	109 (RESERVED)
100-12	110 RECORD DRAWINGS
100-12	110.1 RECORD DRAWING REQUIREMENT
100-15	110.2 RECORD DRAWING CERTIFICATION REQUIREMENTS
100-15	110.3 SUBMITTAL OF RECORD PLANS
100-16	110.4 PARTIAL SUBMITTAL OF RECORD PLANS
100-16	110.5 REVIEW OF RECORD PLANS

100-16 110.6 ACCEPTANCE OF RECORD DRAWINGS

100-18 **111 FINAL ACCEPTANCE OF IMPROVEMENTS**

101 GENERAL

The purpose of this document is to present standards and specifications for the design of public and private improvements that will result in uniform, long lasting, quality construction. It is not intended as a substitute for good engineering judgment, and it anticipates that actual design work will be done by qualified professional engineers.

These standards also expect and require only the highest quality in construction procedures, workmanship, and finished product. Defective, inappropriate, damaged, or unacceptable construction, as determined by the City or its representative, will be removed and replaced at no expense to the City.

102 STANDARD SPECIFICATIONS

102.1 WOOD DALE STANDARD SPECIFICATIONS

The specifications contained herein shall be for the construction of the following public facilities within the City of Wood Dale:

- a) Section 100: General Administration
- b) Section 200: Storm Sewer
- c) Section 300: Sanitary Sewer
- d) Section 400: Water Distribution System
- e) Section 500: Pavement
- f) Section 600: Street Lighting & Traffic Signals
- g) Section 700: Grading, Landscaping & Erosion Control

These specifications shall be herein referred to as the Wood Dale Standard Specifications.

102.2 OTHER SPECIFICATIONS

In addition to the specifications contained herein, the following documents shall be incorporated by reference:

- a) Illinois Department of Transportation, “Standard Specifications for Road and Bridge Construction”, latest edition. (herein referred to as IDOT Standard Specifications)
- b) Illinois Department of Transportation, “Supplemental Specifications and Recurring Special Provisions”, latest edition. (herein referred to as IDOT Supplemental Specifications)
- c) Illinois Department of Transportation, “Standard Specifications for Traffic Control Items”, latest edition.
- d) Illinois Department of Transportation, District 1 Traffic Signal Design Guidelines, latest edition.
- e) Illinois Department of Transportation, Design Manual, latest edition.
- f) Illinois Department of Transportation, Construction Manual, latest edition.
- g) Illinois Department of Transportation, Soils Manual, latest edition.
- h) Illinois Department of Transportation, Highway Standards, latest edition.

- i) Illinois Department of Transportation, Manual of Instructions for Concrete Proportioning and Testing, latest edition.
- j) Illinois Department of Transportation, Manual of Instructions for Bituminous Proportioning and Testing, latest edition.
- k) Federal Highway Administration, “Manual on Uniform Traffic Control Devices, latest edition” and the Illinois Supplement, latest edition.
- l) Illinois Society of Professional Engineers, Illinois Municipal League, et al, Standard Specifications for Water and Sewer Main Construction in Illinois, latest edition.
- m) ASTM Specifications, latest edition.
- n) AASHTO Standards, latest edition.
- o) The National Electrical Code, latest edition.
- p) The National Electrical Safety Code, latest edition.
- q) The Safety Rules for the Installation and Maintenance of Electric Supply and Communication Lines, latest edition.
- r) Illinois Urban Manual, IEPA/NRCS, latest edition.
- s) DuPage County, Countywide Stormwater and Flood Plain Ordinance, latest edition.
- t) National Resources Conservation Services, National Engineering Handbook, latest edition.
- u) City of Wood Dale Municipal Code Book.

102.3 RESOLUTION OF CONFLICTS

In the event of conflict between the Wood Dale Standard Specifications and the documents listed above in Section 102.2, the Wood Dale Standard Specifications shall take precedence and/or the City Engineer's decision will prevail. Any questions arising from these specifications should be directed in writing to the City Engineer for a determination. Any variation requested from these standards shall be submitted to the department head for approval.

102.4 USE OF OTHER MATERIALS

Products not currently approved for use within the City of Wood Dale may be considered for acceptance in accordance with the requirements of this section. The engineer, manufacturer, or City Department that desires to use a new product must submit that request in writing to the City Engineer. That request should include enough information about the product to allow the City Engineer to make a determination as to its appropriateness for use in the city. The request should also indicate if the product is requested for use on a specific project, or if the product is being

requested for inclusion in the Wood Dale Standard Specifications. Upon review of the material, the City Engineer will find the product to meet one of the following categories:

- a) Not Approved – The product submitted is not considered to be acceptable or appropriate for use in the city.
- b) More Information Required – The City Engineer may determine that the information provided is inadequate to make a determination. If that is the case, the applicant may resubmit to the City Engineer with additional information.
- c) Special Use Application Only – The product submitted is acceptable for use on a specific project. Certain products which are not currently approved for use in the City of Wood Dale may have qualities which make them appropriate for use on special projects, even if they are not acceptable for general use throughout the city.
- d) Trial Basis – A trial period may be required for products before they can be considered for inclusion in the Wood Dale Standard Specifications. For those products approved for use on a trial basis, the City Engineer will establish the conditions under which the product can be used. The trial period will typically be one year. The performance of the product will be evaluated during the trial period. At the conclusion of the trial period, the City Engineer will determine whether or not the product will be accepted into the Wood Dale Standard Specifications.
- e) Inclusion in the Wood Dale Standard Specifications – The City Engineer may determine that the product is acceptable for general use throughout the city. If the product is approved, it will be added to the Wood Dale Standard Specifications through the Revision and Amendment process.

In all cases, the City Engineer will respond to the applicant in writing.

The City Engineer shall be responsible for the acceptance or rejection of materials or products for use on city projects. However, the City Engineer may confer with other city staff members to aid in those decisions. For instance, rehabilitation products, materials and construction methods for existing sewer and water mains, services and manholes will also be reviewed by the Public Works Department.

102.5 REVISIONS AND AMENDMENTS

The Wood Dale Standard Specifications will be revised and amended on a recurring basis as needed as determined by the City or its representative. All revisions and amendments will be cataloged in Appendix A.

All public improvements shall be constructed to the Wood Dale Standard Specifications in effect at the time final engineering approval is granted by the City unless specifically directed otherwise by the City Engineer.

102.6 ENGINEERING DESIGN AND DEVELOPMENT STANDARDS MANUAL

The Engineering Design and Development Standards Manual is a manual prepared by the City of Wood Dale to provide developers, contractors, architects, engineers and other building

professionals an easy to follow guide for development within the City of Wood Dale. This manual incorporates aspects of the Wood Dale Standard Specifications, the Wood Dale Municipal Code, and other design standards. In the event of conflict between the Wood Dale Standard Specifications and the Design Manual, the Wood Dale Standard Specifications shall take precedence and/or the City Engineer's decision will prevail.

103 DEVELOPER/CONTRACTOR RESPONSIBILITIES

103.1 PERMITTING

The owner or his/her representative is responsible to obtain any and all permits required by applicable governmental agencies.

Any Work on private property requires City of Wood Dale Community Development Department approval prior to beginning any construction work. The Community Development Department should be contacted to obtain information regarding any improvements to private property.

Work in the right-of-way requires approval of the Director of Public Works or their designee. A right-of-way permit must be processed through the City before any work is completed within the City's right-of-way.

103.2 BONDING AND REGISTRATION

All contractors must be registered with the Community Development Department to make public improvements within the Wood Dale corporate limits.

All contractors must provide a surety bond or letter of credit equal to 110 percent of the value of the proposed improvements. This bond or letter of credit will be held by the city for the duration of the project plus the warranty period. The contractor or developer may request reductions in the value of the letter of credit as approved by the City Engineer.

103.3 LIABILITY

The contractor or developer assumes all responsibility and liability for any action resulting from their work within the public right-of-way.

103.4 WARRANTY OF WORK

The contractor or developer maintains ownership of, and shall be responsible for, all public improvements until the City Engineer provides a Letter of Final Acceptance. From the date of that letter, the city will take ownership of the facilities provided a 12-month warranty by the contractor or developer of all improvements. If at any time during that 12 month period the city considers that any portion of the improvements fail to be meet the Wood Dale Standard Specifications, or exhibit poor workmanship or quality of materials, the city will require the contractor or owner to repair or replace the facility.

104 SURVEYING AND BENCHMARKS

104.1 CITY BENCHMARKS

The City of Wood Dale does not maintain any benchmarks within the City limits. Surveyors are directed to use the DuPage County GIS application called benchmarks NAVD88 found at: <http://www.dupageco.org/GIS/1733/>

105 GENERAL CONSTRUCTION ACTIVITIES

105.1 PRE-CONSTRUCTION MEETING

At the discretion of City staff, a preconstruction meeting may be required with the City of Wood Dale prior to any work being started. A preconstruction meeting will not be scheduled until the project has been approved by the City of Wood Dale.

105.2 NOTIFICATION TO CITY

A minimum of 2 business days' notice shall be given to the City of Wood Dale, prior to starting work, or restarting work after some absence of work for any reason.

105.3 EXISTING UTILITY LOCATIONS

It shall be the contractor's responsibility to adequately identify and locate all existing utilities prior to excavation. Before starting construction, the contractor shall contact JULIE for the location of any and all utilities. The toll-free number is 800-892-0123.

105.4 HOURS OF WORK

Unless otherwise specified in the contract, all work activities shall be limited to the following hours:

- a) Working Hours
 - Monday – Saturday: 7AM – 7PM
 - Sunday and Holidays: No work permitted

Construction work includes the delivery of any materials or equipment and the operation of tools, machinery and apparatus. Holidays include: New Year's Day, Memorial Day, 4th of July, Labor Day, Thanksgiving Day, and Christmas Day. Any exceptions to these limitations must be authorized by the Public Works Director.

106 TRAFFIC CONTROL REQUIREMENTS

106.1 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)

All developers and contractors shall provide suitable traffic control for their construction activities in accordance with Part 6 of the Manual on Uniform Traffic Control Devices, latest edition. Traffic control must be provided for any activity that impacts traffic flow. This includes, but is not limited to, road closures requiring detours, daily lane closures, long term lane closures, narrow lanes, and construction vehicles entering and exiting the public roadway. All traffic control set-ups may be inspected by the City of Wood Dale to ensure that they are providing positive guidance to motorists and are not in themselves presenting a hazardous situation. A representative of the developer or contractor must provide phone numbers at which they can be reached 24 hours a day and on weekends so that they can maintain traffic control devices.

Pedestrians must also be provided with a safe alternate route if pedestrian facilities are to be closed as a result of construction activities. Guidance must be provided to pedestrians so that they may avoid the work zone.

107 PERMITS

It shall be the responsibility of the owner/developer to obtain all required local, state and federal permits as needed to complete their work as contemplated. The City reserves the right to issue a stop work order in the event that proper permits have not been obtained, or if the work is not being conducted per the requirements of any permit.

108 (RESERVED)

109 (RESERVED)

110 RECORD DRAWINGS

Record drawings are required to provide a means of schematic verification that the intent of the approved engineering design has been met, thereby substantiating that the health, safety, and welfare aspects of the engineering design have been adequately provided by the construction of the project. Secondly, record drawings serve as a reference tool for future design and maintenance operations.

110.1 RECORD DRAWING REQUIREMENTS

a) General:

- 1) All improvements, whether private or public, are required to submit record drawings to the City for approval.
- 2) All elevations should be referenced to the same bench mark datum as the original design plans. The appropriate bench marks shall be noted on the cover sheet. Horizontal ties from the benchmark to fixed objects shall be included on the plans.
- 3) The information presented in the record drawings shall be clear and legible. Lettering on any plan shall not be smaller than 1/10 inch in height. Design data shall be lined out with one medium weight ink line and the record data shall then be lettered next to each lined out design dimension or elevation.
- 4) In the event that the civil engineering design drawings are larger than 24 inch x 36 inch, then the record plans shall be photographically reduced on photo fixed film to 24 inch x 36 inch and the scale of the reduced drawings marked on each sheet. However, photo reduction will only be allowed when the reduced drawing has a minimum lettering height of 1/10 inch.
- 5) If reduction of oversized plans yields a lettering height smaller than 1/10 inch, the plans will be copied at the existing scale onto several 24 inch x 36 inch Mylar sheets that overlap a minimum of 2 inches along each edge. A sheet key diagram will be added on the right or lower side of each sheet indicating how each 24 inch x 36 inch sheet should be assembled.
- 6) Digital Files: A standard layering scheme should be followed if possible. A sample scheme is attached as Exhibit 100-1. At a minimum, separate layers with clear concise layer names are required for alignment, profile, topography, soil borings, vegetation, water, rights of way, edge of pavement, roadway plan, roadside feature, property lines, buildings, traffic control, pavement markings, drainage, water, sanitary, electric, gas, telephone and railroads. Also, a plot file or pen schematic is required at time of submittal.

b) Watermain, Sanitary Sewers, and Storm Sewers

1) Watermain

- i) Rim elevation on valve vaults, valve boxes, and service boxes.

- ii) Breakaway flange elevation on fire hydrants and auxiliary valve boxes.
- iii) Pipe sizes, materials and linear distance along water main from appurtenance to appurtenance (i.e. - valve vault to tee, tee to bend, bend to valve, etc.).
- iv) Horizontal ties to all valve vaults, boxes and hydrants (1.0 foot tolerances).
- v) Horizontal ties to all bends, tees, or other fittings (1.0 foot tolerances).
- vi) Location of fire and domestic service lines and horizontal ties to connections along the main.
- vii) Location, material, thickness, length and invert at both ends of casing pipes.

2) Sanitary Sewer

- i) Rim elevations for manholes.
- ii) Invert elevation for all pipes in manholes.
- iii) Pipe sizes, materials and linear distance along sewer from structure to structure.
- iv) Recalculated pipe slopes based on invert to invert elevation along the linear distance between manholes.
- v) Locations of service lines and horizontal ties to connections along main, including horizontal ties to stub termini.
- vi) Horizontal ties to all manholes (1.0 foot tolerance).
- vii) Location, material, thickness, length and invert at both ends of casing pipes.
- viii) Complete record drawings of lift stations, including all piping, electrical elements, and pumping elements.

3) Storm Sewers

- i) Rim elevation on inlets, catch basins, manholes, and top and bottom of slope boxes, head walls, and other special structures.
- ii) Invert elevation of all pipes within inlets, catch basins, manholes; end sections, slope boxes, culverts, and other special structures.
- iii) Pipe sizes, materials, and linear distance along sewers from structure to structure.
- iv) Recalculated pipe slopes based on invert to invert elevations along the linear distance between structures.

- v) Horizontal ties on all inlets, catch basins, manholes, flared end sections, slope boxes, and culverts (1.0 foot tolerance).
 - vi) Location, material, thickness, length and invert at both ends of casing pipes.
- 4) Utilities Systems Identification
- i) Privately owned utility mains that are connected to public utility mains must be clearly labeled as such on the record plans together with a note that states private utility mains shall not be maintained by the City of Wood Dale.
- c) Stormwater Management

Upon completion of final grading or completion of all:

- 1) Detention basins
- 2) Retention basins
- 3) Constructed or regraded streams and channels
- 4) Overflow routes (street areas that act as overflow routes)
- 5) Street depressions which are planned detention areas
- 6) Permanent and/or temporary diversion berms, swales, and control structures
- 7) Parking lots which are planned detention areas

A topographical survey of the stormwater management areas outlined above shall be prepared by an Illinois Registered Professional Engineer. The plans shall contain sufficient spot elevations and grading contour lines to show that the stormwater management facilities have been constructed in compliance with the approved civil engineering design plans. Record information for all public improvements within the stormwater management area must be depicted on the record plans. Additionally, the as-constructed stormwater management volume together with the approved final engineering planned volume shall be depicted in tabular form. The potential as-constructed average and peak release rates as compared with the design release rates must be provided in tabular form when major deviations from the approved design have occurred.

- d) Outdoor Lighting
- 1) Horizontal ties on lighting standards and control cabinets (if applicable) as referenced to the approved plan stationing or coordinates (1.0 foot tolerance)
 - 2) Service cables and service transformers shall be depicted in schematic format

- 3) Directional orientation of mast arm with luminaire
 - 4) Dimensional ties shall be provided for all conduit crossings which are provided for present or future use
- e) Plats of Subdivision
- i. The Illinois State plane grid based bearings and ground based distances shall be noted along the subdivision boundary lines and along the lot lines, from two control monuments to the subdivision boundary monuments.

110.2 RECORD DRAWING CERTIFICATION REQUIREMENTS

Certification of the record information shall be by a registered Professional Engineer in Illinois. The engineer shall review the improvements and provide a signed and sealed Statement of Opinion indicating that the project was constructed and will function in substantial conformance to the approved engineering plans, and that said improvements are accurately depicted on the record drawings. (A sample certification is attached for reference purposes as Exhibit 100-2.) The cover sheet for water, sanitary sewer, storm sewer, outdoor lighting and stormwater management submittals shall have the certification clearly printed thereon. The certification shall bear the original ink handwritten signature, date of signature and impressed seal of the Engineer that prepared the record civil engineering design plans. Per County ordinance, signatures over 90 days old at the time of submittal to the city will not be accepted.

In addition, each sheet shall bear the name of the project and be labeled, dated and initialed by the Professional Engineer using the standard legend denoting "Record Plan" as depicted on the sample certification, see Exhibit 100-3.

110.3 SUBMITTAL OF RECORD PLANS

Three sets of 24 inch x 36 inch record blueline prints (bound/stapled on the 24 inch side) and an electronic copy in PDF format shall be submitted by the developer or the engineer that prepared them to:

City of Wood Dale
Community Development Department
404 N. Wood Dale Road
Wood Dale, Illinois 60191

Each set shall be signed, sealed and dated by the engineer as described in Section 110.2. Additionally, the plans shall clearly indicate the type of submittal (i.e. watermain, sanitary sewer, stormwater, street lighting) and if the submission is a complete or a partial set as described in Section 110.4.

110.4 PARTIAL SUBMITTAL OF RECORD PLANS

When the developer or the engineer for a particular development desires to initiate a partial acceptance of public facilities contained within a development, a partial set of record drawings can be submitted. The partial record plans shall consist of the cover sheet and those sheets which are involved in the partial acceptance.

Partial submittals will comply fully with the specifications contained in this document. In addition, the engineer shall state within the certification the scope of the partial submission (i.e. phase number, unit number, lot numbers, streets), and each sheet shall note “partial” adjacent to the engineer’s signature.

110.5 REVIEW OF RECORD PLANS

A review of all record plans shall be made by the City Engineer and/or City of Wood Dale Community Development staff. If the City Engineer finds that revisions to the subject record plans are required, then the engineer that prepared such record plans shall be notified in writing as to what items on the record plans should be revised. The engineer that prepared the record plans shall:

- a) Make the revisions required promptly to avoid delay of acceptance or occupancy.
- b) Clearly note on the cover sheet and each sheet thereafter, the nature of the revision and the date that revisions were made, even if no revisions were made to that particular sheet.
- c) Re-date and resign the certification on the cover sheet.
- d) Resubmit 3 sets of record drawings and an electronic copy in PDF format for review as detailed in Section 110.2.

110.6 ACCEPTANCE OF RECORD PLANS

Written approval of record plans must be obtained from the City Engineer and/or City of Wood Dale Community Development Staff and is an important part in the issuance of building permits, temporary/final occupancy permits, or acceptance of facilities by City Council.

Following review by the City Engineer, the Engineer/Developer will receive written notification that the record plans are in accordance with City Specifications. The Engineer/Developer shall then provide the city with copies of each sheet that the City Engineer has approved in the following formats:

- a) One copy of a reproducible Mylar sepia (3 mil minimum thickness) – 24 inch x 36 inch with the original ink seal and signature certification. All drawings on Mylar must be ink pens, inkjet or other similar technology. Xerographic methods are not acceptable.
- b) Two copies of record prints on paper – 24 inch x 36 inch
- c) One copy in a digital format (.dxf or .dwg) and an electronic copy in PDF format submitted on a standard size CD-ROM. The drawing file shall be drawn using decimal units with actual Illinois State Plane Grid Coordinates.

In cases of a discrepancy between the drawings submitted, the sealed Mylar will prevail. These drawings shall meet all specifications described within Section 110. No building permits, temporary/final occupancy permits, or acceptance of facilities by City Council will proceed until the reproducible documents have been submitted to:

City of Wood Dale
Community Development Department
404 North Wood Dale Road
Wood Dale, Illinois 60191

111 FINAL ACCEPTANCE OF IMPROVEMENTS

Final acceptance of public improvements shall be granted only after a final inspection has been completed and has revealed that all improvements have been satisfactorily completed in accordance with the Wood Dale Standard Specifications. The City Engineer shall provide a Letter of Final Acceptance. Upon issuance of that letter, the City will accept ownership of any public improvements.

Final acceptance does not relieve the developer or contractor of their responsibility to warranty their work for a period of one year from the date of final acceptance.

**EXHIBIT 100-1
TYPICAL LAYER SCHEME FOR DIGITAL FILES**

LAYER	Items that may be found on that layer
Alignment	Centerline, base line, survey line, stationing, roadway name, bench marks, horizontal ties.
Profile	Roadway profile, vertical curve data, profile elevations, roadway dimensioning, vertical ties.
Topography	Ground contours, detention and retention areas elevations, associated text.
Soil Borings	Soil boring details, plan and profile.
Vegetation	Trees, brush, hedges, forests, associated text.
Water	Lakes, rivers, streams, ponds and associated text.
Right of Way	Right of way, access control, easements and associated text.
Edge of Pavement	Streets, roads, alleys etc.
Roadway Plan	Medians, curbs, gutter, and shoulders.
Roadside Features	Sidewalks, private entrances, commercial entrances.
Buildings	Buildings, fences, parking lots, advertising signs, mailboxes, associated text.
Private Boundaries	Property lines, iron pipes, concrete monuments, survey markers, section corners, ownership information.
Pavement Marking	Pavement marking lines, letters and symbols, raised pavement markers, delineators, regulatory signs and warning signs.
Traffic Signal	Traffic signal plan.
Electric	Power poles, cables, control cabinets, schematics, and junction boxes.
Water utility	Fire hydrants, valve vaults, pipe, buffalo box, pump stations, and storage
Sanitary sewer	Manholes, pipe, lift stations, treatment plants.
Drainage	Manholes, inlets, catch basins, sewer main, overflow routes, ditch flow line, detention and retention areas.
Railroads	Control box, crossing gate, tracks, signal and overpass.
Gas	Gas main.
Telephone	Telephone.

These drawings shall meet all specifications described within Section 700. No building permits, temporary/final occupancy permits, or acceptance of facilities by City Council will proceed until the reproducible documents have been submitted to:

City of Wood Dale
Community Development Department
404 N. Wood Dale Road
Wood Dale, Illinois 60191

**EXHIBIT 100-2 SAMPLE CERTIFICATION
STATEMENT OF OPINION**

Pursuant to the Wood Dale Municipal Code, I _____ a registered Professional Engineer in the State of Illinois, hereby declare that these "Record Drawings" pertaining to (watermain, sanitary sewer, storm sewer) (stormwater management) (outdoor lighting) consisting of sheets _____ and _____ included herewith, have been prepared for a certain project known as _____ and contain information as obtained by the surveyor _____ and the contractor _____.

It is my professional opinion that these "Record Drawings" adequately depict the Record Drawing Information required by the City of Wood Dale's "Record Drawing Procedures and Standards for Civil Engineering Site work Improvements," document bearing the effective date of _____, and substantiate that the improvements constructed as part of this project will function in substantial conformance to the design intent of the approved engineering plans.

Dated: _____

Signed: _____

Illinois Registration Number: _____

(SEAL)

**EXHIBIT 100-3
STANDARD LEGEND**

RECORD PLAN FOR		
TYPE	DATE	P.E. INITIALS
WATERMAIN SANITARY SEWER STORM SEWER		
STORMWATER MANAGEMENT		
OUTDOOR LIGHTING		

**SECTION 200:
STORM SEWER**

<u>Page No.</u>	<u>Description</u>
200-2	201 GENERAL
200-2	201.1 SPECIFICATIONS
200-2	201.2 CONNECTION TO EXISTING FACILITIES
200-3	202 MATERIALS
200-3	202.1 PIPES
200-4	202.2 GRANULAR PIPE BEDDING
200-4	202.3 GRANULAR PIPE BACKFILL
200-4	202.4 CONNECTING DISSIMILAR PIPE MATERIALS
200-4	202.5 MANHOLES
200-5	202.6 CATCH BASINS AND INLETS
200-5	202.7 CASING PIPES
200-6	203 CONSTRUCTION REQUIREMENTS
200-6	203.1 GENERAL REQUIREMENTS
200-6	203.2 MANHOLES, CATCH BASINS AND INLETS
200-7	203.3 TRENCH BACKFILL, BEDDING & BACKFILL
200-8	203.4 PIPE INSTALLATION
200-10	204 INSPECTION AND TESTING
200-10	204.1 CLEANING
200-10	204.2 VISUAL TEST
200-10	204.3 DEFLECTION TESTING FOR FLEXIBLE PIPE

201 GENERAL

The standards and requirements found in this article are for the materials and construction of storm sewer systems within the City of Wood Dale, Illinois.

201.1 SPECIFICATIONS

All work and equipment performed and installed under this section shall be governed by and shall comply with the following specifications, manuals, and codes listed in Section 102.2. The most current editions and all subsequent revisions and alterations for the specifications are required.

201.2 CONNECTION TO EXISTING FACILITIES

No connection to an existing public storm sewer may be made without permission of the Director of Public Works or their designee.

202 MATERIALS

202.1 PIPES

The following materials will be permitted for storm sewer and pipe culverts. Where a particular material is specified in the plans or special provisions, no other kind of material will be permitted all materials must be supplied by an IDOT approved supplier where applicable:

202.1.1 REINFORCED CONCRETE PIPE (RCP)

Reinforced concrete pipe shall conform to ASTM Designation C 76, Classes I, II, III, IV or V. Bituminous joints shall conform to ASTM Designations C 14 or C 76 as may be applicable. Bituminous material shall consist of a homogeneous blend of bitumen, inert filler, and suitable solvent approved by the City Engineer. Rubber gasket joints shall conform to ASTM C 433.

Reinforced concrete pipe shall also be permitted as round, elliptical, or box shaped or as Reinforced Concrete Arch Culvert.

202.1.2 NON-REINFORCED CONCRETE PIPE

Non-reinforced concrete pipe shall be allowed for pipes with a 10 inch or smaller diameter. Non-reinforced concrete pipe shall conform to ASTM Designation C 14, Class 3. Bituminous joints shall conform to ASTM Designations C 14 or C 76 as may be applicable. Bituminous material shall consist of a homogeneous blend of bitumen, inert filler, and suitable solvent approved by the City Engineer. Rubber gasket joints shall conform to ASTM C 433.

202.1.3 DUCTILE IRON PIPE (DIP)

Ductile iron pipe shall conform to ANSI A 21.51 (AWWA C-151), class thickness designed per ANSI A 21.50 (AWWA C-150), tar (seal) coated and cement lined per ANSI A 21.4 (AWWA C-104), with mechanical or rubber ring (slip seal or push on) joints. All ductile iron pipe shall be wrapped with polyethylene.

202.1.4 POLYVINYL CHLORIDE PIPE (PVC)

Polyvinyl Chloride (PVC) pipe shall conform to ASTM D3034, type PSM and ASTM D2241 for water main quality required pipe. The minimum Standard Dimension Ratio (SDR) shall be 26, for depth of 0'-12", SDR 21 for 12'-21', and SDR 18 for any depth over 21'. Joints for PVC pipe shall be flexible elastometric seals per ASTM D 3212 and ASTM F 477.

202.1.5 HIGH DENSITY POLYETHYLENE PIPE (HDPE)

High-density polyethylene (HDPE) pipe shall conform to the requirements of AASHTO M 252 and M 294. Pipe and fittings shall be made from virgin PE compounds which conform to the requirements of cell class 324420C as defined and described in ASTM D 3350. Rubber gasket joints shall be used.

202.1.6 FULLY GALVANIZED CORRUGATED STEEL PIPE

Fully Galvanized Corrugated Steel Pipe may be used for residential driveway crossings only when a ditch section is present. The minimum culvert size is 12" diameter.

202.2 GRANULAR PIPE BEDDING

Bedding, other than concrete embedment, shall consist of gravel, crushed gravel, or crushed stone 1/4 inch to 1 inch in size. As a minimum, the material shall conform to the requirements of IDOT standard specifications. The gradation shall conform to gradation CA-7 or CA-11 of the Standard Specifications.

202.3 GRANULAR PIPE BACKFILL

Backfill material shall conform to the requirements of IDOT standard specifications. The gradation shall conform to gradation CA-6 of the Standard Specifications.

202.4 CONNECTING DISSIMILAR PIPE MATERIALS

Joints connecting dissimilar pipe materials shall be made with sewer clamp non-shear type couplings; Cascade CSS, Romac LSS, Fernco, Inc. Shear Ring, or approved equal. When available, a standard joint with a transition gasket may be used. The name of the manufacturer, class, and date of issue shall be clearly identified on all sections of pipe. The contractor shall also submit bills of lading, or other quality assurance documentation when requested by the City Engineer.

202.5 MANHOLES

Manholes for storm sewers shall have a minimum inside diameter of 48 inches and shall be constructed of precast concrete units in accordance with ASTM C478-05 (or latest edition) and shall conform to the City of Wood Dale Standard Detail Storm 1. All manholes shall be water-tight. All visible leaks shall be sealed in a manner acceptable to the City Engineer.

202.5.1 FRAME AND COVER

Manholes shall be furnished with a self-sealing frame and solid cover (East Jordan Iron Works 1022 with Type A solid cover, or approved equal) with the word "Storm" imprinted on the cover in raised letters. All frames and lids shall meet or exceed AASHTO H-20 loading specifications. Frames shall be shop painted with asphaltic base paint.

Both the manhole frame and cover shall have machined horizontal and vertical bearing surfaces. Inverted manhole frames are not allowed.

Pick holes shall not create openings in the manhole cover.

202.5.2 STEPS

Manhole steps on maximum 16 inch center shall be furnished with each manhole, securely anchored in place, true to vertical alignment, in accordance with the Wood Dale Standard Details. Steps shall be copolymer polypropylene reinforced with 1/2 inch A615/A615M-05a (or latest edition) Grade 60 steel reinforcement, meeting or exceeding ASTM C 478-05 (or latest edition) and OSHA standards.

202.6 CATCH BASINS AND INLETS

Catch basins and inlets shall have a minimum inside diameter of 24 inches and shall be constructed of precast concrete units in accordance with ASTM C478-05 (or latest edition) and shall conform to the City of Wood Dale standard detail. All catch basins and inlets shall be water-tight at all points below grade. All visible leaks shall be sealed in a manner acceptable to the City Engineer.

202.6.1 FRAME AND GRATE

Catch basins and inlets shall be furnished with a frame and grate based upon the location of the installation as listed below. All frames and grates shall meet or exceed AASHTO H-20 loading specifications. Frames shall be shop painted with asphaltic base paint. All storm sewer lids and grates shall be cast with "Dump No Waste. Drains To River."

All manhole frames shall be required to have an external chimney seal. The chimney seal shall be Cretex or an approved equal product that is reviewed and approved by the City Engineer.

- a) Pavement: East Jordan Iron Works 1022 Frame with Type M1 Radial Flat Grate, or approved equal.
- b) Barrier curb and gutter: East Jordan Iron Works 7220 Frame with Type M1 Grate and T1 Curb Box, or approved equal.
- c) Depressed curb: East Jordan Iron Works 5120 Frame and Grate, or approved equal.
- d) Mountable curb: East Jordan Iron Works 7525 Frame and Grate, or approved equal.
- e) Non-paved areas: East Jordan Iron Works 6527 Beehive Grate, or approved equal. Alternately, in areas where there is the likelihood of pedestrian traffic, East Jordan Iron Works 1022 Frame with Type M1 Radial Flat Grate, or approved equal may be used.

202.7 CASING PIPES

All steel casing pipe shall be bituminous coated, a minimum of 30 mils thickness inside and out, shall be of leak proof construction and capable of withstanding the anticipated loadings. The minimum wall thickness for the casing pipe shall be in accordance with Table 200-1. The steel casing pipe shall have minimum yield strength of 35,000 psi and shall meet the requirements of A139/A139M-04 (or latest edition), Grade B. Ring deflection shall not exceed 2% of the nominal diameter. The steel casing pipe shall be delivered to the jobsite with beveled ends to facilitate field welding.

**TABLE 200-1
REQUIRED CASING PIPE WALL THICKNESS**

Steel Casing Diameter	Minimum Wall Thickness (Inches)
20"- 22"	0.344
24"	0.375
28"	0.438
30"	0.469
32"	0.501
34"- 36"	0.532

203 CONSTRUCTION REQUIREMENTS

203.1 GENERAL REQUIREMENTS

203.1.1 RESPONSIBILITY FOR MATERIALS

The contractor shall be responsible for the acceptability and storage of all materials furnished by him and shall assume responsibility for the replacement of all such material found damaged in shipping or on job site or defective in manufacture. This shall include the furnishing of all material and labor required for the replacement of installed material discovered to be defective prior to the final acceptance of the work.

203.1.2 STORAGE OF PIPING MATERIALS

The interior, as well as all sealing surfaces of all pipe, fittings, and other accessories shall be kept free from dirt and foreign matter. Store pipe bundles on flat surfaces with uniform support. Pipe stored outside and exposed to prolonged periods of sunlight should be covered with canvas or other opaque material. Clear plastic sheets shall not be used. Air circulation shall be provided under covering. Keep gaskets away from oil, grease, electric motors (which produce ozone), excessive heat and direct rays of the sun. Consult the manufacturer for specific storage recommendations.

203.1.3 HANDLING OF PIPING MATERIALS

Piping materials shall be unloaded, hauled and distributed at the site of the project by the contractor. Materials shall at all times be handled properly to prevent damage in accordance with manufacturer's recommendations. Pipe and fittings shall not be thrown, dropped, or dragged. Damaged or defective material on the job site shall be rejected and replaced to the satisfaction of the City Engineer. Methods of construction conducive to the damage of sewer pipe shall be corrected when called to the attention of the contractor. All pipe and fittings shall be examined by the contractor above grade before placement in the trench.

203.2 MANHOLES, CATCH BASINS AND INLETS

203.2.1 INSTALLING STRUCTURES IN NON-PAVED AREAS

BMP shall be used at each structure to prevent debris and foreign material from entering the system during construction.

203.2.2 INSTALLING STRUCTURES IN PAVED AREAS

For structures located in paved areas, a minimum of four, 2 inch diameter holes shall be drilled or precast into the structure within 1 foot of the lowest pipe invert. The holes shall be distributed equidistant around the perimeter of the structure. A one (1) foot by one (1) foot section of underdrain filter cloth material shall be sufficiently fixed to the outside of the manhole with mastic materials to prevent slippage during backfilling.

203.2.3 WATER-TIGHTNESS

Non-shrinking hydraulic cement shall be used on all interior and exterior joints within the barrel section to provide a water-tight seal between structure sections. No hydraulic cement shall be applied above the cone section or flat top.

203.2.4 PIPE CONNECTIONS

All structures without sumps shall be provided with a precast or cast-in-place concrete fillet, or bench, to provide a smooth flow between pipe sections.

The inside and outside of all pipe section connections to storm structures shall be shaped with additional mortar to provide a 3 inch collar around the pipe.

203.2.5 FRAMES

All storm sewer structure frames without inside flanges shall be shaped with non-shrinking hydraulic cement to form a fillet to the structure or adjusting ring.

When adjustments are necessary, they shall be performed with a maximum of 2 precast concrete rings set in a continuous layer of preformed bituminous mastic. The maximum height of adjustment shall be 12 inches. Two inch concrete rings shall only be used when the adjustment is less than 3 inches.

Adjustments less than 4 inches may be made using hard composite rubber type rings, such as GNR or approved equal. Only one type of adjusting ring may be used on a structure: combining both concrete and hard composite rubber rings on a structure is not permitted.

203.3 TRENCH BACKFILL, BEDDING & BACKFILL

Granular pipe bedding and haunching shall be required on all storm sewers installed in the City of Wood Dale. Initial backfill shall be required for all sewers constructed of PVC or other flexible pipe material.

203.3.1 PIPE BEDDING

Bedding, other than concrete embedment, shall consist of gravel, crushed gravel, or crushed stone. The pipe shall be laid so that it will be uniformly supported and the entire length of the pipe barrel will have full bearing. No blocking of any kind shall be used to adjust the pipe to grade except when used with embedment concrete. Bedding shall be required for all sewer construction, and shall be of a thickness equal to 1/4 of the outside diameter of the sewer pipe with a maximum thickness of 8 inches. Granular pipe bedding shall be a minimum of 4 inches in earth excavation and a minimum of 6 inches in rock excavation.

Where unsuitable material is encountered at the grade established, all such unsuitable soil shall be removed under the pipe and for the width of the trench, and shall be replaced with well compacted bedding material. The size range and resulting high voids ratio of bedding material make it suitable for use to dewater trenches during pipe installation. This permeable characteristic dictates that its use be limited to locations where pipe support will not be lost by migration of fine grained natural material from the trench walls and bottom or migration of other materials into the bedding material. When such migration is possible, the material's minimum size range should be reduced to finer than 1/4 inch and the gradation properly designed to limit the size of the voids.

Bedding materials shall be placed to provide uniform and adequate longitudinal support under the

pipe. Bell holes at each joint shall be provided to permit the joint to be assembled properly while maintaining uniform pipe support. When the joint has been made, the void under the bell will be filled with bedding or haunching material.

203.3.2 HAUNCHING

The most important factor affecting pipe performance and deflection is the haunching material and its density. Place and consolidate the material under the pipe haunch to provide adequate side support to the pipe while avoiding both vertical and lateral displacement of the pipe from proper alignment. The same coarse materials as used for initial backfill shall also be used for haunching. Place haunching up to the pipe spring line.

203.3.3 INITIAL BACKFILL FOR FLEXIBLE PIPE

Initial backfill begins above the spring line of the pipe and extends to a point 6 inches above the top of the pipe and shall be CA-7 or CA-11 carefully placed so as to completely fill the space around the pipe, in 8 inch layers, loose measurements, and compacted to the satisfaction of the City Engineer.

203.3.4 SELECTED GRANULAR BACKFILL

The backfill for trenches and excavation made in existing or under proposed pavements where the inner edge of the trench is within 2 feet of the edge of the pavement, curb, gutter, curb and gutter, or sidewalk, shall be made with compacted selected granular material conforming to IDOT gradation CA-6. Selected granular backfill shall be placed in uniform layers not exceeding 6 inches (loose measure) and compacted with mechanical equipment to 95% of the standard proctor density in accordance with the applicable AASHTO or ASTM requirements.

203.3.5 DEPTH OF PIPE COVER

The depth of cover over the pipe shall be appropriate for the material and class of pipe specified for the installation. In no case shall the cover over the pipe be less than 24 inches unless specifically allowed otherwise by the City Engineer.

203.4 PIPE INSTALLATION

203.4.1 LAYING OF PIPE

All pipe shall be laid true to line and grade. Dirt and other foreign material shall be prevented from entering the pipe or pipe joint during handling or laying operations.

203.4.2 PIPE TO PIPE CONNECTIONS

All storm sewer pipe to pipe connections shall be sealed with butyl mastic to ensure water tightness. Lift holes are to be sealed using butyl mastic and concrete plugs. At no time shall connections between the storm sewer system and sanitary sewer systems be allowed.

Alternately, premium joint pipe with integral O-rings may be used.

203.4.3 END SECTIONS

Storm sewer pipes may be terminated with special end sections including flared end sections and box inlets. Any end section with an opening greater than 12 inches in diameter shall be covered with a grate whose openings are 3 inch horizontal by 8 inch vertical and is rakeable.

203.4.4 EXISTING DRAIN OR FIELD TILES

All drain or field tiles encountered during construction must be connected to the storm drainage system. The location of known field tiles shall be depicted on the final engineering plans. The connection point of all field tiles to the storm drainage system must be shown on the record drawings for storm sewers.

204 INSPECTION AND TESTING

204.1 CLEANING

Prior to acceptance, all the storm sewer and storm sewer appurtenances shall be cleaned and operational to the satisfaction of the City Engineer.

204.2 VISUAL TEST

The City of Wood Dale may require that storm sewer lines be inspected visually to verify accuracy of alignment and freedom from debris and obstructions. The percentage of sewer lines inspected will be designated by the City Engineer. The full diameter of the pipe for straight alignments shall be visible when viewed between consecutive manholes. The method of test shall be either photography or closed circuit television, unless a specific method is required by the special provisions and approved by the City Engineer.

204.3 DEFLECTION TESTING FOR FLEXIBLE PIPE

A mandrel test is required by the City of Wood Dale. The City Engineer shall randomly select portions of the project to be deflection tested. Such portions shall consist of the manhole intervals for the initial sewer construction up to 1,200 linear feet and not less than 20% of the remainder of the sewer project. The City of Wood Dale reserves the right to test more or less pipe if considered appropriate by the City Engineer.

The 5% deflection test for pipe sizes 6 inches to 18 inches in diameter is to be run using a nine- arm mandrel having a diameter equal to 95% of the inside diameter of the pipe as established in ASTM D-2241-96b. Table 200-2 was developed using the equations outlined in Section 31- 1.11C of the Standard Specifications for Water and Sewer Main Construction in Illinois and shall be applied to testing of storm sewer pipe.

**TABLE 200-2
REQUIRED MANDREL SIZE FOR FLEXIBLE PIPE**

Nominal Pipe Size, Inches	Average Inside Diameter (PVC)	Required Mandrel Size, Inches
6	6.08	5.68
8	7.92	7.38
10	9.87	9.23
12	11.71	10.98
14	12.86	12.02
16	14.70	13.65

204.3.1 TIME OF TESTING

The individual lines to be tested shall be tested no sooner than 30 days after they have been installed by the contractor. During the first year of implementation, additional testing may be performed by the City of Wood Dale.

204.3.2 SEQUENCE OF TESTING

Wherever possible and practical, the testing shall initiate at the downstream lines and proceed towards the upstream lines.

204.3.3 TESTING OF ENTIRE PROJECT

In the event that the deflection exceeds the 5% limit in 10% or more of the manhole intervals tested, the total sewer project shall be tested.

204.3.4 RETEST OF FAILED SECTIONS

Where deflection is found to be in excess of 5% of the base inside diameter, the contractor shall excavate to the point of excess deflection and carefully compact around the point where excess deflection was found. The line shall then be retested for deflection. However, if the deflected pipe fails to return to the original size (inside diameter) after the initial testing, the affected segment shall be replaced.

**SECTION 300:
SANITARY SEWER**

Page No.	Description
300-2	301 GENERAL
300-2	301.1 SEWAGE COLLECTION AND TREATMENT
300-2	301.2 SPECIFICATIONS
300-2	301.3 REGULATIONS
300-2	301.4 START OF CONSTRUCTION
300-2	301.5 UTILITY IDENTIFICATION
300-4	302 MATERIALS
300-4	302.1 MANHOLES
300-5	302.2 PIPE TO MANHOLE CONNECTOR
300-5	302.3 PIPES
300-7	302.4 CONNECTING DISSIMILAR PIPE MATERIALS
300-7	302.5 CASING PIPES
300-7	302.6 BEDDING, HAUNCHING AND INITIAL BACKFILL
300-7	302.7 SELECTED GRANULAR BACKFILL
300-8	303 CONSTRUCTION REQUIREMENTS
300-8	303.1 GENERAL REQUIREMENTS
300-8	303.2 MANHOLES
300-8	303.3 TRENCHING
300-9	303.4 PIPE BEDDING AND BACKFILL
300-10	303.5 PIPE INSTALLATION
300-12	303.6 BRANCH FITTINGS
300-13	304 INSPECTION AND TESTING
300-13	304.1 MANHOLES
300-13	304.2 FLEXIBLE PIPE

301 GENERAL

The standards and requirements found in this article are for the materials and construction of sanitary sewers within the City of Wood Dale, Illinois.

301.1 SEWAGE COLLECTION AND TREATMENT

All sanitary sewage of domestic and other water borne wastes shall be collected and conveyed in a sanitary sewer pipe system to a point of discharge into an existing sanitary sewer system, City of Wood Dale interceptor, or sewage treatment plant. No sanitary sewage shall be allowed to enter any storm sewer system or discharge onto the ground or into receiving streams without first being treated in accordance with city, county, state and federal regulations.

301.2 SPECIFICATIONS

These specifications cover pipe for sanitary sewers and service connections, sewer fittings, manholes and all appurtenances normally used for sanitary sewer collection systems. Special considerations will be covered in the detailed plans and special provisions covering the proposed construction. Sanitary sewers shall be installed in accordance with the "Standard Specifications for Water and Sewer Main Construction in Illinois", latest edition, and applicable ordinances of the City of Wood Dale, except as modified herein.

301.3 REGULATIONS

Additional rules and regulations governing the construction of sanitary sewers in the City of Wood Dale are:

- a) The Sewer Permit Ordinance
- b) The Sewage and Wastewater Control Ordinance
- c) The restrictions, policies, and instructions that may be adopted or issued by the City of Wood Dale
- d) The Illinois Pollution Control Board Regulations
- e) The Environmental Protection Act
- f) Any variance request shall be submitted to the department head for review

301.4 START OF CONSTRUCTION

The contractor shall not begin construction until all required permits have been obtained. Copies of all permits obtained by outside agencies must be provided to the city prior to the start of construction.

301.5 UTILITY IDENTIFICATION

A wood stake (4 inch by 4 inch by 6 foot) stake with not less than the top 2 feet painted green shall be installed next to each sanitary sewer manhole, clean-out, and at the end of each sewer stub (termination at the end of the line). The 4 inch by 4 inch by 6 foot stake shall be maintained in a plumb position until City acceptance of the utility structures.

When newly poured curbs are installed, the contractor shall use a City approved stamp to indent the wet concrete with an "S" to identify the location of each sanitary manhole and sewer stub. The letter "S" shall be indented at the top of the curb 1-1/2 inches to two 2 inches in height and width at a depth of 3/8 inches.

In areas where new curbs are not present or if the developer and/or the contractor fail to indent the curbs as outlined above, the City will then require that identification symbols as approved by the City Engineer be cut into the curb.

302 MATERIALS

302.1 MANHOLES

Manholes for sanitary sewers shall have a minimum inside diameter of 48 inches and shall be constructed of precast concrete units in accordance with ASTM C478-05 (or latest edition) and Section 32 of the "Standard Specifications for Water and Sewer Main Construction in Illinois," and shall follow the City of Wood Dale sanitary sewer standards. All manholes shall be water-tight. All visible leaks shall be sealed in a manner acceptable to the City Engineer.

302.1.1 FRAME AND COVER

Manholes shall be furnished with a self-sealing frame and solid cover (Neenah Foundry R-1772, East Jordan Iron Works 1022-Z3, or equal approved by the City Engineer) with the word "Sanitary" imprinted on the cover in raised letters (see Wood Dale Standard Sanitary Detail 3). All frames and lids shall meet or exceed AASHTO H-20 loading specifications. Frames shall be shop painted with asphaltic base paint.

All manhole frames shall be required to have an external chimney seal. The chimney seal shall be Cretex or an approved equal product that is reviewed and approved by the City Engineer.

Both the manhole frame and cover shall have machined horizontal and vertical bearing surfaces. Inverted manhole frames are not allowed.

Pick holes shall not create openings in the manhole cover.

302.1.2 WATER-TIGHTNESS

Bolt-down frames shall be used in areas subject to flooding and where indicated on the plans. Bolt-down frames and covers shall be Neenah Foundry R-1916-F, East Jordan Iron Works 1040 ZPT or equal approved by the City Engineer. Frames are to be bolted to cone and cover to frame using stainless steel anchor bolts.

A continuous layer of non-hardening, preformed bituminous mastic material, Conseal 102B or approved equal, shall be applied to each manhole barrel cone and top section to provide a watertight seal. Each joint between sections shall be sealed by Cretex or an approved equal that is reviewed and approved by the City Engineer.

Rubber boots/seals must be used where pipes enter manholes. The internal connection shall be dressed up with non-shrink hydraulic cement. Hydraulic cement, mortar, and concrete must be of the strength and water-tightness quality as specified in the ASTM standards.

Lifting holes that extend through the wall of manhole shall not be allowed.

302.1.3 FRAME ADJUSTMENTS

Manhole frames shall be adjusted to proper grade using composite material rings as approved by City Engineer. Bricks, rocks, shims, or concrete blocks are not be allowed. Tapered composite adjusting rings, as approved by City Engineer, shall be required when the frame will be with a roadway area. No dressing or tuckpointing mortar is allowed on rings. Final frame adjustment for manholes within the roadway area shall be in accordance with Sections 602 and 603 of Standard Specifications for Road and Bridge Construction, prepared by the Illinois Department of Transportation, latest edition.

All manhole frames and adjusting rings shall be securely sealed to the cone section or top barrel section of the manhole using resilient, flexible, non-hardening, preformed bituminous mastic material, Conseal 102 B or approved equal. The mastic shall be applied in such a manner that no surface water or ground water inflow can enter the manhole through gaps between the top barrel section or cone section and the first adjusting ring, between adjusting rings, or between the last adjusting ring and the manhole frame. Up to 12 inches of adjusting rings may be installed on a given manhole. No more than one 2 inch adjusting ring, and no more than two adjusting rings in total shall be used.

302.1.4 STEPS

Manhole steps on maximum 16 inch center shall be furnished with each manhole, securely anchored in place, true to vertical alignment, in accordance with the Wood Dale Standard Details. Steps shall be copolymer polypropylene reinforced with ½ inch A615/A615M-05a (or latest edition) Grade 60 steel reinforcement, meeting or exceeding ASTM C 478-05 (or latest edition) and OSHA standards.

302.2 PIPE TO MANHOLE CONNECTOR

A flexible pipe-to-manhole connector shall be used for the connection of the sanitary sewer to precast concrete manholes. The connector shall meet ASTM C923-02 and ASTM A167- 99(2004), or latest edition, and be constructed of EPDM rubber with 304 or 316 series stainless steel connectors (KOR-N-SEAL by NPC, PSX by Press-Seal Gasket Corporation, or approved equal).

302.3 PIPES

All sanitary sewer pipe materials shall conform to the latest applicable ANSI, ASTM, AWWA, AASHTO, or other nationally accepted standards. Only the following sanitary sewer pipe and joint materials are approved for use in the City of Wood Dale, Illinois:

- a) Class 50 ductile iron pipe conforming to ANSI/AWWA C151/A.21.51-02 (or latest edition) with joints conforming to ANSI/AWWA C111/A.21.11-00 (or latest edition). Ductile shall be encased in polyethylene encasement in accordance with ANSI/AWWA C105/A21.5-99 (or latest edition).
- b) Polyvinyl chloride (PVC) pipe (6 inch -16 inch) conforming to ASTM D2241-05 (or latest edition) (SDR 26 – sewer depth between 4-20 feet and SDR 21 for depths between 20-25 feet) with joints conforming to ASTM D3139-98 (2005) or latest edition.

- c) Also acceptable in lieu of ASTM D2241-05 are C900 (SDR 18) for 12 inch diameter sewers and C905 (SDR 25) for 14 inch through 18 inch sewers.

302.3.1 PVC PIPE

This specification is appropriate for PVC pipe (6 inch - 16 inch) complying with ASTM D2241-05 and ASTM D3139-98 (2005) or latest edition. Any proposed PVC pipe greater than 16 inches in size must be approved by City Engineer prior to use. PVC pipe cannot be used in Class V soils (i.e. organic silt, organic clay and peat) as defined according to the Unified Soil Classification System in ASTM D2487-00 (or latest edition). Solvent cement joints will not be allowed in the City of Wood Dale.

Pipe shall be clearly marked as follows at intervals of 5 feet or less:

- a) Manufacture's name or trademark and code
- b) Nominal pipe size
- c) The PVC cell classification, for example 12454-B
- d) The legend "Type IPS SDR-26 PVC 1120 Sewer Pipe"
- e) This designation "Specification D-2241"

PVC Pipe shall be SDR 26. For sewer depths between 20 and 25 feet, SDR 21 shall be provided. Higher SDR numbers will only be allowed with the approval of the City Engineer.

302.3.2 PVC FITTINGS

All PVC fittings shall comply with ASTM F1970-05 (or latest edition) and fittings shall be clearly marked as follows:

- a) Manufacturer's name or trademark
- b) Nominal size
- c) The material designation PVC or IPS (iron pipe size), and this designation "Specification D2241"

Fitting shall be molded for pipe sizes between 6 inches and 8 inches in diameter, and fabricated fittings for 10" to 16" in diameter. A minimum of 150 psi pressure class shall be provided.

PVC fittings shall be SDR 26. Higher SDR numbers will only be allowed with the approval of the City Engineer. Fittings shall be required to pass the same inspection and testing requirements of the PVC pipe.

302.4 CONNECTING DISSIMILAR PIPE MATERIALS

Joints connecting dissimilar pipe materials shall be made with sewer clamp non-shear type couplings; Cascade CSS, Romac LSS, Fernco, Inc. Shear Ring, or approved equal. When available, a standard joint with a transition gasket may be used. The name of the manufacturer, class, and date of issue shall be clearly identified on all sections of pipe. The contractor shall also submit bills of lading, or other quality assurance documentation when requested by the City Engineer.

302.5 CASING PIPES

All steel casing pipe shall be bituminous coated, a minimum of 30 mils thickness inside and out, shall be of leak proof construction and capable of withstanding the anticipated loadings. The minimum wall thickness for the casing pipe shall be in accordance with Table 300-1. The steel casing pipe shall have minimum yield strength of 35,000 psi and shall meet the requirements of A139/A139M-04 (or latest edition), Grade B. Ring deflection shall not exceed 2% of the nominal diameter. The steel casing pipe shall be delivered to the jobsite with beveled ends to facilitate field welding

**TABLE 300-1
REQUIRED CASING PIPE WALL THICKNESS**

Steel Casing Diameter	Minimum Wall Thickness (Inches)
20"- 22"	0.344
24"	0.375
28"	0.438
30"	0.469
32"	0.501
34"- 36"	0.532

302.6 BEDDING, HAUNCHING AND INITIAL BACKFILL

The material used for pipe bedding, haunching and initial backfill shall consist of gravel, crushed gravel, or crushed stone conforming to the requirements of Article 1004.01 of the "Standard Specifications for Road and Bridge Construction", prepared by the Illinois Department of Transportation. The gradation shall conform to gradation CA-7 or CA-11 of the Standard Specifications.

302.7 SELECTED GRANULAR BACKFILL

Selected granular backfill, or trench backfill, shall consist of gravel, crushed gravel, or crushed stone conforming to the requirements of Article 1004.01 of the "Standard Specifications for Road and Bridge Construction", prepared by the Illinois Department of Transportation. The gradation shall conform to gradation CA-6 of the Standard Specifications.

303 CONSTRUCTION REQUIREMENTS

303.1 GENERAL REQUIREMENTS

303.1.1 RESPONSIBILITY FOR MATERIALS

The contractor shall be responsible for the acceptability and storage of all materials furnished by him or herself and shall assume responsibility for the replacement of all such material found damaged in shipping or on job site or defective in manufacture. This shall include the furnishing of all material and labor required for the replacement of installed material discovered to be defective prior to the final acceptance of the work.

303.1.2 STORAGE OF PIPING MATERIALS

The interior, as well as all sealing surfaces of all pipe, fittings, and other accessories shall be kept free from dirt and foreign matter. Store pipe bundles on flat surfaces with uniform support. Pipe stored outside and exposed to prolonged periods of sunlight should be covered with canvas or other opaque material. Clear plastic sheets shall not be used. Air circulation shall be provided under covering. Keep gaskets away from oil, grease, electric motors (which produce ozone), excessive heat and direct rays of the sun. Consult the manufacturer for specific storage recommendations.

303.1.3 HANDLING OF PIPING MATERIALS

Piping materials shall be unloaded, hauled and distributed at the site of the project by the contractor. Materials shall at all times be handled properly to prevent damage in accordance with manufacturer's recommendations. Pipe and fittings shall not be thrown, dropped, or dragged. Damaged or defective material on the job site shall be rejected and replaced to the satisfaction of the City Engineer. Methods of construction conducive to the damage of sewer pipe shall be corrected when called to the attention of the contractor. All pipe and fittings shall be examined by the contractor above grade before placement in the trench.

303.2 MANHOLES

303.2.1 PIPE CONNECTIONS

Where a connection is made to an existing manhole, the manhole shall be cored, and a flexible pipe-to-manhole connector installed. The existing manhole bench shall be reworked as required by City Engineer.

Inverts shall be made to conform accurately to the sewer grades with smooth, well rounded junctions and transitions satisfactory to the City Engineer. If the invert is to be poured in place, the sanitary sewer pipe shall be extended through the manhole, the concrete poured and formed, and the pipe then sawed out through the manhole.

303.3 TRENCHING

Trench construction shall be done in accordance with Sections 20 and 31 of the Standard Specifications for Water and Sewer Main Construction in Illinois, except as modified herein.

303.3.1 WIDE TRENCH

Wide trenches are classified as trenches whose width at the top of the pipe is greater than 2 1/2 pipe diameters on each side of the pipe or a total of 6 pipe diameters. Although there is no width of trench beyond which the load on a flexible pipe exceeds the prism load, accepted installation practices usually dictate narrow trench construction. In isolated circumstances it may be more cost effective to use wide trench construction, i.e., in areas where narrow trench walls cannot be maintained. If trench width at the top of a small diameter pipe (4 inch - 10 inch diameter) must exceed 6 pipe diameters, the embedment up to the pipe spring line should be compacted to a point approximately 2 1/2 pipe diameters from each side of the pipe. For large diameter PVC pipe (12 inch - 48 inch diameter) installed in wide trenches, the embedment up to the pipe spring line should be compacted to a point at least one pipe diameter or 2 feet from side of the pipe, whichever is greater.

303.3.2 ROCK SUB-GRADE

Ledge rock, hard pan, cobbles, boulders or stones larger than 1 1/2 inches shall be removed from the trench bottom to permit a minimum bedding thickness of 6 inches.

303.4 PIPE BEDDING AND BACKFILL

Granular pipe bedding and haunching shall be required on all sanitary sewers installed in the City of Wood Dale. Initial backfill shall be required for all sanitary sewers constructed of PVC or other flexible pipe material.

303.4.1 PIPE BEDDING

Granular pipe bedding shall be provided so that the pipe will be uniformly supported and the entire length of the pipe barrel will have full bearing. No blocking of any kind shall be used to adjust the pipe to grade except when used with embedment concrete. Bedding shall be required for all sewer construction, and shall be of a thickness equal to 1/4 of the outside diameter of the sewer pipe with a maximum thickness of eight inches. Granular pipe bedding shall be a minimum of 4 inches in earth excavation and a minimum of 6 inches in rock excavation.

Where unsuitable material is encountered at the grade established, all such unsuitable soil shall be removed under the pipe and for the width of the trench, and shall be replaced with well compacted bedding material. The size range and resulting high voids ratio of bedding material make it suitable for use to dewater trenches during pipe installation. This permeable characteristic dictates that its use be limited to locations where pipe support will not be lost by migration of fine grained natural material from the trench walls and bottom or migration of other materials into the bedding material. When such migration is possible, the material's minimum size range should be reduced to finer than 1/4 inch and the gradation properly designed to limit the size of the voids.

Bedding materials shall be placed to provide uniform and adequate longitudinal support under the pipe. Bell holes at each joint shall be provided to permit the joint to be assembled properly while maintaining uniform pipe support. When the joint has been made, the void under the bell will be filled with bedding or haunching material.

303.4.2 HAUNCHING

The most important factor affecting pipe performance and deflection is the haunching material and its density. Place and consolidate the material under the pipe haunch to provide adequate side support to the pipe while avoiding both vertical and lateral displacement of the pipe from proper alignment. Place haunching up to the pipe spring line.

303.4.3 INITIAL BACKFILL FOR FLEXIBLE PIPE

Initial backfill begins above the spring line of the pipe and extends to a point 6 inches above the top of the pipe. This material shall be carefully placed so as to completely fill the space around the pipe, in 8 inch layers, loose measurements, and compacted to the satisfaction of the City Engineer.

303.4.4 SELECTED GRANULAR BACKFILL (TRENCH BACKFILL)

The backfill for trenches and excavation made in existing or under proposed pavements where the inner edge of the trench is within 2 feet of the edge of the pavement, curb, gutter, curb and gutter, or sidewalk, shall be made with compacted selected granular material. Selected granular backfill shall be placed in uniform layers not exceeding 6 inches (loose measure) and compacted with mechanical equipment to 95% of the standard proctor density in accordance with the applicable AASHTO or ASTM requirements.

303.4.5 DEPTH OF PIPE COVER

All pipe shall be laid to a minimum depth of 7 feet measured from the proposed ground surface to the top of the pipe, unless specifically allowed otherwise in special circumstances by the City Engineer. If allowed, sanitary sewer and services with ground cover less than 4 feet or more than 25 feet must be constructed of ductile iron class 50 pipe. PVC pipe installed for sewer depths between 20-25 feet shall have a SDR 21 rating. All sanitary sewers and services with less than 4 feet of cover shall have insulation.

303.5 PIPE INSTALLATION

303.5.1 LAYING OF PIPE

Sanitary sewer pipe shall be laid true to line and grade as set forth in Section 31 paragraph 31-1.02 of the "Standard Specifications for Water and Sewer Main Construction in Illinois." Dirt and other foreign material shall be prevented from entering the pipe or pipe joint during handling or laying operations.

Any pipe or fitting that has been installed with dirt or foreign material in it shall be cleaned and re-inspected. At times when pipe laying is not in progress, and at the end of each working day, the open end of the pipe shall be closed with a water tight plug to ensure absolute cleanliness inside the pipe. The City Engineer may request mechanical cleaning (jet flushing) and/or televising if necessary to ensure clean, acceptable pipes, at the contractor's expense.

303.5.2 LAYING OF PIPE ON CURVES

The curvature of sanitary sewers is allowed for sewers 8 inches to 12 inches in diameter. Alignments must follow the general alignment of streets. Only a simple curve design is acceptable. The minimum allowable radius of curvature is 300 feet. Compression type pipe joints are required and manholes are required at the beginning and end of all curves. Maximum joint deflection shall not exceed the manufacturer's recommendations.

303.5.3 INSTALLING PIPE THROUGH CASINGS

This work shall be in conformance with Section 20-2.19 of the Standard Specifications for Water and Sewer Main Construction in Illinois, except as modified herein. Encasements for pipes under highways or railroads shall conform to the requirements of the City of Wood Dale, or the owner of the highway or railroad. Manufactured non-metallic or non-corrosive casing spacers, adjustable runners, or cradles shall be used to support the pipe in the casing and shall be installed per manufacturer's recommendations. A minimum of two supports shall be used per joint of pipe for lengths up to 12.5 feet, and a minimum of three supports shall be used per joint for lengths greater than 12.5 feet. The annular space shall be filled with pea gravel, low-strength grout, or cellular foam concrete and provisions shall be made so that no voids are left. Contractor shall make arrangements to have a City of Wood Dale representative witness the annular spacing filling operations.

303.5.4 CUTTING AND BEVELING PIPE

For shorter than standard pipe lengths, field cuts may be made with either hand or mechanical saws or plastic pipe cutters. Ends shall be cut square and perpendicular to the pipe axis. Spigots shall have burrs removed and ends smoothly beveled by a mechanical bevel or by hand with a rasp or file. Field spigots shall be stop-marked with felt tip marker or wax crayon for the proper length of assembly insertion. The angle and depth of field bevels and lengths to stop-marks shall be comparable to factory pipe spigots.

303.5.5 ASSEMBLY OF JOINTS

Assemble all joints in accordance with recommendations of the manufacturer. If a lubricant is required to facilitate assembly it shall have no detrimental effect on the gasket or on the pipe when subjected to prolonged exposure. Proper jointing may be verified by rotation of the spigot by hand or with a strap wrench. If unusual joining resistance is encountered or if the insertion mark does not reach the flush position, disassemble the joint, inspect for damage, re-clean the joint components and repeat the assembly steps. Note that fitting bells may permit less insertion depth than pipe bells (NOTE: When mechanical equipment is used to assemble joints, care should be taken to prevent over insertion.)

303.5.6 BUILDING SERVICES

When main line bedding, haunching, initial and final backfill must be disturbed to install fittings and service lines, the contractor is directly responsible to ensure that the bedding, haunching, initial and final backfill with appropriate compaction are restored properly to eliminate the possibility of deflection or movement causing future pipe failure.

303.5.7 PIPE CAPS AND PLUGS

All caps and plugs shall be braced, staked, anchored, wired or otherwise secured to the pipe to prevent leakage under the maximum anticipated thrust from internal abnormal operating conditions or test pressures from water or air.

303.6 BRANCH FITTINGS

Fittings for service branches in new construction shall be molded for 6 inch and 8 inch pipe and fabricated for 10 inch to 16 inch diameter with all gasketed connections. Clay/plastic pipe connections must be watertight. The contractor will be permitted to use fittings which include factory molded saddles and tees with alignment rings, and factory molded wyes. When connecting to an existing sewer main by means other than an existing wye or tee, one of the following methods shall be used:

- a) For PVC existing lines only, a sewer tap into the existing main shall be allowed. This would include a circular saw-cut of the sewer main by proper tools ("Shewer Tap" machine or similar) and proper installation of hub-wye saddle or hub-tee saddle. Holes for wye saddles shall be laid out with a template and shall be de-burred and carefully beveled where required to provide a smooth hole shaped to conform to the fitting.
- b) A typical connection would involve a PVC "T" fitting, another 1' (or more) extension of PVC pipe, depending on location of existing joint, the non-shear coupling and the existing clay or PVC pipe. With pipe cutter or appropriate equipment, neatly and accurately cut out desired length of pipe for insertion of proper fitting, using non-shear reinforced banded style repair coupling with 300 series stainless steel shear ring as manufactured Fernco, Inc. or Mission Rubber Company, Inc., or approved equal, connect the sewer pipes and maintain matching flow line elevations. All couplings shall bear the manufacturer's identifying mark and size.

The contractor shall provide details of direct connections to City interceptors greater than 18 inches in diameter and show construction procedure for protecting City structures.

All proposed bypass pumping of sanitary flow shall be approved by Public Works Director or his/her designee prior to performing this work.

304 INSPECTION AND TESTING

All projects shall be inspected and tested upon completion of installation. The City Engineer will designate the locations of tests and extent of the system to be tested, and extent of recording test results. Equipment for performing tests and making measurements shall be furnished by the contractor. Sections of sewer which fail to pass the tests shall have defects located and repaired or replaced and be retested until within the specified allowance

304.1 MANHOLES

All manholes shall be thoroughly cleaned of dirt and debris and all visible leakage eliminated before final inspection and acceptance.

304.1.1 VACUUM TESTING OF SANITARY MANHOLES

All manholes shall be tested for leakage by vacuum testing. A vacuum of 10 inches Hg shall be placed on the manhole and the time shall be measured for the vacuum to drop to 9 inches Hg. The vacuum shall not drop below 9 inch Hg for the time indicated for each size of manhole as shown in Table 300-2.

**TABLE 300-2
REQUIREMENTS FOR MANHOLE VACUUM TESTING**

Manhole Diameter (inches)	Max. time for 9" Drop (seconds)
48	60
60	75
72	90
84	105

Any manholes that fail the test shall be sealed and re-tested until acceptable. The testing shall be done after backfilling. Leaks found shall be fixed externally unless approved by City Engineer. The manhole frame and adjusting rings shall be in place at finished grade prior to testing.

304.2 FLEXIBLE PIPE

Prior to other tests all sanitary sewer pipes shall be cleaned and inspected for major defects. Pre-cleaning by appropriately sized sewer cleaning ball or by high velocity jet or other method shall be performed. Any debris, grit, etc. shall be removed and shall not be allowed to enter the existing system.

304.2.1 VISUAL TEST

The City of Wood Dale requires that sewer lines be inspected visually to verify accuracy of alignment and freedom from debris and obstructions. The percentage of sewer lines inspected will be designated by the City Engineer. The full diameter of the pipe for straight alignments shall be visible when viewed between consecutive manholes. The method of test shall be either photography or closed circuit television, unless a specific method is required by the special provisions and approved by the City Engineer.

304.2.2 DEFLECTION TESTING

A mandrel test is required by the City of Wood Dale. The City Engineer shall randomly select portions of the project to be deflection tested. Such portions shall consist of the manhole intervals for the initial sewer construction up to 1,200 linear feet and not less than 20% of the remainder of the sewer project. The City of Wood Dale reserves the right to test more or less pipe if considered appropriate by the City Engineer.

The 5% deflection test for pipe sizes 6 inches to 18 inches in diameter is to be run using a nine-arm mandrel having a diameter equal to 95% of the inside diameter of the pipe as established in ASTM D-2241-96b. Table 300-3 was developed for various pipe sizes using the equations outlined in Section 31-1.11C of the Standard Specifications for Water and Sewer Main Construction in Illinois.

**TABLE 300-3
REQUIRED MANDREL SIZE FOR SDR 26 PIPE
(ASTM D2241)**

Nominal Pipe Size, Inches	Average Inside Diameter	Required Mandrel Size, Inches
6	6.08	5.68
8	7.92	7.38
10	9.87	9.23
12	11.71	10.98
14	12.86	12.02
16	14.70	13.65

TIME OF TESTING

The individual lines to be tested shall be tested no sooner than 30 days after they have been installed by the contractor. During the first year of implementation, additional testing may be performed by the City of Wood Dale.

SEQUENCE OF TESTING

Wherever possible and practical, the testing shall initiate at the downstream lines and proceed towards the upstream lines.

TESTING OF ENTIRE PROJECT

In the event that the deflection exceeds the 5% limit in 10% or more of the manhole intervals tested, the total sewer project shall be tested.

RETEST OF FAILED SECTIONS

Where deflection is found to be in excess of 5% of the base inside diameter, the contractor shall excavate to the point of excess deflection and carefully compact around the point where excess deflection was found. The line shall then be retested for deflection. However, if the deflected pipe fails to return to the original size (inside diameter) after the initial testing, the affected segment shall be replaced.

304.2.3 LEAKAGE TEST

Methods of test which are suitable for various conditions are low pressure air exfiltration or water exfiltration. Explicit instructions for the following methods of test will be supplied by the project design engineer. Plugs, caps, and branch connections must be secured against blow-off during leakage test.

AIR TESTING SAFETY

The contractor is required to follow OSHA rules for trench safety and confined space requirements.

PLUG RESTRAINT

All plugs shall be installed and braced in such a way that blowouts are prevented. Every plug shall be positively braced against the manhole walls, and no one shall be allowed in the manhole adjoining a line being tested so long as pressure is maintained in the line.

RELIEF VALVE

All pressurizing equipment used for low-pressure air testing shall include a regulator or relief valve set no higher than 9 psig to avoid over-pressurizing and displacing temporary or permanent plugs. As an added safety precaution pressure in the test section should be continuously monitored to make certain that it does not at any time exceed 9 psig.

PLUG DESIGN

Either mechanical or pneumatic plugs may be used. All plugs shall be designed to resist internal testing pressures without the aid of external bracing or blocking. However, the contractor shall internally restrain or externally brace the plugs to the manhole wall as an added safety precaution throughout the test.

SINGULAR CONTROL PANEL

To facilitate test verification by the City Engineer, all air used shall pass through a single, above ground control panel.

EQUIPMENT CONTROLS

The above ground air control equipment shall include a shut-off valve, pressure regulating valve, pressure relief valve, input pressure gauge, and a continuous monitoring pressure gauge having a pressure range from 0 to at least 10 psi. The continuous monitoring gauge shall be no less than 4 inches in diameter with minimum divisions of 0.10 psi and an accuracy of 0.04 psi.

SEPARATE HOSES

Two separate hoses shall be used to (1) connect the control panel to the sealed line for inducing low-pressure air, and (2) a separate hose connection for constant monitoring of air pressure build-up in the line. This requirement greatly diminishes any chance for over-pressurizing the line.

PNEUMATIC PLUGS

If pneumatic plugs are utilized, a separate hose shall also be required to inflate the pneumatic plugs from the above ground control panel.

LINE PREPARATION - LATERALS, STUBS AND FITTINGS

During sewer construction, all service laterals, stubs, and fittings into the sewer test section shall be properly capped or plugged so as not to allow for air loss that could cause an erroneous air test result. It may be necessary and is always advisable to restrain gasketed caps, plugs, or short pipe lengths with bracing stakes, clamps and tie-rods, or wire harnesses over the pipe bells.

PLUG INSTALLATION AND TESTING

After a manhole to manhole reach of pipe has been back-filled to final grade and prepared for testing, the plugs shall be placed in the line at each manhole and secured.

It is advisable to seal test all plugs before use. Seal testing may be accomplished by laying one length of pipe on the ground and sealing it at both ends with the plugs to be checked. The sealed pipe should be pressurized to 9 psig. No persons shall be allowed in the alignment of the pipe during plug testing.

It is required to plug the upstream end of the line first to prevent any upstream water from collecting in the test line.

When plugs are being placed, the pipe adjacent to the manhole shall be visually inspected to detect any evidence of shear in the pipe due to differential settlement between the pipe and the manhole.

LINE PRESSURIZATION

Low pressure air shall be slowly introduced into the sealed line until the internal air pressure reaches 4.0 psig greater than the average back pressure of any ground water above the pipe, but not greater than 9.0 psig. If ground water is present, refer to 'Determination of Ground-Water Elevation and Air Pressure Adjustment'.

PRESSURE STABILIZATION

After a constant pressure of 4.0 psig (greater than the average ground water back pressure), is reached, the air supply shall be throttled to maintain that internal pressure for at least 4 minutes. This time permits the temperature of the entering air to equalize with the temperature of the pipe wall.

TIMING PRESSURE LOSS

When temperatures have been equalized and the pressure stabilized at 4.0 psig (greater than the average ground water back pressure), the air hose from the control panel to the air supply shall be shut off or disconnected. The continuous monitoring pressure gauge shall then be observed while the pressure is decreased to no less than 3.5 psig (greater than the average back pressure of any ground water over the pipe). At a reading of 3.5 psig, or any convenient observed pressure reading between 3.5 psig and 4.0 psig (greater than the average ground water back pressure), timing shall commence with a stop watch or other timing device that is at least 99.8% accurate.

DETERMINATION OF LINE ACCEPTANCE

If the time shown in Table 2, for the designated pipe size length (which includes main line sewers and laterals), is achieved before the air pressure drops 0.5 psig; the section undergoing test shall have passed and shall be presumed to be free of defects. The test may be discontinued once the prescribed time has elapsed even though the 0.5 psig drop has not occurred.

DETERMINATION OF LINE FAILURE

If the pressure drops 0.5 psig before the appropriate time shown in Table 3 has elapsed, the air loss rate shall be considered excessive and the section of pipe has failed the test.

LINE REPAIR OR REPLACEMENT

If the section fails to meet these requirements, the contractor shall determine at his own expense, the source or sources of leakage and he shall repair or replace all defective materials and/or workmanship to the satisfaction of the City Engineer. The extent and type of repair which may be allowed, as well as the results, shall be subject to the approval of the City Engineer. The completed pipe installation shall then be retested and required to meet the requirements of this test.

304.2.4 LEAKAGE TESTING – ADJUSTMENTS FOR GROUND WATER

The requirements of this section shall only apply where ground water is known to exist or is anticipated above the sewer line to be tested.

AIR PRESSURE ADJUSTMENT

The air pressure correction, which must be added to the 3.5 psig normal testing starting pressure, shall be calculated by dividing the average vertical height, in feet of ground water above the invert of the sewer pipe to be tested, by 2.31. The result gives the air pressure correction in pounds per square inch to be added. (For example, if the average vertical height of ground water above the pipe invert is 2.8 feet the additional air pressure required would equal 2.8 divided by 2.31 or 1.2 psig. This would require a minimum starting pressure of 3.5 psig plus 1.2 psig or 4.7 psig.) The allowable pressure drop of 0.5 psig and the timing in Table 300-4 are not affected and shall remain the same.

MAXIMUM TEST PRESSURE

In no case should one starting test pressure exceed 9.0 psig. If the average vertical height of ground water above the pipe invert is more than 12.7 feet, the section so submerged may be tested using 9.0 psig as the starting test pressure.

SPECIFIED TIME TABLES

To facilitate the proper use of this required practice for air testing, Table 300-4 is provided. Table 300-4 contains specified minimum times required for a 0.5 psig pressure drop from a starting pressure of at least 3.5 psig greater than the average back pressure of any ground water above the pipe's invert.

TABLE 300-4

**SPECIFIED TIME REQUIRED FOR A 0.5 PSIG PRESSURE DROP
FOR SIZE AND LENGTH OF PIPE INDICATED FOR Q = 0.0015**

(1) Pipe Dia. (in)	(2) Min. Time (min:sec)	(3) Length For Min. Time (ft)	(4) Time For Longer Length (sec)	Specification Time for Length (L) Shown (min:sec)								
				100 ft	150 ft	200 ft	250 ft	300 ft	350 ft	400 ft	450 ft	500 ft
4	1:53	597	0.190 L	1:53	1:53	1:53	1:53	1:53	1:53	1:53	1:53	1:53
6	2:50	398	0.427 L	2:50	2:50	2:50	2:50	2:50	2:50	2:51	3:12	3:34
8	3:47	298	0.760 L	3:47	3:47	3:47	3:47	3:48	4:26	5:04	5:42	6:20
10	4:43	239	1.187 L	4:43	4:43	4:43	4:57	5:56	6:55	7:54	8:54	9:54
12	5:40	199	1.709 L	5:40	5:40	5:42	7:08	8:33	9:58	11:24	12:50	14:15
15	7:05	159	2.671 L	7:05	7:05	8:54	11:08	13:21	15:35	17:48	20:02	22:16
18	8:30	133	3.846 L	8:30	9:37	12:49	16:01	19:14	22:26	25:38	28:51	32:03
21	9:55	114	5.235 L	9:55	13:05	17:27	21:49	26:11	30:32	34:54	39:16	43:38
24	11:20	99	6.837 L	11:24	17:57	22:48	28:30	34:11	39:53	45:35	51:17	56:59
27	12:45	88	8.653 L	14:25	21:38	28:51	36:04	43:16	50:30	57:42	46:54	72:07
30	14:10	80	10.683 L	17:48	26:43	35:37	44:31	53:25	62:19	71:13	80:07	89:02
33	15:35	72	12.926 L	21:33	32:19	43:56	53:52	64:38	75:24	86:10	96:57	107:43
36	17:00	66	15.384 L	25:39	38:28	51:17	64:06	76:55	89:44	102:34	115:23	128:12

**SECTION 400:
WATER DISTRIBUTION SYSTEM**

Page No.	Description
400-3	401 GENERAL
400-3	401.1 SPECIFICATIONS
400-3	401.2 START OF CONSTRUCTION
400-3	401.3 CONNECTION TO EXISTING WATER MAINS
400-3	401.4 UTILITY IDENTIFICATION
400-4	401.5 AS-BUILTS
400-5	402 MATERIALS
400-5	402.1 DUCTILE IRON PIPE
400-5	402.2 PIPE FITTINGS
400-5	402.3 JOINTS
400-5	402.4 RETAINER GLANDS
400-5	402.5 CASING PIPES
400-6	402.6 PIPE BEDDING
400-6	402.7 PIPE WRAP
400-7	402.8 VALVES
400-8	402.9 TAPPING AND LINE STOP SLEEVES
400-8	402.10 INSERT VALVES
400-9	402.11 CURB STOPS
400-9	402.12 CURB BOXES
400-9	402.13 VALVE BOXES
400-9	402.14 VALVE VAULTS
400-10	402.15 FIRE HYDRANTS
400-12	403 CONSTRUCTION REQUIREMENTS
400-12	403.1 GENERAL REQUIREMENTS
400-12	403.2 PIPE INSTALLATION
400-16	403.3 VALVES
400-16	403.4 TAPPING AND LINE STOP SLEEVES
400-17	403.5 INSERT VALVES
400-17	403.6 CURB BOXES
400-17	403.7 VALVE BOXES
400-17	403.8 VALVE VAULTS
400-18	403.9 FIRE HYDRANTS
400-18	403.10 THRUST BLOCKING AND TIE RODS
400-19	403.11 RETAINER GLANDS

400-20	404 INSPECTION AND TESTING
400-20	404.1 GENERAL INFORMATION
400-20	404.2 TESTING FOR TAPPING SLEEVES AND INSERT VALVES
400-20	404.3 PRESSURE TESTING
400-21	404.4 DISINFECTION (CHLORINATION)
400-24	404.5 FINAL FLUSHING AND TESTING

401 GENERAL

The standards and requirements found in this article are for materials and construction of water mains within the City of Wood Dale, Illinois.

401.1 SPECIFICATIONS

These specifications cover pipe and fittings and items normally used for water distribution systems. Special considerations will be covered in the plans and special provisions. Water distribution systems shall be constructed in accordance with the "Standard Specifications for Water and Sewer Main Construction in Illinois", latest edition, except as modified herein. In cases of conflict between standards, the more restrictive standard shall apply, as determined by the City Engineer.

401.2 START OF CONSTRUCTION

The contractor shall not begin construction until all required permits have been obtained. Copies of all permits obtained by outside agencies must be provided to the City prior to the start of construction.

401.3 CONNECTION TO EXISTING WATER MAINS

Connections to all City water mains must be by pressure tap or with the use of linestop(s) unless otherwise approved by the City Engineer, as shown on the approved engineering plans.

401.3.1 NOTIFICATION

When connecting to the end of an existing line, work must be coordinated with the Department of Public Works with 48 hours' notice. Personnel from the Department of Public Works are the only ones who are to operate water main valves. When water is needed to chlorinate new lines from adjacent City mains which are in service, Department of Public Works personnel must be present to operate or witness the contractor operation of existing City valves.

A representative from the Department of Public Works must be present at all connections to existing water mains. New water main valves, including pressure tap valves, adjacent to an existing water main, and existing water main valves shall only be operated by the City of Wood Dale, Department of Public Works personnel with 48-hour notice (Monday-Friday). 630-350-3530.

401.4 UTILITY IDENTIFICATION

A wood 4 inch by 4 inch by 6 foot stake with not less than the top 2 feet painted blue shall be installed next to each water vault, buffalo box, and valve box for protection of that appurtenance. The stake shall be maintained in a plumb position.

When newly poured curbs are installed, the contractor shall use a city approved stamp to indent the wet concrete with a "W" to identify the location of each water vault, buffalo box, and valve box. The letter "W" will be indented at the top of the curb 1-1/2 inches to 2 inches in height and width and at a depth of 3/8 inch. In areas where new curbs are not present or if the developer and/or the contractor fail to indent the curbs as outlined above, the City will then require that identification symbols as approved by the City Engineer be cut into the curb.

401.5 AS-BUILTS

Upon completion of work, the contractor shall provide as-built locations of all water main, valves, line stops, curb stops, and hydrants in conformance with the requirements of Section 110 of the Wood Dale Standards Specifications.

402 MATERIALS

Specific references made herein for manufactured materials such as pipe, hydrants, valves and fittings refer to designations for American Water Works Association (AWWA) or to the American National Standards Institute (ANSI). Nothing herein shall constitute or imply an endorsement by the City of Wood Dale of any one material over another.

401.3 DUCTILE IRON PIPE

Ductile Iron pipe shall conform to ANSI/AWWA C151/A21.5-02 (or latest edition). The minimum thickness designation shall be Class 52. Casting, marking, testing, etc. shall be provided in accordance with applicable ANSI or AWWA standards. Cement lining shall be provided in accordance with ANSI/AWWA C104/A21.4-03 (or latest edition).

401.4 PIPE FITTINGS

All cast and ductile iron fittings shall conform to the latest ANSI/AWWA C110/A21.10-03 (or latest edition) for short body, cast and ductile iron fittings, 3 inches to 48 inches in diameter. Ductile iron compact fittings 3 inches to 24 inches in diameter shall be in accordance with ANSI/AWWA C153/A21.53-00 (or latest edition) and be Made in the USA.

401.5 JOINTS

Joints for ductile iron pipe shall consist of one of the two following types unless otherwise provided in the special provisions:

- a) Mechanical Joints with stainless steel nuts, bolts and washers, Type 304 or better.
- b) Push-On Rubber Gasket Joints: AWWA C600-99 (or latest edition). Gaskets for water main located within 100 feet of a vehicle fueling facility shall be Buna N or Fluorocarbon rubber.

401.6 RETAINER GLANDS

For use on ductile iron pipe conforming to ANSI/AWWA C151/A21.51-02, nominal pipe sizes 3 inches through 48 inches, mechanical joint wedge action retainer glands shall be used as required to restrain valves, fittings, hydrants, and pipe joints. The retainer glands shall be:

- a) MEGALUG 1100 Series as manufactured by EBAA IRON, INC., or
- b) Uni-Flange Blockbuster 1400 Series from Ford Meter Box Co., or approved equal

Existing ductile iron systems requiring restraint shall be Series 1100SD (split MEGALUG) for mechanical joints. Restraint system for restraining push-on pipe bells shall be MEGALUG Series 1100HD, or FORD Series 1390. All nuts, bolts and washers shall be stainless steel, Type 304 or better.

401.7 CASING PIPES

Casing pipe shall be steel with a wall thickness as shown in Table 400-1. It shall be bituminous coated, a minimum of 30 mils thickness inside and out, and shall be of leak proof construction, capable of withstanding the anticipated loadings. The steel casing pipe shall have minimum yield strength of 35,000 psi and shall meet the requirements of A139/A139M-04 (or latest edition), Grade B. Ring deflection shall not exceed 2% of the nominal diameter. The steel casing pipe shall be delivered to the jobsite with beveled ends to facilitate field welding.

**TABLE 400-1
STEEL CASING PIPE WALL THICKNESS**

Casing Diameter	Minimum Wall Thickness (inches)
20" and 22"	0.344
24"	0.375
28"	0.438
30"	0.469
32"	0.501
34" and 36"	0.532

402.6 PIPE BEDDING

The material used for pipe bedding shall consist of gravel, crushed gravel, or crushed stone conforming to the requirements of Article 1004.01 of the "Standard Specifications for Road and Bridge Construction", prepared by the Illinois Department of Transportation. The gradation shall conform to gradation CA-7 or CA-11 of the Standard Specifications.

402.7 PIPE WRAP

The polyethylene film utilized for pipe wrap shall be in accordance ANSI/AWWA C105/A21.5- 99 (or latest edition). The film shall have a minimum thickness of 0.008 inch (8 mils). The minus tolerance of thickness shall not exceed 10 percent (10%) of the nominal thickness. The tube size or sheet width shall be as shown in Table 400-2.

**TABLE 400-2 PIPE
WRAP SIZE**

Nominal Pipe Diameter	Flat Tube (inches)	Sheet Width (inches)
3"	14	28
4"	16	32
6"	20	40
8"	24	48
10"	27	54
12"	30	60
14"	34	68
16"	37	74
18"	41	82
20"	45	90
24"	54	108

402.8 VALVES

402.8.1 MANUFACTURER AND MARKING

All valves shall be standard pattern and shall have the name or mark of the manufacturer, size and working pressure plainly cast in raised letters on the valve body. Valves may be approved from one of the following manufacturers: Mueller or Clow.

402.8.2 TYPE AND MOUNTING

- a) The valve bodies shall be cast or ductile iron, mounted with approved non-corrosive metals. All wearing surfaces shall be of approved non-corrosive material.
- b) All valves shall be resilient wedge gate valves with non-rising stems with upper and lower thrust collars. Waterways shall be smooth and have no groove or depression where foreign material can lodge and prevent sealing. The stem shall be bronze or other approved non-corrosive metal. All valves shall open by turning counterclockwise. Resilient wedge gate valves shall meet the standards of AWWA C509-01 or AWWA C515-01 (or latest edition) being made by either Mueller or Clow.
- c) All nuts, bolts and washers shall be stainless steel, Type 304 or better.
- d) End Connections - End connections of all valves shall be the mechanical joint type.

402.8.3 VALVE STEM SEALS

Unless otherwise designated in the special provisions, all valves shall be furnished with O- Ring Stem Seals. Number, size and design shall conform to the AWWA Standard for R/W valve O-Ring Stem Seals.

402.8.4 WRENCH NUTS

Wrench nuts shall be made of cast iron and shall be 1-15/16 inches square at the top, 2 inches square at the base, 1-3/4 inches high, unless otherwise designated in the Special Provisions. Nuts shall have a flanged base upon which shall be cast an arrow at least 2 inches long showing the direction of the opening. The word "open" in 1/2 inch or larger letters shall be cast on the nut to clearly indicate the direction of opening the valve. All operating nuts shall be accessible from above grade with use of an operating key.

402.8.5 FACTORY TESTING

Each valve shall be tested at the factory for performance and operation prior to painting. Each 3 inch to 20 inch R/W valve shall be subjected to a hydrostatic pressure test per AWWA C509- 01 or AWWA C515-01 (or latest edition).

402.8.6 FACTORY COATINGS

After the factory test and inspection, all ferrous parts of the valves except finished or bearing surfaces shall have a fusion bonded epoxy coating which complies with AWWA C550-05 (or latest edition).

402.9 TAPPING AND LINE STOP SLEEVES

Tapping sleeve shall be made of ductile iron. All approved stainless steel heavy-duty tapping sleeves shall be Cascade CST-EX, Ford FTSS, or Romac Industries SST III. All nuts, bolts and washers shall be stainless steel, Type 304 or better.

Line stop sleeves shall be stainless steel. Approved sleeve is Severn Trent Premier line stop fitting of all stainless steel construction with drop-in bolt option. All bolts, nuts, washers and blind flanges are to be 18- 8 Type 304 Stainless. Stopple (completion) plug is to be ductile iron.

All tapping and line stop sleeves shall conform to the following:

- a) Sleeve to be pressure rated at 150 psi working pressure and 225 psi test pressure.
- b) Construction to be T-304, 18-8 stainless steel, 14 gauge minimum.
- c) Gaskets to provide 360 degree pipe coverage in addition to a full circumference branch seal gasket.
- d) A stainless steel test port and plug shall be provided and the sleeve installation shall be tested prior to cutting the existing pipe.
- e) V-lugs shall be fabricated to the sleeve and drop-in stainless steel bolts, nuts and washers provided. Nuts shall be coated to prevent galling.

402.10 INSERT VALVES

402.10.1 DOUBLE DISC INSERT GATE VALVE

The materials, internal design, construction, workmanship, and manufacture's tests of insert valves shall conform to AWWA Standard C-500-02 or the latest revision, as modified by the following:

- a) Valves shall be of a ductile iron body, bronze-mounted, non-rising stem, double non-revolving disc, parallel seat, and side wedging construction.
- b) All grey-iron castings shall conform to the requirements of ASTM Specification A126 Class B (31,000 psi minimum tensile strength), or the latest revision.
- c) All nuts, bolts and washers shall be stainless steel, Type 304 or better.
- d) Valve stems shall be cast, forged or rolled bonze, and free from defects.
- e) Valves shall have a mechanical joint bell end, one bell being larger than normal to accept the inserting sleeve. Bells shall contain elastomeric gaskets permanently attached in a plane perpendicular to the centerline of the bore.
- f) Valves shall be rated at 150 psig test with 80 psig working water pressure.
- g) No bypass will be required.

- h) Valves shall open to the left or counter-clockwise.
- i) Valve stem seals shall consist of conventional stuffing boxes, or “O-ring type” seals. Gland bolts and nuts shall be of the same quality bronze as the valve stems.
- j) Insert Sleeve- Each insert valve shall be provided with a split sleeve of the stuffing box type. Said sleeve shall have a bell mechanical outlet outboard of the valve for sealing to the conduit.
- k) The Contractor shall submit three copies of all drawings, furnished by the manufacture, fully and distinctly illustrating and describing the insert valve and sleeve proposed to be furnished.
- l) Double disk insert gate valve to be U.S. Pipe, or approved equal.

402.10.2 RESILIENT TYPE INSERT GATE VALVE

Valve shall be as manufactured by Occlude with material that meets and/or exceeds the AWWA C509-01 or AWWA C515-01 (or latest edition) valve specification. All nuts, bolts and washers shall be stainless steel, Type 304 or better.

402.11 CURB STOPS

Curb stops shall be compression type by Mueller or Ford.

402.12 CURB BOXES

Curb boxes (B-Boxes) shall be Minneapolis pattern base of Mueller -10302 or A.Y. McDonald 3623 MCD Tapped base of 2” including bushing. 1 1/2 inch I.D. box for a 1 inch curb stop, and a 1- 1/4 inch I.D. curb box for a 1-1/2 inch curb stop or larger. One inch curb boxes shall have a 1 inch threaded brass pentagon plug with the word “WATER” in raised letters on the cap (1- 1/2 inch curb boxes shall have a 1-1/2 inch plug).

402.13 VALVE BOXES

Valve boxes/lids shall be Tyler or Bingham and Taylor, two-piece with drop lid, 6850 series (screw type, 5-1/4 inch shafts), or approved equal. Valve boxes and extensions must be cast iron and conform to the requirements of Standard Specifications for Gray Iron Castings, ASTM Designation A-48.

402.14 VALVE VAULTS

Valve vaults shall be constructed of precast concrete units in accordance with ASTM C478-05 (or latest edition) and Section 32 of the "Standard Specifications for Water and Sewer Main Construction in Illinois," and shall follow the City of Wood Dale standards. All valve vaults shall be water-tight. All visible leaks shall be sealed in a manner acceptable to the City Engineer.

402.14.1 FRAME AND COVER

- a) Valve Vaults shall be furnished with a self-sealing frame and slotted cover (Heavy Duty Neenah Foundry R-1772, Heavy Duty East Jordan Iron Works 1022-Z3 or approved equal). Pick holes shall not create openings through the vault cover.

- b) The word "WATER" shall be imprinted on the cover in raised letters.
- c) Frames and lids shall meet or exceed AASHTO H-20 loading specifications.
- d) Frames shall be shop painted with asphaltic base paint.
- e) Both the vault frame and cover shall have machined horizontal and vertical bearing surfaces.

402.15 FIRE HYDRANTS

- a) All fire hydrants shall have 5-1/4 inch valve opening.
- b) All materials used in the production of fire hydrants for ordinary service shall conform to the specifications designated for each material listed in AWWA Standard C502-05 (or latest edition).
- c) The hydrant shall be Mueller A-423 5- 1/4 inch valve opening, or Clow Medallion 5-1/4 inch valve opening and of a pattern approved by the City Engineer. The seat must be of bronze to bronze. The name or mark of the manufacturer and size of the valve opening shall be plainly cast in raised letters and so placed on the hydrant barrel as to be visible after the hydrant has been installed.
- d) Lugs, if required for harnessing the hydrant to the connection pipe from the main in the street, shall be provided on the bell of the elbow or on the hydrant bottom casting. A drawing of the lug construction shall be submitted for approval, on request of the City Engineer.
- e) Hydrants shall be breakaway/traffic style. Breaking devices shall be at the breakaway flange which will allow the hydrant barrel to separate at this point with a minimum breakage of hydrant parts in case of damage. There shall also be provided at this point, a safety stem coupling on the operating stem that will shear at the time of impact. Unless otherwise specified, all hydrants shall be equipped with O-ring stem seals. The breakaway flange is to be just above the proposed ground level per manufacturer specifications.
- f) Hydrant cap chains and chain hooks are not to be installed on hydrant. If any chains and chain hooks have been installed, they shall be removed prior to final acceptance.
- g) The dimensions and details of hydrants and nozzles, unless otherwise noted, shall be as follows:

Hydrant connection pipe size inside diameter:	6 inches
Standpipe minimum inside diameter:	6 inches
Length of hydrant from bottom of hydrant connection to breakaway flange:	5-1/2 foot bury depth min.
Valve opening diameter:	5-1/4 inches
Size of auxiliary gate valve:	6 inches
Hose nozzles, number and size:	Two 2-1/2 inch & one 4-1/2 inch

Hydrant 6" Connection Thread Details:

Steamer Nozzles:	National Standard Hose Thread
Diameter at root of thread:	National Standard Hose Thread
Pattern of thread:	National Standard Hose Thread
Total length of threaded male nipple:	National Standard Hose Thread

- h) All nozzles shall be fitted with cast iron threaded caps with operating nut of the same design and proportions as the hydrant stem nut. Caps shall be threaded to fit the corresponding nozzles and shall be fitted with suitable gaskets for positive water tightness under test pressures.
- i) All nuts, bolts and washers shall be stainless steel, Type 304 or better.
- j) The operating nuts on hydrant stem and nozzle caps shall be the same for all sizes of hydrants. Dimensions shall be as follows:
 - 1) Pattern of Nut: Pentagonal
 - 2) Height: 1-1/16 inch
 - 3) Size of Pentagon: 1.35 inch at bottom of nut 1.23 inch at top of nut measured from point to flat
- k) The hydrant valve shall open by turning to the left (counterclockwise).

402.15.2 FACTORY TESTING

Before the hydrant is painted at the factory, it shall be subjected to a minimum hydrostatic test of 300 pounds per square inch with the hydrant valve in a closed position and again with the hydrant valve in an open position

402.15.3 PAINTING

All iron parts of the hydrant, both inside and outside shall be thoroughly cleaned and thereafter painted with one coat of paint of a durable composition, and two additional exterior coats of Tnemec-Gloss Safety Red (#69HT) per National fire code specifications (final coat shall be applied after installation).

403 CONSTRUCTION REQUIRMENTS

403.1 GENERAL REQUIREMENTS

403.1.1 RESPONSIBILITY FOR MATERIALS

The contractor shall be responsible for the acceptability and storage of all materials furnished by him and shall assume responsibility for the replacement of all such material found damaged in shipping or on job site or defective in manufacture. This shall include the furnishing of all material and labor required for the replacement of installed material discovered to be defective prior to the final acceptance of the work.

403.1.2 HANDLING OF PIPE MATERIAL

All types of pipe shall be handled in such a manner as will prevent damage to the pipe or coating. Damaged pipe and other accessories shall be rejected and replaced to the satisfaction of the City Engineer. The methods of handling shall be corrected to prevent further damage when called to the attention of the contractor. The pipe and fittings shall be inspected by the contractor for defects while suspended above grade.

Dirt or other foreign material shall be prevented from entering the pipe or pipe joint during handling or laying operations and any pipe or fitting that has been installed with dirt or foreign material in it shall be thoroughly cleaned. At times when pipe laying is not in progress, and at the end of each working day, the open ends of the pipe shall be closed by a water tight plug to ensure absolute cleanliness inside the pipe. The plugs shall not be removed until the trench has been dewatered to the satisfaction of the City Engineer.

403.2 PIPE INSTALLATION

Pipe shall be installed in accordance with ANSI/AWWA Standard C600-99 (or latest edition), except as modified herein.

403.2.1 EXCAVATION AND BACKFILL

Excavation and backfill for water mains shall conform to the provisions of Section 20, 21 and 22 of the Standard Specifications for Water Sewer Main Construction in Illinois, latest edition, except as modified herein.

403.2.2 DEPTH OF PIPE COVER

Unless otherwise shown on the plans or indicated in the Special Provisions, all pipe shall be installed with a minimum of 5 feet of ground cover, measured from the proposed grade to the top of the pipe. In areas subject to subsequent excavation or fill, the mains shall be laid to the grades shown on the plans.

403.2.3 PIPE BEDDING

The trench shall have a flat bottom conforming to the grade to which the pipe is laid. The pipe shall be laid on sound aggregate bedding, no less than 4 inches in depth, true to grade and shall have a firm bearing for the full length of pipe. Any part of the trench excavated below grade shall be corrected with trench backfill material and thoroughly compacted.

403.2.4 DEWATERING OF TRENCH

Where water is encountered in the trench, the water shall be removed during pipe laying and jointing operations. Provisions shall be made to prevent floating of the pipe. Trench water shall not be allowed to enter the pipe at any time.

403.2.5 LAYING OF PIPE ON CURVES

Long radius curves, either horizontal or vertical, may be laid with standard pipe by deflections at the joints. The maximum deflections at pipe joints and laying radius for various pipe lengths are as found in the following standards, but at no time shall the deflection of the pipe joints exceed the manufacturer's maximum recommended deflection:

- a) Ductile Iron Pipe Mechanical Joints: AWWA C600-99 (or latest edition)
- b) Ductile Iron Pipe Push-On Joints: AWWA C600-99 (or latest edition)

Where field conditions require deflection of pipe not shown on the plans, the City Engineer must give prior approval of the methods to be used.

403.2.6 MECHANICAL JOINTS

- a) Jointing procedures shall be in accordance with AWWA C600-99 (or latest edition). The outside of the spigot and the inside of the bell shall be cleaned. Lubrication and additional cleaning shall be provided by brushing both the gasket and plain end with an approved pipe lubricant meeting the requirements of ANSI/AWWA C111/A21.11-00 (or latest edition) just prior to slipping gasket onto the plain end for joint assembly. The gland shall be placed on the plain end with the lip extension toward the plain end, followed by the gasket with the narrow edge of the gasket toward the plain end.
- b) The pipe shall be inserted into the socket and the gasket shall be pressed firmly and evenly into the gasket recess. The joint shall be kept straight during assembly.
- c) The gland shall be pushed toward the socket and centered around the pipe with the gland lip against the gasket. The bolts shall be inserted and the nuts hand tightened.
- d) The bolts shall be tightened to the normal range of bolt torque as specified in AWWA C600-99 (or latest edition) which is 75-90 ft-lbs for pipes 4 inches to 24 inches, while at all times maintaining approximately the same distance between the gland and the face of the flange at all points around the socket.
- e) Nuts spaced 180 degrees shall be tightened alternately in order to produce an equal pressure on all parts of the gland.

403.2.7 PUSH-ON JOINTS

- a) Jointing procedures shall be in accordance with AWWA C600-99 (or latest edition). The inside of the bell shall be thoroughly cleaned to remove all foreign matter from the joint. The circular rubber gasket shall be inserted in the gasket seat provided.
- b) A thin film of approved gasket lubricant shall be applied to the inside surface of the gasket. Gasket lubricant shall be a solution of vegetable soap or other solution supplied by the pipe manufacturer and approved by the City Engineer. The lubricant shall be approved for use with potable water. The spigot end of the pipe shall be cleaned and entered into the rubber gasket in the bell, using care to keep the joint from contacting the ground. The joint shall then be completed by forcing the plain end to the seat of the bell. Care must be taken not to damage exterior coating or interior linings while forcing the joint. A timber header or other suitable means shall be used to push the pipe “home” to avoid damage.
- c) Field-cut pipe lengths shall be beveled to avoid damage to the gasket and facilitate making the joint.
- d) All pipe shall be furnished with a depth mark to assure that the spigot end is inserted to the full depth of the joint.

403.2.8 INSTALLING PIPE THROUGH CASINGS

This work shall be in conformance with Section 20-2.19 of the Standard Specifications for Water and Sewer Main Construction in Illinois, except as modified herein. Encasements for pipes under highways or railroads shall conform to the requirements of the City of Wood Dale, or the owner of the highway or railroad. Manufactured non-metallic or non-corrosive casing spacers, adjustable runners, or cradles shall be used to support the pipe in the casing and shall be installed per manufacturer’s recommendations. A minimum of two supports shall be used per joint of pipe for lengths up to 12-1/2 feet, and a minimum of three supports shall be used per joint for lengths greater than 12-1/2 feet. The annular space shall be filled with pea gravel, low-strength grout, or cellular foam concrete and provisions shall be made so that no voids are left. The Contractor shall make arrangements to have a City of Wood Dale representative witness the annular spacing filling operations.

403.2.9 CORROSION PROTECTION - POLYETHYLENE ENCASEMENT

Polyethylene encasement is required for all underground installations of gray, ductile and cast iron pipe and other related appurtenances or water main. Polyethylene encasement shall be required unless a soils report submitted to the City by the Ductile Iron Pipe Research Association indicates that the soils in the area are not corrosive to iron pipe. Should corrosive soils be encountered during the installation of the pipe, then the pipe shall be encased in polyethylene wrap.

Installation shall be in accordance with ANSI/AWWA C105/A21.5-99 (or latest edition). The polyethylene encasement shall prevent contact between the pipe and the surrounding backfill and bedding material but is not intended to be a completely air and water tight enclosure

Overlaps shall be secured by the use of approved adhesive tape, plastic string, or other material capable of holding the polyethylene encasement in place until backfilling operations are completed.

Three different methods for the installation of polyethylene encasement on pipe are acceptable. Methods A and B are for use with polyethylene tubes and method C for use with polyethylene sheets.

a) Method A

Cut the polyethylene tube to a length approximately two feet longer than that of the pipe section. Slip the tube around the pipe, centering it to provide a one foot overlap on each adjacent pipe section, and bunching it accordion fashion length-wise until it clears the pipe ends.

Lower the pipe into the trench and make up the pipe joint with the preceding section of pipe. A shallow bell hole must be made at joints to facilitate installation to the polyethylene tube.

After assembling the pipe joint, make the overlap of the polyethylene tube. Pull the bunched polyethylene from the preceding length of pipe, slip it over the end of the new length of pipe and secure in place. Then slip the end of the polyethylene from the new pipe section over the end of the first wrap until it overlaps the joint at the end of the preceding length of pipe.

Secure the overlap in place. Take up the slack width to make a snug, but not tight, fit along the barrel of the pipe, securing the fold at quarter points.

Repair any rips, punctures, or other damage to the polyethylene with adhesive tape or with a short length of polyethylene tube cut open, wrapped around the pipe and secured in place. Proceed with installation of the next section of pipe in the same manner.

b) Method B

Cut the polyethylene tube to a length approximately one foot shorter than that of the pipe section. Slip the tube around the pipe, centering it to provide six inches of bare pipe at each end. Make the polyethylene snug, but not tight; secure ends as described in Method A.

Before making up a joint, slip a three foot length of polyethylene tube over the end of the preceding pipe section, bunching it accordion fashion lengthwise. After completing the joint, pull the three foot length of polyethylene over the joint, overlapping the polyethylene previously installed on each adjacent section of pipe by at least one foot. Make the polyethylene snug and secure each end as described in Method A.

Repair any rips, punctures, or other damage to the polyethylene. Proceed with installation of the next section of pipe in the same manner.

c) Method C

Cut the polyethylene sheet to a length approximately two feet longer than that of the pipe section. Center the cut length to provide a one foot overlap on each adjacent pipe section, bunching it until it clears the pipe ends. Wrap the polyethylene around the pipe so that it circumventially overlaps the top quadrant of the pipe. Secure the cut edge of polyethylene sheet at intervals of approximately three feet.

Lower the wrapped pipe into the trench and create the pipe joint with the preceding section of pipe. A shallow bell hole must be made at joints to facilitate installation of the polyethylene. After completing the joint, make the overlap as described above.

Repair any rips, punctures or other damage to the polyethylene. Proceed with installation of the next section in the same manner.

Cover bends, reducers, offsets, and other pipe-shaped appurtenances with polyethylene in the same manner as the pipe. When valves, tees, crosses, and other odd-shaped pieces cannot be wrapped practically in a tube, wrap with a flat sheet or split length of polyethylene tube by passing the sheet under the appurtenance and bringing it up around the body. Make seams by bringing the edges together, folding over twice, and taping down. Handle width and overlaps at joints as described above. Tape polyethylene securely in place at valve stem and other penetrations.

403.3 VALVES

The minimum requirements for all valves shall, in design, material and workmanship, conform to AWWA C509-01 or AWWA C515-01 (or latest editions).

All valves shall be inspected upon delivery in the field to insure proper working order before installation. They shall be set and jointed to the pipe in the manner as set forth in the AWWA Standards for the type of connection ends furnished.

The valves shall be suitable for ordinary water works service and intended to be installed in a normal position on buried pipe lines or water distribution systems.

All valves shall be provided with a standard valve chamber so arranged that no shock will be transmitted to the valve and the box or vault opening shall be centered over the operation nut, and the cast iron cover shall be set flush with the road bed or finished surface.

403.4 TAPPING AND LINE STOP SLEEVES

Pressure tap connections shall be made in accordance with Standard Details and in accordance with Section 46 of the Standard Specifications for Water and Sewer Main Construction in Illinois.

Tapping sleeves of stainless steel shall not be used for "size on size" installations nor on water mains larger than 12 inches in size.

The outside surface of the existing main and the inner face of the tapping sleeve shall be disinfected with a 1 % chlorine solution.

403.5 INSERT VALVES

Insert valves shall be furnished with flanged inlet and connections having a machined projection on the flanges to mate with a machined recess on the outlet flanges of the tapping sleeves and crosses.

Insert valves shall be furnished for and installed in a horizontal conduit with the valve stem plumb over the center line of the pipe.

403.6 CURB BOXES

Curb boxes shall be capable of extensions and installed to finished grade, and shall conform to the depth of bury of the service line as provided in the Wood Dale Standard Water Detail 1. "Pigtails" on customer side of curb stop are not allowed.

403.7 VALVE BOXES

Adjustable cast iron valve boxes shall be set to position during backfilling operations so they will be in a vertical alignment to the valve operating stem. The lower casting of the unit shall be installed first in such a manner as to be cushioned and to not rest directly upon the body of the R/W valve or upon the water main. The upper casting of the unit shall then be placed in proper alignment into such an elevation that its top will be at final grade. Backfilling around both units shall be placed and compacted to the satisfaction of the Engineer. Valve boxes must be free of debris, centered over operating nut and easily key-able.

403.8 VALVE VAULTS

Seal tight valve vaults shall be pre-cast with a minimum diameter of 48 inches for valve sizes 6" and 8". On valves larger than 8" and pressure connections, vaults shall be a minimum of 60 inches with eccentric cones installed so that the opening of the cone is placed as close to the centerline of the operation as possible.

A butyl mastic material (CONSEAL CS-102B or equal approved by the City Engineer) shall be used to provide a watertight seal between vault barrel sections, cone to barrel section, and the cone section to frame and cover.

Rubber boots/seals must be used where pipes enter manholes to provide a watertight connection where pipe enters. Elastomeric boots shall conform to ASTM C923-02 and ASTM A167-99(2004), or latest edition with stainless steel bands as manufactured by KOR-N-SEAL by NPC, PSX by Press-Seal Gasket Corporation or approved equal.

Vault frames shall be adjusted to proper grade utilizing reinforced precast concrete rings; brick or concrete blocks will not be allowed. Tapered composite adjusting rings, as approved by City Engineer, shall be required when the frame will be within a roadway area. Final frame adjustment for vaults within the roadway area shall be in accordance with Sections 602 and 603 of Standard Specifications for Road and Bridge Construction, prepared by the Illinois Department of Transportation, latest edition.

Adjusting rings shall be securely sealed to the cone section or top barrel section of the vault using resilient, flexible, non-hardening preformed butyl mastic material (CONSEAL CS-102B or an equal approved by the City Engineer). This mastic shall be applied in such a manner that no surface water or ground water inflow can enter the vault through gaps between the top barrel section or cone section and the first adjusting ring, between adjusting rings, or between the last adjusting ring and the vault frame. Up to 12 inches of adjusting rings may be installed on a given vault; however, no more than one 2 inch adjusting ring and no more than two rings in total shall be used.

403.9 FIRE HYDRANTS

These specifications are to be used in conjunction with the AWWA Standard C502-05 (or latest edition) for fire hydrants for ordinary water works service. Fire hydrants shall be installed at the locations shown on the approved engineering plans.

Hydrants shall be plumb and shall be set so that the center of the hydrant port is a minimum of 18 inches to a maximum of 24 inches above the surrounding finished grade ensuring the breakaway flange at proper ground height. All hydrants shall be inspected in the field upon delivery to the job to ensure proper operation before installation. A minimum of 1/4 cubic yard of washed coarse stone shall be placed at and around the base of the hydrant to ensure proper drainage of the hydrant after use. The blocking of the hydrant shall consist of a wedge of Portland cement concrete of not less than 1/4 cubic yard extending from the hydrant to undisturbed soil and shall be so placed to form a barrier adjacent to the hydrant base top to counteract the pressure of water exerted thereon. Care shall be taken to insure that weep holes are not covered by concrete. The hydrant shall be set on a concrete block to ensure a firm bearing for the hydrant base. The hydrant valve and tee shall be interconnected by stainless steel rods or approved retainer glands. Locking or restrained fittings may be substituted only after prior approval from the City Engineer. The resetting of existing hydrants and moving and reconnection of existing hydrants shall be handled in a manner similar to the new installation. Auxiliary valve shall be installed a minimum of 18 inches from the face of the hydrant. The contractor shall rotate and/or adjust the hydrants to the satisfaction of the department of Public Utilities. The hydrant settings shall follow the Wood Dale Standard Detail Water 2.

Fire hydrant should be bagged "NOT IN SERVICE" until all testing and disinfection has been completed and the new water main section is service.

403.10 THRUST BLOCKING AND TIE RODS

- a) Blocking to prevent movement of lines under pressure at bends, tees, caps, valves (including inside vaults) and hydrants shall be Portland cement concrete, a minimum of 12 inches thick, placed between solid ground and the fittings (see Wood Dale Standard Water Detail 6) and shall be anchored in such a manner that pipe and fitting joints will be accessible for repairs. The Portland cement concrete shall meet or exceed a compressive strength of 3500 psi after 28 days. Thrust blocks may be precast or cast-in-place.
- b) All bends of 11-1/4 degrees or greater, and all tees, crosses and plugs shall be thrust protected to prevent movement of the lines under pressure as shown on the plans.
- c) Where unstable soil and/or backfill conditions exist, it may be necessary to install thrust blocking at deflected sections as well as at fittings. If required by the City Engineer, deflection blocking shall be installed at a point approximately 1/5th of the pipe length each side of the coupling. Couplings/sleeves shall be restrained with approved retainer glands.
- d) Tie rods shall be 5/8 inch diameter (minimum) stainless steel, grade 304. Eyebolts shall be high strength, low alloy steel.
- e) Where conditions prevent the use of concrete thrust blocks, tied joints or restrained joints of a type approved by the City Engineer shall be used.

403.11 RETAINER GLANDS

The contractor may elect to use mechanical joint wedge action retainer glands in lieu of tie-rods. Installation shall be per manufacturers' recommended procedures, including length and/or number of joints to be restrained. Tied or restrained joints shall extend a minimum of two full pipe lengths back from the fitting. And shall utilize MEGALUG Series 1100 materials.

Note: Thrust blocking shall be required behind fire hydrant assemblies in addition to the use of retainer glands and/or tie rods. The use of set screw type retainer glands shall not be permitted for use within the City of Wood Dale.

Use of approved retainer glands does not eliminate the need for thrust blocking at fittings and valves unless approved by the Department of Public Utilities after review of the appropriate supporting calculations.

404 INSPECTION AND TESTING

404.1 GENERAL INFORMATION

When extending an existing line, the contractor must chlorinate and pressure test both new and valved sections of existing lines in accordance with City standards.

For fire lines to buildings, the permanent valve must be in place prior to disinfection and sampling.

404.2 TESTING FOR TAPPING SLEEVES AND INSERT VALVES

Before a tapping sleeve is installed, the exterior of the main to be tapped, as well as the interior surface of the sleeve, shall be thoroughly cleaned and swabbed with a 1 percent hypochlorite solution.

After the surface disinfection, the tapping saddle or sleeve shall be mounted to the main and tapping valve to form a pressure-tight connection. The installation shall be pressure tested at operating pressure plus 50 percent, to insure the integrity of the installation. This shall be a hydrostatic test, introduced through a port on the tapping machine, or through a tapped mechanical joint plug on the outlet side of the tapping valve. The tapping machine and the tapping valve and sleeve assembly shall be externally supported so that no additional weight is placed upon the main(s).

Prior to installation, the insert valve shall be operated in the position that it will assume in service and for the full length of gate travel in both directions to demonstrate the free and perfect functioning of all parts in the intended manner. Any defects of workmanship shall be corrected and tested repeated until satisfactory performance is demonstrated.

404.3 PRESSURE TESTING

All newly laid water mains shall be subjected to a hydrostatic pressure test. Testing shall be in accordance with provision AWWA C-600-99 (or latest edition). Each valved section of pipe shall be slowly filled with water and flushed. The specified test pressure shall be applied by means of a pump connected to the pipe in a satisfactory manner. Water used shall be metered. The pump to pipe connection and all necessary apparatus including gauges and meters shall be furnished by the contractor. Before applying the specified test pressure, all air shall be expelled from the pipe. To accomplish this, taps shall be made, if necessary, at points of highest elevation and afterwards turned off and capped. All joints showing visible leaks shall be repaired or replaced until they are free from leaks. Any cracked or defective pipes, fittings, valves, or hydrants discovered in consequence of this pressure test shall be removed and replaced by the contractor with sound material and the test shall be repeated until satisfactory to the City Engineer. In no instance shall "Bell Joint Clamps" be permitted to repair leaks at push-on Joints.

- a) The newly laid water mains or any valved sections of it shall be subjected to a hydrostatic pressure test of no less than 150 pounds per square inch (psi) or 50% more than the operating pressure, whichever is greater. The test pressure shall not vary by more than ± 5 psi.
- b) The duration of each pressure test shall be for a period of not less than 4 hours.

- c) The pressure test gauge shall be glycerin or oil filled, with a range of not more than 200 psi and increments not greater than 5 psi.

404.3.1 PERMISSIBLE LEAKAGE

- a) Suitable means approved by the City Engineer shall be provided by the contractor for determining the quantity of water lost by leakage. The leakage test shall be conducted after satisfactory completion of the pressure test before being accepted.
- b) Allowable leakage shall not be greater than that indicated in Table 400-3.
- c) Leakage is defined as the quantity of water to be supplied in the newly laid pipe or any valved section under test which is necessary to maintain the specified leakage test pressure after the pipe has been filled with water and the air expelled.
- d) Flanged pipes shall be watertight.

**TABLE 400-3
ALLOWABLE LEAKAGE FOR HYDROSTATIC
PRESSURE TEST (150 PSI)**

Nominal Pipe Diameter	Allowable Leakage (gallons/hour/1000 LF)
2"	0.19
3"	0.28
4"	0.37
6"	0.55
8"	0.74
10"	0.92
12"	1.10
14"	1.29
16"	1.47
18"	1.66
20"	1.84
24"	2.21

404.4 DISINFECTION (CHLORINATION)

404.4.1 FLUSHING

- a) Sections of pipe to be disinfected shall first be flushed to remove any solids or contaminated material that may have become lodged in the pipe. If no hydrant is installed at the end of the main, then a tap should be provided large enough to develop a velocity of at least 2.5 feet per second in the main. One 2-1/2 inch diameter hydrant opening will, under normal pressure, provide this velocity in pipe sizes up to and including 12 inches. See Table 400-4 for additional sizes.

- b) All taps required by the contractor for chlorination or flushing purposes or for temporary or permanent release of air, shall be provided by him as part of the construction of water mains. When completed, the copper tubing shall be removed and the corporation stop placed at the "off" position. After testing, all corporation stops in valve vaults shall be brass-capped to protect threads.

**TABLE 400-4
MINIMUM ORIFICE SIZE (INCHES) TO
FLUSH WATER MAIN AT 2.5 FPS**

Pipe Diameter	Residual Pressure, PSI				
	20	40	60	80	100
4"	1.11	0.94	0.85	0.79	0.75
6"	1.64	1.38	1.24	1.16	1.09
8"	2.23	1.88	1.69	1.58	1.49
10"	2.75	2.31	2.09	1.94	1.84
12"	3.34	2.81	2.54	2.37	2.24
14"	3.86	3.25	2.94	2.73	2.58
16"	4.31	3.63	3.28	3.05	2.88
18"	4.98	4.19	3.78	3.52	3.33
20"	5.53	4.65	4.20	3.91	3.70

NOTE: Standard hydrant nozzle sizes are 2.5 inch and 4.5 inch

404.4.2 DISINFECTION REQUIREMENTS

- a) Before being placed into service, all new water mains and/or extensions to existing mains shall be chlorinated so that an initial chlorine residual of at least 50 ppm is present, and that a chlorine residual of not less than 25 ppm remains in the water after standing 24 hours in the pipe.
- b) For extensions and/or connections equal to or less than one pipe length (< 18 ft), the new pipe, fittings and valve(s) required for the connection/extension may be spray or swab disinfected with a minimum 1 percent hypochlorite solution just prior to being installed.
- c) Before a tapping sleeve is installed, the exterior of the main to be tapped, as well as the interior surface of the sleeve, shall be thoroughly cleaned and swabbed with a 1 percent hypochlorite solution.
- d) Fire service lines requiring disinfection shall have the permanent position indicating valve (OS&Y or approved equal) installed on the fire sprinkler riser prior to disinfection.

404.4.3 FORM OF APPLIED CHLORINE

Chlorine shall be applied by one of the methods which follow, subject to approval by the City Engineer.

- a) Liquid Chlorine - A chlorine gas-water mixture shall be applied by means of a solution- feed chlorinating device or the dry gas may be fed directly through proper devices for regulating the rate of flow and providing effective diffusion of the gas into the water within the pipe being treated. Chlorinating devices for feeding solutions of chlorine gas or the gas itself must provide means for preventing the back flow of water into the chlorine cylinder.
- b) Chlorine-Bearing Compounds in Water - In certain instances, when the usage of chlorine gas is not practical, such as in congested or confined areas, upon approval of the City Engineer, a chlorine bearing compound of known chlorine content, prepared in solution form, may be substituted for chlorine gas.

404.4.4 POINT AND RATE OF APPLICATION

- a) Point of application - The preferred point of application of the chlorinating agent is at the beginning of the pipeline extension or any valved section of it, and through a corporation stop inserted in the pipe. The water injector for delivering the chlorine-bearing water into the pipe should be supplied from a tap made on the pressure side of the gate valve controlling the flow into the pipe line extension. Alternate points of application may be used when approved or directed by the City Engineer.
 - b) Rate of Application - Water from the existing distribution system, or other approved source of supply shall be controlled to flow very slowly into the newly laid pipeline during the application of the chlorine. The rate of chlorine mixture flow shall be a constant feed and in such proportion to the rate of water entering the newly laid pipe that the dosage applied to the water will be at least 50 parts per million unless otherwise directed by the City Engineer.
 - c) Retention Period - Treated water shall be retained in the pipe at least 24 hours. After this period, the chlorine residual at pipe extremities and at other representative points shall be at least 25 parts per million.
 - d) Chlorinating Valves and Hydrants - After the process of chlorinating newly laid pipe, all valves internal to the isolated test section and other appurtenances shall be operated while the pipeline is filled with the chlorinating agent and under normal operating pressure.
- a) Preventing Reverse Flow - Valves shall be manipulated so that the strong chlorine solution in the line being treated will not flow back into the existing distribution system supplying the water. Backflow valves are required on chlorine equipment piping.

404.5 FINAL FLUSHING AND TESTING

- a) Dechlorination/neutralization may be required by the City Engineer. The environment into which the chlorinated water is to be discharged shall be inspected. If there is any possibility that the chlorinated discharge will cause environmental damage, then a neutralizing chemical

shall be added to the discharge water to thoroughly neutralize the chlorine residual remaining in the water (see AWWA C651-05, or latest edition, Appendix B).

- b) Following chlorination, all treated water shall be thoroughly flushed from the newly laid pipe at its extremity until the replacement water throughout its length shows, upon test, a residual not in excess of that carried in the source of supply.
- c) After flushing, water samples collected on 2 successive work days from the treated piping system, as directed by the City Engineer, shall show satisfactory bacteriological results. Water main shall not be flushed to obtain the second day sample. Bacteriological analysis must be performed by a laboratory approved by the Director of the Illinois Department of Public Health and the City Engineer. A minimum of two samples is required. The actual number of samples will be determined by the City Engineer.
- d) Should the initial treatment result in an unsatisfactory bacterial test, the original chlorination procedure shall be repeated by the contractor until satisfactory results are obtained.
- e) Wood Dale Department of Public Works must be notified at least 48 hours prior to flushing. New water mains, including pressure tap valves, connected to an existing water main, and existing water main valves shall only be operated by Wood Dale Department of Public Works personnel.

**SECTION 500:
PAVEMENT**

Page No.	Description
500-2	501 GENERAL
500-2	501.1 STANDARD DOCUMENTS
500-2	501.2 PROTECTION OF RIGHT-OF-WAY IMPROVEMENTS
500-2	501.3 PRIVATE STREETS
500-3	501.4 PAVING RESTRICTIONS
500-3	501.5 MAINTENANCE OF TRAFFIC
500-3	501.6 UTILITY IDENTIFICATION
500-3	501.7 SIDEWALK CLOSURES
500-4	501.8 FINAL ACCEPTANCE
500-4	501.9 AMERICANS WITH DISABILITIES ACT
500-5	502 MATERIALS
500-5	502.1 SUBGRADE
500-5	502.2 SUBBASE
500-5	502.3 BITUMINOUS CONCRETE PAVEMENT
500-5	502.4 PORTLAND CEMENT CONCRETE PAVEMENT
500-6	503 CONSTRUCTION
500-6	503.1 SUBGRADE
500-7	503.2 SUBBASE
500-7	503.3 BITUMINOUS CONCRETE PAVEMENT
500-7	503.4 PORTLAND CEMENT CONCRETE PAVEMENT
500-7	503.5 PAVEMENT MARKINGS
500-7	503.6 PAVEMENT PROTECTION AND REPAIR
500-8	504 INSPECTION AND TESTING
500-8	504.1 GENERAL REQUIREMENTS
500-8	504.2 LABORATORY QUALIFICATIONS
500-9	504.3 TESTING REQUIREMENTS
500-9	504.4 PAVEMENT EVALUATION

501 GENERAL

The standards and requirements found in this article are for materials and construction of roadway pavement, parking lots, driveways, and bicycle/pedestrian pavement within the City of Wood Dale, Illinois.

501.1 STANDARD DOCUMENTS

The following list of Standard Construction Documents define the methods, materials, and testing to be utilized when designing and constructing transportation improvements. The sections in this specification are intended to define further particular elements of both design and construction of transportation projects in Wood Dale, Illinois. The City Engineer shall decide all questions that arise as to the interpretation of the specifications.

- a) Design Manual, latest edition (IDOT)
- b) Construction Manual, latest edition (IDOT)
- c) Soils Manual, latest edition (IDOT)
- d) Highway Standards, latest edition (IDOT)
- e) Manual of instructions for Concrete Proportioning and Testing, latest edition (IDOT)
- f) Manual of Instructions for Bituminous Proportioning and Testing, latest edition (IDOT)

501.2 PROTECTION OF RIGHT-OF-WAY IMPROVEMENTS

The developer and contractor shall have the responsibility to adequately protect the pavement and property, curb and gutter and other right-of-way improvements, whether newly constructed or existing, from any and all damage. Sufficient means shall be employed by the contractor to protect against such damage to the satisfaction of the City Engineer.

Any new or existing improvements that are damaged shall be repaired or replaced in a manner that is satisfactory to the City Engineer.

The contractor and/or developer shall secure all necessary rights to perform any work on private property not within the ownership rights of the developer. The developer shall bear the sole responsibility for damages that may occur as a result of work performed under contracts they initiate.

501.3 PRIVATE STREETS

Private streets shall be designed and constructed in accordance with the standards set forth for public streets.

501.4 PAVING RESTRICTIONS

Roadway construction shall only be permitted between April 15 and November 15, weather permitting, unless otherwise authorized in writing by the City Engineer. This authorization will in no manner void the obligation of the developer and contractor to adhere to the specifications or guarantee the work.

501.5 MAINTENANCE OF TRAFFIC

The contractor shall employ the appropriate methods of traffic control in accordance with the plans, specifications and the Manual on Uniform Traffic Control Devices, such that the safety of vehicles, and pedestrians is preserved at all times. The erection and maintenance of the traffic control devices shall be to the satisfaction of the agency of jurisdiction and the City Engineer.

501.6 UTILITY IDENTIFICATION

When newly poured curbs are installed, the contractor shall use a City approved stamp to indent the wet concrete with an "S" to identify the location of each sanitary manhole and sewer stub and/or indent the wet concrete with a "W" to identify the location of each water valve or water service. The letters shall be indented at the top of the curb and shall be one and one-half (1 1/2) inches to two (2) inches in height, one and one-half (1 1/2) inches to two (2) inches in width, embedded at least three-eighths (3/8) inch deep.

If the developer and/or the contractor fail to indent the curbs as outlined above, the City will require that identification medallions or other symbols as approved by the City Engineer be affixed to the curb.

501.7 SIDEWALK CLOSURES

Closure of sidewalk in a Commercial District poses a serious impediment to access by the heavy pedestrian volume of residents and business employees. Sidewalks shall not be closed unless approved by the City Engineer; any sidewalk closures will be granted only for the brief periods of time needed and shall not be for an entire project. Closure of a sidewalk will be granted by the City Engineer only for those phases of a construction project for which there are no acceptable safe methods of keeping the sidewalk open to pedestrian travel. The following requirements apply to all approved sidewalk closures:

- a) Temporary sidewalks shall be used around or through closed off areas rather than closure of a sidewalk whenever possible. Temporary sidewalks shall comply with ADA standards.
- b) For any closure of a sidewalk, a pedestrian guide signing plan shall be developed as part of the permit submittal. The pedestrian guide signing plan will include directional signing to adjacent municipal parking lots and directional signing to existing designated pedestrian crosswalks at all-way stop and traffic signal controlled intersections, as well as the sidewalk closure signs incorporated into the IDOT standards. The pedestrian guide signing plan shall comply with ADA standards. The project may not commence until the pedestrian guide and closure signing is in place.
- c) Overhead and lateral pedestrian protection shall be installed, where necessary, to insure pedestrian safety, as directed by the City Engineer based upon a review of the project and its sequence of work.

- d) Mid-block pedestrian crosswalks shall not be allowed on streets labeled as Corporate Main streets or thoroughfares due to the high volume of traffic and the multiple traffic lanes of these roads.
- e) Mid-block pedestrian crosswalks for locations other than those noted above may be granted as part of the pedestrian work zone plan by the City Engineer based upon the submittal of a pedestrian traffic engineering study. Appropriate warning signs (and flashers) are required for mid-block pedestrian crossings.
- f) Closure of a sidewalk shall be by a portable or permanent fencing as directed by the City Engineer. Barricades and warning tape are not to be used. Short term closures (those less than 5 days) may be done with barricades and warning tape.

501.8 FINAL ACCEPTANCE

The developer shall maintain the integrity of the pavement, provide periodic cleaning of the pavement, and perform snow removal until final acceptance of the roadway.

501.9 AMERICANS WITH DISABILITIES ACT

All pedestrian facilities shall be constructed in accordance with the latest requirements of the Americans with Disabilities Act (ADA). It is the Contractor's responsibility to review the site conditions and the design plans prior to construction to verify that the proposed improvements can be constructed per ADA requirements. In the event that the proposed improvements cannot be constructed per the ADA requirements, the designer should be consulted and appropriate action must be taken. Appropriate action may include a field change, a plan revision, or a memo to the City from the designer indicating why a certain aspect of the ADA cannot or will not be met. The City will not accept any improvements that fail to meet the requirements of the ADA without documentation from the designer.

It is recommended that the Wood Dale Standard Details be consulted when designing and constructing pedestrian improvements. However, all improvements must ultimately be in accordance with the 2010 ADA Standards for Accessible Design published by the Department of Justice and the Illinois Accessibility Code published by the Illinois Capital Development Board.

502 MATERIALS

502.1 SUBGRADE

All subgrade material shall have a minimum Illinois Bearing Ratio (IBR) of 3.0 as measured by a dynamic cone penetrometer. Subgrade material having an IBR of less than 3.0 shall be modified by undercutting and backfilling the unsuitable areas in accordance with Section 503.1. All materials shall be required to be supplied by a state approved supplier.

502.2 SUBBASE

Unless otherwise indicated, all subbase shall be constructed of compacted, crushed aggregate meeting IDOT gradation CA-6 and shall come from a state approved supplier.

502.3 BITUMINOUS CONCRETE PAVEMENT

Bituminous concrete base course, bituminous concrete binder course and bituminous concrete surface course shall meet the mix design and gradation for the State of Illinois specifications for Bituminous Aggregate Mixture, Bituminous Concrete Binder Course Class modified, and Bituminous Concrete Surface Course Class I modified, respectively. All mix designs shall be approved by the City Engineer. The surface course on all original roadway construction and pavement widenings shall be comprised of only virgin materials.

502.4 PORTLAND CEMENT CONCRETE PAVEMENT

The pavement shall be of Portland cement concrete with or without reinforcement constructed on a prepared subgrade and subbase.

502.4.1 ADMIXTURES

No admixtures other than air entrainment agents in accordance with ASTM C-33 shall be used in the concrete without prior written approval of the City Engineer. All admixtures shall meet all applicable AASHTO and ASTM standards and requirements. The use of calcium chloride is not allowed unless approved in writing by the City Engineer and then only when added by the concrete supplier at the batch plant in accordance with the IDOT Manual of Instructions for Concrete Proportioning and Testing.

502.4.2 SIDEWALKS, DRIVEWAYS & APRONS

Commercial, Industrial, and Multi-Family driveways and parking lots shall comply with applicable articles in sections 300 and 400 of the Illinois Department of Transportation Standards of Roads and Bridge Construction as well as Pavement Details 7 and 13 of this Manual .

All residential driveways and aprons shall be constructed of a minimum three inches (3") bituminous surface over six inches (6") compacted aggregate base or six inches (6") concrete over two inches (2") compacted aggregate base.

A permit is required from the Community Development Department for construction of new, expansion or replacement of driveways and parking lots on private property. A permit from the Public Works Department is required for construction of new, expansion or replacement of driveway apron within the right-of-way.

All driveways shall be a minimum of eight feet (8') in width. All driveways shall extend to the curb or curb line. It shall be mandatory to have said driveway installed prior to the occupancy of the

premises. No driveway shall be so constructed or graded as to leave a step, sharp depression or other obstruction on the sidewalk. The grade shall be as nearly as possible to the same as that of the adjoining sidewalk. It shall be unlawful to have the surface finish of any driveway where the same crosses the sidewalk constructed of such material as to render it slippery or hazardous to pedestrians, or to have the grade of such portion vary from the grade of the sidewalk, or to be other than level. This shall not preclude compliance with the ADA standards.

502.4.3 CURING AND PROTECTION

If membrane curing compounds are utilized they shall also be a type which provides a protective seal which is satisfactory to the City Engineer.

503 CONSTRUCTION

503.1 SUBGRADE

The subbase material shall be laterally supported by a sufficient amount of initial backfill material to prevent movement of the subbase during placement of the concrete and/or removal of the form work.

503.1.1 UNSUITABLE SOILS

Any subgrade material deemed unsuitable by the City Engineer shall be removed and replaced with granular material. The depth of undercut shall be based on the existing subgrade material and strength and shall be approved by the City Engineer. All subgrade sections undercut and backfilled shall be drained with underdrain pipe connected to a new or existing storm sewer or drainage system. Underdrain pipe shall be PVC schedule 40 or SDR 35 with factory drilled perforations, with a minimum diameter of 4 inches.

503.1.2 LIME MODIFICATION

Modification of soils by the use of lime requires prior approval by the City Engineer. Lime modification will only be allowed as a means to expedite construction in those instances where the moisture levels of the subgrade soils prevent construction by standard methods in a time frame deemed acceptable to the City Engineer. Lime modification shall be done in accordance with Section 302 of the Standard Specifications for Road and Bridge Construction, except as modified herein.

The developer or his engineer shall provide a minimum of 10 pounds (5 kg) of lime and 100 pounds (45 kg) of on-site soil, located in the proposed subgrades to be modified, prior to construction of the lime modified subgrade. The lime shall be proportioned within a range of 2% to 6% of soil (oven-dry basis). The required proportion of lime shall be established by the developer's engineer or geotechnical consultant prior to construction, using samples of the proposed soil and lime and IDOT's laboratory procedure for lime modified soil.

The mix design and documentation of all the tests necessary to calculate the mix design shall be submitted to the City Engineer at least 5 days prior to the construction of the lime modified soils. The developer's engineer or geotechnical consultant does have the right to make such adjustments of lime proportioning as considered necessary during the progress of the work, within the range specified (2% to 6%). The source or type of lime shall not be changed during the progress of the work without permission of the City Engineer, and after additional documentation and soil testing.

Upon completion of the lime modified subgrade the developer's engineer or geotechnical consultant shall provide documentation of field tests certifying that the required standard dry density has been obtained. Upon receipt of the documentation the City Engineer shall allow the developer to schedule and perform a proof roll of the subgrade. All areas that fail the proof roll shall be repaired until the subgrade meets the proof roll requirements.

503.2 SUBBASE

A stabilized subbase shall be constructed in accordance with Article 312 of the IDOT Standard Specifications, except that pozzolanic stabilized mixtures are not permitted.

503.3 BITUMINOUS CONCRETE PAVEMENT

Bituminous concrete pavement shall be constructed in accordance with Article 403 through Article 408 of the IDOT Standard Specifications.

503.4 PORTLAND CEMENT CONCRETE PAVEMENT

503.4.1 CURB & GUTTER

All concrete curb and gutter shall be constructed in accordance with Wood Dale Standard Pavement Detail 8, and Section 1020 of the IDOT Standard Specifications.

Where curb and gutter crosses utility trenches, the curb and gutter shall be constructed with two No. 4 epoxy coated deformed steel reinforcement bars extending a minimum of 3 feet beyond the edges of the trench.

503.4.2 COMMERCIAL DRIVEWAY APRONS

All driveway aprons or approaches shall be constructed in accordance with Wood Dale Standard Pavement Detail 7, and Section 1020 of the IDOT Standard Specifications.

503.4.3 SIDEWALK

All sidewalks shall be constructed in accordance with Wood Dale Standard Pavement Details 2, 3A, 3B, and 4, and Section 1020 of the IDOT Standard Specifications.

503.4.4 CURING AND PROTECTION

All concrete curb and gutter, sidewalk and other concrete pavements in the City of Wood Dale shall be cured in accordance with the IDOT Standard Specifications. All provisions of Section 1020.13 shall be employed. All membrane products shall be applied in accordance with the manufacturer's recommendations.

503.5 PAVEMENT MARKINGS

All pavement markings and markers shall be installed in accordance with Article 780 through Article 783 of the IDOT Standard Specifications. Except that paint pavement marking shall only be used as temporary pavement markings.

503.6 PAVEMENT PROTECTION AND REPAIR

The contractor shall be responsible to adequately protect all pavement within the public right-of-way. The City Engineer shall have the sole authority in determining if the pavement has been damaged. Upon the request of the City Engineer, the contractor shall remove the damaged sections of pavement at no cost to the city. Any damaged curb and gutter shall be replaced by a new segment of no less than five feet in length.

504 INSPECTION AND TESTING

During the construction of any public roadways within the corporate limits of the City of Wood Dale, testing shall be performed in accordance with the requirements of this section.

In accordance with the Wood Dale Municipal Code, all sidewalk contractors must be licensed and the contractor must request an inspection by the Department of Transportation and Engineering for all work within the public right-of-way.

504.1 GENERAL REQUIREMENTS

The project owner will employ and pay for the services of a qualified independent testing laboratory to provide the materials testing, as specified, in conjunction with the owner's project engineer and the City Engineer.

Following the completion of the testing and the preparation of the applicable reports, copies shall be distributed as follows:

- a) One copy to the project owner
- b) One copy to the owner's project engineer
- c) One copy to the City Engineer
- d) One copy to the contractor

Failure to provide the applicable test reports will impede adjustments to bonds, letters of credit, the execution of further work, and acceptance of the improvements or the issuance of occupancy permits.

504.2 LABORATORY QUALIFICATIONS

The materials testing consultant and laboratory shall meet the general requirements of the ASTM E-329 "Standards of Recommended Practice for Inspection and Testing Agencies for Concrete, Steel and Bituminous Materials used in Construction".

The materials testing consultant shall provide qualified personnel promptly upon notice and shall cooperate with the owner's project engineer, the City Engineer or representative and the contractor. Any irregularities or deficiencies in the work observed during the performance of services shall be promptly reported to the owner, the owner's project engineer and the City Engineer. The contractor shall cooperate with the materials testing consultant by providing sufficient notice in advance of operations to allow assignment of personnel and scheduling tests, provide access to the work and manufacturing facilities, and provide representative samples of the materials to be incorporated into the work.

504.3 TESTING REQUIREMENTS

Table 500-1 outlines the material and construction testing requirements for pavements constructed within the public right-of-way in the City of Wood Dale. The table defines the testing requirements based on the material to be incorporated into the work.

The testing frequencies outlined in Table 500-1 are the minimum required for verification of the work; additional testing may be required due to the unique nature of a particular project or to verify or examine further deficiencies or irregularities in the work. Both the owner's project engineer and the City engineer reserve the right to order additional testing. The cost of both the initial testing and any additional testing shall be paid for by the project owner. The contractor reserves the right to contract the services of an equally qualified independent testing laboratory, at their expense, to perform additional inspections, sampling and testing when the initial tests indicate that the work is not in accordance with the contract document and specifications. The City Engineer shall have the final authority to make decisions regarding the acceptability of the work.

504.4 PAVEMENT EVALUATION

The City engineer will evaluate pavement in the right-of-way prior to final acceptance. This evaluation shall be based on the test results required by these standards, and by visual inspection of the pavement surface.

Prior to the acceptance of a Portland cement concrete pavement or the installation of the bituminous concrete surface course on either a composite pavement with a Portland cement concrete base course, a bituminous base course or an aggregate base course, a Dynaflect Pavement Evaluation Program Report shall be performed. The program shall include the following general testing/pavement evaluation techniques:

- a) Environmental Study (frost cycle, drainage, etc.)
- b) Pavement Surface Evaluation
- c) Soil borings at approximately one location per mile
- d) Dynamic Pavement Deflection Analyses (Dynaflect machine or equal correlated with Benkelmen Beam or equal)

The cost of the pavement evaluation shall be paid for by the developer. The engineer's estimate and the public improvement letter of credit shall provide an amount sufficient to perform the pavement evaluation. The amount shall be retained until satisfactory completion of the evaluation, payment of the cost of the evaluation to the City by the developer, and City Council acceptance of the roadway.

Prior to construction of the surface course, a field inspection shall be performed of the curb and gutter, base course, and binder course and all failures and deficiencies of the pavement shall be repaired by the contractor to the satisfaction of the City Engineer.

**TABLE 500-1
MATERIAL TESTING
FOR SUBGRADE/EMBANKMENT**

TYPE OF TEST	FIELD SAMPLING FREQUENCY	REMARKS
SOIL BORINGS ASTM D1586-84	MIN. EVERY 1000' AT APPROX. CENTERLINE OF ROW & ONE PER CUL-DE-SAC ^{1,3}	
BEARING RATIO COMPUTATION (IBR B554)	ONE PER TYPE OF SOIL ^{1,3}	
STANDARD PROCTOR/SIEVE ANALYSIS ASTM D698-91	MIN. ONE TEST PER SOIL CLASSIFICATION ^{1,2,3}	THE CITY RESERVES THE RIGHT TO REQUIRE THE MODIFIED PROCTOR ASTM D1557-91 BY NUCLEAR DENSITY DEVICE
ATTERBERG LIMITS AASHTO T-89 & T-90/ASTM D4318-95		
IN-PLACE MOISTURE DENSITY ASTM D2922-96 (SUB-GRADE)	MIN. ONE TEST EVERY 500' AND ONE PER CUL-DE-SAC ^{2,3}	
IN-PLACE MOISTURE DENSITY ASTM D2922-96 (EMBANKMENT)	FOR EACH 500' OF FILL AREA, ONE TEST PER EACH 3' OF EM-BANKMENT HEIGHT	
GRAB SAMPLE ASTM D75-97	OCCASIONALLY ²	LAB EVALUATIONS AS NEEDED
STRING-LINE SUBGRADE	MIN. EVERY 100' WITH A TOLERANCE OF 1/2" +/- ⁴	
PROOF ROLL	MIN. ENTIRE ROAD, EACH LANE OF TRAVEL ⁴	A FULLY LOADED 50,000 LB GVW TANDEM AXLE (6 WHEELER)
^{1/} PRE CONSTRUCTION ^{2/} CONSTRUCTION ^{3/} DEVELOPER'S/OWNER'S TESTING FIRM (MUST MEET ASTM REQUIREMENT E-329) ^{4/} MUST BE WITNESSED BY CITY OF WOOD DALE		

**TABLE 500-2
MATERIAL TESTING
FOR AGGREGATE BASE/SUB-BASE**

TYPE OF TEST	FIELD SAMPLING FREQUENCY	REMARKS
STANDARD PROCTOR/GRADATION ASTM D698-91 (AASHTO T99-74)	MIN. ONE TEST PER TYPE OF MATERIAL & PER SOURCE OF SUPPLY ^{1,2,3}	THE CITY RESERVES THE RIGHT TO REQUIRE THE MODIFIED PROCTOR ASTM D1557-91
IN-PLACE MOISTURE DENSITY ASTM D2992-96	MIN. EVERY 500' PER LIFT ^{2,3}	MATERIAL MUST COME FROM AN APPROVED SOURCE
GRAB SAMPLE D75-97	OCCASIONALLY ²	LAB EVALUATIONS AS NEEDED
STRING-LINE	MIN. EVERY 100' MAX, TOLERANCE OF 1/4" +/- ⁴	
PROOF ROLL	MIN. OF ENTIRE ROAD, EACH LANE OF TRAVEL ⁴	A FULLY LOADED 50,000 LB GVW TANDEM AXLE (6 WHEELER)
^{1/} PRE CONSTRUCTION ^{2/} CONSTRUCTION ^{3/} DEVELOPER'S/OWNER'S TESTING FIRM (MUST MEET ASTM REQUIREMENT E-329) ^{4/} MUST BE WITNESSED BY CITY OF WOOD DALE		

**TABLE 500-3 MATERIAL TESTING
FOR CONCRETE PAVEMENT**

TYPE OF TEST	FIELD SAMPLING FREQUENCY	REMARKS
PLANT INSPECTION	REQUIRED WITH A MIN. OF 100 C.Y. PER DAY ^{2,3}	PAVEMENT ONLY
SLUMP (IN FIELD) AASHTO T119 ASTM C- 143, C-192	MIN. ONE TEST PER 50 C.Y. ^{2,3} (MIN. 2 TESTS PER DAY)	
AIR ENTRAINMENT (IN FIELD) ASTM C- 231 AASHTO T152	MIN. ONE TEST PER 50 C.Y. ^{2,3} (MIN. 2 TESTS PER DAY)	AS PER IDOT'S "CONC. PROPORTIONING AND MANUAL OF INSTRUCTIONS AND TESTING"
STRENGTH (AASHTO T22&T23) 6"x12" SPECIMANS MAY BE USED ASTM C-39, C-87- ROADWAYS	MIN. 4 CYLINDERS PER 100 C.Y. (BREAKS AT 3, 7 AND 14 DAYS WITH 4TH HELD IN RESERVE)	30" BEAMS MAY BE CAST INSTEAD OF CYLINDERS
STRENGTH (AASHTO T22&T23) 6"x12" SPECIMANS MAY BE USED ASTM C-39, C-87	MIN. 3 CYLINDERS PER 50 C.Y. (BREAKS @ 14 & 28 DAYS WITH 3RD CYLINDER IN RESERVE) ^{2,3}	30" BEAMS MAY BE CAST INSTEAD OF CYLINDERS
^{1/} PRE CONSTRUCTION ^{2/} CONSTRUCTION ^{3/} DEVELOPER'S/OWNER'S TESTING FIRM (MUST MEET ASTM REQUIREMENT E-329) ^{4/} MUST BE WITNESSED BY CITY OF WOOD DALE		

**TABLE 500-4 MATERIAL TESTING
FOR ASPHALT PAVEMENT**

TYPE OF TEST	FIELD SAMPLING FREQUENCY	REMARKS
PLANT INSPECTION	REQUIRED WITH A MIN. OF 100 TONS PER DAY ^{2,3}	
IN-PLACE DENSITY ASTM D1559, AASHTO T209, AASHTO T245	MIN. OF EVERY 200' PER LANE PER LIFT, ONE PER CUL-DE-SAC ^{2,3}	BY NUCLEAR DENSITY DEVICE
DENSITY/THICKNESS ASTM D2726-96, AASHTO T164, ASTM D1856-95, AASHTO T170, ASTM D2041-95	2 CORES MIN. PER DAY (ONE CORE FULL TESTING WITH SECOND CORE STANDBY) ^{2,3}	
^{1/} PRE CONSTRUCTION ^{2/} CONSTRUCTION ^{3/} DEVELOPER'S/OWNER'S TESTING FIRM (MUST MEET ASTM REQUIREMENT E-329) ^{4/} MUST BE WITNESSED BY CITY OF WOOD DALE		

**SECTION 600:
STREET LIGHTING & TRAFFIC SIGNALS**

Page No.	Description
600-2	601 GENERAL
600-2	601.1 SPECIFICATIONS
600-2	601.2 RESOLUTION OF CONFLICTS
600-2	601.3 START OF CONSTRUCTION
600-2	601.4 AS-BUILTS
600-3	602 MATERIALS
600-3	602.1 GENERAL
600-3	602.2 STREET LIGHTING POLES
600-5	602.3 BREAK-AWAY DEVICE
600-5	602.4 STREET LIGHTING POLE FOUNDATIONS
600-7	602.5 LUMINAIRES
600-9	602.6 PHOTO-CELL
600-10	602.7 UNDERGROUND CONDUITS AND ELECTRICAL CABLE
600-11	602.8 ELECTRICAL CABLE, 600 VOLT
600-11	602.9 LIGHTING CABLE FUSE KITS
600-12	602.1 STREET LIGHTING HANDHOLES
600-12	602.1 COMPOSITE CONCRETE JUNCTION BOX
600-13	602.1 GROUNDING
600-13	602.1 GROUND ROD
600-14	602.1 STREET LIGHTING CONTROLLER
600-20	603 CONSTRUCTION REQUIREMENTS
600-20	603.1 TRAFFIC SIGNAL SYSTEMS CONTRACTOR PRE-QUALIFICATIONS
600-20	603.2 TRENCH AND BACKFILL FOR ELECTRICAL WORK
600-20	603.3 YELLOW WARNING TAPE OVER STREET LIGHTING CABLE
600-20	603.4 TRAFFIC SIGNAL SYSTEM SERVICE INSTALLATION
600-22	604 INSPECTIONS AND TESTING
600-22	604.1 STREET LIGHTING SYSTEMS
600-22	604.2 TRAFFIC SIGNAL SYSTEMS

601 GENERAL

The standards and requirements found in this article are for the materials and construction of street lighting and traffic signal systems within the City of Wood Dale, Illinois.

601.1 SPECIFICATIONS

All work and equipment performed and installed under this section shall be governed by and shall comply with the following specifications, manuals, and codes listed in Section 102.2. The most current editions and all subsequent revisions and alterations for the specifications are required.

601.2 RESOLUTION OF CONFLICTS

In the event of conflict between the City Standard Specifications and the documents listed in Section 102.2, the City Standard Specifications shall take precedence and/or the Director of Public Works decision will prevail. Any questions arising from these specifications should be directed in writing to the Director of Public Works for a determination.

601.3 START OF CONSTRUCTION

The contractor shall not begin construction until all required permits have been obtained. Copies of all permits obtained by outside agencies must be provided to the City prior to the start of construction.

601.4 AS-BUILTS

Upon completion of work, the contractor shall provide as-built information in conformance with the requirements of Section 110.

602 MATERIALS

602.1 GENERAL

The materials and equipment for installation of street lighting on public streets in Wood Dale are detailed as follows:

602.2 STREET LIGHTING POLES

602.2.1 DECORATIVE LIGHTING

- a) Street lighting poles for decorative lighting shall be of aluminum material, 6061-T6 structural grade aluminum. The mounting height of the fixture shall be 16'-9". The fixture roof and housing shall be made of 356 alloy cast aluminum and shall be mounted directly to the pole and have white acrylic lenses. The luminaire shall be 95 Watt roof mounted LED array, 4500K color temp. The contractor shall submit the technical information, to include catalog cut sheets, for each electrical material item for approval prior to ordering the equipment. The pole shall be "UL Listed" or E.T.L. listed in U.S and Canada.
- b) The straight fluted shaft shall be made of ASTM 6061 extruded aluminum and tempered to a T condition. It shall have a decorative fluted 3" O.D. tenon. The outside diameter of the pole shall not be less than 5 inches.
- c) The wall thickness shall be a minimum of 0.188 inches. And it shall be welded for single unit construction.
- d) The bolt circle of the pole base shall be of 14 inches and utilize ¾" diameter "L" type anchor bolts.
- e) The base housing shall be 2'-3" tall and have an access door to be placed opposite the street side of the pole. It shall measure 19" square at the bottom have a 1" floor thickness and shall be fastened to the base with 1/4 inch – 20 threaded stainless steel hex head bolts and 1 ground lug mounted opposite the access door. The bolts shall be coated with an anti-seize compound during installation. It shall be secured with tamper proof, stainless steel hardware.
- f) The pole and fixture shall be finished in a Smooth Black finish or a Swedish Iron finish as directed by the City of Wood Dale. The finish shall have a minimum 5-year guarantee by the manufacturer.
- g) The fixture shall be either the Prairie style 1230LED Sternberg or an approved equal, the pole shall either be the 8200 Fort Collins series with GFI located 13'-3" above the base, or an approved equal.

602.2.2 REINFORCED LIGHT POLE

- a) Street lighting poles for decorative lighting to be used with (2) way finding signs mounted by others shall be of aluminum material, 6061-T6 structural grade aluminum. The mounting height of the fixture shall be 14', 16'-9" to top of fixture. The fixture roof and housing shall be made of 356 alloy cast aluminum and shall be mounted directly to the pole and have white acrylic lenses. The luminaire shall be 95 Watt roof mounted LED array, 4500K color temp. The contractor shall submit the technical information, to include catalog cut sheets, for each electrical material item for approval prior to ordering the equipment. The pole shall be "UL Listed" or E.T.L. listed in U.S and Canada.
- b) The straight fluted shaft shall be made of ASTM 6061 extruded aluminum and tempered to a T condition. It shall have a decorative fluted 3" O.D. tenon. The outside diameter of the pole shall not be less than 5 inches.
- c) The wall thickness shall be a minimum of 0.250 inches. And it shall be welded for single unit construction.
- d) The bolt circle of the pole base shall be of 14 inches and utilize 1" diameter "L" type anchor bolts.
- e) The base housing shall be 2'-3" tall and have an access door to be placed opposite the street side of the pole. It shall measure 19" square at the bottom have a 1" floor thickness and shall be fastened to the base with 1/4 inch – 20 threaded stainless steel hex head bolts and 1 ground lug mounted opposite the access door. The bolts shall be coated with an anti-seize compound during installation. It shall be secured with tamper proof, stainless steel hardware.
- f) The pole and fixture shall be finished in a Smooth Black finish or a Swedish Iron finish as directed by the City of Wood Dale. The finish shall have a minimum 5-year guarantee by the manufacturer.
- g) The fixture shall be either the Prairie style 1230LED Sternberg or an approved equal, the pole shall either be the 8200 Fort Collins series with GFI located 13'-3" above the base, or an approved equal.

602.2.3 RESIDENTIAL LIGHT POLE

- a) Street lighting poles for residential lighting shall be of aluminum material, Tapered (6"-4.5"). The height of the pole shall be 23'-0" with a mast arm affixed at 22'-6". The mast arm shall be 6' in length and have a rise of 2'-6". The rise shall taper off at 8" from the end. The mounting height of the fixture shall be 25'-0". The contractor shall submit the technical information, to include catalog cut sheets, for each electrical material item for approval prior to ordering the equipment. The pole shall be "UL Listed" or E.T.L. listed in U.S and Canada.
- b) The tapered shaft shall be made of Aluminum tube alloy 6063-T6, 0.156" thick with a satin ground finish.

- c) The outside diameter of the pole shall not be less than 6 inches tapering to 4.5 inches. It shall be furnished with a Pole cap secured with stainless steel screws.
- d) The mounting bracket for the mast arm shall be extruded aluminum pole plate alloy 6063-T6 with ½"-13NC stainless Steel hardware.
- e) The pole shall have a wire hole at 22'-6" with 1" I.D. rubber grommet.
- f) The mast arm shall be tapered (4"-2") aluminum tube 0.125" wall alloy 6063-T6 with an elliptical section near the pole (2 ½"x 5 1/8")
- g) The bolt circle of the pole base shall be 9-10 inches and utilize 4, 1" diameter "L" type anchor bolts 1"x36"x4" conforming with AASHTO M314-90 grade 55 with 10" of threaded end and galvanized per ASTM A153. The anchorage kit will contain 4 hex nuts, 4 lock washers, and 4 flat washers all components galvanized steel. The base flange shall be alloy 356-T6 with bolt covers and stainless steel hex screws. The bolts shall be coated with an anti-seize compound during installation. It shall be secured with tamper proof, stainless steel hardware.
- h) The base foundation shall be 9 ¾" square minimum.
- i) A reinforced handhole shall be located 1'-6" above the base minimum size of 3"x5" with a grounding lug located on the opposite side of the handhole. The handhole frame shall be cast aluminum Alloy 356-T6 with aluminum door and 2 stainless steel hex head screws.
- f) The pole and fixture shall be finished in a satin ground finish as directed by the City of Wood Dale. The finish shall have a minimum 5-year guarantee by the manufacturer. The pole shall either be the Hapco single mast 4-bolt base, or an approved equal.

602.2.4 INDUSTRIAL LIGHT POLE

- j) Street lighting poles for industrial lighting shall be of aluminum material, Tapered (8"-4.5"). The height of the pole shall be 32'-8" with a mast arm affixed at 32'-2". The mast arm shall be 7'-6" in length and have a rise of 2'-6". The rise shall taper off at 8" from the end. The mounting height of the fixture shall be 34'-8". The contractor shall submit the technical information, to include catalog cut sheets, for each electrical material item for approval prior to ordering the equipment. The pole shall be "UL Listed" or E.T.L. listed in U.S and Canada.
- k) The tapered shaft shall be made of Aluminum tube alloy 6063-T6 (ASTM B221), 0.219" thick with a satin ground finish.
- l) The outside diameter of the pole shall not be less than 8 inches tapering to 4.5 inches. It shall be furnished with a Pole cap secured with ¼" 20NC stainless steel hex screws.
- m) The mounting bracket for the mast arm shall be extruded aluminum pole plate alloy 6063-T6 with ½"-13NC stainless Steel hardware.

- n) The pole shall have a 1 ¼” wire hole at 32’-2” with 1” I.D. rubber grommet.
- o) The mast arm shall be tapered (4 ½ ”-2 3/8”) aluminum tube 0.125” wall alloy 6063-T6 with an elliptical section near the pole (2 ½”x 5 1/8”)
- p) The bolt circle of the pole base shall be 11-12 inches and utilize 4, 1” diameter “L” type anchor bolts 1”x36”x4” conforming with AASHTO M314-90 grade 55 with 10” of threaded end and galvanized per ASTM A153. The anchorage kit will contain 4 hex nuts, 4 lock washers, and 4 flat washers all components galvanized steel. The base flange shall be alloy 356-T6 with bolt covers and stainless steel hex screws. The bolts shall be coated with an anti-seize compound during installation. It shall be secured with tamper proof, stainless steel hardware.
- q) The base foundation shall be 11 ¼” square minimum.
- r) A reinforced handhole shall be located 12” above the base minimum size of 4”x8” with the frame tapped ½”-13NC for grounding purposes. The handhole frame shall be cast aluminum Alloy 356-T6 with aluminum door and 2 stainless steel hex head screws.
- s) There shall be a factory installed internal damper.
- t) There shall be a festoon box (Mod. #183) with cover and stainless steel screws located 17’ above the bottom of the pole.
- f) The pole and fixture shall be finished in a satin ground finish as directed by the City of Wood Dale. The finish shall have a minimum 5-year guarantee by the manufacturer. The pole shall either be the Hapco single mast 4-bolt base, or an approved equal.

602.3 BREAK-AWAY DEVICE

When directed by the City of Wood Dale lighting pole shall be connected to the foundation by a breakaway device of a frangible box design. Frangible coupling bolts are not acceptable. The breakaway device shall comply with the IDOT Standard Specifications. The device shall be approximately 9 inches tall and shall have an aluminum access door. Certification shall be submitted from the supplier of a breakaway device that the particular design meets the 1985 AASHTO breakaway specification. The contractor shall submit the technical information, to include catalog cut sheets. Breakaway devices shall match the finish and the color of the pole.

602.4 STREET LIGHTING POLE FOUNDATIONS

602.4.1 CONCRETE FOUNDATION

No direct bury metal foundations or concrete poles are allow for street lighting poles, reinforced concrete foundations are required to be used.

- a) The concrete foundation shall comply with the requirements of the IDOT Standard Specifications.

- b) Studs, Fasteners, Rods: Studs or rods shall be 1 inch diameter and shall be according to AASHTO M 314. Nuts shall be hexagon nuts according to AASHTO M 291 M (M291) and washers shall be according to AASHTO M293. Studs or rods, nuts and washers shall be hot dip galvanized according to AASHTO M232.
- c) Each foundation shall include a copper coated steel ground rod not less than 3/4 inch in diameter and not less than 10 feet in length.
- d) Reinforced street lighting pole foundations shall be a minimum of 24 inches in diameter. The outside top edge of the foundation shall have a 3/4 inch chamfer. The top of the finished foundation shall not protrude more than 4 inches above the finished grade. The anchor bolts, studs, or rods shall protrude a minimum of 3 inches above the concrete foundation.
- e) The anchor bolts shall be inside the cage of reinforcing steel.
- f) Concrete shall be class SI concrete.
- g) Conduit raceways shall be 2 inches for insertion of 1-1/4 inch unit duct conduit. Raceways shall exit the foundation into the soil a minimum of 30 inches below the grade.
- h) The depth of the foundation shall be as directed by the Director of Public Works or their designee and constructed as shown in Wood Dale Standard Lighting Detail 1, based upon an evaluation of the soil conditions encountered.

602.5 LUMINAIRES

602.5.1 RESIDENTIAL LUMINAIRE

- a) The luminaire shall be a LED light comparable to 70-250W HPS roadway luminaires.
- b) The luminaire shall have three different surge protection options that provide a minimum of ANSO C136.2 10kV/5kA or 20kV/10kA protection if needed.
- c) The luminaire shall include standard AEL lineman-friendly features such as tool-less entry, 2 station terminal block and quick disconnects. Bubble level located inside the electrical compartment for easy leveling at installation.
- d) The luminaire shall have types 2, 3, 4, & 5 distributions.
- e) The Luminaire shall have an IP66 rated borosilicate glass optics.
- f) The luminaire shall have 0% uplight
- g) The luminaire shall either be an Autobahn ATBO or and Autobahn ATBM as approved by the Director of Public Works or their designee.

602.5.2 INDUSTRIAL LUMINAIRE

- a) The luminaire shall be composed of 96 high performance white LEDs. Color temperature as per ANSI/NEMA bin Neutral White, 4,000K nominal CRI 70 min 75 typical.
- b) The luminaire shall have a surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I category C high exposure 10kV/10kA waveforms for line-ground, line-neutral and neutral-ground, and in accordance with the U.S. DOE MSSLC model specification for LED roadway luminaires electrical immunity requirements for high test level 10kV/10kA..
- c) The luminaire shall include standard AEL lineman-friendly features such as tool-less entry, 2 station terminal block and quick disconnects. Bubble level located inside the electrical compartment for easy leveling at installation.
- d) The luminaire shall have types 2, 3, 4, & 5 distributions.
- e) The Luminaire housing shall be made of a low doper die cast aluminum alloy A360, 0.100" min thickness. Fits on a 1.66" O.D (1.25"NPS), 1.9" O.D. or 2 3/8" O.D. (2"NPS) by 7" min long tenon. Comes with 2 zinc plated clamp fixed by 4 zinc plated hexagonal bolts 3/8 16 UNC for ease of installation. Provides an easy step adjustment of +/- 5 degree tilt in 2.5" increments. A quick release, tool less entry, hinged, removable door opens downward or disengagement. A clearance of 17" at the rear in order to remove the door. Complete with a bird guard protecting against birds or similar intruders and an ANSI label to identify wattage and source (both included in the box).
- f) The luminaire shall have 0% uplight.
- g) Built in the housing, designed to ensure high efficacy and superior cooling by natural vertical convection air flow pattern always close to LEDs and driver optimizing their efficiency and life. Product does not use any cooling device with moving parts (only passive cooling). Wide openings enable natural cleaning and removal of dirt and debris. Entire luminaire is rated for operation in ambient temperature of -4 degrees C /-40 degrees F up to +50 degrees C/+122 degrees F.
- h) The luminaire shall either be an American Electric Lighting product or approved equal as approved by the Director of Public Works or their designee.

602.6 PHOTO-CELL

Photo cells shall be DTL DBE 124 1.5 T UL, or equal, as approved by the Director of Public Works or their designee. The photo-cell shall be controller cabinet mounted.

Photo-electric control, must meet or exceed the following requirements:

- a) ANSI C136.24.

- b) Line voltage Operating Range of 105 to 400 VAC at 60 Hz.
- c) Load Rating of 1000 VA ballast.
- d) UL Listed.
- e) ROHS compliant
- f) Turn “on” mode calibrated at 1.6 +/- 0.3 foot candles at 120 VAC with turn “off” maximum ratio to turn “on” of 1.5:1.
- g) Time delay: Control shall have an instantaneous “on” response to allow for easy testing. Operating temperature shall have a minimal effect on time delay duration.
- h) MOV rated for 190 Joule/4500 Amp
- i) Instant turn-on, standard 5-10 second turn-off delay
- k) Warranty: The warranty for the photo-electric control shall be a minimum of 4 years.

602.7 UNDERGROUND CONDUITS AND ELECTRICAL CABLE

Wiring to distribute electrical energy to street lighting will be installed underground. All wiring and cabling shall be copper conductor.

602.7.1 UNIT DUCT, 1-1/4 INCH, WITH 4/C - #6 XLP USE-2 CABLE

Unless otherwise directed by the Director of Public Works, the electrical distribution wiring for street lighting from the service point to the pole for individually fed lights and from the controller out to the poles for a street lighting system shall be 4/C - #6 XLP USE-2 electrical cable (colored insulated jacket of black, white, red, and green), 600 volt in 1-1/4 inch Unit Duct installed in accordance with Section 816 of the IDOT Standard Specifications.

602.7.2 UNIT DUCT, 2 INCH, WITH 4/C - #2 XLP USE-2 CABLE

Unless otherwise directed by the Director of Public Works, the service distribution wiring between the City electrical service point and a street lighting system controller shall be 3/C - #2 XLP USE-2 electrical cable (colored insulated jacket of black, white, and red), 600 volt in 2 inch galvanized conduit installed in accordance with Section 810 of the IDOT Standard Specifications. The cabling in conduit shall be placed not less than 3 feet deep.

602.7.3 GALVANIZED STEEL CONDUIT – 2 INCH, 3 INCH OR 4 INCH

Where underground street lighting cables cross public streets or commercial driveways, all electrical cables and all electrical cables in Unit Duct shall be in an appropriate sized galvanized steel conduit. The galvanized steel conduit shall be placed not less than 3 feet deep.

602.8 ELECTRICAL CABLE, 600 VOLT

The material supplied shall be XLP USE-2, 600 volt cable (colored insulated jacket of black, white, red, and green) of the specified number of conductors and cable size per the IDOT Standard Specifications.

602.8.1 POLE WIRE

Pole Wire shall be 1/C No. 10 AWG 600 volt insulated copper conductor, XLP USE-2, stranded in conformance with ASTM B-8 from the luminaire terminal blocks to the pole handhole per IDOT Standard Specifications Sections 817 and 1066.06 for Roadway Lighting pole wire and from the pole handhole to the underground distribution system in a moisture-proof manner. Connection of pole wire to the terminals in the street lighting luminaire is incidental to the installation of the pole wire.

- a) Pole wire shall be insulated with cross-linked polyethylene, (XLP) insulation jackets of black or red or white or green colored insulation. The wire is to run inside the pole and mast arm.
- b) For aluminum poles, two 1/C - #10 pole wire conductors in black and white colors will be used.
- c) For concrete poles, three 1/C - #10 pole wire conductors in black, white, and green color will be used. The green conductor will be connected to the ground lug of the luminaire and to the ground lug/ground cable in the base of the pole.

602.8.2 SPLICING

Splicing of Electrical Cable shall be in accordance with the IDOT Standard Specifications with the following additional requirements.

- a) Splices above grade, such as in poles and junction boxes, shall have a waterproof sealant and a heat-shrinkable plastic cap. The cap shall be of a size suitable for the splice and shall have a factory-applied sealant within.
- b) Additional seal of the splice shall be assured by the application of sealant tape or the use of a sealant insert prior to the installation of the cap. Either method shall be assured compatible with the cap sealant.
- c) Tape sealant shall be applied in not less than one half-lapped layer for a length of at least 1/4 inch longer than the cap length and the tape shall also be wrapped into the crotch of the splice. Insert sealant shall be placed between the wires of the splice and shall be positioned to line up flush or extend slightly past the open base of the cap.

602.9 LIGHTING CABLE FUSE KITS

In-line fuse holder(s) and fuse(s) on all leads shall be in accordance with the IDOT Standard Specifications and as follows:

- a) Fuse holders of the in-line quick disconnect breakaway type shall be used on all light pole installations in the base of each lighting standard. The fuse holder shall have a minimum rating of 30 amps and be sized for 13/32 inch x 1 1/2 inch fuses. Fuse holder shall be Edison HEB-AW-RLC-A 30A 600V for load/line and HET-AW-RLC-A for neutral or equal as approved by the Director of Public Works or their designee.

- b) Wires shall be carefully stripped only as far as needed for connection to the device. Over-stripping shall be avoided. An oxide inhibiting lubricant shall be applied to the wire for minimum connection resistance before the terminals are crimped-on.
- c) Crimping shall be performed in accordance with the fuse holder manufacturer's recommendations.
- d) The exposed metal connecting portion of the assembly shall be taped with two half-lapped wraps of electrical tape and then covered by the specified insulating boot.
- e) The fuse holder shall be installed such that the fuse side is connected to the pole wire (load side) and the receptacle side of the holder connected to the line side.
- f) In-line fuse holder(s) shall be provided on all neutral conductors with a solid slug in place of the fuse in the base of each lighting standard.
- g) Fuses for fuse holders on line/load cable to pole wire connection shall be time delay, rated for 12 ampere, Type MEQ or MEM, or equal.

602.10 STREET LIGHTING HANDHOLES

Street lighting handholes shall be used on the far side of any street crossing opposite a street lighting controller or a specified by the Director of Public works or their designee. Street lighting handholes shall be constructed in accordance with the IDOT Standard Specifications with the following provisions:

- a) The handhole shall be poured in place concrete with inside dimensions of 21-1/2 inches minimum. Frames and lid openings shall match this dimension. Hinged lids shall not be used. The legend "STREET LIGHTING" shall be cast in the lid.
- b) All conduits shall enter the handhole at depth of at least 30 inches.
- c) Cable hooks are required, one per side of handhole. All cable hooks are to be hot-dipped galvanized in accordance with AASHTO Specification M111.

602.11 COMPOSITE CONCRETE JUNCTION BOX

Composite concrete junction boxes shall be constructed in accordance with the provisions of the IDOT Standard Specifications and for the connecting conduits into the junction box. The size shall be a minimum of 11 inches x 18 inches x 18 inches deep PC Style gasketed box with open base. The junction box shall be a:

- a) 4 bolt cover by Quixote Compolsolite with a design load of 8000 pounds or greater, or,
- b) 2 bolt cover by Synertech with a design load of 10,000 pounds or greater, unless otherwise specified in the plans and approved by the Director of Public Works or their designee. The cover shall bear a legend of "STREET LIGHTING". There shall be no holes cut into the sides of the junction box without approval from Director of Public Works or their designee.

602.12 GROUNDING

Street lighting equipment shall be grounded in accordance with the IDOT Standard Specifications with the following provisions:

- a) Metal poles installed on metal foundations do not require a separate ground rod installation.
- b) Metal light poles installed connected directly to a City service point must have a white 1/C #10 XLP/USE-2 bonding jumper installed between the pole grounding lug and the neutral conductor.
- c) Metal light poles installed on a controller circuit do not require a separate bonding jumper at each pole.

602.13 GROUND ROD

Installation of ground rods are required for the grounding of individual electrical service non-metallic street lighting poles/foundations and for supplementing the equipment grounding system via connection at poles or other equipment throughout the street lighting system. All materials and work shall be in accordance with Article 250 of the NEC.

- a) Grounding of concrete street light poles shall be by a 3/4 inch x 10 foot ground rod in accordance with the IDOT Standard Specifications, and connection by colored covered cable in accordance with the provisions of the IDOT Standard Specifications to the lighting system green 1/C #6 ground cable.
- b) Grounding for concrete foundation street lighting poles shall be by installation of the ground rod in the concrete foundation projecting out into the ground or by installation adjacent to a concrete foundation for a street lighting pole, and connection by bare cable in accordance with the provisions of the IDOT Standard Specifications to the lighting system green 1/C #6 ground cable.
- c) Grounding for controller cabinets shall be by installation of a ground rod in the concrete foundation projecting out into the ground and connected to the ground terminal bar in the cabinet by bare cable in accordance with the provisions of the IDOT Standard Specifications.
- d) Where connections to ground rods are made to insulated conductors, the connection shall be wrapped with at least four layers of electrical tape extending 6 inches below finished grade.

602.14 STREET LIGHTING CONTROLLER

A street lighting controller shall be constructed as part of any lighting system for four or more street lights. This item shall consist of furnishing and installing a roadway lighting electrical control cabinet complete with foundation and wiring for control of roadway lighting as specified herein and as directed by the Director of Public Works or their designee. Unless otherwise indicated, the cabinet, including all components, shall be new. Controllers located in the Central Business District shall provide separate circuits and contactors for roadway, pedestrian, and holiday lights as specified in the City of Wood Dale CBD specifications.

602.14.1 STREET LIGHTING CABINET

- a) The cabinet shall be a ground mounted and shall be 30 inches minimum width by 48 inches in height by 17-3/4 inches minimum depth (IDOT Type III) and shall be fabricated from aluminum alloy of 0.125 inches in thickness. The surfaces shall have a smooth, natural aluminum finish.
- b) The main door is of NEMA type construction with a cellular neoprene gasket which is rain and dirt tight without louver slots in the lower portion of the door to exclude the entry of moisture, dirt, and insects. Hinges are 14 gauge stainless steel. Standard equipment includes a three point locking system which secures the door at the top, bottom, and center. A Corbin lock with two keys is also furnished. The main door is equipped with a two position door stop, one stop at 90 degrees and the other at 120 degrees. A nameplate with the legend "City of Wood Dale Street Lighting" shall be fabricated and mounted on the main door. Below the nameplate, a 2nd plate with the legend "Contact the Department of Public Works at (630) 350-3530 to report problems" shall be mounted.
- c) The cabinet shall be equipped with a vent in the underside of the overhang above the cabinet door, which is designed to resist moisture, dirt, and insects.
- d) The equipment mounting panel shall be made of 1/4 inch minimum non-asbestos, inorganic, non-conducting material and shall be drilled and tapped for front mounting of the equipment. The panel shall be easily installed and removed from the front of the panel.

602.14.2 CONTROLLER FOUNDATION

- a) The foundation shall be furnished and installed in place per the dimensions shown on the attached Street Lighting Controller Cabinet Foundation Detail for Type III Cabinet.
- b) The anchor bolts shall comply with ASTM A576. The top 6 inches of the anchor bolts shall be hot dipped galvanized steel according to ASTM 153. The nuts and lock washers shall be galvanized also. There shall be a minimum of 4 anchor bolts for each controller.
- c) The foundation shall include a 2 inch galvanized steel conduit raceway for the service, four 2 inch rigid plastic raceways (for 1-1/4 inch unit duct) for the field circuits, and one spare raceway of 2 inch rigid plastic.
- d) The foundation shall include a copper coated steel ground rod 3/4 inch in diameter and 10 feet in length, including copper bonding wire as shown in Street Lighting Controller Cabinet Foundation Detail for Type III Cabinet.

- e) For the conditions of controller cabinet being a replacement/retrofit of an existing pedestal mounted street light controller, the foundation will include removal of the top 6 inches of the existing foundation, expose the remaining existing concrete foundation to a depth of 48 inch below the finished grade of the new foundation, setting of four anchor bolts into the remaining foundation at a depth to be a minimum of 12 inches below the finished grade of the new foundation to tie the existing foundation into the new ground mount cabinet foundation. Installation of new foundation includes raceways noted in c) above.

602.14.3 CONTROLLER OPERATION

- a) The street light controller shall control and provide over current protection for up to eight individual street light circuits. Each circuit is to be protected by the use of individual thermal-magnetic circuit breakers. Provisions shall be made for connection of up to #6 stranded copper conductors for the individual circuits.
- b) The street light controller shall be actuated by a remotely mounted photocell, which will operate through an auxiliary on-delay relay to pick up the controller's main mechanically held contactor. The operation of the photocell will insure that the street light circuits are energized during nighttime hours and de-energized during daytime hours.

602.14.4 CONTROLLER EQUIPMENT The controller must include the following:

- a) 100 ampere main breaker, 2 pole, 240 volt, JDB 2100
- b) 100 ampere contactor, 2 pole, single throw, electrically operated and mechanically held remote switch, 120 volt, ASCO 2P, 100 amp, model number 920210031.
- c) Eight 35 ampere, 1 pole circuit breakers, 120 volt, "I-Line".
- d) Control breaker, 1 pole, 15 amp, WE GC1015
- e) Relay, DPDT, 120 v, on-delay, Magnacraft W211ACPSOX-7
- f) 15 ampere, HOA switch, 120 volt, Square D Manual Return KS43FBH13 NEMA 4X enclosure
- g) SPST 20 ampere switch
- h) Incandescent light fixture of the enclosed and gasketed type, Crouse Hinds VXHF15GP
- i) 20 ampere duplex receptacle, GFCI
- j) Photocell terminal block
- k) Thermostat, Grainger 2E552
- l) Heating Strip, 150 watt Grainger 2E919 (shall not be mounted to equipment mounting panel)

- m) Surge Protector, Square D SP-11100
- n) Neutral bus bar, 1/4 inch by 1 inch by 12 inches, color coded white, labeled “neutral”
- o) Ground bus bar, 1/4 inch by 1 inch by 12 inches, color coded green labeled “ground”.
- p) Secondary Pedestal shall be installed by the Wood Dale Department of Public Utilities – Electric

602.14.5 SERVICE TO STREET LIGHTING CONTROLLER

- a) This section includes the installation of conduit and wire from the secondary pedestal to the street lighting controller. The secondary pedestal is installed by the City of Wood Dale – Electric at a minimum of 5 feet from the City service point.
- b) The service wiring from the secondary pedestal to the street lighting controller shall be 3/C - #2 XLP/USE-2 colored insulation of black, red, and white in 2 inch galvanized steel conduit.
- c) A metallic threaded bushing with lug shall be installed on the 2 inch galvanized steel conduit for the service and connected by a 1/C #6 XLP/USE-2 cable (green) to the ground rod.
- d) A minimum of 8 feet of 4/C-#2 shall be provided at the secondary pedestal for the purpose of making the connections to the source by the City. Additionally, 10 feet of “tails” should be included in the service to the street lighting controller.

602.14.6 BUS BARS

All bus bars shall be of a size to handle the rated current of the connected equipment. Exposed bus bars shall be insulated, except for ground and neutral bus bars.

Separate ground and neutral bus bars shall be provided. The ground bus bar shall be copper and mounted on the equipment panel. The neutral bar shall be similar. The heads of the screws shall be painted white for the neutral bar and green for the ground bar.

602.14.7 WIRING AND IDENTIFICATION

- a) All wiring shall be of a size to handle the rated current of the connected equipment.
- b) Wiring within the cabinet shall be of the size specified for the corresponding service conductors and branch circuits and shall be rated RHH/RHW or MTW, 600 volts.
- c) Control and auxiliary wiring shall be a minimum of #10 copper and rated RHH or MTW with jacket, 600 volt, stranded copper of appropriate colored insulation of red, black, white, and green.
- d) All power and control wiring shall be tagged with self-sticking cable markers and shall be stranded copper.

- e) All switches, controls and the like shall be identified as to function and position (as applicable) by means of engraved 2 color nameplates attached with screws.

602.14.8 CIRCUIT BREAKERS

- a) All feeders, branch circuits, and auxiliary and control circuits shall have over current protection per the requirements of the NEC and as shown on the engineering plans. The over current protection shall be by means of circuit breakers.
- b) Circuit breakers shall be standard UL-listed molded case, thermal magnetic "I-Line" breakers with trip free indicating handles with terminals adequate for #6 single conductor copper cable.
- c) Circuit breakers shall have a UL-listed interrupting rating of not less than 10,000 rms symmetrical amperes at rated voltage.
- d) The eight branch circuit breakers shall be as specified on the circuit schematic, unless a lesser number is specified.

602.14.9 CONTACTOR(S)

- a) The contactor shall be electrically operated, mechanically held, with the number of poles required for the service and with 120 volt operating coil voltage as indicated or otherwise required. Unless otherwise indicated in the engineering plans, the contactor shall be an ASCO 2P, 100 amp, model number 920210031.
- b) Contactor(s) shall be complete with a non-conducting inorganic, non-asbestos sub-panel for mounting.
- c) Contactor(s) shall be mechanically held, and shall be complete with coil-clearing contacts to interrupt current through the coil once the contactor is held in position.
- d) The main contactor contacts shall be double break, silver to silver type. They shall be spring-loaded and provide a wiping action when opening and closing. The contacts shall be renewable from the front panel, self-aligning, and protected by auxiliary arcing contacts.
- e) The line and load terminals shall be pressure type terminals of copper construction and of the proper size for the ampere rating of the contactor.
- f) The contactor operating coil shall be rated for nominal 120 volt, single phase.
- g) Protection from accidental contact with current carrying parts, when operating the contactor manually, shall be provided.
- h) Contactors shall be clearly marked to indicate whether they are in the open or closed position.

602.14.10 AUTO/MANUAL CONTROL

- a) The cabinet shall be equipped with automatic and manual operating controls via a one-pole, double-throw switch. The switch shall be premium specification grade, rated for the applied duty, but not less than 20 amperes at 120 volts and shall be mounted in a 4 inch square box with cover.
- b) The cabinet control and auxiliary device circuit shall have over current protection as indicated and as required by NEC.
- c) Each street lighting controller shall be wired to an individual photocell located on top of the nearest street light pole. The photocell shall operate at 120 volts, 60 Hertz, AC, and be rated at 1,000 watts. The photocell shall be grounded to the luminaire. The photocell shall be wired to the street lighting controller in unit duct, 1-1/4 inch minimum size, 3/C - #10, 600V, XLP/USE-2 of colored insulation of red, black, and white, if the cabling to the photo-cell cannot be pulled into a field circuit conduit.

602.14.11 INTERIOR LIGHTING AND RECEPTACLE

- a) The auxiliary device circuit shall provide 120 volts single phase to supply the convenience receptacle and cabinet light.
- b) The cabinet shall be equipped with an interior, 60 watt incandescent lighting fixture of the enclosed and gasketed type switched from a single pole, single throw, 20 amperes switch. The switch shall be premium specification grade in a suitable 4 inch box with a cover.
- c) The cabinet shall be equipped with a 120 volt, 20 ampere G.F.I. duplex receptacle, premium specification grade in a 4 inch square box with a cover.
- d) The cabinet shall be equipped with a heating strip that shall maintain the temperature within the cabinet at a minimum of 40 degrees Fahrenheit.

602.14.12 TESTING OF THE ASSEMBLED CABINET

Prior to shipment of the completed cabinet, the control cabinet shall be tested for load, short circuits and complete operation of the cabinet as specified herein and as shown on the plans.

602.14.13 ACCEPTANCE AND CONNECTION

Upon final inspection and approval of the street light system by the City of Wood Dale, the contractor will provide all labor and material necessary to provide 120/240 volt, two-phase, electrical service connection at the service point.

603 CONSTRUCTION REQUIREMENTS

603.1 TRAFFIC SIGNAL SYSTEMS CONTRACTOR PRE-QUALIFICATIONS

All contractors working on traffic signals under City of Wood Dale jurisdiction shall be pre-qualified for traffic signal work with the Illinois Department of Transportation in accordance with the IDOT Standard Specifications.

603.2 TRENCH AND BACKFILL FOR ELECTRICAL WORK

Constructing a trench for the accommodation of conduit and backfilling shall be carried out in accordance with the IDOT Standard Specifications except that the 3rd paragraph of Article 819.04 is deleted. Backfill material shall be CA-6 under all paved surfaces.

The trench shall not be less than 36 inches deep with cable installation at a minimum of 32 inches in depth.

603.3 YELLOW WARNING TAPE OVER STREET LIGHTING CABLE

A 4 inch wide yellow warning tape shall be installed over the street light duct at all locations where new cable is placed by the trench and backfill method. The warning tape shall be placed approximately 1 foot below grade.

603.4 TRAFFIC SIGNAL SYSTEM SERVICE INSTALLATION

Electrical service for traffic signals is to be provided by the City of Wood Dale from a pad-mounted transformer.

The Contractor shall install a meter socket, Milbank #U8980-0-KK supplied by the Contractor. The Milbank shall be located as shown in the plans. The meter shall be supplied and installed by the City of Wood Dale.

Standard service shall be 120/240 volt, two phase, 3 wire between the service point and the Milbank (meter) and shall be 120 volt, one phase, 4 wire between the Milbank (meter) and the traffic signal controller cabinet. The contractor is to contact the City of Wood Dale for Specifications if another service voltage is required.

The Contractor shall install #6 CU, STR, XLP, U.S.E., 600 volt cable (color coded black, white, and red) in 2 inch galvanized steel conduit between the meter socket and the service connection point. For underground service connections, the service conductors and conduit shall extend to within 2 feet of the service connection point. The Contractor shall coil 8 feet of 3C cable at the connection point for NPDU-E personnel to make the hook-up. The conductor shall be sealed, for overhead service connections, unit duct and service conductors shall be attached to utility pole and up to a minimum of ten feet above grade. The service conductors shall be coiled to provide a minimum of 20 feet of available conductor. The conductor shall be sealed.

A schematic detail drawing illustrating the connection to the Milbank and the traffic signal controller is shown as detail. The entire installation will be grounded in a manner satisfactory to the Director of Public Works or their designee.

604 INSPECTIONS AND TESTING

604.1 STREET LIGHTING SYSTEMS

New street lights must be inspected by the City prior to their acceptance. The contractor should contact the Department of Public Works at (630) 350-3530 to schedule an inspection. The inspection must be scheduled at least 48 hours in advance.

604.2 TRAFFIC SIGNAL SYSTEMS

604.2.1 CONCRETE

All concrete work associated with the installation of a traffic signal must be tested by the contractor.

604.2.2 FIELD INSPECTION

A field inspection is required prior to maintenance transfer of a signal from the contractor to the city. It is the intent to have all electrical work completed and equipment field tested by the vendor prior to the city's "turn-on" field inspection. If in the event the Engineer determines work is not complete and the inspection will require more than two hours to complete, the inspection shall be cancelled and the contractor will be required to reschedule at another date. The maintenance of the traffic signals will not be accepted until all punch list work is corrected and re-inspected.

When the road is open to traffic, except as otherwise provided in the IDOT Special Provisions, the contractor may request a turn-on and inspection of the completed traffic signal installation at each separate location. This request must be made to the Department of Public Works at (630) 350-3530 a minimum of 7 working days prior to the time of the requested inspection. The city will not grant a field inspection until written certification is provided by the contractor and the equipment has been field tested and the intersection is operating according to contract requirements. The city's facsimile number is (630) 595-8374.

**SECTION 700:
GRADING, LANDSCAPING & EROSION CONTROL**

<u>Page No.</u>	<u>Description</u>
700-2	701 GENERAL
700-2	701.1 SPECIFICATIONS
700-2	701.2 REGULATIONS
700-2	701.3 START OF CONSTRUCTION
700-3	702 MATERIALS
700-3	702.1 GRADING
700-3	702.2 EROSION CONTROL
700-3	702.3 RESTORATION
700-4	702.4 PLANTINGS
700-5	703 CONSTRUCTION REQUIREMENTS
700-5	703.1 GRADING
700-5	703.2 EROSION CONTROL
700-5	703.3 RESTORATION
700-5	703.4 TREE PROTECTION
700-5	703.5 PLANTINGS
700-6	704 INSPECTION & TESTING
700-6	704.1 INSPECTION
700-6	704.2 TESTING

701 GENERAL

The standards and requirements found in this section are to provide information on the grading of pervious (non-paved) areas, the restoration and landscaping of those areas, and erosion control during and after construction.

701.1 SPECIFICATIONS

The following documents are incorporated by reference:

- a) Illinois Urban Manual, IEPA/NRCS, latest edition
- b) NRCS National Engineering Handbook
- c) Illinois Landscape Contractors Association technical specifications

701.2 REGULATIONS

Additional rules and regulations governing the construction of erosion control measures in the City of Wood Dale are:

- a) The restrictions, policies, and instructions that may be adopted or issued by the City of Wood Dale
- b) National Pollution Discharge Elimination System policies as administered by the Illinois Environmental Protection Agency.

701.3 START OF CONSTRUCTION

The contractor shall not begin construction until all required permits have been obtained. Copies of all permits obtained by outside agencies must be provided to the city prior to the start of construction. And no earth disturbance may commence until the appropriate sediment and erosion control measures are installed.

702 MATERIALS

702.1 GRADING

702.1.1 EMBANKMENT

All materials used for embankment must be suitable for such a use. No sod, frozen material or any material which, by decay or otherwise, might cause settlement shall be allowed to be used for embankment.

702.1.2 TOPSOIL

Topsoil shall be a loamy soil with an organic content between one and ten percent. It shall be relatively free from large roots, sticks, weeds, brush or stones larger than 1 inch in diameter, or other litter and waste products. The topsoil shall be capable of supporting and germinating vegetation.

702.2 EROSION CONTROL

Please refer to the Illinois Urban Manual, latest edition for specifications and instructions for use for the various methods of erosion control measures. The following is an abbreviated listing of some of the more common measures:

- a) Temporary Seed Mixes
- b) Silt Fence
- c) Straw bales or silt boxes
- d) Earth Stabilization: rip-rap, fabrics, etc
- e) Structures: Stormceptor[®], oil/grit separators, etc.
- f) Chemical – flock logs, etc.
- g) Stabilized Construction Entrance

702.3 RESTORATION

Ground cover shall be installed as a permanent erosion control measure, as shown on the approved landscape plans.

702.3.1 SEED MIX

All seed mixes shall be an appropriate mix for the soil type and inundation conditions, as designed. IDOT approved seed mixes per Article 250 of the IDOT Standard Specifications should be considered.

702.3.2 HYDROSEED

Hydroseeding shall be applied based on the coverage amount per area coverage, as specified by the manufacturer.

702.3.3 SOD

The sod shall be approved grass that is native to northeastern Illinois. It shall either be nursery grown or field grown and be well rooted and approved by the Engineer prior to being cut and again before it is laid. Sod that has been grown on soil that is high organic matter such as peat will not be accepted. The consistency of the adherent soil shall be such that it will not break, crumble or tear during handling and placing of the sod.

Each piece of sod shall be well covered with turf grass, shall be free from noxious weeds and other objectionable plants, and shall not contain substances injurious to growth. The grass shall be cut to a length of not less than 1-1/2 inches nor more than four inches before the sod is cut. The sod shall be cut in rectangular pieces with its shortest side not less than 12 inches. The sod shall not be cut less than one inch thick, a thickness which does not include the grass.

702.4 PLANTINGS

All plantings must be in conformance with the approved landscape plan. Materials must be healthy and free of disease. Prohibited trees are as follows:

1. The list of trees that are prohibited from being planted on public property or on private property meeting the requirements of Chapter 17, Article VI, Sec. 17.606 of this code shall be approved by the Public Works Director and kept on file with the City.
2. The list of said prohibited trees shall be reviewed annually to ensure the list includes species that are considered susceptible to disease or undesirable.

703 CONSTRUCTION REQUIREMENTS

703.1 GRADING

All pervious areas shall be graded per the approved plan or to meet the design requirements of section 702.1.

703.2 EROSION CONTROL

703.2.1 INSTALLATION OF EROSION CONTROL MEASURES

All erosion control measures shall be properly installed, as permitted, prior to any land disturbance activities.

703.2.2 MAINTENANCE OF EROSION CONTROL MEASURES

All erosion control measures shall be inspected weekly, after any 0.5 inch rainfall, or more frequently as necessary to maintain their function.

703.2.3 DUST

During extended dry periods, the construction area(s) may need to be watered down to prevent the blowing of soil from the site.

703.2.4 KEEPING PUBLIC ROADS CLEAN

During construction, a stabilized construction entrance shall be utilized to minimize the tracking of dirt onto the public streets. Any dirt that is tracked onto the public streets shall be removed the same day. If the amount tracked on the public street is excessive, cleaning may be required more frequently including by mechanical street sweeper.

703.3 RESTORATION

Restoration measures shall be installed only during the growing season, to enable them to take root. Any areas that do not take root, or that fail to grow, shall be replaced in an adequate time frame to minimize soil erosion. Adequate watering shall be provided to allow for the plantings survival. Final stabilization shall be in accordance with the Illinois Urban Manual standards.

703.4 TREE PROTECTION

Tree protection shall be provided for all trees shown on the plans to be saved within the limits of construction, or as directed by the Engineer. Tree protection shall be installed prior to the start of any clearing or removal work and shall remain protected through the duration of construction.

703.5 PLANTINGS

Plantings shall be planted per the approved landscape plan taking care not to damage the existing root system.

704 INSPECTION & TESTING

704.1 INSPECTION

It is the responsibility of the owner or his designee to inspect or to have inspected all temporary erosion control measures per the requirements of the NPDES permit and correct any deficiencies as needed.

On-site grading inspection will generally be limited to visual inspections of the materials used and the condition of the site prior to seeding. There will also be a verification that all required testing is completed for areas of embankment. As-built or record drawings must be submitted per the Wood Dale Standard Specifications to verify that the grading substantially meets the requirements of the city standards.

A visual inspection of the landscaping will be performed following installation. The health of the plant material will be periodically reviewed and replacement may be required up to 12 months following the installation.

704.2 TESTING

Compaction testing of any embankment will be required per Article 205 of the IDOT Standard Specifications.

No formal testing will be required for landscaping and erosion control devices unless otherwise directed by the City Engineer.

STANDARD GENERAL NOTES

Transportation, Engineering and Standard Construction Plan Notes

The City of Wood Dale has established Standard Notes, which should be included in the final engineering plans for private development projects. The Standard Notes are broken out by type of work. The Consultant designing the final engineering plans should review the lists below to determine which Standard Notes should be included.

General Notes:

The General Notes in this section should be included in all final engineering plans regardless of the type of project.

1. THE OWNER OR HIS/HER/THEIR REPRESENTATIVE IS RESPONSIBLE TO OBTAIN ANY AND ALL PERMITS REQUIRED BY APPLICABLE GOVERNMENTAL AGENCIES.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF WOOD DALE DESIGN MANUAL AND STANDARD SPECIFICATIONS (CURRENT EDITION) AND WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (CURRENT EDITION).
3. THE CONTRACTOR SHALL GIVE NOTICES AND COMPLY WITH APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ALL PUBLIC AUTHORITIES BEARING ON SAFETY OR PERSONS OR PROPERTY ON THEIR PROTECTION FROM DAMAGE, INJURY, OR LOSS.
4. THE CONTRACTOR/DEVELOPER ASSUMES ALL RESPONSIBILITY AND LIABILITY FOR ANY ACTION RESULTING FROM THEIR WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
5. THE CONTRACTOR/DEVELOPER SHALL INDEMNIFY AND HOLD HARMLESS THE CITY OF WOOD DALE AND ITS DESIGNEES.
6. PRIOR TO COMMENCEMENT OF ANY OFF-SITE CONSTRUCTION, THE CONTRACTOR SHALL SECURE WRITTEN AUTHORIZATION THAT ALL OFF-SITE EASEMENTS HAVE BEEN SECURED AND THAT PERMISSION HAS BEEN GRANTED TO ENTER ONTO PRIVATE PROPERTY.
7. THE CONTRACTOR AND THEIR ON-SITE REPRESENTATIVES WILL BE REQUIRED TO ATTEND A PRE-CONSTRUCTION MEETING WITH THE CITY OF WOOD DALE PRIOR TO ANY WORK BEING STARTED. A PRE-CONSTRUCTION MEETING WILL NOT BE SCHEDULED UNTIL THE PROJECT HAS BEEN APPROVED BY THE CITY OF WOOD DALE DEVELOPMENT REVIEW TEAM AND THE REQUIRED SURETY HAS BEEN POSTED.

8. NO EXTRA WORK OF ANY NATURE SHALL BE UNDERTAKEN WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE CITY OF WOOD DALE OR THEIR REPRESENTATIVES.
9. A MINIMUM OF 48 HOURS NOTICE SHALL BE GIVEN TO THE CITY OF WOOD DALE PRIOR TO STARTING WORK OR RESTARTING WORK AFTER SOME ABSENCE OF WORK FOR ANY REASON.
10. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ADEQUATELY IDENTIFY AND LOCATE ALL EXISTING UTILITIES PRIOR TO EXCAVATION. BEFORE STARTING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT JULIE FOR THE LOCATION OF ANY AND ALL UTILITIES. THE TOLL-FREE NUMBER IS 800-892-0123. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ANY PRIVATE FACILITIES OR NON-JULIE MEMBER FACILITIES.
11. THE CONTRACTOR CAN SCHEDULE ALL NECESSARY SITE INSPECTIONS WITH THE CITY OF WOOD DALE BY CALLING (630) 766-5133 BETWEEN THE HOURS OF 8:30AM AND 4:00PM ON WEEKDAYS WHEN THE CITY IS OPEN FOR BUSINESS. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE THE SITE PERMIT NUMBER FOR THE PROJECT IN ORDER TO SCHEDULE THE INSPECTION(S).
12. RECORD DRAWINGS ARE REQUIRED TO BE SUBMITTED AND APPROVED BY THE CITY OF WOOD DALE PRIOR TO FINAL OCCUPANCY BEING GRANTED.
13. THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL STAKING AND LAYOUT OF THE GRADING, UNDERGROUND, AND PAVING IMPROVEMENTS.
14. THE CONTRACTOR IS REQUIRED TO RELOCATE, SALVAGE, AND RE-ERECT SIGNS WHICH INTERFERE WITH HIS CONSTRUCTION OPERATIONS, AND TEMPORARILY RESET ALL SUCH SIGNS DURING CONSTRUCTION. THIS WORK WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT. ALL WORK INVOLVING SIGNS SHALL BE GOVERNED BY THE FOLLOWING REQUIREMENTS:
 - A. SIGNS SHALL NOT BE MOVED UNTIL PROGRESS OF WORK NECESSITATES IT.
 - B. EVERY SIGN REMOVED MUST BE RE-ERECTED AT A TEMPORARY LOCATION IN A WORKMANLIKE MANNER AND BE VISIBLE TO TRAFFIC FOR WHICH IT IS INTENDED. ALL SUCH SIGNS MUST BE MAINTAINED STRAIGHT AND CLEAN FOR THE DURATION OF THE TEMPORARY SETTING.

C. ALL SIGNS SHALL BE RE-ERECTED IN PERMANENT LOCATIONS AS THE ROADWAY IS COMPLETED AT LOCATIONS DESIGNATED BY THE ENGINEER.

15. FINAL ACCEPTANCE OF PUBLIC IMPROVEMENTS SHALL BE GRANTED ONLY AFTER A FINAL INSPECTION HAS BEEN COMPLETED AND HAS REVEALED THAT ALL IMPROVEMENTS HAVE BEEN SATISFACTORILY COMPLETED IN ACCORDANCE WITH THE WOOD DALE STANDARD SPECIFICATIONS. UTILITIES ARE NOT CONSIDERED ACCEPTED UNTIL THEY ARE FORMALLY ACCEPTED BY THE CITY COUNCIL AS REQUIRED IN ACCORDANCE WITH THE WOOD DALE MUNICIPAL CODE.

General Notes (Project Specific):

Review the following General Notes to determine if they are applicable to the work to be completed with the project. Those Notes that are applicable should be included in the engineering plans.

1. TRAFFIC SIGNALS AND THEIR ASSOCIATED EQUIPMENT UNDER THE JURISDICTION OF DUPAGE COUNTY ARE NOT INCLUDED IN THE JULIE SYSTEM. THE CONTRACTOR SHALL CONTACT DUPAGE COUNTY DOT AND IDOT DIRECTLY REGARDING THE LOCATION OF TRAFFIC SIGNALS (CABLING AND ASSOCIATED SYSTEMS) UNDER DUPAGE COUNTY OR IDOT JURISDICTION.

Earth Excavation:

These notes should be included in all plans where earth moving operations will be taking place unless a duplicate of a note from another section.

1. EXCAVATION REQUIRED TO CONSTRUCT THE PROPOSED SUBGRADE OF THE ROADWAY, ALL CONCRETE CURB AND GUTTER TYPES, DRIVEWAYS, ALLEYS OR SIDE ROAD APPROACHES SHALL BE CONSIDERED INCIDENTAL TO PAVEMENT AND CURB REMOVAL.
2. PAVEMENT REMOVAL INCLUDES THE EXISTING PAVEMENT, AGGREGATE SUBBASE, AND SUBGRADE TO THE PROPOSED SUBGRADE ELEVATIONS SHOWN IN THE PLANS.
3. WHERE WORKING CONDITIONS AND RIGHT-OF-WAY PERMIT, PIPE LINE TRENCHES WITH SLOPING SIDES MAY BE USED.
 - A. THE SLOPES SHALL NOT EXTEND BELOW THE TOP OF THE PIPE, AND TRENCH EXCAVATIONS BELOW THIS POINT SHALL BE MADE WITH VERTICAL SIDES WITH WIDTHS NOT EXCEEDING THOSE SPECIFIED HEREIN FOR THE VARIOUS SIZES OF PIPES.

- B. OPEN-CUT TRENCHES SHALL BE SUPPORTED WITH PROTECTIVE MEASURES AS REQUIRED BY THE GOVERNING STATE AND FEDERAL LAWS AND MUNICIPAL ORDINANCES, AS MAY BE NECESSARY TO PROTECT LIFE, PROPERTY, OR THE WORK.
 - C. WHERE FIRM FOUNDATION IS NOT ENCOUNTERED AT THE GRADE ESTABLISHMENT DUE TO UNSUITABLE SOIL, ALL SUCH UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH APPROVED COMPACTED GRANULAR MATERIAL. THIS WORK SHALL BE PAID FOR AS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND POROUS GRANULAR EMBANKMENT, SUBGRADE.
4. THE SUBGRADE SHALL BE FREE FROM UNSUITABLE MATERIAL AND SHALL BE COMPACTED TO A MINIMUM OF NINETY-FIVE PERCENT (95%) OF MODIFIED PROCTOR DENSITY. THIS REQUIREMENT APPLIES TO ALL SUBGRADES AND AGGREGATE BASE COURSES IN THE CONTRACT INCLUDING ROADWAY AND SIDEWALK PAVEMENTS. THE CITY OF WOOD DALE WILL REQUIRE A PROOF-ROLL TEST FOR DETERMINING THE STABILIZATION OF THE SUBGRADE.
 5. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES (48 HOUR NOTIFICATION IS REQUIRED).

Utilities:

This section is for general topics related to all utilities.

1. WATER MAINS AND WATER SERVICE LINES SHALL BE PROTECTED FROM SANITARY SEWERS, STORM SEWERS, COMBINED SEWERS, HOUSE SEWER SERVICE CONNECTIONS, AND DRAINS AS FOLLOWS:
 - A. HORIZONTAL SEPARATION - WATER MAINS AND SEWERS
 - (1) WATER MAINS SHALL BE LOCATED AT LEAST TEN (10) FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN, STORM SEWER, SANITARY SEWER, COMBINED SEWER OR SEWER SERVICE CONNECTION.
 - (2) WATER MAIN MAY BE LOCATED CLOSER THAN TEN (10) FEET TO A SEWER LINE WHEN:
 - (A) LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF TEN (10) FEET AND;
 - (B) THE WATER MAIN INVERT IS AT LEAST 18 INCHES ABOVE THE CROWN OF THE SEWER; AND

(C) THE WATER MAIN IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER, MAINTAINING THE MINIMUM VERTICALSEPARATION OF 18 INCHES.

(3) WHEN IT IS IMPOSSIBLE TO MEET EITHER (A.) OR (B.), BOTH THE WATER MAIN AND DRAIN OR SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, OR PVC PIPE MEETING THE REQUIREMENTS OF WATER MAIN STANDARDS OF CONSTRUCTION. THE DRAIN OR SEWER SHALL BE PRESSURE TESTED TO THE MAXIMUM EXPECTED SURCHARGE HEAD BEFORE BACKFILLING.

B. VERTICAL SEPARATION - WATER MAINS AND SEWERS

(1) A WATER MAIN SHALL BE LAID SO THAT ITS INVERT IS A MINIMUM OF 18 INCHES ABOVE THE CROWN OF THE DRAIN OR SEWER WHENEVER WATER MAINS CROSS STORM SEWERS, SANITARY SEWERS OR SEWER SERVICE CONNECTIONS. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF THE WATER MAIN LOCATED WITHIN TEN (10) FEET HORIZONTALLY OF ANY SEWER OR DRAIN CROSSING. A LENGTH OF WATER MAIN PIPE SHALL BE CENTERED OVER THE SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FROM THE SEWER OR DRAIN.

(2) BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, OR PVC PIPE MEETING THE REQUIREMENTS OF WATER MAIN STANDARDS OF CONSTRUCTION WHEN:

(A) IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED IN (A.); OR

(B) THE WATER MAIN PASSES UNDER A SEWER OR DRAIN

(3) A VERTICAL SEPARATION OF 18 INCHES BETWEEN THE INVERT OF THE SEWER OR DRAIN AND THE CROWN OF THE WATER MAIN SHALL BE MAINTAINED WHERE A WATER MAIN CROSSES UNDER A SEWER. SUPPORT THE SEWER OR DRAIN

LINES TO PREVENT SETTLING AND BREAKING THE WATER MAIN, AS APPROVED BY THE ENGINEER.

(4) CONSTRUCTION OF WATER MAIN QUALITY PIPE SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE PERPENDICULAR DISTANCE FROM THE WATER MAIN TO THE SEWER OR DRAIN LINE IS AT LEAST TEN (10) FEET.

2. THE LOCATIONS OF EXISTING DRAINAGE STRUCTURES, STORM AND SANITARY SEWERS, WATER AND SANITARY SERVICE LINES, AND OTHER UTILITY LINES ARE APPROXIMATE. THEIR EXACT HORIZONTAL AND VERTICAL LOCATIONS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR AT HIS OWN EXPENSE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING FACILITIES SO THAT THE UTILITIES AND THEIR APPURTENANCES MAY BE LOCATED, ADJUSTED, OR MOVED. IF NECESSARY, PRIOR TO THE START OF CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE STANDARD SPECIFICATIONS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.
5. THE CONTRACTOR SHALL COOPERATE WITH THE CITY OF WOOD DALE IF ANY MUNICIPAL UTILITY IMPROVEMENTS ARE REQUIRED WITHIN THE DURATION OF THE CONTRACT.

Water Main:

The Water Main Notes in this section are intended to be included when a project includes water main work as part of the project. The Consultant should review the following Notes to determine if they are applicable to the work being completed.

1. FOR WATER MAIN SHUT OFFS, THE CONTRACTOR SHALL GIVE THE CITY A MINIMUM OF 48 HOURS NOTICE. THE CITY SHALL PROVIDE NOTIFICATION FORMS AND DETERMINE THE LIMIT OF THE AFFECTED AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTION OF THE NOTIFICATION FORMS TO ALL AFFECTED RESIDENTS AT LEAST 24 HOURS PRIOR TO SHUT OFF. ALL SHUT OFFS SHALL BE FOR A MAXIMUM TIME OF FOUR (4) HOURS.

2. THE CITY MAY ASSIST THE CONTRACTOR IN THE INITIAL LOCATING OF THE EXISTING SANITARY SERVICES TO THE INDIVIDUAL RESIDENCES WITHIN THE PROJECT LIMITS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING KNOWLEDGE OF THE LOCATIONS OF THESE SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AS-BUILT KNOWLEDGE OF THE LOCATIONS OF THE NEWLY INSTALLED SERVICES AND MAINS. THE CITY WILL NOT BE RESPONSIBLE FOR LOCATING NEW MAINS OR SERVICES FOR THE CONTRACTOR. FOR THE DURATION OF THE CONTRACT, THE CONTRACTOR SHALL MAKE THE AS-BUILT UNDERGROUND UTILITY INFORMATION AVAILABLE TO THE CITY WHENEVER REQUESTED.
3. THE CONTRACTOR SHALL NOT OPEN OR SHUT ANY WATER VALVES OR FIRE HYDRANTS WITHOUT PRIOR AUTHORIZATION FROM THE CITY WATER DEPARTMENT. UNAUTHORIZED USE SHALL SUBJECT THE OFFENDER TO ARREST AND PROSECUTION.
4. ALL WATER MAIN MATERIAL SHALL BE INSPECTED BY CITY'S PUBLIC WORKS DEPARTMENT PRIOR TO INSTALLATION.
5. THRUST BLOCKING IS REQUIRED AT ALL BENDS, TEES, CAPS, VALVES, AND HYDRANTS.
6. ALL VALVES SHALL BE INSTALLED IN VALVE VAULTS. UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY OF WOOD DALE, VALVE BOXES ARE ONLY PERMITTED FOR FIRE HYDRANT AUXILIARY VALVES.
7. FLUSHING, TESTING, AND DISINFECTION PROCEDURES: FOLLOWING THE INSTALLATION OR REPAIR OF ANY WATER MAIN, SERVICE PIPES, FITTINGS, VALVES, AND HYDRANTS, AND BEFORE THESE ITEMS ARE PLACED INTO SERVICE, FLUSHING, TESTING, AND DISINFECTION MUST OCCUR ACCORDING TO THE LATEST EDITIONS OF: STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS, AMERICAN WATER WORKS ASSOCIATION (AWWA), CITY REQUIREMENTS, AND IN ACCORDANCE WITH THE FOLLOWING SEQUENTIAL EVENTS:
 - A. FLUSHING: PRIOR TO TESTING AND DISINFECTION PROCEDURES, FILLING AND FLUSHING OF ALL DEBRIS SHALL OCCUR ON ANY NEW OR REPAIRED WORK
 - B. HYDROSTATIC PRESSURE TEST: AFTER FLUSHING OPERATIONS, A HYDROSTATIC PRESSURE TEST OF 150 PSI SHALL OCCUR FOR A TEST PERIOD OF TWO (2) HOURS. EACH SECTION OF WATER MAIN AND CONNECTION TO BE PRESSURE TESTED SHALL BE CAREFULLY FILLED WITH WATER TO EXPEL ALL ENTRAPPED AIR AND THE TEST PRESSURE SHALL BE WITHOUT PRESSURE LOSS OR FURTHER

PRESSURE APPLICATION FOR A DURATION OF TWO (2) HOURS. SHOULD THE TEST PRESSURE DROP BELOW 145 PSI THE LINE SHALL BE PUMPED BACK UP TO 150 PSI AND THE AMOUNT OF WATER USED RECORDED. THIS PROCESS SHALL CONTINUE UNTIL THE TEST PERIOD ENDS. ALLOWABLE LEAKAGE SHALL BE PER THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS. IN THE EVENT OF UNACCEPTABLE PRESSURE LOSS, THE CONTRACTOR SHALL LOCATE AND CORRECT ALL LEAKS, AND THEN REPEAT THE HYDROSTATIC PRESSURE TEST UNTIL SATISFACTORY TO THE ENGINEER.

(1) THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY TO PERFORM THE PRESSURE AND LEAKAGE TESTS. THIS COST WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN ASSOCIATED WATER MAIN ITEMS.

(2) THE CONTRACTOR SHALL SATISFACTORILY PERFORM THE PRESSURE AND LEAKAGE TEST PRIOR TO REQUESTING THE ENGINEER AND/OR BUILDING/FIRE INSPECTOR TO WITNESS THE OFFICIAL TESTS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS PRIOR TO THE TIME THAT THE OFFICIAL TESTS ARE REQUESTED. DEPENDING ON TRAFFIC CONDITIONS, PUBLIC HAZARD, OR OTHER REASONS, THE ENGINEER MAY DIRECT WHEN TESTING OF NEW WORK SHALL BE CONDUCTED, AND MAY ORDER THE TESTS TO BE MADE IN RELATIVELY SHORT SECTIONS OF NEW WATER MAINS.

C. DISINFECTION: AFTER COMPLETION OF A SATISFACTORY TEST OR SERIES OF TESTS, CHLORINE SHALL BE APPLIED. AFTER 24 HOURS, THE MAIN SHALL BE FLUSHED AND WATER SAMPLES SHALL BE TAKEN BY THE CITY OF WOOD DALE'S PUBLIC WORKS DEPARTMENT. WATER SAMPLES MAY ONLY BE TAKEN MONDAY THROUGH FRIDAY, THEREFORE, CHLORINATING MAY ONLY OCCUR MONDAY THROUGH THURSDAY. CHLORINATION MAY OCCUR ON FRIDAY IF SAMPLES ARE APPROVED AND ARRANGED TO BE TAKEN ON SATURDAY (48 NOTICE REQUIRED) AND MONDAY.

Sanitary Sewer:

The Sanitary Sewer Notes in this section are intended to be included when a project includes sanitary sewer work as part of the project. The Consultant should review the following Notes to determine if they are applicable to the work being completed.

1. ALL SANITARY SEWER SERVICES SHALL BE INSTALLED AT A MINIMUM 1% PITCH.

2. THE UNDERGROUND CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THE LOCATION OF EACH SERVICE. A FINAL COMPILATION OF SERVICE LOCATIONS SHALL BE PROVIDED UPON COMPLETION OF THE INSTALLATION.
3. WHEN NEW SANITARY SEWER STRUCTURES ARE PROPOSED OR REQUIRED, SANITARY MANHOLES SHALL HAVE EXTERNAL CHIMNEY SEALS INSTALLED OVER THE FRAME AND AROUND THE MANHOLE TO PREVENT INFILTRATION. WHEN SANITARY FRAMES ARE INSTALLED DIRECTLY ON TOP OF FLAT TOP MANHOLE STRUCTURES, IT IS PERMISSIBLE TO INSTALL AN INTERNAL CHIMNEY SEAL PER THE MANUFACTURER'S INSTRUCTIONS.
4. WHEN NEW SANITARY SEWER MAIN AND/OR SANITARY SEWER STRUCTURES ARE PROPOSED OR REQUIRED, TESTING OF SANITARY SEWER MAIN AND SANITARY SEWER STRUCTURES, PER THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS AND APPLICABLE CITY OF WOOD DALE STANDARDS, IS REQUIRED AFTER INSTALLATION. ANY FAILURES OR PROBLEMS IDENTIFIED REQUIRE CORRECTION BY THE CONTRACTOR.
 - A. AIR PRESSURE EXFILTRATION TESTING OF ALL SANITARY SEWER PIPE IS REQUIRED.
 - B. TESTING OF ALL SANITARY SEWER PIPE RIGID MANDREL OR BALL WITH A DIAMETER OF 95% OF THE INSIDE PIPE DIAMETER IS REQUIRED.
 - C. SANITARY SEWER PIPE SHALL BE TELEVISED USING A CLOSED CIRCUIT CAMERA AND RECORDING DEVICE. A COPY OF THE DVD VIDEO OF THE TELEVISED LINE SHALL BE SUBMITTED FOR APPROVAL.
 - D. THE CONTRACTOR SHALL BE REQUIRED TO PERFORM MANHOLE LEAKAGE TESTS ON ALL SANITARY SEWER MANHOLES IN ACCORDANCE WITH THE STANDARDS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION.

Storm Sewer:

The Storm Sewer Notes in this section are intended to be included when a project includes storm sewer work as part of the project. The Consultant should review the following Notes to determine if they are applicable to the work being completed.

Only those materials that are identified on the plans are required to be included. However, if the contractor requests a change to the pipe material and the associated pipe material information is not included in the engineering plans, the applicable Storm Sewer Note will need to be added to final engineering plans as part of the Field Change request.

1. NO CONNECTION TO AN EXISTING PUBLIC STORM SEWER MAY BE MADE WITHOUT PERMISSION OF THE PUBLIC WORKS DIRECTOR.
2. THE CONTRACTOR SHALL REPAIR ANY EXISTING FIELD DRAINAGE TILE DAMAGED DURING CONSTRUCTION AND PROPERLY REROUTE AND/OR CONNECT SAID TILE TO THE NEAREST STORM SEWER OUTLET. ALL LOCATIONS OF ENCOUNTERED FIELD DRAINAGE TILE SHALL BE PROPERLY INDICATED ON THE CONTRACTOR'S RECORD DRAWINGS.
3. THE CONTRACTOR SHALL MAINTAIN PROPER DRAINAGE AT ALL TIMES DURING THE COURSE OF CONSTRUCTION AND SHALL PREVENT STORM WATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS.
4. THE COST OF CONNECTING EXISTING STORM SEWERS AND STORM STRUCTURES TO THE PROPOSED DRAINAGE SYSTEM AND CONNECTING PROPOSED STORM SEWER TO EXISTING STRUCTURES, WHETHER A TEMPORARY OR PERMANENT CONNECTION, SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THIS ALSO INCLUDES ANY TEMPORARY STORM SEWER PIPE REQUIRED TO MAINTAIN PROPER DRAINAGE UNTIL PERMANENT SEWERS ARE CONSTRUCTED. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
5. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS, OR CATCH BASINS. HE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORMWATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE THE SAME. HE SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH SEWERS ARE BUILT AND IN SERVICE. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT.
6. ALL OPENINGS IN EXISTING DRAINAGE STRUCTURES AND PIPES RESULTING FROM STORM SEWER/PIPE CULVERT REMOVAL SHALL BE PLUGGED IN ACCORDANCE WITH SECTION 550.05 OF THE STANDARD SPECIFICATIONS. THE COST WILL BE INCLUDED IN THE ASSOCIATED STORM SEWER ITEM.
7. DRAINAGE STRUCTURE OFFSETS AS SHOWN ON THE PLANS ARE GIVEN TO THE CENTER OF STRUCTURES.

8. CONTRACTOR TO USE FLAT SLAB TOPS WHERE FIELD CONDITIONS PROHIBIT THE USE OF TAPERED TOPS. FLAT TOPS AND CONES ARE TO BE TURNED SO THAT THE FRAME IS CLOSEST TO THE CENTERLINE OF THE ROAD, UNLESS OTHERWISE NOTED IN THE PLANS OR AN EXISTING UTILITY PROHIBITS IT. ALL FLAT TOPS AND CONES ARE ASSUMED TO BE ECCENTRIC.
9. THE FOLLOWING MATERIALS ARE PERMITTED FOR STORM SEWER AND PIPE CULVERTS. WHERE A PARTICULAR MATERIAL IS SPECIFIED IN THE PLANS OR SPECIAL PROVISIONS, NO OTHER KIND OF MATERIAL WILL BE PERMITTED:
 - A. REINFORCED CONCRETE PIPE (RCP) - REINFORCED CONCRETE PIPE SHALL CONFORM TO ASTM DESIGNATION C 76, CLASSES I, II, III, IV OR V. BITUMINOUS JOINTS SHALL CONFORM TO ASTM DESIGNATIONS C 14 OR C 76 AS MAY BE APPLICABLE. BITUMINOUS MATERIAL SHALL CONSIST OF A HOMOGENEOUS BLEND OF BITUMEN, INERT FILLER, AND SUITABLE SOLVENT APPROVED BY THE CITY. RUBBER GASKET JOINTS SHALL CONFORM TO ASTM C 433. REINFORCED CONCRETE PIPE SHALL ALSO BE PERMITTED AS ROUND, ELLIPTICAL, OR BOX SHAPED OR AS REINFORCED CONCRETE ARCH CULVERT.
 - B. NON-REINFORCED CONCRETE PIPE - NON-REINFORCED CONCRETE PIPE SHALL BE ALLOWED FOR PIPES WITH A 10 INCH OR SMALLER DIAMETER. NON-REINFORCED CONCRETE PIPE SHALL CONFORM TO ASTM DESIGNATION C 14, CLASS 3. BITUMINOUS JOINTS SHALL CONFORM TO ASTM DESIGNATIONS C 14 OR C 76 AS MAY BE APPLICABLE. BITUMINOUS MATERIAL SHALL CONSIST OF A HOMOGENEOUS BLEND OF BITUMEN, INERT FILLER, AND SUITABLE SOLVENT APPROVED BY THE CITY. RUBBER GASKET JOINTS SHALL CONFORM TO ASTM C 433.
 - C. DUCTILE IRON PIPE (DIP) - DUCTILE IRON PIPE SHALL CONFORM TO ANSI A 21.51 (AWWA C-151), CLASS THICKNESS DESIGNED PER ANSI A 21.50 (AWWA C-150), TAR (SEAL) COATED AND CEMENT LINED PER ANSI A 21.4 (AWWA C-104), WITH MECHANICAL OR RUBBER RING (SLIP SEAL OR PUSH ON) JOINTS. ALL DUCTILE IRON PIPE SHALL BE WRAPPED WITH POLYETHYLENE.
 - D. POLYVINYL CHLORIDE PIPE (PVC) - POLYVINYL CHLORIDE (PVC) PIPE SHALL CONFORM TO ASTM D 3034, TYPE PSM. THE MINIMUM STANDARD DIMENSION RATIO (SDR) SHALL BE 26. THE PIPE SHALL BE MADE OF PVC PLASTIC HAVING A MINIMUM CELL CLASSIFICATION OF 12454-C, AND SHALL HAVE A MINIMUM PIPE STIFFNESS OF FORTY-SIX (46) LBS. PER INCH (317 KPA). JOINTS FOR

PVC PIPE SHALL BE FLEXIBLE ELASTOMETRIC SEALS PER ASTM D 3212.

- E. HIGH DENSITY POLYETHYLENE PIPE (HDPE) - HIGH-DENSITY POLYETHYLENE (HDPE) PIPE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 252 AND M 294. PIPE AND FITTINGS SHALL BE MADE FROM VIRGIN PE COMPOUNDS WHICH CONFORM TO THE REQUIREMENTS OF CELL CLASS 324420C AS DEFINED AND DESCRIBED IN ASTM D 3350. RUBBER GASKET JOINTS SHALL BE USED.
 - F. FULLY GALVANIZED CORRUGATED STEEL PIPE - FULLY GALVANIZED CORRUGATED STEEL PIPE MAY BE USED FOR RESIDENTIAL DRIVEWAY CROSSINGS ONLY WHEN A DITCH SECTION IS PRESENT. THE MINIMUM CULVERT SIZE IS 12" DIAMETER.
10. BEDDING, OTHER THAN CONCRETE EMBEDMENT, SHALL CONSIST OF GRAVEL, CRUSHED GRAVEL, OR CRUSHED STONE 1/4 INCH TO 1 INCH IN SIZE. AS A MINIMUM, THE MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF IDOT STANDARD SPECIFICATIONS. THE GRADATION SHALL CONFORM TO GRADATION CA-7 OR CA-11 OF THE STANDARD SPECIFICATIONS.
 11. WHEN THE REQUIRED VERTICAL AND HORIZONTAL CLEARANCES, AS SPECIFIED BY THE IEPA, BETWEEN PROPOSED STORM SEWER AND EXISTING OR PROPOSED WATER MAIN CANNOT BE MET, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
 12. BACKFILL MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF IDOT STANDARD SPECIFICATIONS. THE GRADATION SHALL CONFORM TO GRADATION CA-6 OF THE STANDARD SPECIFICATIONS. BACKFILL MATERIAL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
 13. JOINTS CONNECTING DISSIMILAR PIPE MATERIALS SHALL BE MADE WITH SEWER CLAMP NON-SHEAR TYPE COUPLINGS; CASCADE CSS, ROMAC LSS, FERNCO, INC. SHEAR RING, OR APPROVED EQUAL. WHEN AVAILABLE, A STANDARD JOINT WITH A TRANSITION GASKET MAY BE USED. THE NAME OF THE MANUFACTURER, CLASS, AND DATE OF ISSUE SHALL BE CLEARLY IDENTIFIED ON ALL SECTIONS OF PIPE. THE CONTRACTOR SHALL ALSO SUBMIT BILLS OF LADING, OR OTHER QUALITY ASSURANCE DOCUMENTATION WHEN REQUESTED BY THE CITY. ALL NUTS AND BOLTS FOR COUPLINGS SHALL BE STAINLESS STEEL.
 14. MANHOLES FOR STORM SEWERS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES AND SHALL BE CONSTRUCTED OF PRECAST CONCRETE UNITS IN ACCORDANCE WITH ASTM C478-05 (OR LATEST

EDITION) AND SHALL CONFORM TO THE CITY OF WOOD DALE STANDARD DETAIL. ALL MANHOLES SHALL BE WATER-TIGHT. ALL VISIBLE LEAKS SHALL BE SEALED IN A MANNER ACCEPTABLE TO THE CITY.

15. MANHOLES SHALL BE FURNISHED WITH A SELF-SEALING FRAME AND SOLID COVER (EAST JORDAN IRON WORKS 1022 WITH TYPE A SOLID COVER, OR APPROVED EQUAL) IT SHALL HAVE CAST INTO THE LID "CITY OF WOOD DALE" AND THE WORD "STORM" IMPRINTED ON THE COVER IN RAISED LETTERS. ALL FRAMES AND LIDS SHALL MEET OR EXCEED AASHTO H-20 LOADING SPECIFICATIONS. FRAMES SHALL BE SHOP PAINTED WITH ASPHALTIC BASE PAINT. BOTH THE MANHOLE FRAME AND COVER SHALL HAVE MACHINED HORIZONTAL AND VERTICAL BEARING SURFACES. INVERTED MANHOLE FRAMES ARE NOT ALLOWED. PICK HOLES SHALL NOT CREATE OPENINGS IN THE MANHOLE COVER.
16. MANHOLE STEPS ON MAXIMUM 16 INCH CENTER SHALL BE FURNISHED WITH EACH MANHOLE, SECURELY ANCHORED IN PLACE, TRUE TO VERTICAL ALIGNMENT, IN ACCORDANCE WITH THE WOOD DALE STANDARD DETAILS. STEPS SHALL BE COPOLYMER POLYPROPYLENE REINFORCED WITH 1/2 INCH A615/A615M-05A (OR LATEST EDITION) GRADE 60 STEEL REINFORCEMENT, MEETING OR EXCEEDING ASTM C 478-05 (OR LATEST EDITION) AND OSHA STANDARDS.
17. CATCH BASINS AND INLETS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 24 INCHES AND SHALL BE CONSTRUCTED OF PRECAST CONCRETE UNITS IN ACCORDANCE WITH ASTM C478-05 (OR LATEST EDITION) AND SHALL CONFORM TO THE CITY OF WOOD DALE STANDARD DETAIL. ALL CATCH BASINS AND INLETS SHALL BE WATER-TIGHT AT ALL POINTS BELOW GRADE. ALL VISIBLE LEAKS SHALL BE SEALED IN A MANNER ACCEPTABLE TO THE CITY. CATCH BASINS AND INLETS SHALL BE FURNISHED WITH A FRAME AND GRATE BASED UPON THE LOCATION OF THE INSTALLATION AS LISTED BELOW. ALL FRAMES AND GRATES SHALL MEET OR EXCEED AASHTO H-20 LOADING SPECIFICATIONS. FRAMES SHALL BE SHOP PAINTED WITH ASPHALTIC BASE PAINT.
 - A. PAVEMENT: EAST JORDAN IRON WORKS 1022 FRAME WITH TYPE M1 RADIAL FLAT GRATE, OR APPROVED EQUAL.
 - B. BARRIER CURB AND GUTTER: EAST JORDAN IRON WORKS 7220 FRAME WITH TYPE M1 GRATE AND T1 CURB BOX, OR APPROVED EQUAL.
 - C. DEPRESSED CURB: EAST JORDAN IRON WORKS 5120 FRAME AND GRATE, OR APPROVED EQUAL.

- D. MOUNTABLE CURB: EAST JORDAN IRON WORKS 7525 FRAME AND GRATE, OR APPROVED EQUAL.
- E. NON-PAVED AREAS: EAST JORDAN IRON WORKS 6527 BEEHIVE GRATE, OR APPROVED EQUAL. ALTERNATELY, IN AREAS WHERE THERE IS THE LIKELIHOOD OF PEDESTRIAN TRAFFIC, EAST JORDAN IRON WORKS 1022 FRAME WITH TYPE M1 RADIAL FLAT GRATE, OR APPROVED EQUAL MAY BE USED.
18. THE STEEL CASING PIPE SHALL BE BITUMINOUS COATED, A MINIMUM OF 30 MILS THICKNESS INSIDE AND OUT, AND SHALL BE OF LEAK PROOF CONSTRUCTION, CAPABLE OF WITHSTANDING THE ANTICIPATED LOADINGS. SEE TABLE 200-1 IN THE WOOD DALE STANDARD SPECIFICATIONS FOR THE MINIMUM WALL THICKNESSES OF VARIOUS STEEL CASING DIAMETERS.
- THE STEEL CASING PIPE SHALL HAVE MINIMUM YIELD STRENGTH OF 35,000 PSI AND SHALL MEET THE REQUIREMENTS OF A139/A139M-04 (OR LATEST EDITION), GRADE B. RING DEFLECTION SHALL NOT EXCEED 2% OF THE NOMINAL DIAMETER. THE STEEL CASING PIPE SHALL BE DELIVERED TO THE JOBSITE WITH BEVELED ENDS TO FACILITATE FIELD WELDING.
19. ALL PIPE SHALL BE LAID TRUE TO LINE AND GRADE. DIRT AND OTHER FOREIGN MATERIAL SHALL BE PREVENTED FROM ENTERING THE PIPE OR PIPE JOINT DURING HANDLING OR LAYING OPERATIONS. ALL STORM SEWER PIPE TO PIPE CONNECTIONS SHALL BE SEALED WITH BUTYL MASTIC TO ENSURE WATER TIGHTNESS. LIFT HOLES TO BE SEALED USING BUTYL MASTIC AND CONCRETE PLUGS. AT NO TIME SHALL CONNECTIONS BETWEEN THE TWORM SEWER AND SANITARY SEWER BE ALLOWED.
20. FOR STRUCTURES LOCATED IN PAVED AREAS, A MINIMUM OF FOUR, 2-INCH DIAMETER HOLES SHALL BE DRILLED OR PRECAST INTO THE STRUCTURE WITHIN 1 FOOT OF THE LOWEST PIPE INVERT. THE HOLES SHALL BE DISTRIBUTED EQUIDISTANT AROUND THE PERIMETER OF THE STRUCTURE. A 1-FOOT BY 1-FOOT SECTION OF UNDERDRAIN FILTER CLOTH MATERIAL SHALL BE SUFFICIENTLY FIXED TO THE OUTSIDE OF THE MANHOLE WITH MASTIC MATERIAL TO PREVENT SLIPPAGE DURING BACKFILLING.
21. ALL STORM SEWER STRUCTURE FRAMES WITHOUT INSIDE FLANGES SHALL BE SHAPED WITH NON-SHRINKING HYDRAULIC CEMENT TO FORM A FILLET TO THE STRUCTURE OR ADJUSTING RING.

WHEN ADJUSTMENTS ARE NECESSARY, THEY SHALL BE PERFORMED WITH A MAXIMUM OF 2 PRECAST CONCRETE RINGS SET IN A CONTINUOUS LAYER OF PREFORMED BITUMINOUS MASTIC. THE MAXIMUM HEIGHT OF

ADJUSTMENTS SHALL BE 12 INCHES. TWO INCH CONCRETE RINGS SHALL ONLY BE USED WHEN THE ADJUSTMENT IS LESS THAN 3 INCHES.

ADJUSTMENTS LESS THAN 4 INCHES MAY BE MADE USING HARD COMPOSITE RUBBER TYPE RINGS, SUCH AS GNR OR APPROVED EQUAL. ONLY ONE TYPE OF ADJUSTING RING MAY BE USED ON A STRUCTURE; COMBINING BOTH CONCRETE AND HARD COMPOSITE RUBBER RINGS ON A STRUCTURE IS NOT PERMITTED.

Erosion Control and Drainage Notes (General):

The Erosion Control and Drainage Notes in this section should be included in all final engineering plans regardless of the type of work in the project.

1. THE CONTRACTOR SHALL MAINTAIN PROPER DRAINAGE AT ALL TIMES DURING THE COURSE OF CONSTRUCTION AND PREVENT STORM WATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS.
2. DURING EXTENDED DRY PERIODS, THE CONSTRUCTION AREA(S) MAY NEED TO BE WATERED DOWN TO PREVENT THE BLOWING OF SOIL FROM THE SITE.
3. DURING CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE UTILIZED TO MINIMIZE THE TRACKING OF DIRT ONTO THE PUBLIC STREETS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO KEEP PUBLIC STREET PAVEMENT CLEAN OF DIRT AND DEBRIS. ANY DIRT THAT IS TRACKED ONTO THE PUBLIC STREETS SHALL BE REMOVED THE SAME DAY. IF THE AMOUNT TRACKED ON THE PUBLIC STREET IS EXCESSIVE, CLEANING MAY BE REQUIRED MORE FREQUENTLY.

Erosion Control and Drainage Notes (Project Specific):

The Erosion Control and Drainage Notes in this section are intended to be included when a project includes erosion control work as part of the project. The Consultant should review the following Notes to determine if they are applicable to the work being completed.

1. ALL EROSION CONTROL MEASURES SHALL BE PROPERLY INSTALLED, AS PERMITTED, PRIOR TO ANY LAND DISTURBANCE ACTIVITIES. ALL EROSION CONTROL SHALL BE MAINTAINED UNTIL TURF IS ESTABLISHED.
2. ACCEPTABLE PERIMETER EROSION CONTROL INCLUDES SILT FENCE, SILT WORM AND ANY OTHER APPLICATION APPROVED BY THE CITY.
3. ALL OPEN GRATE STRUCTURES SHALL HAVE EROSION CONTROL PROTECTION IN ACCORDANCE WITH THE APPROVED EROSION CONTROL PLANS. INLET BASKETS ARE THE PREFERRED METHOD; STRAW BALES SHALL NOT BE USED.

4. STOCKPILES NOT BEING DISTURBED FOR MORE THAN 14 DAYS SHALL BE SEEDED.
5. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY, AFTER ANY 0.5 INCH RAINFALL, OR MORE FREQUENTLY AS NECESSARY TO MAINTAIN THEIR FUNCTION.

Erosion Control and Drainage Notes (NPDES Permit):

The Erosion Control and Drainage Note in this section should be included if the project requires an NPDES permit.

IT IS THE RESPONSIBILITY OF THE OWNER OR HIS DESIGNEE TO INSPECT ALL TEMPORARY EROSION CONTROL MEASURES PER THE REQUIREMENTS OF THE NPDES PERMIT AND CORRECT ANY DEFICIENCIES AS NEEDED.

Geometric and Paving Notes (General):

The Geometric and Paving Notes in this section should be included in all final engineering plans regardless of the type of work in the project.

1. THE DEVELOPER AND CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO ADEQUATELY PROTECT THE PAVEMENT AND PROPERTY, CURB AND GUTTER AND OTHER RIGHT-OF-WAY IMPROVEMENTS, WHETHER NEWLY CONSTRUCTED OR EXISTING, FROM ANY AND ALL DAMAGE. SUFFICIENT MEANS SHALL BE EMPLOYED BY THE CONTRACTOR TO PROTECT AGAINST SUCH DAMAGE TO THE SATISFACTION OF THE CITY.
2. ANY NEW OR EXISTING IMPROVEMENTS THAT ARE DAMAGED SHALL BE REPAIRED OR REPLACED IN A MANNER THAT IS SATISFACTORY TO THE CITY.
3. THE CONTRACTOR AND/OR DEVELOPER SHALL SECURE ALL NECESSARY RIGHTS AND PERMISSIONS TO PERFORM ANY WORK ON PRIVATE PROPERTY NOT WITHIN THE OWNERSHIP RIGHTS OF THE DEVELOPER. THE DEVELOPER SHALL BEAR THE SOLE RESPONSIBILITY FOR DAMAGES THAT MAY OCCUR AS A RESULT OF WORK PERFORMED UNDER CONTRACTS THEY INITIATE.
4. THE CONTRACTOR/DEVELOPER WILL BE RESPONSIBLE FOR BRINGING PAVEMENTS (STREET, CURB AND GUTTER, SIDEWALK, DRIVEWAY) ON THE PROPERTY UP TO CITY STANDARDS INCLUDING ANY REPAIRS TO SUBSTANDARD PAVEMENTS THAT EXISTED PRIOR TO OR OCCURRED DURING CONSTRUCTION.
5. WHEREVER NEW WORK WILL MEET EXISTING CONDITIONS OTHER THAN LAWN AREAS, REGARDLESS OF WHETHER THE NEW OR EXISTING WORK IS ASPHALT OR CONCRETE, THE EXISTING ADJACENT SIDEWALK, DRIVEWAYS, PAVEMENT OR CURB SHALL BE NEATLY SAW CUT. THE SAW

CUT SHALL BE IN A NEAT STRAIGHT LINE SUFFICIENTLY DEEP SO THAT IT RENDERS A SMOOTH VERTICAL FACE TO MATCH TO. IF THE CONTRACTOR IS NOT CAREFUL OR DOES NOT SAW DEEP ENOUGH AND THE CUT LINE BREAKS OUT OR CHIPS TO AN IMPERFECT EDGE, THEN THE EXISTING SIDE MUST BE RE-CUT SQUARE AND DONE OVER UNTIL IT IS.

6. DURING AND AFTER CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL INCLUDING, BUT NOT LIMITED TO, HMA, GRAVEL, TOP SOIL, ETC., ON CITY ROADWAYS AS A RESULT OF CONTRACTOR OPERATIONS, SHALL BE REMOVED AND DEPOSITED OFF SITE BY THE CLOSE OF EACH BUSINESS DAY. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THIS ALSO APPLIES TO EXCESSIVE PRIMER LEFT ON CITY ROADWAYS.
7. THE THICKNESS OF HMA MIXTURES SHOWN IN THE PLANS IS MINIMAL THICKNESS. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACE OR BASIS ON WHICH THEY ARE TO BE PLACED. PLAN THICKNESS SHOULD BE CONSIDERED THE MINIMUM THICKNESS PERMITTED.
8. THE CONTRACTOR SHALL SET AND CHECK ALL CURB FORMS AND STRING LINES PRIOR TO PLACING CONCRETE TO ENSURE POSITIVE DRAINAGE ALONG THE ROADWAY. IMPROPERLY DRAINING CURB SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
9. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RECONSTRUCTION (WHERE NEW PAVEMENT MEETS EXISTING HMA PAVEMENT)
10. AT ANY LOCATION WHERE THERE IS CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO SIDEWALK, THE NEW CURB SHALL BE DEPRESSED AND THE NEW SIDEWALK RAMPED TO PROVIDE ACCESSIBILITY. THIS WORK SHALL BE DONE AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH IDOT STANDARD 424001.
11. TYPE "A" SIDEWALK RAMPS FOR THE HANDICAPPED SHALL BE INSTALLED AT ALL INTERSECTING STREETS AND DETECTABLE WARNINGS SHALL BE PLACED IN SIDEWALK BEHIND DEPRESSED CONCRETE CURB AND GUTTER IN ACCORDANCE WITH IDOT STANDARD 424001, AND AS DIRECTED BY THE ENGINEER.
12. TESTING OF ROADWAY IS REQUIRED THROUGHOUT THE CONSTRUCTION PROCESS. ANY FAILURES OR PROBLEMS IDENTIFIED SHALL BE CORRECTED BY THE CONTRACTOR.
 - A. THE SUBGRADE SHALL BE PROOF ROLLED USING EITHER A SINGLE DUMP TRUCK WITH TANDEM WHEELS WITH A MINIMUM GROSS

WEIGHT OF 40 THOUSAND POUNDS OR A SEMI TRAILER DUMP TRUCK WITH TANDEM WHEELS WITH A MINIMUM GROSS WEIGHT OF 70 THOUSAND POUNDS. ANY AREAS FOUND TO BE UNSTABLE SHALL BE CORRECTED USING AN UNDERCUT DEPTH AS DIRECTED BY THE ENGINEER A POROUS GRANULAR EMBANKMENT UNDERLAIN WITH GEOTECHNICAL FABRIC.

- B. DURING PAVING OPERATIONS, THE CONTRACTOR IS REQUIRED TO HAVE A TESTING COMPANY ON SITE VERIFYING DENSITY OF THE ASPHALT MAT.

Traffic Control and Protection Notes (General):

The Traffic Control and Protection Notes in this section should be included in all final engineering plans regardless of the type of work in the project.

1. ALL DEVELOPERS AND CONTRACTORS SHALL PROVIDE SUITABLE TRAFFIC CONTROL FOR THEIR CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH PART 6 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. TRAFFIC CONTROL MUST BE PROVIDED FOR ANY ACTIVITY THAT IMPACTS TRAFFIC FLOW. THIS INCLUDES, BUT IS NOT LIMITED TO, ROAD CLOSURES REQUIRING DETOURS, DAILY LANE CLOSURES, LONG TERM LANE CLOSURES, NARROW LANES, AND CONSTRUCTION VEHICLES ENTERING AND EXITING THE PUBLIC ROADWAY. ALL TRAFFIC CONTROL SET-UPS MAY BE INSPECTED BY THE CITY OF WOOD DALE TO ENSURE THAT THEY ARE PROVIDING POSITIVE GUIDANCE TO MOTORISTS AND ARE NOT IN THEMSELVES PRESENTING A HAZARDOUS SITUATION. A REPRESENTATIVE OF THE DEVELOPER OR CONTRACTOR MUST PROVIDE PHONE NUMBERS AT WHICH THEY CAN BE REACHED 24 HOURS A DAY AND ON WEEKENDS SO THAT THEY CAN MAINTAIN TRAFFIC CONTROL DEVICES.
2. PEDESTRIANS MUST BE PROVIDED WITH A SAFE ALTERNATE ROUTE IF PEDESTRIAN FACILITIES ARE TO BE CLOSED AS A RESULT OF CONSTRUCTION ACTIVITIES. GUIDANCE MUST BE PROVIDED TO PEDESTRIANS SO THAT THEY MAY AVOID THE WORK ZONE. SAID PEDESTRIAN DETOUR PLAN (WITH SIGNAGE) IS TO BE REVIEWED AND ACCEPTED BY THE CITY IN WRITING, PRIOR TO THE COMMENCEMENT OF THE WORK.
3. THE CONTRACTOR SHALL EMPLOY THE APPROPRIATE METHODS OF TRAFFIC CONTROL IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, SUCH THAT THE SAFETY OF VEHICLES, AND PEDESTRIANS IS PRESERVED AT ALL TIMES. THE ERECTION AND MAINTENANCE OF THE TRAFFIC CONTROL DEVICES SHALL BE TO THE SATISFACTION OF THE AGENCY OF JURISDICTION AND THE CITY.

4. ANY TEMPORARY OPEN HOLES SHOULD BE BARRICADED AND PROTECTED IN ACCORDANCE WITH APPLICABLE STANDARDS.

Traffic Control and Protection Notes (Arterial Roads):

The Traffic Control and Protection Notes in this section should be included in all final engineering plans if the project involves work either in or adjacent to arterial roadways.

1. LANE CLOSURES ON ARTERIAL ROADWAYS WITHIN THE CITY OF WOOD DALE ARE NOT PERMITTED BETWEEN THE HOURS OF 6AM-9AM AND 3PM-7PM MONDAY THROUGH FRIDAY, UNLESS OTHERWISE PERMITTED BY THE CITY. LANE CLOSURES ON ARTERIAL STREETS ARE PERMITTED BETWEEN 7AM AND 7PM ON WEEKENDS, UNLESS OTHERWISE PERMITTED BY THE CITY. ARTERIAL ROADWAYS ARE DEFINED AS BOTH MAJOR AND MINOR ARTERIAL ROADWAYS AS DESIGNATED ON THE CITY'S MASTER THOROUGHFARE PLAN, LATEST EDITION.
2. ANY WORK THAT IMPACTS A TRAFFIC LANE ON AN ARTERIAL ROADWAY REQUIRES AN ARROWBOARD AS PART OF THE TRAFFIC CONTROL.
3. AT THE END OF EACH DAY OF WORK, THE ROADWAY MUST BE COMPLETELY REOPENED TO TRAFFIC. ANY OPEN HOLES MUST BE PLATED OR COLD PATCHED; THE CITY WILL NOT ALLOW THE HOLES TO BE FILLED WITH GRAVEL.

Traffic Control and Protection Notes (Downtown):

The Traffic Control and Protection Notes in this section should be included in all final engineering plans if the project is located in downtown Wood Dale.

1. PEDESTRIAN TRAFFIC SHALL BE MAINTAINED IN THE DOWNTOWN. IF A PEDESTRIAN DETOUR CANNOT BE ACCOMMODATED, THE CITY MAY REQUIRE THE CONTRACTOR TO PROVIDE A PROTECTED COVERED WALKWAY.
2. ANY WORK IMPACTING THE PUBLIC RIGHT-OF-WAY SHALL NOT BE ALLOWED IN THE DOWNTOWN ON A FRIDAY, SATURDAY, SUNDAY, AND/OR HOLIDAY, UNLESS OTHERWISE PERMITTED BY THE CITY.
3. ALL WORK IN THE DOWNTOWN SHALL BE COORDINATED WITH THE DOWNTOWN WOOD DALE ALLIANCE (DNA) TO AVOID CONFLICT WITH SPECIAL EVENTS.

2

Details

100: General

200: Storm

300: Sanitary

400: Water

500: Roadway

600: Lighting & Traffic

700: Grading, Landscaping & Erosion Control

SECTION 100- GENERAL DETAILS

DIGITAL FILE LAYER SCHEME
SAMPLE CERTIFICATION STATEMENT
SAMPLE RECORD PLAN LEGEND

TYPICAL LAYER SCHEME FOR DIGITAL FILES

LAYER NAME	Items that may be found on that layer
Alignment	Centerline, base line, survey line, stationing, roadway name, bench marks, horizontal ties p.c. and p.t. stations and station equations.
Profile	Roadway profile, vertical curve data, profile elevations, roadway dimensioning, vertical ties.
Topography	Ground contours, detention and retention areas elevations, associated text.
Soil Borings	Soil boring details, plan and profile.
Vegetation	Trees, brush, hedges, forests, associated text.
Water	Lakes, rivers, streams, ponds and associated text.
Right of Way	Right of way, access control, easements and associated text.
Edge of Pavement	Streets, roads, alleys etc.
Roadway Plan	Medians, curbs, gutter, and shoulders.
Roadside Features	Sidewalks, private entrances, commercial entrances
Buildings	Buildings, fences, parking lots, advertising signs, mailboxes, associated text.
Private Boundaries	Property lines, iron pipes, concrete monuments, survey markers, section corners, ownership information.
Pavement Marking	Pavement marking lines, letters and symbols, raised pavement markers, delineators, regulatory signs and warning signs.
Traffic Signal	Traffic signal plan
Electric	Power poles, cables, control cabinets, schematics, and junction boxes
Water utility	Fire hydrants, valve vaults, pipe, buffalo box, pump stations, and storage towers.
Sanitary sewer	Manholes, pipe, lift stations, treatment plants.
Drainage	Manholes, inlets, catch basins, sewer main, overflow routes, ditch flow line, detention and retention areas.
Railroads	Control box, crossing gate, tracks, signal and overpass.
Gas	Gas main
Telephone	Telephone

These drawings shall meet all specifications described within the City Specifications. No building permits, temporary/final occupancy permits, or acceptance of facilities by the City will proceed until the reproducible documents have been submitted to:

City of Wood Dale
Public Works Department
720 Central Ave
Wood Dale, IL 60191

SAMPLE CERTIFICATION

STATEMENT OF OPINION

Pursuant to the Wood Dale Municipal Code, I _____ a registered Professional Engineer in the State of Illinois, hereby declare that these "Record Drawings" pertaining to (watermain, sanitary sewer, storm sewer) (stormwater management) (outdoor lighting) consisting of sheets _____ and _____ included herewith, have been prepared for a certain project known as _____ and contain information as obtained by the surveyor _____ and the contractor _____.

It is my professional opinion that these "Record Drawings" adequately depict the Record Drawing Information required by the City of Wood Dale's "Record Drawing Procedures and Standards for Civil Engineering Site work Improvements," document bearing the effective date of _____, and substantiate that the improvements constructed as part of this project will function in substantial conformance to the design intent of the approved engineering plans.

Dated: _____

Signed: _____

Illinois Registration Number: _____

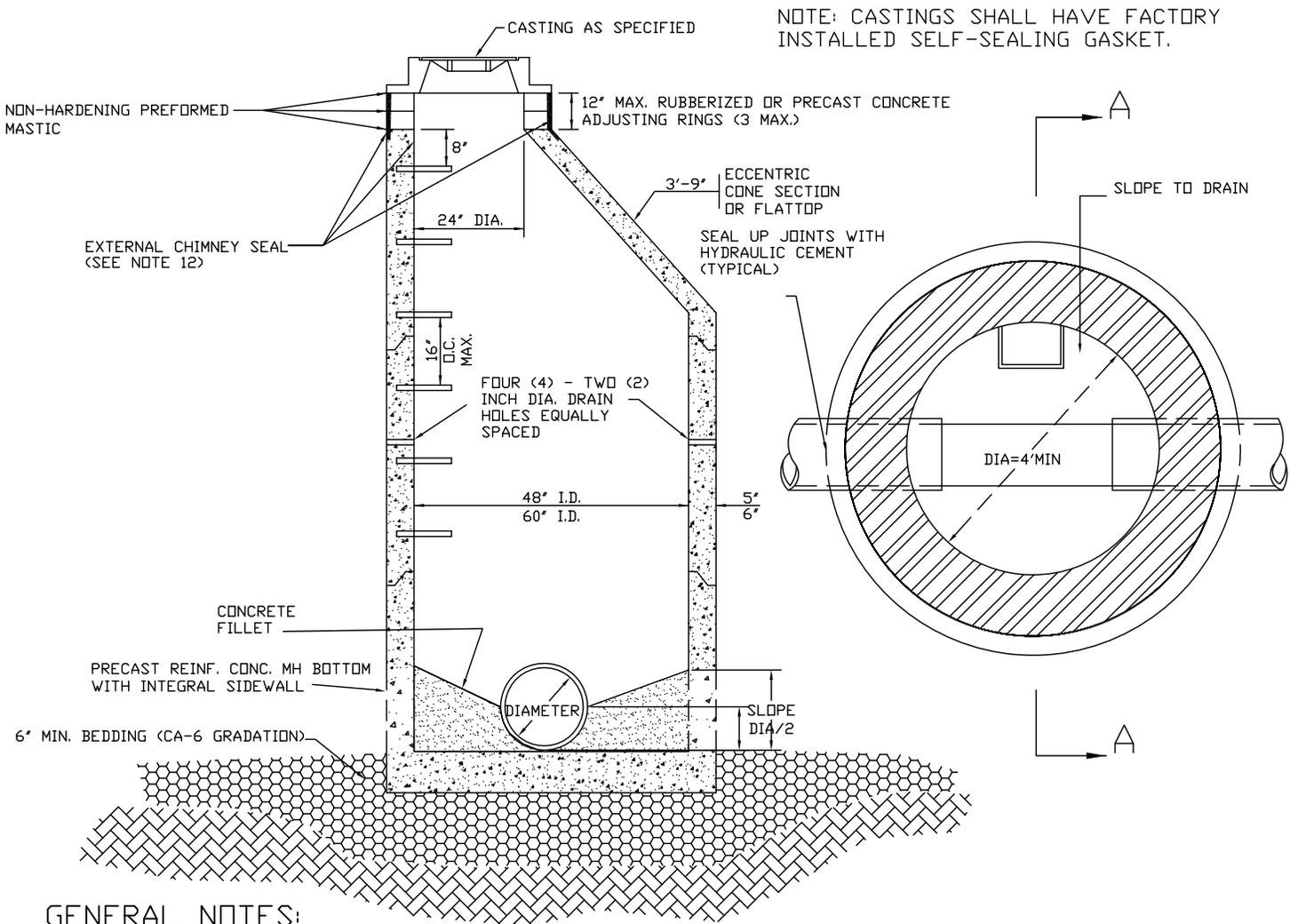
(SEAL)

STANDARD LEGEND

RECORD PLAN FOR		
TYPE	DATE	P.E. INITIALS
WATERMAIN SANITARY SEWER STORM SEWER		
STORMWATER MANAGEMENT		
OUTDOOR LIGHTING		

SECTION 200- STORM SEWER

MANHOLE TYPE A
INLET TYPE A
CATCH BASIN TYPE A
CATCH BASIN TYPE C
PRECAST TEE MANHOLE
CONNECTION BOX FOR PRECAST MANHOLE 1
CONNECTION BOX FOR PRECAST MANHOLE 2
CONNECTION BOX FOR PRECAST MANHOLE 3
CASTING ADJUSTMENTS FOR STRUCTURES IN PAVED AREAS
CASTING ADJUSTMENTS FOR STRUCTURES IN CURB LINE
SUBSURFACE DRAIN TILE CONNECTION
DIRECT SUBSURFACE DRAIN TILE SUMP PUMP CONNECTION
SUBSURFACE DRAIN TILE SUMP PUMP CONNECTION
STORM SEWER TRENCH SECTION 1
STORM SEWER TRENCH SECTION 2
STORM SEWER GRATE FOR BOX INLET
MANHOLE STEP
SILT FENCE
RETAINING WALL 1
RETAINING WALL 2
SPLIT RAIL FENCE
DRY WELL
RESTRICTOR DETAIL
SWALE CONSTRUCTION



NOTE: CASTINGS SHALL HAVE FACTORY INSTALLED SELF-SEALING GASKET.

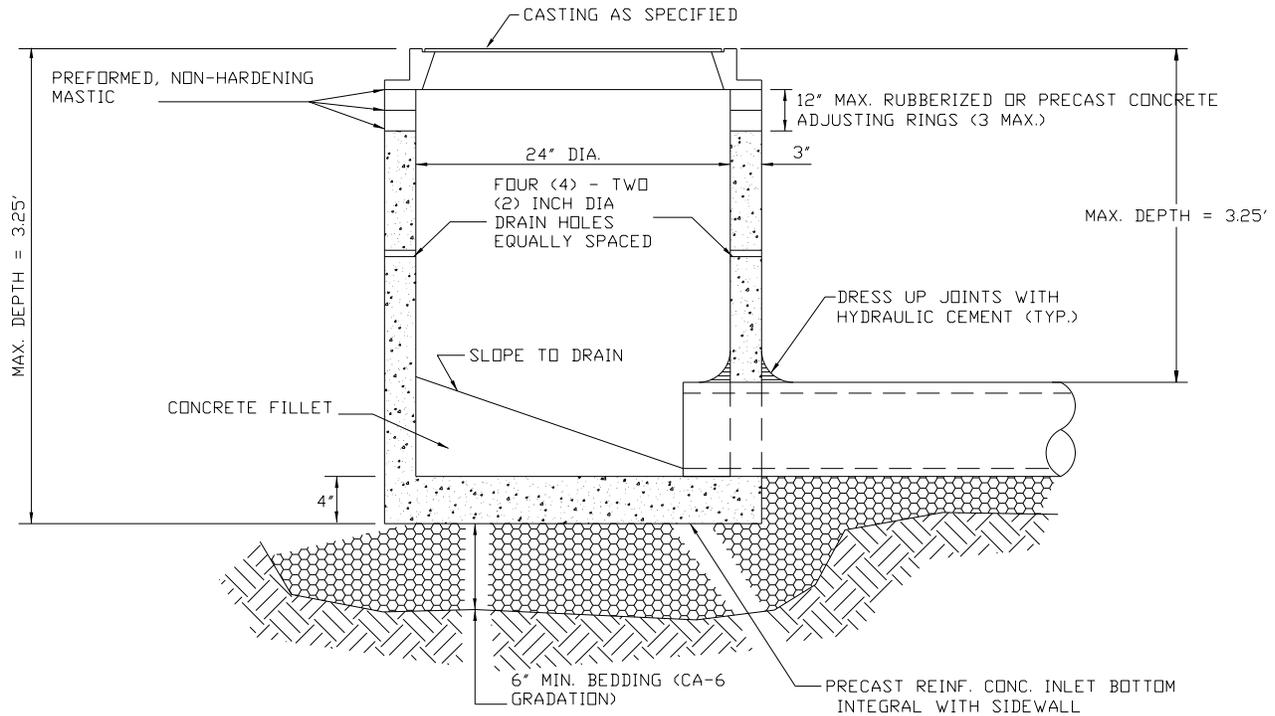
GENERAL NOTES:

1. PROVIDE PRECAST REINFORCED CONCRETE BARREL AND RISER SECTIONS. CONCRETE BLOCK CONSTRUCTION IS NOT PERMITTED.
2. PROVIDE GRANULAR BACKFILL AROUND MANHOLE TO SUBGRADE ELEVATION IN PAVED AREAS. MATERIAL SHALL MEET THE REQUIREMENTS OF IDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" FOR COARSE AGGREGATE (CA-6 GRADATION.)
3. APPLY A CONTINUOUS LAYER OF NON-HARDENING PREFORMED BITUMINOUS MASTIC MATERIAL (RUB-R-NEK OR EZ STICK) TO EACH JOINT BELOW THE BOTTOM OF CONE OR FLATTOP TO PREVENT INFLOW.
4. WHEN THE FRAME DOES NOT MEET PROPOSED ELEVATION, A MINIMUM OF TWO TAPERED RUBBERIZED ADJUSTING RINGS SHALL BE USED FOR FINAL ADJUSTMENT. ONE CONCRETE RING NOT LESS THAN TWO INCHES THICK MAY ALSO BE USED. A MAXIMUM OF THREE ADJUSTING RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 12 INCHES. EACH RING AND THE FRAME SHALL BE SET IN A BED OF NON-PREFORMED MASTIC.
5. PRECAST ADJUSTING RINGS SHALL BE REINFORCED WITH NO. 3 GAUGE WIRE OR EQUIVALENT AND SHALL HAVE A MINIMUM THICKNESS OF 2 INCHES.
6. WITHIN NON-PAVED AREAS MORTAR SHALL ONLY BE USED TO DRESS UP ADJUSTING RINGS AND/OR FRAME ON THE EXTERIOR OF THE STRUCTURE. MORTAR IS NOT PERMITTED ON THE INSIDE OF THE RINGS AND/OR FRAME.
7. ONLY PLASTIC POLYMER STEPS SHALL BE USED.
8. WHEN MANHOLE DEPTH IS OVER 12 FEET, THE THICKNESS OF THE PRECAST, REINFORCED CONCRETE BASE SHALL BE A MINIMUM OF 10 INCHES. WHEN MANHOLE DEPTH IS LESS THAN 12 FEET, THE THICKNESS SHALL BE A MINIMUM OF 8 INCHES.
9. DRESS UP INTERIOR JOINTS OF PRECAST MANHOLE AND OPENINGS AROUND PIPES WITH HYDRAULIC CEMENT.
10. IN PAVED AREAS, DRAIN HOLES/WEEP HOLES SHALL BE COVERED WITH FILTER FABRIC. FILTER FABRIC SHALL BE SECURED TO THE OUTSIDE OF STRUCTURE PRIOR TO BACKFILL.
11. IN GRASSED AREAS, DRAIN HOLES/WEEP HOLES SHALL BE PLUGGED WITH HYDRAULIC CEMENT.
12. EXTERNAL CHIMNEY SEALS (UNLESS OTHERWISE DIRECTED BY CITY) SHALL BE REQUIRED UNLESS THE MANHOLE IS ADJUSTED TO FINAL GRADE IN ACCORDANCE WITH DETAIL STORM 7 - CASTING ADJUSTMENTS FOR STRUCTURES IN PAVED AREAS. EXTERNAL CHIMNEY SEALS SHALL BE CRETEX OR APPROVED EQUAL.

REV.:	REV.:
REV.:	REV.:
DRAWN BY:	DATE: 4-3-18

MANHOLE TYPE A

CITY OF WOOD DALE
STORM 1 Packet Page #224



GENERAL NOTES:

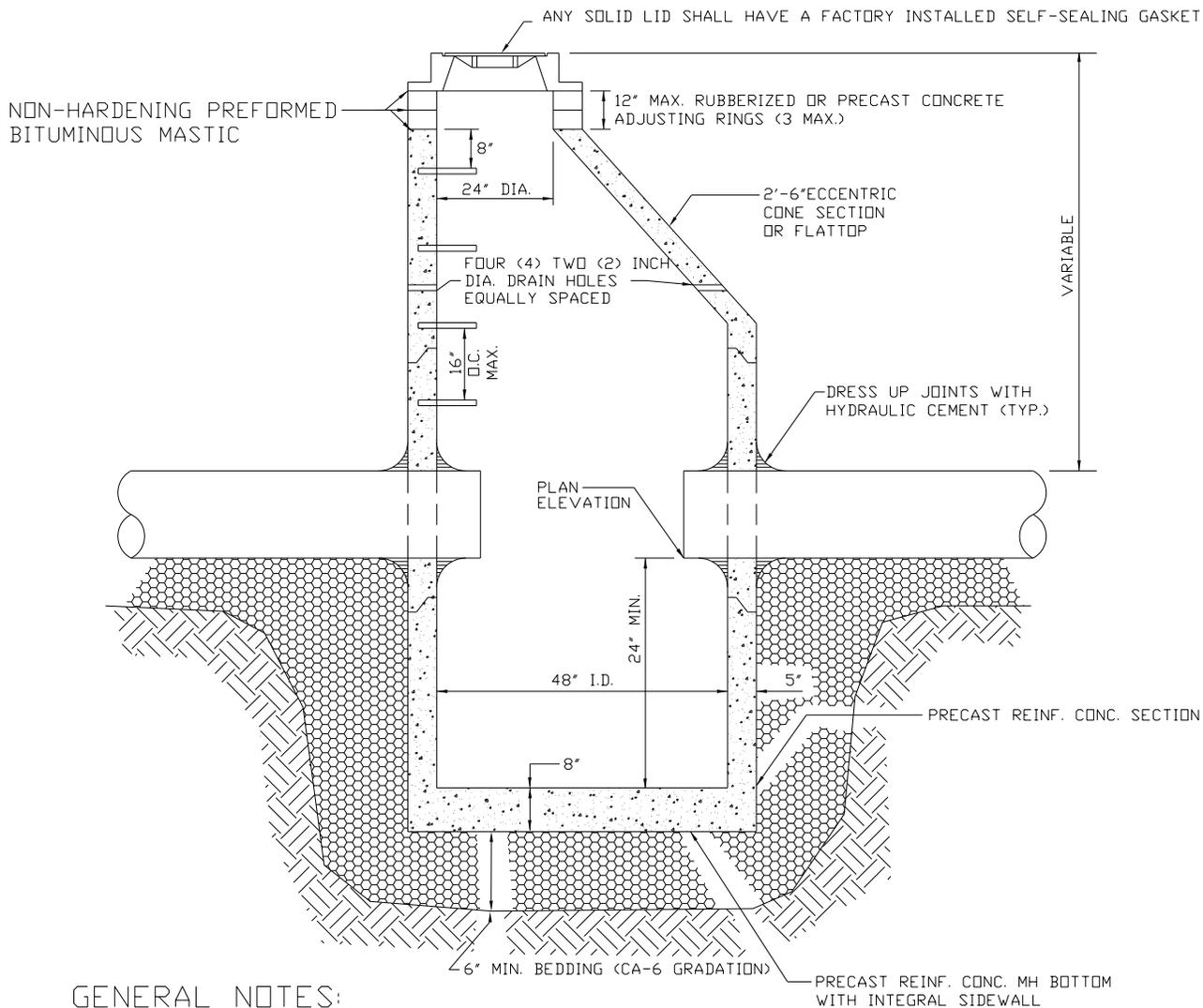
1. PROVIDE PRECAST REINFORCED CONCRETE BARREL AND RISER SECTION. CONCRETE BLOCK CONSTRUCTION IS NOT PERMITTED.
2. PROVIDE GRANULAR BACKFILL AROUND INLET TO SUBGRADE ELEVATION IN PAVED AREAS. MATERIAL SHALL MEET THE REQUIREMENTS OF IDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" FOR COARSE AGGREGATE (CA-6 GRADATION).
3. WHEN THE FRAME DOES NOT MEET PROPOSED ELEVATION, A MINIMUM OF TWO TAPERED RUBBERIZED ADJUSTING RINGS SHALL BE USED FOR FINAL ADJUSTMENT. ONE CONCRETE RING NOT LESS THAN TWO INCHES THICK MAY ALSO BE USED. A MAXIMUM OF THREE ADJUSTING RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 12 INCHES. THE RING(S) AND FRAME SHALL BE SET IN A BED OF PREFORMED NON-HARDENING MASTIC (RUB-R-NEK, EZ STICK OR APPROVED EQUAL).
4. PRECAST ADJUSTING RINGS SHALL BE REINFORCED WITH NO. 3 GAUGE WIRE OR EQUIVALENT AND SHALL HAVE A MINIMUM THICKNESS OF TWO INCHES.
5. MORTAR SHALL NOT BE USED TO DRESS UP ADJUSTING RINGS AND/OR FRAME.
6. IN PAVED AREAS, DRAIN HOLES/WEEP HOLES SHALL BE COVERED WITH FILTER FABRIC. FILTER FABRIC SHALL BE SECURED TO THE OUTSIDE OF STRUCTURE PRIOR TO BACKFILL.
7. IN GRASSED AREAS, DRAIN HOLES/WEEP HOLES SHALL BE PLUGGED WITH HYDRAULIC CEMENT.
8. IF AN IDOT TYPE 8 GRATE CASTING IS CALLED OUT, NO MASTIC SHALL BE ALLOWED BETWEEN THE FRAME AND THE TOP RING OR STRUCTURE. A MINIMUM OF ONE RUBBER RING 1/4" THICKNESS SHALL BE PLACED BETWEEN THE FRAME AND THE TOP RING OR STRUCTURE (EAST JORDAN INFRA-RISER c 24.0 / 36.0 F 0.25 OR APPROVED EQUAL). ALL EXCESS MATERIAL EXTENDING BEYOND THE EDGE OF THE GRATE SHALL BE TRIMMED FLUSH.

REV.:	REV.:
REV.:	REV.:
DRAWN BY:	DATE: 4-3-18

INLET TYPE A

CITY OF WOOD DALE

STORM 2
Packet Page #225



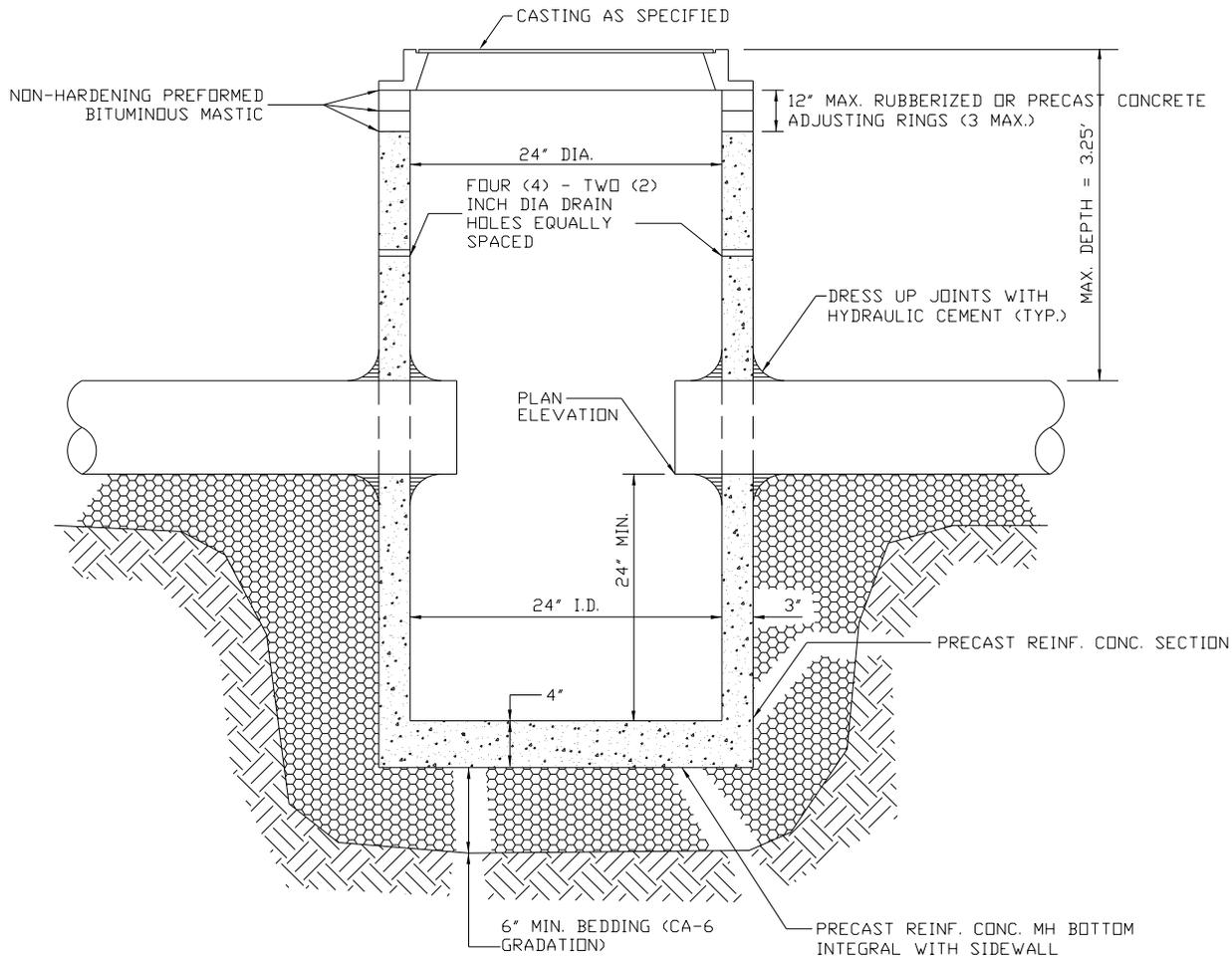
GENERAL NOTES:

1. PROVIDE PRECAST REINFORCED CONCRETE BARREL AND RISER SECTIONS. CONCRETE BLOCK CONSTRUCTION IS NOT PERMITTED.
2. PROVIDE GRANULAR BACKFILL AROUND CATCHBASIN TO SUBGRADE ELEVATION IN PAVED AREAS. MATERIAL SHALL MEET THE REQUIREMENTS OF IDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" FOR COARSE AGGREGATE (CA-6 GRADATION).
3. APPLY A CONTINUOUS LAYER OF NON-HARDENING PREFORMED BITUMINOUS MASTIC MATERIAL (RUB-R-NEK OR E Z STICK) TO EACH JOINT BELOW THE BOTTOM OF CONE OR FLATTOP TO PREVENT INFLOW.
4. WHEN THE FRAME DOES NOT MEET PROPOSED ELEVATION, A MINIMUM OF TWO TAPERED RUBBERIZED ADJUSTING RINGS SHALL BE USED FOR FINAL ADJUSTMENT. ONE CONCRETE RING NOT LESS THAN TWO INCHES THICK MAY ALSO BE USED. A MAXIMUM OF THREE ADJUSTING RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 12 INCHES. EACH RING AND THE FRAME SHALL BE SET ON A BED OF NON-PREFORMED MASTIC.
5. PRECAST ADJUSTING RINGS SHALL BE REINFORCED WITH NO. 3 GAUGE WIRE OR EQUIVALENT AND SHALL HAVE A MINIMUM THICKNESS OF TWO INCHES.
6. WITHIN NON-PAVED AREAS, MORTAR SHALL ONLY BE USED TO DRESS UP ADJUSTING RINGS AND/OR FRAMES ON THE EXTERIOR OF THE STRUCTURE. MORTAR IS NOT PERMITTED ON THE INSIDE OF THE RINGS AND/OR FRAME.
7. ONLY PLASTIC POLYMER STEPS SHALL BE USED.
8. WHEN CATCHBASIN DEPTH IS OVER 12 FEET, THE THICKNESS OF THE PRECAST, REINFORCED CONCRETE BASE SHALL BE A MINIMUM OF 10 INCHES. WHEN CATCHBASIN DEPTH IS LESS THAN 12 FEET, THE THICKNESS SHALL BE A MINIMUM OF 8 INCHES.
9. DRESS UP INTERIOR JOINTS OF PRECAST CATCHBASIN AND OPENINGS AROUND THE PIPES WITH HYDRAULIC CEMENT.
10. IN PAVED AREAS, DRAIN HOLES/WEEP HOLES SHALL BE COVERED WITH FILTER FABRIC. FILTER FABRIC SHALL BE SECURED TO THE OUTSIDE OF STRUCTURE PRIOR TO BACKFILL.
11. IN GRASSED AREAS, DRAIN HOLES/WEEP HOLES SHALL BE PLUGGED WITH HYDRAULIC CEMENT.

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DRAWN BY:	DATE: 4-3-18

CATCH BASIN TYPE A

CITY OF WOOD DALE
STORM 3
Packet Page #226



GENERAL NOTES:

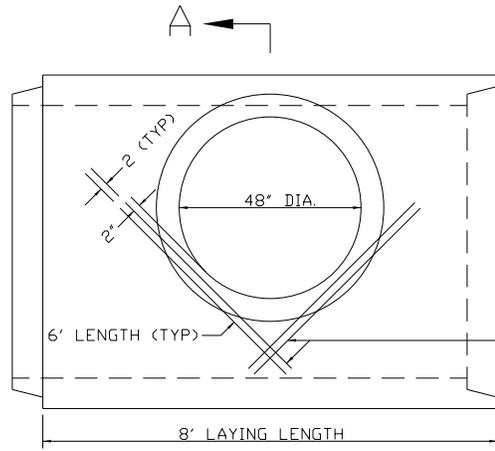
1. PROVIDE PRECAST REINFORCED CONCRETE BARREL AND RISER SECTION. CONCRETE BLOCK CONSTRUCTION IS NOT PERMITTED.
2. PROVIDE GRANULAR BACKFILL AROUND CATCH BASIN TO SUBGRADE ELEVATION IN PAVED AREAS. MATERIAL SHALL MEET THE REQUIREMENTS OF IDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" FOR COARSE AGGREGATE (CA-6 GRADATION.)
3. WHEN THE FRAME DOES NOT MEET PROPOSED ELEVATION, A MINIMUM OF TWO TAPERED RUBBERIZED ADJUSTING RINGS SHALL BE USED FOR FINAL ADJUSTMENT. ONE CONCRETE RING NOT LESS THAN TWO INCHES THICK MAY ALSO BE USED. A MAXIMUM OF THREE ADJUSTING RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 12 INCHES. EACH RING AND THE FRAME SHALL BE SET ON A BED OF NON-PREFORMED MASTIC.
4. PRECAST ADJUSTING RINGS SHALL BE REINFORCED WITH NO. 3 GAUGE WIRE OR EQUIVALENT AND SHALL HAVE A MINIMUM THICKNESS OF TWO INCHES.
5. MORTAR IS NOT PERMITTED ON THE INSIDE OF THE RINGS AND/OR FRAME.
6. WITHIN NON-PAVED AREAS, MORTAR SHALL ONLY BE USED TO DRESS UP ADJUSTING RINGS AND/OR FRAME ON THE EXTERIOR OF THE STRUCTURE. MORTAR IS NOT PERMITTED ON THE INSIDE OF THE RINGS AND/OR FRAME.
7. DRESS UP INTERIOR JOINTS WITH HYDRAULIC CEMENT.
8. IN PAVED AREAS, DRAIN HOLES/WEEP HOLES SHALL BE COVERED WITH FILTER FABRIC. FILTER FABRIC SHALL BE SECURED TO THE OUTSIDE OF STRUCTURE PRIOR TO BACKFILL.
9. IN GRASSED AREAS, DRAIN HOLES/WEEP HOLES SHALL BE PLUGGED WITH HYDRAULIC CEMENT.

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DRAWN BY:	DATE: 4-3-18

CATCH BASIN TYPE C

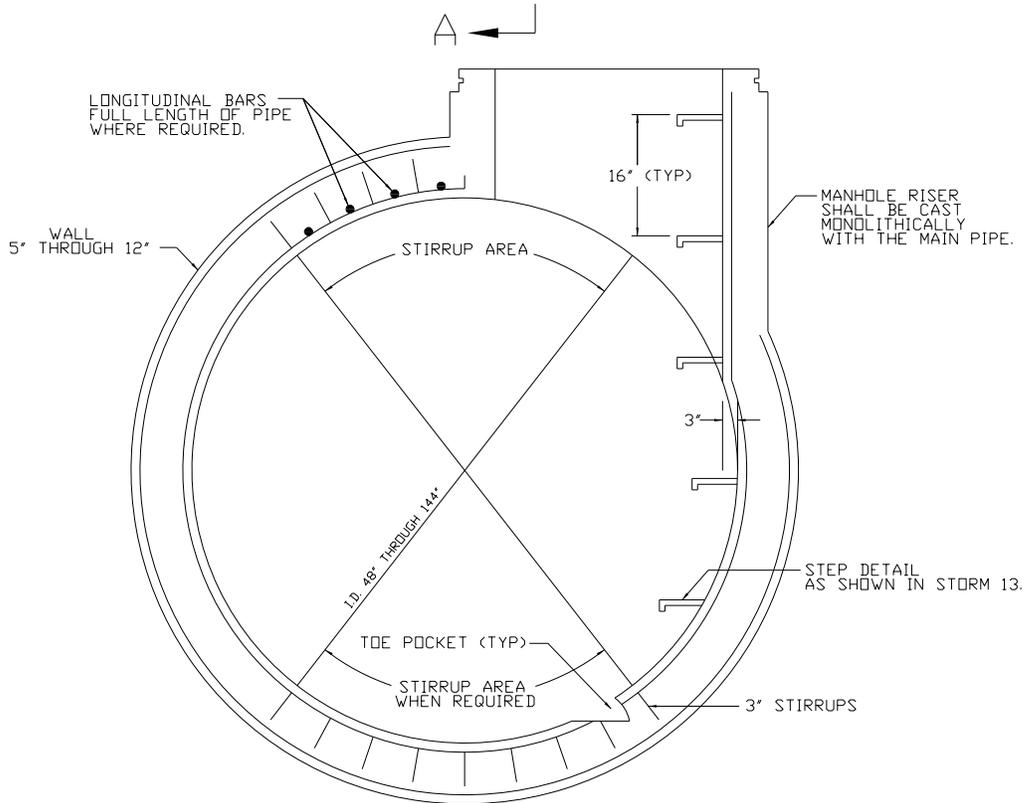
CITY OF WOOD DALE

STORM 4
Packet Page #227



NOTE: CASTINGS SHALL HAVE FACTORY INSTALLED O-RING GASKET.

TWO #5 DIAGONAL REINFORCEMENT BARS WHEN REQUIRED.



SECTION A - A

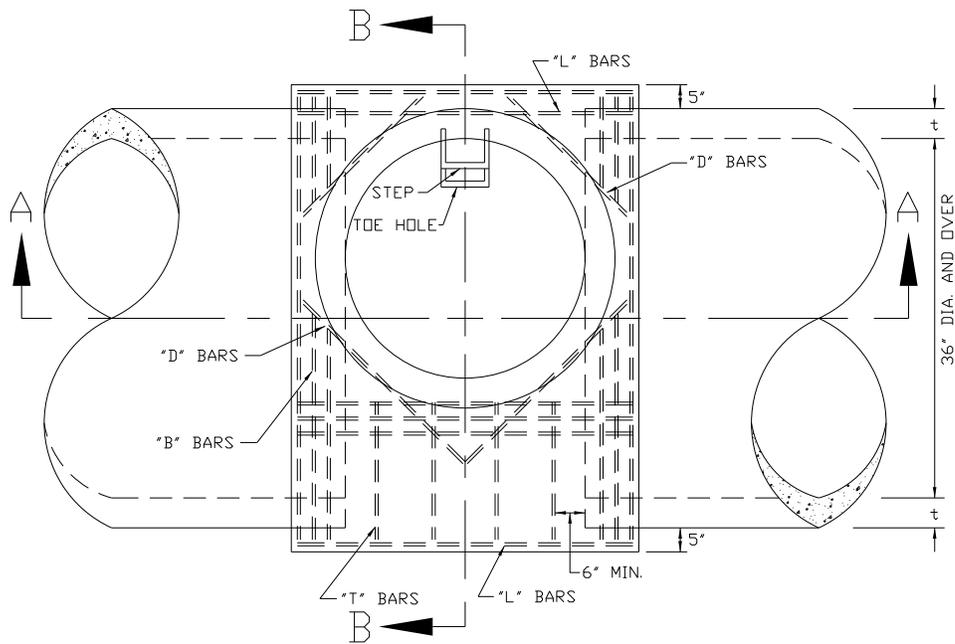
GENERAL NOTES:

1. PROVIDE GRANULAR BACKFILL AROUND MANHOLE TO SUBGRADE ELEVATION IN PAVED AREAS. MATERIAL SHALL MEET THE REQUIREMENTS OF THE IDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" FOR COARSE AGGREGATE (CA-6 GRADATION).
2. APPLY A CONTINUOUS LAYER OF NON-HARDENING, PREFORMED BITUMINOUS MASTIC MATERIAL (RUB-R-NEK OR EZ STICK) TO EACH JOINT BELOW THE BOTTOM OF CONE OR FLATTOP TO PREVENT INFLOW.
3. WHEN THE FRAME DOES NOT MEET PROPOSED ELEVATION, A MINIMUM OF TWO TAPERED RUBBERIZED ADJUSTING RINGS SHALL BE USED FOR FINAL ADJUSTMENT. ONE CONCRETE RING NOT LESS THAN TWO INCHES THICK MAY ALSO BE USED. A MAXIMUM OF THREE ADJUSTING RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 12 INCHES. THE RING(S) AND FRAME SHALL BE SET IN A BED OF NON-HARDENING BUCKET MASTIC.
4. PRECAST CONCRETE ADJUSTING RINGS SHALL BE REINFORCED WITH NO. 3 GAUGE WIRE OR EQUIVALENT AND SHALL HAVE A MINIMUM THICKNESS OF TWO INCHES.
5. MORTAR SHALL NOT BE USED TO DRESS UP ADJUSTING RINGS AND/OR FRAME.
6. ONLY PLASTIC POLYMER STEPS SHALL BE USED.
7. DRESS UP INTERIOR JOINTS OF PRECAST MANHOLE WITH HYDRAULIC CEMENT.
8. BEDDING BENEATH THE MANHOLE SHALL BE A MINIMUM OF SIX INCHES THICK AND SHALL MEET THE REQUIREMENTS FOR GRANULAR BACKFILL (CA-6 GRADATION).
9. WHEN A PRECAST TEE MANHOLE IS SPECIFIED, A SHOP DRAWING FOR THE STRUCTURE SHALL BE SUBMITTED TO THE DIRECTOR OF PUBLIC WORKS FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION OF THE STRUCTURE. THE SHOP DRAWING SHALL BE PREPARED, SIGNED AND SEALED BY A STRUCTURAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF ILLINOIS. PRIOR TO SUBMITTAL TO THE CITY, THE DESIGN ENGINEER SHALL REVIEW AND APPROVE THE SHOP DRAWING. APPROVAL BY THE DESIGN ENGINEER SHALL BE CLEARLY NOTED ON THE SHOP DRAWING.
10. CHIMNEY SEALS SHALL BE REQUIRED UNLESS THE MANHOLE IS ADJUSTED TO FINAL GRADE IN ACCORDANCE WITH DETAIL STORM 7 - CASTING ADJUSTMENTS FOR STRUCTURES IN PAVED AREAS.

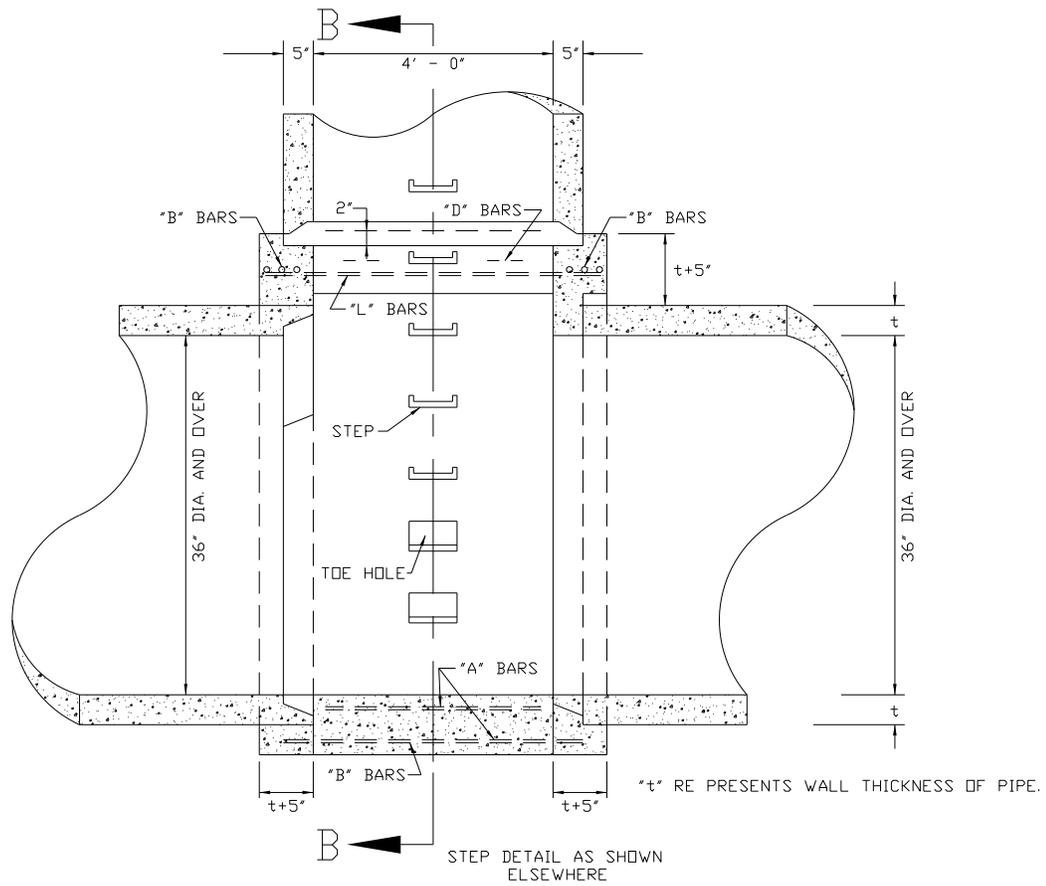
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DRAWN BY:	DATE: 4-3-18

PRECAST TEE MANHOLE

CITY OF WOOD DALE
STORM 5



PLAN



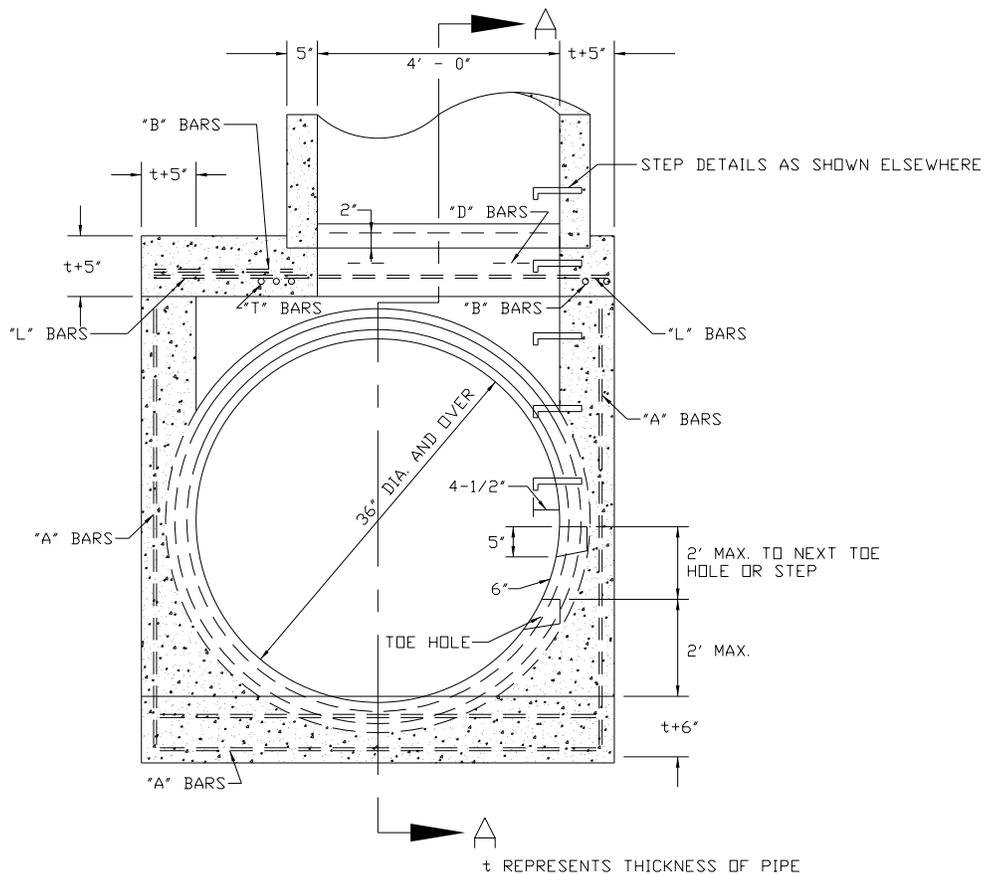
SECTION A-A

REV.:	REV.:
DRAWN BY:	DATE: 4-3-18

CONNECTION BOX FOR
PRECAST MANHOLE

CITY OF WOOD DALE

STORM 6A
Packet Page #229



SECTION B-B

GENERAL NOTES:

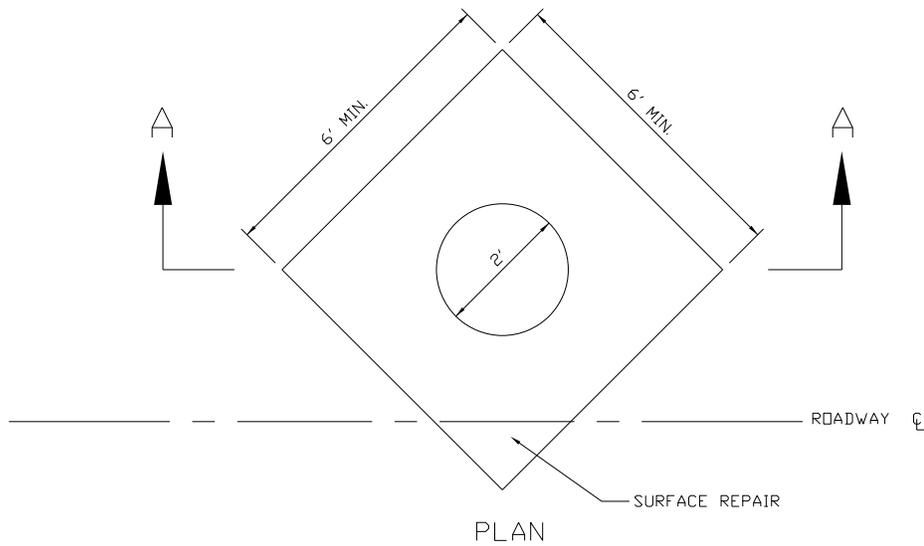
1. CONCRETE FOR THE MANHOLE BASE AND CONNECTION BOX SHALL BE CLASS "SI OR PC".
2. REINFORCEMENT STEEL SHALL CONFORM TO STANDARD SPECIFICATIONS ASTM-3670 FOR STRUCTURAL STEEL. BENDS, HOOKS, AND SPLICES SHALL BE IN ACCORDANCE WITH ACI STANDARD 318.
3. PRECAST RISER RING AND CONE SHALL HAVE A MINIMUM CIRCULAR REINFORCEMENT OF 0.18 SQ. IN. PER FOOT.
4. CONNECTION BOXES FOR SEWERS 36" AND OVER IN DIAMETER SHALL HAVE AT LEAST THE MINIMUM SHOWN AND AS SPECIFIED BELOW:
 "A" BARS AT 12" C/C IN BOTH DIRECTIONS
 "B" BARS AT 3" C/C IN BOTH DIRECTIONS
 "A", "B", AND "L" BAR SIZES:
 5/8" DIA. FOR 36" TO 60" SEWERS
 3/4" DIA. FOR 66" TO 78" SEWERS
 7/8" DIA. FOR 84" TO 96" SEWERS
 "T" BARS: 5/8" DIA. AND AT 12" C/C
 "D" BARS: 5/8" DIA.
5. REINFORCING BARS SHALL HAVE A MINIMUM COVER OF 2" FROM THE EDGE OF THE STRUCTURE.
6. PRECAST CONCRETE ADJUSTING RINGS SHALL BE REINFORCED WITH NO. 3 GAUGE WIRE OR EQUIVALENT AND SHALL HAVE A MINIMUM THICKNESS OF TWO INCHES.

REV.:		CONNECTION BOX FOR PRECAST MANHOLE (CONTINUED)	CITY OF WOOD DALE
REV.:	DATE: 4-3-18		STORM 6B
DRAWN BY:			

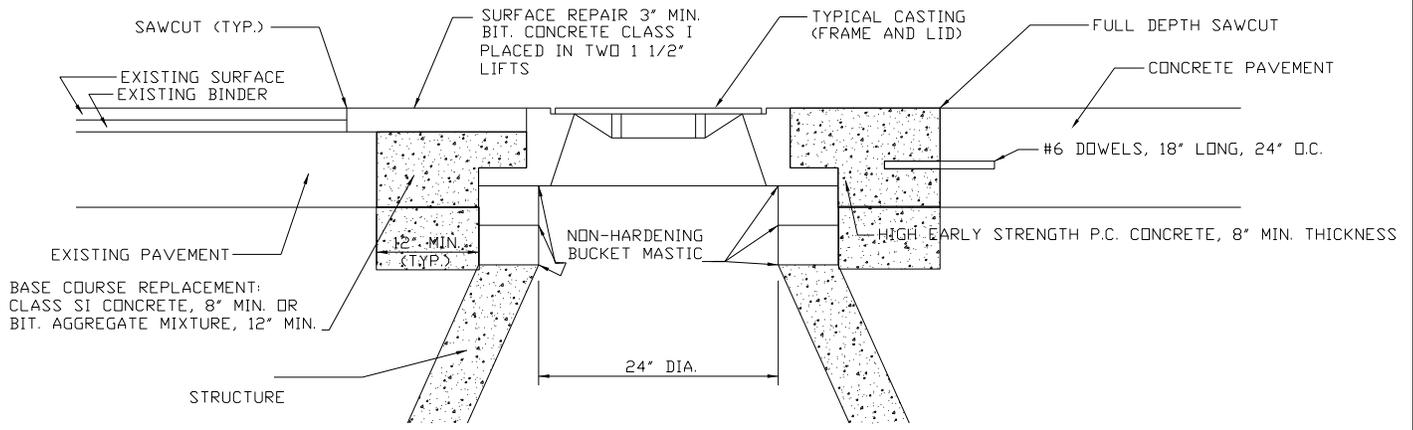
GENERAL NOTES CONT:

7. WHEN A CONNECTION BOX FOR PRECAST MANHOLE IS SPECIFIED, A SHOP DRAWING SHALL BE SUBMITTED TO THE PUBLIC WORKS DIRECTOR FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION OF THE STRUCTURE. THE SHOP DRAWING SHALL BE PREPARED, SIGNED AND SEALED BY A STRUCTURAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF ILLINOIS. THE DESIGN ENGINEER SHALL REVIEW AND APPROVE THE SHOP DRAWING PRIOR TO SUBMITAL TO THE CITY (APPROVAL BY THE DESIGN ENGINEER SHALL BE CLEARLY NOTED ON THE SHOP DRAWING).
8. BEDDING BENEATH THE MANHOLE SHALL BE A MINIMUM OF SIX INCHES THICK AND SHALL MEET THE REQUIREMENTS FOR GRANULAR BACKFILL (CA-6 GRADATION).
9. PROVIDE GRANULAR BACKFILL AROUND MANHOLE TO SUBGRADE ELEVATION IN PAVED AREAS. MATERIAL SHALL MEET THE REQUIREMENTS OF THE IDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" FOR COARSE AGGREGATE (CA-6 GRADATION).
10. APPLY A CONTINUOUS LAYER OF PREFORMED, NON-HARDENING BITUMINOUS MASTIC MATERIAL (RUB-R-NEK, EZ STICK OR APPROVED EQUAL) TO EACH JOINT TO PREVENT INFLOW.
11. WHEN THE FRAME DOES NOT MEET PROPOSED ELEVATION, A MINIMUM OF TWO TAPERED RUBBERIZED ADJUSTING RINGS SHALL BE USED FOR FINAL ADJUSTMENTS. ONE CONCRETE RING NOT LESS THAN TWO INCHES THICK MAY ALSO BE USED. A MAXIMUM OF THREE ADJUSTING RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 12 INCHES. THE RING(S) AND FRAME SHALL BE SET ON A BED OF NON-HARDENING BUCKET MASTIC.
12. DRESS UP INTERIOR JOINTS OF PRECAST MANHOLE WITH HYDRAULIC CEMENT. HOWEVER, ADJUSTING RINGS AND FRAME SHALL NOT BE DRESSED UP.

REV:	REV:	CONNECTION BOX FOR PRECAST MANHOLE (CONTINUED)	CITY OF WOOD DALE
REV:	REV:		
DRAWN BY:	DATE: 4-3-18		STORM 6C Packet Page #231



PLAN

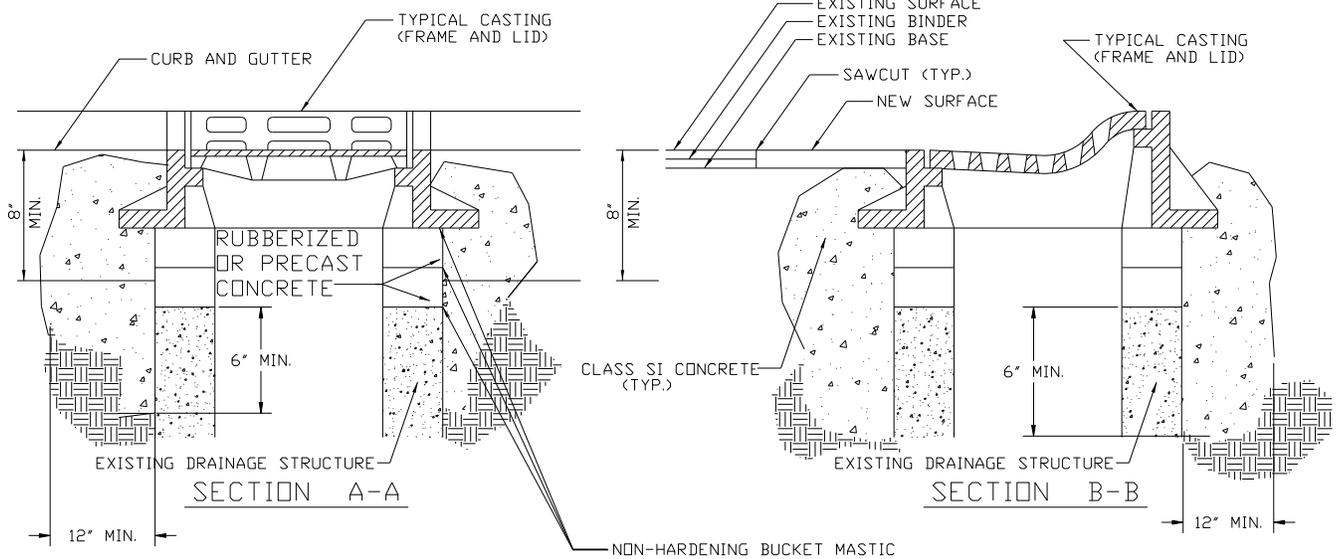
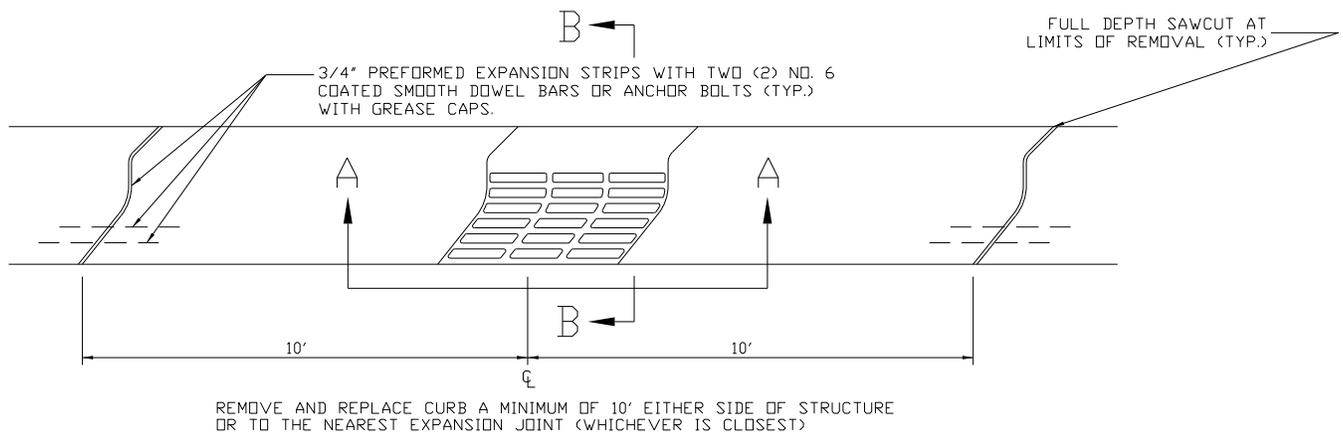


SECTION A-A

GENERAL NOTES:

1. PROVIDE SELECT GRANULAR BACKFILL, CA-6 GRADATION AROUND MANHOLE TO SUBGRADE ELEVATION.
2. WHEN THE FRAME DOES NOT MEET PROPOSED ELEVATION, A MINIMUM OF TWO TAPERED RUBBERIZED ADJUSTING RINGS SHALL BE USED FOR FINAL ADJUSTMENT. ONE CONCRETE RING NOT LESS THAN TWO INCHES THICK MAY ALSO BE USED. A MAXIMUM OF THREE ADJUSTING RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 12 INCHES. THE RING(S) AND FRAME SHALL BE SET ON A BED OF NON-HARDENING BUCKET MASTIC.
3. PRECAST ADJUSTING RINGS SHALL BE REINFORCED WITH NO. 3 GAUGE WIRE OR EQUIVALENT AND SHALL HAVE A MINIMUM THICKNESS OF TWO (2) INCHES.
4. WHEN ADJUSTMENTS ARE LOCATED IN TRAVEL LANES, THEY SHALL BE PROTECTED BY A BARRICADE WITH TWO (2) FLASHING LIGHTS, TWO (2) BARRICADES EACH WITH A SINGLE FLASHING LIGHT OR COVERED BY A ONE (1) INCH STEEL PLATE PROVIDED AND MAINTAINED BY THE CONTRACTOR UNTIL THE SURFACE RESTORATION IS COMPLETE.
5. WHEN ADJUSTMENTS TEMPORARILY RAISE A CASTING ABOVE THE ELEVATION OF THE PAVEMENT SURFACE, IN AREAS SUBJECTED TO VEHICULAR TRAFFIC, A BITUMINOUS RAMP SHALL BE TRANSITIONED A DISTANCE OF ONE (1) FOOT HORIZONTAL FOR EACH INCH OF VEHICLE DISTANCE ABOVE THE EXISTING PAVEMENT. SUCH RAMPS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL THE COMPLETION OF THE SURFACE RESTORATION.
6. FOR BOTH CONCRETE AND ASPHALT ROADS, THE BASE COURSE REPLACEMENT (CONCRETE COLLAR) SHALL BE EXTENDED DOWN TO THE TOP OF THE CONE SECTION.

REV.:	REV.:	CASTING ADJUSTMENTS FOR STRUCTURES IN PAVED AREAS	CITY OF WOOD DALE
REV.:	REV.:		
DRAWN BY:	DATE: 4-3-18		STORM 7 Packet Page #232



GENERAL NOTES:

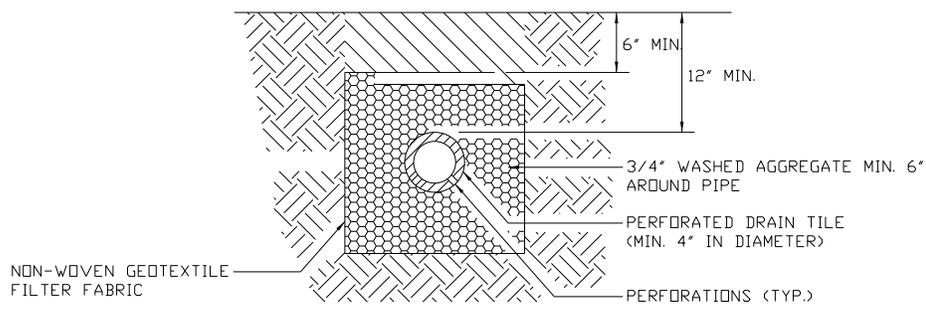
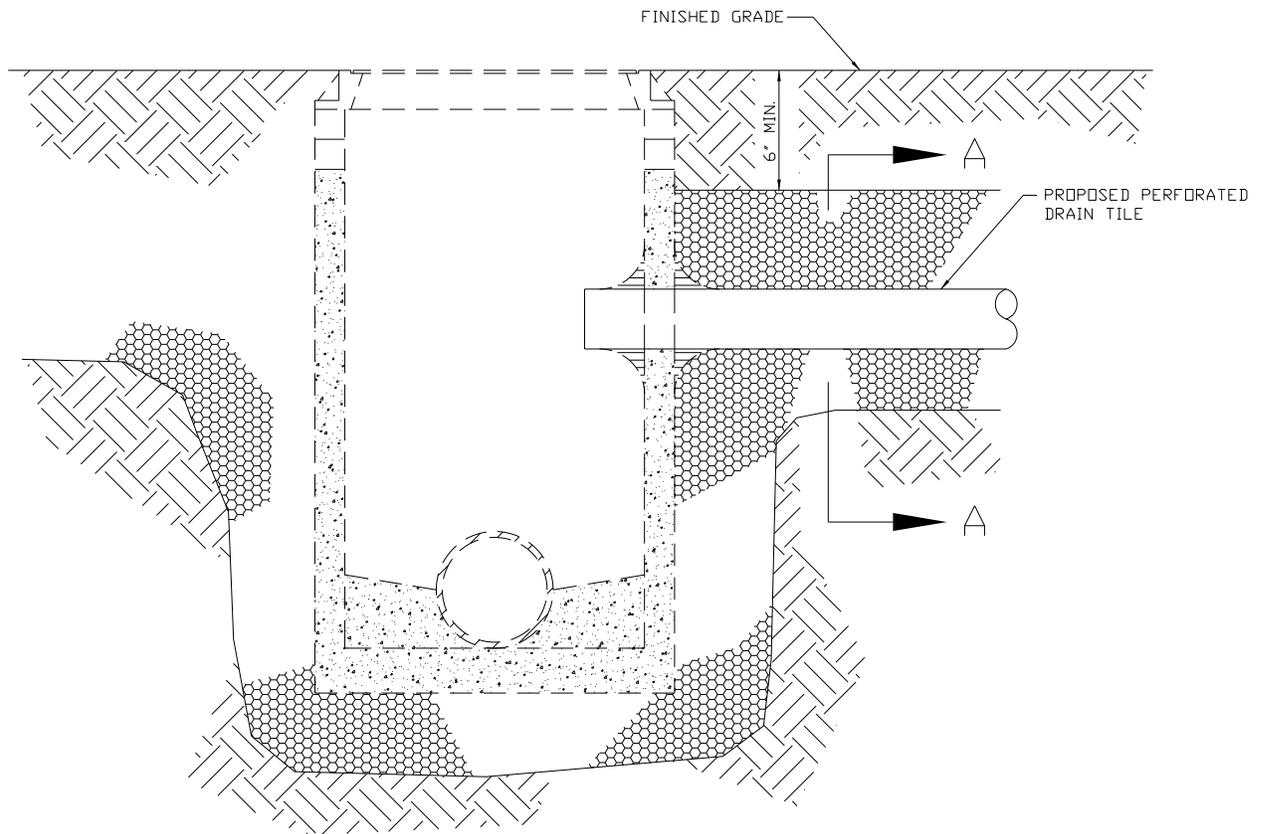
1. WHEN THE FRAME DOES NOT MEET PROPOSED ELEVATION, A MINIMUM OF TWO TAPERED RUBBERIZED ADJUSTING RINGS SHALL BE USED FOR FINAL ADJUSTMENT. ONE CONCRETE RING NOT LESS THAN TWO INCHES THICK MAY ALSO BE USED. A MAXIMUM OF THREE ADJUSTING RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 12 INCHES. THE RING(S) AND FRAME SHALL BE SET ON A BED OF NON-HARDENING BUCKET MASTIC.
2. PRECAST ADJUSTING RINGS SHALL BE REINFORCED WITH NO. 3 GAUGE WIRE OR EQUIVALENT AND SHALL HAVE A MINIMUM THICKNESS OF TWO (2) INCHES.
3. MORTAR SHALL NOT BE USED TO DRESS UP ADJUSTING RINGS.
4. ALL REMOVABLE CASTINGS SHALL BE ORIENTED SO THE OPENING IN THE GRATE PROVIDES THE MAXIMUM HYDRAULIC EFFICIENCY.

REV.:	REV.:
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DRAWN BY:	DATE: 4-3-18

CASTING ADJUSTMENTS FOR
STRUCTURES IN THE CURB LINE

CITY OF WOOD DALE

STORM 8
Packet Page #233

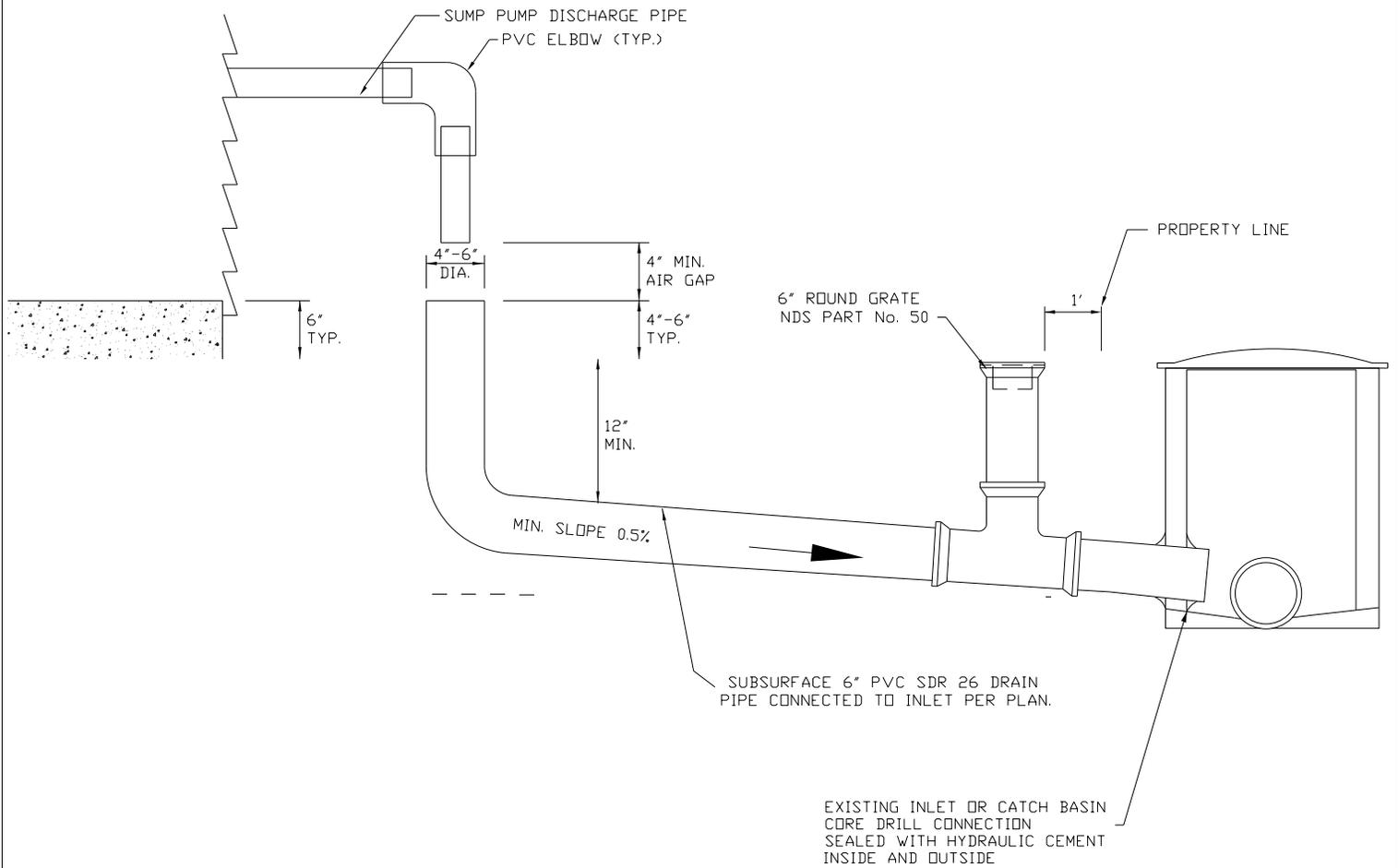


SECTION A-A

GENERAL NOTES:

1. BOTH THE TRENCH AND DRAIN TILE SHALL BE WRAPPED WITH NON-WOVEN GEOTEXTILE FILTER FABRIC.
2. WASHED AGGREGATE SHALL BE PLACED AROUND THE DRAIN TILE.
3. HOLE SHALL BE CORED DRILLED INTO STRUCTURE.
4. HYDRAULIC CEMENT SHALL BE PLACED AROUND THE PIPE TO SEAL THE OPENING, BOTH INSIDE AND OUTSIDE THE STRUCTURE.

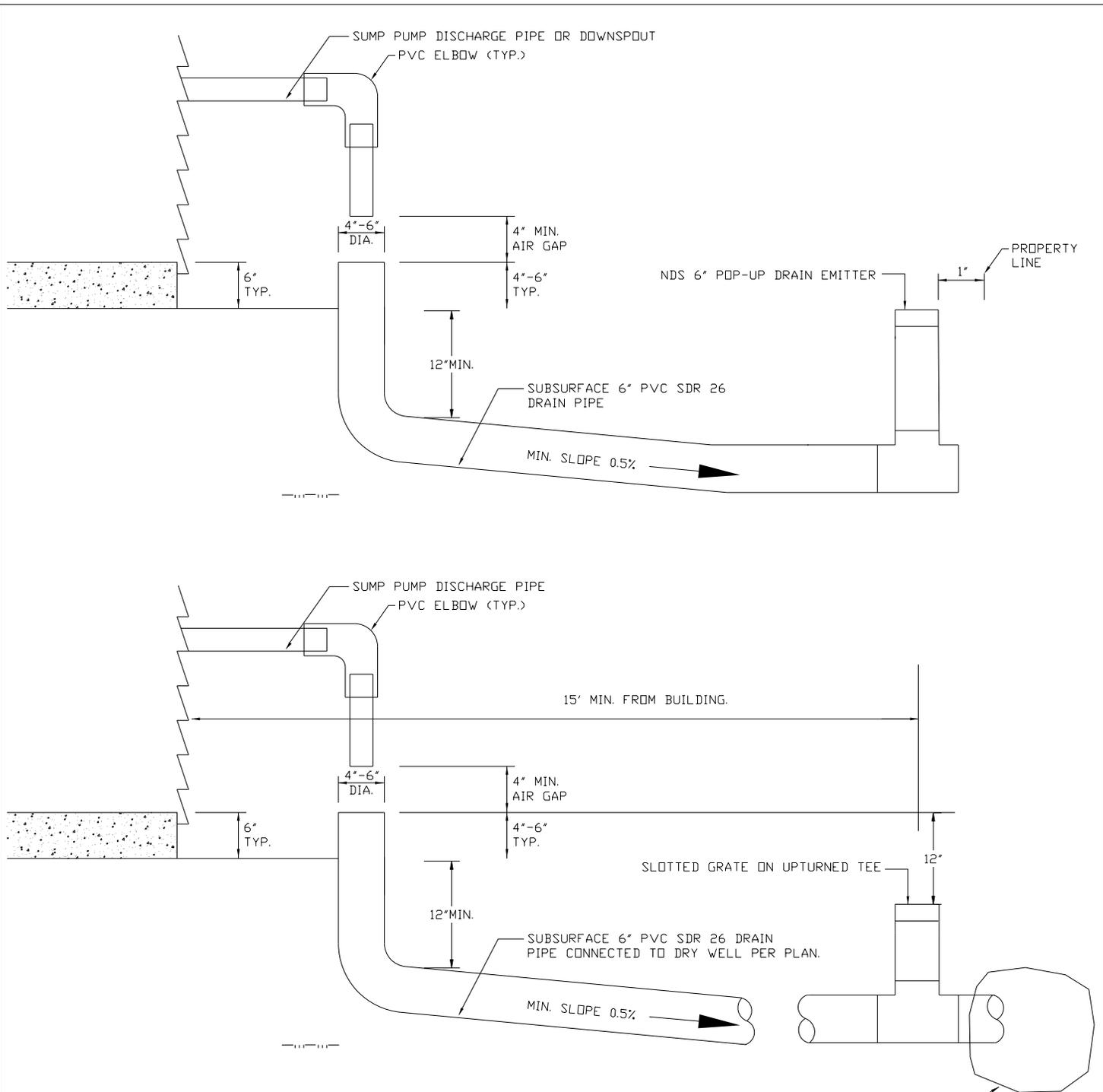
REV.:	REV.:	SUBSURFACE DRAIN TILE CONNECTION	CITY OF WOOD DALE
DRAWN BY:	DATE: 4-3-18		STORM 9 Packet Page #234



GENERAL NOTES:

1. SUMP PUMP CONNECTIONS THAT DIRECTLY CONNECT INTO THE SEPARATED STORM SEWER SYSTEM ARE ONLY PERMITTED IF APPROVED BY THE DIRECTOR OF PUBLIC WORKS OR COMMUNITY DEVELOPMENT.
2. INSTALLATION OF SUMP PUMP CONNECTION MUST BE INSPECTED BY THE CITY OF WOOD DALE.
3. INSTALLER ASSUMES FULL RESPONSIBILITY AND LIABILITY FOR ANY AND ALL DAMAGE TO UTILITIES OR ADJOINING PROPERTIES.
4. REFER TO STORM 10A FOR STANDARD SUBSURFACE DRAIN TILE SUMP PUMP CONNECTION.
5. EXISTING SIDEWALK SHALL BE REMOVED AND REPLACED.
6. SEE STORM 11 FOR TRENCH SECTION

REV.:	REV.:	DIRECT SUBSURFACE DRAIN TILE SUMP PUMP CONNECTION	CITY OF WOOD DALE
REV.:	REV.:		STORM 10
DRAWN BY:	DATE: 4-3-18		Packet Page #235



GENERAL NOTES:

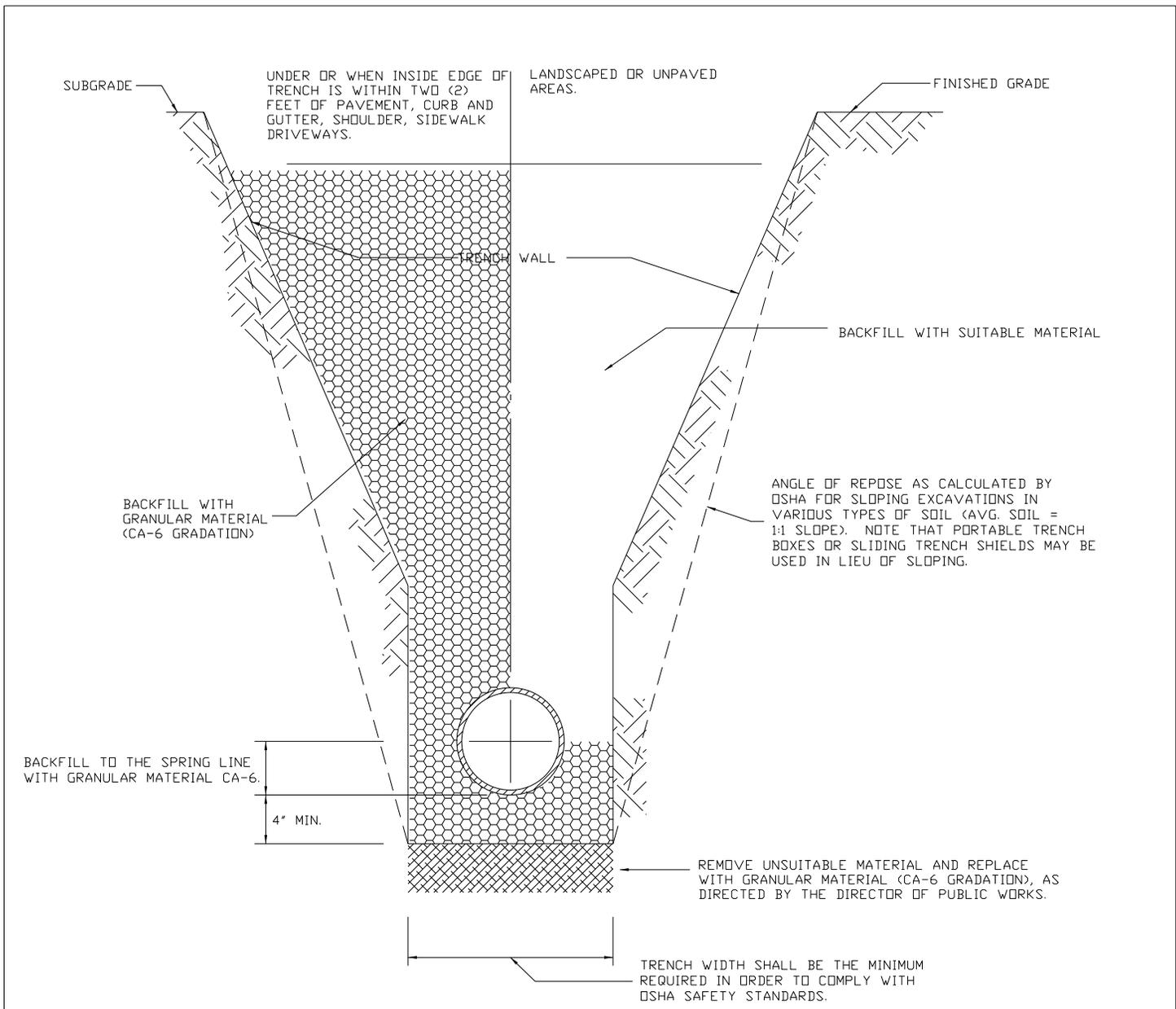
1. FOR RESIDENTIAL DEVELOPMENTS WITH AN ON-SITE STORM WATER CONTROL FACILITY, THE SUMP PUMP SHALL BE CONNECTED INTO THE STORM SEWER SYSTEM NOT LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY.
2. ALL OTHER SUMP PUMP CONNECTIONS ARE TO SPLASH TO GRADE UNLESS WRITTEN APPROVAL IS GIVEN BY THE DIRECTOR OF PUBLIC WORKS.
3. SUMP PUMP DISCHARGE SHALL BE DIRECTED AWAY FROM ADJACENT PROPERTIES.
4. INSTALLER ASSUMES FULL RESPONSIBILITY AND LIABILITY FOR ANY AND ALL DAMAGE TO UTILITIES OR ADJOINING PROPERTIES.
5. INSTALLATION OF SUMP PUMP DRAIN TILES MUST BE INSPECTED BY THE CITY OF WOOD DALE.
6. SLOTTED GRATE ON UPTURNED TEE SHALL BE 12" BELOW ENTRANCE POINT.
7. SEE STORM 11 FOR TRENCH SECTION.

END OF TEE WRAPPED IN GEOTEXTILE FABRIC AND PLACED IN FABRIC-LINED 1 CUBIC YARD DRY WELL

REV.:	REV.:
REV.:	REV.:
DRAWN BY:	DATE: 4-3-18

**SUBSURFACE DRAIN TILE
SUMP PUMP CONNECTION**

CITY OF WOOD DALE
STORM 10A



GENERAL NOTES:

1. CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A SAFE MANNER AT ALL TIMES AND SHALL COMPLY WITH ALL APPLICABLE GOVERNING REGULATIONS, INCLUDING BUT NOT LIMITED TO OSHA SAFETY STANDARDS.
2. ALL BACKFILL MATERIAL UP TO A HEIGHT OF 12 INCHES ABOVE THE PIPE SHALL BE CAREFULLY DEPOSITED IN UNIFORM LAYERS NOT EXCEEDING 8 INCHES THICK (LOOSE MEASURE). THE MATERIAL IN EACH LAYER SHALL BE FIRMLY COMPACTED BY RAMMING OR TAMPING WITH TOOLS APPROVED BY THE DIRECTOR OF PUBLIC WORKS IN SUCH A MANNER AS NOT TO DISTURB OR INJURE THE PIPE. THE BACKFILLING ABOVE THIS HEIGHT SHALL BE DONE AS NOTED BELOW.
3. GRANULAR BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED AS SPECIFIED IN NOTE 2, ABOVE. THE USE OF JETTING SHALL NOT BE ALLOWED UNLESS AUTHORIZED IN WRITING BY THE DIRECTOR OF PUBLIC WORKS. IT SHALL BE THE DESIGN ENGINEER OR CONTRACTOR'S RESPONSIBILITY TO PROVIDE APPROPRIATE JUSTIFICATION AND DOCUMENTATION (SOIL INVESTIGATION REPORTS, ETC.) TO THE CITY WITH THE REQUEST FOR APPROVAL OF JETTING.

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DRAWN BY:	DATE: 4-3-18

STORM SEWER
TRENCH SECTION

GENERAL NOTES CONT:

4. BACKFILL MATERIAL CONSISTING OF SUITABLE EXCAVATED MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING TWELVE (12) INCHES THICK (LOOSE MEASURE) AND EACH LAYER SHALL BE COMPACTED BY RAMMING OR TAMPING TO ACHIEVE THE REQUIRED COMPACTION. JETTING OF THIS MATERIAL MAY BE PERMITTED WHEN AUTHORIZED IN WRITING BY THE DIRECTOR OF PUBLIC WORKS. IT SHALL BE THE DESIGN ENGINEER OR THE CONTRACTOR'S RESPONSIBILITY TO SUBMIT APPROPRIATE JUSTIFICATION AND DOCUMENTATION (SOILS INVESTIGATION REPORTS, ETC.) TO THE CITY WITH THE REQUEST FOR APPROVAL OF JETTING.

5. GRANULAR MATERIAL FOR BACKFILL AND BEDDING SHALL BE GRAVEL, CRUSHED GRAVEL OR STONE MEETING THE REQUIREMENTS OF THE IDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" FOR COURSE APPREGATE (CA-6 GRADATION).

6. MINIMUM COVER OVER THE TOP OF PIPE SHALL BE SIX (6) INCHES BELOW FINISHED SUBGRADE IN PAVED AREAS AND TWELVE (12) INCHES BELOW FINISHED GRADE IN LANDSCAPE AREAS.

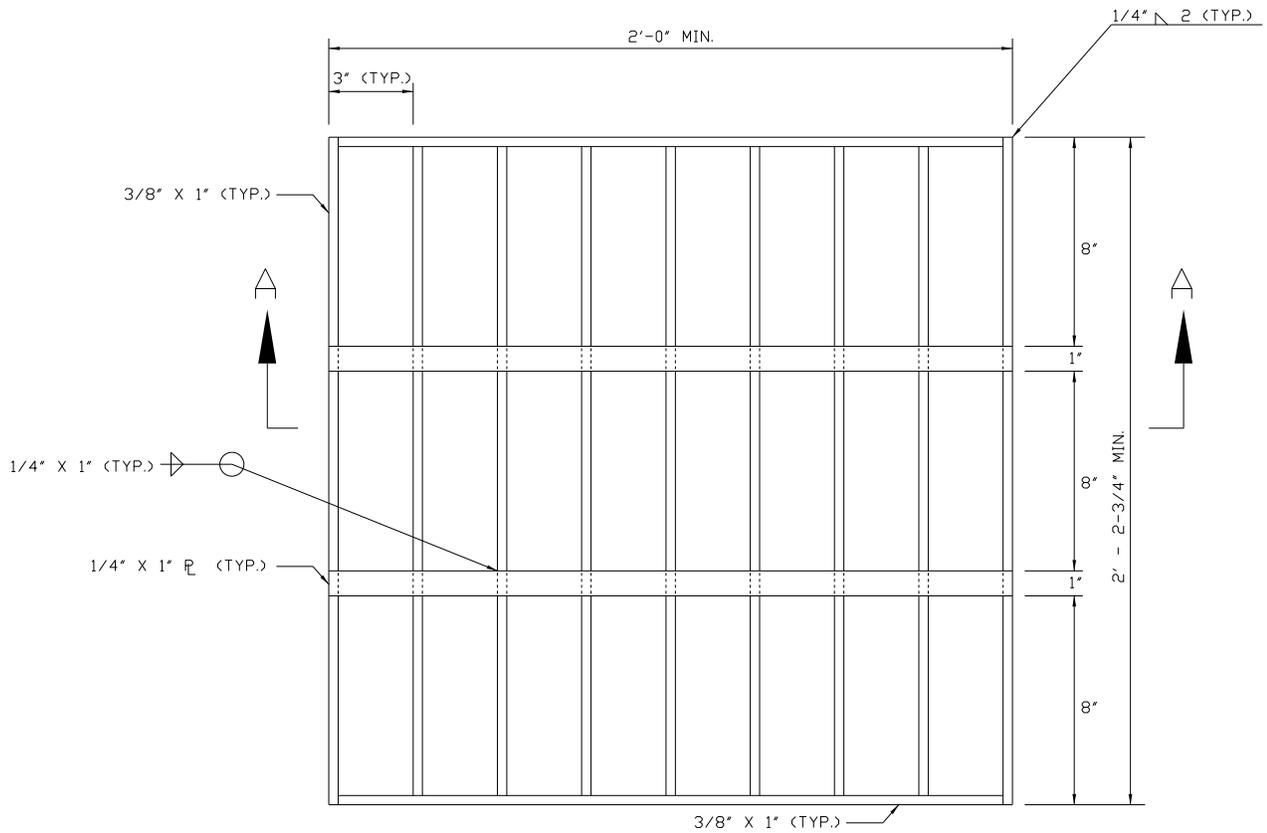
7. THE BEDDING THICKNESS SHALL BE EQUAL TO ONE-QUARTER ($\frac{1}{4}$) OF THE OUTSIDE DIAMETER OF THE PIPE BUT NOT LESS THAN FOUR (4) INCHES.

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DRAWN BY:	DATE: 4-3-18

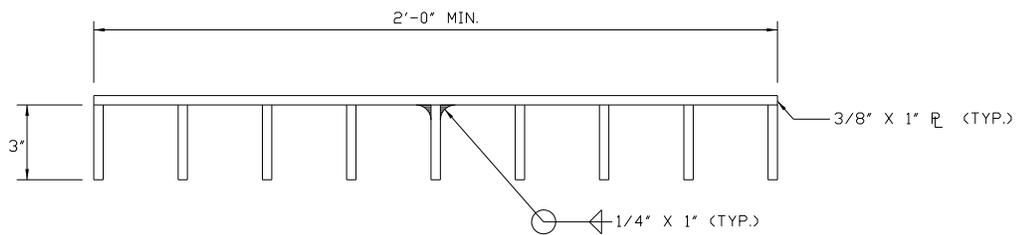
STORM SEWER
TRENCH SECTION

CITY OF WOOD DALE

STORM-11A
Packet Page #238



PLAN

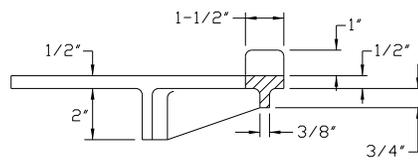
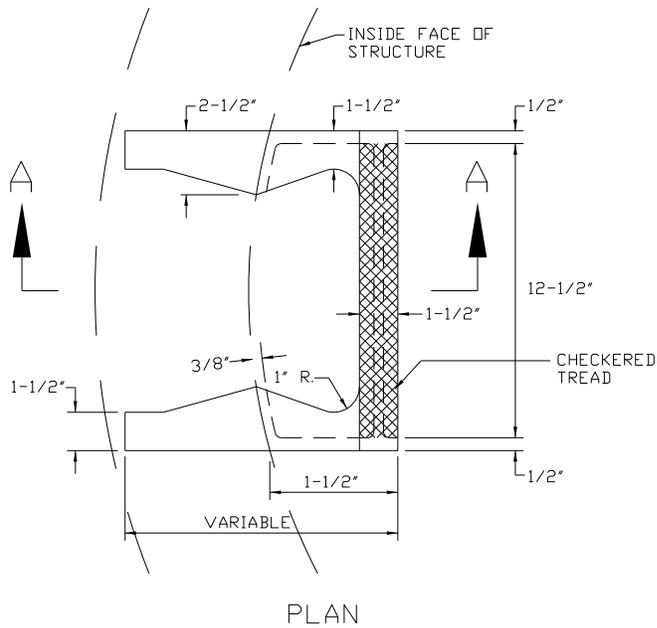


SECTION A-A

GENERAL NOTES:

1. STRUCTURAL STEEL SHAPES AND PLATES SHALL BE IN ACCORDANCE WITH ARTICLE 505.02 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
2. ALL FABRICATIONS SHALL BE COMPLETED AND READY FOR INSTALLATION BEFORE GALVANIZING.
3. GRATES SHALL BE BOLTED DOWN.

REV.:		STORM SEWER GRATE FOR BOX INLET	CITY OF WOOD DALE
REV.:	REV.:		
DRAWN BY:	DATE: 4-3-18		STORM 12 Packet Page #239



GENERAL NOTES:

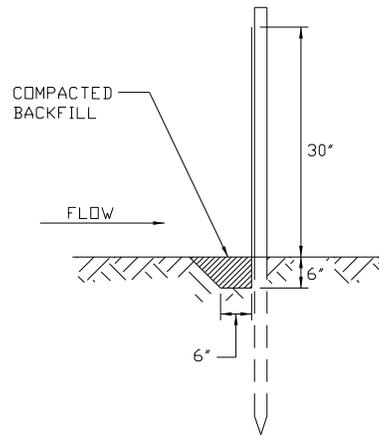
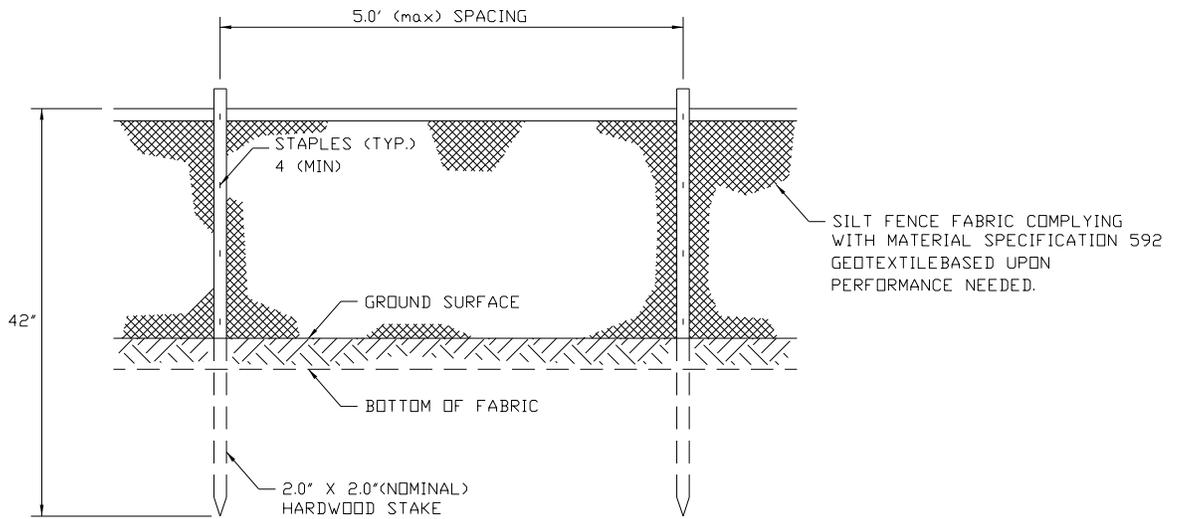
1. PLASTIC POLYMER STEPS SHALL BE USED.
2. STEPS SHALL BE EMBEDDED INTO WALL A MINIMUM OF 4 INCHES. STEPS SHALL NOT BE EXTENDED ON THE OUTSIDE.

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DRAWN BY:	DATE: 4-3-18

MANHOLE STEP

CITY OF WOOD DALE

Project Page #240



GENERAL NOTES:

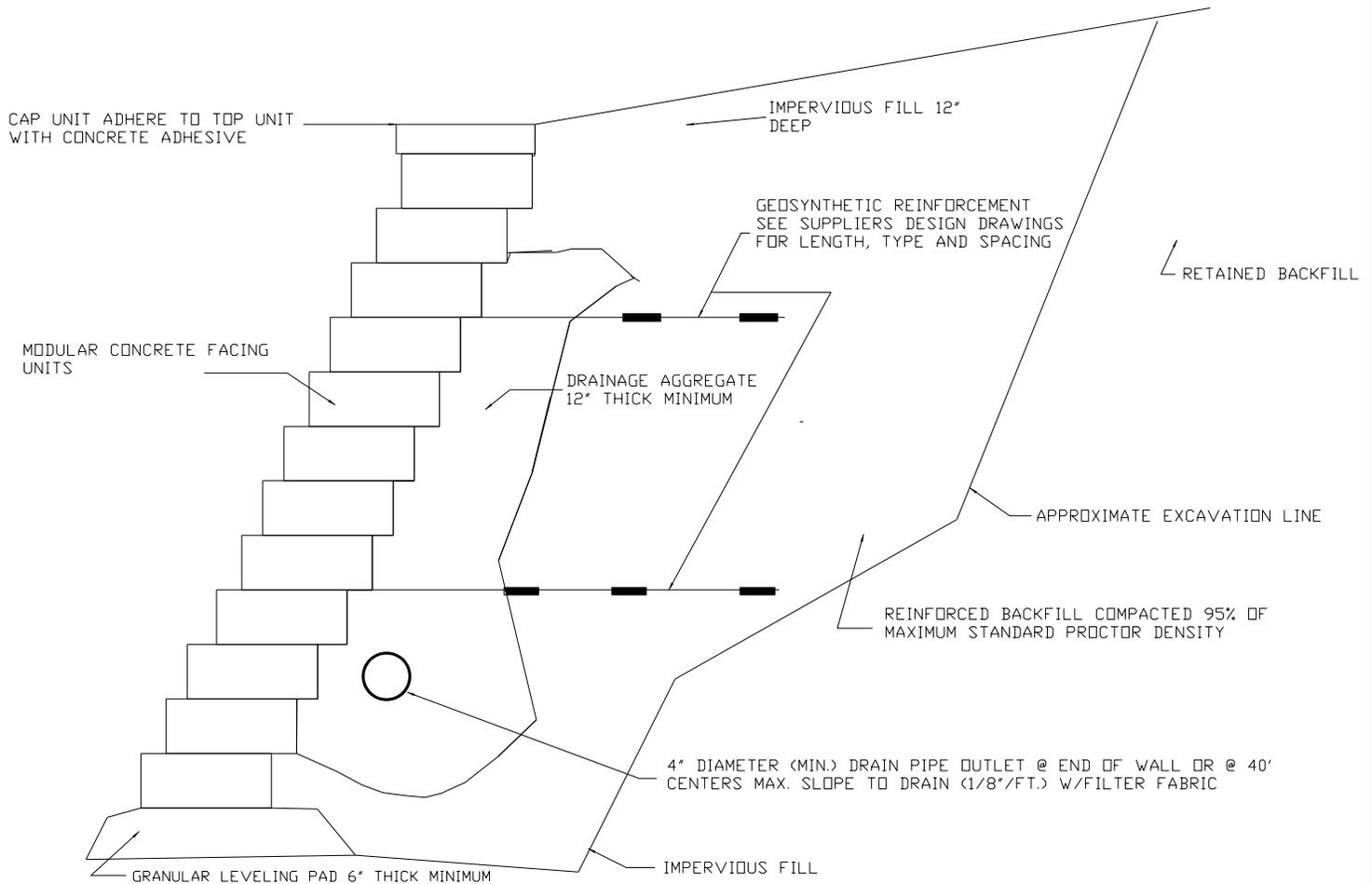
1. SILT FENCE SHALL BE MAINTAINED UNTIL THE AREA TRIBUTARY TO THE STRUCTURE HAS STABILIZED GROUND COVER, AS DETERMINED BY THE DIRECTOR OF PUBLIC WORKS.

REV.:	
REV.:	REV.:
DRAWN BY:	DATE: 4-3-18

SILT FENCE
INSTALLATION

CITY OF WOOD DALE
Sheet #241

IF CONDITIONS ARE DIFFERENT THAN THOSE STATED IN THESE DRAWINGS AND SPECIFICATIONS, THE CONTRACTOR MUST CONTACT THE ENGINEER PRIOR TO PROCEEDING WITH THE CONSTRUCTION OF THE WALL.



TYPICAL SECTION-REINFORCED RETAINING WALL

GENERAL NOTES:

1. RETAINING WALLS SHALL NOT BE APPROVED FOR A PERMIT UNLESS SUCH PLANS ARE SIGNED AND SEALED BY STRUCTURAL ENGINEER, OR PROFESSIONAL ENGINEER AUTHORIZED TO SIGN AND SEAL SUCH PLANS BY STATE STATUTE.
2. STRIP VEGETATION AND ORGANIC SOIL FROM WALL AND GEOSYNTHETIC ALIGNMENT.
3. BENCH CUT ALL EXCAVATED SLOPES.
4. DO NOT OVER EXCAVATE UNLESS DIRECTED BY SITE SOIL ENGINEER TO REMOVE UNSUITABLE SOIL.
5. SITE SOILS ENGINEER SHALL VERIFY FOUNDATION SOILS AS BEING COMPETENT PER THE DESIGN STANDARDS AND PARAMETERS.
6. LEVELING PAD SHALL CONSIST OF COMPACTED COURSE SAND OR CRUSHED GRAVEL 6" THICK MIN.
7. CONTRACTOR MAY OPT FOR A LEAN CONCRETE PAD. CONCRETE PAD SHALL BE UNREINFORCED, 3" THICK MAXIMUM.
8. MINIMUM EMBEDMENT OF WALL BELOW FINISH GRADE SHALL BE 6" FOR WALL HEIGHTS UNDER 4 FT. AND 12" FOR WALLS OVER 4 FT. UNLESS SHOWN DIFFERENTLY.
9. FOR UNITS TO BE EMBEDDED, COMPACT FILL IN FRONT OF UNITS AT THE SAME TIME FILL BEHIND UNITS IS COMPACTED.
10. DRAINAGE AGGREGATE SHALL BE INSTALLED DIRECTLY BEHIND THE WALL WITHIN 12" OF THE TIP OF THE WALL. DRAINAGE AGGREGATE SHALL NOT EXTEND BELOW FINAL GRADE IN FRONT OF WALL.
11. COMPACTION SHALL BE TO 95% OF MAXIMUM STANDARD PROCTOR DENSITY. (ASTM D-698)
12. COMPACTION TESTS SHALL BE TAKEN AS THE WALL IS INSTALLED. THE MIN. NUMBER OF TEST SHALL BE DETERMINED BY THE SITE SOIL ENGINEER.
13. COMPACTION WITHIN 3 FT. OF WALL SHALL BE LIMITED TO HAND OPERATED EQUIPMENT.
14. SEE SUPPLIERS DESIGN DRAWINGS FOR GEOSYNTHETIC TYPE, LENGTH AND LOCATION REQUIRED.
15. GEOSYNTHETIC SHALL BE PLACED WITH STRONGEST DIRECTION PERPENDICULAR TO WALL. FOLLOW GEOSYNTHETIC MANUFACTURER'S INSTALLATION INSTRUCTIONS AND WRITTEN SPECIFICATIONS.
16. CONTRACTOR SHALL DIRECT SURFACE RUNOFF TO AVOID DAMAGING WALL WHILE UNDER CONSTRUCTION.
17. ANY SURFACE DRAINAGE FEATURES, FINISH GRADING, PAVEMENT, OR TURF SHALL BE INSTALLED IMMEDIATELY AFTER WALL IS COMPLETED.
18. FOLLOW APPLICABLE PROVISIONS OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND WRITTEN SPECIFICATIONS.
19. A GEOTECHNICAL TESTING COMPANY MUST BE ON SITE FOR TESTING ON THE WALL BASE FOR ALL WALLS HIGHER THAN THREE FEET. A COPY OF ALL REPORTS SHALL BE PROVIDED TO THE CITY OF WOOD DALE.
20. A PROFESSIONAL ENGINEER OR STRUCTURAL ENGINEER SHALL PROVIDE A SIGNED AND SEALED STATEMENT THAT ALL WALLS HIGHER THAN THREE FEET WERE CONSTRUCTED PER APPROVED PLANS AND SPECIFICATIONS.

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DRAWN BY:	DATE: 4-3-18

RETAINING WALL

CITY OF WOOD DALE

STORM-16
Packet Page #242

21. A SPLIT-RAIL FENCE AT LEAST 42" HIGH SHALL BE CONSTRUCTED ALONG THE TOP OF ANY RETAINING WALL HIGHER THAN 3' WHEN A WALK OR PATH IS ON THE TOP SIDE OF THE WALL AND WITHIN 5' OF THE EDGE OF THE WALL. THE CITY MAY REQUIRE, OR THE OWNER/DEVELOPER MAY PROPOSE (SUBJECT TO APPROVAL BY THE DIRECTOR), AN ALTERNATIVE TYPE OF FENCE IF DEEMED APPROPRIATE BASED ON SPECIFIC SITE CONDITIONS AND CHARACTERISTICS. IF A PARKING LOT OR DRIVEWAY IS SIMILARLY LOCATED THEN A GUARDRAIL PER IDOT SPECIFICATIONS SHALL BE USED IN LIEU OF A FENCE.

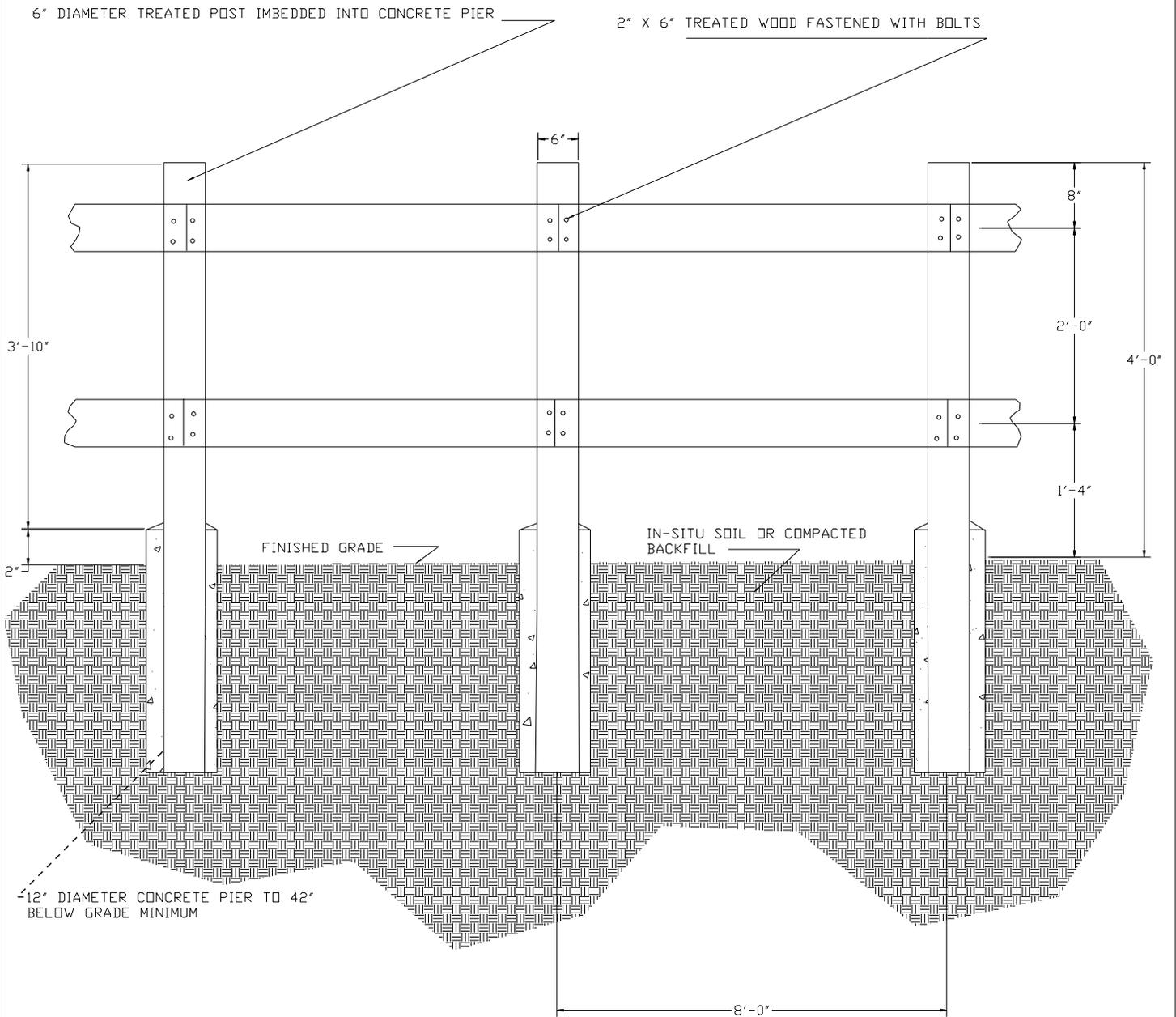
22. A SPLIT-RAIL FENCE AT LEAST 42" HIGH SHALL BE CONSTRUCTED ALONG THE TOP OF ANY SLOPE STEEPER THAN 4H:1V THAT STARTS WITHIN 5' OF A WALK OR PATH AND DESCENDS CONTINUOUSLY TO THE TOP OF A RETAINING WALL HIGHER THAN 3'. THE CITY MAY REQUIRE AN ALTERNATIVE TYPE OF FENCE IF DEEMED APPROPRIATE BASED ON SPECIFIC SITE CONDITIONS AND CHARACTERISTICS. IF A PARKING LOT OR DRIVEWAY IS SIMILARLY LOCATED THEN A GUARDRAIL PER IDOT SPECIFICATIONS SHALL BE USED IN LIEU OF A FENCE.

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RETAINING WALL CONT.

CITY OF WOOD DALE

STORM-16A
 Packet Page #243



NOTES:

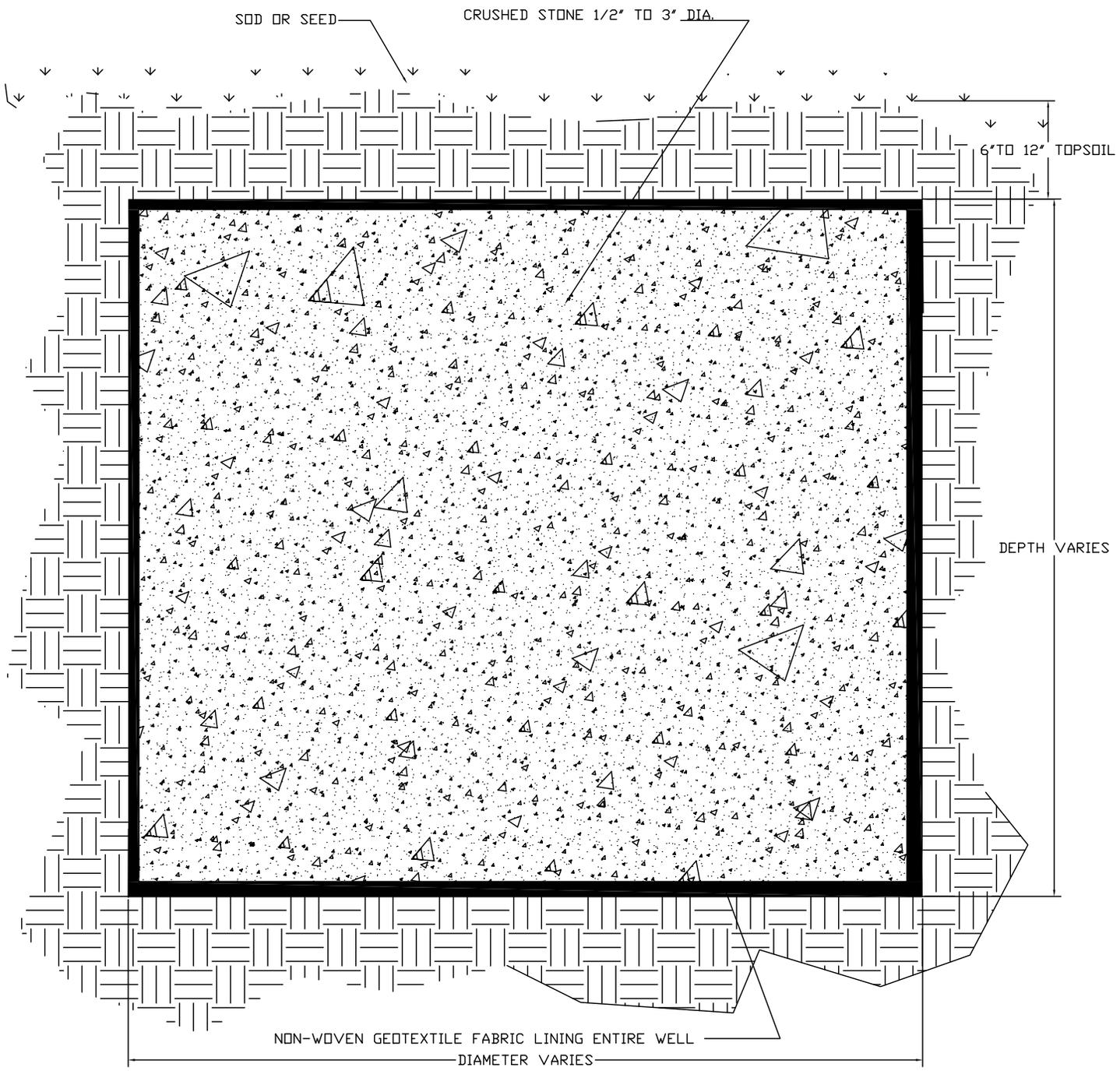
1. ALTERNATIVE MATERIALS AND DIMENSIONS MAY BE ALLOWED ONLY WITH WRITTEN PERMISSION FROM THE CITY.
2. POSTS SHALL BE NOTCHED 1-1/2" DEEP AT RAIL CONNECTIONS.
3. THE MATERIALS AND DIMENSIONS SHALL BE ADJUSTED BY THE DESIGN ENGINEER FOR REVIEW BY THE CITY ACCORDING TO ANTICIPATED LOADS AND CONDITIONS.

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SPLIT-RAIL
FENCE DETAIL

CITY OF WOOD DALE

STORM-17
Packet Page #244



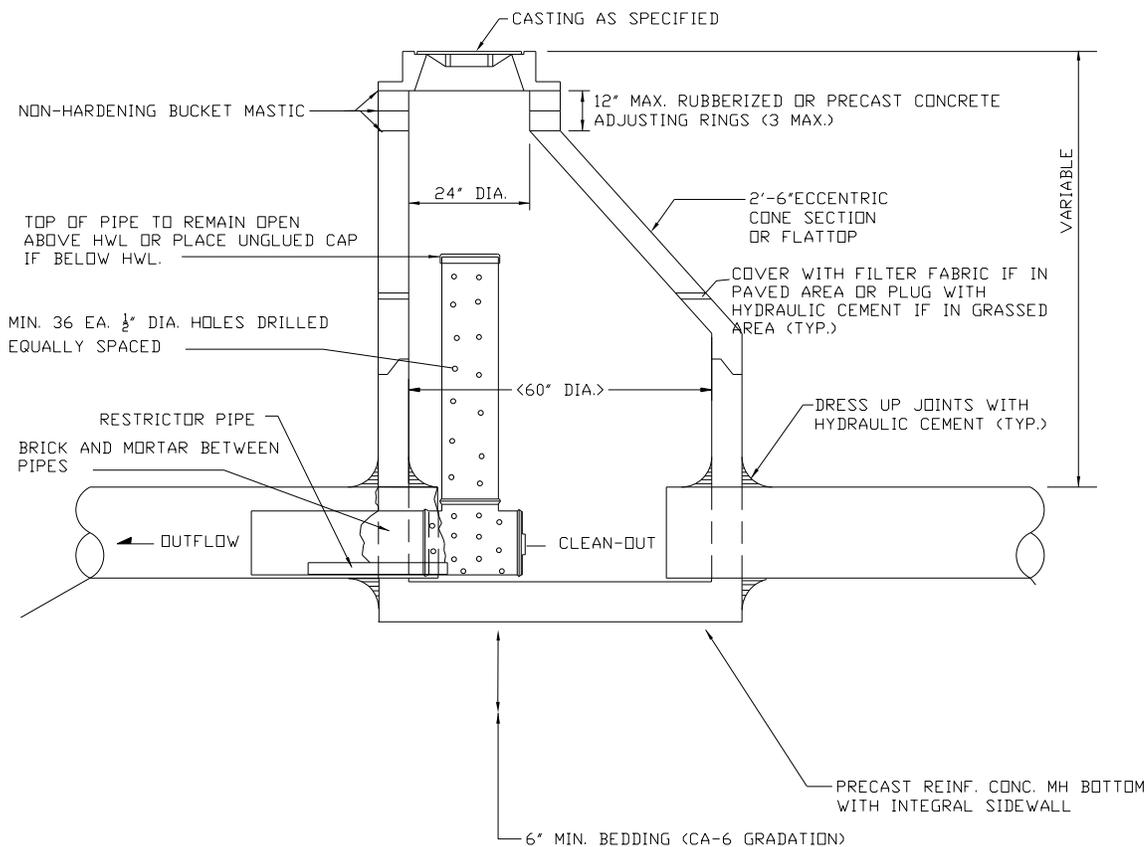
GENERAL NOTES:

1. AGGREGATE SHALL BE IDOT CA-7 OR APPROVED EQUIVALENT. AGGREGATE SHALL BE CLEAN AND WASHED FREE OF FINES,
2. DRY WELL SHALL BE LOCATED A MINIMUM OF 15 FEET FROM BUILDING FOUNDATIONS AND 20 FEET FROM SANITARY SEWERS.

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DRAWN BY:	DATE: 4-03-18

DRY WELL

CITY OF WOOD DALE
Packet Page #245



GENERAL NOTES:

1. RESTRICTOR PIPE MATERIAL CAN BE SCHEDULE 40 PVC PIPE.
2. 6" DIA. SDR 26 PVC PIPE GROUTED INTO THE OUTLET PIPE. EXTEND RESTRICTOR PIPE INTO VISIBLE AREA OF TEE FOR VERIFICATION.
3. CASTINGS SHALL HAVE FACTORY INSTALLED O-RING GASKETS.
4. MANHOLE CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH MANHOLE TYPE A (STORM 1) SPECIFICATIONS.

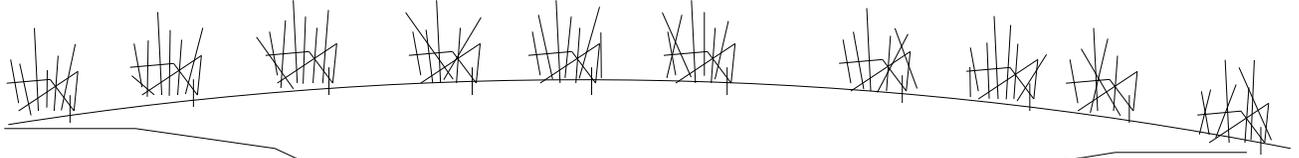
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RESTRICTOR DETAIL

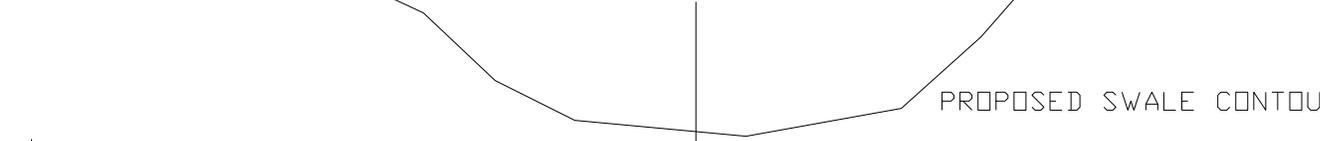
CITY OF WOOD DALE

STORM 19

EXISTING GROUND CONTOUR



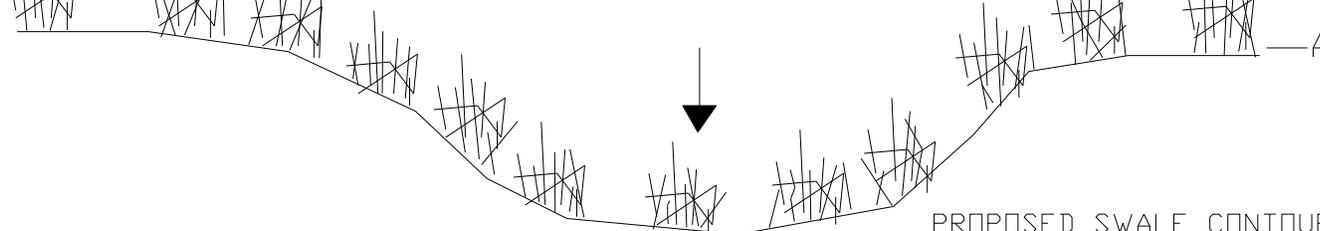
PROPOSED SWALE CONTOUR



DIRECTION OF DRAINAGE



A —



PROPOSED SWALE CONTOUR

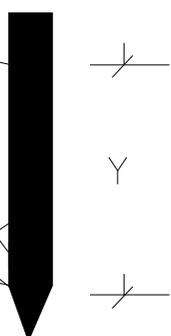
STAKE



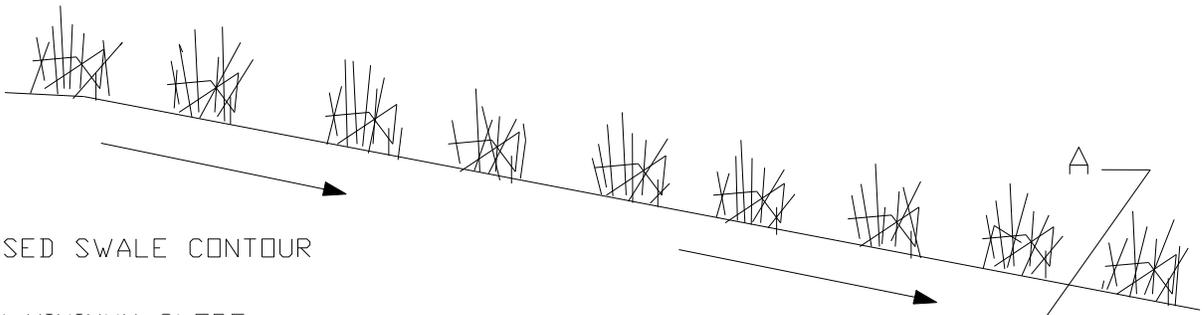
Y

STRING LINE

STAKE

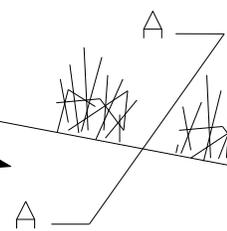


Y



PROPOSED SWALE CONTOUR

1% MINIMUM SLOPE



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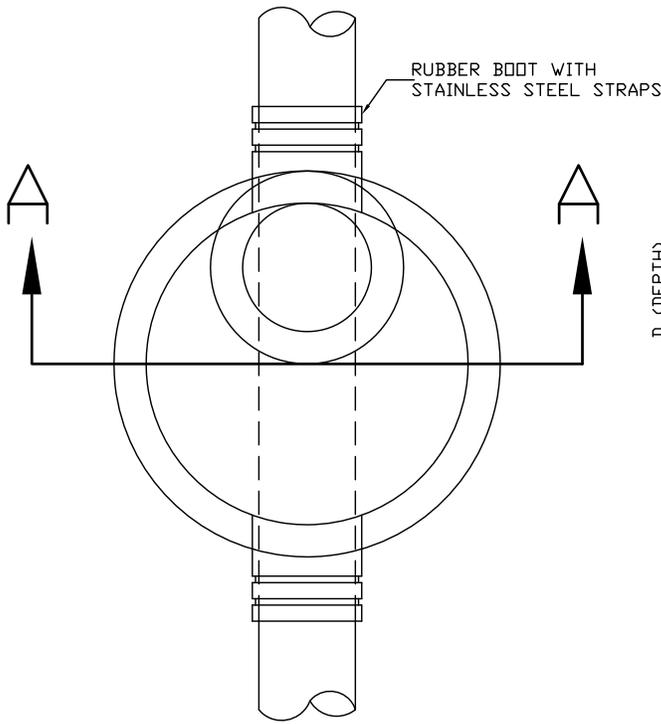
SWALE CONSTRUCTION

CITY OF WOOD DALE

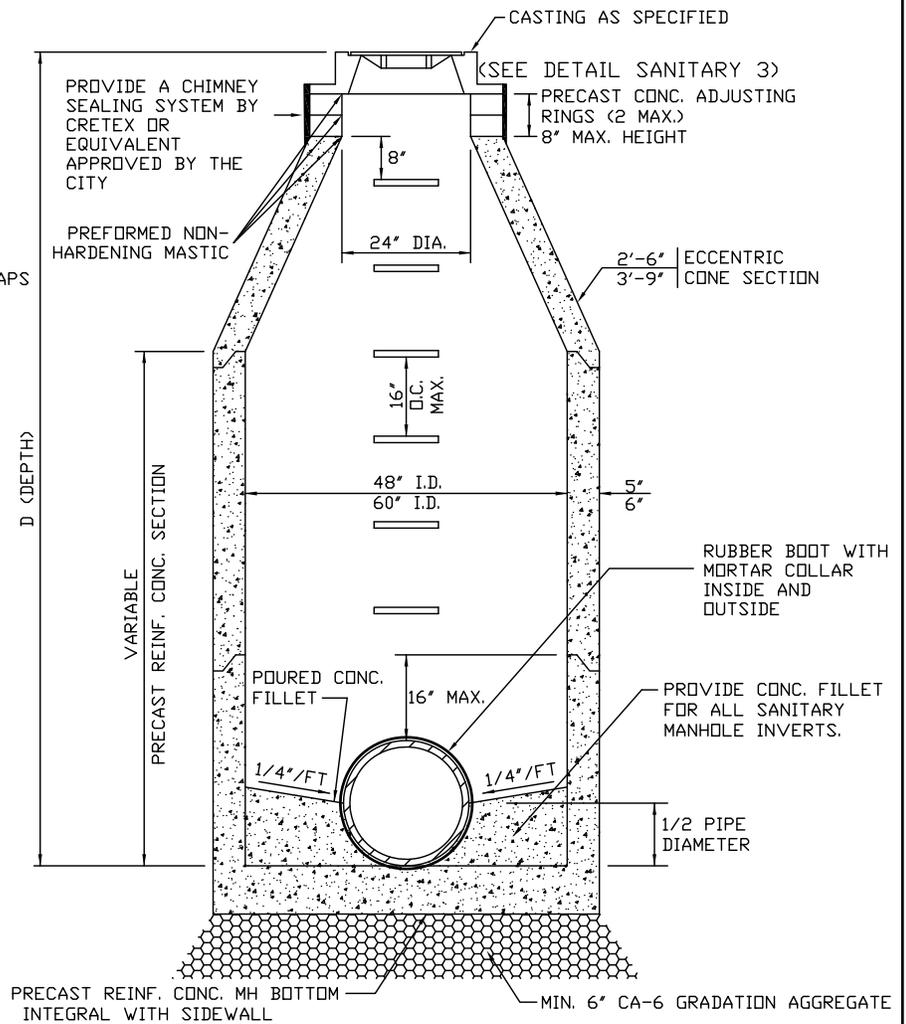
STORM 20
Packet Page #247

SECTION 300- SANITARY SEWER DETAILS

SANITARY MANHOLE
SANITARY MANHOLE FRAME AND COVER
SANITARY RISER FOR SERVICE LATERAL 1
SANITARY RISER FOR SERVICE LATERAL 2
SANITARY SEWER TRENCH SECTION 1
SANITARY SEWER TRENCH SECTION 2
PRECAST CONE AND CHIMNEY
CASING DETAIL
CORING BOOT



PLAN



SECTION A-A

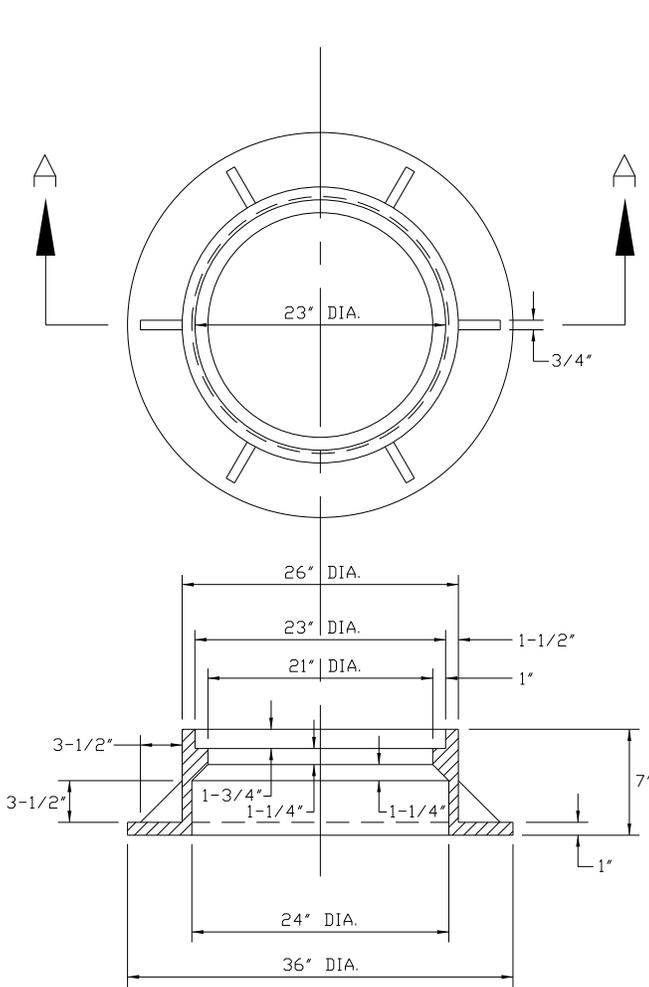
GENERAL NOTES:

1. PROVIDE PRECAST REINFORCED CONCRETE BARREL AND RISER SECTION. CONCRETE BLOCK CONSTRUCTION IS NOT PERMITTED.
2. PROVIDE SELECT GRANULAR BACKFILL AROUND MANHOLE TO SUBGRADE ELEVATION IN PAVED AREAS. MATERIAL SHALL MEET THE REQUIREMENTS OF IDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" COARSE AGGREGATE CA-6 GRADATION, OR AS OTHERWISE DIRECTED BY THE CITY OR ITS REPRESENTATIVE.
3. APPLY A CONTINUOUS LAYER OF NON-HARDENING PREFORMED BITUMINOUS MASTIC MATERIAL (RUB-R-NEK OR EZ STICK) TO EACH JOINT TO PREVENT INFLOW.
4. WHEN THE FRAME DOES NOT MEET PROPOSED ELEVATION, A MAXIMUM OF TWO PRECAST CONCRETE RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 8 INCHES. THE RING(S) AND FRAME SHALL BE SET IN A BED OF PREFORMED NON-HARDENING MASTIC (RUB-R-NEK OR APPROVED EQUAL).
5. PRECAST ADJUSTING RINGS SHALL BE REINFORCED WITH NO. 3 GAUGE WIRE OR EQUIVALENT.
6. MORTAR SHALL NOT BE USED TO DRESS UP ADJUSTING RINGS AND/OR FRAME.
7. ONLY PLASTIC POLYMER STEPS SHALL BE USED.
8. WHEN MANHOLE DEPTH IS OVER 12 FEET, THE THICKNESS OF THE BASE SHALL BE A MINIMUM OF 10 INCHES. WHEN MANHOLE DEPTH IS LESS THAN 12 FEET, THE THICKNESS SHALL BE A MINIMUM OF 8 INCHES.
9. DRESS UP INTERIOR JOINTS WITH HYDRAULIC CEMENT.
10. SANITARY MANHOLES SHALL BE CONSTRUCTED WITH A CHIMNEY SEALING SYSTEM BY CRETEX OR AN EQUAL APPROVED BY THE CITY, WHEN IN PAVMENT OR SUBJECT TO INUNDATION.

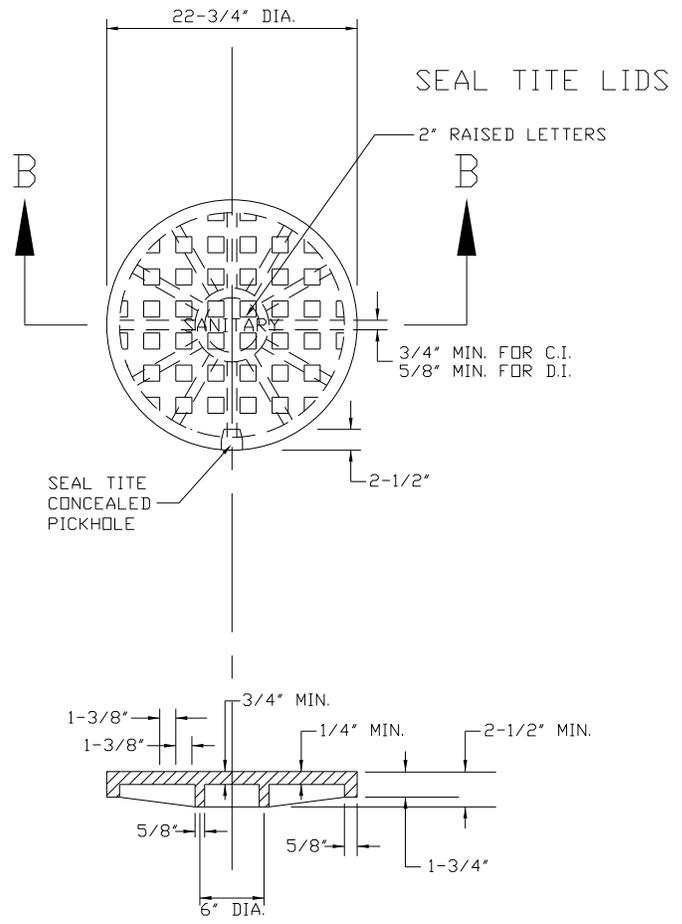
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SANITARY MANHOLE

CITY OF WOOD DALE
 Packet Page #249
 SANITARY 1



SECTION A-A
CAST FRAME



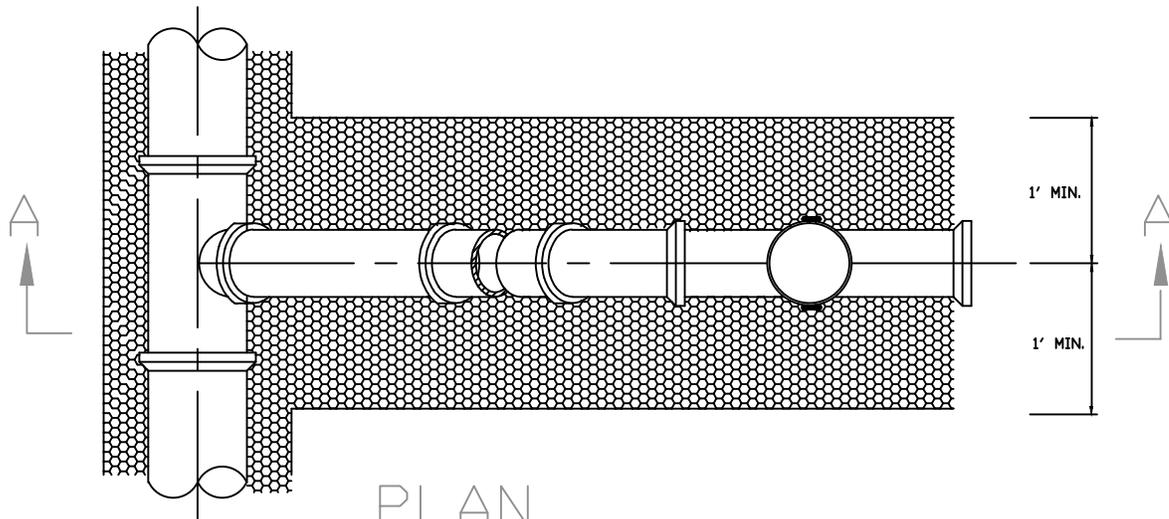
SECTION B-B
CAST CLOSED LID
(SEAL TITE CONCEALED PICKHOLE)

GENERAL NOTES:

1. DUCTILE IRON CASTING SHALL BE TESTED IN ACCORDANCE WITH FEDERAL SPECIFICATIONS.
2. ALL FRAMES AND COVERS SHALL HAVE A MACHINED HORIZONTAL AND VERTICAL BEARING SURFACES. PICK HOLES IN THE COVER SHALL NOT BE OPEN.
3. THE MANHOLE COVERS SHALL HAVE RAISED LETTERS AS SHOWN.
4. DIMENSIONS FOR CASTINGS ARE COMPARABLE TO EAST JORDAN IRON WORKS, INC. 1022 OR NEENAH FOUNDRY 1772 FURNISHED WITH TYPE F CONCEALED PICK HOLES.
5. WATERPROOF, BOLTDOWN FRAME AND COVER SHALL BE USED IN ANY LOCATION SUBJECT TO INUNDATION. (NEENAH R-1916, EAST JORDAN 1022 WT WITH TYPE 5 CLOSED PICK HOLES OR APPROVED EQUAL).
6. LIDS SHALL BE "WATERTITE" OR "SELF-SEALING" WITH A FACTORY INSTALLED GASKET.

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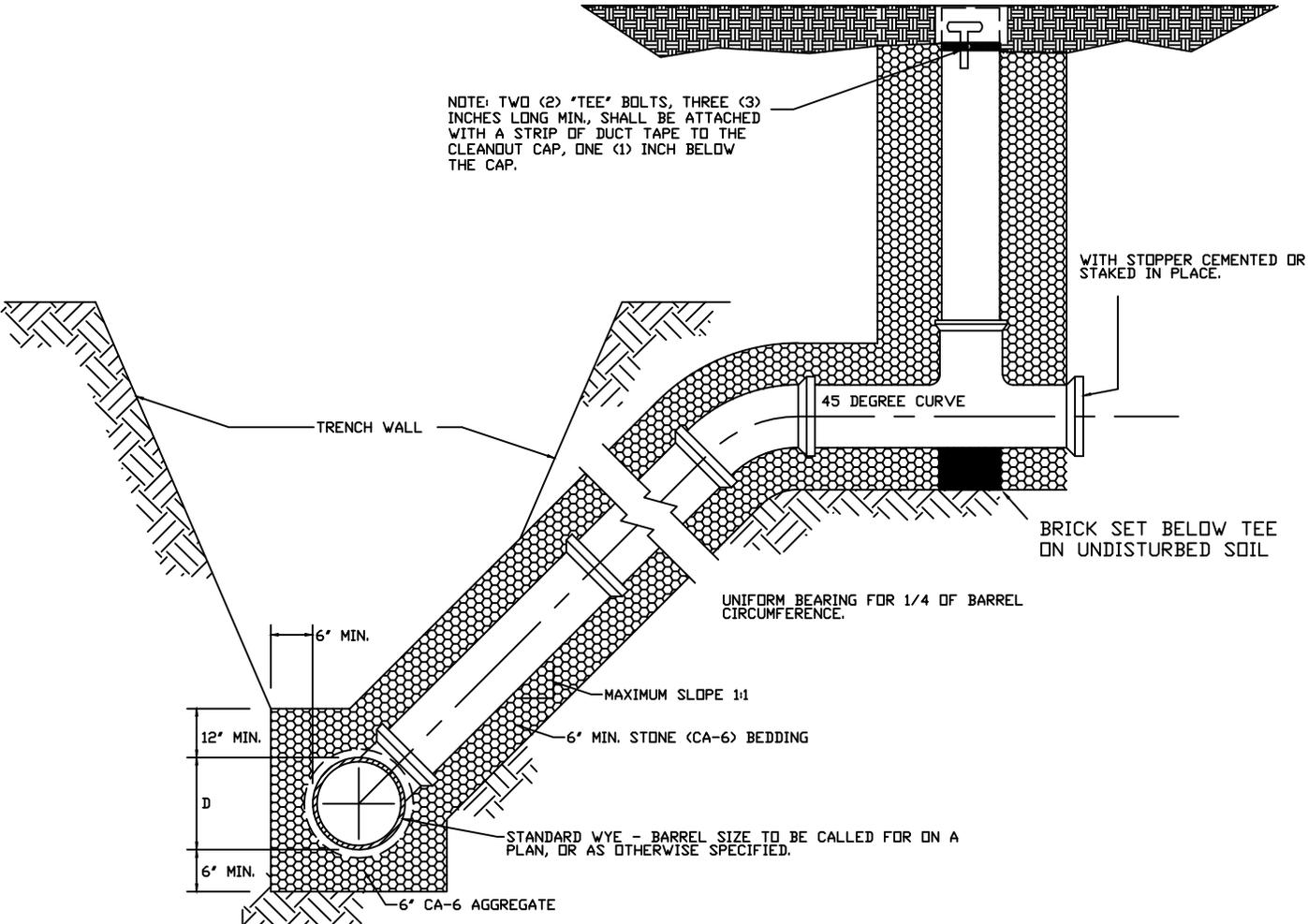
SANITARY MANHOLE
FRAME AND COVER



PLAN

CAP TO BE SET AT FINISHED GRADE.
 CAP IS TO BE AN ASTM 3034 SDR 26
 (6") PVC PUSH ON CAP. GASKET SHALL
 BE REMOVED FROM CAP.

NOTE: TWO (2) "TEE" BOLTS, THREE (3)
 INCHES LONG MIN., SHALL BE ATTACHED
 WITH A STRIP OF DUCT TAPE TO THE
 CLEANOUT CAP, ONE (1) INCH BELOW
 THE CAP.



SECTION A-A

REV.:	CJW	REV.:	11-05-2009
REV.:	ERH	REV.:	8-07-09
DRAWN BY:	VJGL	DATE:	2-16-98

RISER W/CLEANOUT
 SERVICE LATERAL

CITY OF WOOD DALE
 SANITARY 4

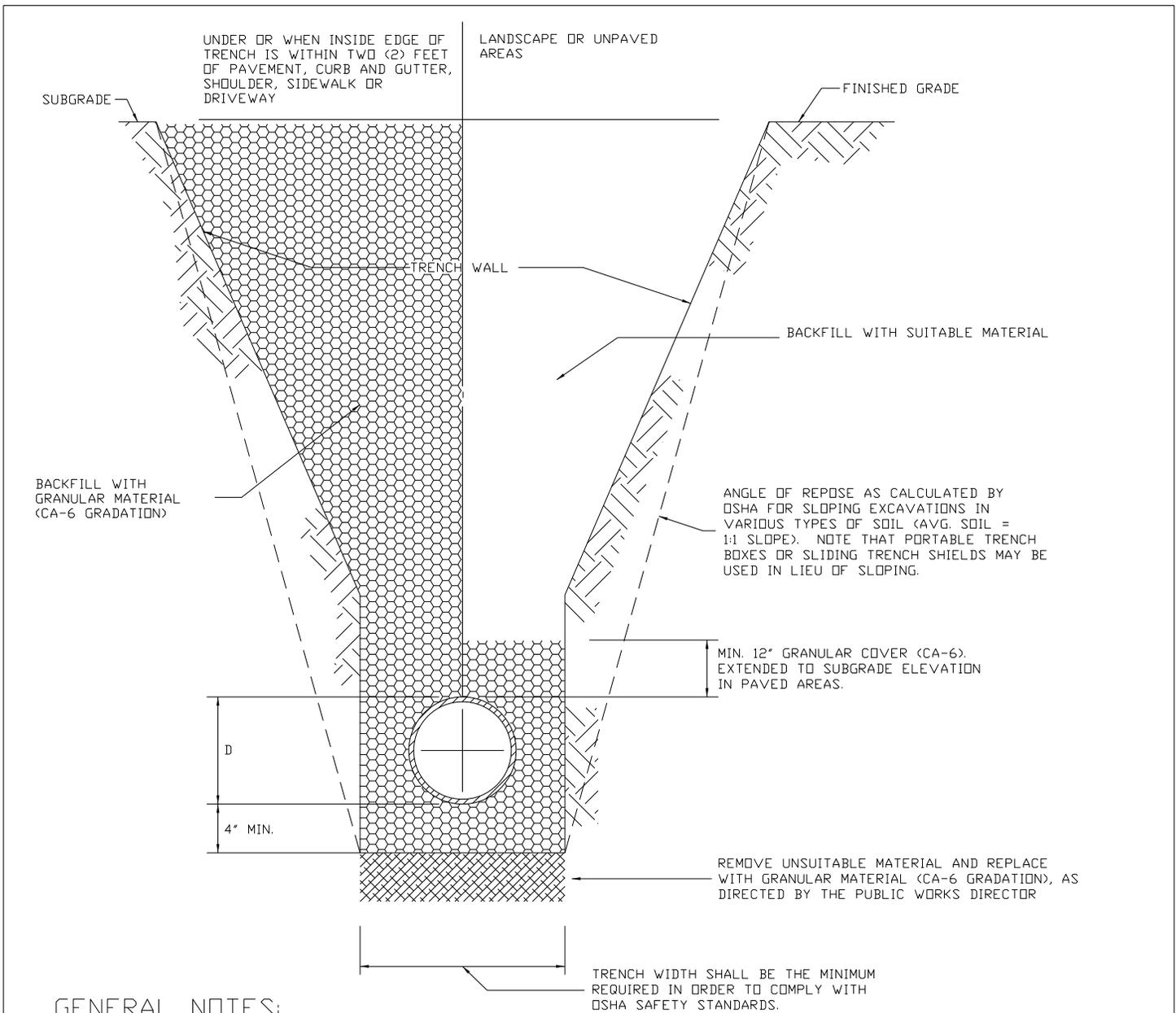
GENERAL NOTES:

1. THE OPEN ENDS SHALL BE PROTECTED FROM DEBRIS ENTERING THE LATERAL.
2. MAXIMUM SLOPE SHALL BE LESS THAN 1 TO 1 WHEN IT IS NECESSARY TO SECURE BEDDING IN UNDISTURBED EARTH.
3. WHEN SERVICE CONNECTION REQUIRES CORING AN EXISTING MAIN, A SEWER SADDLE SHALL BE USED. CLOW TYPE SHALL BE "SEALTITE" OR APPROVED EQUAL. BANDS AND BOLTS SHALL BE STAINLESS STEEL.
4. SERVICE TEE AND CLEAN OUT RISER SHALL BE PVC (SDR26/ASTM D2241). FOR CLEAN OUTS LOCATED WITHIN LANDSCAPED AREAS, THE CONTRACTOR SHALL USE P1215 DWV BUSHING AND G106 CAP MANUFACTURED BY PLASTIC TRENDS, INC (ASTM 3034). GASKET SHALL BE REMOVED FROM CAP.
5. CLEAN OUTS SHALL NOT BE LOCATED IN DRIVEWAY APRONS OR SIDEWALK UNLESS APPROVED BY THE PUBLIC WORKS DIRECTOR IF ALLOWED, THE CONTRACTOR SHALL USE SCHEDULE 40 DWV FIPT HUB ADAPTER AND THE RAISED MIPT PLUG (ASTM D 2665 OR ASTM D 1785) AND AN EAST JORDAN FRAME (2885) AND LID (2975). EQUIVALENT FITTINGS FROM OTHER MANUFACTURES ARE ACCEPTABLE AT THE DISCRETION OF THE PUBLIC WORKS DIRECTOR. WRITTEN ACCEPTANCE MUST BE OBTAINED PRIOR TO THE EQUIVALENT MATERIALS BEING APPROVED. GEOMETRIC STANDARDS CANNOT BE VARIED.

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SANITARY RISER FOR
SERVICE LATERAL

CITY OF WOOD DALE
Packet Page #252 SANITARY 4A



GENERAL NOTES:

1. CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A SAFE MANNER AT ALL TIMES AND SHALL COMPLY WITH ALL APPLICABLE GOVERNING REGULATIONS, INCLUDING BUT NOT LIMITED TO OSHA SAFETY STANDARDS.
2. ALL BACKFILL MATERIAL UP TO A HEIGHT OF 12 INCHES ABOVE THE PIPE SHALL BE CAREFULLY DEPOSITED IN UNIFORM LAYERS NOT EXCEEDING 8 INCHES THICK (LOOSE MEASURE). THE MATERIAL IN EACH LAYER SHALL BE FIRMLY COMPACTED BY RAMMING OR TAMPING WITH TOOLS APPROVED BY THE PUBLIC WORKS DIRECTOR IN SUCH A MANNER AS NOT TO DISTURB OR INJURE THE PIPE. THE BACKFILLING ABOVE THIS HEIGHT SHALL BE DONE AS NOTED BELOW.
3. GRANULAR BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED AS SPECIFIED IN NOTE 2, ABOVE. THE USE OF JETTING SHALL NOT BE ALLOWED UNLESS AUTHORIZED IN WRITING BY THE PUBLIC WORKS DIRECTOR. IT SHALL BE THE DESIGN ENGINEER OR CONTRACTOR'S RESPONSIBILITY TO PROVIDE APPROPRIATE JUSTIFICATION AND DOCUMENTATION (SOIL INVESTIGATION REPORTS, ETC.) TO THE CITY WITH THE REQUEST FOR APPROVAL OF JETTING.
4. BACKFILL MATERIAL CONSISTING OF SUITABLE EXCAVATED MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING TWELVE (12) INCHES THICK (LOOSE MEASURE) AND EACH LAYER SHALL BE COMPACTED BY RAMMING OR TAMPING TO ACHIEVE THE REQUIRED COMPACTION. JETTING OF THIS MATERIAL MAY BE PERMITTED WHEN AUTHORIZED IN WRITING BY THE PUBLIC WORKS DIRECTOR. IT SHALL BE THE DESIGN ENGINEER OR THE CONTRACTOR'S RESPONSIBILITY TO SUBMIT APPROPRIATE JUSTIFICATION AND DOCUMENTATION (SOIL INVESTIGATION REPORTS, ETC.) TO THE CITY WITH THE REQUEST FOR APPROVAL OF JETTING.

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SANITARY SEWER
TRENCH SECTION

GENERAL NOTES CONT:

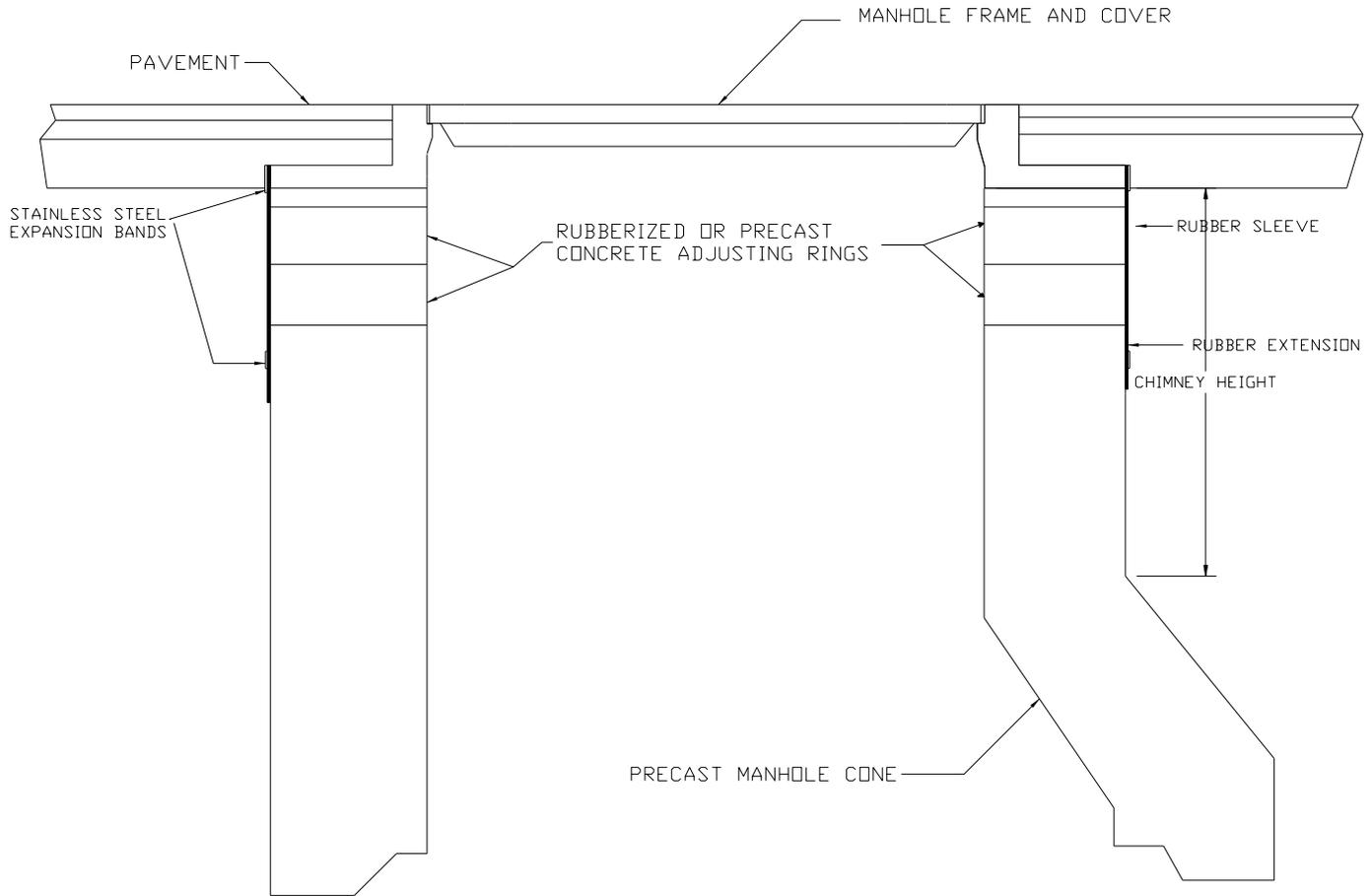
5. GRANULAR MATERIAL FOR BACKFILL AND BEDDING SHALL BE GRAVEL, CRUSHED GRAVEL OR STONE MEETING THE REQUIREMENTS OF THE IDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" FOR COARSE AGGREGATE (CA-6 GRADATION).
6. MINIMUM COVER OVER THE TOP OF PIPE SHALL BE TWELVE (12) INCHES BELOW FINISHED SUBGRADE IN PAVED AREAS AND TWELVE (12) INCHES BELOW FINISHED GRADE IN LANDSCAPE AREAS.
7. THE BEDDING THICKNESS SHALL BE EQUAL TO ONE-QUARTER (1/4) OF THE OUTSIDE DIAMETER OF THE PIPE BUT NOT LESS THAN FOUR (4) INCHES.

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DRAWN BY:	DATE: 4-3-18

SANITARY SEWER
TRENCH SECTION

CITY OF WOOD DALE

SANITARY 5A
Packet Page #254



SECTIONAL VIEW PRECAST CONE AND CHIMNEY GENERAL NOTES:

1. THE RUBBER SLEEVE IS AVAILABLE IN BOTH THE STANDARD 9" WIDE OR THE NARROW 6" WIDE CROSS SECTION.
2. SEE CHIMNEY HEIGHT TABLE OF SEAL AND EXTENSION COMBINATIONS NEEDED TO SPAN FROM THE FRAME TO THE TOP OF THE CONE ON MANHOLES WITH VARIOUS CHIMNEY HEIGHTS. DIAMETER DIFFERENTIALS WILL REDUCE THESE SPAN HEIGHTS.
3. THE TOP OF THE CONE MUST HAVE A MINIMUM 2" HIGH VERTICAL SURFACE THAT IS SMOOTH AND FREE OF ANY FORM OFFSETS OR EXCESSIVE HONEYCOMB.
4. CHIMNEY SEALS SHALL BE REQUIRED UNLESS THE MANHOLE IS ADJUSTED TO FINAL GRADE IN ACCORDANCE WITH DETAIL STORM 7 - CASTING ADJUSTMENTS FOR STRUCTURES IN PAVED AREAS.

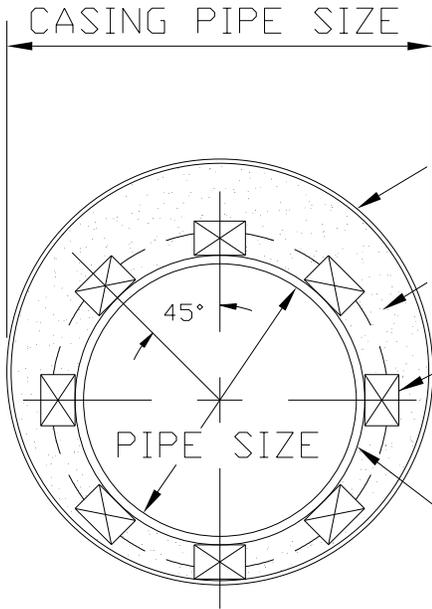
COMBINATIONS OF SEALS & EXTENSIONS	TO SPAN HEIGHTS OF:
NARROW (6") SEAL ONLY	0 - 3"
STANDARD (9") SEAL ONLY	OVER 3" - 6.5"
STANDARD SEAL + EXTENSION	OVER 6.5" - 13.5"
SEAL + MULT. EXTENSIONS	OVER 13.5"
+ 7" FOR EACH ADDED EXTENSION	
NOTE: FRAME OFFSETS AND DIAMETER DIFFERENTIALS WILL REDUCE THESE SPAN HEIGHTS.	

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PRECAST CONE
AND CHIMNEY

CITY OF WOOD DALE

SANITARY 6



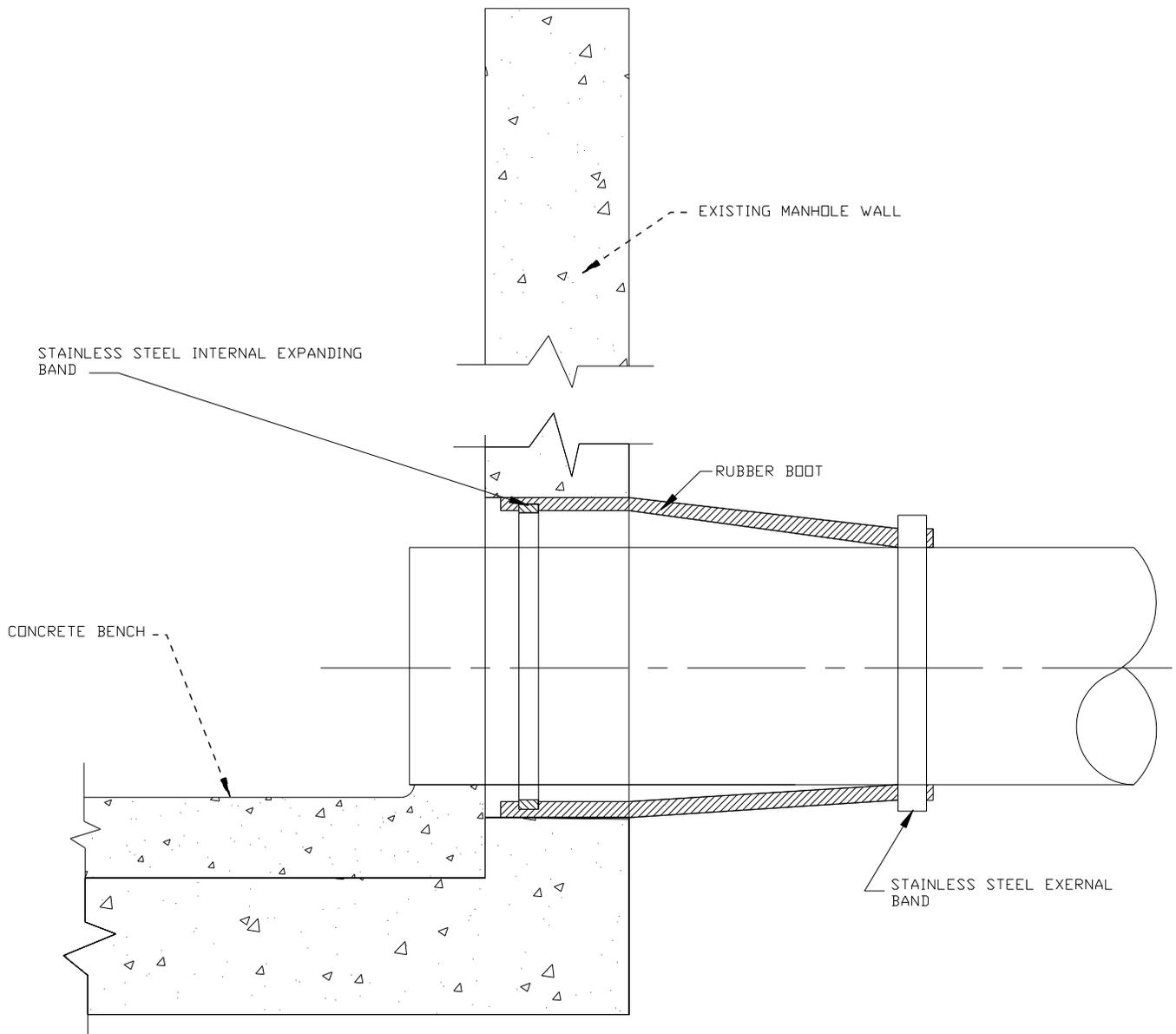
- CASING PIPE WITH 0.25" THICK WALL WITH WELDED JOINTS
- SAND BLOWN-IN THE ENTIRE LENGTH. SEAL ENDS WITH BRICK AND MORTAR
- MANUFACTURED CASING SPACERS MIN. 24" LONG ATTACHED TO PIPING W/ METAL STRAPPING. PROVIDE SPACERS AT EACH END & INTERMEDIATE SPACERS AT MIN. 8' O.C. FOR EACH LENGTH OF PIPE.
- PIPE PUSHED OR PULLED WITH CABLE THRU CASING PIPE.

CASING PIPE DETAILS

REV.:	REV.:
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DRAWN BY:	DATE: 4-3-18

CASING DETAIL

CITY OF WOOD DALE
SANITARY 7 Packet Page #256



GENERAL NOTES:

1. CORE-DRILL CIRCULAR OPENING IN MANHOLE WALL OF DIAMETER TO FIT THE REQUIRED BOOT SIZE.
2. KOR-N-SEAL FLEXIBLE RUBBER BOOT (MANUFACTURED BY NATIONAL POLLUTION CONTROL SYSTEMS, INC.) OR APPROVED EQUAL SHALL BE USED FOR WATERTIGHT CONNECTION.
3. CUT, SHAPE AND SLOPE NEW INVERT CHANNEL IN THE EXISTING CONCRETE BENCH FOR SMOOTH FLOW FROM NEW SANITARY SEWER CONNECTION.
4. CLEAN EXISTING MANHOLE OF ANY DIRT, CONCRETE OR DEBRIS WHICH MAY ACCUMULATE DURING THE CONSTRUCTION PROCESS.

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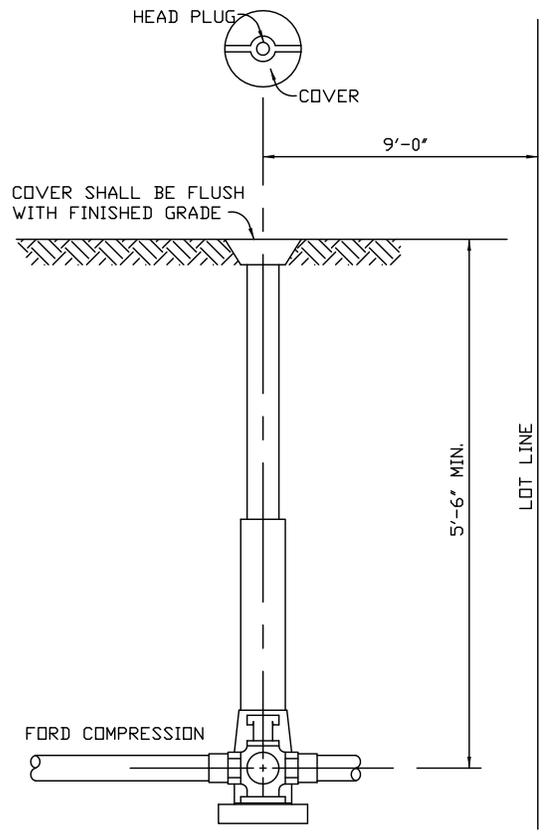
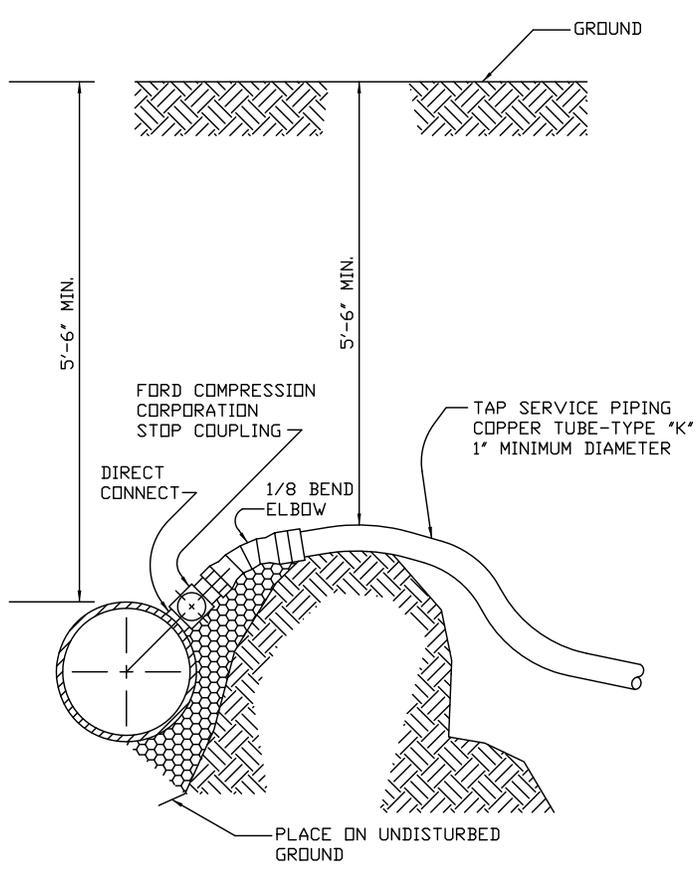
CORING BOOT

CITY OF WOOD DALE

SANITARY 8
Packet Page #257

SECTION 400- WATER MAIN DETAILS

WATER SERVICE TAP AND CONNECTION
HYDRANT SETTING
VALVE BOX INSTALLATION
WATER TIGHT VALVE VAULT
VALVE VAULT FRAME AND COVER
THRUST BLOCK INSTALLATION
WATER MAIN TRENCH SECTION
WATER AND SEWER SEPARATION
CONCRETE SADDLE SUPPORT
TYPICAL PRESSURE CONNECTION IN VAULT
B-BOX ENCASEMENT

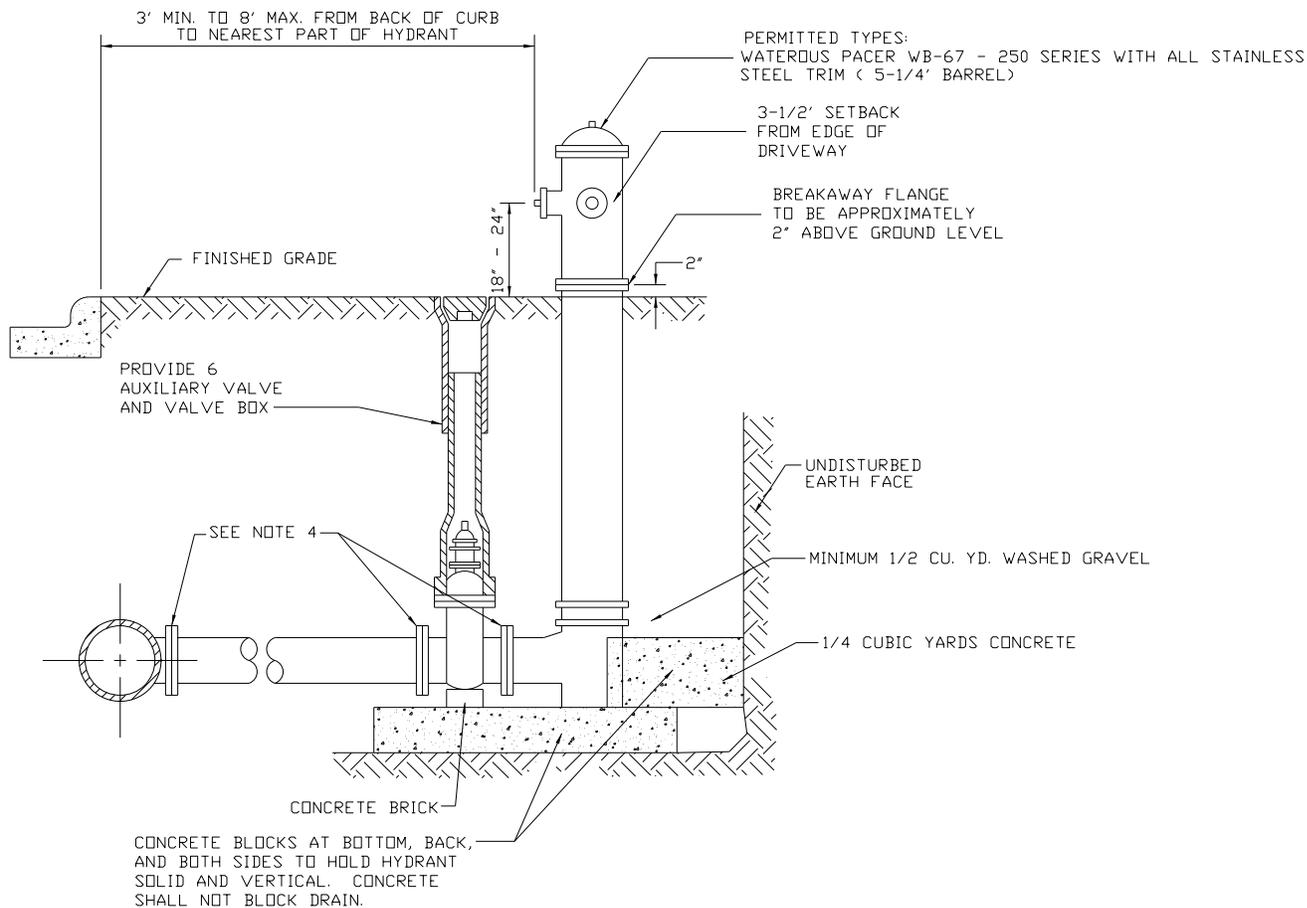


GENERAL NOTES:

1. WATER SERVICE LINE SHALL BE TYPE K COPPER MANUFACTURED IN ACCORDANCE WITH ASTM B88 AND B251 OR APPROVED EQUAL.
2. FOR 1" SERVICE LINES CORPORATION STOPS SHALL BE EITHER MUELLER H-15008 OR 2500 AY MCDONALD OR APPROVED EQUAL.
3. FOR 1 1/2" AND 2" SERVICE LINES CORPORATION STOPS SHALL BE EITHER MUELLER B-25008 OR FORD FB600 OR APPROVED EQUAL.
4. SERVICE LINES GREATER THAN 1" N DIAMETER SHALL HAVE A STAINLESS STEEL BANDED DUCTILE IRON SADDLE (JCM 406 OR CASCADE C-2 TAPPING SLEEVE).
5. B-BOX SHALL BE MUELLER H-10302 OR APPROVED EQUAL.
6. CORPORATION STOPS SHALL BE INSTALLED A MINIMUM OF 18" FROM BELL SECTIONS AND/OR PIPE FITTINGS. MULTIPLE INSTALLATIONS SHALL BE STAGGERED AROUND THE MAIN BY 90° AND SEPARATED BY 18".

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**WATER SERVICE
TAP AND CONNECTION**



GENERAL NOTES:

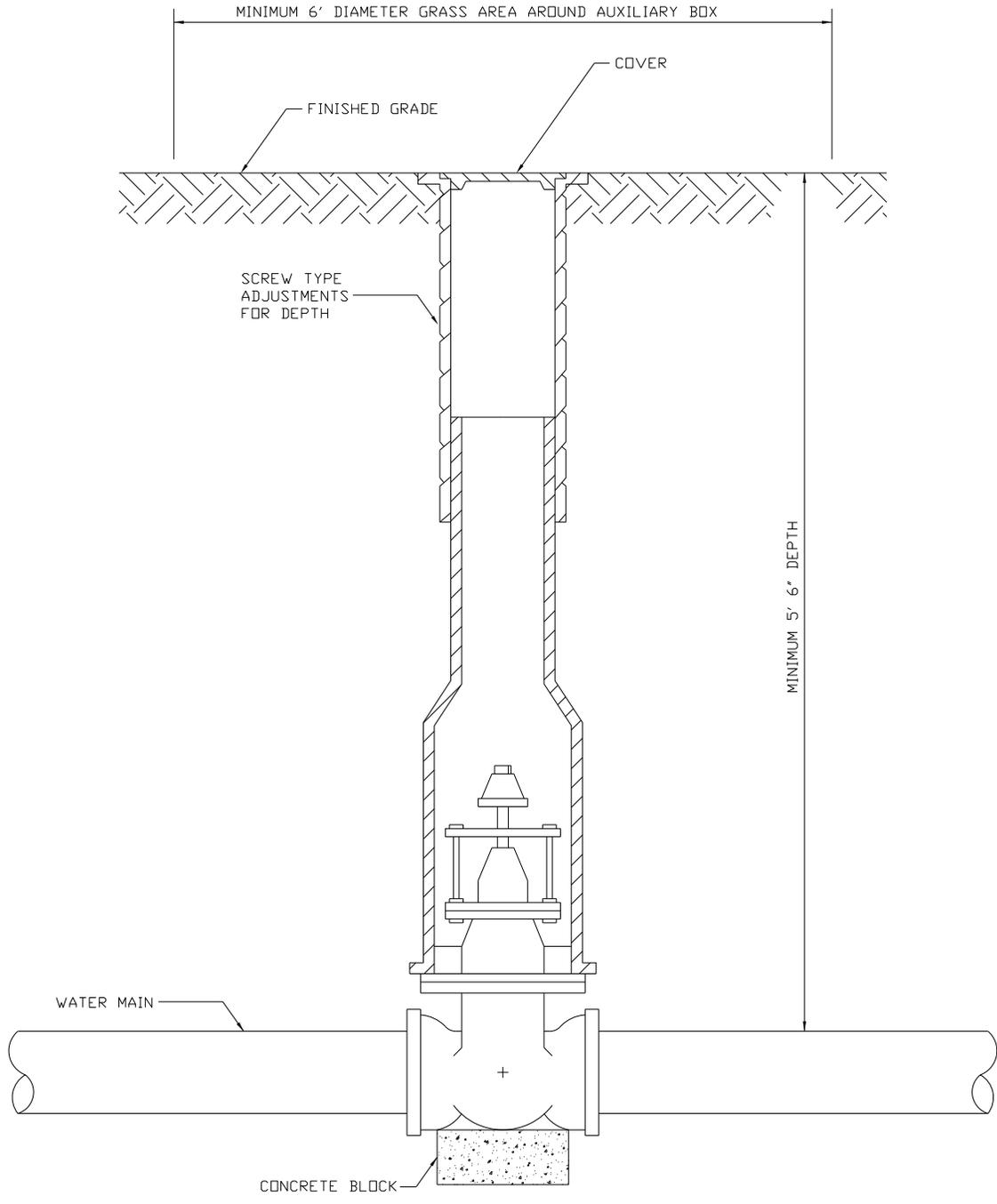
1. MAXIMUM BARREL EXTENSIONS ARE 18 INCHES AND SHALL BE CLOW MEDALLION OR MUELLER CENTURION EXTENSION FOR WATEROUS HYDRANTS.
2. ALL HYDRANTS ARE TO BE SUPPLIED WITH A 6" FLANGED AND MECHANICAL JOINT AUXILIARY VALVE THAT CONFORMS TO AWWA C515. THE GATE VALVE STEM AND WEDGE NUT SHALL CONFORM WITH SECTION 4.4.5.1 OF AWWA 515. ALL TRIM BOLTS ARE TO BE STAINLESS STEEL.
3. THE HYDRANT WILL EXCEED ALL THE REQUIREMENTS OF AWWA C502.
4. RESTRAINED JOINTS ARE REQUIRED THROUGHOUT THE FIRE HYDRANT ASSEMBLY.

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HYDRANT SETTING

CITY OF WOOD DALE

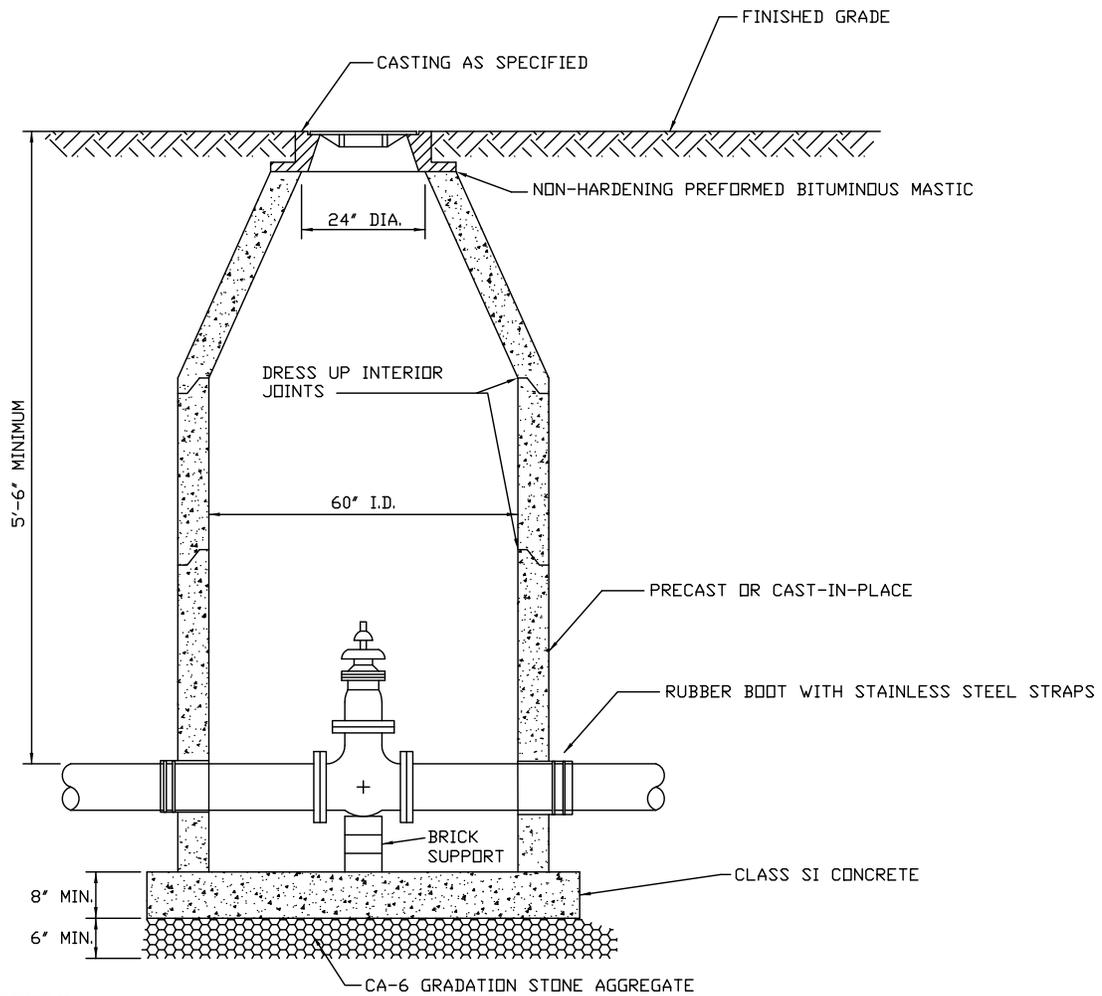
WATER 2



GENERAL NOTES:

1. ALL VALVES 2-1/2" OR LARGER SHALL BE PLACED IN A VALVE VAULT, UNLESS APPROVED BY THE DIRECTOR OF PUBLIC WORKS.
2. VALVES SHALL BE MUELLER A-2360 RESILIENT WEDGE GATE VALVE WITH STAINLESS STEEL TRIM BOLTS OR WATEROUS 2500 RESILIENT WEDGE GATE VALVE WITH STAINLESS STEEL TRIM BOLTS OR APPROVED EQUAL.
3. VALVES THAT REQUIRE RESTRAINT JOINTS, MAY USE FIELD-LOK OR MEGA LUG BRANDS.

REV.:	REV.:	<h2 style="margin: 0;">VALVE BOX INSTALLATION</h2>	CITY OF WOOD DALE
REV.:	REV.:		Packet Page #261 <small>WATER 3</small>
DRAWN BY:	DATE: 4-3-18		



GENERAL NOTES:

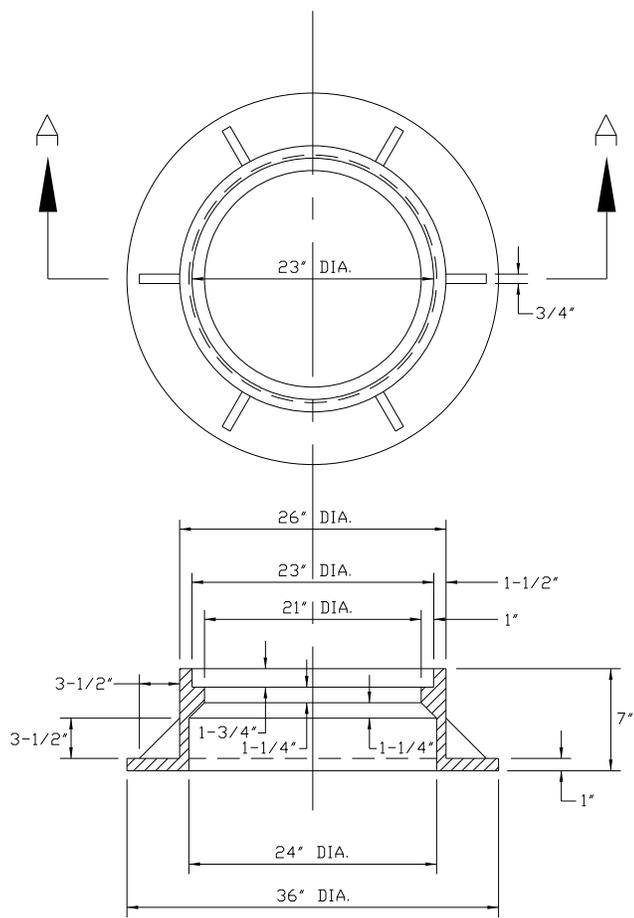
1. PROVIDE PRECAST REINFORCED CONCRETE BARREL AND RISER SECTION. CONCRETE BLOCK CONSTRUCTION IS NOT PERMITTED.
2. PROVIDE TRENCH BACKFILL, CA-6 GRADATION, AROUND MANHOLE TO SUBGRADE ELEVATION IN PAVED AREAS.
3. APPLY A CONTINUOUS LAYER OF NON-HARDENING PREFORMED BITUMINOUS MASTIC MATERIAL (RUB-R-NEK OR E Z STICK) TO EACH JOINT TO PREVENT INFLOW.
4. WHEN THE FRAME DOES NOT MEET PROPOSED ELEVATION, A MINIMUM OF TWO TAPERED RUBBERIZED ADJUSTING RINGS SHALL BE USED FOR FINAL ADJUSTMENT. ONE CONCRETE RING NOT LESS THAN TWO INCHES THICK MAY ALSO BE USED. A MAXIMUM OF THREE ADJUSTING RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 12 INCHES. EACH RING AND THE FRAME SHALL BE SET ON A BED OF NON-PREFORMED MASTIC.
5. PRECAST ADJUSTING RINGS SHALL BE REINFORCED WITH NO. 3 GAUGE WIRE OR EQUIVALENT.
6. WITHIN NON-PAVED AREAS, MORTAR SHALL ONLY BE USED TO DRESS UP ADJUSTING RINGS AND/OR FRAME ON THE EXTERIOR OF THE STRUCTURE. MORTAR IS NOT PERMITTED ON THE INSIDE OF THE RINGS AND/OR FRAME.
7. PLASTIC POLYMER STEPS SHALL NOT BE INSTALLED, UNLESS APPROVED BY THE DIRECTOR OF PUBLIC WORKS OR THEIR DESIGNEE.
8. DRESS UP INTERIOR JOINTS WITH HYDRAULIC CEMENT.
9. VALVE MUST ALIGN WITH CENTER OF VAULT OPENING.
10. CONES MUST BE CONCENTRIC WITH VALVES 12" AND SMALLER.
11. BUTTERFLY VALVES REQUIRE ECCENTRIC CONES.
12. ALL VALVE VAULTS REQUIRE RUBBER BOOTS WITH STAINLESS STEEL STRAPS WITH THE EXCEPTION OF PRESSURE CONNECTION VALVE VAULTS. (SEE WATER DETAIL 10).
13. CHIMNEY SEALS SHALL BE REQUIRED UNLESS THE VALVE VAULT IS ADJUSTED TO FINAL GRADE IN ACCORDANCE WITH DETAIL STORM 7 - CASTING ADJUSTMENTS FOR STRUCTURES IN PAVED AREAS.

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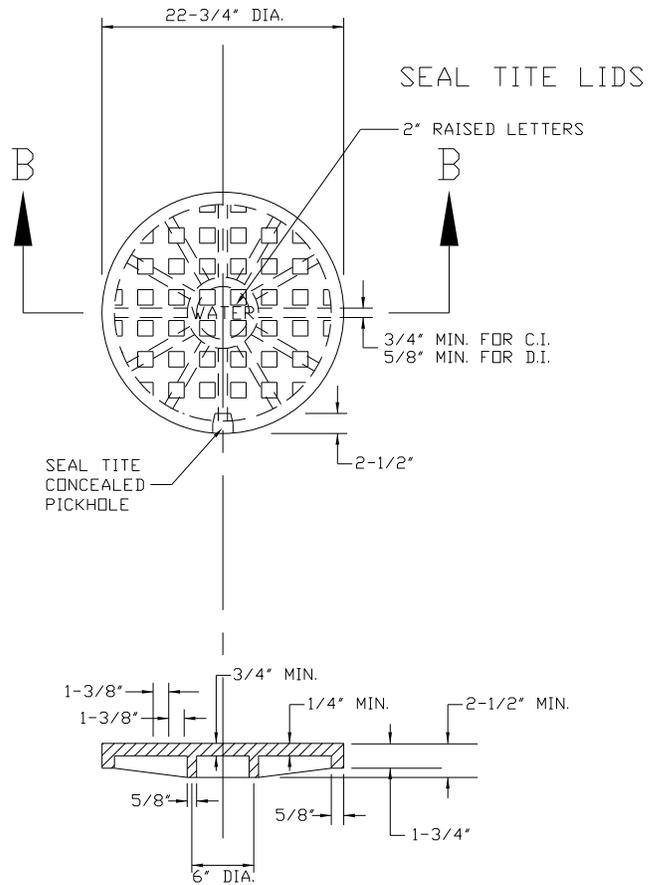
WATER TIGHT VALVE VAULT

CITY OF WOOD DALE

WATER 4
Packet Page #262



SECTION A-A
CAST FRAME



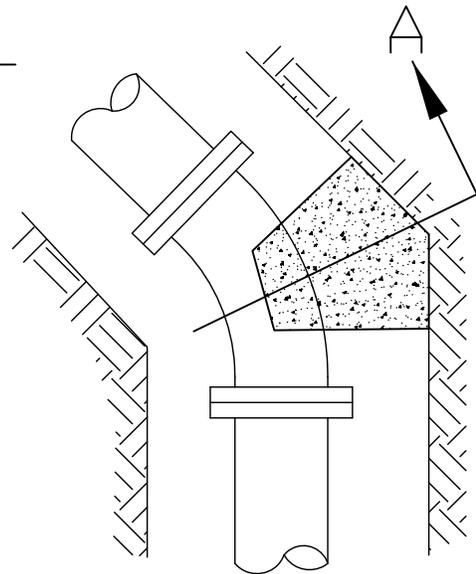
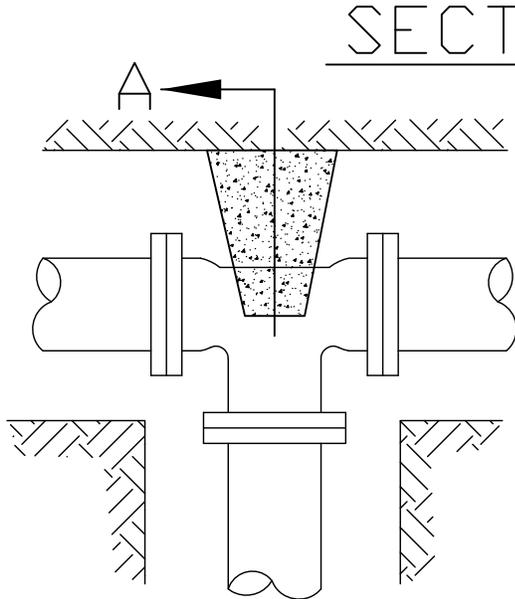
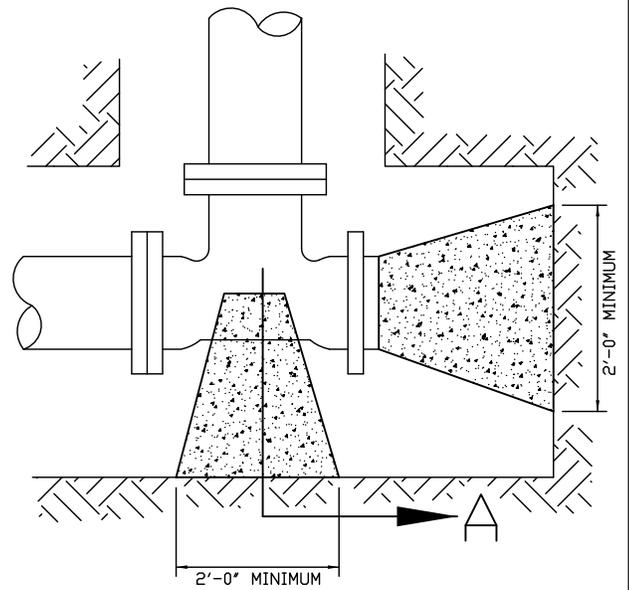
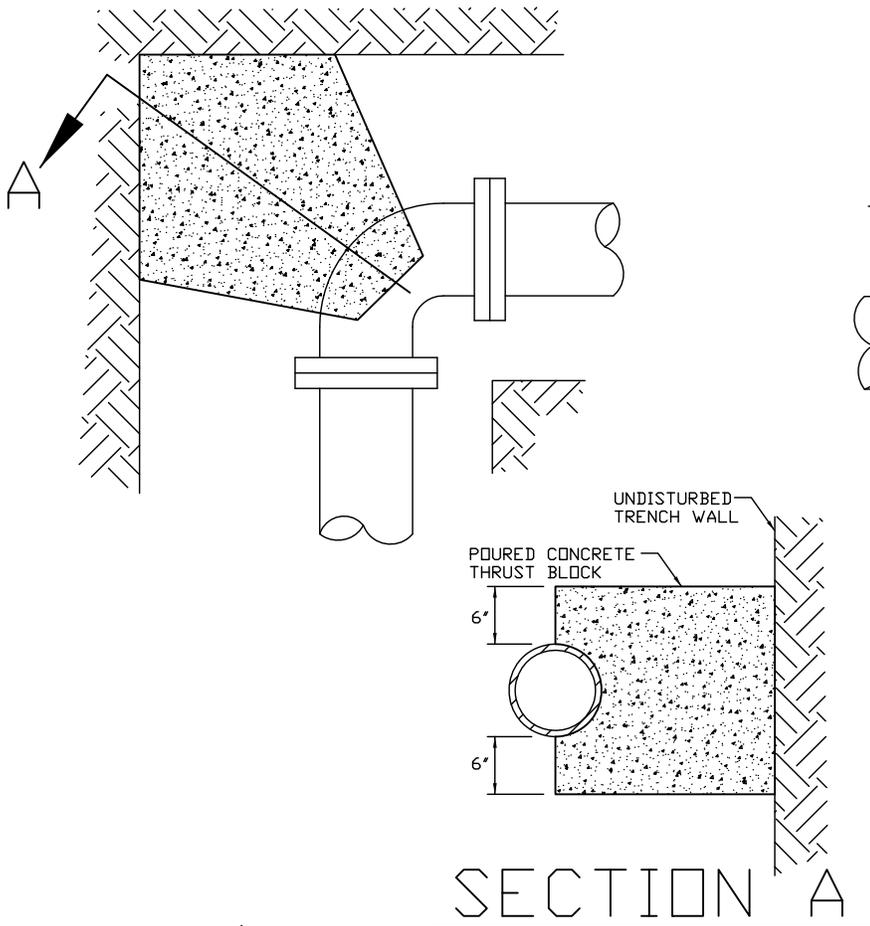
SECTION B-B
CAST CLOSED LID
(SEAL TITE CONCEALED PICKHOLE)

GENERAL NOTES:

1. DUCTILE IRON CASTING SHALL BE TESTED IN ACCORDANCE WITH FEDERAL SPECIFICATIONS.
2. ALL FRAMES AND COVERS SHALL HAVE A MACHINED HORIZONTAL AND VERTICAL BEARING SURFACES. PICK HOLES IN THE COVER SHALL NOT BE OPEN.
3. THE MANHOLE COVERS SHALL HAVE RAISED LETTERS AS SHOWN.
4. DIMENSIONS FOR CASTINGS ARE COMPARABLE TO EAST JORDAN 1022 OR NEENAH FOUNDRY 1772.
5. WATERPROOF, BOLTDOWN FRAME AND COVER SHALL BE USED IN ANY LOCATION SUBJECT TO INUNDATION. (NEENAH R-1916-C, EAST JORDAN 1022 WT OR APPROVED EQUAL).
6. LIDS SHALL BE "WATERTITE" OR "SELF-SEALING" WITH A FACTORY INSTALLED GASKET.

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VALVE VAULT
FRAME AND COVER

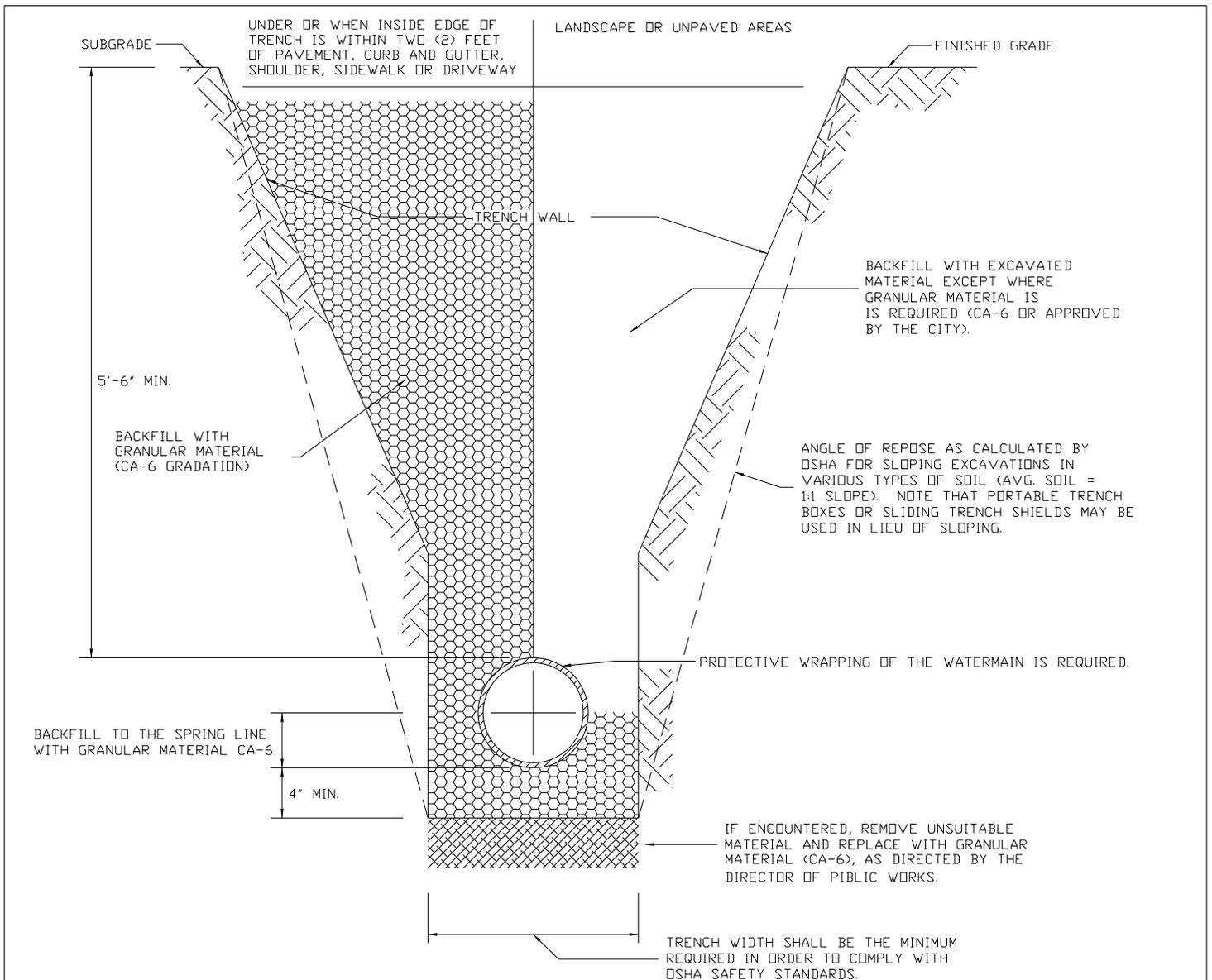


GENERAL NOTES:

1. THRUST BLOCKING IS USED TO PREVENT MOVEMENT OF LINES UNDER PRESSURE BENDS, TEES, CAPS, VALVES, HYDRANTS, AND AT POINTS SPECIFIED BY THE CITY. CONCRETE SHALL BE CLASS SI AND BE A MINIMUM OF TWELVE (12) INCHES THICK PLUS THE SIZE OF THE WATERMAIN. IT SHALL BE PLACED BETWEEN SOLID GROUND AND FITTINGS. FITTINGS WILL BE ACCESSIBLE FOR REPAIRS. THRUST BLOCK SHALL BE PLACED AT BENDS OF 11-1/4 DEGREES OR MORE. THE AREA OF BEARING SHALL BE SUFFICIENT TO RESIST THE APPLIED FORCES. USE OF 90 DEGREE BENDS REQUIRE APPROVAL FROM THE CITY PRIOR TO INSTALLATION.
2. USE OF WOOD MATERIAL FOR THRUST BLOCKING IS STRONGLY PROHIBITED.
3. THRUST BLOCKS MAY BE PRECAST OR CAST-IN-PLACE.

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**THRUST BLOCK
INSTALLATION**



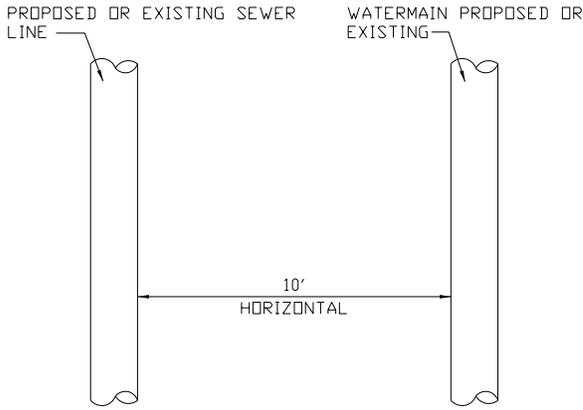
GENERAL NOTES:

1. CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A SAFE MANNER AT ALL TIMES AND SHALL COMPLY WITH ALL APPLICABLE GOVERNING REGULATIONS, INCLUDING BUT NOT LIMITED TO OSHA SAFETY STANDARDS.
2. ALL BACKFILL MATERIAL UP TO A HEIGHT OF 12 INCHES ABOVE THE PIPE SHALL BE CAREFULLY DEPOSITED IN UNIFORM LAYERS NOT EXCEEDING 8 INCHES THICK (LOOSE MEASURE). THE MATERIAL IN EACH LAYER SHALL BE FIRMLY COMPACTED BY RAMMING OR TAMPING WITH TOOLS APPROVED BY THE CITY IN SUCH A MANNER AS NOT TO DISTURB OR INJURE THE PIPE. THE BACKFILLING ABOVE THIS HEIGHT SHALL BE DONE AS NOTED BELOW.
3. GRANULAR BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED AS SPECIFIED IN NOTE 2, ABOVE. THE USE OF JETTING SHALL NOT BE ALLOWED UNLESS AUTHORIZED IN WRITING BY THE CITY. IT SHALL BE THE DESIGN ENGINEER OR CONTRACTOR'S RESPONSIBILITY TO PROVIDE APPROPRIATE JUSTIFICATION AND DOCUMENTATION (SOIL INVESTIGATION REPORTS, ETC.) TO THE CITY WITH THE REQUEST FOR APPROVAL OF JETTING.
4. BACKFILL MATERIAL CONSISTING OF SUITABLE EXCAVATED MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING TWELVE (12) INCHES THICK (LOOSE MEASURE) AND EACH LAYER SHALL BE COMPACTED BY RAMMING OR TAMPING TO ACHIEVE THE REQUIRED COMPACTION. JETTING OF THIS MATERIAL MAY BE PERMITTED WHEN AUTHORIZED IN WRITING BY THE CITY. IT SHALL BE THE DESIGN ENGINEER OR THE CONTRACTOR'S RESPONSIBILITY TO SUBMIT APPROPRIATE JUSTIFICATION AND DOCUMENTATION (SOIL INVESTIGATION REPORTS, ETC.) TO THE CITY WITH THE REQUEST FOR APPROVAL OF JETTING.

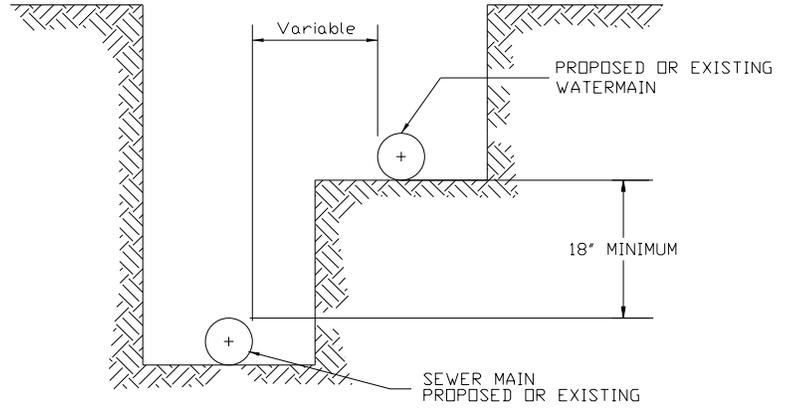
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**WATER MAIN
TRENCH SECTION**

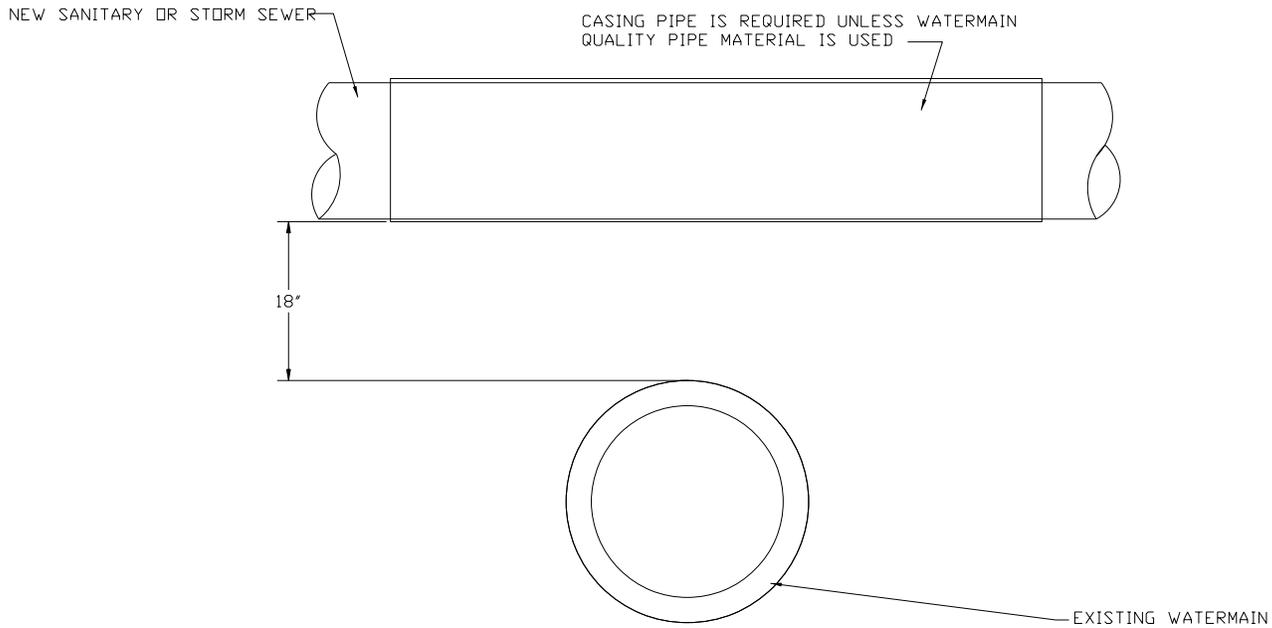
CITY OF WOOD DALE
WATER 7 Packet Page #265



HORIZONTAL SEPARATION



VERTICAL SEPARATION



GENERAL NOTES:

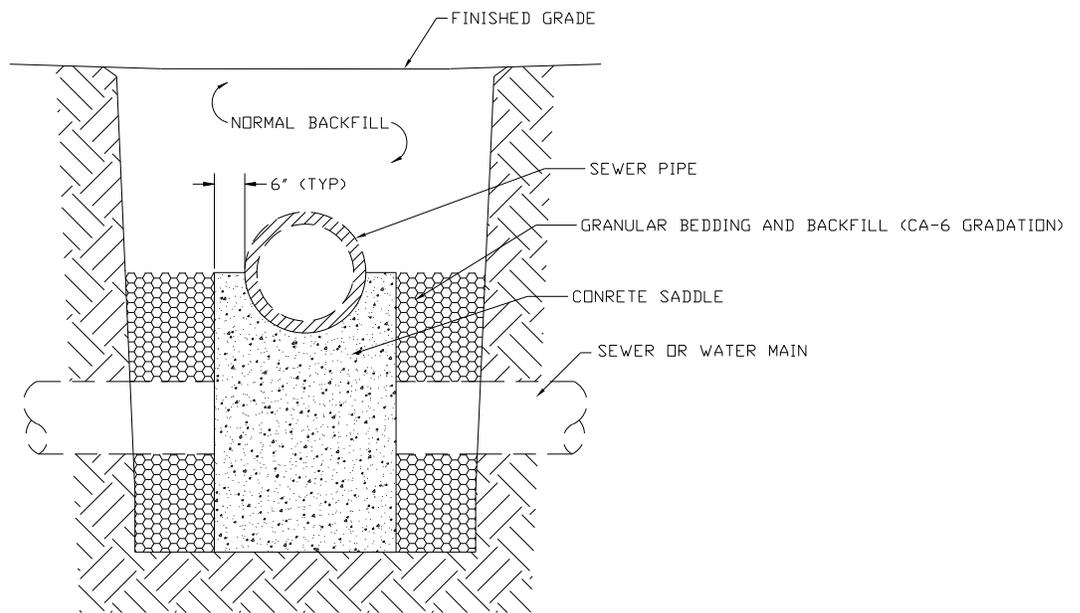
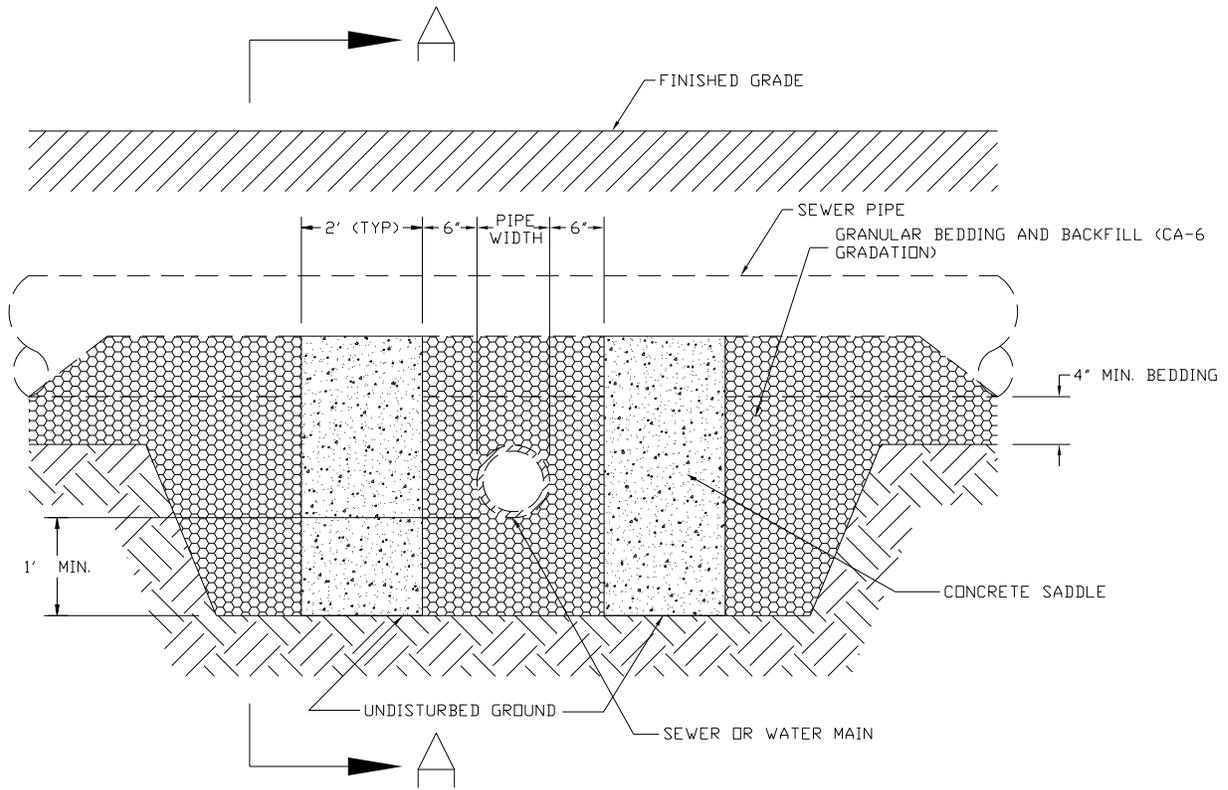
1. WHEN THE MINIMUM 10 FEET HORIZONTAL SEPARATION CANNOT BE ACHIEVED, AN 18 INCH VERTICAL SEPARATION MAY BE PERMITTED. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR ALL PORTIONS OF THE WATERMAIN THAT ARE WITHIN 10 HORIZONTAL FEET OF ANY SEWER OR DRAIN.
2. WHEN THE WATERMAIN MUST PASS UNDER A SEWER OR DRAIN, BOTH THE WATERMAIN AND SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT DUCTILE IRON PIPE, PRE-STRESSED CONCRETE PIPE, OR PVC PIPE MEETING WATERMAIN STANDARDS. (SEE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS).
3. WHEN THE WATERMAIN CROSSES UNDER A SEWER GREATER THAN 24 INCH IN DIAMETER, OR WHEN DIRECTED BY THE ENGINEER, THE SEWER SHALL BE SUPPORTED TO PREVENT SETTLING AND BREAKING OF THE WATER MAIN. REFER TO THE "CONCRETE SADDLE SUPPORT" WATER DETAIL 9.

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WATER AND SEWER
SEPARATION

CITY OF WOOD DALE

WATER 8
Packet Page #266



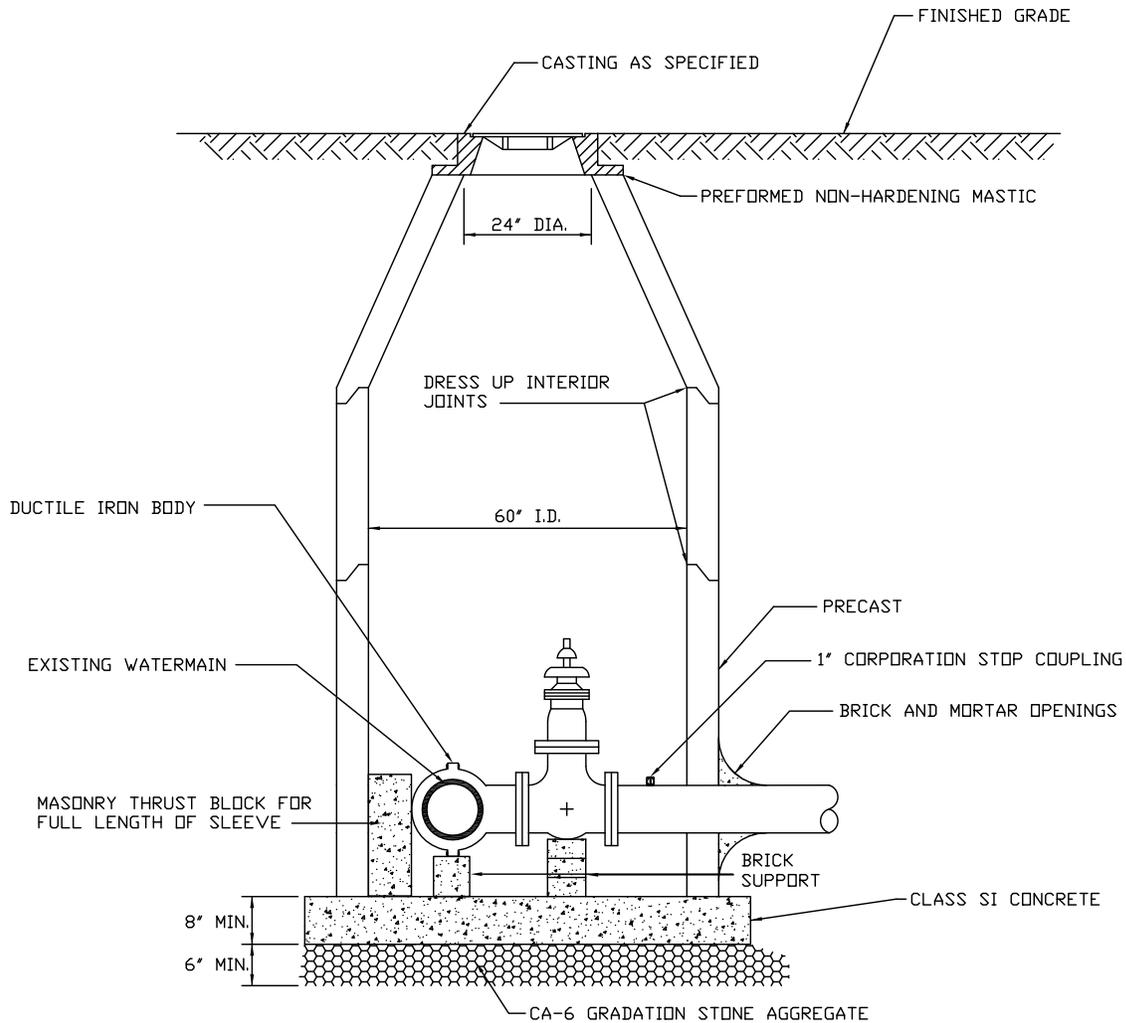
SECTION A-A

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DRAWN BY:	DATE: 4-3-18

CONCRETE SADDLE
SUPPORT

CITY OF WOOD DALE

WATER 9
Packet Page #267

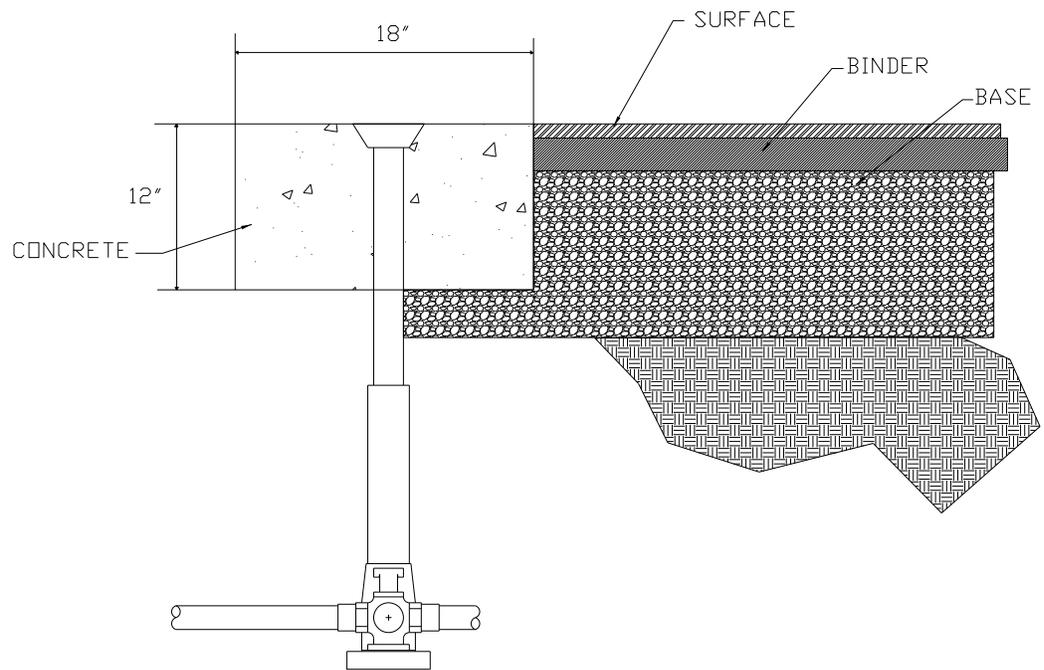


GENERAL NOTES:

1. PROVIDE PRECAST REINFORCED CONCRETE BARREL AND RISER SECTION. CONCRETE BLOCK CONSTRUCTION IS NOT PERMITTED.
2. PROVIDE TRENCH BACKFILL, CA-6 GRADATION, AROUND MANHOLE TO SUBGRADE ELEVATION IN PAVED AREAS.
3. APPLY A CONTINUOUS LAYER OF NON-HARDENING PREFORMED BITUMINOUS MASTIC MATERIAL (RUB-R-NEK OR E Z STICK) TO EACH JOINT TO PREVENT INFLOW.
4. WHEN THE FRAME DOES NOT MEET PROPOSED ELEVATION, A MINIMUM OF TWO TAPERED RUBBERIZED ADJUSTING RINGS SHALL BE USED FOR FINAL ADJUSTMENT. ONE CONCRETE RING NOT LESS THAN TWO INCHES THICK MAY ALSO BE USED. A MAXIMUM OF THREE ADJUSTING RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 12 INCHES. THE RING(S) AND FRAME SHALL BE SET ON A BED OF PREFORMED NON-HARDENING MASTIC (RUB-R-NEK OR APPROVED EQUAL).
5. PRECAST ADJUSTING RINGS SHALL BE REINFORCED WITH NO. 3 GAUGE WIRE OR EQUIVALENT.
6. MORTAR SHALL NOT BE USED TO DRESS UP ADJUSTING RINGS AND/OR FRAME.
7. PLASTIC POLYMER STEPS SHALL NOT BE INSTALLED, UNLESS APPROVED BY THE DIRECTOR OF PUBLIC WORKS OR THEIR DESIGNEE.
8. DRESS UP INTERIOR JOINTS WITH HYDRAULIC CEMENT.
9. VALVE MUST ALIGN WITH CENTER OF VAULT OPENING.
10. CONES MUST BE CONCENTRIC WITH VALVES 12" AND SMALLER.
11. BUTTERFLY VALVES REQUIRE ECCENTRIC CONES.

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DRAWN BY:	DATE: 4-3-18

**TYPICAL PRESSURE
CONNECTION IN VAULT**



GENERAL NOTES:

1. CONCRETE COLLAR AROUND B-BOX WHEN B-BOX FALLS IN ASPHALT PAVEMENT.

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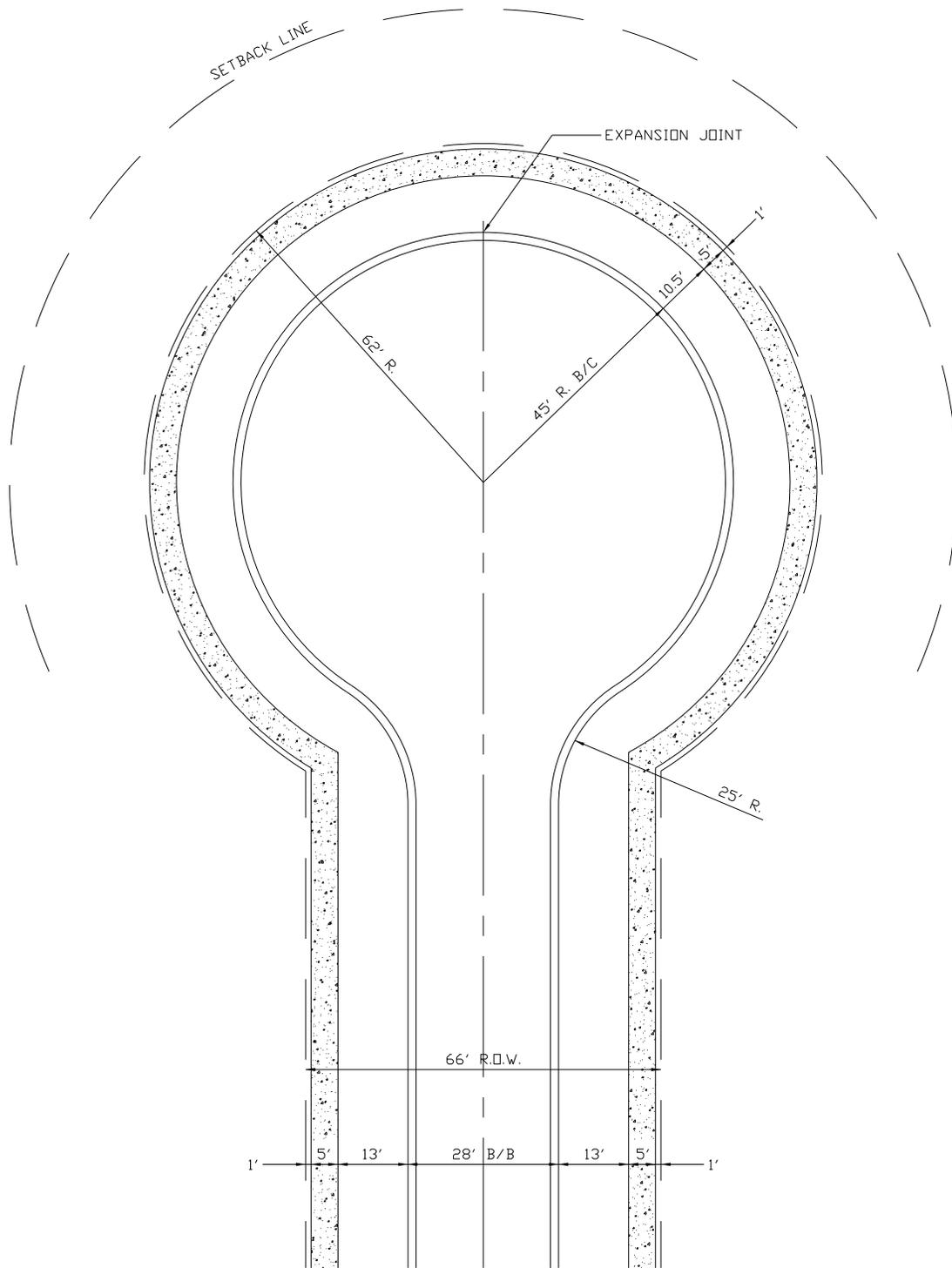
B-BOX ENCASEMENT

CITY OF WOOD DALE

WATER 11
 Packet Page #269

SECTION 500- ROADWAY DETAILS

CONCENTRIC CUL-DE-SAC
SIDEWALK
HANDICAP SIDEWALK RAMP 1
HANDICAP SIDEWALK RAMP 2
SIDEWALK CONSTRUCTION
TYPICAL PAVEMENT CROSS SECTION 1
TYPICAL PAVEMENT CROSS SECTION 2
RESIDENTIAL DRIVEWAY APRON
COMMERCIAL DRIVEWAY APRON
CURB AND GUTTER
RIGID PAVEMENT UTILITY TRENCH
FLEXIBLE PAVEMENT UTILITY TRENCH
PAVEMENT BUTT JOINT
TYPICAL PARKING LOT PAVEMENT



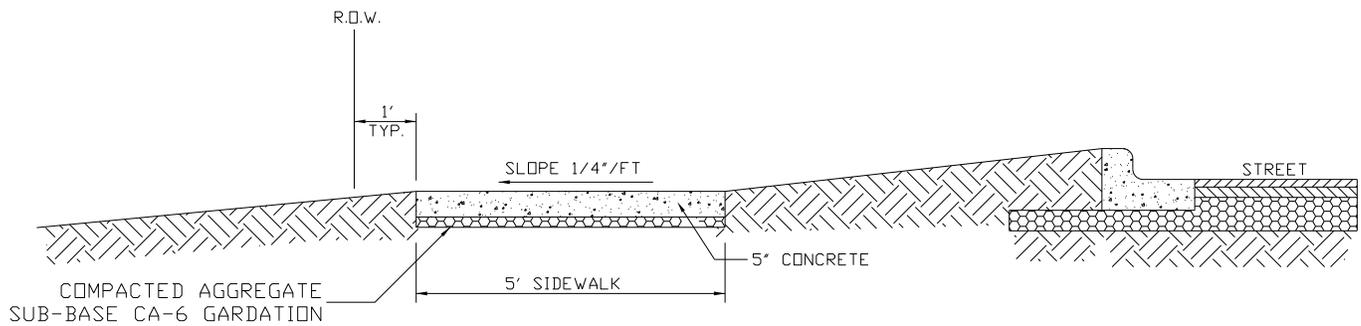
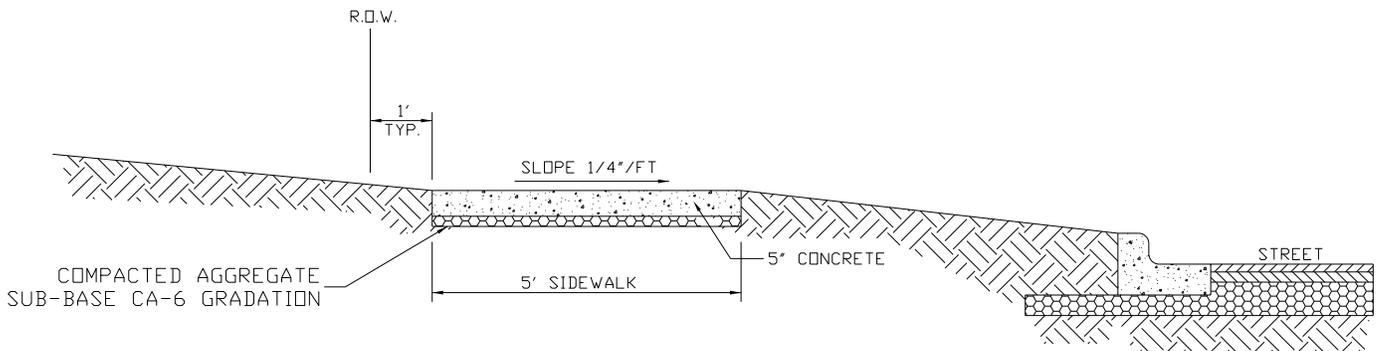
GENERAL NOTES:

1. THE CONCENTRIC CUL-DE-SAC ILLUSTRATION, AS PRESENTED ABOVE, IS PROVIDED AS A VISUAL AID. THE DIMENSIONS AS ILLUSTRATED ARE NOT ALL OF THE DIMENSION REQUIREMENTS FOR THE CITY OF WOOD DALE. DESIGNS SHALL BE REVIEWED ON A SITE SPECIFIC BASIS FOR COMPLIANCE WITH MUNICIPAL CODES. DIMENSION VARIATIONS MAY BE WARRANTED. ALL CONCENTRIC CUL-DE-SAC DESIGNS SUBMITTED FOR REVIEW AND APPROVAL, SHALL PROVIDE INFORMATION IN A FORM AS PRESENTED ABOVE.

DRAWN: 4-3-18	
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CONCENTRIC
CUL-DE-SAC

CITY OF WOOD DALE
PAVEMENT 1 Packet Page #271



GENERAL NOTES:

1. CONCRETE SHALL BE CLASS SI.
2. MINIMUM SIDEWALK THICKNESS SHALL BE FIVE INCHES (5").
3. SIDEWALK THICKNESS ACROSS DRIVEWAYS SHALL BE SIX INCHES (6") MINIMUM FOR RESIDENTIAL DRIVEWAYS, AND EIGHT INCHES (8") MINIMUM FOR NON-RESIDENTIAL DRIVEWAYS.
4. MAXIMUM LONGITUDINAL SLOPE SHALL NOT EXCEED 6% (16:1).
5. MINIMUM TRANSVERSE SLOPE SHALL BE 1/4"/FT. (2%) TYPICAL.
MAXIMUM TRANSVERSE SLOPE SHALL BE NO GREATER THAN 1/2"/FT. (4%) TYPICAL.
6. A TWO INCH (2") MINIMUM AGGREGATE SUB-BASE (CA-6 GRADATION) SHALL BE PROVIDED (FOUR INCHES (4" MINIMUM) THROUGH NON-RESIDENTIAL DRIVEWAYS).
7. AGGREGATE SUB-BASE COURSE SHALL BE MECHANICALLY COMPACTED.
8. ALL SIDEWALK SHALL BE PROMPTLY BACKFILLED AND PROTECTED FROM DAMAGE.

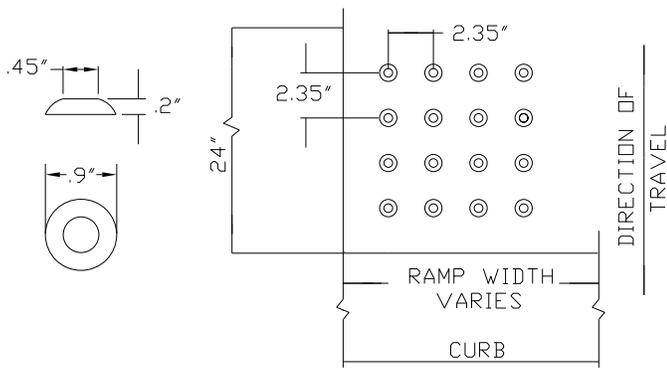
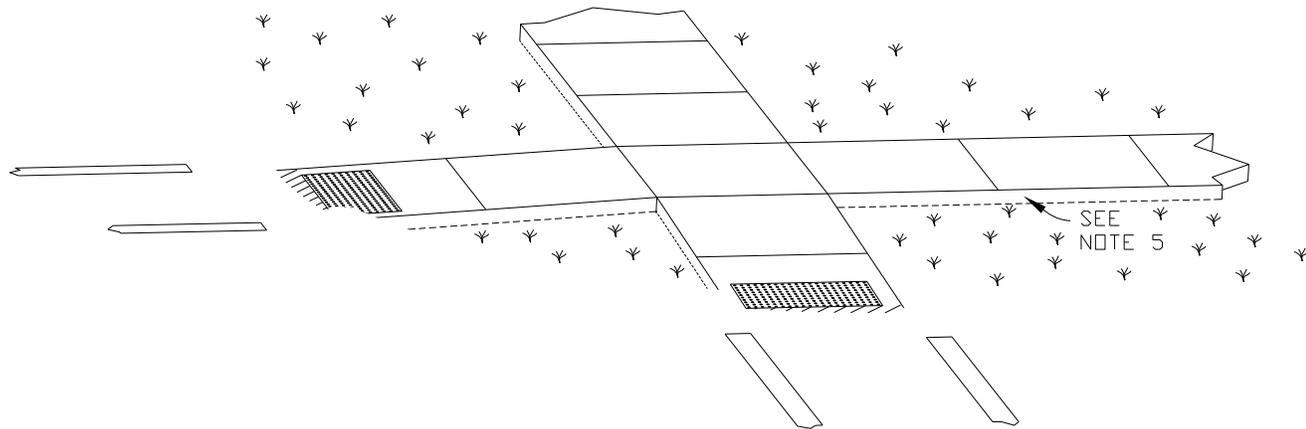
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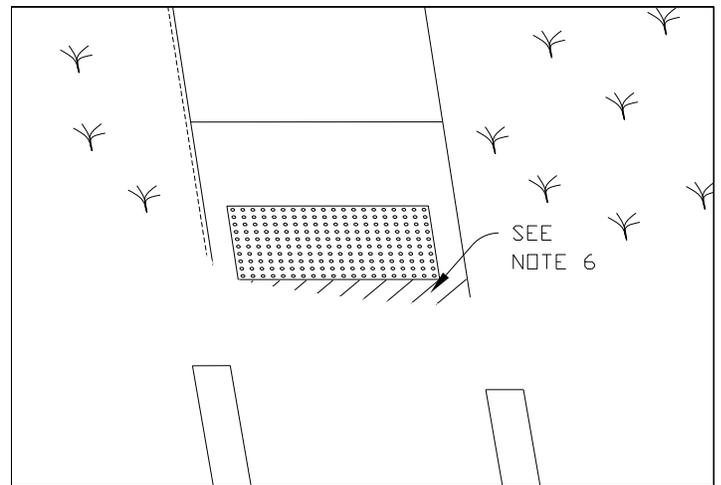
SIDEWALK

CITY OF WOOD DALE

PAVEMENT 2
Packet Page #272



TRUNCATED DOME DETAIL
FOR PUBLIC RIGHT-OF-WAY



GENERAL NOTES:

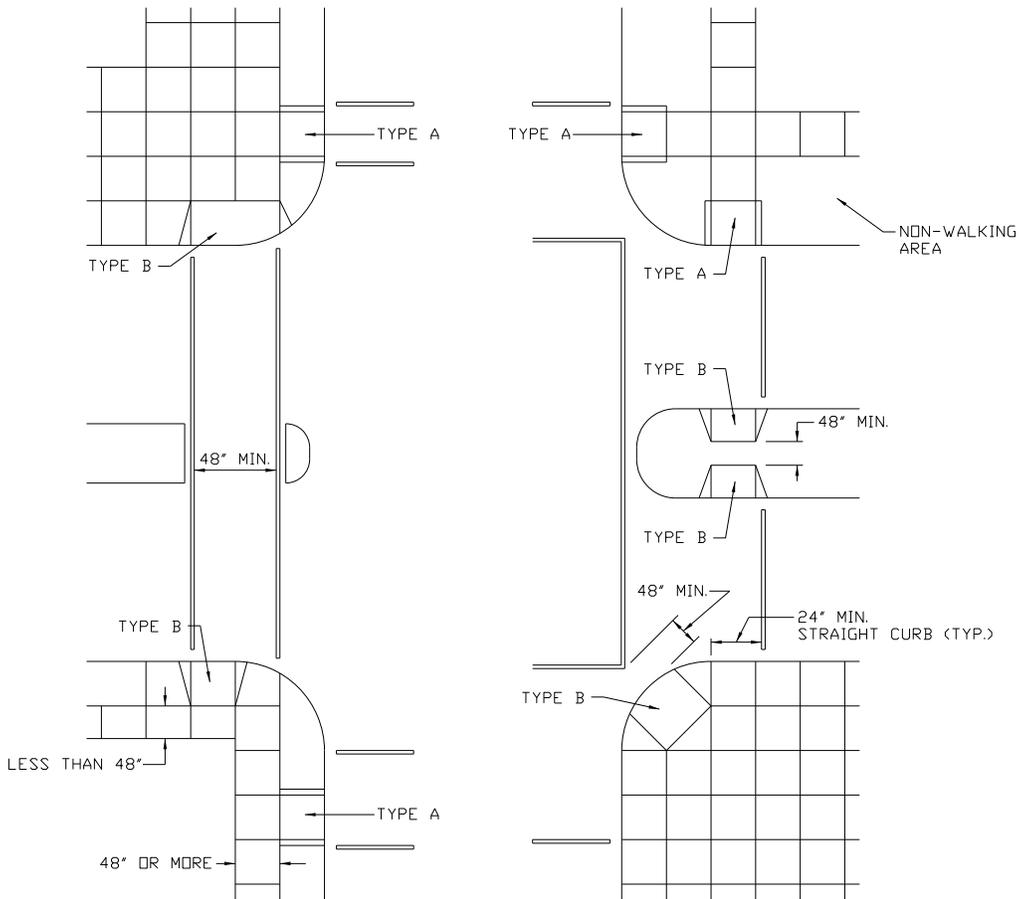
1. RAMPS SHALL BE LOCATED AS SHOWN ON THE PLANS IN ALIGNMENT WITH NORMAL SIDEWALK AND/OR CROSSWALK AND SHALL HAVE SUFFICIENT CURB LENGTH AT CORNER RADIUS TO PREVENT VEHICULAR ENCRDACHMENT.
2. CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.
3. THE MAXIMUM SLOPE OF THE SIDE FLARE FOR TYPE B RAMPS SHALL BE 1:10. HOWEVER, IF THE WIDTH OF THE LANDING AREA BETWEEN THE TOP OF THE RAMP AND AN OBSTRUCTION IS LESS THAN 48 INCHES, THE MAXIMUM SLOPE SHALL BE 1:12.
4. RAMPS SHALL BE CONSTRUCTED OF P.C. CONCRETE IN ACCORDANCE WITH THE IDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION". DETECTABLE WARNING PANELS SHALL BE A 2 FOOT BY 4 FOOT SECTION CONSISTING OF TRUNCATED DOMES ALIGNED IN A SQUARE (PARALLEL ALIGNMENT) PATTERN. DETECTABLE WARNING PANELS SHALL BE SET BACK A MINIMUM OF 6 INCHES FROM THE FRONT OF CURB. THE TYPE OF DETECTABLE WARNING PANELS SHALL BE E-Z SET CERAMIC COMPOSITE DETECTIABLE WARNING PANELS, ARMOR-TILE, CAPE FEAR SYSTEM 3, OR APPROVED EQUAL.
5. THICKNESS OF RAMPS WILL BE THE SAME AS THE ADJACENT SIDEWALK WITH A MINIMUM OF 5 INCHES. THICKNESS OF SIDEWALKS THROUGH RESIDENTIAL DRIVEWAYS SHALL BE A MINIMUM OF 6 INCHES. COMMERCIAL DRIVEWAYS SHALL BE A MINIMUM OF 8 INCHES.
6. UNLESS CURB RAMP IS ALIGNED PERPENDICULAR TO THE STREET RADIUS, AN AREA OF SPECIAL SHAPING MUST BE PROVIDED AT THE BOTTOM OF THE RAMP. THIS AREA SHALL ALLOW THE GRADE BREAK AT THE BOTTOM OF THE RAMP TO BE PERPENDICULAR TO THE RAMP AND SHALL PROVIDE A SMOOTH TRANSITION TO THE GUTTER LINE FOR WHEELCHAIR ACCESS. NO CURB LIP ALLOWED IN THIS AREA. MAXIMUM CROSS SLOPE SHALL BE 2%.

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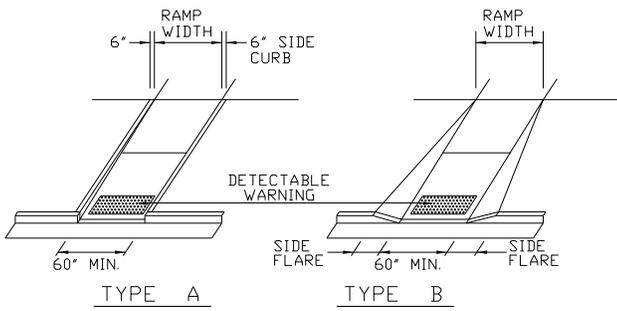
REV.:

HANDICAPPED SIDEWALK
RAMP

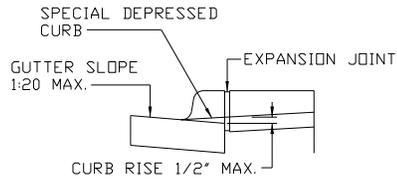
CITY OF WOOD DALE



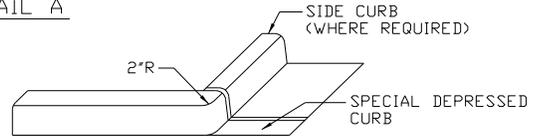
RECOMMENDED LOCATION OF RAMPS



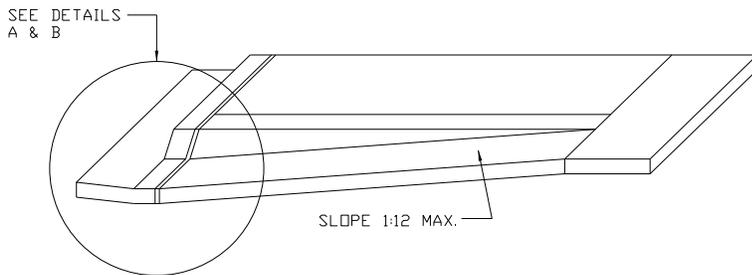
DETAILS OF RAMPS



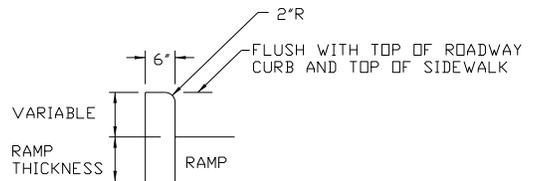
DETAIL A



DETAIL B



RAMP PROFILE



DETAIL OF SIDE CURB

(Side curb may be constructed monolithically with ramp.)

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REV.:	REV.:
DRAWN BY:	DATE: 4-3-18

HANDICAPPED SIDEWALK
RAMP (CONTINUED)

CITY OF WOOD DALE
PAVEMENT 3B

BUSINESS DISTRICT

WHEN SIDEWALK IS PLACE UP TO FACE OF BUILDING, PROVIDE 1/2" PREMOULDED EXPANSION JOINT MATERIAL BETWEEN WALK AND BUILDING

STANDARD WALK
5" THICK
UNLESS NOTED
OTHERWISE

1/2" PREMOULDED EXPANSION JOINT AT 50' INTERVALS

1/2" PREMOULDED EXPANSION JOINT

1/2" PREMOULDED EXPANSION JOINT

TRANSVERSE SLOPE
1/4" PER FT.

WALK THROUGH DRIVEWAY 8" THICK

CURB LINE

STRUCTURE IN SIDEWALK

1/2" PREMOULDED EXPANSION JOINT AT DRIVEWAY

TRANSVERSE SLOPE
1/4" PER FT.

1/2" PREMOULDED EXPANSION JOINT AT 50' INTERVALS

WALK AT DRIVEWAY 6" THICK

1/2" PREMOULDED EXPANSION JOINT

STRUCTURE IN SIDEWALK

DRIVEWAY

PRIVATE WALK

TRANSVERSE CONTRACTION JOINT

SEE RESIDENTIAL DRIVEWAY STANDARD

CURB LINE

5' TYP.

5" THICK

1/2" PREMOULDED EXPANSION JOINT AT INTERSECTION OF WALKS.

5" THICK

1/2" PREMOULDED EXPANSION JOINT

DEPRESSED CURB (TYP.)

DEPRESSED CURB (TYP.)

STANDARD WALK 5" THICK UNLESS OTHERWISE NOTED

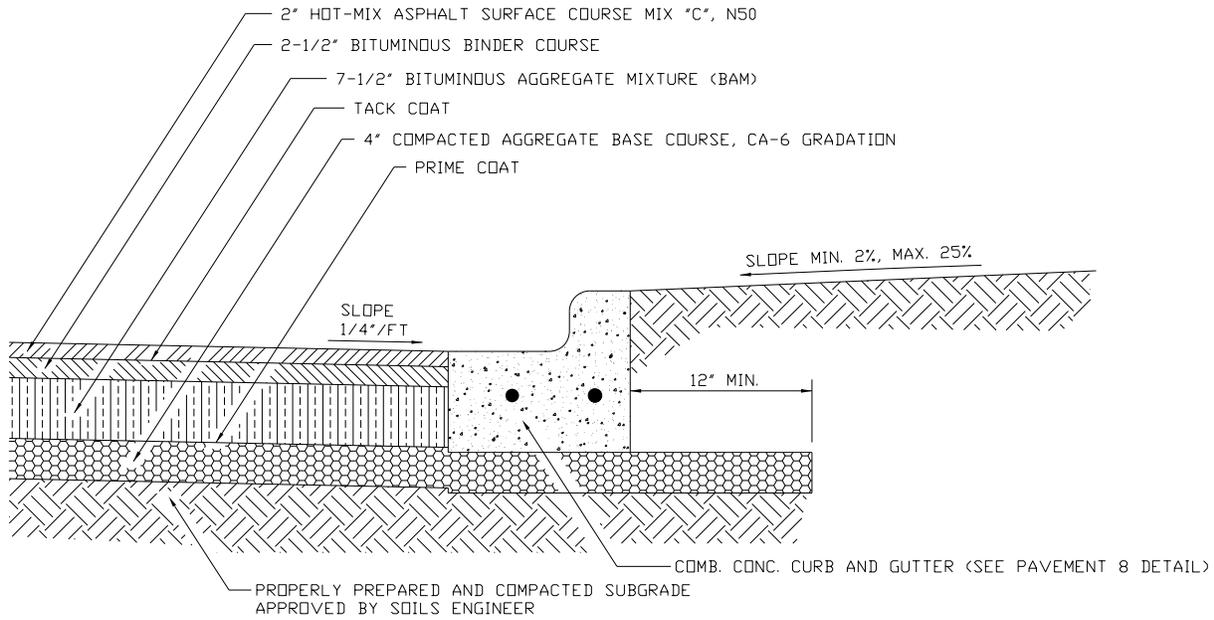
RESIDENTIAL AREA

REV.:	REV.:
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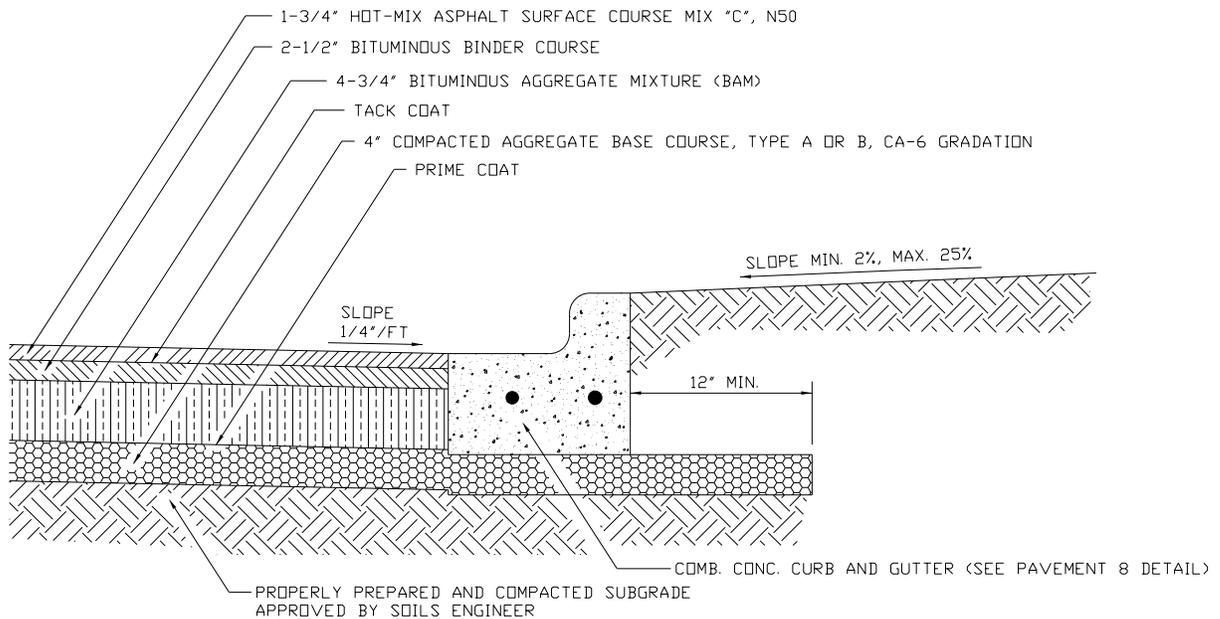
SIDEWALK CONSTRUCTION

CITY OF WOOD DALE

PAVEMENT 4
Packet Page #275



FLEXIBLE PAVEMENT - NON-RESIDENTIAL



FLEXIBLE PAVEMENT - RESIDENTIAL

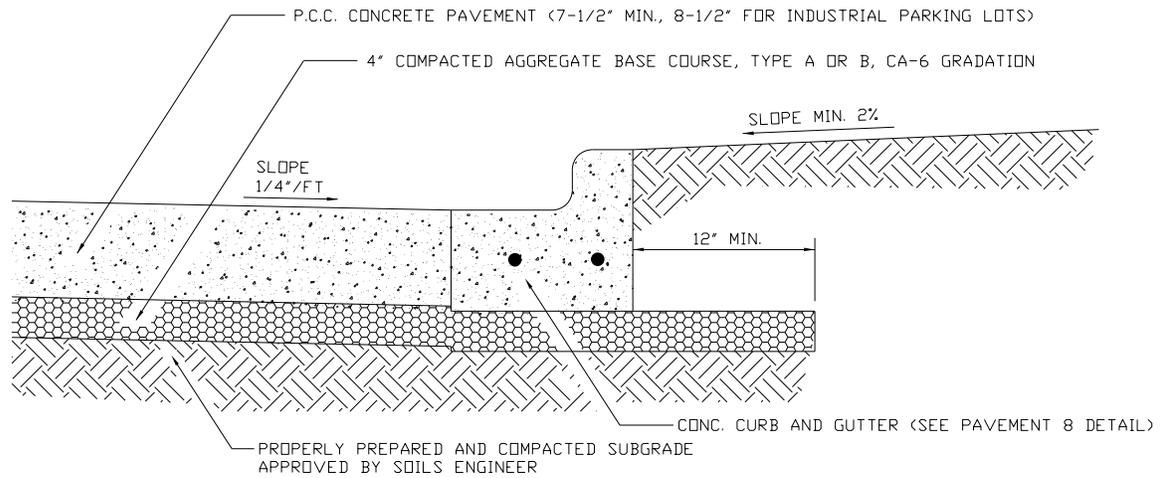
GENERAL NOTES:

1. DIMENSIONS SHOWN ARE MINIMUM VALUES. SOIL ANALYSIS AND TRAFFIC COUNTS SHALL BE USED FOR DETERMINING REQUIRED SECTION.
2. INTEGRAL CURB AND GUTTER SHALL NOT BE PERMITTED WITH RIGID OR COMPOSITE PAVEMENTS.
3. THE FOLLOWING MATERIALS ARE ACCEPTABLE AS BASE COURSE ALTERNATIVES: BITUMINOUS AGGREGATE MIXTURE (BAM) AND P.C. CONCRETE.
4. PROVIDE TACK COAT BETWEEN BAM AND BINDER COURSE IF NOT INSTALLED ON THE SAME DAY.

REV.:	
REV.:	
DRAWN BY:	DATE: 4-3-18

TYPICAL PAVEMENT CROSS-SECTION

CITY OF WOOD DALE
PAVEMENT 5



RIGID PAVEMENT

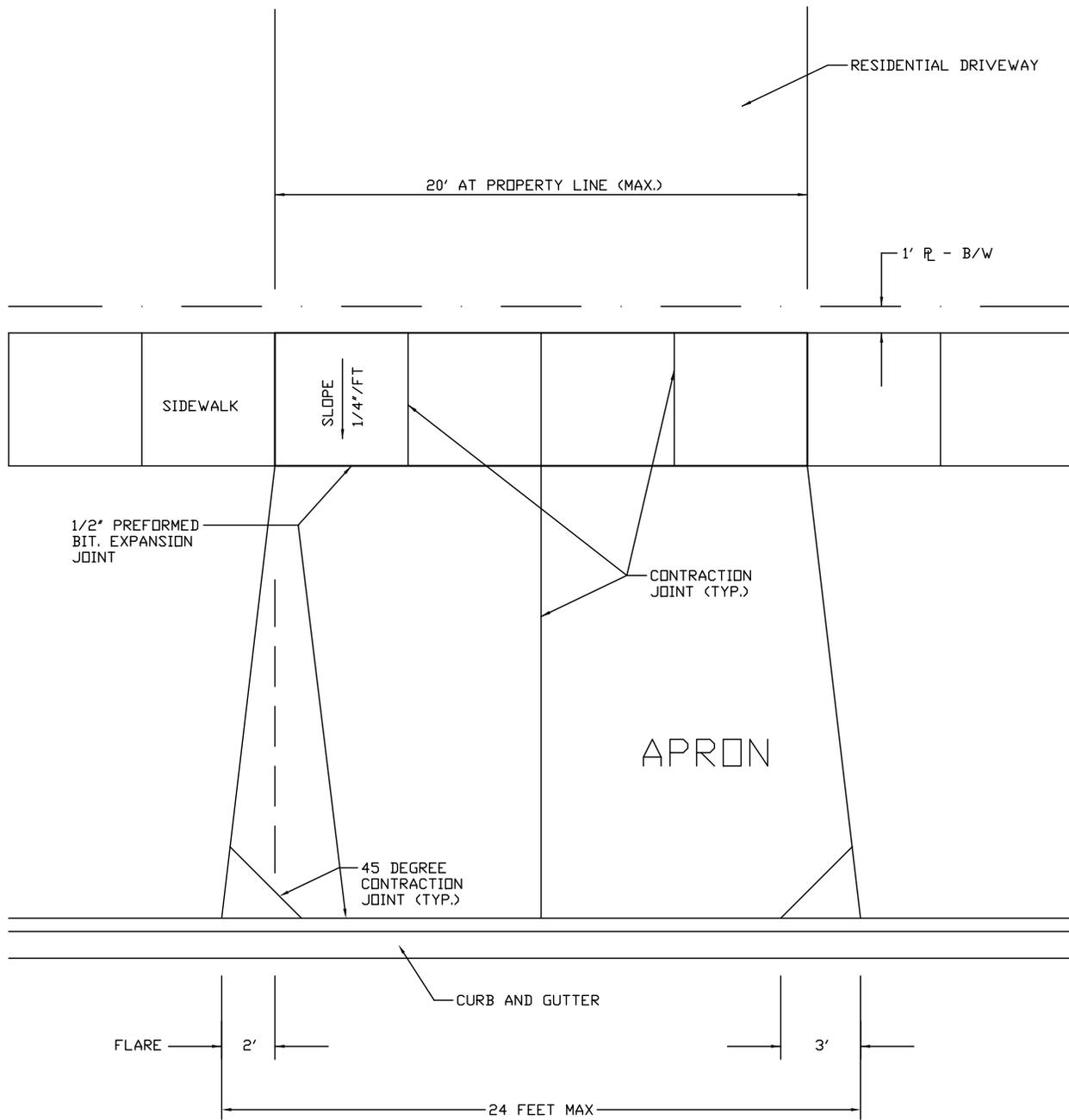
GENERAL NOTES:

1. DIMENSIONS SHOWN ARE MINIMUM VALUES. SOIL ANALYSIS AND TRAFFIC COUNTS SHALL BE USED FOR DETERMINING REQUIRED SECTION.
2. INTEGRAL CURB AND GUTTER SHALL NOT BE PERMITTED WITH RIGID OR COMPOSITE PAVEMENTS.
3. THE FOLLOWING MATERIALS ARE ACCEPTABLE AS BASE COURSE ALTERNATIVES: BITUMINOUS AGGREGATE MIXTURE (BAM) AND P.C. CONCRETE.
4. PROVIDE TACK COAT BETWEEN BAM AND BINDER COURSE IF NOT INSTALLED ON THE SAME DAY.

REV.:	
REV.:	REV.:
DRAWN BY:	DATE: 4-3-18

TYPICAL PAVEMENT
CROSS-SECTION

CITY OF WOOD DALE
PAVEMENT 5A

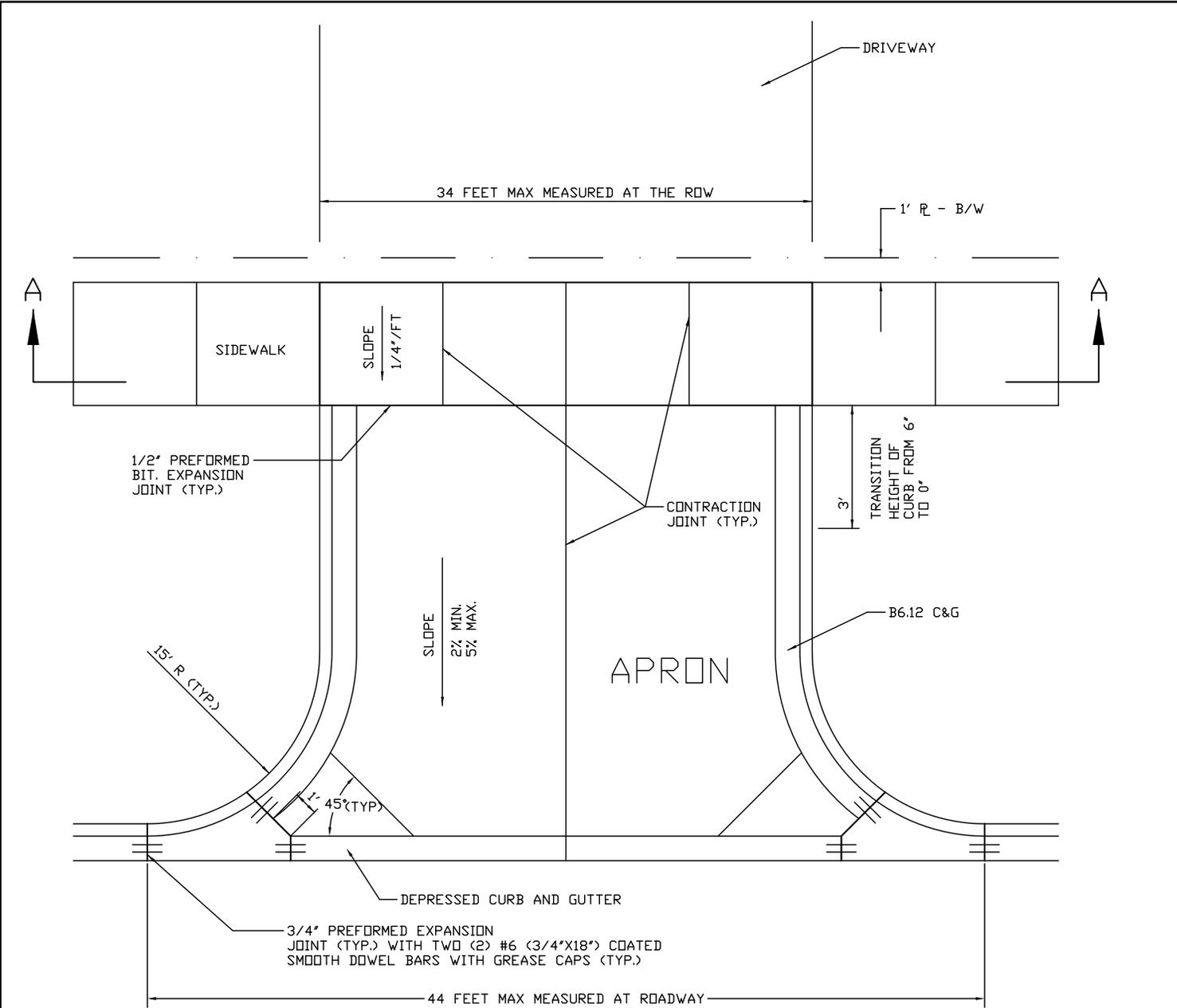


GENERAL NOTES:

1. APRONS SHALL NOT EXCEED 20 FEET IN WIDTH MEASURED AT THE RIGHT-OF-WAY LINE NOR 24 FEET AT THE CURBLINE.
2. ALL AGGREGATE SUB-BASE SHALL BE MECHANICALLY COMPACTED.
3. MINIMUM THICKNESS FOR DRIVEWAY/APRONS: 6" P.C. CONCRETE ON 2" COMPACTED AGGREGATE SUB-BASE (CA-6 GRADATION), OR 3" BITUMINOUS SURFACE ON 6" COMPACTED AGGREGATE SUB-BASE (CA-6 GRADATION).
4. SIDEWALK SHALL EXTEND THROUGH THE DRIVEWAY.
5. DRIVEWAYS SHALL HAVE A MINIMUM SLOPE OF 2% AND A MAXIMUM SLOPE OF 8%.
6. DRIVEWAY APRONS SHALL HAVE A MINIMUM SLOPE OF 2% AND A MAXIMUM SLOPE OF 5%.
7. PATCHES ARE NOT ALLOWED IN NEW APRONS.

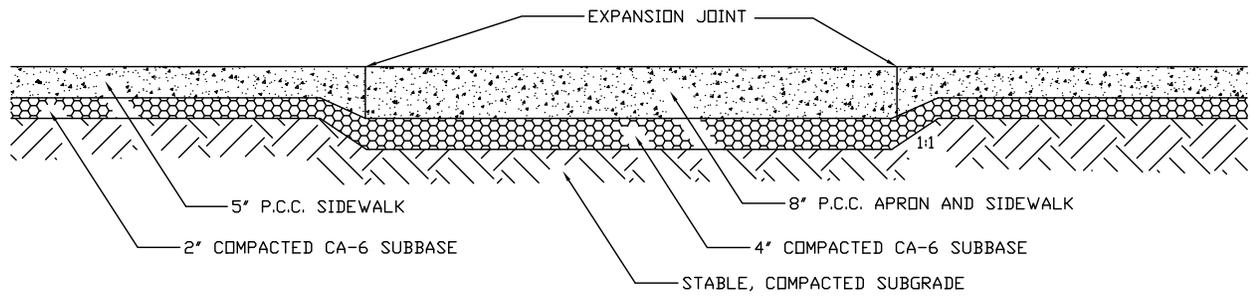
REV.:	REV.:
REV.:	REV.:
DRAWN BY:	DATE: 4-3-18

RESIDENTIAL DRIVEWAY/APRON



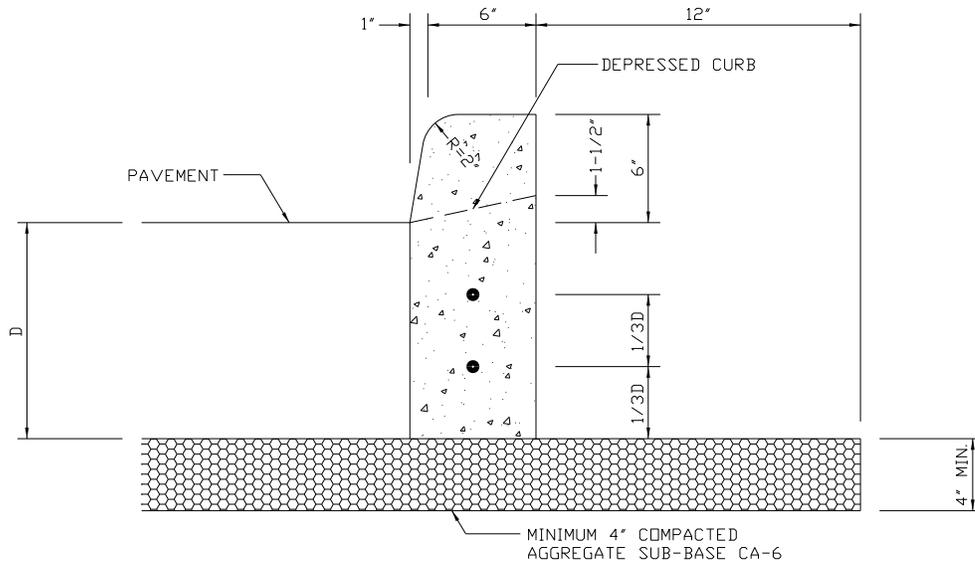
PLAN

NOTE:
ALL AGGREGATE SUBGRADE SHALL
BE MECHANICALLY COMPACTED.

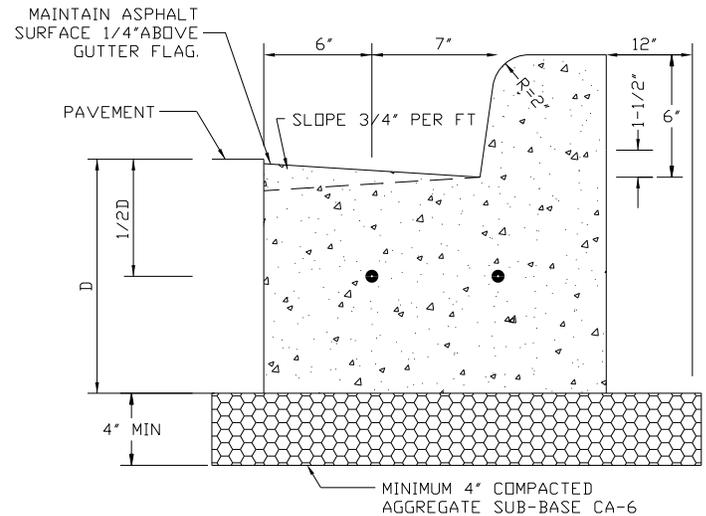
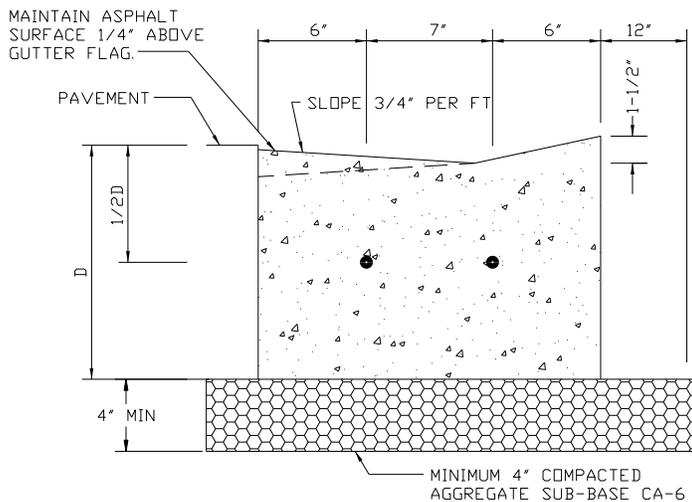


SECTION A-A

REV.:	REV.:	COMMERCIAL/INDUSTRIAL/ MULTI-FAMILY DRIVEWAY/APRON	CITY OF WOOD DALE
DRAWN BY:	DATE: 4-3-18		PAVEMENT 7 Packet Page #279



6" CONCRETE CURB TYPE B



DEPRESSED COMBINATION CURB & GUTTER

COMBINATION CURB & GUTTER

GENERAL NOTES:

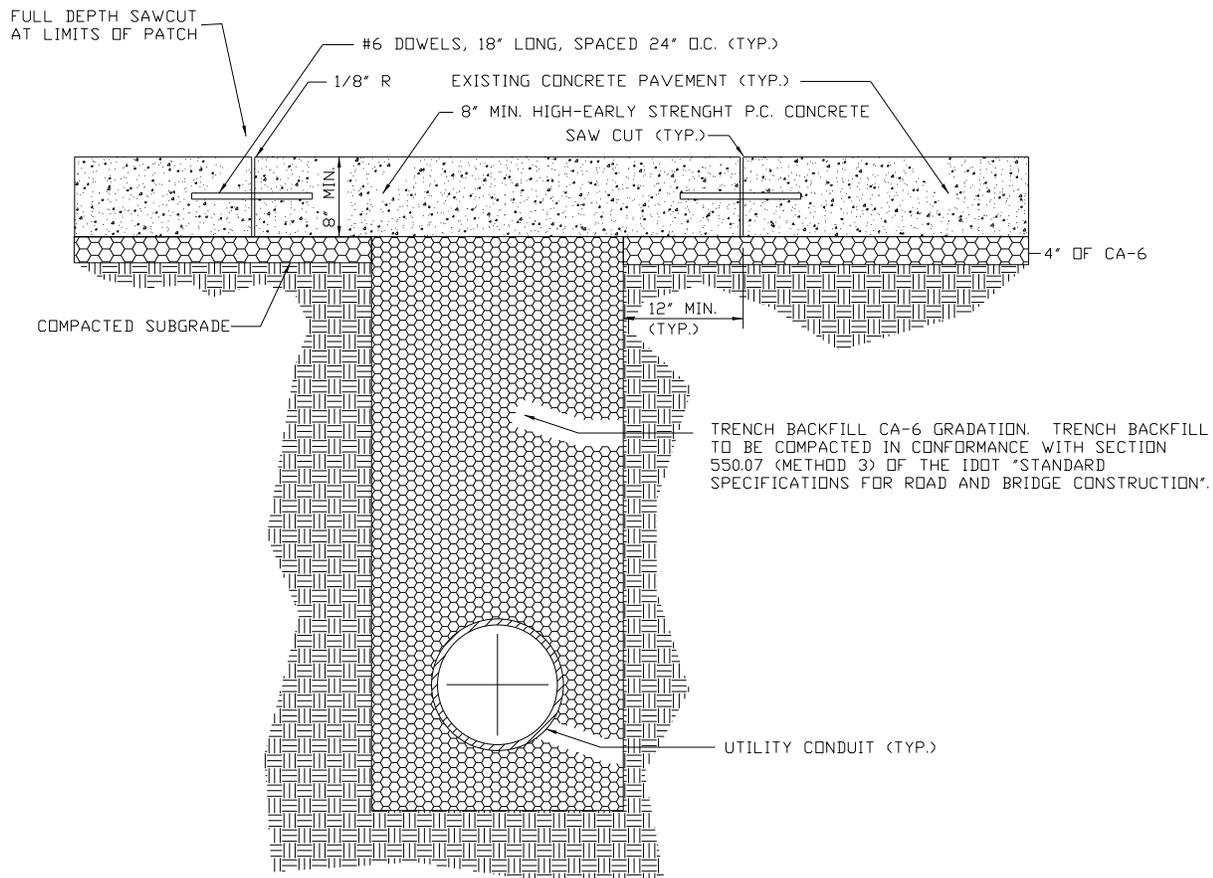
1. 3/4" PREFORMED BITUMINOUS EXPANSION JOINT MATERIAL WITH TWO #6 COATED SMOOTH DOWEL BARS (3/4" DIAMETER X 18") WITH GREASED CAPS SHALL BE PLACED EVERY 45 FEET. THEY SHALL ALSO BE PLACED AT 10' EITHER SIDE OF DRAINAGE STRUCTURES, P.C.'S, RADIUS POINTS, AND BACK OF CUL-DE-SACS. WHEN EXPANSION JOINTS ARE CONSTRUCTED ADJACENT TO EXISTING CURB AND GUTTER, THE EXISTING CURB SHALL BE DRILLED, AND TWO # 6 COATED SMOOTH DOWEL BARS (3/4" DIAMETER X 18") SHALL BE GROUTED IN PLACE. GREASE CAPS SHALL BE PLACED ON THE SIDE OF THE NEW CURB AND GUTTER AND SHALL HAVE A PINCHED STOP THAT WILL PROVIDE A MINIMUM 1" EXPANSION.
2. TOOLED CONTROL JOINTS OR SAWCUTS SHALL BE MADE EVERY 15 FEET.
3. SAWCUTS SHALL BE MADE WITHIN TWENTY-FOUR (24) HOURS AND SEALED WITH A CITY APPROVED JOINT SEALANT. JOINTS SHALL BE CLEAN AND DRY PRIOR TO APPLICATION OF SEALANT.
4. TWO (2) #4 REBARS SHALL BE PLACED CONTINUEDS THROUGHOUT THE CURB AND GUTTER.

REV.:	
REV.:	REV.:
DRAWN BY:	DATE: 4-3-18

CURB AND GUTTER

CITY OF WOOD DALE

PAVEMENT 8
Packet Page #280



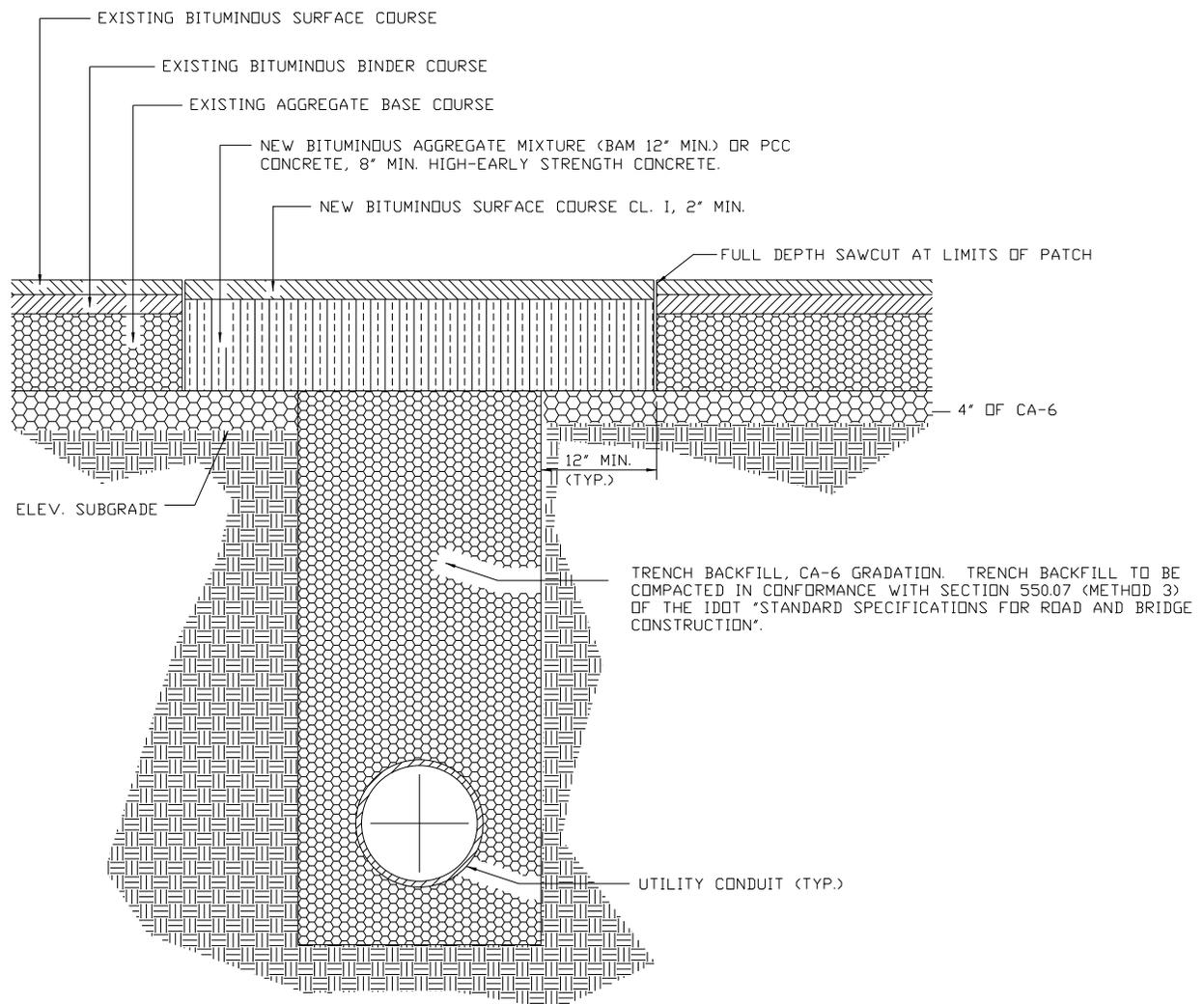
GENERAL NOTES:

1. PAVEMENT SHALL NOT BE OPENED WITHOUT FIRST RECEIVING A PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS.
2. THE TRENCH SHALL BE BACKFILLED WITH AGGREGATE (CA-6 GRADATION) AND COMPACTED TO 95% OF THE STANDARD PROCTOR DENSITY. TRENCH SPOIL OR EXCAVATED MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT HIS EXPENSE.
3. PRIOR TO THE PLACING OF P.C. CONCRETE, THE EXPOSED EDGES OF ALL EXISTING PAVEMENT SHALL BE SAWCUT FULL DEPTH TO PROVIDE A SMOOTH, CLEAN VERTICAL EDGE, FREE OF LOOSE MATERIAL.
4. EXCAVATIONS SHALL BE PROTECTED BY BARRICADES WITH FLASHING LIGHTS, AT LOCATIONS WHERE ADJUSTMENTS ARE LOCATED IN TRAVEL LANES, A ONE-INCH (1") STEEL PLATE SHALL BE PLACED AND MAINTAINED BY THE CONTRACTOR UNTIL THE SURFACE RESTORATION IS COMPLETE. THE PLATE SHALL BE PROTECTED FROM SLIDING AND TRANSITIONED WITH BITUMINOUS RAMPS AS REQUIRED. BARRICADES AND STEEL PLATES SHALL BE PRESENT AT THE WORK SITE PRIOR TO THE ROAD OPENING.
5. MINIMUM WIDTH OF A CONCRETE PATCH SHALL BE FULL CONCRETE PANELS.

REV.:	REV.:
REV.:	REV.:
DRAWN BY:	DATE: 4-3-18

RIGID PAVEMENT
UTILITY TRENCH

CITY OF WOOD DALE
PAVEMENT 10 Packet Page #281



GENERAL NOTES:

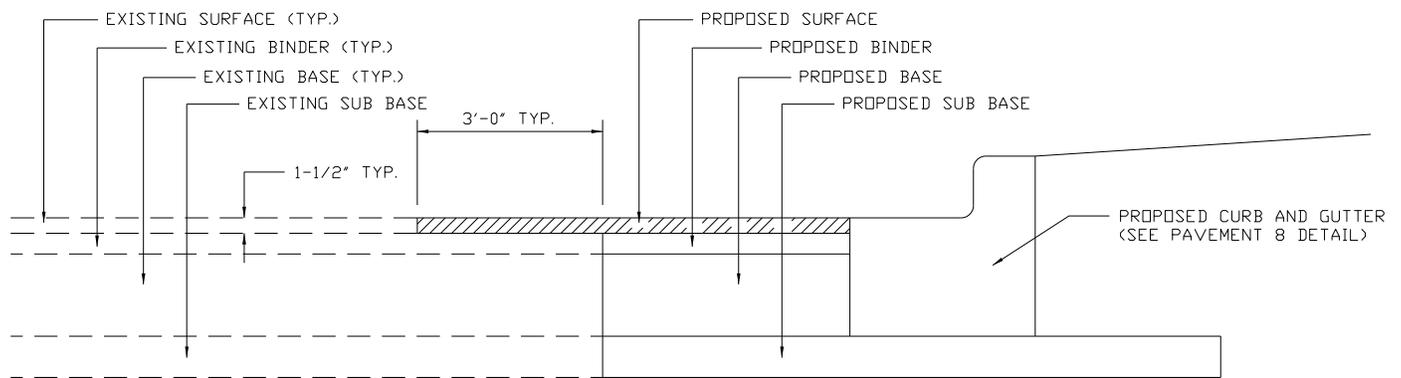
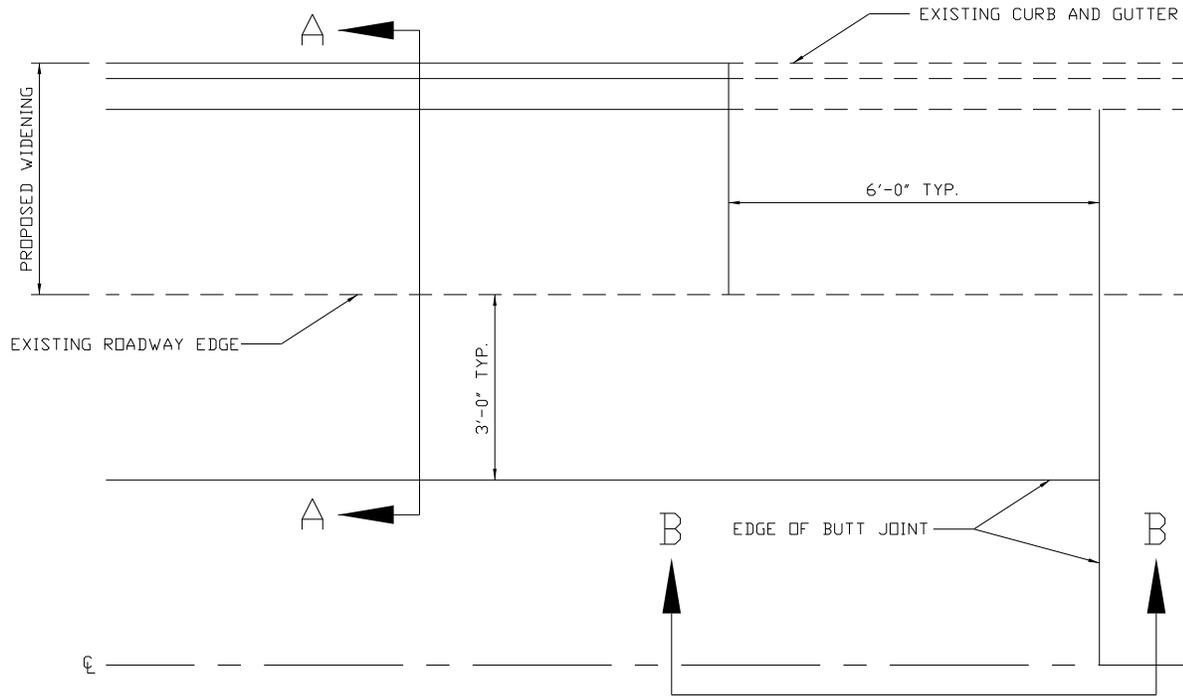
1. PAVEMENT SHALL NOT BE OPENED WITHOUT FIRST RECEIVING A PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS.
2. THE TRENCH SHALL BE BACKFILLED WITH AGGREGATE (CA-6 GRADATION) AND COMPACTED TO 95% OF THE STANDARD PROCTOR DENSITY. TRENCH SPOIL OR EXCAVATED MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT HIS EXPENSE.
3. PRIOR TO THE PLACING OF P.C. CONCRETE, THE EXPOSED EDGES OF ALL EXISTING PAVEMENT SHALL BE SAWCUT FULL DEPTH TO PROVIDE A SMOOTH, CLEAN VERTICAL EDGE, FREE OF LOOSE MATERIAL.
4. EXCAVATIONS SHALL BE PROTECTED BY BARRICADES WITH FLASHING LIGHTS, AT LOCATIONS WHERE ADJUSTMENTS ARE LOCATED IN TRAVEL LANES, A ONE-INCH (1") STEEL PLATE SHALL BE PLACED AND MAINTAINED BY THE CONTRACTOR UNTIL THE SURFACE RESTORATION IS COMPLETE. THE PLATE SHALL BE PROTECTED FROM SLIDING AND TRANSITIONED WITH BITUMINOUS RAMPS AS REQUIRED. BARRICADES AND STEEL PLATES SHALL BE PRESENT AT THE WORK SITE PRIOR TO THE ROAD OPENING.
5. MINIMUM WIDTH OF A PATCH SHALL BE 4.0 FEET. ALL PATCHES SHALL FULL-DEPTH IN A RECTANGULAR SHAPE AND SHALL EXTEND ACROSS FULL LANES.

REV.:	REV.:
REV.:	REV.:
DRAWN BY:	DATE: 4-3-18

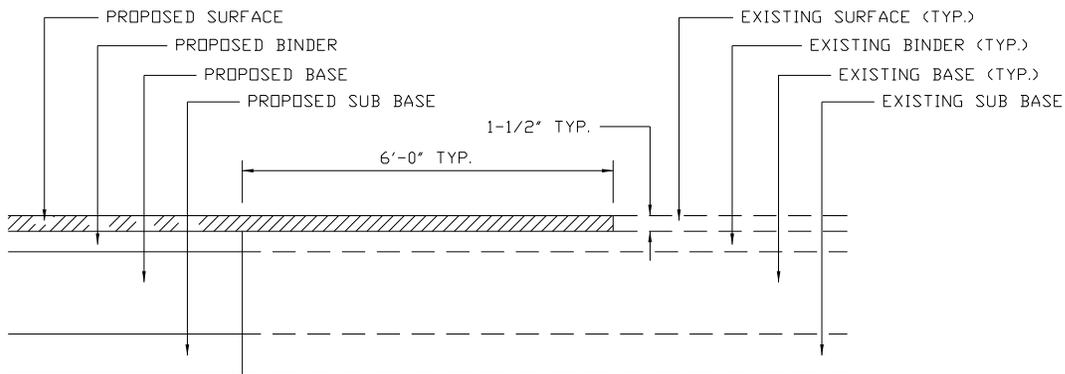
FLEXIBLE PAVEMENT
UTILITY TRENCH

CITY OF WOOD DALE

PAVEMENT 11
Packet Page #282



SECTION A-A



SECTION B-B

GENERAL NOTES:

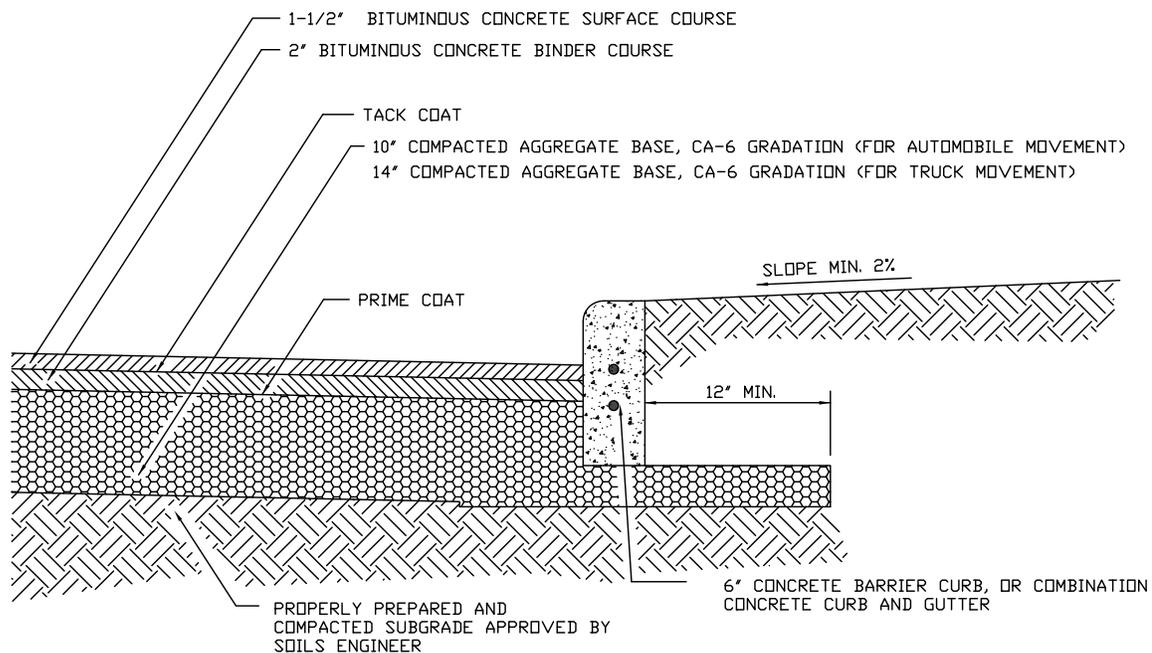
1. FOR WIDENING LESS THAN 8 INCHES AND/OR WHERE REQUIRED COMPACTION IS DIFFICULT TO OBTAIN, CONCRETE BASE SHALL BE USED.

REV.:	
REV.:	
DRAWN BY:	DATE: 4-3-18

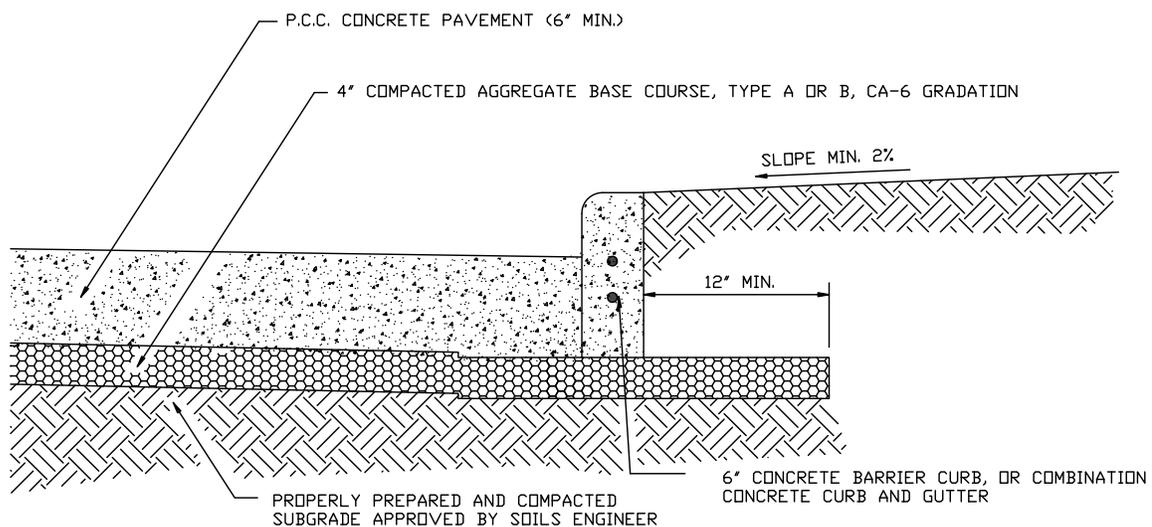
PAVEMENT
BUTT JOINT

CITY OF WOOD DALE

PAVEMENT 12
Packet Page #283



FLEXIBLE PAVEMENT



RIGID PAVEMENT

GENERAL NOTES:

1. DIMENSIONS SHOWN ARE MINIMUM VALUES. SOIL ANALYSIS AND TRAFFIC COUNTS SHALL BE USED FOR DETERMINING REQUIRED PAVEMENT SECTION.
2. INTEGRAL CURB AND GUTTER SHALL NOT BE PERMITTED WITH RIGID OR COMPOSITE PAVEMENTS.
3. THE FOLLOWING MATERIALS ARE ACCEPTABLE AS BASE COURSE ALTERNATIVES: BITUMINOUS AGGREGATE MIXTURE (BAM) AND P.C. CONCRETE.
4. THE USE OF PERMEABLE AND NON-PERMEABLE PAVERS ARE ACCEPTABLE PROVIDED THAT THE INSTALLATION IS IN COMPLIANCE WITH THE MANUFACTURER'S REQUIREMENTS.

REV.:	REV.:
REV.:	REV.:
DRAWN BY:	DATE: 4-3-18

TYPICAL PARKING LOT PAVEMENT

CITY OF WOOD DALE

PAVEMENT 13
Packet Page #284

SECTION 600- LIGHTING & TRAFFIC

DETAILS

CITY STREET NAME SIGN STANDARD
DECORATIVE STREET NAME SIGN
DECORATIVE STOP SIGN
LIGHTING FOUNDATION
LIGHTING FOUNDATION SIZING CHART
CONCRETE POLE FOUNDATION
TRANSFORMER BASE 9"
CONTROL CABINET FOUNDATION
STREET LIGHT CONNECTION TYP 1
STREET LIGHT CONNECTION TYP 2
STREET LIGHTING CONTROLLER SCHEMATIC
CONDUIT UNDER PAVEMENT
CUT SHEETS OF APPROVED POLES, DECORATIVE POLES, AND FIXTURES

City Street Name Sign Standard



36"x 8"
C Series Letters

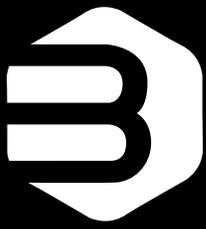


36"x 8"
C Series Letters



48"x 8"
C Series Letters

- 1) City street name signs shall be white background with black "C" series lettering and black border. All lettering sizes and spaces shall follow MUTCD Regulations
- 2) All street name signs shall contain the City Logo on the left hand side of the sign; this logo size shall be compliant with MUTCD Regulations.
- 3) Suffix shall be smaller than the street name.
- 4) All reflective sheeting shall be HIP or Diamond Grade. 3M products only unless approved by the Director of Public Works or their designee.
- 5) Blanks shall be .080 thickness
- 6) Minimum Blank size shall be 8" in with width. 12" blanks shall be used where applicable and appropriate per MUTCD as well as high visibility areas as designated by the Director of Public Works.



BRANDON®

I N D U S T R I E S

1601 Wilmeth Road
McKinney, Texas 75069
Phone: 972.542.3000
Toll Free: 800.247.1274
brandonindustries.com

Complete Sign Unit

made from the following parts:

POLE:

SPS3X12 - 3" x 12' SMOOTH POLE
EXTRUDED ALUMINUM ALLOY 6005-T5
WALL THICKNESS .125"



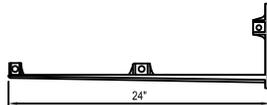
FINIAL:

FIN-A3 - ACORN FINIAL FOR 3" OD ROUND POLE.
HEIGHT: 6.75"
WIDTH: 3.5"
CAST ALUMINUM ALLOY #356



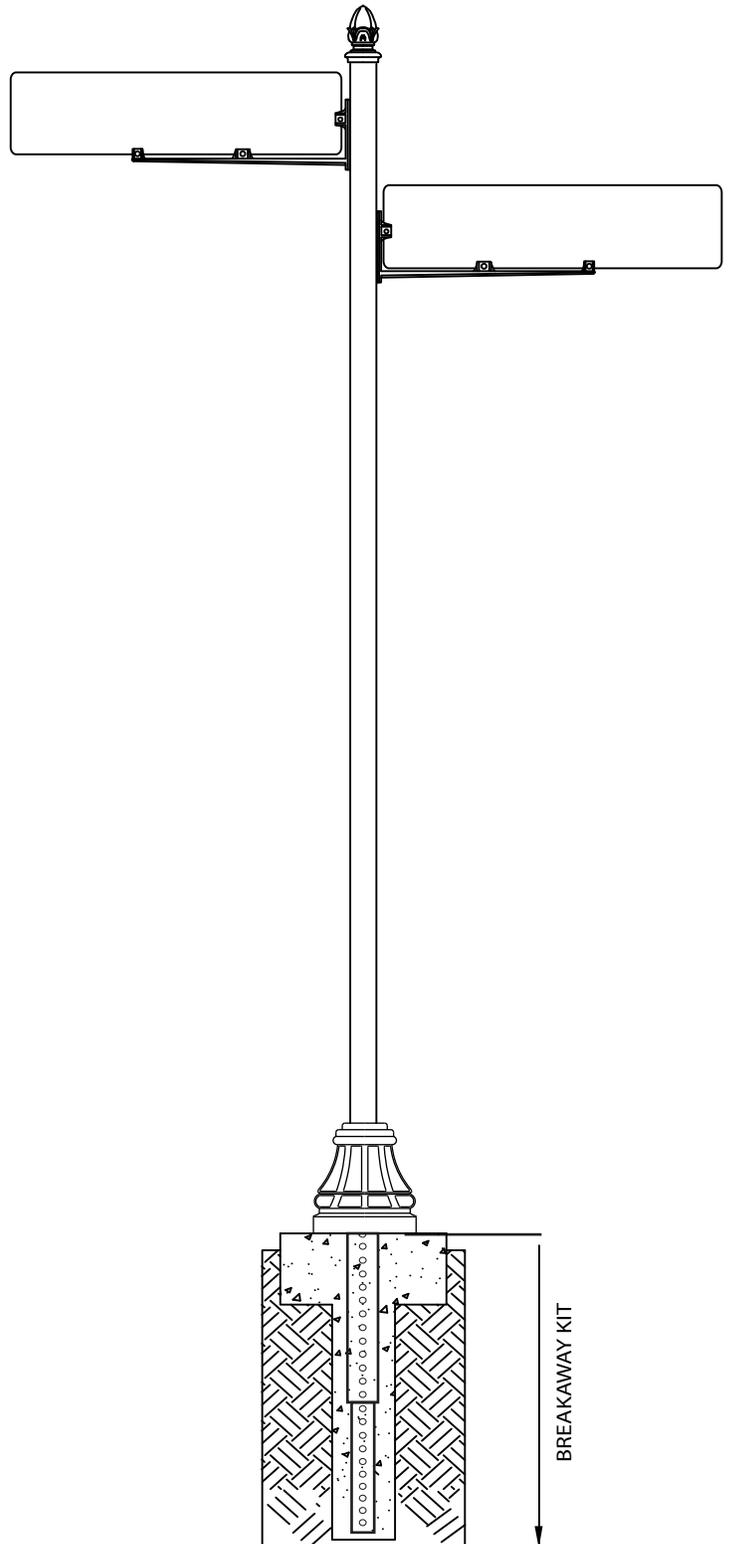
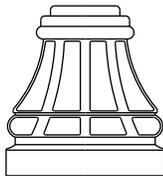
TRIMS:

2WAYARM24 - CANTILEVER ARM FOR STREET SIGN
LENGTH: 24"

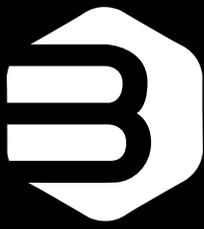


BASE:

2PCD - TWO-PIECE BASE FOR 3" OD POST
HEIGHT: 9.75"
WIDTH: 9"
CAST ALUMINUM ALLOY #356



NOTES:
COMPLETE UNIT SHOWN WITH 2' BELOW GRADE BURIAL.
DRAWING FOR INFORMATION ONLY, NOT INTENDED FOR CONSTRUCTION PURPOSES.



BRANDON®

I N D U S T R I E S

1601 Wilmeth Road
McKinney, Texas 75069
Phone: 972.542.3000
Toll Free: 800.247.1274
brandonindustries.com

Complete Sign Unit

made from the following parts:

POLE:

SPS3X12 - 3" x 12' SMOOTH POLE
EXTRUDED ALUMINUM ALLOY 6005-T5
WALL THICKNESS .125"



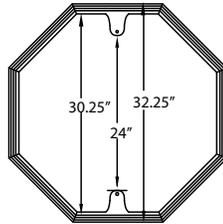
FINIAL:

FIN-A3- ACORN FINIAL FOR 3" OD ROUND POLE.
HEIGHT: 6.75"
WIDTH: 3.5"
CAST ALUMINUM ALLOY #356



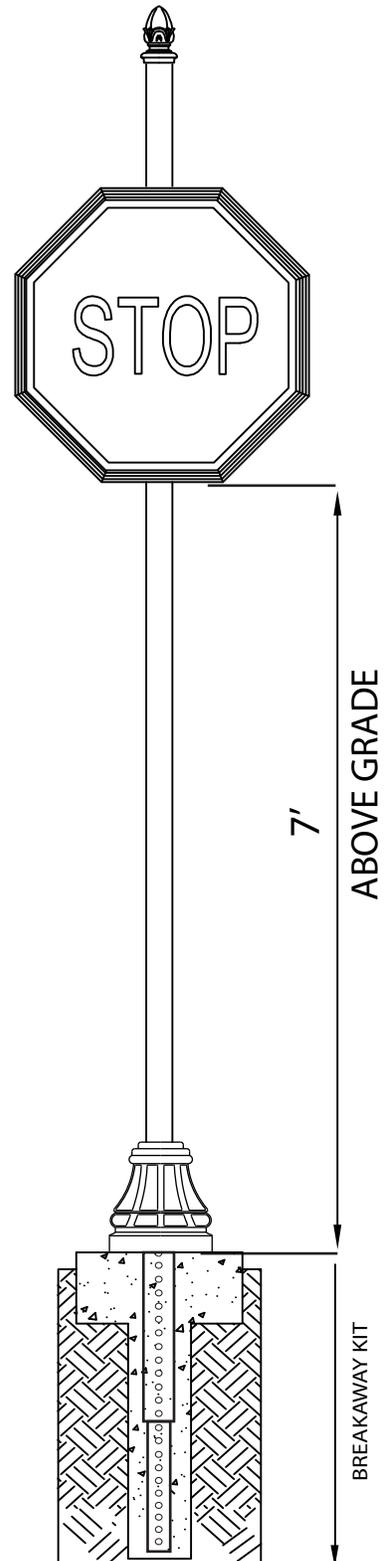
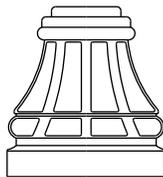
TRIMS:

TSTOP30N- TRIM FOR 30" STOP SIGN
CAST ALUMINUM ALLOY #356



BASE:

2PCD - TWO-PIECE BASE FOR 3" OD POST
HEIGHT: 9.75"
WIDTH: 9"
CAST ALUMINUM ALLOY #356



NOTES:
COMPLETE UNIT SHOWN WITH 2' BELOW GRADE BURIAL.
DRAWING FOR INFORMATION ONLY, NOT INTENDED FOR CONSTRUCTION PURPOSES.

Packet Page #288

4-1" GALVANIZED ANCHOR
BOLTS 2 3/4" PROJECTION

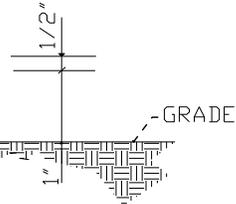
3 SP @ 4"

EXOTHERMIC WELD
#4 BARE GROUND
WIRE

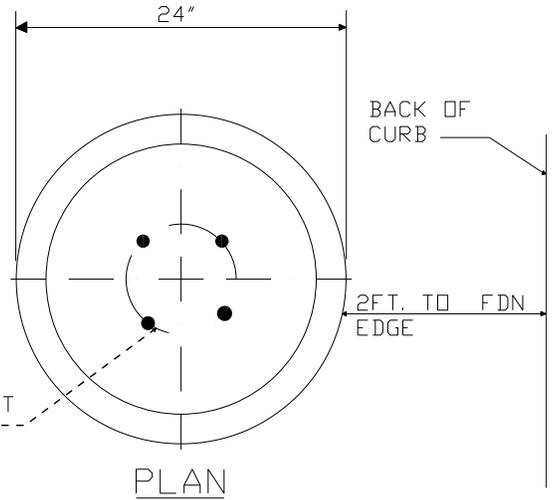
6'-0"
BALANCE @ 12" SP

3/4" DIA. 10'
LENGTH GROUND
ROD

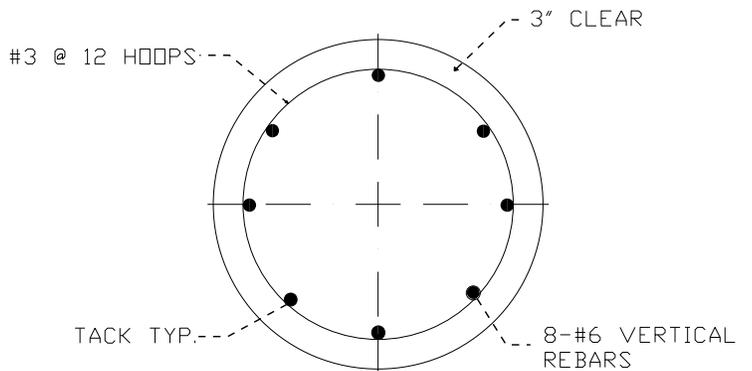
2'-0" 24" DIA.



ELEVATION



PLAN



SECTION A-A

CONCRETE FOUNDATION DETAIL
N.T.S.

REV.:	REV.:
REV.:	DATE: 4-3-18
DRAWN BY:	

LIGHTING FOUNDATION

CITY OF WOOD DALE
LIGHTING FOUNDATION 2
Packet Page #289

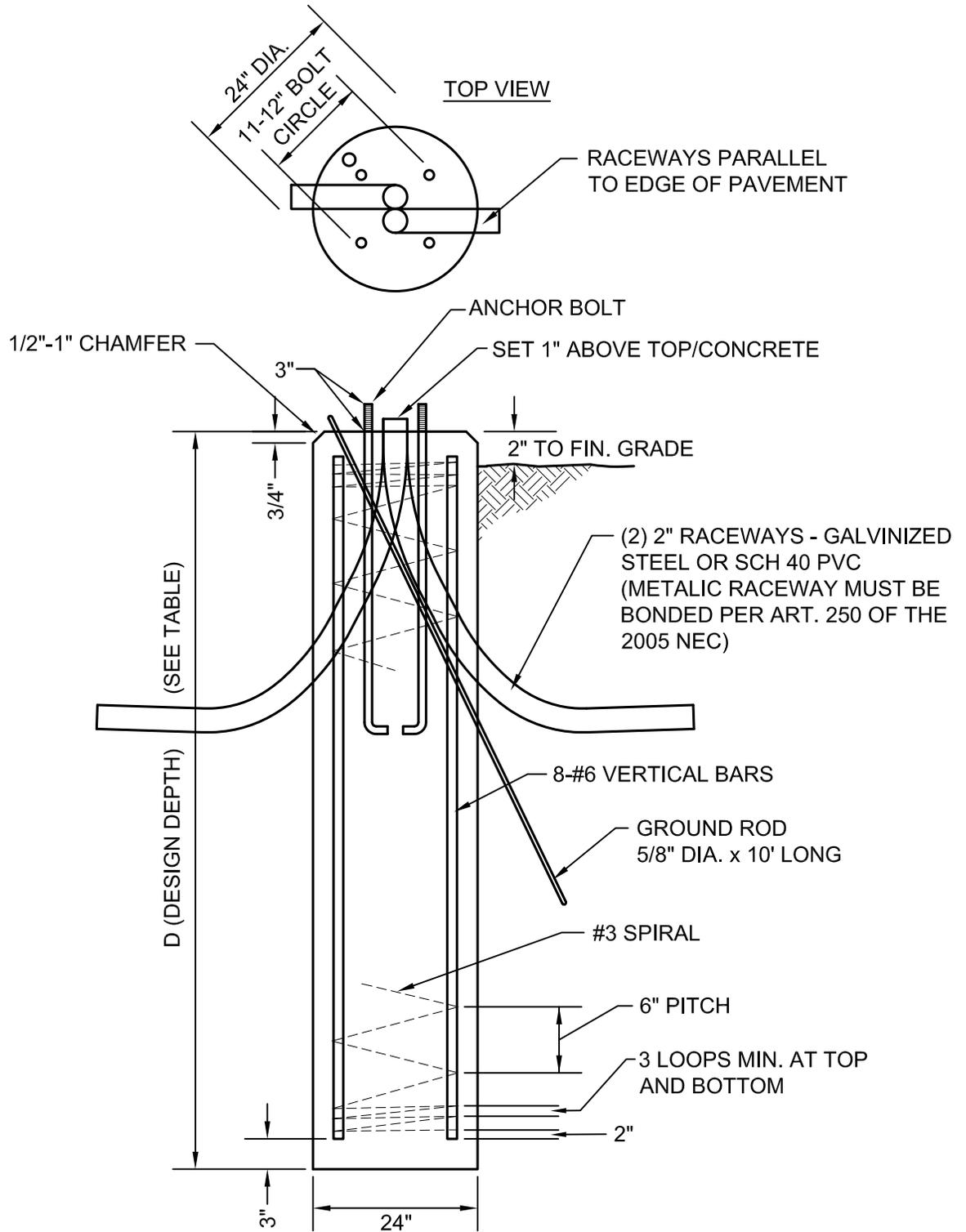
24 IN. DIA. FOUNDATION DEPTH TABLE
DESIGN BASE ON 80 M.P.H. AASHTO WIND LOADING

TYPE OF SOIL	FOUNDATION DEPTH D	REINFORCEMENT IN FOUNDATION	
		VERTICAL BARS	HORIZONTAL BARS
ROCK OR SOLIDIFIED SLAG	5' - 0"	NONE	NONE
DENSE SAND	7' - 9"	8 - #6 X 7'-4"	#3 X 73'
MEDIUM SAND	8' - 3"	8 - #6 X 7'-10"	#3 X 78'
LOOSE SAND	9' - 0"	8 - #6 X 8'-7"	#3 X 85'
STIFF CLAY	7' - 0"	8 - #6 X 6'-7"	#3 X 66'
MEDIUM CLAY	9' - 6"	8 - #6 X 9'-1"	#3 X 90'
SOFT CLAY	13' - 0"	8 - #6 X 12'-7"	#3 X 122'

REV.:	REV.:
REV.:	REV.:
DRAWN BY:	DATE: 4-3-18

LIGHTING FOUNDATION
SIZE CHART

CITY OF WOOD DALE
LIGHTING 1 Packet Page #290



**CONCRETE POLE FOUNDATION
DETAIL**

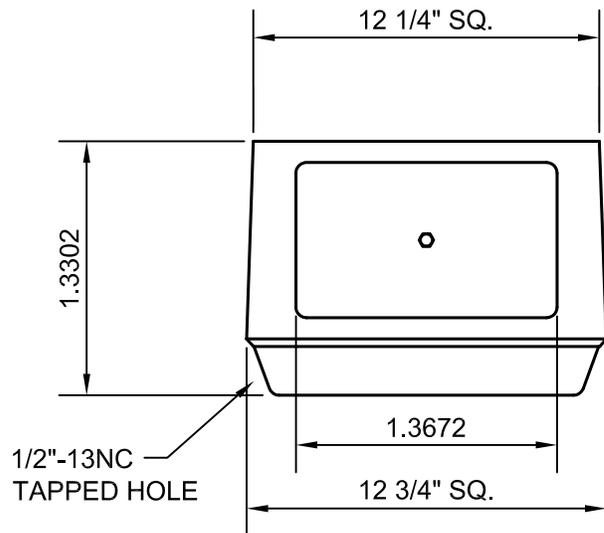
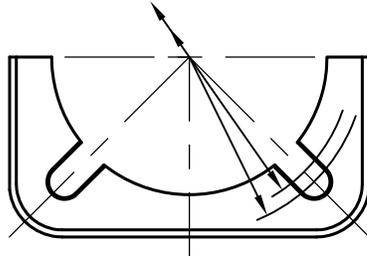
REVISED: 01/01/2013

SHEET 1 OF 2

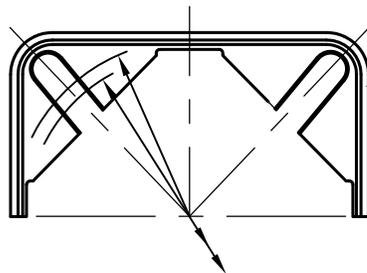
BASE SUPPLIED WITH:

1. DOOR AND 1/4"-20NC S.S. HEX. HD. SCREW
2. EIGHT 1" WASHERS 1/2" THICK X 2 3/4" O.D. (GALV. PER ASTM A153 OR ASTM B454)
3. FOUR 1"-8NC X 3 3/4" LONG GALV. STL. HEX. HD. BOLTS
4. FOUR 1"-8NC GALV. STL. HEX. NUTS
5. FOUR 1" GALV. STL. LOCK WASHERS
6. FOUR 1" GALV. STL. FLAT WASHERS

10 1/2" TO 12" DIA.
BOLT CIRCLE



AKRON FOUNDRY TB6-9"
MATERIAL: ALUM. ALLOY 356-T6



10 1/2" TO 12 1/2" DIA.
BOLT CIRCLE

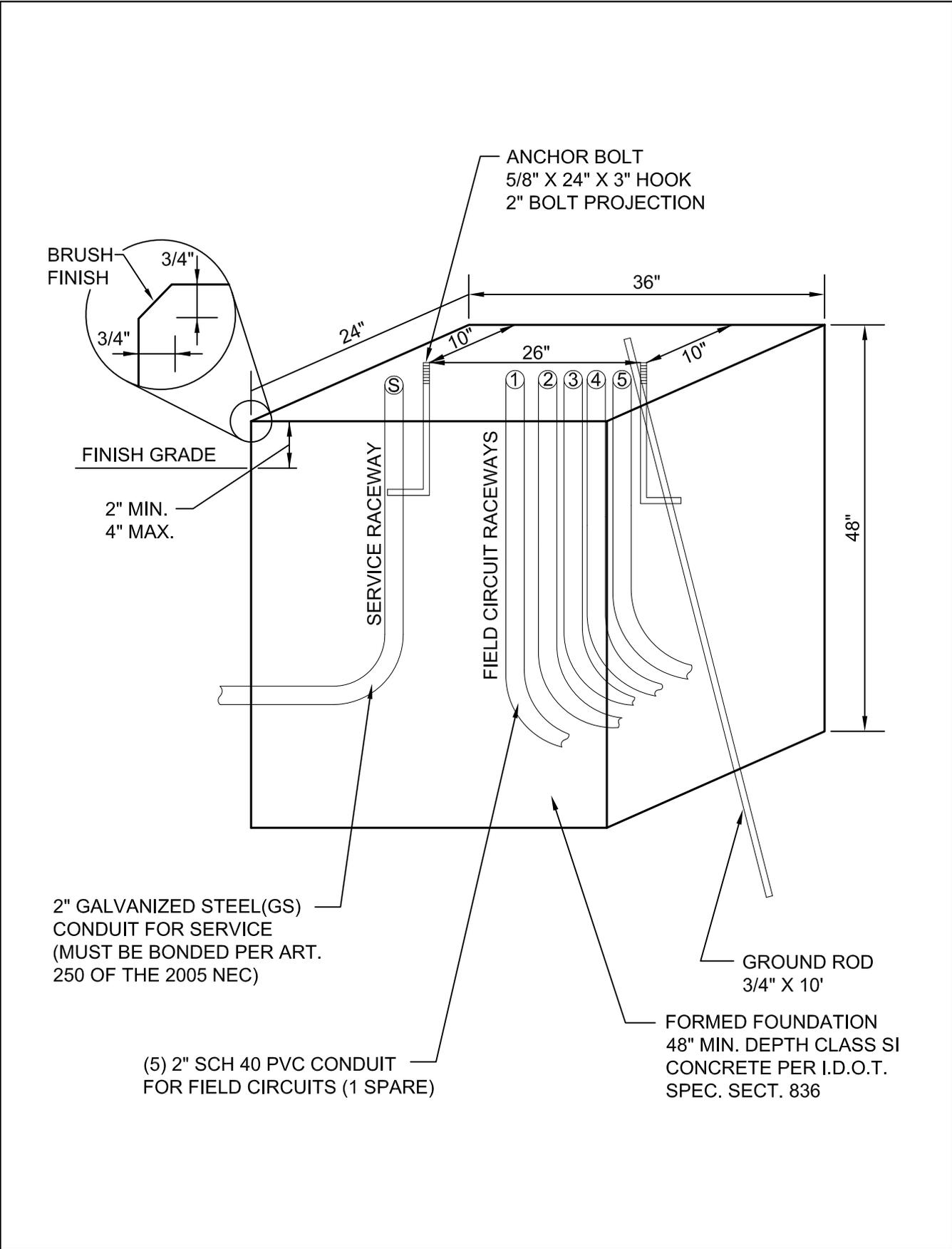
NOTE:

BASE POWDER COATED
TEXTURED DARK BRONZE PER
73737-T31 WHICH HAS HAPCO'S
STANDARD 5 YEAR WARRANTY.

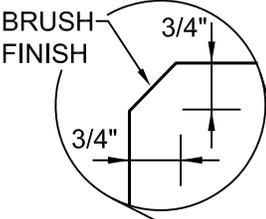
TRANSFORMER BASE - 9 INCH

REVISED: 01/01/2013

SHEET 1 OF 1



ANCHOR BOLT
 5/8" X 24" X 3" HOOK
 2" BOLT PROJECTION



BRUSH FINISH
 3/4"
 3/4"
 FINISH GRADE
 2" MIN.
 4" MAX.

SERVICE RACEWAY

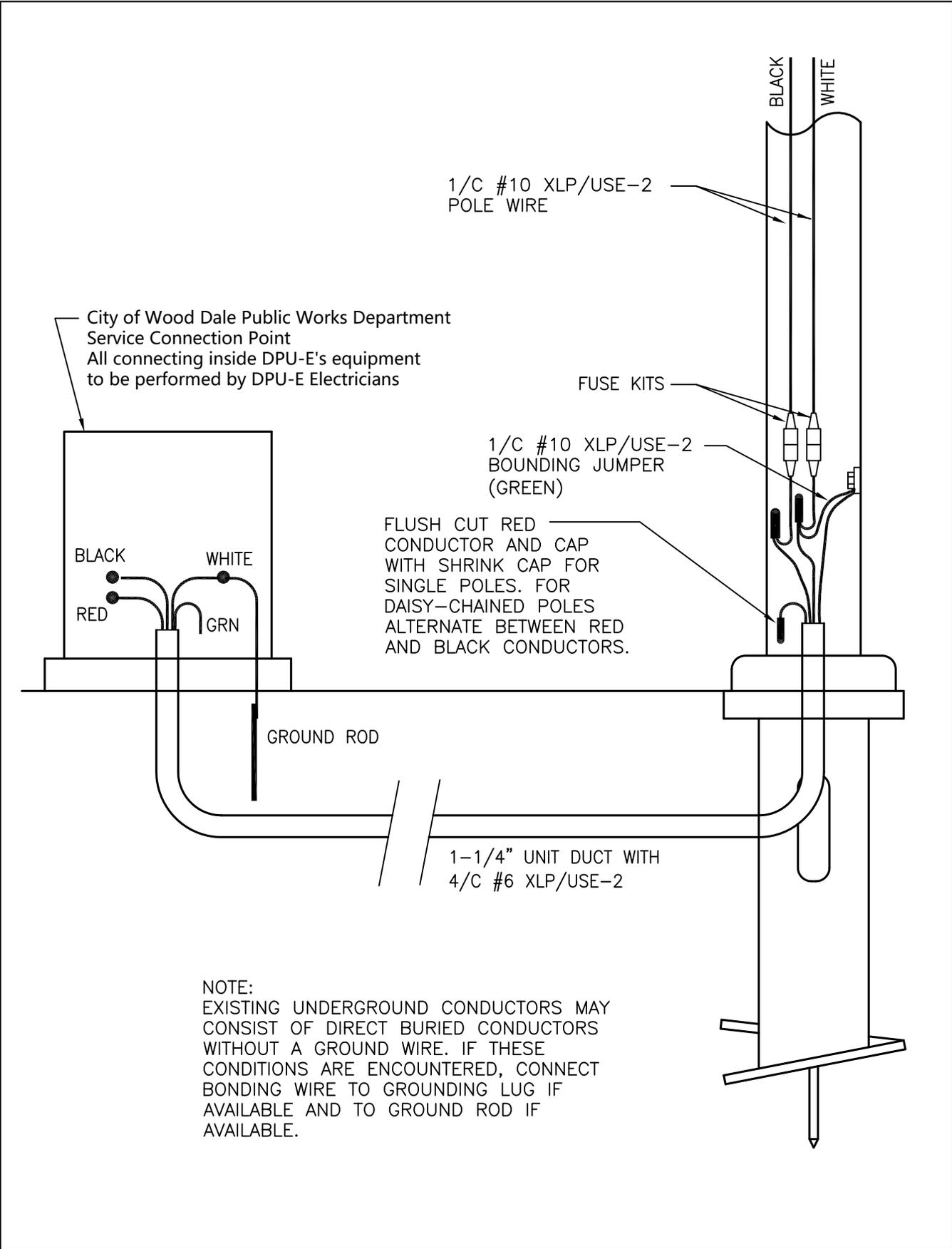
FIELD CIRCUIT RACEWAYS

2" GALVANIZED STEEL(GS)
 CONDUIT FOR SERVICE
 (MUST BE BONDED PER ART.
 250 OF THE 2005 NEC)

(5) 2" SCH 40 PVC CONDUIT
 FOR FIELD CIRCUITS (1 SPARE)

GROUND ROD
 3/4" X 10'

FORMED FOUNDATION
 48" MIN. DEPTH CLASS SI
 CONCRETE PER I.D.O.T.
 SPEC. SECT. 836



City of Wood Dale Public Works Department
 Service Connection Point
 All connecting inside DPU-E's equipment
 to be performed by DPU-E Electricians

1/C #10 XLP/USE-2
 POLE WIRE

FUSE KITS

1/C #10 XLP/USE-2
 BOUNDING JUMPER
 (GREEN)

FLUSH CUT RED
 CONDUCTOR AND CAP
 WITH SHRINK CAP FOR
 SINGLE POLES. FOR
 DAISY-CHAINED POLES
 ALTERNATE BETWEEN RED
 AND BLACK CONDUCTORS.

GROUND ROD

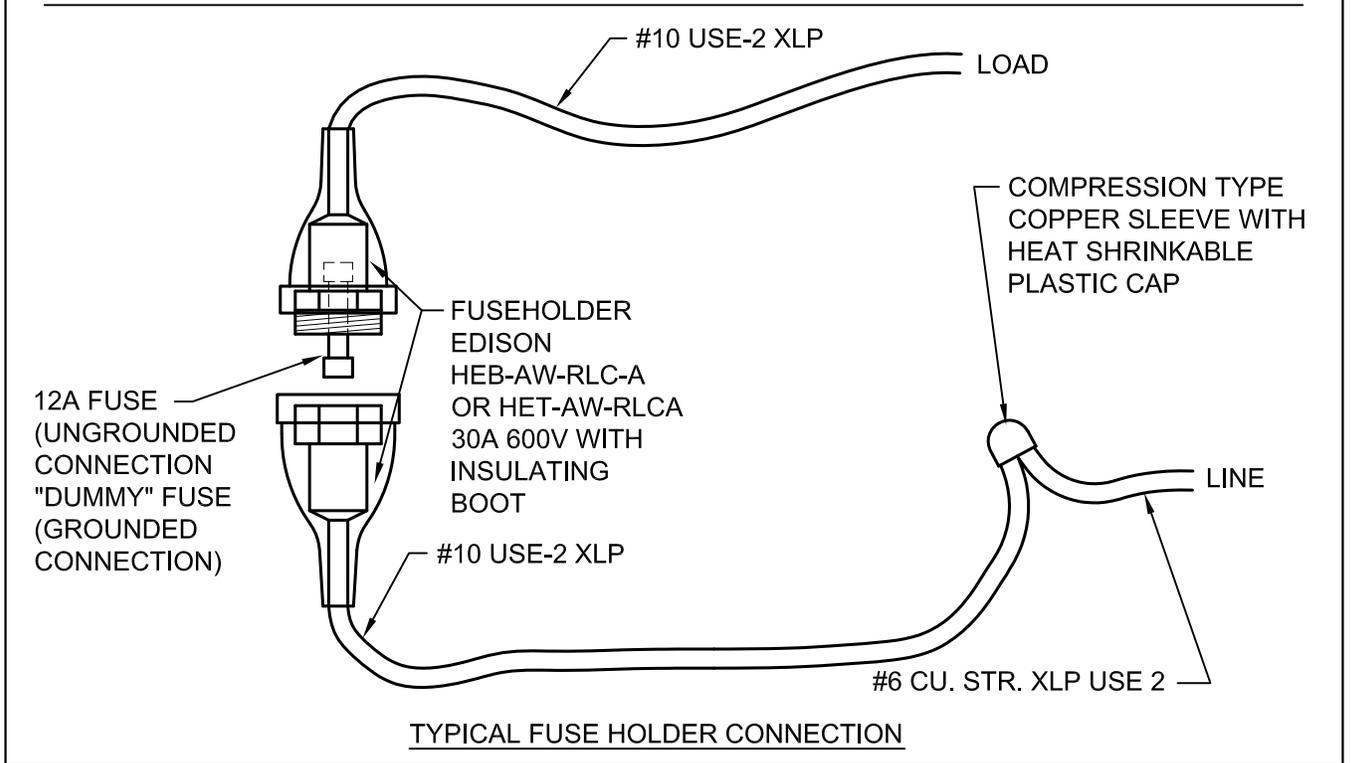
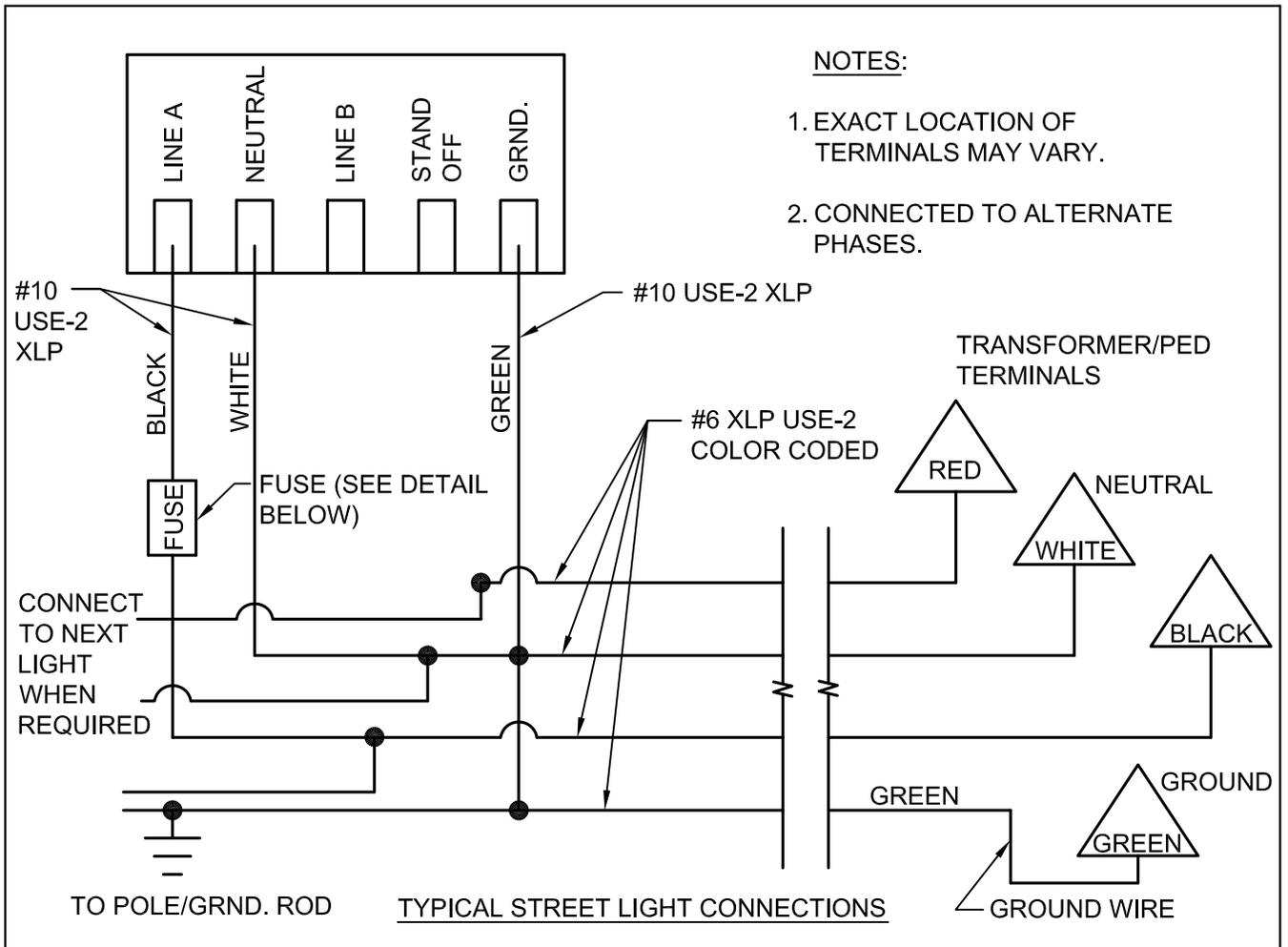
1-1/4" UNIT DUCT WITH
 4/C #6 XLP/USE-2

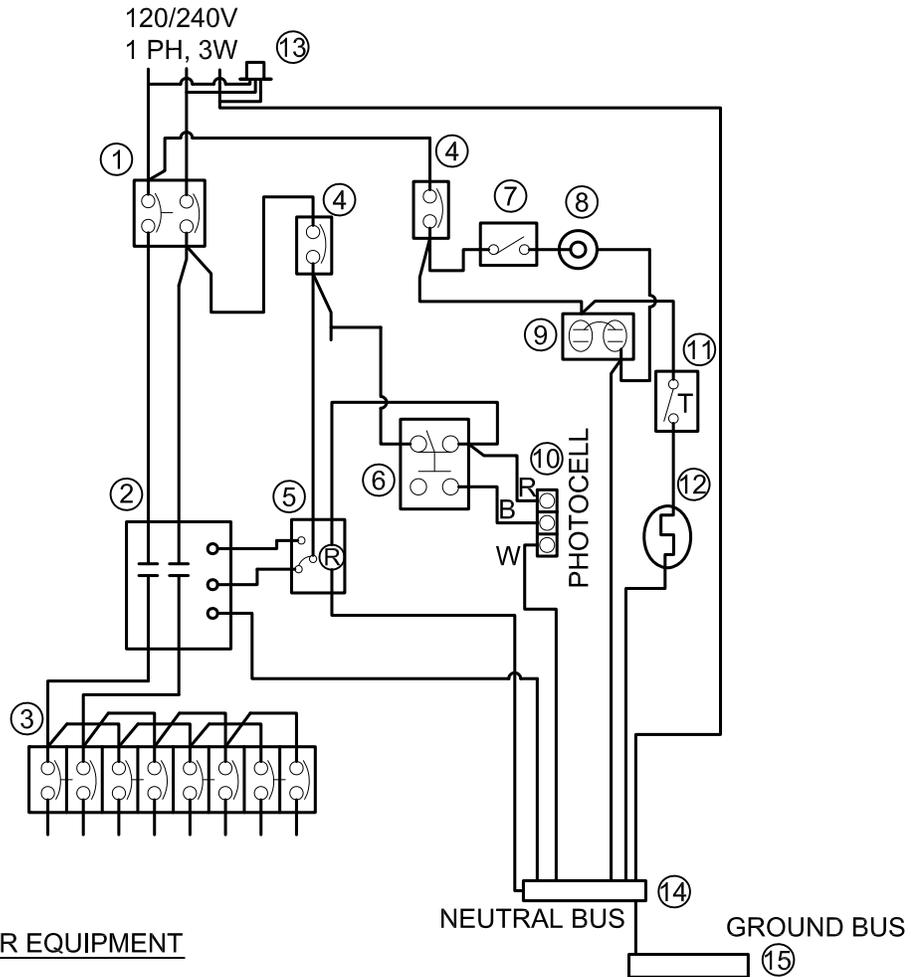
NOTE:
 EXISTING UNDERGROUND CONDUCTORS MAY
 CONSIST OF DIRECT BURIED CONDUCTORS
 WITHOUT A GROUND WIRE. IF THESE
 CONDITIONS ARE ENCOUNTERED, CONNECT
 BONDING WIRE TO GROUNDING LUG IF
 AVAILABLE AND TO GROUND ROD IF
 AVAILABLE.

**TYPICAL STREET LIGHT
 CONNECTION**

REVISED: 01/01/2013

SHEET 1 OF 2





CONTROLLER EQUIPMENT

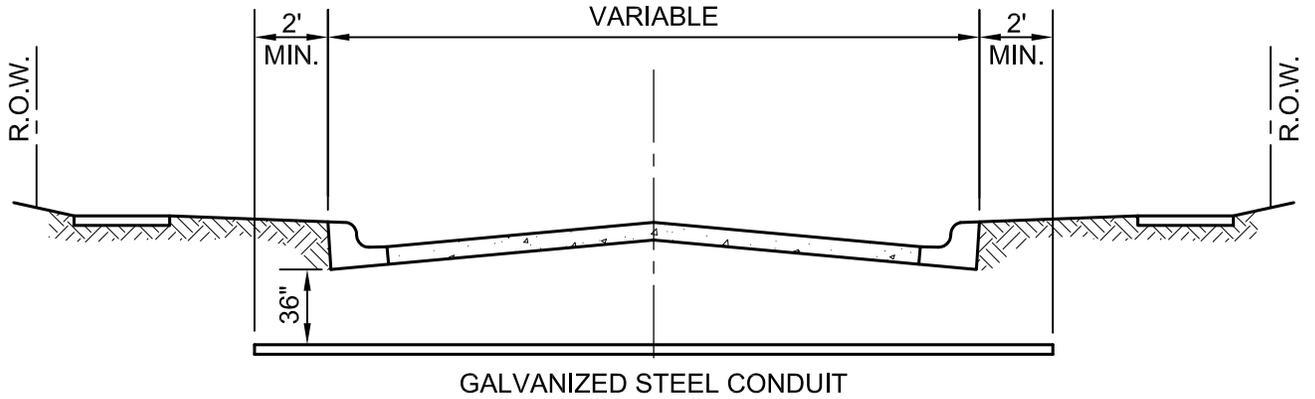
1. 100 AMPERE MAIN BREAKER, 2 POLE, 240 VOLT, JDB 2100
2. 100 AMPERE CONTACTOR, 2 POLE, SINGLE THROW, ELECTRICALLY OPERATED AND MECHANICALLY HELD REMOTE SWITCH, 120 VOLT, ASCO 2P, 100 AMP, MODEL NUMBER 920210031.
3. EIGHT (8) 35 AMPERE, 1 POLE CIRCUIT BREAKERS, 120 VOLT, "I-LINE".
4. CONTROL BREAKER, 1 POLE, 15 AMPERE, WE GC1015.
5. RELAY, DPT, 120 VOLT, ON-DELAY, MAGNACRAFT W211ACPSOX-7.
6. 15 AMPERE, HOA SWITCH, 120 VOLT, SQUARE D MANUAL RETURN KS43FBH13, NEMA 4X ENCLOSURE.
7. SPST 20 AMPERE SWITCH.
8. INCANDESCENT LIGHT FIXTURE OF THE ENCLOSED GASKETED TYPE, CROUSE HINDS VXHF15GP.
9. 20 AMPERE DUPLEX RECEPTACLE, GFCI.
10. PHOTOCELL TERMINAL BLOCK.
11. THERMOSTAT, GRAINGER 2E552.
12. HEATING STRIP, 150 WATT GRAINGER 2E919
13. SURGE PROTECTOR, SQUARE D SP-11100
14. NEUTRAL BUS BAR, 1/4" X 1" X 12", COLOR CODED WHITE, LABELED "NEUTRAL".
15. GROUND BUS BAR, 1/4" X 1" X 12", COLOR CODED GREEN, LABELED "GROUND".

120 VOLT, 60 HERTZ. PHOTO ELECTRIC CELL (D-T-L) UNIT DUCT, 1-1/4", FOR PHOTOCELL CABLE (3/C-#10 USE-2/XLP) IF CONDUIT TO NEAREST POLE IS NOT AVAILABLE

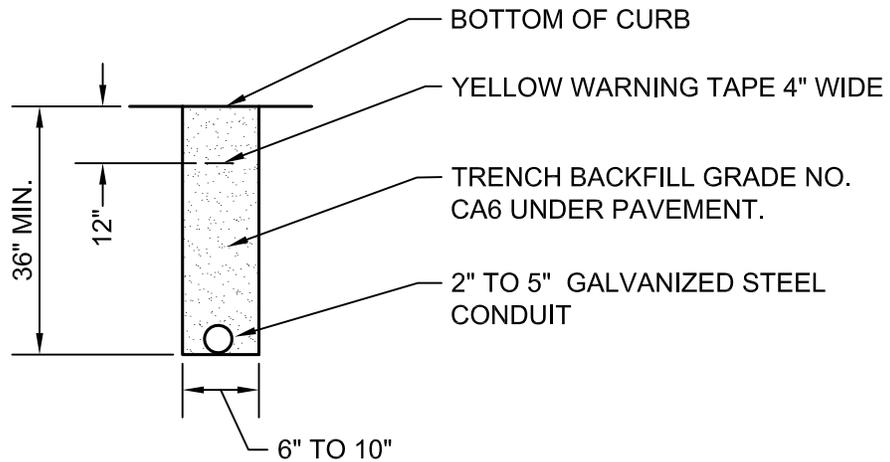
**STREET LIGHTING CONTROLLER
SCHEMATIC**

REVISED: 01/01/2013

SHEET 1 OF 1



STREET CROSSING



TRENCH SECTION

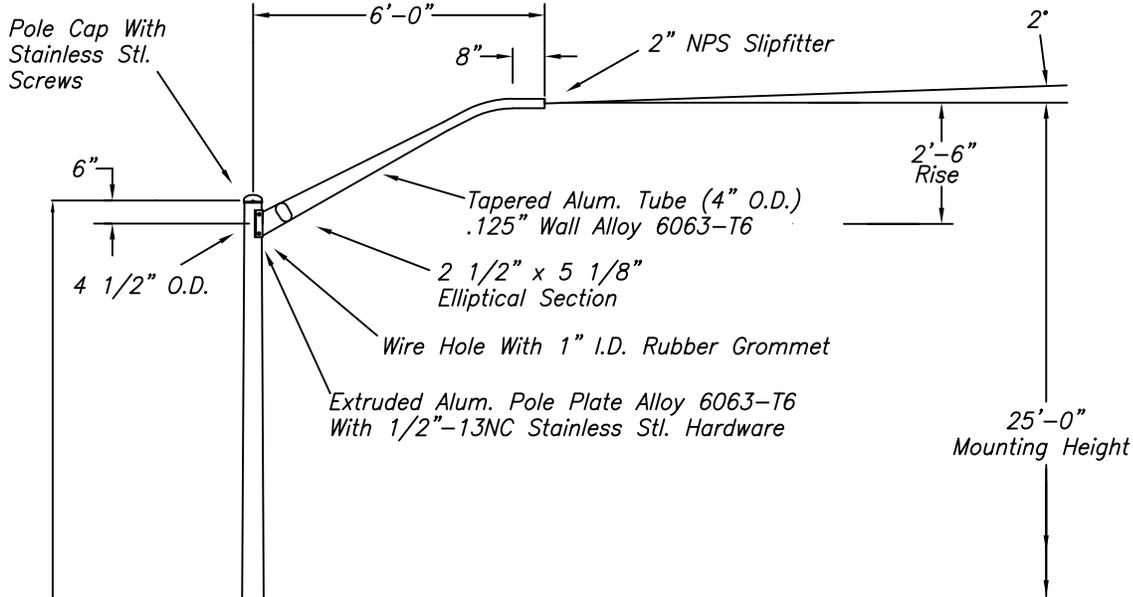
NOTES:

1. CONDUIT SHALL BE GALVANIZED STEEL CONDUIT.
2. CONDUIT SHALL EXTEND A MINIMUM OF 2' BEYOND BACK OF CURB.
3. CONDUIT SHALL BE A MINIMUM OF 36" BELOW CURB BOTTOM.

ELECTRIC CONDUIT UNDER PAVEMENT

REVISED: 01/01/2013

SHEET 1 OF 1



Notes:

- 1) Pole Assembly Consists Of:
 - 1 Ea Shaft Assembly R230C6B00121001
 - 1 Ea Arm Assembly 47005-005
 - 1 Ea Hardware Package 21-001XH

23'-0"

Tapered Alum. Tube
.156" Wall Alloy 6063-T6
Satin Ground Finish

- (4) 1"-8NC Galv. Stl. Anchor Bolts, AASHTO M314-90 Grade 55, 10" Of Threaded End Galv. Per ASTM A153.
- (4) 1"-8NC Galv. Stl. Hex. Nuts
- (4) 1" Galv. Stl. Lockwashers
- (4) 1" Galv. Stl. Flatwashers

Grounding Lug Opposite Handhole For Grounding

Reinforced Handhole (3" X 5") With Cover And Stainless Stl. Hex. Hd. Screws

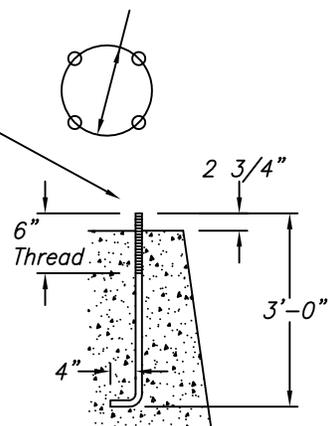
Base Flange Alloy 356-T6 With Bolt Covers And Stainless Stl. Hex. Hd. Screws

6" O.D.

1'-6"

9 3/4" Square

9" To 10" Dia.
Bolt Circle



B21-285W3

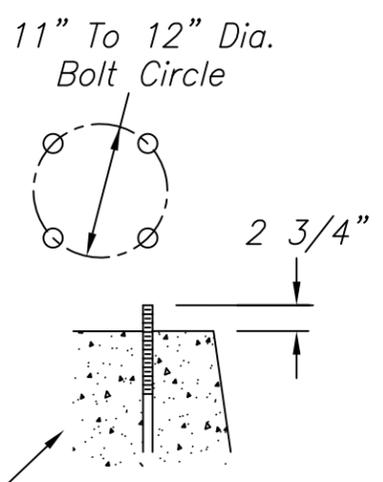
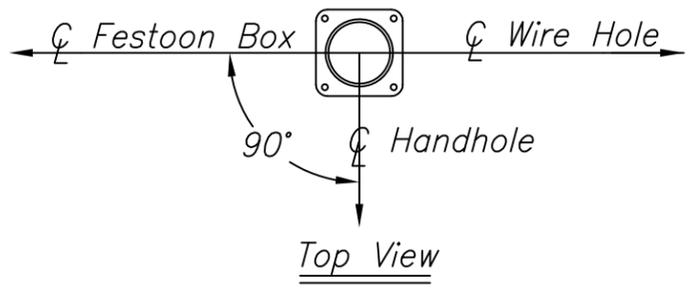
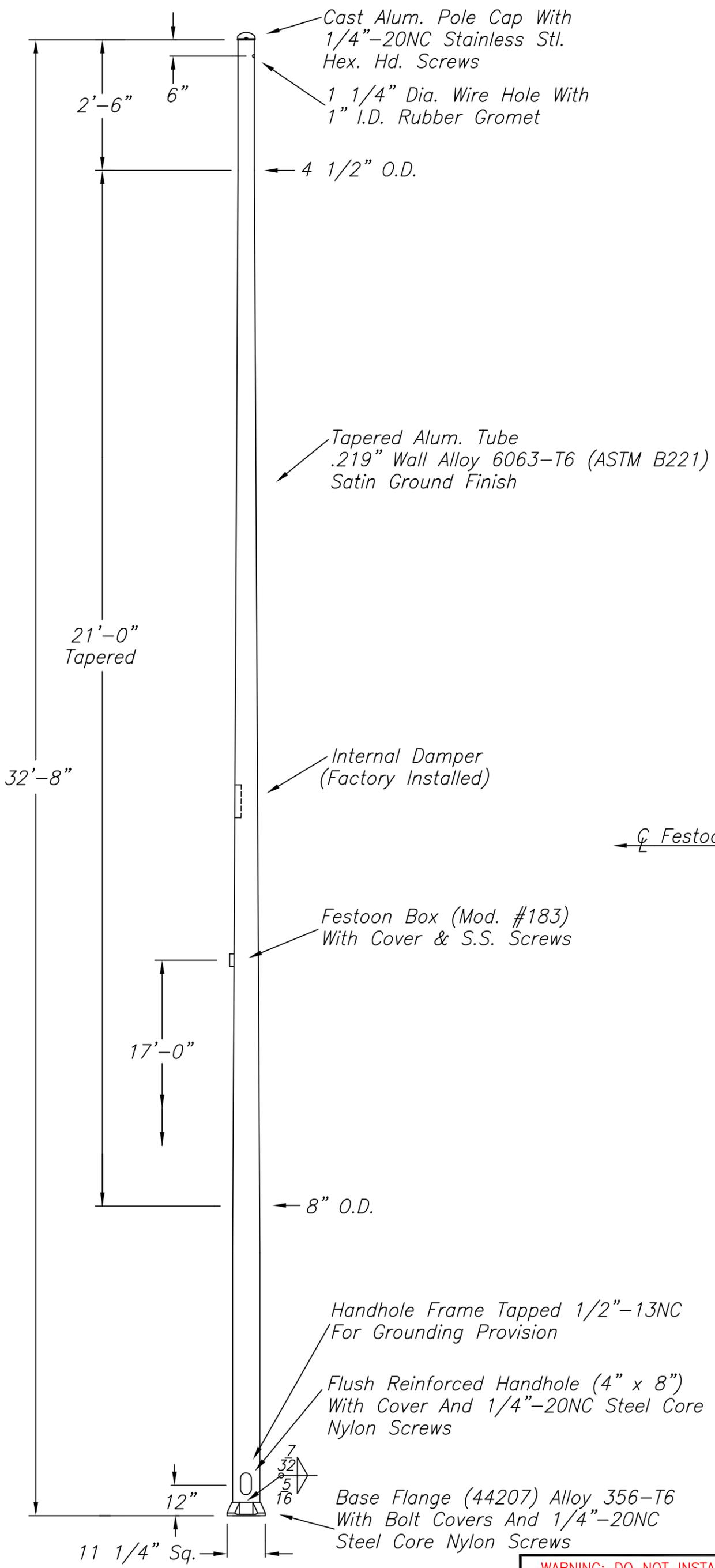
WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

NO.	REVISIONS	DATE

hapco

Abingdon, Va.

TITLE 25'-0" LIGHTING POLE	
CUSTOMER	
SCALE 3/2	DATE 12/09/2008
BY RDG	DWG. NO. Packet Page #298
CHK'D	B21-285W3



B80543

WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

NO.	REVISIONS	DATE

hapco
Abingdon, Va.

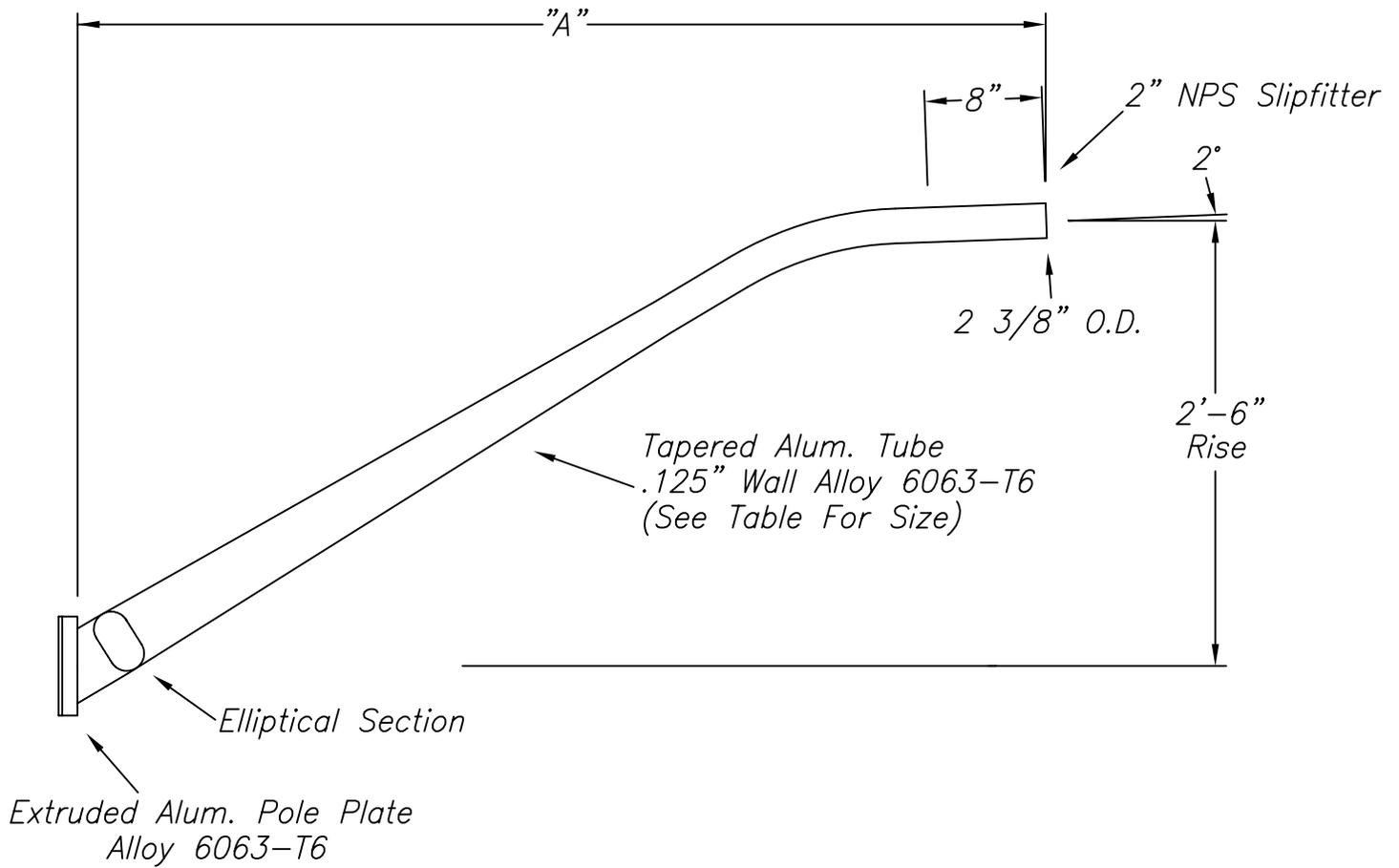
TITLE *SHAFT ASSEMBLY*

CUSTOMER *RIVER GROVE, ILL.*

SCALE *NTS* DATE *3/7/01*

BY *LW* DWG. NO. *B80543*

CHK'D *B80543* Packet Page #299



Item No.	A	Tube Size	Max. Lum. Wt. @ Cg=Length+1 Ft.
50004-001	3'-6"	3 1/2" O.D.	75#
50004-002	5'-6"	4" O.D.	71#
50004-003	7'-6"	4" O.D.	52#
50004-004	9'-6"	5" O.D.	55#

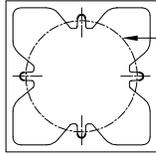
Furnish The Following Stainless Steel Hardware With Each Arm:
 (4) 1/2"-13NC x 1 1/2" Long Hex. Hd. Bolts
 (4) 1/2"-13NC Hex. Nuts
 (4) 1/2" Lockwashers
 (1) 1" I.D. Rubber Grommet

NO.	REVISIONS	DATE
5	Redrawn LW	01/02

hapco
Abingdon, Va.

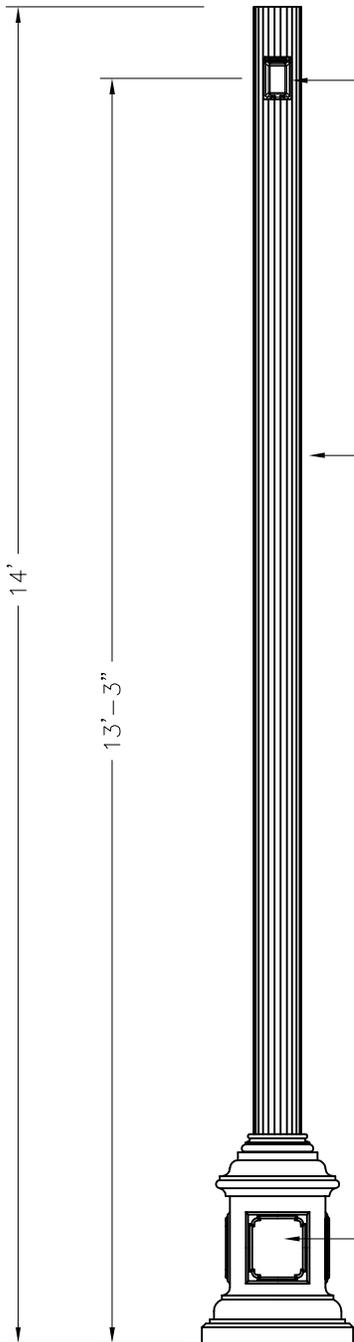
TITLE TAPERED ARMS (4.5" O.D. Pole)	
CUSTOMER	
SCALE NTS	DATE 10/11/66
BY LW	DWG. NO.
CHK'D	A50004

STREET SIDE



MODIFIED BASE FOR
14" DIA. BOLT CIRCLE FOR 1" DIA.
ANCHOR BOLTS

ACCESS DOOR
GFI(LP)IUC



LOW PROFILE DUPLEX GFI
RECEPTACLE WITH IN USE COVER

SMOOTH, BLACK FINISH

6" DIA. FLUTED POLE
.250 WALL THICKNESS
6061-T6 STRUCTURAL
GRADE ALUMINUM.

POLE WELDED FOR SINGLE
UNIT CONSTRUCTION

POLE SHAFT TO BE SLEEVED
WITH 5", .250 WALL THICKNESS
ALUMINUM POLE

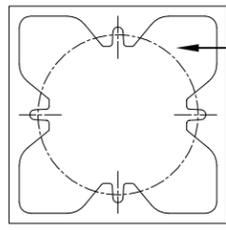
TO BE USED WITH (2) WAY
FINDING SIGNS MOUNTED
SIDE-BY-SIDE BY OTHERS

ACCESS DOOR

19" SQ. BASE, 1" FLOOR THICKNESS
4 ANCHOR BOLTS

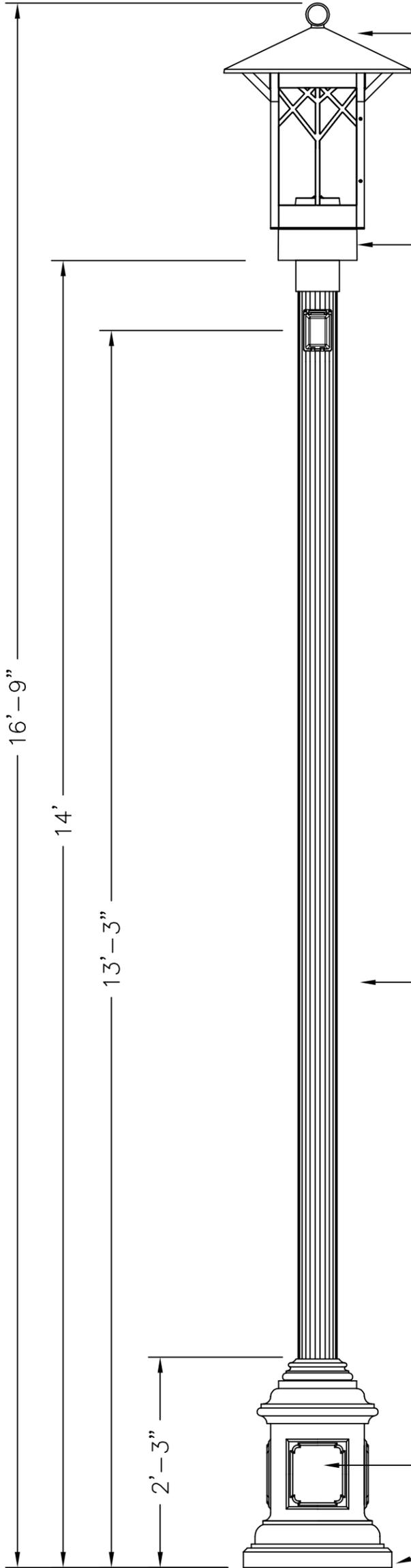
DRAWN	AMK	WOOD DALE, IL	RVSD	DATE	2-8-18	REV	REVISIONS	DRAWING NUMBER	SC25639-B
	SCALE						8214FP6-MOD/GFI-LPIUC/BK		
SternbergLighting									

STREET SIDE



ACCESS DOOR

14" DIA. BOLT CIRCLE FOR 3/4" DIA. ANCHOR BOLTS



356 ALLOY, CAST ALUMINUM
FIXTURE ROOF AND HOUSING

95 WATT, ROOF MOUNTED
LED ARRAY, 4500K COLOR TEMP

WHITE ACRYLIC LENSES

356 ALLOY, CAST ALUMINUM
DRIVER COMPARTMENT

SMOOTH BLACK FINISH

5" DIA. FLUTED POLE
.188 WALL THICKNESS
6061-T6 STRUCTURAL
GRADE ALUMINUM

POLE WELDED FOR SINGLE
UNIT CONSTRUCTION

ACCESS DOOR

19" SQR. BASE, 1" FLOOR THICKNESS
4 ANCHOR BOLTS AND 1 GROUND LUG

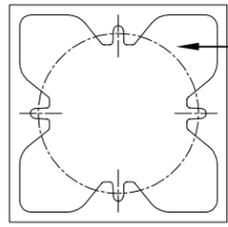
REV	REVISIONS	DATE	RVSD	WOOD DALE, IL ISTHA 4680 - WOOD DALE RD BRIDGE OVER I390 1230LEDPT/8214FP5/4A1R45T3/ML/GFI-LPIUC/WA/BK ITEM X8250500	DRAWN AMK SCALE 3/4" = 1'	POLE HEIGHTS HAVE A TOLERANCE OF + OR - 2"
		2/8/18				
A	ORIGINAL					

STERNBERG

SINCE 1923

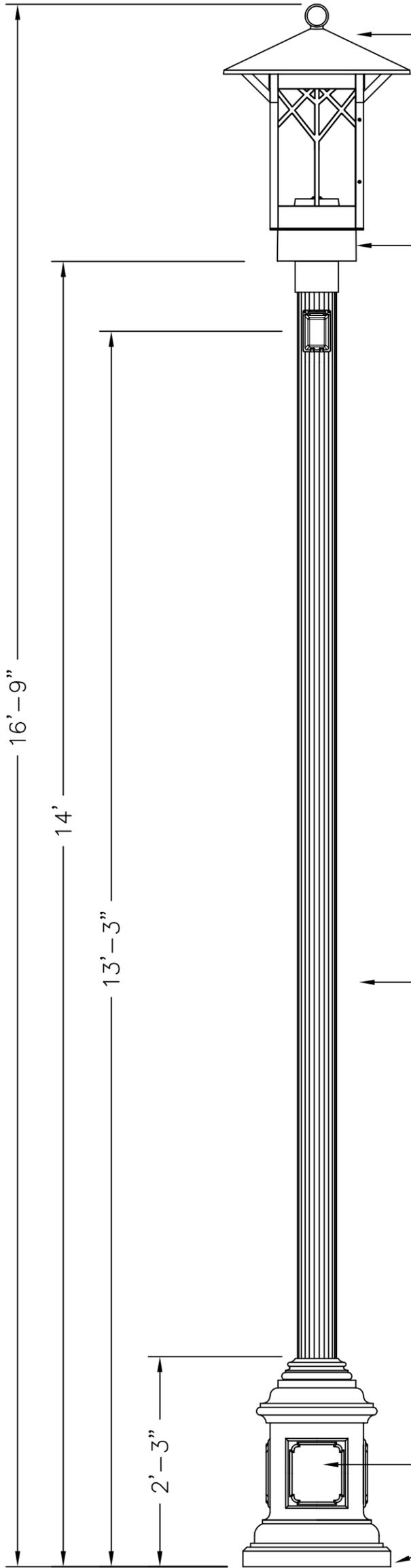
DRAWING NUMBER
SC24215-B

STREET SIDE



ACCESS DOOR

14" DIA. BOLT CIRCLE FOR 3/4" DIA. ANCHOR BOLTS



356 ALLOY, CAST ALUMINUM
FIXTURE ROOF AND HOUSING

95 WATT, ROOF MOUNTED
LED ARRAY, 4500K COLOR TEMP

WHITE ACRYLIC LENSES

356 ALLOY, CAST ALUMINUM
DRIVER COMPARTMENT

SWEDISH IRON FINISH

5" DIA. FLUTED POLE
.188 WALL THICKNESS
6061-T6 STRUCTURAL
GRADE ALUMINUM

POLE WELDED FOR SINGLE
UNIT CONSTRUCTION

ACCESS DOOR

19" SQR. BASE, 1" FLOOR THICKNESS
4 ANCHOR BOLTS AND 1 GROUND LUG

REV	REVISIONS	DATE	RVSD	WOOD DALE, IL ISTHA 4680 - WOOD DALE RD BRIDGE OVER I390 1230LEDPT/8214FP5/4A1R45T3/ML/GFI-LPIUC/WA/SI ITEM X8250500	DRAWN SS	SCALE 3/4" = 1'
		7/22/15				
A	ORIGINAL					

STERNBERG

SINCE 1923

DRAWING NUMBER
SC24215



Consistent with LEED® goals & Green Globes™ criteria for light pollution reduction

Autobahn Series ATBS Roadway & Security Lighting

PRODUCT OVERVIEW



Applications:

- Residential streets
- Parking lots
- General security lighting

Features:

OPTICAL

Same Light: Performance is comparable to 50W – 150W HPS and up to 175W Mercury Vapor roadway and security lighting luminaires.

White Light: Correlated color temperature - standard 4000K, 70 CRI minimum or optional 5000K, 70 CRI minimum.

IP66 rated borosilicate glass optics ensure longevity and minimize dirt depreciation. Unique IP66 rated LED light engines provide 0% uplight and restrict backlight to within sidewalk depth, providing optimal application coverage and optimal pole spacing.

Available distributions are Type II, III, and V roadway distributions. When used with the optional acrylic refractor the unit provides approximately 10% uplight and increased vertical foot-candles

ELECTRICAL

Expected Life: LED light engines are rated >100,000 hours at 25°C, L70. Electronic driver has an expected life of 100,000 hours at a 25°C ambient.

Lower Energy: Saves an expected 40-60% over comparable HID luminaires.

Robust Surge Protection: Three different surge protection options provide a minimum of IEEE/ANSI C62.41 Category C (10kV/5kA) protection.

MECHANICAL

Includes standard AEL lineman-friendly features such as tool-less entry, 3 station terminal block and quick disconnects. Bubble level located inside the electrical compartment for easy leveling at installation.

Rugged die-cast aluminum housing and door are polyester powder-coated for durability and corrosion resistance. Rigorous five-stage pre-treating and painting process yields a finish that achieves a scribe creepage rating of 8 (per ASTM D1654) after over 5000 hours exposure to salt fog chamber (operated per ASTM B117).

Mast arm mount is adjustable for arms from 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter. The 2 – bolt clamping mechanism provides 3G vibration rating per ANSI C136.

The Wildlife shield is cast into the housing (not a separate piece).

CONTROLS

NEMA 3 pin photocontrol receptacle is standard, with the Acuity designed ANSI standard 5 pin and 7 pin receptacles optionally available.

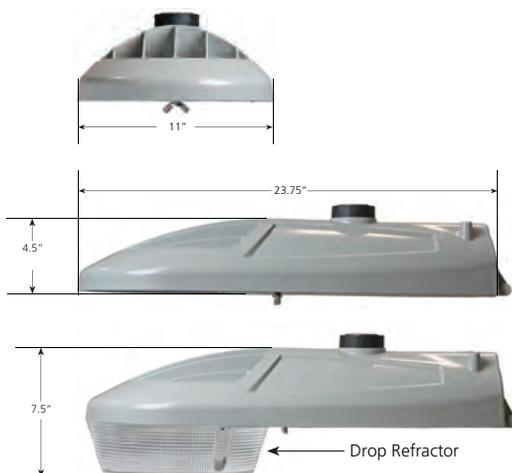
Premium solid state locking-style photocontrol – PCSS (10 year rated life)
Extreme long life solid state locking-style photocontrol – PCL1 (20 year rated life)

Optional onboard Adjustable Output module allows the light output and input wattage to be modified to meet site specific requirements, and also can allow a single fixture to be flexibly applied in many different applications.

STANDARDS

Rated for -40°C to 40°C ambient
CSA Certified to U.S. and Canadian standards
Complies with ANSI: C136.2, C136.10, C136.14, C136.31, C136.15, C136.37

DIMENSIONS



Effective Projected Area (EPA) The EPA for the ATBS is 0.3 sq. ft., Approx. Wt. = 12 lbs. (5 kg)

Note: Specifications subject to change without notice. Actual performance may differ as a result of end-user environment and application.

Autobahn Series ATBS

Roadway & Security Lighting

ORDERING INFORMATION

Example: ATBS A MVOLT R2

Series	Performance Packages	Voltage	Optics
ATBS Autobahn LED Roadway & Security	A 1,800 lumens B 2,400 lumens E 4,000 lumens F 4,600 lumens G 5,600 lumens H 6,300 lumens	MVOLT Multi-volt, 120-277V	R2 Roadway Type II R3 Roadway Type III R5 Roadway Type V D2 Type II, Drop Refractor included D3 Type III, Drop Refractor included D5 Type V, Drop Refractor included

Options

Color Temperature (CCT)

(Blank) 4000K CCT, 70 CRI Min. (standard)
5K 5000K CCT, 70 CRI Min.

Paint

Blank Gray (Standard)
BK Black
WH White
BZ Bronze

Surge Protection

Blank Acuity SPD-10kV/5kA with inductive filter (Standard)
MP MOV Pack
IL SPD with Indicator Light

Misc.

HSS House Side Shield
NL NEMA Label
XL Not CSA Certified

Controls

(Blank) 3 Pin NEMA Photocontrol Receptacle
NR¹ No Photocontrol Receptacle
DM 0V-10V Dimmable Driver
P5 5 Pin Photocontrol Receptacle (dimmable driver included)
P7 7 Pin Photocontrol Receptacle (dimmable driver included)
PCSS¹ DTL DSS Photocontrol
PCL1¹ DTL DLL Photocontrol 120-277V
A0 Field Adjustable Output
SH Shorting Cap

Install Packages

PKGS DTL DSS Photocontrol
PKGL DTL DLL Photocontrol
 Packages ship with selected photocontrol, 24", 1 1/4" diameter arm, 5' of prewire and mounting hardware

Accessories

ATBSREF Drop Refractor for field installation
ATBSHSS House Side Shield for field installation
ATBSLTS Light Trespass Shield for field installation

Notes

1. Not available with Install Packages.



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Warranty Five-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx
 Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Please contact your sales representative for the latest product information. **Packet Page #306**

Autobahn Series ATBS

Roadway & Security Lighting

PERFORMANCE PACKAGE

Performance Package	Distribution	Lumens	LPW	Input Watts
A	R2	1,761	98	18
	R3	1,755	98	
	R5	1,838	102	
	D2	1,685	94	
	D3	1,658	92	
	D5	1,767	98	
B	R2	2,302	96	24
	R3	2,309	96	
	R5	2,411	100	
	D2	2,203	92	
	D3	2,182	91	
	D5	2,318	97	
E	R2	3,962	102	39
	R3	3,979	102	
	R5	4,246	109	
	D2	3,791	97	
	D3	3,760	96	
	D5	4,089	105	
F	R2	4,563	93	49
	R3	4,477	91	
	R5	4,795	98	
	D2	4,366	89	
	D3	4,231	86	
	D5	4,612	94	
G	R2	5,629	88	64
	R3	6,030	85	
	R5	5,837	91	
	D2	5,386	84	
	D3	5,118	80	
	D5	5,590	87	
H	R2	6,249	87	72
	R3	6,321	88	
	R5	6,739	94	
	D2	5,979	83	
	D3	5,973	83	
	D5	6,436	89	

Note: Information shown above is based on nominal system data. Individual fixture performance may vary. Specifications subject to change without notice.



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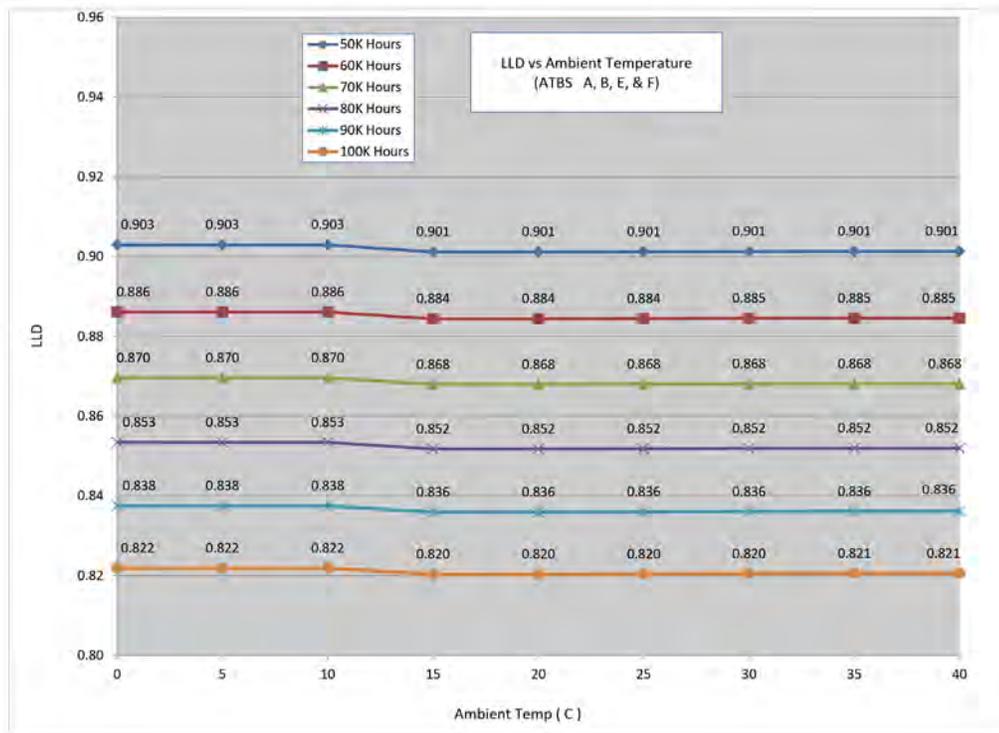
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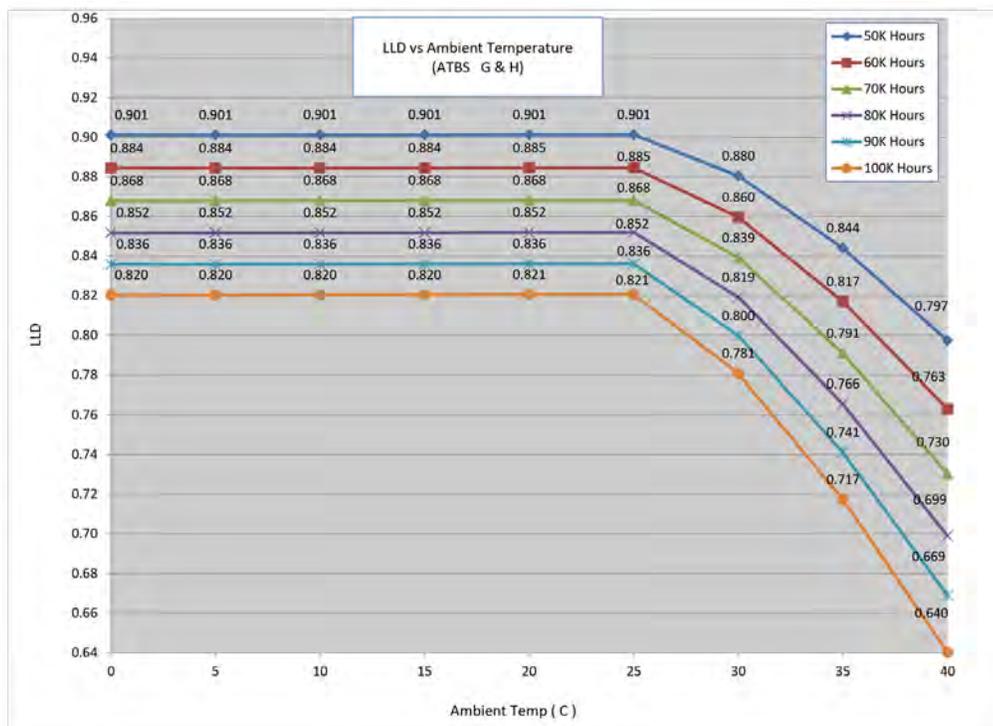
Please contact your sales representative for the latest product information. **Packet Page #307**

Autobahn Series ATBS Roadway & Security Lighting

PERFORMANCE PACKAGE



* LLD vs. temperature charts are based on LM-80 chip data and in-situ thermal test testing per IES TM-21



* LLD vs. temperature charts are based on LM-80 chip data and in-situ thermal test testing per IES TM-21



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Please contact your sales representative for the latest product information. **Packet Page #308**



Consistent with LEED® goals & Green Globes™ criteria for light pollution reduction

Autobahn Series ATB0 Roadway Lighting

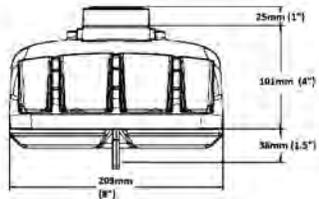
PRODUCT OVERVIEW



Applications:

- Roadways
- Off ramps
- Residential streets
- Parking lots

DIMENSIONS



Effective Projected Area (EPA): The EPA for the ATB0 is 0.76 sq. ft.
Approx. Wt. = 14 lbs.

STANDARDS

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Color temperatures of $\leq 3000\text{K}$ must be specified for International Dark-Sky Association certification.

Rated for -40°C to 40°C ambient

CSA Certified to U.S. and Canadian standards

Complies with ANSI: C136.2, C136.10, C136.14, C136.31, C136.15, C136.37

Features:

OPTICAL

Same Light: Performance is comparable to 70-250W HPS roadway luminaires.

White Light: Correlated color temperature - 4000K, 70 CRI minimum, 3000K, 70 CRI minimum or optional 5000K, 70 CRI minimum.

Unique IP66 rated LED light engines provided 0% uplight and restrict backlight to within sidewalk depth, providing optimal application coverage and optimal pole spacing. Available in Type II, III, IV, and V roadway distributions.

ELECTRICAL

Expected Life: LED light engines are rated $>100,000$ hours at 25°C , L70. Electronic driver has an expected life of 100,000 hours at a 25°C ambient.

Lower Energy: Saves an expected of 40-60% over comparable HID luminaires.

Robust Surge Protection: Three different surge protection options provide a minimum of ANSI C136.2 10kV/5kA protection. 20kV/10kA protection is also available.

MECHANICAL

Includes standard AEL lineman-friendly features such as tool-less entry, 3 station terminal block and quick disconnects. Bubble level located inside the electrical compartment for easily leveling at installation.

Rugged die-cast aluminum housing and door are polyester powder-coated for durability and corrosion resistance. Rigorous five-stage pre-treating and painting process yields a finish that achieves a scribe creepage rating of 7 (per ASTM D1654) after over 5000 hours exposure to salt fog chamber (operated per ASTM B117).

Mast arm mount is adjustable for arms from 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter. Provides a 3G vibration rating per ANSI C136.31

Wildlife shield is cast into the housing (not a separate piece).

CONTROLS

NEMA 3 pin photocontrol receptacle is standard, with the Acuity designed ANSI standard 7 pin receptacle optionally available.

Premium solid state locking style photocontrol - PCSS (10 year rated life) Extreme long life solid state locking style photocontrol - PCLL (20 year rated life).

Multi-level dimming available to provide scheduled dimming as specified by the customer.

Optional onboard Adjustable Output module allows the light output and input wattage to be modified to meet site specific requirements, and also can allow a single fixture to be flexibly applied in many different applications.

Note: Specifications subject to change without notice. Actual performance may differ as a result of end-user environment and application.

Autobahn Series ATB0

Roadway Lighting

ORDERING INFORMATION

Example: ATB0 30LEDE10 MVOLT R2

Series	Performance Packages	Voltage	Optics
ATB0 Autobahn LED Roadway	10BLEDE70 10B Chips, 700mA Driver 10BLEDE10 10B Chips, 1050mA Driver 10BLEDE15 10B Chips, 1500mA Driver 20BLEDE53 20B Chips, 525mA Driver 20BLEDE70 20B Chips, 700mA Driver 20BLEDE10 20B Chips, 1050mA Driver 20BLEDE13 20B Chips, 1300mA Driver 20BLEDE15 20B Chips, 1500mA Driver 30BLEDE70 30B Chips, 700mA Driver 30BLEDE85 30B Chips, 850mA Driver 30BLEDE10 30B Chips, 1050mA Driver 30BLEDE13 30B Chips, 1300mA Driver 30BLEDE15¹ 30B Chips, 1500mA Driver	MVOLT Multi-volt, 120-277V 347 347V 480 480V	R2 Roadway Type II R3 Roadway Type III R4 Roadway Type IV R5 Roadway Type V

Options		
<u>Color Temperature (CCT)</u> (Blank) 4000K CCT, 70 CRI Min. 3K 3000K CCT, 70 CRI Min. 5K 5000K CCT, 70 CRI Min.	UMS-XX 8" Horizontal Arm for Square Pole, Painted to match Fixture UMR-GALV 8" Horizontal Arm for Round Pole, Galvanized UMS-GALV 8" Horizontal Arm for Square Pole, Galvanized	Notes 1 Not available in 347 or 480V. 2 Not available with DM, ML or NR. 3 Not available with DM or ML options. Not available with 10BLED packages. 4 Not available with AO, DM or P7 options. 5 Dimming Schedule and light level information required from the customer in order to configure product. Contact Infrastructure Technical Support to proceed.
<u>Paint</u> (Blank) Gray (Standard) BK Black BZ Bronze DDB Dark Bronze GI Graphite WH White	<u>Controls</u> (Blank) 3 Pin NEMA Photocontrol Receptacle (Standard) P7² 7 Pin Photocontrol Receptacle (Dimmable Driver Included) NR No Photocontrol Receptacle AO³ Field Adjustable Output DM 0V-10V Dimmable Driver (Controls by others) ML^{4,5} Multi-Level Dimming PCSS¹ Solid State Lighting Photocontrol (120-277V) PCLL Solid State Long Life Photocontrol SH Shorting Cap	
<u>Surge Protection</u> (Blank) Standard 10kV/5kA SPD 20 20kV/10KA SPD MP¹ MOV Pack IL¹ SPD with Indicator Light	<u>Packaging</u> (Blank) Single Unit (Standard) JP Job Pack (42/Pallet)	
<u>Terminal Block</u> (Blank) Terminal Block (Standard) T2 Wired to L1 & L2 Positions		
<u>Misc.</u> BL External Bubble Level HS House-Side Shield NL Nema Label XL Not CSA Certified UMR-XX 8" Horizontal Arm for Round Pole, Painted to match Fixture		



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Please contact your sales representative for the latest product information. Packet Page #310

Autobahn Series ATB0

Roadway Lighting

PERFORMANCE PACKAGE

Performance Package	Drive Current (mA)	Input Watts	Optic	4000K CCT		LLD @ 25°C			
				Delivered Lumens	Efficacy (LPW)	50k Hours	75k Hours	100k Hours	
10B	700	25	R2	2994	120	0.98	0.98	0.97	
	1000	37		4293	116	0.98	0.98	0.97	
	1500	54		5688	105	0.97	0.97	0.96	
	700	25	R3	3009	120	0.98	0.98	0.97	
	1000	37		4313	117	0.98	0.98	0.97	
	1500	54		5742	106	0.97	0.97	0.96	
	700	25	R4	2992	120	0.98	0.98	0.97	
	1000	37		4232	114	0.98	0.98	0.97	
	1500	54		5653	105	0.97	0.97	0.96	
	700	25	R5	3065	123	0.98	0.98	0.97	
	1000	37		4422	120	0.98	0.98	0.97	
	1500	54		5844	108	0.97	0.97	0.96	
20B	525	36	R2	4638	129	0.98	0.98	0.97	
	700	48		5956	124	0.98	0.98	0.97	
	1000	71		8506	120	0.98	0.98	0.97	
	1300	87		9922	114	0.96	0.94	0.92	
	1500	99		11038	111	0.95	0.92	0.90	
	525	36	R3	4704	131	0.98	0.98	0.97	
	700	48		6114	127	0.98	0.98	0.97	
	1000	71		8606	121	0.98	0.98	0.97	
	1300	87		10065	116	0.96	0.94	0.92	
	1500	99		11181	113	0.95	0.92	0.90	
	525	36	R4	4676	130	0.98	0.98	0.97	
	700	48		6022	125	0.98	0.98	0.97	
	1000	72		8569	119	0.98	0.98	0.97	
	1300	87		10053	116	0.96	0.94	0.92	
	1500	99		11160	113	0.95	0.92	0.90	
	525	36	R5	4869	135	0.98	0.98	0.97	
	700	48		6287	131	0.98	0.98	0.97	
	1000	71		8880	125	0.98	0.98	0.97	
	1300	87		10397	120	0.96	0.94	0.92	
	1500	99		11593	117	0.95	0.92	0.90	
	30B	700	70	R2	9174	131	0.98	0.98	0.97
		850	83		10457	126	0.98	0.98	0.97
		1000	105		12414	118	0.96	0.96	0.95
		1300	126		14964	119	0.96	0.94	0.92
1500		145	16251		112	0.94	0.91	0.89	
700		70	R3	8893	127	0.98	0.98	0.97	
850		83		10825	130	0.98	0.98	0.97	
1000		105		12748	121	0.96	0.96	0.95	
1300		126		14850	118	0.96	0.94	0.92	
1500		145		16193	112	0.94	0.91	0.89	
700		70	R4	8971	128	0.98	0.98	0.97	
850		83		10589	128	0.98	0.98	0.97	
1000		105		12782	122	0.96	0.96	0.95	
1300		126		14889	118	0.96	0.94	0.92	
1500		145		16463	114	0.94	0.91	0.89	
700		70	R5	9329	133	0.98	0.98	0.97	
850		83		11209	135	0.98	0.98	0.97	
1000		105		13296	127	0.96	0.95	0.94	
1300		126		15254	121	0.96	0.94	0.92	
1500		145		16871	116	0.94	0.91	0.89	

Note: Information shown above is based on 4000K nominal system data. Individual fixture performance may vary. To calculate 3000K lumen values, multiply the 4000K lumens by .93. Specifications subject to change without notice.

ATB0 LLD Multiplier	15°C	20°C	25°C	30°C	35°C	40°C
	1.02	1.01	1	0.98	0.97	0.95

To calculate the LLD for a temperature other than 25°C, multiply the LLD @ 25°C (shown in the performance package table) by the LLD multiplier for the selected temperature.



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Warranty Five-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx
 Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

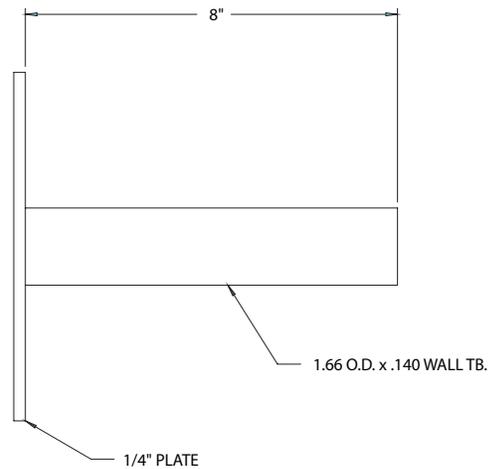
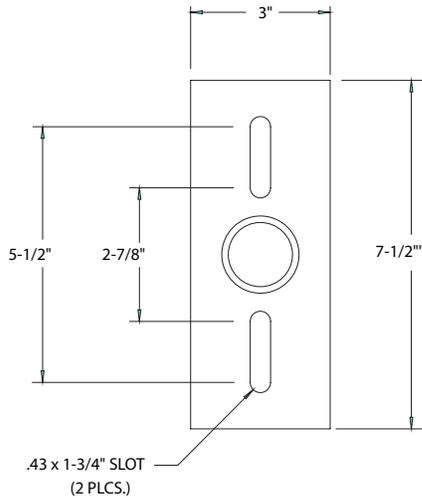
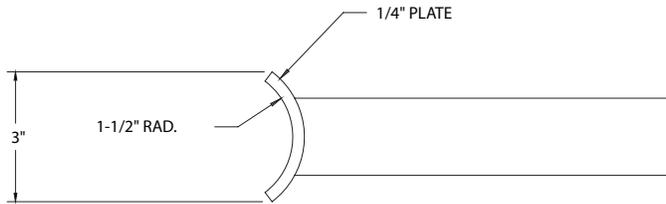
Please contact your sales representative for the latest product information. **Packet Page #311**

Autobahn Series ATB0

Roadway Lighting

UMR POLE ADAPTOR

RECOMMENDED FOR USE WITH POLES OF 4" DIAMETER OR SMALLER



UMS POLE ADAPTOR



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Please contact your sales representative for the latest product information. Packet Page #312



Consistent with LEED® goals & Green Globes™ criteria for light pollution reduction

Autobahn Series ATBM Roadway

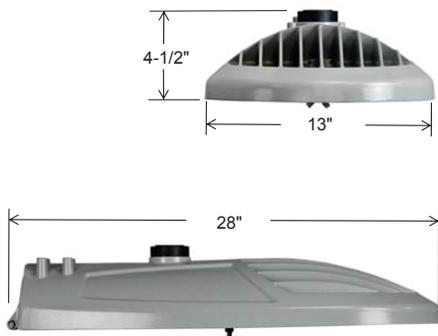
PRODUCT OVERVIEW



Applications:

- Residential streets
- Parking lots
- High speed roadways

DIMENSIONS



Effective Projected Area (EPA)
The EPA for the ATBM is 0.3 sq. ft.,
Approx. Wt. = 21 lbs. (9.5 kg)

STANDARDS

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Color temperatures of $\leq 3000\text{K}$ must be specified for International Dark-Sky Association certification.

Rated for -40°C to 40°C ambient

CSA Certified to U.S. and Canadian standards

Complies with ANSI: C136.2, C136.10, C136.14, C136.31, C136.15, C136.37

Features:

OPTICAL

Same Light: Performance is comparable to 150W – 250W HPS

White Light: Correlated color temperature - 4000K, 70 CRI minimum, 3000K, 70 CRI minimum or optional 5000K, 70 CRI minimum.

IP66 rated borosilicate glass optics ensure longevity and minimize dirt depreciation. Unique IP66 rated LED light engines provide 0% uplight and restrict backlight to within sidewalk depth, providing optimal application coverage and optimal pole spacing.

Available distributions are Type II, III, IV, & V roadway distributions.

ELECTRICAL

Expected Life: LED light engines are rated $>100,000$ hours at 25°C , L70.

Electronic driver has an expected life of 100,000 hours at a 25°C ambient.

Lower Energy: Saves an expected 40-60% over comparable HID luminaires.

Robust Surge Protection: Three different surge protection options provide a minimum of ANSI C136.2 10kV/5kA protection. 20kV/10kA surge protection is also available.

MECHANICAL

Includes standard AEL lineman-friendly features such as tool-less entry, 3 station terminal block and quick disconnects. Bubble level located inside the electrical compartment for easy leveling at installation.

Rugged die-cast aluminum housing and door are polyester powder-coated for durability and corrosion resistance. Rigorous five-stage pre-treating and painting process yields a finish that achieves a scribe creepage rating of 8 (per ASTM D1654) after over 5000 hours exposure to salt fog chamber (operated per ASTM B117).

Mast arm mount is adjustable for arms from 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter. The 2-bolt and optional 4 bolt clamping mechanism provide 3G vibration rating per ANSI C136.

The Wildlife shield is cast into the housing (not a separate piece).

CONTROLS

NEMA 3 pin photocontrol receptacle is standard, with the Acuity designed ANSI standard 5 pin and 7 pin receptacles optionally available.

Premium solid state locking-style photocontrol – PCSS (10 year rated life) Extreme long life solid state locking-style photocontrol – PCL1 (20 year rated life).

Extreme long life solid state locking-style photocontrol with on demand remote on/off control - PCCC (15 year rated life).

Optional onboard Adjustable Output module allows the light output and input wattage to be modified to meet site specific requirements, and also can allow a single fixture to be flexibly applied in many different applications.

Autobahn Series ATBM

Roadway

ORDERING INFORMATION

Example: ATBM A MVOLT R2

Series	Performance Packages	Voltage	Optics	Mounting
ATBM Autobahn LED Roadway	A 7,000 lumens B 8,000 lumens C 9,000 lumens D 11,600 lumens E 13,400 lumens F 15,700 lumens G 16,600 lumens H 17,400 lumens	MVOLT Multi-volt, 120-277V 347 347V 480 480V	R2 Roadway Type II R3 Roadway Type III R4 Roadway Type IV R5 Roadway Type V	(Blank) 2 Bolt Mounting 4B 4 Bolt Mounting

Options			
<u>Color Temperature (CCT)</u> (Blank) 4000K CCT, 70 CRI Min. 3K 3000K CCT, 70 CRI Min. 5K 5000K CCT, 70 CRI Min.	<u>Control Options</u> (Blank) 3 Pin NEMA Photocontrol Receptacle P5 5 Pin Photocontrol Receptacle (dimnable driver included) ² P7 7 Pin Photocontrol Receptacle (dimnable driver included) ² NR No Photocontrol Receptacle ³ AO Field Adjustable Output ⁴ DM 0-10V Dimmable Driver ⁵ PCSS Solid-State Lighting Photocontrol ⁶ PCLL Solid-State Long Life Photocontrol PCCC Solid-State Long Life Photocontrol with remote control on/off ⁷ SH Shorting Cap	<u>Accessories</u> ATBMHSS House Side Shield ATBMLTS Light Trespass Shield RKATBMMVOLTSPD ATBM Acuity SPD Replacement Kit MVOLT RKATBMHVSPD ATBM Acuity SPD Replacement Kit 347/480V RKATBMMVOLTMP ATBM MOV Pack Replacement Kit RKATBMMVOLTIL ATBM IL SPD Replacement Kit	<u>Paint</u> (Blank) Gray BK Black BZ Bronze DDB Dark Bronze GI Graphite WH White
<u>Surge Protection</u> (Blank) Acuity SPD 20 20kV/10KA SPD ⁸ MP MOV Pack ¹ IL SPD with Indicator Light ¹	<u>Packages</u> (Blank) Standard Pack JP Job Pack (36/pallet)		<u>Miscellaneous Options</u> HSS House Side Shield NL NEMA Label Indicating Wattage XL Not CSA Certified – No Terminal Block Cover

Notes:

- 1 Not available with G and H performance packages.
- 2 Dimmable Driver included. Not available with AO, DM or NR.
- 3 Not available with P5, P7.
- 4 Not available with DM, P5 or P7.
- 5 Controls by others. Not available with AO.
- 6 MVOLT only.
- 7 Not available with PCSS or PCLL.
- 8 Not available with G & H packages at 347/480 volts.

Autobahn Series ATBM

Roadway

PERFORMANCE PACKAGE

Performance Package	Distribution	4000 K CCT			LLD @ 25°C		
		Lumens	Input Watts	LPW	50K Hours	75K Hours	100K Hours
A	R2	7,114	60	118	89	84	80
	R3	7,024		117			
	R4	6,958		116			
	R5	7,469		124			
B	R2	8,090	70	115	89	84	80
	R3	8,016		114			
	R4	7,924		113			
	R5	8528		121			
C	R2	9031	81	112	89	84	80
	R3	8,942		111			
	R4	8,827		110			
	R5	9,517		118			
D	R2	11,769	95	124	90	87	84
	R3	11,690		123			
	R4	11,534		121			
	R5	12,388		130			
E	R2	13,601	115	118	90	87	84
	R3	13,416		117			
	R4	13,323		116			
	R5	14,263		124			
F	R2	15,932	133	120	90	86	83
	R3	15,741		118			
	R4	15,476		116			
	R5	16,691		125			
G	R2	17,102	150	114	90	86	83
	R3	16,974		113			
	R4	16,635		111			
	R5	17,938		119			
H	R2	18,085	164	111	90	86	83
	R3	17,929		110			
	R4	17,439		107			
	R5	18,966		116			

Note: Information shown above is based on 4000K nominal system data. Individual fixture performance may vary. Specifications subject to change without notice.



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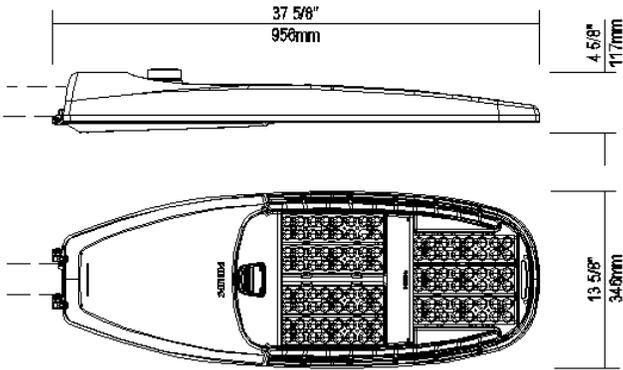
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Warranty Five-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx
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Please contact your sales representative for the Product Page #016.

ATBM

CITY OF WOODDALE GY3 (Reference=L59667-2)



EPA: 0.92 sq ft / weight: 27.3 lb (12.4 kg)
Note: 3D image may not represent color or option selected.
Logos above include link, click to access.

Qty	1	Luminaire	RFL-215W96LED4K-G2-R3M-UNV-DMG-RCD-GY3
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Description of Components:

Housing: Made of a low copper die cast Aluminum alloy (A360), 0.100" (2.5mm) minimum thickness. Fits on a 1.66" (42mm) O.D. (1.25" NPS), 1.9" (48mm) O.D. (1.5" NPS) or 2 3/8" (60mm) O.D. (2" NPS) by 7" (178mm) minimum long tenon. Comes with 2 zinc plated clamp fixed by 4 zinc plated hexagonal bolts 3/8 16 UNC for ease of installation. Provides an easy step adjustment of +/- 5° tilt in 2.5° increments. A quick release, tool less entry, hinged, removable door opens downward to provide access to electronic components and to a terminal block. Door is secured to prevent accidental dropping or disengagement. A clearance of 17" (432mm) at the rear is required in order to remove the door. Complete with a bird guard protecting against birds and similar intruders and an ANSI label to identify wattage and source (both included in box).

Light Engine: Composed of 4 main components: Heat Sink / LED Module / Optical System / Driver

Electrical components are RoHS compliant, IP66 sealed light engine.

LEDs tested by ISO 17025-2005 accredited lab in accordance with IESNA LM-80 guidelines in compliance with EPA ENERGY STAR, extrapolations in accordance with IESNA TM-21. Metal core board ensures greater heat transfer and longer lifespan.

Heat Sink: Built in the housing, designed to ensure high efficacy and superior cooling by natural vertical convection air flow pattern always close to LEDs and driver optimising their efficiency and life. Product does not use any cooling device with moving parts (only passive cooling). Wide openings enable natural cleaning and removal of dirt and debris. Entire luminaire is rated for operation in ambient temperature of -40°C / -40°F up to +50°C / +122°F.

LED Module: Composed of 96 high-performance white LEDs. Color temperature as per ANSI/NEMA bin Neutral White, 4000 Kelvin nominal (3985K +/- 275K or 3710K to 4260K), CRI 70 Min. 75 Typical.

Optical System: 0% uplight and U0 per IESNA TM-15.

Driver: High power factor of 90% minimum. Electronic driver, operating range 50/60 Hz. Auto-adjusting universal voltage input from 120 to 277 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max. **Driver comes with dimming compatible 0-10 volts.**

The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built-in driver surge protection of 2.5kV (min).

Driver Options: (DMG) Integrated Feature, Dimming compatible 0-10 volts. For applicable warranty, certification and operation guide see Philips Lumec dimmable luminaire specification document for unapproved device installed by other. To get document, click on this link: [Specification document](http://www.lumec.com/Lumec3DV2/PdfWebLink/Philips%20Lumec%20dimmable%20luminaire%20specification%20document%20for%20unapproved%20device%20installed%20by%20other.pdf) or go on web site on this address: <http://www.lumec.com/Lumec3DV2/PdfWebLink/Philips Lumec dimmable luminaire specification document for unapproved device installed by other.pdf>

Surge Protector: Integrated Feature, Surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid-State Street Lighting Consortium) model specification for LED roadway luminaires electrical immunity requirements for High Test Level 10kV / 10kA.

Luminaire Options: (RCD) Integrated Feature, Receptacle with 5 pins enabling dimming, can be used with a twist-lock control device or photoelectric cell or a shorting cap. Use of photocell or shorting cap is required to ensure proper illumination.

Luminaire Useful Life: Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in-situ thermal testing in accordance with UL1598 and UL8750, Philips System Reliability Tool. Philips Advance data LM-80/TM-21 data, expected to reach 100,000 + hours with >L70 lumen maintenance @ 25°C. Luminaire Useful Life accounts for LED lumen maintenance AND all of these additional factors including: LED life, driver life, PCB substrate, solder joints, on/off cycles, burning hours and corrosion.

Miscellaneous

Description of Components:

Wiring: The connection of the luminaire is done using a terminal block connector 600V, 85A for use with #2-14 AWG. wires from the primary circuit, located inside the housing. Due to the inrush current that occurs with electronic drivers, recommend using a 10Amp time delay fuse to avoid unwanted fuse blowing (false tripping) that can occur with normal or fast acting fuses.

Hardware: All exposed screws shall be complete with Ceramic primer-seal basecoat to reduce seizing of the parts and offers a high resistance to corrosion. All seals and sealing devices are made and/or lined with EPDM and/or silicone and/or rubber.

Finish: Color to be **medium grey (GY3)** and in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils/24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard.

The surface treatment achieves a minimum of 3000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

LED products manufacturing standard: The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340-5-1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

Vibration Resistance: The RFL meets the **ANSI C136.31**, American National Standard for Roadway Luminaire Vibration specifications for Bridge/overpass applications (Tested for 3G over 100 000 cycles).

The RFL meets the **California Test 611, Testing durability of mast arm mounted luminaires**, specifications (a 2 000 000 cycles test).

Service Tag: Each individual luminaire is uniquely identifiable, thanks to the Philips Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime. Just download the APP and register your product right away. For more details visit: philips.com/servicetag

Warranty: Luminaire comes with a warranty of 10 years on product and finish. See <http://www.usa.lighting.philips.com/support/support/warranty> for details.

Certifications and Compliance: cULus Listed for Canada and USA. Luminaire meets DOE and MSSLC Model Specification for LED Roadway Luminaires. Large RoadFocus luminaires are DesignLights Consortium qualified. Luminaire complies with or exceeds the following ANSI C136 standards: .2, .3, .10, .14, .15, .22, .25, .31, .37, .41.

Web site information details: Click on any specific information details you need: / [cULus Certification](#) / [Warranty](#)

LED Wattage and Lumen Values: 3000K

Ordering Code	Total LEDs	LED current (mA)	Average system watts (W)	Type R2S			Type R2M			Type R3S			Type R3M		
				delivered lumens	Efficacy (LPW)	BUG rating	delivered lumens	Efficacy (LPW)	BUG rating	delivered lumens	Efficacy (LPW)	BUG rating	delivered lumens	Efficacy (LPW)	BUG rating
RFL-145W64LED3K-G2	64	700	137	16813	122.7	B3-U0-G2	16458	120.1	B3-U0-G3	16181	118.1	B2-U0-G3	16127	117.7	B3-U0-G3
RFL-90W80LED3K-G2	80	350	93	11541	124.5	B2-U0-G2	11297	121.8	B2-U0-G2	11107	119.8	B2-U0-G2	11070	119.4	B2-U0-G2
RFL-135W80LED3K-G2	80	530	136	16601	121.7	B3-U0-G2	16251	119.1	B3-U0-G3	15977	117.1	B2-U0-G3	15924	116.7	B3-U0-G3
RFL-180W80LED3K-G2	80	700	174	21016	120.8	B3-U0-G2	20572	118.2	B3-U0-G3	20226	116.2	B2-U0-G3	20159	115.9	B3-U0-G3
RFL-160W96LED3K-G2	96	530	161	19921	123.9	B3-U0-G2	19501	121.3	B3-U0-G3	19172	119.3	B2-U0-G3	19109	118.9	B3-U0-G3
RFL-215W96LED3K-G2	96	700	207	25219	121.8	B3-U0-G3	24687	119.3	B3-U0-G3	24271	117.3	B2-U0-G4	24190	116.9	B3-U0-G3
RFL-335W96LED3K-G2	96	1050	323	35094	108.7	B4-U0-G4	34354	106.4	B4-U0-G4	33775	104.6	B3-U0-G4	33663	104.2	B4-U0-G4
RFL-190W112LED3K-G2	112	530	188	23241	123.9	B3-U0-G3	22751	121.3	B3-U0-G3	22368	119.3	B3-U0-G4	22294	118.9	B3-U0-G3
RFL-241W112LED3K-G2	112	700	243	29422	121.1	B3-U0-G3	28801	118.5	B3-U0-G3	28316	116.5	B3-U0-G4	28222	116.1	B3-U0-G4
RFL-350W112LED3K-G2	112	950	340	37731	111.1	B4-U0-G4	36935	108.8	B4-U0-G4	36313	107.0	B3-U0-G5	36193	106.6	B4-U0-G4

Ordering Code	Total LEDs	LED current (mA)	Average system watts (W)	Type 4			Type 5		
				delivered lumens	Efficacy (LPW)	BUG rating	delivered lumens	Efficacy (LPW)	BUG rating
RFL-145W64LED3K-G2	64	700	137	16210	118.3	B2-U0-G3	16851	123.0	B4-U0-G2
RFL-90W80LED3K-G2	80	350	93	11127	120.0	B2-U0-G2	11567	124.8	B4-U0-G2
RFL-135W80LED3K-G2	80	530	136	16006	117.3	B2-U0-G3	16639	121.9	B4-U0-G2
RFL-180W80LED3K-G2	80	700	174	20263	116.5	B3-U0-G4	21064	121.1	B5-U0-G3
RFL-160W96LED3K-G2	96	530	161	19207	119.5	B3-U0-G4	19967	124.2	B5-U0-G3
RFL-215W96LED3K-G2	96	700	207	24315	117.5	B3-U0-G4	25277	122.1	B5-U0-G3
RFL-335W96LED3K-G2	96	1050	323	33836	104.8	B3-U0-G5	35175	108.9	B5-U0-G4
RFL-190W112LED3K-G2	112	530	188	22408	119.5	B3-U0-G4	23295	124.2	B5-U0-G3
RFL-241W112LED3K-G2	112	700	243	28368	116.7	B3-U0-G4	29489	121.4	B5-U0-G4
RFL-350W112LED3K-G2	112	950	340	36379	107.2	B3-U0-G5	37818	111.4	B5-U0-G4

Field Adjustable Wattage (FAWS) Multiplier Chart

FAWS Position	Typical Delivered Lumens Multiplier	Typical System wattage
1	0.31	0.28
2	0.53	0.50
3	0.62	0.58
4	0.70	0.67
5	0.78	0.75
6	0.83	0.81
7	0.89	0.87
8	0.92	0.91
9	0.96	0.95
10	1.00	1.00

Note: Typical value accuracy +/- 5%

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications: outdoorlighting.applications@philips.com
 Note: Some data may be scaled based on tests of similar. But not identical luminaires

LED Wattage and Lumen Values: 4000K

Ordering Code	Total LEDs	LED current (mA)	Average system watts (W)	Type R2S			Type R2M			Type R3S			Type R3M		
				delivered lumens	Efficacy (LPW)	BUG rating	delivered lumens	Efficacy (LPW)	BUG rating	delivered lumens	Efficacy (LPW)	BUG rating	delivered lumens	Efficacy (LPW)	BUG rating
RFL-145W64LED4K-G2	64	700	137	17820	130.1	B3-U0-G2	17444	127.3	B3-U0-G3	17150	125.2	B2-U0-G3	17093	124.8	B3-U0-G3
RFL-90W80LED4K-G2	80	350	93	12232	131.9	B3-U0-G2	11974	129.1	B2-U0-G2	11772	127.0	B2-U0-G2	11733	126.5	B2-U0-G2
RFL-135W80LED4K-G2	80	530	136	17596	129.0	B3-U0-G2	17224	126.2	B3-U0-G3	16934	124.1	B2-U0-G3	16878	123.7	B3-U0-G3
RFL-180W80LED4K-G2	80	700	174	22275	128.0	B3-U0-G3	21805	125.3	B3-U0-G3	21438	123.2	B3-U0-G4	21367	122.8	B3-U0-G3
RFL-160W96LED4K-G2	96	530	161	21115	131.4	B3-U0-G2	20669	128.6	B3-U0-G3	20321	126.4	B2-U0-G3	20254	126.0	B3-U0-G3
RFL-215W96LED4K-G2	96	700	207	26730	129.1	B3-U0-G3	26166	126.4	B3-U0-G3	25725	124.3	B3-U0-G4	25640	123.9	B3-U0-G3
RFL-335W96LED4K-G2	96	1050	323	37197	115.2	B4-U0-G4	36412	112.7	B4-U0-G4	35799	110.8	B3-U0-G5	35680	110.5	B4-U0-G4
RFL-190W112LED4K-G2	112	530	188	24634	131.3	B3-U0-G3	24114	128.6	B3-U0-G3	23708	126.4	B3-U0-G4	23629	126.0	B3-U0-G3
RFL-241W112LED4K-G2	112	700	243	31185	128.3	B4-U0-G3	30527	125.6	B3-U0-G4	30013	123.5	B3-U0-G4	29913	123.1	B3-U0-G4
RFL-350W112LED4K-G2	112	950	340	39992	117.8	B4-U0-G4	39148	115.3	B4-U0-G4	38489	113.4	B3-U0-G5	38361	113.0	B4-U0-G4

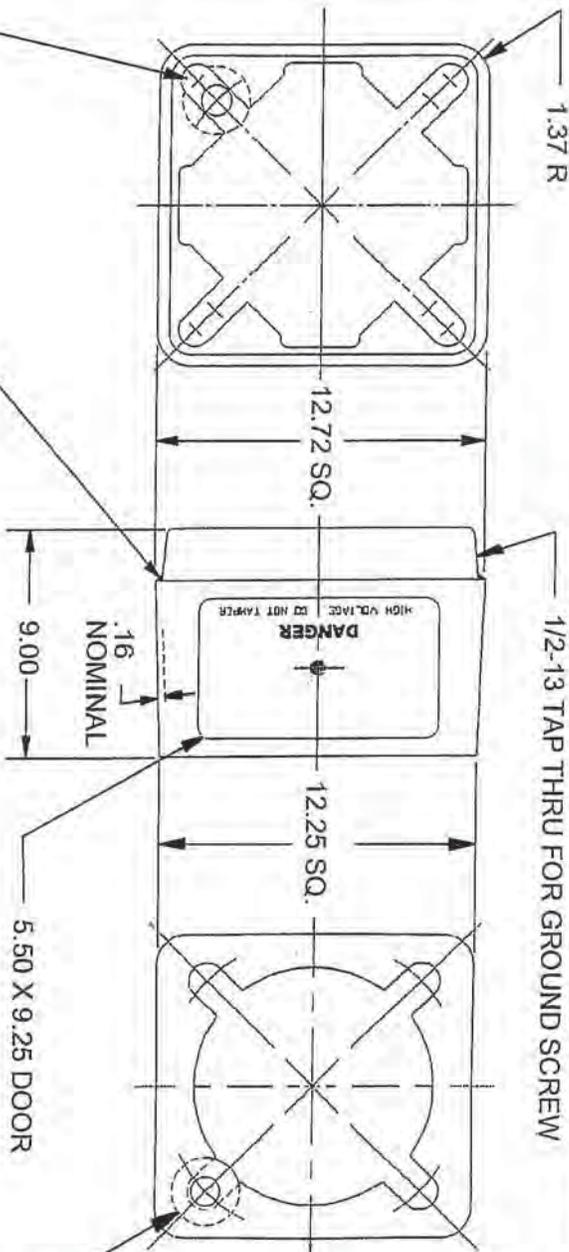
Ordering Code	Total LEDs	LED current (mA)	Average system watts (W)	Type 4			Type 5		
				delivered lumens	Efficacy (LPW)	BUG rating	delivered lumens	Efficacy (LPW)	BUG rating
RFL-145W64LED4K-G2	64	700	137	17181	125.4	B2-U0-G3	17861	130.4	B4-U0-G2
RFL-90W80LED4K-G2	80	350	93	11794	127.2	B2-U0-G2	12260	132.2	B4-U0-G2
RFL-135W80LED4K-G2	80	530	136	16965	124.3	B2-U0-G3	17636	129.2	B4-U0-G2
RFL-180W80LED4K-G2	80	700	174	21477	123.4	B3-U0-G4	22326	128.3	B5-U0-G3
RFL-160W96LED4K-G2	96	530	161	20358	126.7	B3-U0-G4	21163	131.7	B5-U0-G3
RFL-215W96LED4K-G2	96	700	207	25772	124.5	B3-U0-G4	26791	129.4	B5-U0-G3
RFL-335W96LED4K-G2	96	1050	323	35864	111.0	B3-U0-G5	37282	115.4	B5-U0-G4
RFL-190W112LED4K-G2	112	530	188	23751	126.6	B3-U0-G4	24690	131.6	B5-U0-G3
RFL-241W112LED4K-G2	112	700	243	30067	123.7	B3-U0-G5	31256	128.6	B5-U0-G4
RFL-350W112LED4K-G2	112	950	340	38559	113.6	B3-U0-G5	40084	118.1	B5-U0-G4

Field Adjustable Wattage (FAWS) Multiplier Chart

FAWS Position	Typical Delivered Lumens Multiplier	Typical System wattage
1	0.31	0.28
2	0.53	0.50
3	0.62	0.58
4	0.70	0.67
5	0.78	0.75
6	0.83	0.81
7	0.89	0.87
8	0.92	0.91
9	0.96	0.95
10	1.00	1.00

Note: Typical value accuracy +/- 5%

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications: outdoorlighting.applications@philips.com
 Note: Some data may be scaled based on tests of similar. But not identical luminaires



MIG 4043 WIRE 1/4" WITH APPROX. 5" OF WELD ON EACH OF THE (4) INTERNAL CORNERS

BOTTOM BOLT CIRCLE 10" DIA. THRU 12 3/4" DIA. B.C. 4 PLS EQ. SPACED

USE 2 3/4" DIA. X 1/2" TK. STEEL WASHERS

TOP BOLT CIRCLE 10 1/2" DIA. THRU 12" DIA. B.C. 4 PLS. EQ. SPACED

USE 2 3/4" DIA. X 1/2" TK. STEEL WASHERS

DOOR SUPPLIED / BLANK OR LOGO IN ALUMINUM OR NON-METALLIC, INJECTION MOLDED ABS

ST'D. DOOR STRAP # 1041 / USE 1/4-20 X 1" LONG S.S. SCREW / HEAD TYPE CUSTOMER OPTION.

ALL WASHERS TO BE ZINC MECHANICAL COATED PER ASTM 695-85 CLASS 50

356 T-6 ALUMINUM ALLOY / S.S. WHEELABRATED FINISH CHEMICAL AND PHY. CERTS TO BE SUPPLIED WITH EACH SHIPMENT

ADHESIVE BREAKAWAY AND CAUTION LABELS TO APPEAR ON INSIDE WALL OPPOSITE DOOR OPENING

ON INSIDE WALL OPPOSITE DOOR OPENING

AKRON FOUNDRY COMPANY
TRANSFORMER BASE

4-24-06

TB6-9

MATERIAL MELTED AND MANUFACTURED IN THE U.S.A.

CASTINGS PRODUCED IN THE U.S.A.

TOP: JOB# 0962

BOTTOM: JOB# 0805

DOOR: JOB# 2220
(ALUMINUM)

DOOR JOB# 2464
(NON-METALLIC)

ASS'Y: JOB# 2006

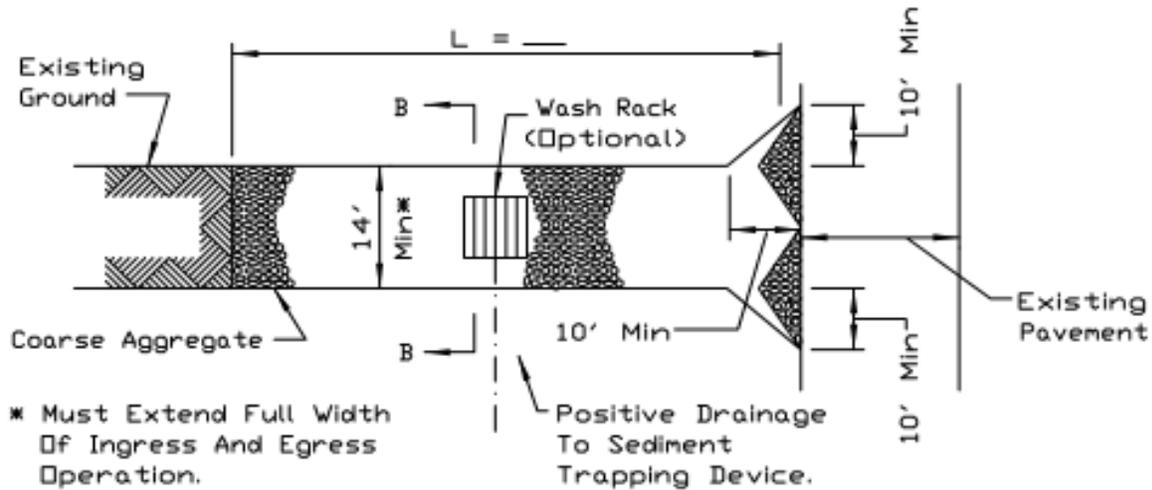
ORDER "P" AFTER PART NUMBER WHEN A NON-METALLIC DOOR APPLICATION IS REQUIRED



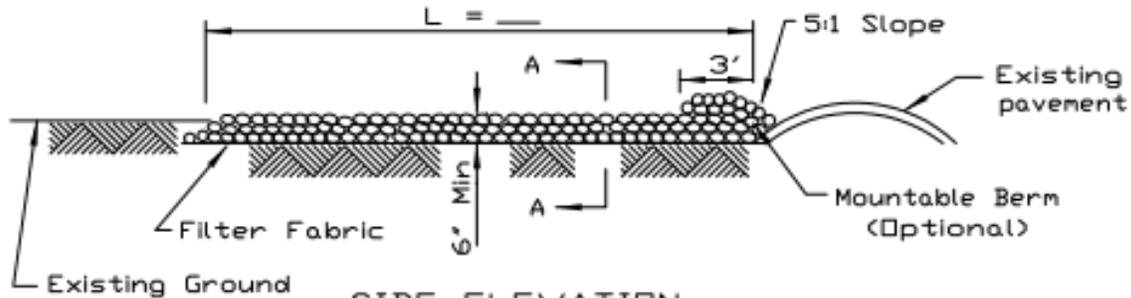
SECTION 700- GRADING, LANDSCAPING & EROSION CONTROL DETAILS

STABILIZED CONSTRUCTION ENTRANCE 1
STABILIZED CONSTRUCTION ENTRANCE 2
DITCH CHECKS
ROCK CHECK DAM
SILT FENCE
INLET PROTECTION
CONCRETE WASHOUT FACILITY
EROSION CONTROL BLANKET INSTALLATION

STABILIZED CONSTRUCTION ENTRANCE PLAN



PLAN VIEW



SIDE ELEVATION

NOTES:

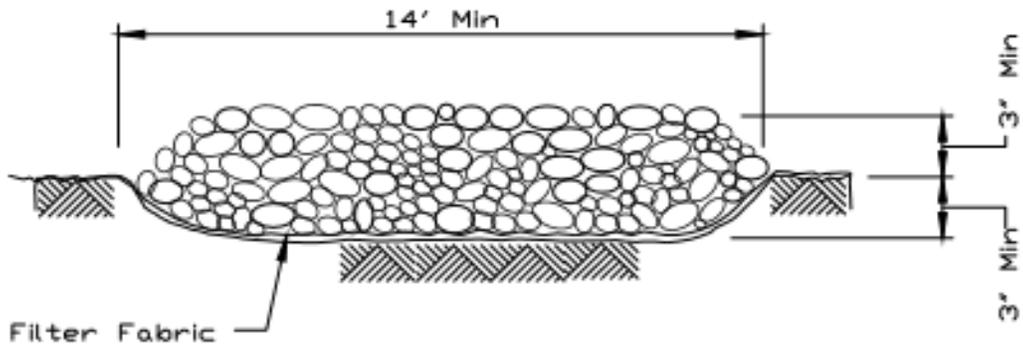
1. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table I or 2, Class I, II or IV and shall be placed over the cleared area prior to the placing of rock.
2. Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
3. Any drainage facilities required because of washing shall be constructed according to manufacturers specifications.
4. If wash racks are used they shall be installed according to the manufacturer's specifications.

REFERENCE	
Project	_____
Designed	_____ Date _____
Checked	_____ Date _____
Approved	_____ Date _____

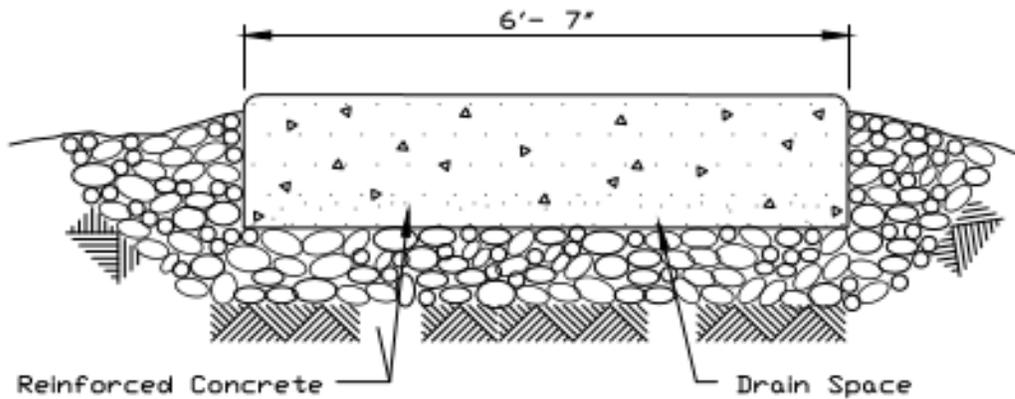


STANDARD DWG. NO.
IL-630
SHEET 1 OF 2
DATE 8-18-94

STABILIZED CONSTRUCTION ENTRANCE PLAN



SECTION A-A



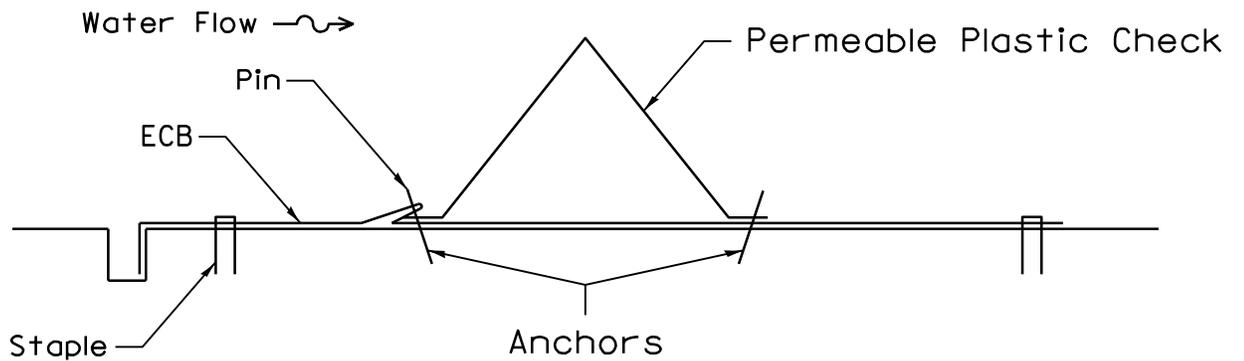
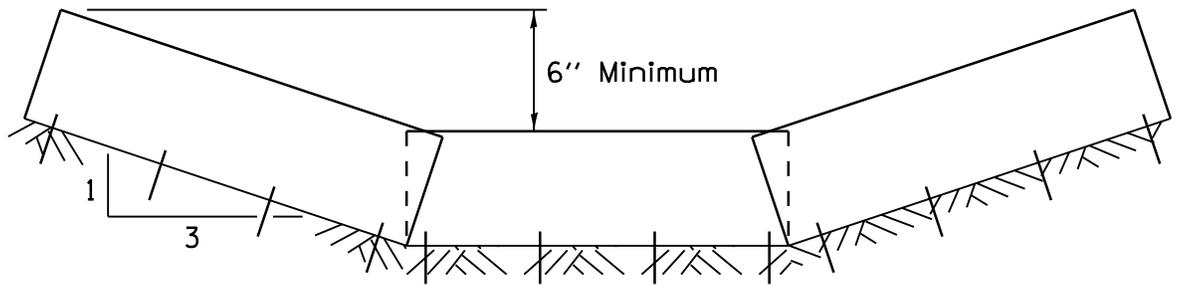
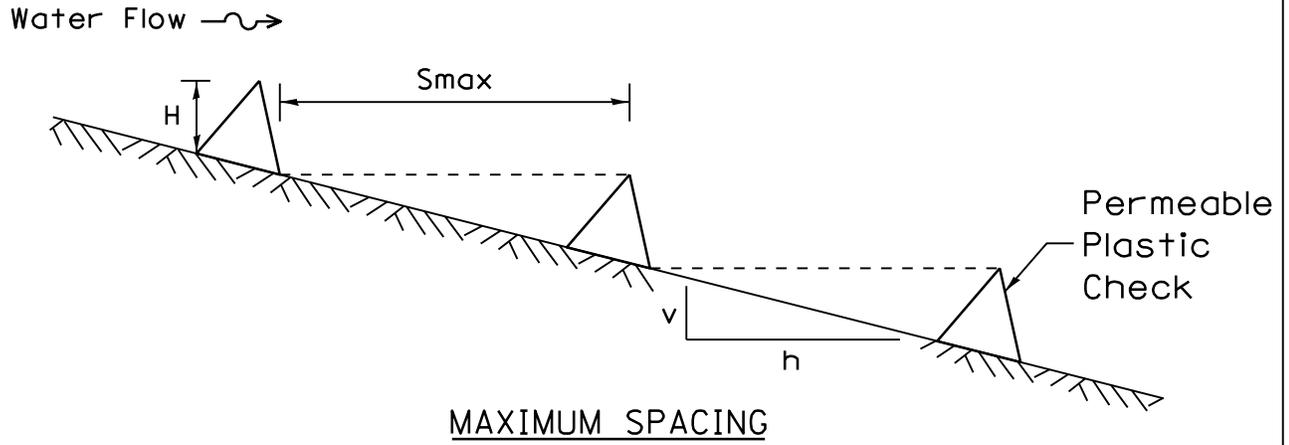
SECTION B-B

REFERENCE
 Project _____
 Designed _____ Date _____
 Checked _____ Date _____
 Approved _____ Date _____



STANDARD DWG. NO.
 IL-630
 SHEET 2 OF 2
 DATE 8-18-94

PLASTIC PERMEABLE CHECKS



REFERENCE

Project _____
 Designed _____ Date _____
 Checked _____ Date _____
 Approved _____ Date _____



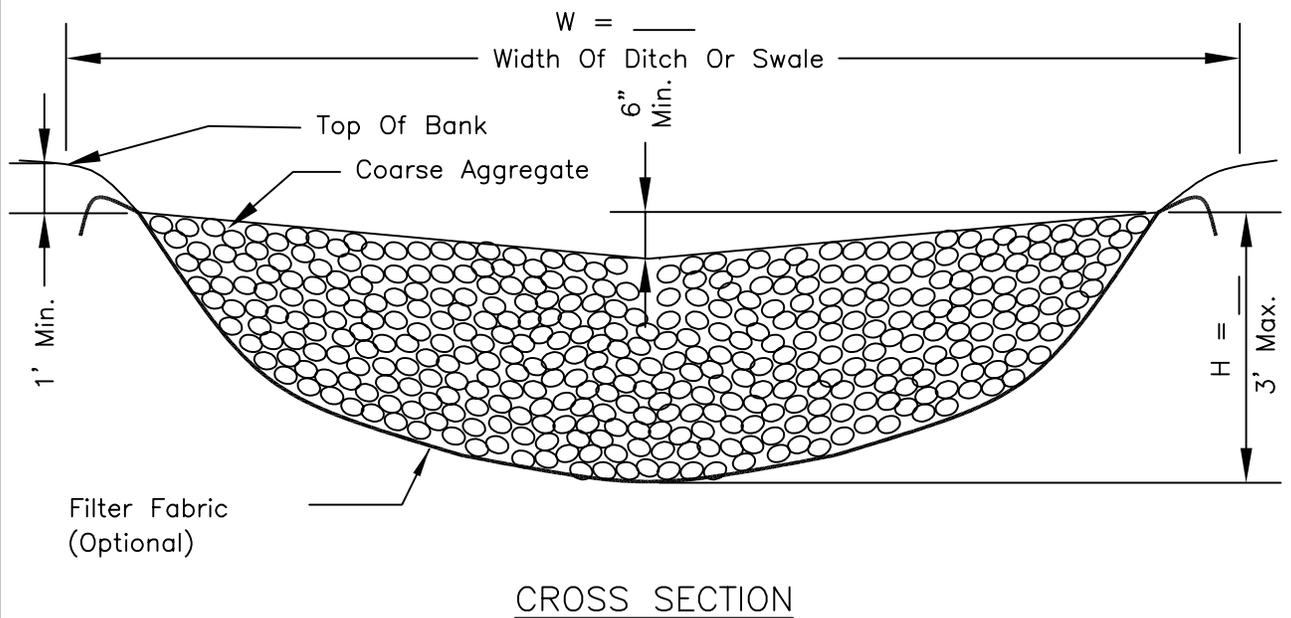
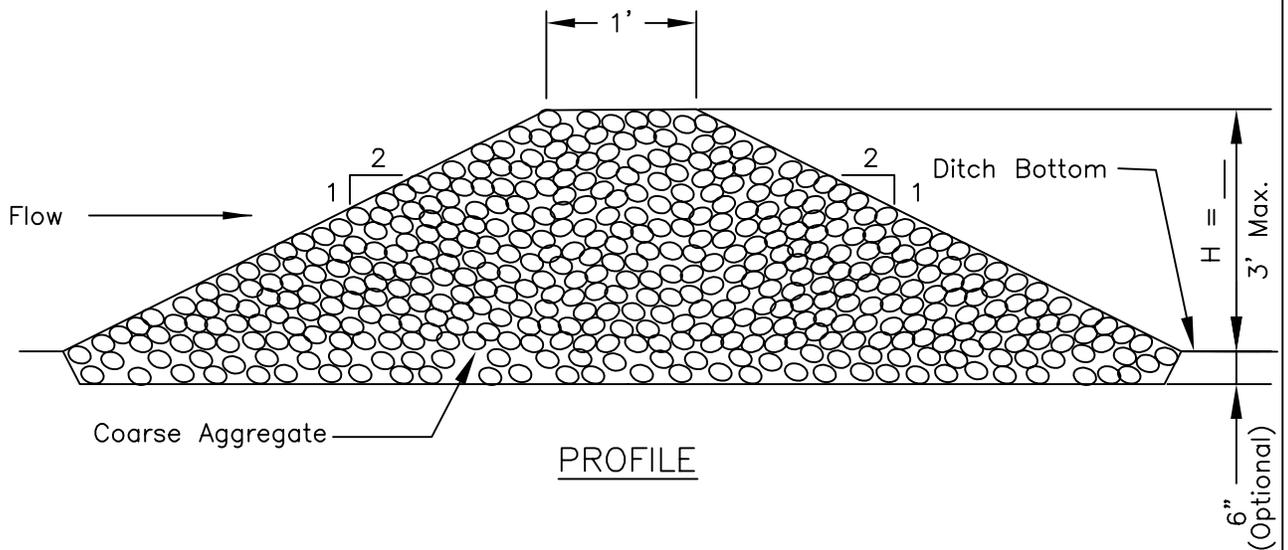
STANDARD DWG. NO.

IUM-514

SHEET 1 OF 1

Packet # 3259-11

ROCK CHECK DAM - COARSE AGGREGATE



NOTES:

1. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table 1 or 2, Class I, II, or IV and shall be placed over the cleared area prior to the placing of rock.
2. Coarse aggregate shall meet one of the following IDOT gradations, CA-1, CA-2, CA-3, or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
3. For added stability, the base of the dam may be keyed 6 inches into the soil.
4. See plans for spacing of dams and H dimensions.
5. Drainage area to each dam shall be less than 2 acres.
6. Use ROCK CHECK DAM-RIPRAP IL-605R for drainage areas of 2 to 10 acres.

REFERENCE

Project _____
 Designed _____ Date _____
 Checked _____ Date _____
 Approved _____ Date _____



NRCS

Natural Resources Conservation Service

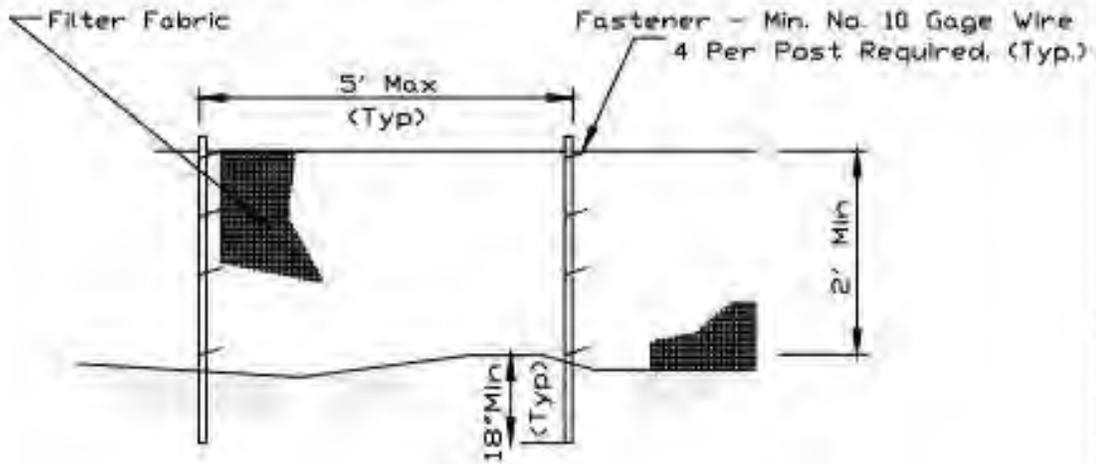
STANDARD DWG. NO.

IL-605CA

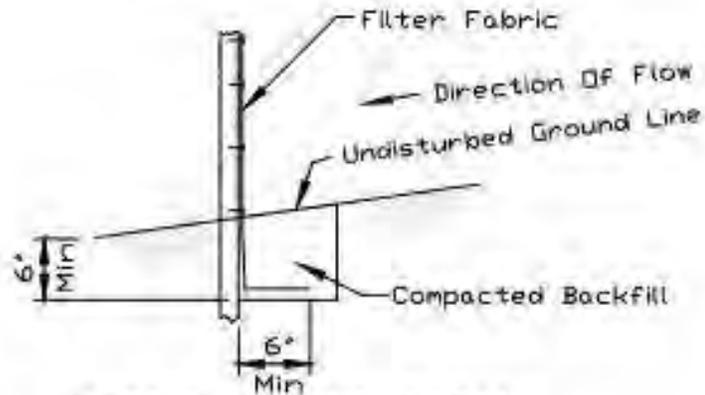
SHEET 1 OF 1

DATE 1-29-99

SILT FENCE PLAN



ELEVATION



FABRIC ANCHOR DETAIL

NOTES:

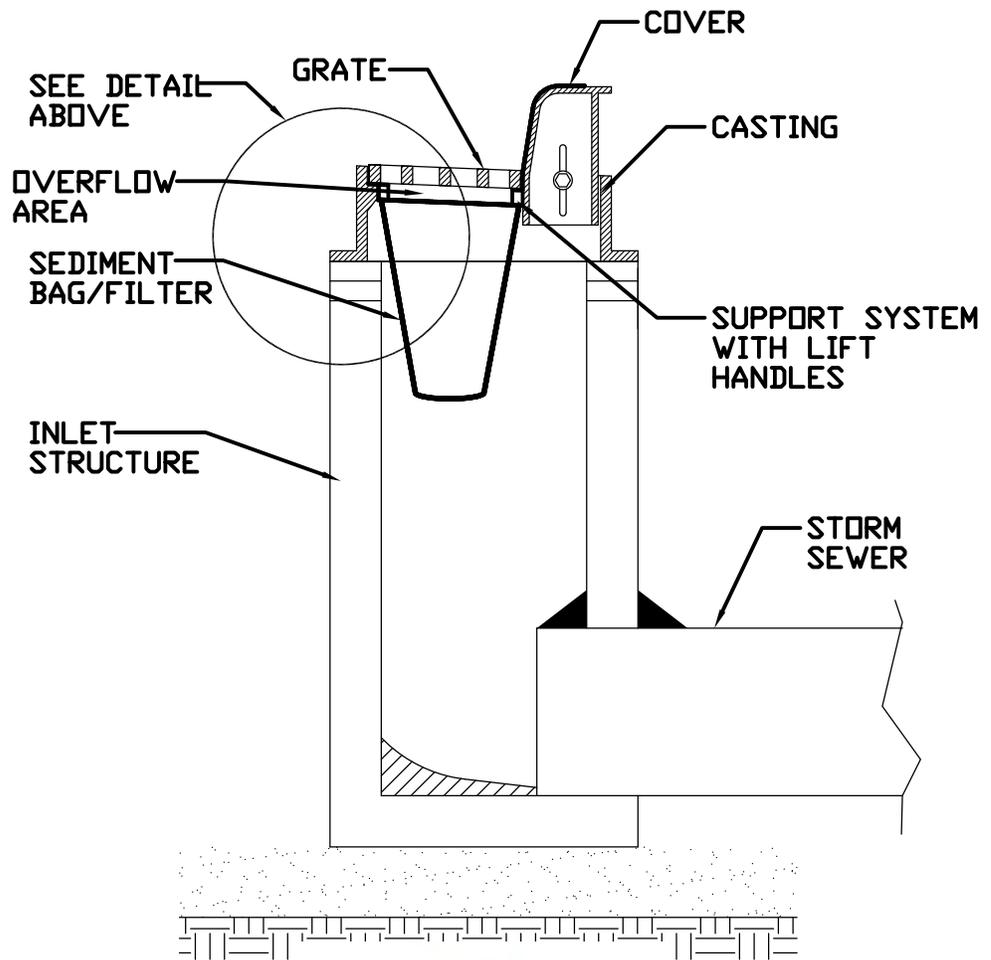
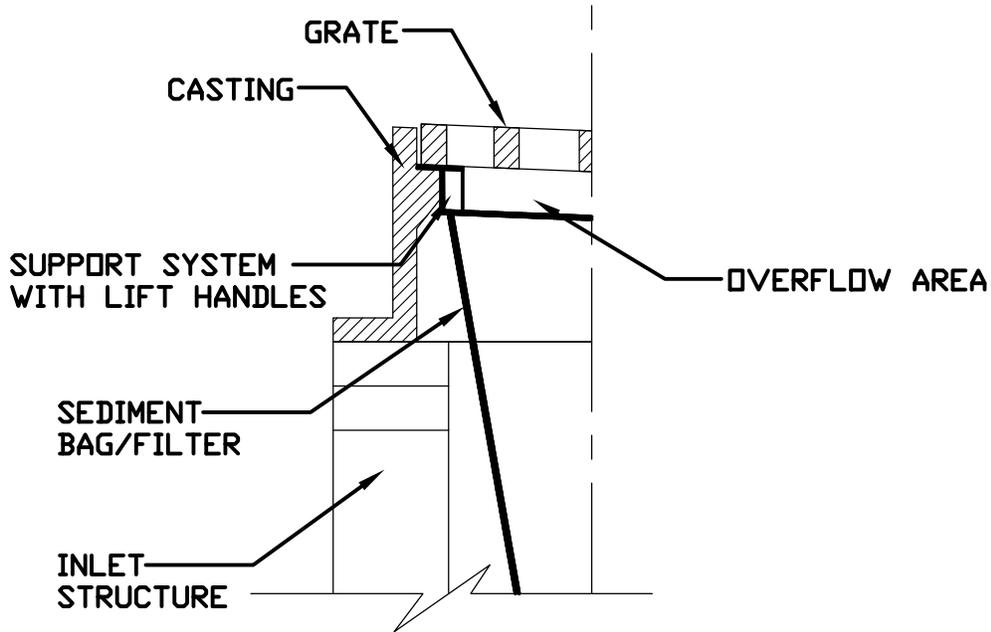
1. Temporary sediment fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.
2. Filter fabric shall meet the requirements of material specification 592 Geotextile based upon performance needed.
3. Fence posts shall be either standard steel post or wood post with a minimum cross-sectional area of 2' x 2' nominal size.

REFERENCE	
Project	_____
Designed	_____ Date _____
Checked	_____ Date _____
Approved	_____ Date _____



STANDARD DWG NO.
IUM-620
SHEET 1 OF 8
DATE 3-16-18

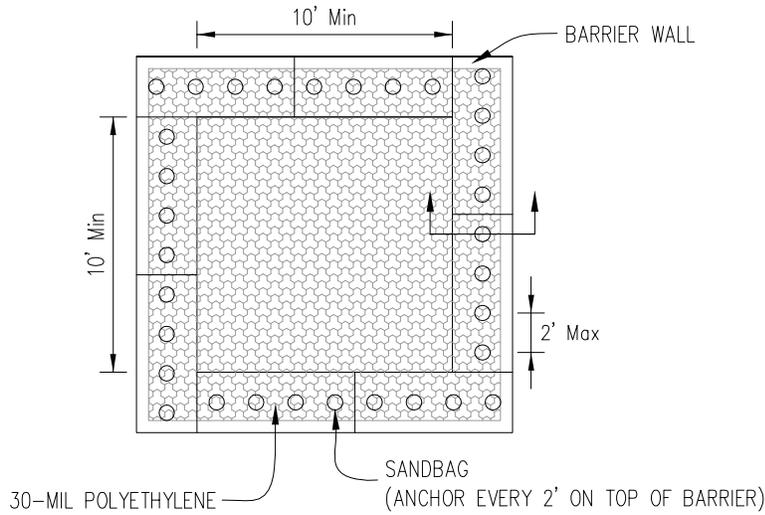
INLET PROTECTION - PAVED AREAS DROP-IN PROTECTION



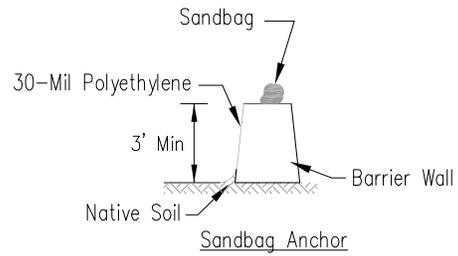
REFERENCE	
Project	_____
Designed	_____ Date _____
Checked	_____ Date _____
Approved	_____ Date _____



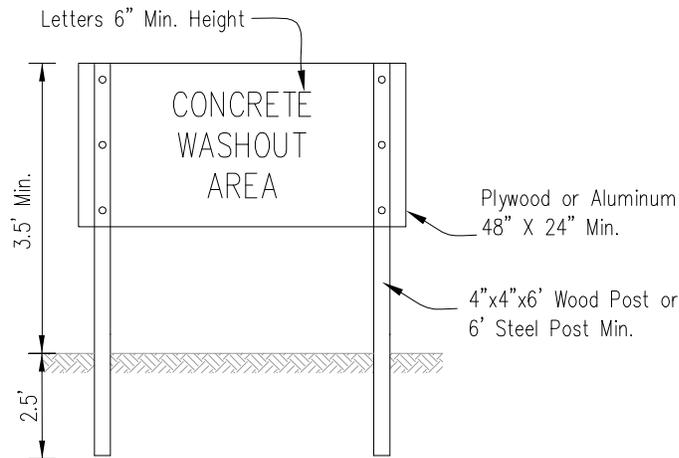
STANDARD DWG. NO.
IUM-561D
 SHEET 1 OF 1
 Packet Page #328
 DATE 01-11-11



PLAN VIEW



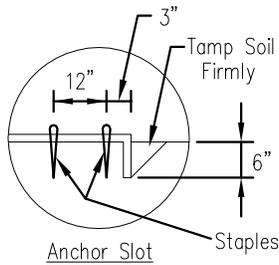
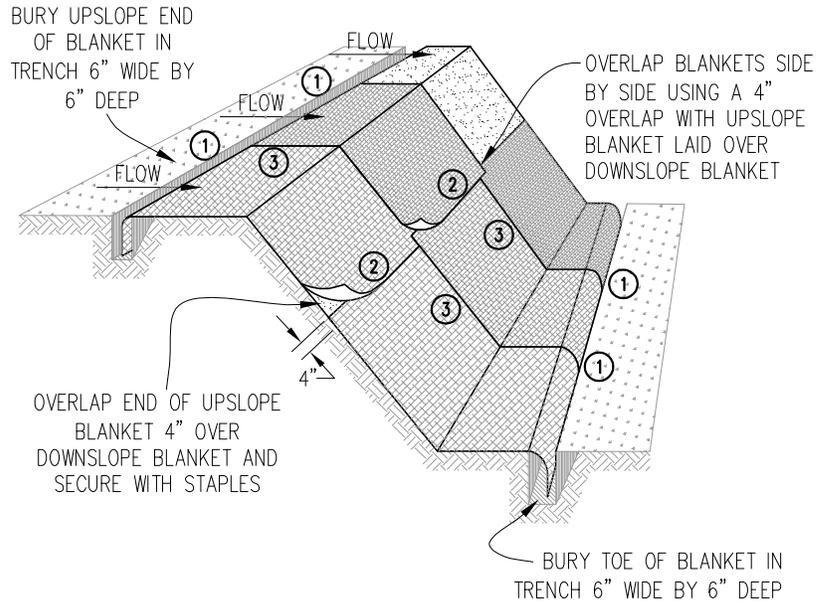
BARRIER WALL ANCHOR SECTION



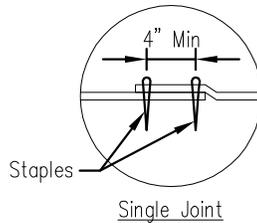
SIGN DETAIL

NOTES:

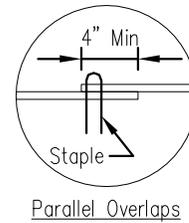
1. Maintaining temporary concrete washout facilities shall include removing and disposing of hardend concrete and/or slurry and returning the facilities to a functional condition.
2. Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.



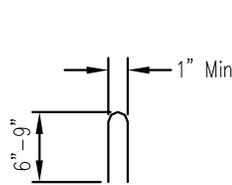
DETAIL 1



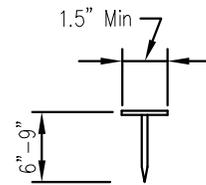
DETAIL 2



DETAIL 3



STAPLE DETAIL



PUSH PIN DETAIL

NOTES:

1. Staples shall be placed in a diamond pattern at 2 per s.y. for stiched blankets. Non-stiched shall use 4 staples per s.y. of material. This equates to 200 staples with stiched blanket and 400 stapels with non-stiched blanket per 100 s.y. of material.
2. Staple or push pin lengths shall be selected based on soil type and conditions. (minimum staple length is 6")
3. Erosion control material shall be placed in contact with the soil over a prepared seedbed.
4. All anchor slots shall be stapled at approximately 12" intervals.



REQUEST FOR COMMITTEE ACTION

Referred to Committee: August 13, 2020
Subject: Pedestrian Bridge Rehabilitation
Staff Contact: Alan Lange, Public Works Director
Department: Public Works

TITLE: Approval of an Agreement between the City of Wood Dale and BP&T Construction for the Salt Creek Greenway Trail Bridge Rehabilitation Project in an Amount Not to Exceed \$130,329

RECOMMENDATION:

Staff Recommends Approval of an Agreement between the City of Wood Dale and BP&T Construction for the Salt Creek Greenway Trail Bridge Rehabilitation Project in an Amount Not to Exceed \$130,329.

BACKGROUND:

The City is responsible for maintaining the pedestrian bridge which carries the Salt Creek Greenway Trail over Irving Park Road. The City previously requested proposals for engineering services and awarded an agreement to Thomas Engineering for design and construction engineering services. Due to the differential nature of the work and small quantities, no bids were received when the project was originally advertised. As such, it was decided to separate the project into three smaller projects to be bid separately. Repairs to the brick masonry surrounding the support structures was completed in 2018. The next and final phases are to make minor steel repairs, painting of all metal including structural girders and beams, and staining of the concrete to provide weather protection and anti-graffiti properties. The metal repairs contract was advertised both as a stand-alone project and as an alternate to the painting and staining contract. No bids were received for the separate standalone metal repairs contract. Two bids were received for the painting and staining contract and both firms included a bid price for the metal repairs alternate bid. The bids as read are as follows;

<u>Firm</u>	<u>Base Bid</u>	<u>Alternate</u>
BP&T	\$82,829.00	\$47,500.00
Dynamic Industrial Services	\$232,369.20	\$24,509.20

The discrepancy in the bid prices is due to differences in the painting systems proposed by the bidders. BP&T proposes an overcoat system while Dynamic Industrial Services proposed stripping the existing paint and applying a new coat. IDOT's Guide Bridge Special Provision allows for six various painting systems, three of which are overcoat systems. Thomas Engineering reviewed the bids and verified references and adherence to the specs as advertised and recommend the City award the project to BP&T Construction.

ANALYSIS:

Staff had budgeted \$300,000 for this project within the CIP for FY 21. Engineer's estimate for this work was \$159,888.

DOCUMENTS ATTACHED

- ✓ Thomas Engineering Recommendation Letter
- ✓ Bid Tabulation

July 16, 2020

Mr. Alan Lange
Director of Public Works
404 N Wood Dale Rd
Wood Dale, IL | 60191

Re: Wood Dale Salt Creek Greenway Trail Bridge Rehabilitation Project
Bid Analysis and Award Recommendation

Dear Mr. Lange:

Thomas Engineering Group, LLC (TEG) prepares this memo to evaluate bids received from vendors for performing contractual bridge rehabilitation and painting services for the City of Wood Dale's Salt Creek Greenway Trail Bridge Rehabilitation Project.

On Tuesday, July 7, 2020, the City received a total of two (2) competitive bid proposals from interested contractors for the Salt Creek Greenway Trail Pedestrian Bridge Painting and Staining contract. The Base Bid includes painting of the steel superstructure, painting of the steel railing, and staining of the concrete substructure. All Base Bids were opened and read aloud. BP&T Construction, located in Arlington Heights, IL submitted a bid proposal in the amount of \$82,829.00. Dynamic Industrial Services Inc., located in Highland, IN submitted a bid proposal in the amount of \$232,369.20. The engineer's estimate of probable cost was \$142,968.00.

The contract also included an Alternate Bid for the Pedestrian Bridge Steel Repairs for repairing decorative steel railing. BP&T Construction submitted an Alternate Bid proposal in the amount of \$47,500.00. Dynamic Industrial Services Inc. submitted an Alternate Bid proposal in the amount of \$24,509.20. The engineer's estimate of probable cost was \$16,920.00 for Steel Repairs.

Based on correspondence received by BP&T Construction and Dynamic Industrial Services following the bid opening, the discrepancy in Base Bid prices are due to differences in painting systems proposed by the bidders. The project was advertised using IDOT's Guide Bridge Special Provision (GBSP), which allows 6 various painting systems, of which 3 are overcoats (Systems 2, 4, or 6). BP&T submitted a bid for using an overcoat system. Dynamic Industrial Services submitted a bid for removing the existing paint and applying a new coat.

In an effort to verify that BP&T maintains the necessary qualifications and equipment in accordance with the requirements in the contract, we requested that BP&T provide evidence of the Society of Protective Coatings (SSPC) QP1, SSPC – Bridge Coating Inspector (BCI), and National Association of Corrosion Engineers (NACE) Coating Inspector Level 2 Certifications. The SSPC QP 1 Certification is meant to attest to an industrial painter's ability to apply coatings to complex industrial and marine coatings. The NACE Coating Inspector Program - Level 2 is designed for Level 2 Coating Inspectors responsible for performing and documenting non-destructive / destructive inspections of liquid and non-liquid coatings to any substrate in a shop or field setting.

BP&T does not possess either SSPC or NACE Certifications, however, they did provide evidence of successful completion of industrial cleaning, painting, and welding projects for municipalities. TEG also called references provided by BP&T. The Village of Mount Prospect, where BP&T performed various painting and tuck pointing work, responded that BP&T performed quality work, cooperated with the



July 14, 2020

RE: Bid Proposal Evaluations – Wood Dale Salt Creek Greenway Trail Bridge Rehabilitation Project

Page 2 of 2

Village, and would be hired again if they were the lowest bidder on a similar project. The Village of Lake Barrington, where BP&T completed industrial painting of metal filter tanks, was satisfied with the work done by BP&T and would hire them again if they were the lowest bidder on a similar project. In addition, The City of Wood Dale and TEG staff has worked directly with BP&T for masonry repairs to the Salt Creek Greenway Trail Bridge. Of the three references provided, Hoffman Estates Park District did not respond.

TEG has compiled the bid proposal information and offers the following recommendation to the City for awarding the Project. A Bid Tabulation worksheet (attached) was developed for evaluation of the bid values submitted at the bid opening. TEG's evaluation of bids included consideration of bid proposal completeness, line item prices, total Base Bid cost, and the contractor's ability to perform the work. Based on the proposal evaluation and attached Bid Tabulation, we believe that BP&T submitted the lowest overall Base Bid cost proposal and recommend that the City consider awarding the Base Bid contract to BP&T in the amount of \$82,829.00.

While the contract shall be awarded on the basis of the lowest Base Bid, the City also has the option to award the Alternate Bid to the lowest bidder. Given that the steel repairs must precede the painting operations, and the steel repairs have generated very little interest from bidders, we hereby recommend that the Alternate Bid for the Pedestrian Bridge Steel Repairs also be awarded to BP&T Construction in the amount of \$47,500.00, making the combined awarded contract value equal to \$130,329.00.

If you have any questions or comments, please feel free to call me at (847) 815-9500 or e-mail at kevinv@thomas-engineering.com.

Sincerely,
thomas engineering group, llc



Kevin C. VanDeWoestyne, P.E., ENV SP
Municipal Department Head

Attachments: Bid Tabulations
Qualifications Letter from BP&T



City of Wood Dale

Salt Creek Greenway Trail Pedestrian Bridge Painting and Staining

Bid Opening: July 7, 2020 at 10:00 AM

				ENGINEERS ESTIMATE		BP&T CONSTRUCTION 1522 N Walnut Ave, Arlington Hts, IL 60004		Dynamic Industrial Services Inc. 2158 W 45th Ave #237, Highland, IN 46322	
ITEM	DESCRIPTION	ESTIMATED QTY	UNIT	EST. UNIT PRICE	EST. TOTAL COST	BID UNIT PRICE	BID TOTAL	BID UNIT PRICE	BID TOTAL
1	PAINTING STEEL RAILING	2085	FOOT	\$ 15.00	\$ 31,275.00	\$ 17.00	\$ 35,445.00	\$ 22.80	\$ 47,538.00
2	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 1	1	L SUM	\$ 38,277.00	\$ 38,277.00	\$ 22,700.00	\$ 22,700.00	\$ 157,000.00	\$ 157,000.00
3	STAINING CONCRETE STRUCTURES	4824	SQ FT	\$ 4.00	\$ 19,296.00	\$ 1.50	\$ 7,236.00	\$ 2.24	\$ 10,805.76
4	TRAFFIC CONTROL AND PROTECTION, SPECIAL	1	L SUM	\$ 10,000.00	\$ 10,000.00	\$ 7,800.00	\$ 7,800.00	\$ 9,500.00	\$ 9,500.00
5	ANTI-GRAFFITI COATING	4824	SQ FT	\$ 5.00	\$ 24,120.00	\$ 2.00	\$ 9,648.00	\$ 1.56	\$ 7,525.44
				SUB TOTAL	\$ 122,968.00	TOTAL	\$ 82,829.00	TOTAL	\$ 232,369.20
				MOBILIZATION	\$ 7,000.00	AS READ	\$ 82,829.00	AS READ	\$ 232,369.20
				CONTINGENCY	\$ 13,000.00				
				TOTAL	\$ 142,968.00				

City of Wood Dale

Salt Creek Greenway Trail Pedestrian Bridge Painting and Staining - Alternate Bid Item

Bid Opening: July 7, 2020 at 10:00 AM

				ENGINEERS ESTIMATE		BP&T CONSTRUCTION 1522 N Walnut Ave, Arlington Hts, IL 60004		Dynamic Industrial Services Inc. 2158 W 45th Ave #237, Highland, IN 46322	
ITEM	DESCRIPTION	ESTIMATED QTY	UNIT	EST. UNIT PRICE	EST. TOTAL COST	BID UNIT PRICE	BID TOTAL	BID UNIT PRICE	BID TOTAL
1	REMOVE AND REPLACE NON-SHRINK GROUT BEARING PEDESTALS	20	EACH	\$ 150.00	\$ 3,000.00	\$ 270.00	\$ 5,400.00	\$ 640.00	\$ 12,800.00
2	STRUCTURAL STEEL REPAIR	440	POUND	\$ 23.00	\$ 10,120.00	\$ 95.00	\$ 41,800.00	\$ 25.68	\$ 11,299.20
3	REMOVE AND REPLACE ANCHOR BOLTS	1	EACH	\$ 800.00	\$ 800.00	\$ 300.00	\$ 300.00	\$ 410.00	\$ 410.00
SUB TOTAL					\$ 13,920.00	TOTAL	\$ 47,500.00	TOTAL	\$ 24,509.20
MOBILIZATION					\$ 1,000.00	AS READ	\$ 47,500.00	AS READ	\$ 24,509.20
CONTINGENCY					\$ 2,000.00				
TOTAL					\$ 16,920.00				

BP&T Construction

1522 N. Walnut Ave
Arlington Heights IL 60004

Re: Salt Creek Greenway Trail Staining and Painting Project

Mr. Kevin Vandewoestyne
Thomas Engineering Group, LLC
762 Shoreline Drive, Suite 200
Aurora, Illinois 60504

July 14, 2020

Dear Kevin,

Per our recent conversation please note that we have experience using all six paint systems that are in the specifications. We have used system 2, 4 and 5 for the Village of Mount Prospect in 2015, 2017, 2018, 2019 and 2020. We have used system 1 for the Village of Lake Barrington in 2017 and system 3 for the Hoffman Estates Park District in 2018, 2019 and 2020. In addition we have welded damaged handrails, prepped, primed and painted them for Dupage Airport Authority and have welded damaged light poles for Sternberg Lighting Company and several other villages.

We have also blasted, primed and painted street light poles and signal head intersections for the Village of Mount Prospect and H&H Electric Company using one of the paint systems and using IDOT traffic controls. Our crew is experienced with IDOT traffic control regulations and has arrow boards, signage and cones.

The system we have chosen for your project only requires cleaning, tool prepping as necessary, priming and painting with two coats. We are experienced using this system and have done so for other villages as indicated on our references and are comfortable with finishing this project ahead of the schedule indicated on the specifications.

If you have any questions or would like additional references please do not hesitate to contact us. Thank you.

Submitted By,
Sarah Choi
B P&T Construction

City of Wood Dale

Salt Creek Greenway Trail Pedestrian Bridge Painting and Staining

Bid Opening: July 7, 2020 at 10:00 AM

				ENGINEERS ESTIMATE		BP&T CONSTRUCTION 1522 N Walnut Ave, Arlington Hts, IL 60004		Dynamic Industrial Services Inc. 2158 W 45th Ave #237, Highland, IN 46322	
ITEM	DESCRIPTION	ESTIMATED QTY	UNIT	EST. UNIT PRICE	EST. TOTAL COST	BID UNIT PRICE	BID TOTAL	BID UNIT PRICE	BID TOTAL
1	PAINTING STEEL RAILING	2085	FOOT	\$ 15.00	\$ 31,275.00	\$ 17.00	\$ 35,445.00	\$ 22.80	\$ 47,538.00
2	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 1	1	L SUM	\$ 38,277.00	\$ 38,277.00	\$ 22,700.00	\$ 22,700.00	\$ 157,000.00	\$ 157,000.00
3	STAINING CONCRETE STRUCTURES	4824	SQ FT	\$ 4.00	\$ 19,296.00	\$ 1.50	\$ 7,236.00	\$ 2.24	\$ 10,805.76
4	TRAFFIC CONTROL AND PROTECTION, SPECIAL	1	L SUM	\$ 10,000.00	\$ 10,000.00	\$ 7,800.00	\$ 7,800.00	\$ 9,500.00	\$ 9,500.00
5	ANTI-GRAFFITI COATING	4824	SQ FT	\$ 5.00	\$ 24,120.00	\$ 2.00	\$ 9,648.00	\$ 1.56	\$ 7,525.44
				SUB TOTAL	\$ 122,968.00	TOTAL	\$ 82,829.00	TOTAL	\$ 232,369.20
				MOBILZATION	\$ 7,000.00	AS READ	\$ 82,829.00	AS READ	\$ 232,369.20
				CONTINGENCY	\$ 13,000.00				
				TOTAL	\$ 142,968.00				



REQUEST FOR COMMITTEE ACTION

Referred to Committee: August 13, 2020
Subject: Phase I Engineering for Elizabeth Drive Bridge Over Salt Creek Bridge Replacement/Rehab
Staff Contact: Alan Lange, Public Works Director
Department: Public Works

TITLE: Approval of an Agreement between the City of Wood Dale and HR Green for Phase I Engineering Services for Elizabeth Drive Bridge Over Salt Creek Replacement/Rehabilitation in an Amount Not to Exceed \$301,071

RECOMMENDATION:

Staff recommends approval of an agreement between the City of Wood Dale and HR Green for Phase I Engineering Services for the Elizabeth Drive Bridge Over Salt Creek Replacement/Rehabilitation Project in an Amount Not to Exceed \$301,071.

BACKGROUND:

During its last inspection, the Elizabeth Drive Bridge was determined to be structurally deficient and obsolete. The report recommended that the three-span structure be replaced within the next five years. The anticipated construction cost of the project is \$2,594,000. The City applied for and will receive Surface Transportation Program – Bridge (STP-Bridge) funding, which may be used to fund the engineering and design related consultant services, as well as the cost of construction.

ANALYSIS:

The City issued a Request for Qualifications for Phase I Engineering Services and seven firms submitted their qualifications. Per the City's Qualifications Based Selection Process, the members of the RFP Steering Committee assigned the firms point values of 1 through 10 for each of the evaluation criteria. The scores were then averaged for a committee score. Based on the results, the RFP Steering Committee recommended the City negotiate with the highest ranked firm, HR Green, for Phase I Engineering

Services. Based on this recommendation, the Public Works Committee authorized the City to initiate negotiations with HR Green to develop a scope and fee for the project.

HR Green has a high degree of familiarity with this project as they have been contracted by the City to conduct the past three bridge inspections as required by IDOT. They also assisted the City with securing STP-Bridge funds for this project. HR Green prepared the attached scope and estimate for this work.

The RFQ, Addendum #1, and submitted qualifications can be viewed at:

<https://www.dropbox.com/sh/qtpeaw5yzrwz23g/AADoVtqPUoXbqV8AJJsQq-lea?dl=0>

DOCUMENTS ATTACHED

- ✓ Scope
- ✓ Cost Estimate

**SCOPE OF SERVICES
CITY OF WOOD DALE
ELIZABETH DRIVE OVER SALT CREEK
BRIDGE REPLACEMENT
PRELIMINARY ENGINEERING - PHASE I**

Project Understanding

The City of Wood Dale (CLIENT) has initiated a project requiring engineering services to complete a Phase I Study which includes developing concepts and alternatives to replace the Elizabeth Drive bridge over Salt Creek. CLIENT selected HR Green, Inc. (COMPANY) to perform the Phase I engineering per their QBS process. The project limits of the study area include Elizabeth Drive from Addison Road to east of the Forest Preserve District of DuPage County (FPDDC) entrance for a length of approximately 1,500 feet (0.28 miles). This project is being funded with STP-Br funds. Therefore, the project will be processed through the IDOT Bureau of Local Roads and Streets (BLRS) and will require a Project Development Report (PDR) to be prepared.

The existing roadway consists of a two (2) lane bituminous pavement, with predominately turf shoulders throughout the project limits. The roadway curves to the south near the crossing of Salt Creek and curves back to the north east of the bridge. An urban curb and gutter cross section exists near the intersection with Addison Road and a predominately rural cross section exists elsewhere within the project limits. The existing three (3) span steel superstructure bridge is structurally deficient, functionally obsolete and fracture critical with a sufficiency rating of 47.9. The cross-section consists of two (2) lanes, nominal shoulders with sidewalk on the south side of the road. The sidewalk does not extend off the bridge. The proposed scope of work includes complete bridge removal and replacement and approach roadway improvements including roadway realignment, reconstruction, and reprofiling.

CLIENT has requested that the proposed design focus on a new bridge, with a concrete deck and integral abutments. In addition, CLIENT desires that a 10-foot multi-use path be constructed on the north side of the new bridge as well as bicycle railing/parapet walls. The new roadway cross-section will likely consist of two (2) 11-foot lanes with 3-foot shoulders but will be evaluated along with different span configurations to cross Salt Creek. COMPANY will coordinate with the IDOT BLRS to present all feasible alternates to meet the purpose and need for the project and provide justification for complete bridge removal and replacement and roadway realignment as the preferred alternate.

The following are additional details and assumptions the scope of work is based upon:

1. The improvement length for the corridor improvements is approximately 1,500 feet. The general scope of work will include survey, wetland delineation, environmental evaluation, hydraulic analysis, geotechnical analysis, preliminary geometric and structural design, Bridge Condition Report (BCR), Type Size and Location drawing (TS&L), stakeholder coordination, permitting, and preparation and submittal of a Project Development Report (PDR).

2. Several utilities exist throughout the corridor. COMPANY will identify and evaluate potential impacts to the existing utilities and coordinate with respective utility owners.
3. The Forest Preserve District of DuPage County (FPDDC) owns several parcels to the north and south of Elizabeth Drive. COMPANY will assist the CLIENT in coordinating with the FPDDC to ensure cooperation and participation with the project. We intend for them to be a Cooperating and Participating Agency via two separate agreements.
4. Staged construction will be evaluated. Since the new structure is anticipated to be built on new alignment due to inadequate existing geometric alignment, the existing bridge can potentially be used during construction of the new bridge. The existing bridge is fracture critical and not feasible for staged construction. Evaluation of the Maintenance of Traffic (MOT) will be conducted in detail during the preliminary design phase.
5. Review of, and improvements to, the adjacent intersections are not included these Scope of Services, aside from the multi-use trail connection to the north/south multi-use trail in the northeast corner of Addison Road and Elizabeth Drive. The connection and ramps at this junction must meet ADA compliance. Signal work is not anticipated at Addison Road since pedestrian buttons currently exist.

Scope of Work

COMPANY will prepare an Abbreviated Bridge Condition Report (ABCR) and Preliminary Bridge Hydraulic Report (PBDHR) for submittal to IDOT prior to completion of the Project Development Report (PDR). The Phase I study and report will be prepared to Federal standards. Due to the potential for unusual circumstances, it is assumed the project will be processed as a Federal Categorical Exclusion (CE).

A. Data Collection and Review

1. Forecasted traffic counts will be requested from the Chicago Metropolitan Area for Planning (CMAP). Exhibits will be developed for both existing and forecasted traffic and identify single unit and multi-unit truck percentages.
2. Coordinate with utility companies to obtain maps of existing utilities within the project limits and place this information on a CADD base map.
3. Request existing roadway, bridge, and utility plans from the CLIENT (where available).
4. Prepare photo log of features within the project limits. An electronic copy of the photo logs will be provided to CLIENT. Photos will be taken of the bridge as well as any properties within the project corridor that may be historical.
5. Crash data from the last five complete years will be requested from CLIENT or Wood Dale Police Department for the improvement limits. A summary of the crash analysis

will be provided, including corrective measures and recommendations to address safety related conditions.

6. Obtain pavement cores, hand augured samples, soil borings, an analysis of soil conditions, and a detailed geotechnical report for the improvement. Two (2) bridge borings will be drilled to 65 ton bearing capacity which will be approximately 60-80 feet deep. One (1) hand augured samples five (5) feet deep will be taken to determine the soil classification and particle size and to design the slope protection and the scour potential. The soils report will be prepared in accordance with IDOT standards for soil boring placement, analysis, and report format. This work will be performed by COMPANY'S geotechnical sub-consultant Wang Engineering, Inc.

B. Survey Services

1. Right-of-Way (ROW) and Topographic Roadway Survey: COMPANY will recover existing ROW evidence for approximately 1,500 feet of Elizabeth Drive from the east line of Addison Road to just east of the Forest Preserve entrance. COMPANY will calculate the existing ROW as shown on provided plat of dedication/ROW maps and recorded subdivision plats to include on the base map. Topographic survey will include roadway cross-sections at 50-foot intervals from 600 feet west and 800 feet east of the bridge and extend 50 feet beyond the existing northern and southern ROW. Existing visible features and improvements including the bridge deck, low beam, wing walls, and headwalls will be surveyed. Existing utilities will be surveyed from visible flags or markings. Storm, sanitary sewer and water main structures will be surveyed, including rim elevation, invert pipe size, direction and elevation as observed at unlocked manholes. Trees lying within the survey limits described above and having a diameter of 4- inches or greater will be located (station and offset) but the species not identified as part of the survey scope. Survey will reference existing NGS control stations, Illinois State Plane Coordinate System East Zone NAD83 (2011). Elevations will be based upon NAVD88 or local benchmarks.
2. Stream Survey: COMPANY will survey Salt Creek's thalweg and water's edge at the bridge face, 50 feet, and 100 feet upstream and downstream from the bridge.
3. Site Topography Survey Base Map: COMPANY will generate a MicroStation V8i SS4 drawing and terrain model of the existing features collected along the roadway according to IDOT standards. One (1) foot contours will be generated with the elevations referenced to NAVD88 (U.S. Survey Feet). COMPANY will provide a MicroStation V8i SS4 drawing with existing features and improvements within the project limits to be shown. Topographic Survey base map will show tags to existing visible utilities and features.

C. Hydraulic Study

1. Update the existing FEQ model (obtained from DuPage County) of Salt Creek with the proposed bridge structure. Verify the existing bridge is modeled correctly in FEQ and modify the model as required. HSPF flow/rainfall inputs will not be modified. Add additional survey cross-sections as needed to FEQ model, additional cross-

sections can affect model stability so the proposed sections will be the same relative location as the existing sections. The bike path (north) and the golf cart (south) bridges will not be added to or removed from the FEQ modeling due to the stability of the model. The model will be based on survey information and preliminary roadway plans.

2. Complete a hydraulic report and associated exhibits summarizing the results of the model, which will include a preliminary plan and profile exhibit and a Waterway Information Table. Compensatory storage for fill in the floodway and floodplain will be calculated, and a location determined for providing the storage. Submit the hydraulic report to the CLIENT for approval, the model will also need to be submitted to IDNR-OWR for permit delegation. Update the modeling and report for any revisions required from the CLIENT.

D. Preliminary Design Studies

1. Geometrics: The following geometric features will be developed and evaluated to determine the preferred alternative:
 - Horizontal Alignment: Assume two (2) alignments will be generated to determine the impacts the improvement will have on the surrounding properties and to address the currently deficient geometric horizontal alignment.
 - Vertical Alignment: Assume four (4) alignments will be generated to determine the most cost-effective structure while minimizing impacts.
 - Roadway Geometry: The existing cross section includes one (1) lane in each direction with a mixed drainage consisting of ditches and a closed drainage system. The proposed alternative will maintain the existing roadway typical section and drainage characteristics. The bridge will be widened to include 3-foot wide shoulders adjacent to each through lane, a ten-foot wide multi-use trail along the north side of the pavement only, as well as the required widening needed to accommodate protective barrier walls/railings.
 - Bike Path Geometry: Evaluation of multi-use path requirements including alignment.
2. Develop Plan and Profile sheets for the preferred alternative: Assume three (3) sheets.
3. Develop typical sections: Assume three (3) each typical sections, existing and proposed.
4. Develop templated cross-sections for slope analysis, every 50 feet and at driveways throughout the project corridor. Cross-sections to include information regarding cross slopes, existing and proposed centerline elevations, and existing ROW.
5. Develop MOT/Detour Plan.
6. Perform barrier warrant analysis.
7. Evaluate and incorporate ADA guidelines for the multi-use trail and at the intersection of Addison Road and Elizabeth Drive and also at the intersection of the multi-use trail

and FPDDC entrance.

E. Abbreviated Drainage Technical Memorandum

1. Drainage related work will be completed to ensure conformance to the latest CLIENT and DuPage County Stormwater Ordinances. It is assumed that the improvements will consist of a combination of curb and gutter and ditches. Drainage will be handled by an enclosed storm sewer for a 10-year design frequency, ditches with a 50-year design frequency and verification of a 100-year overland flow route. An existing drainage plan and a proposed drainage plan will be completed, storm sewer and ditches will be designed, and stormwater detention requirements determined. The offsite drainage area to the storm sewer system will be determined to provide for future capacity when drainage improvements to upstream watersheds are made. An Abbreviated Drainage Technical Memorandum in accordance with requirements outlined in the IDOT/ACEC Drainage Seminar Manual will be completed and submitted. Compensatory storage is not anticipated but will be evaluated during preliminary engineering.

F. Environmental Studies

It is understood that the Elizabeth Drive bridge replacement will be using Federal funds. As such, the National Environmental Policy Act (NEPA) will apply to the environmental evaluation. It is anticipated the improvement will be documented and processed as a Federal Categorical Exclusion.

The following is a summary of the environmental resources typically reviewed and the anticipated involvement for this project:

1. Prepare and submit an Environmental Survey Request (ESR) to IDOT. This will initiate the environmental review process for both cultural and biological resources. The cultural review includes a review of architectural and archeological resources, which are typically associated with water resources such as rivers and streams. However, the database review does not indicate any resources in this area. No coordination beyond the ESR submittal and the documentation of responses generated are anticipated for this scope of services.

A photo log of the project corridor will be collected for project documentation purposes. The Elizabeth Drive bridge over Salt Creek is not on the Illinois Historic Bridge List. Based on the Illinois Department of Natural Resources (IDNR) Historic Preservation Division database, there are no documented architectural resources in the project corridor. It should be noted that the closest picnic pavilion within the Salt Creek Park Forest Preserve is documented as being constructed in the 1930's by the Civilian Conservation Corps. It is anticipated that the project will have no adverse effect on this area due to it being approximately 700 feet north of Elizabeth Drive and not visible from the roadway.

2. **Wetlands** – A wetland delineation will be conducted to evaluate the stream and wetland identified in the project area on the DuPage County wetland maps. COMPANY will complete an onsite, field wetland delineation of the project study area. The study area is assumed to be within Elizabeth Drive ROW in addition to the areas proposed for acquisition. This effort will include Waters of the US, riparian areas, wetlands, and consideration of the buffer areas.

The delineation will be completed using methods described in the US Army Corps of Engineers (USACE) Wetlands Delineation Manual and Midwest Supplement to the Manual. The latest available version of the Chicago Region Floristic Quality Assessment (FQA) Calculator will be used to generate FQA values. Boundary data for wetlands and any other aquatic resources identified in the field will be gathered using sub-meter accuracy GPS for use in the wetland delineation report and impact analysis. Additionally, wetland boundaries will be marked using pin flags or other appropriate boundary markers.

The wetland delineation report will be used to initiate the wetland coordination. This will include the US Army Corps of Engineers (USACOE) jurisdictional determination. This effort is used to determine if the wetlands are jurisdictional or isolated wetlands. Based on the project area, it is highly unlikely that any isolated wetlands will be identified given the project is a bridge over Salt Creek. However, coordination with DuPage County Stormwater Management and/or the CLIENT, a full waiver community, will be conducted to get jurisdictional concurrence and identify the permitting and plan development needs for Phase II.

3. **Air Quality** - It has been assumed that since no additional lanes will be proposed, IDOT will not require analysis. Air quality will be documented in the PDR using the standard language provide in the BLR manual.
4. **Traffic Noise** – The proposed project has the potential to meet the definition of a Type I project under 23 CFR Part 772 (Procedures for Abatement of Highway Traffic Noise and Construction Noise). There is a potential shift in the horizontal alignment to the north. A preliminary estimate indicates that the existing north edge of pavement is approximately 50 feet from the outdoor play area of a daycare facility on the west side of Salt Creek. A straightened alignment may bring the north edge of pavement to within 25 feet or less. This halving of the distance would meet the criteria of a “substantial” shift in horizontal alignment. The preferred alignment can be reviewed to see if the criteria is met, however, for purposes of this scope of services, a traffic noise analysis has been included.
5. **Natural Resources** - Given that the project is bordered by the Forest Preserve District of DuPage County on both sides, it is anticipated that a tree inventory will be required for trees 4-inches in diameter breast height. The corridor will be reviewed for any ‘high quality’ trees that will require consideration in design, require protective action during construction, or will be adversely impacted. This will occur as an additional effort, but likely at the time of the wetland delineation. This will be developed into a tree inventory

report.

6. ***Threatened and Endangered Species*** – The project review for threatened and endangered species will be initiated with the submittal of the ESR to the IDOT BLRS for the state-listed species. Coordination for the federal-listed species will be coordinated with US Fish and Wildlife Services (USFWS) using the Information for Planning and Consultation (IPaC) review process. It is anticipated that no field surveys, conservation plans or Incidental Take Permits will be required at this time.

It is already known that the project area is within a Low Potential Zone for the Rusty Patched Bumble Bee (RPBB). Section 7 consultation and Incidental Take Permits are not needed in these areas. Additionally, the Northern Long-eared Bat (NLEB) is known to occupy roosts in forest and wooded areas. As part of the wetland delineation and tree survey efforts, habitat observations will be made to determine if suitable habitat exists for these species.

7. ***Special Waste*** – As there are no state routes within the project limits, the CLIENT will be responsible for preparing a Preliminary Environmental Site Assessment (PESA). COMPANY will prepare the PESA to document the special waste review of the project limits and surrounding area. Based on the review of the area, it does not appear that any special waste sites are within the project area, but a database review will be ordered to document the surrounding area. A field investigation will be conducted for photo documentation and observations. It is not anticipated that a Preliminary Site Investigation (PSI) will be required or any subsurface investigation will be conducted based the PESA.

Coordination required for soil disposal at a Clean Construction and Demolition Debris (CCDD) facility will be evaluated in Phase II. This will typically require soil sampling and analysis at a minimum for soil pH. Additional parameters may be required based on the CCDD facility requirements.

8. ***Special Lands*** – The Forest Preserve District of DuPage County (FPDDC) owns and operates the Salt Creek Park Forest Preserve on the north side of Elizabeth Drive and the Preserve at Oak Meadows golf course on the south side of Elizabeth Drive. Based on the preliminary consideration of alternatives, land would be required from the Salt Creek Park Forest Preserve, likely in the form of a permanent easement (PE). This will require coordination with the FPDDC. The PE will not likely negatively affect the recreational land use, but rather only impact the buffer zone of the FPDDC property. It is anticipated that the level of coordination required would not exceed a Section 4(f) de minimis level document at most. Design alternatives are being considered that would include a multi-use path on the bridge which would benefit the FPDDC. COMPANY will coordinate with the FPDDC to become both a Cooperating Agency and a Participating Agency. It is anticipated that the FPDDC golf course will not be affected by the proposed project due to the preliminary approach to shift the alignment north.
9. ***Permitting and Resource Agency Coordination*** - Based on the preliminary review

of the project, it is anticipated that the only two resources requiring coordination with a resource agency include threatened and endangered species and Waters of the US/wetlands. The COMPANY will coordinate through or in conjunction with the CLIENT to assure that the proper communication is maintained. It is assumed that the permitting efforts will be conducted in Phase II when the proposed improvement design will be ready for review. The elements related to permitting and agency coordination in Phase I will include the following:

DuPage County Stormwater Management/USACOE – For purposes of this scope of services, it is anticipated that all required permits and associated plans (i.e., Maintenance and Monitoring Plan) will be prepared and applied for in Phase II. Due to the presence of Salt Creek and mapped wetland areas, the jurisdictional determination process will be initiated with the USACOE Chicago District and County by the Company. This would include one (1) field meeting with the regulatory agencies if requested.

Kane-DuPage Soil and Water Conservation District (KDSWCD) – The KDSWCD will have an opportunity to review the Soil and Erosion Control Plans as part of the Phase II permitting process. The KDSWCD will be invited to review the Phase I plans as applicable during Phase I, but the anticipated review and approval process is anticipated to occur during Phase II as part of the Section 404 Joint Application process.

IEPA – NPDES Permit – A Notice of Intent (NOI) and a Stormwater Pollution Prevention Plan (SWPPP) may be required to obtain an NPDES permit as the impacted area will likely exceed one (1) acre. This will be conducted in Phase II and is not part of this scope of services.

G. Abbreviated Bridge Condition Report (ABCR)

1. Perform the field work needed for and prepare the Abbreviated Bridge Condition Report (ABCR). Since complete replacement is highly likely and the low sufficiency rating and fracture critical design justifies replacement, we will utilize previously prepared inspection reports and existing bridge drawings where appropriate.
2. Develop and evaluate bridge replacement alternatives. The alternatives will include consideration of construction time, impacts, and cost. The IDOT's BCR Procedures & Practices will be followed.
3. Preliminary EOPC will be developed for up to two (2) alternates.
4. After review with the CLIENT, submit ABCR to IDOT for review and acceptance before completing the PDR. Include completed BLR 10220 as required for BCR submittals to IDOT BLRS.

H. Preliminary Bridge Design and Hydraulic Report

1. Prepare and submit a Preliminary Bridge Design and Hydraulic Report (PBDHR), BLR 10210 to the IDOT BLRS. A Type, Size, and Location (TS&L) drawing will be developed to go with the PBDHR submittal.

I. Public Involvement

1. For this project, public involvement is anticipated to consist of one (1) public informational meeting (PIM). This will occur once a preferred alternative has been selected and approved by IDOT and the FHWA.
2. For the PIM, the CLIENT will prepare the public notifications to residents whose property is adjacent to the project corridor or whoever else they desire to inform. If they prefer that COMPANY handles this task, then the COMPANY will do so. CLIENT will mail notifications to the applicable residents. CLIENT is anticipated to advertise on the CLIENT website and announcements may be made at CLIENT Council Meetings shown on CC TV. Advertising in one or more newspapers is optional for the CLIENT. It has been assumed that the PIM will be held at the Wood Dale Junior High School.
3. COMPANY will maintain a record of meeting attendees, account for comments received, address written comments, complete a PIM summary.
4. PIM Specifications: COMPANY will facilitate one (1) open house PIM according to the IDOT CECI format.
5. Provide two (2) set of exhibits (boards with aerial and plans, renderings, typical sections, project schedule, and detour routes).
6. Staff Public Meeting with three (3) COMPANY representatives for four (5) hours each.
7. COMPANY will respond to all individual public comments received at the PIM. For this contract, it has been assumed that there will be approximately twenty (20) comments received at the PIM. If substantial additional comments are received, then those responses would be considered additional work.

J. Project Development Report (PDR)

All project data, descriptions/discussions regarding various aspects of the project, engineering drawings, exhibits, maps, plans, ROW coordination, inspections, documentation, and signoffs will be captured within the PDR. The PDR is a standard report that captures all the necessary information to present to and be reviewed and approved by the Illinois Department of Transportation (IDOT) and the FHWA. Upon IDOT and the FHWA's acceptance of the PDR, they will authorize Design Approval (DA). Securing DA represents the completion of the Phase I engineering process, and the ability to move on to Phase II engineering, Design and ROW acquisition.

1. Prepare draft PDR (BLR 22110) and report exhibits.
2. Preliminary Opinions of Probable Costs will be developed.
3. Provide two (2) draft reports for CLIENT review.
4. Address preliminary report comments from CLIENT and prepare final draft PDR

for transmittal to the IDOT BLRS.

5. Provide IDOT BLR two (2) draft reports for review and comment.
6. Address IDOT's preliminary report comments and prepare final PDR.
7. Provide three (3) final PDRs, two (2) to IDOT BLR and one (1) to CLIENT.

K. Plat and Legal Descriptions

COMPANY will prepare a Plat of Highways and Legal Descriptions for the parcels identified in the approved Project Development Report. We estimate 3 Parcels will be affected.

L. Meetings and Coordination

This project will require meetings with CLIENT staff, IDOT, FHWA, DuDOT, DCFPD, and utility companies to obtain support and approval of the Phase I engineering. The following meetings shall be included:

1. Kick-off meeting at CLIENT (1 meeting)
2. Kick-off meeting at IDOT (1 meeting)
3. It is anticipated the FPDDC will be a major stakeholder in the project. Extensive coordination is expected with this agency since they are desirous to relocate their multi-use trail head from its current location (north end of their parking facility) onto Elizabeth Drive. Doing so, will allow them to remove a bridge currently crossing Salt Creek from their bridge inventory, while also requiring the new Elizabeth Drive bridge to be widened to accommodate the multi-use trail. Roadway realignment, along with the addition of the multi-use trail will require a need for ROW from the FPDDC, a publicly owned land and 4(f) resource. All the involvement will necessitate the need to coordinate with FPDDC to become a Cooperating, as well as a Participating Agency. There will be numerous meetings and coordination effort required with this entity to work through the details of ROW acquisition as well as cost participation. Three (3) meetings are anticipated with nearly consistent email and phone coordination required as well.
4. FHWA/IDOT Coordination Meeting (3 meetings)
5. Meeting Specifications:
 - COMPANY will have two (2) representatives at all meetings.
 - A maximum of four (4) hours per meeting have been allotted, including travel time; and,
 - Meeting minutes, if required, will be provided.

M. Project Management and Administration

COMPANY will complete inhouse management of manpower and coordinate the preliminary design and associated tasks. The work includes the time for project-related progress reports, invoicing and filing.

N. Quality Assurance/Quality Control

COMPANY will conduct independent QA/QC reviews to ensure that the preliminary design and Project Development Report meets the approval of the CLIENT and the policy guidelines of the IDOT BLRS.

AVERAGE HOURLY PROJECT RATES

FIRM HR Green, Inc.
PSB N/A
PRIME/SUPPLEMENT Prime

DATE 07/02/20

SHEET 1 OF 4

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			Data Collection and Review			Survey Services			Hydraulic Study			Preliminary Design Studies			Abbr. Drainage Tech Mem		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Senior Project Manager	70.00	256	14.14%	9.90									4	1.71%	1.20				
Senior Engineer	70.00	200	11.04%	7.73	2	4.55%	3.18				40	19.23%	13.46				36	21.95%	15.37
Lead Structural Engineer	59.88	12	0.66%	0.40															
Sr. Proj. Mgr./People Mgr.	70.00	12	0.66%	0.46															
Lead Env. Planner	52.29	84	4.64%	2.43															
Lead Engineer	57.60	118	6.52%	3.75	1	2.27%	1.31				88	42.31%	24.37						
Staff Engineer II	33.21	318	17.56%	5.83	18	40.91%	13.59				56	26.92%	8.94	52	22.22%	7.38	68	41.46%	13.77
Senior Design Technician	39.68	253	13.97%	5.54	8	18.18%	7.21				24	11.54%	4.58	74	31.62%	12.55	60	36.59%	14.52
Project Engineer II	45.71	224	12.37%	5.65	13	29.55%	13.50							104	44.44%	20.31			
Group Leader	64.90	12	0.66%	0.43				8	4.76%	3.09									
Proj. Land Surveyor I	46.09	130	7.18%	3.31				90	53.57%	24.69									
Staff Land Surveyor II	39.08	70	3.87%	1.51				70	41.67%	16.28									
Practice Advisor	42.27	82	4.53%	1.91															
Design Technician I	24.73	26	1.44%	0.36															
Admin. Assisstant I	21.27	14	0.77%	0.16	2	4.55%	0.97												
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
TOTALS		1811	100%	\$49.38	44	100.00%	\$39.76	168	100%	\$44.07	208	100%	\$51.35	234	100%	\$41.44	164	100%	\$43.65

AVERAGE HOURLY PROJECT RATES

FIRM HR Green, Inc.
 PSB N/A
 PRIME/SUPPLEMENT Prime

DATE 07/02/20

SHEET 2 OF 4

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Environmental Studies			Abbreviated BCR			Preliminary Bridge Design Hy			Public Involvement			Project Development Report			Plat and Legal Descriptions		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Senior Project Manager	70.00	155	43.18%	30.22							9	8.57%	6.00	52	41.94%	29.35			
Senior Engineer	70.00				10	8.33%	5.83	10	13.16%	9.21	5	4.76%	3.33						
Lead Structural Engineer	59.88																		
Sr. Proj. Mgr./People Mgr.	70.00																		
Lead Env. Planner	52.29	84	23.40%	12.24															
Lead Engineer	57.60				29	24.17%	13.92												
Staff Engineer II	33.21				68	56.67%	18.82	32	42.11%	13.98				24	19.35%	6.43			
Senior Design Technician	39.68				13	10.83%	4.30	34	44.74%	17.75	40	38.10%	15.12						
Project Engineer II	45.71										51	48.57%	22.20	48	38.71%	17.69			
Group Leader	64.90																4	9.09%	5.90
Proj. Land Surveyor I	46.09																40	90.91%	41.90
Staff Land Surveyor II	39.08																		
Practice Advisor	42.27	82	22.84%	9.65															
Design Technician I	24.73	26	7.24%	1.79															
Admin. Assisstant I	21.27	12	3.34%	0.71															
TOTALS		359	100%	\$54.61	120	100%	\$42.87	76	100%	\$40.95	105	100%	\$46.65	124	100%	\$53.48	44	100%	\$47.80

AVERAGE HOURLY PROJECT RATES

FIRM HR Green, Inc.
 PSB N/A
 PRIME/SUPPLEMENT Prime

DATE 07/02/20

SHEET 3 OF 4

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Meetings and Coordination			Proj. Mangement and Adminis			QA/QC											
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Senior Project Manager	70.00	36	47.37%	33.16															
Senior Engineer	70.00	32	42.11%	29.47	65	100.00%	70.00												
Lead Structural Engineer	59.88							12	50.00%	29.94									
Sr. Proj. Mgr./People Mgr.	70.00							12	50.00%	35.00									
Lead Env. Planner	52.29																		
Lead Engineer	57.60																		
Staff Engineer II	33.21																		
Senior Design Technician	39.68																		
Project Engineer II	45.71	8	10.53%	4.81															
Group Leader	64.90																		
Proj. Land Surveyor I	46.09																		
Staff Land Surveyor II	39.08																		
Practice Advisor	42.27																		
Design Technician I	24.73																		
Admin. Assisstant I	21.27																		
TOTALS		76	100%	\$67.44	65	100%	\$70.00	24	100%	\$64.94	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00

DIRECT COSTS
ELIZABETH DRIVE

Data Collection and Review

In-House Direct Costs

Field Review

1 trip(s) x 85 miles x \$0.575 per mile = \$48.88

Sub-Total \$48.88

Services by Others

Wang Engineering

Sub-Total \$25,000.00

Survey Services

In-House Direct Costs

Mileage

7 trip(s) x 72 miles x \$0.575 per mile = \$289.80

Sub-Total \$289.80

Services by Others

Flagger (2 Days at \$1000/Day -Includes Application Fees) & Insurance

Sub-Total \$0.00

Environmental Studies

In-House Direct Costs

Noise Meter Rental

\$300.00

Radius Report

\$500.00

Sub-Total \$800.00

Abbreviated Bridge Condition Report

In-House Direct Costs

Field Checks

1 trip(s) x 85 miles x \$0.575 per mile = \$48.88

Sub-Total \$48.88

Public involvement

In-House Direct Costs

Exhibits - Handouts 170 per meeting x 1 meeting

4 sheets x 100 copy(ies) x \$0.15 per sheet = \$60.00

Supplies - Foam Board for Exhibits

\$100.00

Meetings

1 trip(s) x 75 miles x \$0.575 per mile = \$43.13

Sub-Total \$203.13

Meetings:

In-House Direct Costs

Meeting with CLIENT (Kick-off)

1 trip(s) x 72 miles x \$0.575 per mile = \$41.40

Meeting with IDOT (Kick-off, FHWA)

4 trip(s) x 66 miles x \$0.575 per mile = \$151.80

Meeting with FPDDC

3 trip(s) x 40 miles x \$0.575 per mile = \$69.00

Sub-Total \$262.20

Total In-House Direct Costs

\$852.88

Total Services by Others

\$25,000.00

Exhibit A (Manhour Estimate)

City of Wood Dale
Elizabeth Drive over Salt Creek
SN 022-7350

Task	Krall	Underwager	Brehm	Hamilton	LaDieu	McCaslin	Bicking	Stark	Schwarz	Shaban	Hood/Stanzck	Zuzzio	Hartman	Liu/Pelizzari	Dobrosavljevic	Bauer	Lang	Lovell	Miller	Martinez/Napo	Total	Direct Costs	Direct Labor
A. Data Collection and Review	0	2	0	0	0	0	0	0	1	1	8	13	0	17	0	0	0	0	0	2			
Site Visit - Photo Log												6									6		\$ 274.26
Traffic Projections from CMAP																					0		\$ 0
Request Projections												2									2		\$ 91.42
Develop Traffic and Exhibits												1		2							3		\$ 112.13
Utility Coordination																							
Submit JULIE														1							1		\$ 33.21
Send Letters to Utility Owners														2						2	4		\$ 108.96
Determine Potential Impacts														4							4		\$ 132.84
Coordinate w/ Utility Owners														2							4		\$ 157.84
Add Utilities to CAD											8	2									8		\$ 317.44
Accident Data Analysis and Recommendations																							
Request Crash Reports												1									1		\$ 45.71
Crash Data Analysis / Diagrams / Recommendations												1		6							7		\$ 244.97
Geotechnical Report Coord.		(Wang Engineering)	2						1	1											4		\$ 230.81
B. Survey Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	90	70	0	0	0			
Right-of-Way / Boundary Survey															4	10	10				24		\$ 1,111.30
Topographic Survey															2	40	60				102		\$ 4,318.20
Topographic Survey Base Map															2	40					42		\$ 1,973.40
C. Hydraulic Study	0	0	0	0	0	0	40	88	0	0	24	0	0	56	0	0	0	0	0	0			
FEQ Modeling							12	68													80		\$ 4,756.80
Exhibits/Narrative							8	12			12			20							52		\$ 2,391.56
Compensatory Storage							8	12			12			16							36		\$ 1,567.52
Permitting							12	8						20							40		\$ 1,965.00
D. Preliminary Design Studies	4	0	0	0	0	0	0	0	0	0	74	104	0	52	0	0	0	0	0	0			
Geometrics																							
Develop and Analyze Horizontal Alignments - Assume 2 Alignments	2											8									10		\$ 505.68
Develop and Analyze Vertical Alignment - Assume 4 profiles due to hyd.	2											8									10		\$ 505.68
Develop Roadway Geometry - 2 Alternatives												40									40		\$ 1,828.40
Develop Bike Path Geometry												16									16		\$ 731.36
Plan and Profile 20 scale - 3 sheets - 24 hr per sheet											24	24		24							72		\$ 2,846.40
Develop Typical Sections - Assume 3 Typical												2		6							8		\$ 290.68
Cross Sections - length 1500' - create model/templates										50											50		\$ 1,984.00
Develop Detour Plan - Use IL 19												2		8							10		\$ 357.10
Barrier Warrant Analysis												4		8							12		\$ 448.52
ADA Ramp Design /Plans - 4 ramps														6							6		\$ 199.26
Note:IDS, autoturns, and signal warrants not included in scope.																							
E. Abbreviated Drainage Technical Memorandum	0	0	0	0	0	0	36	0	0	0	60	0	0	68	0	0	0	0	0	0			
Storm sewer and ditch design							8							24							32		\$ 1,357.04
Existing drainage plan											20			12							40		\$ 1,752.12
Proposed drainage plan							12				20			20							52		\$ 2,297.80
Narrative and exhibits							8				20			12							40		\$ 1,752.12
F. Environmental Studies	34	0	0	0	121	84	0	0	0	0	0	0	0	0	0	0	0	0	82	26	12		
Traffic Noise	2				32	16														80	2	2	\$ 5,853.60
Natural Resource - Tree Survey					4	6														2	2		\$ 1,166.10
Threatened and Endangered Species - Habitat Review					1	6															7		\$ 383.74
Wetlands - Delineation, Report, WIEs	2				12	48												2			64		\$ 3,674.46
Special Waste Assessment (PESA)					32															6	8		\$ 2,558.54
Special Lands - Section 4(f)	24				24															8	2		\$ 3,600.38
Permitting and Resource Agency Coordination																					0		\$ -
- ESR Submittal - Submittal and Photo Log	2				16															8			\$ 1,457.84
- IPaC						6															6		\$ 313.74
- Jurisdictional Determination (DuPage Cty. USACOE)						8															8		\$ 418.32
- Kane DuPage Soil and Water Conservation District (Coord Only)	4																				4		\$ 280.00
G. Abbreviated Bridge Condition Report	0	10	0	0	0	0	0	0	29	68	13	0	0	0	0	0	0	0	0	0			
Review Data & Inspection Preparation									1	2											3		\$ 124.02
Bridge Inspection									4	4											8		\$ 363.24
Analysis & Evaluation																							
Structure Replacement (2 Alternates)									20	32	8										64		\$ 2,812.16
Report Writing		2							4	12											18		\$ 768.92
Prepare Attachments																							
Location Map										8	1										1		\$ 39.68
Cost Estimate(s)		1																			9		\$ 335.68
Proposed Structure Typical		1								2	4										7		\$ 295.14
Structure Photos										2											2		\$ 66.42
Proposed Plan & Profile										2											3		\$ 136.42
Assemble & Submit Report										2											2		\$ 66.42
Disposition & Revisions		1								2											3		\$ 136.42
H. Preliminary Bridge Design and Hydraulic Report (PBDHR)	0	2	0	0	0	0	8	0	0	32	34	0	0	0	0	0	0	0	0	0			
Prepare BLR 10210		2								4											6		\$ 272.84
Type, Size and Location Drawing							4			24	32										60		\$ 2,346.80
Assemble and Submit Report							2			2											4		\$ 206.42
Disposition & Revisions							2			2	2										6		\$ 285.78
I. Public Involvement	9	5	0	0	0	0	0	0	0	0	40	39	12	0	0	0	0	0	0	0			
Public Information Meeting																							

K. Plat and Legal Descriptions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	40	0	0	0	0	44		
Plat and Legal Descriptions															4	40						\$ 2,103.20	
L. Meetings and Coordination	36	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Kick-off Meeting w/ City (2 persons @ 4 hours each)	4	4													8	0	0	0	0	0	0	8	\$ 560.00
Kick-off Meeting w/ IDOT (2 persons @ 4 hours each)	4	4																				8	\$ 560.00
Progress Mtg w/ City (2 persons @ 4 hours each)	4													4								8	
FPDDC (3 Mtg.'s, 2 persons @ 4 hrs. each)	12	12																				24	\$ 1,680.00
FHWA / IDOT Coordination Meetings (3 mtg.'s, 2 persons @ 4 hours each)	12	12																				24	\$ 1,680.00
IDOT Detour Committee Meeting - Exhibits, attend, minutes														4								4	\$ 182.84
M. Project Management and Administration	0	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Project set-up		2																				2	\$ 140.00
Schedule		9																				9	\$ 630.00
Invoicing		18																				18	\$ 1,260.00
Budget Reviews		18																				18	\$ 1,260.00
Progress Reports		18																				18	\$ 1,260.00
N. Quality Assurance / Quality Control	0	0	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
QA / QC			12	12																		24	\$ 1,558.56
Total	83	116	12	12	173	84	84	88	30	101	253	212	12	217	12	130	70	82	26	14	1811	\$ -	\$ 88,956.74



July 6, 2020

Mr. Andy Underwager, PE, SE
Senior Structural Engineer
HR GREEN, INC.
2363 Sequoia Drive, Suite 101
Aurora, IL 60506

Re: Proposal for Geotechnical Engineering Services
Elizabeth Drive over Salt Creek |
SN 022-7350
Wood Dale, Illinois
Wang No. P200702

Dear Mr. Underwager:

Wang Engineering, Inc. (Wang) is pleased to present this proposal to provide geotechnical drilling, laboratory testing, engineering analyses for the proposed replacement of the bridge carrying Elizabeth Drive over Salt Creek (SN 022-7350) in Wood Dale, Illinois.

The following describes our proposed scope of work, cost estimate, and assumptions made in developing the cost estimate.

SCOPE OF WORK

Based on the information provided by HR Green, Wang scope of work will include the geotechnical investigation and the preparation of the Structure Geotechnical Report that will accompany the TSL plan prepared by HR Green for the replacement of the bridge.

Wang proposes to drill and sample two structure borings, one scour boring, and two roadway borings. Moreover, Wang will obtain two bridge deck cores for asbestos determination.

The two structure borings will be behind the bridge's abutments to average depth of 75 feet below the ground surface, and one scour boring to 15 feet below the streambed elevation. If bedrock will be

encountered before the 75 feet depth, a 15-foot long rock core will be obtained. The roadway borings will be drilled to 10 feet below the ground surface elevations.

Geotechnical Drilling and Sampling: Wang will provide equipment, labor, and associated materials to drill and core two structure borings, one scour borings, and two roadway borings for an estimated drilling footage of 185 feet and two partial bridge deck cores. We estimate the investigation program will be carried out behind lane closures with traffic controlled by flaggers. After visiting the site and depending on the surface water level in the creek at that time, Wang will propose an approach for taking the scour boring.

Field Supervision: Prior to drilling, Wang will layout the borings in the field and clear the utilities through the JULIE one-call system. A field engineer will monitor drilling activities, maintain daily field notes, prepare field boring logs, as well as receive, classify, and prepare soils and core samples for laboratory analysis. Soil samples will be classified in accordance with the IDH Soil Classification System and the bedrock core will be described, measured for RQD and recovery, and photographed. The boring locations will be surveyed with a mapping-grade GPS. Boring station, offset, and elevation will be provided by HR Green.

Geotechnical Laboratory Testing: The soil testing program will include natural moisture content, particle size analyses, Atterberg limits and uniaxial compressive strength tests on selected core samples.

Engineering Analysis and Recommendations: Wang will prepare a Structure Geotechnical Report (SGR) in accordance with the IDOT Geotechnical Manual and all applicable memoranda. The geotechnical report will include a detailed description of soil and groundwater conditions, field and laboratory testing procedures and results, and geotechnical engineering analyses, as well as recommendations to support the design and construction of the new abutments and piers widenings. The report will also include a site location map, a boring location plan, a soil profile, and boring logs including the results of the laboratory testing.

SCHEDULING

Wang will start the project expediently upon prior authorization to proceed. We anticipate that, after utility clearance, three working days will be necessary to complete the drilling phase of the project. The laboratory testing program will be completed within one weeks after the field activity completion. Draft report will be submitted to HR Green two weeks after receiving the preliminary TSL plan.

ESTIMATED COST AND ASSUMPTIONS

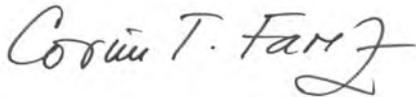
Wang proposes to provide the above tasks on time and expense basis according to the attached cost estimate. Wang would not exceed the estimated upper limit without the Client approval. In preparing the cost estimate we have assumed the following conditions:

- Work will be completed during normal working hours, and
- Lane closures will be necessary and are included in the cost estimate.

Wang Engineering, Inc. appreciates the opportunity to present this proposal. If you have questions, or if you require additional information, please contact us at (630) 953-9928.

Sincerely,

WANG ENGINEERING, INC.

A handwritten signature in black ink that reads 'Corina T. Farez'.

Corina T. Farez, P.E., P.G.
Vice President

PAYROLL ESCALATION TABLE FIXED RAISES

FIRM NAME Wang Engineering, Inc.
PRIME/SUPPLEMENT Prime

DATE 07/06/20
PTB NO. Elizabeth Drive over Salt Creek

CONTRACT TERM 12 MONTHS
START DATE 10/1/2020
RAISE DATE 1/1/2021

OVERHEAD RATE 132.81%
COMPLEXITY FACTOR 0
% OF RAISE 3.00%

ESCALATION PER YEAR

10/1/2020 - 1/1/2021

1/2/2021 - 10/1/2021

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--

3
12

9
12

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= 25.00%
= 1.0225

77.25%

2.25%

The total escalation for this project would be:

PAYROLL RATES

FIRM NAME
PRIME/SUPPLEMENT
PSB NO.

Wang Engineering, Inc.
Prime
Elizabeth Drive over Salt Creek

DATE 07/06/20

ESCALATION FACTOR 2.25%

CLASSIFICATION	CURRENT RATE	PROPOSED RATE	CAPPED CALCULATED RATE
Principal in Charge	\$89.36	\$91.37	\$70.00
Project Manager	\$65.42	\$66.89	\$66.89
Senior Engineer	\$65.42	\$66.89	\$66.89
Project Engineer/Project Geologist	\$43.84	\$44.83	\$44.83
Assistant Engineer/Assistant Geologist	\$28.75	\$29.40	\$29.40
Laboratory Technician	\$30.71	\$31.40	\$31.40
Administrative Assistant	\$37.43	\$38.27	\$38.27
QC/QA Reviewer	\$84.34	\$86.24	\$70.00

Name: Elizabeth Drive over Salt Creek | SN 022-7350
RFP/PTB/PSB/Item: NA
Contract/Job: NA

Date: 07/06/2020
Wang No.: P200702

Task Description	Units	Unit Price	Extended Cost
DRILLING, SAMPLING & INSITU TESTING			
Drilling Coordination, Utilities Clearance, Site Access, Permitting	2.0 Hours	\$112.00 /Hour	\$224.00
Mobilization (ATV mounted)	0	\$1,440.00 /Each	\$0.00
Stand-by Hourly Rate	0.0 Hours	\$400.00 /Hour	\$0.00
<u><i>Drilling & Sampling - Hourly (SPT, Penetrometer, Rimac, Visual Classification Included)</i></u>			
Two-man crew - normal working hrs	21.0 Hours	\$400.00 /Hour	\$8,400.00
Two-man crew - overtime (2 hrs per day)	6.0 Hours	\$450.00 /Hour	\$2,700.00
<u><i>Hand Augering, Pavement/ Deck Coring & Testing</i></u>			
Two-man crew - normal working hrs	3.0 Hours	\$400.00 /Hour	\$1,200.00
Two-man crew - overtime (2 hrs per day)	0.0 Hours	\$450.00 /Hour	\$0.00
Asbestos content testing on deck cores	2 Tests	\$185.00 /Test	\$370.00
<u><i>Surveying of Boring Locations (Two-man crew)</i></u>			
	0.0 Hours	\$230.00 /Hour	\$0.00
<u><i>Other Insitu Tests</i></u>			
Pressuremeter testing	0 Days	\$2,800.00 /Day	\$0.00
Vane shear	0 Tests	\$255.00 /Test	\$0.00
Dilatometer testing	At Cost		\$0.00
Cone penetration testing (CPT/CPTu)	At Cost		\$0.00
Photoionization detector (PID)	0 Days	\$105.00 /Day	\$0.00
Double ring infiltrometer test (ASTM D3385)	0 Tests	\$1,400.00 /Test	\$0.00
Single ring infiltrometer test (Chicago Stormwater Ordinance)	0 Tests	\$700.00 /Test	\$0.00
<u><i>Boring Location Accessibility, Railroad Fees, State/County/Municipal Fees, Barge Drilling</i></u>			
Private utility determination	At Cost		\$0.00
Tree clearance	At Cost		\$0.00
Guardrail removal and replacement	At Cost		\$0.00
Dozer / equipment rental	At Cost		\$0.00
Railroad permitting	At Cost		\$0.00
Railroad protective insurance	At Cost		\$0.00
Railroad flagman	At Cost		\$0.00
Pavement opening permit	At Cost		\$0.00
State/municipal insurance and bonding	At Cost		\$0.00
Barge drilling on a navigable waterway	At Cost		\$0.00
			\$12,894.00

Name: Elizabeth Drive over Salt Creek | SN 022-7350
RFP/PTB/PSB/Item: NA
Contract/Job: NA

Date: 07/06/2020
Wang No.: P200702

Task Description			Units	Unit Price	Extended Cost
LABORATORY TESTING					
T265	D2216	Water Content	54 Tests	\$10.50 /Test	\$567.00
--	D7263	Unit Weight (Density)	0 Tests	\$38.00 /Test	\$0.00
T100	D854	Specific Gravity	0 Tests	\$69.00 /Test	\$0.00
--	D4972	pH of Soil	0 Tests	\$62.00 /Test	\$0.00
T267	D2974	Organic Content by LOI	0 Tests	\$63.00 /Test	\$0.00
T194	--	Organic Content by Wet Combustion	0 Tests	\$140.00 /Test	\$0.00
<u>Particle Size Distribution</u>					
T88	D422	Sieve Analysis	0 Tests	\$80.00 /Test	\$0.00
T88	D422	Combined Sieve and Hydrometer	3 Tests	\$129.00 /Test	\$387.00
--	D1140	Percent Finer than No. 200 Sieve	0 Tests	\$53.00 /Test	\$0.00
<u>Atterberg Limits</u>					
T89, T90	D4318	Liquid and Plastic Limits	3 Tests	\$80.00 /Test	\$240.00
T92	D427	Shrinkage Factors	0 Tests	\$95.00 /Test	\$0.00
<u>Classification of Soils</u>					
--	D2488	Visual Manual	0 Samples	\$20.00 /Sample	\$0.00
--	D2487	Unified Soil Classification System	0 Samples	\$205.00 /Sample	\$0.00
M145	--	AASHTO Classification	0 Samples	\$205.00 /Sample	\$0.00
--	--	USDA Classification	0 Samples	\$129.00 /Sample	\$0.00
<u>Soil Settlement, Swelling, and Collapse Potential</u>					
T216	D2435	One-Dimensional Consolidation	0 Tests	\$585.00 /Test	\$0.00
--	D4546	One-Dimensional Swell	0 Tests	\$567.00 /Test	\$0.00
--	D5333	Collapse Potential	0 Tests	\$315.00 /Test	\$0.00
<u>Shear Strength of Soil</u>					
		Rimac Unconfined Compressive Strength	0 Tests	\$16.00 /Test	\$0.00
T208	D2166	Unconfined Compressive Strength	0 Tests	\$85.00 /Test	\$0.00
T236	D3080	Direct Shear of Soils (3 points)	0 Tests	\$750.00 /Test	\$0.00
T296	D2850	UU Triaxial Compression (3 points)	0 Tests	\$352.00 /Test	\$0.00
T297	D4767	CU Triaxial Compression (3 points)	0 Tests	\$1,160.00 /Test	\$0.00
T297	D4767	CD Triaxial Compression (3 points)	0 Tests	\$1,160.00 /Test	\$0.00
	D7012	Peak Uniaxial Compressive Strength of Rock Core	2 Tests	\$172.00 /Test	\$344.00
<u>Laboratory Compaction Tests</u>					
T99	D698	Moisture-Density of Soils (Standard Effort)	0 Tests	\$210.00 /Test	\$0.00
T180	D1557	Moisture-Density of Soils (Modified Effort)	0 Tests	\$220.00 /Test	\$0.00
T193	D1883	California/Illinois Bearing Ratio (3 points)	0 Tests	\$975.00 /Test	\$0.00
<u>Coefficient of Permeability</u>					
T215	D2434	Hydraulic Conductivity (Constant Head)	0 Tests	\$475.00 /Test	\$0.00
--	D5084	Hydraulic Conductivity (Flexible Wall)	0 Tests	\$500.00 /Test	\$0.00
<u>Additional Sample Preparation Procedures</u>					
		Removal of Organic Matter	0 Samples	\$92.00 /Sample	\$0.00
		Extrusion & Preservation of Undisturbed Samples	0 Samples	\$30.00 /Sample	\$0.00
		Logging & Classification of Undisturbed Samples	0 Samples	\$68.00 /Sample	\$0.00
		Remolding and Trimming of Samples	0 Samples	\$65.00 /Sample	\$0.00
<u>Planting Soil Mix Testing</u>					
<i>Chemical Analyses & Mitigation Recommendations (300 g sample required)</i>					
		pH, CEC, Soluble Salts, OM, P, K, Other Nutrients	0 Tests	\$120.00 /Test	\$0.00
		Residual Chemicals, Herbicides Full Screen	0 Tests	\$680.00 /Test	\$0.00
<i>Mechanical Analyses & Mitigation Recommendations (1,000 g sample required)</i>					
T88	D422	Combined Sieve and Hydrometer	0 Tests	\$129.00 /Test	\$0.00
<u>Analytical Laboratory Services - for CCDD</u>					
		Volatile Organic Components (VOC)	0 No	\$54.00 /Each	\$0.00
		Semi-VOC including PNA's	0 No	\$107.00 /Each	\$0.00
		PCB	0 No	\$60.00 /Each	\$0.00
		Total Metals	0 No	\$48.00 /Each	\$0.00
		PH Determination	0 No	\$8.00 /Each	\$0.00
<u>Corrosion Testing</u>					
		(Resistivity, Chlorides, pH, Redox, and Sulfates)	0 No	\$350.00 /Each	\$0.00
					\$1,538.00

Name: Elizabeth Drive over Salt Creek | SN 022-7350
RFP/PTB/PSB/Item: NA
Contract/Job: NA

Date: 07/06/2020
Wang No.: P200702

Task Description	Units	Unit Price	Extended Cost
TRAFFIC CONTROL			
<u><i>Expressway (1/2 mile)</i></u>			
Shoulder Closure	0.0 No.	\$900.00 /Each	\$0.00
One-lane Closure	0.0 No.	\$3,000.00 /Each	\$0.00
Two-lane Closure	0.0 No.	\$3,200.00 /Each	\$0.00
Three-lane Closure-Only Saturday	0.0 No.	\$3,650.00 /Each	\$0.00
Ramp Closure (Exit-Entrance)	0.0 No.	\$950.00 /Each	\$0.00
Additional 1/2 mile	0.0 No.	\$100.00 /Each	\$0.00
<u><i>Arterial (1/2 mile)</i></u>			
Shoulder Closure	0.0 No.	\$800.00 /Each	\$0.00
One-lane Closure	0.0 No.	\$900.00 /Each	\$0.00
Two-lane Closure	0.0 No.	\$1,000.00 /Each	\$0.00
Detour	0.0 No.	\$900.00 /Each	\$0.00
U-2	0.0 No.	\$1,200.00 /Each	\$0.00
Additional 1/2 mile	0.0 No.	\$100.00 /Each	\$0.00
Driver with multiple short closures (10-hour day)	0.0 No.	\$1,750.00 /Each	\$0.00
<u><i>Impact Attenuator with Driver</i></u>			
Port-to-Port	0.0 Hours	\$205.00 /Hour	\$0.00
<u><i>Roadway Flagmen (two-man crew)</i></u>			
Port-to-Port	24.0 Hours	\$220.00 /Hour	\$5,280.00
			\$5,280.00
Note: Prices are for weekday only (Monday through Friday). Weekend rates (Saturdays and Sundays) are higher and will be provided per project			
FIELD VEHICLES & MILEAGE			
<u><i>Field Vehicle</i></u>			
Field Vehicle Mileage (>100 Miles per Day)	0.0 Miles	\$0.575 /Mile	\$0.00
Field Vehicle Daily (<100 Miles per Day)	4 Days	\$65.00 /Day	\$260.00
			\$260.00
OUT-OF-TOWN EXPENSES			
<u><i>Lodging</i></u>	0 Days	\$100.00 /Day	\$0.00
<u><i>Per Diem</i></u>	0 Days	\$50.00 /Day	\$0.00
			\$0.00
ENGINEERING, REPORTING & MANAGEMENT			
Desk Study, Site Access & Permitting			
Senior Engineer	0.0 Hours	\$177.80 /Hour	\$0.00
Project Engineer/Project Geologist	2.0 Hours	\$119.16 /Hour	\$238.32
Assistant Engineer/Assistant Geologist	4.0 Hours	\$78.15 /Hour	\$312.60
Field Activities			
Project Engineer/Project Geologist	2.0 Hours	\$119.16 /Hour	\$238.32
Assistant Engineer/Assistant Geologist	30.0 Hours	\$78.15 /Hour	\$2,344.50
Laboratory Testing			
Project Engineer/Project Geologist	0.0 Hours	\$119.16 /Hour	\$0.00
Laboratory Technician	0.0 Hours	\$83.46 /Hour	\$0.00
Data Analyses & Engineering			
Senior Engineer	2.0 Hours	\$177.80 /Hour	\$355.60
Project Engineer/Project Geologist	12.0 Hours	\$119.16 /Hour	\$1,429.92
Assistant Engineer/Assistant Geologist	8.0 Hours	\$78.15 /Hour	\$625.20
Report Preparation			
Senior Engineer	6.0 Hours	\$177.80 /Hour	\$1,066.80
Project Engineer/Project Geologist	10.0 Hours	\$119.16 /Hour	\$1,191.60
Assistant Engineer/Assistant Geologist	2.0 Hours	\$78.15 /Hour	\$156.30
QC/QA Reviewer	2.0 Hours	\$207.33 /Hour	\$414.66
Project Management			
Principal in Charge	1.0 Hours	\$207.33 /Hour	\$207.33
Project Manager	4.0 Hours	\$177.80 /Hour	\$711.20
Administrative Assistant	1.0 Hours	\$101.73 /Hour	\$101.73
			\$9,394.08



**GEOTECHNICAL SERVICES
UNIT PRICES
2020**



Name: Elizabeth Drive over Salt Creek | SN 022-7350
RFP/PTB/PSB/Item: NA
Contract/Job: NA

Date: 07/06/2020
Wang No.: P200702

Task Description	Units	Unit Price	Extended Cost
SUMMARY			
<i>DRILLING, SAMPLING & INSITU TESTING</i>			\$12,894.00
<i>LABORATORY TESTING</i>			\$1,538.00
<i>TRAFFIC CONTROL</i>			\$5,280.00
<i>FIELD VEHICLES & MILEAGE</i>			\$260.00
<i>OUT-OF-TOWN EXPENSES</i>			\$0.00
			\$19,972.00



REQUEST FOR COMMITTEE ACTION

Referred to Committee: August 13, 2020
Subject: 2020 Pavement Marking
Staff Contact: Patrick Hastings, Assistant Public Works
Director
Department: Public Works

TITLE: Approval of an Agreement between the City of Wood Dale and Superior Road Striping, Inc. for the 2020 Pavement Marking Program in an Amount Not to Exceed \$17,115

RECOMMENDATION:

Staff Recommends Approval of an Agreement between the City of Wood Dale and Superior Road Striping, Inc. for the 2020 Pavement Marking Program in an Amount Not to Exceed \$17,115.

BACKGROUND:

The City of Wood Dale is responsible for the maintenance and repair of its roadway including the refinishing of the markings that are present on the roadway. DuPage County manages the bidding out of this work under the Municipal Partnership Initiative (MPI) which extends the favorable unit pricing to local municipalities. This project includes various pavement markings that have either become faded and or are missing. To gather this information, staff utilized the street sufficiency study to target roadways and make a review of whether new markings were needed. This project will include updating the pedestrian crosswalks, vehicle stop bars and various roadway symbols.

ANALYSIS:

Pavement marking is budgeted for annually within the Capital Projects Fund for street improvements. For fiscal year 2020 the City budgeted \$35,000 for roadway marking. Bids were received by DuPage County and opened publicly in March. DuPage then makes a recommendation of the lowest responsible bidder to the other participating agencies. Four companies submitted bids and are detailed in the attached bid tab.

DOCUMENTS ATTACHED

- ✓ Pavement Marking Program Bid Documents
- ✓ Bid Tabulation
- ✓ Superior Road Striping's proposal
- ✓ Locations

RETURN WITH BID



DUPAGE COUNTY
DIV. OF TRANSPORTATION

2020 MAR -5 AM 9:43

Local Public Agency
Formal Contract
Proposal

PROPOSAL SUBMITTED BY		
SUPERIOR ROAD STRIPING INC.		
Contractor's Name		
1980 N. HAWTHORNE AVE		
Street		
Melrose Park IL		P.O. Box
City		60160
State		Zip Code

STATE OF ILLINOIS

COUNTY OF DuPage
DuPage County Division of Transportation
(Name of City, Village, Town or Road District)

FOR THE IMPROVEMENT OF

STREET NAME OR ROUTE NO. 2020 Pavement Marking Maintenance
SECTION NO. 20-PVMKG-08-GM
TYPES OF FUNDS _____

SPECIFICATIONS (required)

PLANS (required)

For Municipal Projects
Submitted/Approved/Passed

Mayor President of Board of Trustees Municipal Official

Date

Department of Transportation

Released for bid based on limited review

Regional Engineer

Date

For County and Road District Projects
Submitted/Approved

Highway Commissioner

Date

Submitted/Approved

County Engineer/Superintendent of Highways

Date

Note: All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed.

RETURN WITH BID

NOTICE TO BIDDERS

County DuPage
Local Public Agency DuPage County D.O.T.
Section Number 20-PVMKG-08-GM
Route Various

Sealed proposals for the improvement described below will be received at the office of DuPage County Div of Transportation,
421 N. County Farm Road, 2nd Floor, Wheaton, IL 60187-2553 until 2:00 PM on March 10, 2020

Sealed proposals will be opened and read publicly at the office of the DuPage County Division of Transportation,
421 N. County Farm Road, 2nd Floor, Wheaton, IL 60187-2553 at 2:00 PM on March 10, 2020

DESCRIPTION OF WORK

Name 2020 Pavement Marking Maintenance Length: feet (miles)
Location Various Routes
Proposed Improvement Removal of existing pavement markings and installation of thermoplastic, urethane, and spray
thermoplastic pavement markings, and recessed pavement markers.

1. Plans and proposal forms will be available in the office of online at http://www.dupageco.org/dot/doingbusiness
or by contacting the DuPage County Division of Transportation at (630) 407-6900.

- 2. [X] Prequalification
If checked, the 2 low bidders must file within 24 hours after the letting an "Affidavit of Availability" (Form BC 57), in duplicate, showing all uncompleted contracts awarded to them and all low bids pending award for Federal, State, County, Municipal and private work. One original shall be filed with the Awarding Authority and one original with the IDOT District Office.
3. The Awarding Authority reserves the right to waive technicalities and to reject any or all proposals as provided in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals.
4. The following BLR Forms shall be returned by the bidder to the Awarding Authority:
a. BLR 12200: Local Public Agency Formal Contract Proposal
b. BLR 12200a Schedule of Prices
c. BLR 12230: Proposal Bid Bond (if applicable)
d. BLR 12325: Apprenticeship or Training Program Certification (do not use for federally funded projects)
e. DuPage County Apprenticeship or Training Program Certification (all Apprenticeship/Training Registration Number(s) and/or Certificate(s) need to be included with this form)
f. BLR 12326: Affidavit of Illinois Business Office
g. DuPage County - Required Vendor Ethics Disclosure Statement
h. IRS Form W-9: Request for Taxpayer Identification Number and Certification
i. Three (3) References Form
j. Joint Purchasing Authorization

RETURN WITH BID

5. The quantities appearing in the bid schedule are approximate and are prepared for the comparison of bids. Payment to the Contractor will be made only for the actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as hereinafter provided.
6. Submission of a bid shall be conclusive assurance and warranty the bidder has examined the plans and understands all requirements for the performance of work. The bidder will be responsible for all errors in the proposal resulting from failure or neglect to conduct an in depth examination. The Awarding Authority will, in no case be responsible for any costs, expenses, losses or changes in anticipated profits resulting from such failure or neglect of the bidder.
7. The bidder shall take no advantage of any error or omission in the proposal and advertised contract.
8. If a special envelope is supplied by the Awarding Authority, each proposal should be submitted in that envelope furnished by the Awarding Agency and the blank spaces on the envelope shall be filled in correctly to clearly indicate its contents. When an envelope other than the special one furnished by the Awarding Authority is used, it shall be marked to clearly indicate its contents. When sent by mail, the sealed proposal shall be addressed to the Awarding Authority at the address and in care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and at the place specified in the Notice to Bidders. Proposals received after the time specified will be returned to the bidder unopened.
9. Permission will be given to a bidder to withdraw a proposal if the bidder makes the request in writing or in person before the time for opening proposals.

RETURN WITH BID

PROPOSAL

County	<u>DuPage</u>
Local Public Agency	<u>DuPage County D.O.T.</u>
Section Number	<u>20-PVMKG-08-GM</u>
Route	<u>Various</u>

1. Proposal of Superior Road Striping, Inc.

for the improvement of the above section by the construction of removal of existing pavement markings
and installation of thermoplastic, urethane, and spray thermoplastic pavement markings, and recessed pavement markers

a total distance of _____ feet, of which a distance of _____ feet, (_____ miles) are to be improved.

2. The plans for the proposed work are those prepared by DuPage County Division of Transportation
and approved by the Department of Transportation on _____.

3. The specifications referred to herein are those prepared by the Department of Transportation and designated as
"Standard Specifications for Road and Bridge Construction" and the "Supplemental Specifications and Recurring
Special Provisions" thereto, adopted and in effect on the date of invitation for bids.

4. The undersigned agrees to accept, as part of the contract, the applicable Special Provisions indicated on the "Check
Sheet for Recurring Special Provisions" contained in this proposal.

5. The undersigned agrees to complete the work within _____ working days or by December 04, 2020
unless additional time is granted in accordance with the specifications.

6. A proposal guaranty in the proper amount, as specified in BLRS Special Provision for Bidding Requirements and
Conditions for Contract Proposals, will be required. Bid Bonds **will** be allowed as a proposal guaranty.
Accompanying this proposal is either a bid bond if allowed, on Department form BLR 12230 or a proposal guaranty
check, complying with the specifications, made payable to:

County Treasurer of DuPage

The amount of the check is (5% Bid Bond) (_____).

7. In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must be equal to
the sum of the proposal guaranties, which would be required for each individual proposal. If the proposal guaranty check
is placed in another proposal, it will be found in the proposal for: Section Number _____.

8. The successful bidder at the time of execution of the contract **will** be required to deposit a contract bond for the full
amount of the award. When a contract bond is not required, the proposal guaranty check will be held in lieu thereof. If this
proposal is accepted and the undersigned fails to execute a contract and contract bond as required, it is hereby agreed
that the Bid Bond or check shall be forfeited to the Awarding Authority.

9. Each pay item should have a unit price and a total price. If no total price is shown or if there is a discrepancy between the
product of the unit price multiplied by the quantity, the unit price shall govern. If a unit price is omitted, the total price will
be divided by the quantity in order to establish a unit price.

10. A bid will be declared unacceptable if neither a unit price nor a total price is shown.

11. The undersigned submits herewith the schedule of prices on BLR 12200a covering the work to be performed under this
contract.

12. The undersigned further agrees that if awarded the contract for the sections contained in the combinations on
BLR 12200a, the work shall be in accordance with the requirements of each individual proposal for the multiple bid
specified in the Schedule for Multiple Bids below.

RETURN WITH BID



SCHEDULE OF PRICES

County: DuPage
 Local Public Agency: DuPage County DOT
 Section: 20-PVMKG-08-GM
 Route: Various

Schedule for Multiple Bids

Combination Letter	Sections included in Combinations	Total

Schedule for Single Bid

(For complete information covering these items, see plans and specifications)

Bidder's proposal for making entire improvements	\$449,578.50
--	---------------------

Item No.	Items	Unit	Quantity	Unit Price	Total
1	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	22200	3.75	83,250.00
2	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	19000	0.50	9,500.00
3	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	81250	0.75	60,937.50
4	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	8000	1.00	8,000.00
5	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	45400	1.50	68,100.00
6	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	8200	3.75	30,750.00
7	HOT SPRAY THERMOPLASTIC PAVEMENT MARKING LINE - 4 INCH	FOOT	494000	0.20	98,800.00
8	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	1000	5.00	5,000.00
9	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	9000	0.50	4,500.00
10	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	3000	0.90	2,700.00
11	MODIFIED URETHANE PAVEMENT MARKING - LINE 8"	FOOT	950	1.20	1,140.00
12	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	1600	2.00	3,200.00
13	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	550	5.00	2,750.00
14	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	131500	0.30	39,450.00
15	RECESSED REFLECTIVE PAVEMENT MARKER	EACH	500	22.00	11,000.00
16	REPLACEMENT REFLECTOR	EACH	500	10.00	5,000.00
17	TRAFFIC CONTROL AND PROTECTION	L SUM	1	1.00	1.00
18	MODIFIED URETHANE PAVEMENT MARKING - RAISED MEDIAN	SQ FT	3000	3.00	9,000.00
19	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	3,500.00	3,500.00
20	RAILROAD FLAGGER	DOLLARS	3000	1.00	3,000.00

CONTRACTOR CERTIFICATIONS

County	DuPage
Local Public Agency	DuPage County D.O.T.
Section Number	20-PVMKG-08-GM
Route	Various

The certifications hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder.

1. **Debt Delinquency.** The bidder or contractor or subcontractor, respectively, certifies that it is not delinquent in the payment of any tax administered by the Department of Revenue unless the individual or other entity is contesting, in accordance with the procedures established by the appropriate revenue Act, its liability for the tax or the amount of tax. Making a false statement voids the contract and allows the Department to recover all amounts paid to the individual or entity under the contract in a civil action.
2. **Bid-Rigging or Bid Rotating.** The bidder or contractor or subcontractor, respectively, certifies that it is not barred from contracting with the Department by reason of a violation of either 720 ILCS 5/33E-3 or 720 ILCS 5/33E-4.

A violation of Section 33E-3 would be represented by a conviction of the crime of bid-rigging which, in addition to Class 3 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be barred for 5 years from the date of conviction from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

A violation of Section 33E-4 would be represented by a conviction of the crime of bid-rotating which, in addition to Class 2 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

3. **Bribery.** The bidder or contractor or subcontractor, respectively, certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois or any unit of local government, nor has the firm made an admission of guilt of such conduct which is a matter of record, nor has an official, agent, or employee of the firm committed bribery or attempted bribery on behalf of the firm and pursuant to the direction or authorization of a responsible official of the firm.
4. **Interim Suspension or Suspension.** The bidder or contractor or subcontractor, respectively, certifies that it is not currently under a suspension as defined in Subpart I of Title 44 Subtitle A Chapter III Part 6 of the Illinois Administrative Code. Furthermore, if suspended prior to completion of this work, the contract or contracts executed for the completion of this work may be cancelled.

RETURN WITH BID

SIGNATURES

County	<u>DuPage</u>
Local Public Agency	<u>DuPage County D.O.T.</u>
Section Number	<u>20-PVMKG-08-GM</u>
Route	<u>Various</u>

(If an individual)

Signature of Bidder _____

Business Address _____

(If a partnership)

Firm Name _____

Signed By _____

Business Address _____

Inset Names and Addressed of All Partners

(If a corporation)

Corporate Name Superior Road Striping Inc.

Signed By Joan Yario ^{President}

Business Address 1930 W. Hawthorne Ave
Melrose Park IL 60160

Inset Names of Officers

President Joan Yario

Secretary Joan Yario

Treasurer Joseph Yario

Attest: Joan Yario Secretary



Apprenticeship or Training Program Certification

Return to Buyer and with Bid

Route	<u>Various</u>
County	<u>DuPage</u>
Local Agency	<u>DuPage County D.O.T.</u>
Section Number	<u>20-PVMKG-08-GM</u>

All contractors are required to complete the following certification:

- For this contract proposal or for all groups in this deliver and install proposal.
- For the following deliver and install groups in this material proposal:

The County of DuPage policy, adopted in accordance with the provisions of DuPage County, Illinois County Code, requires this contract to be awarded to the lowest responsive and responsible bidder. The award decision is subject to approval by the Department. In addition to all other responsibility factors, this contract or deliver and install proposal requires all bidders and all bidders' subcontractors to disclose participation in apprenticeship or training programs that are (1) approved by and registered with the United States Department of Labor's Bureau of Apprenticeship and Training, and (2) applicable to the work of the above indicated proposals or groups. Therefore, all bidders are required to complete the following certification:

- I. Except as provided in paragraph IV below, the undersigned bidder certifies that it is a participant, either as an individual or as part of a group program, in an approved apprenticeship or training program applicable to each type of work or craft that the bidder will perform with its own employees.
- II. The undersigned bidder further certifies for work to be performed by subcontract that each of its subcontractors submitted for approval either (A) is, at the time of such bid, participating in an approved, applicable apprenticeship or training program; or (B) will, prior to commencement of performance of work pursuant to this contract, establish participation in an approved apprenticeship or training program applicable to the work of the subcontract.
- III. The undersigned bidder, by inclusion in the list in the space below, certifies the official name of each program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's employees. Types of work or craft that will be subcontracted shall be included and listed as subcontract work.

INTERNATIONAL BROTHERHOOD OF TEAMSTERS
LOCAL 786

IV. Except for any work identified above, any bidder or subcontractor that shall perform all or part of the work of the contract or deliver and install proposal solely by individual owners, partners or members and not by employees to whom the payment of prevailing rates of wages would be required, check the following box, and identify the owner/operator workforce and positions of ownership.

The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. The bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project is accounted for and listed. The Department at any time before or after award may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. In order to fulfill the participation requirement, it shall not be necessary that any applicable program sponsor be currently taking or that it will take applications for apprenticeship, training or employment during the performance of the work of this contract or deliver and install proposal.

Bidder: Superior Road Striping Inc
Address: 1980 W. Hawthorne Ave
Melrose Park IL 60160

By: [Signature]
(Signature)
Title: President



Local Agency Proposal Bid Bond

Route Various
County DuPage
Local Agency DuPage County D.O.T.
Section 20-PVMKG-08-GM

RETURN WITH BID

PAPER BID BOND

WE Superior Road Striping, Inc. 1980 Hawthorne Avenue, Melrose Park, IL 60160 as PRINCIPAL,
and The Guarantee Company of North America USA One Towne Square, Suite 1470, Southfield, MI 48076 as SURETY.

are held jointly, severally and firmly bound unto the above Local Agency (hereafter referred to as "LA") in the penal sum of 5% of the total bid price, or for the amount specified in the proposal documents in effect on the date of invitation for bids whichever is the lesser sum. We bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly pay to the LA this sum under the conditions of this instrument.

WHEREAS THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the said PRINCIPAL is submitting a written proposal to the LA acting through its awarding authority for the construction of the work designated as the above section.

THEREFORE if the proposal is accepted and a contract awarded to the PRINCIPAL by the LA for the above designated section and the PRINCIPAL shall within fifteen (15) days after award enter into a formal contract, furnish surety guaranteeing the faithful performance of the work, and furnish evidence of the required insurance coverage, all as provided in the "Standard Specifications for Road and Bridge Construction" and applicable Supplemental Specifications, then this obligation shall become void, otherwise it shall remain in full force and effect.

IN THE EVENT the LA determines the PRINCIPAL has failed to enter into a formal contract in compliance with any requirements set forth in the preceding paragraph, then the LA acting through its awarding authority shall immediately be entitled to recover the full penal sum set out above, together with all court costs, all attorney fees, and any other expense of recovery.

IN TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this 10th day of March, 2020

Principal

Superior Road Striping, Inc. (Company Name)

By: Joan Yario President (Signature and Title)

(Company Name)

By: (Signature and Title)

(If PRINCIPLE is a joint venture of two or more contractors, the company names, and authorized signatures of each contractor must be affixed.)

The Guarantee Company of North America USA (Name of Surety)

Surety

By: Sharon A. Foulk (Signature and Title)



STATE OF
COUNTY OF

I, See Attached, a Notary Public in and for said county, do hereby certify that Joan Yario and Sharon A. Foulk (Insert names of individuals signing on behalf of PRINCIPAL & SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL and SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instruments as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this 10th day of March, 2020

My commission expires

See Attached (Notary Public)

ELECTRONIC BID

Electronic bid bond is allowed (box must be checked by LA if electronic bid bond is allowed) The Principal may submit an electronic bid bond, in lieu of completing the above section of the Proposal Bid Bond Form. By providing an electronic bid bond ID code and signing below, the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the LA under the conditions of the bid bond as shown above. (If PRINCIPAL is a joint venture of two or more contractors, an electronic bid bond ID code, company/Bidder name title and date must be affixed for each contractor in the venture.)

Electronic Bid Bond ID Code (grid)

(Company/Bidder Name)

(Signature and Title)

Date

SURETY COMPANY ACKNOWLEDGMENT

STATE OF ILLINOIS)
COUNTY OF COOK) ss:

On this **10th** day of **March** in the year **2020**, before me personally came **Sharon A. Foulk**, to me known, who, being by me duly sworn, did depose and say that she resides in **Island Lake, Illinois**; that he is the **ATTORNEY-IN-FACT** of **The Guarantee Company of North America USA**, the corporation described in and which executed the above instrument; that she knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the board of directors of said corporation, and that he signed his name thereto by like order.





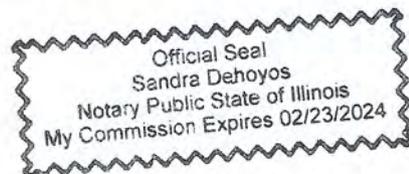
Notary Public
Karen E. Socha, Exp. 1/13/2024

STATE OF ILLINOIS)
COUNTY OF COOK) ss:

On this **10th** day of **March** in the year **2020** before me personally came **Joan Yario**, to me known, who, being by me duly sworn, did depose and say he/she resides in **Bensenville, Illinois** and that she is the **President** of the **Superior Road Striping, Inc.** the corporation described in and which executed the foregoing instrument; that he/she knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the board of said corporation and that he signed his/her name thereto by like order.



Notary Public
Sandra De Hoyos, Exp. 2/23/2024





The Guarantee Company of North America USA
Southfield, Michigan

Bond No. Bid Bond
Principal: Superior Road Striping, Inc.
Obligee: DuPage County Division of Transportation

POWER OF ATTORNEY

NOW ALL BY THESE PRESENTS: That THE GUARANTEE COMPANY OF NORTH AMERICA USA, a corporation organized and existing under the laws of the State of Michigan, having its principal office in Southfield, Michigan, does hereby constitute and appoint

Sharon A. Foulk
Arthur J Gallagher Risk Management Services, Inc.

its true and lawful attorney(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise.

The execution of such instrument(s) in pursuance of these presents, shall be as binding upon THE GUARANTEE COMPANY OF NORTH AMERICA USA as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at the principal office.

The Power of Attorney is executed and may be certified so, and may be revoked, pursuant to and by authority of Article IX, Section 9.03 of the By-Laws adopted by the Board of Directors of THE GUARANTEE COMPANY OF NORTH AMERICA USA at a meeting held on the 31st day of December, 2003. The President, or any Vice President, acting with any Secretary or Assistant Secretary, shall have power and authority:

- 1. To appoint Attorney(s)-in-fact, and to authorize them to execute on behalf of the Company, and attach the Seal of the Company thereto, bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof; and
2. To revoke, at any time, any such Attorney-in-fact and revoke the authority given, except as provided below
3. In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.
4. In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner - Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

Further, this Power of Attorney is signed and sealed by facsimile pursuant to resolution of the Board of Directors of the Company adopted at a meeting duly called and held on the 6th day of December 2011, of which the following is a true excerpt:

RESOLVED that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any Power of Attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, contracts of indemnity and other writings obligatory in the nature thereof, and such signature and seal when so used shall have the same force and effect as though manually affixed.

IN WITNESS WHEREOF, THE GUARANTEE COMPANY OF NORTH AMERICA USA has caused this instrument to be signed and its corporate seal to be affixed by its authorized officer, this 2nd day of October, 2015.



THE GUARANTEE COMPANY OF NORTH AMERICA USA

[Signature of Stephen C. Ruschak]

[Signature of Randall Musselman]

STATE OF MICHIGAN
County of Oakland

Stephen C. Ruschak, President & Chief Operating Officer

Randall Musselman, Secretary

On this 2nd day of October, 2015 before me came the individuals who executed the preceding instrument, to me personally known, and being by me duly sworn, said that each is the herein described and authorized officer of The Guarantee Company of North America USA; that the seal affixed to said instrument is the Corporate Seal of said Company; that the Corporate Seal and each signature were duly affixed by order of the Board of Directors of said Company.



Cynthia A. Takai
Notary Public, State of Michigan
County of Oakland
My Commission Expires February 27, 2024
Acting in Oakland County

IN WITNESS WHEREOF, I have hereunto set my hand at The Guarantee Company of North America USA offices the day and year above written.

[Signature of Cynthia A. Takai]

I, Randall Musselman, Secretary of THE GUARANTEE COMPANY OF NORTH AMERICA USA, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney executed by THE GUARANTEE COMPANY OF NORTH AMERICA USA, which is still in full force and effect.



IN WITNESS WHEREOF, I have thereunto set my hand and attached the seal of said Company this 10th day of March, 2020.

[Signature of Randall Musselman]

Randall Musselman, Secretary Page #385

RETURN WITH BID



Affidavit of Illinois Business Office

County DuPage
Local Public Agency DuPage County D.O.T
Section Number 20-PVMKG-08-GM
Route Various

State of IL)
) ss.
County of DuPage)

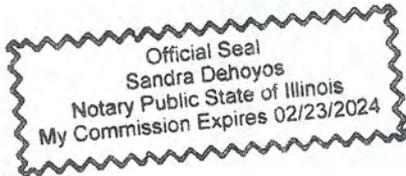
I, JOAN YARID of Bensenville, IL,
(Name of Affiant) (City of Affiant) (State of Affiant)

being first duly sworn upon oath, states as follows:

1. That I am the PRESIDENT of Superior ROAD STRIPING INC.
officer or position bidder
2. That I have personal knowledge of the facts herein stated.
3. That, if selected under this proposal, Superior ROAD STRIPING INC., will maintain a
(bidder)
business office in the State of Illinois which will be located in COOK County, Illinois.
4. That this business office will serve as the primary place of employment for any persons employed in the construction contemplated by this proposal.
5. That this Affidavit is given as a requirement of state law as provided in Section 30-22(8) of the Illinois Procurement Code.

Joan Yarid
(Signature)
JOAN YARID
(Print Name of Affiant)

This instrument was acknowledged before me on 4 day of MARCH, 2020.



(SEAL)

Sandra Dehoyos
(Signature of Notary Public)



Illinois Department of Transportation

Bureau of Construction
2300 South Dirksen Parkway/Room 322
Springfield, Illinois 62764

Affidavit of Availability For the Letting of 3/12/2020

Instructions: Complete this form by either typing or using black ink. "Authorization to Bid" will not be issued unless both sides of this form are completed in detail. Use additional forms as needed to list all work.

Part I. Work Under Contract

List below all work you have under contract as either a prime contractor or a subcontractor. It is required to include all pending low bids not yet awarded or rejected. In a joint venture, list only that portion of the work which is the responsibility of your company. The uncompleted dollar value is to be based upon the most recent engineer's or owners estimate, and must include work subcontracted to others. If no work is contracted, show **NONE**.

	1	2	3	4	Awards Pending	
Contract Number	62G56		62B75	61E97		
Contract With	Peter Baker	Peter Baker	Campanella	D. Const		
Estimated Completion Date	2020	2020	2020	2020		
Total Contract Price	41,719.00	179,549.00	46,571.00	49,219.00		Accumulated Totals
Uncompleted Dollar Value if Firm is the Prime Contractor						
Uncompleted Dollar Value if Firm is the Subcontractor	41,719.00	179,549.00	36,982.00	49,219.00		\$307,469.00
Total Value of All Work						\$307,469.00

Part II. Awards Pending and Uncompleted Work to be done with your own forces.

List below the uncompleted dollar value of work for each contract and awards pending to be completed with your own forces. All work subcontracted to others will be listed on the reverse of this form. In a joint venture, list only that portion of the work to be done by your company. If no work is contracted, show **NONE**.

						Accumulated Totals
Earthwork						
Portland Cement Concrete Paving						
HMA Plant Mix						
HMA Paving						
Clean & Seal Cracks/Joints						
Aggregate Bases & Surfaces						
Highway, R.R. and Waterway Structures						
Drainage						
Electrical						
Cover and Seal Coats						
Concrete Construction						
Landscaping						
Fencing						
Guardrail						
Painting <i>urethane</i>			11,000.00	15,680.00		\$26,680.00
Signing <i>groove</i>		53,071.00	12,770.00	18,780.00		\$84,621.00
Cold Milling, Planning & Rotomilling						
Demolition						
Pavement Markings (Paint) <i>Thermid</i>	31,290.00	126478	9,502.00	7,055.00		\$174,325.00
Other Construction (List) <i>Kpm</i>	10,429.00		3,710.00	7,704.00		\$21,843.00
						\$ 0.00
Totals	\$41,719.00	\$179,549.00	\$36,982.00	\$49,219.00		\$307,469.00

Disclosure of this information is **REQUIRED** to accomplish the statutory purpose as outlined in the "Illinois Procurement Code." Failure to comply will result in non-issuance of an "Authorization To Bid." This form has been approved by the State Forms Management Center. Packet Page #387



Illinois Department of Transportation

Bureau of Construction
2300 South Dirksen Parkway/Room 322
Springfield, Illinois 62764

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	1	2	3	4	Awards Pending	
Contract Number	62C51	62G17		61D65		
Contract With	D Const	JAJohnson	K-Five	Plote		
Estimated Completion Date	2020	2020	2020	2020		
Total Contract Price	60,855.00	59,114.00	10295	48,723.00		Accumulated Totals
Uncompleted Dollar Value if Firm is the Prime Contractor						
Uncompleted Dollar Value if Firm is the Subcontractor	5,540.00	59,114.00	10,295.00	48,723.00		\$123,672.00
Total Value of All Work						\$123,672.00

Part II. Awards Pending and Uncompleted Work to be done with your own forces.

List below the uncompleted dollar value of work for each contract and awards pending to be completed with your own forces. All work subcontracted to others will be listed on the reverse of this form. In a joint venture, list only that portion of the work to be done by your company. If no work is contracted, show **NONE**.

						Accumulated Totals
Earthwork						
Portland Cement Concrete Paving						
HMA Plant Mix						
HMA Paving						
Clean & Seal Cracks/Joints						
Aggregate Bases & Surfaces						
Highway, R.R. and Waterway Structures						
Drainage						
Electrical						
Cover and Seal Coats						
Concrete Construction						
Landscaping						
Fencing						
Guardrail						
Painting <i>Urethane</i>						
Signing <i>brochure</i>				11,675.00		\$11,675.00
Cold Milling, Planning & Rotomilling						
Demolition						
Pavement Markings (Paint) <i>Thermo</i>		37,094.00	10,295.00	28,573.00		\$75,962.00
Other Construction (List) <i>RPM</i>	5,540.00	22,020.00		8,475.00		\$36,035.00
						\$ 0.00
Totals	\$5,540.00	\$59,114.00	\$10,295.00	\$48,723.00		\$123,672.00

Disclosure of this information is **REQUIRED** to accomplish the statutory purpose as outlined in the "Illinois Procurement Code." Failure to comply will result in non-issuance of an "Authorization To Bid." This form has been approved by the State Forms Management Center. Packet Page #388



Illinois Department of Transportation

Bureau of Construction
2300 South Dirksen Parkway/Room 322
Springfield, Illinois 62764

Affidavit of Availability For the Letting of 3/12/2020

Instructions: Complete this form by either typing or using black ink. "Authorization to Bid" will not be issued unless both sides of this form are completed in detail. Use additional forms as needed to list all work.

Part I. Work Under Contract

List below all work you have under contract as either a prime contractor or a subcontractor. It is required to include all pending low bids not yet awarded or rejected. In a joint venture, list only that portion of the work which is the responsibility of your company. The uncompleted dollar value is to be based upon the most recent engineer's or owners estimate, and must include work subcontracted to others. If no work is contracted, show **NONE**.

	1	2	3	4	Awards Pending	
Contract Number	60L71	60L72				
Contract With	TSI	TSI				
Estimated Completion Date	2020	2020				
Total Contract Price	144,218.00	93,125.00				Accumulated Totals
Uncompleted Dollar Value if Firm is the Prime Contractor						
Uncompleted Dollar Value if Firm is the Subcontractor	45,678.00	20,736.00				\$66,414.00
Total Value of All Work						\$66,414.00

Part II. Awards Pending and Uncompleted Work to be done with your own forces.

List below the uncompleted dollar value of work for each contract and awards pending to be completed with your own forces. All work subcontracted to others will be listed on the reverse of this form. In a joint venture, list only that portion of the work to be done by your company. If no work is contracted, show **NONE**.

						Accumulated Totals
Earthwork						
Portland Cement Concrete Paving						
HMA Plant Mix						
HMA Paving						
Clean & Seal Cracks/Joints						
Aggregate Bases & Surfaces						
Highway, R.R. and Waterway Structures						
Drainage						
Electrical						
Cover and Seal Coats						
Concrete Construction						
Landscaping						
Fencing						
Guardrail						
Painting <i>URPETHANE</i>						
Signing <i>GRADE</i>						
Cold Milling, Planning & Rotomilling						
Demolition						
Pavement Markings (Paint)						
Other Construction (List)	45,678.00	20,736.00				\$66,414.00
						\$ 0.00
Totals	\$45,678.00	\$20,736.00				\$66,414.00

Disclosure of this information is **REQUIRED** to accomplish the statutory purpose as outlined in the "Illinois Procurement Code." Failure to comply will result in non-issuance of an "Authorization To Bid." This form has been approved by the State Forms Management Center. Packet Page #389



Illinois Department of Transportation

Bureau of Construction
2300 South Dirksen Parkway/Room 322
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Part I. Work Under Contract

List below all work you have under contract as either a prime contractor or a subcontractor. It is required to include all pending low bids not yet awarded or rejected. In a joint venture, list only that portion of the work which is the responsibility of your company. The uncompleted dollar value is to be based upon the most recent engineer's or owners estimate, and must include work subcontracted to others. If no work is contracted, show **NONE**.

	1	2	3	4	Awards Pending	
Contract Number						
Contract With						
Estimated Completion Date						
Total Contract Price						Accumulated Totals
Uncompleted Dollar Value if Firm is the Prime Contractor						
Uncompleted Dollar Value if Firm is the Subcontractor	497,555.00					\$497,555.00
Total Value of All Work						\$497,555.00

Part II. Awards Pending and Uncompleted Work to be done with your own forces.

List below the uncompleted dollar value of work for each contract and awards pending to be completed with your own forces. All work subcontracted to others will be listed on the reverse of this form. In a joint venture, list only that portion of the work to be done by your company. If no work is contracted, show **NONE**.

						Accumulated Totals
Earthwork						
Portland Cement Concrete Paving						
HMA Plant Mix						
HMA Paving						
Clean & Seal Cracks/Joints						
Aggregate Bases & Surfaces						
Highway, R.R. and Waterway Structures						
Drainage						
Electrical						
Cover and Seal Coats						
Concrete Construction						
Landscaping						
Fencing						
Guardrail						
Painting URETHANE	38,355.00					\$38,355.00
Signing GROVE	84,621.00					\$84,621.00
Cold Milling, Planning & Rotomilling						
Demolition						
Pavement Markings (Paint) TRMMD	250,287.00					\$250,287.00
Other Construction (List) NPM	124,292.00					\$124,292.00
						\$ 0.00
Totals	\$497,555.00					\$497,555.00

Disclosure of this information is **REQUIRED** to accomplish the statutory purpose as outlined in the "Illinois Procurement Code." Failure to comply will result in non-issuance of an "Authorization To Bid." This form has been approved by the State Forms Management Center. Packet Page #390

Part III. Work Subcontracted to Others.

For each contract described in Part I, list all the work you have subcontracted to others.

	1	2	3	4	Awards Pending
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Total Uncompleted					

I, being duly sworn, do hereby declare that this affidavit is a true and correct statement relating to ALL uncompleted contracts of the undersigned for Federal, State, County, City and private work, including ALL subcontract work, ALL pending low bids not yet awarded or rejected and ALL estimated completion dates.

Subscribed and sworn to before me this 4 day of MARCH, 2020 Type or Print Name JOAN YARIO PRESIDENT Title
Officer or Director

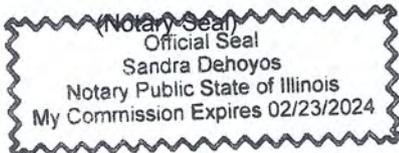
Sandra Dehoyos
 Notary Public

My commission expires 2-23-24

Signed Joan Yario

Company SUPERIOR ROAD STRIPING INC

Address 1980 N. HAWTHORNE AVE
MELROSE PARK IL 60160





Required Vendor Ethics Disclosure Statement

Failure to complete and return this form may result in delay or cancellation of the County's Contractual Obligation.

Date: _____

Bid/Contract/PO #: 20-PVMKG-08-GM

Company Name:	Company Contact:
Contact Phone:	Contact Email:

The DuPage County Procurement Ordinance requires the following written disclosures prior to award:

1. Every contractor, union, or vendor that is seeking or has previously obtained a contract, change orders to one (1) or more contracts, or two (2) or more individual contracts with the county resulting in an aggregate amount at or in excess of \$25,000, shall provide to Procurement Services Division a written disclosure of all political campaign contributions made by such contractor, union, or vendor within the current and previous calendar year to any incumbent county board member, county board chairman, or countywide elected official whose office the contract to be awarded will benefit. The contractor, union or vendor shall update such disclosure annually during the term of a multi-year contract and prior to any change order or renewal requiring approval by the county board. For purposes of this disclosure requirement, "contractor or vendor" includes owners, officers, managers, lobbyists, agents, consultants, bond counsel and underwriters counsel, subcontractors and corporate entities under the control of the contracting person, and political action committees to which the contracting person has made contributions.

NONE (check here) - If no contributions have been made

Recipient	Donor	Description (e.g. cash, type of item, in-kind services, etc.)	Amount/Value	Date Made

2. All contractors and vendors who have obtained or are seeking contracts with the county shall disclose the names and contact information of their lobbyists, agents and representatives and all individuals who are or will be having contact with county officers or employees in relation to the contractor bid and shall update such disclosure with any changes that may occur.

NONE (check here) - If no contacts have been made

Lobbyists, Agents and Representatives and all individuals who are or will be having contact with county officers or employees in relation to the contract or bid	Telephone	Email

A contractor or vendor that knowingly violates these disclosure requirements is subject to penalties which may include, but are not limited to, the immediate cancellation of the contract and possible disbarment from future county contracts.

Continuing disclosure is required, and I agree to update this disclosure form as follows:

- If information changes, within five (5) days of change, or prior to county action, whichever is sooner
- 30 days prior to the optional renewal of any contract
- Annual disclosure for multi-year contracts on the anniversary of said contract
- With any request for change order except those issued by the county for administrative adjustments

The full text for the county's ethics and procurement policies and ordinances are available at:

<http://www.dupageco.org/CountyBoard/Policies/>

I hereby acknowledge that I have received, have read, and understand these requirements.

Authorized Signature: *[Signature]*

Printed Name: DAN YARD

Title: PRESIDENT

Date: 3-4-2020

Attach additional sheets if necessary. Sign each sheet and number each page. Page _____ of _____ (total number of pages)

Request for Taxpayer Identification Number and Certification

**Give Form to the
 requester. Do not
 send to the IRS.**

▶ Go to www.irs.gov/FormW9 for instructions and the latest information.

Print or type.
 See Specific Instructions on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.
Superior MWD Striping Inc.

2 Business name/disregarded entity name, if different from above.

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

Individual/sole proprietor or single-member LLC

C Corporation

S Corporation

Partnership

Trust/estate

Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

Other (see instructions) ▶ _____

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) _____

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.
1980 N. Hawthorne Ave

6 City, state, and ZIP code
Melrose Park IL 60160

7 List account number(s) here (optional)

Requester's name and address (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

				-			-			
--	--	--	--	---	--	--	---	--	--	--

or

Employer identification number

36	-	3	4	3	4	0	8	7
----	---	---	---	---	---	---	---	---

Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- I am a U.S. citizen or other U.S. person (defined below); and
- The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here

Signature of U.S. person ▶ *Gaul & Nelson*

Date ▶ _____

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting*, later, for further information.

Note: If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States.

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515, *Withholding of Tax on Nonresident Aliens and Foreign Entities*).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the instructions for Part II for details),
3. The IRS tells the requester that you furnished an incorrect TIN,
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate Instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships*, earlier.

What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1.

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note: TIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C corporation, or S corporation.** Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box on line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

IF the entity/person on line 1 is a(n) . . .	THEN check the box for . . .
• Corporation	Corporation
• Individual • Sole proprietorship, or • Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes.	Individual/sole proprietor or single-member LLC
• LLC treated as a partnership for U.S. federal tax purposes, • LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or • LLC that is disregarded as an entity separate from its owner but the owner is another LLC that is not disregarded for U.S. federal tax purposes.	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation)
• Partnership	Partnership
• Trust/estate	Trust/estate

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

- Generally, Individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2—The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5—A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8—A real estate investment trust
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10—A common trust fund operated by a bank under section 584(a)
- 11—A financial institution
- 12—A middleman known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G—A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I—A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K—A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note: See *What Name and Number To Give the Requester*, later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at www.SSA.gov. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/Businesses and clicking on Employer Identification Number (EIN) under Starting a Business. Go to www.irs.gov/Forms to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to www.irs.gov/OrderForms to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
4. Custodial account of a minor (Uniform Gift to Minors Act)	The minor ²
5. a. The usual revocable savings trust (grantor is also trustee) b. So-called trust account that is not a legal or valid trust under state law	The grantor-trustee ¹ The actual owner ¹
6. Sole proprietorship or disregarded entity owned by an individual	The owner ³
7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor ⁴

For this type of account:	Give name and EIN of:
8. Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity ⁴
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
11. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
12. Partnership or multi-member LLC	The partnership
13. A broker or registered nominee	The broker or nominee

For this type of account:	Give name and EIN of:
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
15. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships*, earlier.

***Note:** The grantor also must provide a Form W-9 to trustee of trust.

Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records From Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, *Identity Theft Information for Taxpayers*.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes.

Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to phishing@irs.gov. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at spam@uce.gov or report them at www.ftc.gov/complaint. You can contact the FTC at www.ftc.gov/idtheft or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see www.IdentityTheft.gov and Pub. 5027.

Visit www.irs.gov/identitytheft to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

RETURN WITH BID

Joint Purchasing Authorization

County DuPage
Local Public Agency DuPage County D.O.T
Section Number 20-PVMKG-08-GM
Route Various

JOINT PURCHASING:

OTHER TAXING BODIES: Based on County Board Resolution IR-084-76.

Would your firm be willing to extend your bid to other taxing bodies in DuPage County such as school districts, townships, cities and villages, etc.?
The approximate quantity usage is unknown.

YES X NO _____ **

** Failure to complete this form will result in a default assumption of a "NO" response.

State any other requirements that they would have to meet beyond that of our Bid Invitation and Specifications.

Minimum \$ 10,000.00

NOTE: The County of DuPage would not be involved in purchasing by any other taxing body other than to receive a copy of their purchase order that would reference the County of DuPage contract number. The invoicing and payments would be entirely between the other taxing bodies and the Contractor. If the County of DuPage accepts this bid, the procedure to handle joint purchases would be developed by the County of DuPage with the Contractor and distributed to the taxing bodies by the County of DuPage.

REFERENCES

All bidders must provide three (3) projects of a similar nature as being performed in the immediate past five (5) years with the name, address and telephone number of the contact person having knowledge of the project or three (3) references (name, address, and telephone number) with knowledge of the integrity and business practices of the contractor.

PROJECT	Walke county DOT 2019 Pavement Marking
FIRM	Walke county DOT
ADDRESS	600 W. Winchester Libertyville IL 60048
CONTACT	Tom Bennecke
TELEPHONE	847-377-7476

PROJECT	McHenry county 2019 Pavement Marking
FIRM	McHenry county DOT
ADDRESS	16111 Nelson Rd Woodstock IL 60098
CONTACT	Bradley Gibson
TELEPHONE	815-334-4960

PROJECT	Illinois Dept Transp. - Normal replacement Pavement Marking
FIRM	Illinois Dept Transportation
ADDRESS	2300 S. DRIVEN PARKWAY Springfield IL 62764
CONTACT	Pat KenenAkhone
TELEPHONE	847-438-2300

DuPage County Division of Transportation

Project: **2020 Pavement Marking Maint.** Sec. No: **20-PVMKG-08-GM**

Date of Letting: **March 10, 2020 2:00 P.M.**

Item No.	Items	Unit	Quantity	Engineer's Estimate		Superior Road Striping Inc. 1980 N. Hawthorne Ave. Melrose Park, IL 60160		Precision Pavement Markings, Inc. 1220 Bell Court Pingree Grove, IL, 60140		Roadsafe Traffic Systems, Inc. 12225 Disk Drive Romeoville, IL, 60446		Marking Specialists Corporation P.O. Box 745 Arlington Hts., IL, 60006	
				Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
1	THERMOPLASTIC PAVEMENT MARKING - LETTERS	SQ FT	22200	\$3.60	79,920.00	\$3.75	83,250.00	\$3.50	77,700.00	\$4.50	99,900.00	\$3.65	81,030.00
2	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	19000	\$0.65	12,350.00	\$0.50	9,500.00	\$0.50	9,500.00	\$0.65	12,350.00	\$0.75	14,250.00
3	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	81250	\$0.75	60,937.50	\$0.75	60,937.50	\$0.75	60,937.50	\$1.00	81,250.00	\$1.35	109,687.50
4	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	8000	\$1.20	9,600.00	\$1.00	8,000.00	\$1.00	8,000.00	\$1.50	12,000.00	\$1.80	14,400.00
5	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	45400	\$1.60	72,640.00	\$1.50	68,100.00	\$1.50	68,100.00	\$2.25	102,150.00	\$2.40	108,960.00
6	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	8200	\$3.90	31,980.00	\$3.75	30,750.00	\$3.50	28,700.00	\$4.50	36,900.00	\$5.90	48,380.00
7	HOT SPRAY THERMOPLASTIC PAVEMENT MARKING LINE - 4 INCH	FOOT	494000	\$0.27	133,380.00	\$0.20	98,800.00	\$0.29	143,260.00	\$0.25	123,500.00	\$0.34	167,960.00
8	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	1000	\$4.65	4,650.00	\$5.00	5,000.00	\$9.00	9,000.00	\$9.00	9,000.00	\$4.25	4,250.00
9	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	9000	\$0.60	5,400.00	\$0.50	4,500.00	\$1.50	13,500.00	\$1.50	13,500.00	\$0.80	7,200.00
10	MODIFIED URETHANE PAVEMENT MARKING - LINE 8"	FOOT	3000	\$1.35	4,050.00	\$0.90	2,700.00	\$2.25	6,750.00	\$3.00	9,000.00	\$1.65	4,950.00
11	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	950	\$1.50	1,425.00	\$1.20	1,140.00	\$2.00	1,900.00	\$5.00	4,750.00	\$2.20	2,090.00
12	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	1600	\$2.35	3,760.00	\$2.00	3,200.00	\$4.50	7,200.00	\$6.00	9,600.00	\$3.30	5,280.00
13	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	550	\$4.50	2,475.00	\$5.00	2,750.00	\$9.00	4,950.00	\$9.00	4,950.00	\$6.60	3,630.00
14	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	131500	\$0.45	59,175.00	\$0.30	39,450.00	\$0.39	51,285.00	\$0.50	65,750.00	\$0.48	63,120.00
15	RECESSED REFLECTIVE PAVEMENT MARKER	EACH	500	\$25.00	12,500.00	\$22.00	11,000.00	\$32.50	16,250.00	\$50.00	25,000.00	\$47.50	23,750.00
16	REPLACEMENT REFLECTOR	EACH	500	\$9.00	4,500.00	\$10.00	5,000.00	\$7.50	3,750.00	\$20.00	10,000.00	\$19.50	9,750.00
17	TRAFFIC CONTROL AND PROTECTION	L SUM	1	\$5,000.00	5,000.00	\$1.00	1.00	\$1.00	1.00	\$21,000.00	21,000.00	\$28,500.00	28,500.00
18	MODIFIED URETHANE PAVEMENT MARKING - RAISED MEDIAN	SQ FT	3,000	\$4.00	12,000.00	\$3.00	9,000.00	\$4.95	14,850.00	\$12.00	36,000.00	\$3.45	10,350.00
19	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	\$3,000.00	3,000.00	\$3,500.00	3,500.00	\$30,000.00	30,000.00	\$20,000.00	20,000.00	\$3,750.00	3,750.00
20	RAILROAD FLAGGER	DOLLARS	3000	\$1.00	3,000.00	\$1.00	3,000.00	\$1.00	3,000.00	\$1.00	3,000.00	\$1.00	3,000.00
Bidder's Proposal for making Entire Improvements				\$521,742.50		\$449,578.50		\$558,633.50		\$699,600.00		\$714,287.50	
As-Read total (if different from calculated total)						\$353,458.50							

SRS

SUPERIOR ROAD STRIPING, INC.
1967 CORNELL COURT MELROSE PARK, IL 60160

TELEPHONE 708-865-0718
FAX 708-865-0296

8/5/2020

PROPOSAL

CITY OF WOOD DALE
404 N. WOOD DALE ROAD
WOOD DALE, IL 60161

VARIOUS LOCATIONS

THE UNDERSIGNED, PROPOSE TO FURNISH THERMOPLASTIC
PAVEMENT MARKING AND LABOR FOR JOB DESCRIBED BELOW

DESCRIPTION	UNIT	APPROX QUANTITY	UNIT PRICE	AMOUNT
THPL PVT MK L & S	SF	500.0	3.75	1875.00
THPL PVT MK LINE 6	LF	10000.0	0.75	7500.00
THPL PVT MK LINE 24	LF	1400.0	3.75	5250.00
PAVEMENT MARKING REMOVAL	SF	8300.0	0.30	2490.00
				\$ 17,115.00

ACCEPTANCE: YOU ARE HEREBY AUTHORIZED TO FURNISH MATERIAL AND
LABOR NECESSARY TO COMPLETE JOB DESCRIBED.

PLEASE SIGN AND RETURN FAX

SIGNATURE _____

DATE: _____

PRINT FIRST AND LAST NAME _____

RESPECTFULLY SUBMITTED,



SANDRA DEHOYOS
SUPERIOR ROAD STRIPING INC.

AGENCY CUSTOMER ID: _____
LOC #: _____



ADDITIONAL REMARKS SCHEDULE

Page 1 of 1

AGENCY		NAMED INSURED	
POLICY NUMBER AB9178202		SUPERIOR ROAD STRIPING INC 1980 N HAWTHORNE AVE MELROSE PARK, IL 60160	
CARRIER COUNTRY Mutual Insurance Company	NAIC CODE 20990	EFFECTIVE DATE: 8/5/2020	

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: ACORD 25 FORM TITLE: CERTIFICATE OF LIABILITY INSURANCE

ADDITIONAL INSURED(S):
CITY OF WOOD DALE

WORKERS COMPENSATION EXCLUSIONS:
PROPRIETOR, PARTNER(S), EXECUTIVE OFFICER(S), MEMBERS(S) IS/ARE EXCLUDED ON WORKERS COMPENSATION BY
ENDORSEMENT.



REQUEST FOR COMMITTEE ACTION

Referred to Committee: August 13, 2020
Subject: 2020 Pavement Patching Program
Staff Contact: Patrick Hastings, Assistant Public Works
Director
Department: Public Works

TITLE: Approval of an Agreement between the City of Wood Dale and Schroeder Asphalt Services, Inc. for the 2020 Pavement Patching and Crack Sealing Program in an Amount Not to Exceed \$164,110

RECOMMENDATION:

Staff Recommends Approval of an Agreement between the City of Wood Dale and Schroeder Asphalt Services, Inc. for the 2020 Pavement Patching and Crack Sealing Program in an Amount Not to Exceed \$164,110.

BACKGROUND:

The City of Wood Dale is responsible for the maintenance and repair of its roadway network as a matter of public health and safety. In addition to pothole patching, each year the City awards a contract for the resurfacing of sections of roadway as well as crack sealing as a means to extend the useful life of the roadway. This project includes various pavement patches on State and County roads from water main breaks along with roadways that were determined to be good candidates for the patching program using information gathered from the latest Street Sufficiency Study. This project also lumped crack sealing into one larger roadway maintenance contract. Bids were solicited for approximately 5,300 square yards of 3-inch grind and overlay, 150 square yards of IDOT spec patches, 50 square yards of County spec patches and 21,000Lbs of crack sealing.

ANALYSIS:

Pavement Patching and Crack Sealing is budgeted for annually within the Capital Improvement Fund. For fiscal year 2020 the City budgeted \$150,000 for roadway patching and \$35,000 for crack sealing. Bids were opened publicly on August 4, 2020 at

City Hall. Five companies submitted bids. All bids were reviewed and Schroeder Asphalt was determined to be the lowest qualified bidder. Bid results were as follows:

- | | |
|-----------------------|-----------|
| 1. Schroeder Asphalt | \$164,110 |
| 2. Brothers Asphalt | \$167,350 |
| 3. Chicagoland Paving | \$174,905 |
| 4. Johnson Paving | \$188,980 |
| 5. Builders Paving | \$220,550 |

DOCUMENTS ATTACHED

- ✓ 2020 Pavement Patching Program Bid Documents
- ✓ Bid Tabulation
- ✓ Locations

RETURN WITH BID

Submitted By: Brent Schroeder

Company Name: Schroeder Asphalt Services, Inc.

Contact Person: Brent Schroeder

Address: P.O. Box 831

City, State, Zip: Huntley, IL 60142

Telephone: 815/923-4380

Fax: 815/923-4389

CITY OF WOOD DALE DUPAGE COUNTY, ILLINOIS

NOTICE TO CONTRACTORS CONTRACT DOCUMENTS SPECIFICATIONS

FOR

CITY OF WOOD DALE – 2020 PAVEMENT PATCHING AND CRACK SEALING PROGRAM July 13, 2020

Annunziato Pulice, Mayor

Lynn Curiale City Clerk

Prepared By:

City of Wood Dale, Public Works
404 N. Wood Dale Road
Wood Dale, Illinois 60191

RETURN WITH BID

**CITY OF WOOD DALE
2020 PAVEMENT PATCHING AND CRACK SEALING PROGRAM**

-PROPOSAL-

Honorable Mayor and City Council
City of Wood Dale
404 N. Wood Dale Road
Wood Dale, IL 60191

Ladies and Gentlemen:

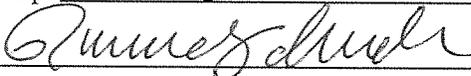
The undersigned does hereby state he has examined the Notice to Bidders, Instructions to Bidders, Special Instructions, General Requirements, Proposal, Sample Contract, Technical Specifications, Certifications, and all other documents, and all work shall be done in accordance with the documents contained herein.

The undersigned does hereby propose to furnish all labor, services, materials, supplies, equipment, apparatus, appliances and to do all work and pay all costs and expenses connected therein required to complete this order in accordance with the documents named in the foregoing paragraph, on the basis of the quantities of work and services actually performed and for the unit prices stated herein below.

Name of Company: Schroeder Asphalt Services, Inc.

Address: P.O. Box 831

City, State, Zip: Huntley, IL 60142

Signed:  Date: 8/4/2020

Title: Ronald Schroeder, President

****Continued on next page****

RETURN WITH BID

BID SHEET

The undersigned, having become familiar with the specifications and with local conditions affecting the cost of the work, hereby proposes and agrees, if this bid is accepted, to enter into an agreement with the City in the form included in the contract documents for the contract sum and within the contract time indicated in this bid and in accordance with other terms and conditions of the contract documents, and in so doing, to provide and furnish all the labor, equipment, materials, supplies, hardware, necessary tools, expendable equipment and supplies, and all utility and transportation services necessary to perform and complete, in a first-class manner, the entire work in conjunction with the 2020 Pavement Patching Program.

In accordance with the complete specifications, the following amount constitutes as a total sum of the bid:

2020 PAVEMENT PATCHING AND CRACK SEALING PROGRAM

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	AMOUNT
1.	PAVEMENT PATCHING- REMOVAL AND REPLACEMENT CLASS D TYPE IV (3IN)	5300	SY	\$ 24.00	\$ 127,200.00
2.	PAVEMENT PATCHING COUNTY ROAD- REMOVAL AND REPLACEMENT PER COUNTY SPECS	50	SY	\$ 47.00	\$ 2350.00
3.	IDOT PATCHING	150	SY	\$ 40.00	\$ 6000.00
4.	CRACK SEALING	21,000	Lbs.	\$ 1.36	\$ 28,560.00
TOTAL:					\$ 164,110.00

RETURN WITH BID

Accompanying this Proposal is a proposal guarantee in the amount of \$ 5% Bid Bond (5%) which is hereby tendered in accordance with the requirement of the Instructions to Bidders and the Specifications and/or Special Provisions. If this proposal is accepted and the undersigned fails to execute a contract as required herein, it is hereby agreed that the proposal guarantee shall become the property of the City of Wood Dale, and shall be considered as payment of damages due to delay and other consequences suffered by the City of Wood Dale due to the failure to execute said contract.

The undersigned acknowledges receipt of addenda as follows:

Addendum, No. N/A, dated _____

No. _____, dated _____

No. _____, dated _____

This bid is an offer which shall be considered accepted only after the Corporate Authorities authorize the execution of the contract. In the event that this proposal is accepted and an award of contract is made to the undersigned bidder, the undersigned does hereby covenant and agree to deliver to the Owner the signed and executed Contract as specified in the Instructions to Bidders and Specifications within ten (10) days after the date of such acceptance and notification thereof.

The proposal shall be binding for sixty (60) days following the bid opening date unless the bidder, upon request of the City of Wood Dale, agrees to an extension.

THIS BID, WHEN ACCEPTED AND SIGNED BY AN AUTHORIZED SIGNATORY OF THE CITY, SHALL BECOME A CONTRACT BINDING UPON BOTH THE PERSON, PARTNERSHIP, OR CORPORATION TO SUPPLY OR PERFORM AS SPECIFIED AND UPON THE CITY TO ACCEPT THE PRODUCT OR SERVICE.

RETURN WITH BID

The undersigned further agrees to begin work within ten (10) working days after the executions and acceptance of the Contract, and thereafter to carry on the work diligently and continuously in such manner as to insure final completion and delivery to the Owner of the entire work under contract in accordance with the provisions of the Contract and Detailed Specifications.

Witness my Hand(s) and Seal this 4th day of August, 2020.
my/our

If an individual, sign
and give address.

Address _____

If partnership, sign all
individual names and
give address of each
partner.

Partnership Name

Name and address of
individual partners.

If corporation, officers duly
authorized should sign,
attach corporate seal.

Schroeder Asphalt Services, Inc.
Corporate Name

ATTEST:

Ronald Schroeder / Ronald Schroeder
President

Address: P.O. Box 831, Huntley, IL 60142

By: *Grace A. Foss* Grace Foss
Secretary



RETURN WITH BID

CITY OF WOOD DALE 2020 PAVEMENT PATCHING AND CRACK SEALING PROGRAM

-DISCLOSURE OF BENEFICIARIES-

In compliance with City of Wood Dale Purchasing Procedures requiring the disclosure of certain interests by persons applying for permits, licenses, approval, or benefits from the City of Wood Dale:

1. Applicant: Schroeder Asphalt Services, Inc.
Name
P.O. Box 831, Huntley, IL 60142
Address

2. Nature of Transaction Sought; for example, license permit approval or sale of products, services, or miscellaneous (explain miscellaneous):

License permit approval for services

3. Nature of Applicant: (Please check one)

- a. Natural Person: _____
- b. Corporation: X
- c. Land Trust/Trustee: _____
- d. Trust/Trustee: _____
- e. Partnership: _____
- f. Joint Venture: _____

4. If applicant is an entity other than described in Section 3, briefly state the nature and characteristics of the applicant:

5. If in your answer to Section 3 you have checked Box b, c, d, or e, identify by name and address each person or entity who is a 7.5 percent shareholder in the case of a corporation, a beneficiary in the case of a trust or land trust, a joint venturer in the case of a joint venture, or who otherwise has a proprietary interest, interest-in profits and losses, or right to control such entity.

Name	Address	Interest
a. <u>Ronald Schroeder,</u>	<u>14010 Harmony Rd.,</u>	<u>Huntley, IL 60142</u>
b. _____	_____	<u>100%</u>
c. _____	_____	_____

6. Name, address, and capacity of person making this disclosure on behalf of the applicant:

Grace Foss, 11022 S. Grant Hwy., Marengo, IL 60152

IMPORTANT NOTE: In the event your answer to Section 5 identifies entities other than a natural person, additional disclosures are required for each such entity.

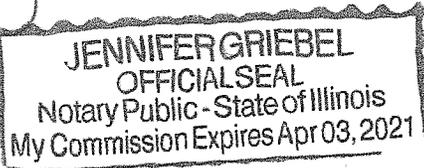
VERIFICATION

I, Grace Foss, being first duly sworn under oath, depose and state that I am the person making this disclosure on behalf of the applicant, that I am duly authorized to make this disclosure, that I have read the above and foregoing Disclosure of Beneficiaries, and that the statements contained therein are true in both substance and fact.

By: Grace A. Foss / Corporate Secretary
(Authorized Signature and Title)

Subscribed and sworn to before me this 4th day
of August, 2020.

Jennifer Griebel
Notary Public

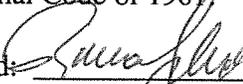


**CITY OF WOOD DALE
2020 PAVEMENT PATCHING AND CRACK SEALING PROGRAM**

BID CERTIFICATION FORM

**RE: CERTIFICATION OF BIDDER, COMPLIANCE WITH SECTION 33E-11
OF ILLINOIS CRIMINAL CODE OF 1961**

I/we hereby certify that Schroeder Asphalt Services, Inc. is not barred from bidding on this contract as the result of a violation of either Section 33E-3 or 33E-4 of this Article of the Illinois Criminal Code of 1961.

Signed:  Ronald Schroeder

Date: 8/4/2020

Title: President

**INTERFERENCE WITH PUBLIC CONTRACTING - - BID RIGGING AND
ROTATING - - KICKBACKS - - BRIBERY**

**PUBLIC ACT 85-1295
S.B. 2002**

AN ACT to add Article 33E to the "Criminal Code of 1961", approved July 28, 1961, as amended. Be it enacted by the People of the State of Illinois, represented in the General Assembly: Section 1: Article 33E is added to the "Criminal Code of 1961", approved July 28, 1961, as amended, the added Article to read as follows:

ARTICLE 33E. PUBLIC CONTRACTS

Sec. 33E-3 Bid-rigging. A person commits the offense of bid-rigging when he knowingly agrees with any person who is, or but for such agreement would be, a competitor of such person concerning any bid submitted or not submitted by such person or another to a unit of State or local government when with the intent that the bid submitted or not submitted will result in the award of a contract to such person or another and he either (1) Provides such person or receives, from another, information be disclosed to a competitor in an independent, noncollusive submission of bids or (2) Submits a bid that is off such a price, or other material terms, that he does not intend the bid to be accepted.

Bid-rigging is a Class 3 felony. Any person convicted of this offense shall be barred for 5 years from the date of conviction from bidding on any contract offered for bid by any unit of State or local government.

Sec 33E-4. Bid rotating. A person commits the offense of bid rotating when pursuant to any collusive scheme or agreement with another. He engages in a patter over time (which, for the purposes of this Section, shall include at least 3 contract bids within a period of 10 years, the most

recent of which occurs after the effective date of this amendatory Act of 1988) of submitting sealed bids to units of State or local government with the intent that the award of such bids rotates, or is distributed among persons or business entities which submit bids on a substantial number of the same contracts. Bid rotating is a Class 2 felony. Any person convicted of this offense shall be permanently barred from bidding on public contracts in the State of Illinois.

Bidder hereby certifies:

- A. That this bid is genuine and it not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation.
- B. That he has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid.
- C. That he has not solicited or induced any person, firm, or corporation to refrain from bidding.
- D. That he has not sought by collusion or otherwise to obtain for himself any advantage over any other bidder or over the Owner.
- E. That he is not barred from bidding for this Contract as a result of a violation of Section 33E-3 or Section 33E-4 of the Illinois Criminal Code of 1961 (Ill. Rev Stat. ch. 38, Paragraph 33E-1 et seq.).

SUBMITTED: _____

DATE: 8/4/2020

FIRM NAME: Schroeder Asphalt Services, Inc.

ADDRESS: P.O. Box 831, Huntley, IL 60142

SIGNED BY: *Ronald Schroeder* 8/4/2020

(Signature and Date)

Ronald Schroeder, President

(Title)

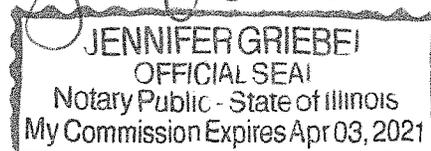
ATTEST: *Grace A. Foss* /Grace Foss

(Secretary)

Subscribed and sworn to before me this 4th day of August 2020.

(Notary Public)

23



**CITY OF WOOD DALE
2020 PAVEMENT PATCHING AND CRACK SEALING PROGRAM**

CERTIFICATION

Schroeder Asphalt Services, Inc. (hereinafter referred to as "Contractor") having submitted a bid/proposal for 2020 Pavement Patching & Crack Sealing Program to the City of Wood Dale, DuPage County, Illinois, for Schroeder Asphalt Services, Inc., hereby certifies that:

5/2-105(A) (4) including the following information:

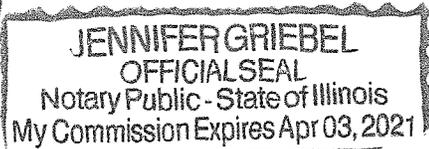
1. An acknowledgement of the illegality of sexual harassment.
2. The definition of sexual harassment under State law.
3. A description of sexual harassment, utilizing examples.
4. The contractor's internal complaint process, including penalties.
5. The legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Human Rights Commission.
6. Directions on how to contact the Department of the Commission.
7. An acknowledgement of protection of a complainant against retaliation as provided in Section 6-101 of the Human Rights Act.

Each contractor must provide a copy of such written policy to the Illinois Department of Human Rights upon request.

By: *Ronald Schroeder* /Ronald Schroeder
/President
Authorized Agent of Contractor

Subscribed and sworn to before me on this 4th day of August 2020.

Jennifer Griebel
Notary Public



**CITY OF WOOD DALE
2020 PAVEMENT PATCHING AND CRACK SEALING PROGRAM**

CONTRACTOR'S DRUG-FREE WORKPLACE CERTIFICATION

Pursuant to Ill. Rev. Stat. ch. 127 paragraph 132.311 et. seq. ("Drug Free Workplace Act), the undersigned contractor hereby certifies to the contracting agency that it will provide a drug-free workplace by:

- (a) Publishing a statement:
 - (1) Notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance, including cannabis, is prohibited in the grantee's of contractor's workplace.
 - (2) Specifying the actions that will be taken against employees for violations of such prohibition.
 - (3) Notifying the employee that, as a condition of employment on such contract or grant, the employee will:
 - (A) Abide by the terms of the statement; and
 - (B) Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.
- (b) Establishing a drug free awareness program to inform employees about:
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee's or contractor's policy of maintaining drug-free workplace;
 - (3) Any available drug counseling, rehabilitation, and employee assistance program; and
 - (4) The penalties that may be imposed upon employees for drug violation.
- (c) Making it a requirement to give a copy of the statement required by subsection (a) to each employee engaged in the performance of the contract or grant and to post the statement in a prominent place in the workplace.
- (d) Notifying the contracting agency within ten (10) days after receiving notice under par (B) of paragraph (3) of subsection (a) from an employee or otherwise receiving actual notice of such conviction.

Dated: 8/4/2020

By:  / Ronald Schroeder
President
Authorized Agent of Contractor

RETURN WITH BID

CITY OF WOOD DALE 2020 PAVEMENT PATCHING AND CRACK SEALING PROGRAM

CERTIFICATIONS

Ronald Schroeder, being first duly sworn, deposes and states that he is President of Schroeder Asphalt Services, Inc. (Partner, Officer, Owner, etc.)
Schroeder Asphalt Services, Inc. (Corporation / Company)

and that he is cognizant of the following statutory requirements and under penalty of perjury and certifies the following:

Anti-Collusion Affidavit of Compliance: That bid is genuine and not collusive or sham; that said bidder has not colluded, conspired, connived or agreed directly or indirectly with any bidder or person to put in a sham bid or to refrain from bidding; and has not in any manner directly or indirectly sought by agreement or collusion or communication or conference with any person to fix the bid price element of said bid or that of any other bidder; or to secure any advantage against any other bidder or any person interested in the proposed contract.

Public Act 85-1295: That bidder is not barred from bidding on this contract as a result of a violation of either Section 33E-3 or 33E-4 of P.A. 85-1295 (720ILCS 5).

Public Act 86-1039: That bidder is not barred from contracting with the City of Wood Dale because of any delinquency in the payment of any tax administered by the Department of Revenue unless the individual or entity is contesting, in accordance with the procedures established by the appropriate revenue act, liability for the tax, or the amount of the tax (65ILCS 5/11-42.1-1).

Public Act 86-1459: That bidder will provide a drug free workplace in accordance with the Illinois Drug Free Workplace Act (30ILCS 580/2).

Illinois Human Rights Act: That bidder is presently in compliance and agrees to comply with all applicable provisions of the Illinois Human Rights Act, together with all rules and regulations promulgated and adopted pursuant thereto (775ILCS 5/1 -101 et seq.).

Equal Employment Opportunities-Affirmative Action: That bidder is presently in compliance and agrees to comply with all applicable provisions of Equal Employment Opportunities--Affirmative Action (775ILCS 5/2-105 [A]).

Americans with Disabilities Act of 1990: That bidder is presently in compliance and agrees to comply with all applicable provisions of the Americans with Disabilities Act of 1990 together with all rules and regulations promulgated and adopted pursuant thereto.

INDIVIDUAL:

Signature of Bidder: _____

Business Address: _____

Business Phone Number: _____

PARTNERSHIP:

Partnership Name: _____

Signed By: _____

Business Address: _____

Business Phone Number: _____

Insert Names and Addresses of All Partners: _____

CORPORATION:

Corporate Name: Schroeder Asphalt Services, Inc.

Signed By: *Ronald Schroeder* /Ronald Schroeder

Title: President

Business Address: P.O. Box 831, Huntley, IL 60142

Business Phone Number: 815/923-4380

Insert Names of Corporate Officers

President: Ronald Schroeder

Secretary: Grace Foss

Treasurer: Ronald Schroeder

Attest: *Grace Foss* /Grace Foss

RETURN WITH BID

CITY OF WOOD DALE 2020 PAVEMENT PATCHING AND CRACK SEALING PROGRAM

-REFERENCES-

Name of Bidding Firm: Schroeder Asphalt Services, Inc.
(Please print)

The Contractor must list three (3) references with needs similar to the City of Wood Dale for whom Contractor has supplied the materials and services for which he is bidding on this contract within the last three years. Please include name, address, telephone number, contact person, and type of work you performed for that entity.

1. Company Name/Municipality: Village of Arlington Heights
Address: 33 S. Arlington Heights Rd., Arlington Hts., IL 60005
Phone: 847/368-5806
Contact Person: Patrick Smith
Type of Work: Asphalt Pavement Patching

2. Company Name/Municipality: Village of Downers Grove
Address: 5101 Walnut Avenue, Downers Grove, IL 60515
Phone: 630/434-5467
Contact Person: Nate Hawk
Type of Work: Asphalt Pavement Patching

3. Company Name/Municipality: Village of Vernon Hills
Address: 290 Evergreen Dr., Vernon Hills, IL 60061
Phone: 847/918-3591
Contact Person: _____
Type of Work: Asphalt Pavement Patching

SCHROEDER

ASPHALT SERVICES, INC.

PO. BOX 831
HUNTLEY, IL 60142

PHONE: (815) 923-4380
FAX: (815) 923-4389

Schroeder Asphalt Services, Inc.
Phone: 815/923-4380
Fax: 815/923-4389

Mailing & Legal Address:
P.O. Box 831
Huntley, IL 60142-0831

Office Location:
11022 S. Grant Hwy.
Marengo, IL 60152-9405

Corporation - Incorporated in the state of Illinois on 5/8/1997
In business for 23 years.

FEIN # 39-1889745

President / Treasurer: Ronald Schroeder
Vice President: Jennifer Graves
Corporate Secretary: Grace Foss

SCHROEDER ASPHALT SERVICES, INC.

P.O. BOX 831
HUNTLEY, IL 60142

PHONE: (815) 923-4380
FAX: (815) 923-4389

JOB REFERENCES

Company: Village of Arlington Heights
33 S. Arlington Heights Rd.
Arlington Heights, IL 60005

Project(s): 2013, 2014 & 2015 HMA Restoration

Amount(s): 2013 - \$83,000.00 (6/10 – 6/23/13) / 2014 - \$325,000.00 (6/10 – 11/16/14) /
2015 – \$265,008.12 (4/13 - 11/15/15) / 2016 - \$549,966.13 /
2017 - \$508,261.80 / 2018 - \$90,043.93

Engineer: Village of Arlington Heights
Jeff Musinski – 847/368-5806
jmusinski@vah.com

Company: Village of Streamwood
301 E. Irving Park Road
Streamwood, IL 60107

Project(s): 2008 & 2009 MFT Resurfacing
2013, 2014 - 2015 - 2016 Roadway Maintenance Program

Amount(s): 2008 - \$456,759.00 (5/1 – 10/31/08) / 2009 - \$399,298.00 (6/4 – 9/30/09) /
2013 - \$630,503.68 (4/30 – 10/20/13) / 2014 - \$766,572.20 (5/26 – 8/31/14) /
2015 - \$761,095.47 (6/1 - 10/18/15) / 2016 - \$862,625.45 (5/29/16 - 10/16/16) /
2018 - \$748,007.85 (5/21 – 9/30/18)

Engineer: Village of Streamwood
Matt Mann / Director of Engineering & Public Works - 630-736-3850
Mmann@streamwood.org

Company: Village of Vernon Hills
290 Evergreen Dr.
Vernon Hills, IL 60061

Project(s): 2012, 2013, 2014, 2015, 2016, 2017 & 2018 Bituminous Patching Program.1 Year Renew
2015 & 2017 Road Rehabilitation

Amount(s): 2012 - \$43,639.04 (6/25 – 7/6/12) / 2013 - \$43,072.86 (7/1 – 7/7/13) /
2014 - \$58,957.50 (8/11 – 11/16/14) / 2015 - \$73,836.77 (7/6 – 7/12/15) /
2016 - \$74,966.40 (8/1/16 - 8/28/16) / 2017 \$64,274.94 (5/29/17 – 6/9/17) /
2018 - \$74,203.84 (7/9 – 9/30/18)
2015 Road Rehabilitation \$1,178,493.22 (6/1 - 7/12/15)
2017 Road Rehabilitation \$920,041.23 (5/17 - 10/15/18)

Engineer: Village of Vernon Hills
Steven Maslov / Engineering Technician - 847/918-3590
stevem@vhill.org

Company: Village of Broadview
2350 S. 25th Avenue
Broadview, IL 60155

Project: 2017 Spring Paving Improvement

Amount(s): \$776,298.25 (5/5 - 10/19/17)

Engineer: Edwin Hancock Engineering
Chris Baker 708/865-0300
cbaker@ehancock.com

Company: Village of Palatine
 200 E. Wood St.
 Palatine, IL 60067
 Project(s): 2012 Palos Avenue Phase 2, ENG 12-401
 2015 Street Rehabilitation, 2015 Kenilworth Ave. Improvements
 Amount(s): 2012 - \$323,290.25 (4/30 – 10/31/12) / 2015 \$552,233.25 (4/20 – 6/14/15) /
 2015 – \$180,467.05 (8/3 – 9/6/15)
 2017 – 2017 Metra Paving Remove & Replace \$17,958.17 (4/23 - 4/28/17)
 2018 – West Wilson Street Improvements \$285,618.13 (4/16 – 6/24/18)
 Engineer: Village of Palatine
 Matt Grenning / Engineer - 847/359-9044
Mgrenning@palatine.il.us

Company: Village of Downers Grove
 5101 Walnut Ave.
 Downers Grove, IL 60515
 Project(s): 2012, 2013, & 2015 Fall Roadway Patching Project
 Amount(s): 2012 - \$82,839.30 (10/23 – 10/26/12) / 2013 - \$229,348.45 (10/27 – 11/17/13) /
 2015 - \$84,371.70 (9/21 – 11/8/15)
 Engineer: Village of Downers Grove
 Nate Hawk - 630/434-5467
nhawk@downers.us

Company: Winfield Township Road District
 30W575 Roosevelt Rd.
 P.O. Box 617
 West Chicago, IL 60186-0617
 Project(s): 2012, 2013, 2014, & 2015 Road Maintenance Program
 Amount(s): 2012 - \$478,599.80 (10/29 – 11/4/12) / 2013 - \$505,610.04 (9/16 – 10/20/13) /
 2014 - \$339,421.39 (10/27 – 11/9/14) / 2015 - \$478,220.38 (9/14 – 10/18/15)
 Engineer: Winfield Township Road District
 John Dusza– 630/231-8850
RoadDistrict@WinfieldTownship.com

Company: Village of Bloomingdale
 201 S. Bloomingdale Road
 Bloomingdale, IL 60108
 Project: 2015 Street Improvement Project
 Amount(s): \$1,354,600.38
 Engineer: Village of Bloomingdale
 Brian Sisco– 630/671-5675
siscob@vil.bloomingdale.il.us

Company: City of St. Charles
 2 East Main Street
 St. Charles, IL 60174
 Project: 2015 MFT Program #15-00106-00-RS
 2016 MFT Program #16-00106-00-RS
 2018 MFT Program #18-00110-00-RS
 Amount(s): 2015 - \$1,112,218.65 / 2016 - \$1,761,733.65 / 2018 - \$1,560,525.82
 Engineer: City of St. Charles
 Ken Jay 630/377-4418
kjay@stcharlesil.gov

Company: Village of Glen Ellyn
535 Duane Street
Glen Ellyn, IL 60137
Project: 2014 Street Resurfacing Project
2018 Parking Lot Resurfacing & Asphalt
Amount(s): 2014 - \$1,238,787.92 / 2018 - \$266,296.24
Engineer: Village of Glen Ellyn
Jeff Perrigo 630/547-5512
jperrigo@glenellyn.org

Company: City of Darien
1702 Plainfield Road
Darien, IL 60561
Project: 2017 & 2018 Street Program
Amount(s): 2017 - \$1,951,291.35 (5/1 - 7/30/17) / 2018 - \$1,294,013.60 (6/4 - 8/19/18)
Engineer: Dan Gombec
Darien Public Works 630/353-8106
dgombac@darienil.gov

Company: Village of Burr Ridge
7660 County Line Road
Burr Ridge, IL 60527
Project: 2017 MFT Road Program
Amount(s): \$530,429.98 (6/1 - 11/10/17)
Engineer: James Miedema, P.E. 630/323-4733 X6010
Village of Burr Ridge
jmiedema@burr-ridge.gov

Company: Village of Broadview
2350 S. 25th Avenue
Broadview, IL 60155
Project: 2017 Spring Paving Improvement
Amount(s): \$776,298.25 (5/5 - 10/19/17)
Engineer: Edwin Hancock Engineering
Chris Baker 708/865-0300
cbaker@ehancock.com

Document A310™ – 2010

Conforms with The American Institute of Architects AIA Document 310

Bid Bond

CONTRACTOR:

(Name, legal status and address)

Schroeder Asphalt Services, Inc.
PO Box 831
Huntley, IL 60142

SURETY:

(Name, legal status and principal place of business)

Hudson Insurance Company
100 William Street, 5th Floor
New York, NY 10038
Mailing Address for Notices

1411 Opus Place, Ste. 450

Downers Grove, IL 60515

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

OWNER:

(Name, legal status and address)

City of Wood Dale
404 North Wood Dale Road
Wood Dale, IL 60191

BOND AMOUNT: \$ 5% Five Percent of Amount Bid

PROJECT:

(Name, location or address, and Project number, if any)

2020 Pavement Patching and Crack Sealing Program

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this 4th day of August, 2020



(Witness)



(Witness) Graciela Casaus

Schroeder Asphalt Services, Inc.

(Principal)

By: 

(Title) Ronald Schroeder, President

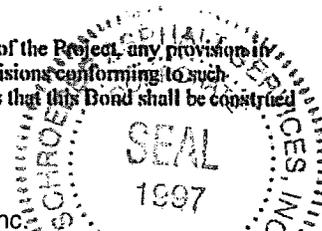
Hudson Insurance Company

(Surety)

(Seal)

By: 

(Title) James T. Moore Attorney-in-Fact





Bond No. Bid Bond

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That HUDSON INSURANCE COMPANY, a corporation of the State of Delaware, with offices at 100 William Street, New York, New York, 10038, has made, constituted and appointed, and by these presents, does make, constitute and appoint

James I. Moore of the State of IL

its true and lawful Attorney(s)-in-Fact, at New York, New York, each of them alone to have full power to act without the other or others, to make, execute and deliver on its behalf, as Surety, bonds and undertakings given for any and all purposes, also to execute and deliver on its behalf as aforesaid renewals, extensions, agreements, waivers, consents or stipulations relating to such bonds or undertakings provided, however, that no single bond or undertaking shall obligate said Company for any portion of the penal sum thereof in excess of the sum of Ten Million Dollars (\$10,000,000.00).

Such bonds and undertakings when duly executed by said Attorney(s)-in-Fact, shall be binding upon said Company as fully and to the same extent as if signed by the President of said Company under its corporate seal attested by its Secretary.

In Witness Whereof, HUDSON INSURANCE COMPANY has caused these presents to be of its Senior Vice President thereunto duly authorized on this 14th day of December, 2017 at New York, New York.



Attest... Dina Daskalakis
Dina Daskalakis
Corporate Secretary

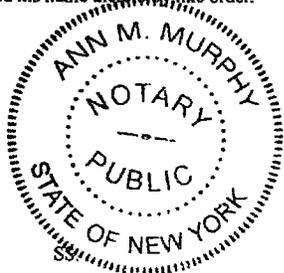
HUDSON INSURANCE COMPANY

By... Michael P. Cifone
Michael P. Cifone
Senior Vice President

STATE OF NEW YORK
COUNTY OF NEW YORK SS.

On the 14th day of December, 2017 before me personally came Michael P. Cifone to me known, who being by me duly sworn did depose and say that he is a Senior Vice President of HUDSON INSURANCE COMPANY, the corporation described herein and which executed the above instrument, that he knows the seal of said Corporation, that the seal affixed to said instrument is such corporate seal, that it was so affixed by order of the Board of Directors of said Corporation, and that he signed his name thereto by like order.

(Notarial Seal)



ANN M. MURPHY
Notary Public, State of New York
No. 01MU6067553
Qualified in Nassau County
Commission Expires December 10, 2021

CERTIFICATION

STATE OF NEW YORK
COUNTY OF NEW YORK

The undersigned Dina Daskalakis hereby certifies:

That the original resolution, of which the following is a true and correct copy, was duly adopted by unanimous written consent of the Board of Directors of Hudson Insurance Company dated July 27th, 2007, and has not since been revoked, amended or modified:

"RESOLVED, that the President, the Executive Vice Presidents, the Senior Vice Presidents and the Vice Presidents shall have the authority and discretion, to appoint such agent or agents, or attorney or attorneys-in-fact, for the purpose of carrying on this Company's surety business, and to empower such agent or agents, or attorney or attorneys-in-fact, to execute and deliver, under this Company's seal or otherwise, bonds obligations, and recognizances, whether made by this Company as surety thereon or otherwise, indemnity contracts, contracts and certificates, and any and all other contracts and undertakings made in the course of this Company's surety business, and renewals, extensions, agreements, waivers, consents or stipulations regarding undertakings so made; and

FURTHER RESOLVED, that the signature of any such Officer of the Company and the Company's seal may be affixed by facsimile to any power of attorney or certification given for the execution of any bond, undertaking, recognizance, contract of indemnity or other written obligation in the nature thereof or related thereto, such signature and seal when so used whether heretofore or hereafter, being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed."

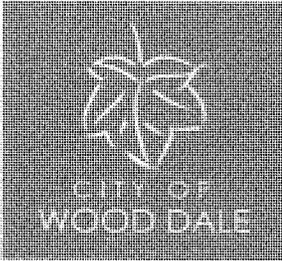
THAT the above and foregoing is a full, true and correct copy of Power of Attorney issued by said Company, and of the whole of the original and that the said Power of Attorney is still in full force and effect and has not been revoked, and furthermore that the Resolution of the Board of Directors, set forth in the said Power of Attorney is now in force.

Witness the hand of the undersigned and the seal of said Corporation this 4th day of August, 2020.

(Corporate seal)



By... Dina Daskalakis
Dina Daskalakis, Secretary



404 N. Wood Dale Road
Wood Dale, IL 60191
PHONE: 630-787-3709
FAX: 630-766-3898

Location: The City of Wood Dale, 404 N. Wood Dale Road
Project: Pavement Patching and Crack Sealing Program
Date: August 4, 2020
Time: 10:00 A.M.

*Present
Bid Bond.*

Contractor:	Bid Amount:	
Johnson Paving	\$188,980.00	y
Brothers Asphalt Paving	\$167,350.00	y
Builders Paving LLC	\$220,550.00	y
Schroeder Asphalt Sves	\$164,110.00	y
Chicago Land Paving Contractors	\$174,905.00	y

2020 PAVEMENT PATCHING AND CRACKING PROGRAM LOCATIONS

Roadways

- 1) Park Ave- From Station to the Salt Creek Pedestrian Trail.
Approx. 417.2 SY



- 2) Maple Ave – from Sunnyside to dead end. Approximatly 398.4 SY



3) Catalpa - Sunnyside to Dead End. Approximatly 670.4 SY



4) Thomas Drive and Tosca Drive – Approximately 1900 SY



5) Jessica Drive – Approximately 721 SY



6) Heather Lane – Approximatly 530 SY



7) Edgewood Ave South of Irving Park – Approximately 615 SY



Patches

All patches will be delineated with white marking paint.

Local Road Patches

1. Maple Ave just North of Irving Park Road
 - a. 10' x 19'. Approximately 21 SY

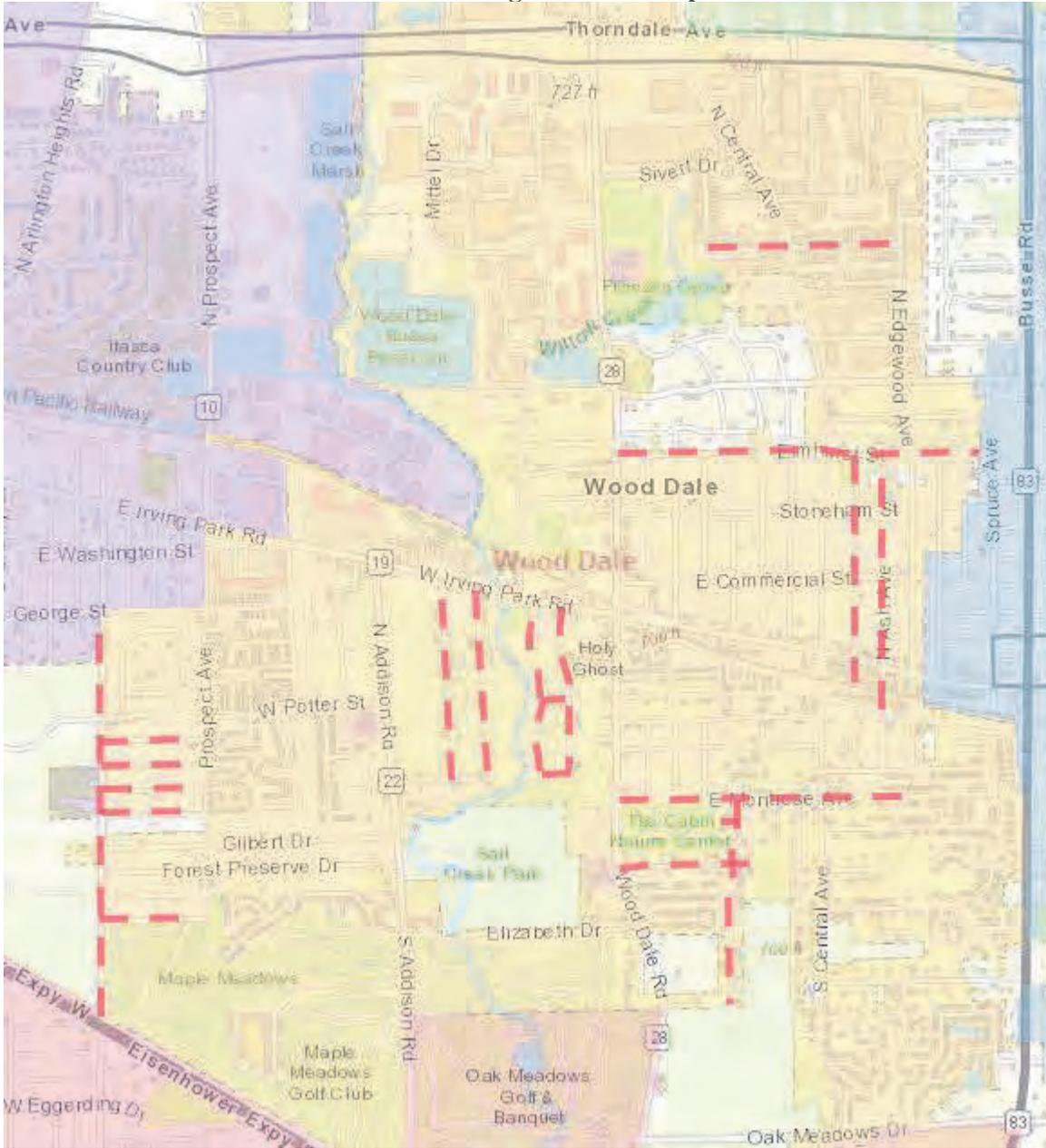
State Road Patches

1. Irving Park Road and Addison Road
 - a. Northern most Westbound lane
 - b. Center of Intersection
 - c. 5' x 6'. Approximately 3.33 SY
2. 310 E. Irving Park Road at Central
 - a. Southern most Eastbound lane
 - b. 6' x 13'. Approximately 8.7 SY
3. 249 E. Irving Park Road and Maple
 - a. Northwest Corner in Westbound lane.
 - b. 19' x 22'. Approximately 46 SY
4. 217 E. Irving Park Road
 - a. Northern most Westbound lane
 - b. 7' x 16'. Approximately 12.4 SY
5. 422 N. Wood Dale Road
 - a. Western most Southbound lane
 - b. 15' x 15'. Approximately 25 SY

County Road Patches

1. 404 N. Wood Dale Road
 - a. At intersection of Center Street
 - b. 12' x 16'. Approximately 21.34
2. 422 N. Wood Dale Road
 - a. 5' x 18'. Approximately 10 SY

Crack Sealing Location Map





REQUEST FOR COMMITTEE ACTION

Referred to Committee: August 13, 2020
Subject: FY 2021 Sewer Rehabilitation
Staff Contact: Alan Lange, Public Works Director
Department: Public Works

TITLE: Approval of an Agreement between the City of Wood Dale and Hoerr Construction, Inc. for the FY 2021 Sewer Rehabilitation Project in an Amount Not to Exceed \$722,105

RECOMMENDATION:

Staff Recommends Approval of an Agreement between the City of Wood Dale and Hoerr Construction, Inc. for the FY 2021 Sewer Rehabilitation Project in an Amount Not to Exceed \$722,105.

BACKGROUND:

The City experienced very rapid development in the 1960's, and as such, much of its critical infrastructure is nearing the end of its useful life. The City has experienced some sanitary sewer overflows from the collection system during significant wet weather events in recent years. Additionally, some sections of our sewer system are in need of significant structural repairs. These conditions can lead to sanitary sewer backups and overflows, sinkholes and collapse, and significant inflow of storm water into our sanitary collection system resulting in the unnecessary treatment of storm water thereby increasing operational costs. The City has committed to addressing these issues by identifying areas in need of repair, conducting an inflow and infiltration study, and scheduling repairs based on this data. This project is one phase of providing reliability to our collection system to extend its life for another fifty years. The project will include sewer lining, point repairs to areas that require extensive repairs and site restoration.

ANALYSIS:

Staff had originally budgeted within the CIP \$300,000 per year over the next five years for repairs and rehabilitation to this area. However, recent condition assessments would recommend that we accelerate these repairs in order to provide reliable service to our residents and avoid potential failures which could lead to public health issues and

violations being issued by the IEPA. The engineer's estimate for this work was \$471,210. Bids came in higher than expected due to a number of factors including complexity of the rear yard excavations, as well as contingency being added for actual conditions of pipe sections which have yet to be televised. The Public Works Department feels however, that it is not in our best interest to rebid the project as there was a general consensus amongst the bids and the City would incur higher engineering costs if the project was delayed and rebid. There is also the possibility that the deteriorated sections could collapse leading to sanitary sewer backups and sinkholes. Future planned projects such as the Ash Lift Station Rehabilitation and South Waste Water Treatment Plant project would be pushed further out to accommodate the increase in cost.

DOCUMENTS ATTACHED

- ✓ RJN Recommendation Letter
- ✓ Bid Tabulation
- ✓ Current Infrastructure Condition

August 5, 2020

Mr. Alan Lange
Director of Public Works
City of Wood Dale
404 N Wood Dale Rd
Wood Dale, Illinois 60191

**SUBJECT: CITY OF WOOD DALE, 2020 SANITARY SEWER REHABILITATION PROGRAM - CONTRACT
AWARD RECOMMENDATION**

Dear Mr. Lange:

Five (5) base bids were received for the above-referenced project. The lowest responsible base bid was received from Hoerr Construction, Inc. of Goodfield, IL in the bid amount of \$722,105.00. A summary of the five base bids received for this project are as follows:

Hoerr Construction, Inc.....	\$722,105.00
Insituform Technologies USA, LLC.....	\$773,995.00
National Power Rodding Corp.....	\$779,950.00
Michels Corporation.....	\$821,750.00
Visu-Sewer.....	\$824,800.00

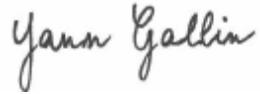
The engineer’s estimate for the above referenced base bid was \$417,210.00. The lowest responsible bidder was approximately 73% over the engineer’s estimate. RJN Group has had numerous positive experiences working with Hoerr Construction, Inc. on previous projects in the field of sanitary sewer rehabilitation. Therefore, we recommend that the City of Wood Dale award the contract for the 2020 Sanitary Sewer Rehabilitation Program to Hoerr Construction, Inc. in the bid amount of \$722,105.00.

Despite the large discrepancy between the engineer’s base bid cost estimate and the contractors’ base bids, we feel nothing would be gained from a rebid as the bids were in a relatively tight range. The unknown conditions of the sewers that need lining, and are yet to be televised, is represented by the contractors’ consistently higher bids and their undertaking of this risk. Additionally, the complexity of the backyard point repairs presented additional risk for the contractors more specifically with regards to access difficulties, excavation, protection of aboveground facilities, and the removal of a shed. The deteriorating condition of several sewer sections warrant corrective action in the near future.

Please call me with any questions at 630.682.4700 ext. 1317.

Sincerely yours,

RJN GROUP, INC.



Yann Gallin
Project Manager



Patrick Hulsebosch, E.I.T.
Lead Project Engineer

**City of Wood Dale
2020 Sewer Rehabilitation Program
Bid Tabulation**

ITEM NO.	DESCRIPTION	UNIT OF MEASURE	BID QUANTITY	UNIT PRICE	ENGINEER'S ESTIMATE	Hoerr Construction, Inc.		Insituform Technologies USA, LLC		National Power Rodding Corp.		Visu-Sewer		Michels Corporation		
						Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price	
1	SEWER CLEANING AND TELEVISIONING	FOOT	12,000	\$ 6.00	\$ 72,000.00	\$ 7.00	\$ 84,000.00	\$ 8.60	\$ 103,200.00	\$ 6.50	\$ 78,000.00	\$ 6.25	\$ 75,000.00	\$ 11.00	\$ 132,000.00	
2	PRE-CONSTRUCTION SURFACE TELEVISIONING	L SUM	1	\$ 2,750.00	\$ 2,750.00	\$ 12,000.00	\$ 12,000.00	\$ 3,550.00	\$ 3,550.00	\$ 15,000.00	\$ 15,000.00	\$ 11,000.00	\$ 11,000.00	\$ 7,310.00	\$ 7,310.00	
3	POINT REPAIR - OAK 1, 8" DIAMETER, 5' LENGTH, 9.2' DEPTH, GRASS RESTORATION	L SUM	1	\$ 11,000.00	\$ 11,000.00	\$ 15,000.00	\$ 15,000.00	\$ 13,650.00	\$ 13,650.00	\$ 17,500.00	\$ 17,500.00	\$ 13,750.00	\$ 13,750.00	\$ 13,000.00	\$ 13,000.00	
4	POINT REPAIR - OAK 2, 8" DIAMETER, 5' LENGTH, 12.1' DEPTH, GRASS RESTORATION	L SUM	1	\$ 13,500.00	\$ 13,500.00	\$ 15,480.00	\$ 15,480.00	\$ 14,100.00	\$ 14,100.00	\$ 17,500.00	\$ 17,500.00	\$ 14,190.00	\$ 14,190.00	\$ 13,500.00	\$ 13,500.00	
5	POINT REPAIR - OAK 3, 8" DIAMETER, 10' LENGTH, 12.2' DEPTH, GRASS RESTORATION	L SUM	1	\$ 17,000.00	\$ 17,000.00	\$ 15,000.00	\$ 15,000.00	\$ 13,650.00	\$ 13,650.00	\$ 17,500.00	\$ 17,500.00	\$ 13,750.00	\$ 13,750.00	\$ 13,000.00	\$ 13,000.00	
6	POINT REPAIR - CEDAR 1, 8" DIAMETER, 5' LENGTH, 8.5' DEPTH, GRASS RESTORATION	L SUM	1	\$ 13,200.00	\$ 13,200.00	\$ 25,800.00	\$ 25,800.00	\$ 23,500.00	\$ 23,500.00	\$ 30,100.00	\$ 30,100.00	\$ 23,650.00	\$ 23,650.00	\$ 22,500.00	\$ 22,500.00	
7	POINT REPAIR - HEMLOCK 1, 8" DIAMETER, 5' LENGTH, 8.6' DEPTH, GRASS RESTORATION	L SUM	1	\$ 13,200.00	\$ 13,200.00	\$ 25,800.00	\$ 25,800.00	\$ 23,500.00	\$ 23,500.00	\$ 30,100.00	\$ 30,100.00	\$ 23,650.00	\$ 23,650.00	\$ 22,500.00	\$ 22,500.00	
8	POINT REPAIR - ASH 1, 8" DIAMETER, 54' LENGTH, 10.2' - 11.2' DEPTH, GRASS RESTORATION	L SUM	1	\$ 30,000.00	\$ 30,000.00	\$ 99,240.00	\$ 99,240.00	\$ 90,350.00	\$ 90,350.00	\$ 115,780.00	\$ 115,780.00	\$ 90,970.00	\$ 90,970.00	\$ 85,000.00	\$ 85,000.00	
9	EMERGENCY POINT REPAIR	L SUM	1	\$ 16,500.00	\$ 16,500.00	\$ 21,000.00	\$ 21,000.00	\$ 19,200.00	\$ 19,200.00	\$ 24,500.00	\$ 24,500.00	\$ 19,250.00	\$ 19,250.00	\$ 18,000.00	\$ 18,000.00	
10	ADDITIONAL 8" SANITARY SEWER, ASTM 3034 SDR 26	FOOT	10	\$ 275.00	\$ 2,750.00	\$ 42.00	\$ 420.00	\$ 38.00	\$ 380.00	\$ 49.00	\$ 490.00	\$ 38.50	\$ 385.00	\$ 35.00	\$ 350.00	
11	ADDITIONAL 6" SANITARY LATERAL, ASTM 3034 SDR 26	FOOT	10	\$ 165.00	\$ 1,650.00	\$ 12.00	\$ 120.00	\$ 11.00	\$ 110.00	\$ 14.00	\$ 140.00	\$ 11.00	\$ 110.00	\$ 10.00	\$ 100.00	
12	ADDITIONAL SERVICE CONNECTION REPAIR (WITHIN TRENCH)	EACH	1	\$ 1,320.00	\$ 1,320.00	\$ 120.00	\$ 120.00	\$ 110.00	\$ 110.00	\$ 140.00	\$ 140.00	\$ 110.00	\$ 110.00	\$ 100.00	\$ 100.00	
13	DYE TESTING OF EXISTING SERVICES	EACH	5	\$ 660.00	\$ 3,300.00	\$ 1,000.00	\$ 5,000.00	\$ 1,600.00	\$ 8,000.00	\$ 750.00	\$ 3,750.00	\$ 600.00	\$ 3,000.00	\$ 1,000.00	\$ 5,000.00	
14	CURED-IN-PLACE SEWER LINER, 8" DIAMETER	FOOT	3,600	\$ 33.00	\$ 118,800.00	\$ 60.00	\$ 216,000.00	\$ 30.00	\$ 108,000.00	\$ 47.00	\$ 169,200.00	\$ 48.50	\$ 174,600.00	\$ 52.00	\$ 187,200.00	
15	CIPP SECTIONAL LINER INSTALLATION, 8" DIAMETER, 5-FOOT	EACH	3	\$ 5,000.00	\$ 15,000.00	\$ 6,000.00	\$ 18,000.00	\$ 5,500.00	\$ 16,500.00	\$ 7,500.00	\$ 22,500.00	\$ 5,495.00	\$ 16,485.00	\$ 6,008.00	\$ 18,024.00	
16	INTERNAL SERVICE LATERAL REINSTATEMENT	EACH	75	\$ 143.00	\$ 10,725.00	\$ 100.00	\$ 7,500.00	\$ 190.00	\$ 14,250.00	\$ 250.00	\$ 18,750.00	\$ 25.00	\$ 1,875.00	\$ 100.00	\$ 7,500.00	
17	PROTRUDING TAP REMOVAL	EACH	6	\$ 440.00	\$ 2,640.00	\$ 700.00	\$ 4,200.00	\$ 795.00	\$ 4,770.00	\$ 500.00	\$ 3,000.00	\$ 200.00	\$ 1,200.00	\$ 417.00	\$ 2,502.00	
18	LATERAL CLEANING & TELEVISIONING	EACH	75	\$ 550.00	\$ 41,250.00	\$ 675.00	\$ 50,625.00	\$ 1,800.00	\$ 135,000.00	\$ 1,300.00	\$ 97,500.00	\$ 2,150.00	\$ 161,250.00	\$ 1,545.00	\$ 115,875.00	
19	LATERAL TELEVISIONING (PUSH CAMERA)	LF	50	\$ 16.50	\$ 825.00	\$ 20.00	\$ 1,000.00	\$ 127.00	\$ 6,350.00	\$ 50.00	\$ 2,500.00	\$ 30.00	\$ 1,500.00	\$ 102.00	\$ 5,100.00	
20	AIR TEST AND GROUT MAINLINE JOINTS, 8"	EACH	3	\$ 110.00	\$ 330.00	\$ 2,100.00	\$ 6,300.00	\$ 2,950.00	\$ 8,850.00	\$ 2,500.00	\$ 7,500.00	\$ 1,150.00	\$ 3,450.00	\$ 2,603.00	\$ 7,809.00	
21	AIR TEST AND GROUT SERVICE CONNECTION, 5-FOOT	EACH	75	\$ 495.00	\$ 37,125.00	\$ 650.00	\$ 48,750.00	\$ 1,560.00	\$ 117,000.00	\$ 650.00	\$ 48,750.00	\$ 1,545.00	\$ 115,875.00	\$ 1,357.00	\$ 101,775.00	
22	CIPP LATERAL LINER INSTALLATION, 8"x 6", 5-FOOT SHORTY	EACH	3	\$ 3,630.00	\$ 10,890.00	\$ 5,250.00	\$ 15,750.00	\$ 4,650.00	\$ 13,950.00	\$ 8,500.00	\$ 25,500.00	\$ 4,675.00	\$ 14,025.00	\$ 4,381.00	\$ 13,143.00	
23	ADDITIONAL CIPP LATERAL LINER, 6"	FOOT	15	\$ 77.00	\$ 1,155.00	\$ 300.00	\$ 4,500.00	\$ 275.00	\$ 4,125.00	\$ 250.00	\$ 3,750.00	\$ 275.00	\$ 4,125.00	\$ 257.00	\$ 3,855.00	
24	PROJECT MANAGEMENT	HR	30	\$ 360.00	\$ 10,800.00	\$ 300.00	\$ 9,000.00	\$ 220.00	\$ 6,600.00	\$ 500.00	\$ 15,000.00	\$ 220.00	\$ 6,600.00	\$ 155.00	\$ 4,650.00	
25	LANDSCAPE ALLOWANCE	EACH	15	\$ 500.00	\$ 7,500.00	\$ 500.00	\$ 7,500.00	\$ 500.00	\$ 7,500.00	\$ 500.00	\$ 7,500.00	\$ 500.00	\$ 7,500.00	\$ 500.00	\$ 7,500.00	
26	LATERAL LAUNCH SERVICES	EACH	10	\$ 1,600.00	\$ 16,000.00	\$ 1,400.00	\$ 14,000.00	\$ 1,780.00	\$ 17,800.00	\$ 800.00	\$ 8,000.00	\$ 2,750.00	\$ 27,500.00	\$ 1,461.00	\$ 14,610.00	
BASE BID TOTAL:					\$ 471,210.00											
							As Read	\$ 722,105.00	\$ 773,995.00	\$ 779,950.00	\$ 797,300.00	\$ 821,750.00	\$ 821,750.00			
							As Corrected	\$ 722,105.00	\$ 773,995.00	\$ 773,995.00	\$ 779,950.00	\$ 824,800.00	\$ 821,903.00	\$ 821,903.00		

**City of Wood Dale
2020 Sewer Rehabilitation Program
Bid Tabulation**

ITEM NO.	SUPPLEMENTAL LANDSCAPING UNIT PRICES	UNIT OF MEASURE	BID QUANTITY	UNIT PRICE	TOTAL PRICE	Hoerr Construction, Inc.	Insituform Technologies USA, LLC	National Power Rodding Corp.	Visu-Sewer	Michels Corporation
						Unit Price	Unit Price	Unit Price	Unit Price	Unit Price
25.1	PROTECT & REPLANT EXISTING SHRUB	EACH	-	\$225.00	-	\$ 600.00	\$ 550.00	\$ 1,500.00	\$ 550.00	\$ 500.00
25.2	DENSI YEW, 3FT, BALLED & BURLAP	EACH	-	\$150.00	-	\$ 780.00	\$ 715.00	\$ 1,500.00	\$ 715.00	\$ 650.00
25.3	ARBORVITAE, 5 GALLON, 3 FOOT	EACH	-	\$150.00	-	\$ 780.00	\$ 715.00	\$ 1,500.00	\$ 715.00	\$ 650.00
25.4	MAGNOLIA, 5 GALLON, 4 FOOT	EACH	-	\$250.00	-	\$ 780.00	\$ 715.00	\$ 1,500.00	\$ 715.00	\$ 650.00
25.5	PERENNIAL SHRUB, 2 1/2 GAL.	EACH	-	\$75.00	-	\$ 780.00	\$ 715.00	\$ 1,500.00	\$ 715.00	\$ 650.00
25.6	RESTORE MULCH OR STONE COVERING	SY	-	\$90.00	-	\$ 600.00	\$ 550.00	\$ 1,500.00	\$ 550.00	\$ 500.00
25.7	REMOVE & REPLACE MULCH OR STONE COVERING	SY	-	\$90.00	-	\$ 600.00	\$ 550.00	\$ 1,500.00	\$ 3,960.00	\$ 500.00

**City of Wood Dale
2020 Sewer Rehabilitation Program
Bid Tabulation**

ITEM NO.	ALTERNATE A	UNIT OF MEASURE	BID QUANTITY	UNIT PRICE	TOTAL PRICE	Hoerr Construction, Inc.		Insituform Technologies USA, LLC		National Power Rodding Corp.		Visu-Sewer		Michels Corporation		
						Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price	
A1.1	PRE-CONSTRUCTION SURFACE TELEVISIONING	L SUM	1	\$ 2,750.00	\$ 2,750.00	\$ 4,000.00	\$ 4,000.00	\$ 550.00	\$ 550.00	\$ 7,500.00	\$ 7,500.00	\$ 2,000.00	\$ 2,000.00	\$ 500.00	\$ 500.00	
A1.2	POINT REPAIR - WALNUT 1, 8" DIAMETER, 18' LENGTH, 8.6' DEPTH, GRASS RESTORATION	L SUM	1	\$ 15,400.00	\$ 15,400.00	\$ 35,400.00	\$ 35,400.00	\$ 32,500.00	\$ 32,500.00	\$ 41,300.00	\$ 41,300.00	\$ 32,450.00	\$ 32,450.00	\$ 30,000.00	\$ 30,000.00	
A1.3	EMERGENCY POINT REPAIR	L SUM	1	\$ 16,500.00	\$ 16,500.00	\$ 21,000.00	\$ 21,000.00	\$ 19,000.00	\$ 19,000.00	\$ 24,500.00	\$ 24,500.00	\$ 19,250.00	\$ 19,250.00	\$ 18,000.00	\$ 18,000.00	
A1.4	ADDITIONAL 8" SANITARY SEWER, ASTM 3034 SDR 26	FOOT	10	\$ 275.00	\$ 2,750.00	\$ 42.00	\$ 420.00	\$ 40.00	\$ 400.00	\$ 49.00	\$ 490.00	\$ 38.50	\$ 385.00	\$ 35.00	\$ 350.00	
A1.5	ADDITIONAL 6" SANITARY LATERAL, ASTM 3034 SDR 26	FOOT	10	\$ 165.00	\$ 1,650.00	\$ 12.00	\$ 120.00	\$ 11.00	\$ 110.00	\$ 14.00	\$ 140.00	\$ 11.00	\$ 110.00	\$ 10.00	\$ 100.00	
A1.6	ADDITIONAL SERVICE CONNECTION REPAIR (WITHIN TRENCH)	EACH	1	\$ 1,320.00	\$ 1,320.00	\$ 120.00	\$ 120.00	\$ 110.00	\$ 110.00	\$ 140.00	\$ 140.00	\$ 110.00	\$ 110.00	\$ 100.00	\$ 100.00	
A1.7	DYE TESTING OF EXISTING SERVICES	EACH	10	\$ 660.00	\$ 6,600.00	\$ 1,000.00	\$ 10,000.00	\$ 1,600.00	\$ 16,000.00	\$ 750.00	\$ 7,500.00	\$ 600.00	\$ 6,000.00	\$ 1,000.00	\$ 10,000.00	
A1.8	CURED-IN-PLACE SEWER LINER, 8" DIAMETER	FOOT	1630	\$ 33.00	\$ 53,790.00	\$ 60.00	\$ 97,800.00	\$ 107.00	\$ 174,410.00	\$ 55.00	\$ 89,650.00	\$ 70.00	\$ 114,100.00	\$ 60.00	\$ 97,800.00	
A1.9	INTERNAL SERVICE LATERAL REINSTATEMENT	EACH	30	\$ 143.00	\$ 4,290.00	\$ 100.00	\$ 3,000.00	\$ 190.00	\$ 5,700.00	\$ 250.00	\$ 7,500.00	\$ 25.00	\$ 750.00	\$ 100.00	\$ 3,000.00	
A1.10	PROTRUDING TAP REMOVAL	EACH	3	\$ 440.00	\$ 1,320.00	\$ 700.00	\$ 2,100.00	\$ 795.00	\$ 2,385.00	\$ 500.00	\$ 1,500.00	\$ 200.00	\$ 600.00	\$ 417.00	\$ 1,251.00	
A1.11	LATERAL CLEANING & TELEVISIONING	EACH	31	\$ 550.00	\$ 17,050.00	\$ 675.00	\$ 20,925.00	\$ 2,000.00	\$ 62,000.00	\$ 1,300.00	\$ 40,300.00	\$ 2,150.00	\$ 66,650.00	\$ 1,730.00	\$ 53,630.00	
A1.12	LATERAL TELEVISIONING (PUSH CAMERA)	LF	50	\$ 16.50	\$ 825.00	\$ 20.00	\$ 1,000.00	\$ 126.00	\$ 6,300.00	\$ 25.00	\$ 1,250.00	\$ 30.00	\$ 1,500.00	\$ 102.00	\$ 5,100.00	
A1.13	AIR TEST AND GROUT MAINLINE JOINTS, 8"	EACH	3	\$ 110.00	\$ 330.00	\$ 2,100.00	\$ 6,300.00	\$ 4,850.00	\$ 14,550.00	\$ 1,500.00	\$ 4,500.00	\$ 1,150.00	\$ 3,450.00	\$ 2,602.00	\$ 7,806.00	
A1.14	AIR TEST AND GROUT SERVICE CONNECTION, 5-FOOT	EACH	31	\$ 495.00	\$ 15,345.00	\$ 650.00	\$ 20,150.00	\$ 1,750.00	\$ 54,250.00	\$ 750.00	\$ 23,250.00	\$ 1,545.00	\$ 47,895.00	\$ 1,537.00	\$ 47,647.00	
A1.15	CIPP LATERAL LINER INSTALLATION, 5-FOOT SHORTY	EACH	3	\$ 3,630.00	\$ 10,890.00	\$ 6,000.00	\$ 18,000.00	\$ 4,650.00	\$ 13,950.00	\$ 7,500.00	\$ 22,500.00	\$ 4,675.00	\$ 14,025.00	\$ 4,381.00	\$ 13,143.00	
A1.16	ADDITIONAL CIPP LATERAL LINER, 6"	FOOT	15	\$ 77.00	\$ 1,155.00	\$ 300.00	\$ 4,500.00	\$ 275.00	\$ 4,125.00	\$ 150.00	\$ 2,250.00	\$ 275.00	\$ 4,125.00	\$ 257.00	\$ 3,855.00	
A1.17	PROJECT MANAGEMENT	HR	4	\$ 360.00	\$ 1,440.00	\$ 300.00	\$ 1,200.00	\$ 220.00	\$ 880.00	\$ 675.00	\$ 2,700.00	\$ 220.00	\$ 880.00	\$ 155.00	\$ 620.00	
A1.18	LANDSCAPE ALLOWANCE	EACH	2	\$ 500.00	\$ 1,000.00	\$ 500.00	\$ 1,000.00	\$ 500.00	\$ 1,000.00	\$ 500.00	\$ 1,000.00	\$ 500.00	\$ 1,000.00	\$ 500.00	\$ 1,000.00	
ALTERNATE BID A TOTAL:					\$ 154,405.00											
						As Read		\$ 247,035.00		\$ 408,220.00		\$ 277,970.00		\$ 315,280.00		\$ 293,902.00
						As Corrected		\$ 247,035.00		\$ 408,220.00		\$ 277,970.00		\$ 315,280.00		\$ 293,902.00

**CITY OF WOOD DALE
DUPAGE COUNTY, ILLINOIS**

CURRENT INFRASTRUCTURE CONDITIONS

REBUILD ILLINOIS
FAST TRACK PUBLIC INFRASTRUCTURE

FOR

**CITY OF WOOD DALE, ILLINOIS
2020 SANITARY SEWER REHABILITATION PROJECT**



CITY OF
WOOD DALE

TABLE OF CONTENTS

2020 SANITARY SEWER REHABILITATION PROJECT

CITY OF WOOD DALE, ILLINOIS

<u>Title</u>	<u>Page</u>
Sewer Replacements.....	3
Point Repairs.....	7
CIPP Lining.....	13

Sewer Replacements

Upstream Manhole (USMH)	Downstream Manhole (DSMH)	Location	Pipe Diameter (in.)	Pipe Material	Drop Pipe?	Segment Length (ft.)	USMH Depth (ft.)	DSMH Depth (ft.)	Number of Live Services
24:31	24:29	171 W Irving Park Rd	8	VCP	Y	172.2	8.5	12.2	2
24:107	24:108	358 Ash Ave	8	VCP	N	202.9	9.7	TBD	4

24-31:24-29

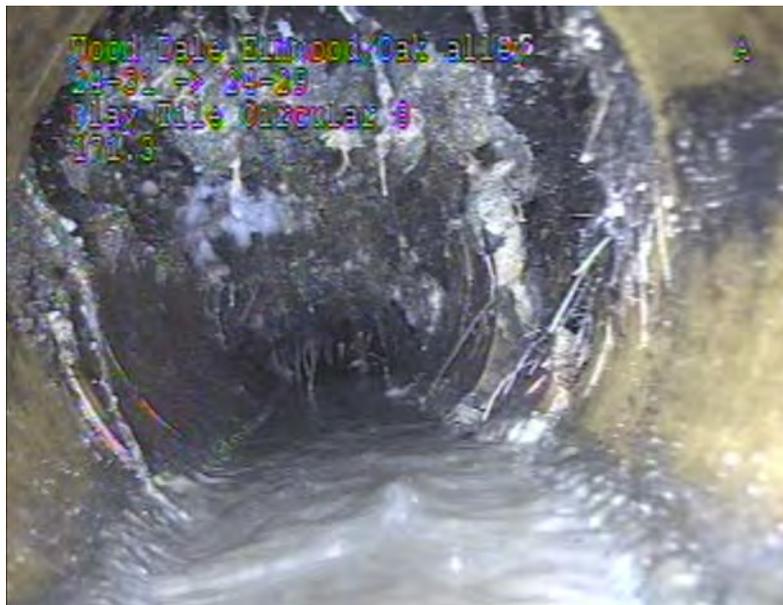
Fracture Multiple 77.8'



Broken 133.8'



Severe Root Infiltration MSA 172'

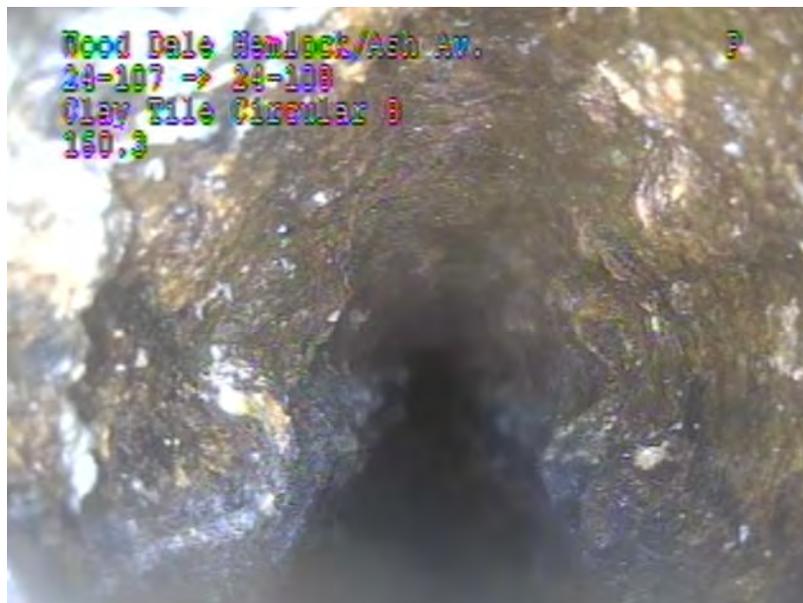




24-107:24-108

Severe Grease Deposits 160.3' and MSA





Point Repairs

Point Repair (PR) Number	Upstream Manhole (USMH)	Downstream Manhole (DSMH)	Approximate Address	Pipe Diameter (in.)	PR from USMH	Length of PR (ft.)	Estimated Depth of PR (ft.)	Repair Type
1	24-24	24-25	390 N Oak Ave	8	85.1	5	9.2	Broken Lateral (85.1' from USMH)
2	24-50	24-51	382 N Cedar Ave	8	133.0	5	8.5	Broken Lateral Connection (133' from USMH)
3	24-29	24-28	306 N Oak Ave	8	23.9	5	12.1	Hole Soil Visible
4	24-95	24-96	374 N Hemlock Ave	8	100.2	5	8.6	Hole Visible (100.2' from USMH)
5	24-18	24-17	415 Walnut Ave	8	42.0	18	8.5	Three Offset Laterals (42', 45.2' and 54.6')

24-24:24-25

Broken Lateral 85.1'



24-50:24-51

Broken Lateral Connection 134.3'



24-29:24-28

Hole Soil Visible 23.9'



24-95:24-96

Hole 101.7'



24-17:24-18

Large Offset Lateral 42' and 45.2'



Large Offset Lateral 54.6'



CIPP Lining

Upstream Manhole (USMH)	Downstream Manhole (DSMH)	Location	Pipe Diameter (in.)	Pipe Material	Segment Length (ft.)	Active Services	Capped Services
24-4	24-5	Walnut Ave	8	VCP	162.1	4	0
24-6A	24R-1	Walnut Ave	8	VCP	69.8	0	0
24-24	24-25	Elmwood Avenue	8	VCP	228	7	1
24-27	24R-3	Elmwood Avenue	8	VCP	244	8	0
24-51	24-52	Cedar Avenue	8	VCP	304	8	2

24-4:24-5

Hole Soil Visible 0.7'



Severe Encrustation 27.2'



24-6A:24R-1

Crack Multiple 30.3'



Crack Hinge 33.6'



24-27:24R-3

Severe Encrustation 164.2' – 218.9'





24-51:24-52

Crack Hinge 2.9'



Crack Hinge 87.8'



Fracture Circumferential 298.3'





FINANCE & ADMINISTRATION COMMITTEE MINUTES

Committee Date: July 9, 2020
Present: Ald. Catalano, Jakab, Sorrentino, Susmarski & Woods
Absent: Ald. R. Messina, E. Wesley & R. Wesley
Also Present: Mayor Police, Treasurer Porch, Clerk Curiale,
City Manager Mermuys, Chief Vesta, A. Lange, E. Cage, B. Wilson
Meeting Convened at: 8:55 p.m.

APPROVAL OF MINUTES:

The minutes of the June 11, 2020 meeting were approved as presented.

REPORT & RECOMMENDATION

BILL PRINTING AND MAILING SERVICES CONTRACT

DISCUSSION:

Director Wilson explained this is part of the ERP process and that staff wants to ensure vendors align with all capabilities of that new system. The new vendor can integrate smoother with ERP than the current incumbent so it would be very beneficial to the City. Ald. Jakab asked about savings that will be seen and was advised by Mr. Wilson that \$21,000 is currently being spent for bill printing and stuffing of bills. The new company will be below \$8,300 per year and can get closer to \$8,000 with some companion billings. It also has the ability to suppress envelopes for auto pay.

VOTE:

Ald. Woods made a motion, seconded by Ald. Susmarski, to approve a Utility Bill Printing and Mailing Services Contract with InfoSend, Inc. A roll call vote was taken, with the following results:

Ayes: Ald. Catalano, Jakab, Sorrentino, Susmarski & Woods
Nays: None
Abstained: None
Motion: Carried



ITEMS TO BE CONSIDERED AT FUTURE MEETINGS:

None

ADJOURNMENT:

The meeting adjourned at 9:00 p.m.

Minutes taken by Eileen Schultz



REQUEST FOR COMMITTEE ACTION

Referred to Committee: August 13, 2020
Subject: Series 2012 Refunding Analysis
Staff Contact: Brad Wilson, Finance Director
Department: Finance

TITLE: Series 2012 Refunding Analysis

RECOMMENDATION:

Provide staff with direction regarding whether or not to pursue refunding of the 2012 bond, and if so, which of the three options.

BACKGROUND:

In 2012 the City issued bonds for the first phase of the treatment plant rehabilitation project. The City has the ability to refund those bonds beginning in Q4 of this year. While the City received a very good interest rate when we first issued the bonds, with the historically low interest rates that we are currently experiencing there is the opportunity to find some savings in refunding the bonds.

ANALYSIS:

The City has three primary options for refunding the bonds. Two of the options require minimal Council action, while one of the options requires a full suite of issuance requirements including newspaper posting and a public hearing.

The three options are:

- 1 – Level savings. Save roughly \$24K per year, estimated total savings of \$286K.
- 2 – Deferred savings. Savings increase each year, estimated total savings of \$307K.

3 – Two year extension. Savings would be between \$55K - \$145 per year, but then 2 years of new debt service would be added to the back-end of the deal. The debt service in this scenario would end at the same time as the IEPA Loan would. Estimated total savings of \$13K, however the real savings would be the reduction in yearly spend, which is offset by the additional years.

Of these options, staff would recommend option 2 first, followed by 3, then 1.

- Option 2 helps to flatten the debt service curve in the future years which would help moderate (not eliminate) rate increases.
- Option 3 provides significant relief, but does add an additional 2 years, so the question at hand is, is the relief each year worth those extra years.
- Option 1 provides some relief in each year. This is fine, but the other options help to moderate future rate increases, whereas this does the first year then is stagnant thereafter.

Relative to the refunding itself, the current savings analysis are based upon refunding with the company that currently holds the bonds. This is the most cost effective way to do it, and with the thin margins we are working with, those could easily be eroded away by all of the fees of doing the deal with a different firm. Also, the firm that holds these bonds is the same firm that won the bid for the Stormwater Bonds issued earlier this year, so they are clearly a firm that has and wants to continue working with the City on these types of deals to help save the City money.

Based upon the direction received, staff will begin to work with the appropriate parties to get the process in motion. An estimated timeline for option 1 or 2 would have the refunding ordinance before the Council in October, and have the close in November/December; option 3 would have a slightly protracted timeline due the need to do a posting and public hearing.

DOCUMENTS ATTACHED

- ✓ Option 1 – 3 analysis

City of Wood Dale, Illinois

Series 2012 Refunding Analysis

6/19/2020

Scenario 1: Level Savings

Calendar Year	Current 2012 Debt Service	General Obligation Refunding Bonds, Series 2020B Dated: October 7, 2020			Refunded 2012 Debt Service	Estimated Net New Debt Service	Savings
		Principal (12/30)	Interest (1) (6/30 & 12/30)	Total			
2020	\$651,070		\$59,022	\$59,022	(\$59,022)	\$651,070	\$0
2021	661,970	380,000	256,000	636,000	(661,970)	636,000	25,970
2022	672,470	410,000	240,800	650,800	(672,470)	650,800	21,670
2023	677,075	430,000	224,400	654,400	(677,075)	654,400	22,675
2024	690,855	460,000	207,200	667,200	(690,855)	667,200	23,655
2025	698,550	485,000	188,800	673,800	(698,550)	673,800	24,750
2026	705,230	510,000	169,400	679,400	(705,230)	679,400	25,830
2027	715,855	545,000	149,000	694,000	(715,855)	694,000	21,855
2028	725,255	575,000	127,200	702,200	(725,255)	702,200	23,055
2029	733,380	605,000	104,200	709,200	(733,380)	709,200	24,180
2030	738,880	635,000	80,000	715,000	(738,880)	715,000	23,880
2031	743,630	665,000	54,600	719,600	(743,630)	719,600	24,030
2032	752,630	700,000	28,000	728,000	(752,630)	728,000	24,630
Total	\$9,166,850	\$6,400,000	\$1,888,622	\$8,288,622	(\$8,574,802)	\$8,880,670	\$286,180

Refunding Statistics

Present Value Savings @ Bond Yield:	\$246,086
Refunded Principal Amount:	\$7,125,000
% PV Savings:	3.45%

(1) Estimated current interest rates plus 20 basis points. Subject to change.

City of Wood Dale, Illinois

Series 2012 Refunding Analysis

6/19/2020

Scenario 2: Deferred Savings

Calendar Year	Current 2012 Debt Service	General Obligation Refunding Bonds, Series 2020B Dated: October 7, 2020			Refunded 2012 Debt Service	Estimated Net New Debt Service	Savings
		Principal (12/30)	Interest (1) (6/30 & 12/30)	Total			
2020	\$651,070		\$59,114	\$59,114	(\$59,114)	\$651,070	\$0
2021	661,970	405,000	256,400	661,400	(661,970)	661,400	570
2022	672,470	430,000	240,200	670,200	(672,470)	670,200	2,270
2023	677,075	450,000	223,000	673,000	(677,075)	673,000	4,075
2024	690,855	480,000	205,000	685,000	(690,855)	685,000	5,855
2025	698,550	505,000	185,800	690,800	(698,550)	690,800	7,750
2026	705,230	525,000	165,600	690,600	(705,230)	690,600	14,630
2027	715,855	545,000	144,600	689,600	(715,855)	689,600	26,255
2028	725,255	565,000	122,800	687,800	(725,255)	687,800	37,455
2029	733,380	590,000	100,200	690,200	(733,380)	690,200	43,180
2030	738,880	615,000	76,600	691,600	(738,880)	691,600	47,280
2031	743,630	635,000	52,000	687,000	(743,630)	687,000	56,630
2032	752,630	665,000	26,600	691,600	(752,630)	691,600	61,030
2033							
2034							
Total	\$9,166,850	\$6,410,000	\$1,857,914	\$8,267,914	(\$8,574,894)	\$8,859,870	\$306,980

Refunding Statistics

Present Value Savings @ Bond Yield:	\$252,271
Refunded Principal Amount:	\$7,125,000
% PV Savings:	3.54%

(1) Estimated current interest rates plus 20 basis points. Subject to change.

City of Wood Dale, Illinois

Series 2012 Refunding Analysis

6/19/2020

Scenario 3: Two Year Extension of Debt Service

Calendar Year	Current 2012 Debt Service	General Obligation Refunding Bonds, Series 2020B Dated: October 7, 2020			Refunded 2012 Debt Service	Estimated Net New Debt Service	Savings
		Principal (12/30)	Interest (1) (6/30 & 12/30)	Total			
2020	\$651,070		\$59,161	\$59,161	(\$59,161)	\$651,070	\$0
2021	661,970	350,000	256,600	606,600	(661,970)	606,600	55,370
2022	672,470	365,000	242,600	607,600	(672,470)	607,600	64,870
2023	677,075	380,000	228,000	608,000	(677,075)	608,000	69,075
2024	690,855	395,000	212,800	607,800	(690,855)	607,800	83,055
2025	698,550	410,000	197,000	607,000	(698,550)	607,000	91,550
2026	705,230	425,000	180,600	605,600	(705,230)	605,600	99,630
2027	715,855	445,000	163,600	608,600	(715,855)	608,600	107,255
2028	725,255	460,000	145,800	605,800	(725,255)	605,800	119,455
2029	733,380	480,000	127,400	607,400	(733,380)	607,400	125,980
2030	738,880	500,000	108,200	608,200	(738,880)	608,200	130,680
2031	743,630	520,000	88,200	608,200	(743,630)	608,200	135,430
2032	752,630	540,000	67,400	607,400	(752,630)	607,400	145,230
2033		560,000	45,800	605,800		605,800	(605,800)
2034		585,000	23,400	608,400		608,400	(608,400)
Total	\$9,166,850	\$6,415,000	\$2,146,561	\$8,561,561	(\$8,574,941)	\$9,153,470	\$13,380

Refunding Statistics

Present Value Savings @ Bond Yield:	\$148,697
Refunded Principal Amount:	\$7,125,000
% PV Savings:	2.09%

(1) Estimated current interest rates plus 20 basis points. Subject to change.